CHICOPEE-SOUTH HADLEY ROUTE 33

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NHP(NHS)-0032(048)X	1	59
	PROJECT FILE NO.	612109	

TITLE SHEET

MASSACHUSETTS DEPARTMENT OF TRANSPORTATION HIGHWAY DIVISION

PLAN OF

RESURFACING AND RELATED WORK ON

ROUTE 33

IN THE CITY & TOWN OF

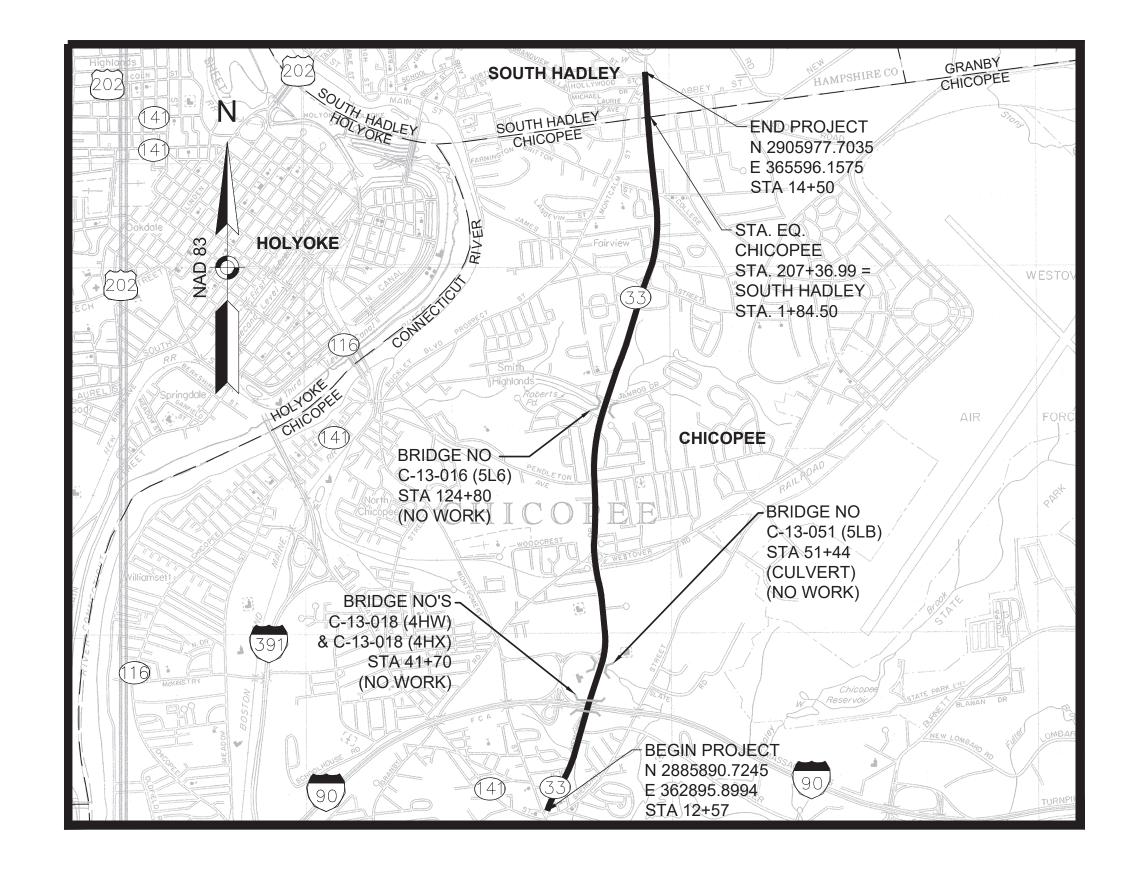
CHICOPEE-SOUTH HADLEY HAMPDEN - HAMPSHIRE COUNTY

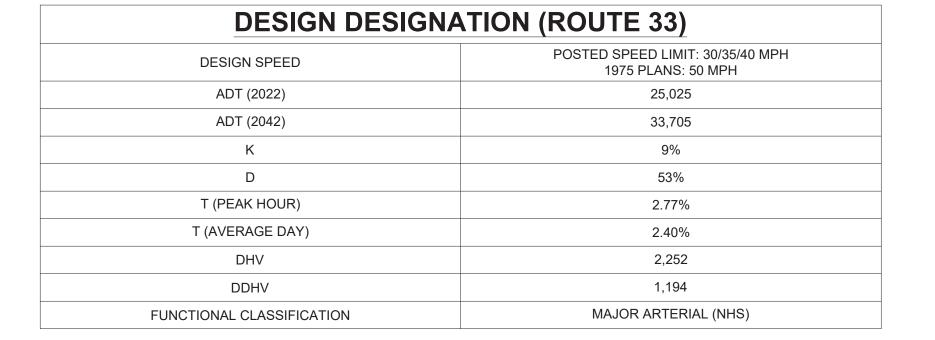
FEDERAL AID PROJECT NO. NHP(NHS)-0032(048)X

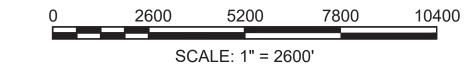
THESE PLANS ARE SUPPLEMENTED BY THE LATEST EDITIONS OF THE FOLLOWING PUBLICATIONS, AS FOR TRAFFIC SIGNALS AND HIGHWAY LIGHTING, THE MASSDOT OVERHEAD SIGNAL STRUCTURE AND FOUNDATION STANDARD DRAWINGS, THE MASSDOT TRAFFIC MANAGEMENT PLANS AND DETAIL DRAWINGS, AND THE ANSI AMERICAN STANDARD FOR NURSERY STOCK.

INDEX

SHEET NO.	DESCRIPTION
1	TITLE SHEET & INDEX
2	LEGEND & ABBREVIATIONS
3 - 5	TYPICAL SECTIONS
6 - 10	CONSTRUCTION PLANS (MONTGOMERY STREET TO FULLER ROAD)
11 - 21	CONSTRUCTION SKETCHES (FULLER ROAD TO HOLLYWOOD STREET
22	CONSTRUCTION TRAFFIC SIGN SUMMARY
23	PAVEMENT MARKINGS DETAILS
24 - 28	PAVEMENT MARKINGS SKETCH
29 - 35	TEMPORARY TRAFFIC CONTROL PLANS & TRAFFIC SIGN SUMMARY
36 - 41	CONSTRUCTION DETAILS
42 - 59	CROSS SECTIONS







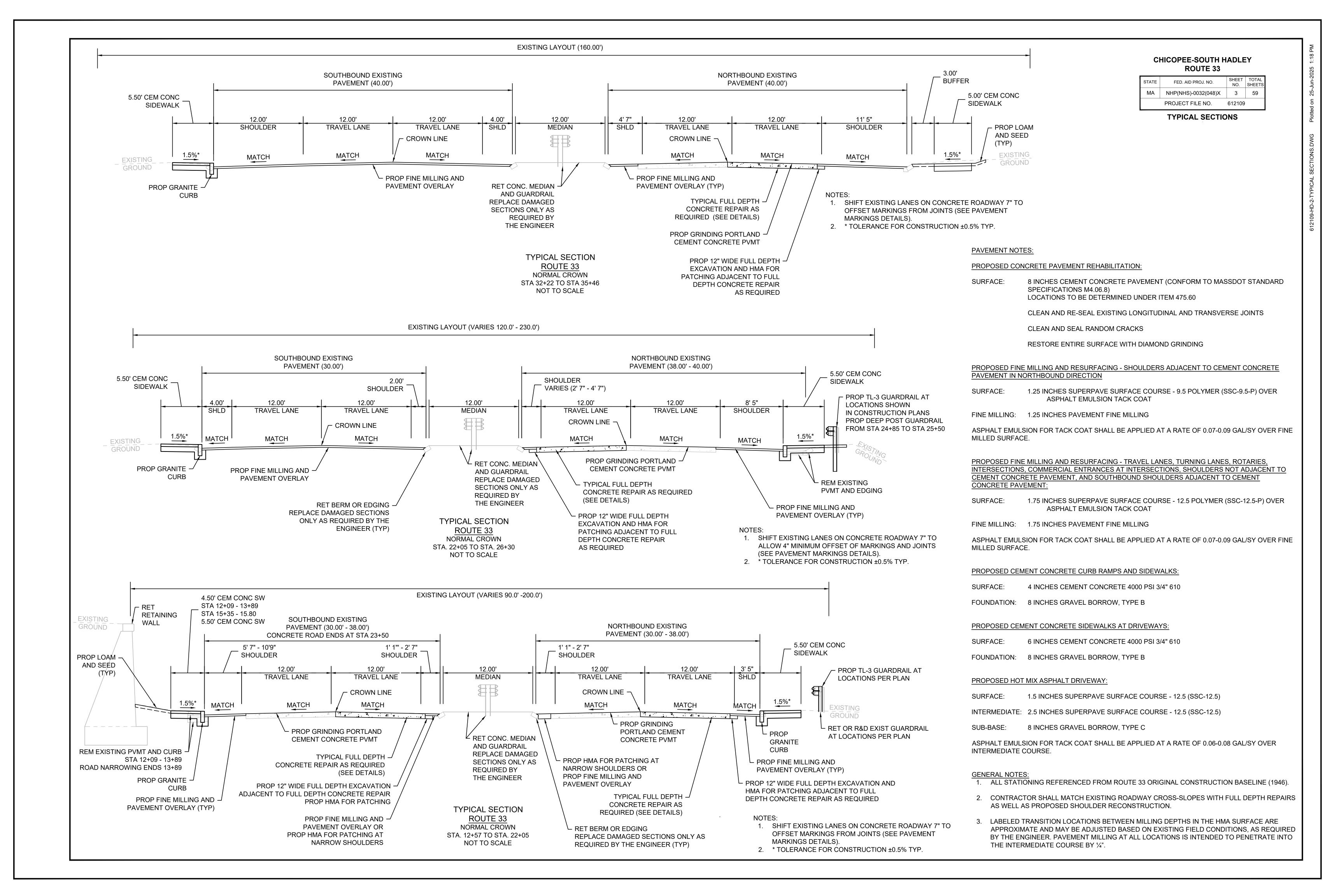
LENGTH OF PROJECT = 20,743.00.00 FEET = 3.929 MILES

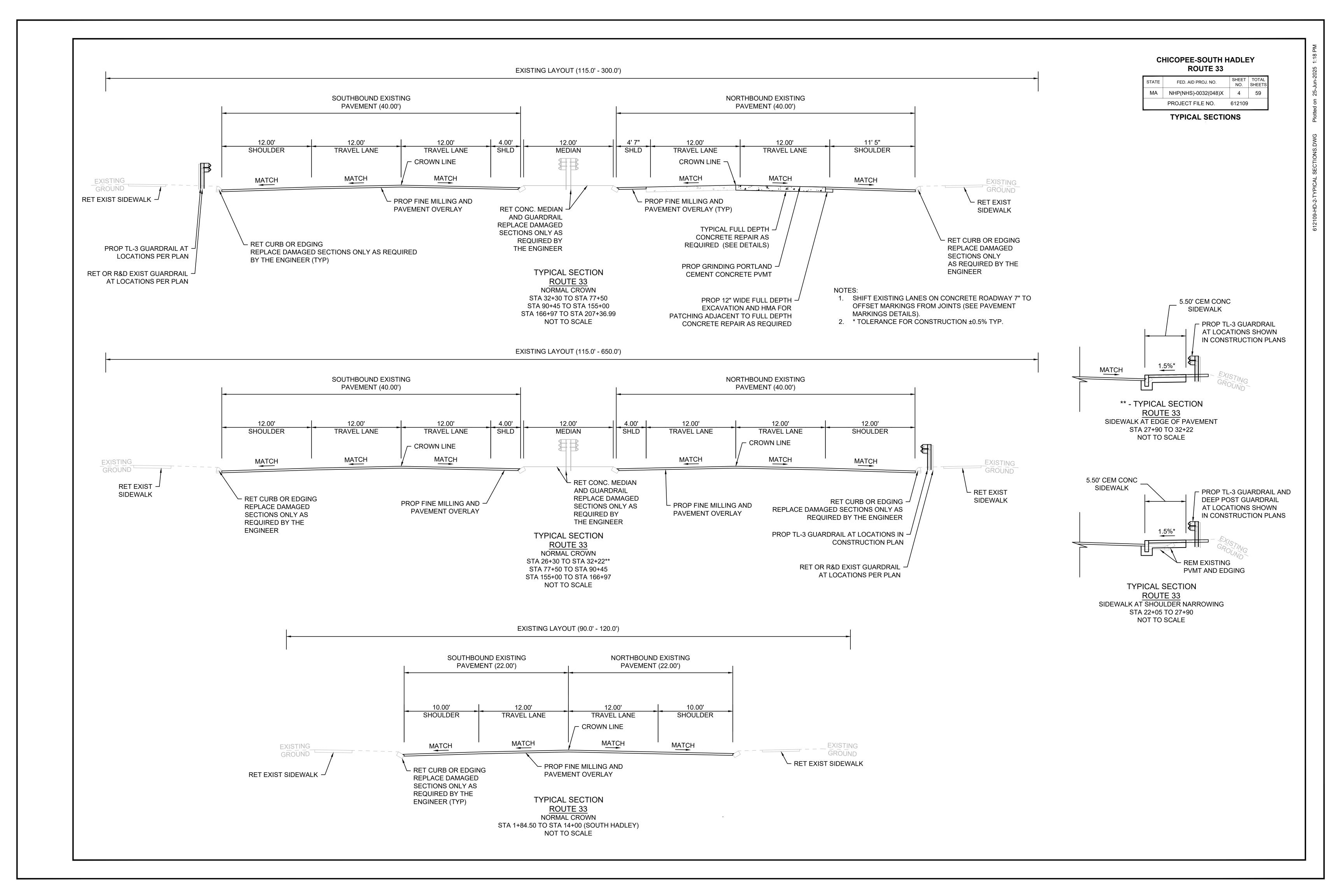
DATE	DESCRIPTION	REV#
	Massachusetts Department of Tolighway Division	O7 ransportation
	APPROVED	
Carrie Lava		

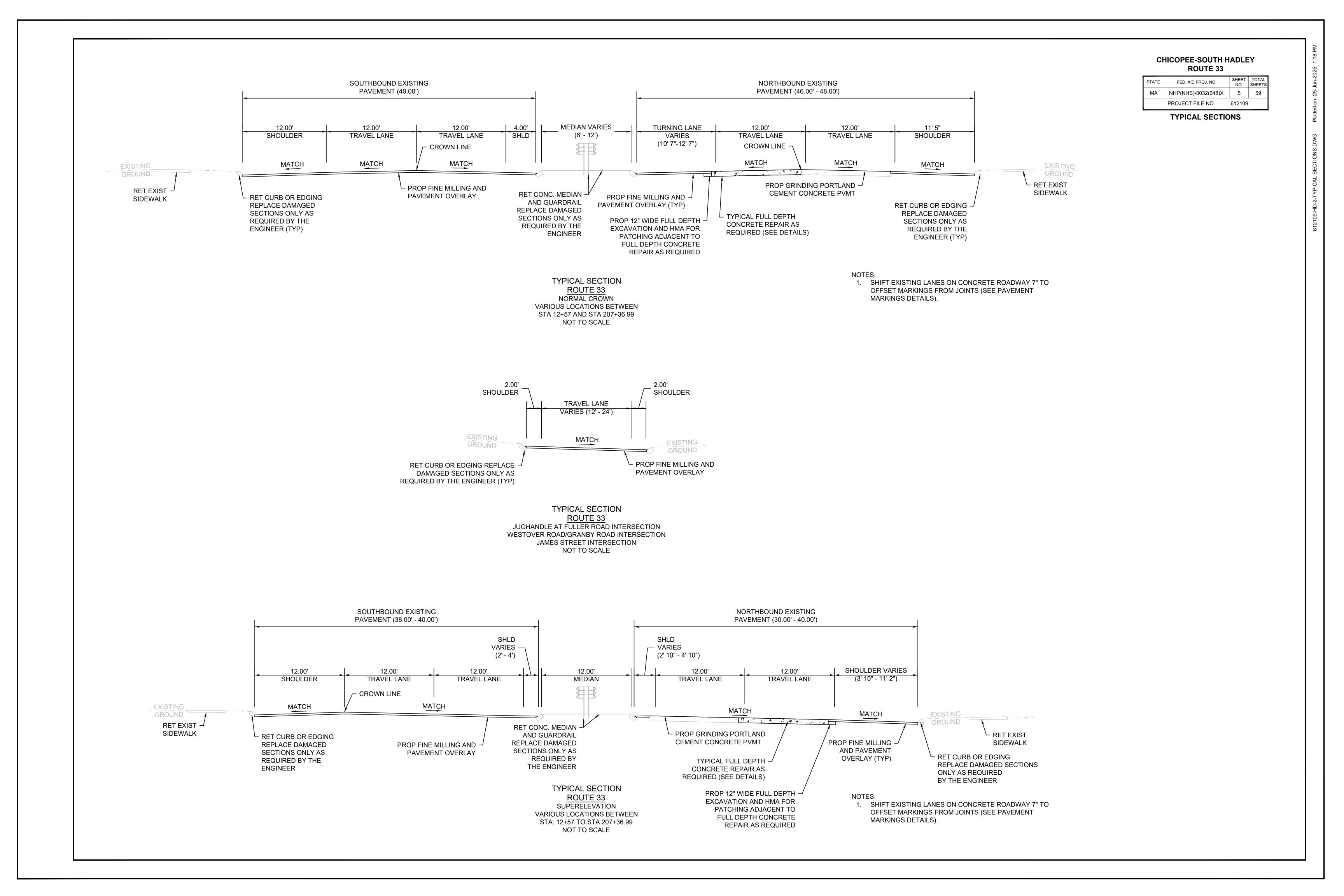
DATE

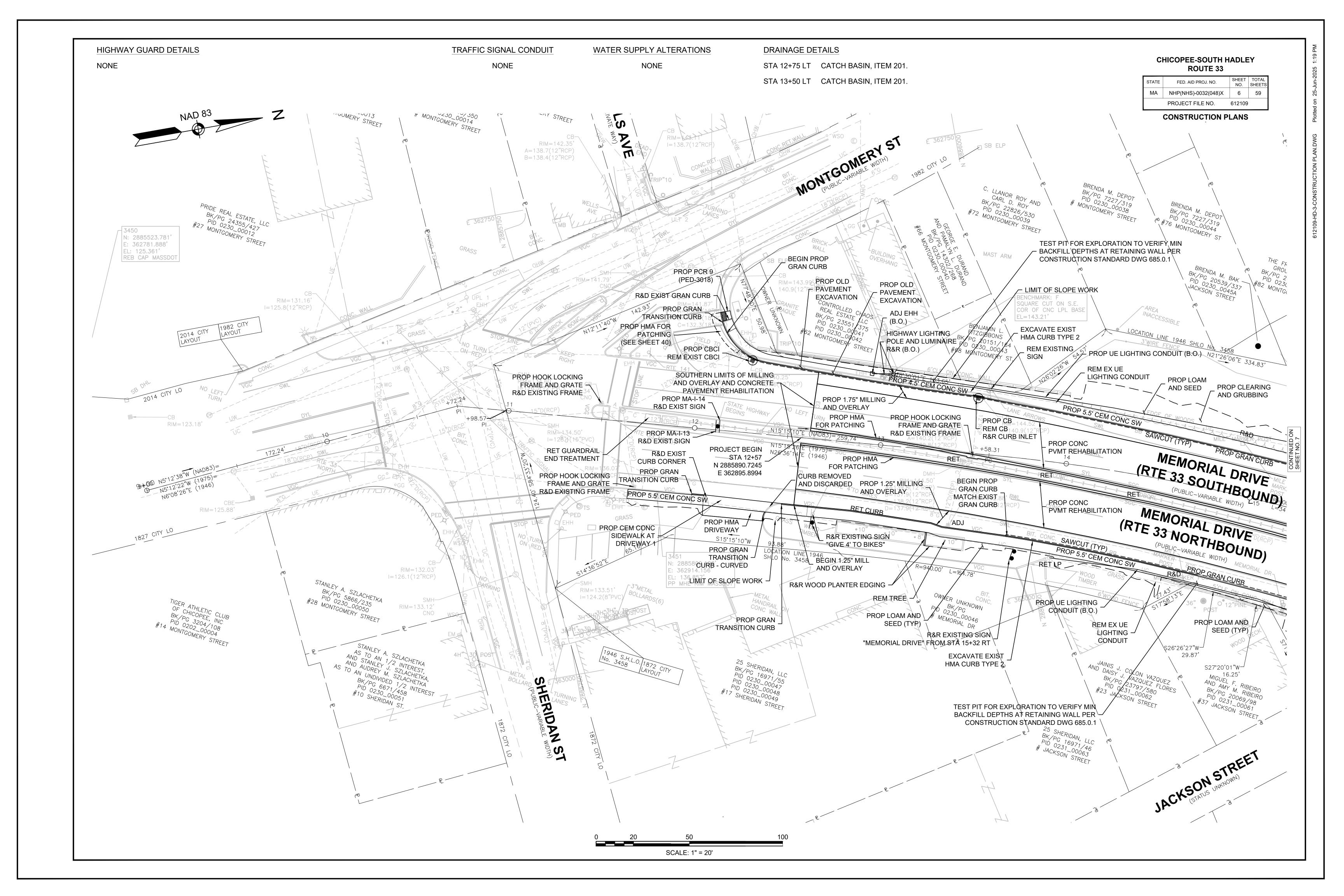
CHIEF ENGINEER

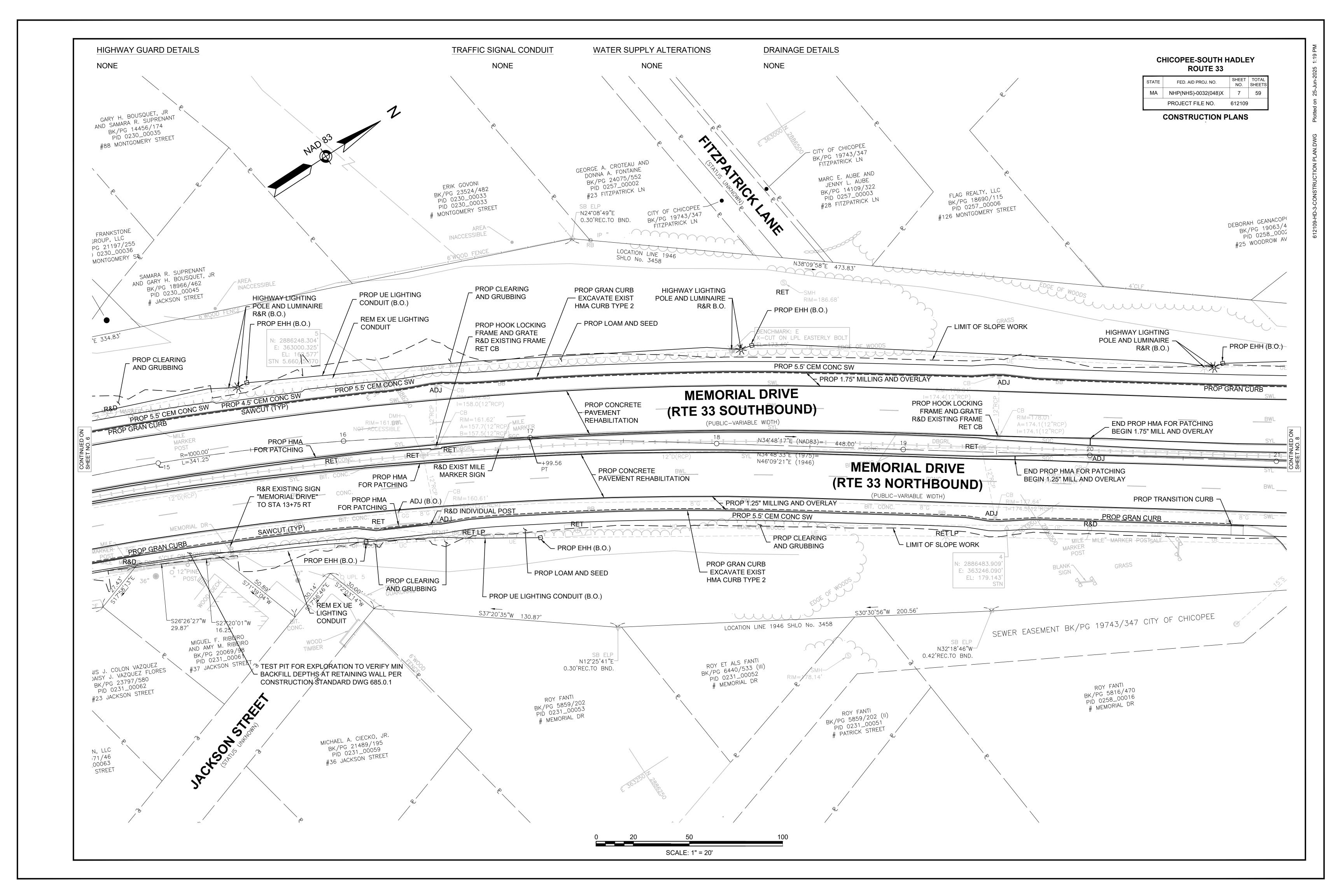
NERAL SYMBOLS		TRAFFIC SY				/IATIONS	_	CHICOPEE-SOUTH HADLEY
EXISTING PROPOSED		EXISTING	PROPOSED	DESCRIPTION	GENERAL			ROUTE 33
□ JB ■ JB ⊕ ⊕ CB ■ CE	JERSEY BARRIER B CATCH BASIN	Ø 1	Ø 1	CONTROLLER PHASE ACTUATED	AADT ABAN	ANNUAL AVERAGE DAILY TRAFFIC ABANDON		STATE FED. AID PROJ. NO. SHEET TOTAL NO. SHEETS
	CATCH BASIN CURB INLET			TDAEEIC SICNAL HEAD (SIZE AS NOTED)	ADJ	ADJUST		MA NHP(NHS)-0032(048)X 2 59
	FLAG POLE			TRAFFIC SIGNAL HEAD (SIZE AS NOTED)	APPROX.	APPROXIMATE		PROJECT FILE NO. 612109
G GP GP	GAS PUMP	L-1		WIRE LOOP DETECTOR (6' x 6' TYP UNLESS OTHERWISE SPECIFIED)	A.C.	ASPHALT CONTED CORRUGATED METAL PIDE		LEGEND & ABBREVIATIONS
□ MB □ MB	MAIL BOX			VIDEO DETECTION CAMERA	ACCM PIPE BIT.	ASPHALT COATED CORRUGATED METAL PIPE BITUMINOUS		
	POST SQUARE POST CIRCULAR	25	*		BC	BOTTOM OF CURB		
WELL # WELL	WELL		>=	MICROWAVE DETECTOR	BD.	BOUND		
EHH • EHH	ELECTRIC HANDHOLE	\oplus	•	PEDESTRIAN PUSH BUTTON, SIGN (DIRECTIONAL ARROW AS SHOWN) AND SADDLE	BL	BASELINE	ABBRE	VIATIONS (cont.)
0 0	FENCE GATE POST	*	*	EMERGENCY PREEMPTION CONFIRMATION STROBE LIGHT	BLDG BM	BUILDING BENCHMARK	GENERA	
GG O GG	GAS GATE	<	←	VEHICULAR SIGNAL HEAD	BO	BY OTHERS	PVC	POINT OF VERTICAL CURVATURE
BHL #	BORING HOLE MONITORING WELL	≪}——	₩—	VEHICULAR SIGNAL HEAD, OPTICALLY PROGRAMMED	BOS	BOTTOM OF SLOPE	PVI	POINT OF VERTICAL INTERSECTION
TP # TP #	TEST PIT	•		FLASHING BEACON	BR.	BRIDGE	PVT	POINT OF VERTICAL TANGENCY
φ "	HYDRANT	←	─		СВ	CATCH BASIN	PVMT PWW	PAVEMENT PAVED WATER WAY
* *	LIGHT POLE			PEDESTRIAN SIGNAL HEAD, (TYPE AS NOTED OR AS SPECIFIED)	CBCI CC	CATCH BASIN WITH CURB INLET CEMENT CONCRETE	R	RADIUS OF CURVATURE
O.BD.	COUNTY BOUND	⊠ RRSG	⊠ RRSG	RAILROAD SIGNAL	CCM	CEMENT CONCRETE MASONRY	R&D	REMOVE AND DISPOSE
	GPS POINT CABLE MANHOLE		•	SIGNAL POST AND BASE (ALPHA-NUMERIC DESIGNATION NOTED)	CEM	CEMENT	RCP	REINFORCED CONCRETE PIPE
©	DRAINAGE MANHOLE	0	● 20'	MAST ARM, SHAFT AND BASE (ARM LENGTH AS NOTED)	CI	CURB INLET	RD RDWW	ROADWAY
E E	ELECTRIC MANHOLE			HIGH MAST POLE OR TOWER	CIP	CAST IRON PIPE	RDWY REM	ROADWAY REMOVE
© ©	GAS MANHOLE				CLF CL	CHAIN LINK FENCE CENTERLINE	RET	RETAIN
(M) (W)	MISC MANHOLE			SIGN AND POST (0 POSTS)	CMP	CORRUGATED METAL PIPE	RET WALL	RETAINING WALL
(S) (D) (T)	SEWER MANHOLE TELEPHONE MANHOLE	00	00	SIGN AND POST (2 POSTS)	CSP	CORRUGATED STEEL PIPE	ROW	RIGHT OF WAY
w w	WATER MANHOLE		★ ^{20′}	MAST ARM WITH LUMINAIRE	CO.	COUNTY	RR R&R	RAILROAD REMOVE AND RESET
MHB ■ MHB	MASSACHUSETTS HIGHWAY BOUND		-	OPTICAL PRE-EMPTION DETECTOR	CONC CONT	CONCRETE CONTINUOUS	R&R R&S	REMOVE AND RESET REMOVE AND STACK
MON	MONUMENT		\bowtie	CONTROL CABINET, GROUND MOUNTED	CONT	CONSTRUCTION	RT	RIGHT
SB	STONE BOUND		₾	CONTROL CABINET, POLE MOUNTED	CR GR	CROWN GRADE	SB	STONE BOUND
TB	TOWN OR CITY BOUND TRAVERSE OR TRIANGULATION STATION				DHV	DESIGN HOURLY VOLUME	SHLD	SHOULDER
or GUY - TPL or GU				FLASHING BEACON CONTROL AND METER PEDESTAL	DI	DROP INLET	SMH ST	SEWER MANHOLE STREET
HTP	TRANSMISSION POLE		\boxtimes	LOAD CENTER ASSEMBLY	DIA DIP	DIAMETER DUCTILE IRON PIPE	STA	STATION
UFB UFB	UTILITY POLE W/ FIREBOX			PULL BOX 12"x12" (OR AS NOTED)	DW	STEADY DON'T WALK - PORTLAND ORANGE	SSD	STOPPING SIGHT DISTANCE
UPDL -∳- UPDL	UTILITY POLE WITH DOUBLE LIGHT			ELECTRIC HANDHOLE 12"x24" (OR AS NOTED)	DWY	DRIVEWAY	SHLO	STATE HIGHWAY LAYOUT LINE
ULT -&- ULT	UTILITY POLE W / 1 LIGHT			TRAFFIC SIGNAL CONDUIT	ELEV (or EL.)	ELEVATION	SW	SIDEWALK TANGENT DISTANCE OF CURVE/TRU
UPL -→ UPL	UTILITY POLE BUSH			TIVILLIO GIGIVIE GOLIDOLI	EMB	EMBANKMENT	TAN	TANGENT DISTANCE OF CURVE/TRUIT
& TYPE	TREE				EOP EXIST (or EX)	EDGE OF PAVEMENT	TEMP	TEMPORARY
0	STUMP				EXC	EXCAVATION	TC	TOP OF CURB
<u> </u>	SWAMP / MARSH				F&C	FRAME AND COVER	TOS	TOP OF SLOPE
WG • WG PM	WATER GATE				F&G	FRAME AND GRATE	TYP UP	TYPICAL UTILITY POLE
	PARKING METER — OVERHEAD CABLE/WIRE				FDN.	FOUNDATION	VAR	VARIES
	— CURBING				FLDSTN GAR	FIELDSTONE GARAGE	VERT	VERTICAL
- <u>99</u>	— CONTOURS (ON-THE-GROUND SURVEY DATA)				GD	GROUND	VC	VERTICAL CURVE
99	— CONTOURS (PHOTOGRAMMETRIC DATA)				GG	GAS GATE	WG WIP	WATER GATE WROUGHT IRON PIPE
	— UNDERGROUND DRAIN PIPE (DOUBLE LINE 24 INCH AND OVER)— UNDERGROUND ELECTRIC DUCT (DOUBLE LINE 24 INCH AND OVER)	PAVEMENT I	MARKINGS SY	YMBOLS	GI	GUTTER INLET	WM	WATER METER/WATER MAIN
	— UNDERGROUND GAS MAIN (DOUBLE LINE 24 INCH AND OVER)	EVICTING		DESCRIPTION	GIP GRAN	GALVANIZED IRON PIPE GRANITE	X-SECT	CROSS SECTION
	— UNDERGROUND SEWER MAIN (DOUBLE LINE 24 INCH AND OVER)	EXISTING	PROPOSED	DESCRIPTION	GRAV	GRAVEL		
	— UNDERGROUND TELEPHONE DUCT (DOUBLE LINE 24 INCH AND OVER)		•1	PAVEMENT ARROW - WHITE	GRD	GUARD		
	— UNDERGROUND WATER MAIN (DOUBLE LINE 24 INCH AND OVER)	ONLY	ONLY	LEGEND "ONLY" - WHITE	HDW	HEADWALL		
	→ BALANCED STONE WALL → GUARD RAIL STEEL POSTS → CHARD RAIL STE		SL	STOP LINE	HMA	HOT MIX ASPHALT		IC CICNIAL ADDDENZIATION
	— GUARD RAIL - STEEL POSTS — GUARD RAIL - WOOD POSTS		cw	CROSSWALK	HOR HYD	HORIZONTAL HYDRANT		IC SIGNAL ABBREVIATION
	— GUARD RAIL - WOOD FOSTS — GUARD RAIL - DOUBLE FACE - STEEL POSTS		<u> </u> SWL		INV	INVERT	CAB CCVE	CABINET CLOSED CIRCUIT VIDEO EQUIPMENT
	— GUARD RAIL - DOUBLE FACE - WOOD POSTS			SOLID WHITE LINE	JCT	JUNCTION	DW	STEADY UPRAISED HAND
	— CHAIN LINK OR METAL FENCE		SYL	SOLID YELLOW LINE	L	LENGTH OF CURVE	FDW	FLASHING UPRAISED HAND
	— WOOD FENCE		BWL	BROKEN WHITE LINE	LB	LEACH BASIN	FR	FLASHING CIRCULAR RED
	·==> · SEDIMENT BARRIER vzzz · COIR LOG SEDIMENT BARRIER		BYL	BROKEN YELLOW LINE	LP LT	LIGHT POLE LEFT	FRL	FLASHING RED LEFT ARROW
· · · · · · · · · · · · · · · · · · ·				DOTTED WHITE LINE	MAX	MAXIMUM	FRR FY	FLASHING RED RIGHT ARROW FLASHING CIRCULAR YELLOW
	— SAWCUT LINE		DYL		MB	MAILBOX	FYL	FLASHING YELLOW LEFT ARROW
	— TOP OR BOTTOM OF SLOPE				MH	MANHOLE	FYR	FLASHING YELLOW RIGHT ARROW
	— LIMIT OF EDGE OF PAVEMENT OR COLD PLANE AND OVERLAY		DWLEx	DOTTED WHITE LINE EXTENSION	MHB	MASSACHUSETTS HIGHWAY BOUND	G	STEADY CIRCULAR GREEN
	BANK OF RIVER OR STREAM BORDER OF WETLAND		DYLEx	DOTTED YELLOW LINE EXTENSION	MIN M&O	MINIMUM MILL & OVERLAY	GL GR	STEADY GREEN LEFT ARROW STEADY GREEN RIGHT ARROW
	100 FT WETLAND BUFFER		DBWL	DOUBLE WHITE LINE	NIC	NOT IN CONTRACT	GR GSL	STEADY GREEN RIGHT ARROW STEADY GREEN SLASH LEFT ARROW
	200 FT RIVERFRONT BUFFER		DBYL	DOUBLE YELLOW LINE	NO.	NUMBER	GSR	STEADY GREEN SLASH RIGHT ARRO
	STATE HIGHWAY LAYOUT				PC	POINT OF CURVATURE	GV	STEADY GREEN VERTICAL ARROW
	TOWN OR CITY LAYOUT				PCC	POINT OF COMPOUND CURVATURE	OL	OVERLAP
	—— COUNTY LAYOUT —— RAILROAD SIDELINE				PCR P.G.L.	PEDESTRIAN CURB RAMP PROFILE GRADE LINE	PED PTZ	PEDESTRIAN PAN, TILT, ZOOM
	TOWN OR CITY BOUNDARY LINE				P.G.L. Pl	POINT OF INTERSECTION	R	STEADY CIRCULAR RED
- P	PROPERTY LINE OR APPROXIMATE PROPERTY LINE				POC	POINT ON CURVE	RL	STEADY RED LEFT ARROW
	— EASEMENT				POT	POINT ON TANGENT	RR	STEADY RED RIGHT ARROW
					PRC	POINT OF REVERSE CURVATURE	TR SIG	TRAFFIC SIGNAL CONDUIT
					PROJ PROP	PROJECT PROPOSED	TSC W	TRAFFIC SIGNAL CONDUIT STEADY WALKING PERSON
					LINOE	I IVOI OOLD	v v	O. L. ID. IVI LIMINO I LIMOUN
					PSB	PLANTABLE SOIL BORROW	Υ	STEADY CIRCULAR YELLOW
					PSB PT	PLANTABLE SOIL BORROW POINT OF TANGENCY	Y YL	STEADY CIRCULAR YELLOW STEADY YELLOW LEFT ARROW

