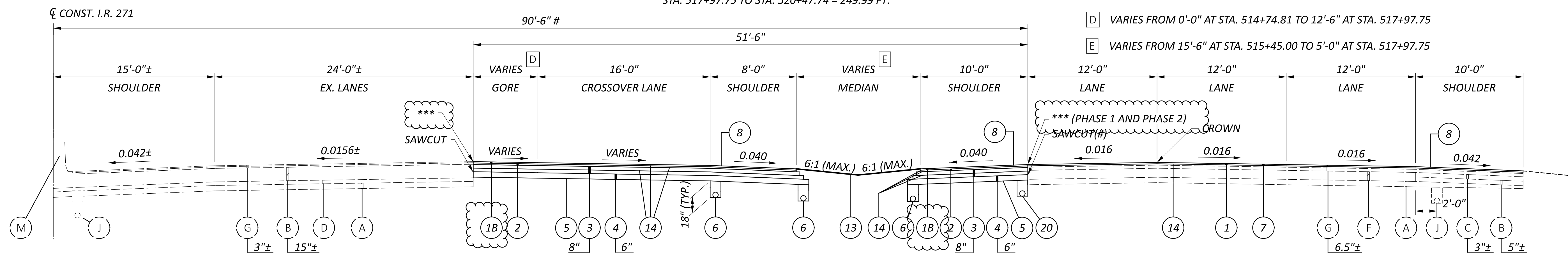
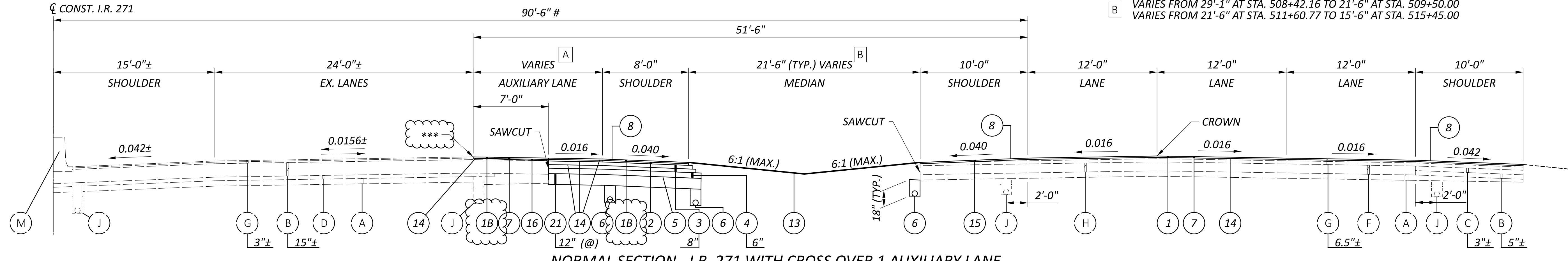


NORMAL SECTION - I.R. 271 WITH CROSS OVER 1
 STA. 517+97.75 TO STA. 520+47.74 = 249.99 FT.



NORMAL SECTION - I.R. 271 WITH CROSS OVER 1
 STA. 515+45.00 TO STA. 517+97.75 = 252.75 FT.



NORMAL SECTION - I.R. 271 WITH CROSS OVER 1 AUXILIARY LANE
 BEGIN WORK TO STA. 515+45.00 = 704.53 FT.

- F VARIES FROM 12'-6" AT STA. 517+97.75 TO 23'-0" AT STA. 520+47.74
- G VARIES FROM 23'-0" AT STA. 517+97.75 TO 12'-6" AT STA. 520+47.74
- H VARIES FROM 6'-3" AT STA. 517+97.75 TO 14'-6" AT STA. 520+47.74
- I VARIES FROM 6'-3" AT STA. 517+97.75 TO 8'-6" AT STA. 520+47.74
- D VARIES FROM 0'-0" AT STA. 514+74.81 TO 12'-6" AT STA. 517+97.75
- E VARIES FROM 15'-6" AT STA. 515+45.00 TO 5'-0" AT STA. 517+97.75
- A VARIES FROM 0'-0" AT STA. 508+50.00 TO 12'-0" AT STA. 509+50.00
 VARIES FROM 12'-0" AT STA. 509+50.00 TO 16'-0" AT STA. 514+74.81
- B VARIES FROM 29'-1" AT STA. 508+42.16 TO 21'-6" AT STA. 509+50.00
 VARIES FROM 21'-6" AT STA. 511+60.77 TO 15'-6" AT STA. 515+45.00

EXISTING LEGEND

- (A) SUBBASE
- (B) BITUMINOUS AGGREGATE BASE (THICKNESS AS SHOWN)
- (C) WATERPROOF AGGREGATE BASE (THICKNESS AS SHOWN)
- (D) FREE DRAINING BASE
- (E) EXISTING GROUND
- (F) 10"± REINFORCED CONCRETE PAVEMENT
- (M) CONCRETE BARRIER
- (N) GUARDRAIL
- (G) ASPHALT CONCRETE (THICKNESS AS SHOWN)
- (H) 10"± CONCRETE BASE
- (I) CONCRETE WALK
- (J) 6" UNDERDRAINS
- (K) 15" SLOTTED DRAIN
- (L) LONGITUDINAL JOINT
- (O) ASPHALT UNDER GUARDRAIL
- (P) 9" CONCRETE BASE

* - VARIABLE PLANING ON EXISTING TRAVEL LANES TO ACHIEVE PREFERRED SHOULDER CROSS SLOPES. SEE DETAIL ON SHEET 18

** - WEDGE COURSE ON EXISTING SHOULDERS TO ACHIEVE REQUIRED TRAVEL LANE CROSS SLOPE

*** - PLACE ITEM 872 - VOID REDUCING ASPHALT MEMBRANE AT JOINT WITH EXISTING ASPHALT TO REMAIN. JOINT DENSITY CORES WILL NOT BE TAKEN AT THIS LOCATION.

- ACTUAL JOINT LOCATION MAY VARY. INTENT OF WORK IS TO REMOVE EXISTING SHOULDERS UP TO COMPOSITE PAVEMENT UNDER MAINLINE LOCAL LANES AND RAMP C2/C3 LANES. PRIOR TO SAW CUTTING PAVEMENT THE CONTRACTOR SHALL LOCATE ACTUAL JOINT. WORK TO LOCATE THE JOINT IS INCIDENTAL TO ITEM 202 PAVEMENT REMOVED AND NO SEPARATE PAYMENT SHALL BE MADE. A QUANTITY OF ITEM 441 ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2 HAS BEEN INCLUDED FOR USE AS DIRECTED BY THE ENGINEER TO RESTORE ASPHALT INTENDED TO REMAIN THAT BECOMES DISTURBED AS PART OF THE JOINT LOCATION.

@ - SEE UNDERCUT TABLE ON PROPOSED TYPICAL SECTIONS SHEET 17
 NOTE: 4'-0" ROUNDING AT ALL GRADE BREAKS UNLESS OTHERWISE NOTED.

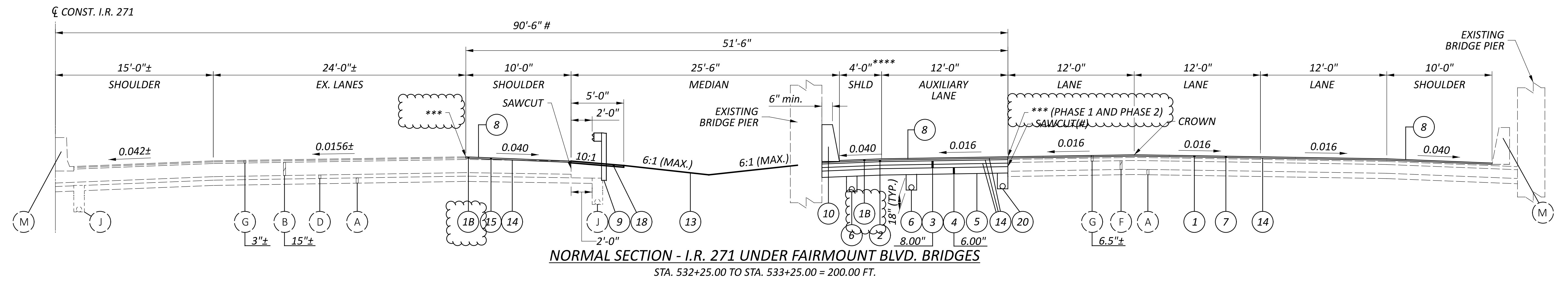
PROPOSED LEGEND

- (1) ITEM 442 - 1.5" ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE A (447), PWL, 2025, A.P.P., PG76-22M
- (1B) ITEM 442 - 1.5" ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE A, (446), PWL, 2025, A.P.P. B, PG76-22M
- (2) ITEM 442 - 1.75" ASPHALT CONCRETE INTERMEDIATE COURSE, 12.5MM, TYPE A (446)
- (3) ITEM 302 - ASPHALT CONCRETE BASE, PG64-22 (449) (PLACED IN 2 LIFTS) (THICKNESS AS SHOWN)
- (4) ITEM 304 - AGGREGATE BASE (THICKNESS AS SHOWN)
- (5) ITEM 204 - SUBGRADE COMPACTION
- (6) ITEM 605 - 6" BASE PIPE UNDERDRAINS WITH GEOTEXTILE FABRIC
- (7) ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN (T=1.5")
- (8) ITEM 618 - RUMBLE STRIPS, SHOULDER, (ASPHALT CONCRETE), A.P.P.
- (9) ITEM 606 - GUARDRAIL, TYPE MGS
- (10) ITEM 662 - CONCRETE BARRIER, SINGLE SLOPE, TYPE D
- (11) ITEM 608 - 4" CONCRETE WALK
- (12) ITEM 609 - CURB, TYPE 2-B
- (13) ITEM 659 - SEEDING AND MULCHING
- (14) ITEM 407 - NON-TRACKING TACK COAT
- (15) ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN (T = VARIES 1.5" TO 4.5")
- (16) ITEM 442 - ASPHALT CONCRETE INTERMEDIATE COURSE, 12.5MM, TYPE A (449) (0" MIN. TO 2.2" MAX.) **
- (17) ITEM 611 - 15", SLOTTED DRAIN, TYPE 2
- (18) ITEM 441 - 3" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1 (449), (UNDER GUARDRAIL), AS PER PLAN
- (19) ITEM 202 - WEARING COURSE REMOVED
 ITEM 609 - 6" CONCRETE TRAFFIC ISLAND
- (20) ITEM 605 - 6" SHALLOW PIPE UNDERDRAINS WITH GEOTEXTILE FABRIC 24" DEPTH
- (21) ITEM 204 - EXCAVATION OF SUBGRADE (THICKNESS AS SHOWN)
 ITEM 204 - GRANULAR MATERIAL, TYPE B (THICKNESS AS SHOWN)
 ITEM 204 - GEOTEXTILE FABRIC

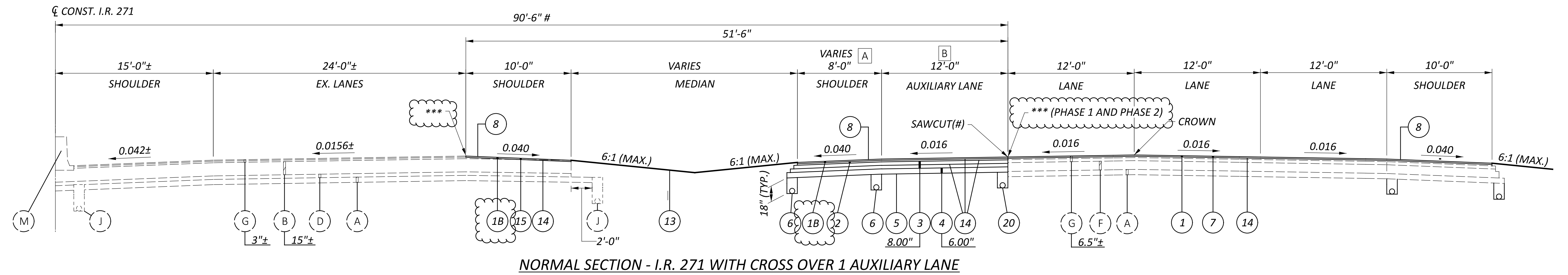
PROPOSED TYPICAL SECTIONS
I.R. 271

DESIGN AGENCY	
DESIGNER	MTD
REVIEWER	MTR 01/04/23
PROJECT ID	113156
SHEET	TOTAL
12	233

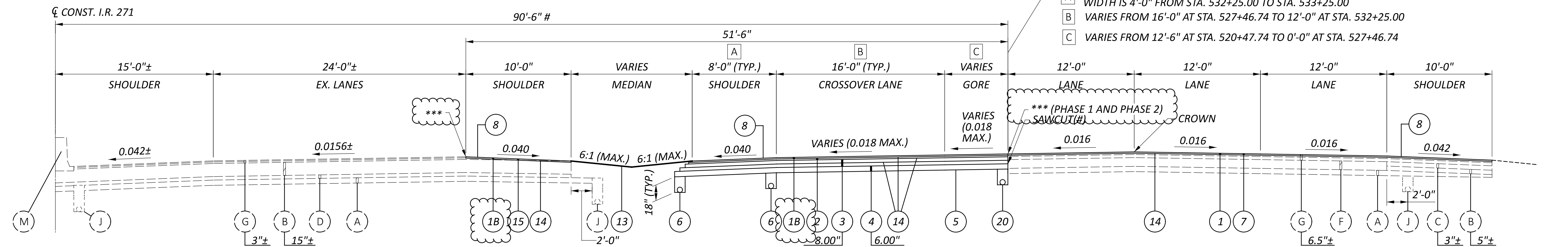




NORMAL SECTION - I.R. 271 UNDER FAIRMOUNT BLVD. BRIDGES
 STA. 532+25.00 TO STA. 533+25.00 = 200.00 FT.



NORMAL SECTION - I.R. 271 WITH CROSS OVER 1 AUXILIARY LANE
 STA. 530+00.00 TO STA. 532+25.00 = 225.00 FT.
 STA. 533+25.00 TO STA. 535+50.00 = 225.00 FT.



NORMAL SECTION - I.R. 271 WITH CROSS OVER 1 AUXILIARY LANE
 STA. 520+47.74 TO STA. 530+00.00 = 952.26 FT.

- A WIDTH IS 4'-0" FROM STA. 520+47.74 TO STA. 523+00.00
- B WIDTH IS 4'-0" FROM STA. 532+25.00 TO STA. 533+25.00
- C VARIES FROM 16'-0" AT STA. 527+46.74 TO 12'-0" AT STA. 532+25.00
- C VARIES FROM 12'-6" AT STA. 520+47.74 TO 0'-0" AT STA. 527+46.74

EXISTING LEGEND

- (A) SUBBASE
- (B) BITUMINOUS AGGREGATE BASE (THICKNESS AS SHOWN)
- (C) WATERPROOF AGGREGATE BASE (THICKNESS AS SHOWN)
- (D) FREE DRAINING BASE
- (E) EXISTING GROUND
- (F) 10"± REINFORCED CONCRETE PAVEMENT
- (G) ASPHALT CONCRETE (THICKNESS AS SHOWN)
- (H) 10"± CONCRETE BASE
- (M) CONCRETE BARRIER
- (N) GUARDRAIL
- (I) CONCRETE WALK
- (J) 6" UNDERDRAINS
- (K) 15" SLOTTED DRAIN
- (L) LONGITUDINAL JOINT
- (O) ASPHALT UNDER GUARDRAIL
- (P) 9" CONCRETE BASE

NOTE: 4'-0" ROUNDING AT ALL GRADE BREAKS UNLESS OTHERWISE NOTED.

* - VARIABLE PLANING ON EXISTING TRAVEL LANES TO ACHIEVE PREFERRED SHOULDER CROSS SLOPES. SEE DETAIL ON SHEET 18

** - WEDGE COURSE ON EXISTING SHOULDERS TO ACHIEVE REQUIRED TRAVEL LANE CROSS SLOPE.

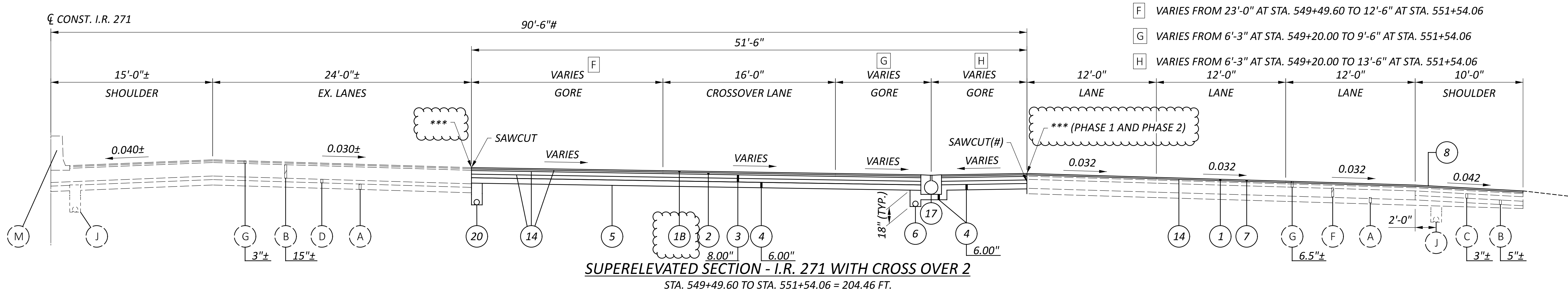
*** - PLACE ITEM 872 - VOID REDUCING ASPHALT MEMBRANE AT JOINT WITH EXISTING ASPHALT TO REMAIN. JOINT DENSITY CORES WILL NOT BE TAKEN AT THIS LOCATION.

**** - NORMAL DESIGN CRITERIA 8'-0"

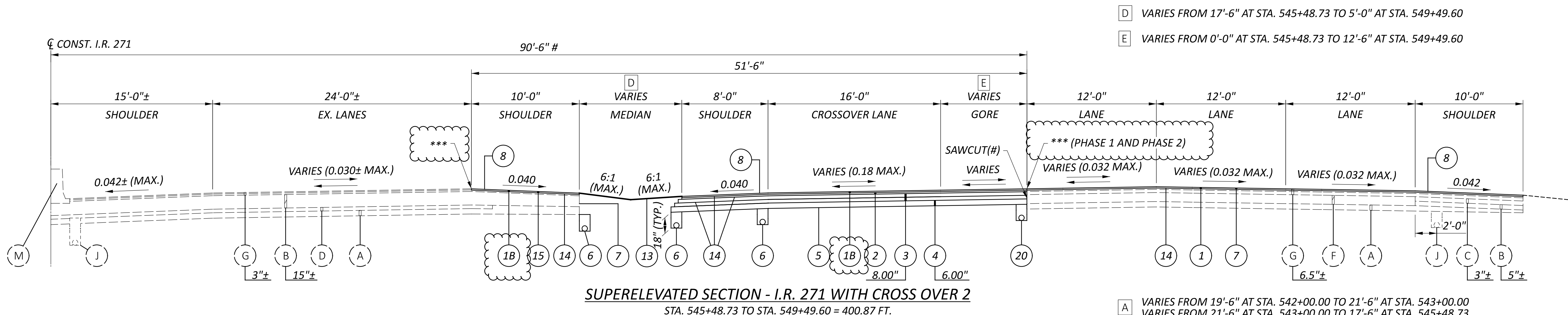
- SEE NOTE ON PROPOSED TYPICAL SECTIONS SHEET 12

PROPOSED LEGEND

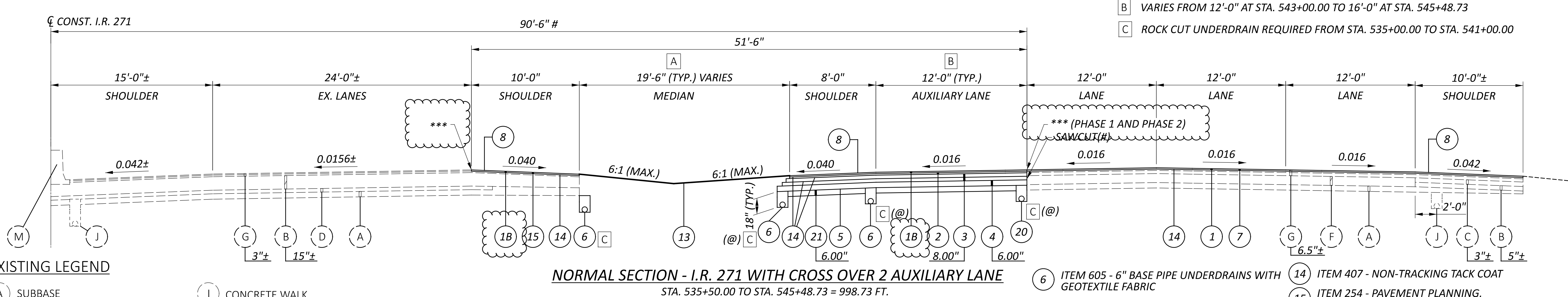
- (1) ITEM 442 - 1.5" ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE A (447), PWL, 2025, A.P.P., PG76-22M
- (1B) ITEM 442 - 1.5" ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE A, (446), PWL, 2025, A.P.P. B, PG76-22M
- (2) ITEM 442 - 1.75" ASPHALT CONCRETE INTERMEDIATE COURSE, 12.5MM, TYPE A (446)
- (3) ITEM 302 - ASPHALT CONCRETE BASE, PG64-22 (449) (PLACED IN 2 LIFTS) (THICKNESS AS SHOWN)
- (4) ITEM 304 - AGGREGATE BASE (THICKNESS AS SHOWN)
- (5) ITEM 204 - SUBGRADE COMPACTION
- (6) ITEM 605 - 6" BASE PIPE UNDERDRAINS WITH GEOTEXTILE FABRIC
- (7) ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN (T=1.5")
- (8) ITEM 618 - RUMBLE STRIPS, SHOULDER, (ASPHALT CONCRETE), A.P.P.
- (9) ITEM 606 - GUARDRAIL, TYPE MGS
- (10) ITEM 662 - CONCRETE BARRIER, SINGLE SLOPE, TYPE D
- (11) ITEM 608 - 4" CONCRETE WALK
- (12) ITEM 609 - CURB, TYPE 2-B
- (13) ITEM 659 - SEEDING AND MULCHING
- (14) ITEM 407 - NON-TRACKING TACK COAT
- (15) ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN (T=VARIES 1.5" TO 4.5")
- (16) ITEM 442 - ASPHALT CONCRETE INTERMEDIATE COURSE, 12.5MM, TYPE A (449) (0" MIN. TO 2.2" MAX.) **
- (17) ITEM 611 - 15", SLOTTED DRAIN, TYPE 2
- (18) ITEM 441 - 3" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1 (449), (UNDER GUARDRAIL), AS PER PLAN
- (19) ITEM 202 - WEARING COURSE REMOVED ITEM 609 - 6" CONCRETE TRAFFIC ISLAND
- (20) ITEM 605 - 6" SHALLOW PIPE UNDERDRAINS WITH GEOTEXTILE FABRIC 24" DEPTH



- F VARIES FROM 23'-0" AT STA. 549+49.60 TO 12'-6" AT STA. 551+54.06
- G VARIES FROM 6'-3" AT STA. 549+20.00 TO 9'-6" AT STA. 551+54.06
- H VARIES FROM 6'-3" AT STA. 549+20.00 TO 13'-6" AT STA. 551+54.06



- D VARIES FROM 17'-6" AT STA. 545+48.73 TO 5'-0" AT STA. 549+49.60
- E VARIES FROM 0'-0" AT STA. 545+48.73 TO 12'-6" AT STA. 549+49.60



- A VARIES FROM 19'-6" AT STA. 542+00.00 TO 21'-6" AT STA. 543+00.00
VARIES FROM 21'-6" AT STA. 543+00.00 TO 17'-6" AT STA. 545+48.73
- B VARIES FROM 12'-0" AT STA. 543+00.00 TO 16'-0" AT STA. 545+48.73
- C ROCK CUT UNDERDRAIN REQUIRED FROM STA. 535+00.00 TO STA. 541+00.00

EXISTING LEGEND

- (A) SUBBASE
- (B) BITUMINOUS AGGREGATE BASE (THICKNESS AS SHOWN)
- (C) WATERPROOF AGGREGATE BASE (THICKNESS AS SHOWN)
- (D) FREE DRAINING BASE
- (E) EXISTING GROUND
- (F) 10"± REINFORCED CONCRETE PAVEMENT
- (G) ASPHALT CONCRETE (THICKNESS AS SHOWN)
- (H) 10"± CONCRETE BASE
- (I) CONCRETE WALK
- (J) 6" UNDERDRAINS
- (K) 15" SLOTTED DRAIN
- (L) LONGITUDINAL JOINT
- (M) CONCRETE BARRIER
- (N) GUARDRAIL
- (O) ASPHALT UNDER GUARDRAIL
- (P) 9" CONCRETE BASE

NOTE: 4'-0" ROUNDING AT ALL GRADE BREAKS UNLESS OTHERWISE NOTED.

* - VARIABLE PLANING ON EXISTING TRAVEL LANES TO ACHIEVE PREFERRED SHOULDER CROSS SLOPES. SEE DETAIL ON SHEET 18

** - WEDGE COURSE ON EXISTING SHOULDERS TO ACHIEVE REQUIRED TRAVEL LANE CROSS SLOPE

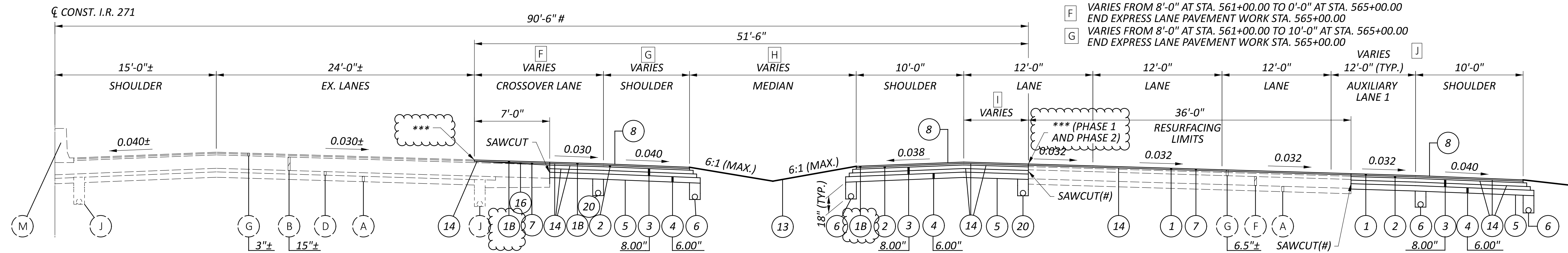
*** - PLACE ITEM 872 - VOID REDUCING ASPHALT MEMBRANE AT JOINT WITH EXISTING ASPHALT TO REMAIN. JOINT DENSITY CORES WILL NOT BE TAKEN AT THIS LOCATION.

