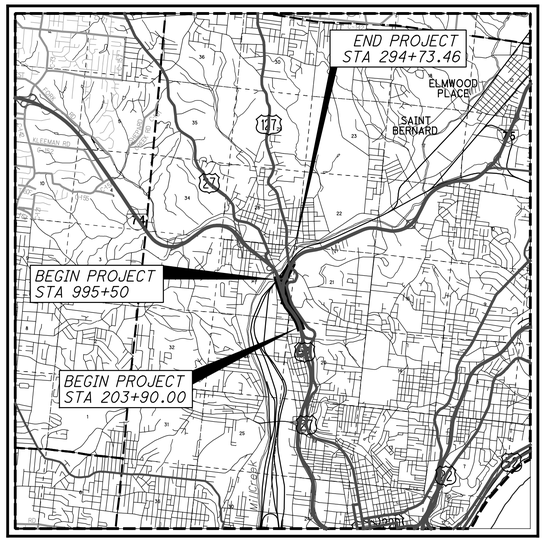
STATE OF OHIO

DEPARTMENT OF TRANSPORTATION

HAM-75-3.84
HAM-74-1908R
(STORM) (BU-25)

HAMILTON COUNTY
CITY OF CINCINNATI



LOCATION MAP

LATITUDE: 39° 09′ 03″ LONGITUDE: -84° 32′ 24″

SCALE IN MILES
0 1 2 3 4

N

PORTION TO BE IMPROVED
INTERSTATE HIGHWAY
FEDERAL ROUTES
STATE ROUTES
COUNTY & TOWNSHIP ROADS
OTHER ROADS

INDEX OF SHEETS:

PROJECT DESCRIPTION

THIS IS PHASE 5A OF THE HAMILTON 75 CORRIDOR PROJECTS (MCE). THE PROJECT ADDS A LANE TO IR 75 SB, PROVIDES 4-LANE CONTINUITY NB, AND RECONFIGURES IR 74 EB RAMPS TO IR 75. THE PROJECT ALSO INCLUDES SURFACE COURSE AND ADDITIONAL PAVEMENT WORK TO THE SOUTH AND IMPROVEMENTS TO RAMP A AT THE HOPPLE ST INTERCHANGE.

BUILDABLE UNIT 25 DESCRIPTION

THIS BU INCLUDES THE RECONSTRUCTION OF THE STORM SEWER TRUNK LINE UNDER BRIDGES 1908R & 1908S.

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.

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL NOT REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY AND THAT PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES.

DESIGN DESIGNATION

	IR 75 SOUTH OF MITCHELL	IR 75 SOUTH OF IR 74	IR 74 WEST OF BEEKMAN	IR 74 EAST OF BEEKMAN	DIRECTIONAL ROADWAY IR 75 NB TO IR 74 WB	DIRECTIONAL ROADWAY IR 74 EB TO IR 75 SB
CURRENT ADT (2010)	149,400	152,100	75,000	88,300	25,300	25,300
DESIGN YEAR ADT (2030)	174,300	179,200	89,300	102,000	29,800	29,800
DESIGN HOURLY VOLUME (2030)	14,640	15,050	8,040	9,180	4,100	4,380
DIRECTIONAL DISTRIBUTION	0.54	0.70	0.72	0.73	1.00	1.00
TRUCKS (24 HOUR B&C)	0.16	0.13	0.15	0.13	0.03	0.08
DESIGN SPEED	60 MPH	60 MPH	60 MPH	60 MPH	50 MPH	50 MPH
LEGAL SPEED	55 MPH	55 MPH	55 MPH	55 MPH	50 MPH	50 MPH
DESIGN FUNCTIONAL CLASSIFICATION:	03 URBAN INTERSTATE	03 URBAN INTERSTATE	03 URBAN INTERSTATE	03 URBAN INTERSTATE	03 URBAN INTERSTATE	03 URBAN INTERSTATE
NHS PROJECT	YES					

DESIGN EXCEPTIONS

DESIGN FEATURE	APPROVAL DATES	SHEET NUMBERS
STOP. SIGHT DIST. - SB IR 75 (CURVE 6)	4/6/18	SEE BU-14
SHOULDER WIDTH - IR 74-1892R BRIDGE	4/10/18	SEE BU-14
SHOULDER WIDTH - RAMP P 1908S BRIDGE	4/11/18	SEE BU-14
CURVE RADIUS - RAMP P 1908S BRIDGE	4/11/18	SEE BU-14
STOP. SIGHT DIST. - RAMP P 1908S BRIDGE	4/11/18	SEE BU-14
S.E. RATE - IR 74 EB CURVE 13, 1908R BRIDGE	4/26/18	SEE BU-14

