GUARDRAIL REPLACEMENT, RETAINING WALL, DRAINAGE

ESTIMATED CONTRACTOR EARTH DISTURBED AREA: .25 ACRES

STRUCTURES, AND MINIMAL PAVEMENT WORK.

NOTICE OF INTENT EARTH DISTURBED AREA:

PROJECT EARTH DISTURBED AREA:

(NOI NOT REQUIRED)

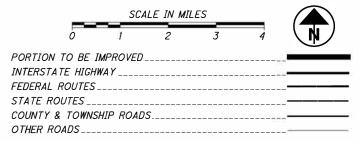
.71 ACRES

DEPARTMENT OF TRANSPORTATION CUYAHOGA COUNTY MED-303-13.90/14.96 SUMMIT COUNT MEDINA\COUNTY SUSPEND PROJEC HINCKLEY TOWNSHIP TA. 53+65.00 BEGIN PROJEC TA. 51+64.00

LOCATION MAP

MED-303-13.90 - LATITUDE: 41° 14′ 23″ LONGITUDE: 81° 42′ 26″ MED-303-14.96 - LATITUDE: 41° 14′ 23″ LONGITUDE: 81° 41′ 17″ MED-303-13.90/14.96 - LATITUDE: 41° 14′ 23″ LONGITUDE: 81° 41′ 52″

TA. 10+60.00



DESIGN DESIGNATION

CURRENT ADT (2020)	6,000
DESIGN YEAR ADT (2040)	6,500
DESIGN HOURLY VOLUME (2040)	600
DIRECTIONAL DISTRIBUTION	<i>51%</i>
TRUCKS (24 HOUR B&C)	4%
DESIGN SPEED	45 MPH
LEGAL SPEED	45 MPH
DESIGN FUNCTIONAL CLASSIFICATION:	
RURAL - 05 MAJOR COLLECTOR	
NHS PROJECT	NO

DESIGN EXCEPTIONS

NONE

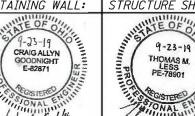
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UNDERGROUND UTILITIES	
CONTACT BOTH SERVICES TWO WORKING DAYS BEFORE YOU DIG .	
OHIO Utilities Protection SERVICE (Non-members must be called directly)	
OIL & GAS PRODUCERS UNDERGROUND PROTECTION SERVICE	

1-800-925-0988 PLAN PREPARED BY:







FOR MED-303-149 *RELATED* STRUCTURE SHEET

HART

E-69738

FOR MED-303-1390 RELATED RETAINING WALL SHEETS



INDEX OF SHEETS:

STATE OF OHIO

MEDINA COUNTY

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MED-303-14.96	<i>36-55</i>
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SOIL_PROFILES	_
(SHEET NOT USED V V V V V V V	9

ADDENDUM 3: 3-WAY STOP REMOVED

STANDARD CONSTRUCTION DRAWINGS

4				SPECIFI	CATIONS	PROVISIONS					
None of the least	BP-3.1	7/18/14	DM-4.4	1/15/16	TST-1-99	7/20/18		800-2019	7/19/19	WATERWAY	
	BP-4.1	7/19/13						832	10/19/18		12/5/18
	BP-5.1	1/18/19	MGS-1.1	1/19/18	MT-101.60	1/20/17		836	1/19/18		
96			MGS-2.1	1/19/18	MT-105.10	7/19/13		846	4/17/15		- 0
,	CB-1.2	1/15/16	MGS-3.1	1/19/18	ti	1		873	10/17/08		
TS	CB-2.1	7/20/18	MGS-4.2	7/19/13	TC-41.20	10/18/13					
	1		MGS-4.3	1/18/13	TC-41.30	10/18/13					
			MGS-5.2	7/15/16	TC-42.20	10/18/13		4			
-	HW-2.1	7/20/18	MGS-5.3	7/15/16	TC-61.30	7/19/19					
William William	HW-2.2	7/20/18	MGS-6.1	1/19/18	TC-65.10	1/17/14					
=					12			1			
ξΞ	MH-1.2	1/15/16	AS-1-15	7/17/15	RM-1.1	7/18/14					
3			AS-2-15	1/19/18		Ī			i i		
•	DM-1.1	7/21/17	DS-1-92	7/18/03							
	DM-4.1	7/20/18	GSD-1-96	7/19/02					Ĵ		
•	DM-4.3	1/15/16	ICD-1-82	7/19/02	5	1					

SUPPLEMENTAL

SPECIAL

2019 SPECIFICATIONS

THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO. DEPARTMENT OF TRANSPORTATION. INCLUDING CHANGES AND SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PROPOSAL SHALL GOVERN THIS IMPROVEMENT.

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY AND THAT DETOURS WILL BE PROVIDED AS INDICATED ON SHEET 10.

22 DISTRICT DEPUTY DIRECTOR

APPROVED_ DIRECTOR, DEPARTMENT OF TRANSPORTATION

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ITEM 614 - MAINTAINING TRAFFIC

DETOUR LIMITATION:

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TRAFFIC SHALL BE MAINTAINED AT ALL TIMES. EXCEPT FOR A PERIOD NOT TO EXCEED 90 CONSECUTIVE DAYS. THROUGH TRAFFIC WILL BE DETOURED AS SHOWN ON SHEET 10.

THE CONTRACTOR SHALL NOTIFY THE ODOT DISTRICT 3 ROADWAY SERVICES MANAGER, IN WRITING, A MINIMUM OF FOURTEEN (14) DAYS IN ADVANCE OF THE DATE THE DETOUR IS NEEDED. THE CONTRACTOR WILL INSTALL, MAINTAIN, AND SUBSEQUENTLY REMOVE THE DETOUR SIGNING.

THE CONTRACTOR SHALL ALSO NOTIFY, IN WRITING, THE FOLLOWING AGENCIES AT LEAST TEN (10) DAYS PRIOR TO THE TIME WHEN THE SR 303 DETOUR WILL BE IMPLEMENTED:

MEDINA COUNTY ENGINEER THE CITY OF NORTH ROYALTON TOWNSHIP TRUSTEES (TWP. ROADS ONLY) LOCAL POLICE, FIRE, AND AMBULANCE DEPARTMENT(S) LOCAL SCHOOL DISTRICT(S) MEDINA COUNTY SHERIFF'S OFFICE

THE CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING, INSTALLING MAINTAINING AND REMOVING THE GATES AND BARRICADES AT THE APPROXIMATE WORK LIMITS OF THE PROJECT, AND THE ADVANCE WARNING SIGNS AS SHOWN ON STANDARD CONSTRUCTION DRAWING MT-101.60.

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH C&MS 614 AND OTHER APPLICABLE PORTIONS OF THE SPECIFICATIONS, AS WELL AS THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614, MAINTAINING TRAFFIC, UNLESS SEPARATELY ITEMIZED IN THE PLAN.

DETOUR SIGNING

THIS ITEM PERTAINS ONLY TO DETOUR SIGNING AS SHOWN ON THE DETOUR MAP SHEET, PAYMENT FOR ALL OTHER DETOURS NOT SHOWN ON THIS PAGE PROPOSED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER WILL BE MADE AS PART OF THE LUMP SUM CONTRACT BID PRICE FOR ITEM 614 MAINTAINING TRAFFIC.

THE FOLLOWING QUANTITY IS INCLUDED FOR THE CONTRACTOR TO PROVIDE THE DETOUR SIGNING AS SHOWN AS PER 614.06 (B).

