

TOWN OF TRUMBULL, CT

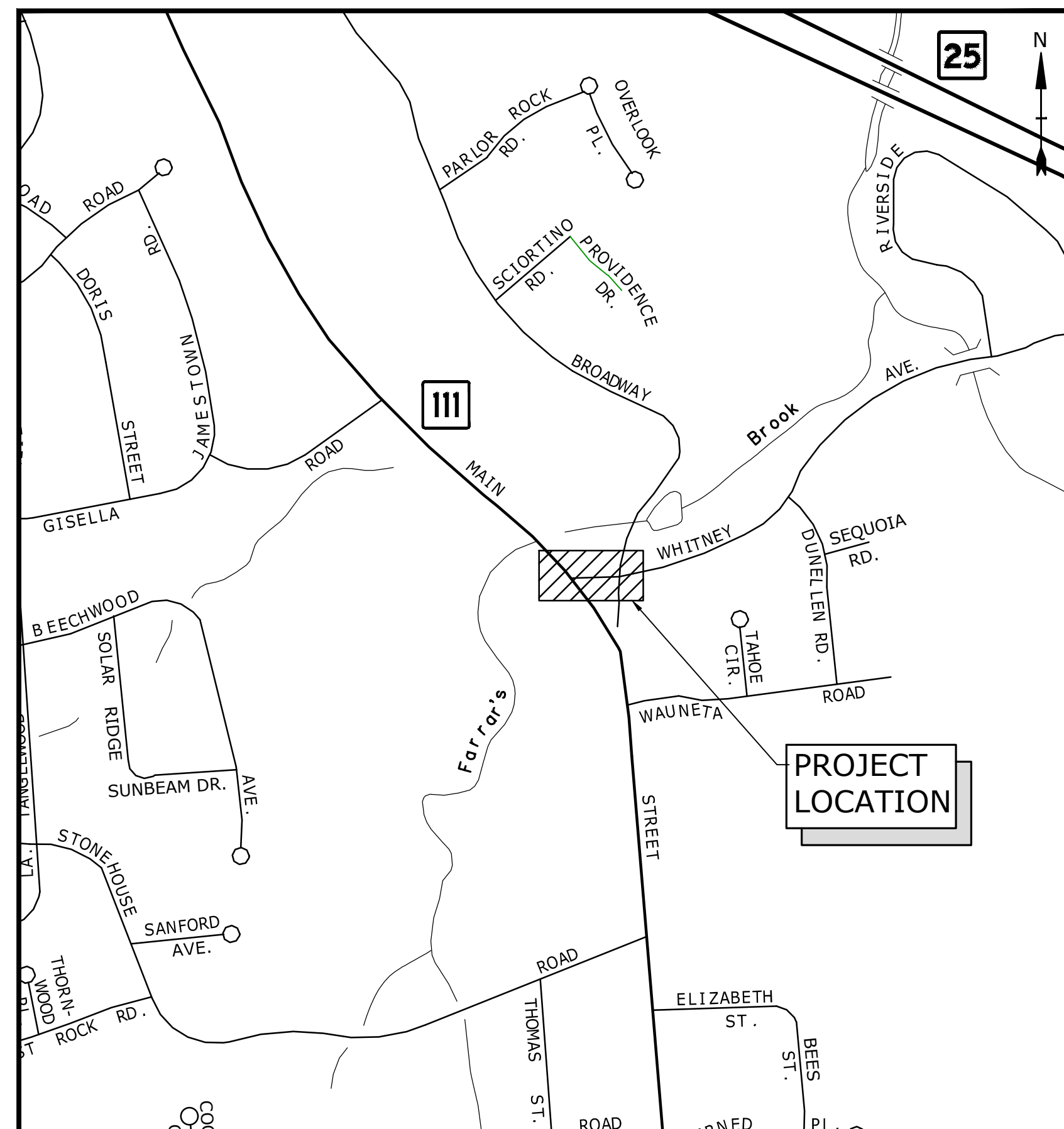
WHITNEY AVENUE AT MAIN STREET (ROUTE 111)

INTERSECTION IMPROVEMENTS

AUGUST 2018

LIST OF DRAWINGS	
SHEET NO.	SHEET TITLE
	COVER SHEET
1	TOPOGRAPHIC AND RIGHT OF WAY SURVEY (MARTIN SURVEYING)
2	TYPICAL SECTIONS AND GENERAL NOTES
3	CONSTRUCTION PLAN
4	GRADING & SOIL EROSION AND SEDIMENT CONTROL PLAN
5	SIGNING AND PAVEMENT MARKING PLAN
6	MAINTENANCE AND PROTECTION OF TRAFFIC PLAN DETAILS
7	DETAILS
8	CROSS SECTIONS STA 0+50 TO 1+00
9	CROSS SECTIONS STA 1+25 TO 1+75
10	TRUCK TURN MOVEMENTS

CTDOT STANDARD SHEETS	
SHEET NO.	SHEET TITLE
11	SIDEWALK RAMP SHEET 1
12	SIDEWALK RAMP SHEET 2
13	SIDEWALK RAMP SHEET 3
14	SIDEWALK RAMP SHEET 4
HW-507_01	TYPE "C", "C-L" & DROP INLET CATCH BASIN
HW-507_07	TYPE "C" & "C-L" CATCH BASIN TOPS AND CURBS
HW-507_10	MANHOLE - FRAME & COVER
HW-815_01	BITUMINOUS CONCRETE CURBING
HW-921_01	DRIVEWAY RAMPS AND SIDEWALKS
TR-1208_01	SIGN PLACEMENT AND RETROREFLECTIVE STRIP DETAILS
TR-1208_02	METAL SIGN POSTS AND SIGN MOUNTING DETAIL
TR-1210_04	PAVEMENT MARKING LINES AND SYMBOLS
TR-1210_08	PAVEMENT MARKINGS FOR NON FREEWAYS
TR-1220_01	SIGNS FOR CONSTRUCTION AND PERMIT OPERATIONS
TR-1220_02	CONSTRUCTION SIGN SUPPORTS AND CHANNELIZING DEVICES



LOCATION MAP
SCALE: 1" = 500'

PREPARED BY:
Tighe&Bond
www.tighebond.com

ALFRED J. MASCIA JR., P.E.

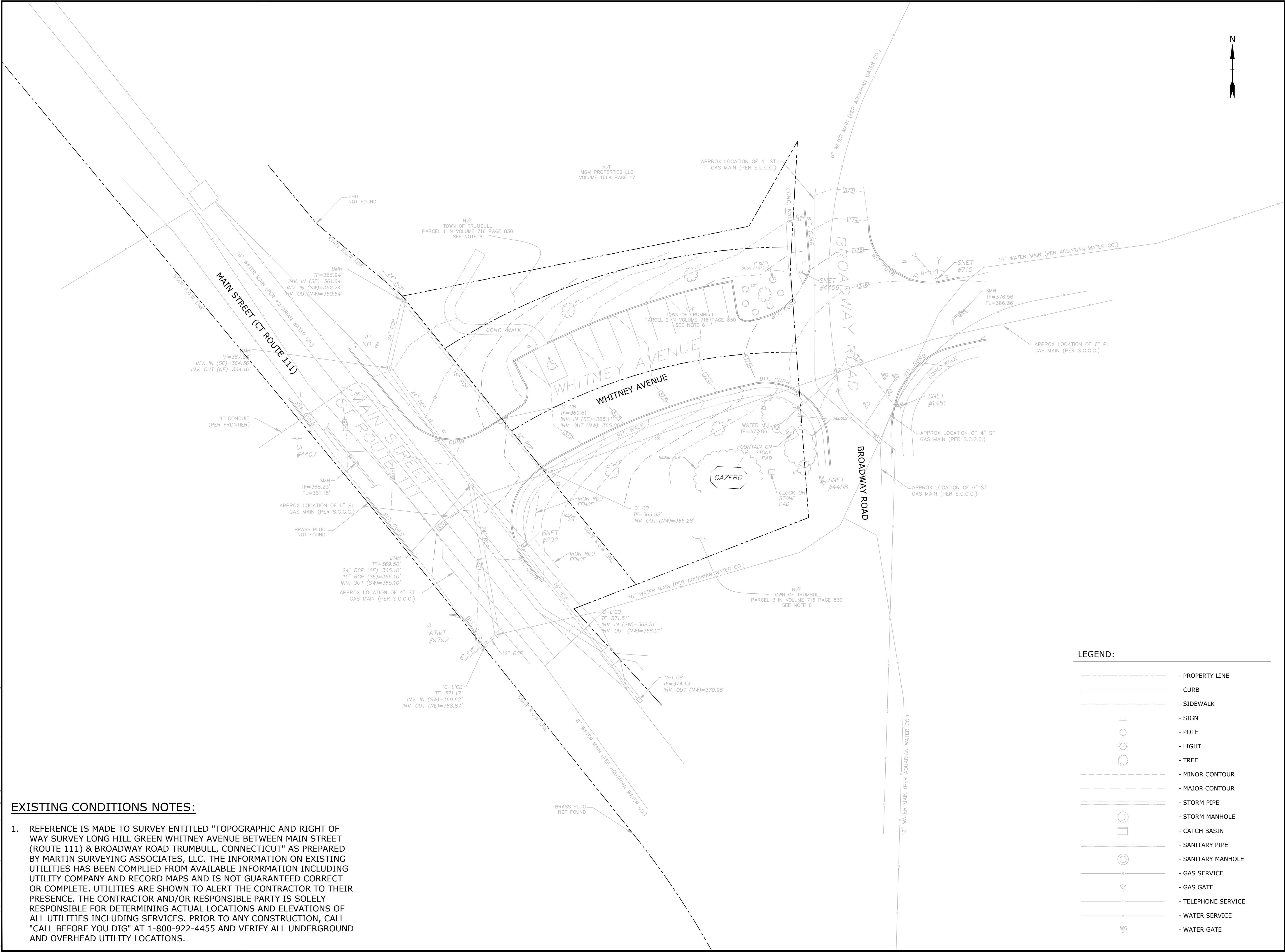
DANA C. HUFF, P.E.

PREPARED FOR:
TOWN OF TRUMBULL

Last Saved: 11/29/2018 2:13pm By: aspersen
Tighe & Bond\21\T0196\116 - Whitney Ave-Route 111\Drawings Figures\AutoCAD\Sheets\T0196-116-1-EX.dwg

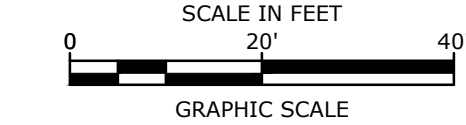
EXISTING CONDITIONS NOTES:

1. REFERENCE IS MADE TO SURVEY ENTITLED "TOPOGRAPHIC AND RIGHT OF WAY SURVEY LONG HILL GREEN WHITNEY AVENUE BETWEEN MAIN STREET (ROUTE 111) & BROADWAY ROAD TRUMBULL, CONNECTICUT" AS PREPARED BY MARTIN SURVEYING ASSOCIATES, LLC. THE INFORMATION ON EXISTING UTILITIES HAS BEEN COMPILED FROM AVAILABLE INFORMATION INCLUDING UTILITY COMPANY AND RECORD MAPS AND IS NOT GUARANTEED CORRECT OR COMPLETE. UTILITIES ARE SHOWN TO ALERT THE CONTRACTOR TO THEIR PRESENCE. THE CONTRACTOR AND/OR RESPONSIBLE PARTY IS SOLELY RESPONSIBLE FOR DETERMINING ACTUAL LOCATIONS AND ELEVATIONS OF ALL UTILITIES INCLUDING SERVICES. PRIOR TO ANY CONSTRUCTION, CALL "CALL BEFORE YOU DIG" AT 1-800-922-4455 AND VERIFY ALL UNDERGROUND AND OVERHEAD UTILITY LOCATIONS.



LEGEND:

	- PROPERTY LINE
	- CURB
	- SIDEWALK
	- SIGN
	- POLE
	- LIGHT
	- TREE
	- MINOR CONTOUR
	- MAJOR CONTOUR
	- STORM PIPE
	- STORM MANHOLE
	- CATCH BASIN
	- SANITARY PIPE
	- SANITARY MANHOLE
	- GAS SERVICE
	- GAS GATE
	- TELEPHONE SERVICE
	- WATER SERVICE
	- WATER GATE



Town of Trumbull

Whitney Avenue at Main Street Intersection Improvements

Trumbull, CT

4	11/29/2018	TOWN COMMENTS
3	8/30/2018	CTDOT COMMENTS
2	8/15/2018	CTDOT COMMENTS
1	7/2/2018	CTDOT & TOWN COMMENTS
MARK	DATE	DESCRIPTION
PROJECT NO: T0196-116		
DATE: 08/15/2018		
FILE: T0196-116-1-EX.dwg		
DRAWN BY: ALW		
CHECKED: COG		
APPROVED: DCH		

EXISTING CONDITIONS PLAN

SCALE: 1" = 20'

EXISTING CONDITIONS NOTES:

1. REFERENCE IS MADE TO SURVEY ENTITLED "TOPOGRAPHIC AND RIGHT OF WAY SURVEY LONG HILL GREEN WHITNEY AVENUE BETWEEN MAIN STREET (ROUTE 111) & BROADWAY ROAD TRUMBULL, CONNECTICUT" DATED 12/20/2017, AS PREPARED BY MARTIN SURVEYING ASSOCIATES, LLC. THE INFORMATION ON EXISTING UTILITIES HAS BEEN COMPLIED FROM AVAILABLE INFORMATION INCLUDING UTILITY COMPANY AND RECORD MAPS AND IS NOT GUARANTEED CORRECT OR COMPLETE. UTILITIES ARE SHOWN TO ALERT THE CONTRACTOR TO THEIR PRESENCE. THE CONTRACTOR AND/OR RESPONSIBLE PARTY IS SOLELY RESPONSIBLE FOR DETERMINING ACTUAL LOCATIONS AND ELEVATIONS OF ALL UTILITIES INCLUDING SERVICES. PRIOR TO ANY CONSTRUCTION, CALL "CALL BEFORE YOU DIG" AT 1-800-922-4455 AND VERIFY ALL UNDERGROUND AND OVERHEAD UTILITY LOCATIONS.

TYPICAL SECTION MATERIAL NOTES:

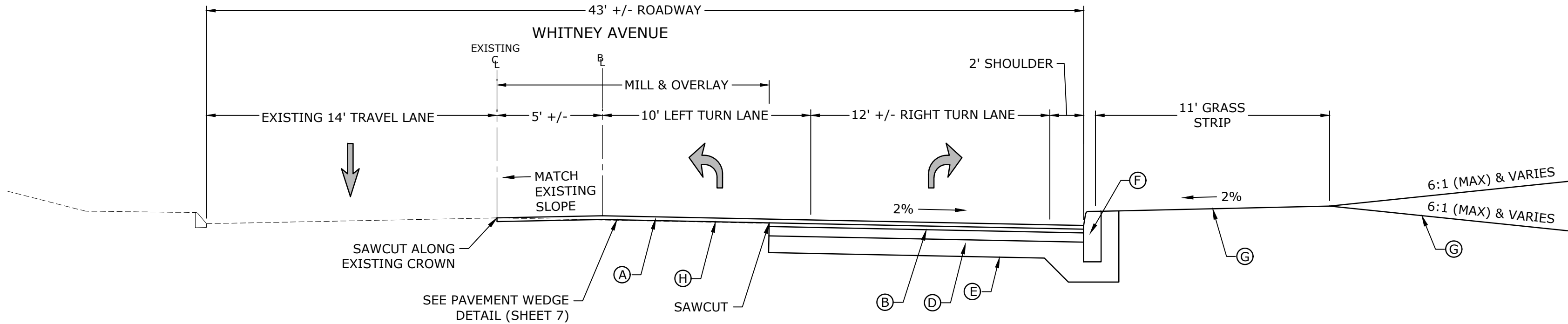
1. FORMATION OF SUBGRADE SHALL BE CONDUCTED IN ACCORDANCE WITH SECTION 2.09 OF THE CONNECTICUT DEPARTMENT OF TRANSPORTATION FORM 817.
2. PROCESSED AGGREGATE BASE SHALL BE PROVIDED IN ACCORDANCE WITH SECTION 3.04 OF THE CONNECTICUT DEPARTMENT OF TRANSPORTATION FORM 817.
3. BITUMINOUS CONCRETE SHALL BE PROVIDED IN ACCORDANCE WITH SECTION 4.06 OF THE CONNECTICUT DEPARTMENT OF TRANSPORTATION FORM 817.
4. TACK COAT MATERIAL SHALL BE PROVIDED IN ACCORDANCE WITH SECTION 4.06 OF THE CONNECTICUT DEPARTMENT OF TRANSPORTATION FORM 817.
5. BITUMINOUS CONCRETE CURBING SHALL BE PROVIDED IN ACCORDANCE WITH SECTION 8.15 OF THE CONNECTICUT DEPARTMENT OF TRANSPORTATION FORM 817.
6. CONCRETE SIDEWALKS AND RAMPS SHALL BE PROVIDED IN ACCORDANCE WITH SECTION 9.21 OF THE CONNECTICUT DEPARTMENT OF TRANSPORTATION FORM 817.
7. BITUMINOUS CONCRETE SIDEWALK SHALL BE PROVIDED IN ACCORDANCE WITH SECTION 9.22 OF THE CONNECTICUT DEPARTMENT OF TRANSPORTATION FORM 817.
8. TOPSOIL AND TURF ESTABLISHMENT SHALL BE PROVIDED IN ACCORDANCE WITH SECTION 9.44 OF THE CONNECTICUT DEPARTMENT OF TRANSPORTATION FORM 817.

CONSTRUCTION NOTES:

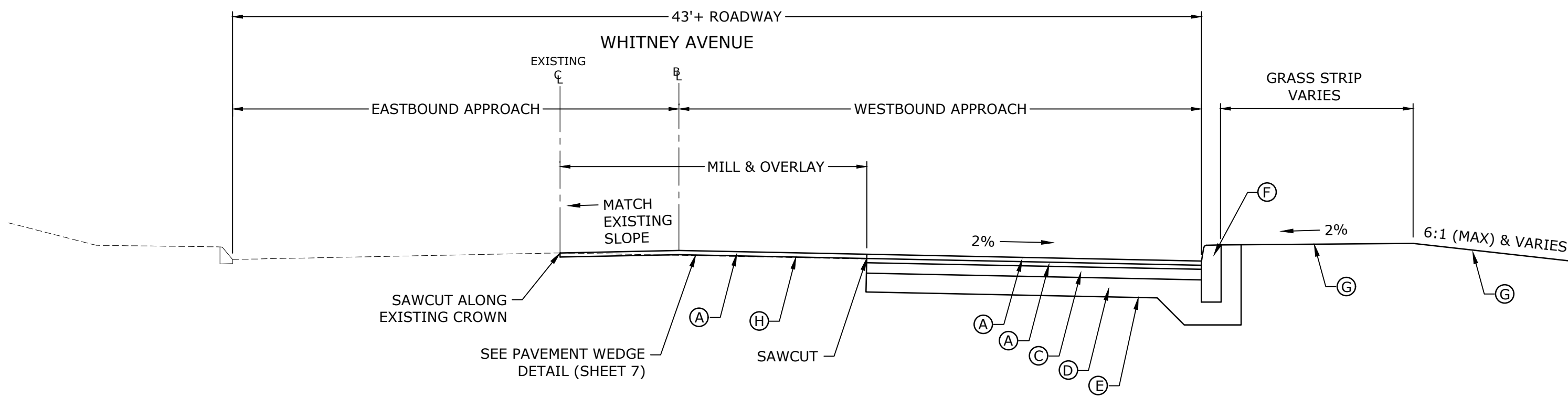
1. CONSTRUCTION SHALL COMPLY WITH THE TOWN OF TRUMBULL STANDARDS & CONNDOT FORM 817.
2. THE CONTRACTOR SHALL OBTAIN A TOWN OF TRUMBULL ROADWAY ENCROACHMENT PERMIT PRIOR TO ANY WORK BEING PERFORMED WITHIN TOWN RIGHT-OF-WAY.
3. THE CONTRACTOR IS RESPONSIBLE FOR THE MAINTENANCE AND PROTECTION OF TRAFFIC. THE CONTRACTOR SHALL PROVIDE A PLAN SHOWING PROPOSED MAINTENANCE AND PROTECTION OF TRAFFIC TO THE TOWN OF TRUMBULL AND THE ENGINEER FOR APPROVAL PRIOR TO THE START OF CONSTRUCTION.
4. ALL UNDERGROUND UTILITIES SHOULD BE CONSIDERED APPROXIMATE LOCATIONS. CONTRACTOR SHALL CONTACT "CALL BEFORE YOU DIG" PRIOR TO ANY EXCAVATION.
5. EXCAVATION OF ANY TYPE SHALL BE ACCOMPLISHED IN SUCH A MANNER THAT UNDERGROUND UTILITIES OR STRUCTURES ARE NOT DAMAGED. IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY FOR ANY DAMAGED INCURRED DURING EXCAVATION OPERATIONS. ALL EXCAVATION SHALL BE IN CONFORMANCE WITH THE LATEST OSHA REQUIREMENTS.
6. ALL WORK TO BE CONFINED WITHIN THE CONTRACT LIMITS WITH NO CLEARING, EXCAVATION, OR DEPOSITION OF FILL TO TAKE PLACE WITHIN REGULATED AREAS OUTSIDE OF THE PROJECT LIMITS.
7. ALL DRIVEWAYS, ROADS, STAIRS, AND SIDEWALKS DISTURBED BY THE CONSTRUCTION IN OR OUTSIDE THE PROJECT LIMIT LINE SHALL BE RETURNED TO THEIR ORIGINAL CONDITION OR BETTER AND SHALL BE GRADED TO MEET THE PROPOSED CONSTRUCTION AS DIRECTED BY THE OWNER'S REPRESENTATIVE AT NO ADDITIONAL COST TO THE OWNER.
8. ANY DAMAGE TO EXISTING CURB, SIDEWALK OR ANY OTHER HIGHWAY APPURTENANCES SHALL BE REPAIRED BY THE CONTRACTOR AT NO COST TO THE TOWN OF TRUMBULL.
9. PROVIDE A CONSTRUCTION SCHEDULE, PRIOR TO THE BEGINNING OF WORK, TO THE TOWN OF TRUMBULL ENGINEERING DEPARTMENT AND INSPECTOR. PROVIDE UPDATED SCHEDULE ON A BI-WEEKLY BASIS THROUGHOUT CONSTRUCTION.
10. IT IS THE RESPONSIBILITY OF EACH BIDDER IN EVALUATING THESE PLANS TO MAKE EXAMINATIONS IN THE FIELD BY VARIOUS METHODS AND OBTAIN NECESSARY INFORMATION FROM AVAILABLE RECORDS, UTILITY COMPANIES, AND INDIVIDUALS AS TO THE LOCATION OF ALL SUBSURFACE STRUCTURES. REVIEW ALL OF THE DRAWINGS AND SPECIFICATIONS ASSOCIATED WITH THIS PROJECT WORK SCOPE PRIOR TO SUBMITTING A BID. SHOULD THE CONTRACTOR FIND A CONFLICT WITH THE DOCUMENTS RELATIVE TO THE SPECIFICATIONS OR APPLICABLE CODES, IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE TOWN ENGINEER IN WRITING PRIOR TO THE BID OPENING. FAILURE BY THE CONTRACTOR TO NOTIFY THE TOWN ENGINEER SHALL CONSTITUTE ACCEPTANCE OF FULL RESPONSIBILITY BY THE CONTRACTOR TO COMPLETE THE SCOPE OF WORK AS DEFINED BY THE DRAWINGS AND IN FULL CONFORMANCE WITH LOCAL REGULATIONS AND CODES.
11. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ALL ELEVATIONS, PROPERTY LINES, LOCATIONS OF UTILITIES AND SITE CONDITIONS IN THE FIELD. IF AN UNFORESEEN INTERFERENCE EXISTS BETWEEN AN EXISTING AND A PROPOSED STRUCTURE, THE CONTRACTOR SHALL NOTIFY THE DESIGN ENGINEER SO THAT THE APPROPRIATE REVISIONS CAN BE MADE.

817 CONSTRUCTION NOTES:

1. REMOVAL OF PAVEMENT MARKINGS ALONG STATE ROADWAYS SHALL BE COMPLETED BY A NON-DESTRUCTIVE METHOD IN COMPLIANCE WITH THE STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD, BRIDGES, AND INCIDENTAL CONSTRUCTION FORM 817 SECTION 12.11 AS REVISED.
2. NEW PAVEMENT MARKINGS SHALL BE PAINTED WITH EPOXY RESIN PAINT IN COMPLIANCE WITH THE STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROADS, BRIDGES, AND INCIDENTAL CONSTRUCTION FOR 817 SECTION 12.10 AS REVISED.
3. NEW SIGN MATERIAL AND SHEETING SHALL BE MADE OF REFLECTIVE MATERIAL IN COMPLIANCE WITH STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROADS, BRIDGES, AND INCIDENTAL CONSTRUCTION FOR 817 SECTION 12.08 AS REVISED. TYPE 1 REFLECTIVE SHEETING SHALL BE USED FOR SIGNS WITH WHITE BACKGROUND, TYPE 3 REFLECTIVE SHEETING SHALL BE USED FOR SIGNS WITH COLORED BACKGROUND EXCEPT FOR SIGNS WITH RED BACKGROUND THAT SHALL BE TYPE 8 OR 9 REFLECTIVE SHEETING.
4. ALL SIGNS AND PAVEMENT MARKINGS INSTALLED ALONG THE STATE ROAD MUST CONFORM TO THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES," THE LATEST STATE OF CONNECTICUT CATALOG OF SIGNS, AND STANDARDS.
5. ANY DAMAGE TO THE EXISTING CURB, SIDEWALK OR ANY OTHER HIGHWAY APPURTENANCES SHALL BE REPLACED BY THE CONTRACTOR AS DIRECTED BY THE DISTRICT 3 PERMIT SECTION AT NO COST TO THE STATE.
6. ALL WORK WITHIN THE STATE RIGHT OF WAY WILL COMPLY WITH THE STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROADS, BRIDGES AND INCIDENTAL CONSTRUCTION FORM 817 WITH THE LATEST SPECIAL PROVISIONS AND TYPICAL STATE STANDARD DETAILS.



TYPICAL SECTION 1 - WHITNEY AVENUE
STA: 0+80 TO 1+63
NO SCALE



TYPICAL SECTION 2 - WHITNEY AVENUE
STA: 1+63 TO 2+03
NO SCALE

TYPICAL SECTION LEGEND:

- (A) - 2" HMA S0.5 TRAFFIC LEVEL 2
- (B) - 3" HMA S1.0
- (C) - 5" HMA S1.0 TRAFFIC LEVEL 2 (PLACED IN TWO EQUAL LIFTS)
- (D) - 12" PROCESSED AGGREGATE BASE
- (E) - FORMATION OF SUBGRADE
- (F) - 6" CONCRETE CURBING
- (G) - 4" TOPSOIL & TURF ESTABLISHMENT
- (H) - TACK COAT

STANDARD ABBREVIATIONS

@	AT	CONC	CONCRETE	MISC	MISCELLANEOUS	SAN	SANITARY
&	AND	CO	CLEAN-OUT	MON	MONUMENT	SCH	SCHEDULE
ABDN('D)	ABANDON(ED)	CPP	CORRUGATED	NIC	NOT IN CONTRACT	SDMH	STORM DRAIN MANHOLE
AC	ACRE	N	POLYETHYLENE PIPE	N	NORTH	SF	SQUARE FEET
AOBE	AS ORDERED BY THE ENGINEER	CY	CUBIC YARDS	NTS	NOT TO SCALE	S	SOUTH
BSMT	BASEMENT	DIP	DUCTILE IRON PIPE	N/A	NOT APPLICABLE	SMH	SANITARY SEWER
BCLC	BITUMINOUS CONCRETE	DWG	DRAWING	N/F	NOW OR FORMERLY	OH	OVERHEAD
BGS	BELOW GROUND SURFACE	EOP	EDGE OF PAVEMENT	PC	POINT OF CURVATURE	STA	STANDARD
BOW	BACK OF WALK	ELEC	ELECTRIC	PCC	POINT OF COMPOUND	STRM	STORM
BL	BASELINE	EL/ELEV	ELEVATION	PCPP	PERFORATED CORRUGATED	T	TANGENT LENGTH/
BW	BOTTOM OF WALL	EMH	ELECTRIC MANHOLE	PCPP	PERFORATED CORRUGATED	TEL	TEL-DATA
BIT	BITUMINOUS	EX/EXIST	EXISTING	PED	POLYETHYLENE	TF	TOP OF FRAME
BC	BOTTOM OF CURB	EG	EXISTING GRADE	PERF.	PERFORATED	TYP	TYPICAL
BLDG	BUILDING	G	GAS	PI	POINT OF INTERSECTION	TC	TOP OF CURB
BOT	BOTTOM	HC	HANDICAP	PT	POINT OF TANGENCY	TW	TOP OF WALL
CATV	CABLE TELEVISION	HYD	HYDRANT	PRC	POINT OF REVERSE	VSJ	VERTICAL STEM JOINT
CIP	CAST IRON PIPE	INC	INCORPORATED	W	WATER	WG/WV	WATER GATE/VALVE
CB	CATCH BASIN	INV	INVERT	PS	PARKING SPACES		
CJ	CONSTRUCTION JOINT	L	LENGTH OF CURVE	PVC	POLYVINYL CHLORIDE		
CL	CENTERLINE	LT	LEFT	R	RADIUS		
CLF	CHAIN LINK FENCE	LOC	LOCATION	RCP	REINFORCED CONCRETE		
CTDEEP	CONNECTICUT DEPT. OF ENERGY & ENV. PROTECTION	LP	LIGHT POLE	REV	REVISION		
CTDOT	CONNECTICUT DEPT. OF TRANSPORTATION	MAX	MAXIMUM	ROW	RIGHT OF WAY		
		MIN	MINIMUM	RT	RIGHT		
		MH	MANHOLE				

Town of
Trumbull

Whitney Avenue
at Main Street
Intersection
Improvements

Trumbull, CT

4	11/29/2018	TOWN COMMENTS
3	8/30/2018	CTDOT COMMENTS
2	8/15/2018	CTDOT COMMENTS
1	7/2/2018	CTDOT & TOWN COMMENTS
MARK	DATE	DESCRIPTION
PROJECT NO: T0196-116		
DATE: 08/15/2018		
FILE: T0196-116-2-TS.dwg		
DRAWN BY: ALW		
CHECKED: COG		
APPROVED: DCH		
TYPICAL SECTIONS AND GENERAL NOTES		
SCALE: NO SCALE		

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COORDINATE NODE TABLE			
POINT NUMBER	DESCRIPTION	NORTHING	EASTING
1	BEGIN CONC CURB	N 662,496.06	E 868,798.00
2	END CONC / BEGIN BIT CURB	N 662,487.56	E 868,791.92
3	PT CURB	N 662,480.10	E 868,772.46
4	PC CURB	N 662,481.98	E 868,742.99
5	PCC CURB	N 662,481.43	E 868,735.93
6	END BIT CURB	N 662,444.34	E 868,647.38
7	BEGIN CONC CURB	N 662,441.44	E 868,642.90
8	END CONC / BEGIN BIT CURB	N 662,437.32	E 868,632.37
9	PT CURB	N 662,446.90	E 868,600.19
10	END BIT CURB	N 662,465.04	E 868,582.19

CURVE TABLE							
CURVE #		STATION	NORTHING	EASTING	DELTA (Δ)	TANGENT	LENGTH
C1	P.C.	0+69.37	N: 662,460.11	E: 868,751.58	29° 31' 54.7"	65.89'	128.86'
	P.I.	1+98.23	N: 662,448.43	E: 868,686.73			
	P.T.		N: 662,406.31	E: 868,636.06			250.00'

CONSTRUCTION PLAN NOTES:

- ALL MANHOLES, CATCH BASINS, AND VALVE BOXES SHALL BE RESET TO FINISHED GRADES.
- TYPE "A" CATCH BASIN GRATES SHALL BE USED AT ALL PROPOSED CATCH BASINS.

ROADWAY LEGEND:

- EXISTING STORM SEWER PIPE
- EXISTING CATCH BASIN
- EXISTING STORM MANHOLE
- EXISTING BITUMINOUS CONCRETE CURB
- PROPOSED BITUMINOUS CONCRETE LIP CURBING
- PROPOSED BITUMINOUS CONCRETE SIDEWALK
- PROPOSED CONCRETE CURB
- PROPOSED CONCRETE SIDEWALK
- PROPOSED SAWCUT LINE
- PROPOSED STORM MANHOLE
- PROPOSED CATCH BASIN
- FULL DEPTH RECONSTRUCTION (SEE TYPICAL SECTION 1)
- FULL DEPTH RECONSTRUCTION (SEE TYPICAL SECTION 2)
- MILL & OVERLAY
- PROPOSED GRADING CUT LIMIT
- PROPOSED GRADING FILL LIMIT

Town of
Trumbull

Whitney Avenue
at Main Street
Intersection
Improvements

Trumbull, CT

CONSTRUCTION PLAN

SCALE: 1" = 20'

SHEET 3

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SOIL EROSION AND SEDIMENTATION CONTROL NOTES:


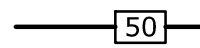
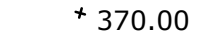
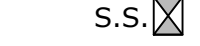
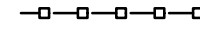
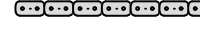



1. UNDERGROUND UTILITY, STRUCTURE AND FACILITY LOCATIONS DEPICTED HEREON HAVE BEEN COMPILED, IN PART, FROM RECORD MAPPING AND OTHER DATA SUPPLIED BY THE RESPECTIVE UTILITY COMPANIES, GOVERNMENTAL AGENCIES AND/OR OTHER SOURCES. THESE LOCATIONS MUST BE CONSIDERED APPROXIMATE IN NATURE. ADDITIONALLY, OTHER SUCH DATA MAY EXIST ON SITE, THE EXISTENCE OF WHICH ARE UNKNOWN TO TIGHE & BOND. THE EXISTENCE, SIZE AND LOCATION OF ALL SUCH FEATURES MUST BE DETERMINED AND VERIFIED IN THE FIELD BY APPROPRIATE AUTHORITIES. ANYONE USING UTILITY INFORMATION AND DATA PROVIDED HEREIN SHALL CONTACT "CALL BEFORE YOU DIG", 1-800-922-4455 OR WWW.CBYD.COM, 72 HOURS IN ADVANCE TO VERIFY THE LOCATION OF UTILITIES PRIOR TO STARTING CONSTRUCTION.
2. ALL SEDIMENTATION AND EROSION CONTROL MEASURES SHALL BE IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS OF THE "2002 CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL" DEP BULLETIN NO 34, AND ALL AMENDMENTS AND ADDENDA THERETO AS PUBLISHED BY THE CONNECTICUT DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION.
3. LAND DISTURBANCE SHALL BE KEPT TO THE MINIMUM NECESSARY FOR CONSTRUCTION.
4. ALL EROSION CONTROL MEASURES SHALL BE INSTALLED AS SHOWN ON THE PLANS AND ELSEWHERE AS ORDERED BY THE OWNER'S REPRESENTATIVE, OR THE TOWN OF TRUMBULL.
5. ALL CATCH BASINS SHALL BE PROTECTED WITH SILT SACKS THROUGHOUT THE CONSTRUCTION PERIOD AND UNTIL ALL DISTURBED AREAS ARE THOROUGHLY STABILIZED.
6. WHEREVER POSSIBLE, EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED PRIOR TO CONSTRUCTION.
7. ADDITIONAL CONTROL MEASURES SHALL BE INSTALLED DURING CONSTRUCTION PERIOD AS ORDERED BY THE OWNER'S REPRESENTATIVE, OR THE TOWN OF TRUMBULL.
8. ALL SEDIMENTATION AND EROSION CONTROL MEASURES SHALL BE MAINTAINED IN EFFECTIVE CONDITION THROUGHOUT THE CONSTRUCTION PERIOD.
9. SEDIMENT REMOVED SHALL BE DISPOSED OF LEGALLY OFFSITE.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTION AND MAINTENANCE OF ALL EROSION CONTROL MEASURES THROUGHOUT THE CONSTRUCTION PERIOD.

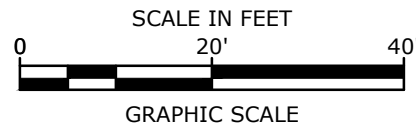
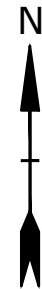
11. THE CONTRACTOR SHALL MAINTAIN A SUPPLY OF SILT FENCE/HAYBALES ON-SITE FOR EMERGENCY REPAIRS.
12. THE CONTRACTOR SHALL UTILIZE APPROVED METHODS/MATERIALS FOR PREVENTING THE BLOWING AND MOVEMENT OF DUST FROM EXPOSED SOIL SURFACES ONTO ADJACENT PROPERTIES AND SITE AREAS.
13. ALL DRAINAGE STRUCTURES SHALL BE INSPECTED WEEKLY BY THE CONTRACTOR AND CLEANED.
14. KEEP ALL PAVED SURFACES CLEAN. SWEEP BEFORE FORECASTED STORMS OR WEEKLY AS NECESSARY. SWEEP IMPACTED PUBLIC ROADS OF ALL DIRT AND DEBRIS AT THE END OF EACH WORK DAY.
15. TREAT ALL UNPAVED SURFACES WITH 4" MINIMUM OF TOPSOIL AND SEEDING PRIOR TO FINAL STABILIZATION.
16. HAYBALE BARRIERS AND SILT FENCING SHALL BE INSTALLED ALONG THE TOE OF CRITICAL CUT AND FILL SLOPES AS SHOWN ON THE PLANS AND AS DIRECTED BY THE OWNER'S REPRESENTATIVE OR THE TOWN OF TRUMBULL.
17. ALL TRUCKS LEAVING THE SITE MUST BE COVERED.
18. ALL SEDIMENTATION AND EROSION CONTROLS SHALL BE CHECKED WEEKLY AND AFTER EACH RAINFALL EVENT. NECESSARY REPAIRS SHALL BE MADE WITHOUT DELAY.
19. PRIOR TO ANY FORECASTED RAINFALL, EROSION AND SEDIMENT CONTROLS SHALL BE INSPECTED AND REPAIRED AS NECESSARY.
20. AFTER ALL DISTURBED AREAS HAVE BEEN STABILIZED, EROSION CONTROLS MAY BE REMOVED ONCE AUTHORIZATION TO DO SO HAS BEEN SECURED FROM THE TOWN OF TRUMBULL. DISTURBED AREAS SHALL BE SEEDED AND MULCHED.

