

DISTRICT 04 2088 SOUTH ARLINGTON RD. • AKRON, OH 44306 • 330-786-3100

# **Environmental Document**

for

# SUM 76/77 Central Interchange PID 101402

**Environmental Document Level: D1** 

Approved: 1/30/2019

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The environmental review, consultation, and other actions required by applicable Federal environmental laws for this project are being, or have been, carried out by ODOT pursuant to 23 U.S.C. 327 and a Memorandum of Understanding dated December 11, 2015, and executed by FHWA and ODOT.

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# Project Type

# Please check all of the following actions that apply (Must check at least one):

(13) Actions described in 23 CFR 771.117 (c)(26), (c)(27), and (c)(28) that do not meet the constraints listed in 23 CFR 771.117(e).(a) Project types that exceed thresholds in Appendix A(b) Project types that exceed thresholds in Appendix B



# **General Project Information**

Project, Cost Schedule and Work Limits		
Environmental Document Level:		D1
PID:	1014	402
Project Name:	SUM 76/77 Central Interchar	nge
Project Sponsor:	DISTRICT 4-PLANNI	NG
ODOT District:		4
Funding Source:	Fede	əral
Private Funding:		No
Local Public Funding:		No
STIP Reference #:	2018stipID0159FDDD/2018stipID 59FDRW/2018stipID0159FDCO a is fiscally constrain	001 Ind Ied.
The next phase of the proposed project is listed on the STIP	Y	Yes
The current cost estimate is in line with existing federal procedures for Administration Modifications	Ohio STIP Amendments and Y	Yes
Planning and Engineering:	\$7,083,778	.60
Right of Way:	\$250,000	00.0
Construction:	\$57,250,000	00.0
Other:	\$0	00.0
An Interchange Modification/Justification/Operations Study (IMS/IJS/IOS	S) was completed	Yes
Date Completed:	01/04/20	J18

### **Project Description:**

The Ohio Department of Transportation (ODOT) proposes to improve the Interstate Route (IR) 76/IR 77/State Route (SR) 8 interchange in the city of Akron, Summit County. This system interchange is locally known as the Central Interchange. Proposed improvements include:

- Permanent removal of the existing left exit ramp and bridge that conveys traffic from IR 76 eastbound to SR 8 northbound;
- Construct a new left exit ramp and bridge on a new alignment to convey traffic from IR 76 eastbound to SR 8 northbound;
- Widen the existing IR 76 eastbound bridge over Brown Street;



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- Permanent removal of the existing left exit ramp and bridge that conveys traffic from IR 76 westbound to IR 77 southbound;
- Construct a new left exit ramp and bridge on a new alignment to convey traffic from IR 76 westbound to IR 77 southbound;
- Widen the existing IR 76 westbound bridge over Inman Street;
- Modify the existing right exit ramp and bridge that conveys traffic from IR 76 westbound to SR 8 northbound;
- Permanent closure of the existing IR 76 westbound exit ramp to Inman Street;
- Permanent closure of the existing IR 77 southbound exit ramp to Lovers Lane;
- Permanent removal of the existing Lafollette Street bridge over IR 77;
- Construct a new pedestrian/bicycle bridge over IR 77 between Lafollette Street and Kipling Street;
- Convert existing Coventry Street between Lafollette Street and Kipling Street to a pedestrian/bicycle trail;
- Replace the existing pavement along IR 76 between King Street and east of the existing pedestrian bridge over IR 76;
- Replace the existing pavement along IR 77 between Lovers Lane and IR 76;
- Replace the existing pavement along SR 8 between IR 76 and Beacon Street;
- Assign two through lanes, one left exit lane and one right exit lane in each direction along IR 76;
- Construct multiple noise walls at various noise sensitive areas; and
- Install new retaining walls, lighting, guardrail, storm sewer/drainage features, signage and pavement markings.

This project was separated from the 2014 Akron Beltway Planning Study. It is the first project resulting from this study due to the deteriorated, deficient bridge conditions along the existing left exits in the interchange. These improvements do not preclude future improvements to the Central Interchange.

IR 76 and IR 77 are functionally classified as Interstates, SR 8 as Freeway/Expressway and Lafollette Street as Local in the project study area.

Minor amount of temporary and permanent rights-of-way are required to construct the project.

The project will include appropriate maintenance of traffic measures to minimize traffic disruptions during project construction. Ramp closures and detours will be necessary to connect the proposed new ramps with the existing highways. Various lane closures will also occur along IR 76, IR 77 and SR 8 throughout construction of the project. Final maintenance of traffic (MOT) plans for the project will be developed during the Stage 3 design phase. Various public involvement activities that were conducted for the project included this maintenance of traffic information to determine impacts and obtain feedback from stakeholders, the public and emergency/public services. Local emergency/public services and community notifications of the project shall be performed in accordance with ODOT Traffic Engineering Manual Notes 642-58 Notification of Traffic Restrictions and 642-8 Item 614, Maintaining Traffic (Notice of Closure Sign), as applicable.

Relocations of existing utilities within the project study area will be necessary to construct the project. These utility relocations will occur within the existing highway/street rights-of-way. Coordination with affected utility owners is ongoing for the project.



The project will not impact any environmentally sensitive resources within the project study area.

Two public involvement meetings were conducted, in compliance with Title VI requirements, for the project. Comments received as a result of these public involvement meetings pertained to the proposed noise walls, the proposed permanent closures of the existing IR 76/IR 77 exit ramps to Inman Street/Lovers Lane, the proposed permanent removal of the existing Lafollette Street bridge over IR 77, SR 8 traffic congestion, ramp configurations, traffic movements, local street congestion/impacts, the proposed pedestrian/bicycle trail and the project construction schedule. The received public comments were summarized and responses to comments were posted to the ODOT District 4 website. Moreover, the received public comments did not identify any substantial environmental controversy on environmental grounds with construction of the project.

The environmental document and associated studies, as applicable, were approved using the Stage 1 Design plans for the project. A copy of the Stage 1 Design plans for the project is included in the Project File/General/Project Information subsection as Stage 1 Design.pdf.

The estimated total project cost specified in Ellis is less than the total project cost specified in the Akron Metropolitan Area Transportation Study (AMATS) Fiscal Year (FY) 2018 - FY 2021 Transportation Improvement Program (TIP).

Project location maps of the project are in the Project File/General/Project Information subsection.

Limits of Proposed Work:	SUM Central Interchange IR-76, IR-77
Start (SLM):	11.31
End (SLM):	11.78
Total Work Length (Miles):	0.47
Roadway Character	

Roadway Character	
Route Number: IR00077	
Functional Classification:	Principal Arterial - Interstate (Urban)
Current Average Daily Traffic:	135920
Current Average Daily Traffic Year:	2020
Design Year Average Daily Traffic:	153200
Design Average Daily Traffic Year:	2040
Daily Hourly Volume:	14800
Truck %:	8
Setting:	Urban



### Topography:

Existing:	Proposed:
60	60
55	55
8	8
through/ramp	through/ramp
132	132
8	8
7	7
n/a	n/a
	Existing:   60   55   8   through/ramp   132   8   7   n/a

#### Route Number: SR00008

Functional Classification:	Principal Arterial - Other Freeway/Expressway (Urban)
Current Average Daily Traffic:	123390
Current Average Daily Traffic Year:	2020
Design Year Average Daily Traffic:	135300
Design Average Daily Traffic Year:	2040
Daily Hourly Volume:	13520
Truck %:	7
Setting:	Urban
Topography:	Level

	Existing:	Proposed:
Design Speed (MPH):	60	60
Legal Speed (MPH):	55	55
Number of Lanes:	6	6
Type of Lanes:	through/ramp	through/ramp
Pavement Width (ft):	112	112
Shoulder Width (ft):	8	8
Median Width (ft):	5	5
Sidewalk Width (ft):	n/a	n/a

#### Route Number: IR00076

Functional Classification:

Principal Arterial - Interstate (Urban) 120890

Current Average Daily Traffic:



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Current Average Daily Traffic Year:	2020
Design Year Average Daily Traffic:	124010
Design Average Daily Traffic Year:	2040
Daily Hourly Volume:	10710
Truck %:	12
Setting:	Urban
Topography:	Level

	Existing:	Proposed:
Design Speed (MPH):	60	60
Legal Speed (MPH):	55	55
Number of Lanes:	8	8
Type of Lanes:	through/ramp	through/ramp
Pavement Width (ft):	132	132
Shoulder Width (ft):	8	8
Median Width (ft):	7	7
Sidewalk Width (ft):	n/a	n/a

Sufficiency Rating:	095.9
General Rating:	7
Date Built:	07/01/1958
Bridge Location:	0.20 MI S OF IR 76
40. Bridge Type:	322
Sufficiency Rating:	081.0
General Rating:	8
Date Built:	07/01/1961
Bridge Location:	0.26 MI W OF SR 8
40. Bridge Type:	322
Sufficiency Rating:	074.8
General Rating:	5
Date Built:	07/01/1960
Bridge Location:	0.06 MI W OF SR 8
40. Bridge Type:	112

ufficiency Rating:	

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Sufficiency Rating:	072.6
General Rating:	5
Date Built:	07/01/1959
Bridge Location:	0.15 MI E OF IR 77
40. Bridge Type:	112
Sufficiency Rating:	083.7
General Rating:	7
Date Built:	07/01/1955
Bridge Location:	0.26 MI E OF SR 8
40. Bridge Type:	321
Design Criteria For Bridges Design Criteria for Bridges	
SFN: 7702949	
Sufficiency Rating:	095.9
General Rating:	7
Date Built:	07/01/1958
Bridge Location:	0.20 MI S OF IR 76

	Existing:	Proposed:
Bridge Type:	322	tbd
Bridge Length (ft):	223	248
Number of Main Spans:	4	2
Max Span Length (ft):	60	132
Load Restrictions (TON):	150	n/a
Curb to Curb Width (ft):	44	14
Shoulder Width(ft):	n/a	n/a
Under Clearance (ft):	n/a	n/a

# Bridge Type Description:

The existing four-span continuous rolled steel beam bridge with reinforced concrete deck on concrete piers and abutments structure that carries Lafollette Street over IR 77 will be permanently removed by the project. A proposed new prefabricated steel truss (ASTM A709 [M] Grade 50, Galvanized) with reinforced concrete substructures bike/pedestrian bridge will be constructed approximately 1500 feet south of the existing Lafollette Street bridge over IR 77.

# Load Restrictions Description:



# AASHTO Pedestrian Live Load (0.09 KSF) or HI5-44 Truck.

Will the structure be rehabilitated or replaced as part of the project?	No
If this bridge is a historic bridge, what type is it?	n/a

#### **Remarks:**

This bridge will be permanently removed as part of the project. A proposed new bike/pedestrian only bridge will be constructed approximately 1500 feet south of the existing bridge location.

SFN: 7703031	
Sufficiency Rating:	081.0
General Rating:	8
Date Built:	07/01/1961
Bridge Location:	0.26 MI W OF SR 8

	Existing:	Proposed:
Bridge Type:	322	322
Bridge Length (ft):	157	157
Number of Main Spans:	3	3
Max Span Length (ft):	66	66
Load Restrictions (TON):	150	150
Curb to Curb Width (ft):	137	89
Shoulder Width(ft):	2	2
Under Clearance (ft):	18.5	18.5

### **Bridge Type Description:**

3-span continuous steel beams with composite reinforced concrete deck, semi-integral stub type abutments and reinforced concrete cap-and-column piers.

# Load Restrictions Description:

HS-20 Case I and Alternative Military Loading with future wearing surface (FWS) of 0.030 KSF (existing beams) & 0.060 KSF (new beams).

Will the structure be rehabilitated or replaced as part of the project?	Yes
If this bridge is a historic bridge, what type is it?	n/a
Remarks:	

This structure will be rehabilitated/widened as part of the project.



### SFN: 7705972

**Sufficiency Rating: General Rating:** Date Built: **Bridge Location:** 0.06 MI W OF SR 8

	Existing:	Proposed:
Bridge Type:	112	tbd
Bridge Length (ft):	240	634
Number of Main Spans:	5	5
Max Span Length (ft):	52	137
Load Restrictions (TON):	150	150
Curb to Curb Width (ft):	34.30	60
Shoulder Width(ft):	2	2
Under Clearance (ft):	14.8	16

## **Bridge Type Description:**

5-span continuous curved steel plate girder with composite reinforced concrete deck, cast-in-place wall type abutments on piles, and reinforced concrete cap-and-column piers on drilled shafts.

### Load Restrictions Description:

HL93 and future wearing surface (FWS) of 0.060 KSF.

Will the structure be rehabilitated or replaced as part of the project?	No
If this bridge is a historic bridge, what type is it?	n/a
Remarks:	

The existing Ramp N structure will be permanently removed as part of the project.

072.6
5
07/01/1959
0.15 MI E OF IR 77

Existing:

Proposed:

074.8

07/01/1960

5



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Bridge Type:	112	tbd
Bridge Length (ft):	134	848
Number of Main Spans:	3	7
Max Span Length (ft):	51	156
Load Restrictions (TON):	150	150
Curb to Curb Width (ft):	34.30	30
Shoulder Width(ft):	2	2
Under Clearance (ft):	15	18.6

# Bridge Type Description:

3-span (unit 1), 4-span (unit 2) continuous curved steel plate girder with reinforced concrete deck, cast-inplace wall type abutments on piles and reinforced concrete piers on drilled shafts.

# Load Restrictions Description:

HL 93 (future wearing surface (FWS) of 0.060 KSF).

Will the structure be rehabilitated or replaced as part of the project?	No
If this bridge is a historic bridge, what type is it?	n/a
Remarks:	

The existing Ramp R structure will be permanently removed as part of the project.

SFN: 7706154	
Sufficiency Rating:	083.7
General Rating:	7
Date Built:	07/01/1955
Bridge Location:	0.26 MI E OF SR 8

	Existing:	Proposed:
Bridge Type:	321	321
Bridge Length (ft):	58	58
Number of Main Spans:	1	1
Max Span Length (ft):	52	52
Load Restrictions (TON):	150	150
Curb to Curb Width (ft):	55	55
Shoulder Width(ft):	2	2
Under Clearance (ft):	14.8	14.8



# Bridge Type Description:

Simple span steel beam (ASTM A709M Grade 50W, Unpainted) composite superstructure with reinforced concrete deck with semi-integral abutments.

## Load Restrictions Description:

HS25 Case I and Alternative Military Loading with a future wearing surface loading of 60 psf.

Will the structure be rehabilitated or replaced as part of the project?	Yes
If this bridge is a historic bridge, what type is it?	n/a

# Remarks:

This structure will be rehabilitated/widened as part of the project.

41. Bridge Length (ft):	223
41. Bridge Length (ft):	157
41. Bridge Length (ft):	240
41. Bridge Length (ft):	134
41. Bridge Length (ft):	58
42. Number of Main Spans:	4
42. Number of Main Spans:	3
42. Number of Main Spans:	5
42. Number of Main Spans:	3
42. Number of Main Spans:	1
43. Max Span Length (ft):	60
43. Max Span Length (ft):	66
43. Max Span Length (ft):	52
43. Max Span Length (ft):	51
43. Max Span Length (ft):	52
44. Load Restrictions (TON):	150



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45. Curb to Curb Width (ft):	44
45. Curb to Curb Width (ft):	137
45. Curb to Curb Width (ft):	34.30
45. Curb to Curb Width (ft):	34.30
45. Curb to Curb Width (ft):	55

## Maintenance of Traffic During Construction

A roadway, bridge or ramp closure is required	Yes
A temporary bridge or roadway is proposed	No
A detour is required for the proposed project	Yes
Access for local through traffic will be provided with appropriate signage	Yes
Provisions for through-traffic dependent businesses will be incorporated into project design	No
Provisions to accommodate any local special events or festivals will be incorporated into project design	No
The proposed MOT substantially impacts sensitive environmental resources	No
Substantial controversy is associated with the proposed MOT	No
Coordination has been initiated and/or completed with local emergency services, schools, public institutions/facilities, etc.	Yes

#### **Remarks:**

The project will include appropriate maintenance of traffic measures to minimize traffic disruptions during project construction. Temporary ramp closures and detours will be necessary to connect the proposed new ramps with the existing highways. Various temporary lane closures will also occur along IR 76, IR 77 and SR 8 throughout construction of the project. Final maintenance of traffic (MOT) plans for the project will be developed during the Stage 3 design phase. Public involvement activities that were conducted for the project included this maintenance of traffic information to determine impacts and obtain feedback from stakeholders, the public and emergency/public services. The Akron emergency/public services attended and participated in the various public involvement activities conducted for the project. Local emergency/public services and community notifications of the project shall be performed in accordance with ODOT Traffic Engineering Manual Notes 642-58 Notification of Traffic Restrictions and 642-8 Item 614, Maintaining Traffic (Notice of Closure Sign), as applicable.

Are there any Environmental Commitments?	No
Right of Way and Utility Involvement	
The project requires Permanent Right-of-Way	Yes
The project requires Permanent Easement(s)	Yes
The project requires Temporary Right-of-Way	Yes



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Number of parcels impacted by Permaner	it Right-of-Way:	1
Right of Way and Utility Involvement		
Number of parcels impacted by Temporar	y Right-of-Way:	5
Approximate acreage of Permanent Right	-of-Way needed:	0.016
Approximate acreage of Temporary Right	-of-Way needed:	0.175
Electrical lines, gas lines, water lines, sew area	er lines, phone lines or other utilities exist in the project	Yes
Large scale transmission facilities are loc	ated within the project area	No
Private utility easements are located with	n the project area	Yes
The existing private utility easement will b	e impacted by the project	Yes
Coordination with identified utilities has b	een initiated and/or completed	Yes

#### **Remarks:**

Minor amount of temporary or permanent right-of-way is required to construct this project.

Utilities in the project area include:

- Akron Energy Systems
- AT&T Ohio
- AT&T Long Distance
- Cargill Salt
- Crown Castle
- Dominion East Ohio
- First Energy
- Frontier Communications
- Involta
- Century Link
- Lightower & Fibertech
- Medina County Fiber Network
- Mobilitie
- Quest/Century Link
- Windstream KDL
- Spectrum
- Verizon Communications
- XO Communications
- ZAYO Group
- City of Akron Communications, Bureau of Water Supply, Bureau of Water Reclamation, Traffic Engineering
- Summit County Engineer's Office



• Summit County Department of Environmental Services

The various utilities have been contacted and have received copies of the Stage 1 Design plans. Several sets of correspondence were sent to the utilities and responses received in February and March 2018. Relocations of existing utilities within the project area will be necessary to construct the project. These utility relocations will occur within the existing highway/street rights-of-way. Coordination with affected utility owners is ongoing during project design and will continue throughout project construction.

A table that specifies the various utility correspondence for the project can be found in the Project File/General/Right-of-Way and Utility Involvement subsection.



Purpose & Need

# Purpose & Need

### **Project History:**

The project area is located in the city of Akron, Summit County, Ohio. The project study area includes the Akron Beltway's Central Interchange, a system interchange between I-76, I-77 and State Route (SR) 8 within a heavily urbanized part of the city.

The I-76 corridor, including the Central Interchange, was the subject of several studies since 2002. The studies, conducted by Ohio Department of Transportation (ODOT) and the Akron Metropolitan Area Transportation Study (AMATS) documented congestion and safety problems at the Central Interchange. Preliminary engineering for improvements to the Central Interchange began in the autumn of 2005, however, construction of the improvements was not completed due to lack of funding. See Project File for the I-76/AMATS MIS Final Report and the Summit I-76 Reconstruction and Upgrade Strategic Plan.

In 2014, study of the Akron Beltway was started with the goal of identifying "right-sized" solutions to the congestion and safety problems associated with the box shaped freeway network that is comprised of Interstate Routes 76, 77 and 277. The Summary of Substandard Conditions, prepared in 2014 for the Akron Beltway study, determined that two bridges associated with the left-hand exit ramps at the Central Interchange are Functionally Obsolete.

### **Purpose Statement:**

The purpose of the transportation improvement is to improve facility deficiencies, mobility, roadway geometrics, and safety at the Central Interchange.

**Need Element(s):** 

# **Primary Need Element**

#### Bridge Conditions:

Two bridges are associated with the existing left-hand exit ramps from westbound I-76 to southbound I-77 (Ramp N) ar eastbound I-76 to northbound SR 8 (Ramp R).

Bridge Number S.F.N.	Bridge Location	Year Built Last Rehab.	Min. Vertical Clearance	Deck Summary	Super- Structure Summary	Sub- Structure Summary	General Appraisal	Sufficiency Rating (%)	Fur Ot
SUM-00076-1148R 7705972	RAMP N (WB I-76 TO SB I-77) OVER EB I-76 & RAMP TO SB I-77	1960 1989	15.07'	5	5	6	5	74.8	,



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S	UM-00076-1 7706065	165L	EB I-70 OVE	RAMP R 6 TO NB SR 8) ER WB I-76	1959 1988	15.09'	5	5	5	5	72.6	
	Summary Rating	Con Desc	dition ription									
	9	Exc	ellent									
	8	Very	/ Good									
	7	G	ood	1								
	6	Satis	factory									
	5	F	air	1								
	4	Р	oor	1								
	3	Se	rious									
	2	Cri	itical	1								
	1	Imn	ninent									
		Fa	ilure									
	0	Fa	niled									

ODOT conducts annual systematic inspection of bridges. Based upon these inspections, structures are assigned a ger appraisal rating on a scale of 0 to 9, where 9 indicates excellent (new) condition and 0 indicates failed (closed to traffic condition. Sub-portions of the bridge, such as the deck, superstructure and substructure, are inspected and also giver summary rating on the same scale from 0 to 9.

The bridges at the Central Interchange were last inspected in 2017. The inspections showed the Superstructure Su Rating for the Ramp N and Ramp R bridges was 5 (Fair). The General Appraisal Rating for these bridges was also 5 (Fa ODOT uses the Federal Highway Administration (FHWA) Sufficiency Rating System to give highway brid sufficiency rating. The sufficiency rating is a measure of the ability of a bridge to remain in service. This ratic computed numerical value used to determine eligibility of a bridge for federal funding. It ranges from 0 to 10 formula includes factors for structural condition, geometric functionality and traffic considerations. According FHWA system, a rating of 100% is considered entirely sufficient (usually new), bridges that have a sufficiency of 80% or less are designated as structurally deficient or functionally obsolete and considered for rehabilitati bridges with a rating of 50% or less are designated as structurally deficient or functionally obsolete and considered and considered and for replacement. The 2017 sufficiency ratings for the Ramp N and Ramp R bridges were less than 80% an bridges are functionally obsolete.

The superstructure ratings of 5 (Fair) and sufficiency rating less than 80% for the Ramp N and Ramp R brid the Central Interchange is due to severe spalling on the underside of these concrete slab bridges. Because maintenance efforts could only seal the spalled areas, a good permanent repair that could improve the cond ratings is not available. Note underdeck patches could fail and present a hazard to traffic beneath the bridg

In addition, the minimum vertical clearance for bridges over major freeway routes is 16 feet according to ODOT criter vertical clearances associated with the Central Interchange Ramp N and Ramp R bridges is almost one foot (1') less the minimum 16 feet.

# Ramp Geometrics:

As shown in the following table, both the existing left-hand exit ramps have deceleration lanes with substandard deceleration length:

Ramp	Ramp Description	Existing Deceleration Lane Length (feet)	Desired Deceleration Lane Length (feet)*
N	WB I-76 to SB I-77	700	800



\* ODOT Location and Design Manual, Volume 1

Note: deceleration length standards do not apply to drop lanes leading to exit ramps.

As shown in the following table, both the existing left-hand exit ramps have substandard inside shoulders:

Ramp	Ramp Description	Existing Inside Shoulder Width (feet)	Desired Inside Shoulder Width (feet)*
N	WB I-76 to SB I-77	3	4
R	EB I-76 to NB SR-8	3	4

\* ODOT Location and Design Manual, Volume 1

As shown in the following table, the existing left-hand exit ramps have substandard horizontal geometry:

Ramp	Ramp Description	Number of Substandard Horizontal Curves	Existing Speed of Horizontal Curves (MPH)	Desired Speed of Horizontal Curves (MPH)*
N	WB I-76 to SB I-77	3	32, 42, 43	45 - 50
R	EB I-76 to NB SR-8	2	26, 42	45 - 50

\* ODOT Location and Design Manual, Volume 1

As shown in the following table, the existing left-hand exit ramps have substandard vertical geometry:

Ramp	Ramp Description	Number of Substandard Vertical Curves	Existing Speed of Vertical Curves (MPH)	Desired Speed of Vertical Curves (MPH)*
N	WB I-76 to SB I-77	2	25, 39	45 - 50
R	EB I-76 to NB SR-8	2	38, 39	45 - 50

\* ODOT Location and Design Manual, Volume 1

The combination of the substandard conditions, as noted above, contribute to safety issues associated with existing left-hand exits within the Central Interchange.

### Safety:

A comprehensive safety review, completed in 2015, of the entire Akron Beltway identified the Central Interc as the "worst" performing area on the entire beltway system. Furthermore, multiple sections of I-76, near t Central Interchange, have been listed on ODOT's Safety Priority List since 2009. The section of I-76 through



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Central Interchange currently ranks #42 on ODOT's Safety Priority List of urban freeway sections. The Akro Metropolitan Area Transportation Study (AMATS) crash report, based on 2014 data, states the Central Interchange has six of the highest ranking freeway sections within the AMATS area.

More specifically, crash data was obtained from ODOT's GIS Crash Analysis Tool (GCAT) for the calendar of 2009 to 2011. Years 2009 - 2011 were chosen for these analyses due to multiple construction projects the study area between 2012 and the present that could skew the crash statistics. From 2009 to 2011, of 300 crashes occurred within the Central Interchange. These crashes included 141 rear-end, 90 fixed obje sideswipe-passing, 2 parked vehicle and 1 overturning crash. 66% of all crashes occurred in daylight and occurred on dry pavement. 70% of the crashes were property damage only and 29% of the crashes were crashes with one (1) fatal crash.

The large number of rear-end crashes (47%) within the Central Interchange points to a traffic congestion Along an uncongested highway, rear-end crashes are less common as traffic should not be slowing dow typically leads to rear-end crashes. The fixed object crashes (30%) occurring within the Central Interchange occurred at the left-hand exit ramps that are geometrically sub-standard and have curves that are design 25-30 miles per hour below the posted 55 mph speed limit of I-76. The sub-standard curves contribute t object crashes at the left-hand exits.

The Interchange Safety Analysis Tool - Enhanced (ISATe) is a predictive model based upon the American Asso of State Highway and Transportation Officials (AASHTO) *Highway Safety Manual* for freeways and interch

ISATe can predict the safety performance of interchanges, including mainline sections, ramp sections and terminal intersections. ISATe employs virtually all geometric variables (excluding vertical alignment) and traffic variables in predicting crash frequency, types and severity based on the relationship between various elements and average crash frequency. In general, when Expected Crash frequency (average anticipated cr as compared to similar sites in the United States) is less than Predicted Crash frequency (existing crash hi the facility may not need improvements. However, when Expected Crash frequency is greater than Predicted frequency, the facility may benefit from improvements.

For the Central Interchange, ISATe calculated the year 2015 Predicted Crash frequency and the year 2015 Ex Crash frequencies for multiple freeway mainline and ramp sections. The freeway sections associated with the e left-hand exit ramps from Westbound I-76 to Southbound I-77 and Eastbound I-76 to Northbound SR 8 h greatest difference between Expected Crash frequency and Predicted crash frequency, indicating those section benefit from improvements.

# **Operations:**

Currently, the sections of both eastbound and westbound I-76 approaching the Central Interchange expected congestion during both AM and PM peak hours.

Level-of-Service (LOS) is a qualitative description of traffic flow on a roadway. LOS is represented by the le through F with LOS A being the best and LOS F being the worst. For the interstate highway system, LOS is deter by the density of traffic on the highway that is expressed as passenger cars per mile per lane (pc/mile

For an urban area such as this, LOS D (>26-35 pc/mile/lane) is typically considered acceptable operation. (>35-45 pc/mile/lane) and LOS F (>45 pc/mile/lane) are considered unacceptable because they represent subscongestion and delay.

Highway Capacity Software was used to analyze the existing Central Interchange. Shown below are the set of I-76 approaching the interchange and associated with the left-hand exit ramps. All sections of I-76 approtection the existing left-hand exit ramps are operating at unacceptable LOS (Year 2015) or will operate at unacceptable LOS by the Design Year (Year 2040).

2015 AM Peak	2015 PM Peak	2040 AM Peak	2040 PM Peak
Hour	Hour	Hour	Hour
LOS/Density	LOS/Density	LOS/Density	LOS/Density



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	(pc/mile/lane)	(pc/mile/lane)	(pc/mile/lane)*	(pc/mile/lane)*
Eastbound sections				
EB 76 from Main Street On-ramp to 77 SB Off-ramp*	C/20.4	D/29.3	D/30.2	F/46.4
EB 76 from 77 SB Off- ramp to Ramp R (off-ramp to SR <u>8 NB</u> )	D/28.2	E/37.5	D/29.2	E/37.2
Ramp R Diverge	C/26.4	D/34.5	C/27.4	D/34.3
EB 76 from Ramp R Diverge to On-ramp from 77 NB/SR8 SB	B/15.8	D/28.1	C/18.1	D/30.5
Ramp R (to SR8 NB)	C/24.9**	B/17.1**	C/22.7**	B/12.1**
Westbound sections		•	•	•
WB 76 from Fuller On- ramp to Inman Off-ramp	D/32.0	C/23.0	E/36.2	C/25.3
WB 76 from Inman Off- ramp to SR8 NB Off-ramp	E/38.4	D/28.0	E/42.9	D/30.1
WB 76 from SR8 NB Off- ramp to Ramp N (off-ramp to I-77 SB)	F/57.7	D/30.3	F/72.5	D/32.0
Ramp N Diverge	E/42.8	D/28.6	F/45.7	D/30.2
WB 76 from Ramp N Diverge to On-ramp from 77 NB/SR8 SB	D/33.4	B/15.6	E/35.2	B/16.1
Ramp N (off-ramp to I-77 SB)	C/24.2**	D/29.6**	D/27.0**	D/31.8**

\*2040 data assumes completion of Main/Broadway interchange improvements

\*\*Actual densities likely to be higher. Highway Capacity Software has a minimum free-flow speed of 55mph, which is considerably higher than the actu speed of the existing left-hand exit ramps.

The unacceptable LOS, as noted above, contributes to substantial traffic congestion and delay associated wi existing left-hand exits within the Central Interchange.

# Secondary Need Elements

## Interchange Spacing:

The AASHTO *Policy on Geometric Design of Highways and Streets*, commonly referred to as the "Green Book the ODOT Location and Design (L&D) Manual contain research, criteria and practices for highway and interce geometric design. Numerous standards are instituted for highways and interchanges to achieve an accerdesign. A critical factor is the recommendation that highway interchanges should be at least 1.0 mile apart to



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for adequate acceleration/deceleration lanes along ramps and adequate merging/weaving sections betweer terminals. The I-76 Inman Street exit ramp is located 0.2 mile east of the westbound I-76 exit ramp to SR 0.3 mile from the westbound I-76 entrance ramp from Fuller Street. The I-77 Lovers Lane ramp is locate mile from the westbound I-76 exit ramp/southbound I-77 mainline ramp to southbound I-77 and 0.42 mile from southbound I-77 exit ramp to Archwood Avenue. Both the I-76 Inman Street and I-77 Lovers Lane exit ram not meet current interchange spacing requirements and are partial interchanges (1/4 of a full interchange) were returning traffic movement, meaning traffic that exits the highway has no direct access to return to the highway.

## **Goals and Objectives:**

Not applicable.

# Summary Statement:

The purpose of the transportation improvement is to address the functionally obsolete bridges within the Central Interchange prior to further deterioration. The **2017** sufficiency ratings for the bridges on ramps from Westbound I-76 to Southbound I-77 (Ramp N) and Eastbound I-76 to Northbound SR 8 (Ramp R) were less than 80%. Therefore, both bridges are functionally obsolete. The sufficiency ratings for the bridges are due to severe spalling on the underside of these concrete slab bridges. Because maintenance efforts could only seal the spalled areas, a good permanent repair that could improve the condition ratings is not available.

# Logical Termini and Independent Utility:

The logical termini for the project on I-76 are from the bridges over Brown Street to the bridges over Arlington Street, a distance of about 1 mile. The logical termini for the project on I-77/SR 8 are from the Lovers Lane bridge over I-77 to the Johnston Street bridge over SR 8, a distance of about 0.7 mile. These termini encompass the functionally obsolete bridges associated with the ramps at the Central Interchange.

This proposed transportation improvement does not depend on any other transportation improvement to meet the established purpose and need. Therefore, independent utility is established for this transportation improvement.



# Alternatives

### Alternatives

### **Discuss No Build Alternative:**

The No Build Alternative would only include routine maintenance of the highway and bridges within the IR 76/IR 77/SR 8 interchange area. This alternative would not change the existing highway ramp configurations or traffic operations. This alternative does not address the structurally deficient bridges, deficient ramp geometrics or safety. The No Build Alternative does not satisfy the project Purpose and Need.

Was a Feasibility Study completed?	Yes
Date Feasibility Study was approved:	11/30/2017

# Was an Alternative Evaluation Report (AER) completed?

#### Alternatives Considered

Name	Description	Reason Dismissed	Preferred Alternative
NEA3	Modify the left exits and retain the left exit ramps as drop lanes, restripe westbound IR 76 pavement from northbound SR 8 ramp to southbound IR 77 ramp, avoids impacts to Johnston Street bridge, relocated SB ramp conflicts with Lafollette Bridge, permanently remove the existing Lovers Lane and Inman Street exit ramps and the existing Lafollette Bridge.	not dismissed	Yes

No



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NEB3	Reconfigure left exits to right exits with fly-over ramps, refinement tightens ramp with only small ROW impacts near Lumiere and Crosier Streets, minimizes traffic impacts during construction with most work offline, Johnston Bridge will be reconstructed and permanently remove Lovers Lane and Inman Street exit ramps.	Substantially higher cost for fly-over bridges and more retaining walls than NEA3.	No

# Discuss Reasons Alternative Identified as Preferred was selected:

A series of design workshops were conducted between ODOT District 4, ODOT Central Office Design and the Federal Highway Administration (FHWA) for the project. Alternatives were developed, analyses completed, and results considered and eliminated during these workshops.

All alternatives included the closure of the two partial interchanges, the IR 76 westbound exit ramp to Inman Street and the IR 77 southbound exit ramp to Lovers Lane.

The NEA3 alternative, estimated cost of \$40 million, provides operational improvements and reduces need for design exceptions while the NEB3 alternative, estimated cost of \$83 million, has higher costs due to fly-over ramps and more retaining walls than NEA3.

NEA3 was selected as the preferred alternative, keeping the left exit ramps while changing to drop lanes to reduce traffic congestion. This alternative was selected over NEB3 based on the costs and fewer right-of-way impacts. This alternative does not preclude other future capacity related improvements that may also be developed through the Akron Beltway Planning Study for the Central Interchange and/or the Akron Beltway.

The Feasibility Study can be found in the Project File/Alternatives/Reports and Project Information subsection.

Feasibility Study acceptance correspondence from ODOT District 4 is in the Project File/Alternatives/Coordination subsection.



### Air

## Mobile Source Air Toxics (MSATs)

Sensitive Areas are located within approximately 500' of the proposed project area	Yes
The proposed project is listed as a C1 in ODOT's CE Guidance and/or falls under 40 CFR 93.126	No
The proposed project involves adding capacity, a new interchange, relocating thru lanes significantly closer to sensitive areas, or expanding an intermodal center	No
Design Year ADT is <140,000	Yes

#### **Remarks:**

This project does not add capacity, a new interchange or a new road on new alignment. This project only modifies the alignment of two existing exit ramps. Hence, the project will not result in any meaningful changes in traffic volume, vehicle mix, location of the existing facility or any other factor that would cause an increase in emissions impacts relative to the no-build alternative. As such, FHWA has determined that this project will generate minimal air quality impacts for Clean Air Act criteria pollutants and has not been linked with any special MSAT concerns. Consequently, the project is exempt from MSAT analysis.

### Particulate Matter 2.5 (PM2.5)

The proposed project is in an air quality non-attainment or maintenance area	Yes
The proposed project falls under 40 CFR 93.126	No
Design Year ADT >125,000 and Design Year Diesel Truck Volume >10.000	No
Significant increase in diesel trucks between Design Year No Build and Design Year Build	No

#### **Remarks:**

In correspondence, dated March 8, 2018, the ODOT-OES Noise and Air Quality Unit initiated PM 2.5 Project Level Conformity Determination coordination with Ohio EPA, USEPA and the Federal Highway Administration (FHWA). The coordination requested concurrence that the proposed project is not a project of air quality concern, met the statutory requirements of the Clean Air Act and is exempt from PM 2.5 Hotspot Analysis. In FHWA correspondence, dated April 6, 2018, FHWA, Ohio EPA and USEPA provided concurrence that the project is not of air quality concern. Therefore, no additional analysis or further coordination concerning PM 2.5 is necessary for the project.

See PM 2.5 agency coordination and concurrence for the project in the Project File/Air/Coordination subsection.

# Carbon (CO)

### The State of Ohio is in attainment for CO at this time and no coordination or analysis is required

#### Ozone

The proposed project is in an Ozone non-attainment or maintenance area



#### The proposed project is listed on the TIP

#### **Remarks:**

Summit County is in an ozone maintenance area. The project is included in the Akron Metropolitan Area Transportation Study (AMATS) Fiscal Year (FY) 2018 - FY 2021 Transportation Improvement Program (TIP) as exempt from air quality analysis. The project design concept and scope have not substantively changed since the project inclusion on the MPO TIP per 40 CFR 93.115. Therefore, ozone is addressed for the project.

#### **Environmental Commitments**

Are there any environmental commitments?

No





# Noise

# Noise

Noise Sensitive Areas located within approximately 500' of the proposed project area	Yes
Noise Analysis conducted	Yes
ODOT Approval Date	08/29/2017
The proposed project is a Type I project	Yes
The proposed project constructs a roadway on new location	No
The proposed project significantly changes the existing roadway's horizontal or vertical alignment	Yes
The proposed project adds capacity (thru travel lanes)	No
The proposed project adds an auxiliary lane(s)	No
The proposed project negatively affects shielding of an existing roadway	No
The proposed project restripes existing pavement for an added thru lane or auxiliary lane	No
The proposed project adds or substantially alters an existing weigh station, rest stop, rideshare lot, or toll plaza	No
The proposed project causes a major change in vehicle mix	No
A design year noise impact was predicted	Yes
All noise attenuation measures were considered and are consistent with existing policy	Yes
Noise barriers proposed	Yes
The proposed project impacts identified NSAs	Yes

# Impacted Noise Sensitive Areas (NSAs)

NSA ID	Name	Address or Location	Qualify for barriers
1	NSA 1	west approach, north side of I-76	Yes
2	NSA 2	northwest quadrant of interchange, along Johnston Street	No
3	NSA 3	northeast quadrant of interchange west of Inman Street	Yes
4	NSA 4	east approach, north side of I-76	Yes
5	NSA 5	west approach, south side of I-76	Yes
6	NSA 6	southeast quadrant of interchange	Yes



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7	NSA 7	east approach, south side of I-76	No
8	NSA 8	south approach, west side of I-77	Yes
9	NSA 9	south approach, east side of I-77	Yes

### **Remarks:**

#### Noise Analysis:

A noise analysis report, dated August 2017, was prepared by Lawhon & Associates, Inc. Nine noise sensitive areas (NSAs) were evaluated within the project area. Opening Year 2020 and Design Year 2040 noise levels for the No Build and Build alternatives were modeled using the FHWA Traffic Noise (TNM) Version 2.5. The results of the analysis indicated eight of the nine areas will have traffic noise impacts approaching (within 1 dB) or exceeding the Level B or C Noise Abatement Criteria of 67 dBA and none of the NSAs will have increases of 10 dBA under the Design Year Build alternative.

Noise abatement measures, including noise walls, were evaluated for the impacted receptors. A noise barrier must be of sufficient length and height to break the line of sight between the receptor and the highway. Under the ODOT Highway Traffic Noise Analysis Manual, noise levels must be reduced by a minimum of 5 dB at any sensitive receptor site for that site to be considered a benefited receptor. The construction of a noise barrier is considered feasible mitigation if a 5 dB noise reduction is achievable. The construction of a noise barrier is considered reasonable mitigation if the construction cost is less than \$35,000 per benefited receptor. It was determined that noise wall construction would be feasible and reasonable for NSAs 1, 3, 4, 5, 6, 8, and 9. A noise wall was not found to be feasible or reasonable for NSA 2 and NSA 7. Upon review of the noise analysis report, ODOT OES accepted the report recommendations in an email dated August 29, 2017. In January 2019, the design of the recommended noise wall for NSA 5 was revisited. Further plan development revealed that some of the recommended noise wall for NSA 5 would be constructed on an existing geogrid reinforced embankment, which is not feasible since drilling associated with installing the drilled shafts would destroy the geogrid material and damage the integrity of the slope. A supplemental noise analysis resulted in the proposed noise wall being shortened to end at the I-76/77 over Brown Street. See Project File > Noise > Noise Analysis - Revisions to Recommended Noise Wall NSA 5.pdf.

### **Noise Public Involvement:**

Noise walls will only be constructed if the property owners and/or residents of the impacts/benefited properties convey a desire for this type of noise abatement. At least 50% of the impacted/benefited property owners/residents in each of the seven recommended barrier zones would need to desire the recommended noise walls for them to proceed into design and construction.

Various methods were employed to contact sufficient benefitting dwelling owners/residents for a recommendation on each noise wall. On March 6, 2018, LAI personnel attended the public involvement meeting, greeted attendees, determined if attendees were a benefitting owner or resident, explained process and distributed noise wall ballots. Six noise wall ballots were returned at the public involvement meeting. On March 28, 2018, letters were sent to each of the benefitting dwellings for each recommended noise wall. 33 noise wall ballots were returned as a result of the March 28, 2018, letter. On April 5, 2018, LAI personnel went door-to-door canvasing dwellings with unreturned noise wall ballots. 108 ballots were completed during the canvasing. Door hangers were also left at those dwellings where no one answered the door. Additional hangers were left on April 26, May 9, and June 6, 2018. A total of 16 noise wall ballots were returned as a result of the survey was posted on June 12, 2018, and resulted in one completed noise wall ballot. Due to the returned ballots being less than 50% for NSAs 1 and 5, another letter was sent on June 28, 2018, to those who did not vote requesting response.



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### The noise wall ballot results are as follows:

NCA	Benefitted	Returned	Ballots with	Percent Yes
NSA	Dweilings	Ballots	r es vole	votes
1	90	70	50	55.6%
3	62	32	32	51.6%
4	2	2	2	100%
6	142	86	73	51.4%
8	44	27	24	54.5%
9	42	24	22	52.4%

For NSA 5, sufficient votes were not returned to meet the 50% respondents threshold required by ODOT's policy. Therefore, ODOT will continue to contact property owners/renters in this NSA in an attempt to acquire greater than 50% of votes to desire the recommended noise wall. Based on the results of the noise wall voting, the recommended noise walls in NSA 1, 3, 4, 6, 8, and 9 will proceed into detailed design and construction as part of the project.

### **Environmental Commitments**

#### Are there any environmental commitments?

Yes



# ESA

Does the project require any Permanent ROW or Easement?:	Yes
ESA	
ESA Screening Report was completed by District Staff	No
Date of ESA Screening IOC from OES:	07/23/2018
Do any sites require a Phase 1 ESA, Phase 2 ESA, or plan note according to the IOC from OES?	No
Remarks:	

Lawhon & Associates, Inc. completed a Regulated Materials Review Form for the project on November 29, 2017, and revised it on June 22, 2018. The RMR was conducted in accordance with the Ohio Department of Transportation Office of Environmental Services (ODOT-OES) Guidance (2017). As a result of this RMR, a Phase 1 ESA was recommended for three parcels. In an email correspondence, dated July 23, 2018, ODOT District 4 stated, while the RMR Guidance Flowchart may have recommended a Phase I ESA on parcels within existing right-of-way, the risk from these parcels did not warrant further action. See the Regulated Materials Review Form for the project in the Project File/ESA/Reports subsection. See the ODOT District 4 email correspondence, dated July 23, 2018, for the project in the Project File/ESA/Coordination subsection.

# According to the IOC from OES does the project require any Environmental Commitments (plan notes and/or other coordination)?

No



# **Cultural Resources**

## **Cultural Properties Present**

# Please describe all of the efforts made to identify Historic Properties (including lit review, field investigation, etc.):

A Cultural Resources Red Flag Summary was prepared by Gray & Pape, Inc. on December 8, 2005, for project SUM 76 9.00 PID 77270. The review of secondary sources, preparation of the historic context, and field verification were part of the Red Flag Summary. The summary did not identify any properties listed on the National Register of Historic Places (NRHP) and seven properties pre-1955. It was determined that further study was warranted on these seven properties. A Phase 1 History/Architecture Survey was prepared by Gray & Pape, Inc. dated October 3, 2006. Thirty-three previously recorded resources were identified within the APE during the literature review and none were listed on the NRHP. 807 architectural resources were identified in the APE during the field review and three were previously recommended as potentially eligible for listing on NHRP. Four resources were recommended for further Phase II study: Margaret Park Montessori School, Church of the Good Shepherd, Akron Brewing Company, and Tasty Pure Food Company. On December 20, 2006 SHPO responded in agreement with the Phase 1 report recommendation for Phase II study on the four resources. SHPO also recommended Phase II study on 556 Beacon Street, The Sacks Electric Building, St. Mary's Catholic Church, Ohio & Erie Canal segment, The Waterworks Building, and Concordia Evangelical Lutheran Church. The Red Flag Summary is in the Project File/Cultural Resources/Project Information subsection.

The Phase 1 Survey is in the Project File/Cultural Resources/Reports subsection.

A Section 106 Scoping Request was prepared by ODOT District 4 Environmental Section personnel during April 2016. The request provided mapping showing the project area and proposed improvements, a photographic log of the project study area and a records check. The records check included a review of electronic data from the Ohio State Historic Preservation Office (OSHPO) to identify properties within the project study area listed on or eligible for the National Register of Historic Places (NRHP), Ohio Archaeological Inventory (OAI) sites and Ohio Historic Inventory (OHI) buildings and structures. Based upon the 2014 Historic Bridge Inventory, the involved bridges were determined to not be eligible for the NRHP. The Interstate Highway System itself is generally exempt from further consideration based upon the SAFETEA-LU Act of 2005 Section 607.

ODOT OES provided an IOC, dated April 18, 2016, indicating that another Phase 1 History/Architecture survey was recommended to address the revised APE and new right-of-way.

A Phase I History/Architecture Survey was completed for the project by Lawhon & Associates, Inc. on December 4, 2017. Twelve (12) historic era bridges were identified within the project construction limits. Twenty additional resources were identified within the APE, however, outside of the project construction limits. The 12 bridges were determined by ODOT to be standard type Interstate structures. Eighteen of the twenty resources beyond the project construction limits were determined 'Not Eligible' in the previous survey. The remaining 2 newly historic resources were determined 'Not Eligible.' The study found no resources eligible for listing on the NRHP are within the APE. No further cultural resource investigations are recommended for the project.

The project will not impact any known or inventoried architectural or archaeological resources. No further cultural resource investigations are recommended for the project.

The Section 106 Scoping Request (Request for Review) for the project is in the Project File/Cultural Resources/Project Information subsection.

The Phase 1 Survey for the project is in the Project File/Cultural/Reports subsection.



# Is there an eligible or listed NRHP Historic Property in the Area of Potential Effects Pursuant to 36 No CFR part 800?

## **OES Approval/OSHPO Concurrence Date:**

01/02/2018

## Remarks:

In an IOC, dated January 2, 2018, ODOT-OES stated, in accordance with Stipulation V(C)(2) of the Section 106 Programmatic Agreement (Agreement No. 19319), executed November 8, 2017, ODOT-OES has determined that the finding of 'No Historic Properties Affected' applies to the proposed undertaking, based on the following:

- The project limits for the undertaking are limited to previously disturbed urban areas. No further archaeological investigations are warranted.
- No National Register of Historic Places-eligible or listed properties will be affected by this project.
- No further cultural resources investigations are warranted.

SHPO was provided a 15-day comment period concerning the Section 106 Coordination for the project. No SHPO comments were received by ODOT OES for the project. This completes the Section 106 review and no further cultural resource investigations are required for the project.

Tribal coordination was conducted for the project in accordance with the MOA. On January 10, 2018, the Miami Tribe of Oklahoma responded stating they have no objection to the project and are not currently aware of existing documentation directly linking a specific Miami cultural or historic site to the project site. However, as this site is within the aboriginal homelands of the Miami Tribe, if any human remains or Native American cultural items falling under the Native American Graves Protection and Repatriation Act (NAGPRA) or archaeological evidence is discovered during any phase of this project, the Miami Tribe requests immediate consultation with the entity of jurisdiction for the location of discovery. Contact Diane Hunter, Tribal Historic Preservation Officer, Miami Tribe of Oklahoma, at 918-541-8966 or dhunter@miamination.com to initiate consultation.

See the ODOT OES Section 106 Coordination correspondence, dated January 2, 2018, for the project in the Project File/Cultural Resources/Coordination subsection.

See the tribal coordination correspondence, dated January 10, 2018, for the project in the Project File/ Cultural Resources/Coordination subsection.

Subsequent to this Section 106 coordination for the project, it was determined that grading work for the project will require permanent right-of-way from one modern property. In an IOC, dated June 11, 2018, ODOT-OES stated, in accordance with Stipulation V(C)(2) of the Section 106 Programmatic Agreement (Agreement No. 19319), executed November 8, 2017, ODOT-OES determined the finding of 'No Historic Properties Affected' still applies to the proposed undertaking, based upon the following:



- The project limits for the undertaking are limited to previously disturbed urban areas. No further archaeological investigations are warranted.
- No National Register-eligible or listed properties will be affected by this project.

This completes the Section 106 review and no further cultural resource investigations are required for the project.

No additional project coordination is required with the SHPO or tribes.

See ODOT OES Section 106 Re-evaluation correspondence, dated June 11, 2018, for the project in the Project File/Cultural Resources/Coordination subsection.

What is the Section 106 effect determination in the OES Transmittal? No Historic Properties Affected

## Archaeological Resource Adverse Effect

### History/Architecture Adverse Effect

#### **Tribal Consultation**

Since no Tribe was interested in this project based on their customized preferences, no further Tribal consultation was conducted

**Environmental Commitments** 

Are there any Environmental Commitments?

No



# Ecological

## ESR

Has an ESR been completed? No Wetlands **Are Wetlands Present?** 

### **Remarks:**

Review of waterway resource mapping and field review of the project study area on April 4, 2016, by Lawhon &Associates, Inc., determined wetlands are not located in the project study area. The project will not impact any wetlands.

### **Streams & Rivers**

	Present:	Impacted:
Streams and Rivers:	No	
National Scenic River:	No	
State Scenic River:	No	
Sec 9:	No	
Sec 10:	No	

#### **Remarks:**

Review of waterway resource mapping and field review of the project study area on April 4, 2016, by Lawhon & Associates, Inc., determined streams, rivers and watercourses are not located in the project study area. The project will not impact any streams, rivers and watercourses.

### **Other Surface Waters**

	Present:	Impacted:
Reservoirs:	No	
Lakes:	No	
Ponds:	No	
Storm Water Management Facility:	No	
Jurisdictional Ditch:	No	

No



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Other (If selected please explain in remarks):	No	
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## **Remarks:**

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Review of waterway resource mapping and field review of the project study area on April 4, 2016, by Lawhon & Associates, Inc., determined other surface waters are not located in the project study area. The project will not impact any other surface waters.

## **Terrestrial Habitat**

	Present:	Impacted:
Terrestrial Habitat:	No	
Unique or high Quality:	No	

#### **Remarks:**

Review of resource mapping and field review of the project study area on April 4, 2016, by Lawhon & Associates, Inc., determined unique or high quality terrestrial habitats are not located in the project study area. The project will not impact any unique or high quality terrestrial habitats.

### Threatened or Endangered Species

	Present:	Impacted:
Within the known range of a Federal Species?	Yes	No
Federal Species/habitat found within the project area?	No	
Within the known range of a State Species?	Yes	No
State Species/habitat found within the project area?	No	

#### Remarks:

Review of resource mapping and field review of the project study area on August 3, 2017, by ODOT District 4 Environmental Section personnel determined threatened or endangered species and their habitats are not located in the project study area. The project will not impact any threatened/endangered species or their habitats.

### **Agency Coordination**

	Coordination Required:	Comments Received Date:
Ohio Department of Natural Resources (ODNR):	No	



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United States Fish and Wildlife Service (USFWS):	No	
Ohio Environmental Protection Agency (OEPA):	No	
United States Army Corps of Engineers (USACE):	No	
ODNR State Scenic River:	No	
National Park Service (NPS) National Scenic River:	No	

## Remarks:

ODOT District 4 Environmental Section personnel confirmed the project will not impact any ecological resources. Therefore, ecological resource agency coordination is not required for the project.

See the Ecologically Exempt Project Documentation Form completed for the project by ODOT District 4 Environmental Section personnel on August 3, 2017, in the Project File/Ecological/Reports subsection.

## Are there any environmental commitments?

No


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#### **Other Resources**

Farmlands

Farmlands

The proposed project is located within an Urbanized Area

The proposed project is located in an area that is in or committed to urban development or water storage and is therefore not subject to the Farmland Policy Protection Act (FPPA) in accordance with 7 CFR 658. No further coordination is required.

#### **Remarks:**

Based upon review of appropriate mapping, the project is in an urbanized area zoned for non-agricultural purposes and is not in an agricultural district. Therefore, the project satisfies the terms and conditions of the Memorandum of Understanding between the Natural Resources Conservation Service and the Ohio Department of Transportation for Projects Involving Farmlands (Agreement No. 19552), executed on March 15, 2016, and completion of the Farmland Conversion Impact Rating Form is not required for the project. No further farmland coordination is required for the project.

#### Are there any environmental commitments?

#### **Drinking Water**

## The proposed project is wholly or partially located within the USEPA designated boundaries of a Sole Source Aquifer

	Present:	Impacted:
The proposed project is wholly or partially located within the OEPA designated boundaries of a Source Water Protection Area	No	

#### Coordination with the Local Public Water Administrator is required

	Present:	Impacted:
Residential Wells are present	No	

#### **Remarks:**

The Ohio EPA Division of Drinking and Ground Waters mapping tool was used to identify the presence of drinking water resources within the project study area. The map indicates public water system wells, intakes, drinking water source protection areas, non-

Yes

No

No



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transient, non-community water systems or transient non-community water systems are not within 1/2 mile of the project study area. The project area does not lie over a Federally-designated sole source aquifer. See the water source protection area map for the project in the Project File/Other Resources/Drinking Water subsection.

A search of the ODNR Division of Soil and Water Well Logs identified one residential drinking water well located in proximity to the project. The project will not impact this drinking water well. See the well log data for the project in the Project File/Other Resources/Drinking Water subsection.

The project will not impact any drinking water resources.

#### Are there any environmental commitments?



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## Section 4(f)

#### Section 4(f) Determination

Section 4(f) properties are within and/or adjacent to the proposed project area

#### Identified Section 4(f) Properties

#### **Remarks:**

Review of available maps and property ownership records by Lawhon & Associates, Inc. did not identify any public parks, recreation areas, wildlife and waterfowl refuges, or historic sites within the project study area. The Archbishop Hoban High School, a private Catholic school, has various athletic facilities located north of IR 76 and east of Inman Street, adjacent to the project study area. These athletic facilities are not public-owned facilities. The former Goodrich Middle School property, located east of IR 77/Coventry Street and south of Lafollette Street, adjacent to the project study area, is owned by the city of Akron. This former middle school property does not serve any recreational functions of the city of Akron.

A future pedestrian/bike trail, known as the Rubber City Heritage Trail, may traverse within/along the project study area. However, this future pedestrian/bike trail currently has no dedicated funding nor an established trail alignment to construct it. As part of its future alignment, it may use the proposed new pedestrian/bicycle bridge to be constructed over IR 77 between Lafollette Street and Kipling Street as part of the project. The Ohio & Erie Canalway Coalition, a private, non-profit organization working to develop the Rubber City Heritage Trail to connect with the Ohio & Erie Canal Towpath Trail, was consulted about the proposed new pedestrian/bicycle bridge over IR 77 to be constructed as part of the project.

On January 2, 2018, ODOT-OES determined the finding of 'No Historic Properties Affected' applies to the proposed undertaking. Furthermore, on June 11, 2018, ODOT-OES determined the finding of 'No Historic Properties Affected' still applies to the proposed undertaking.

Based upon the above information, Section 4(f) properties do not exist within the project study area.

The project will not impact any Section 4(f) properties.

#### Are there any environmental commitments?



## Section 6(f)

#### Section 6(f) Determination

	Present:	Impacted:
6(f) Properties:	No	

#### **Remarks:**

Research of the Land and Water Conservation Fund (LWCF) Coalition website https://www.lwcfcoalition.com/tools did not identify any parks or recreation areas within the project study area that received Section 6(f) funds.

See the LWCF Grant Listing for Summit County in the Project File/Section 6(f)/Project Information subsection.

The project will not impact any Section 6(f) properties.

#### Are there any environmental commitments?



## **Community Impacts**

#### **Community Impacts**

#### Will the proposed action comply with the local/regional development patterns for the area?

#### **Remarks:**

The project is consistent with local plans and is not expected to change development patterns in the area. This project is listed in the Transportation Outlook 2040, the long-range regional transportation plan for Summit County, Portage County and part of Wayne County, as prepared by the Akron Metropolitan Area Transportation Study (AMATS), the metropolitan planning organization for Summit County, Portage County and part of Wayne County. Moreover, the project is also listed in the AMATS Fiscal Year (FY) 2018 - FY 2021 Transportation Improvement Program (TIP).

#### Will the proposed action result in substantial negative impacts to community cohesion?

#### **Remarks:**

The project will not result in any substantive negative impacts to community cohesion within the project study area. Furthermore, community cohesion impacts are not expected with the proposed permanent removal of the existing Lafollette Street bridge over IR 77 as part of the project because the project also proposes to construct a new pedestrian/bicycle bridge over IR 77 between Lafollette Street and Kipling Street.

#### Will the proposed action result in indirect or cumulative impacts?

#### Remarks:

Reasonably foreseeable secondary or cumulative impacts are not expected from the project, including the proposed permanent closure of the existing IR 76 westbound exit ramp to Inman Street, the proposed permanent closure of the existing IR 77 southbound exit ramp to Lovers Lane and the proposed permanent removal of the existing Lafollette Street bridge over IR 77.

# Will the proposed action result in substantial impacts on health and educational facilities, public utilities, fire, police, emergency services, religious institutions, public transportation, pedestrian and bicycle facilities?

#### **Remarks:**

The project, including the proposed permanent closure of the existing IR 76 westbound exit ramp to Inman Street, the proposed permanent closure of the existing IR 77 southbound exit ramp to Lovers Lane and the proposed permanent removal of the existing Lafollette Street bridge over IR 77, will not result in substantive impacts to health and educational facilities, public utilities, fire, police, emergency services, religious institutions, public transportation or pedestrian/bicycle facilities.

The various utilities within the project study area were contacted and received copies of the Stage 1 Design plans. Several sets of correspondence were sent to the utilities and responses received in February and March 2018. Relocations of existing utilities within the project area will be necessary to construct the project. These utility relocations will occur within the existing highway/street rights-of-way. Coordination with affected utility owners is ongoing during project design and will continue throughout project construction.

The project will include appropriate maintenance of traffic measures to minimize traffic disruptions during project construction. Temporary ramp closures and detours will be necessary to connect the proposed new ramps with the existing highways. Various temporary lane closures will also occur along IR 76, IR 77 and SR 8 throughout construction of the project. Final maintenance of traffic (MOT) plans for the project will be developed during the Stage 3 design phase. Public involvement activities that were

No

Yes

No



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conducted for the project included this maintenance of traffic information to determine impacts and obtain feedback from stakeholders, the public and emergency/public services. The Akron emergency/public services attended and participated in the various public involvement activities conducted for the project. Local emergency/public services and community notifications of the proposed temporary ramp/lane closures, detours and other maintenance of traffic measures to be implemented for the project shall be performed in accordance with ODOT Traffic Engineering Manual Notes 642-58 Notification of Traffic Restrictions and 642-8 Item 614, Maintaining Traffic (Notice of Closure Sign), as applicable.

In addition, the project will also construct a new pedestrian/bicycle bridge over IR 77 between Lafollette Street and Kipling Street as part of the proposed improvements.

#### Will the proposed action displace residents, businesses, institutions or farms?

No

#### **Remarks:**

The project will not displace any residents, businesses, institutions or farms.

#### Are there any Environmental Commitments?



## **Underserved Populations**

#### **Underserved Populations**

#### **Identified Underserved Populations**

Census Block Group #	% Minority	% Low Income
391535041001	22	88
391535042001	24	94
391535042002	32	66
391535046001	57	67
391535046004	76	67
391535032001	75	52
391535042003	51	62
391535032001	62	69

Are Underserved Populations located within and/or adjacent to the proposed project area?	Yes
Are there any relocations?	No
Will there be changes to access?	Yes
Will access to shopping, bus stops, schools, jobs, recreational resources, community centers, etc. be diminished or completely restricted on a permanent basis for an Underserved Population?	No
Will man-made dividers such as an overpass, bridge, 4-lane or greater roadway or railroad negatively impact the extent to which a community feels connected or cohesive for an Underserved Population?	No
Will access to or use of the transportation improvement be denied to any Underserved Populations (for reasons such as cost to use, ability to access, etc.)?	No
Will the proposed project result in unanticipated additional impacts to any Underserved Populations?	No
Were any concerns related to impacts on Environmental Justice Populations or any other unique factors that could result in a disproportionately high and adverse effect raised during public involvement?	No
Were any concerns related to impacts on Title VI Populations or any other unique factors that could result in a disparate impact raised during Public Involvement?	No
Were any concerns or any other unique factors that could result in an impact to any of the other Underserved Populations (Limited English Proficiency, Older Adults, or Individuals with Disabilities) raised during Public Involvement?	No

#### **Remarks:**

Based on the proposed permanent closure of the existing IR 76 westbound exit ramp to Inman Street, the proposed permanent closure of the existing IR 77 southbound exit ramp to Lovers Lane and the proposed permanent removal of the existing Lafollette Street bridge over IR 77 with the accompanying proposed construction of a new pedestrian/bicycle bridge over IR 77 between Lafollette Street and Kipling Street, an



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Underserved Populations Impact Analysis Report (UPIAR) was completed for the project by Lawhon & Associates, Inc. during June 2018. The analysis concluded that the project will not have any impacts to Underserved Populations greater than the general population. On July 3, 2018, ODOT-OES stated the report is in compliance with the ODOT-Underserved Populations Guidance (revised January 2018) and approved the UPIAR for the project. The project will not result in disproportionately high and adverse effects on any Environmental Justice population or disparate impacts on any Title VI population. Therefore, no further coordination is required for the project.

Informal coordination was conducted with Akron Metropolitan Housing Authority to provide project information and the opportunity to comment on the project primarily as it related to underserved populations. The agency had no comments related to the project.

The proposed project will have no disproportionately high and adverse effects to minority or low-income populations or disparate impacts to a Title VI population based upon the table above, the attached mapping, and the answers to the questions above. No concerns related to impacts on Environmental Justice or Title VI populations were raised as a result of public involvement activities conducted for the project. Therefore, in accordance with the protections of Executive Order 12898, FHWA Order 6640.23A and Title VI of the Civil Rights Act of 1964, no further analysis is required for the project.

The proposed project will have no substantive impacts to Limited English Proficiency Populations, Older Adults and Individuals with Disabilities based upon the table above, the attached mapping, and the answers to the questions above. No concerns related to impacts on these Underserved Populations were raised as a result of public involvement activities conducted for the project. Therefore, in accordance with the protections of the Age Rehabilitation Act of 1973, Discrimination Act of 1975, Americans with Disabilities Act of 1990, and Executive Order 13166, no further analysis is required for the project.

See the UPIAR for the project in the Project File/Underserved Populations/Reports subsection.

See the ODOT-OES UPIAR Approval IOC, dated July 3, 2018, for the project in the Project File/Underserved Populations/Coordination subsection.

#### Are there any Environmental Commitments?



## **Public Involvement**

#### **Public Involvement**

# Please provide a summary of the Public Involvement activities that have been conducted for this project. (For example press releases, letters to affected property owners and residents, meetings, special purpose meetings, newspaper articles, etc)

Property Owner letters related to field survey work were sent on April 4, 2017, for this project.

An invitation letter was sent to potential stakeholders on October 3, 2016, announcing the October 19, 2016, Stakeholders Meeting. The purpose of the meeting was to present the project and gather input from the Stakeholders. Stakeholders representing Archbishop Hogan High School, AMATS, city of Akron, Akron City Schools, Akron Fire Department, Akron Police Department, Akron City Council, ODOT and project consultants attended the meeting. Stakeholders provided comments on Inman Street closure, keeping LaFollette Street bridge, school in project area is closed and the project schedule.

A Public Involvement Meeting was conducted on October 27, 2016, from 5-7 pm at the Glover Community Learning Center, 935 Hammel Street, Akron. Meeting announcements were sent to an extensive list of community residents on October 12, 2016. ODOT District 4 issued a press release on October 13, 2016, announcing the meeting. Meeting announcements were also posted on ODOT social media sites. On October 14, 2016, the Akron Beacon Journal posted a news article on the online page about the project and the meeting. Seventy-five people, primarily residents, attended the meeting.

A second Stakeholder meeting was conducted for the project on December 6, 2017. Invitation letters were sent to previously identified stakeholders on November 22, 2017. Several agencies were identified as possible links to the neighborhoods in the project study area. East Akron Neighborhood Development Corporation, Truly Reaching You Ministries and six churches were invited to the December 2017 Stakeholder Meeting. No one from these agencies or churches attended the December 2017 Stakeholder Meeting. Stakeholders representing the City of Akron Police and Fire Departments, Akron Metropolitan Area Transportation Study, Alcon Tool, ODOT, and project consultants attended the meeting. Following a presentation by the project team the attendees provided comments and asked questions, which were addressed during the meeting, on the removal of the Lafollette Street vehicle bridge over IR 77 and replacing it with a new bike/pedestrian only bridge.

A second Public Involvement Meeting was conducted on March 6, 2018, from 5:00 pm - 7:00 pm at the Glover Community Learning Center, 935 Hammel Street, Akron. Letters announcing this meeting were sent to over 200 residents, public officials and agencies on February 16, 2018. Meeting announcement flyers were also posted at various locations around the project study area on February 22, 2018. Locations included eight grocery stores, six churches and various other businesses. ODOT District 4 issued a press release on February 20, 2018, announcing the Public Involvement Meeting. A Public Involvement Meeting announcement was posted on the ODOT District 4 website. Paid advertisements were also published in the Akron Beacon Journal on February 18 and March 4, 2018. 107 people attended the meeting representing residents, local churches, AMATS (MPO), city/township officials, business owners and Channel 19 news station reporters.



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See the public involvement materials for the project in the Project File/Public Involvement/Project Information subsection.

Was Public Involvement conducted in compliance with Title VI requirements?	Yes
Is there any substantial environmental controversy on environmental grounds?	No
Please summarize the Public Involvement responses received.	

One written comment was received from Bishop Hogan High School following the October 19, 2016, stakeholder meeting. ODOT's written response was included with responses to the comments received at the public meeting.

Thirteen written comments were received during and after the October 27, 2016, public involvement meeting conducted for the project. The comments included questions about noise walls, not closing Lovers Lane, Lovers Lane/Inman Avenue closures affecting Hoban High School, keep Lafollette bridge open, traffic congestion on SR 8 and ramp configurations. ODOT provided written responses to these comments by letter on December 23, 2016. A summary of the received comments and responses to comments was also posted to the ODOT District 4 website on January 4, 2017.

Twenty-eight written comments were received during and after the March 6, 2018, public involvement meeting. Comments included need for two lane ramps, project schedule, like removing Lafollette bridge, SR 8 traffic congestion, visual affects of noise walls, concern for lanes shut down during construction but no work being done, two lanes at US 224, no left hand exits, ODOT coordinate with GPS mapping providers during construction, weaving now and future, not close Kipling or Coventry Drive, relocate Coventry onto former school property, keep Lafollette bridge, concern for problem youth using proposed Lafollette bridge to enter neighborhood, INVEST analysis should be conducted, long construction time line, Crosier traffic congestion, trail from Kipling to Coventry and Berkhardt will be impacted by other closures. ODOT provided written responses to these comments on April 17, 2018.

See the received comments, responses to comments and related documentation for both public involvement meetings conducted for the project in the Project File/Public Involvement/Project Information subsection.

#### Are there any Environmental Commitments?



#### Permits

waterway Permits
Are Waterway Permits required? No
ODNR
Shore Structure Permit : No
Remarks:
Based on review of waterway resource mapping and field review of the project study area on April 4, 2016, by Lawhon & Associates, Inc., wetlands, streams, rivers and watercourses are not located in the project study area. The project will not impact any wetlands, streams, rivers and watercourses. Therefore, the project does not require any waterway permits.
Are there any environmental commitments? No
Storm Water Permits
NPDES Construction General Permit for Stormwater (NOI): Yes
Watershed Specific NPDES Construction General Permit for Stormwater (NOI): No
Remarks:
Construction of the project will require a total disturbance of approximately 37 acres of earthen area. Consequently, as more than one acre of land will be disturbed to construct the project, a National Pollutant Discharge Elimination System (NPDES) Construction General Permit for Stormwater is required for the project and a Notice of Intent (NOI) will be submitted to Ohio EPA requesting NPDES coverage for this project.
Are there any environmental commitments? Yes
Floodplains
The proposed project involves encroachment within a Special Flood Hazard Area (SFHA) No
Remarks:
Based upon review of the FEMA Flood Insurance Rate Map (FIRM) Community Panels 39153C0184F, 39153C0195F, 39153C0203F and 39153C0211F by Lawhon & Associates, Inc., on February 21, 2018, the project is not located within any regulated floodplains. The project will not impact any floodplains. Therefore, the project does not require any floodplain permits.

See the FEMA FIRM mapping for the project in the Project File/Permits/Floodplains subsection.

#### Are there any environmental commitments?



#### Landfills

#### Is a 2713 Permit required?

#### **Remarks:**

Based on the regulated materials review activities conducted for the project, former/existing landfills do not exist within the project study area. The project will not impact any former/existing landfills. Therefore, the project does not require an Ohio EPA Rule 2713 Permit.

#### Are there any environmental commitments?

No



#### **Environmental Commitments**

#### Noise

1) The Project Designer shall incorporate the following into the plans: Seven barriers and the preferred textures and colors are proposed for NSA 1 - Ashlar Gray; NSA 3 - Ashlar Gray; NSA 4 None; NSA 6 - Drystack Tan; NSA 8 - Drystack Tan; and NSA 9 - Drystack Tan.

2) ODOT will continue to pursue votes to obtain over 50% respondents for the proposed NSA 5 noise wall and provide details to Project Designer.

#### **Permits - Storm Water Permits**

1) ODOT shall prepare and submit the NOI to the OEPA and shall be responsible for obtaining the NPDES permit prior to the start of construction activities. The permit special provisions shall be adhered to and included in the project plans.



## **Preparers and Approvals**

Form Preparer:	Lib La 14 Iru	by Rushley whon AND Associates 41 King Avenue, Columbus OH 43212 shley@lawhon-assoc.com

#### Supporting Form Preparer(s): Robert Lang Thomas Powell Lori Keyser

#### **Approvals & Electronic Signatures**

Approved & Electronically Signed By:	Approval Date:
Edward Deley (PROGRAM ADMIN 3)	1/30/2019



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## Appendix

General
Aerial Map.pdf
County Map.pdf
STIP Listing.pdf
TIP Listing.pdf
USGS Quadrangle Topographical Map.pdf
Air
Conformity Determination Approval - PM 2.5.pdf
Coordination with OEPA-USEPA-FHWA - PM 2.5.pdf
Coordination with OEPA-USEPA-FHWA - PM 2.5_Clarification.pdf
Noise
OES Approval - Noise Analysis.pdf
ESA
RMR Approval.pdf
Cultural Resources
OES Scoping Guidance - History Architecture.pdf
OES Section 106 Effect Determination - Re-Evaluation.pdf
OES Section 106 Effect Determination.pdf
SHPO Response - PID 77270.pdf
Ecological
Ecological Review Form - Ecologically Exempt Project.pdf
Other Resources
Water Source Protection Area Map.pdf
Well Log Data.pdf
Section 6(f)
LWCF Grant Listing.pdf
Underserved Populations
Census Mapping.pdf
OES Approval - Underserved Populations Impact Analysis.pdf



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Public Involvement
District 4 Website Postings - Screen Shots.pdf
News Article.pdf
Press Release 2-20-18.pdf
Press Release.pdf
Public Comments Received.pdf
Public Meeting Comment Sheet.pdf
Public Meeting Exhibits 3-6-18.pdf
Public Meeting Exhibits.pdf
Public Meeting Handouts 3-6-18.pdf
Public Meeting Handouts.pdf
Public Meeting Notification - First Advertisement.PDF
Public Meeting Notification - Second Advertisement .PDF
Public Meeting Notification 2-8-2018.pdf
Public Meeting Notification.pdf
Public Meeting Notification-Social Media.pdf
Public Meeting Sign In Sheet 3-6-18.pdf
Public Meeting Sign In Sheet.pdf
Public Meeting UP Flyer Posted 2-27-18.pdf
Response to Public Comments - Letters.pdf
Response to Public Comments - Web.pdf
Response to Public Comments 2018.pdf
Stakeholder Comments.pdf
Stakeholder Contact List 2016.pdf
Stakeholder Contact List 2017.pdf
Stakeholder Email Comments Responses.pdf
Stakeholder Handout.pdf
Stakeholder Meeting Minutes or Notes 10-19-16.pdf
Stakeholder Meeting Minutes or Notes 12-6-17.pdf
Stakeholder Meeting Sign In Sheet 10-19-16.pdf
Stakeholder Notification 12-6-2017 Meeting.pdf
Stakeholder Notification Letter 10-19-2016.pdf



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Website Posting Comments Responses.pdf

Permits

FEMA FIRM.pdf







## Legend



250 500 n

1,000

2,000

1,500













#### Ecologically Exempt Project Documentation Form (v 01-17)

The environmental review, consultation, and other actions required by applicable Federal environmental laws for this project are being, or have been, carried-out by ODOT pursuant to 23 U.S.C. 327 and a Memorandum of Understanding dated [December 11, 2015], and executed by FHWA and ODOT.

Project C-R-S /	Name:	SUM 76/77 Central Interchange	PID:	101402	Date of Review:	8/3/2017	
Evaluated By:	Robert	Lang, District 4 Environmental S	pecialis	st			

General Project Description (include project scope details that would influence impact determinations):

Replacement of bridges supporting the ramp from I-76 west to I-77 south and the ramp from I-76/I-77 east to SR-8 north. The new ramps will be constructed on a new alignments. The Lafollette Street Bridge over I-77 is proposed to be replaced with a bicycle/pedestrian bridge just south of its current alignment. All construction will occur within existing right-of-way.

- Based on a consideration of the actions associated with this project type, this project does not have the potential to impact ecological resources regulated under the under Sections 404 or 401 of the Clean Water Act, Section 7 of the Endangered Species Act, or the Fish and Wildlife Coordination Act, and should not result in any activities that violate ORC Chapters 1518 and 1531, or Section 1533.324. This project is considered Ecologically Exempt under the Ecological MOA (Agreement 19394). This form will be included in the project file as documentation of compliance with the acts and regulations covered by the agreement.
- Based on the actions associated with this project type, this project requires an assessment of the following additional considerations to document the potential to impact ecological resources.

#### Additional Considerations:

- Projects located within flood plains must comply with necessary flood plain criteria.
- Projects that occur within 1,000 feet of any state designated wild, scenic or recreational river will be assessed and coordinated (if applicable) in accordance with *Memorandum of Agreement Between the Ohio Department of Transportation and the Ohio Department of Natural Resources (Division of Watercraft) For Project Coordination On Ohio's State Wild, Scenic and Recreational Rivers.*
- Impacts to publically owned recreation lands will be evaluated and coordinated in accordance with Section 4(f) of the Department of Transportation (DOT) Act of 1966 and Section 6(f) of the Land and Water Conservation Act when applicable.

#### **Certification** (*Must be acknowledged by a responsible party*)

I certify that I have personally examined and am familiar with the information in this form, and that the data collection was supervised by an individual(s) prequalified to conduct ecological surveys for ODOT or by trained ODOT Environmental staff. Based on my inquiry of those persons immediately responsible for obtaining the information contained in the form, I believe that the determinations have been collected in accordance with the ODOT Ecological Manual current at the time of the form preparation, and is true, accurate, and complete.

Name: Robert Lang

Date: 8/3/2017

Title: District 4 Environmental Specialist

August 7, 2017

## Noise Analysis Report SUM-I 76/I 77/SR 8 Akron Central Interchange

PID 101402



Prepared for: Ohio Department of Transportation District 4 2088 S. Arlington Road Akron, Ohio 44306

> Prepared by: Lawhon & Associates, Inc. 1441 King Avenue Columbus, Ohio 43212



The environmental review, consultation, and other actions required by applicable Federal environmental laws for this project are being, or have been, carried-out by ODOT pursuant to 23 U.S.C. 327 and a Memorandum of Understanding dated December 11, 2015, and executed by FHWA and ODOT.

## Noise Analysis Report SUM-76/77/SR8-Akron Central Interchange PID 101402

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Appendix G Traffic Noise Model Input/Output Files

## **EXECUTIVE SUMMARY**

The Ohio Department of Transportation (ODOT) is proposing to improve the Central Interchange in Akron, Ohio. The Akron Central Interchange is located in Akron, Ohio at the intersection of Interstate 76 (I-76), Interstate 77 (I-77) and State Route 8 (SR 8) and is shown on Figure 1 in Appendix A. To address poor bridge conditions and to improve the substandard ramp geometrics, ODOT has proposed the reconstruction and realignment of ramps in the Central Interchange. The proposed improvement is shown on Figure 2 in Appendix A. The ramps to be improved include the eastbound (EB) I-76 ramp to northbound (NB) SR 8 (Ramp R) and the westbound (WB) I-76 ramp to southbound (SB) I-77 (Ramp N). The existing and proposed relocations of Ramp R and Ramp N are shown on Figure 2 in Appendix A. Also as part of the project, the I-76 WB exit ramp to NB SR 8 will be smoothed out by shifting the alignment slightly to the west. The existing EB I-76 exit ramp to Inman Street and the existing SB I-77 exit ramp to Lovers Lane will both be removed.

A noise analysis was prepared for all noise sensitive receivers located within 500 feet of the existing driving lanes and ramps along I-76 from the pedestrian crossover bridge at Sumner Street to a point approximately 800 feet west of Arlington Road and along SR 8 from a point approximately 500 feet north of the Johnston Street overpass to Lovers Lane on I-77. The project area for the noise analysis is shown on Figure 3 in Appendix A. The noise analysis for this project was conducted in accordance with the Code of Federal Regulations (CFR), Title 23, Part 772, and the U.S. Department of Transportation, Federal Highway Administration (FHWA), Highway Traffic Noise Analysis and Abatement Policy and Guidance (FHWA, 2011). The project was further conducted in accordance with the Ohio Department of Transportation (ODOT) noise policy pertaining to Standard Procedure for Analysis and Abatement of Highway Traffic Noise Analysis manual dated February 2013. Existing year 2016 noise levels and noise levels for Design Year 2036 Build alternative were modeled using the FHWA Traffic Noise Model (TNM) Version 2.5 (FHWA, 1998).

Traffic generated noise levels were predicted at nine noise sensitive areas (NSA), shown on Figure 5 in Appendix A, using the FHWA TNM Version 2.5 for the roadway configurations for the existing year 2020 and the design year 2040 Build alternative. TNM predicted traffic noise impacts to occur at all nine NSAs under the design year build roadway configuration.

In accordance with 23 CFR Part 772, when noise impacts are identified as a result of a proposed action, noise abatement measures must be considered for impacted sites predicted to approach or exceed the applicable FHWA NAC.

Noise abatement, in the form of noise barrier walls were found to be both reasonable and feasible for eight of the nine NSAs. Noise abatement was found to be not reasonable and feasible at NSA 2.

Noise barrier walls recommended for inclusion in the project are shown on the following table.

Recommended Noise Barrier Walls											
Barrier	Barrier	Barrier	Square	Maximum	Benefitted Broperties b	Barrier	Cost per	Effectiveness		Barrier Location <sup>f</sup>	Barrier
	(feet) (fe	(feet) Barrier	Loss <sup>a</sup> (dB)	Fropencies *	0051	receptor	Feasible <sup>d</sup>	Reasonable <sup>e</sup>	Recommended <sup>g</sup>		
NSA 1 Scenario 2	1,912	14	26,773	12.0	45	\$669,323	\$14,873	Yes	Yes	EOS	Yes
NSA 3 Scenario 2	1,894	16	30,304	7.7	32	\$754,713	\$23,584	Yes	Yes	EOS/ROW	Yes
NSA 4 Scenario 1	1,156	14	16,100	7.7	16 (Equivalent)	\$404,711	\$25,294	Yes	Yes	EOS/ROW	Yes
NSA 5 Scenario 1	1,656	14	23,184	11.1	69	\$747,460	\$10,832	Yes	Yes	EOS	Yes
NSA 6 Scenario 2	2,265	15	33,975	10.9	69	\$849,056	\$12,305	Yes	Yes	EOS/ROW	Yes
NSA 8 Scenario 1	1,910	14	26,740	9.8	22	\$669,366	\$30,425	Yes	Yes	ROW	Yes
NSA 9 Scenario 1	1,225	14	17,150	10.1	21	\$428,750	\$20,416	Yes	Yes	ROW	Yes

<sup>a</sup> Insertion Loss (IL) is the maximum noise reduction provided by the noise barrier.

<sup>b</sup> A receptor is considered benefited by the noise barrier if the IL is 5dB or greater.

<sup>c</sup> Cost is based on \$25 per square foot of noise barrier constructed on ground and \$100 per square foot constructed on structure.

<sup>d</sup> A noise barrier is considered feasible if it can provide a substantial noise reduction of at least 7dB at one receptor location.

<sup>e</sup> A noise barrier is considered cost reasonable if the cost per benefited receptor is less than \$35,000.

<sup>f</sup> The location of the noise barrier wall: ROW=noise barrier is located along the right of way line; EOS=noise barrier is located along the edge of shoulder.

<sup>9</sup> Noise barrier recommendation is based on the number of benefited receptors and the relative cost per benefited receptor.

## Section 1.0 INTRODUCTION

#### **Project Description**

The Akron Central Interchange is located in Akron, Ohio at the intersection of Interstate 76 (I-76), Interstate 77 (I-77) and State Route 8 (SR 8). The location of the Central Interchange is shown on Figure 1 in Appendix A. To address poor bridge conditions and to improve the substandard ramp geometrics, ODOT has proposed the reconstruction and realignment of ramps in the Central Interchange in Akron, Ohio. The ramps to be improved include the eastbound (EB) I-76 ramp to northbound (NB) SR 8 (Ramp R) and the westbound (WB) I-76 ramp to southbound (SB) I-77 (Ramp N). The existing and proposed relocations of Ramp R and Ramp N are shown on Figure 2 in Appendix A. Also as part of the project, the I-76 WB exit ramp to NB SR 8 will be smoothed out by shifting the alignment slightly to the west. The existing EB I-76 exit ramp to Inman Street and the existing SB I-77 exit ramp to Lovers Lane will both be removed.

A noise analysis was prepared for all noise sensitive receivers located within 500 feet of the existing driving lanes and ramps along I-76 from the pedestrian crossover bridge at Sumner Street to a point approximately 800 feet west of Arlington Road and along SR 8 from a point approximately 500 feet north of the Johnston Street overpass to Lovers Lane on I-77. The project area for the noise analysis is shown on Figure 3 in Appendix A.

#### Land Use

Land use within the study area is predominantly residential as shown on Figure 4 in Appendix A. On the east leg of I-76, Hoban High School is on the south side of the highway with the school's athletic fields being located on the north side of the highway. The two areas are connected by a pedestrian bridge. There are also isolated areas of manufacturing and a block of undeveloped land in the northwest quadrant of the interchange. The study area was divided into nine noise sensitive areas (NSA) as shown on Figure 5 in Appendix A. All nine NSAs have been modeled for the Existing Year 2020 and the Design Year 2040 noise levels and have been evaluated for noise impact.

## Section 2.0 NOISE ANALYSIS

The noise analysis prepared for this project was conducted in accordance with the Code of Federal Regulations (CFR), Title 23, Part 772, and the U.S. Department of Transportation, FHWA, *Highway Traffic Noise Analysis and Abatement Policy and Guidance* (FHWA, 2011). The project was further conducted in accordance with the ODOT noise policy pertaining to *Standard Procedure for Analysis and Abatement of Highway Traffic Noise* (ODOT, 2015) and the changes, clarifications and additions incorporated into ODOT's Highway Traffic Noise Analysis manual dated April 2015. The Existing Year 2020 noise levels and noise levels for the Design Year 2040 Build alternatives were modeled using the FHWA Traffic Noise Model (TNM) Version 2.5 (FHWA, 1998). Specific data and assumptions used in this analysis are described as follows:

#### Applicability

This noise analysis has been performed in accordance with the policy that applies to Type I projects. A Type I project as described by the ODOT Standard Procedures for Analysis and Abatement of Highway Traffic noise document is a Federal aid highway project for the construction of highway on new location or the physical alteration of an existing highway which significantly changes either the horizontal or vertical alignment or increases the number of through traffic lanes (ODOT, 2015).

#### Analysis Objectives

The objectives of this noise analysis include: (1) identification of existing and future noise sensitive areas in the vicinity of the proposed roadway improvement; (2) characterization of the existing noise environment through computer modeling; (3) prediction of future year noise levels for the Design Year 2040 Build alternative through computer modeling, (4) comparison of existing year noise levels against future year noise levels to identify noise impact within the project area; (5) evaluation of reasonable and feasible noise abatement measures for reducing noise levels where noise impacts are identified; and, (6) communication of the results to the public and local officials.

#### **Noise Descriptors**

Noise descriptors are used to describe the time varying nature of noise. In this report, noise levels will be described as hourly A weighted equivalent sound level in decibels, or **dBA**  $L_{eq(h)}$ . Noise is defined as unwanted sound, which is produced by the vibration of sound pressure waves. Sound pressure levels are used to measure the intensity of sound and are described in terms of decibels (**dB**). Decibels are a logarithmic unit, which expresses the ratio of sound pressure level to a standard reference scale. The decibel scale has a range of 0-120 and is used to show the amount of sound pressure at a given location from the general environment of specific sources. An increase or decrease of 10 dB is perceived as doubling or halving of the sound intensity since the decibel scale is logarithmic. In general, the average person cannot detect an increase or decrease in sound pressure level of less than 3 dB. A change in sound pressure level of 5 dB is readily perceptible by most people.

Sound is composed of various frequencies which are measured in cycles per second or Hertz (Hz). The human ear can detect a wide range of frequencies from 20 to 20,000 Hz, but is most sensitive to sounds over a frequency range of 200 to 5,000 Hz. The human ear does not respond in a uniform manner to different frequency sounds. A sound pressure level of 70 dB will be perceived as much louder at 1,000 Hz than at 100

Hz. To account for this, various weighting methods have been developed to reflect human sensitivity to noise. The purpose of a weighting method is to de-emphasize the frequency ranges in which the human ear is less sensitive. The most commonly used measure of noise level is the A-weighted sound level (dBA). The dBA sound level is widely used for transportation related noise measurements and specifications for community noise ordinances and standards. The dBA has been shown to be highly correlated to human response to noise.

In addition to noise fluctuating in frequency, environmental noise will fluctuate in intensity from moment to moment. Over a period of time there will be quiet moments and peak levels resulting from noisy, identifiable sources (trucks, aircraft, etc.). Because of these fluctuations, it is common practice to average these noise level fluctuations over a specified period of time. The equivalent sound level over a given period of interest,  $L_{eq}$ , is widely accepted as a valid measure of community noise. The  $L_{eq}$  is equal to the equivalent steady state noise level which, in a stated time period, would contain the same acoustical energy as the time varying noise levels that actually occurred during the same time period. The hourly value of  $L_{eq}$ , based upon the peak hour percentage of the annual average daily traffic, is referred to as  $L_{eq(h)}$ . Surveys have shown that  $L_{eq}$  properly predicts annoyance, and this descriptor is commonly used for noise measurement, prediction, and impact assessment.

## Noise Sensitive Areas (NSA)

The FHWA has established seven Activity Categories that must be considered for Noise Abatement Criteria (NAC). The Activity Categories are described in Table 1.

Table 1.   Noise Abstement Criteria (NAC): Hourly A Weighted Sound Level in Decibels (dBA)							
Activity Category	Leq(h)	L10(h)	Description of Activity Category				
A	57 (Exterior)	60 (Exterior)	Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose.				
В	67	70	Residential				
C	67 (Exterior)	70 (Exterior)	Active sports areas, amphitheaters, auditoriums, campgrounds, cemeteries, daycare centers, hospitals, libraries, medical facilities, parks picnic areas, places of worship, playgrounds, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, recreational areas, Section 4(f) sites, television studios, trails and trail crossings.				
D	52 (Interior)	55 (Interior)	Auditoriums, daycare centers, hospitals, libraries, medical facilities, places of worship, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, recording studios, schools and television studios.				
Е	72 (Exterior)	75 (Exterior)	(Exterior) Hotels, motels, offices, restaurant/bars, and other developed lands properties or activities not included in A-D, or F.				
F	N/A	N/A	Agriculture, airports, bus yards, emergency services, industrial, logging, maintenance facilities, manufacturing, mining, rail yards, retail facilities, shipyards, utilities (water resources, water treatment, electrical) and warehousing.				
G	N/A	N/A	Undeveloped lands that are not permitted.				

Nine NSAs were identified within the project area. The locations of the nine NSAs are shown on Figure 5 in Appendix A and described, from west to east as follows:

## <u>NSA 1</u>

NSA 1 is located on the west leg of the Central Interchange on the north side of I-76. NSA 1 begins at the pedestrian crossover bridge at Sumner Street and extends east to Spicer Street, an approximate distance of 1,800 feet. NSA 1 is comprised entirely of residential dwelling units and falls into Activity Category B with an exterior noise abatement level of 67 dBA.

## <u>NSA 2</u>

NSA 2 is located in the northwest quadrant of the Central Interchange. NSA 2 begins at Hedden Avenue and extends east to Wilson Street, an approximate distance of 900 feet. NSA 2 is comprised mostly of residential dwelling units with a couple of commercial buildings on the north side of Johnston Street. The noise sensitive receptors fall into Activity Category B having an exterior noise abatement level of 67 dBA.

## <u>NSA 3</u>

NSA 3 is located in the northeast quadrant of the Central Interchange and fronts the sweeping exit ramp from WB I-76 to NB SR 8. NSA 3 begins at Inman Street and follows Lumiere Street north and west to Jonhstone Street, an approximate distance of 1,600 feet. NSA 3 is comprised of residential dwelling units having an Activity Category B exterior noise abatement level of 67 dBA.

## <u>NSA 4</u>

NSA 4 is located on the east leg of the Central Interchange on the north side of I-76. NSA 4 begins at Inman Street and extends east an approximate distance of 1,700 feet. NSA 4 is comprised of the athletic fields of Hoban High School. A pedestrian overpass road connects the athletic fields to the high school and is situated near the center of the NSA. NSA 4 falls into Activity Category C having an exterior noise abatement level of 67 dBA.

## <u>NSA 5</u>

NSA 5 is located on the west leg of the Central Interchange on the south side of I-76. NSA 5 begins at the pedestrian crossover bridge at Sumner Street and extends east, past Brown Street, along the SB exit ramp to SB I-77 to East Crosier Street. NSA 5 is comprised mostly of residential dwelling units, a church and several commercial buildings located on the north and south sides of South Street and in the SE quadrant of the interchange. The residential dwelling units fall into Activity Category B with an exterior noise abatement level of 67 dBA. The Church, Christ is the Answer Ministries located on the north side of South Street, has no areas for frequent outdoor use and falls into Activity Category D having an interior noise abatement level of 52 dBA.

## <u>NSA 6</u>

NSA 6 is located in the southeast quadrant of the Central Interchange and fronts the sweeping exit ramp from NB I-77 to EB I-76. NSA 6 begins at Lafollette Street and follows the ramp north and east across Inman Street to a point west of the Hoban High School pedestrian bridge, an approximate distance of 2,400 feet. NSA 6 is comprised of residential dwelling units having an Activity Category B exterior noise abatement level of 67 dBA.

## <u>NSA 7</u>

NSA 7 is located on the east leg of the Central Interchange on the south side of I-76. NSA 4 is comprised of Hoban High School and a block of tennis courts east of the high school. The high school has no areas for frequent outdoor use on the side of the building facing I-76. The high school falls into Activity Category D having an interior noise abatement level of 52 dBA. The tennis courts, located directly east of the high school, fall into Activity Category C having an exterior noise abatement level of 67 dBA.

#### <u>NSA 8</u>

NSA 8 is located on the south leg of the Central Interchange on the west side of I-77. NSA 8 begins just north of East Crosier Street and extends south to Lovers Lane, an approximate distance of 2,300 feet. NSA 8 is comprised entirely of residential dwelling units and falls into Activity Category B having an exterior noise abatement level of 67 dBA.

#### <u>NSA 9</u>

NSA 9 is located on the south leg of the Central Interchange on the east side of I-77. NSA 9 begins near the vacant Goodrich Middle School property and extends south to Lovers Lane, an approximate distance of 1,300 feet. NSA 9 is comprised entirely of residential dwelling units and falls into Activity Category B having an exterior noise abatement level of 67 dBA.

#### Traffic

Traffic volumes used in this analysis were provided by the ODOT Office of Statewide Planning & Research in an interoffice communication (IOC) dated September 7, 2016. The traffic data includes peak hour volumes and percentage of truck traffic for the Existing Year 2020 and Design Year 2040. Evening (PM) Peak hour traffic volume was used in the analysis to represent worst case conditions. Three (3) vehicle types were used in the noise model, automobiles, heavy trucks and medium trucks. Truck traffic volume was broken down to 70% heavy truck and 30% medium truck traffic. The same percentages were used in the existing year and design year noise models.

Table 2. Peak Hour Traffic Volumes							
Roadway Section	Direction	Existing Year 2020	Design Year 2040	% Trucks Existing Year	% Trucks Design Year		
176 west of the Control Interchange	EB Peak Hour	5,430	6,030	9	12		
I-10 west of the Central Interchange	WB Peak Hour	4,320	4,510	9	12		
176 past of the Control Interchange	EB Peak Hour	4,560	5,190	12	12		
	WB Peak Hour	4,200	4,490	10	19		
SR 8 north of the Central	SB Peak Hour	6,730	7,460	8	6		
Interchange	NB Peak Hour	5,190	5,690	5	6		
177 south of the Control Interchange	SB Peak Hour	7,730	8,600	8	5		
I-11 South of the Central Interchange	NB Peak Hour	5,710	6,280	4	8		
Ramp EB I-76 to NB SR 8	EB to NB	1,090	1,120	4	8		

Traffic data used in the analysis are shown in the following table and the IOC detailing the traffic data is provided in Appendix B.

Table 2. Peak Hour Traffic Volumes							
Roadway SectionExisting Year 2020Design Year% Trucks Existing Year% Trucks 							
Ramp EB I-76 to SB I-77	EB to SB	1,920	1,980	9	3		
Ramp WB I-76 to NB SR 8	WB to NB	920	930	3	6		
Ramp WB I-76 to SB I-77 WB to SB 1,280 1,390 10 5							

## **Ambient Noise Measurements**

A field visit was conducted in the project area to measure the existing noise environment at representative locations. Noise measurements were performed in accordance with the FHWA Report Number FHWA-PD-96-046, *Measurement of Highway Related Noise* (May, 1996). Measurements were taken at representative receptor sites for 15 minute intervals. The noise meter was tripod mounted with the microphone at a distance of approximately 4.9 feet above ground level and angled toward the dominate noise source. A foam windscreen was used for all noise measurements. Noise measurements were recorded with a Quest 2900 Type 2 Data Logging SLM. Ambient noise levels recorded at representative receptor sites are listed in the following table.

Table 3. Ambient Noise Measurements							
Location	Measured Noise Level Leq						
Location 1	NSA 2 - Front yard of home on Johnston Street facing I-76 WB	65.5					
Location 2	NSA 3 - Front yard of home on Lumiere Street facing SR 8 NB	66.8					
Location 3	NSA 3 - Side yard of home on Lumiere Street facing I-76 WB	70.2					
Location 4	NSA 5 - Front yard of home on South St. facing I-76 EB.	67.1					
Location 5	NSA 6 - Front yard of home on Hammel Street facing the ramp from I-77 NB to I-76 EB.	66.4					
Location 6	NSA 8 - Front yard of home at the corner of Burkhardt/Kipling facing I-77 SB.	67.4					
Location 7	NSA 9 - Side yard od home at corner of Coventry/Kipling facing NB I-77.	68.8					

The noise meter continuously measures and records the ambient noise level and integrates these values into a  $L_{eq}$  for the duration of the reading.

#### Noise Model Validation

During each of the ambient noise measurement periods described previously, simultaneous data including traffic volume, speed, and vehicle composition were collected. During most of the measurement periods, traffic could be observed on both sides of I-76 and I-77. These traffic volumes were input into TNM V2.5 to validate the measured noise level with the modeled noise level at each representative site. The following table presents the TNM predicted noise levels based on the observed traffic data. The table also presents a comparison of the measured levels to the modeled levels at each representative receptor site.

Table 4.       Comparison of Measured and Modeled Noise Levels							
Number	Measured Noise Level (L <sub>eq</sub> in dBA)	Modeled Noise Level (L <sub>eq</sub> in dBA)	Comparison of Modeled Level to Measured Level (dB)				
Location 1	67.3	65.5	1.8				
Location 2	68.8	66.8	2.0				
Location 3	72.9	70.2	2.7				
Location 4	67.7	67.1	0.6				
Location 5	68.1	66.4	1.7				
Location 6	69.6	67.4	2.2				
Location 7	69.5	68.8	0.7				

As shown by the comparison, TNM's ability to accurately predict traffic noise levels was confirmed. All of the ambient measurement sites are within ±3 dB of the TNM predicted noise levels. In general, field measured noise levels will be higher than the modeled noise levels at the same receptor point because the modeled noise level is based solely on noise levels from traffic. It does not take into account ambient noise such as birds, light gusts of wind and other non-traffic noise sources. The TNM Sound Level Results as well as mapping indicating the location of field measurement sites are provided in Appendix C.

## Section 3.0 NOISE MODELING

#### **Existing Condition 2020**

The most dominant noise source within the project area is traffic noise generated by traffic on I-76 and I-77. The FHWA Transportation Noise Model (TNM) Version 2.5 was used to determine the existing noise levels at sensitive receptor sites. Traffic noise levels for Existing Year 2020 condition was predicted for the PM peak hour condition using 2020 traffic volume and the existing roadway alignment.

#### **Design Year 2040 Build Alternative**

The Build Alternative is described as construction of the proposed project. TNM was used to predict future year noise levels for the Build 2040 alternative as if the project were constructed as in the project description. Noise levels for the Build alternative were modeled using the proposed roadway alignment and projected Design Year 2040 traffic volumes that are provided in Appendix B.
### Section 4.0 IMPACT ASSESSMENT

To evaluate the significance of the changes in the predicted noise levels, FHWA has established NAC, as shown in Table 1, for various categories of land use and represents the upper limits of acceptable traffic generated noise emissions. According to FHWA guidance, a project may have a traffic noise impact if either or both of the following conditions exist:

- The predicted noise levels associated with the Build Alternative approach, meet, or exceed the applicable NAC. According to ODOT, noise levels "approach" the NAC when they are within 1 dB of the applicable NAC.
- A substantial increase occurs in predicted noise levels between the future year Build Alternative and the existing year noise level, even though the applicable NAC may not be approached or exceeded. A substantial increase is considered to be a 10 dB or greater increase, representing a doubling or more of the perceived existing noise level.

Almost all of the sensitive noise receptor sites in this analysis fall under the NAC Activity Category B and Activity Category C, both categories having an applicable NAC of 67 dBA  $[L_{eq(h)}]$ . Therefore, under Activity Category B and C, a predicted noise level of 66 dBA would approach the NAC and is considered a noise impact. The church in NSA 5 and Hoban High School in NSA 7 have no areas where frequent outdoor use would occur. Indoor noise levels were predicted for these two sites and would fall under NAC Activity Category D having an applicable Indoor NAC of 52 dBA  $[L_{eq(h)}]$ .

#### Impact Assessment Summary

The evening PM peak hour was used to represent the worst-case traffic condition and is used for impact assessment for all of the NSAs in this analysis. In addition, the TNM-generated peak hour noise levels for the existing condition provides a baseline for a comparison to TNM-generated peak hour noise levels for the design year condition to determine the extent of noise impact, if any. Impact assessment for each of the nine NSAs is summarized in Appendix D and are described as follows:

#### <u>NSA 1</u>

A total of 48 noise sensitive receptors representing 96 individual dwelling units were analyzed for potential noise impact in NSA 1. As shown in Table 5, the predicted Existing Year 2020 noise levels range between 59 and 77 dBA. The predicted Design Year 2040 noise levels range from 60 to 77 dBA. The greatest increase in noise level from the existing year to the design year condition was predicted to be 1.1 dB at receptor site 1-41. None of the receptor sites is predicted to experience a substantial increase (>10dB increase) in noise level under the design year condition. However, 46 dwelling units were predicted to experience a noise level that would approach, meet, or exceed the Category B NAC. With a Design Year 2040 noise impact predicted for NSA 1, noise abatement measures were considered for this NSA. The Impact Assessment Summary for NSA 1 is provided in Appendix D. TNM output data sheets for the Existing Year 2020 and the Design Year 2040 model runs are provided in Appendix G. The existing year and design year noise levels for NSA 1 are summarized in the following table:

Table 5 - NSA 1           North Side of I-76 Sumner Street to Spicer Street										
Receptor		2020 Existing Year	2040 B	uild		Impact C	riteria			
Site	Dwelling Units	Calculated LAeq1h	Calculated LAeq1h	Increase Build over Existing	NAC Activity Category	Substantial Increase	Sound Level Criterion	Impact		
		dBA	dBA	dB		dB	dBA			
1-1	1	72.1	72.3	0.1	В	10	66	Yes		
1-2	1	76.6	76.9	0.3	В	10	66	Yes		
1-3	2	68.6	69.0	0.4	В	10	66	Yes		
1-4	1	71.5	71.6	0.1	В	10	66	Yes		
1-5	2	66.2	66.7	0.5	В	10	66	Yes		
1-6	2	66.8	66.8	0.0	В	10	66	Yes		
1-7	2	59.7	59.6	1.0	В	10	66	No		
1-8	3	63.8	63.1	0.7	В	10	66	No		
1-9	2	59.8	59.3	0.5	В	10	66	No		
1-10	1	74.2	74.1	0.1	В	10	66	Yes		
1-11	1	75.0	75.3	0.3	В	10	66	Yes		
1-12	1	70.7	70.6	0.1	В	10	66	Yes		
1-13	4	70.9	70.8	0.1	В	10	66	Yes		
1-14	2	71.4	71.7	0.3	В	10	66	Yes		
1-15	2	67.4	67.9	0.5	В	10	66	Yes		
1-16	2	65.0	65.6	0.6	В	10	66	Yes		
1-17	2	63.9	64.2	0.3	В	10	66	No		
1-18	2	65.2	65.7	0.5	В	10	66	Yes		
1-19	1	64.4	64.8	0.4	В	10	66	No		
1-20	2	64.1	64.4	0.3	В	10	66	No		
1-21	2	64.4	64.8	0.4	В	10	66	No		
1-22	2	65.2	65.5	0.3	В	10	66	Yes		
1-23	2	57.7	57.7	0.0	В	10	66	No		
1-24	3	60.5	60.7	0.2	В	10	66	No		
1-25	4	61.1	61.2	0.1	В	10	66	No		
1-26	2	59.2	59.7	0.5	В	10	66	No		
1-27	2	59.1	59.4	0.3	В	10	66	No		
1-28	2	73.7	73.9	0.2	В	10	66	Yes		
1-29	2	74.6	75.1	0.5	В	10	66	Yes		
1-30	3	74.4	75.0	0.5	В	10	66	Yes		
1-31	2	70.5	70.1	0.3	В	10	66	Yes		
1-32	2	69.9	70.6	0.8	В	10	66	Yes		
1-33	2	65.4	67.2	0.1	В	10	66	Yes		
1-34	2	68.1	68.8	0.7	В	10	66	Yes		
1-35	2	64.8	66.4	0.9	В	10	66	Yes		
1-36	3	67.0	67.7	0.7	В	10	66	Yes		
1-37	2	67.2	67.9	0.7	В	10	66	Yes		
1-38	2	66.8	67.5	0.7	В	10	66	Yes		

	Table 5 - NSA 1           North Side of L76 Summer Street to Spicer Street									
		North Side of I-	-76 Sumner S	street to S	picer Stre	et				
Receptor	Receptor 2020 Existing 2040 Build Impact Criteria			riteria						
Site	Dwelling Units	Calculated LAeq1h	Calculated LAeq1h	Increase Build over Existing	NAC Activity Category	Substantial Increase	Sound Level Criterion	Impact		
		dBA	dBA	dB		dB	dBA			
1-39	2	62.7	62.7	0.0	В	10	66	No		
1-40	3	61.7	62.4	0.7	В	10	66	No		
1-41	1	62.2	63.3	1.1	В	10	66	No		
1-42	2	65.6	66.3	0.6	В	10	66	No		
1-43	3	64.3	65.2	0.8	В	10	66	No		
1-44	2	63.6	64.1	0.5	В	10	66	No		
1-45	1	65.1	64.8	0.3	В	10	66	No		
1-46	1	63.8	63.8	0.0	В	10	66	No		
1-47	2	62.4	62.8	0.3	В	10	66	No		
1-48	3	62.5	62.7	0.2	В	10	66	No		
Noise Impacts 46										

#### <u>NSA 2</u>

A total of 22 noise sensitive receptors representing 22 individual dwelling units were analyzed for potential noise impact at NSA 2. As shown in Table 6, the predicted Existing Year 2020 noise levels range between 63 and 72 dBA. The predicted Design Year 2040 noise levels also range from 63 to 72 dBA. The greatest increase in noise level from the existing year to the design year condition was predicted to be 1.6 dB at receptor site 2-20. None of the receptor sites is predicted to experience a substantial increase (>10dB increase) in noise level in the design year condition. However, 16 dwelling units were predicted to experience a noise level that would exceed the Category B NAC. With a Design Year 2040 noise impact predicted for NSA 2, noise abatement measures were considered for this NSA. The Impact Assessment Summary for NSA 1 is provided in Appendix D. TNM output data sheets for the Existing Year 2020 and the Design Year 2040 model runs are provided in Appendix G. The existing year and design year noise levels for NSA 2 are summarized in the following table:

Table 6 - NSA 2           Northwest Quadrant of the Central Interchange									
Receptor 2020 Existing 2040 Build Impact Criteria									
Site	Dwelling Units	Calculated LAeq1h	Calculated LAeq1h	Increase Build over Existing	NAC Activity Category	Substantial Increase	Sound Level Criterion	Impact	
		dBA	dBA	dB		dB	dBA		
2-1	1	72.1	72.3	0.1	В	10	66	Yes	
2-2	1	76.6	76.9	0.5	В	10	66	Yes	
2-3	2	68.6	69.0	0.3	В	10	66	Yes	

Table 6 - NSA 2									
		Northwest Qu	adrant of the	Central In	iterchang	е			
Receptor		2020 Existing Year	2040 B	2040 Build		Impact Criteria			
Site	Dwelling Units	Calculated LAeq1h	Calculated LAeq1h	Increase Build over Existing	NAC Activity Category	Substantial Increase	Sound Level Criterion	Impact	
		dBA	dBA	dB		dB	dBA		
2-4	1	71.5	71.6	0.7	В	10	66	Yes	
2-5	1	67.4	67.5	0.8	В	10	66	Yes	
2-6	1	66.8	67.3	0.4	В	10	66	Yes	
2-7	1	66.6	66.9	0.4	В	10	66	Yes	
2-8	1	66.7	67.4	0.3	В	10	66	Yes	
2-9	1	67.6	68.4	0.1	В	10	66	Yes	
2-10	1	70.6	71.0	0.1	В	10	66	Yes	
2-11	1	71.8	72.2	0.3	В	10	66	Yes	
2-12	1	66.0	66.5	0.5	В	10	66	Yes	
2-13	1	65.7	66.5	0.6	В	10	66	Yes	
2-14	1	65.6	66.2	0.3	В	10	66	Yes	
2-15	1	65.5	66.2	0.5	В	10	66	Yes	
2-16	1	64.6	65.7	0.4	В	10	66	Yes	
2-17	1	65.2	65.8	0.3	В	10	66	Yes	
2-18	1	63.7	64.5	0.4	В	10	66	No	
2-19	1	63.9	64.4	0.3	В	10	66	No	
2-20	1	64.0	64.6	1.6	В	10	66	No	
2-21	1	62.8	63.5	1.1	В	10	66	No	
2-22	1	62.5	63.2	1.3	В	10	66	No	
Noise Impacts									

#### <u>NSA 3</u>

A total of 51 noise sensitive receptors representing 52 individual dwelling units were analyzed for potential noise impact in NSA 3. As shown in Table 7, the predicted Existing Year 2020 noise levels range between 62 and 73 dBA. The predicted Design Year 2040 noise levels range from 63 to 69 dBA. Some noise levels decreased in the design year because the WB I-76 ramp to NB SR 8 will be shifted west and away from some dwelling units. The greatest increase in noise level from the existing year to the design year condition was predicted to be 2.8 dB at receptor sites 3-36 and 3-38. None of the receptor sites is predicted to experience a substantial increase (>10dB increase) in noise level in the design year condition. However, 30 dwelling units were predicted for NSA 3, noise abatement measures were considered for this NSA. The Impact Assessment Summary for NSA 3 is provided in Appendix D. TNM output data sheets for the Existing Year 2020 and the Design Year 2040 model runs for NSA 3 are provided in Appendix G. The existing year and design year noise levels for NSA 3 are summarized in the following table:

# Table 7 - NSA 3Northeast Quadrant of the Central Interchange

Receptor		2020 Existing Year	2040 B	uild		Impact C	riteria	
Site	Dwelling Units	Calculated LAeq1h	Calculated LAeq1h	Increase Build over Existing	NAC Activity Category	Substantial Increase	Sound Level Criterion	Impact
		dBA	dBA	dB		dB	dBA	
3-1	1	65.3	66.9	1.8	В	10	66	Yes
3-2	1	65.3	66.9	1.8	В	10	66	Yes
3-3	1	65.3	66.9	1.8	D	10	52	Yes
3-4	1	65.8	67.5	1.8	В	10	66	Yes
3-5	1	66.8	68.5	1.7	В	10	66	Yes
3-6	1	67.4	69.0	1.5	В	10	66	Yes
3-7	1	67.5	68.8	1.1	В	10	66	Yes
3-8	1	65.6	65.9	0.3	В	10	66	Yes
3-9	1	65.8	65.3	0.5	В	10	66	No
3-10	1	65.3	65.6	0.3	В	10	66	Yes
3-11	1	62.3	64.0	1.8	В	10	66	No
3-12	1	61.8	63.7	2.1	В	10	66	No
3-13	1	62.0	64.0	2.1	В	10	66	No
3-14	1	61.9	63.8	2.1	В	10	66	No
3-15	2	61.4	63.1	2.0	В	10	66	No
3-16	1	61.3	63.0	2.0	В	10	66	No
3-17	1	61.6	63.2	1.9	В	10	66	No
3-18	1	61.6	62.8	1.6	В	10	66	No
3-19	1	62.4	63.6	1.6	В	10	66	No
3-20	1	62.8	63.8	1.4	В	10	66	No
3-21	1	63.3	64.4	1.5	В	10	66	No
3-22	1	65.6	64.4	1.2	В	10	66	No
3-23	1	65.0	65.8	0.9	В	10	66	Yes
3-24	1	64.8	65.8	1.0	В	10	66	Yes
3-25	1	63.7	64.4	0.7	В	10	66	No
3-26	1	63.5	64.6	1.2	В	10	66	No
3-27	1	66.9	66.3	0.6	В	10	66	Yes
3-28	1	72.9	68.3	1.6	В	10	66	Yes
3-29	1	65.9	66.9	1.0	В	10	66	Tes
3-30	1	65.0	66.4	1.4	В	10	60	Yes
<u>ງ-31</u>	1	0.00	00.U	1.1	D P	10	00	Tes
<u>ປ່ຽ</u> ວ່າງ	1	04.0 60.0	60.0 60.0			10	00	Vac
<u>১-১১</u> ৫.০/	1	09.0 67 °	69.0	0.0	P	10	00	Vee
3 25	1	6/ 9	67 2	0.3	D P	10	00	Vec
2.25	1	04.0 6/ 2	67.1	2.0 2.0		10	200	Vac
3 27	1	04.3 64.0	66.7	2.0		10	66	Vee
3-37 3_38	1	63.4	66.2	2.1	R	10	66	Yee
3-30	1	60.9	60.2	0.1	R	10	66	Yee
3_/0	1	67.6	68.4	0.1	R	10	66	Yee
3-40	1	6.70	67.5	0.9 N Q	R	10	66	Yae
3-42	1	65.7	66.7	10	R	10	66	Yes
3-43	1	65.4	66.2	0.8	R	10	66	Yes
3-44	1	67.3	67.5	0.3	B	10	66	Yes

	Table 7 - NSA 3           Northoast Quadrant of the Contral Interchange									
Northeast Quadrant of the Central Interchange										
Receptor	ſ	2020 Existing Year	2040 B	Build		Impact C	riteria			
Site	Dwelling Units	Calculated LAeq1h	Calculated LAeq1h	Increase Build over Existing	NAC Activity Category	Substantial Increase	Impact			
		dBA	dBA	dB		dB	dBA			
3-45	1	64.0	65.1	1.1	В	10	66	No		
3-46	1	63.1	64.2	1.1	В	10	66	No		
3-47	1	65.4	65.9	0.6	В	10	66	Yes		
3-48	1	64.9	65.4	0.6	В	10	66	No		
3-49	1	64.1	64.7	0.6	В	10	66	No		
3-50	1	65.0	65.3	0.3	В	10	66	No		
3-51	1	63.8	64.2	0.4	В	10	66	No		
	Noise Impacts 30									

#### <u>NSA 4</u>

NSA 4 is located on the east leg and the north side of I-76. NSA 4 consists of the Hoban High School athletic fields. The athletic fields and high school are connected via a pedestrian bridge over I-76. A total of eight areas of frequent outdoor use were analyzed for potential noise impact.

The following formula used to calculate the equivalent receptors at the Hoban High School Athletic fields is based on a conversation held with the athletic director of Hoban High School. There are 850 students enrolled at Hoban and 85% participate in athletics. There are 26 varsity teams and a similar number of junior varsity and several grade level sports. Of the sports teams at Hoban High School, nine use the athletic fields on the north side of I-76. The sports include football, girls and boys soccer, girls and boys track and field, girls and boys lacrosse, baseball and softball. The athletic director estimated that the fields are used on almost a daily basis when school is in session and also used for about a month in the summer for sport camps. The fields are generally closed for public use. The crossover bridge and trails to the athletic fields are only used for Hoban High School activities and have gates that are locked to discourage public use. The high school discourages public use of the fields due to liability issues.

850 students x 85% participation in sports rate = 722 student athletes.
26 varsity teams ÷ 9 teams that use the athletic fields = 35% of students using the fields adjacent to I-76.
722 student athletes x 35% = 253 athletes regularly using the fields
Average number of people ÷ Residence (household size Ohio Average) = 3
Number of hours used = 8 hours (6.5 school hours and 1.5 after school hours)
Days used per year = 180 instructional days + 30 summer sport camp days = 210 days

(253 athletes  $\div$  3 residence size) x (8 hours  $\div$  24 hours day) x (210 days use  $\div$  365 days year) = 84 x 0.333 x 0.58 = 16.2 or **16 equivalent receptors**.

As shown in Table 8, the predicted Existing Year 2020 noise levels range from 52 to 69 dBA. The predicted

Design Year 2040 noise levels are predicted to range from 54-75 dBA. The highest increase in noise level from the Existing Year 2020 to the Design Year 2040 was predicted to be 6.5 dB at receptor site 4-7. The receptor site is not predicted to experience a substantial increase (>10dB increase) in noise level in the design year condition. However, four of the receptor sites are predicted to experience Design Year 2040 noise levels higher than the Category C (exterior) NAC. With a Design Year 2040 noise impact predicted for NSA 4, noise abatement measures were considered for NSA 4. The Impact Assessment Summary for NSA 4 is provided in Appendix D. TNM output data sheets for the Existing Year 2020 and the Design Year 2040 model runs for NSA 4 are provided in Appendix G. A summary of the noise modeling for NSA 4 is shown in the following table.

Table 8 - NSA 4 Hoban High School Athletic Fields										
Receptor	Receptor 2020 Existing 2040 Build Impact Criteria				riteria					
Site	Dwelling Units	Calculated LAeq1h	Calculated LAeq1h	Increase Build over Existing	NAC Activity Category	Substantial Increase	Sound Level Criterion	Impact		
		dBA	dBA	dB		dB	dBA			
4-1		64.0	64.7	0.7	В	10	66	No		
4-2		65.1	65.2	0.1	В	10	66	No		
4-3		64.3	64.5	0.2	В	10	66	No		
4-4		64.0	64.3	0.3	В	10	66	No		
4-7		68.0	74.5	6.5	В	10	66	Yes		
4-8		69.1	74.1	5.0	В	10	66	Yes		
4-9		63.7	66.2	0.5	В	10	66	Yes		
4-10		68.6	68.5	0.1	В	10	66	Yes		
16 Equivalent receptor sites 4										

Impacts in **bold** type

#### <u>NSA 5</u>

A total of 45 noise sensitive receptors representing 96 individual dwelling units were analyzed for potential noise impact in NSA 5. As shown in Table 9, the predicted Existing Year 2020 exterior noise levels range between 63 and 74 dBA. The predicted Design Year 2040 exterior noise levels range from 63 to 75 dBA. The greatest increase in noise level from the existing year to the design year condition was predicted to be 0.7 dB at several receptor sites. Receptor 5-3 is a church facility (Christ is the Answer Ministries) with no areas for frequent outdoor use. The interior of the church was modeled, as an Activity Category D, for potential noise impact. Interior noise level predictions may be computed by subtracting from the predicted exterior levels the noise reduction factors for the building in question. Noise reduction factors were obtained from Table 7 in the FHWA Highway Traffic Noise Analysis and Abatement Policy and Guidance manual. The church is a brick structure having single glazed windows. Noise reduction due to the exterior structure of the building is 25 dB. Interior noise level for the existing year 2020 is 49.0 dBA and 49.3 dBA for the design year 2040. None of the receptor sites is predicted to experience a substantial increase (>10dB increase) in noise level in the design year condition. However, 60 dwelling units were predicted to experience a noise level that would exceed the Category B NAC. With a Design Year 2040 noise impact predicted for NSA 5, noise abatement measures were considered for this NSA. The Impact Assessment Summary for NSA 5 is provided in Appendix D. TNM output data sheets for the Existing Year 2020 and

	Table 9 - NSA 5										
		North Side of I-	76 Sumner S	Street to S	picer Stre	et					
Receptor	,	2020 Existing Year	2040 E	Build		Impact C	riteria				
Site	Dwelling Units	Calculated LAeq1h	Calculated LAeq1h	Increase Build over Existing	NAC Activity Category	Substantial Increase	Sound Level Criterion	Impact			
		dBA	dBA	dB		dB	dBA				
5-1	1	73.4	73.6	0.2	В	10	66	Yes			
5-2	1	74.0	74.0	0.0	В	10	66	Yes			
5-3 Church <sup>B</sup> exterior/interior	1	74.0/49.0	74.3/49.3	0.3	D	10	51	No			
5-4	2	71.8	72.8	1.0	В	10	66	Yes			
5-5	2	73.9	75.0	1.1	В	10	66	Yes			
5-6	2	73.5	73.4	0.1	В	10	66	Yes			
5-7	2	72.6	72.2	0.4	B	10	66	Yes			
5-8	1	/1.4	71.8	0.4	В	10	66	Yes			
5-9	1	67.3	67.5	0.2	В	10	00	Yes			
5-10	3	69.1	69.2	0.3	B	10	00	Yes			
5-12	3	67.2	67.6	0.1	B	10	66	Ves			
5-12	2	67.2	67.5	0.4	B	10	66	Yes			
5-14	2	69.1	69.8	0.0	B	10	66	Yes			
5-15	2	69.0	69.7	0.7	B	10	66	Yes			
5-16	2	63.7	63.8	0.1	B	10	66	No			
5-17	2	64.6	64.8	0.2	В	10	66	No			
5-18	3	65.3	65.4	0.1	В	10	66	No			
5-19	2	66.4	66.6	0.2	В	10	66	Yes			
5-20	2	65.7	65.3	0.4	В	10	66	No			
5-21	2	65.1	65.1	0.0	В	10	66	No			
5-22	3	65.0	65.6	0.6	В	10	66	Yes			
5-23	1	66.1	66.0	0.1	В	10	66	Yes			
5-24	1	68.3	68.2	0.1	В	10	66	Yes			
5-25	1	67.4	67.3	0.1	B	10	66	Yes			
5-26	2	65.9	66.4	0.5	В	10	66	Yes			
5-27	1	68.4	68./	0.3	В	10	66	Yes			
5-20	<u> </u>	60.9	67.4	0.5	В	10	00	Tes			
5-29	2	62.0	63.0	0.2		10	66	No			
5 31	<u> </u>	64.6	64.9	0.1	B	10	66	No			
5-32	2	64.2	64.5	0.3	B	10	66	No			
5-33	3	63.3	63.6	0.3	B	10	66	No			
5-34	3	63.7	63.8	0.1	B	10	66	No			
5-35	2	64.1	64.1	0.0	B	10	66	No			
5-36	2	63.7	63.9	0.2	В	10	66	No			
5-37	1	64.6	64.7	0.1	В	10	66	No			

the Design Year 2040 model runs for NSA 5 are provided in Appendix G. The existing year and design year noise levels for NSA 5 are summarized in the following table:

			Table 9 - N	SA 5					
North Side of I-76 Sumner Street to Spicer Street									
Receptor		2020 Existing Year	2040 B	2040 Build Impact Criteria					
Site	Dwelling Units	Calculated LAeq1h	Calculated LAeq1h	Increase Build over Existing	NAC Activity Category	Substantial Increase	Sound Level Criterion	Impact	
		dBA	dBA	dB		dB	dBA		
5-38	2	63.7	63.7	0.0	В	10	66	No	
5-39	1	64.6	64.6	0.0	В	10	66	No	
5-40	2	63.7	63.0	0.7	В	10	66	No	
5-42	1	64.9	64.9	0.0	В	10	66	No	
5-43	2	65.3	65.7	0.4	В	10	66	Yes	
5-44	1	64.1	64.3	0.2	В	10	66	No	
5-45	1	66.8	67.1	0.3	В	10	66	Yes	
Impacted Receptors (									

Interior noise level predictions may be computed by subtracting from the predicted exterior levels the noise reduction factors for the building in question. Noise reduction factors were obtained from Table 7 in the FHWA *Highway Traffic Noise Analysis* and *Abatement Policy and Guidance* manual.

A Ordinary light frame structure = 20 dB reduction B Masonry structure with single glaze windows = 25 dB reduction

Impacts in **bold** type

#### <u>NSA 6</u>

A total of 53 noise sensitive receptors representing 108 individual dwelling units were analyzed for potential noise impact in NSA 6. As shown in Table 10, the predicted Existing Year 2020 noise levels range between 61 and 71 dBA. The predicted Design Year 2040 noise levels range from 61 to 73 dBA. The greatest increase in noise level from the existing year to the design year condition was predicted to be 0.7 dB at several receptor sites. None of the receptor sites are predicted to experience a substantial increase (>10dB increase) in noise level in the design year condition. However, 49 dwelling units were predicted to experience a noise level that would exceed the Category B NAC. With a Design Year 2040 noise impact predicted for NSA 6, noise abatement measures were considered for this NSA. The Impact Assessment Summary for NSA 6 is provided in Appendix D. TNM output data sheets for the Existing Year 2020 and the Design Year 2040 model runs for NSA 6 are provided in Appendix G. The existing year and design year noise levels for NSA 6 are summarized in the following table:

Table 10 - NSA 6           Southeast Quadrant of the Central Interchange									
Receptor 2020 Existing 2040 Build Impact Criteria									
Site	Dwelling Units	Calculated LAeq1h	Calculated LAeq1h	Increase Build over Existing	NAC Activity Category	Substantial Increase	Sound Level Criterion	Impact	
		dBA	dBA	dB		dB	dBA		
6-1	2	65.8	68.2	2.4	В	10	66	Yes	
6-2	2	62.9	64.7	1.8	В	10	66	No	
6-3	2	61.6	63.1	1.5	D	10	52	No	

Table 10 - NSA 6           Southeast Quadrant of the Central Interchange									
Receptor		2020 Existing Year	2040 B	uild		Impact C	riteria		
Site	Dwelling Units	Calculated LAeq1h	Calculated LAeq1h	Increase Build over Existing	NAC Activity Category	Substantial Increase	Sound Level Criterion	Impact	
		dBA	dBA	dB		dB	dBA		
6-4	2	63.5	65.3	1.8	В	10	66	No	
6-5	2	62.0	63.5	1.5	В	10	66	No	
6-6	2	71.4	73.0	1.6	В	10	66	Yes	
6-7	3	64.0	65.6	1.6	В	10	66	Yes	
6-8	2	67.8	69.7	1.9	В	10	66	Yes	
6-9	2	63.5	65.1	1.6	В	10	66	No	
6-10	1	69.2	71.4	2.2	В	10	66	Yes	
6-11	2	66.4	67.9	1.5	В	10	66	Yes	
6-12	2	61.1	62.8	1.7	В	10	66	No	
6-13	2	64.3	66.0	1.7	В	10	66	Yes	
6-14	2	67.0	68.4	1.4	В	10	66	Yes	
6-15	2	65.8	67.4	1.6	В	10	66	Yes	
6-16	3	63.5	65.4	1.9	В	10	66	No	
6-17	1	61.7	63.6	1.9	В	10	66	No	
6-18	1	68.0	70.4	2.4	В	10	66	Yes	
6-19	2	65.7	67.6	1.9	В	10	66	Yes	
6-20	2	63.8	65.6	1.8	В	10	66	Yes	
6-21	3	62.2	63.9	1.7	В	10	66	No	
6-22	2	65.9	67.6	1.7	В	10	66	Yes	
6-23	3	64.9	66.3	1.4	В	10	66	Yes	
6-24	1	63.3	64.1	0.8	В	10	66	No	
6-25	2	64.8	65.9	1.1	В	10	66	Yes	
6-26	2	63.8	64.5	0.7	В	10	66	No	
6-27	2	67.2	68.3	1.1	В	10	66	Yes	
6-28	3	67.1	68.3	1.2	В	10	66	Yes	
6-29	3	69.4	70.2	0.8	В	10	66	Yes	
6-30	1	68.9	70.2	1.3	В	10	66	Yes	
6-31	3	67.7	68.9	1.2	В	10	66	Yes	
6-32	2	67.5	68.3	0.8	В	10	66	Yes	
6-33	1	67.8	69.2	1.4	В	10	66	Yes	
6-34	3	64.5	66.3	1.8	В	10	66	Yes	
6-35	2	64.8	65.7	0.9	В	10	66	Yes	
6-36	2	65.2	65.9	0.7	В	10	66	Yes	
6-37	2	66.4	67.7	1.3	В	10	66	Yes	
6-38	2	63.2	63.7	0.5	B	10	66	No	
6-39	3	66.0	66.8	0.8	B	10	66	Yes	
6-40	1	65.5	66.3	0.8	B	10	66	Yes	
6-41	2	65.3	66.5	1.2	B	10	66	Yes	
6-42	2	63.2	63.5	0.3	B	10	66	No	
6-43	2	62.2	62.2		B	10	66	No	
6-44	2	61.0	61.4	0.4	B	10	66	No	
6-45	4	63.3	64.6	1.3	В	10	66	No	

Table 10 - NSA 6           Southeast Quadrant of the Central Interchange										
Receptor 2020 Existing 2040 Build Impact Criteria				riteria						
Site	Dwelling Units	Calculated LAeq1h	Calculated LAeq1h	Increase Build over Existing	NAC Activity Category	Substantial Increase	Sound Level Criterion	Impact		
		dBA	dBA	dB		dB	dBA			
6-46	1	61.9	63.1	1.2	В	10	66	No		
6-47	1	63.9	65.2	1.3	В	10	66	No		
6-48	3	62.3	63.5	1.2	В	10	66	No		
6-49	2	60.9	62.0	1.1	В	10	66	No		
6-50	1	63.6	64.5	0.9	В	10	66	No		
6-51	2	63.5	64.6	1.1	В	10	66	No		
6-52	2	63.7	64.3	0.6	В	10	66	No		
6-53	2	62.3	63.8	1.5	В	10	66	No		
Noise Impacts 49								49		

#### <u>NSA 7</u>

Noise sensitive receptors in NSA 7 consist of Hoban High School and the Hoban High School tennis courts situated just east of the high school building. The Hoban High School building pre-dates the construction of I-76. What was once the front side of the school building is now the back side of the building that faces I-76. A new entrance was built on the south side of the building which faces away from I-76. There are no areas for frequent outdoor use on the side of the school building facing I-76. An interior noise level was predicted to determine the design year noise level. Interior noise level predictions may be computed by subtracting from the predicted exterior levels the noise reduction factors for the building in question. Noise reduction factors were obtained from Table 7 in the FHWA Highway Traffic Noise Analysis and Abatement Policy and Guidance manual. Hoban High School is a brick masonry building. During discussion with a representative of the high school, it was found that the building is not air conditioned and building windows are often kept open during warm weather. The noise reduction due to the exterior of the structure with open windows is 10 dB. As shown in Table 11 the exterior noise level for the existing year is 52.4 dBA and 53.5 dBA for the design year 2040. Applying a noise reduction of 10 dB provides an interior noise level of 42.4 dBA for the existing year and 43.5 dBA for the design year 2040. The increase in noise level from the existing year to the design year condition was predicted to be 1.1 dB at the building interior. The high school building is not predicted to experience a substantial increase (>10dB increase) in noise level in the design year condition. The design year 2040 interior noise level of 43.5 dBA is below the Activity Category D (interior) noise level of 52 dBA. The Hoban High School structure will not experience a design year noise impact with construction of the project.

The predicted existing year 2020 noise level for the Hoban High School tennis courts is 65.1 dBA and the predicted design year 2040 noise levels is 65.2 dBA – an increase of 0.1 dB. The tennis courts are not predicted to experience a substantial increase (>10dB increase) in noise level in the design year condition. The tennis courts were not predicted to experience a noise level that would exceed the Activity Category C noise level of 67 dBA. No noise impact is predicted for NSA 7 and the evaluation of noise abatement measures need not be considered for NSA 7. The Impact Assessment Summary for NSA 7 is provided in

Appendix D. TNM output data sheets for the Existing Year 2020 and the Design Year 2040 model runs for NSA 7 are provided in Appendix G. The existing year and design year noise levels for NSA 7 are summarized in the following table:

Table 11 - NSA 7 Hoban High School Athletic Fields								
Receptor		2020 Existing 2040 Build Year			Impact Criteria			
Site	Dwelling Units	Calculated LAeq1h	Calculated LAeq1h	Increase Build over Existing	NAC Activity Category	Substantial Increase	Sound Level Criterion	Impact
		dBA	dBA	dB		dB	dBA	
High School Building <sup>A</sup> Exterior/Interior		52.4/42.4	53.5/43.5	1.1	D	10	52 interior	No
Tennis Courts		65.1	65.2	0.1	С	10	66	No
						Nois	e Impacts	0
Interior noise level predictions may be computed by subtracting from the predicted exterior levels the noise reduction factors for the building in question. Noise reduction factors were obtained from Table 7 in the FHWA <i>Highway Traffic Noise Analysis</i>								

and Abatement Policy and Guidance manual. <sup>A</sup> All building types with open windows = 10 dB reduction

#### <u>NSA 8</u>

A total of 44 noise sensitive receptors representing 44 individual dwelling units were analyzed for potential noise impact. As shown in Table 12, the predicted Existing Year 2020 noise levels range between 61 and 70 dBA. The predicted Design Year 2040 noise levels range from 62 to 72 dBA. The greatest increase in noise level from the existing year to the design year condition was predicted to be 2.1 dB at receptor sites 8-4 and 8-6. None of the receptor sites is predicted to experience a substantial increase (>10dB increase) in noise level in the design year condition. However, 22 dwelling units were predicted to experience a noise level that would exceed the Category B NAC. With a Design Year 2040 noise impact predicted for NSA 8, noise abatement measures were considered for this NSA. The Impact Assessment Summary for NSA 8 is provided in Appendix D. TNM output data sheets for the Existing Year 2020 and the Design Year 2040 model runs for NSA 8 are provided in Appendix G. The existing year and design year noise levels for NSA 8 are summarized in the following table:

Table 12 - NSA 8           Southeast Quadrant of the Central Interchange								
Receptor		2020 Existing Year 2040 Build Impact Criteria						
Site	Dwelling Units	Calculated LAeq1h	Calculated LAeq1h	Increase Build over Existing	NAC Activity Category	Substantial Increase	Sound Level Criterion	Impact
		dBA	dBA	dB		dB	dBA	
8-1	1	62.9	64.4	1.5	В	10	66	No

Table 12 - NSA 8           Southeast Quadrant of the Central Interchange								
Receptor		2020 Existing Year	2040 B	uild		Impact C	riteria	
Site	Dwelling Units	Calculated LAeq1h	Calculated LAeq1h	Increase Build over Existing	NAC Activity Category	Substantial Increase	Sound Level Criterion	Impact
		dBA	dBA	dB		dB	dBA	
8-2	1	64.6	66.1	1.5	В	10	66	Yes
8-3	1	69.0	70.6	1.6	В	10	66	Yes
8-4	1	65.3	67.4	2.1	В	10	66	Yes
8-5	1	64.4	66.0	1.6	В	10	66	Yes
8-6	1	68.1	70.2	2.1	В	10	66	Yes
8-7	1	64.5	65.8	1.3	В	10	66	Yes
8-8	1	63.2	64.6	1.4	В	10	66	No
8-9	1	67.6	69.0	1.4	В	10	66	Yes
8-10	1	63.4	64.8	1.4	В	10	66	No
8-11	1	68.5	69.5	1.0	В	10	66	Yes
8-12	1	65.3	66.1	0.8	В	10	66	Yes
8-13	1	63.2	64.1	0.9	В	10	66	No
8-14	1	69.2	70.5	1.3	В	10	66	Yes
8-15	1	64.8	65.8	1.0	В	10	66	Yes
8-16	1	69.8	71.5	1.7	В	10	66	Yes
8-17	1	67.4	69.1	1.7	В	10	66	Yes
8-18	1	65.5	67.0	1.5	В	10	66	Yes
8-19	1	70.4	72.0	1.6	В	10	66	Yes
8-20	1	68.3	69.7	1.4	В	10	66	Yes
8-21	1	65.8	67.3	1.5	В	10	66	Yes
8-22	1	66.8	68.1	1.3	В	10	66	Yes
8-23	1	65.1	67.0	1.9	В	10	66	Yes
8-24	1	69.0	70.6	1.6	В	10	66	Yes
8-25	1	68.5	69.9	1.4	В	10	66	Yes
8-26	1	66.0	67.3	1.4	В	10	66	Yes
8-27	1	68.3	69.6	1.3	В	10	66	Yes
8-28	1	65.8	67.2	1.4	В	10	66	Yes
8-29	1	63.2	64.9	1.7	В	10	66	No
8-30	1	61.9	63.3	1.4	В	10	66	No
8-31	1	61.3	62.8	1.5	В	10	66	No
8-32	1	62.3	63.1	0.8	В	10	66	No
8-33	1	62.5	63.6	1.1	В	10	66	No
8-34	1	61.0	62.0	1.0	В	10	66	No
8-35	1	63.5	64.7	1.2	В	10	66	No
8-36	1	62.0	63.3	1.3	B	10	66	No
8-37	1	63.6	65.0	1.4	B	10	66	No
8-38	1	62.0	63.5	1.5	В	10	66	No
8-39	1	63.6	65.0	1.4	В	10	66	No
8-40	1	61.0	62.7	1.7	B	10	66	No
8-41	1	64.1	65.6	1.5	В	10	66	Yes
8-42	1	61.0	62.7	1.6	В	10	66	No
8-43	1	62.8	64.2	1.4	В	10	66	No

Table 12 - NSA 8           Southeast Quadrant of the Central Interchange								
Recept	or	2020 Existing Year	2040 Build		Impact Criteria			
Site	Dwelling Units	Calculated LAeq1h	Calculated LAeq1h	Increase Build over Existing	NAC Activity Category	Substantial Increase	Sound Level Criterion	Impact
		dBA	dBA	dB		dB	dBA	
8-44	1	62.8	64.0	1.2	В	10	66	No
Noise Impacts								22

#### <u>NSA 9</u>

A total of 33 noise sensitive receptors representing 33 individual dwelling units were analyzed for potential noise impact in NSA 9. As shown in Table 13, the predicted Existing Year 2020 noise levels range between 61 and 74 dBA. The predicted Design Year 2040 noise levels also range from 61 to 74 dBA. The greatest increase in noise level from the existing year to the design year condition was predicted to be 1.8 dB at receptor sites 9-21 and 9-27. None of the receptor sites is predicted to experience a substantial increase (>10dB increase) in noise level in the design year condition. However, 19 dwelling units were predicted to experience a noise level that would exceed the Category B NAC. With a Design Year 2040 noise impact predicted for NSA 9, noise abatement measures were considered for this NSA. The Impact Assessment Summary for NSA 9 is provided in Appendix D. TNM output data sheets for the Existing Year 2020 and the Design Year 2040 model runs for NSA 9 are provided in Appendix G. The existing year and design year noise levels for NSA 9 are summarized in the following table:

Table 13 - NSA 9           Southeast Quadrant of the Central Interchange									
Receptor		2020 Existing Year	2040 B	uild		Impact C	riteria		
Site	Dwelling Units	Calculated LAeq1h	Calculated LAeq1h	Increase Build over Existing	NAC Activity Category	Substantial Increase	Sound Level Criterion	Impact	
		dBA	dBA	dB		dB	dBA		
9-1	1	70.7	71.6	0.9	В	10	66	Yes	
9-2	1	67.3	68.5	1.2	В	10	66	Yes	
9-3	1	65.8	66.5	0.7	В	10	66	Yes	
9-4	1	65.8	66.8	1.0	В	10	66	Yes	
9-5	1	69.6	70.5	0.9	В	10	66	Yes	
9-6	1	70.8	71.6	1.3	В	10	66	Yes	
9-7	1	68.5	69.3	0.8	В	10	66	Yes	
9-8	1	64.0	64.7	0.9	В	10	66	No	
9-9	1	73.6	74.2	0.6	В	10	66	Yes	
9-10	1	68.9	69.9	1.0	В	10	66	Yes	
9-11	1	67.6	68.6	1.0	В	10	66	Yes	
9-12	1	65.0	66.3	1.3	В	10	66	Yes	
9-13	1	67.2	68.4	1.2	В	10	66	Yes	

Table 13 - NSA 9									
		Southeast Qu	adrant of the	Central In	terchang	е			
Receptor		2020 Existing Year	2040 Build			Impact Criteria			
Site	Dwelling Units	Calculated LAeq1h	Calculated LAeq1h	Increase Build over Existing	NAC Activity Category	Substantial Increase	Sound Level Criterion	Impact	
		dBA	dBA	dB		dB	dBA		
9-14	1	65.7	66.9	1.2	В	10	66	Yes	
9-15	1	70.4	71.4	1.0	В	10	66	Yes	
9-16	1	67.1	68.2	1.1	В	10	66	Yes	
9-17	1	65.5	66.7	1.2	В	10	66	Yes	
9-18	1	64.0	65.3	1.3	В	10	66	No	
9-19	1	71.1	71.9	0.8	В	10	66	Yes	
9-20	1	68.6	69.5	0.9	В	10	66	Yes	
9-21	1	63.6	65.4	1.8	В	10	66	No	
9-22	1	63.5	64.0	0.5	В	10	66	No	
9-23	1	62.4	63.0	0.6	В	10	66	No	
9-24	1	63.0	63.4	0.4	В	10	66	No	
9-25	1	65.9	66.7	0.8	В	10	66	Yes	
9-26	1	63.2	64.8	1.6	В	10	66	No	
9-27	1	62.7	64.5	1.8	В	10	66	No	
9-28	1	62.7	64.2	1.5	В	10	66	No	
9-29	1	61.5	63.1	1.6	В	10	66	No	
9-30	1	63.5	64.7	1.2	В	10	66	No	
9-31	1	61.7	63.1	1.4	В	10	66	No	
9-32	1	60.7	61.1	0.4	В	10	66	No	
9-33	1	63.3	63.9	0.6	В	10	66	No	
Noise Impacts								19	

### Section 5.0 EVALUATION OF NOISE ABATEMENT MEASURES

In accordance with 23 CFR Part 772, noise abatement measures were evaluated for sites which were predicted to approach or exceed the applicable FHWA NAC. Abatement measures that were considered include traffic management, modifications to the vertical and horizontal roadway alignments, noise insulation, and construction of permanent noise barriers within or adjacent to the right-of-way. In order to be considered for implementation, a potential mitigation measure must be determined to be both feasible and reasonable. Feasibility includes such considerations as effectiveness of the measure in attaining specified reductions in predicted noise levels, the cost of the measure, and the number of receptors that will benefit. Reasonableness considerations can include overall environmental effects, community desirability, the degree that future Build noise levels exceed existing noise levels, and the degree that future Build levels exceed No Build levels.

<u>Traffic management measures:</u> Traffic management measures, which can include restrictions on access to specific motor vehicle types, travel speed, traffic volumes, and/or time of operation, are sometimes used as noise abatement measures. A reduction in speed limit, while possibly generating some beneficial effects on noise level reduction, would affect the ability of the roadway to accommodate anticipated traffic volumes and reduce the capacity of the proposed facility. Limiting truck traffic and/or time of truck traffic operation is not a feasible option to reduce noise impacts due to the lack of nearby routes capable of handling the existing capacity. Limiting truck traffic may further result in economic impact that time use limitations may have on commercial traffic and businesses both within and beyond the project locale. Traffic management measures would not be feasible noise abatement measure; therefore, it is not considered as an option for this project.

<u>Alteration of horizontal and vertical alignments:</u> Alignment modifications generally involve orienting and/or siting the roadway a sufficient distance from noise sensitive areas to minimize noise impact. The horizontal and vertical alignment of the proposed roadway improvement is generally dictated by the existing I-76 and I-77 alignment and elevation. Vertical alignment is further dictated by the existing roadway elevations at ramp connection points, as well as bridge overpasses and underpasses along the existing alignment. Altering the proposed vertical alignment of the I-76 ramps N and R to reduce traffic noise impacts would result in an additional project cost through re-aligning the entire Central Interchange. Altering the horizontal alignment in a populated area would result in additional project cost due to acquisition of new permanent right-of-way, economic and social impact due to likely numerous residential and commercial relocations, and potential impacts on other public or institutional properties such as parks, churches, hospitals, libraries and schools. Furthermore, shifting the horizontal alignment away from sensitive receptor sites to reduce noise impacts will only shift the impacts on other sensitive receptor sites. Vertical and/or horizontal alignment modifications to the proposed alignment are were considered and turned out not to be feasible or reasonable noise abatement measures.

<u>Acquisition of real property or interests therein to serve as a buffer zone:</u> Buffer zones are undeveloped, open spaces which border a highway and are created when a highway agency purchases land or development rights, in addition to the normal right-of-way, so that future dwellings cannot be constructed next to the highway. Following ODOT guidelines, the amount of public funds considered reasonable for noise abatement purposes is \$35,000 per benefited noise sensitive receptor. A property acquisition program to provide a noise

buffer zone adjacent to the existing interstate is not a reasonable noise abatement measure because the land and numerous impacted residential properties adjacent to the project corridor are likely to be of a considerably higher value. Creating a buffer zone is not considered to be a reasonable or feasible abatement measure for this project.

<u>Noise insulation of public use or nonprofit institutional structures:</u> This mitigation measure applies only to public use structures. There are a few public use structures in the project area including Hoban High School which is not impacted by noise due to the project. Noise insulation is not considered for the residential structures or section 4(f) resource impacted by the proposed project.

<u>Noise Barrier Construction</u>: Noise barriers are generally the abatement measure most often associated with noise abatement on highway lane addition projects. Noise barriers reduce noise levels by blocking the sound path between the noise source and noise sensitive receptors. To be effective, noise barriers must be long, continuous, and sufficiently high to break the line of sight from the highway to the receptor. When designing a noise barrier wall, every attempt should be made to obtain a substantial noise reduction of at least 7 dB at front row receptors wherever possible. Noise barriers are generally designed to provide a minimum reduction of 4.5 dB for receptor sites located closest to the roadway. Noise levels must be reduced by a minimum of 4.5 dB at any sensitive receptor site for that site to be considered a benefited receptor. The construction of a noise barrier is considered a feasible mitigation measure if 40% of the impacted dwelling units receive at least a 4.5 dB noise reduction. The construction of a noise barrier is considered a feasible mitigation measure if 40% of the impacted dwelling units receive at least a 4.5 dB noise reduction. The construction of a noise barrier is considered a reasonable mitigation measure if the construction cost is less than \$35,000 per benefited receptor. The cost per square foot of noise barrier wall construction, provided by ODOT is \$25. Reasonableness also includes the desires of the affected property owners to have a noise barrier constructed adjacent to their property.

Noise barrier design was facilitated through the use of TNM Version 2.5. TNM is an interactive computer program with the fundamental purpose of enabling the designer to develop an optimum noise barrier design, one that provides the desired noise reduction at the least cost. Site specific variables used in the computer model include barrier length, the geometry of the roadway to the receptor, barrier height, barrier design material (concrete), and the number of dwelling units benefited by the barrier. Based on the height and length of the modeled barrier, TNM calculates noise barrier effectiveness (noise reduction) and cost. The model can quickly change barrier heights to improve (optimize) the cost efficiency of the barrier system. The effectiveness of a barrier relates to the reduction in noise level the barrier provides and the number of people benefited by the barrier system.

The following subsections present a summary of the noise barrier wall analyses performed for the project area. TNM spreadsheets detailing the level of noise reduction at each receptor site and a description of the evaluated noise barriers and costs are provided Appendix D.

#### Barrier Wall Analysis

A noise barrier analysis was performed for the homes in the project area to determine if the construction of a noise barrier wall would be a reasonable and feasible measure in abating Design Year build traffic noise levels in the vicinity of the highway improvements. In the following tables, the noise wall scenarios for each NSA are compared. Light green shading is used to indicate a feasible and reasonable noise barrier wall. The darker

green shading is used to indicate the recommended scenario option. The bold print is used to indicate the recommended noise abatement measure for the NSA.

#### NSA 1

NSA 1 consists of 97 residential dwelling units located on the west leg and north side of I-76. Noise receptors near the west end of NSA 1, near the pedestrian walkover at Sumner Street, are situated at a similar elevation as I-76. Receptors near the east end of the NSA are at an elevation of up to 20 feet lower than I-76 at the Brown Street overpass. Receptors in NSA 1 are located right up to the I-76 ROW and a noise barrier, along the generally higher in elevation at the edge of shoulder (EOS), is the only option for the placement of a noise barrier wall. Two noise barrier scenarios were evaluated for NSA 1. NSA 1 Scenario 1 is a noise barrier wall located along the EOS extending from the pedestrian overpass to just east of Spicer Street. NSA 1 Scenario 2 is the same as Scenario 1 except the noise barrier wall would not be constructed on the bridge structure over Brown Street. The two noise wall scenarios modeled for NSA 1 are compared in the following tables.

NSA 1 Scenario 1								
Parriar Haight	Parriar Longth	Cost of barrier	Benefited	Cost per benefited				
Darrier Height	Damer Length		Receptors	Receptor				
12	2,072	\$765,720	20	\$38,286				
13	2,072	\$829,530	45	\$18,434				
14	2,072	\$893,340	57	\$15,672				
15	2,072	\$957,150	61	\$15,690				
16	2,072	\$1,020,961	61	\$16,737				
17	2,072	\$1,084,771	63	\$17,218				

NSA 1 Scenario 2								
Barrier Height	Barrier Length	Cost of barrier	Benefited	Cost per benefited				
			Receptors	Receptor				
12	1,912	\$573,705	20	\$28,685				
13	1,912	\$621,514	38	\$16,355				
14	1,912	\$669,323	45	\$14,873				
15	1,912	\$717,132	47	\$15,258				
16	1,912	\$764,940	49	\$15,611				
17	1,912	\$812,749	49	\$16,586				

Noise Barrier Scenario Recommendation NSA 1							
Scenario	Barrier Length	Barrier Height	Cost of Barrier	Benefited Receptors	Cost per Benefited Receptor	Recommended	
Scenario 1	2,072'	14'	\$893,340	57	\$15,672	No	
Scenario 2	1,912'	14'	\$669,323	45	\$14,873	Yes	

Noise barrier wall NSA 1 Scenario 2 is recommended as the noise abatement measure for NSA 1.

#### NSA 2

NSA 2 consists of 22 residential dwelling units. Noise receptors in NSA 2 are situated at a higher elevation than SR 8 and also at a higher elevation than the SB SR 8 ramp to WB I-76. Most of the receptors in NSA 2 are also distanced from interstate by Johnston Street that runs at an angle through NSA 2. The ramp and roadway are in a cut and the only practical location for a noise barrier wall would be along the ROW. Noise barrier wall NSA 2 Scenario 1 was evaluated along the ROW of the SB SR 8 ramp to WB I-76. The noise barrier wall was evaluated at a height of 20 beginning south of the Johnston Street overpass and extending west an approximate distance of 900 feet.

NSA 2 Scenario 1								
Barrier Height	Barrier Length	Cost of barrier	Benefited Receptors	Cost per benefited Receptor				
14	900	\$315,000	2	\$157,500				
15	900	\$337,500	2	\$168,750				
16	900	\$360,000	2	\$180,000				
17	900	\$382,500	3	\$127,500				
18	900	\$405,000	3	\$135,000				
19	900	\$427,500	3	\$142,500				
20	900	\$450,000	3	\$150,000				

None of the configurations for a noise barrier wall in NSA 2 meet the criteria of a reasonable and feasible abatement measure. No noise barrier wall or other noise abatement measure s recommended for NSA 2.

#### NSA 3

NSA 3 is comprised of 52 residential dwelling units. Noise receptors in NSA 3 are located at an elevation of about 20 feet lower than I-76 near the Inman Street overpass at the east side of the NSA. The ramp from WB I-76 to NB SR 8 begins to drop in elevation as it curves north towards Johnston Street as it drops into a cut beneath the Johnston Street bridge. The best alignment for a noise barrier wall at NSA 3 would be on the EOS along I-76 crossing over Inman Street and then transitioning to the right of way (ROW) as the noise barrier follows along the I-76 WB exit ramp to NB SR8 at the north end of the NSA. Two noise barrier scenarios were evaluated for NSA 3. Noise barrier wall NSA 3 Scenario 1 would be located along the EOS of I-76 beginning about 300 feet east of the Inman Street overpass and would continue west following the exit ramp to NB SR 8 transitioning to the ROW at a point north of Hammel Street and ending on the ROW just south of Johnston Street. Noise barrier wall NSA 3 Scenario 2 would be the same as NSA 3 Scenario 1 except that the noise barrier wall would not be built on the bridge structure over Inman Street. The bridge span over Inman Street is only 60 feet in length and both scenarios were similar in cost and number of receptors benefiting of the wall.

NSA 3 Scenario 1								
Parrier Height	Parrier Longth	Cost of barrier	Benefited	Cost per benefited				
Barrier Height	Damer Length		Receptors	Receptor				
13	1,954	\$700,285	12	\$58,357				
14	1,954	\$762,178	16	\$47,636				
15	1,954	\$808,021	20	\$40,401				

NSA 3 Scenario 1								
Barrier Height	Barrier Length	Cost of barrier	Benefited	Cost per benefited				
	Damer Length		Receptors	Receptor				
16	1,954	\$853,489	32	\$26,671				
17	1,954	\$906,832	39	\$23,252				
18	1,954	\$1,095,175	40	\$27,379				

NSA 3 Scenario 2						
Barrier Height	Barrier Length	Cost of barrier	Benefited Receptors	Cost per benefited Receptor		
13	1,894	\$613,204	10	\$61,320		
14	1,894	\$660,374	15	\$44,024		
15	1,894	\$707,543	20	\$35,377		
16	1,894	\$754,713	32	\$23,584		
17	1,894	\$801,975	37	\$21,675		
18	1,894	\$849,052	38	\$22,343		

Noise Barrier Scenario Summary NSA 3						
Scenario	Barrier Length	Barrier Height	Cost of Barrier	Benefited Receptors	Cost per Benefited Receptor	Recommended
Scenario 1	1,954	16'	\$861,889	32	\$26,671	No
Scenario 2	1,894	16'	\$754,713	32	\$23,584	Yes

Noise barrier wall NSA 3 Scenario 2 is recommended for construction as a noise abatement measure because of its lower cost compared to Scenario 1 and it is a feasible and reasonable measure without having to be built on the bridge structure over Inman Street.

#### NSA 4

NSA 4 is located on the east leg and the north side of I-76. NSA 4 consists of the Hoban High School athletic fields. The athletic fields and high school are connected via a pedestrian bridge over I-76. The athletic fields east of the pedestrian bridge are situated about 20 feet higher than I-76 and the fields west of the pedestrian bridge to Inman Street are located at a much lower elevation than the interstate. The only location for a noise barrier wall in NSA 4 would begin along the WB I-76 ROW about 800 feet west of Arlington Street. From this point NSA 4 Scenario 1 would continue west along the ROW to the pedestrian bridge. There would be a break in the noise barrier wall at this point to allow for continued access between the school and the fields via the pedestrian bridge. The exit ramp from WB I-75 to Inman Street will be removed as part of the project. On the west side of the pedestrian bridge the noise barrier wall would transition from the ROW to the EOS of WB I-76 and would end about 300 feet east of Inman Street. The end point for noise barrier NSA 4 Scenario 1 would be arrier NSA 3 Scenarios 1 and 2.

#### Equivalent Receptors Calculation for NSA 4 – NAC Activity Category C

The following formula used to calculate the equivalent receptors at the Hoban High School Athletic fields is based on a conversation held with the athletic director of Hoban High School. There are 850 students enrolled at Hoban and 85% participate in athletics. There are 26 varsity teams and a similar number of junior varsity and several grade level sports. Of the sports teams at Hoban High School, nine use the athletic fields on the north side of I-76. The sports include football, girls and boys soccer, girls and boys track and field, girls and boys lacrosse, baseball and softball. The athletic director estimated that the fields are used on almost a daily basis when school is in session and also used for about a month in the summer for sport camps. The fields are generally closed for public use. The crossover bridge and trails to the athletic fields are only used for Hoban High School activities and have gates that are locked to discourage public use. The high school discourages public use of the fields due to liability issues.

850 students x 85% participation = 722 student athletes.

26 varsity teams  $\div$  9 teams that use the athletic fields = 35% of students using the fields. 722 student athletes x 35% = **253** athletes using the fields Average number of people  $\div$  Residence (household size Ohio Average) = **3** Number of hours used = **8** hours (6.5 school hours and 1.5 after school hours) Days used per year = 180 instructional days + 30 summer sport camp days = **210** days

(253 athletes  $\div$  3 residence size) x (8 hours  $\div$  24 hours day) x (210 days use  $\div$  365 days year) = 84 x 0.333 x 0.58 = 16.2 or **16 equivalent receptors**.

NSA 4 Scenario 1						
Parriar Haight	Parriar Longth	Cost of barrier	Benefited	Cost per benefited		
Damer Height	Damer Lengin	Cost of Damer	Receptors	Receptor		
12	1,156	\$346,895	12	\$28,907		
13	1,156	\$375,803	14	\$26,843		
13.5	1,156	\$391,754	14	\$27,982		
14	1,156	\$404,711	16	\$25,294		
14.5	1,156	\$422,000	16	\$26,375		
15	1,156	\$433,639	16	\$27,102		
15.5	1,156	\$449591	16	\$28,100		
16	1,156	\$462,527	16	\$28,907		

Noise barrier wall NSA 4 Scenario 1 is recommended as a noise abatement measure for the project.

#### NSA 5

NSA 5 is comprised of 80 residential dwelling units. NSA 5 is located on the west leg of I-76 on the south side of the interstate. Receptors near the west end of NSA 5, near the pedestrian walkover, are situated at a similar elevation as the I-76 roadway. Receptors near the east end of the NSA are at an elevation of up to 20 feet lower than the I-76 roadway at the Brown Street overpass. Due to existing elevations, a noise barrier along the EOS would be the only location option. Two noise barrier scenarios were evaluated for NSA 5. The base map used for the figures of NSA 5 Scenario 1 and Scenario 2 is somewhat dated as I-76 east of Brown Street no longer runs on bridges. The streets below the bridges have been re-routed and I-76 is now constructed on fill.