ITEM 614, DETOUR SIGNING -

LUMP SUM

ITEM 614, MAINTAINING TRAFFIC (NOTICE OF CLOSURE SIGN) NOTICE OF CLOSURE SIGNS (W20-H13) SHALL BE ERECTED BY THE CONTRACTOR PRIOR TO THE SCHEDULED ROAD CLOSURE IN ACCORDANCE WITH THE NOTICE OF CLOSURE TIME TABLE BELOW. LAT THE APPROVAL OF THE ENGINEER, PORTABLE CHANGEABLE MESSAGE SIGNS MAY BE USED IN LIEU OF THE STANDARD FLATSHEET SIGN FOR CLOSURE DURATIONS OF LESS THAN 1 WEEK.J

THE SIGNS SHALL BE ERECTED ON THE RIGHT-HAND SIDE OF THE ROAD FACING TRAFFIC. THEY SHALL BE PLACED SO AS NOT TO INTERFERE WITH THE VISIBILITY OF ANY OTHER TRAFFIC CONTROL SIGNS. ON ROADWAYS. THEY SHOULD BE ERECTED AT OR NEAR THE POINT OF CLOSURE.

ITEM	DURATION OF CLOSURE	SIGN DISPLAYED TO PUBLIC
	>= 2 WEEKS	<i>14 CALENDAR DAYS PRIOR</i>
ROAD		TO CLOSURE
CLOSURES	> 12 HOURS &	7 CALENDAR DAYS PRIOR
	< 2 WEEKS	TO CLOSURE
	< 12 HOURS	2 CALENDAR DAYS PRIOR
		TO CLOSURE

THE SIGN SHALL DISPLAY THE DATE OF THE CLOSURE IN MMM-DD FORMAT AND THE NUMBER OF DAYS OF THE CLOSURE. THE LAST LINE OF THE W20-H13 SIGN LISTS A PHONE NUMBER WHICH A MOTORIST MAY CALL FOR ADDITIONAL INFORMATION. THIS IS TO BE A SPECIFIC OFFICE WITHIN THE DISTRICT RATHER THAN THE GENERAL SWITCHBOARD NUMBER.

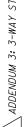
NOTIFICATION OF TRAFFIC RESTRICTIONS

THROUGHOUT THE DURATION OF THE PROJECT, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER IN WRITING OF ALL TRAFFIC RESTRICTIONS AND UPCOMING MAINTENANCE OF TRAFFIC CHANGES. THE CONTRACTOR SHALL ENSURE THE WRITTEN NOTIFICATION IS SUBMITTED IN A TIMELY MANNER TO ALLOW THE PROJECT ENGINEER TO MEET THE REQUIRED TIME FRAMES SET FORTH IN THE TABLE BELOW TO INFORM THE SPECIAL HAULING PERMITS SECTION (HAULING.PERMITS@DOT.OHIO.GOV) AND THE DISTRICT PUBLIC INFORMATION OFFICE(PIO). THIS NOTIFICATION SHALL BE RECEIVED BY THE PROJECT ENGINEER PRIOR TO THE PHYSICAL SETUP OF ANY APPLICABLE SIGNS OR MESSAGE

INFORMATION SHOULD INCLUDE, BUT IS NOT LIMITED TO, ALL CONSTRUCTION ACTIVITIES THAT IMPACT OR INTERFERE WITH TRAFFIC AND SHALL LIST THE SPECIFIC LOCATION, TYPE OF WORK, ROAD STATUS, DATE AND TIME OF RESTRICTION, DURATION OF RESTRICTION, NUMBER OF LANES MAINTAINED. NUMBER OF LANES CLOSED, MINIMUM VERTICAL CLEARANCE, MINIMUM WIDTH OF DRIVABLE PAVEMENT, DETOUR ROUTES, IF APPLICABLE, AND ANY OTHER INFORMATION REQUESTED BY THE PROJECT ENGINEER.

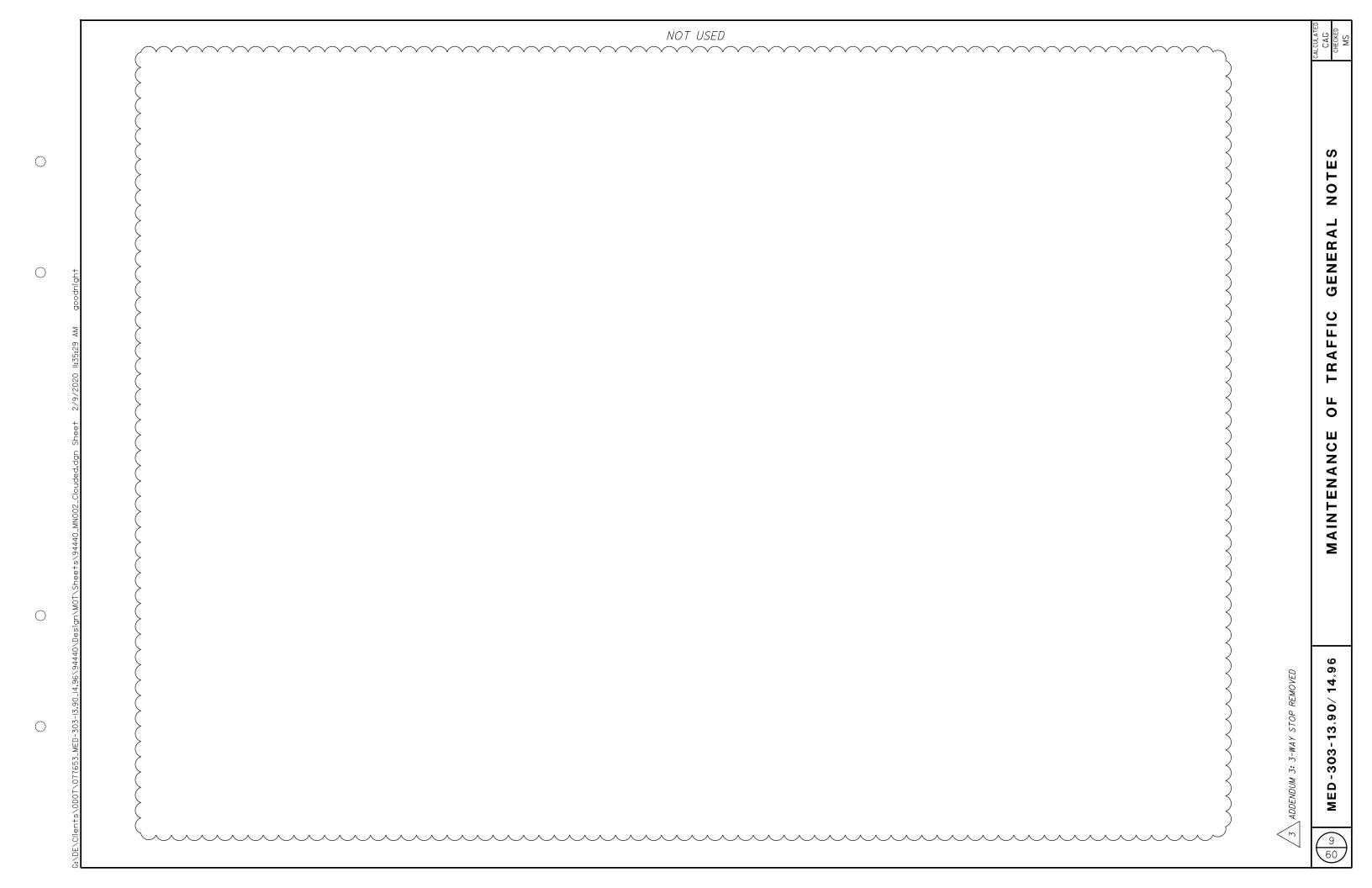
ITEM	DURATION OF CLOSURE	NOTICE DUE TO PERMITS & PIO
	>= 2 WEEKS	21 CALENDAR DAYS PRIOR
ROAD		TO CLOSURE
CLOSURES	> 12 HOURS &	<i>14 CALENDAR DAYS PRIOR</i>
	< 2 WEEKS	TO CLOSURE
	< 12 HOURS	4 BUSINESS DAYS PRIOR
		TO CLOSURE
LANE	>= 2 WEEKS	<i>14 CALENDAR DAYS PRIOR</i>
CLOSURES &		TO CLOSURE
RESTRICTIONS	< 2 WEEKS	5 BUSINESS DAYS PRIOR
		TO CLOSURE
START OF	N/A	<i>14 CALENDAR DAYS PRIOR</i>
CONSTRUCTION		TO IMPLEMENTATION

