PEDESTRIAN SAFETY IMPROVEMENTS

MAIN STREET SOUTH AND POVERTY ROAD SOUTHBURY, CONNECTICUT

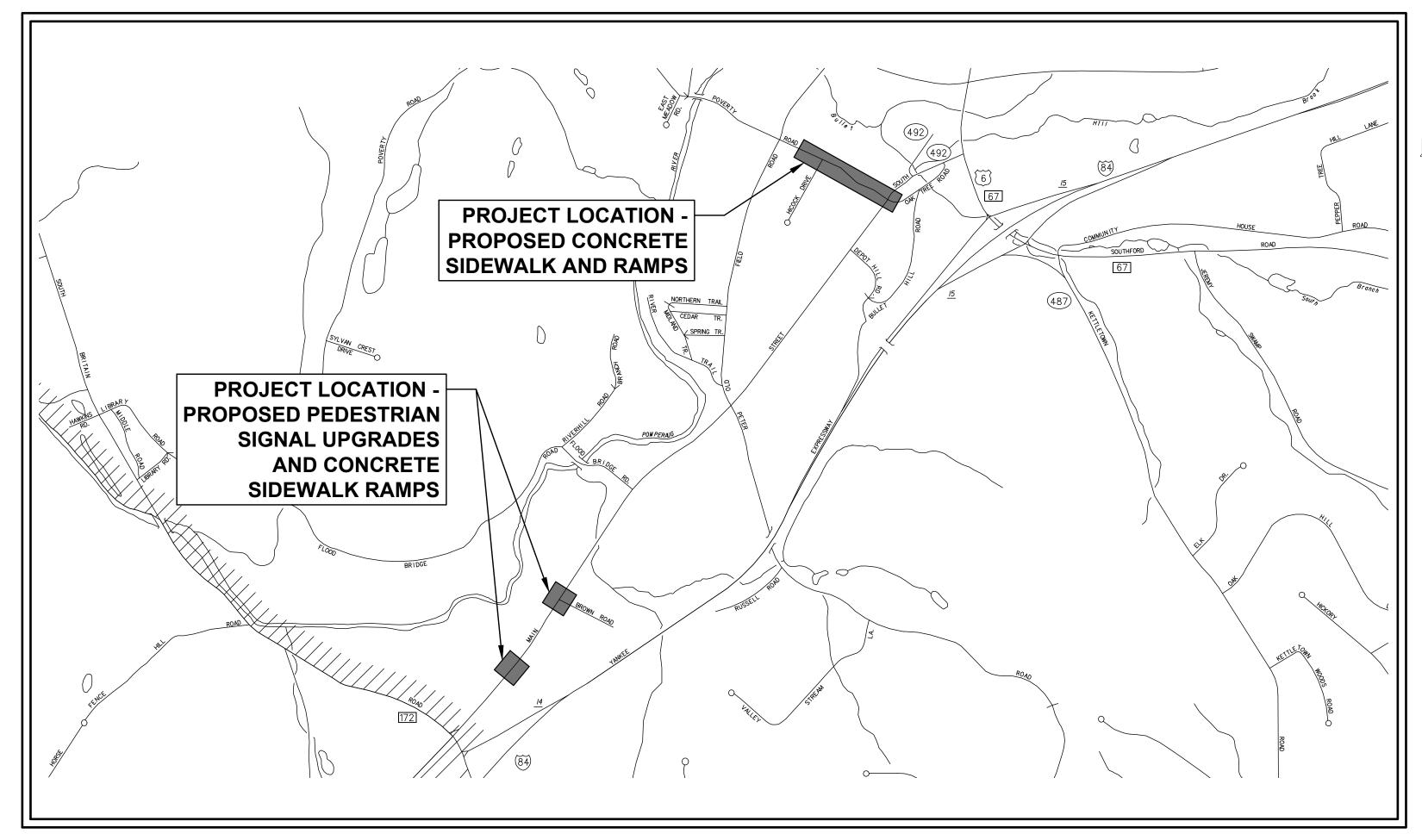
SLR PROJECT #12097.00034 STATE PROJECT #0130-0194 FEDERAL AID PROJECT #1130(005) FINAL DESIGN PLANS JULY 31, 2025

SURVEY NOTES

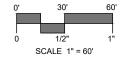
- THIS SURVEY HAS BEEN PREPARED PURSUANT TO THE REGULATIONS OF CONNECTICUT STATE AGENCIES SECTIONS 20-300b-1 THROUGH 20-300b-20 AND THE "STANDARDS AND SUGGESTED METHODS AND PROCEDURES FOR SURVEYS AND MAPS IN THE STATE OF CONNECTICUT" AS ADOPTED BY THE CONNECTICUT ASSOCIATION OF LAND SURVEYORS, INC. ON AUGUST 29, 2019 IT IS A TOPOGRAPHIC SURVEY CONFORMING TO TOPOGRAPHIC ACCURACY CLASS T-2, AND IS INTENDED TO DEPICT THE EXISTING CONDITIONS OF THE SITE.
- NORTH IS BASED UPON THE CONNECTICUT COORDINATE SYSTEM (NAD 1983).
- 3. ELEVATIONS, CONTOURS, AND BENCHMARKS ARE BASED UPON NAVD 1988

GENERAL NOTES

- INFORMATION REGARDING THE LOCATION OF EXISTING UTILITIES HAS BEEN BASED UPON AVAILABLE INFORMATION AND MAY BE INCOMPLETE, AND WHERE SHOWN SHOULD BE CONSIDERED APPROXIMATE. THE LOCATION OF ALL EXISTING UTILITIES SHOULD BE CONFIRMED PRIOR TO BEGINNING CONSTRUCTION. CALL "CALL BEFORE YOU DIG", 811 OR WWW.CBYD.COM AT LEAST TWO FULL WORKING DAYS PRIOR TO THE START OF CONSTRUCTION. ALL UTILITY LOCATIONS THAT DO NOT MATCH THE VERTICAL OR HORIZONTAL CONTROL SHOWN ON THE PLANS SHALL IMMEDIATELY BE BROUGHT TO THE ATTENTION OF THE ENGINEER FOR RESOLUTION.
- SLR INTERNATIONAL CORPORATION ACCEPTS NO RESPONSIBILITY FOR THE ACCURACY OF MAPS AND DATA WHICH HAVE
- ALL DIMENSIONS AND ELEVATIONS SHALL BE VERIFIED IN THE FIELD PRIOR TO CONSTRUCTION. ANY DISCREPANCIES
- SEDIMENT AND EROSION CONTROL MEASURES AS DEPICTED ON THESE PLANS AND DESCRIBED WITHIN THE SEDIMENT AND EROSION CONTROL NARRATIVE SHALL BE IMPLEMENTED AND MAINTAINED UNTIL PERMANENT COVER AND STABILIZATION IS ESTABLISHED. ALL SEDIMENT AND EROSION CONTROL MEASURES SHALL CONFORM TO THE "CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL" AND IN ALL CASES BEST MANAGEMENT
- ALL DISTURBED AREAS SHALL RECEIVE A MINIMUM OF 4" TOPSOIL, AND BE SEEDED WITH GRASS UNLESS OTHERWISE NOTED ON THE PLANS.
- ALL PROPOSED CONTOURS AND SPOT ELEVATIONS INDICATE FINISHED GRADE
- ALL CONSTRUCTION MATERIALS AND METHODS SHALL CONFORM TO THE TOWN OF SOUTHBURY REQUIREMENTS AND TO THE APPLICABLE SECTIONS OF THE STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROADS, BRIDGES, FACILITIES, AND INCIDENTAL CONSTRUCTION, FORM 819 AND JANUARY 2025
- THE PLANS REQUIRE A CONTRACTOR'S WORKING KNOWLEDGE OF LOCAL, MUNICIPAL, WATER AUTHORITY, AND STATE CODES FOR UTILITY SYSTEMS. ANY CONFLICTS BETWEEN MATERIALS AND LOCATIONS SHOWN, AND LOCAL REQUIREMENTS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO THE EXECUTION OF WORK. THE ENGINEER WILL NOT BE HELD LIABLE FOR COSTS INCURRED TO IMPLEMENT OR CORRECT WORK WHICH DOES NOT
- ALL FUEL, OIL, PAINT, OR OTHER HAZARDOUS MATERIALS USED DURING CONSTRUCTION SHOULD BE STORED IN A SECONDARY CONTAINER AND REMOVED TO A LOCKED INDOOR AREA WITH AN IMPERVIOUS FLOOR DURING NON-WORK
- 10. COMPLIANCE WITH THE PERMIT CONDITIONS IS THE RESPONSIBILITY OF BOTH THE CONTRACTOR AND THE PERMITTEE.
- 11. ALL SIGNS AND PAVEMENT MARKINGS MUST CONFORM TO THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES," THE LATEST STATE OF CONNECTICUT CATALOG OF SIGNS AND STANDARD AS REVISED.
- 12. ALL CONSTRUCTED PEDESTRIAN RAMPS SHALL MEET APPLICABLE ACCESSIBILITY CODES AND SHALL COMPLY WITH CTDOT CONSTRUCTION DETAILS. ANY RAMPS NOT MEETING CODES AND DETAILS SHALL BE REMOVED AND REPLACED BY THE CONTRACTOR AT NO COST TO THE TOWN.
- 13. PROCESSED AGGREGATE BASE SHALL BE USED UNDER ALL CONCRETE SIDEWALKS. ANY REFERENCE TO GRANULAR FILL OR COMPACTED GRANULAR FILL IN THE CONTRACT DOCUMENTS SHALL BE REVISED TO PROCESSED AGGREGATE BASE.
- ALL PROPOSED SIDEWALK ALIGNMENTS INCLUDING BASELINES AND ELEVATIONS SHALL BE STAKED BY A CT-LICENSED LAND SURVEYOR TO BE PAID FOR UNDER THE ITEM "CONSTRUCTION SURVEYING". BASELINE FOR EACH STREET OR SIDEWALK SEGMENT SHALL BE STAKED IN ADVANCE OF THE WORK. CONTRACTOR SHALL ARRANGE AND PARTICIPATE IN A FIELD MEETING WITH TOWN AND THE TOWN'S ENGINEER TO CONFIRM THE ALIGNMENT PRIOR TO STARTING THE WORK. THE TOWN AND THE TOWN'S ENGINEER ACCEPT NO RESPONSIBILITY FOR THE ACCURACY OF THE SURVEY LAYOUT; THE MEETING SHALL SERVE TO REVIEW ANY PROPERTY ENCROACHMENTS AND UTILITY IMPACTS IN ADVANCE OF THE WORK.



PROJECT SITE VICINITY MAP:



PREPARED FOR:

MATTHEW TARNOWSKI TOWN OF SOUTHBURY 501 MAIN STREET SOUTH SOUTHBURY, CONNECTICUT 06488

NO.	NAME	TITLE
01		TITLE SHEET
02	IND-01	INDEX PLAN
03	TYP-01	TYPICAL CROSS SECTIONS
04-05	EX-01 - EX-02	EXISTING CONDITIONS AND BASELINE LAYOUT PLANS
06-07	PLN-01 - PLN-02	SIDEWALK PLANS
08-09	TCS-01 - TCS-02	TRAFFIC CONTROL SIGNAL PLANS
10-11	PRO-01 - PRO-02	SIDEWALK PROFILE
12-13	XSC-01 - XSC-02	CROSS SECTIONS
14-20	MDS-01 - MDS-07	MISCELLANEOUS DETAILS
		CTDOT HIGHWAY STANDARD DETAILS
		CTDOT TRAFFIC STANDARD DETAILS

DESIGNED BY:

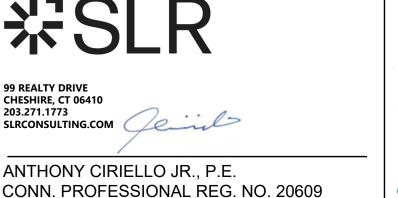


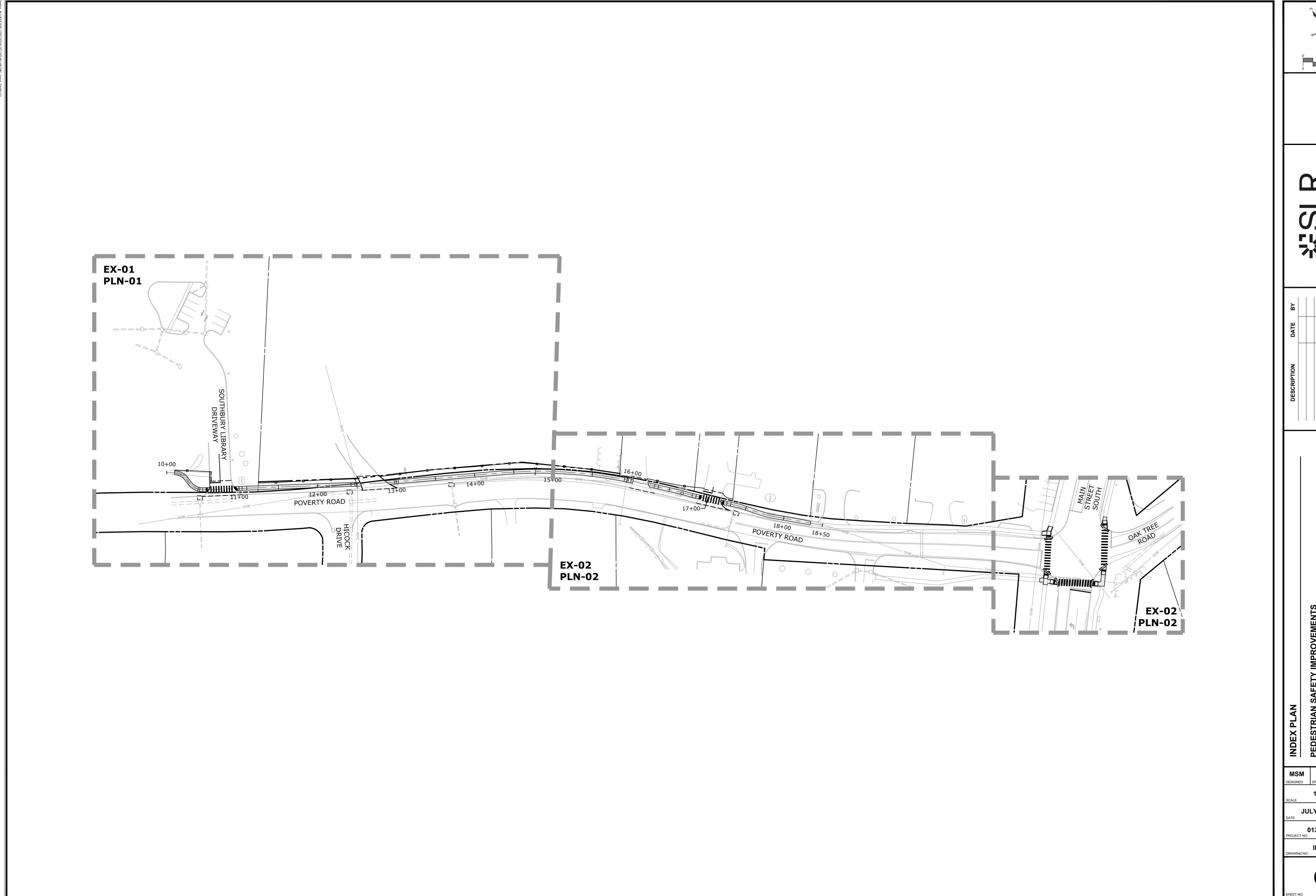
99 REALTY DRIVE CHESHIRE, CT 06410 SLRCONSULTING.COM

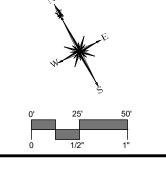
ANTHONY CIRIELLO JR., P.E. CONN. PROFESSIONAL REG. NO. 20609

10/13/2025









MSM ABW MSM 1"=50' JULY 31, 2025

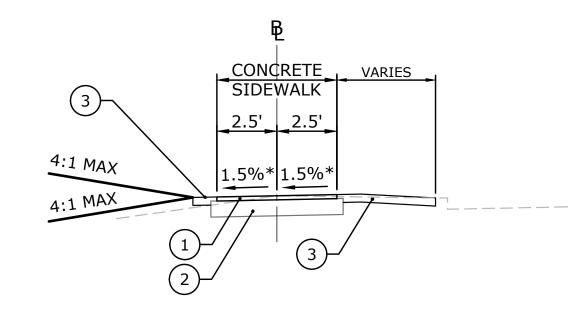
0130-0194

IND-01

- 1) 2" HMA S0.375 (TRAFFIC LEVEL 1)
- 2) 8" PROCESSED AGGREGATE BASE (COMPACTED IN 4" LIFTS)
- 3) 4" TOPSOIL AND TURF ESTABLISHMENT
- 4) 5" CONCRETE SIDEWALK
- 5) 3" HMA S0.375 (TRAFFIC LEVEL 1) (PLACED IN TWO EQUAL LIFTS)
- 6 5" HMA S0.5 (TRAFFIC LEVEL 2) (PLACED IN TWO EQUAL LIFTS)
- 7 12" PROCESSED AGGREGATE BASE (COMPACTED IN 4" LIFTS)
- * 2% MAX CROSS SLOPE

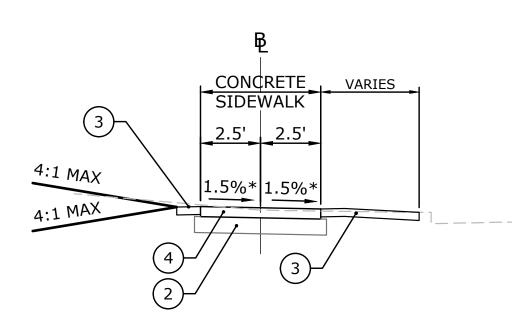
NOTE:

SEE CONCRETE SIDEWALK AND BITUMINOUS CONCRETE DRIVEWAY DETAILS ON STANDARD SHEET NO. HW-921-01 AND HW-922_01



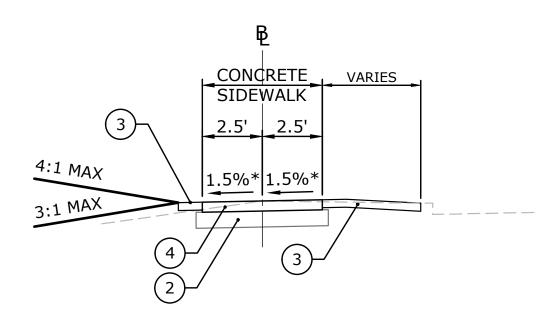
POVERTY ROAD 5' BITUMINOUS CONCRETE SIDEWALK

STA. 10+10 TO 10+48



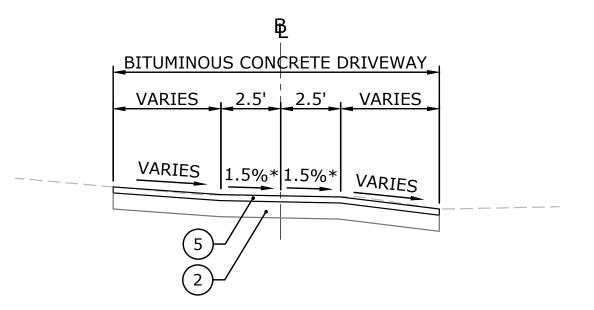
POVERTY ROAD 5' CONCRETE SIDEWALK

STA. 10+48 TO 11+75 STA. 17+00 TO 18+35

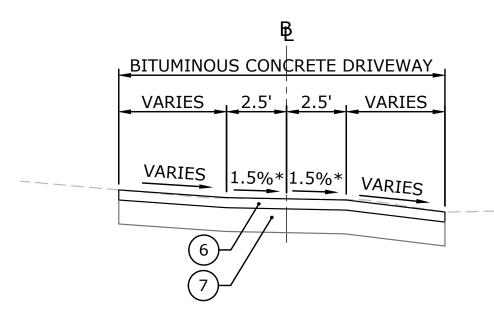


POVERTY ROAD
5' CONCRETE SIDEWALK

STA. 11+75 TO 17+00



RESIDENTIAL DRIVEWAYS



COMMERCIAL DRIVEWAYS

PRALTY DRIVE CHESHIRE, CT 06410

ΒX				
DATE				
DESCRIPTION				

DESTRIAN SAFETY IMPROVEMENTS
IN STREET SOUTH AND POVERTY ROAD

MSM DESIGNED DRAWN CHECKED

NOT TO SCALE

SCALE

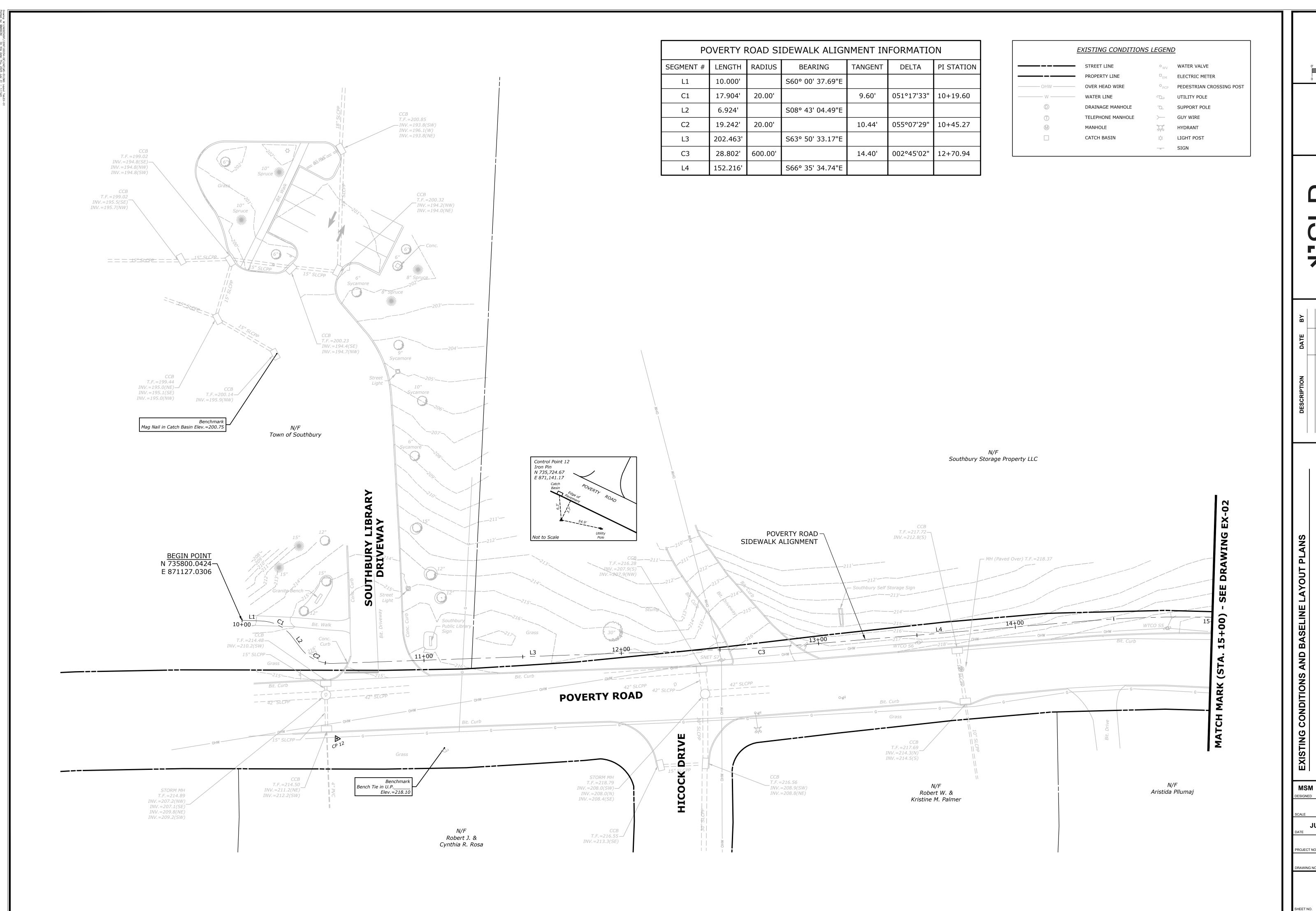
JULY 31, 2025

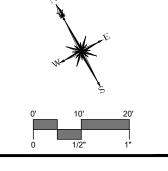
DATE

0130-0194

PROJECT NO.

TYP-01 NG NO.

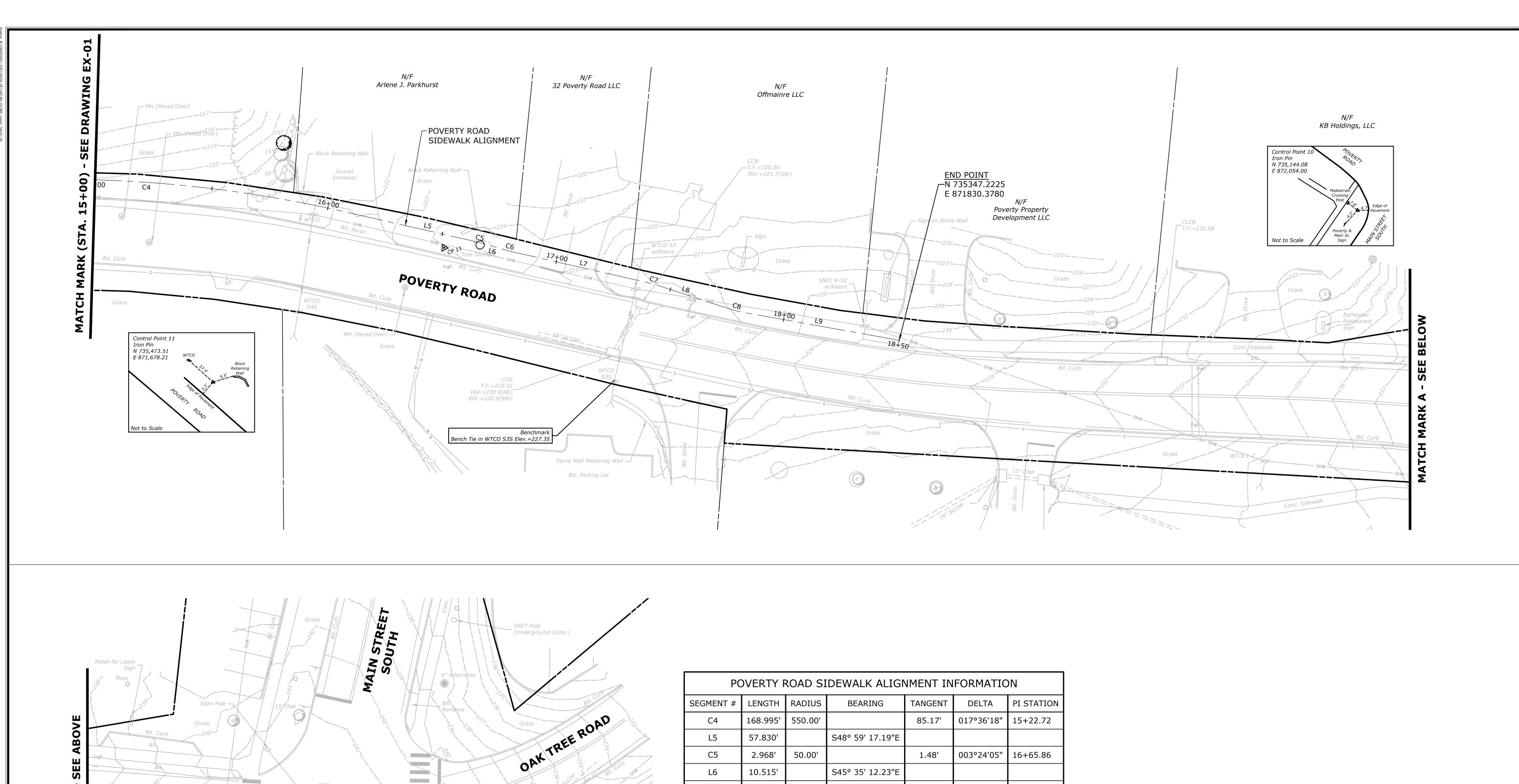




MSM ABW MSM 1"=20' **JULY 31, 2025**

0130-0194

EX-01



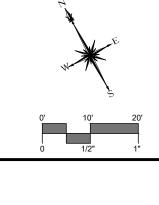
POVERTY ROAD

Benchmark Bench Tie in U.P._WTCOs719 Elev.=241.47

STORM MH T.F.=240.07 INV.=232.5(SE) INV.=226.8(E)

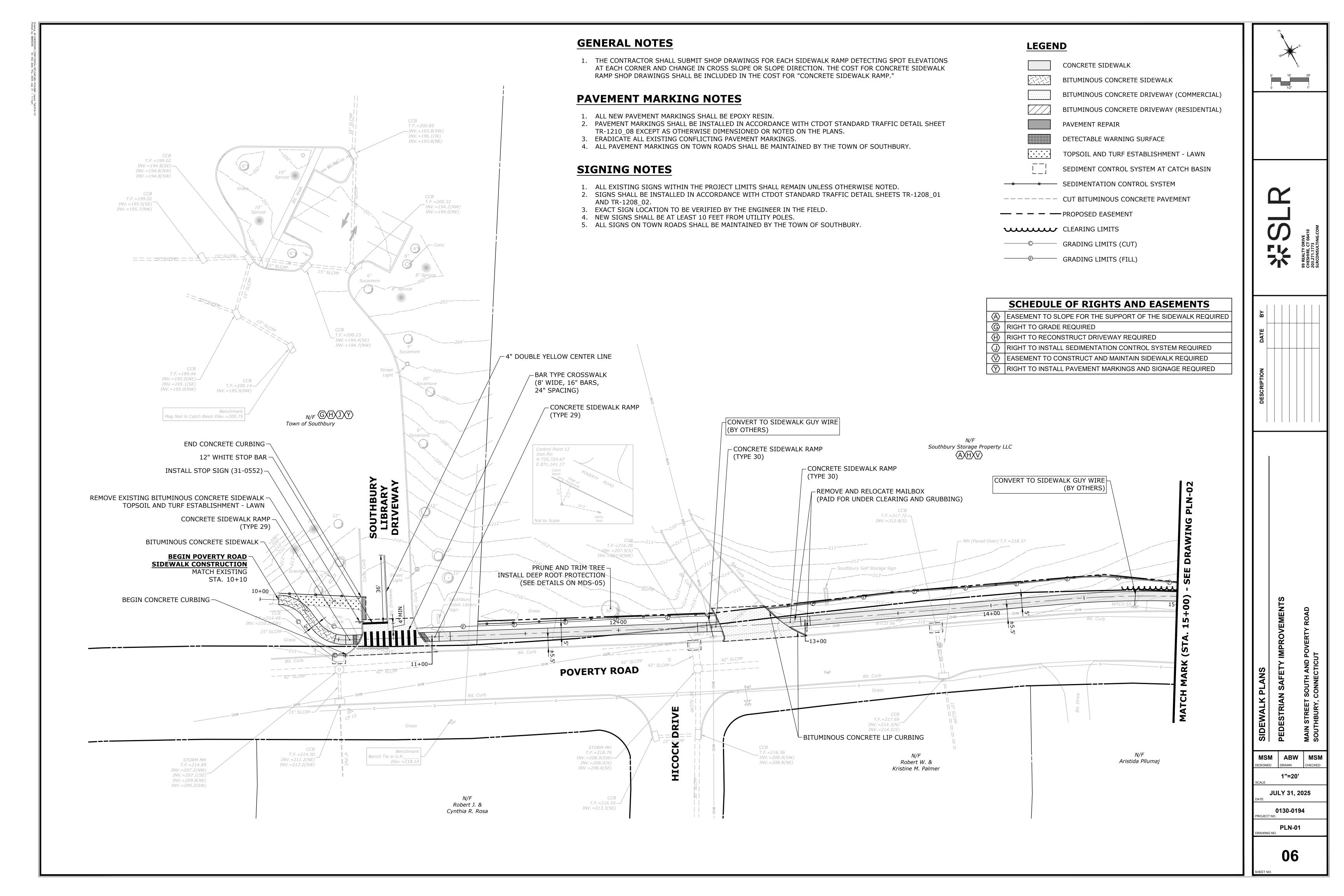
POVERTY ROAD SIDEWALK ALIGNMENT INFORMATION								
SEGMENT #	LENGTH	RADIUS	BEARING	TANGENT	DELTA	PI STATION		
C4	168.995'	550.00'		85.17'	017°36'18"	15+22.72		
L5	57.830'		S48° 59' 17.19"E					
C5	2.968'	50.00'		1.48'	003°24'05"	16+65.86		
L6	10.515'		S45° 35' 12.23"E					
C6	2.968'	50.00'		1.48'	003°24'05"	16+79.34		
L7	59.207'		S48° 59' 17.19"E					
C7	4.697'	50.00'		2.35'	005°22'58"	17+42.38		
L8	31.130'		S43° 36' 19.04"E					
C8	7.019'	50.00'		3.52'	008°02'36"	17+79.38		
L9	67.119'		S51° 38' 54.93"E					

