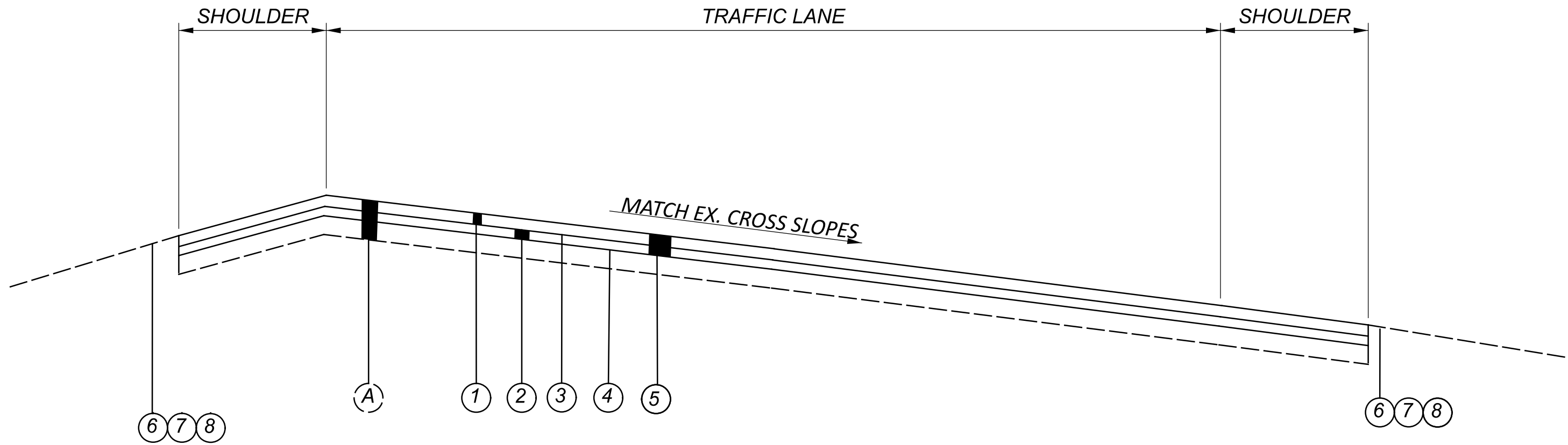


LEGEND: AT RAMPS

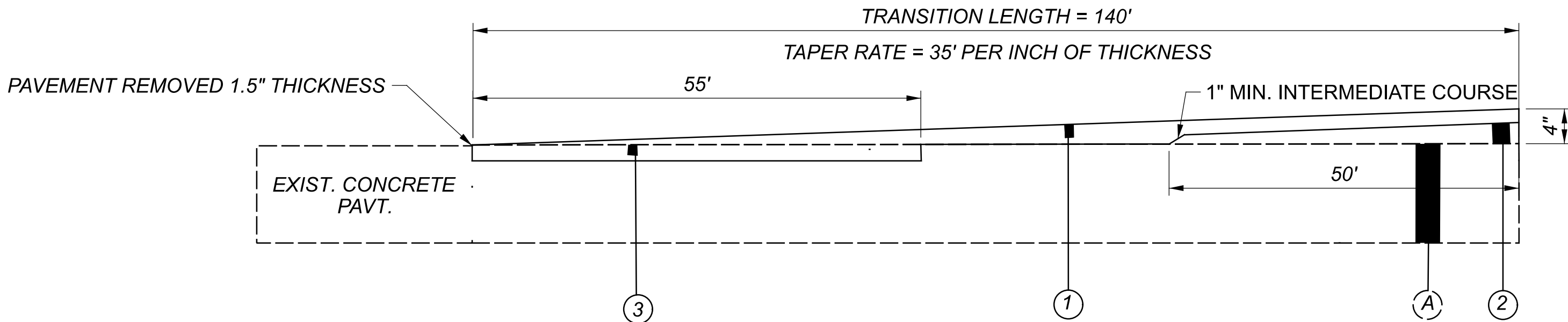
- Ⓐ EXISTING 3.25" ASPHALT ON 9" REINFORCED CONCRETE
- ① ITEM 442 - 1.5" ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE A (447)
- ② ITEM 442 - 1.75" ASPHALT CONCRETE INTERMEDIATE COURSE, 19MM, TYPE A (446)
- ③ ITEM 407 - NON-TRACKING TACK COAT
- ④ ITEM 407 - TACK COAT, 702.13
- ⑤ ITEM 253 - PAVEMENT PLANING, 3.25"
- ⑥ ITEM 617 - COMPACTED AGGREGATE. 2" DEPTH, 12" WIDTH
- ⑦ ITEM 617 - SHOULDER PREP
- ⑧ ITEM 617 - WATER



