

**PAVEMENT (CONT'D)**

**ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR (442), AS PER PLAN B**

THIS ITEM SHALL BE USED FOR THE REPAIR OF UNSOUND, COLD-PATCH, OR POP-OUT AREAS OF TRANSVERSE JOINTS AND CRACKS AS DIRECTED BY THE ENGINEER. THIS WORK SHALL BE PERFORMED PRIOR TO THE PAVING OPERATION. THE DEPTH OF THE REPAIR SHALL BE 6.5" BELOW THE TOP OF THE EXISTING ASPHALT SURFACE. THE WIDTH OF THIS REPAIR SHALL BE 12" CENTERED OVER THE EXISTING JOINT.

USE REPLACEMENT MATERIALS CONFORMING TO THE REQUIREMENTS OF ITEM 442, 19MM.

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR (442), AS PER PLAN B 1190 SY

**ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN**

THIS ITEM SHALL BE USED TO REMOVE THE EXISTING ASPHALT OVERLAY FULL WIDTH AT AN AVERAGE DEPTH OF 3-5" AS SPECIFIED IN THE PLANS. AREAS WHICH HAVE TRANSVERSE WEDGES (BUTT JOINTS) ARE TO BE REMOVED IN TWO PASSES AS REQUIRED FOR MAINTAINING TRAFFIC. NO ADDITIONAL PAYMENT SHALL BE MADE FOR THE SECOND PASS.

**ITEM 442 - ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE A, (447), P.W.L. 2025, AS PER PLAN, PG76-22M**

THE COARSE VIRGIN AGGREGATE FOR THIS ITEM SHALL BE LIMITED TO A BLEND OF AIR COOLED BLAST FURNACE SLAG (ACBS) OR TRAP ROCK FROM ONTARIO AND LIMESTONE. THE CONTRACTOR SHALL USE A MINIMUM 60% OF ACBS OR TRAP ROCK FROM ONTARIO WITH LIMESTONE COMPRISING THE REMAINING PERCENTAGE. AT LEAST 50% OF THE FINE VIRGIN AGGREGATE FOR THIS ITEM SHALL BE LIMITED TO ACBS OR TRAP ROCK FROM ONTARIO.

TABLE 442.02-2 APPLIES EXCEPT NO. 4 SIEVE REQUIREMENTS ARE 52 TO 60 TOTAL PERCENT PASSING. FOR THE NO. 4 SIEVE, DO NOT EXCEED 63 IN PRODUCTION.

WHEN ACBS IS USED FOR A FRACTION OF THE COARSE AGGREGATE, PROVIDE A TOTAL ASPHALT BINDER CONTENT GREATER THAN OR EQUAL TO 6.2%. IF ACBS MAKES UP 100% OF THE COARSE AGGREGATE, APPLY THE BINDER CONTENT REQUIREMENTS OF CMS 442.

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)
92.6%	IF AVE DENSITY IS ≥ 93% AND PWL ≥ 90	PF=1 OR AASHTO PF WHICHEVER IS GREATER
	IF 90 > PWL > 50	AASHTO PF
	IF PWL ≤ 50	REMOVE AND REPLACE

**ITEM 442 - ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE A, (446), P.W.L. 2025, AS PER PLAN, PG76-22M**

JOINT CORING AS PER 446.04 WILL NOT BE REQUIRED FOR ALL ASPHALT CONCRETE PLACED WITH COLD LONGITUDINAL JOINTS USING VOID REDUCING ASPHALT MEMBRANE (VRAM). CONSTRUCT COLD LONGITUDINAL JOINTS OVER VRAM USING THE SAME TECHNIQUES, EQUIPMENT AND ROLLER PATTERNS USED ON THE MAT. OBTAIN 10 MAT CORES FOR EACH LOT OF MATERIAL PER 446.04. PAY FACTORS FOR EACH LOT OF MATERIAL WILL BE DETERMINED PER TABLE 446.04-2.

THE COARSE VIRGIN AGGREGATE AND AT LEAST 50% OF FINE VIRGIN AGGREGATE FOR THIS ITEM SHALL BE LIMITED TO AIR COOLED BLAST FURNACE SLAG (ACBS) OR TRAP ROCK FROM ONTARIO.

TABLE 442.02-2 APPLIES EXCEPT NO. 4 SIEVE REQUIREMENTS ARE 52 TO 60 TOTAL PERCENT PASSING. FOR THE NO. 4 SIEVE, DO NOT EXCEED 63 IN PRODUCTION.