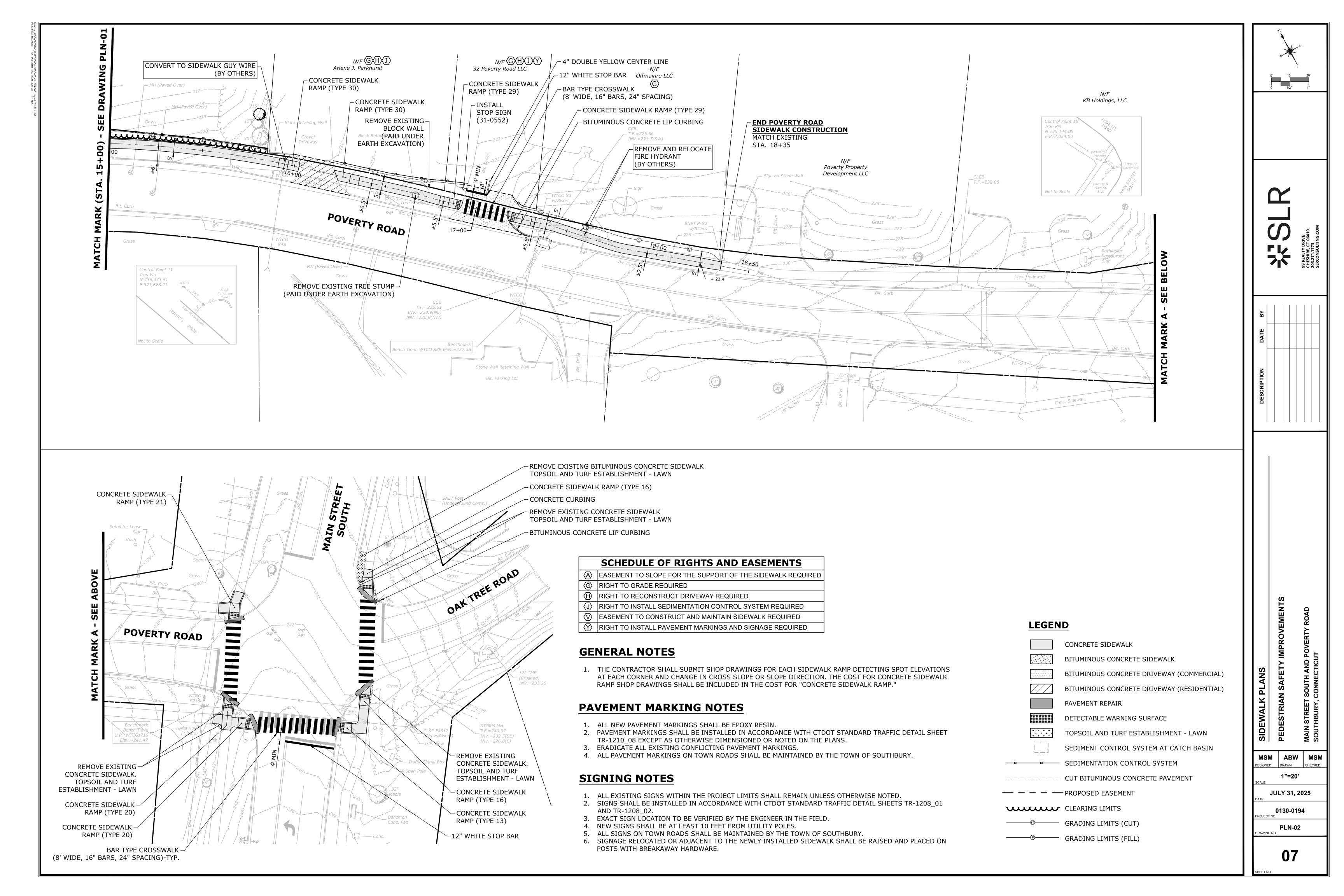
EXISTING CONDITIONS LEGEND							
	STREET LINE	o _{wv}	WATER VALVE				
	PROPERTY LINE	□ _{EM}	ELECTRIC METER				
——— OHW ———	OVER HEAD WIRE	o _{PCP}	PEDESTRIAN CROSSING POST				
	WATER LINE	O	UTILITY POLE				
(DRAINAGE MANHOLE	0	SUPPORT POLE				
\bigcirc	TELEPHONE MANHOLE	\succ	GUY WIRE				
M	MANHOLE	, Co	HYDRANT				
	CATCH BASIN	\$	LIGHT POST				

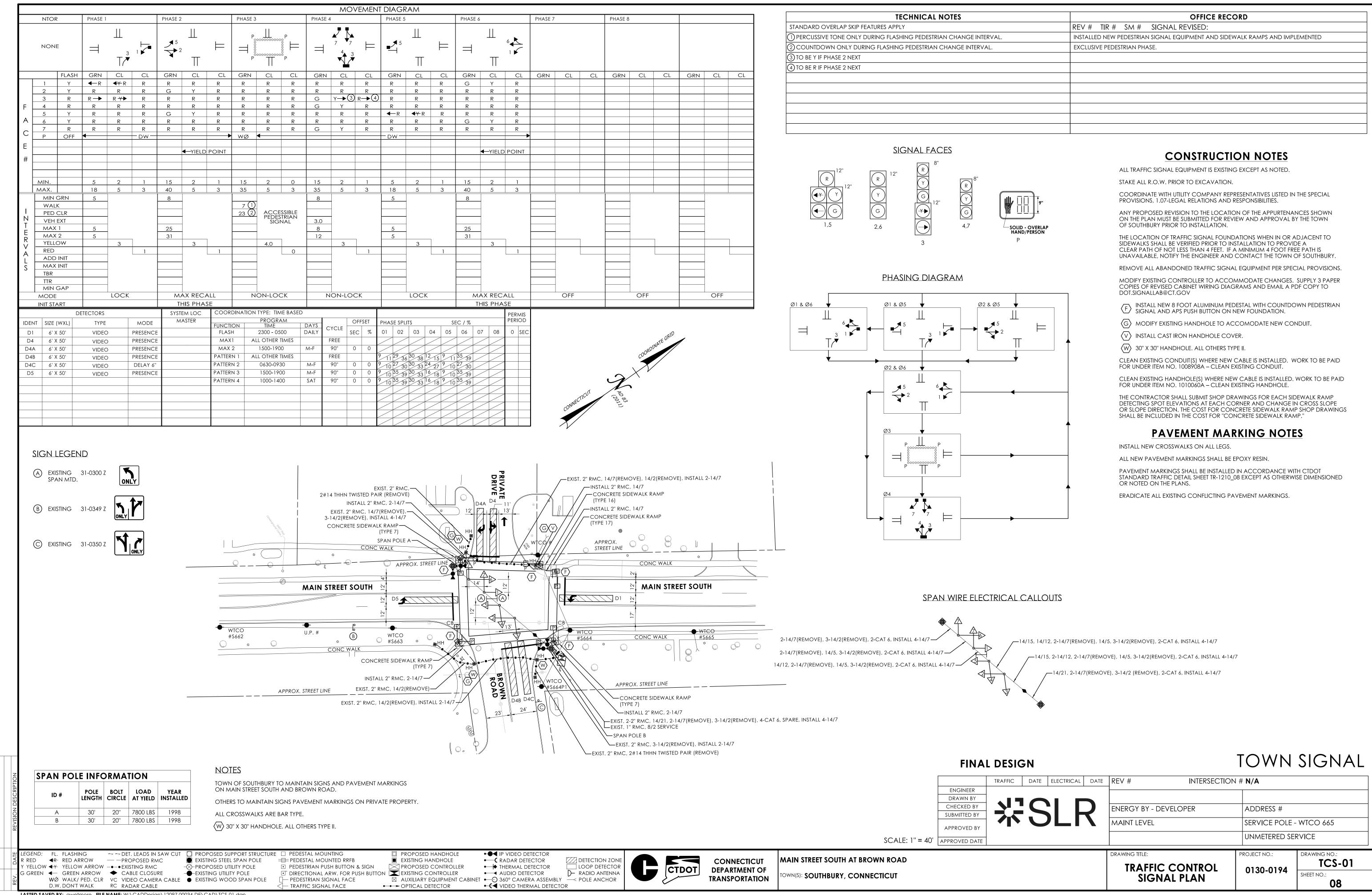


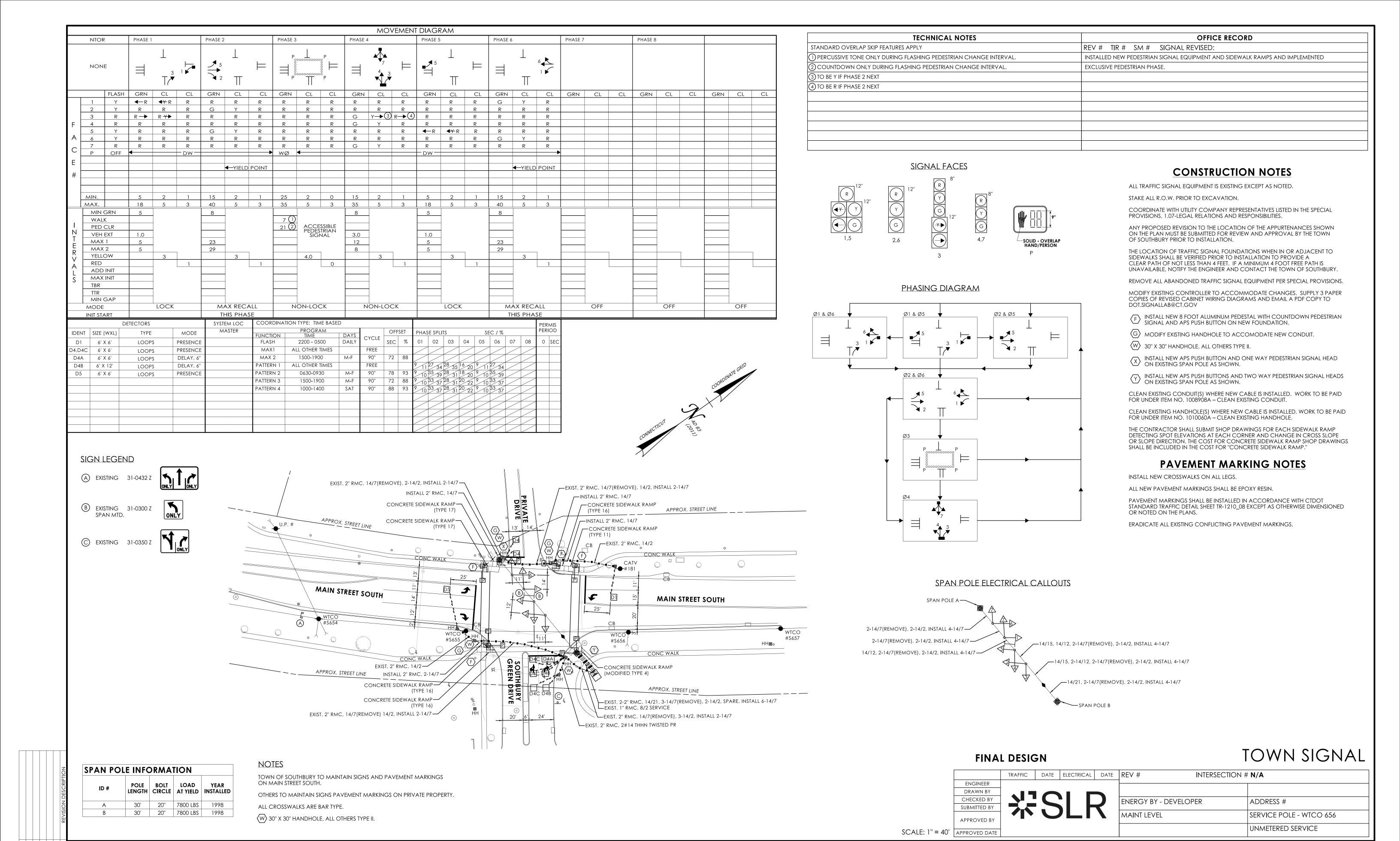
MSM ABW MSM 1"=20' **JULY 31, 2025** 0130-0194

EX-02









DRAWING TITLE:

TRAFFIC CONTROL SIGNAL PLAN

TCS-02

09

SHEET NO.:

0130-0194

MAIN STREET SOUTH AT SOUTHBURY GREEN DRIVE

OWN(S): **Southbury, Connecticut**

CONNECTICUT

DEPARTMENT OF

TRANSPORTATION

CTDOT

••●◀ IP VIDEO DETECTOR

• ♦ THERMAL DETECTOR

• **←** VIDEO THERMAL DETECTOR

LOOP DETECTOR

D- RADIO ANTENNA

• **C** RADAR DETECTOR

■ AUDIO DETECTOR

□ AUXILIARY EQUIPMENT CABINET • → 360° CAMERA ASSEMBLY → POLE ANCHOR

PROPOSED HANDHOLE

PROPOSED CONTROLLER

EXISTING HANDHOLE

• → → OPTICAL DETECTOR

→ → DET. LEADS IN SAW CUT

WØ WALK/ PED. CLR VC VIDEO CAMERA CABLE ● EXISTING WOOD SPAN POLE

EXISTING STEEL SPAN POLE

⊗−PROPOSED UTILITY POLE

-EXISTING UTILITY POLE

PEDESTAL MOUNTED RRFB

— TRAFFIC SIGNAL FACE

PEDESTRIAN PUSH BUTTON & SIGN

– pedestrian signal face

DIRECTIONAL ARW. FOR PUSH BUTTON X EXISTING CONTROLLER

— — PROPOSED RMC

◆R RED ARROW

YELLOW \blacktriangleleft Y YELLOW ARROW $-\bullet-\bullet$ EXISTING RMC

GREEN ← GREEN ARROW ◆ CABLE CLOSURE

D.W. DON'T WALK RC RADAR CABLE

AD = 3.35% K = 14.92 50.00' VC LOW POINT STA. = 13+59.61 LOW POINT ELEV. = 216.71 AD = -5.80% K = 6.90 AD = -9.90%K = 2.0240.00' VC HIGH POINT STA. = 11+39.71 HIGH POINT ELEV. = 216.86 20.00' VC HIGH POINT STA. = 10+45.27 HIGH POINT ELEV. = 215.66 220 220 SOUTHBURY SOUTHBURY SELF STORAGE

DRIVEWAY

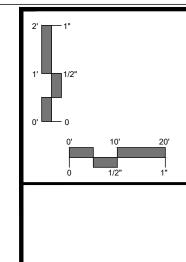
MATCH EXISTING LIBRARY DRIVEWAY MATCH EXISTING BVCS: 11+05.55 BVCE: 216.02 FINISHED GRADE EVCS: 10+55.28 EVCE: 215.42 EXISTING GROUND STA. 10+10 MATCH EXISTING SIDEWALK 210 11+00 10+00 10+50 11+50 12+00 12+50 13+00 13+50 14+00 14+50 15+00 POVERTY ROAD SIDEWALK PROFILE STA. 10+00 TO STA. 15+00 H: 1" = 20' V: 1" = 2'

MSM ABW MSM 1"=20' H 1"=2' V **JULY 31, 2025**

0130-0194

PRO-01

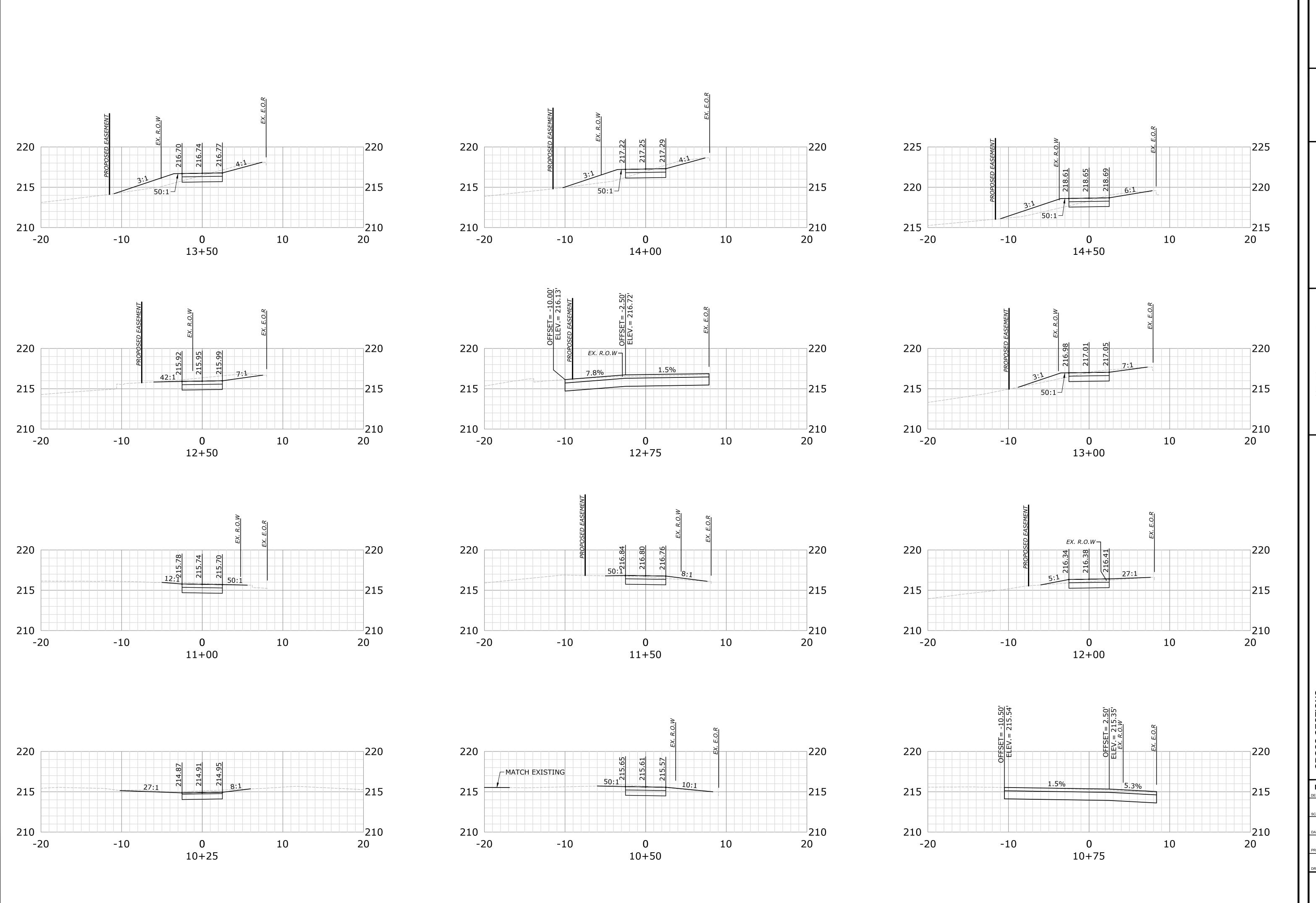
STA. 15+00 TO STA. 18+50 H: 1" = 20' V: 1" = 2'



MSM	ABW	MSM					
DESIGNED	DRAWN	CHECKED					
1"=20' H _{SCALE} 1"=2' V							
JULY 31, 2025							

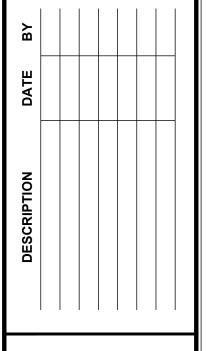
0130-0194

PRO-02



0' 2.5' 5' 0 1/2" 1"

9 REALTY DRIVE HESHIRE, CT 06410



PEDESTRIAN SAFETY IMPROVEMENTS

MAIN STREET SOUTH AND POVERTY ROAD
SOUTHBURY CONNECTICUT

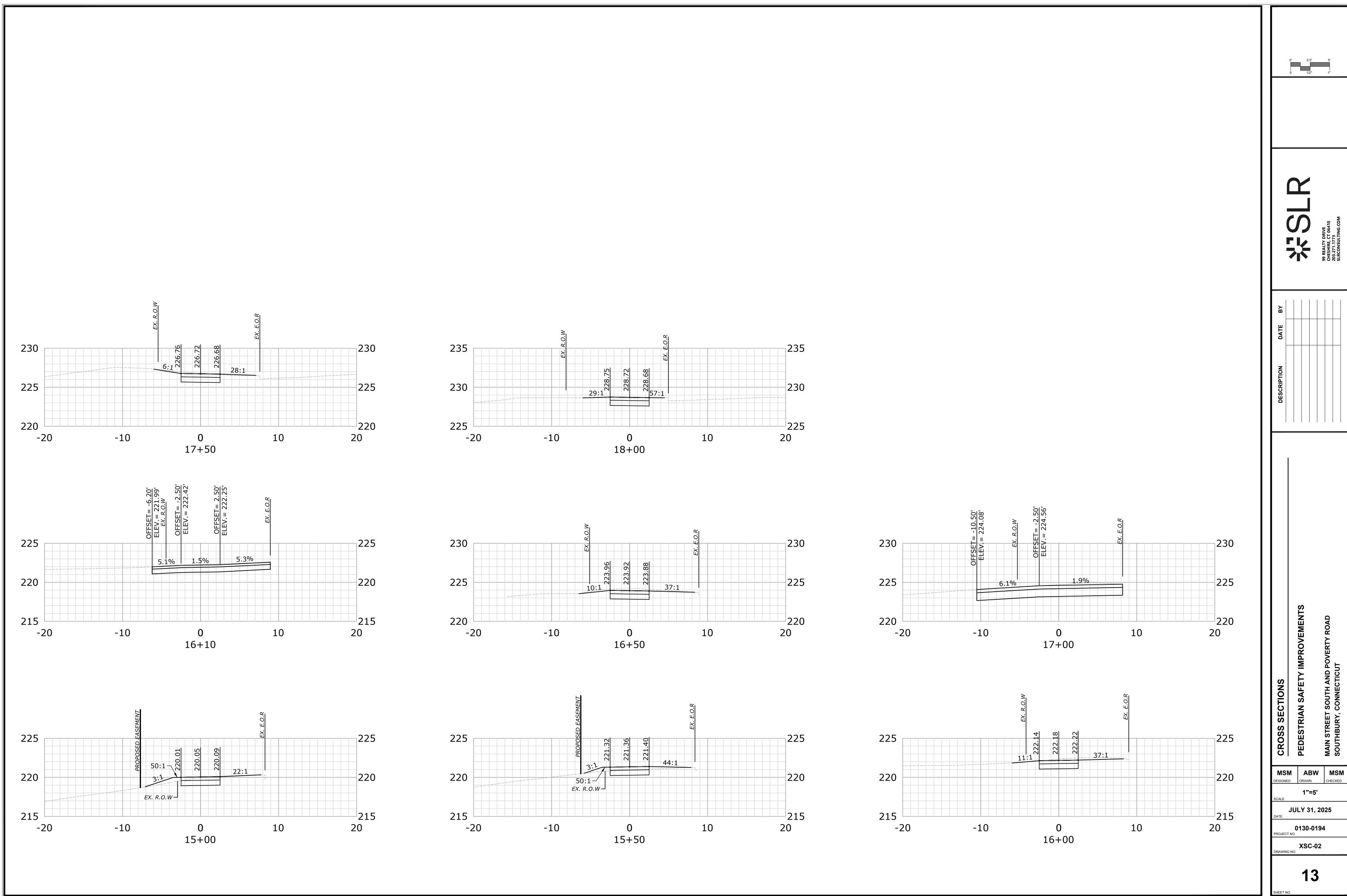
MSM ABW MSM
DESIGNED DRAWN CHECKED

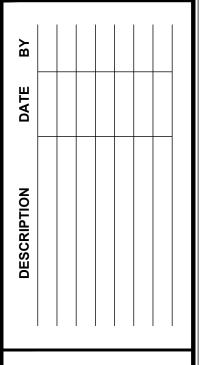
1"=5'
SCALE

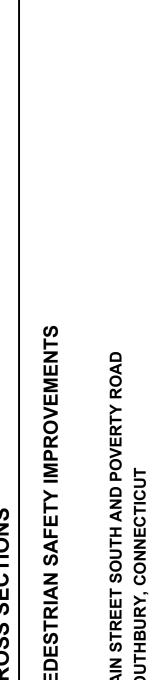
JULY 31, 2025
DATE

0130-0194
PROJECT NO.

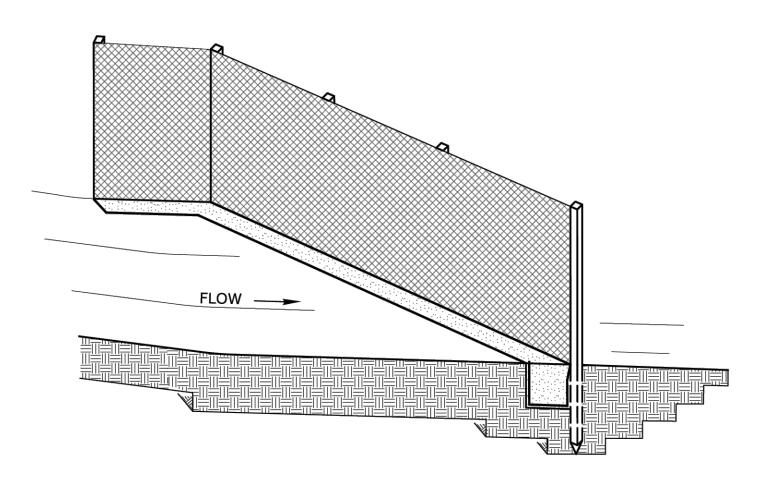
XSC-01 WING NO.