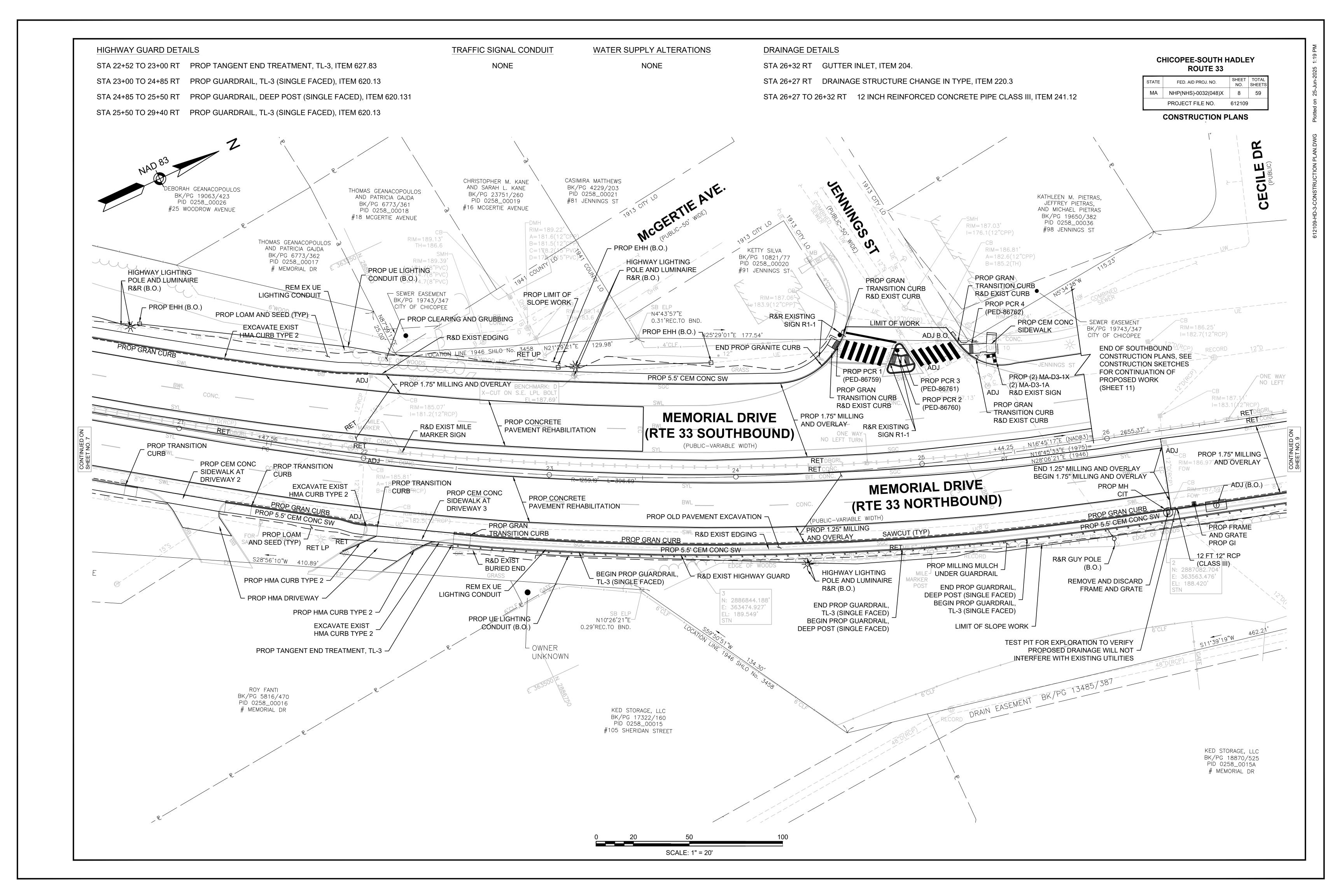


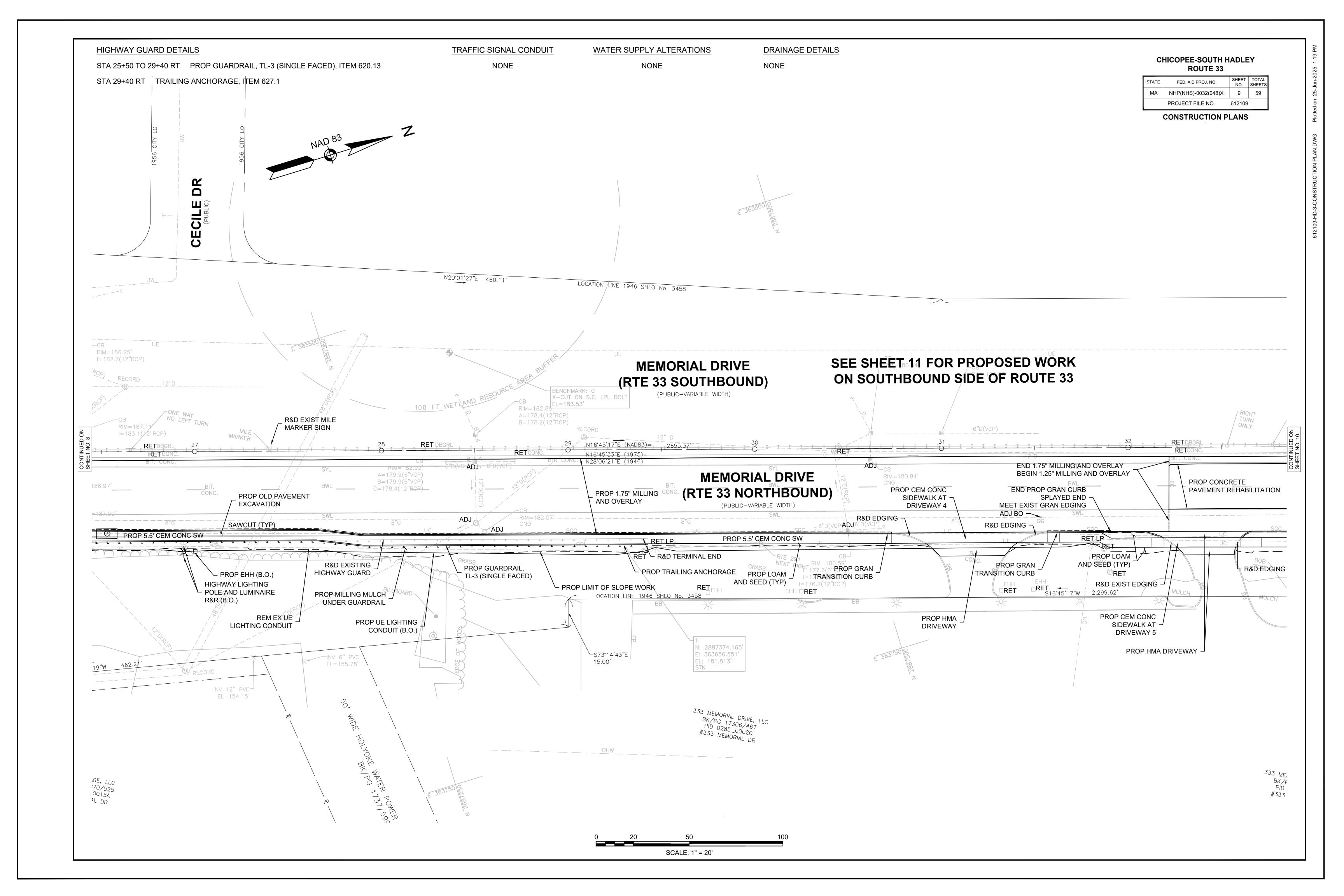


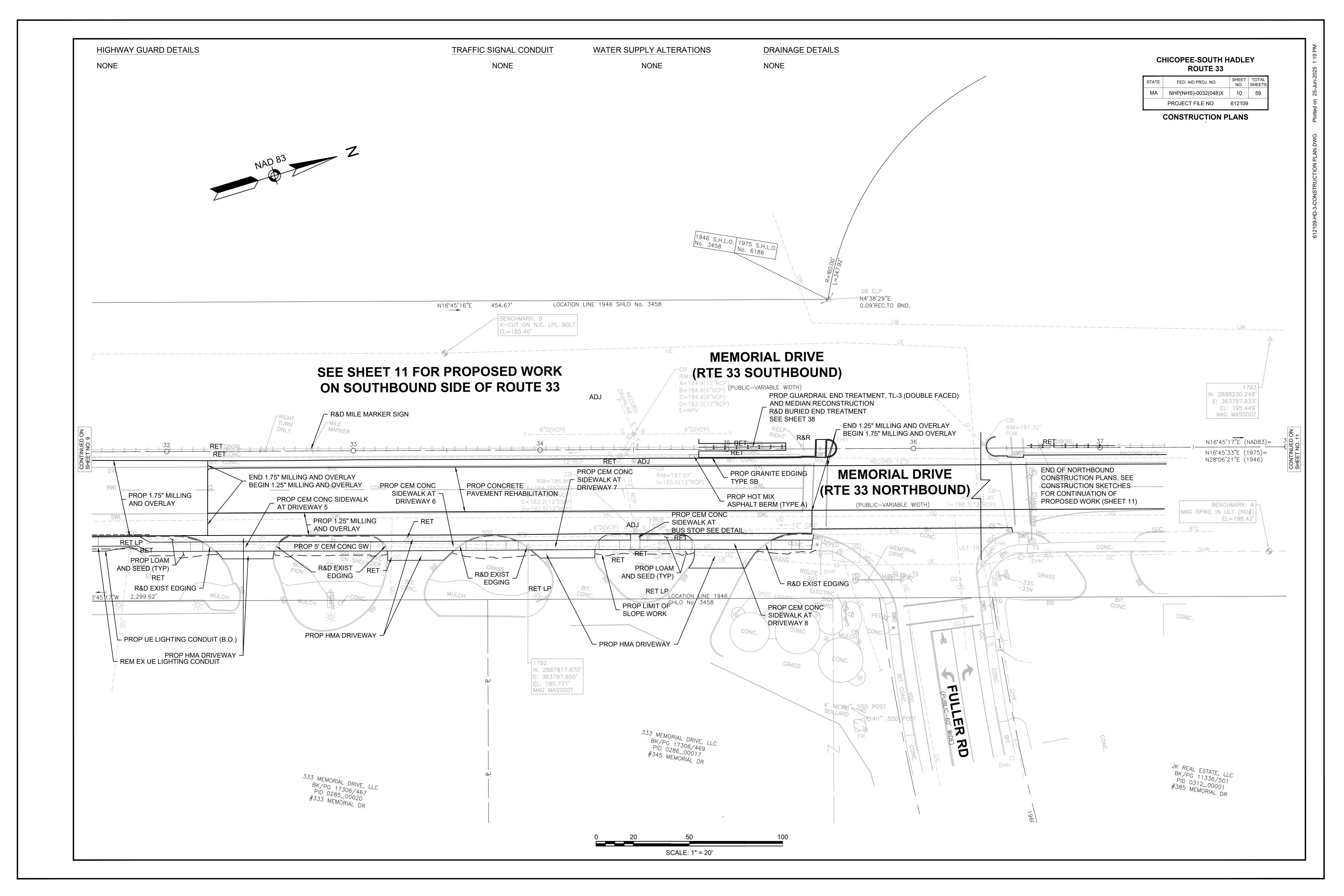


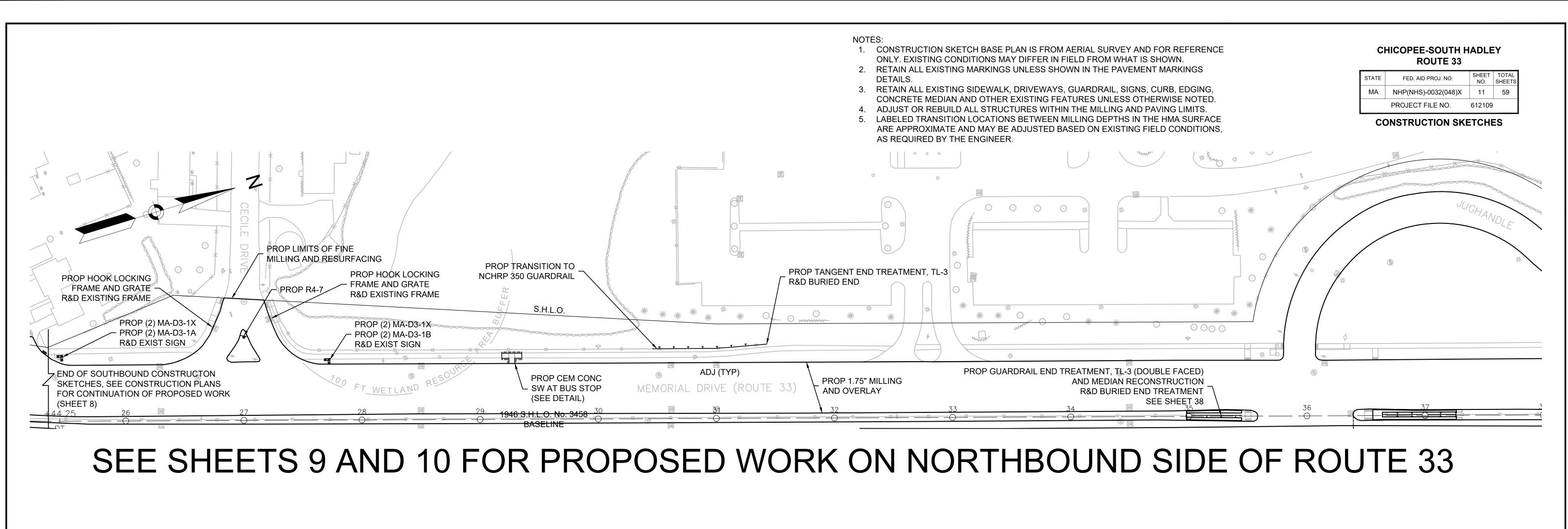


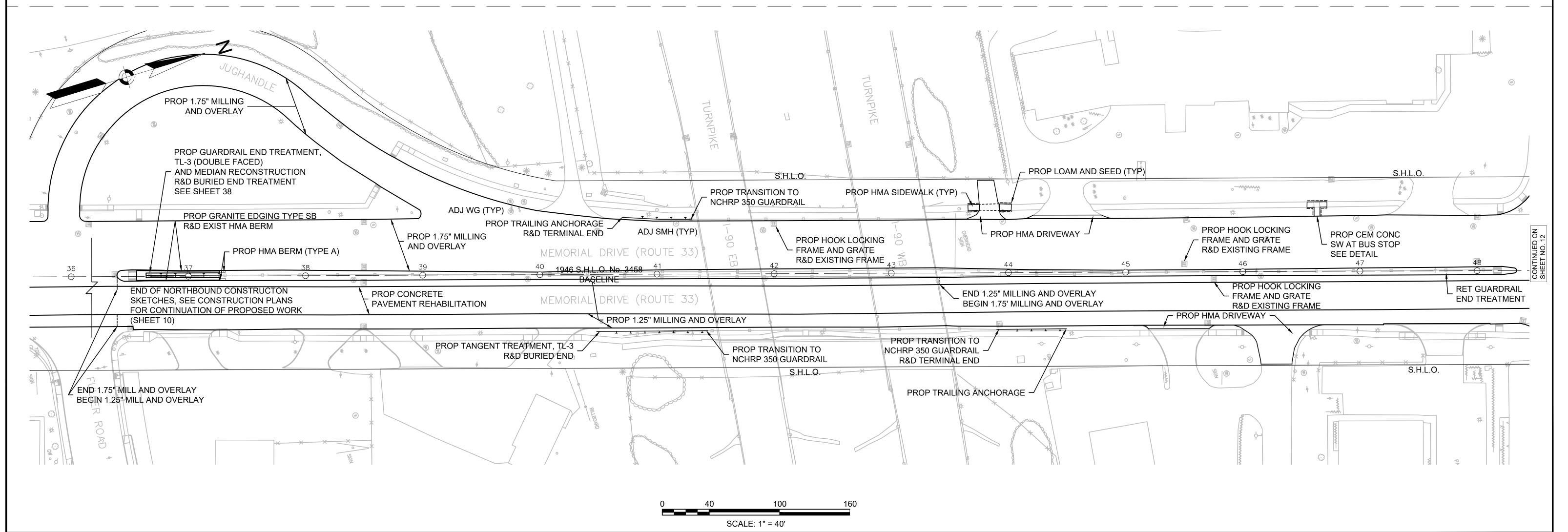


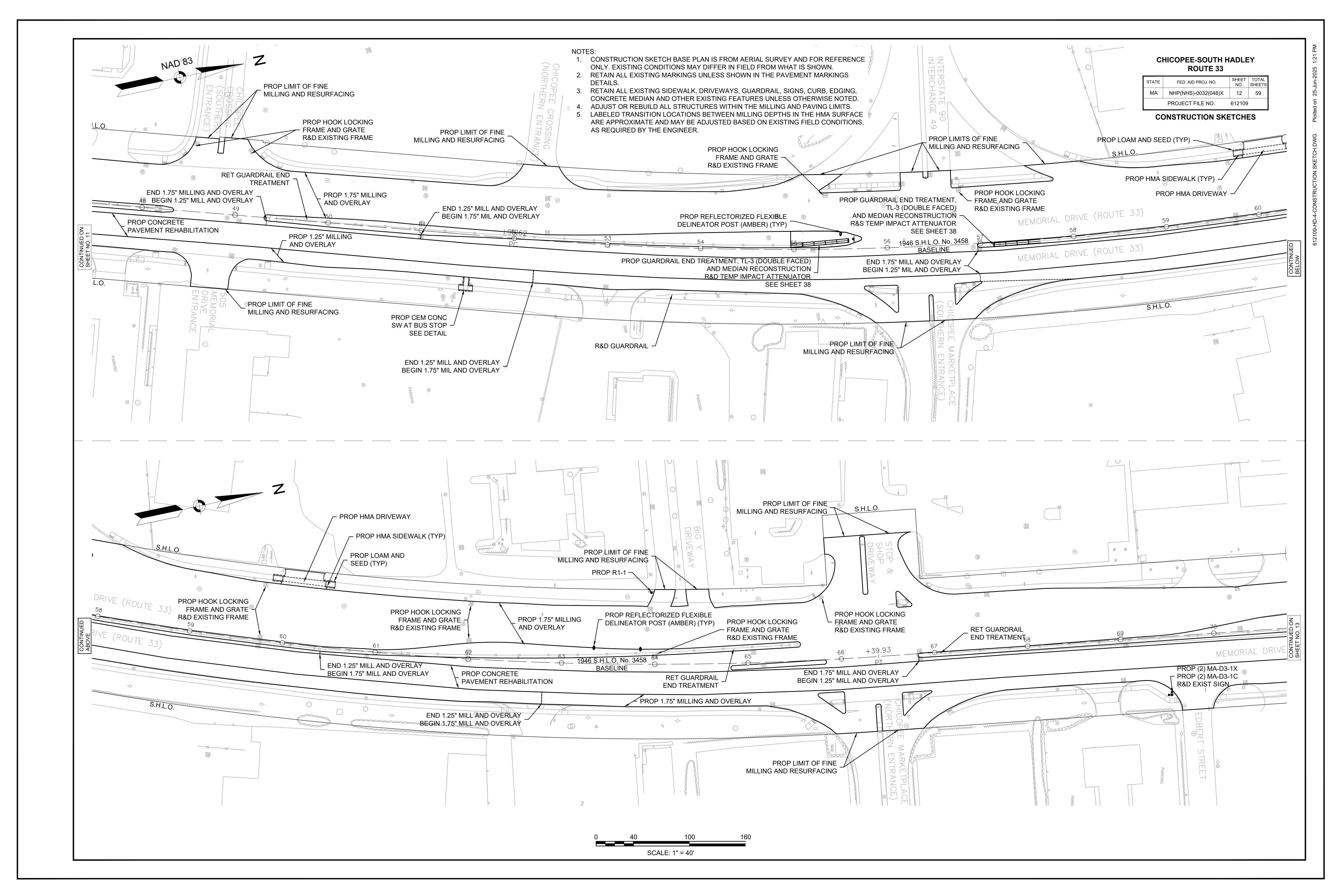


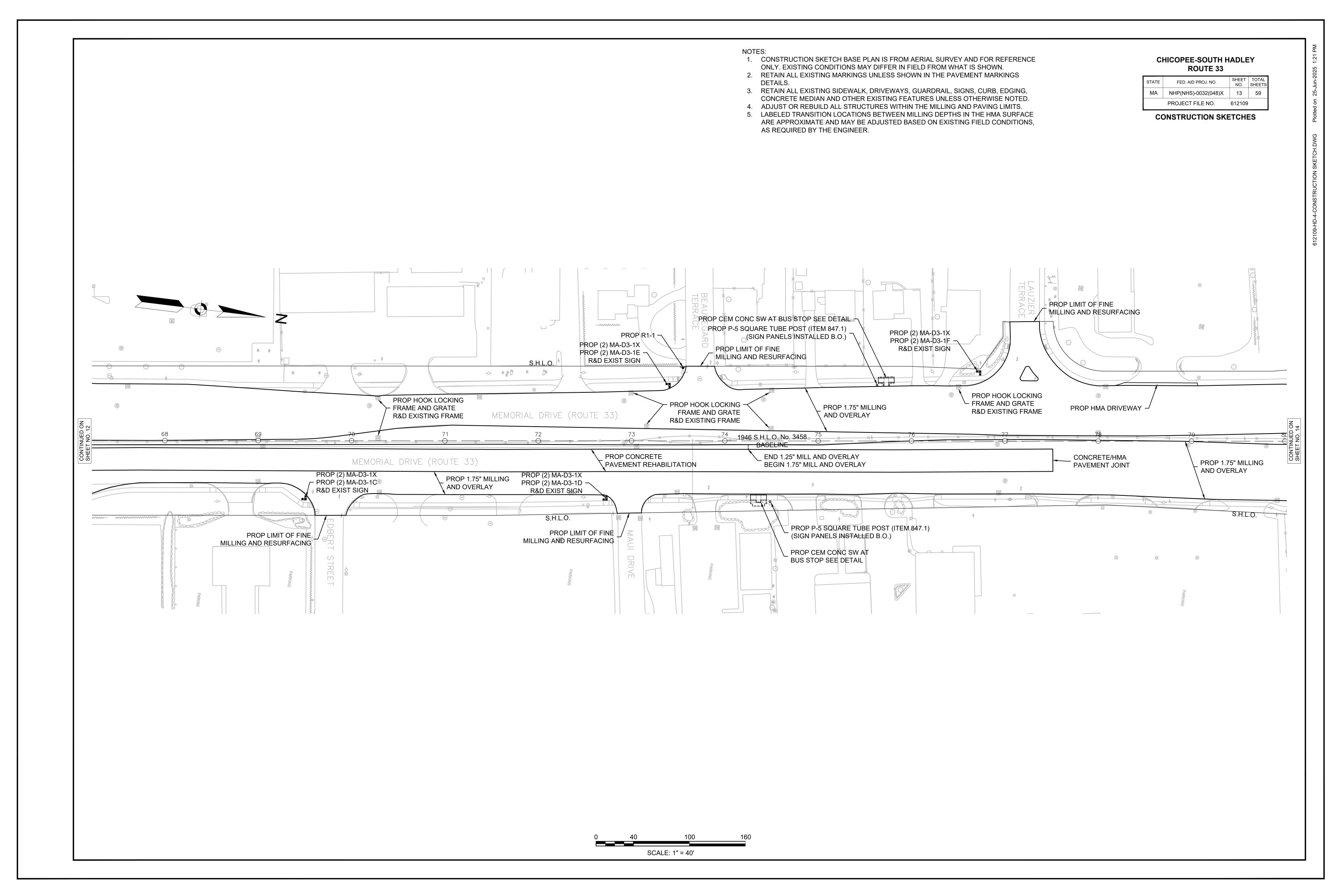


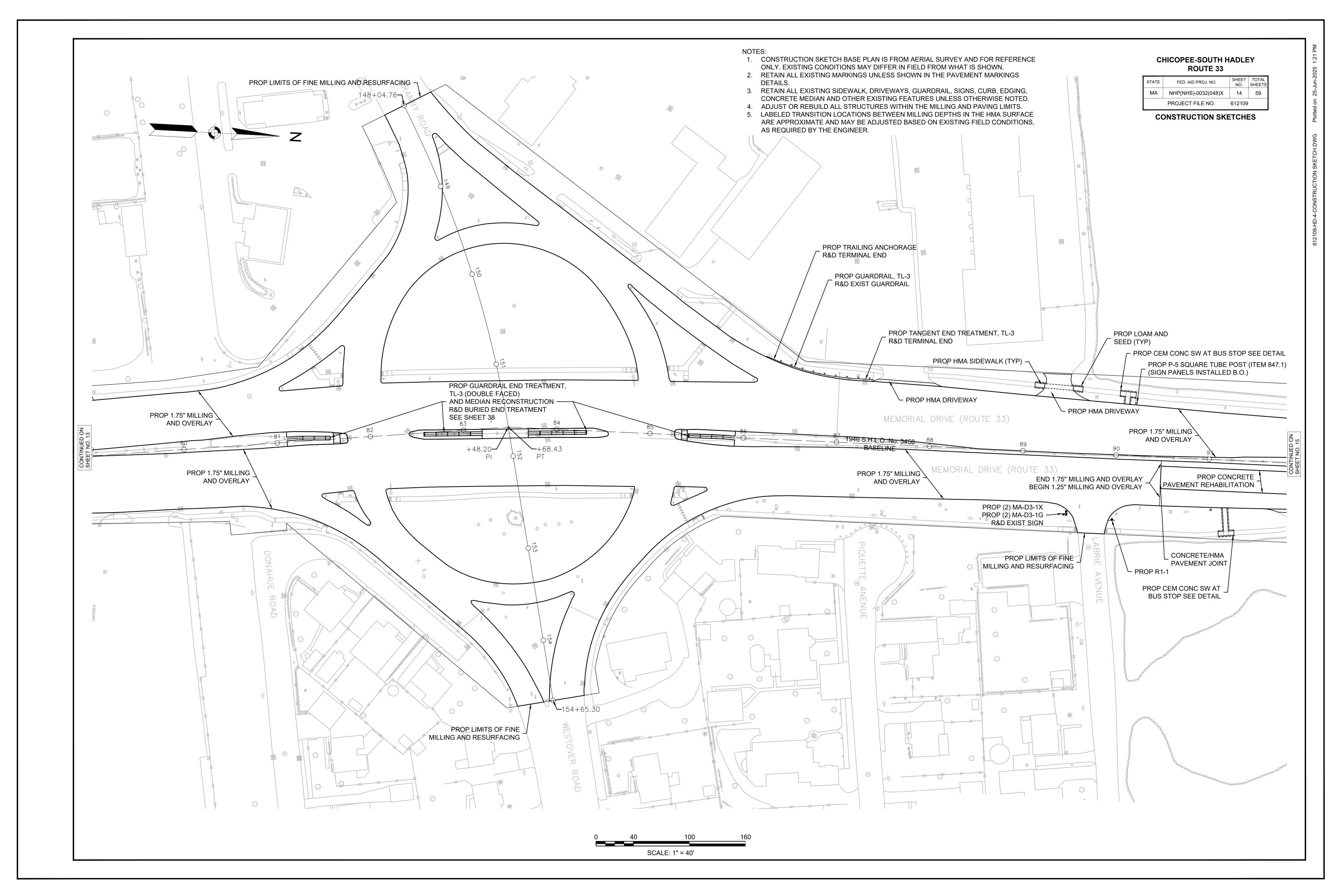


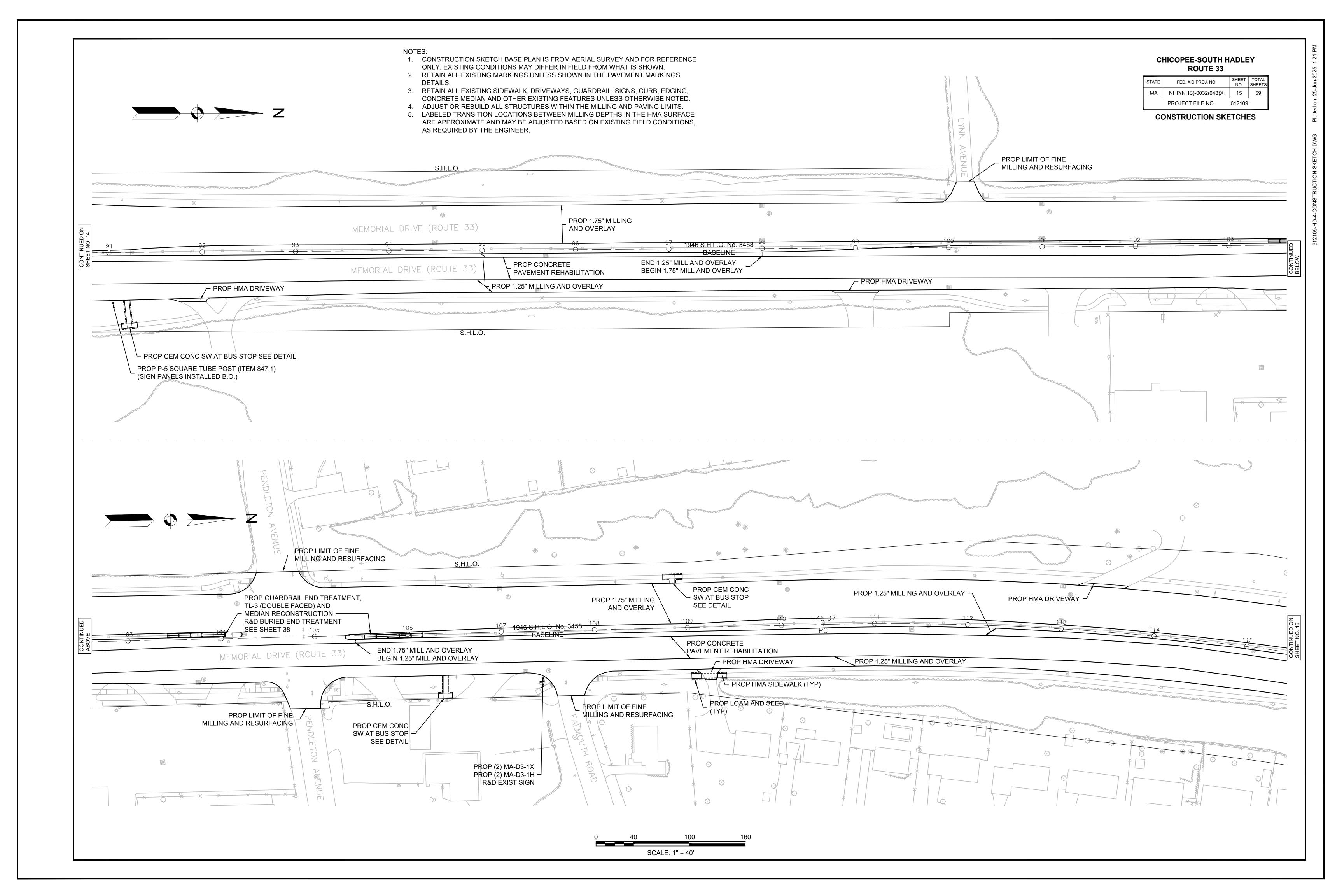


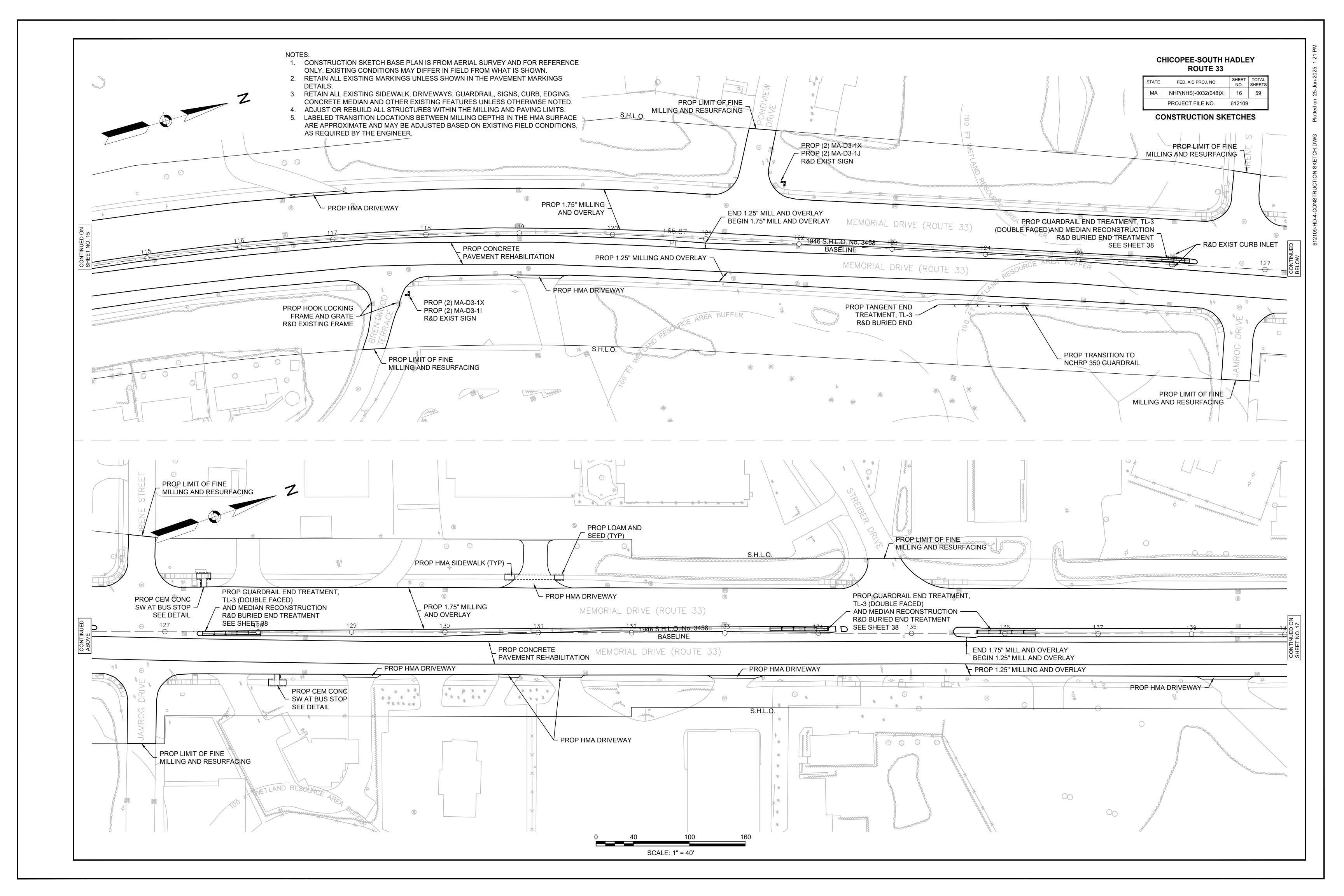


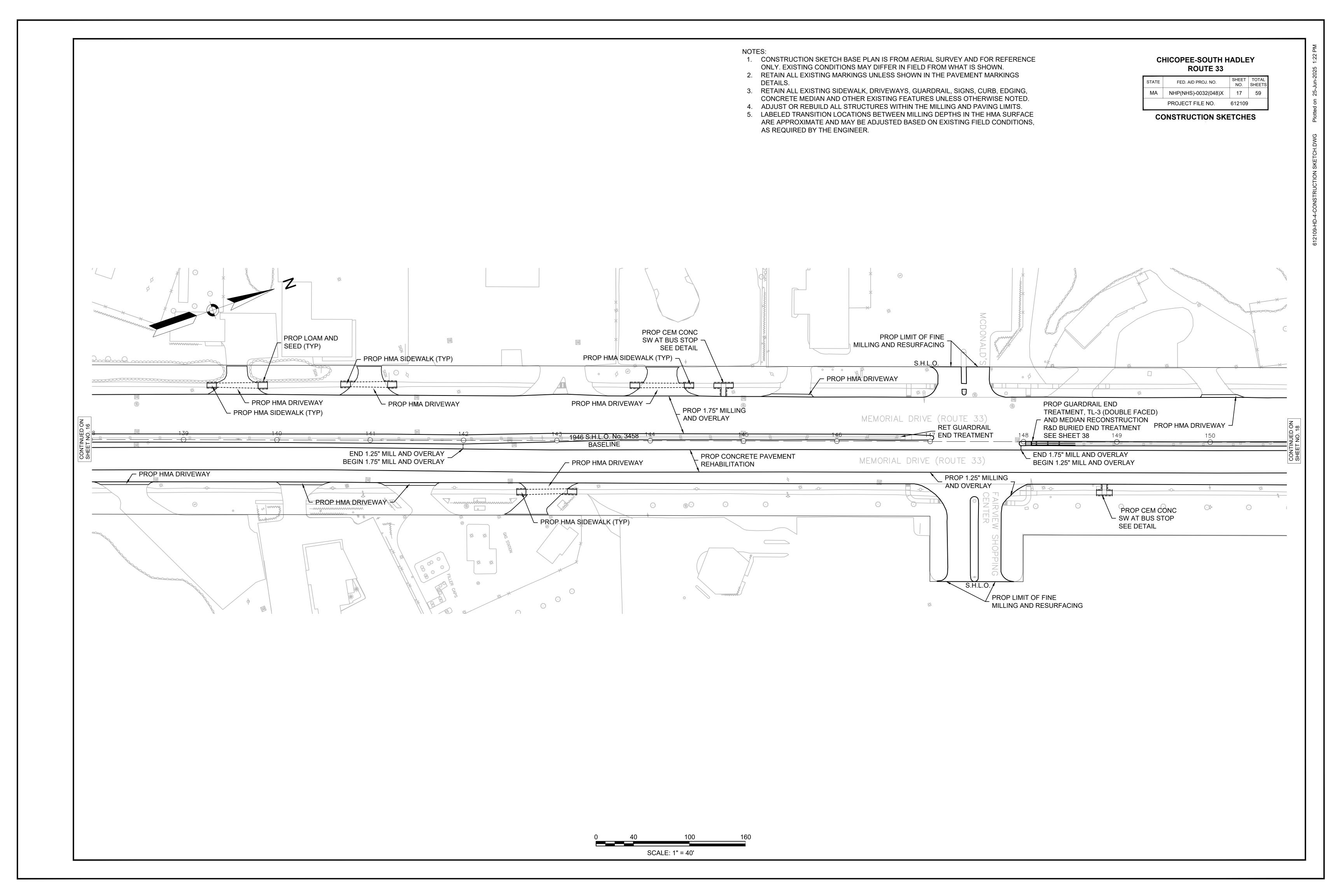


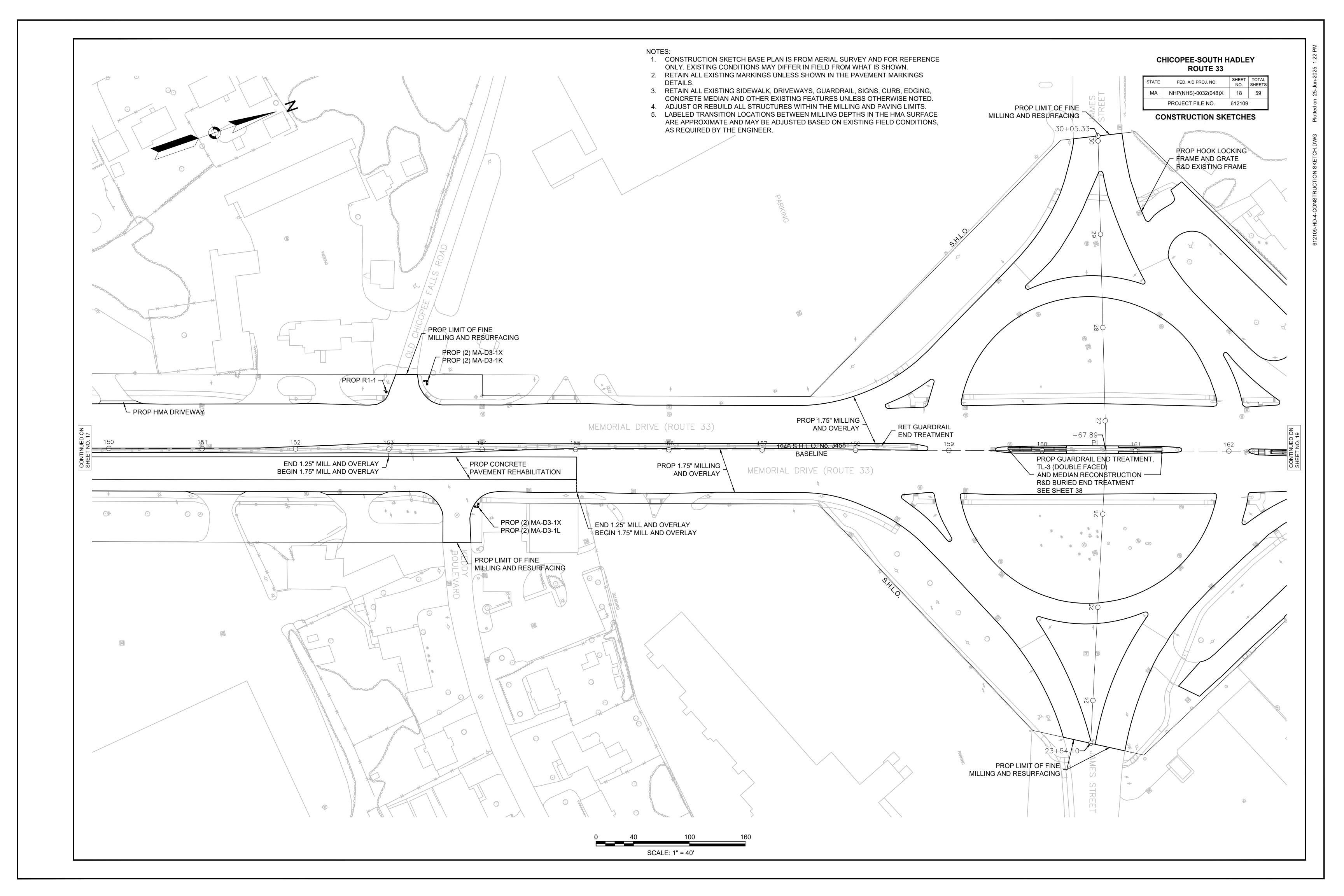


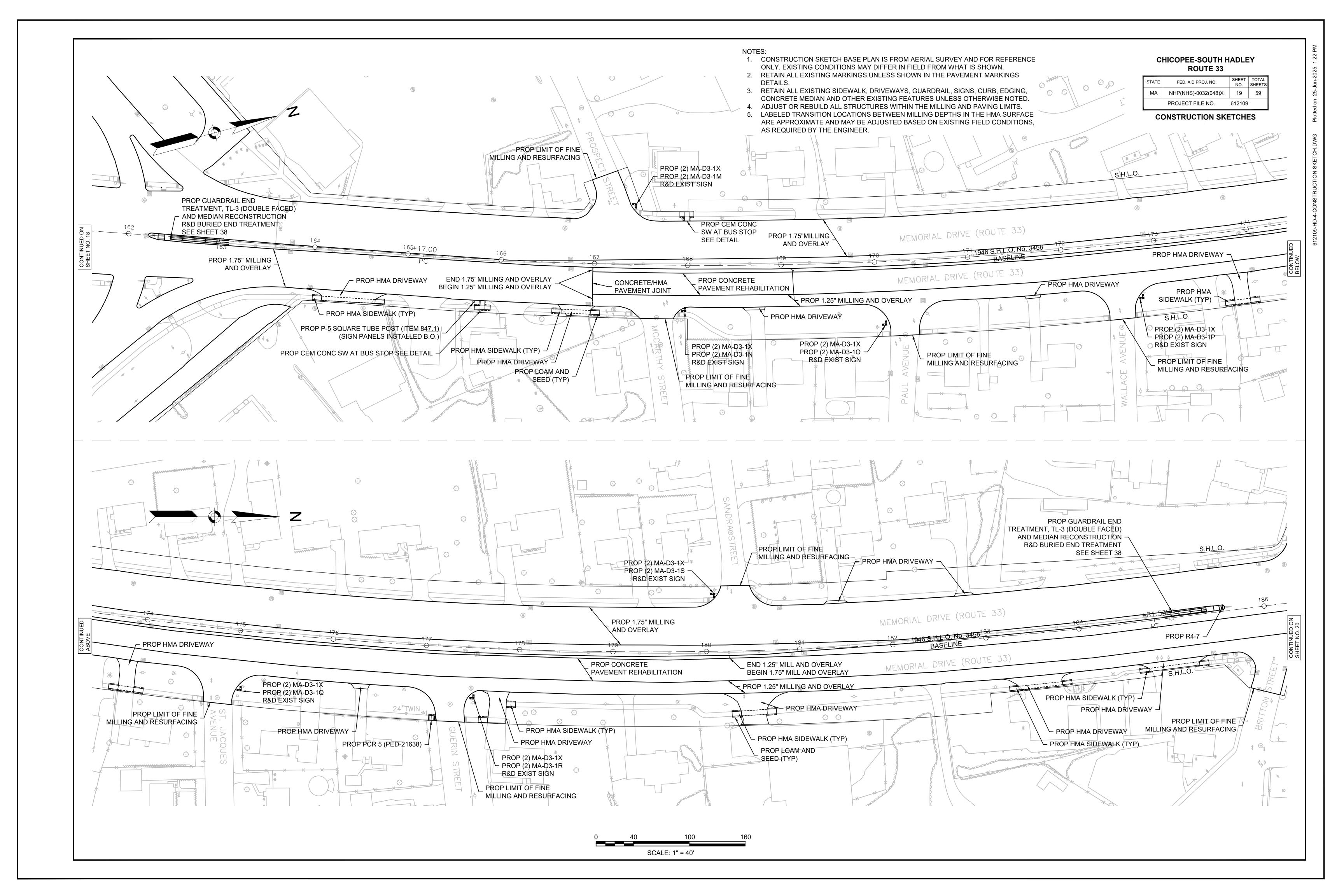


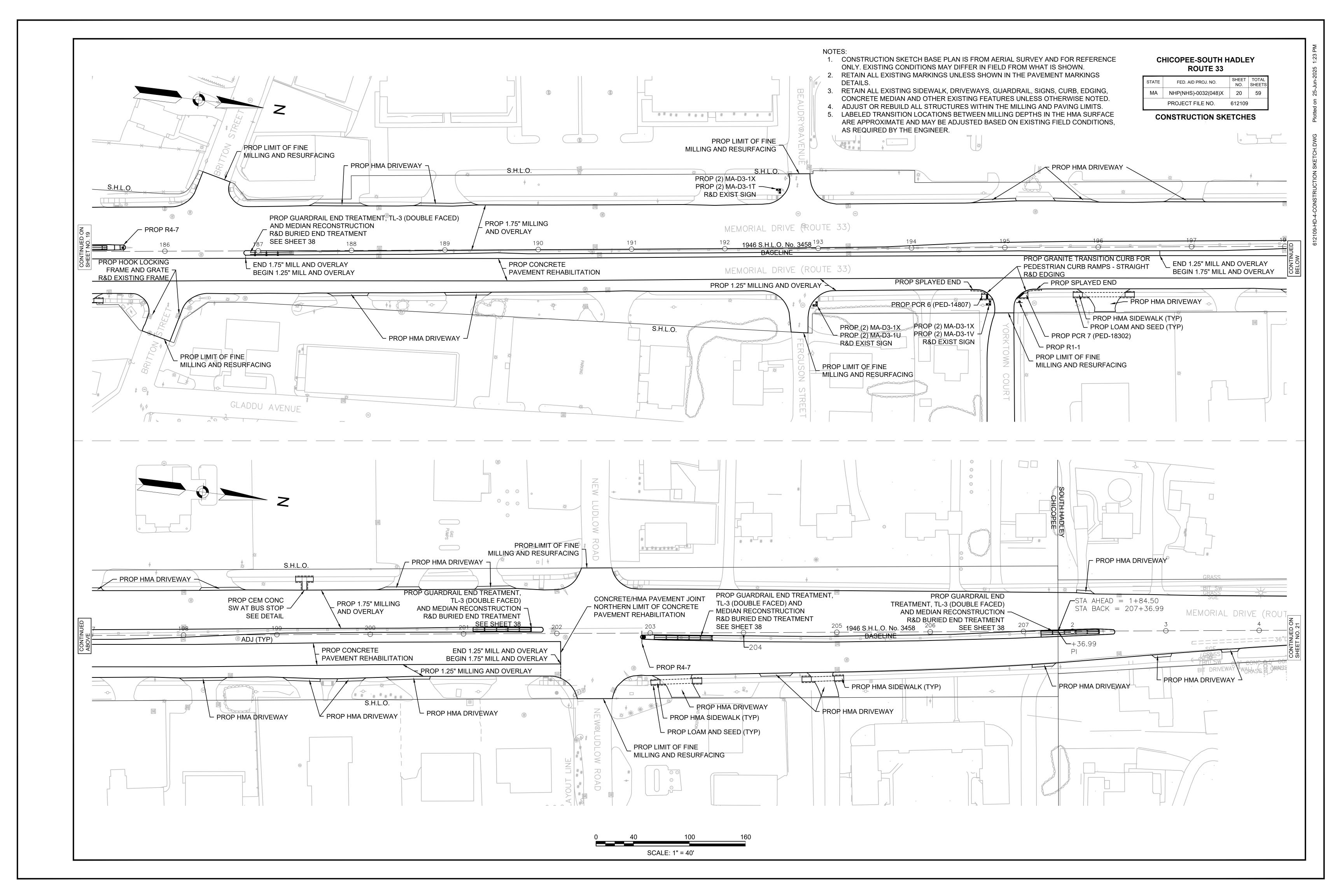


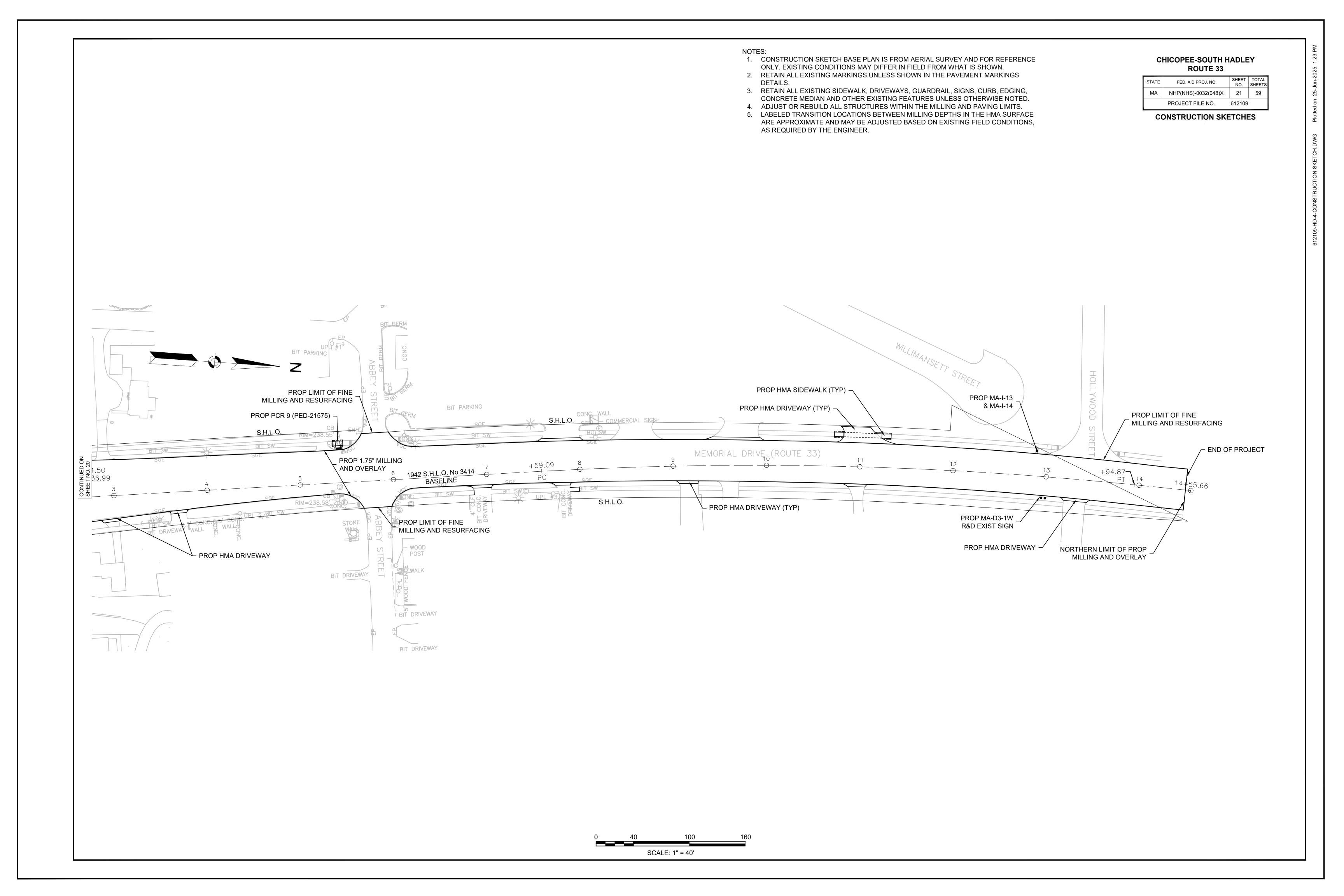












CHICOPEE-SOUTH HADLEY ROUTE 33

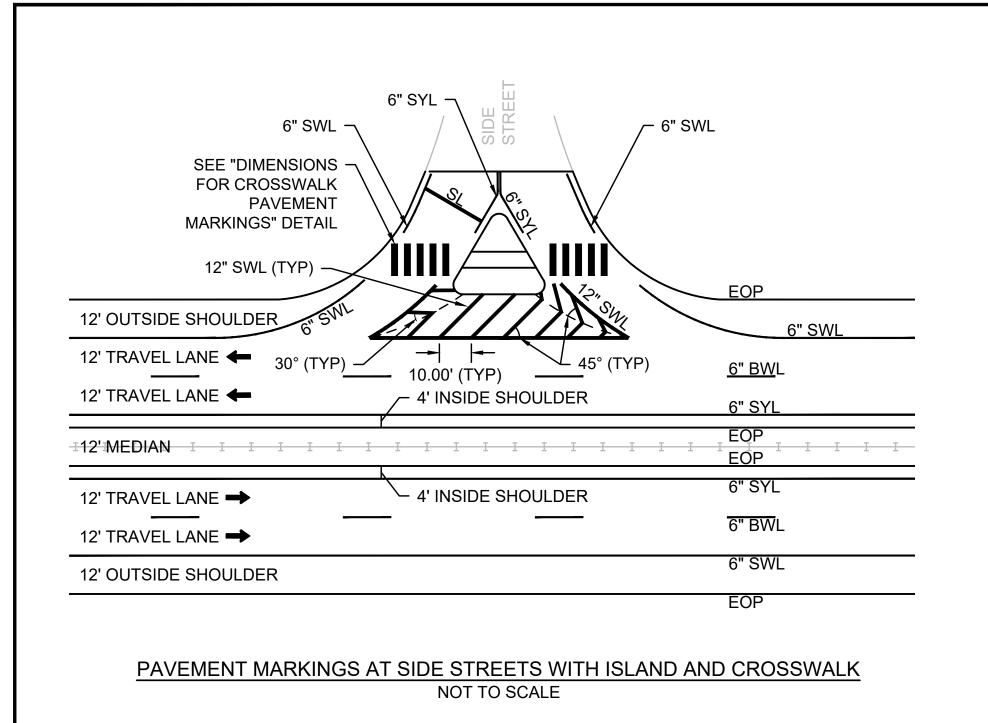
TATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NHP(NHS)-0032(048)X	22	59
	PROJECT FILE NO.	612109	

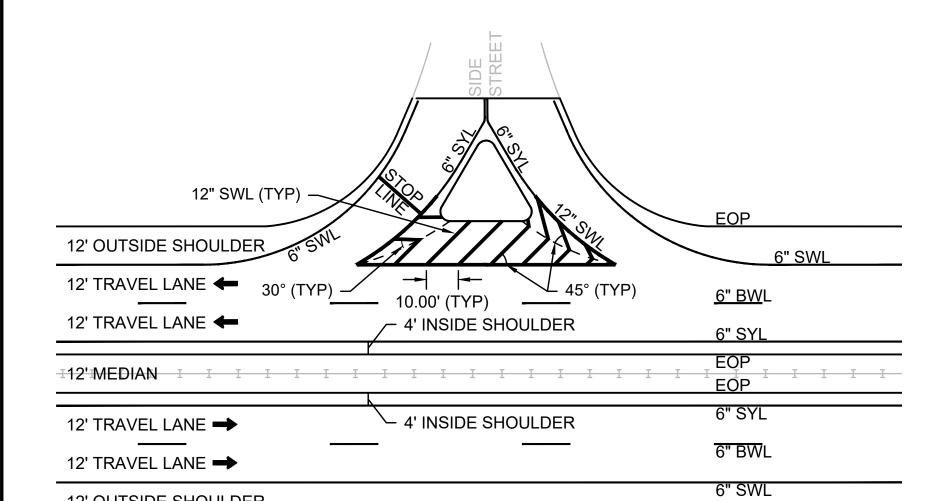
SIGN SUMMARY

IDENTIFI-	SIZE OF SIG	GN (INCHES)		TEXT [DIMENSIONS (IN	NCHES)	NUMBER OF		COLOR		(POST SIZE) AND	UNIT AREA	TOTAL
CATION NUMBER	WIDTH	HEIGHT	TEXT	LETTER HEIGHT	VERTICAL SPACING	ARROW RTE MKR.	SIGNS REQ'D	BACK- GROUND	LEGEND	BORDER	NUMBER REQUIRED	(S.F.)	AREA (S.F.)
MA-D3-1A	51	12	Jennings st	6D/4D	2.75 3.25	NA NA	2	GREEN	WHITE	WHITE	(P5) 2 REQ'D	4.25	8.50
MA-D3-1B	42	12	Cecile Dr	6D/4D	3 3	NA	2	GREEN	WHITE	WHITE	(P5) 2 REQ'D	3.50	7.00
MA-D3-1C	42	12	Edbert st	6D/4D	3 3	NA	2	GREEN	WHITE	WHITE	(P5) 2 REQ'D	3.50	7.00
MA-D3-1D	36	12	Maui Dr	6D/4D	3 3	NA	2	GREEN	WHITE	WHITE	(P5) 0 REQ'D (MOUNT WITH MA-D3-1X)	3.00	6.00
MA-D3-1E	63	12	Beauregard Ter	6D/4D	2.75 3.25	NA	2	GREEN	WHITE	WHITE	(P5) 2 REQ'D	5.25	10.50
MA-D3-1F	48	12	Lauzier ter	6D/4D	3 3	NA	2	GREEN	WHITE	WHITE	(P5) 2 REQ'D	4.00	8.00
MA-D3-1G	45	12	Labrie Ave	6D/4D	3 3	NA	2	GREEN	WHITE	WHITE	(P5) 2 REQ'D	3.75	7.50
MA-D3-1H	54	12	Falmouth Rd	6D/4D	3 3	NA	2	GREEN	WHITE	WHITE	(P5) 2 REQ'D	4.50	9.00
MA-D3-1I	60	12	Brentwood Ter	6D/4D	3 3	NA	2	GREEN	WHITE	WHITE	(P5) 2 REQ'D	5.00	10.00
MA-D3-1J	54	12	Pondview pr	6D/4D	3 3	NA	2	GREEN	WHITE	WHITE	(P5) 2 REQ'D	4.50	9.00
MA-D3-1K	60	21	Old Chicopee Falls Rd	6D/4D	3 3	NA	2	GREEN	WHITE	WHITE	(P5) 2 REQ'D	8.75	17.50
MA-D3-1L	48	12	Keddy Blvd	6D/4D	2.75 3.25	NA	2	GREEN	WHITE	WHITE	(P5) 2 REQ'D	4.00	8.00
MA-D3-1M	48	12	Prospect st	6D/4D	2.75 3.25	NA	2	GREEN	WHITE	WHITE	(P5) 2 REQ'D	4.00	8.00
