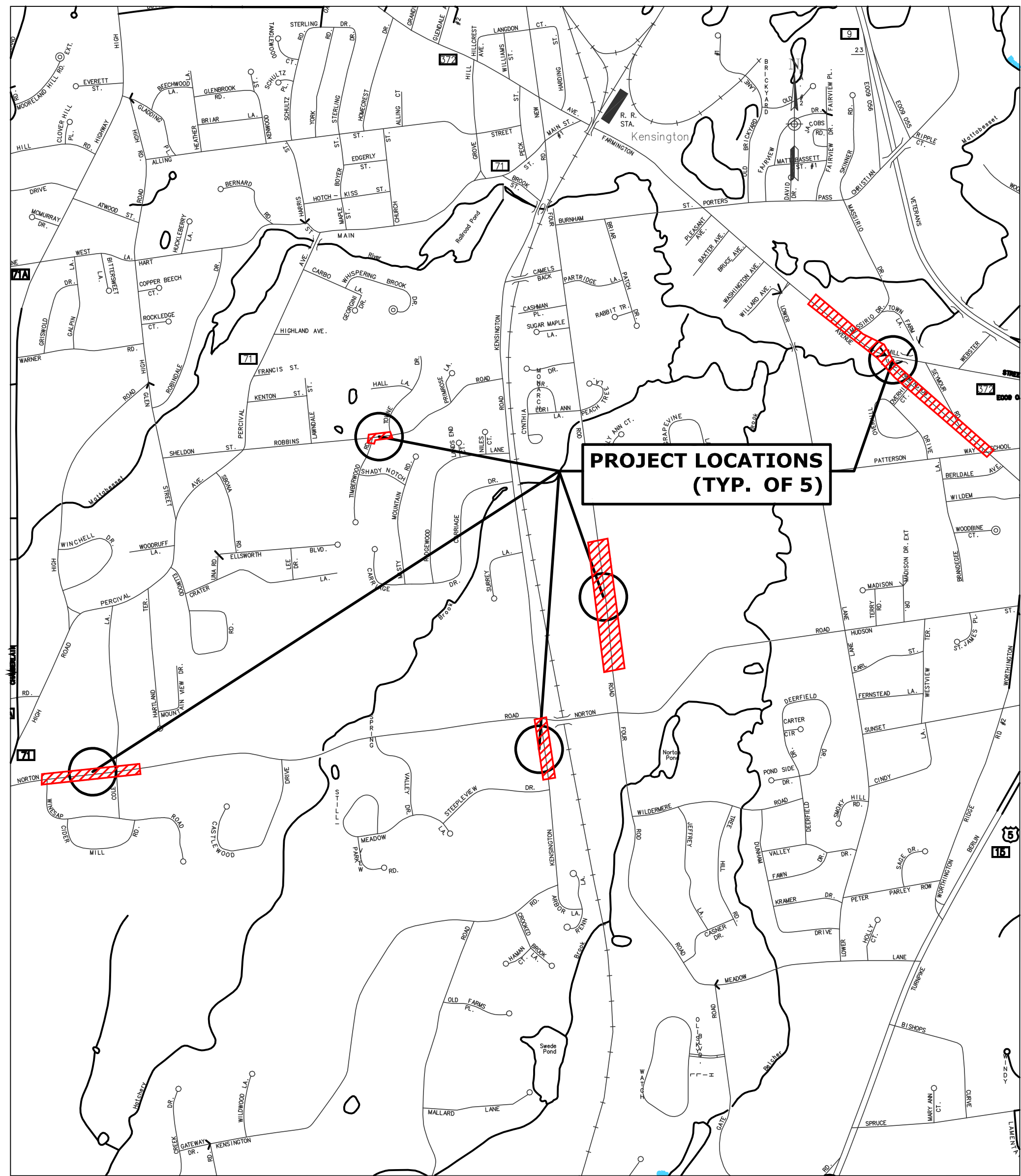
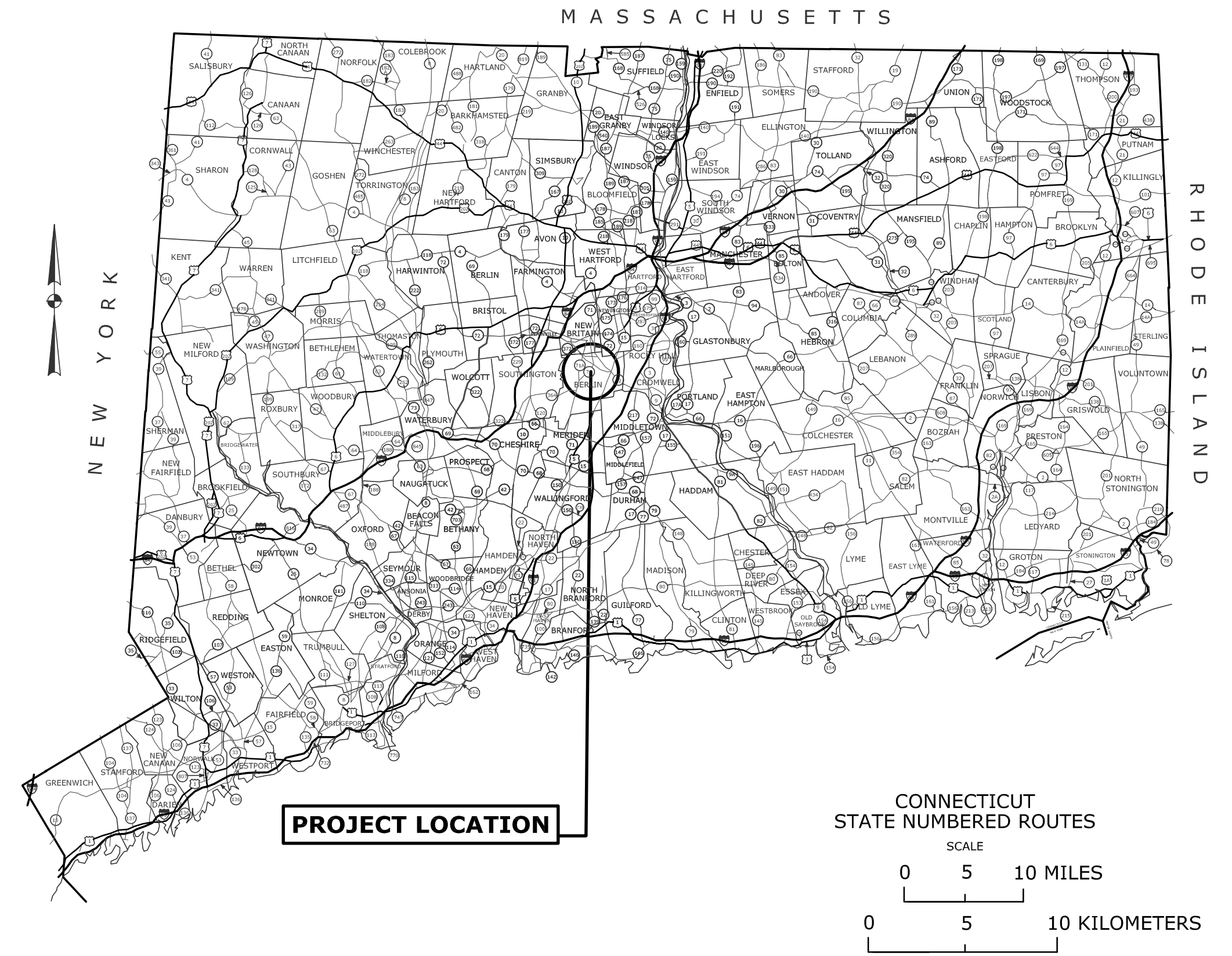


Only Drawings Related to Kensington Rd & Robbins Rd are included in this set.

TOWN OF BERLIN CONNECTICUT

PLANS FOR THE CONSTRUCTION OF BERLIN SIDEWALK CONNECTIVITY PROJECT

PROJECT LIMITS
STATION 0+00 TO STATION 78+72
TO BE MAINTAINED BY THE TOWN OF BERLIN
PROJECT #2021-XX



LOCATION MAP
SCALE: 1" = 1,200'

TECHNICAL SPECIFICATIONS: STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROADS, BRIDGES AND INCIDENTAL CONSTRUCTION (FORM 818) AND ALL LATEST SUPPLEMENTAL SPECIFICATIONS THERETO, AS WELL AS THE TOWN OF BERLIN PUBLIC IMPROVEMENT SPECIFICATIONS.

CONNECTICUT DEPARTMENT OF TRANSPORTATION OR TOWN OF BERLIN BIDDING AND OTHER INFORMATION AND DOCUMENTS WHICH ARE OBTAINED THROUGH THE INTERNET, WORLD WIDE WEB SITES OR OTHER SOURCES ARE NOT TO BE CONSTRUED TO BE OFFICIAL INFORMATION FOR THE PURPOSES OF BIDDING OR CONDUCTING OTHER BUSINESS WITH THE TOWN OF BERLIN.

DESIGN STANDARDS: AASHTO POLICY ON THE GEOMETRIC DESIGN OF HIGHWAYS AND STREETS, DATED 2004 AND THE CONNECTICUT DEPARTMENT OF TRANSPORTATION HIGHWAY DESIGN MANUAL DATED 2003.

IT IS THE RESPONSIBILITY OF EACH BIDDER AND ALL OTHER INTERESTED PARTIES TO OBTAIN ALL BIDDING RELATED INFORMATION AND DOCUMENTS FROM OFFICIAL SOURCES WITHIN THE TOWN OF BERLIN.

SURVEY: ALL COORDINATES ON THE PROJECT ARE BASED ON NAD 83. ALL ELEVATIONS ARE BASED ON NAVD 1988.

PERSONS AND/OR ENTITIES WHICH REPRODUCE AND/OR MAKE SUCH INFORMATION AVAILABLE BY ANY MEANS ARE NOT AUTHORIZED BY THE TOWN OF BERLIN TO DO SO AND MAY BE LIABLE FOR CLAIMS RESULTING FROM THE DISSEMINATION OF UNOFFICIAL, INCOMPLETE AND/OR INACCURATE INFORMATION.

LIST OF DRAWINGS	
SHEET NO.	TITLE
1	TITLE SHEET
2	GENERAL NOTES
3-8	EXISTING CONDITIONS PLANS
9	TYPICAL SECTIONS
10 -11	NORTON ROAD
12	KENSINGTON ROAD
13 - 15	FOUR ROD ROAD
16	ROBBINS ROAD
17 - 21	FARMINGTON AVENUE
22 - 35	CROSS SECTIONS
36 - 38	CONSTRUCTION DETAILS
39	EROSION AND SEDIMENTATION CONTROL DETAILS

CTDOT STANDARD DRAWINGS	
DWG. NO.	TITLE
TR-1205_01	DELINEATION, DELINEATOR AND OBJECT MARKER DETAILS
TR-1208_01	SIGN SUPPORT AND SIGN PLACEMENT DETAILS, GORE EXIT SIGN
TR-1208_02	METAL SIGN POSTS AND SIGN MOUNTING DETAILS
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

STANDARD CONVENTIONS	
North Arrow W/No. Coord.	Grid Arrow
Edge Of Road	Limit Of Marsh
Concrete Pavement	Stone Wall
Dirt Road	Ledge Outcrop
B.C.L.C.	Inland Wetland Limits
Concrete Curb	STATE LINE
Guide Rail	Power Line
Concrete Median Barrier	Swamp
Bit. Walk	Building
Conc. Sidewalk	Transmission Tower
Railroad Tracks	Riprap
Chain Link Fence	Hedge Row
Rustic Fence	Tree Line
Pipe Fence	Shrub
Board Fence	Evergreen Tree
Water Edge	Deciduous Tree
Stream	Retaining Wall
Ditch	Highway Line
TOWN LINE	Street Line
Boring Location	Property Line
	Lot Line
	Easement Line

LEGEND:	
○ Iron Pin (Found)	□ Monument (Found)
▲ Sign	⊙ Manhole
⊞ "C" Catch Basin	⊞ "C-L" Catch Basin
○ Utility Pole	☆ Light Pole
○ Metal Post	○ Guy Anchor
⚡ Water Gate	⊕ Gas Valve
⊕ Gas Meter	⊕ Mail Box
— Piping (San., Strm.)	— G Gas
— E U/G Elec. Line	— W Water Line
— OHW Overhead Utilities	— T U/G Tele. Line

PROPOSED LEGEND:	
— STORM PIPE	— SF SEDIMENTATION CONTROL SYSTEM
— CONTOUR	— EDGE OF BITUMINOUS DRIVE
— EDGE OF ROAD (CONCRETE CURB)	— APPROXIMATE CUT/FILL LIMITS
— DRAINAGE MANHOLE	— CATCH BASIN
— 5" CONCRETE SIDEWALK	— 8" CONCRETE SIDEWALK
— BITUMINOUS DRIVEWAY/SNOW SHELF	

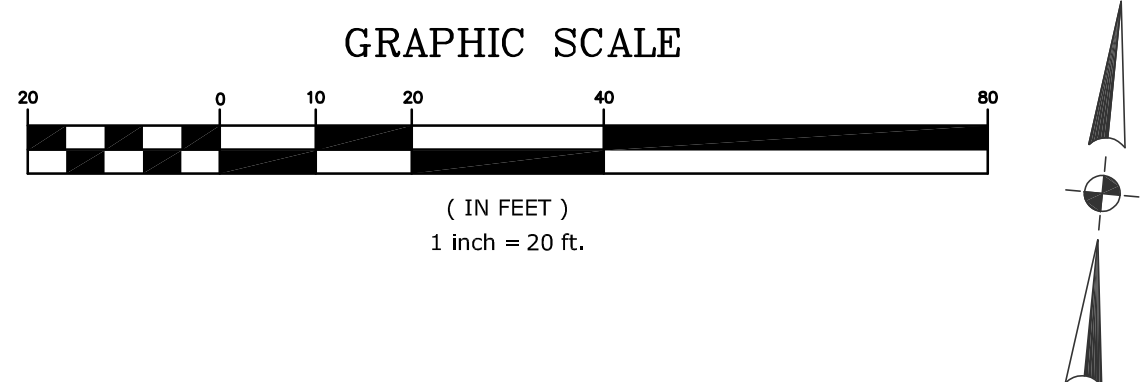
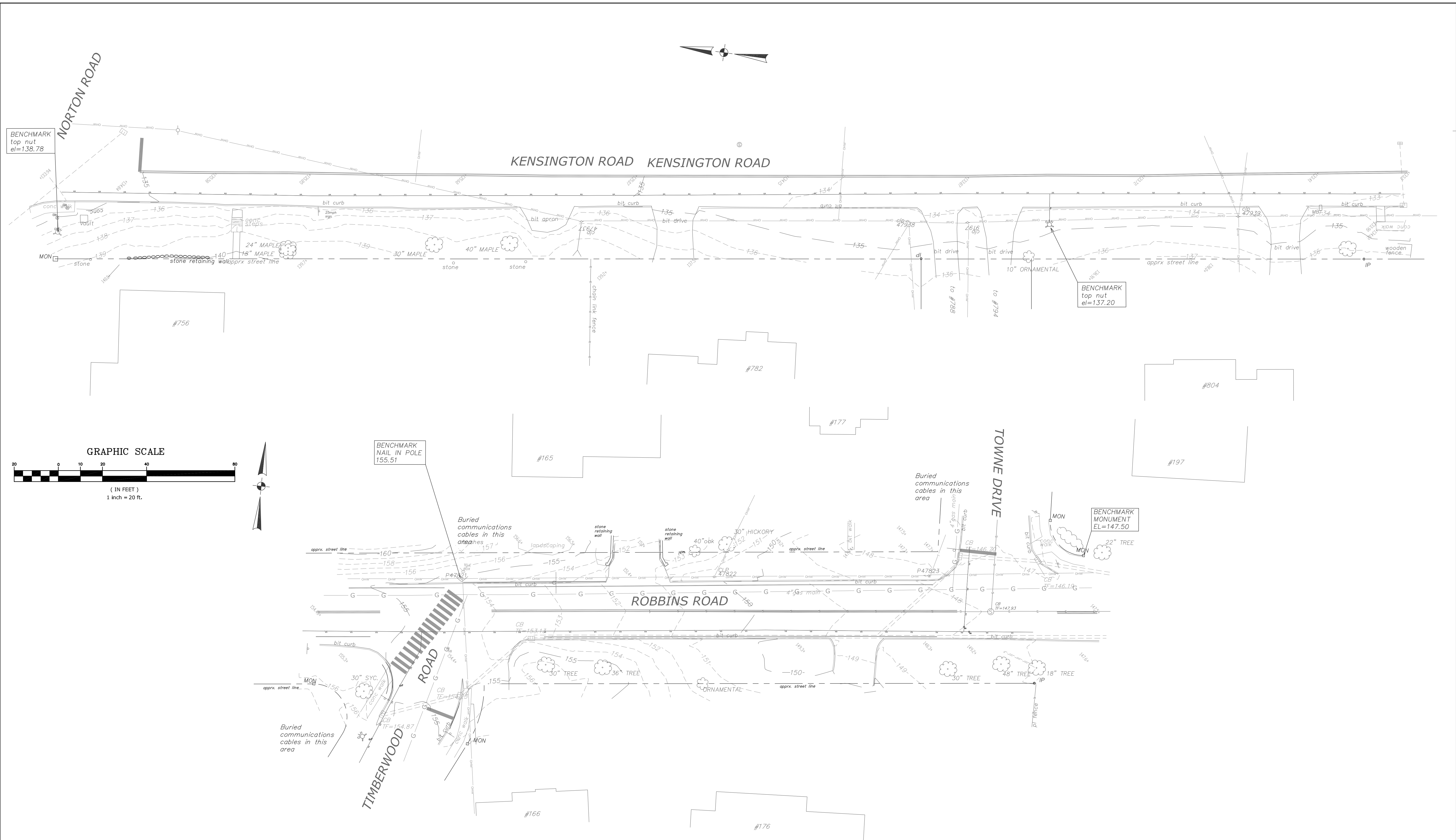
DESIGNED BY WMC CONSULTING ENGINEERS

SUBMITTED BY _____ DATE _____

PUBLIC WORKS DIRECTOR - TOWN OF BERLIN

MICHAEL AHERN

DATE _____



NO.	DATE	DESCRIPTION
REVISIONS		

SUPV.	S.R.M.
DESIGN	R.E.B.
DRAWN	R.E.B.
CHECKED	S.R.M.
DATE	03/08/21

FINAL DESIGN

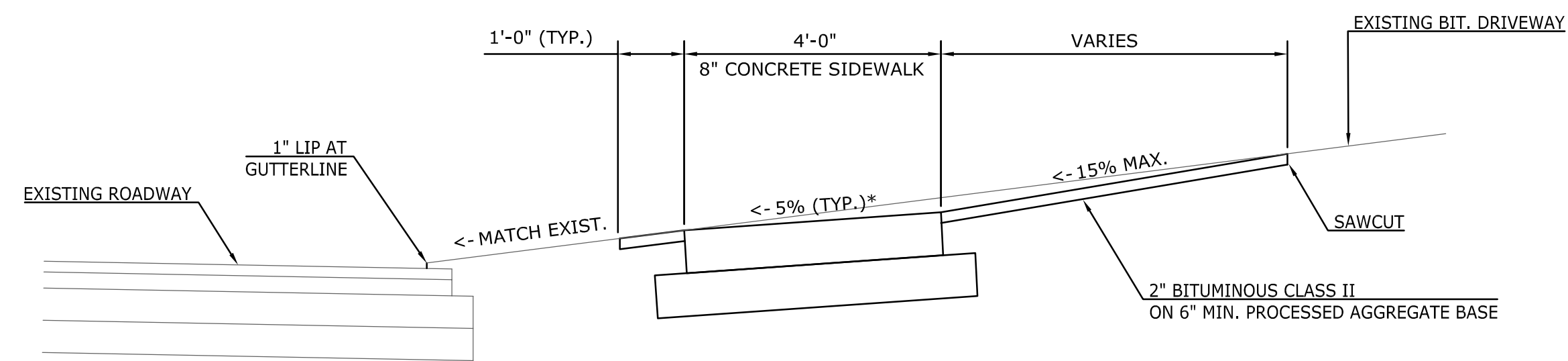
SCALE
 HORIZ: 1" = 20'

WMC
 CONSULTING ENGINEERS

• WENGELL, McDONNELL & COSTELLO •
 87 HOLMES ROAD
 NEWINGTON, CT 06111
 (860) 667-9624

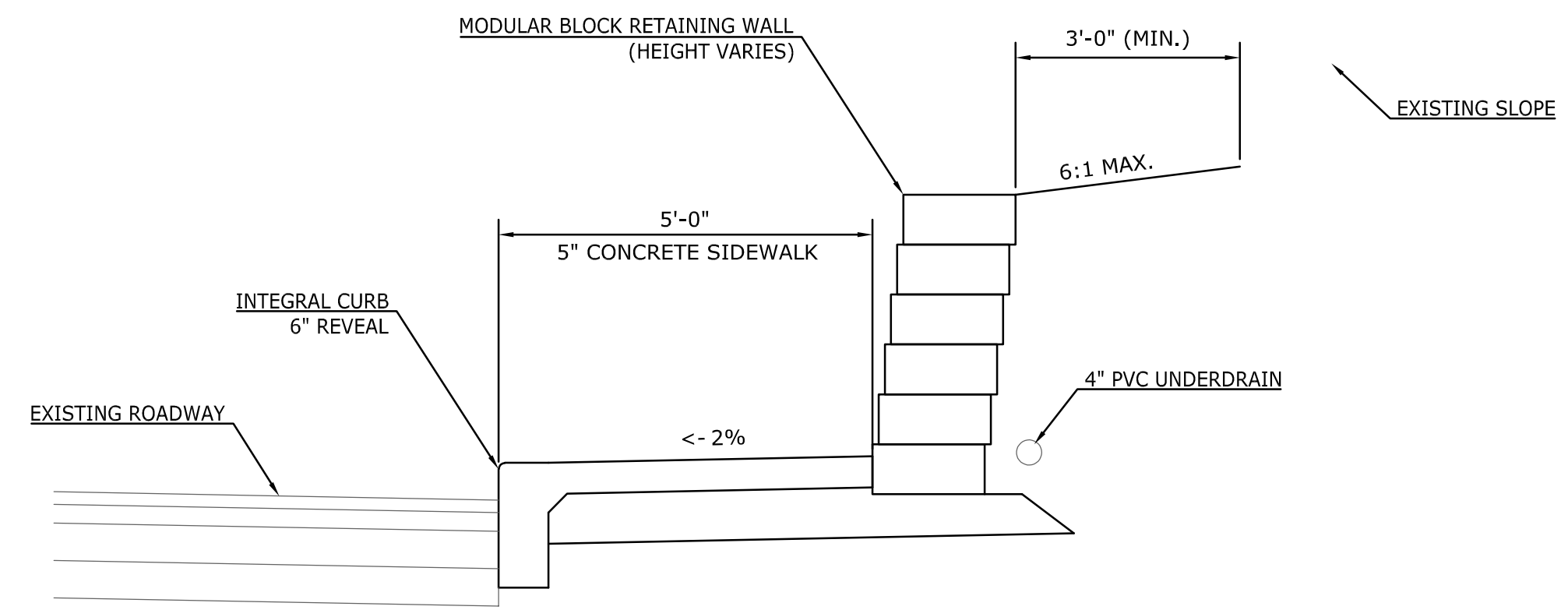
PREPARED FOR
 TOWN OF BERLIN
 240 KENSINGTON ROAD
 BERLIN, CT 06037

EXISTING CONDITIONS SURVEY KENSINGTON & ROBBINS ROAD BERLIN, CONNECTICUT					SHEET 4
D	—	BERLIN SIDEWALKS —	19031.1_PD —	19031.1 —	
SIZE	PROJECT	FILE NAME	NUMBER	REV.	OF
					9



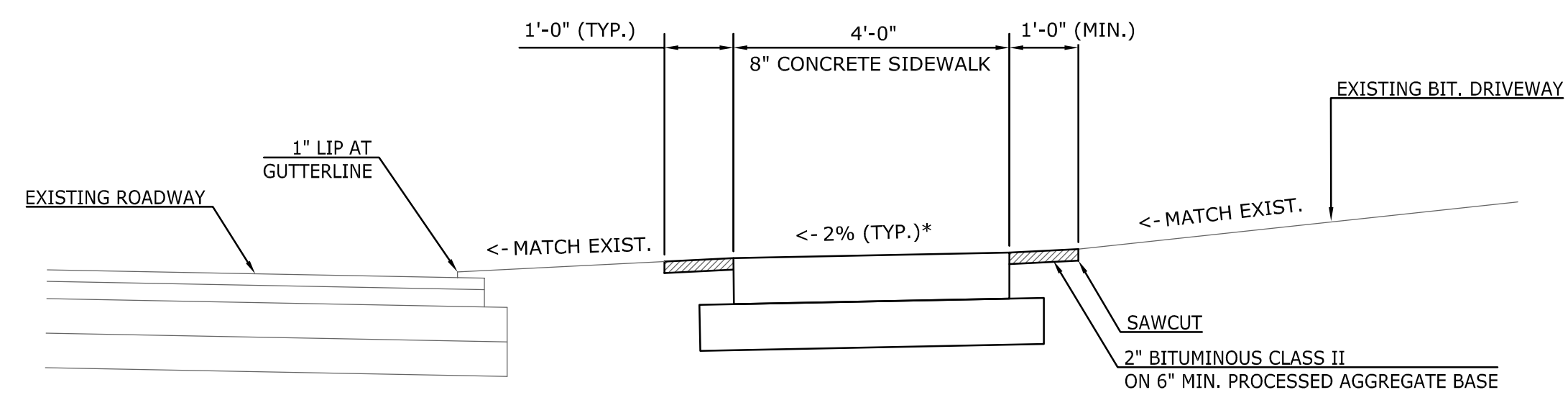
TYPICAL DRIVEWAY (CUT CONDITION)

NOTE:
 1. *SIDEWALK CROSS SLOPE MAY BE ALTERED TO MATCH DRIVEWAY SLOPE WHERE INDICATED ON THE PLANS.
 2. FOR DRIVEWAYS LOCATED IN FILL CONDITION THE SAME SLOPES APPLY.



INTEGRAL SIDEWALK (@ RETAINING WALL)

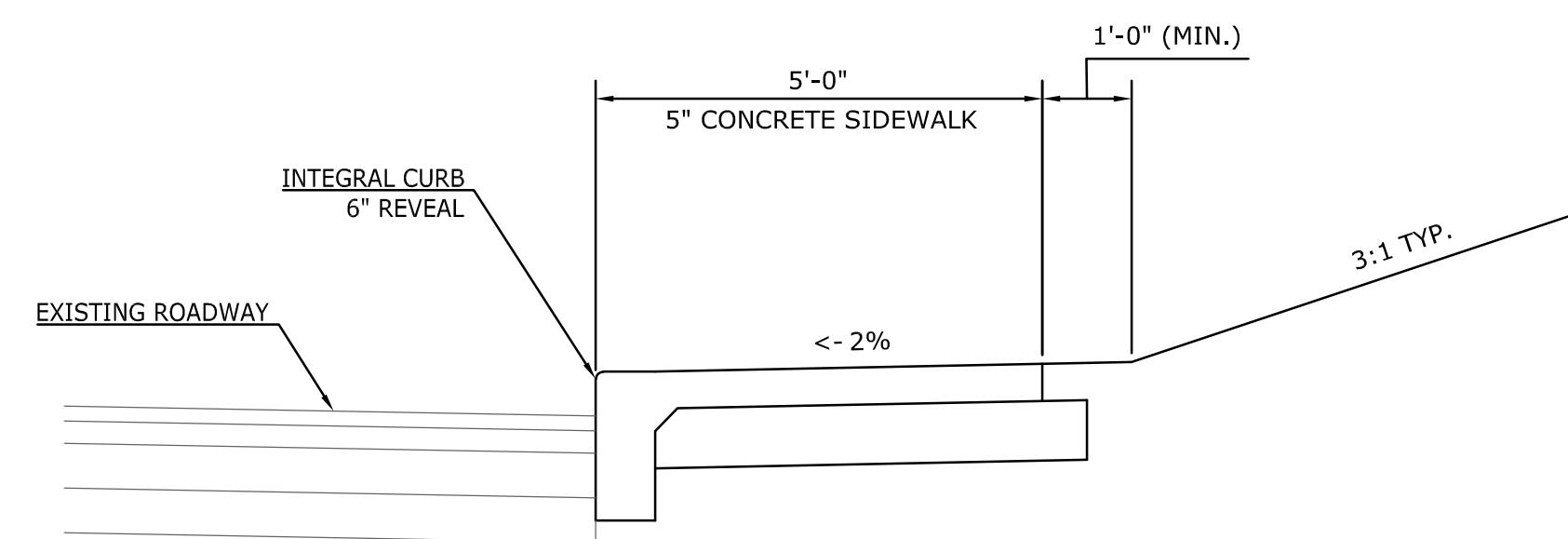
SCALE: 1" = 2'-0"



TYPICAL DRIVEWAY CROSSING

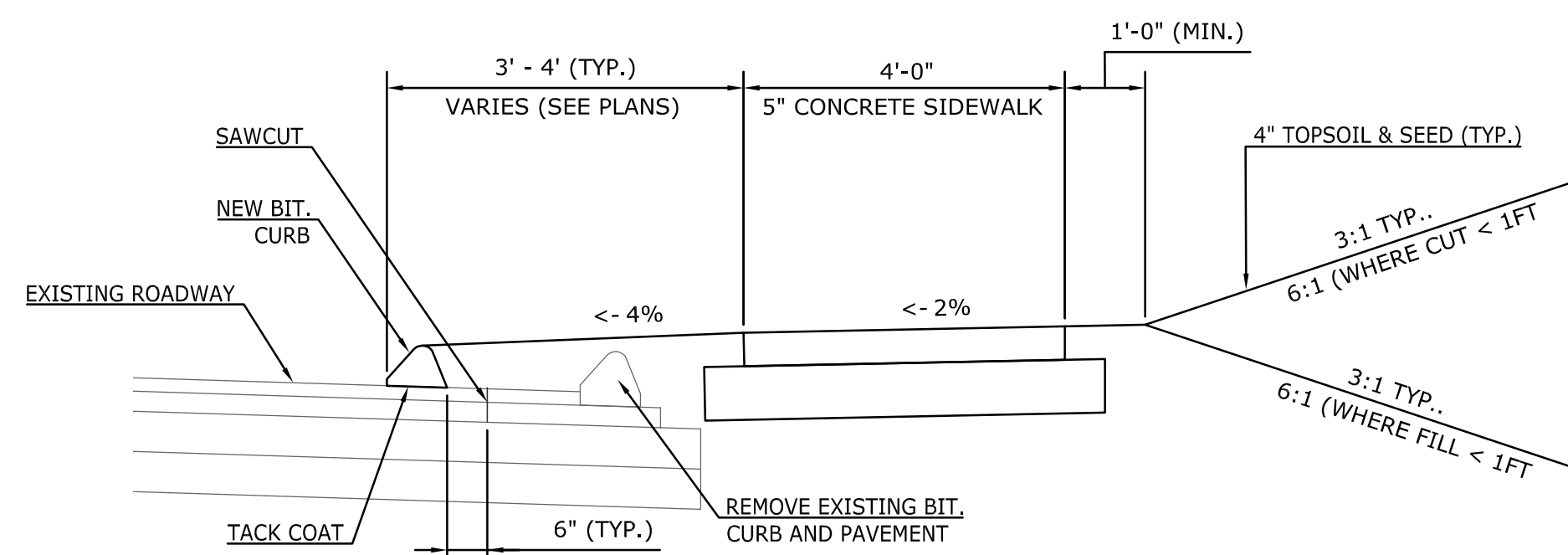
SCALE: 1" = 2'-0"

NOTE:
 *SIDEWALK CROSS SLOPE MAY BE ALTERED TO MATCH DRIVEWAY SLOPE WHERE INDICATED ON THE PLANS.