SITE GRADING NOTES:

21. THE GENERAL CONTRACTOR SHALL PROVIDE FIELD ENGINEERING SERVICES TO ESTABLISH AND RECORD GRADES, LINES, AND ELEVATIONS.
22. MAKE SMOOTH TRANSITIONS BETWEEN ALL SLOPE CHANGES AND FEATHER EDGES OF ALL CUTS AND FILLS TO BLEND WITH EXISTING CONDITIONS.
23. ALL EXCAVATED MATERIAL NOT REQUIRED FOR GRADING OR FILLING SHALL BE REMOVED PROMPTLY FROM THE SITE AND DISPOSED OF LEGALLY OFF-SITE PER THE PROJECT SPECIFICATIONS.
24. ANY AREAS DISTURBED BY CONSTRUCTION ACTIVITIES AND IS NOT PROVIDED WITH A SPECIFIC SITE IMPROVEMENT (PAVING, SIDEWALK, LANDSCAPING, ETC.) SHALL HAVE 4" TOPSOIL AND TURF ESTABLISHMENT IN ACCORDANCE WITH THE PROJECT LANDSCAPE SPECIFICATIONS.
25. THE LOCATIONS OF ITEMS NOT DIMENSIONED ON THE DRAWINGS SHALL BE FIELD STAKED BY THE CONTRACTOR AND THEIR LOCATIONS APPROVED BY THE OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION.

SOIL EROSION AND SEDIMENT CONTROL AND GRADING PLAN LEGEND:

-  - MINOR CONTOUR
-  - MAJOR CONTOUR
-  - SPOT ELEVATION
-  - SILT SACK
-  - GEOTEXTILE SILT FENCE
-  - HAYBALE BARRIER
-  - TREE PROTECTION
-  - PROPOSED GRADING CUT LIMIT
-  - PROPOSED GRADING FILL LIMIT



Town of
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Improvements

Trumbull, CT

MARK	DATE	DESCRIPTION
4	11/29/2018	TOWN COMMENTS
3	8/30/2018	CTDOT COMMENTS
2	8/15/2018	CTDOT COMMENTS
1	7/2/2018	CTDOT & TOWN COMMENTS
PROJECT NO:		T0196-116
DATE:		08/15/2018
FILE:		T0196-116-4-SESC.dwg
DRAWN BY:		ALW
CHECKED:		COG
APPROVED:		DCH

GRADING &
SEDIMENTATION AND
EROSION CONTROL PLAN


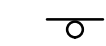


SCALE: 1" = 20'

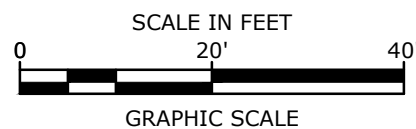
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Tighe & Bond\211\T0196-116-385-CP.dwg

SIGNING AND PAVEMENT MARKING NOTES:

1. INSTALL NEW SIGNS ON NEW METAL SIGN POSTS AS DIRECTED IN ACCORDANCE WITH TRAFFIC STANDARD SHEETS TR-1208_01 "SIGN PLACEMENT AND RETROREFLECTIVE STRIP DETAILS" AND TR-1208_02 "METAL SIGN POSTS AND SIGN MOUNTING DETAILS".
2. EXACT LOCATIONS OF THE SIGNS TO BE VERIFIED BY THE ENGINEER FOLLOWING LOCATION MARKING BY CONTRACTOR. THE CONTRACTOR SHALL ASSURE ADEQUATE SIGHTLINE IS PROVIDED TO SIGNS. ANY CLEARING OR TRIMMING NEEDED TO PROVIDE SIGHTLINE SHALL BE INCLUDED IN CLEARING AND GRUBBING.
3. RESET EXISTING SIGNS DISTURBED BY CONSTRUCTION.
4. SIGNS SHALL BE AT LEAST 10 FEET FROM ALL UTILITY POLES.
5. ALL PAVEMENT MARKINGS TO BE INSTALLED IN ACCORDANCE WITH STANDARD SHEETS TR-1210_04 "PAVEMENT MARKING LINES AND SYMBOLS" AND TR-1210_08 "PAVEMENT MARKINGS FOR NON FREEWAYS".

SIGNING AND PAVEMENT MARKING LEGEND:

- | | |
|---|--|
|  | - EXISTING GROUND MOUNTED SIGN |
|  | - PROPOSED SIGN (GROUND MOUNTED) |
|  | - PROPOSED WHITE EPOXY RESIN DIRECTIONAL ARROW |
|  | - PROPOSED SIGNS BY CONNDOT SIGN NUMBER |
| S.W.E.L. | - SINGLE WHITE EDGE LINE - 4" WHITE EPOXY RESIN PAVEMENT MARKING |
| D.Y.C.L. | - DOUBLE YELLOW CENTERLINE LINE - 4" YELLOW EPOXY RESIN PAVEMENT MARKING |
| S.W.S.L. | - SINGLE WHITE SKIP LINE, 4" WHITE EPOXY RESIN PAVEMENT MARKING |



Town of Trumbull

Whitney Avenue at Main Street Intersection Improvements

Trumbull, CT

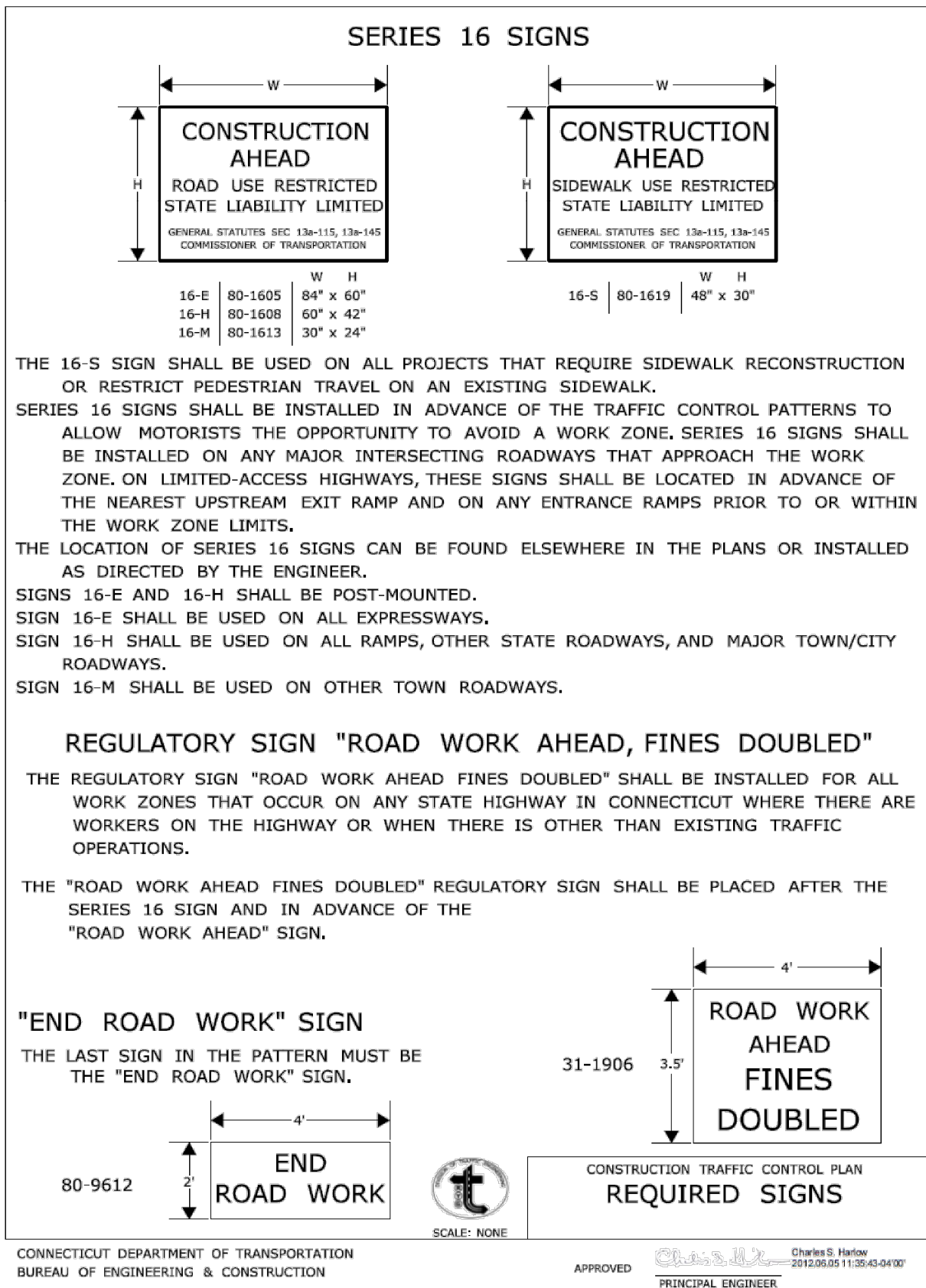
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3	8/30/2018	CTDOT COMMENTS
2	8/15/2018	CTDOT COMMENTS
1	7/2/2018	CTDOT & TOWN COMMENTS
PROJECT NO: T0196-116		
DATE: 08/15/2018		
FILE: T0196-116-385-CP.dwg		
DRAWN BY: ALW		
CHECKED: COG		
APPROVED: DCH		

SIGNING AND PAVEMENT MARKING PLAN

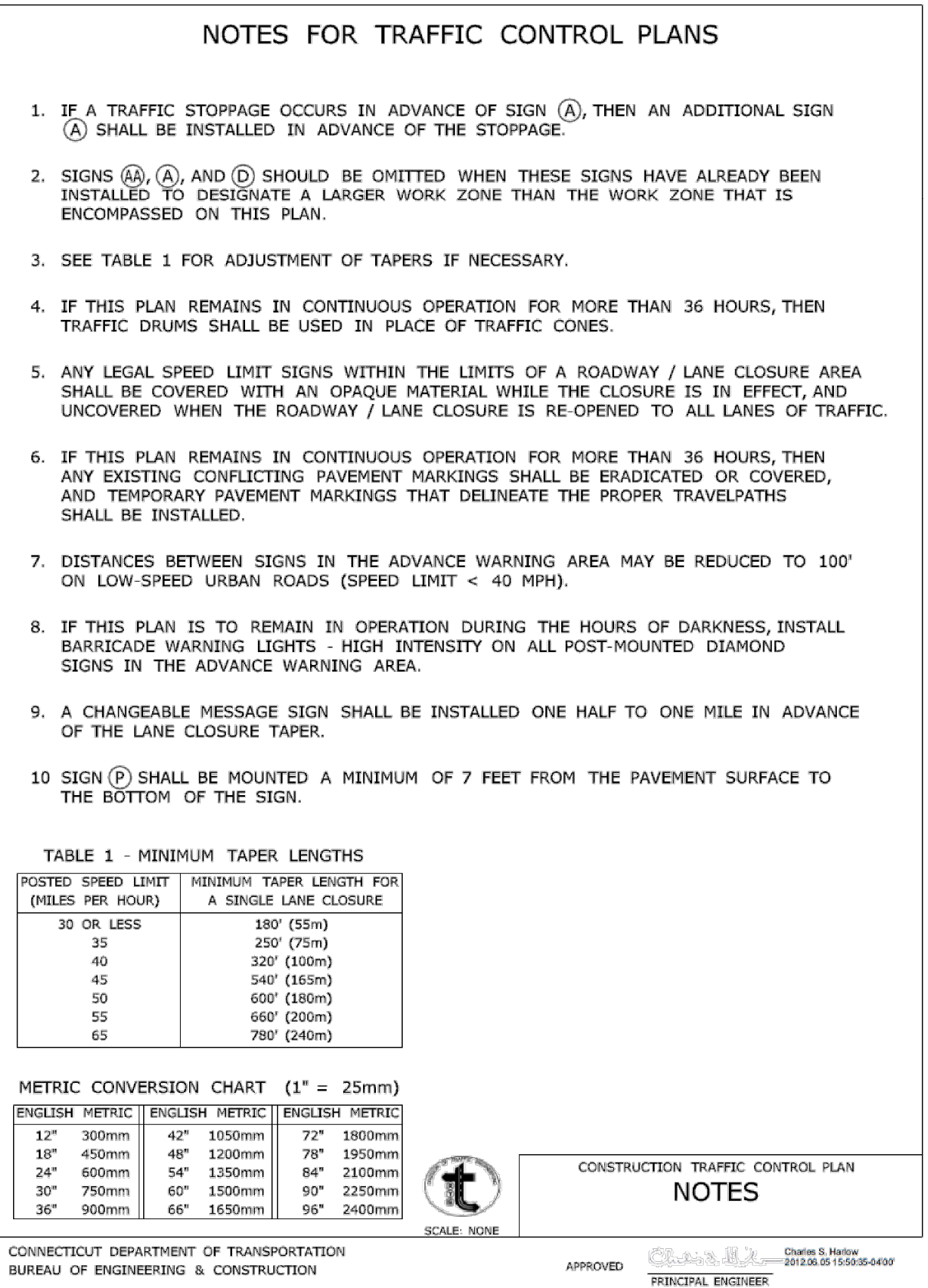
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SHEET 5

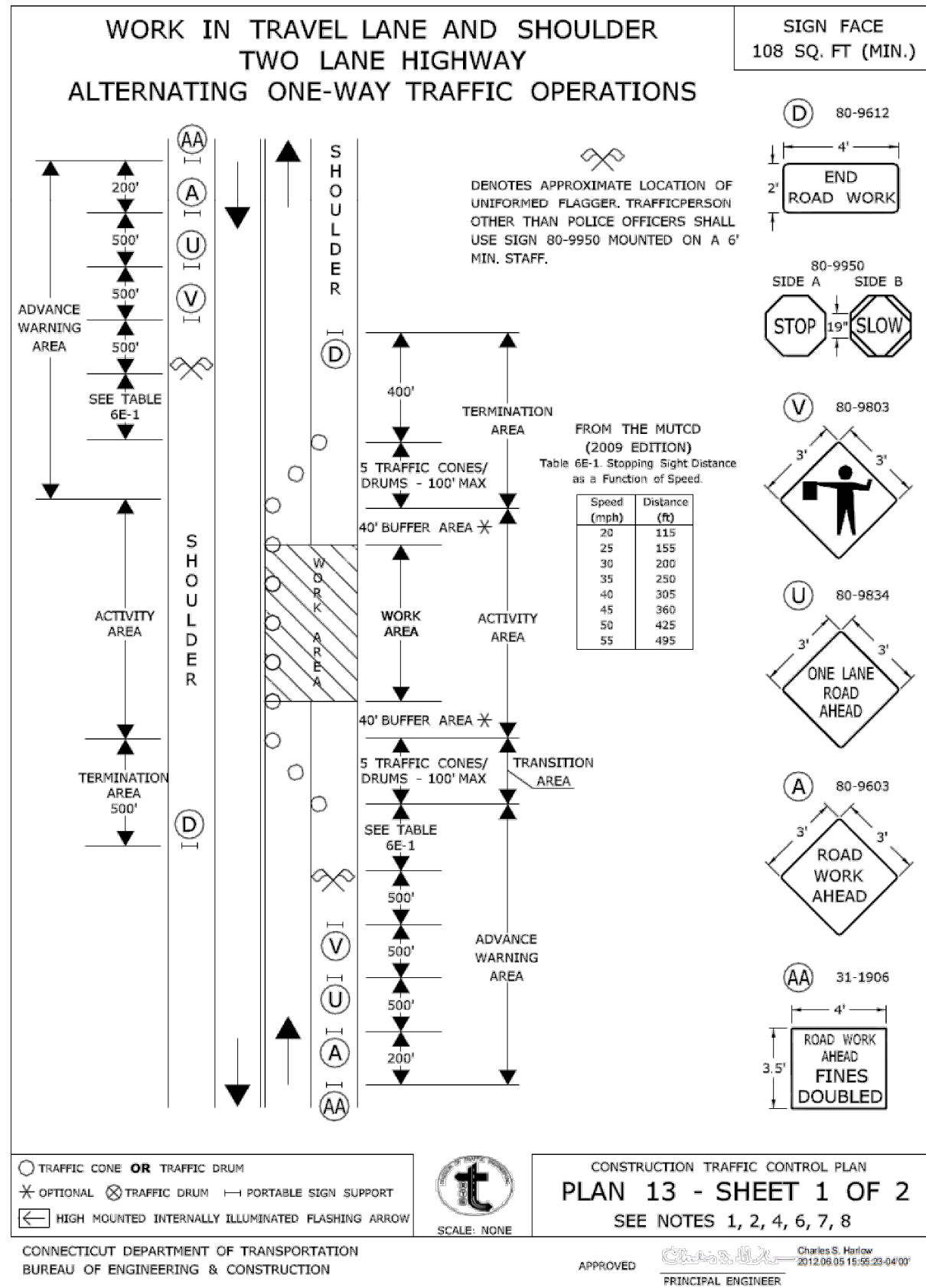
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Tighe & Bond\A\T0196\116 - Whitney Ave-Route 111\Drawings Figures\AutoCAD\Sheets\T0196-116-G-MPT.dwg



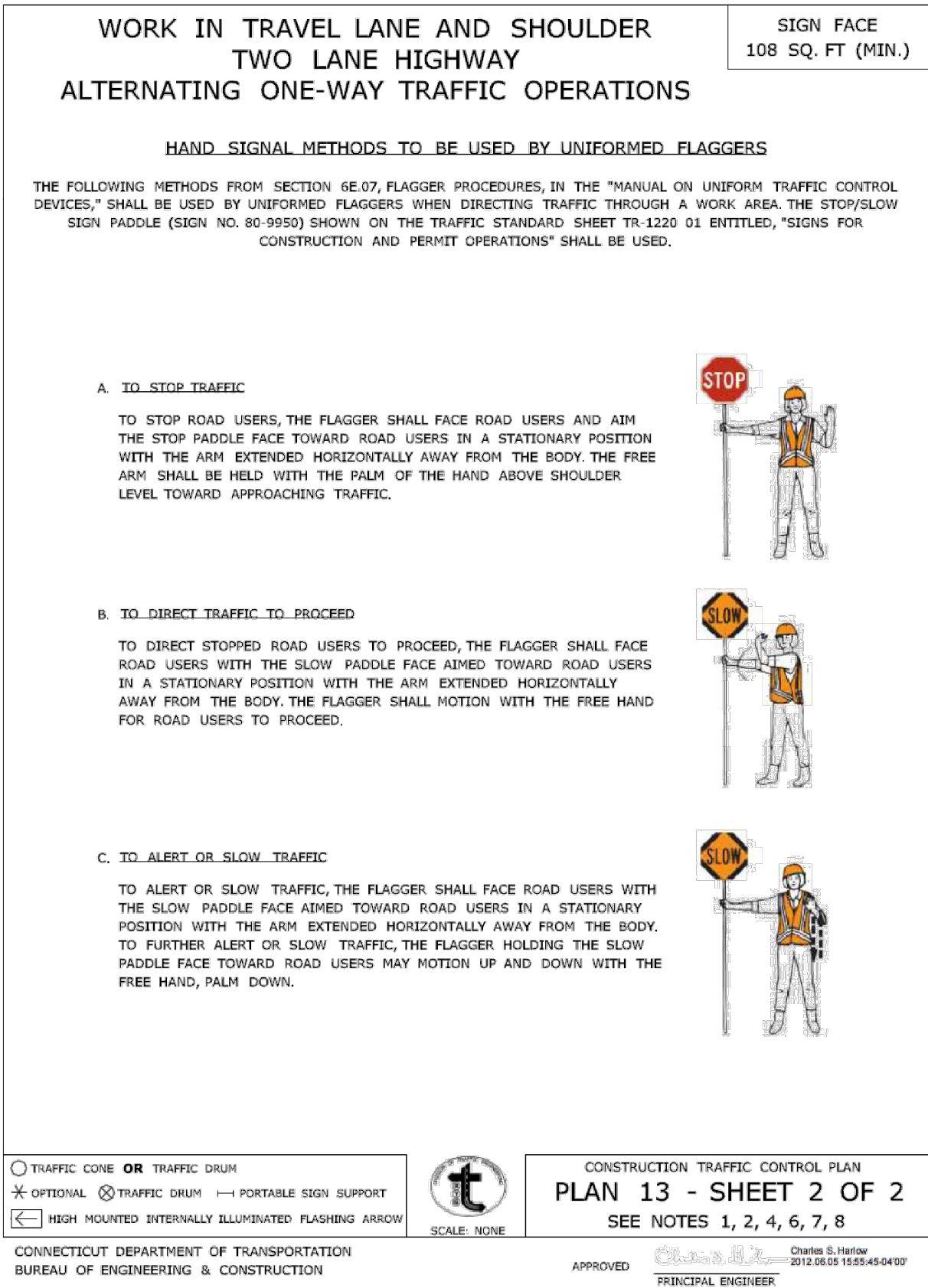
ITEM #971001A



ITEM #971001A



ITEM #971001A



ITEM #971001A

Town of Trumbull

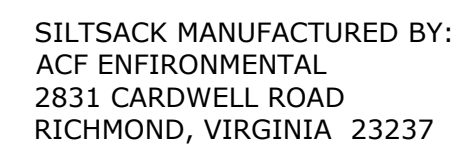
Whitney Avenue
at Main Street
Intersection
Improvements

Trumbull, CT

4	11/29/2018	TOWN COMMENTS
3	8/30/2018	CTDOT COMMENTS
2	8/15/2018	CTDOT COMMENTS
1	7/2/2018	CTDOT & TOWN COMMENTS
MARK	DATE	DESCRIPTION
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DATE: 08/15/2018		
FILE: T0196-116-6-MPT.dwg		
DRAWN BY: ALW		
CHECKED: COG		
APPROVED: DCH		

MAINTENANCE AND
PROTECTION OF TRAFFIC
DETAILS

SCALE: NO SCALE



30'

12"

6"

6"

GEOTEX 2130 OR EQUIVALENT
GEOTEXTILE SECURED TO
POSTS WITH METAL CLIPS
@ 4' O.C., ALTERNATING
ORIENTATION

FLOW

ANCHOR FABRIC WITH
CRUSHED STONE OR
SOIL

1.5" SQUARE HARD WOOD
POSTS 8'-0" O.C.
MAXIMUM

NOTES:

1. CONSTRUCT CURBING IN SECTIONS NOT TO EXCEED 10 FEET IN LENGTH, SUCH THAT THE CURBING JOINTS ALIGN WITH JOINTS IN THE CONCRETE PAVEMENT SLAB. NO SECTION SHALL BE LESS THAN 6 FEET IN LENGTH.

The diagrams illustrate the construction of a straw bale wall in four steps:

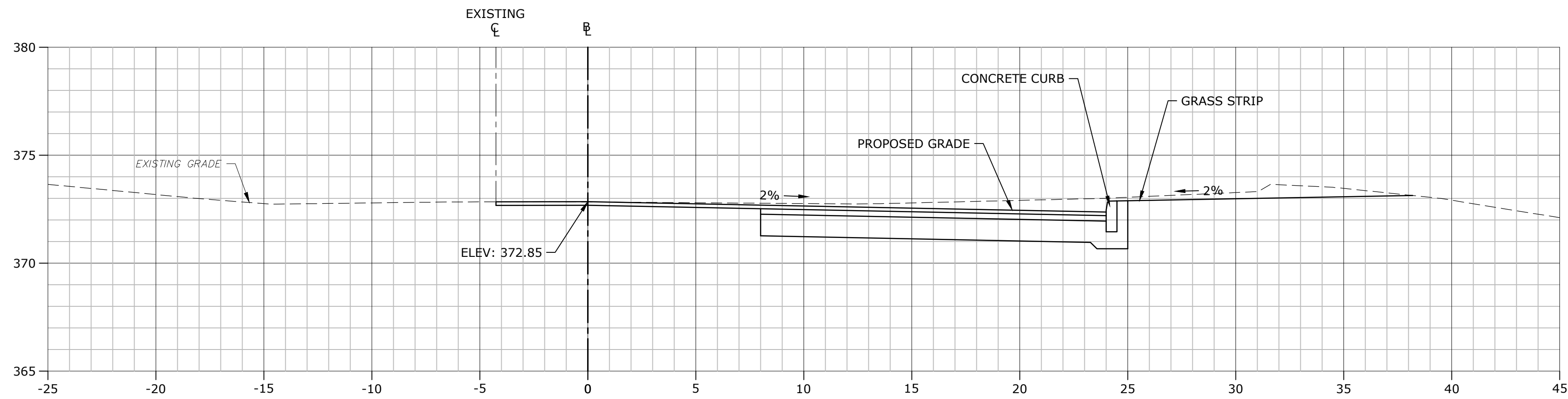
- 1. EXCAVATE A TRENCH 4" DEEP AND THE WIDTH OF THE HAYBALE**: A cross-section diagram showing a rectangular trench dug into the ground. A hay bale is shown being placed into the trench. A label points to the trench with the text "TRENCH, WIDTH OF BALE".
- 2. PLACE AND STAKE HAYBALES TWO STAKES PER BALE**: A cross-section diagram showing a hay bale secured in the trench by two vertical wooden stakes, one on each side. Labels include "STAKE", "HAYBALE", and "BINDING WIRE OR TWINE".
- 3. WEDGE LOOSE STRAW BETWEEN BALES TO CREATE A CONTINUOUS BARRIER**: A top-down diagram showing two hay bales stacked vertically. Small squares represent the bales, and a horizontal line between them is labeled "PACKED STRAW".
- 4. BACKFILL AND COMPACT EXCAVATED SOIL ON THE UPHILL SIDE OF THE BARRIER TO PREVENT PIPING**: A cross-section diagram showing the completed wall. The area behind the wall is filled with soil and compacted. A label points to this area with the text "COMPACTED BACKFILL". A vertical dimension line indicates the backfill height is "2' MIN".

Diagram illustrating a cross-section of a road construction project. The diagram shows the existing road profile (dashed line) and the proposed road profile (solid line). Key features include:

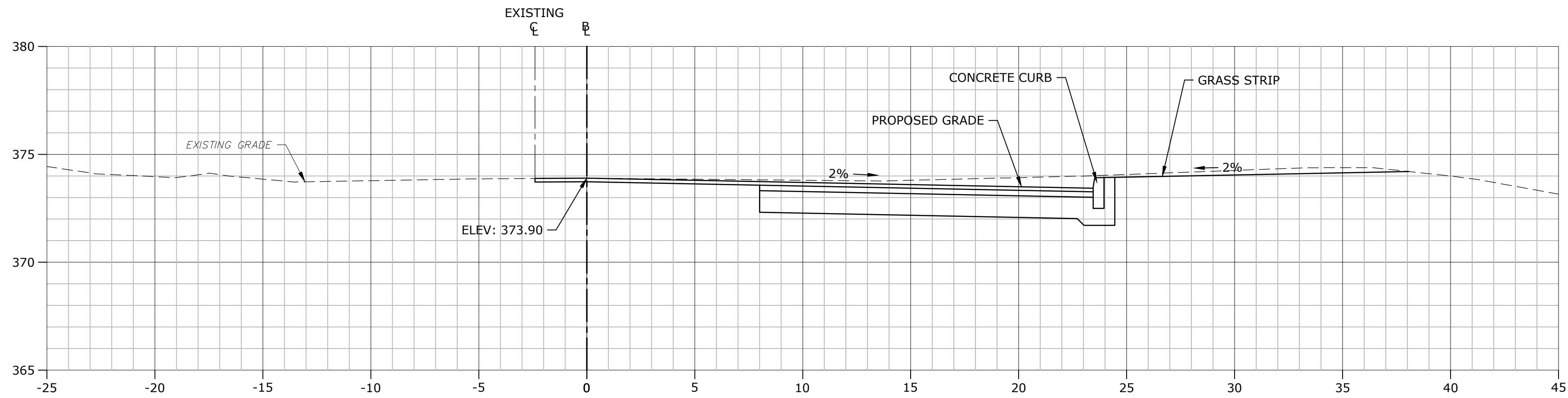
- EXISTING GRADE**: The current road surface level.
- EXTEND EXISTING CROSS SLOPE TO PROPOSED BASELINE**: A note indicating the extension of the existing cross-slope to the proposed baseline.
- EXISTING C**: The centerline of the existing road.
- PROPOSED C**: The centerline of the proposed road.
- 2" S0.375 OVERLAY**: A 2-inch thick overlay of S0.375 material.
- S0.375 WEDGE (1" MIN. THICKNESS)**: A wedge-shaped area of S0.375 material, at least 1 inch thick.
- PROPOSED GRADE**: The new road surface level.
- 2" MILL**: A 2-inch thick mill layer.
- FULL DEPTH RECONSTRUCTION (SEE TYPICAL SECTIONS 1 & 2)**: A section of the road requiring full depth reconstruction.

SHEET 7

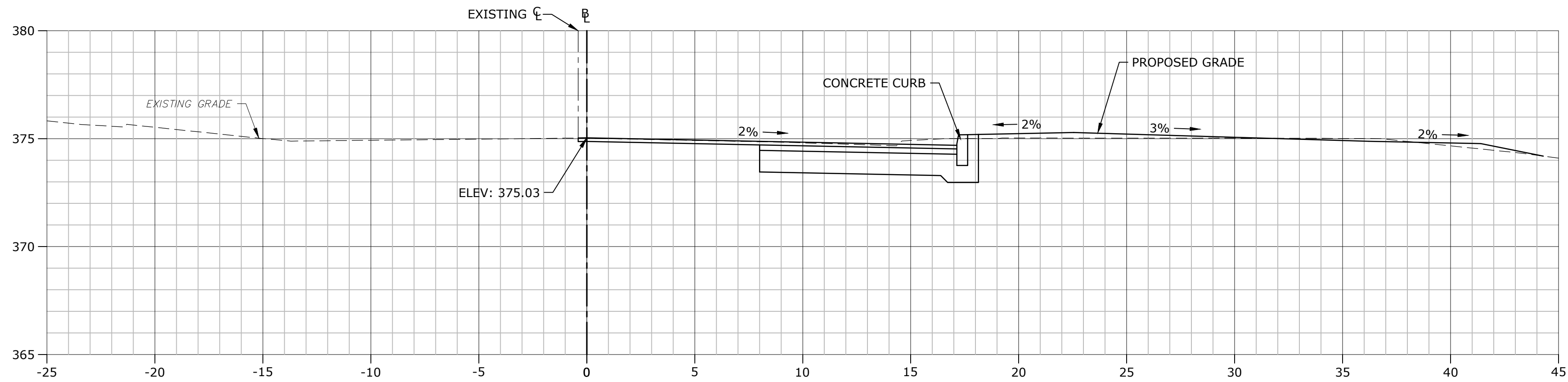
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Tighe & Bond\A\T0196\116_Whitney Ave-Route 111\Drawings_Figures\AutoCAD\Sheets\T0196-116-889-XS.dwg



STATION: 1+00



STATION: 0+75



STATION: 0+50

**Town of
Trumbull**

**Whitney Avenue
at Main Street
Intersections
Improvements**

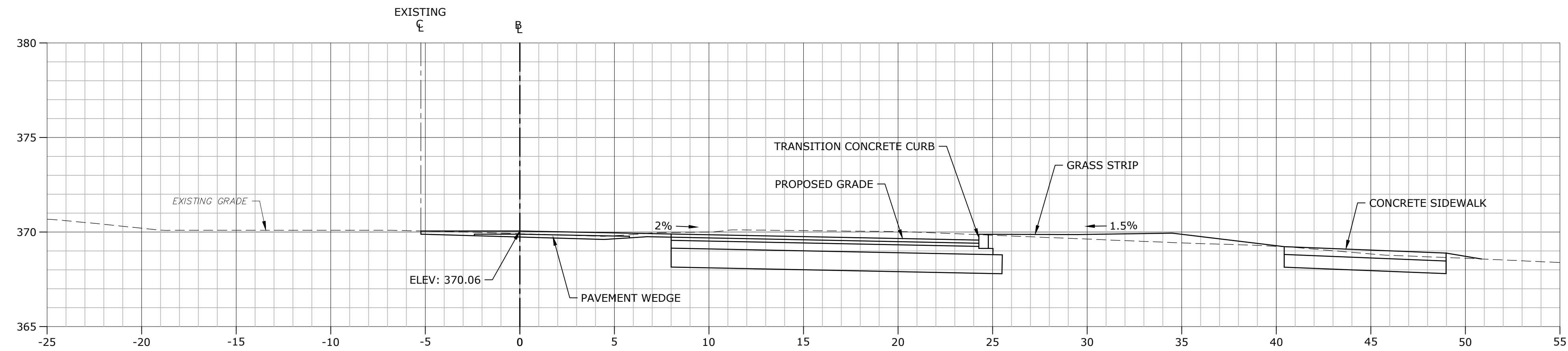
Trumbull, CT

4	11/29/2018	TOWN COMMENTS
3	8/30/2018	CTDOT COMMENTS
2	8/15/2018	CTDOT COMMENTS
1	7/2/2018	CTDOT & TOWN COMMENTS
MARK	DATE	DESCRIPTION
PROJECT NO:		T0196-116
DATE:		08/15/2018
FILE:		T0196-116-889-XS.dwg
DRAWN BY:		ALW
CHECKED:		COG
APPROVED:		DCH

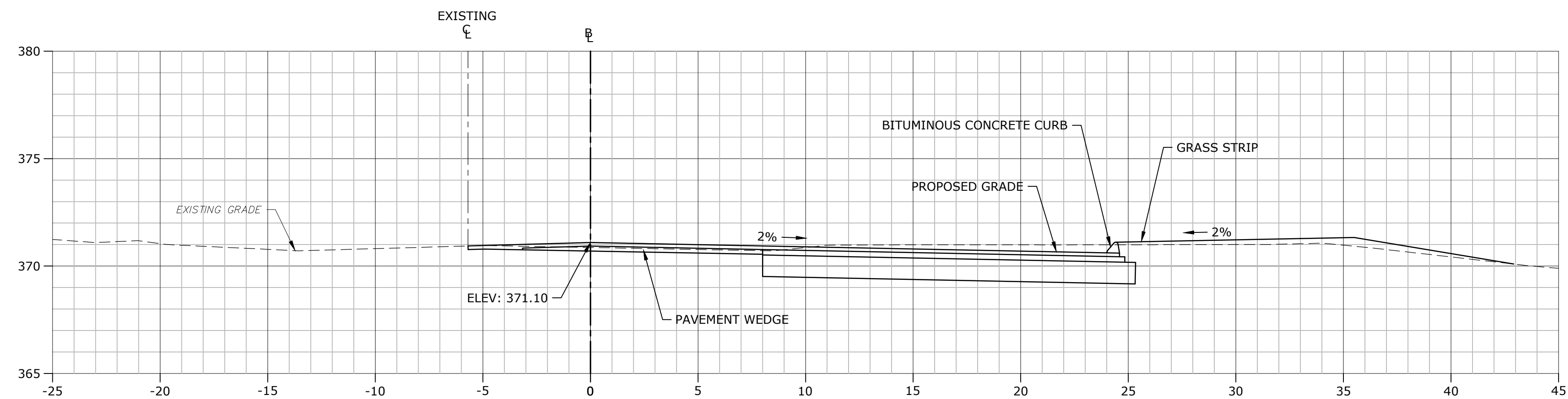
CROSS SECTIONS
STA 0+50 TO 1+00

SCALE: 1" = 4'

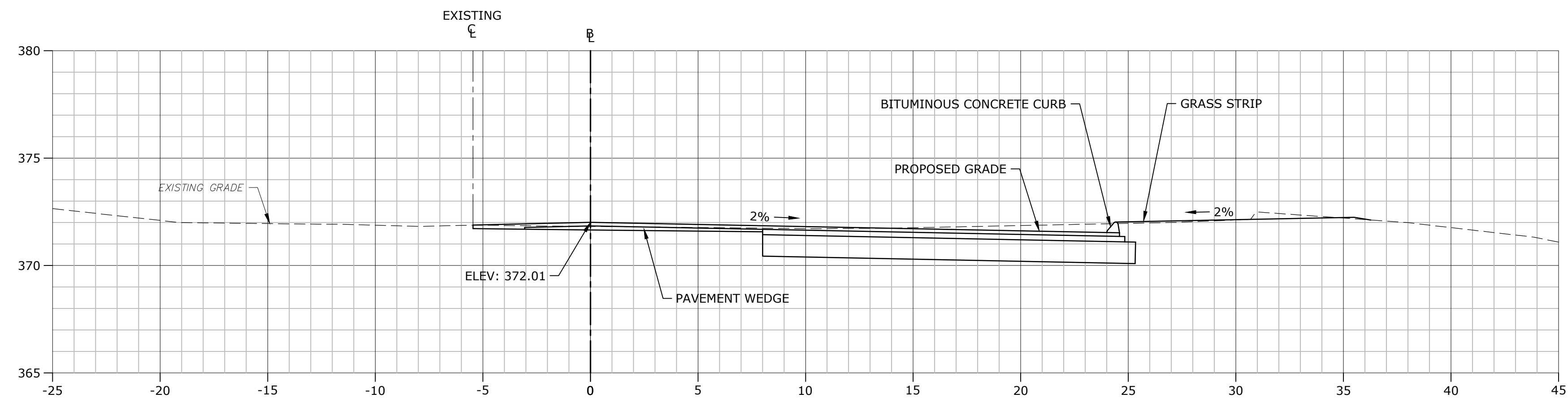
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Tighe & Bond\1\T0196\116 Whitney Ave-Route 111\Drawings Figures\AutoCAD Sheets\T0196-116-889-XS.dwg