ALL REQUIREMENTS OF C&MS ITEM 442 APPLY EXCEPT AS SHOWN.

DENSITY ACCEPTANCE - FOLLOW THE REQUIREMENTS OF 446 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 TABLES.

LOWER SPECIFICATION LIMIT	SURFACE WITH 3 JOINT CORES PAY FACTOR CRITERIA	PAY FACTOR (PF)
92%	IF AVE DENSITY IS ≥ 92.4% AND PWL ≥ 90	PF=1 OR AASHTO PF WHICHEVER IS GREATER
	IF 90 > PWL > 50	AASHTO PF
	IF PWL ≤ 50	REMOVE AND REPLACE
LOWER SPECIFICATION LIMIT	SURFACE WITH NO JOINT CORES PAY FACTOR CRITERIA	PAY FACTOR (PF)
92.6%	IF AVE DENSITY IS ≥ 93% AND PWL ≥ 90	PF=1 OR AASHTO PF WHICHEVER IS GREATER
	IF 90 > PWL > 50	AASHTO PF
	IF PWL ≤ 50	REMOVE AND REPLACE

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

THIS ITEM SHALL BE USED TO PLACE COMPACTED AGGREGATE AT A VARIABLE DEPTH ONLY WHERE NEEDED TO FILL IN LOW SPOTS ALONG THE SHOULDER AND ELIMINATE DROP OFFS. MATERIAL SHALL BE LIMITED TO RECLAIMED ASPHALT CONCRETE PAVEMENT (RAP).

THE ACTUAL DEPTH OF THE COMPACTED AGGREGATE PLACED WILL VARY DEPENDING UPON EXISTING CONDITIONS. FOR ESTIMATING PURPOSES, AN AVERAGE DEPTH OF ONE INCH (1") HAS BEEN USED. WATER, IF NEEDED, SHALL BE APPLIED AS PER 617.05 AND INCLUDED UNDER ITEM 617 - COMPACTED AGGREGATE, AS PER PLAN.

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER:

ITEM 617 - COMPACTED AGGREGATE, AS PER PLAN 25 CY

**ITEM 618 - RUMBLE STRIPS, SHOULDER (ASPHALT CONCRETE), AS PER PLAN**

FOR ALL FREEWAYS, THE LATERAL POSITION OF EDGE LINE RUMBLE STRIPS SHOWN IN SCD BP-9.1 IS REVISED AS FOLLOWS:

- MEDIAN AND OUTSIDE SHOULDER OFFSET FOR SHOULDERS LESS THAN 6'; DIMENSION A AND B ARE EQUAL TO 6'
- MEDIAN AND OUTSIDE SHOULDER OFFSET FOR SHOULDERS 6' TO 12'; DIMENSION A AND B ARE EQUAL TO HALF THE SHOULDER WIDTH MINUS 12"
- MEDIAN AND OUTSIDE SHOULDER OFFSET FOR SHOULDERS GREATER THAN 12'; DIMENSION A AND B ARE EQUAL TO 5'

**ROADWAY**

**ITEM 441 - ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (449), (UNDER GUARDRAIL), AS PER PLAN**

THIS OPERATION SHALL INCLUDE PREPARATION OF THE GRADED SHOULDER USING ITEM 209 - RESHAPING UNDER GUARDRAIL, AS PER PLAN AND PAVING UNDER THE GUARDRAIL USING ITEM 441 - ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (449), (UNDER GUARDRAIL), AS PER PLAN.

HERBICIDE SHALL BE EPA APPROVED FOR PAVING UNDER GUARDRAIL. IT SHALL BE APPLIED TO THE PREPARED AREA AFTER FINAL LEVELING AND GRADING HAS BEEN COMPLETED. THE APPLICATION SHALL BE JUST PRIOR TO PAVING AND SHALL STRICTLY ADHERE TO THE MANUFACTURER'S INSTRUCTIONS.

THE APPLICATOR SHALL BE LICENSED BY THE OHIO DEPARTMENT OF AGRICULTURE AS A COMMERCIAL APPLICATOR AND ALL PERSONS INVOLVED IN THE ACTUAL SPRAYING SHALL BE LICENSED AS COMMERCIAL OPERATORS IN THE APPROPRIATE SPRAY CATEGORY.