Noise barrier wall NSA 5 Scenario 1 is located along the EOS extending from the pedestrian overpass to about 300' east of Brown Street. NSA 5 Scenario 2 is the same as Scenario 1 except the noise barrier wall would not be constructed on the bridge structure spanning Brown Street.

NSA 5 Scenario 1						
Barrier Height	Barrier Length	Cost of barrier	Benefited Receptors	Cost per benefited Receptor		
12	1,656	\$640,680	40	\$16,017		
13	1,656	\$697,070	60	\$11,567		
14	1,656	\$747,460	69	\$10,832		
15	1,656	\$801,000	73	\$10,970		
16	1,656	\$854,240	73	\$11,701		
17	1,656	\$907,630	75	\$12,101		

NSA 5 Scenario 2						
Barrier Height	Barrier Length	Cost of barrier	Benefited Receptors	Cost per benefited Receptor		
12	1,496	\$448,938	31	\$14,481		
13	1,496	\$486,350	43	\$11,310		
14	1,496	\$523,762	50	\$10,475		
15	1,496	\$561,000	56	\$10,020		
16	1,496	\$598,585	60	\$9,976		
17	1,496	\$635,996	61	\$10,426		

Noise Barrier Scenario Summary NSA 5						
Scenario	Barrier Length	Barrier Height	Cost of Barrier	Benefited Receptors	Cost per Benefited Receptor	Recommended
Scenario 1	1,656	14'	\$747,460	69	\$10,832	Yes
Scenario 2	1,496	14'	\$523,764	50	\$10,475	No

Both NSA 5 noise barrier scenarios would be feasible and reasonable noise abatement measures. Comparing Scenario 1 to Scenario 2, Scenario 1 can provide noise abatement to 19 more residential dwelling units at about the same cost per benefited receptor. Scenario 1 is the preferred noise barrier scenario for this NSA.

#### NSA 6

NSA 6 is located in the southeast quadrant of the Central Interchange. On the west side of the NSA, NB I-77, and the ramp from NB I-77 to EB I-76 are located in a cut configuration as both the mainline I-77 and the ramp pass below Lafollette Street. The NB I-77 to EB I-76 ramp gains elevation as it moves east to a point at which it is constructed in a fill configuration as it passes over Inman Street and continues east along EB I-76 near Hoban High School. The best location for a noise barrier wall at NSA 6 would be begin on the ROW north of

Lafollette Street and would continue north and east along the ramp ROW to a point east of Hammel Street where the noise barrier wall would begin to transition to the EOS. The noise barrier wall would continue east along the EOS, crossing over Inman Street and ending on the EB I-76 EOS at a point west of Hoban High School. Two noise barrier scenarios were evaluated for NSA 6. Noise barrier wall NSA 6 Scenario 1 is located along the ROW beginning north of Lafollette Street, extending across Inman Street and ending at a point approximately 600' east of Inman Street. NSA 6 Scenario 2 is the same as Scenario 1 except the noise barrier wall would not be constructed on the bridge structure over Inman Street. The bridge span over Inman Street is only 60 feet in length and both noise barrier scenarios were similar in cost and number of receptors benefiting of the wall.

NSA 6 Scenario 1						
Barrier Height	Barrier Length	Cost of barrier	Benefited	Cost per benefited		
Barrior Holgin	Barnor Eorigan		Receptors	Receptor		
13	2,325	\$812,498	51	\$15,931		
14	2,325	\$877,098	59	\$14,866		
15	2,325	\$939,748	71	\$13,235		
16	2,325	\$1,002,000	81	\$12,175		
17	2,325	\$1,065,048	81	\$13,148		
18	2,325	\$1,127,698	81	\$13,922		

NSA 6 Scenario 2						
Barrior Hoight	Barrior Longth	Cost of barrior	Benefited	Cost per benefited		
Damer Height	Damer Length		Receptors	Receptor		
13	2,265	\$735,868	47	\$15,656		
14	2,265	\$792,452	53	\$14,952		
15	2,265	\$849,056	69	\$12,305		
16	2,265	\$906,000	81	\$11,185		
17	2,265	\$962,263	81	\$11,879		
18	2,265	\$1,018,867	81	\$12,578		

Noise Barrier Scenario Summary NSA 6						
Scenario	Barrier Length	Barrier Height	Cost of Barrier	Benefited Receptors	Cost per Benefited Receptor	Recommended
Scenario 1	2,325	15'	\$939,748	71	\$13,235	No
Scenario 2	2,265	15'	\$849,056	69	\$12,305	Yes

Both of the noise wall scenarios for NSA 6 have similar results. The bridge span over Inman Street is only 60 feet. Without a noise barrier on the bridge over Inman Street, abatement levels are reduced one to two decibels at receptors nearest the bridge. Abatement levels are not reduced under Scenario 2 resulting in a reduction of only two benefited dwelling units as compared to Scenario 1 with a noise barrier on structure. Scenario 2 is recommended as the noise abatement measure for NSA 6.

#### NSA 7

NSA 7 is located on the south side of I-76 at Hoban High School. At this location, I-76 is situated in a deep, steep cut configuration. The high school is located about 20 feet higher than the highway. There are no areas of frequent outdoor use on the side of the high school facing the interstate. An interior location was evaluated for the high school and an exterior location was evaluated near the tennis courts. No noise impacts were identified at this NSA. Consideration of noise abatement is not warranted.

#### NSA 8

NSA 8 is comprised of 44 residential dwelling units and is located on the west side of I-77 south of the Central Interchange. At this location, I-77 is situated in a cut configuration with the receptors situated about 10 to 20 feet higher than the highway elevation. The only location for a noise barrier wall would be along the west ROW line where the elevation is higher. The receptors in NSA 8 are located to the north and to the south of Lafollette Street. Two noise barrier scenarios were evaluated for NSA 8. Noise barrier wall NSA 8 Scenario 1 is located along the ROW beginning north of Lafollette Street and extending north along the ROW for distance of about 400 feet. Scenario 1 would also have a noise barrier wall beginning on the ROW south of Lafollette Street and would extend south to the Lovers Lane bridge over I-77. Scenario 2 is comprised of just the noise barrier wall south of Lafollette Street. The SB I-77 exit ramp to Lovers Lane will be removed as part of the project. As shown in Appendix B both scenarios would pass through the area of the removed ramp.

NSA 8 Scenario 1						
Parriar Haight	Parriar Longth	Cost of barrier	Benefited	Cost per benefited		
Damer Height	Damer Lengin		Receptors	Receptor		
12	1,910	\$573,717	19	\$30,195		
13	1,910	\$621,526	20	\$31,076		
14	1,910	\$669,366	22	\$30,425		
15	1,910	\$717,146	26	\$27,582		
16	1,910	\$764,956	28	\$27,319		
17	1,910	\$774,000	30	\$25,666		
18	1,910	\$859,500	30	\$28,650		

NSA 8 Scenario 2						
Barrier Height	Barrier Length	Cost of barrier	Benefited Receptors	Cost per benefited Receptor		
12	1,510	\$453,481	18	\$25,193		
13	1,510	\$491,271	20	\$24,563		
14	1,510	\$529,061	22	\$24,048		
15	1,510	\$566,250	25	\$22,650		
16	1,510	\$604,641	25	\$24,185		
17	1,510	\$642,431	25	\$25,697		

Noise Barrier Scenario Summary NSA 8						
Scenario	Barrier Length	Barrier Height	Cost of Barrier	Benefited Receptors	Cost per Benefited Receptor	Recommended
Scenario 1	1,910	14	\$669,366	22	\$30,425	Yes
Scenario 2	1,510'	14	\$529,061	22	\$24,048	No

#### NSA 9

NSA 9 is comprised of 33 residential dwelling units. NSA 9 is located on the east side of I-77 south of the Central Interchange. Similar to NSA 8, the receptors located in NSA 9 are situated at an elevation of about 10 to 20 feet higher than the highway elevation. The best location for a noise barrier wall would be along the east ROW line where the elevation is higher. One noise barrier wall scenario was evaluated for NSA 9. NSA 9 Scenario 1 would begin on the ROW just north of the Lovers Lane bridge over I-77. The noise barrier wall would extend north to a point about 150 feet north of Kipling Street. Noise barrier wall NSA 9 Scenario 1 would average 16 feet in height with a length of 1,225 feet. Noise barrier wall NSA 9 Scenario 1 is the recommended abatement measure.

NSA 9 Scenario 1								
Barrier Height	Barrier Length	Cost of barrier	Benefited	Cost per benefited				
			Receptors	Receptor				
13	1,225	\$398,125	11	\$36,193				
14	1,225	\$428,750	21	\$20,416				
15	1,225	\$459,053	22	\$20,866				
16	1,225	\$490,000	25	\$19,600				
17	1,225	\$520,260	25	\$20,810				
18	1,225	\$550,864	25	\$25,697				

Noise Barrier Scenario Summary NSA 9								
Scenario	Barrier Length	Barrier Height	Cost of Barrier	Benefited Receptors	Cost per Benefited Receptor	Recommended		
Scenario 1	1,225	14	\$428,750	21	\$20,416	Yes		

### SECTION 6.0 UNDEVELOPED LANDS

#### Information for Local Officials

In accordance with 23 CFR 772.17, in an effort to prevent future traffic noise impacts on currently undeveloped lands, highway agencies shall inform local officials within whose jurisdiction the highway project is located of the following:

(a) The best estimation of future noise levels (for various distances from the highway improvement) for both developed and undeveloped lands and other properties in the immediate vicinity of the project,

(b) Information that may be useful to local communities to protect future land development from becoming incompatible with anticipated highway noise levels,

For undeveloped properties which have not received a building permit by the date of NEPA document approval, design-year noise analyses were performed to determine the offset from the roadway at which future noise levels would approach an FHWA NAC. The only area in the project corridor that is undeveloped is located along the north side of the SB SR 8 exit ramp to WB I-76.

• A 400-foot section of land, fronting the highway, in the northwest quadrant of the Central Interchange on the north side of Johnston Street.

TNM was used to estimate the distance from the proposed roadway edge of pavement to a distance where traffic noise impact would occur for Activity Categories B and C and for Activity Category E based on the Design Year traffic volumes. The same traffic volumes and vehicle mix was used for this estimation purpose as was used for the Design Year 2040 Build condition. The dBA levels shown below are measured in feet from the proposed edge of pavement to points where 71 dBA (Activity Category E) would be expected to be encountered and to where 66 dBA (Activity Categories B and C) would be expected to be encountered.

#### North side of I-76

66 dBA contour	283 feet
71 dBA contour	74 feet

The distance away from the edge of shoulder of the north side of the SB SR 8 ramp to WB I-76 where the 66 dBA contour line would be expected to occur is at an average distance of 283 feet. The construction of any future noise sensitive land use within 283 feet of the proposed edge of shoulder in this section of the roadway corridor would be expected to experience noise levels that would exceed the Category B and the Category C NAC. The construction of any future noise sensitive land use within 74 feet of the proposed edge of shoulder in this section of roadway would be expected to experience noise levels that would exceed the Category E NAC.

### Section 7.0 CONSTRUCTION NOISE

Noise sensitive receptors will also be subjected to noise impacts associated with the construction phase of the proposed project. Construction noise will generate temporary noise impacts on adjacent and nearby properties, particularly those in residential land use. Construction noise will be emitted intermittently by a range of construction equipment at varying levels of intensity based on the types of operations being performed and the number of pieces of equipment in operation at any given time. Depending on project circumstances, options are available to minimize the temporary adverse noise impacts, including the proper maintenance of equipment, most notably adequate lubrication, and non-leaking mufflers, equipment restriction modifications to reduce noise emissions and restrict the use of certain equipment by location and time of day, controlling non construction traffic by limiting heavy truck movements on residential streets, maximizing the distance between equipment and receptors where possible and, enclosing or screening noisy activities or stationary equipment.

### Section 8.0 CONCLUSION AND RECOMMENDATION

A noise analysis was prepared for all noise sensitive receivers located within 500 feet of the existing driving lanes and ramps along I-76 from the pedestrian crossover bridge at Sumner Street to a point approximately 800 feet west of Arlington Road and along SR 8 from a point approximately 500 feet north of the Johnston Street overpass to Lovers Lane on I-77. Noise levels were modeled for the Existing Year 2020 and the Design Year 2040 Build alternative. The FHWA TNM predicted traffic noise impacts at over 100 receptor sites within the project corridor with implementation of the proposed project. Of the impacted receptor sites, all would experience peak hour traffic noise levels in excess of the Category B NAC or Category C NAC of 67 dBA. No receptor site was predicted to experience a substantial noise impact (increase > 10 dBA) as a result of the proposed action.

In accordance with 23 CFR Part 772, when noise impacts are identified as a result of a proposed action, noise abatement measures must be considered for impacted sites predicted to approach or exceed the applicable FHWA NAC. As described in Section 5.0, the only reasonable and feasible noise abatement measure identified for impacted sensitive receptor sites is the construction of noise barrier walls.

According to ODOT guidance, the criteria to determine the feasibility and reasonableness of noise barrier walls should consider the following items:

<u>The amount of noise reduction provided:</u> When considering noise abatement measures, every reasonable effort should be made to obtain a substantial noise reduction at sensitive receptor sites. In Ohio, a substantial reduction is 7 dB or more.

<u>The number of dwelling units benefited:</u> The threshold of noise reduction, which establishes a benefited property, is at least 4.5 dB. This reduction is determined at an exterior point where frequent human use occurs and a lowered noise level would be of benefit regardless of whether or not the property was identified as impacted.

<u>The cost of the abatement:</u> A reasonable cost for noise barrier walls is determined using a cost index based on total cost per dwelling unit benefited, as well as the unit cost per square foot of the noise barrier material installed for the walls. For a unit cost of \$25.00 per square foot of barrier wall a cost index of \$35,000 per benefited unit should be used.

<u>The views of the impacted residents:</u> In general, the views and desires of the impacted residents play a major consideration in determining the reasonableness of the noise abatement measure. Since noise barrier walls are not a feasible and reasonable noise abatement measure for this project, residents of the impacted properties will not be contacted to solicit their concerns/comments.

The noise barrier evaluation summary in Table 14 shows that noise barrier walls would be both a feasible and a reasonable noise abatement measure at seven of the nine NSAs. Table 15 shows the recommended noise barrier walls.

Table 14.											
Noise Barrier Evaluation Summary											
Barrier	Barrier Length (feet)	Barrier Height (feet)	Square Footage of Barrier	Maximum Insertion Loss <sup>a</sup> (dB)	Properties <sup>b</sup>	Barrier Cost °	benefited receptor	Effect Feasible <sup>d</sup>	Reasonat	Barrier ble <sup>e</sup> Location <sup>f</sup>	Barrier Recommended <sup>g</sup>
NSA 1 Scenario 1	2,072	14	29,008	12.5	57	\$893,340	\$15,672	Yes	Yes	EOS	No
NSA 1 Scenario 2	1,912	14	26,768	13.0	45	\$669,323	\$14,873	Yes	Yes	EOS	Yes
NSA 2 Scenario 1	900	20	18,000	9.0	3	\$450,000	\$150,000	No	No	ROW No	
NSA 3 Scenario 1	1,954	16	31,264	7.7	32	\$853,489	\$26,671	Yes	Yes	EOS/ROW	No
NSA 3 Scenario 2	1,894	16	30,304	7.7	32	\$754,713	\$23,584	Yes	Yes	EOS/ROW	Yes
NSA 4 Scenario 1	1,156	14	16,100	7.7	16 (Equivalent)	\$404,711	\$25,294	Yes	Yes	EOS/ROW	Yes
NSA 5 Scenario 1	1,656	14	23,184	11.1	69	\$747,460	\$10,832	Yes	Yes	EOS	Yes
NSA 5 Scenario 2	1,496	14	20,944	11.2	50	\$523,762	\$10,475	Yes	Yes	EOS	No
NSA 6 Scenario 1	2,325	15	34,875	11.2	71	\$939,748	\$13,325	Yes	Yes	EOS/ROW	No
NSA 6 Scenario 2	2,265	15	33,975	11.2	69	\$849,056	\$12,305	Yes	Yes	EOS/ROW	Yes
NSA 8 Scenario 1	1,910	14	26,740	9.8	22	\$669,366	\$30,425	Yes	Yes	ROW	Yes
NSA 8 Scenario 2	1,510	14	21,140	9.8	22	\$529,061	\$24,048	Yes	Yes	ROW	No
NSA 9 Scenario 1	1,225	14	17,150	10.1	21	\$428,750	\$20,416	Yes	Yes	ROW	Yes

Insertion Loss (IL) is the maximum noise reduction provided by the noise barrier.

<sup>b</sup> A receptor is considered benefited by the noise barrier if the IL is 5dB or greater.

<sup>c</sup> Cost is based on \$25 per square foot of noise barrier constructed on ground and \$100 per square foot constructed on structure..

<sup>d</sup> A noise barrier is considered feasible if it can provide a substantial noise reduction of at least 7dB at one receptor location.

<sup>e</sup> A noise barrier is considered cost reasonable if the cost per benefited receptor is less than \$35,000.

<sup>f</sup> The location of the noise barrier wall: ROW=noise barrier is located along the right of way line; EOS=noise barrier is located along the edge of shoulder.

<sup>g</sup> Noise barrier recommendation is based on the number of benefited receptors and the relative cost per benefited receptor.

Table 15											
Recommended Noise Barrier Walls											
Barrier E L	Barrier Barr Length Heig (feet) (fee	Barrier	Barrier Square Height Footage of feet) Barrier	Maximum Insertion Lossª (dB)	Benefitted Properties <sup>b</sup>	Barrier Cost º	Cost per benefited receptor	Effectiveness		Barrier	Barrier
		Height (feet)						Feasible <sup>d</sup>	Reasonable <sup>e</sup>	Location <sup>f</sup>	Recommended <sup>g</sup>
NSA 1 Scenario 2	1,912	14	26,773	12.0	45	\$669,323	\$14,873	Yes	Yes	EOS	Yes
NSA 3 Scenario 2	1,894	16	30,304	7.7	32	\$754,713	\$23,584	Yes	Yes	EOS/ROW	Yes
NSA 4 Scenario 1	1,156	14	16,100	7.7	16 (Equivalent)	\$404,711	\$25,294	Yes	Yes	EOS/ROW	Yes
NSA 5 Scenario 1	1,656	14	23,184	11.1	69	\$747,460	\$10,832	Yes	Yes	EOS	Yes
NSA 6 Scenario 2	2,265	15	33,975	10.9	69	\$849,056	\$12,305	Yes	Yes	EOS/ROW	Yes
NSA 8 Scenario 1	1,910	14	26,740	9.8	22	\$669,366	\$30,425	Yes	Yes	ROW	Yes
NSA 9 Scenario 1	1,225	14	17,150	10.1	21	\$428,750	\$20,416	Yes	Yes	ROW	Yes

<sup>a</sup> Insertion Loss (IL) is the maximum noise reduction provided by the noise barrier.

<sup>b</sup> A receptor is considered benefited by the noise barrier if the IL is 5dB or greater.

<sup>c</sup> Cost is based on \$25 per square foot of noise barrier constructed on ground and \$100 per square foot constructed on structure.

<sup>d</sup> A noise barrier is considered feasible if it can provide a substantial noise reduction of at least 7dB at one receptor location.

<sup>e</sup> A noise barrier is considered cost reasonable if the cost per benefited receptor is less than \$35,000.

<sup>f</sup> The location of the noise barrier wall: ROW=noise barrier is located along the right of way line; EOS=noise barrier is located along the edge of shoulder.

<sup>9</sup> Noise barrier recommendation is based on the number of benefited receptors and the relative cost per benefited receptor.

### Section 9.0 REFERENCES

Code of Federal Regulations (CFR) Title 23, Part 772, U.S. Department of Transportation, Federal Highway Administration (FHWA), *Procedures for Abatement of Highway Traffic Noise and Construction Noise*. Washington, D.C.

Ohio Department of Transportation, Office of Environmental Services. June, 2011. Standard Procedure for Analysis and Abatement of Highway Traffic Noise. Columbus, Ohio.

U.S. Department of Transportation, Federal Highway Administration. January, 1998. *FHWA Traffic Noise Model (TNM).* Report No. FHWA-PD-96-009. Washington, D.C.

U.S. Department of Transportation, Federal Highway Administration. May, 1996. *Measurement of Highway-Related* Report No. FHWA-PD-96-046. Washington, D.C.

U.S. Department of Transportation, Federal Highway Administration. January, 2011. *Highway Traffic Noise Analysis and Abatement - Policy and Guidance.* Washington, D.C.

## APPENDIX A Figures

Figure 1. Project Location Map Figure 2. Proposed Improvement Figure 3. Study Area Map Figure 4. Land Use Map Figure 5. Noise Sensitive Areas










# APPENDIX B Traffic Data

# **INTER-OFFICE COMMUNICATION**

# TO: Lorie Feudner, District 4

**FROM:** Bryan Raderstorf, Office of Statewide Planning and Research

- SUBJECT: SUM-76-11.56
- DATE: September 7, 2016

In reply to a request dated April 28, 2016, the Office of Statewide Planning and Research has reviewed the 2020/2040 traffic for the subject study and the volumes that were provided are reasonable.

The forecasts shown on the attached pages are certified for use in the subject project.

If you have any questions, please contact me at (614) 752-5736.



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# **APPENDIX C** Field Noise Measurements and Noise Model Validation



















**RESULTS: SOUND LEVELS** 

SUM-I76 Central Interchange (101402)

Lawhon & Assoc.								20 June 2	017				
CMCox								TNM 2.5					
								Calculate	d with TNN	1 2.5			
RESULTS: SOUND LEVELS													
PROJECT/CONTRACT:		SUM-I7	6 Central I	nterchange (	101402)								
RUN:		Model	Validation I	Run									
BARRIER DESIGN:		INPUT	HEIGHTS						Average	pavement type	e shall be use	d unless	
									a State hi	ghway agency	y substantiate	es the use	
ATMOSPHERICS:		68 deg	F, 50% RH						of a diffe	rent type with	approval of F	HWA.	
Receiver									_				
Name	No.	#DUs	Existing	No Barrier						With Barrier	·		
		İ	LAeq1h	LAeq1h			Increase over	existing	Туре	Calculated	Noise Reduc	ction	
		İ		Calculated	Crit'n		Calculated	Crit'n	Impact	LAeq1h	Calculated	Goal	Calculated
								Sub'l Inc					minus
													Goal
			dBA	dBA	dBA		dB	dB		dBA	dB	dB	dB
Loc1	40	1	67.3	65.	5	66	-1.8	3 10	)	65.5	5 O.C	) 4	4 -4.5
Loc2	41	1	68.8	66.	8	66	-2.0	) 10	Snd Lvl	66.8	3 0.0	) 4	4 -4.5
Loc3	42	1	72.9	70.2	2	66	-2.7	7 10	Snd Lvl	70.2	2 0.0	) 4	4 -4.5
Loc4	43	1	67.7	67.	1	66	-0.6	6 10	Snd Lvl	67.1	0.0	) 4	4 -4.5
Loc5	44	1	68.1	66.4	4	66	-1.7	' 10	) Snd Lvl	66.4	0.0	) 4	4 -4.5
Loc6	45	1	69.6	67.4	4	66	-2.2	2 10	Snd Lvl	67.4	0.0	) 4	4 -4.5
Loc7	46	1	69.5	68.	8	66	-0.7	<b>'</b> 10	Snd Lvl	68.8	8 0.0	) 4	4 -4.5
Dwelling Units		# DUs	Noise Re	duction									
		ĺ	Min	Avg	Max								
			dB	dB	dB								
All Selected		7	0.0	0.0	0 0	0.0	)						
All Impacted		6	6.0	0.	0 0	0.0	)						
All that meet NR Goal		C	0.0	0.	0 0	0.0	)						

#### INPUT: RECEIVERS

Lawhon & Assoc.						20 June 2	017					
СМСох						TNM 2.5						
INPUT: RECEIVERS												
PROJECT/CONTRACT:	SUM-I	76 Cen	tral Interchar	nge (101402)								
RUN:	Model	Valida	ation Run									
Receiver												
Name	No.	#DUs	Coordinates	(ground)		Height	Input Sou	nd Levels a	and Criteria	2	1	Active
			X	Y	Z	above	Existing	Impact Cr	iteria	NR	i	in
						Ground	LAeq1h	LAeq1h	Sub'l	Goal	(	Calc.
			ft	ft	ft	ft	dBA	dBA	dB	dB		
Loc1	40	1	2,242,726.0	510,435.0	1,080.00	4.92	67.30	66	10.0		4.5	Y
Loc2	41	1	2,243,507.0	510,707.0	1,102.00	4.92	68.80	66	10.0		4.5	Y
Loc3	42	1	2,244,331.0	510,144.8	1,106.00	4.92	72.90	66	10.0		4.5	Y
Loc4	43	1	2,241,887.0	509,849.0	1,050.00	4.92	67.70	66	10.0		4.5	Y
Loc5	44	1	2,243,808.0	509,499.0	1,103.00	4.92	68.10	66	10.0		4.5	Y
Loc6	45	1	2,242,827.0	508,386.0	1,094.00	4.92	69.60	66	10.0		4.5	Y
Loc7	46	1	2,243,231.0	508,212.0	1,104.00	4.92	69.50	66	10.0		4.5	Y

INPUT: TRAFFIC FOR LAeq1h Volumes

SUM-I76 Central Interchange (101402)

Lawhon & Assoc.				20 Jur	e 2017							
СМСох				TNM 2	.5							
INPUT: TRAFFIC FOR LAeq1h Volumes												
PROJECT/CONTRACT:	SUM-I76 Centr	ral Inte	rchange	(101402	2)							
RUN:	Model Validati	ion Rur	1									
Roadway	Points											
Name	Name	No.	Segmen	it								
			Autos		MTrucks	5	HTrucks	5	Buses		Motorcy	cles
			V	S	V	S	V	S	V	S	V	S
			veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph
I-76 EB1/Ramp I-76EB to I-77SB	point1	1	1010	0	16	55	37	55	0	0	C	) 0
	point2	2	1010	55	16	55	37	55	0	0	C	) 0
	point3	3	1010	55	16	55	37	55	0	0	, C	) 0
	point4	4	1010	55	16	55	37	55	0	0	C	) C
	point5	5	532	55	24	55	48	55	0	0	C	) C
	Brown Street	6	532	2 55	24	55	48	55	0	0	C	) 0
	point7	7	532	55	24	55	48	55	0	0	C	) C
	On fill	8	506	55	8	55	20	55	0	0	C	) C
	point9	9	1010	55	16	55	37	55	0	0	C	) (
	point10	10	1010	55	16	55	37	55	0	0	0	) C
	point11	11	1010	55	16	55	37	55	0	0	0	) C
	point12	12	1010	55	16	55	37	55	0	0	0	) C
	point13	13	1010	55	16	55	37	55	0	0	0	) C
	point14	14	1010	55	16	55	37	55	0	0	0	) C
	Lafollette St.	( 15	1010	55	16	55	37	55	0	0	0	) C
	point16	16	1010	55	16	55	37	55	0	0	0	) C
	point17	17	1010	55	16	55	37	55	0	0	0	) C
	point18	18	1010	55	16	55	37	55	0	0	0	) C
	Lover's Lane	( 19	1010	55	16	55	37	55	0	0	0	) C
	point20	20	1010	55	16	55	37	55	0	0	0	) C
	Cole Ave. Ov	e 21								<u> </u>	<u> </u>	
Brown Street	At Kipling	22	0	0	0	0	0	0	0	0	0	) 0
	At Baird	23	6  O	0 0	0	0	0	0	0	·  0	/ C	) 0

### INPUT: TRAFFIC FOR LAeq1h Volumes

SUM-I76 Central Interchange (101402)

	At Lofollette S	24	0	0	0	0	0	0	0	0	0	0
	At E Crosier	25	0	0	0	0	0	0	0	0	0	0
	At E South	26	0	0	0	0	0	0	0	0	0	0
	At Lamparter \$	27	0	0	0	0	0	0	0	0	0	0
	At E Voris St	28										
Johnston Street	At Gridley Ave	29	0	0	0	0	0	0	0	0	0	0
	At Hammel St	30	0	0	0	0	0	0	0	0	0	0
	At Lumiere St.	31	0	0	0	0	0	0	0	0	0	0
	point32	32	0	0	0	0	0	0	0	0	0	0
	Wilson St	33	0	0	0	0	0	0	0	0	0	0
	Jonhston Ct	34	0	0	0	0	0	0	0	0	0	0
	Hedden Ave	35	0	0	0	0	0	0	0	0	0	0
	point36	36	0	0	0	0	0	0	0	0	0	0
	Spicer St.	37	0	0	0	0	0	0	0	0	0	0
	point38	38	0	0	0	0	0	0	0	0	0	0
	At Brown Stree	39										
I-76 WB to I-77 SB	point317	40	1010	55	16	55	37	55	0	0	0	0
	point41	41	1010	55	16	55	37	55	0	0	0	0
	point42	42	1010	55	16	55	37	55	0	0	0	0
	point43	43	1010	55	16	55	37	55	0	0	0	0
	point44	44	1010	55	16	55	37	55	0	0	0	0
	point45	45	1010	55	16	55	37	55	0	0	0	0
	point46	46	1010	55	16	55	37	55	0	0	0	0
	point47	47	1010	55	16	55	37	55	0	0	0	0
	point48	48	1010	55	16	55	37	55	0	0	0	0
	point49	49	1010	55	16	55	37	55	0	0	0	0
	point50	50	1010	55	16	55	37	55	0	0	0	0
	point51	51	1010	55	16	55	37	55	0	0	0	0
	Lafollette Ove	52	1010	55	16	55	37	55	0	0	0	0
	point53	53	1010	55	16	55	37	55	0	0	0	0
	point17	54	1010	55	16	55	37	55	0	0	0	0
	point18	55	1010	55	16	55	37	55	0	0	0	0
	Lover's Lane (	56	1010	55	16	55	37	55	0	0	0	0
	point20	57	1010	55	16	55	37	55	0	0	0	0
	Cole Ave. Ove	58										
SR8 SB1/Ramp SR8 SB to I-76 WB	Exchange St c	59	684	50	8	50	20	50	0	0	0	0

<b>INPUT: TRAFFIC FOR LAeq1h Volum</b>	mes					SU	M-I76 Ce	ntral Ir	nterchan	ge (1014	<b>102</b> )	
	point60	60	684	50	8	50	20	50	0	0	0	0
	Beacon St uno	61	684	50	8	50	20	50	0	0	0	0
	point62	62	684	50	8	50	20	50	0	0	0	0
	point63	63	684	50	8	50	20	50	0	0	0	0
	point64	64	684	50	8	50	20	50	0	0	0	0
	point65	65	684	50	8	50	20	50	0	0	0	0
	Johnston St or	66	684	50	8	50	20	50	0	0	0	0
	point67	67	684	50	8	50	20	50	0	0	0	0
	point68	68	684	50	8	50	20	50	0	0	0	0
	point69	69	684	50	8	50	20	50	0	0	0	0
	begin fill	70	684	50	8	50	20	50	0	0	0	0
	point71	71	684	50	8	50	20	50	0	0	0	0
	Browm St und	72	684	50	8	50	20	50	0	0	0	0
	point73	73	684	50	8	50	20	50	0	0	0	0
	point74	74	684	50	8	50	20	50	0	0	0	0
	point75	75	684	50	8	50	20	50	0	0	0	0
	point76	76	684	50	8	50	20	50	0	0	0	0
	Grant St ovrpa	77										
Ramp SR8 SB to I76 EB	point78	78	472	50	14	50	36	50	0	0	0	0
	point79	79	472	50	14	50	36	50	0	0	0	0
	Johnston St or	80	472	50	14	50	36	50	0	0	0	0
	point81	81	472	50	14	50	36	50	0	0	0	0
	point82	82	472	50	14	50	36	50	0	0	0	0
	point83	83	472	50	14	50	36	50	0	0	0	0
	I-76 undrpa	84	472	50	14	50	36	50	0	0	0	0
	point85	85	472	50	14	50	36	50	0	0	0	0
	I-76 ovrpa	86	472	50	14	50	36	50	0	0	0	0
	point87	87	472	50	14	50	36	50	0	0	0	0
	point88	88	472	50	14	50	36	50	0	0	0	0
	point89	89	472	50	14	50	36	50	0	0	0	0
	point90	90	472	50	14	50	36	50	0	0	0	0
	Inman St ovrp	91	472	50	14	50	36	50	0	0	0	0
	point92	92	472	50	14	50	36	50	0	0	0	0
	point93	93	472	50	14	50	36	50	0	0	0	0
	ped bridge	204	472	50	14	50	36	50	0	0	0	0
	point95	205	472	50	14	50	36	50	0	0	0	0

INPUT: TRAFFIC FOR LAeq1h Vo	olumes					SU	M-176 Ce	ntral Ir	nterchang	ge (1014	02)	
	point96	272	472	50	14	50	36	50	0	0	0	0
	point258	273	472	50	14	50	36	50	0	0	0	0
	Arlington Rd	274	472	50	14	50	36	50	0	0	0	0
	point260	275	472	50	14	50	36	50	0	0	0	0
	point261	276	472	50	14	50	36	50	0	0	0	0
	point262	277	472	50	14	50	36	50	0	0	0	0
	point263	278	472	50	14	50	36	50	0	0	0	0
	point264	279										
SR8 SB thru lane 4	Exchange Stre	94	1010	55	16	55	37	55	0	0	0	0
	point95	95	1010	55	16	55	37	55	0	0	0	0
	point96	96	1010	55	16	55	37	55	0	0	0	0
	Beacon St und	97	1010	55	16	55	37	55	0	0	0	0
	point98	98	1010	55	16	55	37	55	0	0	0	0
	point99	99	1010	55	16	55	37	55	0	0	0	0
	point100	100	1010	55	16	55	37	55	0	0	0	0
	point101	101	1010	55	16	55	37	55	0	0	0	0
	point102	102	1010	55	16	55	37	55	0	0	0	0
	point103	103	1010	55	16	55	37	55	0	0	0	0
	Lafollette ovrp	104	1010	55	16	55	37	55	0	0	0	0
	point105	105	1010	55	16	55	37	55	0	0	0	0
	point17	106	1010	55	16	55	37	55	0	0	0	0
	point18	107	1010	55	16	55	37	55	0	0	0	0
	Lover's Lane (	108	1010	55	16	55	37	55	0	0	0	0
	point20	109	1010	55	16	55	37	55	0	0	0	0
	Cole Ave. Ove	110										
SR8 SB thru lane 3	Exchange Stre	111	1010	55	16	55	37	55	0	0	0	0
	point95	112	1010	55	16	55	37	55	0	0	0	0
	point96	113	1010	55	16	55	37	55	0	0	0	0
	Beacon St und	114	1010	55	16	55	37	55	0	0	0	0
	point98	115	1010	55	16	55	37	55	0	0	0	0
	point99	116	1010	55	16	55	37	55	0	0	0	0
	point100	117	1010	55	16	55	37	55	0	0	0	0
	point101	118	1010	55	16	55	37	55	0	0	0	0
	point102	119	1010	55	16	55	37	55	0	0	0	0
	point103	120	1010	55	16	55	37	55	0	0	0	0
	Lafollette ovrp	121	1010	55	16	55	37	55	0	0	0	0

INPUT: TRAFFIC FOR LAeq1h Vo	olumes					SU	M-176 Ce	entral Ir	nterchang	ge (1014	<b>102)</b>	
	point105	122	1010	55	16	55	37	55	0	0	0	0
	point17	123	1010	55	16	55	37	55	0	0	0	0
	point18	124	1010	55	16	55	37	55	0	0	0	0
	Lover's Lane (	125	1010	55	16	55	37	55	0	0	0	0
	point20	126	1010	55	16	55	37	55	0	0	0	0
	Cole Ave. Ove	127										
I-77 NB thru lane 4	Cole Street	128	822	55	10	55	24	55	0	0	0	0
	point129	129	822	55	10	55	24	55	0	0	0	0
	Lovers Lane	130	822	55	10	55	24	55	0	0	0	0
	point131	131	822	55	10	55	24	55	0	0	0	0
	point132	132	822	55	10	55	24	55	0	0	0	0
	point133	133	822	55	10	55	24	55	0	0	0	0
	Lafollette Rd c	134	822	55	10	55	24	55	0	0	0	0
	point135	135	822	55	10	55	24	55	0	0	0	0
	point136	136	822	55	10	55	24	55	0	0	0	0
	I-76 EB ovrpa	137	822	55	10	55	24	55	0	0	0	0
	I-76WB ovrpa	138	822	55	10	55	24	55	0	0	0	0
	point139	139	822	55	10	55	24	55	0	0	0	0
	point140	140	822	55	10	55	24	55	0	0	0	0
	point141	141	822	55	10	55	24	55	0	0	0	0
	Beacon St und	142	822	55	10	55	24	55	0	0	0	0
	point143	143	822	55	10	55	24	55	0	0	0	0
	point146	146	822	55	10	55	24	55	0	0	0	0
	Exchange St ι	147										
I-77 NB thru lane 3	Cole Street	148	822	55	10	55	24	55	0	0	0	0
	point129	149	822	55	10	55	24	55	0	0	0	0
	Lovers Lane	150	822	55	10	55	24	55	0	0	0	0
	point131	151	822	55	10	55	24	55	0	0	0	0
	point132	152	822	55	10	55	24	55	0	0	0	0
	point133	153	822	55	10	55	24	55	0	0	0	0
	Lafollette Rd c	154	822	55	10	55	24	55	0	0	0	0
	point135	155	822	55	10	55	24	55	0	0	0	0
	point136	156	822	55	10	55	24	55	0	0	0	0
	I-76 EB ovrpa	157	822	55	10	55	24	55	0	0	0	0
	I-76WB ovrpa	158	822	55	10	55	24	55	0	0	0	0
	point139	159	822	55	10	55	24	55	0	0	0	0

<b>INPUT: TRAFFIC FOR LAeq1h Volume</b>	S					SU	M-176 Ce	entral Ir	nterchang	je (1014	<b>102</b> )	
	point140	160	822	55	10	55	24	55	0	0	0	0
	point141	161	822	55	10	55	24	55	0	0	0	0
	Beacon St und	162	822	55	10	55	24	55	0	0	0	0
	point143	163	822	55	10	55	24	55	0	0	0	0
	point146	164	822	55	10	55	24	55	0	0	0	0
	Exchange St ι	165										
I-77 NB2/Ramp I-77NB to I-76WB	Cole Street	166	822	55	10	55	24	55	0	0	0	0
	point129	167	822	55	10	55	24	55	0	0	0	0
	Lovers Lane	168	822	55	10	55	24	55	0	0	0	0
	point131	169	822	55	10	55	24	55	0	0	0	0
	point132	170	822	55	10	55	24	55	0	0	0	0
	point133	171	822	55	10	55	24	55	0	0	0	0
	point172	172	822	55	10	55	24	55	0	0	0	0
	point173	173	822	55	10	55	24	55	0	0	0	0
	point182	182	822	55	10	55	24	55	0	0	0	0
	point183	183	822	55	10	55	24	55	0	0	0	0
	SR 8 ovrpa	184	822	55	10	55	24	55	0	0	0	0
	point185	185	728	55	10	55	28	55	0	0	0	0
	point186	186	728	55	10	55	28	55	0	0	0	0
	point187	187	728	55	10	55	28	55	0	0	0	0
	point188	188	728	55	10	55	28	55	0	0	0	0
	point71	189	728	55	10	55	28	55	0	0	0	0
	Browm St und	190	728	55	10	55	28	55	0	0	0	0
	point73	191	822	55	10	55	24	55	0	0	0	0
	point74	192	822	55	10	55	24	55	0	0	0	0
	point75	193	822	55	10	55	24	55	0	0	0	0
	point76	194	822	55	10	55	24	55	0	0	0	0
	Grant St ovrpa	195										
I77 NB1/Ramp I-77NB to I-76EB	Cole Street	174	822	55	10	55	24	55	0	0	0	0
	point129	175	822	55	10	55	24	55	0	0	0	0
	Lovers Lane	176	822	55	10	55	24	55	0	0	0	0
	point131	177	822	55	10	55	24	55	0	0	0	0
	point132	178	822	55	10	55	24	55	0	0	0	0
	point133	179	822	55	10	55	24	55	0	0	0	0
	point172	180	822	55	10	55	24	55	0	0	0	0
	point173	181	728	55	10	55	28	55	0	0	0	0

INPUT: TRAFFIC FOR LAeq1h Volu	umes					SU	M-176 Ce	ntral Ir	nterchang	je (1014	02)	
	point196	196	728	55	10	55	28	55	0	0	0	0
	point197	197	728	55	10	55	28	55	0	0	0	0
	point198	198	728	55	10	55	28	55	0	0	0	0
	Inman St ovrp	199	728	55	10	55	28	55	0	0	0	0
	point92	200	728	55	10	55	28	55	0	0	0	0
	point93	201	728	55	10	55	28	55	0	0	0	0
	ped bridge	202	728	55	10	55	28	55	0	0	0	0
	point95	203										
I-76EB2	point1	207	1242	55	37	55	86	55	0	0	0	0
	point2	208	1242	55	37	55	86	55	0	0	0	0
	point3	209	1242	55	37	55	86	55	0	0	0	0
	point4	210	1242	55	37	55	86	55	0	0	0	0
	point5	211	504	55	8	55	18	55	0	0	0	0
	Brown Street	212	504	55	8	55	18	55	0	0	0	0
	point7	213	504	55	8	55	18	55	0	0	0	0
	On fill	214	504	55	8	55	18	55	0	0	0	0
	point9	215										
I-76EB thru lane 3	point1	217	680	55	28	55	54	55	0	0	0	0
	point2	218	680	55	28	55	54	55	0	0	0	0
	point3	219	680	55	28	55	54	55	0	0	0	0
	point4	220	680	55	28	55	54	55	0	0	0	0
	point5	221	680	55	28	55	54	55	0	0	0	0
	Brown Street	222	680	55	28	55	54	55	0	0	0	0
	point7	223	680	55	28	55	54	55	0	0	0	0
	On fill	224	680	55	28	55	54	55	0	0	0	0
	point225	225	680	55	28	55	54	55	0	0	0	0
	point226	226	680	55	28	55	54	55	0	0	0	0
	point237	237	680	55	28	55	54	55	0	0	0	0
	point238	238	680	55	28	55	54	55	0	0	0	0
	point239	239	680	55	28	55	54	55	0	0	0	0
	point240	240	680	55	28	55	54	55	0	0	0	0
	point242	242	680	55	28	55	54	55	0	0	0	0
	Inman St ovrp	241	680	55	28	55	54	55	0	0	0	0
	point249	250	680	55	28	55	54	55	0	0	0	0
	point93	251	680	55	28	55	54	55	0	0	0	0
	ped bridge	252	680	55	28	55	54	55	0	0	0	0

<b>INPUT: TRAFFIC FOR LAeq1h Vo</b>	lumes					SU	M-176 Ce	entral Ir	nterchang	ge (1014	02)	
	point95	253	680	55	28	55	54	55	0	0	0	0
	point96	265	680	55	28	55	54	55	0	0	0	0
	point258	266	680	55	28	55	54	55	0	0	0	0
	Arlington Rd	267	680	55	28	55	54	55	0	0	0	0
	point260	268	680	55	28	55	54	55	0	0	0	0
	point261	269	680	55	28	55	54	55	0	0	0	0
	point262	270	680	55	28	55	54	55	0	0	0	0
	point263	271	680	55	28	55	54	55	0	0	0	0
	point264	280										
I-76 EB thru lane 4	point1	227	680	55	28	55	54	55	0	0	0	0
	point2	228	680	55	28	55	54	55	0	0	0	0
	point3	229	680	55	28	55	54	55	0	0	0	0
	point4	230	680	55	28	55	54	55	0	0	0	0
	point5	231	680	55	28	55	54	55	0	0	0	0
	Brown Street	232	680	55	28	55	54	55	0	0	0	0
	point7	233	680	55	28	55	54	55	0	0	0	0
	On fill	234	680	55	28	55	54	55	0	0	0	0
	point225	235	680	55	28	55	54	55	0	0	0	0
	point226	236	680	55	28	55	54	55	0	0	0	0
	point237	243	680	55	28	55	54	55	0	0	0	0
	point238	244	680	55	28	55	54	55	0	0	0	0
	point239	245	680	55	28	55	54	55	0	0	0	0
	point240	246	680	55	28	55	54	55	0	0	0	0
	point242	247	680	55	28	55	54	55	0	0	0	0
	Inman St ovrp	248	680	55	28	55	54	55	0	0	0	0
	point249	249	680	55	28	55	54	55	0	0	0	0
	point93	254	680	55	28	55	54	55	0	0	0	0
	ped bridge	255	680	55	28	55	54	55	0	0	0	0
	point95	256	680	55	28	55	54	55	0	0	0	0
	point96	257	680	55	28	55	54	55	0	0	0	0
	point258	258	680	55	28	55	54	55	0	0	0	0
	Arlington Rd	259	680	55	28	55	54	55	0	0	0	0
	point260	260	680	55	28	55	54	55	0	0	0	0
	point261	261	680	55	28	55	54	55	0	0	0	0
	point262	262	680	55	28	55	54	55	0	0	0	0
	point263	263	680	55	28	55	54	55	0	0	0	0

# INPUT: TRAFFIC FOR LAeq1h Volumes

SUM-I76 Central Interchange (101402)

	point264	264										
Ramp I-76 EB to SR8 NB	point226	281	680	25	8	25	20	25	0	0	0	0
	point282	282	680	25	8	25	20	25	0	0	0	0
	point283	283	680	25	8	25	20	25	0	0	0	0
	point284	284	680	25	8	25	20	25	0	0	0	0
	point285	285	680	25	8	25	20	25	0	0	0	0
	point286	286	680	25	8	25	20	25	0	0	0	0
	I-76WB undrp	287	680	25	8	25	20	25	0	0	0	0
	point289	289	680	25	8	25	20	25	0	0	0	0
	point288	288	680	25	8	25	20	25	0	0	0	0
	point290	290	680	25	8	25	20	25	0	0	0	0
	point291	291	680	25	8	25	20	25	0	0	0	0
	point292	292	680	25	8	25	20	25	0	0	0	0
	Johnston St or	293	680	25	8	25	20	25	0	0	0	0
	point294	294	680	25	8	25	20	25	0	0	0	0
	point295	295	680	25	8	25	20	25	0	0	0	0
	point296	296	680	25	8	25	20	25	0	0	0	0
	Beacon St uno	297	680	25	8	25	20	25	0	0	0	0
	point143	298	680	25	8	25	20	25	0	0	0	0
	point146	299	680	25	8	25	20	25	0	0	0	0
	Exchange St ι	300										
I-76 WB4 thru lane	point264	307	676	55	34	55	74	55	0	0	0	0
	point263	306	676	55	34	55	74	55	0	0	0	0
	point262	305	676	55	34	55	74	55	0	0	0	0
	point261	304	676	55	34	55	74	55	0	0	0	0
	Arlington Road	303	676	55	34	55	74	55	0	0	0	0
	point 259	302	676	55	34	55	74	55	0	0	0	0
	point258	301	676	55	34	55	74	55	0	0	0	0
	point308	308	676	55	34	55	74	55	0	0	0	0
	point310	310	676	55	34	55	74	55	0	0	0	0
	ped bridge	309	676	55	34	55	74	55	0	0	0	0
	point312	312	676	55	34	55	74	55	0	0	0	0
	point311	311	676	55	34	55	74	55	0	0	0	0
	Inman St undr	313	676	55	34	55	74	55	0	0	0	0
	point314	314	676	55	34	55	74	55	0	0	0	0
	point315	315	676	55	34	55	74	55	0	0	0	0

INPUT: TRAFFIC FOR LAeq1h V	olumes	216 676				SU	M-I76 Ce	ntral Ir	nterchange	e (10140	)2)	
	Ramp ovrpa	316	676	55	34	55	74	55	0	0	0	0
	point317	317	676	55	34	55	74	55	0	0	0	0
	point318	318	676	55	34	55	74	55	0	0	0	0
	point319	319	676	55	34	55	74	55	0	0	0	0
	point320	320	676	55	34	55	74	55	0	0	0	0
	fill	321	676	55	34	55	74	55	0	0	0	0
	point323	323	676	55	34	55	74	55	0	0	0	0
	point322	322	676	55	34	55	74	55	0	0	0	0
	point324	324	676	55	34	55	74	55	0	0	0	0
	point74	394	676	55	34	55	74	55	0	0	0	0
	point75	395	676	55	34	55	74	55	0	0	0	0
	point76	396	676	55	34	55	74	55	0	0	0	0
	Grant St ovrpa	397										
I-76 WB3 thru lane	point264	325	608	55	30	55	66	55	0	0	0	0
	point263	326	608	55	30	55	66	55	0	0	0	0
	point262	327	608	55	30	55	66	55	0	0	0	0
	point261	328	608	55	30	55	66	55	0	0	0	0
	Arlington Road	329	608	55	30	55	66	55	0	0	0	0
	point 259	330	608	55	30	55	66	55	0	0	0	0
	point258	331	608	55	30	55	66	55	0	0	0	0
	point308	332	608	55	30	55	66	55	0	0	0	0
	point310	333	608	55	30	55	66	55	0	0	0	0
	ped bridge	334	608	55	30	55	66	55	0	0	0	0
	point312	335	608	55	30	55	66	55	0	0	0	0
	point311	336	608	55	30	55	66	55	0	0	0	0
	Inman St undr	337	608	55	30	55	66	55	0	0	0	0
	point314	338	608	55	30	55	66	55	0	0	0	0
	point315	339	608	55	30	55	66	55	0	0	0	0
	Ramp ovrpa	340	608	55	30	55	66	55	0	0	0	0
	point317	341	608	55	30	55	66	55	0	0	0	0
	point318	342	608	55	30	55	66	55	0	0	0	0
	point319	343	608	55	30	55	66	55	0	0	0	0
	point320	344	608	55	30	55	66	55	0	0	0	0
	fill	345	608	55	30	55	66	55	0	0	0	0
	point323	346	608	55	30	55	66	55	0	0	0	0
	point322	347	608	55	30	55	66	55	0	0	0	0

<b>INPUT: TRAFFIC FOR LAeq1h Volumes</b>		SUM-I76 Central Interchange (101402)										
	point324	348	608	55	30	55	66	55	0	0	0	0
	point74	390	608	55	30	55	66	55	0	0	0	0
	point75	391	608	55	30	55	66	55	0	0	0	0
	point76	392	608	55	30	55	66	55	0	0	0	0
	Grant St ovrpa	393										
I-76WB2/Ramp I-76WB to SR 8 NB	point264	349	945	55	32	55	74	55	0	0	0	0
	point263	350	945	55	32	55	74	55	0	0	0	0
	point262	351	945	55	32	55	74	55	0	0	0	0
	point261	352	945	55	32	55	74	55	0	0	0	0
	Arlington Road	353	945	55	32	55	74	55	0	0	0	0
	point 259	354	945	55	32	55	74	55	0	0	0	0
	point258	355	945	55	32	55	74	55	0	0	0	0
	point308	356	945	55	32	55	74	55	0	0	0	0
	point310	357	945	55	32	55	74	55	0	0	0	0
	ped bridge	358	945	55	32	55	74	55	0	0	0	0
	point312	359	945	55	32	55	74	55	0	0	0	0
	point311	360	945	55	32	55	74	55	0	0	0	0
	Inman St undr	361	945	55	32	55	74	55	0	0	0	0
	point314	362	945	55	32	55	74	55	0	0	0	0
	point363	363	945	55	32	55	74	55	0	0	0	0
	point364	364	945	55	32	55	74	55	0	0	0	0
	point365	365	945	55	32	55	74	55	0	0	0	0
	point366	366	945	55	32	55	74	55	0	0	0	0
	point367	367	945	55	32	55	74	55	0	0	0	0
	point368	368	945	55	32	55	74	55	0	0	0	0
	point369	369	945	55	32	55	74	55	0	0	0	0
	Johnston St or	370	945	55	32	55	74	55	0	0	0	0
	point294	371	945	55	32	55	74	55	0	0	0	0
	point295	372	945	55	32	55	74	55	0	0	0	0
	point296	373	945	55	32	55	74	55	0	0	0	0
	Beacon St und	374	945	55	32	55	74	55	0	0	0	0
	point143	375	945	55	32	55	74	55	0	0	0	0
	point146	376	945	55	32	55	74	55	0	0	0	0
	Exchange St ι	377										
I-76 WB1	point264	378	945	55	32	55	74	55	0	0	0	0
	point263	379	945	55	32	55	74	55	0	0	0	0

INPUT: TRAFFIC FOR LAeq1h Volume	es	SUM-								M-I76 Central Interchange (101402)						
	point262	380	945	55	32	55	74	55	0	0	0	0				
	point261	381	945	55	32	55	74	55	0	0	0	0				
	Arlington Road	382	945	55	32	55	74	55	0	0	0	0				
	point 259	383	945	55	32	55	74	55	0	0	0	0				
	point258	384	945	55	32	55	74	55	0	0	0	0				
	point308	385	945	55	32	55	74	55	0	0	0	0				
	point310	386	107	45	1	45	2	45	0	0	0	0				
	ped bridge	387	107	45	1	45	2	45	0	0	0	0				
	point388	388	107	45	1	45	2	45	0	0	0	0				
	point389	389														
Lafellette Ave	Brown St	398	0	0	0	0	0	0	0	0	0	0				
	Burkhardt Ave	399	0	0	0	0	0	0	0	0	0	0				
	point400	400	0	0	0	0	0	0	0	0	0	0				
	point401	401	0	0	0	0	0	0	0	0	0	0				
	East Crosier	402	0	0	0	0	0	0	0	0	0	0				
	Hammel St	403														
Lovers Lane	Dietz Ave	404	244	35	5	35	11	35	0	0	0	0				
	Burkhardt Ave	405	244	35	5	35	11	35	0	0	0	0				
	point406	406	244	35	5	35	11	35	0	0	0	0				
	point407	407	244	35	5	35	11	35	0	0	0	0				
	Coventry	408	244	35	5	35	11	35	0	0	0	0				
	Hammel St	409														
Cole Ave	Dietz Ave	410	0	0	0	0	0	0	0	0	0	0				
	Burkhardt Ave	411	0	0	0	0	0	0	0	0	0	0				
	point412	412	0	0	0	0	0	0	0	0	0	0				
	point413	413	0	0	0	0	0	0	0	0	0	0				
	point414	414	0	0	0	0	0	0	0	0	0	0				
	point415	415														
East Crosier Ave/Burkhardt Ave	Brown St	416	0	0	0	0	0	0	0	0	0	0				
	point417	417	0	0	0	0	0	0	0	0	0	0				
	point418	418	0	0	0	0	0	0	0	0	0	0				
	Lafollette	419	0	0	0	0	0	0	0	0	0	0				
	Baird St	420	0	0	0	0	0	0	0	0	0	0				
	Kipling St	421	0	0	0	0	0	0	0	0	0	0				
	McKinlet Ave	422	0	0	0	0	0	0	0	0	0	0				
	Corice St.	423	0	0	0	0	0	0	0	0	0	0				

### INPUT: TRAFFIC FOR LAeq1h Volumes

SUM-I76 Central Interchange (101402)

	Morgan Ave	424	0	0	0	0	0	0	0	0	0	0
	Lovers Lane	425	0	0	0	0	0	0	0	0	0	0
	point426	426	0	0	0	0	0	0	0	0	0	0
	Stanton Ave	427	0	0	0	0	0	0	0	0	0	0
	Cole Ave	428										
Coventry Street	Cole Ave	429	0	0	0	0	0	0	0	0	0	0
	Lovers Lane	430	0	0	0	0	0	0	0	0	0	0
	point431	431	0	0	0	0	0	0	0	0	0	0
	Morgan Ave	432	0	0	0	0	0	0	0	0	0	0
	Corice St	433	0	0	0	0	0	0	0	0	0	0
	McKinley Ave	434	0	0	0	0	0	0	0	0	0	0
	Kipling	435	0	0	0	0	0	0	0	0	0	0
	Lafellette Ave	436										
East Crosiet	Lafellette Ave	437	0	0	0	0	0	0	0	0	0	0
	point438	438	0	0	0	0	0	0	0	0	0	0
	Hammell	439	0	0	0	0	0	0	0	0	0	0
	Gridley St.	440	0	0	0	0	0	0	0	0	0	0
	Inman St	441										
Hammel St/5th Ave	Lafollette	442	0	0	0	0	0	0	0	0	0	0
	East Crosier	443	0	0	0	0	0	0	0	0	0	0
	point444	444	0	0	0	0	0	0	0	0	0	0
	point445	445	0	0	0	0	0	0	0	0	0	0
	point446	446	0	0	0	0	0	0	0	0	0	0
	Inman St	447	0	0	0	0	0	0	0	0	0	0
	Merton Ave	448	0	0	0	0	0	0	0	0	0	0
	Bertha	449	0	0	0	0	0	0	0	0	0	0
	Hudson Ave	450	0	0	0	0	0	0	0	0	0	0
	Elbon Ave	479	0	0	0	0	0	0	0	0	0	0
	Winans Ave	480	0	0	0	0	0	0	0	0	0	0
	point481	481	0	0	0	0	0	0	0	0	0	0
	point482	482	0	0	0	0	0	0	0	0	0	0
	Arlington Road	483	0	0	0	0	0	0	0	0	0	0
	point484	484										
Inman St	E Crosier	451	0	0	0	0	0	0	0	0	0	0
	5th Ave	452	0	0	0	0	0	0	0	0	0	0
	Lumiere St	453	0	0	0	0	0	0	0	0	0	0
## INPUT: TRAFFIC FOR LAeq1h Volumes

	Bradley Pl	454										
Lumiere St	Inman St	455	80	25	0	0	0	0	0	0	0	0
	Gridley St	456	80	25	0	0	0	0	0	0	0	0
	point457	457	80	25	0	0	0	0	0	0	0	0
	Hammel St	458	80	25	0	0	0	0	0	0	0	0
	point459	459	80	25	0	0	0	0	0	0	0	0
	point460	460	80	25	0	0	0	0	0	0	0	0
	point461	461	80	25	0	0	0	0	0	0	0	0
	point462	462										
Hammel St North	point463	463	0	0	0	0	0	0	0	0	0	0
	point464	464										
Wilson St	point465	465	0	0	0	0	0	0	0	0	0	0
	point466	466										
Johnston Ct	point467	467	0	0	0	0	0	0	0	0	0	0
	point468	468										
Hedden Avenue	point469	469	0	0	0	0	0	0	0	0	0	0
	point470	470	0	0	0	0	0	0	0	0	0	0
	point471	471										
South Street	Grant Street	472	0	0	0	0	0	0	0	0	0	0
	Sumner/Ped E	473	0	0	0	0	0	0	0	0	0	0
	Kling St.	474	0	0	0	0	0	0	0	0	0	0
	Brown St	475	0	0	0	0	0	0	0	0	0	0
	point476	476										
Talbot Ave	point477	477	0	0	0	0	0	0	0	0	0	0
	point478	478										
Arlington Road	point485	485	0	0	0	0	0	0	0	0	0	0
	point486	486	0	0	0	0	0	0	0	0	0	0
	point487	487	0	0	0	0	0	0	0	0	0	0
	point488	488	0	0	0	0	0	0	0	0	0	0
	point489	489										
MartinAve/Talbot Ave	Arlington	490	0	0	0	0	0	0	0	0	0	0
	point491	491	0	0	0	0	0	0	0	0	0	0
	point492	492	0	0	0	0	0	0	0	0	0	0
	point493	493										
Pedestrian Bridge over I-76 Hoban High	point494	494	0	0	0	0	0	0	0	0	0	0
	point495	495	0	0	0	0	0	0	0	0	0	0

E:\Lawhon\SUM-IR 76 Central Interchange (101402)\Ex Yr TNM\Validation Run

## INPUT: TRAFFIC FOR LAeq1h Volumes

SUM-I76 Central Interchange (101402)

	point496	496	0	0	0	C	0	0	0	0	0	0
	point497	497										
Gridley Street	point498	498	0	0	0	C	0	0	0	0	0	0
	point499	499										
Spicer St	point500	500	0	0	0	C	0	0	0	0	0	0
	point501	501										

## APPENDIX D Impact Assessment Summary

Receptor Impacted and Benefited

-3 (2)

- O Receptor not Impacted and Benefited
- Receptor Impacted and Not Benefited
- Receptor Not Impacted and Not Benefited

1-16 (2)

1-15 (2)

-11

- Noise Barrier
- X Dwelling Unit Removed

NSA 1 Scenario 1 Noise Barrier on Bridge over Brown Street 2,072' L x 14' high x \$25=\$893,340\* 57 Benefited Receptors Cost per Benefited Receptor = \$15,672 Feasible and Reasonable Not Recommended

1-42(2)

\*includes \$100 ft<sup>2</sup> for barrier on bridge (160')

NSA 1 Scenario 1									
			Noise ba	arrier on bridge over Brow	n Street				
Receptor	Dwelling	Existing Year	Design Year Noise	Noise Level with Noise	Noise Reduction	Impacted	Benefited		
	units	Noise Level	Level	Barrier					
NSA1-1	1	72.1	72.3	67.6	4.7	Yes	Yes (1)		
NSA1-2	1	76.6	76.9	64.9	12.0	Yes	Yes (1)		
NSA1-3	2	68.6	69.0	64.6	4.4	Yes	No		
NSA1-4	1	71.5	71.6	63.6	8.0	Yes	Yes (1)		
NSA1-5	2	66.2	66.7	63.1	3.6	Yes	No		
NSA1-6	2	66.8	66.8	61.6	5.2	Yes	Yes (2)		
NSA1-7	2	59.7	59.6	57.6	2.0	No	No		
NSA1-8	3	63.8	63.1	59.3	3.8	No	No		
NSA1-9	2	59.8	59.3	56.2	3.1	No	No		
NSA1-10	1	74.2	74.1	63.6	10.5	Yes	Yes (1)		
NSA1-11	1	75.0	75.3	65.0	10.3	Yes	Yes (1)		
NSA1-12	1	70.7	70.6	61.9	8.7	Yes	Yes (1)		
NSA1-13	4	70.9	70.8	62.2	8.6	Yes	Yes (4)		
NSA1-14	2	71.4	71.7	62.9	8.8	Yes	Yes(2)		
NSA1-15	2	67.4	67.9	60.9	7.0	Yes	Yes(2)		
NSA1-16	2	65.0	65.6	60.2	5.4	Yes	Yes(2)		
NSA1-17	2	63.9	64.2	59.5	4.7	No	Yes(2)		
NSA1-18	2	65.2	65.7	59.8	5.9	Yes	Yes(2)		
NSA1-19	1	64.4	64.8	59.2	5.6	No	Yes (1)		
NSA1-20	2	64.1	64.4	59.4	5.0	No	Yes(2)		
NSA1-21	2	64.4	64.8	59.5	5.3	No	Yes(2)		
NSA1-22	2	65.2	65.5	59.9	5.6	Yes	Yes(2)		
NSA1-23	2	57.7	57.7	54.9	2.8	No	No		
NSA1-24	3	60.5	60.7	57.3	3.4	No	No		
NSA1-25	4	61.1	61.2	57.7	3.5	No	No		
NSA1-26	2	59.2	59.7	57.1	2.6	No	No		
NSA1-27	2	59.1	59.4	56.6	2.8	No	No		
NSA1-28	2	73.7	73.9	64.1	9.8	Yes	Yes (2)		
NSA1-29	2	74.6	75.1	64.5	10.6	Yes	Yes(2)		
NSA1-30	3	74.4	75.0	64.4	10.5	Yes	Yes (3)		
NSA1-31	2	70.5	70.1	66.2	4.0	Yes	No		
NSA1-32	2	69.9	70.6	62.9	7.8	Yes	Yes(2)		
NSA1-33	2	65.4	67.2	62.5	5.0	Yes	Yes (2)		
NSA1-34	2	68.1	68.8	62.5	6.3	Yes	Yes(2)		

	NSA 1 Scenario 1										
			Noise b	arrier on bridge over Brow	n Street						
Receptor	Dwelling	Existing Year	Design Year Noise	Noise Level with Noise	Noise Reduction	Impacted	Benefited				
	units	Noise Level	Level	Barrier							
NSA1-35	2	64.8	66.4	61.8	4.9	No	Yes (2)				
NSA1-36	3	67.0	67.7	62.0	5.7	Yes	Yes (3)				
NSA1-37	2	67.2	67.9	62.5	5.4	Yes	Yes(2)				
NSA1-38	2	66.8	67.5	62.4	5.1	Yes	Yes(2)				
NSA1-39	2	62.7	62.7	59.3	3.4	No	No				
NSA1-40	3	61.7	62.4	59.3	3.1	No	No				
NSA1-41	1	62.2	63.3	59.7	3.6	No	No				
NSA1-42	2	65.6	66.3	62.6	3.6	No	No				
NSA1-43	3	64.3	65.2	61.0	4.1	No	No				
NSA1-44	2	63.60	64.1	59.7	4.4	No	No				
NSA1-45	1	65.10	64.8	60.7	4.1	No	No				
NSA1-46	1	63.80	63.8	59.1	4.7	No	Yes (1)				
NSA1-47	2	62.40	62.8	58.0	4.7	No	Yes(2)				
NSA1-48	3	62.50	62.7	58.1	4.6	No	Yes (3)				
	97					46	57				

-16 (2 Receptor Impacted and Benefited NSA 1 Scenario 2 Receptor not Impacted and Benefited Noise Barrier Not on Bridge over Brown St. 1,912' L x 14' high x \$25=\$669,323 Receptor Impacted and Not Benefited **45 Benefited Receptors** Receptor Not Impacted and Not Benefited Cost per Benefited Receptor = \$14,873 Proposed Noise Barrier Feasible and Reasonable х **Dwelling Unit Removed Recommended Scenario** 

NSA 1 Scenario 2									
			Noise barr	rier <b>Not</b> on bridge over Bro	own Street				
Receptor	Dwelling	Existing Year	Design Year Noise	Noise Level with Noise	Noise Reduction	Impacted	Benefited		
	units	Noise Level	Level	Barrier					
NSA1-1	1	72.1	72.3	67.6	4.7	Yes	Yes (1)		
NSA1-2	1	76.6	76.9	64.9	12.0	Yes	Yes (1)		
NSA1-3	2	68.6	69.0	64.6	4.4	Yes	No		
NSA1-4	1	71.5	71.6	63.6	8.0	Yes	Yes (1)		
NSA1-5	2	66.2	66.7	63.	3.6	Yes	No		
NSA1-6	2	66.8	66.8	61.2	5.6	Yes	Yes(2)		
NSA1-7	2	59.7	59.6	57.5	2.1	No	No		
NSA1-8	3	63.8	63.1	59.1	4.0	No	No		
NSA1-9	2	59.8	59.3	56.0	3.3	No	No		
NSA1-10	1	74.2	74.1	63.1	11.0	Yes	Yes(1)		
NSA1-11	1	75.0	75.3	64.4	10.9	Yes	Yes (1)		
NSA1-12	1	70.7	70.6	61.5	9.1	Yes	Yes (1)		
NSA1-13	4	70.9	70.8	61.7	9.1	Yes	Yes (4)		
NSA1-14	2	71.4	71.7	62.4	9.3	Yes	Yes(2)		
NSA1-15	2	67.4	67.9	60.5	7.4	Yes	Yes(2)		
NSA1-16	2	65.0	65.6	59.7	5.9	Yes	Yes(2)		
NSA1-17	2	63.9	64.2	59.2	5.0	No	Yes(2)		
NSA1-18	2	65.2	65.7	59.4	6.3	Yes	Yes(2)		
NSA1-19	1	64.4	64.8	58.8	6.0	No	Yes (1)		
NSA1-20	2	64.1	64.4	59.0	5.4	No	Yes(2)		
NSA1-21	2	64.4	64.8	59.2	5.6	No	Yes(2)		
NSA1-22	2	65.2	65.5	59.5	6.0	Yes	Yes(2)		
NSA1-23	2	57.7	57.7	54.8	2.9	No	No		
NSA1-24	3	60.5	60.7	57.1	3.6	No	No		
NSA1-25	4	61.1	61.2	57.4	3.8	No	No		
NSA1-26	2	59.2	59.7	57.0	2.7	No	No		
NSA1-27	2	59.1	59.4	56.4	3.0	No	No		
NSA1-28	2	73.7	73.9	63.8	10.1	Yes	Yes(2)		
NSA1-29	2	74.6	75.1	64.2	10.9	Yes	Yes(2)		
NSA1-30	3	74.4	75.0	65.3	9.6	Yes	Yes(3)		
NSA1-31	2	70.5	70.1	67.5	2.7	Yes	No		
NSA1-32	2	69.9	70.6	63.2	7.5	Yes	Yes(2)		
NSA1-33	2	65.4	67.2	63.7	3.8	Yes	No		
NSA1-34	2	68.1	68.8	62.9	5.9	Yes	Yes(2)		

NSA 1 Scenario 2										
			Noise barr	rier <b>Not</b> on bridge over Bro	wn Street					
Receptor	Dwelling	Existing Year	Design Year Noise	Noise Level with Noise	Noise Reduction	Impacted	Benefited			
	units	Noise Level	Level	Barrier						
NSA1-35	2	64.8	66.4	62.7	4.0	No	No			
NSA1-36	3	67.0	67.7	62.3	5.4	Yes	Yes(3)			
NSA1-37	2	67.2	67.9	63.0	4.9	Yes	Yes(2)			
NSA1-38	2	66.8	67.5	63.1	4.4	Yes	No			
NSA1-39	2	62.7	62.7	59.2	3.5	No	No			
NSA1-40	3	61.7	62.4	59.3	3.1	No	No			
NSA1-41	1	62.2	63.3	60.0	3.3	No	No			
NSA1-42	2	65.6	66.3	63.8	2.4	Yes	No			
NSA1-43	3	64.3	65.2	62.2	2.9	No	No			
NSA1-44	2	63.60	64.1	60.7	3.4	No	No			
NSA1-45	1	65.10	64.8	61.5	3.3	No	No			
NSA1-46	1	63.80	63.8	59.7	4.1	No	No			
NSA1-47	2	62.40	62.8	58.5	4.2	No	No			
NSA1-48	3	62.50	62.7	58.7	4.0	No	No			
	97					46	45			



Receptor Not Impacted and Not Benefited

Proposed Noise Barrier

3 Benefited Receptors Cost per Benefited Receptor = \$150,000 Not Feasible and Not Reasonable Not Recommended

	NSA 2 Scenario 1										
			Noise barrier a	along ramp SB SR 8 to V	WB I-76 ROW						
Receptor	Dwelling	Existing Year	Design Year	Noise Level with	Noise Reduction	Impacted	Benefited				
	units	Noise Level	Noise Level	Noise Barrier							
NSA2-1	1	67.4	67.5	63.2	4.3	Yes	No				
NSA2-2	1	66.8	67.3	63.6	3.7	Yes	No				
NSA2-3	1	66.6	66.9	63.8	3.1	Yes	No				
NSA2-4	1	66.7	67.4	63.8	3.6	Yes	No				
NSA2-5	1	67.6	68.4	63.2	5.2	Yes	Yes				
NSA2-6	1	70.6	71.0	62.7	8.3	Yes	Yes				
NSA2-7	1	71.8	72.2	63.2	9.0	Yes	Yes				
NSA2-8	1	66.0	66.5	63.8	2.7	Yes	No				
NSA2-9	1	65.7	66.5	63.4	3.1	Yes	No				
NSA2-10	1	65.6	66.2	63.8	2.4	Yes	No				
NSA2-11	1	65.5	66.2	63.6	2.6	Yes	No				
NSA2-12	1	64.6	65.7	62.6	3.1	Yes	No				
NSA2-13	1	65.2	65.8	63.7	2.1	Yes	No				
NSA2-14	1	63.7	64.5	62.3	2.2	No	No				
NSA2-15	1	63.9	64.4	62.7	1.7	No	No				
NSA2-16	1	64.0	64.6	62.7	1.9	No	No				
NSA2-17	1	62.8	63.5	61.9	1.6	No	No				
NSA2-18	1	62.5	63.2	61.9	1.3	No	No				
NSA2-19	1	65.9	67.5	64.3	3.2	Yes	No				
NSA2-20	1	65.3	66.9	65.7	1.2	Yes	No				
NSA2-21	1	63.4	64.5	64.1	0.4	No	No				
NSA2-22	1	66.3	66.3	66.3	0.0	Yes	No				
	22					16	3				



	NSA 3 Scenario 1										
	I		Noise Barı	rier on Bridge over Inm	an Street						
Receptor	Dwelling	Existing Year	Design Year	Noise Level with	Noise Reduction	Impacted	Benefited				
	units	Noise Level	Noise Level	Noise Barrier							
NSA 3-1	1	65.3	66.9	65.0	2.1	Yes	No				
NSA 3-2	1	65.3	66.9	63.6	3.5	Yes	No				
NSA 3-3	1	65.3	66.9	62.6	4.5	Yes	Yes (1)				
NSA 3-4	1	65.8	67.5	62.0	5.6	Yes	Yes (1)				
NSA 3-5	1	66.8	68.5	62.2	6.3	Yes	Yes (1)				
NSA 3-6	1	67.4	69.0	62.0	6.9	Yes	Yes (1)				
NSA 3-7	1	67.5	68.8	61.8	6.8	Yes	Yes (1)				
NSA3-8	1	65.6	65.9	60.5	5.4	Yes	Yes (1)				
NSA 3-9	1	65.8	65.3	59.7	5.6	No	Yes (1)				
NSA 3-10	1	65.3	65.6	60.4	5.2	Yes	Yes (1)				
NSA 3-11	1	62.3	64.0	60.3	3.8	No	No				
NSA 3-12	1	61.8	63.7	60.6	3.3	No	No				
NSA 3-13	1	62.0	64.0	61.0	3.1	No	No				
NSA 3-14	1	61.9	63.8	61.3	2.7	No	No				
NSA 3-15	2	61.4	63.1	60.9	2.5	No	No				
NSA 3-16	1	61.3	63.0	61.1	2.2	No	No				
NSA 3-17	1	61.6	63.2	61.6	1.9	No	No				
NSA 3-18	1	61.6	62.8	61.7	1.5	No	No				
NSA 3-19	1	62.4	63.6	62.1	1.5	No	No				
NSA 3-20	1	62.8	63.8	62.1	1.7	No	No				
NSA 3-21	1	63.3	64.4	63.1	1.3	No	No				
NSA 3-22	1	65.6	64.4	59.0	5.4	No	Yes (1)				
NSA 3-23	1	65.0	65.8	60.2	5.7	Yes	Yes (1)				
NSA 3-24	1	64.8	65.8	60.7	5.1	Yes	Yes (1)				
NSA 3-25	1	63.7	64.4	59.6	4.8	No	Yes (1)				
NSA 3-26	1	63.5	64.6	61.5	3.2	No	No				
NSA 3-27	1	66.9	66.3	60.0	6.3	Yes	Yes (1)				
NSA 3-28	1	72.9	68.3	60.8	7.5	Yes	Yes (1)				
NSA 3-29	1	65.9	66.9	60.8	6.1	Yes	Yes (1)				

NSA 3 Scenario 1										
			Noise Barr	rier on Bridge over Inm	an Street	1	1			
Receptor	Dwelling	Existing Year	Design Year	Noise Level with	Noise Reduction	Impacted	Benefited			
	units	Noise Level	Noise Level	Noise Barrier						
NSA 3-30	1	65.0	66.4	60.8	5.6	Yes	Yes (1)			
NSA 3-31	1	65.0	66.0	60.8	5.3	Yes	Yes (1)			
NSA 3-32	1	64.5	65.6	60.8	4.8	Yes	Yes (1)			
NSA3-33	1	69.0	69.0	62.4	6.6	Yes	Yes (1)			
NSA 3-34	1	67.8	68.1	62.4	5.7	Yes	Yes (1)			
NSA 3-35	1	64.8	67.3	61.7	5.6	Yes	Yes (1)			
NSA 3-36	1	64.3	67.1	61.6	5.5	Yes	Yes (1)			
NSA 3-37	1	64.0	66.7	61.5	5.2	Yes	Yes (1)			
NSA 3-38	1	63.4	66.2	61.2	5.0	Yes	Yes (1)			
NSA 3-39	1	69.2	69.3	65.0	4.3	Yes	No			
NSA 3-40	1	67.6	68.4	63.8	4.7	Yes	Yes (1)			
NSA 3-41	1	66.6	67.5	62.7	4.8	Yes	Yes (1)			
NSA 3-42	1	65.7	66.7	61.8	4.9	Yes	Yes (1)			
NSA 3-43	1	65.4	66.2	61.0	5.2	Yes	Yes (1)			
NSA 3-44	1	67.3	67.5	63.1	4.5	Yes	Yes (1)			
NSA3-45	1	64.0	65.1	60.7	4.4	No	No			
NSA3-46	1	63.1	64.2	60.3	3.9	No	No			
NSA3-47	1	65.4	65.9	61.0	5.0	Yes	Yes (1)			
NSA3-48	1	64.9	65.4	60.7	4.8	Yes	Yes (1)			
NSA3-49	1	64.1	64.7	60.3	4.4	No	No			
NSA3-50	1	65.0	65.3	60.7	4.6	Yes	Yes (1)			
NSA3-51	1	63.8	64.2	59.9	4.3	No	No			
	52					32	32			



NSA 3 Scenario 2										
	1		Noise Barrie	r Not on Bridge over In	iman Street		1			
Receptor	Dwelling	Existing Year	Design Year	Noise Level with	Noise Reduction	Impacted	Benefited			
	units	Noise Level	Noise Level	Noise Barrier						
NSA 3-1	1	65.3	66.9	65.0	2.1	Yes	No			
NSA 3-2	1	65.3	66.9	63.6	3.5	Yes	No			
NSA 3-3	1	65.3	66.9	62.6	4.5	Yes	Yes (1)			
NSA 3-4	1	65.8	67.5	62.0	5.6	Yes	Yes (1)			
NSA 3-5	1	66.8	68.5	62.2	6.3	Yes	Yes (1)			
NSA 3-6	1	67.4	69.0	62.0	6.9	Yes	Yes (1)			
NSA 3-7	1	67.5	68.8	61.8	6.8	Yes	Yes (1)			
NSA3-8	1	65.6	65.9	60.5	5.4	Yes	Yes (1)			
NSA 3-9	1	65.8	65.3	59.7	5.6	No	Yes (1)			
NSA 3-10	1	65.3	65.6	60.4	5.2	Yes	Yes (1)			
NSA 3-11	1	62.3	64.0	60.3	3.8	No	No			
NSA 3-12	1	61.8	63.7	60.6	3.3	No	No			
NSA 3-13	1	62.0	64.0	61.0	3.1	No	No			
NSA 3-14	1	61.9	63.8	61.3	2.7	No	No			
NSA 3-15	2	61.4	63.1	60.9	2.5	No	No			
NSA 3-16	1	61.3	63.0	61.1	2.2	No	No			
NSA 3-17	1	61.6	63.2	61.6	1.9	No	No			
NSA 3-18	1	61.6	62.8	61.7	1.5	No	No			
NSA 3-19	1	62.4	63.6	61.9	1.7	No	No			
NSA 3-20	1	62.8	63.8	62.7	1.1	No	No			
NSA 3-21	1	63.3	64.4	62.9	1.5	No	No			
NSA 3-22	1	65.6	64.4	59.0	5.4	No	Yes (1)			
NSA 3-23	1	65.0	65.8	60.2	5.7	Yes	Yes (1)			
NSA 3-24	1	64.8	65.8	60.7	5.1	Yes	Yes (1)			
NSA 3-25	1	63.7	64.4	59.6	4.8	No	Yes (1)			
NSA 3-26	1	63.5	64.6	61.5	3.2	No	No			
NSA 3-27	1	66.9	66.3	60.0	6.3	Yes	Yes (1)			
NSA 3-28	1	72.9	68.3	60.8	7.5	Yes	Yes (1)			
NSA 3-29	1	65.9	66.9	60.8	6.1	Yes	Yes (1)			

NSA 3 Scenario 2										
			Noise Barrie	r Not on Bridge over In	man Street					
Receptor	Dwelling	Existing Year	Design Year	Noise Level with	Noise Reduction	Impacted	Benefited			
	units	Noise Level	Noise Level	Noise Barrier						
NSA 3-30	1	65.0	66.4	60.8	5.6	Yes	Yes (1)			
NSA 3-31	1	65.0	66.0	60.8	5.3	Yes	Yes (1)			
NSA 3-32	1	64.5	65.6	60.8	4.8	Yes	Yes (1)			
NSA3-33	1	69.0	69.0	62.4	6.6	Yes	Yes (1)			
NSA 3-34	1	67.8	68.1	62.4	5.7	Yes	Yes (1)			
NSA 3-35	1	64.8	67.3	61.7	5.6	Yes	Yes (1)			
NSA 3-36	1	64.3	67.1	61.6	5.5	Yes	Yes (1)			
NSA 3-37	1	64.0	66.7	61.5	5.2	Yes	Yes (1)			
NSA 3-38	1	63.4	66.2	61.2	5.0	Yes	Yes (1)			
NSA 3-39	1	69.2	69.3	65.0	4.3	Yes	No			
NSA 3-40	1	67.6	68.4	63.8	4.7	Yes	Yes (1)			
NSA 3-41	1	66.6	67.5	62.7	4.8	Yes	Yes (1)			
NSA 3-42	1	65.7	66.7	61.8	4.9	Yes	Yes (1)			
NSA 3-43	1	65.4	66.2	61.0	5.2	Yes	Yes (1)			
NSA 3-44	1	67.3	67.5	63.1	4.5	Yes	Yes (1)			
NSA3-45	1	64.0	65.1	60.7	4.4	No	No			
NSA3-46	1	63.1	64.2	60.3	3.9	No	No			
NSA3-47	1	65.4	65.9	61.0	5.0	Yes	Yes (1)			
NSA3-48	1	64.9	65.4	60.7	4.8	No	Yes (1)			
NSA3-49	1	64.1	64.7	60.3	4.4	Yes	No			
NSA3-50	1	65.0	65.3	60.7	4.6	Yes	Yes (1)			
NSA3-51	1	63.8	64.2	59.9	4.3	No	No			
	52					43	32			

Equivalent Receptors for NSA 4 – NAC Category C (253 athletes  $\div$  3 residence size) x (8 hours  $\div$  24 hours day) x (210 days use  $\div$  365 days year) = 84 x 0.333 x 0.57 = 15.9 or <u>16 equivalent receptors</u>.

4-2

04-3

Canadad alles an antere sanctela

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NSA 4 Scenario 1 West Barrier = 630' L x 14' high x \$25=\$220,500 East Barrier = 526' L x 14' high x \$25 = \$182,000 Total Barrier Cost = \$404,711 16 Equivalent Benefited Receptors Cost per Benefited Receptor = \$25,294 Feasible and Reasonable

4-6

Area Impacted and Benefited

Noise Barrier NSA 4

Area not Impacted and Benefited

Area not Impacted and not Benefited

Continuation of Noise Barrier NSA 3

04-7

				NSA 4 Scenario 1						
			Noise	barrier along WB I-76	ROW					
Receptor	Dwelling	Existing Year	Design Year	Noise Level with	Noise Reduction	Impacted	Benefited			
	units	Noise Level	Noise Level	Noise Barrier						
NSA4-1		64.0	63.7	56.9	6.8	No	Yes			
NSA4-2		65.1	64.5	56.8	7.7	No	Yes			
NSA4-3		64.3	62.9	56.7	6.2	No	Yes			
NSA4-4		64.0	63.4	56.2	7.2	No	Yes			
NSA4-5		68.0	68.8	63.3	5.5	Yes	Yes			
NSA4-6		69.1	69.8	62.3	7.5	Yes	Yes			
NSA4-7		63.7	64.4	59.5	4.9	No	Yes			
NSA4-8		68.6	65.6	59.9	5.7	Yes	Yes			
Equivalent Receptors										



	NSA 5 Scenario 1									
			Noise Barr	ier on Bridge over Brow	wn Street					
Receptor	Dwelling	Existing Year	Design Year	Noise Level with	Noise Reduction	Impacted	Benefited			
	units	Noise Level	Noise Level	Noise Barrier						
NSA5-1	1	73.4	73.6	64.7	8.9	Yes	Yes (1)			
NSA5-2	1	74.0	74.0	63.3	10.7	Yes	Yes (1)			
NSA5-3	1	74.0	74.3	63.3	11.0	Yes	Yes (1)			
NSA5-4	2	71.8	72.8	63.0	9.8	Yes	Yes (2)			
NSA5-5	2	73.9	75.0	63.8	11.2	Yes	Yes (2)			
NSA5-6	2	73.5	73.4	63.6	9.8	Yes	Yes (2)			
NSA5-7	2	72.6	72.2	63.9	8.3	Yes	Yes (2)			
NSA5-8	1	71.4	71.8	64.4	7.4	Yes	Yes (1)			
NSA5-9	1	67.3	67.5	63.7	3.8	Yes	No			
NSA5-10	3	67.9	68.2	63.1	5.1	Yes	Yes (3)			
NSA5-11	3	68.1	68.2	60.9	7.3	Yes	Yes (3)			
NSA5-12	4	67.2	67.6	60.6	7.0	Yes	Yes (4)			
NSA5-13	2	67.2	67.5	60.6	6.9	Yes	Yes (2)			
NSA5-14	2	69.1	69.8	64.8	5.0	Yes	Yes (2)			
NSA5-15	2	69.0	69.7	65.1	4.6	Yes	Yes (2)			
NSA5-16	2	63.7	63.8	60.1	3.7	No	No			
NSA5-17	2	64.6	64.8	60.1	4.7	No	Yes (2)			
NSA5-18	3	65.3	65.4	59.7	5.7	No	Yes (3)			
NSA5-19	2	66.4	66.6	59.3	7.3	Yes	Yes (2)			
NSA5-20	2	65.7	65.3	58.9	6.4	No	Yes (2)			
NSA5-21	2	65.1	65.1	58.6	6.5	No	Yes (2)			
NSA5-22	3	65.0	65.6	59.1	6.5	Yes	Yes (3)			
NSA5-23	1	66.1	66.0	59.8	6.2	Yes	Yes (1)			
NSA5-24	1	68.3	68.2	62.0	6.2	Yes	Yes (1)			
NSA5-25	1	67.4	67.3	61.5	5.8	Yes	Yes (1)			
NSA5-26	2	65.9	66.4	60.7	5.7	Yes	Yes (2)			
NSA5-27	1	68.4	68.7	63.0	5.7	Yes	Yes (1)			
NSA5-28	2	66.9	67.4	62.0	5.4	Yes	Yes (2)			
NSA5-29	1	62.7	62.9	59.3	3.6	No	No			

NSA 5 Scenario 1										
Noise Barrier on Bridge over Brown Street										
Receptor	Dwelling	Existing Year	Design Year	Noise Level with	Noise Reduction	Impacted	Benefited			
	units	Noise Level	Noise Level	Noise Barrier						
NSA5-30	2	62.9	63.0	58.9	4.1	No	No			
NSA5-31	1	64.6	64.9	60.3	4.6	No	Yes (1)			
NSA5-32	2	64.2	64.5	59.5	5.0	No	Yes (2)			
NSA5-33	3	63.3	63.6	59.4	4.2	No	No			
NSA5-34	3	63.7	63.8	58.3	5.5	No	Yes (3)			
NSA5-35	2	64.1	64.1	58.7	5.4	No	Yes (2)			
NSA5-36	2	63.7	63.9	59.2	4.7	No	Yes (2)			
NSA5-37	1	64.6	64.7	59.1	5.6	No	Yes (1)			
NSA5-38	2	63.7	63.7	58.8	4.9	No	Yes (2)			
NSA5-39	1	64.6	64.6	59.3	5.3	No	Yes (1)			
NSA5-40	2	63.7	63.0	58.4	4.6	No	Yes (2)			
NSA5-42	1	64.9	64.9	59.9	5.0	No	Yes (1)			
NSA5-43	2	65.3	65.7	61.1	4.6	Yes	Yes (2)			
NSA5-44	1	64.1	64.3	60.2	4.1	No	No			
NSA5-45	1	66.8	67.1	62.7	4.4	Yes	No			
	80					40	69			



	NSA 5 Scenario 2									
			Noise Barrie	r Not on Bridge over Br	rown Street					
Receptor	Dwelling	Existing Year	Design Year	Noise Level with	Noise Reduction	Impacted	Benefited			
	units	Noise Level	Noise Level	Noise Barrier						
NSA5-1	1	73.4	73.6	64.7	8.9	Yes	Yes (1)			
NSA5-2	1	74.0	74.0	63.3	10.7	Yes	Yes (1)			
NSA5-3	1	74.0	74.3	63.3	11.0	Yes	Yes (1)			
NSA5-4	2	71.8	72.8	63.0	9.8	Yes	Yes (2)			
NSA5-5	2	73.9	75.0	63.9	11.1	Yes	Yes (2)			
NSA5-6	2	73.5	73.4	63.8	9.6	Yes	Yes (2)			
NSA5-7	2	72.6	72.2	64.6	7.6	Yes	Yes (2)			
NSA5-8	1	71.4	71.8	65.8	6.0	Yes	Yes (1)			
NSA5-9	1	67.3	67.5	63.7	3.8	Yes	No			
NSA5-10	3	67.9	68.2	63.1	5.1	Yes	Yes (3)			
NSA5-11	3	68.1	68.2	60.9	7.3	Yes	Yes (3)			
NSA5-12	4	67.2	67.6	60.7	6.9	Yes	Yes (4)			
NSA5-13	2	67.2	67.5	60.8	6.7	Yes	Yes (2)			
NSA5-14	2	69.1	69.8	66.9	2.9	Yes	No			
NSA5-15	2	69.0	69.7	66.4	3.3	Yes	No			
NSA5-16	2	63.7	63.8	60.1	3.7	No	No			
NSA5-17	2	64.6	64.8	60.1	4.7	No	Yes (2)			
NSA5-18	3	65.3	65.4	59.8	5.6	No	Yes (3)			
NSA5-19	2	66.4	66.6	59.4	7.2	Yes	Yes (2)			
NSA5-20	2	65.7	65.3	59.0	6.3	No	Yes (2)			
NSA5-21	2	65.1	65.1	58.8	6.3	No	Yes (2)			
NSA5-22	3	65.0	65.6	59.4	6.2	Yes	Yes (3)			
NSA5-23	1	66.1	66.0	60.4	5.6	Yes	Yes (1)			
NSA5-24	1	68.3	68.2	63.5	4.7	Yes	Yes (1)			
NSA5-25	1	67.4	67.3	63.0	4.3	Yes	No			
NSA5-26	2	65.9	66.4	62.0	4.4	Yes	No			
NSA5-27	1	68.4	68.7	64.8	3.9	Yes	No			
NSA5-28	2	66.9	67.4	63.5	3.9	Yes	No			
NSA5-29	1	62.7	62.9	59.3	3.6	No	No			

	NSA 5 Scenario 2										
	Noise Barrier Not on Bridge over Brown Street										
Receptor	Dwelling	Existing Year	Design Year	Noise Level with	Noise Reduction	Impacted	Benefited				
	units	Noise Level	Noise Level	Noise Barrier							
NSA5-30	2	62.9	63.0	59.0	4.0	No	No				
NSA5-31	1	64.6	64.9	60.4	4.5	No	Yes (1)				
NSA5-32	2	64.2	64.5	59.7	4.8	No	Yes (2)				
NSA5-33	3	63.3	63.6	59.5	4.1	No	No				
NSA5-34	3	63.7	63.8	58.5	5.3	No	Yes (3)				
NSA5-35	2	64.1	64.1	59.1	5.0	No	Yes (2)				
NSA5-36	2	63.7	63.9	59.6	4.3	No	No				
NSA5-37	1	64.6	64.7	59.7	5.0	No	Yes (1)				
NSA5-38	2	63.7	63.7	59.3	4.4	No	No				
NSA5-39	1	64.6	64.6	60.1	4.5	No	Yes (1)				
NSA5-40	2	63.7	63.0	58.9	4.1	No	No				
NSA5-42	1	64.9	64.9	60.8	4.1	No	No				
NSA5-43	2	65.3	65.7	61.9	3.0	Yes	No				
NSA5-44	1	64.1	64.3	60.8	3.5	No	No				
NSA5-45	1	66.8	67.1	63.6	3.5	Yes	No				
	80					40	50				



\*includes \$100 ft<sup>2</sup> for barrier on bridge (60 feet)

NSA 6 Scenario 1									
	,		Noise Barr	ier on Bridge over Inm	an Street				
Receptor	Dwelling	Existing Year	Design Year	Noise Level with	Noise Reduction with	Impacted	Benefited		
	units	Noise Level	Noise Level	Noise Barrier	noise barrier				
NSA 6-1	2	65.8	68.2	64.2	4.0	Yes	No		
NSA 6-2	2	62.9	64.7	61.2	3.5	No	No		
NSA 6-3	2	61.6	63.1	60.1	3.0	No	No		
NSA 6-4	2	63.5	65.3	61.2	4.1	No	No		
NSA 6-5	2	62.0	63.5	60.5	3.0	No	No		
NSA 6-6	2	71.4	73.0	68.7	4.3	Yes	No		
NSA 6-7	3	64.0	65.6	61.0	4.6	Yes	Yes (3)		
NSA 6-8	2	67.8	69.7	62.7	7.0	Yes	Yes (2)		
NSA 6-9	2	63.5	65.1	59.6	5.5	No	Yes (2)		
NSA 6-10	1	69.2	71.4	60.8	10.6	Yes	Yes(1)		
NSA 6-11	2	66.4	67.9	60.7	7.2	Yes	Yes (2)		
NSA 6-12	2	61.1	62.8	59.6	3.2	No	No		
NSA 6-13	2	64.3	66.0	62.5	3.5	Yes	No		
NSA 6-14	2	67.0	68.4	61.8	6.6	Yes	Yes (2)		
NSA 6-15	2	65.8	67.4	60.4	7.0	Yes	Yes (2)		
NSA 6-16	3	63.5	65.4	60.3	5.1	No	Yes (3)		
NSA 6-17	1	61.7	63.6	60.3	3.3	No	No		
NSA 6-18	1	68.0	70.4	61.3	9.1	Yes	Yes (1)		
NSA 6-19	2	65.7	67.6	59.9	7.7	Yes	Yes (2)		
NSA 6-20	2	63.8	65.6	59.2	6.4	Yes	Yes (2)		
NSA 6-21	3	62.2	63.9	59.1	4.8	No	Yes (3)		
NSA 6-22	2	65.9	67.6	60.2	7.4	Yes	Yes (2)		
NSA 6-23	3	64.9	66.3	59.1	7.2	Yes	Yes (3)		
NSA 6-24	1	63.3	64.1	58.3	5.8	No	Yes (1)		
NSA 6-25	2	64.8	65.9	58.9	7.0	Yes	Yes (2)		
NSA 6-26	2	63.8	64.5	58.6	5.9	No	Yes (2)		
NSA 6-27	2	67.2	68.3	61.7	6.6	Yes	Yes (2)		
NSA 6-28	3	67.1	68.3	61.4	6.9	Yes	Yes (3)		
NSA 6-29	3	69.4	70.2	62.8	7.4	Yes	Yes (3)		

NSA 6 Scenario 1									
	1		Noise Barr	ier on Bridge over Inm	an Street				
Receptor	Dwelling	Existing Year	Design Year	Noise Level with	Noise Reduction with	Impacted	Benefited		
	units	Noise Level	Noise Level	Noise Barrier	noise barrier				
NSA 6-30	1	68.9	70.2	62.0	8.2	Yes	Yes (1)		
NSA 6-31	3	67.7	68.9	61.4	7.5	Yes	Yes (3)		
NSA 6-32	2	67.5	68.3	62.0	6.3	Yes	Yes (2)		
NSA 6-33	1	67.8	69.2	63.2	6.0	Yes	Yes (1)		
NSA 6-34	3	64.5	66.3	62.5	3.8	Yes	No		
NSA 6-35	2	64.8	65.7	63.8	1.9	Yes	No		
NSA 6-36	2	65.2	65.9	59.3	6.6	Yes	Yes (2)		
NSA 6-37	2	66.4	67.7	63.2	4.5	Yes	Yes (2)		
NSA 6-38	2	63.2	63.7	58.1	5.6	No	Yes (2)		
NSA 6-39	3	66.0	66.8	60.2	6.6	Yes	Yes (3)		
NSA 6-40	1	65.5	66.3	60.3	6.0	Yes	Yes (1)		
NSA 6-41	2	65.3	66.5	61.0	5.5	Yes	Yes (2)		
NSA 6-42	2	63.2	63.5	57.8	5.7	No	Yes (2)		
NSA 6-43	2	62.2	62.2	57.1	5.1	No	Yes (2)		
NSA 6-44	2	61.0	61.4	56.9	4.5	No	Yes (2)		
NSA 6-45	4	63.3	64.6	59.7	4.9	No	Yes (4)		
NSA 6-46	1	61.9	63.1	58.8	4.3	No	No		
NSA 6-47	1	63.9	65.2	60.6	4.6	No	Yes (1)		
NSA 6-48	3	62.3	63.5	59.2	4.3	No	No		
NSA 6-49	2	60.9	62.0	58.4	3.6	No	No		
NSA 6-50	1	63.6	64.5	60.7	3.8	No	No		
NSA 6-51	2	63.5	64.6	61.7	2.9	No	No		
NSA 6-52	2	63.7	64.3	61.4	2.9	No	No		
NSA6-53	2	62.3	63.8	60.9	2.9	No	No		
	108					49	71		



	NSA 6 Scenario 2										
			Noise Barrie	r Not on Bridge over In	iman Street						
Receptor	Dwelling	Existing Year	Design Year	Noise Level with	Noise Reduction with	Impacted	Benefited				
	units	Noise Level	Noise Level	Noise Barrier	noise barrier						
NSA 6-1	2	65.8	68.2	64.2	4.0	Yes	No				
NSA 6-2	2	62.9	64.7	61.2	3.5	No	No				
NSA 6-3	2	61.6	63.1	60.1	3.0	No	No				
NSA 6-4	2	63.5	65.3	61.2	4.1	No	No				
NSA 6-5	2	62.0	63.5	60.5	3.0	No	No				
NSA 6-6	2	71.4	73.0	68.7	4.3	Yes	No				
NSA 6-7	3	64.0	65.6	61.0	4.6	Yes	Yes (3)				
NSA 6-8	2	67.8	69.7	62.7	7.0	Yes	Yes (2)				
NSA 6-9	2	63.5	65.1	59.6	5.5	No	Yes (2)				
NSA 6-10	1	69.2	71.4	60.8	10.6	Yes	Yes (1)				
NSA 6-11	2	66.4	67.9	60.7	7.2	Yes	Yes (2)				
NSA 6-12	2	61.1	62.8	59.6	3.2	No	No				
NSA 6-13	2	64.3	66.0	62.5	3.5	Yes	No				
NSA 6-14	2	67.0	68.4	61.8	6.6	Yes	Yes (2)				
NSA 6-15	2	65.8	67.4	60.4	7.0	Yes	Yes (2)				
NSA 6-16	3	63.5	65.4	60.3	5.1	No	Yes (3)				
NSA 6-17	1	61.7	63.6	60.4	3.2	No	No				
NSA 6-18	1	68.0	70.4	61.3	9.1	Yes	Yes (1)				
NSA 6-19	2	65.7	67.6	59.9	7.7	Yes	Yes (2)				
NSA 6-20	2	63.8	65.6	59.3	6.3	Yes	Yes (2)				
NSA 6-21	3	62.2	63.9	59.2	4.7	No	Yes (3)				
NSA 6-22	2	65.9	67.6	61.3	6.3	Yes	Yes (2)				
NSA 6-23	3	64.9	66.3	60.0	6.3	Yes	Yes (3)				
NSA 6-24	1	63.3	64.1	58.9	5.2	No	Yes (1)				
NSA 6-25	2	64.8	65.9	59.9	6.0	Yes	Yes (2)				
NSA 6-26	2	63.8	64.5	59.3	5.2	No	Yes (2)				
NSA 6-27	2	67.2	68.3	62.7	5.6	Yes	Yes (2)				
NSA 6-28	3	67.1	68.3	61.8	6.5	Yes	Yes (3)				
NSA 6-29	3	69.4	70.2	63.0	7.2	Yes	Yes (3)				

	NSA 6 Scenario 2										
			Noise Barrie	r Not on Bridge over In	man Street						
Receptor	Dwelling	Existing Year	Design Year	Noise Level with	Noise Reduction with	Impacted	Benefited				
	units	Noise Level	Noise Level	Noise Barrier	noise barrier						
NSA 6-30	1	68.9	70.2	62.0	8.2	Yes	Yes (1)				
NSA 6-31	3	67.7	68.9	61.4	7.5	Yes	Yes (3)				
NSA 6-32	2	67.5	68.3	62.0	6.3	Yes	Yes (2)				
NSA 6-33	1	67.8	69.2	63.2	6.0	Yes	Yes (1)				
NSA 6-34	3	64.5	66.3	62.5	3.8	Yes	No				
NSA 6-35	2	64.8	65.7	63.8	1.9	Yes	No				
NSA 6-36	2	65.2	65.9	59.8	6.1	Yes	Yes (2)				
NSA 6-37	2	66.4	67.7	63.5	4.2	Yes	No				
NSA 6-38	2	63.2	63.7	58.4	5.3	No	Yes (2)				
NSA 6-39	3	66.0	66.8	60.4	6.4	Yes	Yes (3)				
NSA 6-40	1	65.5	66.3	60.3	6.0	Yes	Yes (1)				
NSA 6-41	2	65.3	66.5	61.1	5.4	Yes	Yes (2)				
NSA 6-42	2	63.2	63.5	58.0	5.5	No	Yes (2)				
NSA 6-43	2	62.2	62.2	57.4	4.8	No	Yes (2)				
NSA 6-44	2	61.0	61.4	57.1	4.3	No	No				
NSA 6-45	4	63.3	64.6	59.8	4.8	No	Yes (4)				
NSA 6-46	1	61.9	63.1	58.9	4.2	No	No				
NSA 6-47	1	63.9	65.2	60.6	4.6	No	Yes (1)				
NSA 6-48	3	62.3	63.5	59.3	4.2	No	No				
NSA 6-49	2	60.9	62.0	58.5	3.5	No	No				
NSA 6-50	1	63.6	64.5	60.8	3.7	No	No				
NSA 6-51	2	63.5	64.6	61.7	2.9	No	No				
NSA 6-52	2	63.7	64.3	61.5	2.8	No	No				
NSA6-53	2	62.3	63.8	60.9	2.9	No	No				
	108					49	69				



NSA 8 Scenario 1									
			Noise Barriers	North and South of Lat	follette Street				
Receptor	Dwelling	Existing Year	Design Year	Noise Level with	Noise Reduction	Impacted	Benefited		
	units	Noise Level	Noise Level	Noise Barrier					
NSA8-1	1	62.9	64.4	61.7	2.7	No	No		
NSA8-2	1	64.6	66.1	62.4	3.7	Yes	No		
NSA8-3	1	69.0	70.6	66.4	4.2	Yes	No		
NSA8-4	1	65.3	67.4	63.3	4.1	Yes	No		
NSA8-5	1	64.4	66.0	62.7	3.3	Yes	No		
NSA8-6	1	68.1	70.2	65.8	4.4	Yes	No		
NSA8-7	1	64.5	65.8	61.8	4.0	Yes	No		
NSA8-8	1	63.2	64.6	61.0	3.6	No	No		
NSA8-9	1	67.6	69.0	62.7	6.3	Yes	Yes		
NSA8-10	1	63.4	64.8	61.3	3.5	No	No		
NSA8-11	1	68.5	69.5	61.6	7.9	Yes	Yes		
NSA8-12	1	65.3	66.1	60.6	5.5	Yes	Yes		
NSA8-13	1	63.2	64.1	59.7	4.4	No	No		
NSA8-14	1	69.2	70.5	62.3	8.2	Yes	Yes		
NSA8-15	1	64.8	65.8	60.6	5.2	Yes	Yes		
NSA8-16	1	69.8	71.5	62.5	9.0	Yes	Yes		
NSA8-17	1	67.4	69.1	61.6	7.5	Yes	Yes		
NSA8-18	1	65.5	67.0	60.8	6.2	Yes	Yes		
NSA8-19	1	70.4	72.0	62.2	9.8	Yes	Yes		
NSA8-20	1	68.3	69.7	61.9	7.8	Yes	Yes		
NSA8-21	1	65.8	67.3	60.6	6.7	Yes	Yes		
NSA8-22	1	66.8	68.1	61.1	7.0	Yes	Yes		
NSA8-23	1	65.1	67.0	60.8	6.2	Yes	Yes		
NSA8-24	1	69.0	70.6	62.1	8.5	Yes	Yes		
NSA8-25	1	68.5	69.9	62.5	7.4	Yes	Yes		
NSA8-26	1	66.0	67.3	61.8	5.5	Yes	Yes		
NSA8-27	1	68.3	69.6	65.5	4.1	Yes	No		
NSA8-28	1	65.8	67.2	62.7	4.5	Yes	Yes		
NSA8-29	1	63.2	64.9	62.8	2.1	No	No		
NSA8-30	1	61.9	63.3	60.3	3.0	No	No		
NSA8-31	1	61.3	62.8	60.7	2.1	No	No		
NSA8-32	1	62.3	63.1	59.1	4.0	No	No		

	NSA 8 Scenario 1											
	Noise Barriers North and South of Lafollette Street											
Receptor	Dwelling	Existing Year	Design Year	Noise Level with	Noise Reduction	Impacted	Benefited					
	units	Noise Level	Noise Level	Noise Barrier								
NSA8-33	1	62.5	63.6	59.7	3.9	No	No					
NSA8-34	1	61.0	62.0	59.1	2.9	No	No					
NSA8-35	1	63.5	64.7	59.7	5.0	No	Yes					
NSA8-36	1	62.0	63.3	59.0	4.3	No	No					
NSA8-37	1	63.6	65.0	59.7	5.3	No	Yes					
NSA8-38	1	62.0	63.5	58.9	4.6	No	Yes					
NSA8-39	1	63.6	65.0	59.2	5.8	No	Yes					
NSA8-40	1	61.0	62.7	58.3	4.4	No	No					
NSA8-41	1	64.1	65.6	59.9	5.7	Yes	Yes					
NSA8-42	1	61.0	62.7	58.6	4.1	No	No					
NSA8-43	1	62.8	64.2	60.2	4.0	No	No					
NSA8-44	1	62.8	64.0	61.3	2.7	No	No					
	44					22	22					



	NSA 8 Scenario 2									
			Noise Barriers	North and South of La	follette Street					
Receptor	Dwelling	Existing Year	Design Year	Noise Level with	Noise Reduction with	Impacted	Benefited			
	units	Noise Level	Noise Level	Noise Barrier	Noise Barrier					
NSA8-1	1	62.9	64.4	64.2	0.2	No	No			
NSA8-2	1	64.6	66.1	66.0	0.1	Yes	No			
NSA8-3	1	69.0	70.6	70.4	0.2	Yes	No			
NSA8-4	1	65.3	67.4	67.0	0.4	Yes	No			
NSA8-5	1	64.4	66.0	65.7	0.3	Yes	No			
NSA8-6	1	68.1	70.2	66.1	4.1	Yes	No			
NSA8-7	1	64.5	65.8	62.2	3.6	Yes	No			
NSA8-8	1	63.2	64.6	61.6	3.0	No	No			
NSA8-9	1	67.6	69.0	63.3	5.7	Yes	Yes			
NSA8-10	1	63.4	64.8	62.0	2.8	No	No			
NSA8-11	1	68.5	69.5	61.7	7.8	Yes	Yes			
NSA8-12	1	65.3	66.1	60.7	5.4	Yes	Yes			
NSA8-13	1	63.2	64.1	59.9	4.2	No	No			
NSA8-14	1	69.2	70.5	62.4	8.1	Yes	Yes			
NSA8-15	1	64.8	65.8	60.8	5.0	Yes	Yes			
NSA8-16	1	69.8	71.5	62.6	8.9	Yes	Yes			
NSA8-17	1	67.4	69.1	61.6	7.5	Yes	Yes			
NSA8-18	1	65.5	67.0	60.9	6.1	Yes	Yes			
NSA8-19	1	70.4	72.0	62.2	9.8	Yes	Yes			
NSA8-20	1	68.3	69.7	61.9	7.8	Yes	Yes			
NSA8-21	1	65.8	67.3	60.6	6.7	Yes	Yes			
NSA8-22	1	66.8	68.1	61.1	7.0	Yes	Yes			
NSA8-23	1	65.1	67.0	60.8	6.2	Yes	Yes			
NSA8-24	1	69.0	70.6	62.1	8.5	Yes	Yes			
NSA8-25	1	68.5	69.9	62.5	7.4	Yes	Yes			
NSA8-26	1	66.0	67.3	61.8	5.5	Yes	Yes			
NSA8-27	1	68.3	69.6	65.5	4.1	Yes	No			
NSA8-28	1	65.8	67.2	62.7	4.5	Yes	Yes			
NSA8-29	1	63.2	64.9	64.5	0.4	No	No			
NSA8-30	1	61.9	63.3	60.9	2.4	No	No			
NSA8-31	1	61.3	62.8	61.3	1.5	No	No			
NSA8-32	1	62.3	63.1	59.3	3.8	No	No			
NSA 8 Scenario 2										
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Noise Barriers North and South of Lafollette Street										
Receptor	Dwelling	Existing Year	Design Year	Noise Level with	Noise Reduction with	Impacted	Benefited			
	units	Noise Level	Noise Level	Noise Barrier	Noise Barrier					
NSA8-33	1	62.5	63.6	59.9	3.7	No	No			
NSA8-34	1	61.0	62.0	59.3	2.7	No	No			
NSA8-35	1	63.5	64.7	59.8	4.9	No	Yes			
NSA8-36	1	62.0	63.3	59.0	4.3	No	No			
NSA8-37	1	63.6	65.0	59.8	5.2	No	Yes			
NSA8-38	1	62.0	63.5	59.0	4.5	No	Yes			
NSA8-39	1	63.6	65.0	59.2	5.8	No	Yes			
NSA8-40	1	61.0	62.7	58.3	4.4	No	No			
NSA8-41	1	64.1	65.6	59.9	5.7	Yes	Yes			
NSA8-42	1	61.0	62.7	58.6	4.1	No	No			
NSA8-43	1	62.8	64.2	60.2	4.0	No	No			
NSA8-44	1	62.8	64.0	61.3	2.7	No	No			
	44					22	22			



NSA 8 Scenario 2								
Noise Barriers North and South of Lafollette Street								
Receptor	Dwelling	Existing Year	Design Year	Noise Level with	Noise Reduction with	Impacted	Benefited	
	units	Noise Level	Noise Level	Noise Barrier	Noise Barrier			
NSA 9-1	1	70.7	71.6	65.4	6.2	Yes	Yes	
NSA 9-2	1	67.3	68.5	62.8	5.7	Yes	Yes	
NSA 9-3	1	65.8	66.5	61.4	5.1	Yes	Yes	
NSA 9-4	1	65.8	66.8	61.4	5.6	Yes	Yes	
NSA 9-5	1	69.6	70.5	62.7	7.8	Yes	Yes	
NSA 9-6	1	70.8	71.6	62.6	9.0	Yes	Yes	
NSA 9-7	1	68.5	69.3	62.1	7.2	Yes	Yes	
NSA 9-8	1	64.0	64.7	60.0	4.7	No	Yes	
NSA 9-9	1	73.6	74.2	64.2	10.0	Yes	Yes	
NSA 9-10	1	68.9	69.9	62.0	7.9	Yes	Yes	
NSA 9-11	1	67.6	68.6	61.6	7.0	Yes	Yes	
NSA 9-12	1	65.0	66.3	60.7	5.6	Yes	Yes	
NSA 9-13	1	67.2	68.4	61.8	6.6	Yes	Yes	
NSA 9-14	1	65.7	66.9	61.2	5.7	Yes	Yes	
NSA 9-15	1	70.4	71.4	63.2	8.2	Yes	Yes	
NSA 9-16	1	67.1	68.2	61.9	6.3	Yes	Yes	
NSA 9-17	1	65.5	66.7	61.4	5.3	Yes	Yes	
NSA 9-18	1	64.0	65.3	61.1	4.2	No	No	
NSA 9-19	1	71.1	71.9	63.0	8.9	Yes	Yes	
NSA 9-20	1	68.6	69.5	62.6	6.9	Yes	Yes	
NSA 9-21	1	63.6	65.4	61.2	4.2	No	No	
NSA 9-22	1	63.5	64.0	60.0	4.0	No	No	
NSA 9-23	1	62.4	63.0	59.6	3.4	No	No	
NSA 9-24	1	63.0	63.4	59.4	4.0	No	No	
NSA 9-25	1	65.9	66.7	61.0	5.7	Yes	Yes	
NSA 9-26	1	63.2	64.8	60.2	4.6	No	Yes	
NSA 9-27	1	62.7	64.5	60.2	4.3	No	No	
NSA 9-28	1	62.7	64.2	60.6	3.6	No	No	
NSA 9-29	1	61.5	63.1	60.1	3.0	No	No	
NSA 9-30	1	63.5	64.7	61.2	3.5	No	No	
NSA 9-31	1	61.7	63.1	60.6	2.5	No	No	
NSA 9-32	1	60.7	61.1	58.2	2.9	No	No	

	NSA 8 Scenario 2								
	Noise Barriers North and South of Lafollette Street								
Receptor	Dwelling	Existing Year	Design Year	Noise Level with	Noise Reduction with	Impacted	Benefited		
	units	Noise Level	Noise Level	Noise Barrier	Noise Barrier				
NSA 9-33	1	63.3	63.9	59.7	4.2	No	No		
	33					19	25		

## **APPENDIX E** Noise Barrier Design Tables

NSA 1 Scenario 2 Noise Barrier NOT on Bridge over Brown Street							
Noise Barrier Station	X	Y	Z (bottom)	Barrier Height	Z (top)		
0+00	2,242,477.0	510,183.0	1,078.5	14	1,092.5		
0+65	2,242,412.0	510,180.5	1,078.5	14	1,092.5		
1+30	2,242,347.0	510,178.0	1,078.5	14	1,092.5		
1+90	2,242,287.5	510,173.6	1,078.5	14	1,092.5		
2+50	2,242,228.3	510,169.2	1,078.5	14	1,092.5		
3+10	2,242,168.8	510,164.8	1,078.0	14	1,092.0		
3+68	2,242,109.5	510,160.4	1,077.0	14	1,091.0		
4+28	2,242,050.0	510,156.0	1,075.0	14	1,089.0		
6+15	2,241,863.0	510,156.0	1,068.0	14	1,082.0		
	Brown Street – No Noise Barrier on bridge over Brown Street						
7+75	2,241,703.0	510,160.0	1,062.5	14	1,076.5		
8+75	2,241,603.0	510,162.6	1,060.0	14	1,074.0		
9+75	2,241,503.0	510,165.2	1,056.5	14	1,070.5		
10+75	2,241,403.0	510,167.8	1,053.5	14	1,067.5		
11+75	2,241,303.0	510,170.4	1,051.0	14	1,065.0		
12+75	2,241,203.0	510,173.0	1,049.5	14	1,063.5		
13+85	2,241,093.0	510,177.0	1,047.5	14	1,061.5		
14+95	2,240,983.0	510,181.0	1,046.0	14	1,060.0		
16+05	2,240,873.0	510,185.0	1,044.5	14	1,058.5		
17+15	2,240,763.0	510,189.0	1,043.0	14	1,057.0		
18+25	2,240,653.0	510,193.0	1,041.0	14	1,055.0		
18+87	2,240,593.0	510,207.5	1,041.0	14	1,055.0		
19+49	2,240,533.0	510,222.0	1,040.5	14	1,054.5		
20+11	2,240,473.0	510,236.5	1,040.0	14	1,054.0		
20+72	2,240,413.0	510,251.0	1,040.0	14	1,054.0		



NSA 3 Scenario 2 Noise Barrier NOT on Bridge over Inman Street							
Noise Barrier Station	X	Y	Z (bottom)	Barrier Height	Z (top)		
0+00	2,244,815.0	510,213.0	1,127.0	16	1,143.0		
0+51	2,244,768.0	510,193.8	1,126.0	16	1,142.0		
1+02	2,244,721.0	510,174.5	1,125.0	16	1,141.0		
1+53	2,244,674.0	510,155.3	1,124.0	16	1,140.0		
2+04	2,244,627.0	510,136.0	1,123.0	16	1,139.0		
2+95	2,244,541.5	510,106.0	1,121.0	16	1,137.0		
3+86	2,244,456.0	510,076.0	1,118.0	16	1,134.0		
	Inn	nan Street – noise	barrier not on bri	dge			
4+53	2,244,391.0	510,060.0	1,117.0	16	1,133.0		
6+26	2,244,219.0	510,038.0	1,112.0	16	1,128.0		
8+01	2,244,044.0	510,045.0	1,106.0	16	1,122.0		
8+89	2,243,956.0	510,054.0	1,104.0	16	1,120.0		
9+82	2,243,865.0	510,074.0	1,102.0	16	1,118.0		
11+13	2,243,747.3	510,132.0	1,101.5	16	1,117.5		
12+42	2,243,642.0	510,207.0	1,097.0	16	1,113.0		
13+55	2,243,569.0	510,293.0	1,095.0	16	1,111.0		
14+19	2,243,547.5	510,353.0	1,094.0	16	1,110.0		
14+83	2,243,525.8	510,413.0	1,093.5	16	1,109.5		
15+47	2,243,504.0	510,473.0	1,092.5	16	1,108.5		
16+11	2,243,482.5	510,533.0	1,092.0	16	1,108.0		
17+25	2,243,457.0	510,644.0	1,096.0	16	1,112.0		
17+83	2,243,443.0	510,699.8	1,096.5	16	1,112.5		
18+40	2,243,429.0	510,755.5	1,097.0	16	1,113.0		
18+98	2,243,415.0	510,811.3	1,097.5	16	1,113.5		
19+54	2,243,401.0	510,867.0	1,098.0	16	1,114.0		



NSA 4 Scenario 1 Hoban High School Athletic Fields								
Noise Barrier Station	X	Y	Z (bottom)	Barrier Height	Z (top)			
Noise Barrier E	ast of Pedestrian Brid	ge						
0+00	2,245,936.0	510,596.0	1,146.00	14	1,160.0			
0+71	2,245,866.0	510,587.0	1,146.00	14	1,160.0			
2+45	2,245,696.0	510,552.0	1,145.00	14	1,159.0			
4+37	2,245,509.0	510,509.0	1,145.00	14	1,159.0			
4+76	2,245,471.0	510,500.0	1,146.00	14	1,160.0			
5+20	2,245,429.0	510,490.0	1,150.00	14	1,164.0			
		Opening for Pedest	trian Bridge					
Noise Barrier W	all west of Pedestriar	n Bridge						
0+00	2,245,393.0	510,482.0	1,148.00	14	1,162.0			
2+21	2,245,193.0	510,387.0	1,136.00	14	1,150.0			
4+20	2,245,007.0	510,317.0	1,126.00	14	1,140.0			
6+31	2,244,817.0	510,225.0	1,125.00	14	1,136.0			



NSA 5 Scenario 1 Noise Barrier on Bridge over Brown Street								
Noise Barrier Station	X	Y	Z (bottom)	Barrier Height	Z (top)			
0+00	2,240,449.0	510,029.0	1,035.0	14	1,049.0			
0+59	2,240,507.8	510,034.3	1,036.0	14	1,050.0			
1+05	2,240,566.5	510,039.5	1,037.5	14	1,051.5			
1+77	2,240,625.3	510,044.8	1,0390	14	1,053.0			
2+36	2,240,684.0	510,050.0	1,040.0	14	1,054.0			
3+34	2,240,782.3	510,050.7	1,041.0	14	1,055.0			
4+33	2,240,880.8	510,051.3	1,042.0	14	1,056.0			
5+31	2,240,979.0	510,052.0	1,044.0	14	1,058.0			
7+03	2,241,151.0	510,044.0	1,047.0	14	1,061.0			
8+30	2,241,278.3	510,036.3	1,051.0	14	1,065.0			
9+58	2,241,405.8	510,028.7	1,054.5	14	1,068.5			
10+85	2,241,533.0	510,021.0	1,057.5	14	1,071.5			
12+57	2,241,704.0	510,007.0	1,061.0	14	1,075.0			
14+16	2,241,862.0	509,988.0	1,066.0	14	1,080.0			
15+28	2,241,973.0	509,972.0	1,076.0	14	1,090.0			
15+70	2,242,014.8	509,964.7	1,079.0	14	1,093.0			
16+12	2,242,056.3	509,957.3	1,080.0	14	1,094.0			
16+54	2,242,098.0	509,950.0	1,081.0	14	1,095.0			



NSA 6 Scenario 2 Noise Barrier NOT on Bridge over Inman Street									
Noise Barrier Station	x	Y	Z (bottom)	Barrier Height	Z (top)				
0+00	2,243,236	508,915	1,093.0	15.0	1,108.0				
2+40	2,243,321	509,141	1,094.0	15.0	1,109.0				
3+50	2,243,368	509,238	1,095.0	15.0	1,110.0				
5+35	2,243,475	509,389	1,096.0	15.0	1,111.0				
6+90	2,243,612	509,466	1,100.0	15.0	1,115.0				
8-60	2,243,754	509,552	1,101.0	15.0	1,116.0				
9+80	2,243,851	509,627	1,102.0	15.0	1,117.0				
12+65	2,244,102	509,757	1,111.0	15.0	1,126.0				
15+90	2,244,395	509,901	1,118.0	15.0	1,133.0				
	Bridge over In	man Street – No N	loise Barrier on B	ridge Structure					
16+50	2,244,452	509,925	1,120.0	15.0	1,135.0				
18+70	2,244,658	510,006	1,122.0	15.0	1,137.0				
19+70	2,244,746	510,045	1,125.0	15.0	1,140.0				
23+25	2,245,076	510,182	1,130.0	15.0	1,145.0				



NSA 8 Scenario 1							
Noise Barrier Station	X	Y	Z (bottom)	Barrier Height	Z (top)		
Noise Barrier No	orth of Lafollette Ro	bad					
0+00	2,242,818.0	509,297.0	1,080.0	14	1,094.0		
2+16	2,242,881.0	509,090.0	1,084.0	14	1,098.0		
3+29	2,242,903.0	508,979.0	1,085.0	14	1,099.0		
4+00	2,242,909.0	508,908.0	1,085.0	14	1,099.0		
	Break in Noise Barrier for Lafollette Road						
Noise Barrier Sc	outh of Lafollette R	oad					
0+00	2,242,912.0	508,805.0	1,086.0	14	1,100.0		
2+40	2,242,911.0	508,565.0	1,089.0	14	1,103.0		
5+11	2,242,912.0	508,294.0	1,095.0	14	1,109.0		
7+68	2,242,910.0	508,037.0	1,096.0	14	1,110.0		
10+37	2,242,909.0	507,768.0	1,097.0	14	1,111.0		
12+04	2,242,905.0	507,601.0	1,099.0	14	1,113.0		
13+17	2,242,913.0	507,488.0	1,101.0	14	1,115.0		
15+11	2,242,923.0	507,294.0	1,102.0	14	1,116.0		



NSA 9 Scenario 1								
Noise Barrier Station	X	Y	Z (bottom)	Barrier Height	Z (top)			
0+00	2,243,169.0	507,273.0	1,110.0	14	1,124.0			
0+32	2,243,171.0	507,305.0	1,109.0	14	1,123.0			
1+00	2,243,172.0	507,373.0	1,109.0	14	1,123.0			
1+68	2,243,173.0	507,441.0	1,108.0	14	1,122.0			
2+28	2,243,175.0	507,501.0	1,107.0	14	1,121.0			
4+98	2,243,177.0	507,771.0	1,105.5	14	1,119.5			
7+67	2,243,177.0	508,040.0	1,103.5	14	1,117.5			
10+24	2,243,176.0	508,297.0	1,102.0	14	1,116.0			
10+74	2,243,176.8	508,347.0	1,101.0	14	1,115.0			
11+24	2,243,177.5	508,397.0	1,100.5	14	1,114.5			
11+74	2,243,178.3	508,447.0	1,099.5	14	1,113.5			
12+24	2,243,179.0	508,497.0	1,099.0	14	1,113.0			



## APPENDIX F Names and Addresses of Benefited Receptors For Public Involvement

	NSA 1 Scenario 2						
Benefited Receptors for Public Involvement							
TNM	Name	Address	City/State/Zip				
Number							
1-1	Dan Relgin	739 Sumner Street	Akron, OH 44311				
1-2	Norman Taylor, Sr	724 Allyn Street	Akron, OH 44311				
1-4	Cindy Newsom	714 Allyn Street	Akron, OH 44311				
1-6	Gino Vicini	702 Allyn Street	Akron, OH 44311				
1_6	Bender Properties NW, LLC	313 Greensfield Lane	Akron, OH 44321				
1-0	Resident	696 Allyn Street	Akron, OH 44311				
1-10	Brenda Harliss	721 Allyn Street	Akron, OH 44311				
1-11	Robert Marshall	714 Kling Street	Akron, OH 44311				
1-12	Joe Louis Lewis	713 Allyn Street	Akron, OH 44311				
1-13	Ashley M. Ilg	383 Minnie Court	Akron, OH 44311				
1 12	George & Jeanie Giusti	2129 Beach Drive	Akron, OH 44312				
1-15	Resident	387 Minnie Court	Akron, OH 44311				
1 12	George & Jeanie Giusti	2129 Beach Drive	Akron, OH 44312				
1-15	Resident	387 Minnie Court	Akron, OH 44311				
1 12	Dang Investments	105 Mayfield Avenue	Akron, OH 44313				
1-15	Resident	393 Minnie Court	Akron, OH 44311				
1-14	Hui Chu Ying	710 Kling Street	Akron, OH 44311				
1 1 1	Braymor Development, LLC	3409 Bailey Road	Cuyahoga Falls, OH 44221				
1-14	Resident	708 Kling Street	Akron, OH 44311				
1-15	Monte Hendrix	702 Kling Street	Akron, OH 44311				
1 15	Braymor Development, LLC	3409 Bailey Road	Cuyahoga Falls, OH 44221				
1-15	Resident	698 Kling Street	Akron, OH 44311				
1-16	Min Chai Zheng	707 Allyn Street	Akron, OH 44311				
1-16	Jing Qui Zheng	705 Allyn Street	Akron, OH 44311				
1 17	Braymor Development, LLC	3409 Bailey Road	Cuyahoga Falls, OH 44221				
1-17	Resident	701 Allyn Street	Akron, OH 44311				
1-17	David Nicol	697 Allyn Street	Akron, OH 44311				
1-18	Richard Gritzinger	696 Kling Street	Akron, OH 44311				
1-18	Donald K Slider	690 Kling Street	Akron, OH 44311				
1-19	Matthew Freeman	2420 Wrens Drive	Stow, OH 44224				
	Resident	686 Kling Street	Akron, OH 44311				
1-20	Kenneth Meyn	374 East Voris Street	Akron, OH 44311				
1-20	James Salivito	376 East Voris Street	Akron, OH 44311				
1-21	John Gheith	380 East Voris Street	Akron, OH 44311				
1-21	Cathy Lillie	386 East Voris Street	Akron, OH 44311				
1 22	Alliance OH Holdings LLC	POB 928769	San Diego, CA 92192				
1-22	Resident	396 East Voris Street	Akron, OH 44311				
1 22	Dang Investment	105 Mayfield Avenue	Akron, OH 44313				
1-22	Resident	400 East Voris Street	Akron, OH 44311				
1 00	Casey McMaster	2251 Eisenhower Avenue	Alexandria, VA 22314				
1-20	Resident	713 Kling Street	Akron, OH 44311				
1-28	James D. Mathers	709 Kling Street	Akron, OH 44311				
1 20	Vernon Blouir	767 Gouglee Road	Akron, OH 44319				
1-29	Resident	443 Lamparter Street	Akron, OH 44311				

	NSA 1 Scenario 2							
	Benefited Receptors for Public Involvement							
I NM Number	Name	Address	City/State/Zip					
1 20	Bender Properties NW, LLC	313 Greensfield Lane	Akron, OH 44321					
1-23	Resident	445 Lamparter Street						
1 20	Beverly Lampers, Trustee	854 Martindale Drive	Tallmadge, OH 44278					
1-50	Resident	449 Lamparter Street	Akron, OH 44311					
1-30	Darin Locy	453 Lamparter Street	Akron, OH 44311					
1-30	Dung Quang Vo	457 Lamparter Street	Akron, OH 44311					
1-32	Nicolas Huffman	705 Kling Street	Akron, OH 44311					
1 20	James Kline, Jr	8549 Deep Cove Drive	Northfield, OH 44067					
1-32	Resident	701 Kling Street	Akron, OH 44311					
1.24	Theodore Barr	3939 Allin Street #104	Long Beach CA 90803					
1-34	Resident	697 Kling Street	Akron, OH 44311					
1 2/	Braymor Development, LLC	3409 Bailey Road	Cuyahoga Falls, OH 44221					
1-34	Resident	693 Kling Street	Akron, OH 44311					
1.26	John Kefalos	770 East Tuscarwawus Street	Barberton, OH 44203					
1-30	Resident	689 Kling Street	Akron, OH 44311					
1.26	William McKown	576 Brown Street STE 1	Akron, OH 44311					
1-30	Resident	685 Kling Street	Akron, OH 44311					
1.26	Donald Bulgrin	1254 Tumbleweed Street NE	Uniontown, OH 44685					
1-30	Resident	426 East Voris Street	Akron, OH 44311					
1-37	Dennis Reid, Jr.	434 East Voris Street	Akron, OH 44311					
1 27	Roger Carter	811 Valdes Avenue	Akron, OH 44320					
1-37	Resident	440 East Voris Street	Akron, OH 44311					

NSA 3 Scenario 2							
	Benefited Receptors for Public Involvement						
TNM	Name	Address	City/State/Zip				
Number	Linda & Wilbur Williams	1766 Kara Avenue	Akron OH 44313				
3-3	Posidont	550 Lumioro Stroot	Akron OH 44315				
		575 Lumiere Street	Akron, OH 44306				
3-4	Posident	563 Lumiere Street	Akron OH 44306				
3-5	Craig Rhoten	567 Lumiere Street	Akron OH 44306				
5-5		45 lefferson Drive	Hudson OH $44236$				
3-6	Resident	571 Lumiere Street	Akron OH 44306				
3-7	Patricia & Antonio Francis	575 Luminiere Street	Akron OH 44306				
	Terry & Gloria Copen	520 Hammel Street	Akron OH 44306				
3-8	Resident	522 Hammel Street	Akron OH 44306				
3-9		538 Hammel Street	Akron OH 44306				
3-10	Donna J. Pollock	530 Hammel Street	Akron OH 44306				
	Patrick Maculaitis	POB 866	New Philadelphia OH 44663				
TNM Number         Namber           3-3         Li 3-3           3-4         Ri 3-4           3-5         Ci 3-6           3-6         Ri 3-7           3-7         Pi 3-8           3-9         Ly 3-10           3-22         Ri 3-23           3-24         M           3-25         Ri 3-28           3-27         Ri 3-28           3-28         M           3-27         Ri 3-28           3-28         M           3-29         Bi 3-30           3-31         W           3-32         C           3-31         W           3-32         C           3-31         W           3-32         Ri 3-33           3-34         Ri 3-34           3-35         Ri 3-34           3-36         Ri 3-37           3-37         W           3-38         Di 3-34           3-41         Ri 3-42           3-42         Ri 3-43	Resident	549 Hammel Street	Akron, OH 44306				
3-23	Joseph & Lou Anne Ware	541 Hammel Street	Akron, OH 44306				
3-24	Marie A Ware	537 Hammel Street	Akron, OH 44306				
3-25	Johnathan Miller	609 South Arlington Road	Akron, OH 44306				
	Resident	533 Hammel Street	Akron, OH 44306				
3-27	Patrick Maculaitis	POB 866	New Philadelphia, OH 44663				
	Resident	555 Hammel Street	Akron, OH 44306				
3-28	Mark M. Mick	560 Gridley Street	Akron, OH 44306				
3-29	Bradley Wise	548 Gridley Street	Akron, OH 44306				
3-30	Robert & Vera Snowden	544 Gridley Street	Akron, OH 44306				
3-31	Westside Property Investments	17590 Parkside Drive N	North Royalton, OH 44133				
	Resident	538 Gridley Street	Akron, OH 44306				
3-32	Cynthia Ridenour	536 Gridley Street	Akron, OH 44306				
2 22	Mountainside Realty Ventures	14837 Detroit Avenue	Lakewood, OH 44107				
5-55	Resident	653 Gridley Street	Akron, OH 44306				
3 34	Cvetkovich Properties LTD	317 Transit Drive	Tallmadge, OH 44278				
5-54	Resident	559 Gridley Street	Akron, OH 44306				
3_35	Kelly Properties Inc.	POB 772	Bath, OH 44210				
0-00	Resident	555 Gridley Street	Akron, OH 44306				
3-36	Donald Ridenour	2380 Lyndon Dr.	Uniontown, OH 44685				
3-36 Donald Ridenour Resident		553 Gridley Street	Akron, OH 44306				
3-37	William & Grace Rauscher	551 Gridley Street	Akron, OH 44306				
3-38	David McKiernan	539 Gridley Street	Akron, OH 44306				
3-40	KP Properties LLC	19311 Prismo Lane	Huntington Beach, CA 92646				
	Resident	580 Inman Street	Akron, OH 44306				
3-41	Dean Smith Trustee	1/39 Bent Bow Drive	Akron, OH 44313				
	Resident	5/6 Inman Street	Akron, OH 44306				
3-42	Sebastian Velez	POB 1022	Medina, OH 44258				
0.40	Kesident	5/2 Inman Street	Akron, OH 44306				
3-43		568 Inman Street	Akron, OH 44306				
3-44	vvoodroe & Hannelore Summerfield	5/1 Inman Street	Akron, OH 44306				

NSA 3 Scenario 2 Benefited Receptors for Public Involvement							
TNM Number	Name         Address         City/State/Zip						
3-47	Cynthia Braham	537 Gridley Street	Akron, OH 44306				
3-48	Eldridge & Eulah McCourt	533 Gridley Avenue	Akron, OH 44306				
3-50	Gladys Headley	560 Inman Street	Akron, OH 44306				

NSA 4 Scenario 1						
Benefited Receptors for Public Involvement						
TNM Number	Name	Address	City/State/Zip			
All NSA 4	Holy Cross Properties of Akron LLC	1 Holy Cross Boulevard	Akron, OH 44306			

NSA 5 Scenario 1						
	Benefited Rec	eptors for Public Involvement				
TNM Number	Name	Address	City/State/Zip			
5-1	Jane Herdina	363 East South Street	Akron, OH 44311			
5.0	Dennis & Michelle Knight	58 Wayne Avenue	Akron, OH 44301			
<u> </u>	Resident	375 East South Street	Akron, OH 44311			
53	Christ is the Answer Ministries	POB 8202	Akron, OH 44320			
0-0		379 East South Street	Akron, OH 44311			
51	Dennis & Michelle Knight	58 Wayne Avenue	Akron, OH 44301			
TNM NumberName Number5-1Jane H5-1Jane H5-2Dennis Reside5-3Christ5-4Dennis 	Resident	393 East South Street	Akron, OH 44311			
TNM Number         Name Number           5-1         Jane           5-2         Denni Resid           5-3         Christ           5-4         Denni Resid           5-4         Bruce           5-5         Bende           5-5         Resid           5-6         Kyle 0           5-7         John           5-6         Kyle 0           5-7         John           7         Resid           5-7         John           7         Resid           5-7         John           8         Resid           5-7         John           8         Resid           5-10         Resid           5-10         Resid           5-11         Resid           5-11         Resid           5-12         Resid           5-12         Resid           5-13         Jerry	Bruce Monchack	4065 State Road	Cuyahoga Falls, OH 44223			
U <sup>-</sup> T	Resident	397 East South Street	Akron, OH 44311			
5-5	Dennis & Michelle Knight	58 Wayne Avenue	Akron, OH 44301			
	Resident	409 East South Street	Akron, OH 44311			
5-5	Bender Properties Southwest LLC	313 Greensfield Lane	Akron, OH 44321			
TNM Number         Ni Ja           5-1         Ja           5-2         Di           5-2         Ri           5-3         Ci           5-4         Bi           5-4         Ri           5-5         Ri           5-5         Ri           5-5         Ri           5-6         Ri           5-7         Ri           5-6         Ri           5-7         Ri           5-10         Ri           5-10         Ri           5-11         Ri           5-11         Ri           5-12         Ri           5-13         Je           5-14         Ei	Resident	411 East South Street	Akron, OH 44311			
5-6	Robert & Cynthia Murray	741 Kling Street	Akron, OH 44311			
5-6	Kyle Congrove	745 Kling Street	Akron, OH 44311			
5-7	John Irace	627 Sparrow Way	Wadsworth, OH 44281			
5-7	Resident	455 East South Street	Akron, OH 44311			
	John Irace	627 Sparrow Way	Wadsworth, OH 44281			
	Resident	455 East South Street	Akron, OH 44311			
5-8	Gild Properties LLC	1802 SR 43	Suffield, OH 44260			
	Resident	469 East South Street	Akron, OH 44311			
5-8 5-9 5-10	Kevin Preston	2331 Innes Road	Akron, OH 44321			
	Resident	354 East South Street	Akron, OH 44311			
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	Bender Properties Southwest LLC	313 Greensfield Lane	Akron, OH 44321			
	Resident	358 East South Street	Akron, OH 44311			
5-10	Bender Properties Southwest LLC	313 Greensfield Lane	City/State/Zip           Akron, OH 44311           Akron, OH 44301           Akron, OH 44311           Akron, OH 44311           Akron, OH 44311           Akron, OH 44301           Akron, OH 44311           Wadsworth, OH 44281           Akron, OH 44311			
0.10	Resident	362 East South Street				
5-10	David Fryberger	577 Fenn Road	Tallmadge, OH 44278			
0.10	Resident	366 East South Street	Akron, OH 44311			
5-11	Dennis & Michelle Knight	58 Wayne Avenue	Akron, OH 44301			
• • • •	Resident	390 East South Street	Akron, OH 44311			
$\begin{array}{c} 5-4 \\ \hline 5-4 \\ \hline 5-5 \\ \hline 5-5 \\ \hline 5-6 \\ \hline 5-6 \\ \hline 5-7 \\ \hline 5-7 \\ \hline 5-7 \\ \hline 5-8 \\ \hline 5-9 \\ \hline 5-10 \\ \hline 5-10 \\ \hline 5-10 \\ \hline 5-10 \\ \hline 5-11 \\ \hline 5-12 \\ \hline 5-12 \\ \hline 5-13 \\ \hline 5-14 \\ $	Bruce Monchack	4065 State Road	Cuyahoga Falls, OH 44223			
	Resident	394 East South Street #1	Akron, OH 44311			
	Resident	394 East South Street #2	Akron, OH 44311 Akron, OH 44301 Akron, OH 44301 Cuyahoga Falls, OH 44223 Akron, OH 44311 Akron, OH 44301 Akron, OH 44311 Akron, OH 44311 Akron, OH 44311 Akron, OH 44311 Wadsworth, OH 44281 Akron, OH 44311 Wadsworth, OH 44281 Akron, OH 44311 Suffield, OH 44260 Akron, OH 44311 Akron, OH 44311 Akron, OH 44311 Akron, OH 44321 Akron, OH 44321 Akron, OH 44321 Akron, OH 44311 Akron, OH 44311 Akron, OH 44311 Akron, OH 44311 Cuyahoga Falls, OH 44223 Akron, OH 44311 Cuyahoga Falls, OH 44223 Akron, OH 44311 Akron, OH 44311 Cuyahoga Falls, OH 44223 Akron, OH 44311 Akron, OH 44311 Cuyahoga Falls, OH 44223 Akron, OH 44311 Akron, OH 44311			
	Bruce Monchack	4065 State Road	Cuyahoga Falls, OH 44223			
5-12	Resident	398 East South Street #1	Akron, OH 44311			
	Resident	398 East South Street #2	Akron, OH 44311			
	Bruce Monchack	4065 State Road	Cuyahoga Falls, OH 44223			
5-12	Resident	402 East South Street #1	Akron, OH 44311			
	Resident	402 East South Street #2	Akron, OH 44311			
5-13	Jerry F Higgins, Jr	3812 Easton Road	Barberton, OH 44203			
	Resident	412 East South Street	Akron, OH 44311			
5-13	Richard L. & Verlinda Bennett	418 East South Street	Akron, OH 44311			
5-14	Eric Cooper & James Oxenrider	496 East South Street	Akron, OH 44311			

NSA 5 Scenario 1						
	Benefited Rec	eptors for Public Involvement				
TNM Number	Name	Address	City/State/Zip			
5 14	John G. Irace	627 Sparrow Way	Wadsworth, OH 44281			
0-14	Resident	500 East South Street	Akron, OH 44311			
	John G. Irace	627 Sparrow Way	Wadsworth, OH 44281			
5-15	Resident	504 East South Street #1	Akron, OH 44311			
5-15 $1$ $5-17$ $1$ $5-17$ $1$ $5-18$ $1$ $5-18$ $1$ $5-18$ $1$ $5-18$ $1$ $5-18$ $1$ $5-18$ $1$ $5-19$ $1$ $5-19$ $1$ $5-20$ $1$ $5-20$ $1$ $5-21$ $2$ $5-22$ $1$ $5-22$ $1$	Resident	504 East South Street #2	Akron, OH 44311			
5_17	Charles Bertison	169 Polonia Avenue	Akron, OH 44319			
5-17	Resident	784 Allyn Street	Akron, OH 44311			
5_17	Jerry & Lila Fausnight	1853 Gless Avenue	City/State/Zip           Wadsworth, OH 44281           Akron, OH 44311           Wadsworth, OH 44281           Akron, OH 44311           Homedale, ID 83628           Akron, OH 44311           Pacentia, CA 92870           Akron, OH 44311           Jerico, NY 11753           Akron, OH 44311           Akron, OH 44311			
5-17	Resident	786 Allyn Street	Akron, OH 44311			
5-18	Bender Properties	313 Greensfield Lane	Akron, OH 44321			
0 10	Resident	777 Allyn Street	Akron, OH 44311			
5-18	Bender Properties	313 Greensfield Lane	Akron, OH 44321			
0 10	Resident	783 Allyn Street	Akron, OH 44311			
5-18	Jeanette Farrell	4646 E Lootens Lane	Homedale, ID 83628			
0.10	Resident	787 Allyn Street	Akron, OH 44311			
5-19	JBJ Trading Company	516 N Plancentia Avenue	Pacentia, CA 92870			
0.10	Resident	766 Beardsley Street	Akron, OH 44311			
5-19	Semgen Holdings IIc	575 Jerico Turnpike Suite 100	Jerico, NY 11753			
	Resident	768 Beardsley Street	City/State/Zip           Wadsworth, OH 44281           Akron, OH 44311           Wadsworth, OH 44281           Akron, OH 44311           Akron, OH 44311           Akron, OH 44311           Akron, OH 44319           Akron, OH 44311           Pacentia, CA 92870           Akron, OH 44311           Jerico, NY 11753           Akron, OH 44311           Jerico, NY 11753           Akron, OH 44311           Akron, OH 44311			
5-20	Equity Trust Co. FBO Steven Leary	POB 22042	Akron, OH 44302			
0.20	Resident	772 Beardsley Street	Akron, OH 44311			
5-20	Equity Trust Co. FBO Steven Leary	POB 22042	Akron, OH 44302			
0.20	Resident	776 Beardsley Street	Akron, OH 44311			
5-21	Samuel E Nelson	773 Beardsley Street	Akron, OH 44311			
5-21	Adria Mundy	779 Beardsley Street	Akron, OH 44311			
5-22	MVH Holdings	2923 Chautauqua Drive	Stow, OH 44224			
	Resident	768 Kling Street	Akron, OH 44311			
5-22	Richard Spencer	772 Kling Street	Akron, OH 44311			
5-22	Roy William Kress	776 Kling Street	Akron, OH 44311			
5-23	Thomas & Cynthia Henry	2696 Canton Road	Uniontown, OH 44685			
	Resident	767 Kling Street	Akron, OH 44311			
5-24	Cameron Mack	50 S Maple Street Suite 1	Akron, OH 44303			
	Resident	466 E South Street	Akron, OH 44311			
5-25	Betty Slater	6079 Powdermill Road	Kent, OH 44240			
	Resident	745 Clay Drive	Akron, OH 44311			
5-26	AA Rental Investments LLC	1454 East Avenue	Akron, OH 44307			
	Resident	753 Clay Drive	Akron, OH 44311			
5-26	Dang Investments	105 Mayfield Avenue	Akron, OH 44313			
- 0-	Resident	/55 Clay Drive	Akron, OH 44311			
5-27	Samir Abdelqader	750 Brown Street	Akron, OH 44311			
5-28	Donald & Betty Slater	60/9 Powdermill Road	Kent, OH 44240			
	Resident	756 Brown Street	Akron, OH 44311			
5-28	Joe Stephen Riley Foundation	760 Brown Street	Akron, OH 44311			
5-31	Real Estate for All LLC	312 Sunny Meadow Blvd	Brampton, Ontario L6R3C3			

	NSA 5 Scenario 1					
	Benefited Rec	eptors for Public Involvement				
TNM	Name	Address	City/State/Zip			
Number						
	Resident	791 Allyn Street	Akron, OH 44311			
5-32	Edward Marquette	782 Beardsley Street	Akron, OH 44311			
5-32	Naomia Ricks	792 Beardsley Street	Akron, OH 44311			
5-34	Mountainside Realty LLC	14837 Detroit Avenue	Lakewood, OH 44107			
	Resident	783 Beardsley Street	Akron, OH 44311			
5-34	Debra James	1799 Akron Peninsula Road	Akron, OH 44313			
	Resident	785 Beardsley Street	Akron, OH 44311			
5-34	David & Melissa Nelson	789 Beardsley Street	Akron, OH 44311			
5-35	Emil Katona	784 Kling Street	Akron, OH 44311			
5-35	Michael Cowens	788 Kling Street	Akron, OH 44311			
5-36	Michael Cowans	792 Kling Street	Akron, OH 44311			
5-36	A 1 Rental Properties	POB 391	Greenlawn, NY 11740			
	Resident	796 Kling Street	Akron, OH 44311			
5-37	Kaushik Saha	779 Kling Street	Akron, OH 44311			
5-38	Michael Cowens	792 Kling Street	Akron, OH 44311			
	Resident	781 Kling Street	Akron, OH 44311			
5-38	Daniel & Ellen Stein	9771 Cooper Lane	Cincinnati, OH 45242			
	Resident	795 Kling Street	Akron, OH 44311			
5-39	Ace Management	1145 Comet Road	Clinton, OH 44216			
	Resident	760 Clay Drive	Akron, OH 44311			
5-40	Orchard Lane Enterprises LLC	4020 Bellaire Lane	Peninsula, OH 44264			
	Resident	770 Clay Drive	Akron, OH 44311			
5-40	Roy Pritt	808 Clay Drive	Akron, OH 44311			
	Resident	792 Clay Drive	Akron, OH 44311			
5-42	Dang Investments	105 Mayfield Avenue	Akron, OH 44313			
	Resident	759 Clay Drive	Akron, OH 44311			
5-43	Susan Bradnick	762 Brown Street	Akron, OH 44311			
5-43	Akron Bible Church	783 Brown Street	Akron, OH 44311			
	Resident	768 Brown Street	Akron, OH 44311			

Benefited Receptors for Public Involvement           TNM Number         Name         Address         City/State/Zip           6-7         Clay East         711 E Crosier Street         Akron, OH 44306           6-7         Dang Investment         105 Mayfield Avenue         Akron, OH 44313           6-7         Beverly Cook         610 Sandford Avenue         Akron, OH 44306           6-7         Resident         715 E Crosier Street         Akron, OH 44306           6-7         Resident         719 E Crosier         Akron, OH 44306           6-7         Resident         719 E Crosier         Akron, OH 44306           6-8         Patrick Leymon         709 Darkow Street         Akron, OH 44306           6-8         Clay East         711 E Crosier Street         Akron, OH 44306           6-9         Gladys Ballard         648 Hammel Street         Akron, OH 44306           6-9         Denise Williams         642 Hammel Street         Akron, OH 44306           6-10         Dang Investments         105 Mayfield Avenue         Akron, OH 44306           6-11         David E Voss         638 Hammel Street         Akron, OH 44306           6-11         Dennis & Shiela Franklin         634 Hammel Street         Akron, OH 44306
TNM NumberNameAddressCity/State/Zip6-7Clay East711 E Crosier StreetAkron, OH 443066-7Dang Investment105 Mayfield AvenueAkron, OH 44313Resident715 E Crosier StreetAkron, OH 443066-7Beverly Cook610 Sandford AvenueAkron, OH 443036-7Beverly Cook610 Sandford AvenueAkron, OH 443066-8Patrick Leymon709 Darkow StreetAkron, OH 443066-8Clay East711 E Crosier StreetAkron, OH 443066-8Clay East711 E Crosier StreetAkron, OH 443066-9Gladys Ballard648 Hammel StreetAkron, OH 443066-9Denise Williams642 Hammel StreetAkron, OH 443066-10Dang Investments105 Mayfield AvenueAkron, OH 443066-11David E Voss638 Hammel StreetAkron, OH 443066-11David E Voss638 Hammel StreetAkron, OH 443066-14Marsha Hosey629 Hammel StreetAkron, OH 443066-15Cathie & Adam Kolleth630 Gridley AvenueAkron, OH 443066-15Robert Eisenbrei2684 Timberline TrailCuyahoga Falls, OH 442236-16Patricia Mae Simmons640 Gridley AvenueAkron, OH 443066-16Patricia Ma
NumberImage: Clay East711 E Crosier StreetAkron, OH 443066-7Dang Investment105 Mayfield AvenueAkron, OH 443136-7Resident715 E Crosier StreetAkron, OH 443066-7Beverly Cook610 Sandford AvenueAkron, OH 443036-7Resident719 E CrosierAkron, OH 443066-8Patrick Leymon709 Darkow StreetAkron, OH 443066-8Clay East711 E Crosier StreetAkron, OH 443066-8Clay East711 E Crosier StreetAkron, OH 443066-9Gladys Ballard648 Hammel StreetAkron, OH 443066-9Denise Williams642 Hammel StreetAkron, OH 443066-10Dang Investments105 Mayfield AvenueAkron, OH 443066-11David E Voss638 Hammel StreetAkron, OH 443066-11David E Voss638 Hammel StreetAkron, OH 443066-14Dawn Franklin625 Hammel StreetAkron, OH 443066-15Cathie & Adam Kolleth630 Gridley AvenueAkron, OH 443066-15Resident636 Gridley AvenueAkron, OH 443066-16Patricia Mae Simmons640 Gridley AvenueAkron, OH 443066-16Patricia Mae Simmons640 Gridley AvenueAkron, OH 443066-16Patricia Mae Simmons640 Gridley AvenueAkron, OH 443066-16Patricia Mae Simmons640 Gridley AvenueAkron, OH 44306
6-7Clay East711 E Croster StreetAkton, OH 443006-7Dang Investment105 Mayfield AvenueAkron, OH 44313Resident715 E Croster StreetAkron, OH 443066-7Beverly Cook610 Sandford AvenueAkron, OH 443036-8Patrick Leymon709 Darkow StreetAkron, OH 443066-8Clay East711 E Croster StreetAkron, OH 443066-8Clay East711 E Croster StreetAkron, OH 443066-8Clay East711 E Croster StreetAkron, OH 443066-8Clay East711 E Croster StreetAkron, OH 443066-9Gladys Ballard648 Hammel StreetAkron, OH 443066-9Denise Williams642 Hammel StreetAkron, OH 443066-10Dang Investments105 Mayfield AvenueAkron, OH 443066-11David E Voss638 Hammel StreetAkron, OH 443066-11David E Voss638 Hammel StreetAkron, OH 443066-14Dawn Franklin634 Hammel StreetAkron, OH 443066-15Cathle & Adam Kolleth630 Gridley AvenueAkron, OH 443066-15Robert Eisenbrei2684 Timberline TrailCuyahoga Falls, OH 442236-16Patricia Mae Simmons640 Gridley AvenueAkron, OH 443066-16Patricia Mae Simmons640 Gridley AvenueAkron, OH 443066-16Patricia Mae Simmons640 Gridley AvenueAkron, OH 443066-16Patricia Mae Simmons640 Gridley AvenueAkron, OH 443066-16Patr
6-7Darig investment105 Mayned AvenueAkton, OH 44313Resident715 E Crosier StreetAkron, OH 443066-7Beverly Cook610 Sandford AvenueAkron, OH 443036-8Resident719 E CrosierAkron, OH 443066-8Patrick Leymon709 Darkow StreetAkron, OH 443066-8Clay East711 E Crosier StreetAkron, OH 443066-8Clay East711 E Crosier StreetAkron, OH 443066-9Gladys Ballard648 Hammel StreetAkron, OH 443066-9Denise Williams642 Hammel StreetAkron, OH 443066-10Dang Investments105 Mayfield AvenueAkron, OH 443066-11David E Voss638 Hammel StreetAkron, OH 443066-11David E Voss638 Hammel StreetAkron, OH 443066-14Dawn Franklin634 Hammel StreetAkron, OH 443066-15Cathie & Adam Kolleth630 Gridley AvenueAkron, OH 443066-15Cathie & Adam Kolleth630 Gridley AvenueAkron, OH 443066-15Resident640 Gridley AvenueAkron, OH 443066-15Resident640 Gridley AvenueAkron, OH 443066-15Resident640 Gridley AvenueAkron, OH 443066-15Resident640 Gridley AvenueAkron, OH 443066-16Patricia Mae Simmons640 Gridley AvenueAkron, OH 443066-16Patricia Mae Simmons640 Gridley AvenueAkron, OH 443066-16Patricia Mae Simmons640 Gridley Avenue<
Resident715 E Croster StreetAkton, OH 443066-7Beverly Cook610 Sandford AvenueAkron, OH 44303Resident719 E CrosterAkron, OH 443066-8Patrick Leymon709 Darkow StreetAkron, OH 443066-8Clay East711 E Croster StreetAkron, OH 443066-8Clay East711 E Croster StreetAkron, OH 443066-8Gladys Ballard648 Hammel StreetAkron, OH 443066-9Gladys Ballard648 Hammel StreetAkron, OH 443066-9Denise Williams642 Hammel StreetAkron, OH 443066-10Dang Investments105 Mayfield AvenueAkron, OH 443066-11David E Voss638 Hammel StreetAkron, OH 443066-11Denis & Shiela Franklin634 Hammel StreetAkron, OH 443066-14Dawn Franklin625 Hammel StreetAkron, OH 443066-15Cathie & Adam Kolleth630 Gridley AvenueAkron, OH 443066-15Resident636 Gridley AvenueAkron, OH 443066-15Resident636 Gridley AvenueAkron, OH 443066-16Patricia Mae Simmons640 Gridley AvenueAkron, OH 443066-16Patricia Mae Simmons640 Gridley AvenueAkron, OH 443066-16Patricia Mae Simmons640 Gridley AvenueAkron, OH 443066-16Patricia Mae Simmons640 Gridley AvenueAkron, OH 443066-16Patricia Mae Simmons640 Gridley AvenueAkron, OH 443066-16Patricia Mae Simmons <td< td=""></td<>
6-7Beverly Cook610 Sandiold AvenueAkron, OH 44303Resident719 E CrosierAkron, OH 443066-8Patrick Leymon709 Darkow StreetAkron, OH 443066-8Clay East711 E Crosier StreetAkron, OH 443066-8Resident705 Darkow StreetAkron, OH 443066-9Gladys Ballard648 Hammel StreetAkron, OH 443066-9Denise Williams642 Hammel StreetAkron, OH 443066-10Dang Investments105 Mayfield AvenueAkron, OH 443066-11David E Voss638 Hammel StreetAkron, OH 443066-11David E Voss638 Hammel StreetAkron, OH 443066-11Dennis & Shiela Franklin634 Hammel StreetAkron, OH 443066-14Dawn Franklin625 Hammel StreetAkron, OH 443066-15Cathie & Adam Kolleth630 Gridley AvenueAkron, OH 443066-15Resident636 Gridley AvenueAkron, OH 443066-16Patricia Mae Simmons640 Gridley AvenueAkron, OH 443066-16Patricia Mae Simmons640 Gridley AvenueAkron, OH 443066-16Patricia Mae Simmons640 Gridley AvenueAkron, OH 44306
Resident719 E CrostelAkton, OH 443066-8Patrick Leymon709 Darkow StreetAkron, OH 443066-8Clay East711 E Crosier StreetAkron, OH 443066-8Resident705 Darkow StreetAkron, OH 443066-9Gladys Ballard648 Hammel StreetAkron, OH 443066-9Denise Williams642 Hammel StreetAkron, OH 443066-10Dang Investments105 Mayfield AvenueAkron, OH 443066-10Dang Investments105 Mayfield AvenueAkron, OH 443066-11David E Voss638 Hammel StreetAkron, OH 443066-11Denis & Shiela Franklin634 Hammel StreetAkron, OH 443066-14Dawn Franklin625 Hammel StreetAkron, OH 443066-14Marsha Hosey629 Hammel StreetAkron, OH 443066-15Cathie & Adam Kolleth630 Gridley AvenueAkron, OH 443066-15Robert Eisenbrei2684 Timberline TrailCuyahoga Falls, OH 442236-16Patricia Mae Simmons640 Gridley AvenueAkron, OH 443066-16Patricia Mae Simmons640 Gridley AvenueAkron, OH 44306
6-8Patrick Leymon709 Darkow StreetAkton, OH 443066-8Clay East711 E Crosier StreetAkron, OH 443066-9Gladys Ballard648 Hammel StreetAkron, OH 443066-9Denise Williams642 Hammel StreetAkron, OH 443066-9Denise Williams642 Hammel StreetAkron, OH 443066-10Dang Investments105 Mayfield AvenueAkron, OH 443066-11David E Voss638 Hammel StreetAkron, OH 443066-11Denis & Shiela Franklin634 Hammel StreetAkron, OH 443066-14Dawn Franklin625 Hammel StreetAkron, OH 443066-14Marsha Hosey629 Hammel StreetAkron, OH 443066-15Cathie & Adam Kolleth630 Gridley AvenueAkron, OH 443066-15Resident636 Gridley AvenueAkron, OH 443066-16Patricia Mae Simmons640 Gridley AvenueAkron, OH 443066-16Patricia Mae Simmons640 Gridley AvenueAkron, OH 44306
6-8Clay East711 E Croster StreetAkron, OH 443066-9Gladys Ballard648 Hammel StreetAkron, OH 443066-9Denise Williams642 Hammel StreetAkron, OH 443066-10Dang Investments105 Mayfield AvenueAkron, OH 44313Resident701 Darkow StreetAkron, OH 443066-11David E Voss638 Hammel StreetAkron, OH 443066-11Denis & Shiela Franklin634 Hammel StreetAkron, OH 443066-11Dennis & Shiela Franklin634 Hammel StreetAkron, OH 443066-14Dawn Franklin625 Hammel StreetAkron, OH 443066-14Marsha Hosey629 Hammel StreetAkron, OH 443066-15Cathie & Adam Kolleth630 Gridley AvenueAkron, OH 443066-15Resident636 Gridley AvenueAkron, OH 443066-16Patricia Mae Simmons640 Gridley AvenueAkron, OH 443066-16Patricia Mae Simmons640 Gridley AvenueAkron, OH 44306
6-9Gladys Ballard703 Darkow StreetAkron, OH 443066-9Denise Williams648 Hammel StreetAkron, OH 443066-9Denise Williams642 Hammel StreetAkron, OH 443066-10Dang Investments105 Mayfield AvenueAkron, OH 44313Resident701 Darkow StreetAkron, OH 443066-11David E Voss638 Hammel StreetAkron, OH 443066-11Dennis & Shiela Franklin634 Hammel StreetAkron, OH 443066-14Dawn Franklin625 Hammel StreetAkron, OH 443066-14Marsha Hosey629 Hammel StreetAkron, OH 443066-15Cathie & Adam Kolleth630 Gridley AvenueAkron, OH 443066-15Robert Eisenbrei2684 Timberline TrailCuyahoga Falls, OH 442236-16Patricia Mae Simmons640 Gridley AvenueAkron, OH 44306
6-9Gladys Ballard646 Hammel StreetAkron, OH 443066-9Denise Williams642 Hammel StreetAkron, OH 443066-10Dang Investments105 Mayfield AvenueAkron, OH 44313Resident701 Darkow StreetAkron, OH 443066-11David E Voss638 Hammel StreetAkron, OH 443066-11Dennis & Shiela Franklin634 Hammel StreetAkron, OH 443066-14Dawn Franklin625 Hammel StreetAkron, OH 443066-14Marsha Hosey629 Hammel StreetAkron, OH 443066-15Cathie & Adam Kolleth630 Gridley AvenueAkron, OH 443066-15Robert Eisenbrei2684 Timberline TrailCuyahoga Falls, OH 442236-16Patricia Mae Simmons640 Gridley AvenueAkron, OH 44306
6-9Define Williams642 Hammel StreetAkron, OH 443066-10Dang Investments105 Mayfield AvenueAkron, OH 44313Resident701 Darkow StreetAkron, OH 443066-11David E Voss638 Hammel StreetAkron, OH 443066-11Dennis & Shiela Franklin634 Hammel StreetAkron, OH 443066-14Dawn Franklin625 Hammel StreetAkron, OH 443066-14Marsha Hosey629 Hammel StreetAkron, OH 443066-15Cathie & Adam Kolleth630 Gridley AvenueAkron, OH 443066-15Robert Eisenbrei2684 Timberline TrailCuyahoga Falls, OH 442236-16Patricia Mae Simmons640 Gridley AvenueAkron, OH 443066-16Patricia Mae Simmons640 Gridley AvenueAkron, OH 44306
6-10Darig investments103 Mayneid AvenueAkron, OH 44313Resident701 Darkow StreetAkron, OH 443066-11David E Voss638 Hammel StreetAkron, OH 443066-11Dennis & Shiela Franklin634 Hammel StreetAkron, OH 443066-14Dawn Franklin625 Hammel StreetAkron, OH 443066-14Marsha Hosey629 Hammel StreetAkron, OH 443066-15Cathie & Adam Kolleth630 Gridley AvenueAkron, OH 443066-15Robert Eisenbrei2684 Timberline TrailCuyahoga Falls, OH 442236-16Patricia Mae Simmons640 Gridley AvenueAkron, OH 44306CAH Properties1043 Perry StreetColumbus OH 43201
6-11David E Voss638 Hammel StreetAkron, OH 443066-11Dennis & Shiela Franklin634 Hammel StreetAkron, OH 443066-14Dawn Franklin625 Hammel StreetAkron, OH 443066-14Marsha Hosey629 Hammel StreetAkron, OH 443066-15Cathie & Adam Kolleth630 Gridley AvenueAkron, OH 443066-15Robert Eisenbrei2684 Timberline TrailCuyahoga Falls, OH 442236-16Patricia Mae Simmons640 Gridley AvenueAkron, OH 44306
6-11David E Voss636 Hammel StreetAkron, OH 443066-11Dennis & Shiela Franklin634 Hammel StreetAkron, OH 443066-14Dawn Franklin625 Hammel StreetAkron, OH 443066-14Marsha Hosey629 Hammel StreetAkron, OH 443066-15Cathie & Adam Kolleth630 Gridley AvenueAkron, OH 443066-15Robert Eisenbrei2684 Timberline TrailCuyahoga Falls, OH 442236-16Patricia Mae Simmons640 Gridley AvenueAkron, OH 443066-16Patricia Mae Simmons640 Gridley AvenueAkron, OH 44306
6-11Definits & Shiela Franklin634 Hammel StreetAkron, OH 443066-14Dawn Franklin625 Hammel StreetAkron, OH 443066-14Marsha Hosey629 Hammel StreetAkron, OH 443066-15Cathie & Adam Kolleth630 Gridley AvenueAkron, OH 443066-15Robert Eisenbrei2684 Timberline TrailCuyahoga Falls, OH 442236-16Patricia Mae Simmons640 Gridley AvenueAkron, OH 443066-16Patricia Mae Simmons640 Gridley AvenueAkron, OH 44306
6-14Dawn Franklin625 Hammel StreetAkron, OH 443066-14Marsha Hosey629 Hammel StreetAkron, OH 443066-15Cathie & Adam Kolleth630 Gridley AvenueAkron, OH 443066-15Robert Eisenbrei2684 Timberline TrailCuyahoga Falls, OH 442236-16Patricia Mae Simmons640 Gridley AvenueAkron, OH 443066-16Patricia Mae Simmons640 Gridley AvenueAkron, OH 443066-16CAH Properties1043 Perry StreetColumbus OH 43201
6-14Marsha Hosey629 Hammel StreetAkron, OH 443066-15Cathie & Adam Kolleth630 Gridley AvenueAkron, OH 443066-15Robert Eisenbrei2684 Timberline TrailCuyahoga Falls, OH 442236-16Patricia Mae Simmons640 Gridley AvenueAkron, OH 443066-16Patricia Mae Simmons640 Gridley AvenueAkron, OH 443066-16CAH Properties1043 Perry StreetColumbus OH 43201
6-15Califie & Adam Kolletin630 Gridley AvenueAkron, OH 443066-15Robert Eisenbrei2684 Timberline TrailCuyahoga Falls, OH 442236-16Patricia Mae Simmons636 Gridley AvenueAkron, OH 443066-16Patricia Mae Simmons640 Gridley AvenueAkron, OH 443066-16CAH Properties1043 Perry StreetColumbus OH 43201
6-15     Robert Elsenbrei     2004 Timbernine Train     Cuyanoga Pails, OH 44223       6-16     Patricia Mae Simmons     636 Gridley Avenue     Akron, OH 44306       6-16     CAH Properties     1043 Perry Street     Columbus OH 43201
6-16     Patricia Mae Simmons     640 Gridley Avenue     Akron, OH 44306       CAH Properties     1043 Perry Street     Columbus OH 43201
CAH Properties 10/3 Perry Street Columbus OH /3201
6-16 Bosident 642 Cridley Avenue Akron OH 44206
Eisophroi Pool Estata Haldings 2684 Timborlino Trail Cuyabaga Fallo OH 44200
6-16 Elsenbrer Rear Estate Holdings 2004 Timberline Train Cuyanoga Fails, OH 44225
Resident     040 Gluley Avenue     Aktoli, OH 44300       6.18     P&S Proportion & Invoctments     3046 Loowood Drive     Stow OH 44224
Posident 617 Gridley Avenue Akron OH 44224
Resident     017 Gluley Avenue     Akton, 01 44300       6.10     AMHA     100 W Codar Street     Akton, OH 44307
Posident 621 Gridley Avenue Akron OH 44306
6.10 Pichard M & Iill Wooley 2311 Erashura Drive Akron OH 44300
Resident 625 Gridley Avenue Akron OH 44321
6-20 Vondie Boykin 620 Gridley Avenue Akron OH 44306
6-20 Conv Stepp 635 Gridley Avenue Akron, OH 44306
6-21 Sherry & James Pride 639 Gridley Avenue Akron, OH 44306
6-21 Robert & Lois Fisenbrei 2684 Timberline Trail Cuivaboga Falls OH 44223
Resident 643 Gridley Avenue Akron OH 44306
6-21 Gene Bowers 645 Gridley Avenue Akron, OH 44306
6-22 Victor Lowesbury 634 Inman Street Akron, OH 44306
6-22 Alice Baldwin 638 Inman Street Akron OH 44306
6-23 James Hyatt 2225 Watkins Street Akron OH 44305
Resident 642 Inman Street Akron OH 44306
6-23 Larry Hunt 648 Inman Street Akron OH 44306
6-23 Pamela Decker 652 Inman Street Akron OH 44306
6-24 Gerald Altizer 2234 Ardendale Avenue Akron OH 44312
Resident 658 Inman Street Akron OH 44306