STATION: 1+75



STATION: 1+50



STATION: 1+25

**Town of
Trumbull**

**Whitney Avenue
at Main Street
Intersections
Improvements**

Trumbull, CT

4	11/29/2018	TOWN COMMENTS
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MARK	DATE	DESCRIPTION
PROJECT NO:		T0196-116
DATE:		08/15/2018
FILE:		T0196-116-889-XS.dwg
DRAWN BY:		ALW
CHECKED:		COG
APPROVED:		DCH

CROSS SECTIONS
STA 1+25 TO 1+75

SCALE: 1" = 4'

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Tighe & Bond, Inc. 111 Whitney Avenue
Tighe & Bond, Inc. 111 Whitney Avenue
Tighe & Bond, Inc. 111 Whitney Avenue



SU-40 SBL



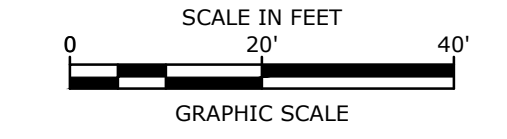
SU-40 WBL



SU-40 WBR



SU-40 NBR



Town of Trumbull

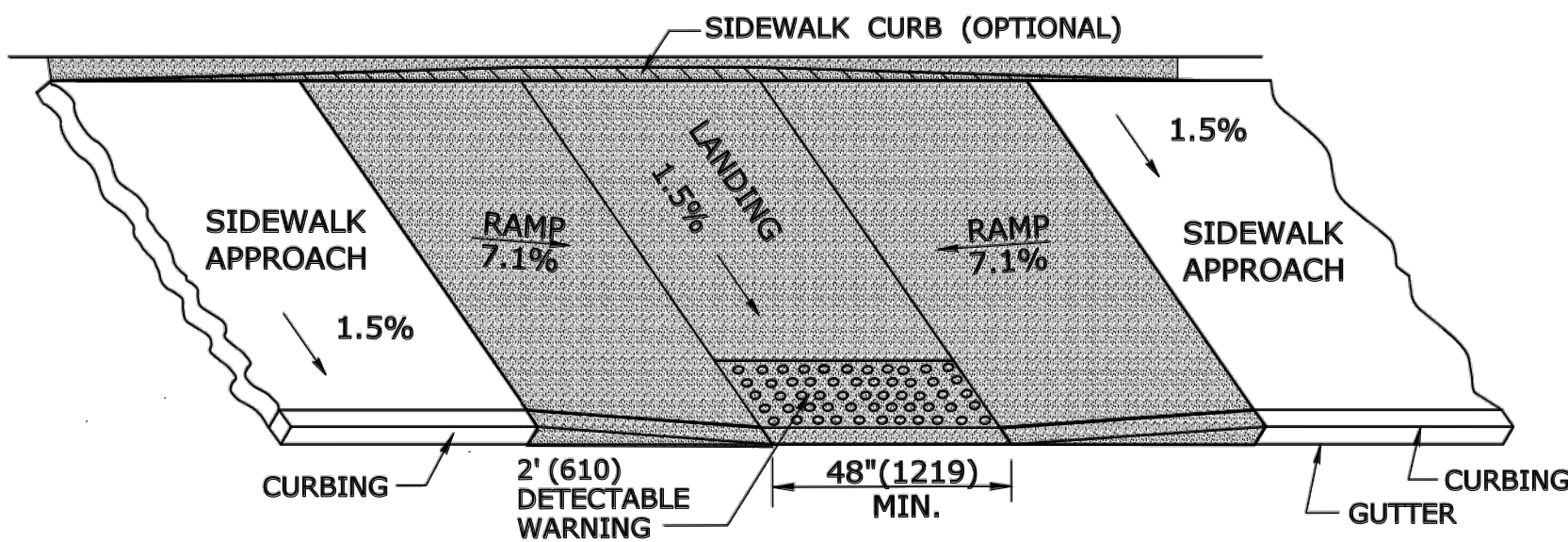
Whitney Avenue at Main Street Intersection Improvements

Trumbull, CT

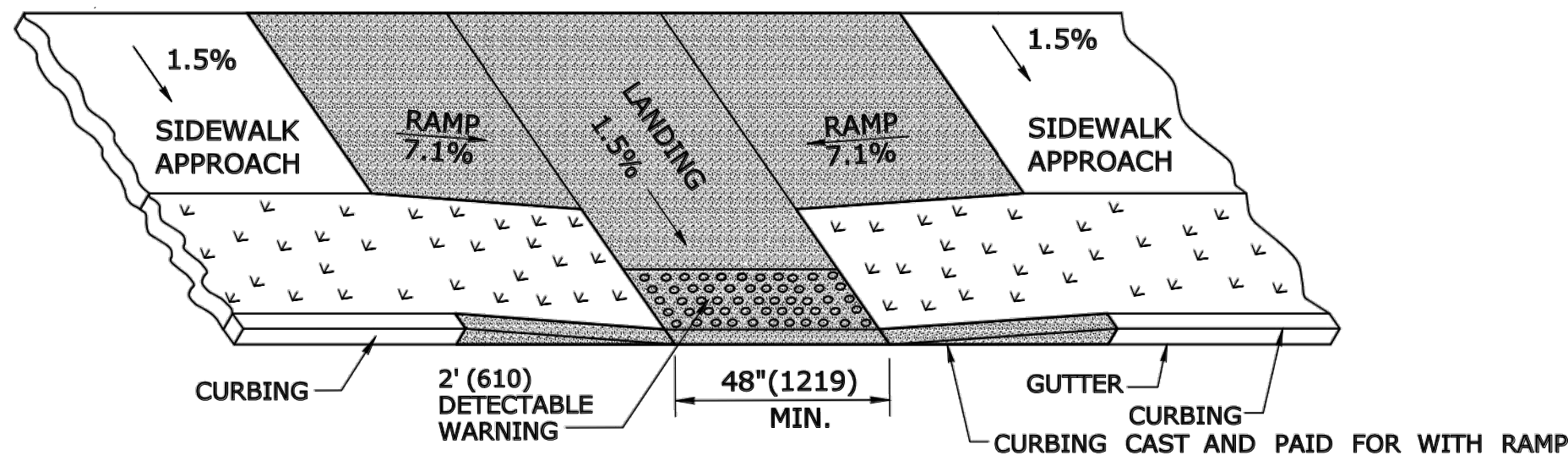
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3	8/30/2018	CTDOT COMMENTS
2	8/15/2018	CTDOT COMMENTS
1	7/2/2018	CTDOT & TOWN COMMENTS
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CHECKED:		COG
APPROVED:		DCH

TRUCK TURN MOVEMENTS

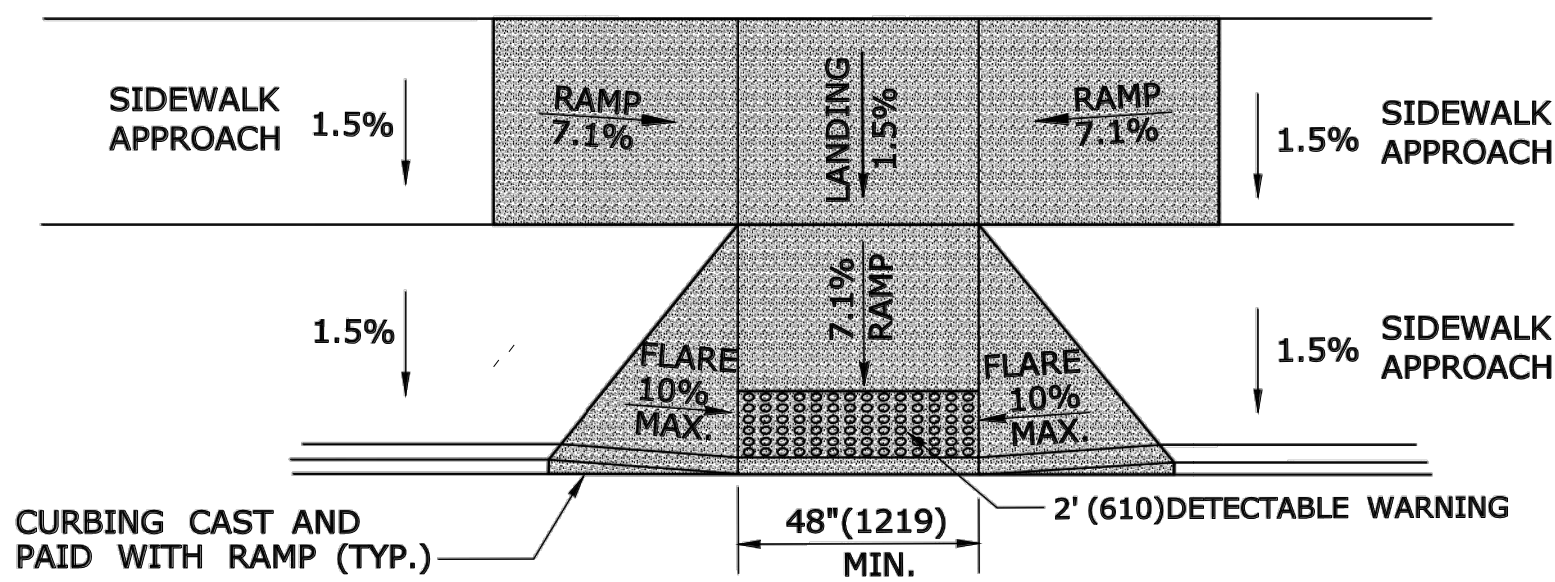
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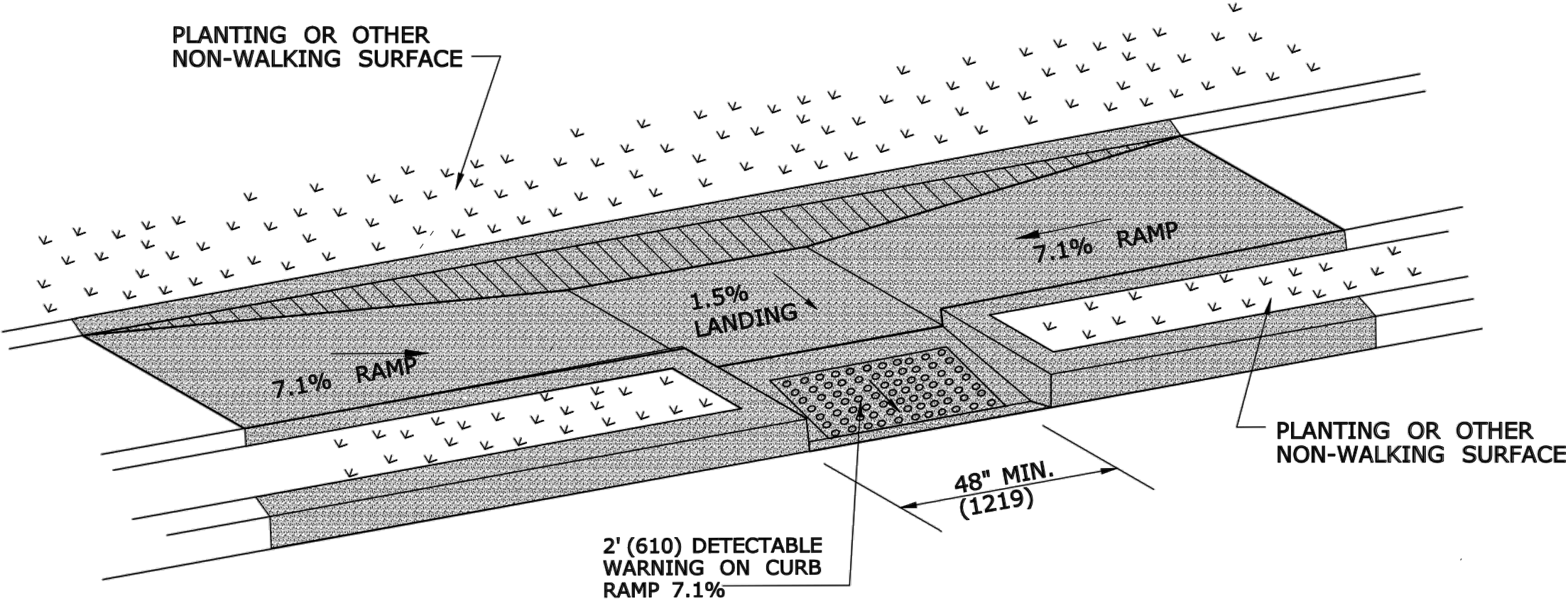
PARALLEL SIDEWALK RAMP (TYPE 1) NO UTILITY STRIP



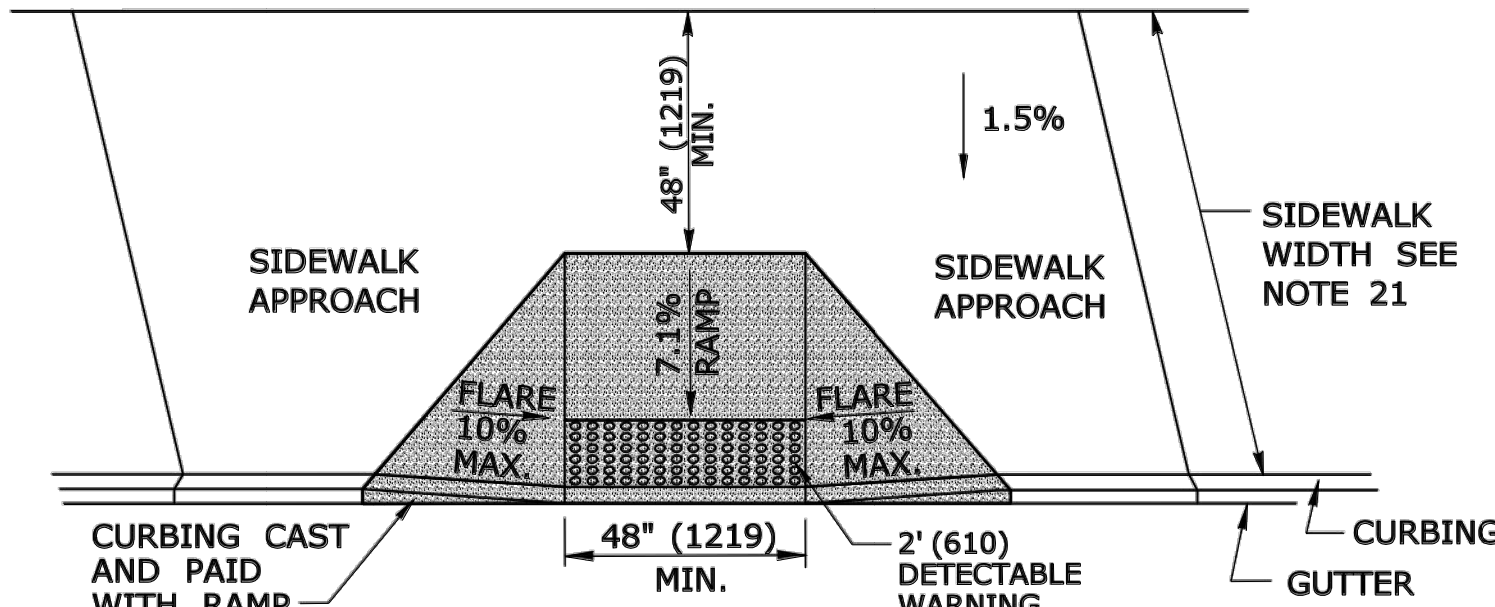
**PARALLEL SIDEWALK RAMP (TYPE 1a)
WITH UTILITY / GRASS STRIP**



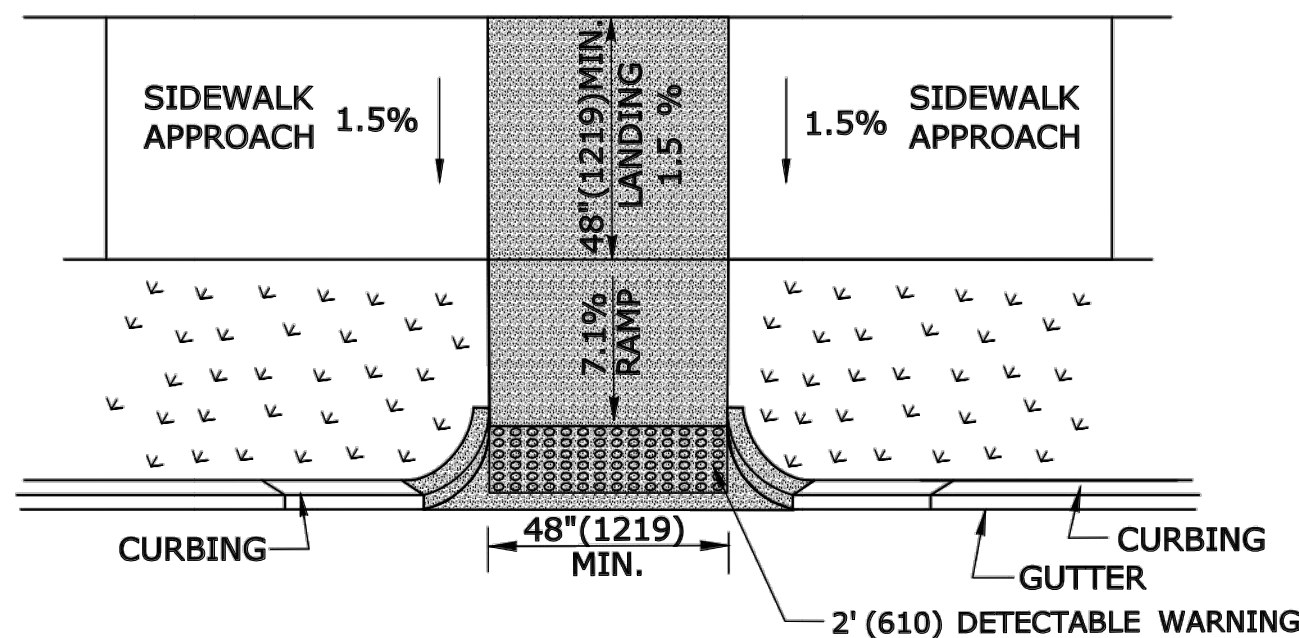
**PARALLEL/PERPENDICULAR SIDEWALK RAMP
NO UTILITY/GRASS STRIP (TYPE 1b)**



**PARALLEL SIDEWALK RAMP (TYPE 1c)
WITH UTILITY / GRASS STRIP**

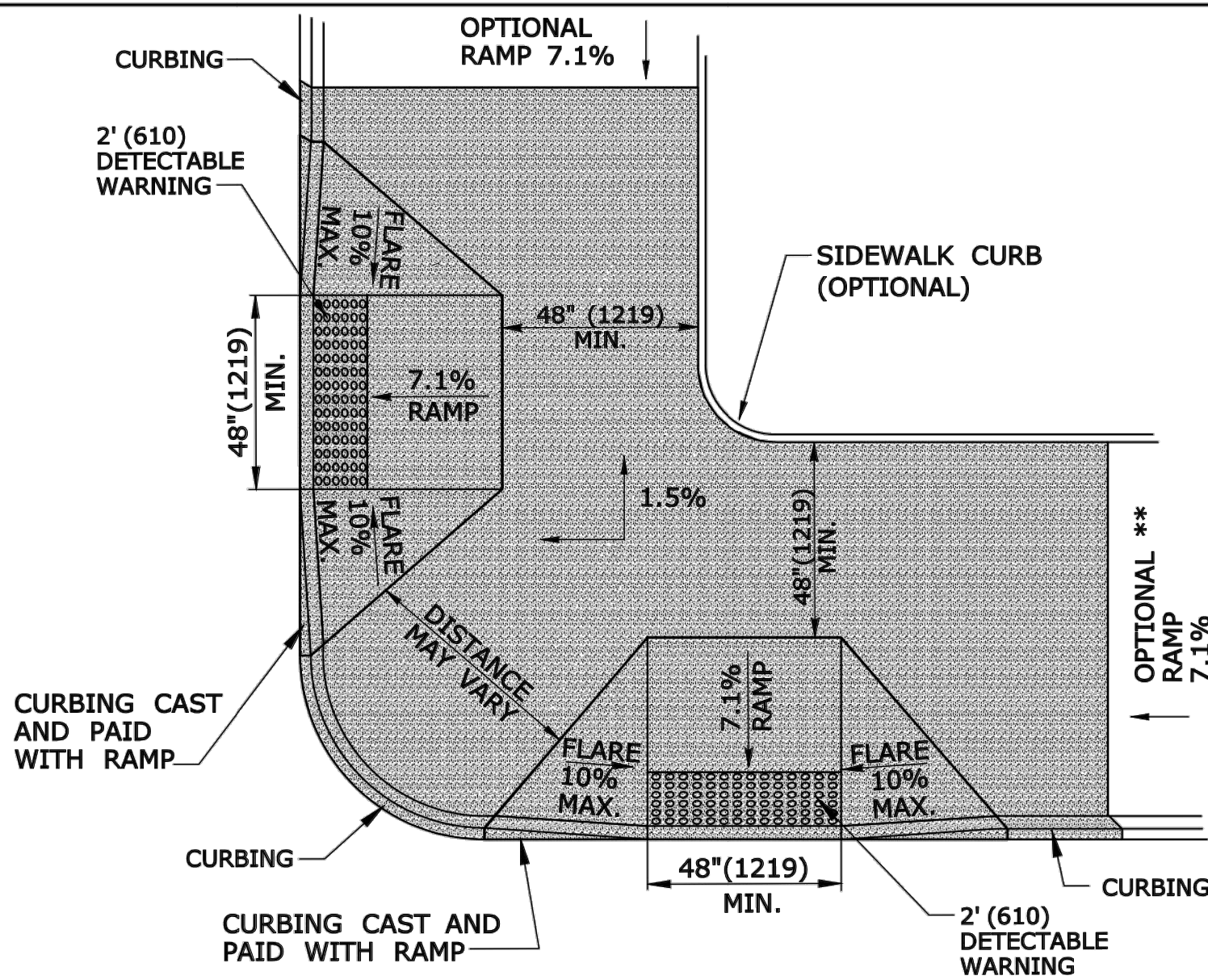


**PERPENDICULAR SIDEWALK RAMP
W/ 48\" (1219) MIN. BY PASS LANDING (TYPE 2)**



**PERPENDICULAR SIDEWALK RAMP
W/CURB RETURNS / UTILITY GRASS STRIP (TYPE 2a)**

* OPTIONAL FLARE ONE SIDE OF RAMP

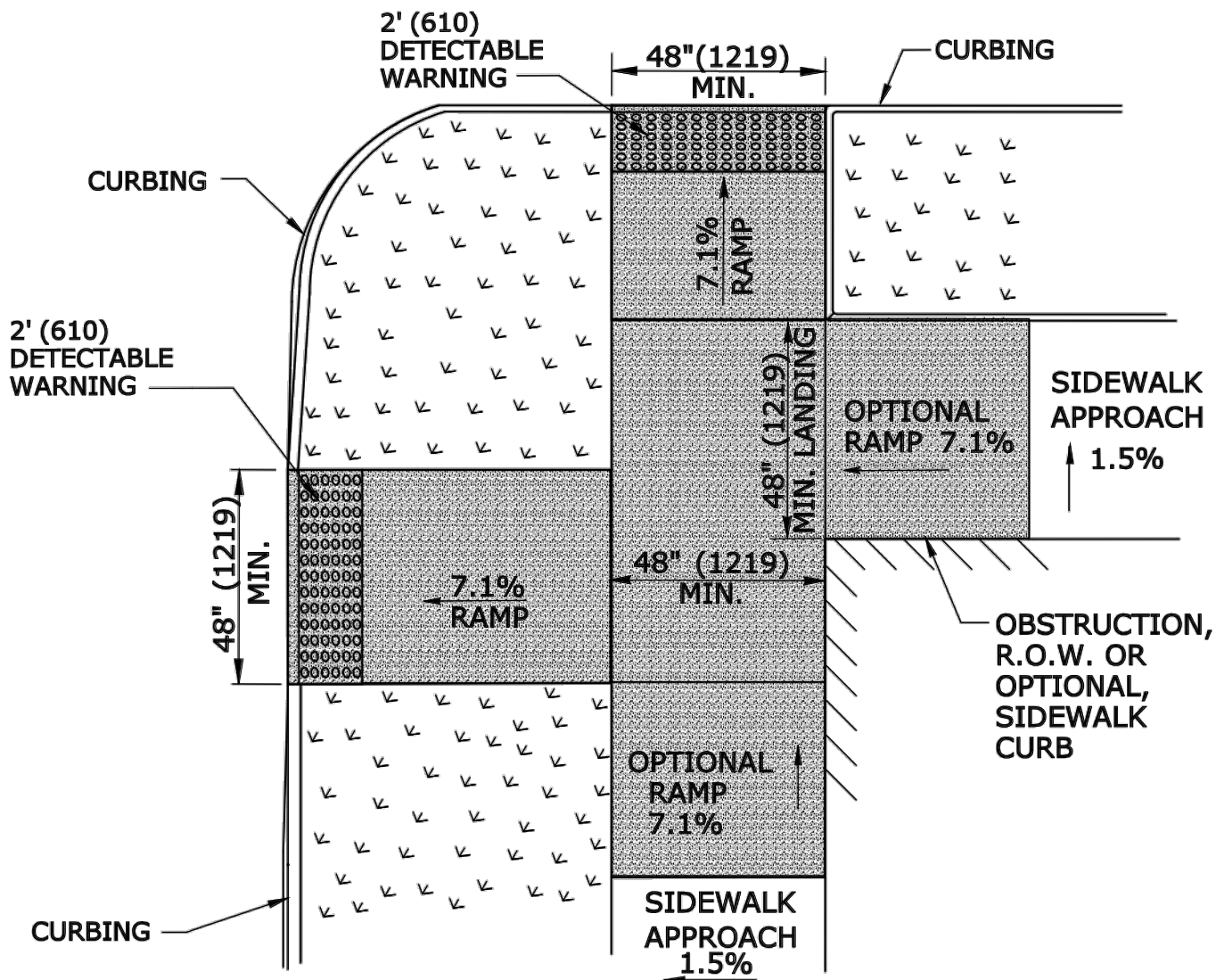


**DUAL PERPENDICULAR
SIDEWALK RAMPS (TYPE 3)**

SEE NOTES 19
* OPTIONAL CURB RETURN ON ONE SIDE OF RAMP
** SEE NOTE 23

GENERAL NOTES:

1. MAXIMUM SLOPES OF ADJOINING GUTTERS AND ROAD SURFACES IMMEDIATELY ADJACENT TO THE SIDEWALK RAMP SHOULD NOT EXCEED 5%. THE MAXIMUM GRADE DIFFERENCE BETWEEN THE GUTTER AND CURB RAMP SHALL NOT EXCEED 13%. SEE DETAIL 1 ON SHEET 4.
2. RAMP GRADE SHALL BE UNIFORM, FREE OF SAGS AND ABRUPT GRADE CHANGES. RUNNING SLOPES OF RAMPS SHALL NOT EXCEED 8.33% AND SHALL NOT EXCEED 15' (4.5m) WITHOUT PROVIDING A LANDING.
3. ALL RAMPS SHALL BE CONSTRUCTED OF CLASS "F" CONCRETE IN ACCORDANCE WITH CONNECTICUT STANDARD SPECIFICATIONS.
4. SIDEWALK RAMPS SHALL HAVE A COARSE BROOM FINISH TRANSVERSE TO THE SLOPE OF THE RAMP. THE SURFACE OF ALL SIDEWALK RAMPS SHALL BE STABLE, FIRM AND SLIP RESISTANT. SURFACE DISCONTINUITIES SHALL NOT EXCEED 1/2" (13) MAX. VERTICAL DISCONTINUITIES BETWEEN 1/4" (6.4) AND 1/2" (13) MAX. SHALL BE BEVELED 1:2 MINIMUM APPLIED ACROSS THE ENTIRE LEVEL CHANGE.
5. DIAGONAL SIDEWALK RAMPS AT MARKED CROSSINGS SHALL BE WHOLLY CONTAINED WITHIN THE MARKINGS, EXCLUDING ANY FLARED SIDES. DIAGONAL AND PERPENDICULAR RAMPS SHALL HAVE THE RAMP CUT PERPENDICULAR TO THE TANGENT OF THE CURB RADIUS FOR THE DESIGNATED ACCESSIBLE ROUTE. BOTH LONGITUDINAL SIDES OF THE RAMP SHOULD BE THE SAME LENGTH. SKEWED RAMPS SHOULD BE AVOIDED. FLARES ARE NOT CONSIDERED PART OF PEDESTRIAN ACCESS ROUTE. DIAGONAL RAMPS SHOULD NOT BE INSTALLED WHERE CURB RADII IS LESS THAN 20'(6096).
6. REMOVAL OF EXISTING SIDEWALK FOR NEW RAMP INSTALLATIONS SHALL BE TO THE NEAREST EXPANSION OR CONTRACTION JOINT. 8.3% MAXIMUM SLOPE MAY NOT BE ACHIEVABLE DUE TO EXISTING SIDEWALK GRADE. IN RECOGNITION OF THIS, A LIMIT OF 15' (4572) FOR REMOVAL SHALL BE USED UNLESS OTHERWISE SHOWN ON THE PLANS OR DIRECTED BY THE ENGINEER. SAW CUT REQUIRED FOR DUMMY JOINTS SHALL BE INCLUDED IN THE COST OF "CONCRETE SIDEWALK RAMP" OR "CONCRETE SIDEWALK".
7. EXPANSION JOINTS IN CONCRETE SHALL MATCH THOSE IN ADJACENT SIDEWALKS BUT IN NO CASE SHALL THE SPACING BETWEEN EXPANSION JOINTS EXCEED 12' (3658) UNLESS OTHERWISE NOTED.
8. CONCRETE SIDEWALK RAMPS, SHALL BE PAID FOR UNDER THE ITEM "CONCRETE SIDEWALK RAMP", AS DEFINED BY THE CONSTRUCTION LIMITS ON THE PLANS AND SHALL BE FIELD VERIFIED.
9. SIDEWALK RAMPS SHALL BE CONSTRUCTED WITH THE TOE AT THE GUTTER CAST INTEGRALLY WITH RAMP UNLESS DIRECTED OTHERWISE BY THE ENGINEER (SEE TYPICAL SECTION ON SHEET 3). CURB REMOVAL AND CAST IN PLACE CURBING REQUIRED FOR THE RAMP, SHALL BE INCLUDED WITH PAY ITEM "CONCRETE SIDEWALK RAMP". CURBING OUTSIDE LIMITS OF RAMP OR LANDING SHOWN ON SHEET 3 SHALL BE CONSTRUCTED AND PAID FOR IN ACCORDANCE WITH CONNECTICUT STANDARD SPECIFICATIONS.
10. PREFERRED LOCATION TO INSTALL DETECTABLE WARNING STRIP SHALL BE 6" (152) FROM THE EDGE OF ROAD ALONG THE FULL WIDTH OF THE RAMP. FOR ALTERNATE LOCATIONS, REFER TO DETECTABLE WARNING PLACEMENT DETAILS ON SHEET 4.
11. TO PERMIT WHEELCHAIR WHEELS TO ROLL BETWEEN DOMES, ALIGN DOMES ON A SQUARE GRID IN THE DIRECTION OF RUNNING SLOPE (PERPENDICULAR TO CURB OR SLOPE BREAK). THE TRANSITION FROM RAMP TO GUTTER SHALL BE FLUSH WITHOUT A LIP.
12. WHERE COMMERCIAL DRIVEWAYS ARE PROVIDED WITH TRAFFIC SIGNALS AND THE SIDEWALK IS CONTINUOUS THROUGH DRIVEWAY, DETECTABLE WARNINGS ARE REQUIRED AT THE JUNCTION BETWEEN THE PEDESTRIAN ROUTE AND DRIVEWAY.
13. CONSTRUCT A SIDEWALK CURB WHEN THERE IS INSUFFICIENT BUFFER AVAILABLE TO GRADE OR WHEN CALLED FOR IN PLANS. PAID FOR WITH SIDEWALK RAMP WHEN REQUIRED FOR RAMP.
14. THE TOP AND BOTTOM OF RAMPS SHOULD BE PROVIDED WITH A 4'x 4' (1219 x 1219) MINIMUM LEVEL LANDING AREA WITH A CROSS SLOPE LESS THAN OR EQUAL TO 2% IN ANY DIRECTION.
15. UTILITY POLES, LUMINAIRE, PEDESTRIAN OR SIGNAL POLES, GRATES, ACCESS COVERS, AND OTHER APPURTENANCES SHALL NOT BE LOCATED ON RAMPS, LANDINGS, BLENDED TRANSITIONS, AND @ GUTTERS WITHIN THE PEDESTRIAN ACCESS ROUTE.
16. APPROACH SIDEWALK WIDTHS, GRASS STRIP OR UTILITY STRIP WIDTHS MAY VARY.
17. APPROACH SIDEWALK AND LANDING CROSS SLOPE SHALL NOT EXCEED 2%.
18. THE RUNNING OR CROSS SLOPES ON LANDINGS AT MID BLOCK CROSSING MAY BE WARPED TO MEET STREET OR HIGHWAY GRADE.
19. FOR PERPENDICULAR CURB RAMPS A MIN. 4' (1.2m) x 4' (1.2m) LEVEL LANDING SHALL BE PROVIDED AT THE TOP OF CURB RAMP. WHERE THE LEVEL LANDING IS RESTRICTED AT THE BACK OF SIDEWALK THE LEVEL LANDING SHALL BE 4' (1.2m) x 5' (1.5m) WITH THE 5' (1.5m) DIMENSION PROVIDED IN THE DIRECTION OF THE RAMP RUN.
20. FOR PARALLEL CURB RAMPS, A MIN. 4' (1.2m) x 4' (1.2m) LEVEL LANDING SHALL BE PROVIDED AT THE BOTTOM OF CURB RAMP. IF THE LEVEL LANDING IS RESTRICTED ON 2 OR MORE SIDES, THE LEVEL LANDING SHALL BE 4' (1.2m) x 5' (1.5m) WITH THE 5' (1.5m) DIMENSION PROVIDED IN THE DIRECTION OF THE PEDESTRIAN STREET CROSSING.
21. WHEN WIDTH OF SIDEWALK IS ≥ 48" AND A PERPENDICULAR SIDEWALK RAMP IS INSTALLED, THE FLARED SIDES SHALL BE 10% MAX. IF WIDTH OF SIDEWALK IS < 48" THE FLARED SIDES MUST NOT EXCEED 8.33% (12:1).
22. SHADED AREAS ARE TYPICAL PAY LIMITS FOR CONCRETE SIDEWALK RAMP BUT, MAY VARY AS DIRECTED BY THE ENGINEER.
23. OPTIONAL RAMP, WHEN REQUIRED, SHALL BE PAID FOR AS PART OF CONCRETE SIDEWALK RAMP.



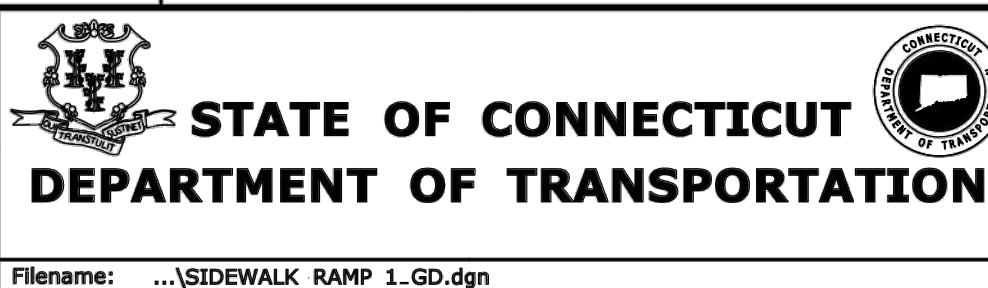
**DUAL PERPENDICULAR SIDEWALK RAMPS (TYPE 3a)
WITH UTILITY / GRASS STRIP**

SEE NOTE 20

ALL METRIC DIMENSIONS ARE IN MILLIMETERS (mm) UNLESS OTHERWISE NOTED.