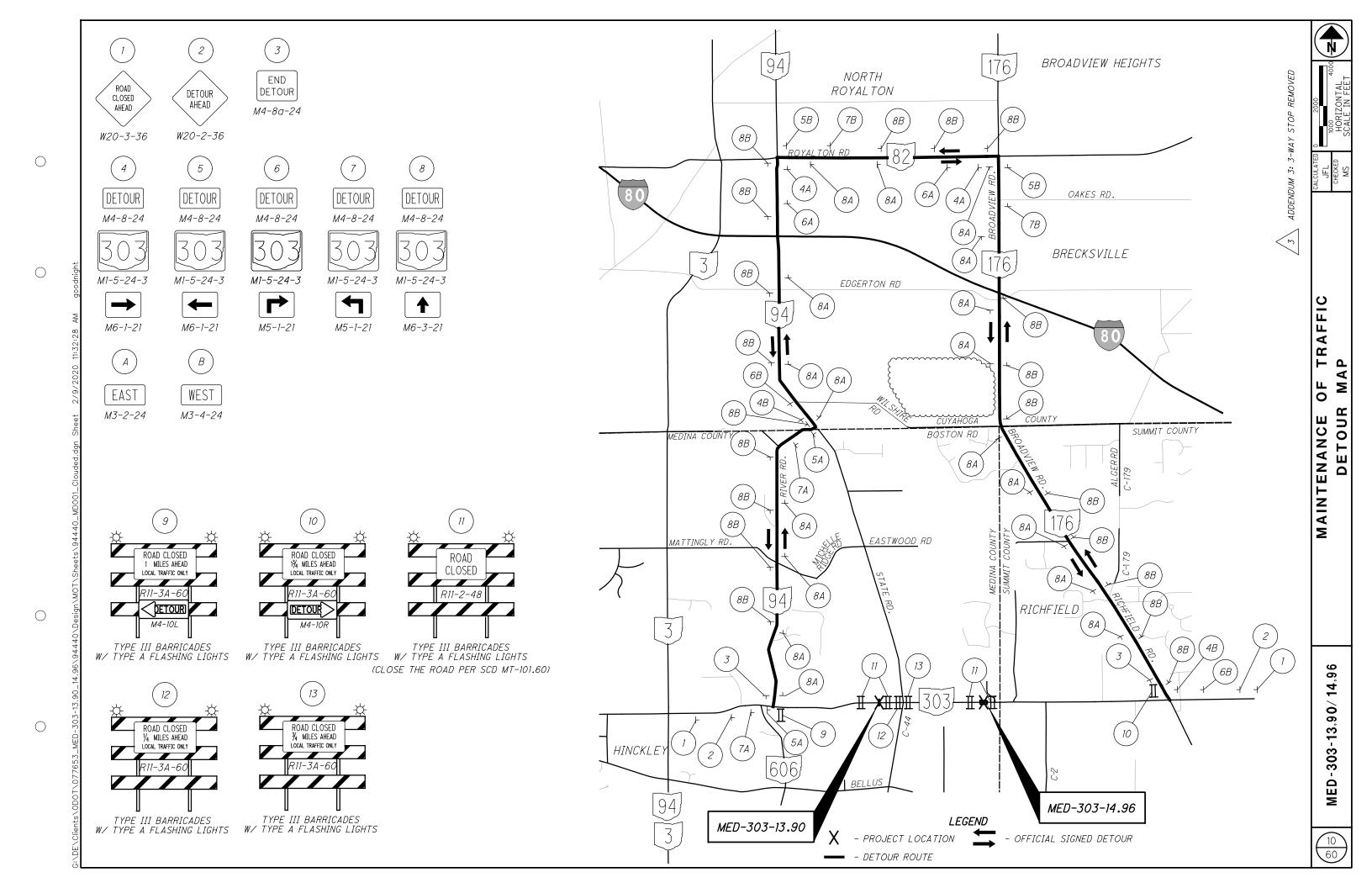
ANY UNFORESEEN CONDITIONS NOT SPECIFIED IN THE PLANS REQUIRING TRAFFIC RESTRICTIONS SHALL ALSO BE REPORTED TO THE PROJECT ENGINEER USING THE NOTIFICATION TIME