NSA 6 Scenario 2						
	Benefited Rec	ceptors for Public Involvement				
TNM Number	Name	Address	City/State/Zip			
6-25	Ronald Miller	2162 S Arlington Road	Akron, OH 44306			
	Resident	639 Inman Street	Akron, OH 44306			
6-25	Daniel Bridle	1310 Connecticut Woods	Hudson, OH 44236			
	Resident	641 Inman Street	Akron, OH 44306			
6-26	Elaine Chin	110 Sabetha Place	Akron, OH 44314			
	Resident	645 Inman Street	Akron, OH 44306			
6-26	Quality Home Improvement	610 Hudson Street	Akron, OH 44306			
	Resident	649 Inman Street	Akron, OH 44306			
6-27	Pacific Northwest Partners	8821 5th Avenue NE Suite 1	Seattle, WA 98115			
	Resident	832 Fifth Avenue	Akron, OH 44306			
6-27	All In Moore Investment Group	2215 SR 44	Atwater, OH 44201			
	Resident	836 Fifth Avenue	Akron, OH 44306			
6-28	Daniel Cuffe	1131 Calvin Street	Akron, OH 44312			
	Resident	840 Fifth Avenue	Akron, OH 44306			
6-28	Fields Collins Properties LLC	556 Talmadge Road	Cuyahoga Falls, OH 44221			
	Resident	844 Fifth Avenue	Akron, OH 44306			
6-28	Michael Sapp	103 Valentine Farms Lane	Akron, OH 44333			
	Resident	846 Fifth Avenue	Akron, OH 44306			
6-29	David Andrew Miller	839 Fifth Avenue	Akron, OH 44306			
6-29	Dondi Williams, Sr	68 Jewett Street	Akron, OH 44305			
	Resident	843 Fifth Avenue	Akron, OH 44306			
6-29	Cynthia Draher	99 N College Street	Akron, OH 44304			
	Resident	847 Fifth Avenue	Akron, OH 44306			
6-30	Kelly Properties	POB 772	Bath, OH 44210			
	Resident	587 Merton Avenue	Akron, OH 44306			
6-31	Henry & Sonja Dixson	577 S Hawkins Avenue	Akron, OH 44320			
	Resident	857 Fifth Avenue	Akron, OH 44306			
6-31	Morris & Corrine Pringle	8651 Fifth Avenue	Akron, OH 44306			
6-31	Lanard Richardson	1977 Wells Creek Run	Akron, OH 44312			
	Resident	871 Fifth Avenue	Akron, OH 44306			
6-32	Tracy Nevins	875 Fifth Avenue	Akron, OH 44306			
6-32	TZ & Mary Nevins	879 Fifth Avenue	Akron, OH 44306			
6-33	Sandra Bogan	883 Fifth Avenue	Akron, OH 44306			
6-36	Thomas Losh	182 Stephens Road	Akron, OH 44312			
	Resident	614 Merton Avenue	Akron, OH 44306			
6-36	Darlene & Jerry Whitis	620 Merton Avenue	Akron, OH 44306			
6-37	Summit County Land Reutilization	1180 S Main Street Suite 230	Akron, OH 44301			
	Resident	624 Merton Avenue	Akron, OH 44306			
6-37	Sandra Brown	626 Merton, Avenue	Akron, OH 44306			
6-38	Jose Felix	918 Beardsley Street	Akron, OH 44306			
	Resident	632 Merton Avenue	Akron, OH 44306			
6-38	Emily & Christopher Gaul	638 Merton Avenue	Akron, OH 44306			
6-39	Eleanor Jone Properties LLC	339 Siebler Avenue	Akron, OH 44312			
	Resident	860 fifth Avenue	Akron, OH 44306			

	NSA 6 Scenario 2							
	Benefited Receptors for Public Involvement							
TNM	Name	Address	City/State/Zip					
Number								
6-39	Rafael Maldonado & Amanda	13204 SW 9th Terrace	Miami, FL 33184					
	Cisneros							
	Resident	864 Fifth Avenue	Akron, OH 44306					
6-39	Summit County Land Reutilization	1180 S Main Street Suite 230Akron, OH 44301609 Merton AvenueAkron, OH 44306						
	Resident	609 Merton Avenue	Akron, OH 44306					
6-40	Philip Trudeau	872 Fifth Avenue	Akron, OH 44306					
6-41	L D & Cathi Smith	880 Fifth Avenue	Akron, OH 44306					
6-41	Curtis Mitchell	967 Cole Avenue	Akron, OH 44306					
	Resident	572 Bertha Avenue	Akron, OH 44306					
6-42	Summit County Land Reutilization	1180 S Main Street Suite 230	Akron, OH 44301					
	Resident	609 Merton Avenue	Akron, OH 44306					
6-42	Dennis Coleman	437 Briarwood Drive	Akron, OH 44302					
	Resident	615 Merton Avenue	Akron, OH 44306					
6-43	Dennis Hailstock & Nola Thomas	623 Merton Avenue	Akron, OH 44306					
6-43	Alan& Angela Carter	627 Merton Avenue	Akron, OH 44306					
6-45	Rebecca Montgomery & Nicholas	4131 Wadsworth Road	Barberton, OH 44203					
	Miller							
	Resident	588 Bertha Avenue	Akron, OH 44306					
6-45	Venture Capitol Holdings LLC	POB 1052	Akron, OH 44309					
	Resident	590 Bertha Avenue	Akron, OH 44306					
6-45	Pamela Sue Jones	592 Bertha Avenue	Akron, OH 44306					
6-45	Ramona Hamilton	700 Excelsior Avenue	Akron, OH 44306					
	Resident	596 Bertha Avenue	Akron, OH 44306					
6-47	Jeff Brandon	5184 Glenmore Way	Medina, OH 44256					
	Resident	571 Bertha Avenue	Akron, OH 44306					

	NSA 8 Scenario 1					
	Benefited Rec	eptors for Public Involvement				
TNM	Name	Address	City/State/Zip			
Number						
8-6	Ella & Willie Ray	5237 Arabian Way	Indianapolis, IN 46228			
	Resident	630 Lafollette Street	Akron, OH 44311			
8-9	Deborah Roberson	629 Baird Street	Akron, OH 44311			
8-11	Equity Trust Co. FBO Daniel Powers					
	Resident	632 Baird Street	Akron, OH 44311			
8-12	Christopher & Gail Richards	628 Baird Street	Akron, OH 44311			
8-13	Terry & Deloris Henderson	620 Baird Street	Akron, OH 44311			
8-14	Janice Calhoun	631 Kipling Street	Akron, OH 44311			
8-15	Lynette Miller	623 Kipling Street	Akron, OH 44311			
8-16	LTC Enterprises #3	1730 McTaggart Drive	Akron, OH 44320			
	Resident	627 McKinley Ave	Akron, OH 44311			
8-18	Daniel Mancini	2770 SR 43	Mogadore, OH 44260			
	Resident	621 McKinley Avenue	Akron, OH 44311			
8-19	Alliance OH Holdings LLC	POB 928769	San Diego, CA 92192			
	Resident	626 McKinley Avenue	Akron, OH 44311			
8-20	Janice Calhoun & Stephanie	622 McKinley Avenue	Akron, OH 44311			
	Bradshaw					
8-21	Ira Joe Calhoun	618 McKinley Avenue	Akron, OH 44311			
8-22	Gerald & Edith Gulley	623 Corice Street	Akron, OH 44311			
8-23	Phyllis Vincent	629 Morgan Street	Akron, OH 44311			
8-25	Dang Investment	105 Mayfield Avenue	Akron, OH 44313			
	Resident	630 Morgan Avenue	Akron, OH 44311			
8-26	Ronnie Hutton, Trustee	4469 Anatolia Drive	Rancho Cordova, CA 95742			
	Resident	626 Morgan Avenue	Akron, OH 44311			
8-35	Vanthalith Khounborin	618 Kipling Street	Akron, OH 44311			
8-37	Janet Lee Jones	617 McKinley Avenue	Akron, OH 44311			
8-38	Linda Futrell	613 McKinley Avenue	Akron, OH 44311			
8-39	Beverly Ely	681 Garth Avenue	Akron, OH 44320			
	Resident	612 McKinley Avenue	Akron, OH 44311			
8-40	Jacqueline Reed	615 Cornice Street	Akron, OH 44311			
8-41	Avie Boyer	618 Corice Street	Akron, OH 44311			

NSA 9 Scenario 1 Reposited Recentors for Public Involvement					
	Deneme Deneme Nor		Citu/Stata/Zin		
Number	Name	Address	City/State/Zip		
9-1	Michael Zmija	4961 Boneta Road	Medina, OH 44256		
	Resident	669 Lovers Lane	Akron, OH 44306		
9-2	Thomas Wiseman	673 Lovers Lane	Akron, OH 44306		
9-3	Alfred Goldsmith	2030 Lee Drive	Akron, OH 44306		
	Resident	675 Lovers Lane	Akron, OH 44306		
9-4	William Dipaolo, Sr.	1300 Dietz Avenue	Akron, OH 44301		
	Resident	680 Morgan Avenue	Akron, OH 44306		
9-5	Ronald Lieving	675 Morgan Avenue	Akron, OH 44306		
9-6	Carl & Victoria Wright, Jr.	668 Corice Street	Akron, OH 44306		
9-7	Brandon Wright	674 Corice Street	Akron, OH 44306		
9-8	Michael Zmija	4961 Boneta Road	Medina, OH 44256		
	Resident	686 Corice Street	Akron, OH 44306		
9-9	Deon Alexander	669 Corice Street	Akron, OH 44306		
9-10	Cid Norris	3713 Easton Road	Barberton, OH 44203		
	Resident	673 Corice Street	Akron, OH 44306		
9-11	Latisha Norris	3713 Easton Road	Barberton, OH 44203		
	Resident	677 Corice Street	Akron, OH 44306		
9-12	Hayley Fedelischak	681 Corice Street	Akron, OH 44306		
9-13	Michael Harpley	674 McKinley Avenue	Akron, OH 44306		
9-14	Terrance Allen	678 McKinley Avenue	Akron, OH 44306		
9-15	Valentine Asset Management LLC	1746 Marigold Avenue	Akron, OH 44301		
	Resident	669 McKinley Avenue	Akron, OH 44306		
9-16	Deloris McCall	405 Weeks Street	Akron, OH 44306		
	Resident	673 McKinley Avenue	Akron, OH 44306		
9-17	Sharon McKim	677 McKinley Street	Akron, OH 44306		
9-19	Barbara Valentine	1282 Kipling Street	Akron, OH 44320		
	Resident	672 Kipling Street	Akron, OH 44306		
9-20	Jeff Brandon	5184 Glenmore Way	Akron, OH 44306		
	Resident 676 Kipling Street		Akron, OH 44306		
9-25	Leon Simon, Jr.	681 Morgan Avenue	Akron, OH 44306		
9-26	Debrah Green, Trustee	1128 Taplin Avenue	Akron, OH 44319		
	Resident	685 Corice Street	Akron, OH 44306		

## **APPENDIX G** TNM Input/Output Files

## **EXISTING YEAR 2020**

TNM Files used in all Existing Year 2020 Model Runs

INPUT: ROADWAYS

SUM-I76 Central Interchange (101402)

Lawhon & Assoc.					1 August 20 <sup>2</sup>	17					
CMCox					TNM 2.5						
INPUT: ROADWAYS							Average	pavement typ	e shall be u	used unles	;S
PROJECT/CONTRACT:	SUM-176 (	Central Int	erchang	e (101402)			a State h	ighway agend	y substant	iates the u	Se
RUN:	NSA 1 202	20					of a diffe	rent type with	the approv	al of FHW	Α
Roadway		Points									
Name	Width	Name	No.	Coordinates	(pavement)		Flow Cor	itrol		Segment	
				X	Y	Z	Control	Speed	Percent	Pvmt	On
							Device	Constraint	Vehicles	Туре	Struct?
									Affected		
	ft			ft	ft	ft		mph	%		
I-76 EB1/Ramp I-76EB to I-77SB	12.0	point1	1	2,239,535.0	510,115.0	1,016.00				Average	
		point2	2	2,239,900.0	510,108.0	1,024.00				Average	
		point3	3	2,240,219.0	510,096.0	1,032.00				Average	
		point4	4	2,240,979.0	510,067.0	1,046.00				Average	
		point5	5	2,241,359.0	510,054.0	1,052.00				Average	
		Brown Str	6	2,241,702.0	510,040.0	1,062.00				Average	Y
		point7	7	2,241,866.0	510,026.0	1,070.00				Average	
		On fill	8	2,242,042.0	510,001.0	1,079.00				Average	
		point9	9	2,242,347.0	509,938.0	1,084.00				Average	
		point10	10	2,242,556.0	509,873.0	1,083.00				Average	
		point11	11	2,242,746.0	509,767.0	1,080.00				Average	
		point12	12	2,242,890.0	509,602.0	1,075.00				Average	
		point13	13	2,242,978.0	509,386.0	1,072.00				Average	
		point14	14	2,242,998.0	509,142.0	1,067.00				Average	
		Lafollette	\$ 15	2,242,997.0	508,886.0	1,066.00				Average	
		point16	16	2,242,991.0	508,561.0	1,077.00				Average	
		point17	17	2,242,979.0	508,038.0	1,090.00				Average	
		point18	18	2,242,983.0	507,761.0	1,093.00				Average	
		Lover's La	a 19	2,243,006.0	507,258.0	1,086.00				Average	
		point20	20	2,243,006.0	506,706.0	1,084.00				Average	
		Cole Ave.	21	2,243,011.0	506,224.0	1,090.00					
Brown Street	28.0	At Kipling	22	2,241,770.0	508,281.0	1,079.00				Average	
		At Baird	23	2,241,774.0	508,556.0	1,075.00				Average	
		At Lofolle	t 24	2,241,774.0	508,845.0	1,067.00				Average	
		At E Cros	i 25	2,241,781.0	509,134.0	1,059.00				Average	
SUM-I76 Central Interchange (101402)

	At E South	26	2,241,781.0	509,888.0 1,047.00	Average	
	At Lampar	27	2,241,776.0	510,220.0 1,037.00	Average	
	At E Voris	28	2,241,773.0	510,581.0 1,044.00	Average	
	At Lovisa	518	2,241,772.0	510,969.0 1,043.00		
Johnston Street 40.0	At Gridley	29	2,244,073.0	511,439.0 1,122.00	Average	
	At Hamme	30	2,243,738.0	511,173.0 1,113.00	Average	
	At Lumiere	31	2,243,473.0	510,963.0 1,102.00	Average	
	point32	32	2,243,367.0	510,889.0 1,102.00	Average Y	
	Wilson St	33	2,243,115.0	510,688.0 1,089.00	Average	
	Jonhston (	34	2,242,835.0	510,457.0 1,079.00	Average	
	Hedden A	35	2,242,641.0	510,314.0 1,067.00	Average	
	point36	36	2,242,472.0	510,270.0 1,050.00	Average	
	Spicer St.	37	2,242,296.0	510,270.0 1,039.00	Average	
	point38	38	2,242,134.0	510,273.0 1,039.00	Average	
	At Brown	39	2,241,776.0	510,220.0 1,037.00		
I-76 WB to I-77 SB 12.0	point317	40	2,243,633.0	509,937.0 1,094.00	Average	
	point41	41	2,243,502.0	509,936.0 1,094.00	Average	
	point42	42	2,243,284.0	509,954.0 1,090.00	Average Y	
	point43	43	2,243,018.0	509,977.0 1,104.00	Average Y	
	point44	44	2,242,946.0	509,974.0 1,104.00	Average	
	point45	45	2,242,874.0	509,952.0 1,104.00	Average	
	point46	46	2,242,815.0	509,911.0 1,104.00	Average Y	
	point47	47	2,242,745.0	509,830.0 1,100.00	Average Y	
	point48	48	2,242,707.0	509,706.0 1,097.00	Average	
	point49	49	2,242,721.0	509,574.0 1,090.00	Average	
	point50	50	2,242,829.0	509,347.0 1,080.00	Average	
	point51	51	2,242,934.0	509,127.0 1,066.00	Average	
	Lafollette	52	2,242,977.0	508,889.0 1,066.00	Average	
	point53	53	2,242,979.0	508,561.0 1,077.00	Average	
	point17	54	2,242,967.0	508,038.0 1,090.00	Average	
	point18	55	2,242,971.0	507,761.0 1,093.00	Average	
	Lover's La	56	2,242,994.0	507,258.0 1,086.00	Average	
	point20	57	2,242,994.0	506,706.0 1,084.00	Average	
	Cole Ave.	58	2,242,999.0	506,224.0 1,090.00		
SR8 SB1/Ramp SR8 SB to I-76 WB 12.0	Beacon St	61	2,243,264.0	512,211.0 1,056.00	Average Y	
	point62	62	2,243,268.0	512,039.0 1,060.00	Average	
	point63	63	2,243,273.0	511,571.0 1,074.00	Average	
	point64	64	2,243,242.0	511,069.0 1,078.00	Average	_
	point65	65	2,243,213.0	510,930.0 1,075.00	Average	

SUM-I76 Central Interchange (101402)

		Johnston \$	66	2,243,164.0	510,734.0	1,072.00	Average	
		point67	67	2,243,089.0	510,515.0	1,072.00	Average	
		point68	68	2,242,964.0	510,345.0	1,077.00	Average	
		point69	69	2,242,785.0	510,224.0	1,080.00	Average	
		begin fill	70	2,242,608.0	510,180.0	1,082.00	Average	
		point71	71	2,242,053.0	510,139.0	1,078.00	Average	
		Browm St	72	2,241,864.0	510,137.0	1,070.00	Average	Y
		point73	73	2,241,704.0	510,141.0	1,063.00	Average	
		point74	74	2,241,205.0	510,159.0	1,050.00	Average	
		point75	75	2,240,651.0	510,179.0	1,041.00	Average	
		point76	76	2,240,156.0	510,193.0	1,030.00	Average	
		Grant St o	77	2,239,533.0	510,210.0	1,018.00		
Ramp SR8 SB to I76 EB	12.0	point78	78	2,243,242.0	511,069.0	1,078.00	Average	
		point79	79	2,243,225.0	510,930.0	1,075.00	Average	
		Johnston \$	80	2,243,180.0	510,771.0	1,072.00	Average	
		point81	81	2,243,104.0	510,512.0	1,072.00	Average	
		point82	82	2,243,074.0	510,334.0	1,075.00	Average	
		point83	83	2,243,092.0	510,148.0	1,077.00	Average	
		I-76 undrp	84	2,243,127.0	510,047.0	1,078.00	Average	Y
		point85	85	2,243,214.0	509,903.0	1,079.00	Average	
		I-76 ovrpa	86	2,243,335.0	509,787.0	1,081.00	Average	
		point87	87	2,243,461.0	509,719.0	1,088.00	Average	
		point88	88	2,243,601.0	509,680.0	1,099.00	Average	
		point89	89	2,243,813.0	509,683.0	1,105.00	Average	
		point90	90	2,244,002.0	509,745.0	1,111.00	Average	
		Inman St o	91	2,244,394.0	509,931.0	1,118.00	Average	Y
		point92	92	2,244,457.0	509,960.0	1,120.00	Average	
		point93	93	2,244,841.0	510,140.0	1,133.00	Average	
		ped bridge	204	2,245,394.0	510,352.0	1,136.00	Average	
		point95	205	2,245,645.0	510,418.0	1,135.00	Average	
		point96	272	2,245,993.0	510,480.0	1,123.00	Average	
		point258	273	2,246,321.0	510,499.0	1,116.00		
SR8 SB thru lane 4	12.0	point96	96	2,243,288.0	512,224.0	1,056.20	Average	Y
		Beacon St	97	2,243,291.0	512,057.0	1,060.20	Average	
		point98	98	2,243,296.0	511,550.0	1,074.20	Average	
		point99	99	2,243,265.0	511,050.0	1,078.20	Average	
		point100	100	2,243,214.0	510,550.0	1,067.20	Average	
		point101	101	2,243,164.0	510,050.0	1,058.20	Average	
		point102	102	2,243,112.0	509,550.0	1,056.20	Average	

SUM-I76 Central Interchange (101402)

	point103	103	2,243,063.0	509,050.0	1,066.20	Average
	Lafollette	104	2,243,048.0	508,887.0	1,068.20	Average
	point105	105	2,243,015.0	508,561.0	1,077.20	Average
	point17	106	2,243,003.0	508,038.0	1,090.20	Average
	point18	107	2,243,007.0	507,761.0	1,093.20	Average
	Lover's La	108	2,243,030.0	507,258.0	1,086.20	Average
	point20	109	2,243,030.0	506,706.0	1,084.20	Average
	Cole Ave.	110	2,243,035.0	506,224.0	1,090.00	
SR8 SB thru lane 3 12.0	point96	113	2,243,276.0	512,217.0	1,056.10	Average Y
	Beacon St	114	2,243,279.0	512,048.0	1,060.10	Average
	point98	115	2,243,284.0	511,550.0	1,074.10	Average
	point99	116	2,243,253.0	511,050.0	1,078.10	Average
	point100	117	2,243,202.0	510,550.0	1,067.10	Average
	point101	118	2,243,152.0	510,050.0	1,058.10	Average
	point102	119	2,243,100.0	509,550.0	1,056.10	Average
	point103	120	2,243,051.0	509,050.0	1,066.10	Average
	Lafollette	121	2,243,036.0	508,887.0	1,068.10	Average
	point105	122	2,243,003.0	508,561.0	1,077.10	Average
	point17	123	2,242,991.0	508,038.0	1,090.10	Average
	point18	124	2,242,995.0	507,761.0	1,093.10	Average
	Lover's La	125	2,243,018.0	507,258.0	1,086.10	Average
	point20	126	2,243,018.0	506,706.0	1,084.10	Average
	Cole Ave.	127	2,243,023.0	506,224.0	1,090.00	
I-77 NB thru lane 4 12.0	Cole Stree	128	2,243,068.0	506,222.0	1,090.00	Average
	point129	129	2,243,069.0	506,700.0	1,084.00	Average
	Lovers La	130	2,243,061.0	507,259.0	1,086.00	Average
	point131	131	2,243,044.0	507,750.0	1,093.00	Average
	point132	132	2,243,045.0	508,250.0	1,084.00	Average
	point133	133	2,243,051.0	508,423.0	1,080.00	Average
	Lafollette I	134	2,243,079.0	508,891.0	1,068.00	Average
	point135	135	2,243,095.0	509,053.0	1,066.00	Average
	point136	136	2,243,143.0	509,550.0	1,056.00	Average
	I-76 EB ov	137	2,243,164.0	509,740.0	1,055.00	Average
	I-76WB ov	138	2,243,190.0	510,012.0	1,058.00	Average
	point139	139	2,243,244.0	510,550.0	1,067.00	Average
	point140	140	2,243,294.0	511,050.0	1,078.00	Average
	point141	141	2,243,329.0	511,548.0	1,072.00	Average
	Beacon St	142	2,243,325.0	512,080.0	1,060.00	Average
	point143	143	2,243,321.0	512,249.0	1,056.00	

I-77 NB thru lane 3 Cole Stree 2,243,080.0 506.222.0 1.090.00 12.0 148 Average 1,084.00 point129 149 2,243,081.0 506,700.0 Average Lovers La 150 2.243.073.0 507.259.0 1.086.00 Average 2,243,056.0 507,750.0 1,093.00 151 point131 Average 2,243,057.0 1,084.00 point132 152 508,250.0 Average 153 2,243,063.0 508.423.0 1.080.00 point133 Average 2,243,092.0 Lafollette 154 508,891.0 1,068.00 Average 155 2,243,107.0 509,053.0 1,066.00 Average point135 156 2.243.155.0 509.550.0 1.056.00 point136 Average 509,740.0 1,055.00 157 2,243,176.0 I-76 EB ov Average 158 2,243,202.0 Average I-76WB ov 510,012.0 1,058.00 159 2,243,256.0 point139 510,550.0 1,067.00 Average 160 2.243.306.0 511.050.0 1.078.00 point140 Average 511,548.0 1,072.00 point141 161 2,243,341.0 Average 162 2,243,337.0 512,080.0 1,060.00 Beacon St Average 163 2,243,333.0 point143 512,249.0 1,056.00 166 2,243,092.0 I-77 NB2/Ramp I-77NB to I-76WB 12.0 Cole Stree 506,222.0 1,090.00 Average 2,243,093.0 1,084.00 point129 167 506,700.0 Average 168 2,243,085.0 Lovers La 507,259.0 1,086.00 Average point131 169 2,243,068.0 507,750.0 1,093.00 Average 170 2,243,069.0 point132 508.250.0 1.084.00 Average point133 171 2,243,075.0 508,423.0 1,080.00 Average 172 2,243,105.0 508,687.0 1,073.00 point172 Average point173 173 2,243,159.0 508,951.0 1,071.00 Average 2,243,255.0 509,317.0 1,076.00 point182 182 Average 183 2,243,276.0 509,561.0 1,076.00 point183 Average 2,243,203.0 Y SR 8 ovrp 184 509,812.0 1,076.00 Average point185 185 2,243,112.0 509,942.0 1,077.00 Average 186 2,242,975.0 510,062.0 1,079.00 point186 Average 2,242,776.0 510,145.0 1,081.00 point187 187 Average 188 2,242,588.0 510,161.0 1,082.00 point188 Average 189 2,242,053.0 510,127.0 1,078.00 point71 Average 190 2,241,864.0 Y Browm St 510,125.0 1,070.00 Average 2,241,704.0 510,129.0 1,063.00 Average point73 191 2,241,205.0 510.147.0 1.050.00 point74 192 Average 193 2,240,651.0 510,167.0 1,041.00 point75 Average 2,240,156.0 510,181.0 1,030.00 point76 194 Average 195 2,239,533.0 Grant St o 510.198.0 1.018.00 12.0 Cole Stree 2,243,104.0 I77 NB1/Ramp I-77NB to I-76EB 174 506,222.0 1,090.00 Average

E:\Lawhon\SUM-IR 76 Central Interchange (101402)\Ex Yr TNM\NSA 1 2020

**INPUT: ROADWAYS** 

SUM-I76 Central Interchange (101402)

SUM-I76 Central Interchange (101402)

							· · · J· ( · · /	
		point129	175	2,243,105.0	506,700.0	1,084.00	Average	
		Lovers La	176	2,243,097.0	507,259.0	1,086.00	Average	
		point131	177	2,243,080.0	507,750.0	1,093.00	Average	
		point132	178	2,243,081.0	508,250.0	1,084.00	Average	
		point133	179	2,243,087.0	508,423.0	1,080.00	Average	
		point172	180	2,243,117.0	508,687.0	1,073.00	Average	
		point173	181	2,243,171.0	508,951.0	1,071.00	Average	
		point196	196	2,243,329.0	509,286.0	1,078.00	Average	
		point197	197	2,243,474.0	509,443.0	1,088.00	Average	
		point198	198	2,244,000.0	509,726.0	1,111.00	Average	
		Inman St o	199	2,244,394.0	509,919.0	1,118.00	Average	Y
		point92	200	2,244,457.0	509,948.0	1,120.00	Average	
		point93	201	2,244,841.0	510,128.0	1,133.00	Average	
		ped bridge	202	2,245,394.0	510,340.0	1,136.00	Average	
		point95	203	2,245,645.0	510,418.0	1,135.00		
I-76EB2	12.0	point1	207	2,239,535.0	510,127.0	1,016.00	Average	
		point2	208	2,239,900.0	510,120.0	1,024.00	Average	
		point3	209	2,240,219.0	510,108.0	1,032.00	Average	
		point4	210	2,240,979.0	510,079.0	1,046.00	Average	
		point5	211	2,241,359.0	510,066.0	1,052.00	Average	
		Brown Stre	212	2,241,702.0	510,052.0	1,062.00	Average	Y
		point7	213	2,241,866.0	510,038.0	1,070.00	Average	
		On fill	214	2,242,042.0	510,013.0	1,079.00	Average	
		point9	215	2,242,347.0	509,938.0	1,084.00		
I-76EB thru lane 3	12.0	point1	217	2,239,535.0	510,139.0	1,016.00	Average	
		point2	218	2,239,900.0	510,132.0	1,024.00	Average	
		point3	219	2,240,219.0	510,120.0	1,032.00	Average	
		point4	220	2,240,979.0	510,091.0	1,046.00	Average	
		point5	221	2,241,359.0	510,078.0	1,052.00	Average	
		Brown Stre	222	2,241,702.0	510,064.0	1,062.00	Average	Y
		point7	223	2,241,866.0	510,050.0	1,070.00	Average	
		On fill	224	2,242,042.0	510,025.0	1,079.00	Average	
		point225	225	2,242,365.0	509,949.0	1,087.00	Average	
		point226	226	2,242,796.0	509,845.0	1,090.00	Average	
		point237	237	2,243,058.0	509,784.0	1,093.00	Average	Y
		point238	238	2,243,297.0	509,750.0	1,102.00	Average	Y
		point239	239	2,243,564.0	509,744.0	1,114.00	Average	
		point240	240	2,243,883.0	509,781.0	1,118.00	Average	
		point242	242	2,244,165.0	509,859.0	1,119.00	Average	
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	Inman St o	241	2,244,391.0	509,946.0	1,118.00	Average	Y
	point249	250	2,244,457.0	509,972.0	1,120.00	Average	
	point93	251	2,244,841.0	510,152.0	1,133.00	Average	
	ped bridge	252	2,245,394.0	510,364.0	1,136.00	Average	
	point95	253	2,245,645.0	510,430.0	1,135.00	Average	
	point96	265	2,245,993.0	510,492.0	1,123.00	Average	
	point258	266	2,246,321.0	510,511.0	1,116.00		
I-76 EB thru lane 4 12.0	point1	227	2,239,535.0	510,151.0	1,016.00	Average	
	point2	228	2,239,900.0	510,144.0	1,024.00	Average	
	point3	229	2,240,219.0	510,132.0	1,032.00	Average	
	point4	230	2,240,979.0	510,103.0	1,046.00	Average	
	point5	231	2,241,359.0	510,090.0	1,052.00	Average	
	Brown Stre	232	2,241,702.0	510,076.0	1,062.00	Average	Y
	point7	233	2,241,866.0	510,062.0	1,070.00	Average	
	On fill	234	2,242,042.0	510,037.0	1,079.00	Average	
	point225	235	2,242,365.0	509,961.0	1,087.00	Average	
	point226	236	2,242,796.0	509,857.0	1,090.00	Average	
	point237	243	2,243,058.0	509,796.0	1,093.00	Average	Y
	point238	244	2,243,297.0	509,762.0	1,102.00	Average	Y
	point239	245	2,243,564.0	509,756.0	1,114.00	Average	
	point240	246	2,243,883.0	509,793.0	1,118.00	Average	
	point242	247	2,244,165.0	509,871.0	1,119.00	Average	
	Inman St o	248	2,244,391.0	509,958.0	1,118.00	Average	Y
	point249	249	2,244,457.0	509,984.0	1,120.00	Average	
	point93	254	2,244,841.0	510,164.0	1,133.00	Average	
	ped bridge	255	2,245,394.0	510,376.0	1,136.00	Average	
	point95	256	2,245,645.0	510,442.0	1,135.00	Average	
	point96	257	2,245,993.0	510,504.0	1,123.00	Average	
	point258	258	2,246,321.0	510,523.0	1,116.00		
Ramp I-76 EB to SR8 NB 12.0	point226	281	2,242,796.0	509,857.0	1,090.00	Average	
	point282	282	2,242,884.0	509,848.0	1,086.00	Average	
	point283	283	2,243,062.0	509,811.0	1,093.00	Average	Y
	point284	284	2,243,297.0	509,774.0	1,104.00	Average	Y
	point285	285	2,243,513.0	509,771.0	1,106.00	Average	
	point286	286	2,243,631.0	509,816.0	1,112.00	Average	
	I-76WB ur	287	2,243,684.0	509,880.0	1,113.00	Average	Y
	point289	289	2,243,710.0	509,937.0	1,112.00	Average	Y
	point288	288	2,243,696.0	510,018.0	1,110.00	Average	
	point290	290	2,243,625.0	510,161.0	1,107.00	Average	

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		point291	291	2,243,463.0	510,474.0	1,090.00	Average	
		point292	292	2,243,386.0	510,645.0	1,082.00	Average	
		Johnston \$	293	2,243,340.0	510,830.0	1,079.00	Average	
		point294	294	2,243,326.0	511,006.0	1,078.00	Average	
		point295	295	2,243,335.0	511,256.0	1,075.00	Average	
		point296	296	2,243,353.0	511,548.0	1,072.00	Average	
		Beacon St	297	2,243,349.0	512,080.0	1,060.00	Average	
		point143	298	2,243,345.0	512,249.0	1,056.00		
I-76 WB4 thru lane	12.0	point258	301	2,246,321.0	510,547.0	1,116.00	Average	
		point308	308	2,245,993.0	510,528.0	1,123.00	Average	
		point310	310	2,245,645.0	510,466.0	1,137.00	Average	
		ped bridge	309	2,245,394.0	510,400.0	1,138.00	Average	
		point312	312	2,244,841.0	510,188.0	1,133.00	Average	
		point311	311	2,244,629.0	510,084.0	1,133.00	Average	
		Inman St u	313	2,244,454.0	510,025.0	1,120.00	Average	Y
		point314	314	2,244,392.0	510,008.0	1,118.00	Average	
		point315	315	2,244,069.0	509,946.0	1,100.00	Average	
		Ramp ovr	316	2,243,728.0	509,933.0	1,095.00	Average	
		point317	317	2,243,633.0	509,937.0	1,094.00	Average	
		point318	318	2,243,502.0	509,948.0	1,094.00	Average	
		point319	319	2,243,284.0	509,966.0	1,090.00	Average	Y
		point320	320	2,242,916.0	510,006.0	1,105.00	Average	Y
		fill	321	2,242,476.0	510,047.0	1,095.00	Average	
		point323	323	2,242,043.0	510,080.0	1,078.00	Average	
		point322	322	2,241,865.0	510,092.0	1,070.00	Average	Y
		point324	324	2,241,699.0	510,105.0	1,063.00	Average	
		point74	394	2,241,205.0	510,123.0	1,050.00	Average	
		point75	395	2,240,651.0	510,143.0	1,041.00	Average	
		point76	396	2,240,156.0	510,157.0	1,030.00	Average	
		Grant St o	397	2,239,533.0	510,174.0	1,018.00		
I-76 WB3 thru lane	12.0	point258	331	2,246,321.0	510,559.0	1,116.00	Average	
		point308	332	2,245,993.0	510,540.0	1,123.00	Average	
		point310	333	2,245,645.0	510,478.0	1,137.00	Average	
		ped bridge	334	2,245,394.0	510,412.0	1,138.00	 Average	
		point312	335	2,244,841.0	510,200.0	1,133.00	Average	
		point311	336	2,244,629.0	510,096.0	1,133.00	Average	
		Inman St ı	337	2,244,454.0	510,037.0	1,120.00	 Average	Y
		point314	338	2,244,392.0	510,020.0	1,118.00	 Average	
		point315	339	2,244,069.0	509,958.0	1,100.00	 Average	

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		Ramp ovr	340	2,243,728.0	509,945.0	1,095.00	Average	
		point317	341	2,243,633.0	509,949.0	1,094.00	Average	
		point318	342	2,243,502.0	509,960.0	1,094.00	Average	
		point319	343	2,243,284.0	509,978.0	1,090.00	Average	Y
		point320	344	2,242,916.0	510,018.0	1,105.00	Average	Y
		fill	345	2,242,476.0	510,059.0	1,095.00	Average	
		point323	346	2,242,043.0	510,092.0	1,078.00	Average	
		point322	347	2,241,865.0	510,104.0	1,070.00	Average	Y
		point324	348	2,241,699.0	510,117.0	1,063.00	Average	
		point74	390	2,241,205.0	510,135.0	1,050.00	Average	
		point75	391	2,240,651.0	510,155.0	1,041.00	Average	
		point76	392	2,240,156.0	510,169.0	1,030.00	Average	
		Grant St o	393	2,239,533.0	510,186.0	1,018.00		
I-76WB2/Ramp I-76WB to SR 8 NB	12.0	point258	355	2,246,321.0	510,571.0	1,116.00	Average	
		point308	356	2,245,993.0	510,552.0	1,123.00	Average	
		point310	357	2,245,645.0	510,490.0	1,137.00	Average	
		ped bridge	358	2,245,394.0	510,424.0	1,138.00	Average	
		point312	359	2,244,841.0	510,212.0	1,133.00	Average	
		point311	360	2,244,629.0	510,108.0	1,133.00	Average	
		Inman St ı	361	2,244,454.0	510,049.0	1,120.00	Average	Y
		point314	362	2,244,392.0	510,032.0	1,118.00	Average	
		point363	363	2,244,277.0	510,013.0	1,112.00	Average	
		point364	364	2,244,099.0	510,016.0	1,106.00	Average	
		point365	365	2,243,880.0	510,081.0	1,105.00	Average	
		point366	366	2,243,728.0	510,178.0	1,102.00	Average	
		point367	367	2,243,578.0	510,326.0	1,099.00	Average	
		point368	368	2,243,475.0	510,474.0	1,090.00	Average	
		point369	369	2,243,398.0	510,645.0	1,082.00	Average	
		Johnston \$	370	2,243,352.0	510,830.0	1,079.00	Average	
		point294	371	2,243,338.0	511,006.0	1,078.00	Average	
		point295	372	2,243,347.0	511,256.0	1,075.00	Average	
		point296	373	2,243,365.0	511,548.0	1,072.00	Average	
		Beacon St	374	2,243,361.0	512,080.0	1,060.00	Average	
		point143	375	2,243,357.0	512,249.0	1,056.00		
I-76 WB1	12.0	point258	384	2,246,321.0	510,583.0	1,116.00	Average	
		point308	385	2,245,993.0	510,564.0	1,123.00	Average	
		point310	386	2,245,645.0	510,502.0	1,137.00	Average	
		ped bridge	387	2,245,394.0	510,436.0	1,139.00	Average	
		point388	388	2,244,999.0	510,315.0	1,122.00	Average	

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		point389	389	2,244,435.0	510,120.9	1,105.00			
Lafellette Ave	24.0	Brown St	398	2,241,774.0	508,845.0	1,067.00		Average	
		Burkhardt	399	2,242,893.0	508,856.0	1,086.00		Average	
		point400	400	2,242,957.0	508,856.0	1,086.00		Average	Y
		point401	401	2,243,176.0	508,856.0	1,092.00		Average	
		East Crosi	402	2,243,259.0	508,856.0	1,092.00		Average	
		Hammel S	403	2,243,763.0	508,861.0	1,102.00			
Lovers Lane	20.0	Dietz Ave	404	2,242,055.0	507,210.0	1,093.00		Average	
		Burkhardt	405	2,242,908.0	507,225.0	1,104.00		Average	
		point406	406	2,242,968.0	507,224.0	1,104.00		Average	Y
		point407	407	2,243,125.0	507,224.0	1,109.00		Average	
		Coventry	408	2,243,199.0	507,226.0	1,111.00		Average	
		Hammel S	409	2,243,753.0	507,228.0	1,125.00			
Cole Ave	20.0	Dietz Ave	410	2,242,048.0	506,010.0	1,098.00		Average	
		Burkhardt	411	2,242,906.0	506,183.0	1,109.00		Average	
		point412	412	2,242,976.0	506,187.0	1,109.00		Average	Y
		point413	413	2,243,132.0	506,189.0	1,118.00		Average	
		point414	414	2,243,215.0	506,189.0	1,119.00		Average	
		point415	415	2,243,747.0	506,192.0	1,132.00			
East Crosier Ave/Burkhardt Ave	20.0	Brown St	416	2,241,781.0	509,134.0	1,059.00		Average	
		point417	417	2,242,811.0	509,143.0	1,083.00		Average	
		point418	418	2,242,853.0	509,111.0	1,084.00		Average	
		Lafollette	419	2,242,893.0	508,856.0	1,086.00		Average	
		Baird St	420	2,242,889.0	508,564.0	1,090.00		Average	
		Kipling St	421	2,242,894.0	508,292.0	1,095.00		Average	
		McKinlet A	422	2,242,890.0	508,039.0	1,097.00		Average	
		Corice St.	423	2,242,890.0	507,765.0	1,098.00		Average	
		Morgan Av	424	2,242,891.0	507,497.0	1,102.00		Average	
		Lovers La	425	2,242,908.0	507,225.0	1,104.00		Average	
		point426	426	2,242,916.0	507,192.0	1,104.00		Average	
		Stanton A	427	2,242,910.0	506,562.0	1,111.00		Average	
		Cole Ave	428	2,242,906.0	506,183.0	1,109.00			
Coventry Street	20.0	Cole Ave	429	2,243,215.0	506,189.0	1,119.00		Average	
		Lovers La	430	2,243,199.0	507,226.0	1,111.00		Average	
		point431	431	2,243,196.0	507,256.0	1,110.00		Average	
		Morgan Av	432	2,243,199.0	507,500.0	1,108.00		Average	
		Corice St	433	2,243,199.0	507,773.0	1,106.00		Average	
		McKinley /	434	2,243,198.0	508,041.0	1,102.00		Average	
		Kipling	435	2,243,199.0	508,294.0	1,102.00		Average	

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		Lafellette /	436	2,243,199.0	508,824.0	1,096.00	
East Crosiet	20.0	Lafellette /	437	2,243,259.0	508,856.0	1,092.00	Average
		point438	438	2,243,352.0	509,146.0	1,097.00	Average
		Hammell	439	2,243,767.0	509,150.0	1,100.00	Average
		Gridley St.	440	2,244,108.0	509,157.0	1,099.00	Average
		Inman St	441	2,244,420.0	509,152.0	1,102.00	
Inman St	20.0	E Crosier	451	2,244,420.0	509,152.0	1,102.00	Average
		5th Ave	452	2,244,424.0	509,765.0	1,100.00	Average
		Lumiere S	453	2,244,426.0	510,121.0	1,105.00	Average
		Bradley Pl	454	2,244,420.0	511,069.0	1,107.00	
Lumiere St	20.0	Inman St	455	2,244,426.0	510,121.0	1,105.00	Average
		Gridley St	456	2,244,102.0	510,106.0	1,097.00	Average
		point457	457	2,243,897.0	510,150.0	1,093.00	Average
		Hammel S	458	2,243,754.0	510,248.0	1,090.00	Average
		point459	459	2,243,632.0	510,390.0	1,092.00	Average
		point460	460	2,243,504.0	510,588.0	1,095.00	Average
		point461	461	2,243,471.0	510,712.0	1,098.00	Average
		point462	462	2,243,473.0	510,963.0	1,102.00	
Hammel St North	20.0	point463	463	2,243,754.0	510,248.0	1,090.00	Average
		point464	464	2,243,738.0	511,173.0	1,113.00	
Wilson St	12.0	point465	465	2,243,115.0	510,688.0	1,089.00	Average
		point466	466	2,242,978.0	511,334.0	1,085.00	
Johnston Ct	20.0	point467	467	2,242,835.0	510,457.0	1,079.00	Average
		point468	468	2,242,822.0	511,153.0	1,078.00	
Hedden Avenue	20.0	point469	469	2,242,641.0	510,314.0	1,067.00	Average
		point470	470	2,242,634.0	510,682.0	1,075.00	Average
		point471	471	2,242,629.0	511,040.0	1,064.00	
South Street	40.0	Grant Stre	472	2,239,511.0	509,844.0	1,035.00	Average
		Sumner/P	473	2,240,376.0	509,865.0	1,033.00	Average
		Kling St.	474	2,240,994.0	509,870.0	1,041.00	Average
		Brown St	475	2,241,781.0	509,888.0	1,047.00	Average
		point476	476	2,242,155.0	509,896.0	1,050.00	
Pedestrian Bridge over I-76 Hoban High	12.0	point494	494	2,245,391.0	510,225.0	1,159.00	Average
		point495	495	2,245,392.0	510,284.0	1,158.00	Average Y
		point496	496	2,245,411.0	510,489.0	1,158.00	Average
		point497	497	2,245,440.0	510,556.0	1,159.00	
Gridley Street	12.0	point498	498	2,244,102.0	510,106.0	1,097.00	Average
		point499	499	2,244,095.0	510,865.0	1,103.00	
Spicer St	24.0	point500	500	2,242,134.0	510,273.0	1,039.00	Average

SUM-I76 Central Interchange (101402)

		point501	501	2,242,134.0	510,881.0	1,022.00	
Ramp I=77SB to Lovers Lane	12.0	point502	502	2,242,967.0	508,038.0	1,090.00	Average
		point503	503	2,242,952.0	507,867.0	1,093.00	Average
		point504	504	2,242,915.0	507,586.0	1,099.00	Average
		Morgan Av	505	2,242,891.0	507,497.0	1,102.00	
Voris Street	20.0	at Brown	506	2,241,773.0	510,581.0	1,044.00	Average
		at King	507	2,241,308.0	510,577.0	1,057.00	Average
		at Allyn	508	2,240,757.0	510,569.0	1,045.00	Average
		at Sumner	509	2,240,372.0	510,563.0	1,043.00	Average
		at Sherma	512	2,239,944.0	510,557.0	1,041.00	
Sumner Street	12.0	point510	510	2,240,372.0	510,563.0	1,043.00	Average
		Smuner S	511	2,240,378.0	510,277.0	1,038.00	
Allyn Street	20.0	point513	513	2,240,757.0	510,569.0	1,045.00	Average
		point514	514	2,240,759.0	510,223.0	1,040.00	
King St/Lampeter St	20.0	point515	515	2,241,308.0	510,577.0	1,057.00	Average
		point516	516	2,241,310.0	510,211.0	1,051.00	Average
		point517	517	2,241,776.0	510,220.0	1,037.00	

INPUT: TRAFFIC FOR LAeq1h Volumes

SUM-I76 Central Interchange (101402)

Lawhon & Assoc.				1 Augu	ust 2017							
CMCox				TNM 2	.5							
INPUT: TRAFFIC FOR LACTIN VOIUM	es CUM 176 Contr	ol Into	 	 (404 402								
		aimte	rchange	(101402	2)							
RUN.	N3A 1 2020				1							
Roadway	Points		-									
Name	Name	No.	Segmen	it								
			Autos		MTrucks	5	HTrucks	5	Buses		Motorcy	cles
			V	S	V	S	V	S	V	S	V	S
			veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph
I-76 EB1/Ramp I-76EB to I-77SB	point1	1	1242	55	37	55	86	55	0	0	0	0
	point2	2	1242	55	37	55	86	55	0	0	0	0
	point3	3	1242	55	37	55	86	55	0	0	0	0
	point4	4	1242	55	37	55	86	55	0	0	0	0
	point5	5	1242	55	37	55	86	55	0	0	0	0
	Brown Street	6	1242	55	37	55	86	55	0	0	0	0
	point7	7	932	50	8	50	20	50	0	0	0	0
	On fill	8	932	50	8	50	20	50	0	0	0	0
	point9	9	1864	50	16	50	40	50	0	0	0	0
	point10	10	1864	50	16	50	40	50	0	0	0	0
	point11	11	1864	50	16	50	40	50	0	0	0	0
	point12	12	1864	50	16	50	40	50	0	0	0	0
	point13	13	1864	50	16	50	40	50	0	0	0	0
	point14	14	1864	50	16	50	40	50	0	0	0	0
	Lafollette St. 0	15	1864	50	16	50	40	50	0	0	0	0
	point16	16	1836	55	29	55	68	55	0	0	0	0
	point17	17	1836	55	29	55	68	55	0	0	0	0
	point18	18	1836	55	29	55	68	55	0	0	0	0
	Lover's Lane	19	1836	55	29	55	68	55	0	0	0	0
	point20	20	1836	55	29	55	68	55	0	0	0	0
	Cole Ave. Ove	21										
Brown Street	At Kipling	22	0	0	0	0	0	0	0	0	0	0
	At Baird	23	0	0	0	0	0	0	0	0	0	0

## INPUT: TRAFFIC FOR LAeq1h Volumes

SUM-I76 Central Interchange (101402)

	At Lofollette S	24	0	0	0	0	0	0	0	0	0	0
	At E Crosier	25	0	0	0	0	0	0	0	0	0	0
	At E South	26	0	0	0	0	0	0	0	0	0	0
	At Lamparter \$	27	0	0	0	0	0	0	0	0	0	0
	At E Voris St	28	0	0	0	0	0	0	0	0	0	0
	At Lovisa St	518										
Johnston Street	At Gridley Ave	29	0	0	0	0	0	0	0	0	0	0
	At Hammel St	30	0	0	0	0	0	0	0	0	0	0
	At Lumiere St.	31	0	0	0	0	0	0	0	0	0	0
	point32	32	0	0	0	0	0	0	0	0	0	0
	Wilson St	33	0	0	0	0	0	0	0	0	0	0
	Jonhston Ct	34	0	0	0	0	0	0	0	0	0	0
	Hedden Ave	35	0	0	0	0	0	0	0	0	0	0
	point36	36	0	0	0	0	0	0	0	0	0	0
	Spicer St.	37	0	0	0	0	0	0	0	0	0	0
	point38	38	0	0	0	0	0	0	0	0	0	0
	At Brown Stree	39										
I-76 WB to I-77 SB	point317	40	1216	30	19	30	45	30	0	0	0	0
	point41	41	1216	30	19	30	45	30	0	0	0	0
	point42	42	1216	30	19	30	45	30	0	0	0	0
	point43	43	1216	30	19	30	45	30	0	0	0	0
	point44	44	1216	30	19	30	45	30	0	0	0	0
	point45	45	1216	30	19	30	45	30	0	0	0	0
	point46	46	0	0	0	0	0	0	0	0	0	0
	point47	47	1216	30	19	30	45	30	0	0	0	0
	point48	48	1216	30	19	30	45	30	0	0	0	0
	point49	49	1216	30	19	30	45	30	0	0	0	0
	point50	50	1216	30	19	30	45	30	0	0	0	0
	point51	51	1216	30	19	30	45	30	0	0	0	0
	Lafollette Ove	52	1216	30	19	30	45	30	0	0	0	0
	point53	53	1836	55	29	55	68	55	0	0	0	0
	point17	54	1836	55	29	55	68	55	0	0	0	0
	point18	55	1836	55	29	55	68	55	0	0	0	0
	Lover's Lane (	56	1836	55	29	55	68	55	0	0	0	0
	point20	57	1836	55	29	55	68	55	0	0	0	0
	Cole Ave. Ove	58										

INPUT: TRAFFIC FOR LAeq1h Volumes						SU	M-176 Cei	ntral Ir	iterchang	ge (1014	<b>102)</b>	
SR8 SB1/Ramp SR8 SB to I-76 WB	Beacon St und	61	2243	55	41	55	94	55	0	0	0	0
	point62	62	2243	55	41	55	94	55	0	0	0	0
	point63	63	2243	55	41	55	94	55	0	0	0	0
	point64	64	979	50	13	50	28	50	0	0	0	0
	point65	65	979	50	13	50	28	50	0	0	0	0
	Johnston St or	66	1104	50	14	50	32	50	0	0	0	0
	point67	67	1104	50	14	50	32	50	0	0	0	0
	point68	68	1104	50	14	50	32	50	0	0	0	0
	point69	69	1104	50	14	50	32	50	0	0	0	0
	begin fill	70	1104	50	14	50	32	50	0	0	0	0
	point71	71	1104	50	14	50	32	50	0	0	0	0
	Browm St und	72	1104	50	14	50	32	50	0	0	0	0
	point73	73	983	55	29	55	68	55	0	0	0	0
	point74	74	983	55	29	55	68	55	0	0	0	0
	point75	75	983	55	29	55	68	55	0	0	0	0
	point76	76	983	55	29	55	68	55	0	0	0	0
	Grant St ovrpa	77										
Ramp SR8 SB to I76 EB	point78	78	979	50	13	50	28	50	0	0	0	0
	point79	79	979	50	13	50	28	50	0	0	0	0
	Johnston St or	80	846	50	14	50	30	50	0	0	0	0
	point81	81	846	50	14	50	30	50	0	0	0	0
	point82	82	846	50	14	50	30	50	0	0	0	0
	point83	83	846	50	14	50	30	50	0	0	0	0
	I-76 undrpa	84	846	50	14	50	30	50	0	0	0	0
	point85	85	846	50	14	50	30	50	0	0	0	0
	I-76 ovrpa	86	846	50	14	50	30	50	0	0	0	0
	point87	87	846	50	14	50	30	50	0	0	0	0
	point88	88	846	50	14	50	30	50	0	0	0	0
	point89	89	846	50	14	50	30	50	0	0	0	0
	point90	90	846	50	14	50	30	50	0	0	0	0
	Inman St ovrp	91	0	0	0	0	0	0	0	0	0	0
	point92	92	1003	55	41	55	96	55	0	0	0	0
	point93	93	1003	55	41	55	96	55	0	0	0	0
	ped bridge	204	1003	55	41	55	96	55	0	0	0	0
	point95	205	1337	55	55	55	128	55	0	0	0	0
	point96	272	1337	55	55	55	128	55	0	0	0	0

# INPUT: TRAFFIC FOR LAeq1h Volumes

SUM-I76 Central Interchange (101402)

	point258	273										
SR8 SB thru lane 4	point96	96	2243	55	41	55	94	55	0	0	0	0
	Beacon St und	97	2243	55	41	55	94	55	0	0	0	0
	point98	98	2243	55	41	55	94	55	0	0	0	0
	point99	99	2204	50	42	50	99	50	0	0	0	0
	point100	100	2204	50	42	50	99	50	0	0	0	0
	point101	101	2204	50	42	50	99	50	0	0	0	0
	point102	102	2204	50	42	50	99	50	0	0	0	0
	point103	103	2204	50	42	50	99	50	0	0	0	0
	Lafollette ovrp	104	2204	50	42	50	99	50	0	0	0	0
	point105	105	1836	55	29	55	68	55	0	0	0	0
	point17	106	1836	55	29	55	68	55	0	0	0	0
	point18	107	1836	55	29	55	68	55	0	0	0	0
	Lover's Lane (	108	1836	55	29	55	68	55	0	0	0	0
	point20	109	1836	55	29	55	68	55	0	0	0	0
	Cole Ave. Ove	110										
SR8 SB thru lane 3	point96	113	2243	55	41	55	94	55	0	0	0	0
	Beacon St und	114	2243	55	41	55	94	55	0	0	0	0
	point98	115	2243	55	41	55	94	55	0	0	0	0
	point99	116	2204	50	42	50	99	50	0	0	0	0
	point100	117	2204	50	42	50	99	50	0	0	0	0
	point101	118	2204	50	42	50	99	50	0	0	0	0
	point102	119	2204	50	42	50	99	50	0	0	0	0
	point103	120	2204	50	42	50	99	50	0	0	0	0
	Lafollette ovrp	121	2204	50	42	50	99	50	0	0	0	0
	point105	122	1836	55	29	55	68	55	0	0	0	0
	point17	123	1836	55	29	55	68	55	0	0	0	0
	point18	124	1836	55	29	55	68	55	0	0	0	0
	Lover's Lane (	125	1836	55	29	55	68	55	0	0	0	0
	point20	126	1836	55	29	55	68	55	0	0	0	0
	Cole Ave. Ove	127										
I-77 NB thru lane 4	Cole Street	128	1371	55	17	55	40	55	0	0	0	0
	point129	129	1371	55	17	55	40	55	0	0	0	0
	Lovers Lane	130	1371	55	17	55	40	55	0	0	0	0
	point131	131	1371	55	17	55	40	55	0	0	0	0
	point132	132	1371	55	17	55	40	55	0	0	0	0

INPUT: TRAFFIC FOR LAeq1h Volume	s					SU	M-176 Ce	ntral In	iterchan	ge (1014	<b>102</b> )	
	point133	133	1511	55	25	55	55	55	0	0	0	0
	Lafollette Rd c	134	1511	55	25	55	55	55	0	0	0	0
	point135	135	1511	55	25	55	55	55	0	0	0	0
	point136	136	1511	55	25	55	55	55	0	0	0	0
	I-76 EB ovrpa	137	1511	55	25	55	55	55	0	0	0	0
	I-76WB ovrpa	138	1511	55	25	55	55	55	0	0	0	0
	point139	139	1511	55	25	55	55	55	0	0	0	0
	point140	140	1511	55	25	55	55	55	0	0	0	0
	point141	141	1298	55	24	55	55	55	0	0	0	0
	Beacon St und	142	1298	55	24	55	55	55	0	0	0	0
	point143	143										
I-77 NB thru lane 3	Cole Street	148	1371	55	17	55	40	55	0	0	0	0
	point129	149	1371	55	17	55	40	55	0	0	0	0
	Lovers Lane	150	1371	55	17	55	40	55	0	0	0	0
	point131	151	1371	55	17	55	40	55	0	0	0	0
	point132	152	1371	55	17	55	40	55	0	0	0	0
	point133	153	1511	55	25	55	55	55	0	0	0	0
	Lafollette Rd c	154	1511	55	25	55	55	55	0	0	0	0
point13	point135	155	1511	55	25	55	55	55	0	0	0	0
	point136	156	1511	55	25	55	55	55	0	0	0	0
	I-76 EB ovrpa	157	1511	55	25	55	55	55	0	0	0	0
	I-76WB ovrpa	158	1511	55	25	55	55	55	0	0	0	0
	point139	159	1511	55	25	55	55	55	0	0	0	0
	point140	160	1511	55	25	55	55	55	0	0	0	0
	point141	161	1298	55	24	55	55	55	0	0	0	0
	Beacon St und	162	1298	55	24	55	55	55	0	0	0	0
	point143	163										
I-77 NB2/Ramp I-77NB to I-76WB	Cole Street	166	1371	55	17	55	40	55	0	0	0	0
	point129	167	1371	55	17	55	40	55	0	0	0	0
	Lovers Lane	168	1371	55	17	55	40	55	0	0	0	0
	point131	169	1371	55	17	55	40	55	0	0	0	0
	point132	170	1371	55	17	55	40	55	0	0	0	0
	point133	171	1267	50	5	50	8	50	0	0	0	0
	point172	172	1267	50	5	50	8	50	0	0	0	0
	point173	173	1267	50	5	50	8	50	0	0	0	0
	point182	182	1267	50	5	50	8	50	0	0	0	0

INPUT: TRAFFIC FOR LAeq1h Volume	es					SU	M-I76 Ce	ntral Ir	nterchang	je (1014	02)	
	point183	183	1267	50	5	50	8	50	0	0	0	0
	SR 8 ovrpa	184	1267	50	5	50	8	50	0	0	0	0
	point185	185	1267	50	5	50	8	50	0	0	0	0
	point186	186	1267	50	5	50	8	50	0	0	0	0
	point187	187	1267	50	5	50	8	50	0	0	0	0
	point188	188	1267	50	5	50	8	50	0	0	0	0
	point71	189	1267	50	5	50	8	50	0	0	0	0
	Browm St und	190	1267	50	5	50	8	50	0	0	0	0
	point73	191	983	55	29	55	68	55	0	0	0	0
	point74	192	983	55	29	55	68	55	0	0	0	0
	point75	193	983	55	29	55	68	55	0	0	0	0
	point76	194	983	55	29	55	68	55	0	0	0	0
	Grant St ovrpa	195										
I77 NB1/Ramp I-77NB to I-76EB	Cole Street	174	1371	55	17	55	40	55	0	0	0	0
	point129	175	1371	55	17	55	40	55	0	0	0	0
	Lovers Lane	176	1371	55	17	55	40	55	0	0	0	0
	point131	177	1371	55	17	55	40	55	0	0	0	0
	point132	178	1371	55	17	55	40	55	0	0	0	0
	point133	179	1175	50	22	50	51	50	0	0	0	0
	point172	180	1175	50	22	50	51	50	0	0	0	0
	point173	181	1175	50	22	50	51	50	0	0	0	0
	point196	196	1175	50	22	50	51	50	0	0	0	0
	point197	197	1175	50	22	50	51	50	0	0	0	0
	point198	198	1175	50	22	50	51	50	0	0	0	0
	Inman St ovrp	199	1175	50	22	50	51	50	0	0	0	0
	point92	200	1003	55	41	55	96	55	0	0	0	0
	point93	201	1003	55	41	55	96	55	0	0	0	0
	ped bridge	202	1003	55	41	55	96	55	0	0	0	0
	point95	203										
I-76EB2	point1	207	1242	55	37	55	86	55	0	0	0	0
	point2	208	1242	55	37	55	86	55	0	0	0	0
	point3	209	1242	55	37	55	86	55	0	0	0	0
	point4	210	1242	55	37	55	86	55	0	0	0	0
	point5	211	1242	55	37	55	86	55	0	0	0	0
	Brown Street	212	1242	55	37	55	86	55	0	0	0	0
	point7	213	932	50	8	50	20	50	0	0	0	0

<b>INPUT: TRAFFIC FOR LAeq1h Volun</b>	nes					SU	M-176 Ce	ntral Ir	nterchang	ge (1014	<b>102</b> )	
	On fill	214	932	50	8	50	20	50	0	0	0	0
	point9	215										
I-76EB thru lane 3	point1	217	1242	55	37	55	86	55	0	0	0	0
	point2	218	1242	55	37	55	86	55	0	0	0	0
	point3	219	1242	55	37	55	86	55	0	0	0	0
	point4	220	1242	55	37	55	86	55	0	0	0	0
	point5	221	1242	55	37	55	86	55	0	0	0	0
	Brown Street	222	1242	55	37	55	86	55	0	0	0	0
	point7	223	1544	55	62	55	148	55	0	0	0	0
	On fill	224	1544	55	62	55	148	55	0	0	0	0
	point225	225	1544	55	62	55	148	55	0	0	0	0
	point226	226	1137	55	22	55	51	55	0	0	0	0
	point237	237	1137	55	22	55	51	55	0	0	0	0
	point238	238	1137	55	22	55	51	55	0	0	0	0
	point239	239	1137	55	22	55	51	55	0	0	0	0
	point240	240	1137	55	22	55	51	55	0	0	0	0
	point242	242	1137	55	22	55	51	55	0	0	0	0
	Inman St ovrp	241	1137	55	22	55	51	55	0	0	0	0
	point249	250	1003	55	41	55	96	55	0	0	0	0
	point93	251	1003	55	41	55	96	55	0	0	0	0
	ped bridge	252	1003	55	41	55	96	55	0	0	0	0
	point95	253	1337	55	55	55	128	55	0	0	0	0
	point96	265	1337	55	55	55	128	55	0	0	0	0
	point258	266										
I-76 EB thru lane 4	point1	227	1242	55	37	55	86	55	0	0	0	0
	point2	228	1242	55	37	55	86	55	0	0	0	0
	point3	229	1242	55	37	55	86	55	0	0	0	0
	point4	230	1242	55	37	55	86	55	0	0	0	0
	point5	231	1242	55	37	55	86	55	0	0	0	0
	Brown Street	232	1242	55	37	55	86	55	0	0	0	0
	point7	233	1544	55	62	55	148	55	0	0	0	0
	On fill	234	1544	55	62	55	148	55	0	0	0	0
	point225	235	1544	55	62	55	148	55	0	0	0	0
	point226	236	1137	55	22	55	51	55	0	0	0	0
	point237	243	1137	55	22	55	51	55	0	0	0	0
	point238	244	1137	55	22	55	51	55	0	0	0	0

INPUT: TRAFFIC FOR LAeq1h Volu	imes					SU	M-176 Ce	ntral In	iterchang	ge (1014	<b>102)</b>	
	point239	245	1137	55	22	55	51	55	0	0	0	0
	point240	246	1137	55	22	55	51	55	0	0	0	0
	point242	247	1137	55	22	55	51	55	0	0	0	0
	Inman St ovrp	248	1137	55	22	55	51	55	0	0	0	0
	point249	249	1003	55	41	55	96	55	0	0	0	0
	point93	254	1003	55	41	55	96	55	0	0	0	0
	ped bridge	255	1003	55	41	55	96	55	0	0	0	0
	point95	256	1337	55	55	55	128	55	0	0	0	0
	point96	257	1337	55	55	55	128	55	0	0	0	0
	point258	258										
Ramp I-76 EB to SR8 NB	point226	281	1046	25	13	25	31	25	0	0	0	0
	point282	282	1046	25	13	25	31	25	0	0	0	0
	point283	283	1046	25	13	25	31	25	0	0	0	0
	point284	284	1046	25	13	25	31	25	0	0	0	0
	point285	285	1046	25	13	25	31	25	0	0	0	0
	point286	286	1046	25	13	25	31	25	0	0	0	0
	I-76WB undrp	287	1046	25	13	25	31	25	0	0	0	0
	point289	289	1046	25	13	25	31	25	0	0	0	0
a	point288	288	1046	25	13	25	31	25	0	0	0	0
	point290	290	1046	25	13	25	31	25	0	0	0	0
	point291	291	1046	25	13	25	31	25	0	0	0	0
	point292	292	1046	25	13	25	31	25	0	0	0	0
	Johnston St or	293	1046	25	13	25	31	25	0	0	0	0
	point294	294	1046	25	13	25	31	25	0	0	0	0
	point295	295	1046	25	13	25	31	25	0	0	0	0
	point296	296	1298	55	24	55	55	55	0	0	0	0
	Beacon St und	297	1298	55	24	55	55	55	0	0	0	0
	point143	298										
I-76 WB4 thru lane	point258	301	945	55	32	55	74	55	0	0	0	0
	point308	308	945	55	32	55	74	55	0	0	0	0
	point310	310	1260	55	42	55	98	55	0	0	0	0
	ped bridge	309	1260	55	42	55	98	55	0	0	0	0
	point312	312	1260	55	42	55	98	55	0	0	0	0
	point311	311	1260	55	42	55	98	55	0	0	0	0
	Inman St undr	313	1379	55	62	55	144	55	0	0	0	0
	point314	314	1379	55	62	55	144	55	0	0	0	0

INPUT: TRAFFIC FOR LAeq1h Volumes						SU	M-I76 Ce	entral Ir	nterchang	ge (101	402)	
	point315	315	1379	55	62	55	144	55	0	0	0	0
	Ramp ovrpa	316	1379	55	62	55	144	55	0	0	0	0
	point317	317	860	55	26	55	60	55	0	0	0	0
	point318	318	860	55	26	55	60	55	0	0	0	0
	point319	319	860	55	26	55	60	55	0	0	0	0
	point320	320	860	55	26	55	60	55	0	0	0	0
	fill	321	860	55	26	55	60	55	0	0	0	0
	point323	323	860	55	26	55	60	55	0	0	0	0
	point322	322	860	55	26	55	60	55	0	0	0	0
	point324	324	983	55	29	55	68	55	0	0	0	0
	point74	394	983	55	29	55	68	55	0	0	0	0
	point75	395	983	55	29	55	68	55	0	0	0	0
	point76	396	983	55	29	55	68	55	0	0	0	0
	Grant St ovrpa	397										
I-76 WB3 thru lane	point258	331	945	55	32	55	74	55	0	0	0	0
	point308	332	945	55	32	55	74	55	0	0	0	0
	point310	333	1260	55	42	55	98	55	0	0	0	0
	ped bridge	334	1260	55	42	55	98	55	0	0	0	0
	point312	335	1260	55	42	55	98	55	0	0	0	0
	point311	336	1260	55	42	55	98	55	0	0	0	0
	Inman St undr	337	1379	55	62	55	144	55	0	0	0	0
	point314	338	1379	55	62	55	144	55	0	0	0	0
	point315	339	1379	55	62	55	144	55	0	0	0	0
	Ramp ovrpa	340	1379	55	62	55	144	55	0	0	0	0
	point317	341	860	55	26	55	60	55	0	0	0	0
	point318	342	860	55	26	55	60	55	0	0	0	0
	point319	343	860	55	26	55	60	55	0	0	0	0
	point320	344	860	55	26	55	60	55	0	0	0	0
	fill	345	860	55	26	55	60	55	0	0	0	0
	point323	346	860	55	26	55	60	55	0	0	0	0
	point322	347	860	55	26	55	60	55	0	0	0	0
	point324	348	983	55	29	55	68	55	0	0	0	0
	point74	390	983	55	29	55	68	55	0	0	0	0
	point75	391	983	55	29	55	68	55	0	0	0	0
	point76	392	983	55	29	55	68	55	0	0	0	0
	Grant St ovrpa	393										

INPUT: TRAFFIC FOR LAeq1h Volumes				SU	M-I76 Ce	entral In	nterchang	ge (1014	-02)			
I-76WB2/Ramp I-76WB to SR 8 NB	point258	355	945	55	32	55	74	55	0	0	0	0
	point308	356	945	55	32	55	74	55	0	0	0	0
	point310	357	1260	55	42	55	98	55	0	0	0	0
	ped bridge	358	1260	55	42	55	98	55	0	0	0	0
	point312	359	1260	55	42	55	98	55	0	0	0	0
	point311	360	1260	55	42	55	98	55	0	0	0	0
	Inman St undr	361	892	50	9	50	19	50	0	0	0	0
	point314	362	892	50	9	50	19	50	0	0	0	0
	point363	363	892	50	9	50	19	50	0	0	0	0
	point364	364	892	50	9	50	19	50	0	0	0	0
	point365	365	892	50	9	50	19	50	0	0	0	0
	point366	366	892	50	9	50	19	50	0	0	0	0
	point367	367	892	50	9	50	19	50	0	0	0	0
	point368	368	892	50	9	50	19	50	0	0	0	0
	point369	369	892	50	9	50	19	50	0	0	0	0
	Johnston St o	370	892	50	9	50	19	50	0	0	0	0
	point294	371	892	50	9	50	19	50	0	0	0	0
	point295	372	892	50	9	50	19	50	0	0	0	0
	point296	373	1298	55	24	55	55	55	0	0	0	0
	Beacon St und	374	1298	55	24	55	55	55	0	0	0	0
	point143	375										
I-76 WB1	point258	384	945	55	32	55	74	55	0	0	0	0
	point308	385	945	55	32	55	74	55	0	0	0	0
	point310	386	107	45	1	45	2	45	0	0	0	0
	ped bridge	387	107	45	1	45	2	45	0	0	0	0
	point388	388	107	45	1	45	2	45	0	0	0	0
	point389	389										
Lafellette Ave	Brown St	398	0	0	0	0	0	0	0	0	0	0
	Burkhardt Ave	399	0	0	0	0	0	0	0	0	0	0
	point400	400	0	0	0	0	0	0	0	0	0	0
	point401	401	0	0	0	0	0	0	0	0	0	0
	East Crosier	402	0	0	0	0	0	0	0	0	0	0
	Hammel St	403										
Lovers Lane	Dietz Ave	404	244	35	5	35	11	35	0	0	0	0
	Burkhardt Ave	405	244	35	5	35	11	35	0	0	0	0
	point406	406	244	35	5	35	11	35	0	0	0	0

INPUT: TRAFFIC FOR LAeq1h Volume	es					SU	M-I76 Ce	ntral Ir	nterchang	je (1014	102)	
	point407	407	244	35	5	35	11	35	0	0	0	0
	Coventry	408	244	35	5	35	11	35	0	0	0	0
	Hammel St	409										
Cole Ave	Dietz Ave	410	0	0	0	0	0	0	0	0	0	0
	Burkhardt Ave	411	0	0	0	0	0	0	0	0	0	0
	point412	412	0	0	0	0	0	0	0	0	0	0
	point413	413	0	0	0	0	0	0	0	0	0	0
	point414	414	0	0	0	0	0	0	0	0	0	0
	point415	415										
East Crosier Ave/Burkhardt Ave	Brown St	416	0	0	0	0	0	0	0	0	0	0
	point417	417	0	0	0	0	0	0	0	0	0	0
	point418	418	0	0	0	0	0	0	0	0	0	0
	Lafollette	419	40	35	0	0	0	0	0	0	0	0
	Baird St	420	40	35	0	0	0	0	0	0	0	0
	Kipling St	421	40	35	0	0	0	0	0	0	0	0
	McKinlet Ave	422	40	35	0	0	0	0	0	0	0	0
	Corice St.	423	40	35	0	0	0	0	0	0	0	0
	Morgan Ave	424	171	35	3	35	6	35	0	0	0	0
	Lovers Lane	425	0	0	0	0	0	0	0	0	0	0
	point426	426	0	0	0	0	0	0	0	0	0	0
	Stanton Ave	427	0	0	0	0	0	0	0	0	0	0
	Cole Ave	428										
Coventry Street	Cole Ave	429	0	0	0	0	0	0	0	0	0	0
	Lovers Lane	430	0	0	0	0	0	0	0	0	0	0
	point431	431	0	0	0	0	0	0	0	0	0	0
	Morgan Ave	432	0	0	0	0	0	0	0	0	0	0
	Corice St	433	0	0	0	0	0	0	0	0	0	0
	McKinley Ave	434	0	0	0	0	0	0	0	0	0	0
	Kipling	435	0	0	0	0	0	0	0	0	0	0
	Lafellette Ave	436										
East Crosiet	Lafellette Ave	437	0	0	0	0	0	0	0	0	0	0
	point438	438	0	0	0	0	0	0	0	0	0	0
	Hammell	439	0	0	0	0	0	0	0	0	0	0
	Gridley St.	440	0	0	0	0	0	0	0	0	0	0
	Inman St	441										
Inman St	E Crosier	451	0	0	0	0	0	0	0	0	0	0

# INPUT: TRAFFIC FOR LAeq1h Volumes

SUM-I76 Central Interchange (101402)

	5th Ave	452	0	0	0	0	0	0	0	0	0	0
	Lumiere St	453	0	0	0	0	0	0	0	0	0	0
	Bradley Pl	454										
Lumiere St	Inman St	455	80	25	0	0	0	0	0	0	0	0
	Gridley St	456	80	25	0	0	0	0	0	0	0	0
	point457	457	80	25	0	0	0	0	0	0	0	0
	Hammel St	458	80	25	0	0	0	0	0	0	0	0
	point459	459	80	25	0	0	0	0	0	0	0	0
	point460	460	80	25	0	0	0	0	0	0	0	0
	point461	461	80	25	0	0	0	0	0	0	0	0
	point462	462										
Hammel St North	point463	463	0	0	0	0	0	0	0	0	0	0
	point464	464										
Wilson St	point465	465	0	0	0	0	0	0	0	0	0	0
	point466	466										
Johnston Ct	point467	467	0	0	0	0	0	0	0	0	0	0
	point468	468										
Hedden Avenue	point469	469	0	0	0	0	0	0	0	0	0	0
	point470	470	0	0	0	0	0	0	0	0	0	0
	point471	471										
South Street	Grant Street	472	0	0	0	0	0	0	0	0	0	0
	Sumner/Ped E	473	0	0	0	0	0	0	0	0	0	0
	Kling St.	474	0	0	0	0	0	0	0	0	0	0
	Brown St	475	0	0	0	0	0	0	0	0	0	0
	point476	476										
Pedestrian Bridge over I-76 Hoban High	point494	494	0	0	0	0	0	0	0	0	0	0
	point495	495	0	0	0	0	0	0	0	0	0	0
	point496	496	0	0	0	0	0	0	0	0	0	0
	point497	497										
Gridley Street	point498	498	0	0	0	0	0	0	0	0	0	0
	point499	499										
Spicer St	point500	500	0	0	0	0	0	0	0	0	0	0
	point501	501										
Ramp I=77SB to Lovers Lane	point502	502	150	50	3	50	7	50	0	0	0	0
	point503	503	150	50	3	50	7	50	0	0	0	0
	point504	504	150	50	3	50	7	50	0	0	0	0

# INPUT: TRAFFIC FOR LAeq1h Volumes

# SUM-I76 Central Interchange (101402)

	Morgan Ave	505										
Voris Street	at Brown	506	0	0	0	0	0	0	0	0	0	0
	at King	507	0	0	0	0	0	0	0	0	0	0
	at Allyn	508	0	0	0	0	0	0	0	0	0	0
	at Sumner	509	0	0	0	0	0	0	0	0	0	0
	at Sherman	512										
Sumner Street	point510	510	0	0	0	0	0	0	0	0	0	0
	Smuner St	511										
Allyn Street	point513	513	0	0	0	0	0	0	0	0	0	0
	point514	514										
King St/Lampeter St	point515	515	0	0	0	0	0	0	0	0	0	0
	point516	516	0	0	0	0	0	0	0	0	0	0
	point517	517										

Lawhon & Assoc. CMCox			1 August 201 TNM 2.5	7
INPUT: TERRAIN LINES				
PROJECT/CONTRACT:	SUM-17	76 Central Inte	erchange (101	402)
RUN:	NSA 1	2020		
Terrain Line	Points	5		
Name	No.	Coordinates	(ground)	
		X	Y	z
	i	ft	ft	ft
ROW South 1	1	2,239,528.0	509,978.0	1,035.00
	2	2,239,829.0	510,001.0	1,040.00
	3	2,239,988.0	509,998.0	1,040.00
	4	2,240,230.0	510,045.0	1,038.00
	5	2,240,390.0	510,046.0	1,036.00
	6	2,240,399.0	510,024.0	1,034.00
	7	2,240,687.0	510,030.0	1,036.00
	8	2,241,011.0	510,026.0	1,040.00
	9	2,241,214.0	510,001.0	1,046.00
	10	2,241,450.0	510,002.0	1,046.00
	11	2,241,565.0	509,982.0	1,046.00
	12	2,241,748.0	509,968.0	1,046.00
	13	2,241,743.0	509,998.0	1,048.00
Terrain Line2	14	2,241,848.5	510,006.5	1,048.00
	15	2,241,845.5	509,972.2	1,048.00
	16	2,241,974.2	509,954.2	1,048.00
	17	2,242,115.8	509,939.1	1,050.00
	18	2,242,290.2	509,888.0	1,055.00
	19	2,242,453.0	509,839.8	1,060.00
	20	2,242,639.8	509,758.6	1,066.00
	21	2,242,645.8	509,677.3	1,068.00
	22	2,242,639.8	509,549.7	1,070.00
	23	2,242,706.0	509,399.2	1,072.00
	24	2,242,763.0	509,317.9	1,080.00
Terrain Line3	25	2,242,771.8	509,647.6	1,076.00
	26	2,242,846.0	509,487.1	1,070.00
	27	2,242,912.0	509,373.9	1,068.00
	28	2,242,961.0	509,186.7	1,064.00
	29	2,242,969.0	509,087.0	1,066.00
Terrain Line4	30	2,242,805.5	509,218.1	1,084.00
	31	2,242,873.0	509,115.1	1,084.00
	32	2,242,890.0	509,028.2	1,084.00
		2,242,915.2	508,896.4	1,084.00
I errain Line5	34	2,242,912.8	508,830.4	1,086.00
		2,242,915.2	508,566.8	1,088.00
	36	2,242,920.2	508,288.0	1,094.00
	37	2,242,917.8	508,039.2	1,096.00

## SUM-I76 Centra

	38	2,242,912.8	507,766.0	1,097.00
	39	2,242,913.0	507,683.2	1,099.00
Terrain Line6	42	2,242,945.8	507,191.2	1,103.00
	43	2,242,938.0	506,715.2	1,110.00
	44	2,242,940.5	506,236.2	1,108.00
	45	2,242,963.5	506,213.4	1,108.00
Terrain Line7	46	2,242,973.5	507,206.4	1,086.00
	47	2,242,976.0	506,710.2	1,084.00
	48	2,242,978.5	506,251.5	1,089.00
Terrain Line8	49	2,242,953.2	508,827.9	1,068.00
	50	2,242,961.0	508,571.9	1,076.00
	51	2,242,955.8	508,298.2	1,083.00
	52	2,242,948.2	508,040.2	1,089.00
	53	2,242,946.5	507,938.9	1,092.00
Terrain Line9	56	2,243,098.0	509,760.0	1,056.00
	57	2,243,082.8	509,562.2	1,056.00
	58	2,243,037.0	509,065.5	1,060.00
Terrain Line10	59	2,243,049.8	509,739.7	1,078.00
	60	2,243,037.0	509,564.8	1,078.00
	61	2,243,031.5	509,341.2	1,078.00
Terrain Line11	62	2,243,192.8	509,732.9	1,054.00
	63	2,243,172.2	509,543.5	1,057.00
	64	2,243,124.8	509,053.2	1,060.00
	65	2,243,106.0	508,893.2	1,066.00
	66	2,243,153.2	509,043.1	1,068.00
	67	2,243,178.5	509,314.6	1,070.00
	68	2,243,202.2	509,552.3	1,071.00
	69	2,243,203.8	509,714.9	1,072.00
Terrain Line12	70	2,243,129.5	506,225.5	1,089.00
	71	2,243,131.2	506,691.8	1,085.00
	72	2,243,126.5	507,206.4	1,085.00
Terrain Line13	73	2,243,167.5	506,228.1	1,116.00
	74	2,243,169.0	506,698.8	1,116.00
	75	2,243,162.8	506,872.7	1,112.00
	76	2,243,169.0	507,205.8	1,110.00
Terrain Line14	77	2,243,128.0	507,257.8	1,085.00
	78	2,243,120.0	507,488.3	1,090.00
	79	2,243,120.0	507,757.9	1,092.00
	80	2,243,124.8	508,031.0	1,090.00
	81	2,243,128.0	508,282.3	1,084.00
	82	2,243,136.0	508,601.2	1,080.00
	83	2,243,161.2	508,822.8	1,070.00
Terrain Line15	84	2,243,172.2	507,258.2	1,110.00
	85	2,243,173.8	507,495.0	1,108.00
	86	2,243,180.0	507,766.5	1,106.00
	87	2,243,180.0	508,042.7	1,104.00
	88	2,243,181.8	508,288.9	1,102.00
	89	2,243,180.0	508,816.5	1,096.00

## SUM-I76 Centra

Terrain Line16	90	2,243,175.2	508,883.4	1,071.00
	91	2,243,210.0	508,998.6	1,072.00
	92	2,243,341.0	509,274.8	1,077.00
	93	2,243,483.0	509,432.7	1,086.00
	94	2,243,779.8	509,600.0	1,101.00
	95	2,244,065.5	509,742.1	1,110.00
	96	2,244,214.0	509,813.8	1,116.00
	97	2,244,394.0	509,895.8	1,116.00
Terrain Line17	98	2,243,219.5	508,880.9	1,094.00
	99	2,243,330.0	509,172.9	1,096.00
	100	2,243,372.5	509,256.5	1,097.00
	101	2,243,513.0	509,412.8	1,100.00
	102	2,243,790.8	509,584.9	1,099.00
	103	2,244,040.2	509,714.3	1,098.00
	104	2,244,210.8	509,791.7	1,099.00
	105	2,244,362.2	509,856.4	1,110.00
	106	2,244,405.0	509,876.9	1,100.00
	107	2,244,406.5	509,905.3	1,100.00
Terrain Line18	108	2,244,466.8	509,931.1	1,120.00
	109	2,244,849.8	510,111.3	1,132.00
Terrain Line19	115	2,244,470.0	509,915.0	1,100.00
	116	2,244,476.5	509,895.7	1,100.00
	117	2,244,727.5	510,030.9	1,106.00
	118	2,245,117.0	510,195.1	1,122.00
	119	2,245,387.5	510,292.9	1,159.00
Terrain Line21	127	2,245,991.2	510,580.2	1,122.00
	128	2,245,640.2	510,515.6	1,136.00
	129	2,245,414.0	510,458.8	1,138.00
Terrain Line22	134	2,246,373.0	510,645.7	1,110.00
	135	2,246,170.5	510,602.7	1,142.00
	136	2,245,996.2	510,594.0	1,147.00
	137	2,245,638.5	510,525.1	1,146.00
	138	2,245,417.0	510,477.7	1,158.00
Terrain Line22-2	146	2,245,836.0	510,887.0	1,132.00
	145	2,245,657.0	510,890.0	1,114.00
	144	2,245,499.0	510,893.0	1,100.00
	143	2,245,215.0	510,564.0	1,100.00
	141	2,244,986.0	510,385.0	1,105.00
	139	2,244,826.0	510,307.0	1,104.00
	140	2,244,471.2	510,169.7	1,103.00
Terrain Line24	147	2,245,526.0	510,536.0	1,145.00
	148	2,245,664.0	510,674.0	1,144.00
	149	2,245,878.0	510,814.0	1,144.00
	150	2,246,076.0	510,768.0	1,145.00
	151	2,246,100.0	510,648.0	1,145.00
	152	2,245,541.0	510,537.0	1,144.00
Terrain Line22-2	153	2,245,398.8	510,475.6	1,158.00
	142	2,245,042.8	510,393.8	1,105.00

## SUM-I76 Centra

Terrain Line21-2	154	2,245,398.2	510,455.2	1,138.00
	130	2,244,992.5	510,329.1	1,121.00
	131	2,244,464.8	510,146.0	1,105.00
Terrain Line27	155	2,244,386.8	510,049.4	1,117.00
	156	2,244,283.8	510,027.8	1,111.00
	157	2,244,106.5	510,032.6	1,105.00
	158	2,243,888.8	510,094.9	1,104.00
	159	2,243,745.0	510,190.7	1,101.00
	160	2,243,589.2	510,329.5	1,098.00
	161	2,243,486.2	510,473.2	1,089.00
	162	2,243,409.8	510,648.9	1,081.00
	163	2,243,364.2	510,842.9	1,076.00
Terrain Line28	164	2,244,396.2	510,067.6	1,098.00
	165	2,244,389.0	510,086.7	1,098.00
	166	2,244,109.0	510,074.8	1,095.00
	167	2,243,898.2	510,120.2	1,093.00
	168	2,243,745.0	510,223.2	1,091.00
	169	2,243,615.8	510,371.7	1,089.00
	170	2,243,486.2	510,572.8	1,094.00
	171	2,243,438.5	510,693.0	1,096.00
	172	2,243,397.8	510,843.8	1,098.00
	173	2,243,381.0	510,858.2	1,098.00
Terrain Line29	174	2,243,634.8	510,226.6	1,102.00
	175	2,243,721.0	510,099.7	1,096.00
	176	2,243,769.0	510,020.7	1,094.00
	177	2,243,771.2	509,979.9	1,094.00
Terrain Line30	178	2,243,625.2	510,188.2	1,106.00
	179	2,243,713.8	510,025.4	1,109.00
	180	2,243,728.2	509,982.3	1,109.00
Terrain Line18-2	181	2,244,849.8	510,111.3	1,132.00
	110	2,245,389.5	510,321.1	1,135.00
Terrain Line19-2	182	2,245,400.2	510,298.1	1,159.00
	120	2,245,651.5	510,375.3	1,164.00
	121	2,245,986.2	510,436.5	1,158.00
	122	2,246,311.2	510,462.2	1,144.00
Terrain Line18-2-2	183	2,245,401.2	510,324.8	1,135.00
	111	2,245,648.2	510,397.8	1,134.00
	112	2,245,983.0	510,459.0	1,122.00
	113	2,246,298.5	510,481.6	1,115.00
Terrain Line34	184	2,243,536.2	510,311.4	1,098.00
	185	2,243,613.2	510,157.4	1,106.00
	186	2,243,678.5	510,021.0	1,109.00
Terrain Line35	187	2,243,495.5	510,011.7	1,089.00
	188	2,243,437.0	510,156.3	1,087.00
	189	2,243,389.2	510,310.2	1,090.00
	190	2,243,372.8	510,468.1	1,094.00
Terrain Line36	192	2,243,217.0	510,008.4	1,057.00
	193	2,243,271.0	510,549.0	1,066.00

## SUM-I76 Centra

	194	2,243,296.0	510,808.8	1,071.00
Terrain Line37	195	2,243,293.0	510,023.2	1,094.00
	196	2,243,340.0	510,537.5	1,090.00
	197	2,243,338.2	510,671.4	1,080.00
Terrain Line38	198	2,243,354.0	510,993.5	1,077.00
	199	2,243,363.0	511,249.6	1,077.00
	200	2,243,380.0	511,543.8	1,071.00
Terrain Line39	201	2,243,392.2	510,966.6	1,100.00
	202	2,243,384.0	511,004.8	1,100.00
	203	2,243,395.0	511,240.6	1,100.00
	204	2,243,412.0	511,530.3	1,110.00
Terrain Line40	205	2,242,839.5	510,182.2	1,069.00
	206	2,243,017.0	510,112.5	1,074.00
	207	2,243,017.0	510,328.2	1,072.00
	208	2,242,853.0	510,202.4	1,069.00
Terrain Line41	209	2,243,253.0	512,036.7	1,059.00
	210	2,243,258.0	511,582.9	1,073.00
	211	2,243,226.0	511,084.7	1,077.00
	212	2,243,149.0	510,740.6	1,071.00
Terrain Line42	213	2,243,213.0	512,025.4	1,092.00
	214	2,243,223.0	511,587.4	1,094.00
	215	2,243,191.0	511,081.1	1,094.00
	216	2,243,131.5	510,778.8	1,100.00
Terrain Line43	217	2,243,124.8	510,661.1	1,071.00
	218	2,243,074.0	510,539.8	1,071.00
	219	2,242,954.0	510,366.8	1,076.00
	220	2,242,880.0	510,335.3	1,076.00
	221	2,242,812.5	510,378.0	1,076.00
Terrain Line44	222	2,243,084.2	510,638.6	1,087.00
	223	2,243,048.5	510,555.5	1,087.00
	224	2,242,947.2	510,414.0	1,086.00
	225	2,242,884.5	510,398.2	1,082.00
	226	2,242,850.8	510,425.2	1,082.00
Terrain Line45	227	2,242,776.8	510,239.0	1,079.00
	228	2,242,606.0	510,195.0	1,081.00
	229	2,242,051.2	510,154.0	1,077.00
	230	2,241,867.0	510,152.0	1,069.00
Terrain Line46	231	2,242,729.5	510,284.0	1,068.00
	232	2,242,592.5	510,240.0	1,058.00
	233	2,242,055.8	510,206.8	1,043.00
	234	2,241,873.8	510,195.6	1,040.00
	235	2,241,855.8	510,173.2	1,038.00
Terrain Line47	236	2,242,518.2	510,356.6	1,060.00
	237	2,242,518.2	511,212.3	1,060.00
Terrain Line48	238	2,242,539.0	510,369.0	1,074.00
	239	2,242,539.0	511,195.7	1,070.00
Terrain Line49	240	2,241,736.0	510,167.7	1,040.00
	241	2,241,719.0	510,204.3	1,040.00

## SUM-I76 Centra

	11	, ,	010,202.1	1,001.00
Terrain Line50	243	2,241,705.5	510,156.0	1,061.00
	244	2,241,422.8	510,167.0	1,054.00
Terrain Line51	245	2,240,975.5	510,052.8	1,045.00
	246	2,241,356.2	510,036.3	1,051.00
	247	2,241,700.2	510,023.0	1,061.00
Terrain Line52	248	2,241,861.5	510,012.7	1,069.00
	249	2,242,036.8	509,989.1	1,078.00
	250	2,242,338.2	509,923.2	1,083.00
	251	2,242,546.2	509,860.3	1,082.00
	252	2,242,694.5	509,774.7	1,079.00
Terrain Line52-2	253	2,242,684.2	509,708.7	1,096.00
	254	2,242,698.2	509,574.4	1,089.00
	255	2,242,813.0	509,340.2	1,079.00
Terrain Line54	257	2,242,178.5	510,352.6	1,040.00
	258	2,242,170.5	511,076.2	1,020.00
Terrain Line55	259	2,242,206.2	510,360.6	1,048.00
	260	2,242,194.2	511,076.2	1,034.00
Terrain Line8-2	261	2,242,947.5	507,730.1	1,092.00
	54	2,242,955.8	507,483.7	1,090.00
	55	2,242,968.5	507,275.9	1,086.00
Terrain Line5-2	262	2,242,915.2	507,547.6	1,101.00
	40	2,242,928.0	507,272.3	1,101.00
	41	2,242,958.5	507,254.6	1,102.00

# NSA 1



**RESULTS: SOUND LEVELS** 

SUM-I76 Central Interchange (101402)

Lawhon & Assoc.							1 August	2017				
СМСох							TNM 2.5					
							Calculate	d with TNN	1 2.5			
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		SUM-I7	6 Central I	nterchange (*	101402)							
RUN:		NSA 1 2	2020									
BARRIER DESIGN:		INPUT	HEIGHTS					Average p	pavement type	e shall be use	d unless	
								a State hi	ghway agency	y substantiate	es the use	
ATMOSPHERICS:		68 deg	F, 50% RH	Ι ι	.l	J.		of a differ	ent type with	approval of F	HWA.	
Receiver												
Name	No.	#DUs	Existing	No Barrier					With Barrier			
			LAeq1h	LAeq1h		Increase over	existing	Туре	Calculated	Noise Reduc	tion	
				Calculated	Crit'n	Calculated	Crit'n	Impact	LAeq1h	Calculated	Goal	Calculated
							Sub'l Inc					minus
												Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
NSA1-1	36	1	0.0	72.1	1 66	6 72.1	10	Snd Lvl	72.1	0.0		4 -4.5
NSA1-2	37	1	0.0	76.6	66	6 76.6	10	Snd Lvl	76.6	0.0		4 -4.5
NSA1-3	38	2	0.0	68.6	66 66	68.6	10	) Snd Lvl	68.6	0.0		4 -4.5
NSA1-4	40	1	0.0	71.5	5 66	6 71.5	10	Snd Lvl	71.5	0.0		4 -4.5
NSA1-10	41	1	0.0	74.2	2 66	6 74.2	10	) Snd Lvl	74.2	0.0		4 -4.5
NSA1-12	42	1	0.0	70.7	7 66	5 70.7	10	Snd Lvl	70.7	0.0		4 -4.5
NSA1-13	45	4	0.0	70.9	9 66	6 70.9	10	Snd Lvl	70.9	0.0		4 -4.5
NSA1-11	47	1	0.0	75.0	0 66	6 75.0	10	) Snd Lvl	75.0	0.0		4 -4.5
NSA1-28	48	2	0.0	73.7	7 66	6 73.7	10	) Snd Lvl	73.7	0.0		4 -4.5
NSA1-29	50	2	0.0	74.6	66 66	5 74.6	10	Snd Lvl	74.6	0.0		4 -4.5
NSA1-30	52	3	0.0	74.4	4 66	5 74.4	10	Snd Lvl	74.4	0.0		4 -4.5
NSA1-31	55	2	0.0	70.5	5 66	5 70.5	10	) Snd Lvl	70.5	0.0		4 -4.5
NSA1-14	56	2	0.0	71.4	4 66	5 71.4	10	Snd Lvl	71.4	0.0		4 -4.5
NSA1-32	59	2	0.0	69.9	9 66	69.9	10	) Snd Lvl	69.9	0.0		4 -4.5
NSA1-33	60	2	0.0	65.4	4 66	65.4	10	)	65.4	0.0		4 -4.5
NSA1-42	62	2	0.0	65.6	66	65.6	10	)	65.6	0.0		4 -4.5
NSA1-15	63	2	0.0	67.4	4 66	67.4	10	) Snd Lvl	67.4	0.0		4 -4.5
NSA1-43	66	3	0.0	64.3	3 66	64.3	10	)	64.3	0.0		4 -4.5
	83		0.0	66.2	2 66	66.2	10		66.2	0.0	·	+ -4.5
	84		0.0	66.8	5 66	66.8	10		66.8	0.0	· · ·	+ -4.5
NSA1-16	85		0.0	65.0	J 66	65.0		)	65.0	0.0		+ -4.5
NSA1-34	88		0.0	68.2		68.1	10		68.1	0.0		+ -4.5
NSA1-18	89		0.0	65.2	2 66	65.2	10	) \	65.2	0.0	·	+ -4.5
NSA1-35	91	2	0.0	64.8	5 66	64.8	10		64.8	0.0		+ -4.5

RESULTS: SOUND LEVELS						5	SUM-I76 Cer	ntral Interch	ange (101402)			
NSA1-36	92	3	0.0	67.	0 6	67.0	) 10	Snd Lvl	67.0	0.0	4	-4.5
NSA1-37	93	2	0.0	67.	2 6	667.2	2 10	Snd Lvl	67.2	0.0	4	-4.5
NSA1-38	94	2	0.0	66.	8 6	66.8	3 10	Snd Lvl	66.8	0.0	4	-4.5
NSA1-17	95	2	0.0	63.	9 6	63.9	) 10		63.9	0.0	4	-4.5
NSA1-19	96	1	0.0	64.4	4 6	664.4	10		64.4	0.0	4	-4.5
NSA1-39	97	2	0.0	62.	7 6	6 62.7	7 10		62.7	0.0	4	-4.5
NSA1-40	98	3	0.0	61.	7 6	61.7	7 10		61.7	0.0	4	-4.5
NSA1-41	99	1	0.0	62.	2 6	62.2	2 10		62.2	0.0	4	-4.5
NSA1-20	102	2	0.0	64.	1 6	664.1	10		64.1	0.0	4	-4.5
NSA1-21	103	2	0.0	64.4	4 6	664.4	l 10		64.4	0.0	4	-4.5
NSA1-22	104	2	0.0	65.	2 6	65.2	2 10		65.2	0.0	4	-4.5
NSA1-23	105	2	0.0	57.	7 6	6 57.7	7 10		57.7	0.0	4	-4.5
NSA1-24	106	3	0.0	60.	56	60.5	5 10		60.5	0.0	4	-4.5
NSA1-25	107	4	0.0	61.	1 6	6 61.1	10		61.1	0.0	4	-4.5
NSA1-26	108	2	0.0	59.	2 6	6 59.2	2 10		59.2	0.0	4	-4.5
NSA1-27	109	2	0.0	59.	1 6	5 59.1	10		59.1	0.0	4	-4.5
NSA1-44	110	2	0.0	63.	6 6	63.6	6 10		63.6	0.0	4	-4.5
NSA1-45	111	1	0.0	65.	1 6	665.1	10		65.1	0.0	4	-4.5
NSA1-46	112	1	0.0	63.	8 6	63.8	3 10		63.8	0.0	4	-4.5
NSA1-47	113	2	0.0	62.4	4 6	6 62.4	l 10		62.4	0.0	4	-4.5
NSA1-7	114	2	0.0	59.	7 6	59.7	7 10		59.7	0.0	4	-4.5
NSA1-8	115	3	0.0	63.	8 6	63.8	3 10		63.8	0.0	4	-4.5
NSA1-9	116	2	0.0	59.	8 6	59.8	3 10		59.8	0.0	4	-4.5
NSA1-48	117	3	0.0	62.	56	6 62.5	5 10		62.5	0.0	4	-4.5
Dwelling Units		# DUs	Noise Red	duction								
		ĺ	Min	Avg	Max							
			dB	dB	dB							
All Selected		97	0.0	0.	0 0.	2						
All Impacted		40	0.0	0.	0 0.	0				İ		
All that meet NR Goal		0	0.0	0.	0 0.	0						

## INPUT: RECEIVERS

Lawhon & Assoc.						1 August	2017				
СМСох						TNM 2.5					
INPUT: RECEIVERS											
PROJECT/CONTRACT:	SUM-	I76 Cen	tral Interchar	nge (101402)	I						
RUN:	NSA 1	2020		,							
Receiver											
Name	No.	#DUs	Coordinates	(ground)		Height	Input Sou	nd Levels a	and Criteria	1	Active
			X	Υ	Z	above	Existing	Impact Cr	iteria	NR	in
						Ground	LAeq1h	LAeq1h	Sub'l	Goal	Calc.
			~	~	<i>c</i> .	<i>c</i> .					_
			π	ft	ft	ft	dBA	dBA	dB	dB	
NSA1-1	36	6 1	2,240,478.0	510,337.0	1,044.00	4.92	0.00	66	10.0	4.	5 Y
NSA1-2	37	' 1	2,240,653.0	510,244.0	1,043.00	4.92	0.00	66	10.0	4.	5 Y
NSA1-3	38	3 2	2,240,499.0	510,417.0	1,046.00	4.92	0.00	66	10.0	4.	5 Y
NSA1-4	40	) 1	2,240,672.0	510,348.0	1,046.00	4.92	0.00	66	10.0	4.	5 Y
NSA1-10	41	1	2,240,851.0	510,274.0	1,045.00	4.92	0.00	66	10.0	4.	.5 Y
NSA1-12	42	2 1	2,240,865.0	510,334.0	1,045.00	) 4.92	0.00	66	10.0	4.	.5 Y
NSA1-13	45	5 4	2,240,999.0	510,337.0	1,047.00	) 4.92	0.00	66	10.0	4.	.5 Y
NSA1-11	47	/ 1	2,241,224.0	510,241.0	1,053.00	4.92	0.00	66	10.0	4.	.5 Y
NSA1-28	48	3 2	2,241,401.0	510,265.0	1,055.00	) 4.92	0.00	66	10.0	4.	.5 Y
NSA1-29	50	) 2	2,241,474.0	510,249.0	1,054.00	) 4.92	0.00	66	10.0	4.	.5 Y
NSA1-30	52	2 3	2,241,572.0	510,251.0	1,054.00	) 4.92	0.00	66	10.0	4.	.5 Y
NSA1-31	55	5 2	2,241,707.0	510,255.0	1,044.00	) 4.92	0.00	66	10.0	4.	.5 Y
NSA1-14	56	ծ 2	2,241,209.0	510,304.0	1,053.00	) 4.92	0.00	66	10.0	4.	.5 Y
NSA1-32	59	) 2	2,241,418.0	510,347.0	1,057.00	4.92	0.00	66	10.0	4.	.5 Y
NSA1-33	60	) 2	2,241,682.0	510,365.0	1,044.00	4.92	0.00	66	10.0	4.	.5 Y
NSA1-42	62	2 2	2,241,866.0	510,342.0	1,039.00	4.92	0.00	66	10.0	4.	.5 Y
NSA1-15	63	3 2	2,241,216.0	510,399.0	1,055.00	4.92	0.00	66	10.0	4.	.5 Y
NSA1-43	66	6 3	2,241,866.0	510,403.0	1,039.00	4.92	0.00	66	10.0	4.	.5 Y
NSA1-5	83	3 2	2,240,484.0	510,486.0	1,046.00	4.92	0.00	66	10.0	4.	.5 Y
NSA1-6	84	4 2	2,240,646.0	510,493.0	1,048.00	) 4.92	0.00	66	10.0	4.	5 Y
NSA1-16	85	5 2	2,240,867.0	510,430.0	1,046.00	4.92	0.00	66	10.0	4.	.5 Y
NSA1-34	88	3 2	2,241,421.0	510,430.0	1,059.00	) 4.92	0.00	66	10.0	4.	.5 Y

INPUT: RECEIVERS		nge (101-	ye (101402)								
NSA1-18	89	2	2,241,215.0	510,477.0	1,056.00	4.92	0.00	66	10.0	4.5	Y
NSA1-35	91	2	2,241,686.0	510,432.0	1,046.00	4.92	0.00	66	10.0	4.5	Y
NSA1-36	92	3	2,241,418.0	510,484.0	1,060.00	4.92	0.00	66	10.0	4.5	Y
NSA1-37	93	2	2,241,543.0	510,492.0	1,061.00	4.92	0.00	66	10.0	4.5	Y
NSA1-38	94	2	2,241,624.0	510,491.0	1,057.00	4.92	0.00	66	10.0	4.5	Y
NSA1-17	95	2	2,240,860.0	510,500.0	1,046.00	4.92	0.00	66	10.0	4.5	Y
NSA1-19	96	1	2,241,209.0	510,504.0	1,055.00	4.92	0.00	66	10.0	4.5	Y
NSA1-39	97	2	2,241,399.0	510,660.0	1,060.00	4.92	0.00	66	10.0	4.5	Y
NSA1-40	98	3	2,241,587.0	510,605.0	1,062.00	4.92	0.00	66	10.0	4.5	Y
NSA1-41	99	1	2,241,692.0	510,635.0	1,052.00	4.92	0.00	66	10.0	4.5	Y
NSA1-20	102	2	2,240,910.0	510,499.0	1,047.00	4.92	0.00	66	10.0	4.5	Y
NSA1-21	103	2	2,240,994.0	510,504.0	1,050.00	4.92	0.00	66	10.0	4.5	Y
NSA1-22	104	2	2,241,134.0	510,504.0	1,054.00	4.92	0.00	66	10.0	4.5	Y
NSA1-23	105	2	2,240,855.0	510,648.0	1,046.00	4.92	0.00	66	10.0	4.5	Y
NSA1-24	106	3	2,240,941.0	510,597.0	1,049.00	4.92	0.00	66	10.0	4.5	Y
NSA1-25	107	4	2,241,117.0	510,600.0	1,053.00	4.92	0.00	66	10.0	4.5	Y
NSA1-26	108	2	2,241,247.0	510,647.0	1,054.00	4.92	0.00	66	10.0	4.5	Y
NSA1-27	109	2	2,241,149.0	510,684.0	1,054.00	4.92	0.00	66	10.0	4.5	Y
NSA1-44	110	2	2,241,894.0	510,502.0	1,040.00	4.92	0.00	66	10.0	4.5	Y
NSA1-45	111	1	2,241,981.0	510,313.0	1,036.00	4.92	0.00	66	10.0	4.5	Y
NSA1-46	112	1	2,242,048.0	510,364.0	1,036.00	4.92	0.00	66	10.0	4.5	Y
NSA1-47	113	2	2,242,038.0	510,413.0	1,033.00	4.92	0.00	66	10.0	4.5	Y
NSA1-7	114	2	2,240,478.0	510,637.0	1,045.00	4.92	0.00	66	10.0	4.5	Y
NSA1-8	115	3	2,240,584.0	510,594.0	1,045.00	4.92	0.00	66	10.0	4.5	Y
NSA1-9	116	2	2,240,718.0	510,700.0	1,045.00	4.92	0.00	66	10.0	4.5	Y
NSA1-48	117	3	2,242,095.0	510,477.0	1,032.00	4.92	0.00	66	10.0	4.5	Y
Lawhon & Assoc.					1 August 2017	-					
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СМСох					TNM 2.5	1					
INPUT: BUILDING ROWS											
PROJECT/CONTRACT:	SUM-I76 Ce	entral Interch	ange (*	101402)							
RUN:	NSA 1 2020										
Building Row			Points	; ;							
Name	Average	Building	No.	Coordinates (	ground)						
	Height	Percent		X	Y	Z					
	ft	%		ft	ft	ft					
Allyn St ws	15.00	60	11	2,240,829.0	510,269.0	1,045.00					
			12	2,240,824.2	510,525.0	1,045.00					
Minnie Ct ws	20.00	80	14	2,240,855.0	510,357.0	1,047.00					
			16	2,241,032.0	510,356.0	1,055.00					
King Street ws	18.00	70	17	2,241,247.0	510,231.0	1,053.00					
			18	2,241,240.5	510,501.3	1,057.00					
King Street es	18.00	60	19	2,241,374.0	510,239.0	1,057.00					
			20	2,241,366.0	510,511.2	1,057.00					
Lamparter Street ns	20.00	60	21	2,241,441.0	510,265.0	1,055.00					
			22	2,241,741.0	510,276.0	1,044.00					
Sumner Street es	20.00	60	23	2,240,450.0	510,328.0	1,044.00					
			24	2,240,444.0	510,535.0	1,046.00					
Brown Street ws	22.00	70	25	2,241,724.0	510,296.0	1,044.00					
			26	2,241,713.0	510,473.0	1,046.00					
Brown Street ES	20.00	80	27	2,241,844.0	510,308.3	1,038.00					
			28	2,241,842.0	510,537.7	1,043.00					
Building10	15.00	50	29	2,242,028.0	510,346.0	1,034.00					
			30	2,242,020.0	510,605.0	1,031.00					
Building11	18.00	70	31	2,240,800.0	510,617.0	1,046.00					
			32	2,241,277.0	510,618.0	1,056.00					
Building12	18.00	70	33	2,240,425.0	510,610.0	1,046.00					
			34	2,240,733.0	510,612.9	1,046.00					
Building13	18.00	60	35	2,240,808.0	510,529.0	1,046.00					
			36	2,241,248.0	510,529.0	1,057.00					

### INPUT: BUILDING ROWS

Building14	18.00	70	37	2,241,348.0	510,525.0	1,060.00
			38	2,241,667.0	510,526.0	1,068.00



SUM-I76 Central Interchange (101402)

Lawhon & Assoc.							1 August	2017				
CMCox							TNM 2.5					
							Calculate	d with TNN	1 2.5			
<b>RESULTS: SOUND LEVELS</b>												
PROJECT/CONTRACT:		SUM-I7	6 Central II	nterchange (1	01402)							
RUN:		NSA 2 2	2020									
BARRIER DESIGN:		INPUT	HEIGHTS					Average p	pavement type	e shall be use	d unless	
								a State hi	ghway agency	y substantiate	es the use	
ATMOSPHERICS:		68 deg	F, 50% RH					of a differ	ent type with	approval of F	HWA.	
Receiver					_							
Name	No.	#DUs	Existing	No Barrier					With Barrier			
			LAeq1h	LAeq1h		Increase over	existing	Туре	Calculated	Noise Reduc	tion	
				Calculated	Crit'n	Calculated	Crit'n	Impact	LAeq1h	Calculated	Goal	Calculated
							Sub'l Inc					minus
												Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
NSA2-1	1	1	0.0	67.2	66	67.2	2 10	) Snd Lvl	67.2	. 0.0		8 -8.0
NSA2-2	2	1	0.0	65.2	66	65.2	2 10	)	65.2	. 0.0		8 -8.0
NSA2-3	3	1	0.0	63.5	66	63.5	5 10	)	63.5	0.0		8 -8.0
NSA2-4	4	1	0.0	66.1	66	66.1	10	Snd Lvl	66.1	0.0		8 -8.0
NSA2-5	5	1	0.0	65.0	66	65.0	) 10	)	65.0	0.0		8 -8.0
NSA2-6	6	1	0.0	65.2	66	65.2	2 10	)	65.2	. 0.0		8 -8.0
NSA2-7	7	1	0.0	63.8	66	63.8	3 10	)	63.8	0.0		8 -8.0
NSA2-8	8	1	0.0	62.3	66	62.3	3 10	)	62.3	0.0		8 -8.0
NSA2-9	9	1	0.0	64.4	66	64.4	L 10	)	64.4	0.0		8 -8.0
NSA2-10	10	1	0.0	62.8	66	62.8	3 10	)	62.8	0.0		8 -8.0
NSA2-11	11	4	0.0	64.5	66	64.5	5 10	)	64.5	0.0		8 -8.0
NSA2-12	12	1	0.0	62.0	66	62.0	) 10	)	62.0	0.0		8 -8.0
NSA2-13	13	4	0.0	64.1	66	64.1	10	)	64.1	0.0		8 -8.0
NSA2-14	14	1	0.0	63.2	66	63.2	2 10	)	63.2	0.0		8 -8.0
NSA2-15	15	1	0.0	67.4	66	67.4	L 10	Snd Lvl	67.4	. 0.0		8 -8.0
NSA2-16	16	1	0.0	66.8	66	66.8	3 10	) Snd Lvl	66.8	0.0		8 -8.0
NSA2-17	17	1	0.0	66.6	66	66.6	6 1C	) Snd Lvl	66.6	0.0		8 -8.0
NSA2-18	18	1	0.0	66.7	66	66.7	10	) Snd Lvl	66.7	0.0		8 -8.0
NSA2-19	19	1	0.0	67.6	66	67.6	6 10	) Snd Lvl	67.6	0.0		8 -8.0
NSA2-20	20	1	0.0	70.6	66	3 70.6	6 10	Snd Lvl	70.6	0.0		8.0
NSA2-21	21	1	0.0	71.8	66	5 71.8	3 10	Snd Lvl	71.8	0.0		8 -8.0
NSA2-22	22	1	0.0	66.0	66	66.0	10	Snd Lvl	66.0	0.0		8 -8.0
NSA2-23	23	1	0.0	65.7	66	65.7	10	)	65.7	0.0		8 -8.0
NSA2-24	24	1	0.0	65.6	66	65.6	6 1C	)	65.6	0.0		8 -8.0

E:\Lawhon\SUM-IR 76 Central Interchange (101402)\Ex Yr TNM\NSA 2 2020

RESULTS: SOUND LEVELS						รเ	JM-I76 Cei	ntral Interc	hange (10140:	2)		
NSA2-25	25	1	0.0	65.5	66	65.5	10		65.5	0.0	8	-8.0
NSA2-26	26	1	0.0	64.6	66	64.6	10		64.6	0.0	8	-8.0
NSA2-27	27	1	0.0	65.2	66	65.2	10		65.2	0.0	8	-8.0
NSA2-28	28	1	0.0	63.7	66	63.7	10		63.7	0.0	8	-8.0
NSA2-29	29	1	0.0	63.9	66	63.9	10		63.9	0.0	8	-8.0
NSA2-30	30	1	0.0	64.0	66	64.0	10		64.0	0.0	8	-8.0
NSA2-31	31	1	0.0	62.8	66	62.8	10		62.8	0.0	8	-8.0
NSA2-32	32	1	0.0	62.5	66	62.5	10		62.5	0.0	8	-8.0
NSA2-33	33	1	0.0	65.9	66	65.9	10		65.9	0.0	8	-8.0
NSA2-34	34	1	0.0	65.3	66	65.3	10		65.3	0.0	8	-8.0
NSA2-35	35	1	0.0	63.4	66	63.4	10		63.4	0.0	8	-8.0
NSA2-36	36	1	0.0	65.0	66	65.0	10		65.0	0.0	8	-8.0
NSA2-37	37	1	0.0	65.1	66	65.1	10		65.1	0.0	8	-8.0
NSA2-38	38	1	0.0	63.4	66	63.4	10		63.4	0.0	8	-8.0
Dwelling Units		# DUs	Noise Red	duction								
			Min	Avg	Max							
			dB	dB	dB							
All Selected		44	0.0	0.0	0.0							
All Impacted		10	0.0	0.0	0.0							
All that meet NR Goal		0	0.0	0.0	0.0							

Lowbon & Accoc						1 August	2017				
Lawnon & Assoc.							2017				
CIVICOX						I INIVI 2.5					
INPUT: RECEIVERS											
PROJECT/CONTRACT:	SUM-I	76 Cen	tral Interchar	nge (101402)	I						
RUN:	NSA 2	2020									
Receiver											
Name	No.	#DUs	Coordinates	(ground)		Height	Input Sou	nd Levels a	and Criteria	a	Active
			X	Y	Z	above	Existing	Impact Cr	iteria	NR	in
						Ground	LAeq1h	LAeq1h	Sub'l	Goal	Calc.
			ft	ft	ft	ft	dBA	dBA	dB	dB	
NSA2-1	1	1	2,241,864.0	510,319.0	1,038.0	0 4.92	0.00	66	10.0	8.0	)
NSA2-2	2	1	2,241,982.0	510,317.0	1,035.0	0 4.92	0.00	66	6 10.0	8.0	)
NSA2-3	3	1	2,242,091.0	510,353.0	1,034.0	0 4.92	0.00	66	6 10.0	8.0	)
NSA2-4	4	1	2,241,866.0	510,350.0	1,039.0	0 4.92	0.00	66	6 10.0	8.0	)
NSA2-5	5	1	2,241,855.0	510,384.0	1,040.0	0 4.92	0.00	66	6 10.0	8.0	)
NSA2-6	6	1	2,241,866.0	510,406.0	1,041.0	0 4.92	0.00	66	6 10.0	8.0	)
NSA2-7	7	1	2,241,997.0	510,412.0	1,032.0	0 4.92	0.00	66	6 10.0	8.0	)
NSA2-8	8	1	2,242,090.0	510,410.0	1,034.0	0 4.92	0.00	66	6 10.0	8.0	)
NSA2-9	9	1	2,241,852.0	510,440.0	1,041.0	0 4.92	0.00	66	6 10.0	8.0	)
NSA2-10	10	1	2,242,090.0	510,451.0	1,038.0	0 4.92	0.00	66	6 10.0	8.0	)
NSA2-11	11	4	2,241,898.0	510,485.0	1,041.0	0 4.92	0.00	66	6 10.0	8.0	)
NSA2-12	12	1	2,242,090.0	510,484.0	1,034.0	0 4.92	0.00	66	6 10.0	8.0	)
NSA2-13	13	4	2,241,896.0	510,515.0	1,041.0	0 4.92	0.00	66	6 10.0	8.0	)
NSA2-14	14	1	2,242,040.0	510,525.0	1,035.0	0 4.92	0.00	66	6 10.0	8.0	)
NSA2-15	15	1	2,242,597.0	510,368.0	1,070.0	0 4.92	0.00	66	6 10.0	8.0	)
NSA2-16	16	1	2,242,601.0	510,404.0	1,072.0	0 4.92	0.00	66	6 10.0	8.0	)
NSA2-17	17	1	2,242,597.0	510,445.0	1,075.0	0 4.92	0.00	66	10.0	8.0	)
NSA2-18	18	1	2,242,726.0	510,435.0	1,080.0	0 4.92	0.00	66	i 10.0	8.0	)
NSA2-19	19	1	2,242,860.0	510,415.0	1,082.0	0 4.92	0.00	66	i 10.0	8.0	ס
NSA2-20	20	1	2,242,936.0	510,425.0	1,084.0	0 4.92	0.00	66	10.0	8.0	ו
NSA2-21	21	1	2,242,975.0	510,470.0	1,086.0	0 4.92	0.00	66	10.0	8.0	)
NSA2-22	22	1	2,242,601.0	510,485.0	1,076.0	0 4.92	0.00	66	10.0	8.0	)

INPUT: RECEIVERS	5	6UM-176 Ce	ntral Interc	change (10 <sup>.</sup>	1402)						
NSA2-23	23	1	2,242,721.0	510,473.0	1,078.00	4.92	0.00	66	10.0	8.0	
NSA2-24	24	1	2,242,601.0	510,517.0	1,077.00	4.92	0.00	66	10.0	8.0	
NSA2-25	25	1	2,242,712.0	510,515.0	1,081.00	4.92	0.00	66	10.0	8.0	
NSA2-26	26	1	2,242,812.0	510,505.0	1,078.00	4.92	0.00	66	10.0	8.0	
NSA2-27	27	1	2,242,670.0	510,544.0	1,081.00	4.92	0.00	66	10.0	8.0	
NSA2-28	28	1	2,242,814.0	510,559.0	1,084.00	4.92	0.00	66	10.0	8.0	
NSA2-29	29	1	2,242,601.0	510,602.0	1,072.00	4.92	0.00	66	10.0	8.0	
NSA2-30	30	1	2,242,711.0	510,583.0	1,076.00	4.92	0.00	66	10.0	8.0	
NSA2-31	31	1	2,242,813.0	510,594.0	1,083.00	4.92	0.00	66	10.0	8.0	
NSA2-32	32	1	2,242,814.0	510,624.0	1,083.00	4.92	0.00	66	10.0	8.0	
NSA2-33	33	1	2,242,977.0	510,649.0	1,087.00	4.92	0.00	66	10.0	8.0	
NSA2-34	34	1	2,242,990.0	510,763.0	1,089.00	4.92	0.00	66	10.0	8.0	
NSA2-35	35	1	2,243,023.0	510,966.0	1,087.00	4.92	0.00	66	10.0	8.0	Y
NSA2-36	36	1	2,243,118.0	511,008.0	1,092.00	4.92	0.00	66	10.0	8.0	Y
NSA2-37	37	1	2,243,111.0	511,107.0	1,093.00	4.92	0.00	66	10.0	8.0	Y
NSA2-38	38	1	2,243,085.0	511,222.0	1,093.00	4.92	0.00	66	10.0	8.0	Y



SUM-I76 Central Interchange (101402)

Lawhon & Assoc.							1 August	2017				
CMCox							TNM 2.5					
							Calculate	ed with TNN	1 2.5			
<b>RESULTS: SOUND LEVELS</b>												
PROJECT/CONTRACT:		SUM-I7	6 Central II	nterchange (1	01402)							
RUN:		Existin	g Year 2020	NSA 3								
BARRIER DESIGN:		INPUT	HEIGHTS					Average	pavement type	e shall be use	d unless	
								a State hi	ghway agenc	y substantiate	es the use	,
ATMOSPHERICS:		68 deg	F, 50% RH					of a diffe	rent type with	approval of F	HWA.	
Receiver												
Name	No.	#DUs	Existing	No Barrier					With Barrier	,		
			LAeq1h	LAeq1h		Increase of	ver existing	Туре	Calculated	Noise Reduc	tion	
				Calculated	Crit'n	Calculated	Crit'n	Impact	LAeq1h	Calculated	Goal	Calculated
							Sub'l Inc					minus
												Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
NSA 3-1	36	1	0.0	65.3		66 6	5.3 1	0	65.3	3 0.0	)	8 -8.0
NSA 3-2	37	1	0.0	65.3		66 6	5.3 1	0	65.3	3 0.0		8 -8.0
NSA 3-3	38	1	0.0	65.3		66 6	5.3 1	0	65.3	3 0.0		8 -8.0
NSA 3-4	39	1	0.0	65.8		66 6	5.8 1	0	65.8	3 0.0		8 -8.0
NSA 3-5	40	1	0.0	66.8		66 6	6.8 1	0 Snd Lvl	66.8	3 0.0		8 -8.0
NSA 3-6	41	1	0.0	67.4		66 6	7.4 1	0 Snd Lvl	67.4	0.0		8 -8.0
NSA 3-7	42	1	0.0	67.5		66 6	7.5 1	0 Snd Lvl	67.5	5 0.0		8 -8.0
NSA3-8	43	1	0.0	65.6		66 6	5.6 1	0	65.6	6 0.0		8 -8.0
NSA 3-9	44	1	0.0	65.8	1	66 6	5.8 1	0	65.8	3 0.0		8 -8.0
NSA 3-10	45	1	0.0	65.3		66 6	5.3 1	0	65.3	3 0.0		8 -8.0
NSA 3-11	46	1	0.0	62.3		66 6	2.3 1	0	62.3	3 0.0		8 -8.0
NSA 3-12	47	1	0.0	61.8		66 6	1.8 1	0	61.8	3 0.0		8 -8.0
NSA 3-13	48	1	0.0	62.0		66 6	2.0 1	0	62.0	0.0		8 -8.0
NSA 3-14	49	1	0.0	61.9		66 6	1.9 1	0	61.9	0.0		8 -8.0
NSA 3-15	50	2	0.0	61.4		66 6	1.4 1	0	61.4	۰.0 I		8 -8.0
NSA 3-16	51	1	0.0	61.3		66 6	1.3 1	0	61.3	3 0.0		8 -8.0
NSA 3-17	52	1	0.0	61.6		66 6	1.6 1	0	61.6	6 0.0		8 -8.0
NSA 3-18	53	1	0.0	61.6		66 6	1.6 1	0	61.6	<u>6</u> 0.0		8 -8.0
NSA 3-19	54	1	0.0	62.4		66 6	2.4 1	0	62.4	0.0		8 -8.0
NSA 3-20	55	1	0.0	62.8		66	2.8 1	0	62.8	<u>s 0.0</u>		8 -8.0
NSA 3-21	56	1	0.0	63.3		66 6	3.3 1	0	63.3	8 0.0		8 -8.0
NSA 3-22	57	1	0.0	65.5		66 6	5.5 1	0	65.5	0.0		8 -8.0
NSA 3-23	58	1	0.0	65.0		6	5.0 1	0	65.0			8 -8.0
NSA 3-24	59	1	0.0	64.8		66 6	4.8 1	0	64.8	0.0		8 -8.0

E:\Lawhon\SUM-IR 76 Central Interchange (101402)\Ex Yr TNM\NSA 3 2020

RESUL	TS:	SOL	JND	LE\	/ELS
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NSA 3-25	60	1	0.0	63.7	66	63.7	10		63.7	0.0	8	-8.0
NSA 3-26	61	1	0.0	63.5	66	63.5	10		63.5	0.0	8	-8.0
NSA 3-27	62	1	0.0	66.9	66	66.9	10	Snd Lvl	66.9	0.0	8	-8.0
NSA 3-28	63	1	0.0	72.9	66	72.9	10	Snd Lvl	72.9	0.0	8	-8.0
NSA 3-29	64	1	0.0	65.9	66	65.9	10		65.9	0.0	8	-8.0
NSA 3-30	65	1	0.0	65.0	66	65.0	10		65.0	0.0	8	-8.0
NSA 3=31	66	1	0.0	65.0	66	65.0	10		65.0	0.0	8	-8.0
NSA 3-32	67	1	0.0	64.5	66	64.5	10		64.5	0.0	8	-8.0
NSA3-33	68	1	0.0	69.0	66	69.0	10	Snd Lvl	69.0	0.0	8	-8.0
NSA 3-34	69	1	0.0	67.8	66	67.8	10	Snd Lvl	67.8	0.0	8	-8.0
NSA 3-35	70	1	0.0	64.8	66	64.8	10		64.8	0.0	8	-8.0
NSA 3-36	71	1	0.0	64.3	66	64.3	10		64.3	0.0	8	-8.0
NSA 3-37	72	1	0.0	64.0	66	64.0	10		64.0	0.0	8	-8.0
NSA 3-38	73	1	0.0	63.4	66	63.4	10		63.4	0.0	8	-8.0
NSA 3-39	74	1	0.0	69.2	66	69.2	10	Snd Lvl	69.2	0.0	8	-8.0
NSA 3-40	75	1	0.0	67.6	66	67.6	10	Snd Lvl	67.6	0.0	8	-8.0
NSA 3-41	76	1	0.0	66.6	66	66.6	10	Snd Lvl	66.6	0.0	8	-8.0
NSA 3-42	77	1	0.0	65.7	66	65.7	10		65.7	0.0	8	-8.0
NSA 3-43	78	1	0.0	65.4	66	65.4	10		65.4	0.0	8	-8.0
NSA 3-44	79	1	0.0	67.3	66	67.3	10	Snd Lvl	67.3	0.0	8	-8.0
NSA3-45	80	1	0.0	64.0	66	64.0	10		64.0	0.0	8	-8.0
NSA3-46	81	1	0.0	63.1	66	63.1	10		63.1	0.0	8	-8.0
NSA3-47	82	1	0.0	65.4	66	65.4	10		65.4	0.0	8	-8.0
NSA3-48	83	1	0.0	64.9	66	64.9	10		64.9	0.0	8	-8.0
NSA3-49	84	1	0.0	64.1	66	64.1	10		64.1	0.0	8	-8.0
NSA3-50	85	1	0.0	65.0	66	65.0	10		65.0	0.0	8	-8.0
NSA3-51	86	1	0.0	63.8	66	63.8	10		63.8	0.0	8	-8.0
Dwelling Units		# DUs	Noise Red	luction								
			Min	Avg	Мах							
			dB	dB	dB							
All Selected		52	0.0	0.0	0.0							
All Impacted		11	0.0	0.0	0.0							
All that meet NR Goal		0	0.0	0.0	0.0							

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Lawhon & Assoc.						1 August	2017				
CMCox						TNM 2.5					
INPUT: RECEIVERS											
PROJECT/CONTRACT:	SUM-I	76 Cen	tral Interchar	ige (101402)	1						
RUN:	Existi	ng Yea	r 2020 NSA 3								
Receiver											
Name	No.	#DUs	Coordinates	(ground)		Height	Input Sou	nd Levels a	and Criteria	à	Active
			X	Y	Z	above	Existing	Impact Cr	iteria	NR	in
						Ground	LAeq1h	LAeq1h	Sub'l	Goal	Calc.
			ft	ft	ft	ft	dBA	dBA	dB	dB	
NSA 3-1	36	1	2,243,514.0	510,911.0	1,104.00	4.92	0.00	66	10.0	8	.0 Y
NSA 3-2	37	1	2,243,511.0	510,860.0	1,103.00	4.92	0.00	66	10.0	8	.0 Y
NSA 3-3	38	1	2,243,511.0	510,822.0	1,102.00	4.92	0.00	66	10.0	8	.0 Y
NSA 3-4	39	1	2,243,514.0	510,782.0	1,102.00	4.92	0.00	66	10.0	8	.0 Y
NSA 3-5	40	1	2,243,506.0	510,746.0	1,102.00	4.92	0.00	66	10.0	8	.0 Y
NSA 3-6	41	1	2,243,507.0	510,707.0	1,102.00	4.92	0.00	66	10.0	8	.0 Y
NSA 3-7	42	1	2,243,510.0	510,649.0	1,100.00	4.92	0.00	66	10.0	8	.0 Y
NSA3-8	43	1	2,243,593.0	510,541.0	1,099.00	4.92	0.00	66	10.0	8	.0 Y
NSA 3-9	44	1	2,243,676.0	510,404.0	1,095.00	4.92	0.00	66	10.0	8	.0 Y
NSA 3-10	45	1	2,243,671.0	510,470.0	1,099.00	4.92	0.00	66	10.0	8	.0 Y
NSA 3-11	46	1	2,243,679.0	510,582.0	1,102.00	4.92	0.00	66	10.0	8	.0 Y
NSA 3-12	47	1	2,243,671.0	510,635.0	1,103.00	4.92	0.00	66	10.0	8	.0 Y
NSA 3-13	48	1	2,243,653.0	510,683.0	1,104.00	4.92	0.00	66	10.0	8	.0 Y
NSA 3-14	49	1	2,243,665.0	510,722.0	1,106.00	4.92	0.00	66	10.0	8	.0 Y
NSA 3-15	50	2	2,243,661.0	510,763.0	1,105.00	4.92	0.00	66	10.0	8	.0 Y
NSA 3-16	51	1	2,243,661.0	510,837.0	1,107.00	4.92	0.00	66	10.0	8	.0 Y
NSA 3-17	52	1	2,243,661.0	510,893.0	1,109.00	4.92	0.00	66	10.0	8	.0 Y
NSA 3-18	53	1	2,243,671.0	510,944.0	1,110.00	4.92	0.00	66	10.0	8	.0 Y
NSA 3-19	54	1	2,243,672.0	510,993.0	1,113.00	4.92	0.00	66	10.0	8	.0 Y
NSA 3-20	55	1	2,243,682.0	511,063.0	1,116.00	4.92	0.00	66	10.0	8	.0 Y
NSA 3-21	56	1	2,243,641.0	511,021.0	1,113.00	4.92	0.00	66	10.0	8	.0 Y
NSA 3-22	57	1	2,243,802.0	510,272.0	1,091.00	4.92	0.00	66	10.0	8	.0 Y

INPUT: RECEIVERS							SUN	I-I76 Centra	al Interchai	nge (1014	402)
NSA 3-23	58	1	2,243,863.0	510,357.0	1,099.00	4.92	0.00	66	10.0	8.0	Y
NSA 3-24	59	1	2,243,885.0	510,404.0	1,102.00	4.92	0.00	66	10.0	8.0	Y
NSA 3-25	60	1	2,243,796.0	510,459.0	1,098.00	4.92	0.00	66	10.0	8.0	Y
NSA 3-26	61	1	2,243,796.0	510,583.0	1,106.00	4.92	0.00	66	10.0	8.0	Y
NSA 3-27	62	1	2,243,884.0	510,218.0	1,095.00	4.92	0.00	66	10.0	8.0	Y
NSA 3-28	63	1	2,244,025.0	510,174.0	1,198.00	4.92	0.00	66	10.0	8.0	Y
NSA 3-29	64	1	2,244,021.0	510,302.0	1,101.00	4.92	0.00	66	10.0	8.0	Y
NSA 3-30	65	1	2,244,000.0	510,369.0	1,102.00	4.92	0.00	66	10.0	8.0	Y
NSA 3=31	66	1	2,243,948.0	510,397.0	1,103.00	4.92	0.00	66	10.0	8.0	Y
NSA 3-32	67	1	2,243,947.0	510,445.0	1,104.00	4.92	0.00	66	10.0	8.0	Y
NSA3-33	68	1	2,244,187.0	510,139.0	1,099.00	4.92	0.00	66	10.0	8.0	Y
NSA 3-34	69	1	2,244,217.0	510,200.0	1,099.00	4.92	0.00	66	10.0	8.0	Y
NSA 3-35	70	1	2,244,141.0	510,236.0	1,099.00	4.92	0.00	66	10.0	8.0	Y
NSA 3-36	71	1	2,244,147.0	510,272.0	1,100.00	4.92	0.00	66	10.0	8.0	Y
NSA 3-37	72	1	2,244,145.0	510,314.0	1,101.00	4.92	0.00	66	10.0	8.0	Y
NSA 3-38	73	1	2,244,145.0	510,352.0	1,101.00	4.92	0.00	66	10.0	8.0	Y
NSA 3-39	74	1	2,244,343.0	510,160.0	1,100.00	4.92	0.00	66	10.0	8.0	Y
NSA 3-40	75	1	2,244,342.0	510,208.0	1,101.00	4.92	0.00	66	10.0	8.0	Y
NSA 3-41	76	1	2,244,340.0	510,251.0	1,101.00	4.92	0.00	66	10.0	8.0	Y
NSA 3-42	77	1	2,244,343.0	510,289.0	1,101.00	4.92	0.00	66	10.0	8.0	Y
NSA 3-43	78	1	2,244,328.0	510,341.0	1,101.00	4.92	0.00	66	10.0	8.0	Y
NSA 3-44	79	1	2,244,454.0	510,317.0	1,103.00	4.92	0.00	66	10.0	8.0	Y
NSA3-45	80	1	2,243,998.0	510,486.0	1,104.00	4.92	0.00	66	10.0	8.0	Y
NSA3-46	81	1	2,244,004.0	510,557.0	1,104.00	4.92	0.00	66	10.0	8.0	Y
NSA3-47	82	1	2,244,217.5	510,389.0	1,102.00	4.92	0.00	66	10.0	8.0	Y
NSA3-48	83	1	2,244,217.5	510,438.0	1,103.00	4.92	0.00	66	10.0	8.0	Y
NSA3-49	84	1	2,244,217.5	510,486.0	1,103.00	4.92	0.00	66	10.0	8.0	Y
NSA3-50	85	1	2,244,334.0	510,408.0	1,101.00	4.92	0.00	66	10.0	8.0	Y
NSA3-51	86	1	2,244,338.0	510,499.0	1,102.00	4.92	0.00	66	10.0	8.0	Y

Lawhon & Assoc.					1 August 2017	
CMCox					TNM 2.5	
INPUT: BUILDING ROWS						
PROJECT/CONTRACT:	SUM-I76 Ce	entral Interch	ange (1	101402)		
RUN:	Existing Ye	ar 2020 NSA	3			
Building Row			Points	j		
Name	Average	Building	No.	Coordinates (	ground)	
	Height	Percent		X	Y	Z
	ft	%		ft	ft	ft
Lumiere St ws	20.00	70	11	2,243,532.0	510,883.0	1,104.00
			12	2,243,532.0	510,639.0	1,100.00
			13	2,243,626.0	510,520.0	1,099.00
Hammel St ws	20.00	70	14	2,243,696.0	511,073.0	1,116.00
			16	2,243,694.2	510,910.4	1,110.00
			15	2,243,696.0	510,561.0	1,102.00
Gridley Street es	18.00	70	17	2,244,157.0	510,694.0	1,102.00
			18	2,244,161.0	510,134.0	1,099.00
Inman Street	18.00	60	19	2,244,359.0	510,360.0	1,101.00
			20	2,244,368.0	510,156.0	1,100.00



Lawhon & Assoc.							1 August	2017				
CMCox							TNM 2.5					
							Calculated	d with TNN	1 2.5			
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		SUM-I7	6 Central I	nterchange (1	01402)							
RUN:		Existin	g Year 202	0 NSA 4 and 7	7							
BARRIER DESIGN:		INPUT	HEIGHTS					Average p	pavement type	e shall be use	d unless	
								a State hi	ghway agency	/ substantiate	es the use	
ATMOSPHERICS:		68 deg	F, 50% RH	l .				of a differ	ent type with	approval of F	HWA.	
Receiver												
Name	No.	#DUs	Existing	No Barrier					With Barrier			
			LAeq1h	LAeq1h		Increase over	existing	Туре	Calculated	Noise Reduc	tion	
				Calculated	Crit'n	Calculated	Crit'n	Impact	LAeq1h	Calculated	Goal	Calculated
							Sub'l Inc					minus
												Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
football west bleachers	110	1	0.0	64.0	) 6	64.0	) 10		64.0	0.0	)	4 -4.5
football east bleachers	111	1	0.0	65.1	6	65.1	1 10		65.1	0.0	) 4	4 -4.5
baseball home plate	112	1	0.0	64.3	8 6	64.3	3 10		64.3	0.0	) 4	4 -4.5
baseball west bleachers	113	1	0.0	64.0	) 6	64.0	) 10		64.0	0.0	) 4	4 -4.5
tennis courts	114	1	0.0	58.3	6	6 58.3	3 10		58.3	0.0	) 4	4 -4.5
Hoban HS indoor	115	1	0.0	52.4	6	6 52.4	4 10		52.4	0.0	) 4	4 -4.5
Track & Field West	116	1	0.0	68.0	) 6	68.0	) 10	Snd Lvl	68.0	0.0	) 4	4 -4.5
Track & Field East	117	1	0.0	69.1	6	69.1	1 10	Snd Lvl	69.1	0.0	) 4	4 -4.5
Trail	118	1	0.0	63.7	6	66 63.7	7 10		63.7	0.0	) 4	4 -4.5
Memorial	119	1	0.0	68.6	6 6	68.6	6 10	Snd Lvl	68.6	0.0	) 4	4 -4.5
Dwelling Units		# DUs	Noise Re	duction								
			Min	Avg	Max							
			dB	dB	dB							
All Selected		10	0.0	0.0	0 0	.0						
All Impacted		3	8 0.0	0.0	0 0	.0						
All that meet NR Goal		0	0.0	0.0	0 0	.0						

Lawhon & Assoc.						1 August	2017					
CMCox						TNM 2.5						
INPUT: RECEIVERS												
PROJECT/CONTRACT:	SUM-I	76 Cen	tral Interchar	nge (101402)								
RUN:	Existi	ng Yea	r 2020 NSA 4	and 7								
Receiver												
Name	No.	#DUs	Coordinates	(ground)		Height	Input Sou	nd Levels a	and Criteria	à	l	Active
			X	Y	Z	above	Existing	Impact Cr	iteria	NR	i	n
						Ground	LAeq1h	LAeq1h	Sub'l	Goal	C	Calc.
			ft	ft	ft	ft	dBA	dBA	dB	dB		
football west bleachers	110	1	2,244,613.0	510,605.0	1,101.0	0 4.92	0.00	66	10.0		4.5	Y
football east bleachers	111	1	2,244,936.0	510,612.0	1,101.0	0 4.92	.000	66	10.0		4.5	Y
baseball home plate	112	1	2,245,144.0	510,591.0	1,100.0	0 4.92	.000	66	10.0		4.5	Y
baseball west bleachers	113	1	2,245,012.0	510,675.0	1,100.0	0 4.92	0.00	66	10.0		4.5	Y
tennis courts	114	1	2,246,178.0	510,195.8	1,150.0	0 4.92	0.00	66	10.0		4.5	Y
Hoban HS indoor	115	1	2,245,731.2	510,247.0	1,168.0	0 4.92	0.00	66	10.0		4.5	Y
Track & Field West	116	1	2,245,567.0	510,568.0	1,144.0	0 4.92	0.00	66	10.0		4.5	Y
Track & Field East	117	1	2,245,751.0	510,599.0	1,144.0	0 4.92	2 0.00	66	10.0		4.5	Y
Trail	118	1	2,245,627.0	510,695.0	1,143.0	0 4.92	0.00	66	10.0		4.5	Y
Memorial	119	1	2,245,176.0	510,466.0	1,118.0	0 4.92	.000	66	10.0		4.5	Y

Lawhon & Assoc.					1 August 2	017	
СМСох					TNM 2.5		
	01104.170.0	 	 • • • • • • • • •	(404 400)			
PROJECT/CONTRACT:	SUM-1/6 (	Sentral Interd	cnange (	101402)			
RUN:	Existing \	'ear 2020 NS	A 4 and	1			
Building Row			Point	s			
Name	Average	Building	No.	Coordin	ates (ground)		
	Height	Percent		Х	Y	Z	
	ft	%		ft	ft	ft	
<< This table is empty >>							



SUM-I76 Central Interchange (101402)

Lawhon & Assoc.							1 August	2017				
CMCox							TNM 2.5					
							Calculate	d with TNN	1 2.5			
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		SUM-I7	6 Central I	nterchange (*	101402)							
RUN:		Existin	g Year 202	0 NSA 5								
BARRIER DESIGN:		INPUT	HEIGHTS					Average p	pavement type	e shall be use	d unless	
								a State hi	ghway agency	y substantiate	es the use	
ATMOSPHERICS:		68 deg	F, 50% RH					of a differ	ent type with	approval of F	HWA.	
Receiver												
Name	No.	#DUs	Existing	No Barrier					With Barrier			
			LAeq1h	LAeq1h		Increase over	existing	Туре	Calculated	Noise Reduc	tion	
				Calculated	Crit'n	Calculated	Crit'n	Impact	LAeq1h	Calculated	Goal	Calculated
							Sub'l Inc					minus
												Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
NSA5-1	36	1	0.0	73.4	4 66	3 73.4	l 10	) Snd Lvl	73.4	0.0		8 -8.0
NSA5-2	37	1	0.0	74.0	0 66	6 74.0	) 10	) Snd Lvl	74.0	0.0		8 -8.0
NSA5-3 church indoor	38	1	0.0	74.0	0 66	6 74.0	10	) Snd Lvl	74.0	0.0		8 -8.0
NSA5-4	39	2	2 0.0	71.8	3 66	6 71.8	3 1C	) Snd Lvl	71.8	8 0.0		8 -8.0
NSA5-5	41	2	2 0.0	73.9	9 66	6 73.9	9 10	) Snd Lvl	73.9	0.0		8 -8.0
NSA5-6	43	2	0.0	73.	5 66	6 73.5	5 10	) Snd Lvl	73.5	5          0.0		8 -8.0
NSA5-7	45	2	0.0	72.0	66 66	6 72.6	6 1C	) Snd Lvl	72.6	6 0.0		8 -8.0
NSA5-8	46	1	0.0	71.4	4 66	6 71.4	۱ <u>۲</u>	) Snd Lvl	71.4	0.0		8 -8.0
NSA5-9	47	1 1	0.0	67.3	3 66	67.3	3 10	) Snd Lvl	67.3	8 0.0		8 -8.0
NSA5-10	49	3	0.0	67.9	9 66	67.9	9 10	) Snd Lvl	67.9	0.0		8 -8.0
NSA5-11	51	3	0.0	68.	1 66	68.1	10	) Snd Lvl	68.1	0.0		8 -8.0
NSA5-12	53	4	. 0.0	67.2	2 66	67.2	2 10	) Snd Lvl	67.2	2 0.0		8 -8.0
NSA5-13	54	2	2 0.0	67.2	2 66	67.2	2 10	) Snd Lvl	67.2	2 0.0		8 -8.0
NSA5-14	56	2	2 0.0	69.1	1 66	69.1	10	) Snd Lvl	69.1	0.0		8 -8.0
NSA5-15	58	2	0.0	69.0	0 66	69.0	) 10	) Snd Lvl	69.0	0.0		8 -8.0
NSA5-16	59	2	2 0.0	63.	7 66	63.7	10	)	63.7	0.0		8 -8.0
NSA5-17	60	2	0.0	64.6	66 66	64.6	6 1C	)	64.6	6 0.0		8 -8.0
NSA5-18	61	3	0.0	65.3	3 66	65.3	3 10	)	65.3	8 0.0		8 -8.0
NSA5-19	62	2	0.0	66.4	4 66	66.4	L 10	) Snd Lvl	66.4	0.0		8 -8.0
NSA5-22	63	3	0.0	65.	7 66	65.7	10	)	65.7	0.0		8 -8.0
NSA5-23	64	1	0.0	66.1	1 66	66.1	10	) Snd Lvl	66.1	0.0		8 -8.0
NSA5-24	65	1	0.0	68.3	3 66	68.3	3 10	) Snd Lvl	68.3	8 0.0		8 -8.0
NSA5-25	66	1	0.0	67.4	4 66	67.4	l 10	) Snd Lvl	67.4	0.0		8 -8.0
NSA5-26	83	2	0.0	65.9	9 66	65.9	9 10	)	65.9	0.0		8 -8.0
E:\Lawhon\SUM-IR 76 Central Inter	rchange (101	402)\Ex	Yr TNM\NS	SA 5 2020					1			

E:\Lawhon\SUM-IR 76 Central Interchange (101402)\Ex Yr TNM\NSA 5 2020

NSA5-29	84	1	0.0	62.7	66	62.7	10		62.7	0.0	8	-8.0
NSA5-30	85	2	0.0	62.9	66	62.9	10		62.9	0.0	8	-8.0
NSA5-31	86	1	0.0	64.6	66	64.6	10		64.6	0.0	8	-8.0
NSA5-20	87	2	0.0	65.1	66	65.1	10		65.1	0.0	8	-8.0
NSA5-21	88	2	0.0	65.0	66	65.0	10		65.0	0.0	8	-8.0
NSA5-27	90	1	0.0	68.4	66	68.4	10	Snd Lvl	68.4	0.0	8	-8.0
NSA5-28	91	2	0.0	66.9	66	66.9	10	Snd Lvl	66.9	0.0	8	-8.0
NSA5-32	94	2	0.0	64.2	66	64.2	10		64.2	0.0	8	-8.0
NSA5-33	95	3	0.0	63.3	66	63.3	10		63.3	0.0	8	-8.0
NSA5-34	96	3	0.0	63.7	66	63.7	10		63.7	0.0	8	-8.0
NSA5-35	97	2	0.0	64.1	66	64.1	10		64.1	0.0	8	-8.0
NSA5-36	98	2	0.0	63.7	66	63.7	10		63.7	0.0	8	-8.0
NSA5-37	99	1	0.0	64.6	66	64.6	10		64.6	0.0	8	-8.0
NSA5-38	100	2	0.0	63.7	66	63.7	10		63.7	0.0	8	-8.0
NSA5-39	101	1	0.0	31.8	66	31.8	10		31.8	0.0	8	-8.0
NSA5-40	102	2	0.0	31.2	66	31.2	10		31.2	0.0	8	-8.0
NSA5-42	103	1	0.0	64.9	66	64.9	10		64.9	0.0	8	-8.0
NSA5-43	104	2	0.0	65.3	66	65.3	10		65.3	0.0	8	-8.0
NSA5-44	105	1	0.0	64.1	66	64.1	10		64.1	0.0	8	-8.0
NSA5-45	106	1	0.0	66.8	66	66.8	10	Snd Lvl	66.8	0.0	8	-8.0
Dwelling Units		# DUs	Noise Red	duction								
			Min	Avg	Max							
			dB	dB	dB							
All Selected		80	0.0	0.0	0.0							
All Impacted		38	0.0	0.0	0.0							
All that meet NR Goal		0	0.0	0.0	0.0					i		