MA-D3-1N	57	12	McCarthy Ave	6D/4D	2.75 3.25	NA	2	GREEN	WHITE	WHITE	(P5) 2 REQ'D	4.75	9.50

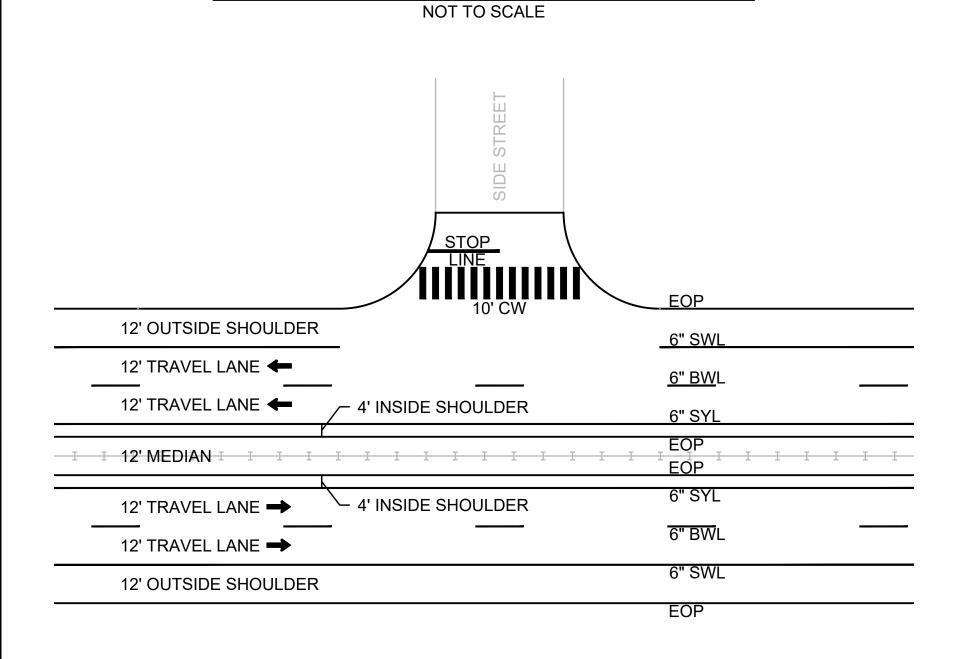
1			<u> </u>								SIGN SUMMAN		
IDENTIFI- CATION	SIZE OF SIG		TEXT		DIMENSIONS (IN		NUMBER OF	DAOL	COLOR		(POST SIZE) AND	UNIT AREA	TOTAL
NUMBER	WIDTH	HEIGHT		LETTER HEIGHT	VERTICAL SPACING	ARROW RTE MKR.	SIGNS REQ'D	BACK- GROUND	LEGEND	BORDER	NUMBER REQUIRED	(S.F.)	AREA (S.F.)
MA-D3-1O	39	12	Paul Ave	6D/4D	3 3	NA	2	GREEN	WHITE	WHITE	(P5) 2 REQ'D	3.25	6.50
MA-D3-1P	51	12	Wallace Ave	6D/4D	3 3	NA	2	GREEN	WHITE	WHITE	(P5) 2 REQ'D	4.25	8.50
MA-D3-1Q	63	12	St Jacques Ave	6D/4D	2.75 3.25	NA	2	GREEN	WHITE	WHITE	(P5) 2 REQ'D	5.25	10.50
MA-D3-1R	42	12	Guerin st	6D/4D	3 3	NA	2	GREEN	WHITE	WHITE	(P5) 2 REQ'D	3.50	7.00
MA-D3-1S	45	12	Sandra st	6D/4D	3 3	NA	2	GREEN	WHITE	WHITE	(P5) 2 REQ'D	3.75	7.50
MA-D3-1T	54	12	Beaudry Ave	6D/4D	2.75 3.25	NA	2	GREEN	WHITE	WHITE	(P5) 2 REQ'D	4.50	9.00
MA-D3-1U	51	12	Ferguson st	6D/4D	2.75 3.25	NA	2	GREEN	WHITE	WHITE	(P5) 2 REQ'D	4.25	8.50
MA-D3-1V	54	12	Yorktown ct	6D/4D	3 3	NA	2	GREEN	WHITE	WHITE	(P5) 2 REQ'D	4.50	9.00
MA-D3-1W	63	12	Willimansett st	6D/4D	3 3	NA	2	GREEN	WHITE	WHITE	(P5) 2 REQ'D	5.25	10.50
MA-D3-1X	51	12	Memorial pr	6D/4D	3 3	NA	44	GREEN	WHITE	WHITE	(P5) 22 REQ'D	4.25	187.00
R1-1	30	30	STOP	TRAFFIC	IANUAL ON UNI CONTROL DEV ETS AND HIGH	ICES FOR	4	RED	WHITE	WHITE	(P5) 1 REQ'D	6.25	25.00
R4-7	24	30		•			2	WHITE	BLACK	BLACK	(P5) 1 REQ'D	5.00	10.00
MA-I-13	24	30	STATE HIGHWAY BEGINS	SEE MassDC	OT STANDARD S	SIGNS BOOK	2	GREEN	WHITE	WHITE	(P5) 1 REQ'D	5.00	10.00
MA-I-14	24	30	STATE HIGHWAY ENDS	•			2	GREEN	WHITE	WHITE	(P5) 1 REQ'D	5.00	10.00

TRAFFIC SIGN SUMMARY





12' OUTSIDE SHOULDER



PAVEMENT MARKINGS AT SIDE STREETS

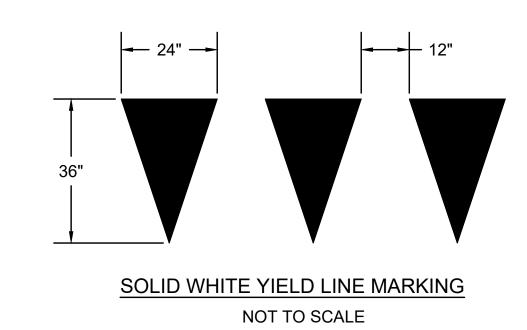
NOT TO SCALE

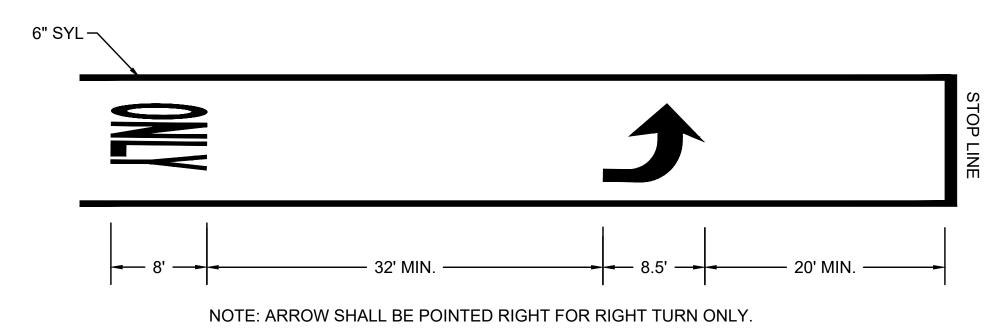
PAVEMENT MARKINGS AT SIDE STREETS WITH ISLAND

CURBLINE -**SCHEMATIC** PARALLEL LINES -**DIRECTION OF TRAVEL** 24" 10' 4' O.C — DIRECTION OF TRAVEL 4' MIN (TYP) 6" MARKING (TYP) - CURBLINE

- NOTES:
 1. ALL 24" LINES SHALL BE APPLIED IN ONE APPLICATION, NO COMBINATION OF LINES (FOUR 6" LINES) WILL BE
- 2. LAYOUT OF CROSSWALKS SHALL BE ORIENTATED IN THE DIRECTION OF TRAVEL AND LOCATED OUTSIDE OF THE WHEEL PATH OF VEHICLES.