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7	27	34	35							01/STR/BR	02/STR/CI		EXT	TOTAL			NO.
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		3	4							4	3	621	00100	7	EACH	RPM	
,, ())	3	4					1		4	3	621	54000	7	EACH	RAISED PAVEMENT MARKER REMOVED	
11 > ~						\sim				8	\rightarrow	626	00112	11	EACH	BARRIER REFLECTOR, TYPE 3, BI-DIRECTIONAL	\leftarrow
			10		+					10		630	03100	10	FT	GROUND MOUNTED SUPPORT, NO. 3 POST	+
																,	
$\overline{}$			1 1		+					1		630 630	85100 86002	1	EACH EACH	REMOVAL OF GROUND MOUNTED SIGN AND REERECTION REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL	+
/3\			 		+					,		030	80002	,	EAUT	REMOVAL OF GROUND MOUNTED FOST SUFFORT AND DISFOSAL	1 3
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\sim																	
		0.08	0.1		++			-		0.1	0.08	642	00094	0.18	MILE	EDGE LINE, 6"	
		0.04	0.05	1	+			+		0.05	0.04	642	00290	0.09	MILE	CENTER LINE	
			0.06		+ +					0.06		646	10010	0.06	MILE	EDGE LINE, 6"	
			0.03							0.03		646	10200	0.03	MILE	CENTER LINE	
	LS				++			-			1,5	202	11000	LS		RETAINING WALLS (13.90) STRUCTURE REMOVED	
	998		<u> </u>	<u> </u>				<u> </u>			LS 998				CX		29
	(LS	$ \uparrow $				\sim	\sim				998 LS	203	35001 98500	998 LS		GRANULAR EMBANKMENT, AS PER PLAN ROADWAY, MISC:GRANULAR EMBANKMENT, TYPE B	26
	9	_															
	LS			1	+						LS	503	11100	LS		COFFERDAMS AND EXCAVATION BRACING	00
	LS 744				+						LS 744	503 507	21301 00400	LS 744	FT	UNCLASSIFIED EXCAVATION, AS PER PLAN STEEL PILES, MISC.: SOLDIER PILES	26 26
	8,096										8,096	509	10000	8,096	LB	EPOXY COATED REINFORCING STEEL	1 20
														Ĺ			
	47										47	511	46010	47	CY	CLASS QCI CONCRETE, RETAINING/WINGWALL NOT INCLUDING FOOTING	
	101				++			-			101	512	10100	101	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	20
	24 10				+						24 10	512 516	33001 13600	24 10	SY SF	TYPE 2 WATERPROOFING, AS PER PLAN I" PREFORMED EXPANSION JOINT FILLER	26
	5										5	518	21200	5	CY	POROUS BACKFILL WITH GEOTEXTILE FABRIC	
	133										133	518	39800	133	FT	4" PERFORATED CORRUGATED PLASTIC PIPE	
	552				+						7 552	518 524	39900 94801	7 552	FT FT	4" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS DRILLED SHAFTS, 42" DIAMETER, AS PER LAN	26
	302				+ +						002	021	5 1001	302	1 1	DIRECTO STATIO, 42 DIAMETER, AS FER EAR	20
	1,179				-						1,179	610	50010	1,179	SF	RETAINING WALL, MISC.: TIMBER LAGGING	26
	723				+						723	610 611	50010 99710	723	SF EACH	RETAINING WALL, MISC.: GEOCOMPOSITE DRAIN PRECAST REINFORCED CONCRETE OUTLET	26
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				SHEE1	T NUM.					PA	IRT.	ITEM	ITEM	GRAND	UNIT	DESCRIPTION		SEE ET NO.
8	38									01/STR/BR	02/STR/CV		EXT	TOTAL	O/VI /	BESONI TION	SHE	ET NO.
																STRUCTURE OVER 20 FOOT SPAN (MED-303-14.96)		
	LS									LS		202	11003	LS		STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN		37
	67									67		202	22900	67	SY	APPROACH SLAB REMOVED		
	1.0									10	-	503	11100	10		COFFERDAMS AND EXCAVATION BRACING		
	LS									LS		303	11100	LS		COFFERDAMS AND EXCAVATION BRACING		—
	LS									LS	1	503	21300	LS		UNCLASSIFIED EXCAVATION		
	LS									LS		505	11100	LS		PILE DRIVING EQUIPMENT MOBILIZATION		
	840									840	1	507	00500	840	FT	12" CAST-IN-PLACE REINFORCED CONCRETE PILES, DRIVEN		
	920 44,105									920 44,105	1	507 509	00550 10000	920 44 , 105	FT LB	12" CAST-IN-PLACE REINFORCED CONCRETE PILES, FURNISHED EPOXY COATED REINFORCING STEEL		
	71,700									77,700		000	10000	11,100		El ON CONTES NEIN CHOING STEEL		
	134									134		511	34446	134	CY	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK		
	71									71	1	511	43512	71	CY	CLASS QCI CONCRETE WITH QC/QA, ABUTMENT INCLUDING FOOTING		
	167 81 , 251									167 81 , 251	1	512 513	10050 10260	167 81 , 251	SY LB	SEALING OF CONCRETE SURFACES (NON-EPOXY) STRUCTURAL STEEL MEMBERS, LEVEL 3		
	1,320									1,320	+	513	20000	1,320	EACH	WELDED STUD SHEAR CONNECTORS	5	
																	AM	
	4,539									4,539		514	00060	4,539	SF SF	FÍELD PAINTING STŘUCTŮRAL STEEL, INTEŘMEDÍATE COAT	<i>∃8</i> .	
2	4,539									4,539		514	00066	4,539	SF	FIELD PAINTING STRUCTURAL STEEL, FINISH COAT	9	
	5	\sim	\sim					\leftarrow		5		514	10000	5	EACH SF	FINAL INSPECTION REPAIR 172" PRÉFORMED EXPANSION JOINT FILLER	SWI .	
	112									112		516	13600	112	SF	1" PREFORMED EXPANSION JOINT FILLER	IN I	
																	PA	
	80									80		516	14014	80	FT	INTEGRAL ABUTMENT EXPANSION JOINT SEAL	07:	
	170 76									170 76		517 518	70000 21200	170 76	FT CY	RAILING (TWIN STEEL TUBE) POROUS BACKFILL WITH GEOTEXTILE FABRIC	FII.	
	202									202		SPECIAL	51822300	76 202	FT	STEEL DRIP STRIP	5	
	102									102		518	40000	102	FT	6" PERFORATED CORRUGATED PLASTIC PIPE	20/	Q:
																	TW.	0.0
	71									71	1	518 507	40010	71	FT	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS	PA	REM
	200									200	+	523 526	20000 25010	200	EACH SY	DYNAMIC LOAD TESTING REINFORCED CONCRETE APPROACH SLABS WITH QC/QA (T=15")	9	7
	74									74	1	526	90010	74	FT	TYPE A INSTALLATION	\$	STC
	133									133		601	32204	133	CY	ROCK CHANNEL PROTECTION, TYPE C WITH GEOTEXTILE FABRIC	<i>₹9</i> 0	~
																	CHAI	3-WA
	31									31		846	00110	31	CF	POLYMER MODIFIED ASPHALT EXPANSION JOINT SYSTEM	3; (Š.
																MAINTENANCE OF TRAFFIC	3	3
LS										LS	LS	614	12420	LS		DETOUR SIGNING	QV.	END
			\sim														1001	1 <i>DD</i>
	^ ^ ^					 			 	 					^ ^ ^			\rightarrow
$1 \sim 1$			$\circ \circ \circ$													INCIDENTALS		~
3										LS	LS	614	11000	LS		MAINTAINING TRAFFIC	1	
										3	2	619	16010	5	MNTH	FIELD OFFICE, TYPE B		
										LS LS	LS LS	623 624	10000	LS LS		CONSTRUCTION LAYOUT STAKES AND SURVEYING MOBILIZATION		
											1 20	02 /	,,,,,,					-
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THE PROPOSED WORK CONSISTS OF BUILDING A SOLDIER PILE WITH LAGGING RETAINING WALL (UNANCHORED) ALONG SR 303 (CENTER ROAD).

DESIGN SPECIFICATIONS

THIS STRUCTURE CONFORMS TO "THE LRFD BRIDGE DESIGN SPECIFICATIONS" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 8TH EDITION, INCLUDING 2018 ERRATA DATED 1/19/18, AND THE ODOT BRIDGE DESIGN MANUAL, 2007.

DESIGN DATA

CONCRETE CLASS OCI - COMPRESSIVE STRENGTH 4000 PSI REINFORCING STEEL - ASTM A615 OR A996 GRADE 60, MINIMUM YIELD STRENGTH 60,000 PSI STRUCTURAL STEEL FOR SOLDIER PILES - ASTM A709 GRADE 50 YIELD STRENGTH 50,000 PSI

ITEM 503 - UNCLASSIFIED EXCAVATION, AS PER PLAN

ALL EXCAVATION REQUIRED TO CONSTRUCT THE PROPOSED RETAINING WALL, STORM SEWER SYSTEM, AND ACCESS DRIVE WITHIN THE LIMITS OF THE ANTICIPATED LAY BACK AREA SHALL BE INCLUDED WITH ITEM 503 - UNCLASSIFIED EXCAVATION, AS PER PLAN, FOR PAYMENT.

LAYING BACK OF THE ROADWAY EMBANKMENT FOR CONSTRUCTION PURPOSES FROM THE BEGINNING OF THE PROJECT TO STATION 52+60 AND FROM STATION 53+03 TO END OF THE PROJECT SHALL BE AT A 1.5 HORIZONTAL TO 1.0 VERTICAL AND AT A 2.0 HORIZONTAL TO A 1.0 VERTICAL BETWEEN STATIONS 52+60 AND 53+03 AS PER THE GEOTECHNICAL ENGINEERS RECOMMENDATIONS.

MAINTENANCE OF TRAFFIC

FOR MAINTENANCE OF TRAFFIC DETAILS, SEE THE ROADWAY

ITEM 507 - STEEL PILES, MISC .: SOLDIER PILES

THIS WORK CONSISTS OF FURNISHING AND PLACING STEEL SOLDIER PILES INTO DRILLED HOLES AS WELL AS MONITORING PLUMBNESS. FURNISH SOLDIER PILES CONSISTING OF STRUCTURAL STEEL MEMBERS THAT MEET THE PLAN REQUIREMENTS AND CONFORM TO ASTM A709, GRADE 50. DO NOT FIELD WELD OR SPLICE STEEL SOLDIER PILES.

MEASUREMENT FOR PAYMENT WILL BE THE DISTANCE BETWEEN THE ENDS OF THE SOLDIER PILE. PAYMENT IS FULL COMPENSATION FOR FURNISHING AND PLACING THE SOLDIER PILES INCLUDING WELDED STUD SHEAR CONNECTORS. AND MONITORING THEIR PLUMBNESS UNTIL THE PLACEMENT OF THE CONCRETE FACING HAS BEGUN.