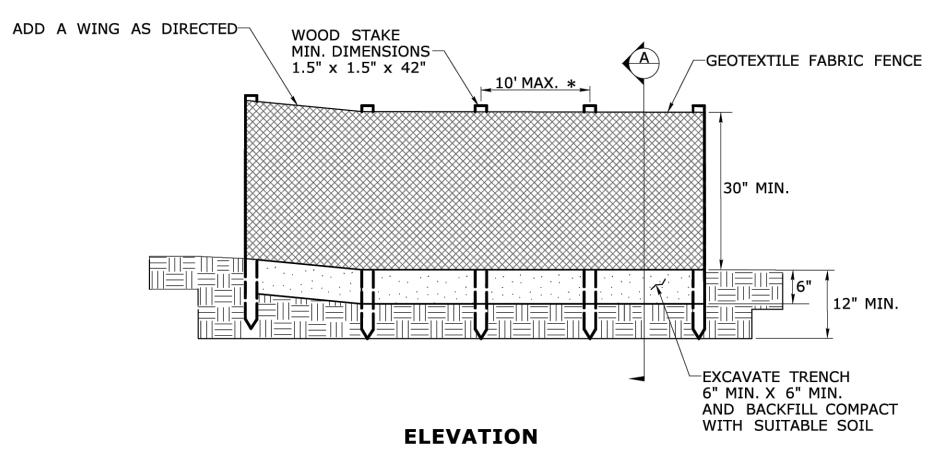




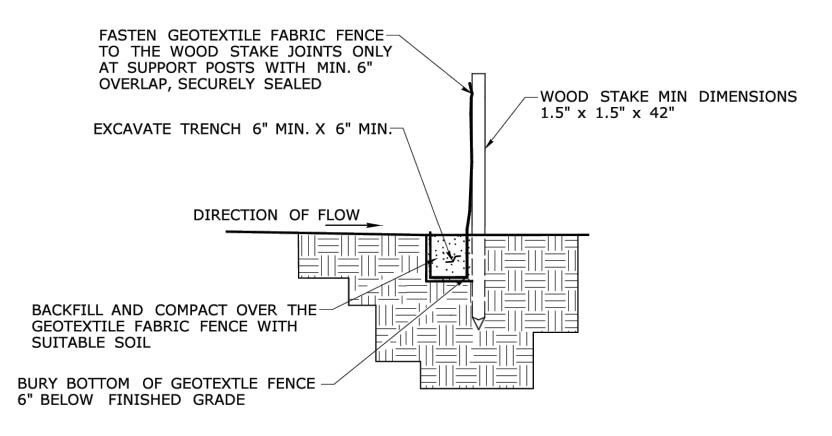
1"=5'



INSTALL THE WING WHEN THE FENCE IS MORE THAN 4'FROM THE TOE OF SLOPE AND THE FENCE LINE GRADIENT IS 5% OR MORE



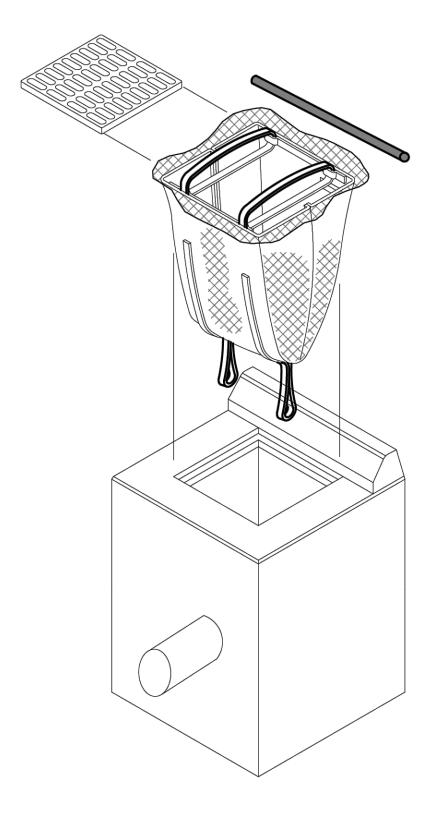
* FOR SLOPES STEEPER THAN 2:1 USE A 5' POST SPACING OR AS DIRECTED BY THE ENGINEER



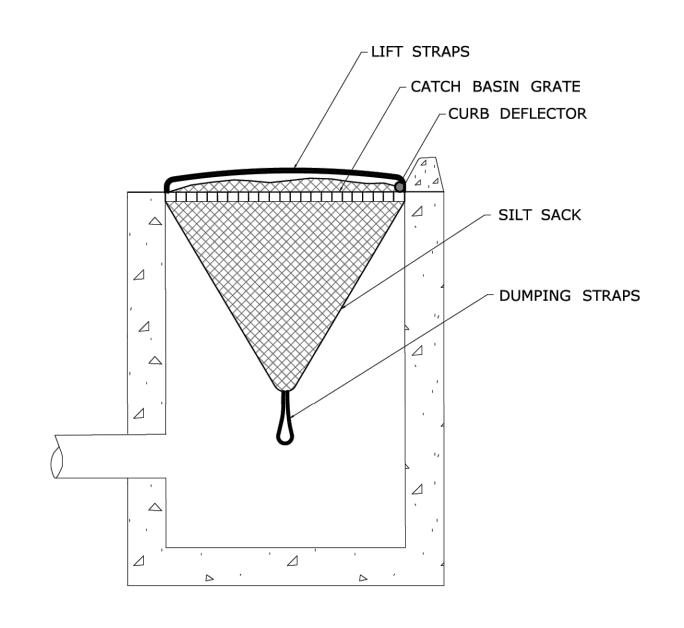
SECTION A

SEDIMENTATION CONTROL SYSTEM

NOT TO SCALE



NOTE: THIS ITEM WILL BE MEASURED BY EACH SEDIMENT CONTROL SYSTEM AT CATCH BASIN



SECTION

SEDIMENT CONTROL SYSTEM AT CATCH BASIN

NOT TO SCALE

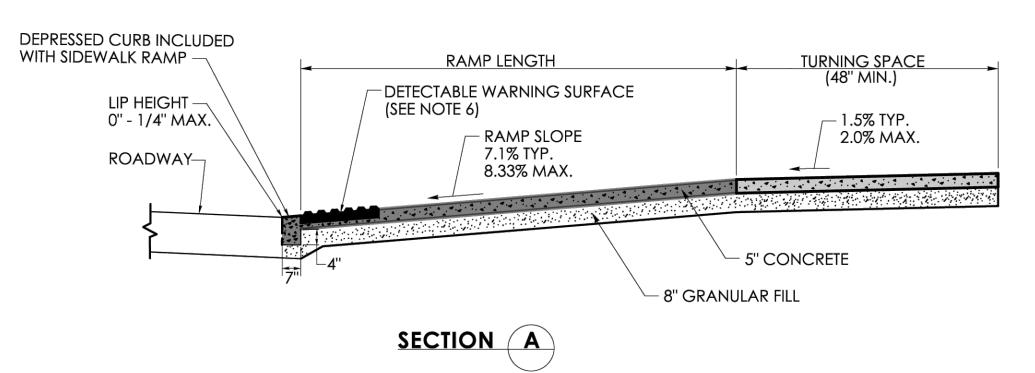
MSM ABW MSM
CHECKED

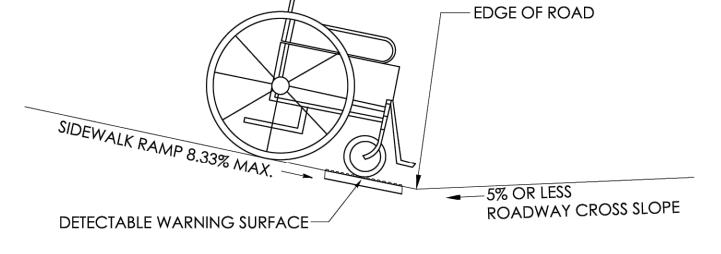
NOT TO SCALE
SCALE

JULY 31, 2025
DATE

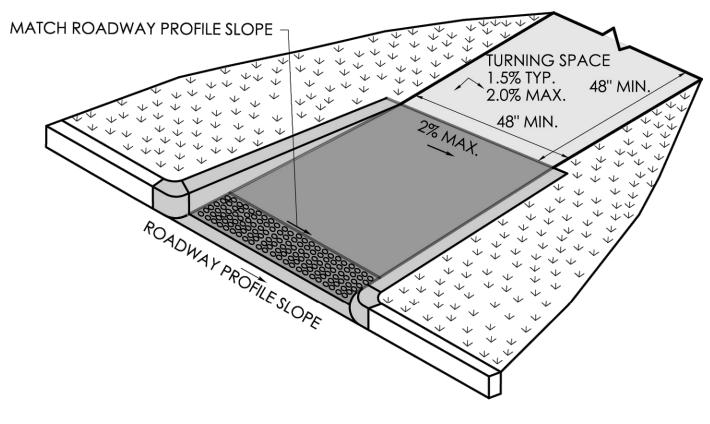
0130-0194
PROJECT NO.

PERPENDICULAR SIDEWALK RAMP AND SECTION



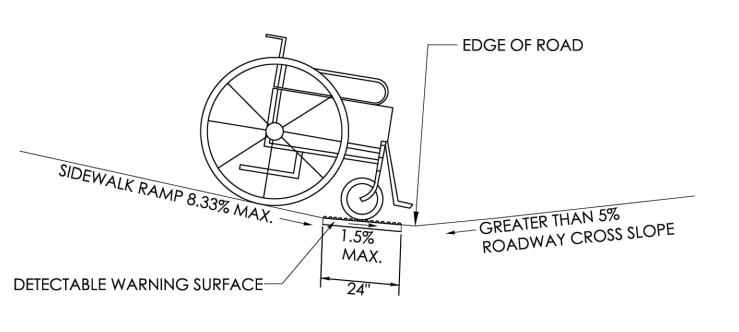


SIDEWALK RAMP GRADE AT ROADWAY CROSS SLOPE OF 5% OR LESS GUTTER COUNTER SLOPE



RAMP WARPING DETAIL

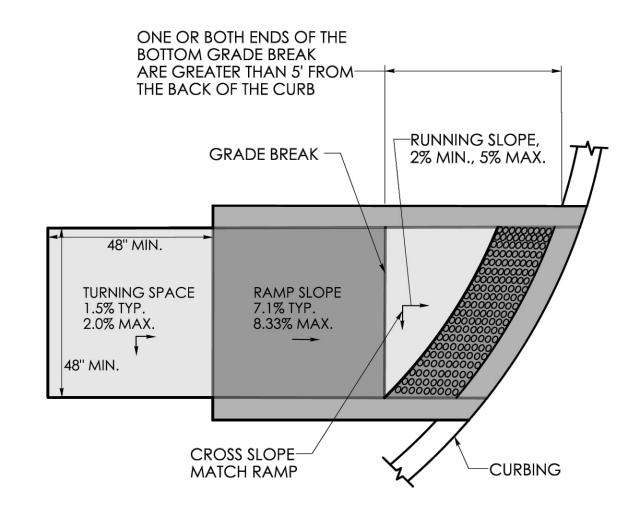
- 1. TRANSITION SIDEWALK RAMP TO MATCH ROADWAY PROFILE AS GRADUALLY AS POSSIBLE. DO NOT EXCEED 3 % PER FOOT CROSS SLOPE RATE OF CHANGE WHEN TRANSITIONING TO ROADWAY PROFILE.
- 2. COMPLETE TRANSITION TO THE ROADWAY PROFILE BEHIND THE DETECTABLE WARNING SURFACE.



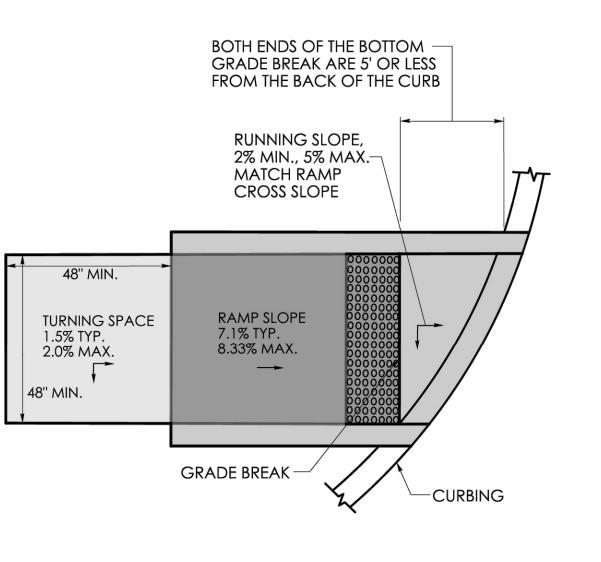
SIDEWALK RAMP GRADE AT ROADWAY CROSS SLOPE OF GREATER THAN 5% GUTTER COUNTER SLOPE

GENERAL NOTES:

- 1. SIDEWALK RAMPS SHALL HAVE A COARSE BROOM FINISH TRANSVERSE TO THE SLOPE OF THE RAMP.
- 2. VERTICAL SURFACE DISCONTINUITIES AT JOINTS SHALL NOT EXCEED $\frac{1}{4}$ " INCH.
- 3. REMOVAL OF EXISTING SIDEWALK FOR NEW RAMP INSTALLATIONS SHALL BE TO THE NEAREST EXPANSION OR CONTRACTION JOINT.
- 4. THE RUNNING SLOPE OF THE CURB RAMP SHALL BE 8.33 PERCENT MAXIMUM BUT SHALL NOT REQUIRE THE RAMP LENGTH TO EXCEED 15 FEET.
- 5. DETECTABLE WARNING SURFACES SHALL BE INSTALLED ON SIDEWALK RAMPS AT PEDESTRIAN STREET CROSSINGS, PEDESTRIAN REFUGE ISLANDS AND RAILROAD CROSSINGS ALONG STREETS OR HIGHWAYS.
- 6. DETECTABLE WARNING SURFACES SHALL EXTEND 2 FEET MIN. IN THE DIRECTION OF PEDESTRIAN TRAVEL AND SPAN THE ENTIRE RAMP OPENING.
- 7. ALL GUIDESHEET VALUES COMPLY WITH PROWAG DRAFT 2013 GUIDELINES. UPDATED VALUES WILL BE MADE TO COMPLY WITH PROWAG FINAL RULE ONCE OFFICIALLY THE LAW.
- 8. CTDOT DESIGN STANDARD USE THE PUBLIC RIGHT-OF-WAY ACCESSIBILITY GUIDELINES (PROWAG) SEE ENGINEERING DIRECTIVE ED-2019-7.
- 9. CURB RAMPS SHALL BE CONSTRUCTED SO THAT WATER WILL NOT ACCUMLATE WITHIN THE PEDESTRIAN ACCESS ROUTE.

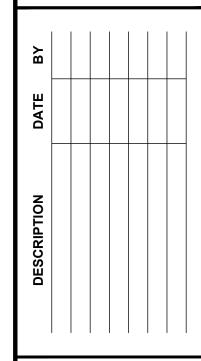


GRADE BREAK GREATER THAN 5' DETECTABLE WARNING SURFACE LOCATION



GRADE BREAK OF 5' OR LESS
DETECTABLE WARNING SURFACE LOCATION

SP REALTY DRIVE



DESTRIAN SAFETY IMPROVEMENTS
IN STREET SOUTH AND POVERTY ROAD

MSM DESIGNED DRAWN CHECKED

NOT TO SCALE

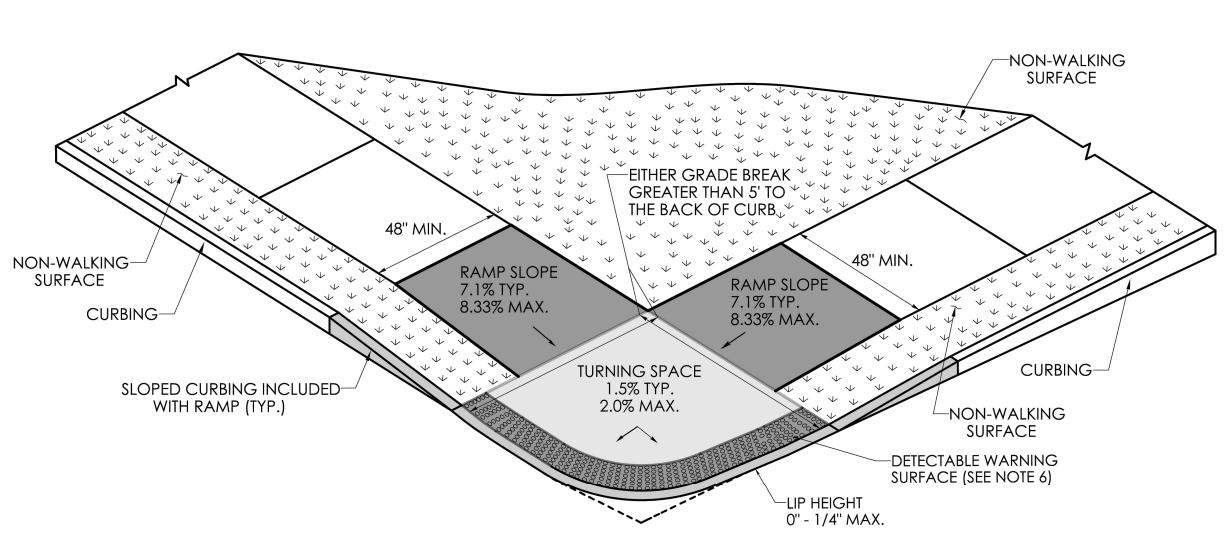
SCALE

JULY 31, 2025

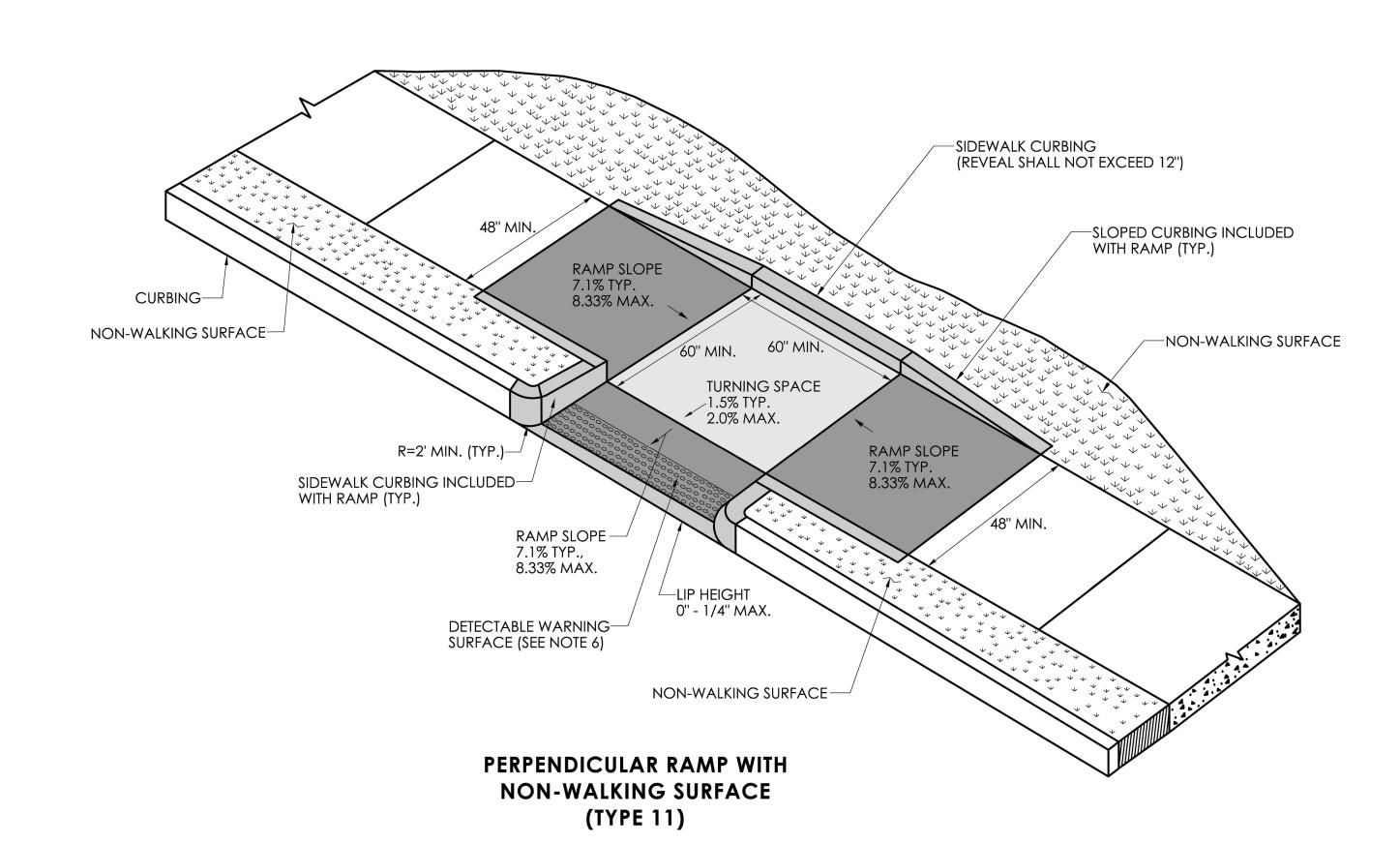
DATE

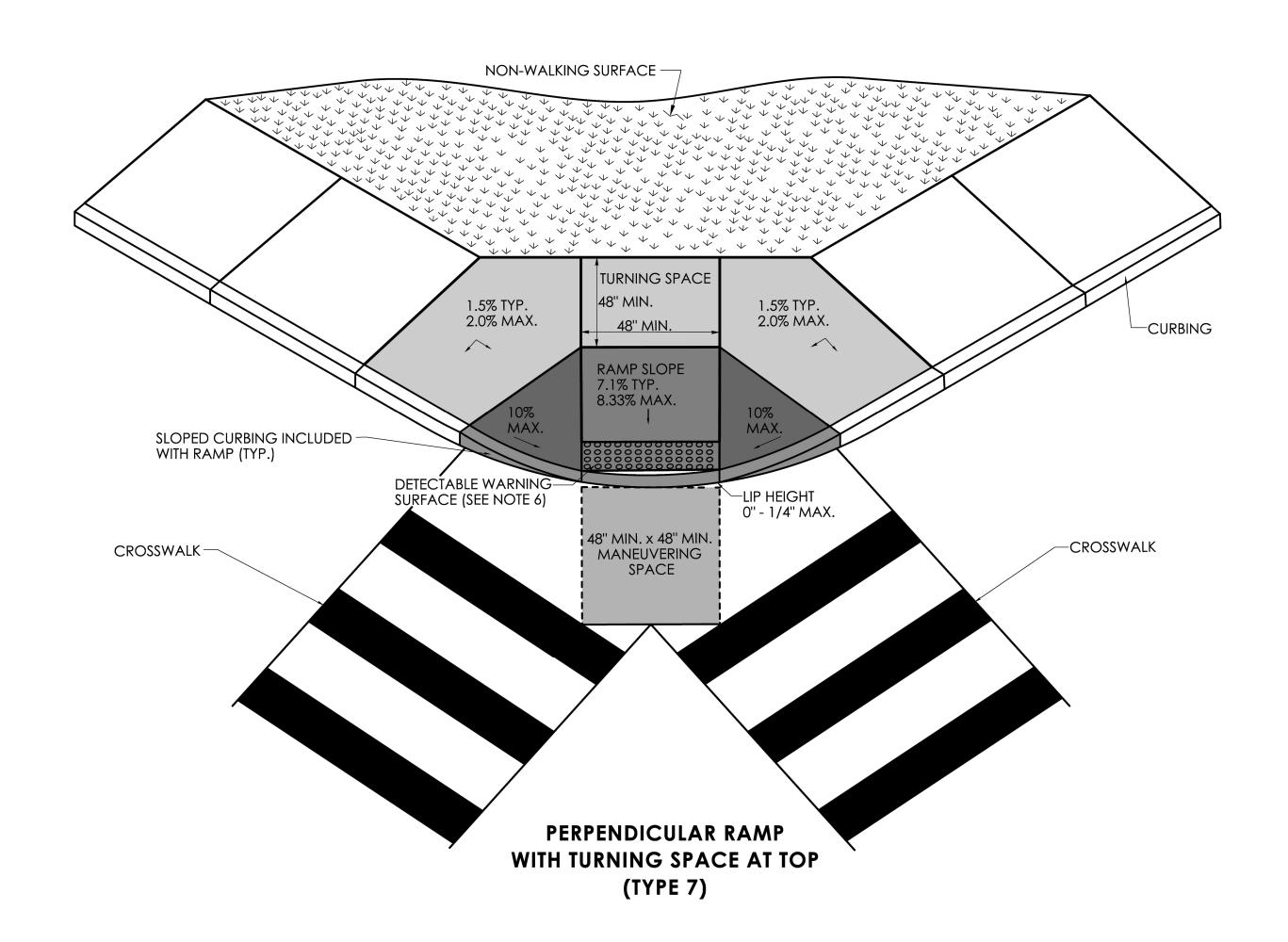
0130-0194

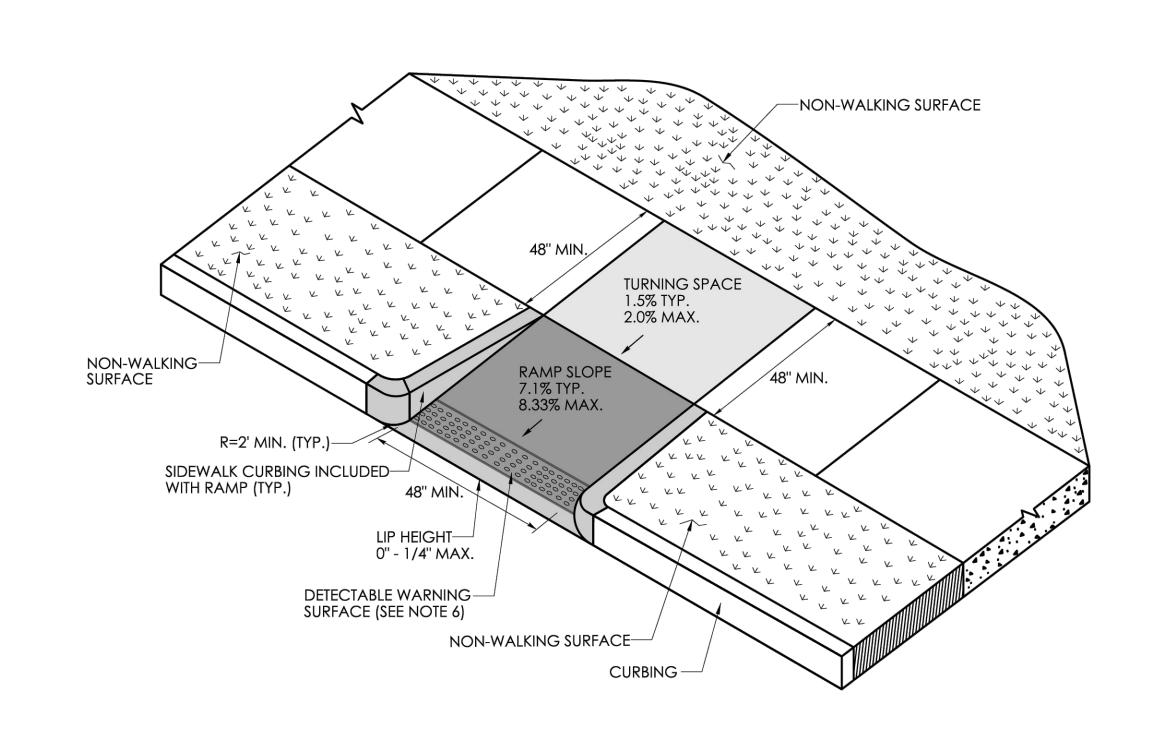
MDS-02



TWO DIRECTIONAL PERPENDICULAR RAMP
WITH A GRADE BREAK
TO BACK OF CURB GREATER THAN 5'
WITH NON-WALKING SURFACE
(TYPE 4)

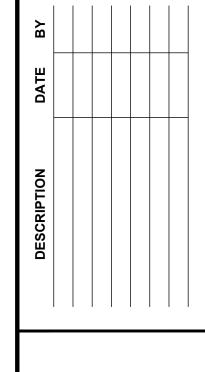






PERPENDICULAR RAMP
WITH NON-WALKING SURFACE
(TYPE 13)

SP REALTY DRIVE CHESHIRE, CT 06410



PEDESTRIAN SAFETY IMPROVEMENTS

MAIN STREET SOUTH AND POVERTY ROAD

MSM ABW CHECKED

NOT TO SCALE

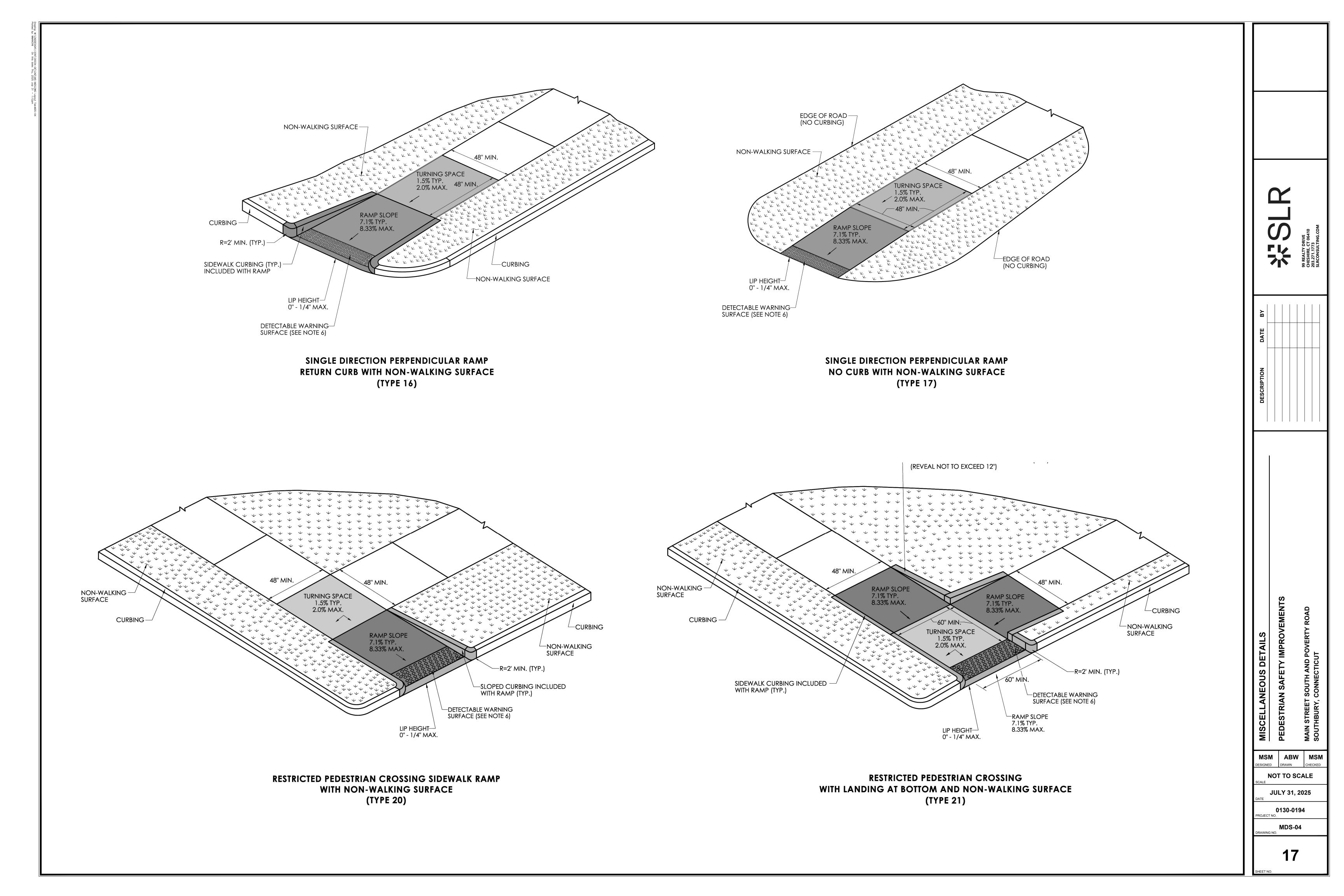
SCALE

JULY 31, 2025

DATE

0130-0194

MDS-03

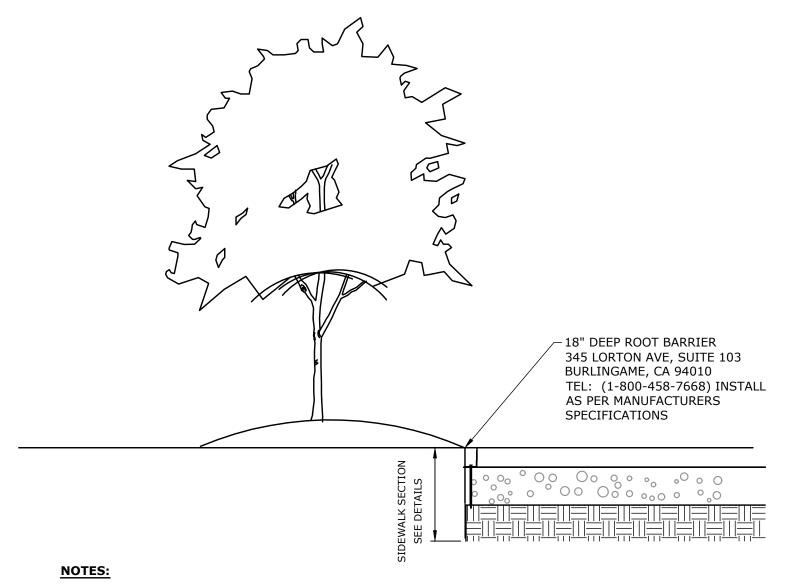


DRIVEWAY CROSSING SIGNALIZED, STOP CONTROLLED OR YIELD WITH DETECTABLE WARNING SURFACE AND NON WALKING SURFACE

(TYPE 29)

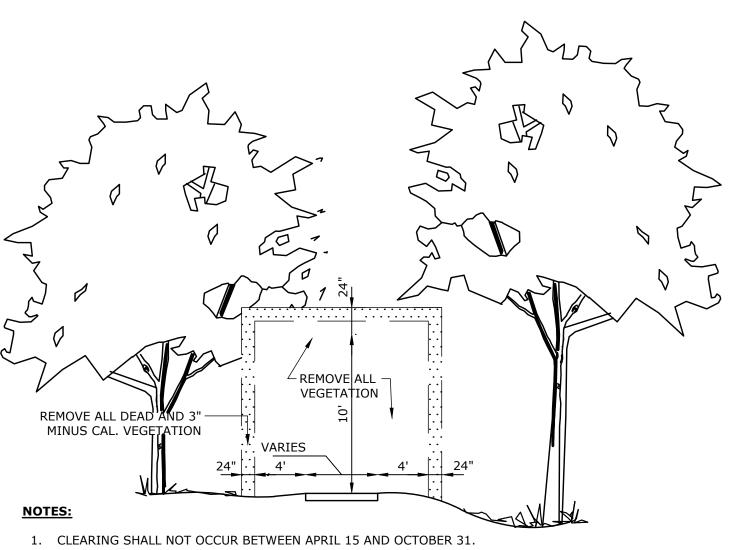
UNSIGNALIZED, NO STOP CONTROL OR YIELD DRIVEWAY CROSSING WITH NON WALKING SURFACE

(TYPE 30)



INSTALL BARRIER FOR A LENGTH EQUAL TO A DISTANCE OF 2' WIDER THAN THE DRIP LINE OF THE TREE.