Lawhon & Assoc						1	August 2	017				
CMCox						'т	NM 2.5					
INPUT: RECEIVERS												
PROJECT/CONTRACT:	SUM-I	76 Cen	tral Interchar	nge (101402)	1							
RUN:	Existi	ng Yea	r 2020 NSA 5									
Receiver												
Name	No.	#DUs	Coordinates	(ground)		H	eight	Input Sou	nd Levels	and Criteri	a	Active
			X	Y	Z	al	bove	Existing	Impact Cr	riteria	NR	in
						G	round	LAeq1h	LAeq1h	Sub'l	Goal	Calc.
			ft	ft	ft	ft		dBA	dBA	dB	dB	
NSA5-1	36	1	2,240,552.0	509,963.0	1,034	.00	4.92	0.00	66	6 10.0	) 8.(	D
NSA5-2	37	1	2,240,657.0	509,968.0	1,035	5.00	4.92	0.00	66	6 10.0	) 8.(	D
NSA5-3 church indoor	38	1	2,240,710.0	509,967.0	1,036	6.00	4.92	0.00	66	6 10.0	) 8.(	0
NSA5-4	39	2	2,240,880.0	509,959.0	1,036	6.00	4.92	0.00	66	6 10.0	) 8.(	0
NSA5-5	41	2	2,241,041.0	509,977.0	1,040	0.00	4.92	0.00	66	6 10.0	) 8.(	0
NSA5-6	43	2	2,241,385.0	509,972.0	1,044	.00	4.92	0.00	66	6 10.0	) 8.(	0
NSA5-7	45	2	2,241,507.0	509,963.0	1,046	6.00	4.92	0.00	66	6 10.0	) 8.(	D
NSA5-8	46	1	2,241,582.0	509,950.0	1,046	6.00	4.92	0.00	66	6 10.0	) 8.(	0
NSA5-9	47	1	2,240,476.0	509,817.0	1,034	.00	4.92	0.00	66	6 10.0	) 8.(	D
NSA5-10	49	3	2,240,557.0	509,824.0	1,035	5.00	4.92	0.00	66	6 10.0	) 8.(	0
NSA5-11	51	3	2,240,846.0	509,824.0	1,037	.00	4.92	0.00	66	6 10.0	) 8.(	D
NSA5-12	53	4	2,240,938.0	509,822.0	1,037	.00	4.92	0.00	66	6 10.0	) 8.(	0
NSA5-13	54	2	2,241,074.0	509,830.0	1,037	.00	4.92	0.00	66	6 10.0	) 8.(	0
NSA5-14	56	2	2,241,887.0	509,849.0	1,050	0.00	4.92	0.00	66	6 10.0	) 8.(	0
NSA5-15	58	2	2,241,955.0	509,850.0	1,052	2.00	4.92	0.00	66	6 10.0	) 8.(	0
NSA5-16	59	2	2,240,465.0	509,645.0	1,036	6.00	4.92	0.00	66	6 10.0	) 8.(	0
NSA5-17	60	2	2,240,634.0	509,648.0	1,039	0.00	4.92	0.00	66	6 10.0	) 8.(	D
NSA5-18	61	3	2,240,723.0	509,652.0	1,041	.00	4.92	0.00	66	6 10.0	) 8.(	D
NSA5-19	62	2	2,240,961.0	509,719.0	1,040	0.00	4.92	0.00	66	6 10.0	) 8.(	D
NSA5-22	63	3	2,241,274.0	509,667.0	1,043	3.00	4.92	0.00	66	6 10.0	) 8.(	0
NSA5-23	64	1	2,241,355.0	509,703.0	1,043	3.00	4.92	0.00	66	6 10.0	) 8.(	0
NSA5-24	65	1	2,241,568.0	509.791.0	1.046	6.00	4.92	0.00	66	6 10.0	) 8.0	0

INPUT: RECEIVERS					S	UM-I76 Ce	ntral Interc	hange (10 <sup>-</sup>	1402)		
NSA5-25	66	1	2,241,560.0	509,752.0	1,046.00	4.92	0.00	66	10.0	8.0	
NSA5-26	83	2	2,241,565.0	509,656.0	1,048.00	4.92	0.00	66	10.0	8.0	
NSA5-29	84	1	2,240,468.0	509,579.0	1,036.00	4.92	0.00	66	10.0	8.0	
NSA5-30	85	2	2,240,635.0	509,546.5	1,041.00	4.92	0.00	66	10.0	8.0	
NSA5-31	86	1	2,240,724.0	509,531.0	1,050.00	4.92	0.00	66	10.0	8.0	
NSA5-20	87	2	2,240,955.0	509,639.0	1,042.00	4.92	0.00	66	10.0	8.0	
NSA5-21	88	2	2,241,026.0	509,647.0	1,040.00	4.92	0.00	66	10.0	8.0	
NSA5-27	90	1	2,241,732.0	509,728.0	1,053.00	4.92	0.00	66	10.0	8.0	
NSA5-28	91	2	2,241,726.0	509,655.0	1,054.00	4.92	0.00	66	10.0	8.0	
NSA5-32	94	2	2,240,954.0	509,517.0	1,050.00	4.92	0.00	66	10.0	8.0	
NSA5-33	95	3	2,240,951.0	509,409.0	1,056.00	4.92	0.00	66	10.0	8.0	
NSA5-34	96	3	2,241,025.0	509,540.0	1,043.00	4.92	0.00	66	10.0	8.0	Y
NSA5-35	97	2	2,241,274.0	509,525.0	1,048.00	4.92	0.00	66	10.0	8.0	
NSA5-36	98	2	2,241,272.0	509,446.0	1,054.00	4.92	0.00	66	10.0	8.0	
NSA5-37	99	1	2,241,345.0	509,587.0	1,045.00	4.92	0.00	66	10.0	8.0	Y
NSA5-38	100	2	2,241,343.0	509,491.0	1,048.00	4.92	0.00	66	10.0	8.0	Y
NSA5-39	101	1	2,241,530.0	509,583.0	0.00	4.92	0.00	66	10.0	8.0	Y
NSA5-40	102	2	2,241,528.0	509,491.0	0.00	4.92	0.00	66	10.0	8.0	Y
NSA5-42	103	1	2,241,567.0	509,561.0	1,049.00	4.92	0.00	66	10.0	8.0	Y
NSA5-43	104	2	2,241,746.0	509,571.0	1,054.00	4.92	0.00	66	10.0	8.0	Y
NSA5-44	105	1	2,241,737.0	509,482.0	1,055.00	4.92	0.00	66	10.0	8.0	Y
NSA5-45	106	1	2,241,846.0	509,659.0	1,055.00	4.92	0.00	66	10.0	8.0	Y

Lawhon & Assoc.					1 August 2017	7
CMCox					TNM 2.5	
INPUT: BUILDING ROWS						
PROJECT/CONTRACT:	SUM-176 Ce	entral Interch	ange (*	101402)		
RUN:	Existing Ye	ar 2020 NSA	5			
Building Row			Points	•		
Name	Average	Building	No.	Coordinates (	ground)	
	Height	Percent		X	Y	Z
	ft	%		ft	ft	ft
South Street ns	18.00	70	11	2,240,842.0	509,934.0	1,036.00
			12	2,241,745.0	509,946.0	1,046.00
South Street ss1	20.00	80	14	2,240,408.0	509,794.0	1,034.00
			16	2,240,603.0	509,804.0	1,035.00
South Street ss2	18.00	80	17	2,240,717.0	509,802.0	1,037.00
			18	2,240,957.0	509,802.0	1,037.00
South Street ss3	18.00	60	19	2,241,027.0	509,809.0	1,037.00
			20	2,241,282.0	509,807.0	1,039.00
South Street ss4	18.00	50	21	2,241,346.0	509,806.0	1,039.00
			22	2,241,534.0	509,816.0	1,043.00
South Street ss5	20.00	80	23	2,241,811.0	509,816.0	1,050.00
			24	2,241,972.0	509,824.0	1,052.00



SUM-I76 Central Interchange (101402)

Lawhon & Assoc.							1 August 2	2017				
CMCox							TNM 2.5					
							Calculated	d with TNN	1 2.5			
<b>RESULTS: SOUND LEVELS</b>												
PROJECT/CONTRACT:		SUM-I7	6 Central II	nterchange (1	01402)							
RUN:		Existin	g Year 2020	0 NSA 6								
BARRIER DESIGN:		INPUT	HEIGHTS					Average p	pavement type	e shall be use	d unless	
								a State hi	ghway agency	substantiate	es the use	•
ATMOSPHERICS:		68 deg	F, 50% RH					of a differ	ent type with	approval of F	HWA.	
Receiver												
Name	No.	#DUs	Existing	No Barrier					With Barrier			
			LAeq1h	LAeq1h		Increase over	existing	Туре	Calculated	Noise Reduc	tion	
				Calculated	Crit'n	Calculated	Crit'n	Impact	LAeq1h	Calculated	Goal	Calculated
							Sub'l Inc					minus
												Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
NSA 6-1	61	2	0.0	65.8	66	65.8	3 10		65.8	0.0	)	4 -4.5
NSA 6-2	62	2	0.0	62.9	66	62.9	9 10		62.9	0.0		4 -4.5
NSA 6-3	63	2	0.0	61.6	66	61.6	6 10		61.6	0.0		4 -4.5
NSA 6-4	65	2	0.0	63.5	66	63.5	5 10		63.5	0.0		4 -4.5
NSA 6-5	66	2	0.0	62.0	66	62.0	) 10		62.0	0.0		4 -4.5
NSA 6-6	67	2	0.0	71.4	66	6 71.4	10	Snd Lvl	71.4	0.0		4 -4.5
NSA 6-7	68	3	0.0	64.0	66	64.0	) 10		64.0	0.0		4 -4.5
NSA 6-8	69	2	0.0	67.8	66	67.8	3 10	Snd Lvl	67.8	0.0		4 -4.5
NSA 6-9	70	2	0.0	63.5	66	63.5	5 10		63.5	0.0		4 -4.5
NSA 6-10	71	1	0.0	69.2	66	69.2	2 10	Snd Lvl	69.2	0.0		4 -4.5
NSA 6-11	72	2	0.0	66.4	66	66.4	1 10	Snd Lvl	66.4	0.0		4 -4.5
NSA 6-12	73	2	0.0	61.1	66	61.1	I 10		61.1	0.0		4 -4.5
NSA 6-13	74	2	0.0	64.3	66	64.3	3 10		64.3	0.0		4 -4.5
NSA 6-14	77	2	0.0	67.0	66	67.0	) 10	Snd Lvl	67.0	0.0		4 -4.5
NSA 6-15	78	2	0.0	65.8	66	65.8	3 10		65.8	0.0		4 -4.5
NSA 6-16	79	3	0.0	63.5	66	63.5	5 10		63.5	0.0		4 -4.5
NSA 6-17	80	1	0.0	61.7	66	61.7	7 10		61.7	0.0		4 -4.5
NSA 6-18	83	1	0.0	68.0	66	68.0	0 10	Snd Lvl	68.0	0.0		4 -4.5
NSA 6-19	84	2	0.0	65.7	66	65.7	7 10		65.7	0.0		4 -4.5
NSA 6-20	85	2	0.0	63.8	66	63.8	3 10		63.8	0.0		4 -4.5
NSA 6-21	86	3	0.0	62.2	66	62.2	2 10		62.2	0.0		4 -4.5
NSA 6-22	87	2	0.0	65.9	66	65.9	9 10		65.9	0.0		4 -4.5
NSA 6-23	88	3	0.0	64.9	66	64.9	) 10		64.9	0.0		4 -4.5
NSA 6-24	89	1	0.0	63.3	66	63.3	3 10		63.3	0.0		4 -4.5

E:\Lawhon\SUM-IR 76 Central Interchange (101402)\Ex Yr TNM\NSA 6 2020

RESULTS: SOUND LEVELS					S	UM-I76 Cen	tral Interc	hange (10140	2)	
NSA 6-25 9	1 2	0.0	64.8	66	64.8	10		64.8	0.0	4
NSA 6-26 9	2 2	0.0	63.8	66	63.8	10		63.8	0.0	4
NSA 6-27 9	3 2	0.0	67.2	66	67.2	10	Snd Lvl	67.2	0.0	4
NSA 6-28 94	4 3	0.0	67.1	66	67.1	10	Snd Lvl	67.1	0.0	4
NSA 6-29 9	3 3	0.0	69.4	66	69.4	10	Snd Lvl	69.4	0.0	4
NSA 6-30 99	9 1	0.0	68.9	66	68.9	10	Snd Lvl	68.9	0.0	4
NSA 6-31 10	) 3	0.0	67.7	66	67.7	10	Snd Lvl	67.7	0.0	4
NSA 6-32 10	1 2	0.0	67.5	66	67.5	10	Snd Lvl	67.5	0.0	4
NSA 6-33 10	2 1	0.0	67.8	66	67.8	10	Snd Lvl	67.8	0.0	4
NSA 6-34 10	3 3	0.0	64.5	66	64.5	10		64.5	0.0	4
NSA 6-35 10	5 2	0.0	64.8	66	64.8	10		64.8	0.0	4
NSA 6-36 10	6 2	0.0	65.2	66	65.2	10		65.2	0.0	4
NSA 6-37 10	7 2	0.0	66.4	66	66.4	10	Snd Lvl	66.4	0.0	4
NSA 6-38 10	3 2	0.0	63.2	66	63.2	10		63.2	0.0	4
NSA 6-39 10	9 3	0.0	66.0	66	66.0	10	Snd Lvl	66.0	0.0	4
NSA 6-40 11	) 1	0.0	65.5	66	65.5	10		65.5	0.0	4
NSA 6-41 11	1 2	0.0	65.3	66	65.3	10		65.3	0.0	4
NSA 6-42 112	2 2	0.0	63.2	66	63.2	10		63.2	0.0	4
NSA 6-43 11	3 2	0.0	62.2	66	62.2	10		62.2	0.0	4
NSA 6-44 11-	1 2	0.0	61.0	66	61.0	10		61.0	0.0	4
NSA 6-45 11	5 4	0.0	63.3	66	63.3	10		63.3	0.0	4
NSA 6-46 11	6 1	0.0	61.9	66	61.9	10		61.9	0.0	4
NSA 6-47 11	7 1	0.0	63.9	66	63.9	10		63.9	0.0	4
NSA 6-48 11	3 3	0.0	62.3	66	62.3	10		62.3	0.0	4
NSA 6-49 11	9 2	0.0	60.9	66	60.9	10		60.9	0.0	4
NSA 6-50 12	) 1	0.0	63.6	66	63.6	10		63.6	0.0	4
NSA 6-51 12	1 2	0.0	63.5	66	63.5	10		63.5	0.0	4
NSA 6-52 12	2 2	0.0	43.4	66	43.4	10		43.4	0.0	4
NSA 6-53 12	3 2	0.0	44.4	66	44.4	10		44.4	0.0	4
Dwelling Units	# DUs	Noise Re	duction							
		Min	Avg	Max						
		dB	dB	dB						
All Selected	108	0.0	0.0	0.0						
All Impacted	30	0.0	0.0	0.0						

0.0

0

0.0

0.0

All that meet NR Goal

-4.5 -4.5

Lawhon & Assoc.						1 August	2017				
CMCox						TNM 2.5					
INPUT: RECEIVERS											
PROJECT/CONTRACT:	SUM-I	76 Cen	tral Interchar	nge (101402)	I						
RUN:	Existi	ng Yea	r 2020 NSA 6	• • •							
Receiver											
Name	No.	#DUs	Coordinates	(ground)		Height	Input Sou	nd Levels a	and Criteria	a	Activ
			X	Y	Z	above	Existing	Impact Cr	iteria	NR	in
						Ground	LAeq1h	LAeq1h	Sub'l	Goal	Calc.
			ft	ft	ft	ft	dBA	dBA	dB	dB	
NSA 6-1	61	2	2,243,367.0	508,939.0	1,101.00	4.92	0.00	66	10.0	4.5	5
NSA 6-2	62	2	2,243,458.0	508,953.0	1,102.00	4.92	0.00	66	10.0	4.5	5
NSA 6-3	63	2	2,243,537.0	508,942.0	1,103.00	4.92	0.00	66	10.0	4.5	5
NSA 6-4	65	2	2,243,496.0	509,111.0	1,102.00	4.92	0.00	66	10.0	4.5	5
NSA 6-5	66	2	2,243,581.0	509,115.0	1,103.00	4.92	0.00	66	10.0	4.5	5
NSA 6-6	67	2	2,243,408.0	509,240.0	1,108.00	4.92	0.00	66	10.0	4.5	5
NSA 6-7	68	3	2,243,564.0	509,234.0	1,102.00	4.92	0.00	66	10.0	4.5	5
NSA 6-8	69	2	2,243,503.0	509,330.0	1,103.00	4.92	0.00	66	10.0	4.5	5
NSA 6-9	70	2	2,243,670.0	509,332.0	1,100.00	4.92	0.00	66	10.0	4.5	5
NSA 6-10	71	1	2,243,532.0	509,398.0	1,100.00	4.92	0.00	66	10.0	4.5	5
NSA 6-11	72	2	2,243,656.0	509,422.0	1,100.00	4.92	0.00	66	10.0	4.5	5
NSA 6-12	73	2	2,243,804.0	509,334.0	1,100.00	4.92	0.00	66	10.0	4.5	5
NSA 6-13	74	2	2,243,804.0	509,419.0	1,103.00	4.92	0.00	66	10.0	4.5	5
NSA 6-14	77	2	2,243,808.0	509,499.0	1,103.00	4.92	0.00	66	10.0	4.5	5
NSA 6-15	78	2	2,244,013.0	509,547.0	1,098.00	4.92	0.00	66	10.0	4.5	5
NSA 6-16	79	3	2,244,008.0	509,467.0	1,098.00	4.92	0.00	66	10.0	4.5	5
NSA 6-17	80	1	2,244,006.0	509,382.0	1,098.00	4.92	0.00	66	10.0	4.5	5
NSA 6-18	83	1	2,244,139.0	509,695.0	1,097.00	4.92	0.00	66	10.0	4.5	5
NSA 6-19	84	2	2,244,144.0	509,625.0	1,097.00	4.92	0.00	66	10.0	4.5	5
NSA 6-20	85	2	2,244,145.0	509,538.0	1,097.00	4.92	0.00	66	10.0	4.5	5
NSA 6-21	86	3	2,244,145.0	509,446.0	1,097.00	4.92	0.00	66	10.0	4.5	5
NSA 6-22	87	2	2.244.341.0	509.665.0	1.100.00	4.92	0.00	66	10.0	4.5	5

INPUT: RECEIVERS							S	SUM-I76 Ce	ntral Interch	ange (101402)
NSA 6-23	88	3	2,244,339.0	509,567.0	1,101.00	4.92	0.00	66	10.0	4.5
NSA 6-24	89	1	2,244,339.0	509,447.0	1,101.00	4.92	0.00	66	10.0	4.5
NSA 6-25	91	2	2,244,460.0	509,541.0	1,105.00	4.92	0.00	66	10.0	4.5
NSA 6-26	92	2	2,244,454.0	509,455.0	1,105.00	4.92	0.00	66	10.0	4.5
NSA 6-27	93	2	2,244,546.0	509,732.0	1,105.00	4.92	0.00	66	10.0	4.5
NSA 6-28	94	3	2,244,640.0	509,737.0	1,108.00	4.92	0.00	66	10.0	4.5
NSA 6-29	98	3	2,244,635.0	509,855.0	1,108.00	4.92	0.00	66	10.0	4.5
NSA 6-30	99	1	2,244,783.0	509,933.0	1,108.00	4.92	0.00	66	10.0	4.5
NSA 6-31	100	3	2,244,847.0	509,863.0	1,112.00	4.92	0.00	66	10.0	4.5
NSA 6-32	101	2	2,244,943.0	509,864.0	1,118.00	4.92	0.00	66	10.0	4.5
NSA 6-33	102	1	2,245,020.0	509,940.0	1,120.00	4.92	0.00	66	10.0	4.5
NSA 6-34	103	3	2,245,174.0	509,865.0	1,126.00	4.92	0.00	66	10.0	4.5
NSA 6-35	105	2	2,245,305.0	509,864.0	1,155.00	4.92	0.00	66	10.0	4.5
NSA 6-36	106	2	2,244,671.0	509,578.0	1,110.00	4.92	0.00	66	10.0	4.5
NSA 6-37	107	2	2,244,657.0	509,499.0	1,137.00	4.92	0.00	66	10.0	4.5
NSA 6-38	108	2	2,244,651.0	509,424.0	1,110.00	4.92	0.00	66	10.0	4.5
NSA 6-39	109	3	2,244,780.0	509,663.0	1,113.00	4.92	0.00	66	10.0	4.5 Y
NSA 6-40	110	1	2,244,935.0	509,736.0	1,117.00	4.92	0.00	66	10.0	4.5 Y
NSA 6-41	111	2	2,244,985.0	509,662.0	1,125.00	4.92	0.00	66	10.0	4.5 Y
NSA 6-42	112	2	2,244,777.0	509,499.0	1,112.00	4.92	0.00	66	10.0	4.5 Y
NSA 6-43	113	2	2,244,777.0	509,422.0	1,112.00	4.92	0.00	66	10.0	4.5 Y
NSA 6-44	114	2	2,244,777.0	509,339.0	1,112.00	4.92	0.00	66	10.0	4.5 Y
NSA 6-45	115	4	2,244,978.0	509,462.0	1,129.00	4.92	0.00	66	10.0	4.5 Y
NSA 6-46	116	1	2,244,979.0	509,336.0	1,130.00	4.92	0.00	66	10.0	4.5 Y
NSA 6-47	117	1	2,245,098.0	509,646.0	1,132.00	4.92	0.00	66	10.0	4.5 Y
NSA 6-48	118	3	2,245,107.0	509,518.0	1,132.00	4.92	0.00	66	10.0	4.5 Y
NSA 6-49	119	2	2,245,099.0	509,383.0	1,133.00	4.92	0.00	66	10.0	4.5 Y
NSA 6-50	120	1	2,245,208.0	509,732.0	1,140.00	4.92	0.00	66	10.0	4.5 Y
NSA 6-51	121	2	2,245,302.0	509,741.0	1,154.00	4.92	0.00	66	10.0	4.5 Y
NSA 6-52	122	2	2,245,292.0	509,583.0	1,062.00	4.92	0.00	66	10.0	4.5 Y
NSA 6-53	123	2	2,245,288.0	509,507.0	1,063.00	4.92	0.00	66	10.0	4.5 Y

Lawhon & Assoc.					1 August 2017	-	
СМСох					TNM 2.5		
INPUT: BUILDING ROWS							
PROJECT/CONTRACT:	SUM-I76 Ce						
RUN:	Existing Ye						
Building Row			Points				
Name	Average	Building	No. Coordinates		ground)		
	Height	Percent		X	Y	Z	
	ft	%		ft	ft	ft	
Hoban High School	30.00	80	1	2,245,509.0	509,985.0	1,163.00	
			2	2,245,486.0	510,101.0	1,164.00	
			3	2,245,507.0	510,109.0	1,165.00	
			4	2,245,494.0	510,220.0	1,165.00	
			5	2,245,579.0	510,231.0	1,167.00	
			6	2,245,577.0	510,266.0	1,167.00	
			7	2,245,905.0	510,300.0	1,166.00	
			8	2,245,912.0	510,268.0	1,166.00	
			9	2,245,969.0	510,272.0	1,163.00	
			10	2,245,993.0	510,056.0	1,163.00	
Lafallette rd	16.00	80	24	2,243,333.0	508,910.0	1,101.00	
			25	2,243,580.0	508,912.0	1,103.00	
E Crosier ss	18.00	60	26	2,243,439.0	509,076.0	1,102.00	
			27	2,243,724.0	509,090.0	1,104.00	
Corice St ns	18.00	60	28	2,243,510.0	509,200.0	1,102.00	
			29	2,243,609.0	509,202.0	1,104.00	
Hammel Street	20.00	70	30	2,243,698.0	509,452.0	1,104.00	
			31	2,243,700.0	509,199.0	1,102.00	
Hammel Street es	18.00	70	32	2,243,833.0	509,539.0	1,102.00	
			33	2,243,826.0	509,187.0	1,105.00	
Inman St ws	18.00	60	34	2,244,369.0	509,703.0	1,100.00	
			35	2,244,359.0	509,509.0	1,101.00	
Gridley St ws	18.00	70	36	2,244,044.0	509,588.0	1,097.00	
			37	2,244,038.0	509,346.0	1,099.00	

INPUT: BUILDING ROWS					SUM-I76 Central Int		
Gridley es	20.00	70	38	2,244,169.0	509,699.0	1,097.00	
			39	2,244,169.0	509,386.0	1,098.00	
Fifth Avenue ns	18.00	70	40	2,244,793.0	509,827.0	1,100.00	
			41	2,245,069.0	509,833.0	1,124.00	
			42	2,245,353.0	509,837.0	1,155.00	
Fifth Ave ss	18.00	60	43	2,244,509.0	509,713.0	1,105.00	
			44	2,244,699.0	509,708.0	1,104.00	


**RESULTS: SOUND LEVELS** 

SUM-I76 Central Interchange (101402)

1

Lawhon & Assoc.							1 August	2017				
CMCox							TNM 2.5					
							Calculated	d with TNN	1 2.5			
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		SUM-I7	6 Central I	nterchange (1	01402)							
RUN:		Existin	g Year 202	0 NSA 4 and 7	7							
BARRIER DESIGN:		INPUT	HEIGHTS					Average p	pavement type	e shall be use	d unless	
								a State hi	ghway agency	/ substantiate	es the use	
ATMOSPHERICS:		68 deg	F, 50% RH	l .				of a differ	ent type with	approval of F	HWA.	
Receiver												
Name	No.	#DUs	Existing	No Barrier					With Barrier			
			LAeq1h	LAeq1h		Increase over	existing	Туре	Calculated	Noise Reduc	tion	
				Calculated	Crit'n	Calculated	Crit'n	Impact	LAeq1h	Calculated	Goal	Calculated
							Sub'l Inc					minus
												Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
football west bleachers	110	1	0.0	64.0	) 6	64.0	) 10		64.0	0.0	)	4 -4.5
football east bleachers	111	1	0.0	65.1	6	65.1	1 10		65.1	0.0	) 4	4 -4.5
baseball home plate	112	1	0.0	64.3	8 6	64.3	3 10		64.3	0.0	) 4	4 -4.5
baseball west bleachers	113	1	0.0	64.0	) 6	64.0	) 10		64.0	0.0	) 4	4 -4.5
tennis courts	114	1	0.0	58.3	6	6 58.3	3 10		58.3	0.0	) 4	4 -4.5
Hoban HS indoor	115	1	0.0	52.4	6	6 52.4	4 10		52.4	0.0	) 4	4 -4.5
Track & Field West	116	1	0.0	68.0	) 6	68.0	) 10	Snd Lvl	68.0	0.0	) 4	4 -4.5
Track & Field East	117	1	0.0	69.1	6	69.1	1 10	Snd Lvl	69.1	0.0	) 4	4 -4.5
Trail	118	1	0.0	63.7	6	66 63.7	7 10		63.7	0.0	) 4	4 -4.5
Memorial	119	1	0.0	68.6	6 6	68.6	6 10	Snd Lvl	68.6	0.0	) 4	4 -4.5
Dwelling Units		# DUs	Noise Re	duction								
			Min	Avg	Max							
			dB	dB	dB							
All Selected		10	0.0	0.0	0 0	.0						
All Impacted		3	8 0.0	0.0	0 0	.0						
All that meet NR Goal		0	0.0	0.0	0 0	.0						

### INPUT: RECEIVERS

Lawhon & Assoc.						1 August	2017					
CMCox						TNM 2.5						
INPUT: RECEIVERS												
PROJECT/CONTRACT:	SUM-I	76 Cen	ntral Interchar	nge (101402)								
RUN:	Existi	ng Yea	r 2020 NSA 4	and 7								
Receiver												
Name	No.	#DUs	Coordinates	(ground)		Height	Input Sou	nd Levels a	and Criteria	a	A	ctive
			X	Y	Z	above	Existing	Impact Cr	iteria	NR	ir	n
						Ground	LAeq1h	LAeq1h	Sub'l	Goal	С	alc.
			ft	ft	ft	ft	dBA	dBA	dB	dB		
football west bleachers	110	1	2,244,613.0	510,605.0	1,101.00	4.92	2 0.00	66	6 10.0	4	4.5	Y
football east bleachers	111	1	2,244,936.0	510,612.0	1,101.00	) 4.92	2 0.00	66	6 10.0	4	4.5	Y
baseball home plate	112	1	2,245,144.0	510,591.0	1,100.00	4.92	2 0.00	66	6 10.0	4	4.5	Y
baseball west bleachers	113	1	2,245,012.0	510,675.0	1,100.00	4.92	2 0.00	66	6 10.0	4	4.5	Y
tennis courts	114	1	2,246,178.0	510,195.8	1,150.00	4.92	2 0.00	66	6 10.0	4	4.5	Y
Hoban HS indoor	115	1	2,245,731.2	2 510,247.0	1,168.00	4.92	2 0.00	66	6 10.0	4	4.5	Y
Track & Field West	116	1	2,245,567.0	510,568.0	1,144.00	4.92	2 0.00	66	6 10.0	4	4.5	Y
Track & Field East	117	1	2,245,751.0	510,599.0	1,144.00	4.92	2 0.00	66	i 10.0	4	4.5	Y
Trail	118	1	2,245,627.0	510,695.0	1,143.00	4.92	2 0.00	66	i 10.0	4	4.5	Y
Memorial	119	1	2,245,176.0	510,466.0	1,118.00	) 4.92	2 0.00	66	6 10.0	4	4.5	Y

# NSA 8



**RESULTS: SOUND LEVELS** 

SUM-I76 Central Interchange (101402)

Lawhon & Assoc.							1 August 2	2017				
CMCox							TNM 2.5					
							Calculated	d with TNN	1 2.5			
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		SUM-I7	6 Central I	nterchange (1	01402)							
RUN:		Existin	g Year 202	0 NSA 8								
BARRIER DESIGN:		INPUT	HEIGHTS					Average p	avement type	e shall be use	d unless	
								a State high	ghway agency	y substantiate	es the use	Э
ATMOSPHERICS:		68 deg	g F, 50% RH					of a differ	ent type with	approval of F	HWA.	
Receiver												
Name	No.	#DUs	Existing	No Barrier					With Barrier			
		ĺ	LAeq1h	LAeq1h		Increase over	existing	Туре	Calculated	Noise Reduc	tion	
				Calculated	Crit'n	Calculated	Crit'n	Impact	LAeq1h	Calculated	Goal	Calculated
							Sub'l Inc					minus
												Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
NSA 8-1	1		1 0.0	69.6	66	69.6	6 10	Snd Lvl	69.6	0.0		8 -8.0
NSA 8-2	2		1 0.0	69.2	2 66	69.2	2 10	Snd Lvl	69.2	0.0		8 -8.0
NSA 8-3	3	2	2 0.0	69.3	66	69.3	3 10	Snd Lvl	69.3	0.0		8 -8.0
NSA 8-4	4		1 0.0	67.5	5 66	67.5	5 10	Snd Lvl	67.5	0.0		8 -8.0
NSA 8-5	5		1 0.0	66.6	66 66	66.6	6 10	Snd Lvl	66.6	0.0		8 -8.0
NSA 8-6	6		1 0.0	63.2	2 66	63.2	2 10		63.2	0.0		8 -8.0
NSA 8-7	7		1 0.0	62.9	66	62.9	10		62.9	0.0		8 -8.0
NSA 8-8	8		1 0.0	64.6	66	64.6	6 10		64.6	0.0		8 -8.0
NSA 8-9	9		1 0.0	69.0	66	69.0	10	Snd Lvl	69.0	0.0		8 -8.0
NSA 8-10	10		1 0.0	65.3	66	65.3	3 10		65.3	0.0		8 -8.0
NSA 8-11	11		1 0.0	64.4	66	64.4	10		64.4	0.0		8 -8.0
NSA 8-12	12		1 0.0	68.1	66	68.1	10	Snd Lvl	68.1	0.0	L	8 -8.0
NSA 8-13	13		1 0.0	64.5	5 66	64.5	5 10		64.5	0.0		8 -8.0
NSA 8-14	14		1 0.0	63.2	2 66	63.2	2 10		63.2	0.0		8 -8.0
NSA 8-15	15		1 0.0	67.6	6 66	67.6	5 10	Snd Lvl	67.6	0.0		8 -8.0
NSA 8-16	16		1 0.0	63.4	66	63.4	10		63.4	0.0	L	8 -8.0
NSA 8-17	17		1 0.0	68.5	66	68.5	5 10	Snd Lvl	68.5	0.0		8 -8.0
NSA 8-18	18		1 0.0	65.3	66	65.3	10		65.3	0.0		8 -8.0
NSA 8-19	19		1 0.0	63.2	2 66	63.2	2 10		63.2	0.0		8 -8.0
	20	· · · · ·		69.2		69.2	10	Snd Lvl	69.2	0.0	<u></u>	<u>× -8.0</u>
NSA 8-21	21	· · · ·	1 0.0	64.8	s 66	64.8	<u>s 10</u>		64.8	0.0	<u> </u>	<u>8</u> -8.0
NSA 8-22	22	· · · ·		69.8	66	69.8		Snd Lvl	69.8	0.0		× -8.0
NSA 8-23	23			67.4	- 66	67.4		Snd Lvl	67.4	0.0		<u>× -8.0</u>
NSA 8-24	24		I U.U	65.5	66	65.5	o <sub> </sub> 10		65.5	0.0		o -8.0

RESULTS: SOUND LEVELS						S	SUM-I76 Cer	ntral Interch	ange (101402)	)		
NSA 8-25	25	1	0.0	70.4	4 66	70.4	10	Snd Lvl	70.4	0.0	8	-8.0
NSA 8-26	26	1	0.0	68.	3 66	68.3	10	Snd Lvl	68.3	0.0	8	-8.0
NSA 8-27	27	1	0.0	65.	8 66	65.8	10		65.8	0.0	8	-8.0
NSA 8-28	28	1	0.0	66.	8 66	66.8	10	Snd Lvl	66.8	0.0	8	-8.0
NSA 8-29	29	1	0.0	65.	1 66	65.1	10		65.1	0.0	8	-8.0
NSA 8-30	30	1	0.0	69.	0 66	69.0	10	Snd Lvl	69.0	0.0	8	-8.0
NSA 8-31	31	1	0.0	68.	5 66	68.5	10	Snd Lvl	68.5	0.0	8	-8.0
NSA 8-32	32	1	0.0	66.	0 66	66.0	10	Snd Lvl	66.0	0.0	8	-8.0
NSA 8-33	33	1	0.0	68.	3 66	68.3	10	Snd Lvl	68.3	0.0	8	-8.0
NSA 8-34	34	1	0.0	65.	8 66	65.8	10		65.8	0.0	8	-8.0
NSA 8-35	35	1	0.0	63.3	2 66	63.2	10		63.2	0.0	8	-8.0
NSA 8-36	36	1	0.0	61.9	9 66	61.9	10		61.9	0.0	8	-8.0
NSA 8-37	37	1	0.0	61.	3 66	61.3	10		61.3	0.0	8	-8.0
NSA 8-38	38	1	0.0	62.3	3 66	62.3	10		62.3	0.0	8	-8.0
NSA 8-39	39	1	0.0	62.	5 66	62.5	10		62.5	0.0	8	-8.0
NSA 8-40	40	1	0.0	61.	0 66	61.0	10		61.0	0.0	8	-8.0
NSA 8-41	41	1	0.0	63.	5 66	63.5	10		63.5	0.0	8	-8.0
NSA 8-42	42	1	0.0	62.	0 66	62.0	10		62.0	0.0	8	-8.0
NSA 8-43	43	1	0.0	63.	6 66	63.6	10		63.6	0.0	8	-8.0
NSA 8-44	44	1	0.0	62.	0 66	62.0	10		62.0	0.0	8	-8.0
NSA 8-45	45	1	0.0	63.	5 66	63.5	10		63.5	0.0	8	-8.0
NSA 8-46	46	1	0.0	61.	0 66	61.0	10		61.0	0.0	8	-8.0
NSA 8-47	47	1	0.0	64.	1 66	64.1	10		64.1	0.0	8	-8.0
NSA 8-48	48	1	0.0	61.	0 66	61.0	10		61.0	0.0	8	-8.0
NSA 8-49	49	1	0.0	62.	8 66	62.8	10		62.8	0.0	8	-8.0
NSA8-50	50	1	0.0	62.8	8 66	62.8	10		62.8	0.0	8	-8.0
Dwelling Units		# DUs	Noise Red	duction								
			Min	Avg	Мах							
			dB	dB	dB							
All Selected		51	0.0	0.0	0.0					i		
All Impacted		20	0.0	0.0	0.0							
All that meet NR Goal		0	0.0	0.0	0.0							

### INPUT: RECEIVERS

						,					
Lawhon & Assoc.						1 August	2017				
СМСох						TNM 2.5					
INPUT: RECEIVERS											
PROJECT/CONTRACT:	SUM-I	76 Cen	tral Interchar	nge (101402)	1						
RUN:	Existi	ng Yea	r 2020 NSA 8							-	
Receiver											
Name	No.	#DUs	Coordinates	(ground)		Height	Input Sou	nd Levels	and Criteria	3	Active
			х	Y	Z	above	Existing	Impact Cr	riteria	NR	in
						Ground	LAeq1h	LAeq1h	Sub'l	Goal	Calc.
				-	-	-					
			ft	ft	ft	ft	dBA	dBA	dB	dB	
NSA 8-1	1	1	2,241,861.0	509,848.0	1,051.00	4.92	0.00	66	3 10.0	8.0	0 Y
NSA 8-2	2	1	2,241,906.0	509,846.0	1,051.00	4.92	0.00	66	3 10.0	8.0	0 Y
NSA 8-3	3	2	2,241,960.0	509,847.0	1,053.00	4.92	2 0.00	66	3 10.0	8.0	0 Y
NSA 8-4	4	1	2,241,817.0	509,682.0	1,055.00	4.92	0.00	66	3 10.0	8.0	0 Y
NSA 8-5	5	1	2,241,818.0	509,635.0	1,055.00	) 4.92	0.00	66	3 10.0	8.0	0 Y
NSA 8-6	6	1	2,241,874.0	509,446.0	1,056.00	) 4.92	0.00	66	3 10.0	8.0	0 Y
NSA 8-7	7	1	2,242,720.0	509,058.0	1,082.00	) 4.92	0.00	66	3 10.0	8.0	0 Y
NSA 8-8	8	1	2,242,777.0	509,049.0	1,083.00	) 4.92	0.00	66	3 10.0	8.0	0 Y
NSA 8-9	9	1	2,242,837.0	508,950.0	1,086.00	) 4.92	0.00	66	3 10.0	8.0	0 Y
NSA 8-10	10	1	2,242,791.0	508,943.0	1,086.00	) 4.92	0.00	66	3 10.0	8.0	0 Y
NSA 8-11	11	1	2,242,763.0	508,940.0	1,086.00	) 4.92	2 0.00	66	3	8.0	0 Y
NSA 8-12	12	1	2,242,834.0	508,766.0	1,087.00	) 4.92	2 0.00	66	3	8.0	0 Y
NSA 8-13	13	1	2,242,795.0	508,758.0	1,085.00	) 4.92	2 0.00	66	3	8.0	0 Y
NSA 8-14	14	1	2,242,756.0	508,761.0	1,086.00	) 4.92	2 0.00	66	3	8.0	0 Y
NSA 8-15	15	1	2,242,814.0	508,653.0	1,089.00	) 4.92	2 0.00	66	3 10.0	8.0	0 Y
NSA 8-16	16	1	2,242,750.0	508,660.0	1,087.00	) 4.92	2 0.00	66	3 10.0	8.0	0 Y
NSA 8-17	17	1	2,242,834.0	508,475.0	1,090.00	) 4.92	2 0.00	66	3 10.0	8.0	0 Y
NSA 8-18	18	1	2,242,781.0	508,468.0	1,090.00	) 4.92	2 0.00	66	3 10.0	8.0	0 Y
NSA 8-19	19	1	2,242,722.0	508,474.0	1,091.00	) 4.92	0.00	66	3 10.0	8.0	0 Y
NSA 8-20	20	1	2,242,827.0	508,386.0	1,094.00	) 4.92	2 0.00	66	3 10.0	8.0	0 Y
NSA 8-21	21	1	2,242,769.0	508,379.0	1,092.00	) 4.92	2 0.00	66	3 10.0	8.0	0 Y
NSA 8-22	22	1	2.242.825.0	508,149,0	1.096.00	) 4.92	0.00	66	3 10.0	8.0	0 Y

INPUT: RECEIVERS							SUN	I-I76 Centr	al Interchai	nge (1014	402)
NSA 8-23	23	1	2,242,797.0	508,128.0	1,095.00	4.92	0.00	66	10.0	8.0	Y
NSA 8-24	24	1	2,242,755.0	508,138.0	1,095.00	4.92	0.00	66	10.0	8.0	Y
NSA 8-25	25	1	2,242,831.0	507,950.0	1,096.00	4.92	0.00	66	10.0	8.0	Y
NSA 8-26	26	1	2,242,791.0	507,919.0	1,097.00	4.92	0.00	66	10.0	8.0	Y
NSA 8-27	27	1	2,242,741.0	507,934.0	1,097.00	4.92	0.00	66	10.0	8.0	Y
NSA 8-28	28	1	2,242,779.0	507,856.0	1,094.00	4.92	0.00	66	10.0	8.0	Y
NSA 8-29	29	1	2,242,759.0	507,574.0	1,099.00	4.92	0.00	66	10.0	8.0	Y
NSA 8-30	30	1	2,242,835.0	507,598.0	1,098.00	4.92	0.00	66	10.0	8.0	Y
NSA 8-31	31	1	2,242,840.0	507,400.0	1,101.00	4.92	0.00	66	10.0	8.0	Y
NSA 8-32	32	1	2,242,792.0	507,411.0	1,101.00	4.92	0.00	66	10.0	8.0	Y
NSA 8-33	33	1	2,242,833.0	507,301.0	1,103.00	4.92	0.00	66	10.0	8.0	Y
NSA 8-34	34	1	2,242,794.0	507,341.0	1,102.00	4.92	0.00	66	10.0	8.0	Y
NSA 8-35	35	1	2,242,726.0	508,941.0	1,086.00	4.92	0.00	66	10.0	8.0	Y
NSA 8-36	36	1	2,242,715.0	508,761.0	1,086.00	4.92	0.00	66	10.0	8.0	Y
NSA 8-37	37	1	2,242,667.0	508,649.0	1,087.00	4.92	0.00	66	10.0	8.0	Y
NSA 8-38	38	1	2,242,689.0	508,475.0	1,091.00	4.92	0.00	66	10.0	8.0	Y
NSA 8-39	39	1	2,242,700.0	508,381.0	1,092.00	4.92	0.00	66	10.0	8.0	Y
NSA 8-40	40	1	2,242,638.0	508,375.0	1,092.00	4.92	0.00	66	10.0	8.0	Y
NSA 8-41	41	1	2,242,716.0	508,211.0	1,092.00	4.92	0.00	66	10.0	8.0	Y
NSA 8-42	42	1	2,242,659.0	508,203.0	1,092.00	4.92	0.00	66	10.0	8.0	Y
NSA 8-43	43	1	2,242,715.0	508,127.0	1,094.00	4.92	0.00	66	10.0	8.0	Y
NSA 8-44	44	1	2,242,666.0	508,134.0	1,093.00	4.92	0.00	66	10.0	8.0	Y
NSA 8-45	45	1	2,242,670.0	507,946.0	1,097.00	4.92	0.00	66	10.0	8.0	Y
NSA 8-46	46	1	2,242,642.0	507,856.0	1,093.00	4.92	0.00	66	10.0	8.0	Y
NSA 8-47	47	1	2,242,734.0	507,705.0	1,094.00	4.92	0.00	66	10.0	8.0	Y
NSA 8-48	48	1	2,242,675.0	507,681.0	1,093.00	4.92	0.00	66	10.0	8.0	Y
NSA 8-49	49	1	2,242,715.0	507,407.0	1,100.00	4.92	0.00	66	10.0	8.0	Y
NSA8-50	50	1	2,242,694.0	507,302.0	1,100.00	4.92	0.00	66	10.0	8.0	Y

Lawhon & Assoc.					1 August 2017	7
CMCox					TNM 2.5	1
			_			
INPUT: BUILDING ROWS						
PROJECT/CONTRACT:	SUM-176 Ce	entral Interch	nange (*	101402)		
RUN:	Existing Ye	ar 2020 NSA	8			
Building Row			Points	5		
Name	Average	Building	No.	Coordinates (	ground)	
	Height	Percent		X	Y	Z
	ft	%		ft	ft	ft
Lafayette ns	20.00	70	11	2,242,688.0	508,923.0	1,086.00
			12	2,242,849.0	508,919.0	1,086.00
Laffeyette ss	15.00	75	13	2,242,694.0	508,789.0	1,086.00
			14	2,242,849.0	508,798.0	1,087.00
Baired ns	20.00	60	15	2,242,655.0	508,628.0	1,087.00
			16	2,242,835.0	508,624.0	1,089.00
Baird ss	15.00	70	17	2,242,623.0	508,506.0	1,091.00
			18	2,242,852.0	508,506.0	1,090.00
Kipling NS	15.00	75	19	2,242,550.0	508,354.0	1,092.00
			20	2,242,853.0	508,358.0	1,094.00
McKinley ns	15.00	70	21	2,242,336.0	508,097.0	1,093.00
			22	2,242,813.0	508,095.0	1,095.00
McKinley ss	15.00	60	23	2,242,607.0	507,973.0	1,097.00
			24	2,242,846.0	507,977.0	1,096.00

# NSA 9



**RESULTS: SOUND LEVELS** 

SUM-I76 Central Interchange (101402)

Lawhon & Assoc.							1 August	2017				
CMCox							TNM 2.5					
							Calculated	d with TNN	1 2.5			
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		SUM-I7	6 Central II	nterchange (1	01402)							
RUN:		Existin	g Year 2020	NSA 9								
BARRIER DESIGN:		INPUT	HEIGHTS					Average p	pavement type	e shall be use	d unless	
								a State hi	ghway agency	y substantiate	es the use	
ATMOSPHERICS:		68 deg	j F, 50% RH					of a differ	ent type with	approval of F	HWA.	
Receiver												
Name	No.	#DUs	Existing	No Barrier					With Barrier			
			LAeq1h	LAeq1h		Increase over	existing	Туре	Calculated	Noise Reduc	tion	
				Calculated	Crit'n	Calculated	Crit'n	Impact	LAeq1h	Calculated	Goal	Calculated
							Sub'l Inc					minus
												Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
NSA 9-1	39	· ·	0.0	70.7	66	6 70.7	10	Snd Lvl	70.7	0.0	4	4 -4.5
NSA 9-2	40		1 0.0	67.3	66	67.3	3 10	Snd Lvl	67.3	8 0.0	4	4 -4.5
NSA 9-3	41		1 0.0	65.8	66	65.8	3 10		65.8	8 0.0		4 -4.5
NSA 9-4	42		1 0.0	65.8	66	65.8	3 10		65.8	3 0.0	4	4 -4.5
NSA 9-5	43		1 0.0	69.6	66	69.6	6 10	Snd Lvl	69.6	6 0.0	4	4 -4.5
NSA 9-6	44		1 0.0	70.8	66	5 70.8	3 10	Snd Lvl	70.8	8 0.0	4	4 -4.5
NSA 9-7	45	-	0.0	68.5	66	68.5	5 10	Snd Lvl	68.5	5          0.0	4	4 -4.5
NSA 9-8	46	-	1 0.0	64.0	66	64.0	) 10		64.0	0.0	4	4 -4.5
NSA 9-9	47	-	0.0	73.6	66	5 73.6	6 10	Snd Lvl	73.6	6 0.0	4	4 -4.5
NSA 9-10	48	-	0.0	68.9	66	68.9	0 10	Snd Lvl	68.9	0.0		4 -4.5
NSA 9-11	49	-	1 0.0	67.6	66	67.6	5 10	Snd Lvl	67.6	6 0.0	4	4 -4.5
NSA 9-12	50	-	0.0	65.0	66	65.0	0 10		65.0	0.0	4	4 -4.5
NSA 9-13	51	-	1 0.0	67.2	66	67.2	2 10	Snd Lvl	67.2	2 0.0	4	4 -4.5
NSA 9-14	52	-	1 0.0	65.7	66	65.7	10		65.7	0.0	4	4 -4.5
NSA 9-15	53	-	1 0.0	70.4	66	6 70.4	10	Snd Lvl	70.4	0.0	4	4 -4.5
NSA 9-16	54	-	1 0.0	67.1	66	67.1	10	Snd Lvl	67.1	0.0	4	4 -4.5
NSA 9-17	55	-	1 0.0	65.5	66	65.5	5 10		65.5	0.0	4	4 -4.5
NSA 9-18	56	-	1 0.0	64.0	66	64.0	10		64.0	0.0	4	4 -4.5
NSA 9-19	57	-	1 0.0	71.1	66	6 71.1	10	Snd Lvl	71.1	0.0	4	4 -4.5
NSA 9-20	58	-	0.0	68.6	66	68.6	6 10	Snd Lvl	68.6	6 0.0	4	4 -4.5
NSA 9-21	59	· ·	1 0.0	63.6	66	63.6	6 10		63.6	6 0.0	4	4 -4.5
NSA 9-22	110	· ·	0.0	63.5	66	63.5	5 10		63.5	5 0.0	4	4 -4.5
NSA 9-23	111	, ·	0.0	62.4	66	62.4	10		62.4	0.0	4	4 -4.5
NSA 9-24	112		0.0	63.0	66	63.0	10		63.0	0.0	4	4 -4.5

### **RESULTS: SOUND LEVELS**

### SUM-I76 Central Interchange (101402)

NSA 9-25	113	1	0.0		65.9	66	65.9	10	 65.9	0.0	4	-4.5
NSA 9-26	114	1	0.0		63.2	66	63.2	10	 63.2	0.0	4	-4.5
NSA 9-27	115	1	0.0		62.7	66	62.7	10	 62.7	0.0	4	-4.5
NSA 9-28	116	1	0.0		62.7	66	62.7	10	 62.7	0.0	4	-4.5
NSA 9-29	117	1	0.0		61.5	66	61.5	10	 61.5	0.0	4	-4.5
NSA 9-30	118	1	0.0		63.5	66	63.5	10	 63.5	0.0	4	-4.5
NSA 9-31	119	1	0.0		61.7	66	61.7	10	 61.7	0.0	4	-4.5
NSA 9-32	120	1	0.0		60.7	66	60.7	10	 60.7	0.0	4	-4.5
NSA 9-33	121	1	0.0		63.3	66	63.3	10	 63.3	0.0	4	-4.5
Dwelling Units		# DUs	Noise Red	duction								
			Min	Avg	Ma	ax						
			dB	dB	dE	В						
All Selected		33	0.0		0.0	0.0						
All Impacted		13	0.0		0.0	0.0						
All that meet NR Goal		0	0.0		0.0	0.0						

### INPUT: RECEIVERS

Lawhon & Assoc						1 August 2	2017				
CMCox						TNM 2.5	2017				
INPUT: RECEIVERS											
PROJECT/CONTRACT:	SUM-I	76 Cen	tral Interchar	nge (101402)							
RUN:	Existi	ng Yea	r 2020 NSA 9								
Receiver											
Name	No.	#DUs	Coordinates	(ground)		Height	Input Sou	nd Levels a	and Criteria	3	Active
			X	Y	Z	above	Existing	Impact Cr	iteria	NR	in
						Ground	LAeq1h	LAeq1h	Sub'l	Goal	Calc.
			ft	ft	ft	ft	dBA	dBA	dB	dB	
NSA 9-1	39	1	2,243,236.0	507,326.0	1,113.00	4.92	0.00	66	10.0	4.{	5
NSA 9-2	40	1	2,243,277.0	507,327.0	1,115.00	4.92	0.00	66	10.0	4.	5
NSA 9-3	41	1	2,243,313.0	507,327.0	1,116.00	4.92	0.00	66	10.0	4.{	5
NSA 9-4	42	1	2,243,302.0	507,413.0	1,113.00	4.92	0.00	66	10.0	4.5	5
NSA 9-5	43	1	2,243,270.0	507,587.0	1,113.00	4.92	0.00	66	10.0	4.5	5
NSA 9-6	44	1	2,243,246.0	507,673.0	1,110.00	4.92	0.00	66	10.0	4.5	5
NSA 9-7	45	1	2,243,284.0	507,671.0	1,112.00	4.92	0.00	66	10.0	4.5	5
NSA 9-8	46	1	2,243,386.0	507,674.0	1,115.00	4.92	0.00	66	10.0	4.	5
NSA 9-9	47	1	2,243,220.0	507,841.0	1,110.00	4.92	0.00	66	10.0	4.5	5
NSA 9-10	48	1	2,243,279.0	507,853.0	1,111.00	4.92	0.00	66	10.0	4.5	5
NSA 9-11	49	1	2,243,307.0	507,865.0	1,112.00	4.92	0.00	66	10.0	4.5	5
NSA 9-12	50	1	2,243,356.0	507,866.0	1,113.00	4.92	0.00	66	10.0	4.5	5
NSA 9-13	51	1	2,243,322.0	507,952.0	1,112.00	4.92	0.00	66	10.0	4.5	5
NSA 9-14	52	1	2,243,363.0	507,959.0	1,114.00	4.92	0.00	66	10.0	4.5	5
NSA 9-15	53	1	2,243,266.0	508,131.0	1,109.00	4.92	0.00	66	10.0	4.5	5
NSA 9-16	54	1	2,243,310.0	508,127.0	1,110.00	4.92	0.00	66	10.0	4.5	5
NSA 9-17	55	1	2,243,349.0	508,125.0	1,112.00	4.92	0.00	66	10.0	4.5	5
NSA 9-18	56	1	2,243,398.0	508,141.0	1,114.00	4.92	0.00	66	10.0	4.5	5
NSA 9-19	57	1	2,243,231.0	508,212.0	1,104.00	4.92	0.00	66	10.0	4.5	5
NSA 9-20	58	1	2,243,275.0	508,210.0	1,106.00	4.92	0.00	66	10.0	4.5	5
NSA 9-21	59	1	2,243,382.0	508,206.0	1,110.00	4.92	0.00	66	10.0	4.5	5
NSA 9-22	110	1	2,243,356.0	507,321.0	1,116.00	4.92	0.00	66	10.0	4.!	5 Y

INPUT: RECEIVERS							5	6UM-176 Ce	ntral Interc	hange (10 <sup>.</sup>	1402)
NSA 9-23	111	1	2,243,389.0	507,323.0	1,118.00	4.92	0.00	66	10.0	4.5	Y
NSA 9-24	112	1	2,243,365.0	507,384.0	1,115.00	4.92	0.00	66	10.0	4.5	Y
NSA 9-25	113	1	2,243,342.0	507,579.0	1,116.00	4.92	0.00	66	10.0	4.5	Y
NSA 9-26	114	1	2,243,412.0	507,896.0	1,115.00	4.92	0.00	66	10.0	4.5	Y
NSA 9-27	115	1	2,243,428.0	507,955.0	1,115.00	4.92	0.00	66	10.0	4.5	Y
NSA 9-28	116	1	2,243,434.0	508,132.0	1,115.00	4.92	0.00	66	10.0	4.5	Y
NSA 9-29	117	1	2,243,472.0	508,119.0	1,116.00	4.92	0.00	66	10.0	4.5	Y
NSA 9-30	118	1	2,243,422.0	508,221.0	1,114.00	4.92	0.00	66	10.0	4.5	Y
NSA 9-31	119	1	2,243,467.0	508,212.0	1,113.00	4.92	0.00	66	10.0	4.5	Y
NSA 9-32	120	1	2,243,435.0	507,405.0	1,117.00	4.92	0.00	66	10.0	4.5	Y
NSA 9-33	121	1	2,243,398.0	507,586.0	1,116.00	4.92	0.00	66	10.0	4.5	Y

Lawhon & Assoc.					1 August 2017	7
CMCox					TNM 2.5	1
INPUT: BUILDING ROWS						
PROJECT/CONTRACT:	SUM-I76 Ce	entral Interch	nange (*	101402)		
RUN:	Existing Ye	ar 2020 NSA	9			
Building Row			Points	•		
Name	Average	Building	No.	Coordinates (	ground)	
	Height	Percent		X	Y	Z
	ft	%		ft	ft	ft
Lovers Lane ns	18.00	70	16	2,243,225.0	507,291.0	1,113.00
			17	2,243,489.0	507,287.0	1,119.00
Morgan Road ss	16.00	50	18	2,243,303.0	507,434.0	1,113.00
			19	2,243,660.0	507,443.0	1,120.00
Corice St	16.00	50	20	2,243,230.0	507,825.0	1,110.00
			21	2,243,390.0	507,821.0	1,113.00
McKinlet Ave ss	15.00	50	22	2,243,255.0	508,095.0	1,109.00
			23	2,243,489.0	508,095.0	1,117.00

## **DESIGN YEAR 2040**

TNM Files used in all Design Year 2040 Model Runs

SUM-I76 Central Interchange (101402)

Lawhon & Assoc.					1 August 20	17					
CMCox					TNM 2.5						
INPUT: ROADWAYS							Average	pavement typ	e shall be u	used unles	S
PROJECT/CONTRACT:	SUM-176	Central Inte	erchange	e (101402)			a State hi	ghway ageno	cy substant	iates the u	se
RUN:	Design Y	ear 2040 al	l runs				of a differ	ent type with	the approv	val of FHW	A
Roadway		Points									
Name	Width	Name	No.	Coordinates	(pavement)		Flow Con	trol		Segment	
				Х	Y	Z	Control	Speed	Percent	Pvmt	On
							Device	Constraint	Vehicles	Туре	Struct?
									Affected		
	ft			ft	ft	ft		mph	%		
I-76 EB1/Ramp I-76EB to I-77SB	12.0	point1	1	2,239,535.0	510,115.0	1,016.00				Average	
		point2	2	2,239,900.0	510,108.0	1,024.00				Average	
		point3	3	2,240,219.0	510,096.0	1,032.00				Average	
		point4	4	2,240,979.0	510,067.0	1,044.00				Average	
		Begin Pro	505	2,241,151.0	510,058.0	1,049.00				Average	
		point5	5	2,241,533.0	510,035.0	1,058.00				Average	
		Brown Stre	6	2,241,704.0	510,020.0	1,060.00				Average	Y
		Brown Stre	7	2,241,862.0	510,001.0	1,066.00				Average	
		On fill	8	2,241,973.0	509,986.0	1,079.00				Average	
		Pro 6	9	2,242,358.0	509,923.0	1,087.00				Average	
		point10	10	2,242,594.0	509,850.0	1,083.00				Average	
		point11	11	2,242,741.0	509,765.0	1,080.00				Average	
		point12	12	2,242,890.0	509,602.0	1,075.00				Average	
		point13	13	2,242,978.0	509,386.0	1,072.00				Average	
		point14	14	2,242,998.0	509,142.0	1,067.00				Average	
		Lafollette	15	2,242,997.0	508,886.0	1,066.00				Average	
		point558	558	2,242,993.0	508,727.0	1,071.50				Average	
		point16	16	2,242,991.0	508,561.0	1,077.00				Average	
		point17	17	2,242,979.0	508,038.0	1,090.00				Average	
		point18	18	2,242,983.0	507,761.0	1,093.00					
Brown Street	28.0	At Kipling	22	2,241,770.0	508,281.0	1,079.00				Average	
		At Baird	23	2,241,774.0	508,556.0	1,075.00				Average	
		At Lofollet	24	2,241,774.0	508,845.0	1,067.00				Average	
		At E Crosi	25	2,241,781.0	509,134.0	1,059.00				Average	
		At E South	26	2,241,781.0	509,888.0	1,047.00				Average	

SUM-I76 Central Interchange (101402)

	At Lampar	27	2,241,776.0	510,220.0 1,03	37.00	Average
	At E Voris	28	2,241,773.0	510,581.0 1,04	44.00	Average
	At Lovisa	559	2,241,772.0	510,969.0 1,04	43.00	
Johnston Street 20.0	At Gridley	29	2,244,073.0	511,439.0 1,12	22.00	Average
	At Hamme	30	2,243,738.0	511,173.0 1,11	13.00	Average
	At Lumiere	31	2,243,473.0	510,963.0 1,102	02.00	Average
	point32	32	2,243,367.0	510,889.0 1,102	02.00	Average Y
	Wilson St	33	2,243,115.0	510,688.0 1,08	89.00	Average
	Jonhston (	34	2,242,835.0	510,457.0 1,07	79.00	Average
	Hedden A	35	2,242,641.0	510,314.0 1,06	67.00	Average
	point36	36	2,242,472.0	510,270.0 1,05	50.00	Average
	Spicer St.	37	2,242,296.0	510,270.0 1,03	39.00	Average
	point38	38	2,242,134.0	510,273.0 1,03	39.00	Average
	At Brown	39	2,241,776.0	510,220.0 1,03	37.00	
I-76 WB to I-77 SB 12.0	point17	54	2,242,967.0	508,038.0 1,09	90.00	Average
	point18	55	2,242,971.0	507,761.0 1,09	93.00	
Ramp SR8 SB to I76 EB 12.0	point78	78	2,243,242.0	511,069.0 1,07	78.00	Average
	point79	79	2,243,225.0	510,930.0 1,07	75.00	Average
	Johnston \$	80	2,243,180.0	510,771.0 1,072	72.00	Average
	point81	81	2,243,104.0	510,512.0 1,07	72.00	Average
	point82	82	2,243,074.0	510,334.0 1,07	75.00	Average
	point83	83	2,243,092.0	510,148.0 1,07	77.00	Average
	I-76 undrp	84	2,243,127.0	510,047.0 1,07	78.00	Average Y
	point85	85	2,243,214.0	509,903.0 1,07	79.00	Average
	I-76 ovrpa	86	2,243,335.0	509,787.0 1,08	81.00	Average
	point87	87	2,243,461.0	509,719.0 1,08	88.00	Average
	point88	88	2,243,601.0	509,680.0 1,09	99.00	Average
	point89	89	2,243,813.0	509,683.0 1,10	05.00	Average
	point90	90	2,244,002.0	509,745.0 1,11	11.00	Average
	Inman St o	91	2,244,394.0	509,931.0 1,11	18.00	Average Y
	point92	92	2,244,457.0	509,960.0 1,12	20.00	Average
	point93	93	2,244,841.0	510,140.0 1,13	33.00	Average
	ped bridge	204	2,245,394.0	510,352.0 1,13	36.00	Average
	point95	205	2,245,645.0	510,418.0 1,13	35.00	Average
	point96	272	2,245,993.0	510,480.0 1,12	23.00	Average
	point258	273	2,246,321.0	510,499.0 1,11	16.00	Average
	Arlington F	274	2,246,986.0	510,507.0 1,09	90.00	
I-76EB thru lane 2 12.0	point1	207	2,239,535.0	510,127.0 1,01	16.00	Average
	point2	208	2,239,900.0	510,120.0 1,024	24.00	Average

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	point3	209	2,240,219.0	510,108.0 1,032.00	Average
	point4	210	2,240,979.0	510,079.0 1,044.00	Average
	Begin Pro	504	2,241,151.0	510,070.0 1,049.00	Average
	point5	211	2,241,535.0	510,047.0 1,058.00	Average
	Brown Stre	212	2,241,704.0	510,032.0 1,060.00	Average Y
	Brown Stre	213	2,241,862.0	510,013.0 1,066.00	Average
	On fill	214	2,241,973.0	509,998.0 1,079.00	Average
	Pro 6	215	2,242,358.0	509,935.0 1,087.00	Average
	Pro 7	509	2,242,607.0	509,885.0 1,088.50	Average
	Pro8	510	2,242,789.0	509,842.0 1,089.00	Average
	End Prop	514	2,243,058.0	509,778.0 1,089.00	
I-76EB thru lane 3 12.0	point1	217	2,239,535.0	510,139.0 1,016.00	Average
	point2	218	2,239,900.0	510,132.0 1,024.00	Average
	point3	219	2,240,219.0	510,120.0 1,032.00	Average
	point4	220	2,240,979.0	510,091.0 1,044.00	Average
	Begin Pro	503	2,241,151.0	510,082.0 1,049.00	Average
	Pro 2	221	2,241,530.0	510,059.0 1,058.00	Average
	Brown Stre	222	2,241,704.0	510,044.0 1,060.00	Average Y
	Brown Stre	223	2,241,862.0	510,025.0 1,066.00	Average
	Pro 5	224	2,241,973.0	510,010.0 1,079.00	Average
	Pro 6	225	2,242,358.0	509,947.0 1,087.00	Average
	Por 7	508	2,242,607.0	509,897.0 1,088.50	Average
	Pro 8	226	2,242,789.0	509,854.0 1,089.00	Average
	End Prop	513	2,243,058.0	509,790.0 1,089.00	
I-76 EB thru lane 4 Prop Ramp EB to NB 12.0	point1	227	2,239,535.0	510,151.0 1,016.00	Average
	point2	228	2,239,900.0	510,144.0 1,024.00	Average
	point3	229	2,240,219.0	510,132.0 1,032.00	Average
	point4	230	2,240,979.0	510,103.0 1,044.00	Average
	Begin Pro	502	2,241,151.0	510,094.0 1,049.00	Average
	Prop 2	231	2,241,540.0	510,074.0 1,058.00	Average
	Brown Stre	232	2,241,704.0	510,066.0 1,060.00	Average Y
	Brown Stre	233	2,241,865.0	510,054.0 1,066.00	Average
	On fill	234	2,241,978.0	510,047.0 1,079.00	Average
	point225	235	2,242,202.0	510,029.0 1,087.00	Average
	point506	506	2,242,363.0	510,007.0 1,088.50	Average
	point507	507	2,242,613.0	509,974.0 1,089.25	Average
	Begin Brid	236	2,242,673.0	509,972.0 1,090.00	Average Y
	Pier 1	515	2,242,759.0	509,977.0 1,111.00	Average Y
	Pier 2	516	2,242,843.0	509,994.0 1,121.00	Average Y

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		Pier 3	517	2,242,958.0	510,038.0	1,122.00		Average	Y
		Pier 4	518	2,243,062.0	510,100.0	1,117.00		Average	Y
		Pier 5	519	2,243,121.0	510,148.0	1,113.00		Average	Y
		Pier 6	520	2,243,199.0	510,229.0	1,108.00		Average	Y
		Pier 7	521	2,243,274.0	510,360.0	1,104.00		Average	Y
		Pier 8	522	2,243,309.0	510,455.0	1,100.00		Average	Y
		End Bridge	523	2,243,322.0	510,503.0	1,096.00		Average	
		point524	524	2,243,336.0	510,628.0	1,090.00		Average	
		point525	525	2,243,332.0	510,835.0	1,088.00		Average	
		end prop r	526	2,243,326.0	511,006.0	1,078.00			
Lafellette Ave	24.0	Brown St	398	2,241,774.0	508,845.0	1,067.00		Average	-
		Burkhardt	399	2,242,893.0	508,856.0	1,086.00		Average	
		point400	400	2,242,927.5	508,854.6	1,086.00		Average	Y
		point401	401	2,243,176.0	508,856.0	1,092.00		Average	
		East Crosi	402	2,243,259.0	508,856.0	1,092.00		Average	
		Hammel S	403	2,243,763.0	508,861.0	1,102.00			
East Crosier Ave/Burkhardt Ave	20.0	Brown St	416	2,241,781.0	509,134.0	1,059.00		Average	
		point417	417	2,242,811.0	509,143.0	1,083.00		Average	
		point418	418	2,242,853.0	509,111.0	1,084.00		Average	
		Lafollette	419	2,242,893.0	508,856.0	1,086.00		Average	
		Baird St	420	2,242,889.0	508,564.0	1,090.00		Average	
		Kipling St	421	2,242,894.0	508,292.0	1,095.00		Average	
		McKinlet A	422	2,242,890.0	508,039.0	1,097.00		Average	
		Corice St.	423	2,242,890.0	507,765.0	1,098.00		Average	
		Morgan Av	424	2,242,891.0	507,497.0	1,102.00		Average	
		Lovers La	425	2,242,908.0	507,225.0	1,104.00			
East Crosiet	20.0	Lafellette /	437	2,243,259.0	508,856.0	1,092.00		Average	
		point438	438	2,243,352.0	509,146.0	1,097.00		Average	
		Hammell	439	2,243,767.0	509,150.0	1,100.00		Average	
		Gridley St.	440	2,244,108.0	509,157.0	1,099.00		Average	
		Inman St	441	2,244,420.0	509,152.0	1,102.00			
Inman St	20.0	E Crosier	451	2,244,420.0	509,152.0	1,102.00		Average	
		5th Ave	452	2,244,424.0	509,765.0	1,100.00		Average	
		Lumiere S	453	2,244,426.0	510,121.0	1,105.00		Average	
		Bradley Pl	454	2,244,420.0	511,069.0	1,107.00			
South Street	40.0	Grant Stre	472	2,239,511.0	509,844.0	1,035.00		Average	
		Sumner/P	473	2,240,376.0	509,865.0	1,033.00		Average	
		Kling St.	474	2,240,994.0	509,870.0	1,041.00		Average	
		Brown St	475	2,241,781.0	509,888.0	1,047.00		Average	

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		point476	476	2,242,155.0	509,896.0 1,050.00		
Spicer St	24.0	point500	500	2,242,134.0	510,273.0 1,039.00	Average	
		point501	501	2,242,134.0	510,881.0 1,022.00		
I-76 EB ex thru lane 3	12.0	Meet Exist	243	2,243,058.0	509,790.0 1,089.00	Average	Y
		point238	244	2,243,297.0	509,762.0 1,100.00	Average	Y
		point239	245	2,243,564.0	509,756.0 1,110.00	Average	
		point240	246	2,243,883.0	509,793.0 1,118.00	Average	
		point242	247	2,244,165.0	509,871.0 1,119.00	Average	
		Inman St o	248	2,244,391.0	509,958.0 1,118.00	Average	Y
		point249	249	2,244,457.0	509,984.0 1,120.00	Average	
		point93	254	2,244,841.0	510,164.0 1,133.00	Average	
		ped bridge	255	2,245,394.0	510,376.0 1,136.00	Average	
		point95	256	2,245,645.0	510,442.0 1,135.00	Average	
		point96	257	2,245,993.0	510,504.0 1,123.00	Average	
		point258	258	2,246,321.0	510,523.0 1,116.00	Average	
		Arlington F	259	2,246,986.0	510,531.0 1,090.00		
I-76EB ex thru lane 2	12.0	Meet Exist	237	2,243,058.0	509,778.0 1,089.00	Average	Y
		point238	238	2,243,297.0	509,750.0 1,100.00	Average	Y
		point239	239	2,243,564.0	509,744.0 1,110.00	Average	
		point240	240	2,243,883.0	509,781.0 1,118.00	Average	
		point242	242	2,244,165.0	509,859.0 1,119.00	Average	
		Inman St o	241	2,244,391.0	509,946.0 1,118.00	Average	Y
		point249	250	2,244,457.0	509,972.0 1,120.00	Average	
		point93	251	2,244,841.0	510,152.0 1,133.00	Average	
		ped bridge	252	2,245,394.0	510,364.0 1,136.00	Average	
		point95	253	2,245,645.0	510,430.0 1,135.00	Average	
		point96	265	2,245,993.0	510,492.0 1,123.00	Average	
		point258	266	2,246,321.0	510,511.0 1,116.00	Average	
		Arlington F	267	2,246,986.0	510,519.0 1,090.00		
Ramp I-76 EB to SR8 NB-2	12.0	point572	572	2,243,326.0	511,006.0 1,078.00	Average	
		point295	295	2,243,335.0	511,256.0 1,075.00	Average	
		point296	296	2,243,353.0	511,548.0 1,072.00	Average	
		Beacon St	297	2,243,349.0	512,080.0 1,060.00		
I-76 WB4 -2	12.0	point532	532	2,243,284.0	509,966.0 1,095.00	Average	Y
		point320	320	2,242,916.0	510,006.0 1,105.00	Average	Y
		fill	321	2,242,476.0	510,047.0 1,102.00	Average	
		point323	323	2,242,043.0	510,080.0 1,076.00	Average	
		point322	322	2,241,865.0	510,092.0 1,066.00	Average	Y
		point324	324	2,241,699.0	510,105.0 1,060.00	Average	

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		point74	394	2,241,205.0	510,123.0	1,050.00		Average	
		point75	395	2,240,651.0	510,143.0	1,041.00		Average	-
		point76	396	2,240,156.0	510,157.0	1,030.00		Average	
		Grant St o	397	2,239,533.0	510,174.0	1,018.00			
I-76 WB3 -2	12.0	point533	533	2,243,284.0	509,978.0	1,095.00		Average	Y
		point320	344	2,242,916.0	510,018.0	1,105.00		Average	Y
		fill	345	2,242,476.0	510,059.0	1,102.00		Average	
		point323	346	2,242,043.0	510,092.0	1,076.00		Average	
		point322	347	2,241,865.0	510,104.0	1,066.00		Average	Y
		point324	348	2,241,699.0	510,117.0	1,060.00		Average	
		point74	390	2,241,205.0	510,135.0	1,050.00		Average	
		point75	391	2,240,651.0	510,155.0	1,041.00		Average	
		point76	392	2,240,156.0	510,169.0	1,030.00		Average	
		Grant St o	393	2,239,533.0	510,186.0	1,018.00			
SR8 NB1	12.0	point294	371	2,243,338.0	511,006.0	1,078.00		Average	
		point295	372	2,243,347.0	511,256.0	1,075.00		Average	
		point296	373	2,243,365.0	511,548.0	1,072.00		Average	
		Beacon St	374	2,243,361.0	512,080.0	1,060.00			
Voris Street	20.0	at Brown	560	2,241,773.0	510,581.0	1,044.00		Average	
		at King	561	2,241,308.0	510,577.0	1,057.00		Average	
		at Allyn	562	2,240,757.0	510,569.0	1,045.00		Average	
		at Sumner	563	2,240,372.0	510,563.0	1,043.00		Average	
		at Sherma	564	2,239,944.0	510,557.0	1,041.00			
Sumner Street	12.0	at Voria	565	2,240,372.0	510,563.0	1,043.00		Average	
		Smuner S	566	2,240,378.0	510,277.0	1,038.00			
Allyn Street	20.0	at Voris	567	2,240,757.0	510,569.0	1,045.00		Average	
		Allyn Stree	568	2,240,759.0	510,223.0	1,040.00			
King Street/Lampeter street	20.0	at Voris	569	2,241,308.0	510,577.0	1,057.00		Average	
		King Stree	570	2,241,310.0	510,211.0	1,051.00		Average	
		Lampeter	571	2,241,776.0	510,220.0	1,037.00			
SR8 SB thru lane 4-2	12.0	point577	577	2,243,291.0	512,057.0	1,060.20		Average	
		point98	98	2,243,296.0	511,550.0	1,074.20		Average	
		point99	99	2,243,265.0	511,050.0	1,078.20		Average	
		point100	100	2,243,214.0	510,550.0	1,067.20		Average	
		point101	101	2,243,164.0	510,050.0	1,058.20		Average	
		point102	102	2,243,112.0	509,550.0	1,056.20		Average	
		point103	103	2,243,063.0	509,050.0	1,066.20		Average	
		Lafollette	104	2,243,048.0	508,887.0	1,068.20		Average	-
		point105	105	2,243,015.0	508,561.0	1,077.20	 	Average	

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		point17	106	2,243,003.0	508,038.0	1,090.20	Average	
		point18	107	2,243,007.0	507,761.0	1,093.20	Average	
		Lover's La	108	2,243,030.0	507,258.0	1,086.20		
SR8 SB thru lane 3-2	12.0	point578	578	2,243,279.0	512,048.0	1,060.10	Average	
		point98	115	2,243,284.0	511,550.0	1,074.10	Average	
		point99	116	2,243,253.0	511,050.0	1,078.10	Average	
		point100	117	2,243,202.0	510,550.0	1,067.10	Average	
		point101	118	2,243,152.0	510,050.0	1,058.10	Average	
		point102	119	2,243,100.0	509,550.0	1,056.10	Average	
		point103	120	2,243,051.0	509,050.0	1,066.10	Average	
		Lafollette	121	2,243,036.0	508,887.0	1,068.10	Average	
		point105	122	2,243,003.0	508,561.0	1,077.10	Average	
		point17	123	2,242,991.0	508,038.0	1,090.10	Average	
		point18	124	2,242,995.0	507,761.0	1,093.10		
SR8 SB1/Ramp SR8 SB to I-76 WB-2	12.0	point579	579	2,243,268.0	512,039.0	1,060.00	Average	
		point63	63	2,243,273.0	511,571.0	1,074.00	Average	
		point64	64	2,243,242.0	511,069.0	1,078.00	Average	
		point65	65	2,243,213.0	510,930.0	1,075.00	Average	
		Johnston \$	66	2,243,164.0	510,734.0	1,072.00	Average	
		point67	67	2,243,089.0	510,515.0	1,072.00	Average	
		point68	68	2,242,964.0	510,345.0	1,077.00	Average	
		point69	69	2,242,785.0	510,224.0	1,080.00	Average	
		begin fill	70	2,242,608.0	510,180.0	1,082.00	Average	
		point71	71	2,242,053.0	510,139.0	1,078.00	Average	
		Browm St	72	2,241,864.0	510,137.0	1,066.00	Average	Y
		point73	73	2,241,704.0	510,141.0	1,060.00	Average	
		point74	74	2,241,205.0	510,159.0	1,050.00	Average	
		point75	75	2,240,651.0	510,179.0	1,041.00	Average	
		point76	76	2,240,156.0	510,193.0	1,030.00	Average	
		Grant St o	77	2,239,533.0	510,210.0	1,018.00		
I-76 WB4 -2	12.0	point583	583	2,247,070.0	510,557.0	1,090.00	Average	Y
		point 259	302	2,246,986.0	510,555.0	1,093.00	Average	
		point258	301	2,246,321.0	510,547.0	1,116.00	Average	
		point308	308	2,245,993.0	510,528.0	1,123.00	Average	
		point310	310	2,245,645.0	510,466.0	1,137.00	Average	
		ped bridge	309	2,245,430.0	510,409.0	1,139.00	Average	
		Pro 1	312	2,244,815.0	510,163.0	1,133.00	Average	
		Pro 2	311	2,244,629.0	510,084.0	1,133.00	Average	
		Pro 3 Inma	313	2,244,454.0	510,025.0	1,110.00	Average	Y

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		Pro 4	314	2,244,390.0	510,003.0	1,110.00		Average	
		Pro 5	315	2,244,011.0	509,907.0	1,100.00		Average	
		Pro 6	316	2,243,709.0	509,880.0	1,102.00		Average	
		Por 7	317	2,243,496.0	509,878.0	1,104.00		Average	
		Pro 8	318	2,243,411.0	509,863.0	1,107.00		Average	
		Start Prop	319	2,243,340.0	509,842.0	1,112.00		Average	Y
		Pier 1	545	2,243,260.0	509,809.0	1,115.00		Average	Y
		Pier 2	546	2,243,146.0	509,735.0	1,115.00		Average	Y
		Pier 3	547	2,243,066.0	509,660.0	1,115.00		Average	Y
		Pier 4	548	2,243,009.0	509,582.0	1,110.00		Average	Y
		Pier 5	549	2,242,962.0	509,500.0	1,102.00		Average	Y
		Pier 6	550	2,242,930.0	509,411.0	1,091.00		Average	Y
		End Prop	551	2,242,917.0	509,356.0	1,084.00		Average	
		point552	552	2,242,905.0	509,194.0	1,078.00		Average	
		point553	553	2,242,920.0	509,074.0	1,072.00		Average	
		point554	554	2,242,943.0	508,890.0	1,066.00		Average	
		point555	555	2,242,959.0	508,727.0	1,071.00		Average	
		point556	556	2,242,965.0	508,561.0	1,077.00		Average	
		point557	557	2,242,967.0	508,038.0	1,090.00			
I-76 WB3 -2	12.0	point584	584	2,247,070.0	510,569.0	1,090.00		Average	Y
		point 259	330	2,246,986.0	510,567.0	1,093.00		Average	
		point258	331	2,246,321.0	510,559.0	1,116.00		Average	
		point308	332	2,245,993.0	510,540.0	1,123.00		Average	
		point310	333	2,245,645.0	510,478.0	1,137.00		Average	
		ped bridge	334	2,245,430.0	510,421.0	1,139.00		Average	
		Pro 1	335	2,244,815.0	510,175.0	1,133.00		Average	
		point311	336	2,244,629.0	510,096.0	1,133.00		Average	
		Inman St u	337	2,244,454.0	510,037.0	1,110.00		Average	Y
		point314	338	2,244,392.0	510,015.0	1,110.00		Average	
		Pro 1	339	2,244,004.0	509,943.0	1,100.00		Average	
		Pro2	340	2,243,702.0	509,934.0	1,095.00		Average	
		Pro 3	341	2,243,517.0	509,947.0	1,094.00		Average	
		Meet exist	534	2,243,284.0	509,966.0	1,090.00			
I-76WB2 -2	12.0	point585	585	2,247,070.0	510,581.0	1,090.00		Average	Y
		point 259	354	2,246,986.0	510,579.0	1,093.00		Average	
		point258	355	2,246,321.0	510,571.0	1,116.00		Average	
		point308	356	2,245,993.0	510,552.0	1,123.00		Average	
		point310	357	2,245,645.0	510,490.0	1,137.00		Average	
		ped bridge	358	2,245,430.0	510,433.0	1,139.00		Average	

SUM-I76 Central Interchange (101402)

### **INPUT: ROADWAYS**

INFUT. NOADWATS						30141-1	ro central interchange (	101402)	
		Pro 1	359	2,244,815.0	510,187.0	1,133.00		Average	
		point311	360	2,244,629.0	510,110.0	1,133.00		Average	
		Inman St ı	361	2,244,454.0	510,049.0	1,110.00		Average	Y
		point314	362	2,244,392.0	510,027.0	1,110.00		Average	
		point363	363	2,244,004.0	509,955.0	1,100.00		Average	
		Pro2	364	2,243,702.0	509,946.0	1,095.00		Average	
		Pro 3	365	2,243,517.0	509,959.0	1,094.00		Average	
		Meet exist	366	2,243,284.0	509,978.0	1,090.00			
I-76 WB1-2	12.0	point586	586	2,247,070.0	510,593.0	1,090.00		Average	Y
		point 259	383	2,246,986.0	510,591.0	1,093.00		Average	
		point258	384	2,246,321.0	510,583.0	1,116.00		Average	
		point308	385	2,245,993.0	510,564.0	1,123.00		Average	
		point310	386	2,245,645.0	510,502.0	1,137.00		Average	
		ped bridge	387	2,245,430.0	510,445.0	1,139.00		Average	
		Pro 1	528	2,244,815.0	510,199.0	1,133.00		Average	
		Pro 2	529	2,244,627.0	510,122.0	1,133.00		Average	
		Pro 3 Inma	530	2,244,456.0	510,063.0	1,110.00		Average	Y
		Pro 4	531	2,244,391.0	510,047.0	1,110.00		Average	
		Pro 5	536	2,244,219.0	510,024.0	1,112.00		Average	
		Pro 6	537	2,244,044.0	510,031.0	1,107.00		Average	
		Pro 7	538	2,243,865.0	510,060.0	1,103.00		Average	
		Pro8	539	2,243,628.0	510,192.0	1,098.00		Average	
		Pro 9	540	2,243,469.0	510,374.0	1,094.00		Average	
		Pro 10	541	2,243,392.0	510,553.0	1,092.00		Average	
		Pro 11	542	2,243,374.0	510,629.0	1,090.00		Average	
		Pro 12	543	2,243,345.0	510,837.0	1,088.00		Average	
		Meet Exist	544	2,243,338.0	511,006.0	1,078.00			
I77 NB1/Ramp I-77NB to I-76EB-2	12.0	point587	587	2,243,097.0	507,259.0	1,086.00		Average	
		point131	177	2,243,080.0	507,750.0	1,093.00		Average	
		point132	178	2,243,081.0	508,250.0	1,084.00		Average	
		point133	179	2,243,087.0	508,423.0	1,080.00		Average	
		point172	180	2,243,117.0	508,687.0	1,073.00		Average	
		point173	181	2,243,171.0	508,951.0	1,071.00		Average	
		point196	196	2,243,329.0	509,286.0	1,078.00		Average	
		point197	197	2,243,474.0	509,443.0	1,088.00		Average	
		point198	198	2,244,000.0	509,726.0	1,111.00		Average	
		Inman St c	199	2,244,394.0	509,919.0	1,118.00		Average	Y
		point92	200	2,244,457.0	509,948.0	1,120.00		Average	
		point93	201	2,244,841.0	510,128.0	1,133.00		Average	

SUM-I76 Central Interchange (101402)

		ped bridge	202	2,245,394.0	510,340.0	1,136.00		Average	
		point95	203	2,245,645.0	510,418.0	1,135.00			
I-77 NB2/Ramp I-77NB to I-76WB-2	12.0	Lovers La	168	2,243,085.0	507,259.0	1,086.00		Average	
		point131	169	2,243,068.0	507,750.0	1,093.00		Average	
		point132	170	2,243,069.0	508,250.0	1,084.00		Average	
		point133	171	2,243,075.0	508,423.0	1,080.00		Average	
		point172	172	2,243,105.0	508,687.0	1,073.00		Average	
		point173	173	2,243,159.0	508,951.0	1,071.00		Average	
		point182	182	2,243,255.0	509,317.0	1,076.00		Average	
		point183	183	2,243,276.0	509,561.0	1,076.00		Average	
		SR 8 ovrp	184	2,243,203.0	509,812.0	1,076.00		Average	Y
		point185	185	2,243,112.0	509,942.0	1,077.00		Average	
		point186	186	2,242,975.0	510,062.0	1,079.00		Average	
		point187	187	2,242,776.0	510,145.0	1,081.00		Average	
		point188	188	2,242,588.0	510,161.0	1,082.00		Average	
		point71	189	2,242,053.0	510,127.0	1,078.00		Average	
		Browm St	190	2,241,864.0	510,125.0	1,066.00		Average	Y
		point73	191	2,241,704.0	510,129.0	1,060.00		Average	
		point74	192	2,241,205.0	510,147.0	1,050.00		Average	
		point75	193	2,240,651.0	510,167.0	1,041.00		Average	
		point76	194	2,240,156.0	510,181.0	1,030.00		Average	
		Grant St o	195	2,239,533.0	510,198.0	1,018.00			
I-77 NB thru lane 3-2	12.0	Lovers La	150	2,243,073.0	507,259.0	1,086.00		Average	
		point131	151	2,243,056.0	507,750.0	1,093.00		Average	
		point132	152	2,243,057.0	508,250.0	1,084.00		Average	
		point133	153	2,243,063.0	508,423.0	1,080.00		Average	
		Lafollette I	154	2,243,092.0	508,891.0	1,068.00		Average	
		point135	155	2,243,107.0	509,053.0	1,066.00		Average	
		point136	156	2,243,155.0	509,550.0	1,056.00		Average	
		I-76 EB ov	157	2,243,176.0	509,740.0	1,055.00		Average	
		I-76WB ov	158	2,243,202.0	510,012.0	1,058.00		Average	
		point139	159	2,243,256.0	510,550.0	1,067.00		Average	
		point140	160	2,243,306.0	511,050.0	1,078.00		Average	
		point141	161	2,243,341.0	511,548.0	1,072.00		Average	
		Beacon St	162	2,243,337.0	512,080.0	1,060.00			
I-77 NB thru lane 4-2	12.0	Lovers La	130	2,243,061.0	507,259.0	1,086.00		Average	
		point131	131	2,243,044.0	507,750.0	1,093.00		Average	
		point132	132	2,243,045.0	508,250.0	1,084.00		Average	
		point133	133	2,243,051.0	508,423.0	1,080.00		Average	

### SUM-I76 Central Interchange (101402)

#### INPUT: ROADWAYS

Lafollette I	134	2 243 079 0	508 891 0	1 068 00	Average	
Laionette i	104	2,240,010.0	000,001.0	1,000.00	/ Weitage	
point135	135	2,243,095.0	509,053.0	1,066.00	Average	
point136	136	2,243,143.0	509,550.0	1,056.00	Average	
I-76 EB ov	137	2,243,164.0	509,740.0	1,055.00	Average	
I-76WB ov	138	2,243,190.0	510,012.0	1,058.00	Average	
point139	139	2,243,244.0	510,550.0	1,067.00	Average	
point140	140	2,243,294.0	511,050.0	1,078.00	Average	
point141	141	2,243,329.0	511,548.0	1,072.00	Average	
Beacon St	142	2,243,325.0	512,080.0	1,060.00		

INPUT: TRAFFIC FOR LAeq1h Volumes

SUM-I76 Central Interchange (101402)

Lawhon & Assoc.				່ 1 Augເ	ist 2017							
CMCox				TNM 2	.5	1		1				
INPUT: TRAFFIC FOR LACT	CLIM IZC Cont			(40440)								
	Sulvi-176 Centr		rchange	(101402	2)							
	Design rear 2	040 ali	runs									
Roadway	Points		-									
Name	Name	No.	Segmer	nt								
			Autos		MTruck	S	HTrucks	•	Buses		Motorcy	cles
			V	S	V	S	V	S	V	S	V	S
			veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph
I-76 EB1/Ramp I-76EB to I-77SB	point1	1	1372	55	40	55	95	55	0	0 0	C	) (
	point2	2	1372	55	40	55	95	55	0	0	C	) (
	point3	3	1372	55	40	55	95	55	0	0 0	C	) (
	point4	4	1372	55	40	55	95	55	0	0 0	C	) (
	Begin Propos	e 505	1471	55	49	55	116	55	0	0 0	C	) (
	point5	5	1471	55	49	55	116	55	0	0 0	C	) (
	Brown Street	1 6	1471	55	49	55	116	55	0	0	C	) (
	Brown Street	2 7	1920	50	10	50	42	50	0	0 0	C	) (
	On fill	8	1920	50	10	50	42	50	0	0 0	C	) (
	Pro 6	9	1920	50	10	50	42	50	0	0 0	C	) (
	point10	10	1920	50	10	50	42	50	0	0 0	C	) (
	point11	11	1920	50	10	50	42	50	0	0 0	C	) (
	point12	12	1920	50	10	50	42	50	0	0 0	C	) (
	point13	13	1920	50	10	50	42	50	0	0 1	C	) (
	point14	14	1920	50	10	50	42	50	0	0 0	C	) (
	Lafollette St. 0	15	1920	50	10	50	42	50	0	0	C	) (
	point558	558	1920	50	10	50	42	50	0	0 0	C	) (
	point16	16	1920	50	10	50	42	50	0	0 0	C	) (
	point17	17	1920	50	10	50	42	50	0	0 0	C	) (
	point18	18										
Brown Street	At Kipling	22	0	0	0	0	0	0	0	0 0	C	) (
	At Baird	23	0	0	0	0	0	0	0	0 0	C	(
	At Lofollette S	5 24	0	0	0	0	0	0	0	0 0	C	) (

### INPUT: TRAFFIC FOR LAeq1h Volumes

SUM-I76 Central Interchange (101402)

	At E Crosier	25	0	0	0	0	0	0	0	0	0	0
	At E South	26	0	0	0	0	0	0	0	0	0	0
	At Lamparter \$	27	0	0	0	0	0	0	0	0	0	0
	At E Voris St	28	0	0	0	0	0	0	0	0	0	0
	At Lovisa St	559										
Johnston Street	At Gridley Ave	29	0	0	0	0	0	0	0	0	0	0
	At Hammel St	30	0	0	0	0	0	0	0	0	0	0
	At Lumiere St.	31	0	0	0	0	0	0	0	0	0	0
	point32	32	0	0	0	0	0	0	0	0	0	0
	Wilson St	33	0	0	0	0	0	0	0	0	0	0
	Jonhston Ct	34	0	0	0	0	0	0	0	0	0	0
	Hedden Ave	35	0	0	0	0	0	0	0	0	0	0
	point36	36	0	0	0	0	0	0	0	0	0	0
	Spicer St.	37	0	0	0	0	0	0	0	0	0	0
	point38	38	0	0	0	0	0	0	0	0	0	0
	At Brown Stree	39										
I-76 WB to I-77 SB	point17	54	1320	55	21	55	49	55	0	0	0	0
	point18	55										
Ramp SR8 SB to I76 EB	point78	78	864	50	14	50	32	50	0	0	0	0
	point79	79	864	50	14	50	32	50	0	0	0	0
	Johnston St o	80	864	50	14	50	32	50	0	0	0	0
	point81	81	864	50	14	50	32	50	0	0	0	0
	point82	82	864	50	14	50	32	50	0	0	0	0
	point83	83	864	50	14	50	32	50	0	0	0	0
	I-76 undrpa	84	864	50	14	50	32	50	0	0	0	0
	point85	85	864	50	14	50	32	50	0	0	0	0
	I-76 ovrpa	86	864	50	14	50	32	50	0	0	0	0
	point87	87	864	50	14	50	32	50	0	0	0	0
	point88	88	864	50	14	50	32	50	0	0	0	0
	point89	89	864	50	14	50	32	50	0	0	0	0
	point90	90	864	50	14	50	32	50	0	0	0	0
	Inman St ovrp	91	864	50	14	50	32	50	0	0	0	0
	point92	92	1003	55	41	55	96	55	0	0	0	0
	point93	93	1142	55	47	55	108	55	0	0	0	0
	ped bridge	204	1142	55	47	55	108	55	0	0	0	0
	point95	205	1522	55	63	55	145	55	0	0	0	0

INPUT: TRAFFIC FOR LAeq1h Volumes						SU	M-176 Ce	entral Ir	nterchang	ge (1014	<b>102)</b>	
	point96	272	1522	55	63	55	145	55	0	0	0	0
	point258	273	1522	55	63	55	145	55	0	0	0	0
	Arlington Rd	274										
I-76EB thru lane 2	point1	207	1372	55	40	55	95	55	0	0	0	0
	point2	208	1372	55	40	55	95	55	0	0	0	0
	point3	209	1372	55	40	55	95	55	0	0	0	0
	point4	210	1372	55	40	55	95	55	0	0	0	0
	Begin Propose	504	1471	55	49	55	116	55	0	0	0	0
	point5	211	1471	55	49	55	116	55	0	0	0	0
	Brown Street	212	1471	55	49	55	116	55	0	0	0	0
	Brown Street 2	213	1782	55	73	55	170	55	0	0	0	0
	On fill	214	1782	55	73	55	170	55	0	0	0	0
	Pro 6	215	1782	55	73	55	170	55	0	0	0	0
	Pro 7	509	1782	55	73	55	170	55	0	0	0	0
	Pro8	510	1782	55	73	55	170	55	0	0	0	0
	End Prop	514										
I-76EB thru lane 3	point1	217	1372	55	40	55	95	55	0	0	0	0
	point2	218	1372	55	40	55	95	55	0	0	0	0
	point3	219	1372	55	40	55	95	55	0	0	0	0
	point4	220	1372	55	40	55	95	55	0	0	0	0
	Begin Propose	503	1471	55	49	55	116	55	0	0	0	0
	Pro 2	221	1471	55	49	55	116	55	0	0	0	0
	Brown Street '	222	1471	55	49	55	116	55	0	0	0	0
	Brown Street 2	223	1782	55	73	55	170	55	0	0	0	0
	Pro 5	224	1782	55	73	55	170	55	0	0	0	0
	Pro 6	225	1782	55	73	55	170	55	0	0	0	0
	Por 7	508	1782	55	73	55	170	55	0	0	0	0
	Pro 8	226	1782	55	73	55	170	55	0	0	0	0
	End Prop	513										
I-76 EB thru lane 4 Prop Ramp EB to NB	point1	227	1372	55	40	55	95	55	0	0	0	0
	point2	228	1372	55	40	55	95	55	0	0	0	0
	point3	229	1372	55	40	55	95	55	0	0	0	0
	point4	230	1372	55	40	55	95	55	0	0	0	0
	Begin Propose	502	1075	55	14	55	31	55	0	0	0	0
	Prop 2	231	1075	55	14	55	31	55	0	0	0	0
	Brown Street	232	1075	55	14	55	31	55	0	0	0	0

<b>INPUT: TRAFFIC FOR LAeq1h Volume</b>	es			SUM-I76 Central Interchange (101402)									
	Brown Street 2	233	1075	55	14	55	31	55	0	0	0	0	
	On fill	234	1075	55	14	55	31	55	0	0	0	0	
	point225	235	1075	55	14	55	31	55	0	0	0	0	
	point506	506	1075	45	14	45	31	45	0	0	0	0	
	point507	507	1075	45	14	45	31	45	0	0	0	0	
	Begin Bridge	236	1075	45	14	45	31	45	0	0	0	0	
	Pier 1	515	1075	45	14	45	31	45	0	0	0	0	
	Pier 2	516	1075	45	14	45	31	45	0	0	0	0	
	Pier 3	517	1075	45	14	45	31	45	0	0	0	0	
	Pier 4	518	1075	45	14	45	31	45	0	0	0	0	
	Pier 5	519	1075	45	14	45	31	45	0	0	0	0	
	Pier 6	520	1075	45	14	45	31	45	0	0	0	0	
	Pier 7	521	1075	45	14	45	31	45	0	0	0	0	
	Pier 8	522	1075	45	14	45	31	45	0	0	0	0	
	End Bridge	523	1075	45	14	45	31	45	0	0	0	0	
	point524	524	1075	45	14	45	31	45	0	0	0	0	
	point525	525	1075	45	14	45	31	45	0	0	0	0	
	end prop ramp	526											
Lafellette Ave	Brown St	398	0	0	0	0	0	0	0	0	0	0	
	Burkhardt Ave	399	0	0	0	0	0	0	0	0	0	0	
	point400	400	0	0	0	0	0	0	0	0	0	0	
	point401	401	0	0	0	0	0	0	0	0	0	0	
	East Crosier	402	0	0	0	0	0	0	0	0	0	0	
	Hammel St	403											
East Crosier Ave/Burkhardt Ave	Brown St	416	0	0	0	0	0	0	0	0	0	0	
	point417	417	0	0	0	0	0	0	0	0	0	0	
	point418	418	0	0	0	0	0	0	0	0	0	0	
	Lafollette	419	0	0	0	0	0	0	0	0	0	0	
	Baird St	420	0	0	0	0	0	0	0	0	0	0	
	Kipling St	421	0	0	0	0	0	0	0	0	0	0	
	McKinlet Ave	422	0	0	0	0	0	0	0	0	0	0	
	Corice St.	423	0	0	0	0	0	0	0	0	0	0	
	Morgan Ave	424	0	0	0	0	0	0	0	0	0	0	
	Lovers Lane	425											
East Crosiet	Lafellette Ave	437	0	0	0	0	0	0	0	0	0	0	
	point438	438	0	0	0	0	0	0	0	0	0	0	

## INPUT: TRAFFIC FOR LAeq1h Volumes

SUM-I76 Central Interchange (101402)

	Hammell	439	0	0	0	0	0	0	0	0	0	0
	Gridley St.	440	0	0	0	0	0	0	0	0	0	0
	Inman St	441										
Inman St	E Crosier	451	0	0	0	0	0	0	0	0	0	0
	5th Ave	452	0	0	0	0	0	0	0	0	0	0
	Lumiere St	453	0	0	0	0	0	0	0	0	0	0
	Bradley Pl	454										
South Street	Grant Street	472	0	0	0	0	0	0	0	0	0	0
	Sumner/Ped E	473	0	0	0	0	0	0	0	0	0	0
	Kling St.	474	0	0	0	0	0	0	0	0	0	0
	Brown St	475	0	0	0	0	0	0	0	0	0	0
	point476	476										
Spicer St	point500	500	0	0	0	0	0	0	0	0	0	0
	point501	501										
I-76 EB ex thru lane 3	Meet Existing	243	1782	55	73	55	170	55	0	0	0	0
	point238	244	1782	55	73	55	170	55	0	0	0	0
	point239	245	1782	55	73	55	170	55	0	0	0	0
	point240	246	1782	55	73	55	170	55	0	0	0	0
	point242	247	1782	55	73	55	170	55	0	0	0	0
	Inman St ovrp	248	1782	55	73	55	170	55	0	0	0	0
	point249	249	1782	55	73	55	170	55	0	0	0	0
	point93	254	1142	55	47	55	108	55	0	0	0	0
	ped bridge	255	1142	55	47	55	108	55	0	0	0	0
	point95	256	1522	55	63	55	145	55	0	0	0	0
	point96	257	1522	55	63	55	145	55	0	0	0	0
	point258	258	1522	55	63	55	145	55	0	0	0	0
	Arlington Rd	259										
I-76EB ex thru lane 2	Meet Existing	237	1782	55	73	55	170	55	0	0	0	0
	point238	238	1782	55	73	55	170	55	0	0	0	0
	point239	239	1782	55	73	55	170	55	0	0	0	0
	point240	240	1782	55	73	55	170	55	0	0	0	0
	point242	242	1782	55	73	55	170	55	0	0	0	0
	Inman St ovrp	241	1782	55	73	55	170	55	0	0	0	0
	point249	250	1782	55	73	55	170	55	0	0	0	0
	point93	251	1142	55	47	55	108	55	0	0	0	0
	ped bridge	252	1142	55	47	55	108	55	0	0	0	0

INPUT: TRAFFIC FOR LAeq1h Volu	mes					SU	M-176 Ce	entral Ir	nterchang	ge (1014	402)	
	point95	253	1522	55	63	55	145	55	0	0	0	0
	point96	265	1522	55	63	55	145	55	0	0	0	0
	point258	266	1522	55	63	55	145	55	0	0	0	0
	Arlington Rd	267										
Ramp I-76 EB to SR8 NB-2	point572	572	1729	55	27	55	64	55	0	0	0	0
	point295	295	1729	55	27	55	64	55	0	0	0	0
	point296	296	1352	55	21	55	49	55	0	0	0	0
	Beacon St und	297										
I-76 WB4 -2	point532	532	937	55	28	55	65	55	0	0	0	0
	point320	320	937	55	28	55	65	55	0	0	0	0
	fill	321	937	55	28	55	65	55	0	0	0	0
	point323	323	937	55	28	55	65	55	0	0	0	0
	point322	322	937	55	28	55	65	55	0	0	0	0
	point324	324	1026	55	31	55	71	55	0	0	0	0
	point74	394	1026	55	31	55	71	55	0	0	0	0
	point75	395	1026	55	31	55	71	55	0	0	0	0
	point76	396	1026	55	31	55	71	55	0	0	0	0
	Grant St ovrpa	397										
I-76 WB3 -2	point533	533	937	55	28	55	65	55	0	0	0	0
	point320	344	937	55	28	55	65	55	0	0	0	0
	fill	345	937	55	28	55	65	55	0	0	0	0
	point323	346	937	55	28	55	65	55	0	0	0	0
	point322	347	937	55	28	55	65	55	0	0	0	0
	point324	348	1026	55	31	55	71	55	0	0	0	0
	point74	390	1026	55	31	55	71	55	0	0	0	0
	point75	391	1026	55	31	55	71	55	0	0	0	0
	point76	392	1026	55	31	55	71	55	0	0	0	0
	Grant St ovrpa	393										
SR8 NB1	point294	371	892	50	9	50	19	50	0	0	0	0
	point295	372	892	50	9	50	19	50	0	0	0	0
	point296	373	1352	55	21	55	49	55	0	0	0	0
	Beacon St und	374										
Voris Street	at Brown	560	0	0	0	0	0	0	0	0	0	0
	at King	561	0	0	0	0	0	0	0	0	0	0
	at Allyn	562	0	0	0	0	0	0	0	0	0	0
	at Sumner	563	0	0	0	0	0	0	0	0	0	0
### INPUT: TRAFFIC FOR LAeq1h Volumes

	at Sherman	564										
Sumner Street	at Voria	565	0	0	0	0	0	0	0	0	0	0
	Smuner St	566										
Allyn Street	at Voris	567	0	0	0	0	0	0	0	0	0	0
	Allyn Street	568										
King Street/Lampeter street	at Voris	569	0	0	0	0	0	0	0	0	0	0
	King Street	570	0	0	0	0	0	0	0	0	0	0
	Lampeter Stre	571										
SR8 SB thru lane 4-2	point577	577	2337	55	44	55	105	55	0	0	0	0
	point98	98	2337	55	44	55	105	55	0	0	0	0
	point99	99	2372	55	97	55	226	55	0	0	0	0
	point100	100	2372	55	97	55	226	55	0	0	0	0
	point101	101	2372	55	97	55	226	55	0	0	0	0
	point102	102	2372	55	97	55	226	55	0	0	0	0
	point103	103	2372	55	97	55	226	55	0	0	0	0
	Lafollette ovrp	104	2372	55	97	55	226	55	0	0	0	0
	point105	105	2372	55	97	55	226	55	0	0	0	0
	point17	106	2372	55	97	55	226	55	0	0	0	0
	point18	107	2372	55	97	55	226	55	0	0	0	0
	Lover's Lane (	108										
SR8 SB thru lane 3-2	point578	578	2337	55	44	55	105	55	0	0	0	0
	point98	115	2337	55	44	55	105	55	0	0	0	0
	point99	116	2372	55	97	55	226	55	0	0	0	0
	point100	117	2372	55	97	55	226	55	0	0	0	0
	point101	118	2372	55	97	55	226	55	0	0	0	0
	point102	119	2372	55	97	55	226	55	0	0	0	0
	point103	120	2372	55	97	55	226	55	0	0	0	0
	Lafollette ovrp	121	2372	55	97	55	226	55	0	0	0	0
	point105	122	2372	55	97	55	226	55	0	0	0	0
	point17	123	2372	55	97	55	226	55	0	0	0	0
	point18	124										
SR8 SB1/Ramp SR8 SB to I-76 WB-2	point579	579	2337	55	44	55	105	55	0	0	0	0
	point63	63	2337	55	44	55	105	55	0	0	0	0
	point64	64	1114	50	14	50	32	50	0	0	0	0
	point65	65	1114	50	14	50	32	50	0	0	0	0
	Johnston St o	66	1114	50	14	50	32	50	0	0	0	0

<b>INPUT: TRAFFIC FOR LAeq1I</b>	h Volumes					SU	M-I76 Ce	ntral Ir	nterchang	ge (1014	02)	
	point67	67	1114	50	14	50	32	50	0	0	0	0
	point68	68	1114	50	14	50	32	50	0	0	0	0
	point69	69	1114	50	14	50	32	50	0	0	0	0
	begin fill	70	1114	50	14	50	32	50	0	0	0	0
	point71	71	1114	50	14	50	32	50	0	0	0	0
	Browm St und	72	1114	50	14	50	32	50	0	0	0	0
	point73	73	1026	55	31	55	71	55	0	0	0	0
	point74	74	1026	55	31	55	71	55	0	0	0	0
	point75	75	1026	55	31	55	71	55	0	0	0	0
	point76	76	1026	55	31	55	71	55	0	0	0	0
	Grant St ovrpa	77										
I-76 WB4 -2	point583	583	1010	55	34	55	79	55	0	0	0	0
	point 259	302	1010	55	34	55	79	55	0	0	0	0
	point258	301	1010	55	34	55	79	55	0	0	0	0
	point308	308	1010	55	34	55	79	55	0	0	0	0
	point310	310	1010	55	34	55	79	55	0	0	0	0
	ped bridge	309	1010	55	34	55	79	55	0	0	0	0
	Pro 1	312	1010	55	34	55	79	55	0	0	0	0
	Pro 2	311	1320	55	21	55	49	55	0	0	0	0
	Pro 3 Inman S	313	1320	55	21	55	49	55	0	0	0	0
	Pro 4	314	1320	55	21	55	49	55	0	0	0	0
	Pro 5	315	1320	45	21	45	49	45	0	0	0	0
	Pro 6	316	1320	45	21	45	49	45	0	0	0	0
	Por 7	317	1320	45	21	45	49	45	0	0	0	0
	Pro 8	318	1320	45	21	45	49	45	0	0	0	0
	Start Prop brd	319	1320	45	21	45	49	45	0	0	0	0
	Pier 1	545	1320	45	21	45	49	45	0	0	0	0
	Pier 2	546	1320	45	21	45	49	45	0	0	0	0
	Pier 3	547	1320	45	21	45	49	45	0	0	0	0
	Pier 4	548	1320	45	21	45	49	45	0	0	0	0
	Pier 5	549	1320	45	21	45	49	45	0	0	0	0
	Pier 6	550	1320	45	21	45	49	45	0	0	0	0
	End Prop Brdo	551	1320	45	21	45	49	45	0	0	0	0
	point552	552	1320	45	21	45	49	45	0	0	0	0
	point553	553	1320	45	21	45	49	45	0	0	0	0
	point554	554	1320	50	21	50	49	50	0	0	0	0

<b>INPUT: TRAFFIC FOR LAeq1</b>	h Volumes	SUM-176 Central Interchange (101402)										
	point555	555	1320	50	21	50	49	50	0	0	0	0
	point556	556	1320	55	21	55	49	55	0	0	0	0
	point557	557										
I-76 WB3 -2	point584	584	1010	55	34	55	79	55	0	0	0	0
	point 259	330	1010	55	34	55	79	55	0	0	0	0
	point258	331	1010	55	34	55	79	55	0	0	0	0
	point308	332	1010	55	34	55	79	55	0	0	0	0
	point310	333	1010	55	34	55	79	55	0	0	0	0
	ped bridge	334	1010	55	34	55	79	55	0	0	0	0
	Pro 1	335	1010	55	34	55	79	55	0	0	0	0
	point311	336	937	55	28	55	65	55	0	0	0	0
	Inman St undr	337	937	55	28	55	65	55	0	0	0	0
	point314	338	937	55	28	55	65	55	0	0	0	0
	Pro 1	339	937	55	28	55	65	55	0	0	0	0
	Pro2	340	937	55	28	55	65	55	0	0	0	0
	Pro 3	341	937	55	28	55	65	55	0	0	0	0
	Meet exist	534										
I-76WB2 -2	point585	585	1010	55	34	55	79	55	0	0	0	0
	point 259	354	1010	55	34	55	79	55	0	0	0	0
	point258	355	1010	55	34	55	79	55	0	0	0	0
	point308	356	1010	55	34	55	79	55	0	0	0	0
	point310	357	1010	55	34	55	79	55	0	0	0	0
	ped bridge	358	1010	55	34	55	79	55	0	0	0	0
	Pro 1	359	1010	55	34	55	79	55	0	0	0	0
	point311	360	937	55	28	55	65	55	0	0	0	0
	Inman St undr	361	937	55	28	55	65	55	0	0	0	0
	point314	362	937	55	28	55	65	55	0	0	0	0
	point363	363	937	55	28	55	65	55	0	0	0	0
	Pro2	364	937	55	28	55	65	55	0	0	0	0
	Pro 3	365	937	55	28	55	65	55	0	0	0	0
	Meet exist	366										
I-76 WB1-2	point586	586	1010	55	34	55	79	55	0	0	0	0
	point 259	383	1010	55	34	55	79	55	0	0	0	0
	point258	384	1010	55	34	55	79	55	0	0	0	0
	point308	385	1010	55	34	55	79	55	0	0	0	0
	point310	386	1010	55	34	55	79	55	0	0	0	0

INPUT: TRAFFIC FOR LAeq1h Volumes			SUM-I76 Central Interchange (101402)									
	ped bridge	387	1010	55	34	55	79	55	0	0	0	0
	Pro 1	528	1010	55	34	55	79	55	0	0	0	0
	Pro 2	529	900	50	8	50	20	50	0	0	0	0
	Pro 3 Inman B	530	900	50	8	50	20	50	0	0	0	0
	Pro 4	531	900	50	8	50	20	50	0	0	0	0
	Pro 5	536	900	50	8	50	20	50	0	0	0	0
	Pro 6	537	900	50	8	50	20	50	0	0	0	0
	Pro 7	538	900	50	8	50	20	50	0	0	0	0
	Pro8	539	900	50	8	50	20	50	0	0	0	0
	Pro 9	540	900	50	8	50	20	50	0	0	0	0
	Pro 10	541	900	50	8	50	20	50	0	0	0	0
	Pro 11	542	900	50	8	50	20	50	0	0	0	0
	Pro 12	543	900	50	8	50	20	50	0	0	0	0
	Meet Exist	544										
I77 NB1/Ramp I-77NB to I-76EB-2	point587	587	1507	55	19	55	44	55	0	0	0	0
	point131	177	1507	55	19	55	44	55	0	0	0	0
	point132	178	1507	55	19	55	44	55	0	0	0	0
	point133	179	1270	50	24	50	56	50	0	0	0	0
	point172	180	1270	50	24	50	56	50	0	0	0	0
	point173	181	1270	50	24	50	56	50	0	0	0	0
	point196	196	1270	50	24	50	56	50	0	0	0	0
	point197	197	1270	50	24	50	56	50	0	0	0	0
	point198	198	1270	50	24	50	56	50	0	0	0	0
	Inman St ovrp	199	1270	50	24	50	56	50	0	0	0	0
	point92	200	1270	50	24	50	56	50	0	0	0	0
	point93	201	1142	55	47	55	108	55	0	0	0	0
	ped bridge	202	1142	55	47	55	108	55	0	0	0	0
	point95	203										
I-77 NB2/Ramp I-77NB to I-76WB-2	Lovers Lane	168	1507	55	19	55	44	55	0	0	0	0
	point131	169	1507	55	19	55	44	55	0	0	0	0
	point132	170	1507	55	19	55	44	55	0	0	0	0
	point133	171	1277	50	5	50	8	50	0	0	0	0
	point172	172	1267	50	5	50	8	50	0	0	0	0
	point173	173	1277	50	5	50	8	50	0	0	0	0
	point182	182	1277	50	5	50	8	50	0	0	0	0
	point183	183	1277	50	5	50	8	50	0	0	0	0

INPUT: TRAFFIC FOR LAeq1h Ve	olumes	SUM-I76 Central Interchange (										
	SR 8 ovrpa	184	1277	50	5	50	8	50	0	0	0	0
	point185	185	1277	50	5	50	8	50	0	0	0	0
	point186	186	1277	50	5	50	8	50	0	0	0	0
	point187	187	1277	50	5	50	8	50	0	0	0	0
	point188	188	1277	50	5	50	8	50	0	0	0	0
	point71	189	1277	50	5	50	8	50	0	0	0	0
	Browm St und	190	1277	50	5	50	8	50	0	0	0	0
	point73	191	1026	55	31	55	71	55	0	0	0	0
	point74	192	1026	55	31	55	71	55	0	0	0	0
	point75	193	1026	55	31	55	71	55	0	0	0	0
	point76	194	1026	55	31	55	71	55	0	0	0	0
	Grant St ovrpa	195										
I-77 NB thru lane 3-2	Lovers Lane	150	1507	55	19	55	44	55	0	0	0	0
	point131	151	1507	55	19	55	44	55	0	0	0	0
	point132	152	1507	55	19	55	44	55	0	0	0	0
	point133	153	1729	55	27	55	64	55	0	0	0	0
	Lafollette Rd c	154	1729	55	27	55	64	55	0	0	0	0
	point135	155	1729	55	27	55	64	55	0	0	0	0
	point136	156	1729	55	27	55	64	55	0	0	0	0
	I-76 EB ovrpa	157	1729	55	27	55	64	55	0	0	0	0
	I-76WB ovrpa	158	1729	55	27	55	64	55	0	0	0	0
	point139	159	1729	55	27	55	64	55	0	0	0	0
	point140	160	1729	55	27	55	64	55	0	0	0	0
	point141	161	1352	55	21	55	49	55	0	0	0	0
	Beacon St und	162										
I-77 NB thru lane 4-2	Lovers Lane	130	1507	55	19	55	44	55	0	0	0	0
	point131	131	1507	55	19	55	44	55	0	0	0	0
	point132	132	1507	55	19	55	44	55	0	0	0	0
	point133	133	1729	55	27	55	64	55	0	0	0	0
	Lafollette Rd c	134	1729	55	27	55	64	55	0	0	0	0
	point135	135	1729	55	27	55	64	55	0	0	0	0
	point136	136	1729	55	27	55	64	55	0	0	0	0
	I-76 EB ovrpa	137	1729	55	27	55	64	55	0	0	0	0
	I-76WB ovrpa	138	1729	55	27	55	64	55	0	0	0	0
	point139	139	1729	55	27	55	64	55	0	0	0	0
	point140	140	1729	55	27	55	64	55	0	0	0	0

### INPUT: TRAFFIC FOR LAeq1h Volumes

										,	
point141	141	1352	55	21	55	49	55	0	0	0	0
Beacon St und	142										

	n	1	1	1
Lawbon & Assoc			1 August 204	
Lawnon & Assoc.			TAUGUST 201	
CMCOX			I NIVI 2.5	
	SUM 17	6 Control Int	rohongo (101	402)
	SUIVI-17		erchange (101	1402)
RUN:	Design	i fear 2040 ai	i runs	
Terrain Line	Points	5		
Name	No.	Coordinates	(ground)	_
		X	Y	Z
		ft	ft	ft
ROW South 1	1	2,239,528.0	509,978.0	1,035.00
	2	2,239,829.0	510,001.0	1,040.00
	3	2,239,988.0	509,998.0	1,040.00
	4	2,240,230.0	510,045.0	1,038.00
	5	2,240,390.0	510,046.0	1,036.00
	6	2,240,399.0	510,024.0	1,034.00
	7	2,240,687.0	510,030.0	1,036.00
	8	2,241,011.0	510,026.0	1,040.00
	9	2,241,214.0	510,001.0	1,046.00
	10	2,241,450.0	510,002.0	1,046.00
	11	2,241,565.0	509,982.0	1,046.00
	12	2,241,748.0	509,968.0	1,046.00
	13	2,241,743.0	509,998.0	1,048.00
Terrain Line2	14	2,241,844.2	509,981.0	1,048.00
	15	2,241,845.5	509,958.1	1,048.00
	16	2,241,974.2	509,954.2	1,048.00
	17	2,242,112.8	509,933.0	1,050.00
	18	2,242,290.2	509,888.0	1,055.00
	19	2,242,453.0	509,839.8	1,060.00
	20	2,242,639.8	509,758.6	1,066.00
	21	2,242,645.8	509,677.3	1,068.00
	22	2,242,639.8	509,549.7	1,070.00
	23	2,242,706.0	509,399.2	1,072.00
	24	2,242,763.0	509,317.9	1,080.00
Terrain Line5	34	2,242,912.8	508,830.4	1,086.00
	35	2,242,915.2	508,566.8	1,088.00
	36	2,242,920.2	508,288.0	1,094.00
	37	2,242,917.8	508,039.2	1,096.00
	38	2,242,912.8	507,766.0	1,097.00
	39	2,242,915.2	507,502.4	1,100.00
	40	2,242,928.0	507,272.3	1,101.00
	41	2,242,958.5	507,254.6	1,102.00
Terrain Line8	49	2,242,929.2	508,829.3	1,068.00
	50	2,242,944.2	508,571.9	1,076.00
	51	2,242,945.2	508,299.7	1,083.00
	52	2,242,948.2	508,040.2	1,089.00
	53	2,242,943.2	507,764.5	1,092.00

### SUM-I76 Centra

	54	2,242,955.8	507,483.7	1,090.00
	55	2,242,968.5	507,275.9	1,086.00
Terrain Line14	77	2,243,128.0	507,257.8	1,085.00
	78	2,243,120.0	507,488.3	1,090.00
	79	2,243,120.0	507,757.9	1,092.00
	80	2,243,124.8	508,031.0	1,090.00
	81	2,243,128.0	508,282.3	1,084.00
	82	2,243,136.0	508,601.2	1,080.00
	83	2,243,161.2	508,822.8	1,070.00
Terrain Line15	84	2,243,172.2	507,258.2	1,110.00
	85	2,243,173.8	507,495.0	1,108.00
	86	2,243,180.0	507,766.5	1,106.00
	87	2,243,180.0	508,042.7	1,104.00
	88	2,243,181.8	508,288.9	1,102.00
	89	2,243,180.0	508,816.5	1,096.00
Terrain Line16	90	2,243,175.2	508,883.4	1,071.00
	91	2,243,210.0	508,998.6	1,072.00
	92	2,243,341.0	509,274.8	1,077.00
	93	2,243,483.0	509,432.7	1,086.00
	94	2,243,779.8	509,600.0	1,101.00
	95	2,244,065.5	509,742.1	1,110.00
	96	2,244,214.0	509,813.8	1,116.00
	97	2,244,394.0	509,895.8	1,116.00
Terrain Line17	98	2,243,219.5	508,880.9	1,094.00
	99	2,243,330.0	509,172.9	1,096.00
	100	2,243,372.5	509,256.5	1,097.00
	101	2,243,513.0	509,412.8	1,100.00
	102	2,243,790.8	509,584.9	1,099.00
	103	2,244,040.2	509,714.3	1,098.00
	104	2,244,210.8	509,791.7	1,099.00
	105	2,244,362.2	509,856.4	1,110.00
	106	2,244,405.0	509,876.9	1,100.00
	107	2,244,406.5	509,905.3	1,100.00
Terrain Line18	108	2,244,466.8	509,931.1	1,120.00
	109	2,244,849.8	510,111.3	1,132.00
Terrain Line19	115	2,244,470.0	509,915.0	1,100.00
	116	2,244,476.5	509,895.7	1,100.00
	117	2,244,727.5	510,030.9	1,106.00
	118	2,245,117.0	510,195.1	1,122.00
	119	2,245,387.5	510,292.9	1,159.00
Terrain Line22-2	146	2,245,836.0	510,887.0	1,132.00
	145	2,245,657.0	510,890.0	1,114.00
	144	2,245,499.0	510,893.0	1,100.00
	143	2,245,215.0	510,564.0	1,100.00
	141	2,244,986.0	510,385.0	1,105.00
	139	2,244,826.0	510,307.0	1,104.00
	140	2,244,471.2	510,169.7	1,103.00
Terrain Line21-2	154	2,245,398.2	510,455.2	1,138.00

### SUM-I76 Centra

	130	2,244,992.5	510,329.1	1,121.00
	131	2,244,464.8	510,146.0	1,105.00
Terrain Line27	155	2,244,388.2	510,062.1	1,117.00
	156	2,244,224.2	510,043.4	1,111.00
	157	2,244,051.2	510,044.0	1,105.00
	158	2,243,888.8	510,094.9	1,104.00
	159	2,243,745.0	510,190.7	1,101.00
	160	2,243,589.2	510,329.5	1,098.00
	161	2,243,486.2	510,473.2	1,089.00
	162	2,243,409.8	510,648.9	1,081.00
	163	2,243,364.2	510,842.9	1,076.00
Terrain Line28	164	2,244,396.2	510,067.6	1,098.00
	165	2,244,389.0	510,086.7	1,098.00
	166	2,244,109.0	510,074.8	1,095.00
	167	2,243,898.2	510,120.2	1,093.00
	168	2,243,745.0	510,223.2	1,091.00
	169	2,243,615.8	510,371.7	1,089.00
	170	2,243,486.2	510,572.8	1,094.00
	171	2,243,438.5	510,693.0	1,096.00
	172	2,243,397.8	510,843.8	1,098.00
	173	2,243,381.0	510,858.2	1,098.00
Terrain Line18-2	181	2,244,849.8	510,111.3	1,132.00
	110	2,245,389.5	510,321.1	1,135.00
Terrain Line38	198	2,243,354.0	510,993.5	1,077.00
	199	2,243,363.0	511,249.6	1,077.00
	200	2,243,380.0	511,543.8	1,071.00
Terrain Line39	201	2,243,392.2	510,966.6	1,100.00
	202	2,243,384.0	511,004.8	1,100.00
	203	2,243,395.0	511,240.6	1,100.00
	204	2,243,412.0	511,530.3	1,110.00
Terrain Line40	205	2,242,839.5	510,182.2	1,069.00
	206	2,243,017.0	510,112.5	1,074.00
	207	2,243,017.0	510,328.2	1,072.00
	208	2,242,853.0	510,202.4	1,069.00
Terrain Line41	209	2,243,253.0	512,036.7	1,059.00
	210	2,243,258.0	511,582.9	1,073.00
	211	2,243,226.0	511,084.7	1,077.00
	212	2,243,149.0	510,740.6	1,071.00
Terrain Line42	213	2,243,213.0	512,025.4	1,092.00
	214	2,243,223.0	511,587.4	1,094.00
	215	2,243,191.0	511,081.1	1,094.00
<b>T</b>	216	2,243,131.5	510,778.8	1,100.00
I errain Line43	217	2,243,124.8	510,661.1	1,071.00
	218	2,243,074.0	510,539.8	1,071.00
	219	2,242,954.0	510,366.8	1,076.00
	220	2,242,880.0	510,335.3	1,076.00
	221	2,242,812.5	510,378.0	1,076.00
Terrain Line44	222	2,243,084.2	510,638.6	1,087.00

### SUM-I76 Centra

	223	2,243,048.5	510,555.5	1,086.00
	224	2,242,947.2	510,414.0	1,084.00
	225	2,242,884.5	510,398.2	1,082.00
	226	2,242,850.8	510,425.2	1,082.00
Terrain Line45	227	2,242,776.8	510,239.0	1,079.00
	228	2,242,606.0	510,198.0	1,081.00
	229	2,242,051.2	510,159.5	1,077.00
	230	2,241,868.5	510,157.0	1,065.00
Terrain Line46	231	2,242,729.5	510,284.0	1,068.00
	232	2,242,592.5	510,240.0	1,058.00
	233	2,242,055.8	510,206.8	1,043.00
	234	2,241,873.8	510,195.6	1,040.00
	235	2,241,855.8	510,173.2	1,038.00
Terrain Line47	236	2,242,518.2	510,356.6	1,060.00
	237	2,242,518.2	511,212.3	1,060.00
Terrain Line48	238	2,242,539.0	510,369.0	1,074.00
	239	2,242,539.0	511,195.7	1,070.00
Terrain Line49	240	2,241,736.0	510,167.7	1,040.00
	241	2,241,719.0	510,204.3	1,040.00
	242	2,241,423.0	510,202.1	1,054.00
Terrain Line51	245	2,240,975.5	510,047.0	1,045.00
	262	2,241,151.0	510,038.0	1,048.00
	261	2,241,531.0	510,016.9	1,057.00
	247	2,241,704.0	510,003.0	1,061.00
Terrain Line52	248	2,241,862.0	509,981.0	1,069.00
	249	2,241,971.2	509,969.0	1,078.00
	250	2,242,352.0	509,909.4	1,083.00
	251	2,242,583.0	509,837.4	1,082.00
	252	2,242,694.5	509,774.7	1,079.00
Terrain Line54	257	2,242,178.5	510,352.6	1,040.00
	258	2,242,170.5	511,076.2	1,020.00
Terrain Line55	259	2,242,206.2	510,360.6	1,048.00
	260	2,242,194.2	511,076.2	1,034.00
Terrain Line36-2	264	2,243,251.2	510,354.8	1,066.00
	194	2,243,296.0	510,808.8	1,071.00

# NSA 1





**RESULTS: SOUND LEVELS** 

SUM-I76 Central Interchange (101402)

Lawhon & Assoc.							1 August	2017				
CMCox							TNM 2.5					
							Calculate	d with TNN	1 2.5			
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		SUM-I7	6 Central I	nterchange (1	01402)							
RUN:		Design	Year 2040	NSA 1								
BARRIER DESIGN:		NSA 1	Scenario 2	45 @14873				Average p	pavement type	e shall be use	d unless	
								a State hi	ghway agency	y substantiate	es the use	
ATMOSPHERICS:		68 deg	F, 50% RH					of a differ	ent type with	approval of F	HWA.	
Receiver												
Name	No.	#DUs	Existing	No Barrier					With Barrier			
			LAeq1h	LAeq1h		Increase over	existing	Туре	Calculated	Noise Reduc	tion	
				Calculated	Crit'n	Calculated	Crit'n	Impact	LAeq1h	Calculated	Goal	Calculated
							Sub'l Inc					minus
												Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
NSA1-1	1	1	72.1	72.3	66	6 0.2	2 10	Snd Lvl	67.6	4.7		4 0.2
NSA1-2	2	1	76.6	76.9	66	§ 0.3	3 10	Snd Lvl	64.9	12.0		4 7.5
NSA1-3	3	2	68.6	69.0	66	δ 0.4	4 1C	) Snd Lvl	64.6	4.4	. 4	4 -0.1
NSA1-4	4	1	71.5	71.6	66	<b>6</b> 0.1	1 10	Snd Lvl	63.6	8.0		4 3.5
NSA1-5	5	2	66.2	66.7	66	6 0.5	5 10	) Snd Lvl	63.1	3.6		4 -0.9
NSA1-6	6	2	66.8	66.8	66	6 0.0	) 10	Snd Lvl	61.6	5.2		4 0.7
NSA1-7	7	2	59.7	59.6	66	<b>6</b> -0.1	10 10	)	57.6	2.0		4 -2.5
NSA1-8	8	3	63.8	63.1	66	<b>6</b> -0.7	7 10	)	59.3	3.8		4 -0.7
NSA1-9	9	2	59.8	59.3	66	-0.5	5 10	)	56.2	3.1		4 -1.4
NSA1-10	10	1	74.2	74.1	66	<b>6</b> -0.1	1 10	Snd Lvl	63.6	10.5		4 6.0
NSA1-11	11	1	75.0	75.3	66	6 0.3	3 10	Snd Lvl	65.0	10.3		4 5.8
NSA1-12	12	1	70.7	70.6	66	<u> </u>	1 10	Snd Lvl	62.0	8.6	i 4	4 4.1
NSA1-13	13	4	/0.9	70.8	66	-0.1		Snd Lvi	62.2	8.6	4	4 4.1
NSA1-14	14	2	/1.4	/1./	66	6 0.3	3 10	Sna Lvi	63.0	8.7	4	4.2
NSA1-15	15	2	67.4	67.9	60	0.5		Sna Lvi	61.0	6.9		<u>+</u> 2.4
NSA1-16	16	2	65.0	65.6	66	0.6		)	60.2	5.4	. 4	$\frac{1}{1}$ 0.9
NSA1-17	17	2	63.9	64.2	60	0.3	- 10	)	59.5	4.7		+ 0.2
NSA1-18	18	2	64.4	64.9	00			)	59.8	5.9		+ 1.4
NSA1-19 NSA1-20	19		64.4	64.8		0.4	+ IU	)	59.3	5.5	4	+ 1.0
NSA 1-20	20		64.1	04.4	60				59.4	5.0	4	+ 0.5
NSA 1-21	21		65.0	04.8	60		+ 10		59.6	5.2	· · · · · · · · · · · · · · · · · · ·	+ 0.7
NSA 1-22	22		. 00.2 57.7	00.0 F7 7				·	59.9	0.0		+ 1.1 A 4 7
NSA 1-23	23		01.1 60 E	01.1 60 7	00			·	54.9	2.0	4	
NOA 1-24	24	3	00.5	00.7	00	0.2			57.4	3.3	1	+ -1.2

RESULTS: SOUND LEVELS						S	UM-I76 Cer	ntral Interc	hange (10140)	2)		
NSA1-25	25	4	61.1	61.2	2 66	6 0.1	10		57.8	3.4	4	-1.1
NSA1-26	26	2	59.2	59.	7 66	6 0.5	10		57.2	2.5	4	-2.0
NSA1-27	27	2	59.1	59.4	4 66	6 0.3	10		56.6	2.8	4	-1.7
NSA1-28	28	2	73.7	73.9	9 66	6 0.2	10	Snd Lvl	64.3	9.6	4	5.2
NSA1-29	29	2	74.6	75.2	1 66	6 0.5	10	Snd Lvl	64.7	10.4	4	5.9
NSA1-30	30	3	74.4	74.9	9 66	6 0.5	10	Snd Lvl	65.5	9.4	4	4.9
NSA1-31	31	2	70.5	70.2	2 66	-0.3	10	Snd Lvl	67.5	2.7	4	-1.8
NSA1-32	32	2	69.9	70.7	7 66	6 0.8	10	Snd Lvl	63.5	7.2	4	2.7
NSA1-33	33	2	65.4	67.5	5 66	6 2.1	10	Snd Lvl	63.8	3.7	4	-0.8
NSA1-34	34	2	68.1	68.8	8 66	6 0.7	10	Snd Lvl	63.1	5.7	4	1.2
NSA1-35	35	2	64.8	66.	7 66	6 1.9	10	Snd Lvl	62.8	3.9	4	-0.6
NSA1-36	36	3	67.0	67.7	7 66	6 0.7	10	Snd Lvl	62.6	5.1	4	0.6
NSA1-37	37	2	67.2	67.9	9 66	6 0.7	10	Snd Lvl	63.2	4.7	4	0.2
NSA1-38	38	2	66.8	67.5	5 66	6 0.7	10	Snd Lvl	63.3	4.2	4	-0.3
NSA1-39	39	2	62.7	62.	7 66	6 0.0	10		59.4	3.3	4	-1.2
NSA1-40	40	3	61.7	62.4	4 66	6 0.7	10		59.5	2.9	4	-1.6
NSA1-41	41	1	62.2	63.3	3 66	5 1.1	10		60.1	3.2	4	-1.3
NSA1-42	42	2	65.6	66.2	2 66	6 0.6	10	Snd Lvl	63.8	2.4	4	-2.1
NSA1-43	43	3	64.3	65.1	1 66	6 0.8	10		62.3	2.8	4	-1.7
NSA1-44	44	2	63.6	64.1	1 66	6 0.5	10		60.8	3.3	4	-1.2
NSA1-45	45	1	65.1	64.8	8 66	-0.3	10		61.6	3.2	4	-1.3
NSA1-46	46	1	63.8	63.8	8 66	6 0.0	10		59.8	4.0	4	-0.5
NSA1-47	47	2	62.4	62.7	7 66	6 0.3	10		58.5	4.2	4	-0.3
NSA1-48	48	3	62.5	62.7	7 60	6 0.2	10		58.8	3.9	4	-0.6
Dwelling Units		# DUs	Noise Red	duction								
			Min	Avg	Max							
			dB	dB	dB							
All Selected		97	2.0	5.3	3 12.0	)						
All Impacted		46	2.4	6.7	7 12.0	)						
All that meet NR Goal		45	4.7	7.2	2 12.0	)						

### **RESULTS: BARRIER DESCRIPTIONS**

Lawhon & Assoc.				1 August	2017						
СМСох				TNM 2.5							
RESULTS: BARRIER DESCRIPTIONS											
PROJECT/CONTRACT:	SUM-	176 Central	Interch	ange (101402)	Ì						
RUN:	Desig	n Year 204	0 NSA 1								
BARRIER DESIGN:	NSA <sup>·</sup>	1 Scenario	2 45 @1	4873							
Barriers											
Name	Туре	Heights a	long Ba	rrier	Length	If Wall	If Berm			Cost	
		Min	Avg	Max		Area	Volume	Тор	Run:Rise		
								Width			
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	\$	
NSA 1 Barrier 1	W	14.00	14	14.00	191	2 26773					669323
									Total Cost:		669323

#### INPUT: BARRIERS

Lawhon & Assoc.					1 Augu	st 2017												
CMCox					TNM 2.	5			1									
INPUT: BARRIERS																		
PROJECT/CONTRACT:	SUM-	76 Cent	ral Interc	change (	101402)													
RUN:	Desig	n Year 2	040 NSA	1														
Barrier				-					Points									
Name	Туре	Height		If Wall	If Berm			Add'tnl	Name	No.	Coordinates	(bottom)		Height	Segme	nt		-
		Min	Max	\$ per	\$ per	Тор	Run:Rise	\$ per			x	Y	Z	at	Seg Ht	Pertu	urbs On	Important
	Ì		İ	Unit	Unit	Width		Unit						Point	Incre-	#Up	#Dn Struct	? Reflec-
	1		Ì	Area	Vol.	Ì		Length							ment			tions?
		ft	ft	\$/sq ft	\$/cu yd	ft	ft:ft	\$/ft			ft	ft	ft	ft	ft			
NSA 1 Barrier 1	W	5.00	99.99	25.00		ĺ		0.00	0+00	27	2,242,477.0	510,183.0	1,080.50	14.00	1.00	3	0	
									0+65	28	2,242,412.0	510,180.5	1,080.00	14.00	1.00	3	0	
									1+30	5	2,242,347.0	510,178.0	1,079.00	14.00	1.00	3	0	
									1+90	15	2,242,287.5	510,173.6	1,079.50	14.00	1.00	3	0	
									2+50	16	2,242,228.2	510,169.2	1,079.00	14.00	1.00	3	0	
									3+10	17	2,242,168.8	510,164.8	1,078.00	14.00	1.00	3	0	
									3+68	18	2,242,109.5	510,160.4	1,077.50	14.00	1.00	3	0	
									4+28	6	2,242,050.0	510,156.0	1,077.50	14.00	1.00	3	0	
									6+15	7	2,241,863.0	510,156.0	1,065.00	14.00	1.00	3	0 Y	
									7+75	8	2,241,703.0	510,160.0	1,060.00	14.00	1.00	3	0	
									8+75	19	2,241,603.0	510,162.6	1,057.50	14.00	1.00	3	0	
									9+75	20	2,241,503.0	510,165.2	1,055.50	14.00	1.00	3	0	
									10+75	21	2,241,403.0	510,167.8	1,053.00	14.00	1.00	3	0	
									11+75	22	2,241,303.0	510,170.4	1,051.00	14.00	1.00	3	0	
									12+75	9	2,241,203.0	510,173.0	1,049.50	14.00	1.00	3	0	
									13+85	23	2,241,093.0	510,177.0	1,047.50	14.00	1.00	3	0	
									14+95	24	2,240,983.0	510,181.0	1,046.00	14.00	1.00	3	0	
									16+05	25	2,240,873.0	510,185.0	1,044.50	14.00	1.00	3	0	
									17+15	26	2,240,763.0	510,189.0	1,043.00	14.00	1.00	3	0	
									18+25	10	2,240,653.0	510,193.0	1,041.00	14.00	1.00	3	0	
									18+87	12	2,240,593.0	510,207.5	1,041.00	14.00	1.00	3	0	
									19+49	13	2,240,533.0	510,222.0	1,040.50	14.00	1.00	3	0	
									20+11	14	2,240,473.0	510,236.5	1,040.00	14.00	1.00	3	0	
									20+72	11	2,240,413.0	510,251.0	1,040.00	14.00				

### INPUT: RECEIVERS

Lowbon 9 Acces						4 August	047					
Lawnon & Assoc.							2017					
CMCOX						I NIVI 2.3						
INPUT: RECEIVERS												
PROJECT/CONTRACT:	SUM-I	76 Cen	tral Interchar	nge (101402)	1							
RUN:	Desig	n Year	2040 NSA 1									
Receiver												
Name	No.	#DUs	Coordinates	(ground)		Height	Input Sou	nd Levels a	and Criteria	a	Ac	tive
			X	Y	Z	above	Existing	Impact Cr	iteria	NR	in	
						Ground	LAeq1h	LAeq1h	Sub'l	Goal	Ca	ılc.
			ft	ft	ft	ft	dBA	dBA	dB	dB		
NSA1-1	1	1	2,240,478.0	510,337.0	1,044.00	4.92	72.10	66	10.0	4	1.5	Y
NSA1-2	2	1	2,240,653.0	510,244.0	1,043.00	4.92	76.60	66	10.0	4	1.5	Y
NSA1-3	3	2	2,240,499.0	510,417.0	1,046.00	4.92	68.60	66	10.0	4	1.5	Y
NSA1-4	4	1	2,240,672.0	510,348.0	1,046.00	4.92	71.50	66	10.0	4	1.5	Y
NSA1-5	5	2	2,240,484.0	510,486.0	1,046.00	4.92	66.20	66	10.0	4	1.5	Y
NSA1-6	6	2	2,240,646.0	510,493.0	1,048.00	) 4.92	66.80	66	10.0	4	1.5	Y
NSA1-7	7	2	2,240,478.0	510,637.0	1,045.00	4.92	59.70	66	10.0	4	1.5	Y
NSA1-8	8	3	2,240,584.0	510,594.0	1,045.00	4.92	63.80	66	10.0	4	1.5	Y
NSA1-9	9	2	2,240,718.0	510,700.0	1,045.00	4.92	59.80	66	10.0	4	1.5	Y
NSA1-10	10	1	2,240,851.0	510,274.0	1,045.00	4.92	74.20	66	10.0	4	1.5	Y
NSA1-11	11	1	2,241,224.0	510,241.0	1,053.00	4.92	75.00	66	10.0	4	1.5	Y
NSA1-12	12	1	2,240,865.0	510,334.0	1,045.00	4.92	70.70	66	10.0	4	1.5	Y
NSA1-13	13	4	2,240,999.0	510,337.0	1,047.00	4.92	70.90	66	10.0	4	1.5	Y
NSA1-14	14	2	2,241,209.0	510,304.0	1,053.00	4.92	71.40	66	10.0	4	ł.5 `	Y
NSA1-15	15	2	2,241,216.0	510,399.0	1,055.00	4.92	67.40	66	10.0	4	ł.5 `	Y
NSA1-16	16	2	2,240,867.0	510,430.0	1,046.00	4.92	65.00	66	10.0	4	ł.5 `	Y
NSA1-17	17	2	2,240,860.0	510,500.0	1,046.00	4.92	63.90	66	10.0	4	1.5	Y
NSA1-18	18	2	2,241,215.0	510,477.0	1,056.00	4.92	65.20	66	10.0	4	ł.5 `	Y
NSA1-19	19	1	2,241,209.0	510,504.0	1,055.00	4.92	64.40	66	10.0	4	1.5	Y
NSA1-20	20	2	2,240,910.0	510,499.0	1,047.00	4.92	64.10	66	10.0	4	1.5	Y
NSA1-21	21	2	2,240,994.0	510,504.0	1,050.00	4.92	64.40	66	10.0	4	1.5	Y
NSA1-22	22	2	2,241,134.0	510,504.0	1,054.00	4.92	65.20	66	10.0	4	1.5	Y

INPUT: RECEIVERS							S	UM-I76 Cent	ral Intercha	nge (1014	402)
NSA1-23	23	2	2,240,855.0	510,648.0	1,046.00	4.92	57.70	66	10.0	4.5	Y
NSA1-24	24	3	2,240,941.0	510,597.0	1,049.00	4.92	60.50	66	10.0	4.5	Y
NSA1-25	25	4	2,241,117.0	510,600.0	1,053.00	4.92	61.10	66	10.0	4.5	Y
NSA1-26	26	2	2,241,247.0	510,647.0	1,054.00	4.92	59.20	66	10.0	4.5	Y
NSA1-27	27	2	2,241,149.0	510,684.0	1,054.00	4.92	59.10	66	10.0	4.5	Y
NSA1-28	28	2	2,241,401.0	510,265.0	1,055.00	4.92	73.70	66	10.0	4.5	Y
NSA1-29	29	2	2,241,474.0	510,249.0	1,054.00	4.92	74.60	66	10.0	4.5	Y
NSA1-30	30	3	2,241,572.0	510,251.0	1,053.00	4.92	74.40	66	10.0	4.5	Y
NSA1-31	31	2	2,241,707.0	510,255.0	1,045.00	4.92	70.50	66	10.0	4.5	Y
NSA1-32	32	2	2,241,418.0	510,347.0	1,057.00	4.92	69.90	66	10.0	4.5	Y
NSA1-33	33	2	2,241,682.0	510,365.0	1,045.00	4.92	65.40	66	10.0	4.5	Y
NSA1-34	34	2	2,241,421.0	510,430.0	1,059.00	4.92	68.10	66	10.0	4.5	Y
NSA1-35	35	2	2,241,686.0	510,432.0	1,047.00	4.92	64.80	66	10.0	4.5	Y
NSA1-36	36	3	2,241,418.0	510,484.0	1,060.00	4.92	67.00	66	10.0	4.5	Y
NSA1-37	37	2	2,241,543.0	510,492.0	1,061.00	4.92	67.20	66	10.0	4.5	Y
NSA1-38	38	2	2,241,624.0	510,491.0	1,057.00	4.92	66.80	66	10.0	4.5	Y
NSA1-39	39	2	2,241,399.0	510,660.0	1,060.00	4.92	62.70	66	10.0	4.5	Y
NSA1-40	40	3	2,241,587.0	510,605.0	1,062.00	4.92	61.70	66	10.0	4.5	Y
NSA1-41	41	1	2,241,692.0	510,635.0	1,052.00	4.92	62.20	66	10.0	4.5	Y
NSA1-42	42	2	2,241,866.0	510,342.0	1,039.00	4.92	65.60	66	10.0	4.5	Y
NSA1-43	43	3	2,241,866.0	510,403.0	1,039.00	4.92	64.30	66	10.0	4.5	Y
NSA1-44	44	2	2,241,894.0	510,502.0	1,040.00	4.92	63.60	66	10.0	4.5	Y
NSA1-45	45	1	2,241,981.0	510,313.0	1,036.00	4.92	65.10	66	10.0	4.5	Y
NSA1-46	46	1	2,242,048.0	510,364.0	1,036.00	4.92	63.80	66	10.0	4.5	Y
NSA1-47	47	2	2,242,038.0	510,413.0	1,033.00	4.92	62.40	66	10.0	4.5	Y
NSA1-48	48	3	2,242,095.0	510,477.0	1,032.00	4.92	62.50	66	10.0	4.5	Y

# NSA 2

No Noise Barrier Wall Recommended

NSA 3

Noise Barrier Wall NSA 3 Scenario 2





**RESULTS: SOUND LEVELS** 

SUM-I76 Central Interchange (101402)

Lawhon & Assoc.							1 August	2017				
CMCox							<b>TNM 2.5</b>					
							Calculate	d with TNN	1 2.5			
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		SUM-I7	76 Central I	nterchange (1	01402)							
RUN:		NSA 3	Design Yea	ar 2040								
BARRIER DESIGN:		NSA 3	Scenario 2	Rec				Average p	pavement type	e shall be use	d unless	
								a State hi	ghway agenc	y substantiate	es the use	
ATMOSPHERICS:		68 deg	g F, 50% RH	l,				of a differ	ent type with	approval of F	HWA.	
Receiver												_
Name	No.	#DUs	Existing	No Barrier					With Barrier			
		1	LAeq1h	LAeq1h		Increase over	existing	Туре	Calculated	Noise Reduc	tion	
		1		Calculated	Crit'n	Calculated	Crit'n	Impact	LAeq1h	Calculated	Goal	Calculated
							Sub'l Inc					minus
												Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
NSA 3-1	1	· ·	1 65.3	67.1	66	6 1.8	3 10	Snd Lvl	65.0	2.1	1	4 -2.4
NSA 3-2	2	2 .	1 65.3	67.1	66	6 1.8	3 10	Snd Lvl	63.6	3.5	5	4 -1.0
NSA 3-3	3	s ·	1 65.3	67.1	66	6 1.8	3 10	Snd Lvl	62.6	6 4.5	5	4 0.0
NSA 3-4	4	· ·	1 65.8	67.6	66	6 1.8	3 10	Snd Lvl	62.0	5.6	;	4 1.1
NSA 3-5	5	5 '	1 66.8	68.5	66	i 1.7	7 10	Snd Lvl	62.2	2 6.3	5	4 1.8
NSA 3-6	6	; ;	1 67.4	68.9	66	6 1.5	5 10	Snd Lvl	62.0	6.9	)	4 2.4
NSA 3-7	7		1 67.5	68.6	66	<b>i</b> 1.1	10	Snd Lvl	61.8	6.8	6	4 2.3
NSA3-8	8	3	1 65.6	65.9	66	0.3	3 10		60.5	5.4		4 0.9
NSA 3-9	9		1 65.8	65.3	66	-0.5	5 10		59.7	5.6	5	4 1.1
NSA 3-10	10		1 65.3	65.6	66	6 0.3	3 10		60.4	5.2	2	4 0.7
NSA 3-11	11		1 62.3	64.1	66	5 1.8	3 10		60.3	3.8	8	4 -0.7
NSA 3-12	12	2 .	1 61.8	63.9	66	<b>5</b> 2.1	1 10		60.6	3.3	8	4 -1.2
NSA 3-13	13	· ·	1 62.0	64.1	66	<b>5</b> 2.1	1 10		61.0	3.1		4 -1.4
NSA 3-14	14	· ·	1 61.9	64.0	66	5 2.1	1 10		61.3	8 2.7	<b>*</b>	4 -1.8
NSA 3-15	15	5 2	2 61.4	63.4	. 66	5 2.0	0 10		60.9	2.5	5	4 -2.0
NSA 3-16	16	5 ·	1 61.3	63.3	66	5 2.0	) 10		61.1	2.2	2	4 -2.3
NSA 3-17	17		1 61.6	63.5	66	5 1.9	9 10		61.6	5 1.9		4 -2.6
NSA 3-18	18	3	1 61.6	63.2	66	5 1.6	<u> </u>		61.7	1.5	5	4 -3.0
NSA 3-22	22	2 .	1 65.6	64.4	. 66	-1.2	2 10		59.0	5.4	-	4 0.9
NSA 3-23	23	<u> </u>	1 65.0	65.9	66	6 O.S	10		60.2	5.7		4 1.2
NSA 3-24	24		1 64.8	65.8	66	<u> </u>	) 10		60.7	5.1		4 0.6
NSA 3-25	25		1 63.7	64.4	66	0.7	10		59.6	5 4.8	8	4 0.3
NSA 3-26	26		1 63.5	64.7	66	5 1.2	2 10		61.5	3.2	2	4 -1.3
NSA 3-27	27		1 66.9	66.3	66	-0.6	j 10	Snd Lvl	60.0	6.3	5	4 1.8
E:\LAWHON\SUM-IR 76 CENTRAL	INTERCHAN	GE (101	402)\DES Y	'R TNM\NSA 3	3 2040					1		

RESULTS: SOUND LEVELS						S	UM-I76 Cer	ntral Intercha	ange (101402)			
NSA 3-28	28	1	72.9	68.3	66	-4.6	10	Snd Lvl	60.8	7.5	4	3.0
NSA 3-29	29	1	65.9	66.9	66	1.0	10	Snd Lvl	60.8	6.1	4	1.6
NSA 3-30	30	1	65.0	66.4	66	1.4	10	Snd Lvl	60.8	5.6	4	1.1
NSA 3-31	31	1	65.0	66.1	66	1.1	10	Snd Lvl	60.8	5.3	4	0.8
NSA 3-32	32	1	64.5	65.6	66	1.1	10		60.8	4.8	4	0.3
NSA3-33	33	1	69.0	69.0	66	0.0	10	Snd Lvl	62.4	6.6	4	2.1
NSA 3-34	34	1	67.8	68.1	66	0.3	10	Snd Lvl	62.4	5.7	4	1.2
NSA 3-35	35	1	64.8	67.3	66	2.5	10	Snd Lvl	61.7	5.6	4	1.1
NSA 3-36	36	1	64.3	67.1	66	2.8	10	Snd Lvl	61.6	5.5	4	1.0
NSA 3-37	37	1	64.0	66.7	66	2.7	10	Snd Lvl	61.5	5.2	4	0.7
NSA 3-38	38	1	63.4	66.2	66	2.8	10	Snd Lvl	61.2	5.0	4	0.5
NSA 3-39	49	1	69.2	69.3	66	0.1	10	Snd Lvl	65.0	4.3	4	-0.2
NSA 3-40	50	1	67.6	68.5	66	0.9	10	Snd Lvl	63.8	4.7	4	0.2
NSA 3-41	51	1	66.6	67.5	66	0.9	10	Snd Lvl	62.7	4.8	4	0.3
NSA 3-42	52	1	65.7	66.7	66	1.0	10	Snd Lvl	61.8	4.9	4	0.4
NSA 3-43	53	1	65.4	66.2	66	0.8	10	Snd Lvl	61.0	5.2	4	0.7
NSA 3-44	54	1	67.3	67.6	66	0.3	10	Snd Lvl	63.1	4.5	4	0.0
NSA3-45	55	1	64.0	65.1	66	1.1	10		60.7	4.4	4	-0.1
NSA3-46	56	1	63.1	64.2	66	1.1	10		60.3	3.9	4	-0.6
NSA3-47	57	1	65.4	66.0	66	0.6	10	Snd Lvl	61.0	5.0	4	0.5
NSA3-48	58	1	64.9	65.5	66	0.6	10		60.7	4.8	4	0.3
NSA3-49	59	1	64.1	64.7	66	0.6	10		60.3	4.4	4	-0.1
NSA3-50	60	1	65.0	65.3	66	0.3	10		60.7	4.6	4	0.1
NSA3-51	61	1	63.8	64.2	66	0.4	10		59.9	4.3	4	-0.2
Dwelling Units		# DUs	Noise Red	duction								
			Min	Avg	Max							
			dB	dB	dB							
All Selected		49	1.5	4.7	7.5							
All Impacted		25	2.1	5.3	7.5							
All that meet NR Goal		32	4.5	5.5	7.5							

### **RESULTS: BARRIER DESCRIPTIONS**

Lawhon & Assoc.				1 August	2017						
СМСох				TNM 2.5							
RESULTS: BARRIER DESCRIPTIONS											
PROJECT/CONTRACT:	SUM-	I76 Central	Intercha	ange (101402)	)						
RUN:	NSA	3 Design Ye	ar 2040								
BARRIER DESIGN:	INPU	IT HEIGHTS	5								
Barriers							-				
Name	Туре	Heights a	long Bar	rrier	Length	If Wall	If Berm			Cost	
		Min	Avg	Max		Area	Volume	Тор	Run:Rise		
								Width			
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	\$	
NSA 3 Barrier 1	W	16.00	16	.00 16.00	1954	4 31260					781489
									Total Cost:		781489

#### INPUT: BARRIERS

Lawhon & Assoc.					1 Augu	st 2017												
CMCox					TNM 2.	5												
INPUT: BARRIERS																		
PROJECT/CONTRACT:	SUM-	76 Cent	ral Interc	hange (	101402)													
RUN:	NSA 3	Design	Year 20	40														
Barrier									Points									
Name	Туре	Height		If Wall	If Berm			Add'tnl	Name	No.	Coordinates	(bottom)		Height	Segmer	nt		
		Min	Max	\$ per	\$ per	Тор	Run:Rise	\$ per			x	Y	Z	at	Seg Ht	Pertu	ırbs On	Important
				Unit	Unit	Width		Unit						Point	Incre- #	#Up	#Dn Struct?	Reflec-
		1		Area	Vol.			Length							ment			tions?
		ft	ft	\$/sq ft	\$/cu yd	ft	ft:ft	\$/ft			ft	ft	ft	ft	ft			
NSA 3 Barrier 1	W	5.00	99.99	25.00		Ì		0.00	0+00	9	2,244,815.0	510,213.0	1,127.00	16.00	1.00	1	1	
									0+51	29	2,244,768.0	510,193.8	1,126.00	16.00	1.00	1	1	
									1+02	30	2,244,721.0	510,174.5	1,125.00	16.00	1.00	1	1	
									1+53	31	2,244,674.0	510,155.3	1,124.00	16.00	1.00	1	1	
									2+04	10	2,244,627.0	510,136.0	1,123.00	16.00	1.00	1	1	
									2+95	32	2,244,541.5	510,106.0	1,121.00	16.00	1.00	1	1	
									3+86	11	2,244,456.0	510,076.0	1,118.00	16.00	1.00	1	1 Y	
									4+53	12	2,244,391.0	510,060.0	1,117.00	16.00	1.00	1	1	
									6+26	13	2,244,219.0	510,038.0	1,112.00	16.00	1.00	1	1	
									8+01	14	2,244,044.0	510,045.0	1,106.00	16.00	1.00	1	1	
									8+89	15	2,243,956.0	510,054.0	1,104.00	16.00	1.00	1	1	
									9+82	16	2,243,865.0	510,074.0	1,102.00	16.00	1.00	1	1	
									11+13	17	2,243,747.2	510,132.0	1,101.50	16.00	1.00	1	1	
									12+42	18	2,243,642.0	510,207.0	1,097.00	16.00	1.00	1	1	
									13+55	19	2,243,569.0	510,293.0	1,095.00	16.00	1.00	1	1	
									14+19	26	2,243,547.5	510,353.0	1,094.25	16.00	1.00	1	1	
									14+83	27	2,243,525.8	510,413.0	1,093.50	16.00	1.00	1	1	
									15+47	28	2,243,504.0	510,473.0	1,092.75	16.00	1.00	1	1	
									16+11	22	2,243,482.5	510,533.0	1,092.00	16.00	1.00	1	1	
									17+25	21	2,243,457.0	510,644.0	1,096.00	16.00	1.00	1	1	
									17+83	23	2,243,443.0	510,699.8	1,096.50	16.00	1.00	1	1	
									18+40	24	2,243,429.0	510,755.5	1,097.00	16.00	1.00	1	1	
									18+98	25	2,243,415.0	510,811.3	1,097.50	16.00	1.00	1	1	
									19+54	20	2,243,401.0	510,867.0	1,098.00	16.00				

### INPUT: RECEIVERS

Lawhon & Assoc.						1 August	2017				
CMCox						TNM 2.5					
INPUT: RECEIVERS											
PROJECT/CONTRACT:	SUM-	76 Cer	ntral Interchar	nae (101402)	1						
RUN:	NSA 3	Desig	n Year 2040								
Receiver											
Name	No.	#DUs	Coordinates	(ground)		Height	Input Sou	nd Levels a	and Criteria	à	Active
			X	Y	Z	above	Existing	Impact Cr	iteria	NR	in
						Ground	LAeq1h	LAeq1h	Sub'l	Goal	Calc.
			ft	ft	ft	ft	dBA	dBA	dB	dB	
NSA 3-1	1	1	2,243,514.0	510,911.0	1,104.00	) 4.92	65.30	66	10.0	4.	5
NSA 3-2	2	: 1	2,243,511.0	510,860.0	1,103.00	) 4.92	65.30	66	10.0	4.	5
NSA 3-3	3	1	2,243,511.0	510,822.0	1,102.00	) 4.92	65.30	66	10.0	4.	5
NSA 3-4	4	1	2,243,514.0	510,782.0	1,102.00	) 4.92	65.80	66	10.0	4.	5
NSA 3-5	5	1	2,243,506.0	510,746.0	1,102.00	) 4.92	66.80	66	10.0	4.	5
NSA 3-6	6	1	2,243,507.0	510,707.0	1,102.00	) 4.92	67.40	66	10.0	4.	5
NSA 3-7	7	1	2,243,510.0	510,649.0	1,100.00	) 4.92	67.50	66	10.0	4.	5
NSA3-8	8	1	2,243,593.0	510,541.0	1,099.00	) 4.92	65.60	66	10.0	4.	5
NSA 3-9	9	1	2,243,676.0	510,404.0	1,095.00	) 4.92	65.80	66	10.0	4.	5
NSA 3-10	10	1	2,243,671.0	510,470.0	1,099.00	) 4.92	65.30	66	10.0	4.	5
NSA 3-11	11	1	2,243,679.0	510,582.0	1,102.00	) 4.92	62.30	66	10.0	4.	5
NSA 3-12	12	1	2,243,671.0	510,635.0	1,103.00	) 4.92	61.80	66	10.0	4.	5
NSA 3-13	13	1	2,243,653.0	510,683.0	1,104.00	) 4.92	62.00	66	10.0	4.	5
NSA 3-14	14	1	2,243,665.0	510,722.0	1,106.00	) 4.92	61.90	66	10.0	4.	5
NSA 3-15	15	2	2,243,661.0	510,763.0	1,105.00	) 4.92	61.40	66	10.0	4.	5
NSA 3-16	16	1	2,243,661.0	510,837.0	1,107.00	) 4.92	61.30	66	10.0	4.	5
NSA 3-17	17	1	2,243,661.0	510,893.0	1,109.00	4.92	61.60	66	10.0	4.	5
NSA 3-18	18	1	2,243,671.0	510,944.0	1,110.00	4.92	61.60	66	10.0	4.	5
NSA 3-19	19	1	2,243,672.0	510,993.0	1,113.00	4.92	62.40	66	10.0	4.	5
NSA 3-20	20	1	2,243,682.0	511,063.0	1,116.00	4.92	62.80	66	10.0	4.	5
NSA 3-21	21	1	2,243,641.0	511,021.0	1,113.00	4.92	63.30	66	10.0	4.	5
NSA 3-22	22	1	2,243,802.0	510,272.0	1,091.00	) 4.92	65.60	66	10.0	4.	5