WELD HEADED STEEL STUDS TO THE FLANGES OF THE SOLDIER PILE IN ORDER TO CONNECT THE CONCRETE WALL FACING TO THE SOLDIER PILE. ATTACH HEADED STUDS ACCORDING TO C&MS 513.22 AND AS SHOWN IN THE PLANS, THE CONTRACTOR MAY ATTACH THE STUDS EITHER BEFORE PLACING THE MAI ATTACH THE STUDS ETHER BEFORE FLACING THE SOLDIER PILE IN THE DRILLED HOLE OR AFTER EXCAVATING IN FRONT OF THE WALL. PROTECT THE HEADED STUDS FROM DAMAGE UNTIL THE CONCRETE WALL FACING IS POURED. REPAIR OR REPLACE DAMAGED HEADED STUDS AT NO EXPENSE TO THE DEPARTMENT.

THE DEPARTMENT WILL PAY FOR SOLDIER PILES AT THE CONTACT UNIT PRICE BID PER FOOT FOR ITEM 507 - STEEL PILES, MISC .: SOLDIER PILES.

ITEM 512 - TYPE 2 WATERPROOFING, AS PER PLAN

TYPE 2 WATERPROOFING SHALL BE ATTACHED TO THE WOOD LAGGING, 3 FEET WIDE FULL HEIGHT CENTERED AT ALL CONCRETE PANEL JOINTS.

ITEM 524 - DRILLED SHAFTS, 42" DIAMETER, AS PER PLAN

THIS WORK CONSISTS OF FURNISHING AND INSTALLING DRILLED SHAFTS FOR SOLDIER PILE AND LAGGING WALLS. THE DRILLED SHAFTS ARE REINFORCED WITH SOLDIER PILES INSTEAD OF REINFORCING STEEL CAGES. THE SOLDIER PILES EXTEND ABOVE THE TOP OF THE DRILLED SHAFT. FURNISH AND INSTALL THE DRILLED SHAFTS IN ACCORDANCE WITH CMS 524 EXCEPT AS MODIFIED AND SUPPLEMENTED BELOW.

EXCAVATE THE HOLE FOR THE DRILLED SHAFT WITHIN 3 INCHES OF THE PLAN LOCATION. THE DESIGN IS BASED ON A BEDROCK ELEVATION AS NOTED ON SHEET 5/8. ALL DRILLED SHAFTS WITH THE STEEL SECTIONS SHALL HAVE A MINIMUM ROCK SOCKET DEPTH OF 5'-6". STEEL SECTIONS SHALL BE TRIMMED TO THE REQUIRED LENGTH IF THE ROCK IS ENCOUNTERED AT A HIGHER ELEVATION THAN THE ESTIMATED TOP OF ROCK ELEVATION OF 1117.00 FT. IF ROCK IS ENCOUNTERED AT AN ELEVATION LOWER THAN THE ESTIMATED TOP OF ROCK ELEVATION OF 1117.00 FT, NOTIFY THE DISTRICT GEOTECHNICAL ENGINEER IMMEDIATELY.

ALIGN THE SOLDIER PILE VERTICALLY WITHIN THE HOLE. PLACE THE SOLDIER PILE SO THAT THE FLANGES ARE PARALLEL TO THE CENTERLINE OF THE ROW OF DRILLED SHAFTS AND THE TOP IS AT THE PLAN ELEVATION. SUPPORT THE SOLDIER PILE SO THAT IT DOES NOT MOVE DURING CONCRETE PLACEMENT. DO NOT ALLOW THE VERTICAL ALIGNMENT OF THE SOLDIER PILE TO VARY BY MORE THAN 1/4" PER FOOT OF DEPTH. DO NOT ALLOW THE ORIENTATION OF THE FLANGES TO VARY BY MORE THAN 10 DEGREES.

USE CLASS QCI CONCRETE ACCORDING TO CMS 511. PLACE CONCRETE TO THE ELEVATION OF THE BOTTOM OF THE LAGGING. THE CONTRACTOR MAY PLACE CONCRETE USING THE FREE FALL METHOD PROVIDED THE DEPTH OF WATER IS LESS THAN 6 INCHES AND THE CONCRETE FALLS WITHOUT STRIKING THE SIDES OF THE HOLE. POURING CONCRETE ALONG THE WEB OF THE SOLDIER PILE IS ACCEPTABLE.

CHECK THE POSITION, THE VERTICAL ALIGNMENT, AND ORIENTATION OF THE SOLDIER PILE IMMEDIATELY AFTER CONCRETE PLACEMENT. MAKE CORRECTIONS AS NECESSARY TO MEET THE ABOVE TOLERANCES.

FILL THE HOLE ABOVE THE BOTTOM OF THE LAGGING TO THE EXISTING GROUND SURFACE WITH LOW STRENGTH MORTAR BACKFILL (LSM) PER ITEM 613. REMOVE CONCRETE AND LSM AS EVEN WITH THE FRONT FACE OF THE SOLDIER PILE IN ORDER TO PLACE THE LAGGING.

MEASUREMENT FOR PAYMENT FOR DRILLED SHAFTS, AS PER PLAN WILL BE LIMITED TO THE ACTUAL DRILLED DISTANCE BETWEEN THE GROUND SURFACE AND THE MINIMUM TIP ELEVATION, AS DETERMINED BY THE ENGINEER. PAYMENT IS FULL COMPENSATION FOR DRILLING THE HOLES, CONSTRUCTING THE DRILLED SHAFTS, SUPPORTING THE SOLDIER PILES, FURNISHING AND PLACING CONCRETE AND LSM, AND REMOVAL OF CONCRETE OR LSM FROM AROUND THE SOLDIER PILE AS NECESSARY TO PLACE LAGGING. THE DEPARTMENT WILL PAY FOR ACCEPTED QUANTITIES AT THE CONTRACT UNIT PRICE BID PER FOOT FOR ITEM 524 -DRILLED SHAFTS, 42" DIAMETER, AS PER PLAN.

ITEM SPECIAL - RETAINING WALL, MISC .: TIMBER LAGGING

THIS ITEM CONSISTS OF FURNISHING AND INSTALLING UNTREATED HARDWOOD LAGGING TO SERVE AS TEMPORARY LAGGING FOR THE SOLDIER PILE WALL. THE LAGGING SHALL CONSIST OF SOUTHERN PINE NO. 2 OR BETTER, WITH NOMINAL 4"X8" DIMENSIONS. LAGGING SHALL BE PLACED AS EXCAVATION OR EMBANKMENT PLACEMENT PROGRESSES, AT NO TIME SHOULD MORE THAN 3 FEET OF UNSUPPORTED EXCAVATION BE PERMITTED. REDUCE THE UNSUPPORTED HEIGHT AS NECESSARY TO PREVENT CAVING AND SLOUGHING OF THE SOILS BETWEEN THE SOLDIER PILES. PROVIDE 1/4" TO 3/4" HORIZONTAL JOINT SPACING BETWEEN THE LAGGING BOARDS TO PERMIT DRAINAGE.

THE DEPARTMENT WILL MEASURE THE TEMPORARY SOUTHERN PINE NO. 2 LAGGING BY THE NUMBER OF SQUARE FEET AND WILL DETERMINE THE AREA FROM PLAN DIMENSIONS USING A LENGTH MEASURED ALONG A HORIZONTAL LINE ALONG THE CENTERLINE OF THE SOLDIER PILES AND A HEIGHT FROM THE BOTTOM OF THE LAGGING TO THE TOP. PAYMENT IS FULL COMPENSATION FOR FURNISHING AND PLACING ALL MATERIALS AND INCIDENTALS NECESSARY TO COMPLETE THE WORK. THE DEPARTMENT WILL PAY FOR ACCEPTED QUANTITIES AT THE CONTRACT UNIT PRICE BID PER SQUARE FOOT FOR ITEM SPECIAL - RETAINING WALL, MISC .: TIMBER LAGGING.