@ - SEE UNDERCUT TABLE ON PROPOSED TYPICAL SECTIONS SHEET 17

- SEE NOTE ON PROPOSED TYPICAL SECTIONS SHEET 12

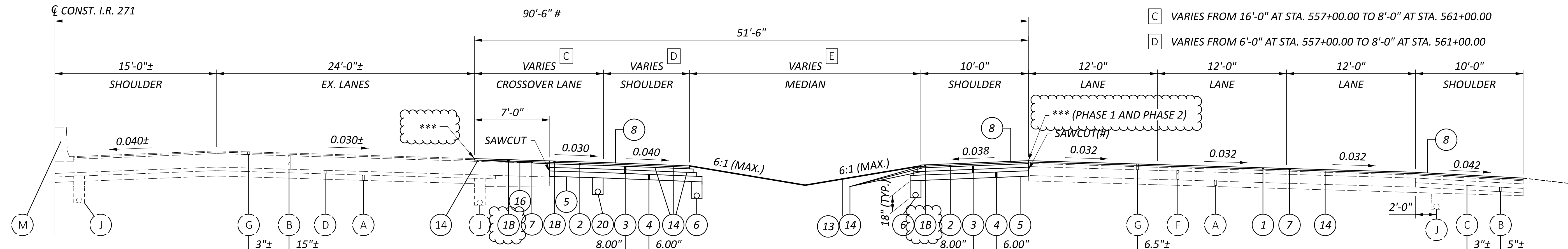
PROPOSED LEGEND

- (1) ITEM 442 - 1.5" ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE A (447), PWL, 2025, A.P.P. B, PG76-22M
- (1B) ITEM 442 - 1.5" ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE A, (446), PWL, 2025, A.P.P. B, PG76-22M
- (2) ITEM 442 - 1.75" ASPHALT CONCRETE INTERMEDIATE COURSE, 12.5MM, TYPE A (446)
- (3) ITEM 302 - ASPHALT CONCRETE BASE, PG64-22 (449) (PLACED IN 2 LIFTS) (THICKNESS AS SHOWN)
- (4) ITEM 304 - AGGREGATE BASE (THICKNESS AS SHOWN)
- (5) ITEM 204 - SUBGRADE COMPACTION
- (6) ITEM 605 - 6" BASE PIPE UNDERDRAINS WITH GEOTEXTILE FABRIC
- (7) ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN (T=1.5")
- (8) ITEM 618 - RUMBLE STRIPS, SHOULDER, (ASPHALT CONCRETE), A.P.P.
- (9) ITEM 606 - GUARDRAIL, TYPE MGS
- (10) ITEM 662 - CONCRETE BARRIER, SINGLE SLOPE, TYPE D
- (11) ITEM 608 - 4" CONCRETE WALK
- (12) ITEM 609 - CURB, TYPE 2-B
- (13) ITEM 659 - SEEDING AND MULCHING
- (14) ITEM 407 - NON-TRACKING TACK COAT
- (15) ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN (T = VARIES 1.5" TO 4.5")
- (16) ITEM 442 - ASPHALT CONCRETE INTERMEDIATE COURSE, 12.5MM, TYPE A (449) (0" MIN. TO 2.2" MAX.) **
- (17) ITEM 611 - 15", SLOTTED DRAIN, TYPE 2
- (18) ITEM 441 - 3" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1 (449), (UNDER GUARDRAIL), AS PER PLAN
- (19) ITEM 202 - WEARING COURSE REMOVED ITEM 609 - 6" CONCRETE TRAFFIC ISLAND
- (20) ITEM 605 - 6" SHALLOW PIPE UNDERDRAINS WITH GEOTEXTILE FABRIC 24" DEPTH
- (21) ITEM 204 - EXCAVATION OF SUBGRADE (THICKNESS AS SHOWN) ITEM 204 - GRANULAR MATERIAL, TYPE B (THICKNESS AS SHOWN) ITEM 204 - GEOTEXTILE FABRIC



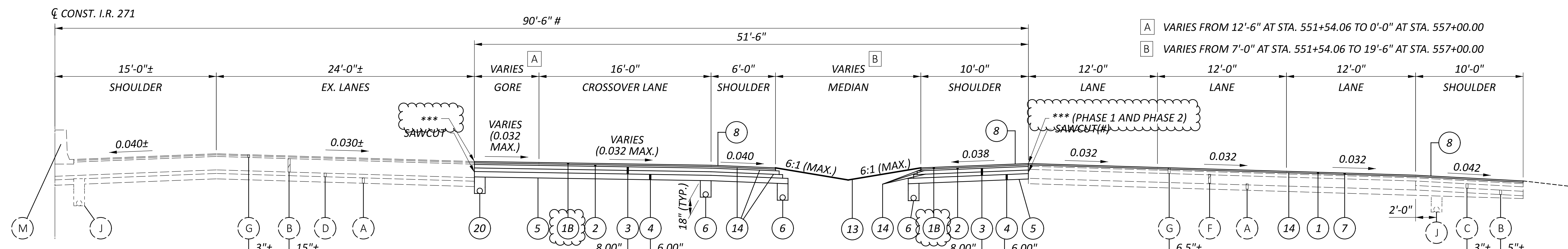
SUPERELEVATED SECTION - I.R. 271 WITH CROSS OVER 2 AUXILIARY LANE AND LOCAL LANE SHIFT
 STA. 561+00.00 TO STA. 567+00.00 = 600.00 FT.

- F VARIES FROM 8'-0" AT STA. 561+00.00 TO 0'-0" AT STA. 565+00.00
END EXPRESS LANE PAVEMENT WORK STA. 565+00.00
- G VARIES FROM 8'-0" AT STA. 561+00.00 TO 10'-0" AT STA. 565+00.00
END EXPRESS LANE PAVEMENT WORK STA. 565+00.00
- H VARIES FROM 25'-6" AT STA. 559+00.00 TO 19'-6" AT STA. 567+00.00
- I VARIES FROM 0'-0" AT STA. 559+00.00 TO 12'-0" AT STA. 567+00.00
- J VARIES FROM 0'-0" AT STA. 561+00.00 TO 12'-0" AT STA. 562+00.00
- C VARIES FROM 16'-0" AT STA. 557+00.00 TO 8'-0" AT STA. 561+00.00
- D VARIES FROM 6'-0" AT STA. 557+00.00 TO 8'-0" AT STA. 561+00.00



SUPERELEVATED SECTION - I.R. 271 WITH CROSS OVER 2 AUXILIARY LANE
 STA. 557+00.00 TO STA. 561+00.00 = 400 FT.

- E VARIES FROM 19'-6" AT STA. 557+00.00 TO 25'-6" AT STA. 561+00.00
- A VARIES FROM 12'-6" AT STA. 551+54.06 TO 0'-0" AT STA. 557+00.00
- B VARIES FROM 7'-0" AT STA. 551+54.06 TO 19'-6" AT STA. 557+00.00



SUPERELEVATED SECTION - I.R. 271 WITH CROSS OVER 2
 STA. 551+54.08 TO STA. 557+00.00 = 545.92 FT.

- 6 ITEM 605 - 6" BASE PIPE UNDERDRAINS WITH GEOTEXTILE FABRIC
- 7 ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN (T=1.5")
- 8 ITEM 618 - RUMBLE STRIPS, SHOULDER, (ASPHALT CONCRETE), A.P.P.
- 9 ITEM 606 - GUARDRAIL, TYPE MGS
- 10 ITEM 662 - CONCRETE BARRIER, SINGLE SLOPE, TYPE D
- 11 ITEM 608 - 4" CONCRETE WALK
- 12 ITEM 609 - CURB, TYPE 2-B
- 13 ITEM 659 - SEEDING AND MULCHING
- 14 ITEM 407 - NON-TRACKING TACK COAT
- 15 ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN (T = VARIES 1.5" TO 4.5")
- 16 ITEM 442 - ASPHALT CONCRETE INTERMEDIATE COURSE, 12.5MM, TYPE A (449) (0" MIN. TO 2.2" MAX.) **
- 17 ITEM 611 - 15", SLOTTED DRAIN, TYPE 2
- 18 ITEM 441 - 3" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1 (449), (UNDER GUARDRAIL), AS PER PLAN
- 19 ITEM 202 - WEARING COURSE REMOVED
- 20 ITEM 609 - 6" CONCRETE TRAFFIC ISLAND

EXISTING LEGEND

- A SUBBASE
- B BITUMINOUS AGGREGATE BASE (THICKNESS AS SHOWN)
- C WATERPROOF AGGREGATE BASE (THICKNESS AS SHOWN)
- D FREE DRAINING BASE
- E EXISTING GROUND
- F 10"± REINFORCED CONCRETE PAVEMENT
- G ASPHALT CONCRETE (THICKNESS AS SHOWN)
- H 10"± CONCRETE BASE
- I CONCRETE WALK
- J 6" UNDERDRAINS
- K 15" SLOTTED DRAIN
- L LONGITUDINAL JOINT
- M CONCRETE BARRIER
- N GUARDRAIL

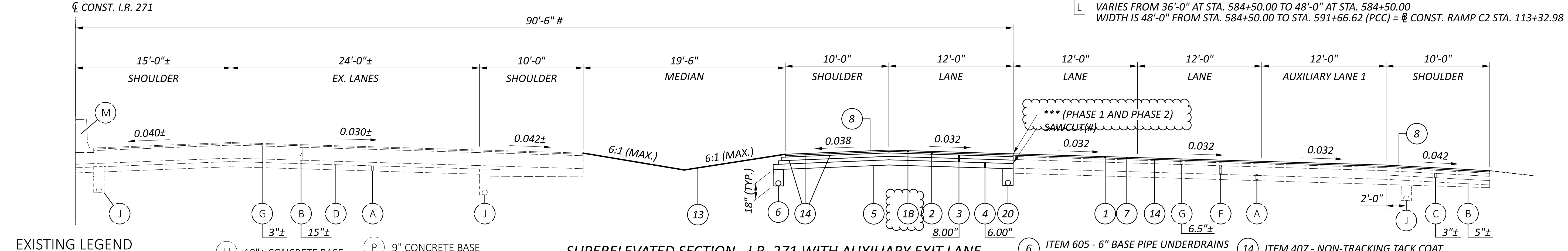
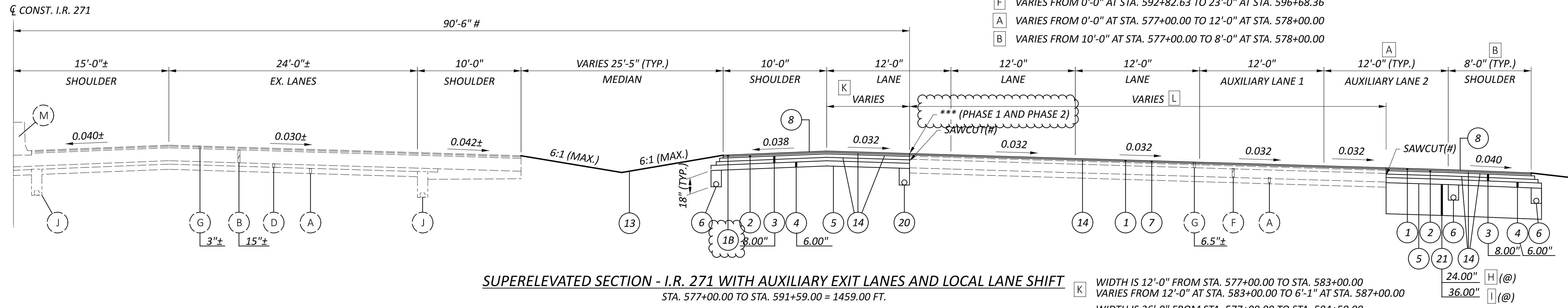
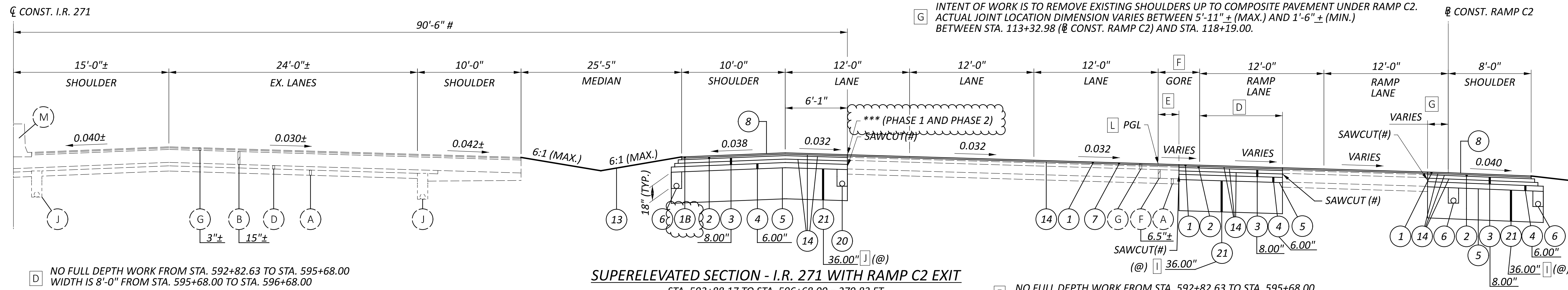
PROPOSED LEGEND

- 1 ITEM 442 - 1.5" ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE A (447), PWL: 2025, A.P.P., PG76-22M
- 1B ITEM 442 - 1.5" ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE A, (446), PWL: 2025, A.P.P. B, PG76-22M
- 2 ITEM 442 - 1.75" ASPHALT CONCRETE INTERMEDIATE COURSE, 12.5MM, TYPE A (446)
- 3 ITEM 302 - ASPHALT CONCRETE BASE, PG64-22 (449) (PLACED IN 2 LIFTS) (THICKNESS AS SHOWN)
- 4 ITEM 304 - AGGREGATE BASE (THICKNESS AS SHOWN)
- 5 ITEM 204 - SUBGRADE COMPACTION

NOTE: 4'-0" ROUNDING AT ALL GRADE BREAKS UNLESS OTHERWISE NOTED
 * - VARIABLE PLANING ON EXISTING TRAVEL LANES TO ACHIEVE PREFERRED SHOULDER CROSS SLOPES. SEE DETAIL ON SHEET 18
 ** - WEDGE COURSE ON EXISTING SHOULDERS TO ACHIEVE REQUIRED TRAVEL LANE CROSS SLOPE.
 *** - PLACE ITEM 872 - VOID REDUCING ASPHALT MEMBRANE AT JOINT WITH EXISTING ASPHALT TO REMAIN. JOINT DENSITY CORES WILL NOT BE TAKEN AT THIS LOCATION.
 # - SEE NOTE ON PROPOSED TYPICAL SECTIONS SHEET 12

PROPOSED TYPICAL SECTIONS
I.R. 271

DESIGN AGENCY	
DESIGNER	MTD
REVIEWER	MTR 01/04/23
PROJECT ID	113156
SHEET	TOTAL
15	233



EXISTING LEGEND

- (A) SUBBASE
- (B) BITUMINOUS AGGREGATE BASE (THICKNESS AS SHOWN)
- (C) WATERPROOF AGGREGATE BASE (THICKNESS AS SHOWN)
- (D) FREE DRAINING BASE
- (E) EXISTING GROUND
- (F) 10"± REINFORCED CONCRETE PAVEMENT
- (G) ASPHALT CONCRETE (THICKNESS AS SHOWN)
- (H) 10"± CONCRETE BASE
- (I) CONCRETE WALK
- (J) 6" UNDERDRAINS
- (K) 15" SLOTTED DRAIN
- (L) LONGITUDINAL JOINT
- (M) CONCRETE BARRIER
- (N) GUARDRAIL
- (O) ASPHALT UNDER GUARDRAIL
- (P) 9" CONCRETE BASE

NOTE: 4'-0" ROUNDING AT ALL GRADE BREAKS UNLESS OTHERWISE NOTED.

*** - VARIABLE PLANING ON EXISTING TRAVEL LANES TO ACHIEVE PREFERRED SHOULDER CROSS SLOPES. SEE DETAIL ON SHEET 18**

**** - WEDGE COURSE ON EXISTING SHOULDERS TO ACHIEVE REQUIRED TRAVEL LANE CROSS SLOPE.**

***** - PLACE ITEM 872 - VOID REDUCING ASPHALT MEMBRANE AT JOINT WITH EXISTING ASPHALT TO REMAIN. JOINT DENSITY CORES WILL NOT BE TAKEN AT THIS LOCATION.**

@ - SEE UNDERCUT TABLE ON PROPOSED TYPICAL SECTIONS SHEET 17

- SEE NOTE ON PROPOSED TYPICAL SECTIONS SHEET 12

PROPOSED LEGEND

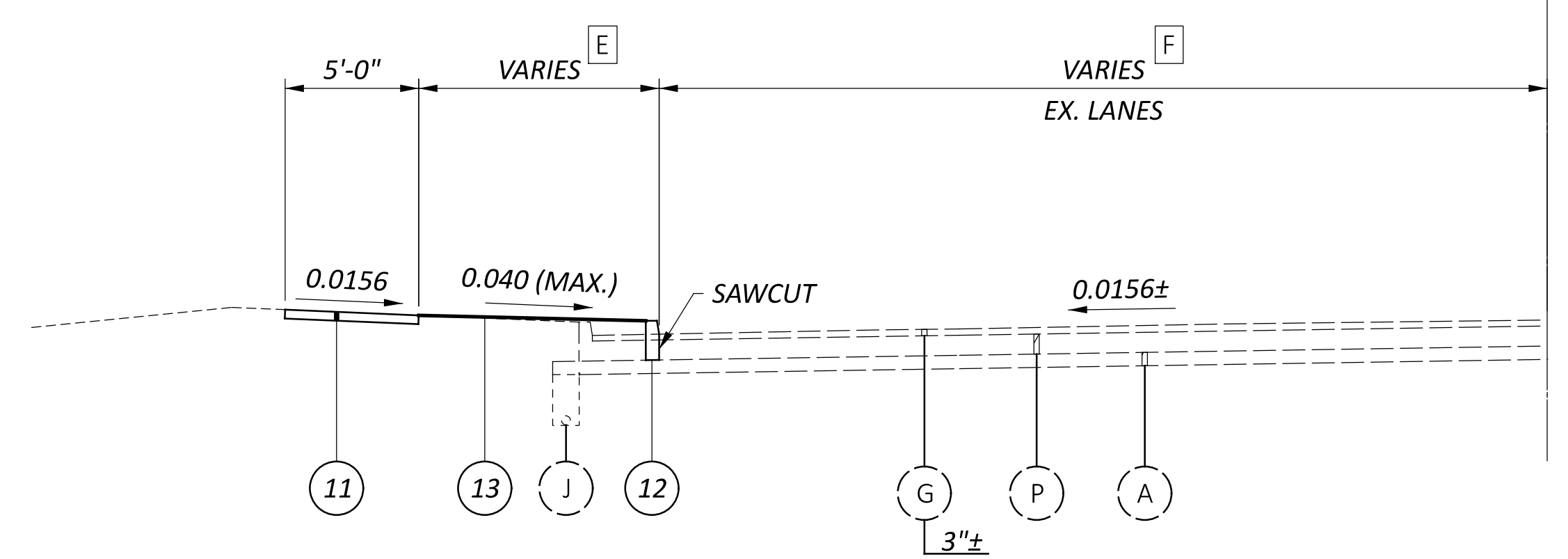
- (1) ITEM 442 - 1.5" ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE A (447), PWL 2025 A.P.P. B, PG76-22M
- (1B) ITEM 442 - 1.5" ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE A, (446), PWL 2025, A.P.P. B, PG76-22M
- (2) ITEM 442 - 1.75" ASPHALT CONCRETE INTERMEDIATE COURSE, 12.5MM, TYPE A (446)
- (3) ITEM 302 - ASPHALT CONCRETE BASE, PG64-22 (449) (PLACED IN 2 LIFTS) (THICKNESS AS SHOWN)
- (4) ITEM 304 - AGGREGATE BASE (THICKNESS AS SHOWN)
- (5) ITEM 204 - SUBGRADE COMPACTION
- (6) ITEM 605 - 6" BASE PIPE UNDERDRAINS WITH GEOTEXTILE FABRIC
- (7) ITEM 254 - PAVEMENT PLANNING, ASPHALT CONCRETE, AS PER PLAN (T=1.5")
- (8) ITEM 618 - RUMBLE STRIPS, SHOULDER, (ASPHALT CONCRETE), A.P.P.
- (9) ITEM 606 - GUARDRAIL, TYPE MGS
- (10) ITEM 662 - CONCRETE BARRIER, SINGLE SLOPE, TYPE D
- (11) ITEM 608 - 4" CONCRETE WALK
- (12) ITEM 609 - CURB, TYPE 2-B
- (13) ITEM 659 - SEEDING AND MULCHING
- (14) ITEM 407 - NON-TRACKING TACK COAT
- (15) ITEM 254 - PAVEMENT PLANNING, ASPHALT CONCRETE, AS PER PLAN (T = VARIES 1.5" TO 4.5")
- (16) ITEM 442 - ASPHALT CONCRETE INTERMEDIATE COURSE, 12.5MM, TYPE A (449) (0" MIN. TO 2.2" MAX.) **
- (17) ITEM 611 - 15", SLOTTED DRAIN, TYPE 2
- (18) ITEM 441 - 3" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1 (449), (UNDER GUARDRAIL), AS PER PLAN
- (19) ITEM 202 - WEARING COURSE REMOVED ITEM 609 - 6" CONCRETE TRAFFIC ISLAND
- (20) ITEM 605 - 6" SHALLOW PIPE UNDERDRAINS WITH GEOTEXTILE FABRIC 24" DEPTH
- (21) ITEM 204 - EXCAVATION OF SUBGRADE (THICKNESS AS SHOWN) ITEM 204 - GRANULAR MATERIAL, TYPE B (THICKNESS AS SHOWN) ITEM 204 - GEOTEXTILE FABRIC

PROPOSED TYPICAL SECTIONS
I.R. 271

DESIGN AGENCY	
DESIGNER	MTD
REVIEWER	MTR 01/04/23
PROJECT ID	113156
SHEET	16
TOTAL	233

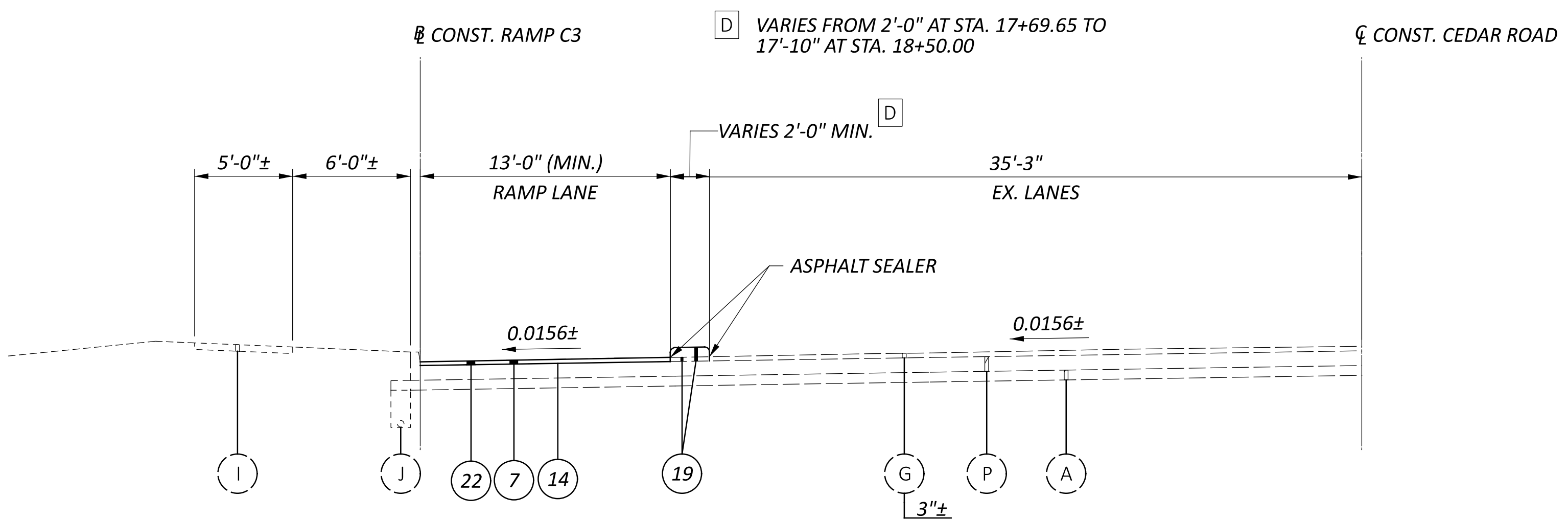
(@) - UNDERCUT TABLE					
THICKNESS	NOTE	LOCATION	SIDE	STATIONS	WARRANTING FACTOR
12"		EXPRESS LANES	RT	BEGIN WORK TO 515+45.00	UNSTABLE SOILS
6"	C	LOCAL LANES	LT	535+00.00 TO 541+00.00	SHALLOW BEDROCK
24"	H	LOCAL LANES	RT	577+00.00 TO 584+00.00	UNSTABLE SOILS
36"	I	LOCAL LANES	RT	584+00.00 TO 597+00.00	UNSTABLE SOILS
		RAMP C2	RT	109+70.85 TO 120+23.97	UNSTABLE SOILS
		RAMP C2	LT	117+23.00 TO 118+50.00	UNSTABLE SOILS
		RAMP C3	RT	0+00.00 TO 1+62.10	UNSTABLE SOILS
	J	LOCAL LANES	LT	592+00.00 TO 597+00.00	UNSTABLE SOILS

E VARIES FROM 8'-6" AT STA. 18+50.00 TO 5'-10" AT STA. 19+30.00
 F VARIES FROM 33'-3" AT STA. 18+50.00 TO 34'-1" AT STA. 19+30.00

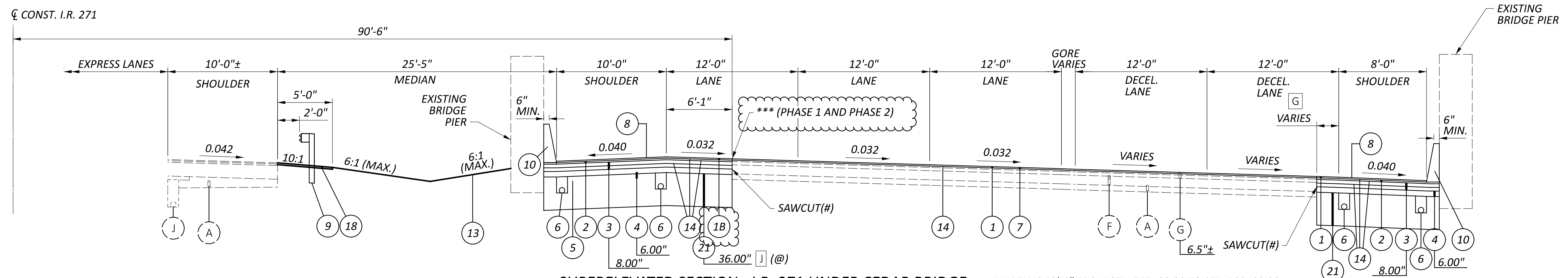


NORMAL SECTION - CEDAR ROAD
 STA. 18+50.00 TO STA. 19+30.00 = 80 FT.

F VARIES FROM 0'-0" AT STA. 592+82.63 TO 23'-0" AT STA. 596+68.36
 G INTENT OF WORK IS TO REMOVE EXISTING SHOULDERS UP TO COMPOSITE PAVEMENT UNDER RAMP C2/C3. ACTUAL JOINT LOCATION DIMENSION VARIES BETWEEN 5'-11" + (MAX.) AND 1'-6" + (MIN.) BETWEEN STA. 113+32.98 (CONST. RAMP C2) AND STA. 0+00.00 (CONST. RAMP C3).



NORMAL SECTION - CEDAR ROAD & RAMP C3
 STA. 13+41 TO STA. 18+50.00 = 148.88 FT.



SUPERELEVATED SECTION - I.R. 271 UNDER CEDAR BRIDGE
 STA. 591+59.00 TO STA. 593+88.17 = 229.17 FT.