INPUT: RECEIVERS							S	UM-I76 Ce	ntral Interc	hange (10:	402)
NSA 3-23	23	1	2,243,863.0	510,357.0	1,099.00	4.92	65.00	66	10.0	4.5	
NSA 3-24	24	1	2,243,885.0	510,404.0	1,102.00	4.92	64.80	66	10.0	4.5	
NSA 3-25	25	1	2,243,857.0	510,459.0	1,098.00	4.92	63.70	66	10.0	4.5	
NSA 3-26	26	1	2,243,796.0	510,583.0	1,106.00	4.92	63.50	66	10.0	4.5	
NSA 3-27	27	1	2,243,884.0	510,218.0	1,095.00	4.92	66.90	66	10.0	4.5	
NSA 3-28	28	1	2,244,025.0	510,174.0	1,098.00	4.92	72.90	66	10.0	4.5	
NSA 3-29	29	1	2,244,021.0	510,302.0	1,101.00	4.92	65.90	66	10.0	4.5	
NSA 3-30	30	1	2,244,021.0	510,352.0	1,102.00	4.92	65.00	66	10.0	4.5	
NSA 3-31	31	1	2,244,005.0	510,397.0	1,103.00	4.92	65.00	66	10.0	4.5	
NSA 3-32	32	1	2,244,021.0	510,445.0	1,104.00	4.92	64.50	66	10.0	4.5	
NSA3-33	33	1	2,244,203.0	510,139.0	1,099.00	4.92	69.00	66	10.0	4.5	
NSA 3-34	34	1	2,244,247.0	510,200.0	1,099.00	4.92	67.80	66	10.0	4.5	
NSA 3-35	35	1	2,244,217.5	510,243.6	1,099.00	4.92	64.80	66	10.0	4.5	Y
NSA 3-36	36	1	2,244,217.5	510,272.0	1,100.00	4.92	64.30	66	10.0	4.5	Y
NSA 3-37	37	1	2,244,217.5	510,314.0	1,101.00	4.92	64.00	66	10.0	4.5	Y
NSA 3-38	38	1	2,244,217.5	510,352.0	1,101.00	4.92	63.40	66	10.0	4.5	Y
NSA 3-39	49	1	2,244,343.0	510,160.0	1,100.00	4.92	69.20	66	10.0	4.5	Y
NSA 3-40	50	1	2,244,342.0	510,208.0	1,101.00	4.92	67.60	66	10.0	4.5	Y
NSA 3-41	51	1	2,244,340.0	510,251.0	1,101.00	4.92	66.60	66	10.0	4.5	Y
NSA 3-42	52	1	2,244,343.0	510,289.0	1,101.00	4.92	65.70	66	10.0	4.5	Y
NSA 3-43	53	1	2,244,328.0	510,341.0	1,101.00	4.92	65.40	66	10.0	4.5	Y
NSA 3-44	54	1	2,244,454.0	510,317.0	1,103.00	4.92	67.30	66	10.0	4.5	Y
NSA3-45	55	1	2,243,998.0	510,486.0	1,104.00	4.92	64.00	66	10.0	4.5	Y
NSA3-46	56	1	2,244,004.0	510,557.0	1,104.00	4.92	63.10	66	10.0	4.5	Y
NSA3-47	57	1	2,244,217.5	510,389.0	1,102.00	4.92	65.40	66	10.0	4.5	Y
NSA3-48	58	1	2,244,217.5	510,438.0	1,103.00	4.92	64.90	66	10.0	4.5	Y
NSA3-49	59	1	2,244,217.5	510,486.0	1,103.00	4.92	64.10	66	10.0	4.5	Y
NSA3-50	60	1	2,244,334.0	510,408.0	1,101.00	4.92	65.00	66	10.0	4.5	Y
NSA3-51	61	1	2,244,338.0	510,499.0	1,102.00	4.92	63.80	66	10.0	4.5	Y

## NSA 5





**RESULTS: SOUND LEVELS** 

SUM-I76 Central Interchange (101402)

Lawhon & Assoc.							1 August	2017				
CMCox							TNM 2.5					
							Calculate	d with TNN	1 2.5			
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		SUM-I7	6 Central Ir	nterchange (1	01402)							
RUN:		Noise E	Barrier NSA	5 Scenario 1								
BARRIER DESIGN:		final 14	ft 69@108	32				Average	oavement type	e shall be use	d unless	
ATMOSPHERICS:		68 dea	F. 50% RH					of a differ	ent type with	approval of F	HWA.	
Receiver			-		+	+	_		51		-	-
Name	No	#DUs	Fxisting	No Barrier					With Barrier			-
			L Aeg1h	I Aeg1h		Increase over	existing	Type	Calculated	Noise Reduc	tion	
					Crit'n	Calculated	Crit'n	Impact	LAeg1h	Calculated	Goal	Calculated
				Calculatou	• · · · · ·	Julioulutou	Sub'l Inc	mpuot	_,	Calculatou		minus
												Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
NSA5-1	1	1	73.4	73.6	66	0.2	2 10	Snd Lvl	64.7	8.9	)	4 4.4
NSA5-2	2	1	74.0	74.0	66	0.0	) 10	Snd Lvl	63.3	10.7		4 6.2
NSA5-3	3	1	74.0	74.3	66	0.3	3 10	Snd Lvl	63.3	3 11.0	) .	4 6.5
NSA5-4	4	2	. 71.8	72.8	66	i 1.0	10	Snd Lvl	63.0	9.8	;	4 5.3
NSA5-5	5	2	73.9	75.0	66	5 1.1	10	Snd Lvl	63.8	8 11.2		4 6.7
NSA5-6	6	2	73.5	73.4	66	-0.1	10	Snd Lvl	63.6	9.8		4 5.3
NSA5-7	7	2	. 72.6	72.2	66	-0.4	l 10	Snd Lvl	63.9	8.3		4 3.8
NSA5-8	8	1	71.4	71.8	66	0.4	l 10	Snd Lvl	64.4	7.4		4 2.9
NSA5-9	9	1	67.3	67.5	66	0.2	2 10	Snd Lvl	63.7	3.8		4 -0.7
NSA5-10	10	3	67.9	68.2	66	0.3	3 10	Snd Lvl	63.1	5.1		4 0.6
NSA5-11	11	3	68.1	68.2	66	0.1	10	Snd Lvl	60.9	7.3		4 2.8
NSA5-12	12	4	67.2	67.6	66	0.4	l 10	Snd Lvl	60.6	5 7.0		4 2.5
NSA5-13	13	2	. 67.2	67.5	66	0.3	3 10	Snd Lvl	60.6	6.9		4 2.4
NSA5-14	14	2	69.1	69.8	66	0.7	<b>'</b> 10	Snd Lvl	64.8	5.0		4 0.5
NSA5-15	15	2	. 69.0	69.7	66	0.7	<b>'</b> 10	Snd Lvl	65.1	4.6	i -	4 0.1
NSA5-16	16	2	. 63.7	63.8	66	0.1	10		60.1	3.7		4 -0.8
NSA5-17	17	2	. 64.6	64.8	66	0.2	2 10		60.1	4.7		4 0.2
NSA5-18	18	3	65.3	65.4	66	6 0.1	10		59.7	5.7	·	4 1.2
NSA5-19	19	2	66.4	66.6	66	0.2	2 10	Snd Lvl	59.3	3 7.3		4 2.8
NSA5-20	20	2	65.7	65.3	66	-0.4	10		58.9	6.4		4 1.9
NSA5-21	21	2	65.1	65.1	66	0.0	10		58.6	6.5	i	4 2.0
NSA5-22	22	3	65.0	65.6	66	0.6	6 10		59.1	6.5	i	4 2.0
NSA5-23	23	1	66.1	66.0	66	-0.1	10	Snd Lvl	59.8	6.2		4 1.7
NSA5-24	24	1	68.3	68.2	66	-0.1	10	Snd Lvl	62.0	6.2		4 1.7

RESULTS: SOUND LEVELS						S	UM-I76 Cer	ntral Intercha	inge (101402)			
NSA5-25	25	1	67.4	67.3	66	-0.1	10	Snd Lvl	61.5	5.8	4	1.3
NSA5-26	26	2	65.9	66.4	66	0.5	10	Snd Lvl	60.7	5.7	4	1.2
NSA5-27	27	1	68.4	68.7	66	0.3	10	Snd Lvl	63.0	5.7	4	1.2
NSA5-28	28	2	66.9	67.4	66	0.5	10	Snd Lvl	62.0	5.4	4	0.9
NSA5-29	29	1	62.7	62.9	66	0.2	10		59.3	3.6	4	-0.9
NSA5-30	30	2	62.9	63.0	66	0.1	10		58.9	4.1	4	-0.4
NSA5-31	31	1	64.6	64.9	66	0.3	10		60.3	4.6	4	0.1
NSA5-32	32	2	64.2	64.5	66	0.3	10		59.5	5.0	4	0.5
NSA5-33	33	3	63.3	63.6	66	0.3	10		59.4	4.2	4	-0.3
NSA5-34	34	3	63.7	63.8	66	0.1	10		58.3	5.5	4	1.0
NSA5-35	35	2	64.1	64.1	66	0.0	10		58.7	5.4	4	0.9
NSA5-36	36	2	63.7	63.9	66	0.2	10		59.2	4.7	4	0.2
NSA5-37	37	1	64.6	64.7	66	0.1	10		59.1	5.6	4	1.1
NSA5-38	38	2	63.7	63.7	66	0.0	10		58.8	4.9	4	0.4
NSA5-39	39	1	64.6	64.6	66	0.0	10		59.3	5.3	4	0.8
NSA5-40	40	2	63.7	63.0	66	-0.7	10		58.4	4.6	4	0.1
NSA5-42	41	1	64.9	64.9	66	0.0	10		59.9	5.0	4	0.5
NSA5-43	42	2	65.3	65.7	66	0.4	10		61.1	4.6	4	0.1
NSA5-44	43	1	64.1	64.3	66	0.2	10		60.2	4.1	4	-0.4
NSA5-45	44	1	66.8	67.1	66	0.3	10	Snd Lvl	62.7	4.4	4	-0.1
Dwelling Units		# DUs	Noise Red	luction								
			Min	Avg	Max							
			dB	dB	dB							
All Selected		80	3.6	6.1	11.2							
All Impacted		40	3.8	7.1	11.2							
All that meet NR Goal		69	4.6	6.5	11.2							

### **RESULTS: BARRIER DESCRIPTIONS**

Lawhon & Assoc.				1 August	2017						
СМСох				TNM 2.5							
RESULTS: BARRIER DESCRIPTIONS											
PROJECT/CONTRACT:	SUM-	-I76 Central	Interch	ange (101402)	)						
RUN:	Noise	e Barrier NS	A 5 Sce	enario 1							
BARRIER DESIGN:	final '	14 ft 69@10	832								
Barriers											
Name	Type Heights along Ba			rrier	Length	If Wall	If Berm			Cost	
		Min	Avg	Max		Area	Volume	Тор	Run:Rise		
								Width			
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	\$	
NSA 5 Barrier 1	W	14.00	14	14.00	1656	3 23178					579460
									Total Cost:		579460

#### INPUT: BARRIERS

Lawhon & Assoc.					1 Augus	st 2017													
CMCox					TNM 2.5	5													
INPUT: BARRIERS																			
PROJECT/CONTRACT:	SUM-	76 Centi	ral Interc	hange (	101402)														
RUN:	Noise	Barrier	NSA 5 S	cenario	1														
Barrier									Points										
Name		Height		If Wall	If Berm		÷	Add'tnl	Name	No.	Coordinates	(bottom)		Height	Segme	ent			
		Min	Max	\$ per	\$ per	Тор	Run:Rise	\$ per			Х	Y	Z	at	Seg H	t Pert	urbs	On	Important
				Unit	Unit	Width		Unit						Point	Incre-	#Up	#Dn	Struct?	Reflec-
				Area	Vol.			Length							ment				tions?
		ft	ft	\$/sq ft	\$/cu yd	ft	ft:ft	\$/ft			ft	ft	ft	ft	ft				
NSA 5 Barrier 1	W	5.00	99.99	25.00	1			0.00	0+00	5	2,240,449.0	510,029.0	1,035.00	12.00	1.00	5	0		
									0+59	15	2,240,507.8	510,034.2	1,036.25	12.00	1.00	5	0		
									1+05	16	2,240,566.5	510,039.5	1,037.50	12.00	1.00	5	0		
									1+77	17	2,240,625.2	510,044.8	1,038.75	12.00	1.00	5	0		
									2+36	6	2,240,684.0	510,050.0	1,040.00	12.00	1.00	5	0	-	
									3+34	18	2,240,782.2	510,050.7	1,041.00	12.00	1.00	5	0		
									4+33	19	2,240,880.8	510,051.3	1,042.00	12.00	1.00	5	0		
									5+31	7	2,240,979.0	510,052.0	1,043.00	12.00	1.00	5	0		
									7+03	8	2,241,151.0	510,044.0	1,048.00	12.00	1.00	5	0		
									8+30	20	2,241,278.2	510,036.3	1,051.17	12.00	1.00	5	0		
									9+58	21	2,241,405.8	510,028.7	1,054.33	12.00	1.00	5	0		
									10+85	9	2,241,533.0	510,021.0	1,057.50	12.00	1.00	5	0		
									12+57	11	2,241,704.0	510,007.0	1,060.00	12.00	1.00	5	0	Y	
									14+16	12	2,241,862.0	509,988.0	1,066.00	12.00	1.00	5	0		
									15+28	13	2,241,973.0	509,972.0	1,078.00	12.00	1.00	5	0		
									15+70	22	2,242,014.8	509,964.7	1,079.00	12.00	1.00	5	0		
									16+12	23	2,242,056.2	509,957.3	1,080.00	12.00	1.00	5	0		
									16+54	14	2,242,098.0	509,950.0	1,081.00	12.00					
### INPUT: RECEIVERS

Lawhon & Assoc.						1 August	2017				
CMCox						TNM 2.5					
INPUT: RECEIVERS											
PROJECT/CONTRACT:	SUM-I	76 Cen	tral Interchar	nge (101402)	1						
RUN:	Noise	Barrie	r NSA 5 Scen	ario 1							
Receiver											
Name	No.	#DUs	Coordinates	(ground)		Height	Input Sou	nd Levels a	and Criteria	a	Active
			X	Y	Z	above	Existing	Impact Cr	iteria	NR	in
						Ground	LAeq1h	LAeq1h	Sub'l	Goal	Calc.
			ft	ft	ft	ft	dBA	dBA	dB	dB	
NSA5-1	1	1	2,240,552.0	509,963.0	1,034.00	4.92	73.40	66	i 10.0	4.	5 Y
NSA5-2	2	1	2,240,657.0	509,968.0	1,035.00	4.92	74.00	66	6 10.0	4.	5 Y
NSA5-3	3	1	2,240,710.0	509,967.0	1,036.00	4.92	74.00	66	6 10.0	4.	5 Y
NSA5-4	4	2	2,240,880.0	509,959.0	1,036.00	4.92	71.80	66	6 10.0	4.	5 Y
NSA5-5	5	2	2,241,041.0	509,977.0	1,040.00	4.92	73.90	66	6 10.0	4.	5 Y
NSA5-6	6	2	2,241,385.0	509,972.0	1,044.00	4.92	73.50	66	6 10.0	4.	5 Y
NSA5-7	7	2	2,241,507.0	509,963.0	1,046.00	4.92	72.60	66	6 10.0	4.	5 Y
NSA5-8	8	1	2,241,582.0	509,950.0	1,046.00	4.92	71.40	66	6 10.0	4.5	5 Y
NSA5-9	9	1	2,240,476.0	509,817.0	1,034.00	4.92	67.30	66	6 10.0	4.	5 Y
NSA5-10	10	3	2,240,557.0	509,824.0	1,035.00	4.92	67.90	66	6 10.0	4.5	5 Y
NSA5-11	11	3	2,240,846.0	509,824.0	1,037.00	4.92	68.10	66	6 10.0	4.5	5 Y
NSA5-12	12	4	2,240,938.0	509,822.0	1,037.00	4.92	67.20	66	6 10.0	4.5	5 Y
NSA5-13	13	2	2,241,074.0	509,830.0	1,037.00	4.92	67.20	66	6 10.0	4.5	5 Y
NSA5-14	14	2	2,241,887.0	509,849.0	1,050.00	4.92	69.10	66	6 10.0	4.5	5 Y
NSA5-15	15	2	2,241,955.0	509,850.0	1,052.00	4.92	69.00	66	6 10.0	4.5	5 Y
NSA5-16	16	2	2,240,465.0	509,645.0	1,036.00	4.92	63.70	66	6 10.0	4.5	5 Y
NSA5-17	17	2	2,240,634.0	509,648.0	1,039.00	4.92	64.60	66	10.0	4.5	5 Y
NSA5-18	18	3	2,240,723.0	509,652.0	1,041.00	4.92	65.30	66	i 10.0	4.5	5 Y
NSA5-19	19	2	2,240,961.0	509,719.0	1,040.00	4.92	66.40	66	i 10.0	4.5	5 Y
NSA5-20	20	2	2,240,955.0	509,639.0	1,042.00	4.92	65.70	66	10.0	4.5	5 Y
NSA5-21	21	2	2,241,026.0	509,647.0	1,040.00	4.92	65.10	66	i 10.0	4.5	5 Y
NSA5-22	22	3	2,241,274.0	509,667.0	1,043.00	4.92	65.00	66	i 10.0	4.	5 Y

INPUT: RECEIVERS						S	UM-I76 Ce	ntral Interc	hange (10 <sup>-</sup>	1402)
NSA5-23	23	l 2,241,355.0	509,703.0	1,043.00	4.92	66.10	66	10.0	4.5	Y
NSA5-24	24	l 2,241,568.0	509,791.0	1,046.00	4.92	68.30	66	10.0	4.5	Y
NSA5-25	25	l 2,241,560.0	509,752.0	1,046.00	4.92	67.40	66	10.0	4.5	Y
NSA5-26	26 2	2 2,241,565.0	509,656.0	1,048.00	4.92	65.90	66	10.0	4.5	Y
NSA5-27	27	l 2,241,732.0	509,728.0	1,053.00	4.92	68.40	66	10.0	4.5	Y
NSA5-28	28 2	2 2,241,726.0	509,655.0	1,054.00	4.92	66.90	66	10.0	4.5	Y
NSA5-29	29	l 2,240,468.0	509,579.0	1,036.00	4.92	62.70	66	10.0	4.5	Y
NSA5-30	30 2	2 2,240,635.0	509,546.5	1,041.00	4.92	62.90	66	10.0	4.5	Y
NSA5-31	31 <sup>-</sup>	l 2,240,724.0	509,531.0	1,050.00	4.92	64.60	66	10.0	4.5	Y
NSA5-32	32 2	2 2,240,954.0	509,517.0	1,050.00	4.92	64.20	66	10.0	4.5	Y
NSA5-33	33 3	3 2,240,951.0	509,409.0	1,056.00	4.92	63.30	66	10.0	4.5	Y
NSA5-34	34 3	3 2,241,025.0	509,540.0	1,043.00	4.92	63.70	66	10.0	4.5	Y
NSA5-35	35 2	2 2,241,274.0	509,525.0	1,048.00	4.92	64.10	66	10.0	4.5	Y
NSA5-36	36 2	2 2,241,272.0	509,446.0	1,054.00	4.92	63.70	66	10.0	4.5	Y
NSA5-37	37	l 2,241,345.0	509,587.0	1,045.00	4.92	64.60	66	10.0	4.5	Y
NSA5-38	38 2	2 2,241,343.0	509,491.0	1,048.00	4.92	63.70	66	10.0	4.5	Y
NSA5-39	39	l 2,241,530.0	509,583.0	1,046.00	4.92	64.60	66	10.0	4.5	Y
NSA5-40	40 2	2 2,241,528.0	509,491.0	1,046.00	4.92	63.70	66	10.0	4.5	Y
NSA5-42	41 <sup>4</sup>	l 2,241,567.0	509,561.0	1,049.00	4.92	64.90	66	10.0	4.5	Y
NSA5-43	42 2	2 2,241,746.0	509,571.0	1,054.00	4.92	65.30	66	10.0	4.5	Y
NSA5-44	43	l 2,241,737.0	509,482.0	1,055.00	4.92	64.10	66	10.0	4.5	Y
NSA5-45	44	l 2,241,846.0	509,659.0	1,055.00	4.92	66.80	66	10.0	4.5	Y

# NSA 6





**RESULTS: SOUND LEVELS** 

SUM-I76 Central Interchange (101402)

Lawhon & Assoc.							1 August 2	2017				
CMCox							TNM 2.5					
							Calculated	d with TNN	1 2.5			
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		SUM-I7	76 Central I	nterchange (1	01402)							
RUN:		Noise	Barrier NSA	A 6 Scenario 2	2							
BARRIER DESIGN:		NSA 6	Scenario 2	without bridg	je			Average	pavement type	shall be use	d unless	
								a State hi	ghway agency	substantiate	es the use	
ATMOSPHERICS:		68 deg	g F, 50% RH	l,				of a diffe	rent type with	approval of F	HWA.	
Receiver												
Name	No.	#DUs	Existing	No Barrier					With Barrier			
			LAeq1h	LAeq1h	, ,	Increase over	existing	Туре	Calculated	Noise Reduc	tion	
				Calculated	Crit'n	Calculated	Crit'n	Impact	LAeq1h	Calculated	Goal	Calculated
							Sub'l Inc					minus
												Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
NSA 6-1	2		2 65.8	68.2	2 66	2.4	10	Snd Lvl	64.2	4.0	)	4 -0.5
NSA 6-2	3		2 62.9	64.7	66	1.8	3 10		61.2	3.5		4 -1.0
NSA 6-3	4		2 61.6	63.1	66	1.5	5 10		60.1	3.0		4 -1.5
NSA 6-4	5		2 63.5	65.3	3 66	1.8	3 10		61.2	4.1		4 -0.4
NSA 6-5	6		2 62.0	63.5	5 66	1.5	5 10		60.5	3.0		4 -1.5
NSA 6-6	7		2 71.4	. 73.0	) 66	1.6	6 10	Snd Lvl	68.7	4.3	; ·	4 -0.2
NSA 6-7	8	:	3 64.0	65.6	66	1.6	6 10		61.0	4.6	;	4 0.1
NSA 6-8	9		2 67.8	69.7	66	1.9	) 10	Snd Lvl	62.7	7.0		4 2.5
NSA 6-9	10		2 63.5	65.1	66	1.6	6 10		59.6	5.5		4 1.0
NSA 6-10	11		1 69.2	. 71.4	66	2.2	2 10	Snd Lvl	60.8	10.6		4 6.1
NSA 6-11	12		2 66.4	67.9	66	1.5	5 10	Snd Lvl	60.7	7.2		4 2.7
NSA 6-12	13		2 61.1	62.8	66	1.7	' 10		59.6	3.2		4 -1.3
NSA 6-13	14	:	2 64.3	66.0	) 66	1.7	10	Snd Lvl	62.5	3.5		4 -1.0
NSA 6-14	15		2 67.0	68.4	66	1.4	10	Snd Lvl	61.8	6.6		4 2.1
NSA 6-15	16		2 65.8	67.4	66	1.6	6 10	Snd Lvl	60.4	7.0		4 2.5
NSA 6-16	17	:	3 63.5	65.4	66	1.9	) 10		60.3	5.1	-	4 0.6
NSA 6-17	18		1 61.7	63.6	66	1.9	) 10		60.4	3.2		4 -1.3
NSA 6-18	19		1 68.0	70.4	66	2.4	10	Snd Lvl	61.3	9.1		4 4.6
NSA 6-19	20		2 65.7	67.6	66	1.9	10	Snd Lvl	59.9	7.7	· ·	4 3.2
NSA 6-20	21		2 63.8	65.6	66	1.8	3 10		59.3	6.3	i	4 1.8
NSA 6-21	22	:	3 62.2	63.9	66	1.7	10		59.2	4.7	·	4 0.2
NSA 6-22	23		2 65.9	67.6	66 66	1.7	10	Snd Lvl	61.3	6.3		4 1.8
NSA 6-23	24	. :	3 64.9	66.3	66	1.4	10	Snd Lvl	60.0	6.3		4 1.8
NSA 6-24	25		1 63.3	64.1	66	0.8	3 10		58.9	5.2	2	4 0.7
E:\LAWHON\SUM-IR 76 CENTRAL	INTERCHAN	GE (101	402)\DES Y		5 <b>204</b> 0					1		

E:\LAWHON\SUM-IR 76 CENTRAL INTERCHANGE (101402)\DES YR TNM\NSA 6 2040

RESULTS: SOUND LEVELS						S	UM-I76 Cer	ntral Interch	nange (10140	2)		
NSA 6-25	26	2	64.8	65.9	66	1.1	10		59.9	6.0	4	1.5
NSA 6-26	27	2	63.8	64.5	66	0.7	10		59.3	5.2	4	0.7
NSA 6-27	28	2	67.2	68.3	66	1.1	10	Snd Lvl	62.7	5.6	4	1.1
NSA 6-28	29	3	67.1	68.3	66	1.2	10	Snd Lvl	61.8	6.5	4	2.0
NSA 6-29	30	3	69.4	70.2	66	0.8	10	Snd Lvl	63.0	7.2	4	2.7
NSA 6-30	31	1	68.9	70.2	66	1.3	10	Snd Lvl	62.0	8.2	4	3.7
NSA 6-31	32	3	67.7	68.9	66	1.2	10	Snd Lvl	61.4	7.5	4	3.0
NSA 6-32	33	2	67.5	68.3	66	0.8	10	Snd Lvl	62.0	6.3	4	1.8
NSA 6-33	34	1	67.8	69.2	66	1.4	10	Snd Lvl	63.2	6.0	4	1.5
NSA 6-34	35	3	64.5	66.3	66	1.8	10	Snd Lvl	62.5	3.8	4	-0.7
NSA 6-35	36	2	64.8	65.7	66	0.9	10		63.8	1.9	4	-2.6
NSA 6-36	37	2	65.2	65.9	66	0.7	10		59.8	6.1	4	1.6
NSA 6-37	38	2	66.4	67.7	66	1.3	10	Snd Lvl	63.5	4.2	4	-0.3
NSA 6-38	49	2	63.2	63.7	66	0.5	10		58.4	5.3	4	0.8
NSA 6-39	50	3	66.0	66.8	66	0.8	10	Snd Lvl	60.4	6.4	4	1.9
NSA 6-40	51	1	65.5	66.3	66	0.8	10	Snd Lvl	60.3	6.0	4	1.5
NSA 6-41	52	2	65.3	66.5	66	1.2	10	Snd Lvl	61.1	5.4	4	0.9
NSA 6-42	53	2	63.2	63.5	66	0.3	10		58.0	5.5	4	1.0
NSA 6-43	54	2	62.2	62.2	66	0.0	10		57.4	4.8	4	0.3
NSA 6-44	55	2	61.0	61.4	66	0.4	10		57.1	4.3	4	-0.2
NSA 6-45	56	4	63.3	64.6	66	1.3	10		59.8	4.8	4	0.3
NSA 6-46	57	1	61.9	63.1	66	1.2	10		58.9	4.2	4	-0.3
NSA 6-47	58	1	63.9	65.2	66	1.3	10		60.6	4.6	4	0.1
NSA 6-48	59	3	62.3	63.5	66	1.2	10		59.3	4.2	4	-0.3
NSA 6-49	60	2	60.9	62.0	66	1.1	10		58.5	3.5	4	-1.0
NSA 6-50	61	1	63.6	64.5	66	0.9	10		60.8	3.7	4	-0.8
NSA 6-51	62	2	63.5	64.6	66	1.1	10		61.7	2.9	4	-1.6
NSA 6-52	63	2	63.7	64.3	66	0.6	10		61.5	2.8	4	-1.7
NSA 6-53	64	2	62.3	63.8	66	1.5	10		60.9	2.9	4	-1.6
Dwelling Units		# DUs	Noise Rec	luction								
			Min	Avg	Max							
			dB	dB	dB							
All Selected		108	1.9	5.2	10.6							
All Impacted		49	3.5	6.4	10.6							
All that meet NR Goal		69	4.6	6.3	10.6							

### **RESULTS: BARRIER DESCRIPTIONS**

Lawhon & Assoc.				1 August	2017						
СМСох				TNM 2.5							
RESULTS: BARRIER DESCRIPTIONS											
PROJECT/CONTRACT:	SUM-	I76 Central	Interch	nange (101402)	)						
RUN:	Noise	Barrier NS	A 6 Sc	enario 2							
BARRIER DESIGN:	NSA	6 Scenario	2 witho	out bridge							
Barriers											
Name	Туре	Heights a	ong Ba	arrier	Length	If Wall	If Berm			Cost	
		Min	Avg	Max		Area	Volume	Тор	Run:Rise		
								Width			
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	\$	
NSA 6 Barrier 1	W	15.00	1	5.00 15.00	2264	33962					849056
									Total Cost:		849056

### INPUT: BARRIERS

SUM-I76 Central Interchange (101402)

Lawhon & Assoc.					1 Augu	st 2017													
CMCox					TNM 2.	5			r										
INPUT: BARRIERS																			
PROJECT/CONTRACT:	SUM-	76 Cent	ral Interc	change (	101402)														
RUN:	Noise	Barrier	NSA 6 S	cenario	2														
Barrier			1						Points										
Name	Туре	Height		If Wall	If Berm			Add'tnl	Name	No.	Coordinates	(bottom)		Height	Segme	ent			
		Min	Max	\$ per	\$ per	Тор	Run:Rise	\$ per			x	Y	Z	at	Seg H	t Pert	urbs	On	Important
				Unit	Unit	Width		Unit					1	Point	Incre-	#Up	#Dn	Struct?	Reflec-
				Area	Vol.			Length							ment				tions?
		ft	ft	\$/sq ft	\$/cu yd	ft	ft:ft	\$/ft			ft	ft	ft	ft	ft				
NSA 6 Barrier 1	W	4.00	99.99	25.00		1		0.00	0+00	1	2,243,236.0	508,915.0	1,093.00	15.00	1.00	3	3 1		1
									2+40	2	2,243,321.0	509,141.0	1,096.00	15.00	1.00	3	8 1		
									3+50	3	2,243,368.0	509,238.0	1,095.00	15.00	1.00	3	3 1		
									5+35	4	2,243,475.0	509,389.0	1,096.00	15.00	1.00	3	8 1		
									6+90	5	2,243,612.0	509,466.0	1,100.00	15.00	1.00	3	8 1		
									8-60	6	2,243,754.0	509,552.0	1,102.00	15.00	1.00	3	8 1		
									9+80	7	2,243,851.0	509,627.0	1,101.00	15.00	1.00	3	3 1		
									12+65	8	2,244,102.0	509,757.0	1,111.00	15.00	1.00	3	8 1		
									15+90	g	2,244,395.0	509,901.0	1,118.00	15.00	1.00	3	3 1	Y	
									16+50	10	2,244,452.0	509,925.0	1,120.00	15.00	1.00	3	8 1		
									18+70	11	2,244,658.0	510,006.0	1,122.00	15.00	1.00	3	8 1		
									19+70	12	2,244,746.0	510,045.0	1,125.00	15.00	1.00	3	8 1		
									23+25	13	2,245,076.0	510,182.0	1,130.00	15.00	L				
Hoban High School	W	0.00	99.99	0.00				0.00	point23	14	2,245,509.0	509,985.0	1,163.00	30.00	0.00	0	0 0		
									point24	15	2,245,486.0	510,101.0	1,164.00	30.00	0.00	0	0 0		
									point25	16	2,245,507.0	510,109.0	1,165.00	30.00	0.00	0	0 0		
									point26	17	2,245,494.0	510,220.0	1,165.00	30.00	0.00	0	0 0		
									point27	18	2,245,579.0	510,231.0	1,167.00	30.00	0.00	0	0 0		
									point28	19	2,245,577.0	510,266.0	1,167.00	30.00	0.00	0		<u> </u>	
									point29	20	2,245,905.0	510,300.0	1,166.00	30.00	0.00			<u> </u>	
									point30	21	2,245,912.0	510,268.0	1,166.00	30.00	0.00	0		<u> </u>	
									point31	22	2,245,969.0	510,272.0	1,163.00	30.00	0.00	0	0	<u> </u>	
									point32	23	2,245,993.0	510,056.0	1,163.00	30.00					

1

### INPUT: RECEIVERS

Lowbon & Accos						1 August	2047				
							2017				
CMCOX											
INPUT: RECEIVERS											
PROJECT/CONTRACT:	SUM-I	76 Cen	tral Interchar	nge (101402)	1						
RUN:	Noise	Barrie	r NSA 6 Scen	ario 2							_
Receiver											
Name	No.	#DUs	Coordinates	(ground)		Height	Input Sou	nd Levels a	and Criteria	3	Active
			X	Y	Z	above	Existing	Impact Cr	iteria	NR	in
						Ground	LAeq1h	LAeq1h	Sub'l	Goal	Calc.
			ft	ft	ft	ft	dBA	dBA	dB	dB	
NSA 6-1	2	2	2,243,367.0	508,939.0	1,101.00	0 4.92	65.80	66	10.0	4.	5
NSA 6-2	3	2	2,243,458.0	508,953.0	1,102.00	) 4.92	62.90	66	10.0	4.	5
NSA 6-3	4	2	2,243,537.0	508,942.0	1,103.00	) 4.92	61.60	66	10.0	4.	5
NSA 6-4	5	2	2,243,496.0	509,111.0	1,102.00	) 4.92	63.50	66	10.0	4.	5
NSA 6-5	6	2	2,243,581.0	509,115.0	1,103.00	) 4.92	62.00	66	10.0	4.	5
NSA 6-6	7	2	2,243,408.0	509,240.0	1,108.00	) 4.92	71.40	66	10.0	4.	5
NSA 6-7	8	3	2,243,564.0	509,234.0	1,102.00	) 4.92	64.00	66	10.0	4.	5
NSA 6-8	9	2	2,243,503.0	509,330.0	1,103.00	) 4.92	67.80	66	10.0	4.	5
NSA 6-9	10	2	2,243,670.0	509,332.0	1,100.00	) 4.92	63.50	66	10.0	4.	5
NSA 6-10	11	1	2,243,532.0	509,398.0	1,100.00	) 4.92	69.20	66	10.0	4.	5
NSA 6-11	12	2	2,243,656.0	509,422.0	1,100.00	) 4.92	66.40	66	10.0	4.	5
NSA 6-12	13	2	2,243,804.0	509,334.0	1,100.00	) 4.92	61.10	66	10.0	4.	5
NSA 6-13	14	2	2,243,804.0	509,419.0	1,103.00	) 4.92	64.30	66	10.0	4.	5
NSA 6-14	15	2	2,243,808.0	509,499.0	1,103.00	) 4.92	67.00	66	10.0	4.	5
NSA 6-15	16	2	2,244,013.0	509,547.0	1,098.00	) 4.92	65.80	66	10.0	4.	5
NSA 6-16	17	3	2,244,008.0	509,467.0	1,098.00	) 4.92	63.50	66	10.0	4.	5
NSA 6-17	18	1	2,244,006.0	509,382.0	1,098.00	) 4.92	61.70	66	10.0	4.	5
NSA 6-18	19	1	2,244,139.0	509,695.0	1,097.00	9 4.92	68.00	66	10.0	4.	5
NSA 6-19	20	2	2,244,144.0	509,625.0	1,097.00	4.92	65.70	66	10.0	4.	5
NSA 6-20	21	2	2,244,145.0	509,538.0	1,097.00	9 4.92	63.80	66	10.0	4.	5
NSA 6-21	22	3	2,244,145.0	509,446.0	1,097.00	) 4.92	62.20	66	10.0	4.	5
NSA 6-22	23	2	2,244,341.0	509,665.0	1,100.00	) 4.92	65.90	66	10.0	4.	5

INPUT: RECEIVERS							S	UM-I76 Ce	entral Interc	change (101402)	t.
NSA 6-23	24	3	2,244,339.0	509,567.0	1,101.00	4.92	64.90	66	10.0	4.5	
NSA 6-24	25	1	2,244,339.0	509,447.0	1,101.00	4.92	63.30	66	10.0	4.5	
NSA 6-25	26	2	2,244,460.0	509,541.0	1,105.00	4.92	64.80	66	10.0	4.5	
NSA 6-26	27	2	2,244,454.0	509,455.0	1,105.00	4.92	63.80	66	10.0	4.5	
NSA 6-27	28	2	2,244,546.0	509,732.0	1,105.00	4.92	67.20	66	10.0	4.5	
NSA 6-28	29	3	2,244,640.0	509,737.0	1,108.00	4.92	67.10	66	10.0	4.5	
NSA 6-29	30	3	2,244,635.0	509,855.0	1,108.00	4.92	69.40	66	10.0	4.5	
NSA 6-30	31	1	2,244,783.0	509,933.0	1,108.00	4.92	68.90	66	10.0	4.5	
NSA 6-31	32	3	2,244,847.0	509,863.0	1,112.00	4.92	67.70	66	10.0	4.5	
NSA 6-32	33	2	2,244,943.0	509,864.0	1,118.00	4.92	67.50	66	10.0	4.5	
NSA 6-33	34	1	2,245,020.0	509,940.0	1,120.00	4.92	67.80	66	10.0	4.5	
NSA 6-34	35	3	2,245,174.0	509,865.0	1,126.00	4.92	64.50	66	10.0	4.5	
NSA 6-35	36	2	2,245,305.0	509,864.0	1,155.00	4.92	64.80	66	10.0	4.5	
NSA 6-36	37	2	2,244,671.0	509,578.0	1,110.00	4.92	65.20	66	10.0	4.5	
NSA 6-37	38	2	2,244,657.0	509,499.0	1,137.00	4.92	66.40	66	10.0	4.5	
NSA 6-38	49	2	2,244,651.0	509,424.0	1,110.00	4.92	63.20	66	10.0	4.5	
NSA 6-39	50	3	2,244,780.0	509,663.0	1,113.00	4.92	66.00	66	10.0	4.5	
NSA 6-40	51	1	2,244,935.0	509,736.0	1,117.00	4.92	65.50	66	10.0	4.5	
NSA 6-41	52	2	2,244,985.0	509,662.0	1,125.00	4.92	65.30	66	10.0	4.5	
NSA 6-42	53	2	2,244,777.0	509,499.0	1,112.00	4.92	63.20	66	10.0	4.5	
NSA 6-43	54	2	2,244,777.0	509,422.0	1,112.00	4.92	62.20	66	10.0	4.5	
NSA 6-44	55	2	2,244,777.0	509,339.0	1,112.00	4.92	61.00	66	10.0	4.5	
NSA 6-45	56	4	2,244,978.0	509,462.0	1,129.00	4.92	63.30	66	10.0	4.5	
NSA 6-46	57	1	2,244,979.0	509,336.0	1,130.00	4.92	61.90	66	10.0	4.5	
NSA 6-47	58	1	2,245,098.0	509,646.0	1,132.00	4.92	63.90	66	10.0	4.5	
NSA 6-48	59	3	2,245,107.0	509,518.0	1,132.00	4.92	62.30	66	10.0	4.5	
NSA 6-49	60	2	2,245,099.0	509,383.0	1,133.00	4.92	60.90	66	10.0	4.5	
NSA 6-50	61	1	2,245,208.0	509,732.0	1,140.00	4.92	63.60	66	10.0	4.5	
NSA 6-51	62	2	2,245,302.0	509,741.0	1,154.00	4.92	63.50	66	10.0	4.5	
NSA 6-52	63	2	2,245,292.0	509,583.0	1,162.00	4.92	63.70	66	10.0	4.5	
NSA 6-53	64	2	2,245,288.0	509,507.0	1,163.00	4.92	62.30	66	10.0	4.5	

# NSA 8





**RESULTS: SOUND LEVELS** 

SUM-I76 Central Interchange (101402)

Lawhon & Assoc.							1 August 2	2017				
CMCox							TNM 2.5					
							Calculated	l with TNN	1 2.5			
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		SUM-I7	6 Central Ir	nterchange (1	01402)							
RUN:		Noise E	Barrier NSA	8 Scenario 1								
BARRIER DESIGN:		final 14	22@24048	3				Average p	oavement type	shall be use	d unless	
								a State hi	ghway agency	r substantiate	es the use	
ATMOSPHERICS:		68 deg	F, 50% RH					of a differ	ent type with	approval of F	HWA.	
Receiver												-
Name	No.	#DUs	Existing	No Barrier					With Barrier			
		İ	LAeq1h	LAeq1h		Increase over	existing	Туре	Calculated	Noise Reduc	tion	
		İ		Calculated	Crit'n	Calculated	Crit'n	Impact	LAeq1h	Calculated	Goal	Calculated
							Sub'l Inc					minus
		ĺ										Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
NSA 8-1	7	1	62.9	64.4	. 66	6 1.5	5 10		61.7	2.7	4	4 -1.8
NSA 8-2	8	1	64.6	66.1	66	5 1.5	5 10	Snd Lvl	62.4	3.7	4	4 -0.8
NSA 8-3	9	1	69.0	70.6	66	6 1.6	6 10	Snd Lvl	66.4	4.2	2	4 -0.3
NSA 8-4	10	1	65.3	67.4	. 66	6 2.1	10	Snd Lvl	63.3	4.1	4	4 -0.4
NSA 8-5	11	1	64.4	66.0	66	δ 1. <del>6</del>	6 10	Snd Lvl	62.7	3.3	. 4	4 -1.2
NSA 8-6	12	1	68.1	70.2	. 66	i 2.1	10	Snd Lvl	65.8	4.4	. 4	<b>-</b> 0.1
NSA 8-7	13	1	64.5	65.8	66	i 1.3	3 10		61.8	4.0	4	-0.5
NSA 8-8	14	1	63.2	64.6	66	6 1.4	10		61.0	3.6	4	-0.9
NSA 8-9	15	1	67.6	69.0	66	i 1.4	10	Snd Lvl	62.7	6.3	4	1.8
NSA 8-10	16	1	63.4	64.8	66	6 1.4	10		61.3	3.5	4	4 -1.0
NSA 8-11	17	1	68.5	69.5	66	6 1.0	) 10	Snd Lvl	61.6	7.9	4	4 3.4
NSA 8-12	18	1	65.3	66.1	66	8.0	3 10	Snd Lvl	60.6	5.5	4	۱.C
NSA 8-13	19	1	63.2	64.1	66	0.9	0 10		59.7	4.4	. 4	<b>-0.</b> 1
NSA 8-14	20	1	69.2	70.5	66	6 1.3	8 10	Snd Lvl	62.3	8.2	4	4 3.7
NSA 8-15	21	1	64.8	65.8	66	5 1.0	0 10		60.6	5.2		ł 0.7
NSA 8-16	22	1	69.8	71.5	66	5 1.7	10	Snd Lvl	62.5	9.0	4	4.5
NSA 8-17	23	1	67.4	69.1	66	5 1.7	10	Snd Lvl	61.6	7.5	4	4 3.0
NSA 8-18	24	1	65.5	67.0	66	6 1.5	5 10	Snd Lvl	60.8	6.2	. 4	i 1.7
NSA 8-19	25	1	70.4	72.0	66	5 1.6	6 10	Snd Lvl	62.2	9.8	4	4 5.3
NSA 8-20	26	1	68.3	69.7	66	6 1.4	10	Snd Lvl	61.9	7.8	4	4 3.3
NSA 8-21	27	1	65.8	67.3	66	5 1.5	5 10	Snd Lvl	60.6	6.7	4	4 2.2
NSA 8-22	28	1	66.8	68.1	66	5 1.3	3 10	Snd Lvl	61.1	7.0	4	4 2.5
NSA 8-23	29	1	65.1	67.0	66	5 1.9	10	Snd Lvl	60.8	6.2	4	l 1.7
NSA 8-24	30	1	69.0	70.6	66	16	3 10	Snd Lvl	62 1	85		4 4 (

E:\LAWHON\SUM-IR 76 CENTRAL INTERCHANGE (101402)\DES YR TNM\NSA 8 2040

RESULTS: SOUND LEVELS						S	UM-I76 Cen	tral Interch	ange (101402)			
NSA 8-25	31	1	68.5	69.9	66	1.4	10	Snd Lvl	62.5	7.4	4	2.9
NSA 8-26	32	1	66.0	67.3	66	1.3	10	Snd Lvl	61.8	5.5	4	1.0
NSA 8-27	33	1	68.3	69.6	66	1.3	10	Snd Lvl	65.5	4.1	4	-0.4
NSA 8-28	34	1	65.8	67.2	66	1.4	10	Snd Lvl	62.7	4.5	4	0.0
NSA 8-29	35	1	63.2	64.9	66	1.7	10		62.8	2.1	4	-2.4
NSA 8-30	36	1	61.9	63.3	66	1.4	10		60.3	3.0	4	-1.5
NSA 8-31	37	1	61.3	62.8	66	1.5	10		60.7	2.1	4	-2.4
NSA 8-32	38	1	62.3	63.1	66	0.8	10		59.1	4.0	4	-0.5
NSA 8-33	39	1	62.5	63.6	66	1.1	10		59.7	3.9	4	-0.6
NSA 8-34	40	1	61.0	62.0	66	1.0	10		59.1	2.9	4	-1.6
NSA 8-35	41	1	63.5	64.7	66	1.2	10		59.7	5.0	4	0.5
NSA 8-36	42	1	62.0	63.3	66	1.3	10		59.0	4.3	4	-0.2
NSA 8-37	43	1	63.6	65.0	66	1.4	10		59.7	5.3	4	0.8
NSA 8-38	44	1	62.0	63.5	66	1.5	10		58.9	4.6	4	0.1
NSA 8-39	45	1	63.5	65.0	66	1.5	10		59.2	5.8	4	1.3
NSA 8-40	46	1	61.0	62.7	66	1.7	10		58.3	4.4	4	-0.1
NSA 8-41	47	1	64.1	65.6	66	1.5	10		59.9	5.7	4	1.2
NSA 8-42	48	1	61.0	62.7	66	1.7	10		58.6	4.1	4	-0.4
NSA 8-43	49	1	62.8	64.2	66	1.4	10		60.2	4.0	4	-0.5
NSA8-44	50	1	62.8	64.0	66	1.2	10		61.3	2.7	4	-1.8
Dwelling Units		# DUs	Noise Rec	luction								
			Min	Avg	Max							
			dB	dB	dB							
All Selected		44	2.1	5.1	9.8							
All Impacted		22	3.3	6.3	9.8							
All that meet NR Goal		21	4.6	6.7	9.8							

### **RESULTS: BARRIER DESCRIPTIONS**

Lawhon & Assoc.				1 August	2017						
CMCox				TNM 2.5							
RESULTS: BARRIER DESCRIPTIONS											
PROJECT/CONTRACT:	SUM-	I76 Central	Intercha	nge (101402	)						
RUN:	Noise	Barrier NS	A 8 Scei	nario 1							
BARRIER DESIGN:	final '	14' 22@240	48								
Barriers											
Name	Туре	Heights a	ong Bar	rier	Length	If Wall	If Berm			Cost	
		Min	Avg	Max		Area	Volume	Тор	Run:Rise		
								Width			
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	\$	
NSA 8 Barrier 1 south	W	14.00	14.	00 14.0	0 1512	21162					529061
NSA 8 Barrier 1 north	W	14.00	14.	00 14.0	0 401	5611					140275
									Total Cost:		669336

### INPUT: BARRIERS

Lawhon & Assoc.					1 Augu	st 2017													
CMCox					TNM 2.	5													
INPUT: BARRIERS																			
PROJECT/CONTRACT:	SUM-I	76 Centr	al Interc	hange (	101402)														
RUN:	Noise	Barrier I	NSA 8 S	cenario	1														
Barrier									Points										
Name	Туре	Height		If Wall	If Berm		÷	Add'tnl	Name	No.	Coordinates	(bottom)		Height	Segm	ent			
	İ	Min	Max	\$ per	\$ per	Тор	Run:Rise	\$ per		ĺ	x	Y	Z	at	Seg H	t Pert	urbs	On	Important
	ĺ			Unit	Unit	Width		Unit		Ì				Point	Incre-	#Up	#Dn	Struct?	Reflec-
				Area	Vol.			Length		1					ment			1	tions?
		ft	ft	\$/sq ft	\$/cu yd	ft	ft:ft	\$/ft			ft	ft	ft	ft	ft				
NSA 8 Barrier 1 north	W	5.00	99.99	25.00				0.00	0+00	5	5 2,242,818.0	509,297.0	1,080.00	12.00	1.00	) 5	5 2	2	
									2+16	6	2,242,881.0	509,090.0	1,084.00	12.00	1.00	) 5	5 2	2	
									3+29	7	2,242,903.0	508,979.0	1,085.00	12.00	1.00	5	5 2	2	
									4+00	8	3 2,242,909.0	508,908.0	1,085.00	12.00					
NSA 8 Barrier 1 south	W	5.00	99.99	25.00				0.00	0+00	9	2,242,912.0	508,805.0	1,086.00	12.00	1.00	) 5	5 2	2	
									2+40	10	2,242,911.0	508,565.0	1,089.00	12.00	1.00	) 5	5 2	2	
									5+11	11	2,242,912.0	508,294.0	1,095.00	12.00	1.00	) 5	5 2	2	
									7+68	12	2,242,910.0	508,037.0	1,096.00	12.00	1.00	) 5	5 2	2	
									10+37	13	3 2,242,909.0	507,768.0	1,097.00	12.00	1.00	) 5	5 2	2	
									12+04	14	2,242,905.0	507,601.0	1,099.00	12.00	1.00	) 5	5 2	2	
									13+17	15	5 2,242,913.0	507,488.0	1,101.00	12.00	1.00	) 5	5 2	2	
									15+11	16	2,242,923.0	507,294.0	1,102.00	12.00	1				

### INPUT: RECEIVERS

I awhon & Assoc						1 August 3	2017				
CMCox						TNM 2.5					
INPUT: RECEIVERS											
PROJECT/CONTRACT:	SUM-I	76 Cer	tral Interchar	nge (101402)							
RUN:	Noise Barrier NSA 8 Scenario 1										
Receiver											
Name	No.	#DUs	Coordinates	(ground)		Height	Input Sou	nd Levels a	and Criteri	a	Active
			X	Y	Z	above	Existing	Impact Cr	iteria	NR	in
						Ground	LAeq1h	LAeq1h	Sub'l	Goal	Calc.
			ft	ft	ft	ft	dBA	dBA	dB	dB	
NSA 8-1	7	1	2,242,720.0	509,058.0	1,082.00	4.92	62.90	66	10.0	4.5	5
NSA 8-2	8	1	2,242,777.0	509,049.0	1,083.00	4.92	64.60	66	10.0	) 4.5	5
NSA 8-3	9	1	2,242,837.0	508,950.0	1,086.00	4.92	69.00	66	10.0	) 4.5	5
NSA 8-4	10	1	2,242,791.0	508,943.0	1,086.00	4.92	65.30	66	10.0	) 4.5	5
NSA 8-5	11	1	2,242,763.0	508,940.0	1,086.00	4.92	64.40	66	10.0	) 4.5	5
NSA 8-6	12	1	2,242,834.0	508,766.0	1,087.00	4.92	68.10	66	10.0	) 4.5	5
NSA 8-7	13	1	2,242,795.0	508,758.0	1,085.00	4.92	64.50	66	10.0	) 4.5	5
NSA 8-8	14	1	2,242,756.0	508,761.0	1,086.00	4.92	63.20	66	10.0	) 4.5	5
NSA 8-9	15	1	2,242,814.0	508,653.0	1,089.00	4.92	67.60	66	10.0	) 4.5	5
NSA 8-10	16	1	2,242,750.0	508,660.0	1,087.00	4.92	63.40	66	10.0	) 4.5	5
NSA 8-11	17	1	2,242,834.0	508,475.0	1,090.00	4.92	68.50	66	10.0	) 4.5	5
NSA 8-12	18	1	2,242,781.0	508,468.0	1,090.00	4.92	65.30	66	10.0	) 4.5	5
NSA 8-13	19	1	2,242,722.0	508,474.0	1,091.00	4.92	63.20	66	10.0	) 4.5	5
NSA 8-14	20	1	2,242,827.0	508,386.0	1,094.00	4.92	69.20	66	10.0	) 4.5	5
NSA 8-15	21	1	2,242,769.0	508,379.0	1,092.00	4.92	64.80	66	10.0	) 4.5	5
NSA 8-16	22	1	2,242,825.0	508,149.0	1,096.00	4.92	69.80	66	10.0	) 4.5	5
NSA 8-17	23	1	2,242,797.0	508,128.0	1,095.00	4.92	67.40	66	10.0	) 4.5	;
NSA 8-18	24	1	2,242,755.0	508,138.0	1,095.00	4.92	65.50	66	10.0	) 4.5	;
NSA 8-19	25	1	2,242,831.0	507,950.0	1,096.00	4.92	70.40	66	10.0	4.5	5
NSA 8-20	26	1	2,242,791.0	507,919.0	1,097.00	4.92	68.30	66	10.0	) 4.5	;
NSA 8-21	27	1	2,242,741.0	507,934.0	1,097.00	4.92	65.80	66	10.0	) 4.5	;
NSA 8-22	28	1	2,242,779.0	507.856.0	1.094.00	4.92	66.80	66	10.0	) 4.5	;

INPUT: RECEIVERS						al Intercha	rchange (101402)				
NSA 8-23	29	1	2,242,759.0	507,574.0	1,099.00	4.92	65.10	66	10.0	4.5	
NSA 8-24	30	1	2,242,835.0	507,598.0	1,098.00	4.92	69.00	66	10.0	4.5	
NSA 8-25	31	1	2,242,840.0	507,400.0	1,101.00	4.92	68.50	66	10.0	4.5	
NSA 8-26	32	1	2,242,792.0	507,411.0	1,101.00	4.92	66.00	66	10.0	4.5	
NSA 8-27	33	1	2,242,833.0	507,301.0	1,103.00	4.92	68.30	66	10.0	4.5	
NSA 8-28	34	1	2,242,794.0	507,341.0	1,102.00	4.92	65.80	66	10.0	4.5	
NSA 8-29	35	1	2,242,726.0	508,941.0	1,086.00	4.92	63.20	66	10.0	4.5	Y
NSA 8-30	36	1	2,242,715.0	508,761.0	1,086.00	4.92	61.90	66	10.0	4.5	Y
NSA 8-31	37	1	2,242,667.0	508,649.0	1,087.00	4.92	61.30	66	10.0	4.5	Y
NSA 8-32	38	1	2,242,689.0	508,475.0	1,091.00	4.92	62.30	66	10.0	4.5	Y
NSA 8-33	39	1	2,242,700.0	508,381.0	1,092.00	4.92	62.50	66	10.0	4.5	Y
NSA 8-34	40	1	2,242,638.0	508,375.0	1,092.00	4.92	61.00	66	10.0	4.5	Y
NSA 8-35	41	1	2,242,716.0	508,211.0	1,092.00	4.92	63.50	66	10.0	4.5	Y
NSA 8-36	42	1	2,242,659.0	508,203.0	1,092.00	4.92	62.00	66	10.0	4.5	Y
NSA 8-37	43	1	2,242,715.0	508,127.0	1,094.00	4.92	63.60	66	10.0	4.5	Y
NSA 8-38	44	1	2,242,666.0	508,134.0	1,093.00	4.92	62.00	66	10.0	4.5	Y
NSA 8-39	45	1	2,242,670.0	507,946.0	1,097.00	4.92	63.50	66	10.0	4.5	Y
NSA 8-40	46	1	2,242,642.0	507,856.0	1,093.00	4.92	61.00	66	10.0	4.5	Y
NSA 8-41	47	1	2,242,734.0	507,705.0	1,094.00	4.92	64.10	66	10.0	4.5	Y
NSA 8-42	48	1	2,242,675.0	507,681.0	1,093.00	4.92	61.00	66	10.0	4.5	Y
NSA 8-43	49	1	2,242,715.0	507,407.0	1,100.00	4.92	62.80	66	10.0	4.5	Y
NSA8-44	50	1	2,242,694.0	507,302.0	1,100.00	4.92	62.80	66	10.0	4.5	Y

# NSA 9





**RESULTS: SOUND LEVELS** 

SUM-I76 Central Interchange (101402)

Lawhon & Assoc.							2 August	2017				
CMCox							TNM 2.5					
							Calculate	d with TNN	1 2.5			
<b>RESULTS: SOUND LEVELS</b>												
PROJECT/CONTRACT:		SUM-I7	6 Central Ir	nterchange (1	01402)							
RUN:		NSA 9 I	Design Yea	r 2040								
BARRIER DESIGN:		NSA 9 \$	Scenario 1					Average p	pavement type	e shall be use	d unless	
								a State hi	ghway agency	y substantiate	es the use	)
ATMOSPHERICS:		68 deg	F, 50% RH					of a differ	ent type with	approval of F	HWA.	
Receiver												
Name	No.	#DUs	Existing	No Barrier					With Barrier			
			LAeq1h	LAeq1h		Increase over	r existing	Туре	Calculated	Noise Reduc	tion	
				Calculated	Crit'n	Calculated	Crit'n	Impact	LAeq1h	Calculated	Goal	Calculated
							Sub'l Inc					minus
												Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
NSA 9-1	2	1	70.7	71.6	6	6 0.9	9 10	Snd Lvl	65.4	6.2		4 1.7
NSA 9-2	3	1	67.3	68.5	6	6 1.3	2 10	Snd Lvl	62.8	5.7		4 1.2
NSA 9-3	4	1	65.8	66.5	6	6 0.	7 10	Snd Lvl	61.4	5.1		4 0.6
NSA 9-4	5	1	65.8	66.8	6	6 1.0	0 10	) Snd Lvl	61.2	5.6		4 1.1
NSA 9-5	6	1	69.6	70.5	6	6 0.9	9 10	) Snd Lvl	62.7	7.8		4 3.3
NSA 9-6	7	1	70.3	71.6	6	6 1.3	3 10	Snd Lvl	62.6	9.0		4 4.5
NSA 9-7	8	1	68.5	69.3	6	6 0.8	8 10	Snd Lvl	62.1	7.2		4 2.7
NSA 9-8	9	1	65.6	64.7	6	-0.9	9 10	)	60.0	4.7		4 0.2
NSA 9-9	10	1	73.6	74.2	6	6 0.0	6 10	) Snd Lvl	64.2	10.0		4 5.5
NSA 9-10	11	1	68.9	69.9	6	6 1.0	0 10	Snd Lvl	62.0	7.9		4 3.4
NSA 9-11	12	1	67.6	68.6	6	6 1.0	0 10	Snd Lvl	61.6	5 7.0		4 2.5
NSA 9-12	13	1	65.0	66.3	6	6 1.3	3 10	) Snd Lvl	60.7	5.6		4 1.1
NSA 9-13	14	1	67.2	68.4	6	6 1.3	2 10	Snd Lvl	61.8	6.6		4 2.1
NSA 9-14	15	1	65.7	66.9	6	6 1.3	2 10	) Snd Lvl	61.2	5.7		4 1.2
NSA 9-15	16	1	70.4	71.4	6	6 1.0	0 10	Snd Lvl	63.2	8.2		4 3.7
NSA 9-16	17	1	67.1	68.2	6	6 1.	1 10	Snd Lvl	61.9	6.3		4 1.8
NSA 9-17	18	1	65.5	66.7	6	6 1.	2 10	) Snd Lvl	61.4	5.3		4 0.8
NSA 9-18	19		64.0	65.3	6		3 10	)	61.1	4.2		4 -0.3
NSA 9-19	20		71.1	71.9	6	.6 0.8	8 10	Snd Lvl	63.0	8.9		4 4.4
NSA 9-20	21	1	68.6	69.5	6	0.9	9 10	Snd Lvl	62.6	6.9		4 2.4
NSA 9-21	22	1	63.6	65.4	6	1.6	8 10	)	61.2	4.2		4 -0.3
NSA 9-22	61		63.5	64.0	6	0.	b 10	)	60.0	4.0		4 -0.5
NSA 9-23	62		62.4	63.0	6	0.0	b 10		59.6	3.4		4 -1.1
NSA 9-24	63	1	63.0	63.4	6	0.4	4 10	)	59.4	4.0		4 -0.5

E:\Lawhon\SUM-IR 76 Central Interchange (101402)\Des Yr TNM\NSA 9 2040

### **RESULTS: SOUND LEVELS**

NSA 9-25	64	1	65.9	6	6.7	66	0.8	10	Snd Lvl	61.0	5.7	4	1.2
NSA 9-26	66	1	63.2	6	4.8	66	1.6	10		60.2	4.6	4	0.1
NSA 9-27	67	1	62.7	6	4.5	66	1.8	10		60.2	4.3	4	-0.2
NSA 9-28	68	1	62.7	6	4.2	66	1.5	10		60.6	3.6	4	-0.9
NSA 9-29	69	1	61.5	6	3.1	66	1.6	10		60.1	3.0	4	-1.5
NSA 9-30	70	1	63.5	6	4.7	66	1.2	10		61.2	3.5	4	-1.0
NSA 9-31	71	1	61.7	6	3.1	66	1.4	10		60.6	2.5	4	-2.0
NSA 9-32	72	1	60.7	6	1.1	66	0.4	10		58.2	2.9	4	-1.6
NSA 9-33	73	1	63.3	6	3.9	66	0.6	10		59.7	4.2	4	-0.3
Dwelling Units		# DUs	Noise Red	duction									
			Min	Avg	Ma	ax							
			dB	dB	dE	3							
All Selected		33	2.5		5.6	10.0							
All Impacted		19	5.1		6.9	10.0							
All that meet NR Goal		21	4.6		6.7	10.0							

### **RESULTS: BARRIER DESCRIPTIONS**

Lawhon & Assoc.				2 August	2017						
СМСох				TNM 2.5							
RESULTS: BARRIER DESCRIPTIONS											
PROJECT/CONTRACT:	SUM-	I76 Central	Intercha	ange (101402)							
RUN:	NSA	9 Design Ye	ar 2040								
BARRIER DESIGN:	NSA	9 Scenario	1								
Barriers											
Name	Туре	Heights a	long Bar	rier	Length	If Wall	If Berm			Cost	
		Min	Avg	Max		Area	Volume	Тор	Run:Rise		
	İ							Width			
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	\$	
Barrier 1	W	14.00	14	.00 14.00	1224	17138					428450
									Total Cost:		428450

### INPUT: BARRIERS

Lawhon & Assoc.					2 Augus	st 2017													
CMCox					TNM 2.5	5													
INPUT: BARRIERS																			
PROJECT/CONTRACT:	SUM-	76 Centr	ral Interc	change (	101402)														
RUN:	NSA 9	Design	Year 204	40															
Barrier									Points										
Name	Туре	Height		If Wall	If Berm			Add'tnl	Name	No.	Coordinates	(bottom)		Height	Segm	ent			
	Ì	Min	Max	\$ per	\$ per	Тор	Run:Rise	\$ per			X	Y	Z	at	Seg H	t Pert	urbs	On	Important
				Unit	Unit	Width		Unit		Ì				Point	Incre-	#Up	#Dn	Struct?	Reflec-
				Area	Vol.			Length		1					ment				tions?
		ft	ft	\$/sq ft	\$/cu yd	ft	ft:ft	\$/ft			ft	ft	ft	ft	ft				
Barrier 1	W	5.00	99.99	25.00			1	0.00	0+00	9	2,243,169.0	507,273.0	1,110.00	14.00	1.00	2	2 0	)	
									0+32	10	2,243,171.0	507,305.0	1,109.00	14.00	1.00	2	c C	)	
									1+00	20	2,243,172.0	507,373.0	1,109.00	14.00	1.00	2	c C	)	
									1+68	11	2,243,173.0	507,441.0	1,109.00	14.00	1.00	2	e C	)	
									2+28	12	2,243,175.0	507,501.0	1,107.00	14.00	1.00	2	e C	)	
									4+98	13	2,243,177.0	507,771.0	1,105.50	14.00	1.00	2	: C	)	
									7+67	14	2,243,177.0	508,040.0	1,102.00	14.00	1.00	2	e C	)	
									10+24	15	2,243,176.0	508,297.0	1,102.00	14.00	1.00	2	e c	)	
									10+74	17	2,243,176.8	508,347.0	1,101.25	14.00	1.00	2	e c	)	
									11+24	18	2,243,177.5	508,397.0	1,100.50	14.00	1.00	2	e c	)	
									11+74	19	2,243,178.2	508,447.0	1,099.75	14.00	1.00	2	C	)	
									12+24	16	2,243,179.0	508,497.0	1,099.00	14.00					

### INPUT: RECEIVERS

Lawhon & Assoc.						2 August	2017				
СМСох						TNM 2.5					
INPUT: RECEIVERS											
PROJECT/CONTRACT:	SUM-I	76 Cen	tral Interchar	nae (101402)							
RUN:	NSA 9	Desig	n Year 2040	·J· (····-/							
Receiver											
Name	No.	#DUs	Coordinates	(ground)		Height	Input Sou	nd Levels a	and Criteria	a	Active
			X	Y	Z	above	Existing	Impact Cr	iteria	NR	in
						Ground	LAeq1h	LAeq1h	Sub'l	Goal	Calc.
			ft	ft	ft	ft	dBA	dBA	dB	dB	
NSA 9-1	2	1	2,243,236.0	507,326.0	1,113	00 4.92	2 70.70	66	6 10.0	4.5	5
NSA 9-2	3	1	2,243,277.0	507,327.0	1,115	00 4.92	67.30	66	6 10.0	4.5	5
NSA 9-3	4	1	2,243,313.0	507,327.0	1,116	00 4.92	2 65.80	66	6 10.0	4.5	5
NSA 9-4	5	1	2,243,302.0	507,413.0	1,113	00 4.92	2 65.80	66	6 10.0	4.5	5
NSA 9-5	6	1	2,243,270.0	507,587.0	1,113	00 4.92	69.60	66	6 10.0	4.5	5
NSA 9-6	7	1	2,243,246.0	507,673.0	1,110	00 4.92	2 70.30	66	6 10.0	4.5	5
NSA 9-7	8	1	2,243,284.0	507,671.0	1,112	00 4.92	68.50	66	6 10.0	4.5	5
NSA 9-8	9	1	2,243,386.0	507,674.0	1,115	00 4.92	2 65.60	66	6 10.0	4.5	5
NSA 9-9	10	1	2,243,220.0	507,841.0	1,110	00 4.92	2 73.60	66	6 10.0	4.5	5
NSA 9-10	11	1	2,243,279.0	507,853.0	1,111	00 4.92	68.90	66	6 10.0	4.5	5
NSA 9-11	12	1	2,243,307.0	507,865.0	1,112	00 4.92	67.60	66	6 10.0	4.5	5
NSA 9-12	13	1	2,243,356.0	507,866.0	1,113	00 4.92	65.00	66	6 10.0	4.5	5
NSA 9-13	14	1	2,243,322.0	507,952.0	1,112	00 4.92	2 67.20	66	6 10.0	4.5	5
NSA 9-14	15	1	2,243,363.0	507,959.0	1,114	00 4.92	65.70	66	6 10.0	4.5	5
NSA 9-15	16	1	2,243,266.0	508,131.0	1,109	00 4.92	2 70.40	66	6 10.0	4.5	5
NSA 9-16	17	1	2,243,310.0	508,127.0	1,110	00 4.92	67.10	66	6 10.0	4.5	5
NSA 9-17	18	1	2,243,349.0	508,125.0	1,112	00 4.92	65.50	66	6 10.0	4.5	5
NSA 9-18	19	1	2,243,398.0	508,141.0	1,114	00 4.92	64.00	66	5 10.0	4.5	5
NSA 9-19	20	1	2,243,231.0	508,212.0	1,104	00 4.92	2 71.10	66	6 10.0	4.5	5
NSA 9-20	21	1	2,243,275.0	508,210.0	1,106	00 4.92	68.60	66	6 10.0	4.5	5
NSA 9-21	22	1	2,243,382.0	508,206.0	1,110	00 4.92	63.60	66	6 10.0	4.5	5
NSA 9-22	61	1	2,243,356.0	507,321.0	1,116	00 4.92	63.50	66	6 10.0	4.5	5 Y

INPUT: RECEIVERS							SUM-I76 Central Interchange (101402							
NSA 9-23	62	1	2,243,389.0	507,323.0	1,118.00	4.92	62.40	66	10.0	4.5	Y			
NSA 9-24	63	1	2,243,365.0	507,384.0	1,115.00	4.92	63.00	66	10.0	4.5	Y			
NSA 9-25	64	1	2,243,342.0	507,579.0	1,116.00	4.92	65.90	66	10.0	4.5	Y			
NSA 9-26	66	1	2,243,412.0	507,896.0	1,115.00	4.92	63.20	66	10.0	4.5	Y			
NSA 9-27	67	1	2,243,428.0	507,955.0	1,115.00	4.92	62.70	66	10.0	4.5	Y			
NSA 9-28	68	1	2,243,434.0	508,132.0	1,115.00	4.92	62.70	66	10.0	4.5	Y			
NSA 9-29	69	1	2,243,472.0	508,119.0	1,116.00	4.92	61.50	66	10.0	4.5	Y			
NSA 9-30	70	1	2,243,422.0	508,221.0	1,114.00	4.92	63.50	66	10.0	4.5	Y			
NSA 9-31	71	1	2,243,467.0	508,212.0	1,113.00	4.92	61.70	66	10.0	4.5	Y			
NSA 9-32	72	1	2,243,435.0	507,405.0	1,117.00	4.92	60.70	66	10.0	4.5	Y			
NSA 9-33	73	1	2,243,398.0	507,586.0	1,116.00	4.92	63.30	66	10.0	4.5	Y			

### Akron Central Interchange PID 101402 Proposed Revisions to Recommended Noise Wall NSA 5

Prepared by: Thomas Bolte, PE Project Manager Burgess & Niple, Inc. Craig Cox Lawhon & Associates, Inc.

A noise analysis report was prepared for the Akron Central Interchange project by Lawhon & Associates, Inc. and is dated August 7, 2017. In the report, Noise Wall NSA 5 Scenario 1 is listed as feasible and reasonable, and therefore recommended. NSA 5 Scenario 1 extends along the south shoulder of I-76 EB across the Brown St. bridge, ending about 500 feet east of the Brown St. bridge. A plan view of NSA 5 Scenario 1 taken from the noise analysis report is shown as Exhibit A.

Project SUM-76/77-11.27 & 12.12 (hereafter referred as PID 86979) was recently completed in this area. As part of that project, the three existing bridges over Spicer St. and Johnston St. just east of Brown St. were removed and replaced with embankment (see Exhibits B and C).

In order to reduce the footprint of the embankment, to not encroach on the new South St. cul-de-sac built as part of the PID 86979 project, a geogrid reinforced embankment was built on the south side of I-76 EB with a 1:1 side slope (see Exhibits D and E).

Constructing a conventional noise wall with conventional drilled shaft foundations is not feasible in the area where the geogrid reinforcing exists because the drilling associated with installing the drilled shafts would destroy the geogrid material and damage the integrity of the slope.

Lawhon & Associates, Inc. has prepared a supplemental noise analysis in this area assuming NSA 5 ends at the west side of the Brown St. bridge. The results of that analysis are presented in Exhibit F. Four receptors, consisting of five dwelling units, would no longer be benefited without the section of barrier east of Brown Street. The receptors that are no longer benefited are: 5-24, 5-35 (2 dwelling units), 5-37, and 5-39. The shortened noise barrier wall would still be a feasible and reasonable noise abatement measure for NSA-5.

## Exhibit A



5-17 (2)

0

5-<u>16</u>(2)

NSA 5 Scenario 1 Noise Barrier on Bridge over Brown Street 1,656' L x 14' high x \$25=\$747,460\* 69 Benefited Receptors Cost per Benefited Receptor = \$10,832 Feasible and Reasonable Recommended Scenario

\*includes \$100 ft<sup>2</sup> for barrier on bridge (160')

# Exhibit B

Bridges removed as part of PID 86979 project

Aerial Taken Prior to PID 86979 Project

Receptor Impacted and Benefited
Receptor not Impacted and Benefited
Receptor Impacted and Not Benefited
Receptor Not Impacted and Not Benefited
Proposed Noise Barrier

0

5-17 (2)

5-16 (2)

NSA 5 Scenario 1 Noise Barrier on Bridge over Brown Street 1,656' L x 14' high x \$25=\$747,460\* 69 Benefited Receptors Cost per Benefited Receptor = \$10,832 Feasible and Reasonable Recommended Scenario

\*includes \$100 ft<sup>2</sup> for barrier on bridge (160')



# Exhibit C 2018 Aerial Image after completion of PID 86979 project



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and the second

P

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Strange I





- ITEM 863 - REINFORCED EMBANKMENT, AS PER PLAN (SELECT GRANULAR BACKFILL)

-ITEM 659 - SEEDING & MULCHING, CLASS 3B ITEM 670 - SLOPE EROSION PROTECTION -ITEM 863 - REINFORCED EMBANKMENT, AS PER PLAN (NATURAL SOIL) \_ \_ \_ \_ - ITEM 863 - GEOGRID, TYPE P3



# Exhibit E





# Exhibit F


				NSA 5			
			Nois	e Barrier to Brown Stro	eet		
Receptor	Dwelling	Existing Year	Design Year	Noise Level with	Noise Reduction	Impacted	Benefited
	units	Noise Level	Noise Level	Noise Barrier			
NSA5-1	1	73.4	73.6	64.7	8.9	Yes	Yes (1)
NSA5-2	1	74.0	74.0	63.3	10.7	Yes	Yes (1)
NSA5-3	1	74.0	74.3	63.3	11.0	Yes	Yes (1)
NSA5-4	2	71.8	72.8	63.0	9.8	Yes	Yes (2)
NSA5-5	2	73.9	75.0	63.9	11.1	Yes	Yes (2)
NSA5-6	2	73.5	73.4	63.8	9.6	Yes	Yes (2)
NSA5-7	2	72.6	72.2	64.6	7.6	Yes	Yes (2)
NSA5-8	1	71.4	71.8	65.8	6.0	Yes	Yes (1)
NSA5-9	1	67.3	67.5	63.7	3.8	Yes	No
NSA5-10	3	67.9	68.2	63.1	5.1	Yes	Yes (3)
NSA5-11	3	68.1	68.2	60.9	7.3	Yes	Yes (3)
NSA5-12	4	67.2	67.6	60.7	6.9	Yes	Yes (4)
NSA5-13	2	67.2	67.5	60.8	6.7	Yes	Yes (2)
NSA5-14	2	69.1	69.8	66.9	2.9	Yes	No
NSA5-15	2	69.0	69.7	66.4	3.3	Yes	No
NSA5-16	2	63.7	63.8	60.1	3.7	No	No
NSA5-17	2	64.6	64.8	60.1	4.7	No	Yes (2)
NSA5-18	3	65.3	65.4	59.8	5.6	No	Yes (3)
NSA5-19	2	66.4	66.6	59.4	7.2	Yes	Yes (2)
NSA5-20	2	65.7	65.3	59.0	6.3	No	Yes (2)
NSA5-21	2	65.1	65.1	58.8	6.3	No	Yes (2)
NSA5-22	3	65.0	65.6	59.4	6.2	Yes	Yes (3)
NSA5-23	1	66.1	66.0	60.4	5.6	Yes	Yes (1)
NSA5-24	1	68.3	68.2	64.5	3.7	Yes	No
NSA5-25	1	67.4	67.3	63.0	4.3	Yes	No
NSA5-26	2	65.9	66.4	62.0	4.4	Yes	No
NSA5-27	1	68.4	68.7	64.8	3.9	Yes	No
NSA5-28	2	66.9	67.4	63.5	3.9	Yes	No
NSA5-29	1	62.7	62.9	59.3	3.6	No	No

				NSA 5			
			Nois	se Barrier to Brown Stro	eet		
Receptor	Dwelling	Existing Year	Design Year	Noise Level with	Noise Reduction	Impacted	Benefited
	units	Noise Level	Noise Level	Noise Barrier			
NSA5-30	2	62.9	63.0	59.0	4.0	No	No
NSA5-31	1	64.6	64.9	60.4	4.5	No	Yes (1)
NSA5-32	2	64.2	64.5	59.7	4.8	No	Yes (2)
NSA5-33	3	63.3	63.6	59.5	4.1	No	No
NSA5-34	3	63.7	63.8	58.5	5.3	No	Yes (3)
NSA5-35	2	64.1	64.1	59.8	4.3	No	No
NSA5-36	2	63.7	63.9	59.6	4.3	No	No
NSA5-37	1	64.6	64.7	60.8	3.9	No	No
NSA5-38	2	63.7	63.7	59.3	4.4	No	No
NSA5-39	1	64.6	64.6	61.4	3.2	No	No
NSA5-40	2	63.7	63.0	58.9	4.1	No	No
NSA5-42	1	64.9	64.9	60.8	4.1	No	No
NSA5-43	2	65.3	65.7	61.9	3.0	Yes	No
NSA5-44	1	64.1	64.3	60.8	3.5	No	No
NSA5-45	1	66.8	67.1	63.6	3.5	Yes	No
	80					40	45



# SUM 76/77 Central Interchange (PID 101402)

## **Regulated Materials Review**

June 22, 2018 - Revised



The environmental review, consultation, and other actions required by applicable Federal environmental laws for this project are being, or have been, carried-out by ODOT pursuant to 23 U.S.C. 327 and a Memorandum of Understanding dated December 11, 2015, and executed by FHWA and ODOT.

**APPENDIX B: RMR REVIEW FORM** 

#### **APPENDIX B: RMR REVIEW FORM**

NAME: John Korth/ Trevor Berger	DATE: 6/21/2018
TITLE: Environmental Scientist/ Environmental Scientist	DISTRICT: District 4
COUNTY/ROUTE/SECTION Summit/ 76/77 Interchange	PID: 101402
PROJECT DESCRIPTION: Replace the left handed exit ramps from both WB	and EB I-76 in the central interchange. Reconstruction of
these ramps will address both the poor bridge condition and the substandard ramp geo WB and EB I-76 to provide drop lanes for NB and SB exits in each direction as well as tw and operations. L&A developed a Study Area based off of an overall project exhibit pro	ometrics. Reconfiguring the lane arrangements on both vo thru lane movements for I-76 addresses both safety vided by Burgess & Niple, Inc.
Right-of-way and Deep Excavation	
Question 1a: Is new Permanent Right-of-Way to be obtained for Limits?	rom any Property within the Project
🛛 Yes 🗌 No 🗌	Unknown
Question 1b. Will Project involve executions to greater than	6 faat daan?
$\square$ Yes $\square$ No $\square$	Unknown
for Regulated Materials. No documentation is required. However, if the answer to either Question is Yes or Unknown, p	proceed to Question 2.
<b>Question 2:</b> Are all of the Properties from which new Permane Deep Excavations will occur be limited to one or more of the fo	nt Right-of-Way will be acquired or where llowing:
<ul><li>A. Previously Undeveloped Property?</li><li>B. Forested Land or a Cemetery?</li><li>C. Park or Other Recreational Land?</li><li>D. Used only for Residential Purposes?</li><li>E. Used only for Agricultural Purposes?</li></ul>	
Answer:	🗆 Yes 🖾 No 🗆 Unknown
If the answer is yes – upload this Form and the justification to E exempt from further evaluation for Regulated Materials.	invironet; the Project is considered

If the answer to Question 2 is No or Unknown, conduct an Environmental Database Search in accordance with Guidance Step 3.

The Environmental Database Search should be conducted for the following databases and the following distances from the Project Limits:

RESULTS OF ENVIRONMENTAL DATABASE SEAF	RCH				lf "Yes", ho	ow many?
National Priorities List Sites (within 1/2 mile)	$\boxtimes$	No		Yes	Choose an	n item.
Solid Waste Listed Sites (within ½ mile)	$\boxtimes$	No		Yes	Choose an	n item.
Active CERCLIS/CERCLIS NFRAP Sites (within 0.1 mile)	$\boxtimes$	No		Yes	Choose an	n item.
RCRA CORRACTS Listed Sites (within 0.1 mile)	$\boxtimes$	No		Yes	Choose an	n item.
RCRA Non-CORRACTS TSD Facilities Sites (within 0.1 mile)	$\boxtimes$	No		Yes	Choose ar	n item.
Ohio Voluntary Action Program Site (within or immediately adjacent to project limits)	$\boxtimes$	No		Yes	Choose ar	n item.
RCRA Generators  No  Yes  (within or immediately adjacent to project limits)	LQG	Choo	se an it	tem. 🗵	CE/SQG	6 or more
Institutional/Engineering Control List Sites (within or immediately adjacent to project limits)	$\boxtimes$	No		Yes	Choose ar	n item.
BUSTR Registered UST List Site (within or immediately adjacent to project limits)		No	$\boxtimes$	Yes	3	
BUSTR Leaking UST (LUST) Site (within or immediately adjacent to project limits)		No	$\boxtimes$	Yes	3	
Ohio Spills Database Site (within or immediately adjacent to project limits)		No	$\boxtimes$	Yes	2	

**Question 3:** Did the Environmental Database Search identify any Properties within the Specified Search Radii?

$\boxtimes$	Yes	No
$\square$	res	INU

**Question 4:** Did the District project scoping field review have any indicators of potential issues? If a District project scoping field review was not performed, check no.

🗌 Yes 🛛 No

If the Answer is No to both Questions 3 and 4, <u>Stop Here</u>; Proceed to Site Inventory and Land Use Risk Evaluation at the end of this Form

If the Answer is Yes to either Question 3 or 4, Answer Question 5.

**Question 5:** Refer to the Environmental Database Search Results and populate the list below with Properties identified. For each Property, answer the following Question:

Are the Project Limits Downgradient of the Identified Property?

PROPERTY ADDRESS/ID					
538 E SOUTH ST, AKRON, OH 44311		NO	$\boxtimes$	YES	SAME ELEVATION
525 E SOUTH ST, AKRON, OH	$\boxtimes$	NO		YES	SAME ELEVATION
481 E SOUTH ST, AKRON, OH 44311	$\boxtimes$	NO		YES	SAME ELEVATION
1391 S KUTHER RD @ INTERSECTION OF MILL CREEK RD, WASHINGTON TWP, OH	$\boxtimes$	NO		YES	SAME ELEVATION
893 S. JOHNSONVILL-FARMERSVILL RD, JACKSON TWP, OH	$\boxtimes$	NO		YES	SAME ELEVATION
1230 S CLEVE-MASSILLON RD, COPLEY, OH 44321	$\boxtimes$	NO		YES	SAME ELEVATION
427 E SOUTH ST, AKRON, OH, 44304	$\boxtimes$	NO		YES	SAME ELEVATION
513 E SOUTH ST, AKRON, OH	$\boxtimes$	NO		YES	SAME ELEVATION
CITY OF AKRON WTP, AKRON, OH	$\boxtimes$	NO		YES	SAME ELEVATION
446 E SOUTH ST, AKRON, OH	$\boxtimes$	NO		YES	SAME ELEVATION
I-77 NB AT CENTRAL INTERCHANGE, AKRON, OH		NO	$\boxtimes$	YES	SAME ELEVATION
431 E SOUTH ST, AKRON, OH	$\boxtimes$	NO		YES	SAME ELEVATION
478 E SOUTH ST, AKRON, OH	$\boxtimes$	NO		YES	SAME ELEVATION
474 E SOUTH ST, AKRON, OH 44311	$\boxtimes$	NO		YES	SAME ELEVATION
604 INMAN ST, AKRON, OH		NO	$\boxtimes$	YES	SAME ELEVATION
460 E SOUTH ST, AKRON, OH	$\boxtimes$	NO		YES	SAME ELEVATION
682 LAFOLLETTE, AKRON, OH		NO	$\boxtimes$	YES	SAME ELEVATION
550 JOHNSTON ST, AKRON, OH		NO	$\boxtimes$	YES	SAME ELEVATION
705 JOHNSTON ST, AKRON, OH 44306		NO	$\boxtimes$	YES	SAME ELEVATION
555 GRIDLEY ST, AKRON, OH		NO	$\boxtimes$	YES	SAME ELEVATION
700 LAFOLLETTE ST, AKRON, OH 44306		NO	$\boxtimes$	YES	SAME ELEVATION
445 LAMPARTER STREET, AKRON, OH	$\boxtimes$	NO		YES	SAME ELEVATION
667 MCKINLET AVE, AKRON, OH		NO	$\boxtimes$	YES	SAME ELEVATION
711 JOHNSTON ST, AKRON, OH		NO	$\boxtimes$	YES	SAME ELEVATION
502 HAMMEL STREET, AKRON, OH		NO	$\boxtimes$	YES	SAME ELEVATION
398 E SOUTH STREET, AKRON, OH	$\boxtimes$	NO		YES	SAME ELEVATION
773 KLING ST, AKRON, OH	$\boxtimes$	NO		YES	SAME ELEVATION
643 JOHNSTON ST, AKRON, OH		NO	$\boxtimes$	YES	SAME ELEVATION
686 BROWN, AKRON, OH	$\boxtimes$	NO		YES	SAME ELEVATION
677 CORICE ST, AKRON, OH		NO	$\boxtimes$	YES	SAME ELEVATION
635 JOHNSTON ST, AKRON, OH		NO	$\boxtimes$	YES	SAME ELEVATION
131 HUDSON RD, AKRON, OH		NO	$\boxtimes$	YES	SAME ELEVATION
203 HUDSON DRIVE EXT, AKRON, OH		NO	$\boxtimes$	YES	SAME ELEVATION
475 HUDSON DRIVE EXT, AKRON, OH		NO	$\boxtimes$	YES	SAME ELEVATION
681 LOVERS LANE, AKRON, OH 44306		NO	$\boxtimes$	YES	SAME ELEVATION
580 LAFOLLETTE ST, AKRON, OH		NO	$\boxtimes$	YES	SAME ELEVATION
623 JOHNSTON ST, AKRON, OH		NO	$\boxtimes$	YES	SAME ELEVATION
574 LAFOLLETTE ST, AKRON, OH		NO	$\boxtimes$	YES	SAME ELEVATION
652 SPICER ST, AKRON, OH 44311	$\boxtimes$	NO		YES	SAME ELEVATION
601 E CROSIER, AKRON, OH		NO	$\boxtimes$	YES	SAME ELEVATION

607 JOHNSTON ST, AKRON, OH		NO	$\boxtimes$	YES	SAME ELEVATION
650 SPICER ST, AKRON, OH	$\boxtimes$	NO		YES	SAME ELEVATION
596 E CROSIER ST, AKRON, OH, 44311		NO	$\boxtimes$	YES	SAME ELEVATION
565 JOHNSTON STREET, AKRON, OH	$\boxtimes$	NO		YES	SAME ELEVATION
754 JOHNSTON ST, AKRON, OH		NO	$\boxtimes$	YES	SAME ELEVATION
587 BAIRD ST, AKRON, OH 44311		NO	$\boxtimes$	YES	SAME ELEVATION
353 E SOUTH ST, AKRON, OH	$\boxtimes$	NO		YES	SAME ELEVATION
756 JOHNSTON ST, AKRON, OH		NO	$\boxtimes$	YES	SAME ELEVATION
792 BROWN, AKRON, OH	$\boxtimes$	NO		YES	SAME ELEVATION
755 JOHNSTON ST, AKRON, OH		NO	$\boxtimes$	YES	SAME ELEVATION
758 JOHNSTON ST, AKRON, OH		NO	$\boxtimes$	YES	SAME ELEVATION
400 ELBON AVE, AKRON, OH 44306		NO	$\boxtimes$	YES	SAME ELEVATION
568 E CROSIER ST, AKRON, OH, 44311		NO	$\boxtimes$	YES	SAME ELEVATION
450 GRIDLEY ST, AKRON, OH		NO	$\boxtimes$	YES	SAME ELEVATION
588 BERTHA STREET, SUMMIT, OH		NO	$\boxtimes$	YES	SAME ELEVATION
769 JOHNSTON ST, AKRON, OH		NO	$\boxtimes$	YES	SAME ELEVATION
813 SUMNER ST, AKRON, OH	$\boxtimes$	NO		YES	SAME ELEVATION
805 BROWN, AKRON, OH	$\boxtimes$	NO		YES	SAME ELEVATION
550 BAIRD, AKRON, OH		NO	$\boxtimes$	YES	SAME ELEVATION
775 JOHNSTON STREET, ARKON, OH		NO	$\boxtimes$	YES	SAME ELEVATION
817 SUMNER ST, AKRON, OH	$\boxtimes$	NO		YES	SAME ELEVATION
806 BROWN ST, AKRON, OH 44311	$\boxtimes$	NO		YES	SAME ELEVATION
611 STANTON AVE, AKRON, OH		NO	$\boxtimes$	YES	SAME ELEVATION
819 SUMNER ST, AKRON, OH	$\boxtimes$	NO		YES	SAME ELEVATION
511-601 E CROSIER, AKRON, OH 44311	$\boxtimes$	NO		YES	SAME ELEVATION
340 E SOUTH ST, AKRON, OH	$\boxtimes$	NO		YES	SAME ELEVATION
338 E SOUTH ST, AKRON, OH	$\boxtimes$	NO		YES	SAME ELEVATION
614 SPICER, AKRON, OH	$\boxtimes$	NO		YES	SAME ELEVATION
503 INMAN ST, AKRON, OH		NO	$\boxtimes$	YES	SAME ELEVATION
556 BEACON ST, AKRON, OH, 44311	$\boxtimes$	NO		YES	SAME ELEVATION
620 STANTON AVE, AKRON, OH 44301		NO	$\boxtimes$	YES	SAME ELEVATION
714 SUMNER ST, AKRON, OH	$\boxtimes$	NO		YES	SAME ELEVATION
541 KIPLING ST, AKRON, OH 44311		NO	$\boxtimes$	YES	SAME ELEVATION
547 MCKINLEY AVE, AKRON, OH		NO	$\boxtimes$	YES	SAME ELEVATION
793 JOHNSTON ST, AKRON, OH		NO	$\boxtimes$	YES	SAME ELEVATION
537 KIPLING ST, AKRON, OH		NO	$\boxtimes$	YES	SAME ELEVATION
536 BEACON ST, AKRON, OH 44311	$\boxtimes$	NO		YES	SAME ELEVATION
859 EDGE ST, AKRON, OH		NO	$\boxtimes$	YES	SAME ELEVATION
608 SPICER ST, AKRON, OH 44304	$\boxtimes$	NO		YES	SAME ELEVATION
883 BROWN, AKRON, OH		NO	$\boxtimes$	YES	SAME ELEVATION
551 BEACON ST, AKRON, OH 44306	$\boxtimes$	NO		YES	SAME ELEVATION
795 BAIRD ST, AKRON, OH		NO	$\boxtimes$	YES	SAME ELEVATION
870 BROWN, AKRON, OH		NO	$\boxtimes$	YES	SAME ELEVATION
935 BROWN, AKRON, OH		NO	$\boxtimes$	YES	SAME ELEVATION
475 INMAN STREET, AKRON, OH		NO	$\boxtimes$	YES	SAME ELEVATION
884 BROWN, AKRON, OH		NO	$\boxtimes$	YES	SAME ELEVATION

880 BROWN, AKRON, OH		NO	$\boxtimes$	YES	SAME ELEVATION
807 JOHNSTON ST, AKRON, OH		NO	$\boxtimes$	YES	SAME ELEVATION
905 BROWN, AKRON, OH		NO	$\boxtimes$	YES	SAME ELEVATION
739 INMAN ST, AKRON, OH 44306		NO	$\boxtimes$	YES	SAME ELEVATION
953 BROWN ST, AKRON, OH, 44311		NO	$\boxtimes$	YES	SAME ELEVATION
997 BROWN ST, AKRON, OH 44311		NO	$\boxtimes$	YES	SAME ELEVATION
892 BROWN, AKRON, OH		NO	$\boxtimes$	YES	SAME ELEVATION
963 BROWN, AKRON, OH		NO	$\boxtimes$	YES	SAME ELEVATION
697 SHERMAN ST, AKRON, OH 44301	$\boxtimes$	NO		YES	SAME ELEVATION
320 S ARLIGNTON ST, AKRON, OH		NO	$\boxtimes$	YES	SAME ELEVATION
318 S ARLINGTON RD, AKRON, OH		NO	$\boxtimes$	YES	SAME ELEVATION
991-97 BROWN, AKRON, OH		NO	$\boxtimes$	YES	SAME ELEVATION
440 BRUNER STREET, AKRON, OH		NO	$\boxtimes$	YES	SAME ELEVATION
722 SHERMAN, AKRON, OH	$\boxtimes$	NO		YES	SAME ELEVATION
323 S ARLINGTON ST, AKRON, OH		NO	$\boxtimes$	YES	SAME ELEVATION
759 INMAN ST, AKRON, OH		NO	$\boxtimes$	YES	SAME ELEVATION
313 S ARLINGTON ST, AKRON, OH		NO	$\boxtimes$	YES	SAME ELEVATION
390 S ARLINGTON ST, AKRON, OH		NO	$\boxtimes$	YES	SAME ELEVATION
535 SPICER ST, AKRON, OH	$\boxtimes$	NO		YES	SAME ELEVATION
935 HAMMEL ST, AKRON, OH		NO	$\boxtimes$	YES	SAME ELEVATION
345 4 <sup>TH</sup> NW, AKRON, OH		NO	$\boxtimes$	YES	SAME ELEVATION
540 GAGE ST, AKRON, OH	$\boxtimes$	NO		YES	SAME ELEVATION
302 S ARLINGTON ST, AKRON, OH 44306		NO	$\boxtimes$	YES	SAME ELEVATION
496 4 <sup>TH</sup> NW, AKRON, OH		NO	$\boxtimes$	YES	SAME ELEVATION
996 BROWN, AKRON, OH		NO	$\boxtimes$	YES	SAME ELEVATION
984 BROWN, AKRON, OH		NO	$\boxtimes$	YES	SAME ELEVATION
355 S ARLINGTON ST, AKRON, OH		NO	$\boxtimes$	YES	SAME ELEVATION
585 BROWN ST, AKRON, OH 44311	$\boxtimes$	NO		YES	SAME ELEVATION
1101 4 <sup>TH</sup> AVE, AKRON, OH		NO	$\boxtimes$	YES	SAME ELEVATION
421 TALBOT AVE, AKRON, OH		NO	$\boxtimes$	YES	SAME ELEVATION
994 BROWN ST, AKRON, 44311		NO	$\boxtimes$	YES	SAME ELEVATION
357 S ARLINGTON ST, AKRON, OH		NO	$\boxtimes$	YES	SAME ELEVATION
964 BROWN, AKRON, OH		NO	$\boxtimes$	YES	SAME ELEVATION
296 S ARLINGTON ST, AKRON, OH		NO	$\boxtimes$	YES	SAME ELEVATION
384-90 S ARLINGTON ST, AKRON, OH		NO	$\boxtimes$	YES	SAME ELEVATION
570 SPICER ST, AKRON, OH 44311	$\boxtimes$	NO		YES	SAME ELEVATION
264 S ARLINGTON ST, AKRON, OH		NO	$\boxtimes$	YES	SAME ELEVATION
552 SPICER ST, AKRON, OH, 44311	$\boxtimes$	NO		YES	SAME ELEVATION
674 COLE AVE, AKRON, OH		NO	$\boxtimes$	YES	SAME ELEVATION
978 BROWN, AKRON, OH		NO	$\boxtimes$	YES	SAME ELEVATION
944 BROWN, AKRON, OH		NO	$\boxtimes$	YES	SAME ELEVATION
778 LOVERS LANE ST, AKRON, OH		NO	$\boxtimes$	YES	SAME ELEVATION
781 LOVERS LANE ST, AKRON, OH		NO	$\boxtimes$	YES	SAME ELEVATION
543 GAGE, AKRON, OH 44311	$\boxtimes$	NO		YES	SAME ELEVATION
438 DOWNING PLACE, AKRON ,OH		NO	$\boxtimes$	YES	SAME ELEVATION
274 E SOUTH ST, AKRON, OH 44311	$\boxtimes$	NO		YES	SAME ELEVATION

877 MCGOWAN ST, AKRON, OH		NO	$\boxtimes$	YES	SAME ELEVATION
333 E CROSIER ST, AKRON, OH	$\boxtimes$	NO		YES	SAME ELEVATION

The following land uses are considered "low risk":

- Commercial Office Space
- Banks
- Physicians/Dentist Offices
- Retail Stores
- Pharmacy
- Grocery
- Restaurant
- Daycares
- Lodging
- Car Dealerships (Note if there are repair or oil change areas on the property, this is considered high risk.)
- Florists/Landscapers

The following Land Uses are considered "high risk"

- Gas Stations
- Dry Cleaners
- Automotive Repair/Service/Oil Change
- Body Shops
- Electrical Substations
- Railroad Maintenance/Sidings
- Junkyard/Scrapyard
- Oil/Chemical Warehouse/Storage
- Landfill
- ANY Industrial Use

### **PROPERTY INVENTORY AND LAND USE EVALUATION**

#### PLEASE ATTACH MAPPING SHOWING SITES CROSS-REFERENCED TO THE INVENTORY FORM

Property Address/Property ID #	Current Land Use	What is the Current Land Use Risk?	Was the Property Identified on EDS?	Is this a Total Take, a Partial Take w/ Demo, or other?	According to the Flowchart, is a Phase I Required for this
					Property?
705 Johnston	A & C Welding	High Risk	Yes	Other - No deep	No
St/6859733				excavation expected	
264 S Arlington	Children's Services	Low Risk	Yes	Other - No deep	No
Street/6760904	(Historical Auto Station)			excavation expected	
1 Holy Cross	High School (Historical Auto	Low Risk	Yes	Other - No deep	No
Blvd./6708179	Station & Cleaners)			excavation expected	
Interstate 76	Interstate 76 (Historical	Low Risk	Yes	<b>Other</b> - >6ft excavation for	Yes
(Historically: 604	Auto Station)			sound walls	
Inman St)					
700 Lafollette	Goodrich Middle School	Low Risk	Yes	Other - Temporary ROW	No
Street/6708996	(Historical Auto Station)				
667 McKinley	Residential (Historical	Low Risk	Yes	Other - No deep	No
Ave/6736429	Cleaners)			excavation expected	
613 E Crosier	Mike's St Auto	High Risk	Yes	Other - No deep	No
St/6763260				excavation expected	
613 E Crosier	Mike's St Auto	High Risk	Yes	Other - No deep	No
St/6721455				excavation expected	
538 E South	Summit County Engineers	Low Risk	No	Partial Take w/o Demo	No
Street/6708887					
538 E South	Summit County Engineers	High Risk	Yes	Other - No deep	No
Street/6709658				excavation expected	
Bond St/6716823	Interstate 76 (Historical	Low Risk	Yes	Other - >6ft excavation for	Yes
(Historically	Auto Station)			sound walls	
referenced as 525 E					
South St and 550					
Johnston St)					
Interstate 76	Interstate 76 (Historical	Low Risk	Yes	Other - >6ft excavation for	Yes
(Historically 513 E	Auto Station)			sound walls	

South St)					
481 E South	Vacant Commercial	Low Risk	Yes	Other - No deep	No
St/6736195	(Historical Auto & Cleaners)			excavation expected	
565 Johnston	Construction	High Risk	Yes	Other - No deep	No
St/6758096				excavation expected	

**MAP OF STUDY AREA** 









**MAP OF SUSPECT PROPERTIES** 



**AERIAL PHOTOGRAPHS** 









File Name: 2016 Aerial.mxd

Edited: 10/5/2017 By: afraley


















































SANBORN MAPS

16-0568C 538 East South Street Akron, OH 44311

Inquiry Number: 4927013.5 May 05, 2017

# **Certified Sanborn® Map Report**



6 Armstrong Road, 4th floor Shelton, CT 06484 Toll Free: 800.352.0050 www.edrnet.com

# 05/05/17 Site Name: 05/05/17 Site Name: Client Name: 16-0568C Lawhon & Associates, Inc. 538 East South Street 1441 King Avenue Akron, OH 44311 Columbus, OH 43212

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Contact: Bryon Alexander

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Project	16-0568	
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1986		Certification #: 4978-476D-93F2
1951		The Sanhorn Library includes more than 1.2 million
1940		fire insurance maps from Sanborn, Bromley, Perris &
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1910		historical property usage in approximately 12,000 American cities and towns. Collections searched:
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#### Sanborn Sheet Key

This Certified Sanborn Map Report is based upon the following Sanborn Fire Insurance map sheets.



#### **1986 Source Sheets**



Volume 5, Sheet 508 1986

#### **1951 Source Sheets**





Volume 5, Sheet 531

1986

Volume 5, Sheet 508 1951



Volume 5, Sheet 533 1986



Volume 5, Sheet 505 1986



1951

# 1951

#### **1940 Source Sheets**



Volume 5, Sheet 505 1940

Volume 5, Sheet 508 1940



Volume 5, Sheet 531

1951

Volume 5, Sheet 531 1940



Volume 5, Sheet 533 1940

#### **1916 Source Sheets**



Volume 2, Sheet 207 1916



Volume 2, Sheet 231 1916







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page 4















0 Feet

150

Outlined areas indicate map sheets within the collection.



600

300



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page 7



16-0568C 538 East South Street Akron, OH 44311

Inquiry Number: 4927013.5 May 05, 2017

# **Certified Sanborn® Map Report**



6 Armstrong Road, 4th floor Shelton, CT 06484 Toll Free: 800.352.0050 www.edrnet.com

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#### **1986 Source Sheets**





Volume 5, Sheet 531 1986

#### **1951 Source Sheets**

1986



Volume 5, Sheet 508 1951

# Volume 5, Sheet 531 1951

#### **1940 Source Sheets**



Volume 5, Sheet 508 1940



Volume 5, Sheet 531 1940



Volume 2, Sheet 206 1916



Volume 2, Sheet 207 1916

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Volume 2, Sheet 208 1916





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**Certified Sanborn® Map** 



16-0568C 538 East South Street Akron, OH 44311

Inquiry Number: 4927013.5 May 05, 2017

# **Certified Sanborn® Map Report**



6 Armstrong Road, 4th floor Shelton, CT 06484 Toll Free: 800.352.0050 www.edrnet.com

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Volume 6, Sheet 607 1986

#### **1951 Source Sheets**





Volume 6, Sheet 608

1986

Volume 5, Sheet 608 1951



Volume 6, Sheet 609 1986



Volume 6, Sheet 617 1986



Volume 5, Sheet 617 1951

Volume 5, Sheet 607 1951

#### **1940 Source Sheets**



Volume 5, Sheet 608 1940

Volume 5, Sheet 609

1940

Volume 5, Sheet 609

1951

Volume 5, Sheet 617 1940



1940

#### **1916 Source Sheets**



Volume 2, Sheet 233 1916











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Volume 5, Sheet 609 Volume 5, Sheet 608

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4927013 - 5 page 7

16-0568C 538 East South Street Akron, OH 44311

Inquiry Number: 4927013.5 May 05, 2017

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# **1986 Source Sheets**



Volume 5, Sheet 506 1986

# **1951 Source Sheets**



1951

Volume 6, Sheet 607

1986

Volume 5, Sheet 607 1951



Volume 6, Sheet 609 1986



Volume 5, Sheet 609 1951



**1940 Source Sheets** 

Volume 5, Sheet 506 1940



Volume 5, Sheet 609 1940



Volume 5, Sheet 607 1940



Volume 2, Sheet 232 1916









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# **Certified Sanborn® Map**





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# **Certified Sanborn® Map**







16-0568C 538 East South Street Akron, OH 44311

Inquiry Number: 4927013.5 May 05, 2017

# **Certified Sanborn® Map Report**



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1940		fire insurance maps from Sanborn, Bromley, Perris &
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Volume 5, Sheet 505

# **1951 Source Sheets**

1986





Volume 5, Sheet 505 1951

Volume 5, Sheet 506 1951

1986

# **1940 Source Sheets**



Volume 5, Sheet 505 1940



Volume 5, Sheet 506 1940



Volume 2, Sheet 231 1916



Volume 2, Sheet 232 1916

















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16-0568C 538 East South Street Akron, OH 44311

Inquiry Number: 4927013.5 May 05, 2017

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# **1951 Source Sheets**



Volume 5, Sheet 505 1951

# **1940 Source Sheets**



Volume 5, Sheet 505 1940



Volume 2, Sheet 231 1916







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# **Certified Sanborn® Map**



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16-0568C 538 East South Street Akron, OH 44311

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1940		Browne, Hopkins, Barlow and others which track
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# **1986 Source Sheets**



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# **1951 Source Sheets**



Volume 5, Sheet 507 1951



Volume 5, Sheet 507 1986



Volume 5, Sheet 508 1986



Volume 5, Sheet 508 1951

# **1950 Source Sheets**



Volume 1, Sheet 28 1950



Volume 1, Sheet 28 1940



Volume 5, Sheet 507 1940



Volume 5, Sheet 508 1940

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Volume 2, Sheet 206 1916



Volume 2, Sheet 207 1916



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16-0568C 538 East South Street Akron, OH 44311

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Volume 1, Sheet 28 1986

# **1951 Source Sheets**



1951



Volume 5, Sheet 508 1986



Volume 5, Sheet 517 1986



517

Volume 5, Sheet 517 1951

# **1950 Source Sheets**



Volume 1, Sheet 28 1950



Volume 1, Sheet 28 1940



Volume 5, Sheet 508 1940



Volume 5, Sheet 517 1940

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Volume 2, Sheet 198 1916



Volume 2, Sheet 205 1916



Volume 2, Sheet 206 1916







Volume 5, Sheet 508 Volume 1, Sheet 28

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page 8


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16-0568C 538 East South Street Akron, OH 44311

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Volume 1, Sheet 27 1986

#### **1951 Source Sheets**



Volume 1, Sheet 28

1986

Volume 5, Sheet 517 1951

#### **1950 Source Sheets**

1951



Volume 1, Sheet 27 1950

Volume 1, Sheet 28 1950

#### **1940 Source Sheets**



Volume 1, Sheet 27 1940



Volume 1, Sheet 28 1940



Volume 5, Sheet 516 1940



Volume 5, Sheet 517 1940



Volume 5, Sheet 517 1986



Volume 5, Sheet 516

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#### **1916 Source Sheets**



Volume 2, Sheet 197 1916



Volume 2, Sheet 198 1916



Volume 2, Sheet 204 1916



Volume 2, Sheet 205 1916









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### **Certified Sanborn® Map**









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16-0568C 538 East South Street Akron, OH 44311

Inquiry Number: 4927013.5 May 05, 2017

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Volume 5, Sheet 506 1986

#### **1951 Source Sheets**



**1940 Source Sheets** 

1951



Volume 6, Sheet 607

1986

Volume 5, Sheet 607 1951



Volume 6, Sheet 608 1986



Volume 5, Sheet 608 1951

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Volume 5, Sheet 607 1940



Volume 2, Sheet 233 1916



Volume 5, Sheet 506

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Volume 2, Sheet 180 1916



Volume 5, Sheet 608

Volume 2, Sheet 232 1916





### **Certified Sanborn® Map**













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16-0568C 538 East South Street Akron, OH 44311

Inquiry Number: 4927013.5 May 05, 2017

## **Certified Sanborn® Map Report**



6 Armstrong Road, 4th floor Shelton, CT 06484 Toll Free: 800.352.0050 www.edrnet.com

# 05/05/17 Site Name: 05/05/17 Site Name: Client Name: 16-0568C Lawhon & Associates, Inc. 538 East South Street 1441 King Avenue Akron, OH 44311 Columbus, OH 43212

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PO #	NA	
Project	16-0568	
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1986		Certification #: 4978-476D-93F2
1951		The Sanhorn Library includes more than 1.2 million
1940		fire insurance maps from Sanborn, Bromley, Perris &
1016		Browne, Hopkins, Barlow and others which track
1910		historical property usage in approximately 12,000 American cities and towns. Collections searched:
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		University Dublications of America
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#### **1986 Source Sheets**



Volume 5, Sheet 504 1986

#### **1951 Source Sheets**



1951



Volume 5, Sheet 506

1986

Volume 5, Sheet 506 1951



Volume 6, Sheet 607 1986



Volume 5, Sheet 607 1951







Volume 5, Sheet 506 1940

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Volume 5, Sheet 607 1940

#### **1916 Source Sheets**



Volume 2, Sheet 179 1916



Volume 2, Sheet 232 1916









16-0568C 538 East South Street Akron, OH 44311

Inquiry Number: 4927013.5 May 05, 2017

## **Certified Sanborn® Map Report**



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#### **1986 Source Sheets**



Volume 5, Sheet 503 1986

#### **1951 Source Sheets**





Volume 5, Sheet 504

1986

Volume 5, Sheet 504 1951



Volume 5, Sheet 505 1986



Volume 5, Sheet 506 1986



Volume 5, Sheet 506 1951

### 1951

#### **1940 Source Sheets**



Volume 5, Sheet 503 1940

Volume 5, Sheet 504

1940

Volume 5, Sheet 505

1951

Volume 5, Sheet 505 1940



Volume 5, Sheet 506 1940

#### **1916 Source Sheets**



Volume 2, Sheet 176 1916



Volume 2, Sheet 231 1916



Volume 2, Sheet 232 1916





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Outlined areas indicate map sheets within the collection.





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16-0568C 538 East South Street Akron, OH 44311

Inquiry Number: 4927013.5 May 05, 2017

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Volume 5, Sheet 503 1986

#### **1951 Source Sheets**



Volume 5, Sheet 507

1986

Volume 5, Sheet 505 1951

Volume 5, Sheet 507 1951

#### **1940 Source Sheets**



Volume 5, Sheet 505 1940

Volume 5, Sheet 507 1940

## 1916 Source Sheets



Volume 2, Sheet 231 1916



Volume 5, Sheet 505 1986











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16-0568C 538 East South Street Akron, OH 44311

Inquiry Number: 4927013.5 May 05, 2017

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Volume 5, Sheet 507 1986

#### **1951 Source Sheets**





Volume 5, Sheet 508

1986

Volume 5, Sheet 507 1951



Volume 5, Sheet 505 1986



Volume 5, Sheet 508 1951



1951



Volume 5, Sheet 505 1940

Volume 5, Sheet 507 1940



Volume 5, Sheet 508 1940

#### **1916 Source Sheets**



Volume 2, Sheet 207 1916



Volume 2, Sheet 231 1916





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# **Certified Sanborn® Map**

1951





# **Certified Sanborn® Map**

1940



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page 6



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# **Certified Sanborn® Map**

1916



**ENVIRONMENTAL DATABASE REPORT** 

# 16-0568C

538 East South Street Akron, OH 44311

Inquiry Number: 5001817.2s July 25, 2017

# The EDR Radius Map<sup>™</sup> Report



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FORM-LBF-MGA

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#### **GEOCHECK ADDENDUM**

**GeoCheck - Not Requested** 

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#### TARGET PROPERTY INFORMATION

#### ADDRESS

538 EAST SOUTH STREET AKRON, OH 44311

#### COORDINATES

Latitude (North):	41.0618380 - 41° 3' 42.61"
Longitude (West):	81.5049220 - 81° 30' 17.71"
Universal Tranverse Mercator:	Zone 17
UTM X (Meters):	457573.8
UTM Y (Meters):	4545532.5
Elevation:	1061 ft. above sea level

#### USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	5966296 AKRON WEST, OH
Version Date:	2013
East Map:	5966294 AKRON EAST, OH
Version Date:	2013

#### **AERIAL PHOTOGRAPHY IN THIS REPORT**

Portions of Photo from:	20150816
Source:	USDA

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE FLEVATION	DIST (ft. & mi.) DIRECTION
A1	SUMMIT COUNTY ENGINE	538 E SOUTH ST - ATT	OH LUST, OH UST		TP
A2	SUMMIT COUNTY ENGINE	538 E SOUTH ST - ATT	OH ARCHIVE UST		TP
A3	SUMMIT COUNTY ENGINE	538 E SOUTH ST	RCRA-CESQG		TP
A4	SUMMIT COUNTY ENGINE	538 E SOUTH ST	FINDS, ECHO		TP
A5	SUMMIT COUNTY ENGINE	538 E SOUTH ST - ATT	OH RGA LUST		TP
A6	SUMMIT CO ENGINEERS	538 E SOUTH ST	OH RGA LUST		TP
B7	MILT S SUNOCO	525 E SOUTH ST	EDR Hist Auto	Lower	1 ft.
<b>C</b> 8		481 E SOUTH ST	EDR Hist Cleaner	Lower	1 ft.
B9	RICKY DECKER	1391 S KUTHER RD @ I	OH SPILLS	Lower	1 ft.
C10	BROSKE & ROBINSON SE	481 E SOUTH ST	EDR Hist Auto	Lower	1 ft.
B11	LEROY SCHINDLER	893 S. JOHNSONVILLE-	OH SPILLS	Lower	1 ft.
B12	COPLEY AUTO COLLISIO	1230 S CLEVE-MASSILL	RCRA-CESQG, NY MANIFEST	Lower	1 ft.
D13	BUTLERS SERVICE	427 E SOUTH ST	EDR Hist Auto	Lower	1 ft.
C14	GROSS PAT CLEANERS	481 E SOUTH ST	RCRA NonGen / NLR, FINDS, ECHO	Lower	1 ft.
B15	MILLER J A	513 E SOUTH ST	EDR Hist Auto	Lower	1 ft.
E16	UNK	CITY OF AKRON WTP	OH SPILLS	Lower	1 ft.
D17	AVALON CLEANERS	446 E SOUTH	EDR Hist Cleaner	Lower	1 ft.
18	KENMORE CONSTRUCTION	I-77 NB AT CENTRAL I	OH SPILLS	Higher	1 ft.
D19	NO	431 E SOUTH	EDR Hist Auto	Lower	15, 0.003, West
C20	GRAND DRY CLEANERS	478 E SOUTH ST	EDR Hist Cleaner	Lower	20, 0.004, West
C21	BERT W. FALOR	474 E SOUTH ST	OH ARCHIVE UST	Lower	38, 0.007, West
C22	KATZ A L	474 E SOUTH ST	EDR Hist Auto	Lower	38, 0.007, West
C23	HIGHLAND SERVICE	474 E SOUTH ST	OH LUST, OH UST	Lower	38, 0.007, West
C24	HIGHLAND SERVICE	474 E SOUTH ST	OH RGA LUST	Lower	38, 0.007, West
C25	BERT FULOR	474 E SOUTH ST	OH RGA LUST	Lower	38, 0.007, West
F26	WHIDDON E W	604 INMAN ST	EDR Hist Auto	Higher	40, 0.008, East
D27	GROSS P J	460 E SOUTH ST	EDR Hist Cleaner	Lower	41, 0.008, West
G28	TEMPLETON H L	682 LA FOLLETTE	EDR Hist Auto	Higher	47, 0.009, SSE
E29	FRANDSEN G F	550 JOHNSTON ST	EDR Hist Auto	Higher	70, 0.013, WNW
H30	A & C WELDING INC	705 JOHNSTON STREET	RCRA-CESQG, FINDS, ECHO	Higher	85, 0.016, NNE
31	MYERS & FORBES REAR	555 GRIDLEY ST	EDR Hist Auto	Higher	93, 0.018, ENE
G32	GOODRICH JUNIOR HIGH	700 LAFOLLETTE ST	RCRA-SQG, FINDS, ECHO	Higher	105, 0.020, SSE
F33	GIL S MARATHON	345 5TH NE	EDR Hist Auto	Higher	107, 0.020, East
<b>I</b> 34	445 LAMPARTER STREET	445 LAMPARTER STREET	US CDL	Lower	140, 0.027, WNW
F35	LAZAR J P	340 5TH NE	EDR Hist Cleaner	Higher	144, 0.027, East
36	A & M DISCOUNT CLEAN	667 MCKINLEY AVE	EDR Hist Cleaner	Higher	154, 0.029, South
H37	SACKS ELECTICAL SUPP	711 JOHNSTON ST	OH RGA LUST	Higher	177, 0.034, NNE
H38	SACKS ELECTICAL SUPP	711 JOHNSTON ST	OH ARCHIVE UST	Higher	177, 0.034, NNE
H39	SACKS ELECTICAL SUPP	711 JOHNSTON ST	OH LUST, OH UST	Higher	177, 0.034, NNE

Click on Map ID to see full detail.

MAP
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MAP	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE FLEVATION	DIST (ft. & mi.) DIRECTION
H40	SACKS ELECTRICAL SUP	711 JOHNSTON ST	FINDS	Higher	177, 0.034, NNE
H41	SACKS ELECTRIC	711 JOHNSON ST	OH RGA LUST	Higher	177, 0.034, NNE
42	502 HAMMEL STREET	502 HAMMEL STREET	US HIST CDL	Higher	183, 0.035, NE
43	VERIZON WIRELESS - D	565 WILSON ST	FINDS	Higher	192, 0.036, North
44	SHEIK CLEANERS	398 E SOUTH ST	EDR Hist Cleaner	Lower	194, 0.037, West
45	773 KLING ST	773 KLING ST	US HIST CDL	Lower	210, 0.040, West
J46	ROYAL SERVICE STATIO	643 JOHNSTON ST	EDR Hist Auto	Higher	213, 0.040, North
147	W & M MOTOR SERVICE	686 BROWN	EDR Hist Auto	Lower	213, 0.040, WNW
48	677 CORICE ST	677 CORICE ST	US CDL	Higher	231, 0.044, South
J49	NIVENS L C	635 JOHNSTON ST	EDR Hist Cleaner	Higher	266, 0.050, North
K50	GOOD DRY CLEANERS	131 HUDSON RD	EDR Hist Cleaner	Higher	267, 0.051, East
K51	KOONS W C	203 HUDSON DRIVE E	EDR Hist Auto	Higher	267, 0.051, East
K52	MC HENRY E M	475 HUDSON DRIVE E	EDR Hist Auto	Higher	267, 0.051, East
53	D & W REPAIR	681 LOVERS LANE	EDR Hist Auto	Higher	276, 0.052, South
L54	HANSON J G	580 LAFOLLETTE ST	EDR Hist Auto	Higher	279, 0.053, SW
J55	W BUCKEYE CLEANERS	623 JOHNSTON ST	EDR Hist Cleaner	Higher	322, 0.061, NNW
L56	ALCON TOOL CO	574 LAFOLLETTE ST	RCRA-SQG, FINDS, ECHO	Higher	332, 0.063, SW
M57	CHAPEL HILL TOWING &	652 SPICER ST	EDR Hist Auto	Lower	370, 0.070, WNW
N58	MAIN YARD	601 E CROSIER	OH RGA LUST	Higher	376, 0.071, SW
N59	SUMMIT COUNTY ENGINE	601 E CROSIER ST	OH LUST, OH UST, OH ARCHIVE UST	Higher	376, 0.071, SW
N60	SUMMIT COUNTY ENGINE	601 E CROSIER ST	OH RGA LUST	Higher	376, 0.071, SW
N61	SUMMIT COUNT ENGINEE	601 E CROSIER ST	EDR Hist Auto	Higher	376, 0.071, SW
62	607 JOHNSTON ST	607 JOHNSTON ST	US CDL	Higher	385, 0.073, NNW
M63	650 SPICER ST	650 SPICER ST	US CDL	Lower	409, 0.077, WNW
N64	BONDURANT SERVICE &	596 E CROSIER ST	EDR Hist Auto	Higher	414, 0.078, SW
<b>O</b> 65	WATER MAIN YARD CITY	565 JOHNSTON STREET	OH RGA LUST	Lower	450, 0.085, NW
<b>O66</b>	AKRON CITY JOHNSTON	565 JOHNSTON ST	RCRA NonGen / NLR, FINDS	Lower	450, 0.085, NW
<b>O67</b>	WATER MAIN YARD CITY	565 JOHNSTON STREET	OH RGA LUST	Lower	450, 0.085, NW
<b>O68</b>	WATER DEPT	565 JOHNSTON ST (WES	OH RGA LUST	Lower	450, 0.085, NW
<b>O</b> 69	WATER MAIN YARD CITY	565 JOHNSTON STREET	OH LUST, OH UST	Lower	450, 0.085, NW
<b>O7</b> 0	CITY OF AKRON WATER	565 JOHNSTON ST	FINDS, ECHO	Lower	450, 0.085, NW
071	WATER DEPT	565 JOHNSTON ST (WES	OH RGA LUST	Lower	450, 0.085, NW
P72	ROYAL CLEANERS	754 JOHNSTON ST	EDR Hist Cleaner	Higher	527, 0.100, NNE
Q73	OHIO MATERIALS HANDL	565 LAFOLLETTE ST	EDR Hist Auto	Higher	534, 0.101, SW
R74	ALCON TOOL	587 BAIRD ST	RCRA-SQG, OH SPILLS, FINDS, ECHO	Higher	540, 0.102, SW
S75	FRIGIDAIRE QUICK CLE	353 E SOUTH ST	EDR Hist Cleaner	Lower	543, 0.103, West
P76	<b>ROYAL CLEANERS &amp; TAI</b>	756 JOHNSON ST	EDR Hist Cleaner	Higher	549, 0.104, NNE
T77	ANN S DRY CLEANING	792 BROWN	EDR Hist Cleaner	Lower	559, 0.106, WSW
P78	755 JOHNSTON ST	755 JOHNSTON ST	US HIST CDL	Higher	566, 0.107, NNE

Click on Map ID to see full detail.

MAP	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.)
P79	SHOEMAKER A F	758 JOHNSTON ST	EDR Hist Auto	Higher	586, 0.111, NNE
U80	ARCHBISHOP HABAN HIG	400 ELBON AVE	OH LUST, OH UST	Higher	609, 0.115, East
U81	ARCHBISHOP HOBAN HIG	400 ELBON AVE	OH RGA LUST	Higher	609, 0.115, East
U82	ARCHBISHOP HOBAN HIG	400 ELBON	US AIRS, FINDS, ECHO	Higher	609, 0.115, East
U83	HOBIN HIGH SCHOOL	400 ELBON AVENUE	RCRA NonGen / NLR	Higher	609, 0.115, East
U84	ARCHBISHOP HABAN HIG	400 ELBON AVE	OH RGA LUST	Higher	609, 0.115, East
U85	ARCHBISHOP HABAN HIG	400 ELBON AVE	OH ARCHIVE UST	Higher	609, 0.115, East
Q86	OHIO MATERIALS HANDL	568 E CROSIER ST	EDR Hist Auto	Higher	619, 0.117, SW
P87	TANNER E W	450 GRIDLEY ST	EDR Hist Auto	Higher	619, 0.117, NE
88	588 BERTHA STREET	588 BERTHA STREET	US CDL	Higher	665, 0.126, ESE
V89	GREISER MRS F M	769 JOHNSTON ST	EDR Hist Cleaner	Higher	665, 0.126, NNE
W90	RANKIN J W	813 SUMNER ST	EDR Hist Auto	Lower	689, 0.130, West
T91	MILT S SOHIO	805 BROWN	EDR Hist Auto	Lower	692, 0.131, WSW
R92	JOHNSON R P	550 BAIRD	EDR Hist Auto	Higher	706, 0.134, SW
V93	775 JOHNSTON STREET	775 JOHNSTON STREET	US CDL	Higher	707, 0.134, NNE
W94	SERVICE AUTO & MACHI	817 SUMNER ST	EDR Hist Auto	Lower	710, 0.134, West
T95	ENGINE DOCTOR INC	806 BROWN ST	EDR Hist Auto	Lower	716, 0.136, WSW
X96	YEE SING	611 STANTON AVE	EDR Hist Cleaner	Higher	726, 0.138, South
W97	BOVEY J F	819 SUMNER ST	EDR Hist Auto	Lower	729, 0.138, West
98	GEORGE BODY & TRAILE	511-601 E CROSIER	EDR Hist Auto	Lower	735, 0.139, WSW
S99	SOUTH STREET LAUNDRO	340 E SOUTH ST	EDR Hist Cleaner	Lower	754, 0.143, West
S100	FOREMAN R W	340 E SOUTH ST	EDR Hist Auto	Lower	754, 0.143, West
S101	KORY W E	338 E SOUTH ST	EDR Hist Auto	Lower	760, 0.144, West
Y102	W MANTON C J REAR	614 SPICER	EDR Hist Auto	Lower	770, 0.146, NW
Z103	INMAN CLEANERS	503 INMAN ST	EDR Hist Cleaner	Higher	794, 0.150, NE
AA104	BUDOFF IRON & METAL	556 BEACON ST	FINDS	Lower	798, 0.151, North
AA105	HYBUD EQUIPMENT CORP	556 BEACON ST	FINDS	Lower	798, 0.151, North
X106	AUTO EXCITER LLC	620 STANTON AVE	EDR Hist Auto	Higher	830, 0.157, South
107	G & M MOTORS	714 SUMNER ST	EDR Hist Auto	Lower	843, 0.160, WNW
AB108	STONEYS RADIATOR SER	541 KIPLING ST	EDR Hist Auto	Higher	849, 0.161, SW
109	WORDEN D I	547 MCKINLEY AVE	EDR Hist Auto	Higher	856, 0.162, SSW
V110	SUPERIOR BATTERY & E	793 JOHNSTON ST	EDR Hist Auto	Higher	865, 0.164, NNE
AB111	A & H GARAGE	537 KIPLING ST	EDR Hist Auto	Higher	868, 0.164, SW
AA112	TIMS TRANSMISSION	536 BEACON ST	EDR Hist Auto	Lower	880, 0.167, North
Z113	859 EDGE ST	859 EDGE ST	US CDL	Higher	891, 0.169, NE
Y114	MOORES AUTOBODY	608 SPICER ST	EDR Hist Auto	Lower	909, 0.172, NW
AB115	B & B CLEANERS	883 BROWN	EDR Hist Cleaner	Higher	915, 0.173, SW
AA116	WASTE MANAGEMENT OF	551 BEACON ST	RCRA-CESQG, FINDS	Lower	946, 0.179, North
AA117	MILESTONE SERVICES C	551 BEACON ST	FINDS, ECHO	Lower	946, 0.179, North

Click on Map ID to see full detail.

				DIST (ft. & mi.)
AC118STEEN F W	795 BAIRD ST	EDR Hist Auto	Higher	972, 0.184, SE
119 ANTON J A	870 BROWN	EDR Hist Auto	Higher	1000, 0.189, SW
AD120BARAN T F	935 BROWN	EDR Hist Auto	Higher	1015, 0.192, SSW
Z121 475 INMAN STREET	475 INMAN STREET	US CDL	Higher	1020, 0.193, NE
AB122 B & B CLEANERS	884 BROWN	EDR Hist Cleaner	Higher	1024, 0.194, SW
AB123B & B CLEANERS	880 BROWN	EDR Hist Cleaner	Higher	1026, 0.194, SW
124 MC KITRICK M L	807 JOHNSTON ST	EDR Hist Auto	Higher	1027, 0.195, NE
AB125 SCHOLA ELMER F	905 BROWN	EDR Hist Auto	Higher	1047, 0.198, SW
AC126LEOS ONE HOUR VALET	739 INMAN ST	EDR Hist Cleaner	Higher	1052, 0.199, SE
AD127BROWN STREET AUTOCRA	953 BROWN ST	RCRA-CESQG, FINDS, ECHO	Higher	1079, 0.204, SSW
AD128BROWN STREET AUTOMOT	953 BROWN ST	EDR Hist Auto	Higher	1079, 0.204, SSW
AE129 MAC'S CONVENIENCE ST	997 BROWN ST.	USAIRS	Higher	1081, 0.205, SSW
AE130 HOLLAND OIL CO NO 4	997 BROWN ST	FINDS, ECHO	Higher	1081, 0.205, SSW
AE131 OVERFIELD BROS	997 BROWN	EDR Hist Auto	Higher	1081, 0.205, SSW
AB132 GATSLE RUDOLPH	892 BROWN	EDR Hist Auto	Higher	1085, 0.205, SW
AF133 PRICE S L	963 BROWN	EDR Hist Auto	Higher	1101, 0.209, SSW
AG134FHM PROPERTIES	697 SHERMAN ST	RCRA-LQG, FINDS, ECHO	Lower	1114, 0.211, WNW
AG135697 SHERMAN ST	697 SHERMAN ST	US CDL	Lower	1114, 0.211, WNW
AH136HALL A J	320 S ARLINGTON ST	EDR Hist Auto	Higher	1116, 0.211, East
AH137SMITH L L	318 SARLINGTON RD	EDR Hist Auto	Higher	1118, 0.212, East
AE138 CHAPMAN H C	991-97 BROWN	EDR Hist Auto	Higher	1126, 0.213, SSW
139 440 BRUNER STREET	440 BRUNER STREET	US CDL	Higher	1152, 0.218, ENE
140 722 SHERMAN	722 SHERMAN	US CDL	Lower	1156, 0.219, West
AH141OSBORNE R H	323 SARLINGTON ST	EDR Hist Auto	Higher	1162, 0.220, East
AH142JACK YEE	323 SARLINGTON	EDR Hist Cleaner	Higher	1162, 0.220, East
AC143SOHIO OIL CO SITE 03	759 INMAN ST	RCRA NonGen / NLR, FINDS, ECHO	Higher	1165, 0.221, SE
AC144A & A SOHIO	759 INMAN ST	EDR Hist Auto	Higher	1165, 0.221, SE
AH145MAYFLOWER CLEANERS	313 SARLINGTON ST	EDR Hist Cleaner	Higher	1166, 0.221, East
AI146 T&M REMOVE & REPLACE	390 S ARLINGTON ST	EDR Hist Auto	Higher	1172, 0.222, East
AJ147 TRANS ENVIRO	535 SPICER ST	FINDS	Lower	1176, 0.223, NNW
AJ148 AKRON TRUCK & TRAILE	535 SPICER ST	EDR Hist Auto	Lower	1176, 0.223, NNW
AK149 GLOVER ELEMENTARY SC	935 HAMMEL ST	FINDS	Higher	1178, 0.223, South
AK150 GLOVER COMMUNITY LEA	935 HAMMEL ST	OH NPDES	Higher	1178, 0.223, South
AI151 DIME LAUNDRY	345 4TH NW	EDR Hist Cleaner	Higher	1179, 0.223, East
AL152 540 GAGE ST	540 GAGE ST	US CDL	Lower	1186, 0.225, North
AM153CLARK OIL & REFINING	302 S ARLINGTON ST	RCRA NonGen / NLR, FINDS, ECHO	Higher	1188, 0.225, ENE
AM154CLARK OIL & REFINING	302 SARLINGTON ST	EDR Hist Auto	Higher	1188, 0.225, ENE
AI155 WALLET C C	496 4TH NW	EDR Hist Auto	Higher	1192, 0.226, East
AE156 MEHOK ANDREW	996 BROWN	EDR Hist Auto	Higher	1196, 0.227, SSW

Click on Map ID to see full detail.

#### MAP

MAP ID SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
AE157 PADLE H J	984 BROWN	EDR Hist Auto	Higher	1197, 0.227, SSW
AN158PETKOVSKY PAUL	355 SARLINGTON ST	EDR Hist Cleaner	Higher	1204, 0.228, East
AO159	585 BROWN ST	EDR Hist Auto	Lower	1207, 0.229, NW
AI160 HAVERTY G C	1101 4TH AVE	EDR Hist Cleaner	Higher	1209, 0.229, East
161 MARHOFER C W STOW 0	421 TALBOT AVE	EDR Hist Auto	Higher	1209, 0.229, East
AE162 DOLLAR GENERAL STORE	994 BROWN ST	FINDS, ECHO	Higher	1212, 0.230, SSW
AN163PARAMOUNT CLEANERS	357 SARLINGTON ST	EDR Hist Cleaner	Higher	1214, 0.230, East
AF164 HURDT V A	964 BROWN	EDR Hist Auto	Higher	1215, 0.230, SSW
AM165BERRY G B REAR	296 SARLINGTON ST	EDR Hist Auto	Higher	1219, 0.231, ENE
AI166 ALLIED AUTO INC	384-90 S ARLINGTON S	EDR Hist Auto	Higher	1219, 0.231, East
AO167RUBBER CITY PRINTERY	570 SPICER ST	FINDS	Lower	1224, 0.232, NW
AM168SUMMIT CO CHILD SERV	264 S ARLINGTON ST	OH NPDES	Higher	1227, 0.232, ENE
AJ169 CRAMER DE LUXE SALES	552 SPICER ST	EDR Hist Auto	Lower	1233, 0.234, NNW
AJ170 C AND S AUTO BODY	552 SPICER ST.	US AIRS, FINDS, ECHO	Lower	1233, 0.234, NNW
AJ171 CRAMER DELUXE SALES	552 SPICER ST	RCRA-CESQG, FINDS, ECHO	Lower	1233, 0.234, NNW
172 674 COLE AVE	674 COLE AVE	US CDL	Higher	1233, 0.234, South
AE173 SOUTHLAND CORPORATIO	978 BROWN	EDR Hist Auto	Higher	1240, 0.235, SSW
AD174CANTER R J	944 BROWN	EDR Hist Auto	Higher	1260, 0.239, SW
AP175 BELL C R	778 LOVERS LANE ST	EDR Hist Auto	Higher	1263, 0.239, SSE
AP176 HASAN MRS SUE	781 LOVERS LANE ST	EDR Hist Cleaner	Higher	1277, 0.242, SSE
AL177 SIGMOND FROUD W	543 GAGE	EDR Hist Auto	Lower	1306, 0.247, North
AQ178438 DOWNING PLACE	438 DOWNING PLACE	US CDL	Higher	1310, 0.248, NE
AR179REPUBLIC DIESEL	274 E SOUTH ST	EDR Hist Auto	Lower	1311, 0.248, West
AR180CENTER AUTOMOTIVE PA	274 E SOUTH ST	RCRA-SQG, FINDS, ECHO	Lower	1311, 0.248, West
AQ181DAUGHERTY E A	877 MCGOWAN ST	EDR Hist Auto	Higher	1320, 0.250, NE
182 LEE JOHN T	333 E CROSIER ST	EDR Hist Cleaner	Lower	1320, 0.250, WSW

#### TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following records. For more information on this property see page 8 of the attached EDR Radius Map report:

Site	Database(s)	EPA ID
SUMMIT COUNTY ENGINE 538 E SOUTH ST - ATT AKRON, OH 44311	OH LUST FR Status: Inactive FR Status: NFA: No Further Action Facility Status: Inactive FR Status: NFA: No Further Action	N/A
	OH UST Facility Id: 77000867 Tank Status: REM - Removed	
SUMMIT COUNTY ENGINE 538 E SOUTH ST - ATT AKRON, OH 44311	OH ARCHIVE UST Facility Number: 77000867 Tank Status: REM	N/A
SUMMIT COUNTY ENGINE 538 E SOUTH ST AKRON, OH 44311	RCRA-CESQG EPA ID:: OHD981189053	OHD981189053
SUMMIT COUNTY ENGINE 538 E SOUTH ST AKRON, OH 44311	FINDS Registry ID:: 110042291775 ECHO	N/A
SUMMIT COUNTY ENGINE 538 E SOUTH ST - ATT AKRON, OH	OH RGA LUST	N/A
SUMMIT CO ENGINEERS 538 E SOUTH ST AKRON, OH	OH RGA LUST	N/A

#### DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

#### STANDARD ENVIRONMENTAL RECORDS

#### Federal NPL site list

NPL..... National Priority List

Proposed NPL\_\_\_\_\_ Proposed National Priority List Sites NPL LIENS\_\_\_\_\_ Federal Superfund Liens

#### Federal Delisted NPL site list

Delisted NPL..... National Priority List Deletions

#### Federal CERCLIS list

FEDERAL FACILITY\_\_\_\_\_\_ Federal Facility Site Information listing SEMS\_\_\_\_\_\_ Superfund Enterprise Management System

#### Federal CERCLIS NFRAP site list

SEMS-ARCHIVE\_\_\_\_\_ Superfund Enterprise Management System Archive

#### Federal RCRA CORRACTS facilities list

CORRACTS..... Corrective Action Report

#### Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF..... RCRA - Treatment, Storage and Disposal

#### Federal institutional controls / engineering controls registries

LUCIS\_\_\_\_\_ Land Use Control Information System US ENG CONTROLS\_\_\_\_\_ Engineering Controls Sites List US INST CONTROL\_\_\_\_\_ Sites with Institutional Controls

#### Federal ERNS list

ERNS\_\_\_\_\_ Emergency Response Notification System

#### State- and tribal - equivalent CERCLIS

OH SHWS\_\_\_\_\_\_ This state does not maintain a SHWS list. See the Federal CERCLIS list and Federal NPL list. OH DERR\_\_\_\_\_\_ Division of Environmental Response and Revitalization Database

#### State and tribal landfill and/or solid waste disposal site lists

OH SWF/LF..... Licensed Solid Waste Facilities

#### State and tribal leaking storage tank lists

INDIAN LUST...... Leaking Underground Storage Tanks on Indian Land OH UNREG LTANKS...... Ohio Leaking UST File

#### State and tribal registered storage tank lists

FEMA UST	Underground Storage Tank Listing
OH AST	Above Ground Storage Tanks
INDIAN UST	Underground Storage Tanks on Indian Land

#### State and tribal institutional control / engineering control registries

OH HIST ENG CONTROLS... Operation & Maintenance Agreements Database

OH HIST INST CONTROLS... Institutional Controls Database OH ENG CONTROLS....... Sites with Engineering Controls OH INST CONTROL......... Sites with Institutional Engineering Controls

#### State and tribal voluntary cleanup sites

OH VCP...... Voluntary Action Program Sites INDIAN VCP...... Voluntary Cleanup Priority Listing

#### State and tribal Brownfields sites

OH BROWNFIELDS..... Ohio Brownfield Inventory

#### ADDITIONAL ENVIRONMENTAL RECORDS

#### Local Brownfield lists

US BROWNFIELDS..... A Listing of Brownfields Sites

#### Local Lists of Landfill / Solid Waste Disposal Sites

OH SWRCY	Recycling Facility Listing
OH HIST LF	Old Solid Waste Landfill
INDIAN ODI	Report on the Status of Open Dumps on Indian Lands
DEBRIS REGION 9	Torres Martinez Reservation Illegal Dump Site Locations
ODI	Open Dump Inventory
IHS OPEN DUMPS	Open Dumps on Indian Land

#### Local Lists of Hazardous waste / Contaminated Sites

OH CDL..... Clandestine Drug Lab Locations

#### Local Land Records

LIENS 2\_\_\_\_\_ CERCLA Lien Information

#### **Records of Emergency Release Reports**

HMIRS	Hazardous Materials Information Reporting System
OH SPILLS 90.	SPILLS 90 data from FirstSearch
OH SPILLS 80	SPILLS 80 data from FirstSearch

#### Other Ascertainable Records

FUDS	Formerly Used Defense Sites
DOD	Department of Defense Sites
SCRD DRYCLEANERS	State Coalition for Remediation of Drycleaners Listing
US FIN ASSUR	Financial Assurance Information
EPA WATCH LIST	EPA WATCH LIST
2020 COR ACTION	2020 Corrective Action Program List
TSCA	Toxic Substances Control Act
TRIS	Toxic Chemical Release Inventory System
SSTS	Section 7 Tracking Systems
ROD	Records Of Decision

RMP	Risk Management Plans
RAATS	RCRA Administrative Action Tracking System
PRP	Potentially Responsible Parties
PADS	PCB Activity Database System
ICIS	Integrated Compliance Information System
FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide
	Act)/TSCA (Toxic Substances Control Act)
MLTS	Material Licensing Tracking System
COAL ASH DOE	Steam-Electric Plant Operation Data
COAL ASH EPA	Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER	PCB Transformer Registration Database
RADINFO	Radiation Information Database
HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing
DOT OPS	Incident and Accident Data
CONSENT	Superfund (CERCLA) Consent Decrees
INDIAN RESERV	Indian Reservations
FUSRAP	. Formerly Utilized Sites Remedial Action Program
UMTRA	Uranium Mill Tailings Sites
LEAD SMELTERS	Lead Smelter Sites
US MINES	Mines Master Index File
ABANDONED MINES	Abandoned Mines
DOCKET HWC	Hazardous Waste Compliance Docket Listing
UXO	Unexploded Ordnance Sites
FUELS PROGRAM	_ EPA Fuels Program Registered Listing
OH AIRS	Title V Permits Listing
OH COAL ASH	Coal Ash Disposal Site Listing
OH CRO	Cessation of Regulated Operations Facility Listing
OH DRYCLEANERS	Drycleaner Facility Listing
OH Financial Assurance	Financial Assurance Information Listing
OH HIST USD	Urban Setting Designations Database
OH LEAD	Lead Inspections Listing
OH IOWNGAS	DERR Towngas Database
OH UIC	Underground Injection Wells Listing
OH USD	Urban Setting Designation Sites

#### EDR HIGH RISK HISTORICAL RECORDS

#### EDR Exclusive Records

EDR MGP..... EDR Proprietary Manufactured Gas Plants

#### EDR RECOVERED GOVERNMENT ARCHIVES

#### Exclusive Recovered Govt. Archives

OH RGA LF..... Recovered Government Archive Solid Waste Facilities List

#### SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.

Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in **bold italics** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

#### STANDARD ENVIRONMENTAL RECORDS

#### Federal RCRA generators list

RCRA-SQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

A review of the RCRA-SQG list, as provided by EDR, and dated 12/12/2016 has revealed that there are 3 RCRA-SQG sites within approximately 0.125 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
GOODRICH JUNIOR HIGH	700 LAFOLLETTE ST	SSE 0 - 1/8 (0.020 mi.)	G32	32
ALCON TOOL CO	574 LAFOLLETTE ST	SW 0 - 1/8 (0.063 mi.)	L56	40
ALCON TOOL	587 BAIRD ST	SW 0 - 1/8 (0.102 mi.)	R74	53

RCRA-CESQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

A review of the RCRA-CESQG list, as provided by EDR, and dated 12/12/2016 has revealed that there are 2 RCRA-CESQG sites within approximately 0.125 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
A & C WELDING INC	705 JOHNSTON STREET	NNE 0 - 1/8 (0.016 mi.)	H30	30
Lower Elevation	Address	Direction / Distance	Map ID	Page
COPLEY AUTO COLLISIO	1230 S CLEVE-MASSILL	0 - 1/8 (0.000 mi.)	B12	15

#### State and tribal leaking storage tank lists

OH LUST: The Leaking Underground Storage Tank Incident Reports contain an inventory of reported leaking underground storage tank incidents. The data come from the Department of Commerce Division of State Fire Marshal's List of Reported Petroleum Underground Storage Tank Release Incidents.

A review of the OH LUST list, as provided by EDR, and dated 11/13/2016 has revealed that there are 5 OH LUST sites within approximately 0.125 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SACKS ELECTICAL SUPP	711 JOHNSTON ST	NNE 0 - 1/8 (0.034 mi.)	H39	36
FR Status: Inactive FR Status: NF	A: No Further Action			
Facility Status: Inactive FR Status:	NFA: No Further Action			
SUMMIT COUNTY ENGINE	601 E CROSIER ST	SW 0 - 1/8 (0.071 mi.)	N59	43

FR Status: Inactive FR Status: NFA: No Further Action Facility Status: Inactive FR Status: NFA: No Further Action

ARCHBISHOP HABAN HIG FR Status: Inactive FR Status: Facility Status: Inactive FR Stat	<i>400 ELBON AVE</i> NFA: No Further Action tus: NFA: No Further Action	E 0 - 1/8 (0.115 mi.)	U80	58
Lower Elevation	Address	Direction / Distance	Map ID	Page
HIGHLAND SERVICE FR Status: Inactive FR Status: Facility Status: Inactive FR Stat	<b>474 E SOUTH ST</b> NFA: No Further Action tus: NFA: No Further Action	W 0 - 1/8 (0.007 mi.)	C23	26
WATER MAIN YARD CITY FR Status: Inactive FR Status: FR Status: Active FR Status: T Facility Status: Inactive FR Statu Facility Status: Active FR Statu	565 JOHNSTON STREET NFA: No Further Action 1S: Tier 1 Source Investigation tus: NFA: No Further Action s: T1S: Tier 1 Source Investigation	NW 0 - 1/8 (0.085 mi.)	O69	50

#### State and tribal registered storage tank lists

OH UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the Department of Commerce Division of State Fire Marshal's Facility File.

A review of the OH UST list, as provided by EDR, and dated 11/13/2016 has revealed that there are 5 OH UST sites within approximately 0.125 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SACKS ELECTICAL SUPP Facility Id: 77004914 Tank Status: REM - Removed	711 JOHNSTON ST	NNE 0 - 1/8 (0.034 mi.)	H39	36
SUMMIT COUNTY ENGINE Facility Id: 77000829 Tank Status: REM - Removed Tank Status: CIU - Currently In Use	601 E CROSIER ST	SW 0 - 1/8 (0.071 mi.)	N59	43
ARCHBISHOP HABAN HIG Facility Id: 77004152 Tank Status: REM - Removed	400 ELBON AVE	E 0 - 1/8 (0.115 mi.)	U80	58
Lower Elevation	Address	Direction / Distance	Map ID	Page
HIGHLAND SERVICE Facility Id: 77000209 Tank Status: REM - Removed	474 E SOUTH ST	W 0 - 1/8 (0.007 mi.)	C23	26
WATER MAIN YARD CITY Facility Id: 77010273 Tank Status: REM - Removed	565 JOHNSTON STREET	NW 0 - 1/8 (0.085 mi.)	O69	50

#### ADDITIONAL ENVIRONMENTAL RECORDS

#### Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL: A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

A review of the US HIST CDL list, as provided by EDR, and dated 02/09/2017 has revealed that there are 3 US HIST CDL sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
502 HAMMEL STREET 755 JOHNSTON ST	502 HAMMEL STREET 755 JOHNSTON ST	NE 0 - 1/8 (0.035 mi.) NNE 0 - 1/8 (0.107 mi.)	42 P78	37 58
Lower Elevation	Address	Direction / Distance	Map ID	Page
773 KLING ST	773 KLING ST	W 0 - 1/8 (0.040 mi.)	45	38

US CDL: A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

A review of the US CDL list, as provided by EDR, and dated 02/09/2017 has revealed that there are 14 US CDL sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
677 CORICE ST	677 CORICE ST	S 0 - 1/8 (0.044 mi.)	48	39
607 JOHNSTON ST	607 JOHNSTON ST	NNW 0 - 1/8 (0.073 mi.)	62	46
588 BERTHA STREET	588 BERTHA STREET	ESE 1/8 - 1/4 (0.126 mi.)	88	65
775 JOHNSTON STREET	775 JOHNSTON STREET	NNE 1/8 - 1/4 (0.134 mi.)	V93	66
859 EDGE ST	859 EDGE ST	NE 1/8 - 1/4 (0.169 mi.)	Z113	72
475 INMAN STREET	475 INMAN STREET	NE 1/8 - 1/4 (0.193 mi.)	Z121	77
440 BRUNER STREET	440 BRUNER STREET	ENE 1/8 - 1/4 (0.218 mi.)	139	88
674 COLE AVE	674 COLE AVE	S 1/8 - 1/4 (0.234 mi.)	172	104
438 DOWNING PLACE	438 DOWNING PLACE	NE 1/8 - 1/4 (0.248 mi.)	AQ178	105
Lower Elevation	Address	Direction / Distance	Map ID	Page
445 LAMPARTER STREET	445 LAMPARTER STREET	WNW 0 - 1/8 (0.027 mi.)	134	34
650 SPICER ST	650 SPICER ST	WNW 0 - 1/8 (0.077 mi.)	M63	46
697 SHERMAN ST	697 SHERMAN ST	WNW 1/8 - 1/4 (0.211 mi.)	AG135	87
722 SHERMAN	722 SHERMAN	W 1/8 - 1/4 (0.219 mi.)	140	89
540 GAGE ST	540 GAGE ST	N 1/8 - 1/4 (0.225 mi.)	AL152	94

#### Local Lists of Registered Storage Tanks

OH ARCHIVE UST: Underground storage tank records that have been removed from the Underground Storage Tank database.

A review of the OH ARCHIVE UST list, as provided by EDR, and dated 11/13/2016 has revealed that there are 4 OH ARCHIVE UST sites within approximately 0.125 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SACKS ELECTICAL SUPP Facility Number: 77004914 Tank Status: REM	711 JOHNSTON ST	NNE 0 - 1/8 (0.034 mi.)	H38	35
SUMMIT COUNTY ENGINE Facility Number: 77000829 Tank Status: REM Tank Status: CIU	601 E CROSIER ST	SW 0 - 1/8 (0.071 mi.)	N59	43
ARCHBISHOP HABAN HIG Facility Number: 77004152 Tank Status: REM	400 ELBON AVE	E 0 - 1/8 (0.115 mi.)	U85	63
Lower Elevation	Address	Direction / Distance	Map ID	Page
BERT W. FALOR Facility Number: 77000209 Facility Number: 77008366 Tank Status: REM	474 E SOUTH ST	W 0 - 1/8 (0.007 mi.)	C21	22

#### **Records of Emergency Release Reports**

OH SPILLS: The Spills Database comes from the Ohio EPA.

A review of the OH SPILLS list, as provided by EDR, and dated 11/10/2016 has revealed that there are 5 OH SPILLS sites within approximately 0.125 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
KENMORE CONSTRUCTION Spill No.: 0410-77-4365	I-77 NB AT CENTRAL I	0 - 1/8 (0.000 mi.)	18	21
ALCON TOOL Spill No.: 9308-77-3469	587 BAIRD ST	SW 0 - 1/8 (0.102 mi.)	R74	53
Lower Elevation	Address	Direction / Distance	Map ID	Page
RICKY DECKER Spill No.: 9908-75-3004	1391 S KUTHER RD @ I	0 - 1/8 (0.000 mi.)	B9	14
LEROY SCHINDLER Spill No.: 1202-57-0440	893 S. JOHNSONVILLE-	0 - 1/8 (0.000 mi.)	B11	15
UNK Spill No.: 9002-77-0752	CITY OF AKRON WTP	0 - 1/8 (0.000 mi.)	E16	20

#### Other Ascertainable Records

RCRA NonGen / NLR: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 12/12/2016 has revealed that there are 3 RCRA NonGen / NLR sites within approximately 0.125 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
HOBIN HIGH SCHOOL	400 ELBON AVENUE	E 0 - 1/8 (0.115 mi.)	U83	61
Lower Elevation	Address	Direction / Distance	Map ID	Page
GROSS PAT CLEANERS AKRON CITY JOHNSTON	481 E SOUTH ST 565 JOHNSTON ST	0 - 1/8 (0.000 mi.) NW 0 - 1/8 (0.085 mi.)	C14 O66	18 47

US AIRS: The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

A review of the US AIRS list, as provided by EDR, has revealed that there are 3 US AIRS sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
ARCHBISHOP HOBAN HIG Database: US AIRS MINOR, Date	400 ELBON of Government Version: 10/12/2016	E 0 - 1/8 (0.115 mi.)	U82	60
MAC'S CONVENIENCE ST Database: US AIRS MINOR, Date	997 BROWN ST. of Government Version: 10/12/2016	SSW 1/8 - 1/4 (0.205 mi.)	AE129	82
Lower Elevation	Address	Direction / Distance	Map ID	Page
C AND S AUTO BODY Database: US AIRS MINOR, Date	552 SPICER ST. of Government Version: 10/12/2016	NNW 1/8 - 1/4 (0.234 mi.)	AJ170	100

FINDS: The Facility Index System contains both facility information and "pointers" to other sources of information that contain more detail. These include: RCRIS; Permit Compliance System (PCS); Aerometric Information Retrieval System (AIRS); FATES (FIFRA [Federal Insecticide Fungicide Rodenticide Act] and TSCA Enforcement System, FTTS [FIFRA/TSCA Tracking System]; CERCLIS; DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes); Federal Underground Injection Control (FURS); Federal Reporting Data System (FRDS); Surface Impoundments (SIA); TSCA Chemicals in Commerce Information System (CICS); PADS; RCRA-J (medical waste transporters/disposers); TRIS; and TSCA. The source of this database is the U.S. EPA/NTIS.

A review of the FINDS list, as provided by EDR, and dated 04/04/2017 has revealed that there are 26

FINDS sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
A & C WELDING INC	705 JOHNSTON STREET	NNE 0 - 1/8 (0.016 mi.)	H30	30
GOODRICH JUNIOR HIGH	700 LAFOLLETTE ST	SSE 0 - 1/8 (0.020 mi.)	G32	32
SACKS ELECTRICAL SUP	711 JOHNSTON ST	NNE 0 - 1/8 (0.034 mi.)	H40	37
VERIZON WIRELESS - D	565 WILSON ST	N 0 - 1/8 (0.036 mi.)	43	38
ALCON TOOL CO	574 LAFOLLETTE ST	SW 0 - 1/8 (0.063 mi.)	L56	40
ALCON TOOL	587 BAIRD ST	SW 0 - 1/8 (0.102 mi.)	R74	53
ARCHBISHOP HOBAN HIG	400 ELBON	E 0 - 1/8 (0.115 mi.)	U82	60
BROWN STREET AUTOCRA	953 BROWN ST	SSW 1/8 - 1/4 (0.204 mi.)	AD127	79
HOLLAND OIL CO NO 4	997 BROWN ST	SSW 1/8 - 1/4 (0.205 mi.)	AE130	84
SOHIO OIL CO SITE 03	759 INMAN ST	SE 1/8 - 1/4 (0.221 mi.)	AC143	89
GLOVER ELEMENTARY SC	935 HAMMEL ST	S 1/8 - 1/4 (0.223 mi.)	AK149	93
CLARK OIL & REFINING	302 S ARLINGTON ST	ENE 1/8 - 1/4 (0.225 mi.)	AM153	94
DOLLAR GENERAL STORE	994 BROWN ST	SSW 1/8 - 1/4 (0.230 mi.)	AE162	98
Lower Elevation	Address	Direction / Distance	Map ID	Page
GROSS PAT CLEANERS	481 E SOUTH ST	0 - 1/8 (0.000 mi.)	C14	18
AKRON CITY JOHNSTON	565 JOHNSTON ST	NW 0 - 1/8 (0.085 mi.)	O66	47
CITY OF AKRON WATER	565 JOHNSTON ST	NW 0 - 1/8 (0.085 mi.)	070	52
BUDOFF IRON & METAL	556 BEACON ST	N 1/8 - 1/4 (0.151 mi.)	AA104	69
HYBUD EQUIPMENT CORP	556 BEACON ST	N 1/8 - 1/4 (0.151 mi.)	AA105	69
WASTE MANAGEMENT OF	551 BEACON ST	N 1/8 - 1/4 (0.179 mi.)	AA116	73
MILESTONE SERVICES C	551 BEACON ST	N 1/8 - 1/4 (0.179 mi.)	AA117	76
FHM PROPERTIES	697 SHERMAN ST	WNW 1/8 - 1/4 (0.211 mi.)	AG134	86
TRANS ENVIRO	535 SPICER ST	NNW 1/8 - 1/4 (0.223 mi.)	AJ147	92
RUBBER CITY PRINTERY	570 SPICER ST	NW 1/8 - 1/4 (0.232 mi.)	AO167	100
C AND S AUTO BODY	552 SPICER ST.	NNW 1/8 - 1/4 (0.234 mi.)	AJ170	100
CRAMER DELUXE SALES	552 SPICER ST	NNW 1/8 - 1/4 (0.234 mi.)	AJ171	101
CENTER AUTOMOTIVE PA	274 E SOUTH ST	W 1/8 - 1/4 (0.248 mi.)	AR180	105

NY MANIFEST: Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

A review of the NY MANIFEST list, as provided by EDR, and dated 01/30/2017 has revealed that there is 1 NY MANIFEST site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
COPLEY AUTO COLLISIO	1230 S CLEVE-MASSILL	0 - 1/8 (0.000 mi.)	B12	15
EPA ID: OH0000706812				

OH NPDES: General information regarding NPDES (National Pollutant Discharge Elimination System) permits.