ROOT PRUNING/ROOT BARRIER NOT TO SCALE



CLEARING LIMITS

NOT TO SCALE

MSM ABW MSM **NOT TO SCALE JULY 31, 2025**

0130-0194

MDS-05

TEMPORARY PAVEMENT REPAIR FOR TRENCH THROUGH OVERLAID PORTLAND CEMENT CONCRETE OR BITUMINOUS CONCRETE PAVEMENT

3" HMA S0.375 OR 3" HMA S0.5 TRAFFIC LEVEL 2-PLACED IN TWO EQUAL LIFTS OR AS DIRECTED BY THE DISTRICT ANY AREA 1500 S.F. OR LESS USE S0.375 FOR THE TOP COURSE -SAW CUT EDGE, TACK COAT, AND SEAL JOINT 6" HMA S1.0 TRAFFIC LEVEL 2 PLACED IN-AFTER PAVING (TYP.) TWO EQUAL LIFTS OR MATCH EXISTING PAVEMENT THICKNESS WHICHEVER IS GREATER EXISTING BITUMINOUS CONCRETE PAVEMENT 19" (30" IN ROCK CUT) OR AS DIRECTED BY THE DISTRICT EXISTING BITUMINOUS PAVEMENT OR--TACK COAT EDGE (TYP.) PORTLAND CEMENT CONCRETE -10" PROCESSED AGGREGATE BASE MATERIAL COMPACTED IN 5" LIFTS COMPACTED GRANULAR FILL PLACED IN 8" LIFTS

PERMANENT PAVEMENT REPAIR WITHOUT MILLING - THROUGH PORTLAND CEMENT CONCRETE OR BITUMINOUS CONCRETE PAVEMENT

MILL AND PAVE WITH 2" TO 3" HMA S0.375 OR MILL AND PAVE 10' MIN. OR 2" TO 3" HMA SO.5 TRAFFIC LEVEL 2 OR AS AS DIRECTED BY THE DISTRICT DIRECTED BY THE DISTRICT AND FOR ANY AREA 1500 S.F. OR LESS USE S0.375 FOR THE TOP COURSE-TACK COAT, AND SEAL JOINT 6" HMA S1.0 TRAFFIC LEVEL 2 PLACED IN-AFTER PAVING (TYP.)-TWO EQUAL LIFTS OR MATCH EXISTING PAVEMENT THICKNESS WHICHEVER IS GREATER -EXISTING BITUMINOUS TRENCH WIDTH CONCRETE PAVEMENT 19" (30" IN ROCK CUT) OR AS DIRECTED BY THE DISTRICT TACK COAT EDGE (TYP.) EXISTING BITUMINOUS PAVEMENT OR-PORTLAND CEMENT CONCRETE -10" PROCESSED AGGREGATE BASE MATERIAL COMPACTED IN 5" LIFTS COMPACTED GRANULAR FILL-PLACED IN 8" LIFTS

PERMANENT PAVEMENT REPAIR WITH MILLING

PAVEMENT REPAIR

NOT TO SCALE

ROADWAY PROFILE

GENERAL NOTES:

-3" HMA SO.5 TRAFFIC LEVEL 2

IN TWO EQUAL LIFTS

AS DIRECTED BY THE DISTRICT

PLACED IN TWO EQUAL LIFTS OR

6" HMA S1.0 TRAFFIC LEVEL 2 PLACED

-10" PROCESSED AGGREGATE BASE

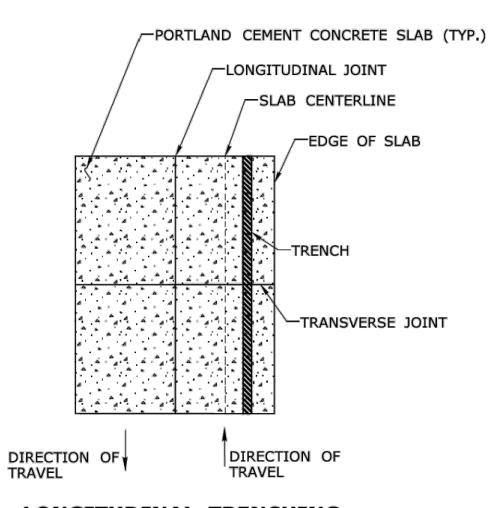
MATERIAL COMPACTED IN 5" LIFTS

1. LONGITUDINAL TRENCHING FOR JOINTED CONCRETE PAVEMENT:

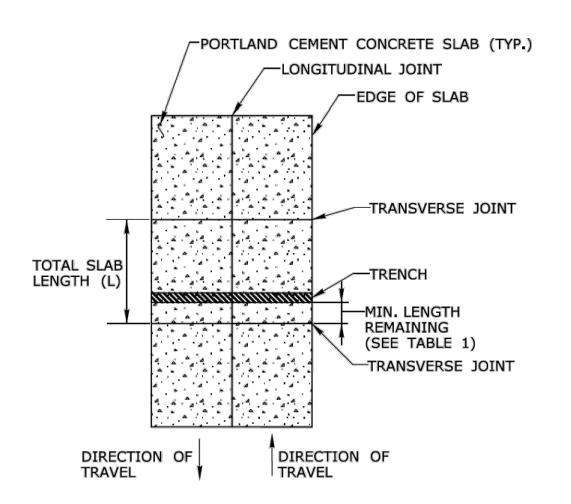
- A. IF THE LONGITUDINAL TRENCH FALLS BETWEEN THE SLAB CENTERLINE AND THE EDGE OF SLAB, REMOVE CONCRETE
 AND BITUMINOUS CONCRETE PAVEMENT FROM THE TRENCH EDGE TO THE EDGE OF ROAD. IF THE LONGITUDINAL TRENCH
 FALLS BETWEEN THE LONGITUDINAL JOINT AND THE SLAB CENTERLINE, REMOVE THE ENTIRE CONCRETE SLAB AND BITUMINOUS
 CONCRETE PAVEMENT TO THE EDGE OF ROAD. IN EITHER CASE REBUILD WITH THE FOLLOWING:
 - a. PLACE HMA S1.0 TRAFFIC LEVEL 2 IN TWO EQUAL 4" 5" LIFTS TO MATCH EXISTING CONCRETE PAVEMENT THICKNESS b. PLACE HMA S0.5 TRAFFIC LEVEL 2 IN 2" - 3" LIFTS TO MATCH EXISTING BITUMINOUS CONCRETE PAVEMENT THICKNESS, WITH THE FINAL LIFT BEING 2"
- 2. TRANSVERSE TRENCHING FOR JOINTED CONCRETE PAVEMENT:

TABLE 1					
TOTAL SLAB LENGTH (L)	MIN. LENGTH REMAINING				
40' OR LONGER	1/4 L				
15' - 40'	10'				
15' OR SHORTER	REBUILD TO NEAREST JOINT				

- A. FOR TRANSVERSE TRENCHES, THE MINIMUM SLAB LENGTH AS SHOWN IN TABLE 1 SHALL BE LEFT IN PLACE TO THE NEAREST TRANSVERSE JOINT. IF THIS CRITERIA CANNOT BE MET, THE EXISTING SLAB AREA FROM THE TRENCH EDGE TO THE NEAREST TRANSVERSE JOINT SHALL BE REMOVED AND REBUILT AS FOLLOWS:
 - a. PLACE HMA S1.0 TRAFFIC LEVEL 2 IN TWO EQUAL 4" 5" LIFTS TO MATCH EXISTING CONCRETE PAVEMENT THICKNESS b. PLACE HMA S0.5 TRAFFIC LEVEL 2 IN 2" 3" LIFTS TO MATCH EXISTING BITUMINOUS CONCRETE PAVEMENT THICKNESS, WITH THE FINAL LIFT BEING 2"

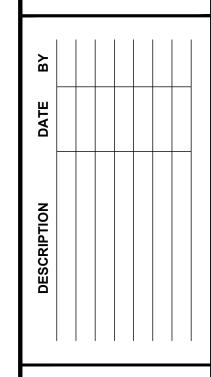


FOR JOINTED CONCRETE PAVEMENT
(SEE NOTE 1)



TRANSVERSE TRENCHING FOR JOINTED CONCRETE PAVEMENT (SEE NOTE 2)

学 SLR



TRIAN SAFETY IMPROVEMENTS
REET SOUTH AND POVERTY ROAD

MSM ABW CHECKED

NOT TO SCALE

SCALE

JULY 31, 2025

DATE

MDS-06

0130-0194

S EALTY DRIVE

DESCRIPTION DATE BY

CELLANEOUS DETAILS
ESTRIAN SAFETY IMPROVEMENTS

MSM ABW CHECKED

NOT TO SCALE

SCALE

JULY 31, 2025

DATE

0130-0194

MDS-07

*ONLY STANDARD SHEETS MARKED WITH AN " " ARE IN THIS PROJECT

**REVISED OR ADDED

\ *	SHEET NO.	TITLE	APPROVAL DATE**
	HW-211_01	ANTI-TRACKING PAD	11-09-22
	HW-286_01	DRAINAGE TRENCH EXCAVATION	11-09-22
	HW-505 01a	01-21-25	
	HW-505 01b	STEEL REINFORCING FOR STRAIGHT ENDWALLS (2" DIFF BASE TO FLOW LINE)	01-05-24
	HW-505 01c	STEEL REINFORCING FOR STRAIGHT ENDWALLS (STANDARD RIPRAP APPLICATION)	01-05-24
	HW-505_02	TYPE "D-G" & "L" ENDWALLS	01-05-24
	HW-586_01	CATCH BASIN AND DROP INLET TYPES "C" AND "C-L" STRUCTURES	01-05-24
	HW-586_02	CATCH BASIN (TYPES "C" AND "C-L") FOR DOUBLE GRATE TYPE I STRUCTURES	01-05-24
	HW-586_03	CATCH BASIN (TYPES "C" AND "C-L") FOR DOUBLE GRATE TYPE II STRUCTURES	01-05-24
	HW-586_04	PRECAST CATCH BASIN AND ROUND STRUCTURE	10-17-24
	HW-586_05	PRECAST CATCH BASIN TYPES FOR DOUBLE GRATE TYPE I	10-17-24
	HW-586_06	PRECAST CATCH BASIN TYPES FOR DOUBLE GRATE TYPE II	10-17-24
	HW-586 07a	CATCH BASIN TYPE "C" AND "C-L" TOPS	01-05-24
	HW-586 07b	CATCH BASIN TYPE "C" AND "C-L" DOUBLE GRATE TYPE I TOPS	11-09-22
	HW-586 07c	CATCH BASIN TYPE "C" AND "C-L" DOUBLE GRATE TYPE II TOPS	11-08-22
	HW-586 07d	CATCH BASIN TYPE "C-G" AND "C-M" BARRIER CURB TOPS	11-09-22
	HW-586_08	CATCH BASIN FRAMES AND GRATES	11-09-22
	HW-586_09	CATCH BASIN LOCK DOWN TOPS	11-09-22
	HW-586_10a	MANHOLE FRAME AND COVER	01-05-24
	HW-586_10b	MANHOLE FRAME AND GRATE	01-05-24
	HW-586_10c	REINFORCED PRECAST CONCRETE MANHOLE	11-08-22
	HW-586_10d	MANHOLE NON-PRECAST CONCRETE UNIT	11-08-22
	HW-686_01a	CONCRETE PIPE CONNECTION SHEET 1	11-08-22
	HW-686_01b	CONCRETE PIPE CONNECTION SHEET 2	11-08-22
	HW-686_02a	DRAINANGE PIPE ENDS SHEET 1 [CORRUGATED METAL PIPE]	11-08-22
	HW-686_02b	DRAINAGE PIPE ENDS SHEET 2 [CONCRETE PIPE]	11-08-22
	HW-751_01	UNDERDRAINS AND UNDERDRAIN OUTLETS	10-17-24
	HW-803_01	PAVED APRONS	11-08-22
	HW-811_01	CONCRETE CURBING	11-08-22
	HW-813_01	GRANITE STONE TRANSITION CURBING	11-08-22
	HW-813_02	STONE CURBING	11-08-22
	HW-815_01	BITUMINOUS CONCRETE CURBING	11-08-22

*	SHEET NO.	TITLE	APPROVA DATE**
	HW-821_01a	TRANSITION - 45" F-SHAPE TO 45" VERTICAL SHAPE SHEET 1	11-08-22
	HW-821_01b	TRANSITION - 45" F-SHAPE TO 45" VERTICAL SHAPE SHEET 2	11-08-22
	HW-821_01c	TRANSITION - 45" F-SHAPE TO 45" VERTICAL SHAPE SHEET 3	11-08-22
	HW-821_02a	45" F-SHAPE PRECAST CONCRETE BARRIER CURB SHEET 1	11-08-22
	HW-821_02b	45" F-SHAPE PRECAST CONCRETE BARRIER CURB SHEET 2	11-08-22
	HW-821_03a	transition - 32" Jersey Shape to 45" Vertical Shape Sheet 1	11-08-22
	HW-821_03b	transition - 32" Jersey shape to 45" Vertical shape sheet 2	11-08-22
	HW-821_03c	TRANSITION - 32" JERSEY SHAPE TO 45" VERTICAL SHAPE SHEET 3	11-08-22
	HW-821_03d	TRANSITION - 32" JERSEY SHAPE TO 45" VERTICAL SHAPE SHEET 4	11-08-22
	HW-821_03e	transition - 32" Jersey shape to 45" f-shape	11-08-22
	HW-821_04a	MERRITT PARKWAY NARROW MEDIAN BARRIER	11-08-22
	HW-821_04b	MERRITT PARKWAY - 2' WIDE MEDIAN BARRIER AND ROADSIDE BARRIER	11-08-22
	HW-821_05a	TRANSITION - 45" F-SHAPE TO 54" VERTICAL SHAPE SHEET 1	11-08-22
	HW-821_05b	TRANSITION - 45" F-SHAPE TO 54" VERTICAL SHAPE SHEET 2	11-08-22
	HW-821_06	54" VERTICAL SHAPE BARRIER	11-08-22
	HW-821_07	MISCELLANOUS DETAILS FOR BARRIER TRANSITIONS	11-08-22
	HW-821_08a	F-SHAPE CONC. BARRIER CURB (21"x45") TRANSITION FOR THRIE-BEAM	10-17-24
	HW-821_08b	F-SHAPE CONC. BARRIER CURB (21"x45") TRANSITION FOR THRIE-BEAM - REINF.	11-08-22
	HW-821_09a	SINGLE SLOPE CONC. BARRIER CURB (20"x42") TRANS. FOR THRIE-BEAM	11-08-22
	HW-821_09b	SINGLE SLOPE CONC. BARRIER CURB (20"x42") TRANS. FOR THRIE-BEAM - REINF.	11-08-22
	HW-821_10a	VERTICAL FACE CONC. (21"x54") TRANSITION FOR THRIE-BEAM	11-08-22
	HW-821 10b	VERTICAL FACE CONC. (21"x54") TRANSITION FOR THRIE-BEAM REINF.	11-08-22
	HW-821_11a	42" SINGLE SLOPE PRECAST CONCRETE BARRIER CURB -SHEET 1	01-05-24
	HW-821_11b	42" SINGLE SLOPE PRECAST CONCRETE BARRIER CURB -SHEET 2	01-05-24
	HW-822_01	TEMPORARY PRECAST CONCRETE BARRIER CURB	11-08-22
	HW-822 02a	TEMPORARY TRAFFIC BARRIER - DETAILS	11-08-22
	HW-822 02b	TEMPORARY TRAFFIC BARRIER (BOLTED)	01-23-25
	HW-822 02c	TEMPORARY TRAFFIC BARRIER & TEMPORARY TRAFFIC BARRIER (PINNED)	01-23-25
	HW-905_01	STONE WALL FENCE	11-09-22
	HW-906 01	WIRE FENCE	11-08-22

NOT TO SCALE

OFFICE OF ENGINEERING 2800 BERLIN TURNPIKE NEWINGTON, CT 06111



*ONLY STANDARD SHEETS MARKED WITH AN " 🗸 " ARE IN THIS PROJECT

**REVISED OR ADDED

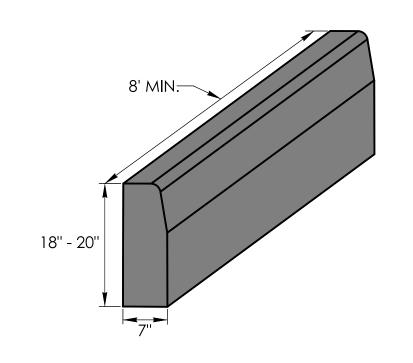
SHEET NO.	TITLE	APPROV DATE**
HW-910_01	W-BEAM METAL BEAM RAIL HARDWARE	11-08-2
HW-910_02	METAL BEAM RAIL (TYPE R-B 350) GUIDERAIL	11-08-2
HW-910_03	METAL BEAM RAIL (TYPE MD-B 350) GUIDERAIL	11-08-2
HW-910_04	METAL BEAM RAIL (TYPE R-B 350) SYSTEMS 5, 5A, & 6	11-08-2
HW-910_05	METAL BEAM RAIL R-B 350 SPAN TYPE I, II, III SECTIONS	11-08-2
HW-910_06	R-B 350 BRIDGE ATTACHMENT SAFETY SHAPE PARAPET	11-08-2
HW-910_07	R-B 350 BRIDGE ATTACHMENT VERTICAL SHAPE PARAPET	11-08-22
HW-910 09a	MISCELLANEOUS GUIDERAIL TRANSITIONS SHEET 1	11-08-2
HW-910 09b	MISCELLANEOUS GUIDERAIL TRANSITIONS SHEET 2	11-08-2
HW-910 10	METAL BEAM RAIL 8" x 6" BOX BEAM	11-08-22
HW-910 11	CURVED GUIDERAIL TREATMENT DETAIL	11-08-2
HW-910_12a	MERRITT PARKWAY GUIDERAIL LEADING END ATTACHMENTS AND SYSTEMS 2&3	11-08-2
HW-910_12b	MERRITT PARKWAY GUIDERAIL HARDWARE DETAILS	11-08-2
HW-910_12c	MERRITT PARKWAY GUIDERAIL TRAILING END ATTACHMENTS	11-02-2
HW-910_12d	MERRITT PARKWAY MEDIAN GUIDERAIL AND END ANCHOR	10-17-2
HW-910_13a	THRIE-BEAM METAL BEAM RAIL HARDWARE	11-08-22
HW-910_13b	THRIE-BEAM TRANSITIONS	11-08-2
HW-910_14a	THRIE-BEAM 350 BRIDGE ATTACHMENT	11-08-22
HW-910_14b	THRIE-BEAM 350 GUIDERAIL TRANSITION TO R-B 350 GUIDERAIL	11-08-2
HW-910_15	MD-B 350 MEDIAN BARRIER SAFETY SHAPE ATTACHMENT TYPE I	11-08-2
HW-910_16	MD-B 350 MEDIAN BARRIER SAFETY SHAPE ATTACHMENT TYPE II	11-08-2
HW-910_17	R-B TERMINAL SECTION	11-08-2
HW-910_18	METAL BEAM RAIL (TYPE MD-I) GUIDERAIL	11-08-2
HW-910_19a	METAL BEAM RAIL (MODIFIED TYPE R-I) AND END ANCHORAGE TYPE I	10-17-2
HW-910_19b	METAL BEAM RAIL (MODIFIED TYPE R-I) AND END ANCHORAGE TYPE II	10-17-2
HW-910_19c	METAL BEAM RAIL (MODIFIED TYPE R-I) SYSTEMS 2 AND 3	11-08-2
HW-910_20	MASH W-BEAM HARDWARE	10-17-2
HW-910_21	METAL BEAM RAIL (R-B MASH) GUIDERAIL	01-05-2
HW-910_22	METAL BEAM RAIL (MD-B MASH) GUIDERAIL	11-08-22
HW-910_23	METAL BEAM RAIL (R-B MASH) HALF & QUARTER POST SPACING GUIDERAIL	11-08-22
HW-910_24	METAL BEAM RAIL SPAN SECTION TYPES II AND III	11-08-2

SHEET NO.	TITLE	APPROVAL DATE**
HW-910_25a	metal beam rail transition 350 to mash	10-17-24
HW-910_25b	METAL BEAM RAIL MEDIAN APPLICATION TRANSITION 350 TO MASH GUIDERAIL	01-05-24
HW-910_26	THRIE-BEAM ATTACHMENT HARDWARE	11-08-22
HW-910_27	THRIE-BEAM ATTACHMENT	11-08-22
HW-910_29	THRIE-BEAM BRIDGE ATTACHMENT TRAILING END	02-02-24
HW-911_01	R-B END ANCHORAGE TYPE I AND II	10-17-24
HW-911_02	MD-B END ANCHORAGE TYPE I	10-17-24
HW-911_03	ANCHOR IN EARTH CUT SLOPE & ANCHOR IN ROCK CUT SLOPE	01-05-24
HW-911_05	MERRITT PARKWAY GUIDERAIL END ANCHORS	11-08-22
HW-913_01a	CHAIN LINK FENCE	11-08-22
HW-913_01b	CHAIN LINK FENCE HARDWARE	11-08-22
HW-913_02	CHAIN LINK FENCE GATES	11-08-22
HW-918_01a	THREE CABLE GUIDERAIL (I-BEAM POSTS) SHEET 1	11-08-22
HW-918_01b	THREE CABLE GUIDERAIL (I-BEAM POSTS) SHEET 2	11-08-22
HW-918_01c	THREE CABLE GUIDERAIL (I-BEAM POSTS) SHEET 3	11-08-22
HW-921_01	CONCRETE SIDEWALKS	11-08-22
HW-922_01	BITUMINOUS CONCRETE SIDEWALK AND BITUMINOUS CONCRETE DRIVEWAY	11-08-22
HW-924_01	CONCRETE DRIVEWAY RAMPS	10-17-24
HW-930_01	OBJECT MARKER (MAINTENANCE)	10-17-24
HW-949_01a	LANDSCAPE PLANTING	11-09-22
HW-949_01b	TREE STAKING	11-02-22
HW-1800_01	GRADING PLAN FOR IMPACT ATTENUATION SYSTEMS (FLARED AND TANGENTIAL)	10-17-2
HW-1800 02	GRADING PLAN FOR IMPACT ATTENUATION SYSTEMS (MEDIAN/GORE)	10-17-24

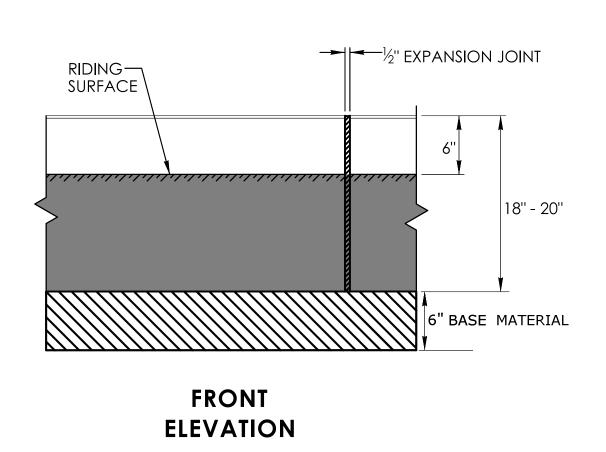
NOT TO SCALE

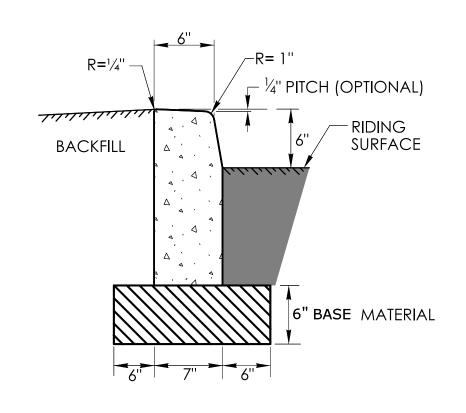
OFFICE OF ENGINEERING 2800 BERLIN TURNPIKE NEWINGTON, CT 06111



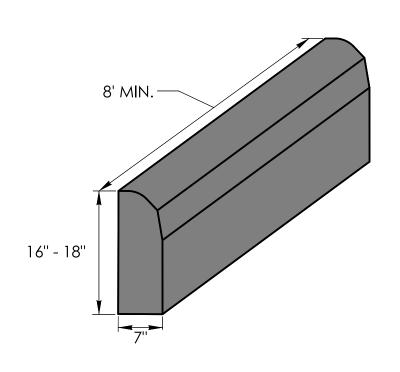


CONCRETE CURBING (6" REVEAL)

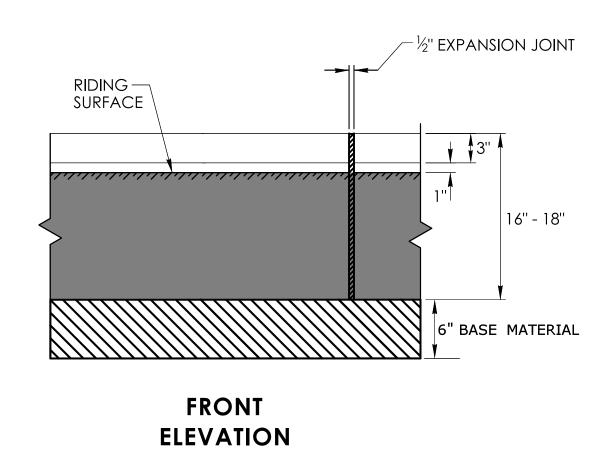


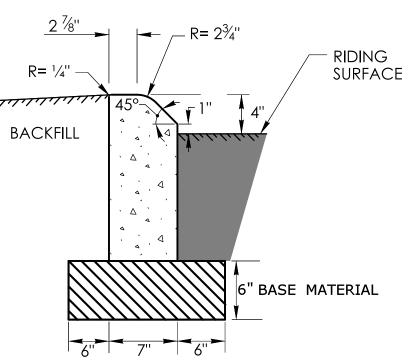


SECTION



CONCRETE PARK CURBING (4" REVEAL)





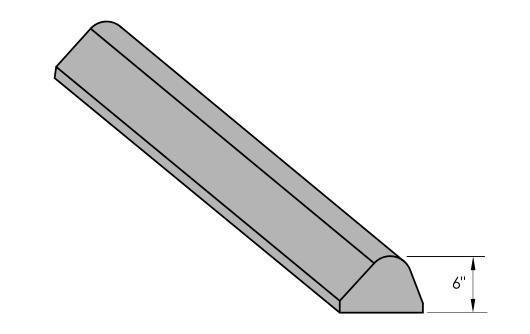
SECTION

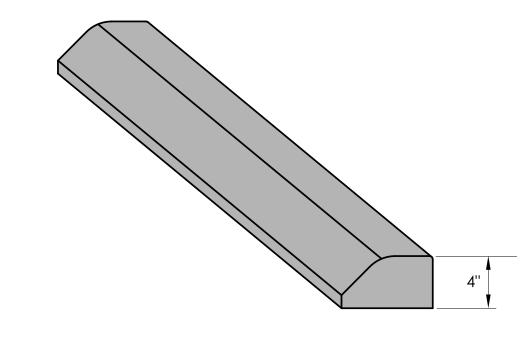
GENERAL NOTE:

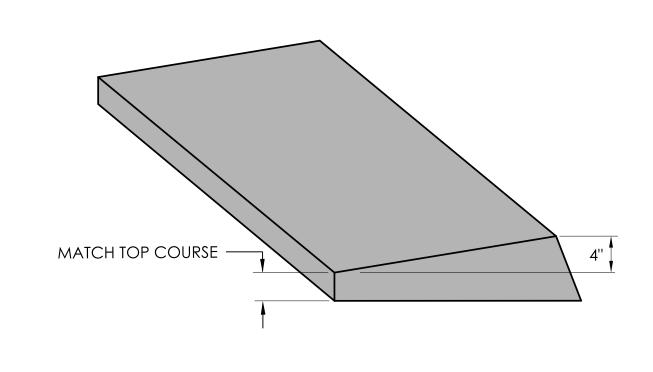
 PRECAST CONCRETE CURBING MAY BE CAST BY THE MANUFACTURER WITH OPTIONAL LIFTING AND DOWEL BAR HOLES.