EXISTING LEGEND

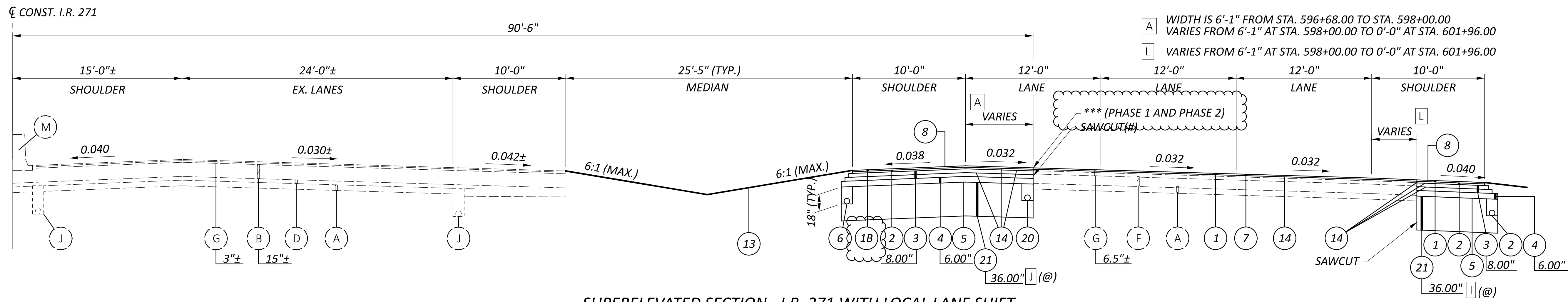
- (A) SUBBASE
- (B) BITUMINOUS AGGREGATE BASE (THICKNESS AS SHOWN)
- (C) WATERPROOF AGGREGATE BASE (THICKNESS AS SHOWN)
- (D) FREE DRAINING BASE
- (E) EXISTING GROUND
- (F) 10"± REINFORCED CONCRETE PAVEMENT
- (G) ASPHALT CONCRETE (THICKNESS AS SHOWN)
- (H) 10"± CONCRETE BASE
- (I) CONCRETE WALK
- (J) 6" UNDERDRAINS
- (K) 15" SLOTTED DRAIN
- (L) LONGITUDINAL JOINT
- (M) CONCRETE BARRIER
- (N) GUARDRAIL
- (O) ASPHALT UNDER GUARDRAIL
- (P) 9" CONCRETE BASE

NOTE: 4'-0" ROUNDING AT ALL GRADE BREAKS UNLESS OTHERWISE NOTED.
 * - VARIABLE PLANING ON EXISTING TRAVEL LANES TO ACHIEVE PREFERRED SHOULDER CROSS SLOPES. SEE DETAIL ON SHEET 18
 ** - WEDGE COURSE ON EXISTING SHOULDERS TO ACHIEVE REQUIRED TRAVEL LANE CROSS SLOPE.
 *** - PLACE ITEM 872 - VOID REDUCING ASPHALT MEMBRANE AT JOINT WITH EXISTING ASPHALT TO REMAIN. JOINT DENSITY CORES WILL NOT BE TAKEN AT THIS LOCATION.
 @ - SEE UNDERCUT TABLE ON THIS PROPOSED TYPICAL SECTIONS SHEET
 # - SEE NOTE ON PROPOSED TYPICAL SECTIONS SHEET 12

PROPOSED LEGEND

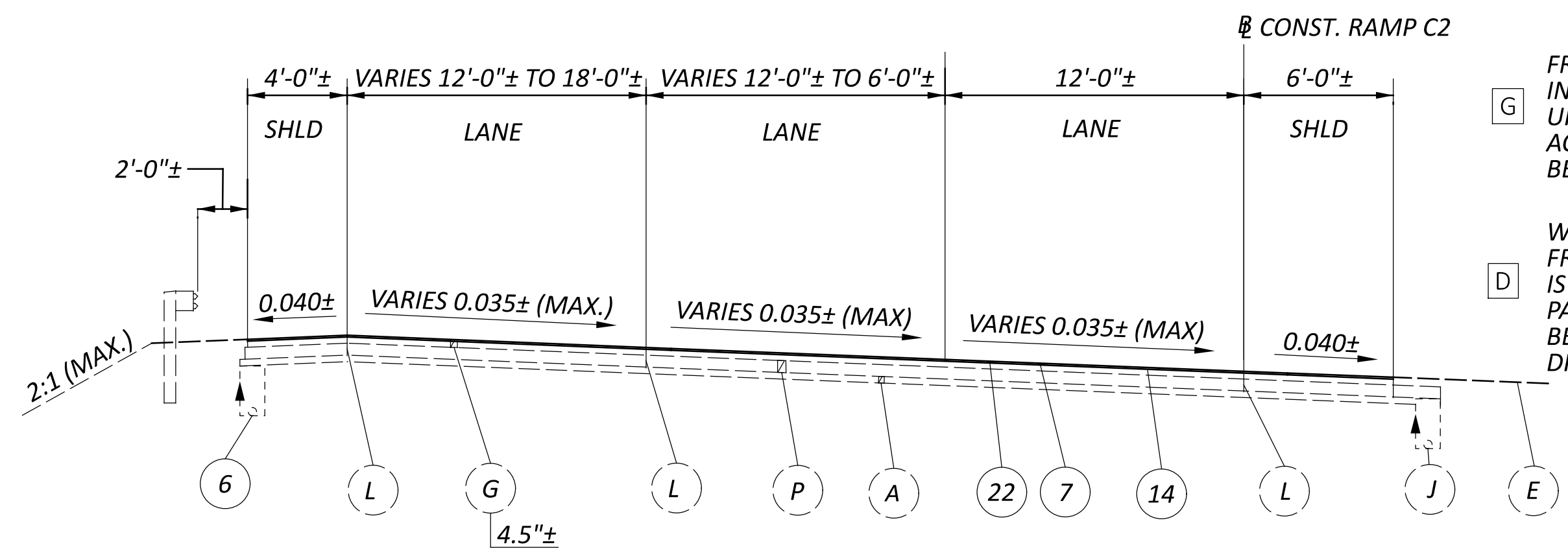
- (1) ITEM 442 - 1.5" ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE A (447), PWL, 2025 A.P.P., PG76-22M
- (1B) ITEM 442 - 1.5" ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE A, (446), PWL, 2025, A.P.P. B, PG76-22M
- (2) ITEM 442 - 1.75" ASPHALT CONCRETE INTERMEDIATE COURSE, 12.5MM, TYPE A (446)
- (3) ITEM 302 - ASPHALT CONCRETE BASE, PG64-22 (449) (PLACED IN 2 LIFTS) (THICKNESS AS SHOWN)
- (4) ITEM 304 - AGGREGATE BASE (THICKNESS AS SHOWN)
- (5) ITEM 204 - SUBGRADE COMPACTION
- (6) ITEM 605 - 6" BASE PIPE UNDERDRAINS WITH GEOTEXTILE FABRIC
- (7) ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN (T=1.5")
- (8) ITEM 618 - RUMBLE STRIPS, SHOULDER, (ASPHALT CONCRETE), A.P.P.
- (9) ITEM 606 - GUARDRAIL, TYPE MGS
- (10) ITEM 662 - CONCRETE BARRIER, SINGLE SLOPE, TYPE D
- (11) ITEM 608 - 4" CONCRETE WALK
- (12) ITEM 609 - CURB, TYPE 6
- (13) ITEM 659 - SEEDING AND MULCHING
- (14) ITEM 407 - NON-TRACKING TACK COAT
- (15) ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN (T = VARIES 1.5" TO 4.5")
- (16) ITEM 442 - ASPHALT CONCRETE INTERMEDIATE COURSE, 12.5MM, TYPE A (449) (0" MIN. TO 2.2" MAX.) **
- (17) ITEM 611 - 15", SLOTTED DRAIN, TYPE 2
- (18) ITEM 441 - 3" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1 (449), (UNDER GUARDRAIL), AS PER PLAN
- (19) ITEM 202 - WEARING COURSE REMOVED
- (20) ITEM 609 - 6" CONCRETE TRAFFIC ISLAND
- (21) ITEM 204 - EXCAVATION OF SUBGRADE (THICKNESS AS SHOWN) ITEM 204 - GRANULAR MATERIAL, TYPE B (THICKNESS AS SHOWN) ITEM 204 - GEOTEXTILE FABRIC
- (22) ITEM 442 - ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE A (446), PWL, 2025 A.P.P. A, PG76-22M

DESIGN AGENCY	
DESIGNER	MTD
REVIEWER	MTR 01/04/23
PROJECT ID	113156
SHEET	17
TOTAL	233



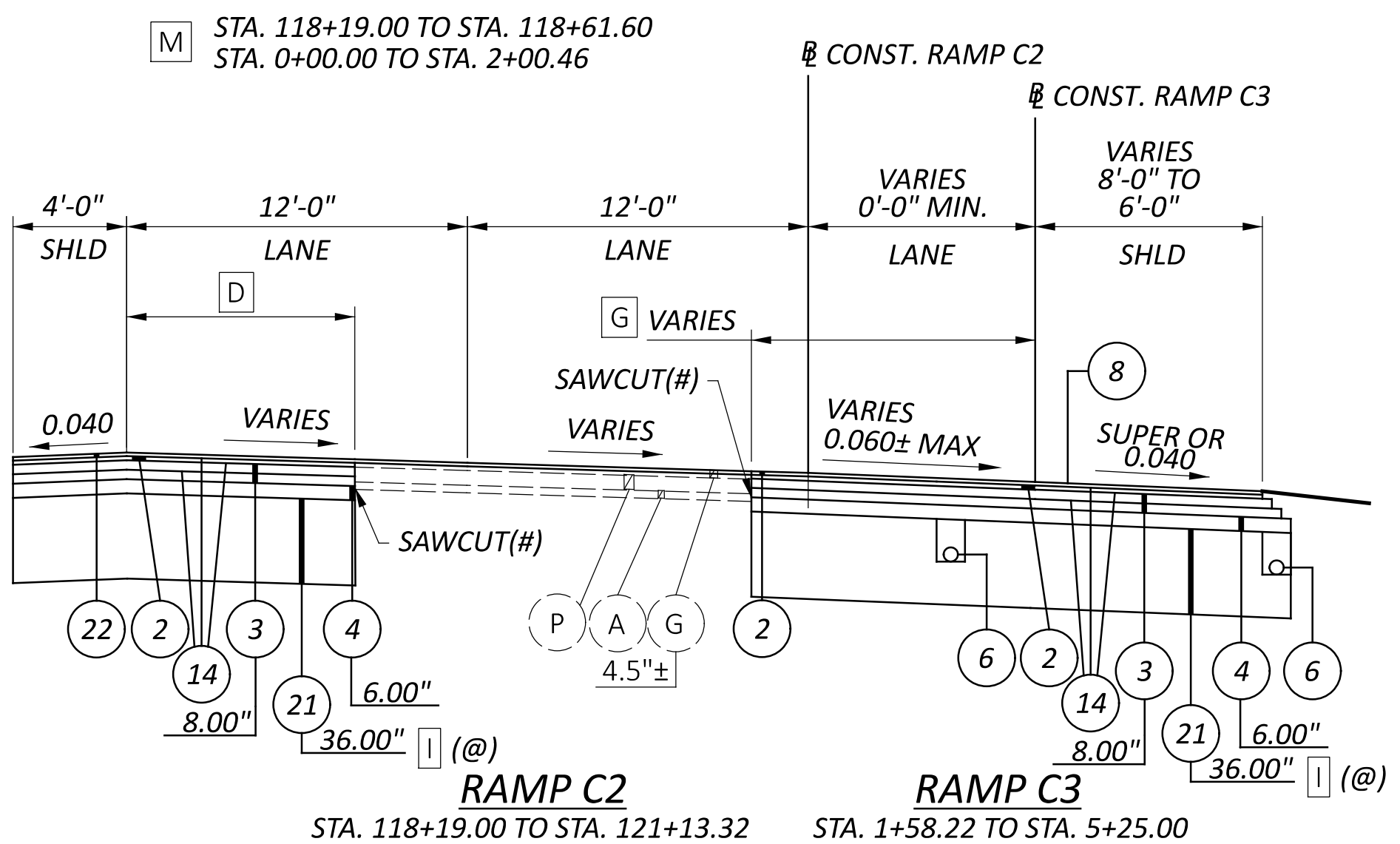
SUPERELEVATED SECTION - I.R. 271 WITH LOCAL LANE SHIFT
 STA. 596+68.00 TO STA. 601+96.00 = 528.00 FT.

A WIDTH IS 6'-1" FROM STA. 596+68.00 TO STA. 598+00.00
 VARIES FROM 6'-1" AT STA. 598+00.00 TO 0'-0" AT STA. 601+96.00
L VARIES FROM 6'-1" AT STA. 598+00.00 TO 0'-0" AT STA. 601+96.00



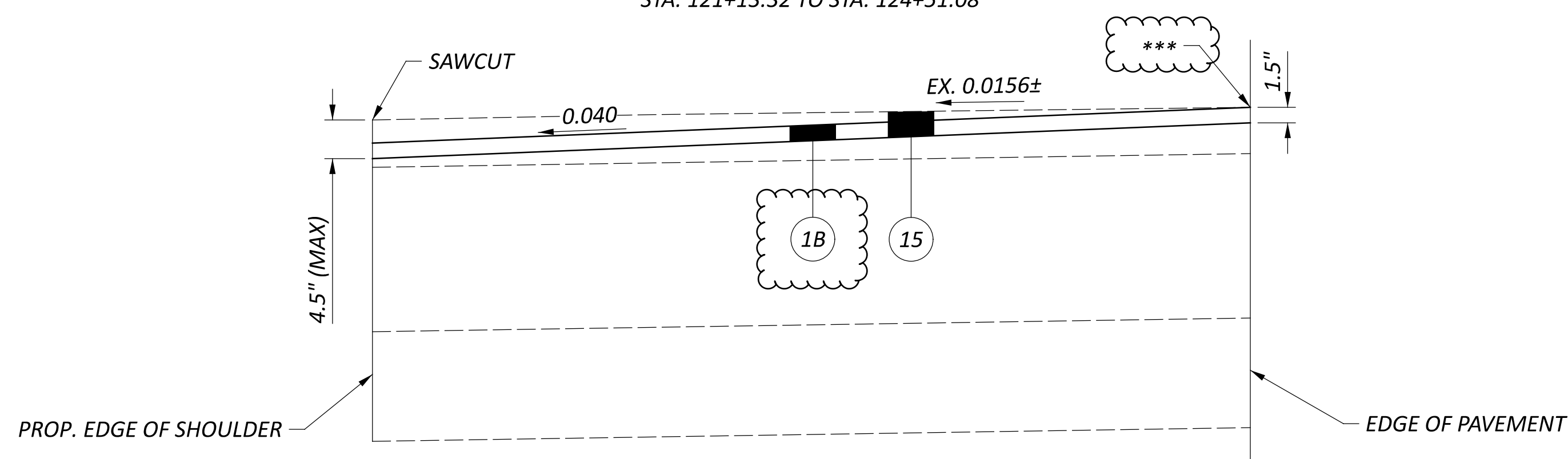
NORMAL SECTION - RAMP C2
 STA. 121+13.32 TO STA. 124+51.08

G FROM STA. 0+00.00 TO STA. 5+25.00 THE INTENT OF WORK IS TO REMOVE EXISTING SHOULDERS UP TO COMPOSITE PAVEMENT UNDER RAMP C2/C3. ACTUAL JOINT LOCATION DIMENSION VARIES BETWEEN 5'-8" ± (MAX.) AND 0'-0" ±
D WIDTH IS 8'-0" FROM STA. 118+19.00 TO STA. 119+00.00 ± FROM STA. 119+00.00 ± TO STA. 121+13.32 THE INTENT OF WORK IS TO REMOVE EXISTING SHOULDERS UP TO THE COMPOSITE PAVEMENT OR DOWELED JOINT UNDER RAMP C2. BETWEEN THESE LIMITS THE ACTUAL JOINT LOCATION DIMENSION VARIES BETWEEN 8'-0" ± (MAX.) AND 4'-0" ±



M STA. 118+19.00 TO STA. 118+61.60
 STA. 0+00.00 TO STA. 2+00.46
B CONST. RAMP C2
C CONST. RAMP C3

RAMP C2
 STA. 118+19.00 TO STA. 121+13.32
RAMP C3
 STA. 1+58.22 TO STA. 5+25.00



VARIABLE SHOULDER PLANING DETAIL (LOCAL LANES SHOWN, MIRROR FOR EXPRESS)
 LOCAL LANES = STA. 508+47.58 TO STA. 515+45.00 = 697.42 FT.
 EXPRESS LANES = STA. 520+47.74 TO STA. 549+49.60 = 2901.86 FT.

EXISTING LEGEND

- (A) SUBBASE
- (B) BITUMINOUS AGGREGATE BASE (THICKNESS AS SHOWN)
- (C) WATERPROOF AGGREGATE BASE (THICKNESS AS SHOWN)
- (D) FREE DRAINING BASE
- (E) EXISTING GROUND
- (F) 10"± REINFORCED CONCRETE PAVEMENT
- (G) ASPHALT CONCRETE (THICKNESS AS SHOWN)
- (H) 10"± CONCRETE BASE
- (I) CONCRETE WALK
- (J) 6" UNDERDRAINS
- (K) 15" SLOTTED DRAIN
- (L) LONGITUDINAL JOINT
- (M) CONCRETE BARRIER
- (N) GUARDRAIL
- (O) ASPHALT UNDER GUARDRAIL
- (P) 9" CONCRETE BASE

NOTE: 4'-0" ROUNDING AT ALL GRADE BREAKS UNLESS OTHERWISE NOTED.
 * - VARIABLE PLANING ON EXISTING TRAVEL LANES TO ACHIEVE PREFERRED SHOULDER CROSS SLOPES. SEE DETAIL ON THIS SHEET
 ** - WEDGE COURSE ON EXISTING SHOULDERS TO ACHIEVE REQUIRED TRAVEL LANE CROSS SLOPE.
 *** - PLACE ITEM 872 - VOID REDUCING ASPHALT MEMBRANE AT JOINT WITH EXISTING ASPHALT TO REMAIN. JOINT DENSITY CORES WILL NOT BE TAKEN AT THIS LOCATION.
 @ - SEE UNDERCUT TABLE ON PROPOSED TYPICAL SECTIONS SHEET 17
 # - SEE NOTE ON PROPOSED TYPICAL SECTIONS SHEET 12

PROPOSED LEGEND

- (1) ITEM 442 - 1.5" ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE A (447), PWL, 2025 A.P.P. B, PG76-22M
- (1B) ITEM 442 - 1.5" ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE A, (446), PWL, 2025, A.P.P. B, PG76-22M
- (2) ITEM 442 - 1.75" ASPHALT CONCRETE INTERMEDIATE COURSE, 12.5MM, TYPE A (446)
- (3) ITEM 302 - ASPHALT CONCRETE BASE, PG64-22 (449) (PLACED IN 2 LIFTS) (THICKNESS AS SHOWN)
- (4) ITEM 304 - AGGREGATE BASE (THICKNESS AS SHOWN)
- (5) ITEM 204 - SUBGRADE COMPACTION
- (6) ITEM 605 - 6" BASE PIPE UNDERDRAINS WITH GEOTEXTILE FABRIC
- (7) ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN (T=1.5")
- (8) ITEM 618 - RUMBLE STRIPS, SHOULDER, (ASPHALT CONCRETE), A.P.P.
- (9) ITEM 606 - GUARDRAIL, TYPE MGS
- (10) ITEM 662 - CONCRETE BARRIER, SINGLE SLOPE, TYPE D
- (11) ITEM 608 - 4" CONCRETE WALK
- (12) ITEM 609 - CURB, TYPE 2-B
- (13) ITEM 659 - SEEDING AND MULCHING
- (14) ITEM 407 - NON-TRACKING TACK COAT
- (15) ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN (T = VARIES 1.5" TO 4.5")
- (16) ITEM 442 - ASPHALT CONCRETE INTERMEDIATE COURSE, 12.5MM, TYPE A (449) (0" MIN. TO 2.2" MAX.) **
- (17) ITEM 611 - 15", SLOTTED DRAIN, TYPE 2
- (18) ITEM 441 - 3" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1 (449), (UNDER GUARDRAIL), AS PER PLAN
- (19) ITEM 202 - WEARING COURSE REMOVED ITEM 609 - 6" CONCRETE TRAFFIC ISLAND
- (20) ITEM 605 - 6" SHALLOW PIPE UNDERDRAINS WITH GEOTEXTILE FABRIC 24" DEPTH
- (21) ITEM 204 - EXCAVATION OF SUBGRADE (THICKNESS AS SHOWN) ITEM 204 - GRANULAR MATERIAL, TYPE B (THICKNESS AS SHOWN) ITEM 204 - GEOTEXTILE FABRIC
- (22) ITEM 442 - ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE A (446), PWL, 2025 A.P.P. A, PG76-22M

DESIGN AGENCY	
DESIGNER	MTD
REVIEWER	KKP 01/04/23
PROJECT ID	113156
SHEET	18
TOTAL	233

GENERAL

ROUNDING

THE ROUNDING AT SLOPE BREAKPOINTS SHOWN ON THE TYPICAL SECTIONS APPLIES TO ALL CROSS SECTIONS, EVEN THOUGH OTHERWISE SHOWN.

UTILITIES

LISTED BELOW ARE ALL UTILITIES LOCATED WITHIN THE PROJECT CONSTRUCTION LIMITS TOGETHER WITH THEIR RESPECTIVE OWNERS:

BREEZELINE
 105 BLAZE INDUSTRIAL PARKWAY
 BERE, OH 44017
 ATTN: LARRY BURRUEL
 CELL: 440 915-9256
 EMAIL: LARRY.BURRUEL@WOINC.COM

ODOT-D12 TRAFFIC
 5500 TRANSPORTATION BLVD.
 GARFIELD HEIGHTS, OH 44125
 ATTN: DAVID NIMRICHTER
 PHONE: 216-584-2296
 EMAIL: DAVID.NIMRICHTER@DOT.OHIO.GOV

CITY OF BEACHWOOD
 23355 MERCANTILE RD.
 BEACHWOOD, OH 44122
 ATTN: CHRIS ARRIETTA
 PHONE: 216-292-1922

EVERSTREAM
 1228 EUCLID AVENUE, STE 250
 CLEVELAND, OHIO 44115
 ATTN: GIO REILLO
 OFFICE: 216-905-0780
 CELL: 216-905-0780
 EMAIL: GREILLO@EVERSTREAM.NET

CEI FIRST ENERGY
 6896 MILLER RD, STE 101
 BRECKSVILLE, OH 44141
 ATTN: JOHN M. ZASSICK
 PHONE: 440-546-8706
 EMAIL: JMZASSICK@FIRSTENERGYCORP.COM

OHIO VALLEY ENERGY SYSTEMS
 200 VICTORIA RD, #4
 YOUNGSTOWN, OH 44515
 ATTN: G MILLER
 PHONE: 330-799-2268
 EMAIL: GMILLER@OV-ENERGY.COM

CITY OF LYNDHURST
 CHAGRIN VALLEY ENGINEERING
 2299 FORBES RD, STE B
 CLEVELAND, OH 44146
 ATTN: JEFFREY FILARSKI,
 CITY ENGINEER
 PHONE: 440-399-0810
 EMAIL: FILARSKI@CVELIMITED.COM

CHARTER COMMUNICATIONS
 7820 DIVISION DR.
 MENTOR, OH 44060
 ATTN: EMIL SYMISTER
 PHONE: 216-575-8016
 x12165551158
 EMAIL: EMIL.SYMISTER@CHARTER.COM

CITY OF CLEVELAND
 DIVISION OF WATER
 1201 LAKESIDE AVE
 CLEVELAND, OH, 44114
 ATTN: FRED ROBERTS
 PHONE: 216-664-244
 x75590
 EMAIL: FRED_ROBERTS@CLEVELANDWATER.COM

ZAYO FIBER SOLUTIONS
 4199 KINROSS LAKES PKWY STE 10
 RICHFIELD, OH 44286
 PHONE: 234-281-0025
 EMAIL: DAVE.GULASKA@ZAYO.COM

AT&T
 13630 LORAIN AVE
 2ND FLOOR
 CLEVELAND, OH 44111
 ATTN: JAMES JANIS
 DESIGN MANAGER
 PHONE: 216-476-6142
 FAX: 216-476-6013
 EMAIL: PJ8191@ATT.COM

DOMINION ENERGY OHIO
 320 SPRINGSIDE DR., SUITE 320
 AKRON, OHIO 44333
 PHONE: 330-664-2409
 EMAIL: RELOCATION@DOMINIONENERGY.COM

THE LOCATION OF THE UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE AS OBTAINED FROM THE OWNERS AS REQUIRED BY SECTION 153.64 O.R.C.

EXISTING PLANS

EXISTING PLANS FOR THE PROJECT CORRIDOR MAY BE INSPECTED IN THE ODOT DISTRICT 12 OFFICE IN GARFIELD HEIGHTS, OHIO.

CONSTRUCTION NOISE

ACTIVITIES AND LAND USE ADJACENT TO THIS PROJECT MAY BE AFFECTED BY CONSTRUCTION NOISE. IN ORDER TO MINIMIZE ANY ADVERSE CONSTRUCTION NOISE IMPACTS, WORK HOURS WILL BE RESTRICTED TO 7:00 AM TO 7:00 PM.

THE CONTRACTOR SHALL APPLY TO THE MUNICIPALITY/MUNICIPALITIES IN WHICH THE WORK IS BEING PERFORMED TO PERFORM NIGHT TIME WORK. IN THE EVENT A NOISE VARIANCE IS NOT GRANTED, WORK SHALL COMMENCE DURING DAY TIME HOURS AT NO ADDITIONAL COST. ANY ADDITIONAL MAINTENANCE OF TRAFFIC COST SHALL BE INCLUDED IN THE LUMP SUM BID FOR ITEM 614 MAINTAINING TRAFFIC, AS PER PLAN. NO SEPARATE PAYMENT WILL BE MADE.

DO NOT OPERATE AT ANY TIME ANY DEVICE IN SUCH A MANNER THAT THE NOISE CREATED SUBSTANTIALLY EXCEEDS THE NOISE CUSTOMARILY AND NECESSARILY ATTENDANT TO THE REASONABLE AND EFFICIENT PERFORMANCE OF SUCH EQUIPMENT. THE NOISE LEVEL RESULTING FROM CONSTRUCTION SHALL BE WITHIN THE LIMITS SPECIFIED IN OSHA REGULATIONS AND IN ALL LOCAL ORDINANCES.

SURVEYING PARAMETERS

PRIMARY PROJECT CONTROL MONUMENTS GOVERN ALL POSITIONING ON ODOT PROJECTS. SEE SHEET OF THE PLANS FOR A TABLE CONTAINING PROJECT CONTROL INFORMATION.

USE THE FOLLOWING PROJECT CONTROL, VERTICAL POSITIONING, AND HORIZONTAL POSITIONING PARAMETERS FOR ALL SURVEYING:

VERTICAL POSITIONING

ORTHOMETRIC HEIGHT DATUM: NAVD 88
 GEOID: GEOID 18

HORIZONTAL POSITIONING

REFERENCE FRAME: NAD83 (2011)
 ELLIPSOID: GRS80
 MAP PROJECTION: LAMBERT CONFORMAL CONIC
 COORDINATE SYSTEM: OHIO STATE PLANE, NORTH ZONE (3401) (EPOCH 2020.0000)
 COMBINED SCALE FACTOR: 0.99992012
 ORIGIN OF COORDINATE SYSTEM: 0,0

ORTHOMETRIC HEIGHT OF MONUMENT CP03 USED AS THE BASIS FOR ELEVATIONS DETERMINED FOR PROJECT CONTROL POINTS AND BENCHMARKS. OTHER EXISTING CONTROL MONUMENT ELEVATIONS DETERMINED BY CONVENTIONAL OR GNSS SURVEY METHODS.

ALL WORK PERFORMED BY ENGINEERING ASSOCIATES, INC. AND INCLUDED IN THE SURVEY MASTER REPORT DATED 02/03/2022.

USE THE POSITIONING METHODS AND MONUMENT TYPE USED IN THE ORIGINAL SURVEY TO RESTORE ALL MONUMENTS RELATED TO PRIMARY PROJECT CONTROL THAT ARE DAMAGED OR DESTROYED BY CONSTRUCTION ACTIVITIES. RESTORE THE DAMAGED OR DESTROYED MONUMENTS IN ACCORDANCE WITH CMS 623.

UNITS ARE IN U.S. SURVEY FEET.

WORK LIMITS

THE WORK LIMITS SHOWN ON THESE PLANS ARE FOR PHYSICAL CONSTRUCTION ONLY. PROVIDE THE INSTALLATION AND OPERATION OF ALL WORK ZONE TRAFFIC CONTROL AND WORK ZONE TRAFFIC CONTROL DEVICES REQUIRED BY THESE PLANS WHETHER INSIDE OR OUTSIDE THESE WORK LIMITS.