A review of the OH NPDES list, as provided by EDR, and dated 11/08/2016 has revealed that there are 2 OH NPDES sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
GLOVER COMMUNITY LEA Facility Npdes Permit: 3GC02944*AG	935 HAMMEL ST	S 1/8 - 1/4 (0.223 mi.)	AK150	93
SUMMIT CO CHILD SERV	264 S ARLINGTON ST	ENE 1/8 - 1/4 (0.232 mi.)	AM168	100

Facility Npdes Permit: 3GC00503\*AG

#### EDR HIGH RISK HISTORICAL RECORDS

#### **EDR Exclusive Records**

EDR Hist Auto: EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

A review of the EDR Hist Auto list, as provided by EDR, has revealed that there are 74 EDR Hist Auto sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
WHIDDON E W	604 INMAN ST	E 0 - 1/8 (0.008 mi.)	F26	29
TEMPLETON H L	682 LA FOLLETTE	SSE 0 - 1/8 (0.009 mi.)	G28	30
FRANDSEN G F	550 JOHNSTON ST	WNW 0 - 1/8 (0.013 mi.)	E29	30
MYERS & FORBES REAR	555 GRIDLEY ST	ENE 0 - 1/8 (0.018 mi.)	31	32
GIL S MARATHON	345 5TH NE	E 0 - 1/8 (0.020 mi.)	F33	34
ROYAL SERVICE STATIO	643 JOHNSTON ST	N 0 - 1/8 (0.040 mi.)	J46	38
KOONS W C	203 HUDSON DRIVE E	E 0 - 1/8 (0.051 mi.)	K51	39
MC HENRY E M	475 HUDSON DRIVE E	E 0 - 1/8 (0.051 mi.)	K52	40
D & W REPAIR	681 LOVERS LANE	S 0 - 1/8 (0.052 mi.)	53	40
HANSON J G	580 LAFOLLETTE ST	SW 0 - 1/8 (0.053 mi.)	L54	40
SUMMIT COUNT ENGINEE	601 E CROSIER ST	SW 0 - 1/8 (0.071 mi.)	N61	46
BONDURANT SERVICE &	596 E CROSIER ST	SW 0 - 1/8 (0.078 mi.)	N64	46
OHIO MATERIALS HANDL	565 LAFOLLETTE ST	SW 0 - 1/8 (0.101 mi.)	Q73	53
SHOEMAKER A F	758 JOHNSTON ST	NNE 0 - 1/8 (0.111 mi.)	P79	58
OHIO MATERIALS HANDL	568 E CROSIER ST	SW 0 - 1/8 (0.117 mi.)	Q86	64
TANNER E W	450 GRIDLEY ST	NE 0 - 1/8 (0.117 mi.)	P87	65
JOHNSON R P	550 BAIRD	SW 1/8 - 1/4 (0.134 mi.)	R92	66
AUTO EXCITER LLC	620 STANTON AVE	S 1/8 - 1/4 (0.157 mi.)	X106	70
STONEYS RADIATOR SER	541 KIPLING ST	SW 1/8 - 1/4 (0.161 mi.)	AB108	71
WORDEN D I	547 MCKINLEY AVE	SSW 1/8 - 1/4 (0.162 mi.)	109	71
SUPERIOR BATTERY & E	793 JOHNSTON ST	NNE 1/8 - 1/4 (0.164 mi.)	V110	71
A & H GARAGE	537 KIPLING ST	SW 1/8 - 1/4 (0.164 mi.)	AB111	72
STEEN F W	795 BAIRD ST	SE 1/8 - 1/4 (0.184 mi.)	AC118	76
ANTON J A	870 BROWN	SW 1/8 - 1/4 (0.189 mi.)	119	76
BARAN T F	935 BROWN	SSW 1/8 - 1/4 (0.192 mi.)	AD120	77
MC KITRICK M L	807 JOHNSTON ST	NE 1/8 - 1/4 (0.195 mi.)	124	78
SCHOLA ELMER F	905 BROWN	SW 1/8 - 1/4 (0.198 mi.)	AB125	78
BROWN STREET AUTOMOT	953 BROWN ST	SSW 1/8 - 1/4 (0.204 mi.)	AD128	81
OVERFIELD BROS	997 BROWN	SSW 1/8 - 1/4 (0.205 mi.)	AE131	84
GATSLE RUDOLPH	892 BROWN	SW 1/8 - 1/4 (0.205 mi.)	AB132	85
PRICE S L	963 BROWN	SSW 1/8 - 1/4 (0.209 mi.)	AF133	85
HALL A J	320 S ARLINGTON ST	E 1/8 - 1/4 (0.211 mi.)	AH136	88
SMITH L L	318 SARLINGTON RD	E 1/8 - 1/4 (0.212 mi.)	AH137	88

#### **Equal/Higher Elevation**

CHAPMAN H C OSBORNE R H A & A SOHIO
T&M REMOVE & REPLACE
CLARK OIL & REFINING
WALLET C C
MEHOK ANDREW
PADLE H J
MARHOFER C W STOW 0
HURDT V A
BERRY G B REAR
ALLIED AUTO INC
SOUTHLAND CORPORATIO
CANTER R J
BELL C R
DAUGHERTY E A

#### Lower Elevation

MILT S SUNOCO **BROSKE & ROBINSON SE** BUTLERS SERVICE MILLER J A NO KATZ A L W & M MOTOR SERVICE CHAPEL HILL TOWING & RANKIN J W MILT S SOHIO **SERVICE AUTO & MACHI** ENGINE DOCTOR INC BOVEY J F **GEORGE BODY & TRAILE** FOREMAN R W KORY W E W MANTON C J REAR **G & M MOTORS** TIMS TRANSMISSION MOORES AUTOBODY **AKRON TRUCK & TRAILE** Not reported CRAMER DE LUXE SALES SIGMOND FROUD W REPUBLIC DIESEL

#### Address

Address	Direction / Distance	Map ID	Page
991-97 BROWN	SSW 1/8 - 1/4 (0.213 mi.)	AE138	88
323 S ARLINGTON ST	E 1/8 - 1/4 (0.220 mi.)	AH141	89
759 INMAN ST	SE 1/8 - 1/4 (0.221 mi.)	AC144	91
390 S ARLINGTON ST	E 1/8 - 1/4 (0.222 mi.)	AI146	92
302 S ARLINGTON ST	ENE 1/8 - 1/4 (0.225 mi.)	AM154	96
496 4TH NW	E 1/8 - 1/4 (0.226 mi.)	AI155	96
996 BROWN	SSW 1/8 - 1/4 (0.227 mi.)	AE156	96
984 BROWN	SSW 1/8 - 1/4 (0.227 mi.)	AE157	96
421 TALBOT AVE	E 1/8 - 1/4 (0.229 mi.)	161	98
964 BROWN	SSW 1/8 - 1/4 (0.230 mi.)	AF164	99
296 SARLINGTON ST	ENE 1/8 - 1/4 (0.231 mi.)	AM165	99
384-90 S ARLINGTON S	E 1/8 - 1/4 (0.231 mi.)	AI166	99
978 BROWN	SSW 1/8 - 1/4 (0.235 mi.)	AE173	104
944 BROWN	SW 1/8 - 1/4 (0.239 mi.)	AD174	104
778 LOVERS LANE ST	SSE 1/8 - 1/4 (0.239 mi.)	AP175	104
877 MCGOWAN ST	NE 1/8 - 1/4 (0.250 mi.)	AQ181	107
Address	Direction / Distance	Map ID	Page
525 E SOUTH ST	0 - 1/8 (0.000 mi.)	B7	14
481 E SOUTH ST	0 - 1/8 (0.000 mi.)	C10	15
427 E SOUTH ST	0 - 1/8 (0.000 mi.)	D13	18
513 E SOUTH ST	0 - 1/8 (0.000 mi.)	B15	20
431 E SOUTH	W 0 - 1/8 (0.003 mi.)	D19	21
474 E SOUTH ST	W 0 - 1/8 (0.007 mi.)	C22	25
686 BROWN	WNW 0 - 1/8 (0.040 mi.)	147	39
652 SPICER ST	WNW 0 - 1/8 (0.070 mi.)	M57	42
813 SUMNER ST	W 1/8 - 1/4 (0.130 mi.)	W90	66
805 BROWN	WSW 1/8 - 1/4 (0.131 mi.)	T91	66
817 SUMNER ST	W 1/8 - 1/4 (0.134 mi.)	W94	66
806 BROWN ST	WSW 1/8 - 1/4 (0.136 mi.)	T95	67
819 SUMNER ST	W 1/8 - 1/4 (0.138 mi.)	W97	67
511-601 E CROSIER	WSW 1/8 - 1/4 (0.139 mi.)	98	68
340 E SOUTH ST	W 1/8 - 1/4 (0.143 mi.)	S100	68
338 E SOUTH ST	W 1/8 - 1/4 (0.144 mi.)	S101	68
614 SPICER	NW 1/8 - 1/4 (0.146 mi.)	Y102	68
714 SUMNER SI	WNW 1/8 - 1/4 (0.160 mi.)	107	70
536 BEACON ST	N 1/8 - 1/4 (0.167 mi.)	AA112	72
608 SPICER ST	NVV 1/8 - 1/4 (0.172 mi.)	Y114	72
	NNVV $1/8 - 1/4$ (0.223 ml.)	AJ148	93
	NVV 1/8 - 1/4 (U.229 MI.)	AU159	97
552 SPICER 51	NNVV $1/8 - 1/4$ (0.234 ml.)	AJ169	100
	$1 \times 1/6 = 1/4 (0.247 \text{ mL})$		105
214 E SUUIN SI	vv 1/0 - 1/4 (U.248 MI.)	AK 179	105

EDR Hist Cleaner: EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

A review of the EDR Hist Cleaner list, as provided by EDR, has revealed that there are 30 EDR Hist

Cleaner sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
LAZAR J P	340 5TH NE	E 0 - 1/8 (0.027 mi.)	F35	34
A & M DISCOUNT CLEAN	667 MCKINLEY AVE	S 0 - 1/8 (0.029 mi.)	36	34
NIVENS L C	635 JOHNSTON ST	N 0 - 1/8 (0.050 mi.)	J49	39
GOOD DRY CLEANERS	131 HUDSON RD	E 0 - 1/8 (0.051 mi.)	K50	39
W BUCKEYE CLEANERS	623 JOHNSTON ST	NNW 0 - 1/8 (0.061 mi.)	J55	40
ROYAL CLEANERS	754 JOHNSTON ST	NNE 0 - 1/8 (0.100 mi.)	P72	52
ROYAL CLEANERS & TAI	756 JOHNSON ST	NNE 0 - 1/8 (0.104 mi.)	P76	57
GREISER MRS F M	769 JOHNSTON ST	NNE 1/8 - 1/4 (0.126 mi.)	V89	65
YEE SING	611 STANTON AVE	S 1/8 - 1/4 (0.138 mi.)	X96	67
INMAN CLEANERS	503 INMAN ST	NE 1/8 - 1/4 (0.150 mi.)	Z103	69
B & B CLEANERS	883 BROWN	SW 1/8 - 1/4 (0.173 mi.)	AB115	73
B & B CLEANERS	884 BROWN	SW 1/8 - 1/4 (0.194 mi.)	AB122	78
B & B CLEANERS	880 BROWN	SW 1/8 - 1/4 (0.194 mi.)	AB123	78
LEOS ONE HOUR VALET	739 INMAN ST	SE 1/8 - 1/4 (0.199 mi.)	AC126	79
JACK YEE	323 SARLINGTON	E 1/8 - 1/4 (0.220 mi.)	AH142	89
MAYFLOWER CLEANERS	313 SARLINGTON ST	E 1/8 - 1/4 (0.221 mi.)	AH145	92
DIME LAUNDRY	345 4TH NW	E 1/8 - 1/4 (0.223 mi.)	AI151	94
PETKOVSKY PAUL	355 SARLINGTON ST	E 1/8 - 1/4 (0.228 mi.)	AN158	97
HAVERTY G C	1101 4TH AVE	E 1/8 - 1/4 (0.229 mi.)	AI160	98
PARAMOUNT CLEANERS	357 SARLINGTON ST	E 1/8 - 1/4 (0.230 mi.)	AN163	99
HASAN MRS SUE	781 LOVERS LANE ST	SSE 1/8 - 1/4 (0.242 mi.)	AP176	104
Lower Elevation	Address	Direction / Distance	Map ID	Page
Not reported	481 E SOUTH ST	0 - 1/8 (0.000 mi.)	C8	14
AVALON CLEANERS	446 E SOUTH	0 - 1/8 (0.000 mi.)	D17	21
GRAND DRY CLEANERS	478 E SOUTH ST	W 0 - 1/8 (0.004 mi.)	C20	21
GROSS P J	460 E SOUTH ST	W 0 - 1/8 (0.008 mi.)	D27	29
SHEIK CLEANERS	398 E SOUTH ST	W 0 - 1/8 (0.037 mi.)	44	38
FRIGIDAIRE QUICK CLE	353 E SOUTH ST	W 0 - 1/8 (0.103 mi.)	S75	57
ANN S DRY CLEANING	792 BROWN	WSW 0 - 1/8 (0.106 mi.)	T77	58
SOUTH STREET LAUNDRO	340 E SOUTH ST	W 1/8 - 1/4 (0.143 mi.)	S99	68
LEE JOHN T	333 E CROSIER ST	WSW 1/8 - 1/4 (0.250 mi.)	182	107
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#### EDR RECOVERED GOVERNMENT ARCHIVES

#### **Exclusive Recovered Govt. Archives**

OH RGA LUST: The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Commerce in Ohio.

A review of the OH RGA LUST list, as provided by EDR, has revealed that there are 12 OH RGA LUST sites within approximately 0.125 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SACKS ELECTICAL SUPP	711 JOHNSTON ST	NNE 0 - 1/8 (0.034 mi.)	H37	35
SACKS ELECTRIC	711 JOHNSON ST	NNE 0 - 1/8 (0.034 mi.)	H41	37
MAIN YARD	601 E CROSIER	SW 0 - 1/8 (0.071 mi.)	N58	42
SUMMIT COUNTY ENGINE	601 E CROSIER ST	SW 0 - 1/8 (0.071 mi.)	N60	45
ARCHBISHOP HOBAN HIG	400 ELBON AVE	E 0 - 1/8 (0.115 mi.)	U81	59

#### +i/ Equal/Highe

Equal/Higher Elevation	Address	Direction / Distance	<b>Map ID</b> U84	<b>Page</b> 63 <b>Page</b>	
ARCHBISHOP HABAN HIG	400 ELBON AVE	E 0 - 1/8 (0.115 mi.)			
Lower Elevation	Address	Direction / Distance	Map ID		
HIGHLAND SERVICE	474 E SOUTH ST	W 0 - 1/8 (0.007 mi.)	C24	29	
BERT FULOR	474 E SOUTH ST	W 0 - 1/8 (0.007 mi.)	C25	29	
WATER MAIN YARD CITY	565 JOHNSTON STREET	NW 0 - 1/8 (0.085 mi.)	O65	47	
WATER MAIN YARD CITY	565 JOHNSTON STREET	NW 0 - 1/8 (0.085 mi.)	O67	49	
WATER DEPT	565 JOHNSTON ST (WES	NW 0 - 1/8 (0.085 mi.)	O68	49	
WATER DEPT	565 JOHNSTON ST WES	NW 0 - 1/8 (0.085 mi.)	O71	52	

There were no unmapped sites in this report.

## **OVERVIEW MAP - 5001817.2S**



This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME:	16-0568C
ADDRESS:	538 East South Street
	Akron OH 44311
LAT/LONG:	41.061838 / 81.504922

CLIENT: Lawhon & Associates, Inc. CONTACT: John Korth INQUIRY #: 5001817.2s DATE: July 25, 2017 8:32 am Copyright © 2017 EDR, Inc. © 2015 TomTom Rel. 2015.

# DETAIL MAP - 5001817.2S



- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites



Indian Reservations BIA Power transmission lines 100-year flood zone 500-year flood zone

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

Ħ

LAT/LONG: 41.061838 / 81.504922 DATE:		SITE NAME: ADDRESS: LAT/LONG:	16-0568C 538 East South Street Akron OH 44311 41.061838 / 81.504922	CLIENT: CONTACT: INQUIRY #: DATE:	Lawh John 5001 July :
---------------------------------------	--	-------------------------------------	--	--	--------------------------------

IENT: Lawhon & Associates, Inc. DNTACT: John Korth QUIRY #: 5001817.2s ATE: July 25, 2017 8:33 am

Copyright © 2017 EDR, Inc. © 2015 TomTom Rel. 2015.

# **MAP FINDINGS SUMMARY**

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMEN	ITAL RECORDS							
Federal NPL site list								
NPL Proposed NPL NPL LIENS	0.500 0.250 0.500		0 0 0	0 0 0	0 NR 0	NR NR NR	NR NR NR	0 0 0
Federal Delisted NPL si	ite list							
Delisted NPL	0.250		0	0	NR	NR	NR	0
Federal CERCLIS list								
FEDERAL FACILITY SEMS	0.250 0.250		0 0	0 0	NR NR	NR NR	NR NR	0 0
Federal CERCLIS NFRA	P site list							
SEMS-ARCHIVE	0.250		0	0	NR	NR	NR	0
Federal RCRA CORRAC	CTS facilities l	ist						
CORRACTS	0.125		0	NR	NR	NR	NR	0
Federal RCRA non-COF	RRACTS TSD I	acilities list						
RCRA-TSDF	0.125		0	NR	NR	NR	NR	0
Federal RCRA generato	ors list							
RCRA-LQG RCRA-SQG RCRA-CESQG	0.125 0.125 0.125	1	0 3 2	NR NR NR	NR NR NR	NR NR NR	NR NR NR	0 3 3
Federal institutional co engineering controls re	ntrols / gistries							
LUCIS US ENG CONTROLS US INST CONTROL	0.250 0.250 0.250		0 0 0	0 0 0	NR NR NR	NR NR NR	NR NR NR	0 0 0
Federal ERNS list								
ERNS	0.250		0	0	NR	NR	NR	0
State- and tribal - equiv	alent CERCLIS	S						
OH SHWS OH DERR	N/A 0.250		N/A 0	N/A 0	N/A NR	N/A NR	N/A NR	N/A 0
State and tribal landfill solid waste disposal site	and/or te lists							
OH SWF/LF	0.250		0	0	NR	NR	NR	0
State and tribal leaking	storage tank l	lists						
OH LUST INDIAN LUST OH UNREG LTANKS	0.125 0.250 0.250	1	5 0 0	NR 0 0	NR NR NR	NR NR NR	NR NR NR	6 0 0
# **MAP FINDINGS SUMMARY**

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
State and tribal registered	storage tai	nk lists						
FEMA UST OH UST OH AST INDIAN UST	0.250 0.125 0.250 0.250	1	0 5 0 0	0 NR 0 0	NR NR NR NR	NR NR NR NR	NR NR NR NR	0 6 0 0
State and tribal institution control / engineering conti	al rol registrie	S						
OH HIST ENG CONTROLS OH HIST INST CONTROLS OH ENG CONTROLS OH INST CONTROL	0.125 0.125 0.125 0.250		0 0 0 0	NR NR NR 0	NR NR NR NR	NR NR NR NR	NR NR NR NR	0 0 0 0
State and tribal voluntary	cleanup site	es						
OH VCP INDIAN VCP	0.250 0.250		0 0	0 0	NR NR	NR NR	NR NR	0 0
State and tribal Brownfield	ls sites							
OH BROWNFIELDS	0.125		0	NR	NR	NR	NR	0
ADDITIONAL ENVIRONMENT	AL RECORD	5						
Local Brownfield lists								
US BROWNFIELDS	0.250		0	0	NR	NR	NR	0
Local Lists of Landfill / So Waste Disposal Sites	lid							
OH SWRCY OH HIST LF INDIAN ODI DEBRIS REGION 9 ODI IHS OPEN DUMPS	0.250 0.250 0.250 0.250 0.250 0.250 0.500		0 0 0 0 0	0 0 0 0 0	NR NR NR NR 0	NR NR NR NR NR	NR NR NR NR NR	0 0 0 0 0
Local Lists of Hazardous v Contaminated Sites	vaste /							
US HIST CDL OH CDL US CDL	0.250 0.250 0.250		3 0 4	0 0 10	NR NR NR	NR NR NR	NR NR NR	3 0 14
Local Lists of Registered S	Storage Tar	nks						
OH ARCHIVE UST	0.125	1	4	NR	NR	NR	NR	5
Local Land Records								
LIENS 2	0.250		0	0	NR	NR	NR	0
Records of Emergency Re	lease Repo	rts						
HMIRS OH SPILLS	0.250 0.125		0 5	0 NR	NR NR	NR NR	NR NR	0 5

# **MAP FINDINGS SUMMARY**

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
OH SPILLS 90	0.125		0	NR	NR	NR	NR	0
OH SPILLS 80	0.125		0	NR	NR	NR	NR	0
Other Ascertainable Rec	ords							
RCRA NonGen / NLR	0.125		3	NR	NR	NR	NR	3
FUDS	0.250		0	0	NR	NR	NR	0
DOD	0.250		0	0	NR	NR	NR	0
SCRD DRYCLEANERS	0.250		0	0	NR	NR	NR	0
US FIN ASSUR	0.250		0	0	NR	NR	NR	0
EPA WATCH LIST	0.250		0	0	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	0.250		0	0	NR	NR	NR	0
IRIS	0.250		0	0	NR	NR	NR	0
5515	0.250		0	0				0
ROD	0.250		0	0				0
	0.250		0	0				0
DDD	0.250		0	0				0
PADS	0.250		0	0	NR	NR	NR	0
	0.250		0	0	NR	NR	NR	0
FTTS	0.250		õ	Õ	NR	NR	NR	õ
MLTS	0.250		Õ	0	NR	NR	NR	Õ
COAL ASH DOE	0.250		Ō	0	NR	NR	NR	Ō
COAL ASH EPA	0.250		0	0	NR	NR	NR	0
PCB TRANSFORMER	0.250		0	0	NR	NR	NR	0
RADINFO	0.250		0	0	NR	NR	NR	0
HIST FTTS	0.250		0	0	NR	NR	NR	0
DOT OPS	0.250		0	0	NR	NR	NR	0
CONSENT	0.250		0	0	NR	NR	NR	0
INDIAN RESERV	0.250		0	0	NR	NR	NR	0
FUSRAP	1.000		0	0	0		NR	0
	0.250		0	0				0
	0.250		0	0				0
	0.250		0	2				0
	0.250 TP							0
FINDS	0 250	1	10	16	NR	NR	NR	27
FCHO	TP	1	NR	NR	NR	NR	NR	1
DOCKET HWC	TP	•	NR	NR	NR	NR	NR	0
UXO	1.000		0	0	0	0	NR	Õ
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
OH AIRS	0.250		0	0	NR	NR	NR	0
OH COAL ASH	0.250		0	0	NR	NR	NR	0
OH CRO	0.250		0	0	NR	NR	NR	0
OH DRYCLEANERS	0.250		0	0	NR	NR	NR	0
OH Financial Assurance	0.250		0	0	NR	NR	NR	0
OH HIST USD	0.250		0	0	NR	NR	NR	0
OH LEAD	TP		NR	NR	NR	NR	NR	0
	0.250		1	0	NR	NR	NR	1
	0.250		0	2			NR	2
	0.250		U	U	INK	NK	INK	U

# **MAP FINDINGS SUMMARY**

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	<u>&gt; 1</u>	Total Plotted
OH UIC OH USD	0.250 0.250		0 0	0 0	NR NR	NR NR	NR NR	0 0
EDR HIGH RISK HISTORIC	AL RECORDS							
EDR Exclusive Records	;							
EDR MGP EDR Hist Auto EDR Hist Cleaner	0.250 0.250 0.250		0 24 14	0 50 16	NR NR NR	NR NR NR	NR NR NR	0 74 30
EDR RECOVERED GOVER	NMENT ARCHI	VES						
Exclusive Recovered G	ovt. Archives							
OH RGA LF OH RGA LUST	0.250 0.125	2	0 12	0 NR	NR NR	NR NR	NR NR	0 14
- Totals		8	96	96	0	0	0	200

# NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

N/A = This State does not maintain a SHWS list. See the Federal CERCLIS list.

Database(s)

EDR ID Number EPA ID Number

A1 Target Property	SUMMIT COUNTY ENGINEERS 538 E SOUTH ST - ATTN: MAINT AKRON, OH 44311		OH LUST OH UST	U004214171 N/A
	Site 1 of 6 in cluster A			
Actual: 1061 ft.	LUST: Release Number: 77000867-N00001 Release Date: 08/12/1994 Facility Status: Inactive LTF Status: 1 SUS/CON from reg FR Status: NFA: No Further Ac Priority: 2 Review Date: 09/23/2005 Priority Decode: SUS/CON from non- Class1 Decode: A viable RP have bee Class: Viable Responsible F	gulated UST tion regulated UST en identified Party has been identified		
	UST: Facility Id: Facility Type: Owner Name: Owner Address: Owner City/State/Zip:	77000867 Government SUMMIT COUNTY ENGINEERS 538 E SOUTH ST - ATTN: MAINT 44311		
	Tank Number: Status: UST Capacity: Tank Content: Installation Date: Construction: Date Last Used: Date Tast Used:	REM - Removed 11000 Gasoline Not reported Not reported 08/13/1994		
	Date TCL Closed: Date Removed: CAS Number: Abandoned Approved: Regulated: Sensitive Area:	Not reported 08/13/1994 8006-61-9 Not reported YES NO		
	Date Of Sensitivity: UST Configurations: Construction Comments: Corrosion Protections: Corrosion Protection Comments: Primary Release Detection:	Not reported Not reported Not reported Not reported Not reported AMO - Alternative Method (Other, explain)		
	Secondary Release Detection: Release Detection Comments: Piping Configuration: Piping Configuration Comments: Piping Styles: Piping Constructions:	Not reported RDTank: / RDLine: Not reported Not reported NA - Not Applicable OTH - Other (explain)		
	Piping Construction Comments: Piping Corrosion Protections: Piping Corrosion Protection Comments Piping Release Detections: Piping Release Detection Comments: Spill Prevention Manholes: Spill Prevention Manhole Comments: OverFill Prevention:	Not reported OTH - Other (explain) : Not reported OTH - Other(explain) Not reported NP - None Present No Not reported		

Map ID			MAP FINDINGS		
Distance Elevation	Site			Database(s)	EDR ID Number EPA ID Number
	SUMMIT COUNTY EN Comments:	IGINEERS (	Continued) Not reported		U004214171
A2 Target Property	SUMMIT COUNTY EN 538 E SOUTH ST - AT AKRON, OH 44311	IGINEERS TN: MAINT		OH ARCHIVE UST	U004101918 N/A
	Site 2 of 6 in cluster	4			
Actual: 1061 ft.	ARCHIVE UST: Facility Number: Owner Name: Owner Address: Owner City,St,Zig	0:	77000867 SUMMIT COUNTY ENGINEERS 538 E SOUTH ST - ATTN: MAINT AKRON, OH 44311		
	Permit: Facility Id: Permit Id: Permit Status: Issued Date: LFD Permit Id: Permit Id: Permit Status: Issued Date: LFD Permit Id: Facility Id: Permit Status: Issued Date: LFD Permit Id: Permit Status: Issued Date: LFD Permit Id: Inspection: Facility Id: Permit Number: Code: Inspection Type:	77000867 P0001 Expired 4/11/1995 Not reporte 77000867 P0002 Expired 9/9/1996 Not reporte 77000867 P0002 Expired 9/9/1996 Not reporte 77000867 P00002 503 Final 77000867 P00001 101 Final	d d		
	Tank ID: Tank Type: <b>Tank Status:</b> Install Date: Content: Capacity: Corrosion Protec CAS #: Regulated: Overfill Device Insta Release Detection Date Removed:	tion Tank: stalled: illed: n On Tank:	T00001 Not reported <b>Removed</b> Not reported Gasoline 11000 Not reported 8006-61-9 Yes No No No Not reported 8/13/1994		

Database(s)

EDR ID Number EPA ID Number

	SUMMIT COUNTY ENGINEERS (Continued)				
	Date Last Use: Date Abandoned/Closed: AST/UST: Corrosion Protection Piping: Piping Material: Piping Type: Release Detection On Piping:	8/13/1994 Not reported UST Not reported Not reported Not reported Not reported			
A3 Target Property	SUMMIT COUNTY ENGINEER 538 E SOUTH ST AKRON, OH 44311	RCRA-CESQG	1000300453 OHD981189053		
	Site 3 of 6 in cluster A				
Actual: 1061 ft.	RCRA-CESQG: Date form received by agency Facility name: Facility address: EPA ID: Contact: Contact address: Contact country: Contact telephone: Contact email: EPA Region: Land type: Classification: Description:	r: 08/04/2010 SUMMIT COUNTY ENGINEER 538 E SOUTH ST AKRON, OH 44311 OHD981189053 GUS KABBARA 601 E CROSIER ST AKRON, OH 44311 US (330) 643-2860 GKABBARA@SUMMITENGINEER.NET 05 County Conditionally Exempt Small Quantity Generator Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste			
	Owner/Operator Summary: Owner/operator name: Owner/operator address: Owner/operator country: Owner/operator telephone: Legal status: Owner/Operator Type: Owner/Op start date: Owner/Op end date:	BD OF COUNTY COMMISSIONERS SUMMIT CO OH ADDRESS NOT REPORTED CITY NOT REPORTED, AK 99998 Not reported (312) 555-1212 County Owner Not reported Not reported			

NAME NOT REPORTED

ADDRESS NOT REPORTED

Owner/operator name:

Owner/operator address:

Database(s)

EDR ID Number EPA ID Number

SUMMIT COUNTY ENGINEER (Co	ntinued)	1000300453
Owner/operator country: Owner/operator telephone: Legal status: Owner/Operator Type: Owner/Op start date: Owner/Op end date:	CITY NOT REPORTED, AK 99998 Not reported (312) 555-1212 County Operator Not reported Not reported	
Handler Activities Summary: U.S. importer of hazardous wa Mixed waste (haz. and radioao Recycler of hazardous waste: Transporter of hazardous wast Treater, storer or disposer of H Underground injection activity: On-site burner exemption: Furnace exemption: Used oil fuel burner: Used oil fuel burner: Used oil processor: User oil refiner: Used oil fuel marketer to burne Used oil Specification markete Used oil transfer facility: Used oil transporter:	ste: No tive): No No e: No W: No No No No No No r: No r: No No	
Historical Generators: Date form received by agency: Site name: Classification:	12/16/1985 SUMMIT ENGINEER COUNTY OF Small Quantity Generator	
. Waste code: . Waste name:	D001 IGNITABLE WASTE	
. Waste code: . Waste name:	F005 THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: TOLUENE KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE ( ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS OR LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RE THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.	METHYL ETHYL MIXTURES/BLENDS BY VOLUME) OF THOSE SOLVENTS COVERY OF
Facility Has Received Notices of Regulation violated: Area of violation: Date violation determined: Date achieved compliance: Violation lead agency: Enforcement action: Enforcement action date: Enf. disposition status: Enf. disp. status date: Enforcement lead agency: Proposed penalty amount: Final penalty amount: Paid penalty amount:	Violations: Not reported Generators - General 08/04/2010 11/03/2010 State WRITTEN INFORMAL 08/23/2010 Not reported Not reported State Not reported Not reported Not reported Not reported Not reported Not reported Not reported	

Database(s)

EDR ID Number EPA ID Number

## SUMMIT COUNTY ENGINEER (Continued)

### 1000300453

Regulation violated: Area of violation: Date violation determined: Date achieved compliance: Violation lead agency: Enforcement action: Enforcement action date: Enf. disposition status: Enf. disp. status date: Enforcement lead agency: Proposed penalty amount: Final penalty amount: Paid penalty amount:	Not reported Generators - General 08/04/2010 11/03/2010 State WRITTEN INFORMAL 10/21/2010 Not reported Not reported State Not reported Not reported Not reported Not reported Not reported
Regulation violated: Area of violation: Date violation determined: Date achieved compliance: Violation lead agency: Enforcement action: Enforcement action date: Enf. disposition status: Enf. disp. status date: Enforcement lead agency: Proposed penalty amount: Final penalty amount: Paid penalty amount:	Not reported Universal Waste - Small Quantity Handlers 08/04/2010 09/09/2010 State WRITTEN INFORMAL 08/23/2010 Not reported Not reported State Not reported Not reported Not reported Not reported Not reported
Evaluation Action Summary: Evaluation date: Evaluation: Area of violation: Date achieved compliance: Evaluation lead agency: Evaluation date: Evaluation: Area of violation: Date achieved compliance: Evaluation lead agency:	09/09/2010 NON-FINANCIAL RECORD REVIEW Generators - General 11/03/2010 State 08/04/2010 COMPLIANCE EVALUATION INSPECTION ON-SITE Universal Waste - Small Quantity Handlers 09/09/2010 State
Evaluation date: Evaluation: Area of violation: Date achieved compliance: Evaluation lead agency:	08/04/2010 COMPLIANCE EVALUATION INSPECTION ON-SITE Generators - General 11/03/2010 State

# A4SUMMIT COUNTY ENGINEERTarget538 E SOUTH STPropertyAKRON, OH 44311

## Site 4 of 6 in cluster A

Actual: 1061 ft.

Registry ID:

FINDS:

110042291775

Environmental Interest/Information System

FINDS 1014822540 ECHO N/A

Map ID Direction			MAP FINDINGS			
Distance Elevation	Site				Database(s)	EDR ID Number EPA ID Number
	SUMMIT COUNTY EI	NGINEE	R (Continued)			1014822540
		RCRA Conse events and tre progra correct	nfo is a national information system vation and Recovery Act (RCRA) pro- and activities related to facilities that at, store, or dispose of hazardous was n staff to track the notification, permi- ive action activities required under R	that supports the Re ogram through the t t generate, transpor aste. RCRAInfo allo it, compliance, and CRA.	esource racking of t, ws RCRA	
		<u>Click t</u> additio	<u>ais hyperlink</u> while viewing on your co nal FINDS: detail in the EDR Site Re	omputer to access		
	ECHO: Envid: Registry ID: DFR URL:		1014822540 110042291775 http://echo.epa.gov/d	letailed-facility-repor	t?fid=110042291775	
A5 Target Property	SUMMIT COUNTY EI 538 E SOUTH ST - A AKRON, OH	NGINEEF TTN: MA	RS INT		OH RGA LUST	S114791635 N/A
	Site 5 of 6 in cluster	Α				
Actual: 1061 ft.	RGA LUST:	2012 2011 2009 2008 2007 2006 2005 2004 2003 2002 2001 2000	SUMMIT COUNTY ENGINEERS SUMMIT COUNTY ENGINEERS SUMMIT COUNTY ENGINEERS SUMMIT COUNTY ENGINEERS SUMMIT COUNTY ENGINEERS SUMMIT COUNTY ENGINEERS SUMMIT COUNTY ENGINEERS SUMMIT COUNTY ENGINEERS SUMMIT COUNTY ENGINEERS SUMMIT COUNTY ENGINEERS SUMMIT COUNTY ENGINEERS SUMMIT COUNTY ENGINEERS SUMMIT COUNTY ENGINEERS	538 E SOUTH ST 538 E SOUTH ST 538 E SOUTH ST 538 E SOUTH ST 538 E SOUTH ST 538 E SOUTH ST 538 E SOUTH ST 538 E SOUTH ST 538 E SOUTH ST 538 E SOUTH ST 538 E SOUTH ST 538 E SOUTH ST 538 E SOUTH ST	- ATTN: MAINT - ATTN: MAINT - ATTN: MAINT - ATTN: MAINT - ATTN: MAINT - ATTN: MAINT - ATTN: MAINT - ATTN: MAINT - ATTN: MAINT - ATTN: MAINT - ATTN: MAINT - ATTN: MAINT - ATTN: MAINT	
A6 Target Property	SUMMIT CO ENGINE 538 E SOUTH ST AKRON, OH	EERS			OH RGA LUST	S114791625 N/A
	Site 6 of 6 in cluster	Α				
Actual: 1061 ft.	RGA LUST:	1999 1998 1997 1996 1995 1994	SUMMIT CO ENGINEERS538 ESUMMIT CO ENGINEERS538 ESUMMIT CO ENGINEERS538 ESUMMIT CO ENGINEERS538 ESUMMIT CO ENGINEERS538 ESUMMIT CO ENGINEERS538 E	E SOUTH ST E SOUTH ST E SOUTH ST E SOUTH ST E SOUTH ST E SOUTH ST		

Map ID			М	AP FINDINGS	]	
Direction Distance Elevation	Site				Database(s)	EDR ID Number EPA ID Number
B7	MILT S SUN 525 E SOL	NOCO JTH ST			EDR Hist Auto	1009029054 N/A
< 1/8 1 ft	AKRON, OF	H				
	Site 1 of 5 i	n cluster B				
Relative: Lower	EDR Hist	t Auto				
Actual: 1047 ft.	Year: 1930 1935 1940 1946 1957	Name: BLATT L S PRITCHARD C. PRITCHARD C. FOX L B MILT S SUNOC	ARL ARL CO	Type: AUTOMOBILE FILLING AUTOMOBILE SERVICE AUTOMOBILE SERVICE AUTOMOBILE SERVICE AUTOMOBILE SERVICE	STATIONS E STATIONS E STATIONS E STATIONS E STATIONS	
C8 < 1/8	481 E SOU AKRON, OI	TH ST H 44311			EDR Hist Cleaner	1009148969 N/A
1 ft.	Site 1 of 9 i	n cluster C				
Relative: Lower	EDR Hist	t Cleaner				
Actual: 1047 ft.	Year: 1961 1967 1969 1970 1971 1972 1976 1977 1978 1979 1986 1987 1988 1989 1990 1991 1992 1993 1994	Name: GROSS PAT D GROSS PAT D GROSS PAT 2 GROSS PAT 2	RY CLEANING RY CLEANING HOUR CLEANERS HOUR CLEANERS RY CLEANING HOUR CLEANERS RY CLEANING HOUR CLEANERS HOUR CLEANERS HOUR CLEANERS HOUR CLEANERS HOUR CLEANERS HOUR CLEANERS HOUR CLEANERS HOUR CLEANERS HOUR CLEANERS HOUR CLEANERS RY CLEANERS RY CLEANERS	Type: DRY CLEANERS DRY CLEANERS Drycleaning Plants, Exce Drycleaning Plants, Exce Drycleaning Plants, Exce DRY CLEANERS Drycleaning Plants, Exce DRY CLEANERS Drycleaning Plants, Exce Drycleaning Plants, Exce	apt Rugs apt Rugs apt Rugs apt Rugs apt Rugs apt Rugs apt Rugs apt Rugs apt Rugs apt Rugs apt Rugs apt Rugs apt Rugs apt Rugs apt Rugs apt Rugs apt Rugs apt Rugs apt Rugs	

**B9 RICKY DECKER** 

1391 S KUTHER RD @ INTERSECTION OF MILL CREEK RD WASHINGTON TWP, OH

GROSS PAT DRY CLEANERS

GROSS PAT DRY CLEANERS

< 1/8 1 ft.

Site 2 of 5 in cluster B

1996 1997

SPILLS: **Relative:** Spill No.: 9908-75-3004 Lower Spill Number: 3004 Actual: Spill Month/Year: 8/1999 1047 ft.

OH SPILLS S106321220 N/A

Drycleaning Plants, Except Rugs

Drycleaning Plants, Except Rugs

Map ID		MAP FINE	DINGS		
Distance Elevation	Site			Database(s)	EDR ID Number EPA ID Number
	RICKY DECKER (Continue	d)			S106321220
	Date Split Reported: Reporter Name: Confidential: District Code: Employee Number: District C Decode: Product Spilled Name: Lat/Long:	LAURA NISWONGER No SW 1765 South West DIESEL FUEL 401556.8 / 841226.1			
C10 < 1/8 1 ft.	BROSKE & ROBINSON SEF 481 E SOUTH ST AKRON, OH	RVICE		EDR Hist Auto	1008990183 N/A
	Site 2 of 9 in cluster C				
Relative:	EDR Hist Auto				
Actual: 1047 ft.	Year: Name: 1925 MAIN, 1930 MAIN		Type: AUTOMOBILE OILS AND AUTOMOBILE FILLING S	) GASOLINE STATIONS	
B11 < 1/8 1 ft	LEROY SCHINDLER 893 S. JOHNSONVILLE-FAI JACKSON TWP, OH	RMERSVILLE RD		OH SPILLS	S111831229 N/A
1 10.	Site 3 of 5 in cluster B				
Relative:	SPILLS:				
Lower	Spill No.: Spill Number:	1202-57-0440 440			
Actual: 1047 ft.	Spill Month/Year: Date Spill Reported: Reporter Name: Confidential:	2/2012 02/23/2012 DENNY BRISTOW			
	District Code:	SW			
	Employee Number: District C Decode:	1798 South West			
	Product Spilled Name: Lat/Long:	FUEL OIL 3943499 / 8425338			
B12	COPLEY AUTO COLLISION 1230 S CLEVE-MASSILLON	I INC I RD		RCRA-CESQG NY MANIFEST	1004763355 OH0000706812
< 1/8 1 ft.	COPLEY, OH 44321				
	Site 4 of 5 in cluster B				
Relative: Lower	RCRA-CESQG: Date form received by a Facility name:	agency: 09/06/1994 COPLEY AUTO COLLI	SION INC		
Actual: 1049 ft.	Facility address:	1230 S CLEVE-MASSI COPLEY. OH 44321	LLON RD		
	EPA ID: Contact: Contact address:	OH0000706812 JOHN PLEVRIS 1230 S CLEVE-MASSI COPLEY, OH 44321	LLON RD		

Database(s)

EDR ID Number EPA ID Number

# COPLEY AUTO COLLISION INC (Continued)

1004763355

	(continued)
Contact country: Contact telephone: Contact email: EPA Region: Classification: Description:	<ul> <li>(216) 666-5060</li> <li>Not reported</li> <li>O5</li> <li>Conditionally Exempt Small Quantity Generator</li> <li>Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste</li> </ul>
Owner/Operator Summary:	NICK PLEVRIS
Owner/operator address:	750 S MEDINA LINE RD
	WADS, OH 44281
Owner/operator country:	Not reported
Legal status:	(210) 000-1370 Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported
Handler Activities Summary: U.S. importer of hazardous wa Mixed waste (haz. and radioar Recycler of hazardous waste: Transporter of hazardous was Treater, storer or disposer of H Underground injection activity On-site burner exemption: Furnace exemption: Used oil fuel burner: Used oil fuel burner: Used oil processor: User oil refiner: Used oil fuel marketer to burn Used oil Specification marketer Used oil transfer facility: Used oil transporter:	aste: No ctive): No No No HW: No : No No No No No Per: No No No
Waste code:	D001
. Waste name:	IGNITABLE WASTE
Violation Status:	No violations found
NY MANIFEST:	
Country:	USA OLIOOOG700040
EPA ID: Facility Status:	UTUUUU/Ub812 Not reported
i donity otatao.	

Database(s)

EDR ID Number EPA ID Number

#### **COPLEY AUTO COLLISION INC (Continued)**

1230 S CLEVEL MASS. RD Location Address 1: ΒP Code: Location Address 2: Not reported Total Tanks: Not reported COPLEY Location City: Location State: OH 44321 Location Zip: Location Zip 4: Not reported NY MANIFEST: EPAID: OH0000706812 COPLEY AUTO COLLISION Mailing Name: Mailing Contact: JOHN PLEVRIS Mailing Address 1: 1230 S CLEVEL MASS RD Mailing Address 2: Not reported Mailing City: COPLEY Mailing State: OH 44321 Mailing Zip: Mailing Zip 4: Not reported Mailing Country: USA Mailing Phone: 2166665010 NY MANIFEST: Document ID: NYH0674631 Manifest Status: Not reported Not reported seq: Year: 2004 Trans1 State ID: P207004IL Trans2 State ID: Not reported 06/10/2004 Generator Ship Date: Trans1 Recv Date: 06/10/2004 Trans2 Recv Date: Not reported TSD Site Recv Date: 06/18/2004 Part A Recv Date: Not reported Not reported Part B Recv Date: Generator EPA ID: OH0000706812 Trans1 EPA ID: NJD080631369 Trans2 EPA ID: Not reported NYD049836 TSDF ID 1: TSDF ID 2: Not reported Manifest Tracking Number: Not reported Import Indicator: Not reported Export Indicator: Not reported Not reported Discr Quantity Indicator: Discr Type Indicator: Not reported Discr Residue Indicator: Not reported Discr Partial Reject Indicator: Not reported Discr Full Reject Indicator: Not reported Manifest Ref Number: Not reported Alt Facility RCRA ID: Not reported Alt Facility Sign Date: Not reported MGMT Method Type Code: Not reported F003 - UNKNOWN Waste Code: Waste Code: Not reported Waste Code: Not reported Waste Code: Not reported Waste Code: Not reported

### 1004763355

D13

1 ft.

C14

1 ft.

Classification:

Description:

Non-Generator

Handler: Non-Generators do not presently generate hazardous waste

MAP FINDINGS

EDR ID Number Site Database(s) **EPA ID Number COPLEY AUTO COLLISION INC (Continued)** 1004763355 Waste Code: Not reported Quantity: 00110 Units: G - Gallons (liquids only)\* (8.3 pounds) Number of Containers: 001 Container Type: TT - Cargo tank, tank trucks Handling Method: B Incineration, heat recovery, burning. 01.00 Specific Gravity: Click this hyperlink while viewing on your computer to access 8 additional NY\_MANIFEST: record(s) in the EDR Site Report. 1009030118 **BUTLERS SERVICE EDR Hist Auto** 427 E SOUTH ST N/A < 1/8 **AKRON, OH 44304** Site 1 of 4 in cluster D EDR Hist Auto **Relative:** Lower Year: Name: Type: Actual: 1935 HUBER BROS AUTOMOBILE SERVICE STATIONS 1038 ft. 1940 OVENDORF A E JR AUTOMOBILE SERVICE STATIONS 1946 MILLS E N AUTOMOBILE SERVICE STATIONS 1957 **BUTLER ORIN JR** AUTOMOBILE SERVICE STATIONS **BUTLER S PURE OIL** AUTOMOBILE SERVICE STATIONS 1961 1967 **BUTLER S PURE OIL** AUTOMOBILE SERVICE STATIONS 1973 **BUTLERS UNION 76 Gasoline Service Stations** 1976 BUTLERS SERVICE **Gasoline Service Stations** 1977 BUTLERS SERVICE **Gasoline Service Stations** 1978 BUTLERS SERVICE **Gasoline Service Stations** 1979 BUTLERS SERVICE Gasoline Service Stations 1980 BUTLERS SERVICE **Gasoline Service Stations GROSS PAT CLEANERS** RCRA NonGen / NLR 1000386003 OHD055827877 481 E SOUTH ST FINDS **AKRON, OH 44311** < 1/8 ECHO Site 3 of 9 in cluster C RCRA NonGen / NLR: **Relative:** Date form received by agency: 01/16/1997 Lower Facility name: **GROSS PAT CLEANERS** Actual: Facility address: 481 E SOUTH ST 1047 ft. **AKRON, OH 44311** EPA ID: OHD055827877 DONALD GROSS Contact: Contact address: 481 E SOUTH ST **AKRON, OH 44311** Contact country: US Contact telephone: (330) 434-1011 Contact email: Not reported EPA Region: 05

Database(s)

EDR ID Number EPA ID Number

# **GROSS PAT CLEANERS (Continued)**

0	wner/Operator Summary: Owner/operator name: Owner/operator address:	GROSS DONALD ADDRESS NOT REPORTED CITY NOT REPORTED, AK 99998
Owner/operator country: Owner/operator telephone:		Not reported (312) 555-1212
	Owner/Operator Type	Owner
	Owner/Op start date:	Not reported
	Owner/Op end date:	Not reported
	Owner/operator name: Owner/operator address:	NAME NOT REPORTED ADDRESS NOT REPORTED CITY NOT REPORTED. AK 99998
	Owner/operator country:	Not reported
	Owner/operator telephone:	(312) 555-1212
	Legal status:	Private
	Owner/Operator Type:	Operator
	Owner/Op start date:	Not reported
	Owner/Op end date.	Notrepoted
Н	andler Activities Summary: U.S. importer of hazardous wa	aste: No
	Mixed waste (haz. and radioa	ctive): No
	Recycler of hazardous waste:	No
	I ransporter of hazardous was	ste: No
I reater, storer or disposer of		mw. No
	On-site burner exemption:	No
	Furnace exemption:	No
	Used oil fuel burner:	No
	Used oil processor:	No
	User oil refiner:	No
	Used oil fuel marketer to burn	er: No
	Used oil Specification markete	er: No
	Used oil transfer facility:	NO
	Used on transporter.	NO
	. Waste code:	F002
. Waste name:		THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2, TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE
		ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
	Violation Status:	No violations found
F	INDS:	
	Registry ID:	110004614891
		ation Outland
	Environmental Interest/Inform	alion System

RCRAInfo is a national information system that supports the Resource

Distance Elevation	Site		Database(s)	EDR ID Number EPA ID Number
	GROSS PAT CLEANE	RS (Continued)		1000386003
		Conservation and Recovery Act (RCRA) program through the tracking events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RC program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.	g of RA	
		The OH-CORE (Ohio - Core) database contains information common shared among the Ohio EPA environmental programs. The information facility-based, general in nature, and used to support specific programmatic systems while simultaneously maintaining an inventory common facility-related data. Specific programmatic details are maintained in programmatic databases.	ly n is of	
		<u>Click this hyperlink</u> while viewing on your computer to access additional FINDS: detail in the EDR Site Report.		
	ECHO: Envid: Registry ID: DFR URL:	1000386003 110004614891 http://echo.epa.gov/detailed-facility-report?fid=?	10004614891	
B15 < 1/8	MILLER J A 513 E SOUTH ST AKRON, OH		EDR Hist Auto	1009031116 N/A
1 ft.	Site 5 of 5 in cluster E	3		
Relative: Lower	EDR Hist Auto			
Actual: 1048 ft.	Year: Name: 1940 BYRD F 1946 BYRD F 1957 MILLER	Type: AUTOMOBILE SERVICE STAT AUTOMOBILE SERVICE STAT J A AUTOMOBILE SERVICE STAT	TONS TONS TONS	
E16 < 1/8	UNK CITY OF AKRON WTF AKRON, OH		OH SPILLS	S102882155 N/A
1 ft.	Site 1 of 2 in cluster E	E		
Relative: Lower	SPILLS: Spill No.: Spill Number:	9002-77-0752 0752		
Actual: 1056 ft.	Spill Month/Year: Date Spill Report Reporter Name: Confidential: District Code: Employee Numbe District C Decode Product Spilled N Lat/Long:	2/1990 ed: 02/08/1990 NEDO-OEPA No NE er: Not reported e: North East lame: SURFACTENT Not reported		

Map ID Direction		MAP FINDINGS			
Distance Elevation	Site			Database(s)	EDR ID Number EPA ID Number
D17 < 1/8 1 ft	AVALON CLEANERS 446 E SOUTH AKRON, OH			EDR Hist Cleaner	1009150109 N/A
	Site 2 of 4 in cluster D				
Relative: Lower	EDR Hist Cleaner				
Actual: 1038 ft.	Year: Name: 1951 AVALON CLE.	ANERS	Type: DRY CLEANERS		
18 < 1/8 1 <del>ft</del>	KENMORE CONSTRUCTIO I-77 NB AT CENTRAL INTE AKRON, OH	N CO RCHANGE		OH SPILLS	S106962047 N/A
Relative: Higher Actual: 1067 ft.	SPILLS: Spill No.: Spill Number: Spill Month/Year: Date Spill Reported: Reporter Name: Confidential: District Code: Employee Number: District C Decode: Product Spilled Name: Product Spilled Name: Lat/Long:	0410-77-4365 4365 10/2004 10/13/2004 JOHN PINTER Not reported NE 1769 North East HYDRAULIC FLUID HYDRAULIC FLUID 4103399 / 8130177			
D19 West < 1/8	NO 431 E SOUTH AKRON, OH			EDR Hist Auto	1009030210 N/A
0.003 mi. 15 ft.	Site 3 of 4 in cluster D				
Relative:	EDR Hist Auto				
Lower Actual: 1038 ft.	Year: Name: 1930 NO		Type: AUTOMOBILE FILLING S	STATIONS	
C20 West < 1/8 0.004 mi.	GRAND DRY CLEANERS 478 E SOUTH ST AKRON, OH			EDR Hist Cleaner	1009151522 N/A
20 ft.	Site 4 of 9 in cluster C				
Relative: Lower	EDR Hist Cleaner				
Actual: 1046 ft.	Year: Name: 1951 DROBNY CLE	ANERS	l ype: DRY CLEANERS		

EDR ID Number Database(s) EPA ID Number

C21 West < 1/8	BERT W. FALOR 474 E SOUTH ST AKRON, OH 44311		OH ARCHIVE UST	U004085180 N/A
38 ft.	Site 5 of 9 in cluster C			
Relative: Lower	ARCHIVE UST: Facility Number:	77000209		
Actual: 1044 ft.	Owner Address: Owner City,St,Zip:	474 E SOUTH ST AKRON, OH 44311		
	Inspection: Facility Id: 77000209 Permit Number: P00001 Code: 103 Inspection Type: Final			
	Tank ID: Tank Type: Tank Status: Install Date: Content: Capacity: Corrosion Protection Tank: CAS #: Regulated: Overfill Device Installed: Spill Device Installed: Spill Device Installed: Release Detection On Tank: Date Removed: Date Last Use: Date Abandoned/Closed: AST/UST: Corrosion Protection Piping: Piping Material: Piping Type: Release Detection On Piping: Tank ID: Tank Type: Tank Status: Install Date: Content: Capacity: Corrosion Protection Tank: CAS #: Regulated: Overfill Device Installed: Spill Device Installed: Release Detection On Tank: Date Removed: Date Last Use: Date Abandoned/Closed: AST/UST: Corrosion Protection Piping: Piping Material:	T00001 Other Removed Not reported Unknown Not reported Not reported Yes No No No Not reported 5/10/1993 5/10/1993 S/10/1993 Not reported UST Not reported UST Not reported UNknown Not reported Not reported Not reported Not reported Not reported 8000 Not reported 8000 Not reported 8000 Not reported 8000 Not reported 8000 Not reported 8000 Not reported 8000 Not reported 8000 Not reported 8000 Not reported 8006-61-9 Yes No No No Not reported 6/9/1993 6/7/1993 Not reported UST Not reported Galvanized Steel		
	Piping Type:	Pressure		

Database(s)

EDR ID Number EPA ID Number

# BERT W. FALOR (Continued)

Release Detection On Piping: Not reported

Tank ID:	T00001
Tank Type:	Steel
Tank Status:	Removed
Install Date:	1/1/1976
Content:	Gasoline
Capacity:	8000
Corrosion Protection Tank:	Not reported
CAS #:	8006-61-9
Regulated:	Yes
Overfill Device Installed:	No
Spill Device Installed:	No
Release Detection On Tank:	Not reported
Date Removed:	6/9/1993
Date Last Use:	6/7/1993
Date Abandoned/Closed:	Not reported
AST/UST:	UST
Corrosion Protection Piping:	Not reported
Piping Material:	Galvanized Steel
Piping Type:	Pressure
Release Detection On Piping:	Not reported

Tank ID:	T00001
Tank Type:	Other
Tank Status:	Removed
Install Date:	Not reported
Content:	Unknown
Capacity:	Not reported
Corrosion Protection Tank:	Not reported
CAS #:	Not reported
Regulated:	Yes
Overfill Device Installed:	No
Spill Device Installed:	No
Release Detection On Tank:	Not reported
Date Removed:	5/10/1993
Date Last Use:	5/10/1993
Date Abandoned/Closed:	Not reported
AST/UST:	UST
Corrosion Protection Piping:	Not reported
Piping Material:	Unknown
Piping Type:	Not reported
Release Detection On Piping:	Not reported

Tank ID:	T00002
Tank Type:	Steel
Tank Status:	Removed
Install Date:	1/1/1976
Content:	Gasoline
Capacity:	8000
Corrosion Protection Tank:	Not reported
CAS #:	8006-61-9
Regulated:	Yes
Overfill Device Installed:	No

## U004085180

Database(s)

EDR ID Number EPA ID Number

# BERT W. FALOR (Continued)

Spill Device Installed:	No
Release Detection On Tank:	Not reported
Date Removed:	6/9/1993
Date Last Use:	6/7/1993
Date Abandoned/Closed:	Not reported
AST/UST:	UST
Corrosion Protection Piping:	Not reported
Piping Material:	Galvanized Steel
Piping Type:	Pressure
Release Detection On Piping:	Not reported

Tank ID:	T00002
Tank Type:	Steel
Tank Status:	Removed
Install Date:	1/1/1976
Content:	Gasoline
Capacity:	8000
Corrosion Protection Tank:	Not reported
CAS #:	8006-61-9
Regulated:	Yes
Overfill Device Installed:	No
Spill Device Installed:	No
Release Detection On Tank:	Not reported
Date Removed:	6/9/1993
Date Last Use:	6/7/1993
Date Abandoned/Closed:	Not reported
AST/UST:	UST
Corrosion Protection Piping:	Not reported
Piping Material:	Galvanized Steel
Piping Type:	Pressure
Release Detection On Piping:	Not reported

Tank ID:	T00003
Tank Type:	Steel
Tank Status:	Removed
Install Date:	1/1/1976
Content:	Gasoline
Capacity:	6000
Corrosion Protection Tank:	Not reported
CAS #:	8006-61-9
Regulated:	Yes
Overfill Device Installed:	No
Spill Device Installed:	No
Release Detection On Tank:	Not reported
Date Removed:	6/9/1993
Date Last Use:	6/7/1993
Date Abandoned/Closed:	Not reported
AST/UST:	UST
Corrosion Protection Piping:	Not reported
Piping Material:	Galvanized Steel
Piping Type:	Pressure
Release Detection On Piping:	Not reported

Tank ID:

T00003

Database(s)

EDR ID Number **EPA ID Number** 

#### U004085180

#### **BERT W. FALOR (Continued)**

Tank Type:	Steel
Tank Status:	Removed
Install Date:	1/1/1976
Content:	Gasoline
Capacity:	6000
Corrosion Protection Tank:	Not reported
CAS #:	8006-61-9
Regulated:	Yes
Overfill Device Installed:	No
Spill Device Installed:	No
Release Detection On Tank:	Not reported
Date Removed:	6/9/1993
Date Last Use:	6/7/1993
Date Abandoned/Closed:	Not reported
AST/UST:	UST
Corrosion Protection Piping:	Not reported
Piping Material:	Galvanized Steel
Piping Type:	Pressure
Release Detection On Piping:	Not reported

38 ft.

#### KATZ A L 474 E SOUTH ST West

< 1/8	
0.007	mi.

# AKRON, OH Site 6 of 9 in cluster C

EDR Hist Auto

**Relative:** 

Lower

Actual: 1044 ft.

Year:	Name:
1971	K P PRCO SERVICE
1972	KATZ A L
1972	K P ARCO SERVICE
1973	K P ARCO SERVICE
1974	REDS ARCO SERVICE
1976	RED S ARCO SERVICE
1976	REDS ARCO SERVICE
1977	REDS ARCO SERVICE
1983	HIGHLAND SERVICE CENTER
1985	HIGHLAND SERVICE CENTER
1986	HIGHLAND SERVICE CENTER
1987	HIGHLAND SERVICE CENTER
1988	HIGHLAND SERVICE CENTER
1989	HIGHLAND SERVICE CENTER
1990	HIGHLAND SERVICE CENTER
1991	HIGHLAND SERVICE CENTER
1992	HIGHLAND SERVICE CENTER
1993	HIGHLAND SERVICE CENTER
2004	FAIR AUTO
2005	FAIR AUTO
2006	FAIR AUTO
2007	FAIR AUTO
2008	FAIR AUTO

EDR Hist Auto 1009031915 N/A

Type: **Gasoline Service Stations** AUTOMOBILE SERVICE STATIONS **Gasoline Service Stations Gasoline Service Stations Gasoline Service Stations** AUTOMOBILE SERVICE STATIONS **Gasoline Service Stations Gasoline Service Stations** Gasoline Service Stations Gasoline Service Stations Gasoline Service Stations Gasoline Service Stations **Gasoline Service Stations Gasoline Service Stations** Automotive Repair Shops, NEC Automotive Repair Shops, NEC Automotive Repair Shops, NEC

#### Automotive Repair Shops, NEC Automotive Repair Shops, NEC

TC5001817.2s Page 25

Database(s)

EDR ID Number EPA ID Number

C23 West < 1/8 0.007 mi.	HIGHLAND SERVICE 474 E SOUTH ST AKRON, OH 44311		OH LUST OH UST	U004214498 N/A
38 ft.	Site 7 of 9 in cluster C			
Relative: Lower Actual: 1044 ft.	LUST: Release Number: 77000209-N00001 Release Date: 06/10/1993 Facility Status: Inactive LTF Status: 1 SUS/CON from re FR Status: NFA: No Further A Priority: 2 Review Date: 08/05/2005 Priority Decode: SUS/CON from nor Class1 Decode: A viable RP have b Class: Viable Responsible	egulated UST Action h-regulated UST een identified Party has been identified		
	UST: Facility Id: Facility Type: Owner Name: Owner Address: Owner City/State/Zip:	77000209 Gas Station Not reported Not reported Not reported		
	Tank Number: Status: UST Capacity: Tank Content: Installation Date: Construction: Date Last Used: Date TCL Closed: Date TCL Closed: Date Removed: CAS Number: Abandoned Approved: Regulated: Sensitive Area: Date Of Sensitivity: UST Configurations: Construction Comments: Corrosion Protections: Corrosion Protections: Corrosion Protection Comments: Primary Release Detection: Release Detection Comments: Piping Configuration: Piping Configuration Comments: Piping Styles:	T00001 REM - Removed 550 Used Oil Not reported BM - Bare Metal 06/07/1993 Not reported 06/09/1993 Not reported Not reported Not reported Not reported Not reported Not reported Not reported Not reported Not reported AMO - Alternative Method (Other, explain) Not reported RDTank: / RDLine: Not reported Not reported RDTank: / RDLine: Not reported Not Reporte		
	Piping Constructions: Piping Construction Comments: Piping Corrosion Protections: Piping Corrosion Protection Comment Piping Release Detections: Piping Release Detection Comments: Spill Prevention Manholes: Spill Prevention Manhole Comments: OverFill Prevention: OverFill Prevention Comment:	OIH - Other (explain) Unknown OTH - Other (explain) is: Not reported OTH - Other(explain) Not reported NP - None Present No Not reported OverFill Spill: No		

Not reported

Database(s)

EDR ID Number EPA ID Number

#### **HIGHLAND SERVICE (Continued)**

Comments:

T00001 Tank Number: Status: **REM - Removed** UST Capacity: 8000 Tank Content: Gasoline Installation Date: 01/01/1976 BM - Bare Metal Construction: Date Last Used: 06/07/1993 Date TCL Closed: Not reported 06/09/1993 Date Removed: 8006-61-9 CAS Number: Abandoned Approved: Not reported Regulated: YES Sensitive Area: NO Date Of Sensitivity: Not reported **UST** Configurations: Not reported Construction Comments: Steel **Corrosion Protections:** Not reported **Corrosion Protection Comments:** Not reported Primary Release Detection: AMO - Alternative Method (Other, explain) Secondary Release Detection: Not reported **Release Detection Comments:** RDTank: / RDLine: Piping Configuration: Not reported Piping Configuration Comments: Not reported Piping Styles: P - Pressure **Piping Constructions:** BM - Bare Metal **Piping Construction Comments:** Galvanized Steel OTH - Other (explain) Piping Corrosion Protections: Piping Corrosion Protection Comments: Not reported OTH - Other(explain) Piping Release Detections: Piping Release Detection Comments: Not reported Spill Prevention Manholes: NP - None Present Spill Prevention Manhole Comments: No OverFill Prevention: Not reported **OverFill Prevention Comment:** OverFill Spill: No Comments: Not reported

Tank Number: Status: UST Capacity: Tank Content: Installation Date: Construction: Date Last Used: Date TCL Closed: Date Removed: CAS Number: Abandoned Approved: Regulated: Sensitive Area: Date Of Sensitivity: **UST Configurations:** Construction Comments: **Corrosion Protections:** 

T00002 **REM - Removed** 8000 Gasoline 01/01/1976 BM - Bare Metal 06/07/1993 Not reported 06/09/1993 8006-61-9 Not reported YES NO Not reported Not reported Steel Not reported

#### U004214498

Database(s)

EDR ID Number EPA ID Number

#### HIGHLAND SERVICE (Continued)

**Corrosion Protection Comments:** Primary Release Detection: Secondary Release Detection: Release Detection Comments: Piping Configuration: **Piping Configuration Comments:** Piping Styles: **Piping Constructions: Piping Construction Comments: Piping Corrosion Protections:** Piping Corrosion Protection Comments: Not reported Piping Release Detections: Piping Release Detection Comments: Spill Prevention Manholes: Spill Prevention Manhole Comments: **OverFill Prevention: OverFill Prevention Comment:** Comments:

Not reported AMO - Alternative Method (Other, explain) Not reported RDTank: / RDLine: Not reported Not reported P - Pressure BM - Bare Metal Galvanized Steel OTH - Other (explain) OTH - Other(explain) Not reported NP - None Present No Not reported OverFill Spill: No Not reported

Tank Number: T00003 Status: **REM - Removed** UST Capacity: 6000 Tank Content: Gasoline Installation Date: 01/01/1976 BM - Bare Metal Construction: 06/07/1993 Date Last Used: Date TCL Closed: Not reported Date Removed: 06/09/1993 8006-61-9 CAS Number: Abandoned Approved: Not reported Regulated: YES Sensitive Area: NO Date Of Sensitivity: Not reported **UST Configurations:** Not reported Construction Comments: Steel Corrosion Protections: Not reported **Corrosion Protection Comments:** Not reported AMO - Alternative Method (Other, explain) Primary Release Detection: Secondary Release Detection: Not reported **Release Detection Comments:** RDTank: / RDLine: Piping Configuration: Not reported **Piping Configuration Comments:** Not reported Piping Styles: P - Pressure **Piping Constructions:** BM - Bare Metal **Piping Construction Comments:** Galvanized Steel **Piping Corrosion Protections:** OTH - Other (explain) Piping Corrosion Protection Comments: Not reported Piping Release Detections: OTH - Other(explain) Piping Release Detection Comments: Not reported Spill Prevention Manholes: NP - None Present Spill Prevention Manhole Comments: No **OverFill Prevention:** Not reported **OverFill Prevention Comment:** OverFill Spill: No Comments: Not reported

## U004214498

Map ID			MAP FINDINGS		
Distance Elevation	Site			Database(s)	EDR ID Number EPA ID Number
C24 West < 1/8 0.007 mi.	HIGHLAND SERVICE 474 E SOUTH ST AKRON, OH			OH RGA LUST	S114768859 N/A
38 ft.	Site 8 of 9 in cluster 0	;			
Relative: Lower	RGA LUST:	1999	HIGHLAND SERVICE 474 E SOUTH ST		
Actual: 1044 ft.		1998 1997 1996 1995 1994	HIGHLAND SERVICE474 E SOUTH STHIGHLAND SERVICE474 E SOUTH STHIGHLAND SERVICE474 E SOUTH STHIGHLAND SERVICE474 E SOUTH STHIGHLAND SERVICE474 E SOUTH ST		
C25 West < 1/8	BERT FULOR 474 E SOUTH ST AKRON, OH			OH RGA LUST	S114748274 N/A
0.007 ml. 38 ft.	Site 9 of 9 in cluster 0	;			
Relative: Lower	RGA LUST:	2012	BERT FULOR 474 E SOUTH ST		
Actual:		2011	BERT FULOR 474 E SOUTH ST		
1044 ft.		2010 2009 2008	BERT FULOR 474 E SOUTH ST BERT FULOR 474 E SOUTH ST BERT FULOR 474 E SOUTH ST		
		2007 2006	BERT FULOR 474 E SOUTH ST BERT FULOR 474 E SOUTH ST		
		2000	BERT FULOR 474 E SOUTH ST		
		2004	BERT FULOR 474 E SOUTH ST		
		2003	BERT FULOR 474 E SOUTH ST		
		2001 2000	BERT FULOR 474 E SOUTH ST BERT FULOR 474 E SOUTH ST		
F26 East < 1/8	WHIDDON E W 604 INMAN ST AKRON, OH			EDR Hist Auto	1009031128 N/A
0.008 ml. 40 ft.	Site 1 of 3 in cluster F				
Relative: Higher	EDR Hist Auto				
Actual: 1104 ft.	Year: Name: 1951 A A MOT	OR TU	Type: NE-UP SERVICE REAR AUTOMOBILE REPAIRING		
D27 West < 1/8 0.008 mi	GROSS P J 460 E SOUTH ST AKRON, OH			EDR Hist Cleaner	1009150479 N/A
41 ft.	Site 4 of 4 in cluster D	)			
Relative: Lower	EDR Hist Cleaner				
Actual: 1040 ft.	Year: Name: 1957 GROSS	ΡJ	Type: DRY CLEANERS		

ID tion		MAP FINDINGS	
nce ation	Site	Database(s)	EDR ID Number EPA ID Number
	TEMPLETON H L 682 LA FOLLETTE AKRON, OH	EDR Hist Auto	1009030070 N/A
) mi.	Site 1 of 2 in cluster G		
tive:	EDR Hist Auto		
er al: ft.	Year: Name: 1951 TEMPLETON	Type: AUTOMOBILE REPAIRING	
ni.	FRANDSEN G F 550 JOHNSTON ST AKRON, OH	EDR Hist Auto	1009028772 N/A
	Site 2 of 2 in cluster E		
:	EDR Hist Auto		
	Year: Name: 1940 FRANDSEN 1946 HAL ROUSH	Type:       G F     AUTOMOBILE REPAIRING       INC     AUTOMOBILE SERVICE STATIONS	
ni.	A & C WELDING INC 705 JOHNSTON STREET AKRON, OH 44306	RCRA-CESQG FINDS ECHO	1004767426 OHR000037416
	Site 1 of 6 in cluster H		
	RCRA-CESQG: Date form received b Facility name:	y agency: 07/27/1999 A & C WELDING INC	
	Facility address: EPA ID: Contact:	705 JOHNSTON STREET AKRON, OH 44306 OHR000037416 TIMOTHY_GORBACH	
	Contact address:	705 JOHNSTON STREET AKRON, OH 44306	
	Contact country: Contact telephone: Contact email: EPA Region:	(330) 762-4777 Not reported 05	
	Classification:       Conditionally Exempt Small Quantity Generator         Description:       Handler: generates 100 kg or less of hazardous waste per calend month, and accumulates 1000 kg or less of hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil waste; or 100 kg or less		
		other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any	
		time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste	

Database(s)

EDR ID Number **EPA ID Number** 

## A & C WELDING INC (Continued)

Owner/Operator Summary:	
Owner/operator name:	A & C WELDING INC
Owner/operator address:	705 JOHNSTON STREET
	AKRON, OH 44306
Owner/operator country:	Not reported
Owner/operator telephone:	(330) 762-4777
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported
Handler Activities Summary:	
	Coto, No

0.5. Importer of hazardous waste.	INO
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Waste code: D001 **IGNITABLE WASTE** Waste name:

Waste code:

. Waste code:	F005
. Waste name:	THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL
	KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE,
	2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS
	CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF
	ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS OR THOSE SOLVENTS
	LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF
	THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Violation Status:

No violations found

FINDS:

Registry ID:

110004734342

Environmental Interest/Information System

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

The OH-CORE (Ohio - Core) database contains information commonly shared among the Ohio EPA environmental programs. The information is facility-based, general in nature, and used to support specific

1004767426

31 ENE < 1/8 0.018 mi. 93 ft.

Relative: Higher

Actual: 1100 ft.

G32 SSE

< 1/8 0.020 mi. 105 ft.

Relative: Higher

Actual: 1102 ft.

MAP FINDINGS

stems while simulta related data. Specif ogrammatic databa: <u>ok</u> while viewing on 3: detail in the EDR 1004767426 1100473434 http://echo.ep	aneously maintaining an inve fic programmatic details are uses. In your computer to access Site Report. 42 ba.gov/detailed-facility-report	entory of ?fid=110004734342	1004767426
stems while simulta related data. Specif ogrammatic databa nk while viewing on 3: detail in the EDR 1004767426 11000473434 http://echo.ep	aneously maintaining an inve fic programmatic details are uses. In your computer to access I Site Report. 42 ba.gov/detailed-facility-report	entory of ?fid=110004734342	
ak while viewing on detail in the EDR 1004767426 11000473434 http://echo.ep	n your computer to access Site Report. 42 ba.gov/detailed-facility-report	?fid=110004734342	
1004767426 11000473434 http://echo.ep	42 oa.gov/detailed-facility-report	?fid=110004734342	
		EDR Hist Auto	1009031732 N/A
	Type: AUTOMOBILE REPAIRIN	IG	
		RCRA-SQG FINDS ECHO	1001113600 OHR000014027
5/2002 DDRICH MIDDLE S LAFOLLETTE ST RON, OH 44306149 R000014027 N BROADWAY RON, OH 44308 BERT BOXLER N BROADWAY RON, OH 44308 D) 761-2977 reported	SCHOOL 99 Generator ore than 100 and less than 10 ndar month and accumulates	000 kg of hazardous	
0 (F  F ) N (F ) N (F ) N (F ) S (C) ) O (F) (F) ) N (F) (F) (F) (F) (F) (F) (F) (F) (F) (F)	IO LAFOLLETTE ST (RON, OH 4430614) HR000014027 N BROADWAY (RON, OH 44308 DBERT BOXLER N BROADWAY (RON, OH 44308 S 30) 761-2977 ot reported j nall Small Quantity ( andler: generates mo aste during any caler	IO LAFOLLETTE ST (RON, OH 443061499 HR000014027 IN BROADWAY (RON, OH 44308 DBERT BOXLER IN BROADWAY (RON, OH 44308 S 30) 761-2977 ot reported in nall Small Quantity Generator andler: generates more than 100 and less than 100 aste during any calendar month and accumulates in a comunity of the state of	IO LAFOLLETTE ST (RON, OH 443061499 HR000014027 IN BROADWAY (RON, OH 44308 DBERT BOXLER IN BROADWAY (RON, OH 44308 S 30) 761-2977 of reported in and ISmall Quantity Generator andler: generates more than 100 and less than 1000 kg of hazardous aste during any calendar month and accumulates less than 6000 kg of Izardous waste at any time; or generates 100 kg or less of hazardous aste during any calendar month, and accumulates more than 1000 kg of Izardous waste during any calendar month, and accumulates more than 1000 kg of

 Owner/Operator Summary:
 AKRON BOARD OF EDUCATION

 Owner/operator address:
 70 N BORADWAY

EDR ID Number EPA ID Number

Database(s)

Database(s)

EDR ID Number EPA ID Number

1001113600

#### AKRON, OH 44308 Owner/operator country: Not reported Owner/operator telephone: (330) 761-2977 Legal status: Municipal

Owner

**GOODRICH JUNIOR HIGH SCHOOL (Continued)** 

Owner/Operator Type:

Owner/Op start date:	Not i	reported
Owner/Op end date:	Not i	reported
Handler Activities Summary:		
U.S. importer of hazardous wa	iste:	No
Mixed waste (haz. and radioad	ctive):	No
Recycler of hazardous waste:		No
Transporter of hazardous was	te:	No
Treater, storer or disposer of H	IW:	No
Underground injection activity:		No
On-site burner exemption:		No
Furnace exemption:		No
Used oil fuel burner:		No
Used oil processor:		No
User oil refiner:		No
Used oil fuel marketer to burne	er:	No
Used oil Specification markete	r:	No
Used oil transfer facility:		No
Used oil transporter:		No

Waste code:	D000
Waste name:	Not Defined

Historical Generators:

Date form received by agency	:05/14/1996
Site name:	GOODRICH MIDDLE SCHOOL
Classification:	Small Quantity Generator

Violation Status:

#### FINDS:

Registry ID:

#### 110004717450

No violations found

Environmental Interest/Information System

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

The OH-CORE (Ohio - Core) database contains information commonly shared among the Ohio EPA environmental programs. The information is facility-based, general in nature, and used to support specific programmatic systems while simultaneously maintaining an inventory of common facility-related data. Specific programmatic details are maintained in programmatic databases.

<u>Click this hyperlink</u> while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

Map ID Direction				MAP FIND	INGS			
Distance Elevation	Site					Da	tabase(s)	EDR ID Number EPA ID Number
	GOODRICH JU	INIOR HIGH S	CHOOL (Con	tinued)				1001113600
	ECHO: Envid: Registry II DFR URL	D: :		1001113600 110004717450 http://echo.epa	) a.gov/detailed-facility-repor	t?fid=11000	4717450	
F33 East < 1/8 0.020 mi.	GIL S MARATH 345 5TH NE AKRON, OH	ION				EDR	Hist Auto	1009032015 N/A
107 ft.	Site 2 of 3 in cl	luster F						
Actual: 1102 ft.	Year: Na 1967 G	ame: IL S MARATHO	ON		Type: AUTOMOBILE SERVICE	STATIONS		
I34 WNW < 1/8 0.027 mi. 140 ft.	445 LAMPART 445 LAMPART AKRON, OH Site 1 of 2 in cl	ER STREET ER STREET luster I					US CDL	1014863852 N/A
Relative: Lower	US CDL: Seizure D	ate:	03/19/2009					
Actual: 1054 ft. F35 East < 1/8	LAZAR J P 340 5TH NE AKRON. OH					EDR His	t Cleaner	1009150901 N/A
0.027 mi. 144 ft.	Site 3 of 3 in cl	luster F						
Relative:	EDR Hist Cle	eaner						
Actual: 1099 ft.	Year: Na 1961 L/	ame: AZAR J P			Type: DRY CLEANERS			
36 South < 1/8 0.029 mi. 154 ft.	A & M DISCOU 667 MCKINLE AKRON, OH	INT CLEANER IY AVE	S			EDR His	t Cleaner	1009150795 N/A
Relative:	EDR Hist Cle	eaner						
Actual: 1102 ft.	Year: Na 1961 A	ame: & M DISCOUN		8	Type: DRY CLEANERS			

		MAP FINDINGS	;		
Site				Database(s)	EDR ID Nun EPA ID Num
SACKS ELECTIC 711 JOHNSTON S AKRON, OH	AL SUPPLY ( St	co.		OH RGA LUST	S114786521 N/A
Site 2 of 6 in alua	tor U				
KGA LUST:	2012 2011 2010 2009 2008 2007 2006 2005 2004	SACKS ELECTICAL SUPPLY CO SACKS ELECTICAL SUPPLY CO SACKS ELECTICAL SUPPLY CO SACKS ELECTICAL SUPPLY CO SACKS ELECTICAL SUPPLY CO SACKS ELECTICAL SUPPLY CO SACKS ELECTICAL SUPPLY CO SACKS ELECTICAL SUPPLY CO	<ul> <li>711 JOHNSTON</li> <li>711 JOHNSTON</li> <li>711 JOHNSTON</li> <li>711 JOHNSTON</li> <li>711 JOHNSTON</li> <li>711 JOHNSTON</li> <li>711 JOHNSTON</li> <li>711 JOHNSTON</li> <li>711 JOHNSTON</li> <li>711 JOHNSTON</li> <li>711 JOHNSTON</li> <li>711 JOHNSTON</li> <li>711 JOHNSTON</li> </ul>	ST   ST   ST   ST   ST   ST   ST   ST	
	2003 2002 2001 2000	SACKS ELECTICAL SUPPLY CO SACKS ELECTICAL SUPPLY CO SACKS ELECTICAL SUPPLY CO SACKS ELECTICAL SUPPLY CO	<ol> <li>711 JOHNSTON</li> <li>711 JOHNSTON</li> <li>711 JOHNSTON</li> <li>711 JOHNSTON</li> <li>711 JOHNSTON</li> </ol>	IST IST IST	
SACKS ELECTIC 711 JOHNSTON S AKRON, OH 443(	AL SUPPLY ( ST )9	co.		OH ARCHIVE UST	U00410039 N/A
Site 3 of 6 in clus	ter H				
ARCHIVE UST: Facility Numl Owner Name Owner Addre Owner City,S	ber: b: bss: bt,Zip:	77004914 SACKS ELECTRICAL SUPP PO BOX 1579 AKRON, OH 44309	LY CO.		
Inspection: Facility Id: Permit Numb Code: Inspection Ty	7700491 per: P00001 101 vpe: Final	14			
Tank ID: Tank Type: <b>Tank Status</b> Install Date: Content:	:	T00001 Not reported <b>Removed</b> Not reported Unknown			
Capacity: Corrosion Pr CAS #: Regulated: Overfill Devic	otection Tank:	Not reported Not reported Not reported Yes No			
Spill Device I Release Dete Date Remove Date Last Us Date Abando AST/UST:	nstalled: ection On Tan ed: e: ned/Closed:	NO k: Not reported 6/30/1992 6/30/1992 Not reported UST			
Corrosion Pr Piping Mater Piping Type: Release Dete	otection Piping ial: ection On Pipi	g: Not reported Not reported Not reported ng: Not reported			

Database(s)

EDR ID Number EPA ID Number

H39 NNE < 1/8 0.034 mi.	SACKS ELECTICAL S 711 JOHNSTON ST AKRON, OH 44309	UPPLY CO.		OH LUST OH UST	U004214426 N/A
177 ft.	Site 4 of 6 in cluster H				
Relative: Higher	LUST: Release Number: Release Date:	77004914-N00001 Not reported			
Actual: 1119 ft.	Facility Status: LTF Status: FR Status: Priority: Review Date:	Inactive 6 Closure of regulated NFA: No Further Act 3 06/20/2000	d UST tion		
	Priority Decode:	SUS/CON from AST			
	Class1 Decode:	A viable RP have bee	en identified		
	Class:	Viable Responsible P	arty has been identified		
	UST:				
	Facility Id:		77004914		
	Facility Type:		Gas Station		
	Owner Name:		Not reported		
	Owner Address:		Not reported		
	Owner City/State/	Zip:	Not reported		
	Tank Number:		T00001		
	Status:		REM - Removed		
	UST Capacity:		Not reported		
	Tank Content:		Unknown		
	Installation Date:		Not reported		
	Construction:				
	Date Last Used:		06/30/1992		
	Date TCL Closed.				
	CAS Number:		Not reported		
		wed.	Not reported		
	Regulated:	weu.	YES		
	Sensitive Area		NO		
	Date Of Sensitivity	<i>v</i> .	Not reported		
	UST Configuration	). IS:	Not reported		
	Construction Com	iments:	Not reported		
	Corrosion Protecti	ions:	Not reported		
	Corrosion Protecti	ion Comments:	Not reported		
	Primary Release I	Detection:	AMO - Alternative Method (Other, explain)		
	Secondary Release	se Detection:	Not reported		
	Release Detection	n Comments:	RDTank: / RDLine:		
	Piping Configurati	on:	Not reported		
	Piping Configurati	on Comments:	Not reported		
	Piping Styles:		NA - Not Applicable		
	Piping Construction	ons:	Net reported		
	Piping Construction	Protections:	OTH - Other (explain)		
	Piping Corrosion P	Protection Comments	Not reported		
	Piping Release Dr	etections:	OTH - Other(explain)		
	Piping Release De	etection Comments:	Not reported		
	Spill Prevention M	lanholes:	NP - None Present		
	Spill Prevention M	lanhole Comments:	No		
	OverFill Preventio	n:	Not reported		
	OverFill Preventio	n Comment:	OverFill Spill: No		

		MA	P FINDINGS			
Site				Da	tabase(s)	EDR ID Number EPA ID Number
SACKS ELECTICA Comments:	AL SUPPLY	7 CO. (Continued) Not rep	ported			U004214426
SACKS ELECTRIC 711 JOHNSTON S AKRON, OH 4430	CAL SUPPL T 16	. Ү СО			FINDS	1005803395 N/A
Site 5 of 6 in clust	ter H					
FINDS:						
Registry ID:		110006221123				
	sharec facility- progra commo mainta <u>Click tl</u> additio	among the Ohio EPA -based, general in natu- mmatic systems while on facility-related data. ined in programmatic on his hyperlink while view nal FINDS: detail in the	environmental programs. The ure, and used to support specifi simultaneously maintaining an Specific programmatic details databases. ving on your computer to access e EDR Site Report.	information is c inventory of are s		
SACKS ELECTRIC 711 JOHNSON ST AKRON, OH	2			OH R	GA LUST	S114786522 N/A
Site 6 of 6 in clust	er H					
RGA LUST:	1999 1998 1997 1996 1995 1994	SACKS ELECTRIC SACKS ELECTRIC SACKS ELECTRIC SACKS ELECTRIC SACKS ELECTRIC SACKS ELECTRIC	711 JOHNSON ST 711 JOHNSON ST 711 JOHNSON ST 711 JOHNSON ST 711 JOHNSON ST 711 JOHNSON ST			
502 HAMMEL STR 502 HAMMEL STR AKRON, OH	REET REET			US	HIST CDL	1010311366 N/A
US HIST CDL: Seizure Date		2007-05-16				

Map ID Direction					
Distance Elevation	Site		Database(s)	EDR ID Number EPA ID Number	
43 North < 1/8 0.036 mi. 192 ft.	VERIZON WIRELESS - DOWNTOWN AKRON CENTRAL 565 WILSON ST AKRON, OH 44311	-	FINDS	1015793667 N/A	
Relative: Higher	FINDS:				
Actual:	Registry ID: 110046558391				
1089 ft.	9 ft. Environmental Interest/Information System The OH-CORE (Ohio - Core) database contains information commonly shared among the Ohio EPA environmental programs. The information is facility-based, general in nature, and used to support specific programmatic systems while simultaneously maintaining an inventory of common facility-related data. Specific programmatic details are maintained in programmatic databases.				
	<u>Click this hyperlink</u> while viewing c additional FINDS: detail in the EDI	on your computer to access R Site Report.			
44 West < 1/8 0.037 mi. 194 ft.	SHEIK CLEANERS 398 E SOUTH ST AKRON, OH		EDR Hist Cleaner	1009150850 N/A	
Relative:	EDR Hist Cleaner				
Actual: 1037 ft.	Year: Name: 1961 SHEIK CLEANERS	Type: DRY CLEANERS			
45 West < 1/8 0.040 mi. 210 ft.	773 KLING ST 773 KLING ST AKRON, OH		US HIST CDL	1009626230 N/A	
Relative: Lower	US HIST CDL: Seizure Date: 2005-03-01				
Actual: 1042 ft. J46 North < 1/8 0.040 mi.	ROYAL SERVICE STATION 643 JOHNSTON ST AKRON, OH		EDR Hist Auto	1009029374 N/A	
213 ft.	Site 1 of 3 in cluster J				
Relative: Higher Actual: 1082 ft.	Year: Name: 1930 ROYAL SERVICE STATION 1935 GREDICEK STEPHEN 1940 SABO A T	Type: AUTOMOBILE FILLING S AUTOMOBILE SERVICE AUTOMOBILE SERVICE	STATIONS STATIONS STATIONS		

Map ID Direction				MAP FIND	NDINGS			
Distance Elevation	Site					Da	tabase(s)	EDR ID Number EPA ID Number
I47 WNW < 1/8	W & M MOT 686 BROW AKRON, OH	OR SERVICE N				EDR	Hist Auto	1009030076 N/A
213 ft.	Site 2 of 2 in	n cluster I						
Relative: Lower	EDR Hist	Auto						
Actual: 1042 ft.	Year: 1951	Name: W & M MOTOR	SERVICE		Type: AUTOMOBILE REPAIRII	NG		
48 South < 1/8 0.044 mi. 231 ft.	677 CORICE 677 CORICE AKRON, OH	E ST E ST					US CDL	1009626201 N/A
Relative: Higher	US CDL: Seizure	e Date:	11/07/2004					
Actual: 1107 ft. J49 North < 1/8 0.050 mi.	NIVENS L C 635 JOHNS AKRON, OH	STON ST				EDR His	t Cleaner	1009215727 N/A
266 ft.	Site 2 of 3 in	n cluster J						
Relative: Higher	EDR Hist	Cleaner						
Actual: 1082 ft.	Year: 1946	Name: NIVENS L C			Type: CLOTHES PRESSERS,	CLEANERS	AND REPA	AIRERS
K50 East < 1/8 0.051 mi.	GOOD DRY 131 HUDS AKRON, OH	CLEANERS ON RD				EDR His	t Cleaner	1009152881 N/A
267 ft.	Site 1 of 3 in	n cluster K						
Relative: Higher	EDR Hist	Cleaner						
Actual: 1155 ft.	Year: 1951	Name: GOOD DRY CL	EANERS		Type: DRY CLEANERS			
K51 East < 1/8 0.051 mi.	KOONS W ( 203 HUDS) AKRON, OH	; ON DRIVE EXT				EDR	Hist Auto	1009032132 N/A
267 ft.	Site 2 of 3 in	n cluster K						
Relative: Higher	EDR Hist	Auto			Type:			
Actual: 1155 ft.	1935 1940 1946	LITTLE W M KOONS W C GERBER C F			AUTOMOBILE REPAIRI AUTOMOBILE REPAIRI AUTOMOBILE SERVICE	NG NG STATIONS	i	

Map ID Direction		MAP FINE	DINGS			
Distance Elevation	Site			Database(s)	EDR ID Number EPA ID Number	
K52 East < 1/8 0.051 mi. 267 ft.	MC HENRY E M 475 HUDSON DRIVE EXT AKRON, OH Site 3 of 3 in cluster K			EDR Hist Auto	1009032039 N/A	
Relative: Higher	EDR Hist Auto					
Actual: 1155 ft.	Year: Name: 1935 FLEMING C E 1940 MC HENRY E I	М	I ype: AUTOMOBILE SERVICE S AUTOMOBILE SERVICE S	TATIONS TATIONS		
53 South < 1/8 0.052 mi. 276 ft.	D & W REPAIR 681 LOVERS LANE AKRON, OH 44306			EDR Hist Auto	1021207576 N/A	
Relative: Higher	EDR Hist Auto					
Actual: 1111 ft.	Year: Name: 1977 D & W REPAIR	ł	Type: Not reported			
L54 SW < 1/8 0.053 mi.	HANSON J G 580 LAFOLLETTE ST AKRON, OH			EDR Hist Auto	1009030817 N/A	
Relative:	EDR Hist Auto					
Actual: 1074 ft.	Year: Name: 1935 HANSON J G		Type: AUTOMOBILE REPAIRING			
J55 NNW < 1/8 0.061 mi.	W BUCKEYE CLEANERS 623 JOHNSTON ST AKRON, OH			EDR Hist Cleaner	1009150803 N/A	
322 ft.	Site 3 of 3 in cluster J					
Relative: Higher	EDR Hist Cleaner					
Actual: 1081 ft.	Year: Name: 1961 W BUCKEYE C	LEANERS	Type: DRY CLEANERS			
L56 SW < 1/8 0.063 mi	ALCON TOOL CO 574 LAFOLLETTE ST AKRON, OH 44311			RCRA-SQG FINDS ECHO	1000337961 OHT400012159	
332 ft.	Site 2 of 2 in cluster L					
Relative: Higher Actual: 1070 ft	RCRA-SQG: Date form received by a Facility name: Facility address:	agency: 07/10/1980 ALCON TOOL CO 574 LAFOLLETTE ST				

\_\_\_\_
Database(s)

EDR ID Number EPA ID Number

1000337961

ALCON TOOL CO (Continued)	
	AKRON, OH 44311
EPA ID:	OHT400012159
Mailing address:	587 BAIRD ST
	AKRON, OH 44311
Contact:	L CONNER
Contact address:	587 BAIRD ST
	AKRON, OH 44311
Contact country:	US
Contact telephone:	(216) 773-9171
EDA Bogion:	
Classification:	00 Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous
Description.	waste during any calendar month and accumulates less than 6000 kg of
	hazardous waste at any time: or generates 100 kg or less of hazardous
	waste during any calendar month, and accumulates more than 1000 kg of
	hazardous waste at any time
Owner/Operator Summary:	
Owner/operator name:	NAME NOT REPORTED
Owner/operator address:	ADDRESS NOT REPORTED
	CITY NOT REPORTED, AK 99998
Owner/operator country:	Not reported
Owner/operator telephone:	(312) 555-1212
Legal status:	Private
Owner/Operator Type:	Uperator Net reported
Owner/Op and date:	Not reported
owner/op end date.	Notreported
Owner/operator name:	NAME NOT REPORTED
Owner/operator address:	ADDRESS NOT REPORTED
	CITY NOT REPORTED, AK 99998
Owner/operator country:	Not reported
Owner/operator telephone:	(312) 555-1212 Drivete
Dwper/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported
Handler Activities Summary:	
U.S. importer of hazardous wa	ste: No
Mixed waste (haz. and radioad	tive): No
Recycler of hazardous waste:	No
Transporter of hazardous was	e: No
Treater, storer or disposer of H	IW: No
Underground injection activity:	No
On-site burner exemption:	NO
Furnace exemption:	
Used oil processor:	
Used on processor:	No
Used oil fuel marketer to burne	ar: No
Used oil Specification markete	r: No
Used oil transfer facility:	No
Used oil transporter:	No

Database(s) EPA

	ALCON TOOL CO (C	ontinued)					1000337961
	. Waste code: . Waste name:		U228 ETHENE,	TRICHLORO	)- (OR) TRICHLOROETHYLEN	E	
	Violation Status:		No violatio	ons found			
	FINDS:						
	Registry ID:		11000474	1138			
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		Click this h additional	<u>vyperlink</u> whi FINDS: deta	ile viewing or iil in the EDR	your computer to access Site Report.		
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M57 WNW < 1/8 0.070 mi.	CHAPEL HILL TOWING & AUTO SVC EDR Hist Auto 652 SPICER ST AKRON, OH 44311						1021810607 N/A
370 ft.	Site 1 of 2 in cluster I	VI					
Relative: Lower Actual: 1029 ft.	Year: Name: 1986 CHAPEL 1987 CHAPEL 1988 CHAPEL	. HILL TOWI . HILL TOWI . HILL TOWI	ING & AUTC ING & AUTC ING & AUTC	) SVC ) SVC ) SVC	Type: Automotive Services, NEC Automotive Services, NEC Automotive Services, NEC		
N58 SW < 1/8 0.071 mi.	MAIN YARD 601 E CROSIER AKRON, OH					OH RGA LUST	S114774572 N/A
376 ft.	Site 1 of 5 in cluster 1	N					
Relative: Higher	RGA LUST:	1999 M/		601 E CRO	SIER		
Actual: 1069 ft.		1998 M/ 1997 M/	AIN YARD	601 E CRO	SIER		

Map ID Direction Distance Elevation Site MAP FINDINGS

Database(s) EPA

N	AIN YARD (Continu	ued)				S1147745
		1996	MAIN YARD	601 E CROSIER		
		1995 1994	MAIN YARD MAIN YARD	601 E CROSIER 601 E CROSIER		
5 6 4	SUMMIT COUNTY EN 501 E CROSIER ST AKRON, OH 44311	IGINEE	RS		OH LUST OH UST OH ARCHIVE UST	U0008960 N/A
S	Site 2 of 5 in cluster I	N				
	LUST:					
	Release Number	: 77000 09/07/	829-N00001 1989			
	Facility Status:	Inacti	ve			
	LTF Status:	1 SUS	CON from reg	ulated UST		
	FR Status:	NFA:	No Further Act	tion		
	Priority: Roview Date:	2	2016			
	Priority Decode:	SUS/0	CON from non-r	egulated UST		
	Class1 Decode:	A viab	le RP have bee	en identified		
	Class:	Viable	Responsible P	arty has been identified		
	UST:					
	Facility Id:			77000829		
	Facility Type:			Government		
	Owner Name:			SUMMIT COUNTY ENGINEERS		
	Owner City/State	/Zip:		44311		
	Tank Number:			T00001		
	Status:			CIU - Currently In Use		
	UST Capacity:			6000 Diagad		
	Tank Content:			Diesei		
	Construction			FRP-Fiberglass Reinforced Plastic		
	Date Last Used:			Not reported		
	Date TCL Closed	ł:		Not reported		
	Date Removed:			Not reported		
	CAS Number:			68334-30-5		
	Abandoned Appr	oved:		Not reported		
	Regulated: Sensitive Area			NO		
	Date Of Sensitivi	tv:		Not reported		
	UST Configuration	ons:		SW - Single Wall		
	Construction Cor	nments		Not reported		
	Corrosion Protec	tions:		NR - None Required by Rule		
	Corrosion Protec	tion Coi	nments:	Not reported		
	Secondary Release	se Dete	action.	ATG - Automatic Tank Gauging		
	Release Detection	on Comr	nents:	Not reported		
	Piping Configura	tion:		SC - Secondarily Contained		
	Piping Configura	tion Cor	nments:	Not reported		
	Piping Styles:			S - Suction		
	Piping Construct	ions:	mente	HKP - Fiberglass Reinforced Plastic		
	Piping Construct	Protect	ions:	NR - None required by rule		
	Piping Corrosion	Protect	ion Comments:	Not reported		
	Piping Release D	Detection	ns:	NR- None Required by rule		

Database(s)

EDR ID Number EPA ID Number

#### SUMMIT COUNTY ENGINEERS (Continued)

Piping Release Detection Comments: Spill Prevention Manholes: Spill Prevention Manhole Comments: OverFill Prevention: OverFill Prevention Comment: Comments:

SS SB - Spill Containment Manhole (bucket) Not reported FILL - Fill Pipe (drop tube flapper) Not reported Not reported

Tank Number: T00002 Status: **REM - Removed** UST Capacity: 1000 Tank Content: Gasoline Installation Date: 01/01/1976 Construction: **FRP-Fiberglass Reinforced Plastic** Date Last Used: 12/01/1992 Date TCL Closed: Not reported 12/29/1992 Date Removed: CAS Number: 8006-61-9 Abandoned Approved: Not reported Regulated: YES Sensitive Area: NO Date Of Sensitivity: Not reported **UST** Configurations: Not reported Construction Comments: **Fiberglass Reinforced Plastic Corrosion Protections:** Not reported **Corrosion Protection Comments:** Not reported Primary Release Detection: AMO - Alternative Method (Other, explain) Secondary Release Detection: Not reported **Release Detection Comments:** RDTank: / RDLine: Piping Configuration: Not reported Piping Configuration Comments: Not reported Piping Styles: S - Suction **Piping Constructions:** FRP - Fiberglass Reinforced Plastic **Piping Construction Comments: Fiberglass Reinforced Plastic** OTH - Other (explain) Piping Corrosion Protections: Piping Corrosion Protection Comments: Not reported Piping Release Detections: OTH - Other(explain) Piping Release Detection Comments: Not reported Spill Prevention Manholes: NP - None Present Spill Prevention Manhole Comments: No **OverFill Prevention:** Not reported **OverFill Prevention Comment:** OverFill Spill: No Comments: Not reported

#### ARCHIVE UST:

Facility Number: Owner Name: Owner Address: Owner City,St,Zip: 77000829 SUMMIT COUNTY ENGINEERS 538 E SOUTH ST - ATTN: MAINT AKRON, OH 44311

#### Inspection:

Facility Id:77000829Permit Number:P00001Code:101Inspection Type:Final

#### U000896047

Database(s)

EDR ID Number EPA ID Number

#### SUMMIT COUNTY ENGINEERS (Continued)

Tank ID: T00001 Fiberglass Reinforced Plastic Tank Type: Tank Status: **Currently In Use** Install Date: 10/1/1989 Content: Diesel 6000 Capacity: Corrosion Protection Tank: None Required 68334-30-5 CAS #: Regulated: Yes Overfill Device Installed: Yes Spill Device Installed: Yes Release Detection On Tank: Statistical Inventory Reconciliation Not reported Date Removed: Date Last Use: Not reported Date Abandoned/Closed: Not reported AST/UST: UST None Required Corrosion Protection Piping: Fiberglass Reinforced Plastic Piping Material: Piping Type: Suction: no valve at tank Release Detection On Piping: No Monitoring Suction/Gravity System

Tank ID: T00002 Tank Type: **Fiberglass Reinforced Plastic** Tank Status: Removed 1/1/1976 Install Date: Content: Gasoline Capacity: 1000 Corrosion Protection Tank: Not reported 8006-61-9 CAS #: Regulated: Yes Overfill Device Installed: No Spill Device Installed: No Release Detection On Tank: Not reported 12/29/1992 Date Removed: 12/1/1992 Date Last Use: Date Abandoned/Closed: Not reported AST/UST: UST **Corrosion Protection Piping:** Not reported Piping Material: **Fiberglass Reinforced Plastic** Piping Type: Suction: no valve at tank Release Detection On Piping: Not reported

N60 SW < 1/8 0.071 mi.	SUMMIT COUNTY E 601 E CROSIER ST AKRON, OH	NGINEEF	RS	
376 ft.	Site 3 of 5 in cluster	Ν		
Relative: Higher	RGA LUST:	2012	SUMMIT COUNTY ENGINEERS	601 E CROSIER ST

nigner	2012	SOMMET COONTTENGINEERS	UUT E CRUSIER ST
-	2011	SUMMIT COUNTY ENGINEERS	601 E CROSIER ST
Actual:	2010	SUMMIT COUNTY ENGINEERS	601 E CROSIER ST
1069 ft.	2009	SUMMIT COUNTY ENGINEERS	601 E CROSIER ST
	2008	SUMMIT COUNTY ENGINEERS	601 E CROSIER ST
	2007	SUMMIT COUNTY ENGINEERS	601 E CROSIER ST
	2006	SUMMIT COUNTY ENGINEERS	601 E CROSIER ST
	2005	SUMMIT COUNTY ENGINEERS	601 E CROSIER ST

#### U000896047

OH RGA LUST S114791636 N/A

		MAP FIN	IDINGS		]		
Site					Da	itabase(s)	EDR ID Number EPA ID Number
							0444704000
SUMMIT CC					-		5114791636
	2004 2003 2002 2001 2000	SUMMIT COUNTY ENGIN SUMMIT COUNTY ENGIN SUMMIT COUNTY ENGIN SUMMIT COUNTY ENGIN	IEERS IEERS IEERS IEERS IEERS	601 E CROSIER S 601 E CROSIER S 601 E CROSIER S 601 E CROSIER S 601 E CROSIER S	ST ST ST ST ST		
SUMMIT CC 601 E CROS AKRON, OF	DUNT ENGINEER BIER ST I 44311	S GARAGE			EDR	Hist Auto	1021052937 N/A
Site 4 of 5 in	n cluster N						
EDR Hist	Auto						
Year: 1989	Name: SUMMIT COUN	IT ENGINEERS GARAGE	Type Gene	e: eral Automotive Rep	air Shops		
607 JOHNS 607 JOHNS AKRON, OH	TON ST TON ST I					US CDL	1012062292 N/A
US CDL: Seizur	e Date:	10/13/2004					
650 SPICER 650 SPICER AKRON, OH	ST ST					US CDL	1014864272 N/A
Site 2 of 2 in	n cluster M						
US CDL: Seizur	e Date:	12/01/2002					
BONDURAN 596 E CROS AKRON, OH	NT SERVICE & TO BIER ST I 44311	OWING			EDR	Hist Auto	1009032237 N/A
Site 5 of 5 in	n cluster N						
EDR Hist	Auto						
Year: 1969 1970 1971 1972 1972 1976	Name: BONDURANT S BONDURANT S BONDURANT S BONDURANT S BONDURANT S	SERVICE & TOWING INC SERVICE & TOWING INC SERVICE & TOWING INC TOWING & SERVICE IN SERVICE & TOWING INC	Type Gene Gene AUT Gene	eral Automotive Rep eral Automotive Rep eral Automotive Rep OMOBILE REPAIRII eral Automotive Rep OMOBILE REPAIRI	air Shops air Shops air Shops NG air Shops NG		

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	Į	MAP FINDINGS			
Site				Database(s)	EDR ID Nur
VATER MAIN YAR 665 JOHNSTON S AKRON, OH	RD CITY OF	AKRON		OH RGA LUST	S11479854 N/A
Site 1 of 7 in clust	er O				
RGALLIST					
NOA LOOT.	2008	WATER MAIN YARD CITY OF AKRON	565 JOHNS	STON STREET	
	2007	WATER MAIN YARD CITY OF AKRON	565 JOHNS	STON STREET	
	2006	WATER MAIN YARD CITY OF AKRON	565 JOHNS	STON STREET	
	2005	WATER MAIN YARD CITY OF AKRON	565 JOHNS	STON STREET	
	2004	WATER MAIN YARD CITY OF AKRON	565 JOHNS	STON STREET	
	2003	WATER MAIN YARD CITY OF AKRON	565 JOHNS	STON STREET	
	2002	WATER MAIN YARD CITY OF AKRON	565 JOHNS	STON STREET	
	2001	WATER MAIN YARD CITY OF AKRON	565 JOHNS	STON STREET	
	2000	WATER MAIN YARD CITY OF AKRON	565 JOHNS	STON STREET	
	1999	WATER MAIN YARD CITY OF AKRON	565 JOHNS	STON STREET	
	1998	WATER MAIN YARD CITY OF AKRON	565 JOHNS	STON STREET	
KRON CITY JOH	NSTON ST	DISTRIBUTN CNTR		RCRA NonGen / NLR	100033598
65 JOHNSTON S AKRON, OH 4431	Т 1			FINDS	OHD15603
Site 2 of 7 in clust					
	er O				
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RCRA NonGen / Date form rec Facility name: Facility addres EPA ID: Contact: Contact count Contact count Contact count Contact count Contact count Contact count Contact ceept Contact email EPA Region: Land type: Classification: Description: Owner/Operator	er O NLR: eived by ag ss: ess: ess: try: hone: try: or name: or address: or country: or telephon tor Type: rt date: d date: or name: or address: or country: or telephon	lency: 10/14/2011 CITY OF AKRON WATER DISTRIB 565 JOHNSTON ST AKRON, OH 443111816 OHD156034175 KATHY BROWN 565 JOHNSTON ST AKRON, OH 443111816 US Not reported Not reported 05 Municipal Non-Generator Handler: Non-Generators do not pre CITY OF AKRON 166 S HIGH ST AKRON, OH 44308 US e: (330) 375-2554 Municipal Owner Not reported Not reported Not reported AKRON CITY OF ADDRESS NOT REPORTED CITY NOT REPORTED CITY NOT REPORTED, AK 99998 Not reported e: (312) 555-1212 Municipal	JTION sently general	te hazardous waste	

Database(s)

EDR ID Number EPA ID Number

#### AKRON CITY JOHNSTON ST DISTRIBUTN CNTR (Continued)

Owner/Op start date:	Not reported
Owner/Op end date:	Not reported
Owner/operator name:	NAME NOT REPORTED
Owner/operator address:	ADDRESS NOT REPORTED
	CITY NOT REPORTED, AK 99998
Owner/operator country:	Not reported
Owner/operator telephone:	(312) 555-1212
Legal status:	Municipal
Owner/Operator Type:	Operator
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

#### Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Historical Generators:

Date form received by agency	y:02/26/1990
Site name:	AKRON CITY OF WATER DIST
Classification:	Small Quantity Generator

. Waste code: D001 . Waste name: IGNITABLE WASTE

. Waste code: F003

Waste name:THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL<br/>ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL<br/>ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT<br/>MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT<br/>NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS<br/>CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED<br/>SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR<br/>MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL<br/>BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT<br/>MIXTURES.

Violation Status: No violations found

# Evaluation Action Summary: 10/14/2011 Evaluation: 10/14/2011 Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE Area of violation: Not reported

#### 1000335989

Database(s)

Date achieved Evaluation lea	d compliance: id agency:	Not reported State	d			
FINDS:						
Registry ID:		110009635	065			
Environmenta	I Interest/Infor The OH- shared a facility-ba programm common maintaine	rmation System CORE (Ohio - C mong the Ohio ased, general in matic systems v facility-related o ed in programm	Core) database contains EPA environmental prog nature, and used to sup while simultaneously main data. Specific programma natic databases.	information commo rams. The informat port specific ntaining an invento atic details are	only cion is ry of	
	<u>Click this</u> additiona	<u>s hyperlink</u> while al FINDS: detail	e viewing on your comput in the EDR Site Report.	ter to access		
WATER MAIN YAF	D CITY OF A	AKRON			OH RGA LUST	S114798
565 JOHNSTON S AKRON, OH	TREET					N/A
565 JOHNSTON S AKRON, OH Site 3 of 7 in clust	TREET er O					N/A
565 JOHNSTON S AKRON, OH Site 3 of 7 in clust RGA LUST:	<b>TREET</b> er O 2012 V 2011 V 2010 V 2009 V	WATER MAIN Y WATER MAIN Y WATER MAIN Y WATER MAIN Y	(ARD CITY OF AKRON (ARD CITY OF AKRON (ARD CITY OF AKRON (ARD CITY OF AKRON	565 JOHNSTON 565 JOHNSTON 565 JOHNSTON 565 JOHNSTON	STREET STREET STREET STREET	N/A
565 JOHNSTON S AKRON, OH Site 3 of 7 in clust RGA LUST: WATER DEPT 565 JOHNSTON S AKRON, OH	TREET er O 2012 V 2011 V 2010 V 2009 V T (WEST EXC	WATER MAIN Y WATER MAIN Y WATER MAIN Y WATER MAIN Y CAVATION	(ARD CITY OF AKRON (ARD CITY OF AKRON (ARD CITY OF AKRON (ARD CITY OF AKRON	565 JOHNSTON 565 JOHNSTON 565 JOHNSTON 565 JOHNSTON	STREET STREET STREET STREET OH RGA LUST	N/A S114798 N/A
565 JOHNSTON S AKRON, OH Site 3 of 7 in clust RGA LUST: WATER DEPT 565 JOHNSTON S AKRON, OH Site 4 of 7 in clust	TREET er O 2012 V 2011 V 2010 V 2009 V T (WEST EXC er O	WATER MAIN Y WATER MAIN Y WATER MAIN Y WATER MAIN Y CAVATION	(ARD CITY OF AKRON (ARD CITY OF AKRON (ARD CITY OF AKRON (ARD CITY OF AKRON	565 JOHNSTON 565 JOHNSTON 565 JOHNSTON 565 JOHNSTON	STREET STREET STREET STREET OH RGA LUST	N/A S114798 N/A

Database(s)

WATER MAIN YARD ( 565 JOHNSTON STRE AKRON, OH 44311	CITY OF AKRON		OH LUST OH UST	U004239718 N/A
Site 5 of 7 in cluster 0	)			
LUST: Release Number:	77010273-N00001			
Facility Status: LTF Status: FR Status:	Inactive 1 SUS/CON from re NFA: No Further A	gulated UST ction		
Review Date: Priority Decode: Class1 Decode: Class:	2 07/09/2002 SUS/CON from non A viable RP have be Viable Responsible	-regulated UST een identified Party has been identified		
Release Number: Release Date: Facility Status: LTF Status: FR Status: Priority:	77010273-N00002 09/21/2015 Active 1 SUS/CON from re T1S: Tier 1 Source 2	gulated UST Investigation		
Review Date: Priority Decode: Class1 Decode: Class:	12/08/2015 SUS/CON from non A viable RP have be Viable Responsible	-regulated UST een identified Party has been identified		
UST:				
Facility Id: Facility Type: Owner Name: Owner Address: Owner City/State	/Zip:	77010273 Unknown Not reported Not reported Not reported		
Tank Number: Status: UST Capacity: Tank Content: Installation Date: Construction: Date Last Used: Date TCL Closed Date Removed: CAS Number: Abandoned Appro Regulated: Sensitive Area: Date Of Sensitivit UST Configuratio Construction Con Corrosion Protect Corrosion Protect Primary Release Secondary Relea Release Detectio Piping Configurati	: y: ns: nments: tions: tion Comments: Detection: se Detection: n Comments: ion:	T00001 REM - Removed 5000 Diesel 01/01/1900 Not reported Not		
	WATER MAIN YARD ( 565 JOHNSTON STRE AKRON, OH 44311 Site 5 of 7 in cluster ( LUST: Release Number: Release Date: Facility Status: LTF Status: Priority: Review Date: Priority Decode: Class1 Decode: Class1 Decode: Class1 Decode: Class1 Decode: Class1 Decode: Class1 Decode: Class1 Decode: Class1 Decode: Class1 Decode: Class1 Decode: Class1 Decode: Class2 WST: Facility Status: FR Status: FR Status: Owner Name: Owner Address: Owner City/State Tank Number: Status: UST Capacity: Tank Content: Installation Date: Construction: Date Last Used: Date TCL Closed Date Removed: CAS Number: Abandoned Appro Regulated: Sensitive Area: Date Of Sensitiviti UST Configuratio Construction Con Corrosion Protect Corrosion Protect Corrosion Protect Primary Release Secondary Relea Release Detectio Piping Configurati	WATER MAIN YARD CITY OF AKRON 565 JOHNSTON STREET AKRON, OH 44311 Site 5 of 7 in cluster O LUST: Release Number: 77010273-N00001 Release Date: 10/17/1989 Facility Status: Inactive LTF Status: 1 SUS/CON from re FR Status: NFA: No Further A Priority: 2 Review Date: 07/09/2002 Priority Decode: SUS/CON from non Class1 Decode: A viable RP have be Class: Viable Responsible Release Number: 77010273-N00002 Release Date: 09/21/2015 Facility Status: Active LTF Status: 1 SUS/CON from re FR Status: T1S: Tier 1 Source Priority: 2 Review Date: 12/08/2015 Priority Decode: SUS/CON from non Class1 Decode: A viable RP have be Class: Viable Responsible UST: Facility Id: Facility Id: Facility Type: Owner Name: Owner Address: Owner City/State/Zip: Tank Number: Status: UST Capacity: Tank Content: Installation Date: Construction: Date Last Used: Date TCL Closed: Date Removed: CAS Number: Abandoned Approved: Regulated: Sensitive Area: Date Of Sensitivity: UST Configurations: Corrosion Protection Comments: Corrosion Protection: Secondary Release Detection: Secondary Release Detection: Release Detection Comments: Primary Release Detection: Release Detection: Release Detection: Release Detection: Release Detection: Secondary Release Detection: Release Removed: Release Removed: Release Removed: Release Removed:	WATER MAIN YARD CITY OF AKRON 565 JOINSTON STREET AKRON, OH 44311         Site 5 of 7 in cluster 0         LUST:         Release Number: 77010273-N00001         Release Date:       10/17/1989         Facility Status:       In SUS/CON from regulated UST         FR Status:       NFA: No Further Action         Priority Decode:       SUS/CON from non-regulated UST         Class:       OT/09/2002         Priority Decode:       SUS/CON from non-regulated UST         Class:       Viable RP have been identified         Class:       Viable RP have been identified         Class:       OT/0273-N00002         Release Number:       77010273-N00002         Release Number:       TOS: Tore 1 Source Investigation         Priority Decode:       SUS/CON from non-regulated UST         Class:       TIS: Tier 1 Source Investigation         Priority Decode:       SUS/CON from non-regulated UST         Class:       Viable RP have been identified         Class:       Viable RP have been identified         Class:       Viable RP have been identified         Class:       Not reported         Owner Address:       Not reported         Owner Address:       Not reported         Owner Address:       Not reported <td>WATER MAIN YARD CITY OF AKRON 565 JOHNSTON STREET AKRON, OH 44311       OH LUST OF UST         Site 5 of 7 in cluster O       LUST: Release Number: 77010273-N00001 Release Date: 10/17/1989         Facility Status: In SUSCOM from regulated UST FR Status: 1 SUSCOM from regulated UST FR Status: 1 SUSCOM from non-regulated UST Class 1 Decode: SUS(COM from non-regulated UST Class 1 Decode: SUS(COM from non-regulated UST Class 1 Decode: SUS(COM from non-regulated UST Class 1 Decode: SUS(COM from non-regulated UST Class: Wiable Responsible Party has been identified Class: Address: Not reported Owner Address: Not reported Owner Address: Not reported Date ICI, Closed: Not reported Date Last Used: Not reported Date Last Used: Not reported Date Class: Not reported Date Class: Not reported Date Class: Not reported Date Class: Not reported Date Class: Not reported Date Class: Not reported Date Class: Not reported Construction: Not reported Construction Comments: Not reported Construction Comments: Not reported Construction Comments: Not reported Construction Comments: Not reported Primacy Release Detection: Not reported Primacy Release Detection: Not reported Primaconfiguration: Not reported Primacy Release Det</td>	WATER MAIN YARD CITY OF AKRON 565 JOHNSTON STREET AKRON, OH 44311       OH LUST OF UST         Site 5 of 7 in cluster O       LUST: Release Number: 77010273-N00001 Release Date: 10/17/1989         Facility Status: In SUSCOM from regulated UST FR Status: 1 SUSCOM from regulated UST FR Status: 1 SUSCOM from non-regulated UST Class 1 Decode: SUS(COM from non-regulated UST Class 1 Decode: SUS(COM from non-regulated UST Class 1 Decode: SUS(COM from non-regulated UST Class 1 Decode: SUS(COM from non-regulated UST Class: Wiable Responsible Party has been identified Class: Address: Not reported Owner Address: Not reported Owner Address: Not reported Date ICI, Closed: Not reported Date Last Used: Not reported Date Last Used: Not reported Date Class: Not reported Date Class: Not reported Date Class: Not reported Date Class: Not reported Date Class: Not reported Date Class: Not reported Date Class: Not reported Construction: Not reported Construction Comments: Not reported Construction Comments: Not reported Construction Comments: Not reported Construction Comments: Not reported Primacy Release Detection: Not reported Primacy Release Detection: Not reported Primaconfiguration: Not reported Primacy Release Det

Database(s)

EDR ID Number EPA ID Number

## WATER MAIN YARD CITY OF AKRON (Continued)

Piping Styles:	Not reported
Piping Constructions:	Not reported
Piping Construction Comments:	Not reported
Piping Corrosion Protections:	Not reported
Piping Corrosion Protection Comments:	Not reported
Piping Release Detections:	Not reported
Piping Release Detection Comments:	Not reported
Spill Prevention Manholes:	Not reported
Spill Prevention Manhole Comments:	Not reported
OverFill Prevention:	Not reported
OverFill Prevention Comment:	Not reported
Comments:	ORPHAN TANKS

T00002
REM - Removed
6000
Unknown
01/01/1900
Not reported
Not reported
Not reported
Not reported
Not reported
Not reported
YES
NO
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#### U004239718

lap ID			MAP FIN	IDINGS			
istance levation	Site				Database(s)	EDR ID Number EPA ID Number	
70 W 1/8 .085 mi. 50 ft.	CITY OF AKRON WATE 565 JOHNSTON ST AKRON, OH 44311 Site 6 of 7 in cluster O		N		FINDS ECHO	1015976495 N/A	
elative:	FINDS:						
ower	Registry ID:	11004	6262174				
υ53 π.	Environmental Interest/Information System RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.						
	( 2	Lick this hyperlink additional FINDS: o	while viewing o detail in the EDF	n your computer to access R Site Report.			
	ECHO: Envid: Registry ID: DFR URL:		1015976495 1100462621 http://echo.e	74 pa.gov/detailed-facility-repor	t?fid=110046262174		
′1 V I/8 085 mi.	WATER DEPT 565 JOHNSTON ST (WE AKRON, OH	EST EXCA			OH RGA LUST	S114798531 N/A	
0 ft.	Site 7 of 7 in cluster O						
lative: wer	RGA LUST:	994 WATER D	EPT 565 JOH	INSTON ST (WEST EXCA			
tual: 53 ft.							
2 IE 1/8	ROYAL CLEANERS 754 JOHNSTON ST AKRON, OH				EDR Hist Cleaner	1009215691 N/A	
?7 ft.	Site 1 of 5 in cluster P						
lative: gher	EDR Hist Cleaner						
tual: 19 ft.	Year: Name: 1940 ROYAL CL	EANERS		Type: CLOTHES PRESSERS, (	CLEANERS AND REP	AIRERS	

) on			MAP FINDINGS				
ce on	Site				Database(s)	EDR ID Number EPA ID Number	
mi.	OHIO MATE 565 LAFOL AKRON, OH	ERIALS HANDLIN LETTE ST 1 44311	IG INC		EDR Hist Auto	1021829561 N/A	
	Site 1 of 2 in	n cluster Q					
/e:	EDR Hist	Auto					
: t.	Year: 2012 2013 2014	Name: OHIO MATERIA OHIO MATERIA OHIO MATERIA	LS HANDLING INC LS HANDLING INC LS HANDLING INC	Type: Engine Repair Engine Repair Engine Repair			
mi.	ALCON TO 587 BAIRD AKRON, OF	OL ST 1 44311			RCRA-SQG OH SPILLS FINDS ECHO	1000337957 OHD004468260	
	Site 1 of 2 i	n cluster R					
e:	RCRA-SO Date fo	QG: orm received by a	gency: 03/01/2010				
:	Facility Facility EPA II Contac Contac Contac Contac EPA R Land ty Classif Descri	y name: y address: D: ct: ct address: ct country: ct telephone: ct telephone: ct email: region: ype: fication: ption:	ALCON TOOL 587 BAIRD ST AKRON, OH 443 OHD004468260 JOHN RANKIN 587 BAIRD ST AKRON, OH 443 US (330) 773-9171 JRANKIN@ALCO 05 Private Small Small Quar Handler: generate waste during any hazardous waste waste during any	11 11 DNTOOL.COM ntity Generator es more than 100 and less than calendar month and accumulate at any time; or generates 100 kg calendar month, and accumulat	1000 kg of hazardous as less than 6000 kg of g or less of hazardous es more than 1000 kg of	f	
	Owner/O Owner Owner Owner Legal s Owner Owner Owner	perator Summary. /operator name: /operator address /operator country /operator telepho status: /Operator Type: /Op start date: /Op end date:	NAME NOT REP ADDRESS NOT I CITY NOT REPC Not reported ne: (312) 555-1212 Private Operator Not reported Not reported AL CON TOOI	ORTED REPORTED JRTED, AK 99998			
	Owner Owner Legal s Owner Owner	/operator address /operator country /operator telepho status: /Operator Type: /Op start date:	Not reported AK US Not reported Private Operator Not reported				

Database(s)

EDR ID Number EPA ID Number

1000337957

#### ALCON TOOL (Continued)

Owner/Op end date:	Not reported
Owner/operator name:	ALCON TOOL
Owner/operator address:	Not reported
	Not reported
Owner/operator country:	llS
Owner/operator telephone:	Not reported
l enal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op and date:	Not reported
Owner/Op end date.	Not reported
Owner/operator name:	NAME NOT REPORTED
Owner/operator address:	ADDRESS NOT REPORTED
	CITY NOT REPORTED. AK 99998
Owner/operator country:	Not reported
Owner/operator telephone:	(312) 555-1212
l enal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op start date:	Not reported
Owner/Op end date.	Not reported
Handler Activities Summary:	and the
U.S. importer of hazardous w	aste: No
Mixed waste (haz. and radioa	ictive): No
Recycler of hazardous waste	NO
Transporter of hazardous was	ste: No
Treater, storer or disposer of	HW: No
Underground injection activity	r: No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burn	ier: No
Used oil Specification market	er: No
Used oil transfer facility:	No
Used oil transporter:	No
. Waste code:	D005
. Waste name:	BARIUM
Historical Generators:	
Date form received by agency	y: 03/18/1994
Site name:	ALCON TOOL COMPANY
Classification:	Large Quantity Generator
Date form received by agency	y:06/28/1993
Site name:	ALCON TOOL CO
Classification:	Small Quantity Generator
	5010
. vvaste code:	
. Waste name:	QUENCHING BATH RESIDUES FROM OIL BATHS FROM METAL HEAT TREATING
	OPERATIONS IN WHICH CYANIDES ARE USED IN THE PROCESS.
	5014
. waste code:	FULL

EDR ID Number Database(s) EPA ID Number

ALCON TOOL (Continued)	1000337957
. Waste name:	SPENT CYANIDE SOLUTIONS FROM SLAT BATH POT CLEANING FROM METAL HEAT TREATING OPERATIONS.
. Waste code: . Waste name:	U228 ETHENE, TRICHLORO- (OR) TRICHLOROETHYLENE
Date form received by agency	<i>r</i> :02/11/1992
Site name:	ALCON TOOL COMPANY
Classification:	Large Quantity Generator
Facility Has Received Notices of	Violations:
Regulation violated:	Not reported
Area of violation:	TSD IS-Preparedness and Prevention
Date violation determined:	03/10/2010
Date achieved compliance:	04/21/2010
Violation lead agency:	State
Enforcement action:	WRITTEN INFORMAL
Enforcement action date:	03/19/2010
Enf. disposition status:	Not reported
Enfit disp. status date.	State
Proposed penalty amount:	Sidle Not reported
Final penalty amount:	Not reported
Paid penalty amount:	Not reported
Regulation violated:	Not reported
Area of violation:	Generators - Pre-transport
Date violation determined:	03/10/2010
Date achieved compliance:	03/10/2010
Violation lead agency:	State
Enforcement action:	WRITTEN INFORMAL
Enforcement action date:	03/19/2010
Enf. disposition status:	Not reported
Enf. disp. status date:	Not reported
Enforcement lead agency:	State Net reported
Final populty amount:	Not reported
Paid penalty amount:	Not reported
Population violated:	Netroported
Area of violation:	Universal Waste - Small Quantity Handlers
Date violation determined:	03/10/2010
Date achieved compliance:	04/21/2010
Violation lead agency:	State
Enforcement action:	WRITTEN INFORMAL
Enforcement action date:	03/19/2010
Enf. disposition status:	Not reported
Enf. disp. status date:	Not reported
Enforcement lead agency:	State
Proposed penalty amount:	Not reported
Final penalty amount: Paid penalty amount:	Not reported Not reported
Regulation violated	Not reported
Area of violation	TSD IS-Container Use and Management
Date violation determined:	03/10/2010
Date achieved compliance:	04/21/2010

Database(s)

EDR ID Number EPA ID Number

1000337957

#### (C . tin <u>م</u> ALCO

LCON TOOL (Continued)		
Violation lead agency: Enforcement action: Enforcement action da Enf. disposition status Enf. disp. status date: Enforcement lead age Proposed penalty amount: Paid penalty amount:	ate: s: ency: ount:	State WRITTEN INFORMAL 03/19/2010 Not reported Not reported State Not reported Not reported Not reported
Evaluation Action Summary Evaluation date: Evaluation: Area of violation: Date achieved complian Evaluation lead agency:	y: ce:	03/10/2010 COMPLIANCE EVALUATION INSPECTION ON-SITE TSD IS-Preparedness and Prevention 04/21/2010 State
Evaluation date: Evaluation: Area of violation: Date achieved complian Evaluation lead agency:	ce:	03/10/2010 COMPLIANCE EVALUATION INSPECTION ON-SITE Generators - Pre-transport 03/10/2010 State
Evaluation date: Evaluation: Area of violation: Date achieved compliance: Evaluation lead agency:		03/10/2010 COMPLIANCE EVALUATION INSPECTION ON-SITE Universal Waste - Small Quantity Handlers 04/21/2010 State
Evaluation date: Evaluation: Area of violation: Date achieved complian Evaluation lead agency:	ce:	03/10/2010 COMPLIANCE EVALUATION INSPECTION ON-SITE TSD IS-Container Use and Management 04/21/2010 State
Evaluation date: Evaluation: Area of violation: Date achieved complian Evaluation lead agency:	ce:	10/21/1997 COMPLIANCE EVALUATION INSPECTION ON-SITE Not reported Not reported State
SPILLS: Spill No.: Spill Number: Spill Month/Year: Date Spill Reported: Reporter Name: Confidential: District Code: Employee Number: District C Decode: Product Spilled Name: Lat/Long:	9308- 3469 8/199 08/18 COMI No NE Not re Not re North TRICI Not re	77-3469 3 /1993 PANY eported East HLOROETHYLENE eported

#### FINDS:

Registry ID:

110004596606

EDR ID Number Database(s) EPA ID Number

	ALCON TOOL (Continued)								
	Enviro	nmental In	terest/Information System RCRAInfo is a national inform Conservation and Recovery A events and activities related to and treat, store, or dispose of program staff to track the notif corrective action activities req The OH-CORE (Ohio - Core) shared among the Ohio EPA of	iem al information system that supports the Resource ecovery Act (RCRA) program through the tracking of related to facilities that generate, transport, spose of hazardous waste. RCRAInfo allows RCRA (the notification, permit, compliance, and vities required under RCRA.					
			facility-based, general in natur programmatic systems while s common facility-related data. maintained in programmatic d						
			Click this hyperlink while view additional FINDS: detail in the	ing on your computer to acc EDR Site Report.	ess				
	ECHO: Envid: Registi DFR U	ry ID: IRL:	100033 110004 http://ec	7957 596606 :ho.epa.gov/detailed-facility-	report?fid=110004596606				
S75 West < 1/8 0.103 mi.	FRIGIDAIRE 353 E SOU AKRON, OH	E QUICK ( JTH ST I	CLEAN CENTER		EDR Hist Cleaner	1009149496 N/A			
543 ft.	Site 1 of 4 in	n cluster \$	5						
Relative: Lower	EDR Hist	Cleaner		Timei					
Actual: 1033 ft.	1967 1972 1976	FRIGIDA HELPE S	IRE QUICK CLEAN CENTER SELFE LAUNDRY SELFE LAUNDRY	LAUNDRIES - SELF LAUNDRIES - SELF LAUNDRIES-SELF	SERVICE SERVICE SERVICE				
P76 NNE < 1/8 0.104 mi.	ROYAL CLE 756 JOHNS AKRON, OH	EANERS & SON ST I	A TAILORS		EDR Hist Cleaner	1009149746 N/A			
549 ft.	Site 2 of 5 in	n cluster I	2						
Relative: Higher	EDR Hist	Cleaner		_					
Actual: 1119 ft.	Year: 1951	Name: ROYAL	CLEANERS & TAILORS	Type: DRY CLEANERS					

		МАР	FINDINGS		
Site				Database(s)	EDR ID Nu EPA ID Nu
ANN S DRY 792 BROW AKRON, OH	CLEANING /N 1			EDR Hist Cleaner	100915010 N/A
Site 1 of 3 i	n cluster T				
EDR Hist	Cleaner				
			-		
Year: 1946 1951	Name: ANN S DRY ( ANN S DRY (	CLEANING	Type: CLOTHES PRESSERS, ( DRY CLEANERS	CLEANERS AND REP	AIRERS
755 JOHNS 755 JOHNS AKRON, OF	TON ST TON ST I			US HIST CDL	100962626 N/A
Site 3 of 5 in	n cluster P				
US HIST Seizur	CDL: e Date:	2006-03-17			
SHOEMAKE 758 JOHN AKRON, OF Site 4 of 5 in	ER A F STON ST I n cluster P			EDR Hist Auto	100899042 N/A
EDK HIST	Auto				
Year: 1925 1930 1935 1935 1940 1940	Name: SHOEMAKEF JOHNSTON S TANNER E W SANDERSON MYERS & HR GEESAMAN I	R A F ST GARAGE SERVICE I J W UBIK R M	Type: AUTOMOBILE OILS AND AUTOMOBILE REPAIRIN AUTOMOBILE REPAIRIN AUTOMOBILE SERVICE AUTOMOBILE REPAIRIN AUTOMOBILE SERVICE	9 GASOLINE IG IG STATIONS IG STATIONS	
ARCHBISH 400 ELBON AKRON, OF	OP HABAN HIC AVE 1 44306	GH SCHOOL		OH LUST OH UST	U0042144 N/A
Site 1 of 6 in	n cluster II				
LUST: Releas Releas Facilit LTF St FR Sta Priority Review Priority Class1 Class:	se Number: 770 se Date: Not y Status: Inac atus: 6 C atus: NF/ /: 3 v Date: 12/0 / Decode: SUS Decode: A vi Vial	04152-N00001 reported ctive losure of regulated UST A: No Further Action 06/2000 S/CON from AST able RP have been identifie ble Responsible Party has b	d een identified		

Database(s)

EDR ID Number EPA ID Number

#### ARCHBISHOP HABAN HIGH SCHOOL (Continued)

Facility Id:	77004152
Facility Type:	Commercial
Owner Name:	Not reported
Owner Address:	Not reported
Owner City/State/Zip:	Not reported
Tank Number:	T00001
Status:	REM - Removed
UST Capacity:	1000
Tank Content:	Gasoline
Installation Date:	07/01/1954
Construction:	Other
Date Last Used:	09/29/1997
Date TCL Closed:	Not reported
Date Removed:	09/29/1997
CAS Number:	8006-61-9
Abandoned Approved:	Not reported
Regulated:	YES
Sensitive Area:	NO
Date Of Sensitivity:	Not reported
UST Configurations:	Not reported
Construction Comments:	Other
Corrosion Protections:	Not reported
Corrosion Protection Comments:	Not reported
Primary Release Detection:	AMO - Alternative Method (Other, explain)
Secondary Release Detection:	Not reported
Release Detection Comments:	RDTank: / RDLine:
Piping Configuration:	Not reported
Piping Configuration Comments:	Not reported
Piping Styles:	S - Suction
Piping Constructions:	OTH - Other (explain)
Piping Construction Comments:	Unknown
Piping Corrosion Protections:	OTH - Other (explain)
Piping Corrosion Protection Comments:	Not reported
Piping Release Detections:	OTH - Other(explain)
Piping Release Detection Comments:	Not reported
Spill Prevention Manholes:	NP - None Present
Spill Prevention Manhole Comments:	No
OverFill Prevention:	Not reported
OverFill Prevention Comment:	OverFill Spill: No
Comments:	Not reported

U81 East < 1/8 0.115 mi. 609 ft.	ARCHBISHOP HOBA 400 ELBON AVE AKRON, OH Site 2 of 6 in cluster 1		OH RGA LUST	S114746271 N/A		
Relative: Higher	RGA LUST:	1999		400 ELBON AVE		
Actual:		1990	ARCHDISHOF HUBAN HIGH SCHOOL	400 ELBON AVE		

1171 ft.

U004214406

Database(s)

U82 East < 1/8 0.115 mi. 609 ft.	ARCHBISHOP HOBAN HIGH SCHOO 400 ELBON AKRON, OH 44306 Site 3 of 6 in cluster U	DL	US AIRS FINDS ECHO	1016129285 N/A
Relative: Higher Actual: 1171 ft.	US AIRS MINOR: Envid: Region Code: Programmatic ID: Facility Registry ID: D and B Number: Primary SIC Code: NAICS Code: Default Air Classification Code: Facility Type of Ownership Code: Air CMS Category Code: HPV Status:	1016129285 05 AIR OH0000001677010041 110064589770 Not reported Not reported 611110 MIN Not reported Not reported Not reported Not reported Not reported		
	FINDS:			
	Registry ID: 11	0009635047		
Environmental Interest/Informa RCRAInfo is Conservatio events and a and treat, ste program sta corrective ac The OH-CO shared amon facility-base programmat common fac maintained i		n System national information system that supports the Resource and Recovery Act (RCRA) program through the tracking of ivities related to facilities that generate, transport, e, or dispose of hazardous waste. RCRAInfo allows RCRA o track the notification, permit, compliance, and on activities required under RCRA. (Ohio - Core) database contains information commonly the Ohio EPA environmental programs. The information is general in nature, and used to support specific systems while simultaneously maintaining an inventory of y-related data. Specific programmatic details are programmatic databases.		
	Registry ID: 11	0064589770		
	Environmental Interest/Informatio AIR MINOR	n System		
	Click this hyper additional FIND	<u>tlink</u> while viewing on your computer to access DS: detail in the EDR Site Report.		
	ECHO: Envid: Registry ID: DFR URL: Envid: Registry ID:	1016129285 110064589770 http://echo.epa.gov/detailed-facility-report?fid=11006 1016129285 110009635047	64589770	
	DFR URL:	http://echo.epa.gov/detailed-facility-report?fid=11000	9635047	

Database(s) EPA

U83 East < 1/8 0.115 mi.	HOBIN HIGH SCHOOL 400 ELBON AVENUE AKRON, OH 44306		RCRA NonGen / NLR	1001203275 OHR000024679
609 ft.	Site 4 of 6 in cluster U			
Relative: Higher Actual: 1171 ft.	RCRA NonGen / NLR: Date form received by agency Facility name: Facility address: EPA ID: Mailing address: Contact: Contact address: Contact country:	: 07/20/2006 HOBIN HIGH SCHOOL 400 ELBON AVENUE AKRON, OH 44306 OHR000024679 1 HOLY CROSS BLVD AKRON, OH 44306 KENNETH HADERS 1 HOLY CROSS BLVD AKRON, OH 44306 US		
	Contact telephone:	(330) 773-6658		
	Contact email:	HADERSK@HOBAN.ORG		
	EPA Region:	05		
	Classification:	Non-Generator Handler: Non Concrators do not presently gener	ata bazardaus wasta	
	Description.	Tander. Non-Generators do hot presently gener	ale nazaruous wasie	
	Owner/Operator Summary: Owner/operator name: Owner/operator address: Owner/operator country: Owner/operator telephone: Legal status: Owner/Operator Type: Owner/Op start date: Owner/Op end date: Handler Activities Summary: U.S. importer of hazardous wa	BROTHERS OF HOLY CROSS 400 ELBON AVENUE AKRON, OH 44306 Not reported (330) 773-0541 Private Owner Not reported Not reported Not reported		
	Mixed waste (haz. and radioa	ctive): No		
	Recycler of hazardous waste: Transporter of hazardous wass Treater, storer or disposer of I Underground injection activity On-site burner exemption: Furnace exemption: Used oil fuel burner: Used oil fuel burner: Used oil processor: User oil refiner: Used oil fuel marketer to burn Used oil Specification marketer Used oil transfer facility: Used oil transporter:	No HW: No : No No No No No Per: No No No No No No No No No No		
	Historical Generators: Date form received by agency Site name: Classification:	: 08/18/1997 HOBIN HIGH SCHOOL Large Quantity Generator		
	. Waste code:	D001		

Database(s)

HOBIN HIGH SCHOOL (Conti	nued) 1001203275	
. Waste name:	IGNITABLE WASTE	
. Waste code: . Waste name:	D002 CORROSIVE WASTE	
. Waste code: . Waste name:	D007 CHROMIUM	
. Waste code: . Waste name:	D008 LEAD	
. Waste code: . Waste name:	D009 MERCURY	
. Waste code: . Waste name:	F001 THE FOLLOWING SPENT HALOGENATED SOLVENTS USED IN DEGREASING: TETRACHLOROETHYLENE, TRICHLORETHYLENE, METHYLENE CHLORIDE, 1,1,1-TRICHLOROETHANE, CARBON TETRACHLORIDE AND CHLORINATED FLUOROCARBONS; ALL SPENT SOLVENT MIXTURES/BLENDS USED IN DEGREASING CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LI IN F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.	3 ISTED
. Waste code: . Waste name:	F002 THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2, TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFOI USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F004, ANI F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AN SPENT SOLVENT MIXTURES.	RE <u>:</u> D
. Waste code: . Waste name:	F003 THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHY ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVEN MIXTURES.	Ί
. Waste code: . Waste name:	F004 THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: CRESOLS, CRESYLIC ACI AND NITROBENZENE; AND THE STILL BOTTOMS FROM THE RECOVERY OF THESE SOLVENTS; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AN SPENT SOLVENT MIXTURES.	D, 4 Ξ 1D
. Waste code:	F005	

		MAP FINDINGS				
Site	Ц			] Da	tabase(s)	EDR ID Number EPA ID Number
HOBIN HIGH SCHOOL	Continu	ed)				1001203275
. Waste name:		THE FOLLOWING SPENT NONHAL KETONE, CARBON DISULFIDE, ISC 2-ETHOXYETHANOL, AND 2-NITRC CONTAINING, BEFORE USE, A TOT ONE OR MORE OF THE ABOVE NC LISTED IN F001, F002, OR F004; AN THESE SPENT SOLVENTS AND SP	OGENATED DBUTANOL, I DPROPANE; TAL OF TEN DNHALOGEN ID STILL BO PENT SOLVE	SOLVENTS PYRIDINE, E ALL SPENT PERCENT ( IATED SOLV TTOMS FRO NT MIXTUR	TOLUENE BENZENE, SOLVENT OR MORE (ENTS OR OM THE RE ES.	E, METHYL ETHYL MIXTURES/BLENDS (BY VOLUME) OF THOSE SOLVENTS ECOVERY OF
Violation Status:		No violations found				
ARCHBISHOP HABAN H 400 ELBON AVE AKRON, OH	IGH SC	IOOL		OH R	GA LUST	S114746270 N/A
Site 5 of 6 in cluster U						
RGA LUST: 2 2	12 AI 11 AI	CHBISHOP HABAN HIGH SCHOOL	400 ELBON 400 ELBON	I AVE I AVE		
24	10 AI	CHBISHOP HABAN HIGH SCHOOL	400 ELBON			
21	09 AI 08 AI	CHBISHOP HABAN HIGH SCHOOL	400 ELBON 400 ELBON	I AVE		
24	07 AI	CHBISHOP HABAN HIGH SCHOOL	400 ELBON	AVE		
20 2 <sup>.</sup>	06 AI 05 AI	CHBISHOP HABAN HIGH SCHOOL	400 ELBON 400 ELBON	IAVE IAVE		
2	04 AI	CHBISHOP HABAN HIGH SCHOOL	400 ELBON	AVE		
20	03 AI	CHBISHOP HABAN HIGH SCHOOL	400 ELBON			
2	02 AI 01 AI	CHBISHOP HABAN HIGH SCHOOL	400 ELBON	AVE AVE		
2	00 AI	CHBISHOP HABAN HIGH SCHOOL	400 ELBON	I AVE		
ARCHBISHOP HABAN H 400 ELBON AVE AKRON, OH 44306	IGH SC	IOOL		OH ARCH	IVE UST	U004084309 N/A
Site 6 of 6 in cluster U						
ARCHIVE UST: Facility Number: Owner Name:		77004152 ARCHBISHOP HOBAN HIGH SCHO	OL			
Owner Address: Owner City,St,Zip:		400 ELBON AVE AKRON, OH 44306				
Permit: Facility Id: 7' Permit Id: P Permit Status: E Issued Date: 4, LFD Permit Id: N	004152 00001 pired 22/1999 ot report	ed				
Facility Id: 7 Permit Id: P Permit Status: E Issued Date: 4, LFD Permit Id: N	004152 00002 pired 22/1999 ot report	ed				
Inspection: Facility Id: 7	004152					

Database(s)

EDR ID Number EPA ID Number

#### **ARCHBISHOP HABAN HIGH SCHOOL (Continued)**

Permit Number: P00002 Code: 103 Inspection Type: Final

Facility Id:77004152Permit Number:P00002Code:103Inspection Type:Final

Tank ID:	T00001
Tank Type:	Other
Tank Status:	Removed
Install Date:	7/1/1954
Content:	Gasoline
Capacity:	1000
Corrosion Protection Tank:	Not reported
CAS #:	8006-61-9
Regulated:	Yes
Overfill Device Installed:	No
Spill Device Installed:	No
Release Detection On Tank:	Not reported
Date Removed:	9/29/1997
Date Last Use:	9/29/1997
Date Abandoned/Closed:	Not reported
AST/UST:	UST
Corrosion Protection Piping:	Not reported
Piping Material:	Unknown
Piping Type:	Suction: valve at tank
Release Detection On Piping:	Not reported

## Q86OHIO MATERIALS HANDLING INCSW568 E CROSIER ST< 1/8</td>AKRON, OH 44311

Site 2 of 2 in	n cluster Q
EDR Hist	Auto
Year:	Name:
1975	<b>BRENNAN INDUSTRIAL TRUCK CO*</b>
1976	<b>BRENNAN INDUSTRIAL TRUCK CO*</b>
1977	<b>BRENNAN INDUSTRIAL TRUCK CO*</b>
1978	<b>BRENNAN INDUSTRIAL TRUCK CO*</b>
1979	YALE INDUSTRIAL TRK NE OH
1979	<b>BRENNAN INDUSTRIAL TRUCK CO*</b>
1980	YALE INDUSTRIAL TRK NE OH
1980	<b>BRENNAN INDUSTRIAL TRUCK CO*</b>
1982	<b>BRENNAN INDUSTRIAL TRUCK CO*</b>
	Site 2 of 2 in EDR Hist 1975 1976 1977 1978 1979 1979 1980 1980 1980 1982

TRIAL TRUCK CO\* L TRK NE OH TRIAL TRUCK CO\* TRIAL TRUCK CO\* 1982 YALE INDUSTRIAL TRK NE OH 1983 **BRENNAN INDUSTRIAL TRUCK CO\*** 1983 OHIO MATERIALS HANDLING INC 1985 OHIO MATERIALS HANDLING INC 1986 OHIO MATERIALS HANDLING INC 1987 OHIO MATERIALS HANDLING INC 1988 OHIO MATERIALS HANDLING INC 1989 OHIO MATERIALS HANDLING INC

1990 OHIO MATERIALS HANDLING INC

#### Type:

General Automotive Repair Shops General Automotive Repair Shops General Automotive Repair Shops General Automotive Repair Shops General Automotive Repair Shops General Automotive Repair Shops General Automotive Repair Shops General Automotive Repair Shops General Automotive Repair Shops General Automotive Repair Shops General Automotive Repair Shops General Automotive Repair Shops General Automotive Repair Shops General Automotive Repair Shops General Automotive Repair Shops General Automotive Repair Shops Engine Repair Engine Repair

#### U004084309

EDR Hist Auto 1021024658

N/A

Map ID		М	AP FINDINGS		
Direction Distance Elevation	Site	۹		Database(s	EDR ID Number s) EPA ID Number
		RIALS HANDLING INC (Continued)			1021024658
	1991	OHIO MATERIALS HANDLING INC	Engine Repair		
	1992	OHIO MATERIALS HANDLING INC	Engine Repair		
	1993	OHIO MATERIALS HANDLING INC	Engine Repair		
	1994	OHIO MATERIALS HANDLING INC	Engine Repair		
	1995	OHIO MATERIALS HANDLING INC	Engine Repair		
	1996		Engine Repair		
	1997	OHIO MATERIALS HANDLING INC	Engine Repair		
	1990	OHIO MATERIALS HANDLING INC	Engine Repair		
	2000	OHIO MATERIALS HANDLING INC	Engine Repair		
	2001	OHIO MATERIALS HANDLING INC	Engine Repair		
	2002	OHIO MATERIALS HANDLING INC	Engine Repair		
	2003	OHIO MATERIALS HANDLING INC	Engine Repair		
	2004	OHIO MATERIALS HANDLING INC	Engine Repair		
	2005	OHIO MATERIALS HANDLING INC	Engine Repair		
	2006	OHIO MATERIALS HANDLING INC	Engine Repair		
	2007	OHIO MATERIALS HANDLING INC	Engine Repair		
	2008	OHIO MATERIALS HANDLING INC	Engine Repair		
	2009	OHIO MATERIALS HANDLING INC	Engine Repair		
	2010		Engine Repair		
	2011		Ligino Kopan		
P87	TANNER E	w		EDR Hist Au	to 1009030611
NE	450 GRIDL	.EY ST			N/A
< 1/8	AKRON, OH	1			
0.117 mi.					
619 ft.	Site 5 of 5 i	n cluster P			
Relative:	EDR Hist	Auto			
Higher					
	Year:	Name:	Туре:		
Actual:	1925	TANNER E W			
111911.	1930	BAER G C	AUTOMOBILE REPAIRIN	lG	
		A OTDEET			101000001
88	588 BERIH	A SIREEI		05 CL	N/A
1/8-1/4	SUMMIT O				N/A
0.126 mi.	0000000,00				
665 ft.					
Relative: Higher	Seizur	e Date: 10/23/2008			
Actual: 1129 ft.					
V89	GREISER M	IRS F M		EDR Hist Clean	er 1009148851
NNE	769 JOHN	STON ST			N/A
1/8-1/4	AKRON, OF	1			
0.126 mi.					
665 ft.	Site 1 of 3 i	n cluster V			
Relative:	EDR Hist	Cleaner		EDR Hist Auto 1009030611 N/A US CDL 1012062834 N/A US CDL 1012062834 N/A	
Higher					
-	Year:	Name:	Туре:		
Actual:	1930	ROYAL CLEANERS	DRY CLEANING		
1 1 <b>22</b> îî.	1940	GREISER MRS F M	CLOTHES PRESSERS, (	LEANERS AND R	PAIRERS

	MA	AP FINDINGS		
Site			Database(s)	EDR ID Number EPA ID Number
RANKIN J W 813 SUMNER ST AKRON, OH			EDR Hist Auto	1009116988 N/A
Site 1 of 3 in cluster W				
EDR Hist Auto				
Year: Name: 1940 RANKIN J W		Type: AUTOMOBILE RADIATOR	REPAIRING	
MILT S SOHIO 805 BROWN AKRON, OH			EDR Hist Auto	1009033143 N/A
Site 2 of 3 in cluster T				
EDR Hist Auto				
Year: Name: 1967 MILT S SOHI	0	Type: AUTOMOBILE SERVICE S	STATIONS	
JOHNSON R P 550 BAIRD AKRON, OH			EDR Hist Auto	1009029125 N/A
Site 2 of 2 in cluster R				
EDR Hist Auto				
Year: Name: 1961 JOHNSON R	Ρ	Type: AUTOMOBILE REPAIRING	3	
775 JOHNSTON STREET 775 JOHNSTON STREET AKRON, OH			US CDL	1010311368 N/A
Site 2 of 3 in cluster V				
US CDL: Seizure Date:	05/26/2007			
SERVICE AUTO & MACHII 817 SUMNER ST AKRON, OH	NE CO		EDR Hist Auto	1009030608 N/A
Site 2 of 3 in cluster W				
EDR Hist Auto				
Year: Name: 1920 SERVICE AU 1925 SUMNER GA 1930 SUMNER GA 1935 WILKINSON (	TO & MACHINE CO RAGE RAGE C W	Type: AUTOMOBILE REPAIRING AUTO REPAIR AUTOMOBILE REPAIRING AUTOMOBILE REPAIRING	3	

	MAP F	INDINGS	
Site		Database(s)	EDR ID Num EPA ID Numl
			4000000000
SERVICE A			1009030608
1940	RANKIN AUTO RADIATOR SERVICE		
1961	ELSEG AUTO RADIATOR SERVICE	AUTOMOBILE RADIATOR REPAIRING	
ENGINE DC	OCTOR INC	EDR Hist Auto	1021657125
806 BROW	N ST		N/A
AKRON, OF	1 44311		
Site 3 of 3 i	n cluster T		
EDR Hist	Auto		
Year:	Name:	Туре:	
1986	A-1 AUTOMOTIVE & RADIATOR SV	General Automotive Repair Shops	
1987	A-1 AUTOMOTIVE & RADIATOR SV	General Automotive Repair Shops	
1991	S&A GARAGE	General Automotive Repair Shops	
1992	S&A GARAGE	General Automotive Repair Shops	
1993		General Automotive Repair Shops	
1990	ENGINE DOCTOR INC	General Automotive Repair Shops	
2000	ENGINE DOCTOR INC	General Automotive Repair Shops	
YFF SING		FDR Hist Cleaner	1009149428
611 STAN	TON AVE		N/A
AKRON, OH	1		
Site 1 of 2 i	n cluster X		
EDR Hist	Cleaner		
Year:	Name:	Туре:	
1925	YEE SING	LAUNDRIES	
1935	WONG YEE	LAUNDRIES CHINESE	
			1000028836
819 SUMN	ER ST		N/A
AKRON, OF	1		•
Site 3 of 3 i	n cluster W		
EDR Hist	Auto		
Year:	Name:	Туре:	
4000	BOVEY JE	AUTOMOBILE REPAIRING	

D		MAP	FINDINGS	3S		
nce	Site			Database(s)	EDR ID Number EPA ID Number	
/4 0 mi. t.	GEORGE BODY & T 511-601 E CROSIER AKRON, OH 44311	RAILER CO INC		EDR Hist Auto	1020572067 N/A	
ive: er	EDR Hist Auto					
	Year: Name: 1969 GEOR( 1970 GEOR(	GE BODY & TRAILER CO INC GE BODY & TRAILER CO INC	Type: Truck And Bus Bodies Truck And Bus Bodies			
	SOUTH STREET LA 340 E SOUTH ST AKRON, OH	UNDROMAT		EDR Hist Cleaner	1009150701 N/A	
	Site 2 of 4 in cluster	S				
	Vear: Name:					
	1976 SOUTH	I STREET LAUNDROMAT	LAUNDRIES-SELF SER	/ICE		
	FOREMAN R W 340 E SOUTH ST AKRON, OH			EDR Hist Auto	1009031123 N/A	
	Site 3 of 4 in cluster	S				
	EDR Hist Auto					
	Year: Name: 1940 FOREN	IAN R W	Type: AUTOMOBILE SERVICE	STATIONS		
	KORY W E 338 E SOUTH ST AKRON, OH			EDR Hist Auto	1009031864 N/A	
	Site 4 of 4 in cluster	S				
	EDR Hist Auto					
	Year: Name: 1935 KORY	WE	Type: AUTOMOBILE REPAIRIN	١G		
	W MANTON C J RE/ 614 SPICER AKRON, OH	AR		EDR Hist Auto	1009031290 N/A	
	Site 1 of 2 in cluster	Y				
	EDR Hist Auto					
	Year: Name: 1951 W MAN	ITON C J REAR	Type: AUTOMOBILE REPAIRIN	١G		

				MAP FIN	NDINGS			
n 9 	Site					Da	tabase(s)	EPA ID Number
1	INMAN CLE 503 INMAN AKRON, OH	ANERS I ST I				EDR His	st Cleaner	1009150114 N/A
;	Site 1 of 3 i	n cluster Z						
:	EDR Hist	Cleaner						
	Year: 1951	Name: BETTY CLEAI	NERS		Type: DRY CLEANERS			
1	BUDOFF IR 556 BEACO AKRON, OH	ON & METAL ( N ST I 44311	:0				FINDS	1006215325 N/A
	Site 1 of 5 in	n cluster AA						
	FINDS:							
	Registi	ry ID:	11000963	4761				
		prog com main Clici addi	grammatic systems imon facility-related ntained in program <u>k this hyperlink</u> whi itional FINDS: deta	in nature, a while simu data. Spec matic datab ile viewing c ail in the ED	Itaneously maintaining an i cific programmatic details a ases. on your computer to access R Site Report.	nventory of re		
	HYBUD EQU 556 BEACO AKRON, OH Site 2 of 5 it	JIPMENT COR N ST I 44311	P				FINDS	1000332403 N/A
	FINDS:							
	Registi	ry ID:	11000460	10076				
	Enviro	nmental Interest The shai facil prog com main	/Information Syste OH-CORE (Ohio - red among the Ohi ity-based, general grammatic systems mon facility-related ntained in program	m · Core) data o EPA envir in nature, a s while simu d data. Spea matic datab	base contains information ronmental programs. The in nd used to support specific ltaneously maintaining an i cific programmatic details a ases.	commonly nformation is nventory of re		
		Clic	<u>k this hyperlink</u> whi itional FINDS: deta	ile viewing c ail in the ED'	on your computer to access R Site Report.	5		

ID tion			MA	P FINDINGS		
stance evation	Site		Database(s)	EDR ID Number EPA ID Number		
6 h /4	AUTO EXCI 620 STANT AKRON, OF	ITER LLC ON AVE † 44301			EDR Hist Auto	1020285978 N/A
rmı. <sup>E</sup> t.	Site 2 of 2 i	n cluster X				
tive: er	LDIA HISI	Auto				
-	Year:	Name:		Туре:		
	2002 2003	AUTO EXCITER AUTO EXCITER	R LLC R LLC	General Automotive Repa General Automotive Repa	iir Shops iir Shops	
t mi.	G & M MOT 714 SUMN AKRON, OH	ORS IER ST 1			EDR Hist Auto	1009030874 N/A
/e:	EDR Hist	Auto				
	Year:	Name:		Type:		
	1920	A B & W GARA	GE	AUTOMOBILE REPAIRIN	IG	
	1930	NEISWONGER	WP	AUTOMOBILE REPAIRIN	IG	
	1935	PARKER HARC	DLD	AUTOMOBILE REPAIRIN	IG	
	1946	G & M MOTOR	5	AUTOMOBILE REPAIRIN	IG	
	1969	AKRON IGNITI	ON & REPAIR	Automotive Repair Shops	, NEC	
	1970	AKRON IGNITIO	ON & REPAIR	Automotive Repair Shops	, NEC	
	1971			Automotive Repair Shops	, NEC	
	1972			Automotive Repair Shops	, NEC	
	1973		ON & REPAIR	Automotive Repair Shops	NEC	
	1975	AKRON IGNITI	ON & REPAIR	Automotive Repair Shops	NEC	
	1976	AKRON IGNITI	ON & REPAIR	Automotive Repair Shops	, NEC	
	1977	AKRON IGNITI	ON & REPAIR	Automotive Repair Shops	, NEC	
	1978	AKRON IGNITI	ON & REPAIR	Automotive Repair Shops	, NEC	
	1979	AKRON IGNITI	ON & REPAIR	Automotive Repair Shops	, NEC	
	1980	AKRON IGNITI	ON & REPAIR	Automotive Repair Shops	, NEC	
	1982	AKRON IGNITIO	UN & REPAIR INC	General Automotive Repa	ar Shops	
	1983			General Automotive Repa	nr Shops	
	1900		N & REPAIR INC	General Automotive Repa	ni Shops nir Shops	
	1900			General Automotive Repa	ni Shops nir Shops	
	1988	AKRON IGNITI	ON & REPAIR INC	General Automotive Repa	air Shops	
	1989	AKRON IGNITI	ON & REPAIR INC	General Automotive Repa	ir Shops	
	1990	AKRON IGNITI	ON & REPAIR INC	General Automotive Repa	ir Shops	
	1991	AKRON IGNITI	ON & REPAIR INC	General Automotive Repa	ir Shops	
	1992	AKRON IGNITI	ON & REPAIR INC	General Automotive Repa	ir Shops	
	1993	AKRON IGNITI	ON & REPAIR INC	General Automotive Repa	ir Shops	
	1994	AKRON IGNITI	ON & REPAIR INC	General Automotive Repa	ir Shops	
	1995	AKRON IGNITI	ON & REPAIR INC	General Automotive Repa	ir Shops	
	1996			General Automotive Repa	ar Shops	
	1997			General Automotive Repa	ar Shops	
	1998			General Automotive Repa	nr Shops	
	1999			General Automotive Repa	ni Shops	
	2000				ur Shope	
	2001 2002			General Automotive Popo	air Shons	
	2002			General Automotive Repa		

F

		IDINGS		
Site		Database(s)	EDR ID Nu EPA ID Nu	
STONEYS F 541 KIPLIN AKRON, OF	RADIATOR SERVICE G ST † 44311	EDR Hist Auto	102073953 N/A	
Site 1 of 7 i	n cluster AB			
EDR Hist	Auto			
		_		
Year: 1977 1978 1979	Name: STONEYS RADIATOR SERVICE STONEYS RADIATOR SERVICE STONEYS RADIATOR SERVICE	Type: Automotive Repair Shops, NEC Automotive Repair Shops, NEC Automotive Repair Shops, NEC		
WORDEN D 547 MCKIN	) I NLEY AVE	EDR Hist Auto	10091149 N/A	
AKKON, OF	1			
EDR Hist	Auto			
Year:	Name:	Туре:		
1957		MOTORCYCLE SALES AND SERVICE		
1901	HYATT JIM	General Automotive Repair Shops		
1992	HYATT JIM	General Automotive Repair Shops		
SUPERIOR 793 JOHN AKRON, OH	BATTERY & ELECTRIC SERVICE STON ST I	EDR Hist Auto	10089903 N/A	
Site 3 of 3 i	n cluster V			
EDR Hist	Auto			
Year:	Name:	Туре:		
1920				
1925 1930	SUPERIOR BATTERY AND SERVICE	AUTOMOBILE VILS AND GASULINE		
1935	HUBER H J	AUTOMOBILE SERVICE STATIONS		
1940	SUPERIOR BATTERY & ELECTRIC SER	AUTOMOBILE SERVICE STATIONS		
1946	SUPERIOR BATTERY & ELECTRIC SER	AUTOMOBILE REPAIRING		
1961				
1907		General Automotive Repair Shops		
1979	HED ENTERPRISES	General Automotive Repair Shops		
1980	HED ENTERPRISES	General Automotive Repair Shops		
1982	HED ENTERPRISES	General Automotive Repair Shops		
1983		General Automotive Repair Shops		
1985	HED ENTERPRISES	General Automotive Repair Shops		
1987	HED ENTERPRISES	General Automotive Repair Shops		
1988	HED ENTERPRISES	General Automotive Repair Shops		
2002	MOYERS MICHAEL AUTO REPAIR	General Automotive Repair Shops		
2003	MOYERS MICHAEL AUTO REPAIR	General Automotive Repair Shops		
2004	WOTERS WIGHAEL AUTO REPAIR	General Automotive Repair Shops		

Database(s) DR Hist Auto	EDR ID Num EPA ID Numl 1009029414 N/A
DR Hist Auto s  DR Hist Auto	1009029414 N/A
s  DR Hist Auto	
s —— DR Hist Auto	
s  DR Hist Auto	
s  DR Hist Auto	
DR Hist Auto	
	1020958195 N/A
Shops	
Shops Shops	
Shops	
US CDL	1009626234 N/A
DR Hist Auto	1020739557 N/A
S	
s	
	DR Hist Auto

Map ID Direction			MAP FINDINGS			
Distance Elevation	Site					EDR ID Number EPA ID Number
	MOORES A	UTOBODY (Con	tinued)			1020739557
	2010 2011 2012 2013 2014	S & H AUTO AN S & H AUTO AN S & H AUTO AN S & H AUTO AN S & H AUTO AN	ID TRUCK REPAIR ID TRUCK REPAIR ID TRUCK REPAIR ID TRUCK REPAIR ID TRUCK REPAIR	General Automotive Repa General Automotive Repa General Automotive Repa General Automotive Repa General Automotive Repa	air Shops air Shops air Shops air Shops air Shops	
AB115 SW 1/8-1/4 0.173 mi.	B & B CLEA 883 BROW AKRON, OH	ANERS /N 1			EDR Hist Cleaner	1009149818 N/A
915 ft.	Site 3 of 7 in	n cluster AB				
Relative: Higher	EDR Hist	Cleaner				
Actual: 1072 ft.	Year: 1976	Name: B & B CLEANE	RS	Type: DRY CLEANERS		
AA116 North 1/8-1/4 0.179 mi.	WASTE MA 551 BEACO AKRON, OH	NAGEMENT OF IN ST I 44306	OHIO SERVICE GARAGE		RCRA-CESQG FINDS	1004763334 OH0000567537
946 ft.	Site 4 of 5 in	n cluster AA				
Relative:	RCRA-CE Date fo	ESQG: prm received by a	gency: 09/13/2011			
	Facility	/ name: / oddrooo:	MILESTONE SERVI	CES CORP		
1016 ft.	гасшу	address.	AKRON, OH 44311			
	EPA II Contad	D: ct:	OH0000567537 ED STANLEY			
	Contac	ct address:	551 BEACON ST			
	Contac	ct country:	US (000) 074 0000			
	Contac	ct telephone: ct email:	ED@MILESTONESE	ERVICESCORP.COM		
	EPA R Land t	legion: vpe:	05 Private			
	Classif	fication:	Conditionally Exemp	t Small Quantity Generator	aste ner calendar	
	Desch	puon.	month, and accumula	ates 1000 kg or less of hazard	lous waste at any time;	
			or generates 1 kg or month, and accumula	ates at any time: 1 kg or less of	of acutely hazardous	
			waste; or 100 kg or le other debris resulting	ess of any residue or contamir I from the cleanup of a spill, in	nated soil, waste or to or on any	
			land or water, of acut of any residue or con	tely hazardous waste; or gene taminated soil, waste or other	rates 100 kg or less debris resulting	
			from the cleanup of a	a spill, into or on any land or w	ater, of acutely	
			time: 1 kg or less of a	acutely hazardous waste; or 1	00 kg or less of	
			the cleanup of a spill	, into or on any land or water,	of acutely	
	0	norotor Ourses	1102010003 WOSIE			

Owner/Operator Summary: Owner/operator name: Owner/operator address:

BUDOFF IRON AND METAL CO 556 BEACON ST

Database(s)

EDR ID Number EPA ID Number

ASTE MANAGEMENT OF OHI	O SERVICE GARAGE (Continued)	1004763334
Owner/operator country:	AKRON, OH 44306 Not reported	
Owner/operator telephone:	(216) 374-1088	
Legal status:	Private	
Owner/Operator Type:	Owner	
Owner/Op start date:	Not reported	
Owner/Op end date:	Not reported	
Handler Activities Summary:		
U.S. importer of hazardous	waste: No	
Mixed waste (haz. and radio	active): No	
Recycler of hazardous wast	e: No	
Transporter of hazardous wa	aste: No	
Treater, storer or disposer o	f HW: No	
Underground injection activi	ty: No	
On-site burner exemption:	No	
Furnace exemption:	No	
Used oil fuel burner:	No	
Used oil processor:	No	
User oil refiner:	No	
Used oil fuel marketer to bui	mer: No	
Used oil Specification marke	eter: No	
Used oil transfer facility:	No	
Used oil transporter:	No	
. Waste code:	D001	
. Waste name:	IGNITABLE WASTE	
. Waste code:	F003	
. Waste name:	THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: X	YLENE, ACETONE, ETHYL
	ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBU	TYL KETONE, N-BUTYL
	ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT	SOLVENT
	MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE	ABOVE SPENT
	NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT	MIXTURES/BLENDS
	CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE	NONHALOGENATED
	SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY	VOLUME) OF ONE OR
	MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AN	ID F005; AND STILL
	BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVE	NTS AND SPENT SOLVENT
	MIXTURES.	
. Waste code:	F005	
. Waste name:	THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: TO	OLUENE, METHYL ETHYL
	KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BEN	NZENE,
	2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SC	LVENT MIXTURES/BLENDS
	CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR	MORE (BY VOLUME) OF
	ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVEN	ITS OR THOSE SOLVENTS
	LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM	THE RECOVERY OF
	THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES	
Date form received by agen	nr: 00/27/2006	
Site name:	MILESTONE SERVICES CORP	
Classification:	Small Quantity Generator	
บเองจากเปลาปา.		
. Waste code:	D001	

. Waste name: IGNITABLE WASTE

Map ID Direction		MAP FINDINGS				
Distance Elevation	Site		Database(s)	EDR ID Number EPA ID Number		
	WASTE MANAGEMENT OF OHIO SERVICE GARAGE (Continued) 1004763334					
	. Waste code: . Waste name:	D035 METHYL ETHYL KETONE				
	. Waste code: . Waste name:	code:F003name:THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, I ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUT ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATEI SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OF MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOL MIXTURES.e code:F005 THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: TOLUENE, METHYL E KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/ CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS OR THOSE SOL LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS OR THOSE SOL UNTHE SEDENT SOLVENTS AND SPENT SOLVENTS OR THOSE SOL UNTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME 				
	. Waste code: . Waste name:					
	Date form received by a Site name: Classification:	ency: 08/11/1994 WASTE MANAGEMENT OF OHIO SERVICE GAF Conditionally Exempt Small Quantity Generator	RAGE			
	. Waste code: . Waste name:	D001 IGNITABLE WASTE				
	. Waste code: . Waste name:	D039 TETRACHLOROETHYLENE				
	Violation Status:	No violations found				
	Evaluation Action Summary Evaluation date: Evaluation: Area of violation: Date achieved compliand Evaluation lead agency:	r: 09/13/2011 COMPLIANCE EVALUATION INSPECTION ON-S Not reported ce: Not reported State	SITE			
	FINDS:					
	Registry ID:	110004575816				
	Environmental Interest/Ir The O shared facility progra comm mainta	terest/Information System The OH-CORE (Ohio - Core) database contains information commonly shared among the Ohio EPA environmental programs. The information is facility-based, general in nature, and used to support specific programmatic systems while simultaneously maintaining an inventory of common facility-related data. Specific programmatic details are maintained in programmatic databases.				