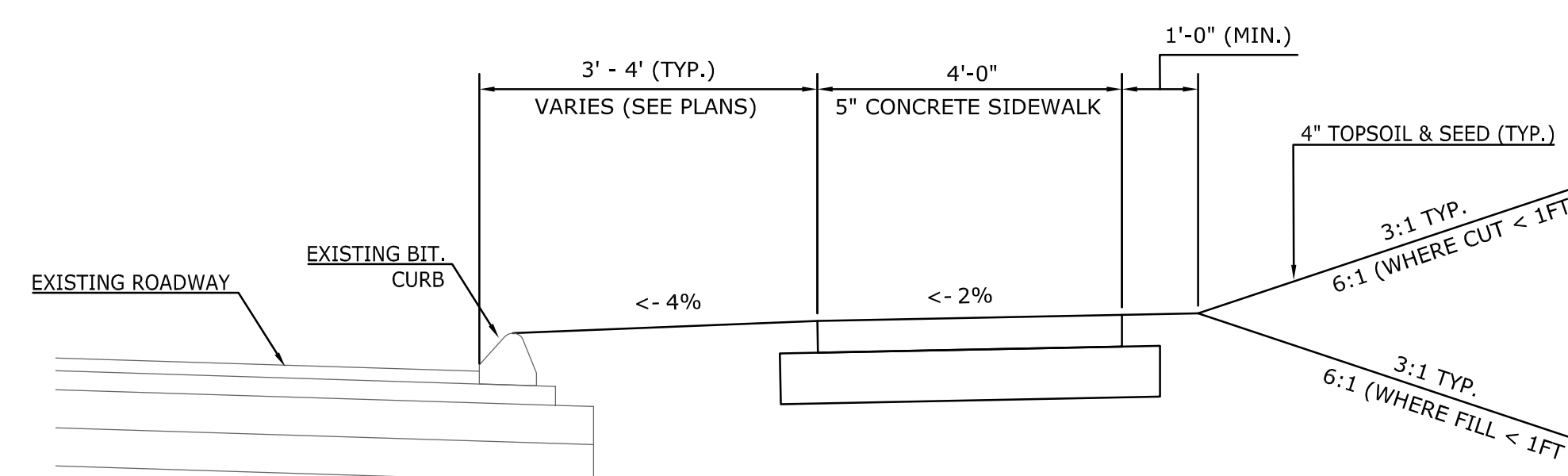
INTEGRAL SIDEWALK

SCALE: 1" = 2'-0"



TYPICAL INTERSECTION RADII ADJUSTMENT

SCALE: 1" = 2'-0"



TYPICAL CONCRETE SIDEWALK


SCALE: 1" = 2'-0"

NO.	DATE	DESCRIPTION
REVISIONS		

SUPV.	S.R.M.
DESIGN	R.E.B.
DRAWN	R.E.B.
CHECKED	S.R.M.
DATE	03/08/21

FINAL DESIGN

SCALE
AS NOTED

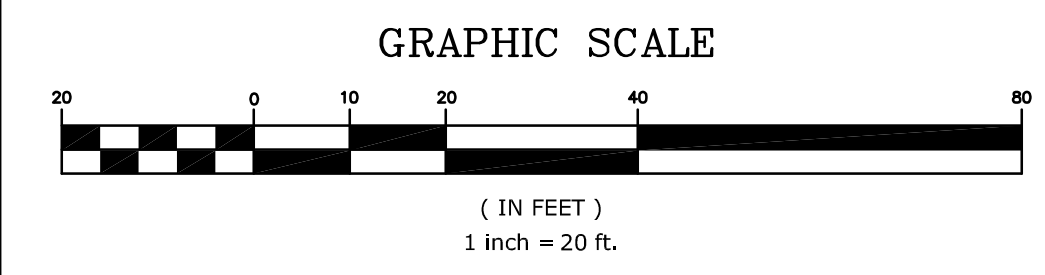
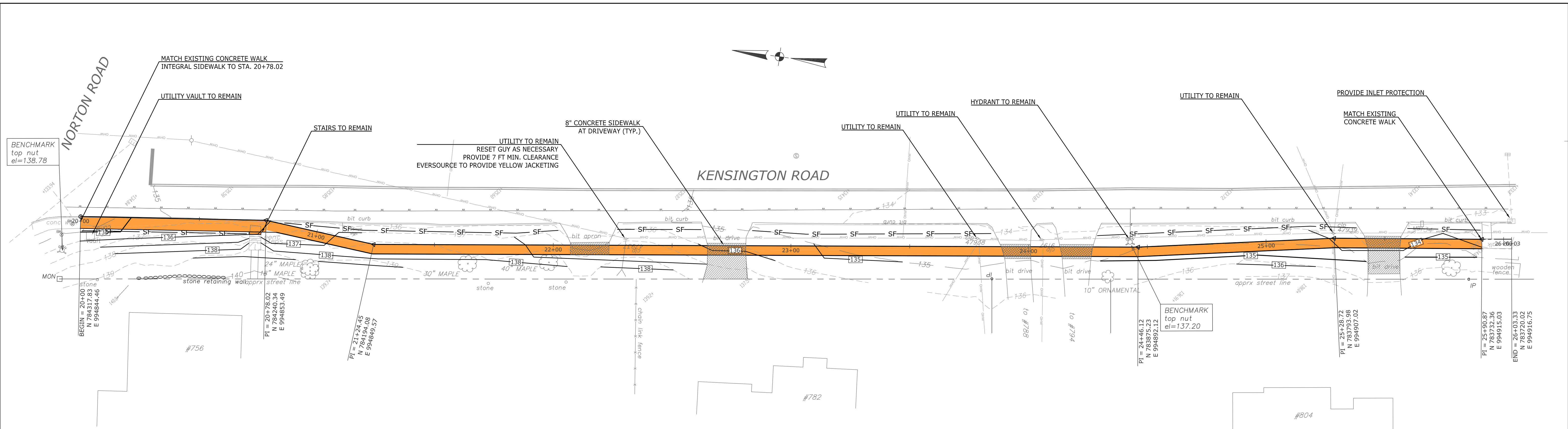

 WENGELL, McDONNELL & COSTELLO
 87 HOLMES ROAD
 NEWINGTON, CT 06111
 (860) 667-9624

PREPARED FOR

TOWN OF BERLIN
 240 KENSINGTON ROAD
 BERLIN, CT 06037

TYPICAL SECTIONS
 BERLIN SIDEWALK CONNECTIVITY
 BERLIN, CONNECTICUT

NO.	DATE	DESCRIPTION	NO.	DATE	DESCRIPTION
D - BERLIN SIDEWALKS - 19031.1_PD - 19031.1 - SIZE PROJECT FILE NAME NUMBER REV. OF SHEET 9					



- LEGEND
- 5" CONCRETE SIDEWALK
 - 8" CONCRETE SIDEWALK
 - BITUMINOUS DRIVEWAY/SNOW SHELF
 - PROPOSED CONTOUR
 - SILT FENCE

SUPV.	S.R.M.
DESIGN	R.E.B.
DRAWN	R.E.B.
CHECKED	S.R.M.
DATE	03/08/21

FINAL DESIGN

SCALE
HORIZ: 1" = 20'
VERT: 1" = 2'

WMC
CONSULTING ENGINEERS

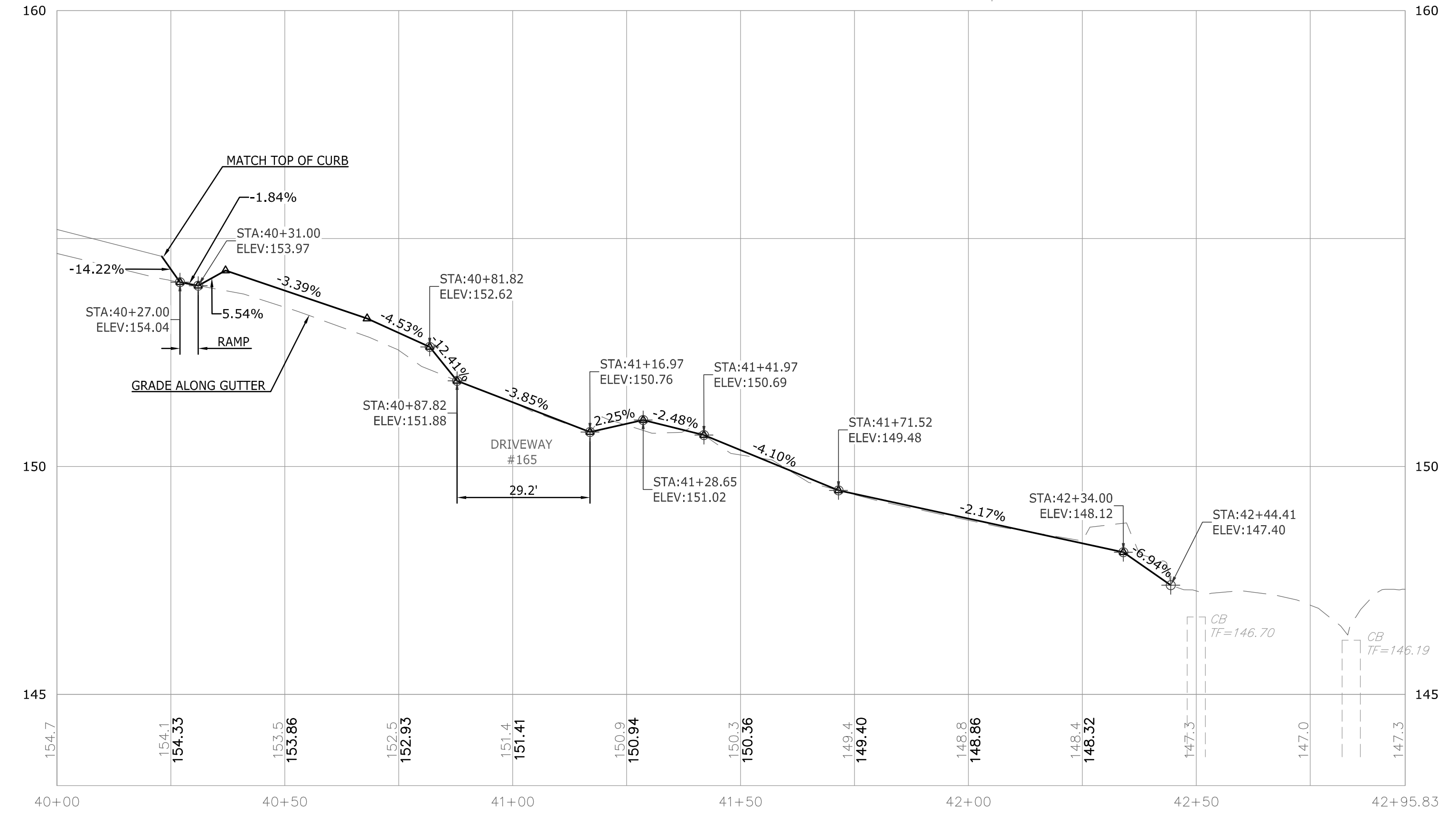
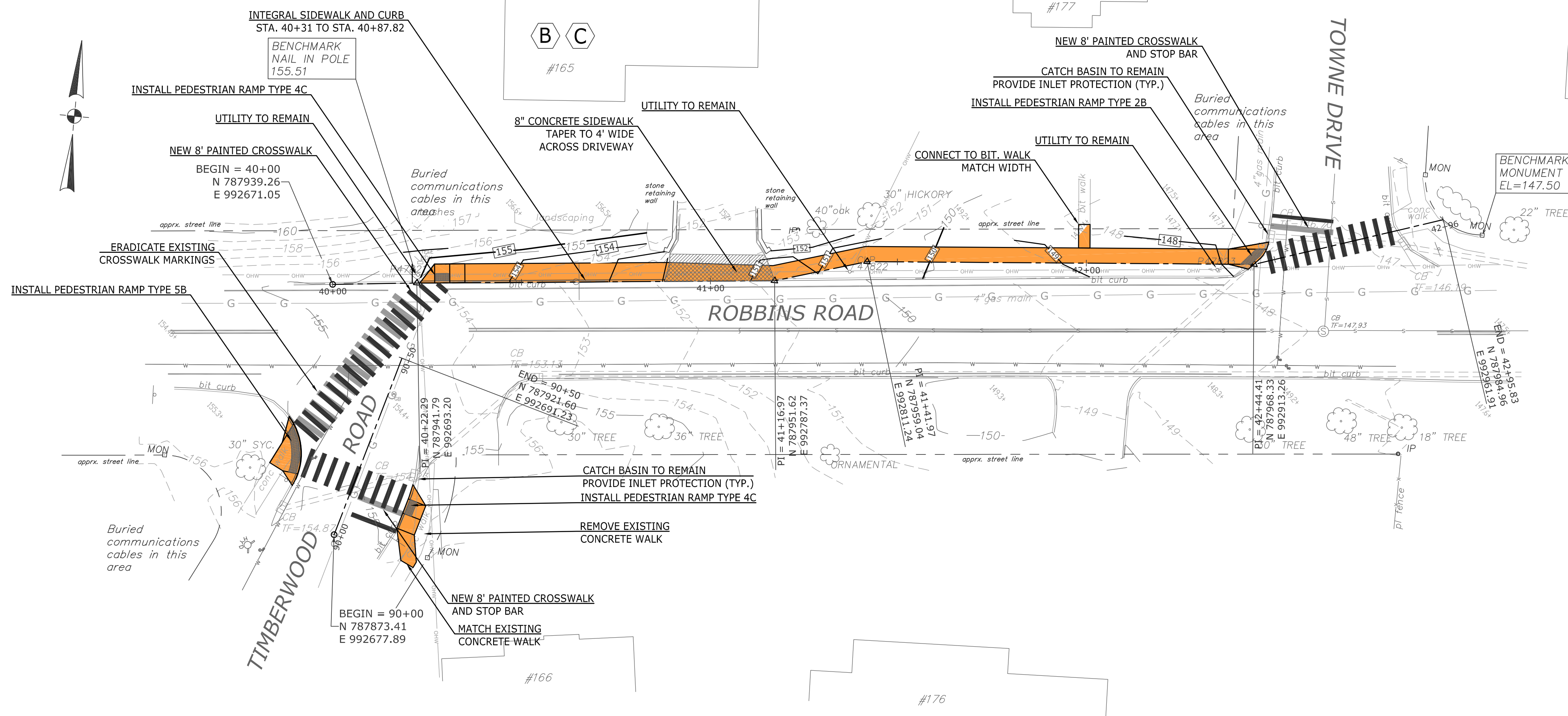
• WENGELL, McDONNELL & COSTELLO •
87 HOLMES ROAD
NEWINGTON, CT 06111
(860) 667-9624

PREPARED FOR
TOWN OF BERLIN
240 KENSINGTON ROAD
BERLIN, CT 06037

KENSINGTON ROAD IMPROVEMENTS
STA. 20+00 TO STA. 25+91
BERLIN, CONNECTICUT

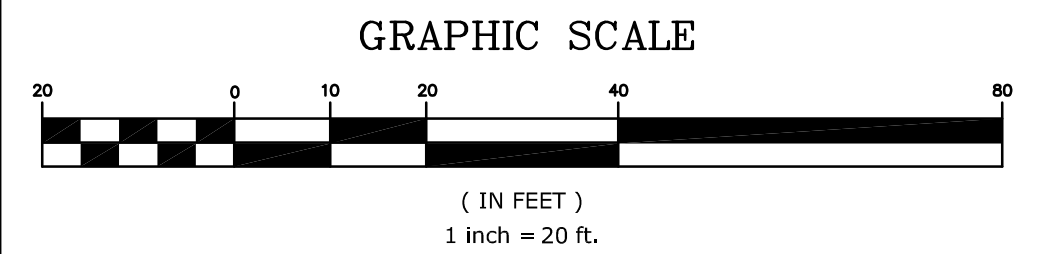
NO.	DATE	DESCRIPTION
REVISIONS		

D - BERLIN SIDEWALKS - 19031.1_PD - 19031.1 -	SHEET 12
SIZE PROJECT FILE NAME NUMBER REV. OF	



- LEGEND**
- 5' CONCRETE SIDEWALK
 - 8' CONCRETE SIDEWALK
 - BITUMINOUS DRIVEWAY/SNOW SHELF
 - PROPOSED CONTOUR
 - SILT FENCE

ROW IMPACTS	
LOCATION	TYPES
B	RIGHT TO GRADE REQUIRED
C	RIGHT TO CONSTRUCT (OR RECONSTRUCT) DRIVEWAY (AND/OR PARKING LOT) REQUIRED
D	RIGHT TO INSTALL SEDIMENTATION CONTROL SYSTEM REQUIRED