ENGINEERS SEAL:

STATE OF OHIO
BRUCE FRASER
E-59019
REGISTERED
PROFESSIONAL ENGINEER

SIGNED: Bruce Fraser
DATE: 02/12/2019

PLAN PREPARED BY:

AMERICAN STRUCTUREPOINT INC.
2550 CORPORATE EXCHANGE DR, STE 300
COLUMBUS, OH 43231
TEL 614.901.2235 FAX 614.901.2236
www.structurepoint.com

STANDARD CONSTRUCTION DRAWINGS

BP-1.1	7/28/00	DM-1.1	7/21/17	RM-4.5	7/21/17	HL-20.21	1/19/18	MT-98.11	1/20/17	TC-21.20	1/19/18
BP-2.1	7/17/15	DM-1.2	1/18/13	RM-4.6	7/19/13	HL-20.24	1/19/18	MT-98.20	7/18/14	TC-21.50	7/15/16
BP-2.2	7/18/08	DM-1.3	7/18/14			HL-30.11	1/19/18	MT-98.21	7/18/14	TC-22.10	10/18/13
BP-2.3	7/18/14	DM-2.1	1/18/13	A-1-69	7/19/02	HL-30.21	1/17/14	MT-98.29	1/20/17	TC-22.20	1/17/14
BP-2.4	7/19/13	DM-4.1	1/15/16	AS-1-15	7/17/15	HL-30.22	1/17/14	MT-98.30	7/21/17	TC-41.30	10/18/13
BP-3.1	7/18/14	DM-4.2	7/20/12	AS-2-15	1/19/18	HL-30.31	1/17/14	MT-99.30	1/19/18	TC-42.10	10/18/13
BP-6.1	7/19/13	DM-4.3	1/15/16	EXJ-4-87	1/19/18	HL-30.32	1/17/14	MT-99.60	7/15/16	TC-42.20	10/18/13
BP-8.1	7/18/08	DM-4.4	1/15/16	GSD-1-96	7/19/02	HL-30.33	1/17/14	MT-101.70	1/17/14	TC-52.10	10/18/13
				PCB-91	1/18/13	HL-30.41	1/19/18	MT-101.75	7/15/16	TC-52.20	1/19/18
CB-1.1	1/15/16	MGS-1.1	1/19/18	PSID-1-13	7/15/16	HL-40.10	1/20/17	MT-101.80	1/16/18	TC-61.30	1/20/17
CB-1.2	1/15/16	MGS-2.1	1/19/18	RB-1-55	7/19/13	HL-40.20	1/20/17	MT-101.90	7/21/17	TC-65.10	1/17/14
CB-1.3	1/15/16	MGS-3.1	1/19/18	SBR-1-13	1/14/14	HL-50.11	1/16/15	MT-102.10	1/20/17	TC-65.11	7/21/17
CB-2.1	1/15/16	MGS-3.2	1/18/13	SBR-2-13	1/14/14	HL-50.21	1/19/18	MT-102.20	7/18/14	TC-71.10	1/19/18
CB-2.2	1/15/16	MGS-4.2	7/19/13	SICD-1-96	7/18/14	HL-60.12	7/15/16	MT-103.10	1/19/18	TC-72.20	7/15/16
CB-2.3	1/15/16	MGS-4.3	1/18/13	SICD-2-14	7/18/14	HL-60.21	1/16/15	MT-104.10	10/16/15	TC-73.20	7/21/17
CB-3.1	1/15/16	MGS-5.2	7/15/16	VPF-1-90	1/19/18	HL-60.31	7/21/17	MT-105.10	7/19/13		
CB-3.3	1/15/16	MGS-5.3	7/15/16							ITS-13.10	7/17/15
		MGS-6.1	1/19/18	HL-10.11	1/19/18	MT-95.30	7/21/17	TC-7.65	1/15/16	ITS-14.10	7/17/15
I-2.1	1/15/16			HL-10.12	1/20/17	MT-95.31	7/21/17	TC-9.10	1/19/18	ITS-14.11	7/17/15
I-2.2	1/15/16			HL-10.13	1/20/17	MT-95.32	7/21/17	TC-9.30	1/19/18	ITS-15.10	7/17/15
I-2.3	1/15/16	RM-1.1	7/18/14	HL-10.15	7/17/15	MT-95.50	7/21/17	TC-12.30	1/19/18	ITS-15.11	7/17/15
I-2.4	1/15/16	RM-4.1	7/21/17	HL-10.31	1/19/18	MT-95.45	7/21/17	TC-15.115	10/18/13	ITS-50.10	1/19/18
		RM-4.3	7/18/14	HL-20.11	4/21/17	MT-95.73	1/19/18	TC-16.21	1/19/18		
MH-1.2	1/15/16	RM-4.4	7/21/17	HL-20.13	1/19/18	MT-98.10	1/20/17	TC-21.10	7/21/17		