DIMENSIONS FOR CROSSWALK PAVEMENT MARKINGS NOT TO SCALE



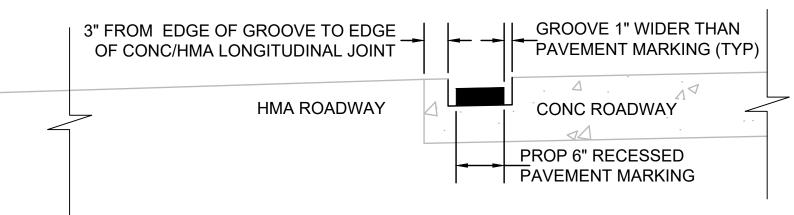


TURN ONLY MARKING AND LEGEND DETAIL NOT TO SCALE

CHICOPEE-SOUTH HADLEY ROUTE 33

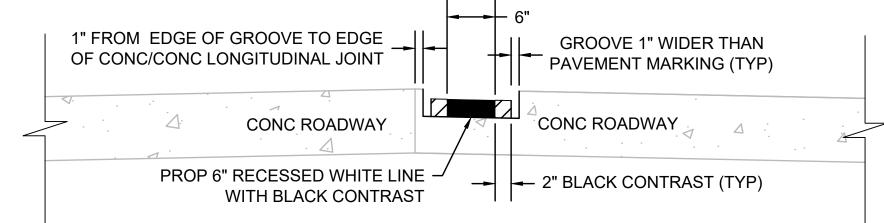
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NHP(NHS)-0032(048)X	23	59
	PROJECT FILE NO.	612109	

PAVEMENT MARKINGS DETAILS



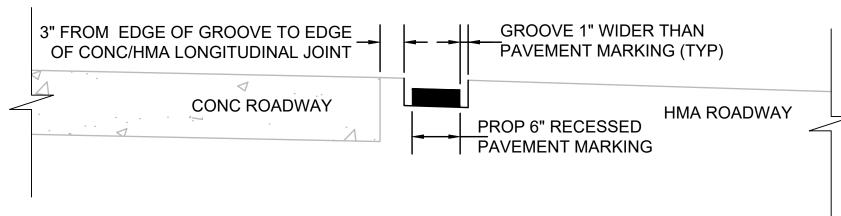
PAVEMENT MARKINGS AT LONGITUDINAL HMA/CONC JOINT NOT TO SCALE

NOTE: GROOVED PAVEMENT AND MARKING DEPTH EXAGGERATED FOR VISUAL CLARITY



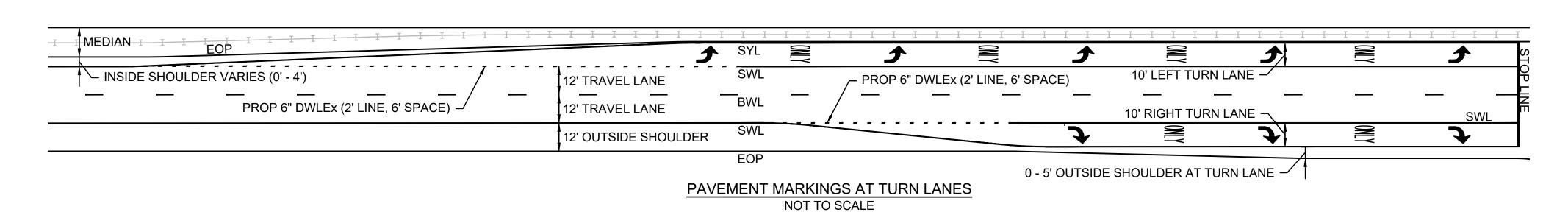
PAVEMENT MARKINGS AT LONGITUDINAL CONC/CONC JOINT NOT TO SCALE

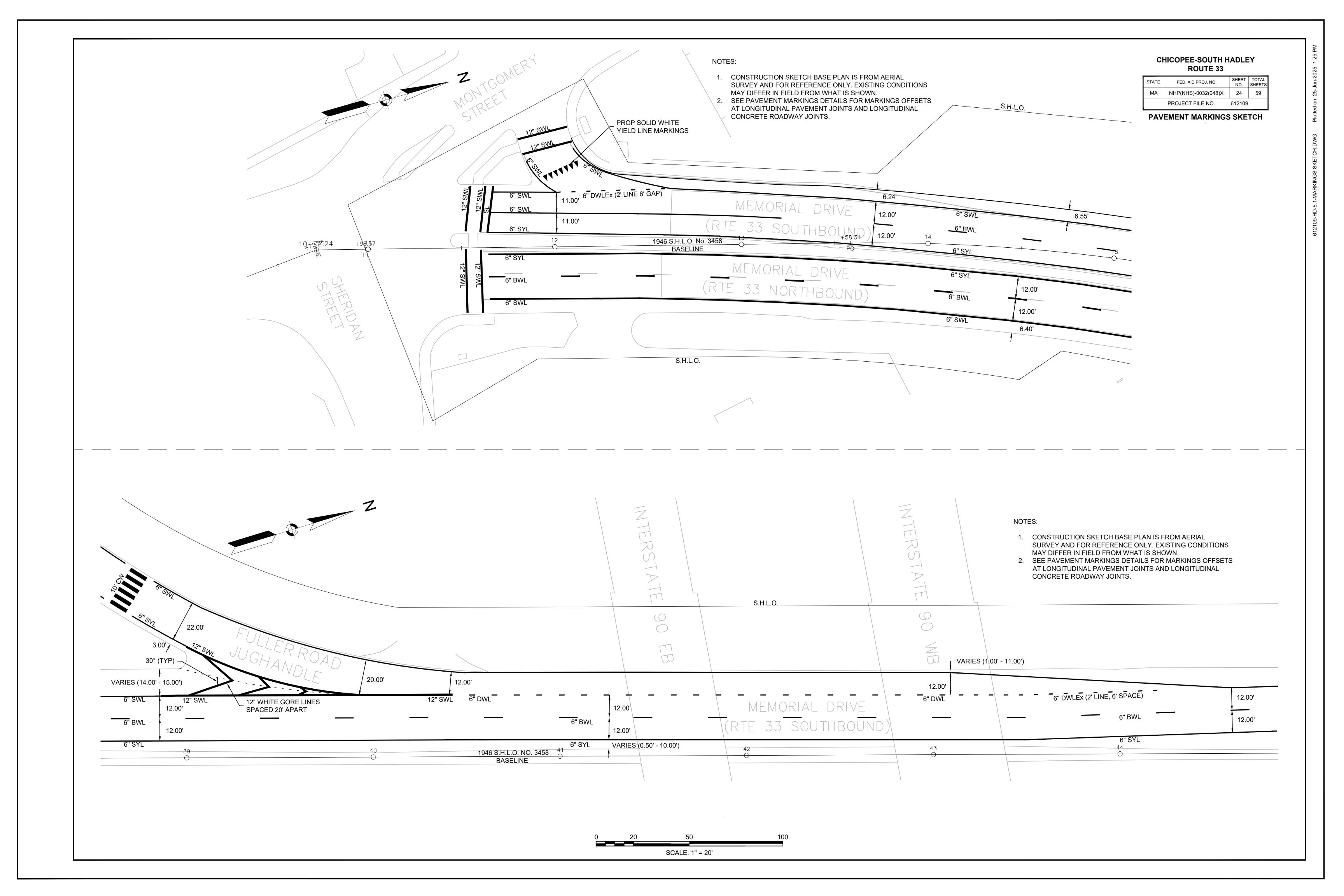
NOTE: GROOVED PAVEMENT AND MARKING DEPTH EXAGGERATED FOR VISUAL CLARITY

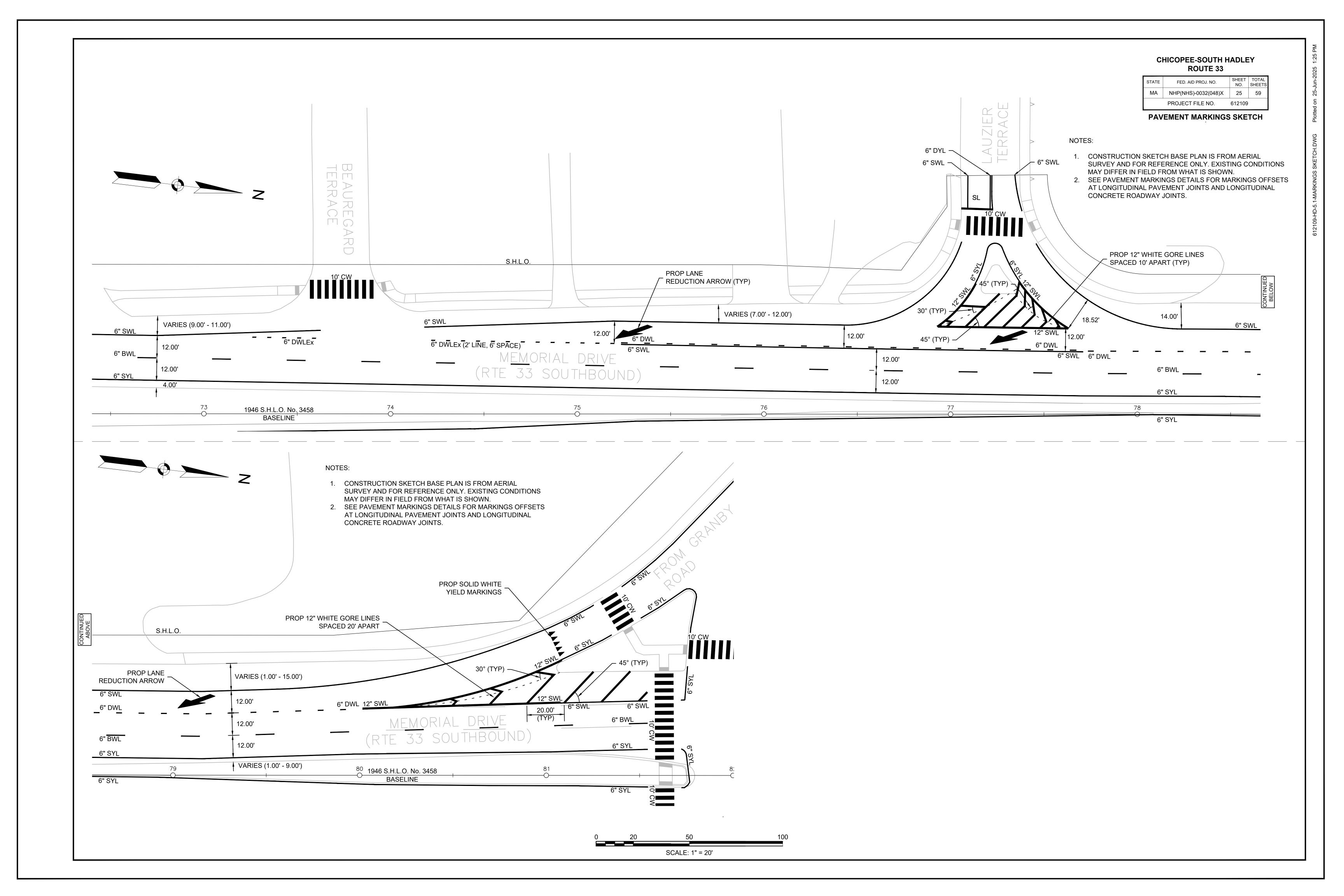


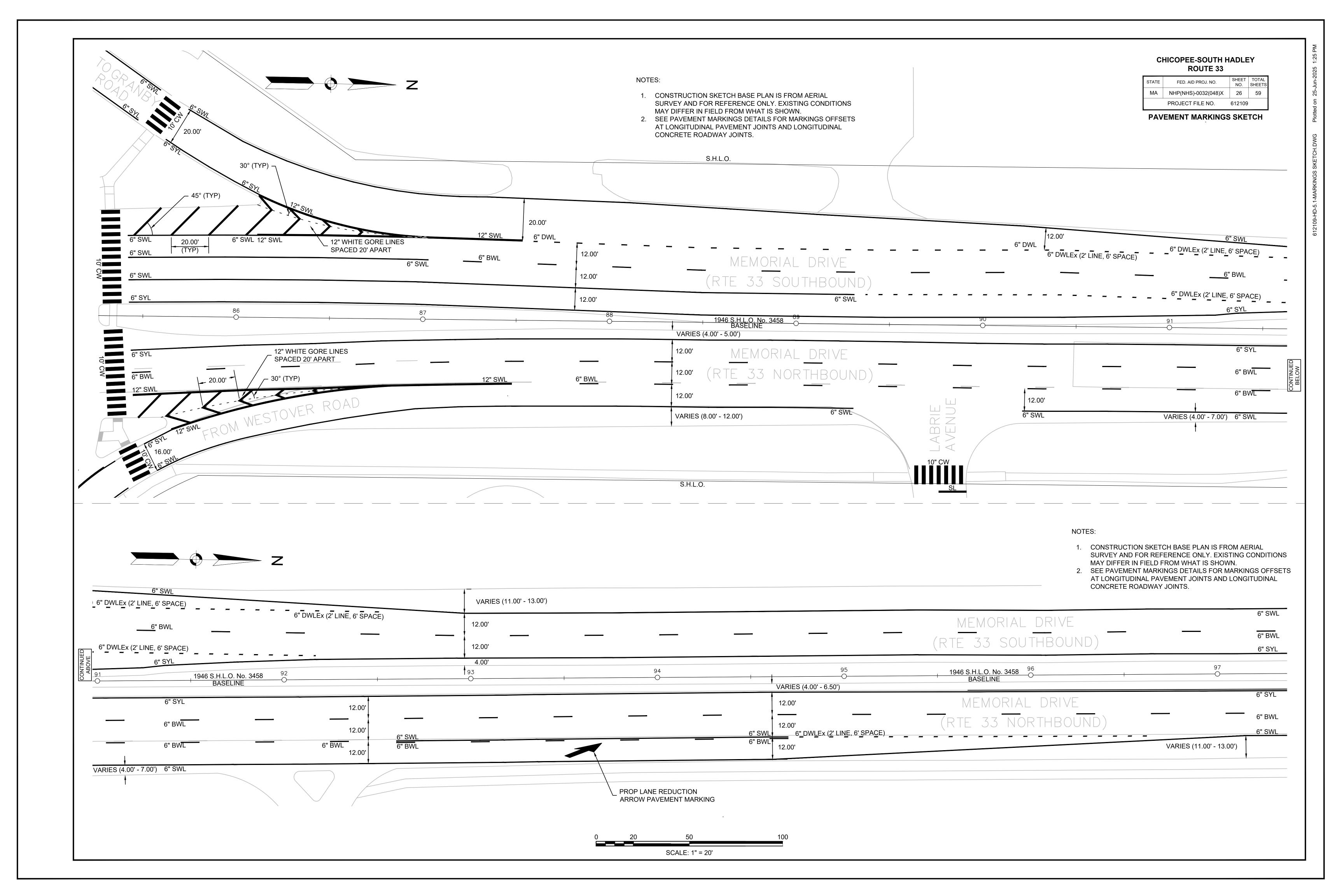
PAVEMENT MARKINGS AT LONGITUDINAL CONC/HMA JOINT NOT TO SCALE

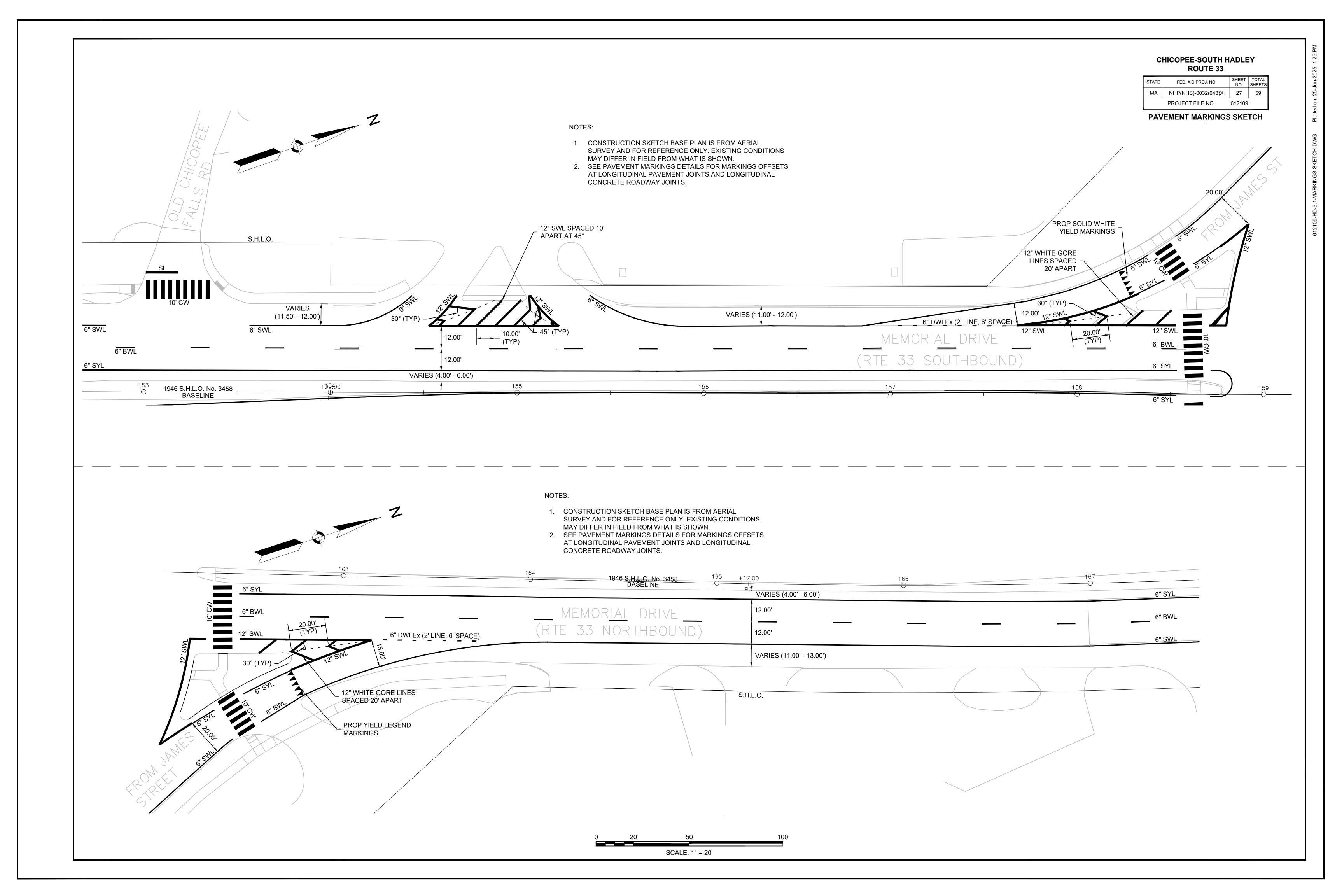
NOTE: GROOVED PAVEMENT AND MARKING DEPTH EXAGGERATED FOR VISUAL CLARITY

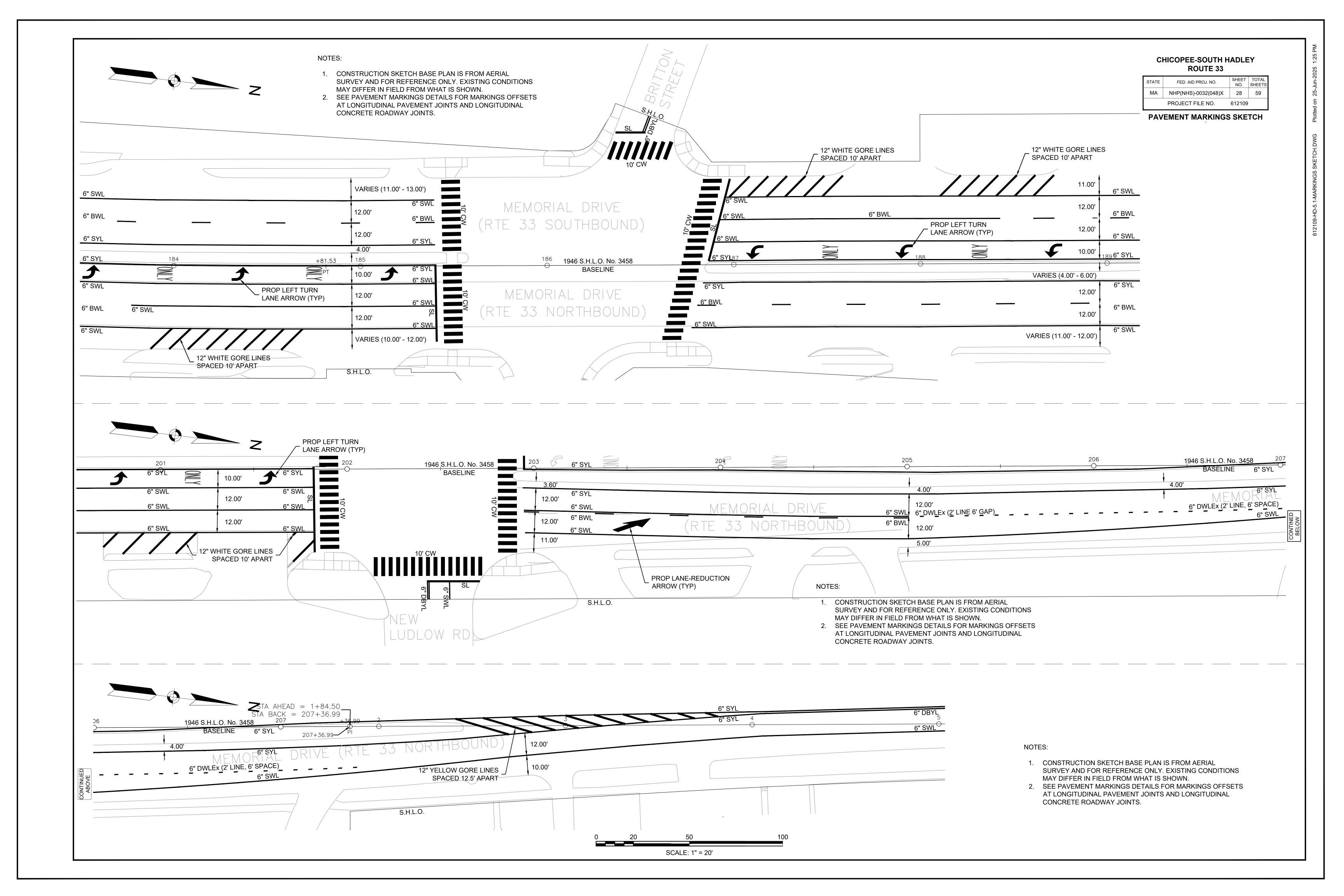


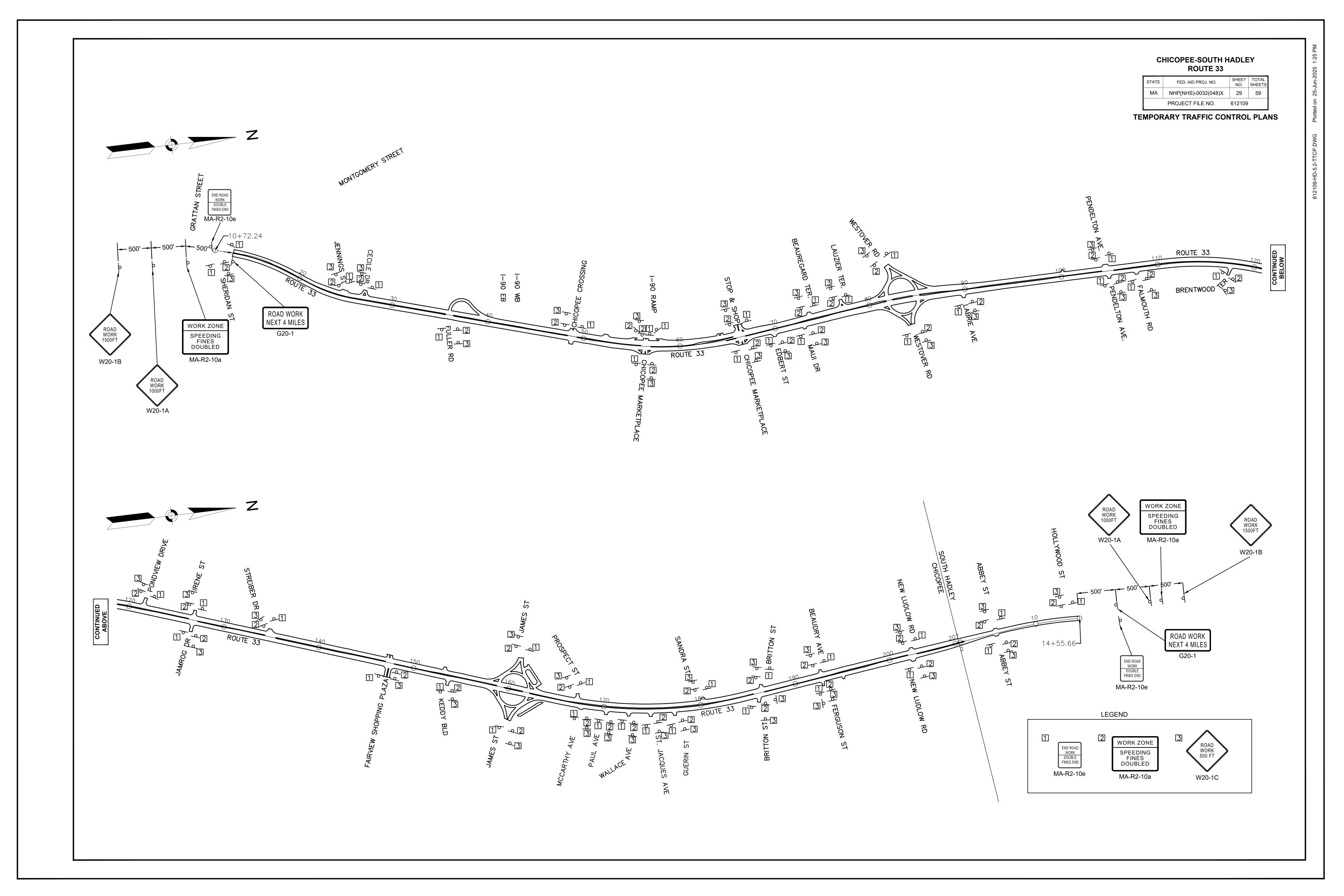












TRAFFIC SIGN SUMMARY

IDENTIFI-	SIZE OF SIG	GN (INCHES)		TEXT	DIMENSIONS (II	NCHES)	NUMBER OF		COLOR		UNIT AREA	TOTAL
CATION NUMBER	WIDTH	HEIGHT	TEXT	LETTER HEIGHT	VERTICAL SPACING	ARROW RTE MKR.	SIGNS REQ'D	BACK- GROUND	LEGEND	BORDER	(S.F.)	AREA (S.F.)
G20-1	48	24	ROAD WORK NEXT 4 MILES	SEE FH HIGHWAY	HWA 2004 STA SIGNS MAN ENT (ENGLIS	ANDARD UAL & 2012		FLUOR- ESCENT ORANGE	BLACK	BLACK	8.00	16.00
R3-7L	30	30	LEFT LANE MUST TURN LEFT				4	FLUOR- ESCENT ORANGE	BLACK	BLACK	6.25	25.00
R4-7	24	30	7				8	WHITE	BLACK	BLACK	5.00	40.00
R9-9	24	12	SIDEWALK				2	FLUOR- ESCENT ORANGE	BLACK	BLACK	2.00	4.00
R5-1	36	36	DO NOT ENTER				1	WHITE	RED	RED	9.00	9.00
R9-11	24	12	SIDEWALK CLOSED AHEAD CROSS HERE				1	FLUOR- ESCENT ORANGE	BLACK	BLACK	2.00	2.00
R9-11a	24	12	SIDEWALK CLOSED CROSS HERE				2	FLUOR- ESCENT ORANGE	BLACK	BLACK	2.00	4.00
W1-4L	36	36					4	FLUOR- ESCENT ORANGE	BLACK	BLACK	9.00	36.00
W1-4R	36	36					4	FLUOR- ESCENT ORANGE	BLACK	BLACK	9.00	36.00
W1-4cL	48	48					2	FLUOR- ESCENT ORANGE	BLACK	BLACK	16.00	32.00
W1-4cR	48	48					2	FLUOR- ESCENT ORANGE	BLACK	BLACK	16.00	32.00
W4-2L	36	36					5	FLUOR- ESCENT ORANGE	BLACK	BLACK	9.00	45.00
W4-2R	36	36					3	FLUOR- ESCENT ORANGE	BLACK	BLACK	9.00	27.00
W5-1	36	36	ROAD NARROWS				8	FLUOR- ESCENT ORANGE	BLACK	BLACK	9.00	72.00
W8-1	36	36	BUMP				2	FLUOR- ESCENT ORANGE	BLACK	BLACK	9.00	18.00
W8-9	36	36	LOW SHOULDER				5	FLUOR- ESCENT ORANGE	BLACK	BLACK	9.00	45.00

TEMPORARY TRAFFIC CONTROL NOTES

- 1. PLACEMENT OF CONSTRUCTION SIGNING, TRAFFIC CONTROL DEVICES, AND TEMPORARY PAVEMENT MARKINGS FOR EACH SET UP SHALL BE COMPLETE PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
- 2. TYPICAL DAYTIME WORK HOURS ARE FROM 7:00 AM TO 3:30 PM ON WEEKDAYS, UNLESS OTHERWISE PERMITTED BY MASSDOT HIGHWAY DIVISION. ALL WORK SCHEDULES SHALL BE PRE-APPROVED BY THE DEPARTMENT PRIOR TO BEGINNING WORK.
- 3. WHERE THERE IS A DIFFERENCE IN ELEVATION BETWEEN MILLED PAVEMENT AND EXISTING PAVEMENT OR NEW PAVEMENT, THE CONTRACTOR SHALL PATCH A TEMPORARY HMA WEDGE WITH A 12:1 (OR FLATTER) SLOPE FOR A SMOOTH TRANSITION

TEMPORARY TRAFFIC CONTROL NOTES - CONCRETE PAVEMENT REPAIRS

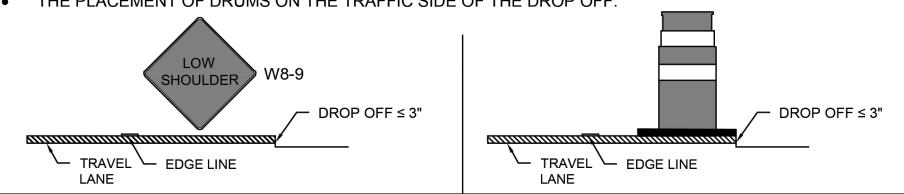
- 1. CONTRACTOR SHALL SUBMIT TO THE RESIDENT ENGINEER TRAFFIC MANAGEMENT PLANS FOR REVIEW AND APPROVAL BY MASSDOT HIGHWAY DIVISION.
- 2. TRAFFIC SETUPS FOR CONCRETE REPAIR WORK SHALL BE LIMITED TO $\frac{1}{2}$ MILE. THE ENGINEER MAY RESTRICT THE MAXIMUM LENGTH OF ANY ONE TEMPORARY TRAFFIC CONTROL SETUP DUE TO TRAFFIC AND CONGESTION CONCERNS.
- 3. CHANNELIZATION SHALL BE ACCOMPLISHED THROUGH THE USE OF REFLECTORIZED PLASTIC DRUMS IN ACCORDANCE WITH THE CURRENT M.U.T.C.D.
- 4. THE CONTRACTOR SHALL MAINTAIN ACCESS TO DRIVEWAYS AND ACCESS TO THE ROADWAY THROUGHOUT CONSTRUCTION. DRIVEWAY ACCESS SHALL BE MAINTAINED BY RESTRICTING THE WORK ZONE TO HALF OF THE DRIVEWAY WIDTH.
- 5. ALL DRUMS SHALL BE PLACED AND MOVED AS NECESSARY TO MAINTAIN ADEQUATE ABUTTER ACCESS AT ALL TIMES. WORK MAY REQUIRED ADDITIONAL SIGNS, DRUMS, AND OTHER TRAFFIC CONTROL DEVICES.
- 6. IF NECESSARY, DETOURS AT INTERSECTIONS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO BEGINNING WORK.
- 7. CROSS-SECTIONAL GRADE DIFFERENCE IN EXCESS OF 2" DURING NON-WORKING HOURS WILL REQUIRE DELINEATION BY USE OF REFLECTORIZED DRUMS OR CONES, AS DIRECTED BY MASSDOT HIGHWAY DIVISION.
- 8. CROSS SECTION GRADE DIFFERENCES IN EXCESS OF 4" DURING NON-WORKING HOURS SHALL BE PROTECTED BY BACKFILLING WITH A WEDGE OF EARTHWORK TO BE COMPACTED AT A 4:1 SLOPE AND WILL ALSO REQUIRE DELINEATION OF DRUMS.

SHORT-TERM PAVEMENT EDGE DROP-OFFS

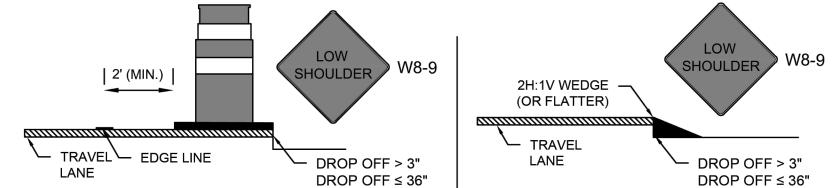
THIS GUIDANCE IS ADOPTED FROM THE ROADSIDE DESIGN GUIDE, 4TH EDITION.

PAVEMENT DROP-OFFS MAY OCCUR DURING PAVING, EXCAVATION, AND OTHER CONSTRUCTION ACTIVITIES. DROP-OFFS CREATE HAZARDS FOR VEHICLES IF NOT PROPERLY MITIGATED. THE FOLLOWING APPLIES FOR ALL ROADS WITH SPEED LIMITS GREATER THAN 30 MPH; FOR ROADS WITH SPEEDS OF 30 MPH OR LESS, TREATMENTS FOR PAVEMENT EDGE DROP-OFFS SHALL BE AT THE DISCRETION OF THE ENGINEER. DROP-OFFS BETWEEN ADJACENT, OPEN TRAVEL LANES SHALL NOT EXCEED 2", AND ANY DROP-OFF IN EXCESS OF 3" SHALL NOT BE LEFT UNATTENDED WITHOUT ONE OF THESE MITIGATION MEASURES APPLIED.

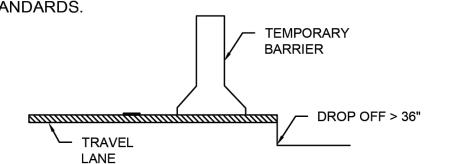
- SHOULDER DROP-OFFS 3" OR LESS ADJACENT TO A SHOULDER OR ACTIVE LANE SHOULD BE MITIGATED BY:
- A W8-9 (LOW SHOULDER) SIGN IN ADVANCE OF AND AT REGULAR INTERVALS THROUGHOUT THE TREATMENT; OR
- THE PLACEMENT OF DRUMS ON THE TRAFFIC SIDE OF THE DROP OFF.