SURFACE

SURFACE



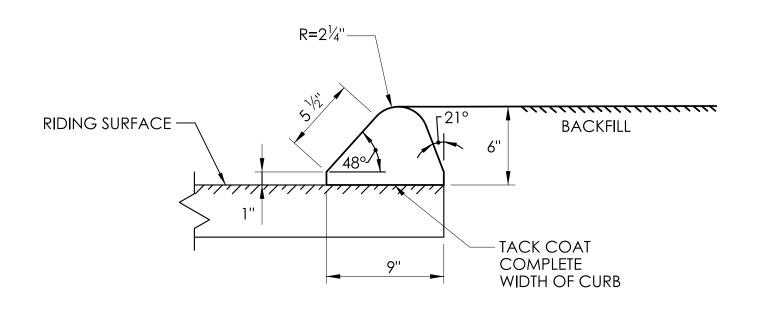


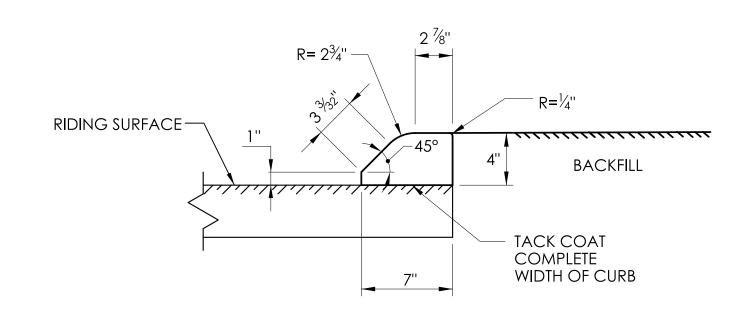


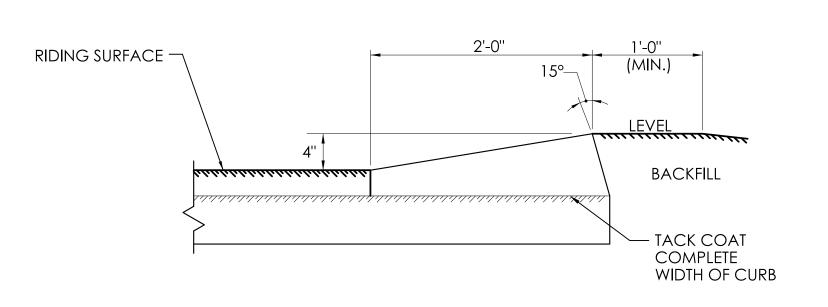
BITUMINOUS CONCRETE LIP CURBING (6" HIGH)

BITUMINOUS CONCRETE PARK CURBING (4" HIGH)

BITUMINOUS CONCRETE BERM CURBING (4" HIGH)







SECTION

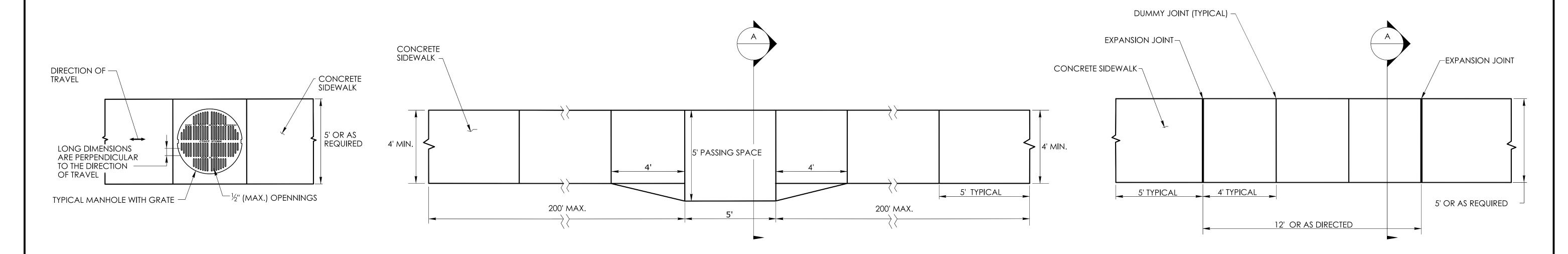
SECTION

NOTTO SCALE

| SIGNATURE BLOCK: OFFICE OF ENGINEERING 2800 BERLIN TURNPIKE NEWINGTON, CT 061111 | STANDARD SHEET NO.:
| OFFICE OF ENGINEERING 2800 BERLIN TURNPIKE NEWINGTON, CT 061111 | STANDARD SHEET NO.:
| OFFICE OF ENGINEERING 2800 BERLIN TURNPIKE NEWINGTON, CT 061111 | STANDARD SHEET NO.:
| OFFICE OF ENGINEERING 2800 BERLIN TURNPIKE NEWINGTON, CT 061111 | STANDARD SHEET NO.:
| OFFICE OF ENGINEERING 2800 BERLIN TURNPIKE NEWINGTON, CT 061111 | STANDARD SHEET NO.:
| OFFICE OF ENGINEERING 2800 BERLIN TURNPIKE NEWINGTON, CT 061111 | STANDARD SHEET NO.:
| OFFICE OF ENGINEERING 2800 BERLIN TURNPIKE NEWINGTON, CT 061111 | STANDARD SHEET NO.:
| OFFICE OF ENGINEERING 2800 BERLIN TURNPIKE NEW NO.:
| OFFICE OF ENGINEERING 2800 BERLIN TURNPIKE NEW NO.:
| OFFICE OF ENGINEERING 2800 BERLIN TURNPIKE NEW NO.:
| OFFICE OF ENGINEERING 2800 BERLIN TURNPIKE NEW NO.:
| OFFICE OF ENGINEERING 2800 BERLIN TURNPIKE NEW NO.:
| OFFICE OF ENGINEERING 2800 BERLIN TURNPIKE NEW NO.:
| OFFICE OF ENGINEERING 2800 BERLIN TURNPIKE NEW NO.:
| OFFICE OF ENGINEERING 2800 BERLIN TURNPIKE NEW NO.:
| OFFICE OF ENGINEERING 2800 BERLIN TURNPIKE NEW NO.:
| OFFICE OF ENGINEERING 2800 BERLIN TURNPIKE NEW NO.:
| OFFICE OF ENGINEERING 2800 BERLIN TURNPIKE NEW NO.:
| OFFICE OF ENGINEERING 2800 BERLIN TURNPIKE NEW NO.:
| OFFICE OF ENGINEERING 2800 BERLIN TURNPIKE NEW NO.:
| OFFICE OF ENGINEERING 2800 BERLIN TURNPIKE NEW NO.:
| OFFICE OF ENGINEERING 2800 BERLIN TURNPIKE NEW NO.:
| OFFICE OF ENGINEERING 2800 BERLIN TURNPIKE NEW NO.:
| OFFICE OF ENGINEERING 2800 BERLIN TURNPIKE NEW NO.:
| OFFICE OF ENGINEERING 2800 BERLIN TURNPIKE NEW NO.:
| OFFICE OF ENGINEERING 2800 BERLIN TURNPIKE NEW NO.:
| OFFICE OF ENGINEERING 2800 BERLIN TURNPIKE NEW NO.:
| OFFICE OF ENGINEERING 2800 BERLIN TURNPIKE NEW NO.:
| OFFICE OF ENGINEERING 2800 BERLIN TURNPIKE NEW NO.:
| OFFICE OF ENGINEERING 2800 BERLIN TURNPIKE NEW NO.:
| OFFICE OF ENGINEERING 2800 BERLIN TURNPIKE NEW NO.:
| OFFICE OF ENGINEERING 2800 BERLIN TURNPIKE NEW NO.:
| OFFICE OF ENGINEERING 2800 BERLIN TURNPIKE NEW N

GENERAL NOTES:

- 1. SEE CONCRETE SIDEWALK RAMPS GUIDE SHEETS FOR PEDESTRIAN RAMP TYPES.
- 2. ALL CURBING SHALL BE INSTALLED AS EITHER PRECAST OR CAST IN PLACE AS DIRECTED.



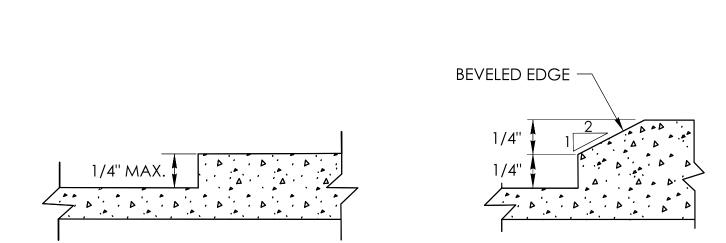
PEDESTRIAN ACCESS ROUTE OVER A MANHOLE WITH GRATE

- 1. HORIZONTAL OPENINGS IN GRATES AND JOINTS MUST NOT BE MORE THAN ½ INCH
- 2. ELONGATED OPENINGS IN GRATES MUST BE PLACED SO THAT THE LONG DIMENSION IS PERPENDICULAR TO THE DIRECTION OF TRAVEL

5' PASSING SPACE FOR 4' WIDE SIDEWALK PLAN

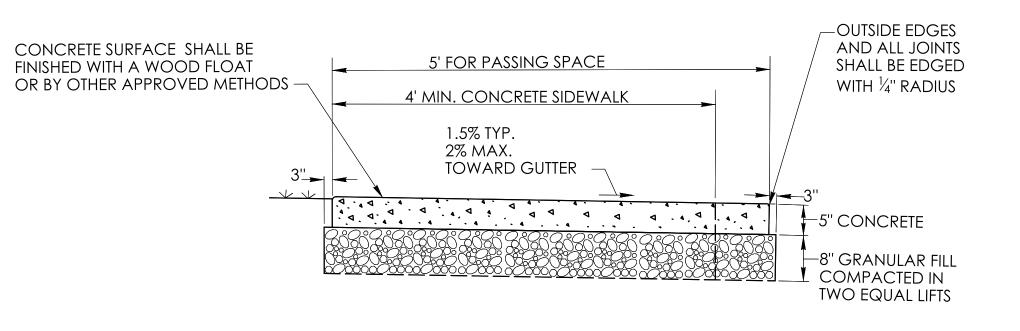
PASSING SPACES SHALL BE PROVIDED AT INTERVALS OF 200' MAXIMUM FOR SIDEWALKS LESS THAN 5' IN WIDTH

5' WIDE SIDEWALK PLAN



VERTICAL SURFACE DISCONTINUITIES

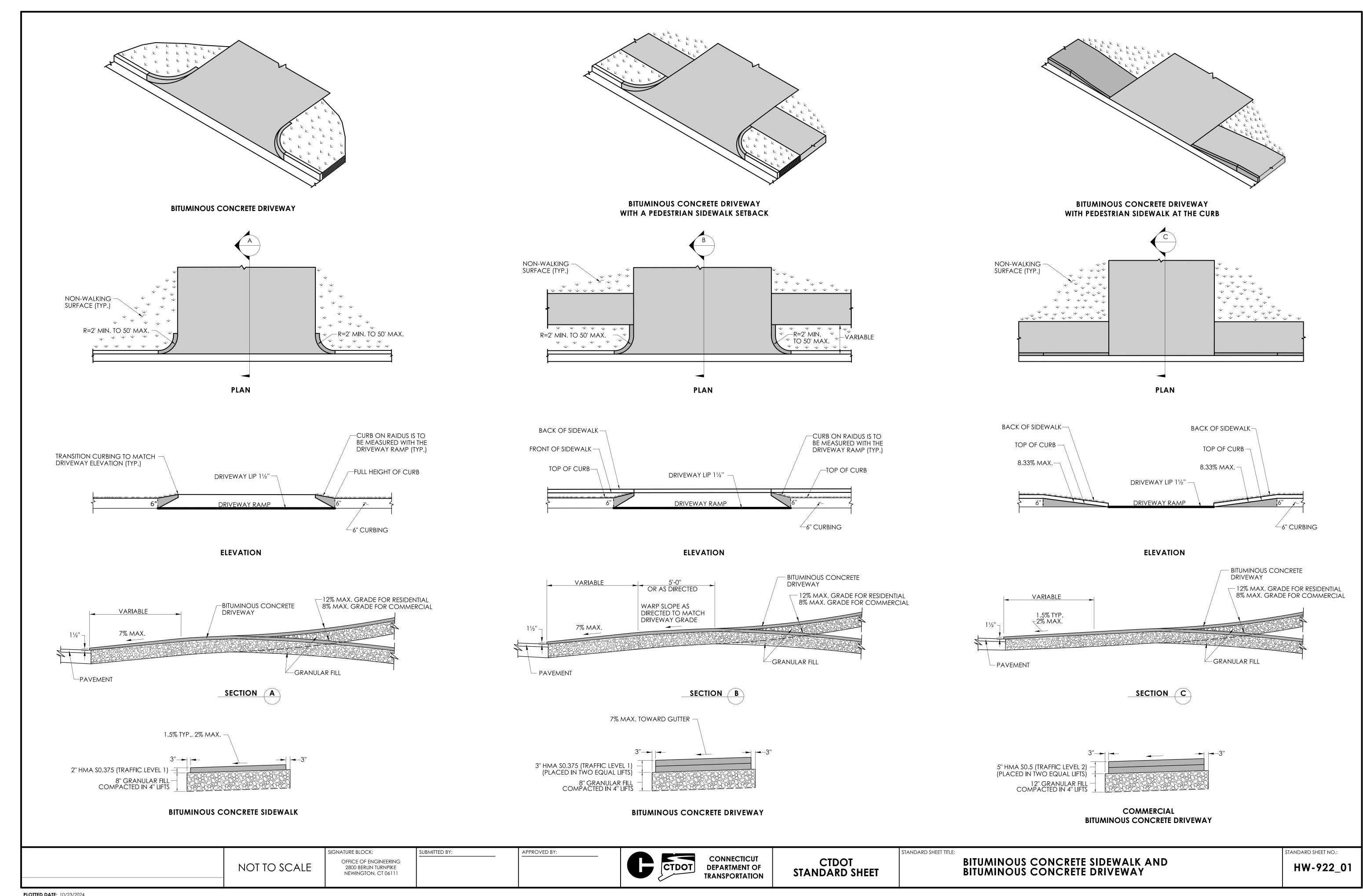
VERTICAL SURFACE DISCONTINUITIES MUST BE BEVELED TO A HEIGHT NOT GREATER THAN 1/4 INCH. THE BEVEL MUST BE THE ENTIRE WIDTH OF THE DISCONTINUITY



5' PASSING SPACE FOR 4' WIDE SIDEWALK

SECTION A

	SIGNATURE BLOCK:	SUBMITTED BY:	APPROVED BY:		STANDARD SHEET TITLE:	STANDARD SHEET NO.:
NOT TO SCALI	OFFICE OF ENGINEERING 2800 BERLIN TURNPIKE NEWINGTON, CT 06111			CONNECTICUT DEPARTMENT OF TRANSPORTATION CTD STANDAR	ONCRETE SIDEWALKS	HW-921_01



STANDARI	SHEETS MARKED WITH AN "V" ARE IN THIS PROJECT #	**REVISE OR ADDE
SHEET NO.	TITLE	APPROVA DATE**
TR-1000_01	GENERAL CLAUSES (TEST PROCEDURES)	1/2014
TR-1001_01	TRENCHING & BACKFILLING, ELECTRICAL CONDUIT	2/2024
TR-1002_01	TRAFFIC CONTROL FOUNDATIONS	2/2024
TR-1010_01	CONCRETE HANDHOLE	2/2024
ΓR-1102_01	PEDESTALS, PEDESTRIAN SIGNALS	4/2012
TR-1105_01	TRAFFIC SIGNALS AND CABLE ASSIGNMENTS	8/2018
ΓR-1107_01	PEDESTRIAN PUSH BUTTON	8/2018
ΓR-1108 ₋ 01	CONTROLLERS	5/2013
ΓR-1111 ₋ 01	LOOP VEHICLE DETECTOR AND SAWCUT	4/2014
ΓR-1113_01	CONTROL CABLE	4/2014
ΓR-1114 ₋ 01	BONDING & UTILITY POLE ATTACHMENT DETAILS, SIGN HANGER, "Y" CLAMP DETAILS	8/2018

	TITLE	DATE**
TR-1205_01	DELINEATION, DELINEATOR AND OBJECT MARKER DETAILS	8/2018
TR-1208_01	SIGN PLACEMENT AND RETROREFLECTIVE STRIP DETAILS	8/2018
TR-1208_02	METAL SIGN POSTS AND SIGN MOUNTING DETAILS	6/2017
TR-1210_04	PAVEMENT MARKINGS LINES AND SYMBOLS	8/2018
TR-1210_05	PAVEMENT MARKINGS FOR DIVIDED HIGHWAYS	4/2017
TR-1210_06	PAVEMENT MARKINGS FOR DIVIDED HIGHWAYS	8/2018
TR-1210_07	PAVEMENT MARKINGS FOR EXIT RAMPS	4/2017
TR-1210_08	PAVEMENT MARKINGS FOR NON FREEWAYS	8/2018
TR-1210_09	PAVEMENT MARKINGS FOR BICYCLE LANES, PARKING STALLS, AND RR CROSSINGS	4/2017
TR-1220_01	SIGNS FOR CONSTRUCTION AND PERMIT OPERATIONS	8/2018
TR-1220_02	CONSTRUCTION SIGN SUPPORTS AND CHANNELIZING DEVICES	8/2018

STANDARD SHEETS SHALL BE USED WITH STANDARD SPECIFICATIONS

NOT TO SCALE

SIGNATURE BLOCK:

OFFICE OF ENGINEERING
2800 BERLIN TURNPIKE
NEWINGTON, CT 06111

SUBMITTED BY:

APPOVED BY:



DOCUMENT ALL LOOP DETECTOR VALUES BOTH CALCULATED AND MEASURED.

DEFINITIONS:

LOOP: #14 AWG WIRE IN SAWCUT, TERMINATED IN HANDHOLE, IMSA SPEC 51-7. LEAD-IN: 14/2 SHIELDED TWISTED PAIR CABLE FROM HANDHOLE TO CONTROLLER, IMSA SPEC 50-2. LOOP CIRCUIT: LOOP SAWCUT WIRE SPLICED TO 14/2 LEAD-IN CABLE. AMPLIFIER: ELECTRONIC DEVICE CONNECTED TO LOOP CIRCUIT. SENSES CHANGE IN RESONANT FREQUENCY AND CREATES AN OUTPUT TO THE CONTROLLER.

MEGOHMETER: INSTRUMENT SPECIFICALLY DESIGNED TO TEST THE INSULATION RESISTANCE OF A CIRCUIT. COMMON MANUFACTURERS: AMEC®, AMPROBE®, FLUKE®, MEGGER®.

1: RESISTANCE:

1a: INSULATION RESISTANCE: PERFORM A 600 VOLT (MINIMUM) MEGOHMETER TEST ON LOOP CIRCUIT. THE LOOP AMPLIFIER MUST BE DISCONNECTED FROM THE LOOP CIRCUIT OR THE LOOP AMPLIFIER WILL BE DAMAGED. THE RESISTANCE OF THE LOOP WIRE TO GROUND MUST BE GREATER THAN 100 MEG OHMS.

1b: WIRE RESISTANCE: MEASURE THE DC RESISTANCE OF THE LOOP CIRCUIT. THE LOOP CIRCUIT MUST BE DISCONNECTED FROM THE AMPLIFIER. USING AN OHMMETER CONNECTED ACROSS THE LOOP CIRCUIT, MEASURE THE DC RESISTANCE OF THE CONDUCTORS. THE RESISTANCE SHOULD BE LESS THAN 4 OHMS.

NOTE: ALL TESTS SHALL BE DONE AT THE CONTROLLER ASSEMBLY (CA), HOWEVER IT IS RECOMMENDED TO PERFORM A PRELIMINARY MEGOHMETER TEST AT THE HANDHOLE PRIOR TO SEALING THE SAWCUT AND SPLICING TO THE LEAD-IN. IF A DEFECTIVE LOOP WIRE IS FOUND, IT MAY BE EASILY REPLACED.

2: LOOP CIRCUIT INDUCTANCE:

2a: CALCULATE INDUCTANCE OF LOOP (L_{100P}) AND LEAD-IN CABLE ($L_{14/2}$).

	· LOOI?	` = 1, =
OOP INDUCTANCE (ENGLISH)	LOOP INDUCTANCE (METRIC)
$L_{LOOP} = (P/4) (N^2 + N)$	$L_{LOOP} = (3.28P/4)$	$(N^2 + N)$
LEAD-IN INDUCTANCE	LEAD-IN INDUCT	ANCE
$L_{14/2} = (0.24 \mu\text{h/FT}) (D)$	$L_{14/2} = (0.78 \mu h)$	/m) (D)

WHERE:

 L_{LOOP} = INDUCTANCE OF INDIVIDUAL LOOP SEGMENTS IN MICROHENRIES (μh). $L_{14/2}$ = INDUCTANCE OF LEAD-IN CABLE.

P = PERIMETER OF INDIVIDUAL LOOP SEGMENT, IN FEET OR METERS. N = NUMBER OF TURNS.

D = LENGTH OF LEAD-IN CABLE FROM SPLICE IN HANDHOLE TO CONTROLLER, IN FEET OR METERS.

(TOTAL INDUCTANCE OF SEGMENTED LOOP SPLICED IN PARALLEL.

 $L_T = L_1 + L_2 + L_3$ etc., (TOTAL INDUCTANCE OF SEGMENTED LOOP SPLICED IN SERIES.) $L_T = 1 / [(1 / L_1) + (1 / L_2) + (1 / L_3) + etc.],$

WHERE:

 L_T = TOTAL INDUCTANCE OF THE SEGMENTED ARRANGEMENT. L_1 , L_2 , L_3 = INDUCTANCE OF INDIVIDUAL LOOP SEGMENTS.

EXAMPLE: (IN ENGLISH)

3: POWER INTERRUPTION:

6'x 6', 4 TURNS, APPROXIMATELY 300' FROM THE CONTROLLER

$P = (24/4) (4^2 + 4)$ $L_{14/2} = (0.24 \mu h/FT) (300)$ $L_{14/2} = (0.24) (300)$ $L_{14/2} = 72 \mu h$
$_{P} = 120 \mu h$ $L_{14/2} = 72$

AFTER THE AMPLIFIER HAS TUNED AND IS OPERATING, DISCONNECT POWER BY REMOVING

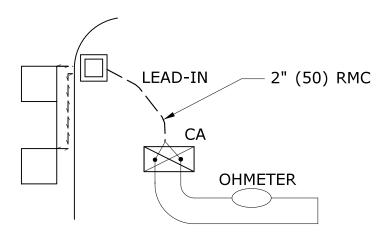
FUSE OR HARNESS CONNECTOR. RETURN POWER TO THE AMPLIFIER AND CONFIRM IT

2b: MEASURE INDUCTANCE OF LOOP AND LEAD-IN AT CONTROLLER. USE INSTRUMENT DESIGNED TO MEASURE LOOP CIRCUIT INDUCTANCE.

RE-TUNES AUTOMATICALLY WITHOUT ANY MANUAL ADJUSTMENTS.

- 2" (50) RMC **MEGOHMETER**

TEST 1a



TEST 1b

TOWN: LOCATION: AMPLIFIER **INDUCTANCE** RESISTANCE POWER LOOP MICROHENRIES (μh) OHMS **INTERRUPTION** NUMBER TO GROUND LOOP WIRE CALCULATED MEASURED PASS/FAIL (1b) (2a) (2b) D1 FRONT D1 REAR D2A D4A FRONT D4B REAR

LOOP CIRCUIT TEST DATA (EXAMPLE)

INDUCTIVE LOOP TEST PROCEDURE

D6A D6B

PROJECT:

IN	COLOR	FUNCTION
		440 3/40 31 4 4
4	WHITE	110 VAC Neutral
3	BROWN	Output Relay Common (moving contact)
2	BLACK	110 VAC (Fused)
)	RED	Loop
.	ORANGE	Loop
•	YELLOW	Output Relay Contact (Closes with moving contact when detecting vehicle)
3	BLUE	Output Relay Contact (Opens with moving contact when detecting vehicle)
1	GREEN	Chassis Ground
	GREY	110 VAC Delay/Extend Override
Shell		Ground (shall be connected to pin H in the connector)

EGEND AS SHOWN ON TRAFFIC CONTROL SIGNAL PLAN: INDUCTIVE LOOP DETECTOR → SAW CUT ___ RIGID METAL CONDUIT

| 1-2014 | REVISED GROUND RESISTANCE NOTES.

REVISION DESCRIPTION

4-2012 MINOR REVISIONS.

REV. DATE

DETECTOR AMPLIFIER PIN DESIGNATION

HE INFORMATION, INCLUDING ESTIMATED

QUANTITIES OF WORK, SHOWN ON THESE

INVESTIGATIONS BY THE STATE AND IS

IN NO WAY WARRANTED TO INDICATE

THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.

SHEETS IS BASED ON LIMITED

Plotted Date: 1/7/2014

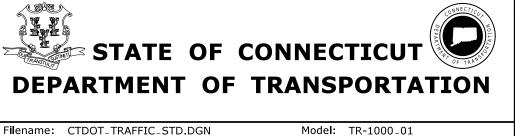
& METRIC UNITS (mm).

OVER 1" TO NEAREST 5 mm

UNDER 1" TO NEAREST 1 mm.

IMENSIONS ARE IN ENGLISH ('.") METRIC DIMENSIONS ARE ROUNDED:

NOT TO SCALE



NAME/DATE/TIME: CTDOT STANDARD SHEET NAME/DATE/TIME: OFFICE OF ENGINEERING

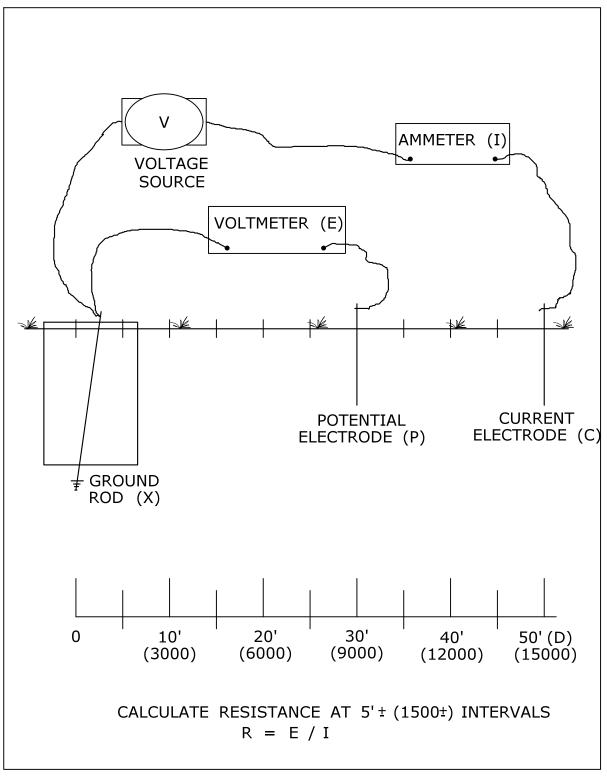
GENERAL CLAUSES (TEST PROCEDURES) TR-1000_01

TEST PROCEDURE:

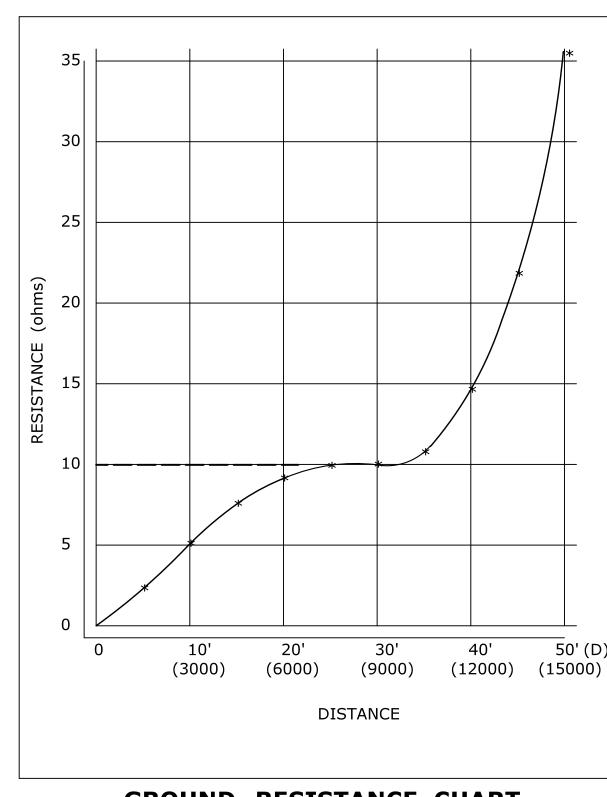
- INSERT ELECTRODE (C) A DISTANCE (D) FROM THE FOUNDATION. RECOMMEND A MINIMUM 50'.
- CONNECT A VOLTAGE SOURCE AND AMMETER BETWEEN THE FOUNDATION GROUND ROD (X) AND C. - MEASURE THE CURRENT FLOW (I) BETWEEN X AND C.
- INSERT POTENTIAL ELECTRODE (P) AT 5' (1500) INTERVALS IN A STRAIGHT LINE TO ELECTRODE C.
- MEASURE VOLTAGE (E) AT EACH LOCATION OF P.
- CALCULATE RESISTANCE (R) AT EACH LOCATION OF P USING THE FORMULA R=E/I.
- PLOT THE VALUES ON A RXD GROUND RESISTANCE CHART. - THE ACTUAL GROUND RESISTANCE IS WHERE THE PLOTTED CURVE IS RELATIVELY FLAT, USUALLY AT 62%± OF D.
- SEE EXAMPLE CHART: CURVE FLATTENS OUT AT 10 OHMS, APPROXIMATELY 30' (9000) FROM FOUNDATION. - IF GROUND RESISTANCE IS GREATER THAN 10 OHMS, PERFORM CORRECTIVE ACTION AND RE-TEST.

SUGGESTED CORRECTIVE ACTION:

- A. INSTALL ADDITIONAL 10' (3000) GROUND ROD(S).
 - REFER TO NESC SECTION 09, RULE 94.B.2. DRIVE ADDITIONAL GROUND RODS NO CLOSER TO FOUNDATION THAN 6'(1800). IF MORE THAN ONE IS NEEDED, SPACE MINIMUM 6'(1800) APART.
 - BONDS TO ADDITIONAL GROUND ROD(S) SHALL BE MADE BY A CLAMP DESIGN FOR DIRECT BURIAL OR BY EXOTHERMIC WELDING TECHNIQUE.
 - TOP OF ADDITIONAL GROUND ROD(S) SHALL BE 6" (150) BELOW GRADE.
- B. IN AREAS OF SHALLOW BEDROCK, INSTALL A GROUND GRID OR ARRAY CONSISTING OF BURIED WIRE, RODS, STRIPS
 - OR PLATES. REFER TO NESC SECTION 09, RULE 94.B.3.
 - REFER TO NEC SECTION 250.
 - MINIMUM DEPTH OF 18" (450)
 - GRID CONNECTIONS AND BONDS ON GROUND GRID SHALL BE MADE BY CLAMPS DESIGNED FOR DIRECT BURIAL OR BY EXOTHERMIC WELDING TECHNIQUE.



