

LOCATION MAP

LATITUDE: 40 °15'21" LONGITUDE: 82 °55'41"



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

FOR DESIGN DESIGNATIONS, SEE SHEET 2

ADA DESIGN WAIVERS: NONE REQUIRED

UNDERGROUND UTILITIES

Contact Two Working Days
Before You Dig

Before You Dig

OHIO811. 8-1-1, or 1-800-362-2764

(Non members must be called directly)

PLAN PREPARED BY:
ms consultants, inc.
ENGINEERS, ARCHITECTS & PLANNERS
2321 SCHROCK ROAD
COLUMBUS, OHIO 43229
PHONE (614) 898-7100

STATE OF OHIO

DEPARTMENT OF TRANSPORTATION

DEL-71-8.91 (PHASE A)

PART 1

BERKSHIRE TOWNSHIP



DELAWARE COUNTY

FOR PART 2, SEE DEL-71-8.91 (PHASE A)

INDEX OF SHEETS:

TITLE SHEET	P.1	RAMP A EXCEL LANE CROSS SECTIONS	P.316-P.328
DESIGN DESIGNATION INFORMATION	P.2	RAMP A CROSS SECTIONS	P.329-P.337
SCHEMATIC PLAN & CURVE DATA	P.3-P.4	RAMP B CROSS SECTIONS	P.338-P.346
TYPICAL SECTIONS	P.5-P.19	RAMP D CROSS SECTIONS	P.347-P.353
GENERAL NOTES	P.20-P.23	RAMP H CROSS SECTIONS	P.354-P.358
MAINTENANCE OF TRAFFIC	P.24-P.100	I-71 MEDIAN BARRIER CROSS SECTIONS	P.359-P.362
GENERAL SUMMARIES	P.101-P.107, P.107A	SUPERELEVATION TABLES	P.363-P.367
SUBSUMMARIES	P.108-P.117 (P. 114 & 118 NOT USED)	JOINT DETAILS	P.368-P.377
SITE PLAN	P.119-P.120	GRADING DETAILS	P.378-P.387
CD ROAD PLAN/PROFILES	P.121-P.152	GORE DETAILS	P.388-P.409
SUNBURY PARKWAY PLANS	P.153-P.164	INTERSECTION DETAILS	P.410-P.416
SUNBURY PARKWAY PROFILES	P.165-P.170	STORM PROFILES	P.417-P.430
WILSON ROAD PLAN/PROFILES	P.171-P.176	CULVERT DETAILS	P.431-P.437 (P.438 UNUSED)
RAMP A PLANS	P.177-P.188	BMP NOTES & DETAILS	P.439-P.464 (P. 461 NOT USED)
RAMP A PROFILES	P.189-P.191	TRAFFIC SIGNING & PAVEMENT MARKING	P.465-P.520
RAMP B PLAN/PROFILES	P.192-P.201 (P.193 NOT USED)	TRAFFIC SIGNALS	P.521-P.522
RAMP D PLAN/PROFILES	P.202-P.205	TRAFFIC SURVEILLANCE	P.523-P.535, P.523A, P.523B
RAMP H PROFILE	P.206	LIGHTING PLANS & DETAILS	P.536-P.564
CD ROAD CROSS SECTIONS	P.207-P.260	STRUCTURES (OVER 20 FOOT SPAN)	P.565-P.598
SUNBURY PKWY CROSS SECTIONS	P.261-P.308	GEOTECHNICAL PROFILE - ROADWAY	P.599-P.663
WILSON ROAD CROSS SECTIONS	P.309-P.315		

PARTS 1 AND 2

	STANDARD CONSTRUCTION DRAWINGS										SUPPLEMENTAL SPECIFICATIONS		SPECIAL PROVISIONS
ENGINEER'S SEAL: ROADWAY	BP-2.1	1/21/22	CB-2-2A, 2B, 2C	7/19/24	ITS-12.10	7/15/22	MT-95.30	7/19/19	TC-41.10	7/19/13	800-2023	7/19/24	408 PERMIT 01/24/2025
	BP-2.2	1/15/21	CB-3	7/19/24	ITS-14.10	7/19/24	MT-95.45	7/21/23	TC-41.20	10/18/13	804	7/19/24	
	BP-3.1	1/19/24	CB-3A	7/19/24	ITS-14.11	7/19/24	MT-98.21	7/21/23	TC-41.30	4/21/23	807	1/21/22	
	BP-5.1	7/15/22	CB-8	7/19/24	ITS-14.50	7/19/24	MT-98.28	1/17/20	TC-41.50	10/18/13	808	7/19/24	
	BP-7.1	1/19/24	I-2-6	7/19/24	ITS-14.60	1/19/24	MT-98.29	1/17/20	TC-42.10	10/18/13	809	7/19/24	
	F-2.1	7/20/18	I-3B, 3B1	7/19/24	ITS-15.11	7/19/24	MT-98.30	7/16/21	TC-42.20	10/18/13	813	7/21/23	
	F-3.1	7/19/13	I-3C, 3C1	7/19/24	ITS-18.00	7/16/21	MT-99.20	4/19/19	TC-51.11	1/15/16	821	4/20/12	
	F-3.3	7/19/13	MH-3	7/19/24	ITS-50.11	7/19/24	MT-99.50	7/21/23	TC-52.20	1/15/21	832	7/19/24	
	F-3.4	7/19/13			HL-10.11	7/21/23	MT-101.70	7/19/24	TC-61.10	4/21/23	836	1/19/24	
	MGS-1.1	7/16/21	DM-1.1	7/17/20	HL-10.12	7/21/23	MT-101.75	7/21/23	TC-61.30	7/19/24	840	7/19/24	
	MGS-2.1	1/19/18	DM-1.2	7/16/21	HL-10.13	1/20/23	MT-101.90	7/17/20	TC-65.10	1/17/14	850	7/21/23	
ENGINEER'S SEAL: STRUCTURES	MGS-3.1	1/19/18	DM-4.2	7/20/12	HL-10.31	7/15/22	MT-102.10	7/21/23	TC-65.11	1/19/24	872	1/21/22	
	MGS-4.2	7/19/13			HL-20.11	7/21/23	MT-102.20	4/19/19	TC-71.10	4/21/23	902	7/19/19	
	MGS-5.3	7/15/16	AS-1-15	1/20/23	HL-20.21	1/15/21	MT-102.30	10/16/15	TC-72.20	7/21/23	904	7/15/22	
			AS-2-15	7/21/23	HL-30.11	7/21/23	MT-103.10	1/21/22	TC-73.20	7/19/24	905	4/17/20	
	RM-1.1	1/20/23	BR-2-15	7/19/24	HL-30.21	4/17/20	MT-104.10	1/19/24	TC-74.10	7/21/23	908	10/20/17	
	RM-4.3	1/21/22	PSID-1-13	7/19/24	HL-30.22	1/15/21	MT-105.10	1/17/20			909	7/19/24	
	RM-4.4	7/21/23	SBR-1-20	7/19/24	HL-30.31	7/19/24					913	4/16/21	
	RM-4.5	7/21/17	SICD-1-21	1/21/22	HL-30.41	1/21/22	TC-12.31	4/15/22			921	7/19/24	
	RM-4.6	7/19/13	SICD-2-14	1/19/24	HL-40.10	7/19/24	TC-15.116	1/19/24			992	4/18/14	
	RM-5.2	7/21/23	VPF-1-90	7/21/23	HL-50.21	7/15/22	TC-21.11	7/16/21					
					HL-60.11	7/21/17	TC-21.21	1/20/23					
	HW-2.1	7/15/22	ITS-10.10	7/19/24	HL-60.21	7/20/18	TC-21.50	4/17/20					
	HW-2.2	7/20/18	ITS-10.11	7/19/24	HL-60.31	7/19/24	TC-22.20	1/17/14					