ITEM SPECIAL - RETAINING WALL, MISC.: GEOCOMPOSITE DRAIN

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING PREFABRICATED GEOCOMPOSITE DRAIN (PGD) VERTICALLY AND CENTERED IN EACH SOLDIER PILE BAY. THE PGD SHALL BE THE WIDTH AS SHOWN ON THESE PLANS WITHIN EACH SOLDIER PILE BAY. THE CONTRACTOR SHALL USE ONE OF THE FOLLOWING OR AN EQUAL PGD APPROVED BY THE ENGINEER.

AMERIDRAIN 200 AMERICAN WICK DRAIN CORPORATION, INC. 1209 AIRPORT ROAD MONROE, NC 28110-7389 PHONE:1-800-242-9425 OR 704-238-9200

TENCATE G100N TENCATE GEOSYNTHETICS NORTH AMERICA 365 SOUTH HOLLAND DRIVE PENDERGRASS, GA 30567 PHONE: 1-800-685-9900 OR 706-693-2226

J-DRAIN 200 JDR ENTERPRISES, INC. 292 SOUTH MAIN STREET. SUITE 200 ALPHARETTA, GA 30009 PHONE: 1-800-843-7569 OR 770-442-1467

ROADWAY, MISC .: GRANULAR EMBANKMENT, TYPE B

PLACE AND COMPACT EMBANKMENT MATERIAL AS PER REQUIREMENTS OF ITEM 203 GRANULAR EMBANKMENT, TYPE B.

ITEM SPECIAL - RETAINING WALL, MISC .: GEOCOMPOSITE

DRAIN (CONTINUED)

INSTALL THE DRAIN PER THE MANUFACTURER'S RECOMMENDATIONS. PLACE THE GEOTEXTILE SIDE OF THE DRAIN AGAINST THE RETAINED SLOPE FACE. EXTEND THE DRAIN TO THE FULL HEIGHT OF THE WALL AS SHOWN IN THE PLANS. CARRY THE DRAIN TO THE BOTTOM OF THE WALL AND OUTLET TO THE UNDERDRAIN AS SHOWN ON WALL DETAIL SHEETS. THE DEPARTMENT WILL MEASURE THE DRAIN BY THE NUMBER OF SQUARE YARDS OF SURFACE AREA OF DRAIN PLACED. THE DEPARTMENT WILL PAY FOR ACCEPTED QUANTITY AT THE CONTRACT UNIT PRICE BID PER SQUARE YARD FOR ITEM SPECIAL - RETAINING WALL, MISC: GEOCOMPOSITE DRAIN.

ABBREVIATIONS:

C/C - CENTER TO CENTER CIP - CAST-IN-PLACE CJ - CONSTRUCTION JOINT CLR - CLR CONST - CONSTRUCTION DIA - DIAMETER EF - EACH FACE ELEV - ELEVATION EOP - EDGE OF PAVEMENT EX - EXISTING FF - FAR FACE I.R. 75 - INTERSTATE ROUTE 75 INC - INCREMENT

LT - LEFT LSM - LOW STRENGTH MORTAR

MAX - MAXIMUM MIN - MINIMUM NB - NORTH BOUND NF - NEAR FACE

PEJF - PREFORMED EXPANSION JOINT FILLER
PERF CPP - PERFORATED CORRUGATED PLASTIC PIPE PROP - PROPOSED

RT - RIGHT SER - SERIES SPA - SPACING ST - STRAIGHT STA - STATION TYP - TYPICAL MIN.

GENERAL NER PILE AND R-303 WEST DIER G SR-

GRANUL, 4:

CHA

UNIT

EMBANKMENT

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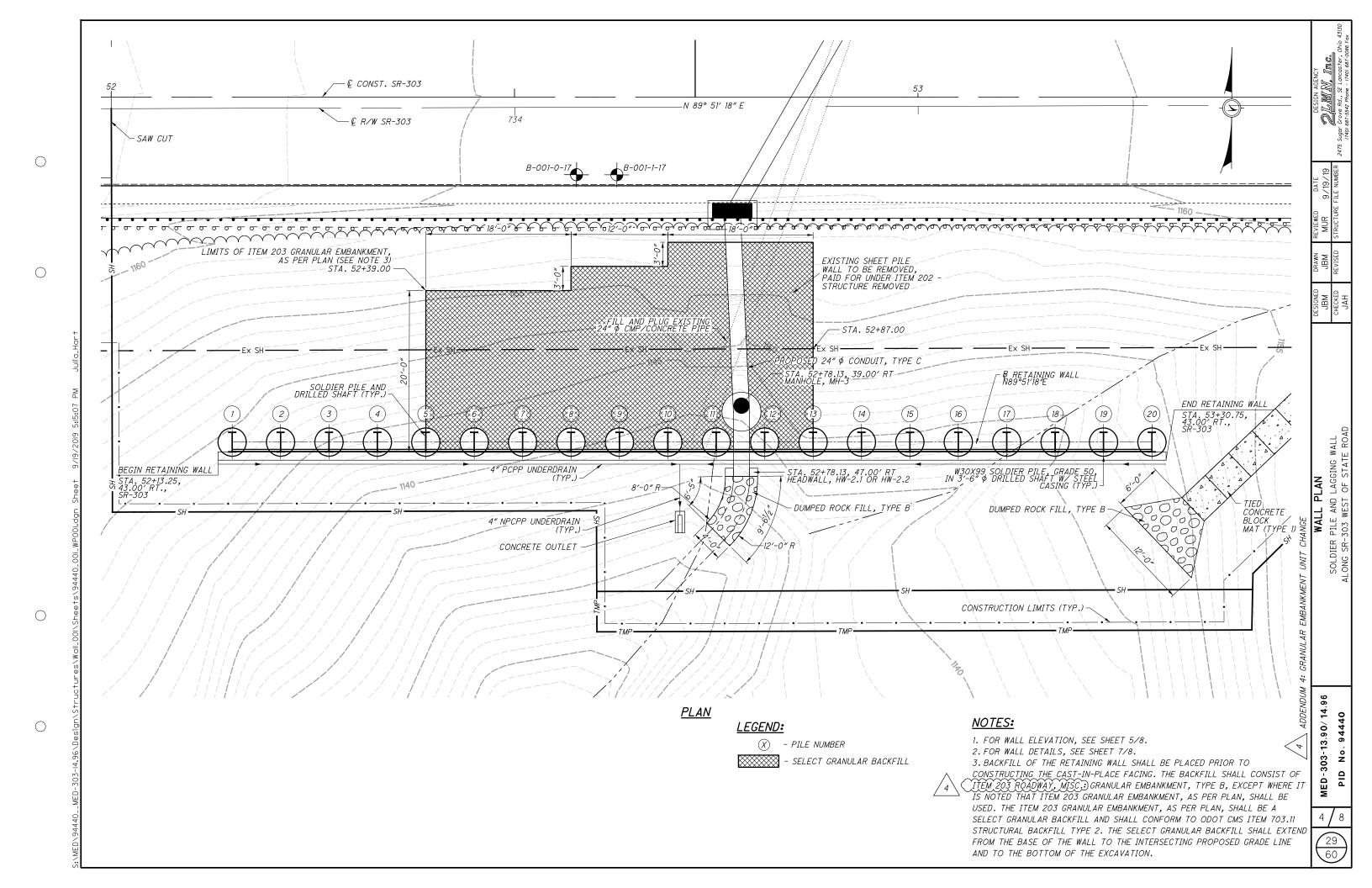
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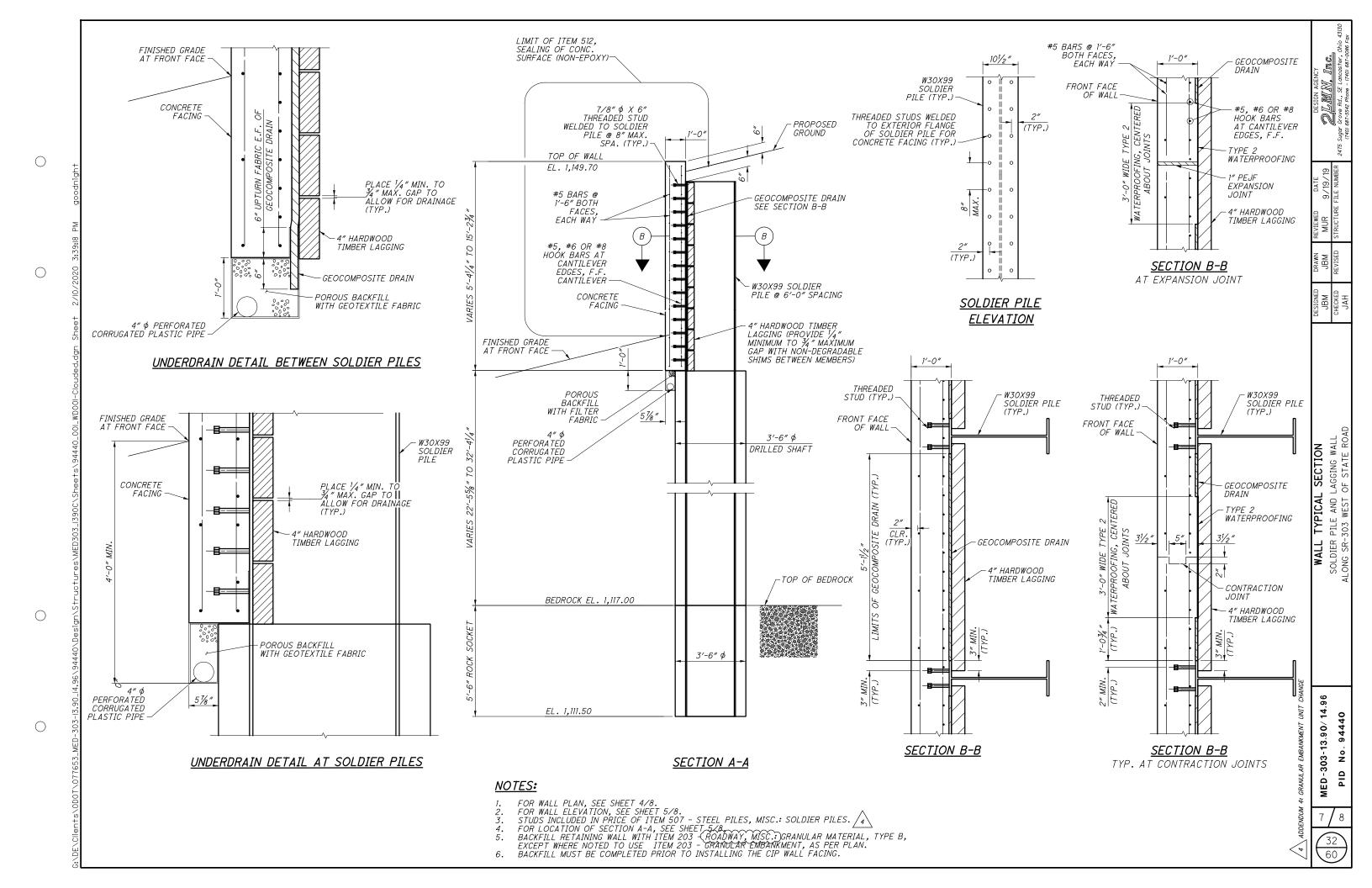
				ESTIMATED QUANTITIES	
ITEM	EXT.	QUANTITY O2/STR/CV	UNIT	DESCRIPTION	REF. SHEET
202	11000	LS		STRUCTURE REMOVED	
203	35001	998	CY	GRANULAR EMBANKMENT, AS PER PLAN	4/8
			\\\\\		
203	98500	LS		ROADWAY, MISC .: GRANULAR EMBANKMENT, TYPE B	1/8
503	11100	LS		COFFERDAMS AND EXCAVATION BRACING	
503	21301	LS		UNCLASSIFIED EXCAVATION, AS PER PLAN	1/8
507	00400	744	FT	STEEL PILES, MISC.: SOLDIER PILES	1/8
509	10000	8,096	LB	EPOXY COATED REINFORCING STEEL	
C 11	40010	47	OV	OLACC OCLOCALORETE DETAINING (WINGWALL NOT INCLUDING FOOTING	
511	46010	47	CY	CLASS QC1 CONCRETE, RETAINING/WINGWALL NOT INCLUDING FOOTING	
512	10100	101	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	
512	33001	24	SY	TYPE 2 WATERPROOFING, AS PER PLAN	1/8
516	13600	10	SF	I" PREFORMED EXPANSION JOINT FILLER	
<i>518</i>	21200	5	CY	POROUS BACKFILL WITH GEOTEXTILE FABRIC	
<i>518</i>	39800	133	FT	4" PERFORATED CORRUGATED PLASTIC PIPE	
<i>518</i>	39900	7	FT	4" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS	
524	94801	<i>552</i>	FT	DRILLED SHAFTS, 42" DIAMETER, AS PER PLAN	1/8
611	99710	1	EACH	PRECAST REINFORCED CONCRETE OUTLET	
SPECIAL	610E50010	723	SF	RETAINING WALL, MISC.: GEOCOMPOSITE DRAIN	1/8
SPECIAL	610E50010	1,179	SF	RETAINING WALL, MISC.: TIMBER LAGGING	1/8





MED-303-13.90/14.96 PID No. 94440





AS-1-15 REVISED 7/17/2015 AS-2-15 REVISED 1/19/2018 DS-1-92 REVISED 7/18/2003 GSD-1-96 REVISED 7/19/2002 ICD-1-82 REVISED 7/19/2002 TST-1-99 REVISED 7/20/2018

AND TO THE FOLLOWING SUPPLEMENTAL SPECIFICATION(S):

846 DATED 4/17/2015

DESIGN SPECIFICATIONS:

THIS STRUCTURE CONFORMS TO THE "LRFD BRIDGE DESIGN SPECIFICATIONS" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 2017, AND THE ODOT BRIDGE DESIGN MANUAL, 2007, DATED 01/19/2018.

DESIGN LOADING:

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FUTURE WEARING SURFACE (FWS) OF 0.060 KSF

DESIGN DATA:

CONCRETE CLASS QC2 - COMPRESSIVE STRENGTH 4.5 KSI (SUPERSTRUCTURE)

CONCRETE CLASS QC1 - COMPRESSIVE STRENGTH 4.0 KSI (SUBSTRUCTURE)

REINFORCING STEEL - MINIMUM YIELD STRENGTH 60 KSI

STRUCTURAL STEEL - ASTM A709 GRADE 50 - YIELD STRENGTH 50 KSI

LRFD LOAD MODIFIERS

A LOAD MODIFIER OF 1.0 HAS BEEN ASSUMED FOR THE DESIGN OF THIS STRUCTURE IN ACCORDANCE WITH THE AASHTO LRFD BRIDGE DESIGN SPECIFICATION, ARTICLE 1.3.5 AND ODOT BRIDGE DESIGN MANUAL, 2007.

DECK PROTECTION METHOD:

EPOXY COATED REINFORCING STEEL 21/2" CONCRETE COVER STEEL DRIP STRIP

MONOLITHIC WEARING SURFACE:

MONOLITHIC WEARING SURFACE IS ASSUMED, FOR DESIGN PURPOSES, TO BE 1 INCH THICK.

PILE DESIGN LOADS (ULTIMATE BEARING VALUE):

THE ULTIMATE BEARING VALUE IS 230 KIPS PER PILE FOR THE REAR AND FORWARD ABUTMENT PILES.

8 PILES, 60 FEET LONG, ORDER LENGTH (REAR

8 PILES, 55 FEET LONG, ORDER LENGTH (FORWARD ABUTMENT)

1 DYNAMIC LOAD TESTING ITEMS

BEAM STABILITY DURING ERECTION:

THE FOLLOWING PROVISIONS APPLY IN ADDITION TO THE REQUIREMENTS OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS (C&MS) 501.05. WHERE BEAMS ARE PLACED BUT NOT CONNECTED TO CROSSFRAMES, AND NOT OTHERWISE SUPPORTED BY CRANES, TEMPORARY LATERAL BRACING OR HOLD-DOWNS SHALL BE PROVIDED AT THE ABUTMENTS. IN PARTICULAR, THIS SHALL APPLY TO THE FIRST BEAM ERECTED. DESIGN OF TEMPORARY BRACING OR HOLD-DOWNS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE SIGNED AND SEALED BY AN ENGINEER REGISTERED IN THE STATE OF OHIO AND SUBMITTED IN ACCORDANCE WITH C&MS 501.05 AND APPROVED BY THE ENGINEER PRIOR TO CONSTRUCTION. THE DESIGN SHALL INCORPORATE A MINIMUM WIND LOAD OF 16 PSF APPLIED LATERALLY TO THE BEAM. APPLICABLE STANDARDS FOR DESIGN INCLUDE THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 8TH EDITION (2017), LRFD BRIDGE CONSTRUCTION SPECIFICATIONS, 4TH EDITION (2017), GUIDE SPECIFICATIONS FOR WIND LOADS ON BRIDGES DURING CONSTRUCTION, 1ST EDITION (2017), AND GUIDE DESIGN SPECIFICATIONS FOR BRIDGE TEMPORARY WORKS, 2ND EDITION (2017). END BRACING OR HOLD-DOWNS MAY BE REMOVED AFTER A MINIMUM OF TWO BEAM LINES HAVE BEEN SET AND ALL CROSSFRAMES ATTACHED.

DECK PLACEMENT DESIGN ASSUMPTIONS:

THE FOLLOWING ASSUMPTION OF CONSTRUCTION MEANS AND METHODS WERE MADE FOR THE ANALYSIS AND DESIGN OF THE SUPERSTRUCTURE. THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN OF THE FALSEWORK SUPPORT SYSTEM WITHIN THESE PARAMETERS AND WILL ASSUME RESPONSIBILITY FOR SUPERSTRUCTURE ANALYSIS FOR DEVIATION FROM THESE DESIGN ASSUMPTIONS.

AN EIGHT WHEEL FINISHING MACHINE WITH A MAXIMUM WHEEL LOAD OF 2.26 KIPS.

A MINIMUM OUT-TO-OUT WHEEL SPACING AT EACH END OF THE MACHINE IS 103".

A MAXIMUM SPACING OF OVERHANG FALSEWORK BRACKETS OF 48 IN.

A MAXIMUM DISTANCE FROM THE CENTERLINE OF THE FASCIA GIRDER TO THE FACE OF THE SAFETY HANDRAIL OF 65".

ITEM 202, STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN:

THE WORK CONSISTS OF THE REMOVAL OF THE EXISTING BRIDGE STRUCTURE FOR MED-303-1496. REMOVE EXISTING SUPERSTRUCTURE, INCLUDING WEARING COURSE, PIERS, ABUTMENTS AND FOOTINGS IN THEIR ENTIRETY. EXISTING PIER PILES SHALL BE REMOVED TO A MINIMUM OF 2 FEET BELOW EXISTING STREAM BED ELEVATION. EXISTING ABUTMENT PILES SHALL BE REMOVED TO A MINIMUM OF FOOT BELOW THE BOTTOM OF PROPOSED FOOTING AS TO AVOID INTERFERENCE WITH PROPOSED STRUCTURE. IF INTERFERENCE IS UNAVOIDABLE, COMPLETELY REMOVE EXISTING ABUTMENT PILES. THE CONTRACTOR HAS THE OPTION OF COMPLETELY REMOVING EXISTING ABUTMENT PILES IN LIEU OF PARTIAL REMOVAL OF PILES IF THERE IS NO INTERFERENCE TO THE PROPOSED SUBSTRUCTURE. PAYMENT FOR ALL LABOR, EQUIPMENT, AND MATERIALS NECESSARY TO COMPLETE THIS WORK SHALL BE PAID FOR AT THE CONTRACT LUMP SUM PRICE FOR ITEM 202: STRUCTURE REMOVED. OVER 20 FOOT SPAN. AS PER PLAN.

ITEM 203, EMBANKMENT, AS PER PLAN

PLACE AND COMPACT EMBANKMENT MATERIAL IN 6 INCH LIFTS FOR THE CONSTRUCTION OF THE APPROACH EMBANKMENT.

ITEM 512, SEALING OF CONCRETE SURFACES:

ABUTMENT AND DECK EDGE CONCRETE SHALL BE SEALED WITH A NON-EPOXY SYSTEM PER C&MS 512. THE COLOR SHALL BE FEDERAL COLOR STANDARD NO. FS-595B-17778, LIGHT

ITEM 514, PAINTING OF STRUCTURAL STEEL:

ALL STRUCTURAL STEEL SHALL BE PAINTED IN ACCORDANCE WITH C&MS 514. THE FINISH COAT COLOR SHALL BE FEDERAL COLOR STANDARD NO. FS-595B-14277, GREEN.

ABBREVIATIONS:

 ΔPPR - APPROACH вот. - BOTTOM - BEARING(S) BRG(S).

BTA- BRIDGE TERMINAL ASSEMBLY

BTW.- BETWEEN

C/C- CENTER TO CENTER - CENTERLINE CIP- CAST IN PLACE

CLR. - CLEAR - CONSTRUCTION JOINT CONST. - CONSTRUCTION

- DIAMETER DIA. EA. - EACH ELEV. - ELEVATION E.S. - EACH SIDE EST. - ESTIMATED EQ. - EQUAL - EXISTING FX. EXP. - EXPANSION

F.A. - FORWARD ABUTMENT F/F - FACE TO FACE - FLOWLINE - FAR SIDE F.S.

INT. - INTEGRAL LT. - I FFT MAX.- MAXIMUM MIN. - MINIMUM NO. - NUMBER N.S. - NFAR SIDE

NPCPP - NON-PERFORATED CORRUGATED PLASTIC PIPE

N.W.- NORMAL WATER

OHWM - ORDINARY HIGH WATER MARK 0/0 - OUT-TO-OUT

PCPP - PERFORATED CORRUGATED PLASTIC PIPE PEJF - PREFORMED EXPANSION JOINT FILLER

P/G- PROFILE GRADE - PLATE PROP. - PROPOSED

RCP - REINFORCED CONCRETE PROTECTION

RT. - RIGHT

R.A.

TYP.

R/W- RIGHT OF WAY

SCD - STANDARD CONSTRUCTION DRAWING

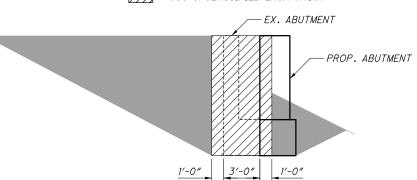
- REAR ABUTMENT

SER. - SERIES SHLDR. - SHOULDER SPA. - SPACES SR - STATE ROUTE STA. - STATION TBR - TO BE REMOVED ΤH - TEST HOLE - TOE OF SLOPE T/S

- TYPICAL

- 203 EXCAVATION

- 503 UNCLASSIFIED EXCAVATION



EXCAVATION CLASSIFICATION DETAIL

/3ackslash ADDENDUM 3: REDUCED PIER PILE REMOVAL TO 2 FEET BELOW GRADE.

TERAL NO. SEE NO. MED-303-

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