-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
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1	7/13	Created new sheets (4 total).	-	-
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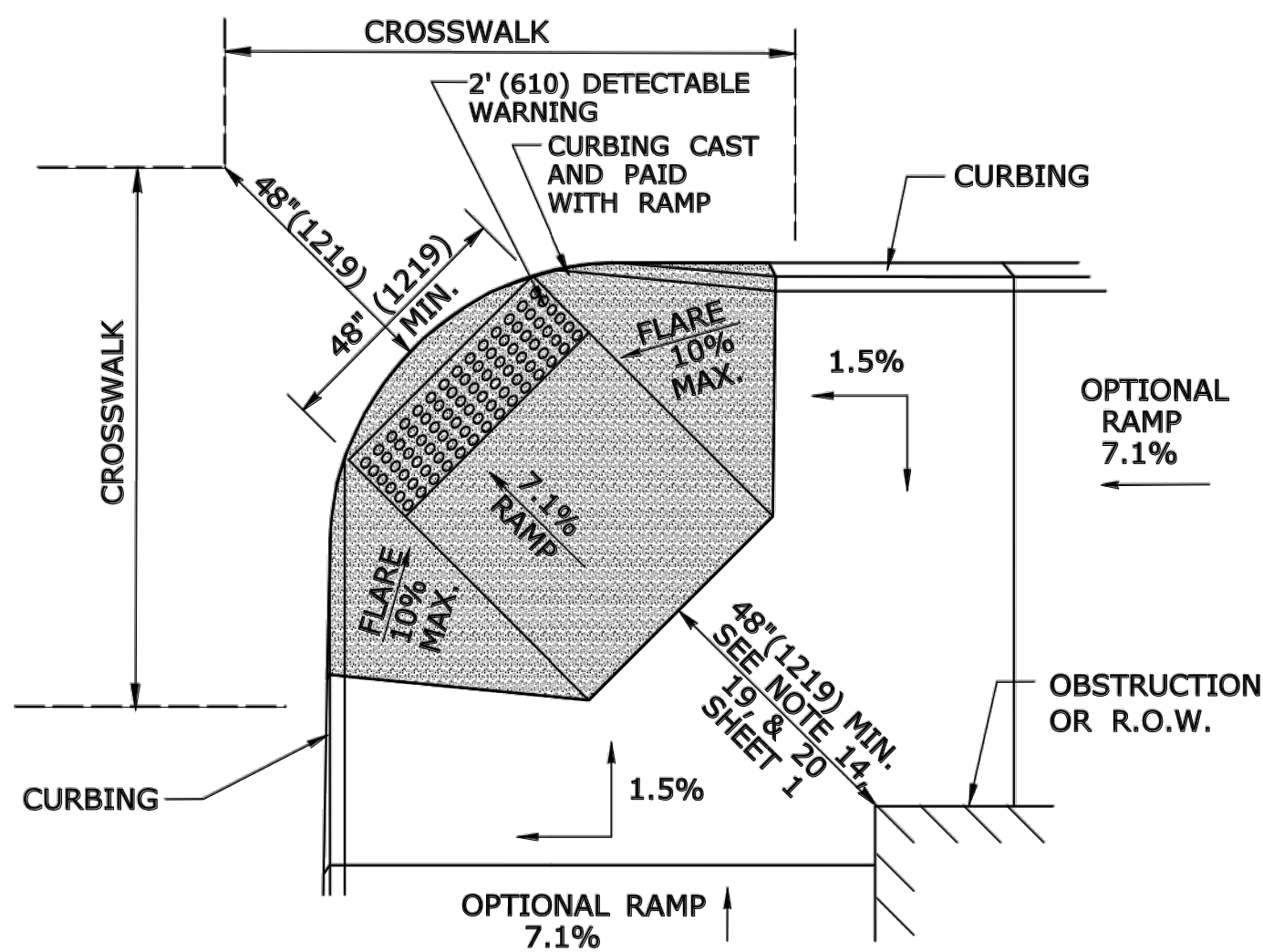
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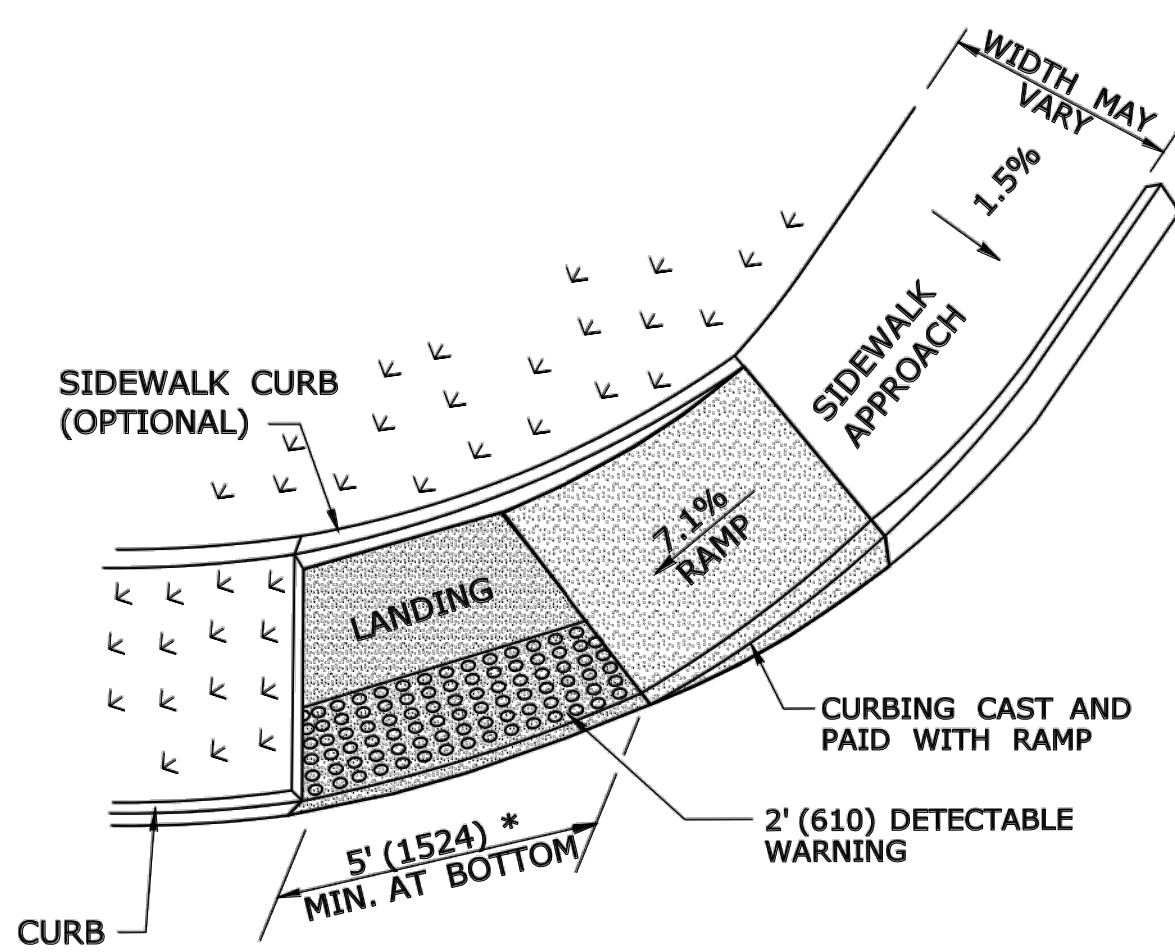
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Tighe & Bond
www.tighebond.com

PROJECT TITLE:
**WHITNEY AVENUE AT
MAIN STREET (ROUTE 111)
INTERSECTION IMPROVEMENTS**

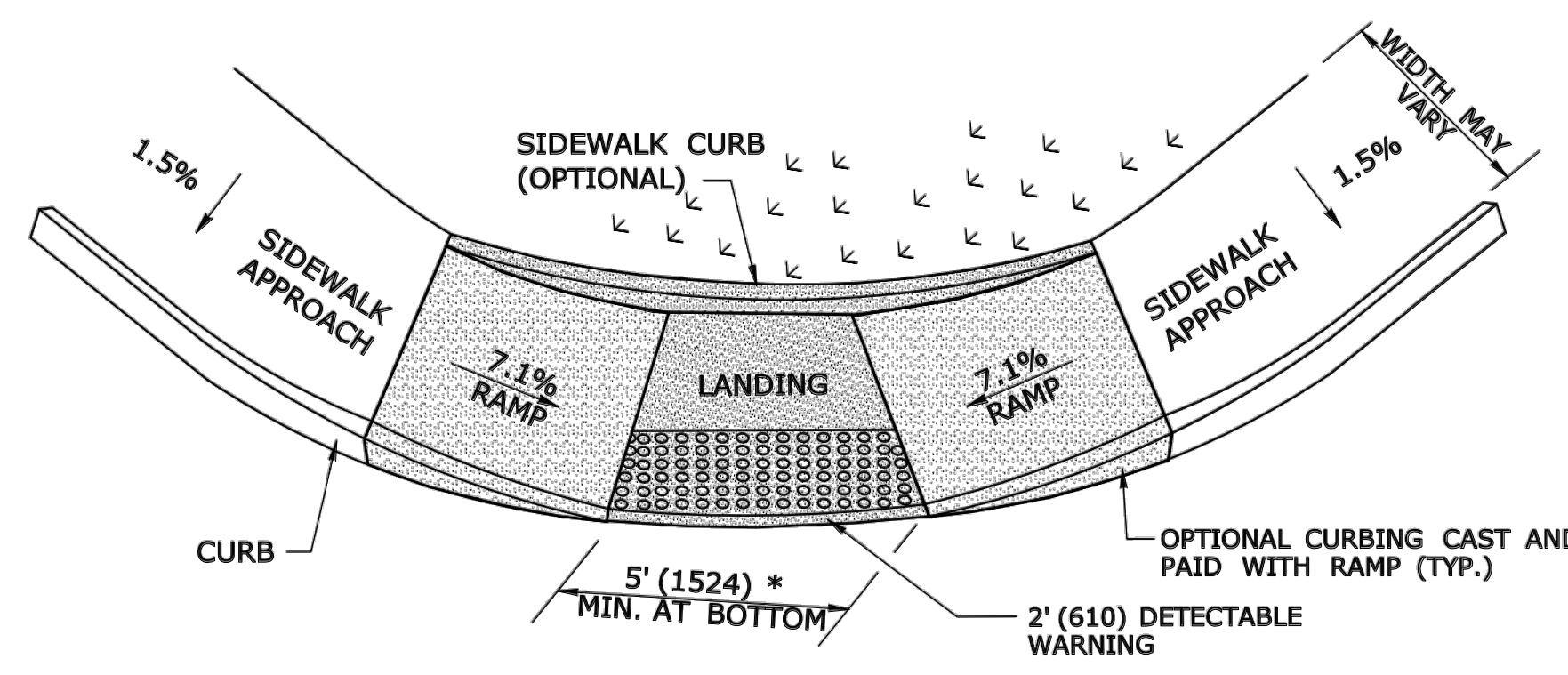
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TRUMBULL
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**SIDEWALK RAMPS
SHEET 1**
PROJECT NO.
T0196-116
DRAWING NO.
SHEET NO.
SHEET 11



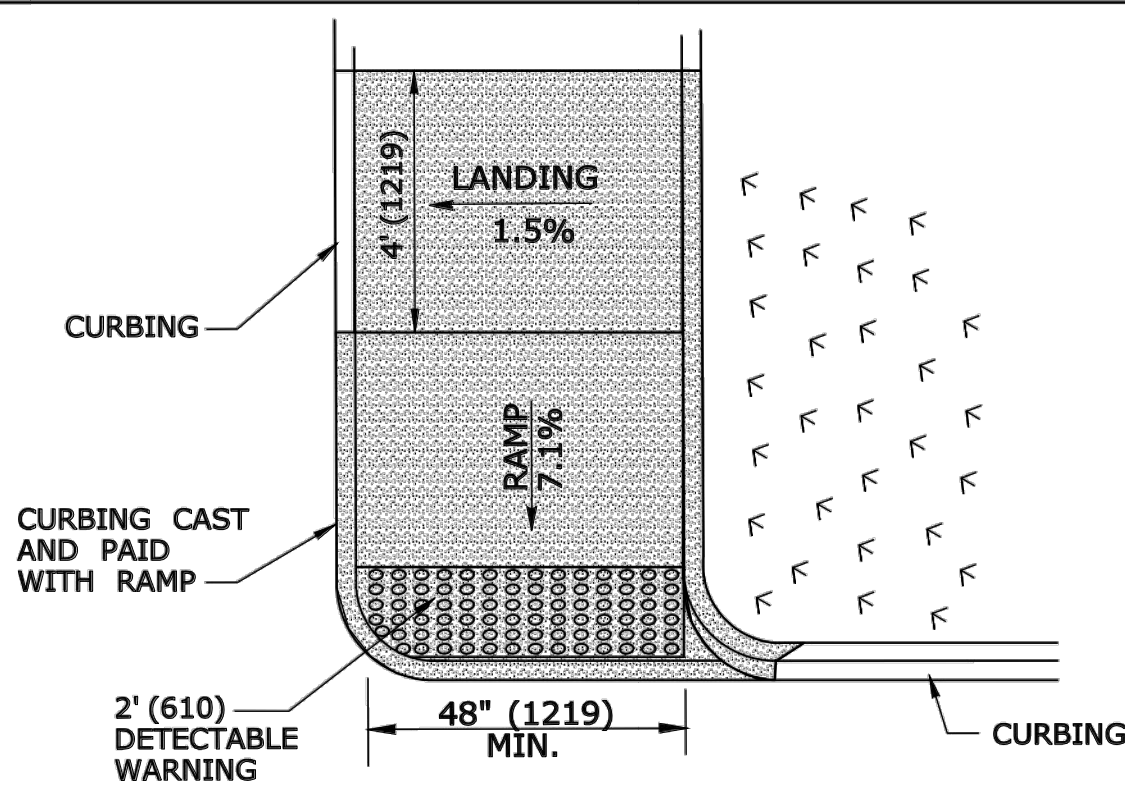
**DIAGONAL SIDEWALK RAMP (TYPE 4)
W/LANDING AT TOP**



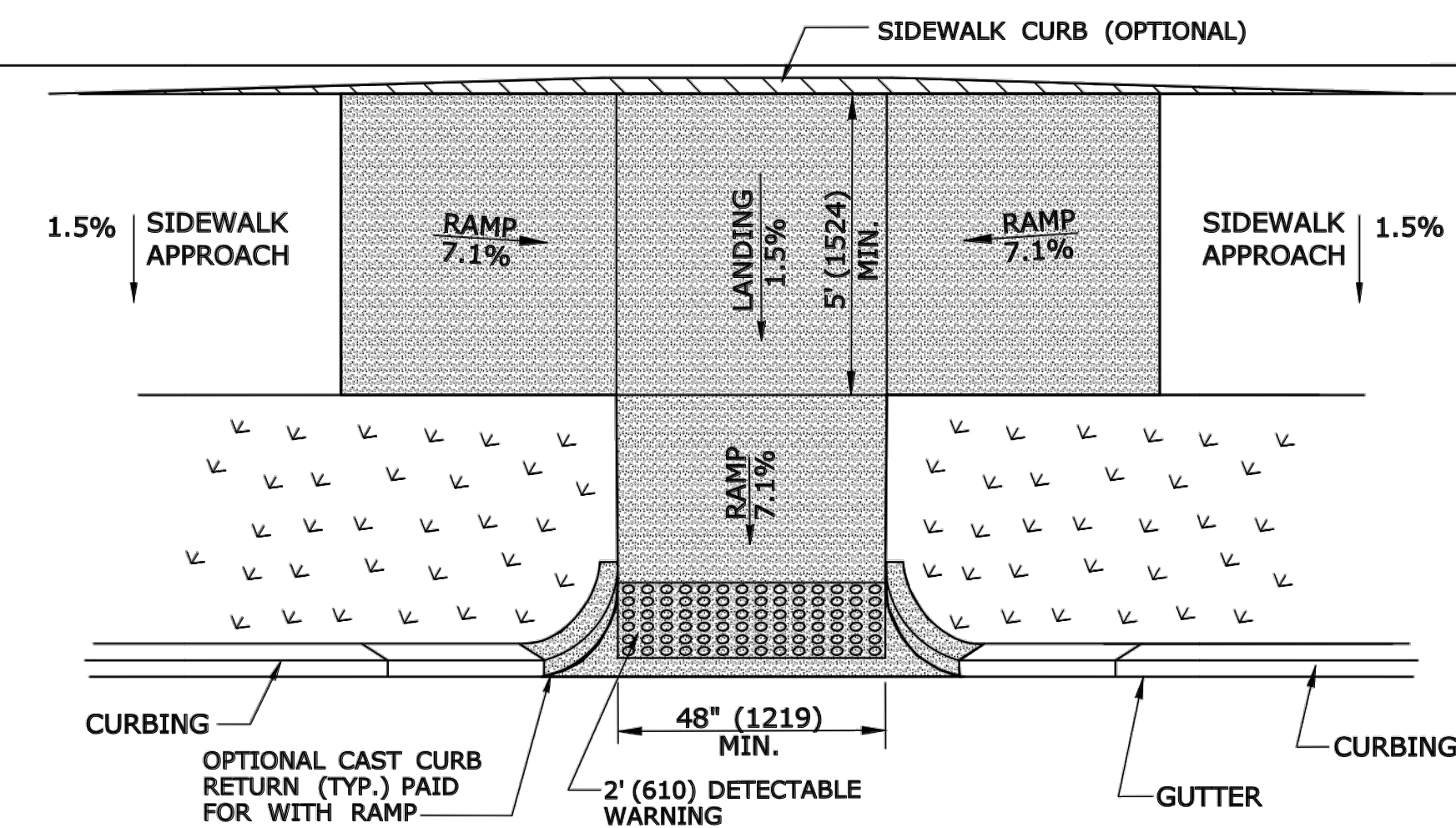
**SINGLE PARALLEL SIDEWALK RAMP
W/LANDING AT BOTTOM ON
CORNER (TYPE 4c)**
* SEE NOTE 20 SHEET 1



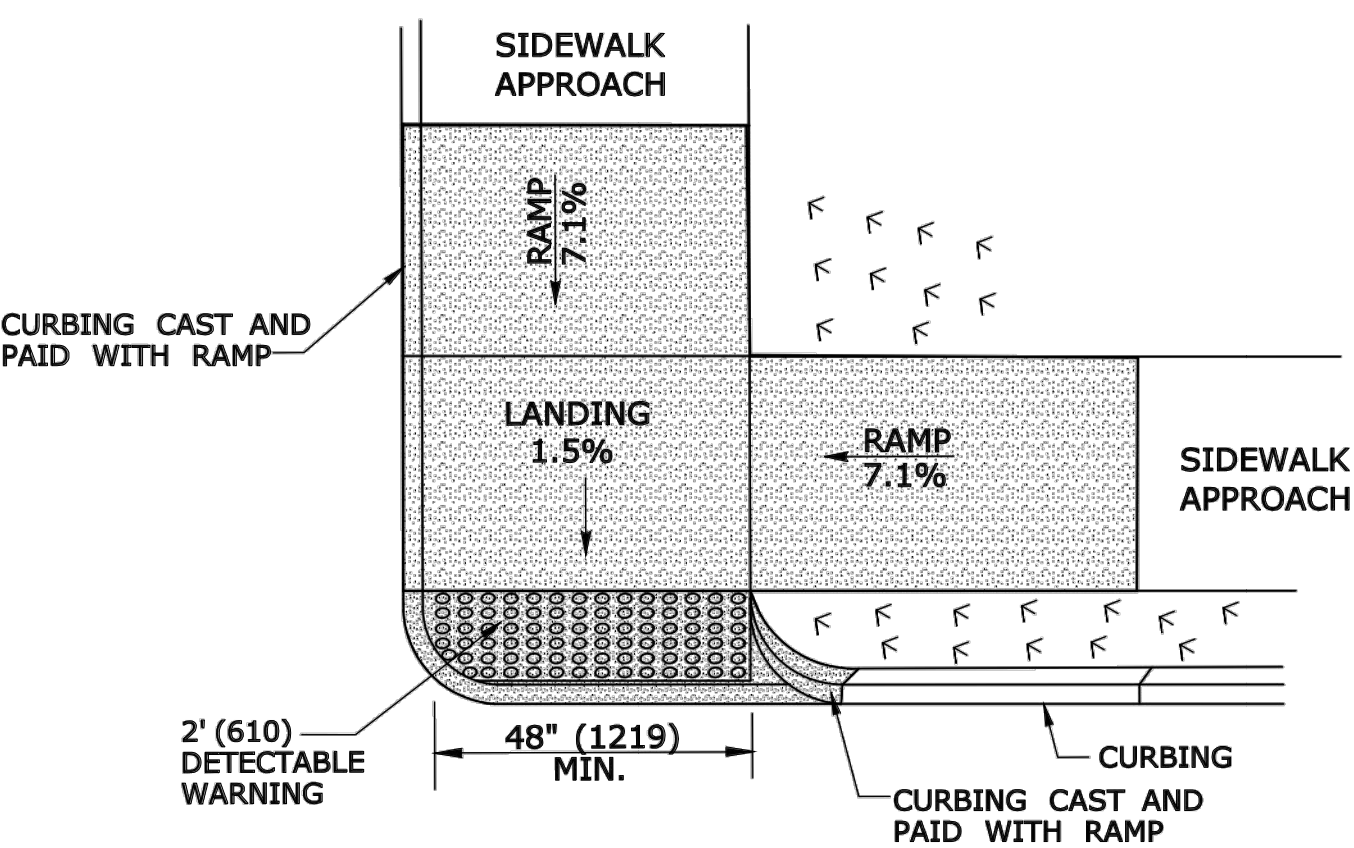
**DOUBLE PARALLEL SIDEWALK RAMP
W/LANDING AT BOTTOM ON CORNER (TYPE 4f)**
* SEE NOTE 20 SHEET 1



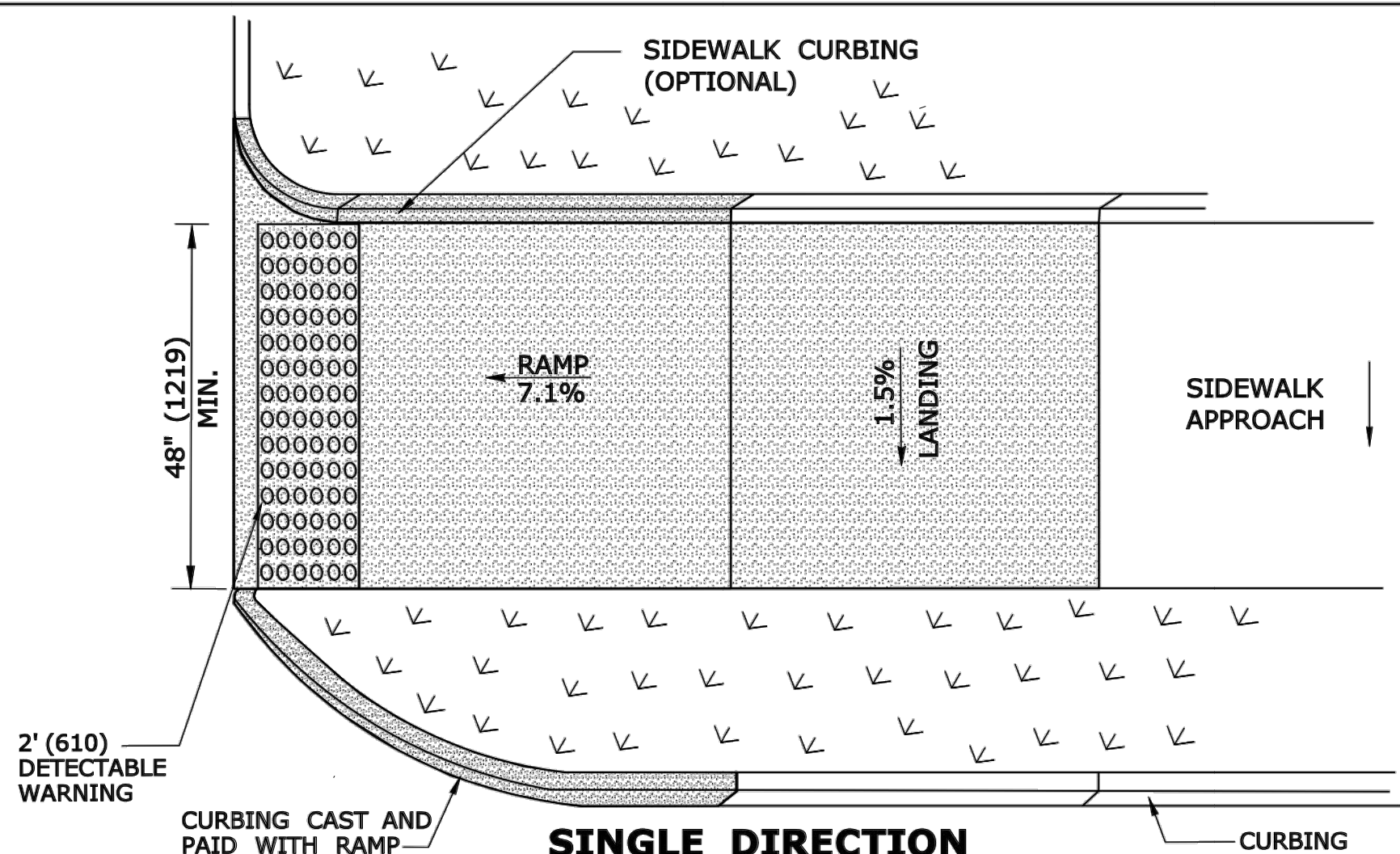
**SINGLE DIRECTION
PERPENDICULAR SIDEWALK RAMP
NO / UTILITY GRASS STRIP
(TYPE 4a)**



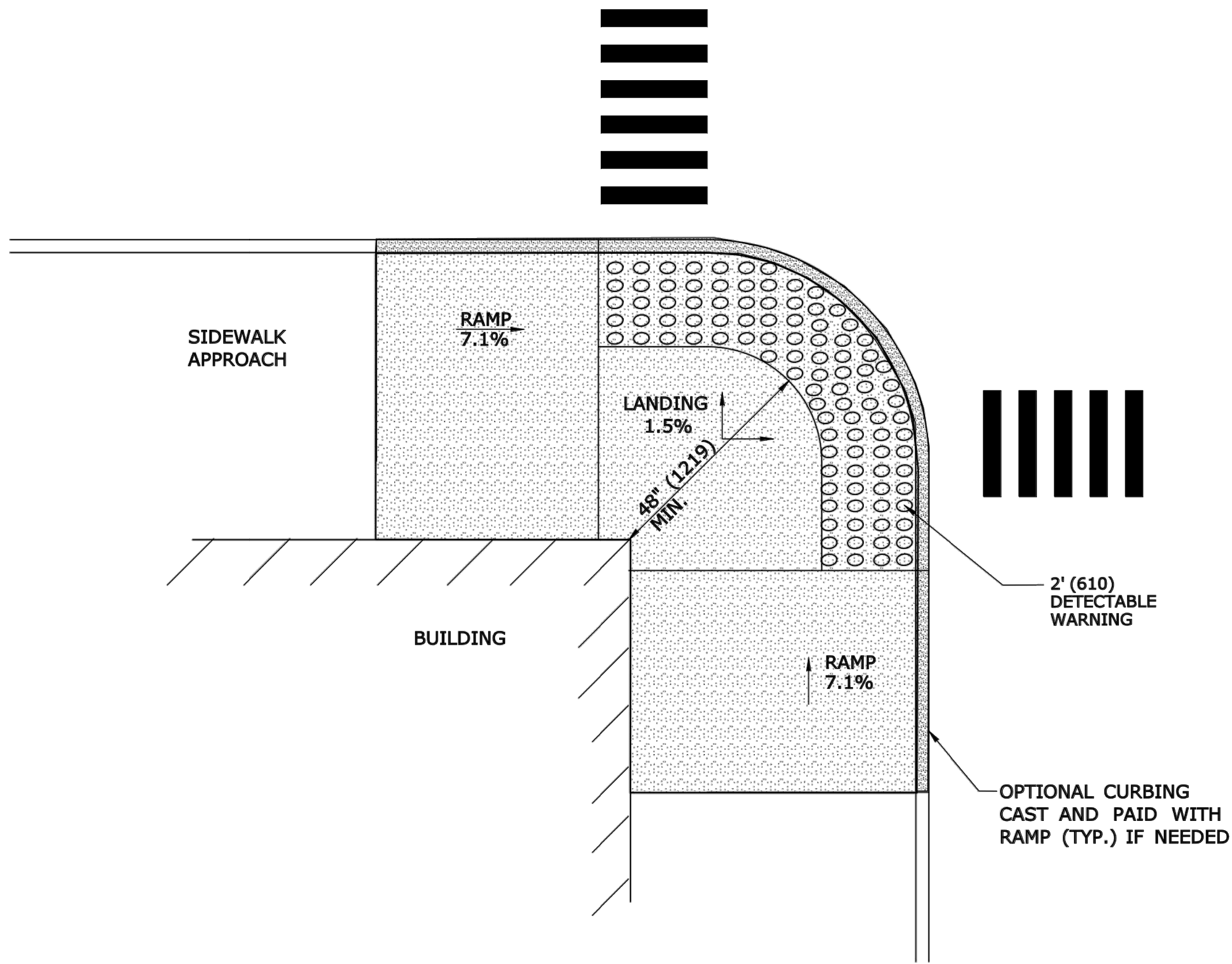
**PARALLEL/PERPENDICULAR SIDEWALK RAMP
COMBINATION W/ CURB RETURNS (TYPE 4d)**
* OPTIONAL FLARE ONE SIDE



**DOUBLE DIRECTION
PARALLEL SIDEWALK RAMP
NO / UTILITY GRASS STRIP
(TYPE 4b)**
SEE NOTE 20 SHEET 1



**SINGLE DIRECTION
PERPENDICULAR SIDEWALK RAMP
W/ UTILITY GRASS STRIP (TYPE 4e)**
REFER TO DETECTABLE WARNING PLACEMENT ON SHEET 4




**RESTRICTED CONDITION
DIAGONAL SIDEWALK RAMP
(TYPE 4g)**

ALL METRIC DIMENSIONS ARE IN MILLIMETERS (mm) UNLESS OTHERWISE NOTED

REV.	DATE	REVISION DESCRIPTION	SHEET NO.	Plotted Date: 5/27/2014

DESIGNER/DRAFTER:
MGB/EMK
CHECKED BY:
LLF

**STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION**

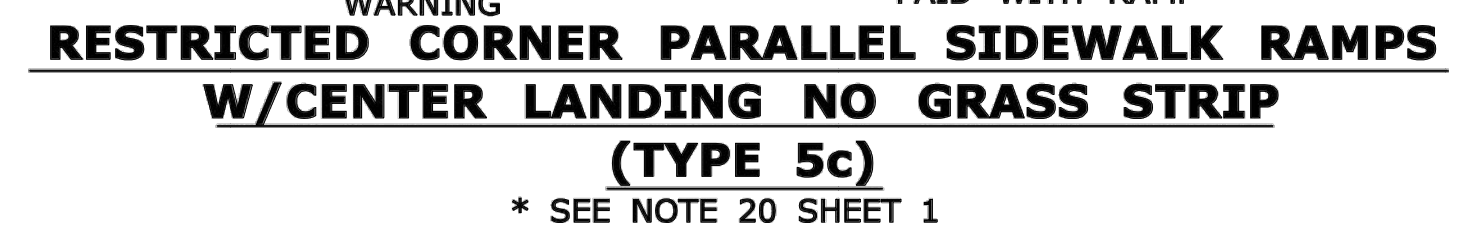
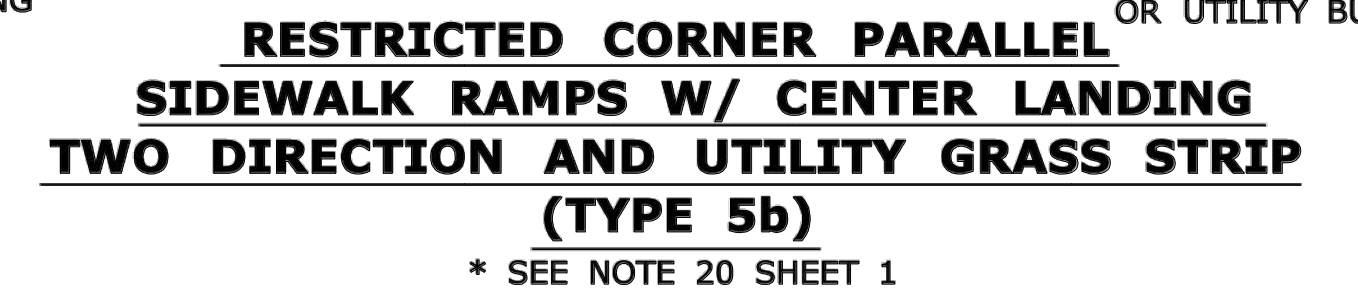
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SIGNATURE/
BLOCK:
OFFICE OF ENGINEERING
APPROVED BY:
Tighe & Bond
www.tighebond.com



PROJECT TITLE:
**WHITNEY AVENUE AT
MAIN STREET (ROUTE 111)
INTERSECTION IMPROVEMENTS**

TOWN:
TRUMBULL
DRAWING TITLE:
**SIDEWALK RAMP
SHEET 2**

PROJECT NO.
T0196-116
DRAWING NO.
SHEET NO.
SHEET 12



ALL METRIC DIMENSIONS ARE IN MILLIMETERS (mm) UNLESS OTHERWISE NOTED

				DESIGNER/DRAFTER: MGB/EMK		 STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION	SIGNATURE/ BLOCK: OFFICE OF ENGINEERING	PROJECT TITLE: WHITNEY AVENUE AT MAIN STREET (ROUTE 111) INTERSECTION IMPROVEMENTS	TOWN: TRUMBULL	PROJECT NO. T0196-116
				CHECKED BY: LLF						APPROVED BY:  Tighe & Bond <small>www.tighebond.com</small>
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.						File name: ...SIDEWALK_RAMP_3_GD.dgn				SHEET NO. SHEET 13
REV.	DATE	REVISION DESCRIPTION	SHEET NO.							



SEE NOTE 1 SHEET HW-921 02a

1. RAMPED MEDIANS SHALL HAVE A CURB RAMP AT EITHER END AND LEVEL LANDING A MINIMUM OF 5' x 5' (1.5m x 1.5m) IN BETWEEN. CUT-THROUGH MEDIANS SHALL BE A MINIMUM OF 6' (1.8m) LONG AND 5' (1.5m) WIDE. FOR ALL MEDIANS, CUT-THROUGH OR RAMPED, A 2' (610) STRIP OF DETECTABLE WARNINGS SHALL BE INSTALLED AT THE ENTRANCE AND EXIT.
2. SEE GENERAL NOTES ON SHEET 1.



STANDARD DOME ON DETECTABLE WARNING TILES



NOTE: WHEN NO GATE IS PRESENT, INSTALL DETECTABLE WARNING SURFACE 12' (3.6m) FROM THE NEAREST RAIL. IF GATE IS PRESENT, INSTALL DETECTABLE WARNING 2' (610) PRIOR TO GATE. THE ROWS OF TRUNCATED DOMES IN A DETECTABLE WARNING SURFACE SHALL BE INSTALLED PARALLEL WITH THE DIRECTION OF PEDESTRIAN TRAVEL.



ALL METRIC DIMENSIONS ARE IN MILLIMETERS (mm) UNLESS OTHERWISE NOTED

[illegible]

DESIGNER/DRAFTER:
MGB/EMK
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LLF




STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION




SIGNATURE/
BLOCK:

OFFICE OF ENGINEERING

APPROVED BY: **Tighe & Bond**
www.tighebond.com

PROJECT TITLE:

WHITNEY AVENUE AT MAIN STREET (ROUTE 111) INTERSECTION IMPROVEMENTS

TOWN:

TRUMBULL

DRAWING TITLE:

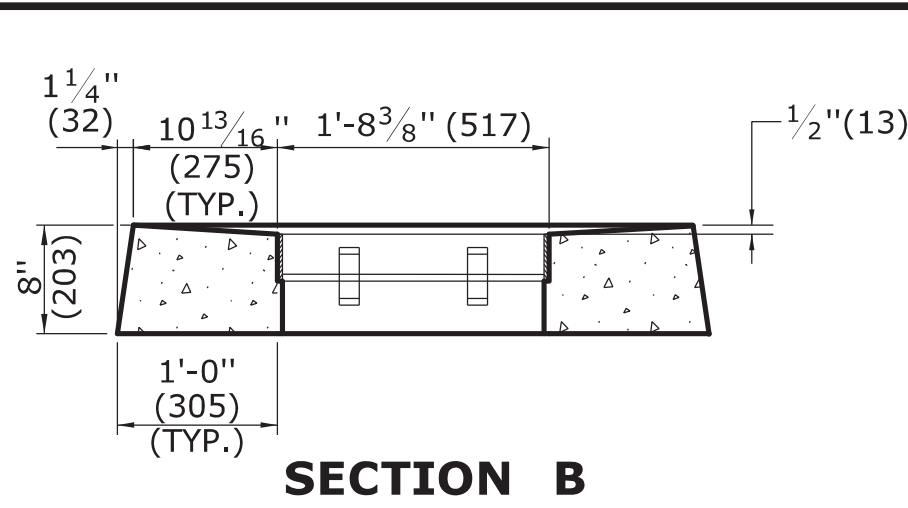
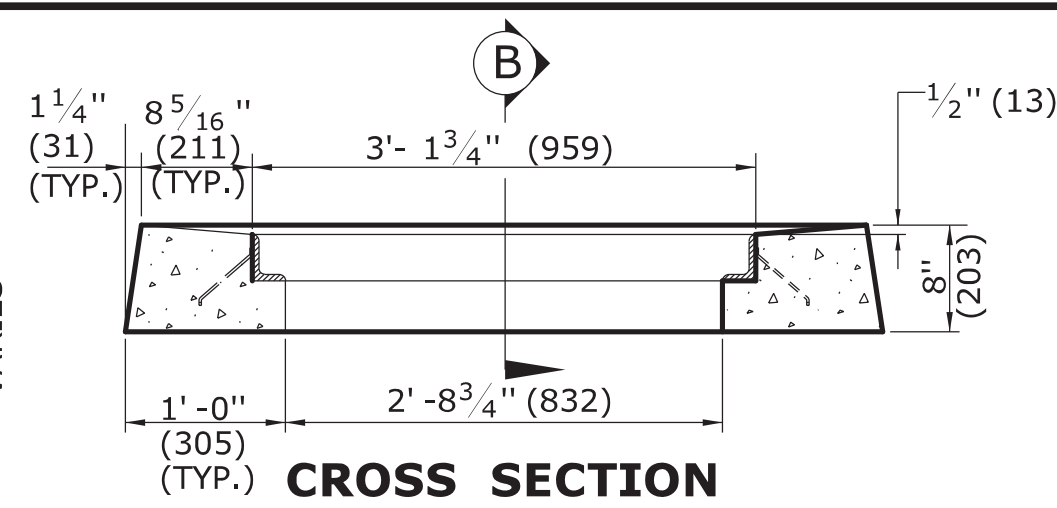
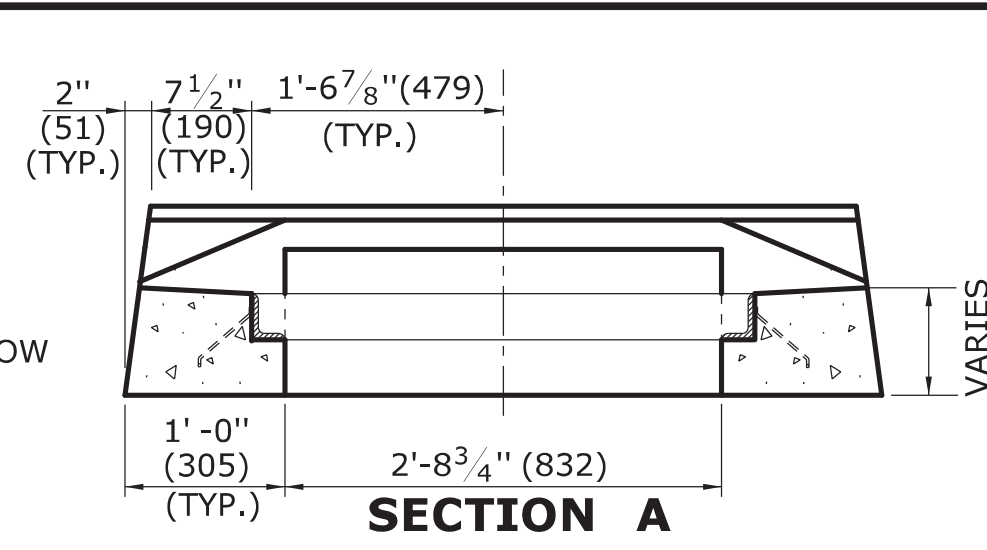
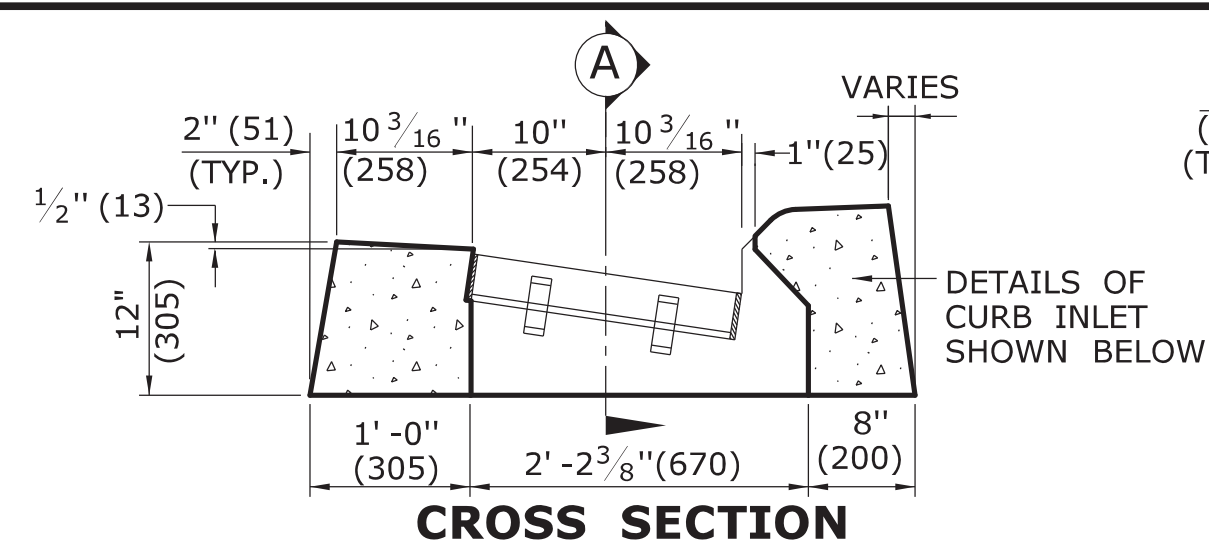
**SIDEWALK RAMP
SHEET 4**

PROJECT NO.