PROTECTION OF RIGHT-OF-WAY LANDSCAPING

PRIOR TO BEGINNING WORK, THE CONTRACTOR, THE PROJECT ENGINEER, AND A REPRESENTATIVE OF THE MAINTAINING AGENCY WILL REVIEW AND RECORD ALL LANDSCAPING ITEMS WITHIN THE RIGHT-OF-WAY (BOTH WITHIN AND OUTSIDE THE CONSTRUCTION LIMITS). A RECORD OF THIS REVIEW WILL BE KEPT IN THE PROJECT ENGINEER'S FILES. PRIOR TO FINAL ACCEPTANCE, A FINAL REVIEW OF LANDSCAPING ITEMS WILL BE MADE.

CONSTRUCT ALL ACTIVITIES, EQUIPMENT STORAGE, AND STAGING TO WITHIN THE CONSTRUCTION LIMITS. UNLESS OTHERWISE IDENTIFIED IN THE PLANS OR PROPOSAL, THE CONSTRUCTION LIMITS ARE IDENTIFIED AS 30 FEET FROM THE EDGE OF PAVEMENT.

SUBMIT A WRITTEN REQUEST TO THE PROJECT ENGINEER TO USE ANY AREA OUTSIDE THESE LIMITS. THE DOCUMENT SUBMITTED MUST CLEARLY IDENTIFY THE AREA AND EXPLAIN THE PROPOSED USE AND RESTORATION OF THE AREA. USE OF THESE AREAS FOR DISPOSAL OF WASTE MATERIAL AND CONSTRUCTION DEBRIS, EXCAVATION OF BORROW MATERIAL AND PLACEMENT OF PORTABLE PLANTS IS PROHIBITED. THE REQUEST MUST BE APPROVED, IN WRITING, BEFORE THE CONTRACTOR HAS PERMISSION TO USE THE AREA.

ANY ITEMS DAMAGED BEYOND THE CONSTRUCTION LIMITS, AS DEFINED ABOVE, WILL BE REPLACED IN KIND OR AS APPROVED BY THE PROJECT ENGINEER.

CLEARING AND GRUBBING

ALTHOUGH THERE ARE NO TREES OR STUMPS SPECIFICALLY MARKED FOR REMOVAL WITHIN THE LIMITS OF THE PROJECT, A LUMP SUM QUANTITY IS INCLUDED IN THE GENERAL SUMMARY FOR ITEM 201, CLEARING AND GRUBBING. ALL PROVISIONS AS SET FORTH IN THE SPECIFICATIONS UNDER THIS ITEM ARE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 201, CLEARING AND GRUBBING.

RIGHT OF WAY

ALL WORK SHALL BE PERFORMED WITHIN THE EXISTING RIGHT OF WAY.

EQUIPMENT AND MATERIAL STORAGE

IN ORDER TO PROVIDE FOR THE SAFETY OF THE TRAVELING PUBLIC AND CONTRACTOR'S ATTENTION IS DIRECTED TO 614.03. IN ADDITION THE FOLLOWING PROVISIONS SHALL APPLY:

1. ANY REMOVED ITEMS SHALL NOT BE STORED ON THE RIGHT OF WAY FOR MORE THAN THIRTY (30) DAYS.
2. THE STORAGE OF EQUIPMENT, MATERIALS, AND VEHICLES WITHIN THE HIGHWAY RIGHT OF WAY WILL BE PERMITTED. THE NUMBER OF AREAS AND EXACT LOCATIONS SHALL BE APPROVED BY THE ENGINEER.
3. ALL DISTURBED AREAS SHALL BE RETURNED TO THEIR ORIGINAL CONDITION AT NO EXPENSE TO THE STATE.

ITEM 204 - SUBGRADE COMPACTION AND PROOF ROLLING

CONSTRUCT THE SUBGRADE AS FOLLOWS AND IN THE FOLLOWING SEQUENCE:

1. SHAPE THE SUBGRADE TO WITHIN 0.2 FEET OF THE PLAN SUBGRADE ELEVATION.
2. EXCAVATE AND REPLACE UNSUITABLE SUBGRADE BEFORE PROOF ROLLING. THE EXCAVATION LIMITS ARE SHOWN AND LABELED ON THE CROSS SECTIONS AS UNSUITABLE SUBGRADE. UNSUITABLE SUBGRADE INCLUDES UNSUITABLE SOIL (A-4B, A-2-5, A-5, A-7-5, AND SOIL WITH A LIQUID LIMIT GREATER THAN 65) AND ANY COAL, SHALE, OR ROCK WHICH NEEDS TO BE REMOVED ACCORDING TO SECTION 204.05 OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS (C&MS).

IF THERE IS UNSUITABLE SUBGRADE IN A SHALLOW FILL LOCATION, EXCAVATE AND REPLACE THE UNSUITABLE SUBGRADE BEFORE CONSTRUCTING THE SHALLOW FILL AND SHAPING THE SUBGRADE.
3. COMPACT THE SUBGRADE ACCORDING TO C&MS 204.03.
4. APPROXIMATE LIMITS FOR EXCAVATION OF UNSTABLE SUBGRADE ARE SHOWN AND LABELED ON THE CROSS SECTIONS AS UNSTABLE SUBGRADE. THE ENGINEER WILL IDENTIFY THE ACTUAL LIMITS OF EXCAVATION FOR UNSTABLE SUBGRADE BASED ON THE PROOF ROLLING RESULTS AND VISUAL OBSERVATIONS.

PROOF ROLL THE COMPACTED SUBGRADE ACCORDING TO C&MS 204.06.
5. EXCAVATE UNSTABLE SUBGRADE AS DIRECTED BY THE ENGINEER AND STABILIZE BY REPLACING WITH THE SPECIFIED MATERIALS ACCORDING TO C&MS 204.07. EXCAVATIONS WILL EXTEND 18 INCHES BEYOND THE EDGE OF THE SURFACE OF THE PAVEMENT, PAVED SHOULDERS, OR PAVED MEDIANS.
6. PROOF ROLL THE STABILIZED AREAS ACCORDING TO C&MS 204.06 TO VERIFY STABILITY.
7. FINE GRADE THE SUBGRADE TO THE SPECIFIED GRADE.

THE QUANTITIES FOR EXCAVATING THE UNSUITABLE SUBGRADE AND UNSTABLE SUBGRADE ARE BOTH PAID UNDER ITEM 204, EXCAVATION OF SUBGRADE.

ITEM 619 - FIELD OFFICE, TYPE C, AS PER PLAN

IN ADDITION TO THE REQUIREMENTS OF CMS 619, THE CONTRACTOR SHALL FURNISH AND SET UP A WI-FI ROUTER MEETING THE REQUIREMENTS OF IEEE 802.11AC FOR THE EXCLUSIVE USE OF THE DEPARTMENT.

ALL OTHER FIELD OFFICE ITEMS SUPPLIED SHALL MEET THE REQUIREMENTS OF TYPE C FIELD OFFICE.

ITEM 619 - FIELD OFFICE, TYPE C, AS PER PLAN **8 MONTHS**

ITEM 623 - CONSTRUCTION LAYOUT STAKES AND SURVEYING, AS PER PLAN

AFTER COMPLETION OF ALL WORK, BUT PRIOR TO FINAL ACCEPTANCE OF THE PROJECT, AN OHIO PROFESSIONAL SURVEYOR SHALL DETERMINE THE MINIMUM VERTICAL CLEARANCES OF ALL EXISTING AND NEW BRIDGES WITHIN THE PROJECT LIMITS. AT A MINIMUM, MEASUREMENTS SHALL BE TAKEN ALONG EACH FASCIA BEAM AT THE EDGE OF THE SHOULDERS, EDGE LINES, LANE LINES, AND CROWN OF THE ROADWAY BELOW. THE ODOT DISTRICT 12 VERTICAL CLEARANCE SURVEY FORM SHALL BE USED, WHERE APPLICABLE, TO DOCUMENT THE MEASUREMENTS. WHERE THE ODOT DISTRICT 12 VERTICAL CLEARANCE SURVEY FORM IS NOT APPLICABLE, THE MEASUREMENTS SHALL BE DOCUMENTED ON A CONTRACTOR -DEVELOPED FORM THAT CLOSELY RESEMBLES THE ODOT DISTRICT 12 VERTICAL CLEARANCE SURVEY FORM AND ACCURATELY DEPICTS THE BRIDGE, THE LANE AND SHOULDER CONFIGURATION OF THE ROADWAY THAT PASSES BELOW THE BRIDGE. THE COMPLETED FORM SHALL BEAR THE STAMP OR SEAL OF AN OHIO PROFESSIONAL SURVEYOR WHO HAS TAKEN THE MEASUREMENTS AND SHALL BE SUBMITTED TO THE PROJECT ENGINEER PRIOR TO FINAL ACCEPTANCE OF THE PROJECT.

THE ODOT DISTRICT 12 VERTICAL CLEARANCE SURVEY FORM CAN BE DOWNLOADED FROM THE FOLLOWING FTP SITE:

HTTP://FTP.DOT.STATE.OH.US/PUB/CONTRACTS/ATTACH/CUY-113156

PAVEMENT

PLANING REQUIREMENTS

THE DURATION OF TIME BETWEEN PLANING THE ASPHALT AND PLACING THE ASPHALT OVERLAY SHALL BE KEPT TO A MINIMUM. IN NO INSTANCE SHALL THIS TIME EXCEED 10 CALENDAR DAYS. THE TIME LIMIT SHALL BEGIN ON THE FIRST DAY OF PLANING AND SHALL CONTINUE BASED ON CALENDAR DAYS, MINUS ANY WEATHER DAYS, UNTIL COMPLETION OF THE ASPHALT CONCRETE SURFACE COURSE. THIS IS TO ENSURE THAT THE POTENTIAL DEGRADATION OF THE EXPOSED PAVEMENT DUE TO TRAFFIC IS KEPT TO A MINIMUM. THIS REQUIREMENT APPLIES TO BOTH MAINLINE AND RAMPS ALIKE.

IN THE EVENT THAT THE TIME BETWEEN EXPOSING THE EXISTING PLACEMENT AND PLACING THE ASPHALT SURFACE COURSE EXCEEDS 10 CALENDAR DAYS, LIQUIDATED DAMAGES AS PER 108.07 OF THE CMS SHALL BE ASSESSED.

ASPHALT CONCRETE SURFACE COURSE SEALING REQUIREMENTS

IN ADDITION TO THE GUTTER SEALING REQUIREMENTS SPECIFIED IN SCD BP-3.1 AND C&MS 401.15, AFTER COMPLETION OF THE SURFACE COURSE, THE CONTRACTOR SHALL USE A CERTIFIED 702.01 PG BINDER TO SEAL THE FOLLOWING LOCATIONS:

- ALL CASTINGS INCLUDED BUT NOT LIMITED TO MONUMENTS, MANHOLES, WATER VALVES, CATCH BASINS, CURB INLETS.
- BUTT JOINTS AND FEATHER JOINTS INCLUDING BRIDGE APPROACHES.
- FORWARD JOINT FOR DRIVEWAY ASPHALT AND TRAILING JOINT WHEN BUTTING TO EXISTING ASPHALT DRIVE.
- PERIMETER OF ALL PAVEMENT REPAIRS OR OTHER ASPHALT INLAIS WHEN PAVEMENT REPAIRS/INLAIS ARE NOT OVERLAID WITH AN ASPHALT CONCRETE SURFACE COURSE.
- ALL COLD LONGITUDINAL JOINTS BETWEEN PAVED SHOULDERS AND GUARDRAIL ASPHALT.

THE MATERIAL USED SHALL BE A CERTIFIED 702.01 PG BINDER. THE WIDTH OF THE SEALER SHALL BE 2-3 INCHES.

ANY ADDITIONAL COSTS ASSOCIATED WITH THE WORK IDENTIFIED IN THIS NOTE SHALL BE INCLUDED IN THE APPROPRIATE ASPHALT CONCRETE SURFACE COURSE ITEM OF WORK.

LONGITUDINAL JOINTS (FLEXIBLE PAVEMENT)

LONGITUDINAL JOINTS BETWEEN A PAVEMENT LANE AND ADJOINING SHOULDER OR SPEED CHANGE LANE, AND BETWEEN A SPEED CHANGE LANE AND THE ADJOINING SHOULDER SHALL BE MADE THE SAME DAY. ALL LONGITUDINAL JOINTS SHALL BE HOT WITH THE EXCEPTION OF ONE COLD JOINT PER ROADWAY. LOCATE THE COLD JOINT ALONG THE CENTERLINE OR A LANE LINE. LONGITUDINAL JOINT LOCATIONS SHALL BE AS APPROVED BY THE ENGINEER. EACH RAMP SHALL HAVE A MAXIMUM OF ONE LONGITUDINAL COLD JOINT LOCATED APPROXIMATELY HALFWAY ACROSS THE RAMP.

PROFILE AND ALIGNMENT

IN AREAS OF RESURFACING PLACE THE PROPOSED PAVEMENT TO FOLLOW THE ALIGNMENT AND PROFILE OF THE EXISTING PAVEMENT UNLESS SHOWN OTHERWISE IN THE PLAN SET. PLACE THE PROPOSED ASPHALT CONCRETE OVERLAY (WITH A UNIFORM THICKNESS OF 1.5 INCHES AS SHOWN ON THE TYPICAL SECTIONS).

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

THIS ITEM SHALL BE USED FOR THE REPAIR OF UNSOUND, COLD-PATCH, OR POP-OUT AREAS OF LONGITUDINAL JOINTS AS DIRECTED BY THE ENGINEER. THIS WORK SHALL BE PERFORMED PRIOR TO THE PLANING OPERATION. THE DEPTH OF THE REPAIR SHALL BE 6.5" BELOW THE TOP OF THE EXISTING ASPHALT SURFACE. THE WIDTH OF THE 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 A **1190 SY**

DESIGN AGENCY



DESIGNER
AFG

REVIEWER
KKP 01/05/23

PROJECT ID
113156

SHEET TOTAL
19 | 233

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 PLANING OPERATION. THE DEPTH OF THE REPAIR SHALL BE 6.5" BELOW THE TOP OF THE EXISTING ASPHALT SURFACE. THE WIDTH OF THE 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 1.5" 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), PWL, 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 (ACBFS) OR TRAP ROCK FROM ONTARIO AND LIMESTONE. THE CONTRACTOR SHALL USE A MINIMUM 60% OF ACBFS 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 ACBFS 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 ACBFS IS USED FOR A FRACTION OF THE COARSE AGGREGATE, PROVIDE A TOTAL ASPHALT BINDER CONTENT GREATER THAN OR EQUAL TO 6.2%. IF ACBFS 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.

Table with 3 columns: LOWER SPECIFICATION LIMIT, PAY FACTOR CRITERIA, PAY FACTOR (PF). Rows for 92.6% and 92.6% density with conditions for AASHTO PF and removal/replacement.

ITEM 442 - ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE A, (446), PWL, 2025, AS PER PLAN B, 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 REST OF 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 FOR THIS ITEM SHALL BE LIMITED TO A BLEND OF AIR COOLED BLAST FURNACE SLAG (ACBFS) OR TRAP ROCK FROM ONTARIO AND LIMESTONE. THE CONTRACTOR SHALL USE A MINIMUM 60% OF ACBFS 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 ACBFS 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 ACBFS IS USED FOR A FRACTION OF THE COARSE AGGREGATE, PROVIDE A TOTAL ASPHALT BINDER CONTENT GREATER THAN OR EQUAL TO 6.2%. IF ACBFS MAKES UP 100% OF THE COARSE AGGREGATE, APPLY THE BINDER CONTENT REQUIREMENTS OF CMS 442.

ITEM 442 - ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE A, (446), PWL, 2025, AS PER PLAN B, PG76-22M (CONT'D)

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.

Table with 3 columns: LOWER SPECIFICATION LIMIT, SURFACE WITH 3 JOINT CORES PAY FACTOR CRITERIA, PAY FACTOR (PF). Rows for 92% and 92.6% density with conditions for AASHTO PF and removal/replacement.

ITEM 442 - ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE A, (446), PWL, 2025, AS PER PLAN A, 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 REST OF 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 (ACBFS) 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.

Table with 3 columns: LOWER SPECIFICATION LIMIT, SURFACE WITH 3 JOINT CORES PAY FACTOR CRITERIA, PAY FACTOR (PF). Rows for 92% and 92.6% density with conditions for AASHTO PF and removal/replacement.

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 75 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:

- 1. MEDIAN AND OUTSIDE SHOULDER OFFSET FOR SHOULDER LESS THAN 6': DIMENSION A AND B ARE EQUAL TO 6"
2. MEDIAN AND OUTSIDE SHOULDER OFFSET FOR SHOULDERS 6' TO 12': DIMENSION A AND B ARE EQUAL TO HALF THE SHOULDER WIDTH MINUS 12"
3. 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:

- 1. SET GUARDRAIL POSTS
2. PLACE ITEM 441

METHOD B:

- 1. PLACE ITEM 441
2. BORE ASPHALT AT POST LOCATIONS (MAY BE OMITTED IF STEEL POSTS ARE USED)
3. SET GUARDRAIL POSTS
4. PATCH AROUND POSTS. 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.

ITEM 209 - RESHAPING UNDER GUARDRAIL, AS PER PLAN (CONT'D)

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 703.16 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 J, 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, EQUIPMENT AND INCIDENTALS 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.

EXISTING SUBSURFACE DRAINAGE

PROVIDE UNOBSTRUCTED OUTLETS FOR ALL EXISTING UNDERDRAINS OR AGGREGATE DRAINS ENCOUNTERED DURING CONSTRUCTION.

PROVIDE AN OUTLET PER STANDARD CONSTRUCTION DRAWING DM-1.1 FOR ALL UNDERDRAINS THAT OUTLET TO A SLOPE. UNDERDRAINS THAT CAN BE CONNECTED TO THE NEW OR EXISTING UNDERDRAINS AT THE END OF THE PROJECT LIMITS AS WELL AS ALL NECESSARY BENDS OR BRANCHES REQUIRED FOR CONNECTION ARE INCLUDED IN THE BASIS OF PAYMENT FOR UNCLASSIFIED PIPE UNDERDRAINS.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR THE WORK NOTED ABOVE:

ITEM 611 - 6" CONDUIT, TYPE F FOR UNDERDRAIN OUTLETS 500 FT.
 ITEM 611 - PRECAST REINFORCED CONCRETE OUTLET 5 EACH

ITEM SPECIAL - MISCELLANEOUS METAL

EXISTING CASTINGS MAY PROVE TO BE UNSUITABLE FOR REUSE, AS DETERMINED BY THE ENGINEER. THE CONTRACTOR IS RESPONSIBLE TO PROVIDE THE CASTINGS OF THE REQUIRED TYPE, SIZE AND STRENGTH (HEAVY OR LIGHT DUTY) FOR THE PARTICULAR STRUCTURE IN QUESTION. FURNISH MATERIALS PER 611 WITH PRIOR APPROVAL OF THE ENGINEER.

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

ITEM SPECIAL MISCELLANEOUS METAL 3000 POUNDS

REPLACE EXISTING CASTINGS DAMAGED BY CONTRACTOR NEGLIGENCE, AS DETERMINED BY THE ENGINEER AT THE EXPENSE OF THE CONTRACTOR.

ITEM 611 - MANHOLE, NO. 5, AS PER PLAN

THIS ITEM SHALL MEET THE REQUIREMENTS SET FORTH IN ITEM 611 OF THE CMS. THE WORK FOR THIS ITEM INCLUDES FURNISHING AND INSTALLING A TYPE 5 MANHOLE WITH A GRATE AND FRAME CONFORMING TO THE DETAILS IN SCD CB-6. THE INTENT IS FOR THE MANHOLE TO ACT AS A TYPE 6 CATCH BASIN WITH A DEPTH GREATER THAN 72". MODIFY THE MANHOLE TOP OPENING TO ACCOMMODATE A FRAME AND GRATE CONFORMING TO THE DETAILS IN ODOT SCD CB-6.

PAYMENT AT THE UNIT PRICE OF EACH SHALL BE FULL COMPENSATION FOR ALL LABOR, MATERIALS, EQUIPMENT AND INCIDENTALS TO COMPLETE IN PLACE THE ENTIRE MANHOLE, INCLUDING MODIFICATION OF THE MANHOLE TOP, AND FURNISHING THE REQUIRED FRAME AND GRATE.

ITEM 611 - 15" SLOTTED DRAIN, TYPE 2

THIS ITEM CONSISTS OF 15 INCH DIAMETER SLOTTED DRAIN ALUMINUM COATED STEEL CONDUIT 707.01 WITH 6 INCH TRAPEZOIDAL GALVANIZED SOLID BAR GRATE AS APPROVED BY THE ENGINEER. ALL COSTS FOR LABOR AND MATERIALS, INCLUDING TYPE 2 BEDDING, AND BACKFILLING AS DETAILED ON STANDARD CONSTRUCTION DRAWING DM-1.3 IS INCLUDED IN THE PRICE BID PER FOOT FOR ITEM 611 - 15" SLOTTED DRAIN, TYPE 2.

ITEM 611 - CATCH BASIN RECONSTRUCTED TO GRADE, AS PER PLAN

THIS ITEM SHALL CONFORM TO CMS 611. IN ADDITION TO THE WORK TO RECONSTRUCT THE CATCH BASIN THE WORK FOR THIS ITEM SHALL INCLUDE REMOVAL AND REPLACEMENT OF EXISTING CONCRETE APRON THAT MAY BE IMPACTED BY THE CATCH BASIN WORK. REPLACEMENT LIMITS SHALL BE ESTABLISHED/APPROVED BY THE ENGINEER. APRONS SHALL CONFORM TO THE SPECS REFERENCED IN ODOT STANDARD CONSTRUCTION DRAWINGS.

EROSION CONTROL

SEEDING AND MULCHING

THE FOLLOWING QUANTITIES ARE PROVIDED TO PROMOTE GROWTH AND CARE OF PERMANENT SEEDED AREAS:

ITEM 659, SOIL ANALYSIS TEST	2	EACH
ITEM 659, TOPSOIL	2798	CY
ITEM 659, SEEDING AND MULCHING	25204	SY
ITEM 659, REPAIR SEEDING AND MULCHING	1261	SY
ITEM 659, INTER-SEEDING	1261	SY
ITEM 659, COMMERCIAL FERTILIZER	3.53	TONS
ITEM 659, LIME	5.21	ACRES
ITEM 659, WATER	140	M. GAL.

APPLY SEEDING AND MULCHING S TO ALL AREAS OF EXPOSED SOIL BETWEEN THE RIGHT-OF-WAY LINES AND WITHIN THE CONSTRUCTION LIMITS FOR AREAS OUTSIDE THE RIGHT-OF-WAY LINES COVERED BY WORK AGREEMENT OR SLOPE EASEMENT. QUANTITY CALCULATIONS FOR SEEDING AND MULCHING ARE BASED ON THESE LIMITS.

WATER QUALITY

POST CONSTRUCTION STORM WATER TREATMENT

THIS PLAN UTILIZES STRUCTURAL BEST MANAGEMENT PRACTICES (BMP'S) FOR POST CONSTRUCTION STORM WATER TREATMENT.

VEGETATED FILTER STRIP

THIS PLAN UTILIZES VEGETATED FILTER STRIP(S) FOR POST CONSTRUCTION STORM WATER TREATMENT. PLACE EITHER ITEM 660 SODDING OR ITEM 659 SEEDING AND MULCHING WITH A 4-INCH LIFT OF TOPSOIL AND ITEM 670, SLOPE EROSION PROTECTION TO ALL DISTURBED AREAS DESIGNATED AS VEGETATED FILTER STRIPS, THE EDGE OF SHOULDER, AND THE FORESLOPE AS SPECIFIED IN THE PLANS.

VEGETATED BIOFILTER

THIS PLAN UTILIZES VEGETATED BIOFILTER(S) FOR POST CONSTRUCTION STORM WATER TREATMENT. PLACE EITHER ITEM 660 SODDING OR ITEM 659 SEEDING AND MULCHING WITH A 4-INCH LIFT OF TOPSOIL AS SHOWN IN THE PLANS TO ANY DISTURBED AREA ON THE SHOULDER AND FORESLOPE DRAINING TO A VEGETATED BIOFILTER. THE DITCH FOR EACH VEGETATED BIOFILTER IS TRAPEZOIDAL AS SHOWN IN THE PLAN CROSS SECTIONS. PROVIDE ITEM 670 AS SPECIFIED IN THE PLANS.

DESIGN AGENCY



DESIGNER

AFG

REVIEWER

KKP 01/05/23

PROJECT ID

113156

SHEET TOTAL

21 | 233

ITEM 614, MAINTAINING TRAFFIC

IR 271 NB LOCAL LANES (RECONSTRUCTION WORK) A MINIMUM OF 3 LANES OF TRAFFIC SHALL BE MAINTAINED AT ALL TIMES BY USE OF THE EXISTING PAVEMENT, THE PROPOSED PAVEMENT, AND TEMPORARY SURFACES USING ITEM 614. SEE ADDITIONAL MOT NOTES FOR EXCEPTIONS TO THESE LANE REQUIREMENTS.

IR 271 NB EXPRESS LANES (RECONSTRUCTION WORK) A MINIMUM OF 2 LANES OF TRAFFIC SHALL BE MAINTAINED AT ALL TIMES BY USE OF THE EXISTING PAVEMENT, THE PROPOSED PAVEMENT, AND TEMPORARY SURFACES USING ITEM 614. SEE ADDITIONAL MOT NOTES FOR EXCEPTIONS TO THESE LANE REQUIREMENTS.

IR 271 NB LOCAL/EXPRESS LANES (OFFPEAK/RESURFACING) DURING OFF PEAK PERIODS OF THE RECONSTRUCTION WORK OR TO COMPLETE RESURFACING ADDITIONAL LANES MAY BE CLOSED PER THE DISTRICT 12 PERMITTED LANE CLOSURE SCHEDULE (PLCS). ALL REQUESTS FOR ADDITIONAL LANE CLOSURES SHALL BE SUBMITTED IN WRITING TO THE ENGINEER AND RECEIVE APPROVAL PRIOR TO IMPLEMENTATION. LANE CLOSURES THAT EXTEND BEYOND THE TIME PERIODS SPECIFIED IN THE PLCS SHALL BE SUBJECT TO ROAD USER COST PER THE LANE VALUE CONTRACT TABLE FOR EACH MINUTE THE LANE REMAINS CLOSED BEYOND THE SPECIFIED LIMIT BEING ASSESSED TO THE CONTRACTOR.

IR 271 NB LOCAL TO EXPRESS CROSSOVER RAMP (RECONSTRUCTION) A MINIMUM OF 1 LANE OF TRAFFIC SHALL BE MAINTAINED AT ALL TIMES BY USE OF THE EXISTING PAVEMENT, THE PROPOSED PAVEMENT, AND TEMPORARY SURFACES USING ITEM 614, EXCEPT FOR A SINGLE PERIOD NOT TO EXCEED 90 CALENDAR DAYS WHEN THE RAMP MAY BE CLOSED. A POSTED DETOUR ROUTE WILL NOT BE PLACED AS TRAFFIC CAN REMAIN ON THE LOCAL LANES. CLOSURES BEYOND THE SPECIFIED PERIOD WILL BE SUBJECT TO A DISINCENTIVE IN THE AMOUNT OF \$1,650.00/DAY.

IR 271 NB EXPRESS TO LOCAL CROSSOVER RAMP (RECONSTRUCTION) A MINIMUM OF 1 LANE OF TRAFFIC SHALL BE MAINTAINED AT ALL TIMES BY USE OF THE EXISTING PAVEMENT, THE PROPOSED PAVEMENT, AND TEMPORARY SURFACES USING ITEM 614.

RAMP C2 (NB 271 EXIT TO BRAINARD/CEDAR EB) (RECONSTRUCTION) FROM THE OPENING OF THE DECELERATION LANE TO THE PHYSICAL GORE WITH RAMP C3 A MINIMUM OF 1 LANE OF TRAFFIC SHALL BE MAINTAINED AT ALL TIMES BY USE OF THE EXISTING PAVEMENT, THE PROPOSED PAVEMENT, AND TEMPORARY SURFACES USING ITEM 614. FROM THE PHYSICAL GORE WITH RAMP C3 TO BRAINARD ROAD ALL EXISTING LANES SHALL REMAIN OPEN AT ALL TIMES.

RAMP C3 (NB 271 EXIT TO CEDAR WB) (RECONSTRUCTION) A MINIMUM OF 1 LANE OF TRAFFIC SHALL BE MAINTAINED AT ALL TIMES BY USE OF THE EXISTING PAVEMENT, THE PROPOSED PAVEMENT, AND TEMPORARY SURFACES USING ITEM 614, EXCEPT FOR A PERIOD NOT TO EXCEED FOURTEEN (14) TOTAL CALENDAR DAYS WHEN THE RAMP MAY BE CLOSED AND DETOURED AS SHOWN ON SHEET 62. ROAD USER COSTS IN THE AMOUNT OF \$3,000/DAY SHALL BE ASSESSED TO THE CONTRACTOR FOR EACH DAY THE RAMP REMAINS CLOSED BEYOND THE SPECIFIED LIMIT.

CEDAR ROAD WB (RECONSTRUCTION/RESURFACING) 3 LANES OF TRAFFIC SHALL BE MAINTAINED AT ALL TIMES BY USE OF THE EXISTING PAVEMENT, THE PROPOSED PAVEMENT, AND TEMPORARY SURFACES USING ITEM 614, EXCEPT FOR A PERIOD NOT TO EXCEED FOURTEEN (14) TOTAL CALENDAR DAYS WHEN THE WESTBOUND LANES MAY BE RESTRICTED TO ONE LANE OF TRAFFIC. THE RESTRICTION ON WB CEDAR ROAD SHALL BE CONCURRENT TO THE CLOSURE OF RAMP C3. ROAD USER COSTS IN THE AMOUNT \$3,500/DAY SHALL BE ASSESSED TO THE CONTRACTOR FOR EACH DAY THE LANE(S) REMAIN CLOSED BEYOND THE SPECIFIED LIMIT.

RAMP C2/C3 (NB 271 EXIT TO BRAINARD/CEDAR) (RESURFACING) TO COMPLETE MILLING, PARTIAL DEPTH PAVEMENT REPAIRS AND RESURFACING WORK THE CONTRACTOR MAY CLOSE THE RAMP BETWEEN THE HOURS OF 9:00 PM TO 5:00 AM UP TO THREE (3) TIMES. IN ALL OTHER PERIODS ALL LANES ON THE RAMP SHALL BE OPEN WITH TRAFFIC IN EXISTING LANE CONFIGURATION. WHEN CLOSED THE CONTRACTOR SHALL CLOSE THE RAMP PER MT-98.29 AND A PCMS SHALL BE PLACED AS DIRECTED BY THE ENGINEER TO ROUTE TRAFFIC TO THE NEXT EXIT. A SECOND PCMS SHALL BE PLACED AS DIRECTED BY THE ENGINEER AT THIS EXIT INDICATING A U-TURN TO SB 271.

CLOSURES ON RAMP C2 SHALL BE CONCURRENT WITH CLOSURE OF RAMP C3. ROAD USER COSTS IN THE AMOUNT OF \$3,000/DAY SHALL BE ASSESSED TO THE CONTRACTOR FOR EACH DAY THE LANE(S) REMAIN CLOSED BEYOND THE SPECIFIED LIMIT.

ITEM 614, MAINTAINING TRAFFIC (CONT.)

GENERAL: ALL EXISTING LANES, INCLUDING RAMPS SHALL BE OPEN AND AVAILABLE TO TRAFFIC IN THE ORIGINAL OR PROPOSED FINAL ALIGNMENT BETWEEN OCTOBER 15 AND APRIL 1 UNLESS OTHERWISE APPROVED BY THE ENGINEER. SHOULD THE CONTRACTOR FAIL TO MEET THESE REQUIREMENTS, A DISINCENTIVE SHALL BE ASSESSED PER THE LANE VALUE CONTRACT TABLE AND/OR OTHER NOTES (RAMPS AND INTERIM COMPLETION DATE).

THE CONTRACTOR SHALL NOTIFY THE ENGINEER, THE RESPONSIBLE LAW ENFORCEMENT AGENCY AND THE OHIO DEPARTMENT OF TRANSPORTATION, DISTRICT 12 PUBLIC INFORMATION OFFICER ((216) 584-2007) NOT LESS THAN 24 HOURS PRIOR TO A SCHEDULED DISRUPTION OF TRAFFIC

NIGHTTIME WORK ON INTERSTATE 271 AND RAMP C-2 SHALL BE PERMITTED IN ACCORDANCE WITH THESE PLANS AND NOTES. ALL OTHER WORK ALONG RAMP C-3 AND CEDAR ROAD WILL NEED COORDINATED WITH THE MUNICIPALITY. THE CONTRACTOR SHALL PROVIDE FLOOD LIGHTING OF THE WORK AREA IN ACCORDANCE WITH CMS 401.15 IN ORDER TO ASSURE THE SAFEST CONDITIONS DURING NIGHTTIME WORK. A LIGHTING PLAN FOR NIGHTTIME OPERATIONS SHALL BE PRESENTED TO AND APPROVED BY THE ENGINEER.

PERMITTED LANE CLOSURES: ALL LANE CLOSURES MAY ONLY BE IMPLEMENTED AT THE TIMES PERMITTED BY THE "DISTRICT 12 PERMITTED LANE CLOSURE TIMES" LIST, WHICH IS LOCATED ON THE ODOT WEBSITE:

HTTPS://WWW.DOT.STATE.OH.US/DISTRICTS/D12/HIGHWAYMANAGEMENT/PAGES/PERMITTEDLANECLOSURES.ASPX

THE LATEST REVISION, AT 14 DAYS PRIOR TO THE BID DATE, SHALL BE IN EFFECT FOR THIS PROJECT.

NO LANE OR SHOULDER CLOSURES SHALL BE IN PLACE WHEN NO WORK IS BEING PERFORMED, UNLESS DIRECTED BY THE ENGINEER. SHOULDER CLOSURES SHALL ONLY BE ALLOWED AT THE TIMES SPECIFIED FOR LANE CLOSURES.

CONTACT TROY ONESTI, DISTRICT 12 WORK ZONE TRAFFIC MANAGER, AT (216) 584-2204 IF THERE ARE ANY QUESTIONS.

ALL NOTES ON THE PERMITTED LANE CLOSURE TIMES SHALL BE PART OF THE PROJECT.

OFF-PEAK HOURS (PERIODS): SEVERAL REFERENCES ARE MADE WITHIN THE PLAN SET TO OFF PEAK HOURS. FOR INTERSTATE ROUTE 271 THESE SHALL BE GOVERNED BY ODOT PERMITTED LANE CLOSURE CHARTS (SEE PERMITTED LANE CLOSURE NOTE). FOR ALL OTHER ROADWAYS THE BELOW ARE THE TIME PERIOD THAT ARE BEING REFERENCED. NOISE ORDINANCE, HOLIDAY AND WINTER WORK RESTRICTIONS SHALL APPLY TO THESE.

ALL OTHER ROADWAYS: MONDAY-FRIDAY 10A.M. TO 3 P.M. WEEKEND - 7 P.M. FRIDAY TO 6 A.M. MONDAY

LANE VALUE CONTRACT TABLE

Table with 6 columns: DESCRIPTION OF CRITICAL LANE/RAMP TO BE MAINTAINED, DIRECTION, LANES, RESTRICTED TIME PERIOD, TIME UNIT, DISINCENTIVE (PER TIME UNIT PER LANE). Rows include IR-271 LOCAL LANES and IR-271 EXPRESS LANES.

THE CONTRACTOR SHALL BE ASSESSED A DISINCENTIVE IN THE AMOUNT OF THE LARGEST DISINCENTIVE WITHIN ALL SECTIONS IMPACTED BY THE PHYSICAL LANE RESTRICTION, INCLUDING THE TRANSITION AREA, ACTIVITY AREA, AND TERMINATION AREA AS DEFINED BY THE ODOT CD

ITEM 614, MAINTAINING TRAFFIC (CONT.)

LANES OPEN DURING HOLIDAYS OR SPECIAL EVENTS NO WORK SHALL BE PERFORMED AND ALL EXISTING LANES SHALL BE OPEN TO TRAFFIC DURING THE FOLLOWING DESIGNATED HOLIDAYS OR SPECIAL EVENTS:

Table with 2 columns: HOLIDAY, GENERAL/REGULAR ELECTION DAY (NOV). Rows include THANKSGIVING, CHRISTMAS (OBSERVED), LABOR DAY, MEMORIAL DAY, FOURTH OF JULY (OBSERVED).

THE PERIOD OF TIME THAT THE LANES ARE TO BE OPEN DEPENDS ON THE DAY OF THE WEEK ON WHICH THE HOLIDAY OR SPECIAL EVENT FALLS. THE FOLLOWING SCHEDULE SHALL BE USED TO DETERMINE THIS PERIOD:

Table with 2 columns: DAY OF HOLIDAY OR SPECIAL EVENT, TIME ALL LANES MUST BE OPEN TO TRAFFIC. Rows include SUNDAY, MONDAY, TUESDAY, GEN./REG. ELECTION, WEDNESDAY, THURSDAY, THANKSGIVING ONLY, FRIDAY, SATURDAY.

DURING THE SAME PERIODS, MAINTAIN PEDESTRIAN ACCESS IF PEDESTRIAN ACCESS WAS PRESENT PRIOR TO CONSTRUCTION. NEWLY CONSTRUCTED LANE ADDITIONS, ONCE COMPLETED AND INITIALLY OPENED TO TRAFFIC, SHALL BE OPEN TO TRAFFIC DURING ALL SUBSEQUENT DESIGNATED HOLIDAYS AND SPECIAL EVENTS, AND RELATED PERIODS OF TIME, SPECIFIED ABOVE.

SHOULD THE CONTRACTOR FAIL TO MEET ANY OF THESE REQUIREMENTS, THE CONTRACTOR SHALL BE ASSESSED A DISINCENTIVE PER THE LANE VALUE CONTRACT (PN 127).

LANE CLOSURE/REDUCTION REQUIRED LENGTH AND DURATION OF LANE CLOSURES AND RESTRICTIONS SHALL BE AT THE APPROVAL OF THE ENGINEER. IT IS THE INTENT TO MINIMIZE THE IMPACT TO THE TRAVELING PUBLIC. LANE CLOSURES OR RESTRICTIONS OVER SEGMENTS OF THE PROJECT IN WHICH NO WORK IS ANTICIPATED WITHIN A REASONABLE TIME FRAME, AS DETERMINED BY THE ENGINEER, SHALL NOT BE PERMITTED. THE LEVEL OF UTILIZATION OF MAINTENANCE OF TRAFFIC DEVICES SHALL BE COMMENSURATE WITH THE WORK IN PROGRESS.

RAMP CLOSURE FOR RESURFACING THE CONTRACTOR MAY CLOSE RAMP C2 & C3 FOR MILLING, PARTIAL DEPTH PAVEMENT REPAIRS, OR RESURFACING. CLOSURES FOR RAMPS SCHEDULED FOR REPAIRS AND RESURFACING SHALL BE IN ACCORDANCE WITH THE NOTES ON SHEET 22 FOR RAMP C2/C3 (NB 271 EXIT TO BRAINARD/CEDAR) (RESURFACING)

THE MOTORING PUBLIC SHALL BE GIVEN ADVANCE WARNING OF CLOSURES AT LEAST 72 HOURS IN ADVANCE THROUGH THE USE OF EITHER A GROUND MOUNTED FLAT SHEET SIGN OR A PORTABLE CHANGEABLE MESSAGE SIGN. A LEO WITH PATROL CAR (PAID FOR SEPARATELY) SHALL BE USED FOR EACH RAMP CLOSURE AND BE PRESENT FOR THE ENTIRE CLOSURE TIME.

FREEWAY EXIT RAMPS SHALL BE CLOSED WITH A PCMS ROUTING TRAFFIC TO THE NEXT EXIT AND A SECOND PCMS INDICATING A U-TURN AT THE EXIT, UNLESS DIRECTED DIFFERENTLY BY THE PROJECT ENGINEER.

FOR RAMP CLOSURES, ONE OR TWO ADDITIONAL PCMS UNITS WILL BE NEEDED AS DESCRIBED ABOVE. THESE WILL BE IN ADDITION TO THE PCMS UNITS SPECIFIED IN THE PLANS AND SHALL BE INCLUDED FOR PAYMENT IN ITEM 614 - MAINTAINING TRAFFIC.

NOTICE OF CLOSURE SIGNS NOTICE OF CLOSURE SIGNS (W20-H13) SHALL BE ERECTED BY THE CONTRACTOR PRIOR TO THE SCHEDULED ROAD OR RAMP CLOSURE IN ACCORDANCE WITH THE NOTICE OF CLOSURE TIME TABLE BELOW. AT 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.

NOTICE OF CLOSURE SIGNS (CONT.)

THE SIGNS SHALL BE ERECTED ON THE RIGHT-HAND SIDE OF THE ROAD/RAMP 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. THE SIGNS MAY BE ERECTED ANYWHERE ON RAMPS AS LONG AS THEY ARE VISIBLE TO THE MOTORISTS USING THE RAMP. ON ENTRANCE RAMPS, THE SIGN SHALL BE ERECTED WELL IN ADVANCE OF THE MERGE AREA TO AVOID DISTRACTING MOTORISTS.

NOTICE OF CLOSURE SIGN TIME TABLE:

Table with 3 columns: ITEM, DURATION OF CLOSURE, SIGN DISPLAYED TO PUBLIC. Rows include RAMP & ROAD CLOSURES > 12 HOURS & < 2 WEEKS, < 12 HOURS.

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.

MAINTAINING TRAFFIC, ESTIMATED QUANTITIES THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR USE AS DETERMINED BY THE ENGINEER FOR THE MAINTENANCE OF TRAFFIC.

Table with 4 columns: ITEM, MATERIAL, QUANTITY, UNIT. Rows include ITEM 614, ASPHALT CONCRETE FOR MAINTAINING TRAFFIC WORK ZONE IMPACT ATTENUATOR (UNIDIRECTIONAL).

SIGNS AND BARRICADES THE CONTRACTOR SHALL PROVIDE, ERECT AND MAINTAIN SIGNS AND SIGN SUPPORTS, AS DETAILED IN THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, AND TYPE III BARRICADES OF THE TYPE AND LOCATION AS SHOWN IN THE PLANS AND REFERENCED STANDARD CONSTRUCTION DRAWINGS.

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH C&M 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.

CONTRACTOR ACCESS

THOUGH SPECIFIC LOCATIONS OF CONTRACTOR ACCESS TO COMPLETE HIGHWAY WORK HAVE NOT BEEN DESIGNATED ON THE MOT PLANS THE CONTRACTOR SHALL MAINTAIN ALL INGRESS/EGRESS POINTS TO WORK AREAS.

PRIOR TO STARTING EACH PHASE OF CONSTRUCTION THE CONTRACTOR SHALL PROVIDE A FORMAL ACCESS PLAN TO THE ENGINEER FOR APPROVAL. THE PLAN SHALL INDICATE LOCATIONS OF INGRESS AND EGRESS, REQUIRED TRAFFIC CONTROL AND DURATION OF TIME THAT SAID ACCESS POINTS WILL BE IN PLACE AND OPERATIONAL. NO WORK ON A PHASE SHALL COMMENCE UNTIL APPROVAL OF THE ACCESS PLAN IS RECEIVED FROM THE ENGINEER. ANY SIGNIFICANT CHANGES TO THE THE MOT AS DETERMINED BY THE ENGINEER RESULTING FROM THE ACCESS PLANS SHALL BE STAMPED BY A LICENSED PROFESSIONAL ENGINEER IN THE STATE OF OHIO.

PAYMENT FOR FURNISHING ACCESS PLANS AND RESULTANT MODIFICATIONS TO THE PLAN MOT SHALL BE INCLUDED WITH THE LUMP SUM PAYMENT FOR ITEM 614 - MAINTENANCE OF TRAFFIC.

DESIGN AGENCY



Table with 2 columns: FIELD, VALUE. Rows include DESIGNER (NRE), REVIEWER (MTR 10/12/23), PROJECT ID (113156), SHEET (22), TOTAL (233).

DUST CONTROL

THE CONTRACTOR SHALL FURNISH AND APPLY WATER FOR DUST CONTROL AS DIRECTED BY THE ENGINEER. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED FOR DUST CONTROL PURPOSES:

ITEM 616, WATER 50 M. GAL.

ITEM 614 - WORK ZONE PAVEMENT MARKINGS

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER FOR WORK ZONE PAVEMENT MARKINGS PER THE REQUIREMENTS OF CMS 614.04 AND 614.11. PLACE TEMPORARY MARKINGS AT THE SAME LOCATIONS AS THE PROPOSED PERMANENT PAVEMENT MARKINGS.

WORK ZONE TEMPORARY MARKING WIDTHS SHALL BE GIVEN IN CMS 614 OR 641.

AFTER THE PLANING IS COMPLETED. USE THE FOLLOWING TEMPORARY MARKINGS:

PRIOR TO THE START OF PAVEMENT PLANING USE THE FOLLOWING TEMPORARY MARKINGS TO STRIPE THE PERMANENT TRAFFIC CONTROL CONDITION.

Table with 3 columns: Item Description, Quantity, and Unit. Includes items like WORK ZONE LANE LINE, EDGE LINE, CHANNELIZING LINE, DOTTED LINE, CROSSWALK LINE, STOP LINE, TRANSVERSE/DIAGONAL LINE, and ARROW.

AFTER THE PLANING IS COMPLETED. USE THE FOLLOWING TEMPORARY MARKINGS:

Table with 3 columns: Item Description, Quantity, and Unit. Includes items like WORK ZONE LANE LINE, EDGE LINE, CHANNELIZING LINE, DOTTED LINE, CROSSWALK LINE, STOP LINE, TRANSVERSE/DIAGONAL LINE, and ARROW.

AFTER THE SURFACE COURSE IS PLACED, USE THE FOLLOWING TEMPORARY MARKINGS:

Table with 3 columns: Item Description, Quantity, and Unit. Includes items like WORK ZONE LANE LINE, EDGE LINE, CHANNELIZING LINE, DOTTED LINE, CROSSWALK LINE, STOP LINE, TRANSVERSE/DIAGONAL LINE, and ARROW.

PERMANENT PAVEMENT MARKINGS

AFTER PLACING THE SURFACE COURSE, THE CONTRACTOR MAY PLACE PERMANENT MARKINGS INSTEAD OF PLACING WORK ZONE PAVEMENT MARKINGS, WHICH SHALL BE NON-PERFORMED AT THESE LOCATIONS.

WORK ZONE SPEED ZONES (WZSZS)

THE FOLLOWING WORK ZONE SPEED ZONE (WZSZ) SPEED LIMIT REVISION(S) HAVE BEEN APPROVED FOR USE ON THIS PROJECT WHEN WORK ZONE CONDITIONS AND FACTORS ARE MET AS DESCRIBED BELOW:

Table with 4 columns: WZSZ REVISION NUMBER, COUNTY-ROUTE-SECTION, DIRECTION. Includes rows for WZ-65267 and WZ-65259.

POTENTIAL WZSZ LOCATIONS SHALL HAVE AN ORIGINAL (PRE-CONSTRUCTION) POSTED SPEED LIMIT OF 55 MPH OR GREATER, A QUALIFYING WORK ZONE CONDITION OF AT LEAST 0.5 MILE IN LENGTH, AN EXPECTED WORK DURATION OF AT LEAST THREE HOURS, AND A WORK ZONE CONDITION IN PLACE THAT REDUCES THE EXISTING FUNCTIONALITY OF THE TRAVEL LANES OR SHOULDERS (I.E., LANE CLOSURE, LANE SHIFT, CROSSOVER, CONTRAFLOW AND/OR SHOULDER CLOSURE).

IF THE WORK ZONE MEETS THESE MINIMUM CRITERIA, IT SHALL BE ANALYZED FURTHER USING TABLE 1 BELOW TO DETERMINE IF AND WHEN IT QUALIFIES FOR A SPEED LIMIT REDUCTION. DEPENDING ON THE ORIGINAL POSTED SPEED LIMIT, THE TYPE OF TEMPORARY TRAFFIC CONTROL USED, AND WHETHER OR NOT WORKERS ARE PRESENT, A WARRANTED WZSZ WILL VARY IN THE APPROVED SPEED LIMIT TO BE POSTED OVER TIME.

C&MS ITEM 614, PARAGRAPH 614.02(B), INDICATES THAT TWO DIRECTIONS OF A DIVIDED HIGHWAY ARE CONSIDERED SEPARATE HIGHWAY SECTIONS. THEREFORE, IF THE WORK ON A MULTI-LANE DIVIDED HIGHWAY IS LIMITED TO ONLY ONE DIRECTION, A SPEED LIMIT REDUCTION IN THE DIRECTION OF THE WORK DOES NOT AUTOMATICALLY CONSTITUTE A SPEED LIMIT REDUCTION IN THE OPPOSITE DIRECTION.

ALL WZSZS FLUCTUATE BETWEEN TWO APPROVED REDUCED SPEED LIMITS OR BETWEEN AN APPROVED REDUCED SPEED LIMIT AND THE ORIGINAL POSTED SPEED LIMIT. ONLY ONE OF TWO SIGNING STRATEGIES SHALL BE USED TO IMPLEMENT A WZSZ.

WZSZS USING DSL SIGN ASSEMBLIES SHALL BE IN ACCORDANCE WITH THIS NOTE, APPROVED LIST, SUPPLEMENTAL SPECIFICATIONS (SS) 808 AND 908, AND TRAFFIC SCD MT-104.10.

ONLY ONE WARRANTED SPEED LIMIT APPLIES AT ANY ONE TIME; SPEED LIMIT REDUCTIONS ARE NOT CUMULATIVE. WZSZS SHALL NOT BE USED FOR MOVING/MOBILE ACTIVITIES, AS DEFINED IN OMUTCD PART 6.

WHEN LOOKING UP THE WARRANTED WORK ZONE SPEED LIMITS, ALWAYS USE THE ORIGINAL, PRE-CONSTRUCTION, POSTED SPEED LIMIT. DO NOT USE A PRIOR OR CURRENT WORK ZONE SPEED LIMIT AS A LOOK UP VALUE IN THE TABLE. POSITIVE PROTECTION IS GENERALLY REGARDED AS PORTABLE BARRIER OR OTHER RIGID BARRIER IN USE ALONG THE WORK AREA WITHIN THE SUBJECT WARRANTED WORK ZONE CONDITION.

TABLE 1: WARRANTED WORK ZONE SPEED LIMITS (MPH) FOR WORK ZONES ON HIGH-SPEED (55 MPH OR GREATER) MULTI-LANE HIGHWAYS

Table with 5 columns: ORIGINAL POSTED SPEED LIMIT, WITH POSITIVE PROTECTION WORKERS PRES., WORKERS NOT PRES., WITHOUT POSITIVE PROTECTION WORKERS PRES., WORKERS NOT PRES.

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

ITEM 808, DIGITAL SPEED LIMIT (DSL) SIGN ASSEMBLY ASSUMING 6 DSL SIGN ASSEMBLY(IES) FOR 8 MONTHS 48 SIGN MNTH

TRAFFIC INCIDENT MANAGEMENT (TIM) DURING MOT

OHIO TIM IS OHIO'S TRAFFIC INCIDENT MANAGEMENT PROGRAM WHICH IS COMMITTED TO MAINTAINING THE SAFE AND EFFECTIVE FLOW OF TRAFFIC DURING EMERGENCIES AS TO PREVENT FURTHER DAMAGE, INJURY OR UNDUE DELAY OF THE MOTORING PUBLIC. IN ADDITION TO COMPLYING WITH THE PROVISION OF OMUTCD CHAPTER 6I, CONTROL OF TRAFFIC THROUGH TRAFFIC INCIDENT MANAGEMENT AREAS, THE CONTRACTOR SHALL ACTIVELY PARTICIPATE IN TIM PLANNING AND IMPLEMENTATION AS OUTLINED BELOW.

- 1. SUPERINTENDENT SHALL IDENTIFY THE INDIVIDUAL PERSONS ON THE PROJECT WHO WILL, OR MAY NEED TO, PERFORM THE DUTIES HEREIN. AT A MINIMUM, INCLUDE THE SUPERINTENDENT, FOREMEN AND SUPERVISORS (OR EQUIVALENT) AS WELL AS THE WORKSITE TRAFFIC SUPERVISOR (WTS; IF APPLICABLE TO THE PROJECT). THESE INDIVIDUALLY IDENTIFIED PERSONS SHALL COLLECTIVELY BE KNOWN AS CONTRACTOR TRAFFIC INCIDENT MANAGEMENT (TIM) CONTACTS. NOTIFY THE PROJECT ENGINEER OF THE CONTRACTOR TIM CONTACTS (ALONG WITH CONTACT INFORMATION FOR EACH) AT OR BEFORE THE PRECONSTRUCTION MEETING.
2. SUPERINTENDENT SHALL NOTIFY THE ENGINEER IMMEDIATELY IF ANY CONTRACTOR TIM CONTACT IS ADDED, REMOVED OR THE CONTACT INFORMATION CHANGES OVER THE COURSE OF THE PROJECT.
3. PRIOR THE FIRST DAY OF WORK IN THE FIELD, EACH CONTRACTOR TIM CONTACT ON THE PROJECT SHALL HAVE ATTENDED AND SUCCESSFULLY COMPLETED OHIO TIM TRAINING PROVIDED BY THE DEPARTMENT OR DESIGNEE. TRAINING INFORMATION CAN BE FOUND ONLINE.
4. SUPERINTENDENT, AT A MINIMUM, SHALL ATTEND AND ACTIVELY PARTICIPATE IN A DEPARTMENT SCHEDULED TIM MEETING BEFORE CONSTRUCTION WORK BEGINS AND BEFORE EACH PHASE CHANGE. THESE MEETINGS WILL RESULT IN A DEPARTMENT ISSUED PROJECT SPECIFIC TRAFFIC INCIDENT MANAGEMENT PLAN (TIMP). AT THE TIM MEETINGS THE ATTENDING CONTRACTOR TIM CONTACTS SHALL:
A. COLLABORATE WITH ODOT AND SAFETY FORCES;
B. SHARE PROJECT SPECIFIC DETAILS THAT IMPACT TIM RESPONDERS; AND
C. RECOMMEND WAYS TO INCORPORATE NECESSARY EMERGENCY ACCESS AND OTHER TIM ELEMENTS FOR TIM RESPONDERS GIVEN PROJECT SPECIFIC WORK BEING COMPLETED AND PROJECT SPECIFIC PHASING.
5. CONTRACTOR TIM CONTACTS SHALL IMPLEMENT COMPONENTS OF THE RESULTING TIMP (SUCH AS APPROVED EMERGENCY INGRESS/EGRESS POINTS, ETC), AS DIRECTED BY THE ENGINEER IN ACCORDANCE WITH 109.05.
6. CONTRACTOR TIM CONTACTS SHALL PERFORM, AT A MINIMUM, THE FOLLOWING FUNCTIONS WHEN AN INCIDENT/CRASH OCCURS:
A. IF OBSERVED OR PRESENT WHEN OCCURS, CALL 911 AND THEN NOTIFY THE TRAFFIC MANAGEMENT CENTER (TMC) TO PROVIDE THE FOLLOWING:
I. LOCATION, INCLUDING MILEPOST NUMBER AND DIRECTION OF TRAVEL
II. NUMBER AND TYPE OF VEHICLES INVOLVED, IF KNOWN
III. ESTIMATED EXTENT OF DAMAGE OR INJURY, IF KNOWN
IV. ESTIMATED NUMBER OF PATIENTS INVOLVED, IF KNOWN
V. ANY POTENTIAL HAZARDOUS CONDITIONS, IF KNOWN
VI. THE PLACARD NUMBER ON ANY HAZARDOUS MATERIALS PLACARD FROM A SAFE DISTANCE, IF APPLICABLE AND VISIBLE
B. FOLLOWING AN INCIDENT/CRASH:
I. INITIATE TRAFFIC MANAGEMENT/PROVIDE TEMPORARY TRAFFIC CONTROL AS INDICATED IN THE TIMP, AS DIRECTED BY THE ENGINEER IN ACCORDANCE WITH 109.05.
II. RECOMMEND ROADWAY REPAIR NEEDS.
III. PROVIDE REPAIR RESOURCES AND INITIATE REPAIRS, AS DIRECTED BY THE ENGINEER IN ACCORDANCE WITH 109.05.
IV. ATTEND AND PARTICIPATE IN AN AFTER ACTION REVIEW (AAR).

ALL COSTS, UNLESS OTHERWISE SPECIFIED, RESULTING FROM THE ABOVE REQUIREMENTS SHALL BE CONSIDERED TO BE INCLUDED IN THE LUMP SUM PRICE FOR ITEM 614, MAINTAINING TRAFFIC. FAILURE TO PERFORM THE REQUIREMENTS OF THIS PLAN NOTE WILL RESULT IN A DAILY FINE OF 2% OF ITEM 614, MAINTAINING TRAFFIC AND MAY RESULT IN ONE OR MORE CONTRACTOR TIM CONTACTS BEING REMOVED FROM THE LIST OF OHIO TIM TRAINED INDIVIDUALS (AT THE SOLE DISCRETION OF THE OHIO TIM EXECUTIVE COMMITTEE). IN THE EVENT AN INDIVIDUAL IS REMOVED FROM THE OHIO TIM TRAINED LIST, THE INDIVIDUAL WILL BE REMOVED FROM CONTRACTOR TIM CONTACT RESPONSIBILITIES ON ALL PROJECTS.

ITEM 614 - WORK ZONE RAISED PAVEMENT MARKER, AS PER PLAN

WORK ZONE RAISED PAVEMENT MARKERS, AS PER PLAN, AND THEIR INSTALLATION SHALL CONFORM TO C&MS 614 OR C&MS 621 AS SPECIFIED HEREIN.

- RAISED PAVEMENT MARKERS IN USE DURING THE SNOW-PLOWING SEASON SHALL CONFORM TO 621.

- RAISED PAVEMENT MARKERS IN USE DURING THE NON-SNOW-PLOW SEASON SHALL CONFORM TO EITHER 614 OR TO 621.

THE SNOW-PLOWING SEASON SHALL RUN FROM NOVEMBER 1ST THROUGH APRIL 1ST.

IF PROJECT DELAYS, NOT THE FAULT OF ODOT, CAUSE THE WORK TO EXTEND INTO THE SNOW-PLOWING SEASON, THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING WORK ZONE RAISED PAVEMENT MARKERS (WZRPMS) CONFORMING TO C&MS 614, WITH RAISED PAVEMENT MARKERS CONFORMING TO 621, AS DETERMINED BY THE ENGINEER, AT THE CONTRACTOR'S EXPENSE.

THIS ITEM SHALL INCLUDE PURCHASE, INSTALLATION AND REMOVAL OF ITEM 614 WORK ZONE RAISED PAVEMENT MARKER, AS PER PLAN, INCLUDING FILLING OF ANY DEPRESSIONS CREATED IN THE PAVEMENT AS PER C&MS 621.08.

RAISED PAVEMENT MARKERS IN WORK ZONES, INSTALLED ON PERMANENT CONCRETE SURFACES, SHALL BE ITEM 614 WORK ZONE RAISED PAVEMENT MARKERS. WZRPMS ARE INTENDED FOR USE ONLY DURING THE NON-SNOW-PLOWING SEASON. WZRPMS SHALL NOT BE PROVIDED DURING THE SNOW-PLOWING SEASON.

THE SNOW-PLOWING SEASON SHALL RUN FROM NOVEMBER 1ST THROUGH APRIL 1ST.

WHERE A TEMPORARY ALIGNMENT WILL REMAIN IN USE THROUGH THE WINTER, THE WZRPMS SHALL BE REMOVED PRIOR TO THE BEGINNING OF THE SNOW-PLOWING SEASON AND REPLACED APPROXIMATELY APRIL 1, OR AS OTHERWISE DETERMINED BY THE ENGINEER.

THIS ITEM SHALL INCLUDE PURCHASE, INSTALLATION AND REMOVAL OF ITEM 614 WORK ZONE RAISED PAVEMENT MARKERS.

RAISED PAVEMENT MARKER REFLECTOR REMOVAL AND REPLACEMENT

THIS WORK SHALL CONSIST OF REMOVING REFLECTORS FROM THE EXISTING RAISED PAVEMENT MARKERS PRIOR TO PHASE 1A. EXISTING CASTINGS SHALL REMAIN IN PLACE. NEW RAISED PAVEMENT MARKER REFLECTORS SHALL BE PROVIDED AND INSTALLED INTO EXISTING CASTINGS AFTER PHASE 1B, PRIOR TO THE WINTER-OVER PHASE. REMOVAL AND REPLACEMENT LIMITS FOR THE NORTHBOUND LOCAL LANES SHALL EXTEND FROM THE BEGIN WORK LIMIT (508+50) TO END WORK LIMIT (609+00) AS SHOWN ON THE MOT PLAN SHEETS. REMOVAL AND REPLACEMENT LIMITS ON THE NORTHBOUND EXPRESS LANES SHALL EXTEND FROM THE BEGIN WORK LIMIT (508+00) TO 527+47 AND AGAIN FROM 542+50 TO 564+00.

ALL LABOR, MATERIALS, EQUIPMENT, AND INCIDENTALS REQUIRED TO REMOVE EXISTING AND INSTALL NEW RAISED PAVEMENT MARKER REFLECTORS SHALL BE INCLUDED WITH ITEM 614 - MAINTAINING TRAFFIC.

Table with 2 columns: Field Name and Value. Includes fields for DESIGN AGENCY (HNTB), DESIGNER (NRE), REVIEWER (MTR 10/12/23), PROJECT ID (113156), SHEET (23), and TOTAL (233).

ITEM 614 - LAW ENFORCEMENT OFFICER (WITH PATROL CAR) FOR ASSISTANCE DURING CONSTRUCTION OPERATIONS

USE OF LAW ENFORCEMENT OFFICERS (LEOS) BY CONTRACTORS OTHER THAN THE USES SPECIFIED BELOW WILL NOT BE PERMITTED AT PROJECT COST. LEOS SHOULD NOT BE USED WHERE THE OMUTCD INTENDS THAT FLAGGERS BE USED.

IN ADDITION TO THE REQUIREMENTS OF C&MS 614 AND THE OMUTCD, A UNIFORMED LEO WITH AN OFFICIAL PATROL CAR (CAR WITH TOP-MOUNTED EMERGENCY FLASHING LIGHTS AND COMPLETE MARKINGS OF THE APPROPRIATE LAW ENFORCEMENT AGENCY) SHALL BE PROVIDED FOR THE FOLLOWING TRAFFIC CONTROL TASKS:

- DURING THE ENTIRE ADVANCE PREPARATION AND CLOSURE SEQUENCE WHERE COMPLETE BLOCKAGE OF TRAFFIC IS REQUIRED.

- DURING A TRAFFIC SIGNAL INSTALLATION WHEN IMPACTING THE NORMAL FUNCTION OF THE SIGNAL OR THE FLOW OF TRAFFIC, OR WHEN TRAFFIC NEEDS TO BE DIRECTED THROUGH AN ENERGIZED TRAFFIC SIGNAL CONTRARY TO THE SIGNAL DISPLAY (E.G., DIRECTING MOTORISTS THROUGH A RED LIGHT).

IN ADDITION TO THE REQUIREMENT OF C&MS 614 AND THE OMUTCD, A UNIFORMED LEO WITH AN OFFICIAL PATROL CAR (CAR WITH TOP-MOUNTED EMERGENCY FLASHING LIGHTS AND COMPLETE MARKINGS OF THE APPROPRIATE LAW ENFORCEMENT AGENCY) MAY BE PROVIDED FOR THE FOLLOWING TRAFFIC CONTROL TASKS AS APPROVED BY THE ENGINEER:

- FOR LANE CLOSURES: DURING INITIAL SET-UP PERIODS, TEAR DOWN PERIODS, SUBSTANTIAL SHIFTS OF A CLOSURE POINT OR WHEN NEW LANE CLOSURE ARRANGEMENTS ARE INITIATED FOR LONG-TERM LANE CLOSURES/SHIFTS (FOR THE FIRST AND LAST DAY OF MAJOR CHANGES IN TRAFFIC CONTROL SETUP).

- FOR OPERATIONS WITHOUT POSITIVE PROTECTION OCCURRING WITHIN 10 FEET OF AN OPEN TRAVELED LANE THAT MEET ALL OF THE FOLLOWING CRITERIA:

- ON A MULTI-LANE DIVIDED INTERSTATE, OTHER FREEWAY OR EXPRESSWAY; AND

- AN AUTHORIZED SPEED LIMIT OF 45 MPH OR GREATER THAT IS IN EFFECT AT THE TIME OF THE OPERATION; AND,

- AADT OF 50,000 (OR AADT OF 30,000 WITH 25% OR HIGHER PERCENT TRUCKS)

"WITHOUT POSITIVE PROTECTION" MEANS USE OF DRUMS, CONES, SHADOW VEHICLE, ETC. WITHOUT PROTECTION FROM PORTABLE BARRIER OR OTHER RIGID BARRIER ALONG THE WORK AREA. THIS PHRASE DOES NOT APPLY TO CASES WHERE POSITIVE PROTECTION IS REQUIRED. MOBILE OPERATIONS ARE REGARDED AS "WITHOUT POSITIVE PROTECTION". FOR WORK ZONES USING A COMBINATION OF BARRIER AND TEMPORARY TRAFFIC CONTROL DEVICES (CONES, DRUMS, ETC), THE DESIGNATION SHALL BE BASED UPON THE TYPE OF DEVICES USED IN THE AREA THAT WORKERS ARE LOCATED.

IF MULTIPLE ACTIVE LOCALIZED QUALIFYING WORK AREAS OCCUR WITHOUT POSITIVE PROTECTION, PER MAINLINE TRAFFIC DIRECTION, PROVIDE A UNIFORMED LEO AND OFFICIAL PATROL CAR IN ADVANCE OF:

- THE FIRST ACTIVE WORK AREA THAT DRIVERS WILL ENCOUNTER; OR
- THE ACTIVE WORK AREA Laterally CLOSEST TO THE OPEN TRAVELED LANE; OR
- OTHER LOCATION AS APPROVED BY THE ENGINEER.

THE UNIFORMED LEO AND OFFICIAL PATROL CAR MAY RELOCATE AMONG THE LISTED LOCATIONS AS APPROPRIATE AS THE OPERATIONS PROCEED IN THE LOCALIZED QUALIFYING WORK AREAS.

IN GENERAL, LEOS SHOULD BE POSITIONED IN ADVANCE OF AND ON THE SAME SIDE AS THE LANE RESTRICTION (OR AT THE POINT OF ROAD CLOSURE), AND TO MANUALLY CONTROL TRAFFIC MOVEMENTS THROUGH SIGNALIZED INTERSECTIONS IN WORK ZONES.

LEOS SHOULD NOT FORGO THEIR TRAFFIC CONTROL RESPONSIBILITIES TO APPREHEND MOTORISTS FOR ROUTINE TRAFFIC VIOLATIONS. HOWEVER, IF A MOTORIST'S ACTIONS ARE CONSIDERED TO BE RECKLESS, THEN PURSUIT OF THE MOTORIST IS APPROPRIATE.

THE LEOS WORK AT THE DIRECTION OF THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR SECURING THE SERVICES OF THE LEOS WITH THE APPROPRIATE AGENCIES AND COMMUNICATING THE INTENTIONS OF THE PLANS WITH RESPECT TO DUTIES OF THE LEOS. THE ENGINEER SHALL HAVE FINAL CONTROL OVER THE LEOS' DUTIES AND PLACEMENT, AND WILL RESOLVE ANY ISSUES THAT MAY ARISE BETWEEN THE TWO PARTIES.

ENSURE PROVIDED LEOS HAVE BEEN TRAINED APPROPRIATE TO THE JOB DECISIONS THEY ARE REQUIRED TO MAKE WHILE ON THE PROJECT, IN ACCORDANCE WITH C&MS 614.03.

ITEM 614 - LAW ENFORCEMENT OFFICER (WITH PATROL CAR) FOR ASSISTANCE DURING CONSTRUCTION OPERATIONS (CONT.)

THE LEO SHALL REPORT IN TO THE CONTRACTOR PRIOR TO THE START OF THE SHIFT, IN ORDER TO RECEIVE INSTRUCTIONS REGARDING SPECIFIC WORK ASSIGNMENTS DURING HIS/HER SHIFT. THE LEO IS EXPECTED TO STAY AT THE PROJECT SITE FOR THE ENTIRE DURATION OF HIS/HER SHIFT. THE LEO SHALL REPORT TO THE CONTRACTOR AT THE END OF HIS/HER SHIFT. SHOULD IT BE NECESSARY TO LEAVE THE PROJECT SITE, THE LEO SHALL NOTIFY THE ENGINEER. THE CONTRACTOR SHALL PROVIDE THE LEO WITH A TWO-WAY COMMUNICATION DEVICE THAT SHALL BE RETURNED TO THE CONTRACTOR AT THE END OF HIS/HER SHIFT.

LEOS (WITH PATROL CAR) REQUIRED BY THE TRAFFIC MAINTENANCE TASKS ABOVE SHALL BE PAID FOR ON A UNIT PRICE (HOURLY) BASIS UNDER ITEM 614, LAW ENFORCEMENT OFFICER (WITH PATROL CAR) FOR ASSISTANCE. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE 280 HOURS

THE HOURS PAID SHALL INCLUDE ANY MINIMUM SHOW-UP TIME REQUIRED BY THE LAW ENFORCEMENT AGENCY INVOLVED.

ANY ADDITIONAL COSTS (ADMINISTRATIVE OR OTHERWISE) INCURRED BY THE CONTRACTOR TO OBTAIN THE SERVICES OF AN LEO ARE INCLUDED WITH THE BID UNIT PRICE FOR ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE.

RUMBLE STRIP REMOVAL AND REPLACEMENT PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN

ALL EXISTING RUMBLE STRIPS ON THE NORTHBOUND OUTSIDE SHOULDER THAT ARE IN CONFLICT WITH THE PROPOSED MOVEMENT OF TRAFFIC DURING THE MOT OPERATIONS SHALL BE REMOVED BY PAVEMENT PLANING. THE REMOVED RUMBLE STRIP AREAS SHALL BE FILLED WITH ASPHALT CONCRETE SURFACE COURSE. THE RUMBLE STRIP REMOVAL AREA SHALL BE 2.5 FEET WIDE AND 1.5 INCHES DEEP, CENTERED ON THE RUMBLE STRIP. THE PAVEMENT PLANING AND PLACEMENT OF ASPHALT CONCRETE SURFACE COURSE SHOULD BE COMPLETED IN THE SAME OPERATION. THE ESTIMATED REMOVAL LENGTH IS 9255 FT.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN (1.5" DEPTH)	2571 SY
ITEM 407 - NON-TRACKING TACK COAT	219 GAL
ITEM 441 - ASPHALT CONCRETE SURFACE COURSE, TYPE 1 (449), AS PER PLAN, PG64-22, 1-1/2"	108 CY

ITEM 441 ASPHALT CONCRETE SURFACE COURSE, TYPE 1 (449), AS PER PLAN, PG64-22

THE COARSE VIRGIN AGGREGATE FOR THIS ITEM SHALL CONSIST OF A BLEND OF 60% MIN. AIR COOLED BLAST FURNACE SLAG (ACBFS) OR TRAP ROCK FROM ONTARIO WITH LIMESTONE COMPRISING THE REMAINING PERCENTAGE.

IN ADDITION TO THE JOINT SEALING REQUIREMENTS SPECIFIED IN 401.17, THE CONTRACTOR SHALL SEAL THE PERIMETER OF ALL RUMBLE STRIP PAVEMENT REPLACEMENT AREAS. THE MATERIAL USED SHALL BE A CERTIFIED 702.01 PG BINDER. THE WIDTH OF THE SEALER SHALL BE 2-3 INCHES.

PAYMENT FOR ALL LABOR, MATERIALS AND EQUIPMENT REQUIRED TO PERFORM THE ABOVE WORK SHALL BE INCLUDED IN THE CONTRACT PRICE FOR ITEM 441 - ASPHALT CONCRETE SURFACE COURSE, TYPE 1 (449), AS PER PLAN, PG64-22.

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 BOARDS.

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.

NOTIFICATION OF TRAFFIC RESTRICTIONS TIME TABLE

ITEM	DURATION OF CLOSURE	NOTICE DUE TO PERMITS & PIO
RAMP & ROAD CLOSURES	≥ 2 WEEKS	21 CALENDAR DAYS PRIOR TO CLOSURE
	> 12 HOURS & < 2 WEEKS	14 CALENDAR DAYS PRIOR TO CLOSURE
	≤ 12 HOURS	4 BUSINESS DAYS PRIOR TO CLOSURE
LANE CLOSURES & RESTRICTIONS	≥ 2 WEEKS	14 CALENDAR DAYS PRIOR TO CLOSURE
	< 2 WEEKS	5 BUSINESS DAYS PRIOR TO CLOSURE
START OF CONSTRUCTION & TRAFFIC PATTERN CHANGES	N/A	14 CALENDAR DAYS PRIOR 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 TABLE.

DESIGN AGENCY	
HNTB	
DESIGNER	NRE
REVIEWER	MTR 10/12/23
PROJECT ID	113156
SHEET	TOTAL
26	233

SEQUENCE OF CONSTRUCTION

PRE-PHASE 1A (NO SHEETS PROVIDED)

WORK THIS PHASE:

- IR 271 NORTHBOUND LOCAL LANES
- REMOVE EXISTING RUMBLE STRIPS ON OUTSIDE SHOULDER IN ACCORDANCE WITH THE NOTES ON SHEET 26.
- REMOVE EXISTING PAVEMENT MARKINGS WHICH CONFLICT WITH PHASE 1A LANE CONFIGURATIONS AND STRIPE PROPOSED PHASE 1A WORK ZONE PAVEMENT MARKINGS.
- REMOVE EXISTING OVERHEAD SIGNAGE RELATED TO THE CROSSOVER RAMP FROM THE LOCAL LANES TO THE EXPRESS LANES.

- IR 271 NORTHBOUND EXPRESS LANES
- REMOVE EXISTING PAVEMENT MARKINGS WHICH CONFLICT WITH PHASE 1A LANE CONFIGURATIONS AND STRIPE PROPOSED PHASE 1A WORK ZONE PAVEMENT MARKINGS.

- MAINTENANCE OF TRAFFIC:
- IR 271 NORTHBOUND LOCAL LANES
- USE OFF PEAK LANE CLOSURES WITH DRUMS PER ODOT D12 PERMITTED LANE CLOSURE SCHEDULE (PLCS) AND MT SERIES STANDARD CONSTRUCTION DRAWINGS.

- IR 271 NORTHBOUND EXPRESS LANES
- USE OFF PEAK LANE CLOSURES WITH DRUMS PER ODOT D12 PERMITTED LANE CLOSURE SCHEDULE (PLCS) AND MT SERIES STANDARD CONSTRUCTION DRAWINGS.

PHASE 1A (SEE SHEETS 38-46)

WORK THIS PHASE:

- IR 271 NORTHBOUND LOCAL LANES
- REMOVE PORTIONS OF THE EXISTING NORTHBOUND PAVEMENT AND SHOULDER ON THE INSIDE OF THE LOCAL LANES.
- REMOVE GROUND MOUNTED SIGNS AND SUPPORTS, OVERHEAD SIGNS AND OVERHEAD SIGN SUPPORTS AS NOTED IN THE MOT PLANS.
- REMOVE EXISTING NORTHBOUND MEDIAN DRAINAGE AS REQUIRED IN PLANS.
- BUILD PORTIONS OF NEW NORTHBOUND PAVEMENT AND INSIDE SHOULDERS, NEW DRAINAGE AND MEDIAN GRADING.

- IR 271 NORTHBOUND EXPRESS LANES
- REMOVE PORTIONS OF THE EXISTING NORTHBOUND PAVEMENT AND SHOULDER ON THE OUTSIDE OF THE EXPRESS LANES.
- REMOVE GROUND MOUNTED SIGNS AND SUPPORTS, OVERHEAD SIGNS AND OVERHEAD SIGN SUPPORTS AS NOTED IN THE MOT PLANS.
- REMOVE EXISTING NORTHBOUND MEDIAN DRAINAGE AS REQUIRED IN PLANS.

- BUILD PORTIONS OF NEW NORTHBOUND PAVEMENT AND OUTSIDE SHOULDERS, NEW DRAINAGE AND MEDIAN GRADING.

- NB CROSSOVER RAMP 1 (SOUTH OF FAIRMOUNT)
- REMOVE EXISTING PAVEMENT AND DRAINAGE FOR EXISTING RAMP CROSSING FROM LOCAL LANES TO THE EXPRESS LANES.
- BUILD NEW RAMP CROSSING FROM EXPRESS LANES TO LOCAL LANES.

- MAINTENANCE OF TRAFFIC:
- IR 271 NORTHBOUND LOCAL LANES
- MAINTAIN 3 LANES OF TRAFFIC ON EXISTING PAVEMENT BY SHIFTING LANES EAST.

- IR 271 NORTHBOUND EXPRESS LANES
- MAINTAIN 2 LANES OF TRAFFIC ON EXISTING PAVEMENT BY SHIFTING LANES WEST.

- NB CROSSOVER RAMP 1 (SOUTH OF FAIRMOUNT)
- RAMP CLOSED THIS PHASE.

SEQUENCE OF CONSTRUCTION (CONT)

PHASE 1B (SEE SHEETS 47-52)

NO WORK IN THIS PHASE SHALL BEGIN BEFORE COMPLETION OF PHASE 1A WORK.

WORK THIS PHASE:

- IR 271 NORTHBOUND LOCAL LANES
- REMOVE REMAINING PORTIONS OF THE EXISTING NORTHBOUND PAVEMENT AND SHOULDER ON THE INSIDE OF THE LOCAL LANES.
- REMOVE GROUND MOUNTED SIGNS AND SUPPORTS, OVERHEAD SIGNS AND OVERHEAD SIGN SUPPORTS AS NOTED IN THE MOT PLANS.
- REMOVE EXISTING NORTHBOUND MEDIAN DRAINAGE AS REQUIRED IN PLANS.
- BUILD REMAINING PORTIONS OF NEW NORTHBOUND PAVEMENT AND INSIDE SHOULDERS, NEW DRAINAGE AND MEDIAN GRADING.

- IR 271 NORTHBOUND EXPRESS LANES
- REMOVE REMAINING PORTIONS OF THE EXISTING NORTHBOUND PAVEMENT AND SHOULDER ON THE OUTSIDE OF THE EXPRESS LANES.
- REMOVE GROUND MOUNTED SIGNS AND SUPPORTS, OVERHEAD SIGNS AND OVERHEAD SIGN SUPPORTS AS NOTED IN THE MOT PLANS.
- REMOVE EXISTING NORTHBOUND MEDIAN DRAINAGE AS REQUIRED IN PLANS.

- BUILD REMAINING PORTIONS OF NEW NORTHBOUND PAVEMENT AND OUTSIDE SHOULDERS, NEW DRAINAGE AND MEDIAN GRADING.

- NB CROSSOVER RAMP 2 (NORTH OF FAIRMOUNT)
- REMOVE EXISTING PAVEMENT AND DRAINAGE FOR EXISTING RAMP CROSSING FROM EXPRESS LANES TO THE LOCAL LANES.
- BUILD NEW RAMP CROSSING FROM LOCAL LANES TO EXPRESS LANES.

- MAINTENANCE OF TRAFFIC:
- IR 271 NORTHBOUND LOCAL LANES
- MAINTAIN 3 LANES OF TRAFFIC ON EXISTING PAVEMENT BY SHIFTING LANES EAST.

- IR 271 NORTHBOUND EXPRESS LANES
- MAINTAIN 2 LANES OF TRAFFIC ON EXISTING PAVEMENT BY SHIFTING LANES WEST.

- NB CROSSOVER RAMP 1 (SOUTH OF FAIRMOUNT)
- RAMP OPEN TO TRAFFIC FROM EXPRESS LANES TO LOCAL LANES.

- NB CROSSOVER RAMP 2 (NORTH OF FAIRMOUNT)
- RAMP CLOSED THIS PHASE.

- INTERIM COMPLETION DATE
- ALL WORK IN PHASE 1B SHALL BE COMPLETED BY OCTOBER 15, 2025. FAILURE TO COMPLETE PHASE 1B WORK AND RETURN TRAFFIC TO ITS ORIGINAL OR FINAL POSITION PER THE NOTES ON SHEET 22 BY THIS DATE WILL RESULT IN THE ASSESSMENT OF A DISINCENTIVE IN THE AMOUNT OF \$3,000.00/DAY.

OVERWINTER 2025/2026

AT THE COMPLETION OF PHASE 1B THE FOLLOWING WILL NEED COMPLETED FOR THE OVER WINTER CONDITION PRIOR TO STARTING PHASE 2A. THE CONTRACTOR SHALL MAINTAIN THE TRAFFIC CONTROL ELEMENTS OVER WINTER.

- TRAFFIC LANES FOR THE NORTHBOUND LOCAL AND EXPRESS LANES SHALL BE PLACED AS FOLLOWS. THE NORTHBOUND LOCAL LANES FROM BEGIN PROJECT TO STATION 560+00 AND EXPRESS LANES AND CROSSOVER RAMPS FROM BEGIN PROJECT TO STATION 565+00 SHALL BE PLACED PER THE PERMANENT TRAFFIC CONTROL PLAN USING ITEM 614 WORK ZONE PAVEMENT MARKINGS, CLASS I, 807 PAINT. THE NORTHBOUND LOCAL LANES FROM 560+00 TO END PROJECT SHALL BE RESTRIPTED TO MATCH THE PRECONSTRUCTION CONDITION USING ITEM 614 WORKZONE PAVEMENT MARKINGS, CLASS I, 807 PAINT. PRIOR TO REMOVING EXISTING MARKINGS AT THE START OF CONSTRUCTION THE CONTRACTOR SHALL LOG AND KEEP A RECORD OF THE EXISTING CONDITIONS TO BE RESTRIPTED. SEE THE MOT SUBSUMMARY FOR QUANTITIES TO COMPLETE THE STRIPING.

- THE CROSSOVER RAMPS BETWEEN IR-271 NORTHBOUND LOCAL AND EXPRESS LANES SHALL BE OPENED TO TRAFFIC.

- PREVIOUSLY REMOVED RPM REFLECTORS SHALL BE REPLACED IN THE EXISTING RPM CASTINGS PER THE PLAN NOTE ON SHEET 23.

- FROM STATION 560+00 TO STATION 598+00 THE PORTABLE BARRIER ALONG THE WEST EDGELINE OF THE LOCAL LANES SHALL BE MOVED WEST TO CREATE A 10 FOOT SHOULDER OVER WINTER. SEE THE MOT SUBSUMMARY FOR QUANTITIES TO COMPLETE THE MOVE AND SEE SHEETS 35-36 FOR A TYPICAL SECTION OF THE OVER WINTER CONDITION.

SEQUENCE OF CONSTRUCTION (CONT)

PHASE 2A (SEE SHEETS 53-62)

NO WORK IN THIS PHASE SHALL BEGIN BEFORE APRIL 1, 2026.

WORK THIS PHASE:

- IR 271 NORTHBOUND LOCAL LANES
- REMOVE PORTIONS OF THE EXISTING NORTHBOUND PAVEMENT AND SHOULDER ON THE OUTSIDE OF THE LOCAL LANES.
- REMOVE GROUND MOUNTED SIGNS AND SUPPORTS, OVERHEAD SIGNS AND OVERHEAD SIGN SUPPORTS AS NOTED IN THE MOT PLANS.
- BUILD PORTIONS OF NEW NORTHBOUND FULL DEPTH PAVEMENT AND OUTSIDE SHOULDERS, DRAINAGE AND DITCH GRADING. PAVEMENT WORK SHALL OMIT CONSTRUCTION OF PERMANENT ASPHALT SURFACE COURSE.

- RAMP C2 (NORTHBOUND EXIT TO BRAINARD/CEDAR)
- REMOVE PORTIONS OF THE EXISTING PAVEMENT AND OUTSIDE SHOULDER.
- BUILD NEW FULL DEPTH PAVEMENT AND OUTSIDE SHOULDER. PAVEMENT WORK SHALL OMIT CONSTRUCTION OF PERMANENT ASPHALT SURFACE COURSE.

- RAMP C3
- REMOVE PORTIONS OF THE EXISTING OUTSIDE SHOULDER.
- BUILD NEW FULL DEPTH PAVEMENT AND OUTSIDE SHOULDER. PAVEMENT WORK SHALL OMIT CONSTRUCTION OF PERMANENT ASPHALT SURFACE COURSE.
- REMOVE EXISTING QUICK CURB AND PLACE CONCRETE TRAFFIC ISLAND AND CURB RAMPS.

- CEDAR ROAD
- REMOVE EXISTING QUICK CURB AND PLACE NEW CONCRETE TRAFFIC ISLAND AND ASSOCIATED CONCRETE CURBING/CATCH BASIN.

- MAINTENANCE OF TRAFFIC:
- IR 271 NORTHBOUND LOCAL LANES
- MAINTAIN 3 LANES OF TRAFFIC ON EXISTING PAVEMENT BY SHIFTING LANES WEST.

- IR 271 NORTHBOUND EXPRESS LANES
- ALL LANES OPEN IN FINAL LANE POSITIONS.

- RAMP C2
- RAMP OPEN TO TRAFFIC. MAINTAIN 1 LANE OF TRAFFIC ON EXISTING PAVEMENT IN WORK AREA. BEYOND WORK AREA ALL LANES OPEN IN EXISTING LANE LOCATION/CONFIGURATION.

- RAMP C3
- RAMP CLOSED FOR 14 CALENDAR DAYS. DETOUR TRAFFIC TO RAMP C2 AND BRAINARD ROAD. MAINTAIN 1 LANE OF TRAFFIC ON EXISTING PAVEMENT IN ALL OTHER PERIODS.

- CEDAR ROAD
- CLOSE THE WESTBOUND RIGHT LANE PER MT-95.31 FOR 14 DAYS CONCURRENT TO THE CLOSURE OF RAMP C3.

PHASE 2B (SEE SHEETS 63-64)

NO WORK IN THIS PHASE SHALL BEGIN BEFORE COMPLETION OF PHASE 2A WORK.

WORK THIS PHASE:

- IR 271 NORTHBOUND LOCAL LANES
- REMOVE PORTIONS OF THE EXISTING NORTHBOUND PAVEMENT AND SHOULDER ON THE OUTSIDE OF THE LOCAL LANES INCLUDING GORE AREA WITH RAMP C2.
- REMOVE GROUND MOUNTED SIGNS AND SUPPORTS, OVERHEAD SIGNS AND OVERHEAD SIGN SUPPORTS AS NOTED IN THE MOT PLANS.
- BUILD PORTIONS OF NEW NORTHBOUND FULL DEPTH PAVEMENT AND OUTSIDE SHOULDERS, DRAINAGE AND DITCH GRADING. PAVEMENT WORK SHALL OMIT CONSTRUCTION OF PERMANENT ASPHALT SURFACE COURSE.

- RAMP C2 (NORTHBOUND EXIT TO BRAINARD/CEDAR)
- REMOVE PORTIONS OF THE EXISTING PAVEMENT AND OUTSIDE SHOULDER INCLUDING GORE AREA WITH IR 271.
- BUILD NEW FULL DEPTH PAVEMENT AND INSIDE SHOULDER. PAVEMENT WORK SHALL OMIT CONSTRUCTION OF PERMANENT ASPHALT SURFACE COURSE.

- MAINTENANCE OF TRAFFIC:
- IR 271 NORTHBOUND LOCAL LANES
- MAINTAIN 3 LANES OF TRAFFIC ON EXISTING PAVEMENT BY SHIFTING LANES WEST.

- IR 271 NORTHBOUND EXPRESS LANES
- ALL LANES OPEN IN FINAL LANE POSITIONS.

- RAMP C2
- RAMP OPEN TO TRAFFIC. MAINTAIN 1 LANE OF TRAFFIC ON EXISTING PAVEMENT IN WORK AREA. BEYOND WORK AREA ALL LANES OPEN IN EXISTING LANE LOCATION/CONFIGURATION.

SEQUENCE OF CONSTRUCTION (CONT)

RESURFACING OPERATIONS (NO SHEETS PROVIDED)

THIS WORK SHALL BE COMPLETED CONCURRENTLY WITH PART 2 RESURFACING OF I-271 NORTHBOUND LOCAL LANES.

WORK THIS PHASE:

- IR 271 NB LOCAL LANES, RAMP C2/C3, AND CEDAR ROAD
- MILL EXISTING ASPHALT SURFACE TO SPECIFIED DEPTH ON EXISTING PAVEMENT TO REMAIN.
- COMPLETE PARTIAL DEPTH PAVEMENT REPAIRS AS DIRECTED BY THE ENGINEER.
- PLACE FINAL SURFACE COURSE ON RESURFACING AREAS AND NEW FULL DEPTH PAVEMENT AREAS OMITTED IN PREVIOUS PHASES.
- PLACE FINAL TRAFFIC CONTROL AND RUMBLE STRIPS AS SPECIFIED IN THE PLANS.

- MAINTENANCE OF TRAFFIC:
- IR 271 NORTHBOUND LOCAL LANES, EXPRESS LANES, AND CROSSOVER RAMPS
- USE OFF PEAK LANE AND SHOULDER CLOSURES PER THE ODOT D12 PLCS.

- RAMP C2/C3
- USE OFF PEAK RAMP CLOSURES TO COMPLETE WORK.

- CEDAR ROAD/BRAINARD ROAD
- USE FLAGGERS AND CLOSURES OF THE CURB LANE PER MT-95.31 DURING OFF PEAK PERIODS AS APPROVED BY THE ENGINEER.

DESIGN AGENCY



DESIGNER
NRE

REVIEWER
MTR 10/12/23

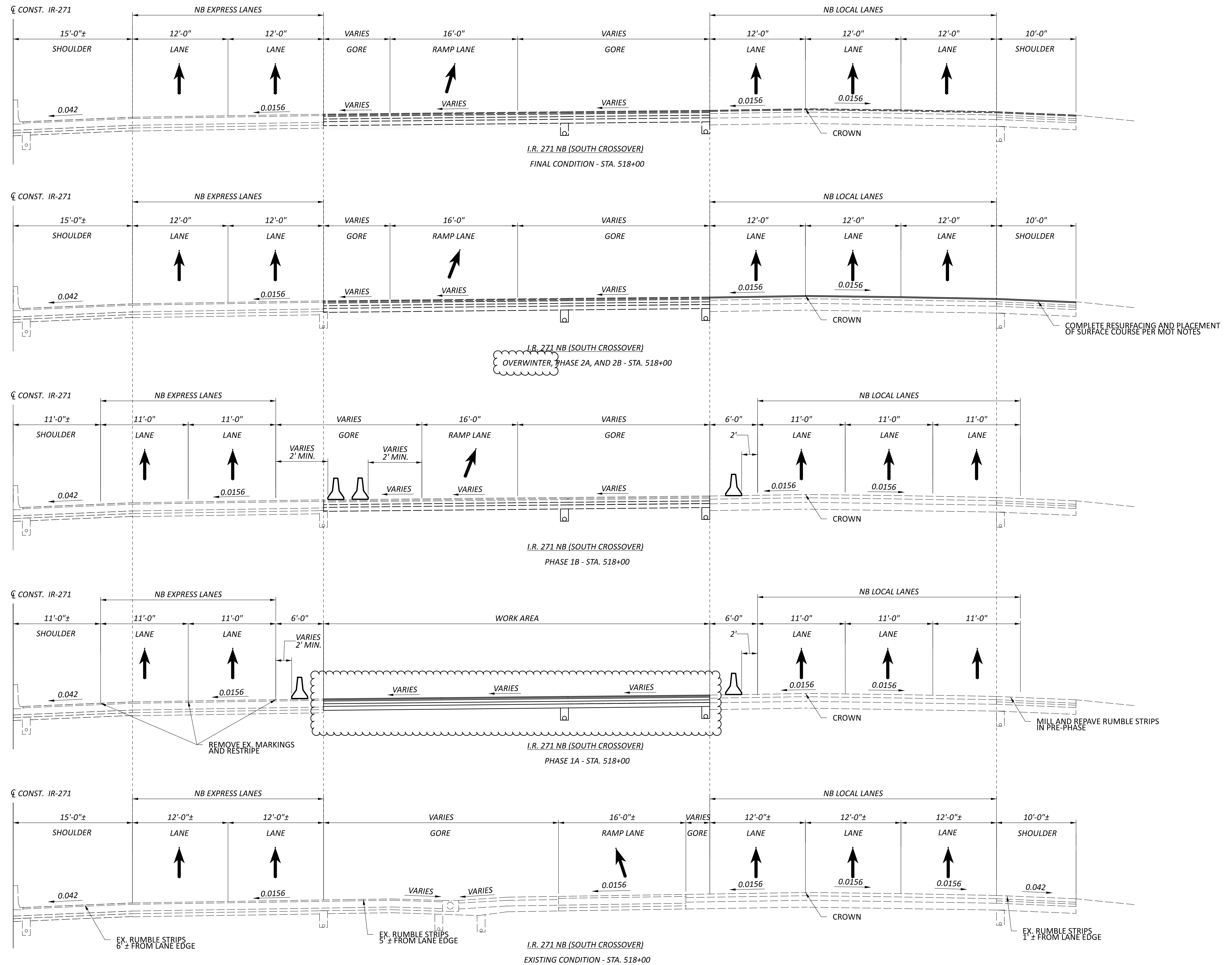
PROJECT ID
113156

SHEET TOTAL
27 233

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, 12", 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, 12", 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		FT	EACH
WORK ZONE PAVEMENT MARKINGS AND PORTABLE BARRIER																							
1B	IR-271 NB EXPRESS	508+50	511+00																				
1B	IR-271 NB EXPRESS	517+50	548+00		1		62	62							1	3050							
1B	IR-271 NB EXPRESS	532+00	535+00																				
1B	IR-271 NB LOCAL	508+50	525+84									0.06											
1B	IR-271 NB LOCAL	511+00	532+00									0.33											
1B	IR-271 NB LOCAL	517+50	564+00				93	93				0.40											
1B	IR-271 NB LOCAL	525+84	532+00																				
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		
SUBTOTALS FOR PHASE 1B CARRIED TO SHEET 31																							
				1			155	155			1.07		867		1	7700					0.06	ELW	
SUBTOTALS FOR OVERWINTER CONDITION CARRIED TO SHEET 31				1						4.55	5.28	6000	4196	735			3800					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									0.14											
2A	IR-271 NB EXPRESS	551+54	565+00									0.26											
2A	IR-271 NB EXPRESS	557+00	565+00											795									
2A	IR-271 NB CROSSOVER 1	514+75	520+48																				
2A	IR-271 NB CROSSOVER 1	517+98	527+47											1151									
2A	IR-271 NB CROSSOVER 1	517+98	527+47											1912									
2A	IR-271 NB CROSSOVER 2	545+49	551+54											1203									
2A	IR-271 NB CROSSOVER 2	549+50	557+00											1490									
2A	IR-271 NB LOCAL	508+50	517+98																				
2A	IR-271 NB LOCAL	508+50	554+00									0.19											
2A	IR-271 NB LOCAL	508+50	554+00				39					0.86											
2A	IR-271 NB LOCAL	508+50	554+00				39					0.86											
2A	IR-271 NB LOCAL	508+50	599+79																				
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																				
2A	IR-271 NB LOCAL	557+00	599+31																				
2A	IR-271 NB LOCAL	564+00	585+00																				
2A	IR-271 NB LOCAL	564+00	585+00																				
2A	IR-271 NB LOCAL	564+00	580+00																				
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+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	0.65		

PHASE	LOCATION	BEGIN STA.	END STA.	614	614	614	614	614	614	614	614	614	614	614	622	622	622	642	642	642	
				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, 12", 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, 12", 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																					
2B	IR-271 NB LOCAL	523+00	542+50								1954										
2B	IR-271 NB LOCAL	523+00	542+50								1955										
2B	IR-271 NB LOCAL	526+00	542+50								1652										
2B	IR-271 NB LOCAL	526+00	539+50							0.26											
2B	IR-271 NB LOCAL	526+00	557+00													3083					
2B	IR-271 NB LOCAL	542+50	545+49						0.06												
2B	IR-271 NB LOCAL	594+65	603+00											1	580	240					
2B	RAMP C2	113+66	116+22								259										
2B	RAMP C2	113+66	121+85							0.16											
2B	RAMP C2	113+66	116+21													257					
2B	RAMP C2	115+60	121+50													598					
2B	RAMP C2	116+22	121+48							0.11											
SUBTOTALS FOR PHASE 2B									0.06	0.53	5820				1	4518	240				
SUBTOTALS SHEET 29				5310	3	1140	230	304	3.02	5.07	8083	2704			1	16050	500	7642		8.73	
SUBTOTALS SHEET 30				4009	3	199	225	239	8.15	11.26	20447	8528	1471	35	1	14393	1250	246	5	0.71	
TOTALS CARRIED TO GENERAL SUMMARY				9319	6	1339	455	543	11.23	16.86	34350	11232	1471	35	3	34961	1990	7888	5	9.44	
SEE SHEET 23 FOR ADDITIONAL WORK ZONE PAVEMENT MARKING QUANTITIES ASSOCIATED WITH RESURFACING OPERATIONS																					