FEDERAL PROJECT NUMBER

E190 (125)

RAILROAD INVOLVEMENT

NONE

PROJECT DESCRIPTION

CONSTRUCT A NEW PARTIAL DIAMOND INTERCHANGE ON I-71 AT SUNBURY PARKWAY. THIS WILL INCLUDE AN ENTRANCE RAMP FROM SUNBURY PARKWAY TO I-71 SB AND AN EXIT RAMP FROM I-71 NB TO SUNBURY PARKWAY. BUILD A I-71 NB CD ROAD BETWEEN SUNBURY PARKWAY AND SR 36/37 COMBINING THE EXITING TRAFFIC TO SUNBURY WITH THE EXITING TRAFFIC TO SR 36/37. CONNECT SUNBURY PARKWAY TO WILSON RD. THE PROJECT WILL ALSO INCLUDE THE SUNBURY PARKWAY TWO SPAN BRIDGE OVER I-71, THE RECONSTRUCTION OF STORM SEWERS AND CULVERTS, AND THE RELOCATION OF SIGNAGE AND LIGHTING. THE FULL PARCLO INTERCHANGE AND THE EXTENSION OF SUNBURY PARKWAY WILL BE BUILT IN FUTURE PHASES.

EARTH DISTURBED AREAS

PROJECT EARTH DISTURBED AREA:	53.26 ACRES
ESTIMATED CONTRACTOR EARTH DISTURBED AREA:	42.15 ACRES
NOTICE OF INTENT EARTH DISTURBED AREA:	95.41 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.

2023 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.

TRAFFIC REROUTED FOR BRIEF TIME PERIODS

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 SHEETS P.35 & P.47, AND THAT PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES.

NO.	RFI	DESCRIPTION	REV. BY	DATE
PIR4	.	ADD SPEC. PROVISION	TAZ	04/10/25
.

Anthony C. Turowski, P.E.
District 06 Deputy Director

Pamela Boratyn
Director, Department of Transportation

ITEM SPECIAL - FILL AND PLUG EXISTING CONDUIT

THIS ITEM CONSISTS OF THE CONSTRUCTION OF BULKHEADS IN AN EXISTING 15 INCH DIAMETER CONDUIT AND FILLING THE AREA SEALED OFF WITH ITEM 613, SAND OR OTHER MATERIAL APPROVED BY THE ENGINEER.

LOCATE THE BULKHEADS AT THE LIMITS OF THE AREA TO BE FILLED, AS INDICATED ON THE PLANS. THE BULKHEADS CONSIST OF BRICK OR CONCRETE MASONRY WITH A MINIMUM THICKNESS OF 12 INCHES.

PUMP THE FILL MATERIAL INTO PLACE OR 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 IS FILLED. THE LENGTH OF FILLED AND PLUGGED CONDUIT TO BE PAID FOR IS 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 PER 203, OR IT MAY BE REMOVED. THE LENGTH, MEASURED AS PROVIDED ABOVE, WILL 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, 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, NOTIFY THE ENGINEER 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, NOTIFY THE ENGINEER 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 IS INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 611 CONDUIT ITEM.

ITEM 304 - AGGREGATE BASE, AS PER PLAN, 6" AVG.

THIS ITEM SHALL CONFORM TO ITEM 304 OF THE OHIO DEPARTMENT OF TRANSPORTATION CONSTRUCTION AND MATERIAL SPECIFICATIONS. THE QUANTITY PROVIDED IN THE PAVEMENT EDGE REPAIR CALCULATIONS ON THE CALCULATIONS SPREADSHEET HAS BEEN ESTIMATED USING A 6" THICKNESS.

THE CONTRACTOR MUST FIRST FIELD VERIFY THE THICKNESS OF THE EXISTING AGGREGATE BASE AND DETERMINE THE DEPTH OF EXISTING SUBGRADE PRIOR TO THE PLACING OF THIS ITEM. IF THE EXISTING SUBGRADE IS FOUND TO BE AT A DIFFERENT ELEVATION THAN THE PROPOSED SUBGRADE (WHEN ASSUMING A PROPOSED 6" AGGREGATE BASE), THE CONTRACTOR SHALL PROVIDE THE RESULTS OF THE INVESTIGATION TO THE PROJECT ENGINEER. THE ENGINEER SHALL THEN DIRECT THE CONTRACTOR TO ADJUST THE THICKNESS OF THIS ITEM ACCORDINGLY.

THE CONTRACTOR WILL BE COMPENSATED FOR ANY ADDITIONAL QUANTITY OF THIS ITEM AT THE CONTRACT BID PRICE OF THE ITEM. THE CONTRACTOR WILL NOT RECIEVE ANY ADDITIONAL COMPENSATION BEYOND THE ADJUSTED QUANTITY AT THE CONTRACT BID PRICE.

ODOT'S CONCRETE BARRIER INLETS

PER ODOT'S STANDARD CONSTRUCTION DRAWINGS FOR CONCRETE BARRIER INLET DETAILS, THE STATION AND OFFSET IS CALLED OUT TO THE CENTER OF THE GRATE. THE GRATE ELEVATION CALLED OUT IN THE STORM SEWER PROFILES AND CROSS SECTIONS ARE TO THE CENTER EDGE OF THE GRATE WHERE IT ABUTS TO THE FACE OF BARRIER.

ITEM 601 - RIPRAP, TYPE D, AS PER PLAN

THIS IS FOR USE AT THE PROPOSED HEADWALL WHERE THERE IS A SIDE APPROACHING DITCH IN ADDITION TO THE INLET OR OUTLET AT THE FRONT OF THE REINFORCED CONCRETE RIPRAP.

THIS WILL REQUIRE UTILIZING THE STANDARD CUTOFF WALL AS DETAIL IN THE DM-1.1 , ALONG WITH AN ADDITIONAL CUTOFF WALL ON THE SIDE OF THE APPROACHING DITCH TO PREVENT UNDERMINING OF THE RIPRAP.



ITEM 503 - COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN

FOR THE PROPOSED STORM SEWER BETWEEN STRUCTURE (I1 TO HW) AND STRUCTURE (I2 TO HW), THE COFFERDAMS AND EXCAVATION BRACING SHALL BE A SEPARATE PAY ITEM FROM ITEM 611 CONDUIT MISC.: CONDUIT INSTALLED BY THE TRENCHLESS METHOD, 15". IT IS ANTICIPATED THAT THE APPROXIMATE JACKING PIT DIMENSION FOR THE PROPOSED 15" PIPES AT STRUCTURE (I1 & I2) WILL BE 35'X12' AND AT A APPROXIMATE DEPTH OF 8'. IT IS ANTICIPATED THAT THE APPROXIMATE RECEIVING PIT DIMENSION FOR THE PROPOSED 15" PIPES AT STRUCTURE (I1 & I2) WILL BE 20' IN DIAMETER AND AT A APPROXIMATE DEPTH OF 3'.

PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE LUMP SUM PRICE BID FOR ITEM 503, COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN.

ITEM 611 - CONDUIT MISC: CONDUIT INSTALLED BY THE TRENCHLESS METHOD, 15"

INSTALL THE CONDUIT WITH A TRENCHLESS METHOD THAT PROVIDES HORIZONTAL AND VERTICAL ALIGNMENT ACCORDING TO THE PLAN THAT CONFORMS TO CMS 611. CONDUIT CAN BE INSTALLED BY TRENCHLESS METHODS SUCH AS: JACK AND BORE, TUNNELING, MICROTUNNELING, OR APPROVED EQUAL.

ALL CONDUIT MATERIALS SHALL FIT THE METHOD SELECTED AND MEET ODOT MATERIAL SPECIFICATIONS. ENSURE ALL MATERIAL PROVIDES A 75 YEAR DESIGN SERVICE LIFE. TUNNEL LINER PLATE WILL REQUIRE CONCRETE FIELD PAVING PER CMS 611.

IF FURNISHING A STEEL CASING PIPE TO CONVEY THE STORM WATER, ENSURE IT CONFORMS TO 748.06 WITH A FULL CIRCUMFERENCIAL PENETRATING B-U4B WELD AT THE JOINTS. ALL WELDING IS PERFORMED BY AN ODOT APPROVED FIELD WELDER. HYDROSTATIC TESTING IS NOT REQUIRED FOR THE CASING PIPE.

IF FURNISHING A TUNNEL LINER PLATE, ENSURE THE BASE METAL COMPOSITION, DEPTH AND SPAN OF THE CORRUGATIONS, AND SIZE AND SPACING OF BOLTS AND BOLT HOLES ARE IN ACCORDANCE WITH DETAILS OF THE MANUFACTURER. INSTALLATION OF THE STRUCTURE IS IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. ENSURE GALVANIZING IS PROVIDED IN ACCORDANCE WITH 707.03 AFTER CORRUGATING, FORMING, AND PUNCHING OF THE PLATES AND BOLT HOLES.

ALTERNATE MATERIALS MAY BE USED CONTINGENT UPON DEPARTMENT APPROVAL.

NO TRENCH EXCAVATION SHALL BE CLOSER THAN 10 FEET TO THE EXISTING BACK OF CURB. PROVIDE ALL NECESSARY DESIGN CALCULATIONS FOR PIPE MATERIALS AND JACKING FORCES AS PART OF THE INSTALLATION PLAN.

ITEM 203 - EMBANKMENT, AS PER PLAN

PLACE AND COMPACT EMBANKMENT MATERIAL IN 6 INCH LIFTS FOR THE CONSTRUCTION OF THE BRIDGE ABUTMENT APPROACH EMBANKMENT AT THE FOLLOWING LOCATIONS:

Item 203 Embankment, As Per Plan			
Alignment	Structure	Location	Embankment, as per Plan (CY)
Sunbury Parkway	DEL-00071-08.910	Forward	12526
Sunbury Parkway	DEL-00071-08.910	Rear	11192
TOTAL			23718

ITEM 202 - REMOVAL MISC.: WOOD POLE

THE CONTRACTOR SHALL REMOVE AND DISPOSE OF A EXISTING WOOD POLE PER ODOT'S CONSTRUCTION AND MATERIALS SPECIFICATIONS, ITEM 202. THE WOOD POLE APPEARS TO BE AN OLD AEP DISTRIBUTION POLE, CUT OFF BELOW THE EXISTING POWER LINES. THE CONTRACTOR SHALL CONFIRM WITH AEP THAT THE WOOD POLE HAS BEEN ABANDONED PRIOR TO BEING REMOVED.

ALL WORK ASSOCIATED WITH THE REMOVAL AND DISPOSAL OF THE WOOD POLE WILL BE PAID FOR AS FOLLOWS: ITEM 202 - REMOVAL MISC.: WOOD POLE

ITEM 202 - REMOVAL MISC.: POLE AND FOUNDATION

THE CONTRACTOR SHALL REMOVE AND DISPOSE OF A EXISTING STEEL POLE AND CONCRETE FOUNDATION PER ODOT'S CONSTRUCTION AND MATERIALS SPECIFICATIONS, ITEM 202. BEFORE REMOVING THE POLE AND FOUNDATION THE CONTRACTOR SHALL CONFIRM WITH ODOT THAT THE POLE HAS BEEN ABANDONED PRIOR TO BEING REMOVED.

ALL WORK ASSOCIATED WITH THE REMOVAL AND DISPOSAL OF THE POLE AND FOUNDATION WILL BE PAID FOR AS FOLLOWS: ITEM 202 - REMOVAL MISC.: POLE AND FOUNDATION

ITEM 202 - REMOVAL MISC.: REFLECTOR POST

THE CONTRACTOR SHALL REMOVE AND DISPOSE OF THE EXISTING FOUR FOOT HIGH REFLECTOR POST PER ODOT'S CONSTRUCTION AND MATERIALS SPECIFICATIONS, ITEM 202.

ALL WORK ASSOCIATED WITH THE REMOVAL AND DISPOSAL OF THE REFLECTOR POST WILL BE PAID FOR AS FOLLOWS: ITEM 202 - REMOVAL MISC.: REFLECTOR POST

ITEM 202 - REMOVAL MISC.: BUILDING PAD

THE CONTRACTOR SHALL REMOVE AND DISPOSE OF A PORTION OF THE EXISTING WEIGHT STATION BUILDING PAD THAT IS WITHIN THE CONSTRUCTION LIMITS.

ALL WORK ASSOCIATED WITH THE REMOVAL AND DISPOSAL OF THE EXISTING BUILDING PAD WILL BE PAID FOR AS FOLLOWS: ITEM 202 - REMOVAL MISC.: BUILDING PAD

NO.	RFI	DESCRIPTION	REV. BY	DATE
PIR3	.	REVISE DRAINAGE NOTE	TAZ	03/17/25
.

DESIGN AGENCY



DESIGNER

ACW

REVIEWER

TAZ 08/01/23

PROJECT ID

106959

SHEET

P.23

TOTAL

663


DEL-71-8.91 (PHASE A) PART 1

MODEL: Sheet PAPER SIZE: 34x22 (in.) DATE: 4/7/2025 TIME: 8:27:58 AM USER: zhangmeilester
\\msnssd1\clients\files\Production\03\600\06873-00\1-7.91 Phase A\106959\400-Engineering\Roadway\Sheets\106959_GG001.dgn


SHEET NUM.												PART.		ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
P.21	P.22	P.108	P.109	P.110	P.113	P.464	P.466	OFFICE				01/NHS/01	02/NHS/08						
																		ROADWAY	
LS												LS		201	11000	LS		CLEARING AND GRUBBING	P.21/P.22
		10										10		202	20010	10	EACH	HEADWALL REMOVED	
		400										400		202	23000	400	SY	PAVEMENT REMOVED	
		259										259		202	30000	259	SF	WALK REMOVED	
		59										59		202	32000	59	FT	CURB REMOVED	
	300	166										466		202	35100	466	FT	PIPE REMOVED, 24" AND UNDER	
		30										30		202	35200	30	FT	PIPE REMOVED, OVER 24"	
		1,965										1,965		202	38000	1,965	FT	GUARDRAIL REMOVED	
							1					1		202	42010	1	EACH	ANCHOR ASSEMBLY REMOVED, TYPE E	
		839										839		202	48000	839	FT	CABLE BARRIER REMOVED	
		5										5		202	58100	5	EACH	CATCH BASIN REMOVED	
		1										1		202	58200	1	EACH	INLET REMOVED	
		625										625		SPECIAL	20270000	625	FT	FILL AND PLUG EXISTING CONDUIT, 15"	P.23
	200											200		SPECIAL	20270110	200	FT	PIPE CLEANOUT, 24" AND UNDER	P.22
	100											100		SPECIAL	20270120	100	FT	PIPE CLEANOUT, 27" TO 48"	P.22
		4,909										4,909		202	75000	4,909	FT	FENCE REMOVED	
		1										1		202	98100	1	EACH	REMOVAL MISC.: WOOD POLE	P.23
		1										1		202	98100	1	EACH	REMOVAL MISC.: POLE AND FOUNDATION	P.23
		14										14		202	98100	14	EACH	REMOVAL MISC.: REFLECTOR POST	P.23
		140										140		202	98400	140	SF	REMOVAL MISC.: BUILDING PAD	P.23
						8,130		72,785				80,915		203	10000	80,915	CY	EXCAVATION	
						1,736		205,215				206,951		203	20000	206,951	CY	EMBANKMENT	
								30,572				30,572		203	20001	30,572	CY	EMBANKMENT, AS PER PLAN	P.23
								37,000				37,000		203	40001	37,000	CY	BORROW, AS PER PLAN	P.22
								21,122				21,122		204	10000	21,122	SY	SUBGRADE COMPACTION	P.21
								34				34		204	45000	34	hour	PROOF ROLLING	P.21
								72,971				72,971		206	15010	72,971	SY	CEMENT STABILIZED SUBGRADE, 12 INCHES DEEP	
								4,434				4,434		206	15020	4,434	SY	CEMENT STABILIZED SUBGRADE, 14 INCHES DEEP	
			4,953				100					5,053		606	15050	5,053	FT	GUARDRAIL, TYPE MGS	
			14				1					15		606	26150	15	EACH	ANCHOR ASSEMBLY, MGS TYPE E (MASH 2016)	P.21
			10									10		606	26550	10	EACH	ANCHOR ASSEMBLY, MGS TYPE T	
			4									4		606	35002	4	EACH	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 1	
			1,731									1,731		SPECIAL	60655010	1,731	FT	CABLE BARRIER WITH CONCRETE LINE POST FOUNDATION	P.22
			3									3		SPECIAL	60655150	3	EACH	CABLE BARRIER, ANCHOR ASSEMBLY	P.22
			1									1		606	60022	1	EACH	IMPACT ATTENUATOR, TYPE 2 (UNIDIRECTIONAL) 75 mph, 24" WIDTH, (MASH 2016)	P.21
			2									2		606	60050	2	EACH	IMPACT ATTENUATOR, TYPE 3 (BIDIRECTIONAL) 75 MPH, 24" WIDTH (MASH 2016)	P.21
			7,868									7,868		607	15000	7,868	FT	FENCE, TYPE 47	
			8,311									8,311		608	10000	8,311	SF	4" CONCRETE WALK	
			1,252									1,252		608	52000	1,252	SF	CURB RAMP	
			160									160		608	53020	160	SF	DETECTABLE WARNING	
				225								225		622	10100	225	FT	CONCRETE BARRIER, SINGLE SLOPE, TYPE B1	
			4,892									4,892		622	10120	4,892	FT	CONCRETE BARRIER, SINGLE SLOPE, TYPE C	
			352									352		622	10160	352	FT	CONCRETE BARRIER, SINGLE SLOPE, TYPE D	
			1									1		622	24840	1	EACH	CONCRETE BARRIER END SECTION, TYPE B	
			2									2		622	24850	2	EACH	CONCRETE BARRIER END SECTION, TYPE B1	
			4									4		622	25000	4	EACH	CONCRETE BARRIER END SECTION, TYPE D	
			1									1		622	25004	1	EACH	CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE B	
			30									30		622	25008	30	EACH	CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE C	
			2									2		622	25050	2	EACH	CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE D	
			2									2		622	25051	2	EACH	CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE D, AS PER PLAN	P.5
			8									8		623	38500	8	EACH	MONUMENT ASSEMBLY, TYPE C	P.21
			2									2		625	32000	2	EACH	GROUND ROD	
				118								118		654	10001	118	MSF	RENOVATING EXISTING SOIL, AS PER PLAN	P.439
LS												LS		SPECIAL	69098400	LS		SURVEY CONTROL VERIFICATION	P.21
												LS		878	25000	LS		INSPECTION AND COMPACTION TESTING OF UNBOUND MATERIALS	

GENERAL SUMMARY

DESIGN AGENCY



ms consultants



DESIGNER
ACW

REVIEWER
TAZ 11/22

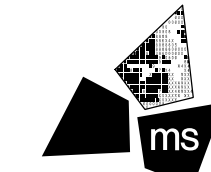
PROJECT ID	106959
------------	--------

SHEET	TOTAL
B 101	6

LAST REVISED: PIR4 04/07/2025

SHEET NUM.									PART.		ALT	ITEM	ITEM	GRAND	UNIT	DESCRIPTION	SEE SHEET NO.
P.24	P.25	P.26	P.28	P.34	P.109	P.113	P.567		01/NHS/01	02/NHS/08	(X)		EXT	TOTAL			
																STRUCTURE OVER 20 FOOT SPAN (DEL-00071-08.910) (CONT.)	
							32			32		516	46900	32	EACH	BEARING DEVICE, MISC.:ELASTOMERIC BEARING ASSEMBLY	P.578
							255			255		518	21200	255	CY	POROUS BACKFILL WITH GEOTEXTILE FABRIC	
							303			303		518	40000	303	FT	6" PERFORATED CORRUGATED PLASTIC PIPE	
							43			43		518	40010	43	FT	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS	
							136			136		524	94904	136	FT	DRILLED SHAFTS, 48" DIAMETER, INTO BEDROCK	
							152			152		524	94906	152	FT	DRILLED SHAFTS, 54" DIAMETER, ABOVE BEDROCK	
							1,009			1,009		526	30010	1,009	SY	REINFORCED CONCRETE APPROACH SLABS WITH QC/QA (T=17")	
							303			303		526	90030	303	FT	TYPE C INSTALLATION	
																STRUCTURE OVER 20 FOOT SPAN (DEL-00071-08.910) ALTERNATES	
							546			546	X	607	39930	546	FT	VANDAL PROTECTION FENCE, 12' CURVED, COATED FABRIC (ALTERNATE 1)	P.20
										565	X	607	98000	565	FT	FENCE, MISC.: DECORATIVE FENCE (ALTERNATE 2)	P.20
							585			585	X	517	75122	585	FT	RAILING (CONCRETE PARAPET WITH TWIN STEEL TUBE RAILING AND VANDAL PROTECTION FENCE) (ALTERNATE 1)	P.20
										565	X	517	76300	565	FT	RAILING, MISC.: CONC. PARAPET W/ TWIN STEEL TUBE RAIL & DECORATIVE PROTECTION FENCE (ALTERNATE 2)	P.20
																MISCELLANEOUS STRUCTURE	
				<div><div>3</div><div></div></div>		LS			LS			503	11101	LS		COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN	P.23
				<div><div>7,167</div><div></div></div>					7,167			512	10000	7,167	SY	SEALING OF CONCRETE SURFACES	
																MAINTENANCE OF TRAFFIC	
			472						472			614	11110	472	HOURL	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE	
			3,199						3,199			614	11630	3,199	FT	INCREASED BARRIER DELINEATION	
			11						11			614	12380	11	EACH	WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (UNIDIRECTIONAL)	
			1						1			614	12400	1	EACH	WORK ZONE IMPACT ATTENUATOR, MISC.:48" WIDE HAZARDS, UNIDIRECTIONAL	P.28
LS									LS			614	12420	LS		DETOUR SIGNING	
	12								12			614	12484	12	EACH	WORK ZONE INCREASED PENALTIES SIGN	
10									10			614	12500	10	EACH	REPLACEMENT SIGN	
	20								20			614	12600	20	EACH	REPLACEMENT DRUM	
				1,850					1,850			614	12801	1,850	EACH	WORK ZONE RAISED PAVEMENT MARKER, AS PER PLAN	P.28
	667								667			614	13000	667	CY	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC	
				248					248			614	13310	248	EACH	BARRIER REFLECTOR, TYPE 1 (ONE-WAY)	
				311					311			614	13350	311	EACH	OBJECT MARKER, ONE WAY	
		80							80			614	18601	80	SNMT	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN	P.26
8.15									8.15			614	20010	8.15	MILE	WORK ZONE LANE LINE, CLASS I, 6"	
				4.37					4.37			614	20056	4.37	MILE	WORK ZONE LANE LINE, CLASS I, 6", 807 PAINT	
9.24									9.24			614	22010	9.24	MILE	WORK ZONE EDGE LINE, CLASS I, 6"	
				9.79					9.79			614	22056	9.79	MILE	WORK ZONE EDGE LINE, CLASS I, 6", 807 PAINT	
3,646									3,646			614	23010	3,646	FT	WORK ZONE CHANNELIZING LINE, CLASS I, 12"	
				20,020					20,020			614	23110	20,020	FT	WORK ZONE CHANNELIZING LINE, CLASS I, 12", 807 PAINT	
508									508			614	24000	508	FT	WORK ZONE DOTTED LINE, CLASS I, 6"	
				4,200					4,200			614	24102	4,200	FT	WORK ZONE DOTTED LINE, CLASS I, 6", 807 PAINT	
				537					537			614	28000	537	FT	WORK ZONE GORE MARKING, CLASS II	
20				20					40			614	30000	40	EACH	WORK ZONE ARROW, CLASS I	
				2					2			614	30001	2	EACH	WORK ZONE ARROW, CLASS I, AS PER PLAN	P.28
				864					864			615	20000	864	SY	PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A	
			<div><div>3</div><div></div></div>	<div><div>17,340</div><div></div></div>					<div><div>17,340</div><div></div></div>			<div><div>622</div><div></div></div>	<div><div>41100</div><div></div></div>	<div><div>17,340</div><div></div></div>	FT	PORTABLE BARRIER, UNANCHORED	
	72								72			808	18700	72	SNMT	DIGITAL SPEED LIMIT (DSL) SIGN ASSEMBLY	
																INCIDENTALS	
									LS			108	10000	LS		CPM PROGRESS SCHEDULE	
									LS			614	11000	LS		MAINTAINING TRAFFIC	
									24			619	16020	24	MINTH	FIELD OFFICE, TYPE C	
									LS			623	10000	LS		CONSTRUCTION LAYOUT STAKES AND SURVEYING	
									LS			624	10000	LS		MOBILIZATION	

DESIGN AGENCY



ms consultants, inc.

DESIGNER

ACW

REVIEWER

TAZ 11/22/23

PROJECT ID

106959

SHEET

P.107A

TOTAL

663

DEL-71-8.91 (PHASE A) PART 1

MODEL SHEET PAPER SIZE: 34x22 (in.) DATE: 3/17/2025 TIME: 3:38:52 PM USER: tzangmeister
\\msconsultants.com\files\Production\0360\06873-00\171-91 Phase A\106959\400-Engineering\Roadway\Sheets\106959_GS002.dgn

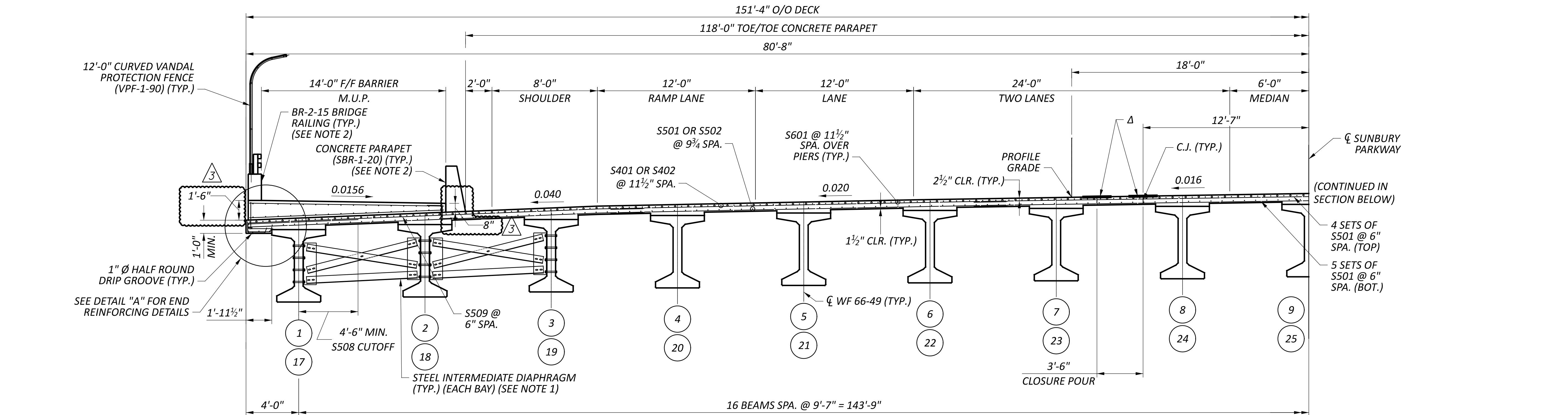
[illegible]

9
TO
ID
02/
ACW
ER
CONSULTANT
m
m
AGENCY

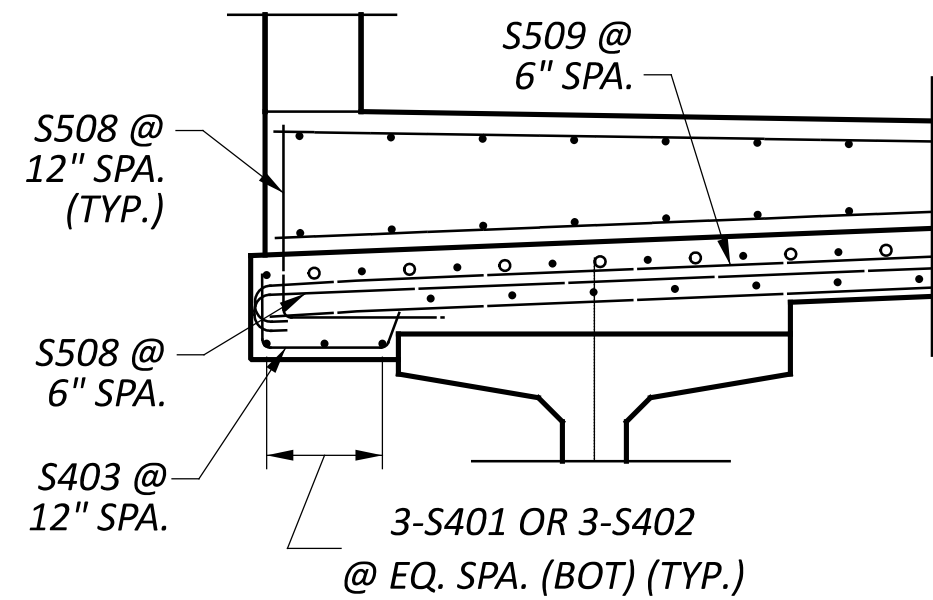
SHEET TOTAL

NO.	RFI	DESCRIPTION	REV. BY	DATE
PIR3	.	REVISE COFFERDAM ITEM	TAZ	03/17/25
.

LAST REVISED: PIR3 03/17/2025

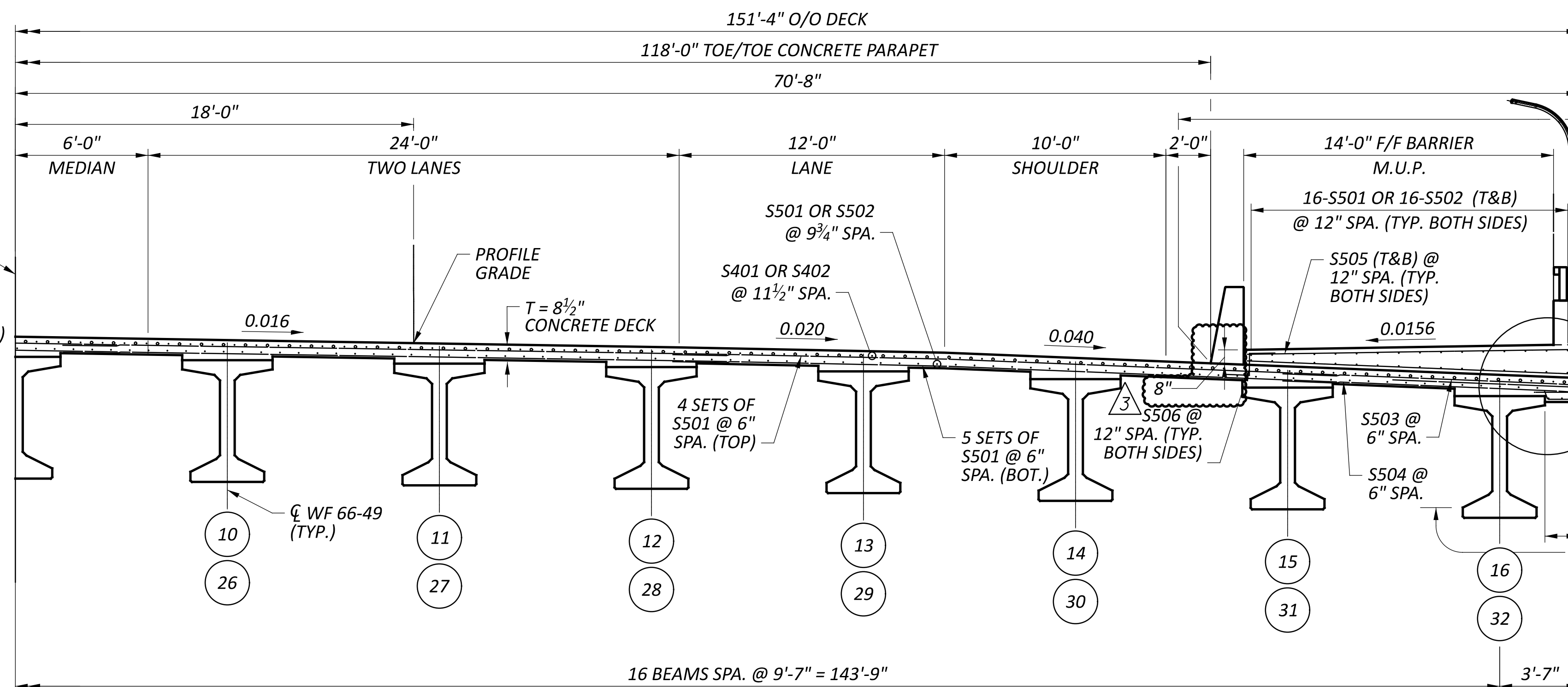


TYPICAL TRANSVERSE SECTION (1 OF 2)

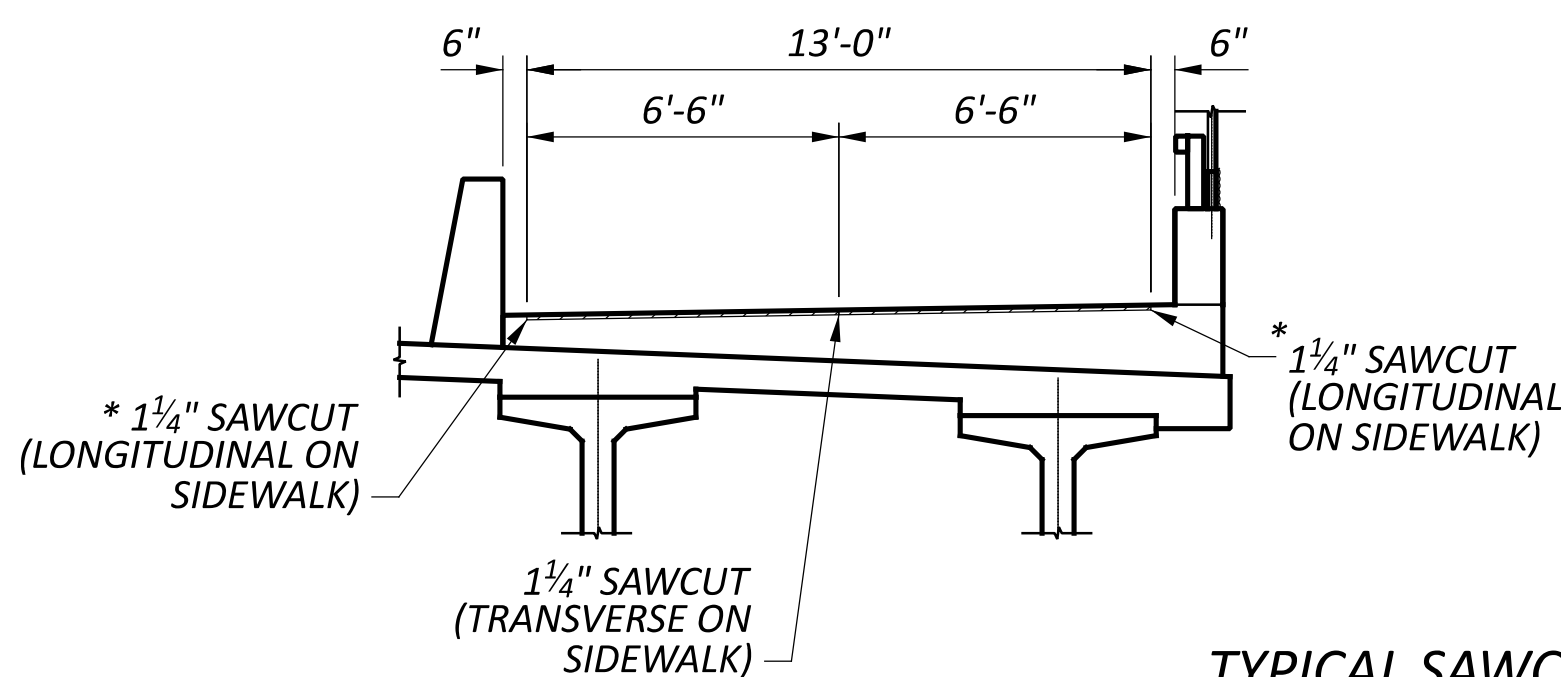


DETAIL "A"

CL SUNBURY PARKWAY
(CONTINUED IN SECTION ABOVE)



TYPICAL TRANSVERSE SECTION (2 OF 2)



TYPICAL SAWCUT DETAILS

LEGEND:

- # BEAM NUMBER
Δ 2'-0" WIDE H.M.W.M. CENTERED ON C.J.
* M.U.P. SAWCUT JOINT SPACING SHALL MATCH THE DEFLECTION JOINT SPACING FOR BR-2-15 BRIDGE RAILING.
T&B TOP AND BOTTOM

NO.	DESCRIPTION	REV.	BY	DATE
PIR3	ADDED SUP DIMENSIONS		ATM	03/14/25

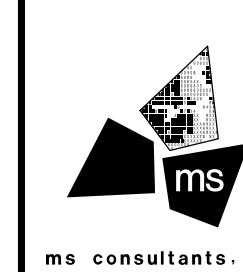
NOTES:

- FOR STEEL INTERMEDIATE DIAPHRAGM DETAILS, SEE STANDARD CONSTRUCTION DRAWING PSIB-1-13.
- FOR BR-2-15 BRIDGE RAILING AND SBR-1-20 CONCRETE PARAPET DETAILS AND REINFORCING, SEE SHEETS 26/34 AND 27/34.
- SEALING OF LONGITUDINAL DECK JOINTS WITH HIGH MOLECULAR WEIGHT METHACRYLATE (H.M.W.M.) IS INCIDENTAL TO COST OF ITEM 511 - CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK.
- DECK SLAB THICKNESS FOR CONCRETE QUANTITY: THE ESTIMATED QUANTITY OF DECK CONCRETE IS MEASURED ACCORDING TO C&MS 511. IN ADDITION TO THE DESIGN SLAB THICKNESS, THE QUANTITY INCLUDES A VARIABLE HAUNCH THICKNESS THAT PROVIDES AN ALLOWANCE FOR: VERTICAL GRADE ADJUSTMENT, BEAM CAMBER, AND ADDITIONAL SACRIFICIAL HAUNCH THICKNESS.

TYPICAL TRANSVERSE SECTION
BRIDGE NO. DEL-00071-08.910
OVER I-71

SFN
2102440

DESIGN AGENCY



DESIGNER	CHECKER
ATM	SJR
REVIEWER	
YSJ	11/30/23
PROJECT ID	
106959	
SUBSET	TOTAL
19	34
SHEET	TOTAL
P.583	663