

OTHER ROADS \_\_\_\_\_

## DESIGN DESIGNATION (DATA FROM TDMS, FOR INFORMATION ONLY)

CURRENT ADT (2022)	43,910
TRUCKS (24 HOUR B&C)	2,809
DESIGN SPEED	60 MPH
LEGAL SPEED	60 MPH
DESIGN FUNCTIONAL CLASSIFICATION:	
URBAN FREEWAYS AND EXPRESSWAYS	
NHS PROJECT	YES

## **DESIGN EXCEPTIONS**

NONE

## ADA DESIGN WAIVERS



PLAN PREPARED BY: **ODOT DISTRICT 4 - CAPITAL PROGRAMS** 2088 S. ARLINGTON ROAD AKRON, OHIO 44306

	STANDARD CONSTRUCTION DRAWINGS										SPECIAL PROVISIONS	
	BP-2.1	1/21/22	MT-98.28	1/17/20	TC-52.10	10/18/13			800-2019	SEE PROPOSAL	ASBESTOS REPORT	
	BP-2.2	1/15/21	MT-98.29	1/17/20	TC-52.20	1/15/21			807	1/21/22	MAH-6880-0791E	
	BP-3.1	1/21/22	MT-99.20	4/19/19					808	1/18/19		$\mathbf{D}$
ENGINEER'S SEAL	BP-9.1	1/18/19	MT-101.70	1/17/20	TC-65.10	1/17/14			821	4/20/12	ASBESTOS REPORT	2
			MT-101.75	1/17/20	TC-65.11	7/15/22			832	7/15/2	MAH-680-0794	۲
	DM-4.1	7/17/20	MT-101.90	7/17/20	TC-71.10	7/15/22			850	4/15/22	uuu	added
	DM-4.3	1/15/16	MT-102.10	1/17/20	TC-73.20	1/17/20			875	1/18/19	ASBESTOS REPORT	
NX ATE OF OXY	DM-4.4	1/15/16	MT-104.10	10/16/ <mark>15</mark>	$\sim$		$\bigcap$		908	10/20/17	MAH-680-1073R	
			MT-105.10	1/17/20	GSD-1-19	1/15/21	∕)—— added		921	4/20/12		
	MT-95.40	1/17/20		Ľ		<u> </u>	<i>J</i>				ASBESTOS REPORT	
$=$ $\begin{bmatrix} ANDRASIK \\ F-80194 \end{bmatrix}$	MT-95.41	1/17/20	TC-41.10	7/19/13							MAH-680-1073L	
RECIPER N	MT-95.50	7/21/17	TC-41.20	10/18/13								
S/ONAL ENG	MT-98.10	1/17/20	TC-41.30	10/18/13								
	MT-98.11	1/17/20	TC-41.40	10/18/13								
SIGNED:	MT-98.20	4/19/19	TC-42.10	10/18/13								
DATE:	MT-98.22	1/17/20	TC-42.20	10/18/13								

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MAH-680-7

# **STATE OF OHIO DEPARTMENT OF TRANSPORTATION**

# MAH-680-7.37

## CITY OF YOUNGSTOWN, BOARDMAN TOWNSHIP

## MAHONING COUNTY

## **INDEX OF SHEETS:**

HEET	P. 1
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AL SUMMARY	P. 18-19
MMARIES & CALCULATIONS	P. 20-25
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NONE

## **PROJECT DESCRIPTION**

## EARTH DISTURBED AREAS

### LIMITED ACCESS

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL NOT REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY EXCEPT AS NOTED ON SHEET 9, AND THAT PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES.



### FEDERAL PROJECT NUMBER

E200(173)

### RAILROAD INVOLVEMENT

RESURFACING IR 680, SLM 7.31 TO SLM 12.00, IN MAHONING COUNTY, INCLUDES MINOR REHABILITATION BRIDGE WORK TO 9 STRUCTURES.

**PROJECT EARTH DISTURBED AREA:** ESTIMATED CONTRACTOR EARTH DISTURBED AREA: NOTICE OF INTENT EARTH DISTURBED AREA:

**4.68 ACRES** 0.25 ACRES NOI NOT REQUIRED

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.

#### 2019 SPECIFICATIONS

THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, INCLUDING SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PLANS, CHANGES LISTED IN THE PROPOSAL, AND THE SUPPLEMENTAL SPECIFICATION 800 VERSION INDICATED ON THE PROPOSAL SHALL GOVERN THIS IMPROVEMENT.

Arthur G. Noirot Jr., P.E. District 04 Deputy Director

ock Marchbanks, PhD Director, Department of Transportation

SHEET TITLE

ESIGN AGENCY







DOUTE	SL	M	LENGTH	PW	
ROOTE	FROM TO		(MILES)	(FEET)	
MAH-680 NB	9.54	10.80	1.26	50.00	
MAH-680 NB	10.83	11.85	1.02	50.00	
MAH-680 NB	11.86	12.09	0.23	38.00	

#### <u>LEGEND</u>

6

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- (1)ITEM 254, PAVEMENT PLANING, ASPHALT CONCRETE PAVEMENT (T=1")
- 2 ITEM 254, PAVEMENT PLANING, ASPHALT CONCRETE PAVEMENT (T=2")
- 3 ITEM 407, NON-TRACKING TACK COAT (0.08 GAL/SY)
- (4)ITEM 408, PRIME COAT, AS PER PLAN (0.40 GAL/SY)
- 5 ITEM 442, ASPHALT CONCRETE SURFACE COURSE, 12-5 MM, TYPE A (447), PWL, 2024, AS PER PLAN (T=1.5")
  - ITEM 442, ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (448), AS PER PLAN (T=2.5")
  - TTEM 617, COMPACTED AGGREGATE, AS PER PLAN (T=2")

AM 16 49 9 DATE: 7/21/2023 --^^ ^ ^ive Proje MAH-680-

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DOUTE	SL	LENGTH		
ROUTE	FROM	то	(MILES)	
MAH-680 SB	9.51	10.75	1.24	
MAH-680 SB	10.79	11.86	1.07	
MAH-680 SB	11.86	12.16	0.30	

TYPICAL SECTION 2 INCLUDES ACCELERATION LANES, DECELERATION LANES, AND GORES. SEE PG. 20 & 21 FOR ASSOCIATED CADD GENERATED AREA.

- EXISTING CONTINUOUSLY REINFORCED CONCRETE PAVEMENT (8")  $\langle \boldsymbol{A} \rangle$
- (B)EXISTING AGGREGATE BASE (4"-6")
- EXISTING ASPHALT CONCRETE PAVEMENT (3"-3.75")
- EXISTING REINFORCED CONCRETE PAVEMENT  $\langle D \rangle$









SHEET TOTAL P.2 P.35

TYPICAL SECTION 1 INCLUDES ACCELERATION LANES, DECELERATION LANES, AND GORES. SEE PG. 20 & 21 FOR ASSOCIATED CADD GENERATED AREA.



		(	(	)	
	ΤΥΡΙζΑ	AL SECTION	(3: RAMP, 1	NO CURB	
UNTY	INTERCHANGE	SLM	AVG. PW (FT)	RAMP ID	COMMENT
1AH	IR 680 SB TO E INDIANOLA AVE	7.720	22	E	CONTAINS ~250' TWO CURB SECTION
1AH	IR 680 NB TO SHIRLEY RD	8.446	24	G	
1AH	SHIRLEY RD TO IR 680 SB	8.600	22	Н	CONTAINS ~300' ONE CURB SECTION
1AH	IR 680 SB TO SR 170 WB	9.065	24	К	
1AH	SR 170 WB TO IR 680 NB	9.080	22	J	CONTAINS ~200' ONE CURB SECTION & ~150' TWO CURB SECTION
1AH	SR 170 EB TO IR 680 NB	9.295	24	0	CONTAINS ~50' ONE CURB SECTION & ~100' TWO CURB SECTION
1AH	680 NB TO LEMOYNE AVE	9.464	22	N-N	CONTAINS ~300' ONE CURB SECTION
1AH	US 224 WB TO IR 680 NB	11.682	24	w	CONTAINS ~300' ONE CURB SECTION & ~350' TWO CURB SECTION
1AH	IR 680 NB TO US 224	12.026	22	U	CONTAINS ~350' ONE CURB SECTION
1AH	US 224 TO IR 680 SB	12.142	34	R	CONTAINS ~350' ONE CURB SECTION
1AH	IR 680 SB TO US 224 WB	11.719	24	Т	
1AH	IR 680 SB TO US 224 EB	11.931	22	S	CONTAINS ~450' ONE CURB SECTION
				1	

TYPICAL SECTION 3 DOES NOT INCLUDE ACCELERATION LANES, DECELERATION LANES, AND GORES.

#### adjusted widths

#### TYPICAL SECTION 4: RAMP, ONE CURB

UNTY	INTERCHANGE	SLM	AVG. PW (FT)	RAMP ID	COMMENT
ЛАН	SR 170 TO IR 680 SB	9.553	22	M-M	CONTAINS ~600' NO CURB SECTION
ЛАН	IR 680 SB TO SR 170 EB	9.332	22	ζL	CONTAINS ~400' NO CURB SECTION
ЛАН	US 224 EB TO IR 680 NB	11.886	22	γ v	CONTAINS ~500' NO CURB SECTION

TYPICAL SECTION 4 DOES NOT INCLUDE ACCELERATION LANES, DECELERATION LANES, AND GORES.

#### TYPICAL SECTION 5: RAMP, TWO CURB

COUNTY	INTERCHANGE	SLM	2	AVG. PW (FT)	) }	RAMP ID	COMMENT
MAH	POWERSDALE AVE TO IR 680 NB	7.450	7	29	2	F	CONTAINS ~400' ONE CURB SECTION
MAH	E INDIANOLA AVE TO IR 680 NB	8.070		24	くく	Х	CONTAINS ~100' ONE CURB SECTIONS & ~100' NO CURB SECTION

TYPICAL SECTION 5 DOES NOT INCLUDE ACCELERATION LANES, DECELERATION LANES, AND GORES.

 $\widehat{(A)}$  EXISTING CONTINUOUSLY REINFORCED CONCRETE PAVEMENT (8")

(B) EXISTING AGGREGATE BASE (4"-6")

 $\widehat{(C)}$  EXISTING ASPHALT CONCRETE PAVEMENT (3"-3.75")

(D) EXISTING REINFORCED CONCRETE PAVEMENT

TYPICAL SECTIONS	
DESIGN AGENCY	
DESIGNER MRS REVIEWER MJA 04-24-23 PROJECT ID 103883 SHEET TOTAL	
P.3 P.35	

#### UTILITIES

THE CONTRACTOR SHALL USE THE FOLLOWING PROCEDURE AT EACH LOCATION WHERE WORK IS PERFORMED. IN ACCORDANCE WITH SECTIONS 105.07 AND 107.16 IN THE CONSTRUCTION AND MATERIALS SPECIFICATIONS.

THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER, OHIO811, THE OHIO DEPARTMENT OF TRANSPORTATION DISTRICT 4 HEADQUARTERS (MICHELLE CHANEY AT 330-786-2267) AND ALL NON REGISTERED UTILITY OWNERS AT LEAST TWO (2) WORKING DAYS PRIOR TO COMMENCING CONSTRUCTION OPERATIONS IN ALL AREAS.

THE LOCATION OF EXISTING UNDERGROUND UTILITIES ARE NOT SHOWN ON THE PLANS, BUT CAN BE OBTAINED FROM THE OWNERS OF THE UTILITIES. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO UTILITIES.

#### 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.

#### **PROFILE AND ALIGNMENT**

PLACE THE PROPOSED PAVEMENT TO FOLLOW THE ALIGNMENT AND PROFILE OF THE EXISTING PAVEMENT. PLACE THE PROPOSED ASPHALT CONCRETE OVERLAY AS SHOWN ON THE TYPICAL SECTIONS.

#### **PAVEMENT MARKING LANE WIDTHS**

THE NORMAL LANE WIDTH FOR THE PAVEMENT MARKINGS ON THIS PROJECT SHALL BE AS FOLLOWS [AT LEAST 3 DAYS PRIOR TO PERFORMING THE WORK CONTACT THETRAFFIC OFFICE AT 330-786-3147 TO CONFIRM THE WIDTHS]:

ROUTE	S.L.M. TO S.L.M.	LANE WIDTH
IR 680	7.37 TO 12.12	12'

#### **PAVEMENT MARKING DETAILS**

THE PAVEMENT MARKING DETAIL SHEETS HAVE BEEN SUPPLIED AS REFERENCE DOCUMENTS FOR THIS PROJECT AND ARE AVALIBLE ON THE ODOT FTP SITE AT

https://ftp.dot.state.oh.us/pub/contracts/Attach/ FOR THIS PROJECT. FOR ANY LOCATIONS THAT PAVEMENT MARKING DETAILS HAVE NOT BEEN MADE AVAILABLE TO THE CONTRACTOR, IT WILL BE THE CONTRACTORS RESPONSIBILITY TO PUT BACK NEW PAVEMENT MARKINGS IN THE ORIGINAL LOCATIONS.

removed full depth rigid repairs notes

#### ITEM 253 - PAVEMENT REPAIR (OUTSIDE SHOULDER REPAIR)

A QUANTITY OF THIS ITEM SHALL BE PROVIDED FOR USE AS DIRECTED BY THE ENGINEER. THIS ITEM SHALL CONSIST OF CUTTING AND REMOVING DETERIORATED PAVEMENT FULL DEPTH AND PLACING 8" +/-1" 301 ASPHALT CONCRETE BASE, PG64-22. THE MAXIMUM COMPACTED DEPTH OF ANY ONE LAYER SHALL BE 6 INCHES. UNLESS OTHERWISE DIRECTED BY THE ENGINEER, THIS ITEM SHALL BE PERFORMED AFTER THE COMPLETION OF MAINLINE PAVEMENT PLANING AND PRIOR TO THE PLACEMENT OF ASPHALT ON THE MILLED SURFACE.

