



PIPESTONE COUNTY, MN

ESTIMATED QUANTITIES

SPEC. NUMBER	ITEM	UNIT	REGULAR PARTIC.	MUNICIPAL PARTIC.	TOTAL QUANTITY
2221.509	SHOULDER BASE AGGREGATE, CLASS 1	TON	25805	854	26659
2232.504	MILL BITUMINOUS SURFACE (2.0")	SQ YD	8496	4516	13012
2357.506	BITUMINOUS MATERIAL FOR TACK COAT	GAL.	19557	1295	20852
2360.509	TYPE SP 12.5 WEARING COURSE MIXTURE (2,B)	TON	26792	1673	28465
2563.601	TRAFFIC CONTROL	LS	0.94	0.06	1
2582.503	4" SOLID LINE PAINT	LIN FT	44489	540	45029
2582.503	6" SOLID LINE PAINT	LIN FT	171506	3085	174591
2582.503	24" SOLID LINE PAINT	LIN FT	96	12	108
2582.503	4" BROKEN LINE PAINT	LIN FT	15927	341	16268
2582.503	4" DOUBLE SOLID LINE PAINT	LIN FT	6447	0	6447
2582.518	PAVEMENT MESSAGE PAINT	SQ FT	200	0	200

BASIS FOR PLANNED QUANTITIES

COMPACTED DENSITY AGGREGATE SHOULDERING (140 LBS. / CU. FT.) (DRY WEIGHT)

MIXTURE FOR 2" WEARING COURSE (220 LBS. / SQ. YD.)

MIXTURE FOR 1" LEVELING COURSE (110 LBS. / SQ. YD.)

BITUMINOUS MATERIAL FOR TACK COAT, EACH APPLICATION (0.08 GAL. / SQ. YD.) (EST.) UNMILLED AREAS

BITUMINOUS MATERIAL FOR TACK COAT, EACH APPLICATION (0.10 GAL. / SQ. YD.) (EST.) MILLED AREAS

2 STREET INTERSECTIONS, 26 INTERSECTIONS, 48 FARM ENTRANCES, 84 FIELD ENTRANCES, 26 MAILBOX APPROACHES, 2 RIGHT LANES AND 7 LEVELING LOCATIONS

ITEM 2221.509 INCLUDES 8756 TONS FOR EXISTING 1"-2" LOW SHOULDERS

ITEM 2332.504 AREAS TO BE MILLED AS SHOWN IN THE TYPICAL SECTIONS, IN ADDITION TO 2 STREET INTERSECTIONS AND AS DIRECTED BY THE ENGINEER

ITEM 2332.504 TRANSITION TAPERS ARE TO BE PAID AS MILL BITUMINOUS SURFACE (2.0")

ITEM 2357.506 INCLUDES 2660 GAL. FOR INTERSECTIONS, ENTRANCES, MAILBOX APPROACHES, TURN LANES AND LEVELING

ITEM 2360.509 INCLUDES 3584 TONS FOR INTERSECTIONS, ENTRANCES, MAILBOX APPROACHES, TURN LANES AND LEVELING

ITEM 2582.503 4" LINE PAINT SHALL BE YELLOW, 6" SOLID LINE PAINT SHALL BE WHITE

ITEM 2582.503 24" SOLID LINE PAINT, SHALL BE WHITE STOP BARS FOR 9 INTERSECTIONS

ITEM 2582.518 INCLUDES 4 STOP AHEAD MESSAGES AT 50 SQ. FT. EACH

LEVELING LOCATIONS: 226+03 (125x24), 270+39 (140x24), 354+27 (95x24), 365+57 (80x24), 382+00 (180x24), 467+14 (140x24) AND 678+88 (85x24)

ALL TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE LATEST MMUTCD, INCLUDING THE LATEST FIELD MANUAL FOR TEMPORARY TRAFFIC CONTROL ZONE LAYOUTS. THE CONTRACTOR SHALL FURNISH, INSTALL, MAINTAIN, AND REMOVE ALL TRAFFIC CONTROL DEVICES REQUIRED TO PROVIDE SAFE MOVEMENT OF VEHICULAR AND/OR PEDESTRIAN TRAFFIC PASSING THROUGH THE WORK ZONE DURING THE LIFE OF THE CONTRACT OPERATIONS TO THE FINAL COMPLETION THEREOF. THE ENGINEER WILL HAVE THE RIGHT TO MODIFY THE REQUIREMENTS FOR TRAFFIC CONTROL AS DEEMED NECESSARY DUE TO EXISTING FIELD CONDITIONS. THE COST FOR SAID SIGNAGE SHALL BE INCLUDED IN THE UNIT PRICE BID FOR 2563.601 TRAFFIC CONTROL.

UTILITIES: GOPHER STATE ONE CALL 1-800-252-1166

THE SUBSURFACE UTILITY INFORMATION IN THIS PLAN IS UTILITY QUALITY LEVEL D. THIS QUALITY LEVEL WAS DETERMINED ACCORDING TO THE GUIDELINES OF CI/ASCE 38-22 ENTITLED "STANDARD GUIDELINES FOR INVESTIGATING AND DOCUMENTING EXISTING UTILITIES.