- SHOULDER DROP-OFFS GREATER THAN 3" BUT LESS THAN OR EQUAL TO 36" MUST BE MITIGATED BY:
 A W8-9 (LOW SHOULDER) SIGN IN ADVANCE OF AND AT REGULAR INTERVALS THROUGHOUT THE
- A W8-9 (LOW SHOULDER) SIGN IN ADVANCE OF AND AT REGULAR INTERVALS THROUGHOUT THE
 TREATMENT AND THE PLACEMENT OF DRUMS ON THE TRAFFIC SIDE OF THE DROP-OFF, OFFSET AT LEAST
 2' FROM THE TRAVEL LANE; OR
- A W8-9 (LOW SHOULDER) SIGN IN ADVANCE OF AND AT REGULAR INTERVALS THROUGHOUT THE TREATMENT AND THE PLACEMENT OF A TEMPORARY WEDGE OF MATERIAL ALONG THE FACE OF THE DROP-OFF. THE WEDGE SHOULD CONSIST OF STABLE MATERIAL PLACED ON A 2H:1V OR FLATTER SLOPE.



SHOULDER DROP-OFFS GREATER THAN 36" MUST BE PROTECTED BY TEMPORARY BARRIER DESIGNED TO MASSDOT STANDARDS.



TCP.DWG Plotted on 25-Jul

109-HD-5.2-TTCP.DWG

TRAFFIC SIGN SUMMARY

IDENTIFI- CATION	SIZE OF SIC	GN (INCHES)	TEXT		DIMENSIONS (IN	•	NUMBER OF		COLOR		UNIT AREA	TOTAL
NUMBER	WIDTH	HEIGHT	IEXI	LETTER HEIGHT	VERTICAL SPACING	ARROW RTE MKR.	SIGNS REQ'D	BACK- GROUND	LEGEND	BORDER	(S.F.)	AREA (S.F.
W8-15	36	36	GROOVED PAVEMENT	SEE FH HIGHWAY	WA 2004 STA SIGNS MANI ENT (ENGLISI	ANDARD JAL & 2012	2	FLUOR- ESCENT ORANGE	BLACK	BLACK	9.00	18.00
W8-15p	24	18	0				2	FLUOR- ESCENT ORANGE	BLACK	BLACK	3.00	6.00
W8-25	36	36	SHOULDER ENDS				1	FLUOR- ESCENT ORANGE	BLACK	BLACK	9.00	9.00
W9-3	36	36	CENTER LANE CLOSED AHEAD				1	FLUOR- ESCENT ORANGE	BLACK	BLACK	9.00	9.00
W11-2	36	36					4	FLUOR- ESCENT ORANGE	BLACK	BLACK	9.00	36.00
W12-1	36	36					1	FLUOR- ESCENT ORANGE	BLACK	BLACK	9.00	9.00
W16-9p	24	12	AHEAD				2	FLUOR- ESCENT ORANGE	BLACK	BLACK	2.00	4.00
W16-7pL	24	12					2	FLUOR- ESCENT ORANGE	BLACK	BLACK	2.00	4.00
W20-1	36	36	ROAD WORK AHEAD				4	FLUOR- ESCENT ORANGE	BLACK	BLACK	9.00	36.00
W20-1a	36	36	ROAD WORK 1000FT				2	FLUOR- ESCENT ORANGE	BLACK	BLACK	9.00	18.00
W20-1b	36	36	ROAD WORK 1500FT				2	FLUOR- ESCENT ORANGE	BLACK	BLACK	9.00	18.00
W20-1c	36	36	ROAD WORK 500 FT				48	FLUOR- ESCENT ORANGE	BLACK	BLACK	9.00	432.00
W20-4	36	36	ONE LANE ROAD AHEAD				6	FLUOR- ESCENT ORANGE	BLACK	BLACK	9.00	54.00
W20-5L	36	36	LEFT LANE CLOSED AHEAD				6	FLUOR- ESCENT ORANGE	BLACK	BLACK	9.00	54.00
W20-5R	36	36	RIGHT LANE CLOSED AHEAD				3	FLUOR- ESCENT ORANGE	BLACK	BLACK	9.00	27.00
W20-7	36	36	FLAGGER AHEAD				4	FLUOR- ESCENT ORANGE	BLACK	BLACK	9.00	36.00

IDENTIFI-	SIZE OF SIC	GN (INCHES)		TE	XT DIM	MENSIONS (II	NCHES)	NUMBER OF		COLOR			TOTAL
CATION NUMBER	WIDTH	HEIGHT	TEXT	LETTER HEIGH		VERTICAL SPACING	ARROW RTE MKR.	SIGNS REQ'D	BACK- GROUND	LEGEND	BORDER	UNIT AREA (S.F.)	AREA (S.F.
W21-5	36	36	SHOULDER	SEE HIGHW	FHW. 'AY SI	A 2004 STA GNS MAN			FLUOR- ESCENT ORANGE	BLACK	BLACK	9.00	9.00
W21-5bR	36	36	RIGHT SHOULDER CLOSED XXX					1	FLUOR- ESCENT ORANGE	BLACK	BLACK	9.00	9.00
W21-5aR	36	36	RIGHT SHOULDER CLOSED					1	FLUOR- ESCENT ORANGE	BLACK	BLACK	9.00	9.00
MA-R2-10a	48	48	WORK ZONE SPEEDING FINES DOUBLED	SEE M		OT 2016 S GNS BOOK	TANDARD (45	FLUOR- ESCENT ORANGE	BLACK	BLACK	16.00	720.00
MA-R2-10e	36	36	END ROAD WORK DOUBLE FINES END					46	FLUOR- ESCENT ORANGE	BLACK	BLACK	9.00	414.00
MA-W20-7b	48	36	POLICE OFFICER AHEAD					2	FLUOR- ESCENT ORANGE	BLACK	BLACK	12.00	24.00
MA-W24-2	36	36	LANES SHIFT AHEAD					2					
MA-W28-1	48	48	RUMBLE STRIPS AHEAD					6	FLUOR- ESCENT ORANGE	BLACK	BLACK	16.00	96.00
MA-W30-8R	36	36	SQUEEZE					2	FLUOR- ESCENT ORANGE	BLACK	BLACK	9.00	18.00
MA-W4-7R	36	36	THRU TRAFFIC MERGE RIGHT					4	FLUOR- ESCENT ORANGE	BLACK	BLACK	9.00	36.00

NOTES:

THE TRAFFIC SIGN SUMMARY WAS CREATED FOR THE FOLLOWING:

CONSTRUCTION STANDARDS DRAWING NUMBER 852.1.1 - SIDEWALK DETOUR

CONSTRUCTION STANDARDS DRAWING NUMBER 852.1.2 - SIDEWALK DIVERSION

CONSTRUCTION STANDARDS DRAWING NUMBER 852.1.3 - PEDESTRAIN DETOUR FOR CROSSWALK CLOSURE CONSTRUCTION STANDARDS DRAWING NUMBER 852.4.4 - ALTERNATING ONE-WAY (TRAFFIC OFFICER)

CONSTRUCTION STANDARDS DRAWING NUMBER 852.5.1 - TWO LANE ROAD CENTER OF ROAD CLOSURE

CONSTRUCTION STANDARDS DRAWING NUMBER 852.5.2 - TWO LANE ROAD CENTER OF ROAD CLOSURE WITH DROP-OFF PROTECTION

CONSTRUCTION STANDARDS DRAWING NUMBER 852.5.3 - TWO LANE ROAD SHOULDER CLOSURE CONSTRUCTION STANDARDS DRAWING NUMBER 852.5.4 - TWO LANE ROAD HALF ROAD CLOSURE

CONSTRUCTION STANDARDS DRAWING NUMBER 852.7.1 - DIVIDED HIGHWAY RIGHT SHOULDER CLOSURE (SHORT TERM)

CONSTRUCTION STANDARDS DRAWING NUMBER 852.7.3 - DIVIDED HIGHWAY RIGHT LANE CLOSURE

CONSTRUCTION STANDARDS DRAWING NUMBER 852.7.4 - DIVIDED HIGHWAY LEFT LANE CLOSURE

CONSTRUCTION STANDARDS DRAWING NUMBER 852.7.7 - DIVIDED HIGHWAY CENTER LANE CLOSURE (SHORT TERM)

CONSTRUCTION STANDARDS DRAWING NUMBER 852.7.10 - DIVIDED HIGHWAY MULTIPLE LANE SHIFT CONSTRUCTION STANDARDS DRAWING NUMBER 852.7.11 - DIVIDED HIGHWAY SCARIFIED PAVEMENT/STEEL PLATE

CONSTRUCTION STANDARDS DRAWING NUMBER 852.10.1 - INTERSECTION CENTER CLOSURE CONSTRUCTION STANDARDS DRAWING NUMBER 852.10.2 - INTERSECTION QUADRANT CLOSURE

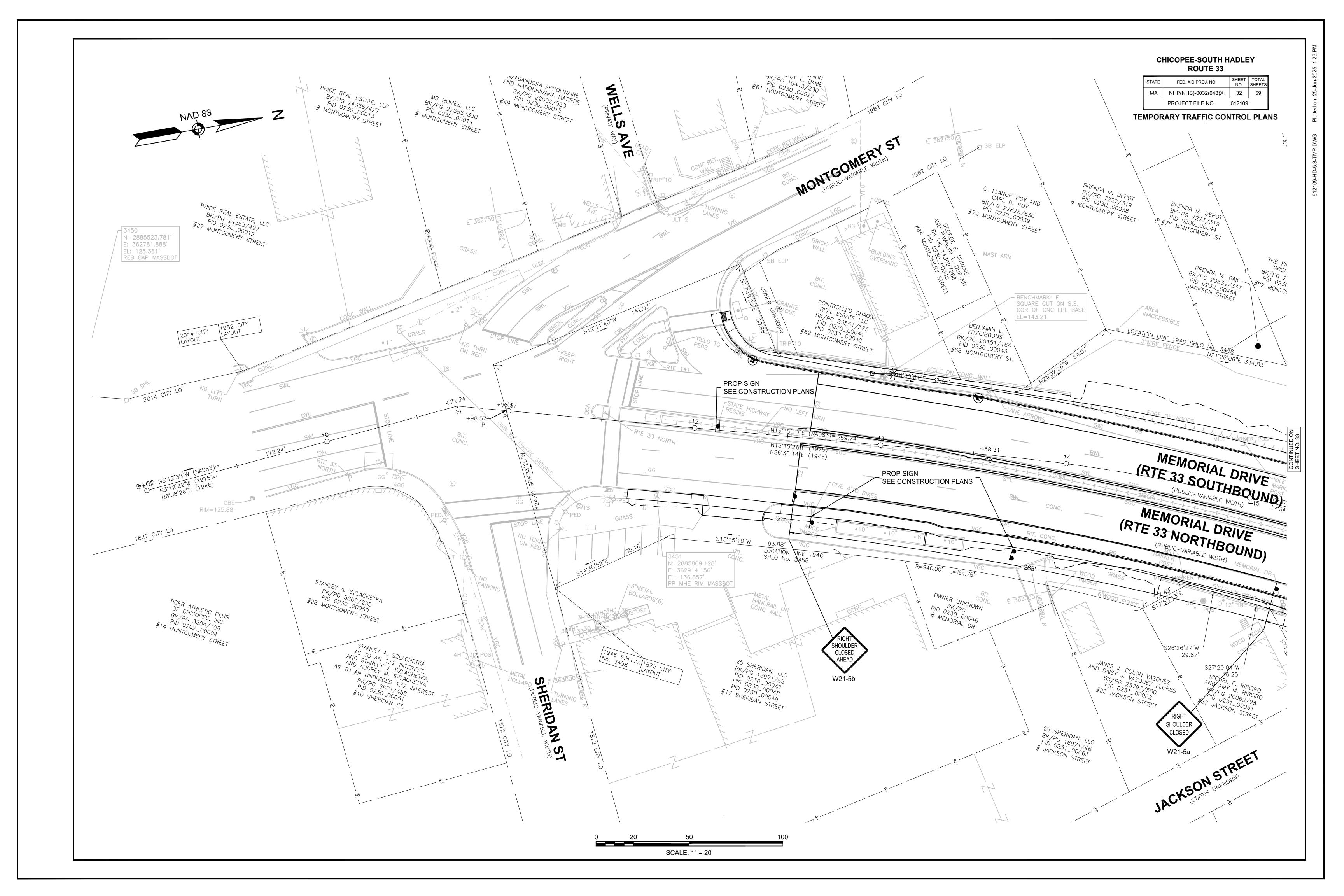
CONSTRUCTION STANDARDS DRAWING NUMBER 852.10.3 - INTERSECTION FAR SIDE INSIDE LANE CLOSURE

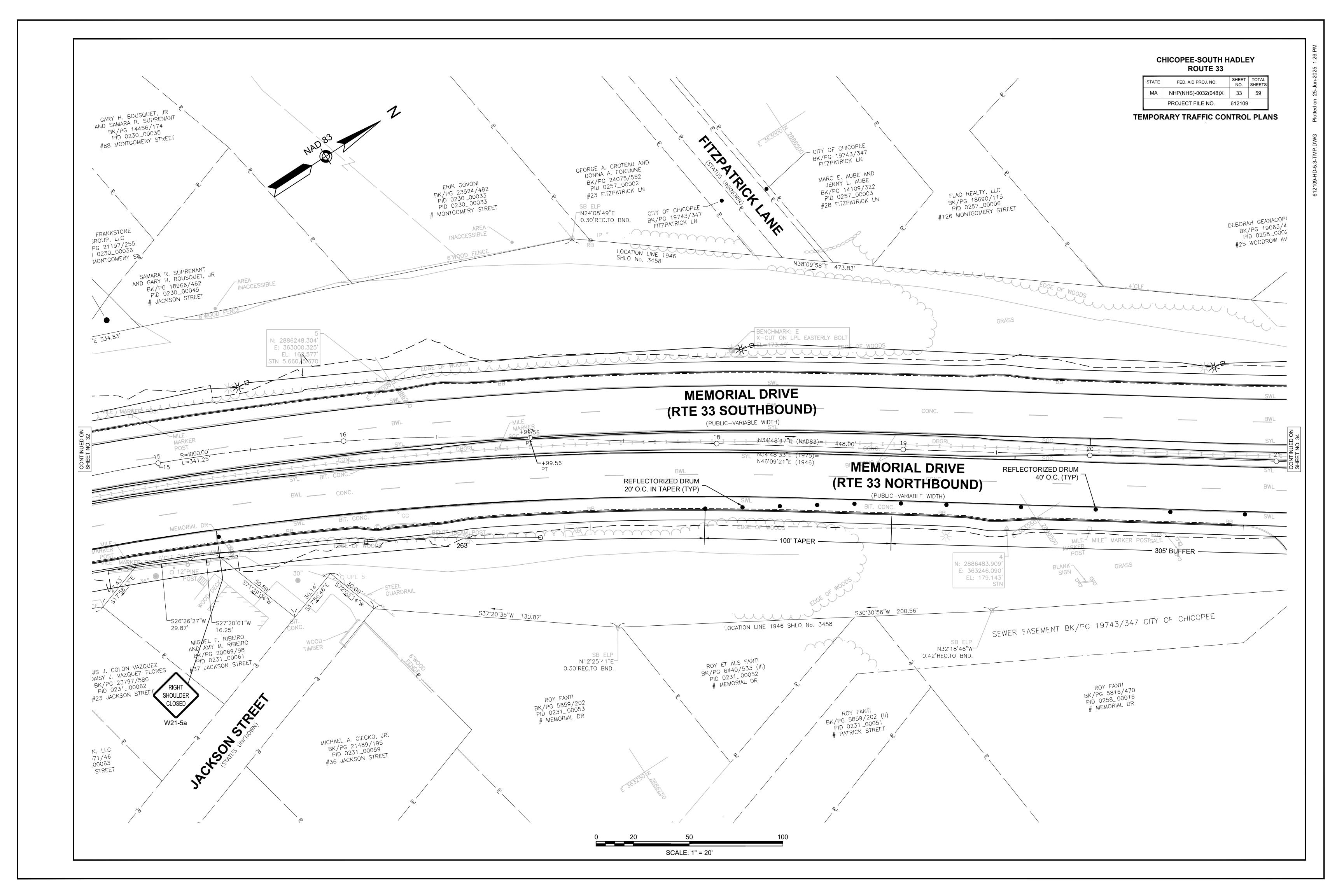
CONSTRUCTION STANDARDS DRAWING NUMBER 852.10.4 - INTERSECTION FAR SIDE RIGHT LANE CLOSURE

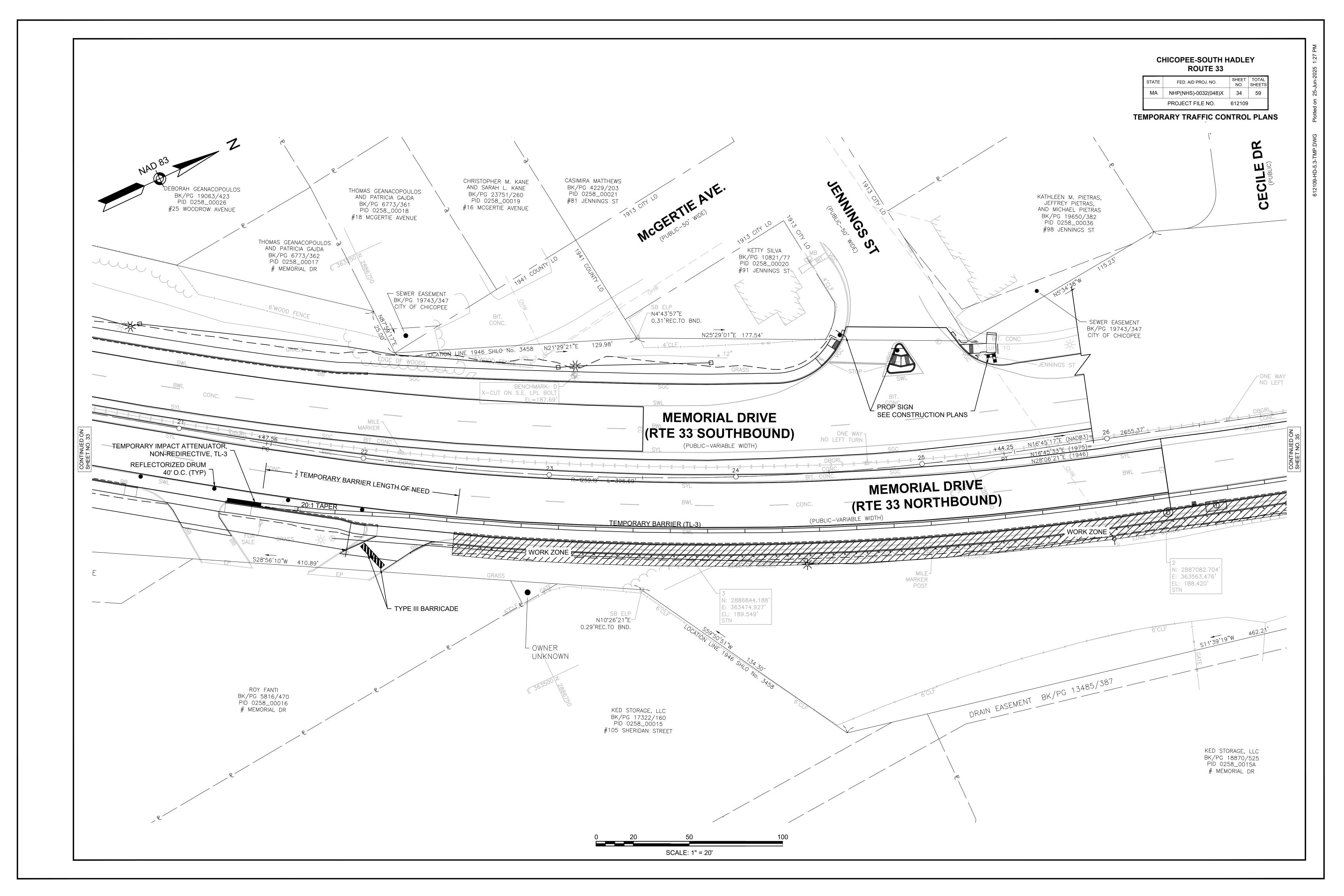
CONSTRUCTION STANDARDS DRAWING NUMBER 852.10.6 - INTERSECTION MULTI-LANE CLOSURE (LOW SPEED)

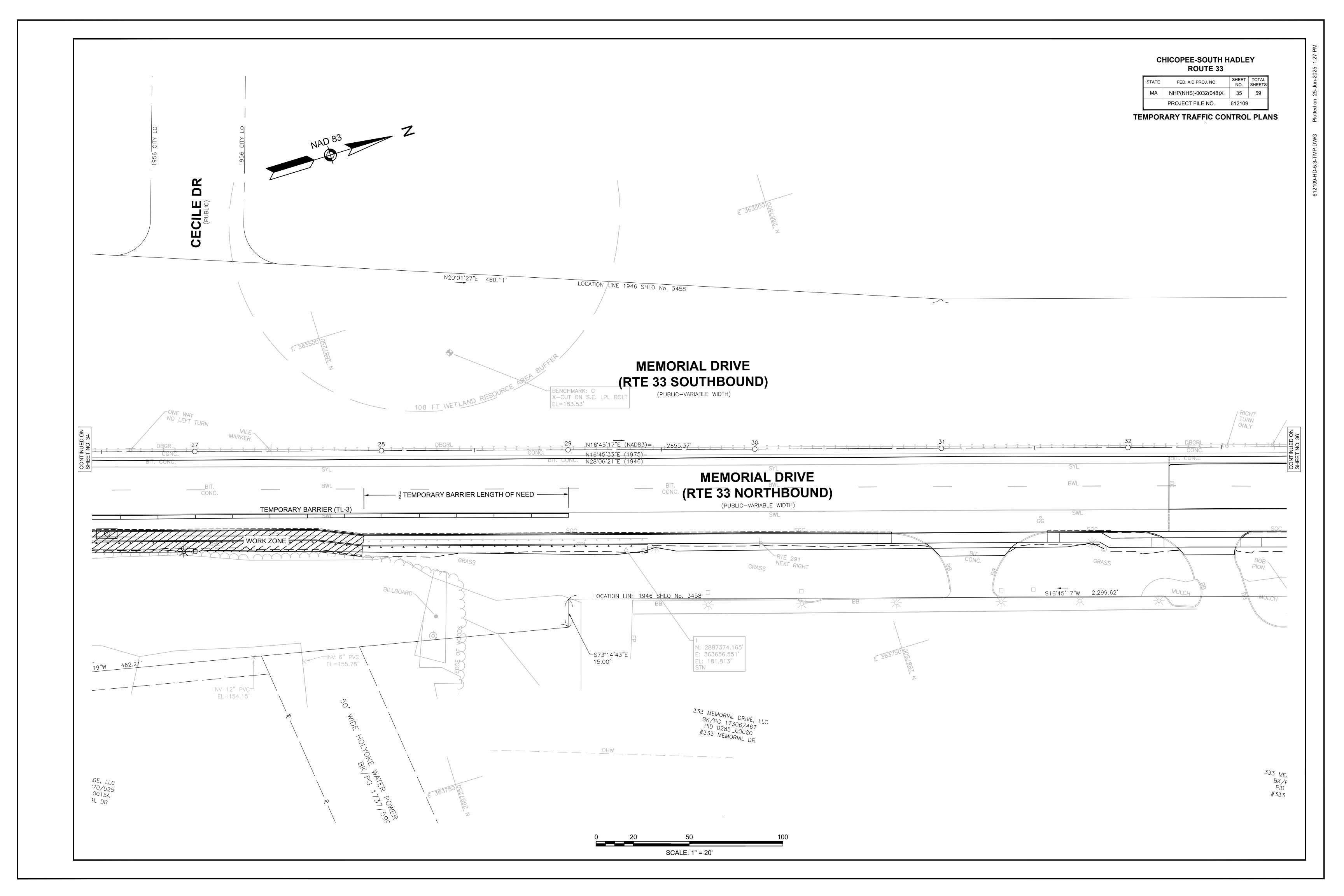
PROJECT LIMIT SIGNS TO REMAIN IN PLACE FOR PROJECT DURATION (SEE SHEET 29)

SHORT-TERM PAVEMENT EDGE DROP OFFS (SEE SHEET 30)

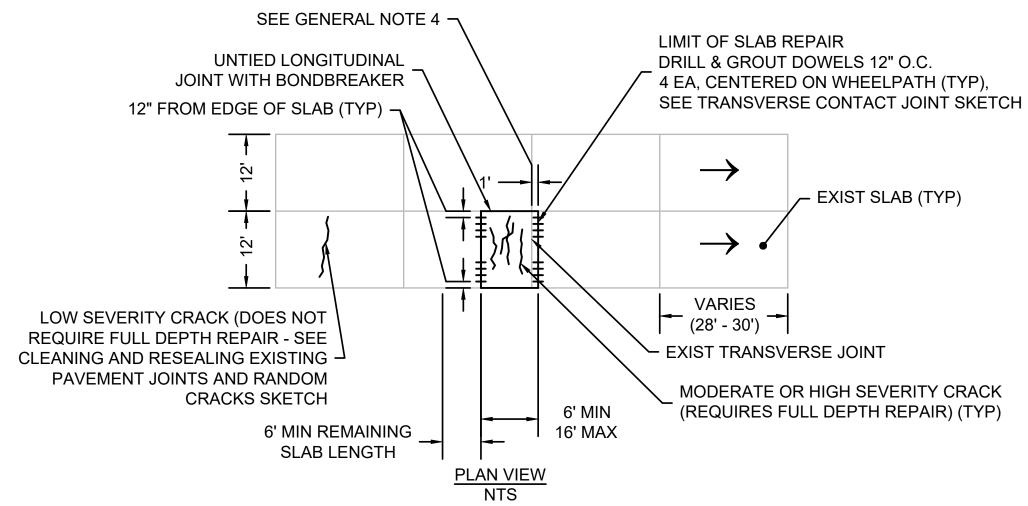








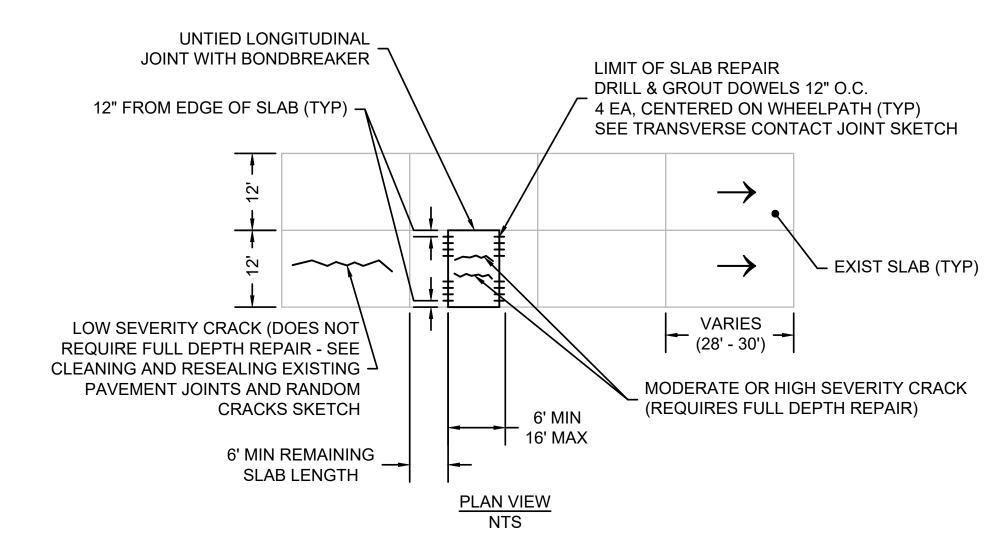
CONSTRUCTION DETAILS
CONCRETE PAVEMENT REPAIRS



TRANSVERSE CRACK SEVERITY

LOW - CRACKS THAT ARE NOT SPALLED OR WITH SPALLING \leq 10% OF THE CRACK LENGTH. MODERATE - CRACKS WITH SPALLING ALONG > 10% AND \leq 50% OF THE CRACK LENGTH. HIGH - CRACKS WITH SPALLING ALONG > 50% OF THE CRACK LENGTH.

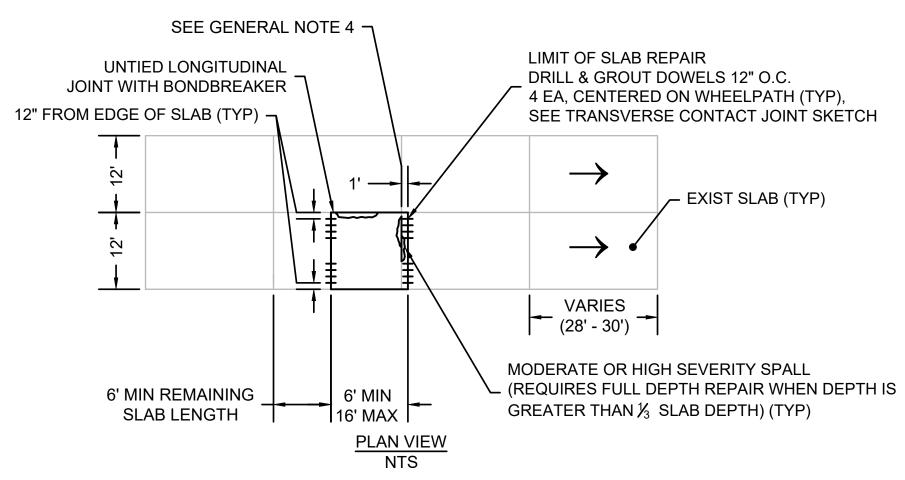
FULL DEPTH REPAIR (TRANSVERSE CRACK)



LONGITUDINAL CRACK SEVERITY

LOW - CRACK < $\frac{1}{8}$ " WIDE, NO SPALLING, NO MEASURABLE FAULTING MODERATE - CRACK > $\frac{1}{8}$ " TO < $\frac{1}{2}$ " WIDE, WITH SPALLING < 3" OR FAULTING UP TO $\frac{1}{2}$ " HEIGHT HIGH - CRACK $\geq \frac{1}{2}$ " WIDE OR WITH SPALLING ≥ 3 ", FAULTING $\geq \frac{1}{2}$ "

FULL DEPTH REPAIR (LONGITUDINAL CRACK)



NOTES:

NOTES:

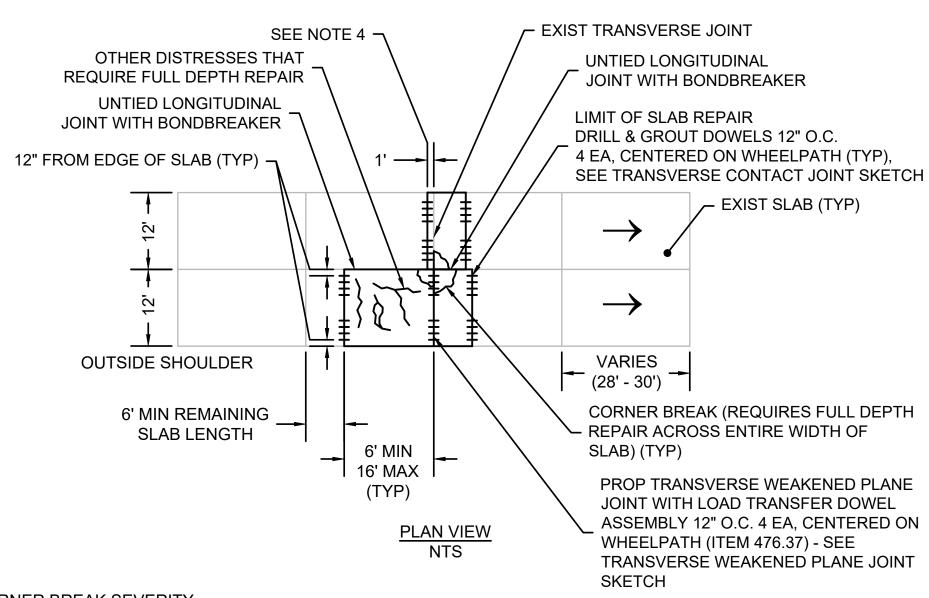
1. JOINT SPALL IS CRACKING, BREAKING, CHIPPING OR FRAYING OF SLAB EDGES WITHIN 1' FROM THE FACE OF THE JOINT.

JOINT SPALL SEVERITY

LOW - SPALL THAT IS < 3" WIDE MEASURED FROM THE FACE OF JOINT WITH LOSS OF MATERIAL, OR SPALL WITH NO LOSS OF MATERIAL AND NO PATCHING.

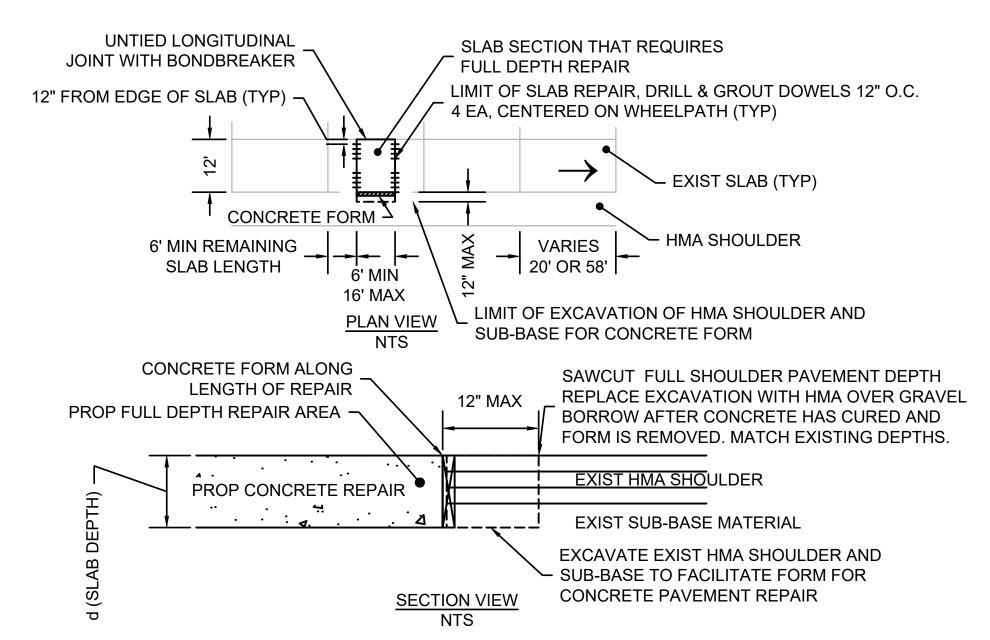
MODERATE - SPALL 3" TO 6" WIDE MEASURED FROM THE FACE OF JOINT WITH LOSS OF MATERIAL.
HIGH - SPALL > 6" WIDE MEASURED FROM THE FACE OF JOINT WITH LOSS OF MATERIAL OR IS BROKEN INTO TWO
OR MORE PIECES OR CONTAINS PATCH MATERIAL.

FULL DEPTH REPAIR
(LONGITUDINAL AND TRANSVERSE JOINT SPALL)



CORNER BREAK SEVERITY
ALL CORNER BREAKS EXCEPT FOR ONES WITH HAIRLINE CRACKS ONLY, REQUIRE FULL DEPTH REPAIR.