NO.	DATE	DESCRIPTION
REVISIONS		

FINAL DESIGN

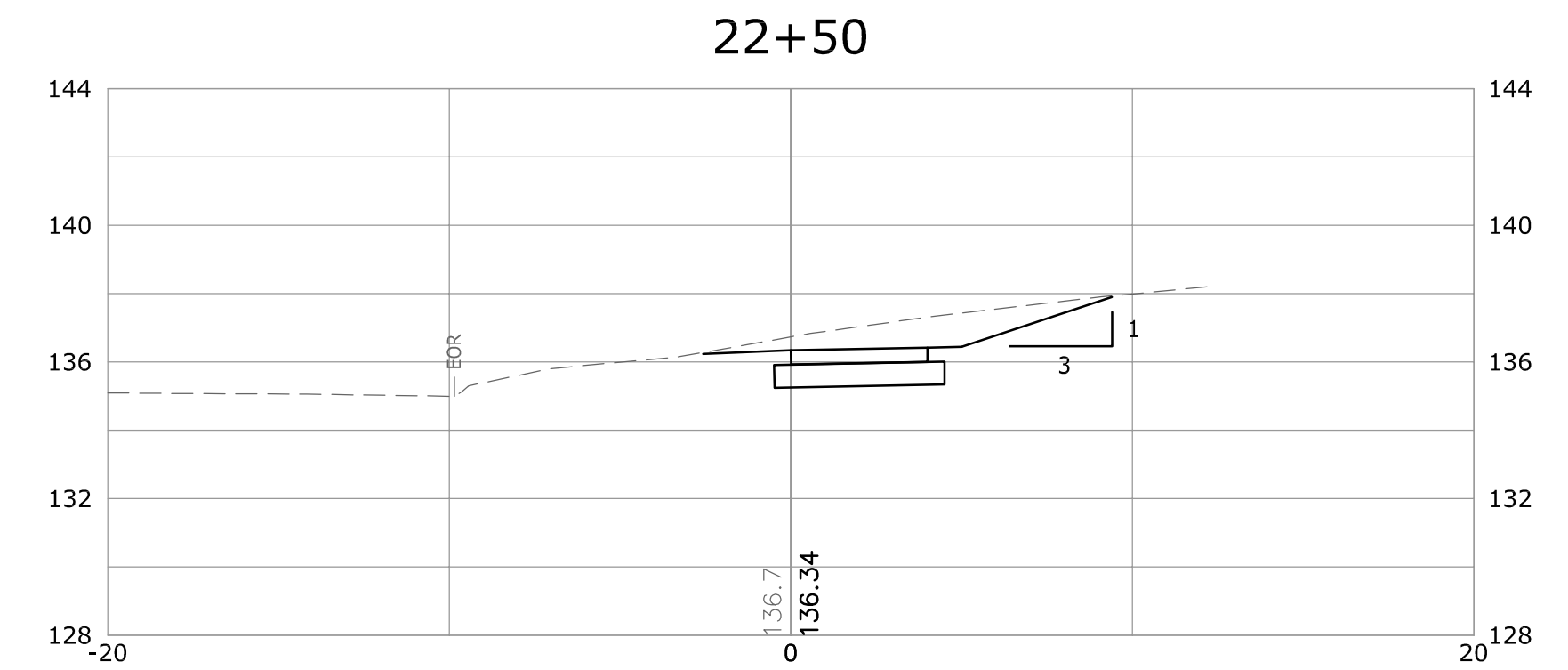
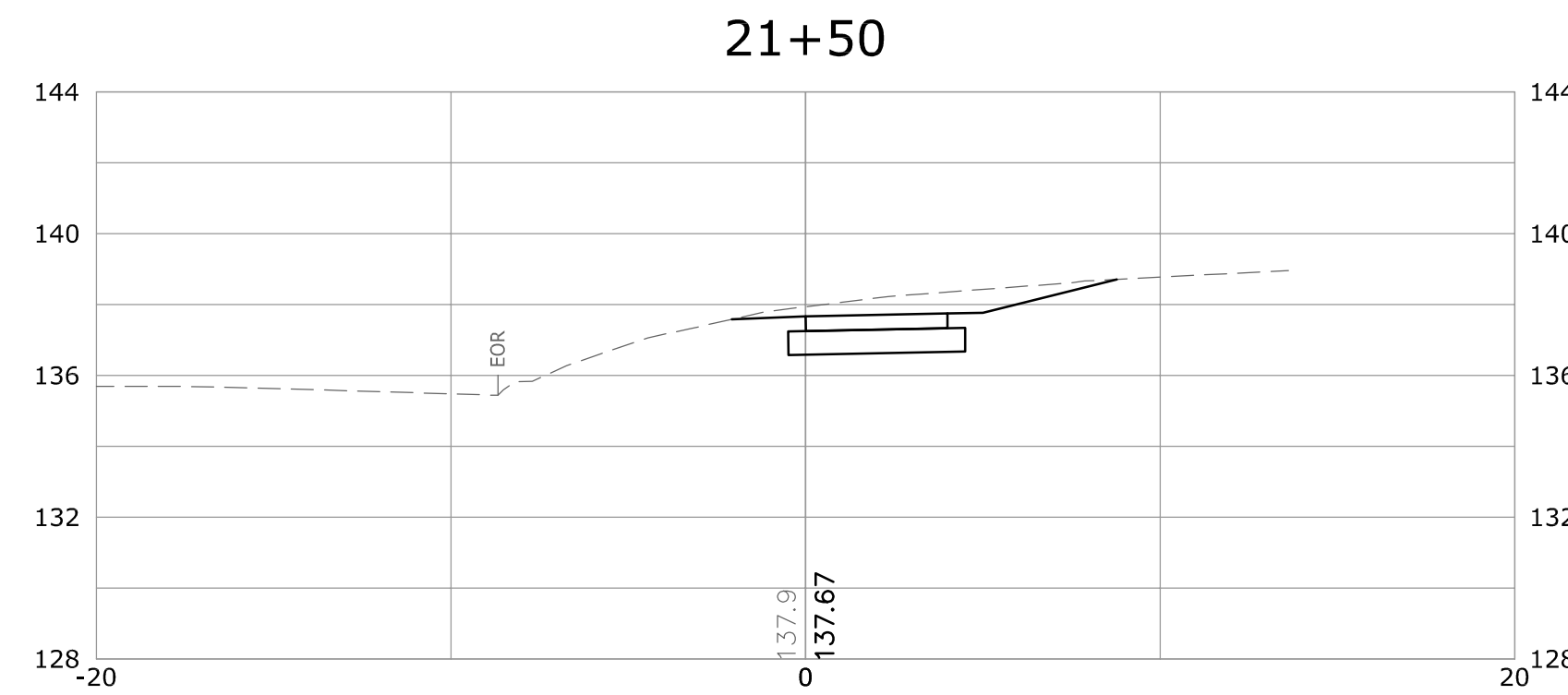
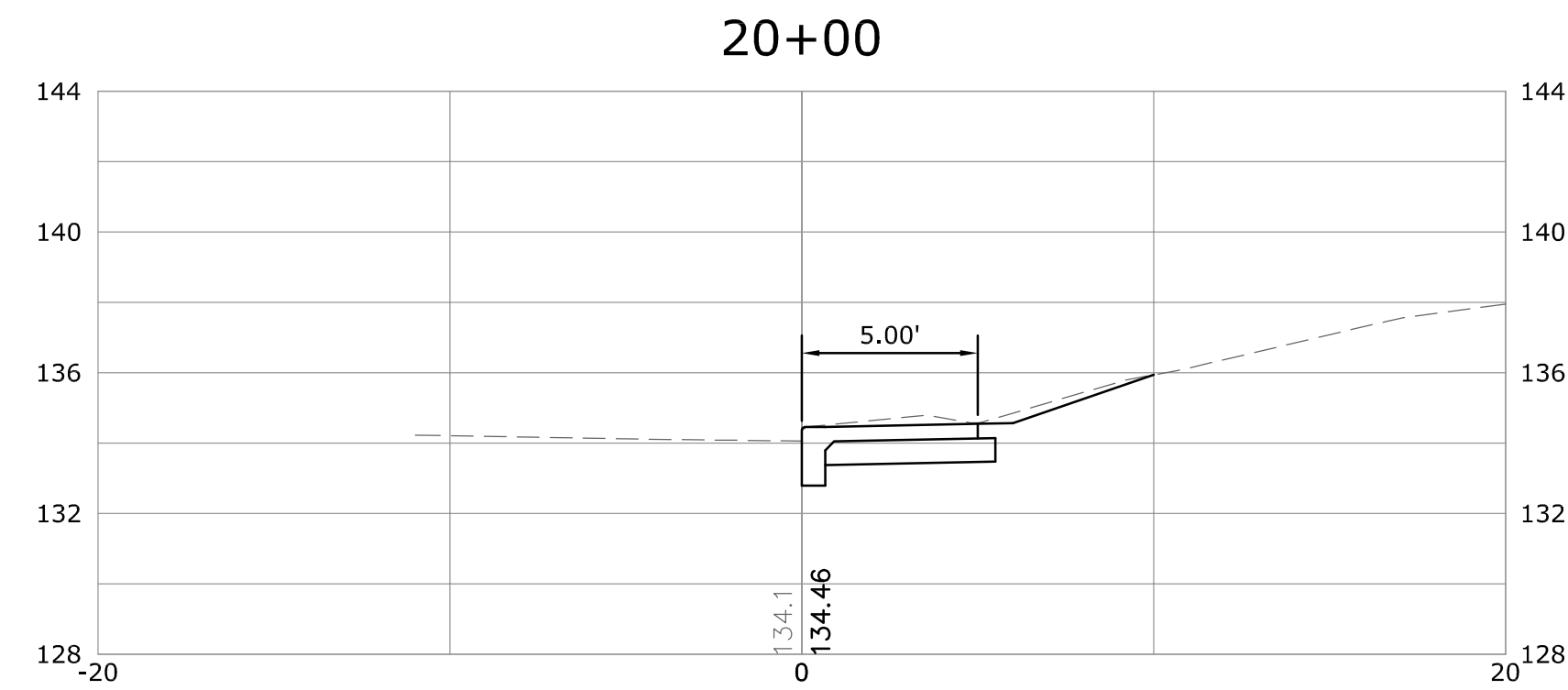
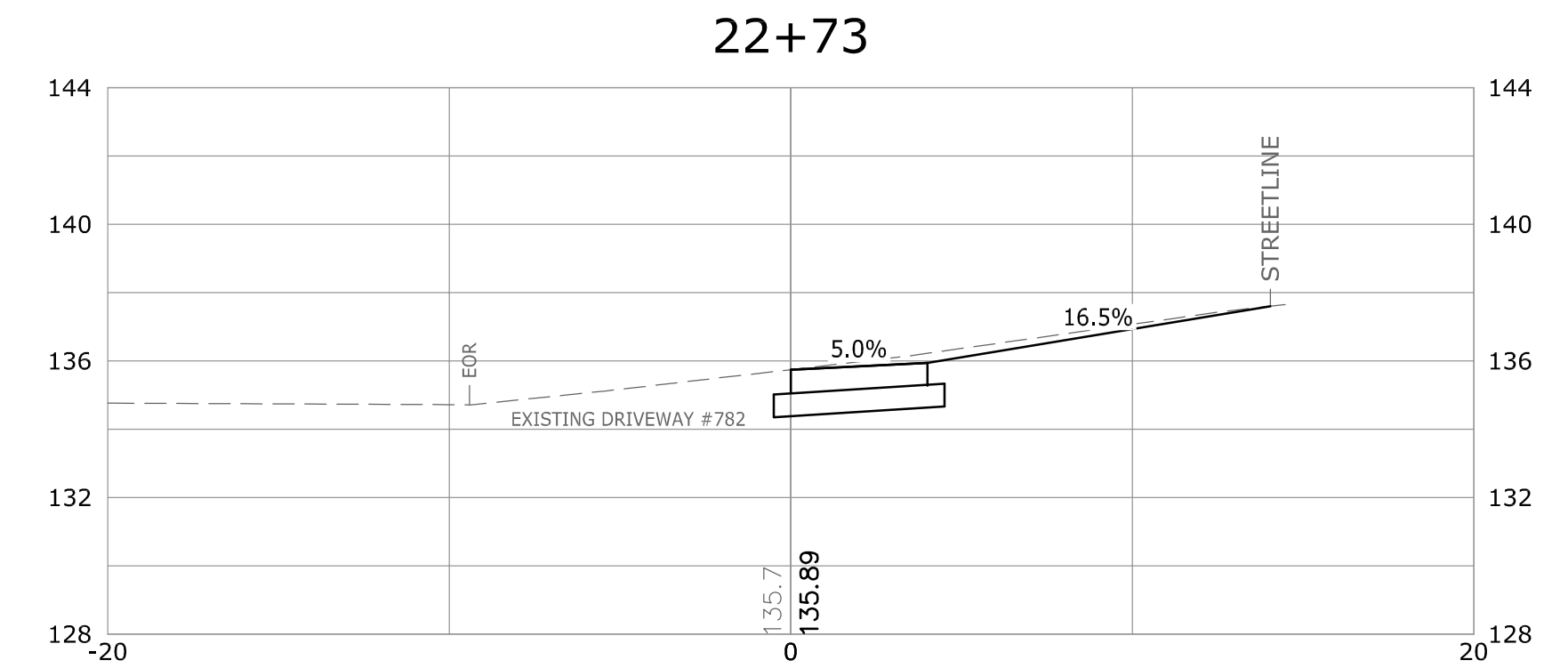
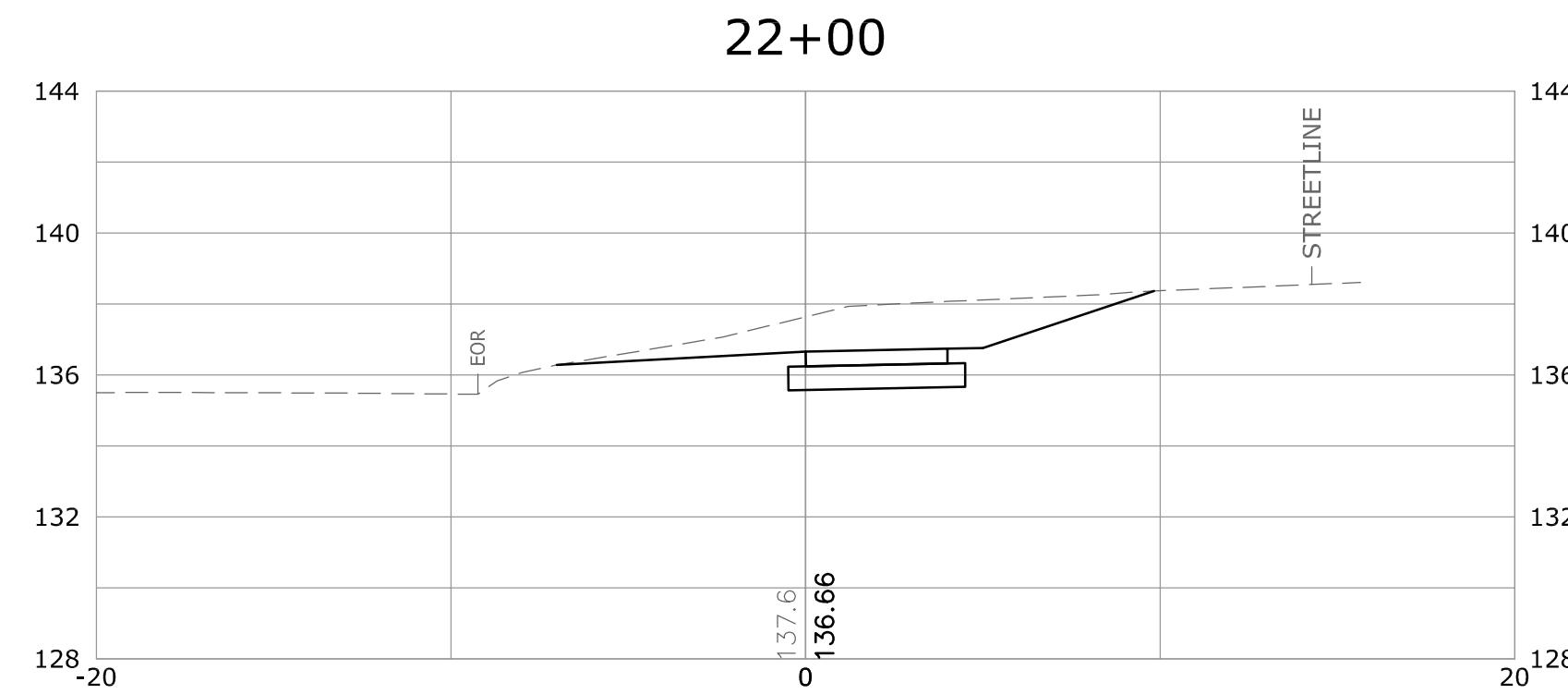
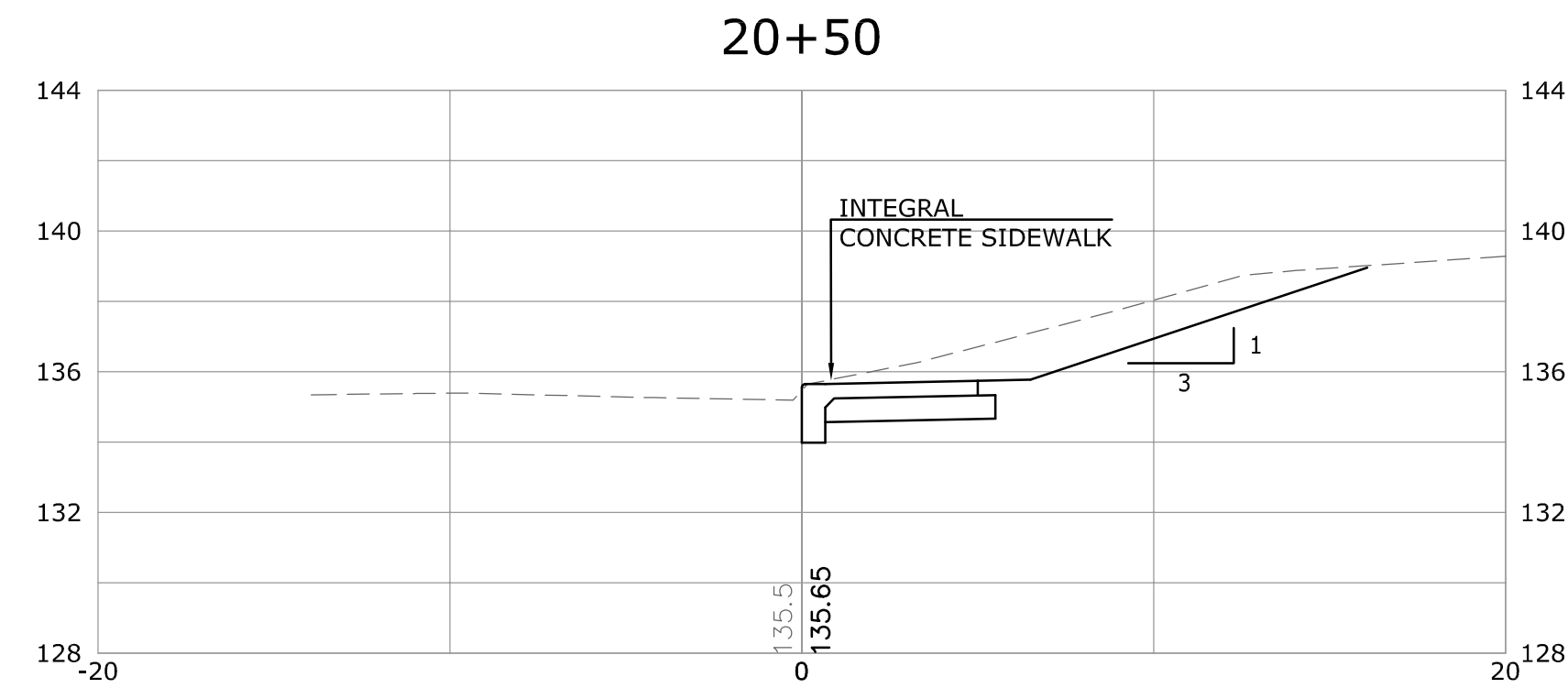
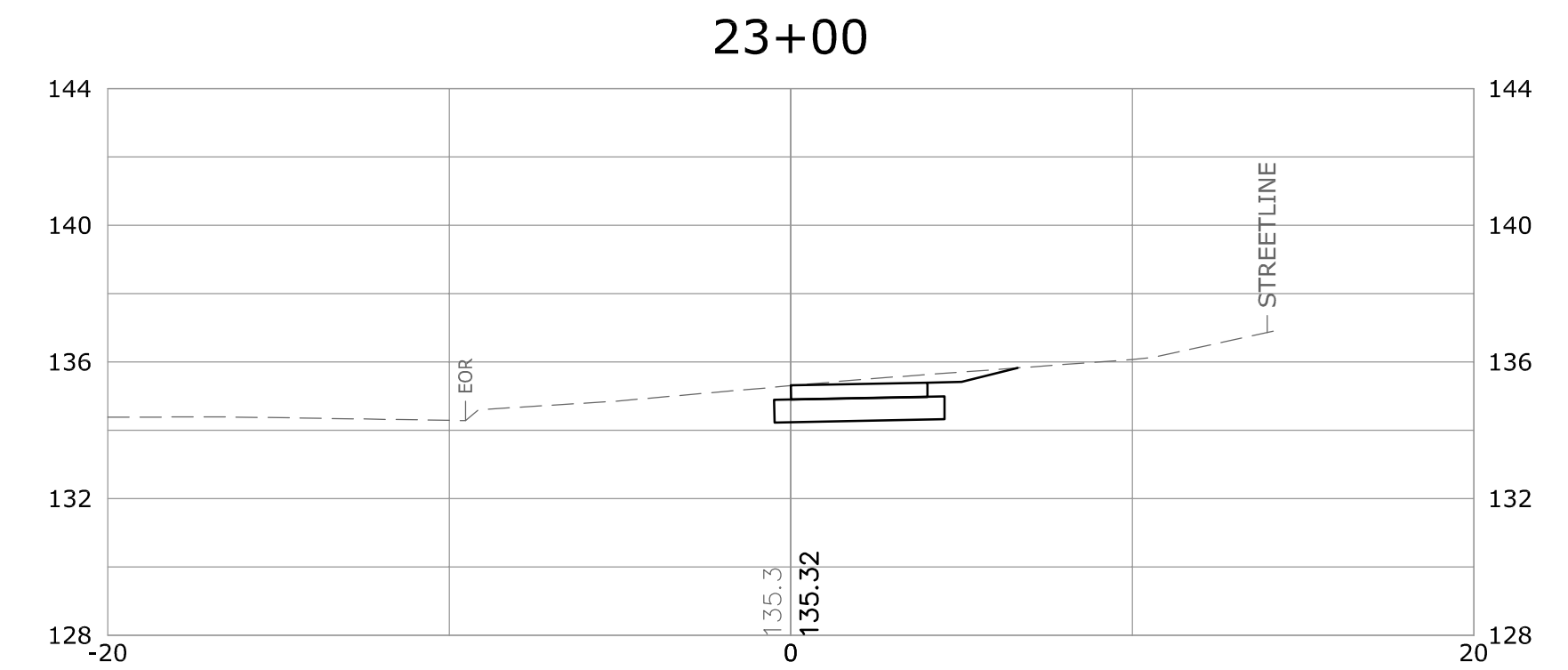
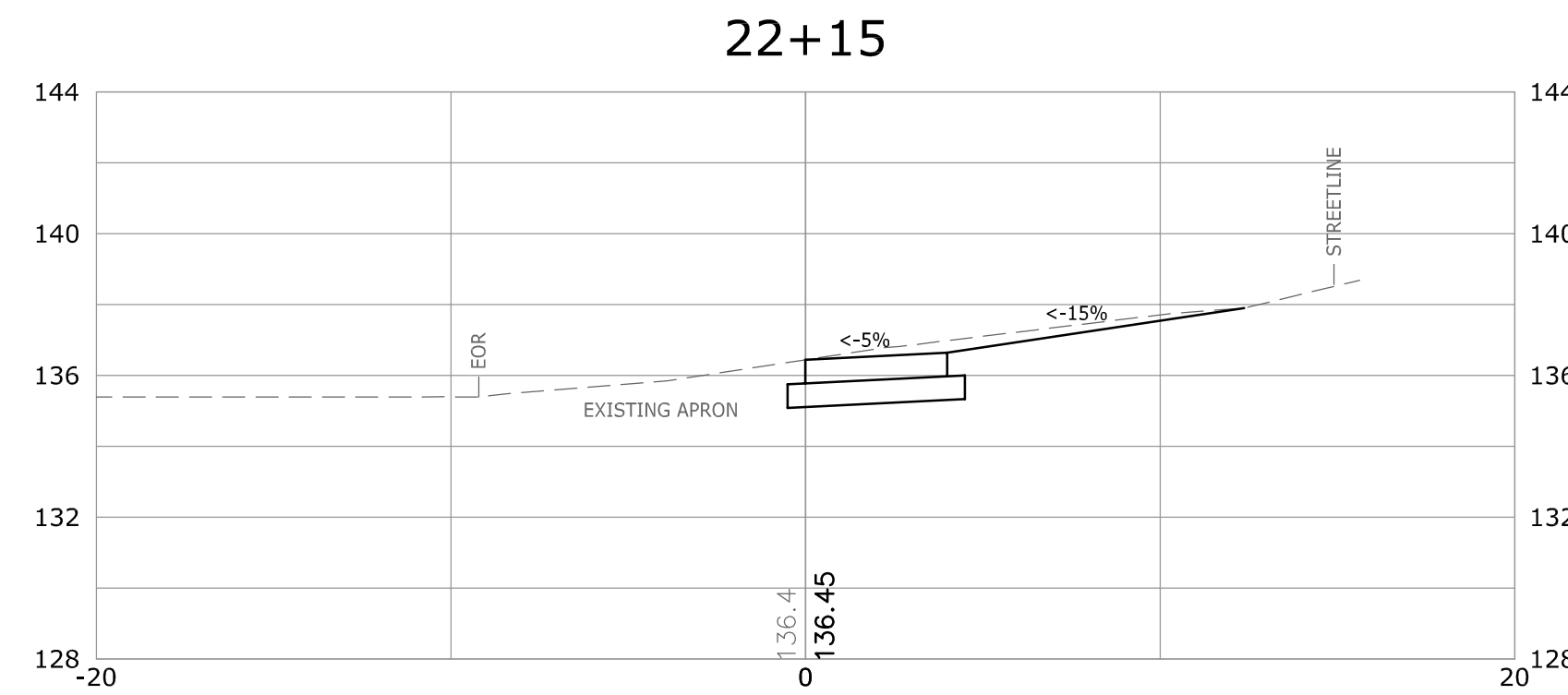
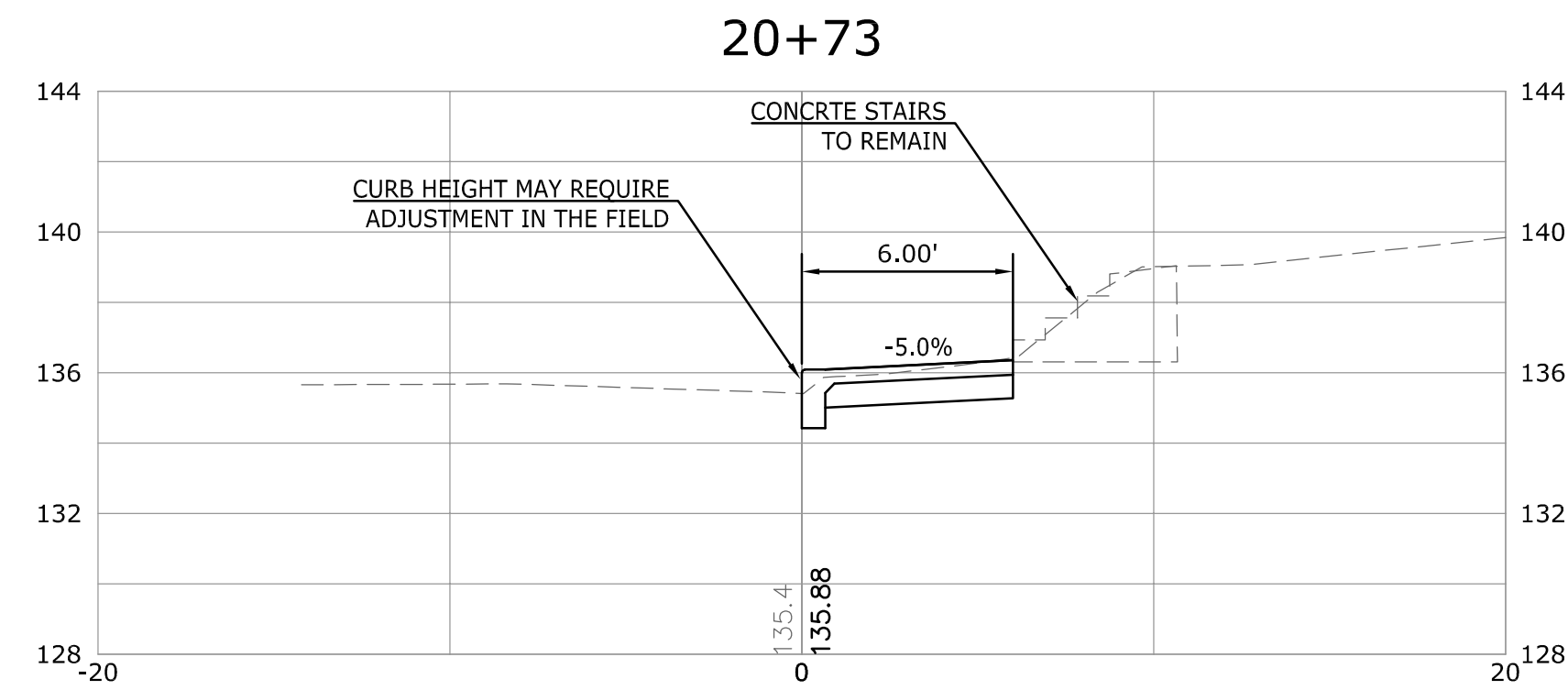
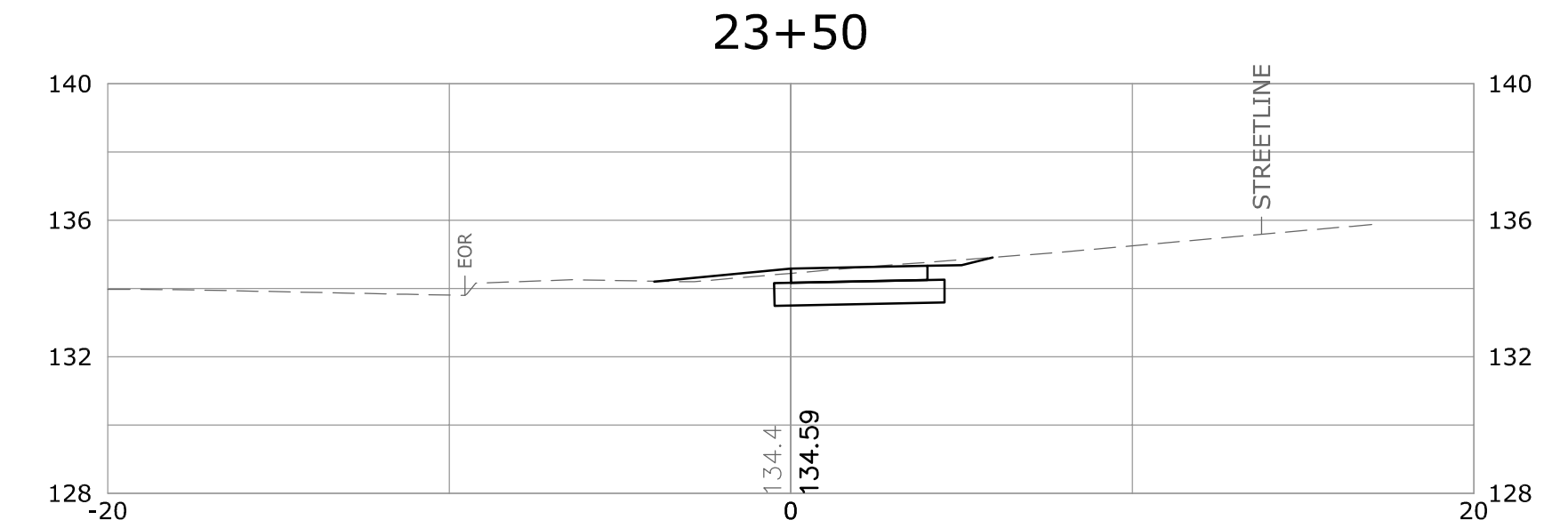
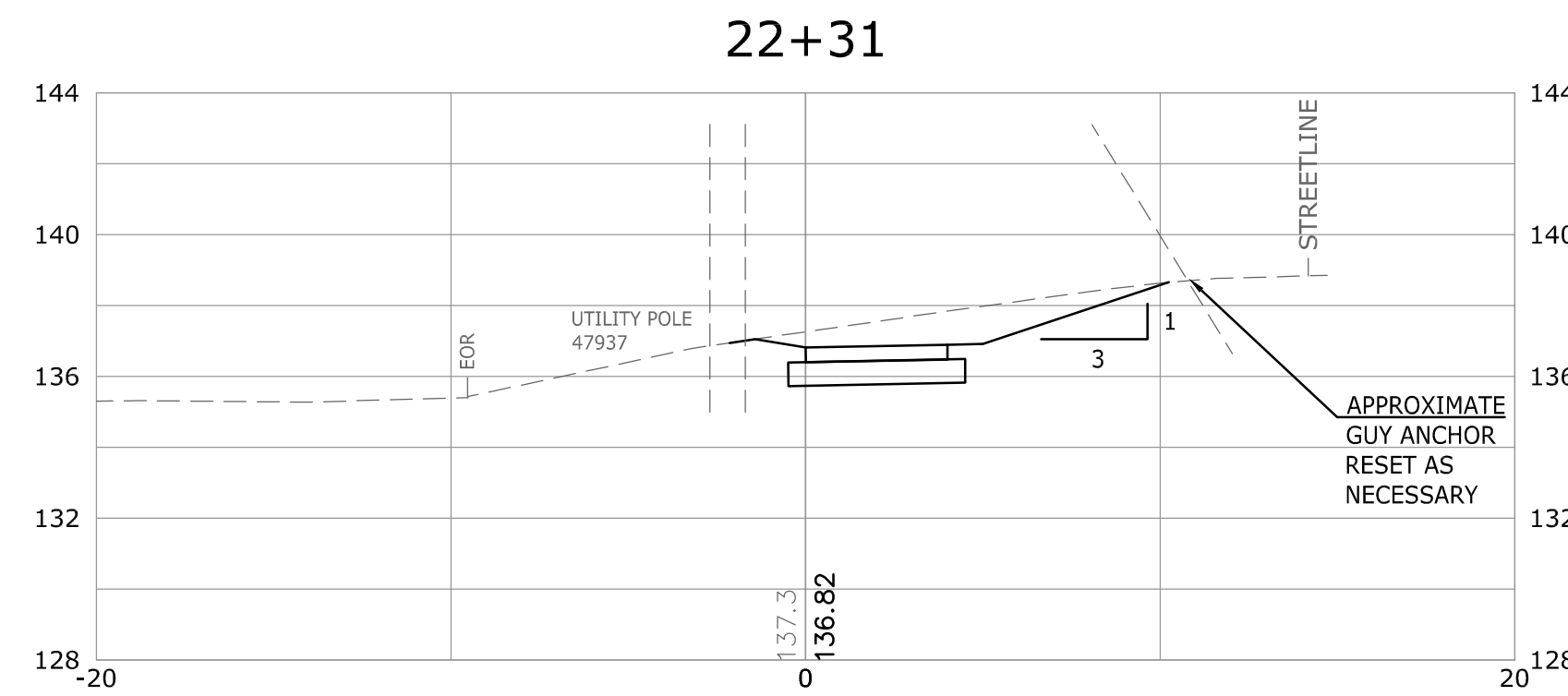
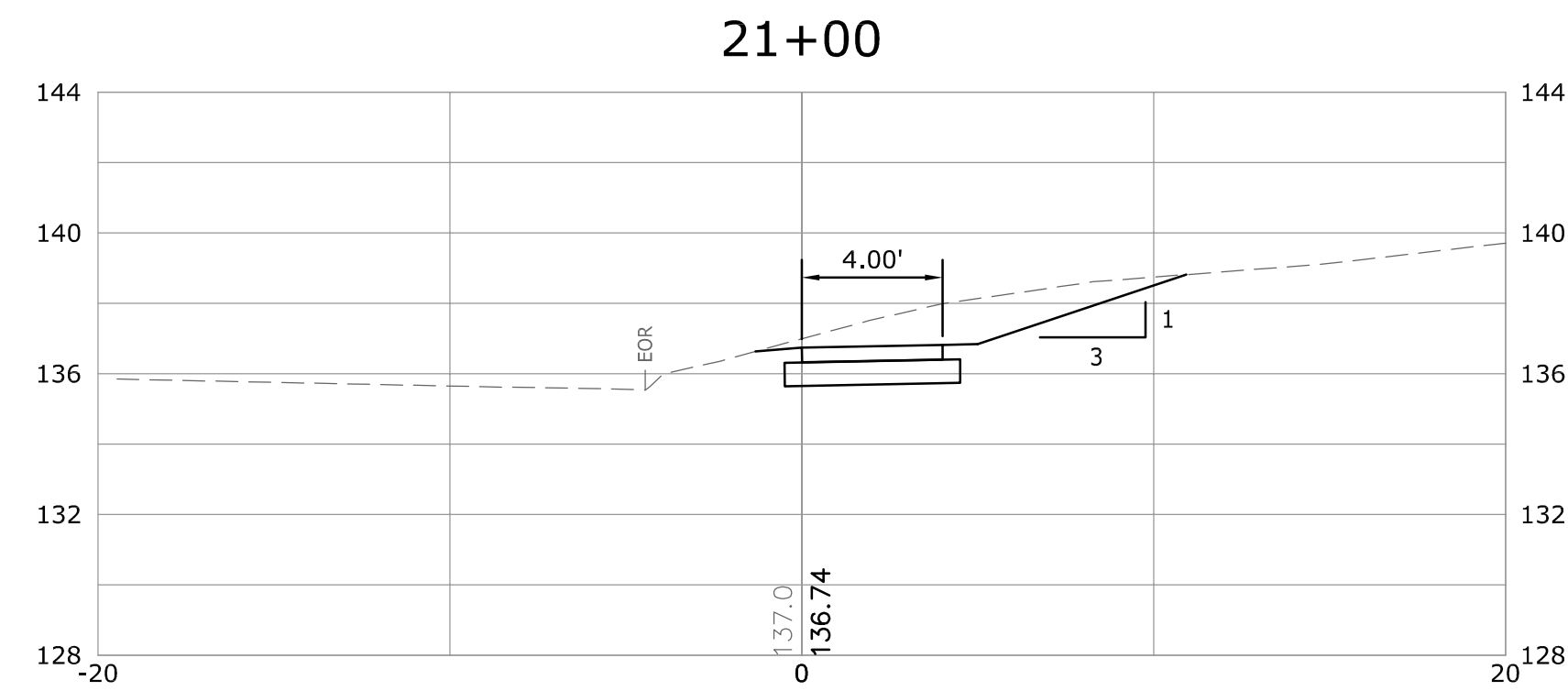
SCALE
HORIZ: 1" = 20'
VERT: 1" = 2'

WMC
CONSULTING ENGINEERS
• WENGELL, McDONNELL & COSTELLO •
87 HOLMES ROAD
NEWINGTON, CT 06111
(860) 667-9624

PREPARED FOR
TOWN OF BERLIN
240 KENSINGTON ROAD
BERLIN, CT 06037

ROBBINS ROAD IMPROVEMENTS
STA. 40+10 TO STA. 42+50
BERLIN, CONNECTICUT

SIZE	PROJECT	FILE NAME	NUMBER	REV.	OF
D - BERLIN SIDEWALKS -	19031.1_PD -	19031.1 -			16




NO.	DATE	DESCRIPTION
REVISIONS		

SUPV.	S.R.M.
DESIGN	R.E.B.
DRAWN	R.E.B.
CHECKED	S.R.M.
DATE	03/08/21

FINAL DESIGN

SCALE

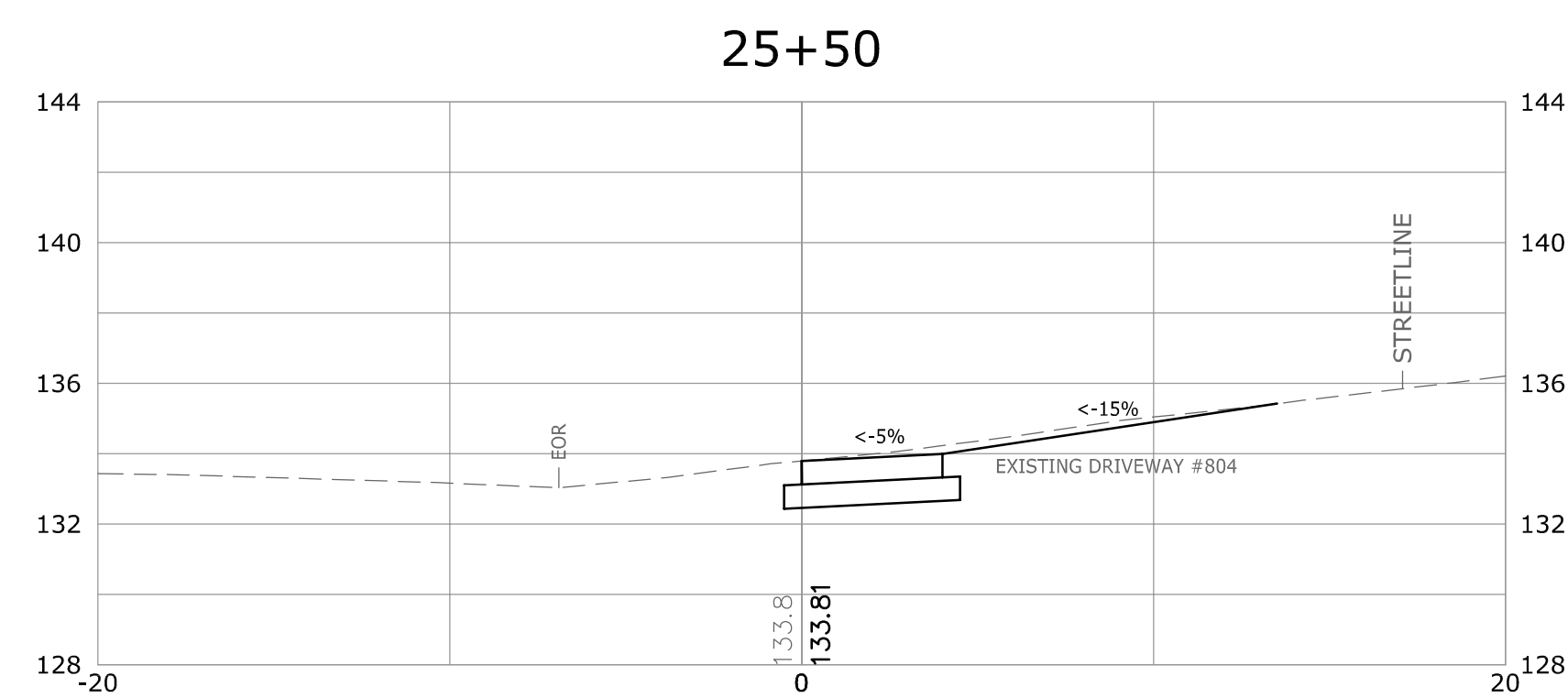
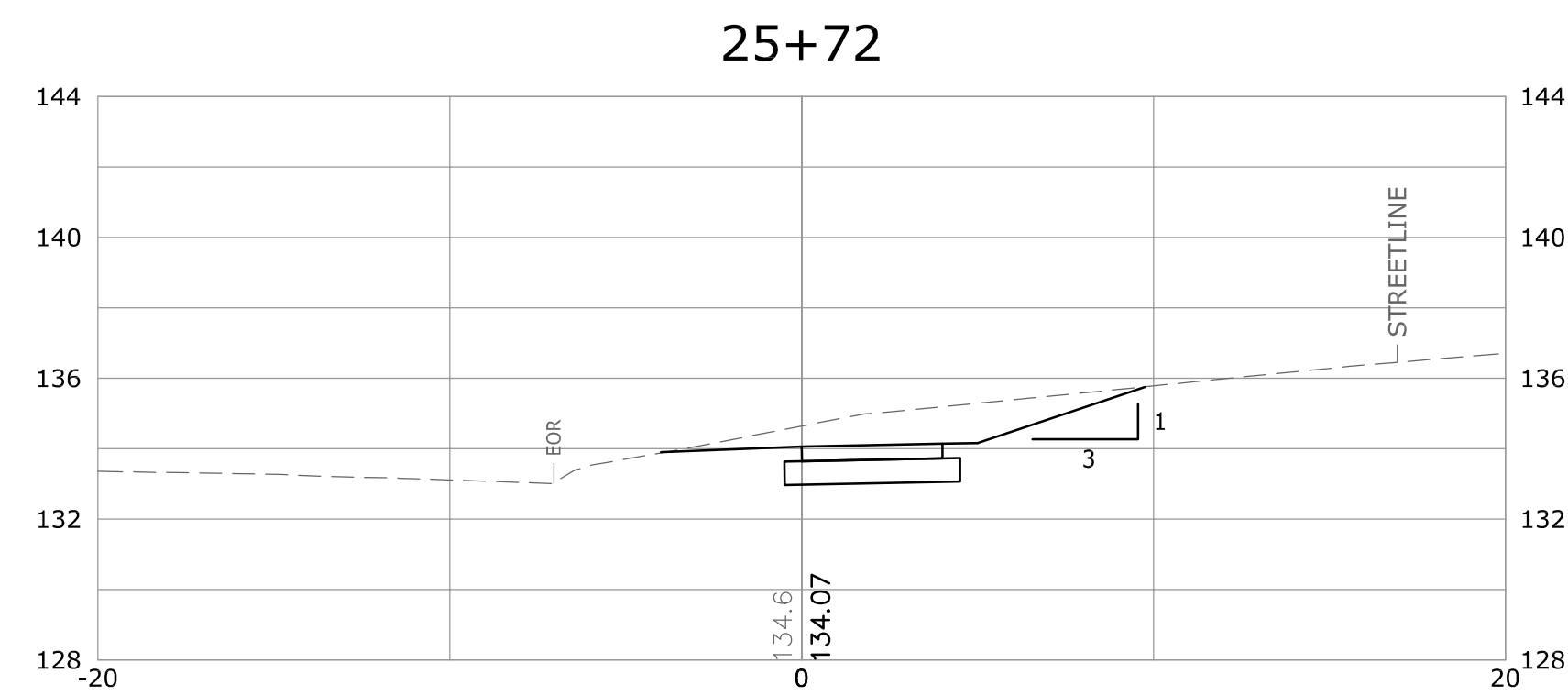
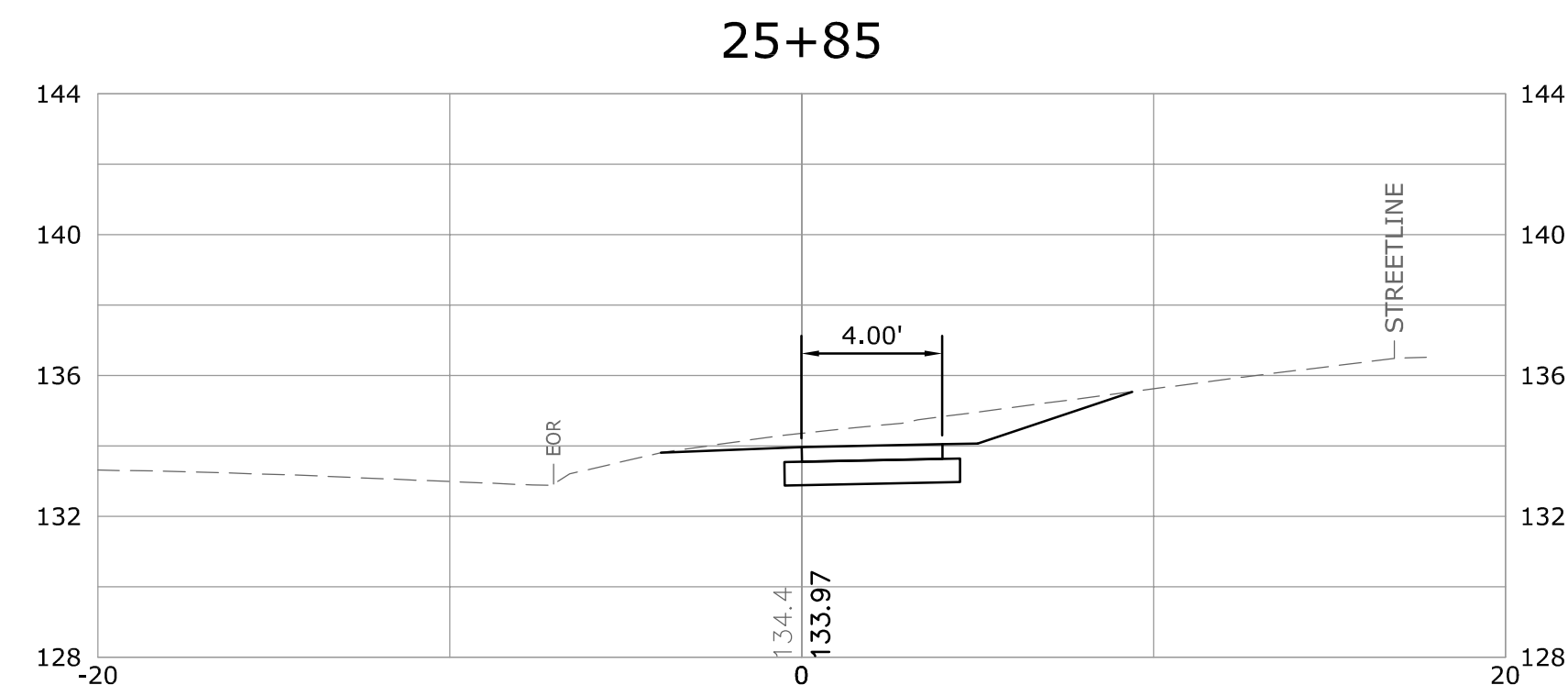
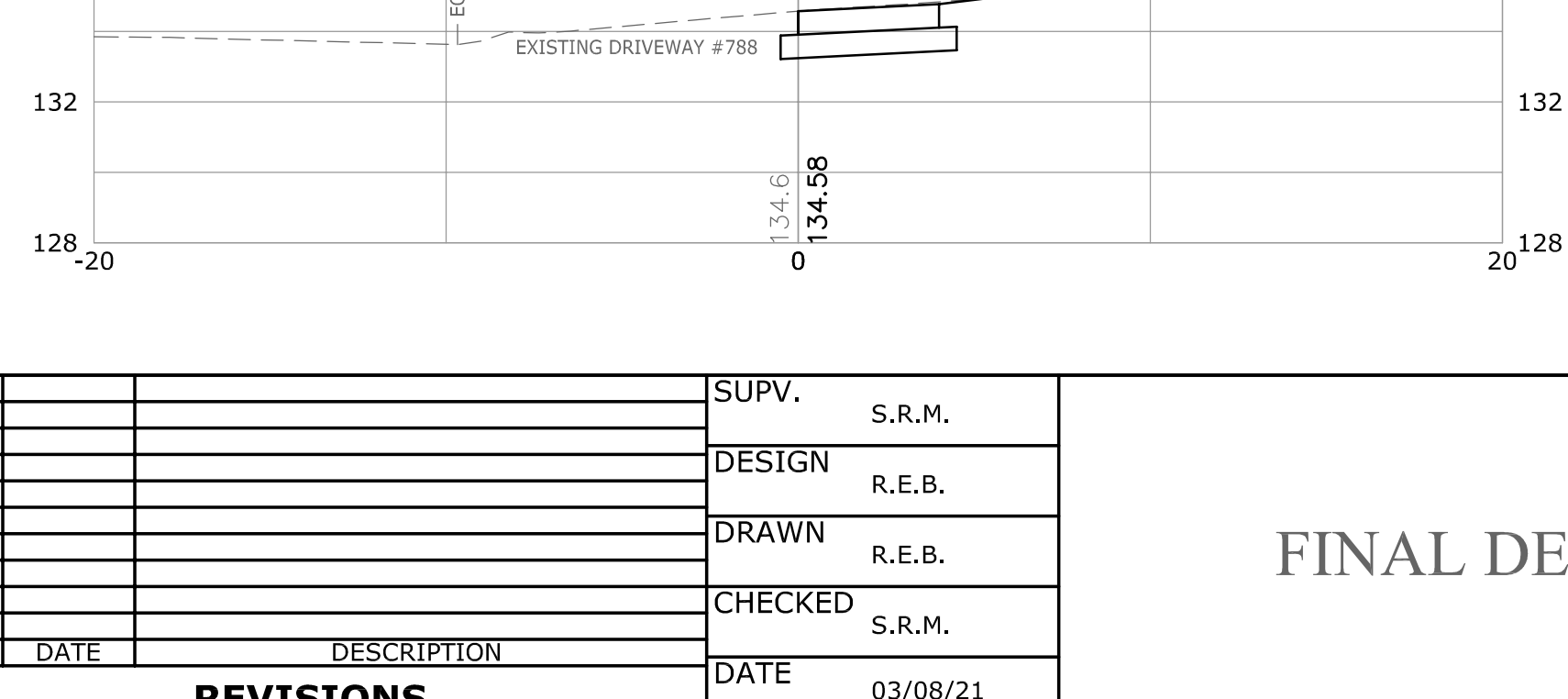
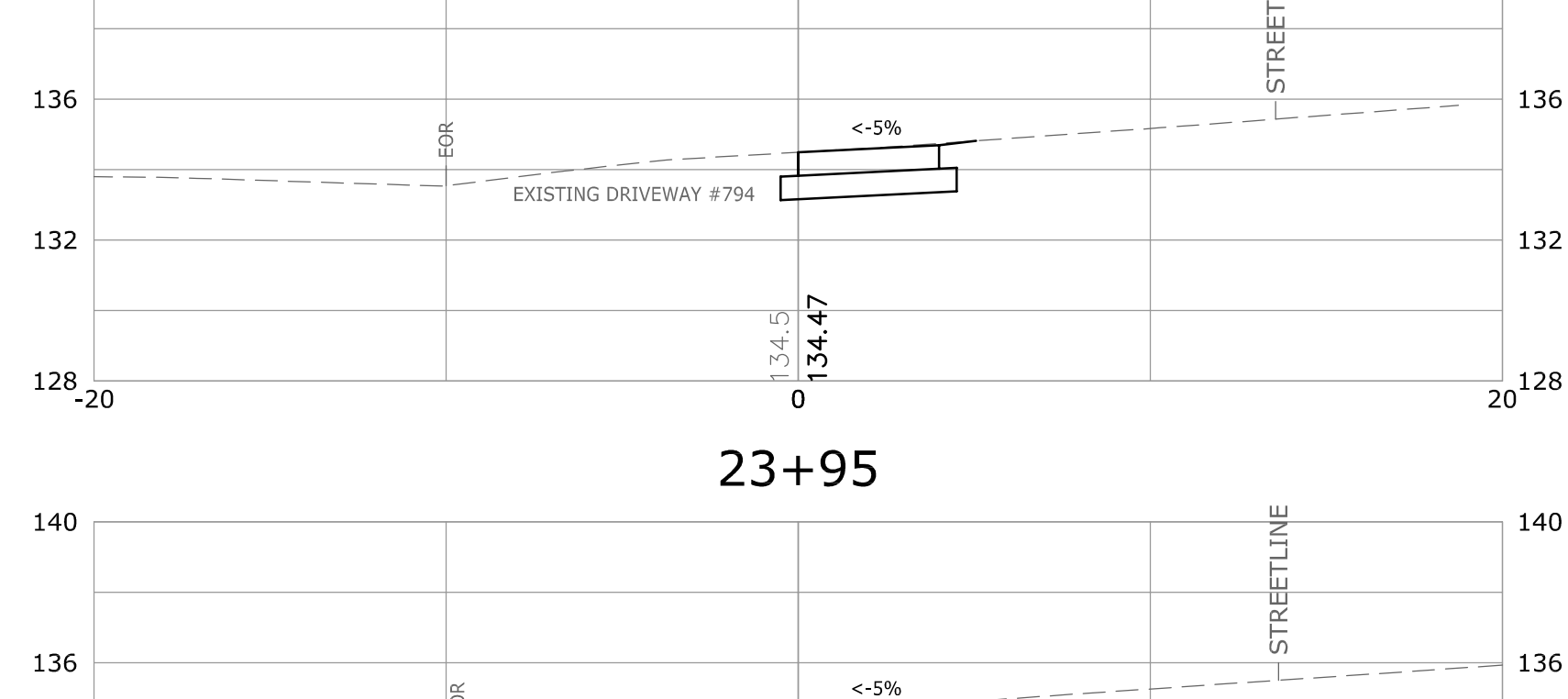
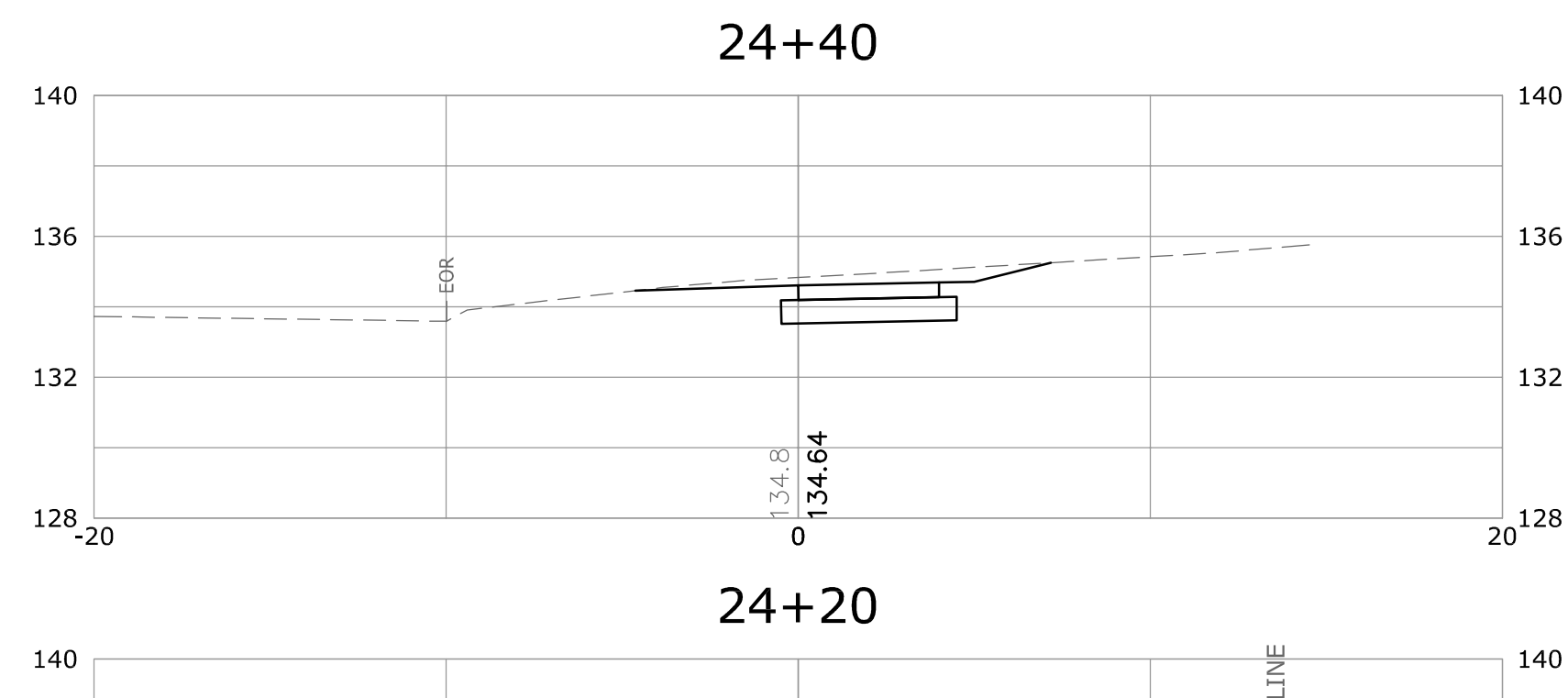
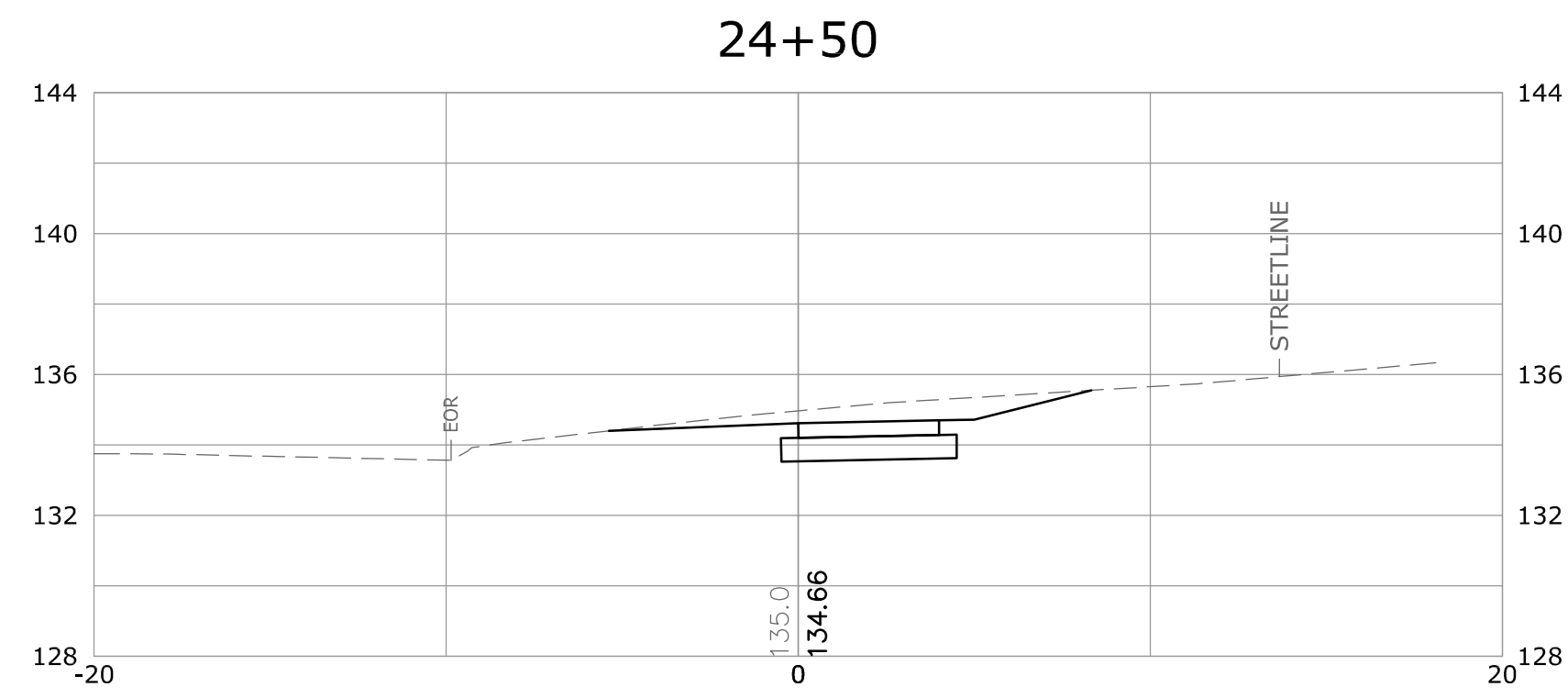
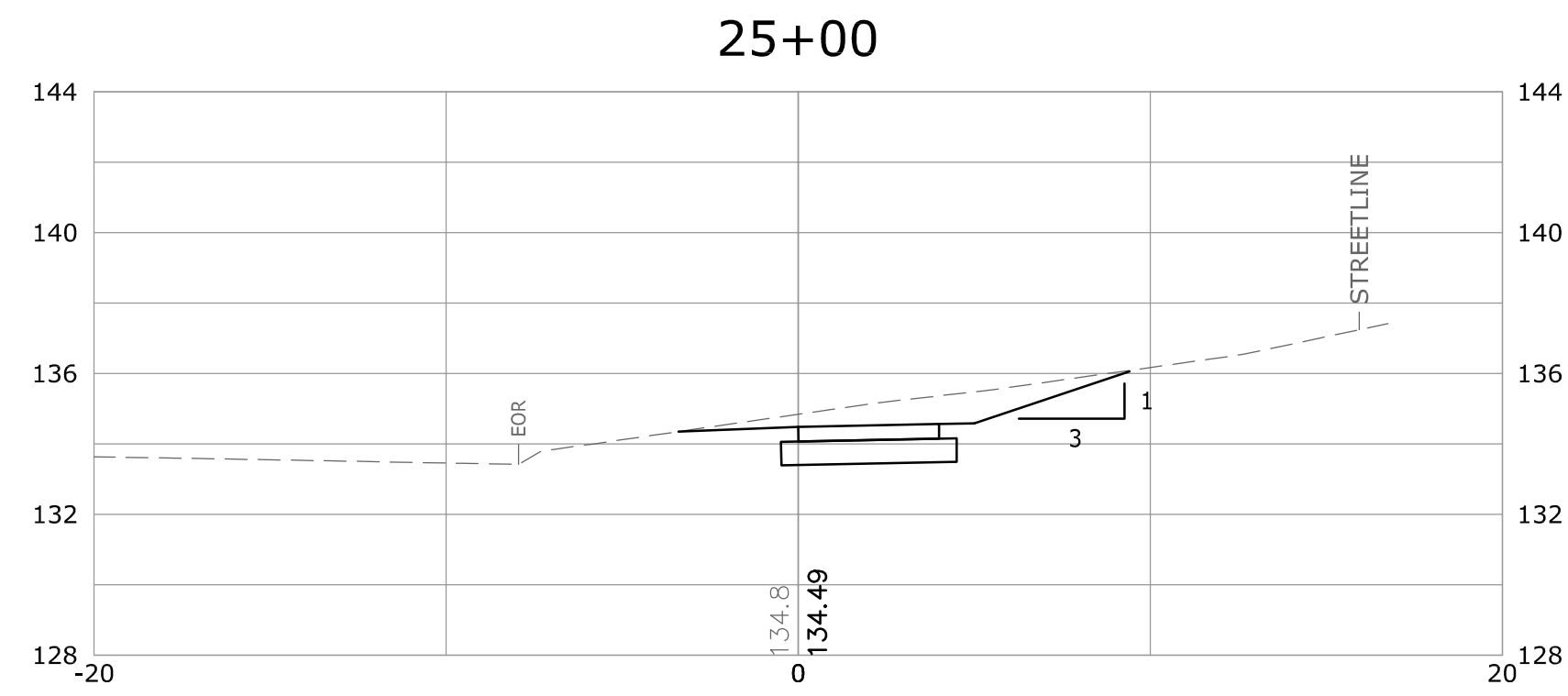
1" = 5'


WMC
 CONSULTING ENGINEERS
 • WENGELL, McDONNELL & COSTELLO •
 87 HOLMES ROAD
 NEWINGTON, CT 06111
 (860) 667-9624

PREPARED FOR

TOWN OF BERLIN
 240 KENSINGTON ROAD
 BERLIN, CT 06037

CROSS SECTIONS STA. 20+00 - STA. 23+50					SHEET	25
KENSINGTON ROAD IMPROVEMENTS						
BERLIN, CONNECTICUT						
D	- BERLIN SIDEWALKS -	19031.1_PD	19031.1	-	REV.	OF
SIZE	PROJECT	FILE NAME	NUMBER	REV.	OF	39



NO.	DATE	DESCRIPTION
REVISIONS		

SUPV.	S.R.M.
DESIGN	R.E.B.
DRAWN	R.E.B.
CHECKED	S.R.M.
DATE	03/08/21

FINAL DESIGN

SCALE

1" = 5'

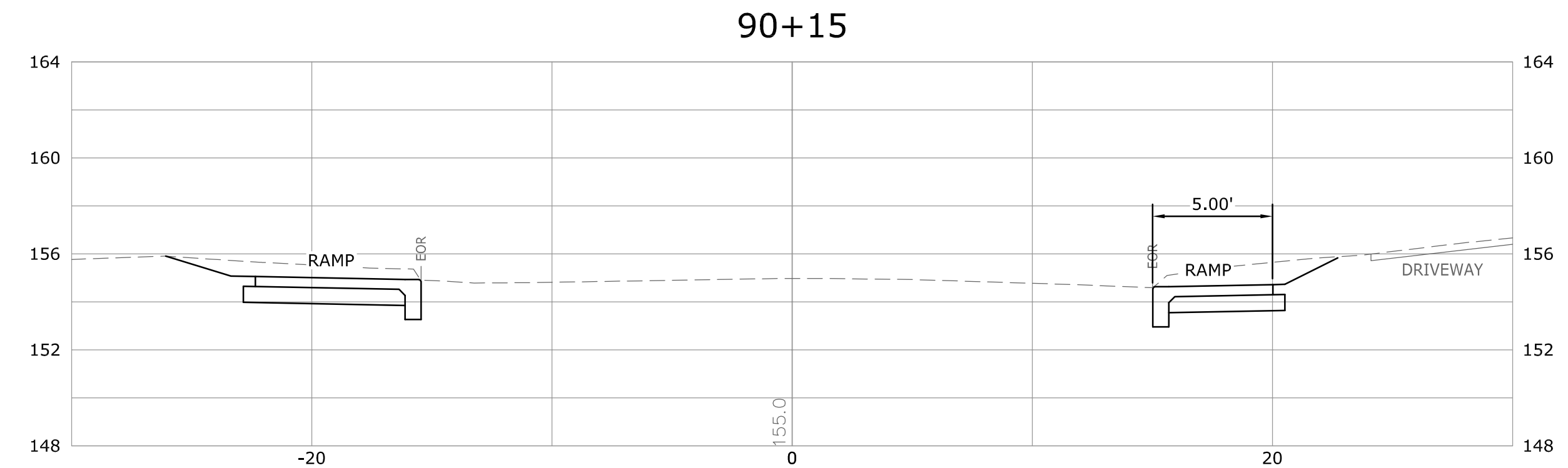
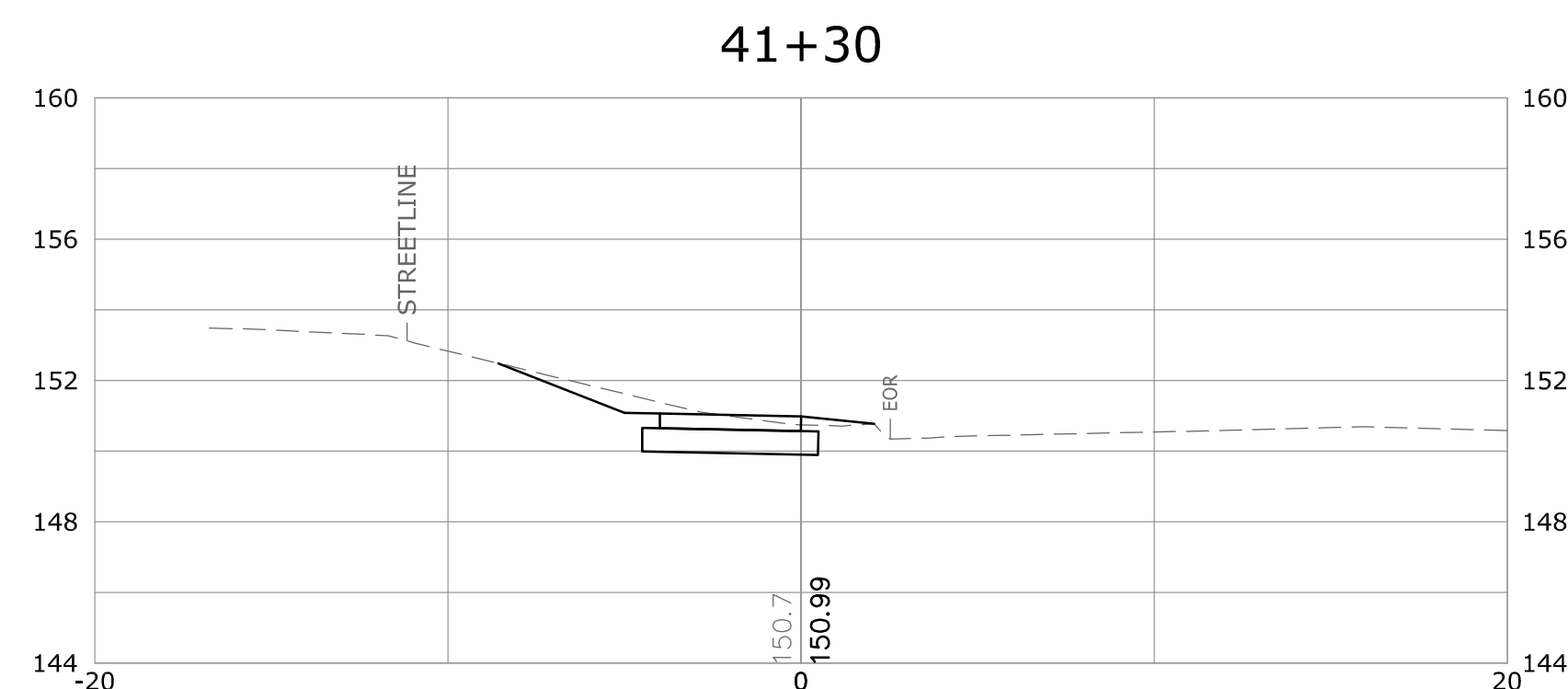
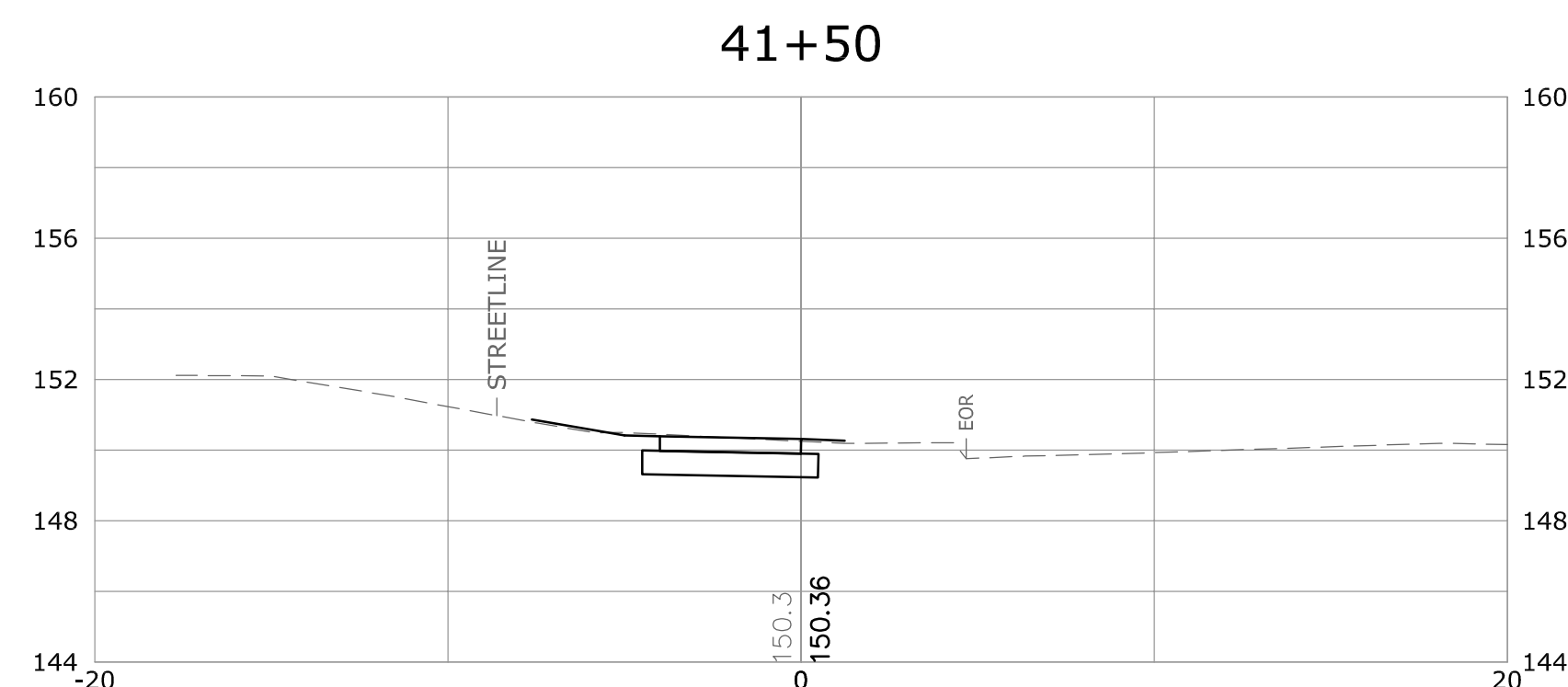
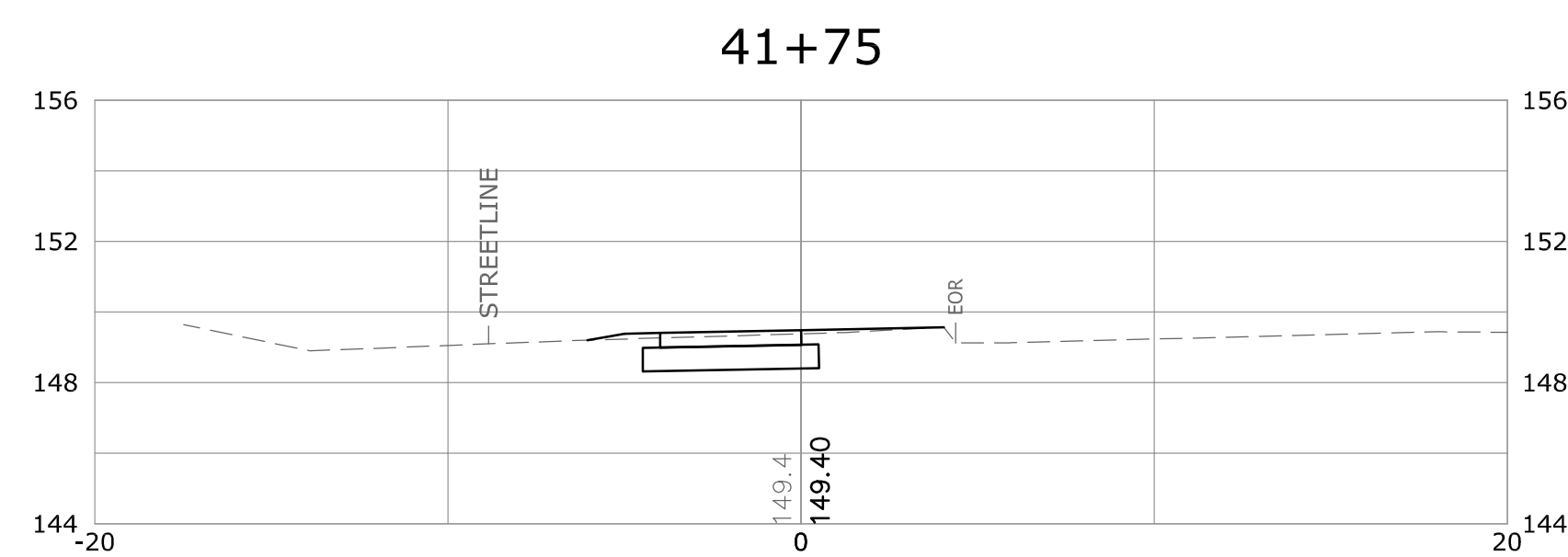
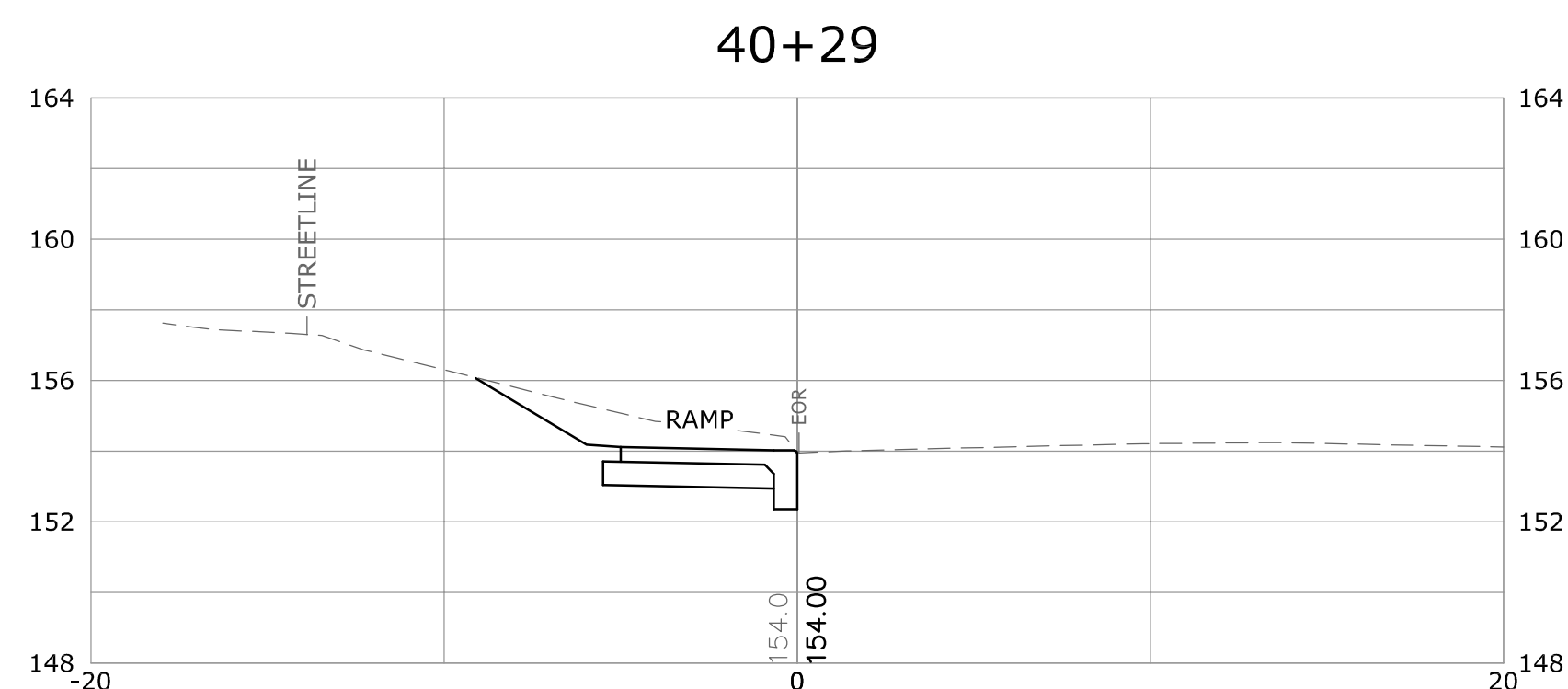
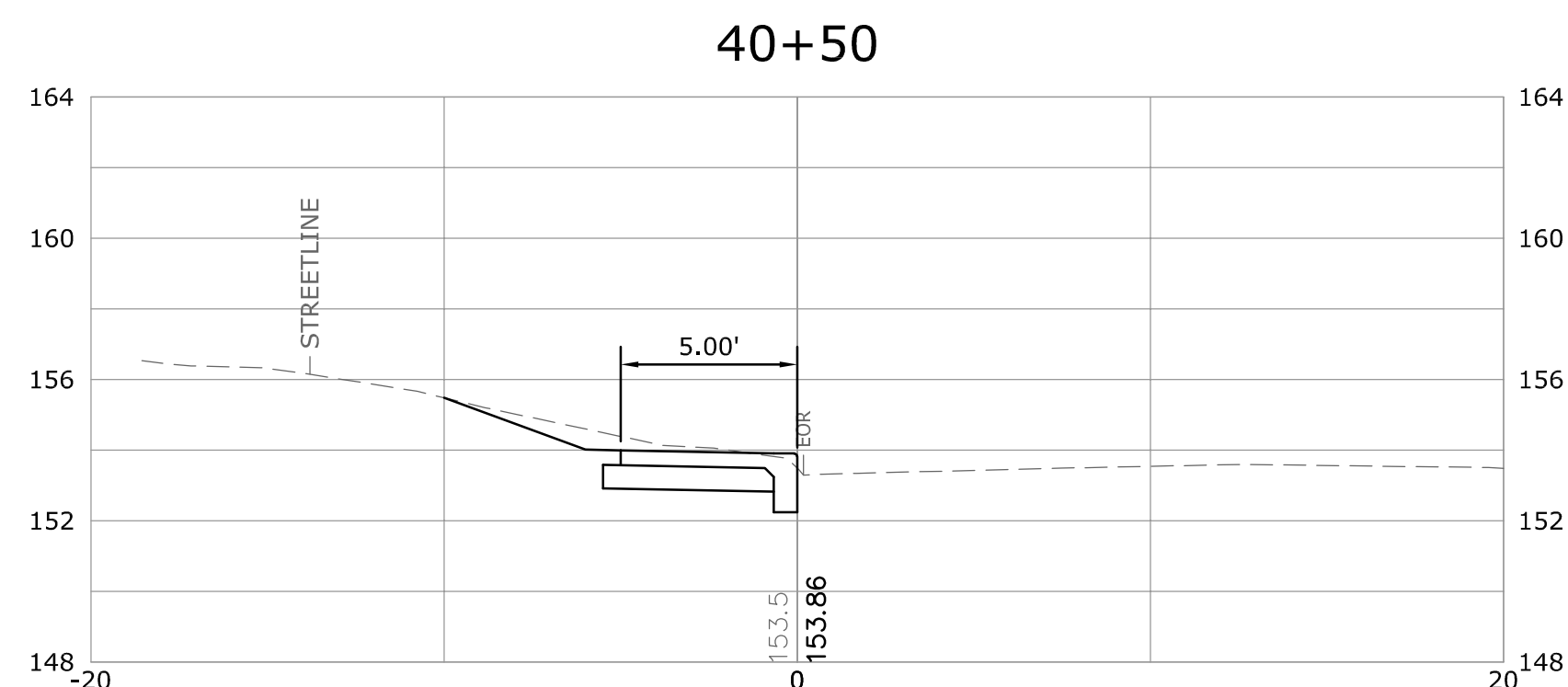
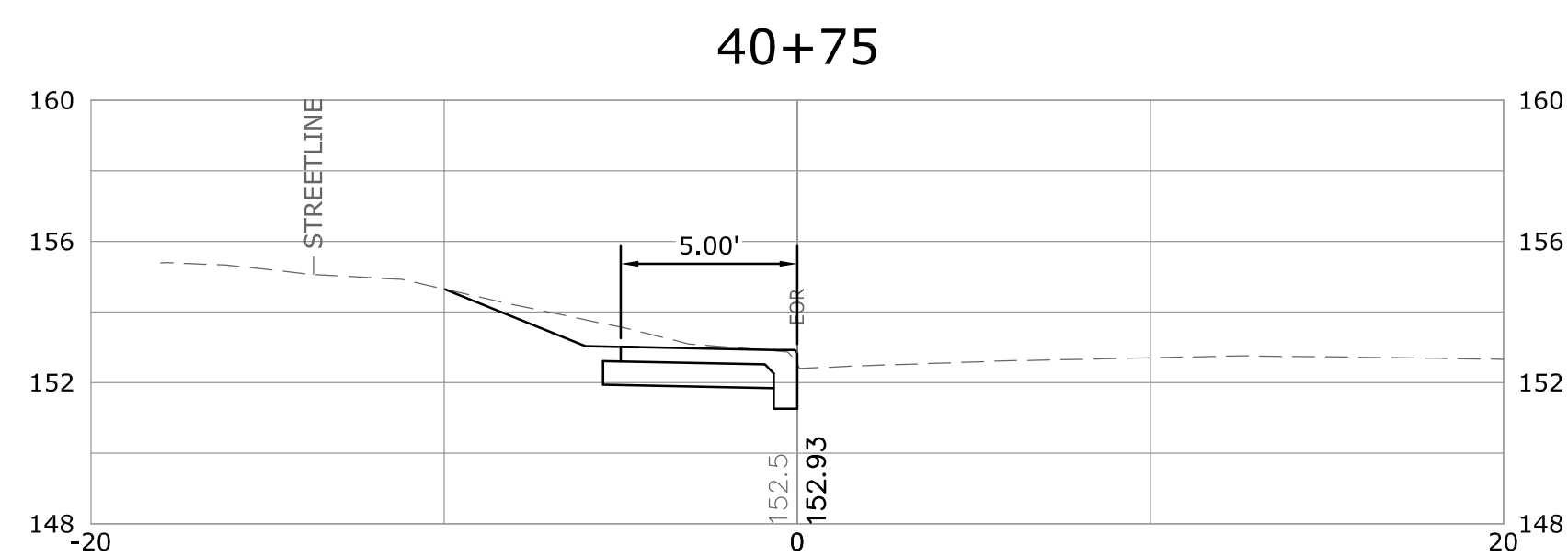
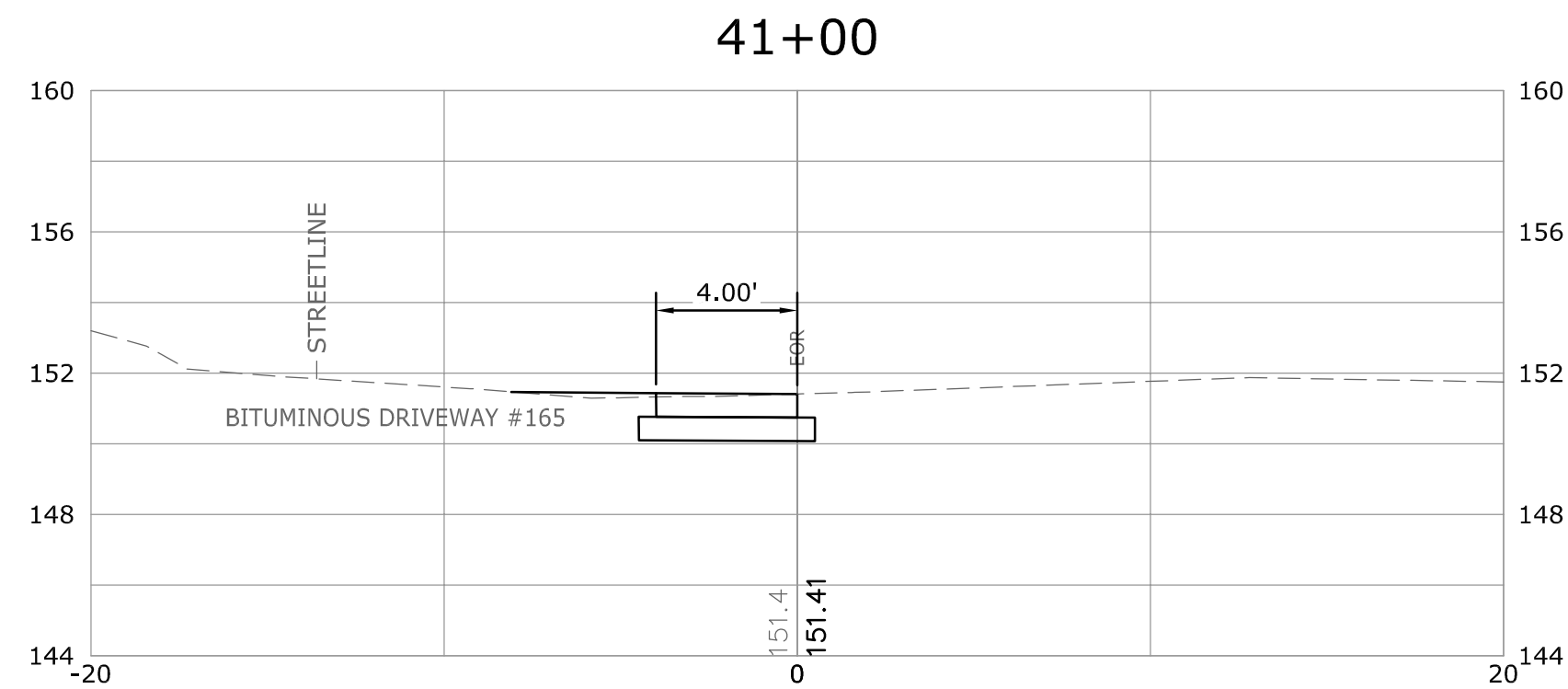

WMC
 CONSULTING ENGINEERS
 • WENGELL, McDONNELL & COSTELLO •
 87 HOLMES ROAD
 NEWINGTON, CT 06111
 (860) 667-9624

PREPARED FOR

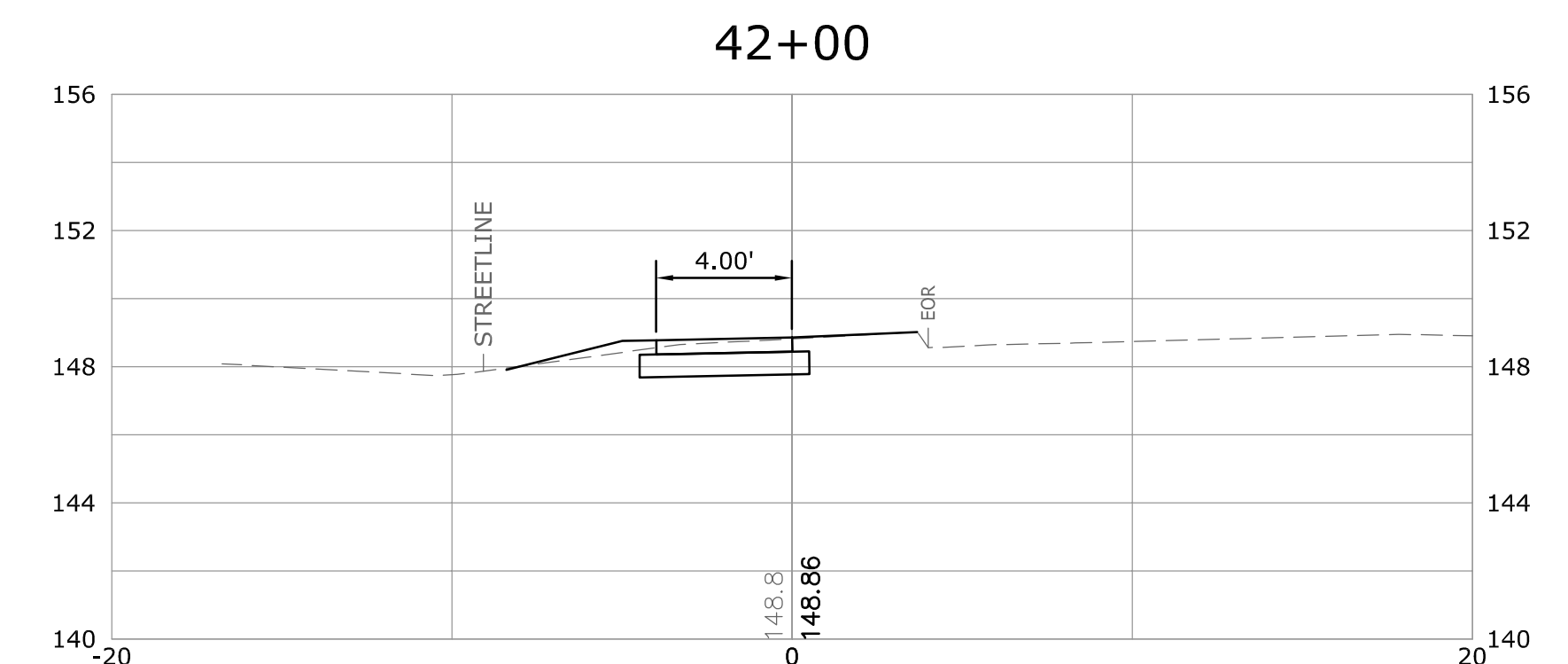
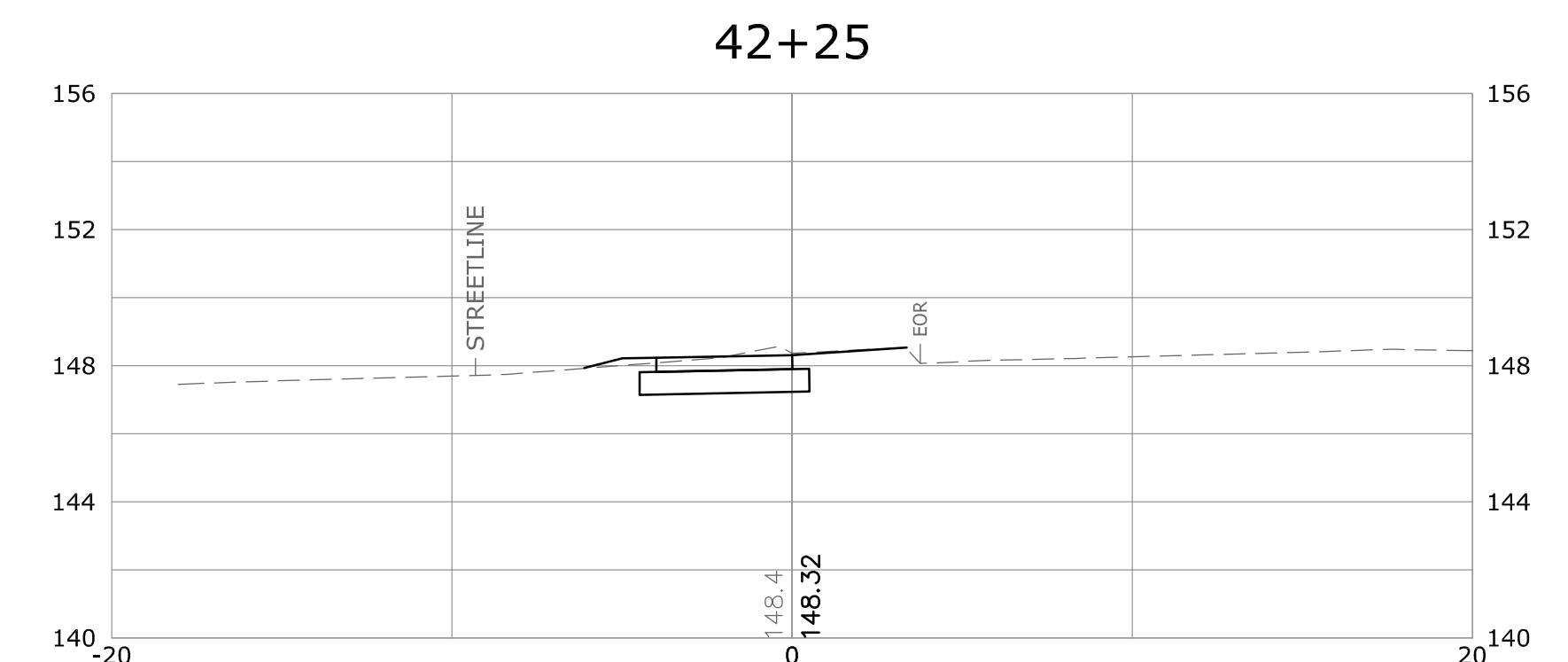
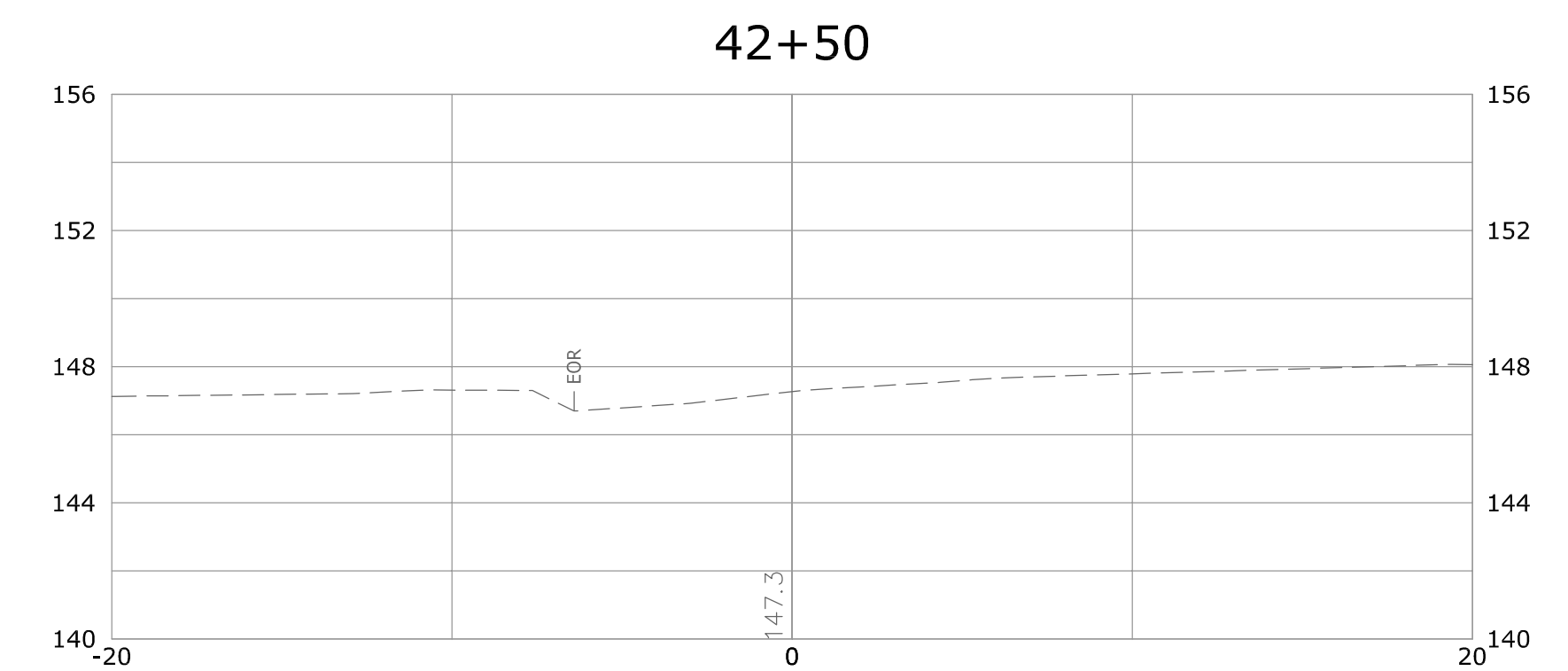
TOWN OF BERLIN
 240 KENSINGTON ROAD
 BERLIN, CT 06037

CROSS SECTIONS STA. 23+95 - STA. 25+85
KENSINGTON ROAD IMPROVEMENTS
BERLIN, CONNECTICUT

SIZE	PROJECT	FILE NAME	NUMBER	REV.	OF	SHEET	26
D	BERLIN SIDEWALKS	19031.1_PD	19031.1	-	-		39



TIMBERWOODS ROAD @ CROSSWALK



NO.	DATE	DESCRIPTION
REVISIONS		

SUPV.	S.R.M.
DESIGN	R.E.B.
DRAWN	R.E.B.
CHECKED	S.R.M.
DATE	03/08/21

FINAL DESIGN

SCALE
1" = 5'

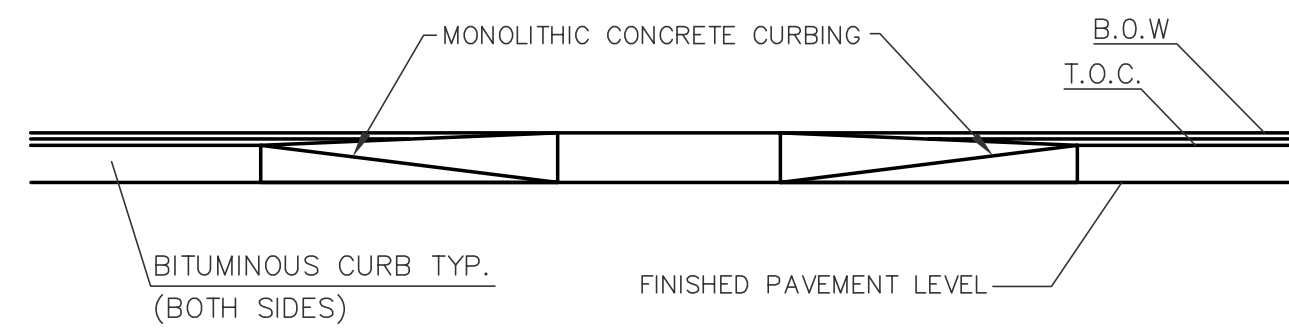
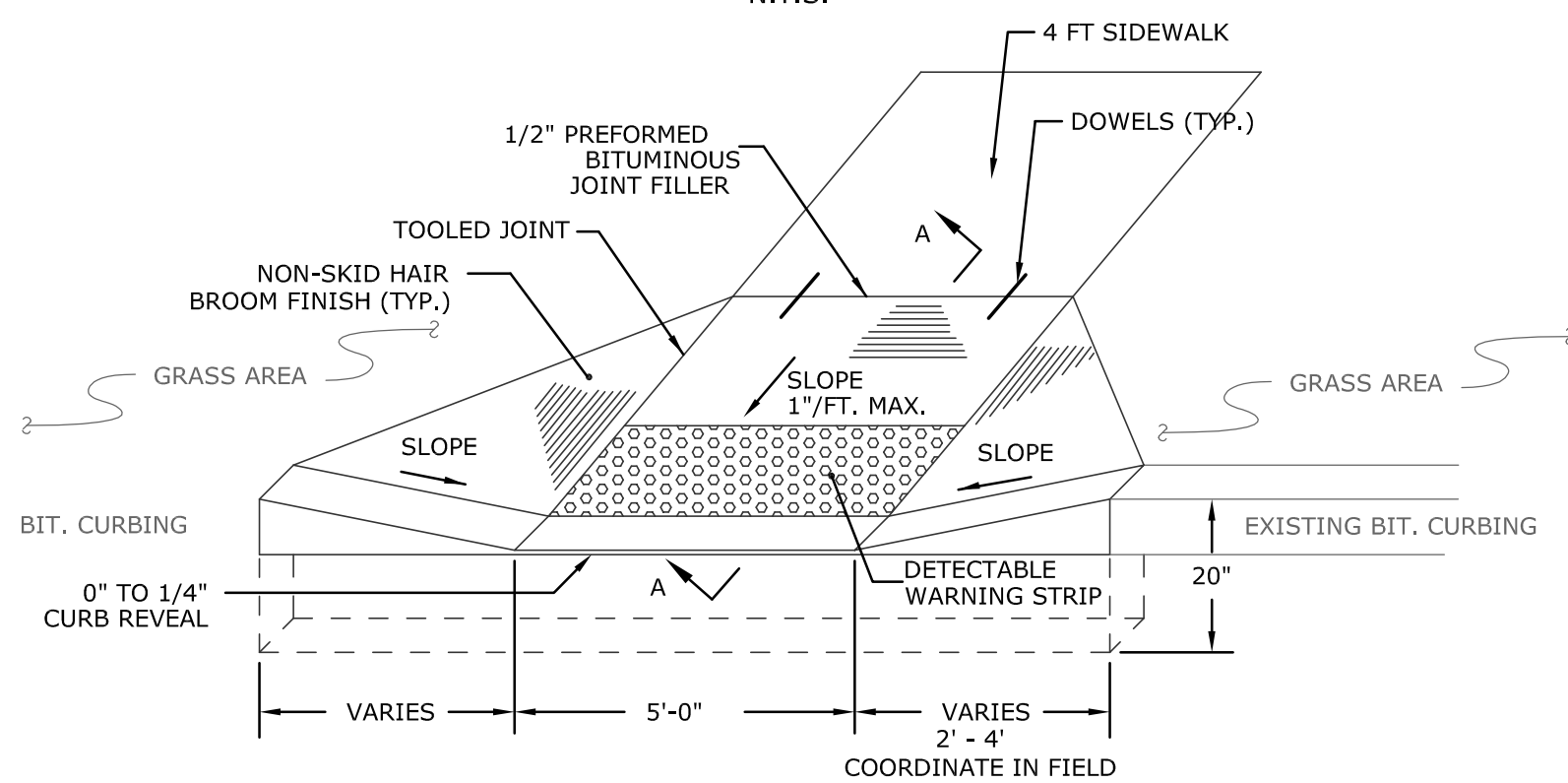
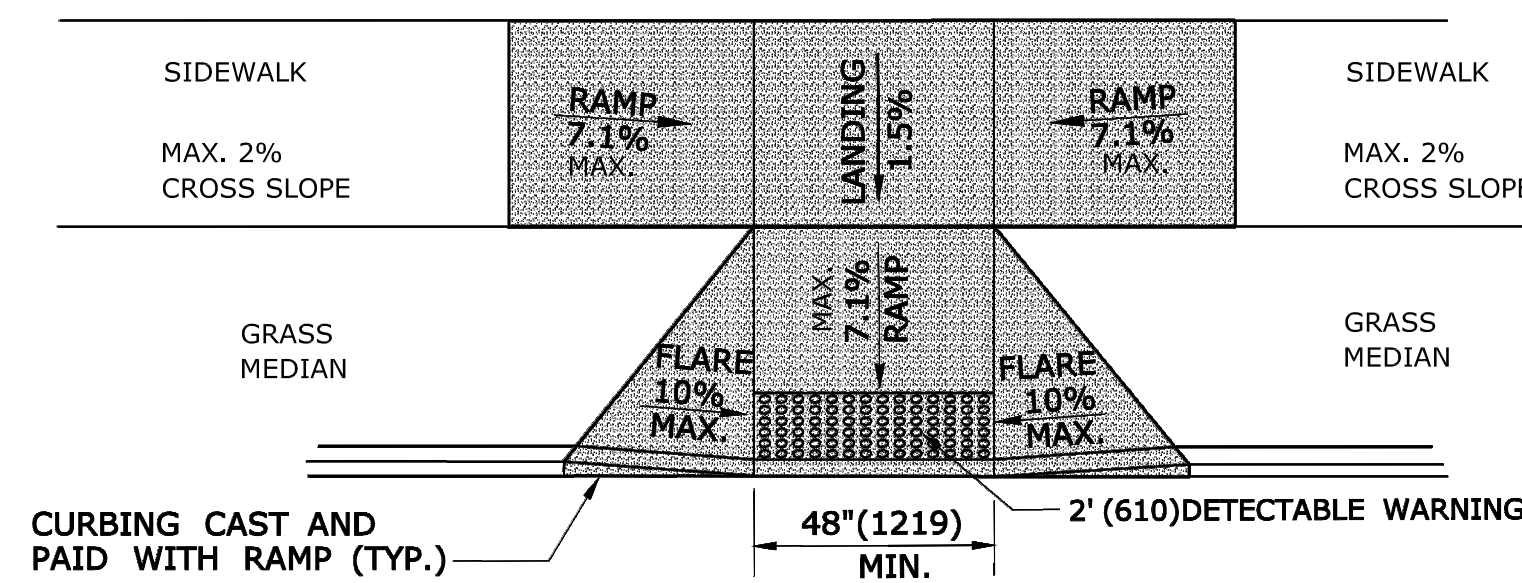


WENGELL, McDONNELL & COSTELLO
87 HOLMES ROAD
NEWINGTON, CT 06111
(860) 667-9624

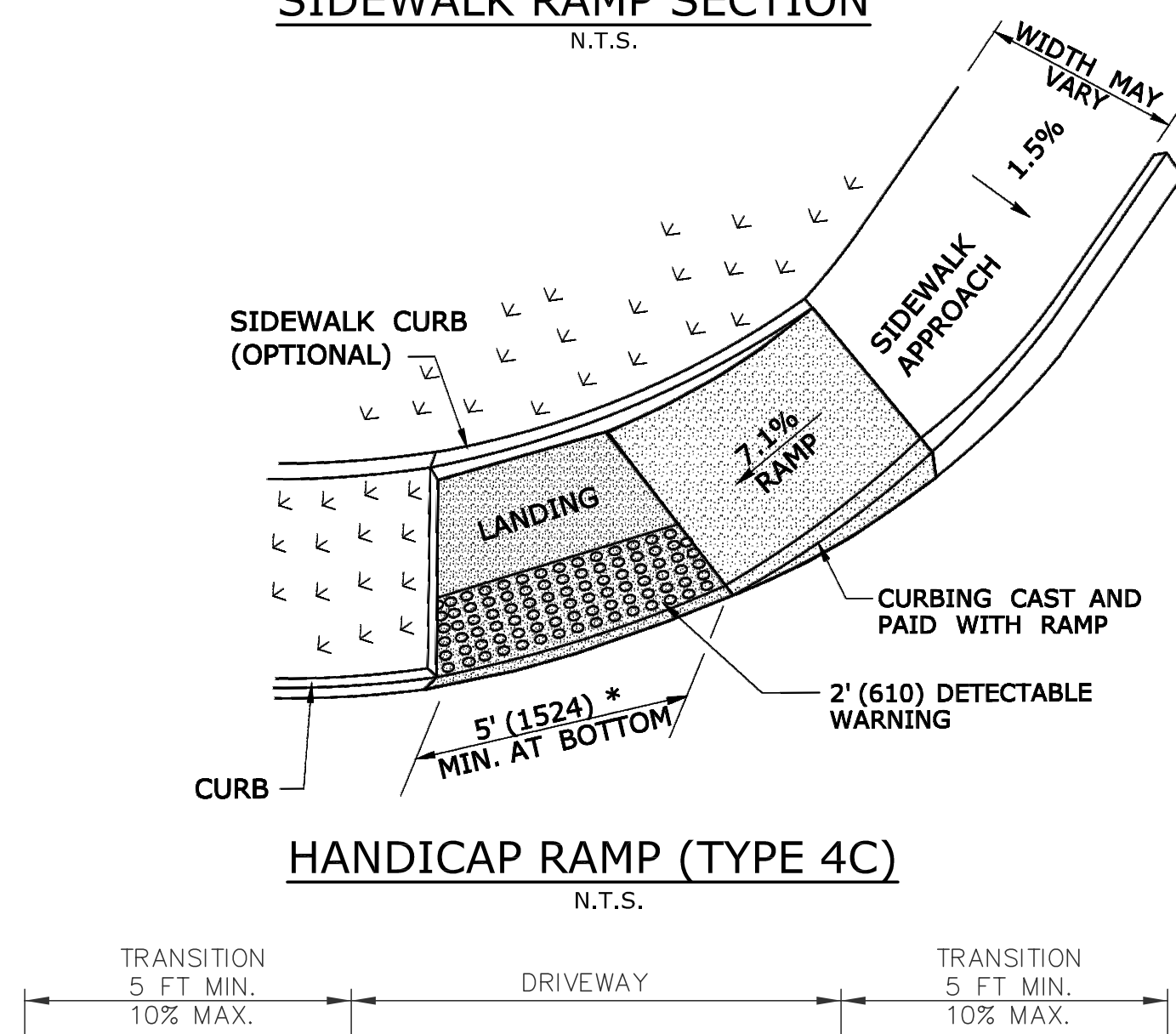
PREPARED FOR
TOWN OF BERLIN
240 KENSINGTON ROAD
BERLIN, CT 06037

CROSS SECTIONS STA. 40+27 - STA. 42+50
ROBBINS ROAD IMPROVEMENTS
BERLIN, CONNECTICUT

D	BERLIN SIDEWALKS	19031.1_PD	19031.1			SHEET	29
SIZE	PROJECT	FILE NAME	NUMBER	REV.	OF		39

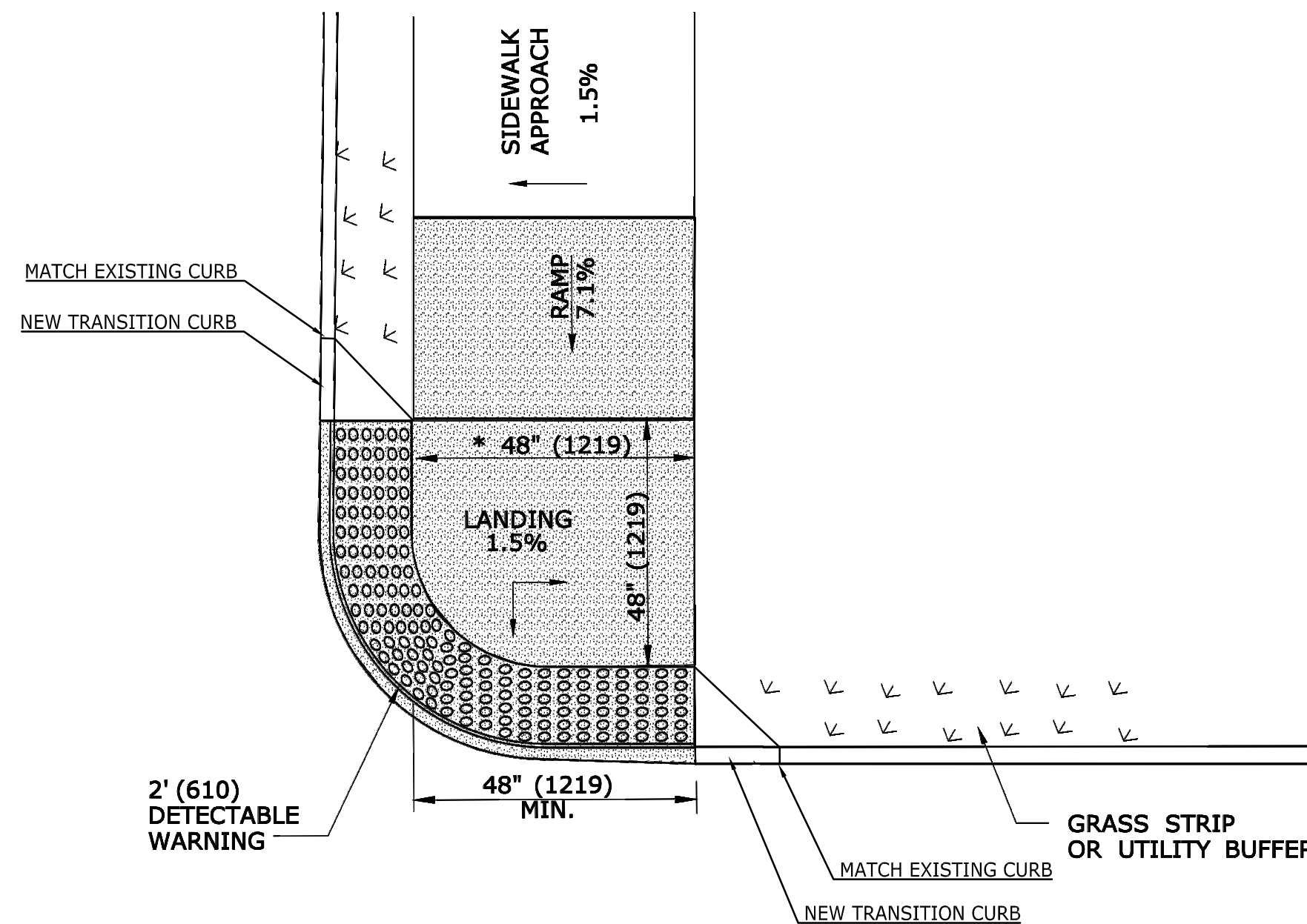


SIDEWALK RAMP SECTION
N.T.S.

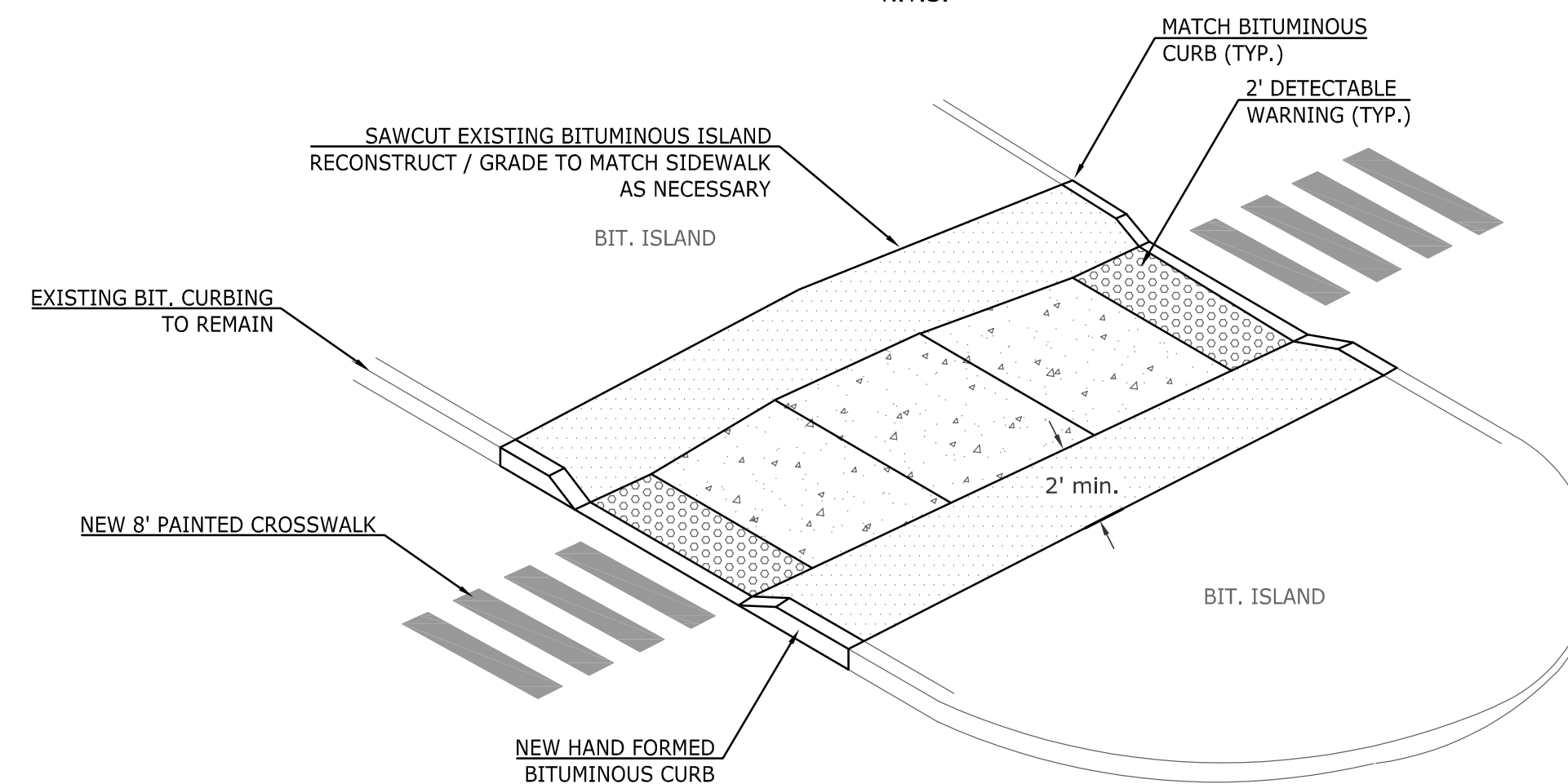


PROFILE

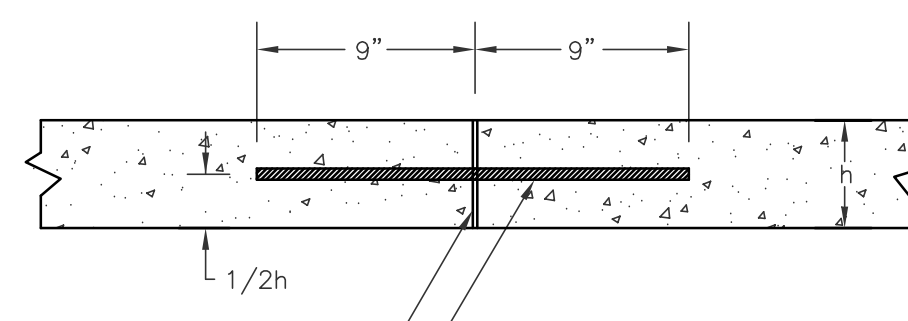
RECESSED SIDEWALK AT DRIVEWAYS
N.T.S.



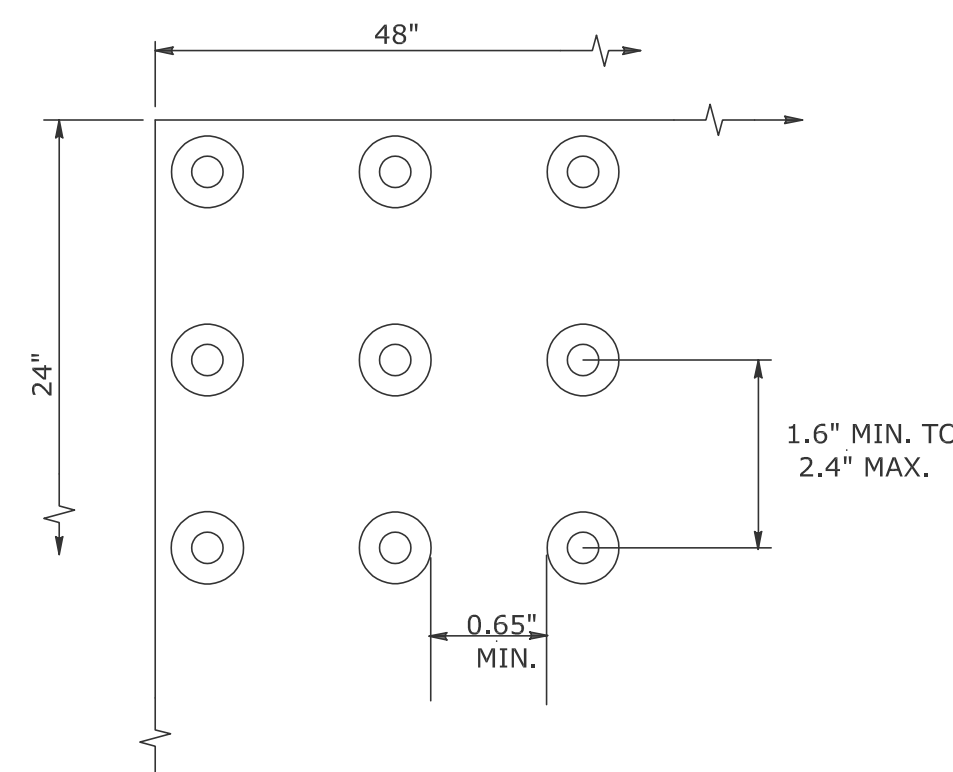
HANDICAP RAMP (TYPE 5B)
N.T.S.



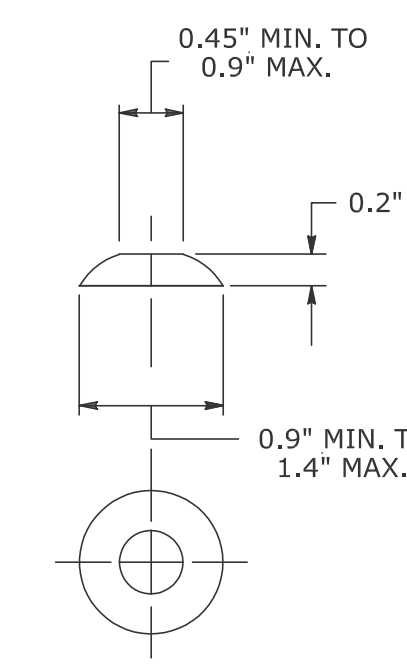
HANDICAP RAMP (TYPE 6B)
N.T.S.



EXPANSION JOINT DETAIL
N.T.S.



DOMES SPACING
N.T.S.

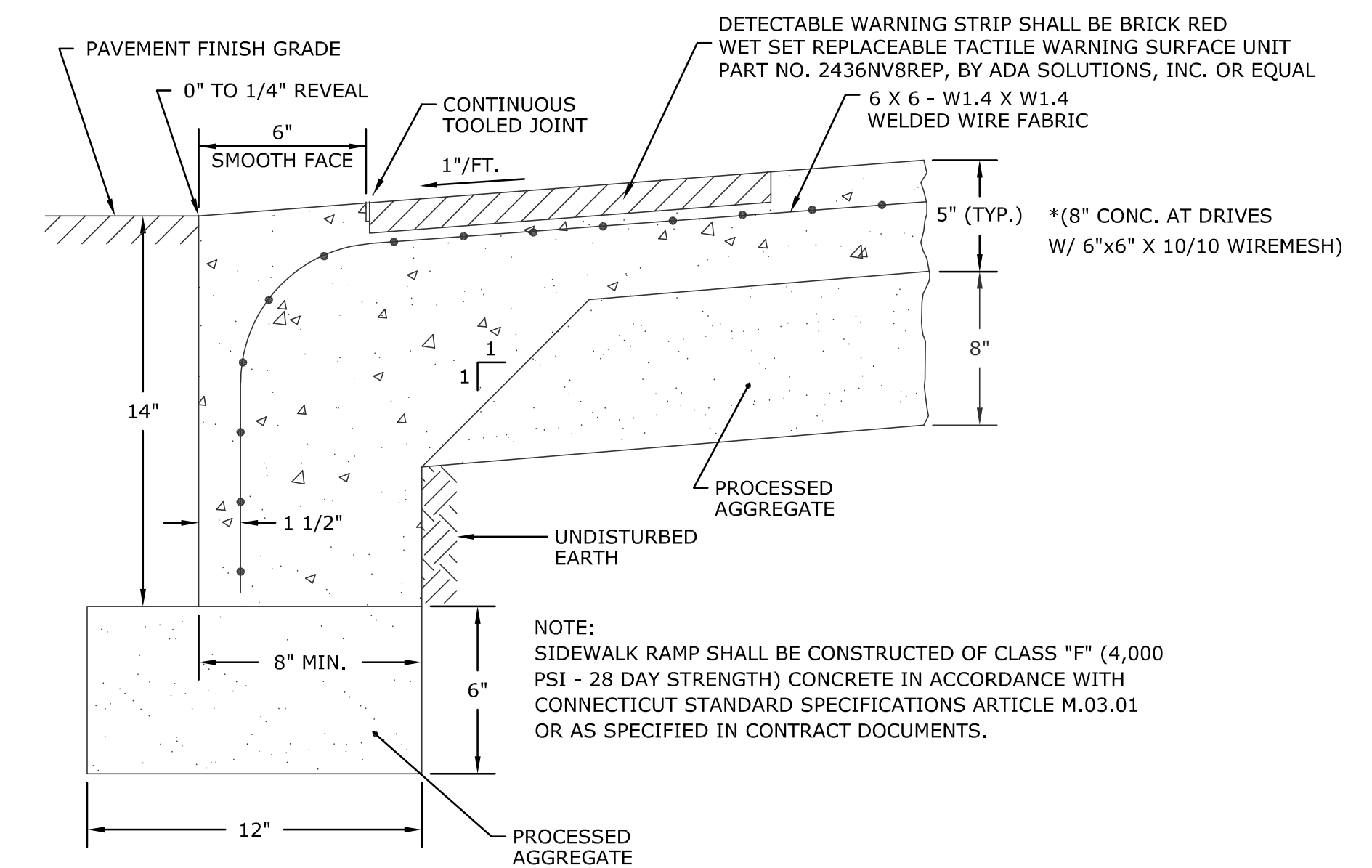


DOMES SECTION
N.T.S.

DETECTABLE WARNING STRIP
N.T.S.

SIDEWALK RAMP NOTES:

1. MAXIMUM SLOPES OF ADJOINING GUTTERS AND ROAD SURFACES IMMEDIATELY ADJACENT TO THE SIDEWALK RAMP OR ACCESSIBLE ROUTE SHOULD NOT EXCEED 20:1.
2. CARE SHALL BE TAKEN TO ASSURE UNIFORM GRADE ON THE RAMP, FREE OF SAGS AND ABRUPT GRADE CHANGES.
3. ALL RAMP SHALL BE CONSTRUCTED OF CLASS "F" CONCRETE IN ACCORDANCE WITH THE SPECIFICATIONS IN THE CONTRACT DOCUMENTS.
4. SIDEWALK RAMP SHALL HAVE A COARSE BROOM FINISH TRANSVERSE TO THE SLOPE OF THE RAMP. THE SURFACE ALONG ACCESSIBLE ROUTES SHALL BE STABLE, FIRM AND SLIP RESISTANT IN COMPLIANCE WITH ADAAG SECTION 4.5. DETECTABLE WARNING SURFACES SHALL BE INSTALLED FLUSH AT ALL RAMP AND EXTEND 24" MIN. FROM BACK EDGE OF CURBING ALONG TRAVEL WAY.
5. DIAGONAL SIDEWALK RAMP AT MARKED CROSSINGS SHALL BE WHOLLY CONTAINED WITHIN THE MARKINGS, EXCLUDING ANY FLARED SIDES.
6. REMOVAL OF EXISTING SIDEWALK FOR NEW RAMP INSTALLATIONS SHALL BE TO THE NEAREST EXPANSION/CONTRACTIONS JOINT OR DUMMY JOINT, 12:1 MAY NO BE ACHIEVABLE DUE TO SIDEWALK GRADE. IN RECOGNITION OF THIS, A MINIMUM LIMIT OF 15' FOR A PARALLEL RAMP SHALL BE USED. REMOVAL SHALL NOT BE FURTHER THAN 2' FROM THE PROPOSED RAMP UNLESS DIRECTED BY THE ENGINEER. SAW CUT REQUIRED FOR DUMMY JOINTS SHALL BE INCLUDED IN THE COST OF 'CONCRETE SIDEWALK'.
7. EXPANSION JOINTS IN CONCRETE SHALL MATCH THOSE IN ADJACENT SIDEWALKS BUT IN NO CASE SHALL THE SPACING BETWEEN EXPANSION JOINTS EXCEED 15' UNLESS OTHERWISE NOTED.
8. RAISED ISLANDS IN MARKED CROSSINGS SHALL HAVE SIDEWALK RAMP AT BOTH SIDES AND A LEVEL AREA AT LEAST 4' LONG BETWEEN THE RAMP. IF THIS CAN NOT BE ACHIEVED, THE RAISED ISLAND SHALL BE CUT THROUGH LEVEL WITH THE ROADWAY AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
9. SIDEWALK RAMP SHALL BE CONSTRUCTED AND PAID FOR UNDER THE ITEM "CONCRETE SIDEWALK RAMP", INCLUDING CURBING WITHIN THE LIMITS OF THE NEW SIDEWALK RAMP.
10. CURBING WITHIN THE LIMITS OF THE NEW SIDEWALK RAMP SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE REQUIREMENTS OF FORM 818 SECTIONS 8.11 AND 8.13.
11. HANDICAP RAMP CONFORMING WITH CONNECTICUT GENERAL STATUTES, SEC. 7-118a, SHALL BE INCORPORATED IN ALL PROPOSED SIDEWALKS AT ALL STREET INTERSECTIONS, AND AT ALL OTHER LOCATIONS WHERE THE GRADE OF A DRIVEWAY OR OTHER FACILITY TAKES PRECEDENCE OVER THE GRADE OF THE PROPOSED SIDEWALK.
12. TRANSITION TO FULL HEIGHT CURB. INSTALL CURB TYPES AS INDICATED ON THE PLANS.
13. INSTALL THE EDGE OF THE DETECTABLE WARNING 6" FROM EDGE OF ROAD.
14. TO PERMIT WHEELCHAIR WHEELS TO ROLL BETWEEN DOMES, ALIGN DOMES ON A SQUARE GRID IN THE DIRECTION OF PEDESTRIAN TRAVEL.



HANDICAP RAMP SECTION A-A
N.T.S.

SUPV.	S.R.M.
DESIGN	R.E.B.
DRAWN	R.E.B.
CHECKED	S.R.M.
NO.	DATE
DESCRIPTION	
REVISIONS	
DATE	03/08/21

FINAL DESIGN

SCALE
N.T.S.



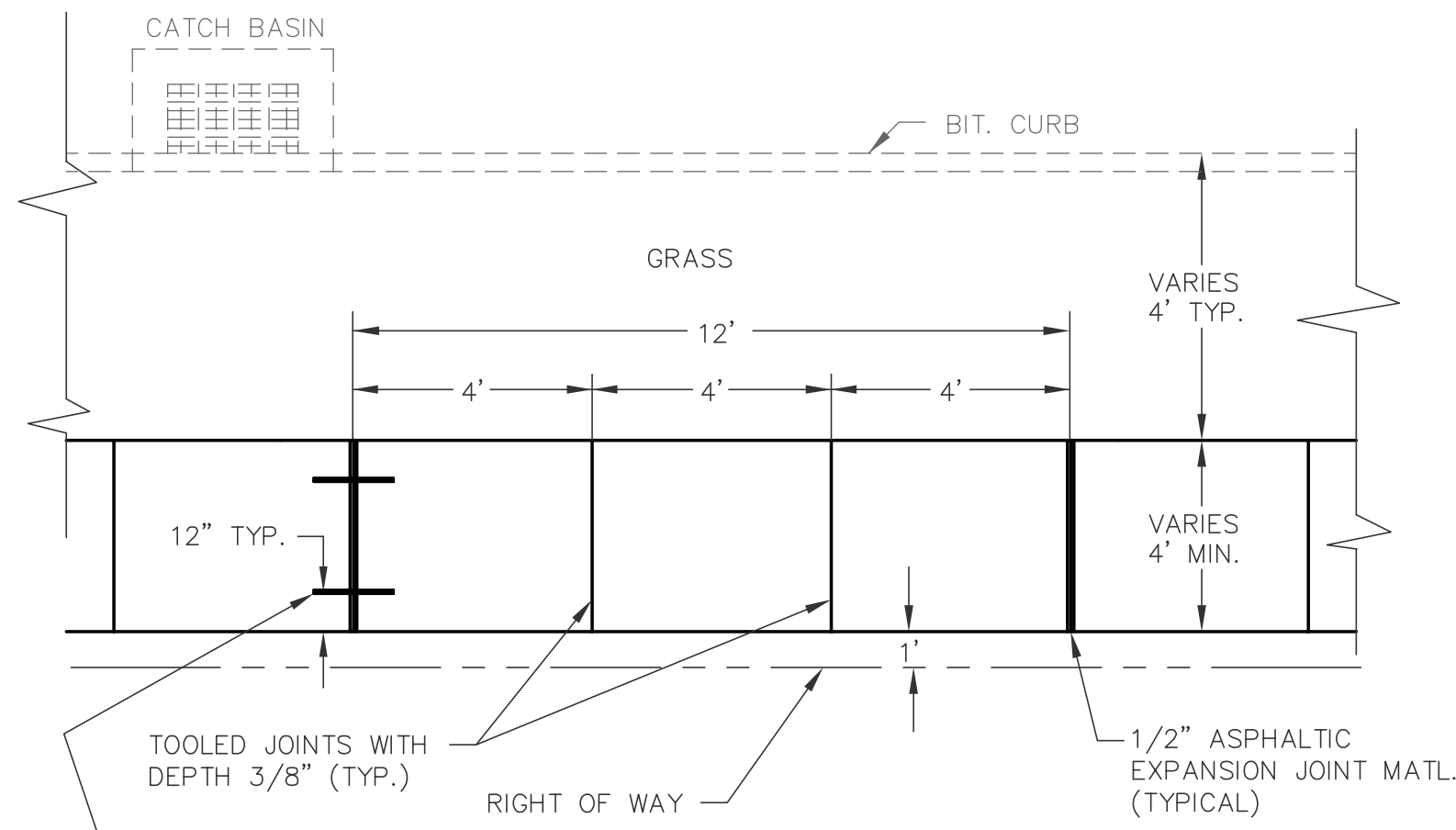
• WENGELL, McDONNELL & COSTELLO •
87 HOLMES ROAD
NEWINGTON, CT 06111
(860) 667-9624

PREPARED FOR

TOWN OF BERLIN
240 KENSINGTON ROAD
BERLIN, CT 06037

CONSTRUCTION DETAILS 1 OF 3
BERLIN SIDEWALK CONNECTIVITY
BERLIN, CONNECTICUT

D - BERLIN SIDEWALKS - 19031.1_PD - 19031.1	SHEET	36
SIZE PROJECT FILE NAME NUMBER REV.	OF	39



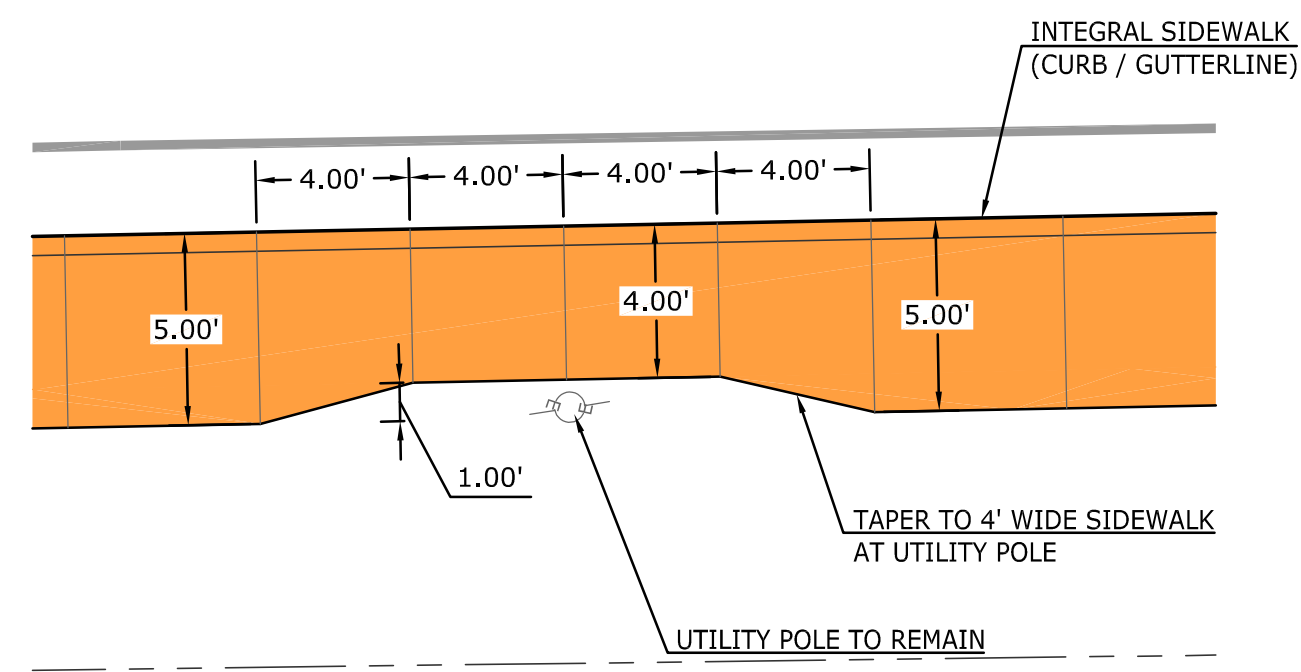
NOTE: 1. DOWELS SHALL BE PLACED AT CONSTRUCTION JOINTS AND WHERE NEW CONCRETE MEETS EXISTING CONCRETE (SEE DETAIL).
2. CONCRETE SHALL BE 4000 P.S.I.

TYPICAL SIDEWALK LAYOUT

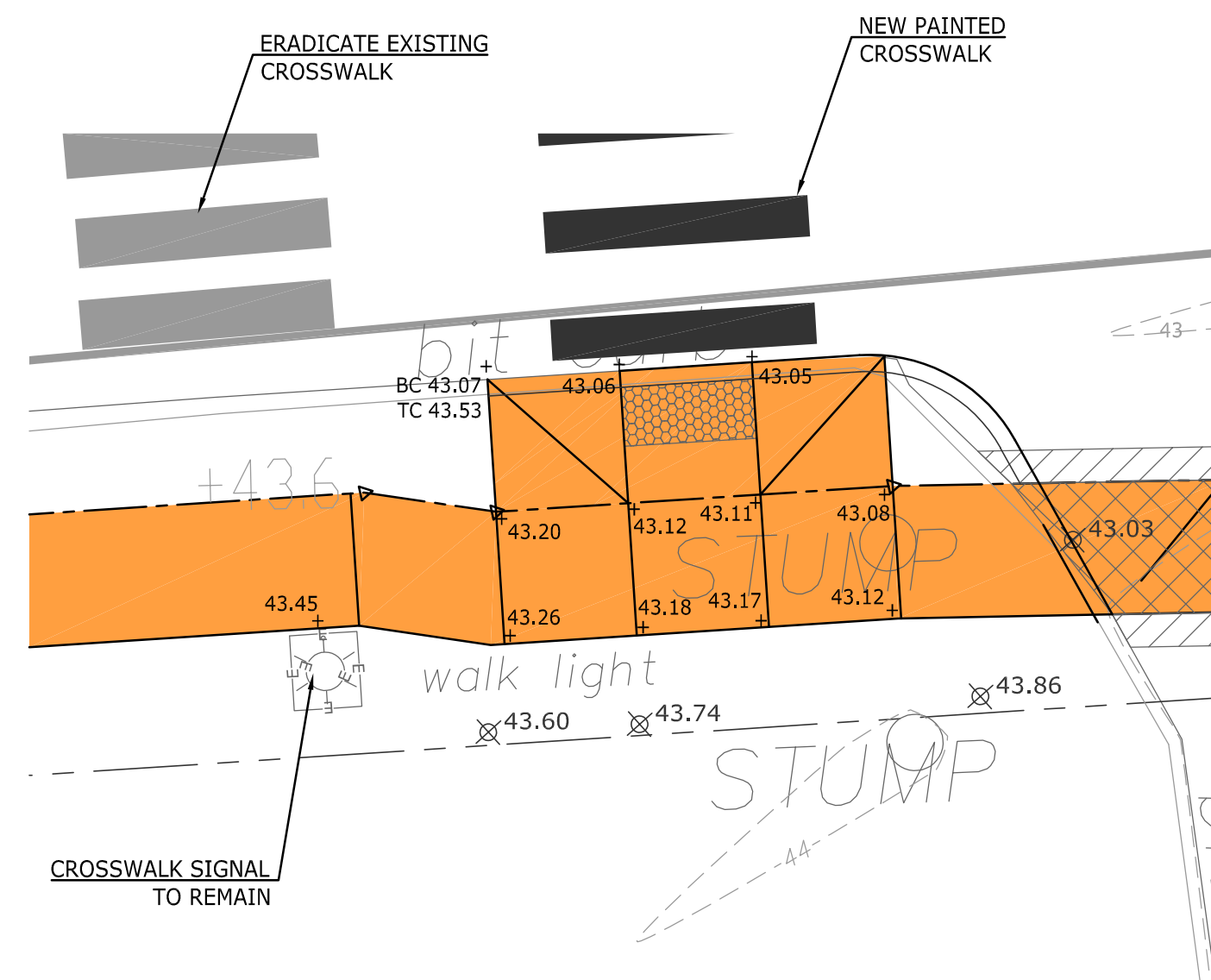
N.T.S.

SIDEWALK PLAN NOTES:

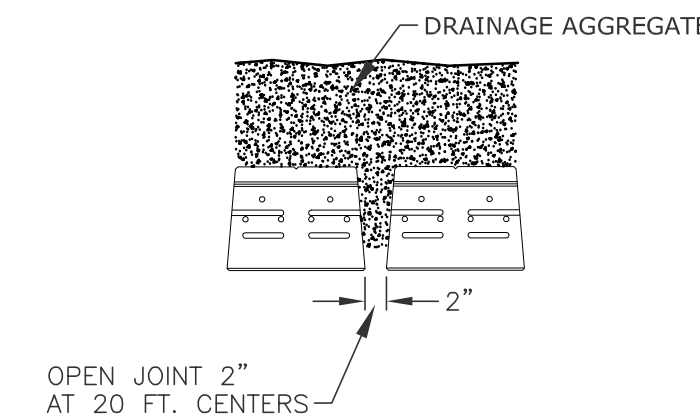
- 4,000 psi (CLASS F) CONCRETE (28 DAY STRENGTH).
- FORMS ARE TO BE SET TRUE TO LINE AND GRADE ON WELL COMPACTED BASE.
- PROPER FINISHING PROCEDURE WILL BE FOLLOWED INCLUDING JOINTING, EDGING, AND BROOMING. A FINE BRISTLE BROOM SHOULD BE USED. ALL EDGING TOOL IMPRINTS SHOULD BE STEEL TROWELED PRIOR TO BROOMING.
- CURING COMPOUND MAY BE REQUIRED.
- PRECAUTIONS ARE TO BE TAKEN TO PROTECT SURFACE FROM DAMAGE.
- WALKS SHALL BE BACKFILLED AS SOON AS FORMS ARE REMOVED.
- ALL CONCRETE SIDEWALK SLABS SHALL BE RECTANGULAR IN SHAPE. NO FIGURE L SLABS ARE TO BE CONSTRUCTED.
- SIDEWALK SLABS SHOULD NOT EXCEED 5' IN WIDTH. IF SIDEWALK SLABS GREATER THAN 5' IN WIDTH ARE TO BE CONSTRUCTED, A LONGITUDINAL EXPANSION JOINT SHALL BE CONSTRUCTED TO FORM ACCEPTABLE SLABS.
- INSERT METAL DOWELS AT ALL EXPANSION JOINTS AS SHOWN ON TYPICAL SIDEWALK DETAIL.



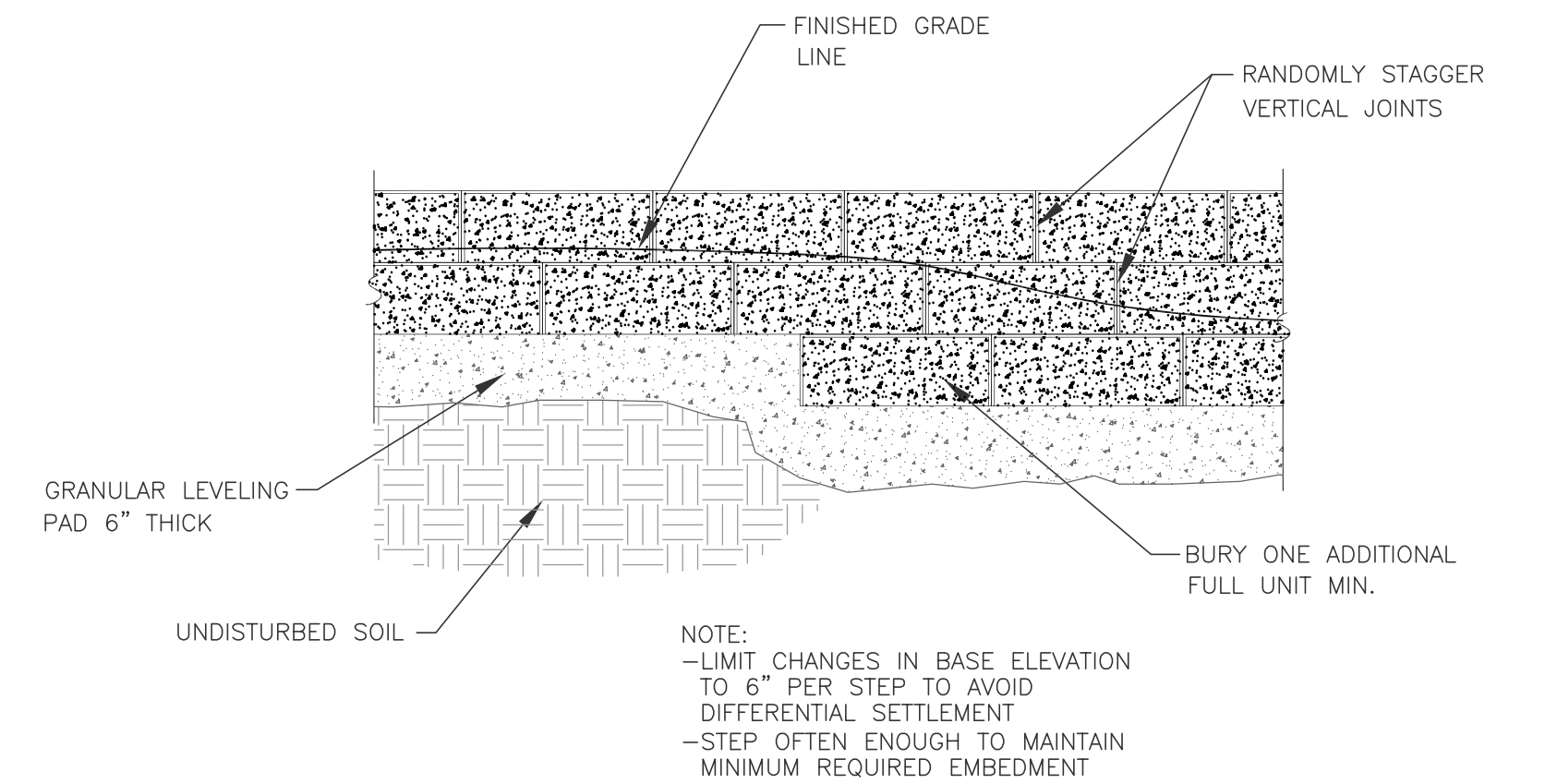
**SIDEWALK TREATMENT (STA. 1+25)
NORTON ROAD**
NOT TO SCALE



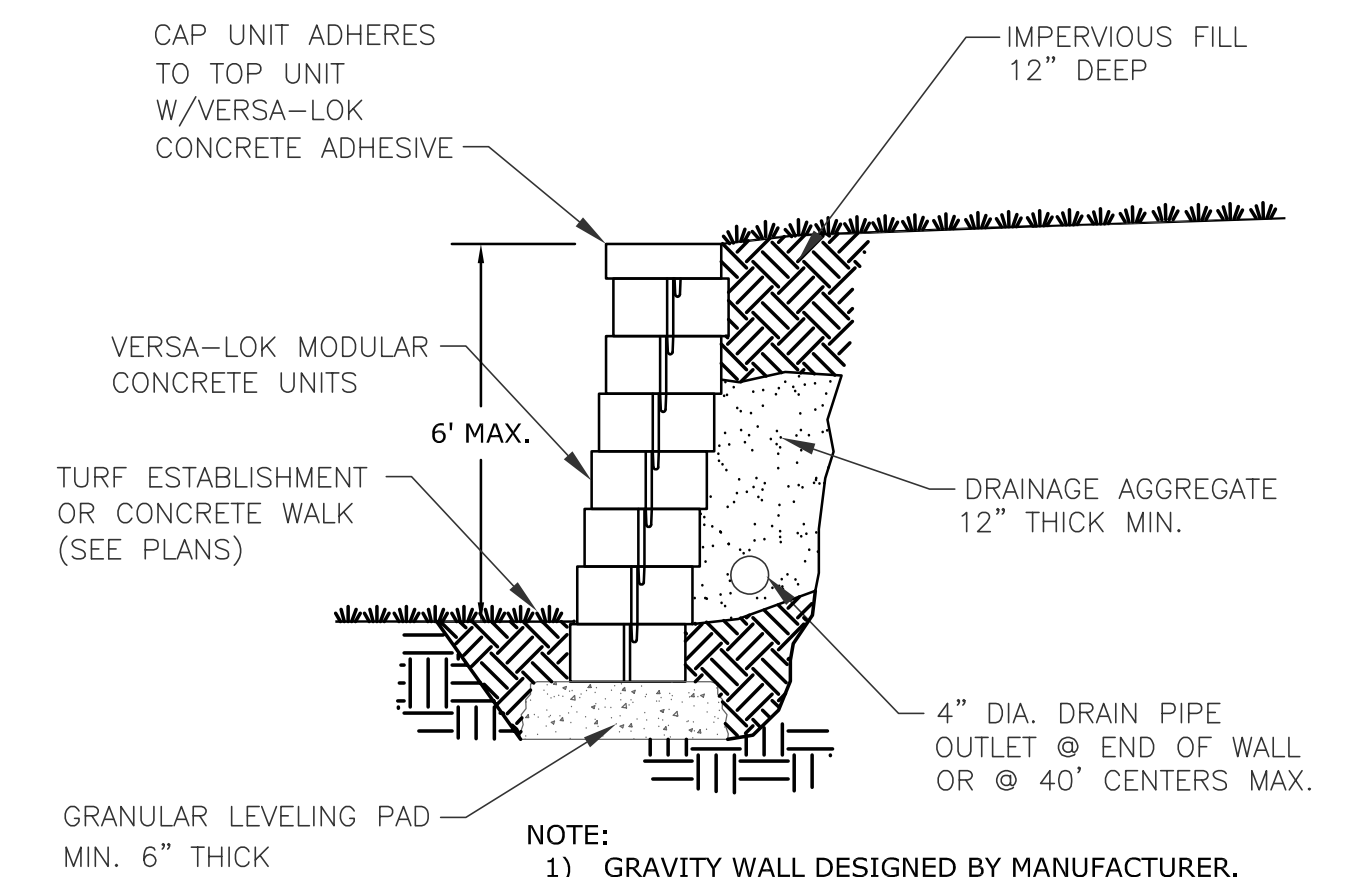
**SIDEWALK RAMP (STA. 55+73)
FARMINGTON AVENUE**
NOT TO SCALE



DRAIN DETAIL
WALLS UNDER 4' (IF REQUIRED)
N.T.S.



STEPPING BASE DETAIL
N.T.S.



TYPICAL RETAINING WALL
MODULAR CONCRETE UNIT
N.T.S.

NO.	DATE	DESCRIPTION
REVISIONS		

SUPV.	S.R.M.
DESIGN	R.E.B.
DRAWN	R.E.B.
CHECKED	S.R.M.
DATE	03/08/21

FINAL DESIGN

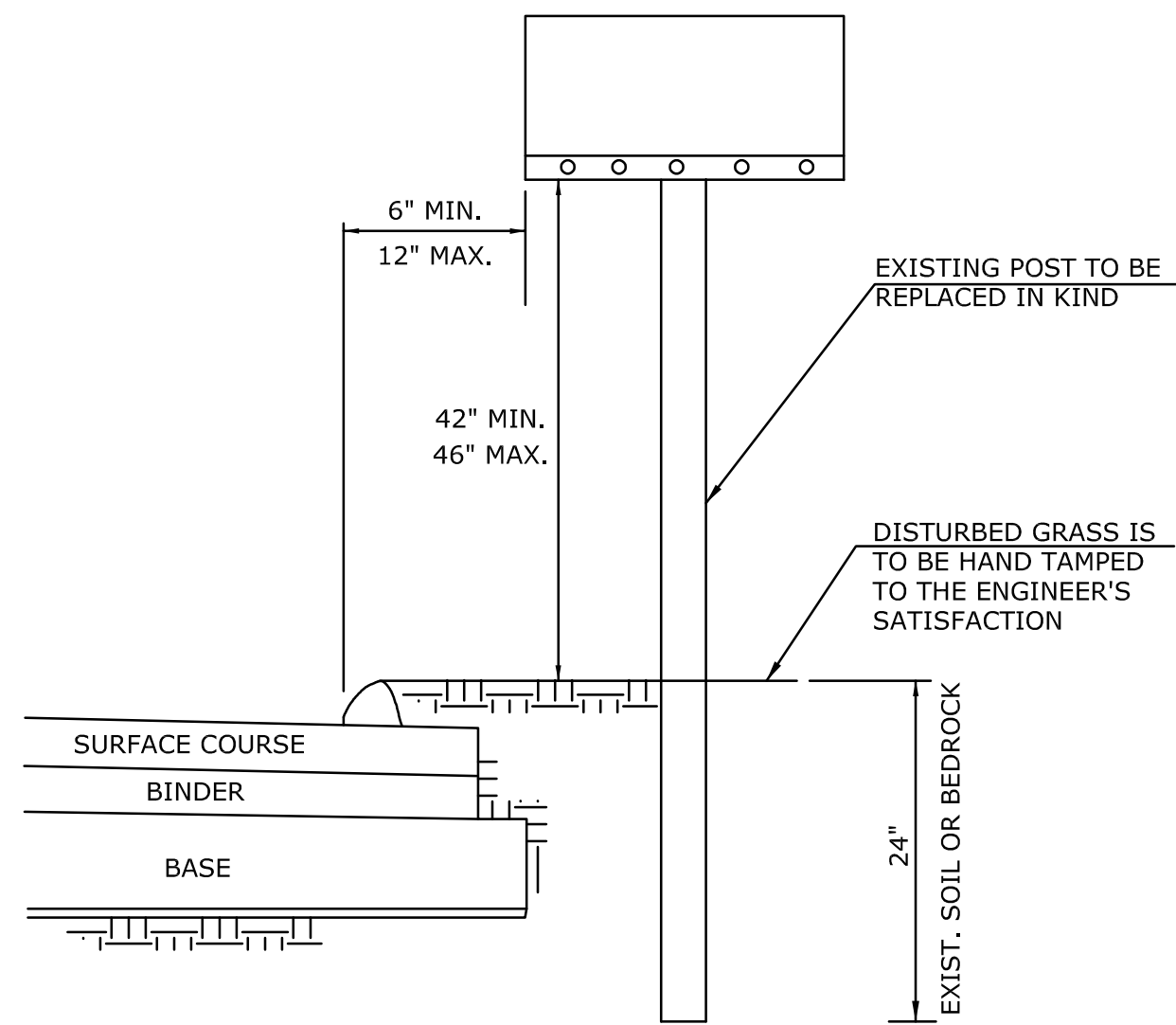
SCALE
N.T.S.

WMC
CONSULTING ENGINEERS

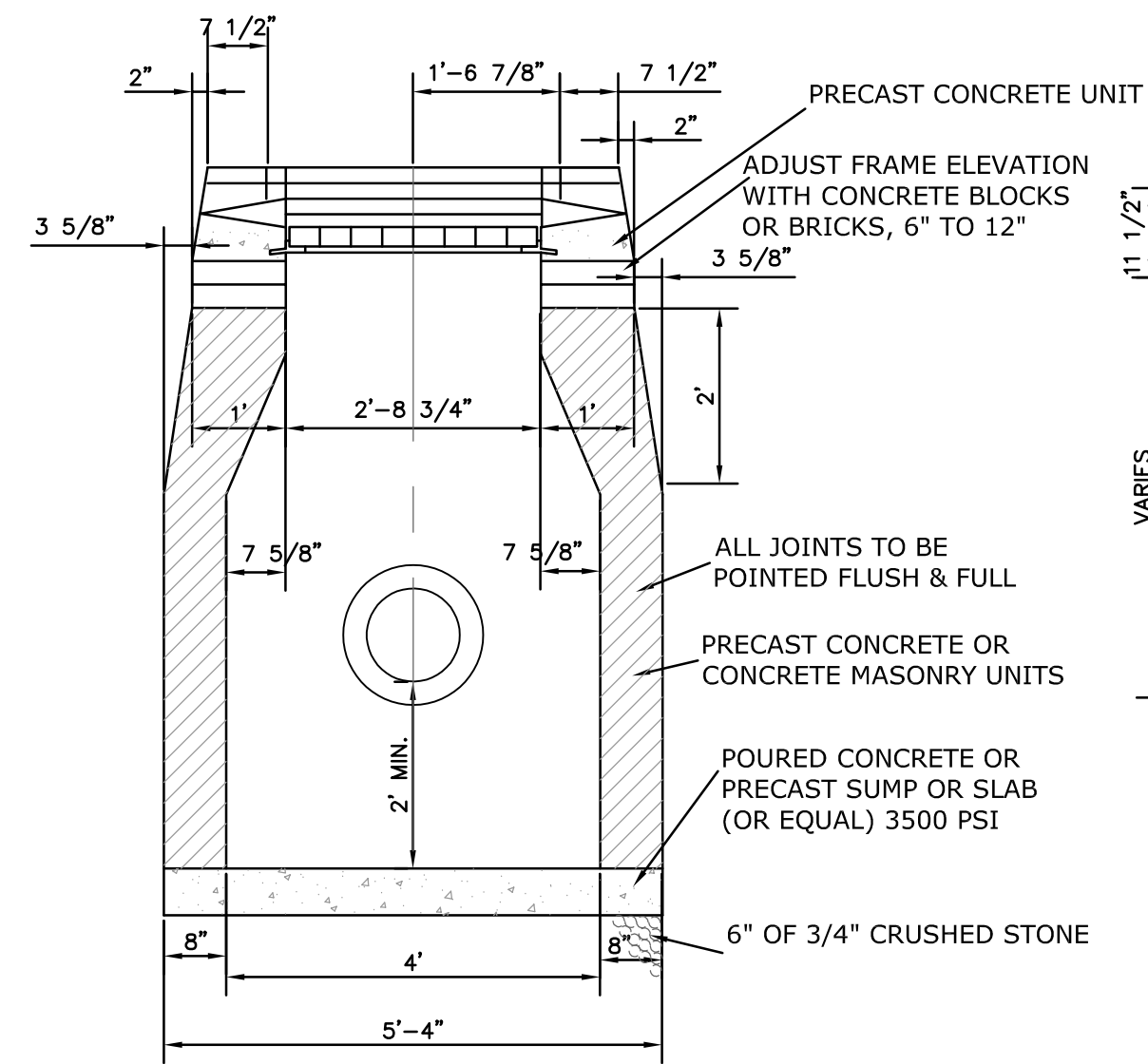
WENGELL, McDONNELL & COSTELLO
87 HOLMES ROAD
NEWINGTON, CT 06111
(860) 667-9624

PREPARED FOR
TOWN OF BERLIN
240 KENSINGTON ROAD
BERLIN, CT 06037

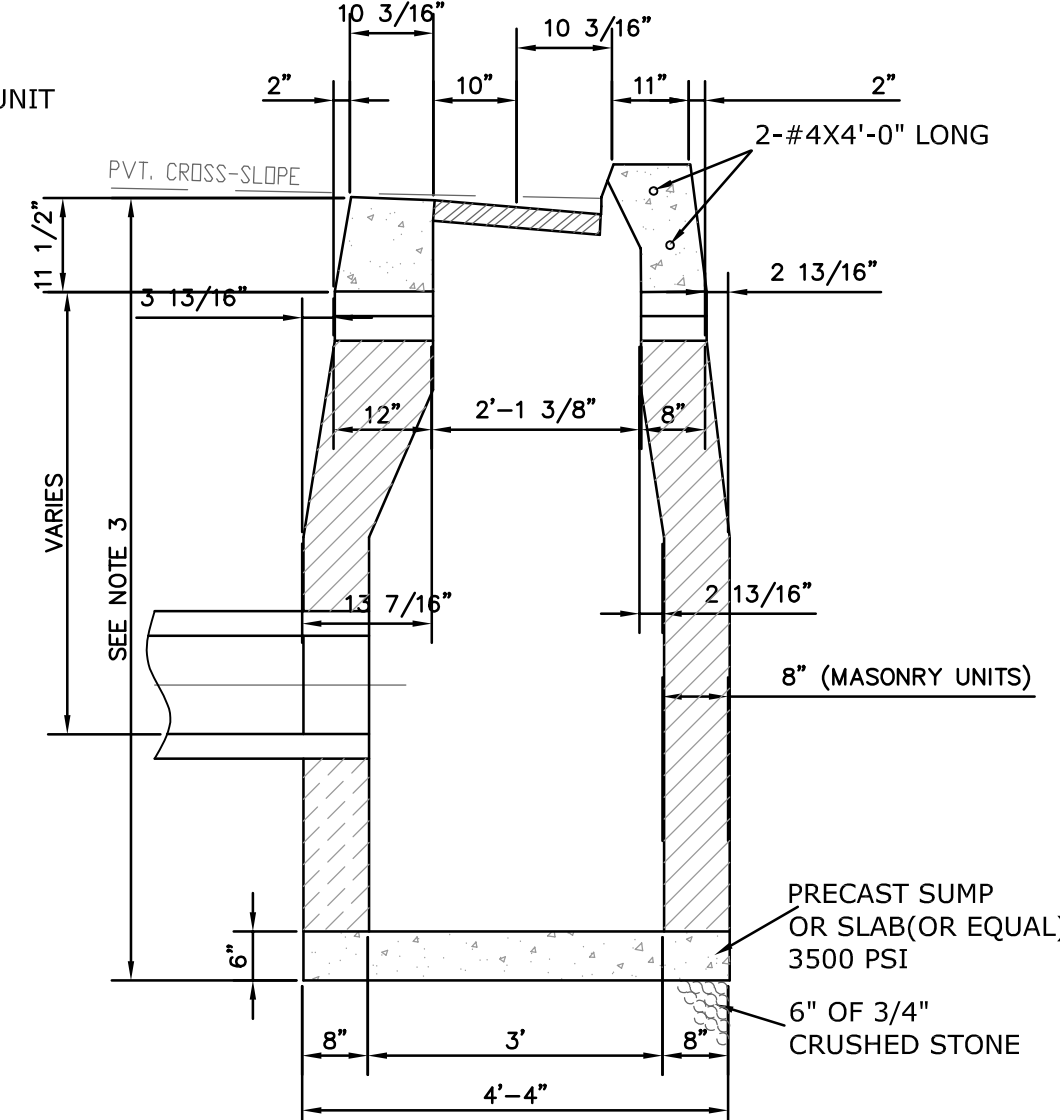
CONSTRUCTION DETAILS 2 OF 3 BERLIN SIDEWALK CONNECTIVITY BERLIN, CONNECTICUT					SHEET	37
D	BERLIN SIDEWALKS	19031.1_PD	19031.1		REV.	OF
SIZE	PROJECT	FILE NAME	NUMBER	REV.	OF	39



MAILBOX AND PAPER TUBE SETTING LOCATION
N.T.S.



FRONT ELEVATION

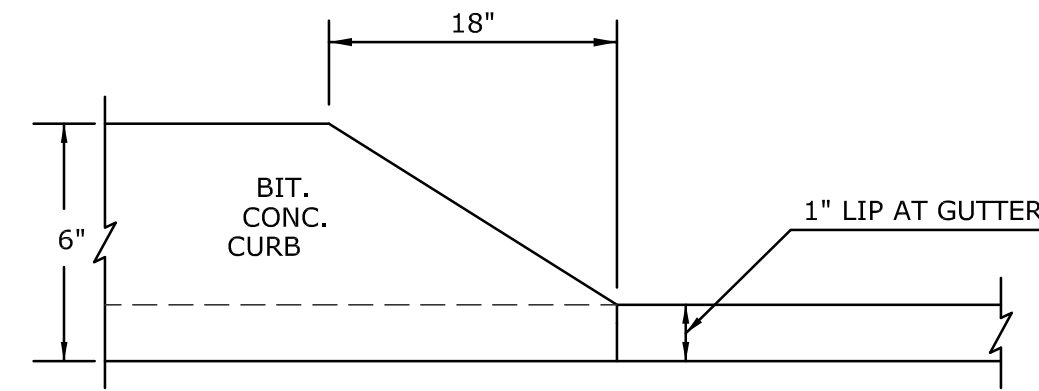


SIDE ELEVATION

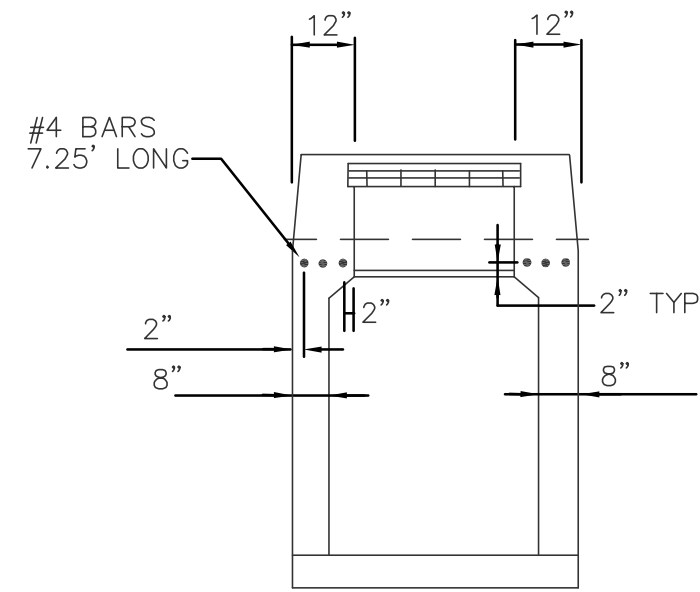
CATCH BASIN NOTES :

1. MINIMUM COVER OVER TOP OF PIPE SHALL BE 2'-0".
2. WALL THICKNESS SHALL BE SUFFICIENT TO MEET HS-20 LOADING.
3. WALL THICKNESS FOR STRUCTURES OVER 10' HIGH IS 12" FOR CONCRETE BLOCK UNITS. INSIDE DIMENSIONS REMAIN THE SAME.
4. ALL PIPES SHALL BE CUT FLUSH WITH INSIDE WALLS.
5. ALL BRICKS SHALL BE CONCRETE.
6. ALL PIPE PENETRATION SHALL BE PARGED SMOOTH TO PROVIDE A WATERTIGHT SEAL BOTH INSIDE AND OUTSIDE THE BASIN.
7. INSIDE WALLS OF STRUCTURE TO BE SMOOTH. NO SHELVES ALLOWED.
8. FRAME AND GRATE SHALL BE GALVANIZED.

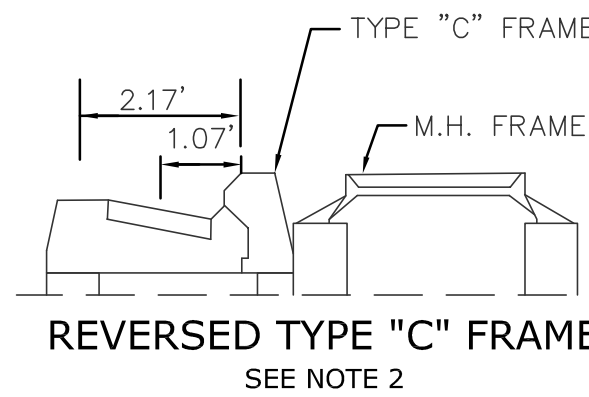
TYPE "C" CATCH BASIN
NOT TO SCALE



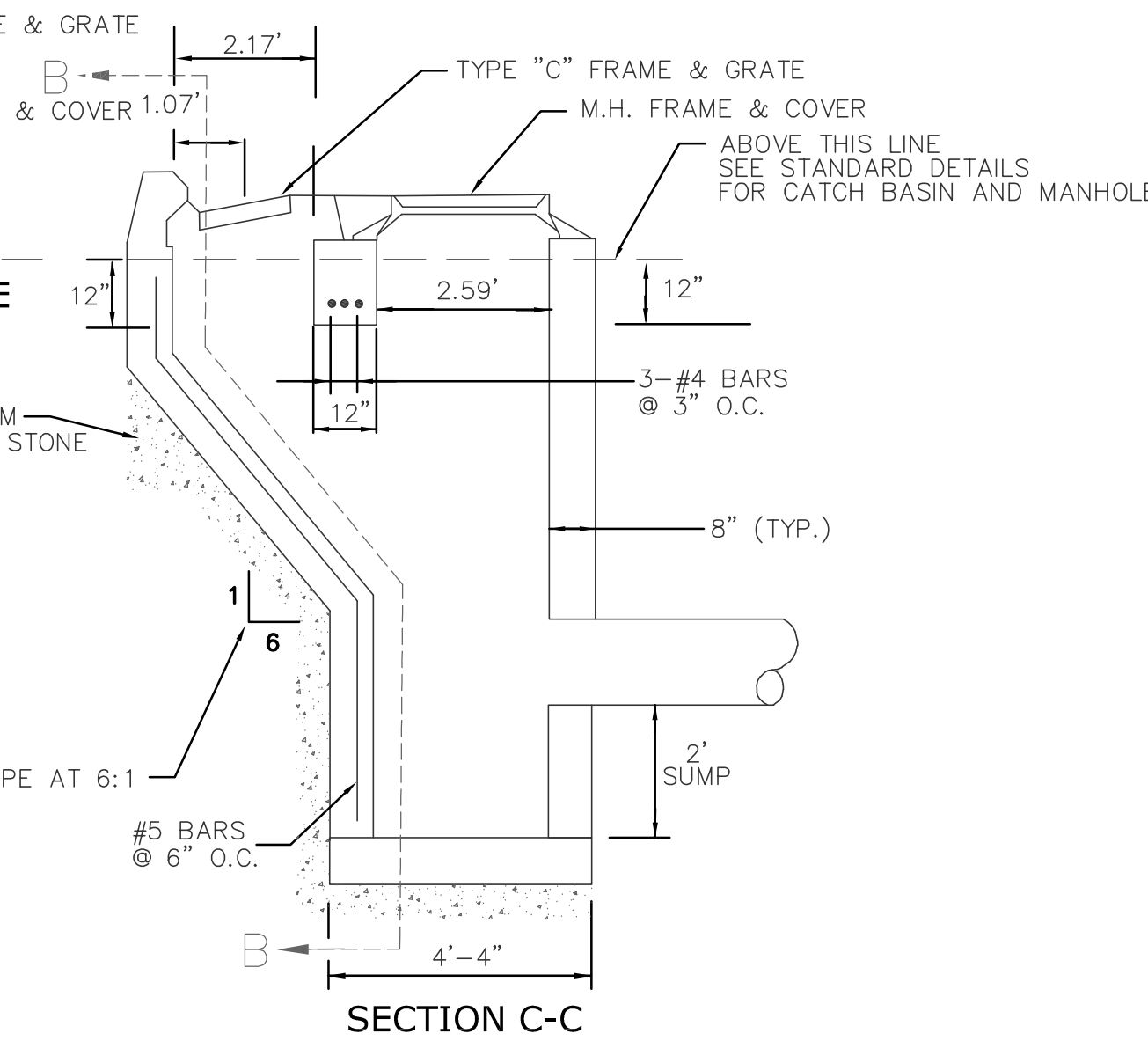
BITUMINOUS CONCRETE LIP CURBING DRIVEWAY DETAIL (PROFILE ALONG GUTTER)
N.T.S.



SECTION B-B

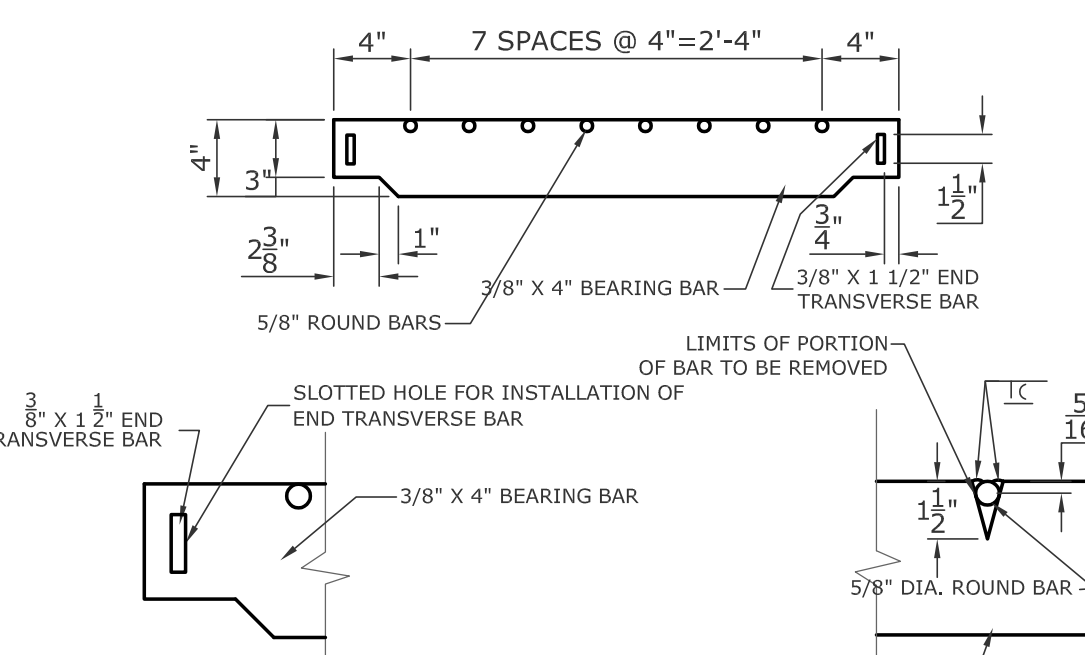
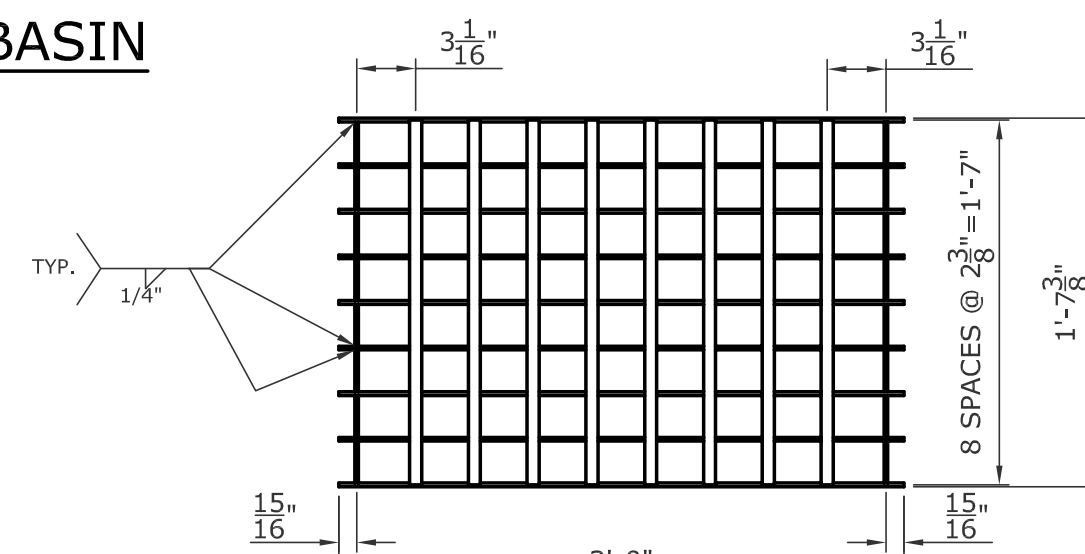


REVERSED TYPE "C" FRAME
SEE NOTE 2



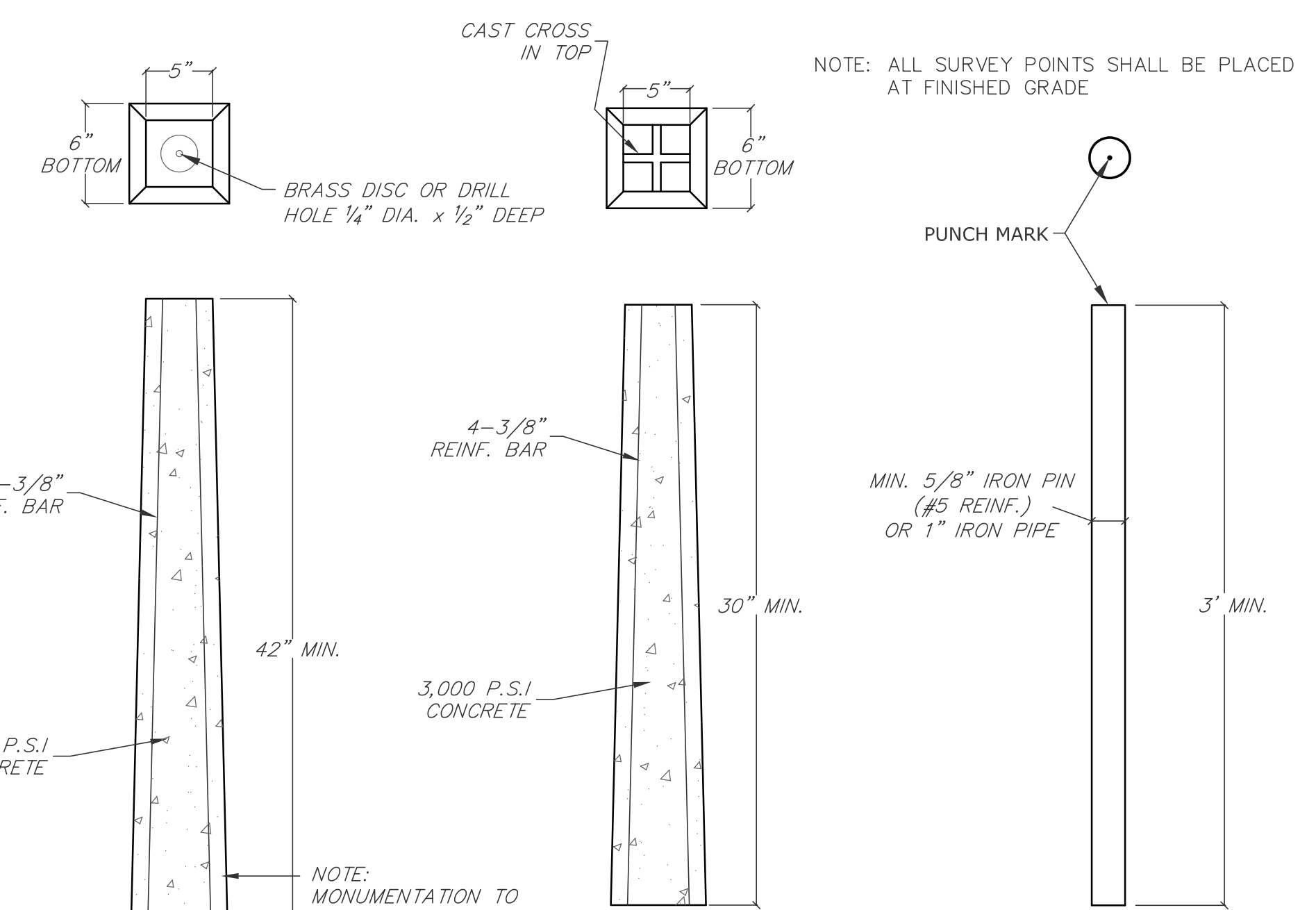
SPECIAL TYPE "C" CATCH BASIN
NOT TO SCALE

NOTE:
1. TYPE "C" CATCH BASIN FRAME CAN BE REVERSED TO SUIT FIELD CONDITIONS (SEE DETAIL ABOVE).

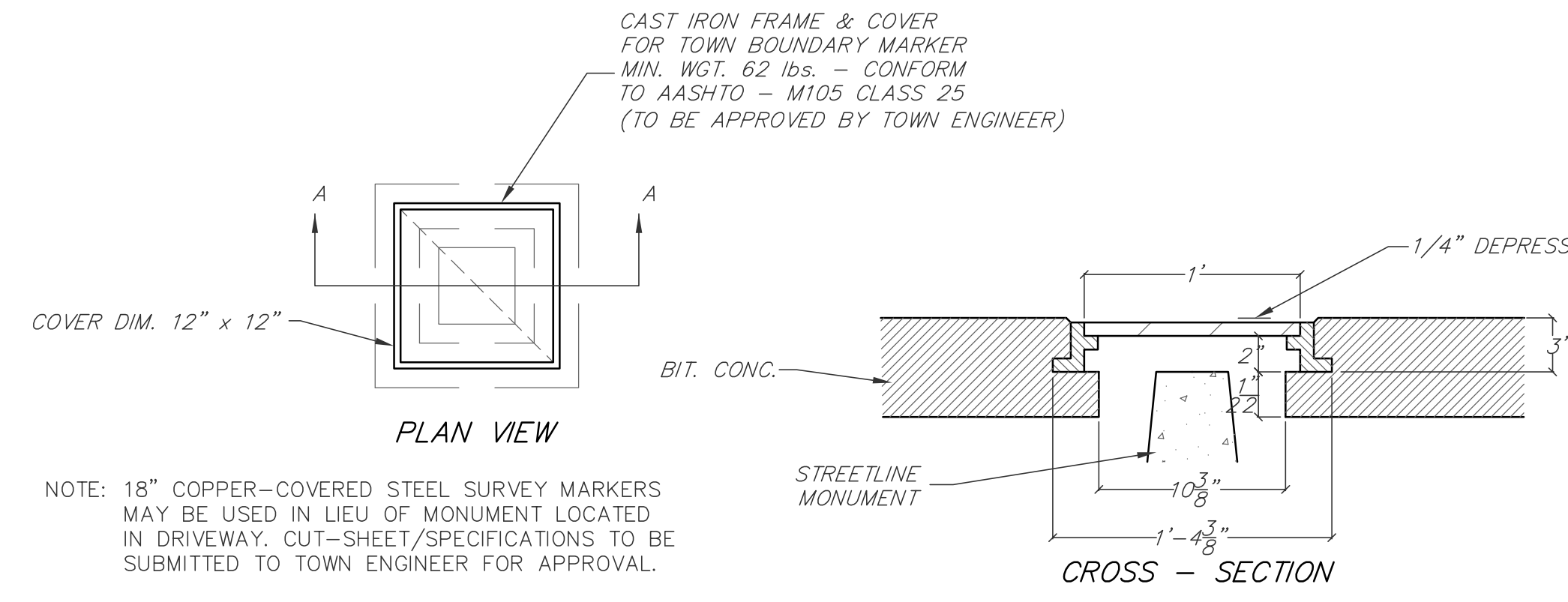


TYPE "A" GRATE DETAIL
NOT TO SCALE

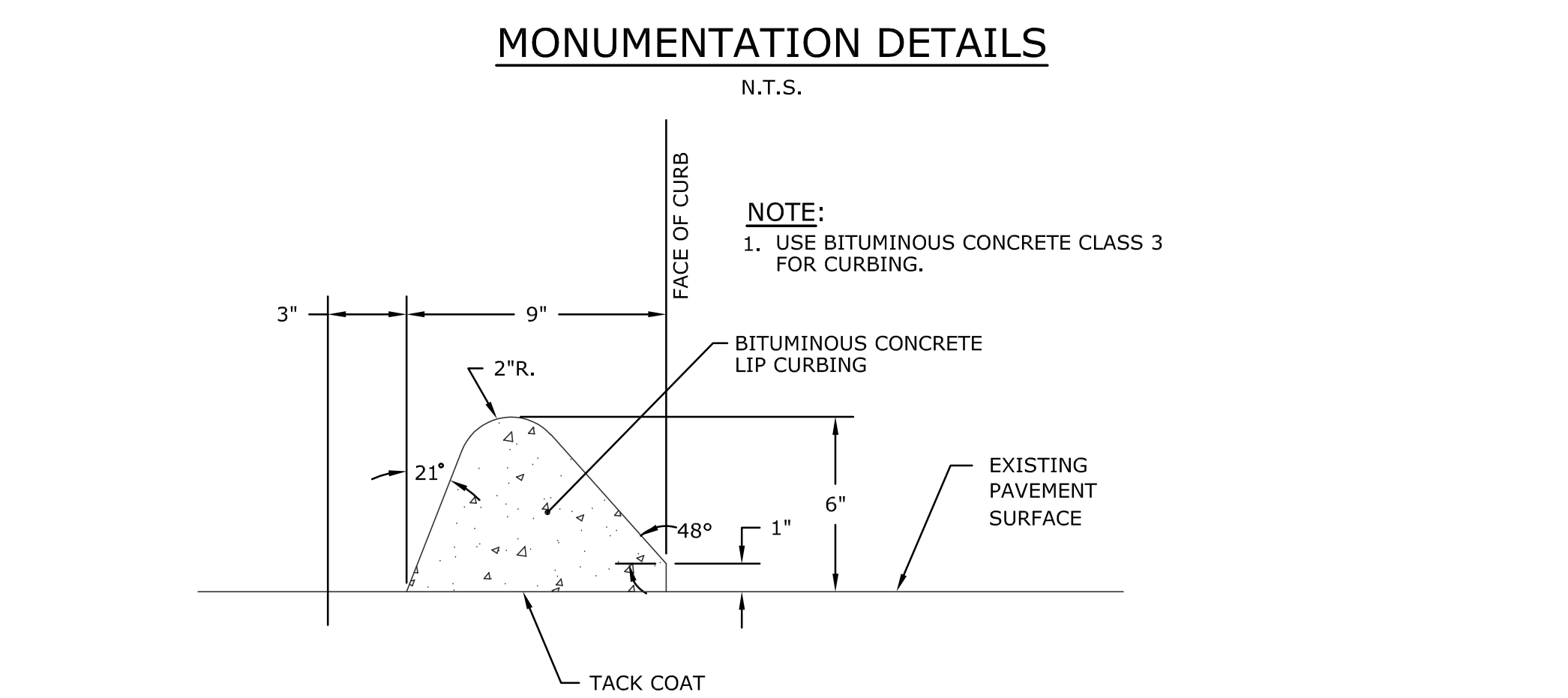
- NOTES:
1. FRAMES AND GRATES SHALL BE STEEL.
 2. STEEL FRAMES AND GRATES SHALL BE GALVANIZED IN ACCORDANCE WITH M.06.03.
 3. ALL METAL UNITS SUBJECT TO MANUFACTURING TOLERANCES.
 4. ONLY LOW HYDROGEN ELECTRODES SHALL BE USED.
 5. DIMENSIONAL TOLERANCES MAY BE +/- 1/16".
 6. WELDING WILL BE PERFORMED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR ROADS, BRIDGES AND INCIDENTAL CONSTRUCTION.
 7. ALL BARS SHALL BE WELDED AT ALL INTERSECTIONS



MONUMENTATION DETAILS
N.T.S.



STREETLINE MONUMENT IN PAVEMENT COVER DETAIL
N.T.S.



6" BITUMINOUS CONCRETE LIP CURBING
N.T.S.

SUPV.	S.R.M.
DESIGN	R.E.B.
DRAWN	R.E.B.
CHECKED	S.R.M.
NO.	DATE
DESCRIPTION	
DATE	03/08/21

FINAL DESIGN

SCALE
N.T.S.

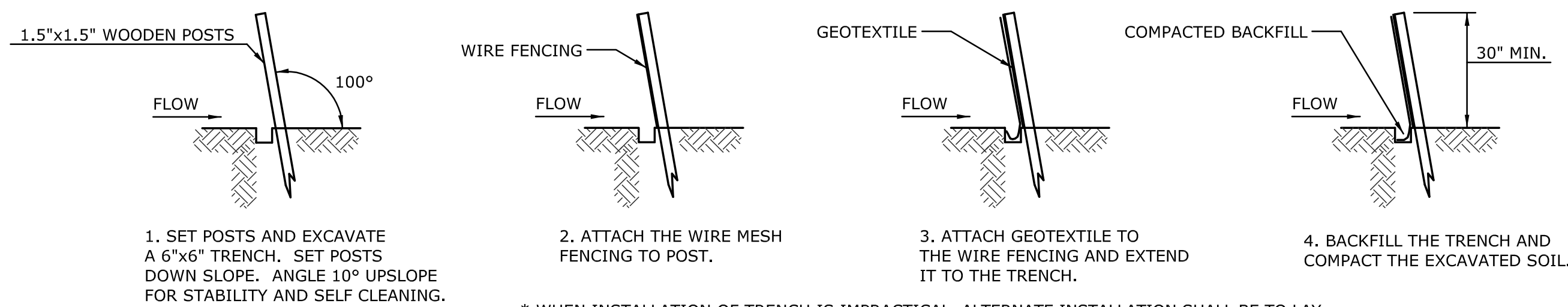


WENDELL, McDONNELL & COSTELLO
87 HOLMES ROAD
NEWINGTON, CT 06111
(860) 667-9624

PREPARED FOR
TOWN OF BERLIN
240 KENSINGTON ROAD
BERLIN, CT 06037

CONSTRUCTION DETAILS 3 OF 3
BERLIN SIDEWALK CONNECTIVITY
BERLIN, CONNECTICUT

D - BERLIN SIDEWALKS - 19031.1_PD - 19031.1	FILE NAME	NUMBER	REV.	OF	SHEET
					39



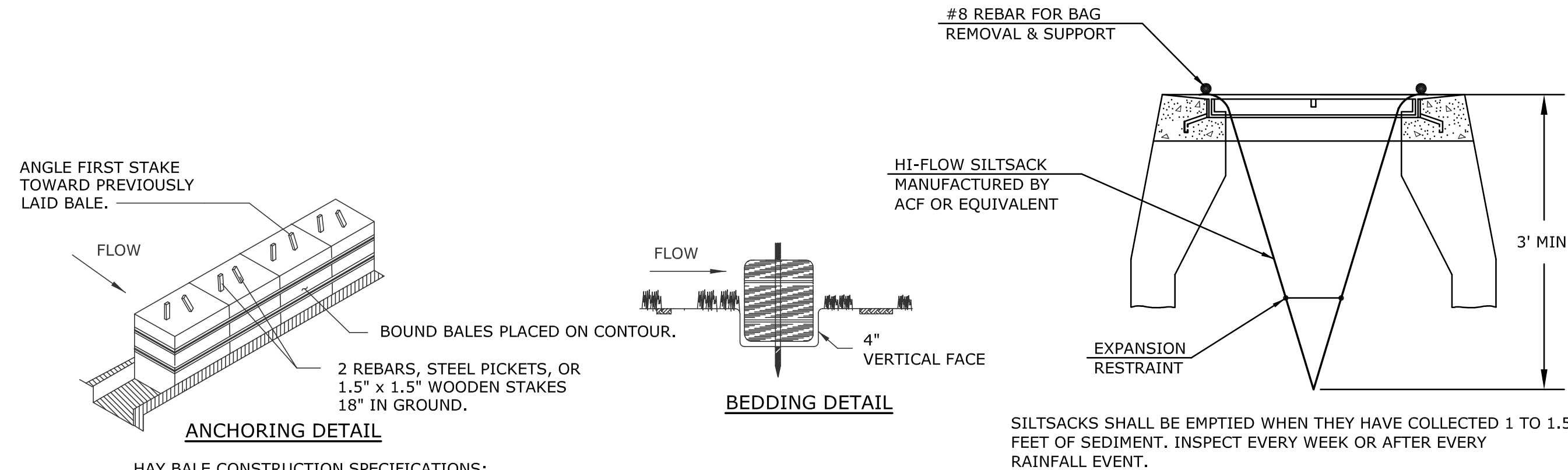
* WHEN INSTALLATION OF TRENCH IS IMPRACTICAL, ALTERNATE INSTALLATION SHALL BE TO LAY 6" FLAP HORIZONTALLY ON GROUND AND BURY FLAP BY RAMP SOIL OR STONE UP TO CONTROL FENCE. DEPTH OF RAMP SHALL BE AS REQUIRED TO HOLD DOWN FLAP WITHOUT LEAKAGE UNDER CONTROL FENCE WHILE MAINTAINING MINIMUM HEIGHT.

GEOTEXTILE FENCE SYSTEM

REFER TO PAGE 5-11-35 "CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENTATION CONTROL" AND PAGE 55 "ON-SITE MITIGATION FOR CONSTRUCTION ACTIVITIES".

SEDIMENTATION CONTROL SYSTEM INSTALLATION

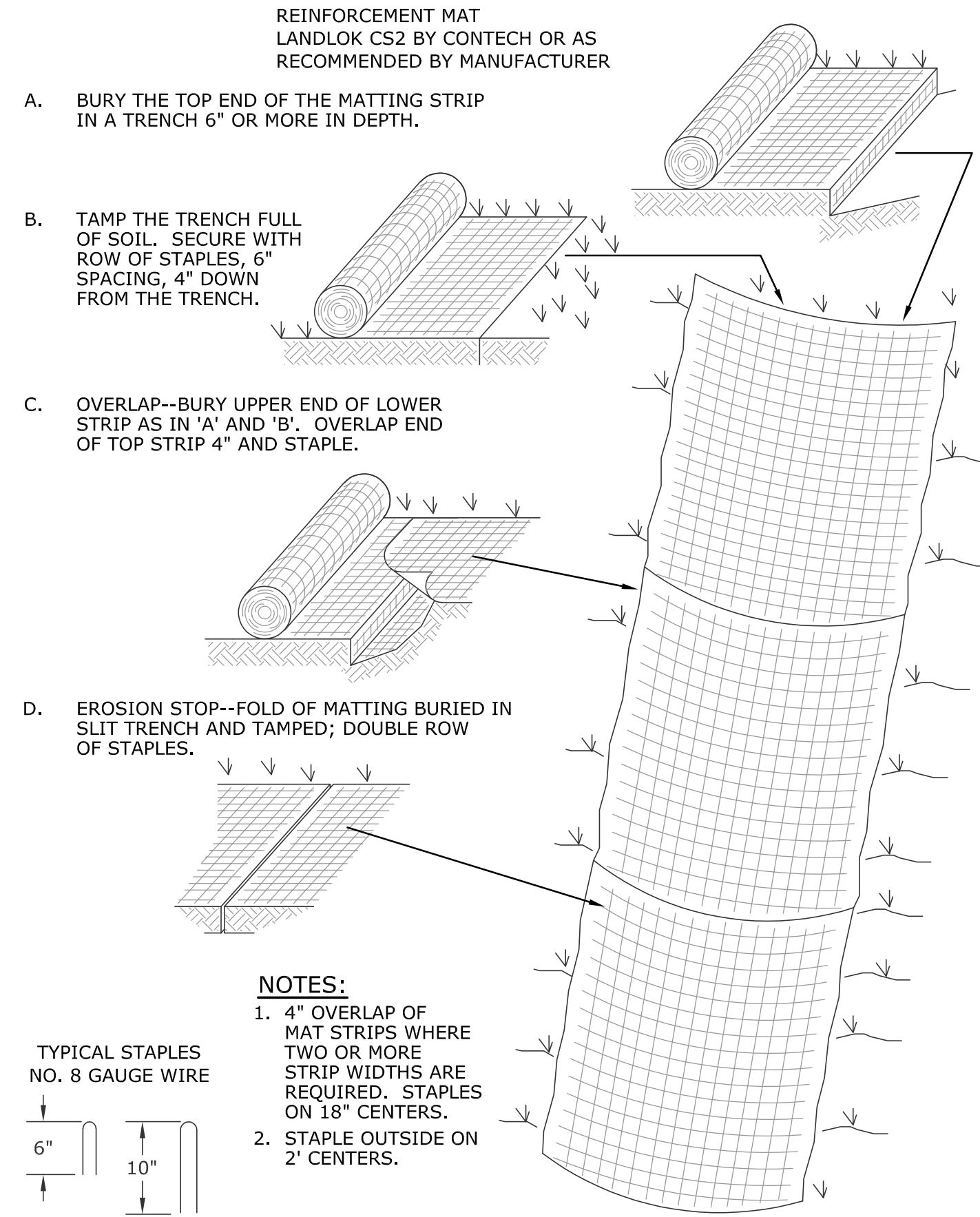
N.T.S.



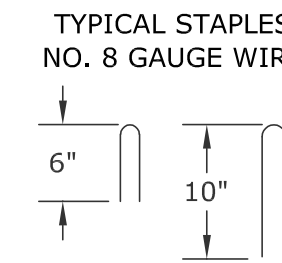
SILT SACKS SHALL BE EMPTIED WHEN THEY HAVE COLLECTED 1 TO 1.5 FEET OF SEDIMENT. INSPECT EVERY WEEK OR AFTER EVERY RAINFALL EVENT.

SILTATION SAC IN CATCH BASIN

N.T.S.

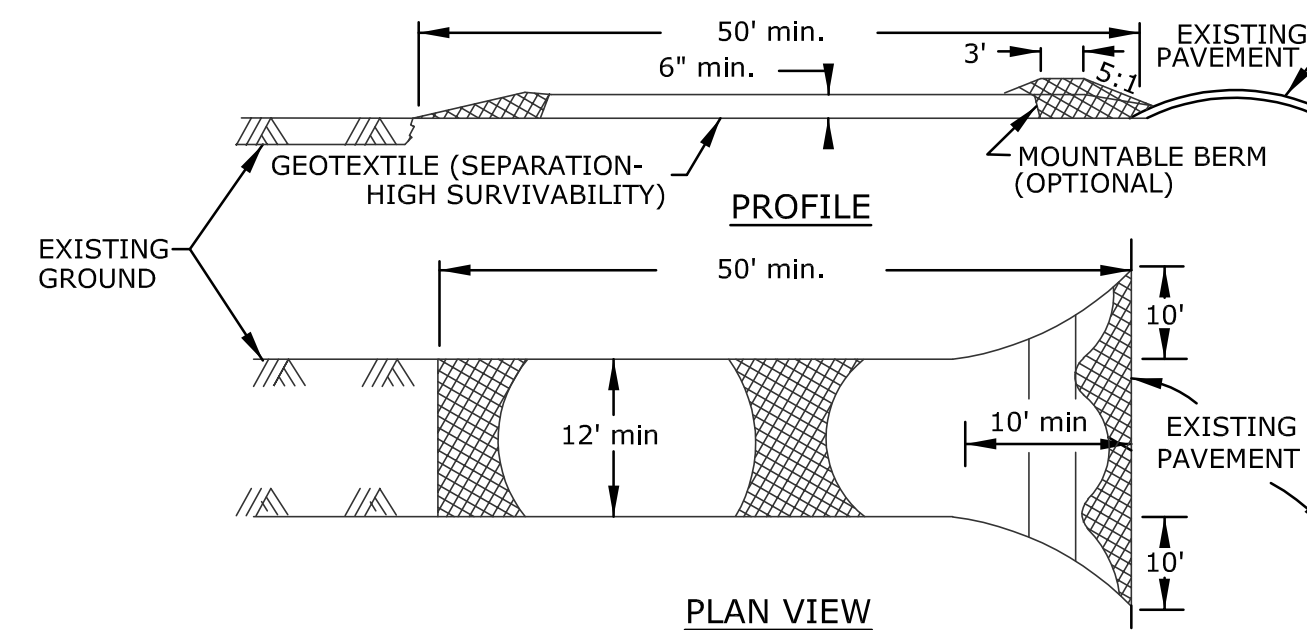


NOTES:
1. 4" OVERLAP OF MAT STRIPS WHERE TWO OR MORE STRIP WIDTHS ARE REQUIRED. STAPLES ON 18" CENTERS.
2. STAPLE OUTSIDE ON 2' CENTERS.



STEEP SLOPE TREATMENT DETAIL

N.T.S.



REFER TO PAGE 5-12-2 "CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENTATION CONTROL" AND PAGE 50 "ON-SITE MITIGATION FOR CONSTRUCTION ACTIVITIES".

- CONSTRUCTION SPECIFICATION:
- STONE SIZE - USE 2" STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
 - LENGTH - AS REQUIRED, BUT NOT LESS THAN 50 FT (EXCEPT ON A SINGLE RESIDENCE LOT WHERE A 30' MINIMUM LENGTH WOULD APPLY).
 - THICKNESS - NOT LESS THAN 6".
 - WIDTH - 12' MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS.
 - GEOTEXTILE - WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE. GEOTEXTILE WILL NOT BE REQUIRED ON A SINGLE FAMILY RESIDENCE LOT.
 - SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
 - MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAYS. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHT-OF-WAYS MUST BE REMOVED IMMEDIATELY.
 - WASHING - WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SETTLING AREA SIZED TO HOLD THE VOLUME OF WATER USED DURING ANY 2-HOUR PERIOD.
 - PERIODIC INSPECTION AND NECESSARY MAINTENANCE SHALL BE PROVIDED AFTER EACH RAINFALL.

STABILIZED CONSTRUCTION ENTRANCE

N.T.S.

GENERAL

THIS PLAN PROPOSES EROSION CONTROL MEASURES TO HELP CONTROL ACCELERATED EROSION AND SEDIMENTATION AND REDUCE THE DANGER FROM STORM WATER RUNOFF AT THE SITE. THE RUNOFF SHALL BE CONTROLLED BY THE INTERCEPTION, DIVERSION, AND SAFE DISPOSAL OF PRECIPITATION. RUNOFF SHALL ALSO BE CONTROLLED BY STAGING CONSTRUCTION ACTIVITY AND PRESERVING NATURAL VEGETATION WHENEVER POSSIBLE. EXISTING VEGETATION SHALL BE PROTECTED AND ONLY THAT CLEARING AND GRUBBING ABSOLUTELY NECESSARY FOR THE PROPOSED CONSTRUCTION SHALL BE PERFORMED. ALL DISTURBED AREAS SHALL BE RESTORED TO THEIR ORIGINAL CONDITION AND CONTOUR, UNLESS OTHERWISE INDICATED ON THE PLANS. THE CONTRACTOR SHALL TAKE SPECIAL CARE WITH HIS CONSTRUCTION METHODS AND SHALL COMPLY WITH THE FOLLOWING GUIDELINES. REFERENCE IS MADE TO THE "CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENTATION CONTROL" (2002), AS AMENDED. THE GUIDELINES ARE OBTAINABLE FROM THE CONNECTICUT DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION, 79 ELM STREET, HARTFORD, CONNECTICUT 06106, AND SHOULD BE USED AS A REFERENCE IN CONSTRUCTING THE EROSION AND SEDIMENTATION CONTROLS INDICATED ON THESE PLANS.

EROSION CONTROL

ALL AREAS SHALL BE PROTECTED FROM EROSION DURING AND AFTER CONSTRUCTION, PARTICULARLY THE STORAGE OF EXCAVATED OR STOCKPILED MATERIAL. THE CONTRACTOR SHALL CAREFULLY STRIP ALL TOPSOIL, LOAM, OR ORGANIC MATTER PRIOR TO TRENCHING OR OTHER OPERATIONS AND SHALL STORE THEM SEPARATELY FROM ALL OTHER MATERIALS DURING EXCAVATION. EACH STOCKPILE MUST BE ADEQUATELY RINGED WITH SEDIMENTATION CONTROL SYSTEM (I.E. HAY BALES AND/OR GEOTEXTILE FENCE). DEBRIS AND OTHER WASTE RESULTING FROM EQUIPMENT MAINTENANCE AND CONSTRUCTION WILL NOT BE DISCARDED ON SITE. STABILIZING OF SLOPES SHALL BE DONE IMMEDIATELY AFTER CONSTRUCTION OF SLOPES. SLOPES STEEPER THAN 3:1 SHALL BE PROTECTED WITH EROSION CONTROL MATTING. THIS MATTING IS MANUFACTURED COMBINATIONS OF MULCH AND NETTING AND SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. ALL OTHER AREAS SHALL BE MULCHED WITH HAY OR STRAW AT A RATE OF 2 TO 3 TONS PER ACRE. STRAW OR HAY MULCH MUST BE ANCHORED IMMEDIATELY AFTER SPREADING TO PREVENT WINDBLOWING. THE METHODS RECOMMENDED BY THE "CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENTATION CONTROL" SHALL BE USED FOR THE ANCHORING OF MULCH OR NETTING.

EROSION AND SEDIMENTATION CONTROL PLAN

AN EROSION AND SEDIMENTATION CONTROL PLAN MUST BE SUBMITTED IN WRITING TO THE ENGINEER AND APPROVED BY THE ENGINEER PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION ACTIVITIES. SEDIMENTATION CONTROL SYSTEM - THE SEDIMENTATION CONTROL SYSTEM SHALL CONSIST OF A GEOTEXTILE BARRIER FENCE. THE SEDIMENTATION CONTROL SYSTEM SHALL BE INSTALLED IMMEDIATELY AFTER A CUT SLOPE HAS BEEN GRADED, BEFORE A FILL SLOPE HAS BEEN CREATED AND AS INDICATED ON THE PLANS. THE SYSTEM IS DESIGNED TO INTERCEPT SILT AND SEDIMENT BEFORE IT REACHES THE WETLANDS OR WATERCOURSES. DEPOSITS OF SEDIMENT AND SILT ARE TO BE PERIODICALLY REMOVED FROM THE UPSTREAM SIDE OF THE FENCE. THIS MATERIAL IS TO BE SPREAD AND STABILIZED IN AREAS NOT SUBJECT TO EROSION, OR IN AREAS WHICH ARE NOT TO BE PAVED OR BUILT ON. THE SEDIMENTATION CONTROL SYSTEM IS TO BE REPLACED AS NECESSARY TO PROVIDE PROPER FILTERING ACTION. THE SYSTEM IS TO REMAIN IN PLACE AND BE MAINTAINED TO INSURE EFFICIENT SILTATION CONTROL UNTIL ALL AREAS ABOVE THE FENCE ARE STABILIZED AND VEGETATION HAS BEEN ESTABLISHED.

STACKED HAY BALES - HAY OR STRAW BALES USED FOR EROSION CONTROL SHALL BE STACKED AT CATCH BASINS WHERE SEDIMENT MAY ENTER THE CATCH BASIN OR AS DIRECTED BY THE ENGINEER. DEPOSITS OF SEDIMENT AND SILT ARE TO BE PERIODICALLY REMOVED FROM THE UPSTREAM SIDE OF THE EROSION CHECKS. THIS MATERIAL IS TO BE SPREAD AND STABILIZED IN AREAS NOT SUBJECT TO EROSION, OR IN AREAS WHICH ARE NOT TO BE PAVED OR BUILT ON. HAY OR STRAW BALES ARE TO BE REPLACED AS NECESSARY TO PROVIDE PROPER FILTERING ACTION. THE SYSTEM IS TO REMAIN IN PLACE AND BE MAINTAINED TO INSURE EFFICIENT SILTATION CONTROL UNTIL ALL AREAS ABOVE THE EROSION CHECKS ARE STABILIZED AND VEGETATION HAS BEEN ESTABLISHED.

IN ALL AREAS, REMOVAL OF TREES, BUSHES, AND OTHER VEGETATION, AND DISTURBANCE OF THE SOIL, IS TO BE KEPT TO AN ABSOLUTE MINIMUM WHILE ALLOWING PROPER DEVELOPMENT OF THE SITE.

DURING CONSTRUCTION, AS SMALL AN AREA OF SOIL AS POSSIBLE SHOULD BE EXPOSED FOR AS SHORT A TIME AS POSSIBLE. AFTER CONSTRUCTION, GRADE, RESPREAD TOPSOIL, AND STABILIZE SOIL BY SEEDING AND MULCHING AS TO PREVENT EROSION.

EROSION AND SEDIMENTATION CONTROL MAINTENANCE PROCEDURES

ALL EROSION AND SEDIMENTATION CONTROL DEVICES SHALL BE INSPECTED DURING CONSTRUCTION ON A DAILY BASIS AND FOLLOWING ALL STORMS BY THE RESIDENT ENGINEER. THE CONTRACTOR SHALL MAINTAIN AND MAKE REPAIRS AND REMOVE SEDIMENT AS REQUESTED BY THE ENGINEER. THIS WORK SHALL BE PERFORMED WITHIN 24 HOURS OF THE REQUEST AND THERE SHALL BE NO SEPARATE PAYMENT FOR THIS WORK.

THE CONTRACTOR SHALL CLEAN SEDIMENT AND DEBRIS FROM ALL DRAINAGE STRUCTURES, AND PIPES AT THE COMPLETION OF CONSTRUCTION, AND AS REQUESTED BY THE ENGINEER TO KEEP THE SYSTEM FUNCTIONING PROPERLY DURING CONSTRUCTION.

FOLLOWING COMPLETION OF CONSTRUCTION, THE CONTRACTOR SHALL REPAIR ALL ERODED AREAS AND ENSURE A GOOD STAND OF TURF IS ESTABLISHED THROUGHOUT. THE CONTRACTOR SHALL REPAIR ALL ERODED OR DISPLACED RIPRAP, AND CLEAN SEDIMENT COVERED STONES.

ALL APPROPRIATE EROSION AND SEDIMENT CONTROL MEASURES SHOULD BE ESTABLISHED PRIOR TO AND BE MAINTAINED THROUGH ALL CONSTRUCTION PHASES.

WETLAND IMPACTS & DISTURBANCE

EQUIPMENT OPERATING IN WETLANDS: OPERATION OF EQUIPMENT IN WETLAND AREAS IS GENERALLY NOT ALLOWED AND MUST BE APPROVED IN ADVANCE. ANY EQUIPMENT OPERATING IN WETLAND AREAS SHALL BE LOW GROUND PRESSURE (LESS THAN 3 PSI) OR SHALL BE SET ON TEMPORARY FILL OR MATTING. TEMPORARY FILL, TIMBER MATTING OR OTHER MATTING MUST BE APPROVED IN ADVANCE AND WILL NOT BE PAID SEPARATELY, BUT SHALL BE INCLUDED IN THE GENERAL COST OF OTHER RELATED WORK ITEMS.

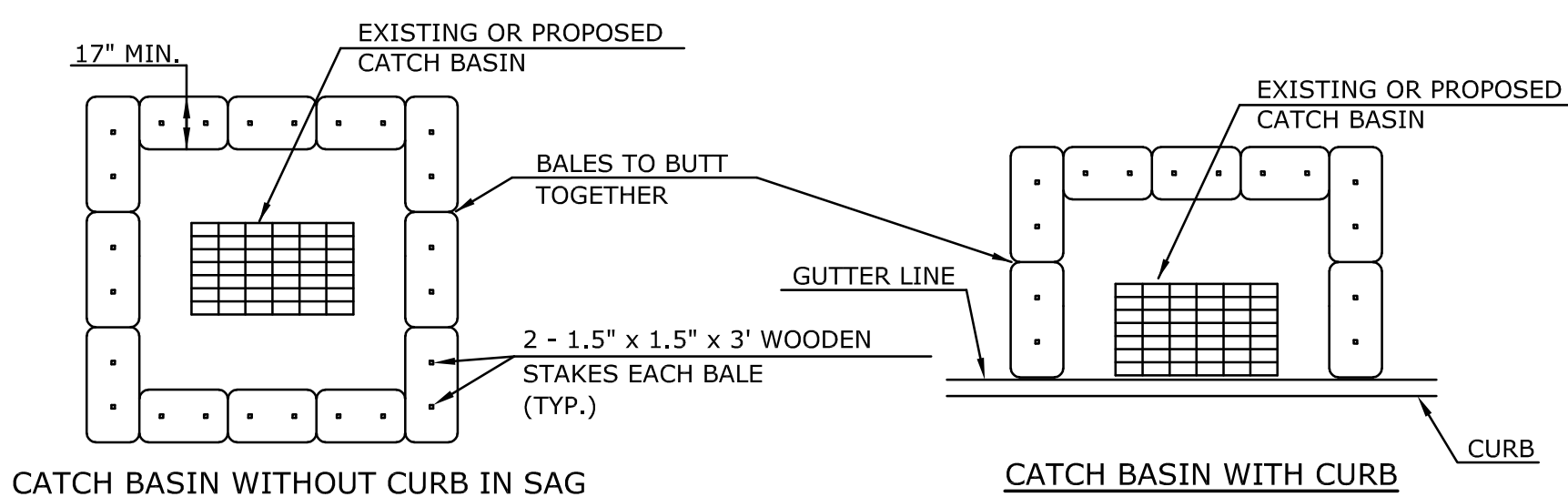
TEMPORARY FILL: PLACEMENT OF TEMPORARY FILL (SOIL, RIP RAP, ETC.) IN WETLAND AREAS THAT IS NOT SPECIFICALLY SHOWN ON THE CONTRACT DRAWINGS IS GENERALLY NOT ALLOWED AND MUST BE APPROVED IN ADVANCE. ANY TEMPORARY FILL APPROVED FOR PLACEMENT, SHALL BE PLACED ON GEOTEXTILE LAID ON THE PRE-CONSTRUCTION WETLAND GRADE. UNCONFINED TEMPORARY FILL THAT IS PLACED IN FLOWING WATER SHALL BE ONLY CLEAN WASHED STONE.

WETLAND DISTURBANCE: ONLY THOSE WETLAND AREAS SPECIFICALLY SHOWN ON THE CONTRACT DRAWINGS OR INCLUDED IN APPROVED PERMITS TO BE DISTURBED, OR ADDITIONAL AREAS SPECIFICALLY APPROVED AS ABSOLUTELY NECESSARY TO COMPLETE THE PROPOSED WORK, SHALL BE DISTURBED.

WETLAND & WETLAND FRINGE AREA RESTORATION: ALL DISTURBED WETLAND AND WETLAND FRINGE AREAS SHALL BE RESTORED WITH A WETLAND SEED MIX OR WETLAND TRANSITIONAL SEED MIX CONTAINING ONLY SPECIES NATIVE TO CONNECTICUT. ALL SEED MIX FOR WETLAND OR WETLAND FRINGE (TRANSITIONAL) AREAS MUST BE SUBMITTED AND APPROVED IN ADVANCE. THIS WORK SHALL NOT BE PAID SEPARATELY, BUT SHALL BE INCLUDED IN THE GENERAL COST OF OTHER RELATED WORK ITEMS.

HAY BALE DETAIL

N.T.S.



REFER TO PAGE 5-11-33 "CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENTATION CONTROL" AND PAGE 40 "ON-SITE MITIGATION FOR CONSTRUCTION ACTIVITIES".

SEDIMENTATION CONTROL DETAILS

N.T.S.

		SUPV.	S.R.M.
		DESIGN	R.E.B.
		DRAWN	R.E.B.
		CHECKED	S.R.M.
NO.	DATE	DESCRIPTION	DATE
REVISIONS			
			03/08/21

FINAL DESIGN

SCALE
N.T.S.



WENGELL, McDONNELL & COSTELLO
87 HOLMES ROAD
NEWINGTON, CT 06111
(860) 667-9624

PREPARED FOR

TOWN OF BERLIN
240 KENSINGTON ROAD
BERLIN, CT 06037

**EROSION CONTROL DETAILS
BERLIN SIDEWALK CONNECTIVITY
BERLIN, CONNECTICUT**

D - BERLIN SIDEWALKS - 19031.1_PD - 19031.1 -		SHEET 39	
SIZE	PROJECT	FILE NAME	NUMBER
			REV. OF
			39