IT IS NOT THE INTENT TO REPAIR EVERY DETERIORATED AREA WITHIN THE PROJECT. THE ENGINEER SHALL DETERMINE WHICH AREAS ARE TO BE REPAIRED. PAYMENT SHALL BE BASED ON THE ACTUAL NUMBER OF SQUARE YARDS OF PAVEMENT REMOVED AND REPLACED TO THE LIMITS DESIGNATED BY THE ENGINEER.

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY: 253, PAVEMENT REPAIR (OUTSIDE SHOULDER REPAIR), 7000 SQ YD



#### ITEM 252 - RIGID REMOVAL FLEXIBLE REPLACEMENT (FLANGE BEAM JOINTS)

A QUANTITY OF THIS ITEM SHALL BE PROVIDED FOR USE AS DIRECTED BY THE ENGINEER. THIS ITEM SHALL CONSIST OF CUTTING AND REMOVING DETERIORATED PAVEMENT FULL DEPTH AND PLACING 8-10" OF 301 ASPHALT CONCRETE BASE, PG64-22. THE MAXIMUM COMPACTED DEPTH OF ANY ONE LAYER SHALL BE 6 INCHES. UNLESS OTHERWISE DIRECTED BY THE ENGINEER, THIS ITEM SHALL BE PERFORMED AFTER THE COMPLETION OF MAINLINE PAVEMENT PLANING AND PRIOR TO THE PLACEMENT OF ASPHALT ON THE MILLED SURFACE.

IT IS NOT THE INTENT TO REPAIR EVERY DETERIORATED AREA WITHIN THE PROJECT. THE ENGINEER SHALL DETERMINE WHICH AREAS ARE TO BE REPAIRED. PAYMENT SHALL BE BASED ON THE ACTUAL NUMBER OF SQUARE YARDS OF PAVEMENT REMOVED AND REPLACED TO THE LIMITS DESIGNATED BY THE ENGINEER.

FLANGE BEAM JOINTS ARE PRESENT WITHIN 50' OF MAH-680-0794, MAH-680-1073L, AND MAH-680-1073R.

	THIS REPLACEMENT IS LIMITED
	SHALLOWLY BE USED AS REFER
	SCD BP-1.2 SHOWS DETAILS FC
	C DIMENSIONING, AND CONCRE
added ——	-uuuuuuu
	THE FOLLOWING ESTIMATED C

TO THE GENERAL SUMMARY: 252, RIGID REMOVAL FLEXIBLE REPLACEMENT (FLANGE BEAM JOINTS), 2000 SQ YD

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IAH-680

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D TO THE LANES OF TRAVEL AND SCD BP-1.2 RENCE (SEE RAGES 50-50 FOR SCD BP-1-2). OR FLANGE BEAM SIZING, CONCRETE ETE REINFORCEMENT. mmmmm

QUANTITY HAS BEEN CARRIED

ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR (441) (LONGITUDINAL)	LINI
A QUANTITY OF THIS ITEM SHALL BE PROVIDED FOR USE	ARE
AS DIRECTED BY THE ENGINEER. THE ITEM SHALL CONSIST	OF I
OF REPAIRING EXISTING LOCATIONS EXHIBITING SURFACE	DRA
DETERIORATION AND PLACING ITEM 441 ASPHALT CONCRETE,	ARE
TYPE 2. THE ASPHALT CONCRETE SHALL BE COMPACTED WITH	ENT
A TYPE I PNEUMATIC TIRE ROLLER AND A STEEL WHEEL	BY 1
ROLLER AS PER 401.13. IT IS NOT THE INTENT TO	WIL
REPAIR EVERY DETERIORATED AREA WITHIN THE PROJECT.	OTH
PAVEMENT REPAIRS WILL BE MARKED IN THE FIELD BY THE	
PROJECT ENGINEER ACCORDING TO CMS 251.02. MINIMUM	GRA
WIDTH IS 2'. UNI ESS OTHERWISE DIRECTED BY THE	MA
FNGINFER. THIS ITEM SHALL BE PERFORMED AFTER THE	GRA
COMPLETION OF MAINLINE PAVEMENT PLANING AND PRIOR	DEN
TO THE PLACEMENT OF ASPHALT ON THE MILLED SURFACE	MU
PAYMENT SHALL BE BASED ON THE ACTUAL NUMBER OF	RF
SQUARE YARDS OF PAVEMENT REPAIR.	OFF
	CEE
THE CONTRACTOR MAT PERFORM OF TO 75% OF THE PARTIAL DEPTH	
PAVEINIENT REPAIRS PRIOR TO OCTOBER 30, 2023 BEFORE MAINLINE PAVEINIENT	PER
PLANING OPERATIONS CONTINIENCE AS DIRECTED BY THE PROJECT	INC
	— a THF
THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED	INC
TO THE GENERAL SUMMARY:	ASI
251. PARTIAL DEPTH PAVEMENT REPAIR (441) (LONGITUDINAL), 7200 SO. YD.	/ 10 2
	ΔΠ
	REI
ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR (441) (TRANSVERSE)	ITEN
A OLIANTITY OF THIS ITEM SHALL BE PROVIDED FOR LISE	20
AS DIRECTED BY THE ENGINEER THE ITEM SHALL CONSIST	65
OF REPAIRING EXISTING LOCATIONS EXHIBITING SUBFACE	65
DETERIORATION AND DIACING ITEM AA1 ASPHAIT CONCRETE	65
TYDE 2 THE ASPHALT CONCRETE SHALL BE COMPACTED WITH	65
A TYDE I DNELINAATIC TIDE DOLLED AND A STEEL MUHEEL	02
POLLED AS DED 401 12 IT IS NOT THE INTENT TO	
ROLLER AS PER 401.13. IT IS NOT THE INTENT TO	ITEI
REPAIR EVERT DETERIORATED AREA WITHIN THE PROJECT.	<i>  E </i>
PAVEIVIENT REPAIRS WILL BE WARKED IN THE FIELD BY THE	<b>T</b> 110
PROJECT ENGINEER ACCORDING TO CIVIS 251.02. MIINIMUM	
WIDTH IS 2. UNLESS OTHERWISE DIRECTED BY THE	SHA
ENGINEER, THIS TIEM SHALL BE PERFORMED AFTER THE	ARE
COMPLETION OF MAINLINE PAVEMENT PLANING AND PRIOR	
TO THE PLACEMENT OF ASPHALT ON THE MILLED SURFACE.	HAS
PAYMENT SHALL BE BASED ON THE ACTUAL NUMBER OF	30
SQUARE YARDS OF PAVEMENT REPAIR.	
I THE CONVERSE INTO A CONTRACT OF THE PARTIAL DEPTH	1
PAVEIVIENT KEPAIKS PRIOK TO OCTOBER 30, 2023 BEFORE MAINLINE PAVEMENT	
PLAINING OPERATIONS CONNINENCE AS DIRECTED BY THE PROJECT	
ENGINEEK.	
THE FOLLOWING ESTIMATED OLIANITITY HAS REEN CARRIED	
TO THE GENERAL SUMMARY:	
251, PARTIAL DEPTH PAVEMENT REPAIR (441) (TRANSVERSE), 800 SQ. YD.	

#### ITEM 203 - EXCAVATION (FOR PAVEMENT REPAIR)

THIS ITEM OF WORK SHALL CONSIST OF REMOVING AND DISPOSING OF ALL UNSUITABLE MATERIAL BY EXCAVATING THE EXISTING SUBGRADE AND SUBBASE TO AN AVERAGE DEPTH OF 6 INCHES OR AS DIRECTED BY THE ENGINEER. EXACT LIMITS OF REMOVAL SHALL BE DETERMINED BY THE ENGINEER. ALL EQUIPMENT, LABOR, TOOLS, AND INCIDENTALS NECESSARY TO COMPLETE THIS ITEM SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 203 EXCAVATION (FOR PAVEMENT REPAIR). THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY: 203, EXCAVATION (FOR PAVEMENT REPAIR), 1500 CU YD

#### EAR GRADING

EAS WHERE THE SHOULDER IS HIGHER THAN THE EDGE PAVEMENT WILL BE GRADED TO PROVIDE POSITIVE AINAGE. THIS WORK WILL ONLY BE PERFORMED IN EAS NECESSARY AND WILL NOT BE PERFORMED ON THE TIRE PROJECT. AREAS FOR THE WORK WILL BE MARKED THE PROJECT ENGINEER. UNDER NO CIRCUMSTANCES LL THIS WORK BE PERFORMED CONCURRENTLY WITH ANY HER OPERATION.

ADING WILL BE ACCOMPLISHED BY THE REMOVAL OF ATERIAL TO PROVIDE A 0.08 POSITIVE SLOPE. THE ADED AREAS WILL BE COMPACTED TO A SUFFICIENT NSITY TO PREVENT EROSION UNTIL SEEDING AND JLCHING IS PERFORMED. ALL EXCESS MATERIAL WILL REMOVED FROM THE BERMS AND WILL BE DISPOSED OF F THE PROJECT BY THE CONTRACTOR.

EDING AND MUCHING. FERTILIZER AND LIME WILL BE RFORMED WITHIN A PERIOD NOT TO EXCEED 10 DAYS AFTER E LINEAR GRADING.

added

QUANTITY OF ITEM 209 IS NOT PERMITED TO BE CREASED. REDUCTIONS IN QUANTITIES ARE PERMITTED DETERMINED BY THE PROJECT ENGINEER.

MATERIALS, LABOR, EQUIPMENT, TOOLS, AND CIDENTALS NECESSARY TO COMPLETE THIS WORK WILL INCLUDED IN THE UNIT PRICE FOR THE PERTINENT BID M. THE FOLLOWING QUANTITIES HAVE BEEN CARRIED THE GENERAL SUMMARY: 09, LINEAR GRADING, 810 STA. 59. SEEDING AND MULCHING, 22500 SQ YD 59, COMMERCIAL FERTILIZER, 3.04 TON 59, LIME, 4.68 ACRES

59, WATER, 121.5 M. GAL.

#### M 304 - AGGREGATE BASE (FOR PAVEMENT REPAIR)

E FOLLOWING ESTIMATED QUANTITY HAS BEEN PROVIDED AND ALL BE USED AS DIRECTED BY THE ENGINEER TO BACKFILL EAS WHICH WERE EXCAVATED UNDER ITEM 203 EXCAVATION DR PAVEMENT REPAIR). THE FOLLOWING ESTIMATEDQUANTITY AS BEEN CARRIED TO THE GENERAL SUMMARY; 04, AGGREGATE BASE (FOR PAVEMENT REPAIR), 1500 CU YD

adjusted quantity

— added

NOTES ENERAL ר)

ESIGN AGENCY



DESIGNER											
MRS											
REVIEWER											
MJA 04-24-23											
PROJECT ID											
PROJECT ID	)										
PROJECT ID	) 883										
PROJECT ID 103 SHEET	883 TOTAL										

#### 442 ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (447), *PWL, 2024, AS PER PLAN (PG70-22M)*

ALL REQUIREMENTS OF C&MS ITEM 442 APPLY EXCEPT AS SHOWN. MAT DENSITY ACCEPTANCE - FOLLOW THE REQUIREMENTS OF 447 MAT DENSITY ACCEPTANCE, EXCEPT AS MODIFIED BELOW. OBTAIN 6-INCH DIAMETER CORES FOR EACH LOT. THE PWL CALCULATOR, LOCATED ON THE ODOT WEBSITE AT THE OFFICE OF CONSTRUCTION ADMINISTRATION, WILL BE USED TO DETERMINE THE LOT PWL AND THE LOT AASHTO PAY FACTORS. THE DEPARTMENT WILL DETERMINE THE PAY FACTOR FOR EACH LOT CORED BY THE FOLLOWING TABLE.