CONTRACTORS SHALL CONTACT PUBLIC UTILITIES PRIOR TO CONSTRUCTION, SO THAT LOCATIONS OF ALL UNDERGROUND OR ABOVE GROUND FACILITIES ARE IDENTIFIED AND RELOCATED IF NECESSARY SO AS NOT TO CONFLICT WITH CONSTRUCTION OPERATIONS.

STANDARD PLATES

THE FOLLOWING STANDARD PLATES AS APPROVED BY THE F.H.W.A. SHALL APPLY ON THIS PROJECT

PLATE NO.	DESCRIPTION
8000K	TEMPORARY CHANNELIZERS

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

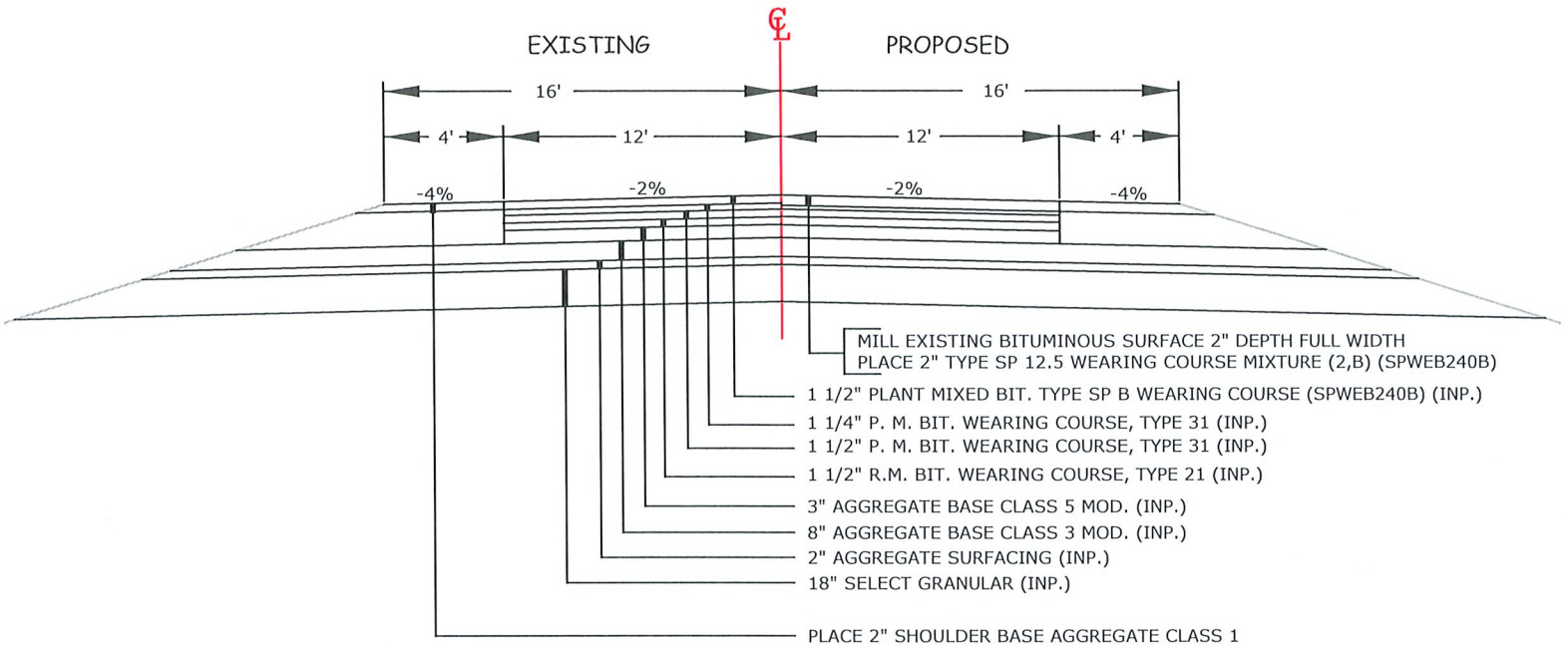
SIGNATURE:  PRINTED NAME: NICHOLAS G. BERGMAN