Map ID Direction	MAP FINDINGS						
Distance Elevation	Site				Data	abase(s)	EDR ID Number EPA ID Number
	WASTE MANAGEME	NT OF OHIO SERVIC	CE GARAGE(Cor	ntinued)			1004763334
	<u>Click this hyperlink</u> while viewing on your computer to access additional FINDS: detail in the EDR Site Report.						
AA117 North 1/8-1/4 0 179 mi	MILESTONE SERVIC 551 BEACON ST AKRON, OH 44311	ES CORP				FINDS ECHO	1014905245 N/A
946 ft.	Site 5 of 5 in cluster	AA					
Relative:	FINDS:						
Lower	Registry ID:	110044	4305533				
1016 ft.	Environmental Interest/Information System RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA. <u>Click this hyperlink</u> while viewing on your computer to access						
		additional FINDS: d	tional FINDS: detail in the EDR Site Report.				
	ECHO: Envid: Registry ID: DFR URL:		1014905245 110044305533 http://echo.epa.c	gov/detailed-facility-report	:?fid=110044	305533	
AC118 SE 1/8-1/4 0.184 mi. 972 ft.	STEEN F W 795 BAIRD ST AKRON, OH Site 1 of 4 in cluster (	AC			EDR H	list Auto	1009031115 N/A
Relative:	EDR Hist Auto						
Higher Actual: 1109 ft.	Year: Name: 1930 STEEN I 1935 STEEN I	F W F W		Type: AUTOMOBILE FILLING S AUTOMOBILE SERVICE	STATIONS STATIONS		
	1940 BUTCHE	ER R D	/	AUTOMOBILE SERVICE	STATIONS		
119 SW 1/8-1/4 0.189 mi. 1000 ft.	ANTON J A 870 BROWN AKRON, OH				EDR H	list Auto	1009031081 N/A
Relative:	EDR Hist Auto						
Actual: 1070 ft.	Year: Name: 1935 THORN <sup>-</sup>	TON,	ר א	Type: AUTOMOBILE SERVICE	STATIONS		
Database(s)

EDR ID Number EPA ID Number

1009031081

# ANTON J A (Continued)

1940	ANTON J A	AUTOMOBILE SERVICE STATIONS
1946	MURAWSKI JOSEPH	AUTOMOBILE SERVICE STATIONS
1957	SPEEDWAY AMOCO SERVICE	AUTOMOBILE SERVICE STATIONS
1961	SPEEDWAY AMOCO SERVICE	AUTOMOBILE SERVICE STATIONS
1967	SPEEDWAY MARATHON SERVICE	AUTOMOBILE SERVICE STATIONS
1969	SPEEDWAY MARATHON SERVICE	Gasoline Service Stations
1970	SPEEDWAY MARATHON SERVICE	Gasoline Service Stations
1971	SPEEDWAY MARATHON SERVICE	Gasoline Service Stations
1972	SPEEDWAY MARATHON SERVICE	AUTOMOBILE SERVICE STATIONS
1972	SPEEDWAY MARATHON SERVICE	Gasoline Service Stations
1973	SPEEDWAY MARATHON SERVICE	Gasoline Service Stations
1974	SPEEDWAY MARATHON SERVICE	Gasoline Service Stations
1975	SPEEDWAY MARATHON SERVICE	Gasoline Service Stations
1978	ECONOMY MUFFLER	Automotive Repair Shops, NEC
1979	ECONOMY MUFFLER	Automotive Repair Shops, NEC
1980	ECONOMY MUFFLER	Automotive Repair Shops, NEC
1982	ECONOMY MUFFLER	Automotive Repair Shops, NEC
1983	ECONOMY MUFFLER	Automotive Repair Shops, NEC
1985	ECONOMY MUFFLER	Automotive Repair Shops, NEC
1986	ECONOMY MUFFLER	Automotive Repair Shops, NEC
1987	ECONOMY MUFFLER	Automotive Repair Shops, NEC
1988	ECONOMY MUFFLER	Automotive Repair Shops, NEC
2005	BROWNTREE AUTO CARE	General Automotive Repair Shops
2006	BROWNTREE AUTO CARE	General Automotive Repair Shops
2007	BROWNTREE AUTO CARE	General Automotive Repair Shops
2008	BROWNTREE AUTO CARE	General Automotive Repair Shops

AD120 SSW 1/8-1/4 0 192 mi	BARAN T F 935 BROW AKRON, OH	/N 1	EDR Hist Auto	1009029471 N/A
1015 ft.	Site 1 of 4 i	n cluster AD		
Relative: Higher	EDR Hist	Auto		
U	Year:	Name:	Туре:	
Actual:	1940	WILLIAMS B T	AUTOMOBILE SERVICE STATIONS	
1081 ft.	1946	BARAN T F	AUTOMOBILE SERVICE STATIONS	

Z121 NE 1/8-1/4 0 193 mi	475 INMAN STREET 475 INMAN STREET AKRON, OH		
1020 ft.	Site 3 of 3 in cluster Z		
Relative: Higher	US CDL: Seizure Date:	11/17/2008	
Astual			

Actual: 1117 ft.

US CDL 1012062125 N/A

ם ר				INGS		
ection			L			
tance vation	Site				Database(s)	EDR ID Number EPA ID Number
122	B & B CLEA 884 BROW AKRON, OH	ANERS /N ł			EDR Hist Cleane	- 1009151134 N/A
94 mi. 24 ft.	Site 4 of 7 i	n cluster AB				
ative: her	EDR Hist	Cleaner				
al: ft.	Year: 1967 1972	Name: B & B CLEANE B & B CLEANE	RS RS	Type: DRY CLEANERS DRY CLEANERS		
!3 /4 ∤ mi.	B & B CLEA 880 BROW AKRON, OH	ANERS /N 1			EDR Hist Cleane	- 1009150796 N/A
t.	Site 5 of 7 i	n cluster AB				
:	EDR Hist	Cleaner				
	Year: 1957 1961	Name: B & B CLEANE B & B CLEANE	RS RS	Type: DRY CLEANERS DRY CLEANERS		
i.	MC KITRICI 807 JOHN AKRON, OH	K M L STON ST I			EDR Hist Auto	0 1009031196 N/A
:	EDR Hist	Auto				
	Year: 1940 1946 1957	Name: MC KITRICK M MC KITRICK M MC KITRICK M	L L L	Type: AUTOMOBILE SERVICE AUTOMOBILE SERVICE AUTOMOBILE SERVICE	STATIONS STATIONS STATIONS	
i.	SCHOLA EI 905 BROW AKRON, OH	_MER F /N ł			EDR Hist Auto	0 1009030866 N/A
•	Site 6 of 7 i	n cluster AB				
<b>:</b> :	EDR Hist	Auto		_		
	Year: 1940 1946 1957 1961 1972	Name: SCHOLA E F SCHOLA E F SCHOLA E F SCHOLA ELME HUTH ORAL	FR F	I ype: AUTOMOBILE SERVICE AUTOMOBILE SERVICE AUTOMOBILE SERVICE AUTOMOBILE SERVICE AUTOMOBILE SERVICE	STATIONS STATIONS STATIONS STATIONS STATIONS	

AC126			EDD Hist Cleaner	1000150002
Map ID Direction Distance Elevation	Site	MAP FINDINGS	Database(s)	EDR ID Number EPA ID Number

F

SE 1/8-1/4 0 199 mi	739 INMAN AKRON, OI	ST 1 44306		N/A
1052 ft.	Site 2 of 4 i	n cluster AC		
Relative: Higher	EDR Hist	t Cleaner		
•	Year:	Name:	Туре:	
Actual:	1951	VALET CLEANERS	DRY CLEANERS	
1110 ft.	1961	LEO S	DRY CLEANERS	
	1969	LEOS ONE HOUR VALET SERVICE	Drycleaning Plants, Except Rugs	
	1970	LEOS ONE HOUR VALET SERVICE	Drycleaning Plants, Except Rugs	
	1971	LEOS ONE HOUR VALET SERVICE	Drycleaning Plants, Except Rugs	
	1972	LEOS ONE HOUR VALET SERVICE	Drycleaning Plants, Except Rugs	
	1973	LEOS ONE HOUR VALET SERVICE*	Drycleaning Plants, Except Rugs	
	1974	LEOS ONE HOUR VALET SERVICE*	Drycleaning Plants, Except Rugs	
	1975	LEOS ONE HOUR VALET SERVICE*	Drycleaning Plants, Except Rugs	
	1976	LEOS ONE HOUR VALET SERVICE*	Drycleaning Plants, Except Rugs	
	1977	LEOS ONE HOUR VALET SERVICE*	Drycleaning Plants, Except Rugs	
AD127	BROWN ST		RCRA-CESQC	6 1000437719 6 0HD017471350
1/8-1/4 0.204 mi.	AKRON, OI	H 44311	ECHO	)
1079 ft.	Site 2 of 4 i	n cluster AD		
Relative:	RCRA-C	ESQG:		

Relative:			
Higher	Date form received by ag	gency: 06/28/2010	
-	Facility name:	BROWN STREET AUTOCRAFT	
Actual:	Facility address:	953 BROWN ST	
1081 ft.	-	AKRON, OH 44311	
	EPA ID:	OHD017471350	
	Contact:	BOB WHITE	
	Contact address:	953 BROWN ST	
		AKRON, OH 44311	
	Contact country:	US	
	Contact telephone:	(330) 724-6953	
	Contact email:	Not reported	
	EPA Region:	05	
	Land type:	Private	
	Classification:	Conditionally Exempt Small Quantity Generator	
	Description:	Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste	

Owner/Operator Summary: Owner/operator name:

NAME NOT REPORTED

Database(s)

EDR ID Number EPA ID Number

# **BROWN STREET AUTOCRAFT (Continued)**

	Owner/operator address:	ADDRESS NOT REPORTED CITY NOT REPORTED. AK 99998
	Owner/operator country:	Not reported
	Owner/operator telephone:	(312) 555-1212
	l egal status:	Private
	Owner/Operator Type:	Operator
	Owner/Op start date:	Not reported
	Owner/Op end date:	Not reported
	Owner/operator name:	WISEMAN DALLAS
	Owner/operator address:	ADDRESS NOT REPORTED
		CITY NOT REPORTED, AK 99998
	Owner/operator country:	Not reported
	Owner/operator telephone:	(312) 555-1212
	Legal status:	Private
	Owner/Operator Type:	Owner
	Owner/Op start date:	Not reported
	Owner/Op end date:	Not reported
Н	andler Activities Summary:	
	U.S. importer of hazardous wa	aste: No
	Mixed waste (haz. and radioa	ctive): No
	Recycler of hazardous waste:	No
	Transporter of hazardous was	ste: No
	Treater, storer or disposer of	HW: No
	Underground injection activity	: No
	On-site burner exemption:	No
	Furnace exemption:	No
	Used oil fuel burner:	No
	Used oil processor:	No
	User oil refiner:	No
	Used oil fuel marketer to burn	er: No
	Used oil Specification markete	er: No
	Used oil transfer facility:	No
	Used oil transporter:	No
	Waata aada:	D001
	. Waste name:	IGNITABLE WASTE
н	istorical Generators:	
	Date form received by agency	/: 12/01/1986
	Site name:	BROWN STREET AUTOCRAFT
	Classification:	Small Quantity Generator
		5004
	. Waste code:	FUUT
	. waste name:	TETPOLOWING SPENT HALOGENATED SOLVENTS USED IN DEGREASING:
		TETRACHLOROE THYLENE, IRICHLORE THYLENE, METHYLENE CHLORIDE,
		1,1,1-1 RICHLOROE I HANE, CARBON TE TRACHLORIDE AND CHLORINATED
		FLUOROCARBONS; ALL SPENT SOLVENT MIXTURES/BLENDS USED IN DEGREASING
		CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF
		ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED
		IN F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE
		SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
	. Waste code	F003

#### 1000437719

. Waste name:

THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL

Map ID	
Direction	
Distance	
Elevation	Site

EDR ID Number Database(s) EPA ID Number

	BROWN STREET AUTOCRAFT		1000437719	
		ACETATE, ETHYL BE ALCOHOL, CYCLOHE MIXTURES/BLENDS ( NONHALOGENATED CONTAINING, BEFOR SOLVENTS, AND A T MORE OF THOSE SO BOTTOMS FROM THE MIXTURES.	NZENE, ETHYL ETHER, METHYL ISOBUT' XANONE, AND METHANOL; ALL SPENT S CONTAINING, BEFORE USE, ONLY THE AI SOLVENTS; AND ALL SPENT SOLVENT M E USE, ONE OR MORE OF THE ABOVE N DTAL OF TEN PERCENT OR MORE (BY VC LVENTS LISTED IN F001, F002, F004, AND E RECOVERY OF THESE SPENT SOLVEN	YL KETONE, N-BUTYL OLVENT BOVE SPENT IXTURES/BLENDS ONHALOGENATED DLUME) OF ONE OR D F005; AND STILL TS AND SPENT SOLVENT
	Violation Status:	No violations found		
	Evaluation Action Summary: Evaluation date: Evaluation: Area of violation: Date achieved compliance: Evaluation lead agency: FINDS:	06/28/2010 COMPLIANCE EVALU Not reported Not reported State	ATION INSPECTION ON-SITE	
	Registry ID:	110004600067		
	Environmental Interest/Infor RCRAInfo Conserva events an and treat, program s corrective The OH-O shared ar facility-ba programn common maintaine	mation System o is a national information tion and Recovery Act (RG d activities related to facili store, or dispose of hazar staff to track the notificatio action activities required CORE (Ohio - Core) datab nong the Ohio EPA enviro sed, general in nature, an hatic systems while simulta acility-related data. Special d in programmatic databa	system that supports the Resource CRA) program through the tracking of ties that generate, transport, dous waste. RCRAInfo allows RCRA n, permit, compliance, and under RCRA. ase contains information commonly nmental programs. The information is d used to support specific aneously maintaining an inventory of ic programmatic details are ses.	
	Click this additional	hyperlink while viewing on FINDS: detail in the EDR	your computer to access Site Report.	
	ECHO: Envid: Registry ID: DFR URL:	1000437719 11000460006 http://echo.ep	7 a.gov/detailed-facility-report?fid=110004600	067
AD128 SSW 1/8-1/4 0.204 mi. 1079 ft.	BROWN STREET AUTOMOTIVE 953 BROWN ST AKRON, OH 44311 Site 3 of 4 in cluster AD		EDR Hist	Auto 1020200804 N/A
Relative:	EDR Hist Auto			
Actual: 1081 ft.	Year: Name: 1969 BROWN STREET A	UTOCRAFT	Type: General Automotive Repair Shops	

AE129

SSW

997 BROWN ST.

MAP FINDINGS

Database(s)

EDR ID Number EPA ID Number

1020200804

# **BROWN STREET AUTOMOTIVE (Continued)**

1070		Conoral Automotive Popair Shape
1970	BROWN STREET AUTOCRAFT	General Automotive Repair Shops
1072	BROWN STREET AUTOCRAFT	General Automotive Repair Shops
1973	BROWN STREET AUTOMOTIVE	General Automotive Repair Shops
1974	BROWN STREET AUTOMOTIVE	General Automotive Repair Shops
1975	BROWN STREET AUTOMOTIVE	General Automotive Repair Shops
1976	BROWN STREET AUTOMOTIVE	General Automotive Repair Shops
1977	BROWN STREET AUTOMOTIVE	General Automotive Repair Shops
1978	BROWN STREET AUTOMOTIVE	General Automotive Repair Shops
1979	BROWN STREET AUTOMOTIVE	General Automotive Repair Shops
1980	BROWN STREET AUTOMOTIVE	General Automotive Repair Shops
1982	BROWN STREET AUTOMOTIVE	General Automotive Repair Shops
1983	BROWN STREET AUTOMOTIVE	General Automotive Repair Shops
1985	BROWN STREET AUTOMOTIVE	General Automotive Repair Shops
1986	BROWN STREET AUTOMOTIVE	General Automotive Repair Shops
1987	BROWN STREET AUTOMOTIVE	General Automotive Repair Shops
1990	BROWN STREET AUTOMOTIVE	Exterior Repair Services
1991	BROWN STREET AUTOMOTIVE	Exterior Repair Services
1992	BROWN STREET AUTOMOTIVE	Exterior Repair Services
1993	BROWN STREET AUTOMOTIVE	Exterior Repair Services
1994	BROWN STREET AUTOMOTIVE	Exterior Repair Services
1995	BROWN STREET AUTOMOTIVE	Exterior Repair Services
1996	BROWN STREET AUTOMOTIVE	Exterior Repair Services
1997	BROWN STREET AUTOMOTIVE	Exterior Repair Services
1998	BROWN STREET AUTOMOTIVE	Exterior Repair Services
1999	BROWN STREET AUTOMOTIVE	Exterior Repair Services
2000	BROWN STREET AUTOMOTIVE	Exterior Repair Services
2001	BROWN STREET AUTOMOTIVE	Exterior Repair Services
2002	BROWN STREET AUTOMOTIVE	Exterior Repair Services
2003	BROWN STREET AUTOMOTIVE	Exterior Repair Services
2004	BROWN STREET AUTOMOTIVE	Exterior Repair Services
2005	BROWN STREET AUTOMOTIVE	Exterior Repair Services
2006	BROWN STREET AUTOMOTIVE	Exterior Repair Services
2007	BROWN STREET AUTOMOTIVE	Exterior Repair Services
2008	BROWN STREET AUTOMOTIVE	Exterior Repair Services
2009	BROWN STREET AUTOMOTIVE	Exterior Repair Services
2010	BROWN STREET AUTOMOTIVE	Exterior Repair Services
2011	BROWN STREET AUTOMOTIVE	Exterior Repair Services
2012	BROWN STREET AUTOMOTIVE	Exterior Repair Services
2013	BROWN STREET AUTOMOTIVE	Exterior Repair Services
2014	BROWN STREET AUTOMOTIVE	Exterior Repair Services

US AIRS 1016940107 N/A

1/8-1/4 0.205 mi.	AKRON, OH 44311	
1081 ft.	Site 1 of 8 in cluster AE	
Relative:	US AIRS MINOR:	
Higher	Envid:	1016940107
•	Region Code:	05
Actual:	Programmatic ID:	AIR OH000001677011007
1084 ft.	Facility Registry ID:	110058902665
	D and B Number:	Not reported
	Primary SIC Code:	Not reported
	NAICS Code:	447190
	Default Air Classification Code:	MIN
	Facility Type of Ownership Code:	Not reported

MAC'S CONVENIENCE STORES, LLC. DBA CIRCLE K #5577

# TC5001817.2s Page 82

Map ID	
Direction	
Distance	
Elevation	Site

Database(s) EPA

EDR ID Number EPA ID Number

Μ	AC'S CONVENIENCE STORES, LI	.C. DBA CIRCLE K #5577 (Continued)	1016940107
	Air CMS Category Code: HPV Status:	Not reported Not reported	
	US AIRS MINOR:		
	Region Code: Programmatic ID:	05 AIR OH0000001677011007	
	Facility Registry ID:	110058902665	
	Air Operating Status Code:	OPR	
	Default Air Classification Code:	MIN State Implementation Dian for National Drimony and Cos	andam (Archiant Air Ovelity Otan danda
	Air Program:	State Implementation Plan for National Primary and Sec	ondary Ambient Air Quality Standards
	Activity Status Date:	2015-11-08 00.00.00	
	Activity Group:	Compliance Monitoring	
	Activity Type:	Inspection/Evaluation	
	Activity Status:	Active	
	Region Code:	05	
	Programmatic ID:	AIR OH0000001677011007	
	Facility Registry ID:	110058902665	
	Air Operating Status Code:	OPR	
	Default Air Classification Code:	MIN	
	Air Program:	State Implementation Plan for National Primary and Sec	ondary Ambient Air Quality Standards
	Activity Date:	2014-10-09 00:00:00	
	Activity Group:	2015-09-23 19.10.21 Compliance Menitoring	
	Activity Type:	Inspection/Evaluation	
	Activity Status:	Active	
	Region Code:	05	
	Programmatic ID:	AIR OH000001677011007	
	Facility Registry ID:	110058902665	
	Air Operating Status Code:	OPR	
	Default Air Classification Code:	MIN	
	Air Program:	State Implementation Plan for National Primary and Sec	ondary Ambient Air Quality Standards
	Activity Date:	2015-06-22 00:00:00	
	Activity Status Date:	2015-09-23 19:16:48	
	Activity Group:	Compliance Monitoring	
	Activity Status:	Active	
	Region Code:	05	
	Programmatic ID:	AIR OH0000001677011007	
	Facility Registry ID:	110058902665	
	Air Operating Status Code:	OPR	
	Default Air Classification Code:	MIN	
	Air Program:	State Implementation Plan for National Primary and Sec	ondary Ambient Air Quality Standards
	Activity Date:	2013-10-07 00:00:00	
	Activity Status Date:	Not reported	
	Activity Group:	Compliance Monitoring	
	Activity Type:	Inspection/Evaluation	
	ACTIVITY STATUS:	Not reported	

Database(s)

EDR ID Number EPA ID Number

AE130 SSW 1/8-1/4 0.205 mi.	HOLLAND ( 997 BROWN AKRON, OH	OIL CO NO 4 N ST 1 44311				FINDS ECHO	1005803935 N/A
1081 ft.	Site 2 of 8 in	n cluster AE					
Relative: Higher	FINDS:	10					
Actual:	Registi	ry ID:	110006270132				
1084 ft.	Enviro	nmental Inter T S fi C C n	est/Information System 'he OH-CORE (Ohio - Core) of hared among the Ohio EPA ef- acility-based, general in nature rogrammatic systems while so ommon facility-related data. So haintained in programmatic data	databas environ e, and imultar Specific atabas	se contains information commonly mental programs. The information is used to support specific neously maintaining an inventory of c programmatic details are es.		
	Registi	ry ID:	110058902665				
	Enviro	nmental Inter S N A iii u f t t t t c a a	est/Information System FS (Aerometric Information R bubsystem) replaces the formulational Emission Data Syster erometric Data (SAROAD). A nformation concerning airborn sed to track emissions and co FS data are utilized by states to comply with regulatory prog stimation of total national emi edesign to support facility ope f the Clean Air Act. AIR MINOR	Retrieva er Com n (NEI NRS is te pollu ompliat to pre- rams a issions erating	al System (AIRS) Facility opliance Data System (CDS), the DS), and the Storage and Retrieval of the national repository for ation in the United States. AFS is nee data from industrial plants. Appare State Implementation Plans and by EPA as an input for the AFS is undergoing a major permits required under Title V		
	ECHO: Envid: Registi DFR U	ry ID: IRL:	1005803 1100589 http://ecl	3935 902665 ho.epa	; .gov/detailed-facility-report?fid=110058	902665	
AE131 SSW 1/8-1/4 0.205 mi.	OVERFIELD 997 BROW AKRON, OH	D BROS /N I			EDR H	ist Auto	1009032166 N/A
1081 ft.	Site 3 of 8 in	n cluster AE					
Relative: Higher	EDR Hist	Auto			Tana		
Actual: 1084 ft.	1925 1930 1935 1940 1957 1961	KOHN MAY OVERFIEL BERNEL J LEIDEL LA JOHN S PU	/ER KENMORE 0 LA LOND ( D BROS J WRENCE JRE OIL L	J	AUTOMOBILE OILS AND GASOLINE AUTOMOBILE FILLING STATIONS AUTOMOBILE SERVICE STATIONS AUTOMOBILE SERVICE STATIONS AUTOMOBILE SERVICE STATIONS AUTOMOBILE SERVICE STATIONS		

Database(s)

EDR ID Number EPA ID Number

1009032166

# OVERFIELD BROS (Continued)

1967	FLEMING JAMES	AUTOMOBILE SERVICE STATIONS
1969	WYANTS PURE OIL SERVICE STN	Gasoline Service Stations
1970	WYANTS PURE OIL SERVICE STN	Gasoline Service Stations
1971	WYANTS PURE OIL SERVICE STN	Gasoline Service Stations
1972	GERSTENSLAGER N J	AUTOMOBILE SERVICE STATIONS
1976	GERSTENSLAGER N J	AUTOMOBILE SERVICE STATIONS
1982	COBENS SERVICE	Gasoline Service Stations
1983	COBENS SERVICE	Gasoline Service Stations
1985	COBENS SERVICE	Gasoline Service Stations
1986	COBENS SERVICE	Gasoline Service Stations
1987	COBENS SERVICE	Gasoline Service Stations
1988	COBENS SERVICE	Gasoline Service Stations
1989	COBENS SERVICE	Gasoline Service Stations, NEC
1990	COBENS SERVICE	Gasoline Service Stations, NEC
1999	HOLLAND OIL COMPANY	Gasoline Service Stations
2000	HOLLAND OIL COMPANY	Gasoline Service Stations
2001	HOLLAND OIL COMPANY	Gasoline Service Stations
2002	HOLLAND OIL COMPANY	Gasoline Service Stations
2003	HOLLAND OIL COMPANY	Gasoline Service Stations
2004	HOLLAND OIL COMPANY	Gasoline Service Stations
2005	HOLLAND OIL COMPANY	Gasoline Service Stations
2006	HOLLAND OIL COMPANY	Gasoline Service Stations
2007	MACS CONVENIENCE STORES LLC	Gasoline Service Stations
2008	MACS CONVENIENCE STORES LLC	Gasoline Service Stations
2009	MACS CONVENIENCE STORES LLC	Gasoline Service Stations
2010	MACS CONVENIENCE STORES LLC	Gasoline Service Stations
2011	MACS CONVENIENCE STORES LLC	Gasoline Service Stations
2012	MACS CONVENIENCE STORES LLC	Gasoline Service Stations

AB132 SW 1/8-1/4 0.205 mi.	GATSLE RU 892 BROW AKRON, OH	IDOLPH N
1085 ft.	Site 7 of 7 in	n cluster AB
Relative: Higher	EDR Hist	Auto
0	Year:	Name:
Actual:	1940	GATSLE RUDOLPH
1072 ft.	1951	GATSLE RUDOLPH

PRICE S L

963 BROWN

Site 1 of 2 in cluster AF EDR Hist Auto

Year: Name:

1951

PRICE S L

AKRON, OH

AF133

1/8-1/4

0.209 mi. 1101 ft.

Relative: Higher

Actual:

1082 ft.

SSW

N/A

EDR Hist Auto 1009030008

Type: AUTOMOBILE REPAIRING AUTOMOBILE REPAIRING

EDR Hist Auto	1009029792
	N/A

Type: AUTOMOBILE REPAIRING

Database(s)

EDR ID Number EPA ID Number

AG134 WNW 1/8-1/4 0.211 mi.	FHM PROPERTIES 697 SHERMAN ST AKRON, OH 44301	RCRA-LQG FINDS ECHO	1004767592 OHR000041418
1114 ft.	Site 1 of 2 in cluster AG		
Relative: Lower	RCRA-LQG: Date form received by agenc	y: 05/10/2000	
Actual	Facility name:	FHM PROPERTIES	
ACTUAI: 1044 ft	Facility address:	697 SHERMAN ST	
104410			
	EFAID. Mailing addross:		
	Mailing address.	AKRON OH 44304	
	Contact:	GEORGIA LEHMAN	
	Contact address:	PO BOX 641	
		AKRON, OH 44309	
	Contact country:	US	
	Contact telephone:	(330) 434-6565	
	Contact email:	Not reported	
	EPA Region:	05	
	Classification:	Large Quantity Generator	
	Description:	Handler: generates 1,000 kg or more of hazardous waste during any	
		calendar month; or generates more than 1 kg of acutely hazardous wast	е
		during any calendar month; or generates more than 100 kg of any	
		residue or contaminated soil, waste or other debris resulting from the	
		cleanup of a spill, into of on any land of water, of acutely hazardous	
		bazardous waste during any calendar month, and accumulates more tha	n 1
		kg of acutely hazardous waste at any time: or generates 100 kg or less	
		of any residue or contaminated soil, waste or other debris resulting	
		from the cleanup of a spill, into or on any land or water, of acutely	
		hazardous waste during any calendar month, and accumulates more tha	n
		100 kg of that material at any time	
	Owner/Operator Summary:		
	Owner/operator name:	EHM PROPERTIES	
	Owner/operator address:	12 VINE ST	
		AKRON. 44 304	
	Owner/operator country:	Not reported	
	Owner/operator telephone:	(330) 434-6565	
	Legal status:	Private	
	Owner/Operator Type:	Owner	
	Owner/Op start date:	Not reported	
	Owner/Op end date:	Not reported	
	Handler Activities Summary:		
	U.S. importer of hazardous w	vaste: No	
	Mixed waste (haz. and radioa	active): No	
	Recycler of hazardous waste	: No	
	Transporter of hazardous wa	ste: No	
	Treater, storer or disposer of	HW: No	
	Underground injection activity	y: No	
	On-site burner exemption:	No	
	Furnace exemption:	No	
	Used oil fuel burner:	NO	
	Used oil processor:	NO	
	User on refiner:	INU	

1044 ft.

MAP FINDINGS

Database(s)

EDR ID Number EPA ID Number

#### FHM PROPERTIES (Continued) 1004767592 Used oil fuel marketer to burner: No Used oil Specification marketer: No Used oil transfer facility: No Used oil transporter: No Waste code: F003 THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE. ETHYL Waste name: ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES. Violation Status: No violations found FINDS: 110004737045 Registry ID: Environmental Interest/Information System RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste, RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA. The OH-CORE (Ohio - Core) database contains information commonly shared among the Ohio EPA environmental programs. The information is facility-based, general in nature, and used to support specific programmatic systems while simultaneously maintaining an inventory of common facility-related data. Specific programmatic details are maintained in programmatic databases. Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report. ECHO: Envid: 1004767592 Registry ID: 110004737045 DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110004737045 AG135 **697 SHERMAN ST** US CDL 1014864321 WNW **697 SHERMAN ST** N/A 1/8-1/4 AKRON, OH 0.211 mi. 1114 ft. Site 2 of 2 in cluster AG US CDL: Relative: Seizure Date: 04/04/2000 Lower Actual:

		1		
	М	AP FINDINGS		
Site			Database(s)	EDR ID Number EPA ID Number
HALL A J 320 S ARLINGTON ST AKRON, OH			EDR Hist Auto	1009031082 N/A
Site 1 of 5 in cluster AH				
EDR Hist Auto				
Year: Name: 1930 OTT F D 1935 CADY L L 1940 ARLINGTON A 1940 HALL A J 1946 ARLINGTON M	UTO SERVICE	Type: AUTOMOBILE REPAIRIN AUTOMOBILE SERVICE AUTOMOBILE SERVICE AUTOMOBILE REPAIRIN AUTOMOBILE REPAIRIN	NG STATIONS STATIONS NG NG	
SMITH L L 318 SARLINGTON RD AKRON, OH			EDR Hist Auto	1009029902 N/A
Site 2 of 5 in cluster AH				
EDR Hist Auto				
Year: Name: 1967 SMITH L L 1972 SMITH L L 1976 SMITH L L		Type: AUTOMOBILE SERVICE AUTOMOBILE SERVICE AUTOMOBILE SERVICE	STATIONS STATIONS STATIONS	
CHAPMAN H C 991-97 BROWN AKRON, OH			EDR Hist Auto	1009029712 N/A
Site 4 of 8 in cluster AE				
EDR Hist Auto				
Year: Name: 1946 CHAPMAN H C	;	Type: AUTOMOBILE SERVICE	STATIONS	
440 BRUNER STREET 440 BRUNER STREET AKRON, OH			US CDL	1014949820 N/A
US CDL: Seizure Date:	06/05/2012			

1070 ft.

Map ID Direction		MAP FINDINGS			
Distance Elevation	Site			Database(s	EDR ID Number ) EPA ID Number
140 West 1/8-1/4 0.219 mi. 1156 ft.	722 SHERMAN 722 SHERMAN AKRON, OH			US CD	L 1014864409 N/A
Relative: Lower	US CDL: Seizure Date:	02/15/2005			
Actual: 1040 ft. AH141 East 1/8-1/4 0 220 mi	OSBORNE R H 323 S ARLINGTON ST AKRON, OH			EDR Hist Aut	o 1008990188 N/A
1162 ft.	Site 3 of 5 in cluster AH				
Relative: Higher	EDR Hist Auto				
Actual: 1068 ft.	Year: Name: 1925 OSBORNE R H 1930 OSBORNE R H 1935 STRAGA TONY 1940 PARKER F L	TY A A A A	/pe: UTOMOBILE OILS AND UTOMOBILE FILLING S UTOMOBILE SERVICE UTOMOBILE SERVICE	GASOLINE TATIONS STATIONS STATIONS	
AH142 East 1/8-1/4 0.220 mi.	JACK YEE 323 SARLINGTON AKRON, OH			EDR Hist Cleane	or 1009149417 N/A
1162 ft.	Site 4 of 5 in cluster AH				
Relative: Higher	EDR Hist Cleaner				
Actual: 1068 ft.	Year: Name: 1920 JACK YEE	Ty L/	ype: AUNDRIES CHINESE		
AC143 SE 1/8-1/4 0.221 mi	SOHIO OIL CO SITE 03041 759 INMAN ST AKRON, OH 44306		R	CRA NonGen / NL FIND ECH	R 1000258878 S OHD982620445 O
1165 ft.	Site 3 of 4 in cluster AC				
Relative: Higher	RCRA NonGen / NLR: Date form received by a Facility name:	gency: 07/28/1998 SOHIO OIL CO SITE 0304	.1		
Actual: 1118 ft.	Facility address: EPA ID: Mailing address: Contact: Contact address: Contact country: Contact telephone: Contact telephone: Contact email: EPA Region:	759 INMAN ST AKRON, OH 44306 OHD982620445 4850 E 49TH ST CLEVELAND, OH 44125 ROSEVELT WATFORD 4850 E 49TH ST CLEVELAND, OH 44125 US (216) 271-8839 Not reported 05			
	Classification: Description:	Non-Generator Handler: Non-Generators c	to not presently generate	e hazardous waste	

Database(s)

EDR ID Number EPA ID Number

# SOHIO OIL CO SITE 03041 (Continued)

Owner/Operator Summary:	
Owner/operator name:	NAME NOT REPORTED
Owner/operator address:	ADDRESS NOT REPORTED CITY NOT REPORTED, AK 99998
Owner/operator country:	Not reported
Owner/operator telephone:	(312) 555-1212
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported
Owner/operator name:	SOHIO OIL CO
Owner/operator address:	ADDRESS NOT REPORTED CITY NOT REPORTED, AK 99998
Owner/operator country:	Not reported
Owner/operator telephone:	(312) 555-1212
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported
Handler Activities Summary:	
U.S. importer of hazardous wa	aste: No
Mixed waste (haz. and radioad	ctive): No
Recycler of hazardous waste:	No
Transporter of hazardous was	te: No
Treater, storer or disposer of I	HW: No
Underground injection activity	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oll refiner:	NO
Used oil fuel marketer to burn	er: No
Used oil Specification markete	er: No
Used oil transfer facility:	NO
Used oil transporter:	NO
. Waste code:	D000
. Waste name:	Not Defined
. Waste code:	D001
. Waste name:	IGNITABLE WASTE
Violation Status:	No violations found
FINDS:	

Registry ID:

110004655506

Environmental Interest/Information System

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

## 1000258878

Database(s) EPA ID Nu

EDR ID Number EPA ID Number

	SOHIO OIL CO SITE 03041 (Continued)				
		<u>Click this hyperlink</u> wh additional FINDS: det	ile viewing on your computer to access ail in the EDR Site Report.		
	ECHO: Envid: Regist DFR L	ry ID: JRL:	1000258878 110004655506 http://echo.epa.gov/detailed-facility-report?fid=110004655506		
AC144 SE 1/8-1/4 0.221 mi.	A & A SOH 759 INMAI AKRON, OH	IO N ST I	EDR Hist Auto	1009029679 N/A	
1165 ft.	Site 4 of 4 i	n cluster AC			
Relative: Higher	EDR Hist	Auto			
Actual: 1118 ft.	Year: 1940 1946 1957 1961 1967 1969 1970 1971 1972 1973 1974 1975 1976 1977 1977 1977 1977 1978 1979 1980 1982 1983 1985 1986 1987 1987 1988 1988 1988 1988	Name: BELL C R BELL C R LANSINGER C P A & A SOHIO INMAN & BAIRD SOHIO INMAN & BAIRD SOHIO INMAN & BAIRD SOHIO INMAN & BAIRD SOHIO SERVI INMAN & BARD SOHIO A & A BRAKE SERVICE INC	Type: AUTOMOBILE SERVICE STATIONS AUTOMOBILE SERVICE STATIONS AUTOMOBILE SERVICE STATIONS AUTOMOBILE SERVICE STATIONS AUTOMOBILE SERVICE STATIONS Gasoline Service Stations Gasoline Service Stations CE Gasoline Service Stations AUTOMOBILE SERVICE STATIONS Automotive Repair Shops, NEC Automotive Repair Shops, NEC Automotive Repair Shops, NEC Automotive Repair Shops, NEC Gasoline Service Stations Gasoline Service Stations Gasoline Service Stations Miscellaneous General Merchandise Gasoline Service Stations Miscellaneous General Merchandise Variety Stores Variety Stores Variety Stores Variety Stores Automotive Repair Shops, NEC Automotive Repair Shops, NEC		

Map ID			MA	AP FINDINGS		
Distance Elevation	Site				 Database(s)	EDR ID Number EPA ID Number
AH145 Fast	MAYFLOW	ER CLEANERS			EDR Hist Cleaner	1009215685 N/A
1/8-1/4 0.221 mi. 1166 ft.	AKRON, OF Site 5 of 5 in	n cluster AH				NA
Relative: Higher	EDR Hist	Cleaner				
Actual: 1067 ft.	Year: 1940	Name: MAYFLOWER (	CLEANERS	Type: CLOTHES PRESSERS	, CLEANERS AND REP	AIRERS
Al146 East 1/8-1/4 0.222 mi.	T&M REMO 390 S ARLII AKRON, OF	VE & REPLACE NGTON ST 1 44306	Αυτο		EDR Hist Auto	1022029989 N/A
1172 ft.	Site 1 of 5 in	n cluster Al				
Relative: Higher	LDICTIIS	Nesse		Tana		
Actual: 1070 ft.	Year: 1991 1992 1993 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008	DEANS GARAG DEANS GARAG DEANS GARAG T&M REMOVE T&M REMOVE T&M REMOVE T&M REMOVE T&M REMOVE T&M REMOVE T&M REMOVE T&M REMOVE T & M REMOVE T & M REMOVE T & M REMOVE T & M REMOVE T & M REMOVE	GE GE GE & REPLACE AUTO & REPLACE AUTO & REPLACE AUTO & REPLACE AUTO & REPLACE AUTO & REPLACE AUTO & REPLACE AUTO E & REPLACE AUTO E & REPLACE AUTO E & REPLACE AUTO E & REPLACE AUTO E & REPLACE AUTO E & REPLACE AUTO	General Automotive Re General Automotive Re	pair Shops pair Shops pair Shops pair Shops pair Shops pair Shops pair Shops pair Shops pair Shops pair Shops pair Shops pair Shops pair Shops pair Shops pair Shops pair Shops pair Shops pair Shops	
AJ147 NNW 1/8-1/4 0.223 mi.	TRANS EN 535 SPICER AKRON, OH	/IRO 8 ST 1 44311			FINDS	1023522162 N/A
1176 ft.	Site 1 of 5 in	n cluster AJ				
Relative: Lower	FINDS:		440000074004			
Actual: 1016 ft.	Enviro	טו עו: nmental Interest/I STAT	nformation System E MASTER			

<u>Click this hyperlink</u> while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

		MAP F	MAP FINDINGS			
Site				Data	abase(s)	EDR ID Num EPA ID Numl
AKRON TR 535 SPICE	UCK & TRAILEF R ST	REPAIR		EDR H	ist Auto	1022144863 N/A
AKRON, O	H 44311					
Site 2 of 5	in cluster AJ					
EDR His	t Auto					
Year:	Name:		Type:	ant And Darta		
2007			Auto And Truck Equipme	ent And Parts		
2008	AKRON TRUC	K & TRAILER REPAIR	Auto And Truck Equipm	ent And Parts		
2010	AKRON TRUC	K & TRAILER REPAIR	Auto And Truck Equipme	ent And Parts		
2011	AKRON TRUC	K & TRAILER REPAIR	Auto And Truck Equipme	ent And Parts		
2012	AKRON TRUC	K & TRAILER REPAIR	Auto And Truck Equipme	ent And Parts		
2013	AKRON TRUC	K & TRAILER REPAIR	Auto And Truck Equipme	ent And Parts		
2014	AKRON TRUC	K & TRAILER REPAIR	Auto And Truck Equipme	ent And Parts		
GLOVER E 935 HAMM AKRON, O	LEMENTARY SO EL ST H 44306	CHOOL			FINDS	1006215263 N/A
Site 1 of 2	in cluster AK					
FINDS:						
Regis	try ID:	110009634039				
Enviro	onmental Interest The shar facili prog com main <u>Click</u> addii	Information System OH-CORE (Ohio - Core) dated among the Ohio EPA environment ty-based, general in nature, rammatic systems while sim non facility-related data. Sp tained in programmatic data	tabase contains information c vironmental programs. The inf and used to support specific iultaneously maintaining an in ecific programmatic details ar abases.	ommonly formation is ventory of e		
GLOVER C 935 HAMM AKRON, O Site 2 of 2 OH NPD Issue Towns Eacilit	COMMUNITY LEA EL ST H 44306 in cluster AK ES: Date: ship: v Nodes Permit:	12/14/2006 Not reported		он	NPDES	S108582742 N/A

Map ID		MAP FINDINGS				
Direction Distance Elevation	Site	4		Data	abase(s)	EDR ID Number EPA ID Number
Al151 East	DIME LAUNDRY 345 4TH NW			EDR Hist	Cleaner	1009148824 N/A
1/8-1/4 0.223 mi. 1179 ft.	AKRON, OH Site 2 of 5 in cluster Al					
Relative: Higher	EDR Hist Cleaner					
Actual: 1067 ft.	Year: Name: 1961 DIME LAUNDF 1967 DIME LAUNDF	Type Y LAU Y LAU	n: NDRIES - SELF SEF NDRIES - SELF SEF	RVICE RVICE		
AL152 North 1/8-1/4 0.225 mi.	540 GAGE ST 540 GAGE ST AKRON, OH Site 1 of 2 in cluster Al				US CDL	1009626270 N/A
Relative: Lower	US CDL: Seizure Date:	04/10/2006				
Actual: 1008 ft. AM153 ENE 1/8-1/4 0.225 mi. 1188 ft	CLARK OIL & REFINING C 302 S ARLINGTON ST AKRON, OH 44306 Site 1 of 4 in cluster AM	PRP NO 1143	F	RCRA NonG	en / NLR FINDS ECHO	1000912920 OH0000553131
Relative:	RCRA NonGen / NLR:					
Higher Actual: 1074 ft.	Date form received by Facility name: Facility address: EPA ID: Mailing address: Contact: Contact address: Contact country: Contact country: Contact telephone: Contact email: EPA Region: Classification: Description: Owner/Operator Summar Owner/Operator Summar Owner/operator name: Owner/operator address Owner/operator countr Owner/operator teleph Legal status: Owner/Operator Type:	gency: 06/30/1999 CLARK STORE NO 1143 302 S ARLINGTON ST AKRON, OH 44306 OH0000553131 8000 S BEECH DALY RD TAYLOR, MI 48180 MARY CLAIR HAYDEN 8000 S BEECH DALY RD TAYLOR, MI 48180 US (313) 291-2840 Not reported 05 Non-Generator Handler: Non-Generators do 1 CLARK REFINING & MARKE ST LOUIS, MO 63105 CLARK REFINING & MARKE ST LOUIS, MO 63105 Not reported ne: (314) 524-5100 Private Owner	not presently generat	e hazardous	waste	
	Owner/Op start date: Owner/Op end date: Handler Activities Summa	Not reported Not reported y:				

Database(s)

EDR ID Number EPA ID Number

#### CLARK OIL & REFINING CORP NO 1143 (Continued)

U.S. importer of hazardous wa	ste:	No
Mixed waste (haz. and radioad	tive):	No
Recycler of hazardous waste:		No
Transporter of hazardous wast	te:	No
Treater, storer or disposer of H	IW:	No
Underground injection activity:		No
On-site burner exemption:		No
Furnace exemption:		No
Used oil fuel burner:		No
Used oil processor:		No
User oil refiner:		No
Used oil fuel marketer to burne	er:	No
Used oil Specification markete	r:	No
Used oil transfer facility:		No
Used oil transporter:		No
. Waste code:	D001	
Waste name:	IGNIT	ABI F

. Waste code:	D018
. Waste name:	BENZENE

#### Violation Status:

# FINDS:

Registry ID:

110009612188

No violations found

WASTE

Environmental Interest/Information System

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

The OH-CORE (Ohio - Core) database contains information commonly shared among the Ohio EPA environmental programs. The information is facility-based, general in nature, and used to support specific programmatic systems while simultaneously maintaining an inventory of common facility-related data. Specific programmatic details are maintained in programmatic databases.

<u>Click this hyperlink</u> while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO: Envid: Registry ID: DFR URL:

1000912920 110009612188 http://echo.epa.gov/detailed-facility-report?fid=110009612188

# 1000912920

Map ID		MAF	MAP FINDINGS			
Distance Elevation	Site			Database(s)	EDR ID Number EPA ID Number	
AM154 ENE 1/8-1/4 0.225 mi. 1188 ft.	CLARK OIL & REFINING C 302 S ARLINGTON ST AKRON, OH Site 2 of 4 in cluster AM	ORP		EDR Hist Auto	1009032994 N/A	
Relative:	EDR Hist Auto					
Actual: 1074 ft.	Year: Name: 1972 CLARK OIL & 1976 CLARK OIL &	REFINING CORP REFINING CORP	Type: AUTOMOBILE SERVICE AUTOMOBILE SERVICE	STATIONS STATIONS		
Al155 East 1/8-1/4 0.226 mi.	WALLET C C 496 4TH NW AKRON, OH			EDR Hist Auto	1009030019 N/A	
1192 ft.	Site 3 of 5 in cluster Al					
Relative: Higher	EDR Hist Auto					
Actual: 1067 ft.	Year: Name: 1957 WALLET C C 1961 WALLET C C 1967 WALLET C C		Type: AUTOMOBILE SERVICE AUTOMOBILE SERVICE AUTOMOBILE SERVICE	STATIONS STATIONS STATIONS		
AE156 SSW 1/8-1/4 0.227 mi.	MEHOK ANDREW 996 BROWN AKRON, OH			EDR Hist Auto	1009031795 N/A	
1196 ft.	Site 5 of 8 in cluster AE					
Relative:	EDR Hist Auto					
Actual: 1080 ft.	Year: Name: 1930 FREIMAN JOI 1940 MEHOK ANDI 1946 HAINES FREI	HN REW D	Type: AUTOMOBILE FILLING S AUTOMOBILE SERVICE AUTOMOBILE SERVICE	STATIONS STATIONS STATIONS		
AE157 SSW 1/8-1/4 0.227 mi.	PADLE H J 984 BROWN AKRON, OH			EDR Hist Auto	1009031321 N/A	
1197 ft.	Site 6 of 8 in cluster AE					
Relative: Higher	EDR Hist Auto					
Actual: 1081 ft.	Year: Name: 1946 PADLE H J		Type: AUTOMOBILE SERVICE	STATIONS		

~			MAP FINDINGS		_		
n	Site					 Database(s)	EDR ID Number EPA ID Number
i.	PETKOVSK 355 SARL AKRON, OF	Y PAUL INGTON ST I				EDR Hist Cleaner	1009215728 N/A
<b>e</b> :	EDR HIST	Cleaner					
	Year: 1946	Name: PETKOVSKY P	AUL		Type: CLOTHES PRESSERS	CLEANERS AND REP	AIRERS
	585 BROW AKRON, OF	N ST I 44311				EDR Hist Auto	1009029342 N/A
i.	Site 1 of 2 in	n cluster AO					
<b>e</b> :	EDR Hist	Auto					
	Year: 1925 1930 1935 1940 1946 1961 1967 1969 1970 1971 1972 1972 1973 1974 1975 1976 1976 1976 1977 1982 1983 1985 1986 1987 1988 1989 1990 1991 1992 1993 1996	Name: WEISS F S WILLEMSEN & WILLEMSEN & WILLEMSEN & PHARES & MC W & M MOTOR	PEARSON PEARSON PEARSON NICHOLS SERVICE		Type: AUTOMOBILE OILS AN AUTOMOBILE FILLING AUTOMOBILE SERVIC AUTOMOBILE SERVIC AUTOMOBILE SERVIC AUTOMOBILE SERVIC AUTOMOBILE REPAIR General Automotive Rep General Automotive Rep	ID GASOLINE STATIONS E STATIONS E STATIONS E STATIONS E STATIONS ING ING Dair Shops Dair Shops	

Map ID		MAP FIN	DINGS			
Direction Distance Elevation	Site	ц		Da	tabase(s)	EDR ID Number EPA ID Number
Al160 East 1/8-1/4 0.229 mi.	HAVERTY G C 1101 4TH AVE AKRON, OH			EDR His	t Cleaner	1009215715 N/A
1209 ft.	Site 4 of 5 in cluster Al					
Relative: Higher	EDR HISt Cleaner					
Actual: 1066 ft.	Year: Name: 1930 HAVERTY G 1940 LINCOLN CL	C EANERS	Type: CLOTHES PRESSERS, CLOTHES PRESSERS,	CLEANERS CLEANERS	AND REPA	AIRERS
161 East 1/8-1/4 0.229 mi. 1209 ft.	MARHOFER C W STOW 0 421 TALBOT AVE AKRON, OH	MAY C A		EDR	Hist Auto	1009030558 N/A
Relative: Higher	EDR Hist Auto					
Actual: 1081 ft.	Year: Name: 1925 MARHOFER	C W STOW 0 MAY C A	Type: AUTO REPAIR			
AE162 SSW 1/8-1/4 0.230 mi. 1212 ft.	DOLLAR GENERAL STOP 994 BROWN ST AKRON, OH 44311 Site 7 of 8 in cluster AE	ξE #14219			FINDS ECHO	1017406530 N/A
Relative:	FINDS:					
Higher	Registry ID:	110063080455				
Actual: 1080 ft.	Environmental Interes RC Cor eve and pro cor	t/Information System RAInfo is a national information inservation and Recovery Act (RC ints and activities related to facili I treat, store, or dispose of hazar gram staff to track the notificatio rective action activities required	system that supports the Re CRA) program through the t ities that generate, transpor rdous waste. RCRAInfo allo n, permit, compliance, and under RCRA.	esource racking of t, ws RCRA		
	ado ECHO: Envid: Registry ID: DFR URL:	litional FINDS: detail in the EDR 1017406530 11006308045 http://echo.ep	Site Report. 55 ba.gov/detailed-facility-repor	t?fid=11006	3080455	

						<b>-</b>	
Map ID Direction				MAP FIND	INGS		
Distance Elevation	Site					Database(s)	EDR ID Number EPA ID Number
AN163 East 1/8-1/4 0.230 mi. 1214 ft.	PARAMOUI 357 SARL AKRON, OH Site 2 of 2 in	NT CLEANERS INGTON ST 1 n cluster AN				EDR Hist Cleane	7 1009150914 N/A
Relative: Higher	EDR Hist	Cleaner			Tana		
Actual: 1065 ft.	Year: 1961	Name: PARAMOUNT	CLEANERS		Type: DRY CLEANERS		
AF164 SSW 1/8-1/4 0.230 mi.	HURDT V A 964 BROW AKRON, OH	/N I				EDR Hist Auto	o 1009031098 N/A
1215 ft.	Site 2 of 2 i	n cluster AF					
Relative: Higher	EDR Hist	Auto					
Actual: 1080 ft.	Year: 1935 1940 1946 1957 1961	Name: HURDT V A BILLINGTON V ENRIGHT HON CHAPMAN BR VAUDRIN W D	V W //E & AUTO SUPPL' OS INC	Y STOR	Type: AUTOMOBILE SERVIC AUTOMOBILE SERVIC AUTOMOBILE SERVIC AUTOMOBILE SERVIC AUTOMOBILE SERVIC	CE STATIONS CE STATIONS CE STATIONS CE STATIONS CE STATIONS	
AM165 ENE 1/8-1/4 0.231 mi. 1219 ft.	BERRY G B 296 SARL AKRON, OF Site 3 of 4 ii	REAR INGTON ST I				EDR Hist Auto	o 1009029545 N/A
Relative:	EDR Hist	Auto					
Higher Actual: 1075 ft.	Year: 1920	Name: BERRY G B RE	EAR		Type: AUTOMOBILE GARAG	GES	
Al166 East 1/8-1/4 0.231 mi	ALLIED AU 384-90 S AF AKRON, OF	TO INC RLINGTON ST 1 44306				EDR Hist Auto	0 1021019455 N/A
1219 ft.	Site 5 of 5 in	n cluster Al					
Relative: Higher	EDR Hist	Auto					
Actual: 1069 ft.	Year: 1987	Name: ALLIED AUTO	INC		Type: Auto And Home Supply	/ Stores	

	MAP FINDINGS			
Site			Database(s)	EDR ID N EPA ID Ni
RUBBER CITY PRINTERY 570 SPICER ST AKRON. OH 44311	' INC		FINDS	10062134 N/A
Site 2 of 2 in eluctor AO				
FINDS.				
Registry ID:	110009612632			
The sha faci pro cor ma	○ OH-CORE (Ohio - Core) da ared among the Ohio EPA er ility-based, general in nature grammatic systems while sin nmon facility-related data. S intained in programmatic da	atabase contains information con nvironmental programs. The info a, and used to support specific multaneously maintaining an inve pecific programmatic details are tabases.	nmonly rmation is entory of	
<u>Clin</u> ado	<u>:k this hyperlink</u> while viewin ditional FINDS: detail in the F	ig on your computer to access EDR Site Report.		
SUMMIT CO CHILD SERV 264 S ARLINGTON ST AKRON, OH 44306	VISIT & RESPITE CTR		OH NPDES	S1085870 N/A
Site 4 of 4 in cluster AM				
OH NPDES: Issue Date:	12/16/2003			
Township:	Not reported			
Applicant Name: Applicant Address:	DOMOKUR ROBINSON E 4651 MEDINA RD AKRON	EDWARDS INC NOH 44321		
CRAMER DE LUXE SALE 552 SPICER ST AKRON, OH 44311	SINC		EDR Hist Auto	10209216 N/A
Site 3 of 5 in cluster AJ				
EDR Hist Auto				
Year: Name: 1987 CRAMER DE	LUXE SALES INC	Type: Motor Vehicle Supplies Ar	nd New Parts	
C AND S AUTO BODY 552 SPICER ST. AKRON, OH 44311			US AIRS FINDS ECHO	10183171 N/A
Site 4 of 5 in cluster AJ				
US AIRS MINOR:				
Envid: Region Code:	1018317113 05			

Database(s)

EDR ID Number **EPA ID Number** 

# C AND S AUTO BODY (Continued)

D and B Number:	Not reported
Primary SIC Code:	Not reported
NAICS Code:	811121
Default Air Classification Code:	UNK
Facility Type of Ownership Code:	Not reported
Air CMS Category Code:	Not reported
HPV Status:	Not reported

#### FINDS:

Registry ID:

Environmental Interest/Information System AIR EMISSIONS CLASSIFICATION UNKNOWN

110067429143

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

# ECHO:

Envid: Registry ID: DFR URL:

1018317113 110067429143 http://echo.epa.gov/detailed-facility-report?fid=110067429143

AJ171 NNW 1/8-1/4 0.234 mi.	CRAMER DELUXE SALES INC 552 SPICER ST AKRON, OH 44311	RCRA-CESQG FINDS ECHO	1000297741 OHD004192399
1233 ft.	Site 5 of 5 in cluster AJ		
Relative: Lower Actual: 1017 ft.	RCRA-CESQG: Date form received by agence Facility name: Facility address: EPA ID: Contact: Contact address: Contact country: Contact telephone: Contact email: EPA Region: Classification: Description:	y: 10/02/2007 SUN VALLEY AUTO CRAFT 552 SPICER ST AKRON, OH 44311 OHD004192399 GREG CLEMONS 552 SPICER ST AKRON, OH 44311 US (330) 761-1800 Not reported 05 Conditionally Exempt Small Quantity Generator Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from	
		the cleanup of a spill, into or on any land or water, of acutely	

Database(s)

EDR ID Number EPA ID Number

#### **CRAMER DELUXE SALES INC (Continued)**

hazardous waste

Owner/Operator Summary:	CONNIE CRAMER STUETZER
Owner/operator name:	1161 DELIA AVE
Owner/operator address:	AKRON, OH 44320
Owner/operator country:	US
Owner/operator telephone:	(330) 336-4732
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	01/01/1900
Owner/Op end date:	Not reported
Owner/operator name:	SUN VALLEY AUTO CRAFT
Owner/operator address:	552 SPICER ST
Owner/operator country: Owner/operator telephone: Legal status: Owner/Operator Type: Owner/Op start date: Owner/Op end date:	AKRON, OH 44311         US         (330) 761-1800         Private         Operator         01/01/1999         Not reported
Handler Activities Summary:	
<ul> <li>U.S. importer of hazardous w</li></ul>	aste: No
Mixed waste (haz. and radioa	ctive): No
Recycler of hazardous waste:	ste: No
Transporter of hazardous waste:	HW: No
Transporter of hazardous waste:	HW: No
Transporter or disposer of	No
Underground injection activity	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil fuel burner:	No
Used oil fuel burner:	No
Used oil fuel marketer to burn	No
Used oil fuel marketer to burn	No
Used oil fuel marketer to burn	No
Used oil specification market	No
Used oil transfer facility:	No
Used oil transporter:	N
. Waste code:	D001
. Waste name:	IGNITABLE WASTE
. Waste code:	D035
. Waste name:	METHYL ETHYL KETONE
. Waste code: . Waste name:	F003 THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL

# 1000297741

BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT

Map ID Direction		MAP FINDINGS		
Distance Elevation	Site		Database(s)	EDR ID Number EPA ID Number
	CRAMER DELUXE SALES	NC (Continued)		1000297741
		MIXTURES.		
	. Waste code: . Waste name:	F005 THE FOLLOWING SPENT NONHALOGENATED S KETONE, CARBON DISULFIDE, ISOBUTANOL, P 2-ETHOXYETHANOL, AND 2-NITROPROPANE; A CONTAINING, BEFORE USE, A TOTAL OF TEN F ONE OR MORE OF THE ABOVE NONHALOGENA LISTED IN F001, F002, OR F004; AND STILL BOT THESE SPENT SOLVENTS AND SPENT SOLVEN	SOLVENTS: TOLUENE YRIDINE, BENZENE, ILL SPENT SOLVENT PERCENT OR MORE ATED SOLVENTS OR TOMS FROM THE RE IT MIXTURES.	E, METHYL ETHYL MIXTURES/BLENDS (BY VOLUME) OF THOSE SOLVENTS ECOVERY OF
	Historical Generators:			
	Date form received by a Site name: Classification:	agency: 09/15/1985 CRAMER DELUXE SALES INC Small Quantity Generator		
	. Waste code: . Waste name:	D000 Not Defined		
	. Waste code: . Waste name:	D001 IGNITABLE WASTE		
	Violation Status:	No violations found		
	FINDS:			
	Registry ID:	110004591816		
	Environmental Interest/ RCR Cons even and t prog corre The share facili prog com main Click addit	Information System Alnfo is a national information system that supports the Res ervation and Recovery Act (RCRA) program through the tra ts and activities related to facilities that generate, transport, reat, store, or dispose of hazardous waste. RCRAInfo allow 'am staff to track the notification, permit, compliance, and ctive action activities required under RCRA. OH-CORE (Ohio - Core) database contains information con ed among the Ohio EPA environmental programs. The infor cy-based, general in nature, and used to support specific 'ammatic systems while simultaneously maintaining an inve non facility-related data. Specific programmatic details are tained in programmatic databases.	source acking of vs RCRA nmonly rmation is entory of	
	ECHO: Envid: Registry ID: DFR URL:	1000297741 110004591816 http://echo.epa.gov/detailed-facility-report/	?fid=110004591816	

		MAP FINDINGS			
Site				Database(s)	EDR ID Number EPA ID Number
674 COLE A 674 COLE A AKRON, OH	VE VE			US CDL	1014864303 N/A
US CDL: Seizure	Date:	11/16/2000			
SOUTHLAN 978 BROWN AKRON, OH	D CORPORATIC 44311	DN		EDR Hist Auto	1020855286 N/A
Site 8 of 8 in	cluster AE				
EDR Hist	Auto				
Year: 1989 1990	Name: SOUTHLAND C SOUTHLAND C	ORPORATION	Type: Convenience Stores Convenience Stores		
CANTER R 944 BROW AKRON, OH	J N			EDR Hist Auto	1009029428 N/A
Site 4 of 4 in	cluster AD				
EDR Hist	Auto				
Year: 1935 1940	Name: CANTER R J CONLEY G T		Type: AUTOMOBILE REPAIRING AUTOMOBILE REPAIRING		
BELL C R 778 LOVER AKRON, OH	S LANE ST			EDR Hist Auto	1009030921 N/A
Site 1 of 2 in	cluster AP				
EDR Hist	Auto				
Year: 1935	Name: BELL C R		Type: AUTOMOBILE SERVICE STA	TIONS	
HASAN MRS 781 LOVEF AKRON, OH	S SUE RS LANE ST		E	DR Hist Cleaner	1009214747 N/A
Site 2 of 2 in	cluster AP				
EDR Hist	Cleaner				
Year: 1940	Name: HASAN MRS S	UE	Type: CLOTHES PRESSERS, CLEA	NERS AND REP	AIRERS

Map ID Direction			MAP FIN	IDINGS		
Distance Elevation	Site			Database(s	EDR ID Number EPA ID Number	
AL177 North 1/8-1/4 0.247 mi. 1306 ft.	SIGMOND FROUD W 543 GAGE AKRON, OH 44311 Site 2 of 2 in cluster A	L			EDR Hist Auto	o 1021360714 N/A
Relative: Lower	EDR Hist Auto			_		
Actual: 1007 ft.	Year: Name: 1969 SIGMONI 1970 SIGMONI	D FROUD W D FROUD W		l ype: Gasoline Service Stations Gasoline Service Stations	S S	
AQ178 NE 1/8-1/4 0.248 mi.	438 DOWNING PLACE 438 DOWNING PLACE AKRON, OH				US CD	- 1014863829 N/A
1310 ft. Relative: Higher	US CDL: Seizure Date:	12/05/	/2010			
Actual: 1096 ft. AR179 West 1/8-1/4 0.248 mi. 1311 ft. Relative:	REPUBLIC DIESEL 274 E SOUTH ST AKRON, OH 44311 Site 1 of 2 in cluster A EDR Hist Auto	R			EDR Hist Auto	o 1021783646 N/A
Lower Actual: 1037 ft.	Year: Name: 2014 REPUBLI	C DIESEL		Type: General Automotive Repa	air Shops	
AR180 West 1/8-1/4 0.248 mi. 1311 ft	CENTER AUTOMOTIV 274 E SOUTH ST AKRON, OH 44311 Site 2 of 2 in cluster A	E PARTS CO	)		RCRA-SQC FIND ECHC	6 1000451235 6 OHD986986289 )
Relative: Lower Actual: 1037 ft.	RCRA-SQG: Date form receive Facility name: Facility address: EPA ID: Mailing address: Contact: Contact country: Contact country: Contact telephone Contact telephone Contact email: EPA Region: Classification: Description:	ed by agency:	09/17/1990 CENTER AUTOMOTI 274 E SOUTH ST AKRON, OH 44311 OHD986986289 PO BOX 2039 AKRON, OH 44309 ROBERT ALLAN PO BOX 2039 AKRON, OH 44309 US (216) 434-2174 Not reported 05 Small Small Quantity Handler: generates m waste during any cale hazardous waste at ai	VE PARTS CO Generator ore than 100 and less than 1 ndar month and accumulates ny time; or generates 100 kg	000 kg of hazardous s less than 6000 kg o or less of hazardous	f

EDR ID Number EPA ID Number

Database(s)

#### **CENTER AUTOMOTIVE PARTS CO (Continued)**

waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:			
Owner/operator name:	ALLAN ROBERT B		
Owner/operator address:	Not reported		
	Not reported		
Owner/operator country:	Not reported		
Owner/operator telephone:	Not reported		
Legal status:	Private		
Owner/Operator Type:	Owner		
Owner/Op start date:	Not reported		
Owner/Op end date:	Not reported		
Handler Activities Summary:			
U.S. importer of hazardous w	vaste: No		
Mixed waste (haz. and radioa	active): No		
Recycler of hazardous waste: No			

Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

. Waste code:	D002
. Waste name:	CORROSIVE WASTE

Violation Status:

#### FINDS:

# Registry ID:

# 110004669216

No violations found

Environmental Interest/Information System

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

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#### 1000451235

Map ID Direction Distance				EDR ID Number		
Elevation	Site			Database(s)	EPA ID Number	
	CENTER AUTOMOTIVE PARTS CO (Continued)					
		cess				
	ECHO: Envid: Regist DFR U	ry ID: IRL:	1000451235 110004669216 http://echo.epa.gov/detailed-facility	y-report?fid=110004669216		
AQ181 NE 1/8-1/4 0.250 mi.	DAUGHER1 877 MCGC AKRON, OH	TY E A OWAN ST I		EDR Hist Auto	1009031743 N/A	
1320 ft.	Site 2 of 2 in	n cluster AQ				
Relative:	EDR Hist	Auto				
Actual: 1112 ft.	Year: 1925	Name: DAUGHERTY E	A Type: A AUTO REPAIR			
182 WSW 1/8-1/4 0.250 mi. 1320 ft.	LEE JOHN 333 E CRC AKRON, OH	T DSIER ST I		EDR Hist Cleaner	1009150902 N/A	
Relative: Lower	EDR Hist	Cleaner				
Actual: 1040 ft.	Year: 1961	Name: LEE JOHN T	Type: DRY CLEANERS			

Count: 0 records.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)

NO SITES FOUND

# **GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING**

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

**Number of Days to Update:** Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

#### STANDARD ENVIRONMENTAL RECORDS

#### Federal NPL site list

#### NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 04/05/2017 Date Data Arrived at EDR: 04/21/2017 Date Made Active in Reports: 05/12/2017 Number of Days to Update: 21 Source: EPA Telephone: N/A Last EDR Contact: 07/07/2017 Next Scheduled EDR Contact: 10/16/2017 Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC) Telephone: 202-564-7333

EPA Region 1 Telephone 617-918-1143

EPA Region 3 Telephone 215-814-5418

EPA Region 4 Telephone 404-562-8033

EPA Region 5 Telephone 312-886-6686

EPA Region 10 Telephone 206-553-8665

#### Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

EPA Region 6

EPA Region 7

EPA Region 8

**EPA Region 9** 

Telephone: 214-655-6659

Telephone: 913-551-7247

Telephone: 303-312-6774

Telephone: 415-947-4246

Date of Government Version: 04/05/2017 Date Data Arrived at EDR: 04/21/2017 Date Made Active in Reports: 05/12/2017 Number of Days to Update: 21

Source: EPA Telephone: N/A Last EDR Contact: 07/07/2017 Next Scheduled EDR Contact: 10/16/2017 Data Release Frequency: Quarterly

#### NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991 Date Data Arrived at EDR: 02/02/1994 Date Made Active in Reports: 03/30/1994 Number of Days to Update: 56 Source: EPA Telephone: 202-564-4267 Last EDR Contact: 08/15/2011 Next Scheduled EDR Contact: 11/28/2011 Data Release Frequency: No Update Planned

#### Federal Delisted NPL site list

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 04/05/2017 Date Data Arrived at EDR: 04/21/2017 Date Made Active in Reports: 05/12/2017 Number of Days to Update: 21 Source: EPA Telephone: N/A Last EDR Contact: 07/07/2017 Next Scheduled EDR Contact: 10/16/2017 Data Release Frequency: Quarterly

#### Federal CERCLIS list

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 11/07/2016	Source: Environmental Protection Agency
Date Data Arrived at EDR: 01/05/2017	Telephone: 703-603-8704
Date Made Active in Reports: 04/07/2017	Last EDR Contact: 07/07/2017
Number of Days to Update: 92	Next Scheduled EDR Contact: 10/16/2017
	Data Release Frequency: Varies

## SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 02/07/2017 Date Data Arrived at EDR: 04/19/2017 Date Made Active in Reports: 05/05/2017 Number of Days to Update: 16 Source: EPA Telephone: 800-424-9346 Last EDR Contact: 06/08/2017 Next Scheduled EDR Contact: 07/31/2017 Data Release Frequency: Quarterly

#### Federal CERCLIS NFRAP site list

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

# **GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING**

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that. based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 02/07/2017 Date Data Arrived at EDR: 04/19/2017 Date Made Active in Reports: 05/05/2017 Number of Days to Update: 16

Source: EPA Telephone: 800-424-9346 Last EDR Contact: 06/08/2017 Next Scheduled EDR Contact: 07/31/2017 Data Release Frequency: Quarterly

## Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 12/12/2016	Source: EPA
Date Data Arrived at EDR: 12/28/2016	Telephone: 800-424-9346
Date Made Active in Reports: 02/10/2017	Last EDR Contact: 06/29/2017
Number of Days to Update: 44	Next Scheduled EDR Contact: 10/09/2017
	Data Release Frequency: Quarterly

## Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 12/12/2016 Date Data Arrived at EDR: 12/28/2016 Date Made Active in Reports: 02/10/2017 Number of Days to Update: 44

Source: Environmental Protection Agency Telephone: 312-886-6186 Last EDR Contact: 06/29/2017 Next Scheduled EDR Contact: 10/09/2017 Data Release Frequency: Quarterly

#### Federal RCRA generators list

# RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 12/12/2016 Date Data Arrived at EDR: 12/28/2016 Date Made Active in Reports: 02/10/2017 Number of Days to Update: 44

Source: Environmental Protection Agency Telephone: 312-886-6186 Last EDR Contact: 06/29/2017 Next Scheduled EDR Contact: 10/09/2017 Data Release Frequency: Quarterly

#### RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small guantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 12/12/2016 Date Data Arrived at EDR: 12/28/2016 Date Made Active in Reports: 02/10/2017 Number of Days to Update: 44

Source: Environmental Protection Agency Telephone: 312-886-6186 Last EDR Contact: 06/29/2017 Next Scheduled EDR Contact: 10/09/2017 Data Release Frequency: Quarterly

#### RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 12/12/2016 Date Data Arrived at EDR: 12/28/2016 Date Made Active in Reports: 02/10/2017 Number of Days to Update: 44

Source: Environmental Protection Agency Telephone: 312-886-6186 Last EDR Contact: 06/29/2017 Next Scheduled EDR Contact: 10/09/2017 Data Release Frequency: Varies

#### Federal institutional controls / engineering controls registries

#### LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 12/28/2016	Source: Department of the Navy
Date Data Arrived at EDR: 01/04/2017	Telephone: 843-820-7326
Date Made Active in Reports: 04/07/2017	Last EDR Contact: 05/15/2017
Number of Days to Update: 93	Next Scheduled EDR Contact: 08/28/2017
	Data Release Frequency: Varies

## US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 02/13/2017	Source: Environmental Protection Agency
Date Data Arrived at EDR: 02/28/2017	Telephone: 703-603-0695
Date Made Active in Reports: 06/09/2017	Last EDR Contact: 05/31/2017
Number of Days to Update: 101	Next Scheduled EDR Contact: 09/11/2017
	Data Release Frequency: Varies

## US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 02/13/2017 Date Data Arrived at EDR: 02/28/2017 Date Made Active in Reports: 06/09/2017 Number of Days to Update: 101

Source: Environmental Protection Agency Telephone: 703-603-0695 Last EDR Contact: 05/31/2017 Next Scheduled EDR Contact: 09/11/2017 Data Release Frequency: Varies
#### Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 09/26/2016 Date Data Arrived at EDR: 09/29/2016 Date Made Active in Reports: 11/11/2016 Number of Days to Update: 43 Source: National Response Center, United States Coast Guard Telephone: 202-267-2180 Last EDR Contact: 06/28/2017 Next Scheduled EDR Contact: 10/09/2017 Data Release Frequency: Annually

#### State- and tribal - equivalent CERCLIS

SHWS: This state does not maintain a SHWS list. See the Federal CERCLIS list and Federal NPL list. State Hazardous Waste Sites. State hazardous waste site records are the states' equivalent to CERCLIS. These sites may or may not already be listed on the federal CERCLIS list. Priority sites planned for cleanup using state funds (state equivalent of Superfund) are identified along with sites where cleanup will be paid for by potentially responsible parties. Available information varies by state.

Date of Government Version: N/ASource: Ohio EPADate Data Arrived at EDR: N/ATelephone: 614-644-2924Date Made Active in Reports: N/ALast EDR Contact: 05/05/2017Number of Days to Update: N/ANext Scheduled EDR Contact: 08/21/2017Data Release Frequency: N/A

#### DERR: Division of Emergency & Remedial Response's Database

The DERR listings contains sites from all of Ohio that are in the Division of Environmental Response and Revitalization (DERR) database, which is an index of sites for which our district offices maintain files. The database is NOT a record of contaminated sites or sites suspected of contamination. Not all sites in the database are contaminated, and a site's absence from the database does not imply that it is uncontaminated.

Date of Government Version: 08/19/2016 Date Data Arrived at EDR: 11/09/2016 Date Made Active in Reports: 02/06/2017 Number of Days to Update: 89 Source: Ohio EPA Telephone: 614-644-3538 Last EDR Contact: 05/10/2017 Next Scheduled EDR Contact: 08/21/2017 Data Release Frequency: Semi-Annually

#### State and tribal landfill and/or solid waste disposal site lists

#### SWF/LF: Licensed Solid Waste Facilities

Solid Waste Facilities/Landfill Sites. SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 09/08/2016 Date Data Arrived at EDR: 01/13/2017 Date Made Active in Reports: 02/07/2017 Number of Days to Update: 25 Source: Ohio Environmental Protection Agency Telephone: 614-644-2621 Last EDR Contact: 07/14/2017 Next Scheduled EDR Contact: 10/23/2017 Data Release Frequency: Annually

#### State and tribal leaking storage tank lists

LUST: Leaking Underground Storage Tank File

Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state.

Date of Government Version: 11/13/2016 Date Data Arrived at EDR: 11/16/2016 Date Made Active in Reports: 02/07/2017 Number of Days to Update: 83 Source: Department of Commerce Telephone: 614-752-8200 Last EDR Contact: 05/18/2017 Next Scheduled EDR Contact: 08/28/2017 Data Release Frequency: Quarterly

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.		
Date of Government Version: 10/07/2016 Date Data Arrived at EDR: 01/26/2017 Date Made Active in Reports: 05/05/2017 Number of Days to Update: 99	Source: EPA Region 10 Telephone: 206-553-2857 Last EDR Contact: 04/28/2017 Next Scheduled EDR Contact: 08/07/2017 Data Release Frequency: Quarterly	
INDIAN LUST R9: Leaking Underground Storage Ta LUSTs on Indian land in Arizona, California, N	anks on Indian Land ew Mexico and Nevada	
Date of Government Version: 10/06/2016 Date Data Arrived at EDR: 01/26/2017 Date Made Active in Reports: 05/05/2017 Number of Days to Update: 99	Source: Environmental Protection Agency Telephone: 415-972-3372 Last EDR Contact: 04/28/2017 Next Scheduled EDR Contact: 08/07/2017 Data Release Frequency: Quarterly	
INDIAN LUST R8: Leaking Underground Storage T LUSTs on Indian land in Colorado, Montana, N	anks on Indian Land Iorth Dakota, South Dakota, Utah and Wyoming.	
Date of Government Version: 10/17/2016 Date Data Arrived at EDR: 01/26/2017 Date Made Active in Reports: 05/05/2017 Number of Days to Update: 99	Source: EPA Region 8 Telephone: 303-312-6271 Last EDR Contact: 04/28/2017 Next Scheduled EDR Contact: 08/07/2017 Data Release Frequency: Quarterly	
INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in Iowa, Kansas, and Nebraska		
Date of Government Version: 09/01/2016 Date Data Arrived at EDR: 01/26/2017 Date Made Active in Reports: 05/05/2017 Number of Days to Update: 99	Source: EPA Region 7 Telephone: 913-551-7003 Last EDR Contact: 04/28/2017 Next Scheduled EDR Contact: 08/07/2017 Data Release Frequency: Varies	
INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in New Mexico and Oklahoma.		
Date of Government Version: 10/01/2016 Date Data Arrived at EDR: 01/26/2017 Date Made Active in Reports: 05/05/2017 Number of Days to Update: 99	Source: EPA Region 6 Telephone: 214-665-6597 Last EDR Contact: 04/28/2017 Next Scheduled EDR Contact: 08/07/2017 Data Release Frequency: Varies	
INDIAN LUST R4: Leaking Underground Storage T LUSTs on Indian land in Florida, Mississippi ar	anks on Indian Land nd North Carolina.	
Date of Government Version: 10/14/2016 Date Data Arrived at EDR: 01/27/2017 Date Made Active in Reports: 05/05/2017 Number of Days to Update: 98	Source: EPA Region 4 Telephone: 404-562-8677 Last EDR Contact: 04/28/2017 Next Scheduled EDR Contact: 08/07/2017 Data Release Frequency: Semi-Annually	
INDIAN LUST R1: Leaking Underground Storage T A listing of leaking underground storage tank lo	anks on Indian Land ocations on Indian Land.	
Date of Government Version: 11/14/2016 Date Data Arrived at EDR: 01/26/2017 Date Made Active in Reports: 05/05/2017 Number of Days to Update: 99	Source: EPA Region 1 Telephone: 617-918-1313 Last EDR Contact: 04/28/2017 Next Scheduled EDR Contact: 08/07/2017	

Data Release Frequency: Varies

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.		
	Date of Government Version: 11/14/2016 Date Data Arrived at EDR: 01/26/2017 Date Made Active in Reports: 05/05/2017 Number of Days to Update: 99	Source: EPA, Region 5 Telephone: 312-886-7439 Last EDR Contact: 04/28/2017 Next Scheduled EDR Contact: 08/07/2017 Data Release Frequency: Varies
UNR	EG LTANKS: Ohio Leaking UST File A suspected or confirmed release of petroleum	from a non-regulated UST.
	Date of Government Version: 08/25/1999 Date Data Arrived at EDR: 08/19/2003 Date Made Active in Reports: 08/26/2003 Number of Days to Update: 7	Source: Department of Commerce Telephone: 614-752-7938 Last EDR Contact: 08/01/2003 Next Scheduled EDR Contact: N/A Data Release Frequency: No Update Planned
Stat	e and tribal registered storage tank lists	
FEM	A UST: Underground Storage Tank Listing A listing of all FEMA owned underground stora	ge tanks.
	Date of Government Version: 01/01/2010 Date Data Arrived at EDR: 02/16/2010 Date Made Active in Reports: 04/12/2010 Number of Days to Update: 55	Source: FEMA Telephone: 202-646-5797 Last EDR Contact: 07/14/2017 Next Scheduled EDR Contact: 10/23/2017 Data Release Frequency: Varies
UST	: Underground Storage Tank Tank File Registered Underground Storage Tanks. UST's Act (RCRA) and must be registered with the sta information varies by state program.	s are regulated under Subtitle I of the Resource Conservation and Recovery ate department responsible for administering the UST program. Available
	Date of Government Version: 11/13/2016 Date Data Arrived at EDR: 11/17/2016 Date Made Active in Reports: 02/07/2017 Number of Days to Update: 82	Source: Department of Commerce Telephone: 614-752-8200 Last EDR Contact: 05/18/2017 Next Scheduled EDR Contact: 08/28/2017 Data Release Frequency: Quarterly
AST	: Above Ground Storage Tanks A listing of aboveground storage tank site locat	ions in the state.
	Date of Government Version: 08/15/2016 Date Data Arrived at EDR: 08/22/2016 Date Made Active in Reports: 10/20/2016 Number of Days to Update: 59	Source: Department of Commerce Telephone: 614-752-7037 Last EDR Contact: 05/08/2017 Next Scheduled EDR Contact: 08/21/2017 Data Release Frequency: Varies
INDI	AN UST R8: Underground Storage Tanks on In The Indian Underground Storage Tank (UST) of land in EPA Region 8 (Colorado, Montana, Nor	dian Land latabase provides information about underground storage tanks on Indian th Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).
	Date of Government Version: 10/17/2016	Source: EPA Region 8

Date of Government Version: 10/17/2016 Date Data Arrived at EDR: 01/26/2017 Date Made Active in Reports: 05/05/2017 Number of Days to Update: 99

Source: EPA Region 8 Telephone: 303-312-6137 Last EDR Contact: 04/28/2017 Next Scheduled EDR Contact: 08/07/2017 Data Release Frequency: Quarterly

#### INDIAN UST R9: Underground Storage Tanks on Indian Land The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 10/06/20	16 Source: EPA Region 9
Date Data Arrived at EDR: 01/26/2017	Telephone: 415-972-3368
Date Made Active in Reports: 05/05/20	17 Last EDR Contact: 04/28/2017
Number of Days to Update: 99	Next Scheduled EDR Contact: 08/07/2017
	Data Release Frequency: Quarterly

#### INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 10/07/2016	Source: EPA Region 10
Date Data Arrived at EDR: 01/26/2017	Telephone: 206-553-2857
Date Made Active in Reports: 05/05/2017	Last EDR Contact: 04/28/2017
Number of Days to Update: 99	Next Scheduled EDR Contact: 08/07/2017
	Data Release Frequency: Quarterly

#### INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 09/01/2016	
Date Data Arrived at EDR: 01/26/2017	
Date Made Active in Reports: 05/05/2017	
Number of Days to Update: 99	

Source: EPA Region 7 Telephone: 913-551-7003 Last EDR Contact: 04/28/2017 Next Scheduled EDR Contact: 08/07/2017 Data Release Frequency: Varies

#### INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 10/01/2016 Date Data Arrived at EDR: 01/26/2017 Date Made Active in Reports: 05/05/2017 Number of Days to Update: 99

Source: EPA Region 6 Telephone: 214-665-7591 Last EDR Contact: 04/28/2017 Next Scheduled EDR Contact: 08/07/2017 Data Release Frequency: Semi-Annually

#### INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 11/14/2016	Source: EPA, Region 1
Date Data Arrived at EDR: 01/26/2017	Telephone: 617-918-1313
Date Made Active in Reports: 05/05/2017	Last EDR Contact: 04/28/2017
Number of Days to Update: 99	Next Scheduled EDR Contact: 08/07/2017
	Data Release Frequency: Varies

#### INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 10/14/2016	Source: EPA Region 4
Date Data Arrived at EDR: 01/27/2017	Telephone: 404-562-9424
Date Made Active in Reports: 05/05/2017	Last EDR Contact: 04/28/2017
Number of Days to Update: 98	Next Scheduled EDR Contact: 08/07/2017
	Data Release Frequency: Semi-Annually

#### INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 01/14/2017	So
Date Data Arrived at EDR: 01/26/2017	Tel
Date Made Active in Reports: 05/05/2017	Las
Number of Days to Update: 99	Ne

Source: EPA Region 5 Telephone: 312-886-6136 Last EDR Contact: 04/28/2017 Next Scheduled EDR Contact: 08/07/2017 Data Release Frequency: Varies

#### State and tribal institutional control / engineering control registries

#### HIST ENG CONTROLS: Operation & Maintenance Agreements Database

Volunteers that complete a voluntary action that relies on the ongoing operation and maintenance (O&M) of an engineered control to make the site protective (e.g" cap systems and ground water treatment systems) must enter into a legally binding agreement with the Ohio EPA before the director issues a covenant not to sue. This O&M Agreement must describe how the remedy is constructed and how itwill be monitored, maintained and repaired. It also lays out inspection opportunities for the agency. Companies must document that they have the financial capability to operate any remedy relied on, before the agency will agree to enter into the O&M Agreement. The statute requires that the agency be notified of any change in ownership. This database is no longer updated or maintained by the state agency.

Date of Government Version: 05/10/2005 Date Data Arrived at EDR: 04/04/2006 Date Made Active in Reports: 05/04/2006 Number of Days to Update: 30 Source: Ohio EPA Telephone: 614-644-2306 Last EDR Contact: 06/02/2008 Next Scheduled EDR Contact: 09/01/2008 Data Release Frequency: No Update Planned

#### HIST INST CONTROLS: Institutional Controls Database

"Institutional control" is a restriction that is recorded in the same manner as a deed which limits access to or use of the property such that exposure to hazardous substances or petroleum are effectively and reliably eliminated or mitigated. Examples of institutional controls include land and water use restrictions. This database is no longer updated or maintained by the state agency.

Date of Government Version: 05/10/2005	Source: Ohio EPA
Date Data Arrived at EDR: 04/06/2006	Telephone: 614-644-2306
Date Made Active in Reports: 05/04/2006	Last EDR Contact: 06/02/2008
Number of Days to Update: 28	Next Scheduled EDR Contact: 09/01/2008
	Data Release Frequency: No Update Planned

#### ENG CONTROLS: Sites with Engineering Controls

A database that tracks properties with engineering controls.

Date of Government Version: 08/19/2016	Source: Ohio EPA
Date Data Arrived at EDR: 11/09/2016	Telephone: 614-644-2306
Date Made Active in Reports: 02/06/2017	Last EDR Contact: 05/10/2017
Number of Days to Update: 89	Next Scheduled EDR Contact: 08/21/2017
	Data Release Frequency: Semi-Annually

#### INST CONTROL: Sites with Institutional Engineering Controls A database that tracks properties with institutional controls.

Date of Government Version: 08/19/2016	
Date Data Arrived at EDR: 11/09/2016	
Date Made Active in Reports: 02/06/2017	
Number of Days to Update: 89	

Source: Ohio Environmental Protection Agency Telephone: 614-644-2306 Last EDR Contact: 05/10/2017 Next Scheduled EDR Contact: 08/21/2017 Data Release Frequency: Semi-Annually

State and tribal voluntary cleanup sites

#### INDIAN VCP R7: Voluntary Cleanup Priority Lisitng

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 7 Telephone: 913-551-7365 Last EDR Contact: 04/20/2009 Next Scheduled EDR Contact: 07/20/2009 Data Release Frequency: Varies

VCP: Voluntary Action Program Sites Site involved in the Voluntary Action Program.

> Date of Government Version: 09/19/2016 Date Data Arrived at EDR: 11/09/2016 Date Made Active in Reports: 02/06/2017 Number of Days to Update: 89

Source: Ohio EPA, Voluntary Action Program Telephone: 614-728-1298 Last EDR Contact: 05/10/2017 Next Scheduled EDR Contact: 08/21/2017 Data Release Frequency: Semi-Annually

INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015	Source: EPA, Region 1
Date Data Arrived at EDR: 09/29/2015	Telephone: 617-918-1102
Date Made Active in Reports: 02/18/2016	Last EDR Contact: 06/27/2017
Number of Days to Update: 142	Next Scheduled EDR Contact: 10/09/2017
· ·	Data Release Frequency: Varies

#### State and tribal Brownfields sites

BROWNFIELDS: Ohio Brownfield Inventory

A statewide brownfields inventory. A brownfield is an abandoned, idled or under-used industrial or commercial property where expansion or redevelopment is complicated by known or potential releases of hazardous substances and/or petroleum.

Date of Government Version: 12/12/2016 Date Data Arrived at EDR: 12/15/2016 Date Made Active in Reports: 02/06/2017 Number of Days to Update: 53

Source: Ohio EPA Telephone: 614-644-3748 Last EDR Contact: 06/15/2017 Next Scheduled EDR Contact: 09/25/2017 Data Release Frequency: Varies

#### ADDITIONAL ENVIRONMENTAL RECORDS

#### Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 03/02/2017 Date Data Arrived at EDR: 03/02/2017 Date Made Active in Reports: 04/07/2017 Number of Days to Update: 36

Source: Environmental Protection Agency Telephone: 202-566-2777 Last EDR Contact: 06/20/2017 Next Scheduled EDR Contact: 10/02/2017 Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

#### HIST LF: Old Solid Waste Landfill A list of about 1200 old abandoned dumps or landfills. This database was developed from Ohio EPA staff notebooks and other information dating from the mid-1970s Date of Government Version: 01/01/1980 Source: Ohio EPA Date Data Arrived at EDR: 07/01/2003 Telephone: 614-644-3749 Last EDR Contact: 06/26/2003 Date Made Active in Reports: 07/17/2003 Number of Days to Update: 16 Next Scheduled EDR Contact: N/A Data Release Frequency: No Update Planned SWRCY: Recycling Facility Listing A listing of recycling facility locations. Date of Government Version: 01/24/2017 Source: Ohio EPA Date Data Arrived at EDR: 01/27/2017 Telephone: 614-728-5357 Date Made Active in Reports: 02/07/2017 Last EDR Contact: 07/10/2017 Number of Days to Update: 11 Next Scheduled EDR Contact: 10/23/2017 Data Release Frequency: Varies INDIAN ODI: Report on the Status of Open Dumps on Indian Lands Location of open dumps on Indian land. Date of Government Version: 12/31/1998 Source: Environmental Protection Agency Date Data Arrived at EDR: 12/03/2007 Telephone: 703-308-8245 Date Made Active in Reports: 01/24/2008 Last EDR Contact: 05/01/2017 Number of Days to Update: 52 Next Scheduled EDR Contact: 08/14/2017 Data Release Frequency: Varies DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California. Date of Government Version: 01/12/2009 Source: EPA, Region 9 Date Data Arrived at EDR: 05/07/2009 Telephone: 415-947-4219 Date Made Active in Reports: 09/21/2009 Last EDR Contact: 04/24/2017 Number of Days to Update: 137 Next Scheduled EDR Contact: 08/07/2017 Data Release Frequency: No Update Planned **ODI:** Open Dump Inventory An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria. Date of Government Version: 06/30/1985 Source: Environmental Protection Agency Date Data Arrived at EDR: 08/09/2004 Telephone: 800-424-9346 Date Made Active in Reports: 09/17/2004 Last EDR Contact: 06/09/2004 Number of Days to Update: 39 Next Scheduled EDR Contact: N/A Data Release Frequency: No Update Planned IHS OPEN DUMPS: Open Dumps on Indian Land A listing of all open dumps located on Indian Land in the United States. Date of Government Version: 04/01/2014 Source: Department of Health & Human Serivces, Indian Health Service Date Data Arrived at EDR: 08/06/2014 Telephone: 301-443-1452 Date Made Active in Reports: 01/29/2015 Last EDR Contact: 05/05/2017

Next Scheduled EDR Contact: 08/14/2017

Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

Number of Days to Update: 176

US HIST CI	DI: National	Clandestine I	aboratory	Register
			Laboratory	regiotor

A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 02/09/2017 Date Data Arrived at EDR: 03/08/2017 Date Made Active in Reports: 06/09/2017 Number of Days to Update: 93 Source: Drug Enforcement Administration Telephone: 202-307-1000 Last EDR Contact: 02/28/2017 Next Scheduled EDR Contact: 06/12/2017 Data Release Frequency: No Update Planned

CDL: Clandestine Drug Lab Locations

A list of clandestine drug lab sites with environmental impact. This list is extracted from the SPILLS database based on the "product" type.

Date of Government Version: 11/10/2016 Date Data Arrived at EDR: 11/11/2016 Date Made Active in Reports: 02/06/2017 Number of Days to Update: 87 Source: Ohio EPA Telephone: 614-644-2080 Last EDR Contact: 05/08/2017 Next Scheduled EDR Contact: 08/21/2017 Data Release Frequency: Varies

US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 02/09/2017 Date Data Arrived at EDR: 03/08/2017 Date Made Active in Reports: 06/09/2017 Number of Days to Update: 93 Source: Drug Enforcement Administration Telephone: 202-307-1000 Last EDR Contact: 05/31/2017 Next Scheduled EDR Contact: 09/11/2017 Data Release Frequency: Quarterly

#### Local Lists of Registered Storage Tanks

ARCHIVE UST: Archived Underground Storage Tank Sites

Underground storage tank records that have been removed from the Underground Storage Tank database.

Date of Government Version: 11/13/2016 Date Data Arrived at EDR: 11/17/2016 Date Made Active in Reports: 02/07/2017 Number of Days to Update: 82 Source: Department of Commerce, Division of State Fire Marshal Telephone: 614-752-7938 Last EDR Contact: 05/18/2017 Next Scheduled EDR Contact: 08/28/2017 Data Release Frequency: Quarterly

#### Local Land Records

#### LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 02/18/2014 Date Data Arrived at EDR: 03/18/2014 Date Made Active in Reports: 04/24/2014 Number of Days to Update: 37 Source: Environmental Protection Agency Telephone: 202-564-6023 Last EDR Contact: 06/09/2017 Next Scheduled EDR Contact: 08/07/2017 Data Release Frequency: Varies

#### **Records of Emergency Release Reports**

#### HMIRS: Hazardous Materials Information Reporting System Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 12/28/2016 Date Data Arrived at EDR: 12/28/2016 Date Made Active in Reports: 02/03/2017 Number of Days to Update: 37 Source: U.S. Department of Transportation Telephone: 202-366-4555 Last EDR Contact: 06/28/2017 Next Scheduled EDR Contact: 10/09/2017 Data Release Frequency: Annually

#### SPILLS: Emergency Response Database

Incidents reported to the Emergency Response Unit. The focus of the ER program is to minimize the impact on the environment from accidental releases, spills, and unauthorized discharges from any fixed or mobile sources. Incidents involving petroleum products, hazardous materials, hazardous waste, abandoned drums, or other materials which may pose as a pollution threat to the state?s water, land, or air should be reported immediately. Not all incidents included in the database are actual SPILLS, they can simply be reported incidents.

Date of Government Version: 11/10/2016 Date Data Arrived at EDR: 11/11/2016 Date Made Active in Reports: 02/06/2017 Number of Days to Update: 87 Source: Ohio EPA Telephone: 614-644-2084 Last EDR Contact: 05/08/2017 Next Scheduled EDR Contact: 08/21/2017 Data Release Frequency: Varies

#### SPILLS 90: SPILLS90 data from FirstSearch

Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 09/13/2012 Date Data Arrived at EDR: 01/03/2013 Date Made Active in Reports: 02/27/2013 Number of Days to Update: 55 Source: FirstSearch Telephone: N/A Last EDR Contact: 01/03/2013 Next Scheduled EDR Contact: N/A Data Release Frequency: No Update Planned

#### SPILLS 80: SPILLS80 data from FirstSearch

Spills 80 includes those spill and release records available from FirstSearch databases prior to 1990. Typically, they may include chemical, oil and/or hazardous substance spills recorded before 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 80.

Date of Government Version: 04/24/2004 Date Data Arrived at EDR: 01/03/2013 Date Made Active in Reports: 03/01/2013 Number of Days to Update: 57 Source: FirstSearch Telephone: N/A Last EDR Contact: 01/03/2013 Next Scheduled EDR Contact: N/A Data Release Frequency: No Update Planned

#### Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 12/12/2016 Date Data Arrived at EDR: 12/28/2016 Date Made Active in Reports: 02/10/2017 Number of Days to Update: 44 Source: Environmental Protection Agency Telephone: 312-886-6186 Last EDR Contact: 06/29/2017 Next Scheduled EDR Contact: 10/09/2017 Data Release Frequency: Varies

#### FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 01/31/2015	Source: U.S. Army Corps of Engineers
Date Data Arrived at EDR: 07/08/2015	Telephone: 202-528-4285
Date Made Active in Reports: 10/13/2015	Last EDR Contact: 02/24/2017
Number of Days to Update: 97	Next Scheduled EDR Contact: 06/05/2017
	Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005 Date Data Arrived at EDR: 11/10/2006 Date Made Active in Reports: 01/11/2007 Number of Days to Update: 62 Source: USGS Telephone: 888-275-8747 Last EDR Contact: 07/12/2017 Next Scheduled EDR Contact: 10/23/2017 Data Release Frequency: Semi-Annually

#### FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 12/31/2005 Date Data Arrived at EDR: 02/06/2006 Date Made Active in Reports: 01/11/2007 Number of Days to Update: 339 Source: U.S. Geological Survey Telephone: 888-275-8747 Last EDR Contact: 07/14/2017 Next Scheduled EDR Contact: 10/23/2017 Data Release Frequency: N/A

#### SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 01/01/2017 Date Data Arrived at EDR: 02/03/2017 Date Made Active in Reports: 04/07/2017 Number of Days to Update: 63 Source: Environmental Protection Agency Telephone: 615-532-8599 Last EDR Contact: 05/19/2017 Next Scheduled EDR Contact: 08/28/2017 Data Release Frequency: Varies

#### US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 02/13/2017 Date Data Arrived at EDR: 02/15/2017 Date Made Active in Reports: 05/12/2017 Number of Days to Update: 86 Source: Environmental Protection Agency Telephone: 202-566-1917 Last EDR Contact: 05/17/2017 Next Scheduled EDR Contact: 08/28/2017 Data Release Frequency: Quarterly

#### EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013 Date Data Arrived at EDR: 03/21/2014 Date Made Active in Reports: 06/17/2014 Number of Days to Update: 88 Source: Environmental Protection Agency Telephone: 617-520-3000 Last EDR Contact: 05/08/2017 Next Scheduled EDR Contact: 08/21/2017 Data Release Frequency: Quarterly

#### 2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 04/22/2013 Date Data Arrived at EDR: 03/03/2015 Date Made Active in Reports: 03/09/2015 Number of Days to Update: 6 Source: Environmental Protection Agency Telephone: 703-308-4044 Last EDR Contact: 05/05/2017 Next Scheduled EDR Contact: 08/21/2017 Data Release Frequency: Varies

#### TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2012 Date Data Arrived at EDR: 01/15/2015 Date Made Active in Reports: 01/29/2015 Number of Days to Update: 14 Source: EPA Telephone: 202-260-5521 Last EDR Contact: 06/21/2017 Next Scheduled EDR Contact: 10/02/2017 Data Release Frequency: Every 4 Years

#### TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2014 Date Data Arrived at EDR: 11/24/2015 Date Made Active in Reports: 04/05/2016 Number of Days to Update: 133 Source: EPA Telephone: 202-566-0250 Last EDR Contact: 05/26/2017 Next Scheduled EDR Contact: 09/04/2017 Data Release Frequency: Annually

#### SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2009Source: EPADate Data Arrived at EDR: 12/10/2010Telephone: 2Date Made Active in Reports: 02/25/2011Last EDR CorNumber of Days to Update: 77Next Schedule

Source: EPA Telephone: 202-564-4203 Last EDR Contact: 04/26/2017 Next Scheduled EDR Contact: 08/07/2017 Data Release Frequency: Annually

#### ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 11/25/2013SDate Data Arrived at EDR: 12/12/2013Date Made Active in Reports: 02/24/2014Number of Days to Update: 74I

Source: EPA Telephone: 703-416-0223 Last EDR Contact: 06/09/2017 Next Scheduled EDR Contact: 09/18/2017 Data Release Frequency: Annually

#### RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 02/01/2017 Date Data Arrived at EDR: 02/09/2017 Date Made Active in Reports: 04/07/2017 Number of Days to Update: 57 Source: Environmental Protection Agency Telephone: 202-564-8600 Last EDR Contact: 04/21/2017 Next Scheduled EDR Contact: 08/07/2017 Data Release Frequency: Varies

#### RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995 Date Data Arrived at EDR: 07/03/1995 Date Made Active in Reports: 08/07/1995 Number of Days to Update: 35 Source: EPA Telephone: 202-564-4104 Last EDR Contact: 06/02/2008 Next Scheduled EDR Contact: 09/01/2008 Data Release Frequency: No Update Planned

#### PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 10/25/2013	Source: EPA
Date Data Arrived at EDR: 10/17/2014	Telephone: 202-564-6023
Date Made Active in Reports: 10/20/2014	Last EDR Contact: 06/06/2017
Number of Days to Update: 3	Next Scheduled EDR Contact: 08/21/2017
	Data Release Frequency: Quarterly

#### PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 04/10/2017
Next Scheduled EDR Contact: 07/24/2017
Data Release Frequency: Annually

#### ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 11/18/2016 Date Data Arrived at EDR: 11/23/2016 Date Made Active in Reports: 02/10/2017 Number of Days to Update: 79 Source: Environmental Protection Agency Telephone: 202-564-2501 Last EDR Contact: 07/07/2017 Next Scheduled EDR Contact: 10/23/2017 Data Release Frequency: Quarterly

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act) FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009	Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Date Data Arrived at EDR: 04/16/2009	Telephone: 202-566-1667
Date Made Active in Reports: 05/11/2009	Last EDR Contact: 05/19/2017
Number of Days to Update: 25	Next Scheduled EDR Contact: 09/04/2017
	Data Release Frequency: Quarterly

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act) A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009	Source: EPA
Date Data Arrived at EDR: 04/16/2009	Telephone: 202-566-1667
Date Made Active in Reports: 05/11/2009	Last EDR Contact: 05/19/2017
Number of Days to Update: 25	Next Scheduled EDR Contact: 09/04/2017
	Data Release Frequency: Quarterly

MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 08/30/2016	Source: Nuclear Regulatory Commission
Date Data Arrived at EDR: 09/08/2016	Telephone: 301-415-7169
Date Made Active in Reports: 10/21/2016	Last EDR Contact: 05/08/2017
Number of Days to Update: 43	Next Scheduled EDR Contact: 08/21/2017
	Data Release Frequency: Quarterly

COAL ASH DOE: Steam-Electric Plant Operation Data

A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005	Source: Department of Energy
Date Data Arrived at EDR: 08/07/2009	Telephone: 202-586-8719
Date Made Active in Reports: 10/22/2009	Last EDR Contact: 06/05/2017
Number of Days to Update: 76	Next Scheduled EDR Contact: 09/18/2017
	Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List

A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 07/01/2014	
Date Data Arrived at EDR: 09/10/2014	
Date Made Active in Reports: 10/20/2014	
Number of Days to Update: 40	

Source: Environmental Protection Agency Telephone: N/A Last EDR Contact: 06/05/2017 Next Scheduled EDR Contact: 09/18/2017 Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database

The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 02/01/2011	Source: Environmental Protection Agency
Date Data Arrived at EDR: 10/19/2011	Telephone: 202-566-0517
Date Made Active in Reports: 01/10/2012	Last EDR Contact: 04/28/2017
Number of Days to Update: 83	Next Scheduled EDR Contact: 08/07/2017
	Data Release Frequency: Varies

RADINFO: Radiation Information Database

The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 01/04/2017 Date Data Arrived at EDR: 01/06/2017 Date Made Active in Reports: 02/10/2017 Number of Days to Update: 35 Source: Environmental Protection Agency Telephone: 202-343-9775 Last EDR Contact: 07/12/2017 Next Scheduled EDR Contact: 10/16/2017 Data Release Frequency: Quarterly

#### HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing

A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006Source:Date Data Arrived at EDR: 03/01/2007TelephoDate Made Active in Reports: 04/10/2007Last EDNumber of Days to Update: 40Next Source:

Source: Environmental Protection Agency Telephone: 202-564-2501 Last EDR Contact: 12/17/2007 Next Scheduled EDR Contact: 03/17/2008 Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing

A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006 Date Data Arrived at EDR: 03/01/2007 Date Made Active in Reports: 04/10/2007 Number of Days to Update: 40 Source: Environmental Protection Agency Telephone: 202-564-2501 Last EDR Contact: 12/17/2008 Next Scheduled EDR Contact: 03/17/2008 Data Release Frequency: No Update Planned

DOT OPS: Incident and Accident Data

Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 07/31/2012	Source: Department of Transporation, Office of Pipeline Safety
Date Data Arrived at EDR: 08/07/2012	Telephone: 202-366-4595
Date Made Active in Reports: 09/18/2012	Last EDR Contact: 05/02/2017
Number of Days to Update: 42	Next Scheduled EDR Contact: 08/14/2017
	Data Release Frequency: Varies

#### CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 09/30/2016	Source:
Date Data Arrived at EDR: 11/18/2016	Telepho
Date Made Active in Reports: 02/03/2017	Last ED
Number of Days to Update: 77	Next Sc

Source: Department of Justice, Consent Decree Library Telephone: Varies Last EDR Contact: 06/21/2017 Next Scheduled EDR Contact: 10/09/2017 Data Release Frequency: Varies

#### BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2013 Date Data Arrived at EDR: 02/24/2015 Date Made Active in Reports: 09/30/2015 Number of Days to Update: 218 Source: EPA/NTIS Telephone: 800-424-9346 Last EDR Contact: 05/26/2017 Next Scheduled EDR Contact: 09/04/2017 Data Release Frequency: Biennially

#### **INDIAN RESERV: Indian Reservations**

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2014	Source: USGS
Date Data Arrived at EDR: 07/14/2015	Telephone: 202-208-3710
Date Made Active in Reports: 01/10/2017	Last EDR Contact: 07/11/2017
Number of Days to Update: 546	Next Scheduled EDR Contact: 10/23/2017
	Data Release Frequency: Semi-Annually

#### FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 12/23/2016 Date Data Arrived at EDR: 12/27/2016 Date Made Active in Reports: 02/17/2017 Number of Days to Update: 52 Source: Department of Energy Telephone: 202-586-3559 Last EDR Contact: 05/05/2017 Next Scheduled EDR Contact: 08/21/2017 Data Release Frequency: Varies

#### UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 09/14/2010 Date Data Arrived at EDR: 10/07/2011 Date Made Active in Reports: 03/01/2012 Number of Days to Update: 146 Source: Department of Energy Telephone: 505-845-0011 Last EDR Contact: 05/22/2017 Next Scheduled EDR Contact: 09/04/2017 Data Release Frequency: Varies

#### LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 12/05/2016SDate Data Arrived at EDR: 01/05/2017TDate Made Active in Reports: 02/10/2017LNumber of Days to Update: 36M

Source: Environmental Protection Agency Telephone: 703-603-8787 Last EDR Contact: 07/07/2017 Next Scheduled EDR Contact: 10/16/2017 Data Release Frequency: Varies

#### LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001 Date Data Arrived at EDR: 10/27/2010 Date Made Active in Reports: 12/02/2010 Number of Days to Update: 36 Source: American Journal of Public Health Telephone: 703-305-6451 Last EDR Contact: 12/02/2009 Next Scheduled EDR Contact: N/A Data Release Frequency: No Update Planned

#### US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

	Date of Government Version: 10/12/2016 Date Data Arrived at EDR: 10/26/2016 Date Made Active in Reports: 02/03/2017 Number of Days to Update: 100	Source: EPA Telephone: 202-564-2496 Last EDR Contact: 06/21/2017 Next Scheduled EDR Contact: 10/09/2017 Data Release Frequency: Annually
US A	AIRS MINOR: Air Facility System Data A listing of minor source facilities.	
	Date of Government Version: 10/12/2016 Date Data Arrived at EDR: 10/26/2016 Date Made Active in Reports: 02/03/2017 Number of Days to Update: 100	Source: EPA Telephone: 202-564-2496 Last EDR Contact: 06/21/2017 Next Scheduled EDR Contact: 10/09/2017 Data Release Frequency: Annually
USN	AINES: Mines Master Index File Contains all mine identification numbers issued violation information.	for mines active or opened since 1971. The data also includes
	Date of Government Version: 02/08/2017 Date Data Arrived at EDR: 02/28/2017 Date Made Active in Reports: 04/07/2017 Number of Days to Update: 38	Source: Department of Labor, Mine Safety and Health Administration Telephone: 303-231-5959 Last EDR Contact: 05/31/2017 Next Scheduled EDR Contact: 09/11/2017 Data Release Frequency: Semi-Annually
US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.		
	Date of Government Version: 12/05/2005 Date Data Arrived at EDR: 02/29/2008 Date Made Active in Reports: 04/18/2008 Number of Days to Update: 49	Source: USGS Telephone: 703-648-7709 Last EDR Contact: 05/31/2017 Next Scheduled EDR Contact: 09/11/2017 Data Release Frequency: Varies
US N	AINES 3: Active Mines & Mineral Plants Databa Active Mines and Mineral Processing Plant ope of the USGS.	erations for commodities monitored by the Minerals Information Team
	Date of Government Version: 04/14/2011 Date Data Arrived at EDR: 06/08/2011 Date Made Active in Reports: 09/13/2011 Number of Days to Update: 97	Source: USGS Telephone: 703-648-7709 Last EDR Contact: 06/02/2017 Next Scheduled EDR Contact: 09/11/2017 Data Release Frequency: Varies
ABA	NDONED MINES: Abandoned Mines An inventory of land and water impacted by part information needed to implement the Surface M contains information on the location, type, and with the reclamation of those problems. The inv program officials. It is dynamic to the extent that problems are reclaimed.	st mining (primarily coal mining) is maintained by OSMRE to provide Mining Control and Reclamation Act of 1977 (SMCRA). The inventory extent of AML impacts, as well as, information on the cost associated ventory is based upon field surveys by State, Tribal, and OSMRE at it is modified as new problems are identified and existing
	Date of Government Version: 03/14/2017 Date Data Arrived at EDR: 03/17/2017 Date Made Active in Reports: 04/07/2017 Number of Days to Update: 21	Source: Department of Interior Telephone: 202-208-2609 Last EDR Contact: 06/09/2017 Next Scheduled EDR Contact: 09/25/2017

Data Release Frequency: Quarterly

#### FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 04/04/2017	Source: EPA
Date Data Arrived at EDR: 04/07/2017	Telephone: (312) 353-2000
Date Made Active in Reports: 05/12/2017	Last EDR Contact: 06/07/2017
Number of Days to Update: 35	Next Scheduled EDR Contact: 09/18/2017
	Data Release Frequency: Quarterly

#### ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 03/19/2017	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/21/2017	Telephone: 202-564-2280
Date Made Active in Reports: 05/12/2017	Last EDR Contact: 06/07/2017
Number of Days to Update: 52	Next Scheduled EDR Contact: 09/18/2017
	Data Release Frequency: Quarterly

#### DOCKET HWC: Hazardous Waste Compliance Docket Listing

A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 06/02/2016	Source: Environmental Protection Agency
Date Data Arrived at EDR: 06/03/2016	Telephone: 202-564-0527
Date Made Active in Reports: 09/02/2016	Last EDR Contact: 05/24/2017
Number of Days to Update: 91	Next Scheduled EDR Contact: 09/11/2017
	Data Release Frequency: Varies

#### UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 10/25/2015	Source: Department of Defense
Date Data Arrived at EDR: 01/29/2016	Telephone: 571-373-0407
Date Made Active in Reports: 04/05/2016	Last EDR Contact: 07/17/2017
Number of Days to Update: 67	Next Scheduled EDR Contact: 10/30/2017
	Data Release Frequency: Varies

#### FUELS PROGRAM: EPA Fuels Program Registered Listing

This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 02/22/2017 Date Data Arrived at EDR: 02/22/2017 Date Made Active in Reports: 05/12/2017 Number of Days to Update: 79

Source: EPA Telephone: 800-385-6164 Last EDR Contact: 05/24/2017 Next Scheduled EDR Contact: 09/04/2017 Data Release Frequency: Quarterly

#### AIRS: Title V Permits Listing

A listing of Title V Permits issued by the Division of Air Pollution Control. It is a federal operating permit program adopted and implemented by the state. The basic program elements typically specify that major sources will submit an operating application to the specified state environmental regulatory agency according to a schedule.

Date of Government Version: 01/13/2017	Source: Ohio EPA
Date Data Arrived at EDR: 01/18/2017	Telephone: 614-644-2270
Date Made Active in Reports: 02/10/2017	Last EDR Contact: 06/19/2017
Number of Days to Update: 23	Next Scheduled EDR Contact: 10/02/2017
	Data Release Frequency: Varies

COAL ASH: Coal Ash Disposal Site Listing A listing of coal ash disposal site locations.		
Date of Government Version: 04/13/2015 Date Data Arrived at EDR: 04/16/2015 Date Made Active in Reports: 05/29/2015 Number of Days to Update: 43	Source: Ohio EPA Telephone: 614-644-2134 Last EDR Contact: 07/10/2017 Next Scheduled EDR Contact: 10/23/2017 Data Release Frequency: Varies	
CRO: Cessation of Regulated Operations Facility Li "Cessation of Regulated Operations" means th of any transaction or proceeding through which the production, use, storage or handling of reg	sting ne discontinuation or termination of regulated operations or the finalizing n those operations are discontinued. "Regulated Operations" means ulated substances.	
Date of Government Version: 09/26/2016 Date Data Arrived at EDR: 11/11/2016 Date Made Active in Reports: 02/06/2017 Number of Days to Update: 87	Source: Ohio EPA Telephone: 614-644-3065 Last EDR Contact: 05/09/2017 Next Scheduled EDR Contact: 08/21/2017 Data Release Frequency: Varies	
DRYCLEANERS: Drycleaner Facility Listing A listing of drycleaner facility locations.		
Date of Government Version: 01/09/2017 Date Data Arrived at EDR: 01/11/2017 Date Made Active in Reports: 02/06/2017 Number of Days to Update: 26	Source: Ohio EPA Telephone: 614-644-3469 Last EDR Contact: 07/10/2017 Next Scheduled EDR Contact: 10/09/2017 Data Release Frequency: Varies	
Financial Assurance: Financial Assurance Informati Financial assurance information.	on Listing	
Date of Government Version: 01/10/2017 Date Data Arrived at EDR: 01/12/2017 Date Made Active in Reports: 02/06/2017 Number of Days to Update: 25	Source: Ohio EPA Telephone: 614-644-2955 Last EDR Contact: 07/10/2017 Next Scheduled EDR Contact: 10/23/2017 Data Release Frequency: Varies	
HIST USD: Urban Setting Designations Database A USD may be requested for properties participating in the VAP when there is no current or future use of the ground water by local residents for drinking, showering, bathing or cooking. In these areas, an approved USD would lower the cost of cleanup and promote economic redevelopment while still protecting public health and safety. If these USDs were to be approved, the ground water cleanup or response requirements for the areas could be lessened. The Ohio EPA director may approve a USD request based on a demonstration that the USD requirements are met and an evaluation of existing and future uses of ground water in the area. The Ohio EPA director's decision on approval or denial of the request is needed before cleanup requirements for the site can be determined. This database is no longer updated or maintained by the state agency.		
Date of Government Version: 05/10/2005 Date Data Arrived at EDR: 04/25/2006 Date Made Active in Reports: 05/11/2006 Number of Days to Update: 16	Source: Ohio EPA Telephone: 614-644-3749 Last EDR Contact: 06/02/2008 Next Scheduled EDR Contact: 09/01/2008 Data Release Frequency: No Update Planned	
LEAD: Lead Inspections Listing Department of Health lead inspections include	d in the Environmental Licensing System.	

Department of fleatth lead inspections include	
Date of Government Version: 12/20/2016	Source: D
Date Data Arrived at EDR: 12/21/2016	Telephone

Date of Government Version: 12/20/2016	Source: Department of Health
Date Data Arrived at EDR: 12/21/2016	Telephone: 614-644-8649
Date Made Active in Reports: 02/10/2017	Last EDR Contact: 06/20/2017
Number of Days to Update: 51	Next Scheduled EDR Contact: 10/02/2017
	Data Release Frequency: Quarterly

#### NPDES: NPDES General Permit List General information regarding NPDES (National Pollutant Discharge Elimination System) permits. Source: Ohio EPA Date of Government Version: 11/08/2016 Date Data Arrived at EDR: 11/10/2016 Telephone: 614-644-2031 Date Made Active in Reports: 02/10/2017 Last EDR Contact: 05/10/2017 Number of Days to Update: 92 Next Scheduled EDR Contact: 08/21/2017 Data Release Frequency: Semi-Annually

TOWNGAS: DERR Towngas Database

The database includes 82 very old sites (circa 1895) which produced gas from coal for street lighting. Most visual evidence of these sites has disappeared, however the potential for buried coal tar remains. The database is no longer in active use.

Date of Government Version: 07/28/1992 Date Data Arrived at EDR: 02/21/2003 Date Made Active in Reports: 03/05/2003 Number of Days to Update: 12

Source: Ohio EPA Telephone: 614-644-3749 Last EDR Contact: 02/12/2003 Next Scheduled EDR Contact: N/A Data Release Frequency: No Update Planned

UIC: Underground Injection Wells Listing A listing of underground injection well locations.

Date of Government Version: 04/08/2016	Source: Ohio EPA
Date Data Arrived at EDR: 05/12/2016	Telephone: 614-644-2752
Date Made Active in Reports: 07/18/2016	Last EDR Contact: 05/11/2017
Number of Days to Update: 67	Next Scheduled EDR Contact: 08/21/2017
	Data Release Frequency: Varies

#### USD: Urban Setting Designation Sites

A USD may be requested for properties participating in the VAP when there is no current or future use of the ground water by local residents for drinking, showering, bathing or cooking. In these areas, an approved USD would lower the cost of cleanup and promote economic redevelopment while still protecting public health and safety. If these USDs were to be approved, the ground water cleanup or response requirements for the areas could be lessened. The Ohio EPA director may approve a USD request based on a demonstration that the USD requirements are met and an evaluation of existing and future uses of ground water in the area. The Ohio EPA director's decision on approval or denial of the request is needed before cleanup requirements for the site can be determined.

Source: Ohio EPA

Telephone: 614-644-3749

Last EDR Contact: 05/10/2017

Data Release Frequency: Varies

Next Scheduled EDR Contact: 08/21/2017

Date of Government Version: 11/01/2016 Date Data Arrived at EDR: 11/09/2016 Date Made Active in Reports: 02/08/2017 Number of Days to Update: 91

#### EDR HIGH RISK HISTORICAL RECORDS

#### **EDR Exclusive Records**

#### EDR MGP: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A Date Data Arrived at EDR: N/A Date Made Active in Reports: N/A Number of Days to Update: N/A

Source: EDR, Inc. Telephone: N/A Last EDR Contact: N/A Next Scheduled EDR Contact: N/A Data Release Frequency: No Update Planned

#### EDR Hist Auto: EDR Exclusive Historic Gas Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A Date Data Arrived at EDR: N/A Date Made Active in Reports: N/A Number of Days to Update: N/A Source: EDR, Inc. Telephone: N/A Last EDR Contact: N/A Next Scheduled EDR Contact: N/A Data Release Frequency: Varies

#### EDR Hist Cleaner: EDR Exclusive Historic Dry Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A Date Data Arrived at EDR: N/A Date Made Active in Reports: N/A Number of Days to Update: N/A Source: EDR, Inc. Telephone: N/A Last EDR Contact: N/A Next Scheduled EDR Contact: N/A Data Release Frequency: Varies

#### EDR RECOVERED GOVERNMENT ARCHIVES

#### **Exclusive Recovered Govt. Archives**

RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Ohio Environmental Procetion Agency in Ohio.

Date of Government Version: N/A Date Data Arrived at EDR: 07/01/2013 Date Made Active in Reports: 01/13/2014 Number of Days to Update: 196 Source: Ohio Environmental Protection Agency Telephone: N/A Last EDR Contact: 06/01/2012 Next Scheduled EDR Contact: N/A Data Release Frequency: Varies

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists.

Compiled from Records formerly available from the Department of Commerce in Ohio.

Date of Government Version: N/A Date Data Arrived at EDR: 07/01/2013 Date Made Active in Reports: 12/20/2013 Number of Days to Update: 172 Source: Department of Commerce Telephone: N/A Last EDR Contact: 06/01/2012 Next Scheduled EDR Contact: N/A Data Release Frequency: Varies

#### OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data Facility and manifest data. Manifest is a docum transporters to a tsd facility.	ent that lists and tracks hazardous waste from the generator through
Date of Government Version: 07/30/2013 Date Data Arrived at EDR: 08/19/2013 Date Made Active in Reports: 10/03/2013 Number of Days to Update: 45	Source: Department of Energy & Environmental Protection Telephone: 860-424-3375 Last EDR Contact: 05/15/2017 Next Scheduled EDR Contact: 08/28/2017 Data Release Frequency: No Update Planned
NJ MANIFEST: Manifest Information Hazardous waste manifest information.	
Date of Government Version: 12/31/2015 Date Data Arrived at EDR: 09/29/2016 Date Made Active in Reports: 01/03/2017 Number of Days to Update: 96	Source: Department of Environmental Protection Telephone: N/A Last EDR Contact: 07/10/2017 Next Scheduled EDR Contact: 10/23/2017 Data Release Frequency: Annually
NY MANIFEST: Facility and Manifest Data Manifest is a document that lists and tracks haz facility.	zardous waste from the generator through transporters to a TSD
Date of Government Version: 01/30/2017 Date Data Arrived at EDR: 02/01/2017 Date Made Active in Reports: 02/13/2017 Number of Days to Update: 12	Source: Department of Environmental Conservation Telephone: 518-402-8651 Last EDR Contact: 05/03/2017 Next Scheduled EDR Contact: 08/14/2017 Data Release Frequency: Annually
PA MANIFEST: Manifest Information Hazardous waste manifest information.	
Date of Government Version: 12/31/2015 Date Data Arrived at EDR: 07/22/2016 Date Made Active in Reports: 11/22/2016 Number of Days to Update: 123	Source: Department of Environmental Protection Telephone: 717-783-8990 Last EDR Contact: 07/17/2017 Next Scheduled EDR Contact: 10/30/2017 Data Release Frequency: Annually
RI MANIFEST: Manifest information Hazardous waste manifest information	
Date of Government Version: 12/31/2013 Date Data Arrived at EDR: 06/19/2015 Date Made Active in Reports: 07/15/2015 Number of Days to Update: 26	Source: Department of Environmental Management Telephone: 401-222-2797 Last EDR Contact: 05/22/2017 Next Scheduled EDR Contact: 09/04/2017 Data Release Frequency: Annually
VT MANIFEST: Hazardous Waste Manifest Data Hazardous waste manifest information.	
Date of Government Version: 11/07/2016 Date Data Arrived at EDR: 11/18/2016 Date Made Active in Reports: 01/06/2017 Number of Days to Update: 49	Source: Department of Environmental Conservation Telephone: 802-241-3443 Last EDR Contact: 07/17/2017 Next Scheduled EDR Contact: 10/30/2017 Data Release Frequency: Annually

WI MANIFEST: Manifest Information Hazardous waste manifest information.

> Date of Government Version: 12/31/2016 Date Data Arrived at EDR: 04/13/2017 Date Made Active in Reports: 07/14/2017 Number of Days to Update: 92

Source: Department of Natural Resources Telephone: N/A Last EDR Contact: 06/12/2017 Next Scheduled EDR Contact: 09/25/2017 Data Release Frequency: Annually

#### **Oil/Gas Pipelines**

Source: PennWell Corporation

Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

Electric Power Transmission Line Data

Source: PennWell Corporation

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Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

#### AHA Hospitals:

Source: American Hospital Association, Inc.

Telephone: 312-280-5991

The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing

Source: Centers for Medicare & Medicaid Services

Telephone: 410-786-3000

A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services,

a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes

Source: National Institutes of Health

Telephone: 301-594-6248

Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on elementary

and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

**Private Schools** 

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Licensed Child Day Care Facilities

Source: Department of Job & Family Services Telephone: 614-466-6282

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.

Source: FEMA

Telephone: 877-336-2627

Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

Current USGS 7.5 Minute Topographic Map Source: U.S. Geological Survey

#### STREET AND ADDRESS INFORMATION

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**PROJECT PLANS** 



STATE OF OHIO DEPARTMENT OF TRANSPORTATION

# SUM-76/77 11.31/11.30

## **CENTRAL INTERCHANGE**

SUMMIT COUNTY CITY OF AKRON

SEE SHEET 2 FOR INDEX OF SHEETS

SEE SHEET 3 FOR DESIGN DESIGNATIONS AND EXCEPTIONS

	ENGINEERS SEAL: FOR STRUCTURES OVER 20' SPAN				
		STAGE I SUBMITTAL – JANUARY 2	2, 2018		
UNDERGROUND UTILITIES CONTACT BOTH SERVICES TWO WORKING DAYS BEFORE YOU DIG.		STANDARD CONSTRUCTION DRAWINGS	SUPPLEMENTAL SPECIAL SPECIFICATIONS PROVISIONS		77 30
O HIO Call Before You Dig	SIGNED:				/ <b>7</b> 6/ / <b>1</b> 1.
Utilities Protection 1-800-362-2764 SERVICE (Non-members must be called directly)	ENGINEERS SEAL: FOR ENTIRE PLAN EXCEPT STRUCTURES OVER 20' SPAN				1 1 10
OIL & GAS PRODUCERS UNDERGROUND PROTECTION SERVICE 1-800-925-0988				APPROVED DISTRICT DEPUTY DIRECTOR	l st
PLAN PREPARED BY: BURGESS & NIPLE				APPROVED	
5085 REED ROAD COLUMBUS, OH 43220	SIGNED: DA TE:			DATE DIRECTOR, DEPARTMENT OF TRANSPORTATION	$\begin{pmatrix} 1\\ 302 \end{pmatrix}$

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## PROJECT DESCRIPTION

THE AKRON BELTWAY PLANNING STUDY (PID 95831) IDENTIFIED THE NEED TO REPLACE THE LEFT HANDED EXIT RAMPS (RAMPS N & R) FROM BOTH WB AND EB I-76 IN THE CENTRAL INTERCHANGE. RE-CONSTRUCTION OF THESE RAMPS WILL ADDRESS BOTH THE POOR BRIDGE CONDITION AND THE SUBSTANDARD RAMP GEOMETRICS. RECONFIGURING THE LANE ARRANGEMENTS ON BOTH WB AND EB I-76 TO PROVIDE DROP LANES FOR NB AND SB EXITS IN EACH DIRECTION AS WELL AS TWO THRU LANE MOVEMENTS FOR I-76 ADDRESSES BOTH SAFETY AND OPERATIONS. THE CENTRAL INTERCHANGE PROJECT (PID 101402) IS THE FIRST IDENTIFIED PROJECT FROM THE AKRON BELTWAY PLANNING STUDY AND HAS BEEN ADVANCED PRIOR TO THE FINALIZATION OF THAT STUDY DUE TO THE CONDITION OF THE BRIDGES ON RAMPS N & R.

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## EARTH DISTURBED AREAS

PROJECT EARTH DISTURBED AREA:36.1 ACRESESTIMATED CONTRACTOR EARTH DISTURBED AREA:1.0 ACRESNOTICE OF INTENT EARTH DISTURBED AREA:37.1 ACRES

## LIMITED ACCESS

THIS IMPROVEMENT IS ESPECIALLY DESIGNED FOR THROUGH TRAFFIC AND HAS BEEN DECLARED A LIMITED ACCESS HIGHWAY OR FREEWAY BY ACTION OF THE DIRECTOR IN ACCORDANCE WITH THE PROVISIONS OF SECTION 5511.02 OF THE OHIO REVISED CODE.

## 2016 SPECIFICATIONS

THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, INCLUDING SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PLANS AND CHANGES LISTED IN THE PROPOSAL SHALL GOVERN THIS IMPROVEMENT.

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SUM-76-1179L (INMAN ST.)	
SUM-77-1181 (RUBBER CITY HERITAGE TRAIL)	

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#### DESIGN DESIGNATION

#### <u>IR-77</u>

IR-//	
CURRENT ADT (2020	_ 135,920
DESIGN YEAR ADT (2040)	_ 153,200
DESIGN HOURLY VOLUME (2040)	14,800
DIRECTIONAL DISTRIBUTION	58%
TRUCKS (24 HOUR B&C)	8%
DESIGN SPEED	_ 60 MPH
LEGAL SPEED	55 MPH
DESIGN FUNCTIONAL CLASSIFICATION:	
URBAN INTERSTATE	

#### <u>IR-76</u>

CURRENT ADT (2020	120,890 (WEST OF SR-8); 98,750 (EAST OF SR-8)
DESIGN YEAR ADT (2040)	124,010 (WEST OF SR-8); 101,590 (EAST OF SR-8)
DESIGN HOURLY VOLUME (2040)	10,710 (WEST OF SR-8); 10,600 (EAST OF SR-8)
DIRECTIONAL DISTRIBUTION	63% (WEST OF SR-8); 64% (EAST OF SR-8)
TRUCKS (24 HOUR B&C)	12% (WEST OF SR-8); 16% (EAST OF SR-8)
DESIGN SPEED	60 MPH (WEST OF INMAN); 65 MPH (EAST OF INMAN)
LEGAL SPEED	55 MPH (WEST OF INMAN); 60 MPH (EAST OF INMAN)
DESIGN FUNCTIONAL CLASSIFICATION:	
URBAN INTERSTATE	

#### <u>SR-8</u>

CURRENT ADT (2020	123,390
DESIGN YEAR ADT (2040)	135,300
DESIGN HOURLY VOLUME (2040)	13,520
DIRECTIONAL DISTRIBUTION	51%
TRUCKS (24 HOUR B&C)	7%
DESIGN SPEED	60 MPH
LEGAL SPEED	55 MPH
DESIGN FUNCTIONAL CLASSIFICATION:	
URBAN INTERSTATE	

#### RAMP N

CURRENT ADT (2020	14,590	
DESIGN YEAR ADT (2040)	15,640	
DESIGN HOURLY VOLUME (2040)	1,390	
DIRECTIONAL DISTRIBUTION	100%	
TRUCKS (24 HOUR B&C)	10%	
DESIGN SPEED	45 MPH (MIN.)	*
LEGAL SPEED	N/A MPH	**
DESIGN FUNCTIONAL CLASSIFICATION:		
URBAN INTERCHANGE SYSTEM RAMP		

#### RAMP R

CURRENT ADT (2020	
DESIGN YEAR ADT (2040) 15,580	
DESIGN HOURLY VOLUME (2040)1,160	
DIRECTIONAL DISTRIBUTION 100%	
TRUCKS (24 HOUR B&C)8%	
DESIGN SPEED 45 MPH (MIN.)	*
LEGAL SPEEDN/A MPH	**
DESIGN FUNCTIONAL CLASSIFICATION:	
URBAN INTERCHANGE SYSTEM RAMP	

#### RAMP U

CURRENT ADT (2020	12,100	
DESIGN YEAR ADT (2040)	12,110	
DESIGN HOURLY VOLUME (2040)	1,510	
DIRECTIONAL DISTRIBUTION	100%	
TRUCKS (24 HOUR B&C)	6%	
DESIGN SPEED	45 MPH (MIN.)	*
LEGAL SPEED	N/A MPH	**
DESIGN FUNCTIONAL CLASSIFICATION:		
URBAN INTERCHANGE SYSTEM RAMP		

#### LANE M

CURRENT ADT (2020) 21,800	
DESIGN YEAR ADT (2040)24,400	
DESIGN HOURLY VOLUME (2040)1,390	
DIRECTIONAL DISTRIBUTION 100%	
TRUCKS (24 HOUR B&C) 10%	
DESIGN SPEED 45 MPH (MIN.)	*
LEGAL SPEEDN/A MPH	**
DESIGN FUNCTIONAL CLASSIFICATION:	
URBAN INTERCHANGE SYSTEM RAMP	

## LANE S

CURRENT ADT (2020) 10,960	
DESIGN YEAR ADT (2040) 10,970	
DESIGN HOURLY VOLUME (2040)970	
DIRECTIONAL DISTRIBUTION 100%	
TRUCKS (24 HOUR B&C)8%	
DESIGN SPEED 45 MPH (MIN.)	*
LEGAL SPEEDN/A MPH	**
DESIGN FUNCTIONAL CLASSIFICATION:	
URBAN INTERCHANGE SYSTEM RAMP	

#### INMAN STREET

CURRENT ADT (2020	3,290
DESIGN YEAR ADT (2040)	3,290
DESIGN HOURLY VOLUME (2040)	300
DIRECTIONAL DISTRIBUTION	53%
TRUCKS (24 HOUR B&C)	6%
DESIGN SPEED	30 MPH
LEGAL SPEED	25 MPH
DESIGN FUNCTIONAL CLASSIFICATION:	
LOCAL STREET	

#### E. SOUTH STREET

CURRENT ADT (2020	3,290
DESIGN YEAR ADT (2040)	3,290
DESIGN HOURLY VOLUME (2040)	300
DIRECTIONAL DISTRIBUTION	53%
TRUCKS (24 HOUR B&C)	6%
DESIGN SPEED	25 MPH
LEGAL SPEED	25 MPH
DESIGN FUNCTIONAL CLASSIFICATION:	
LOCAL STREET	

NHS PROJECT\_\_\_\_\_YES

#### \* DESIGN SPEED VARIES. SEE CURVE DATA FOR INFORMATION. \*\* LEGAL SPEED DOES NOT APPLY TO INTERCHANGE RAMPS.

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DESIGN EXCEPTIONS	CALCULATED DSS CHECKED MRT
DESIGN EXCEPTIONS	DESIGN DESIGNATIONS AND DESIGN EXCEPTIONS
	SUM -76/77 11.31/11.30
	3 302



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IR-76 EB CURVE DATA	IR-76 WB CURVE DATA
$ \begin{array}{c} (1) \\ P.I. \ Sta. \ 523+90.92 \\ \Delta = \ 10^{\circ} \ 48^{\circ} \ 01^{\prime\prime} \ (RT) \\ Dc = \ 0^{\circ} \ 42^{\prime} \ 00^{\prime} \\ R = \ 8, \ 185.11^{\prime} \\ T = \ 773.74^{\prime} \\ L = \ 1,542.90^{\prime} \\ E = \ 36.49^{\prime} \\ \Theta_{ux} = \ 0.025 \\ P.C. \ Sta. \ 516+17.18 \\ P.T. \ Sta. \ 516+17.18 \\ P.T. \ Sta. \ 531+60.08 \\ V_{Res} = \ 55 \ MPH \\ \end{array} $	$ \begin{array}{c} \textbf{(3)} \\ P.I. Sta. 526+42.95 \\ \Delta = 2^{\circ} 22' \ 30'' (RT) \\ Dc = 0^{\circ} 15' \ 00'' \\ R = 22,918.31' \\ T = 475.00' \\ L = 950.00' \\ R = 2,92' \\ E = 4.92' \\ \textbf{(JPROX.NC)} \\ P.C. Sta. 521+67.88 \\ P.T. Sta. 531+17.88 \\ P.T. Sta. 531+17.88 \\ V_{RE} = MATCH EX. \\ (50 MPH) \\ \end{array} $
SR-8 CURVE DATA	RAMP R CURVE DATA
$ \begin{array}{c} \textbf{(C6)} P.I. \ Sta. \ 4289+34.60 \\ \Delta = 2^{\circ} \ 40' \ 06'' \ (LT) \\ Dc = 0^{\circ} \ 28' \ 00'' \\ R = 12,277.67' \\ T = 285.93' \\ L = 571.76' \\ E = 3.33' \\ E = 28.36' \\ e_{\text{MX}} = NC \\ P.I. \ Sta. \ 4294+63.37 \\ P.I. \ Sta. \ 4294+63.37 \\ P.I. \ Sta. \ 4292+20.43 \\ V_{\text{Des}} = 60 \ MPH \end{array} \right) \begin{array}{c} \textbf{(C7)} P.I. \ Sta. \ 4302+70.06 \\ \Delta = 8^{\circ} \ 03' \ 13'' \ (RT) \\ Dc = 0^{\circ} \ 30' \ 00'' \\ R = 5,729.58' \\ T = 329.46' \\ L = 658.19' \\ E = 9.46' \\ e_{\text{MX}} = MC \\ e_{\text{MX}} = NC \\ P.C. \ Sta. \ 4294+63.37 \\ P.I. \ Sta. \ 4330+84.37 \\ P.I. \ Sta. \ 4330+84.37 \\ P.I. \ Sta. \ 4330+84.37 \\ P.I. \ Sta. \ 4337+42.55 \\ V_{\text{Des}} = 60 \ MPH \end{array} $	$ \begin{array}{c} \textbf{(3)} P.I. \ Sta. \ 2520+90.04 \\ \Delta = \ 2^{\circ} \ 2I' \ 5I'''(RT) \\ Dc = \ 0^{\circ} \ 5J' \ 00'' \\ R = \ 22,918.3I' \\ T = \ 472.87' \\ L = \ 936.6I' \\ L = \ 234.68' \\ E = \ 4.88' \\ E = \ 4.88' \\ E = \ 4.88' \\ E = \ 1.80' \\ LT = \ 133 \\ e_{\text{MAX}} = \ 0.025 \\ P.I. \ Sta. \ 2525+62.78 \\ P.C. \ Sta. \ 2525+62.78 \\ P.C. \ Sta. \ 2525+62.78 \\ P.T. \ Sta. \ 2527+97.46 \\ T1 = \ 772. \\ V_{\text{Des}} = \ 45 \ MPH \\ V_{\text{Des}} = \ 45 \ MPH \\ \end{array} $
RAMP U CURVE DATA	LANE M CURVE DATA
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$

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 $\begin{array}{c} \textbf{C5} \\ \textbf{P.I. Sta. 563+78.80} \\ \Delta = 2l^{\circ} 59' 45'' (RT) \\ \textbf{Dc} = 2^{\circ} 00' 00'' \\ R = 2,864.79' \\ T = 556.75' \\ L = 1,099.79' \\ E = 53.60' \\ \textbf{e_{MAX}} = MATCH EX. \\ (APPROX. 0.030) \\ \textbf{P.C. Sta. 558+22.05} \\ \textbf{P.T. Sta. 569+21.84} \\ V_{\text{DES}} = MATCH EX. \\ (50 MPH) \end{array}$ 

2538+28.05 '4' 19" (LT) 45′00″ 81′ .00′ 44′ 58″ .50′ 82′ 34.16′ 50' 27′ 060 2530+55.55 2540+89.71 2542+89.71 MPH

C12 P.I. Sta. 2546+44.49  $\Delta = 5^{\circ} 27' 06'' (RT)$   $Dc = 1^{\circ} 45' 00''$  R = 3,274.04' T = 155.88' L = 311.52' E = 3.71'  $E_{MAX} = MATCH EX.$  (APPROX. 0.035)P.C. Sta. 2544+88.61 P.T. Sta. 2548+00.13  $V_{DES} = 50$  MPH

**CIB** P.I. Sta. 1535+20.91 Δ = 73° 36′ 21″ (RT)  $Dc = 9^{\circ} 00' 00''$ R = 636.62' Ls = 200.00' θs = 08° 59′ 58″ LT = 133.51' ST = 66.82' Lc = 617.85' 10 Ts = 578.18' Es = 161.72' емах = 0.060 C.S. Sta. 1529+42.73 S.C. Sta. 1531+42.73 C.S. Sta. 1537+60.59 S.T. Sta. 1539+60.59 Vdes = 45 MPH

3Y DATA DATA DATA MRT	SUM-76/77 11.31/11.30
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<pre>P.I. Sta. 3323+37.81 Δ = 4° 43′ 07″ (LT) Dc = 1° 45′ 00″ R = 3,274.04′ Ls= 200.00′ Øs = 01° 45′ 00″ LT = 133.34′ ST = 66.67′ Lc = 169.64′ T1= 228.73′ T2= 141.08′ @mx = 0.027 T.S. Sta. 3321+09.08 S.C. Sta. 3323+09.08 P.T. Sta. 3324+78.72 Voes = 45 MPH</pre>	C20       P.I. Sta. 3337+14.20         Δ = 94° 59′ 43″ (RT)         Dc = 9° 00′ 00″         R = 636.62′         T = 694.69′         L = 1,055.50′         E = 305.65′         €MAX = 0.060         P.C. Sta. 3330+19.51         P.T. Sta. 3340+75.01         VDES = 45 MPH	C21 P.I. Sta. 3344+08.90 Δ = 11° 26' 23" (LT) Dc = 4° 00' 00" R = 1,432.39' T = 143.47' L = 285.99' E = 7.17' ΘMAX = 0.046 P.C. Sta. 3342+65.43 C.S. Sta. 3345+51.42 Vors = 45 MPH	SI P.I. STA. 3346+28.66 Ls= 200.00' Øs = 4° 45' 00" LT = 122.86' ST = 77.24' @max = 0.046 C.S. Sta. 3345+51.42 S.C. Sta. 3347+51.42 VDES = 45 MPH	P.I. Sta. 3349+36.26 Δ = 2° 46' 20" (LT) Dc = 0° 45' 00" R = 7,639.44' T = 184.84' L = 369.61' E = 2.24' ΘMAX = 0.043 S.C. Sta. 3347+51.42 P.T. Sta. 3351+21.03 VDES = 50 MPH
BURKHARDT AVENUE CUR P.I. Sta. 317+85.45 $\Delta = 13^{\circ} \ 00' \ 55'' \ (LT)$ Dc = 7° 00' 00'' R = 818.51' T = 93.37' L = 185.93' E = 5.31' GMMX = MATCH EX. (NC) P.C. Sta. 300+83.23 P.T. Sta. 302+55.59	<b>EVE DATA</b> <b>C25</b> P.I. Sta. $316+02.36$ $\Delta = 4^{\circ} 01' 34'' (LT)$ $Dc = 4^{\circ} 00' 00''$ R = 1,432.39' T = 50.35' L = 100.65' E = 0.88' $\Theta ux = MATCH EX. (NC)$ P.C. Sta. $315+52.01$ P.T. Sta. $316+52.67$ V = 30.MPH	$\begin{array}{cccccc} \hline P.I. \ Sta. \ 301+69.44\\ \Delta = \ 3^{\circ} \ 31' \ 45'' \ (RT)\\ Dc = \ 2^{\circ} \ 02' \ 52''\\ R = \ 2,798.10'\\ T = \ 86.20'\\ L = \ 172.35'\\ E = \ 1.33'\\ e_{MAX} = \ MATCH \ EX. \ (NC)\\ P.C. \ Sta. \ 316+92.08\\ P.T. \ Sta. \ 316+78.01\\ Vare = \ 30 \ MPH \end{array}$		$\begin{array}{c} \hline \textbf{CROSIER STREET CURVE DAT.} \\ \hline \textbf{C27} \\ P.I. Sta. 200+55.91 \\ \Delta = 108^{\circ} 50' 04'' (RT) \\ Dc = 143^{\circ} 14' 22'' \\ R = 40.00' \\ T = 55.91' \\ L = 75.98' \\ E = 28.74' \\ \hline \textbf{e}_{MAX} = MATCH EX. (NC) \\ P.C. Sta. 200+00.00 \\ P.T. Sta. 200+75.98 \\ Vare = 30 MPH \end{array}$

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<b>LANE S CUI</b> (C28)         P.I. Sta.         Δ = 37° 24         Dc = 9° 00         R = 636.6         T = 215.5C         L = 415.5E         E = 35.48         @MX = MATU	INMAN STREET CUR P.I. Sta. 803+36.1 Δ = 0° 25′ 22″ (LT) Dc = 0° 45′ 00″ R = 7,639.44′ T = 28.19′ L = 56.37′ E = 0.05′ емих = MATCH EX. (N P.C. Sta. 803+08. P.T. Sta. 803+64. Voes = 30 MPH	<ul> <li>VE DATA</li> <li>19</li> <li>100</li> <li>37</li> <li>P.I. Sta. 6510+20.77</li> <li>∆ = 65° 10' 56" (LT)</li> <li>Dc = 8° 56' 00"</li> <li>R = 641.37'</li> <li>T = 410.04'</li> <li>L = 729.66'</li> <li>E = 119.87'</li> <li>emx = MATCH EX.</li> </ul>	_	
eux - MATU (APP P.C. Sta. P.C.C. Sta Voes = MATU	27 EX. 0.080) 6501+95.16 a. 6506+10.74 CH EX.	EMA - MAICH EX. 0.080) P.C.C. Sta. 6506+10.74 P.T. Sta. 6513+40.39 Voes = MATCH EX.		SUM-76/77 11.31/11.30 HORIZOI



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- (7) ₿ CONST. SR-8 STA. 4326+24.61 = ₿ CONST. RAMP S STA. 6500+00.00



₿ CONST. LANE S —



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LEC	GEND - PROPOSED ITEMS	LEGEN
$\left(1\right)$	ITEM 442 - 1 1/2" ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE B	$\left(\begin{array}{c} \widehat{A} \end{array}\right)  3''$
(2)	ITEM 407 - NON-TRACKING TACK COAT (SEE CMS 407.06 FOR APPLICATION RATE)	$\left(\begin{array}{c} B \\ B \end{array}\right)  9''$
$\overbrace{3}$	ITEM 442 - I 3/4" ASPHALT CONCRETE INTERMEDIATE COURSE, I9MM, TYPE B	$\left(\begin{array}{c} \widetilde{c} \end{array}\right)  6''$
(4)	ITEM 407 - TACK COAT (SEE CMS 407.06 FOR APPLICATION RATE)	$\left(\begin{array}{c} D \end{array}\right)$ 3"
$\underbrace{}_{5}$	ITEM 302 - 10" ASPHALT CONCRETE BASE (2 LIFTS)	$(\widetilde{E})$ PIF
6	ITEM 304 - 6" AGGREGATE BASE	$\left( \stackrel{-}{F} \right)$ CO
7	ITEM 204 - SUBGRADE COMPACTION	$\left(\widehat{\widehat{G}}\right)$ GU
8	ITEM 204 - PROOF ROLLING	$(\widehat{H})$ CUI
9	ITEM 441 - 2 1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PGL64-22 (2 LIFTS)	$\left(\begin{array}{c} I \end{array}\right)$ WA
10	ITEM 302 - 9" ASPHALT CONCRETE BASE (2 LIFTS)	$\left(\begin{array}{c} \widehat{J} \end{array}\right)  g''$
(1)	ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE, 1 1/2"	
12	ITEM 441 - I 1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG 64-22	
13	ITEM 441 - 1 1/2" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (448), PG 64-22	
14	NOT USED	
(15)	ITEM 609 - CURB, TYPE 6	
16	ITEM 608 - 6" CONCRETE WALK	
(17)	ITEM 605 - 4" BASE PIPE UNDERDRAIN W/ GEOTEXTILE FABRIC	
18	ITEM 605 - 6" BASE PIPE UNDERDRAIN W/ GEOTEXTILE FABRIC	
(19)	ITEM 606 - GUARDRAIL, TYPE MGS	
20	ITEM 622 - CONCRETE BARRIER, SINGLE SLOPE, TYPE BI	
(21)	ITEM 622 - CONCRETE BARRIER, SINGLE SLOPE, TYPE D	
22	ITEM 609 - CURB, TYPE 4C	
23	ITEM 526 - REINFORCED CONCRETE APPROACH SLABS (T=15″)	
24)	ITEM 526 - REINFORCED CONCRETE APPROACH SLABS (T=17")	
25)	ITEM 659 - SEEDING AND MULCHING	
	$\begin{array}{c} 1 \\ 2 \\ 3 \\ 4 \\ 5 \\ 6 \\ 7 \\ 8 \\ 9 \\ 0 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1$	<ul> <li>LEGEND - PROPOSED ITEMS</li> <li>1 ITEM 442 - 1 1/2* ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE B</li> <li>2 ITEM 407 - NON-TRACKING TACK COAT (SEE CMS 407.06 FOR APPLICATION RATE)</li> <li>3 ITEM 442 - 1 3/4* ASPHALT CONCRETE INTERMEDIATE COURSE, 19MM, TYPE B</li> <li>4 ITEM 407 - TACK COAT (SEE CMS 407.06 FOR APPLICATION RATE)</li> <li>3 ITEM 402 - 1 0* ASPHALT CONCRETE BASE (2 LIFTS)</li> <li>6 ITEM 302 - 10* ASPHALT CONCRETE BASE (2 LIFTS)</li> <li>6 ITEM 204 - SUBGRADE COMPACTION</li> <li>9 ITEM 204 - SUBGRADE COMPACTION</li> <li>9 ITEM 411 - 2 1/2* ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PGL64-22 (2 LIFTS)</li> <li>10 ITEM 204 - PROOF ROLLING</li> <li>9 ITEM 411 - 2 1/2* ASPHALT CONCRETE BASE (2 LIFTS)</li> <li>11 ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE, 1 1/2*</li> <li>11 ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE, 1 1/2*</li> <li>11 ITEM 411 - 1 1/2* ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG 64-22</li> <li>11 ITEM 411 - 1 1/2* ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (448), PG 64-22</li> <li>11 ITEM 411 - 1 1/2* ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (448), PG 64-22</li> <li>11 ITEM 609 - CURB, TYPE 6</li> <li>11 ITEM 609 - CURB, TYPE 6</li> <li>11 ITEM 609 - CURB, TYPE 6</li> <li>11 ITEM 606 - GUARDRAIL, TYPE MAGS</li> <li>11 ITEM 606 - GUARDRAIL, TYPE MAGS</li> <li>11 ITEM 606 - GUARDRAIL, TYPE MAGS</li> <li>11 ITEM 606 - GUARDRAIL, TYPE MAGS</li> <li>11 ITEM 607 - CURB, TYPE 4C</li> <li>11 ITEM 609 - CURB, TYPE 4C</li> <li>11 ITEM 629 - CURB, TYPE 4C</li> <li>11 ITEM 526 - REINFORCED CONCRETE APPROACH SLABS (T=15*)</li> <li>11 ITEM 526 - REINFORCED CONCRETE APPROACH SLABS (T=15*)</li> <li>11 ITEM 659 - SEEDING AND MULCHING</li> </ul>

### ND - EXISTING ITEMS

- ± ASPHALT CONCRETE
- ' ± CONCRETE PAVEMENT
- ' ± SUBBASE
- 6" ± STABILIZED AGGREGATE
- PE UNDERDRAIN
- ONCRETE BARRIER, TYPE B-50
- JARDRAIL
- IRB
- LΚ
- ' ± ASPHALT CONCRETE BASE



CURB AND GUARDRAIL DETAIL

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### <u>NOTES</u>

FOR DITCH, SIDE SLOPE GRADING AND ROUNDING DETAILS SEE SHEETS 21,23

\* SEE TYPICAL SECTIONS FOR DETAILS





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#### A IR-76 EB VARIES FROM 10.0' AT STA. 530+11.03 TO 8.0' AT STA. 531+11.03 8.0' FROM STA. 533+11.03TO STA. 533+59.47



₿ CONST. IR-76 EB





## <u>NOTES</u>

FOR LEGEND SEE SHEET 10 FOR PLAN ABBREVIATIONS, SEE GENERAL NOTES FOR DITCH AND GRADING INFORMATION, SEE CROSS SECTIONS

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TYPICAL SECTIONS - IR-76 EB	
SUM -76/77 11.31/11.30	
12 302	






A	SR-8	10.0' FROM STA. 4293+10.00 TO STA. 4294+81.61 VARIES FROM 10.0' AT STA. 4294+81.61 TO 8.0' AT STA. 4295+81.61 8.0' FROM STA. 4295+81.61 TO STA. 4297.81.78
В	SR-8	12.0' FROM STA. 4293+10.00 TO STA. 4295+81.78 VARIES FROM 12.0' AT STA. 4295+81.78 TO 16.0' AT STA. 4297+81.78
С	SR-8	8.0' FROM STA. 4297+81.78 TO STA. 4301+11.75
	LANE M	8.0' FROM STA. 1549+39.47 TO STA. 1548+18.83
	RAMP N	VARIES FROM 8.0' AT STA. 3321+09.08 TO 4.0' AT STA. 3322+09.13 4.0' FROM STA. 3322+09.13 TO STA. 3324+24.85 (RAMP N / LANE M GORE)
D	SR-8	16.0' FROM STA. 4297+81.78 TO STA. 4301+11.45
	LANE M	16.0' FROM STA. 1549+39.47 TO STA. 1548+18.83
	RAMP N	16.0' FROM STA. FROM STA. 3321+09.08 TO STA. 3324+24.85 (RAMP N / LANE M GORE)
Ε	SR-8	VARIES FROM 0.0' AT STA. 4297+81.94 TO 23.0' AT LANE M STA. 1545+02.57 (RAMP N / LANE M GORE)
F	SR-8	12.0' FROM STA. 4297+81.78 TO STA. 4301+11.45
	LANE M	VARIES FROM 12.0' AT STA. 1549+39.47 TO 16.0' AT STA. 1546+36.27 16.0' FROM STA. 1546+36.27 TO STA. 1541+51.62 (SR-8 / LANE M GORE)
G	SR-8	VARIES FROM 0.0' AT STA. 4304+13.78 TO 23.0' AT STA. 4308+96.29 (LANE M / SR-8 GORE)









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<u>NOTES</u> FOR LEGEND SEE SHEET 10 FOR PLAN ABBREVIATIONS, SEE GENERAL NOTES FOR DITCH AND GRADING INFORMATION, SEE CROSS SECTIONS

# SR-8 SB NORMAL SECTION

STA. 4308+96.29 (SR-8 / LANE M GORE) TO STA. 4310+74.10 (END WORK) H VARIES FROM -0.016 (RT) AT STA. 4309+88.76 TO -0.016 (LT) AT STA. 4310+74.10 о С

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FOR PLAN ABBREVIATIONS, SEE GENERAL NOTES FOR DITCH AND GRADING INFORMATION, SEE CROSS SECTIONS △ FOR RAMPS WITHOUT GUARDRAIL WIDTH = 2.0' MIN.