T0196-116

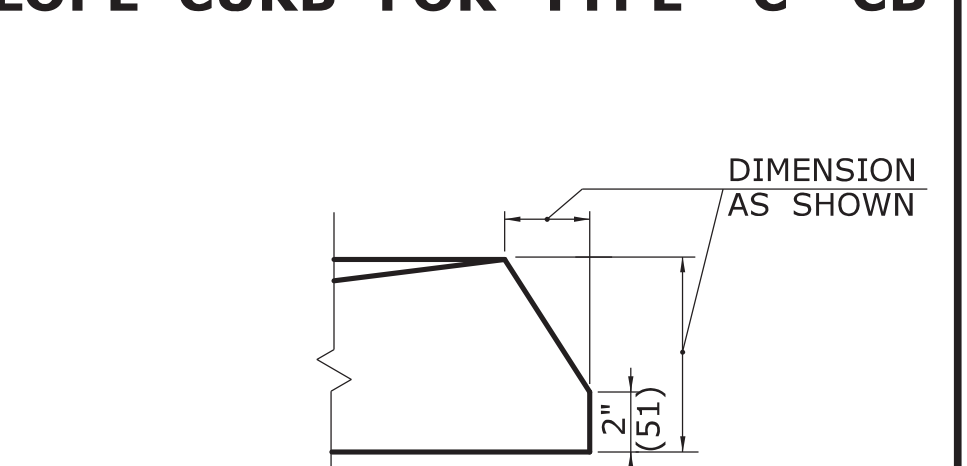
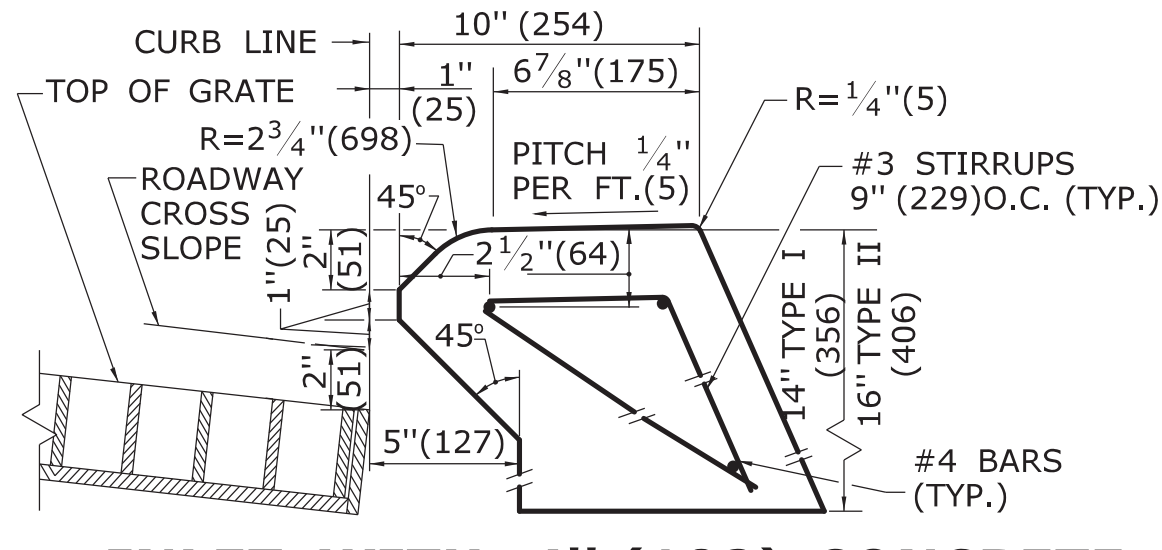
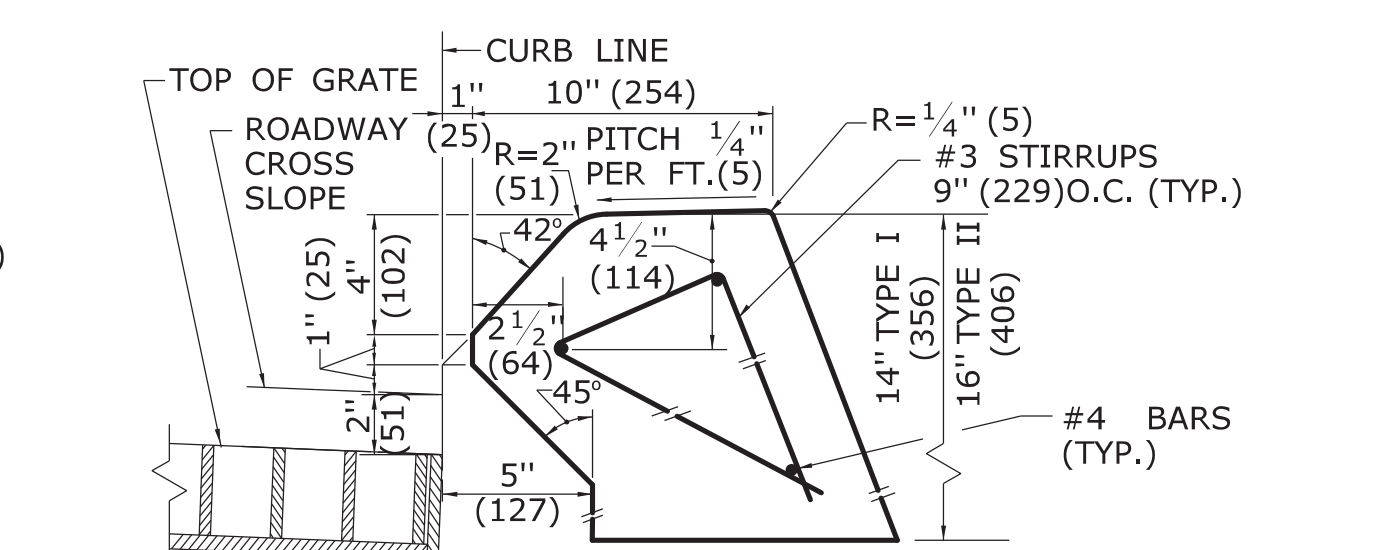
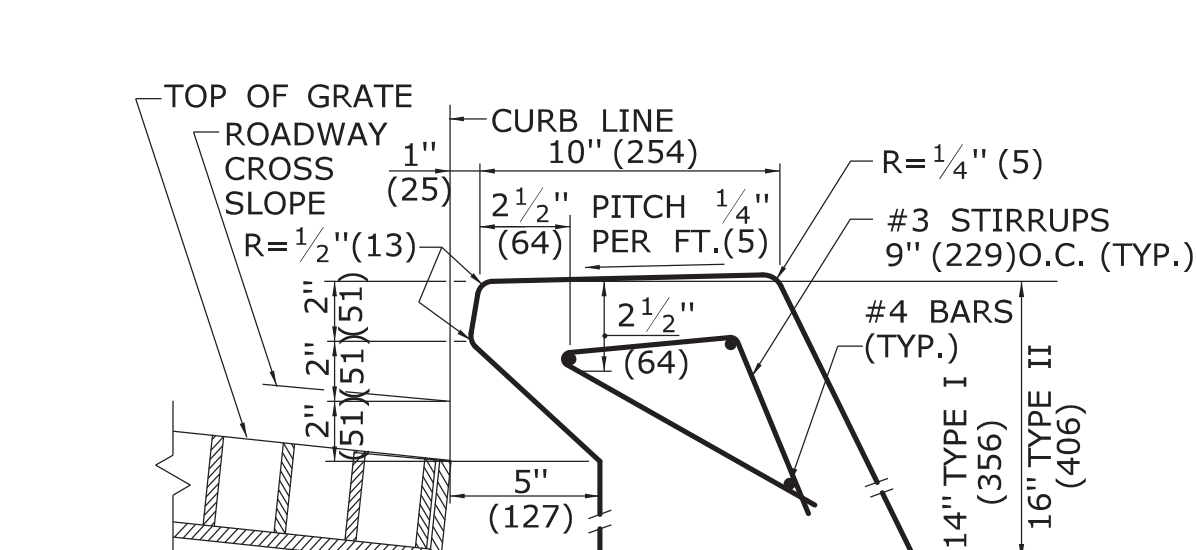
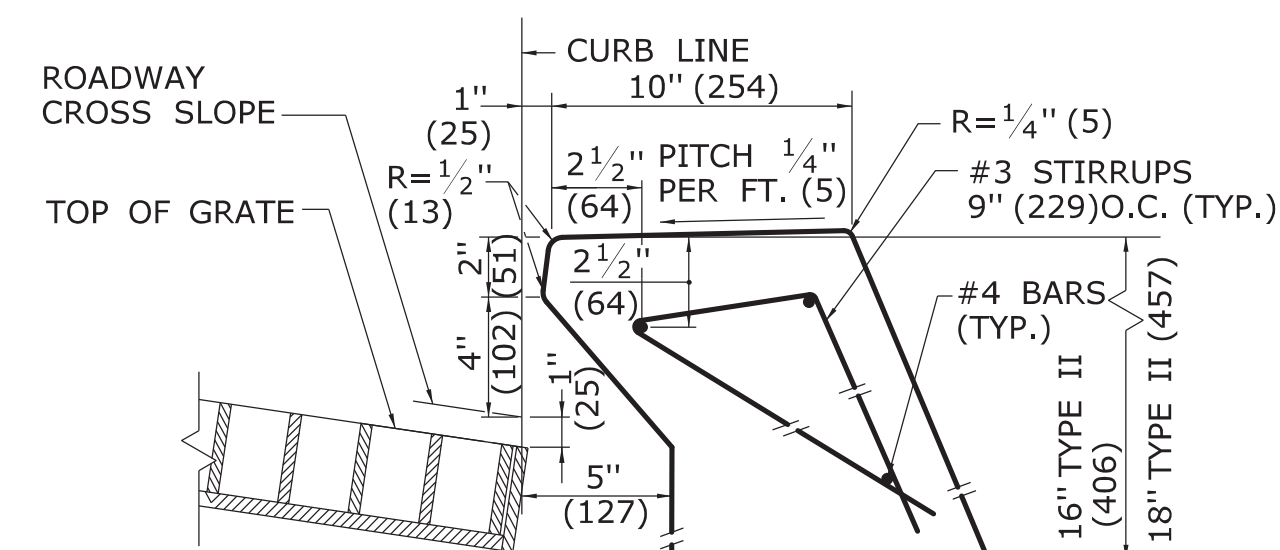
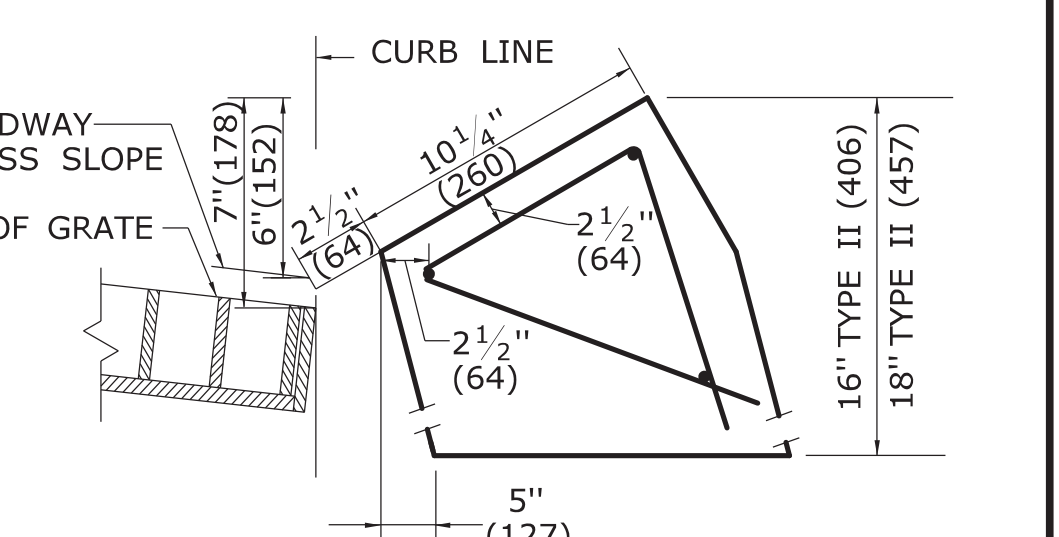
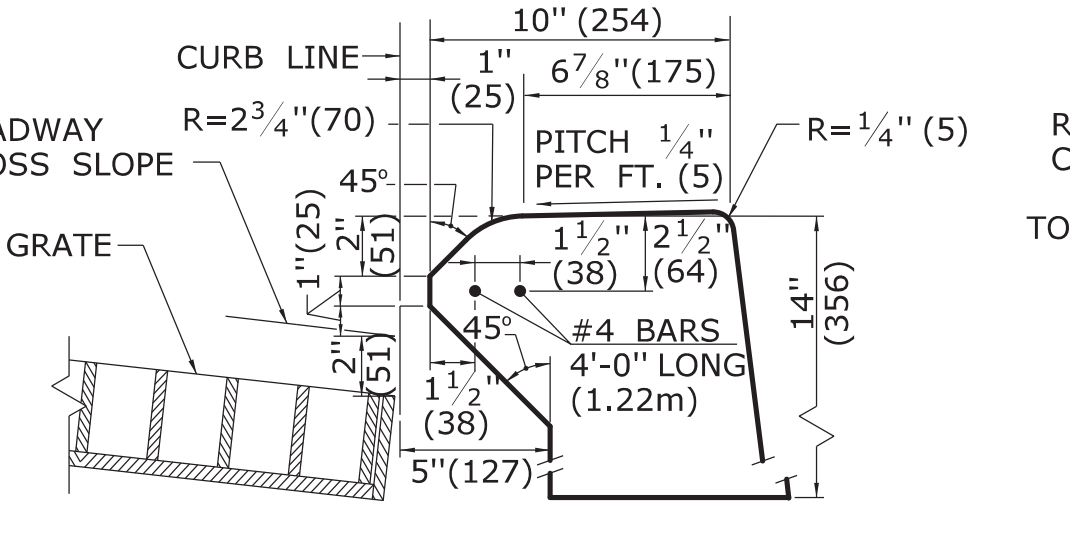
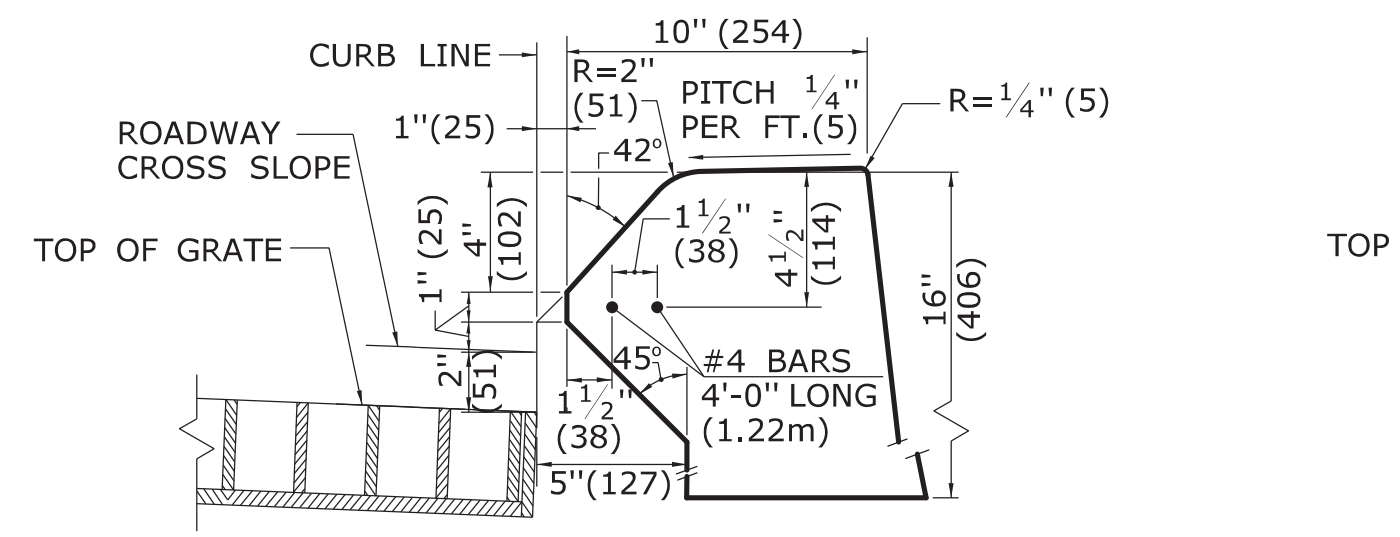
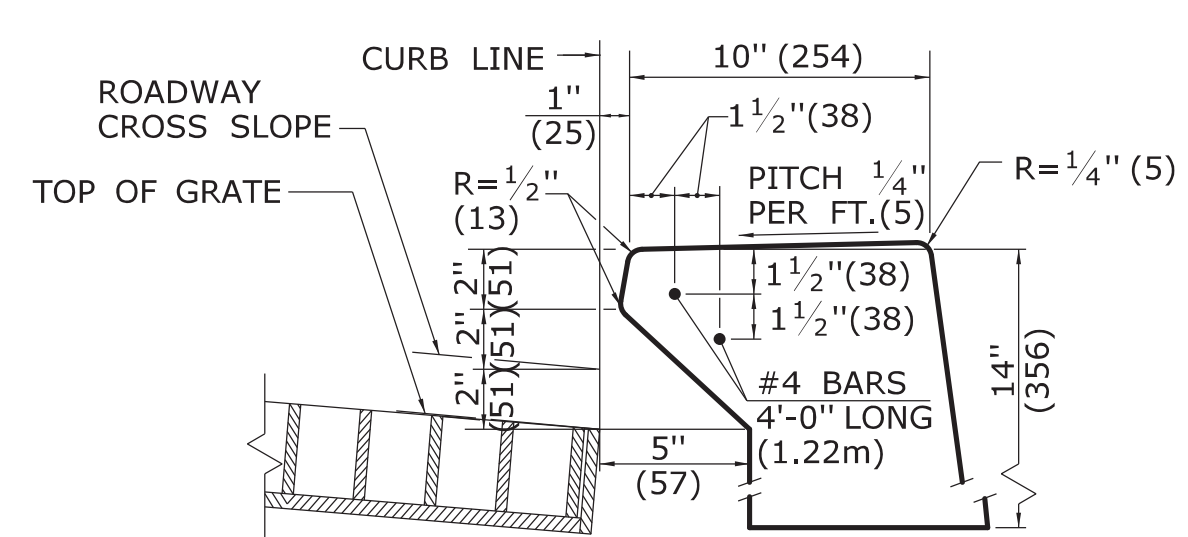
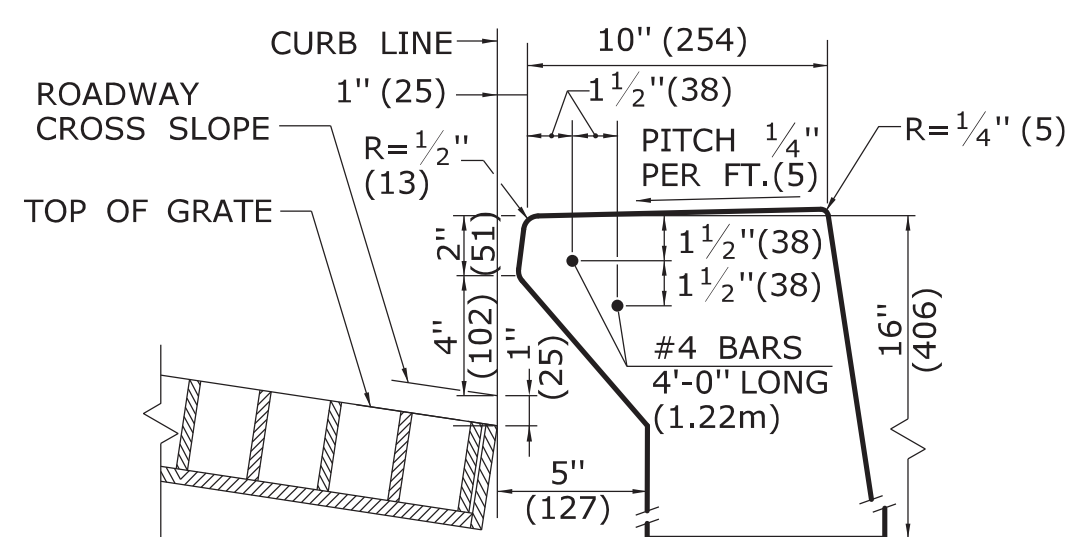
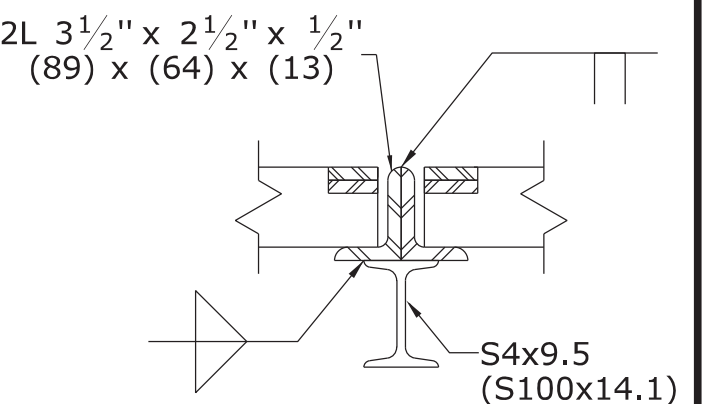
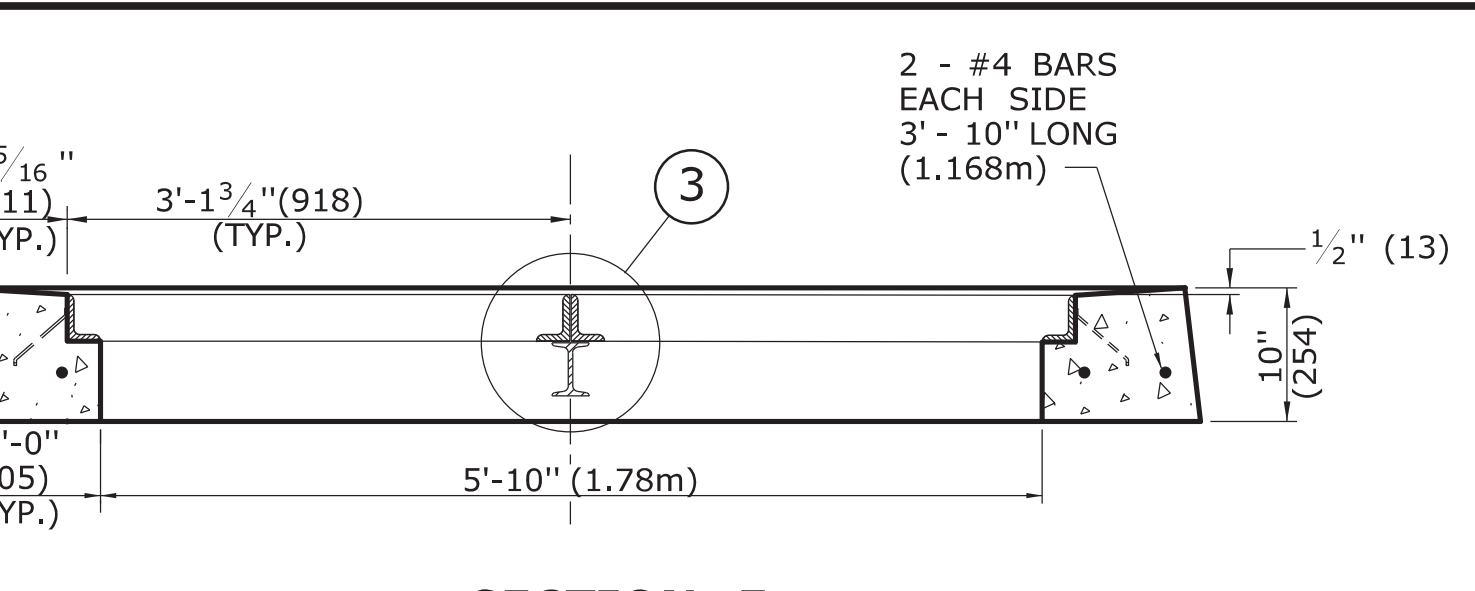
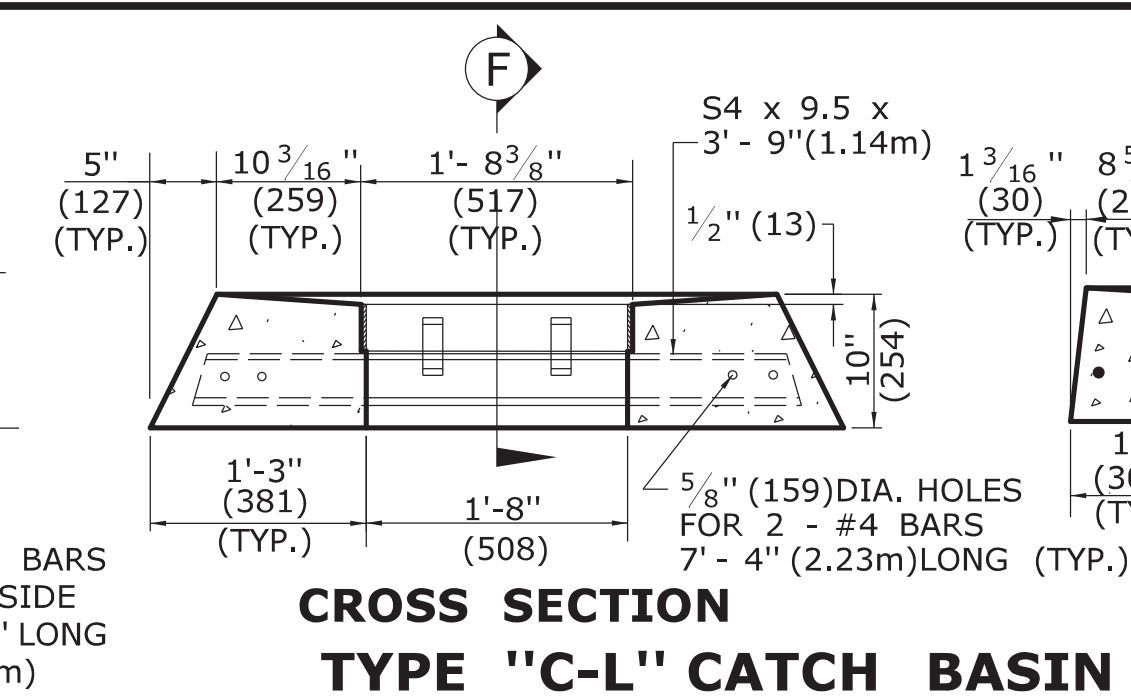
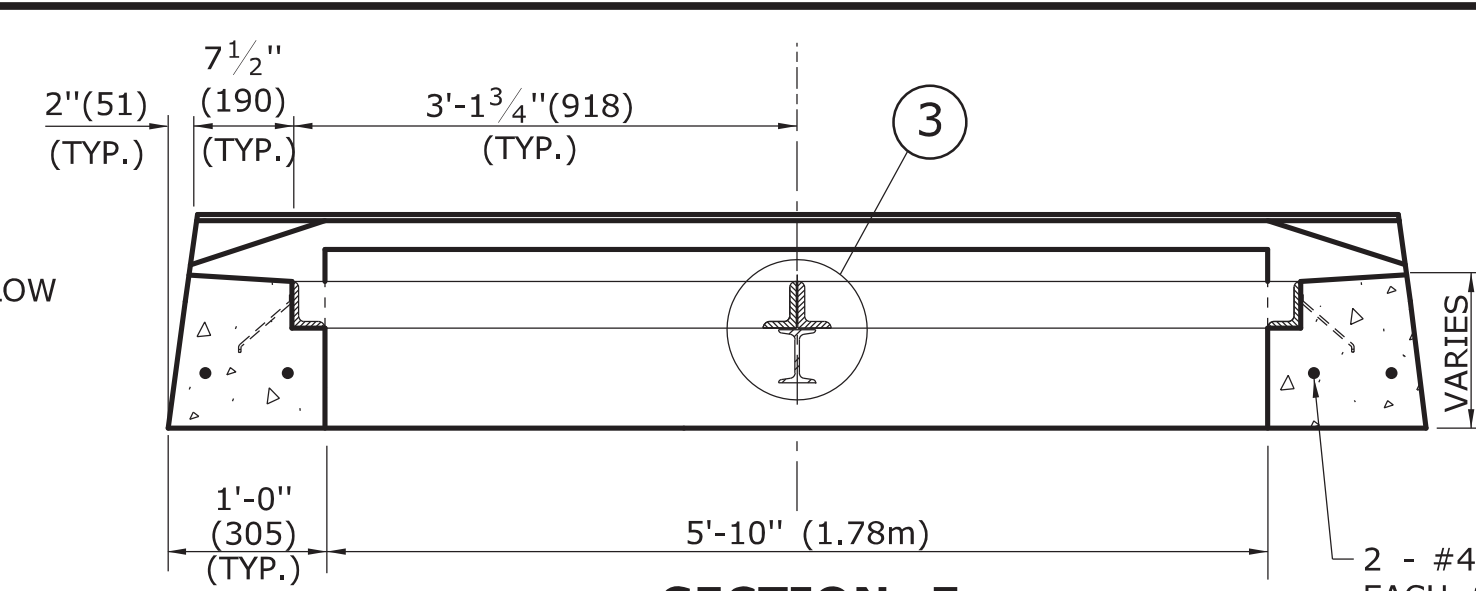
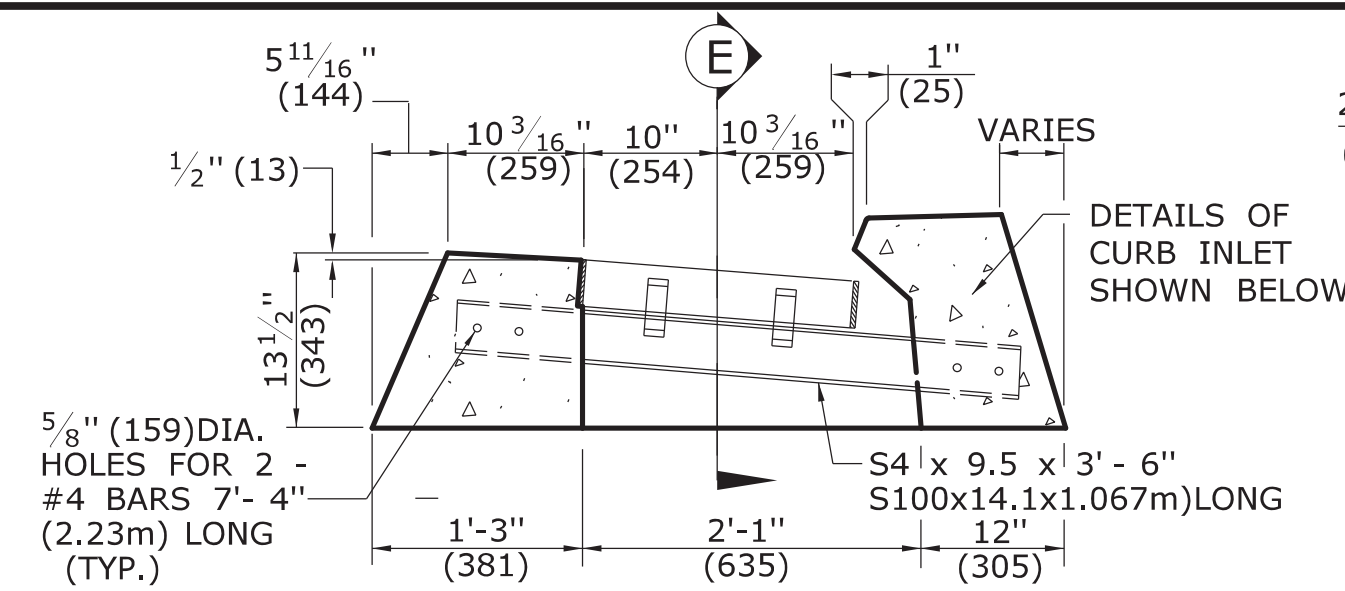
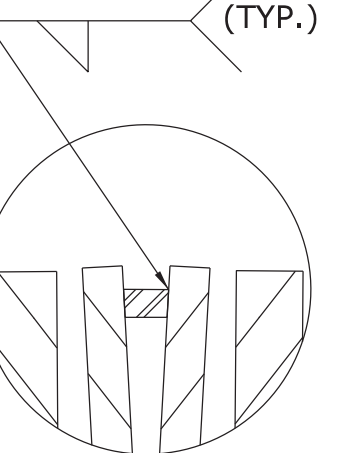
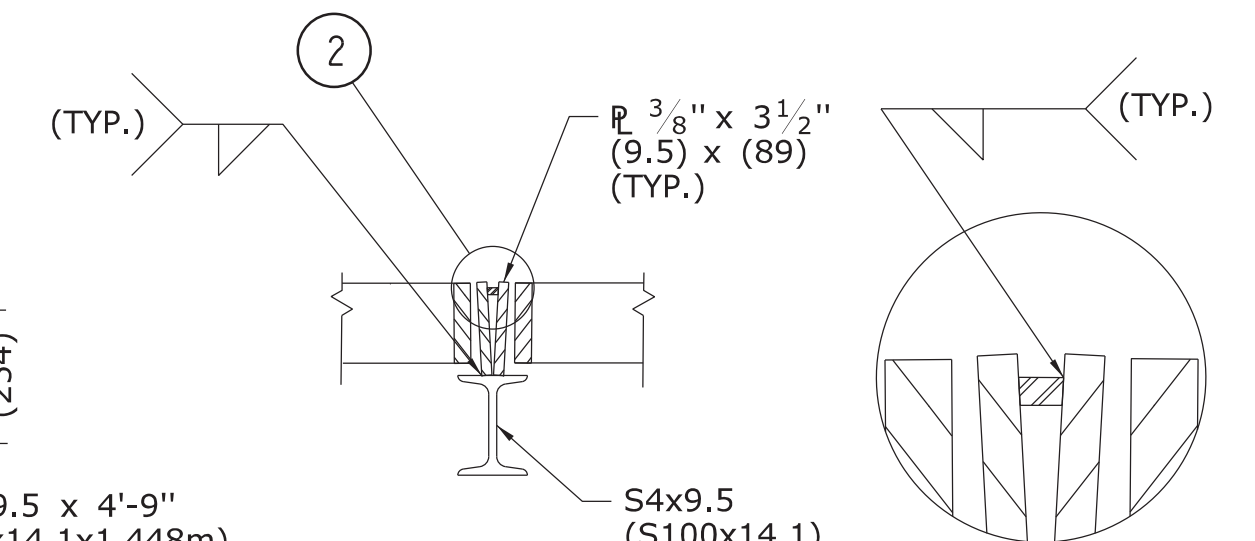
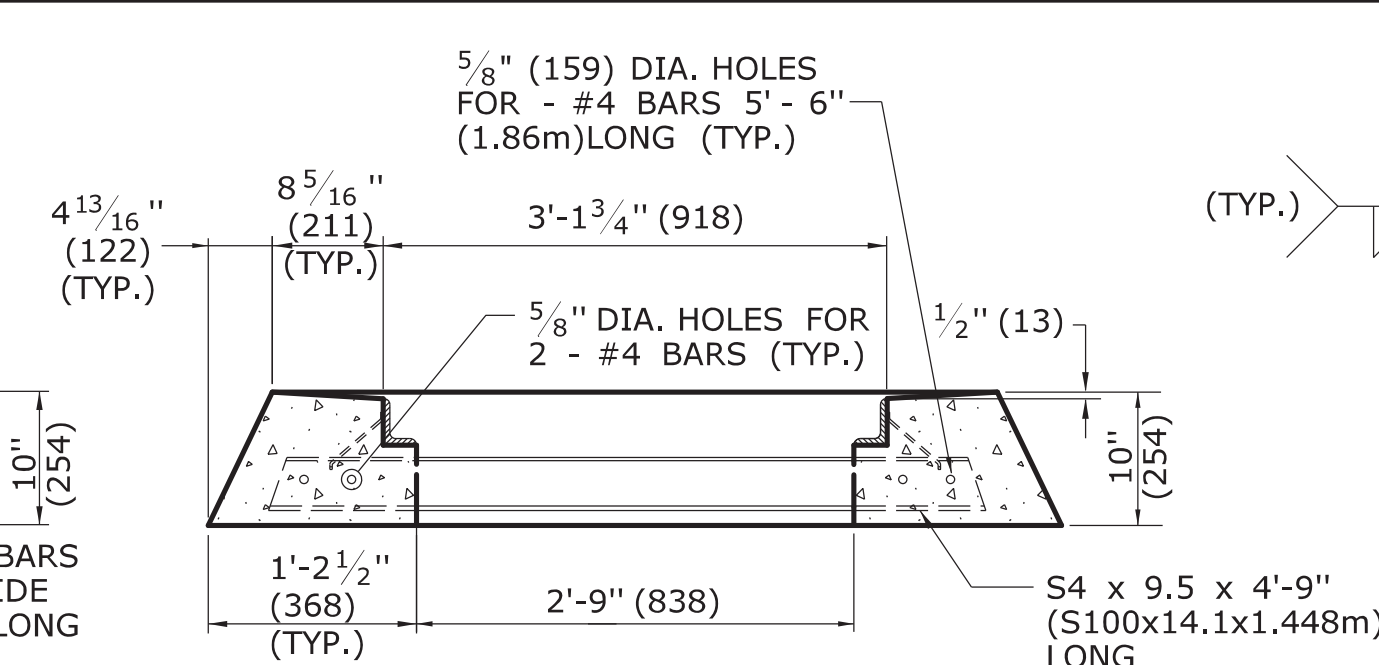
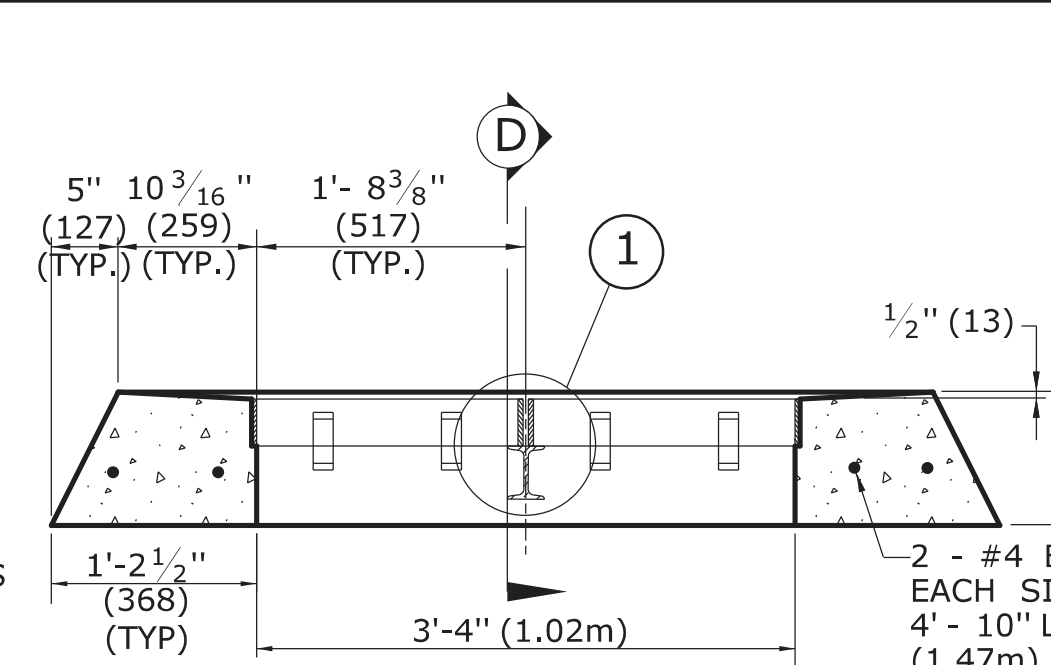
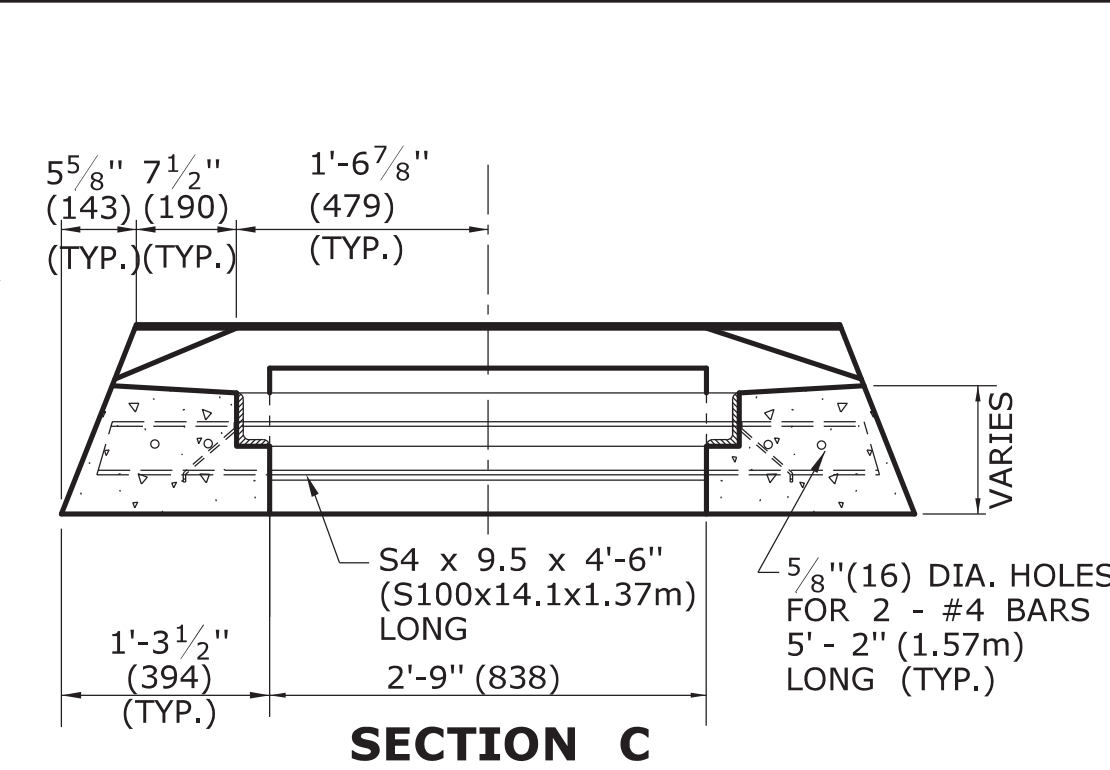
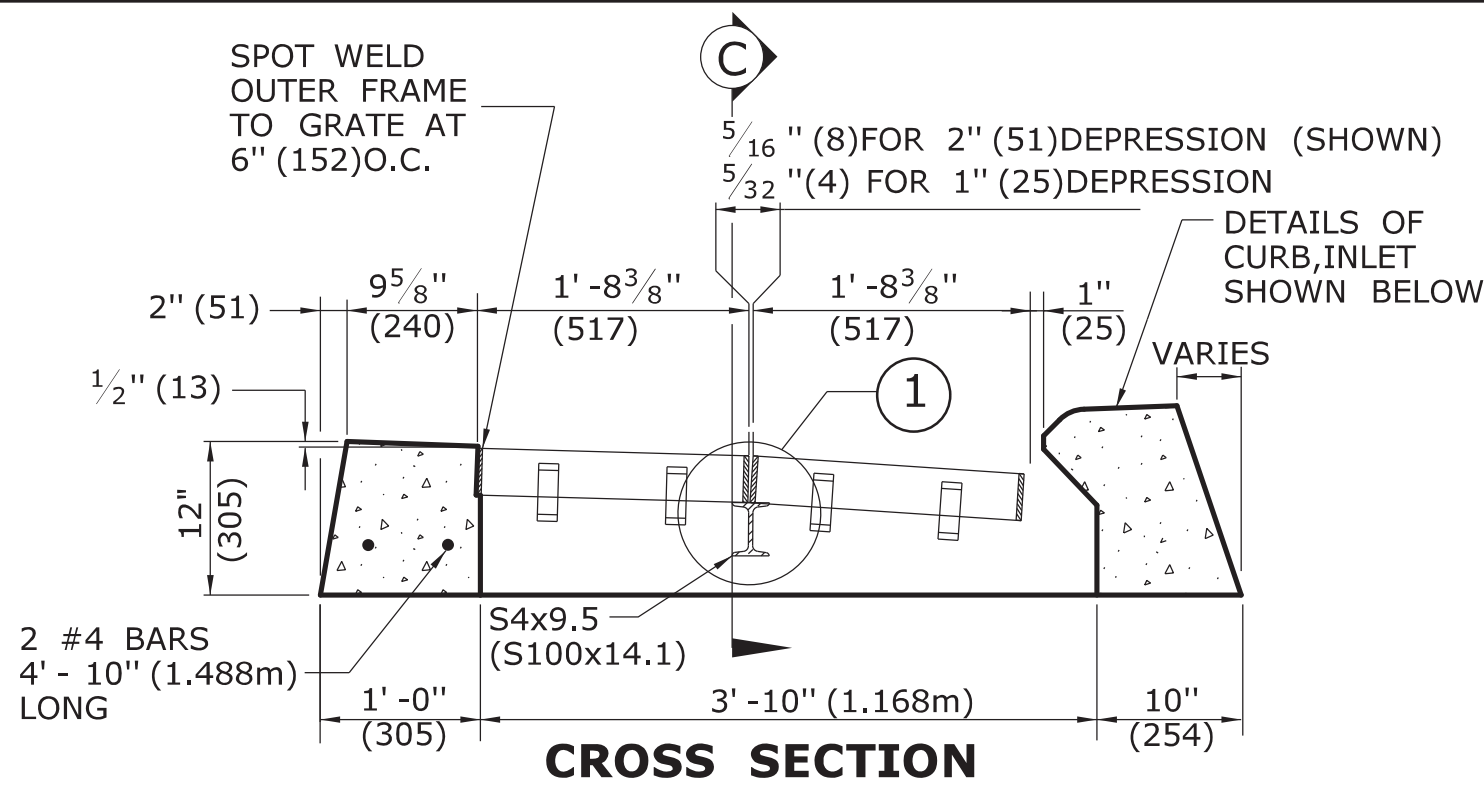
SHEET NO.

SHEET 14






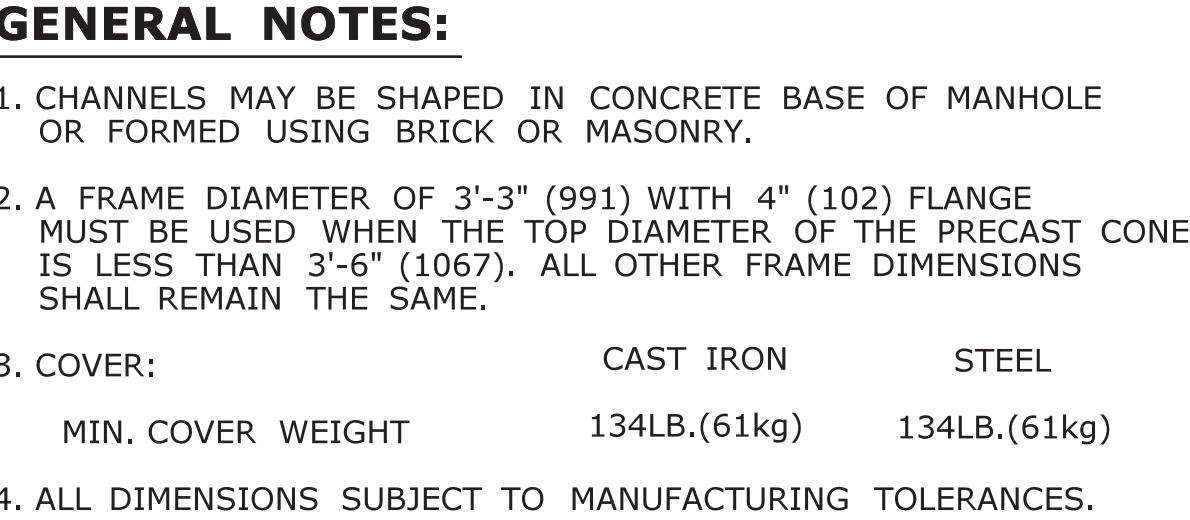
- GENERAL NOTES:**

1. FOR DETAILS OF FRAME AND GRATE SEE STANDARD SHEET HW-507-08.
2. ALL STEEL, EXCEPT REINFORCING BARS, SHALL BE GALVANIZED IN CONFORMANCE WITH SECTION M06.03 OF CONNECTICUT'S STANDARD SPECIFICATIONS.
3. ALL BARS SHALL HAVE A MINIMUM 2" (51) COVER.







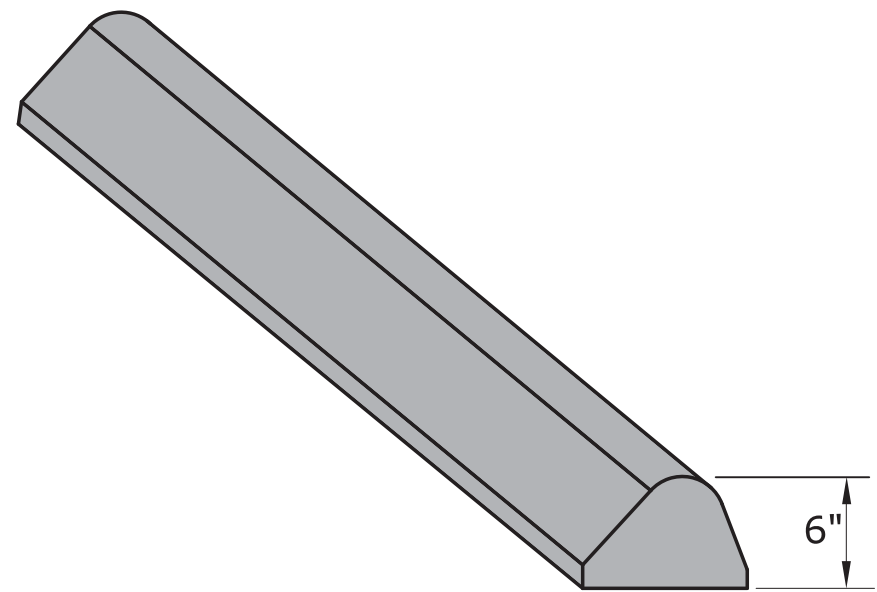
ALL METRIC DIMENSIONS ARE IN MILLIMETERS (mm) UNLESS OTHERWISE NOTED

-	-	-	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.	NOT TO SCALE	 STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION	Filename: CTDOT-HWY_STD_Nov2011.don Model: 12-HW-507_07	SUBMITTED BY:	NAME/DATE/TIME:	CTDOT STANDARD SHEET	STANDARD SHEET TITLE: TYPE "C" & "C-L" CATCH BASIN TOPS AND CURBS	STANDARD SHEET NO.: HW-507_07		
-	-	-						Leo Fontaine 2011.11.10 10:04:01 -05'00'				APPROVED BY:	NAME/DATE/TIME:
2	7/28/11	REMOVE MIN. DROP NOTE						James H. Norman 2011.11.10 10:19:36 -05'00'				OFFICE OF ENGINEERING	
1	6/01/10	REVISE CALL-OUT											
REV	DATE	REVISION DESCRIPTION					Plotted Date: 11/10/2011						

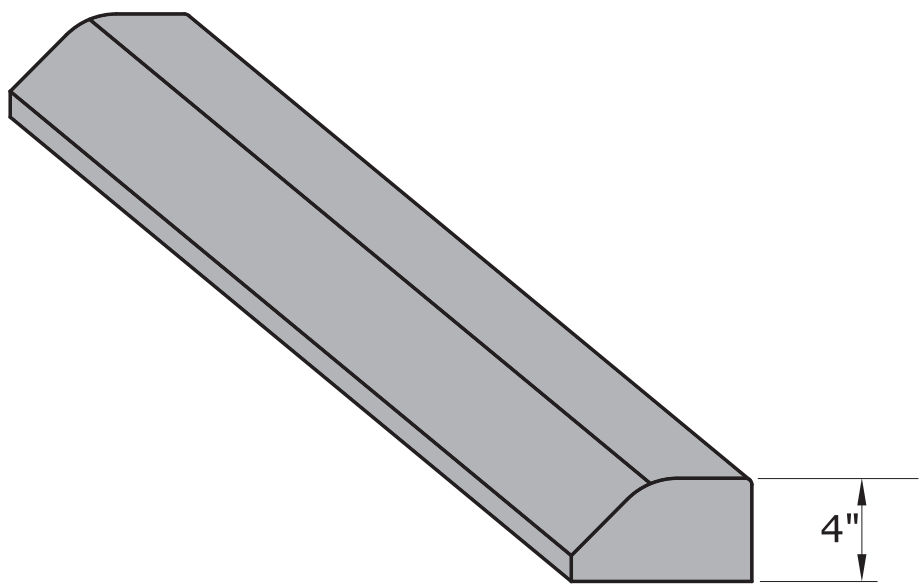


ALL METRIC DIMENSIONS ARE IN MILLIMETERS (mm) UNLESS OTHERWISE NOTED

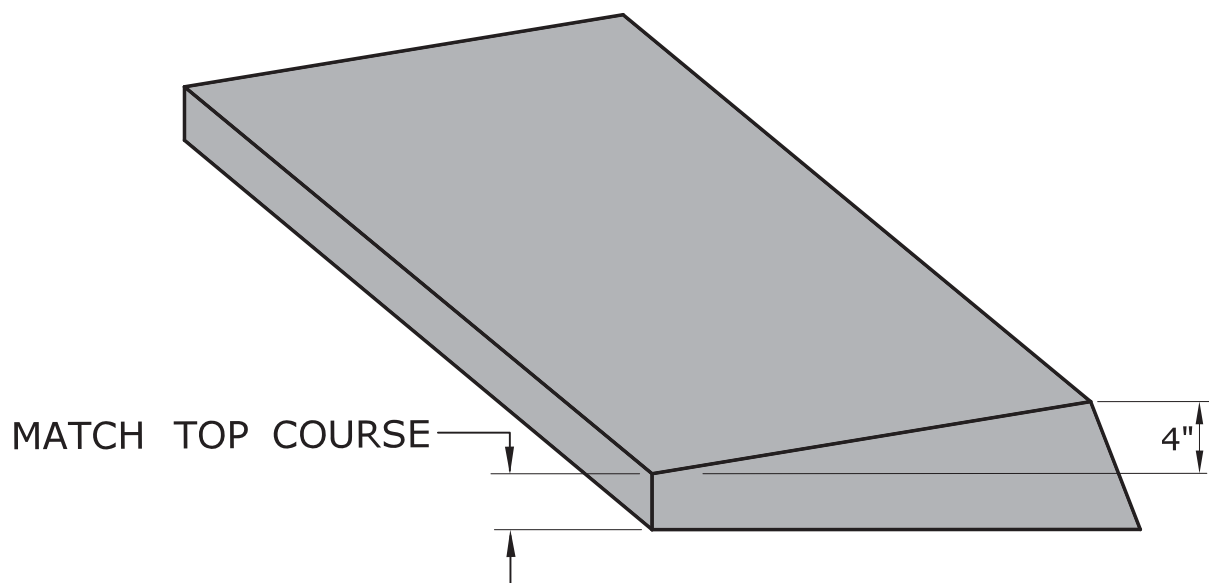
1	6/11	REVISE STEP WIDTH PER OSHA	THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.	NOT TO SCALE	<div><div>STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION</div></div>	SUBMITTED BY: NAME/DATE/TIME:		CTDOT STANDARD SHEET OFFICE OF ENGINEERING	STANDARD SHEET TITLE:	STANDARD SHEET NO.:	
2	7/13	REVISE COVER FRAME WEIGHT				<div><div>Digitally signed by Leo L. Fontaine Date: 2013.07.24 11:01:54-04'00'</div></div>			APPROVED BY: NAME/DATE/TIME:	MANHOLE - FRAME & COVER	HW-507_10
-	-	-				James H. Norman 2013.07.24 14:43:21-04'00'					
-	-	-									
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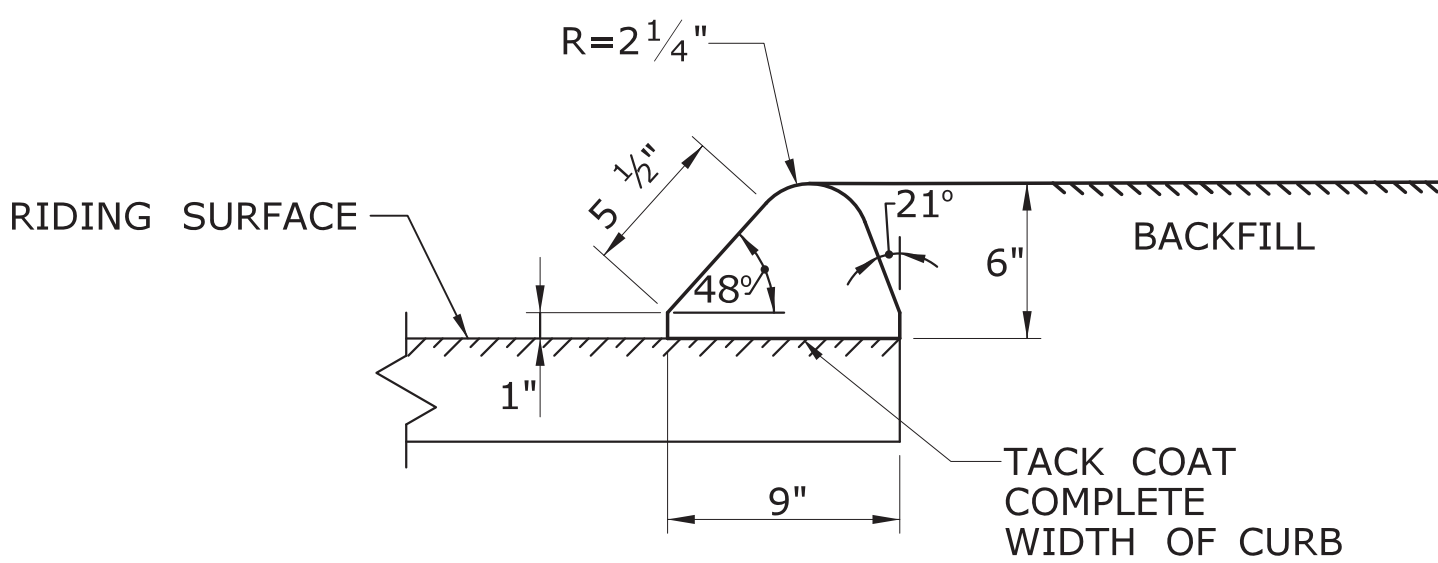
BITUMINOUS CONCRETE LIP CURBING
(6" HIGH)



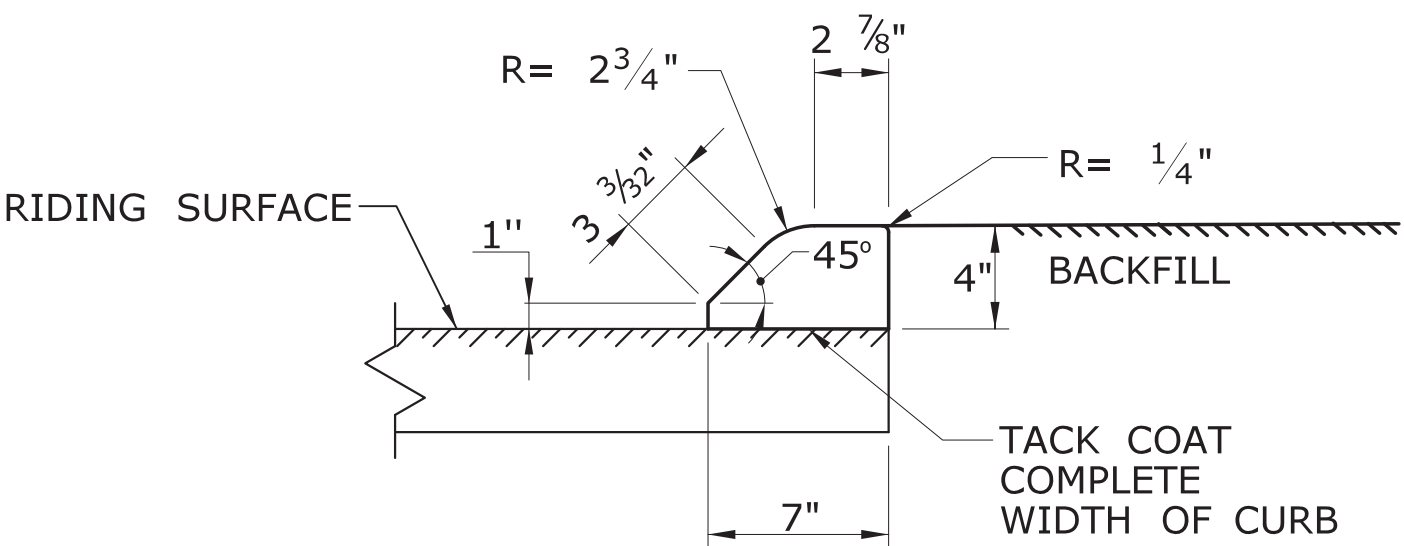
BITUMINOUS CONCRETE PARK CURBING
(4" HIGH)



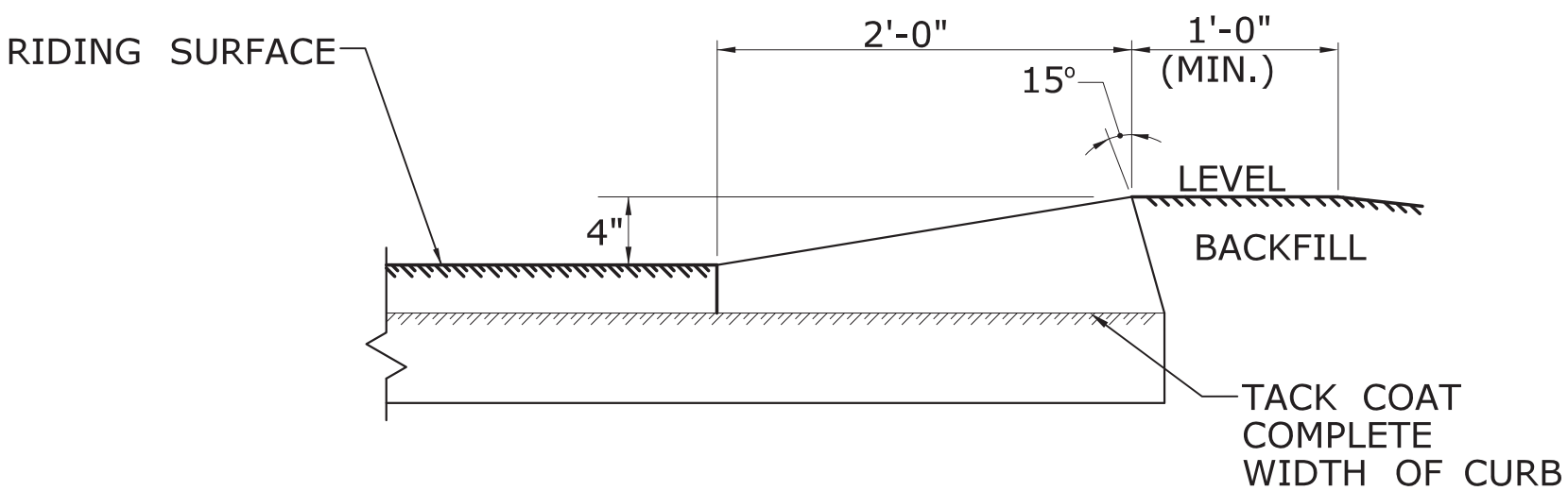
BITUMINOUS CONCRETE BERM CURBING
(4" HIGH)






SECTION



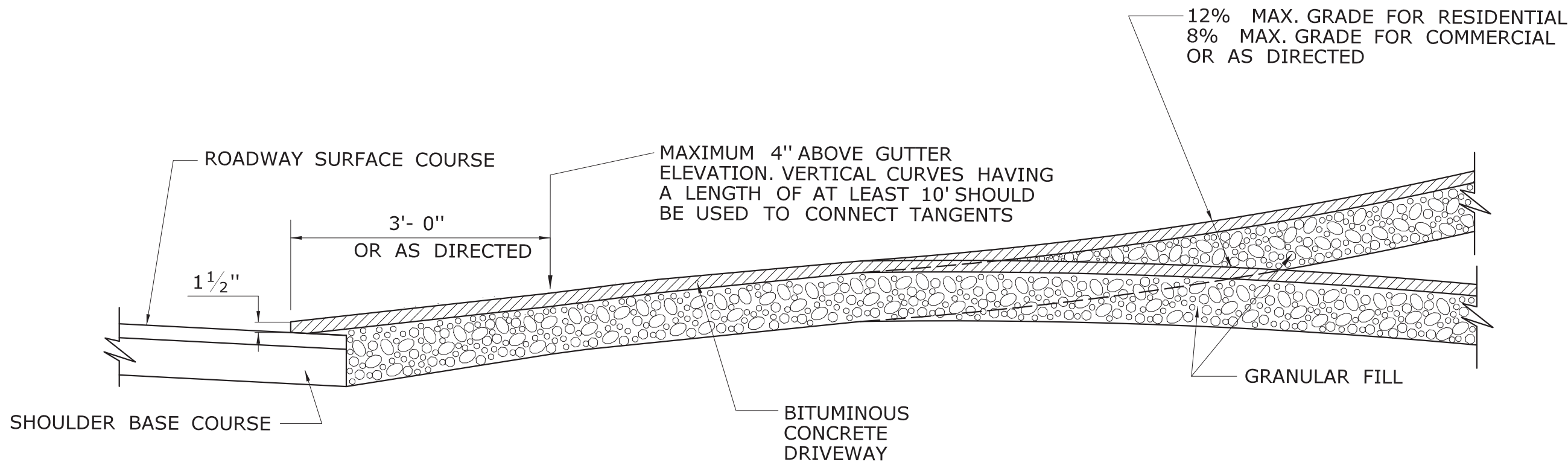
SECTION



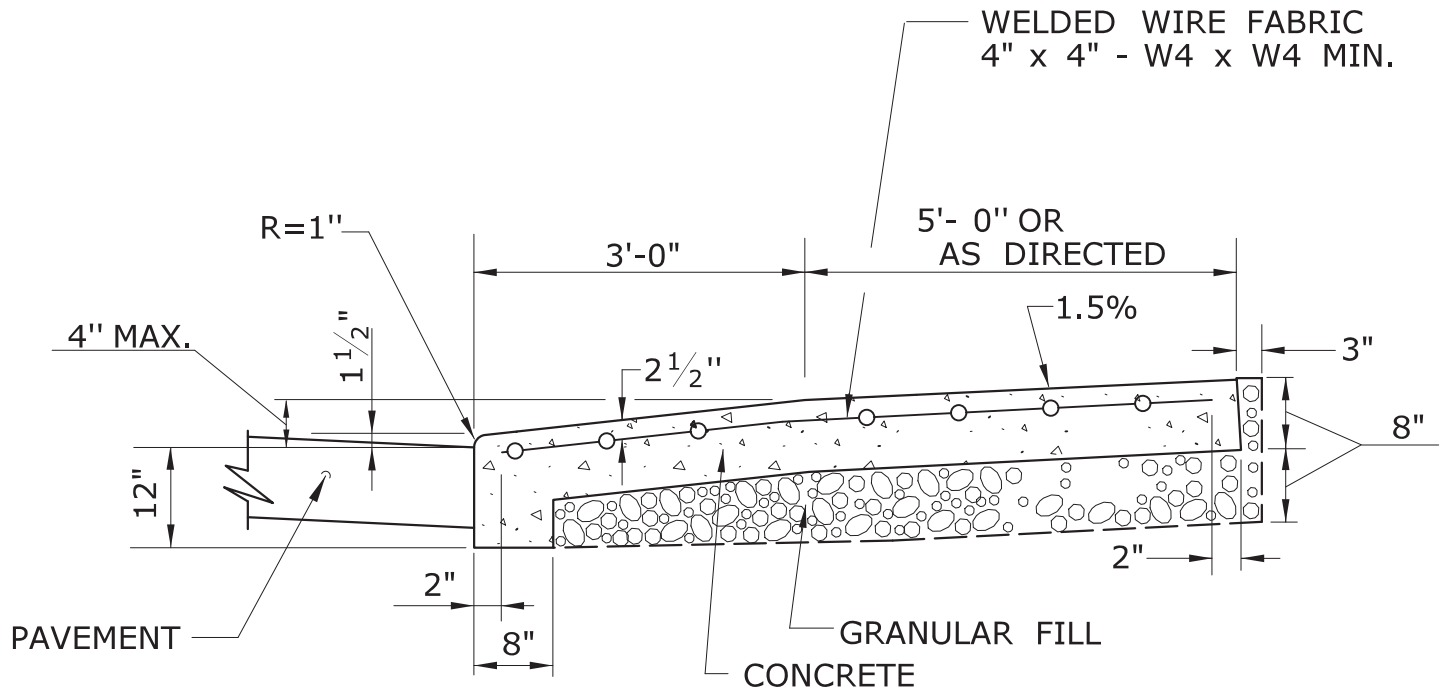
SECTION

1	6/17	NEW SHEET	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.	NOT TO SCALE	 STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION	SUBMITTED BY:  NAME/DATE/TIME: Leo Fontaine, P.E. 2017.06.07 07:33:51-04'00"	APPROVED BY:  NAME/DATE/TIME: Gregory M. Dorosh, P.E. 2017.06.07 10:44:27-04'00"	CTDOT STANDARD SHEET OFFICE OF ENGINEERING	STANDARD SHEET TITLE: BITUMINOUS CONCRETE CURBING	STANDARD SHEET NO.: HW-815_01
REV.	DATE	REVISION DESCRIPTION	Plotted Date: 6/6/2017	Filename: HW-815_01.dgn	Model: CT-Civil-2D_Sheet					

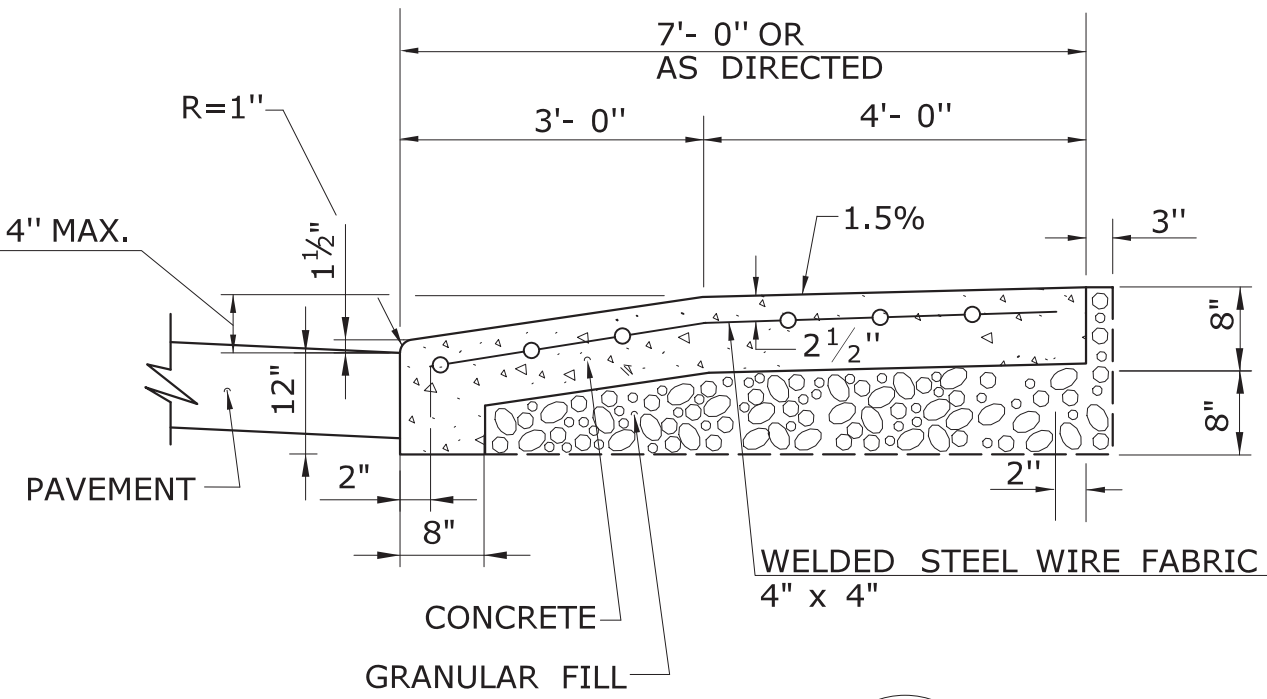
- GENERAL NOTES:**
1. DRIVEWAY ENTRANCE SHALL BE A MINIMUM OF 12' WIDE, EXCLUDING CURBING WHEN PRESENT.
 2. WELDED WIRE FABRIC MATS WITH REINFORCING AT CLOSER SPACING MAY BE USED.
 3. SURFACE HMA S0.375 TO BE PLACED IN TWO EQUAL LIFTS FOR BOTH RESIDENTIAL AND COMMERCIAL DRIVEWAYS.



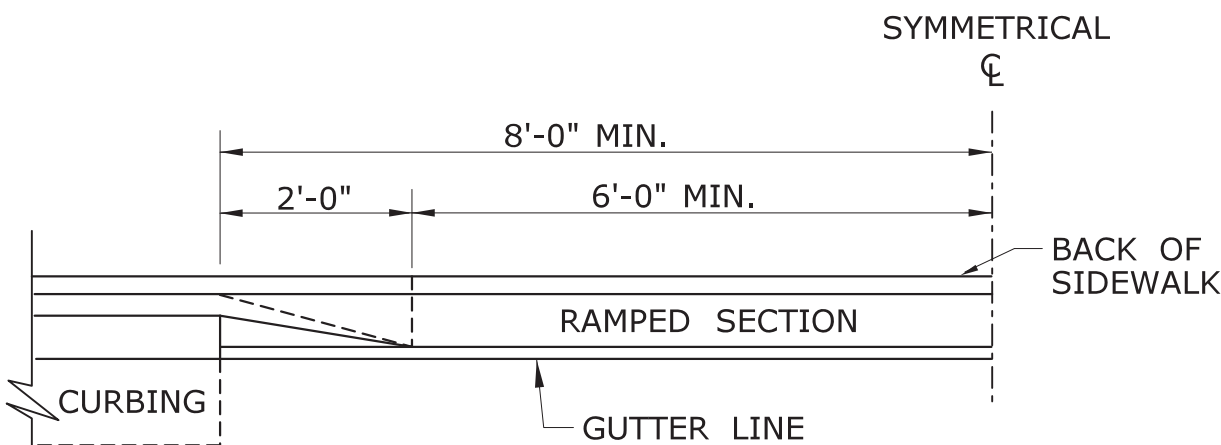
SECTION A



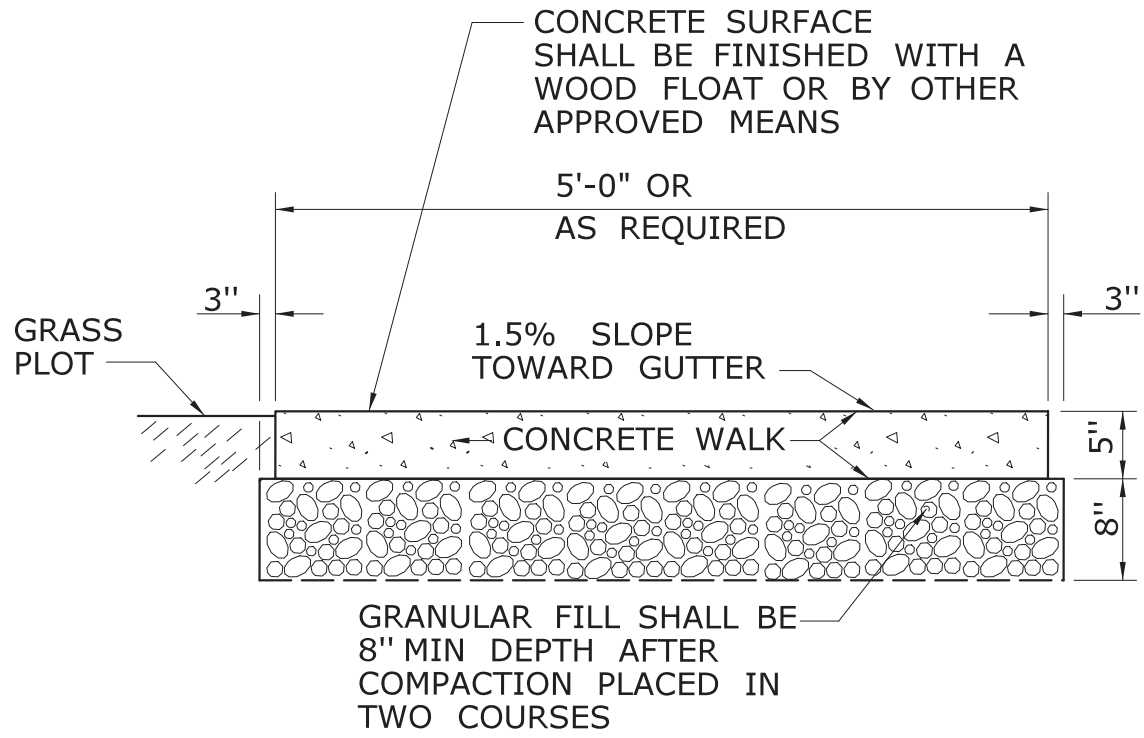
SECTION C



SECTION B

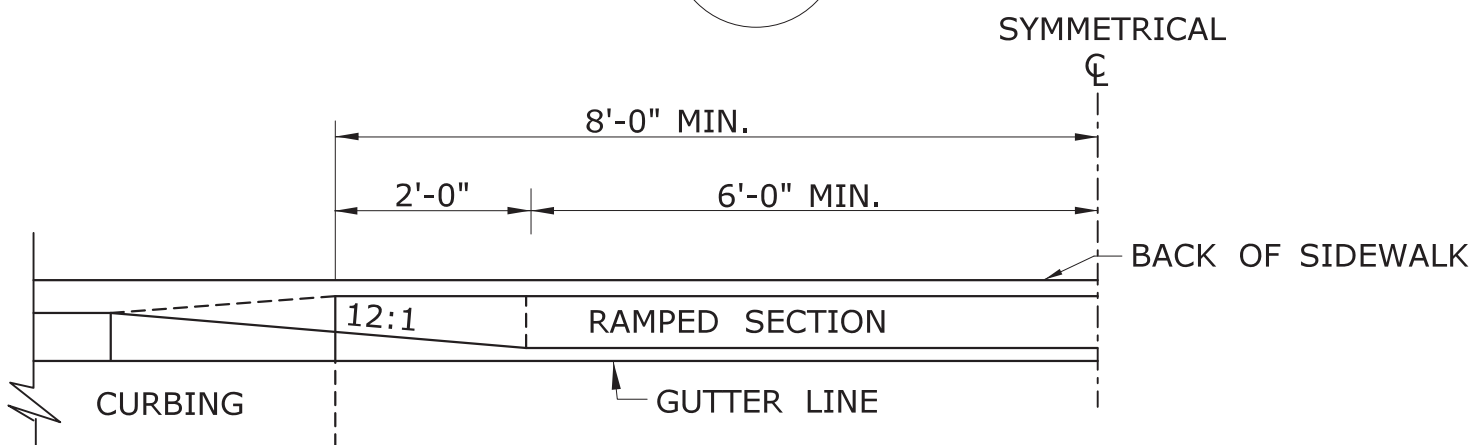


HALF ELEVATION

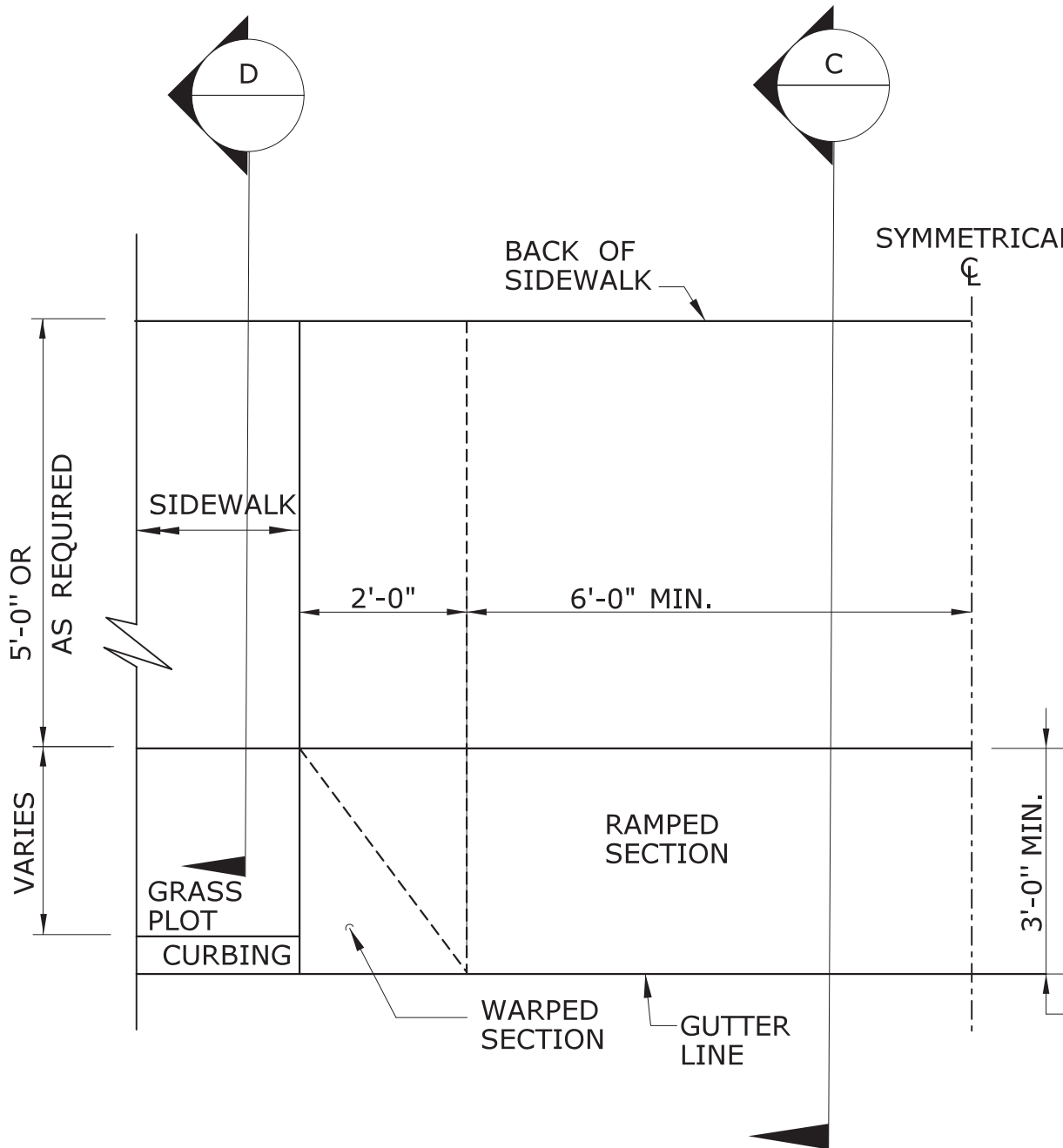


SECTION D

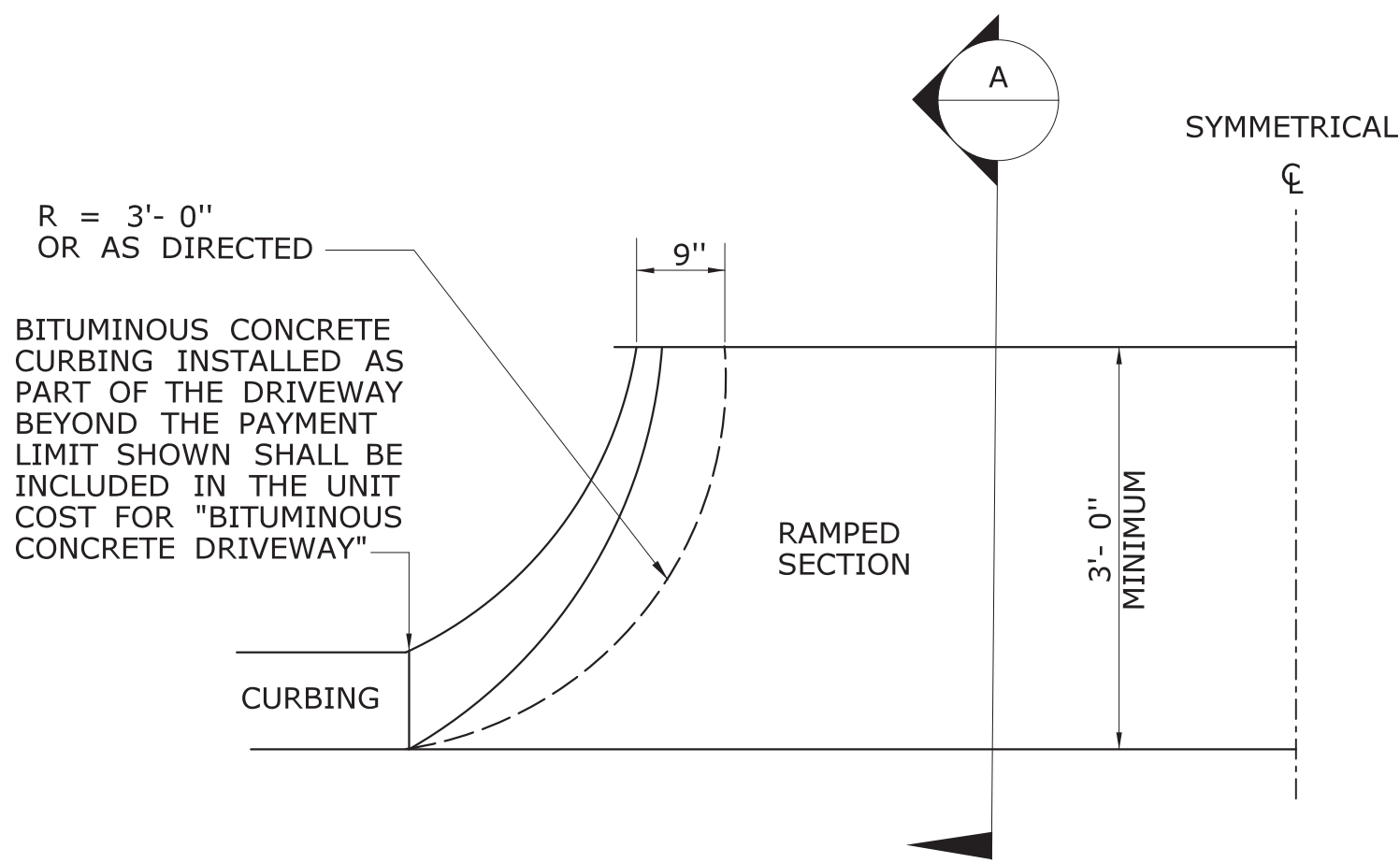
TYPICAL SECTION
BITUMINOUS CONCRETE
SIDEWALK AND DRIVEWAY



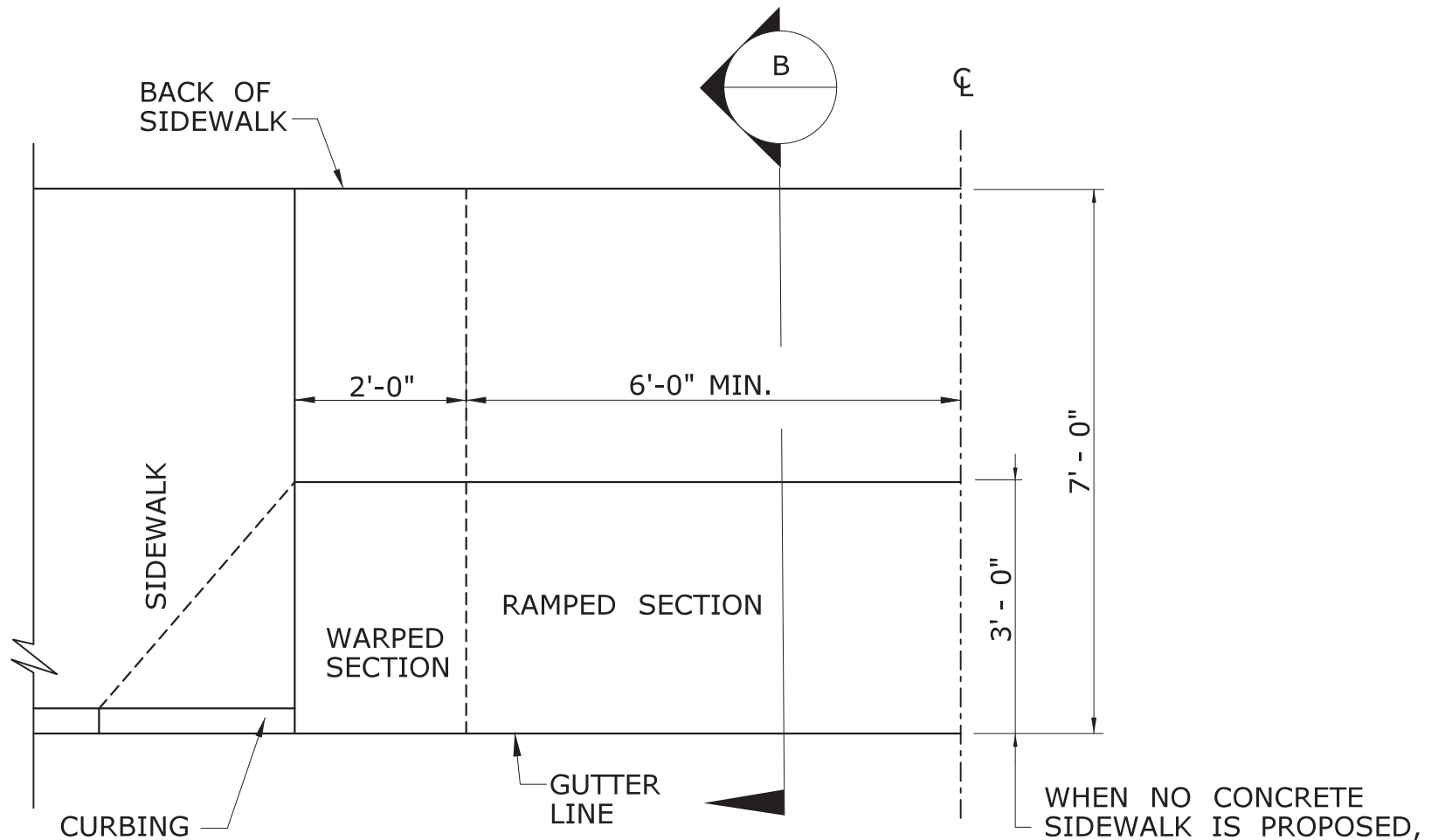
HALF ELEVATION




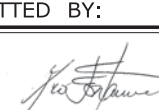
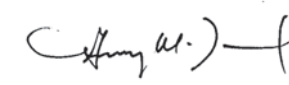
HALF PLAN OF
CONCRETE DRIVEWAY RAMP WHERE
CURB IS SEPARATED FROM
SIDEWALK BY GRASS PLOT

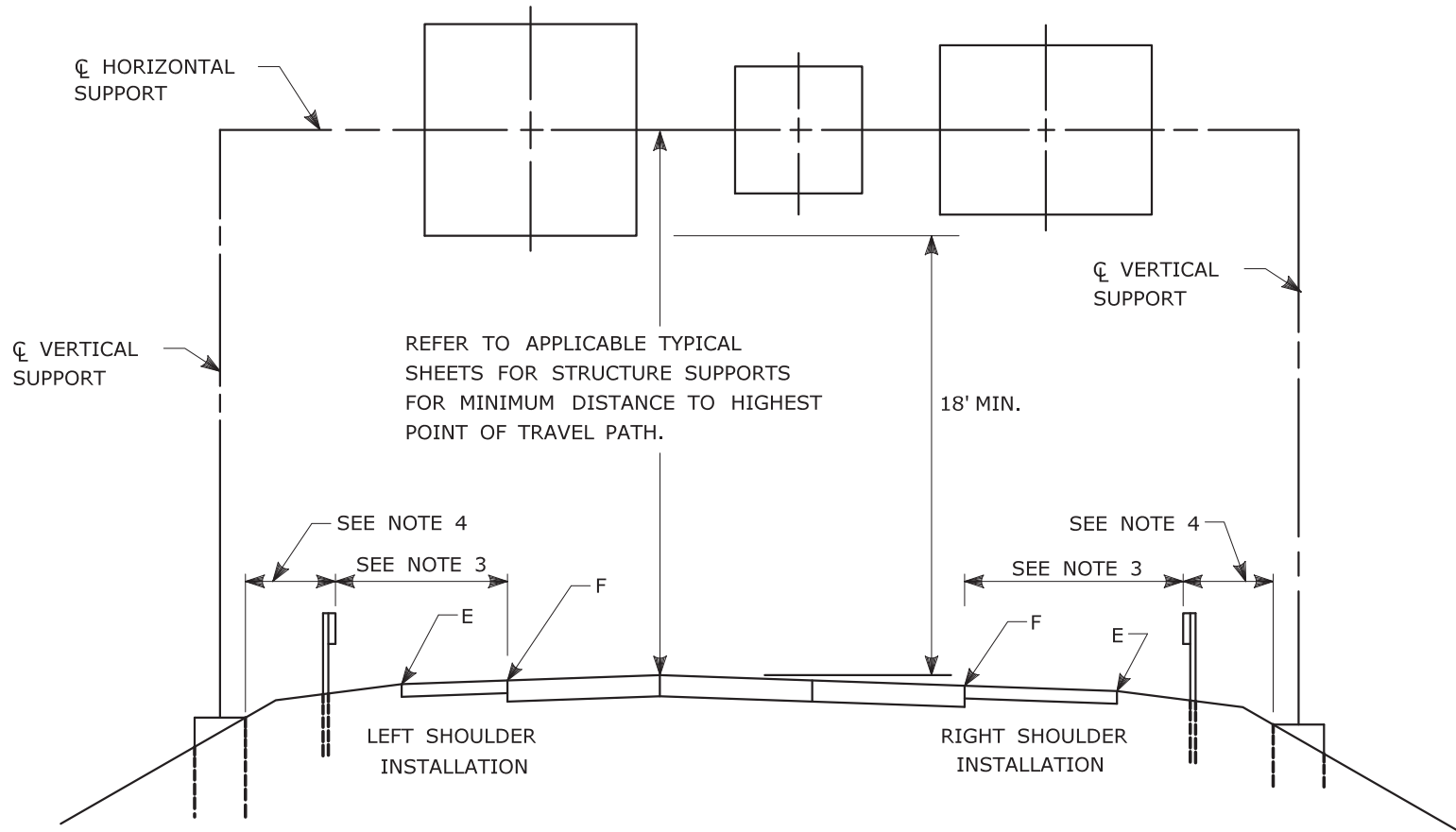


HALF BITUMINOUS CONCRETE
DRIVEWAY PLAN



HALF PLAN OF
CONCRETE DRIVEWAY RAMP WHERE
SIDEWALK ADJOINS CURBING

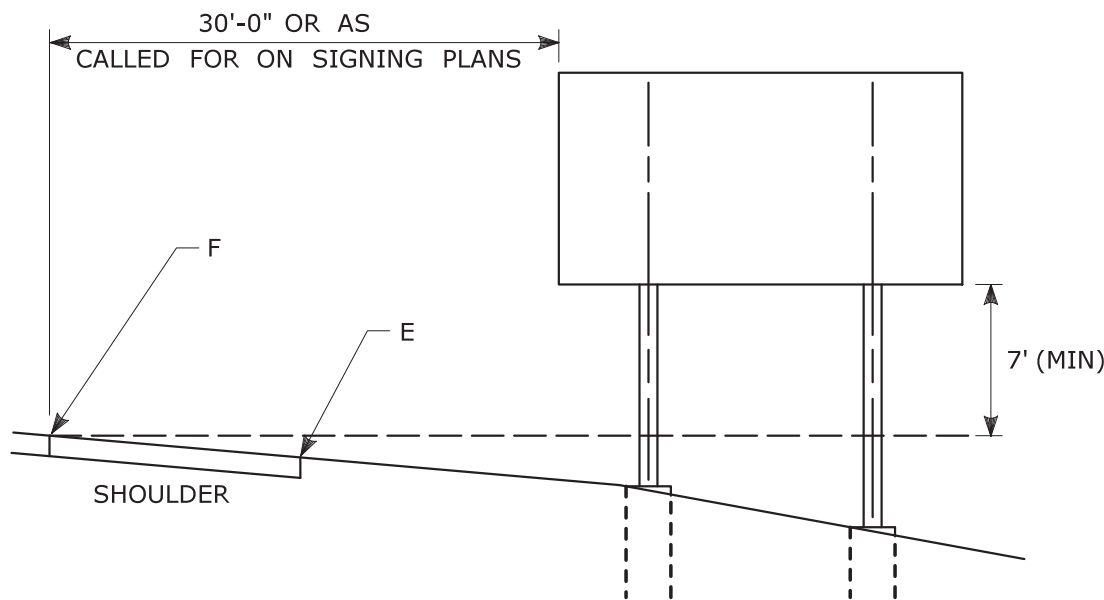
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2	6/01/10	REVISED HALF ELEVATION DETAILS								
3	1/12	REVISE 2% MAX. SLOPE NOTE								
4	6/17	REVISED SLOPES & MATERIAL COMPOSITIONS								
-	-	INCREASED WALKING WIDTH OF CONCRETE DRIVEWAY RAMP								
REV.	DATE	REVISION DESCRIPTION	Plotted Date: 6/6/2017		Filename: HW-921_01.dgn	Model: CT_Civil_2D_Sheet				



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.

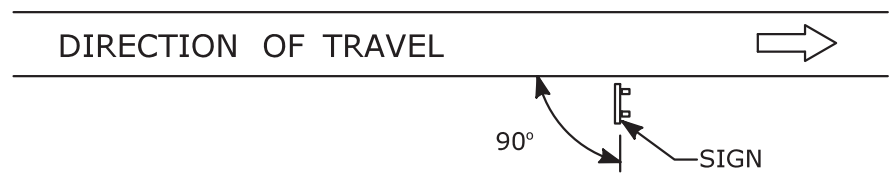


DIAGRAM "A"

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.

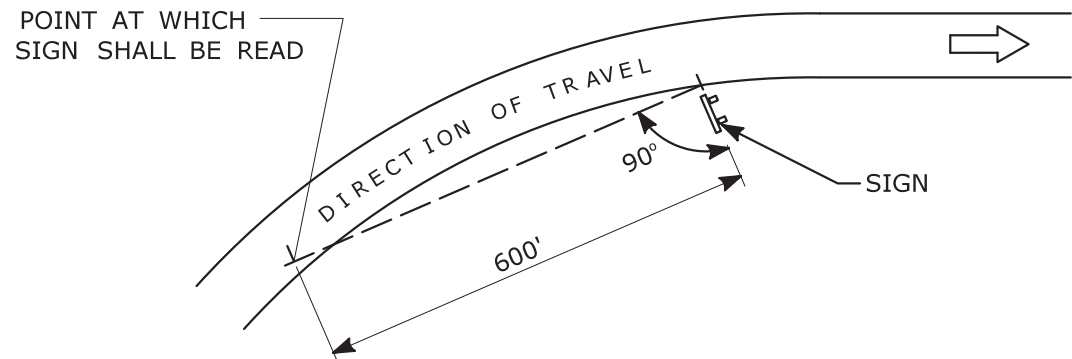
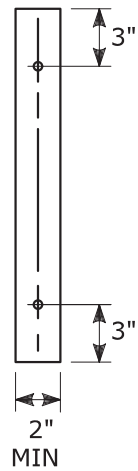


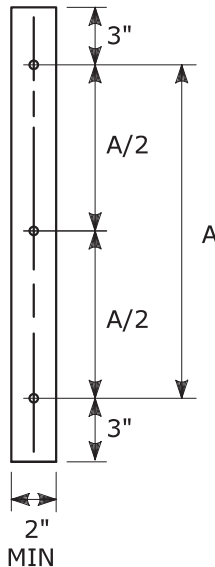
DIAGRAM "B"

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

RETROREFLECTIVE STRIPS
48" LONG OR LESS:



RETROREFLECTIVE STRIPS
OVER 48" LONG:



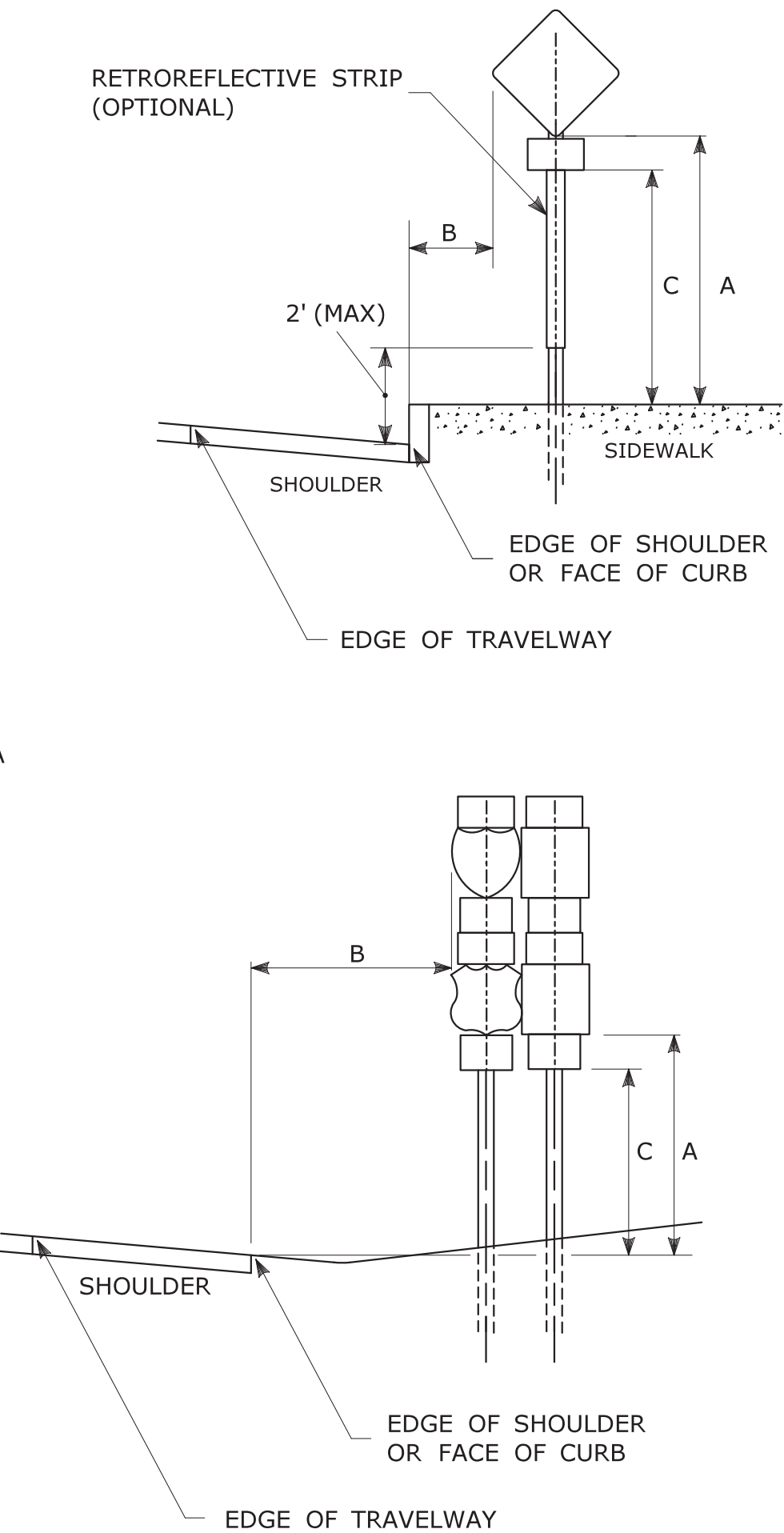
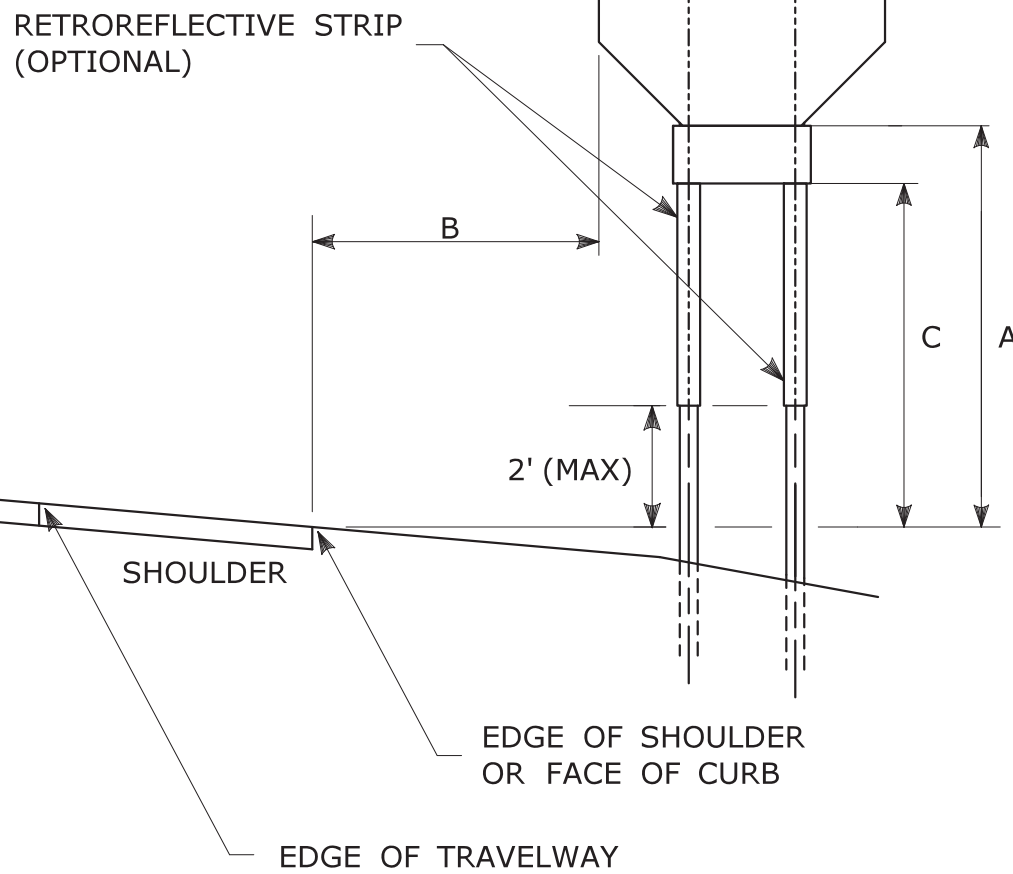
RETROREFLECTIVE STRIP DETAIL

NOTES:

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 RETROREFLECTIVE 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" MIN SIGN HEIGHT	DIM."B" MIN LATERAL OFFSET	DIM."C" MIN PLAQUE HEIGHT	ASSEMBLY LOCATION
7'	6' 12'	5'	SIGNS ON FREEWAYS AND EXPRESSWAYS EXCEPT CHEVRON ALIGNMENT SIGNS, ONE-DIRECTION LARGE ARROW SIGNS, DO NOT ENTER SIGNS, AND WRONG WAY SIGNS
5'	2'	4'	<ul style="list-style-type: none">• SIGNS IN RURAL AREAS• DO NOT ENTER AND WRONG WAY SIGNS ALONG EXIT RAMP• DO NOT ENTER AND WRONG WAY SIGNS ON LIMITED ACCESS HIGHWAYS
5'	2'	N/A	<ul style="list-style-type: none">• CHEVRON ALIGNMENT SIGNS LOCATED ON FREEWAYS, EXPRESSWAYS, RAMP, AND IN RURAL AREAS• ONE-DIRECTION LARGE ARROW SIGNS LOCATED ON FREEWAYS, EXPRESSWAYS, RAMP, AND IN RURAL AREAS
4'	2'	4'	CENTRAL ISLANDS OF ROUNDABOUTS
7'	2'	6'	BUSINESS & RESIDENTIAL AREAS WHERE PARKING OR OTHER OBSTRUCTIONS LIMIT VISIBILITY
7'	2'	7'	SIDEWALKS

OR AS DIRECTED BY THE ENGINEER

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.

A CLEAR PATH OF NOT LESS THAN 4 FT SHALL BE PROVIDED IN SIDEWALK AREAS.

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2	4-2017	MINOR REVISIONS.											
1	2-2011	MINOR REVISIONS.											
REV.	DATE	REVISION DESCRIPTION		Plotted Date: 4/3/2017	NOT TO SCALE				APPROVED BY: Gregory M. Dorosh, P.E. 2017.04.20 13:14:38-04'00'	NAME/DATE/TIME:	OFFICE OF ENGINEERING		

SECTION A-A

3 1/2"

3/4" TYP.

2"

1 5/16"

1"

3/8" DIA.
HOLES 1" O.C.

LENGTH AS REQUIRED

3"

TAPER

Detailed description: The drawing consists of two parts. The top part is a cross-section labeled 'SECTION A-A' showing a U-shaped profile. The top flange has a width of 3 1/2 inches and a height of 3/4 inch (typical). The vertical leg has a height of 2 inches. The bottom flange has a width of 1 5/16 inches. The bottom part is a side elevation of a tapered post. The post has a series of circular holes spaced 1 inch on center, with a diameter of 3/8 inch. The top of the post has a 1-inch wide flange. The post tapers from a larger diameter at the top to a smaller diameter at the bottom, with a 3-inch taper indicated at the base. The length of the post is marked as 'LENGTH AS REQUIRED'. Section lines A-A are shown at the top of the post.

Diagram illustrating the components and dimensions for the sign panel mounting assembly:

- WASHER** $\frac{11}{32}$ " I.D. X $\frac{11}{16}$ " O.D. X $\frac{1}{16}$ " THICK
- SELF LOCKING NUT WITH PLASTIC OR FIBER INSERT**
- NYLON WASHER** $\frac{3}{8}$ " I.D. X $\frac{5}{8}$ " O.D. X $\frac{1}{32}$ " THICK
- BACK-UP PLATE** $\frac{1}{8}$ " THICK
- SIGN PANEL**
- $\frac{5}{16}$ " BOLT HEX HEAD**

Diagram illustrating the components and dimensions of a sign panel assembly:

- WASHER $\frac{11}{32}$ " I.D. X $\frac{11}{16}$ " O.D. X $\frac{1}{16}$ " THICK
- SELF LOCKING NUT WITH PLASTIC OR FIBER INSERT
- NYLON WASHER $\frac{3}{8}$ " I.D. X $\frac{5}{8}$ " O.D. X $\frac{1}{32}$ " THICK
- SIGN PANEL
- $\frac{5}{16}$ " BOLT HEX HEAD
- BACK-UP PLATE $\frac{1}{8}$ " THICK

2"

3 1/2"

3/8" DIA. HOLE

BOLTS - STAINLESS STEEL CONFORMING TO ASTM F593,
ALLOY GROUP 1 OR 2 (ALLOY TYPES 304 OR 316).

SELF LOCKING NUTS - STAINLESS STEEL CONFORMING TO ASTM F594,
ALLOY GROUP 1 OR 2 (ALLOY TYPES 304 OR 316).

WASHERS - STAINLESS STEEL CONFORMING TO ASTM A240,
(ALLOY TYPES 304 OR 316).

6'-6"
OR
LENGTH
AS
REQUIRED

3/4"

C

C

30 - 3/8" DIA.
HOLES 1" O.C.

GROUND
LINE

24" MIN
EMBEDMENT

3" (75)

TAPER

1. STEEL FOR DELINEATOR POSTS SHALL BE ASTM A36 STEEL.
STEEL FOR ALL OTHER POSTS SHALL CONFORM TO THE MECHANICAL REQUIREMENTS OF ASTM A 499 GRADE 80 AND TO THE CHEMICAL REQUIREMENTS OF ASTM A1 CARBON STEEL TEE RAIL HAVING NOMINAL WEIGHT (MASS) OF 91 LBS. OR GREATER PER LINEAR YARD.
2. AFTER FABRICATION, ALL STEEL POSTS, STRAPS AND PLATES SHALL BE GALVANIZED TO MEET THE REQUIREMENTS OF ASTM A123.
3. WASHERS FOR BREAKAWAY INSTALLATIONS SHALL MEET ASTM F436, TYPE 1.
4. SPACER BAR FOR BREAKAWAY INSTALLATION SHALL CONFORM TO THE MECHANICAL REQUIREMENTS OF ASTM A36.
5. ALL BOLTS, NUTS, AND WASHERS FOR BREAKAWAY INSTALLATIONS SHALL BE GALVANIZED TO MEET THE REQUIREMENTS OF ASTM A153.
6. ALL SIGN POSTS SHALL HAVE BREAKAWAY FEATURES THAT MEET AASHTO REQUIREMENTS CONTAINED IN THE CURRENT "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS." THE BREAKAWAY FEATURES SHALL BE STRUCTURALLY ADEQUATE TO CARRY THE SIGNS SHOWN IN THE PLANS AT 60 mph WIND LOADINGS. INSTALLATIONS SHALL BE IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.
7. SIGN POSTS SHALL BE 4 LBS./FT.

SECTION F-F

DIRECTION OF TRAVEL

SIGN POST

F

F

STEEL

4" MAX REVEAL

4"

GROUND LINE

38" MIN EMBEDMENT

5/16" DIA. GRADE 9 CADMIUM PLATED HEX HEAD BOLT WITH FLAT WASHER, LOCK WASHER AND HEX NUT.

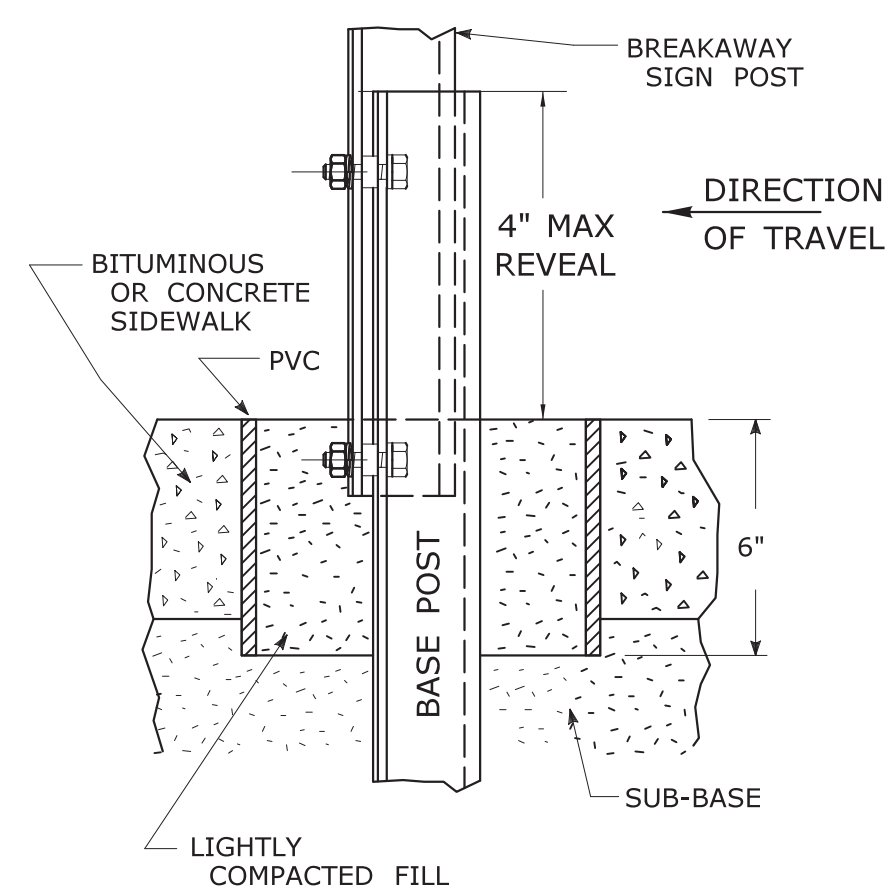
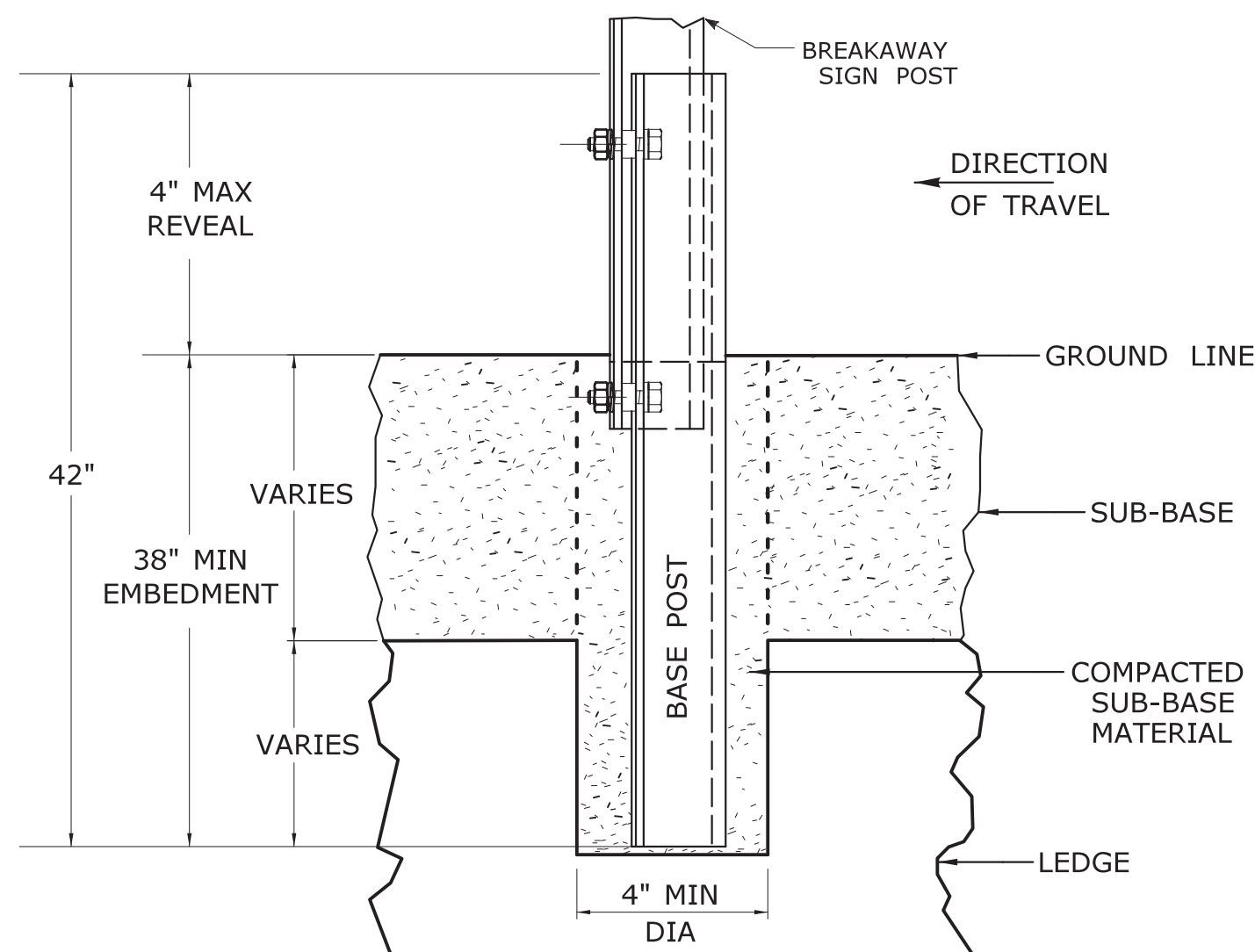
42"

POST

BASE

4" WIDE X 1 1/2" Thk. BREAKAWAY SYSTEM MASH OR NCHRP 350 REQUIREMENTS POSTS

HOLE SHALL BE FILLED WITH SUB-BASE MATERIAL AND COMPACTED WITH A TAMPING BAR, OR TECHNIQUE APPROVED BY THE ENGINEER, PRIOR TO BASE POST INSTALLATION.



Technical drawing of a sign panel assembly, showing side and top views with dimensions and component labels.

Side View Dimensions:

- Overall width: $6\frac{1}{4}"$
- Distance from left edge to center of hole: $3\frac{1}{8}"$
- Panel height: $1"$
- Distance from center of hole to right edge: $\frac{1}{2}"$


Top View Dimensions:

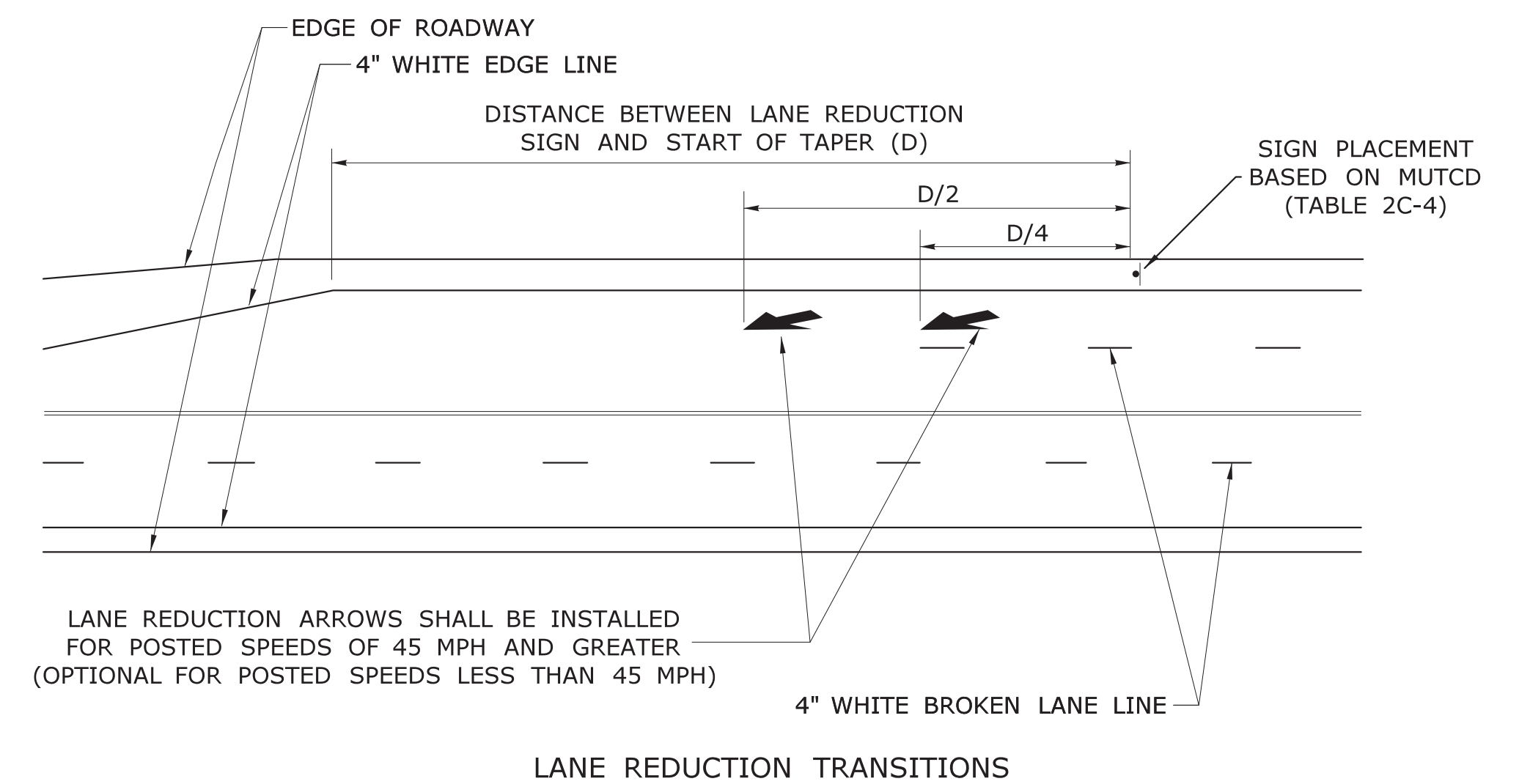
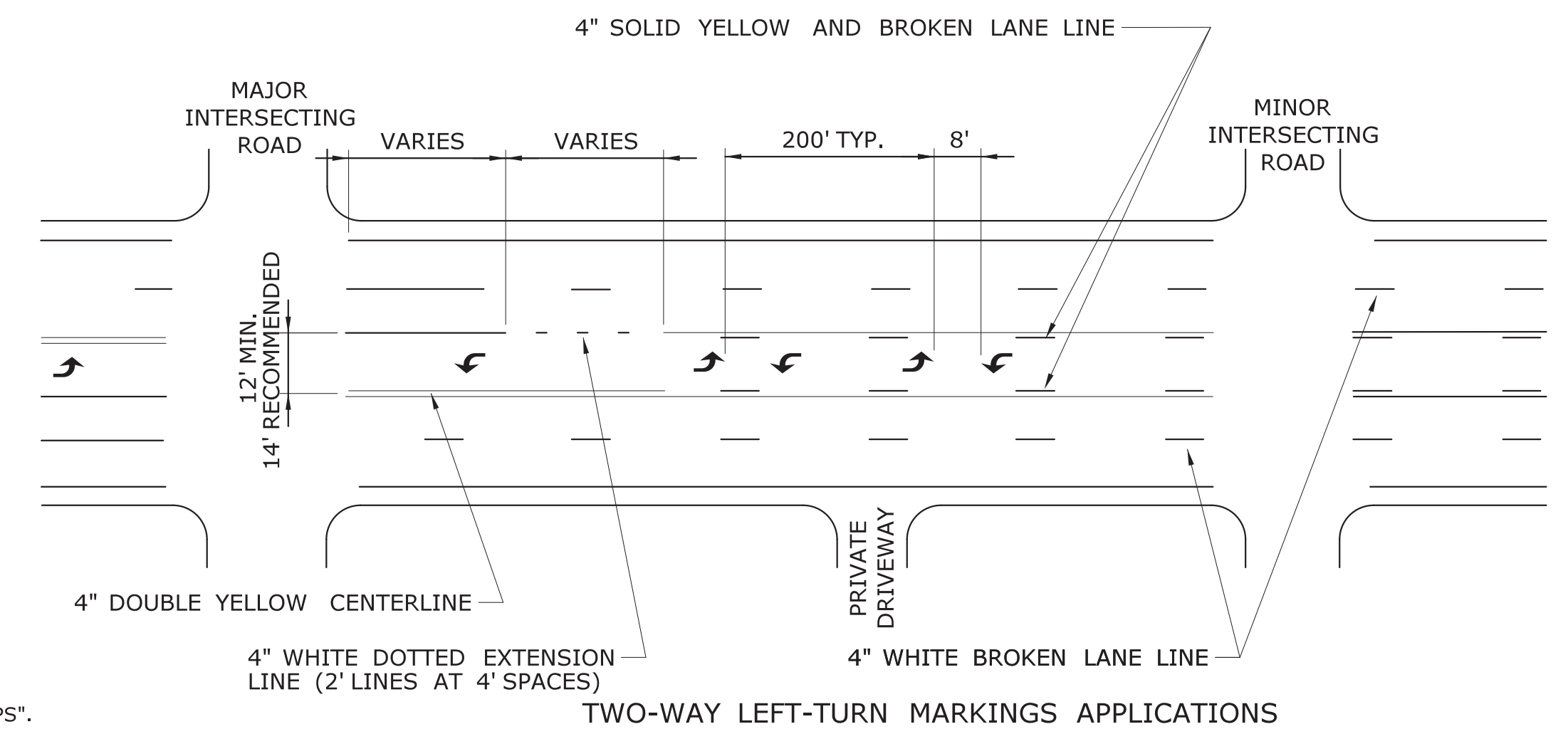
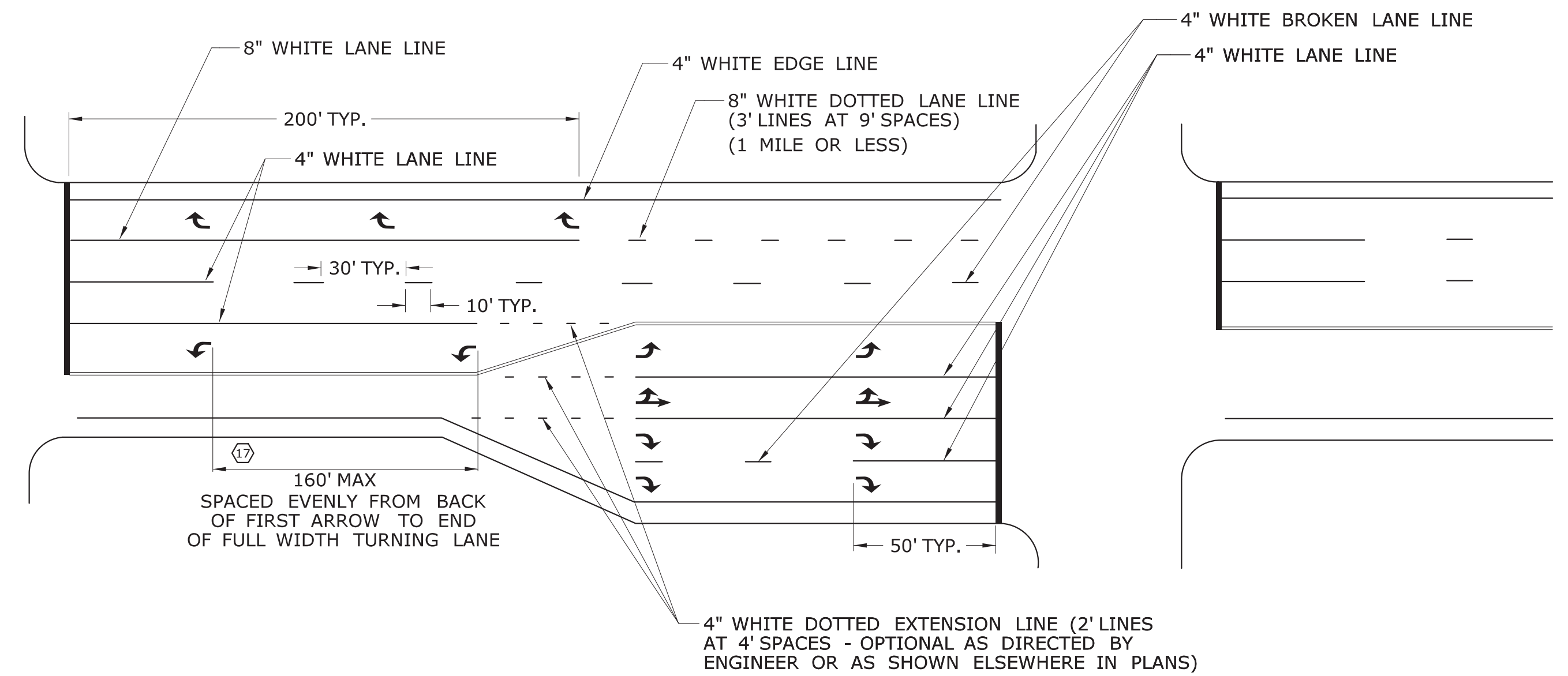
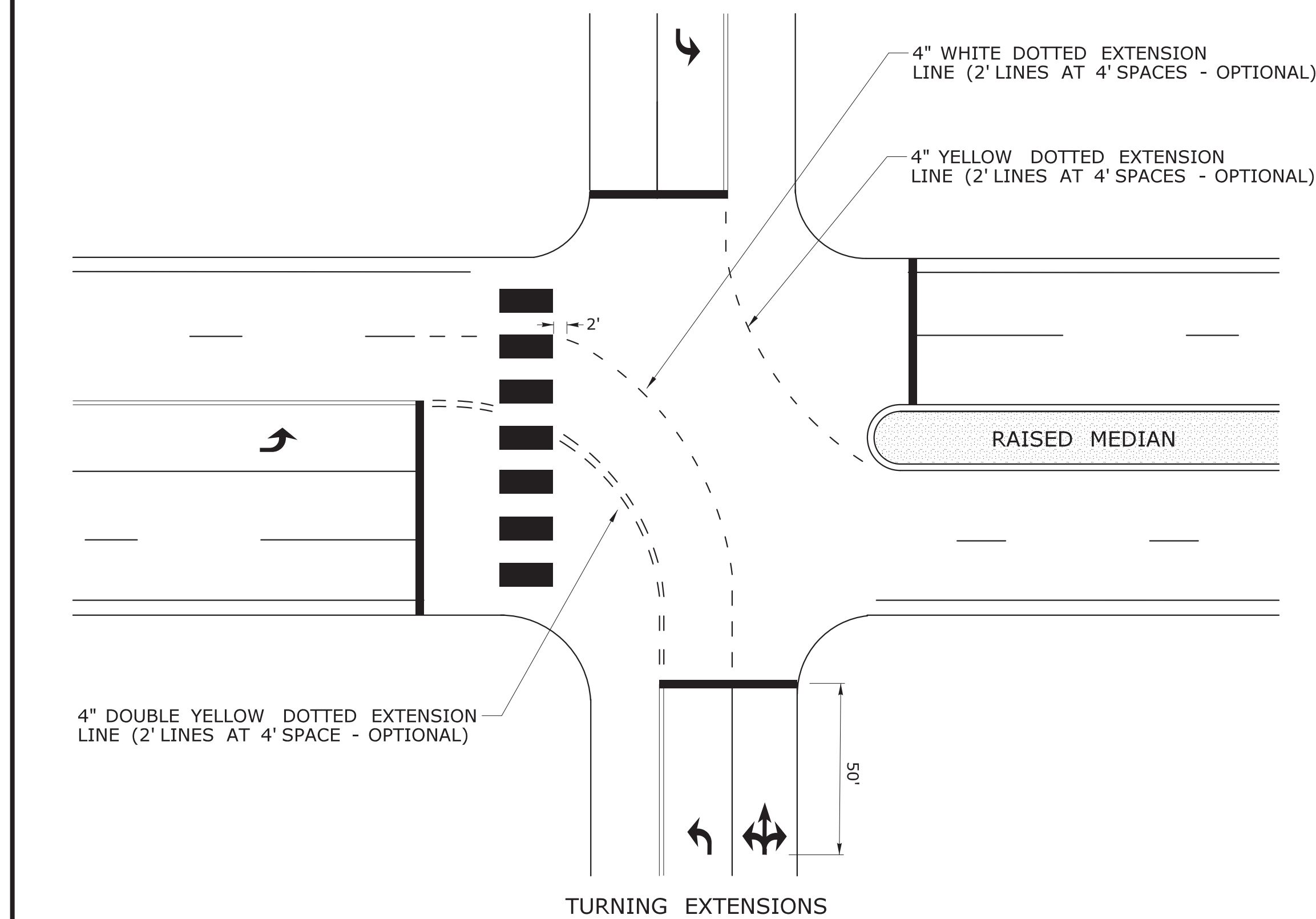
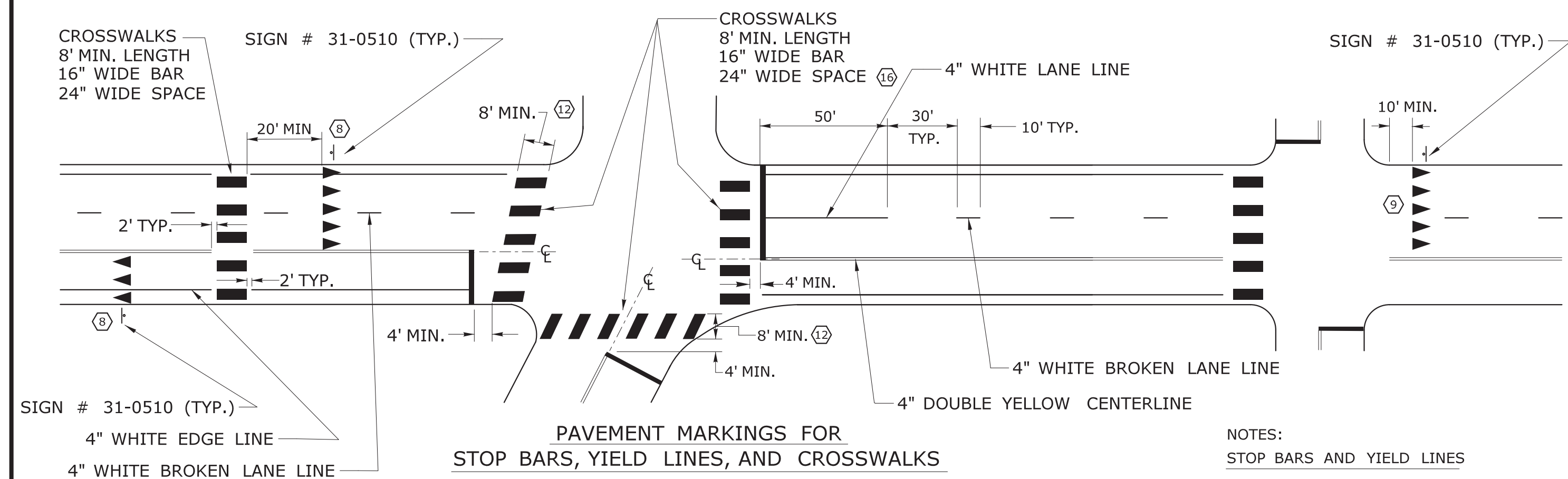
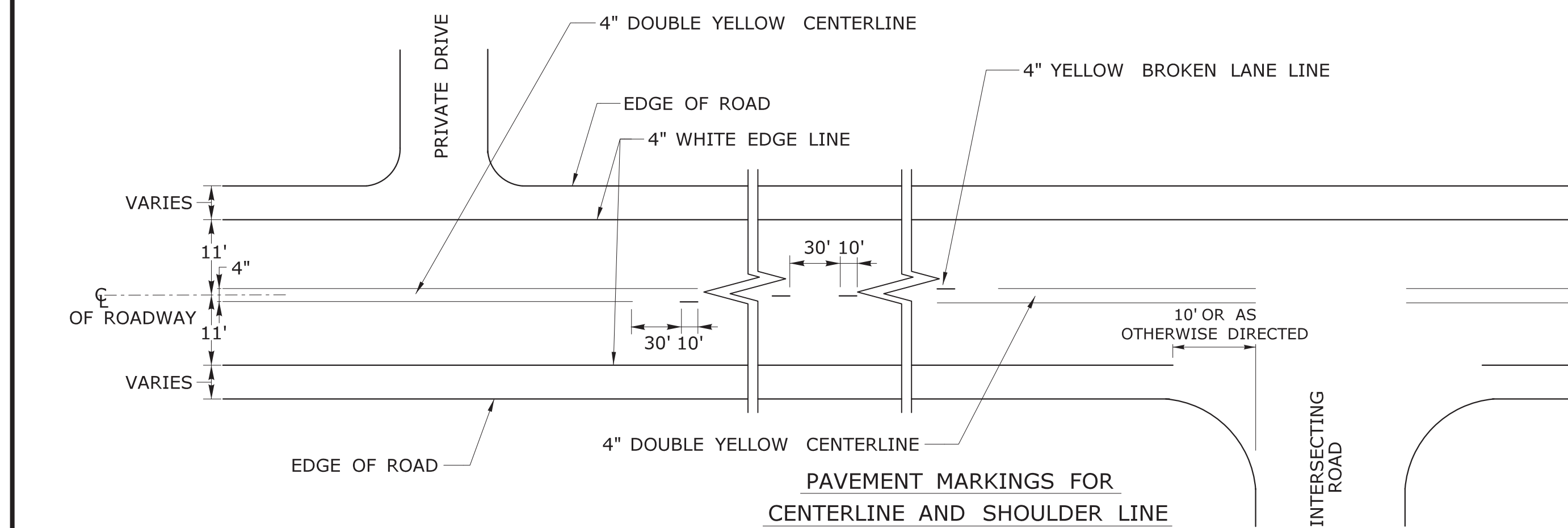
- Overall width: $5"$
- Distance from left edge to center of hole: $5"$
- Panel width: $5" \text{ TYP.}$
- Distance from top edge to center of hole: $2\frac{1}{2}"$

Component Labels:

- SIGN PANEL
- HEX HEAD BOLT
- $\frac{5}{16}" \times 1"$
- $\frac{3}{8}" \text{ DIA. HOLE}$
- $\frac{5}{16}" \text{ HEX HEAD BOLT}$
- NYLON WASHER
- $\frac{11}{32}" \text{ I.D.} \times \frac{5}{8}" \text{ O.D.} \times \frac{1}{32}" \text{ THICK}$
- RADIUS SHALL BE AS SMALL AS PRACTICAL
- .080 THICK ALUMINUM
- STAINLESS STEEL WASHER
- $\frac{11}{32}" \text{ I.D.} \times \frac{11}{16}" \text{ O.D.} \times \frac{1}{16}" \text{ THICK}$
- SELF LOCKING NUT WITH PLASTIC OR FIBER INSERT.
- SELF LOCKING NUT WITH PLASTIC OR FIBER INSERT.
- STAINLESS STEEL WASHER
- $\frac{11}{32}" \text{ I.D.} \times \frac{11}{16}" \text{ O.D.} \times \frac{1}{16}" \text{ THICK}$
- NYLON WASHER
- $\frac{11}{32}" \text{ I.D.} \times \frac{5}{8}" \text{ O.D.} \times \frac{1}{32}" \text{ THICK}$

[illegible]

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			Plotted Date: 4/3/2017				<div>APPROVED BY:NAME/DATE/TIME:<div>Gregory M. Dorosh, P.E. 2017.04.20 13:16:12-04'00"</div></div>				
REV.	DATE	REVISION DESCRIPTION					Filename: TR-1210_04.dgnModel: CT-Civil.2D-Sheet				



- NOTES:

STOP BARS AND YIELD LINES

1. STOP BARS AND YIELD LINES SHALL BE WHITE.
2. STOP BARS SHALL BE 12" MIN. UNLESS OTHERWISE NOTED ON PLANS.
3. STOP BARS TO BE PLACED A MINIMUM OF 4' IN ADVANCE OF THE NEAREST EDGE OF CROSSWALK AND SHOULD BE PLACED 90° TO THE CENTERLINE OF THE ROADWAY.
4. IN THE ABSENCE OF A MARKED CROSSWALK THE STOP BAR SHOULD BE PLACED 90° TO THE CENTERLINE OF THE ROADWAY, AT THE DESIRED STOPPING POINT AT LEAST 5' AND NO MORE THAN 30' FROM THE NEAREST EDGE OF THE INTERSECTING ROADWAY.
5. THE STOP SIGN SHOULD BE PLACED IN LINE WITH THE STOP BAR. HOWEVER, IF THE STOP SIGN CANNOT BE LOCATED EXACTLY WHERE VEHICLES ARE EXPECTED TO STOP, THE STOP BAR SHOULD BE PLACED AT THE STOPPING POINT.
6. FOR STOP BARS AT RAMPS SEE DETAILS "R", "S", "T", & "U" AND NOTES ON TRAFFIC STANDARD SHEET TR-1210 07 "PAVEMENT MARKINGS FOR DIVIDED HIGHWAYS EXIT RAMPS".
7. FOR YIELD LINE INSTALLATIONS, ONLY FULL TRIANGLES ARE TO BE INSTALLED.
- ⑧ MID-BLOCK CROSSWALKS ARE CROSSWALKS LOCATED MORE THAN 50 FEET FROM A SIGNALIZED OR UNSIGNALIZED INTERSECTION. YIELD LINES ASSOCIATED WITH MIDBLOCK CROSSWALKS SHOULD BE INSTALLED 20 TO 50 FEET IN ADVANCE OF THE NEAREST CROSSWALK LINE OR AS DIRECTED BY THE ENGINEER.
SIGN # 31-0510 IS REQUIRED.
- ⑨ FOR CROSSWALKS AT UNSIGNALIZED INTERSECTIONS WITH MINOR STREET STOP CONTROL, YIELD LINES SHALL BE INSTALLED ON MULTI-LANE APPROACHES, BUT NOT SINGLE LANE APPROACHES.
10. THE YIELD SIGN SHOULD BE PLACED IN LINE WITH A YIELD LINE. HOWEVER, IF THE YIELD SIGN CANNOT BE LOCATED EXACTLY WHERE VEHICLES ARE EXPECTED TO YIELD, THE YIELD LINE SHOULD BE PLACED AT THE YIELDING POINT.

CROSSWALKS

11. CROSSWALK MARKINGS SHALL BE WHITE.
12. AT LOCATIONS WHERE THE CROSSWALK IS SKEWED, BARS TO BE PARALLEL TO CURB AND ENDS OF BARS TO BE PARALLEL. THE LENGTH OF THE BARS WILL VARY DEPENDING ON THE ANGLE OF SKEW.
13. BARS SHOULD BE NO CLOSER THAN 1' FROM EDGE OF ROAD.
14. ONLY FULL LENGTH BARS ARE TO BE INSTALLED.
15. DECORATIVE CROSSWALKS SHALL BE BANDED FROM CURB TO CURB WITH A MINIMUM 12" WIDE WHITE TRANSVERSE LINE ALONG EACH EDGE.
16. 24" WIDE SPACE TO BE CENTERED ON YELLOW CENTERLINE.

PAVEMENT MARKINGS FOR TURNING LANES

- 17 INSTALL AT LEAST TWO ARROWS PER LANE WHERE STORAGE LENGTH IS GREATER THAN 150 FEET.

[illegible]



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".



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 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.



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. TRAFFIC CONES NOT USED AT NIGHT MAY UTILIZE TYPE III SHEETING.
6. THE SECTIONS OF CONES NOT COVERED WITH RETROREFLECTIVE STRIPES SHALL BE ORANGE.



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 ORANGE AND WHITE STRIPES SLOPING DOWNWARD IN THE DIRECTION TRAFFIC IS TO PASS. 6" WIDE STRIPES SHALL BE USED.
3. THE ENTIRE AREA OF 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.



NOTES:

SUPPORTS SHALL BE METAL SIGN POSTS AND HAVE BREAK-AWAY FEATURES.




SEE TYPICAL SHEETS:

"TYPICAL SIGN SUPPORT AND SIGN PLACEMENT DETAILS-GORE EXIT SIGN"
 "TYPICAL METAL SIGN POSTS AND SIGN MOUNTING DETAILS"



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 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.

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2	8-2015	UPDATED PER MUTCD AND FORM 816 JAN 2015 REVISION.			NOT TO SCALE		APPROVED BY: NAME/DATE/TIME:  Charles S. Harlow, P.E. 2015.08.28 11:40:57-04'00"		CTDOT STANDARD SHEET		CONSTRUCTION SIGN SUPPORTS AND CHANNELIZING DEVICES	
1	2-2011	MINOR REVISIONS.							OFFICE OF ENGINEERING		TR-1220_02	
REV.	DATE	REVISION DESCRIPTION	Plotted Date: 8/14/2015		Filename: CTDOT_TRAFFIC_STD.DGN Model: TR-1220_02							