FULL DEPTH REPAIR (CORNER BREAK)



NOTE: 1. SEE CLEANING AND RESEALING EXISTING JOINTS AND RANDOM CRACKS SKETCH FOR FINAL JOINT CONSTRUCTION DETAILS.

FULL DEPTH REPAIR
(CONCRETE REPAIR ADJACENT TO HMA SHOULDER)

GENERAL NOTES:

- 1. TIGHT HAIRLINE CRACKS THAT DO NOT EXTEND TO THE BOTTOM OF THE SLAB, DO NOT REQUIRE ANY TREATMENT, SEALING, OR REPAIR.
- 2. ALL CONCRETE FOR REPAIRS SHALL BE HIGH EARLY STRENGTH, TYPE III, 5000 PSI ¾" 705 PORTLAND CEMENT CONCRETE. FINISHED TO GRADE. SLOPE. AND TEXTURE.

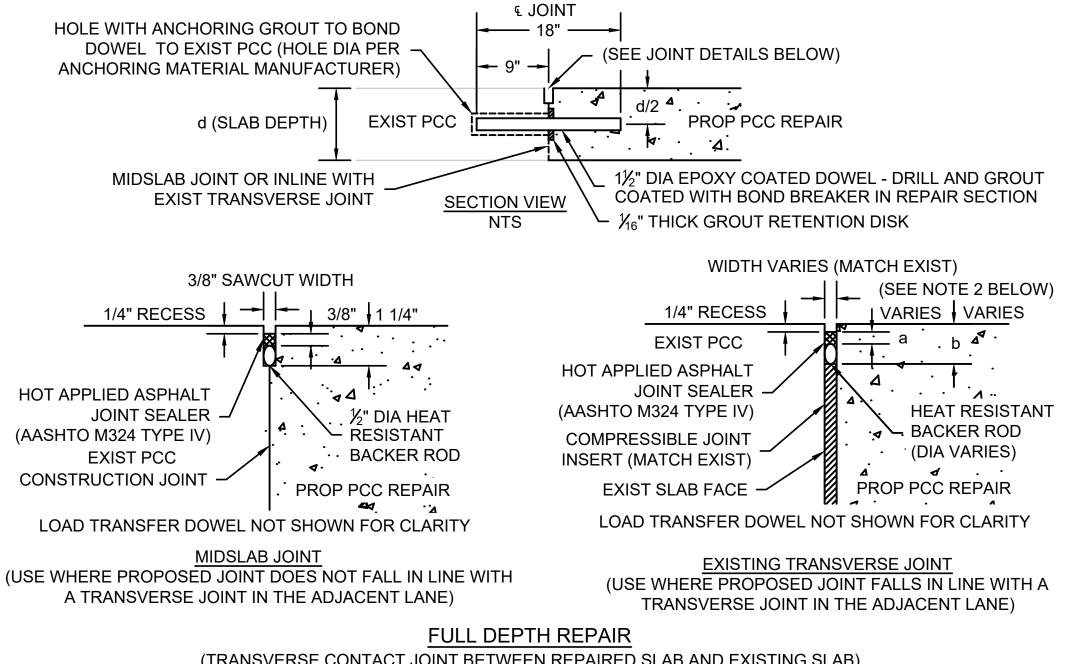
FULL DEPTH REPAIR NOTES:

- 3. FULL DEPTH REPAIRS SHALL EXTEND THE FULL WIDTH OF THE CONCRETE SLAB.
- 4. IF PATCH BOUNDARY WIDTH FALLS WITHIN 6' OF AN EXISTING TRANSVERSE JOINT THAT DOES NOT REQUIRE REPAIR, THE PATCH SHALL EXTEND 1' BEYOND THE TRANSVERSE JOINT INTO THE ADJACENT SLAB.
- 5. THE ENTIRE SLAB SHALL BE REPLACED IF THERE ARE MULTIPLE INTERSECTING CRACKS.
- 6. PNEUMATIC TOOLS USED TO EXCAVATE UNSOUND OR DETERIORATED CONCRETE SHALL HAVE A MAXIMUM WEIGHT OF 30 POUNDS. IF SOUND CONCRETE IS DAMAGED DURING CONCRETE EXCAVATION WITH THE PNEUMATIC TOOLS, THEN LIGHTER TOOLS SHALL BE USED.

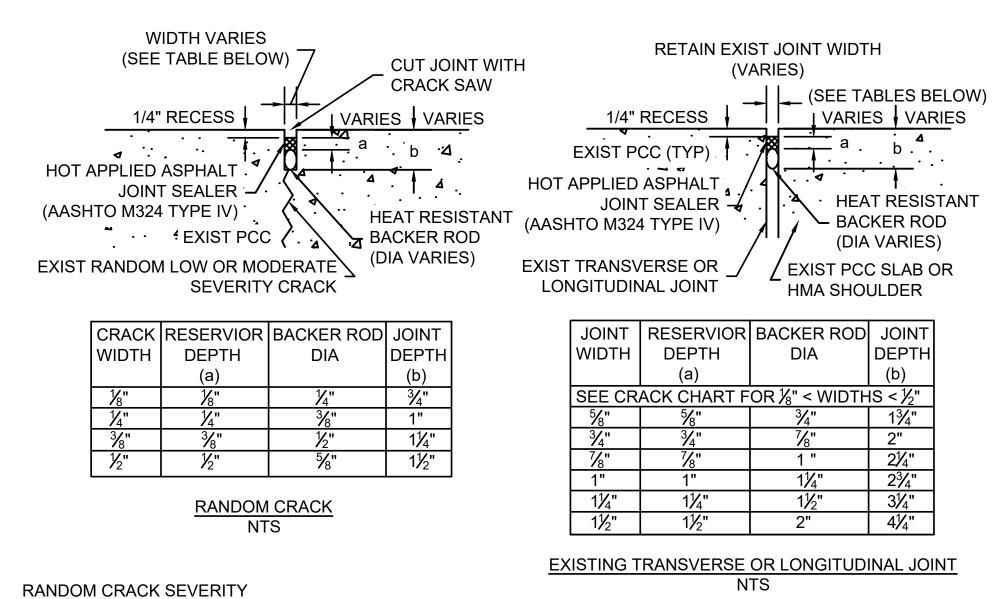
ROADWAY DIAMOND GRINDING NOTES:

- DIAMOND GRINDING OF ROADWAY SHALL OCCUR AFTER FULL AND PARTIAL DEPTH CONCRETE REPAIR ARE COMPLETE AND PRIOR TO CLEANING AND SEALING JOINTS AND RANDOM CRACKS.
- 8. CROSS SLOPES TO MATCH.

CONSTRUCTION DETAILS **CONCRETE PAVEMENT REPAIRS**



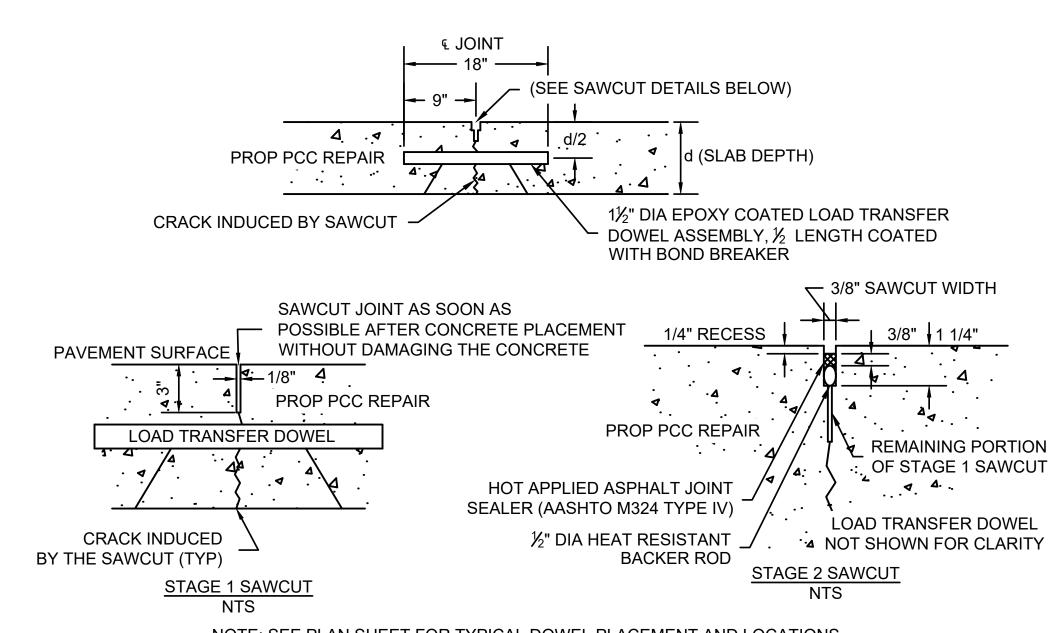
(TRANSVERSE CONTACT JOINT BETWEEN REPAIRED SLAB AND EXISTING SLAB)



LOW - CRACK < 1/8" WIDE, NO SPALLING, NO MEASURABLE FAULTING MODERATE - CRACK > 1/8" TO < 1/2" WIDE, WITH MINIMAL SPALLING

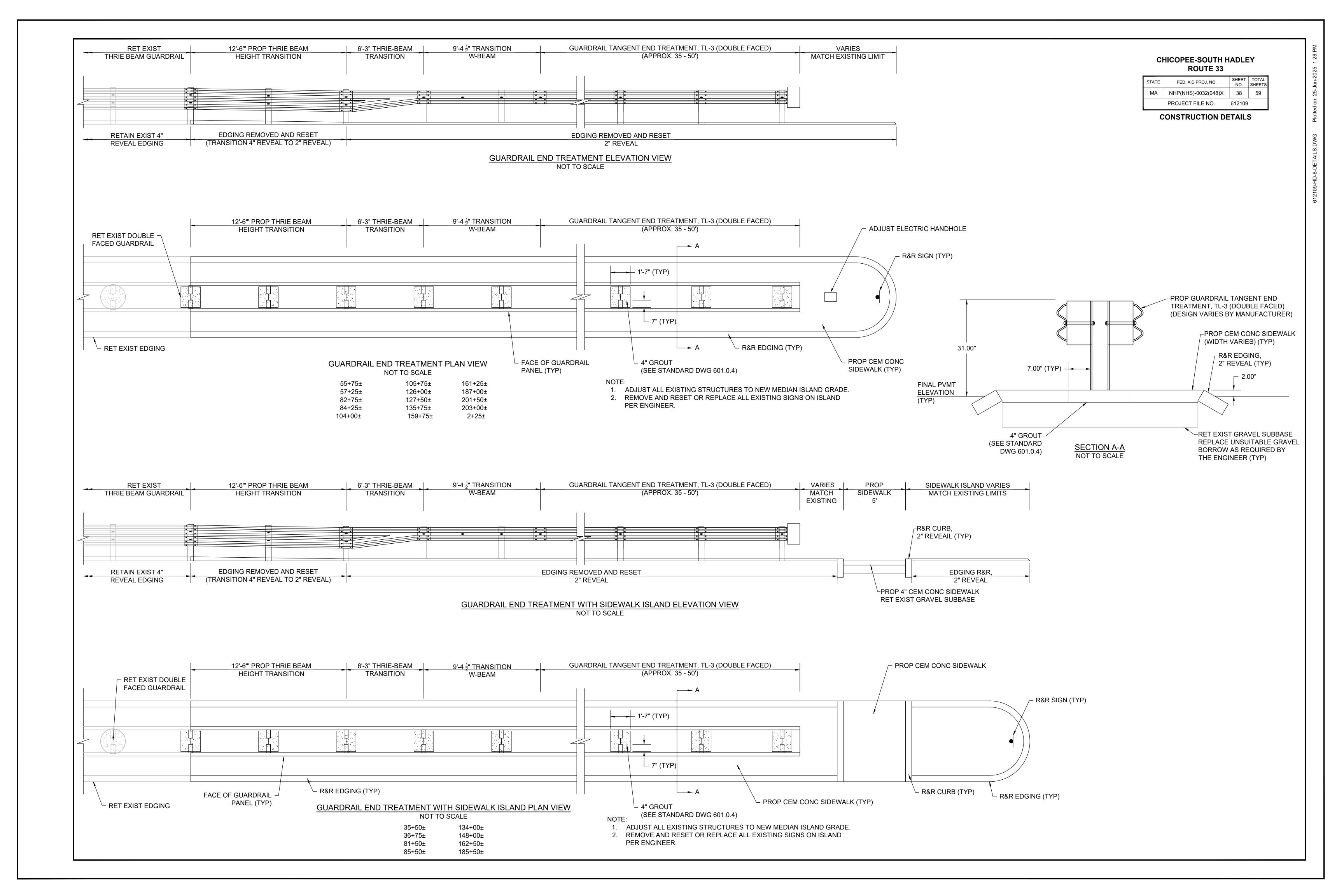
CLEANING AND RESEALING EXISTING PAVEMENT JOINTS

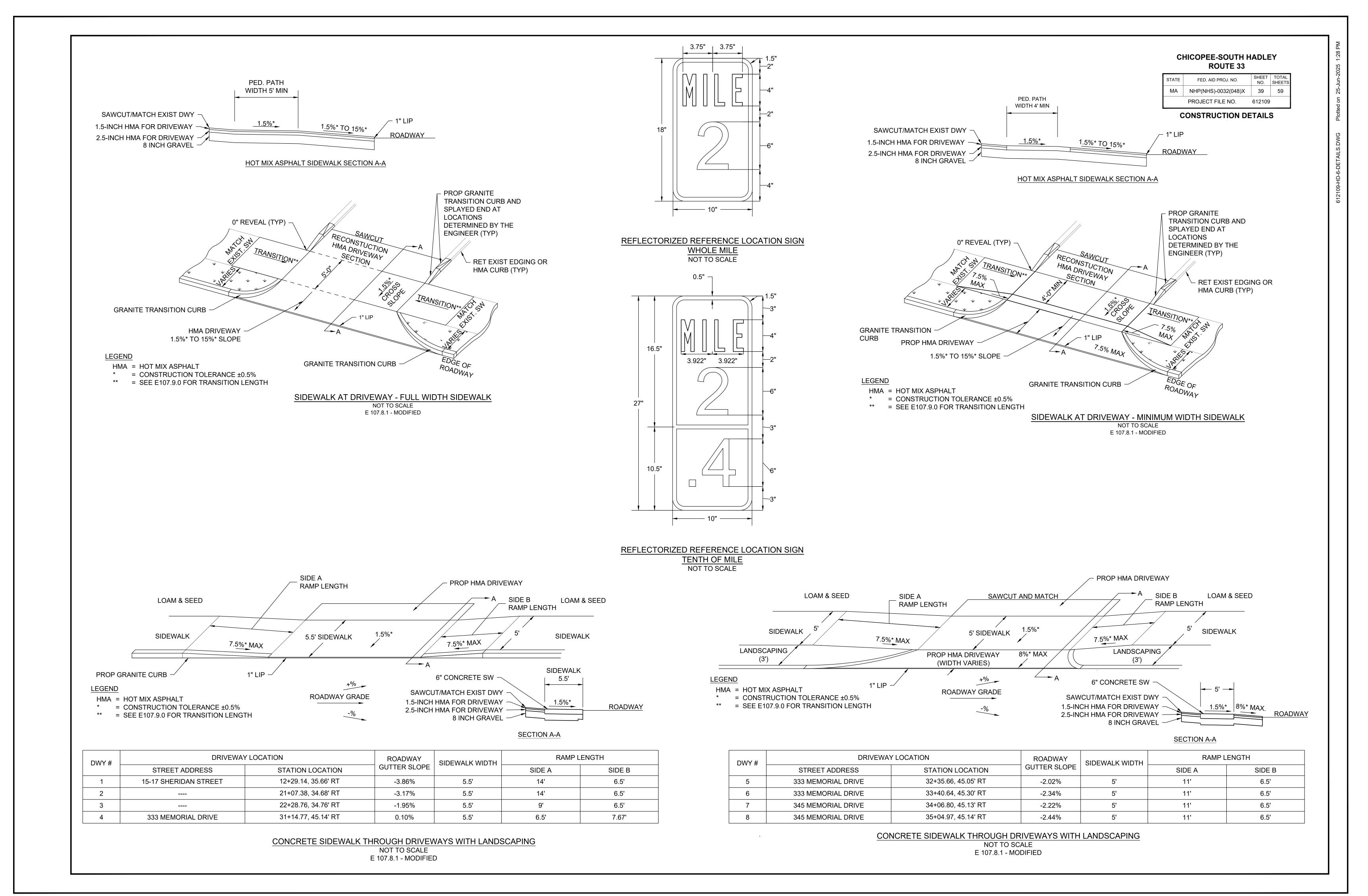
AND RANDOM CRACKS (SECTION VIEW)

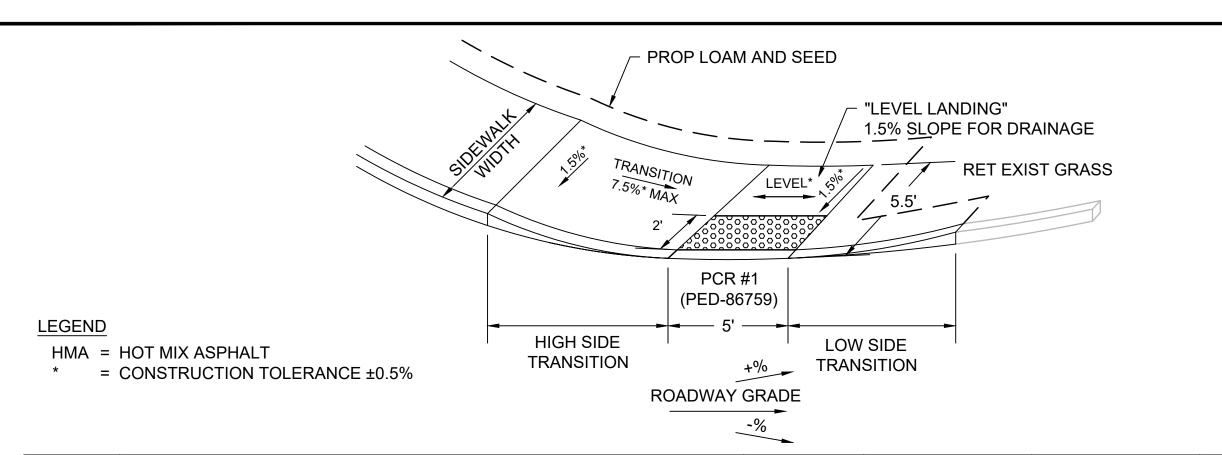


NOTE: SEE PLAN SHEET FOR TYPICAL DOWEL PLACEMENT AND LOCATIONS.

FULL DEPTH REPAIR (TRANSVERSE WEAKENED PLANE JOINT BETWEEN ADJACENT FULL DEPTH REPAIRS)

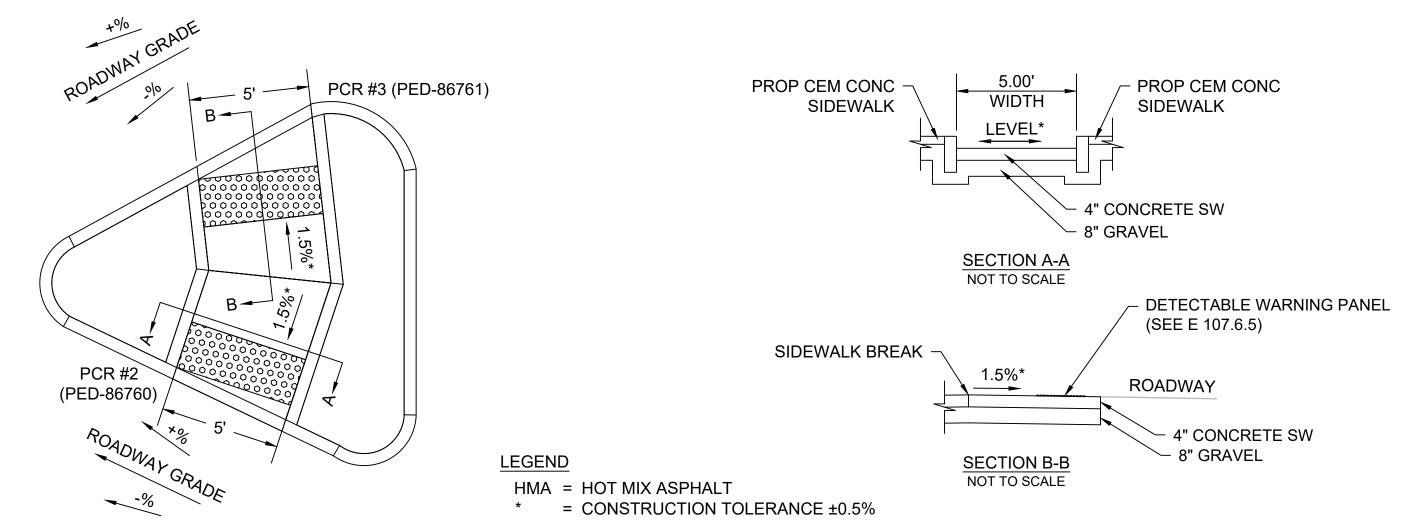






PCR NO.	RAMP REFERENCE POINT			ROADWAY GUTTER		TRANSITION LENGTH	
	STREET LOCATION	STATION LOCATION	WIDTH	SLOPE	WIDTH	HIGH SIDE	LOW SIDE
1	91 JENNINGS STREET	24+60.13, 67.0' LT	5.5'	-0.47%	5'	7.67'	6.5'

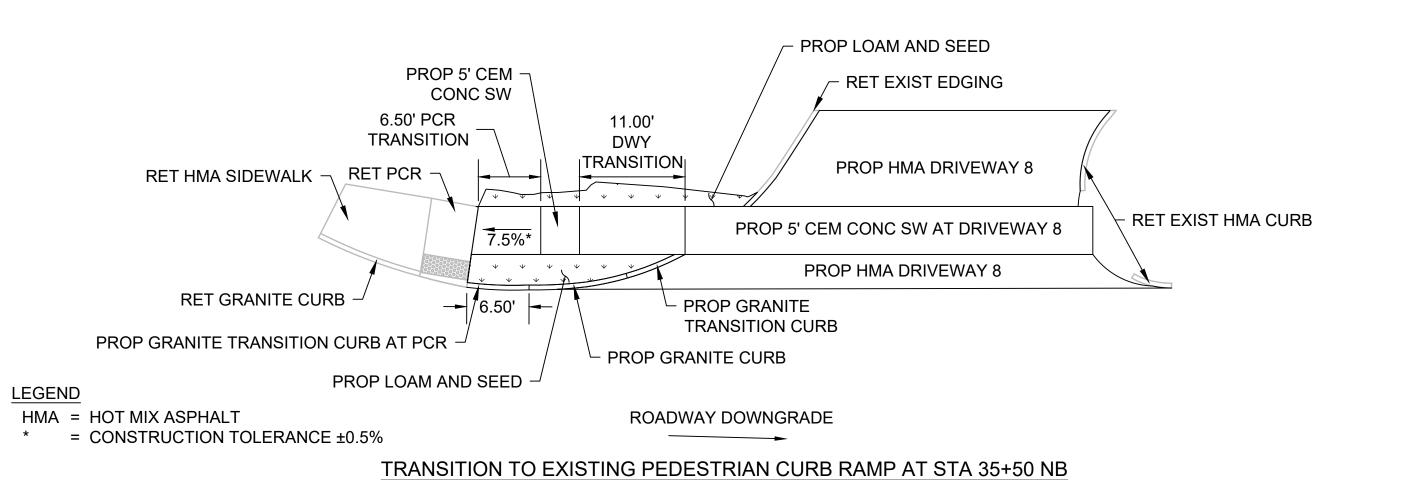
PEDESTRIAN CURB RAMP 1 NOT TO SCALE



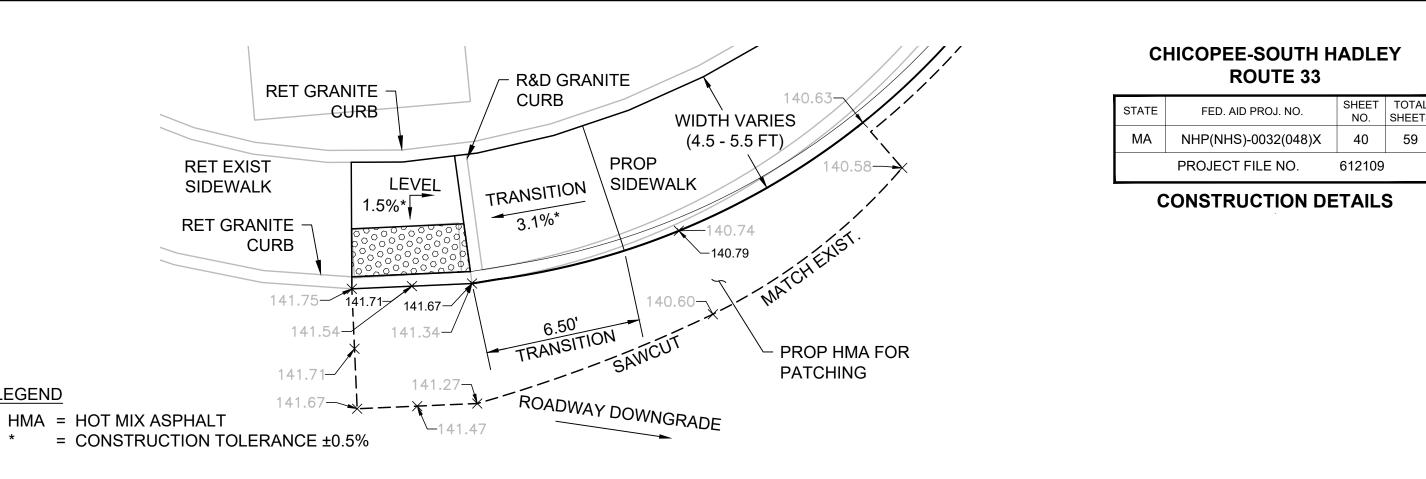
	PCR NO.	RAMP REFERENCE POINT					TRANSITION LENGTH	
		STREET LOCATION	STATION LOCATION	WIDTH	SLOPE	WIDTH	HIGH SIDE	LOW SIDE
	2	JENNINGS STREET INTERSECTION	24+88.93, 57.8' LT	5'	-0.67%	5'	N/A	N/A
	3	JENNINGS STREET INTERSECTION	25+00.67, 56.4' LT	5'	0.05%	5'	N/A	N/A

PCR NO.	RAMP REFERENCE POINT		SIDEWALK	ROADWAY GUTTER	RAMP ENTRANCE	TRANSITION LENGTH	
T OICHO.	STREET LOCATION	STATION LOCATION	WIDTH	SLOPE	WIDTH	HIGH SIDE	LOW SIDE
2	JENNINGS STREET INTERSECTION	24+88.93, 57.8' LT	5'	-0.67%	5'	N/A	N/A
3	JENNINGS STREET INTERSECTION	25+00.67, 56.4' LT	5'	0.05%	5'	N/A	N/A

PEDESTRIAN CURB RAMPS 2 AND 3 NOT TO SCALE



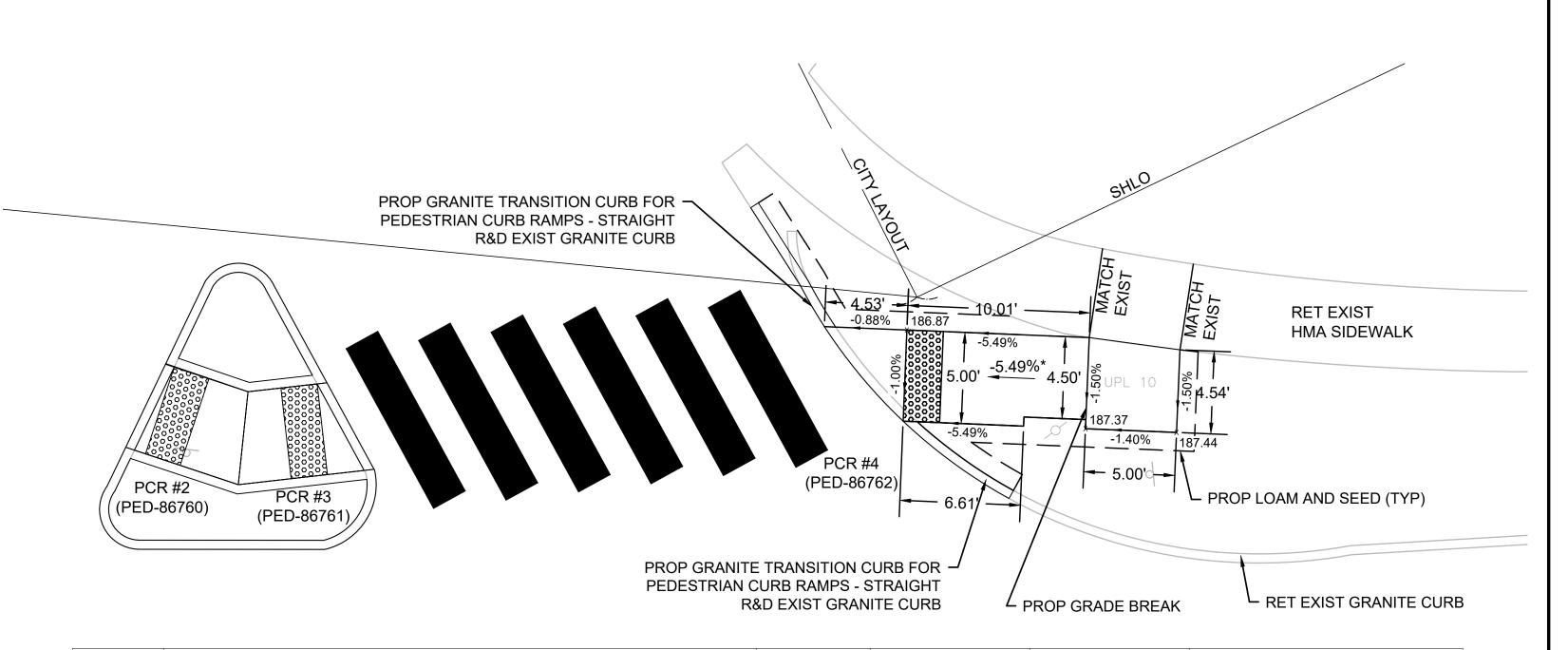
NOT TO SCALE



<u>LEGEND</u>

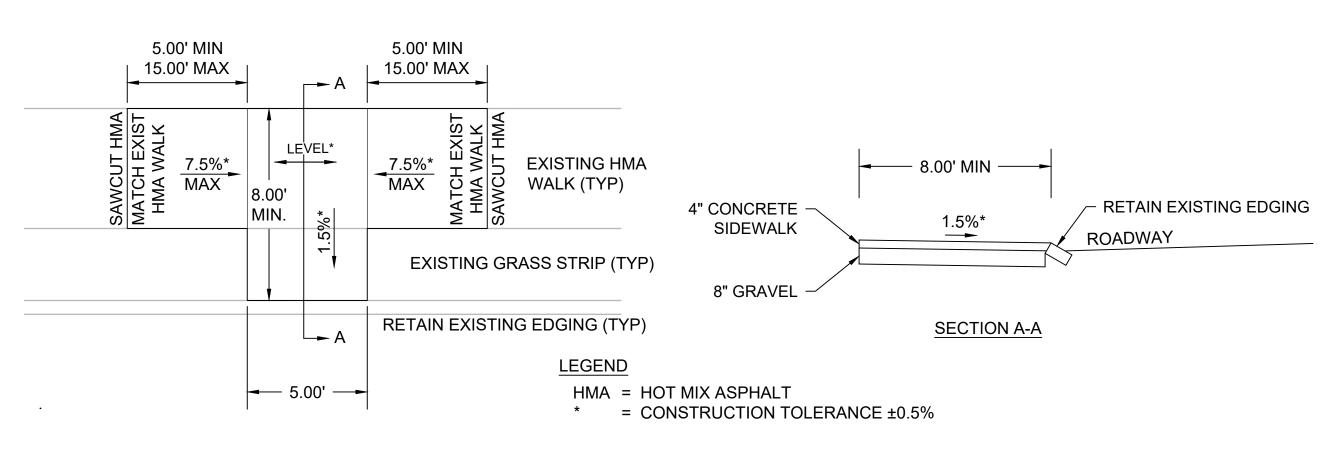
PCR NO.	RAMP REFERENCE POINT		SIDEWALK	ROADWAY GUTTER	RAMP ENTRANCE	TRANSITION LENGTH	
	STREET LOCATION	STATION LOCATION	WIDTH	SLOPE	WIDTH	HIGH SIDE	LOW SIDE
9	MEMORIAL DRIVE / MONTGOMERY STREET	12+08.84, 60.45' LT	4'-10"	8.20%	5'	EXIST.	6.5'

PEDESTRIAN CURB RAMP 9 1" = 4'

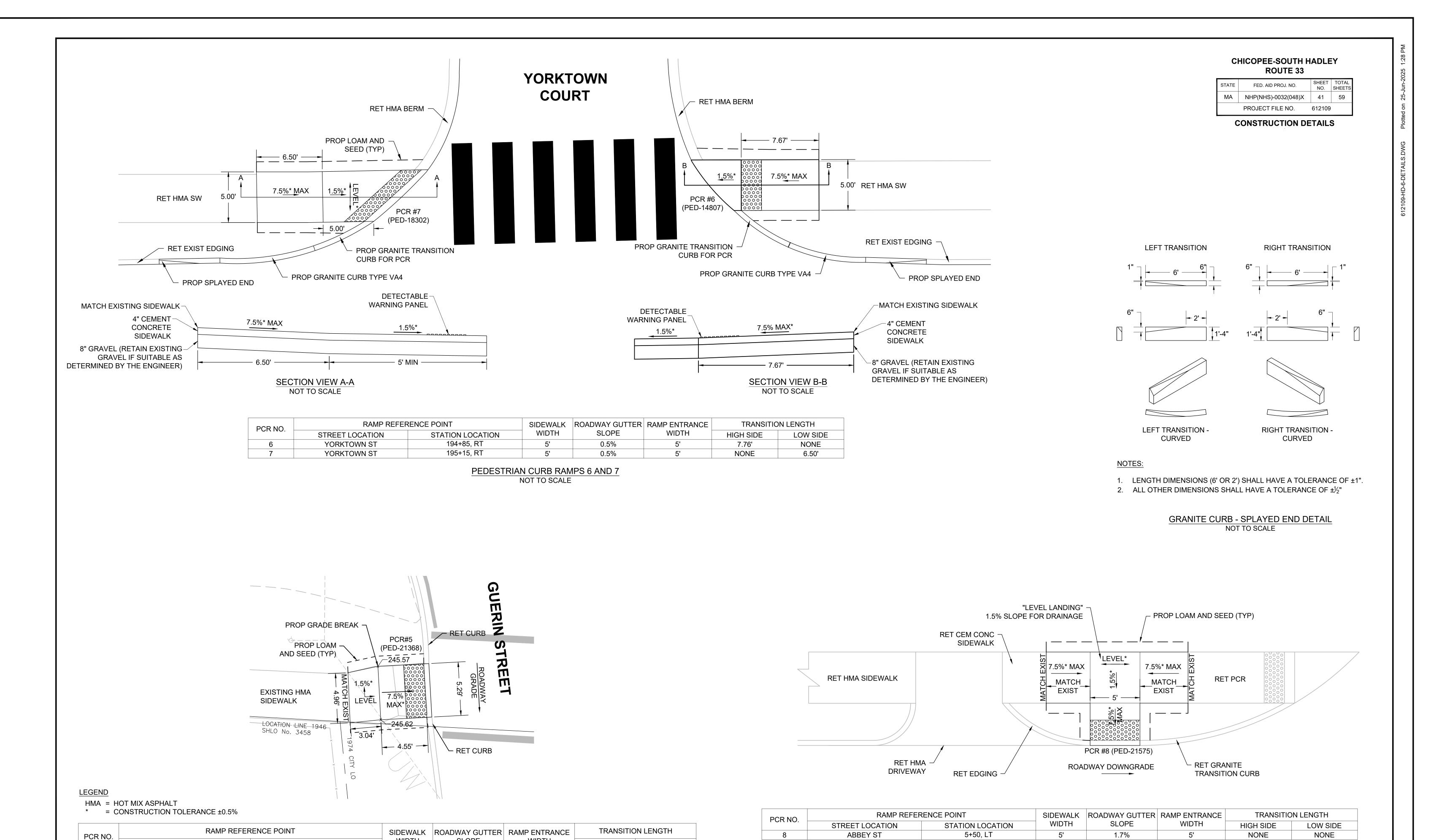


PCR NO.	RAMP REFERENCE POINT			ROADWAY GUTTER		TRANSITION LENGTH	
1 OKNO.	STREET LOCATION	STATION LOCATION	WIDTH	SLOPE	WIDTH	HIGH SIDE	LOW SIDE
4 9	98 JENNINGS STREET	25+29.82, 58.6' LT	5'	0.06%	5'	7'-8"	6'-6"

PEDESTRIAN CURB RAMP 4 1" = 5'



CEMENT CONCRETE SIDEWALKS AT BUS STOPS NOT TO SCALE



WIDTH

4.96'

PEDESTRIAN CURB RAMP 5

STATION LOCATION 177+13.94, 73.82' RT

STREET LOCATION

1765 MEMORIAL DRIVE

5

SLOPE

-1.17%

WIDTH

5.29'

HIGH SIDE

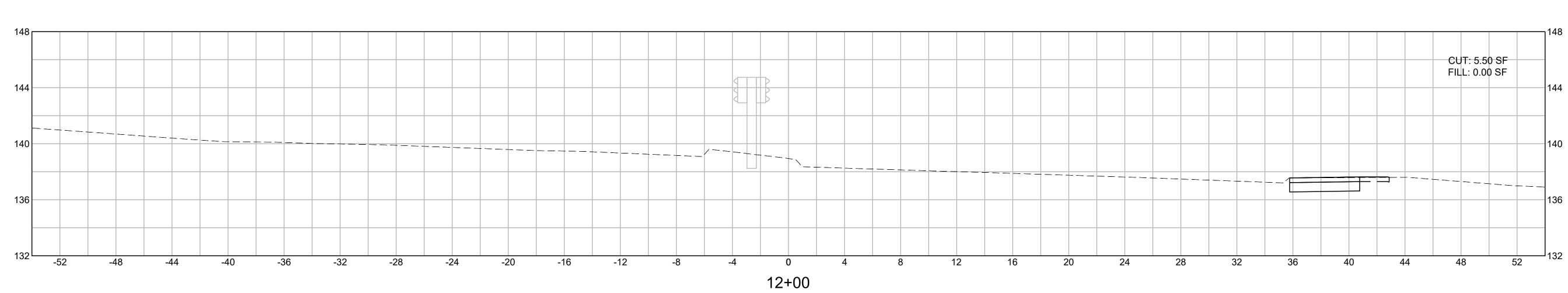
LOW SIDE

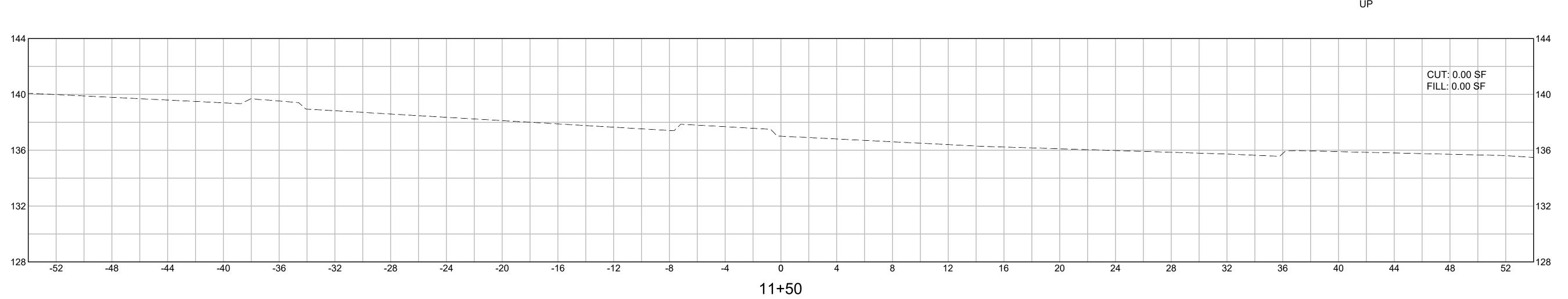
PEDESTRIAN CURB RAMP 8
NOT TO SCALE

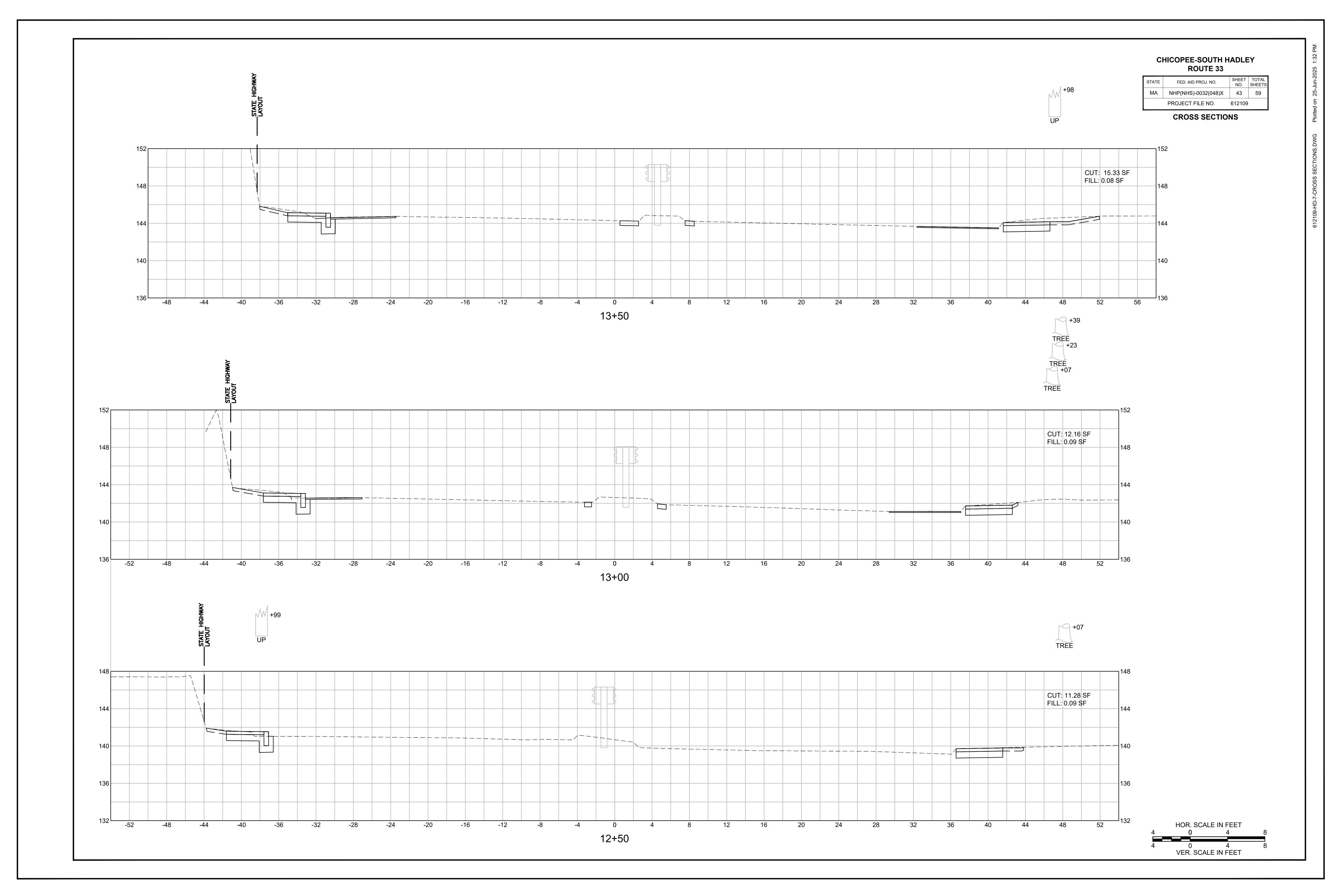
CHICOPEE-SOUTH HADLEY ROUTE 33 STATE FED. AID PROJ. NO. SHEET TOTAL NO. SHEETS MA NHP(NHS)-0032(048)X 42 59 PROJECT FILE NO. 612109 **CROSS SECTIONS** HOR. SCALE IN FEET

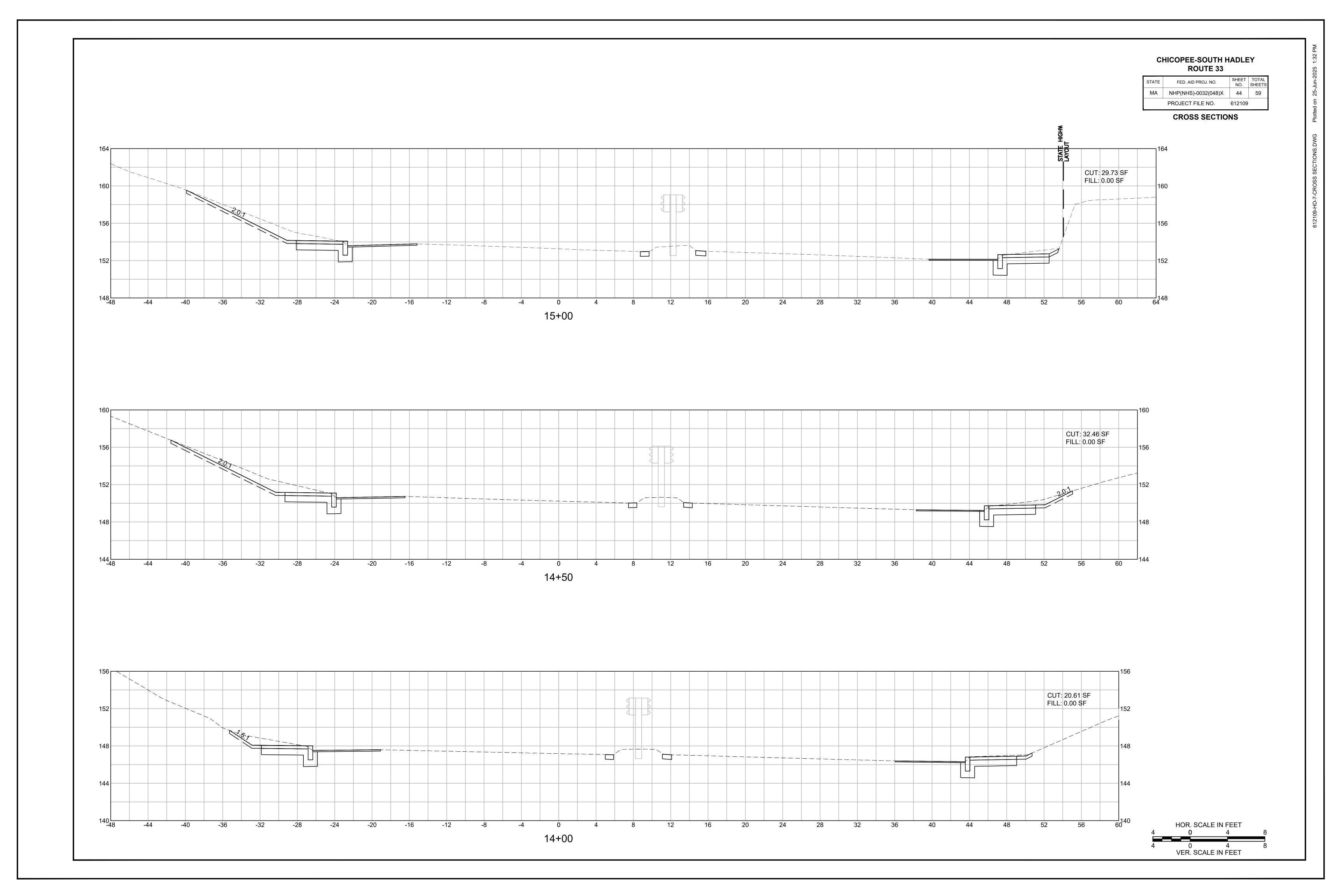
VER. SCALE IN FEET

18 148 144 144 144 144 148 52 56 32 12+25

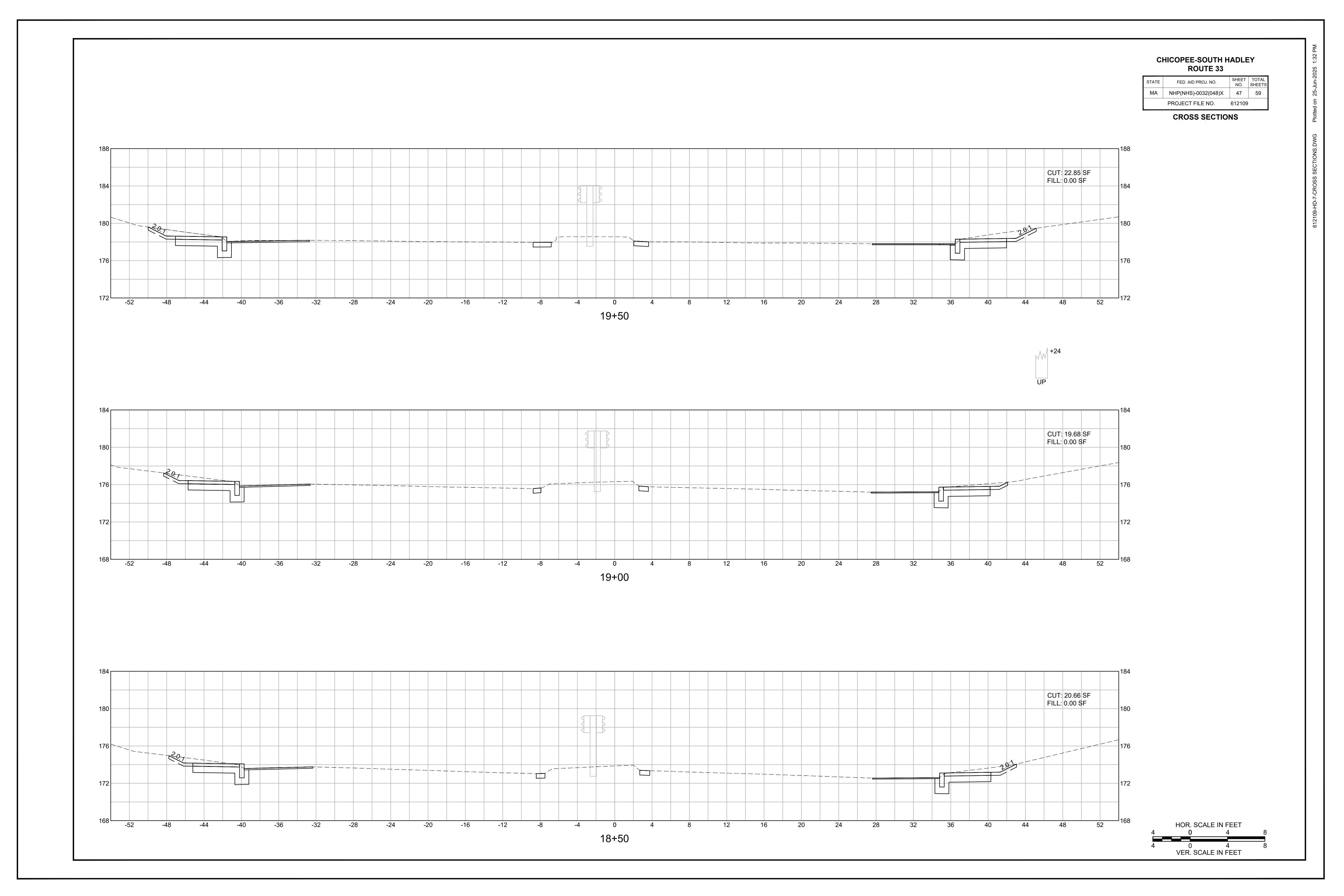




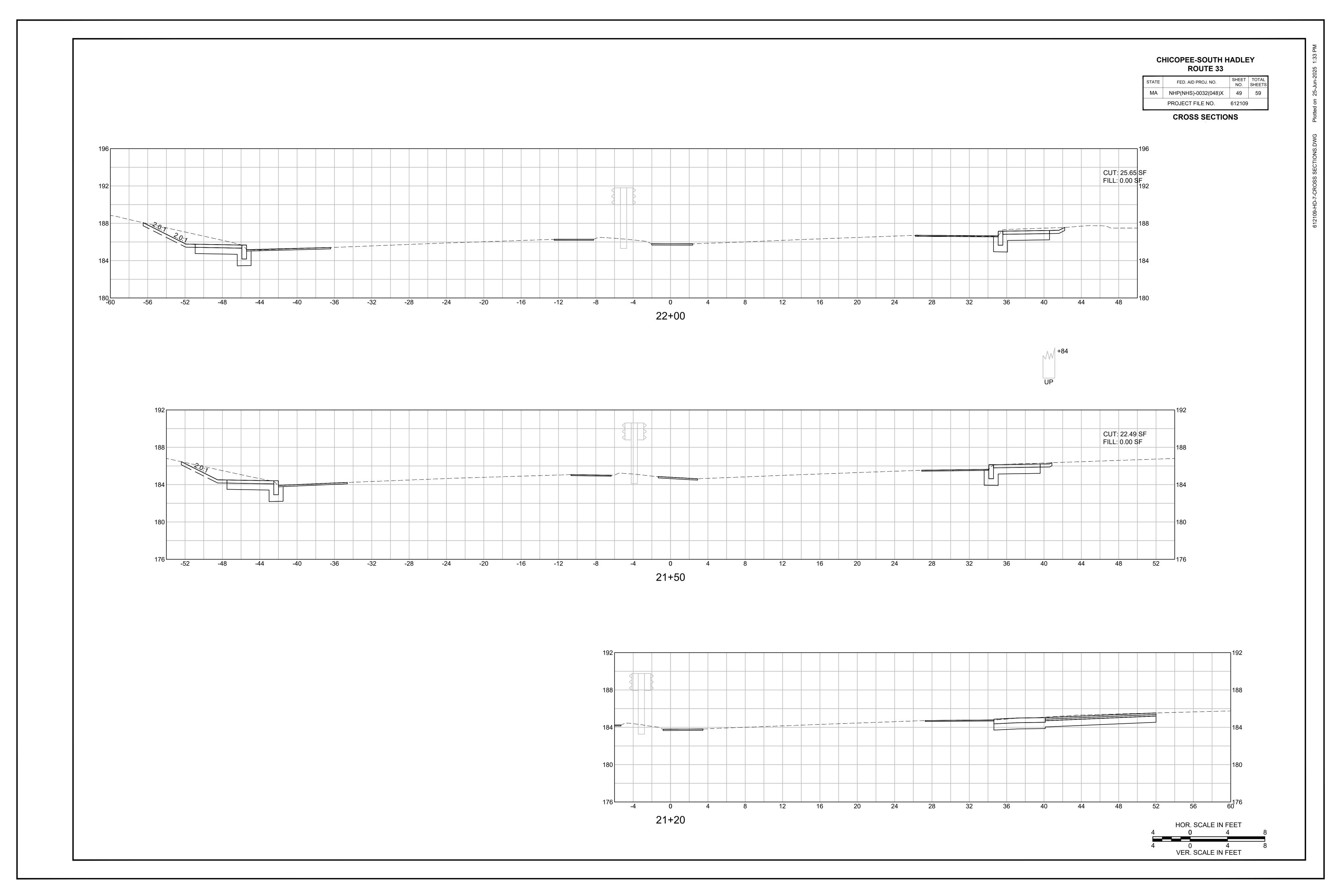




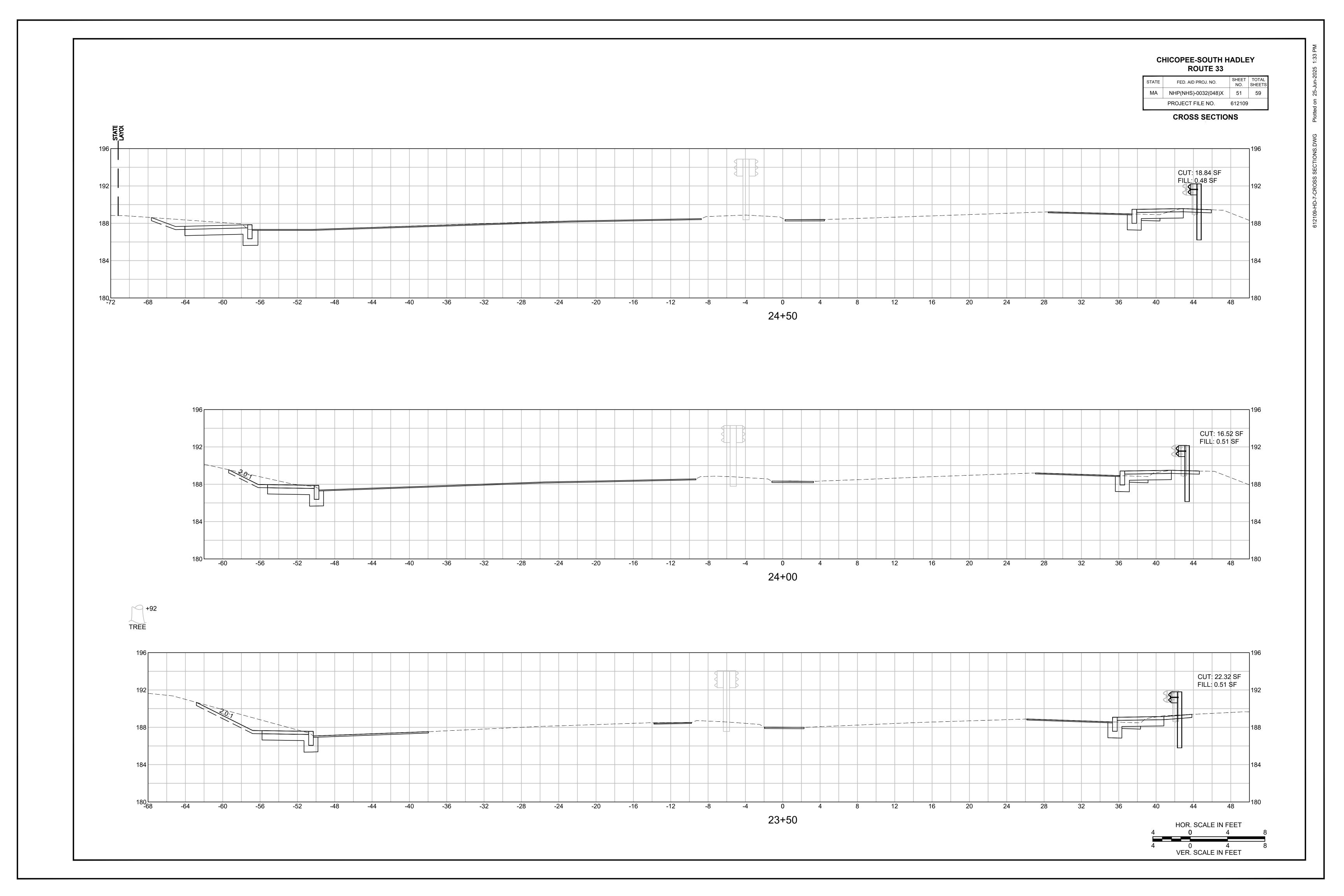
CHICOPEE-SOUTH HADLEY **ROUTE 33** STATE FED. AID PROJ. NO. SHEET TOTAL NO. SHEETS MA NHP(NHS)-0032(048)X 46 59 PROJECT FILE NO. 612109 **CROSS SECTIONS** CUT: 19.91 SF FILL: 0.00 SF -12 -8 0 18+00 CUT: 24.60 SF FILL: 0.00 SF 17+50 CUT: 29.00 SF FILL: 0.00 SF HOR. SCALE IN FEET 17+00 VER. SCALE IN FEET

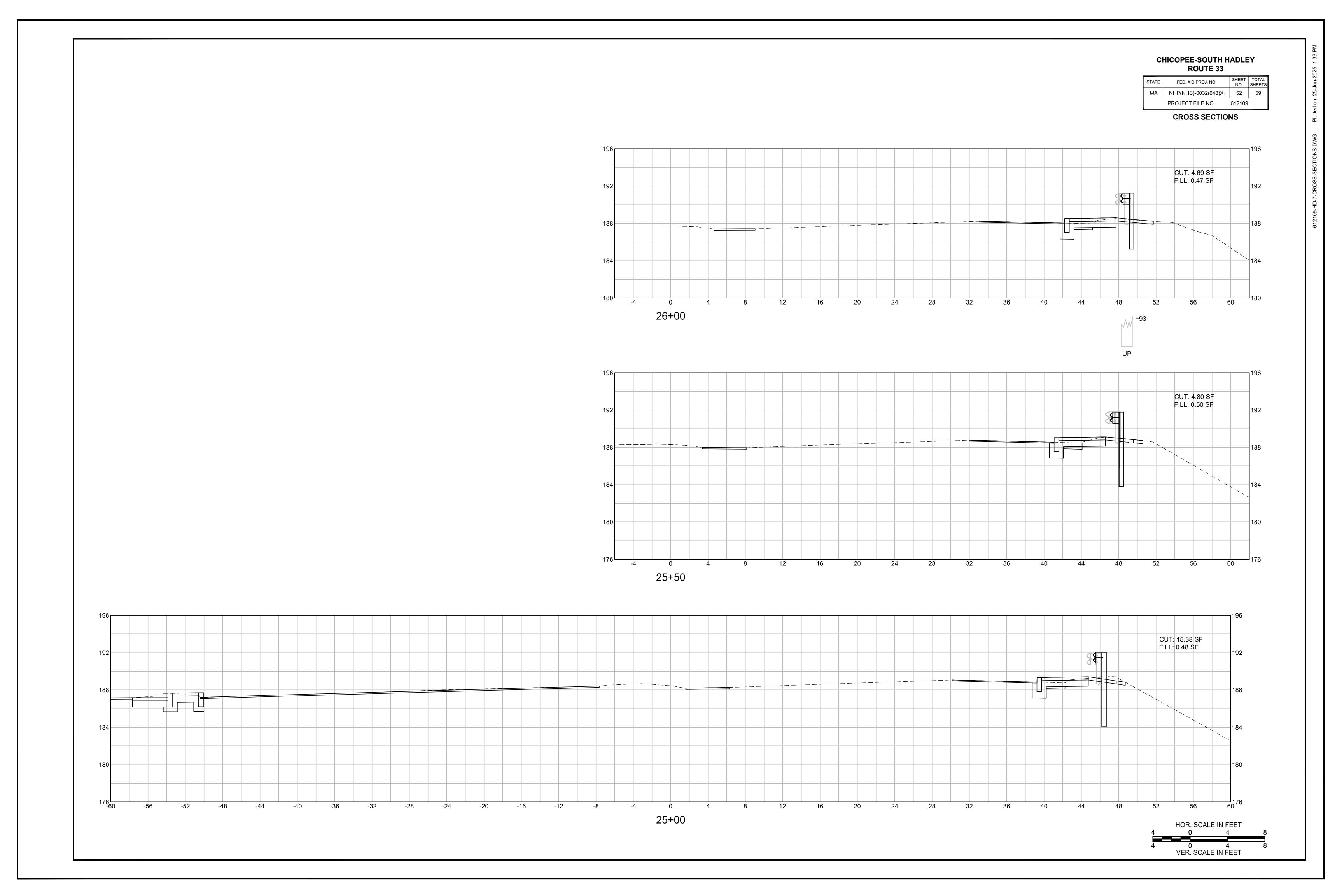


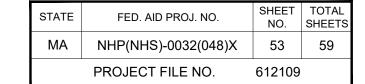
CHICOPEE-SOUTH HADLEY **ROUTE 33** STATE FED. AID PROJ. NO. SHEET TOTAL NO. SHEETS MA NHP(NHS)-0032(048)X 48 59 PROJECT FILE NO. 612109 **CROSS SECTIONS** CUT: 21.05 SF FILL: 0.00 SF -12 -8 0 21+00 CUT: 20.14 SF FILL: 0.00 SF 20+50 CUT: 17.81 SF FILL: 0.00 SF HOR. SCALE IN FEET -12 -8 20+00 VER. SCALE IN FEET

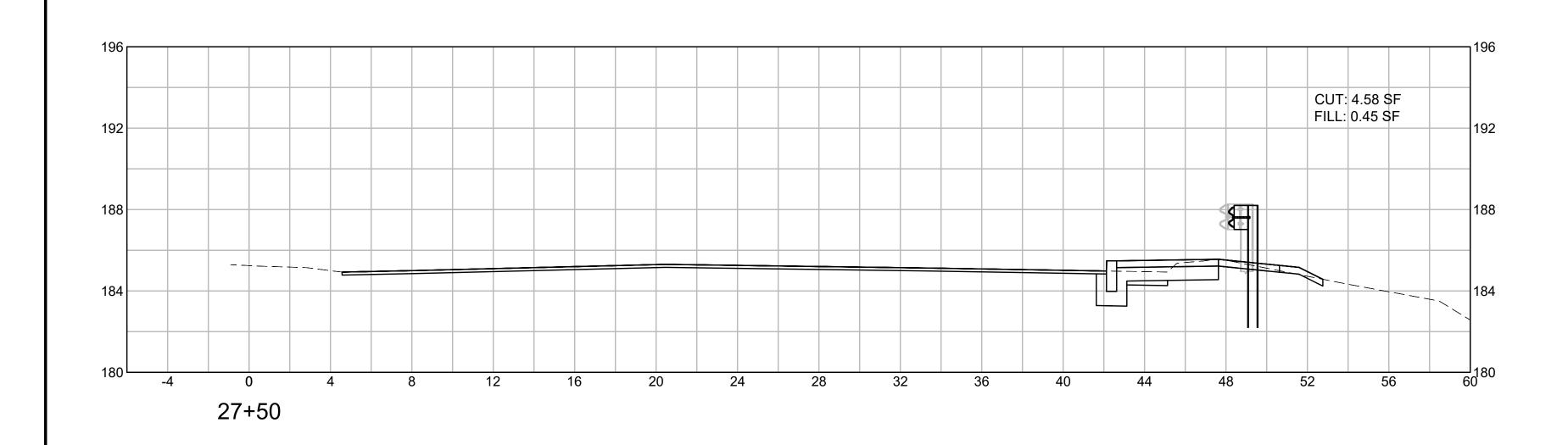


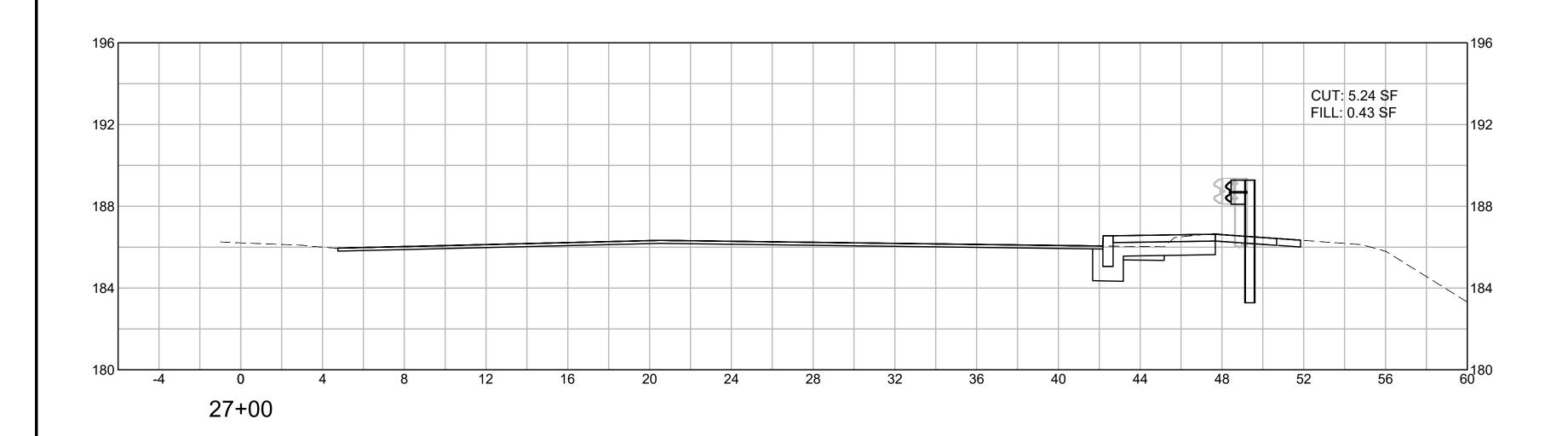
CHICOPEE-SOUTH HADLEY **ROUTE 33** STATE FED. AID PROJ. NO. SHEET TOTAL SHEETS MA NHP(NHS)-0032(048)X 50 59 PROJECT FILE NO. 612109 **CROSS SECTIONS** CUT: 17.60 SF FILL: 0.51 SF -12 -20 23+00 CUT: 19.46 SF FILL: 0.50 SF 22+50 22+20 HOR. SCALE IN FEET VER. SCALE IN FEET

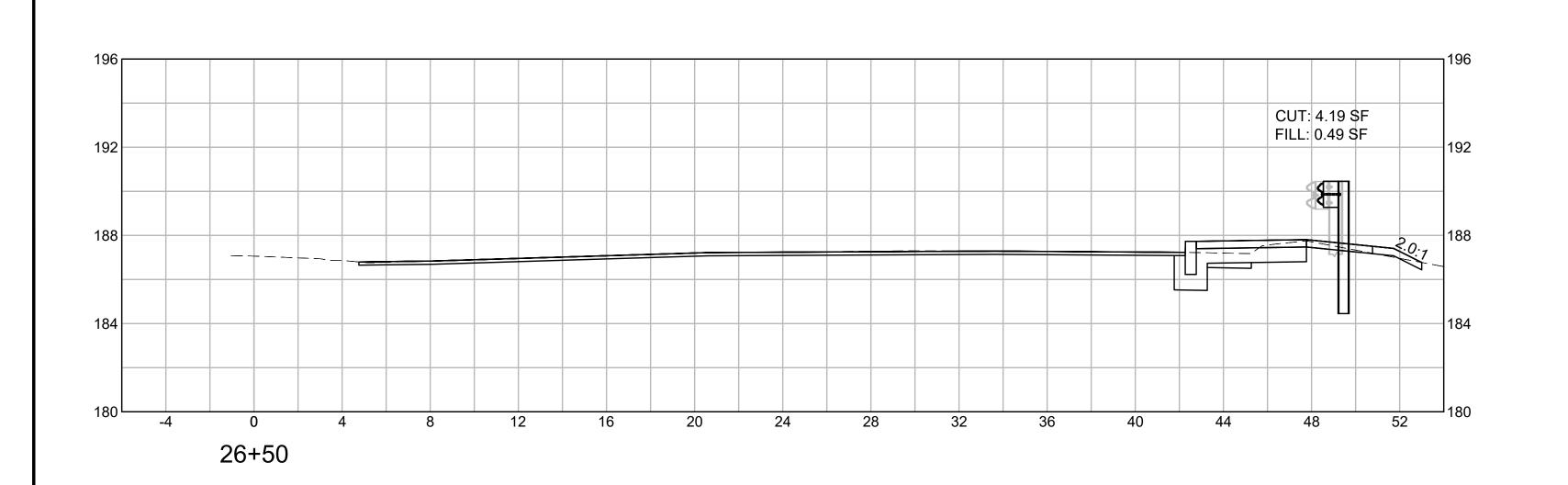


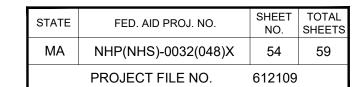


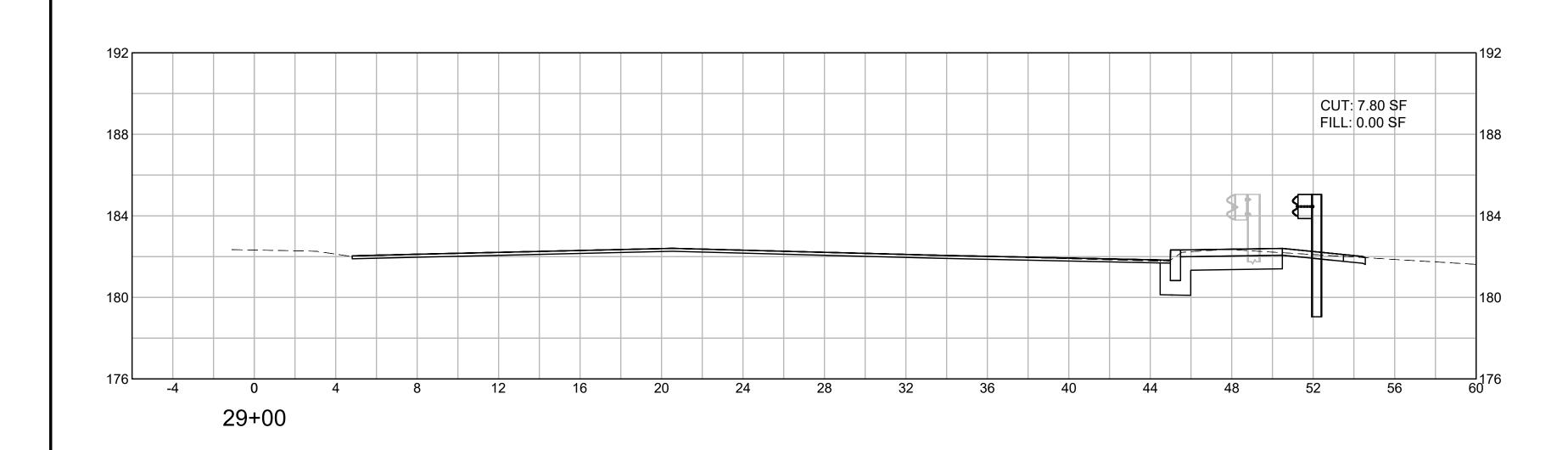


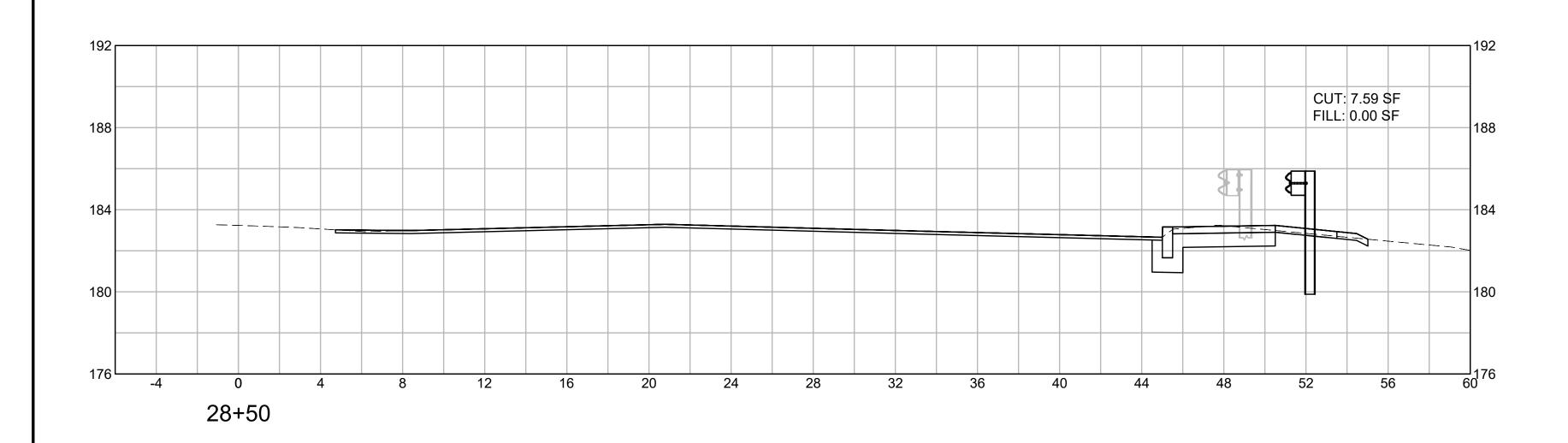


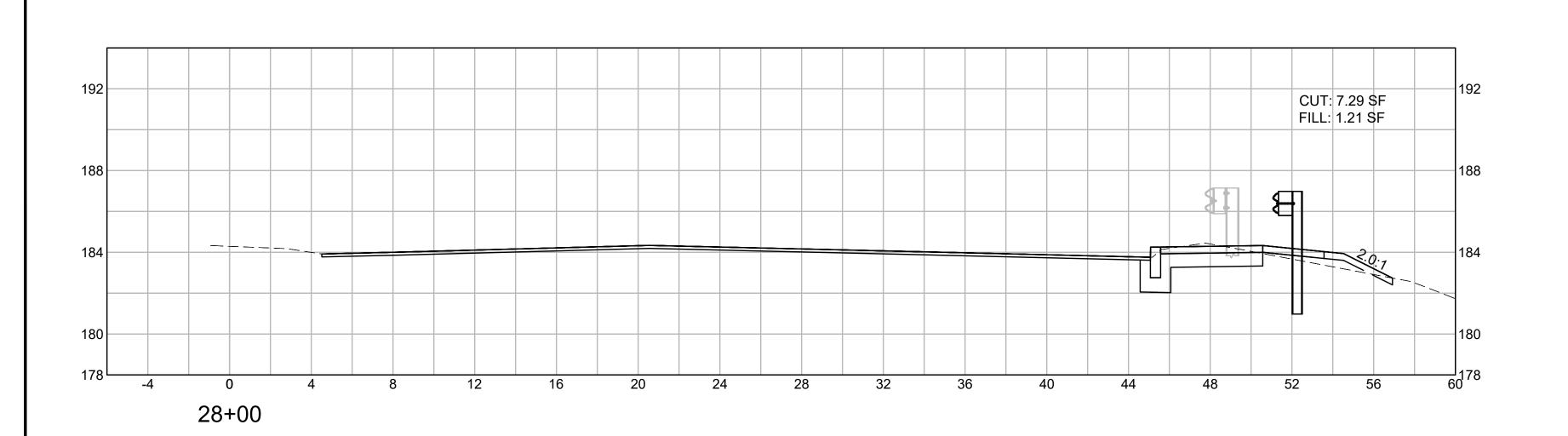








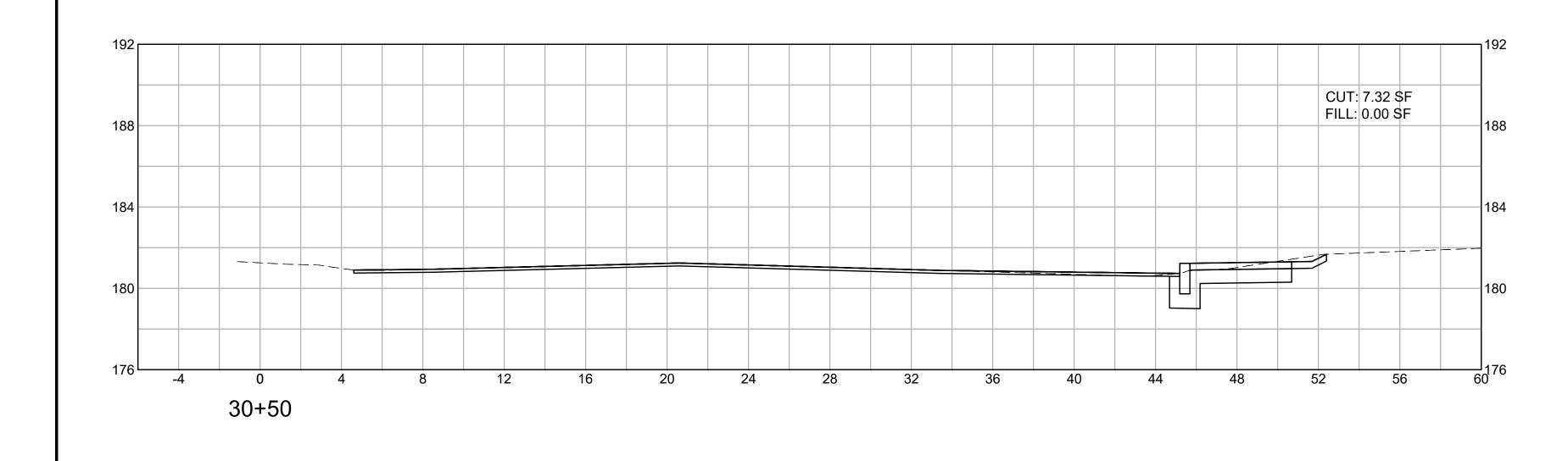


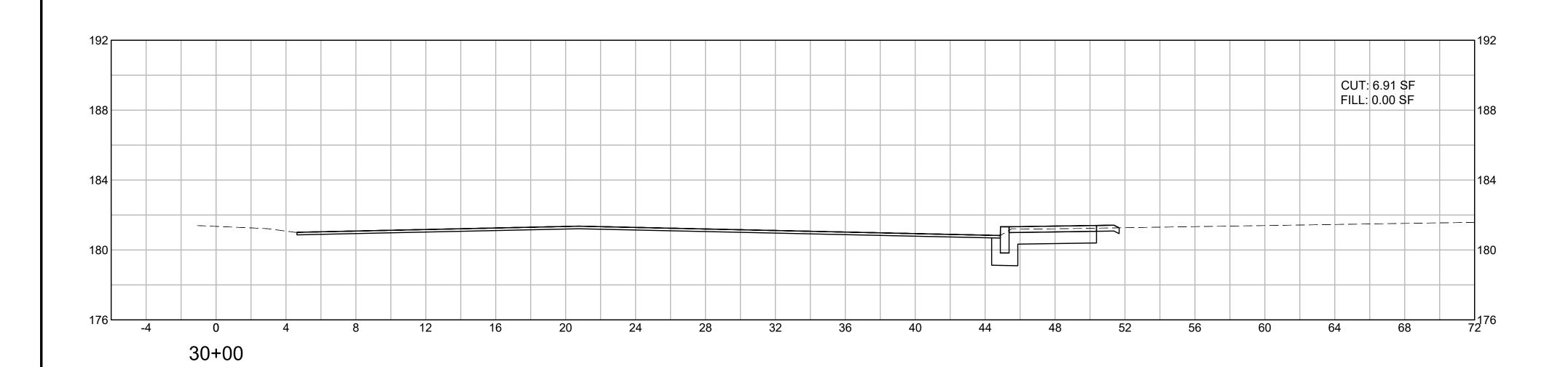


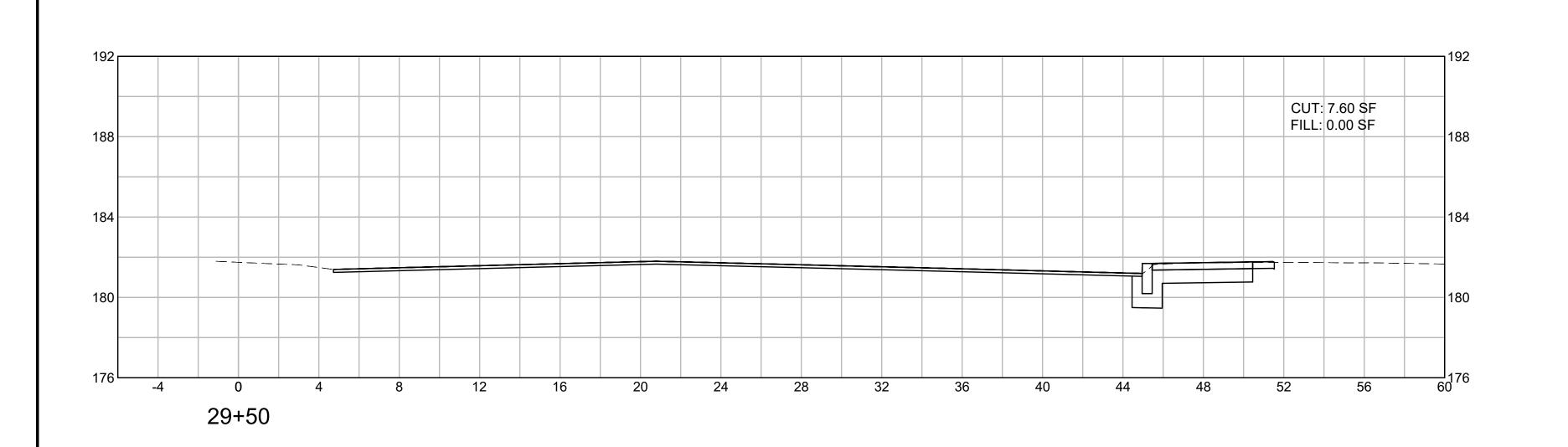
CHICOPEE-SOUTH HADLEY ROUTE 33 STATE FED. AID PROJ. NO. SHEET TOTAL NO. SHEETS MA NHP(NHS)-0032(048)X 55 59

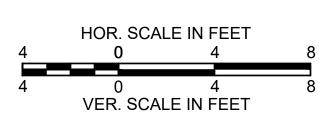


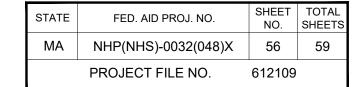
PROJECT FILE NO. 612109

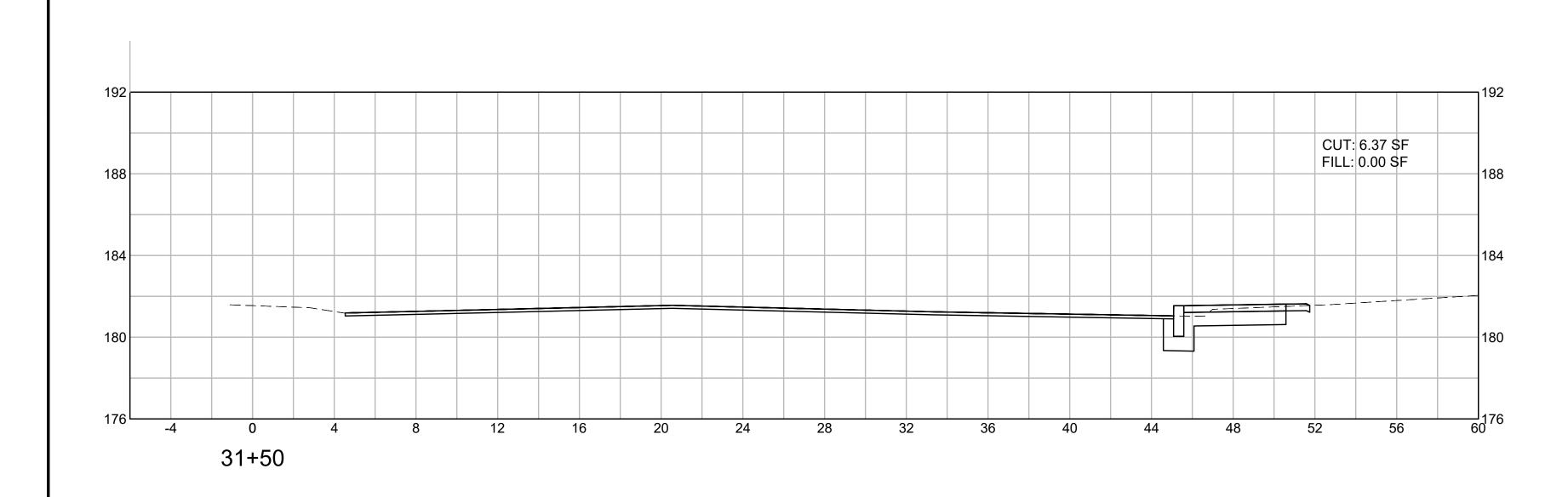


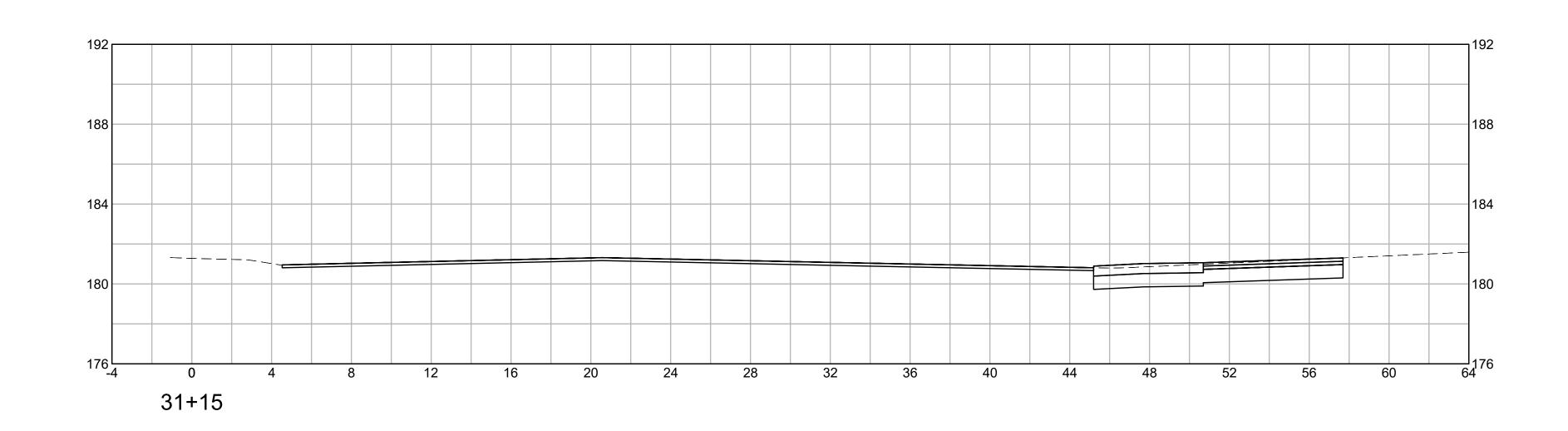


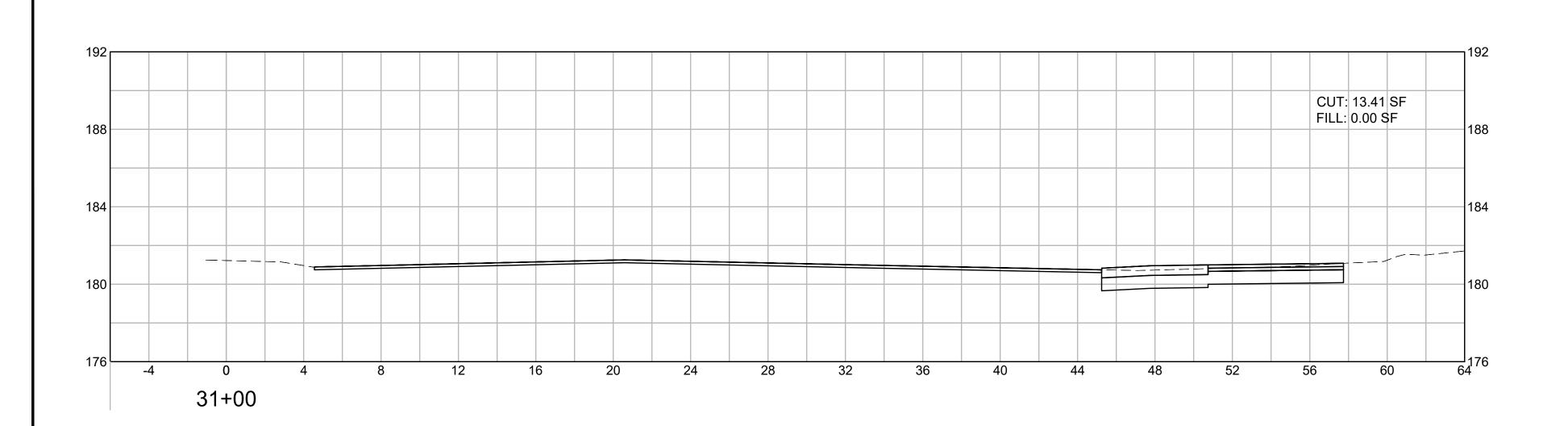


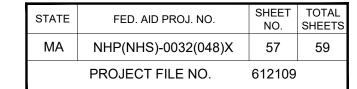


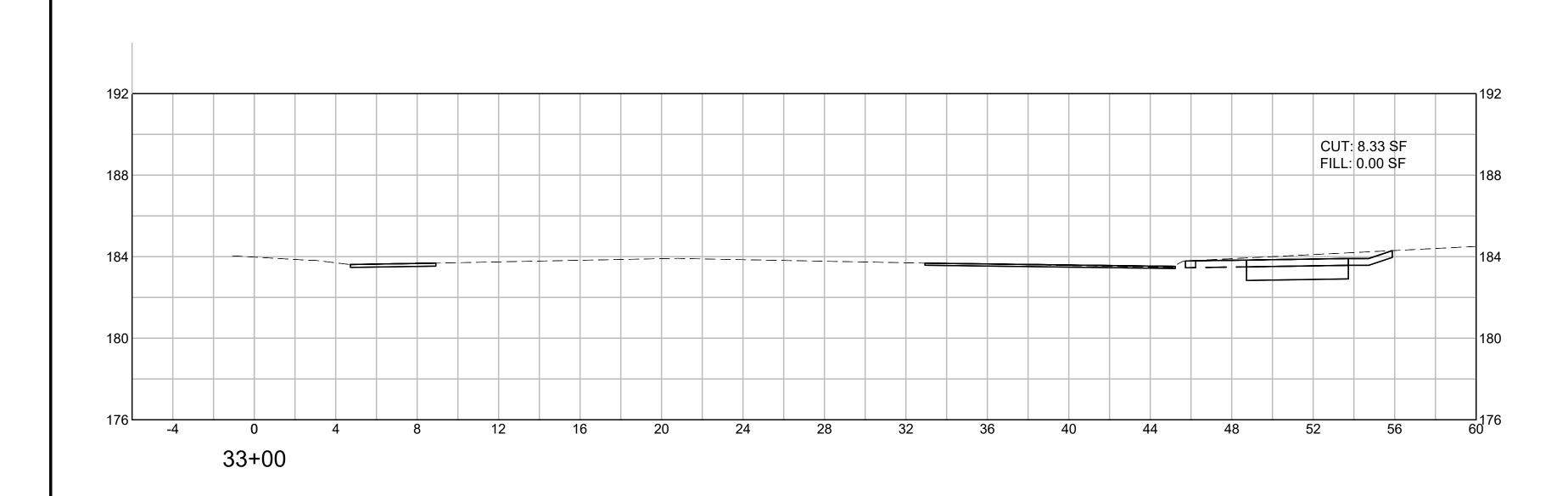


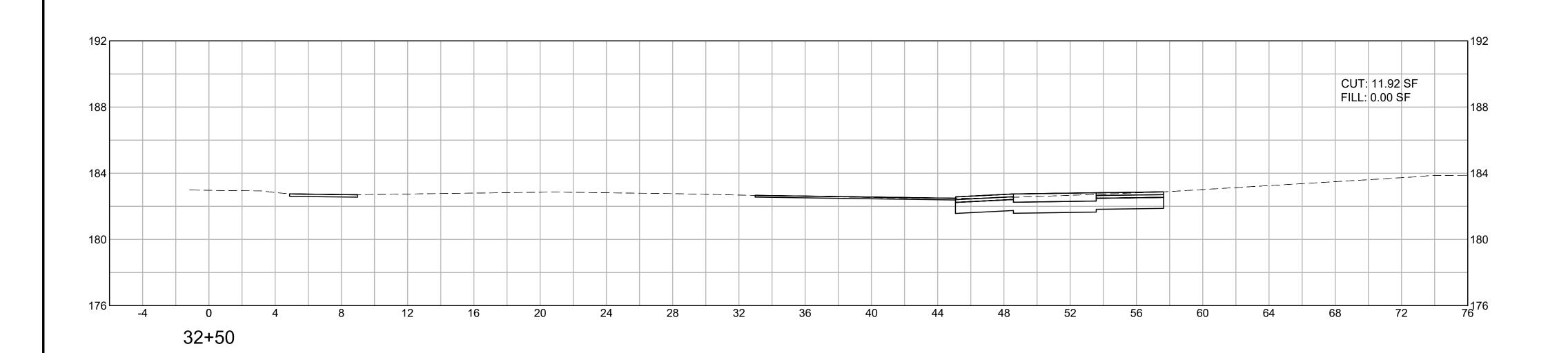


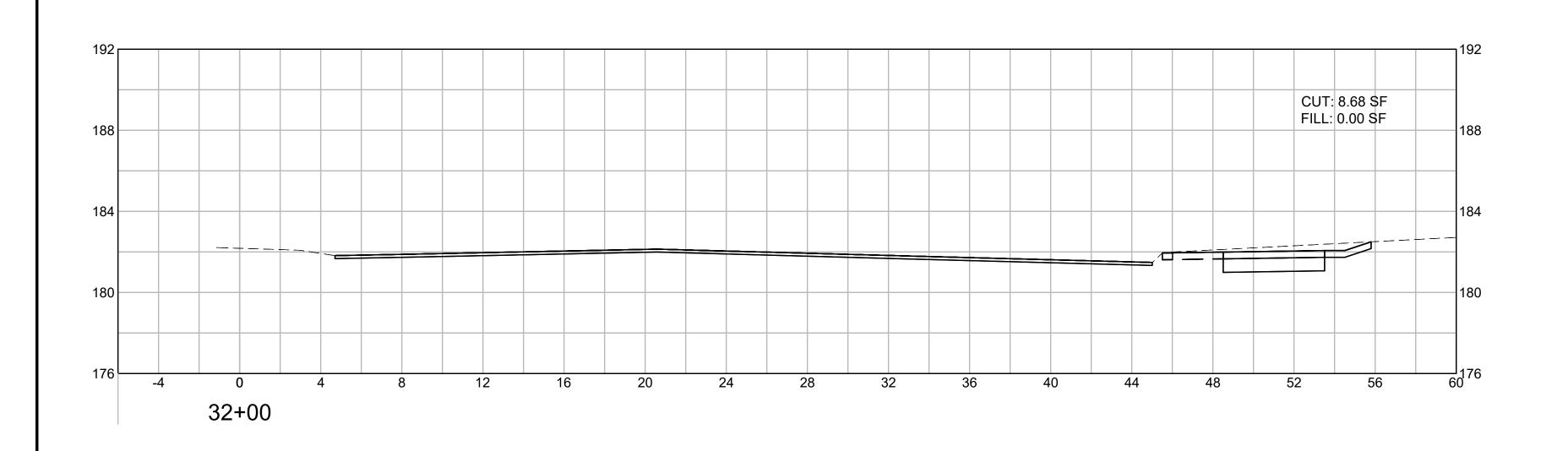


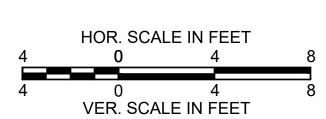


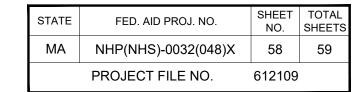


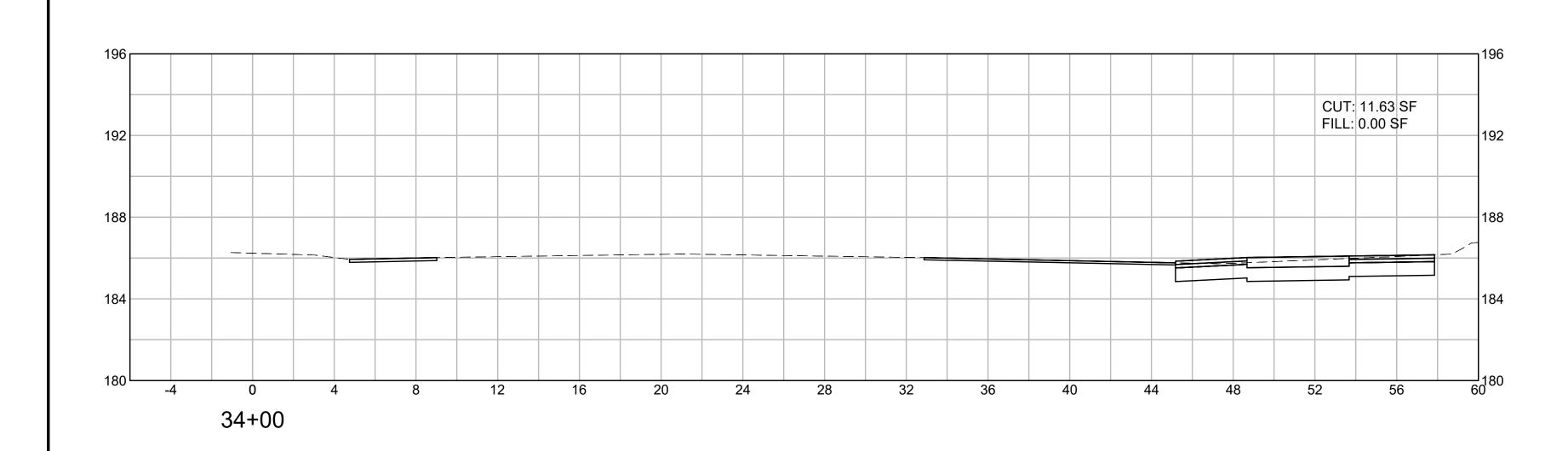


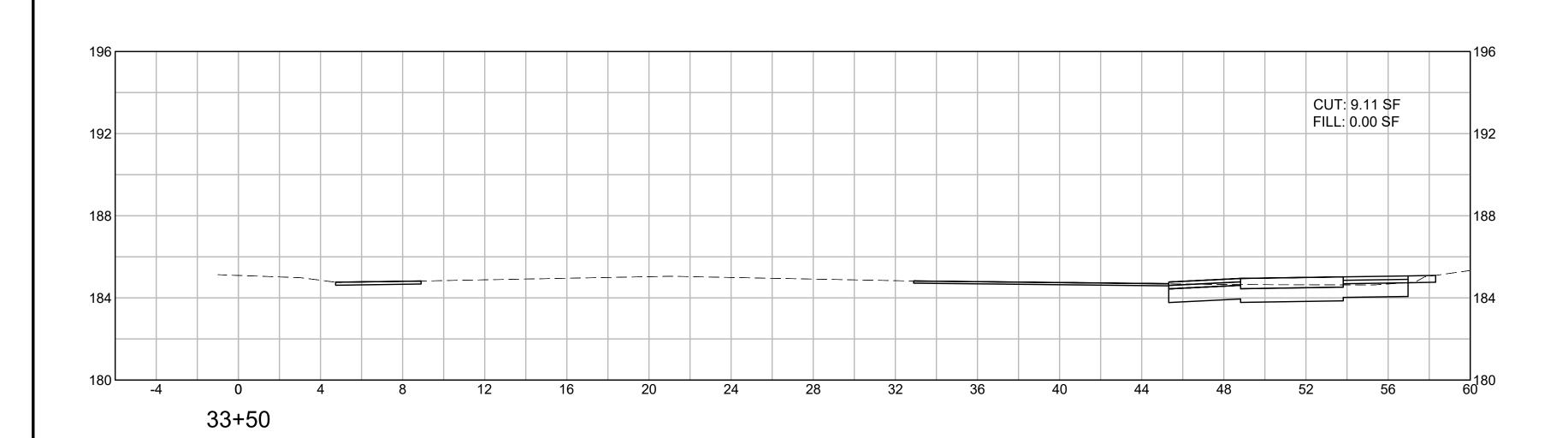


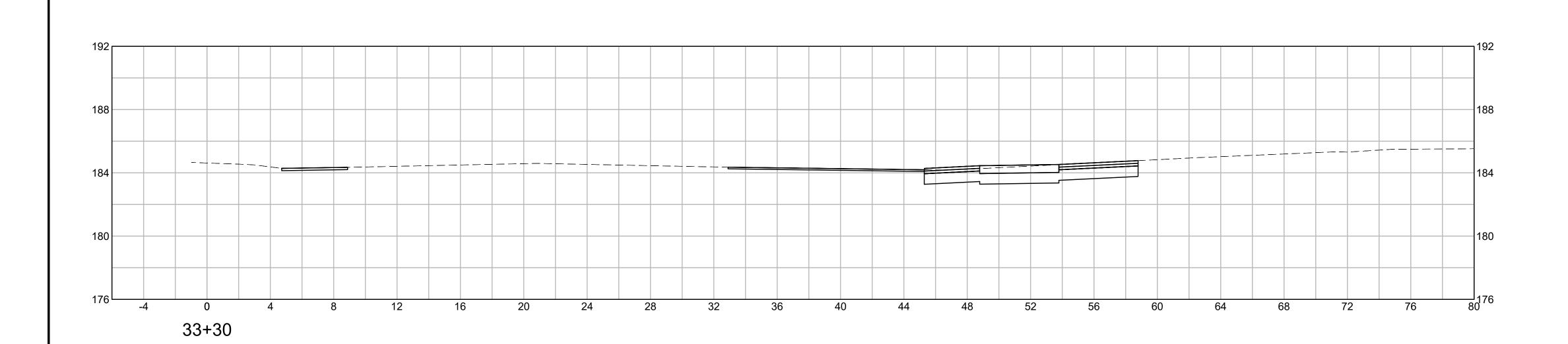


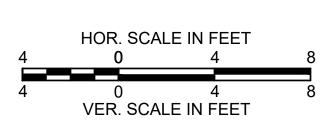












CHICOPEE-SOUTH HADLEY STATE FED. AID PROJ. NO. SHEET TOTAL SHEETS MA NHP(NHS)-0032(048)X 59 59 CUT: 16.94 SF FILL: 0.00 SF 44 35+00 CUT: 8.89 SF FILL: 0.00 SF 34+50

34+20

ROUTE 33

PROJECT FILE NO. 612109

HOR. SCALE IN FEET 0 4

VER. SCALE IN FEET