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2.00' 4.5'

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 $(4)_1$ 

(2)

(3)

(6)

(10)

16.0'

EX.

LANE

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RAMP U SUPERELEVATED SECTION STA. 4536+08.55 (RAMP R GORE) TO STA. 4547+83.27 (I-76 WB GORE) В

6.0' FROM STA. 4536+08.55 TO STA. 4546+08.27 VARIES FROM 6.0' AT STA. 4546+08.27 TO 13.0' AT STA. 4547+83.27



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17 302

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SUM -11.31

TOM NO 10 GUARDRAIL FRO STA. 300+80 STA. 303+06 > FENCE F 300+80 304+55 ₿ CONST. BURKHARDT ST. PROP STA. STA. (19 SAWCUT PGL П (15) 0.08 ----------25 \_\_\_\_\_ (A) (C)(12) BURKHARDT ST. NORMAL SECTION STA. 300+80.00 TO STA. 303+64.92







HERITAGE TRAIL-I NORMAL SECTION STA. 10+00.00 TO STA. 13+44.35



HERITAGE TRAIL-3 NORMAL SECTION STA. 30+00.00 TO STA. 36+14.97



INMAN ST. NORMAL SECTION STA. 802+42.72 TO STA. 803+84.00 
 A
 VARIES FROM 16.5' AT STA. 802+42.72 TO 11.00' AT STA. 803+52.72

 11.0' FROM STA. 803+52.72 TO STA. 803+84.00

 B
 7.50' SIDEWALK FROM STA. 802+42.82 TO STA. 803+31.92

 VARIES FROM 7.50' AT STA 803+31.92 TO 8.50' AT STA. 803+52.85
 C FROM STA. 803+52.85 TO STA. 803+84.00 D SEE PLAN VIEW FOR LIMITS OF RESURFACING



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# E. SOUTH ST. NORMAL SECTION

STA. 21+88.39 TO STA. 23+35.50 E VARIES FROM 20.0' AT STA. 22+22.00 TO 11.00' AT STA. 23+30.00 E 11.0' FROM STA. 23+30.00 TO STA. 23+33.00 F FULL DEPTH PVMT. AND CURB FROM STA. 22+22.00 TO STA. 23+35.00

G STA. 21+88.39 TO STA. 23+33.00 SEE PLAN VIEW FOR LIMITS OF RESURFACING







# APPROACH SLAB SECTION - IR-76 WB

SECTION APPLIES: BK STA. 549+21.33 TO STA. 549+46.33 STRUCTURE SUM-076-1080L AH STA. 550+05.89 TO STA. 550+30.89

<u>NOTES</u> FOR LEGEND SEE SHEET 10 FOR PLAN ABBREVIATIONS, SEE GENERAL NOTES FOR DITCH AND GRADING INFORMATION, SEE CROSS SECTIONS

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WIDTH "A" - "D"			BACKSLOPE					
	20' R.	ADIUS	6:1 4:1		;/	3:1		
FORESLOPE	A	C	8•	D	B#	D	B•	D
8:1	1.25′	2.50'	2.92'	5.75′	3.67′	7.33′	4.50'	8.83′
6:1	1.67′	3.25′	3.33'	6.58′	4.08′	8.17′	4.75′	9.58′
4:1	2.50'	4.83′	4.08′	8.17′	4.75′	9.67′		
3:1	3.25′	6.33′	4.92′	9.58′				





WIDTH VARIES

SEE TYPICAL SECTIONS

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EOP

5.0'

0.08

# FILL SECTION - (SAFETY/CLEAR ZONE GRADING)

OR AS SHOWN ON CROSS SECTIONS
\*\* SEE RECOVERABLE DITCH DETAIL ON THIS SHEET
† SEE TYPICAL SECTIONS FOR PAVEMENT BUILDUP.
\$ 4.0' ROUNDING

2001ER481E

\* 6:1

1.3' MIN. (20' RADIUS) -

(25)

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NOTE: ALL DETAILS ON THIS SHEET SHOWN ARE NOT DRAWN TO SCALE (N.T.S.)







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#### PLAN ABBREVIATIONS

THE FOLLOWING LIST OF ABBREVIATION DEFINITIONS SHOULD BE USED FOR THIS PLAN SET:

ABBREVIATION	DESCRIPTION
ATG	ADJUSTED TO GRADE
11	ANCHOR ASSEMBLY
ALT	ASTERTEAN
ASPH.	ASPHALI
AVE.	AVENUE
<u><u></u></u>	BASELINE
BM	BENCH MARK
BLVD.	BOULEVARD
BTA	BRIDGE TERMINAL ASSEMBLY
СВ	CATCH BASIN
CD.	COLLECTOR-DISTRIBUTOR
60	CENTERI INE
	COMMERCIAL
	LONCRETE
CONST.	CONSTRUCTION
CONTÍD	CONTINUED
CORP.	CORPORATION
CMP	CORRUGATED METAL PIPE
CU YD	CUBIC YARD
CI	CURB INLET
DIST.	DISTANCE
	DO NOT DISTURB
EA.	
LUA	EARTH DISTURBED AREA
LB	LASTBOUND
EL	EDGE LINE
EOP	EDGE OF PAVEMENT
EOS	EDGE OF SHOULDER
ELEC.	ELECTRIC
FIFV.	FLEVATION
FST	ESTIMATEZESTIMATED
EST.	
	EXCAVATION
	EXISTING
<i>F1</i> .	FEET
FH	FIRE HYDRANT
<u>E</u>	FLOW LINE
GR	GUARDRAIL
HW	HEADWALL
HWY.	HIGHWAY
IN.	INCHES
INT.	INTERSECTION
INV	INVERT
IR	INTERSTATE ROUTE
113	INTELLIGENT TRANSPORTATION
	STSTEMS
L //N.	LINEAR
MUT	MAINTENANCE OF TRAFFIC
MH	MANHOLE
MAX.	MAXIMUM
MGS	MIDWEST GUARDRAIL SYSTEM
MI.	MILE(S)
MIN.	MINIMUM
MO.	MONTH(S)
N	NORTH
NB	NORTHBOUND
NE	NORTHEAST
	NORTHWEST
	NUMBER
N.1.5.	NOT TO SCALE
OVHD.	OVERHEAD
PVMT	PAVEMENT
PL.	PLACE
PCB	PORTABLE CONCRETE BARRIER
PG	PROFILE GRADE
PGI	PROFILE GRADE I INF
P	PROPERTY I INF
	PROPOSED

### PLAN ABBREVIATIONS (CONT'D)

<u>ABBREVIATION</u>	DESCRIPTION
RAD.	RADIUS
REF.	REFERENCE
REINF.	REINFORCED
RMVD.	REMOVED
RES.	RESIDENTIAL
RD.	ROAD
RCP	ROCK CHANNEL PROTECTION
RNDG.	ROUNDING
RTG	RECONSTRUCTED TO GRADE
SEC.	SECTION
SHT.	SHEET
SHLDR.	SHOULDER
S	SOUTH
SB	SOUTHBOUND
SE	SOUTHEAST
SW	SOUTHWEST
SQ FT	SQUARE FEET
SQ YD	SQUARE YARD
STD.	STANDARD
STA.	STATION
ST.	STREET
STRUCT.	STRUCTURE
TELE.	TELEPHONE
TEMP.	TEMPORARY
TBR	TO BE REMOVED
TBRR	TO BE REMOVED AND RELOCATED
TOT.	TOTAL
TWP.	TOWNSHIP
TYP.	TYPICAL
US	UNITED STATES ROUTE
VAR.	VARIABLE/VARIES
VC	VERTICAL CURVE
V.C.	VERTICAL CLEARANCE
Vdes	DESIGN SPEED
WM	WATER MAIN
WV	WATER VALVE
WB	WESTBOUND

# ROUNDING

THE ROUNDING AT SLOPE BREAKPOINTS SHOWN ON THE TYPICAL SECTIONS APPLIES TO ALL CROSS-SECTIONS EVEN THOUGH OTHERWISE SHOWN.

#### UTILITIES

LISTED BELOW ARE ALL UTILITIES LOCATED WITHIN THE PROJECT CONSTRUCTION LIMITS TOGETHER WITH THEIR RESPECTIVE OWNERS:

STEAM AKRON ENERGY SYSTEMS, LLC ATTN: JOHN STRIZAK OFFICE (330) 374-0600x211 CELL (330) 472-1308 RONNY TURNER OFFICE (330) 374-0600 CELL (330) 603-8358 KELLY DODSON OFFICE (330) 374-0600x205 CELL (330) 603-9841 PAUL BURNS OFFICE (330) 374-0600x226 CELL (440) 371-4534 FAX (330) 374-0202 226 OPPORTUNITY PKWY. AKRON, OH 44307

*TELECOMMUNICATIONS AT&T-OHIO ATTN: JASON HONEYCUTT OFFICE (330)-384-9643 FAX (330) 384-9866 VERN LUNTSFORD OFFICE (330) 384-3610 CELL (330) 212-5732 LUCIE HINSHAW OFFICE (330) 384-3048 50 W.BOWERY AKRON, OHIO 44313* 

TELECOMMUNICATIONS AT&T-LONG DISTANCE ATTN: BILL HARKNESS ISS COMMERCE PARK DR. SUITE #1 WESTERVILLE, OH 43082

CELL (770) 316-5309

CARGILL SALT ATTN: ANDREW STAKER 2065 MANCHESTER RD. AKRON, OH 43082 OFFICE (330) 848-6428 CELL (330) 780-5792

TELECOMMUNICATIONS CROWN CASTLE ATTN: MICHAEL BRYANT OFFICE (502) 318-1342 CELL (502) 690-6505 KEITH STORSIN CELL (330) 813-6710

GAS DOMINION EAST OHIO ATTN: COREY ROLLINS OFFICE (330) 664-2754 FAX (888) 504-0126 ANIKA ANJUM CELL (330) 388-4566 BRYAN DAYTON OFFICE (330) 664-2409 DAVE FELLER OFFICE (234) 208-2183 CELL (330-323-9978 320 SPRINGSIDE DR. AKRON, OH 44333

ELECTRIC FIRST ENERGY ATTN: CRAIG BUTLER OFFICE (330) 436-4153 DAVID MILLER OFFICE (330) 436-4055 CELL (330) 715-4340 FAX (330)-436 4318 ROSS CATANESE OFFICE (330) 436-4177 CELL (330) 807-0338 ERIC LIVESAY OFFICE (330) 294 6310 CELL (330) 618-6903 1910 W. MARKET ST., BLDG. AKRON, OH 44313

FIBER OPTIC FRONTIER COMMUNICATIONS ATTN: RANDY HOWARD OFFICE (330) 722-9586 CELL (330) 416-4614

INVOLTA ATTN: RAY HICKS OFFICE (330) 259-4920 CELL (330) 518-8960

FIBER OPTIC CENTURY LINK FORMER LEVEL 3 COMMUNICATIONS ATTN: MIKE CLIFFORD OFFICE (800) 4LEVEL3 CELL (513) 615-2250 1025 ELDORADO BLVD. BROOMFLELD, CO 80021

FIBER OPTIC LIGHTOWER AND FIBERTECH ATTN: BILL DARDEN OFFICE (585) 445-5865 CELL (585) 313-7728

FIBER OPTIC MEDINA COUNTY FIBER NETWORK ATTN: DAVID CORRADO OFFICE (216) 832-7059

FIBER OPTIC MOBILITIE ATTN: KEVIN BRECHT OFFICE (330) 515-5555 CELL (330) 571-1788 120 S. RIVERSIDE PLAZA, SUITE IBOOG CHICAGO, IL 60606

FIBER OPTIC QUEST/CENTURY LINK ATTN: CHRIS STRAYER OFFICE (303) 886-1299 441 W. BROAD ST. PATASKALA, OH 43062

FIBER OPTIC WINDSTREAM/KDL ATTN: DWAYNE LAHMANN OFFICE (330) 419-1293 388 S. MAIN ST. AKRON, OH 44308

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CABLE SPECTRUM ATTN: RON ICKES OFFICE (330) 494-9200 OR (330) 555-3009 CELL (216) 392-7964 ANDREW FETTERMAN OFFICE (330) 633-9203 OR (330) 555-3087 CELL (330) 312-8845 DOUG UMPLEBY OFFICE (330) 369-7140 530 S. MAIN ST. AKRON, OH 44311 FIBER OPTIC VERIZON COMMUNICATIONS ATTN: JEFF FERRINGER OFFICE (330) 785-2477 AL GUEST OFFICE (330) 253-8267 CELL (330) 329-5495 FAX (918) 562-7014 120 RAVINE ST. AKRON, OH 44303 FIBER OPTIC XO COMMUNICATIONS ATTN: DALE FERGUSON OFFICE (216) 619-3492 CELL (216) 820-3868 815 SUPERIOR AVE. CLEVELAND, OH 44114 FIBER OPTIC ZAYO GROUP ATTN: DAVE GALUSKA OFFICE (234) 281-0025 ERIC LICIS OFFICE (330) 237-3292 CELL (216) 533-0023 GEORGE MURRAY OFFICE (330) 252-0054 CELL (330) 352-5952

CELL (330) 352-5952 SCOTT HEINLEN CELL (740) 501-6921 ONE WEST THIRD ST., SUITE 1300 TULSA, OK 74103

CITY OF AKRON COMMUNICATIONS ATTN: MALCOLM VALENTINE OFFICE (330) 375-2670 FAX (330) 375-2996 JOHN HEFFERNAN OFFICE (330) 375-2685

THE LOCATION OF THE UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE AS OBTAINED FROM THE OWNERS AS REQUIRED BY SECTION 153.64 O.R.C.

# EXISTING PLANS

EXISTING PLANS LISTED BELOW MAY BE INSPECTED IN THE ODOT DISTRICT 4 OFFICE IN AKRON, OHIO.

SUM-076-11 <b>.</b> 20
SUM-076-11.74
SUM-077-10.43

CITY OF AKRON BUREAU OF WATER SUPPLY ATTN: JEFF BRONOWSKI OFFICE (330) 678-0077×439 FAX (330) 375-2301 SHAWN NEEDHAM OFFICE (330) 375-2845 FAX (330) 375-2301

CITY OF AKRON BUREAU OF WATER RECLAMATION ATTN: BRIAN GRESSER OFFICE (330) 375-2963x7130 FAX (330) 375-2966 JIM AITKEN OFFICE (330) 375-2435 FAX (330) 375-2435

CITY OF AKRON TRAFFIC ENGINEERING ATTN: MIKE LUPICA OFFICE (330) 375-2851 FAX (330) 375-2307 RICHARD DAVIS OFFICE (330) 375-2851 CELL (330) 606-9797 ROB ALLISON OFFICE (330) 375-2851 CELL (330) 812-7550 ADAM STALLER OFFICE (330) 312-7550

SUMMIT COUNTY ENGINEER'S OFFICE ATTN: EUGENE WILSON OFFICE (330) 643-8734 CELL (330) 808 5599 FAX (330) 762-7829 STEVE BURGESS OFFICE (330) 808-5575

SUMMIT COUNTY DEPARTMENT OF ENVIRONMENTAL SERVICES ATTN: ROSS NICHOLSON OFFICE (330) 926-2477 FAX (330) 926-2531 PAUL ALBANESE OFFICE (330) 926-2495 CELL (330) 808-6919 FAX (330) 926-2531 ERAL NOTE

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#### SURVEYING PARAMETERS

PRIMARY PROJECT CONTROL MONUMENTS GOVERN ALL POSITIONING ON ODOT PROJECTS. SEE SHEET **8gb0000#E** PLANS FOR A TABLE CONTAINING PROJECT CONTROL INFORMATION.

USE THE FOLLOWING PROJECT CONTROL, VERTICAL POSITIONING, AND HORIZONTAL POSITIONING PARAMETERS FOR ALL SURVEYING:

PROJECT CONTROL

POSITIONING METHOD: STATIC GNSS

MONUMENT TYPE: TYPE A

VERTICAL POSITIONING

ORTHOMETRIC HEIGHT DATUM: NAVD88

GEOID: GEOID12B

HORIZONTAL POSITIONING

REFERENCE FRAME: NAD83 (2011) (EPOCH:2010.0000) ELLIPSOID: GRS80 MAP PROJECTION: LAMBERT CONFORMAL CONIC COORDINATE SYSTEM: OHIO STATE PLANE, NORTH ZONE COMBINED SCALE FACTOR: 0.99989474882 ORIGIN OF COORDINATE SYSTEM: 0.0

USE THE POSITIONING METHODS AND MONUMENT TYPE USED IN THE ORIGINAL SURVEY TO RESTORE ALL MONUMENTS RELATED TO PRIMARY PROJECT CONTROL THAT ARE DAMAGED OR DESTROYED BY CONSTRUCTION ACTIVITIES. RESTORE THE DAMAGED OR DESTROYED MONUMENTS IN ACCORDANCE WITH CMS 623.

UNITS ARE IN U.S. SURVEY FEET.

# WORK LIMITS

THE WORK LIMITS SHOWN ON THESE PLANS ARE FOR PHYSICAL CONSTRUCTION ONLY. PROVIDE THE INSTALLATION AND OPERATION OF ALL WORK ZONE TRAFFIC CONTROL AND WORK ZONE TRAFFIC CONTROL DEVICES REQUIRED BY THESE PLANS WHETHER INSIDE OR OUTSIDE THESE WORK LIMITS.

# ENDANGERED BAT HABITAT REMOVAL

THIS PROJECT IS LOCATED WITHIN THE KNOWN HABITAT RANGES OF THE FEDERALLY LISTED AND PROTECTED INDIANA BAT AND NORTHERN LONG-EARED BAT. NO TREES SHALL BE REMOVED UNDER THIS PROJECT FROM APRIL I THROUGH SEPTEMBER 30. ALL NECESSARY TREE REMOVAL SHALL OCCUR FROM OCTOBER I THROUGH MARCH 31. THIS REOUIREMENT IS NECESSARY TO AVOID AND MINIMIZE IMPACTS TO THESE SPECIES AS REQUIRED BY THE ENDANGERED SPECIES ACT. FOR THE PURPOSES OF THIS NOTE, A TREE IS DEFINED AS: A LIVE, DYING, OR DEAD WOODY PLANT, WITH A TRUNK THREE INCHES OR GREATER IN DIAMETER AT A HEIGHT OF 4.5 FEET ABOVE THE GROUND SURFACE, AND WITH A MINIMUM HEIGHT OF 13 FEET.

#### CLEARING AND GRUBBING

REMOVE ALL TREES AND STUMPS SPECIFICALLY MARKED FOR REMOVAL WITHIN THE CONSTRUCTION LIMITS UNDER THE LUMP SUM BID FOR ITEM 201, CLEARING AND GRUBBING. THE FOLLOWING IS AN APPROXIMATE ESTIMATE OF THE NUMBER OF TREES AND STUMPS TO BE REMOVED.

SIZE	NO. TREES	NO. STUMPS	TOTAL
18″	Х	Х	Х
30″	Х	Х	Х
48″	Х	Х	X
60″	Х	Х	Х

#### BENCHING OF FOUNDATION SLOPES

ALTHOUGH CROSS-SECTIONS INDICATE SPECIFIC DIMENSIONS FOR PROPOSED BENCHING OF THE EMBANKMENT FOUNDATIONS IN CERTAIN AREAS, NO WAIVER OF THE SPECIFICATIONS IS INTENDED. BENCH ALL OTHER SLOPED EMBANKMENT AREAS AS SET FORTH IN 203.05. NO ADDITIONAL PAYMENT WILL BE MADE FOR BENCHING REQUIRED UNDER THE PROVISIONS OF 203.05

# MONUMENT ASSEMBLIES

CONSTRUCT MONUMENT ASSEMBLIES IN ACCORDANCE WITH THE DETAILS SHOWN ON THE STANDARD CONSTRUCTION DRAWINGS AND AT THE LOCATIONS SHOWN ON SHEET NO. **\$**gb1000**\$** 

# ITEM 204 - PROOF ROLLING

THE FOLLOWING QUANTITY IS PROVIDED IN THE GENERAL SUMMARY TO ADDRESS LOCATIONS REQUIRING PROOF ROLLING.

ITEM 204 - PROOF ROLLING XX HOUR.

#### ADDITIONAL SOIL INFORMATION

THE SOIL PROFILE AND/OR STRUCTURE FOUNDATION INVESTIGATIONS SHEETS CONTAIN ALL AVAILABLE SOIL AND BEDROCK INFORMATION WHICH CAN BE CONVENIENTLY SHOWN. ADDITIONAL SUBSURFACE INVESTIGATION INFORMATION IS AVAILABLE FROM NEAS.

#### AIRWAY/HIGHWAY CLEARANCE FOR AIRPORTS AND HELIPORTS

THIS PROJECT HAS BEEN IDENTIFIED AS BEING WITHIN THE INFLUENCE AREA OF A PUBLIC USE AIRPORT OR HELIPORT. NO TEMPORARY STRUCTURES OR CONSTRUCTION EQUIPMENT AT MAXIMUM OPERATING HEIGHT SHALL EXCEED A HEIGHT OF 1259 FT. IF ANY TEMPORARY STRUCTURES OR CONSTRUCTION EQUIPMENT WILL EXCEED THIS HEIGHT, FURTHER COORDINATION WITH THE FEDERAL AVIATION ADMINISTRATION (FAA), AND THE ODOT OFFICE OF AVIATION, WILL BE NECESSARY PRIOR TO ERECTING SUCH TEMPORARY STRUCTURES OR OPERATING SUCH EQUIPMENT ON THE PROJECT. THE CONTRACTOR WILL BE REQUIRED TO FILE A NEW FAA FORM 7460-1, ADVISING THE FAA THAT AERONAUTICAL STUDY NO. X IS BEING RESUBMITTED AND THAT AN ALTERATION TO THE ORIGINAL SUBMISSION IS REQUESTED.

NOTIFY THE ODOT OFFICE OF AVIATION WHEN RESUBMITTING FAA FORM 7460-1. NO TEMPORARY STRUCTURES OR CONSTRUCTION EQUIPMENT SHALL EXCEED THE PERMISSIBLE HEIGHT, UNTIL A COPY OF THE FAA APPROVAL AND THE ODOT OFFICE OF AVIATION PERMIT HAS BEEN FURNISHED TO THE PROJECT ENGINEER.

FAA APPROVAL MAY TAKE UP TO 45 DAYS. ALL SUBMISSIONS SHALL BE DIRECTED TO THESE OFFICES:

EXPRESS PROCESSING CENTER THE FEDERAL AVIATION ADMINISTRATION SOUTHWEST REGIONAL OFFICE AIR TRAFFIC AIRSPACE BRANCH ASW-520 2601 MEACHAM BLVD. FORT WORTH, TX 76137-4298

#### ITEM 204 - SUBGRADE COMPACTION AND PROOF ROLLING

CONSTRUCT THE SUBGRADE AS FOLLOWS AND IN THE FOLLOWING SEQUENCE:

1. SHAPE THE SUBGRADE TO WITHIN 0.2 FEET OF THE PLAN SUBGRADE ELEVATION.

2. EXCAVATE AND REPLACE UNSUITABLE SUBGRADE BEFORE PROOF ROLLING. THE EXCAVATION LIMITS ARE SHOWN AND LABELED ON THE CROSS SECTIONS AS UNSUITABLE SUBGRADE. UNSUITABLE SUBGRADE INCLUDES UNSUITABLE SOIL (A-4B, A-2-5, A-5, A-7-5, AND SOIL WITH A LIOUID LIMIT GREATER THAN 651 AND ANY COAL, SHALE, OR ROCK WHICH NEEDS TO BE REMOVED ACCORDING TO 204.05.

IF THERE IS UNSUITABLE SUBGRADE IN A SHALLOW FILL LOCATION, EXCAVATE AND REPLACE THE UNSUITABLE SUBGRADE BEFORE CONSTRUCTING THE SHALLOW FILL AND SHAPING THE SUBGRADE.

3. COMPACT THE SUBGRADE ACCORDING TO 204.03.

4. APPROXIMATE LIMITS FOR EXCAVATION OF UNSTABLE SUBGRADE ARE SHOWN AND LABELED ON THE CROSS SECTIONS AS UNSTABLE SUBGRADE. THE ENGINEER WILL IDENTIFY THE ACTUAL LIMITS OF EXCAVATION FOR UNSTABLE SUBGRADE BASED ON THE PROOF ROLLING RESULTS AND VISUAL OBSERVATIONS.

PROOF ROLL THE COMPACTED SUBGRADE ACCORDING TO 204.06.

5. EXCAVATE UNSTABLE SUBGRADE AS DIRECTED BY THE ENGINEER AND STABILIZE BY REPLACING WITH THE SPECIFIED MATERIALS ACCORDING TO 204.07. EXCAVATIONS WILL EXTEND 18 INCHES BEYOND THE EDGE OF THE SURFACE OF THE PAVEMENT, PAVED SHOULDERS, OR PAVED MEDIANS.

6. PROOF ROLL THE STABILIZED AREAS ACCORDING TO 204.06 TO VERIFY STABILITY.

7. FINE GRADE THE SUBGRADE TO THE SPECIFIED GRADE.

THE QUANTITIES FOR EXCAVATING THE UNSUITABLE SUBGRADE AND UNSTABLE SUBGRADE ARE BOTH PAID UNDER ITEM 204 EXCAVATION OF SUBGRADE.

# ROADWAY NOTES

# CONNECTION BETWEEN EXISTING AND PROPOSED GUARDRAIL

WHEN IT IS NECESSARY TO SPLICE PROPOSED GUARDRAIL TO EXISTING GUARDRAIL, ONLY THE EXISTING GUARDRAIL SHALL BE CUT, DRILLED, OR PUNCHED. THE CONNECTION SHALL BE MADE USING A W-BEAM, BEAM SPLICE AS SHOWN IN AASHTO M 180-12, EXCEPT THE BEAM WASHERS ARE NOT TO BE USED. PAYMENT SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE RESPECTIVE GUARDRAIL ITEMS.

# ITEM 606 - ANCHOR ASSEMBLY, MGS TYPE E

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING ANY OF THE GUARDRAIL END TERMINALS FOR TYPE MGS GUARDRAIL AS LISTED ON ROADWAY ENGINEERING'S WEB PAGE UNDER ROADSIDE SAFETY DEVICES FOR APPROVED GUARDRAIL END TREATMENTS. INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS, IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

THE FACE OF THE TYPE E IMPACT HEAD SHALL BE COVERED WITH A SHEET OF TYPE G REFLECTIVE SHEETING, PER CMS 730.19.

REFER TO THE MANUFACTURER'S INSTRUCTIONS REGARDING THE INSTALLATION OF, AND THE GRADING AROUND THE FOUNDATION TUBES AND GROUND STRUT. THE TOP OF ANY FOUNDATION TUBE SHOULD BE LESS THAN 4 INCHES ABOVE THE GROUND. THE PLACEMENT OF THE FOUNDATION TUBES SHOULD BE AN APPROPRIATE DEPTH BELOW THE LEVEL LINE IN ORDER TO MAINTAIN THE FINISHED GUARDRAIL HEIGHT OF 31 INCHES FROM THE EDGE OF THE SHOULDER.

ON-SITE GRADING IS REQUIRED IF THE TOP OF THE FOUNDATION TUBES OR TOP OF THE GROUND STRUT DOES PROJECT MORE THAN 4 INCHES ABOVE THE GROUND LINE.

PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT PRICE BID FOR ITEM 606, ANCHOR ASSEMBLY, MGS TYPE E, EACH, AND SHALL INCLUDE ALL LABOR, TOOLS, EOUIPMENT AND MATERIALS NECESSARY TO CONSTRUCT A COMPLETE AND FUNCTIONAL ANCHOR ASSEMBLY SYSTEM, INCLUDING ALL RELATED TRANSITIONS, REFLECTIVE SHEETING, HARDWARE, GRADING, EMBANKMENT AND EXCAVATION NOT SEPARATELY SPECIFIED, AS REQUIRED BY THE MANUFACTURER.

# ITEM 606 - ANCHOR ASSEMBLY, MGS TYPE B

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING ANY OF THE GUARDRAIL END TERMINALS FOR TYPE MGS GUARDRAIL AS LISTED ON ROADWAY ENGINEERING'S WEB PAGE UNDER ROADSIDE SAFETY DEVICES FOR APPROVED GUARDRAIL END TREATMENTS. INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS, IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

REFER TO THE MANUFACTURER'S INSTRUCTIONS REGARDING THE INSTALLATION OF, AND THE GRADING AROUND, THE FOUNDATION TUBES AND GROUND STRUT. THE TOP OF ANY FOUNDATION TUBE SHOULD BE LESS THAN 4 INCHES ABOVE THE GROUND. THE PLACEMENT OF THE FOUNDATION TUBES SHOULD BE AN APPROPRIATE DEPTH BELOW THE LEVEL LINE IN ORDER TO MAINTAIN THE FINISHED GUARDRAIL HEIGHT OF 31 INCHES FROM THE EDGE OF THE SHOULDER.

ON-SITE GRADING IS REQUIRED IF THE TOP OF THE FOUNDATION TUBES OR TOP OF THE GROUND STRUT DOES PROJECT MORE THAN 4 INCHES ABOVE THE GROUND LINE. THE FACE OF THE TYPE B IMPACT HEAD SHALL BE COVERED WITH TYPE G REFLECTIVE SHEETING, PER CMS 730.19. PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT PRICE BID FOR ITEM 606, ANCHOR ASSEMBLY, MGS TYPE B, EACH, AND SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT AND MATERIALS NECESSARY TO CONSTRUCT A COMPLETE AND FUNCTIONAL ANCHOR ASSEMBLY SYSTEM, INCLUDING REFLECTIVE SHEETING AND ALL RELATED HARDWARE, GRADING, EMBANKMENT AND EXCAVATION NOT SEPARATELY SPECIFIED, AS REQUIRED BY THE MANUFACTURER. GENERAL NOT

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# ROADWAY NOTES (CONT'D)

# FENCE LENGTHS

THE LENGTHS OF FENCE SHOWN IN THE PLANS ARE HORIZONTAL DIMENSIONS. MEASUREMENTS OF THE FINAL QUANTITIES WILL BE IN ACCORDANCE WITH ITEM 607.

# ITEM 607 - FENCE, TYPE CLT, AS PER PLAN

ALL REQUIREMENTS OF SECTION 607 OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS SHALL APPLY WITH THE FOLLOWING MODIFICATIONS: PROPOSED POLES ARE TO BE EMBEDDED THROUGH THE EXISTING CONCRETE SLOPE PROTECTION. BACKFILL THE CAVITY AROUND THE POLES WITH CONCRETE MEETING SECTIONS 499, 511 AND 601.07.

### ITEM 202 - FENCE REMOVED, AS PER PLAN

ALL REQUIREMENTS OF SECTION 202.09 OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS SHALL APPLY WITH THE FOLLOWING MODIFICATIONS: EXISTING POLES ARE EMBEDDED THROUGH THE EXISTING CONCRETE SLOPE PROTECTION. BACKFILL THE CAVITY CREATED BY THE REMOVAL OF THE POLES WITH CONCRETE MEETING SECTIONS 499, 551 AND 601.07.

# PAVING UNDER GUARDRAIL

THIS OPERATION SHALL INCLUDE PREPARATION OF THE GRADED SHOULDER USING ITEM 209, LINEAR GRADING, AS PER PLAN AND PAVING UNDER THE GUARDRAIL USING 441 ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (448), UNDER GUARDRAIL, AS PER PLAN.

ITEM 209, LINEAR GRADING, AS PER PLAN SHALL CONSIST OF EXCAVATING TOPSOIL, and PLACING GRANULAR MATERIAL.

ALL COLLECTED DEBRIS AND TOPSOIL, INCLUDING RHIZOMES, ROOTS AND OTHER VEGETATIVE PLANT MATERIAL SHALL BE REMOVED AND DISPOSED OF AS SPECIFIED IN 105.17.

THE REMOVED MATERIAL SHALL BE REPLACED WITH COMPACTABLE GRANULAR MATERIAL CONFORMING TO 703.16 PLACED TO GRADE AS DETAILED ON THE TYPICAL SECTION OR AS APPROVED BY THE ENGINEER.

ALL EQUIPMENT, MATERIALS AND LABOR REQUIRED TO PERFORM THE WORK OUTLINED ABOVE SHALL BE INCLUDED FOR PAYMENT UNDER ITEM 209, LINEAR GRADING, AS PER PLAN. PAVING UNDER GUARDRAIL SHALL CONSIST OF PLACING ITEM 441 TO THE DEPTH SPECIFIED USING ONE OF THE FOLLOWING METHODS:

METHOD A:

1. SET GUARDRAIL POSTS 2. PLACE ITEM 441

#### METHOD B:

1. PLACE ITEM 441 2. BORE ASPHALT AT POST LOCATIONS (MAY BE OMITTED IF STEEL POSTS ARE USED) 3. SET GUARDRAIL POSTS 4. PATCH AROUND POSTS. THE MATERIALS USED FOR PATCHING SHALL BE AN ASPHALT CONCRETE APPROVED BY THE ENGINEER. PATCHED AREAS SHALL BE COMPACTED USING EITHER HAND OR MECHANICAL METHODS. FINISHED SURFACES SHALL BE SMOOTH AND SLOPED TO DRAIN AWAY FROM THE POSTS.

ALL EQUIPMENT, MATERIALS AND LABOR REQUIRED TO PERFORM THE WORK OUTLINED ABOVE, WITH THE EXCEPTION OF SETTING GUARDRAIL POSTS, SHALL BE INCLUDED FOR PAYMENT UNDER ITEM 441, ASPHALT CONCRETE, INTERMEDIATE COURSE, TYPE I(448), UNDER GUARDRAIL, AS PER PLAN.

# EROSION CONTROL NOTES

## SEEDING AND MULCHING

THE FOLLOWING OUANTITIES ARE PROVIDED TO PROMOTE GROWTH AND CARE OF PERMANENT SEEDED AREAS:

659,	SOIL ANALYSIS TEST	X EACH
659,	TOPSOIL	X CU. YD.
659,	SEEDING AND MULCHING	X SQ. YD.
659,	REPAIR SEEDING AND MULCHING	X SQ. YD.
659,	INTER-SEEDING	X SQ. YD.
659,	COMMERCIAL FERTILIZER	X TON
659,	LIME	X ACRES
659,	WATER	X M. GAL.
659,	MOWING	X M. SQ. FT.

SEEDING AND MULCHING SHALL BE APPLIED TO ALL AREAS OF EXPOSED SOIL BETWEEN THE RIGHT-OF-WAY LINES, AND WITHIN THE CONSTRUCTION LIMITS FOR AREAS OUTSIDE THE RIGHT-OF-WAY LINES COVERED BY WORK AGREEMENT OR SLOPE EASEMENT. OUANTITY CALCULATIONS FOR SEEDING AND MULCHING ARE BASED ON THESE LIMITS.

# SODDING

THE FOLLOWING QUANTITIES ARE PROVIDED TO PROMOTE GROWTH AND CARE OF PERMANENT SODDED AREAS.

659, SOIL ANALYSIS TEST	X EACH
659, TOPSOIL	X CU. YD.
659, COMMERCIAL FERTILIZER	X TON
659, LIME	X ACRE
659, WATER	X M. GAL.
660, SODDING, UNSTAKED, STAKED,	REINFORCED
	X SQ. YD.

# PAVEMENT NOTES

# PROFILE AND ALIGNMENT

PLACE THE PROPOSED PAVEMENT TO FOLLOW THE ALIGNMENT AND PROFILE OF THE EXISTING PAVEMENT. (PREVIOUS CONSTRUCTION PLANS, PROJECT NO. ...., SHOWING THE ORIGINAL ALIGNMENT AND PROFILE, ARE AVAILABLE FOR INSPECTION AT THE ODOT DISTRICT 4 OFFICE). PLACE THE PROPOSED ASPHALT CONCRETE OVERLAY (WITH A UNIFORM THICKNESS OF X INCHES (VARYING IN THICKNESS FROM X INCHES AT THE CROWN TO X INCHES AT THE PAVEMENT EDGEI(AS SHOWN ON THE TYPICAL SECTIONS).

# CONTRACTION AND/OR EXPANSION JOINTS

ALTHOUGH SPECIFIC LOCATIONS OF CERTAIN CONTRACTION AND EXPANSION JOINTS HAVE BEEN DETAILED ON THIS PLAN, NO WAIVER OF THE SPECIFICATIONS IS INTENDED. IN ALL CASES, THE PROVISION OF EXPANSION JOINTS AT ALL MAJOR STRUCTURES INCLUDING THE MAXIMUM SPACING BETWEEN CONTRACTION JOINTS IS IN ACCORDANCE WITH STANDARD CONSTRUCTION DRAWING BP-2.2 AND THE SPECIFICATIONS.

#### PART-WIDTH CONSTRUCTION

BECAUSE OF THE NECESSITY TO BUILD THIS PROJECT UNDER TRAFFIC AND TO CONSTRUCT THE FULL PAVEMENT WIDTH IN STAGES, EXERCISE CARE TO PREVENT THE CONSTRUCTION OF A BUTT JOINT IN THE BASE COURSES. LAP LONGITUDINAL JOINTS AS SHOWN ON STANDARD CONSTRUCTION DRAWING BP-3.1.

#### MEDIAN AND/OR CURBING ON APPROACH SLABS

WITHIN THE LIMITS OF THE APPROACH SLAB, TRANSITION THE SHAPE OF THE MEDIAN AND/OR CURBING ON APPROACH SLABS FROM THE STANDARD SECTION ON THE APPROACHES TO THE SECTION USED ON THE BRIDGE.

# PAVEMENT RESTORATION FOR PIPE INSTALLATIONS AND/OR REMOVALS

THE FOLLOWING OUANTITY HAS BEEN PROVIDED FOR PAVEMENT RESTORATION FOLLOWING INSTALLATION AND/OR REMOVAL OF PIPES.

ITEM 301 - ASPHALT CONCRETE BASE, PG64-22 X CU. YDS.

THE ABOVE OUANTITY IS BASED ON A 301 THICKNESS OF X INCHES AND A PAVEMENT RESTORATION WIDTH THAT INCLUDES THE TRENCH WIDTH PLUS TWO FEET ON EACH SIDE OF THE TRENCH.

PROVIDE ANY MATERIALS USED OUTSIDE THE LIMITS STATED ABOVE AT NO ADDITIONAL COST.

# PAVEMENT RESTORATION FOR DRAINAGE STRUCTURE INSTALLATIONS

THE FOLLOWING QUANTITY IS PROVIDED FOR PAVEMENT RESTORATION FOLLOWING INSTALLATION OF ITEM 611, DRAINAGE STRUCTURES.

ITEM 301, ASPHALT CONCRETE BASE, PG64-22 X CU. YDS.

THE ABOVE QUANTITY IS BASED ON A 301 THICKNESS OF X INCHES AND A WIDTH OF TWO FEET AROUND THE PERIMETER OF THE DRAINAGE STRUCTURE.

PROVIDE ANY MATERIALS USED OUTSIDE THE LIMITS STATED ABOVE AT NO ADDITIONAL COST.

# PAVEMENT RESTORATION FOR MONUMENT ASSEMBLY INSTALLATIONS

THE FOLLOWING QUANTITY IS PROVIDED FOR PAVEMENT RESTORATION FOLLOWING INSTALLATION OF ITEM 623, MONUMENT ASSEMBLIES.

ITEM 301, ASPHALT CONCRETE BASE, PG64-22 X CU. YDS.

THE ABOVE QUANTITY IS BASED ON A 301 THICKNESS OF X INCHES AND A WIDTH OF TWO FEET AROUND THE PERIMETER OF THE MONUMENT ASSEMBLIES.

PROVIDE ANY MATERIALS USED OUTSIDE THE LIMITS STATED ABOVE AT NO ADDITIONAL COST.

# DRAINAGE NOTES

# ITEM SPECIAL - FILL AND PLUG EXISTING CONDUIT

THIS ITEM SHALL CONSIST OF THE CONSTRUCTION OF BULKHEADS IN AN EXISTING X IN DIAMETER CONDUIT AND FILLING THE AREA THUS SEALED OFF WITH ITEM 613, SAND OR OTHER MATERIAL APPROVED BY THE ENGINEER.

BULKHEADS SHALL BE LOCATED AT THE LIMITS OF THE AREA TO BE FILLED AS INDICATED ON THE PLANS. THE BULKHEADS SHALL CONSIST OF BRICK OR CONCRETE MASONRY WITH A MINIMUM THICKNESS OF 12 INCHES.

THE FILL MATERIAL SHALL BE PUMPED INTO PLACE, OR PLACED BY OTHER MEANS APPROVED BY THE ENGINEER, SO THAT, AFTER SETTLEMENT, AT LEAST 90 PERCENT OF THE CROSS-SECTIONAL AREA OF THE CONDUIT, FOR ITS ENTIRE LENGTH, SHALL BE FILLED. THE LENGTH OF FILLED AND PLUGGED CONDUIT TO BE PAID FOR SHALL BE THE ACTUAL NUMBER OF FEET (MEASURED ALONG THE CENTERLINE OF EACH CONDUIT FROM OUTER FACE TO OUTER FACE OF BULKHEADS) FILLED AND PLUGGED AS DESCRIBED ABOVE.

IN LIEU OF FILLING AND PLUGGING THE EXISTING CONDUIT, THE PIPE MAY BE CRUSHED AND BACKFILLED IN ACCORDANCE WITH THE PROVISIONS OF 203, OR IT MAY BE REMOVED. THE LENGTH, MEASURED AS PROVIDED ABOVE, SHALL BE PAID FOR AT THE CONTRACT PRICE PER FOOT FOR, ITEM SPECIAL, FILL AND PLUG EXISTING CONDUIT.

# CROSSINGS AND CONNECTIONS TO EXISTING PIPES AND UTILITIES

WHERE PLANS PROVIDE FOR A PROPOSED CONDUIT TO BE CONNECTED TO, OR CROSS OVER OR UNDER AN EXISTING SEWER OR UNDERGROUND UTILITY, THE CONTRACTOR SHALL LOCATE THE EXISTING PIPES OR UTILITIES BOTH AS TO LINE AND GRADE BEFORE STARTING TO LAY THE PROPOSED CONDUIT.

IF IT IS DETERMINED THAT THE ELEVATION OF THE EXISTING CONDUIT, OR EXISTING APPURTENANCE TO BE CONNECTED, DIFFERS FROM THE PLAN ELEVATION OR RESULTS IN A CHANGE IN THE PLAN CONDUIT SLOPE, THE ENGINEER SHALL BE NOTIFIED BEFORE STARTING CONSTRUCTION OF ANY PORTION OF THE PROPOSED CONDUIT WHICH WILL BE AFFECTED BY THE VARIANCE IN THE EXISTING ELEVATIONS.

IF IT IS DETERMINED THAT THE PROPOSED CONDUIT WILL INTERSECT AN EXISTING SEWER OR UNDERGROUND UTILITY IF CONSTRUCTED AS SHOWN ON THE PLAN, THE ENGINEER SHALL BE NOTIFIED BEFORE STARTING CONSTRUCTION OF ANY PORTION OF THE PROPOSED CONDUIT WHICH WOULD BE AFFECTED BY THE INTERFERENCE WITH AN EXISTING FACILITY.

PAYMENT FOR ALL THE OPERATIONS DESCRIBED ABOVE SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 611 CONDUIT ITEM.

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# DRAINAGE NOTES (CONT'D)

## UNRECORDED TREATED NON-STORMWATER DRAINAGE

FURNISH A CONTINUANCE FOR ALL UNRECORDED TREATED NON-STORMWATER DRAINAGE, SUCH AS TREATED SEPTIC, TREATED WASTEWATER, TREATED CURTAIN/GRADIENT DRAINS, AND TREATED FOUNDATION FLOOR DRAINS DISTURBED BY THE WORK. FURNISH EITHER AN OPEN CONTINUANCE OR AN UNOBSTRUCTED CONTINUANCE BY CONNECTING A CONDUIT THROUGH THE CURB OR INTO A DRAINAGE STRUCTURE. THE LOCATION, TYPE, SIZE AND GRADE OF THE NEEDED CONDUIT TO REPLACE OR EXTEND AN EXISTING DRAIN WILL BE DETERMINED BY THE ENGINEER. ALL SUCH CONTINUANCE MAY ALSO REQUIRE A NPDES PERMIT FROM THE OHIO ENVIRONMENTAL PROTECTION AGENCY. REPORT ALL CONTINUANCE TO THE LOCAL HEALTH DEPARTMENT.

WHERE MAKING A CONNECTION INTO A HIGHWAY DRAINAGE CONDUIT, AN INSPECTION WELL SHALL BE PROVIDED IN ACCORDANCE WITH STANDARD CONSTRUCTION DRAWING DM-3.1.

THE FOLLOWING ESTIMATED OUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER IN MAKING THE ABOVE CONTINUANCE:

611,	X" CONDUIT, TYPE C	X FT.
611.	INSPECTION WELL	X EACH

#### ITEM 611 - CONDUIT BORED OR JACKED

WHERE IT IS SPECIFIED THAT A CONDUIT BE INSTALLED BY THE METHOD OF BORING OR JACKING, NO TRENCH EXCAVATION SHALL BE CLOSER THAN X FEET TO THE (EDGE OF PAVEMENT) (NEAREST RAIL). PROVIDE A STEEL CASING PIPE CONFORMING TO 748.06 HAVING JOINTS WITH A CIRCUMFERENTIAL FULLY PENETRATING B-U4B WELD THAT IS PERFORMED BY AN ODOT APPROVED FIELD WELDER. THE INSTALLED CASING PIPE IS THE STORM WATER CONVEYANCE CARRIER UNLESS OTHERWISE SPECIFIED IN THE PLANS. HYDROSTATIC TESTING IS NOT REQUIRED FOR THE CASING PIPE.

## REVIEW OF DRAINAGE FACILITIES

BEFORE ANY WORK IS STARTED ON THE PROJECT AND AGAIN BEFORE FINAL ACCEPTANCE BY THE STATE, REPRESENTATIVES OF THE STATE AND THE CONTRACTOR, ALONG WITH LOCAL REPRESENTATIVES, SHALL MAKE AN INSPECTION OF ALL EXISTING SEWERS WHICH ARE TO REMAIN IN SERVICE AND WHICH MAY BE AFFECTED BY THE WORK. THE CONDITION OF THE EXISTING CONDUITS AND THEIR APPURTENANCE SHALL BE DETERMINED FROM FIELD OBSERVATIONS. RECORDS OF THE INSPECTION SHALL BE KEPT IN WRITING ALONG WITH PHOTOS BY THE STATE.

ALL NEW CONDUITS, INLETS, CATCH BASINS, AND MANHOLES CONSTRUCTED AS A PART OF THE PROJECT SHALL BE FREE OF ALL FOREIGN MATTER AND IN A CLEAN CONDITION BEFORE THE PROJECT WILL BE ACCEPTED BY THE STATE.

ALL EXISTING SEWERS INSPECTED INITIALLY BY THE ABOVE MENTIONED PARTIES SHALL BE MAINTAINED AND LEFT IN A CONDITION REASONABLY COMPARABLE TO THAT DETERMINED BY THE ORIGINAL INSPECTION. ANY CHANGE IN THE CONDITION RESULTING FROM THE CONTRACTOR'S OPERATIONS SHALL BE CORRECTED BY THE CONTRACTOR TO THE SATISFACTION OF THE ENGINEER.

PAYMENT FOR ALL OPERATIONS DESCRIBED ABOVE SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 611 CONDUIT ITEMS.

#### MANHOLES, CATCH BASINS AND INLETS REMOVED OR ABANDONED

ALL CASTINGS SHALL BE CAREFULLY REMOVED AND STORED WITHIN THE RIGHT OF WAY FOR SALVAGE BY (STATE) (CITY) (VILLAGE) (COUNTY) FORCES.

PAYMENT FOR ALL OF THE ABOVE SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 202 ITEM.

### ITEM 511 WINGWALLS OR HEADWALLS FOR 611 ITEMS

FOR ITEMS 706.05, 706.051, 706.052 AND 706.053 WITH A CAST-IN-PLACE WINGWALL OR HEADWALL A PRECAST ALTERNATIVE MAY BE FURNISHED PER 602.03. THE PRECAST ALTERNATIVE WILL MEET THE CAST-IN-PLACE STRUCTURAL DESIGN LOADINGS, DESIGN HEIGHT, AND DESIGN LENGTH DIMENSIONS.

FULL COMPENSATION FOR THE PRECAST WINGWALL OR HEADWALL IS THE NUMBER OF CUBIC YARDS OF ITEM 511 AND POUNDS OF ITEM 509 FOR THE CORRESPONDING CAST-IN-PLACE STRUCTURE.

# ITEM SPECIAL - MISCELLANEOUS METAL

EXISTING CASTINGS MAY PROVE TO BE UNSUITABLE FOR REUSE, AS DETERMINED BY THE ENGINEER. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE THE CASTINGS OF THE REQUIRED TYPE, SIZE AND STRENGTH (HEAVY OR LIGHT DUTY) FOR THE PARTICULAR STRUCTURE IN QUESTION. ALL MATERIAL SHALL MEET ITEM 611 OF THE SPECIFICATIONS AND SHALL HAVE THE PRIOR APPROVAL OF THE ENGINEER.

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER.

SPECIAL, MISCELLANEOUS METAL X POUNDS

THE CONTRACTOR IS CAUTIONED TO USE EXTREME CARE IN THE REMOVAL, STORAGE AND REPLACEMENT OF ALL EXISTING CASTINGS. CASTINGS DAMAGED BY THE NEGLIGENCE OF THE CONTRACTOR, AS DETERMINED BY THE ENGINEER, SHALL BE REPLACED WITH THE PROPER NEW CASTINGS AT THE EXPENSE OF THE CONTRACTOR.

#### ITEM 611 - CATCH BASIN NO. 3A, AS PER PLAN

THIS ITEM SHALL BE A CITY OF AKRON CATCH BASIN NO. 5 PER THE CITY OF AKRON CMS SECTION 563.

THIS ITEM SHALL BE PAID FOR AT THE UNIT PRICE BID FOR EACH CATCH BASIN NO. 3A, AS PER PLAN, AND SHALL INCLUDE ALL MATERIALS, LABOR AND INCIDENTALS TO CONSTRUCT THIS ITEM AS NOTED.

#### ITEM 611 - MANHOLE NO. 3, AS PER PLAN

THIS ITEM SHALL BE A CITY OF AKRON MANHOLE NO. 2 PER THE CITY OF AKRON CMS SECTION 562.

THIS ITEM SHALL BE PAID FOR AT THE UNIT PRICE BID FOR EACH MANHOLE NO. 3, AS PER PLAN, AND SHALL INCLUDE ALL MATERIALS, LABOR AND INCIDENTALS TO CONSTRUCT THIS ITEM AS NOTED.

## ITEM 611 - 12" CONDUIT, TYPE B, AS PER PLAN

THIS ITEM SHALL BE A CITY OF AKRON TYPE A PIPE PER THE CITY OF AKRON CMS SECTION 551.

THIS ITEM SHALL BE PAID FOR AT THE UNIT PRICE BID PER FOOT OF 12" CONDUIT, TYPE B, AS PER PLAN AND SHALL INCLUDE ALL MATERIALS, LABOR AND INCIDENTALS TO CONSTRUCT THIS ITEM AS NOTED.

#### ITEM SPECIAL - PIPE CLEANOUT

THIS WORK SHALL CONSIST OF REMOVING SEDIMENT AND DEBRIS FROM THE EXISTING DRAINAGE CONDUITS SPECIFIED IN THE PLANS. ALL MATERIAL REMOVED SHALL BE DISPOSED OF AS PER 105.16 AND 105.17. ALL SEWERS SHALL BE CLEANED OUT TO THE SATISFACTION OF THE ENGINEER.

CLEANOUT OF THE PIPE SHALL BE PAID FOR AT THE UNIT PRICE BID FOR ITEM SPECIAL - PIPE CLEANOUT. THIS PRICE SHALL INCLUDE THE COST FOR MATERIAL, EQUIPMENT, LABOR, AND ALL INCIDENTALS REQUIRED TO COMPLETE THE CLEANOUT.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR THE ABOVE NOTED WORK:

SPECIAL, PIPE CLEANOUT, 24" AND UNDER X FT. SPECIAL, PIPE CLEANOUT, 27" TO 48" X FT. SPECIAL, PIPE CLEANOUT, OVER 48" X FT.

#### EXISTING SUBSURFACE DRAINAGE

PROVIDE UNOBSTRUCTED OUTLETS FOR ALL EXISTING UNDERDRAINS OR AGGREGATE DRAINS ENCOUNTERED DURING CONSTRUCTION.

PROVIDE AN OUTLET PER STANDARD CONSTRUCTION DRAWING DM-1.1 FOR ALL UNDERDRAINS THAT OUTLET TO A SLOPE. UNDERDRAINS THAT CAN BE CONNECTED TO THE NEW OR EXISTING UNDERDRAINS AT THE END OF THE PROJECT LIMITS AS WELL AS ALL NECESSARY BENDS OR BRANCHES REOUIRED FOR CONNECTION ARE INCLUDED IN THE BASIS OF PAYMENT FOR UNCLASSIFIED PIPE UNDERDRAINS.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR THE WORK NOTED ABOVE:

601, TIED CONCRETE BLOCK MAT, TYPE I X SO. YD. 605, AGGREGATE DRAINS X FT. 611 X" CONDUIT, TYPE F X FT. 611, PRECAST REINFORCED CONCRETE OUTLET X EACH 605 X" UNCLASSIFIED PIPE UNDERDRAINS X FT.

#### TEMPORARY DRAINAGE ITEMS

TEMPORARY DRAINAGE ITEMS LABELED ON THE MAINTENANCE OF TRAFFIC PLAN ARE ITEMIZED ON THE MOT PLANS. PAYMENT FOR THE TEMPORARY DRAINAGE ITEMS ARE ITEMIZED AND CARRIED TO THE GENERAL SUMMARY.

PIPE CONNECTIONS TO CORRUGATED METAL STRUCTURES	JLATED FK CKED RT
CONNECTIONS OF PROPOSED LONGITUDINAL DRAINAGE TO CORRUGATED METAL STRUCTURES SHALL BE MADE BY MEANS OF A SHOP FABRICATED OR FIELD WELDED STUB ON THE STRUCTURE. THE STUB SHALL MEET THE REQUIREMENTS OF 707 AND HAVE A MINIMUM LENGTH OF 2 FEET AND A MINIMUM WALL THICKNESS OF 0.064 INCHES.	CALCU 1 CHE M
THE LOCATION AND ELEVATION OF THE STUB ARE TO BE CONSIDERED APPROXIMATE AND MAY BE ADJUSTED BY THE ENGINEER TO AVOID CUTTING THROUGH JOINTS IN THE STRUCTURE.	
THE FIELD WELDED JOINT, IF USED, SHALL BE THOROUGHLY CLEANED AND REGALVANIZED OR OTHERWISE SUITABLY REPAIRED. WELDING SHALL MEET THE REQUIREMENTS OF 513.21.	
A MASONRY COLLAR, AS PER STANDARD DRAWING DM-1.1, WILL BE REQUIRED TO CONNECT THE LONGITUDINAL DRAINAGE TO THE STUB, WHEN PIPE OTHER THAN CORRUGATED METAL IS PROVIDED FOR THE LONGITUDINAL DRAINAGE.	S
PAYMENT FOR CUTTING INTO THE STRUCTURE AND PROVIDING THE CONNECTION DESCRIBED, SHALL BE INCLUDED IN THE CONTRACT PRICE FOR ITEM 611 OR 522.	NOTE
UNRECORDED UNTREATED NON-STORMWATER DRAINAGE	Ļ
FURNISH NO CONTINUANCE FOR ANY UNRECORDED UNTREATED NONSTORMWATER DRAINAGE SUCH AS UNTREATED SEPTIC, UNTREATED WASTEWATER, UNTREATED CURTAIN/GRADIENT DRAINS, AND UNTREATED FOUNDATION FLOOR DRAINS DISTURBED BY THE WORK. PLUG ANY UNRECORDED UNTREATED NON-STORMWATER DRAINAGE WITH CONCRETE AT THE RIGHT OF WAY LINE. PAYMENT FOR PLUGGING SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 202 OR 203 ITEM.	GENERA
UNRECORDED STORM WATER DRAINAGE	
FURNISH A CONTINUANCE FOR ALL UNRECORDED STORM WATER DRAINAGE,SUCH AS ROOF DRAINS, FOOTER DRAINS, OR YARD DRAINS, DISTURBED BY THE WORK. FURNISH EITHER AN OPEN CONTINUANCE OR AN UNOBSTRUCTED CONTINUANCE BY CONNECTING A CONDUIT THROUGH THE CURB OR INTO A DRAINAGE STRUCTURE. THE LOCATION, TYPE, SIZE AND GRADE OF THE NEEDED CONDUIT TO REPLACE OR EXTEND AN EXISTING DRAIN WILL BE DETERMINED BY THE ENGINEER. ALL SUCH CONTINUANCE REQUIRES A RIGHT OF WAY USE PERMIT.	
THE FOLLOWING CONDUIT TYPES MAY BE USED: 707.33, 707.41 NON-PERFORATED, 707.42, 707.43, 707.45, 707.46, 707.47, 707.51, 707.52 SDR35.	
THE FOLLOWING CONDUIT TYPES MAY BE USED: 707.33, 707.41 NON-PERFORATED, 707.42, 707.43, 707.45, 707.46, 707.47, 707.51, 707.52 SDR35. THE FOLLOWING ESTIMATED OUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER FOR THE WORK NOTED ABOVE:	
THE FOLLOWING CONDUIT TYPES MAY BE USED: 707.33, 707.41 NON-PERFORATED, 707.42, 707.43, 707.45, 707.46, 707.47, 707.51, 707.52 SDR35. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER FOR THE WORK NOTED ABOVE: 611, X" CONDUIT, TYPE B, FOR DRAINAGE CONNECTION X FT.	
THE FOLLOWING CONDUIT TYPES MAY BE USED: 707.33, 707.41 NON-PERFORATED, 707.42, 707.43, 707.45, 707.46, 707.47, 707.51, 707.52 SDR35.THE FOLLOWING ESTIMATED OUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER FOR THE WORK NOTED ABOVE:611, X" CONDUIT, TYPE B, FOR DRAINAGE CONNECTION X FT.611, X" CONDUIT, TYPE C, FOR DRAINAGE CONNECTION X FT.	
THE FOLLOWING CONDUIT TYPES MAY BE USED: 707.33, 707.41 NON-PERFORATED, 707.42, 707.43, 707.45, 707.46, 707.47, 707.51, 707.52 SDR35.THE FOLLOWING ESTIMATED OUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER FOR THE WORK NOTED ABOVE:611, X" CONDUIT, TYPE B, FOR DRAINAGE CONNECTION X FT.611, X" CONDUIT, TYPE C, FOR DRAINAGE CONNECTION X FT.611, X" CONDUIT, TYPE E, FOR DRAINAGE CONNECTION X FT.	

611, X" CONDUIT, TYPE F, FOR DRAINAGE CONNECTION X FT.

SUM-76/77 11.31/11.30

# DRAINAGE NOTES (CONT'D)

# UNRECORDED ACTIVE SANITARY SEWER CONNECTIONS

FURNISH A CONTINUANCE FOR ALL UNRECORDED ACTIVE SANITARY SEWER CONNECTIONS SUCH AS SANITARY, WASTEWATER, CURTAIN/GRADIENT DRAINS, AND FOUNDATION FLOOR DRAINS DISTURBED BY THE WORK. FURNISH AN UNOBSTRUCTED CONTINUANCE OF THE UNRECORDED ACTIVE SANITARY SEWER CONNECTIONS TO THE SATISFACTION OF THE ENGINEER. ALL SUCH CONTINUANCE REQUIRES A RIGHT OF WAY USE PERMIT. ALL SANITARY AND SANITARY WASTEWATER CONTINUANCE MAY ALSO REQUIRE A NPDES PERMIT FROM THE OHIO ENVIRONMENTAL PROTECTION AGENCY. REPORT ALL CONTINUANCE TO THE LOCAL HEALTH DEPARTMENT.

THE FOLLOWING CONDUIT TYPES MAY BE USED: 707.42, 707.43, 707.44, 707.45, 707.46, 707.47, 707.51, 707.52 SDR35, 706.01, 706.02, OR 706.08 WITH JOINTS AS PER 706.11 OR 706.12.

THE FOLLOWING ESTIMATED OUANTITIES HAVE BEEN INCLUDED IN THE GENERAL UMMARY FOR USE AS DIRECTED BY THE ENGINEER FOR THE WORK NOTED ABOVE:

611, X" CONDUIT, TYPE B, FOR SANITARY X FT.

611, X" CONDUIT, TYPE C, FOR SANITARY X FT.

#### ITEM 611 - CONDUIT MISC.: CURED-IN-PLACE PIPE LINER

INSTALL A CONTINUOUS (JOINT-LESS) CURED-IN-PLACE PIPELINER SYSTEM TO LINE THE INTERIOR OF THE HOST PIPE TO BE REHABILITATED. THE LINER PIPE MUST BE ABLE TO MOLD ITSELF OR FIT TIGHTLY TO THE SHAPE OF THE EXISTING PIPE. THE LINER MUST PROVIDE FOR COMPLETE STRUCTURAL INTEGRITY, INDEPENDENT OF THE LOAD BEARING CAPACITY OF THE EXISTING HOST PIPE. THE PIPELINER MUST BE CAPABLE OF CONFORMING TO THE PIPELINE BENDS IN THE HOST PIPE WITHOUT SPLITTING, RUPTURING, OR WRINKLING OF THE PIPE LINER MATERIAL. THE LINING MUST PROVIDE A FLOW CAPACITY EQUAL TO, OR GREATER THAN, THAT OF THE HOST PIPE PRIOR TO REHABILITATION. CURED-IN-PLACE PIPELINERS SHALL CONFORM TO ASTM D5813 AND BE DESIGNED ACCORDING TO ASTM F1216 AS A FULLY DETERIORATED GRAVITY PIPE. REFER TO SUPPLEMENTAL SPECIFICATION 833, SPECIFICALLY SECTION 833.04 ITEM 1. AND TABLES 833.04-1 AND 833.04-3 FOR THE DESIGN PARAMETERS.

INSTALLATION SHALL BE PER ASTM F 1216, ASTM F 1743, ASTM 2019 AND PER THE MANUFACTURER'S RECOMMENDATIONS. ALL PROCESS WATER AND CONDENSATE FROM STEAM USED IN THE INSTALLATION AND CURING PROCESS SHALL BE MANAGED PER 107.19 AS A LIQUID WASTE.

INSPECT THE EXISTING HOST PIPE USING EXPERIENCED PERSONNEL TRAINED IN LOCATING BREAKS, OBSTACLES, AND SERVICE CONNECTIONS BY CLOSED-CIRCUIT TELEVISION OR MAN ENTRY BEFORE AND AFTER INSTALLATION OF THE PIPELINER. CLEAN, REMOVE DEBRIS, AND REPAIR CONDUIT WALLS AND JOINTS PRIOR TO INSTALLING THE PIPELINER. RESTORE ACTIVE SERVICE CONNECTIONS AFTER INSTALLATION OF THE PIPELINER. PAYMENT FOR THE ABOVE WORK SHALL BE INCLUDED IN THE CONTRACT PRICE FOR ITEM 611, CONDUIT MISC.; CURED-IN-PLACE PIPE LINER.

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X production of the second sec DITCH EROSION PROTECTION  $\begin{array}{c} \textbf{S1} \quad P.1. \quad STA. \quad 3346+28.66 \quad E_{X} \quad LA-R_{/W} \quad \textbf{C22} \quad P \quad \textbf{I}. \quad STA. \quad 3349+36.26 \\ LS= 200.00' \quad \textbf{L}= 2^{\circ} \quad 46^{\circ} \quad 20'' \quad (LT) \\ \textbf{B}_{S} = 4^{\circ} \quad 45^{\circ} \quad 00'' \\ \textbf{B}_{S} = 4^{\circ} \quad 45^{\circ} \quad 00'' \\ \end{array}$ R = 7,639.44' T = -184.84'-M L = 369.61' E = 2.24' емах = 0.043 P.C. Sta. 3347+51.42 P.T. sta. 3351+21.03 VDES = 50 MPH 4549 ₿ CONST. RAMP R ₿ CONST. IR-76 WB 549 (22) 3349 ₿ CONST. IR-76 EB-OFILIE













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				C	URVE	NO. 1 SUP	PERELE	VATIO	N TABL	E			
				P.I. STATI	ON 523+9	90.92		Dc= 00	°42'00"				
		L	EFT SID	E		CENTER CONTR	RLINE ROL		R	IGHT SI	DE		
EDGE ELEVATION	TRANSITION	RATE	*ELEVATION CORRECTION	CROSS SLOPE	WIDTH	STATION	PROFILE GRADE	WIDTH	CROSS SLOPE	*ELEVATION CORRECTION	TRANSITION RATE	EDGE ELEVATION	REMARKS
1045.80	4		-0.38	-0.016	24.00	514+71.49	1046.19	24.00	-0.016	-0.38		1045.80	N.C.
1045.89			-0.37	-0.015	24.00	514+75.00	1046.26	24.00	-0.016	-0.39		1045.87	
1046.51			-0.25	-0.010	24.00	515+00.00	1046.76	24.00	-0.017	-0.41		1046.34	
1047.74	$\left  - \right $		-0.13	-0.001	24.00	515+50.00	1047.76	24.00	-0.019	-0.44		1040.02	
1047.83			+0.00	+0.000	24.00	515+53.28	1047.83	24.00	-0.020	-0.47		1047.36	1/2 LEVEL
1048.36			+0.10	+0.004	24.00	515+75.00	1048.26	24.00	-0.020	-0.49	3:1	1047.77	
1048.98	21		+0.22	+0.009	24.00	516+00.00	1048.76	24.00	-0.022	-0.52	210	1048.25	
1049.41	· •		+0.30	+0.013	24.00	516+17.18	1049.11	24.00	-0.022	-0.53		1048.57	<i>P.C.</i>
1049.60			+0.34	+0.014	24.00	516+25.00	1049.26	24.00	-0.023	-0.54		1048.72	<b>.</b>
1049.85			+0.38	+0.016	24.02	516+35.07	1049.47	24.00	-0.023	-0.55		1048.91	н.С.
1050.22			+0.45	+0.024	24.13	516+75.00	1049.70	24.00	-0.024	-0.57		1049.67	
1050.99		/	+0.60	+0.025	24.16	516+81.08	1050.39	24.00	-0.025	-0.60	♥	1049.79	F.S.
1051.37	Ľ		+0.61	+0.025	24.27	517+00.00	1050.77	24.00	-0.025	-0.60	Ĺ	1050.17	
1051.89			+0.61	+0.025	24.46	517+25.00	1051.28	24.00	-0.025	-0.60		1050.68	
1052.43			+0.62	+0.025	24.69	517+50.00	1051.81	24.00	-0.025	-0.60		1051.21	
1052.99	<u> </u>		+0.62	+0.025	24.98	517+75.00	1052.37	24.00	-0.025	-0.60		1051.77	
1053.57			+0.63	+0.025	25.31	518+00.00	1052.94	24.00	-0.025	-0.60		1052.34	
1054.18 1054 91			+0.04	+0.025	25.70 26.12	518+25.00	1053.54	24.00	-0.025	-0.00		1052.94	
1055.46	<u> </u>		+0.67	+0.025	26.61	518+75.00	1054.10	24.00	-0.025	-0.60		1053.50	
1056.14	<u> </u>		+0.68	+0.025	27.15	519+00.00	1055.46	24.00	-0.025	-0.60		1054.86	
1056.83			+0.69	+0.025	27.73	519+25.00	1056.14	24.00	-0.025	-0.60		1055.54	
1057.55			+0.71	+0.025	28.36	519+50.00	1056.84	24.00	-0.025	-0.60		1056.24	
1058.30			+0.73	+0.025	29.04	519+75.00	1057.57	24.00	-0.025	-0.60		1056.97	
1059.06	<u> </u>		+0.74	+0.025	29.77	520+00.00	1058.32	24.00	-0.025	-0.60		1057.72	
			+0.30	+0.025	12.00	520+25.00	1059.08	24.00	-0.025	-0.60		1058.48	
AT -			+0.30	+0.025	12.00	520+50.00 520±75 00	1059.87	24.00	-0.025	-0.00		1059.27	
	<u> </u>		+0.30	+0.025	12.00	521+00.00	1061.52	24.00	-0.025	-0.60		1060.92	
щ –			+0.30	+0.025	12.00	521+25.00	1062.37	24.00	-0.025	-0.60		1061.77	
Ь T			+0.30	+0.025	12.00	521+50.00	1063.24	24.00	-0.025	-0.60		1062.64	
ບ ]			+0.30	+0.025	12.00	521+75.00	1064.14	24.00	-0.025	-0.60		1063.54	
	<u> </u>		+0.30	+0.025	12.00	522+00.00	1065.06	24.00	-0.025	-0.60	ļ	1064.46	ļ
い 王 王 王 二	<u> </u>		+0.30	+0.025	12.00	522+25.00	1065.99	24.00	-0.025	-0.60		1065.39	
äγ −	<u> </u>		+0.30	+0.025	12.00	522+50.00	1067.04	24.00	-0.025	-0.60		1065.35	
¦. ¦	<u> </u>		+0.30	+0.025	12.00	523+00.00	1068.92	24.00	-0.025	-0.60		1068.32	
<u>о</u> –	<u> </u>		+0.30	+0.025	12.00	523+25.00	1069.91	24.00	-0.025	-0.60		1069.31	
¥ 1			+0.30	+0.025	12.00	523+50.00	1070.90	24.00	-0.025	-0.60		1070.30	
API			+0.30	+0.025	12.00	523+75.00	1071.89	24.00	-0.025	-0.60		1071.29	
ЯЙ ]			+0.30	+0.025	12.00	524+00.00	1072.87	24.00	-0.025	-0.60		1072.27	
			+0.30	+0.025	12.00	524+25.00	1073.86	24.00	-0.025	-0.60		1073.26	
10/5.15			+0.30	+0.025	12.00	524+50.00	1074.85	24.00	-0.025	-0.60		1074.25	
1070.14			+0.30	+0.025	12.00	524+75.00 525±00.00	1075.84	24.00 24.00	-0.025	-0.00		1075.24	
1078.09	<u> </u>		+0.30	+0.025	12.00	525+25.00	1077.79	24.00	-0.025	-0.60		1077.19	
1079.01			+0.30	+0.025	12.00	525+50.00	1078.71	24.00	-0.025	-0.60		1078.11	
1079.87			+0.30	+0.025	12.00	525+75.00	1079.57	24.00	-0.025	-0.60		1078.97	
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**CURVE NO. 1 SUPEI** P.I. STATION 523+90.92 CENTERLIN LEFT SIDE CONTROL \*ELEVATION CORRECTION TRANSITION RATE EDGE ELEVATION STATION CROSS SLOPE WIDTH 1079.01 +0.30 +0.025 12.00 525+50.00 10 1079.87 +0.30 +0.025 12.00 525+75.00 10 12.00 +0.30 526+00.00 10 1080.68 +0.025 12.00 1081.43 +0.30 +0.025 526+25.00 10 1082.13 +0.30 +0.025 12.00 526+50.00 10 1082.78 +0.30 +0.025 12.00 526+75.00 10 1083.37 +0.30 +0.025 12.00 527+00.00 10 1083.91 +0.30 +0.025 12.00 527+25.00 10 12.00 1084.39 +0.30 +0.025 527+50.00 10 1084.82 +0.30 +0.025 12.00 527+75.00 10 1085.19 +0.30 +0.025 12.00 528+00.00 10 12.00 1085.51 +0.30 +0.025 528+25.00 10 1085.78 +0.30 12.00 528+50.00 10 +0.025 +0.30 12.00 1085.99 +0.025 528+75.00 10 1086.15 +0.30 +0.025 12.00 529+00.00 10 1086.25 +0.30 +0.025 12.00 529+25.00 10 1086.30 +0.30 +0.025 12.00 529+50.00 10 1086.29 +0.30 +0.025 12.00 529+75.00 10 1086.23 +0.30 +0.025 12.00 530+00.00 10 1086.11 +0.30 +0.025 12.00 530+25.00 10 1085.95 +0.30 +0.025 12.00 530+50.00 10 1085.73 +0.30 +0.025 12.00 530+75.00 10 1085.48 +0.30 +0.025 12.00 531+00.00 10 1085.23 +0.30 12.00 531+25.00 10 +0.025 +0.30 12.00 1085.20 +0.025 531+28.13 10 12.00 531+50.00 10 1084.87 +0.20 +0.016 1084.86 +0.19 +0.016 12.00 531+51.13 10 1084.73 +0.15 +0.012 12.00 531+60.08 10 12.00 1084.54 +0.08 +0.007 531+75.00 10 1084.37 +0.00 +0.000 12.00 531+92.03 10 1084.30 -0.04 -0.003 12.00 532+00.00 10 532+25.00 10 1084.16 -0.15 -0.013 12.00 1084.14 V -0.19 -0.016 12.00 532+32.93 10 \* NEGATIVE CORRECTIONS MEANING BELOW PROFILE GRADE POSITIVE CORRECTIONS MEANING ABOVE PROFILE GRADE.

RELE	VATIO	N TABL	.E				
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	WIDTH	CROSS SLOPE	*ELEVATION CORRECTION	TRANSITION RATE	EDGE ELEVATION	REMARKS	
078.71	24.00	-0.025	-0.60		1078.11		
079.57	24.00	-0.025	-0.60		1078.97		
080.38	24.00	-0.025	-0.60		1079.78		
081.83	24.00	-0.025	-0.62		1080.52		B
082.48	25.84	-0.025	-0.65		1081.83		Ш
083.07	26.71	-0.025	-0.67		1082.40		76
083.61	27.74	-0.025	-0.69		1082.91		<u> </u>
084.09	28.95	-0.025	-0.72		1083.37		
084.52	12.00	-0.025	-0.30		1084.22		<u> </u>
085.21	12.00	-0.025	-0.30		1084.91		Ξ
085.48	12.00	-0.025	-0.30		1085.18		Ā
085.69	12.00	-0.025	-0.30		1085.39		
085.85	12.00	-0.025	-0.30		1085.55		6
085.95	12.00	-0.025	-0.30		1085.65		Ĕ
086.00 085.90	12.00	-0.025	-0.30		1085.70		Ā
085.93	12.00	-0.025	-0.30		1085.63		>
085.81	12.00	-0.025	-0.30		1085.51		ш
085.65	12.00	-0.025	-0.30		1085.35		Ē
085.43	12.00	-0.025	-0.30		1085.13		E E
085.18	12.00	-0.025	-0.30		1084.88		Ъ
084.93 084.90	12.00	-0.025	-0.30		1084.63	FS	D:
084.68	12.00	-0.016	-0.20		1084.48	1.0.	S
084.67	12.00	-0.016	-0.19		1084.47	R.C.	
084.58	12.00	-0.012	-0.15	1:	1084.43	Р.Т.	
084.46	12.00	-0.007	-0.08	213	1084.38		
084.37	12.00	+0.000	+0.00	••	1084.37	1/2 LEVEL	
084.34	12.00	+0.003	+0.04		1084.30		
084.33	12.00	+0.016	+0.10		1084.52	N.C.	
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			C	CURVE	NO. 2 SUF	PERELE	VATIO	N TABL	.E										S	UPERELE	V
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		LEFT SID	)E		CENTER			F	RIGHT SI	DE				1		l	EFT SID	E		CENTER	
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EDGE ELEVATION	TRANSITION RATE	*ELEVATION CORRECTIOI	CROSS SLOPE	WIDTH	STATION	PROFILE GRA	WIDTH	CROSS SLOPE	*ELEVATION CORRECTIOI	TRANSITION	RATE	EDGE ELEVATION	IAAMARI		EDGE ELEVATION	TRANSITION RATE	*ELEVATION CORRECTIOI	CROSS SLOPE	WIDTH	STATION	
1086.08		+0.19	+0.016	12.00	533+59.47	1085.89	12.00	-0.016	-0.19			1085.70	N.C.								
1086.39		+0.13	+0.011	12.00	533+75.00	1086.26	12.00	-0.011	-0.13			1086.12									╞
1086.97	5:1	+0.04	+0.003	12.00	534+00.00 534+10 53	1086.93	12.00	-0.003	-0.04	5:1		1086.89	1/2   EVEI							<b></b>	┝
1087.64	5.9	-0.05	-0.005	12.00	534+25.00	1087.69	12.00	+0.005	+0.05	5.9		1087.75									+
1088.41	26	-0.15	-0.012	12.00	534+50.00	1088.56	12.00	+0.012	+0.15	26		1088.71									t
1089.25		-0.24	-0.020	12.00	534+75.00	1089.50	12.00	+0.020	+0.24			1089.74									F
1090.10		-0.34	-0.028	12.00	535+00.00	1090.43	12.00	+0.028	+0.34			1090.77									╞
1090.94		-0.43	-0.036	12.00	535+25.00	1091.37	12.00	+0.036	+0.43			1091.80									┝
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PROFILE GRADE	WIDTH	CROSS SLOPE	*ELEVATION CORRECTION	TRANSITION RATE	EDGE ELEVATION	REMARKS	
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				C	URVE	NO. 4 SUP	PERELE	VATIO	N TABL	E	-		
			F	P.I. STATIO	ON 547+2	27.87		Dc= 02	2°15'00"				-
			LEFT SID	E			RLINE ROL		F	NGHT SIE	ЭE		
EDGE ELEVATION	TRANSITION	RATE	*ELEVATION CORRECTION	CROSS SLOPE	WIDTH	STATION	PROFILE GRADE	WIDTH	CROSS SLOPE	*ELEVATION CORRECTION	TRANSITION	RATE EDGE ELEVATION	REMARKS
1095.70			-0.19	-0.016	12.00	538+49.51	1095.90	12.00	-0.016	-0.19		1095.70	) N.C.
1095.69			-0.19	-0.016	12.00	538+50.00	1095.88	12.00	-0.016	-0.19	<u> </u>	1095.69	)
1095.06		•	-0.19	-0.016	12.00	538+75.00 538+83.20	1095.25	12.00	-0.016	-0.19		1095.00	5 3
1094.80			-0.13	-0.018	12.00	539+00.00	1095.05	12.00	-0.004	-0.05	┝╴╇	1094.63	3
1093.98			-0.24	-0.020	12.00	539+23.20	1094.22	12.00	+0.000	+0.00		1094.22	2 1/2 LEVEL
1093.95			-0.24	-0.020	12.00	539+25.00	1094.19	12.00	+0.000	+0.00		1094.19	)
1093.50	1.		-0.27	-0.023	12.00	539+50.00	1093.77	12.00	+0.005	+0.06	<u> </u>	1093.83	3
1093.13	105		-0.30	-0.025	12.00	539+75.00	1093.43	12.00	+0.010	+0.12	02	1093.5	5
1092.83	4β6		-0.33	-0.028	12.00	540+00.00	1093.17	12.00	+0.015	+0.18	136	1093.34	F
1092.01			-0.37	-0.030	12.00	540+25.00 540±50.00	1092.98	12.00	+0.019	+0.23	4	1093.21	5
1092.40	-	<u> </u>	-0.43	-0.035	12.00	540+75.00	1092.83	12.00	+0.024	+0.35	$\left  \right $	1093.18	3
1092.41	-		-0.46	-0.038	12.00	541+00.00	1092.87	12.00	+0.034	+0.41		1093.22	7
1092.49			-0.49	-0.041	12.00	541+25.00	1092.98	12.00	+0.039	+0.46		1093.44	1
1092.64			-0.52	-0.043	12.00	541+48.20	1093.15	12.00	+0.043	+0.52	▼	1093.67	7 S.C.,F.S.
1092.65			-0.52	-0.043	12.00	541+50.00	1093.17	12.00	+0.043	+0.52		1093.69	7
1092.92			-0.52	-0.043	12.00	541+75.00	1093.43	12.00	+0.043	+0.52		1093.95	5
093.26	<u> </u>		-0.52	-0.043	12.00	542+00.00	1093.78	12.00	+0.043	+0.52		1094.29	)
1093.68	<u> </u>		-0.52	-0.043	12.00	542+25.00	1094.19	12.00	+0.043	+0.52	<u> </u>	1094.7	
1094.17			-0.52	-0.043	12.00	542+50.00	1094.68	12.00	+0.043	+0.52		1095.20	7
1094.73	-		-0.52	-0.043	12.00	542+75.00	1095.25	12.00	+0.043	+0.52		1095.7	1
1095.30	-		-0.52	-0.043	12.00	543±25 00	1095.69	12.00	+0.043	+0.52	-	1090.4	2
096.89	-		-0.52	-0.043	12.00	543+50.00	1097.41	12.00	+0.043	+0.52	<u> </u>	1097.92	2
1097.76			-0.52	-0.043	12.00	543+75.00	1098.28	12.00	+0.043	+0.52		1098.79	7
1098.70			-0.52	-0.043	12.00	544+00.00	1099.22	12.00	+0.043	+0.52		1099.74	1
1099.73			-0.52	-0.043	12.00	544+25.00	1100.24	12.00	+0.043	+0.52		1100.76	3
1100.82			-0.52	-0.043	12.00	544+50.00	1101.34	12.00	+0.043	+0.52		1101.8	5
1101.99	<u> </u>		-0.52	-0.043	12.00	544+75.00	1102.51	12.00	+0.043	+0.52		1103.03	3
103.22	-		-0.52	-0.043	12.00	545+00.00	1103.73	12.00	+0.043	+0.52		1104.25	7
1104.44	-		-0.52	-0.043	12.00	545+25.00 545,50.00	1104.96	12.00	+0.043	+0.52		1105.47	, )
105.00	-		-0.52	-0.043	12.00	545+75 00	1107.36	12.00	+0.043	+0.52		1107.8	3
1107.98	-		-0.52	-0.043	12.00	546+00.00	1108.50	12.00	+0.043	+0.52	<u> </u>	1109.01	1
1109.07			-0.52	-0.043	12.00	546+25.00	1109.58	12.00	+0.043	+0.52		1110.10	,
1110.11			-0.52	-0.043	12.00	546+50.00	1110.62	12.00	+0.043	+0.52		1111.14	1
1111.10			-0.52	-0.043	12.00	546+75.00	1111.61	12.00	+0.043	+0.52		1112.13	3
1112.04	-		-0.52	-0.043	12.00	547+00.00	1112.56	12.00	+0.043	+0.52	<u> </u>	1113.07	7
1112.94	-		-0.52	-0.043	12.00	547+25.00	1113.45	12.00	+0.043	+0.52		1113.97	<u> </u>
1113.78	-		-0.52	-0.043	12.00	547+50.00	1114.30	12.00	+0.043	+0.52		1114.82	:
1115.34	-		-0.52	-0.043	12.00	548+00 00	1115.85	12.00	+0.043	+0.52		1116 2	7
1116.04	-		-0.52	-0.043	12.00	548+25.00	1116.56	12.00	+0.043	+0.52	<u> </u>	1117.08	3
1116.70			-0.52	-0.043	12.00	548+50.00	1117.22	12.00	+0.043	+0.52		1117.73	3
1117.31			-0.52	-0.043	12.00	548+75.00	1117.83	12.00	+0.043	+0.52		1118.34	1
1117.87			-0.52	-0.043	12.00	549+00.00	1118.39	12.00	+0.043	+0.52		1118.90	)
1118.39			-0.52	-0.043	12.00	549+25.00	1118.90	29.06	+0.043	+1.25		1120.15	5
1118.89	-		-0.52	-0.043	12.00	549+50.00	1119.40	27.85	+0.043	+1.20	<u> </u>	1120.60	)
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					C	URVE	NO. 4 SUP	ERELE	VATIO	N TABL	E				CICKED RT
l				ŀ	P.I. STATI	ON 547+2	27.87		Dc= 02	2°15'00"					
			L	EFT SID	E		CENTER CONTR	LINE OL		R	IGHT SID	ЭE			
	EDGE ELEVATION	TRANSITION	RATE	*ELEVATION CORRECTION	CROSS SLOPE	WIDTH	STATION	PROFILE GRADE	WIDTH	CROSS SLOPE	*ELEVATION CORRECTION	TRANSITION RATE	EDGE ELEVATION	REMARKS	
ľ	1119.39			-0.52	-0.043	12.00	549+75.00	1119.90	26.81	+0.043	+1.15		1121.06		
ŀ	1119.89			-0.52	-0.043	12.00 12.00	550+00.00	1120.40	25.93 25.21	+0.043	+1.11		1121.52		
ŀ	1120.12			-0.32	-0.043	29.78	550+50.00	1120.30	24.66	+0.043	+1.06		1121.35		
	1120.67			-1.23	-0.043	28.61	550+75.00	1121.90	24.28	+0.043	+1.04		1122.95		B
ŀ	1121.22			-1.19	-0.043	27.58	551+00.00	1122.40	24.06	+0.043	+1.03		1123.44		
ŀ	1121.76			-1.15	-0.043	26.67 25.90	551+25.00 551+50.00	1122.90	24.00	+0.043	+1.03		1123.94		97.
ŀ	1122.82			-1.09	-0.043	25.26	551+75.00	1123.90	24.00	+0.043	+1.03		1124.94		1 ÷
	1122.88			-1.08	-0.043	25.19	551+78.21	1123.97	24.00	+0.043	+1.03		1125.00	F.S.	ш
	1123.44			-0.96	-0.039	24.75	552+00.00	1124.40	24.00	+0.039	+0.93		1125.33		٦ ۲
ŀ	1124.08 1124 70			-0.82	-0.034	24.37	552+25.00 552+50.00	1124.90 1125 40	24.00	+0.034	+0.81		1125.72		AE
ŀ	1125.33			-0.58	-0.024	24.01	552+75.00	1125.90	24.00	+0.024	+0.58		1126.48		Γ
	1125.65			-0.52	-0.022	24.00	552+88.12	1126.17	24.00	+0.022	+0.52		1126.68	Р.Т.	Z
ŀ	1125.94	1		-0.46	-0.019	24.00	553+00.00	1126.40	24.00	+0.019	+0.46		1126.86		<u> </u>
ŀ	1126.34	213		-0.38	-0.016	24.00	553+16.24	1126.73	24.00	+0.016	+0.38	213	1127.11	R.C.	A I
ŀ	1120.30			-0.23	-0.009	24.00	553+50.00	1120.30	24.00	+0.009	+0.23	- 4	1127.63		
Ľ	1127.78			-0.11	-0.005	24.00	553+75.00	1127.89	24.00	+0.005	+0.11		1127.99		
	1128.33			+0.00	+0.000	24.00	553+98.03	1128.33	24.00	+0.000	+0.00		1128.33	1/2 LEVEL	ш
ŀ	1128.37			+0.01	+0.000	24.00	554+00.00	1128.36	24.00	-0.000	-0.01		1128.35		
ŀ	1128.96			+0.13	+0.005	24.00	554+25.00 554+50.00	1128.83	24.00	-0.005	-0.13		1128.70		Ъ
	1130.09			+0.36	+0.015	24.00	554+75.00	1129.73	24.00	-0.015	-0.36		1129.37		DS
I	1130.20		7	+0.38	+0.016	24.00	554+79.82	1129.81	24.00	-0.016	-0.38	▼	1129.43	N.C.	
															SUM-76/77 11.30/11.31
	* NEGA POSIT	TIVE TVE (	CORF CORR	RECTIONS ECTIONS I	MEANING MEANING A	BELOW PF	ROFILE GRADE OFILE GRADE.								258 300

				С	URVE N	NO. 10 SUI	PEREL	EVATIO	N TABI	E	_				
			Р	.I. STATIC	<u>)N 2526+</u>	80.16		Dc= 01	<u>°30'00"</u>						
		I	LEFT SID	E		CENTER CONTR	RLINE ROL		R	NGHT SI	DE				
	EDGE ELEVATION	TRANSITION RATE	*ELEVATION CORRECTION	CROSS SLOPE	WIDTH	STATION	PROFILE GRADE	WIDTH	CROSS SLOPE	*ELEVATION CORRECTION	TRANSITION RATE	EDGE	REMARKS	EDGE ELEVATION	TRANSITION RATE
						2525+62.78	1083.19	16.00	+0.025	+0.40		1083.59	P.C.C.		
						2525+95.34 2525+98.30	1085.35	16.00 16.00	+0.025	+0.40	85:1	1085.75	FS		
						2526+00.00	1085.66	16.00	+0.024	+0.38	~ •	1086.04	1.0.		
						2526+25.00	1087.35	16.00	+0.024	+0.38		1087.73			
						2526+50.00 2526+75.00	1089.04	16.00 16.00	+0.024	+0.38		1089.42			
						2527+00.00	1090.72	16.00	+0.024	+0.38		1091.79			
						2527+25.00	1094.10	16.00	+0.024	+0.38		1094.48			
						2527+50.00	1095.79	16.00	+0.024	+0.38		1096.17	ES		
						2527+61.94	1098.59	16.00	+0.024	+0.30		1098.98	<u>г.</u> э.		
						2527+85.62	1098.19	16.00	+0.016	+0.26		1098.45	R.C.		
						2527+97.46	1098.99	16.00	+0.012	+0.19	<b>F</b>	1099.18	<i>P.T.</i>		
						2528+00.00	1100.85	16.00	+0.003	+0.18	185	1100.89			
						2528+32.98	1101.39	16.00	+0.000	+0.00		1101.39	1/2 LEVEL		
						2528+50.00	1102.54	16.00	-0.006	-0.09		1102.44			
						2528+75.00 2528+80.34	1104.22	16.00 16.00	-0.014	-0.23		1104.00	N.C.		
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CORRECTIONS MEANING BELOW PROFILE GRADE CORRECTIONS MEANING ABOVE PROFILE GRADE.

## LEFT SIDE \*ELEVATION CORRECTION CROSS SLOPE

P.I. STATION 2546+44.49

Cl	JRVE N	IO. 12 SUF	PEREL	EVATIC	N TAB	LE				
ATIC	N 2546+	44.49		Dc= 01	L°45'00"					
		CENTER CONTR	LINE		R	IGHT SIE	)E			
SLOPE	WIDTH	STATION	PROFILE GRADE	WIDTH	CROSS SLOPE	*ELEVATION CORRECTION	TRANSITION RATE	EDGE ELEVATION	REMARKS	
		2543+43.04	1077.62	14.58	-0.016	-0.23		1077.39		
		2543+50.00	1077.44	14.46	-0.016	-0.23		1077.21		
_		2543+75.00	1076.89	14.10	-0.016	-0.23		1076.66		~ ~
_		2544+00.00	1076.46	13.74	-0.016	-0.22		1075.24		Ê
_		2544+50.00	1075.99	13.02	-0.016	-0.21		1075.78		E E
		2544+68.13	1075.94	16.00	-0.016	-0.26			N.C.	2
		2544+75.00	1075.95	16.00	-0.018	-0.29	<u></u>	ETA SEI		
		2544+88.61	1075.97	16.00	-0.022	-0.36	00		P.C.	· ·
		2545+00.00	1075.99	16.00	-0.026	-0.42				ш
_		2545+19.33	1076.03	16.00	-0.032	-0.51		0	F.S.	ЯL Д
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ING	BELOW PI	ROFILE GRADE								302
NG A	BOVE PR	OFILE GRADE.								$\smile$

				С	URVE I	NO. 11 SUI	PEREL	EVATIO	N TAB	LE						
			Р	.I. STATIO	<u> 2537+</u>	15.98		Dc= 08	8°45'00"							
		I	LEFT SID	E		CENTEF CONTE	rline Rol		F	RIGHT SIE	DE					
	EDGE ELEVATION	TRANSITION RATE	*ELEVATION CORRECTION	CROSS SLOPE	WIDTH	STATION	PROFILE GRADE	WIDTH	CROSS SLOPE	*ELEVATION CORRECTION	TRANSITION RATE	EDGE	REMARKS		EDGE ELEVATION	TRANSITION RATE
						2530+14.11	1113.61	16.00	+0.016	+0.26		1113.87	N.C.			
						2530+25.00	1114.35	16.00	+0.020	+0.31		1114.66				
						2530+50.00 2530+55.55	1116.04	16.00	+0.028	+0.45	5	1116.49	P.C.			
						2530+75.00	1117.72	16.00	+0.037	+0.59	185	1118.31				<u> </u>
						2531+00.00	1119.40	16.00	+0.045	+0.72		1120.12				
						2531+25.00	1120.98	16.00	+0.053	+0.86		1121.83	5.0			
						2531+44.35 2531+50.00	1122.10	16.00	+0.060	+0.96		1123.06	F.S.			
						2531+75.00	1123.70	16.00	+0.060	+0.96		1124.66				
						2532+00.00	1124.85	16.00	+0.060	+0.96		1125.81				
						2532+25.00	1125.85	16.00	+0.060	+0.96		1126.81			I	
						2532+50.00	1126.72	16.00	+0.060	+0.96		1127.68				
						2533+00.00	1128.02	16.00	+0.060	+0.96		1128.98				
						2533+25.00	1128.45	16.00	+0.060	+0.96		1129.41				
						2533+50.00	1128.75	16.00	+0.060	+0.96		1129.71				
						2533+75.00	1128.90	16.00	+0.060	+0.96		1129.86				
						2534+25.00	1128.78	16.00	+0.060	+0.96		1129.74				
						2534+50.00	1128.51	16.00	+0.060	+0.96		1129.47				
						2534+75.00	1128.10	16.00	+0.060	+0.96		1129.06				
						2535+00.00	1127.54	16.00	+0.060	+0.96		1128.50				
						2535+25.00	1126.00	16.00	+0.060	+0.96		1127.80				
						2535+75.00	1125.02	16.00	+0.060	+0.96		1125.98				
						2536+00.00	1123.89	16.00	+0.060	+0.96		1124.85				
						2536+25.00	1122.63	16.00	+0.060	+0.96		1123.59			I	
						2536+75.00	1119.67	16.00	+0.060	+0.96		1122.10				
						2537+00.00	1117.97	16.00	+0.060	+0.96		1118.93				<u> </u>
						2537+25.00	1116.22	16.00	+0.060	+0.96		1117.18				
						2537+50.00	1114.47	16.00	+0.060	+0.96		1115.43				
						2537+75.00	1112.72	16.00	+0.060	+0.96		1113.08				
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ORRECTIONS MEANING BELOW PROFILE GRADE ORRECTIONS MEANING ABOVE PROFILE GRADE.

P.I. STATION 2537+15.98

LEFT SIDE

\*ELEVATION CORRECTION

CROSS SLOPE

Cl	JRVE N	IO. 11 SUF	PEREL	EVATIC	N TAB	LE				
ATIC	)N 2537+	15.98		Dc= 08	3°45'00"					
		CENTER CONTR	LINE		R	IGHT SIC	DE			
SLOPE	WIDTH	STATION	PROFILE GRADE	WIDTH	CROSS SLOPE	*ELEVATION CORRECTION	TRANSITION RATE	EDGE ELEVATION	REMARKS	
		2538+00.00	1110.97	16.00	+0.060	+0.96		1111.93		
_		2538+25.00	1109.02	16.00	+0.060	+0.96		1109.98		
_		2538+50.00	1107.47	16.00	+0.060	+0.96		1108.43		~
_		2539+00.00	1103.97	16.00	+0.060	+0.96		1104.93		ш
		2539+25.00	1102.22	16.00	+0.060	+0.96		1103.18		ЯР
_		2539+50.00	1100.47	16.00	+0.060	+0.96		1101.43		AI
_		2539+75.00 2540+00.00	1098.72	16.00	+0.060	+0.96		1099.68		£
		2540+25.00	1095.22	16.00	+0.060	+0.96		1096.18		
		2540+50.00	1093.47	16.00	+0.060	+0.96		1094.43		1
_		2540+75.00	1091.72	16.00	+0.060	+0.96		1092.68	00.50	B
_		2540+89.71 2541±00.00	1090.69	16.00	+0.060	+0.96		1091.65	C.S.,F.S.	T/
_		2541+25.00	1088.22	16.00	+0.049	+0.79		1089.01		Z
		2541+50.00	1086.51	16.00	+0.042	+0.67		1087.18		0
_		2541+75.00	1084.93	16.00	+0.034	+0.55	7	1085.48		F
_		2542+00.00 2542+25 00	1083.48	16.00	+0.027	+0.43		1083.91		
		2542+50.00	1080.95	15.91	+0.012	+0.19	508	1081.14		Ш
		2542+75.00	1079.88	15.55	+0.004	+0.07		1079.95		Ш
_		2542+89.71	1079.31	15.33	+0.000	+0.00		1079.31		Ř
_		2543+00.00 2543+25.00	1078.94	15.19 14.83	-0.003	-0.05		1078.89		Ш
_		2543+43.04	1077.62	14.57	-0.016	-0.23	•	1077.39	N.C.	Б
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ING	BELOW P	ROFILE GRADE								302
NG /	<b>ABOVE PR</b>	OFILE GRADE.								-

			С	URVE	NO. <u>13</u> SUI	PERELE	EVATIO	N TABI	LE								
		Р	.I. STATIC	ON 4536+	03.06		Dc= 04	°30'00"								Р	' <b>.</b>  .
		LEFT SID	E		CENTEF CONTF	RLINE ROL		F	RIGHT SIE	DE					I	_EFT SID	E
EDGE ELEVATION	TRANSITION RATE	*ELEVATION CORRECTION	CROSS SLOPE	WIDTH	STATION	PROFILE GRADE	WIDTH	CROSS SLOPE	*ELEVATION CORRECTION	TRANSITION RATE	EDGE ELEVATION	REMARKS		EDGE ELEVATION	TRANSITION RATE	*ELEVATION CORRECTION	
					4533+19.07	<u>н</u>	16.00	+0.035	+0.56		Щ	P.C.C.					t
					4533+50.15 4533+75.00	- Ö	16.00 16.00	+0.035	+0.56	1.1	- Ğ -						┝
					4533+91.59	<u></u> п о -	16.00	+0.049	+0.78	~	<u>ы</u> м –	F.S.					t
					4534+00.00	UNE -	16.00	+0.049	+0.78								Γ
					4534+25.00	- 빙분 -	16.00	+0.049	+0.78		빙품 -					<u> </u>	L
					4534+50.00	- LS →	16.00	+0.049	+0.78		- LS -					<u> </u>	╞
					4534+75.00 4535±00.00	52-	16.00	+0.049	+0.78		- <u>₽</u> -						┢
					4535+25.00	으됴 -	16.00	+0.049	+0.78		- 5 <u>6</u> -						t
					4535+50.00		16.00	+0.049	+0.78		푼						t
					4535+75.00	A L	16.00	+0.049	+0.78								Γ
					4536+00.00	0	16.00	+0.049	+0.78		5					<u> </u>	L
					4536+25.00	1081.94	16.00	+0.049	+0.78		1082.73					<u> </u>	╞
					4536+50.00	1083.13	16.00	+0.049	+0.78		1083.91						┝
					4537+00.00	1085.50	16.00	+0.049	+0.78		1086.29						t
					4537+25.00	1086.69	16.00	+0.049	+0.78		1087.48						t
					4537+50.00	1087.88	16.00	+0.049	+0.78		1088.66						Γ
					4537+75.00	1089.04	16.00	+0.049	+0.78		1089.83						L
					4538+00.00	1090.17	16.00	+0.049	+0.78		1090.95					<u> </u>	╞
					4538+25.00	1091.24	16.00	+0.049	+0.78		1092.03					<u> </u>	┝
					4538+77.91	1091.49	16.00	+0.049	+0.78		1092.27	P.C.C.					t
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P.I. STATION 4543+48.72

CROSS SLOPE

Cl	JRVE N	IO. 14 SUF	PERELI	EVATIC	N TAB	LE				CKED CKED
ATIO	N 4543+	48.72		Dc= 08	3°00'00"					
		CENTER CONTR	LINE OL		R	IGHT SIC	θE			
SLOPE	WIDTH	STATION	PROFILE GRADE	WIDTH	CROSS SLOPE	*ELEVATION CORRECTION	TRANSITION RATE	EDGE ELEVATION	REMARKS	
		4538+77.91	1093.37	16.00	+0.049	+0.78		1094.16	P.C.C.	
		4539+00.31	1094.22	16.00	+0.049	+0.78	<u>.</u>	1095.00		
_		4539+25.00	1095.10	16.00	+0.057	+0.91	20	1096.01	ES	
		4539+50.00	1095.96	16.00	+0.060	+0.96	•	1096.92	1.0.	
		4539+75.00	1096.77	16.00	+0.060	+0.96		1097.73		ЯΡ
		4540+00.00	1097.54	16.00	+0.060	+0.96		1098.50		A
_		4540+25.00	1098.26	16.00	+0.060	+0.96		1099.22		£
		4540+75.00	1090.93	16.00	+0.060	+0.96		1100.53		
		4541+00.00	1100.16	16.00	+0.060	+0.96		1101.12		<u> </u>
		4541+25.00	1100.70	16.00	+0.060	+0.96		1101.66		B
		4541+50.00	1101.20	16.00	+0.060	+0.96		1102.16		T⊿
_		4541+75.00	1101.65	16.00	+0.060	+0.96		1102.61		' Z
		4542+25.00	1102.43	16.00	+0.060	+0.96		1103.39		ō
		4542+50.00	1102.75	16.00	+0.060	+0.96		1103.71		E
_		4542+75.00	1103.05	16.00	+0.060	+0.96		1104.01		A/
_		4543+00.00	1103.35	16.00	+0.060	+0.96		1104.31		ш
		4543+50.00	1103.95	16.00	+0.060	+0.96		1104.91		
		4543+75.00	1104.25	16.00	+0.060	+0.96		1105.21		R
		4544+00.00	1104.55	16.00	+0.060	+0.96		1105.51		Ш
_		4544+25.00	1104.85	16.00	+0.060	+0.96		1105.81		Ч
		4544+75.00	1105.45	16.00	+0.060	+0.96		1106.41		SI
		4545+00.00	1105.76	16.00	+0.060	+0.96		1106.72		
		4545+25.00	1106.11	16.00	+0.060	+0.96		1107.07		
_		4545+50.00	1106.51	16.00	+0.060	+0.96		1107.47		
		4546+00.00	1106.97	16.00	+0.060	+0.96		1107.93		
		4546+25.00	1108.06	16.00	+0.060	+0.96		1109.02		
		4546+34.11	1108.28	16.00	+0.060	+0.96		1109.24	F.S.	
		4546+50.00	1108.68	16.00	+0.060	+0.96		1109.64		
		4546+75.00	11109.36	16.00	+0.060	+0.96		1111.06		
		4547+10.91	1110.44	16.00	+0.060	+0.96		1111.40	Р.Т.	
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			С	URVE	NO. 15 SU	PERELI	EVATIO	N TAB	LE	-							S	UPERELE	V
		Р	.I. STATIO	ON 4550+	+00.65		Dc= 03	°30'00"											I
		LEFT SID	E		CENTER CONTE	RUNE ROL		F	RIGHT SI	DE					LEFT SID	E		CENTER CONTF	1LI 70
EDGE ELEVATION	TRANSITION RATE	*ELEVATION CORRECTION	CROSS SLOPE	WIDTH	STATION	PROFILE GRADE	WIDTH	CROSS SLOPE	*ELEVATION CORRECTION	TRANSITION RATE	EDGE ELEVATION	REMARKS	EDGE ELEVATION	TRANSITION RATE	*ELEVATION CORRECTION	CROSS SLOPE	WIDTH	STATION	
					4547+10.92	1110.44	16.00	+0.060	+0.96		1111.40	P.C.C							t
					4547+25.00	1110.89	16.00	+0.055	+0.88	- io	1111.77							L	╋
					4547+50.00	1112 13	16.00	+0.047	+0.75		1112.48	FS						<b> </b>	╋
					4547+75.00	1112.64	16.00	+0.043	+0.69	•	1113.32	1.0.						l	+
					4548+00.00		16.00	+0.043	+0.69										t
					4548+25.00	S	16.00	+0.043	+0.69										T
					4548+50.00		16.00	+0.043	+0.69										Ι
					4548+75.00	뿌 .	16.00	+0.043	+0.69										T
					4549+00.00	<u></u>	16.00	+0.043	+0.69									<b></b>	╇
					4549+25.00	AIL -	16.00	+0.043	+0.69									<b> </b>	╇
					4549+50.00		16.00	+0.043	+0.69									i	╋
					4549+75.00	- <u> </u>	16.00	+0.043	+0.09									l	╈
					4550+25.00	- ۳ -	16.00	+0.043	+0.69									<b></b>	$^{+}$
					4550+50.00	Ö.	16.00	+0.043	+0.69									l	$^{+}$
					4550+75.00	- 00 -	16.00	+0.043	+0.69										t
					4551+00.00		16.00	+0.043	+0.69										T
					4551+25.00	ш.	16.00	+0.043	+0.69										
					4551+50.00	Q.	16.00	+0.043	+0.69									L	╇
					4551+75.00	ĽĽ.	16.00	+0.043	+0.69									<b></b>	╇
					4552+00.00		16.00	+0.043	+0.69			50						L	╋
					4552+22.88	≚ -	16.00	+0.043	+0.69			F.S.						i	+
					4552+25.00		16.00	+0.042	+0.00	2:1									+
					4552+75.00	Ĕ.	16.00	+0.025	+0.41	18								l	+
					4552+84.45		16.00	+0.022	+0.36			P.T.							t
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STATION	PROFILE GRADE	HTUIW	CROSS SLOPE	*ELEVATION CORRECTION	TRANSITION RATE	EDGE ELEVATION	REMARKS			
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			С	URVE N	NO. 17 SUI	PERELI	EVATIO	N TABI	LE							С		NO. 18 SUF	·EF
			ΡΙ STATIO	N 1527+	50.78		Dc= 02	°15'00"		1						ΡΙ STATIO	N 1534+	78.43	Γ
			_		CENTER	RLINE		_								_		CENTER	
	<u> </u>	LEFT SID	E		CONTR	ROL		F		DE			LEFT SIDE			CONTR	IOL		
EDGE ELEVATION	TRANSITION RATE	*ELEVATION CORRECTION	CROSS SLOPE	WIDTH	STATION	PROFILE GRADE	WIDTH	CROSS SLOPE	*ELEVATION CORRECTION	TRANSITION RATE	EDGE ELEVATION	REMARKS	EDGE ELEVATION	TRANSITION RATE	*ELEVATION CORRECTION	CROSS SLOPE	WIDTH	STATION	
		+0.40	+0.025	16.00	1525+58.10							P.C.C.	1081.96		+0.96	+0.060	16.00	1531+50.00	10
ပြ		+0.40	+0.025	16.00	1525+70.03	ုလ _							1081.59		+0.96	+0.060	16.00	1531+75.00	10
- ::: -	3:1	+0.42	+0.026	16.00	1525+75.00	- 1							1081.21		+0.96	+0.060	16.00	1532+00.00	10
- 15 -	21	+0.66	+0.034	16.00	1526+25.00	1, -							1080.46		+0.96	+0.060	16.00	1532+25.00	10
	V	+0.69	+0.043	16.00	1526+31.37							F.S.	1080.08		+0.96	+0.060	16.00	1532+75.00	10
- <b>F</b>		+0.69	+0.043	16.00	1526+50.00	TA -							1079.68		+0.96	+0.060	16.00	1533+00.00	10
- 🖱 -		+0.69	+0.043	16.00	1526+75.00	- 8 -							1079.26		+0.96	+0.060	16.00	1533+25.00	10
- 22 -		+0.69	+0.043	16.00	1527+25.00	- H -							1078.35		+0.96	+0.060	16.00	1533+75.00	10
[ <u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u>]</u>		+0.69	+0.043	16.00	1527+50.00	j ğ j							1077.86		+0.96	+0.060	16.00	1534+00.00	10
Ш		+0.69	+0.043	16.00	1527+75.00	] Ш –							1077.36		+0.96	+0.060	16.00	1534+25.00	10
- IJ -		+0.69	+0.043	16.00	1528+00.00	- B -							1076.86		+0.96	+0.060	16.00	1534+50.00	10
		+0.69	+0.043	16.00	1528+50.00	1 円 -							1075.86		+0.96	+0.060	16.00	1535+00.00	10
E A I		+0.69	+0.043	16.00	1528+75.00	I AI							1075.36		+0.96	+0.060	16.00	1535+25.00	10
0		+0.69	+0.043	16.00	1529+00.00	] IJ							1074.86		+0.96	+0.060	16.00	1535+50.00	10
- <u></u>		+0.69	+0.043	16.00	1529+25.00	♀ -						65	1074.36		+0.96	+0.060	16.00	1535+75.00	10
- 4P -		+0.69	+0.043	16.00	1529+42.73	- 4 -						0.3.	1073.36		+0.96	+0.060	16.00	1536+25.00	10
E E E		+0.70	+0.044	16.00	1529+50.00	L R L							1072.86		+0.96	+0.060	16.00	1536+50.00	10
	~	+0.73	+0.046	16.00	1529+75.00								1072.36		+0.96	+0.060	16.00	1536+75.00	10
1092.69		+0.77	+0.048	16.00	1530+00.00	1022 22							1071.86		+0.96	+0.060	16.00	1537+00.00	10
1083.34	35.2	+0.83	+0.052	16.00	1530+50.00	1082.50							1071.30		+0.96	+0.060	16.00	1537+50.00	10
1083.00	Ř	+0.87	+0.054	16.00	1530+75.00	1082.13							1070.65		+0.96	+0.060	16.00	1537+60.59	10
1082.66		+0.90	+0.056	16.00	1531+00.00	1081.75							1070.31		+0.91	+0.057	16.00	1537+75.00	10
1082.31		+0.94	+0.058	16.00	1531+25.00	1081.38						SCES	1069.72	+	+0.82	+0.051	16.00	1538+00.00	10
1002.07	•	+0.30	+0.000	10.00	1551742.75	1001.11						3.0.,1.3.	1068.55		+0.65	+0.040	16.00	1538+50.00	10
													1067.96	84.	+0.56	+0.035	16.00	1538+75.00	10
													1067.38	~	+0.47	+0.029	16.00	1539+00.00	100
													1066.86		+0.38	+0.024	16.00	1539+25.00 1539+50.00	100
													1066.32	•	+0.25	+0.016	16.00	1539+60.59	10
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JPERELEVATION TABLE										
	Dc= 09°00'00"									
RI FR	LINE OL		R	IGHT SID	Ε					
	PROFILE GRADE	WIDTH	CROSS SLOPE	*ELEVATION CORRECTION	TRANSITION RATE	EDGE ELEVATION	REMARKS			
0	1081.00									
0 0	1080.63 1080.25									
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	P.I. STA. 3323+93.92				Dc = 1					
	P.I. STA. 3337+14.			20		Dc = 9				
	LEFT	SIDE		BASELINE C	ONTROL					
TRANSITION RATE	EDGE ELEVATION	CROSS SLOPE	WIDTH	STATION	PROFILE GRADE	НТОШ	CROSS SLOPE	EDGE ELEVATION	TRANSITION RATE	REMARKS
	N	IERGES IN	TO LANE I	M, SEE PAVEN	IENT ELEV	ATION DE	TAIL SHEE	Т		
	1075.78	-0.0270	16.00	3324+24.85	1076.21					
	1075.78	-0.0270	16.00	3324+25.00	1076.21					
	1075.12	-0.0270	16.00	3324+50.00	1075.55					
÷-\	1075.00	-0.0270	16.00	3324+54.74	1075.43					FS
85.	1074.58	-0.0202	16.00	3324+75.00	1074.90					
$\leftarrow$	1074.31	-0.0160	16.00	3324+87.30	1074.57					NC
$\uparrow$	1077.27	-0.0160	16.00	3328+53.74	1077.53					NC
	1078.32	-0.0088	16.00	3328+75.00	1078.46					
	1079.66	-0.0004	16.00	3329+00.00	1079.67					
	1081.12	0.0081	16.00	3329+25.00	1080.99					
	1082.59	0.0160	16.00	3329+48.46	1082.33					RC
5:1	1082.69	0.0165	16.00	3329+50.00	1082.43					
18	1084.38	0.0250	16.00	3329+75.00	1083.98					
	1086.18	0.0334	16.00	3330+00.00	1085.65					
	1088.07	0.0419	16.00	3330+25.00	1087.40					
	1089.95	0.0503	16.00	3330+50.00	1089.15					
	1091.84	0.0588	16.00	3330+75.00	1090.90					
$\downarrow$	1092.12	0.0600	16.00	3330+78.70	1091.16					FS
	1093.61	0.0600	16.00	3331+00.00	1092.65					
	1095.36	0.0600	16.00	3331+25.00	1094.40					
	1097.11	0.0600	16.00	3331+50.00	1096.15					
	1098.86	0.0600	16.00	3331+75.00	1097.90					
	1100.61	0.0600	16.00	3332+00.00	1099.65					
	1102.36	0.0600	16.00	3332+25.00	1101.40					
	1104.11	0.0600	16.00	3332+50.00	1103.15					
	1105.86	0.0600	16.00	3332+75.00	1104.90					
	1107.61	0.0600	16.00	3333+00.00	1106.65					
	1109.36	0.0600	16.00	3333+25.00	1108.40					
	1111.10	0.0600	16.00	3333+50.00	1110.14					
	1112.78	0.0600	16.00	3333+75.00	1111.82					
	1114.36	0.0600	16.00	3334+00.00	1113.40					
	1115.83	0.0600	16.00	3334+25.00	1114.87					
	1117.21	0.0600	16.00	3334+50.00	1116.25					
	1118.48	0.0600	16.00	3334+75.00	1117.52					
	1119.64	0.0600	16.00	3335+00.00	1118.68					
	1120.71	0.0600	16.00	3335+25.00	1119.75					
	1121.67	0.0600	16.00	3335+50.00	1120.71					
	1122.53	0.0600	16.00	3335+75.00	1121.57					
	1123.29	0.0600	16.00	3336+00.00	1122.33					
	1123.94	0.0600	16.00	3336+25.00	1122.98					
	1124.49	0.0600	16.00	3336+50.00	1123.53					
	1124.94	0.0600	16.00	3336+75.00	1123.98					
	1125.29	0.0600	16.00	3337+00.00	1124.33					<u> </u>
	1125.54	0.0600	16.00	3337+25.00	1124.58		1			1

	r					
		P.I. STA	. 3337+14.	20		
		P.I. STA	. 3304+08.	90		
	LEFT	SIDE		BASELINE C	ONT	
TRANSITION RATE	EDGE ELEVATION	ELEVATION CROSS SLOPE		STATION	DROFII F	
					I	
	1125.68	0.0600	16.00	3337+50.00	11	
	1125.72	0.0600	16.00	3337+75.00	11.	
	1125.66	0.0600	16.00	3338+00.00	11	
	1125.49	0.0600	16.00	3338+25.00	11	
	1125.22	0.0600	16.00	3338+50.00	11	
	1124.85	0.0600	16.00	3338+75.00	11	
	1124.38	0.0600	16.00	3339+00.00	11	
	1123.81	0.0600	16.00	3339+25.00	11	
	1123.18	0.0600	16.00	3339+50.00	11	
	1122.56	0.0600	16.00	3339+75.00	11	
$\uparrow$	1122.28	0.0600	16.00	3339+86.21	11	
	1121.85	0.0553	16.00	3340+00.00	11	
	1121.10	0.0469	16.00	3340+25.00	11	
	1120.33	0.0384	16.00	3340+50.00	11	
+	1119.58	0.0300	16.00	3340+75.00	11	
85:	1118.82	0.0216	16.00	3341+00.00	11	
+	1118.32	0.0160	16.00	3341+16.45	11	
	1118.06	0.0131	16.00	3341+25.00	11	
	1116 54	-0.0047	16.00	3341+75.00	11	
	1115.77	-0.0122	16.00	3342+00.00	11	
↓	1115.44	-0.0160	16.00	3342+11.17	11	
•	4444.00	0.0400	10.00	0040-4474		
T T	1114.60	-0.0160	16.00	3342+44.71	11	
_	1114.44	-0.0178	16.00	3342+50.00	11	
85:3	1113.68	-0.0262	16.00	3342+75.00	11	
1	1112.91	-0.0347	16.00	3343+00.00	11	
	1112.19	-0.0431	16.00	3343+25.00	11	
¥	1111.90	-0.0400	16.00	3343+33.01	11	
	1111.03	-0.0460	16.00	3343+50.00	11	
	1110.00	-0.0400	16.00	3344+00.00	11	
	1110.50	-0.0400	16.00	3344+25.00	11	
	1110 5/	-0.0+00	16.00	3344+50.00	11	
	1110 51	-0 0460	16.00	3344+75.00	11	
	1110.56	-0 0460	16.00	3345+00.00	11	
	1110 71	-0 0460	16.00	3345+25.00	11	
	1110.95	-0 0460	16.00	3345+50.00	11	
	1110.97	-0.0460	16.00	3345+51 42	11	
	1111 29	-0 0454	16.00	3345+75.00	11	
	1111 72	-0 0447	16.00	3346+00.00	11	
	1112 26	-0.0440	16.00	3346+25.00	11	
	1112.88	-0.0433	16.00	3346+50.00	11	
	1113.17	-0.0430	16.00	3346+60.54	11	
	M	RGES INT	О IR-76 И	B, SEE PAVE	IEN	

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	Dc =4	° 00' 00''				CALCI CHE CHE
NTROL		RIGH				
PROFILE GRADE	WIDTH	SLOPE	EDGE ELEVATION	TRANSITION RATE	REMARKS	
1124.72						
1124.76						
1124.70						<u> </u>
1124.53						2
1124.26						R
1123.89						
1123.42						
1122.85						
1122.22						
1121.60						_ ◄
1121.32					FS	
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1120.33						- <u> </u>
1119.72						
1118 47						
1118.06					RC	Ξ Ξ
1117.85					110	┤╓╵
1117.22						
1116.60						Ē
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4444 05		1	1			_
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1114.72						_
1113 17						_
1112 88						_
1112.69					FS	_
1112.37						
1111.96						
1111.64						
1111.42						
1111.28						<b>NO</b>
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1111.30						11,6
1111.45						
1111.69						_⊇ອ່ດ
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1113.86						$\left(\frac{207}{302}\right)$
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	CALCULATED 0 2D SNP 1D 1D 1D 1D CHECKED HORIZONTAL 4D AD MRT SCALE IN FEET
2525 1075.43 PHYSICAL NOSE 1074.16 1073.56 1073.26 1525 1073.26 1525 1073.26	TERMINAL DETAIL RAMP R & IR-76 EB EXIT GORE
<u>NOTES:</u> 1. FOR SHOULDER CROSS SLOPES, SEE TYPICAL SECTIONS. 2. FOR PAVEMENT CROSS SLOPES AND ELEVATIONS BEYOND THOSE SHOWN, SEE TYPICAL SECTIONS AND SUPERING FUNCTION TAPE	SUM -76/77 11.31/11.30
SUPERELEVATION TABLES. 3. FOR GEOMETRIC INFORMATION, SEE PLAN SHEETS AND GEOMETRIC LAYOUT SHEET. 4. ELEVATIONS SHOWN AT 25' INTERVALS.	268 302







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BEG. VARYING SHOULDER WIDTH, MATCH EXISTING STA. 2517+90.97 BEGIN RAMP EX. IR-76 WB R EL-\_\_\_₽ CONST. RAMP R DL-LL-- EX. OVHD SIGN (DND) LANE 90.97 TΑ 0. 2520 25,19 2518 2517 16.0′ \_ A-\_ 518 519 517 12. 520 STA ti . . . . .. . . . . . . . . . . . . . . ΝА DL-EL-EXIT Cuyahoga Falls EXIT 🖓 23B ₿ CONST. IR-76 EB-8 NORTH ONLY TG EAST Youngstown LEVEL 1 STA. 518+26 OS-Canton R-

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围 巾 EX. LANE O ----₿ CONST. RAMP R 34:05 СН-CH-EL-CV-48.0 +05.0 2525 5 2524 2523 2522 1.5  $\rightarrow$ 0 A N 110 . ..... . . . . . . . 3.0′  $\mathbf{V}$ 12.0 523 522 525 0  $\xrightarrow{-}$ ₿ CONST. IR-76 EB \_ \_ ----- $\rightarrow$ 1525 EEEEEEEE MA TC EX. BROWN STREET BEGIN LANE M BEG. SHLDR TAPER +88.94, 36.00' RT EL-(LL-) DL-

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EX. IR-76 WB EL EL-2530 2529 2528 2527 -₿ CONST. RAMP R ₿ CONST. IR-76 EB-529 528 527 2 +69.89 F 6 1527 9 1528 9.0 1529 -₽ CONST. LANE M L\_\_\_\_ CV-CH-CH-000+0 B/ EL-DL-LL-Youngstown T6 EAST - EX. OVHD SIGN (TBR) LEVEL 1 STA. 527+70 SOUTH Canton EXI: 23A (os-) R-

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LL-EL-\_\_\_₽ CONST. IR-76 WB 12.0' 537 537 539 36 538 540  $\mathbb{S}^{\mathbf{i}}$ 12.0' 4.0′ EL-EL-₿ CONST. RAMP N 233 EL· 16.5' 539 538 53 ₿ CONST. IR-76 EB —

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B CALCULATED 0 20 GJL 10 CHECKED HORIZONTAL 40 JTP SCALE IN FEET	
SIGN & PAVEMENT MARKING PLAN - IR-76 W STA.561+00.00 TO STA.565+00.00	
SUM -76/77 11.31/11.30	
288 302	

289 BREAKLINE STA. 565+00 SEE SHEET







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	UTP SCALE IN FEET
SIGN & PAVEMENT MARKING PLAN - SR-8	STA, 4309+00,00 TO STA, 4314+00,00
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	SIGN & PAVEMENT MARKING PLAN - RAMP N CALCULATED OF 20 TO CHECKED OF 20 TO CHECKED OF 20 TO TO TO TO TO TO TO TO TO TO TO TO TO
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A AND A REPART OF	IGN AND PAVEMENT MARKING PLAN - RAMP R CALCULATED 20 STA. 2534+00.00 TO STA. 2539+00.00
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BW 0 34. 0314 3314 2014 1000       BW 200 514.539+36.87 ELEV. 1087.538 OFFSET 196.09 RT.         DR 4200 514.539+36.87 ELEV. 1087.538 OFFSET 196.09 RT.         DR ADDITIONAL BENCHMARK INFORMATION SEE ROADWAY PLAN WEET ROADWAY SCHEMATIC PLAN SHEET I         OTES         RTHWORK LIMITS SHOWN ARE APPROXIMATE. ACTUAL SLOPES SHALL DR ADDITIONAL DENCHMARK INFORMATION SEE ROADWAY PLAN WEET ROADWAY SCHEMATIC PLAN SHEET I         OTES         RTHWORK LIMITS SHOWN ARE APPROXIMATE. ACTUAL SLOPES SHALL DR ADDITION PLAN CROSS SECTIONS.         ESIGN TRAFFIC:         DR 40 F 1, 53,730 2016 ADTT = 5,910 356 ADT = 54,730 2016 ADTT = 5,960 RECCIONAL DISTRIBUTION = 1002         EEEEND         Imod 10, PEQUIPED       D.D. = 6.0' MIN, REOUIRED 10.0' ACTUAL VERTICAL CLEARANCE (FIER 1) CLEARANCE (FIER 2)         PPR, = APPROACH NO.OR COUCK CC: .: VERTICAL CLEARANCE         IMOD 20000 BUT         PPR, = APPROACH NO.OR COUCK PIER DECK, SEMI-INTEGRAL STUB TYPE ADDIMENTS AND REINFORCED CONCRETE CLEARANCE (FIER 1) CAP-AND-COLUMM PIERS.         SPANS: 38'-3%'+36'-6'4'+1, 50'-4'/2'* ALONG REF. CHORD 90ADWAY: VARIES 88'-3'* TO 15-5'4'* TO 2000 BUT         NTH FUTURE WEARING SURFACE (FWS) OF 0.030 KSF SKEW: 6*59'44* TO REFERENCE CHORD WITH FUTURE WEARING SURFACE (FWS) OF 0.030 KSF SKEW: 6*59'44* TO REFERENCE CHORD WITH FUTURE WEARING SURFACE (FWS) OF 0.030 KSF (FENS TINE DELINS AND REINFORCED CLAP-AND-COLUMN PIERS.         SPANS: 38'-3%'+10 REFERENCE CHORD WEARING SURFACE: TO 800 MERICE STACK SKEW: 6'59'44* TO REFERENCE CHORD WEARING SURFACE: TO 800 MER ACE (FWS) OF 0.030 KSF (FENS TI			
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CR ADDITIONAL BENCHMARK INFORMATION SEE ROADWAY PLAN         HEET ROADWAY SCHEMATIC PLAN SHEET I         COTES         MATHWORK LIMITS SHOWN ARE APPROXIMATE. ACTUAL SLOPES SHALL         OM TO PLAN CROSS SECTIONS.         SEGION TRAFTC:         DIG ADT = 53,730         DIG ADT = 53,740         DIG ADT = 54,260         2040 ADTT = 5,910         DIG ADT = 53,730         DIG ADT = 53,740         DIG ADT = 53,740         DIG ADT = 53,750		Inter Coll	
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<ul> <li>CATSTING BOURDE LOCATION</li> <li>CATSTING BOURD LOCATION</li> <li>CATSTING BOURD LOCATION</li> <li>CATSTING SUPPRESENT AND REAL PORTAL CLEARANCE (PIER 1)</li> <li>CLEARANCE (PIER 2)</li> <li>CLEARANCE (PIER 2)</li> <li>CLEARANCE (PIER 2)</li> <li>CLEARANCE (PIER 2)</li> <li>CLEARANCE (PIER 2)</li> <li>CLEARANCE (PIER 2)</li> <li>CLEARANCE (PIER 2)</li> <li>CLEARANCE (PIER 2)</li> <li>CLEARANCE (PIER 2)</li> <li>CLEARANCE (PIER 2)</li> <li>CLEARANCE (PIER 2)</li> <li>CLEARANCE (PIER 2)</li> <li>CLEARANCE (PIER 2)</li> <li>CLEARANCE (PIER 2)</li> <li>CLEARANCE (PIER 2)</li> <li>CLEARANCE (PIER 2)</li> <li>CLEARANCE (PIER 2)</li> <li>CLEARANCE (PIER 2)</li> <li>CLEARANCE (PIER 2)</li> <li>CLEARANCE (PIER 2)</li> <li>CLEARANCE (PIER 2)</li> <li>CLEARANCE (PIER 2)</li> <li>CLEARANCE (PIER 2)</li> <li>CLEARANCE (PIER 2)</li> <li>CLEARANCE (PIER 2)</li> <li>CLEARANCE (PIER 2)</li> <li>CLEARANCE (PIER 2)</li> <li>CLEARANCE (PIER 2)</li> <li>CLEARANCE (PIER 2)</li> <li>CLEARANCE (PIER 2)</li> <li>CLEARANCE (PIER 2)</li> <li>CLEARANCE (PIER 2)</li> <li>CLEARANCE (PIER 2)</li> <li>CLEARANCE (PIER 2)</li> <li>CLEARANCE (PIER 2)</li> <li>CLEARANCE (PIER 2)</li> <li>CLEARANCE (PIER 2)</li> <li>CLEARANCE (PIER 2)</li> <li>CLEARANCE (PIER 2)</li> <li>CLEARANCE (PIER 2)</li> <li>CLEARANCE (PIER 2)</li> <li>CLEARANCE (PIER 2)</li> <li>CLEARANCE (PIER 2)</li> <li>CLEARANCE (PIER 2)</li> <li>CLEARANCE (P</li></ul>		JA N	
<sup>1</sup> (A) <sup>0</sup> MIN. REQUIRED <sup>1</sup> ΔΔ = 6.0' MIN. REQUIRED <sup>1</sup> Λ <sup>0</sup> VPEFERED <sup>1</sup> Λ <sup>0</sup> ΛCTUAL VERTICAL <sup>1</sup> CLEARANCE <sup>1</sup> Δ <sup>0</sup> ΔCTUAL VERTICAL <sup>1</sup> CLEARANCE <sup>1</sup> Δ <sup>0</sup> ΔCTUAL VERTICAL <sup>1</sup> CLEARANCE <sup>1</sup> Δ <sup>0</sup> ΔCTUAL VERTICAL <sup>1</sup> CLEARANCE <sup>1</sup> Δ <sup>0</sup> ΔCTUAL VERTICAL <sup>1</sup> CLEARANCE <sup>1</sup> Δ <sup>0</sup> ΔCTUAL VERTICAL <sup>1</sup> CLEARANCE <sup>1</sup> Δ <sup>0</sup> ΔCTUAL VERTICAL <sup>1</sup> CLEARANCE <sup>1</sup> Δ <sup>0</sup> ΔCTUAL VERTICAL <sup>1</sup> CLEARANCE <sup>1</sup> Δ <sup>0</sup> ΔCTUAL <sup>1</sup> Δ <sup>0</sup> ΔCTUAL <sup>1</sup> Δ <sup>0</sup> ΔCTUAL <sup>1</sup> Δ <sup>0</sup> ΔCTUAL <sup>1</sup> Δ <sup>0</sup> ΔCTUAL <sup>1</sup> Δ <sup>0</sup> ΔCTUAL <sup>1</sup> Δ <sup>0</sup> ΔCTUAL <sup>1</sup> Δ <sup>0</sup> ΔCTUAL <sup>1</sup> Δ <sup>0</sup> ΔCTUAL <sup>1</sup> Δ <sup>0</sup> ΔCTUAL <sup>1</sup> Δ <sup>0</sup> ΔCTUAL <sup>1</sup> Δ <sup>0</sup> ΔCTUAL <sup>1</sup> Δ <sup>0</sup> ΔCTUAL <sup>1</sup> Δ <sup>0</sup> ΔCTUAL <sup>1</sup> Δ <sup>0</sup> ΔCTUAL <sup>1</sup> Δ <sup>0</sup> ΔCTUAL <sup>1</sup> Δ <sup>0</sup> ΔCTUAL <sup>1</sup> Δ <sup>0</sup> ΔCTUAL <sup>1</sup> Δ <sup>0</sup> ΔCTUAL <sup>1</sup> Δ <sup>0</sup> ΔCTUAL <sup>1</sup> Δ <sup>0</sup> ΔCTUAL <sup>1</sup> Δ <sup>0</sup> ΔCTUAL <sup>1</sup> Δ <sup>0</sup> ΔCTUAL <sup>1</sup> Δ <sup>0</sup> ΔCTUAL <sup>1</sup> Δ <sup>0</sup> ΔCTUAL <sup>1</sup> Δ <sup>0</sup> ΔCTUAL <sup>1</sup> Δ <sup>0</sup> ΔCTUAL <sup>1</sup> Δ <sup>0</sup> ΔCTUAL <sup>1</sup> Δ <sup>0</sup> ΔCTUAL <sup>1</sup> Δ <sup>0</sup> ΔCTUAL <sup>1</sup> Δ <sup>0</sup> ΔCTUAL <sup>1</sup> Δ <sup>0</sup> ΔCTUAL <sup>1</sup> Δ <sup>0</sup> ΔCTUAL <sup>1</sup> Δ <sup>0</sup> ΔCTUAL <sup>1</sup> Δ <sup>0</sup> ΔCTUAL <sup>1</sup> Δ <sup>0</sup> ΔCTUAL <sup>1</sup> Δ <sup>0</sup> ΔCTUAL <sup>1</sup> Δ <sup>0</sup> ΔCTUAL <sup>1</sup> Δ <sup>0</sup> ΔCTUAL <sup>1</sup> Δ <sup>0</sup> ΔCTUAL <sup>1</sup> Δ <sup>0</sup> ΔCTUAL <sup>1</sup> Δ <sup>0</sup> ΔCTUAL <sup>1</sup> Δ <sup>0</sup> ΔCTUAL <sup>1</sup> Δ <sup>0</sup> ΔCTUAL <sup>1</sup> Δ <sup>0</sup> ΔCTUAL <sup>1</sup> Δ <sup>0</sup> ΔCTUAL <sup>1</sup> Δ <sup>0</sup> ΔCTUAL <sup>1</sup> Δ <sup>0</sup> ΔCTUAL <sup>1</sup> Δ <sup>0</sup> ΔCTUAL <sup>1</sup> Δ <sup>0</sup> ΔCTUAL <sup>1</sup> Δ <sup>0</sup> ΔCTUAL <sup>1</sup> Δ <sup>0</sup> ΔCTUAL <sup>1</sup> Δ <sup>0</sup> ΔCTUAL <sup>1</sup> Δ <sup>0</sup> ΔCTUAL <sup>1</sup> Δ <sup>0</sup> ΔCTUAL <sup>1</sup> Δ <sup>0</sup> ΔCTUAL <sup>1</sup> Δ <sup>0</sup> ΔCTUAL <sup>1</sup> Δ <sup>0</sup> ΔCTUAL <sup>1</sup> Δ <sup>0</sup> ΔCTUAL <sup>1</sup> Δ <sup>0</sup> ΔCTUAL <sup>1</sup> Δ <sup>0</sup> ΔCTUAL <sup>1</sup> Δ <sup></sup>	- EXISTING BORING LOCATION	S. S.	
PPR. = APPROACH       CELEMINGE WITH COMPOSITE         :0.R. = TOP OF ROCK         :0.C. = VERTICAL CLEARANCE         EXISTING STRUCTURE         INTER SALE DEAMS WITH COMPOSITE         REINFORCED CONCRETE DECK, SEMI-INTEGRAL STUB         TYPE: 3-SPAN CONTINUOUS STEEL BEAMS WITH COMPOSITE         REINFORCED CONCRETE DECK, SEMI-INTEGRAL STUB         CAP-AND-COLUMN PIERS.         SPANS: 38'-3%(*, 66'-61/4:, 50'-41/2** ALONG REF. CHORD         ROADWAY: VARIES 68'-3*± TO 71-5%(*± TOE/TOE PARAPET         LOADING: HS-20 CASE I AND ALTERNATE MILITARY LOADING         WITH FUTURE WEARING SURFACE (FWS) OF 0.030 KSF         SKEW: 6*59'44*± TO REFERENCE CHORD         APPROACH SLABS: 25'-0" LONG (AS-I-BI MODIFIED)         WEARING SURFACE: I* MONOLITHIC CONCRETE         SUPERELEVATION: 0.025 FT/FT         STRUCTURAL FILE NUMBER: T703031         DATE BUILT: 196I WITH MAJOR REHABILITATION 2016         IMPOPOSED STRUCTURE         TYPE 3-SPAN CONTINUOUS STEEL BEAMS WITH COMPOSITE         REINFORCED CONCRETE DECK, SEMI-INTEGRAL STUB         TYPE 3-SPAN CONTINUOUS STEEL BEAMS WITH COMPOSITE         REINFORCED CONCRETE DECK, SEMI-INTEGRAL STUB <td colspa<="" td=""><td></td><td>DESIGNED SJA CHECKED XAC</td></td>	<td></td> <td>DESIGNED SJA CHECKED XAC</td>		DESIGNED SJA CHECKED XAC
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Skew: 6 39 44 # 10 Reference CHORD         APPROACH SLABS: 25'-0" LONG (AS-I-81 MODIFIED)         WEARING SURFACE: I" MONOLITHIC CONCRETE         ALIGNMENT: TANGENT AND RIGHT CURVE         SUPERELEVATION: 0.025 FT/FT         STRUCTURAL FILE NUMBER: 7703031         DATE BUILT: 1961 WITH MAJOR REHABILITATION 2016         IPPOPOSED STRUCTURE	WITH FUTURE WEARING SURFACE (FWS) OF 0.030 KSF		
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TYPE: 3-SPAN CONTINUOUS STEEL BEAMS WITH COMPOSITE REINFORCED CONCRETE DECK, SEMI-INTEGRAL STUB TYPE ABUTMENTS AND REINFORCED CONCRETE CAP-AND-COLUMN PIERS. SPANS: 38'-3 <sup>5</sup> /6"±, 66'-6 <sup>1</sup> /4"±, 50'-4 <sup>1</sup> /2"± ALONG REF. CHORD ROADWAY: VARIES 84'-3"± TO 89'-6"± TOE/TOE PARAPET LOADING: HS-20 CASE I AND ALTERNATE MILITARY LOADING WITH FUTURE WEARING SURFACE (FWS) OF 0.030 KSF (EXISTING BEAMS) & 0.060 KSF (NEW BEAMS) SKEW: 6°59'44"± TO REFERENCE CHORD WEARING SURFACE: I" MONOLITHIC CONCRETE (NEW DECK) LATEX CONCRETE OVERLAY (EXISTING DECK) APPROACH SLABS: 25'-0" LONG (AS-I-81 MODIFIED) ALIGNMENT: RIGHT CURVE SUPERELEVATION: 0.025 FT/FT COORDINATES: LATITUDE 41° 03' 44.67" N LONGITUDE 81° 30' 34.13" W	PROPOSED STRUCTURE	B I-76	
SPANS: 38'-35%6"±, 66'-61/4"±, 50'-41/2"± ALONG REF. CHORD ROADWAY: VARIES 84'-3"± TO 89'-6"± TOE/TOE PARAPET LOADING: HS-20 CASE I AND ALTERNATE MILITARY LOADING WITH FUTURE WEARING SURFACE (FWS) OF 0.030 KSF (EXISTING BEAMS) & 0.060 KSF (NEW BEAMS) SKEW: 6°59'44"± TO REFERENCE CHORD WEARING SURFACE: 1" MONOLITHIC CONCRETE (NEW DECK) LATEX CONCRETE OVERLAY (EXISTING DECK) APPROACH SLABS: 25'-0" LONG (AS-1-81 MODIFIED) ALIGNMENT: RIGHT CURVE SUPERELEVATION: 0.025 FT/FT COORDINATES: LATITUDE 41° 03' 44.67" N LONGITUDE 81° 30' 34.13" W	TYPE: 3-SPAN CONTINUOUS STEEL BEAMS WITH COMPOSITE REINFORCED CONCRETE DECK, SEMI-INTEGRAL STUB TYPE ABUTMENTS AND REINFORCED CONCRETE CAP-AND-COLUMN PIERS.		
ROADWAY: VARIES 84'-3"± TO 89'-6"± TOE/TOE PARAPET LOADING: HS-20 CASE I AND ALTERNATE MILITARY LOADING WITH FUTURE WEARING SURFACE (FWS) OF 0.030 KSF (EXISTING BEAMS) & 0.060 KSF (NEW BEAMS) SKEW: 6°59'44"± TO REFERENCE CHORD WEARING SURFACE: I" MONOLITHIC CONCRETE (NEW DECK) LATEX CONCRETE OVERLAY (EXISTING DECK) APPROACH SLABS: 25'-0" LONG (AS-I-81 MODIFIED) ALIGNMENT: RIGHT CURVE SUPERELEVATION: 0.025 FT/FT COORDINATES: LATITUDE 41° 03' 44.67" N LONGITUDE 81° 30' 34.13" W	SPANS: 38'-35/6"±, 66'-61/4"±, 50'-41/2"± ALONG REF. CHORD		
LOADING: HS-20 CASE I AND ALTERNATE MILITARY LOADING WITH FUTURE WEARING SURFACE (FWS) OF 0.030 KSF (EXISTING BEAMS) & 0.060 KSF (NEW BEAMS) SKEW: 6°59'44"± TO REFERENCE CHORD WEARING SURFACE: 1" MONOLITHIC CONCRETE (NEW DECK) LATEX CONCRETE OVERLAY (EXISTING DECK) APPROACH SLABS: 25'-0" LONG (AS-1-81 MODIFIED) ALIGNMENT: RIGHT CURVE SUPERELEVATION: 0.025 FT/FT COORDINATES: LATITUDE 41° 03' 44.67" N LONGITUDE 81° 30' 34.13" W	ROADWAY: VARIES 84'-3"± TO 89'-6"± TOE/TOE PARAPET		
SKEW: 6°59'44"± TO REFERENCE CHORD WEARING SURFACE: 1" MONOLITHIC CONCRETE (NEW DECK) LATEX CONCRETE OVERLAY (EXISTING DECK) APPROACH SLABS: 25'-0" LONG (AS-1-81 MODIFIED) ALIGNMENT: RIGHT CURVE SUPERELEVATION: 0.025 FT/FT COORDINATES: LATITUDE 41° 03' 44.67" N LONGITUDE 81° 30' 34.13" W	LOADING: HS-20 CASE I AND ALTERNATE MILITARY LOADING WITH FUTURE WEARING SURFACE (FWS) OF 0.030 KSF (EXISTING BEAMS) & 0.060 KSF (NEW BEAMS)	77/- 1.30 01402	
APPROACH SLABS: 25'-0" LONG (AS-I-8I MODIFIED) ALIGNMENT: RIGHT CURVE SUPERELEVATION: 0.025 FT/FT COORDINATES: LATITUDE 41° 03' 44.67" N LONGITUDE 81° 30' 34.13" W	SKEW: 6°59′44″± TO REFERENCE CHORD WEARING SURFACE: 1″ MONOLITHIC CONCRETE (NEW DECK) LATEX CONCRETE OVERLAY (EXISTING DECK)	1-76/ 31/1 No. 10	
SUPERELEVATION: 0.025 FT/FT COORDINATES: LATITUDE 41° 03′ 44.67″ N LONGITUDE 81° 30′ 34.13″ W	APPROACH SLABS: 25'-O" LONG (AS-1-81 MODIFIED) ALIGNMENT: RIGHT CURVE	SUN 11. PID	
LONGITUDE 81° 30' 34.13" W	SUPERELEVATION: 0.025 FT/FT COORDINATES: LATITUDE 41° 03′ 44.67″ N		
	LONGITUDE 81° 30′ 34.13″ W	$\frac{1}{3}$	
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BENCHMARK DATA	DLE nners
BM #5 STA. 3322+30.18, ELEV.1082.764, OFFSET 137.48′RT.,CMC BM #200 STA. 3338+59.87, ELEV.1087.538 OFFSET 296.86 RT. IP.	W W W W W W W W W W W W W W W W W W W
OR ADDITIONAL BENCHMARK INFORMATION. SEE ROADWAY PLAN SHEET \$60009\$ \$1019\$	BESS & BESS & s ■ Archite ROAD, COLU
<u>VOTES</u>	REED
. EARTHWORK LIMITS SHOWN ARE APPROXIMATE. ACTUAL SLOPES SHALL CONFORM TO PLAN CROSS SECTIONS.	<b>BU</b> Engir soss
NOT SET A SET	ATE /2017 NUMBER 3
3. ALL PILES ARE HP12x53 (ESTIMATED PILE LENGTH: 45'-O")	D 775 597
DESIGN TRAFFIC:	VED B 770
2022 ADT = 15781 2022 ADTT = 1542	REVIEV TAI STRUC
'042 ADT = 16831 2042 ADTT = 1647 )IRECTIONAL DISTRIBUTION = 100%	vn MAK sed
	DRAV HL /1 REVIS
<u>.EGENU</u> A = EORWARD ABUTMENT	
A. = REAR ABUTMENT HLDR. = SHOULDER .O.R. = TOP OF ROCK	DESIGNED MAK CHECKED JHL
- = EXISTING BORING LOCATION	<u>ک</u> ۳ ه
= BENCHMARK LOCATION	:0UNT) 2+42.9 3+77.6
△ = 16.0 MIN. REQUIRED (18.7' REQUIRED OVER EXISTING BRIDGE TO ACCOMODATE FUTU INTERCHANGE IMPROVEMENTS) IN ACCOMPACE PROVIDED	INMIT C 33328 13338
$\Delta \Delta = 16.5' \text{ MINI. CLEARANCE FROMIDED.}$ $\Delta \Delta = 16.5'  MINIMUM REQUIRED, 29.7'± (OVER LANE M), 18.5'± (EB I- OVER LANE O), AND 39.2'± (OVER RAMP S) PROVIDED$	76 76 76
<ul> <li>POINT OF MINIMUM VERTICAL CLEARANCE</li> <li>BASED ON HORIZONTAL SITE DISTANCE</li> <li>BASED ON 4'-O" SHOULDER, 2'-O" TO FACE OF GUARDRAIL, 5'- CLEARANCE BEHIND GUARDRAIL AND 1'-6" FUTURE RAMP WIDENI</li> </ul>	-O″ NG.
HISTORIC BORING LOCATION	
BORING APPROX. APPROX. TOP OF	~ 9
A-8 STA. 3332+19.28, 38.6±' LT 1058±	149F BOU
A-10 STA. 3334+41.13, 17.3±'LT 1070±	AST
B-8 STA. 3338+86.04, 83.0±'LT 1079±	
B-1/ STA. 3338+29.10, 33.9±' RT 1078± B-45 STA 3336+92.65 13.0+' RT 1075+	NUS -1
NOTE: BORING DATA FROM PREVIOUS PROJECTS.	ITE IO.
LOCATIONS ARE APPROXIMATE.	S DGE N OV
EXISTING STRUCTURE - NONE	BRI RAMP
PROPOSED STRUCTURE	
TYPE: 5-SPAN CONTINUOUS CURVED STEEL PLATE GIRDER WITH COMPOSITE REINFORCED CONCRETE DECK, CAST-IN-PLACE WALLTYPE ABUTMENTS ON PILES, AND REINFORCED CONCRETE CAP-AND-COLUMN PIERS ON DRILLED SHAFTS SPANS: 121,757, 137,177, 137,177, AND 967, 676, BEARINGS	
(ALONG & RAMP N) 112.03', 134.30', 136.87', 133.12', 87.62' C/C BEARINGS (ALONG REFERENCE CHORD)	7 / 8
ROADWAY: 30'-0" TOE/TOE PARAPET	101
LOADING: HL93 AND FUTURE WEARING SURFACE (FWS) OF 0.060 KSF	-76  0.
SKEW: KAUTAL	
AFFRUALH SLABSE SU'-U' LUNG (AS-I-15 ANU AS-2-15) ALIONMENTE QODOLOON RICHT CURVE	SU PI
RELIGINIMELIVIT J OU OU RIGHT CORVE	
COORDINATES: LATITUDE 41° 03′ 38.08″ N I ONGITUDE 81° 30′ 17.33″ W	1/1



PROPOSED TYPICAL SECTION

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PROPOSED PIER TYPE CAPPED COLUMN PIERS ON DRILLED SHAFTS SOCKETED INTO ROCK

BURGESS & NIPLE Engineers = Architects = Planners 5085 REED ROAD, COLUMBUS, OHIO 4322 17 II 06/ FILE eviewei TAB DRAWN MAK DESIGNED MAK CHECKED ۸ND SB MISCELLANEOUS BRIDGE DETAILS SUM-76-1149R AMP S, LANE 0, 1-76 EB, S.R. 8 NB & S RAMP OVER z SUM-76/77/8 PID No. 101402 --- -



	37 37
BENCHMARK DATA	00 CII
BM #1 STA. 540+15.24       ELEV. 1087.538       OFFSET 404.649         BM #2 STA. 557+04.43       ELEV. 1132.268       OFFSET 101.5799         BM #3 STA. , ELEV. , OFFSET ,       BM #4 STA       ELEV. OFFSET ,	1800 INDIAN WO MAUMEE, OHIC
FOR ADDITIONAL BENCHMARK INFORMATION. SEE ROADWAY PLAN SHEET	
<u>NOTES</u>	
EARTHWORK LIMITS SHOWN ARE APPROXIMATE. ACTUAL SLOPES SHALL CONFORM TO PLAN CROSS SECTIONS. DESIGN TRAFFIC: 2020 ADT = 98,750 2020 ADTT = 15800 2040 ADT = 101,590 2040 ADTT = 16255 DIRECTIONAL DISTRIBUTION = 64% REFERENCE LINE GEOMETRIC SCHEMATIC	REVIEWED DATE TLR 9/17 STRUCTURE FILE NUMBER 7706154
UTILITY SIZES AND DEPTHS TO BE DETERMINED	DRAWN RJS REVISED
➡ BORING LOCATION ★ - PHASE 1 CONSTRUCTION ★★ - PHASE 2 CONSTRUCTION ▲ 14'-6" REQUIRED MINIMUM VERTICAL CLEARANCE	DESIGNED DRH CHECKED RJS
14'-8'/4" ACTUAL MINIMUM VERTICAL CLEARANCE	I
■ 8'-0" REQUIRED MINIMUM HORIZONTAL CLEARANCE 7'-2"± ACTUAL MINIMUM HORIZONTAL CLEARANCE	COUNTY +21.33 +30.89
EXISTING STRUCTURE	MIT 549- 550-
TYPE: TWIN SIMPLE SPAN STEEL BEAM WITH REINFORCED CONCRETE DECK AND SUBSTRUCTURE ON SPREAD FOOTINGS	SUM STA.
SPANS: 54'-7¾" C/C BEARINGS ROADWAY: 54'-0" TOE/TOE OF PARAPET LOADING: HS20-44 CASE I AND ALTERNATE MILITARY LOADING SKEW: 15°45'40" LEFT FORWARD APPROACH SLABS: AS-1-81 (15'-0" LONG) ALIGNMENT: CURVE 2°28'00" LT. CROWN: SUPERELEVATION 0.04 FT/FT STRUCTURAL FILE NUMBER: 7706189 DATE BUILT: 1955 DISPOSITION: TO BE REHABILITATED	SITE PLAN SUM-76-1179L SOUND OVER INMAN STREET
PROPOSED WORK	ESTB
WORK: SIMPLE SPAN STEEL BEAM (ASTM A709[M] GRADE 50W, UNPAINTED) COMPOSITE SUPERSTRUCTURE WITH REINFORCED CONCRETE DECK WITH SEMI-INTEGRAL ABUTMENTS. SPANS: 54'-6¾" C/C BEARINGS (MEASURED ALONG PROP. REFERENCE LINE) ROADWAY: VARIES 72'-1" TO 75'-2¾" TOE/TOE PARAPET	I-76 W
LOADING: SUPERSTRUCTURE - HS25 CASE I AND ALTERNATE MILITARY LOADING WITH A FUTURE WEARING SURFACE LOADING OF 60 PSF SUBSTRUCTURE - HS20 CASE I AND ALTERNATE MILITARY LOADING WITH A FUTURE WEARING SURFACE LOADING OF 60 PSF SKEW: 15°47'44" LEFT FORWARD (MEASURED ALONG PROP. REFERENCE LINE) APPROACH SLABS: 25'-0" LONG (AS-1-15 & AS-2-15 TYPE A)	SUM-76/77/8 PID No. 101402
ALIGNMENT: CURVE 2°28′00″ LT.	
CROWN: 0.043 FT/FT SUPERELEVATION	1/7
COORDINATES: LATITUDE 41°03′43.57″ LONGITUDE 81°30′01.15″	



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BENCHMARK DATA	
BM #5 STA.105+06.46, ELEV. 1082.764, OFFSET 462.82′RT., CMON BM #200 STA.108+40.94, ELEV. 1087.538, OFFSET 695.05′LT., IPIN	Recta - Pla
OR ADDITIONAL BENCHMARK INFORMATION. SEE ROADWAY PLAN HEET	<b>JRGESS</b> gineers = Archi reed road, colui
<u>IOTES</u> ARTHWORK LIMITS SHOWN ARE APPROXIMATE. ACTUAL SLOPES SHALL ONFORM TO PLAN CROSS SECTIONS.	DATE DATE DATE DATE DATE DATE DATE DATE
EE SHEET 2 / 3 FOR PROFILE.	REVIEWED TAB 1 STRUCTURE FIL 77029
<u>EGEND</u>	WN SED
– EXISTING BORING LOCATION	DRA AA REVIS
LOCATION OF MINIMUM VERTICAL CLEARANCE	SIGNED CAS EECKED BFK
.A. = FORWARD ABUIMENI ?.A. = REAR ABUTMENT * = B CONSTRUCTION HERITAGE TRAII -1	Щ С
<ul> <li>STA. 11+56.70 = € CONSTRUCTION HERITAGE TRAIL-2 STA. 20+00.00</li> <li>** = € CONSTRUCTION HERITAGE TRAIL-2 STA. 22+91.19 = € CONSTRUCTION HERITAGE TRAIL-3 STA. 33+83.66</li> </ul>	MMIT COUNTY A. 0+16.10 A. 2+69.36
EXISTING STRUCTURE	SUN SUN ST,
TYPE: FOUR SPAN CONTINUOUS ROLLED BEAM WITH REINFORCED CONCRETE DECK ON CONCRETE PIERS AND ABUTMENTS SPANS: 53.00'±, 51.15'±, 59.85'±, 49.50'±, C/C BEARINGS ROADWAY: 44'-0"± t/t CURB, 4'-9"± SIDEWALKS (LT. & RT.) LOADING: CF-400 SKEW: VARIES (1°06'30"± TO 13°22'00"±) APPROACH SLABS: 25'-0"± (REAR AND FORWARD) ALIGNMENT: TANGENT CROWN: ¾6"/FT STRUCTURAL FILE NUMBER: 7702949 DATE BUILT: 1958 WEARING SURFACE: MONOLITHIC CONCRETE DISPOSITION: TO BE REMOVED	SITE PLAN JM-77-1181 RUBBER CITY HERITAGE TRAIL RAMP N, LANE M, S.R. 8, AND LANE O
PROPOSED STRUCTURE	NO. S OVEF
TYPE: PREFABRICATED STEEL TRUSS (ASTM AT09 [M] GRADE 50, GALVANIZED) WITH REINFORCED CONCRETE SUBSTRUCTURES SPANS: 116'-5½' (€ REAR ABUTMENT BEARINGS TO € PIER) 132'-9¾'' (€ PIER TO € FORWARD ABUTMENT BEARINGS)	BRIDGE BRIDGE
ROADWAY: 15'-O" FACE-TO-FACE OF TRUSSES 14'-O" FACE-TO-FACE OF BRIDGE RAILINGS	~~ <sup>©</sup>
LOADING: AASHTO PEDESTRIAN LIVE LOAD (0.09 KSF) OR HI5-44 TRUCK	6 / 7 11.3( 0140
SKEW: 0°	M-7 31/1
ALIGNMENT: TANGENT WEARING SURFACE: CONCRETE	SUI 11.3
APPROACH SLABS: 15' LONG CROWN: NONE	
COORDINATES: LATITUDE: N 41°03'31.15"	1/3
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