HERBICIDE LABEL, MATERIAL SAFETY DATA SHEET AND COPY OF APPLICATORS LICENSE SHALL BE SUBMITTED TO THE ENGINEER FOR VERIFICATION PRIOR TO COMMENCING WORK.

PAVING UNDER GUARDRAIL SHALL CONSIST OF PLACING ITEM 441 TO A DEPTH OF 3" AND A MAXIMUM WIDTH OF 4' USING ONE OF THE FOLLOWING METHODS:

METHOD A:

- SET GUARDRAIL POSTS
- PLACE ITEM 441

METHOD B:

- PLACE ITEM 441
- BOB ASPHALT AT POST LOCATIONS (MAY BE OMITTED IF STEEL POSTS ARE USED)
- SET GUARDRAIL POSTS
- PATCH AND PATCH THE MATERIALS USED FOR PATCHING SHALL BE AN ASPHALT CONCRETE APPROVED BY THE ENGINEER. PATCHED AREAS SHALL BE COMPACTED USING EITHER HAND OR MECHANICAL METHODS. FINISHED SURFACES SHALL BE SMOOTH AND SLOPED TO DRAIN AWAY FROM THE POSTS.

ALL LABOR, EQUIPMENT, AND MATERIALS REQUIRED TO PERFORM THE WORK OUTLINED ABOVE, WITH THE EXCEPTION OF SETTING GUARDRAIL POSTS, SHALL BE INCLUDED FOR PAYMENT UNDER ITEM 441 - ASPHALT CONCRETE, INTERMEDIATE COURSE, TYPE 1 (449), (UNDER GUARDRAIL), AS PER PLAN.

**ITEM 209 - RESHAPING UNDER GUARDRAIL, AS PER PLAN**

THIS ITEM OF WORK SHALL BE USED TO PREPARE PROPOSED AND EXISTING GUARDRAIL RUNS FOR PAVING UNDER GUARDRAIL, INCLUDING REMOVAL AND DISPOSAL OF EXISTING ASPHALT UNDER GUARDRAIL.

A SAWCUT WILL BE PERFORMED, WHEN APPLICABLE, TO ASSIST THE REMOVAL OF EXISTING ASPHALT UNDER GUARDRAIL AND MINIMIZE DAMAGE TO EXISTING SHOULDER ASPHALT. PAYMENT FOR SAWCUTTING WILL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 209 - RESHAPING UNDER GUARDRAIL, AS PER PLAN.

FILL ALL HOLES REMAINING AFTER REMOVAL OF GUARDRAIL POSTS AND ANCHOR ASSEMBLIES WITH GRANULAR MATERIAL. DO NOT USE FILL MATERIAL CONTAINING SOD. ALL FILL MATERIALS SHALL BE APPROVED BY THE ENGINEER AND SHALL BE COMPACTED AS DIRECTED BY THE ENGINEER. PAYMENT FOR THE ABOVE IS INCLUDED IN THE APPLICABLE GUARDRAIL ITEM.

RESHAPE AND COMPACT SUBGRADE TO ENSURE POSITIVE DRAINAGE. ESTABLISH A CROSS-SLOPE OF 0.042 (HALF INCH PER FOOT) GRADE TO A MAXIMUM WIDTH OF 6' TO PROVIDE POSITIVE DRAINAGE AWAY FROM THE TRAVEL LANES.

ALL COLLECTED DEBRIS AND TOPSOIL SHALL BE REMOVED AND DISPOSED OF AS SPECIFIED IN SECTION 105.17 OF THE CMS.

IN AREAS WHERE ASPHALT UNDER GUARDRAIL WILL NOT BE REPLACED, THE REMOVED MATERIAL SHALL BE REPLACED WITH COMPACTABLE GRANULAR MATERIAL CONFORMING TO 705.16 AND PLACED TO GRADE AS APPROVED BY THE ENGINEER. SEED AND MULCH THESE AREAS ACCORDING TO 659.

PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT BID PRICE FOR ITEM 209 - RESHAPING UNDER GUARDRAIL, AS PER PLAN AND SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT, AND MATERIALS NECESSARY TO PERFORM THE WORK.

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY

ITEM 209 - RESHAPING UNDER GUARDRAIL, AS PER PLAN 40 STA.

**ITEM 209 - LINEAR GRADING, AS PER PLAN**

THIS ITEM OF WORK SHALL CONSIST OF GRADING ALONG THE OUTSIDE EDGE OF THE PAVED SHOULDER TO ELIMINATE HIGH SPOTS AND PROVIDE POSITIVE SHEET FLOW OFF THE PAVEMENT AND SHOULDER INTO ROADSIDE DITCHES OR DRAINAGE STRUCTURES. THIS ITEM IS NOT INTENDED TO BE USED TO EXCAVATE A UNIFORM DEPTH TO PLACE ITEM 617 - COMPACTED AGGREGATE, AS PER PLAN.

ANY DEBRIS COLLECTED SHALL BE REMOVED AND DISPOSED OF AS SPECIFIED IN SECTION 105.16 & 105.17 OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS.

PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT BID PRICE FOR ITEM 209 STATION, LINEAR GRADING, AS PER PLAN AND SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT AND MATERIALS NECESSARY TO PERFORM THIS WORK.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY

ITEM 209 - LINEAR GRADING, AS PER PLAN 80 STA.

**ITEM 606 - ANCHOR ASSEMBLY, MGS TYPE E (MASH 2016)**

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING ANY OF THE GUARDRAIL END TERMINALS FOR TYPE MGS GUARDRAIL AS LISTED ON ROADWAY ENGINEERING'S WEB PAGE UNDER ROADSIDE SAFETY DEVICES FOR APPROVED GUARDRAIL END TREATMENTS. INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS, IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

THE FACE OF THE TYPE E IMPACT HEAD SHALL BE COVERED WITH A SHEET OF TYPE 1, ASTM D4956 TYPE XI REFLECTIVE SHEETING, PER CMS 730.193.

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. 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.

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.

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

**ITEM 606 - IMPACT ATTENUATOR TYPE 1 (UNIDIRECTIONAL)**

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING ANY ONE OF THE TYPE 1 IMPACT ATTENUATORS AS LISTED ON THE OFFICE OF ROADWAY ENGINEERING'S WEB PAGE. INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS, IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT PRICE BID FOR ITEM 606, IMPACT ATTENUATOR, TYPE 1 (UNIDIRECTIONAL OR BIDIRECTIONAL), EACH, AND SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT AND MATERIALS NECESSARY TO CONSTRUCT A COMPLETE AND FUNCTIONAL IMPACT ATTENUATOR SYSTEM, INCLUDING ALL RELATED TRANSITIONS, HARDWARE, REFLECTIVE SHEETING AND GRADING, NOT SEPARATELY SPECIFIED, AS REQUIRED BY THE MANUFACTURER.

**ITEM 202 - REMOVAL MISC.: QUICK CURB REMOVED AND DISPOSED**

THIS ITEM SHALL FOLLOW ITEM 202 OF THE CMS AND AS DESCRIBED BELOW. WORK FOR THIS ITEM INCLUDES REMOVAL AND DISPOSAL OF EXISTING QUICK CURB, ATTACHED DELINEATORS AND ALL HARDWARE. CARE SHOULD BE TAKEN BY THE CONTRACTOR DURING THE REMOVAL TO AVOID ANY UNNECESSARY DAMAGE TO EXISTING PAVEMENT. THE UNIT COST PAYMENT PER FOOT SHALL BE FULL COMPENSATION FOR ALL LABOR, MATERIALS, EQUIPMENTALS TO REMOVE AND DISPOSE OF THE QUICK CURB AS DESCRIBED ABOVE TO THE SATISFACTION OF THE ENGINEER.

**DRAINAGE**

**CROSSING AND CONNECTION OF 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.

**REVIEW OF DRAINAGE FACILITIES**

PRIOR TO THE START OF WORK AND AGAIN BEFORE FINAL ACCEPTANCE, PERFORM AN INSPECTION WITH REPRESENTATIVES OF THE DEPARTMENT, CONTRACTOR AND LOCALS OF ALL EXISTING DRAINAGE FACILITIES THAT ARE TO REMAIN IN SERVICE WHICH MAY BE AFFECTED BY THE WORK. THE CONDITION OF THE EXISTING CONDUITS AND THEIR APPURTENANCES IS DETERMINED FROM FIELD OBSERVATIONS. RECORDS OF THE INSPECTION ARE MAINTAINED BY THE DEPARTMENT.

CONFIRM ALL EXISTING SEWERS INSPECTED INITIALLY BY THE ABOVE-MENTIONED PARTIES ARE MAINTAINED AND LEFT IN A CONDITION COMPARABLE TO THAT DETERMINED BY THE ORIGINAL INSPECTION. THE CONTRACTOR IS RESPONSIBLE TO CORRECT ANY CHANGE IN THE CONDITION RESULTING FROM THEIR OPERATIONS AS DIRECTED AND APPROVED BY THE ENGINEER.

PAYMENT FOR ALL OPERATIONS DESCRIBED ABOVE IS INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 611 CONDUIT ITEMS.

DESIGN AGENCY



DESIGNER

AFG

REVIEWER

KKP 01/05/23

PROJECT ID

113156

SHEET

20

TOTAL

233





PHASE	LOCATION	BEGIN STA.	END STA.	614	614	614	614	614	614	614	614	614	614	614	622	622	622	642	642	642	MARKING TYPE REMOVED	
				INCREASED BARRIER DELINEATION	WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (UNIDIRECTIONAL)	WORK ZONE RAISED PAVEMENT MARKER, AS PER PLAN	BARRIER REFLECTOR, TYPE 1	OBJECT MARKER, ONE WAY	WORK ZONE LANE LINE, CLASS 1, 6", 807 PAINT	WORK ZONE EDGE LINE, CLASS 1, 6", 807 PAINT	WORK ZONE CHANNELIZING LINE, CLASS 1, 8", 807 PAINT	WORK ZONE DOTTED LINE, CLASS 1, 6", 807 PAINT	WORK ZONE TRANSVERSE/DIAGONAL LINE, CLASS 1, 642 PAINT	WORK ZONE CROSSWALK LINE, CLASS 1, L2, 642 PAINT	DUAL PORTABLE BARRIER, TRANSITION/TERMINATION	PORTABLE BARRIER, UNANCHORED	PORTABLE BARRIER, ANCHORED	REMOVAL OF PAVEMENT MARKING	REMOVAL OF PAVEMENT MARKING	REMOVAL OF PAVEMENT MARKING		MARKING TYPE REMOVED
				FT	EACH	EACH	EACH	EACH	MILE	MILE	FT	FT	FT	FT	EACH	FT	FT	FT	EACH	MILE		
WORK ZONE PAVEMENT MARKINGS AND PORTABLE BARRIER																						
1B	IR-271 NB EXPRESS	508+50	511+00									250										
1B	IR-271 NB EXPRESS	517+50	548+00		1		62	62						1	3050							
1B	IR-271 NB EXPRESS	532+00	535+00								0.06											
1B	IR-271 NB LOCAL	508+50	525+84								0.33											
1B	IR-271 NB LOCAL	511+00	532+00								0.40											
1B	IR-271 NB LOCAL	517+50	564+00				93	93							4650							
1B	IR-271 NB LOCAL	525+84	532+00									617										
1B	IR-271 NB LOCAL	549+55	564+00								0.28											
EX. PAVEMENT MARKING REMOVAL																						
1B	IR-271 NB EXPRESS	508+16	511+00																	0.06	ELW	
SUBTOTALS FOR PHASE 1B CARRIED TO SHEET 31					1		155	155			1.07		867		1	7700					0.06	
WORK ZONE PAVEMENT MARKINGS AND PORTABLE BARRIER																						
2A	IR-271 NB EXPRESS	508+00	527+47						0.37													
2A	IR-271 NB EXPRESS	508+00	508+50								0.01											
2A	IR-271 NB EXPRESS	511+00	514+75										376									
2A	IR-271 NB EXPRESS	520+48	524+50																			
2A	IR-271 NB EXPRESS	542+50	564+00																			
2A	IR-271 NB EXPRESS	542+50	546+00		19				0.41													
2A	IR-271 NB EXPRESS	542+50	549+50																			
2A	IR-271 NB EXPRESS	551+54	565+00																			
2A	IR-271 NB EXPRESS	557+00	565+00									795										
2A	IR-271 NB CROSSOVER 1	514+75	520+48										1151		178							
2A	IR-271 NB CROSSOVER 1	517+98	527+47										1912		218							
2A	IR-271 NB CROSSOVER 2	545+49	551+54										1203		165							
2A	IR-271 NB CROSSOVER 2	549+50	557+00										1490		175							
2A	IR-271 NB LOCAL	508+50	517+98																			
2A	IR-271 NB LOCAL	508+50	554+00						0.86													
2A	IR-271 NB LOCAL	508+50	554+00		39				0.86													
2A	IR-271 NB LOCAL	508+50	599+79		39																	
2A	IR-271 NB LOCAL	520+48	549+50																			
2A	IR-271 NB LOCAL	527+47	545+49																			
2A	IR-271 NB LOCAL	527+47	535+50																			
2A	IR-271 NB LOCAL	548+71	557+00																			
2A	IR-271 NB LOCAL	551+54	606+00																			
2A	IR-271 NB LOCAL	554+00	564+00																			
2A	IR-271 NB LOCAL	554+00	564+00			51							983									
2A	IR-271 NB LOCAL	554+00	564+00			51							981									
2A	IR-271 NB LOCAL	557+00	599+31		1		70	84								2893						
2A	IR-271 NB LOCAL	564+00	585+00						0.4													
2A	IR-271 NB LOCAL	564+00	585+00						0.4													
2A	IR-271 NB LOCAL	564+00	580+00						0.3													
2A	IR-271 NB LOCAL	577+00	584+50																			
2A	IR-271 NB LOCAL	580+00	585+00																			
2A	IR-271 NB LOCAL	585+00	606+00																			
2A	IR-271 NB LOCAL	585+00	606+00																			
2A	IR-271 NB LOCAL	585+00	596+90																			
2A	IR-271 NB LOCAL	592+00	597+00																			
2A	IR-271 NB LOCAL	592+00	597+00																			
2A	IR-271 NB LOCAL	593+87	597+55																			
2A	IR-271 NB LOCAL	593+87	597+56																			
2A	IR-271 NB LOCAL	593+87	606+00																			
2A	IR-271 NB LOCAL	596+90	606+00																			
2A	IR-271 NB LOCAL	597+55	598+69																			
2A	RAMP C3	9+79	9+84																			
2A	RAMP C3	9+84	9+93																			
2A	CEDAR ROAD WB	13+34	20+05																			
2A	CEDAR ROAD WB	13+34	20+00																			
2A	CEDAR ROAD WB	21+15	23+60																			
2A	CEDAR ROAD WB	25+00	29+65																			
2A	CEDAR ROAD WB	25+45	29+65																			
EX. PAVEMENT MARKING REMOVAL																						
2A	IR-271 NB EXPRESS	508+00	511+00																		0.06	ELY
2A	IR-271 NB EXPRESS	524+50	527+47																		0.06	ELY
2A	IR-271 NB EXPRESS	561+00	564+00																		0.06	ELY
2A	IR-271 NB EXPRESS	561+00	565+00																		0.08	ELW
2A	IR-271 NB LOCAL	556+17	560+99																		0.09	ELY
2A	RAMP C2	116+00	118+42																			
2A	RAMP C2	118+42	120+16																			
2A	BRAINARD SOUTH	17+19	19+94																			
2A	CEDAR WB	13+08	19+81																			
2A	CEDAR EB	21+12	27+60																			
SUBTOTALS FOR PHASE 2A CARRIED TO SHEET 31				4009	1	199	70	84	3.60	4.91	14447	3465	736	35	2893	1250	246	5			0.06	ELY

DESIGN AGENCY

**HNTB**

DESIGNER  
NRE

REVIEWER  
MTR 02/27/24

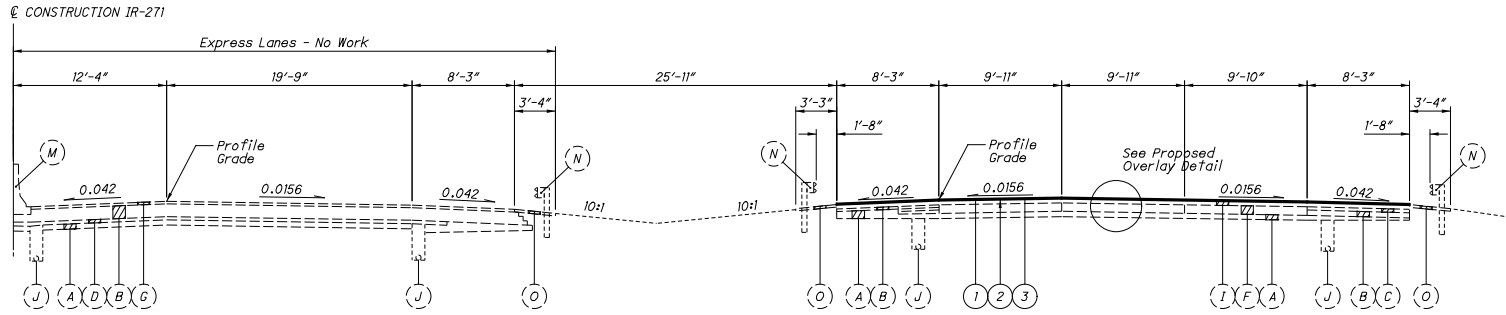
PROJECT ID  
113156

SHEET TOTAL  
30 233

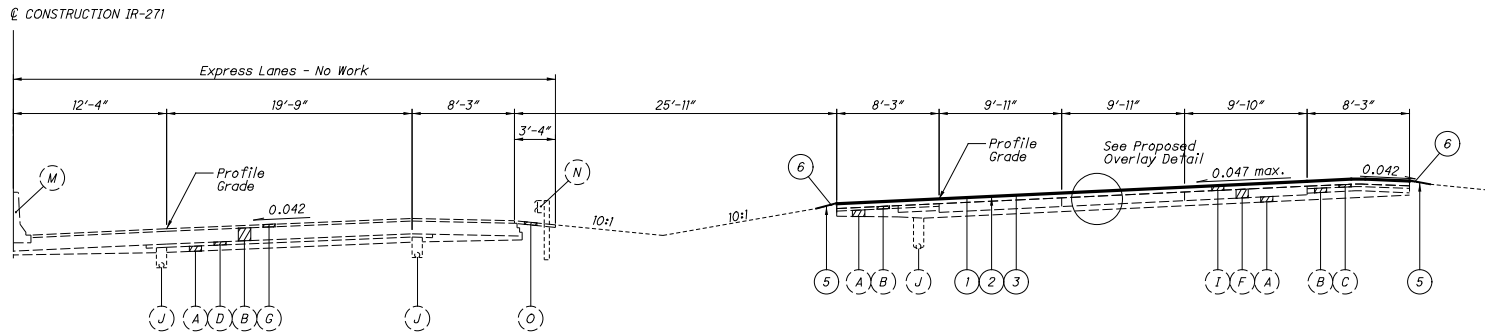








**3-Lane Normal Section (NB Shown)**  
 Sta. 532+68.89 to Sta. 545+81.86 (SB ONLY)  
 Sta. 608+70.91 to Sta. 609+73.43 BK  
 Sta. 606+20.66 AH to 673+77.67



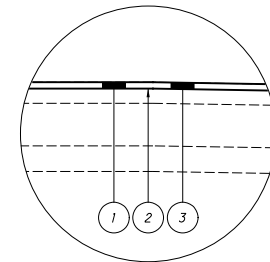
**3-Lane Superelevated Section (NB, Curve Left Shown)**  
 Sta. 545+81.86 to Sta. 601+95.95 (SB ONLY)  
 Sta. 601+95.95 to Sta. 609+73.43 BK= (Curve Right)  
 Sta. 606+20.66 AH to Sta. 608+70.91 (Curve Right)  
 Sta. 673+77.67 to Sta. 733+15.55 (Curve Left)

**Existing Legend**

- (A) Subbase
- (B) Bituminous Aggregate Base
- (C) Waterproof Aggregate Base
- (D) Free Draining Base
- (E) 9" Reinforced Concrete Pavement
- (F) 10" Reinforced Concrete Pavement
- (G) 3" Asphalt Overlay
- (H) 4-1/4" Asphalt Overlay
- (I) 6-1/2" Asphalt Overlay
- (J) Underdrain
- (K) Trench Drain (Concrete Encased, Do Not Disturb)
- (L) Concrete Curb
- (M) Concrete Barrier
- (N) Guardrail
- (O) Asphalt Under Guardrail

**Proposed Legend**

- (1) Item 254 - Pavement Planing, Asphalt Concrete, 1-1/2", As Per Plan
- (2) Item 407 - Non-tracking Tack Coat
- (3) Item 442 - Asphalt Concrete Surface Course, 12.5MM, Type A (447), PWL, 2025 As Per Plan, PG76-22M
- (4) Item 442 - Asphalt Concrete Surface Course, 12.5MM, Type A (446), PWL, 2025 As Per Plan, PG76-22M
- (5) Linear Grading, As Per Plan
- (6) Compacted Aggregate, As Per Plan



**Proposed Overlay Detail**