Lower Specification Limit	Pay Factor Criteria	Pay Factor (PF)
	If AVE density is $\ge$ 93% AND PWL $\ge$ 80	PF =1 or AASHTO PF whichever is greater
92.60%	lf 80 > PWL > 50	AASHTO PF
	If PWL ≤ 50	REMOVE AND REPLACE

#### ITEM 448 - ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE A, (448), AS PER PLAN

703.05 DO NOT USE COARSE AGGREGATE FROM A SOURCE DESIGNATED 'SR' OR 'SRH' ACCORDING TO THE OFFICE OF MATERIALS MANAGEMENT (OMM) IN ANY JOB MIX FORMULA (JMF) FOR THIS ITEM.

added —

#### ITEM SPECIAL - VERTICAL CLEARANCE

AFTER ALL CONSTRUCTION HAS BEEN COMPLETED, A REGISTERED SURVEYOR WILL TAKE VERTICAL CLEARANCE MEASUREMENTS AT LOCATIONS INDICATED ON THE APPROVED ODOT FORM (AVAILABLE IN THE DISTRICT 4 STRUCTURES AND PAVEMENT OFFICE). THE FINAL MEASUREMENTS SHALL BE RECORDED ON THE FORM AND SUBMITTED TO THE PROJECT ENGINEER AND THE DISTRICT 4 STRUCTURES AND PAVEMENT ENGINEER. THE RECORD SHALL BEAR THE SEAL OF THE LECENSED SURVEYOR WHO HAS TAKEN THE MEASUREMENTS. THIS WORK SHALL BE PERFORMED AT THE FOLLOWING STRUCTURES:

MAH-680-0817 MAH-680-0837 MAH-680-0990 MAH-680-1180

THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:

SPECIAL, VERTICAL CLEARANCE, 4 EACH

#### ITEM 408 - PRIME COAT, AS PER PLAN

APPLY "MC-70" AT A RATE OF 0.4 GALLONS PER SQUARE YARD, OR AS DETERMINED BY THE ENGINEER, TO THE COMPLETED COMPACTED AGGREGATE SHOULDER.

removed full depth rigid repairs

#### **PAVEMENT PLANING UNDER OVERHEAD BRIDGES (I-680)**

THE PAVEMENT PLANING UNDER OVERHEAD BRIDGES SHALL BE INCREASED TO 1.5" AT A RATE AS SHOWN IN STANDARD CONSTRUCTION DRAWING BP-3.1. PAYMENT FOR THIS WORK HAS BEEN CARRIED OVER TO THE GENERAL SUMMARY AS ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE PAVEMENT (T = 1.5").

#### INLET ADJUSTED TO GRADE (SLM 7.37 TO 9.40)

AN ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR ADJUSTING INLETS TO GRADE.

EXISTING CASTINGS MAY PROVE TO BE UNSUITABLE FOR REUSE, AS DETERMINED BY THE ENGINEER. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE THE CASTINGS OF REQUIRED TYPE, SIZE AND STRENGTH. ENSURE ALL MATERIAL MEETS CMS ITEM 611 AND HAS PRIOR APPROVAL OF THE ENGINEER.

ITEM 611 – INLET ADJUSTED TO GRADE, 6 EACH ITEM SPECIAL – MISCELLANEOUS METAL, 600 LB

INLET RECONSTRUCTED TO GRADE (SLM 7.37 TO 9.40)

AN ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR RECONSTRUCTING INLETS TO GRADE.

EXISTING CASTINGS MAY PROVE TO BE UNSUITABLE FOR REUSE, AS DETERMINED BY THE ENGINEER. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE THE CASTINGS OF REQUIRED TYPE, SIZE AND STRENGTH. ENSURE ALL MATERIAL MEETS CMS ITEM 611 AND HAS PRIOR APPROVAL OF THE ENGINEER.

ITEM 611 – INLET RECONSTRUCTED TO GRADE, 9 EACH ITEM SPECIAL – MISCELLANEOUS METAL, 900 LB

#### ITEM 617 - COMPACTED AGGREGATE, AS PER PLAN

IN LOW SHOULDER AREAS EXCEEDING 1", AND ADJACENT TO THE SAFETY EDGE. OR AS DIRECTED BY THE ENGINEER. RECYCLED ASPHALT PAVEMENT (RAP) SHALL BE USED IN AREAS ADJACENT TO THE PAVED BERM. THE RAP SHALL HAVE A MINIMUM PG CONTENT OF 4.5% AND MEET THE FOLLOWING GRADATION. ONCE THE STOCKPILE MEETS THE GRADATION, THE PG CONTENT OF THE RAP SHALL BE DETERMINED PER 441.03. THE RAP ANALYSIS MUST BE SUBMITTED TO THE ENGINEER FOR APPROVAL 2 WEEKS PRIOR TO USE. METHOD OF MEASUREMENT SHALL BE AS PER 617.06. PLACEMENT AND COMPACTION SHALL MEET THE REQUIREMENTS OF ITEM 617. ALL MATERIALS, LABOR, EQUIPMENT, TOOLS AND INCIDENTALS NECESSARY TO COMPLETE THE WORK SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 617 COMPACTED AGGREGATE, AS PER PLAN.

#### MODIFIED GRADATION SHALL APPLY:

SIEVE	TOTAL PERCENT F
1- 1/2"	100
3/4"	50-100
NO. 4	35-70
NO. 30	9-33
NO. 200	0-13

 $\mathbf{M}$ IAH-680 Σ

38.29

DATE

PASSING

#### **ITEM SPECIAL - AS-BUILT CONSTRUCTION RECORD DRAWINGS**

PRIOR TO FINAL ACCEPTANCE OF THE WORK. THE CONTRACTOR SHALL FURNISH THE DEPARTMENT FORMAL AS-BUILT CONSTRUCTION RECORD-DRAWING PLANS. THE FORMAL AS-BUILT CONSTRUCTION RECORD-DRAWING SHALL INCLUDE ALL RED-LINED CHANGES. RED-LINE CHANGE SHALL BE DENOTED UTILIZING CLOUDING IN MICROSTATION (OR OTHER CAD SOFTWARE) OR CLOUDING IN PDF EDITING SOFTWARE. THE AS-BUILT CONSTRUCTION RECORD-DRAWING SHALL HAVE A SIGNED VERIFICATION ON THE TITLE SHEET FROM THE CONTRACTOR INDICATING THAT ALL RED-LINED AND FIELD CHANGES HAVE BEEN INCORPORATED INTO AS-BUILT CONSTRUCTION RECORD-DRAWINGS.

THE CONTRACTOR'S VERIFICATION STATEMENT INDICATES ALL KNOWN FIELD MODIFICATIONS MADE HAVE BEEN INCLUDED IN THE FORMAL RECORD-DRAWING. THE CONTRACTOR'S VERIFICATION STATEMENT SHALL BE SIGNED BY THE CONTRACTOR'S PROJECT MANAGER (OR ACCEPTABLE REPRESENTATIVE)

IN ADDITION TO THE INFORMATION SHOWN ON THE CONSTRUCTION PLANS. THE AS-BUILT CONSTRUCTION RECORD-DRAWINGS SHALL SHOW THE FOLLOWING:

- 1. ALL DEVIATIONS FROM THE ORIGINAL APPROVED CONSTRUCTION PLANS WHICH RESULT IN A CHANGE OF LOCATION, MATERIAL TYPE OR SIZE OF WORK.
- 2. ANY UTILITIES, PIPES, WELLHEADS, ABANDONED PAVEMENTS, FOUNDATIONS OR OTHER MAJOR OBSTRUCTIONS DISCOVERED AND REMAINING IN PLACE WHICH ARE NOT SHOWN, OR DO NOT CONFORM TO LOCATIONS OR DEPTHS SHOWN IN THE PLANS. UNDERGROUND FEATURES SHALL BE SHOWN AND LABELED ON THE RECORD-DRAWING PLAN IN TERMS OF STATION, OFFSET AND ELEVATION.
- 3. THE FINAL OPTION AND SPECIFICATION NUMBER SELECTED FOR THOSE ITEMS WHICH ALLOW SEVERAL MATERIAL OPTIONS UNDER THE SPECIFICATION (E.G., CONDUIT).
- 4. CHANGES TO THE PAY ITEMS AND FINAL QUANTITIES AS PAID SHALL BE SHOWN ON THE GENERAL SUMMARY AND SUBSUMMARIES.
- 5. ADDITIONAL PLAN SHEETS MAY BE NEEDED IF NECESSARY TO SHOW WORK NOT INCLUDED IN THE CONSTRUCTION PLANS. IF ADDITIONAL PLAN SHEETS ARE NEEDED, THEY ARE REQUIRED TO BE PREPARED IN CONFORMANCE WITH THE LOCATION AND DESIGN MANUAL, VOLUME 3, SECTION 1200 - PLAN PREPARATION.

NOTATION SHALL ALSO BE MADE OF LOCATIONS AND THE EXTENT OF USE OF MATERIALS, OTHER THAN SOIL, FOR EMBANKMENT CONSTRUCTION (ROCK, BROKEN CONCRETE WITHOUT REINFORCING STEEL,

THE PLAN INDEX SHALL SHOW THE PLAN SHEETS WHICH HAVE CHANGES APPEARING ON THEM.

TWO COPIES OF THE AS-BUILT CONSTRUCTION RECORD-DRAWINGS SHALL BE DELIVERED TO THE PROJECT ENGINEER FOR APPROVAL UPON COMPLETION OF THE PHYSICAL WORK BUT PRIOR TO THE REQUEST FOR FINAL PAYMENT. AFTER THE DEPARTMENT HAS APPROVED THE AS-BUILT CONSTRUCTION RECORD-DRAWINGS, THE ASSOCIATED ELECTRONIC FILES SHALL BE DELIVERED TO THE DISTRICT CAPITAL PROGRAMS ADMINISTRATOR. ACCEPTANCE OF THESE PLANS AND DELIVERY OF THE ASSOCIATED ELECTRONIC FILES IS REQUIRED PRIOR TO THE WORK BEING ACCEPTED AND THE FINAL ESTIMATE APPROVED.

PAYMENT FOR ALL THE ABOVE SHALL BE LUMP SUM UPON PROPER EXECUTION OF ALL WORK OF THIS ITEM AS DETERMINED BY THE **PROJECT ENGINEER.** 

removed "442 ASPHALT CONCRETE SURFACE COURSE, 12.55MM, TYPE A (446), PWL, 2024, AS PER PLAN" note

ESIGN AGENCY



REVIEWER MJA 04-24-23 ROJECT ID 103883 HEET TOTAL P.5 P.35

				SHEE	T NUM.						PA	RT.		ITEM	GRAND		
			4	5	6	14	16	17	19		01/IMS/05	02/IMS/47		EXT	TOTAL		adjusted quantities
			1 500								1 500	$\sim$	203	10000	1 500	CV	
			810								810	h	203	60200	810	USTAU	LINEAR GRADING
					2,240						2,240		622	41100	2,240	FT	PORTABLE BARRIER, UNANCHORED
				4							4		SPECIAL	69098000	4	EACH	VERTICAL CLEARANCE
			22,500								22,500		659	10000	22,500	SY	SEEDING AND MULCHING
			3.04								3.04		659	20000	3.04	TON	
			4.68								4.68		659	31000	4.68		
			121.5								5 000		832	30000	5 000	FACH	FROSION CONTROL
											0,000						
				6							6		611	99150	6	EACH	INLET ADJUSTED TO GRADE
				9							9		611	99154	9	EACH	INLET RECONSTRUCTED TO GRADE
				1,500							1,500		SPECIAL	61199820	1,500	LB	MISCELLANEOUS METAL
			7 000								7 200		054	04000	7 000	<u>ov</u>	
			1,200 200								1,200 200		201	01000	1,200 200	01 QV	PARTIAL DEFTIN FAVEIVIENT REPAIK (441) (LUNGITU PARTIAL DEPTH DAVEMENT DEDAID (441) (TDANGVE
			2 000								2 000		252	01000	2 000	SV	FULL DEPTH RIGID PAVEMENT REMOVAL AND FLEX
			7 000								7 000		253	01000	7 000	SY	PAVEMENT REPAIR (OUTSIDE SHOULDER REPAIR)
			7,000				1.135				1.135		254	01000	1,135	SY	PAVEMENT PLANING. ASPHALT CONCRETE (T = 1.5"
							.,			(	~~~~~	m		~~~~~~	$\sim$		
							227,296	85,447		5	312,743		254	01000	312,743	SY	PAVEMENT PLANING, ASPHALT CONCRETE (T=1")
							54,384			Ś	54,384		254	01000	54,384	SY	PAVEMENT PLANING, ASPHALT CONCRETE (T=2")
			1,500							٢	1,500		304	20000	1,500	CY	AGGREGATE BASE (FOR PAVEMENT REPAIR)
							22,535	6,836			29,371		407	20000	29,371	GAL	NON-TRACKING TACK COAT
							6,811	4,728		<b>\</b>	11,539		408	10001	11,539	GAL	PRIME COAT, AS PER PLAN
							0.450	0.000			44.400		140	00400	44.400		
							8,158	2,962		<u> </u>	11,120		442	10221	11,120	CY CY	ANTI-SEGREGATION EQUIPMENT
							3,471	3,301			3 777		442	20001	3 777		ASPHALT CONCRETE SURFACE COURSE 12.5 MM
c							946	657		<u>ح</u>	1 603		617	10100	1 603		
)1.dg							19				19		618	40600	19	MILE	RUMBLE STRIPS, SHOULDER (ASPHALT CONCRETE
3600										X	uiu	ιιι	tiin	min	min	·····	himitin
383_0									46.26		46.26		850	10010	46.26	MILE	GROOVING FOR 6" RECESSED PAVEMENT MARKING
1038									5,725		5,725		850	10110	5,725	FT	GROOVING FOR 6" RECESSED PAVEMENT MARKING
leets									14,158		14,158		850	10130	14,158	FT	GROOVING FOR 12" RECESSED PAVEMENT MARKIN
ay/Sh									0.5		0.5		850	20010	0.5	MILE	GROOVING FOR 6" RECESSED PAVEMENT MARKING
adwa									302		302		850	20130	302	FT	GROOVING FOR 12" RECESSED PAVEMENT MARKIN
lg/Rc							04.470				04.470		075	40000	04.470		
Jeerir							24,473			<del>\</del>	24,473		875	10000	24,473		LONGITUDINAL JOINT ADHESIVE (1LB/2FT) (OUTSID
Engir																	1
/400-							1,560				1,560		621	00100	1,560	EACH	RPM
3883							1,248				1,248		621	54000	1,248	EACH	RAISED PAVEMENT MARKER REMOVED
drasi ng/10												421	630	02100	421	FT	GROUND MOUNTED SUPPORT, NO. 2 POST
mano												78	630	80100	78	SF	SIGN, FLAT SHEET
SER: 4\Ma												37	630	80100	37	SF	SIGN, FLAT SHEET, 730.20
M US trict 0																	
37 PI s\Dist												31	630	84900	31	EACH	REMOVAL OF GROUND MOUNTED SIGN AND DISPO
2.42 ojects						100					102	31	630	86002	31		REMOVAL OF GROUND MOUNTED POST SUPPORT
ÀE: : è Pro						100					103		646	20300	103		
23 TI Activ						14					14		646	20320	14	FACH	WRONG WAY ARROW
0/20ź ts\01																	
:: 7/2 Imen		1					1		26		26		807	12010	26	MILE	WET REFLECTIVE EPOXY PAVEMENT MARKING, ED
DATE									20.76		20.76		807	12110	20.76	MILE	WET REFLECTIVE EPOXY PAVEMENT MARKING, LAN
ן (.ר 1~02/									14,460		14,460		807	12310	14,460	FT	WET REFLECTIVE EPOXY PAVEMENT MARKING, CH
22 (ir Jot-pv									5,725		5,725		807	12410	5,725	FT	WET REFLECTIVE EPOXY PAVEMENT MARKING, DO
34x ohioc																	
(SIZE																	
APEF intley																	
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DESCRIPTION	SHEET NO.	
removed full depth rigid repairs and		
full depth		
ROADWAY		
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DRAINAGE		
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RSE)		R
BLE REPLACEMENT (FLANGE BEAM JOINTS)		<b>     </b>
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[YPEA[447], PVI[2024, AS PER PLAN (I=1.5")]	5	
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G, (ASPHALT)		
G, (ASPHALT) changed asphalt type		
G, (ASPHALT) G (CONCRETE)		
G. (CONCRETE)		
E SHOULDERS)		
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RAFFIC CONTROL		
SAL		
AND DISPOSAL		
		DESIGN AGENCY
GE LINE, 6"		
IE LINE, 6"		
ANNELIZING LINE, 12"		
I I ED LINE, 6"		1
	-	DESIGNER
		CMR
		REVIEWER MIA 04-24-23
		PROJECT ID
		103883
		SHEET TOTAL
	1	T.JJ T.JJ



MAH-680-7.31

Sh 170 (SM 200)         Sign 2001 (SM 200)         Sign 2001				1		1 1		1 1	1	, , , , , , , , , , , , , , , , , , , ,		>
SLM 6.23 HI 101000 SLM 5.28 HI 101000 HI 1010000 HI 101000 HI 1010000 HI 1010000 HI 101000 HI 101000 HI 101000 HI 101000 HI 101000 H	>>> >>>		SUSPEND PA			RIOT			OMARAVE			
Number Side offers         Number Side offers           SM 578         Side offers	N AVE		SLM 9.23 STRUCTURE		SPRING	E S	LS HIZI				COUNTRY	HAMIL TON
BCCSUME PAINNE         Status           Status         Status           Statu		N AVE	/AH-680-092	21 1	AVE		COMO	$\sum_{i=1}^{n}$				
SM 1/0         SUBJECT         THE INFORMATION OF SUBJECT         SUBJE		F	RESUME PAN SLM 9.28	/ING	WHI		30		MANOF	NOOT NOOT		
Image: state provide	HETCH					RMA AVE RMAAVE			<u>IINGATERD</u>			EDGEWATER
SR 700 CRCOSS @ SLU # 22         THL 60 APE TRUCTURES         TRUCTURES TRUCTURES           4         254         407         408         442         442         667         618         575         224           4         254         407         408         442         442         667         618         575         224           4         254         407         408         442         442         667         618         575         224           1000         258         570         124         492         667         618         575         224           1100         100         25.57         124         129         129         129         129         129         129         129         129         129         129         129         129         129         129         149         141         142         143         143 <td>INTVIEM VE</td> <td>T JONIZE Y</td> <td></td> <td></td> <td>SHERIDAN</td> <td></td> <td>SHANTER BR</td> <td>EBROO</td> <td>2</td> <td>8</td> <td>AVE</td> <td></td>	INTVIEM VE	T JONIZE Y			SHERIDAN		SHANTER BR	EBROO	2	8	AVE	
SIGSTEDD THINNES SIGNET BOD THIN	2  \	<u>PRETT</u>			A A A A A A A A A A A A A A A A A A A	RD	IAM-O-	НОН		MOTOS	MOODWARD	MEADOWLN
SILUEREND PAI/WRG SLM 10.73           SR 170 CROSS & SLM 4.28         THALLA AVE CROSS & SLM 4.28           TRALLA AVE CROSS & SLM 4.28         THALLA AVE CROSS & SLM 4.28           TRALLA AVE CROSS & SLM 4.28         THALLA AVE CROSS & SLM 4.28           TRALLA AVE CROSS & SLM 4.28         THALLA AVE CROSS & SLM 4.28           TRALLA AVE CROSS & SLM 4.28         THALLA AVE CROSS & SLM 4.28           TRALLA AVE CROSS & SLM 4.28         THALLA AVE CROSS & SLM 4.28           TRALLA AVE CROSS & SLM 4.28         THALLA AVE CROSS & SLM 4.28           TRALLA AVE CROSS & SLM 4.28         THALLA AVE CROSS & SLM 4.28         THALLA AVE CROSS & SLM 4.28           TRALLA AVE CROSS & SLM 4.28         THALLA AVE CROSS & SLM 4.28         THALLA AVE CROSS & SLM 4.28         THALLA AVE CROSS & SLM 4.28           TRALLA AVE CROSS & SLM 4.28         THALLA AVE CROSS & SLM 4.28         THALLA AVE CROSS & SLM 4.28         THALLA AVE CROSS & SLM 4.28           TRALLA AVE CROSS & SLM 4.28         THALLA AVE CROSS & SLM 4.28           TRALLA AVE CROSS & SLM 4.28         THALLA AVE CROSS & SLM 4.28         THALA AVE CROSS & SLM 4.28         THALA AVE CROSS & SLM 4.28         THALA AVE CROSS & SLM 4.28         TH		HIESSI H	LEMPYNE					HERIDAN				
Shift and 25           Shift and 25 </td <td><math>\overline{\langle}</math></td> <td></td> <td>E E</td> <td><math>\uparrow</math></td> <td>AVE</td> <td></td> <td>NE</td> <td></td> <td>AWN AVE</td> <td>SUSPER</td> <td>ND PAVING</td> <td></td>	$\overline{\langle}$		E E	$\uparrow$	AVE		NE		AWN AVE	SUSPER	ND PAVING	
Stratuctory         Stratuctory         Stratuctory           Stratuctory         Stratuctory         Stratuctory         Stratuctory           A         254         407         408         442         442         442         617         618         875         254           H         Stratuctory         Stratuctory <td< td=""><td></td><td>7</td><td>AECONNLE BROWNLE</td><td>NCROFT</td><td>INCODE</td><td>Kologia katalan kata</td><td>EMOYNE</td><td>HIBERT C</td><td></td><td>SLM 10.</td><td>75</td><td>~l</td></td<>		7	AECONNLE BROWNLE	NCROFT	INCODE	Kologia katalan kata	EMOYNE	HIBERT C		SLM 10.	75	~l
SR 170 CROSS @ SLM 9.25         THALLA AVE SLM 19.25         THALLA	TITUTE			BL MEAL	ТНИТИ	SEOL	NO AVE		MOYNEAVE	STRUCT MAH-68	TURES: 0-1073L	A A
Sim 1770 CROSS 65 SLM 9.25         SLM 10.78         SLM 10.78           4         254         407         408         442         617         613         875         254           4         254         407         408         442         647         613         875         254           1000 200 D PM 50         15         16         15         15         15         15         15         15         15         16         15         16         16									/	RESUM	E PAVING	OHNSTG
CrOSS @ SLM 9.25         Cross @ SLM 9.25           4         254         407         408         442         442         617         618         875         254           4         254         407         408         442         442         617         618         875         254           4         254         407         408         442         442         617         618         875         254           1         1000 DF         1000 DF <td></td> <td>/</td> <td></td> <td>AVE</td> <td></td> <td></td> <td></td> <td>S S S S S S S S S S S S S S S S S S S</td> <td></td> <td>SLM 10.</td> <td>79</td> <td></td>		/		AVE				S S S S S S S S S S S S S S S S S S S		SLM 10.	79	
Image: application of the second se	CRO	SS @ SLM 9	9.25	A ELOOMBROO		5 7			$\sim$			
A         254         007         408         442         442         617         618         975         254           4         254         407         408         442         442         617         618         975         254           4         254         407         408         442         442         617         618         975         254           4         124         57         124         125         442         617         618         975         254           11         129<	/	5		ALE IN	THALIA	AVE				IGHTNER PL	ADOWLN	TARACT
A         254         407         408         442         442         617         618         875         254           4         254         407         408         442         442         617         618         875         254           4         254         407         408         442         442         617         618         875         254           4         254         407         408         442         444         442         617         618         875         254           4         254         407         408         617         618         875         254         11         11         115         110         110         110         111         115         110         110         111         115         110         111         115         110         110         111         115         110         111         115         110         110         111         111         111         111         111         111         111         111         111         111         111         111         111         111         111         111         111         1111         111         111         111 </td <td>SIMO</td> <td>WAYPORI</td> <td><math>\bigcirc</math> –</td> <td>230</td> <td></td> <td></td> <td><u>'</u></td> <td></td> <td></td> <td></td> <td>WE</td> <td></td>	SIMO	WAYPORI	$\bigcirc$ –	230			<u>'</u>				WE	
4         254         407         408         442         442         617         618         875         254           4         254         407         408         442         442         617         618         875         254           4         254         407         408         442         442         617         618         875         254           900         98         97         10         11         100         11         100         11         100         11         100         11         100         11         100         11         100         11         100         11         100         11         100         11         100         11         100         11         100         11         100         11         100         11         100         11         100         11         100         100         11         100         100         11         100         100         11         100         100         11         100         100         11         100         100         11         100         100         100         100         100         100         100         100         100<	AREMA		RD							/	20W LN	
4         254         407         408         442         442         442         617         618         875         254           L         107         408         442         442         617         618         875         254           L         107         657         107         618         875         254         107           L         107         108         975         11				$\langle$			changed asph	alt type 🖉 🚔	$\overline{}$		MEAL	
4         254         407         408         442         442         617         518         875         254           L         1						-	ROBINWOOD LM	EVAN	IS AVE	ALL AVE		
4         254         407         408         442         442         442         617         618         875         254           Lin         US         VS					FI	$\longrightarrow$				ENRIDGE	C	
4         254         407         408         442         442         442         617         618         875         254           I					THE REPORT	NST			ST			1
BED         SY         GS         T         L         SY         GS         T         L         SY         GS         T         L         SY         GS         SY         GAL         GY         GS         SY         GAL         GY         GS         SY         GAL         GY         GA         GAL         GY         GY         GAL         GY         GA         GAL         GY         GY         GA         GAL         GY         GY         GA         GA         GA         GA         GA         G	4	254 世	407 2	408		442	<u>لا</u> م 442	617	618	875 E	254 	
ST         SS         O         F         F         ST         ST <td></td> <td>NCRE</td> <td>GAL/S</td> <td>AL/SY</td> <td>(T=1.5</td> <td>PLAN</td> <td>DURSE , AS P</td> <td>:2")</td> <td>PHALI</td> <td>1LB/21</td> <td>NCRE</td> <td></td>		NCRE	GAL/S	AL/SY	(T=1.5	PLAN	DURSE , AS P	:2")	PHALI	1LB/21	NCRE	
Image: Constraint of the second sec			(0.08	(0.4 G	AENT	ACE CC S PER	ACE CC - 2024	TE (T=	ER (AS	SIVE (: ERS)	ALT CC	
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	<b>f</b>	ASPH/	COAT	PLAN	QUIPN	SURF/ 48), A 5")	SURF/ ), PWI =1.5")	ŝREGA	DULDF (ETE)	ADHE	ASPH/ .5")	
V         V	(T=1	IING, . (T=2	TACK	S PER	ION E	:RETE E A (4 (T=2.	RETE (447 A) (147 A) (158 A) (159 A) (	D AGG	S, SHG ONCR	OINT DE SH	IING,	
by ware         by ware <t< td=""><td></td><td>PLAN</td><td>KING</td><td>A, A</td><td>EGAT</td><td>CONC 1, TYP</td><td>CONC YPE A</td><td>ACTEI</td><td>STRIP C</td><td>NAL J DUTSI</td><td>. PLAN</td><td></td></t<>		PLAN	KING	A, A	EGAT	CONC 1, TYP	CONC YPE A	ACTEI	STRIP C	NAL J DUTSI	. PLAN	
Here         Exp         Exp <thexp< th=""> <thexp< th=""></thexp<></thexp<>		MENT	-TRAC	ME CC	-SEGR	HALT .5 MN	HALT MM, T	COMP	MBLE	ITUDI ((	MENT	
Y         GAL         GAL         CY         CY         CY         CY         MILE         LB         SY           5.00         3461.33         1522.99         276.91         519.20         240.37         649.00         38.46         1.18         1557.60		PAVEI	NON	PRIN	ANTI	ASP 12	ASP 12.5 l		RUI	LONG	PAVEI	
5.00       3461.33       1522.99       276.91       519.20       240.37       649.00       38.46       1.18       1557.60         3.70       4048.00       1728.54       323.84       607.20       281.11       731.61       44.98       1.38       1821.60       252.50         0.07       997.33       526.59       79.79       149.60       69.26       232.71       11.08       0.34       448.80	/	SY	GAL	GAL	CY	СҮ	СҮ	СҮ	MILE	LB	SY	
3.70       4048.00       1728.54       323.84       607.20       281.11       71.61       44.98       1.38       1821.60       252.50         0.07       997.33       526.59       79.79       149.60       69.26       232.71       11.08       0.34       448.80	6.00	3461.33	1522.99	276.91	519.20	240.37	649.00	38.46	1.18	1557.60	252.50	
0.00       2346.67       1032.53       187.73       352.00       162.96       440.00       26.07       0.80       1056.00	8.70 5.07	4048.00 997.33	1728.54 526.59	323.84 79.79	149.60	69.26	232.71	44.98	0.34	448.80	252.50	
1.17       101.01       111.10       101.00	0.00	2346.67 762 67	1032.53 323 37	187.73 61.01	352.00 114 40	162.96 52.96	440.00	26.07 8.47	0.80	1056.00 343.20		
2.67       7450.67       2972.27       1192.11       1117.60       517.41       1237.61       165.57       2.54       3352.80       100.00         3.33       6453.33       2581.33       1032.53       968.00       448.15       1075.56       143.41       2.20       2904.00	8.67	586.67	262.83	46.93	88.00	40.74	112.44	6.52	0.20	264.00		
.27       938.67       268.15       150.19       140.80       65.19       100.55       20.86       0.32       422.40       215.00         9.20       3344.00       1417.86       267.52       501.60       232.22       599.13       37.16       1.14       1504.80       53.37         3050.67       1273.28       244.05       457.60       211.85       536.06       33.90       1.04       1372.80       252.50         8.00       2816.00       1464.32       225.28       422.40       195.56       645.33       31.29       0.96       1267.20       55.70         .67       1466.67       621.87       117.33       220.00       101.85       262.78       16.30       0.50       660.00       53.33         .47       762.67       323.37       61.01       114.40       52.96       136.64       8.47       0.26       343.20       586.67         .33       586.67       267.52       93.87       88.00       40.74       114.89       13.04       0.20       264.00       53.33         .33       6453.33       2581.33       1032.53       968.00       448.15       1075.56       143.41       2.20       2904.00       54.00 <tr< td=""><td>2.67 3.33</td><td>7450.67 6453.33</td><td>2972.27 2581.33</td><td>1192.11 1032.53</td><td>1117.60 968.00</td><td>517.41 448.15</td><td>1237.61 1075.56</td><td>165.57 143.41</td><td>2.54</td><td>3352.80 2904.00</td><td>100.00</td><td></td></tr<>	2.67 3.33	7450.67 6453.33	2972.27 2581.33	1192.11 1032.53	1117.60 968.00	517.41 448.15	1237.61 1075.56	165.57 143.41	2.54	3352.80 2904.00	100.00	
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.33       586.67       267.52       93.87       88.00       40.74       114.89       13.04       0.20       264.00       100         8.67       7274.67       2901.87       1163.95       1091.20       505.19       1208.28       161.66       2.48       3273.60       100.00         3.33       6453.33       2581.33       1032.53       968.00       448.15       1075.56       143.41       2.20       2904.00       110.00         2.00       1584.00       464.34       253.44       237.60       110.00       175.84       35.20       0.54       712.80       215.00         5.40       54384.00       22534.35       6810.03       8157.60       3776.67       9470.64       945.84       18.54       24472.80       1135.00         296       54384       22535       6811       8158       3777       9471       946       19       24473       1135	).47	762.67	323.37	61.01	114.40	52.96	136.64	8.47	0.26	343.20		
3.33       6453.33       2581.33       1032.53       968.00       448.15       1075.56       143.41       2.20       2904.00         2.0       1584.00       464.34       253.44       237.60       110.00       175.84       35.20       0.54       712.80       215.00         5.40       54384.00       22534.35       6810.03       8157.60       3776.67       9470.64       945.84       18.54       24472.80       1135.00         296       54384       22535       6811       8158       3777       9471       946       19       24473       1135	.33 8.67	586.67 7274.67	267.52 2901.87	93.87	88.00 1091.20	40.74 505.19	114.89	13.04 161.66	0.20 2.48	264.00 3273.60	100.00	
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#### **DESIGN SPECIFICATIONS**

THIS STRUCTURE CONFORMS TO THE "LRFD BRIDGE DESIGN SPECIFICATIONS" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS. 17TH EDITION. INCLUDING THE 2012 INTERIM SPECIFICATIONS AND THE ODOT BRIDGE DESIGN MANUAL, 2019.

#### EXISTING STRUCTURE VERIFICATION

EXISTING STRUCTURE VERIFICATION: DETAILS AND DIMENSIONS SHOWN ON THESE PLANS PERTAINING TO THE EXISTING STRUC-TURE HAVE BEEN OBTAINED FROM PLANS OF THE EXISTING STRUCTURE AND FROM FIELD OBSERVATIONS AND MEASURE-MENTS. CONSEQUENTLY, THEY ARE INDICATIVE OF THE EXIST-ING STRUCTURE AND THE PROPOSED WORK BUT THEY SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. THE CONTRACTOR IS REFERRED TO CMS SECTIONS 102.05, 105.02 AND 513.04.

BASE CONTRACT BID PRICES UPON A RECOGNITION OF THE UNCERTAINTIES DESCRIBED ABOVE AND UPON A PREBID EXAM-INATION OF THE EXISTING STRUCTURE. HOWEVER, THE DE-PARTMENT WILL PAY FOR ALL PROJECT WORK BASED UPON ACTUAL DETAILS AND DIMENSIONS WHICH HAVE BEEN VERIFIED IN THE FIELD.

#### **PROPOSED WORK:**

MAH-680-0791E (RAMP E OVER DEWEY AVENUE)

-PATCH ALL UNSOUND AREAS OF THE EXISTING CONCRETE WEARING SURFACE, INCLUDING THE APPROACH SLABS -REMOVAL OF FORWARD AND REAR SLIDING PLATE EXPANSION JOINTS AND REPLACE WITH ADHESIVE JOINT SEAL SYSTEM -PATCH ALL UNSOUND AREAS OF CONCRETE ABUTMENTS BACKWALLS. AND DECK UNDERSIDE. SEAL WITH EPOXY-URETHANE. USE FIBER WRAP IN REPAIRS OVER TRAFFIC

-REMOVE EXISTING SEALANT FROM ABUTMENT AND BACKWALL SURFACES AND RESEAL WITH EPOXY-URETHANE SEALER -RESET AND REFURBISH THE EXISTING ABUTMENT BEARINGS

-CLEAN OUT EXISTING SCUPPERS

-CLEARING AND GRUBBING 15' AROUND STRUCTURE TO REMOVE ALL VEGETATION

-PROVIDE NEW CORRECT STRUCTURE IDENTIFICATION SIGNS

MAH-680-0794 (OVER DEWEY AVENUE CR-533P)

-PATCH ALL UNSOUND AREAS OF THE EXISTING CONCRETE WEARING SURFACE, INCLUDING THE APPROACH SLABS -REMOVAL OF FORWARD AND REAR SLIDING PLATE EXPANSION JOINTS AND REPLACE WITH ADHESIVE JOINT SEAL SYSTEM -PATCH ALL UNSOUND AREAS OF CONCRETE ABUTMENTS BACKWALLS, AND DECK UNDERSIDE, SEAL WITH EPOXY-URETHANE. USE FIBER WRAP IN REPAIRS OVER TRAFFIC

-REMOVE EXISTING SEALANT FROM ABUTMENT AND BACKWALL SURFACES AND RESEAL WITH EPOXY-URETHANE SEALER -RESET AND REFURBISH THE EXISTING ABUTMENT BEARINGS -CLEAN OUT EXISTING SCUPPERS

-CLEARING AND GRUBBING 15' AROUND STRUCTURE TO REMOVE ALL VEGETATION

-PROVIDE NEW CORRECT STRUCTURE IDENTIFICATION SIGNS

#### MAH-680-0817 (UNDER INDIANOLA AVENUE CR-514)

-PATCH ALL UNSOUND AREAS OF CONCRETE PIERS AND ABUTMENTS. SEAL WITH EPOXY-URETHANE -ASPHALT PAVING TO TRANSITION THE APPROACH PAVEMENT AND APPROACH SLAB ON THE SOUTH END OF THE BRIDGE -REPLACEMENT OF PRESSURE RELIEF JOINTS PER BP-2.4 -CLEARING AND GRUBBING 15' AROUND STRUCTURE TO REMOVE ALL VEGETATION -PROVIDE NEW CORRECT STRUCTURE IDENTIFICATION SIGNS MAH-680-0837 (UNDER SHIRLEY ROAD CR-529) -PATCH ALL UNSOUND AREAS OF CONCRETE PIERS AND ABUTMENTS. SEAL WITH EPOXY-URETHANE -REPAIR WASHOUT AND EROSION AROUND PIER 1 -CLEARING AND GRUBBING 15' AROUND STRUCTURE TO REMOVE ALL VEGETATION -PROVIDE NEW CORRECT STRUCTURE IDENTIFICATION SIGNS

MAH-680-0921 (OVER SR-170 MIDLOTHIAN BLVD) ABUTMENTS. SEAL WITH EPOXY-URETHANE -REMOVE EXISTING SEALANT FROM PARAPET FACE SURFACES AND RESEAL WITH EPOXY-URETHANE SEALER -RESET AND REFURBISH THE EXISTING BEARINGS -CLEAN OUT EXISTING SCUPPERS -CLEARING AND GRUBBING 15' AROUND STRUCTURE TO REMOVE ALL VEGETATION -PROVIDE NEW CORRECT STRUCTURE IDENTIFICATION SIGNS

MAH-680-0990 (UNDER THALIA AVENUE TR-1682) -PATCH ALL UNSOUND AREAS OF CONCRETE PIERS. SEAL WITH EPOXY-URETHANE -CLEARING AND GRUBBING 15' AROUND STRUCTURE TO REMOVE ALL VEGETATION -PROVIDE NEW CORRECT STRUCTURE IDENTIFICATION SIGNS

MAH-680-1073L (OVER MATHEWS ROAD CR-102) -PATCH ALL UNSOUND AREAS OF THE EXISTING CONCRETE WEARING SURFACE. INCLUDING THE APPROACH SLABS -REMOVAL OF FORWARD AND REAR SLIDING PLATE EXPANSION JOINTS AND REPLACE WITH ADHESIVE JOINT SEAL SYSTEM -PATCH ALL UNSOUND AREAS OF CONCRETE ABUTMENTS BACKWALLS, DECK EDGES, AND DECK UNDERSIDE. SEAL WITH EPOXY-URETHANE. USE FIBER WRAP IN REPAIRS OVER TRAFFIC -REMOVE EXISTING SEALANT FROM ABUTMENT AND BACKWALL SURFACES AND RESEAL WITH EPOXY-URETHANE SEALER -RESET AND REFURBISH THE EXISTING ABUTMENT BEARINGS -CLEAN OUT EXISTING SCUPPERS -CLEARING AND GRUBBING 15' AROUND STRUCTURE TO

REMOVE ALL VEGETATION -PROVIDE NEW CORRECT STRUCTURE IDENTIFICATION SIGNS

MAH-680-1073R (OVER MATHEWS ROAD CR-102) -PATCH ALL UNSOUND AREAS OF THE EXISTING CONCRETE WEARING SURFACE. INCLUDING THE APPROACH SLABS -REMOVAL OF FORWARD AND REAR SLIDING PLATE EXPANSION JOINTS AND REPLACE WITH ADHESIVE JOINT SEAL SYSTEM -PATCH ALL UNSOUND AREAS OF CONCRETE ABUTMENTS BACKWALLS, AND DECK UNDERSIDE. SEAL WITH EPOXY-URETHANE. USE FIBER WRAP IN REPAIRS OVER TRAFFIC

-REMOVE EXISTING SEALANT FROM ABUTMENT, BACKWALL, AND INSIDE & TOP OF PARAPETS SURFACES. RESEAL WITH EPOXY-URETHANE SEALER -RESET AND REFURBISH THE EXISTING ABUTMENT BEARINGS -CLEAN OUT EXISTING SCUPPERS -CLEARING AND GRUBBING 15' AROUND STRUCTURE TO REMOVE ALL VEGETATION -PROVIDE NEW CORRECT STRUCTURE IDENTIFICATION SIGNS

 $\sim$ MAH-224-1964 (OVER MAH-680-11.80) - corrected CRS -----PATCHALL UNSOUND AREAS OF CONCRETE PIERS AND ABUTMENTS. SEAL WITH EPOXY-URETHANE -REMOVE EXISTING SEALANT FROM INSIDE & TOP OF PARAPETS SURFACES. RESEAL WITH EPOXY-URETHANE SEALER -CLEARING AND GRUBBING 15' AROUND STRUCTURE TO

REMOVE ALL VEGETATION -PROVIDE NEW CORRECT STRUCTURE IDENTIFICATION SIGNS

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-PATCH ALL UNSOUND AREAS OF CONCRETE PIERS AND

#### ITEM 201 - CLEARING AND GRUBBING. AS PER PLAN. AROUND BRIDGES/STRUCTURES/CULVERTS

ALTHOUGH NO TREES OR STUMPS ARE SPECIFICALLY MARKED FOR REMOVAL WITHIN THE PLANS, A LUMP SUM QUANTITY IS INCLUDED IN THE STRUCTURE GENERAL SUMMARY FOR ITEM 201 – CLEARING AND GRUBBING, AS PER PLAN. AROUND BRIDGES/STRUCTURES/CULVERTS. SCALPING IS NOT REQUIRED FOR THIS ITEM OF WORK. ALL VEGETATION, TREE STUMPS AND TREE REMOVAL DEBRIS. AND STANDING/ DOWNED TREES SHALL BE REMOVED WITHIN 15 FEET (OR TO THE R/W LIMITS, WHICHEVER IS CLOSER) OF THE HEADWALLS, ABUTMENTS AND/OR PIERS.

ALL OTHER PROVISIONS AS SET FORTH IN THE CMS UNDER THIS ITEM ARE INCLUDED IN THE LUMP SUM BID PRICE FOR ITEM 201 – CLEARING AND GRUBBING, AS PER PLAN, AROUND BRIDGES/STRUCTURES/CULVERTS.

#### ITEM 516 - JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN

THIS WORK CONSISTS OF RAISING OR RE-POSITIONING EXISTING STRUCTURES TO THE DIMENSIONS AND REQUIREMENTS DEFINED IN THE PROJECT PLANS. SUBMIT CONSTRUCTION PLANS IN ACCORDANCE WITH C&MS 501.05. IF, DURING THE JACKING **OPERATIONS. CRACKING OF THE CONCRETE SUPERSTRUCTURE.** SEPARATION OF THE CONCRETE DECK FROM THE STEEL STRINGERS. OR OTHER DAMAGE TO THE STRUCTURE IS VISUALLY OBSERVED, IMMEDIATELY CEASE THE JACKING OPERATION AND INSTALL SUPPORTS TO THE SATISFACTION OF THE ENGINEER. ANALYZE THE DAMAGE AND SUBMIT A METHOD OF CORRECTION TO THE ENGINEER FOR APPROVAL. EPOXY INJECT ALL BEAMS THAT SEPARATE FROM THE DECK FOR A DISTANCE OF THE SEPARATION IN ACCORDANCE WITH C&MS 512.07. THE DEPARTMENT WILL NOT PAY FOR THE COST OF THIS EPOXY INJECTION OR OTHER REQUIRED REPAIRS. THE BRIDIGE BEARINGS SHALL BE FULLY SEATED ALL CONTACT AREAS. IF FULL SEATING IS NOT ATTAINED. SUBMIT A REPAIR PLAN TO THE ENGINEER. THE DEPARTMENT WILL NOT PAY FOR THE REPAIR COSTS TO ENSURE FULL SEATING ON BEARINGS. THE DEPARTMENT WILL MEASURE THIS WORK ON A LUMP SUM BASIS. THE DEPARTMENT WILL PAY FOR THE ACCEPTED QUANTITIES AT THE CONTRACT PRICE FOR ITEM 516. JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN.

#### ITEM 516 - REFURBISHING BEARING DEVICES. AS PER PLAN

THIS ITEM SHALL INCLUDE ALL WORK NECESSARY TO PROPERLY ALIGN BRIDGE BEARINGS, AS WELL AS THEIR CLEARNING AND PAINTING. INCLUDED SHALL BE THE DISASSEMBLY OF THE BEARINGS, HAND TOOL CLEANING (GRINDING IF NECESSARY), PAINTING ACCORDING TO ITEM 514. REPLACEMENT OF ANY DAMAGED SHEET LEAD WITH PREFORMED BEARING PADS (C&MS 711.21), INSTALLATION OF ANY NECESSARY STEEL SHIMS OF THE SAME SIZE AS THE BEARINGS TO PROVIDE A SNUG FIT, REALIGNMENT O FTHE UPPER BEARING PLATE BY REMOVING EXISTING WELDS AND REWELDING SO THAT THE BEARINGS ARE VERTICALLY ALIGNED AT 60 DEGREES FARENHEIT, LUBRICATING SLIDING SURFACES. AND REASSEMBLY OF THE BEARINGS. ASSURE ALL BEARINGS ARE SHIMMED ADEQUATELY AND THAT NO BEAMS AND/OR BEARING DEVICES ARE "FLOATING". AT NO ADDITIONAL COST TO THE STATE. THE CONTRACTOR MAY INSTALL NEW BEARINGS OF THE SAME TYPE AS THE EXISTING IN PLACE OF REFURBISHING THE BEARINGS. ALL WORK SHALL BE TO THE SATIFACTION OF THE ENGINEER. PAYMENT FOR ALL OF THE ABOVE DESCRIBED LABOR AND MATERIALS WILL BE MADE AT THE CONTRACT PRICE BID FOR ITEM 516 - REFURBISH BEARING DEVICES, AS PER PLAN.

THE QUANTITIES PER STRUCTURE ARE AS FOLLOWS: SPEC, STRUCTURES: CONCRETE SPALL REMOVAL, 25 SQ YD ITEM SPECIAL - SEALING, SEALING OF CONCRETE SURFACES, 25 SQ YD ITEM SPECIAL - COMPOSITE FIBER WRAP SYSTEM. 20 SF 843. PATCHING CONCRETE STRUCTURES WITH TROWELABLE MORTAR. 20 SF

THIS ITEM SHALL INCLUDE THE ELEMENTS INDICATED IN THE PLANS AND GENERAL NOTES AND THAT ARE NOT SEPARATELY LISTED FOR PAYMENT. EXCEPT FOR WEARING COURSE REMOVAL. ITEMS TO BE REMOVED INCLUDE ALL EXISTING MATERIALS BEING REPLACED BY NEW CONSTRUCTION AND MISCELLANEOUS ITEMS THAT ARE NOT SHOWN TO BE INCORPORATED INTO THE FINAL CONSTRUCTION AND ARE DIRECTED TO BE REMOVED BY THE ENGINEER. THE USE OF EXPLOSIVES. HEADACHE BALLS AND/OR HOE-RAMS WILL NOT BE PERMITTED. THE METHOD OF REMOVAL AND THE WEIGHT OF HAMMER SHALL BE APPROVED BY THE ENGINEER. PERFORM ALL WORK IN A MANNER THAT WILL NOT CUT. ELONGATE OR DAMAGE THE EXISTING REINFORCING STEEL TO BE PRESERVED. CHIPPING HAMMERS SHALL NOT BE HEAVIER THAN THE NOMINAL 90-POUND CLASS. PNEUMATIC HAMMERS SHALL NOT BE PLACED IN DIRECT CONTACT WITH REINFORCING STEEL THAT IS TO BE RETAINED IN THE REBUILT STRUCTURE.SUBMIT CONSTRUCTION PLANS ACCORDING TO CMS 501.05.

#### ITEM 519 - PATCHING CONCRETE STRUCTURES. AS PER PLAN

PRIOR TO THE SURFACE CLEANING SPECIFIED IN 519.04 AND WITHIN 24 HOURS OF PLACING PATCHING MATERIAL. BLAST CLEAN ALL SURFACES TO BE PATCHED INCLUDING THE EXPOSED REINFORCING STEEL. ACCEPTABLE METHODS INCLUDE HIGH-PRESSURE WATER BLASTING WITH OR WITHOUT ABRASIVES IN THE WATER, ABRASIVE BLASTING WITH CONTAINMENT, OR VACUUM ABRASIVE BLASTING.

#### SPECIAL - STRUCTURES: CONCRETE SPALL REMOVAL

THIS WORK WILL CONSIST OF REMOVING ALL VISIBLY SPALLED AREAS OF THE BOTTOM DECK FLOOR OF STRUCTURE(S) MAH-680-0791E, MAH-680-0794, MAH-680-1073L, AND MAH-680-1073R WITHOUT SOUNDING. AFTER SPALLED CONCRETE AREAS HAVE BEEN REMOVED, REMOVAL AREAS WILL BE SEALED WITH ITEM SPECIAL - SEALING OF CONCRETE SURFACES

CONCRETE SPALL REMOVAL WILL BE PAID FOR AT THE UNIT BID PRICE FOR SPECIAL – STRUCTURE MISC.: CONCRETE SPALL REMOVAL. THIS PRICE WILL INCLUDE THE COST OF LABOR. EQUIPMENT. AND ALL INCIDENTALS REQUIRED TO COMPLETE THIS WORK.

ALL SPALLED AREAS OF THE BOTTOM DECK FLOOR OVER TRAFFIC SHALL ALSO BE PATCHED USING ITEM 843 - PATCHING CONCRETE STRUCTURES WITH TROWELABLE MORTAR AND ITEM 519 - SPECIAL COMPOSITE FIBER WRAP SYSTEM AS DIRECTED BY THE PROJECT ENGINEER.

#### ITEM 202, PORTIONS OF STRUCTURE REMOVED, AS PER PLAN:

#### **EROSION REPAIR**

THIS WORK WILL CONSIST OF REPAIRING THE EROSION AT THE APPROXIMATE LOCATIONS DETAILED BELOW AND AT THE DIRECTION OF THE ENGINEER. REPAIR WORK WILL BE PAID FOR BY THE FOLLOWING ITEMS.

MAH-680-0837: REPAIR EROSION AROUND PIERS ITEM 203. BORROW. 10 CY ITEM 601, DUMPED ROCK FILL, TYPE C, 5 CY ITEM 613, LOW STRENGTH MORTAR BACKFILL, 5 CY



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#### SCREEDING:

THE PATCHING MATERIAL WILL BE PLACED, CONSOLIDATED, AND FINISHED TO THE ADJACENT GRADE. PATCHES EXCEEDING 50 SQ FT (4.6 SQ M) WILL BE LEVELED AND CONSOLIDATED WITH A MECHANICAL VIBRATING SCREED. SMALLER PATCHES WILL BE HAND VIBRATED AND LEVELED WITH A STRAIGHTEDGE. THE SCREED WILL BE PLACED PARALLEL TO THE BRIDGE CENTERLINE SO THAT THE DECK PROFILE REMAINS CONSISTENT WITH THE WORN SURFACE.

DO NOT ADD WATER TO AID THE FINISHING AND AN EVAPORATION RETARDANT MAY NOT BE USED.

AFTER THE PATCHES HAVE BEEN CONSOLIDATED AND FINISHED THEY WILL BE TEXTURED IN ACCORDANCE WITH 451.09. THE CONCTRACTOR WILL TEST THE SURFACE OF THE PLASTIC CONCRETE FOR TRUENESS AND FOR BEING FLUSH WITH THE EDGES OF THE ADJACENT SURFACES BY USE OF A STRAIHTEDGE. THE STRAIGHTEDGE WILL BE DONE BY PLACING THE STRAIGHTEDGE PARALLEL TO THE BRIDGE CENTERLINE WITH THE ENDS RESTING ON THE EXISTING WEARING SURFACE ADJACENT TO THE PATCH AND DRAWING THE STRAIGHTEDGE ACROSS THE PATCH. ANY HIGH OR LOW AREAS EXCEEDING 1#8 INCH IN 10 FEET (3 MM IN 3 M) WILL BE CORRECTED. IF ANY CORRECTIONS ARE MADE, THE SURFACE WILL BE RECHECKED.

#### CURING:

COVER THE FINISHED PATCHED SURFACES WITH A SINGLE LAYER OF CLEAN WET BURLAP AND COVER THE BURLAP WITH A 4-MIL WHITE OPAQUE POLYETHYLENE FILM FOR A MINIMUM OF 4 HOURS FOLLOWED BY A MEMBRANE CURE PER 511.17 METHOD (B).

ADEQUATE PRECAUTIONS WILL BE TAKEN TO PROTECT THE FRESHLY PLACED VES-LMC FROM RAIN.

THE CONTRACTOR WILL SUPPLY A PROPERLY CALIBRATED IMPACT REBOUND HAMMER TO VERIFY THAT THE PATCHES HAVE REACHED 3000 PSI COMPRESSIVE STRENGTH PRIOR TO OPENING TO TRAFFIC.

#### **INSPECTION AND SOUNDING OF CONCRETE PATCHES:**

AFTER CURING AND BEFORE FINAL ACCEPTANCE, ALL PATCHED AREAS WILL BE SOUNDED. ALL DELAMINATED AREAS WILL BE REMOVED AND REPATCHED ACCORDING TO THIS NOTE. ALL PATCHES WHICH ARE SOUND BUT SHOW SIGNS OF CRACKING WILL BE SEALED AND THE PERIMETER OF ALL PATCHES WILL ALSON BE SEALED WITH GRAVITY FED RESIN.

ALL SOUNDING AND REPLACEMENT OF REJECTED AREAS WILL BE THE RESPONSIBILITY OF THE CONCTRACTOR AND INCLUDED IN THE UNIT BID PRICE FOR THIS ITEM.

#### **METHOD OF MEASUREMENT:**

PAYMENT WILL BE MADE AT THE CONTRACTOR PRICE PER CUBIC YARD FOR ITEM SPECIAL - PATCHING CONCRETE STRUCTURES, MISC.: VES-LMC (VERY EARLY STRENGHT LATEX MODIFIED CONCRETE) WHICH WILL INCLUDE ALL MATERIALS AND LABOR REQUIRED TO PERFORM THIS WORK INCLUDING REMOVAL AND DISPOSAL OF THE EXISTING MATERIAL.

#### ITEM SPECIAL - PATCHING CONCRETE STRUCTURES, MISC.: TRIAL BATCH FOR VES-LMC (VERY EARLY STRENGTH LATEX MODIFIED CONCRETE)

MAKE ONE OR MORE, ON CUBIC YARD, TRIAL BATCHES OF THE VES-LMC MATERIAL AT LEAST 14 DAYS PRIOR TO THE MATERIAL BEING PLACED. DEMONSTRATE THE ABILITY TO ACHIEVE THE REQUIREMENTS OF THE MATERIAL AS PER THE PLAN NOTE.

PAYMENT WILL BE MADE AT THE LUMP SUM CONTRACT PRICE FOR ITEM SPECIAL - PATCHING CONCRETE STRUCTURES, MISC.: TRIAL BATCH FOR VES-LMC (VERY EARLY STRENGTH LATEX MODIFIED CONCRETE) WHICH WILL INCLUDE ALL MATERIALS AND LABOR REQUIRED TO PERFORM THIS WORK.

#### ITEM 509 REINFORCING STEEL, REPLACEMENT OF EXISTING REINFORCING STEEL, AS PER PLAN

REPLACE ALL EXISTING REINFORCING BARS DEEMED BY THE ENGINEER TO BE UNUSABLE BECAUSE OF CORROSION. THE DEPARTMENT WILL MEASURE THE REPLACEMENT REINFORCING STEEL BY THE NUMBER OF POUNDS ACCEPTED IN PLACE.

REPLACE ALL EXISTING REINFORCING STEEL BARS WHICH ARE TO BE INCORPORATED INTO THE NEW WORK AND ARE DEEMED BY THE ENGINEER TO BE MADE UNUSABLE BY CONCRETE REMOVAL OPERATIONS WITH NEW EPOXY COATED REINFORCING STEEL OF THE SAME SIZE AT NO COST TO THE DEPARTMENT.

#### ITEM 509 - EPOXY COATED REINFORCING STEEL, AS PER PLAN

ITEM 509 - EPOXY COATED REINFORCING STEEL, AS PER PLAN: IN ADDITION TO THE PROVISIONS OF ITEM 509, FIELD BEND AND/OR FIELD CUT THE REINFORCING STEEL DESIGNATED IN THE PLANS, AS NECESSARY, IN ORDER TO MAINTAIN THE REQUIRED CLEARANCES AND BAR SPACINGS. REPAIR ALL DAMAGE TO THE EPOXY COATING, AS A RESULT OF THIS WORK, ACCORDING TO 709.00.

#### SPECIAL - COMPOSITE FIBER WRAP SYSTEM

FIBER WRAP SYSTEM SHALL BE USED ON PATCHING OF SPALLED AREAS OF THE BOTTOM DECK FLOOR AND DECK EDGES LOCATED OVER VEHICULAR, RAIL OR PEDESTRIAN TRAFFIC. USE OF FIBER WRAP SHALL BE AS DIRECTED BY THE PROJECT ENGINEER. FOR DETAILS SEE PROPOSAL NOTE 519 - COMPOSITE FIBER WRAP SYSTEM.

#### ITEM 611 – MANHOLE ADJUSTED TO GRADE, AS PER PLAN ITEM 638 – VALVE BOX ADJUSTED TO GRADE, AS PER PLAN

IN ADDITION TO THE REQUIREMENTS OF CMS 611.10.D FOR MANHOLES, OR 638.18 FOR VALVE BOXES, THE THE CONTRACTOR SHALL PROVIDE A COPY OF THE COMPLETED CONTRACTOR WILL MAKE A CLEAN CIRCULAR CUT AROUND THE CASTING NOTICATION OF DEMOLITION AND RENOVATION FORM TO THE PROJECT (48" DIAMETER FOR STORM AND SANITARY MANHOLE CASTINGS, 24"-28" ENGINEER AT LEAST TEN (10) WORKING DAYS PRIOR TO THE START FOR VALVE BOXES AND MONUMENT ASSEMBLIES, AND 2' IN DIAMETER LARGER OF ANY DEMOLITION AND/OR RENOVATION THAN THE CASTING DIAMETER FOR ANY CASTINGS THAT ARE LARGER THAN STANDARD MANHOLES) AND REMOVE AND DISCARD THE EXISTING CASTING. THE CONTRACTOR SHALL FURNISH ALL FEES. LABOR. AND MATERIALS INSTALL A NEW CASTING TO GRADE (ACCORDING TO TOLERANCES AS SHOWN NECESSARY TO COMPLETE AND SUBMIT THE DEPANOTIFICATION FORM. ON STANDARD CONSTRUCTION DRAWING BP-3.1) AFTER THE PAVEMENT PAYMENT FOR THIS WORK SHALL BE INCLUDED IN ITEM 202 -SURFACE COURSE HAS BEEN REPLACED. PORTIONS OF STRUCTURE REMOVED, AS PER PLAN. 

CMS 499 CLASS QCMS CONCRETE (DYE THE CONCRETE SUCH THAT ITS COLOR CLOSELY MATCHES THE COLOR OF THE SURROUNDING PAVEMENT) WILL BE USED FOR BACKFILLING THE FULL PAVEMENT SECTION AND THE JOINT BETWEEN THE ASPHALT AND CONCRETE WILL BE SEALED WITH CMS 702.01 PG BINDER. EPOXY COATED REBAR SHALL BE PLACED IN THE CONCRETE AT 6" MAXIMUM ON CENTER AND A MINIMUM OF 3.5" CLEARANCE FROM THE TOP, BOTTOM AND SIDES. THE CONCRETE WILL BE VIBRATED SUFFICIENTLY TO ELIMINATE AIR POCKETS UNDER THE FRAME.

PAYMENT WILL INCLUDE REMOVAL OF THE EXISTING MATERIAL, INSTALLATION AND FURNISHING OF A NEW CASTING, AND ALL LABOR AND MATERIALS REQUIRED TO COMPLETE THIS ITEM OF WORK AS DESCRIBED.

#### ASBESTOS NOTIFICATION (MAH-680-0791E)

A CERTIFIED ASBESTOS HAZARD EVALUATION SPECIALIST INSPECTED THE BRIDGE STRUCTURE SCHEDULED FOR DEMOLITION AND/OR REHABILITATION:

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#### corrected item name -

adjusted note and pay items

THE INSPECTION DETERMINED THAT MAH-680-0791E CONTAINS ASBESTOS ITE THE ASBESTOS CONTAINING MATERIAL SHALL BE REMOVED AND DIS-POSED OF BY THE CONTRACTOR. THE CONTRACTOR SHALL ENSURE THAT THE ABATEMENT. TRANSPORT. AND DISPOSAL OF ASBESTOS CONTAINING MATERIAL IS CONDUCTED IN ACCORDANCE WITH ALL FEDERAL, STATE, AND LOCAL REGULATIONS. THE CONTRACTOR SHALL ENSURE THAT ALL DOCUMENTATION RELATED TO THE ABATEMENT TRANSPORT, AND DISPOSAL OF ASBESTOS CONTAINING MATERIAL IS SUBMITTED TO THE PROJECT ENGINEER FOR RECORD KEEPING WITHIN 2 WEEKS OF COMPLETION.

THE DEPARTMENT HAS PROVIDED A COPY OF THE OHIO ENVIRONMENTAL PROTECTION AGENCY (OEPA) NOTIFICATION OF DEMOLITION AND RENOVATION FORM (PARTIALLY COMPLETED) AND THE ASBESTOS I INSPECTION REPORT IN THE REFERENCE FILES FOR THIS PROJECT. THE CONTRACTOR SHALL COMPLETE THE FORM AND SUBMIT IT TO THE OEPA AT LEAST TEN (10) WORKING DAYS PRIOR TO THE START OF ANY DEMOLITION AND/OR RENOVATION. ONLINE SUBMISSION IS AVAILABLE AT http://www.epa.ohio.gov/asbestos AND IS ENCOURAGED, OR THE CONTRACTOR SHALL SUBMIT IT TO ONE OF THE ADDRESSES BELOW:

ASBESTOS PROGRAM OHIO EPA, DAPC P.O. BOX 1049 COLUMBUS, OH 43216-1049

#### ASBESTOS PROGRAM

OHIO EPA, DAPC 50 W. TOWN ST., SUITE 700 COLUMBUS. OH 43215

THE FORM SHALL INCLUDE:

- 1. THE CONTRACTOR'S NAME AND ADDRESS
- 2. THE SCHEDULED DATES FOR THE START AND COMPLETION OF THE STRUCTURE DEMOLITION AND/OR RENOVATION
- 3. DESCRIPTION OF THE PLANNED DEMOLITION WORK AND METHODS BE USED
- 4. ALL NECESSARY FEES

THE CONTRACTOR SHALL FURNISH ALL LABOR, EQUIPMENT, AND MATERIALS NECESSARY TO PROPERLY ABATE, TRANSPORT, AND DISPOSE OF ASBESTOS CONTAINING MATERIAL IN A LANDFILL LICENSED BY THE LOCAL HEALTH DEPARTMENT AND PERMITTED BY THE OHIO ENVIRONMENTAL PROTECTION AGENCY - DIVISION OF AIR POLLUTION CONTROL TO ACCEPT ASBESTOS CONTAINING MATERIAL. PAYMENT FOR THIS WORK SHALL BE INCLUDED IN ITEM SPECIAL -REMOVAL OF ASBESTOS CONTAINING MATERIAL.

#### END CROSSFRAMES (MAH-680-1073L&R)

THE CONTRACTOR SHALL REMOVE AND INSTALL NEW END CROSSFRAMES AT THE ABUTMENTS OF MAH-680-1073L&R DURING THE CONCRETE PATCHING OF THE BACKWALLS AS DIRECTED BY THE PROJECT ENGINEER. THE CONTRACTOR SHALL NOT REMOVE ABUTTING END CROSSFRAMES AT THE SAME TIME. THE CONTRACTOR SHALL NOT REMOVE BOTH END CROSSFRAMES IN THE SAME BAY AT THE SAME TIME. ALL CROSSFRAME STEEL SHALL BE PAINTED TO MATCH THE EXISTING COLOR.

THIS WORK SHALL BE PAID FOR BY THE FOLLOWING ITEMS PER STRUCTURE:

ITEM 513 - STRUCTURAL STEEL MEMBERS, LEVEL UF, 2,543 LBS ITEM 513 - STRUCTURAL STEEL MISC .: FILLET WELDING, 120 FT ITEM 514 - FIELD PAINTING OF STRUCTURAL STEEL CROSSFRAMES. LS DAI THI THA INC BAC THA WIL NE۱ REI LΕΛ CRC ON OF A 1, FAE DRA NO FIEI MA RES AF1 COI SPE AN ALL ТО FOF REF

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ITEM 513 - STRUCTURAL STEEL, MISC.: REPLACEMENT OF DAMAGED CROSSFRAMES	
THIS WORK CONSISTS OF REPLACING DAMAGED CROSSFRAMESTHAT ARE BENT OF HAVE SECTION LOSS. THIS ITEM WILLINCLUDE SUPPLYING NEW CROSSFRAMES AND WELDING THEMBACK TO THE ORIGINAL POSITIONS OF THE CROSSFRAMESTHAT ARE BEING REPLACED. AFTER REMOVAL, ALL WELDSWILL BE GROUND SMOOTH IN PREPARATION OF WELDING THENEW CROSSFRAMES IN PLACE. ALL CROSSFRAMES TO BEREPLACED WILL BE FIELD MEASURED TO VERIFY SIZE ANDLENGTHS PRIOR TO ORDERING MATERIAL. THE NEWCROSSFRAMES WILL BE WELDED TO THE GIRDERS OR BEAMSON BOTH SIDES OF THE VERTICAL LEG AND ON THE TOP SIDEOF THE HORIZONTAL LEG. THE ANGLE WILL BE WELDED USINGA 1/4" CONTINUOUS FILLET WELD. STEEL MEMBERS TO BEFABRICATED UNDER THIS ITEM WILL NOT REQUIRE SHOPDRAWINGS PRIOR TO FABRICATION. AISC CERTIFICATION ISNOT REQUIRED. THE CONTRACTOR WILL TAKE THE NECESSARYFIELD MEASUREMENTS TO VERIFY MEASUREMENTS BEFORE ORDERINGMATERIALS. THE ENGINEER WILL HAVE THE AUTHORITY AND THERESPONSIBILITY FOR ENSURING THAT THE STEEL IS ACCEPTABLE.AFTER FABRICATION THE PAY WEIGHTS SHALL BE COMPUTED INCOMPLIANCE WITH ITEM 513 OF THE CONSTRUCTION AND MATERIALSPECIFICATIONS AND SUBMITTED TO THE ENGINEER FOR REVIEWAND APPROVAL.ALL LABOR, MATERIALS, EQUIPMENT, AND INCIDENTALS NECESSARYTO COMPLETE THIS ITEM EXCEPT FOR PAINT WILL BE INCLUDEDFOR PAYMENT UNDER ITEM 513 - STRUCTURAL STEEL MISC.:	BERERAL NOTES
REPLACEMENT OF DAMAGED CROSSFRAMES.	RE (
ASBESTOS NOTIFICATION (MAH-680-0794, MAH-680-1073L&R)	TUI
A CERTIFIED ASBESTOS HAZARD EVALUATION SPECIALIST INSPECTED THE BRIDGE STRUCTURE SCHEDULED FOR DEMOLITION AND/OR REHABILITATION;	STRUC
THE SURVEY DETERMINED THAT NO ASBESTOS IS PRESENT ON THE STRUCTURE.	
THE DEPARTMENT HAS PROVIDED A COPY OF THE OHIO ENVIRONMENTAL PROTECTION AGENCY (OEPA) NOTIFICATION OF DEMOLITION AND RENOVATION FORM (PARTIALLY COMPLETED) AND THE ASBESTOS I INSPECTION REPORT IN THE REFERENCE FILES FOR THIS PROJECT. THE CONTRACTOR SHALL COMPLETE THE FORM AND SUBMIT IT TO THE OEPA AT LEAST TEN (10) WORKING DAYS PRIOR TO THE START OF ANY DEMOLITION AND/OR RENOVATION. ONLINE SUBMISSION IS AVAILABLE AT http://www.epa.ohio.gov/asbestos AND IS ENCOURAGED, OR THE CONTRACTOR SHALL SUBMIT IT TO ONE OF THE ADDRESSES BELOW:	
ASBESTOS PROGRAM OHIO EPA, DAPC P.O. BOX 1049	
COLUMBUS, OH 43216-1049 OR	
ASBESTOS PROGRAM OHIO EPA, DAPC	
50 W. TOWN ST., SUITE 700 COLUMBUS, OH 43215 THE FORM SHALL INCLUDE:	SFN <b>O</b> DESIGN AGENCY
<ol> <li>THE CONTRACTOR'S NAME AND ADDRESS</li> <li>THE SCHEDULED DATES FOR THE START AND COMPLETION OF THE STRUCTURE DEMOLITION AND/OR RENOVATION</li> <li>DESCRIPTION OF THE PLANNED DEMOLITION WORK AND METHODS BE USED</li> <li>ALL NECESSARY FEES</li> </ol>	
THE CONTRACTOR SHALL PROVIDE A COPY OF THE COMPLETED NOTICATION OF DEMOLITION AND RENOVATION FORM TO THE PROJECT ENGINEER AT LEAST TEN (10) WORKING DAYS PRIOR TO THE START OF ANY DEMOLITION AND/OR RENOVATION	DESIGNER CMR MJA REVIEWER MJA 04-24-23 PROJECT ID 103883
THE CONTRACTOR SHALL FURNISH ALL FEES, LABOR, AND MATERIALS NECESSARY TO COMPLETE AND SUBMIT THE OERA NOTIFICATION FORM. PAYMENT FOR THIS WORK SHALL BE INCLUDED IN ITEM 202 - PORTIONS OF STRUCTURE REMOVED, AS PER PLAN.	SUBSET TOTAL P.3 P.10 SHEET TOTAL P.28 P.35

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909	2468					986	986		509	10001	LB	EPOXY COATED REINFORCING STEEL, AS PER PLAN		2/10	
100	200		~~~~~			200	200		509	20001	~~~~LB~~~	REINFORCING STEEL, REPLACEMENT OF EXISTING REINFORCING STEEL, AS PER PLAN		2/10	
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IS									SPECIAL	53000200		STRUCTURES, REMOVAL OF ASBESTOS CONTAINING MATERIAL			DESIGN AGENCI
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		5							441	50300	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448)			
152	508					440	440		510	10000	EACH	DOWEL HOLES WITH NONSHRINK, NONMETALLIC GROUT			
															DESIGNER CHECKER CMR MJA REVIEWER MJA 04-24-23 PROJECT ID 103883 SUBSET TOTAL P.4 P.10 SHEET TOTAL P.29 P.35

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	BRIDGE NUMBER	STRUCTURE TYPE			PROPOS	ED SEAL	.ING	FEDE COLOR N	ERAL NUMBER	ABUT (SQ YD)	PIER (SQ YD)	SUPER (SQ YD)	GENERAL (SQ YD)	TOTAL (SQ YD)			
	MAH-680-0791E	STEEL BEAM CONTINUOUS	SEAL / SURF/	ABUTMENT, ACES	BACKWALL	., AND SF	PALL REMOVAL	MATCH E		57		25	17	99			
	MAH-680-0794	STEEL BEAM CONTINUOUS	SEAL / SURF/	ABUTMENTS ACES	s, Backwai	LS, AND	SPALL REMOVAL	MATCH E	EXISTING	230		25	28	283			
	MAH-680-0817	STEEL BEAM CONTINUOUS	SEAL	ALL REPAIRI	ED CONCRE	ETE SUR	FACES	MATCH E					28	28	) ) adju	isted quantitie	€S
	MAH-680-0837	STEEL BEAM CONTINUOUS	SEAL	EAL ALL REPAIRED CONCRETE SURFACES									39	39			
	MAH-680-0921	STEEL BEAM CONTINUOUS	SEAL   SEAL /	PARAPETS F ALL REPAIRI	PER DETAIL ED CONCRE	.A ETE SURI	FACES	MATCH E				228	28	256			
	MAH-680-0990	STEEL BEAM CONTINUOUS	SEAL	ALL REPAIRI			FACES	MATCH E					23	23	AILS		
	MAH-680-1073L	STEEL BEAM CONTINUOUS	SEAL / SURF/	ABUTMENT, ACES, AND F	BACKWALL PARAPETS	., DECK E AS PER E	EDGES, SPALL REMOVAL DETAIL A	MATCH E		85		153	25	263	ke det		
ied descriptions —	MAH-680-1073R	STEEL BEAM CONTINUOUS	SEAL / SURF/	ABUTMENT, ACES, AND F	BACKWALL	., DECK E AS PER E	EDGES, SPALL REMOVAL DETAIL A	MATCH E		85		153	14	252	0CT UT		
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			SLABS)	APPROACH SLAB WIDTH	APPROACH SLAB AREA	APPROACH (FORWARD / REAR)	PATCHING CONCRETE BRIDGE DECK - TYPE C		PAVEMENT PLANING, ASPHALT CONCRETE (T=2")	NON-TRACKING TACK COAT @ 0.09 GAL/SY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449), AS PER PLAN (T=2")						
		2	FT 0.00	FT 28.00	SQ YD 62.22	FWD	SY 1.00		SY	GAL	CY						
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															P.30	P.35	

	BRIDGE NUMBER	STRUCTURE TYPE		PROPOS	ED SEAL	LING		FEDE COLOR N	ABUT (SQ YD)	PIER (SQ YD)	SUPER (SQ YD)	GENERAL (SQ YD)	TOTAL (SQ YD)			
	MAH-680-0791E	STEEL BEAM CONTINUOUS	SEAL ABUTMENT SURFACES	, BACKWALL	., AND SF	PALL REMOV	AL	MATCH E	XISTING	57		25	17	99		
	MAH-680-0794	STEEL BEAM CONTINUOUS	SEAL ABUTMENT SURFACES	S, BACKWAI	LS, AND	) SPALL REM(	DVAL	MATCH E	XISTING	230		25	28	283		
	MAH-680-0817	STEEL BEAM CONTINUOUS	SEAL ALL REPAIF	ED CONCRE	ETE SUR	FACES		MATCH E	XISTING	•			28	28	) )— adjusted	quantities
	MAH-680-0837	STEEL BEAM CONTINUOUS	SEAL ALL REPAIF	ED CONCRE	ETE SUR	FACES		MATCH E	XISTING	- - -			39	39		
	MAH-680-0921	STEEL BEAM CONTINUOUS	SEAL PARAPETS SEAL ALL REPAIF	PER DETAIL ED CONCRE	. A ETE SUR	FACES		MATCH E	XISTING	- - -		228	28	256		
	MAH-680-0990	STEEL BEAM CONTINUOUS	SEAL ALL REPAIF		ETE SUR	FACES	~~~~~~	MATCH E	XISTING	- - - -			23	23	AILS	
	MAH-680-1073L	STEEL BEAM CONTINUOUS	SEAL ABUTMENT SURFACES, AND	, BACKWALL PARAPETS /	., DECK E AS PER [	EDGES, SPAL DETAIL A	L REMOVAL	MATCH E	XISTING	85		153	25	263	É DET/	
dified descriptions ——	MAH-680-1073R	STEEL BEAM CONTINUOUS	SEAL ABUTMENT SURFACES, AND	, BACKWALL PARAPETS /	., DECK E AS PER [	EDGES, SPAL DETAIL A	L REMOVAL	MATCH E	XISTING	85		153	14	252	JCTUR	
corrected CRS —	MAH-224-1964	STEEL BEAM CONTINUOUS	SEAL PARAPETS SEAL ALL REPAIF	PER DETAIL	.A ETE SUR	FACES		MATCH E	XISTING			344	23	367	STRU	
					ROACH S		SPECIAL		254	SPECIAL	APPROACE 441				-	
			APPROACH (APPROACH APPROACH SLAB WIDTH	APPROACH SLAB AREA	APPROACH (FORWARD / REAR)		PATCHING CONCRETE BRIDGE DECK - TYPE C		PAVEMENT PLANING, ASPHALT CONCRETE (T=2")	NON-TRACKING TACK COAT @ 0.09 GAL/SY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449), AS PER PLAN (T=2")					
		2	FT FT 0.00 28.00	SQ YD 62.22	FWD		SY 1.00		SY	GAL	CY					
		2	0.00 28.00	62.22 265.00	REAR FWD		1.00 3.00								-	
		2	0.00 119.25	265.00	REAR		3.00								SFN 0	
									180.00	17.00	10.00					
		2 2	5.00 51.00 5.00 51.00	141.67 141.67	FWD REAR		2.00 2.00									)
		2	5.00 51.00	141.67	REAR		1.00								DESIGNER CHEC	KER
															CMR MJ REVIEWER	A
															PROJECT ID	-23
															SUBSET TOTAL P.5 P.1 SHEET TOTAL	.0
															P.30 P.3	5