MAINTENANCE OF TRAFFIC SUBSUMMARY



MAINTENANCE OF TRAFFIC TYPICAL SECTIONS
 SOUTH CROSSOVER - STA. 518+00

DESIGN AGENCY

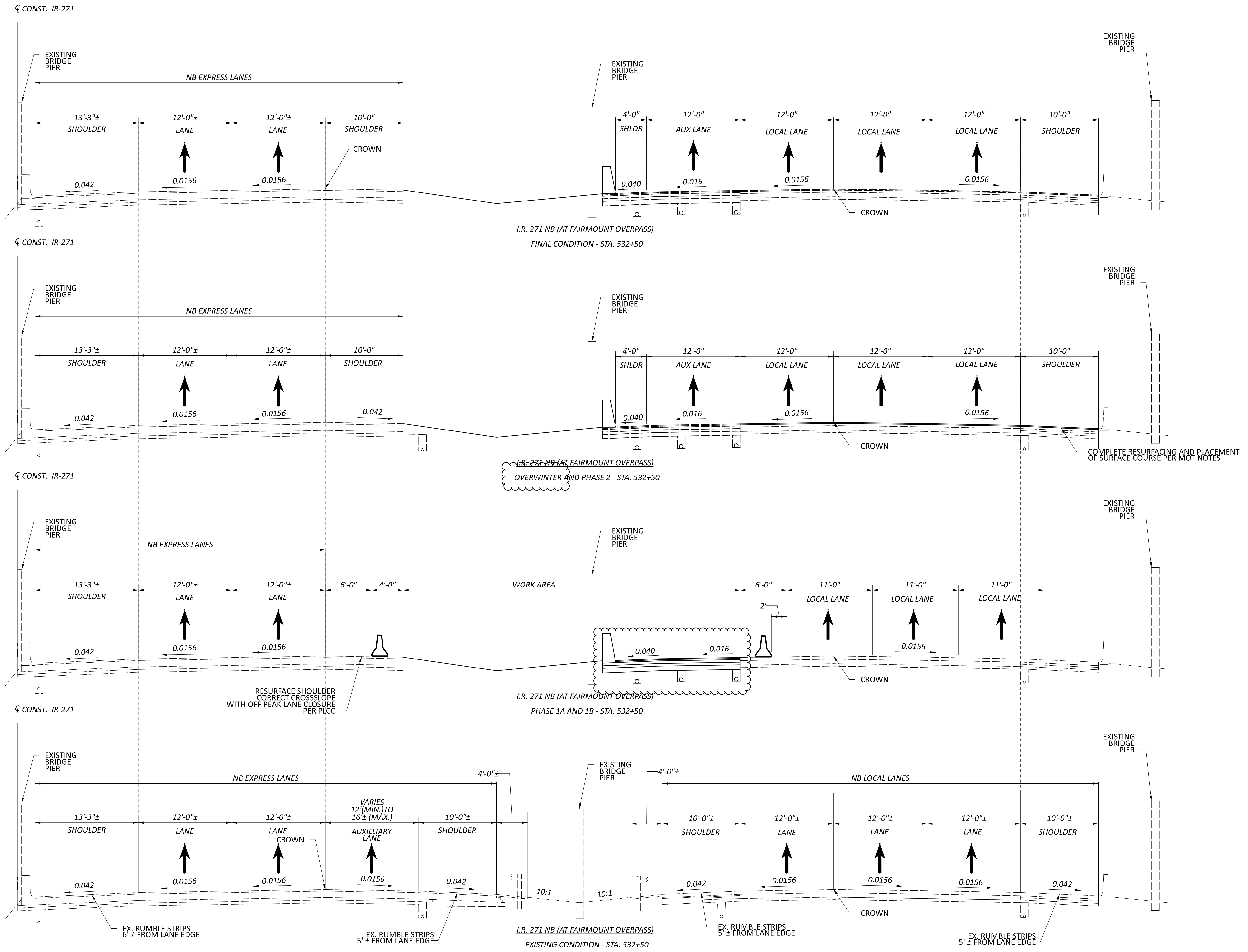


DESIGNER
NRE

REVIEWER
MTR 10/12/23

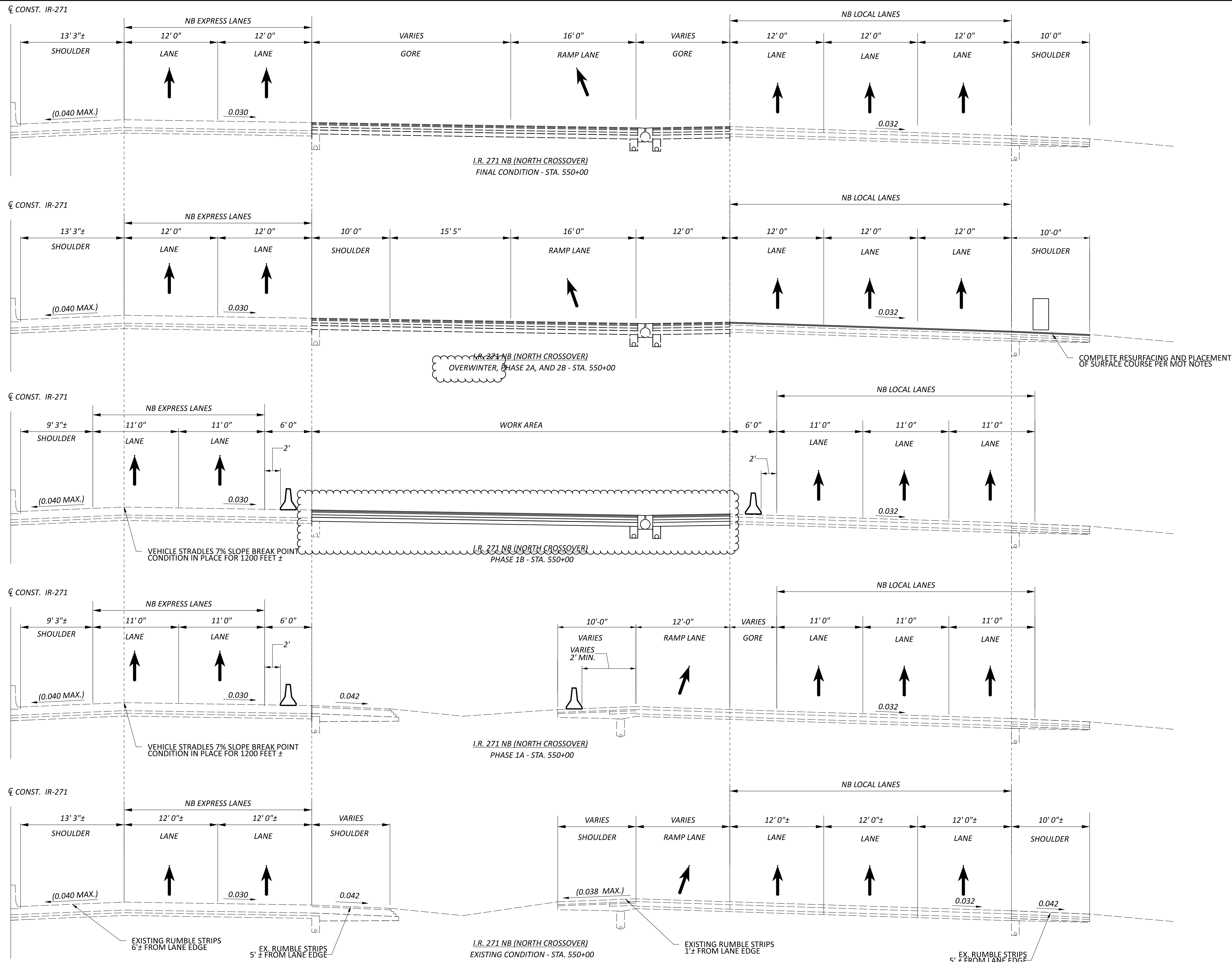
PROJECT ID
113156

SHEET TOTAL
32 233



MAINTENANCE OF TRAFFIC TYPICAL SECTIONS
 FAIRMOUNT OVERPASS - STA. 532+50

DESIGN AGENCY	HNTB
DESIGNER	NRE
REVIEWER	MTR 10/12/23
PROJECT ID	113156
SHEET	TOTAL
33	233



MAINTENANCE OF TRAFFIC TYPICAL SECTIONS
 NORTH CROSSOVER - STA. 550+00

DESIGN AGENCY

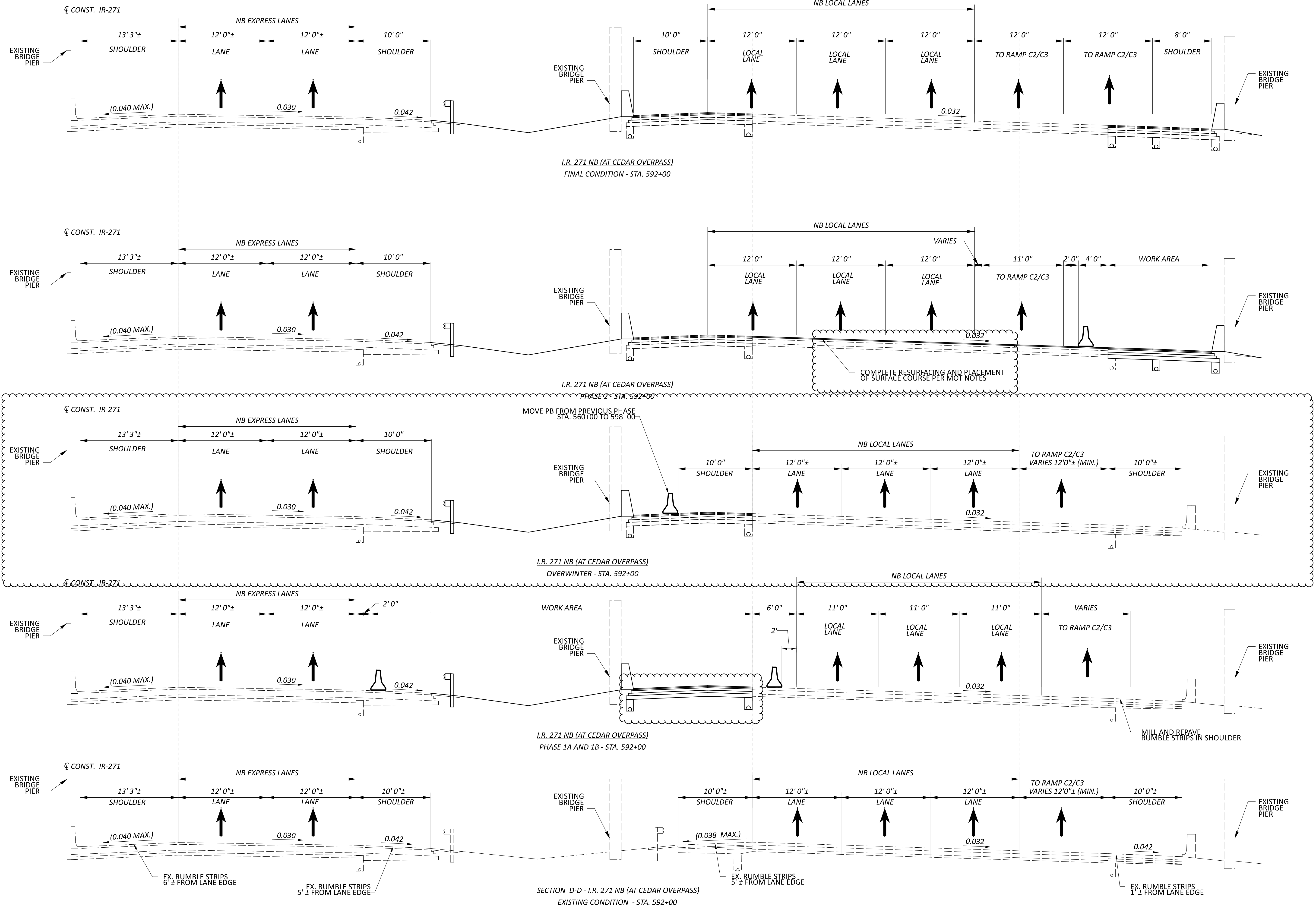


DESIGNER
NRE

REVIEWER
MTR 10/12/23

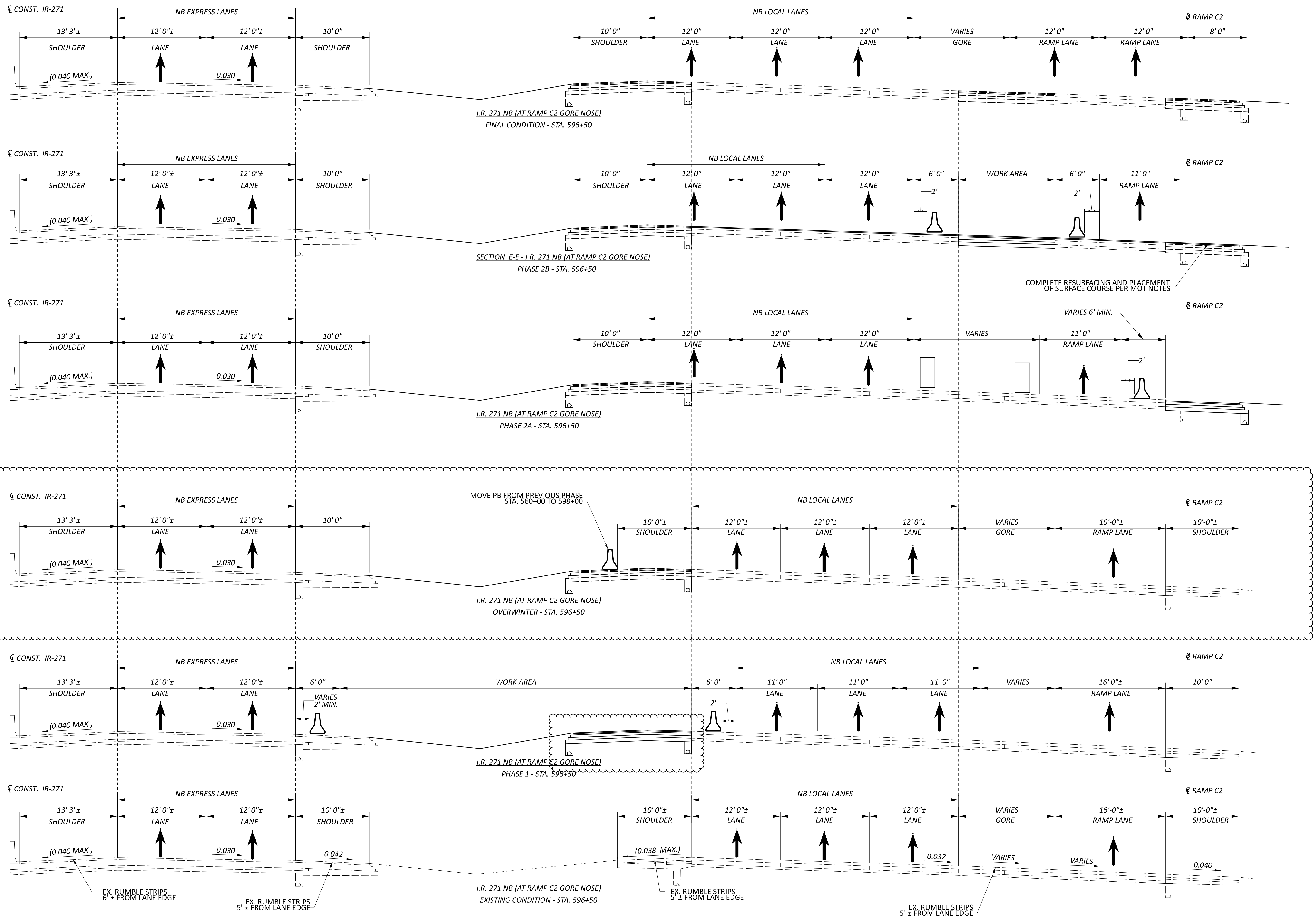
PROJECT ID
113156

SHEET TOTAL
34 233



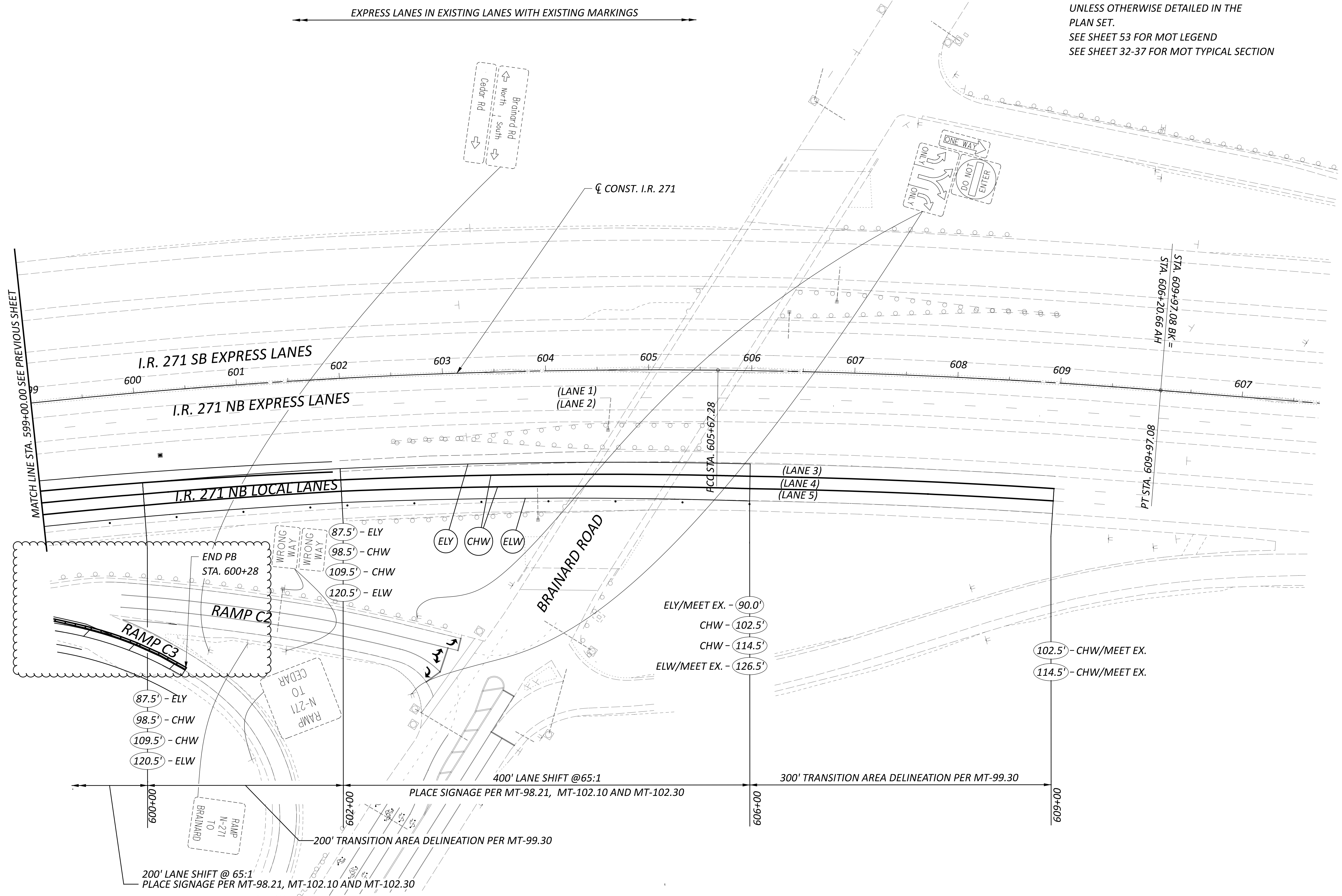
SECTION D-D - I.R. 271 NB (AT CEDAR OVERPASS)
 EXISTING CONDITION - STA. 592+00

DESIGN AGENCY	HNTB
DESIGNER	NRE
REVIEWER	MTR 10/12/23
PROJECT ID	113156
SHEET	TOTAL
35	233

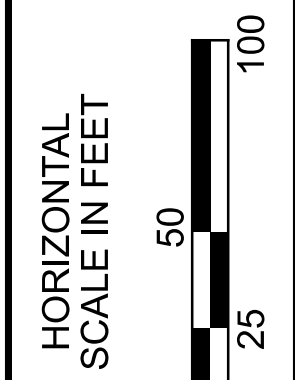
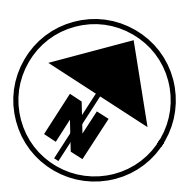


MAINTENANCE OF TRAFFIC TYPICAL SECTIONS
 RAMP C2 GORE NOSE - STA. 596+50

DESIGN AGENCY	
HNTB	
DESIGNER	NRE
REVIEWER	MTR 10/12/23
PROJECT ID	113156
SHEET	TOTAL
36	233



NOTE: SIGNAGE FOR MAINTENANCE OF TRAFFIC SHALL BE PLACED PER THE REFERENCED STANDARD CONSTRUCTION DRAWINGS UNLESS OTHERWISE DETAILED IN THE PLAN SET.
 SEE SHEET 53 FOR MOT LEGEND
 SEE SHEET 32-37 FOR MOT TYPICAL SECTION



MAINTENANCE OF TRAFFIC - PHASE 2A
 STA. 599+00.00 TO STA. 607+73.53

DESIGN AGENCY






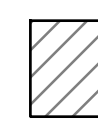
DESIGNER	NRE
REVIEWER	MTR 09/27/23
PROJECT ID	113156
SHEET	TOTAL
61	233

SHEET NUM.						PART.			ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
19	22	23	24	26	31	01/SAF/21	02/NFP/05	03/IMS/05						
				280		140		140	614	11110	280	hour	MAINTENANCE OF TRAFFIC LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE	26
					9,319	9,319			614	11630	9,319	FT	INCREASED BARRIER DELINEATION	
	3				6	6			614	12360	6	EACH	WORK ZONE IMPACT ATTENUATOR (REPLACEMENT) (UNIDIRECTIONAL)	
			24			6			614	12380	6	EACH	WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (UNIDIRECTIONAL)	24
						12		12	614	12484	24	EACH	WORK ZONE INCREASED PENALTIES SIGN	24
					1,339	1,339			614	12801	1,339	EACH	WORK ZONE RAISED PAVEMENT MARKER, AS PER PLAN	23
	50					50			614	13000	50	CY	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC	
					455	455			614	13310	455	EACH	BARRIER REFLECTOR, TYPE 1, ONE WAY	26
					543	543			614	13350	543	EACH	OBJECT MARKER, ONE WAY	26
			48			24		24	614	18601	48	SNMT	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN	24
					11.23	11.23			614	20056	11.23	MILE	WORK ZONE LANE LINE, CLASS I, 6", 807 PAINT	
		9.27				9.27			614	20110	9.27	MILE	WORK ZONE LANE LINE, CLASS I, 6", 642 PAINT	
		5.35				5.35			614	20560	5.35	MILE	WORK ZONE LANE LINE, CLASS III, 6", 642 PAINT	
					16.86	16.86			614	22056	16.86	MILE	WORK ZONE EDGE LINE, CLASS I, 6", 807 PAINT	
		8.92				8.92			614	22110	8.92	MILE	WORK ZONE EDGE LINE, CLASS I, 6", 642 PAINT	
					6.11	6.11			614	22360	6.11	MILE	WORK ZONE EDGE LINE, CLASS III, 6", 642 PAINT	
					34,350	34,350			614	23110	34,350	FT	WORK ZONE CHANNELIZING LINE, CLASS I, 12", 807 PAINT	
		11,156				11,156			614	23210	11,156	FT	WORK ZONE CHANNELIZING LINE, CLASS I, 12", 642 PAINT	
		7,882				7,882			614	23690	7,882	FT	WORK ZONE CHANNELIZING LINE, CLASS III, 12", 642 PAINT	
					11,232	11,232			614	24102	11,232	FT	WORK ZONE DOTTED LINE, CLASS I, 6", 807 PAINT	
					12,524	12,524			614	24202	12,524	FT	WORK ZONE DOTTED LINE, CLASS I, 6", 642 PAINT	
		6,876				6,876			614	24612	6,876	FT	WORK ZONE DOTTED LINE, CLASS III, 6", 642 PAINT	
		978			1,471	2,449			614	25200	2,449	FT	WORK ZONE TRANSVERSE/DIAGONAL LINE, CLASS I, 642 PAINT	
		871				871			614	25620	871	FT	WORK ZONE TRANSVERSE/DIAGONAL LINE, CLASS III, 642 PAINT	
		108				108			614	26200	108	FT	WORK ZONE STOP LINE, CLASS I, 642 PAINT	
						54			614	26610	54	FT	WORK ZONE STOP LINE, CLASS III, 642 PAINT	
		456			35	491			614	27050	491	FT	WORK ZONE CROSSWALK LINE, CLASS I, 12", 642 PAINT	
		228				228			614	27250	228	FT	WORK ZONE CROSSWALK LINE, CLASS III, 12", 642 PAINT	
		50				50			614	30200	50	EACH	WORK ZONE ARROW, CLASS I, 642 PAINT	
		34				34			614	30650	34	EACH	WORK ZONE ARROW, CLASS III, 642 PAINT	
						LS			615	10000	LS		ROADS FOR MAINTAINING TRAFFIC	
						50			616	10000	50	MGAL	WATER	23
					3	3			622	41060	3	EACH	DUAL PORTABLE BARRIER TRANSITION/TERMINATION	
					34,961	34,961			622	41100	34,961	FT	PORTABLE BARRIER, UNANCHORED	
					1,990	1,990			622	41110	1,990	FT	PORTABLE BARRIER, ANCHORED	
					7,888	7,888			642	30000	7,888	FT	REMOVAL OF PAVEMENT MARKING	
					5	5			642	30020	5	EACH	REMOVAL OF PAVEMENT MARKING	
					9.44	9.44			642	30030	9.44	MILE	REMOVAL OF PAVEMENT MARKING	
			48			24		24	808	18700	48	SNMT	DIGITAL SPEED LIMIT (DSL) SIGN ASSEMBLY	23
						LS			108	10000	LS		INCIDENTALS CPM PROGRESS SCHEDULE	
						LS			614	11000	LS		MAINTAINING TRAFFIC	22
8						4		4	619	16021	8	MNTH	FIELD OFFICE, TYPE C, AS PER PLAN	19
LS						LS		LS	623	10001	LS		CONSTRUCTION LAYOUT STAKES AND SURVEYING, AS PER PLAN	19
						LS			624	10000	LS		MOBILIZATION	







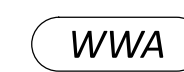
GENERAL SUMMARY

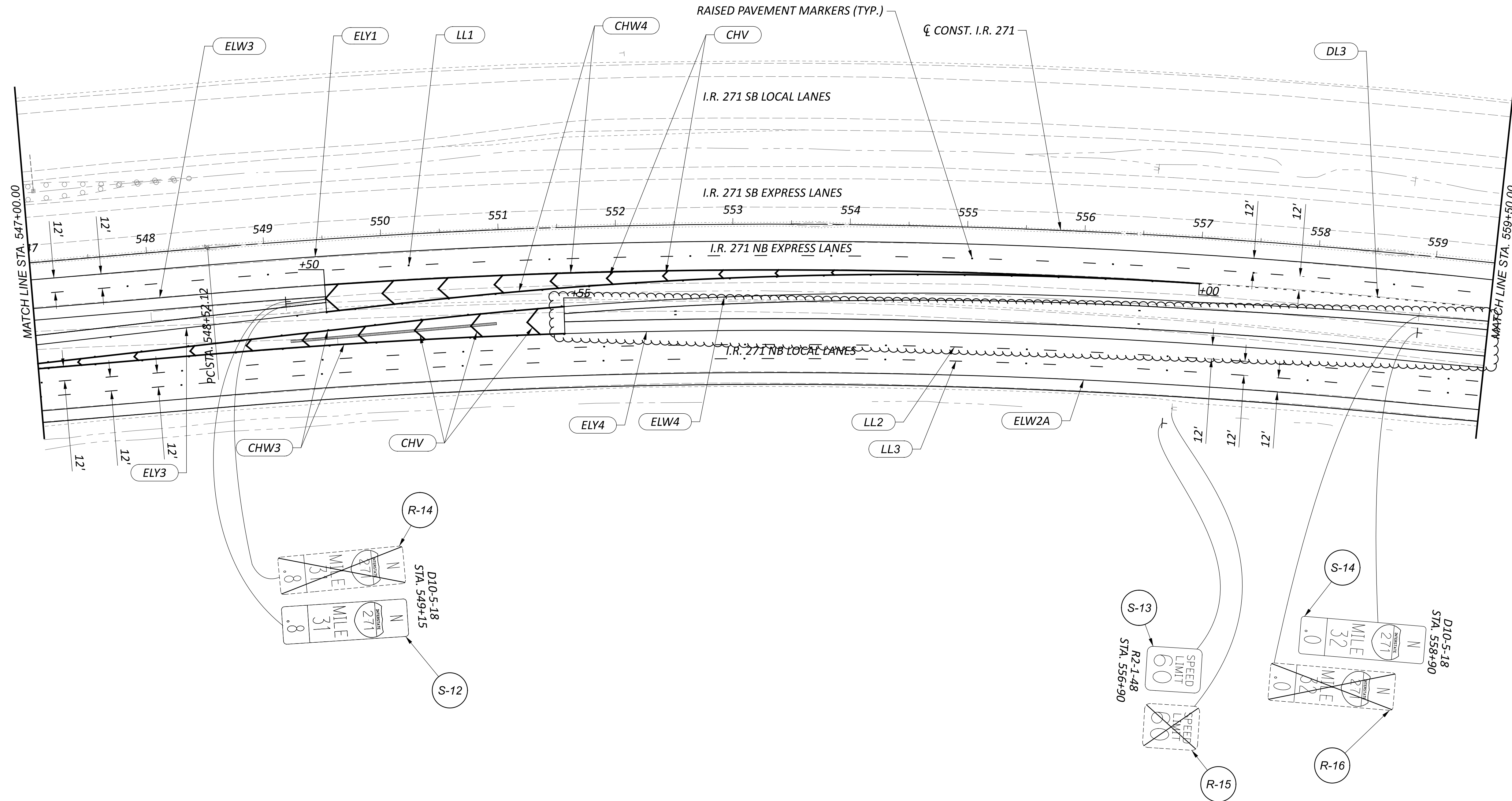
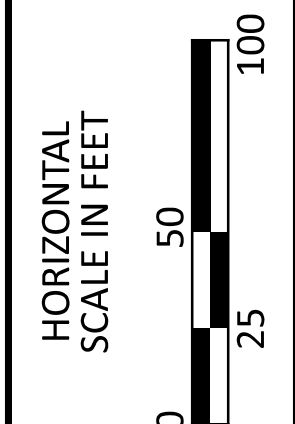
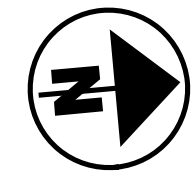
DESIGN AGENCY	
HNTB	
DESIGNER	AS
REVIEWER	
MTR	02/27/24
PROJECT ID	113156
SHEET	68
TOTAL	233

SIGNING LEGEND

-  = PROPOSED SIGN
-  = EXISTING SIGN TO REMAIN
-  = EXISTING SIGN TO BE REMOVED
-  = EXISTING SIGN TO BE REMOVED AND RESET

PAVEMENT MARKING LEGEND

-  ELW EDGE LINE, 6" (WHITE)
-  ELY EDGE LINE, 6" (YELLOW)
-  CHW CHANNELIZING LINE, 12" (WHITE)
-  CHV CHEVRON MARKING, 24"
-  LL LANE LINE, 6"
-  DL DOTTED LINE, 6"
-  WWA WRONG WAY ARROW



TRAFFIC CONTROL
 STA. 547+00 TO STA. 559+50

DESIGN AGENCY	HNTB
DESIGNER	MTD
REVIEWER	MTR 12/09/22
PROJECT ID	113156
SHEET	TOTAL
210	233

Drainage

Review of Drainage Facilities

Before any work is started on the project and again before final acceptance by the State, representatives of the State and the Contractor, along with local representatives, shall make an inspection of all existing sewers which are to remain in service and which may be affected by the work. The condition of the existing conduits and their appurtenances shall be determined from field observations. Records of the inspection shall be kept in writing by the State.

All new conduits, inlets, catch basins and manholes constructed as part of the project shall be free of all foreign matter and in a clean condition before the project will be accepted by the State.

All existing sewers inspected initially by the above mentioned parties shall be maintained and left in a condition reasonably comparable to that determined by the original inspection. Any change in the condition resulting from the Contractor's operations shall be corrected by the Contractor to the satisfaction of the Engineer.

Payment for all operations described above shall be included in the contract price for the pertinent 611 drainage items.

Castings Adjusted to Grade, As Per Plan

All castings shall be adjusted to the finished roadway elevation by the Contractor. The time between adjusting the castings and resurfacing shall be kept to an absolute minimum. No adjusting rings shall be permitted. When performing this work, the pavement shall be sawcut prior to removal and hook bolts shall be used where practical to connect existing pavement to new concrete.

The following estimated quantities have been carried to the General Summary:

Item 611 – Catch Basin Adjusted to Grade, As Per Plan..... **4 Each**

Castings Reconstructed to Grade

The Contractor and Field Engineer shall field check all existing catch basins, manholes, or monument boxes located within the limits of the project. Any casting found that exhibits substantial deterioration and requires more work than is specified under "Castings Adjusted to Grade" shall be "Reconstructed to Grade" as directed by the Engineer. If none are needed, these items are to be non-performed

The following estimated quantities have been carried to the General Summary:

Item 611 – Catch Basin Reconstructed to Grade **2 Each**
Item 611 – Manhole Reconstructed to Grade **2 Each**

Item Special – Miscellaneous Metal

Existing castings may prove to be unsuitable for reuse, as determined by the Engineer. It shall be the Contractor's responsibility to provide the castings of the required type, size, and strength (heavy duty) for the particular structure in question. All materials must meet Item 611 of the CMS and shall have the prior approval of the Engineer.

The Contractor is cautioned to use extreme care in the removal, storage, and replacement of all existing castings. Castings damaged by the negligence of the Contractor, as determined by the Engineer, shall be replaced with the proper new castings at the expense of the Contractor.

The Contractor shall not order materials until authorized by the Engineer, and if none are needed, the item shall be non-performed.

The following estimated quantity has been carried to the General Summary for use as directed by the Engineer:

Item Special – Miscellaneous Metal **5,000 Lbs**

Pavement

Profile and Alignment

Place the proposed pavement to follow the alignment of the existing pavement. Previous construction plans showing the original alignment are available for inspection at the ODOT District 12 office. Place the proposed asphalt concrete as shown on the typical sections. The intent of the plans is to maintain the existing profile.

Planing Requirements

The duration of time between planing the asphalt and placing the asphalt overlay shall be kept to a minimum. In no instance shall this time exceed 10 calendar days. The time limit shall begin on the first day of planing and shall continue based on calendar days, minus any weather days, until completion of the asphalt concrete surface course. This is to ensure that the potential degradation of the exposed pavement due to traffic is kept to a minimum. This requirement applies to both mainline and ramps alike.

In the event that the time between exposing the existing pavement and placing the asphalt surface course exceeds 10 calendar days, liquidated damages as per 108.07 of the CMS shall be assessed.

Asphalt Concrete Surface Course Sealing Requirements

In addition to the gutter sealing requirements specified in SCD BP-3.1 and C&MS 401.15, after completion of the surface course, the contractor shall use a certified 702.01 PG binder to seal the following locations:

- All castings including but not limited to monuments, manholes, water valves, catch basins, curb inlets.
- Butt joints and feather joints including bridge approaches.
- Forward joint for driveway asphalt and trailing joint when butting to existing asphalt drive.
- Perimeter of all pavement repairs or other asphalt inlays when pavement repairs /inlays are not overlaid with an asphalt concrete surface course.
- All cold longitudinal joints between paved shoulders and guardrail asphalt.

The material used shall be a certified 702.01 PG binder. The width of the sealer shall be 2-3 inches.

Any additional costs associated with the work identified in this note shall be included in the appropriate asphalt concrete surface course item of work.

Longitudinal Joints (Flexible Pavement)

Longitudinal joints between a pavement lane and adjoining shoulder or speed change lane, and between a speed change lane and the adjoining shoulder shall be made the same day. All longitudinal joints shall be hot with the exception of one cold joint per roadway. Locate the cold joint along the centerline or a lane line. Longitudinal joint locations shall be as approved by the Engineer. Each ramp shall have a maximum of one longitudinal cold joint located approximately halfway across the ramp.

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 1.5" 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 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 planing operation. The depth of the repair shall be 6.5" below the top of the existing asphalt surface. The width of the repair shall be 24" 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 **1,303 Sq Yd**

Item 251 - Partial Depth Pavement Repair (442), As Per Plan A

This item shall be used for the repair of unsound, cold-patch, or pop-out areas of longitudinal joints as directed by the Engineer. This work shall be performed prior to the planing operation. The depth of the repair shall be 6.5" below the top of the existing asphalt surface. The width of the repair shall be 24" 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 A **2,184 Sq Yd**

General Notes

DESIGN AGENCY



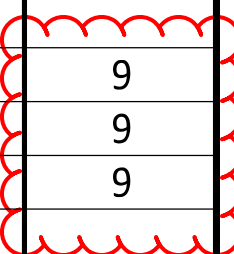
DESIGNER
JDA

REVIEWER
EJK 07/31/23

PROJECT ID
113156

SHEET TOTAL
9 33

SHEET NUM.											PART.		ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
7-11	12-15	18	19	20	21	22	23				04/IMS/05							
																	ROADWAY	
450											450	209	60201	450	STA	LINEAR GRADING, AS PER PLAN	8	
																	EROSION CONTROL	
											1,000	832	30000	1,000	EACH	EROSION CONTROL		
																	DRAINAGE	
4											4	611	98631	4	EACH	CATCH BASIN ADJUSTED TO GRADE, AS PER PLAN	9	
2											2	611	98634	2	EACH	CATCH BASIN RECONSTRUCTED TO GRADE		
2											2	611	99660	2	EACH	MANHOLE RECONSTRUCTED TO GRADE		
5,000											5,000	SPECIAL	61199820	5,000	LB	MISCELLANEOUS METAL	9	
																	PAVEMENT	
4,368											4,368	251	01021	4,368	SY	PARTIAL DEPTH PAVEMENT REPAIR (442), AS PER PLAN A	9	
2,606											2,606	251	01021	2,606	SY	PARTIAL DEPTH PAVEMENT REPAIR (442), AS PER PLAN B	9	
		209,696	50,897								260,593	254	01001	260,593	SY	PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN, 1.5"	9	
		17,824	4,324								22,148	407	20000	22,148	GAL	NON-TRACKING TACK COAT		
		5,242	570								5,812	442	00100	5,812	CY	ANTI-SEGREGATION EQUIPMENT		
			2,138								2,138	442	10001	2,138	CY	ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (446), AS PER PLAN, PWL, 2025, PG76-22M	10	
		8,762									8,762	442	10301	8,762	CY	ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (447), AS PER PLAN, PWL, 2025, PG76-22M	10	
276											276	617	10101	276	CY	COMPACTED AGGREGATE, AS PER PLAN	10	
12											12	618	40601	12	MILE	RUMBLE STRIPS, SHOULDER (ASPHALT CONCRETE), AS PER PLAN	10	
				45,888	71,341	13,271	15,103				145,603	850	10110	145,603	FT	GROOVING FOR 6" RECESSED PAVEMENT MARKING, (ASPHALT)		
				4,184	6,777	244	1,080				12,285	850	10130	12,285	FT	GROOVING FOR 12" RECESSED PAVEMENT MARKING, (ASPHALT)		
				1,423	1,371	6,776	2,667				12,237	850	20110	12,237	FT	GROOVING FOR 6" RECESSED PAVEMENT MARKING, (CONCRETE)		
					183	1,140	91				1,414	850	20130	1,414	FT	GROOVING FOR 12" RECESSED PAVEMENT MARKING, (CONCRETE)		
			14,119								14,119	872	10000	14,119	FT	VOID REDUCING ASPHALT MEMBRANE (VRAM)		
																	TRAFFIC CONTROL	
				85	125	69	75				354	620	00500	354	EACH	DELINEATOR, POST GROUND MOUNTED		
				372	619	178	173				1,342	621	00100	1,342	EACH	RPM		
1,007											1,007	621	54000	1,007	EACH	RAISED PAVEMENT MARKER REMOVED		
											197	646	10400	197	FT	STOP LINE		
											1,048	646	10510	1,048	FT	CROSSWALK LINE, 12"		
											91	646	10600	91	FT	TRANSVERSE/DIAGONAL LINE		
											50	646	20300	50	EACH	LANE ARROW		
				5.08	7.34	3.42	3.33				19.17	807	12010	19.17	MILE	WET REFLECTIVE EPOXY PAVEMENT MARKING, EDGE LINE, 6"		
				3.86	6.45	0.22					10.53	807	12110	10.53	MILE	WET REFLECTIVE EPOXY PAVEMENT MARKING, LANE LINE, 6"		
				4,184	6,960	1,384	2,377				14,905	807	12310	14,905	FT	WET REFLECTIVE EPOXY PAVEMENT MARKING, CHANNELIZING LINE, 12"		
				4,420	2,365						6,785	807	12410	6,785	FT	WET REFLECTIVE EPOXY PAVEMENT MARKING, DOTTED LINE, 6"		



General Summary

DESIGN AGENCY



DESIGNER
JDA

REVIEWER
EJK 07/31/23

PROJECT ID
113156

SHEET TOTAL
16 33