3 POINT GROUND RESISTANCE TEST CIRCUIT



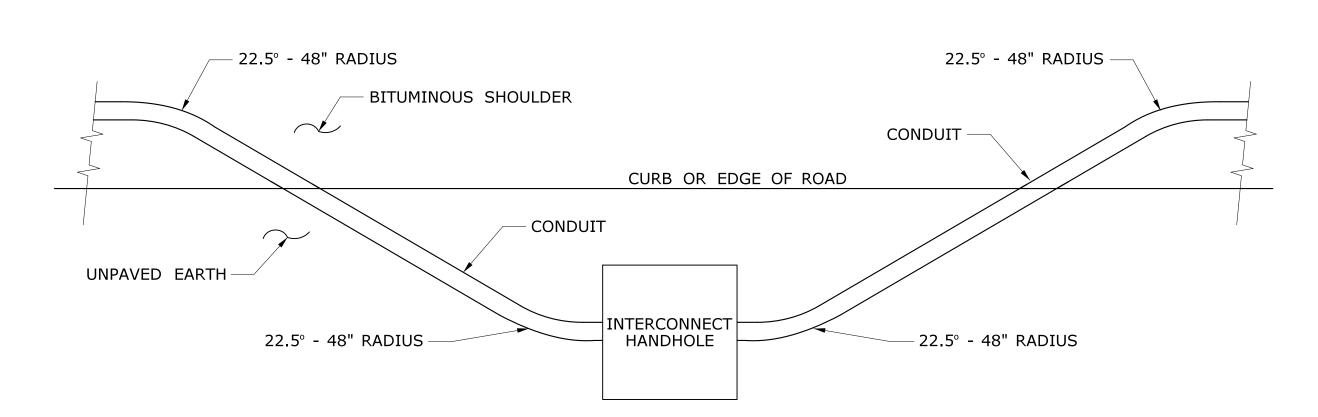
GROUND RESISTANCE CHART (EXAMPLE)

NOTES:

APPROVED BY:

- 1. WHEN REQUESTED BY THE ENGINEER, MEASURE RESISTANCE-TO-GROUND OF GROUND ROD AT TRAFFIC CONTROL FOUNDATIONS. SEE FALL-OF-POTENTIAL METHOD. IF LESS THAN 10 ohms, INSTALL SUPPLEMENTAL ELECTRODES AS REQUIRED. NEC ARTICLE 250
- 2. DURING THE TEST, THE GROUND ROD SHOULD NOT BE BONDED TO ANY RMC IN THE FOUNDATION.
- 3. THE VOLTAGE SOURCE, VOLTMETER, AMMETER, ELECTRODES P AND C, AND CONNECTING CABLES ARE AVAILABLE AS A SPECIALIZED TEST INSTRUMENT.
- 4. REFER TO NATIONAL ELECTRICAL SAFETY CODE (NESC) SECTION 09, GROUNDING METHODS FOR ELECTRIC SUPPLY AND COMMUNCATIONS FACILITIES.
- 5. REFER TO NATIONAL ELECTRICAL CODE (NEC) CHAPTER 2, ARTICLE 250, GROUNDING.

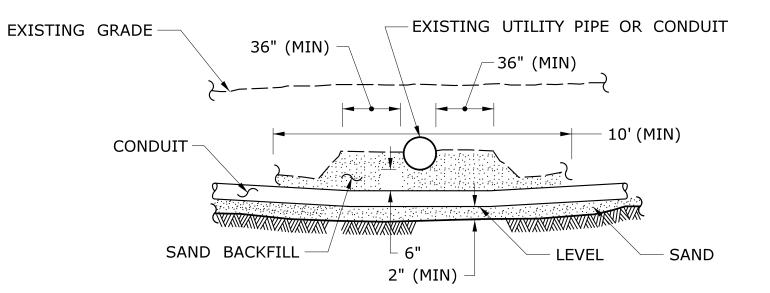
3 POINT FALL-OF-POTENTIAL GROUND RESISTANCE TEST



INTERCONNECT TYPICAL CURB CROSSING

NOTES:

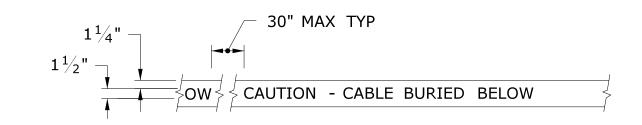
1. RESTORE AREAS DISTURBED BY TRENCH TO ORIGINAL CONDITION.



CROSSING UNDER EXISTING UTILITY

NOTES:

- 1. WHEN ENCOUNTERED AT APPROXIMATELY THE SAME DEPTH, CROSS BENEATH.
- 2. PROTECT & SUPPORT EXPOSED EXISTING UTILITY.

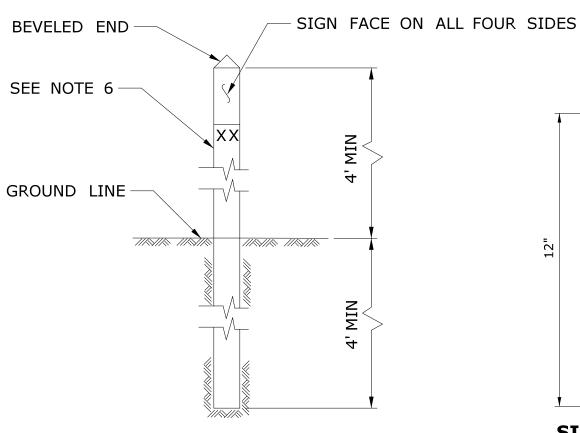


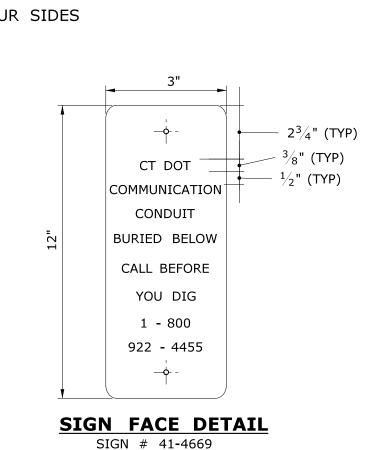
DETECTABLE WARNING TAPE

NOTE:

STANDARD SPECIFICATIONS, ARTICLE: 1.05.15

1. TAPE COLORS: COMMUNICATION - ORANGE BACKGROUND / BLACK LEGEND POWER - RED BACKGROUND / BLACK LEGEND

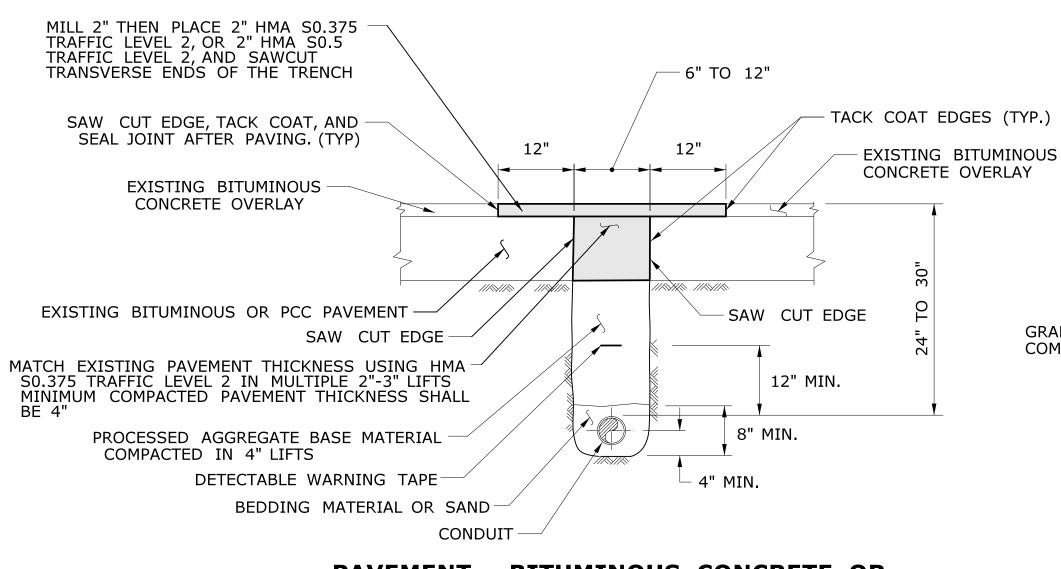




INTERCONNECT CONDUIT IDENTIFICATION POST

NOTES:

- 1. 4" x 4" NOMINAL, PRESSURE TREATED WOOD POST.
- 2. ATTACH SIGN TO POST WITH $\frac{1}{4}$ " x $1\frac{1}{4}$ " STAINLESS STEEL LAG SCREW WITH NYLON WASHER ON FACE OF SIGN.
- 3. SIGN COLORS: BACKGROUND ORANGE (RETROREFLECTIVE) LEGEND - BLACK (OPAQUE).
- 4. INSTALL POST APPROX 24" FROM RMC IN VICINITY OF EACH INTERCONNECT HANDHOLE.
- 5. INSTALL ADDITIONAL POST(S) WHERE SPACING BETWEEN INTERCONNECT HANDHOLES IS GREATER THAN 1500' APART.
- 6. PERMANENTLY ATTACH STAINLESS STEEL NUMBERS INDICATING DISTANCE IN FEET TO TRENCH CONTAINING COMMUNICATION CABLE. ATTACH NUMBERS TO SIDE OF POST FACING CONDUIT.
- 7. IDENTIFICATION POSTS WITH SIGNS SHALL BE PAID UNDER THE COMMUNICATION CABLE ITEM.

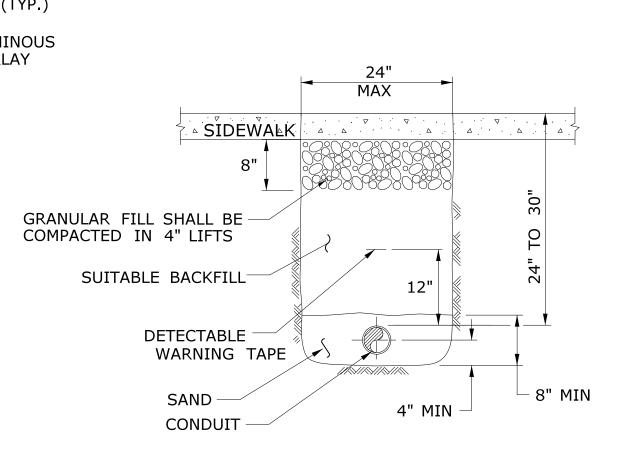


PAVEMENT - BITUMINOUS CONCRETE OR OVERLAYED PORTLAND CEMENT CONCRETE

NOTES:

STANDARD SPECIFICATION, SECTION 3.04 AND STANDARD SPECIFICATION, ARTICLE 4.06.03

- 1. TOTAL HOT MIX ASPHALT (HMA) THICKNESS TO MATCH EXISTING BITUMINOUS CONCRETE AND PORTLAND CEMENT CONCRETE (PCC) THICKNESS.
- 2. WHEN ALLOWED BY ENGINEER, USE CONTROLLED LOW STRENGTH MATERIAL (CLSM) AS BEDDING MATERIAL. TOP OF CLSM SHALL BE AT LEAST 20" BELOW SURFACE.

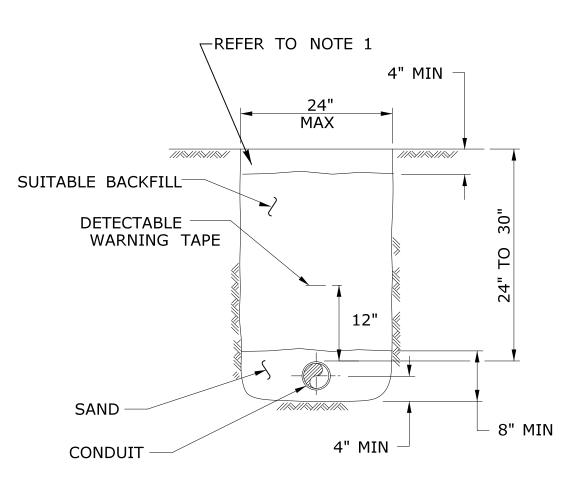


SIDEWALK

NOTES:

STANDARD SPECIFICATIONS, SECTIONS 9.21 & 9.22

1. WHERE CONCRETE SIDEWALK IS DAMAGED OR CUT, REPLACE THE ENTIRE SECTION BETWEEN JOINTS. REPLACEMENT SIDEWALK IS PAID FOR UNDER THE ITEM "CONCRETE SIDEWALK".



GENERAL NOTES:

- 1. TOP OF CONDUIT AT LEAST 24" DEEP.
- 2. COMPACT BACKFILL IN ≤6" LIFTS. HAND COMPACTION NOT PERMITTED.

EARTH

NOTES:

STANDARD SPECIFICATIONS, SECTION 9.50 OR SEEDING TYPE CALLED OUT ON THE PLANS.

1. IN MOWED AREAS: PLACE TOPSOIL, FERTILIZER, SEED, & MULCH.

LEGEND AS SHOWN ON TRAFFIC CONTROL SIGNAL PLAN: --- PROPOSED RMC (RIGID METAL CONDUIT) -•-- EXISTING RMC (RIGID METAL CONDUIT)

NOT TO SCALE

SIGNATURE BLOCK: OFFICE OF ENGINEERING 2800 BERLIN TURNPIKE NEWINGTON, CT 06111

SUBMITTED BY:

APPOVED BY:

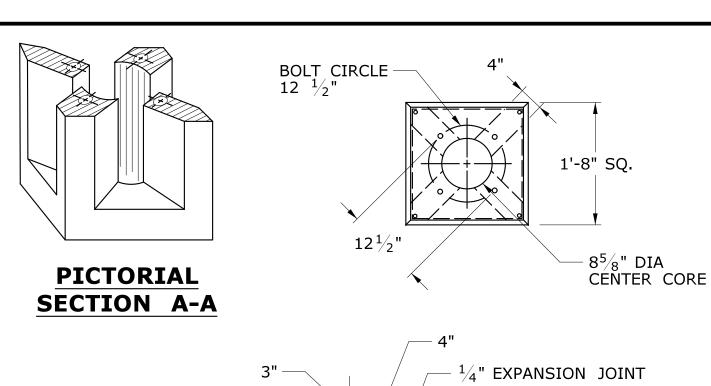


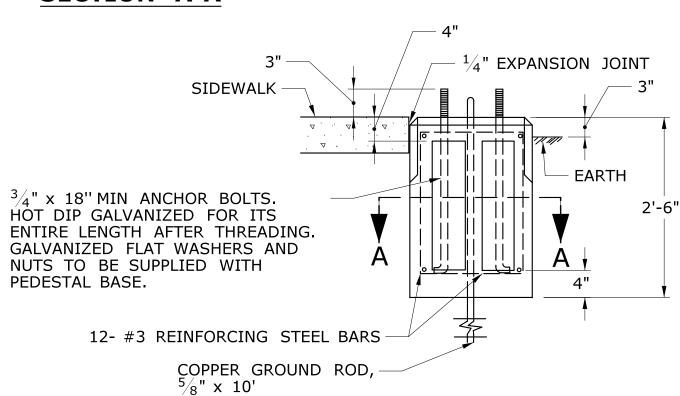
CTDOT STANDARD SHEET

TRENCHING & BACKFILLING, ELECTRICAL CONDUIT

STANDARD SHEET NO .:

TR-1001_01





TRAFFIC CONTROL FOUNDATION PEDESTAL - TYPE I - PRECAST

TRAFFFIC CONTROL FOUNDATION PEDESTAL TYPE I NOTES:

INSTALL FOUNDATION ON 12" OF COMPACTED GRANULAR FILL IN ACCORDANCE WITH SECTION 2.13 LEVEL FOUNDATION WITH A PROJECTION OF 3" ABOVE FINISHED GRADE.

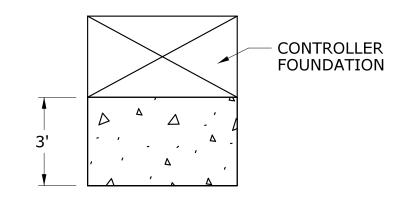
INSTALL COPPER GROUND ROD: 5/8" X 10'

PLACE NO. 6 CRUSHED STONE IN THE CENTER OPENINGS AFTER THE CONDUITS AND

GROUND ROD HAVE BEEN INSTALLED.

CONDUITS SHALL NOT PROJECT MORE THAN 2" ABOVE FOUNDATION. CONCRETE: (CAST-IN PLACE) PCC04460 IN ACCORDANCE WITH SECTION M.03

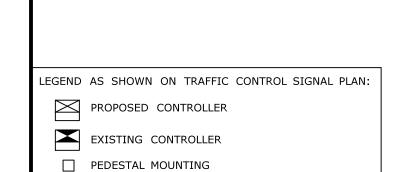
CONCRETE: (PRECAST) PRC04060 IN ACCORDANCE WITH ARTICLE M.14.01

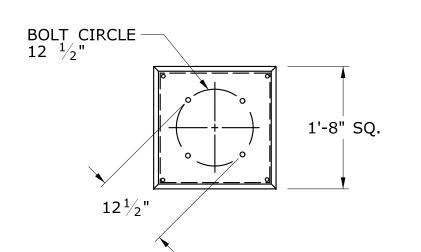


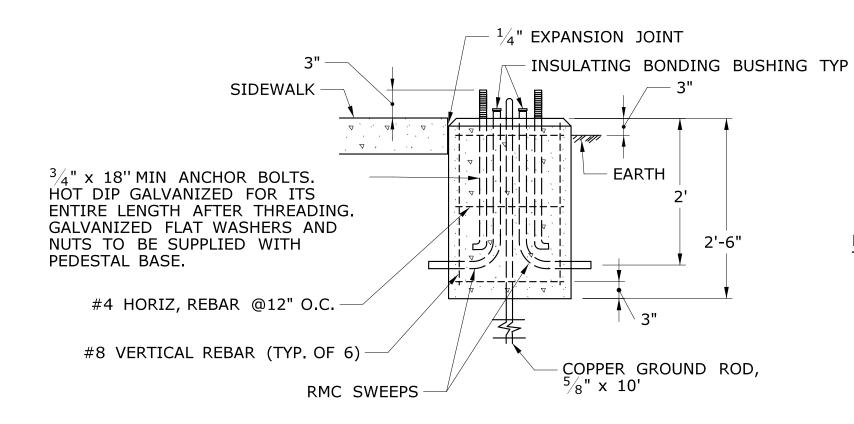
INSTALL PRECAST OR CAST IN PLACE CONCRETE SIDEWALK ON CABINET DOOR SIDE OF CONTROLLER FOUNDATION. PITCH SIDEWALK $\frac{1}{4}$ " PER FOOT AWAY FROM THE CONTROLLER FOUNDATION. REFER TO HIGHWAY STANDARD SHEET HW-921_01 FOR SIDEWALK CONSTRUCTION.

TYPICAL CONCRETE SIDEWALK AT CONTROLLER FOUNDATION

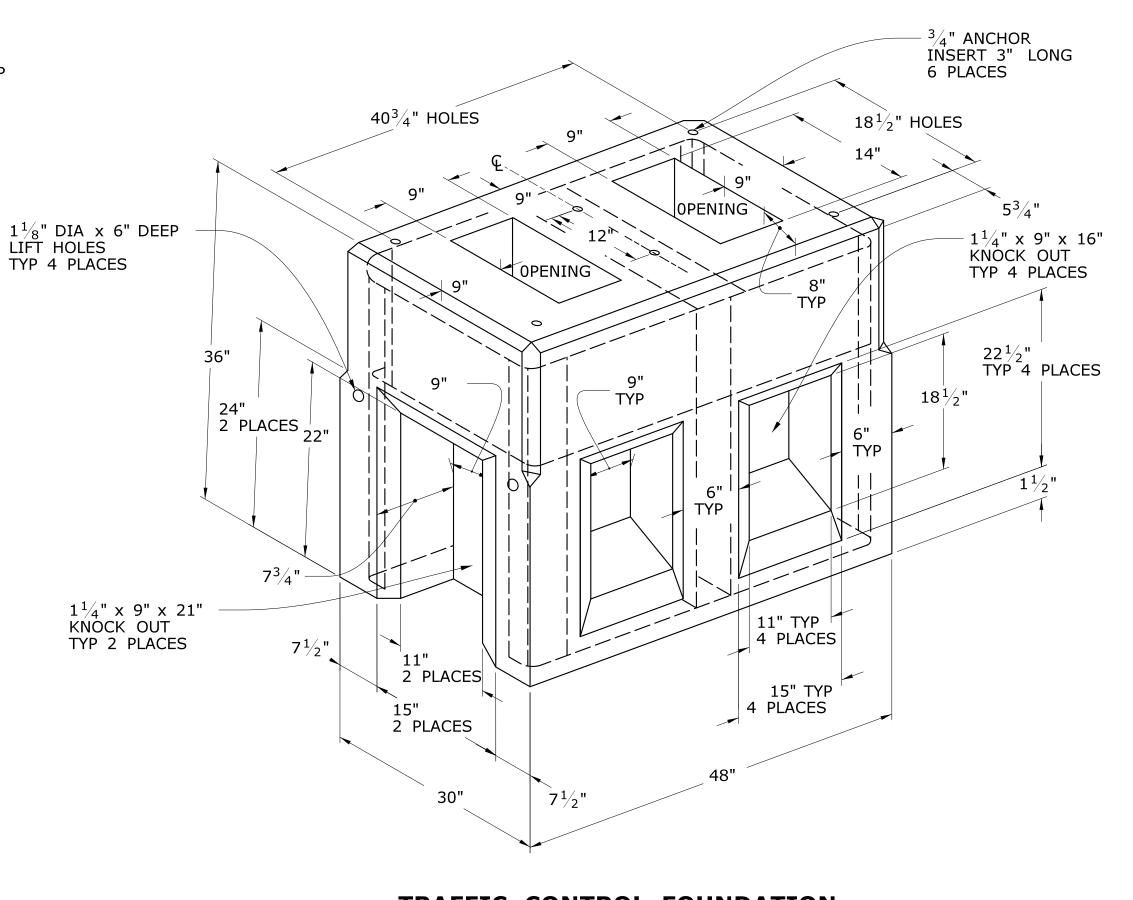
NOT TO SCALE







TRAFFIC CONTROL FOUNDATION PEDESTAL - TYPE I - CAST IN PLACE



TRAFFIC CONTROL FOUNDATION **CONTROLLER - TYPE IV - PRECAST**

TRAFFFIC CONTROL FOUNDATION CONTROLLER TYPE IV NOTES:

INSTALL FOUNDATION ON 12" OF COMPACTED GRANULAR FILL IN ACCORDANCE WITH SECTION 2.13 LEVEL FOUNDATION WITH A PROJECTION OF 4" ABOVE FINISHED GRADE.

INSTALL COPPER GROUND ROD: 5/8" x 10'

PLACE NO. 6 CRUSHED STONE IN THE CENTER OPENINGS AFTER THE CONDUITS AND GROUND ROD HAVE BEEN INSTALLED. THE OPENINGS SHALL BE CAPPED WITH A 2" GROUT LEVEL WITH THE TOP OF THE FOUNDATION AND NEATLY FINISHED. THE GROUT SHALL CONFORM WITH THE REQUIREMENTS OF ARTICLE M.03.05.

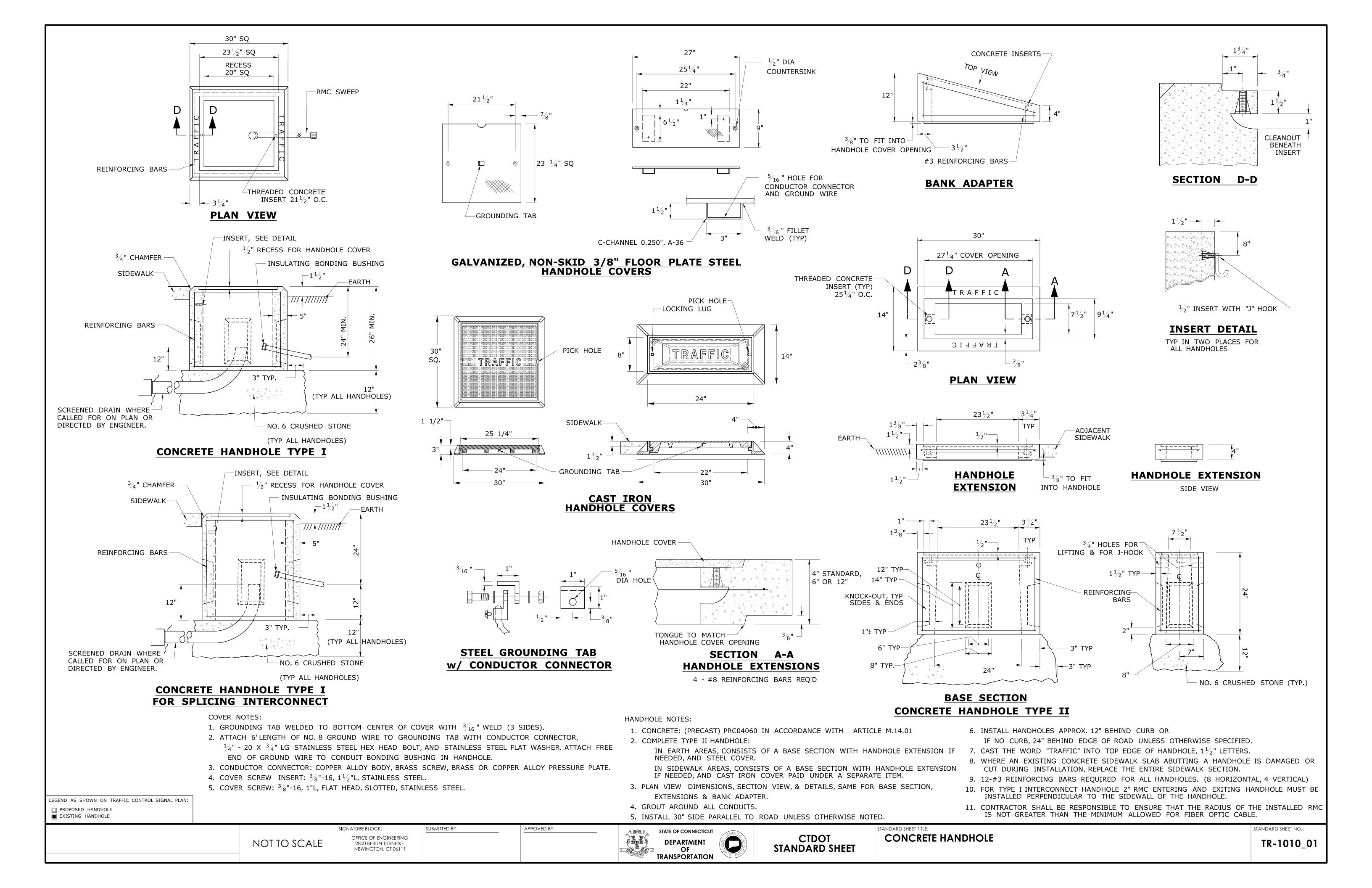
#4 REBAR 2" MIN COVER AROUND ALL OPENINGS, 3-#4 REBARS IN ALL CORNERS. CONDUITS SHALL NOT PROJECT MORE THAN 2" ABOVE FOUNDATION.