TYPICAL RESURFACING SECTION RAMPS

LEGEND: OVERLAY TRANSITION

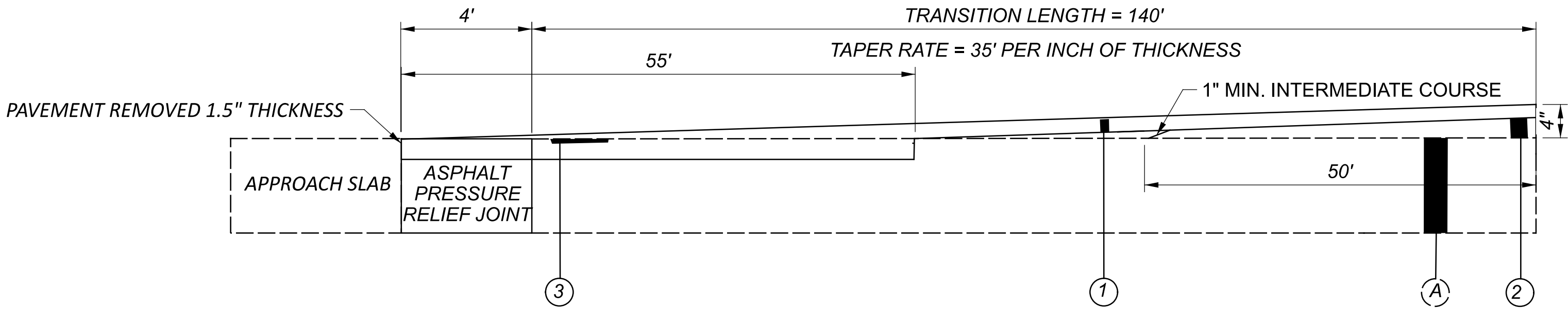
- Ⓐ EXISTING 12" REINFORCED CONCRETE PAVEMENT
- ① ITEM 442 - 1.5" ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE A (447)
- ② ITEM 442 - "VARIABLE" ASPHALT CONCRETE INTERMEDIATE COURSE, 19MM, TYPE A (449)
- ③ ITEM 202 - PAVEMENT REMOVED



TRANSITION DETAIL: RAMPS, SAG LOCATION\*, MEDIAN BARRIER AFTER ASBURY RD\*\*

\*S.L.M. (SAG) EB/WB: 37.94      \*\*S.L.M. (MEDIAN CONCRETE BARRIER): 36.705

(SAGS) DISTANCE FROM WESTERN APPROACH EB SLAB WB/WB: 575'



TRANSITION DETAIL: BRIDGES

LOCATIONS: S.L.M. 39.40 (EB/WB), 39.00 (EB/WB), 37.860 (EB/WB)\*, 37.350 (EB/WB)

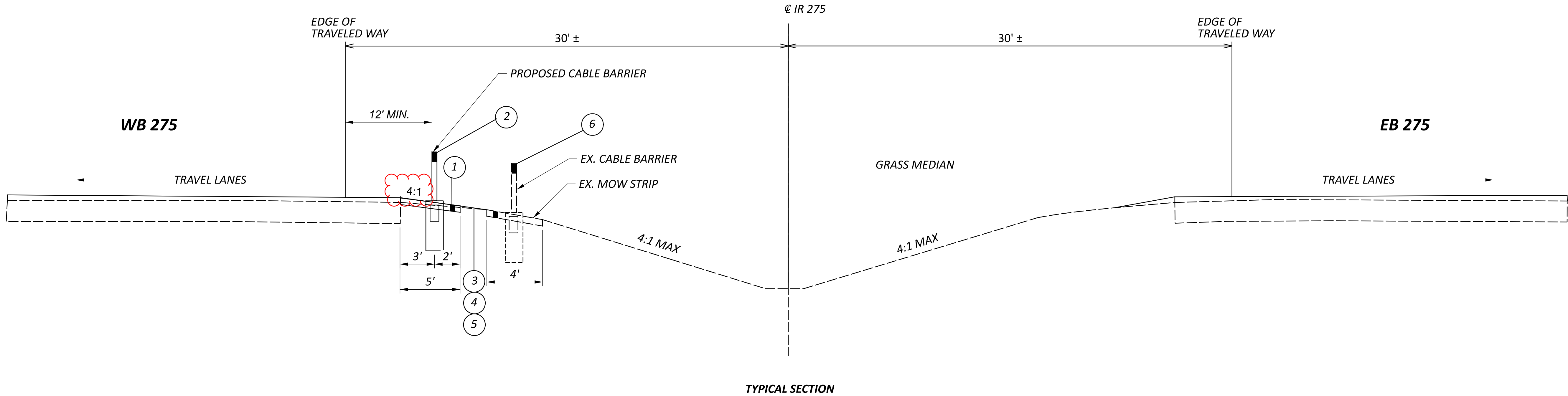
NOTE: BRIDGES HAVE A TRANSITION ON EACH END OF A BRIDGE, EXCEPT FOR THE 37.860 BRIDGES.

\* TRANSITIONS WILL END APPROX. 575' FROM THE WESTERN APPROACH SLABS OF EITHER BRIDGE.

THE FOLLOWING QUANTITIES HAVE BEEN BROUGHT TO TO THE GENERAL SUMMARY

ITEM 202 - PAVEMENT REMOVED.....	4206 SQ YDS
ITEM 442 - "VARIABLE" ASPHALT CONCRETE INTERMEDIATE COURSE, 19 MM, TYPE A (449).....	118 CU YDS





**LEGEND**

- 1 ITEM SPECIAL - 5' CONCRETE MOW STRIP
- 2 ITEM 606 - SPECIAL - CABLE BARRIER
- 3 ITEM 209 - BORROW
- 4 ITEM 209 - LINEAR GRADING
- 5 ITEM 659 - SEEDING AND MULCHING
- 6 ITEM 202 - CABLE BARRIER REMOVED FOR STORAGE



ITEM 606 - SPECIAL - CABLE BARRIER, ANCHOR ASSEMBLY (BRIFEN) (ALTERNATE 2)

ITEM 606 - SPECIAL - CABLE BARRIER, ANCHOR ASSEMBLY (BRIFEN) (ALTERNATE 2) SHALL BE SUBJECT TO THE REQUIREMENTS OF ITEM 606 - SPECIAL - CABLE BARRIER, ANCHOR ASSEMBLY (ALTERNATE 1), AND SHALL BE CONSTRUCTED WITH THE BRIFEN CABLE BARRIER SYSTEM.

ITEM 606 - SPECIAL - CABLE BARRIER (BRIFEN) (ALTERNATE 2)

ITEM 606 - SPECIAL - CABLE BARRIER (BRIFEN) SHALL BE SUBJECT TO THE REQUIREMENTS OF ITEM 606 - CABLE BARRIER (ALTERNATE 1), AND SHALL BE CONSTRUCTED WITH THE BRIFEN CABLE BARRIER SYSTEM.

ITEM SPECIAL - MOW STRIP

THE CONTRACTOR SHALL CONSTRUCT A 5 FOOT WIDE BY 4 INCH DEPTH MOW STRIP WITH MATERIALS CONFORMING TO ITEM 608 - CONCRETE WALK AS SHOWN IN THE TYPICAL SECTIONS ON SHEET 4.

THE MOW STRIP SHALL BE PLACED ON COMPACTED EARTH AND CONSTRUCTED USING CLASS QC1 CONCRETE WITH A CURING COMPOUND MEETING THE SPECIFICATIONS OF 705.07 OF THE CMS. THE MOW STRIP SHALL BE INTEGRAL TO THE SOCKETED CONCRETE FOUNDATION.

THE MOW STRIP SHALL HAVE A TRANSVERSE JOINT EVERY 8 FEET AND AN EXPANSION JOINT EVERY 100 FEET. THE JOINTS AND MATERIALS TO CONSTRUCT THE JOINTS SHALL CONFORM TO 608.03 (C) OF THE CMS.

REMOVAL OF EXISTING ASPHALT PAVEMENT AND ANY EXCAVATION REQUIRED TO INSTALL THE MOW STRIP IS INCLUDED WITH THIS PAY ITEM. NOTE THERE IS EXISTING ASPHALT PAVEMENT PRESENT FROM A PREVIOUS MOT SCHEME AT VARIOUS LOCATIONS WITHIN THE LIMITS OF THE PROPOSED MOW STRIP.

IF MATERIAL FROM THE EXCAVATION OF THE MOW STRIP AND THE SOCKETED CONCRETE FOUNDATION IS WASTED ADJACENT TO THE MOW STRIP THE AREA SHALL BE SEEDED AND MULCHED TO THE SPECIFICATIONS OF ITEM 659 IN THE CMS. PAYMENT FOR SEEDING AND MULCHING SHALL BE MADE UNDER OTHER PAY ITEMS.

ALL MATERIAL, LABOR, AND EQUIPMENT TO CONSTRUCT THE CONCRETE MOW STRIP SHALL BE PAID FOR UNDER ITEM SPECIAL - MOW STRIP.

ITEM 202 - CABLE BARRIER REMOVED FOR STORAGE

THE EXISTING CABLE BARRIER POSTS ARE TO BE REMOVED AND DELIVERED TO THE ODOT MILFORD OUTPOST AT:

809 US 50  
MILFORD, OHIO 45150

CONTACT MIKE THOMPSON AT 513-382-6948 TO COORDINATE THE DELIVERY TIMEFRAME AND OTHER DETAILS.

ALL OTHER CABLE BARRIER COMPONENTS, INCLUDING THE CONCRETE MOW STRIP, ARE TO BE REMOVED AND BECOME PROPERTY OF THE CONTRACTOR.

ITEM 606 - ANCHOR ASSEMBLY, MGS TYPE B

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING ANY OF THE MASH 2016 TYPE B FLARED END TREATMENTS FOR TYPE MGS GUARDRAIL AS LISTED UNDER "PRODUCTS ACCEPTED FOR NEW INSTALLATIONS" ON THE ROADWAY APPROVED PRODUCTS LIST POSTED ON ROADWAY ENGINEERING'S WEB PAGE. INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS, IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS. REFER TO THE POSTED SHOP DRAWINGS FOR THE MOST CURRENT APPROVED PRODUCT MODELS.

REFER TO THE MANUFACTURER'S INSTRUCTIONS REGARDING THE INSTALLATION OF, AND THE GRADING AROUND, THE FOUNDATION TUBES AND GROUND STRUT. THE TOP OF ANY FOUNDATION TUBE SHOULD BE LESS THAN 4 INCHES ABOVE THE GROUND. ON-SITE GRADING IS REQUIRED IF THE TOP OF THE FOUNDATION TUBES OR TOP OF THE GROUND STRUT DOES PROJECT MORE THAN 4 INCHES ABOVE THE GROUND LINE. THE PLACEMENT OF THE FOUNDATION TUBES SHOULD BE AN APPROPRIATE DEPTH BELOW THE LEVEL LINE IN ORDER TO MAINTAIN THE FINISHED GUARDRAIL HEIGHT OF 31 INCHES FROM THE EDGE OF THE SHOULDER.

THE FACE OF THE TYPE B IMPACT HEAD SHALL BE COVERED WITH SOLID FLUORESCENT YELLOW REBOUNDABLE RETROREFLECTIVE SHEETING, PER CMS 730.191.

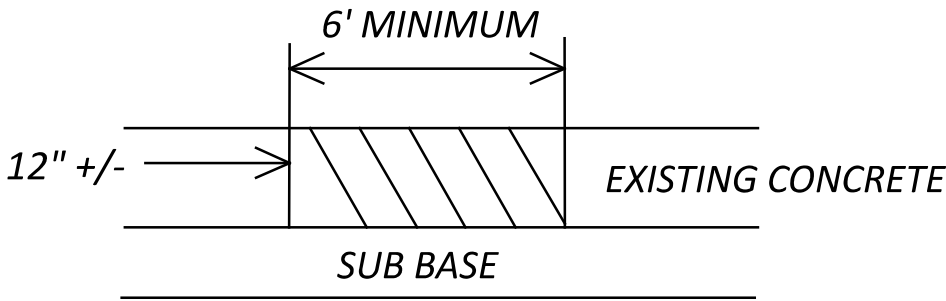
PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT PRICE BID FOR ITEM 606, ANCHOR ASSEMBLY, MGS TYPE B, EACH, AND SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT AND MATERIALS NECESSARY TO CONSTRUCT A COMPLETE AND FUNCTIONAL ANCHOR ASSEMBLY SYSTEM, INCLUDING REFLECTIVE SHEETING AND ALL RELATED HARDWARE, GRADING, EMBANKMENT AND EXCAVATION NOT SEPARATELY SPECIFIED, AS REQUIRED BY THE MANUFACTURER.

ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE (RAMPS)

THE PLANING SHALL BE SCHEDULED SO AS TO BE COVERED BY THE INTERMEDIATE COURSE PRIOR TO REOPENING THE LANE TO TRAFFIC. THE COST OF THE ABOVE SHALL BE INCLUDED IN THE UNIT BID PRICE FOR THE RESPECTIVE ITEM. A DISINCENTIVE IN THE AMOUNT OF \$19,500 SHALL BE ASSESSED FOR EACH DAY, OR PORTION THEREOF, A PLANED SURFACE IS OPEN TO TRAFFIC.

ITEM 255 - FULL DEPTH REMOVAL AND RIGID REPLACEMENT, TYPE 2, CLASS RS

AN ESTIMATED QUANTITY OF 1262 SY YDS OF ITEM 255-PAVEMENT REPAIR HAS BEEN CARRIED TO THE GENERAL SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER. THIS WORK SHALL OCCUR PRIOR TO OVERLAY WORK.



EXISTING DETERIORATED CONCRETE SHALL BE REMOVED TO A A DEPTH OF 12" ± OR AS DIRECTED BY THE ENGINEER AND REPLACED WITH CLASS MS CONCRETE.

ITEM 255 - FULL DEPTH PAVEMENT SAWING

A QUANTITY OF 4914 FT OF ITEM 255 - FULL DEPTH PAVEMENT SAWING HAS BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM 258 - LOAD TRANSFER RETROFIT

THIS WORK CONSISTS OF SAWING SLOTS ACROSS TRANSVERSE CRACKS, CLEANING THE SLOT INJECTING CAULKING FILLER, PLACING A DOWEL BAR IN THE SLOT, AND FILLING THE SLOT WITH A PATCHING MATERIAL. ALL LOCATIONS OF LOAD TRANSFER RETROFIT SHALL BE DETERMINED BY THE ENGINEER OR AND SHALL FOLLOW STANDARD DRAWING BP-2.6.

A QUANTITY OF 2652 EACH RETROFIT DOWEL BARS HAS BEEN CARRIED TO THE GENERAL SUMMARY.

SOIL INFORMATION AND PROPERTIES

REFER TO ODOT GDM SECTION 500 TABLE 500-2 FOR ASSUMED SOIL PROPERTIES OF EMBANKMENT FILL. REDUCE THE VALUES IN THE UPPER 3-4 FT. AS FREEZE THAW WOULD HAVE LIKELY DEGRADED THE MATERIAL. IT IS POSSIBLE THAT INTER-BEDDED SHALE AND LIMESTONE WILL BE ENCOUNTERED ON THE LOCATION AS SIGNIFICANT CUT/FILLS WERE REQUIRED TO CONSTRUCT I-275. TYPICALLY, THERE WILL BE AT LEAST 2 FT. OF FILL IN THESE LOCATIONS FOR MAIN LINE.

THE MAJORITY OF THE SITE WILL BE SILT AND CLAY (ODOT A6-A TO A7-6). REFER TO THE SUMMARY OF SOIL TEST DATA ON SHEET 19. SPT VALUES WERE NOT ALWAYS AVAILABLE IN ODOT HISTORICAL DATA, SEE THE SOIL DETAIL SHEETS WHICH PROVIDES A NOISE BARRIER SOIL PROFILE SUMMARY WITH SOME SPT FOR REFERENCE. SOIL PARAMETERS SHOULD NOT EXCEED TABLE 500-2 IN ANY CASE AND SHOULD BE REDUCED FOR CONSERVATISM.

REFER TO ODOT TIMS SYSTEM TO OBTAIN ADDITIONAL DATA. [HTTPS://TIMS.DOT.STATE.OH.US/TIMS](https://tims.dot.state.oh.us/tims)

AIRWAY/HIGHWAY CLEARANCE FOR AIRPORTS AND HELIPORTS

THIS PROJECT HAS BEEN IDENTIFIED AS BEING WITHIN THE INFLUENCE AREA OF A PUBLIC USE AIRPORT OR HELIPORT. NO TEMPORARY STRUCTURES OR CONSTRUCTION EQUIPMENT AT MAXIMUM OPERATING HEIGHT SHALL EXCEED A HEIGHT OF 27' FT. IF ANY TEMPORARY STRUCTURES OR CONSTRUCTION EQUIPMENT WILL EXCEED THIS HEIGHT, FURTHER COORDINATION WITH THE FEDERAL AVIATION ADMINISTRATION (FAA), AND ODOT OFFICE OF AVIATION, WILL BE NECESSARY PRIOR TO ERECTING SUCH TEMPORARY STRUCTURES OR OPERATING SUCH EQUIPMENT ON THE PROJECT. THE CONTRACTOR WILL BE REQUIRED TO SUBMIT FORM 7460-1 TO THE FAA. NOTIFY THE ODOT OFFICE OF AVIATION WHEN SUBMITTING FAA FORM 7460-1.

NO TEMPORARY STRUCTURES OR CONSTRUCTION EQUIPMENT SHALL EXCEED THE PERMISSIBLE HEIGHT, UNTIL A COPY OF THE FAA APPROVAL AND THE ODOT OFFICE OF AVIATION PERMIT HAS BEEN FURNISHED TO THE PROJECT ENGINEER.

FEDERAL AVIATION ADMINISTRATION  
SOUTHWEST REGIONAL OFFICE  
OBSTRUCTION EVALUATION GROUP  
10101 HILLWOOD PARKWAY  
FORT WORTH, TX 76177  
FAX: (817) 222-5920  
[HTTP://CEAAA.FAA.GOV](http://CEAAA.FAA.GOV)

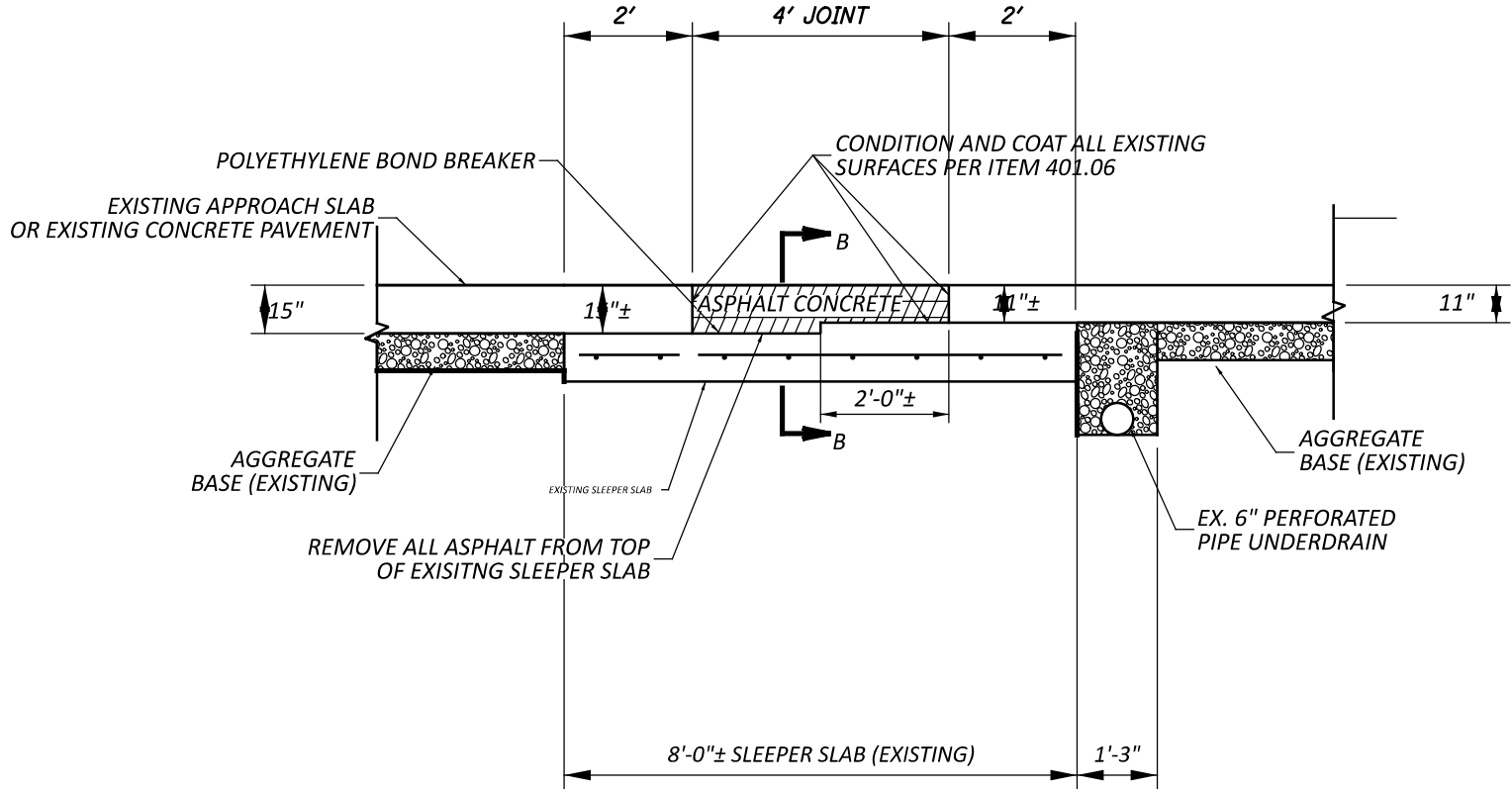
OHIO DEPARTMENT OF TRANSPORTATION  
OFFICE OF AVIATION  
2829 WEST DUBLIN-GRANVILLE ROAD  
COLUMBUS, OHIO 43235  
[OHIO.AIRPORT.PROTECTION@DOT.OHIO.GOV](mailto:OHIO.AIRPORT.PROTECTION@DOT.OHIO.GOV)

ITEM 451- SPECIAL PRESSURE RELIEF JOINT, TYPE A , ASPHALT REPLACEMENT

FOLLOW ALL PROVISIONS OF S.C.D. BP-2.3 EXCEPT AS SHOWN IN THE DETAIL BELOW. THE REMOVAL OF EXISTING ASPHALT SHALL BE INCLUDED WITH ITEM 451 FOR PAYMENT.

THIS PAY ITEM SHALL MEET THE REQUIREMENTS OF STANDARD DRAWING BP-2.3 EXCEPT AS FOLLOWS:

WORK SHALL INCLUDE REMOVAL OF THE EXISTING ASPHALT MATERIAL FROM THE PRESSURE RELIEF JOINT. REPLACE WITH ITEM 442 ASPHALT CONCRETE INTERMEDIATE COURSE, 12.5 MM (448) PER BP-2.3. SEE DETAIL BELOW FOR FURTHER INFORMATION.



QUANTITIES ACCOUNT FOR A JOINT AT THE END OF EACH STRUCTURE AND HAVE BEEN CARRIED TO GENERAL SUMMARY.

THIS ITEM INCLUDES ALL LABOR, MATERIAL, EQUIPMENT, AND INCIDENTALS TO COMPLETE THE SPECIFIED WORK.

THE RELIEF JOINTS WILL BE REPLACED AS SHOWN IN THE DETAIL AT THE FOLLOWING LOCATIONS:

BRIDGE	QUANTITY (FT)
HAM-275-3928R	48 FT.
HAM-275-3944L	50 FT.
HAM-275-3885R	94 FT.
HAM-275-3905L	99 FT.
HAM-275-3776R	40 FT.
HAM-275-3793L	40 FT.
HAM-275-3720R	164 FT.
HAM-275-3720L	167 FT.

COMPACT THE ASPHALT CONCRETE IN EQUAL LIFTS NOT EXCEEDING 3" WITH COMPACTION EQUIPMENT AS APPROVED BY THE ENGINEER. USE ITEM 442 ASPHALT CONCRETE INTERMEDIATE COURSE, 12.5 MM (448).



SHEET NUM.												PART.	ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
3	4	6	7	8	9	10	13	14	15	16		01/IMS						
	4,206											4,206	202	23000	4,206	SY	ROADWAY	
								27,076				27,076	202	38000	27,076	FT	PAVEMENT REMOVED	
								16				16	202	42010	16	EACH	GUARDRAIL REMOVED	
								14				14	202	42040	14	EACH	ANCHOR ASSEMBLY REMOVED, TYPE E	
								4				4	202	42050	4	EACH	ANCHOR ASSEMBLY REMOVED, TYPE T	
								27				27	202	47000	27	EACH	ANCHOR ASSEMBLY REMOVED, TYPE B	
																	BRIDGE TERMINAL ASSEMBLY REMOVED	
										2,074		2,074	202	48100	2,074	FT		
977												977	202	32000	977	FT	CABLE BARRIER REMOVED FOR STORAGE	
2,516												2,516	209	70000	2,516	CY	CURB REMOVED	
								283				283	209	15000	283	STA	BORROW	
5.64												5.64	209	60500	5.64	MILE	RESHAPING UNDER GUARDRAIL	
																	LINEAR GRADING	
								26,712.5				26,712.5	606	15100	26,712.5	FT		
								1				1	606	26050	1	EACH	GUARDRAIL, TYPE MGS WITH LONG POSTS	
								18				18	606	26150	18	EACH	ANCHOR ASSEMBLY, MGS TYPE B	
								14				14	606	26550	14	EACH	ANCHOR ASSEMBLY, MGS TYPE E	
								17				17	606	35002	17	EACH	ANCHOR ASSEMBLY, MGS TYPE T	
																	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 1	
								36				36	609	23001	36	FT		
								11				11	606	35102	11	EACH	COMBINATION CURB AND GUTTER, TYPE 4, AS PER PLAN	6
630												630	609	26000	630	FT	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 2	
347												347	609	18000	347	FT	CURB, TYPE 6	
																	COMBINATION CURB AND GUTTER, TYPE 3	
										1,152		1,152	SPECIAL	69098300	1,152	SY		
																	MOW STRIP	7
										2,024		2,024	SPECIAL	60655000	2,024	FT	ROADWAY ALTERNATES	6
										2		2	SPECIAL	60655150	2	EACH	CABLE BARRIER, (ALTERNATE 1)	7
										2,024		2,024	SPECIAL	60655000	2,024	FT	CABLE BARRIER, ANCHOR ASSEMBLY, (ALTERNATE 1)	6
										2		2	SPECIAL	60655150	2	EACH	CABLE BARRIER, (BRIFEN) (ALTERNATE 2)	7
																	CABLE BARRIER, ANCHOR ASSEMBLY, (BRIFEN) (ALTERNATE 2)	
		9,933										9,933	659	10000	9,933	SY	EROSION CONTROL	
		1.34										1.34	659	20000	1.34	TON	SEEDING AND MULCHING	
		2.05										2.05	659	31000	2.05	ACRE	COMMERCIAL FERTILIZER	
		27										27	659	35000	27	MGAL	LIME	
												10,000	832	30000	10,000	EACH	WATER	
																	EROSION CONTROL	
												3	611	98630	3	EACH	DRAINAGE	
																	CATCH BASIN ADJUSTED TO GRADE	
																	PAVEMENT	
							21,068					21,068	254	01000	21,068	SY	PAVEMENT PLANING, ASPHALT CONCRETE, 3.25"	
							214					214	254	01600	214	SY	PATCHING PLANED SURFACE	
			1,262									1,262	255	19100	1,262	SY	FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, TYPE 2, CLASS QC RS	
			4,914									4,914	255	20000	4,914	FT	FULL DEPTH PAVEMENT SAWING	
			2,652									2,652	258	10000	2,652	EACH	RETROFIT DOWEL BAR	
6.1												6.1	304	20000	6.1	CY	AGGREGATE BASE	
							13,142					13,142	407	13900	13,142	GAL	TACK COAT, 702.13	
							9,856					9,856	407	20000	9,856	GAL	NON-TRACKING TACK COAT	
							11,051					11,051	442	00100	11,051	CY	ANTI-SEGREGATION EQUIPMENT	
							10,969					10,969	442	10100	10,969	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, 19 MM, TYPE A (446)	
	118											118	442	22400	118	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, 19 MM, TYPE A (449), VARIABLE	
							7,068					7,068	442	10300	7,068	CY	ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (447)	
			702									702	SPECIAL	45130000	702	FT	PRESSURE RELIEF JOINT, TYPE A, ASPHALT REPLACEMENT	7
							73					73	617	10100	73	CY	COMPACTED AGGREGATE	
							1,306					1,306	617	20000	1,306	SY	SHOULDER PREPARATION	
							1					1	617	25000	1	MGAL	WATER	
							12.95					12.95	618	40600	12.95	MILE	RUMBLE STRIPS, SHOULDER (ASPHALT CONCRETE)	
		783										783	621	00100	783	EACH	TRAFFIC CONTROL	
		722										722	621	54000	722	EACH	RPM	
								298				298	626	00110	298	EACH	RAISED PAVEMENT MARKER REMOVED	
										21		21	626	00118	21	EACH	BARRIER REFLECTOR, TYPE 2 (BIDIRECTIONAL)	
									65			65	644	00500	65	FT	BARRIER REFLECTOR, TYPE 6	
																	STOP LINE	