DATE: 10/14/2024 LICENSE NUMBER: 50636

TYPICAL SECTIONS

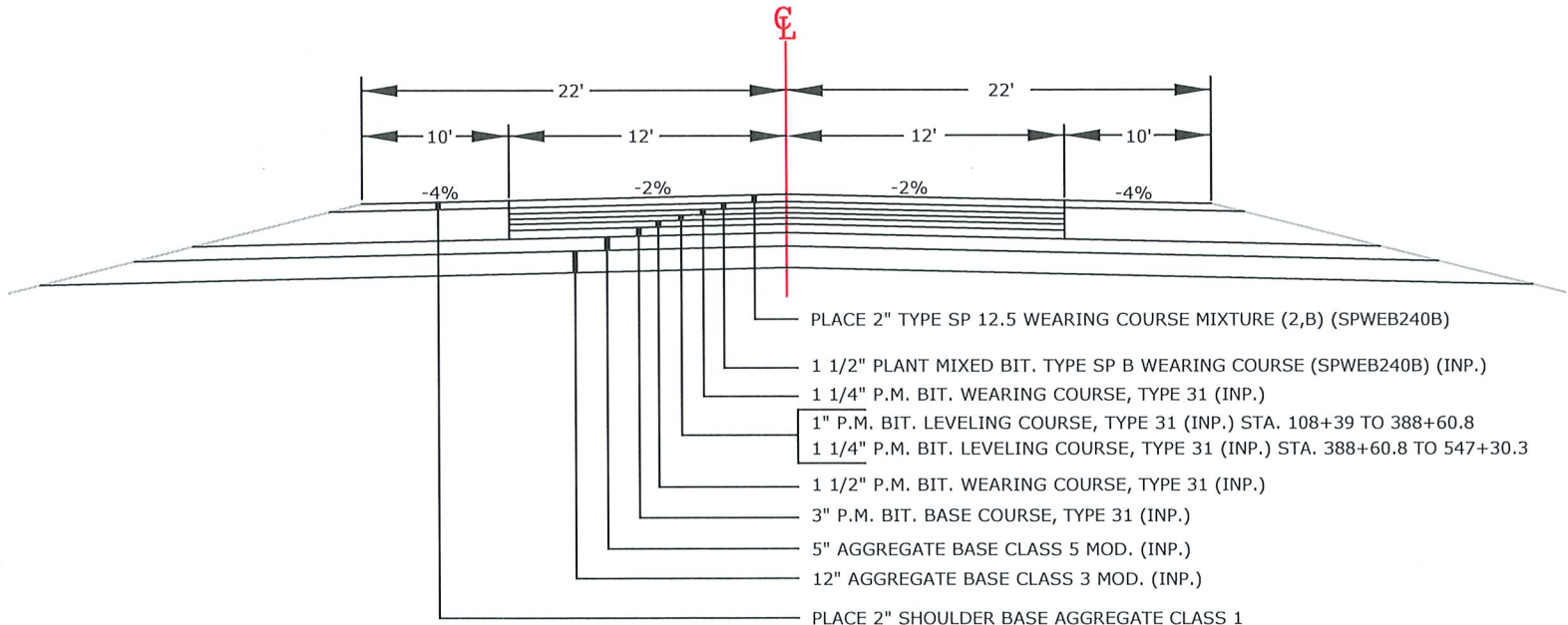
(NOT TO SCALE)

STA. 80+29.8 TO STA. 106+48.8



NOTES: MILL EXISTING BITUMINOUS SURFACE 2" DEPTH FULL WIDTH STA. 80+29.8 TO STA. 106+48.8
PAVE A 2' WIDE SHOULDER FROM STA. 105+50 TO STA. 105+84 (4" DEPTH 1 LIFT WITH OVERLAY)
(THIS MAY REQUIRE REMOVING 2" DEPTH OF EXISTING AGGREGATE SHOULDER WHICH SHALL BE INCIDENTAL TO TYPE 12.5 WEARING COURSE MIXTURE)

STA. 106+48.8 TO STA. 547+30.3



NOTE: MILL EXISTING BITUMINOUS SURFACE 2" DEPTH FULL WIDTH STA. 106+48.8 TO STA. 110+40 (TAPER 2" TO 0" IN THE LAST 75')

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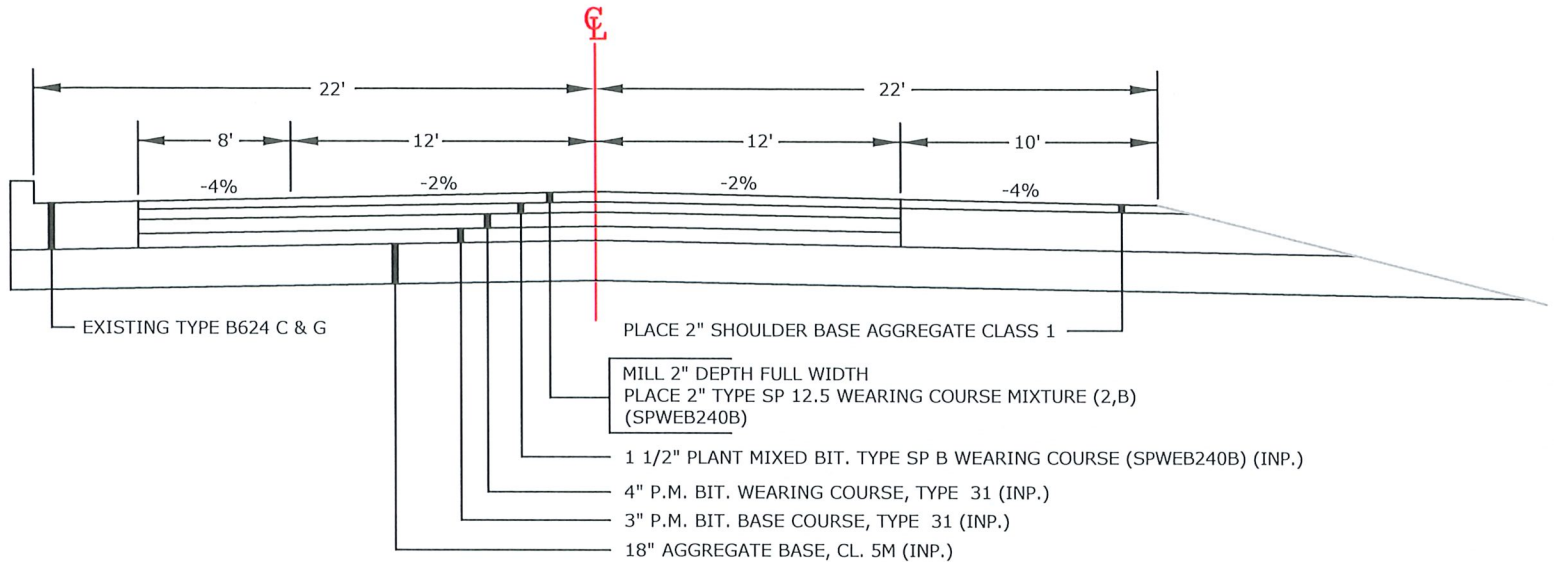
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NOTE: ALL DIMENSIONS AND SLOPES ON TYPICAL SECTIONS AND DETAILS ARE APPROXIMATE. FIELD CONDITIONS MAY REQUIRE SOME VARIATION FROM THAT SHOWN.

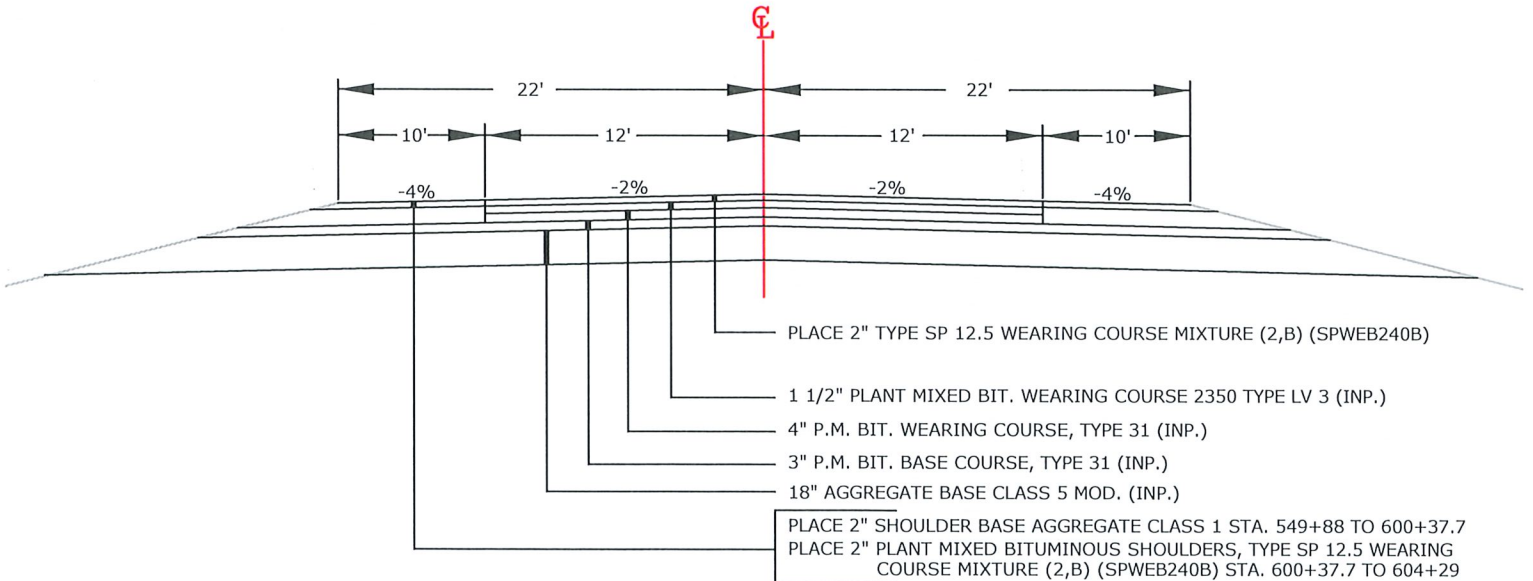
TYPICAL SECTIONS

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STA. 547+30.3 TO STA. 549+88



STA. 549+88 TO STA. 604+29



NOTES: SHOULDER SLOPES FROM STA. 600+37.7 TO 604+29 ARE -2%
MILL A TAPER 2" TO 0" DEPTH STA. 549+88 TO STA. 550+38 (FULL WIDTH) TO BE PAID AS MILL BITUMINOUS SURFACE (2.0")
MILL A TAPER 0" TO 2" DEPTH STA. 603+79 TO STA. 604+29 (FULL WIDTH) TO BE PAID AS MILL BITUMINOUS SURFACE (2.0")

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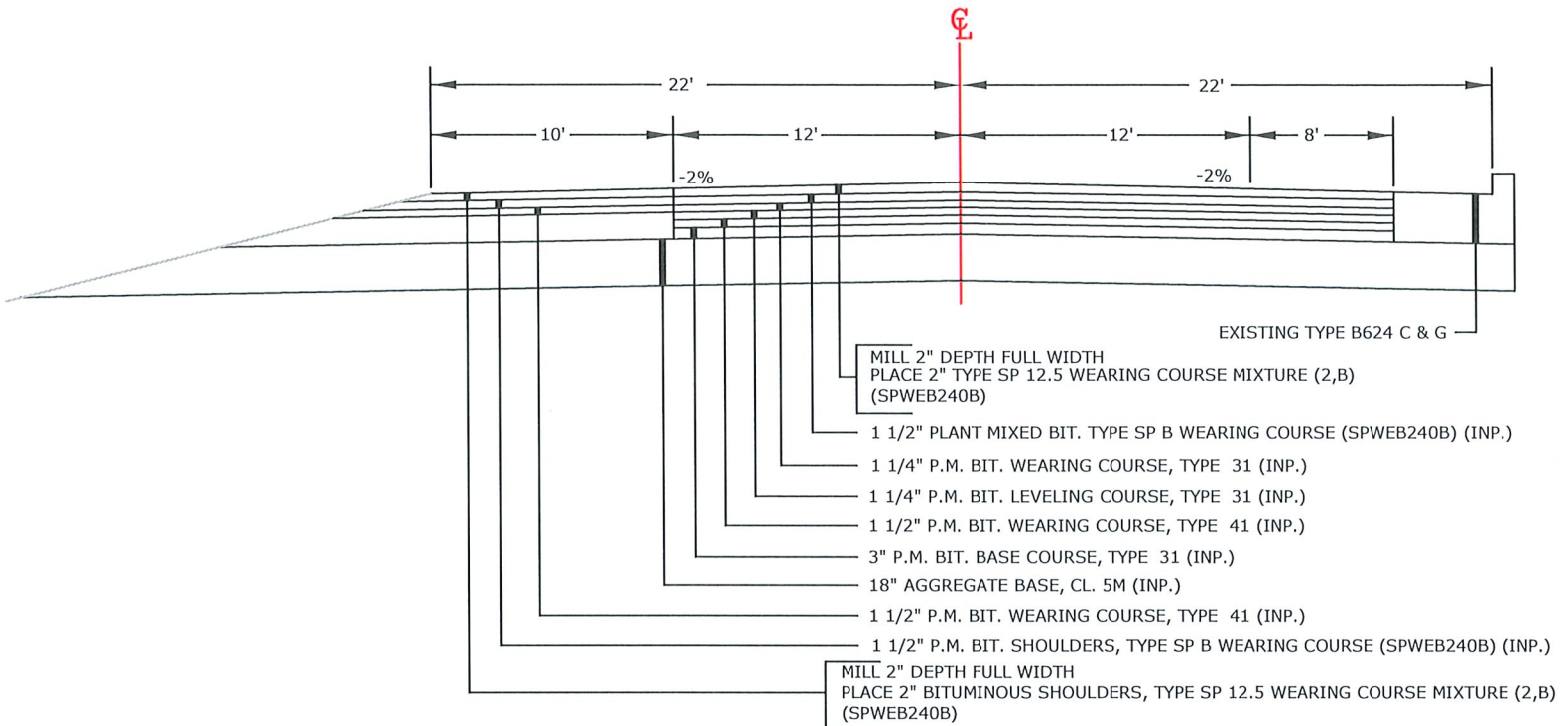
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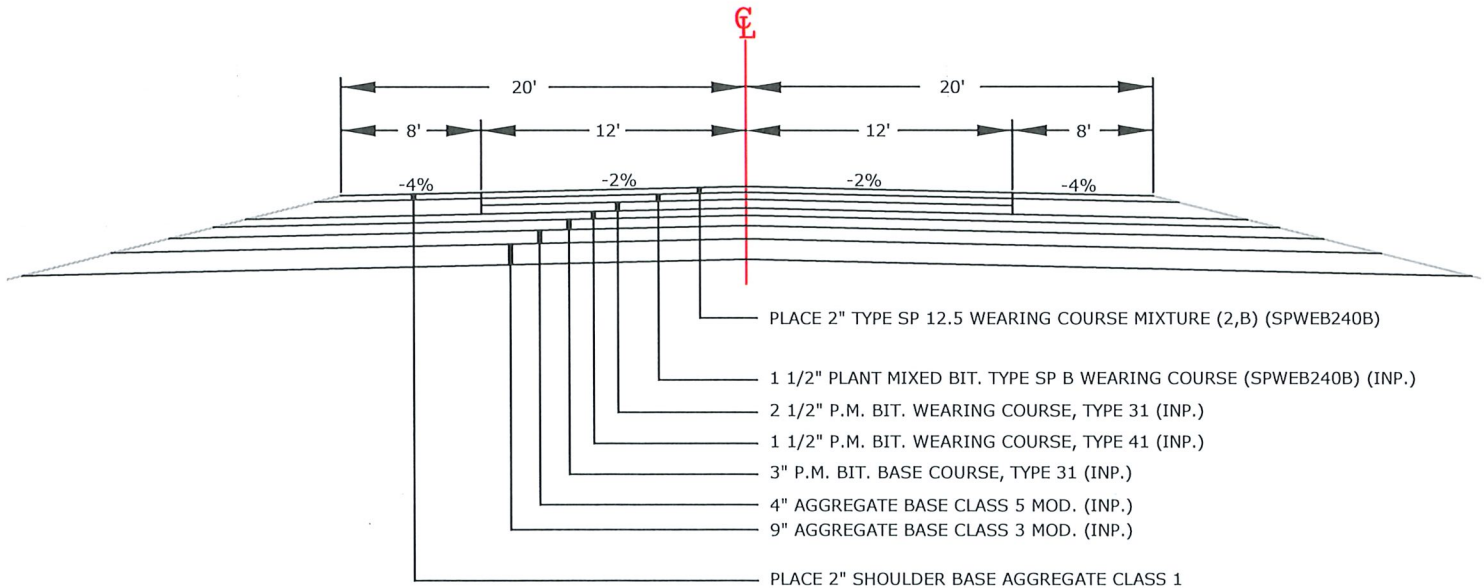
TYPICAL SECTIONS

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STA. 604+29 TO STA. 612+78



STA. 612+78 TO STA. 918+47.9



NOTES: MILL A TAPER 2" TO 0" DEPTH STA. 612+78 TO STA. 613+53 (FULL WIDTH) TO BE PAID A MILL BITUMINOUS SURFACE (2.0")
MILL A TAPER 0" TO 2" DEPTH STA. 917+97.9 TO STA. 918+47.9 (FULL WIDTH) TO BE PAID AS MILL BITUMINOUS SURFACE (2.0")

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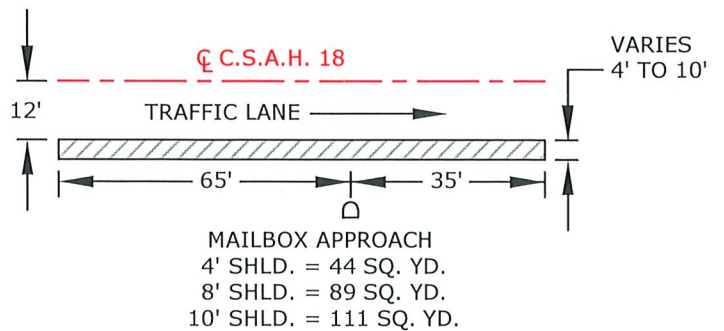
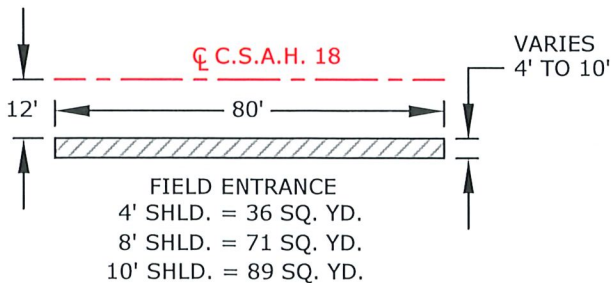
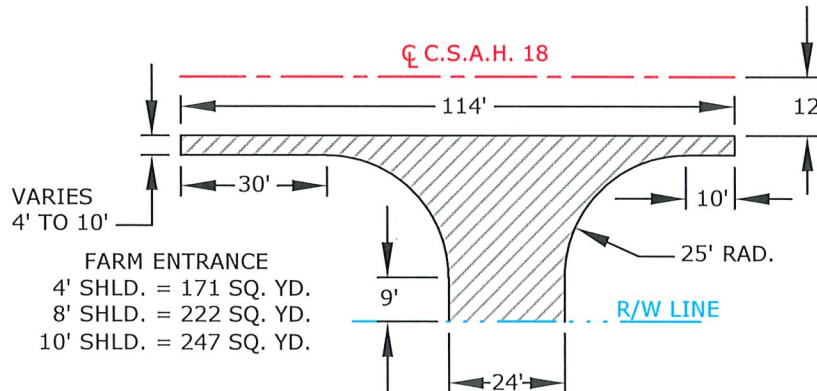
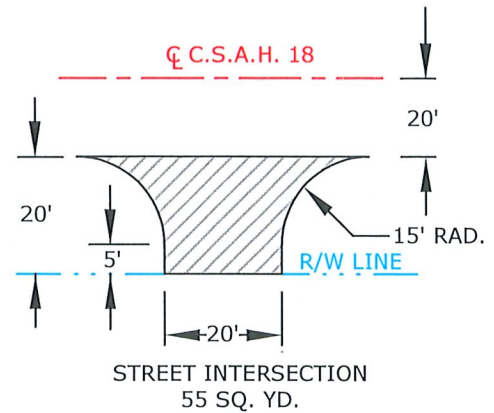
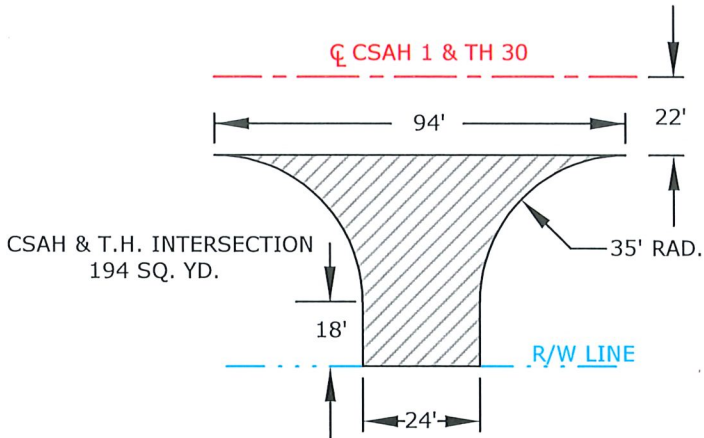
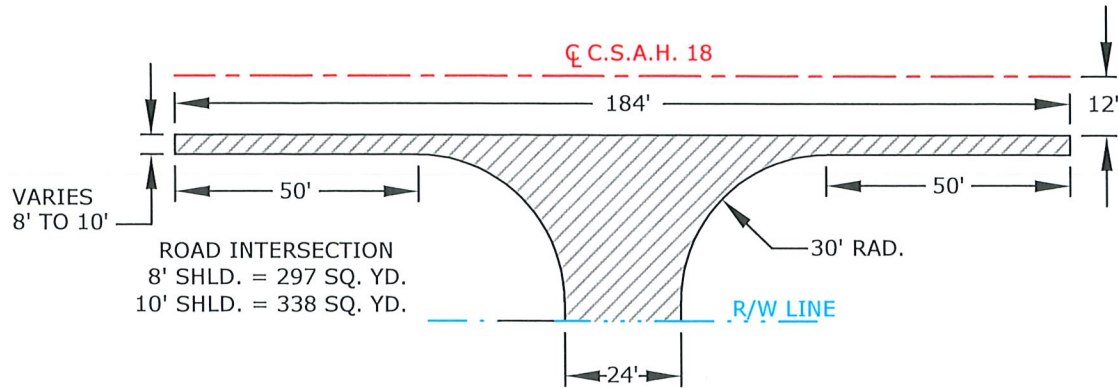
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DETAILS

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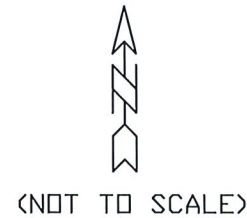
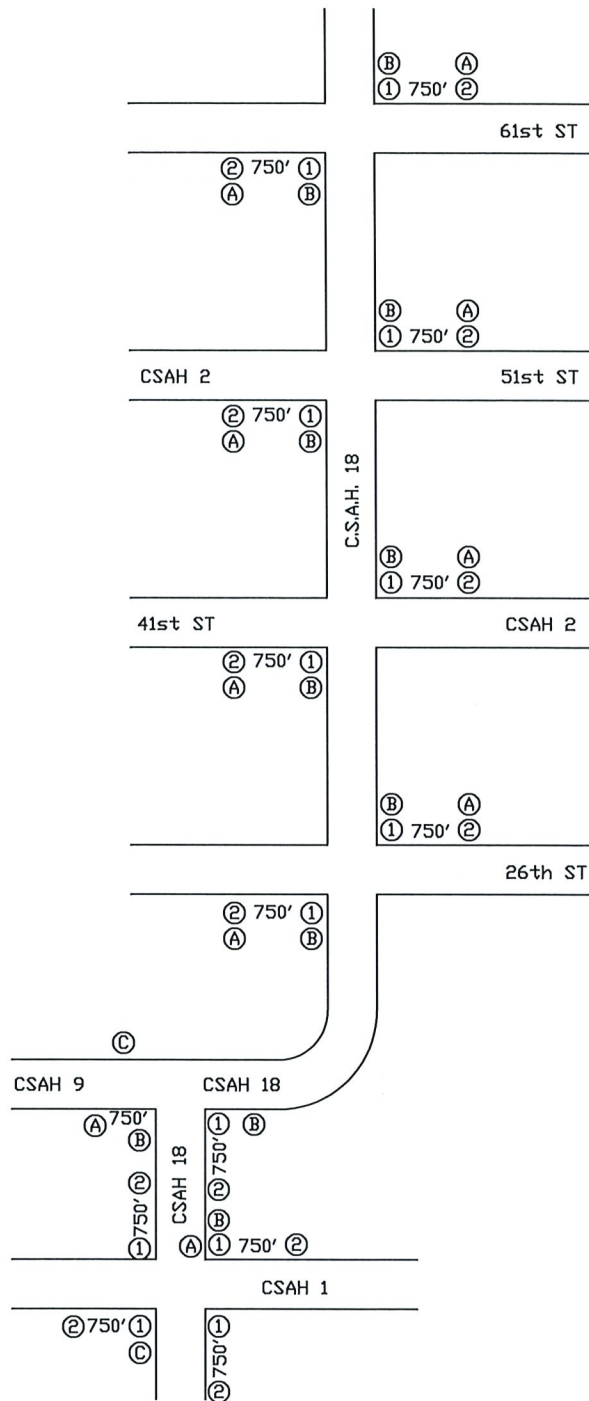
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TRAFFIC CONTROL FOR SP 059-618-040



LEGEND INPLACE PERMANENT SIGNS

- ① = STOP (R1-1) INPLACE
- ② = STOP AHEAD (W3-1) INPLACE

LEGEND CONTRACTOR FURNISHED SIGNS	
SIGN DESCRIPTION	QUANTITY
① = ROAD WORK AHEAD (W20-1)	36
② = LOW SHOULDER (W8-9)	32
③ = END ROAD WORK (W20-2a)	3

NOTE:
ALL OTHER INTERNAL SIGNING REQUIRED AS PER OPERATIONS OF CONTRACTOR SHALL BE INCLUDED IN THE UNIT PRICE BID FOR 2563.601 TRAFFIC CONTROL.

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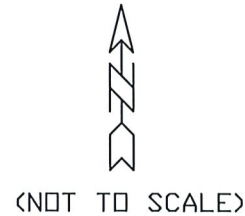
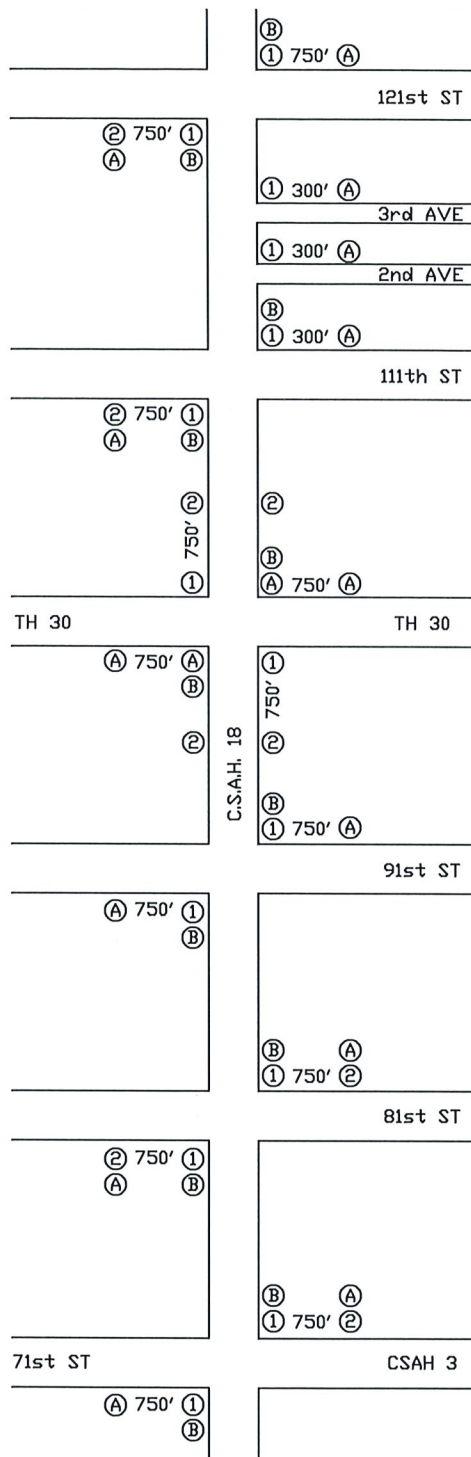
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LEGEND

CONTRACTOR FURNISHED SIGNS	
SIGN DESCRIPTION	
Ⓐ	ROAD WORK AHEAD (W20-1)
Ⓑ	LOW SHOULDER (W8-9)
Ⓒ	END ROAD WORK (W8-9)

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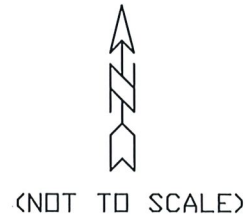
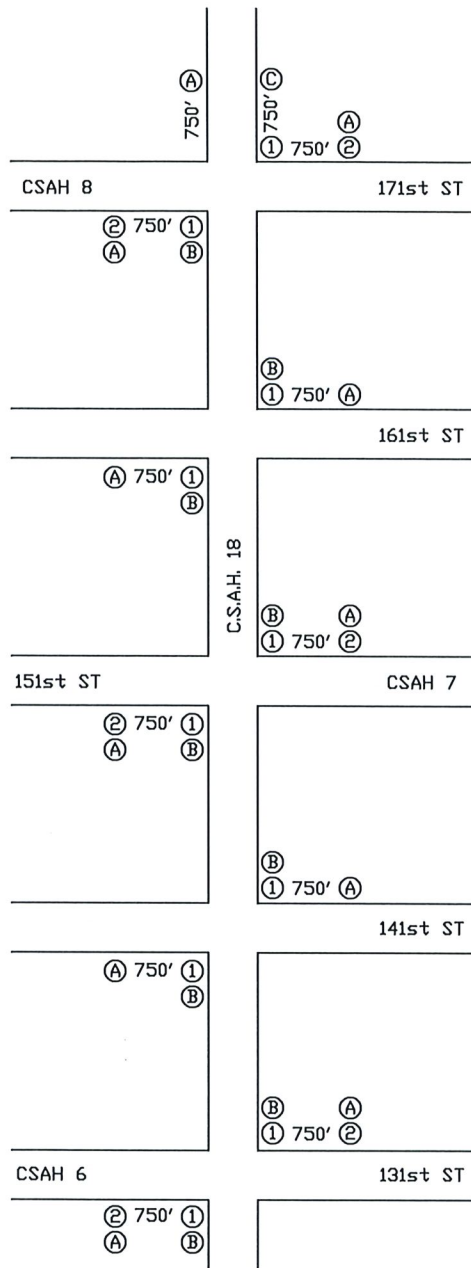
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