SUPPLEMENTAL SPECIFICATIONS

800-2016	1/19/18
804	1/15/16
806	3/2/15
808	10/16/15
809	1/19/18
814	7/15/16
821	4/20/12
832	1/17/14
839	7/17/15
840	7/20/18
866	4/21/17
867	4/15/16
902	12/31/12
904	7/15/16
908	10/20/17
914	7/15/16
921	4/20/12
939	7/17/15

SPECIAL PROVISIONS

UNDERGROUND UTILITIES

CONTACT BOTH SERVICES TWO WORKING DAYS **BEFORE YOU DIG.**

OHIO Utilities Protection SERVICE
Call Before You Dig
1-800-362-2764
(Non-members must be called directly)

OIL & GAS PRODUCERS
UNDERGROUND PROTECTION SERVICE
1-800-925-0988

FEDERAL PROJECT NO. **E170 (713)**

PID NO. **104667**

CONSTRUCTION PROJECT NO. **183000**

RAILROAD INVOLVEMENT
CSXT (CSX OP# OH1179)
NORFOLK SOUTHERN

HAM-75-3.84

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A ℄ RAMP O STA 235+72.96, ℄ = ℄ IR 74 WB STA 1036+11.21, 32.5' LT

B ℄ RAMP E STA 221+95.34, ℄ = ℄ IR 75 STA 220+53.64, 256.6' RT

C ℄ RAMP E STA 238+15.40, ℄ = ℄ IR 75 STA 238+15.40, 84.9' RT

D ℄ IR 74 WB STA 1055+57.83, ℄ = ℄ IR 75 STA 220+86.92, 188.4' RT

FOR HORIZONTAL CURVE DATA, SEE BU-14.

BEGIN WORK STA 2128+06

WESTERN HILLS VIADUCT

SPRING GROVE AVE

COOK ST

COLERAIN AVE

MARSHALL AVE

CENTRAL PKWY

℄ CONST IR 75

℄ IR 74 EB STA 1020+70.00, ℄ = ℄ IR 74 STA 1020+70.00, 20.0' RT

℄ IR 74 STA 1022+55.29, ℄ = ℄ IR 74 WB STA 1022+55.92, 20.0' RT

MATCH LINE A-A IR 75 STA 176+00

BEGIN PROJECT STA 991+50

E170 (715)

MATCH LINE C-C IR 74 STA 990+00

BEEKMAN ST

℄ CONST IR 74

WESLEYAN MEMORIAL CEMETERY

STRUCTURE NO HAM-74-1840

STRUCTURE NO HAM-74-1852

STRUCTURE NO HAM-74-1875

STRUCTURE NO HAM-74-1892

STRUCTURE NO HAM-74-1908R

STRUCTURE NO HAM-74-1908L

STRUCTURE NO HAM-74-1931L&R

STRUCTURE NO HAM-74-1908S

STRUCTURE NO HAM-74-0440

STRUCTURE NO HAM-127-0514

STRUCTURE NO HAM-75-0605

STRUCTURE NO HAM-75-0383

STRUCTURE NO HAM-52-2044

℄ CONST IR 74 EB

℄ CONST IR 74 WB

℄ CONST RAMP A

℄ CONST RAMP E

℄ CONST RAMP O

℄ CONST RAMP P

℄ CONST IR 75

℄ IR 74 WB STA 987+94.06, ℄ = ℄ IR 74 987+94.06, 20.0' LT

℄ IR 74 EB STA 987+94.06, ℄ = ℄ IR 74 987+94.06, 20.0' RT

MATCH LINE B-B IR 75 STA 285+00

PROP 60" CUVLERT

BEGIN WORK STA 980+90

END PROJECT STA 294+73.46

E170 (713)

MATCH LINE C-C IR 74 STA 990+00

PROP BIORETENTION BASIN

BEGIN IR 74 DIRECTIONAL ROADWAY

PROP OUTLET TO BASIN

LOCATION OF PROPOSED STORM WORK

℄ IR 74 WB STA. 1036+32.96, 0.00 RT= RAILROAD

CSX RAILROAD

NS RAILROAD

℄ IR 74 EB STA 1049+73.79, ℄ = ℄ IR 75 STA 226+33.67, 70.2' LT

PROP DETENTION & OUTLET

℄ RAMP A STA 199+29.60, ℄ = ℄ IR 75 STA 199+29.61, 85.5' LT

℄ RAMP O STA 248+63.90, ℄ = ℄ IR 75 STA 248+73.90, 71.5' LT

℄ RAMP P STA 248+31.22, ℄ = ℄ IR 75 STA 248+31.17, 68.6' RT

MONMOUTH AVE

SASSAFRAS ST

COMFORT ST

CENTRAL PARKWAY

WALL NO. 2

LUDLOW AVE

WALL NO. 4

WALL NO. 5

WALL NO. 21

WALL NO. 7

MT. STORM PARK

MILL CREEK

CLIFTON AVE

MITCHELL AVE

CANAL RIDGE ROAD LANDFILL

EX. DUKE ENERGY TRANSMISSION LINE

EX. GAS LINE 12" STEEL PIPE INTERMEDIATE PRESSURE 35PSI INSTALLED 1959

PROP OUTLET

MAPLE ST

MATCH LINE A-A IR 75 STA 176+00

MATCH LINE B-B IR 75 STA 285+00

END WORK STA 324+34

S__ = STREAM NUMBER, REFER TO ENVIRONMENTAL COMMITMENTS

HORIZONTAL SCALE IN FEET

0 200 400 800

CALCULATED BER CHECKED JS

SCHEMATIC PLAN

HAM-75-3.84

2 4

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* DENOTES WORK NOT PERFORMED AS PART OF THIS BU

BEGIN FULL-DEPTH* +61.72

BEGIN FULL-DEPTH* +84.62

℄ CONST RAMP O

℄ CONST IR 74 WB

℄ CONST RAMP P

℄ CONST IR 74 EB

EX CB (TBR)*

EX MH (TBR)

FILLED AND PLUGGED (TBR)

D283* D286* D287* D300* D310* D320* D325* D326* D330*

PC Sta. 235+72.86

CS Sta. 230+27.46

ST Sta. 1036+32.96

TS Sta. 1036+83.34

SC Sta. 1039+43.34

CS Sta. 1032+34.69

S 17° 25' 11" E

S 18° 13' 13" E

36" TYPE B*

43" X 68" TYPE B*

54" TYPE B*

54" TYPE B (RCP)

30" TYPE B*

15" TYPE C*

54" STM (ABANDONED)

STRUCTURE NO HAM-74-1908S
SEE BU-5 & BU-7 FOR DETAILS

LIGHTING CONDUIT, SEE BU-19 FOR DETAILS

END APPROACH SLAB*
STA 1039+03.88 (IR 74 EB)

BEGIN APPROACH SLAB*
STA 1038+78.88 (IR 74 EB)

ITS CONDUIT, SEE BU-19 FOR DETAILS

NOTE: HIGHLY ORGANIC AND POTENTIALLY PETROLEUM CONTAMINATED SOILS ENCOUNTERED DURING INSTALLATION OF DRAINAGE WORK.

COUNTER BERM, SEE BU-11 FOR DETAILS

CONST LIMITS

STRUCTURE NO HAM-74-1980R
SEE BU-10 & BU-11 FOR DETAILS

BIORETENTION CELL, SEE BU-14 FOR DETAILS

Ex LA-R/W

Ex R/W

Ex RR

54" STM (ABANDONED)

PO Sta. 1038+79.99

ST Sta. 1034+89.40

SPIRAL DATA - IR 74 WB
PI STA 1033+66.54
Ls = 400.00'
θs = 8° 00' 00"
LT = 266.94'
ST = 133.58'
x = 399.22'
y = 18.59'
k = 199.87'
p = 4.65'

CURVE DATA - IR 74 WB
PI STA 1040+09.33
Δ = 17° 28' 33" (LT)
Dc = 4° 30' 00"
R = 1,273.24'
Ls = 260.00'
θs = 5° 51' 00"
LT = 173.43'
ST = 86.75'
x = 259.73'
y = 8.84'
k = 129.95'
p = 2.21'
Δc = 5° 46' 33" (LT)
Lc = 128.35'
Ts = 325.99'
Es = 17.19'
C = 128.30'
C1 = C2 = 259.88'
C.B.1 = S 19° 22' 11" E
C.B. = S 26° 09' 28" E
C.B.2 = N 32° 56' 45" W
e_{max} = 0.053

CURVE DATA - RAMP O
PI STA 239+36.29
Δ = 134° 55' 26" (LT)
Dc = 38° 00' 00"
R = 150.78'
T = 363.33'
L = 355.06'
E = 242.59'
C = 278.53'
C.B. = S 84° 54' 24" E
e_{max} = 0.06

CURVE DATA - IR 74 EB
PI STA 1028+73.19
Δ = 33° 33' 19" (RT)
Dc = 3° 54' 00"
R = 1,469.12'
Ls = 400.00'
θs = 7° 48' 00"
LT = 266.93'
ST = 133.57'
x = 399.26'
y = 18.13'
k = 199.88'
p = 4.53'
Δc = 17° 57' 19" (RT)
Lc = 460.39'
Ts = 644.17'
Es = 70.05'
C = 458.51'
C1 = C2 = 399.67'
C.B.1 = S 49° 10' 33" E
C.B. = S 34° 59' 53" E
C.B.2 = N 20° 49' 12" W
e_{max} = 0.083 (EX)

CURVE DATA - RAMP P
PI STA 228+65.45
Δ = 7° 31' 12" (LT)
Dc = 2° 15' 00"
R = 2,546.48'
T = 167.35'
L = 334.22'
E = 5.49'
C = 333.98'
C.B. = S 22° 58' 36" E
e_{max} = 0.033

NOTE:

FOR HAM-74-1908S PLANS, SEE BU-5 & BU-7
FOR HAM-74-1908R PLANS, SEE BU-10 & BU-11
FOR ROADWAY PLANS, SEE BU-14
FOR STORM SEWER PLANS, SEE BU-14
FOR LIGHTING PLANS, SEE BU-19
FOR ITS PLANS, SEE BU-19

HORIZONTAL SCALE IN FEET
0 10 20 40

CALCULATED LZS
CHECKED JS

PLAN - IR 74 EB & WB
STA. 1035+00 TO STA. 1040+50

HAM-75-3.84

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PVI STA 1037+30.00
EL = 545.45
940.00 VC
K = 172
SSD = 609'

PVI STA 1037+30.00
EL = 545.45
940.00 VC
K = 172
SSD = 609'

+3.12 %

-2.34 %

-0.10 %

-1.60 %

PROFILE GRADE

FOR IR 74 EB STRUCTURE 1908R SEE BU-11

STA 1037+81.16, 25.60' LT
EX. MH-3-84, GRATE ELEV 500.89
EX. 30" STM SE 486.39
(TBR) EX. 54" STM N 485.32
54" (NW) 485.38
54" (E) 485.38

D320

(TBR)
STA 1037+35.89, 52.90' LT
EX. MH-3-84, GRATE ELEV 497.49
EX. 54" STM S 485.19
EX. 54" STM W 485.27

STA 1037+28.25, 8.25' LT
MH-3, RIM ELEV 504.99
54" (SE) 485.32
54" (NE) 485.32

D310

D290

STA 1037+27.52, 18.32' LT
EX. MH-3-84, GRATE ELEV 503.14
(TBR) EX. 54" STM E 485.42
EX. 54" STM N 485.31
54" (SW) 485.31

D300

35.17, 8.38' LT
TE ELEV 492.44
STM SE 484.83
" STM N 484.83
30" (W) 484.83

CONCRETE BERM
SEE BU-11 FOR
DETAILS

D325*

STA 1038+30.00, 24.00' RT
MH-3, RIM ELEV 494.90
15" (S) 487.78
54" (W) 485.45
43" X 68" (E) 485.45

D

EX. 54" RCP

41'-54"
TYPE B
@ 0.12%

4" RCP

* DENOTES WORK NOT PERFORMED AS PART OF THIS BU

555 550 545 540 535 530 525 520 515 510 505 500 495 490 485 480 475 470

536.59 537.00 537.38 537.72 538.03 538.29 538.53 538.72 538.88 539.01 539.09 539.14 539.16 539.13 539.08 538.98 538.85 538.68 538.48 538.24 537.96 537.65 537.30

491.28 491.71 491.74 493.60 503.10 507.88 508.11 507.78 506.33 501.20 500.59 500.21 501.99 511.50 522.16 532.44 538.30 538.03 537.70 537.38 537.13 536.88 536.65

1035+00 1036+00 1037+00 1038+00

PROFILE - IR 74 EB
STA. 1033+50 TO STA. 1038+50

HAM-75-3.84

LZS
JS

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4