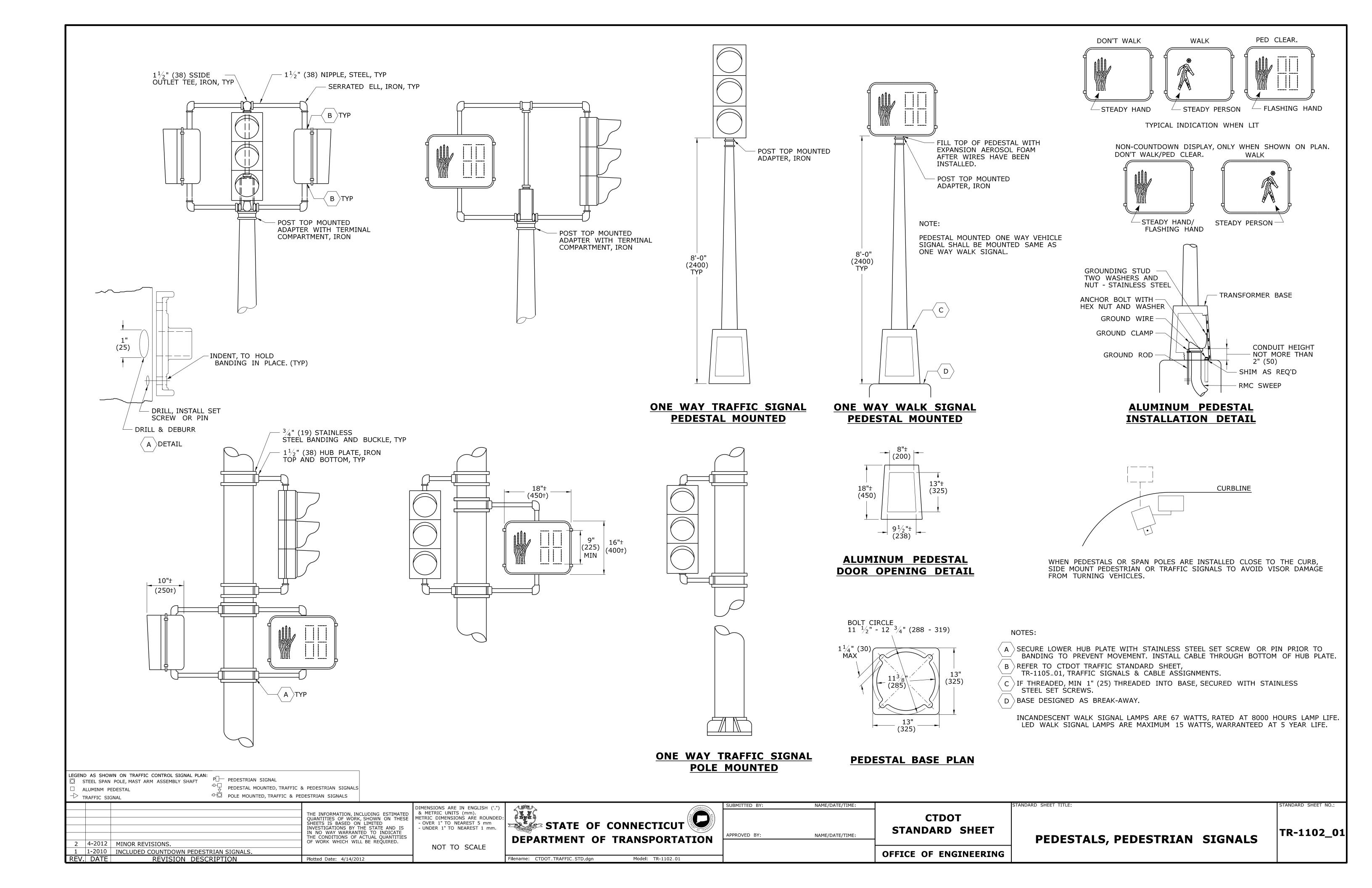
CONCRETE: (PRECAST) PRC04060 IN ACCORDANCE WITH ARTICLE M.14.01

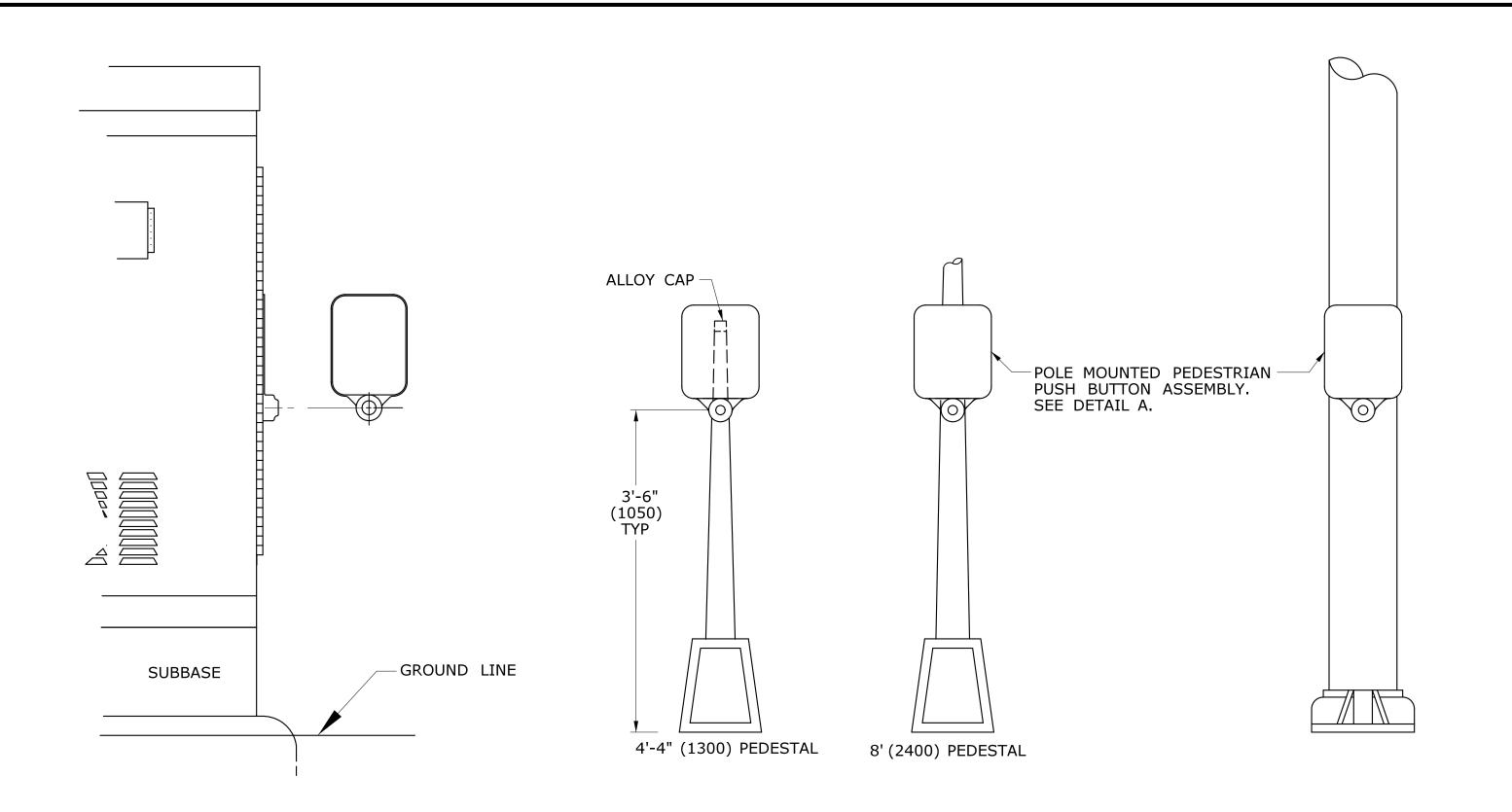
STATE OF CONNECTICUT TRANSPORTATION

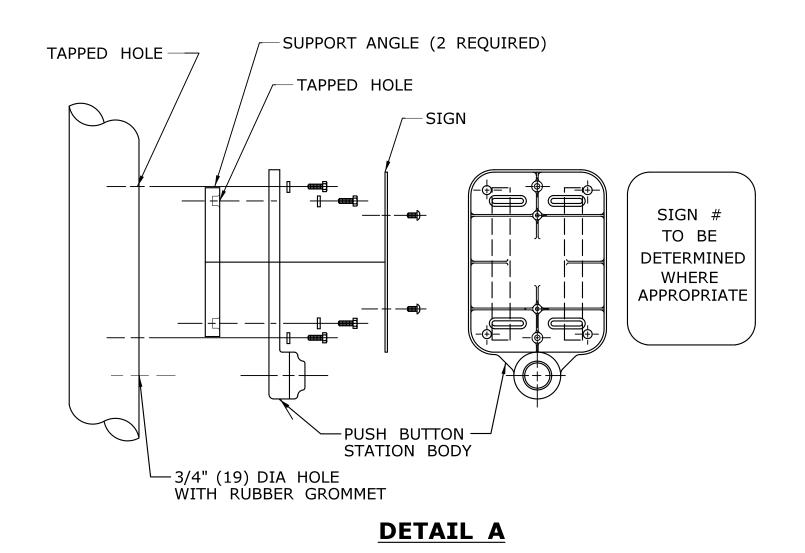
SUBMITTED BY:

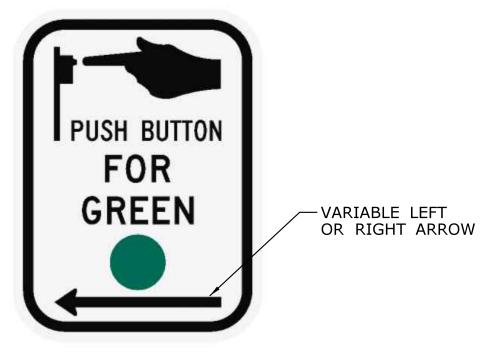
APPOVED BY:











SIGN # 31-0833 USE APPROPRIATE LEFT OR RIGHT ARROW



SIGN # 31-0835

FOR CROSSING WITH SIDE STREET GREEN

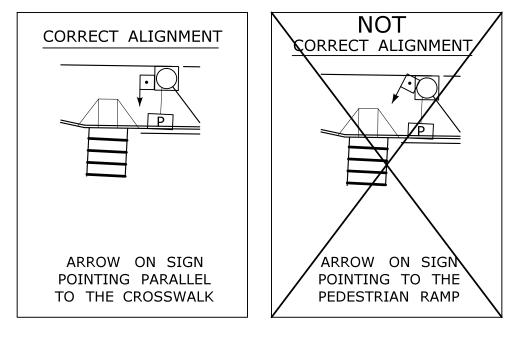
SURFACE MOUNTED

PEDESTAL MOUNTED

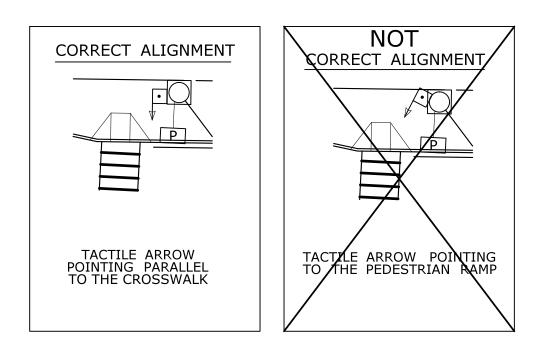
SPAN POLE/MAST ARM MOUNTED

GENERAL NOTES:

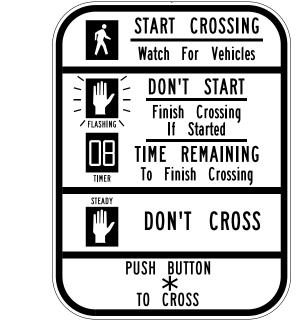
3'-6" (1050) FROM FINISHED GRADE SUCH AS SIDEWALK TO CENTER OF PUSH BUTTON. PUSH BUTTON INSTALLATIONS SHALL CONFORM TO THE REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT (ADA) STANDARDS FOR ACCESSIBLE DESIGN, CURRENT EDITION GOVERNS. 4'-4" (1300) PEDESTAL TO INCLUDE ALLOY CAP SECURED WITH STAINLESS STEEL SET SCREW.







ACCESSIBLE PEDESTRIAN SIGNAL AND DETECTOR



★ USE APPROPRIATE ARROW UNLESS OTHERWISE NOTED ON PLAN.

FOR NEW PUSHBUTTON HOUSING, USE 9" x 15" SIGN NO. 31-0856.

FOR EXISTING PUSHBUTTON HOUSING, WITH 9" x 12" SIZE, USE SIGN NO. 31-0845.

EGEND AS SHOWN ON TRAFFIC CONTROL SIGNAL PLAN-

	ND AS SHOW	IV OIV	TRAFFIC CONTROL SIGNAL FLAN.	
⊡	PEDESTRIAN	PUSH	BUTTON	
□	PEDESTRIAN	PUSH	BUTTON, PEDESTAL MOUNTED	
\bigcirc	PEDESTRIAN	PUSH	BUTTON, POLE MOUNTED	

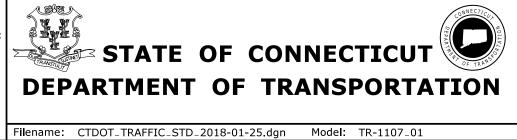
1 4-2012 MINOR REVISIONS & UPDATED SIGN #31-0845.

REVISION DESCRIPTION

	UPDATED PEDESTRIAN SIGN LEGE ADDED PEDESTRIAN EXAMPLE ALIG	SNMENTS	THE INFORMATION, INCLUDING ESTIMATED	DIMENSIONS ARE IN ENGLISH (& METRIC UNITS (mm). METRIC DIMENSIONS ARE ROUN - OVER 1" TO NEAREST 5 mm - UNDER 1" TO NEAREST 1 mr

Plotted Date: 8/9/2018

OUNDED: mm 1 mm.



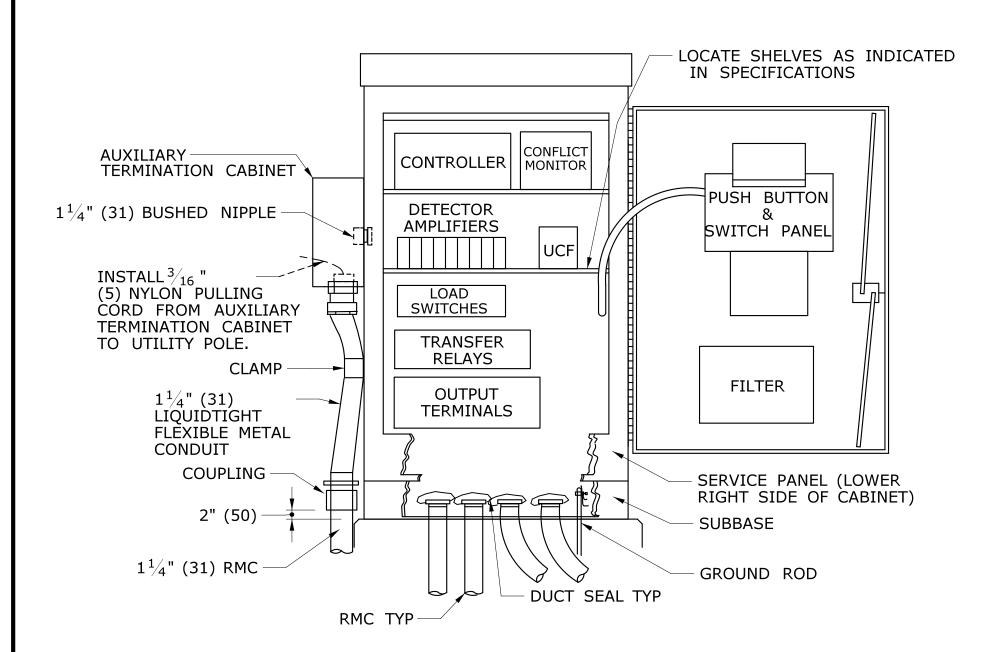
		OLLICE OF ENGINEERING	
		OFFICE OF ENGINEERING	
APPROVED BY:	NAME/DATE/TIME:	STANDARD SHEET	
		CTDOT	
SUBMITTED BY:	NAME/DATE/TIME:		ST.

EXAMPLE ALIGNMENTS

FOR EXCLUSIVE PEDESTRIAN PHASE

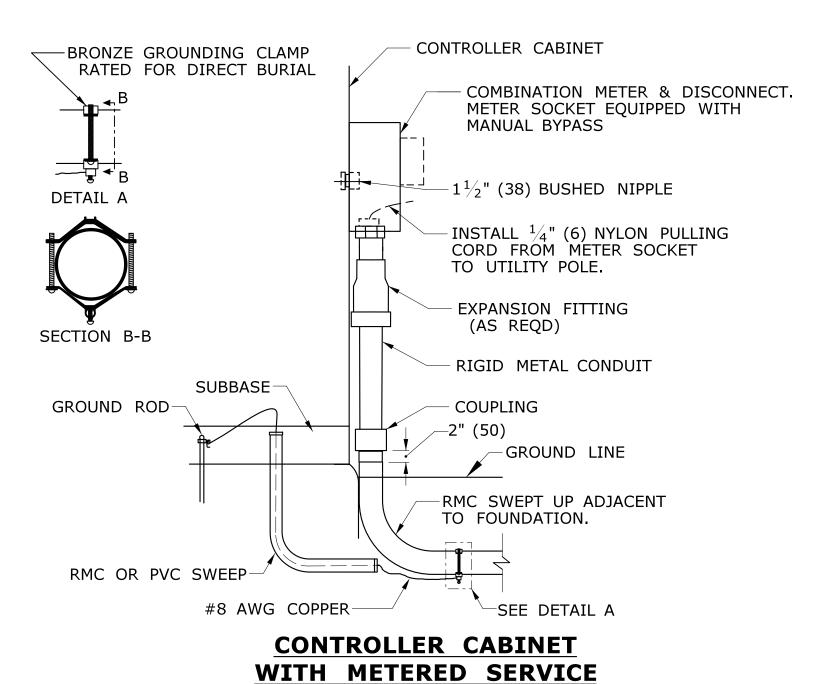
PEDESTRIAN PUSH BUTTONS

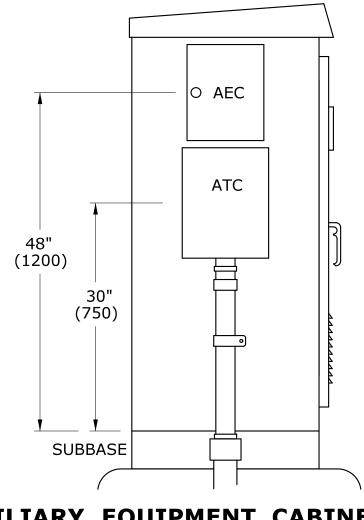
TR-1107_01



PROVIDE A MINIMUM CLEARANCE OF 6" (150) FROM THE CABINET BASE TO ALL COMPONENTS AND TERMINALS.

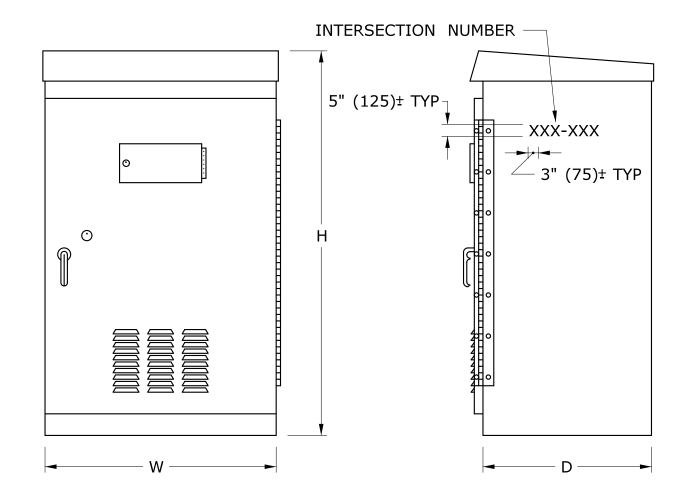
TYPICAL BASE MOUNTED CONTROLLER ON TYPE IV FOUNDATION





AUXILIARY EQUIPMENT CABINET (AEC) AUXILIARY TERMINATION CABINET (ATC)

CABINET TYPE	HEIGHT	WIDTH	DEPTH
ATC	16"(400)	12"(300)	6"(150)
AEC	14"(350)	11"(275)	11"(275)



BASE MOUNTED TRAFFIC CONTROLLER (TYPE B, D & E)

CABINET	DE	DEPTH		WIDTH		HEIGHT	
TYPE	MIN	MAX	MIN	MAX	MIN	MAX	
В	17"	19"	30"	34"	52"	56"	
	(425)	(475)	(750)	(850)	(1300)	(1400)	
D	25"	27"	42"	45"	54"	59"	
	(625)	(675)	(1050)	(1125)	(1350)	(1475)	
Е	17"	19"	30"	32"	49"	52"	
	(425)	(475)	(750)	(800)	(1225)	(1300)	



SUBBASE

(FRONT VIEW)

(TOP & BOTTOM VIEW)

SLOT AND FLANGE DIMENSIONS TO BE PER MANUFACTURER.

GENERAL NOTES:

GROUT ALL BASES AFTER MOUNTING ON FOUNDATIONS, WHERE NECESSARY.

3'-0" (900) FROM SIDEWALK TO BOTTOM OF CONTROLLER.

INSTALL PEDESTALS AND POLES SO THAT DOORS AND COVERS ARE ON THE SIDE AWAY FROM THE STREET, UNLESS OTHERWISE SPECIFIED.

INSTALL CABINET SO THAT DOOR OPENS FIELD SIDE UNLESS OTHERWISE NOTED ON PLANS. CAULK SEAM BETWEEN SUBBASE AND FOUNDATION.

STENCIL SIX DIGIT INTERSECTION NUMBER, USING BLACK PAINT ON SIDE, FRONT OR BACK OF CABINET MOST VISIBLE FROM THE ROAD.

Plotted Date: 5/15/2013

EGEND AS SHOWN ON TRAFFIC CONTROL SIGNAL PLAN: CONTROLLER ASSEMBLY

REV. DATE

☑ AUXILIARY TERMINTION CABINET

			THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE
			SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE
			THE CONDITIONS OF ACTUAL QUANTITIES
2	5-2013	REVISED SUBBASE.	OF WORK WHICH WILL BE REQUIRED.
1	4-2012	REVISED CABINET TYPES & MINOR REVISIONS.	

REVISION DESCRIPTION

IMENSIONS ARE IN ENGLISH ('.") & METRIC UNITS (mm). IETRIC DIMENSIONS ARE ROUNDED - OVER 1" TO NEAREST 5 mm - UNDER 1" TO NEAREST 1 mm.

NOT TO SCALE

STATE OF CONNECTICUT **DEPARTMENT OF TRANSPORTATION** Filename: CTDOT_TRAFFIC_STD.dgn Model: TR-1108_01

			OF
	APPROVED BY:	NAME/DATE/TIME:	S
A7ATION			
	SUBMITTED BY:	NAME/DATE/TIME:	

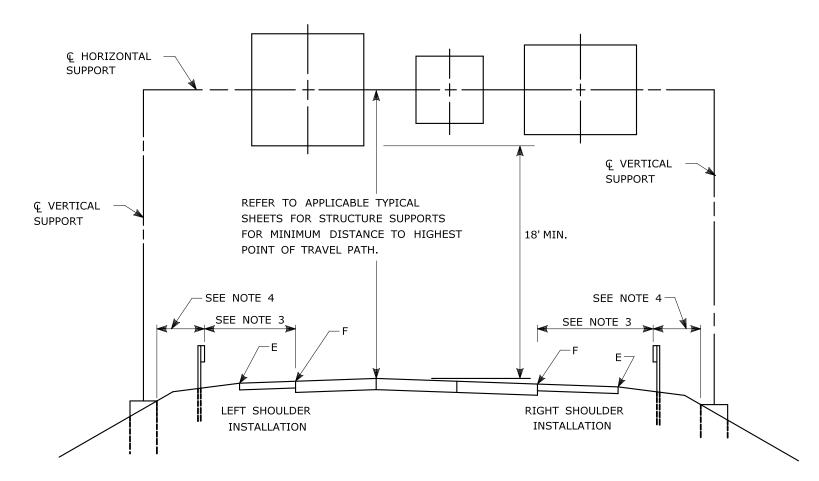
CTDOT STANDARD SHEET FFICE OF ENGINEERING

TR-1108_01

CONTROLLERS

FLANGE (TYP.)

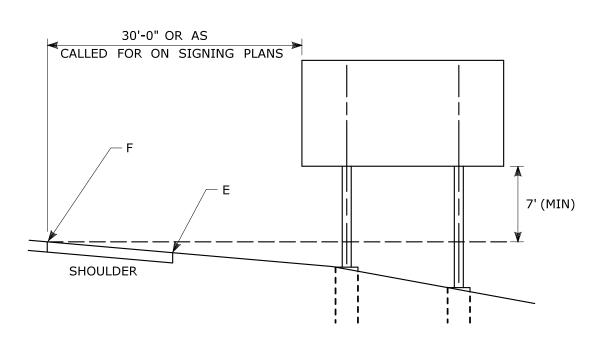
- 6" (150) MIN 12" (̀300)́ MAX



TYPICAL PLACEMENT OF OVERHEAD SIGNS ON SIGN SUPPORTS

NOTES:

- 1) FOR PLACEMENT OF CANTILEVER SIGN SUPPORT USE APPLICABLE
- PORTION OF ABOVE DETAIL.
- 2) BARRIER SYSTEMS MAY BE REQUIRED FOR BOTH SIDES OF SUPPORTS IN MEDIANS.
- 3) IMPACT PROTECTION SHALL BE PROVIDED FOR THE SIGN SUPPORTS LOCATED WITHIN CLEAR ZONE.
- 4) SIGN SUPPORT FOUNDATIONS SHALL BE LOCATED OUTSIDE OF BARRIER SYSTEMS DEFLECTION AREA.
- 5) ALL SIGNS ARE TO BE LEVEL, REGARDLESS OF CAMBER IN SUPPORT.



TYPICAL PLACEMENT OF SIDE MOUNTED SIGNS ON

STRUCTURAL STEEL BREAKAWAY SIGN SUPPORTS

NOTES:

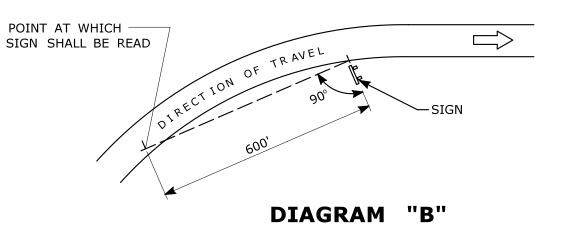
- 1) MIN. VERTICAL CLEARANCE ABOVE SIDEWALKS SHALL BE 7'.
- 2) WHERE GUIDE RAIL IS USED, THE OFFSET TO THE NEAR EDGE OF SIGN FACE SHALL BE AS SHOWN ELSEWHERE IN THE CONTRACT PLANS.
- 3) ON INTERSECTING ROADS AT RAMP TERMINI, THE OFFSET TO THE NEAR EDGE OF OF SIGN FACE SHALL BE 6'MIN. FROM POINT "E".
- 4) IF 30'-0" MIN. CANNOT BE MET, PLEASE CONTACT THE ENGINEER.

- FOR MAXIMUM EFFECTIVENESS, POSITION SIDE MOUNTED SIGNS ON STRUCTURAL STEEL BREAKAWAY SIGN SUPPORTS AS FOLLOWS:
- ON A TANGENT SECTION, POSITION THE SIGN SO THE VERTICAL AXIS IS PLUMB AND THE HORIZONTAL AXIS IS AT AN ANGLE OF 90° WITH THE TRAFFIC LANE WHICH THE SIGN SERVES. SIGNS LOCATED 30 FT OR MORE FROM THE EDGE OF THE ROAD SHALL BE TURNED APPROXIMATELY 3° TOWARD THE ROAD.



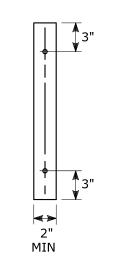
DIAGRAM "A"

ON A HORIZONTAL CURVE SECTION, POSITION THE SIGN SO THE VERTICAL AXIS IS PLUMB AND THE HORIZONTAL AXIS IS AT AN ANGLE OF 90° WITH A STRAIGHT LINE BETWEEN THE SIGN AND THE POINT AT WHICH THE SIGN SHALL BE READ.

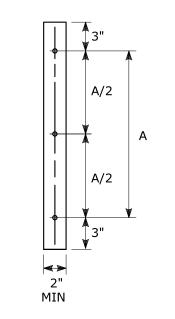


SIGN ORIENTATION DETAILS FOR SIDE MOUNTED SIGNS ON STRUCTURAL STEEL BREAKAWAY SIGN SUPPORTS

RETROREFLECTIVE STRIPS 48" LONG OR LESS:

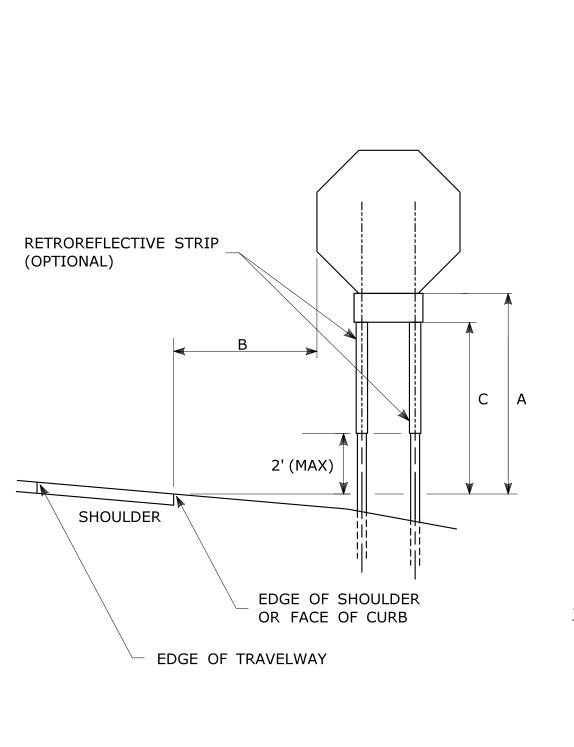


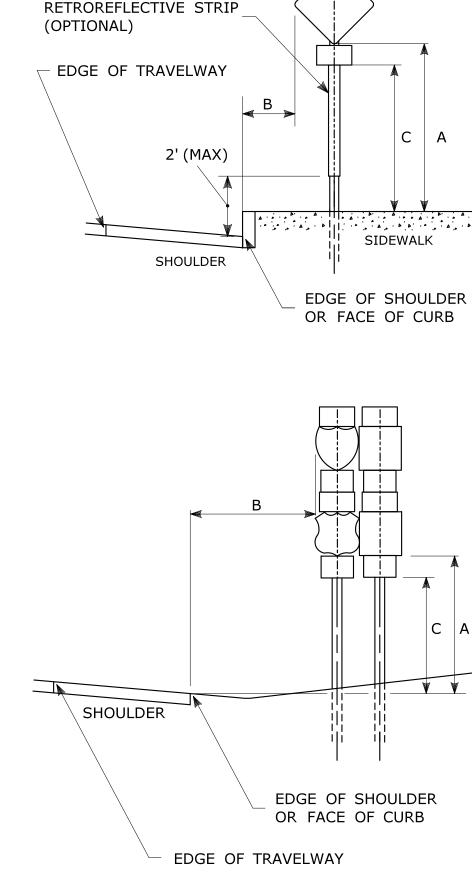
RETROREFLECTIVE STRIPS OVER 48" LONG:



RETROREFLECTIVE STRIP DETAIL

- RETROREFLECTIVE STRIPS WHICH ARE 48 IN LONG OR LESS SHALL BE ATTACHED USING 2 BOLTS AND RETROREFLECTIVE STRIPS OVER 48 IN LONG SHALL BE ATTACHED USING 3 BOLTS AS SHOWN ON THE DETAILS ABOVE.
- REFER TO STANDARD SHEET No. TR-1208_02 "METAL SIGN POSTS AND SIGN MOUNTING DETAILS" FOR MOUNTING DETAILS.
- RETROREFLECTIVE STRIP COLOR SHALL MATCH THE BACKGROUND COLOR OF THE SIGN, EXCEPT THAT THE COLOR OF THE STRIP FOR "YIELD" AND "DO NOT ENTER" SIGNS SHALL BE RED.





TYPICAL SIGN PLACEMENT DETAIL

NOTES:

ALL SIGNS AND SHIELDS ON DIRECTIONAL ASSEMBLIES SHALL ABUT VERTICALLY.

REFER TO STANDARD SHEET No. TR-1208_02 "METAL SIGN POSTS AND SIGN MOUNTING DETAILS" FOR SIGN POSTS AND SIGN MOUNTING.

IF A RETFOREFLECTIVE STRIP IS USED ON SIGN SUPPORT, IT SHALL BE PLACED FOR THE FULL LENGTH OF THE SUPPORT FROM THE BOTTOM OF THE SIGN TO WITHIN 2 FT ABOVE THE EDGE OF THE ROADWAY. PARKING SIGNS TYPICALLY USE 45° MOUNTING BRACKET.

DIM."A" DIM."B" DIM."C" MIN SIGN MIN LATERAL MIN PLAQUE ASSEMBLY LOCATION HEIGHT OFFSET (1) HEIGHT (1)	
5' SIGNS ON FREEWAYS AND EXPRESSWAYS EXCEPT CHEVRON ALIGNMENT SO ONE-DIRECTION LARGE ARROW SIGNS, DO NOT ENTER SIGNS, AND WRONG WAY SIGNS	SIGNS,
• SIGNS IN RURAL AREAS • DO NOT ENTER AND WRONG WAY SIGNS ALONG EXIT RAMPS • DO NOT ENTER AND WRONG WAY SIGNS ON LIMITED ACCESS HIGHWA	YS
• CHEVRON ALIGNMENT SIGNS LOCATED ON FREEWAYS, EXPRESSWAYS, RAMPS, AND IN RURAL AREAS • ONE-DIRECTION LARGE ARROW SIGNS LOCATED ON FREEWAYS, EXPRESSWAYS, RAMPS, AND IN RURAL AREAS	
4' 6' 12' 3 N/A INCIDENT MANAGEMENT SIGNS AND MILE POST MARKER ASSEMBLIES LOCATED ON FREEWAYS AND EXPRESSWAYS	
4' 2' 4' CENTRAL ISLANDS OF ROUNDABOUTS	
7' 2' (4) 6' BUSINESS & RESIDENTIAL AREAS WHERE PARKING OR OTHER OBSTRUCTIONS LIMIT VISIBILITY	
7' 2' 4 7' SIDEWALKS 5	

OR AS DIRECTED BY THE ENGINEER

CTDOT

- 8 FT MINIMUM HEIGHT REQUIRED IF A SUPPLEMENTAL PLAQUE IS SUBMOUNTED BELOW THE MAJOR SIGN.
- 6 FT FROM EDGE OF SHOULDER, WHEN SHOULDER IS OVER 6 FT WIDE
- 12 FT FROM EDGE OF TRAVELWAY, WHEN SHOULDER IS LESS THAN 6 FT WIDE. A LATERAL OFFSET OF AT LEAST 1 FT FROM THE FACE OF THE CURB MAY BE USED WHERE SIDEWALK WIDTH
- IS LIMITED OR WHERE EXISTING UTILITY POLES ARE CLOSE TO THE CURB.
- (5) A CLEAR PATH OF NOT LESS THAN 4 FT SHALL BE PROVIDED IN SIDEWALK AREAS.

THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS NO WAY WARRANTED TO INDICATE 8-2018 | INCLUDED INCIDENT MANAGEMENT AND MILE MARKER SIGNS. THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED. 4-2017 MINOR REVISIONS 1 2-2011 MINOR REVISIONS REV. DATE REVISION DESCRIPTION Plotted Date: 8/10/2018

STATE OF CONNECTICUT **DEPARTMENT OF TRANSPORTATION**

Model: TR-1208_01

Filename: TR_1208_01_1_2018.dgn

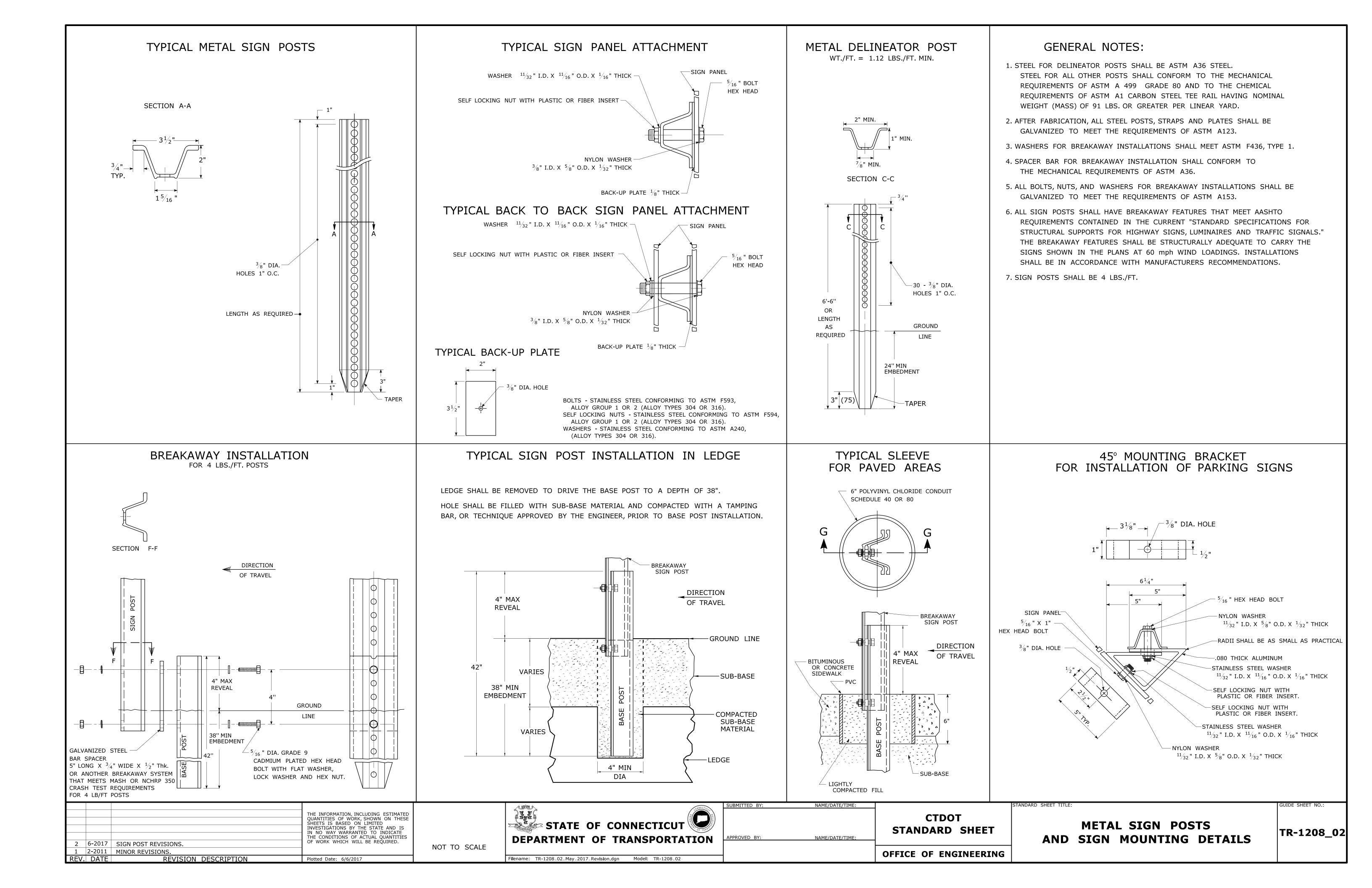
NOT TO SCALE

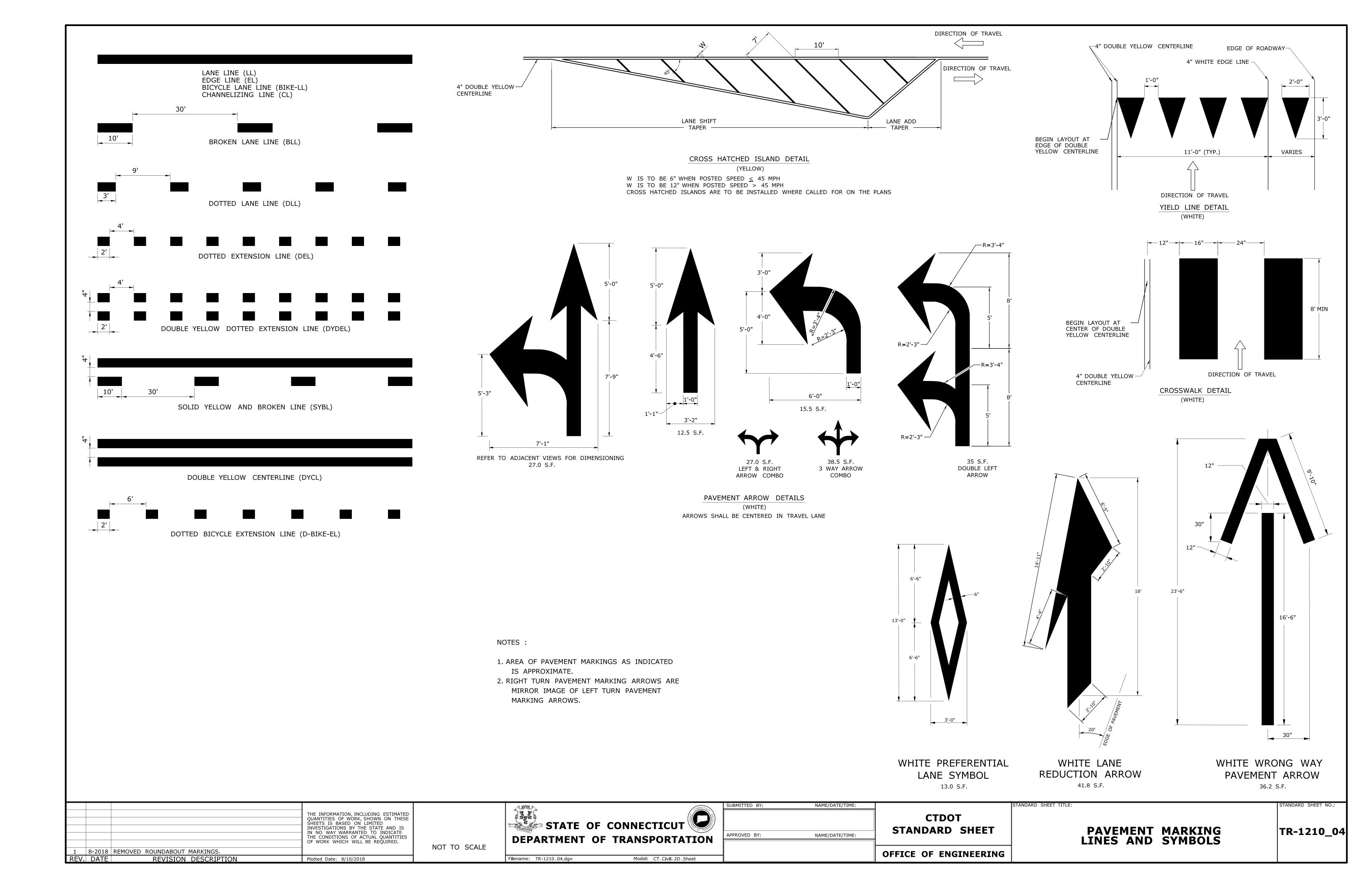
NAME/DATE/TIME: APPROVED BY: NAME/DATE/TIME: OFFICE OF ENGINEERING

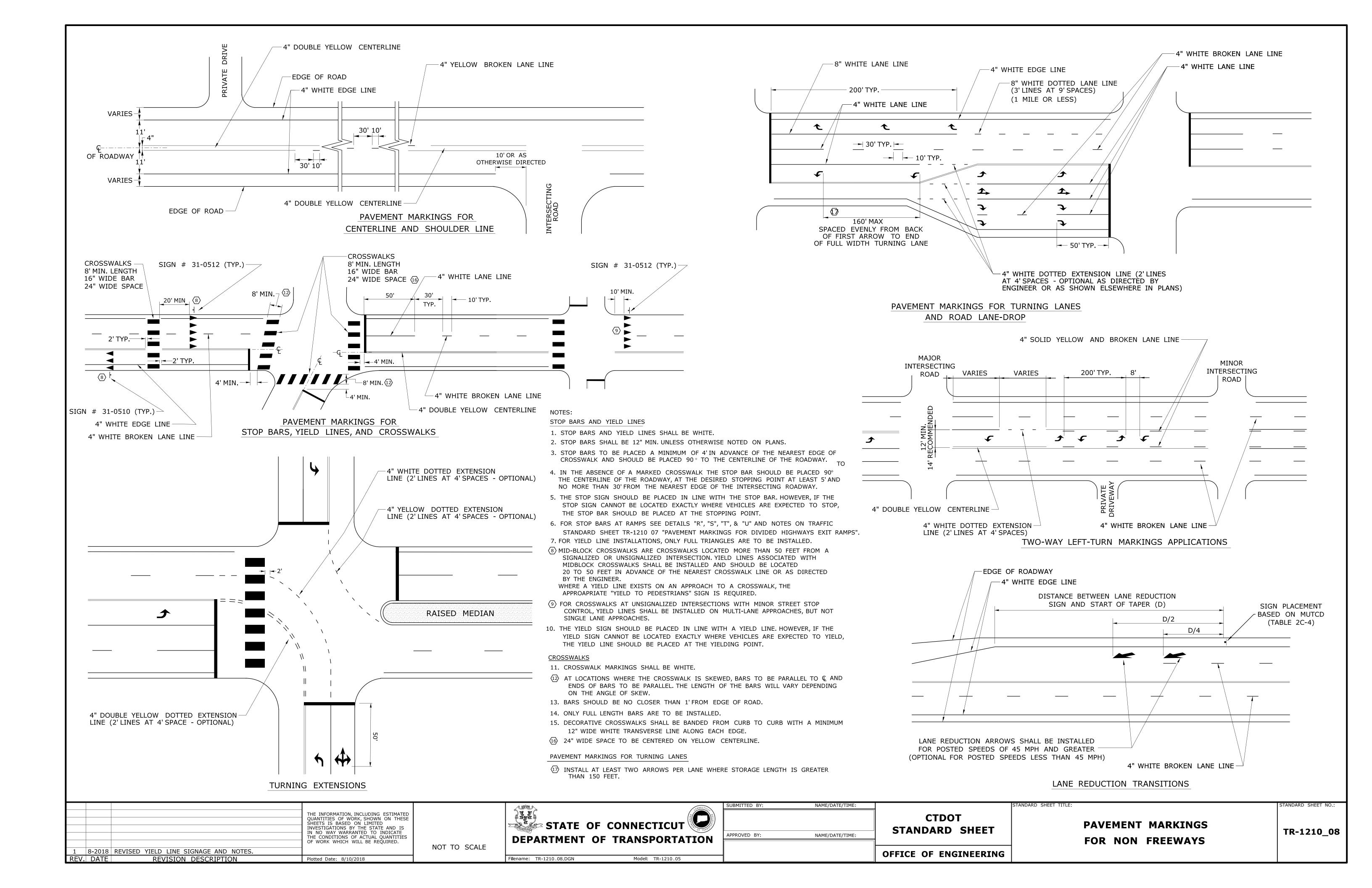
SIGN PLACEMENT AND RETROREFLECTIVE STRIP DETAILS

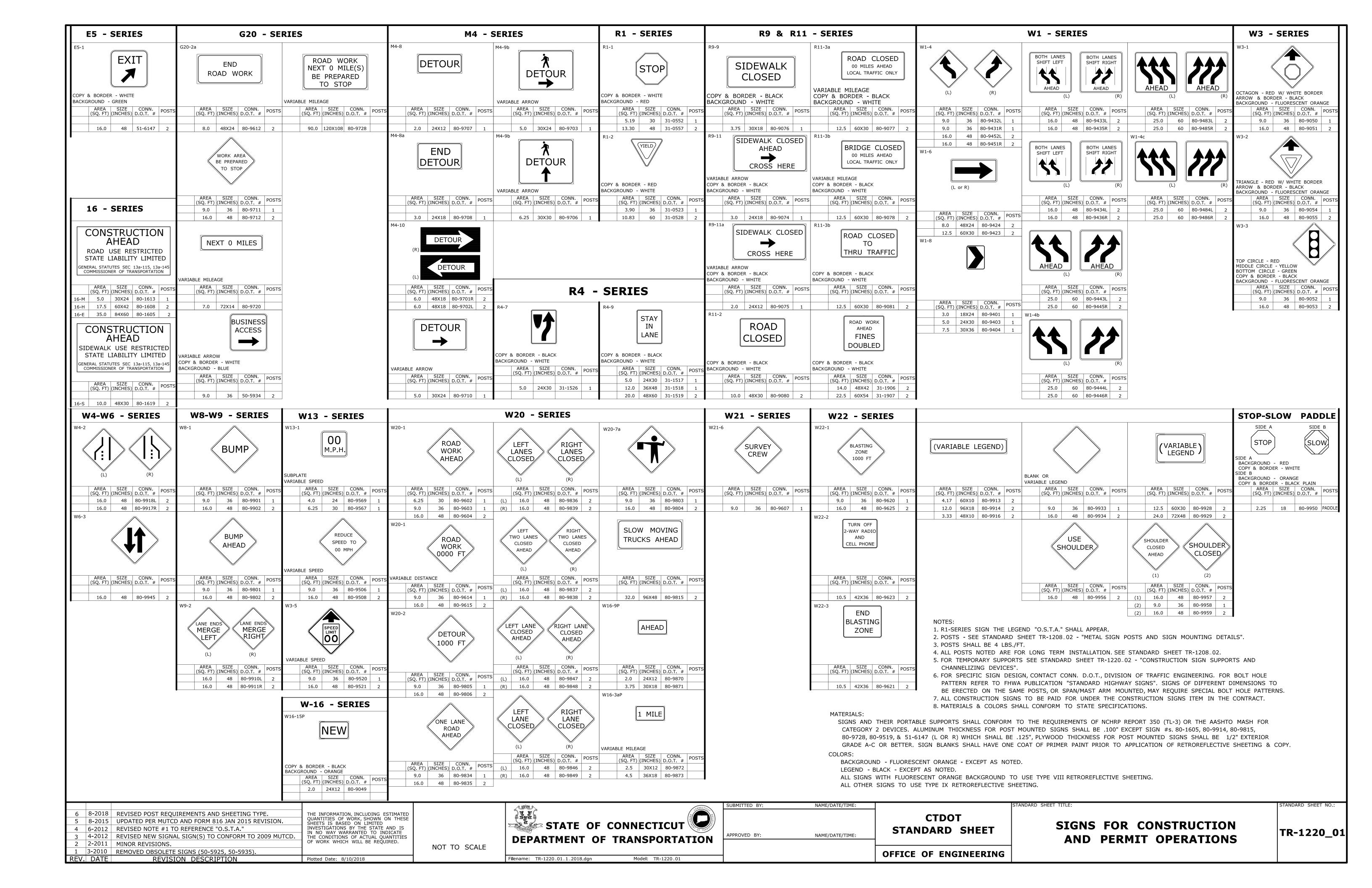
TR-1208_01

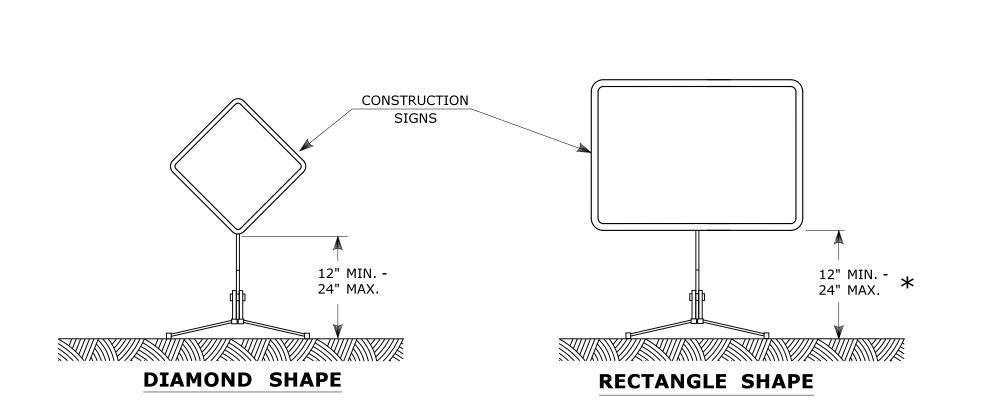
STANDARD SHEET







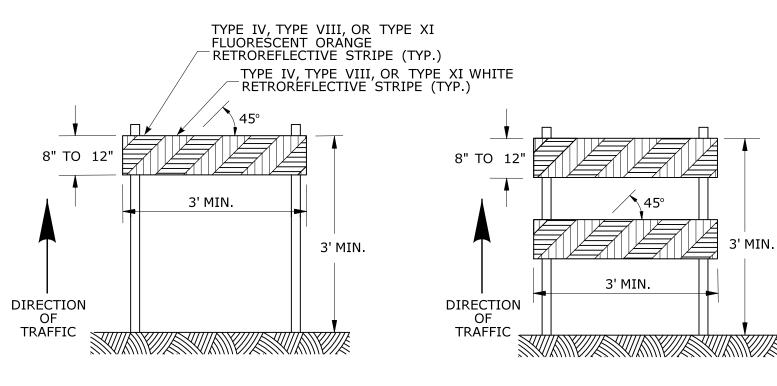




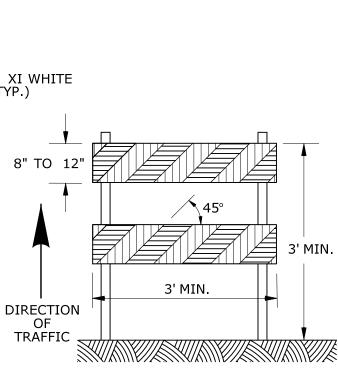
PORTABLE CONSTRUCTION SIGNS

NOTES FOR PORTABLE SIGN SUPPORTS:

- 1. SIGNS AND THEIR PORTABLE SUPPORTS SHALL CONFORM TO THE REQUIREMENTS OF NCHRP REPORT 350 (TL-3) OR THE AASHTO MASH FOR CATEGORY 2 DEVICES AND THE LATEST EDITION OF THE MUTCD.
- 2. MOUNTING HEIGHT OF SIGNS SHALL BE A MINIMUM OF 12" AND A MAXIMUM OF 24". SIGNS SHALL BE MOUNTED HIGHER AS NEEDED TO MEET FIELD CONDITIONS OR AS DIRECTED BY THE ENGINEER.
- 3. THE ENGINEER RESERVES THE RIGHT TO REJECT ANY SUPPORT DEEMED UNSUITABLE FOR THE PURPOSE INTENDED.
- 4. PORTABLE SIGN SUPPORTS SHALL BE STABILIZED IN A MANNER THAT WILL NOT AFFECT THEIR COMPLIANCE WITH NCHRP REPORT 350 (TL-3) OR THE AASHTO MASH FOR CATEGORY 2 DEVICES.
- 5. PORTABLE CONSTRUCTION SIGN SUPPORTS SHOULD NOT BE USED FOR DURATION OF MORE THAN 3 DAYS EXCEPT FOR R9-8 THROUGH R9-11a SERIES, R11 SERIES, W1-6 THROUGH W1-8 SERIES, M4-10, AND E5-1. SEE STANDARD SHEET TR-1220_01 - "SIGNS FOR CONSTRUCTION AND PERMIT OPERATIONS" FOR SIGN DETAILS.
- * FOR E5-1 (EXIT SIGNS) USE MIN 48".







TYPE II BARRICADE

5' MIN. DIRECTION OF TRAFFIC 4' MIN.

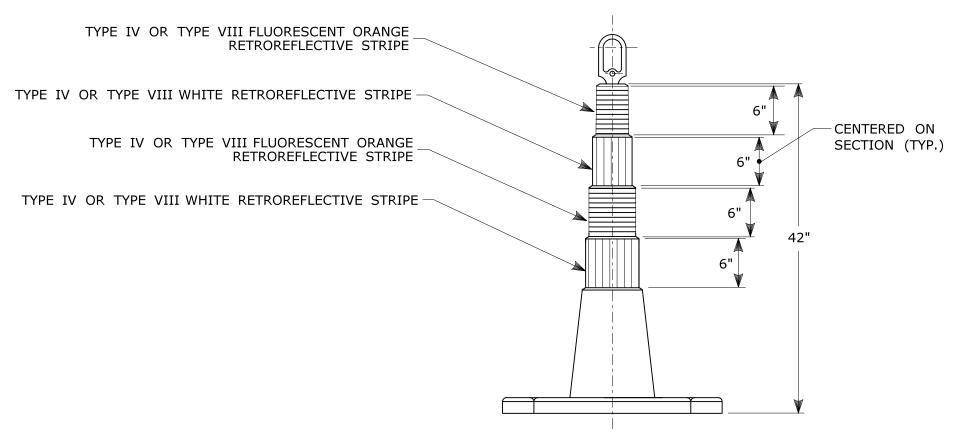
TYPE III BARRICADE

NOT TO SCALE

CONSTRUCTION BARRICADES

NOTES

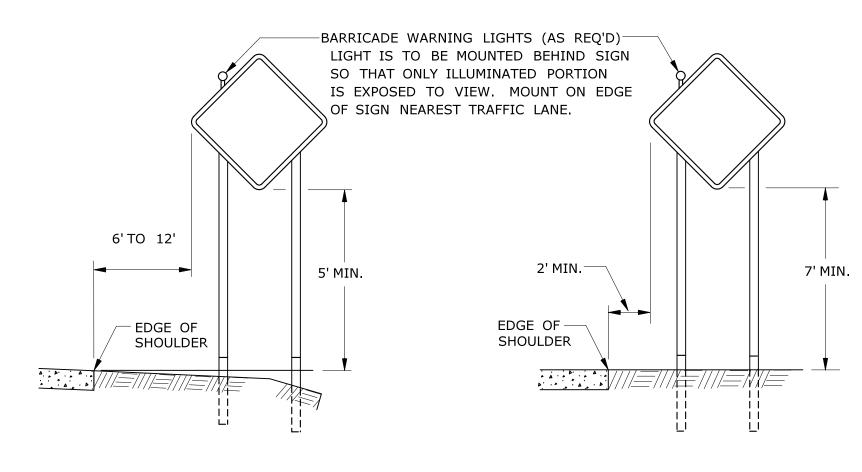
- 1. CONSTRUCTION BARRICADES SHALL CONFORM TO THE REQUIREMENTS OF NCHRP REPORT 350 (TL-3) OR THE AASHTO MASH AND THE LATEST EDITION OF THE MUTCD.
- 2. MARKINGS FOR BARRICADE RAILS SHALL BE ALTERNATE FLUORESCENT ORANGE AND WHITE STRIPES SLOPING DOWNWARD IN THE DIRECTION TRAFFIC IS TO PASS. 6" WIDE STRIPES SHALL BE USED.
- 3. THE ENTIRE AREA OF FLUORESCENT ORANGE AND WHITE STRIPES SHALL BE RETROREFLECTIVE SHEETING AS REQUIRED IN THE SPECIFICATIONS. THE SIDES OF BARRICADES FACING TRAFFIC SHALL HAVE RETROREFLECTIVE RAIL FACES.
- 4. THE ENGINEER RESERVES THE RIGHT TO REJECT ANY BARRICADE DEEMED UNSUITABLE FOR THE PURPOSE INTENDED.
- 5. CORNERS OF BARRICADE RAILS SHALL BE ROUNDED.
- 6. SIGNS MAY ONLY BE INSTALLED ON TYPE III BARRICADES AND SHALL BE PLACED SO AS TO COVER NO MORE THAN ONE BARRICADE RAIL.



42" TRAFFIC CONE

NOTES:

- 1. TRAFFIC CONES SHALL CONFORM TO THE REQUIREMENTS OF NCHRP REPORT 350 (TL-3) OR THE AASHTO MASH FOR CATEGORY 1 DEVICES AND THE LATEST EDITION OF THE MUTCD.
- 2. IF RUBBER CONES ARE USED, THEY SHALL HAVE INTERIOR RIBS FOR RIGIDITY.
- 3. IF PLASTIC CONES ARE USED, THEY SHALL BE COLOR IMPREGNATED.
- 4. THE ENGINEER RESERVES THE RIGHT TO REJECT ANY CONE DEEMED UNSUITABLE FOR THE PURPOSE INTENDED.
- 5. THE ENTIRE AREA OF FLUORESCENT ORANGE AND WHITE STRIPES SHALL BE RETROREFLECTIVE SHEETING AS REQUIRED IN THE SPECIFICATIONS.
- 6. THE SECTIONS OF CONES NOT COVERED WITH RETROREFLECTIVE STRIPES SHALL BE ORANGE.



RURAL AREA

URBAN AREA

PLACEMENT OF CONSTRUCTION SIGNS TYPICAL LONG TERM INSTALLATION

NOTES:

SUPPORTS SHALL BE METAL SIGN POSTS AND HAVE BREAK-AWAY FEATURES. REFER TO STANDARD SHEETS:

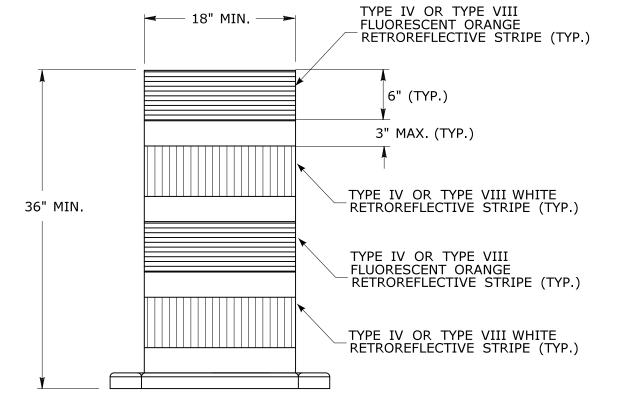
TR-1208_01 - "SIGN PLACEMENT AND RETROREFLECTIVE STRIP DETAILS." TR-1208_02 - "METAL SIGN POSTS AND SIGN MOUNTING DETAILS."

WHITE RETROREFLECTIVE STRIPE TYPE VI WHITE RETROREFLECTIVE STRIPE 28" MIN.

TRAFFIC CONE

NOTES:

- 1. TRAFFIC CONES SHALL CONFORM TO THE REQUIREMENTS OF NCHRP REPORT 350 (TL-3) OR THE AASHTO MASH FOR CATEGORY 1 DEVICES AND THE LATEST EDITION OF THE MUTCD.
- 2. IF RUBBER CONES ARE USED, THEY SHALL HAVE INTERIOR RIBS FOR RIGIDITY.
- 3. IF PLASTIC CONES ARE USED, THEY SHALL BE COLOR IMPREGNATED.
- 4. THE ENGINEER RESERVES THE RIGHT TO REJECT ANY CONE DEEMED UNSUITABLE FOR THE PURPOSE INTENDED.
- 5. THE ENTIRE AREA OF WHITE STRIPES SHALL BE RETROREFLECTIVE SHEETING AS REQUIRED IN THE SPECIFICATIONS.
- 6. TRAFFIC CONES NOT USED AT NIGHT MAY UTILIZE TYPE III SHEETING.
- 7. THE SECTIONS OF CONES NOT COVERED WITH RETROREFLECTIVE STRIPES SHALL BE ORANGE.



TRAFFIC DRUM **FRONT VIEW**

NOTES:

- 1. TRAFFIC DRUM SHALL CONFORM TO THE REQUIREMENTS OF NCHRP REPORT 350 (TL-3) OR THE AASHTO MASH FOR CATEGORY 1 DEVICES AND THE LATEST EDITION OF THE MUTCD.
- 2. THE ENGINEER RESERVES THE RIGHT TO REJECT ANY DRUM DEEMED UNSUITABLE FOR THE PURPOSE INTENDED.
- 3. THE ENTIRE AREA OF FLUORESCENT ORANGE AND WHITE STRIPES SHALL BE RETROREFLECTIVE SHEETING AS REQUIRED IN THE SPECIFICATIONS.
- 4. THE SECTIONS OF DRUMS NOT COVERED WITH RETROREFLECTIVE STRIPES SHALL BE ORANGE.

3 2 1	8-2018 8-2015 2-2011	UPDATED SHEETING TYPE AND COLOR. UPDATED PER MUTCD AND FORM 816 JAN 2015 REVISION. MINOR REVISIONS.	THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.		
REV.	DATE	REVISION DESCRIPTION	Plotted Date: 8/10/2018		

STATE OF CONNECTICUT	SUBMITTED
DEPARTMENT OF TRANSPORTATION	APPROVED
DEPARTMENT OF TRANSPORTATION	
ename: TR-1220 02 3 2018 dgn Model: TR-1220 02	1

		OFFICE OF ENGINEERING
BY:	NAME/DATE/TIME:	CTDOT STANDARD SHEET
) БТ.	NAME/DATE/TIME.	

CONSTRUCTION SIGN SUPPORTS AND CHANNELIZING DEVICES

TR-1220_02

TANDARD SHEET NO.: