

CONSTRUCTION OF BEELINE TRAIL - PHASE 2

NEW BRITAIN · CONNECTICUT

MARCH 2023

CITY BID NO. 4041

PREPARED FOR

CITY OF NEW BRITAIN

27 WEST MAIN STREET
NEW BRITAIN, CT 06051

ERIN E. STEWART, MAYOR

MARK MORIARTY, P.E., DIRECTOR OF PUBLIC WORKS

ROBERT TROTTIER, P.E., CITY ENGINEER

PREPARED BY



FUSS & O'NEILL

146 HARTFORD ROAD
MANCHESTER, CONNECTICUT 06040
860.646.2469
www.fando.com

PROJECT TEAM

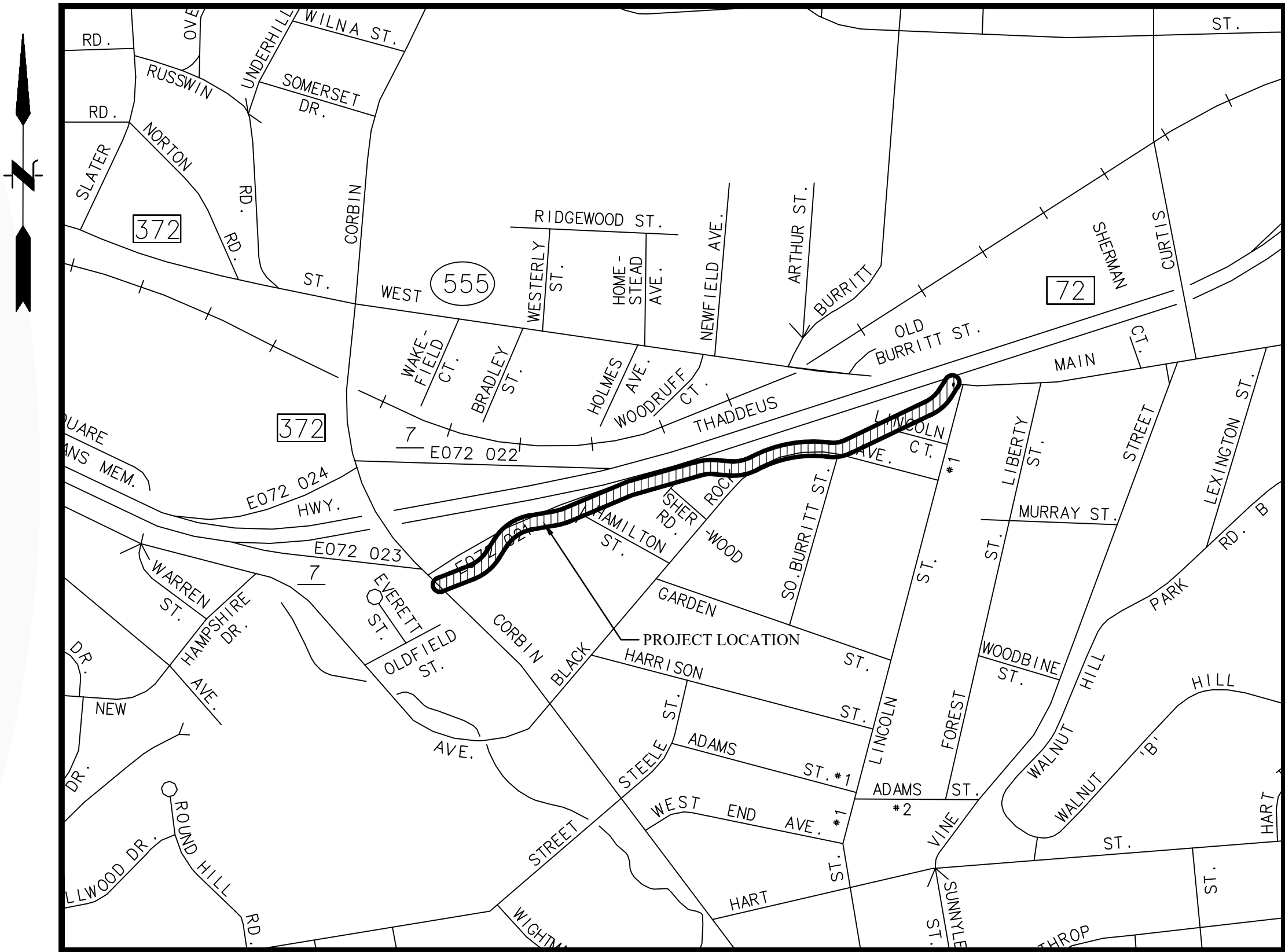
GOLDEN AERIAL SURVEY, INC.
26 LAKESIDE BLVD E
WATERBURY, CT 06708
TEL: (203) 426-3322
www.goldenaerialsurveys.com

SHEET INDEX

SHEET No.	SHEET TITLE
COV-01	COVER SHEET
GEN-01	GENERAL NOTES & LEGEND PLAN
EXC-01 TO EXC-02	EXISTING CONDITIONS PLANS
IND-01	INDEX PLAN
TXS-01 TO TXS-03	TYPICAL CROSS SECTIONS
MDS-01 TO MDS-05	MISCELLANEOUS DETAILS
ALN-01 TO ALN-04	ALIGNMENT & LAYOUT PLANS
PLN-01 TO PLN-04	TRAIL CONSTRUCTION PLANS
PRO-01 TO PRO-04	TRAIL PROFILE
SEC-01 TO SEC-04	GRADING AND SEDIMENTATION & EROSION CONTROL PLANS
S-1 TO S-2	RETAINING WALL PLAN AND DETAILS
XSC-01 TO XSC-30	TRAIL CROSS SECTIONS
UTL-01 TO UTL-04	UTILITY PLANS - FOR INFORMATION ONLY

CTDOT HIGHWAY STANDARD SHEETS

CTDOT TRAFFIC STANDARD SHEETS



LOCATION MAP
SCALE: 1" = 500'

GENERAL NOTES:

- CONSTRUCTION SPECIFICATIONS:
 - Connecticut Department of Transportation, Standard Specifications for Roads, Bridges, Facilities and Incidental Construction, Form 818, dated 2020, Supplemental Specifications, dated July 2023 and Special Provisions
- DESIGN:
 - Connecticut Department of Transportation Highway Design Manual, dated 2003, revised 2020
 - AASHTO Guide for the Development of Bicycle Facilities, dated 2012, revised 2018
- SURVEY:
 - Original survey by Fuss & O'Neill (May 2021)
 - Supplemental survey by Golden Aerial (September 2021)
 - Topographic Information based on NAD83 Horizontal and NAVD88 Vertical Datums
- AVERAGE DAILY TRAFFIC (ADT):
 - N/A

Approved By: _____ Date _____
Robert Trottier, P.E.
City Engineer - City of New Britain

Designed By: _____ Date _____
Kristen E. Solloway
CT P.E. License No. 22072

FINAL DESIGN (100%) PLANS

PROJ. No.: 20190754.A10
DATE: MARCH 2023

COV-01

File: J:\DWG\IP20190754A\10\Civil\Plan\PHASE 2\20190754A10_GEN02.dwg Layout: GEN-01 Plotted: 2023-03-31 2:55 PM Saved: 2023-03-31 2:55 PM User: SBearce
PC3: DWG TO PDF-PC3 STB\CTB: FO STB
MS VIEW: LAYER STATE:

GENERAL NOTES

GENERAL

1.

SYMBOLS AND LEGENDS OF PROJECT FEATURES ARE GRAPHIC REPRESENTATIONS AND ARE NOT NECESSARILY SHOWN ON THE DRAWINGS TO SCALE OR TO THEIR ACTUAL DIMENSION OR LOCATION. COORDINATE DETAIL SHEET DIMENSIONS, MANUFACTURERS' LITERATURE, SHOP DRAWINGS AND FIELD MEASUREMENTS OF SUPPLIED PRODUCTS FOR LAYOUT OF THE PROJECT FEATURES.
2.

DO NOT RELY SOLELY ON ELECTRONIC VERSIONS OF DRAWINGS, SPECIFICATIONS, AND DATA FILES THAT ARE PROVIDED BY THE ENGINEER. FIELD VERIFY LOCATION OF PROJECT FEATURES.
3.

PERFORM NECESSARY CONSTRUCTION NOTIFICATIONS, APPLY FOR AND OBTAIN NECESSARY PERMITS, PAY FEES, AND POST BONDS ASSOCIATED WITH THE WORK AS REQUIRED BY THE CONTRACT DOCUMENTS.
4.

BASE PLAN: THE ROUTE 72 NON-ACCESS HIGHWAY RIGHT OF WAY LINES SHOWN WERE DETERMINED BY AN ACTUAL FIELD SURVEY CONDUCTED BY FUSS & O'NEILL, AND CONFORM TO HORIZONTAL CLASS A-2. REMAINING RIGHT OF WAY LINES, ABUTTING PROPERTY LINES AND STREETLINES ARE DEPICTED BASED ON ANALYSIS OF RECORD RESEARCH, GIS DATA AND COMPILATION OF DATA SUPPLEMENTED BY LIMITED FIELD MEASUREMENTS. IN THESE AREA'S RIGHT OF WAY LINES, ABUTTING PROPERTY, AND STREETLINES CONFORM TO HORIZONTAL CLASS D. THE TOPOGRAPHY DEPICTED ON THIS SURVEY CONFORMS TO THE ACCURACY OF A CLASS T-3 TOPOGRAPHIC SURVEY. THE TOPOGRAPHY WAS COMPILED BY GOLDEN AERIAL SURVEYS, INC. DURING MAY 2021 AND SUPPLEMENTED WITH FIELD SURVEY BY FUSS & O'NEILL INC. IN MAY & JUNE 2021.
6.

TOPOGRAPHIC INFORMATION IS BASED ON NAD83 HORIZONTAL AND NAVD88 VERTICAL DATUMS.

PROSECUTION OF WORK

1.

THE CONTRACTOR SHALL STAKE THE LIMITS OF TRAIL CORRIDOR CLEARING AND GRUBBING AND FIELD VERIFY WITH THE ENGINEER AND CITY OF NEW BRITAIN PRIOR TO PERFORMING PROJECT-WIDE CLEARING AND GRUBBING.
2.

THE CONTRACTOR SHALL MAINTAIN ACCESS TO AND EGRESS FROM ALL COMMERCIAL AND RESIDENTIAL DRIVEWAYS. IF A TEMPORARY DRIVEWAY CLOSURE IS NECESSARY, IT SHALL BE PERMITTED IN ACCORDANCE WITH THE SPECIAL PROVISION FOR ITEM #0971001A - MAINTENANCE AND PROTECTION OF TRAFFIC.
3.

THE CONTRACTOR SHALL CONSTRUCT THE PROJECT IN ACCORDANCE WITH THE SUGGESTED SEQUENCE OF CONSTRUCTION AND AS LIMITED IN THE SPECIAL PROVISION FOR SEC. 1.08 - PROSECUTION AND PROGRESS.

REGULATORY REQUIREMENTS

1.

PERFORM THE WORK IN ACCORDANCE WITH THE LATEST EDITION OF THE CONNECTICUT DEPARTMENT OF TRANSPORTATION'S (CTDOT) STANDARD SPECIFICATIONS FOR ROADS, BRIDGES, FACILITIES AND INCIDENTAL CONSTRUCTION, FORM 818, DATED 2020, SUPPLEMENTARY SPECIFICATIONS, DATED JULY 2022 AND SPECIAL PROVISIONS.
2.

PROVIDE TRAFFIC SIGNAGE AND PAVEMENT MARKINGS IN CONFORMANCE WITH THE LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (2018 EDITION) AND WITH THE SPECIAL PROVISION FOR ITEM #0971001A - MAINTENANCE AND PROTECTION OF TRAFFIC.
3.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR SITE SECURITY AND JOB SAFETY. PERFORM CONSTRUCTION ACTIVITIES IN ACCORDANCE WITH OSHA STANDARDS AND LOCAL REQUIREMENTS.
4.

PERFORM THE WORK IN ACCORDANCE WITH THE FOLLOWING CONDITIONS AS SET FORTH PER CTDOT ENCROACHMENT PERMIT #XXX:

EROSION AND SEDIMENT CONTROL

1.

INSTALL EROSION CONTROL MEASURES PRIOR TO STARTING ANY WORK ON THE SITE. REFER TO THE SEDIMENTATION & EROSION CONTROL PLANS.
2.

IMPLEMENT ALL NECESSARY MEASURES REQUIRED TO CONTROL STORMWATER RUNOFF, DUST, SEDIMENT, AND DEBRIS FROM EXITING THE SITE. PERFORM CORRECTIVE ACTION AS NEEDED FOR EROSION CLEANUP AND REPAIRS TO OFF SITE AREAS, IF ANY, AT NO COST TO THE CITY OR STATE.
3.

INSPECT AND MAINTAIN EROSION CONTROL MEASURES PER THE SCHEDULE IN THE SEDIMENTATION & EROSION CONTROL PLANS. DISPOSE OF SEDIMENT IN AN UPLAND AREA. DO NOT ENCUMBER OTHER DRAINAGE STRUCTURES AND PROTECTED AREAS.
4.

PERFORM CONSTRUCTION SEQUENCING IN SUCH A MANNER TO CONTROL EROSION AND TO MINIMIZE THE TIME THAT EARTH MATERIALS ARE EXPOSED BEFORE THEY ARE COVERED, SEEDED, OR OTHERWISE STABILIZED.
5.

UPON COMPLETION OF CONSTRUCTION AND ESTABLISHMENT OF PERMANENT GROUND COVER, REMOVE AND DISPOSE OF TEMPORARY EROSION CONTROL MEASURES AS NECESSARY. CLEAN SEDIMENT AND DEBRIS FROM TEMPORARY MEASURES AND FROM PERMANENT STORM DRAIN SYSTEMS AS DIRECTED BY THE ENGINEER. CLEANING OF PERMANENT STORM DRAIN STRUCTURES AND PIPES, AS DEEMED NECESSARY, SHALL BE PAID FOR IN ACCORDANCE WITH ARTICLE 1.04.05 - EXTRA WORK OF FORM 818.

CONSTRUCTION LAYOUT

1.

PROVIDE PROPER TRANSITIONS BETWEEN EXISTING AND PROPOSED SITE IMPROVEMENTS. FIELD VERIFY EXISTING PAVEMENT AND GROUND ELEVATIONS AT THE INTERFACE WITH PROPOSED PAVEMENTS AND DRAINAGE STRUCTURES BEFORE START OF CONSTRUCTION.
2.

PRIOR TO ORDERING MATERIALS AND BEGINNING CONSTRUCTION, FIELD VERIFY PROPOSED UTILITY ROUTES AND IDENTIFY ANY INTERFERENCES OR OBSTRUCTIONS WITH EXISTING UTILITIES OR PUBLIC RIGHT-OF-WAY.
3.

IMMEDIATELY INFORM THE ENGINEER IN WRITING IF EXISTING UTILITY CONDITIONS CONFLICT OR DIFFER FROM THAT INDICATED AND IF THE WORK CANNOT BE COMPLETED AS INDICATED.
4.

DIMENSIONS ARE FROM FACE OF CURB, FACE OF BUILDING, FACE OF WALL, AND CONSTRUCTION BASELINE, UNLESS NOTED OTHERWISE.
5.

BOUNDS OR MONUMENTATION DISTURBED DURING CONSTRUCTION SHALL BE SET OR RESET BY A PROFESSIONAL LICENSED SURVEYOR AT NO COST TO CITY OR STATE.

EARTHWORK

1.

NOTIFY "CALL BEFORE YOU DIG" AT 1-800-922-4455 AT LEAST 72 HOURS BEFORE STARTING EXCAVATION.
2.

STOP WORK IN THE VICINITY OF SUSPECTED CONTAMINATED SOIL, GROUNDWATER OR OTHER MEDIA. IMMEDIATELY NOTIFY THE OWNER SO THAT APPROPRIATE TESTING AND SUBSEQUENT ACTION CAN BE TAKEN. RESUME WORK IN THE IMMEDIATE VICINITY ONLY UPON DIRECTION BY THE OWNER.
3.

ALL SURPLUS MATERIAL TAKEN FROM EXCAVATIONS WITHIN THE LIMITS OF THE STATE'S RIGHT-OF-WAY SHALL BE RE-USED WITHIN THE PROJECT LIMITS UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

UTILITIES

1.

TERMINATE EXISTING UTILITIES IN CONFORMANCE WITH LOCAL, STATE AND INDIVIDUAL UTILITY COMPANY STANDARD SPECIFICATIONS AND DETAILS. COORDINATE UTILITY SERVICE DISCONNECTS WITH UTILITY REPRESENTATIVES.
2.

THE TYPE, SIZE AND LOCATION OF DEPICTED UNDERGROUND UTILITIES ARE APPROXIMATE REPRESENTATIONS OF INFORMATION OBTAINED FROM FIELD LOCATIONS OF VISIBLE FEATURES, EXISTING MAPS AND PLANS OF RECORD, UTILITY MAPPING, AND OTHER SOURCES OF INFORMATION OBTAINED BY THE ENGINEER. ASSUME NO GUARANTEE AS TO THE COMPLETENESS, SERVICEABILITY, EXISTENCE, OR ACCURACY OF UNDERGROUND FACILITIES. FIELD VERIFY THE EXACT LOCATIONS, SIZES, AND ELEVATIONS OF THE POINTS OF CONNECTIONS TO EXISTING UTILITIES.
3.

COORDINATE THE WORK AND WORK SCHEDULE WITH UTILITY COMPANIES. PROVIDE ADEQUATE NOTICE TO UTILITIES TO PREVENT DELAYS IN CONSTRUCTION.
4.

RIM ELEVATIONS FOR MANHOLES, VALVE COVERS, GATE AND PULL BOXES, AND OTHER STRUCTURES ARE APPROXIMATE. SET OR RESET RIM ELEVATIONS AS FOLLOWS:

IN PAVEMENTS AND CONCRETE SURFACES: FLUSH
IN SURFACES ALONG ACCESSIBLE ROUTES: FLUSH
IN LANDSCAPE, SEEDED, AND OTHER EARTH SURFACE AREAS:
1 INCH ABOVE SURROUNDING AREA; TAPER EARTH TO RIM ELEVATION.

SITE RESTORATION

1.

PROVIDE 4 INCHES OF TOPSOIL AND SEED TO AREAS DISTURBED DURING CONSTRUCTION AND NOT DESIGNATED TO BE RESTORED WITH IMPERVIOUS SURFACES (BUILDINGS, PAVEMENTS, WALKS, ETC.) UNLESS OTHERWISE NOTED.
2.

REPAIR DAMAGES RESULTING FROM CONSTRUCTION LOADS, AT NO ADDITIONAL COST TO THE CITY OR STATE.
3.

RESTORE AREAS DISTURBED OUTSIDE OF SLOPE LIMITS BY CONSTRUCTION OPERATIONS TO THEIR ORIGINAL CONDITION OR BETTER, AT NO ADDITIONAL COST TO THE CITY OR STATE.

Ⓢ

SANITARY MANHOLE

Ⓢ

STORM MANHOLE

Ⓢ

ELECTRIC MANHOLE

①

TELEPHONE MANHOLE

CATCH BASIN

FLAT TOP CATCHBASIN

DOUBLE CATCHBASIN

FLARED END

●

SOIL BORING

MONITOR WELL

○

EXISTING IRON PIPE

○

EXISTING L ROD OR L PIN

○

EXISTING DRILL HOLE

EXISTING MONUMENT

●

IRON PIN TO BE SET

■

MONUMENT TO BE SET

MAIL BOX

CONTROL POINT

WATER VALVE

FIRE HYDRANT

UTILITY POLE

GUY WIRE

⊗

BOLLARD

SIGN

GAS GATE

WELL

BUSH

DECIDUOUS TREE

PINE TREE

PEDESTRIAN WALK SIGNAL

FLOOD LIGHT

LIGHT

WETLANDS FLAG

PROPERTY LINE

EASEMENT LINE

EDGE OF WATER

CURB

TREELINE

STONE WALL

WETLANDS

EXISTING CONTOUR

INDEX CONTOUR

CHAIN LINK FENCE

STOCKADE FENCE

WIRE FENCE

GUIDE RAIL

STORM DRAINAGE PIPE

SANITARY SEWER PIPE

OVERHEAD WIRES

WATER MAIN

UNDERGROUND GAS

UNDERGROUND TELEPHONE

UNDERGROUND ELECTRIC

LEDGE LINE

RAILROAD TRACK

LEGEND

FINAL DESIGN

No.	DATE	DESCRIPTION	DESIGNER	REVIEWER	

SEAL

SEAL

SCALE:

HORIZ.: NTS

VERT.: NTS

DATUM:

HORIZ.:

VERT.:

0

0

0

0

GRAPHIC SCALE

FUSS & O'NEILL

146 HARTFORD ROAD
MANCHESTER, CONNECTICUT 06040
860.646.2469
www.fando.com

CITY OF NEW BRITAIN

GENERAL NOTES & LEGEND

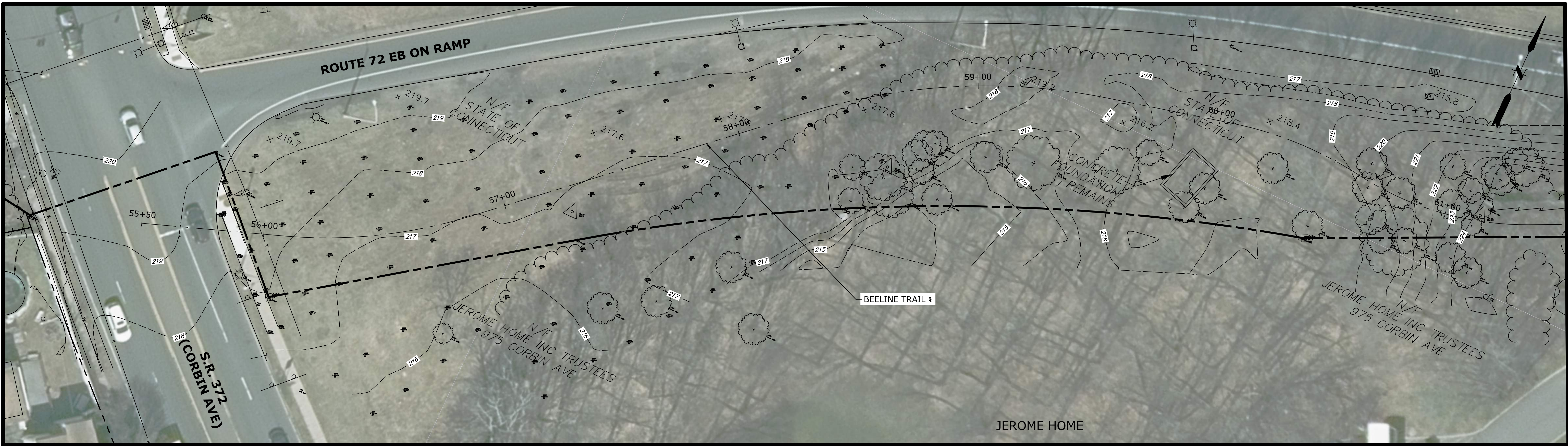
CONSTRUCTION OF BEELINE TRAIL - PHASE 2

NEW BRITAINCONNECTICUT

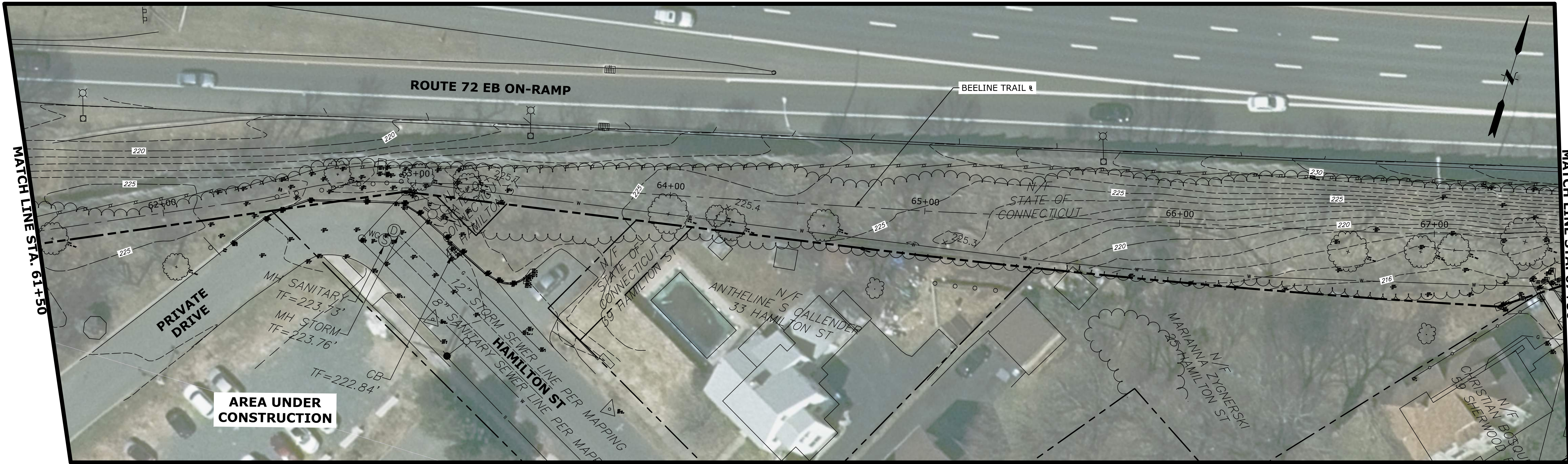
PROJ. No.: 20190754.A10
DATE: MARCH 2023

GEN-01

File: J:\DWG\2019\0754A\10\Civil\Plan\PHASE 2\20190754A10_EXC-PH2.dwg Layout: EXC-01 Plotted: 2023-04-03 7:42 AM Saved: 2022-10-10 5:38 PM User: SBeane
MS VIEW: LAYER STATE: EXC-01 TO 02 Plotter: DWG TO PDF PC3 CTB File: FO STB



MATCH LINE STA. 61+50



MATCH LINE STA. 67+50

FINAL DESIGN

1.	No.	DATE	DESCRIPTION	DESIGNER	REVIEWER
				XX/XX	XX

SEAL

SEAL

SCALE:
HORZ.: 1" = 20'
VERT.:
DATUM:
HORZ.: NAD83
VERT.: NAVD88
20 10 0 20
GRAPHIC SCALE

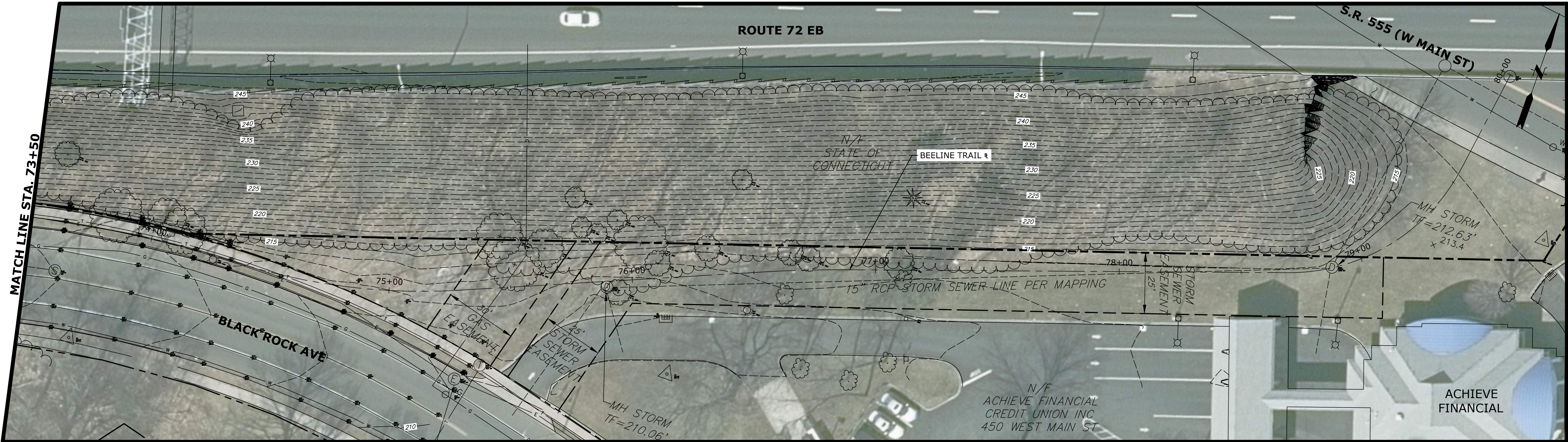
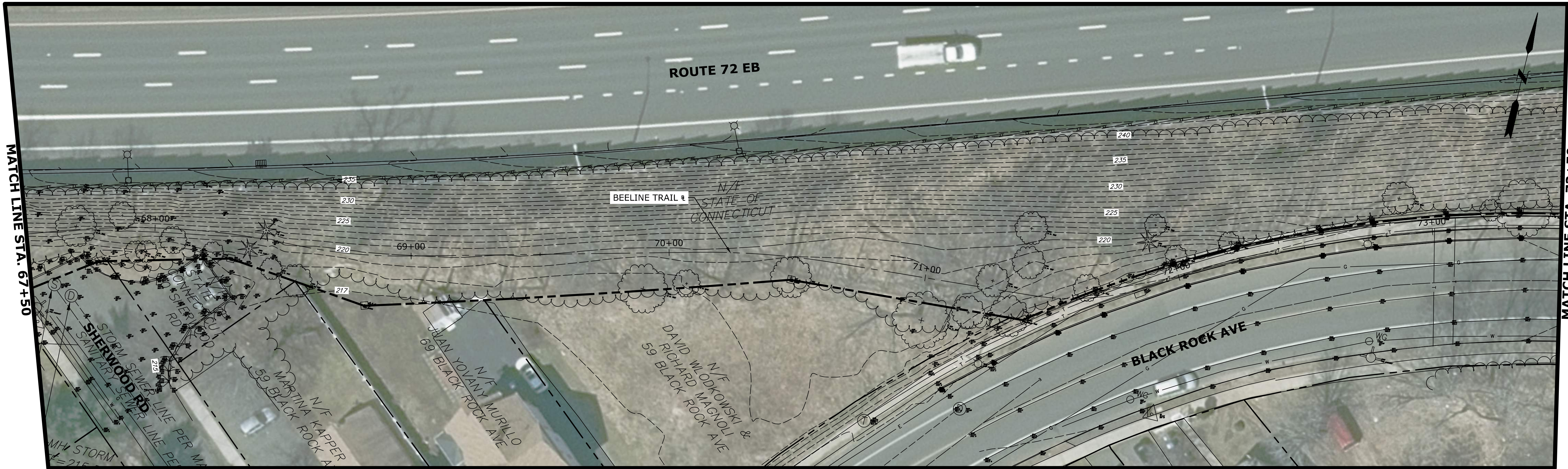
f **FUSS & O'NEILL**
146 HARTFORD ROAD
MANCHESTER, CONNECTICUT 06040
860.646.2469
www.fando.com

CITY OF NEW BRITAIN
EXISTING CONDITIONS PLAN
CONSTRUCTION OF BEELINE TRAIL - PHASE 2
NEW BRITAIN CONNECTICUT

PROJ. No.: 20190754.A10
DATE: MARCH 2023
EXC-01

File: J:\DWG\2019\0754\A10\Civil\Plan\PHASE 2\20190754A10_EXC-PH2.dwg Layout: EXC-02 Plotted: 2023-04-03 7:44 AM Saved: 2022-10-10 5:38 PM User: SBeane
Plotter: DWG TO PDF PC3 CTB File: FO STB

MS VIEW: LAYER STATE: EXC-01 TO 02



FINAL DESIGN

1.	No.	DATE	DESCRIPTION	DESIGNER	REVIEWER
				XX/XX	XX

SEAL

SEAL

SCALE:
HORZ.: 1" = 20'
VERT.:
DATUM:
HORZ.: NAD 83
VERT.: NAVD 88
20 10 0 20
GRAPHIC SCALE

 **FUSS & O'NEILL**
146 HARTFORD ROAD
MANCHESTER, CONNECTICUT 06040
860.646.2469
www.fando.com

CITY OF NEW BRITAIN
EXISTING CONDITIONS PLAN
CONSTRUCTION OF BEELINE TRAIL - PHASE 2
NEW BRITAIN CONNECTICUT

PROJ. No.: 20190754.A10
DATE: MARCH 2023
EXC-02

File: J:\DWG\20190754A\10\Civil\Plan\PHASE 2\20190754A10_IND02.dwg Layout: IND-01 Plotted: 2023-04-03 7:52 AM Saved: 2022-10-10 5:16 PM User: SBeare
MS VIEW: IND-01 LAYER STATE: IND-01



FINAL DESIGN

1.	No.	DATE	DESCRIPTION	DESIGNER	REVIEWER
				XX/XX	XX

SEAL

SEAL

SCALE:
HORZ.: 1" = 100'
VERT.:
DATUM:
HORZ.: NAD83
VERT.: NAVD88
100 50 0 100
GRAPHIC SCALE

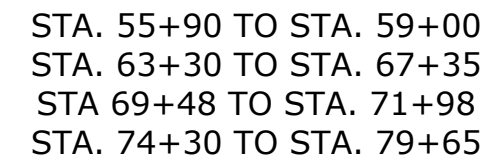
**FUSS & O'NEILL**
146 HARTFORD ROAD
MANCHESTER, CONNECTICUT 06040
860.646.2469
www.fando.com

CITY OF NEW BRITAIN
INDEX PLAN
CONSTRUCTION OF BEELINE TRAIL - PHASE 2
NEW BRITAIN CONNECTICUT

PROJ. No.: 20190754.A10
DATE: MARCH 2023
IND-01

- (A) POINT OF APPLICATION OF GRADE
- (B) 1" HMA S0.25 (TRAFFIC LEVEL 2)
- (C) 2" HMA S0.5 (TRAFFIC LEVEL 2)
- (D) 6" PROCESSED AGGREGATE BASE
- (E) 3" STONEDUST
- (F) 4" TOPSOIL & TURF ESTABLISHMENT
- (G) FORMATION OF SUBGRADE
- (H) GEOTEXTILE (HIGH SURVIVABILITY)
- (I) ROOT CONTROL BARRIER (SEE MISC. DETAILS)

1. 4 FT PAVED TRAIL AND 1 FT GRADED SHOULDER
-STA. 61+31 TO STA. 63+54
-STA. 67+11 TO STA. 70+41
2. 4 FT PAVED TRAIL AND 1 FT GRADED SHOULDER
-STA. 61+37 TO STA. 63+54
-STA. 67+10 TO STA. 68+54
3. EROSION CONTROL MATTING TYPE D SHALL BE PLACED ON ALL SLOPES STEEPER THAN 3:1.
4. FORMATION OF SUBGRADE WILL NOT BE MEASURED DIRECTLY FOR PAYMENT BUT SHALL BE CONSIDERED AS INCLUDED IN ITEM #0922250A - BITUMINOUS CONCRETE TRAIL.
5. FINAL LIMITS OF ROOT BARRIER CONTROL AND GEOTEXTILE INSTALLATION WILL BE FIELD DETERMINED AND AS DIRECTED BY THE ENGINEER.
6. ADDITIONAL FILL AS NECESSARY SHALL BE SUITABLE SURPLUS EXCAVATION TAKEN FROM WITHIN THE STATE RIGHT-OF-WAY AND SHALL NOT CONTAIN ANY MATERIAL WHICH PASSES A NO. 200 SIEVE. FILL SHALL BE PLACED IN ACCORDANCE WITH SEC. 2.02.03 OF FORM 818.

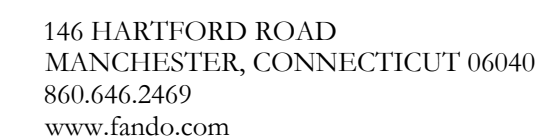


1.			XX/XX
No.	DATE	DESCRIPTION	DESIGNER
			REVIEWER

SEAL

0

0



CONNECTICUT

TXS-01

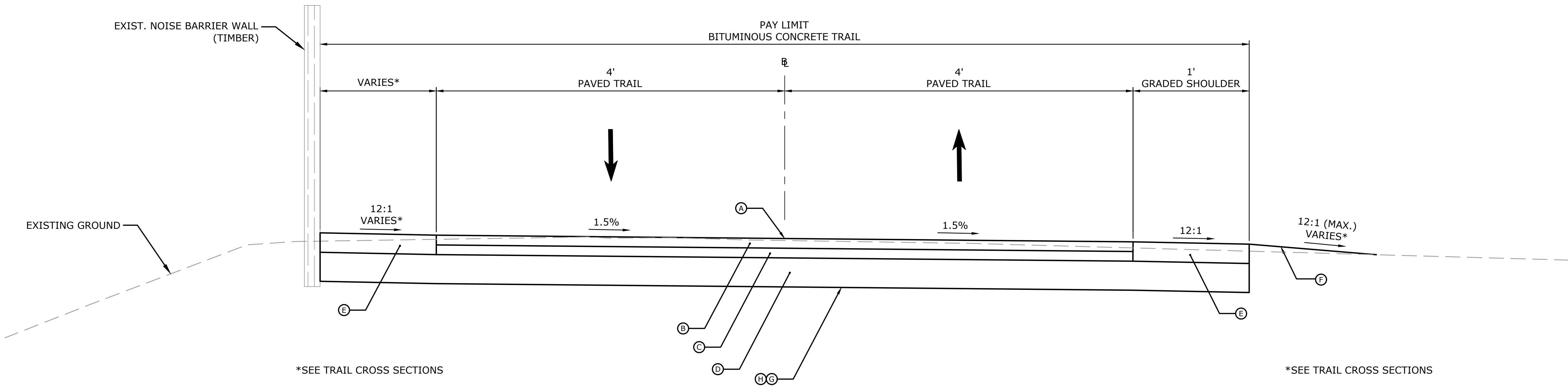
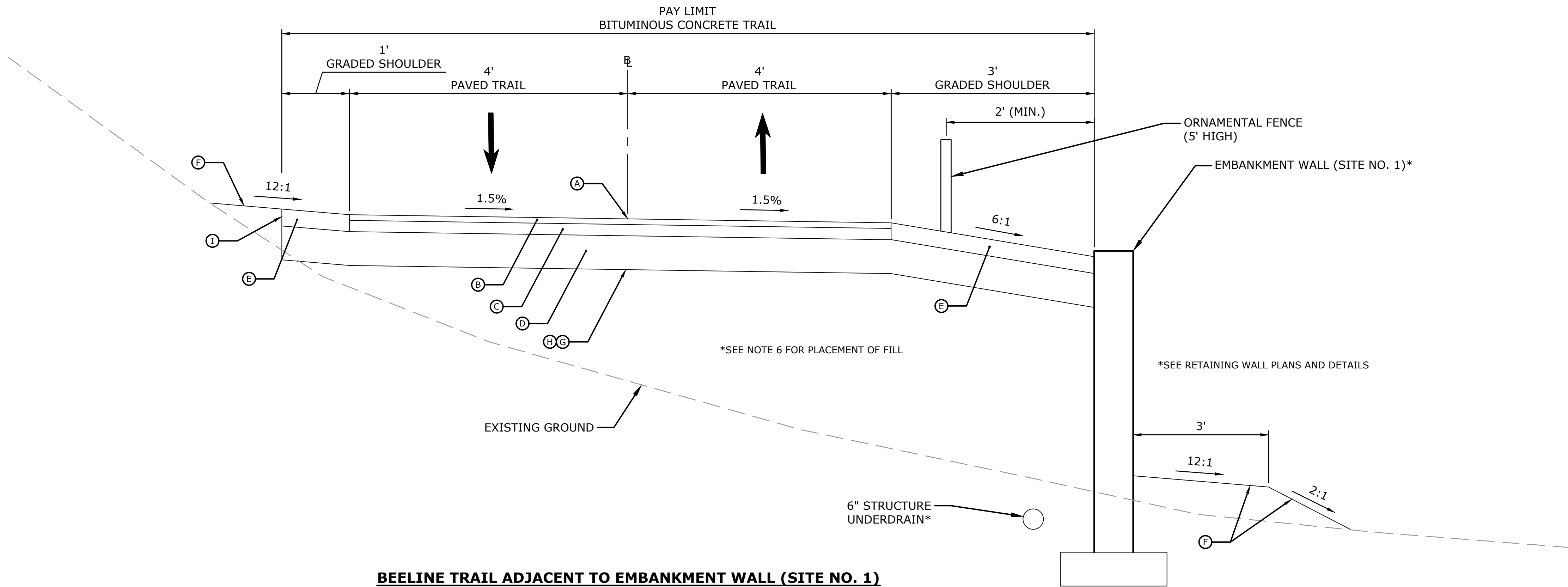
File: J:\DWG\20190754A10\Civil\Plan\PHASE 2\20190754A10_TXS02.dwg Layout: TXS-02 Plotted: 2023-04-01 10:02 AM Saved: 2023-03-31 4:56 PM User: SBearce
Plotter: DWG TO PDF.PC3 CTB File: FO.STB
MS VIEW: LAYER STATE:

LEGEND:

- (A) POINT OF APPLICATION OF GRADE
- (B) 1" HMA S0.25 (TRAFFIC LEVEL 2)
- (C) 2" HMA S0.5 (TRAFFIC LEVEL 2)
- (D) 6" PROCESSED AGGREGATE BASE
- (E) 3" STONEDUST
- (F) 4" TOPSOIL & TURF ESTABLISHMENT
- (G) FORMATION OF SUBGRADE
- (H) GEOTEXTILE (HIGH SURVIVABILITY)
- (I) ROOT CONTROL BARRIER (SEE MISC. DETAILS)

NOTES:

- 4 FT PAVED TRAIL AND 1 FT GRADED SHOULDER
-STA. 61+31 TO STA. 63+54
-STA. 67+11 TO STA. 70+41
- 4 FT PAVED TRAIL AND 1 FT GRADED SHOULDER
-STA. 61+37 TO STA. 63+54
-STA. 67+10 TO STA. 68+54
- EROSION CONTROL MATTING TYPE D SHALL BE PLACED ON ALL SLOPES STEEPER THAN 3:1.
- FORMATION OF SUBGRADE WILL NOT BE MEASURED DIRECTLY FOR PAYMENT BUT SHALL BE CONSIDERED AS INCLUDED IN ITEM #0922250A - BITUMINOUS CONCRETE TRAIL.
- FINAL LIMITS OF ROOT BARRIER CONTROL AND GEOTEXTILE INSTALLATION WILL BE FIELD DETERMINED AND AS DIRECTED BY THE ENGINEER.
- ADDITIONAL FILL AS NECESSARY SHALL BE SUITABLE SURPLUS EXCAVATION TAKEN FROM WITHIN THE STATE RIGHT-OF-WAY AND SHALL NOT CONTAIN ANY MATERIAL WHICH PASSES A NO. 200 SIEVE. FILL SHALL BE PLACED IN ACCORDANCE WITH SEC. 2.02.03 OF FORM 818.



FINAL DESIGN

1.	No.	DATE	DESCRIPTION	DESIGNER	REVIEWER
				XX/XX	XX

SEAL

SEAL

SCALE:

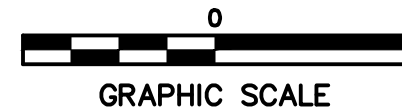
HORIZ.: NTS

VERT.: NTS

DATUM:

HORIZ.:

VERT.:



FUSS & O'NEILL

146 HARTFORD ROAD
MANCHESTER, CONNECTICUT 06040
860.646.2469
www.fando.com

CITY OF NEW BRITAIN

TYPICAL CROSS SECTIONS

CONSTRUCTION OF BEELINE TRAIL - PHASE 2

NEW BRITAIN

CONNECTICUT

PROJ. No.: 20190754.A10
DATE: MARCH 2023

TXS-02

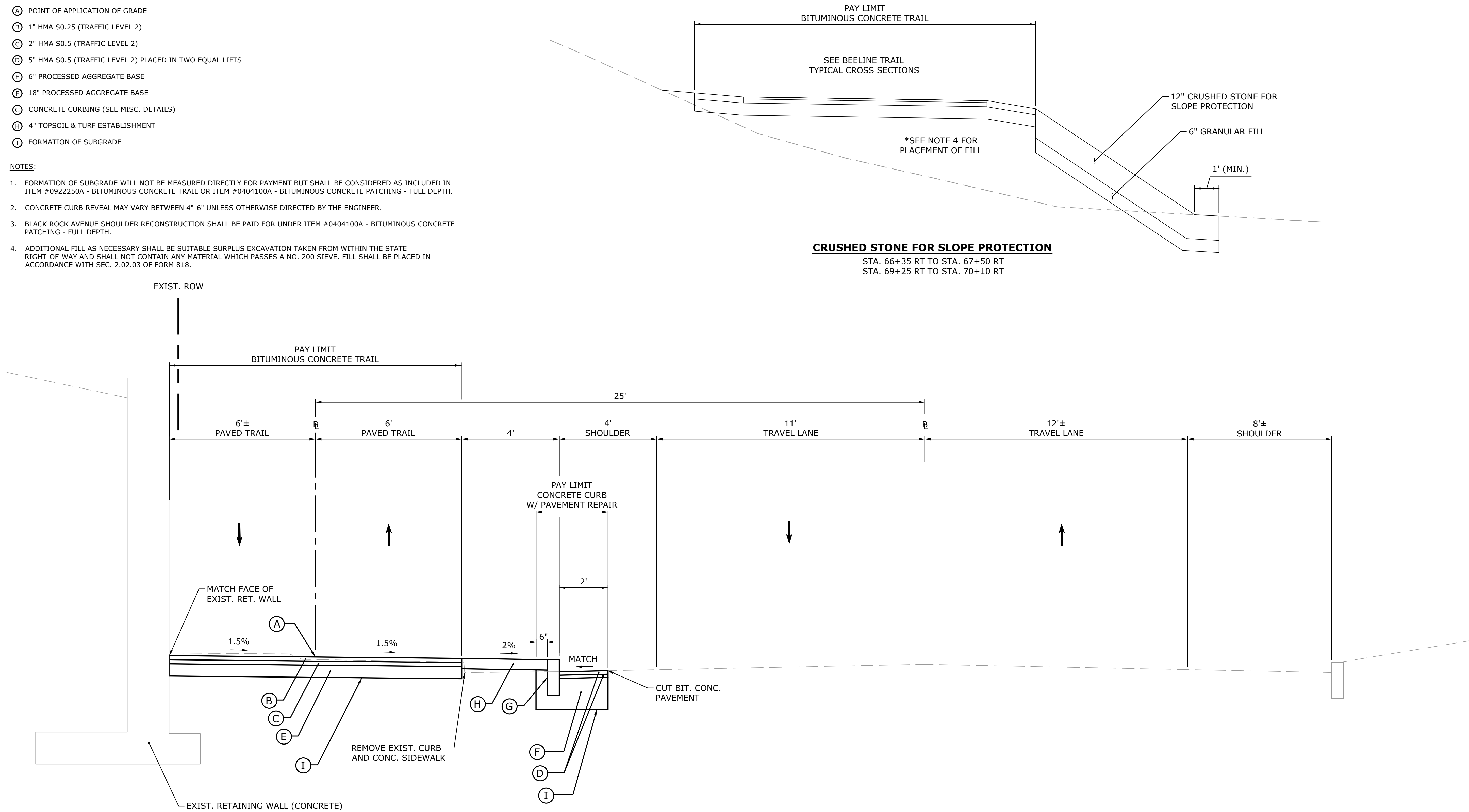
File: J:\DWG\20190754A10\Civil\Plan\PHASE 2\20190754A10_TXS02.dwg Layout: TXS-03 Plotted: 2023-04-03 4:23 PM Saved: 2023-04-02 8:48 AM User: SBeance
Plotter: DWG TO PDF.PC3 CTB File: FO.STB
MS VIEW: LAYER STATE:

LEGEND:

- Ⓐ POINT OF APPLICATION OF GRADE
- Ⓑ 1" HMA S0.25 (TRAFFIC LEVEL 2)
- Ⓒ 2" HMA S0.5 (TRAFFIC LEVEL 2)
- Ⓓ 5" HMA S0.5 (TRAFFIC LEVEL 2) PLACED IN TWO EQUAL LIFTS
- Ⓔ 6" PROCESSED AGGREGATE BASE
- Ⓕ 18" PROCESSED AGGREGATE BASE
- Ⓖ CONCRETE CURBING (SEE MISC. DETAILS)
- Ⓗ 4" TOPSOIL & TURF ESTABLISHMENT
- Ⓘ FORMATION OF SUBGRADE

NOTES:

- FORMATION OF SUBGRADE WILL NOT BE MEASURED DIRECTLY FOR PAYMENT BUT SHALL BE CONSIDERED AS INCLUDED IN ITEM #0922250A - BITUMINOUS CONCRETE TRAIL OR ITEM #0404100A - BITUMINOUS CONCRETE PATCHING - FULL DEPTH.
- CONCRETE CURB REVEAL MAY VARY BETWEEN 4"-6" UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
- BLACK ROCK AVENUE SHOULDER RECONSTRUCTION SHALL BE PAID FOR UNDER ITEM #0404100A - BITUMINOUS CONCRETE PATCHING - FULL DEPTH.
- ADDITIONAL FILL AS NECESSARY SHALL BE SUITABLE SURPLUS EXCAVATION TAKEN FROM WITHIN THE STATE RIGHT-OF-WAY AND SHALL NOT CONTAIN ANY MATERIAL WHICH PASSES A NO. 200 SIEVE. FILL SHALL BE PLACED IN ACCORDANCE WITH SEC. 2.02.03 OF FORM 818.



BEELINE TRAIL AT BLACK ROCK AVENUE (SHOULDER RECONSTRUCTION)
STA. 71+98 TO STA. 74+30

FINAL DESIGN

1.	No.	DATE	DESCRIPTION	DESIGNER	REVIEWER
				XX/XX	XX

SEAL

SEAL

SCALE:

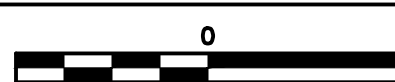
HORZ.: NTS

VERT.: NTS

DATUM:

HORZ.: NTS

VERT.: NTS



GRAPHIC SCALE



FUSS & O'NEILL

146 HARTFORD ROAD
MANCHESTER, CONNECTICUT 06040
860.646.2469
www.fando.com

CITY OF NEW BRITAIN

TYPICAL CROSS SECTIONS

CONSTRUCTION OF BEELINE TRAIL - PHASE 2

NEW BRITAIN

CONNECTICUT

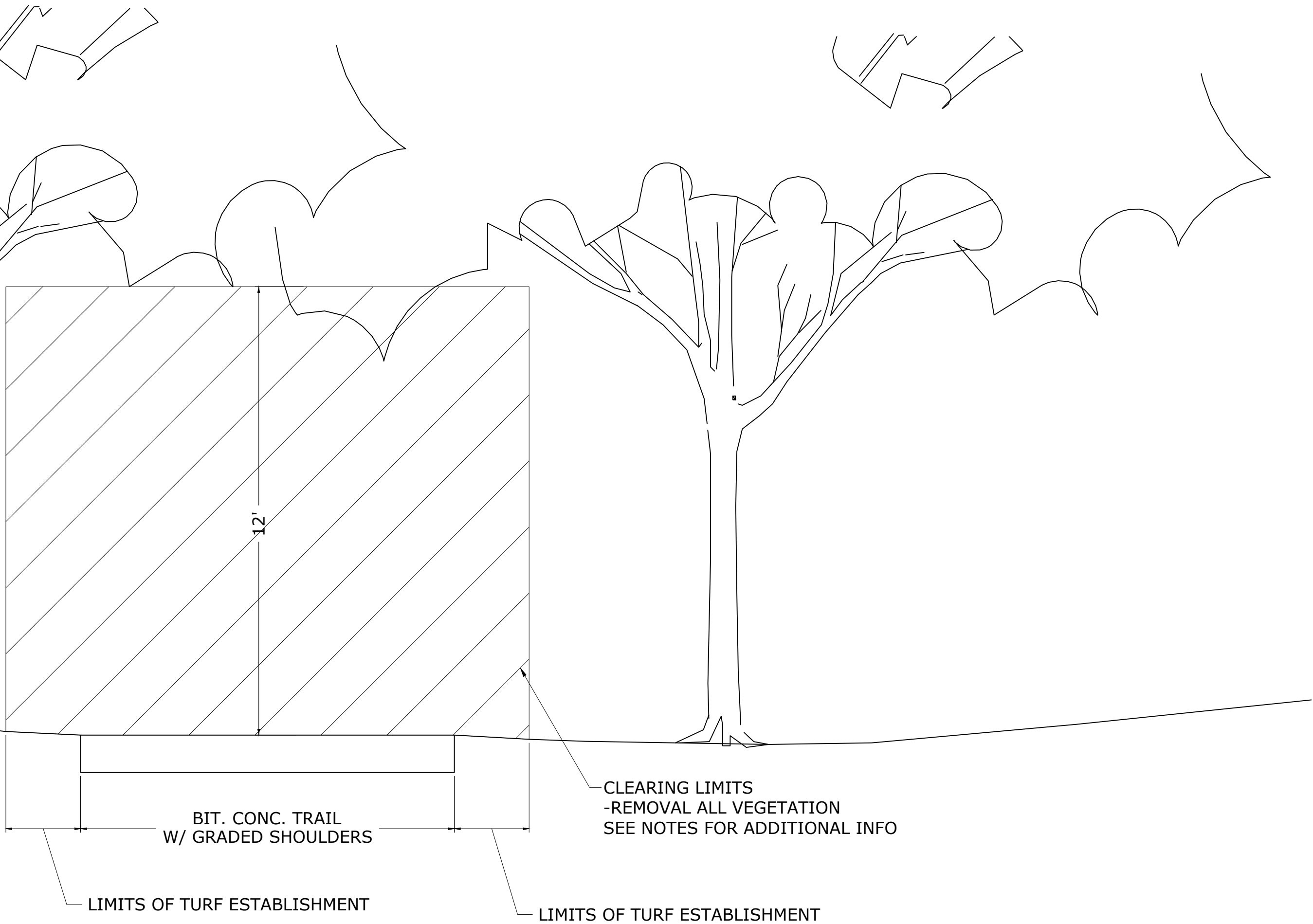
PROJ. No.: 20190754.A10
DATE: MARCH 2023

TXS-03

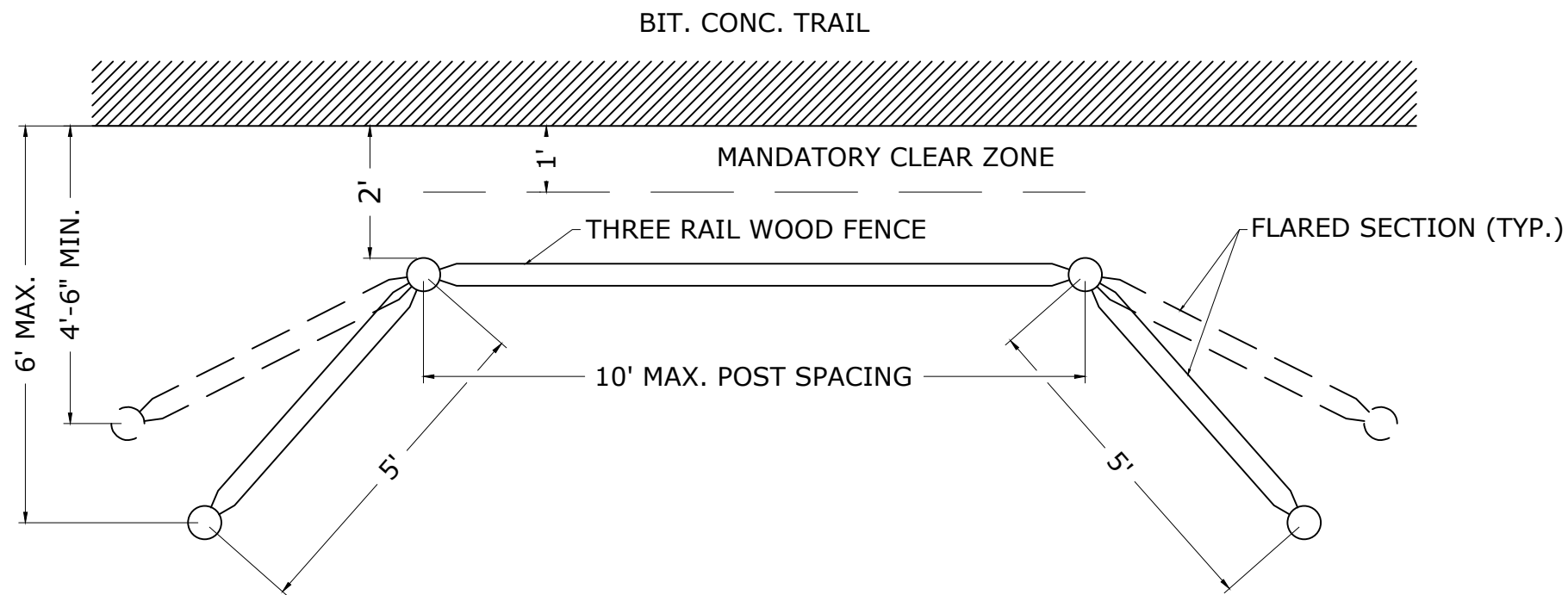
File Path: J:\DWG\GP20190754A10\Civil\Plan\PHASE 2\20190754A10_MDS02.dwg Layout: MDS-01 Plotted: Sat, April 01, 2023 - 10:25 AM User: shearea
MS VIEW: Plotter: DWG TO PDF.PC3 CTB File: FOSTB

NOTES:

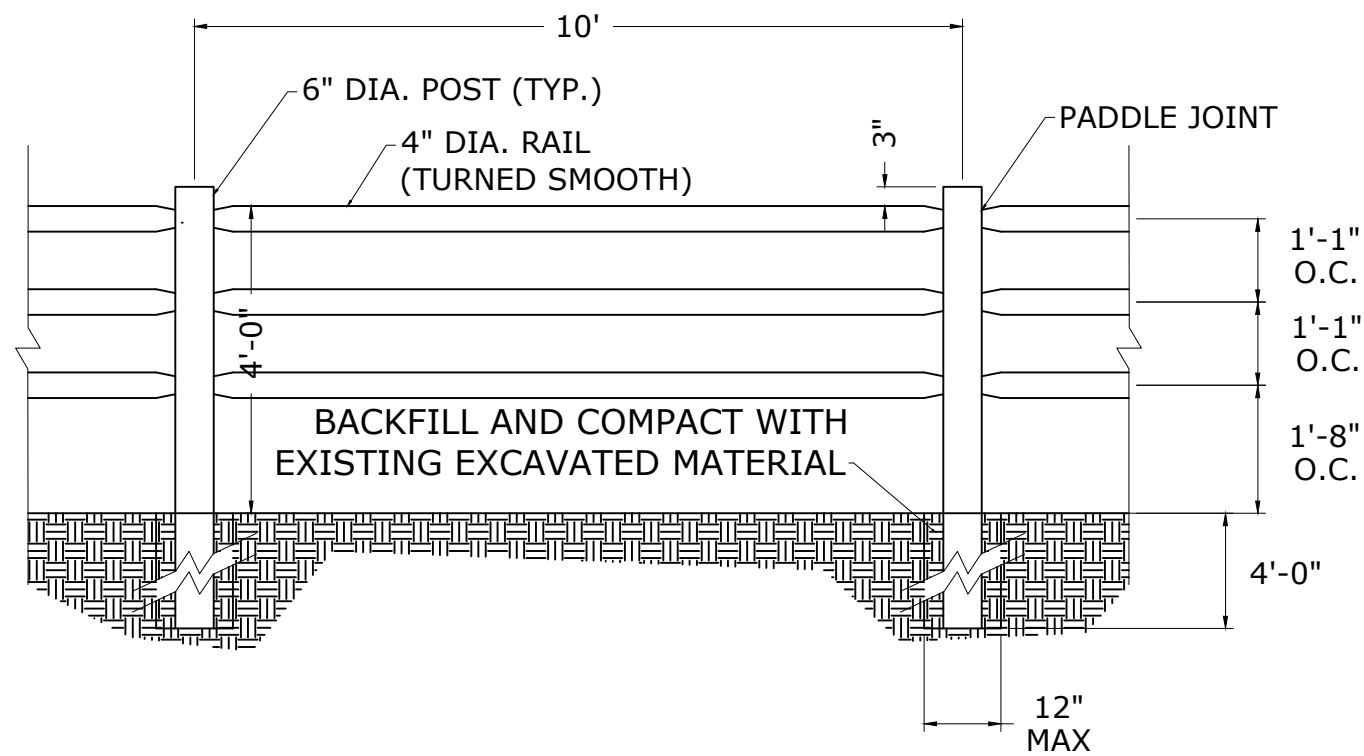
1. SEE SPECIAL PROVISIONS FOR "CLEARING AND GRUBBING".
2. CONTRACTOR SHALL BE RESPONSIBLE FOR LIMBING OF OVERHANGING VEGETATION TO THE HEIGHT INDICATED UNLESS OTHERWISE DIRECTED BY THE CITY AND/OR ENGINEER.
3. IF CLEARING OPERATIONS REVEAL HAZADOUS TREES BEYOND THE LIMITS INDICATED ON THE PLANS THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL.
4. CONTRACTOR SHALL CLEAR AND GRUB ALL VEGETATION 5' BEYOND APPROXIMATE SLOPE LIMIT AS SHOWN ON THE PLANS UNLESS OTHERIWSE DIRECTED BY THE CITY AND/OR ENGINEER. ALL DEAD TREES SHALL BE REMOVED WITHIN 10' OF APPROXIMATE SLOPE LIMIT.



TYPICAL CLEARING LIMITS



- NOTE:
1. THREE RAIL FENCE USED ON EDGE OF 2:1 SLOPES IN LOCATION SHOWN ON PLANS.
 2. 2' CLEAR DIMENSIONS OFF EDGE OF TRAIL TO FACE OF POSTS.
 3. NO TRAIL AMENITIES SHALL BE PLACED WITHIN THE 1' MANDATORY CLEAR ZONE.
 4. SEE PLANS FOR LOCATIONS.



THREE RAIL WOOD FENCE

FINAL DESIGN

1.	No.	DATE	DESCRIPTION	DESIGNER	REVIEWER
				XX/XX	XX

SEAL

SEAL

SCALE:

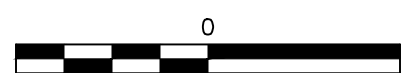
HORZ.: N.T.S.

VERT.:

DATUM:

HORZ.:

VERT.:



GRAPHIC SCALE



FUSS & O'NEILL

146 HARTFORD ROAD
MANCHESTER, CONNECTICUT 06040
860.646.2469
www.fando.com

CITY OF NEW BRITAIN

MISCELLANEOUS DETAILS

CONSTRUCTION OF BEELINE TRAIL - PHASE 2

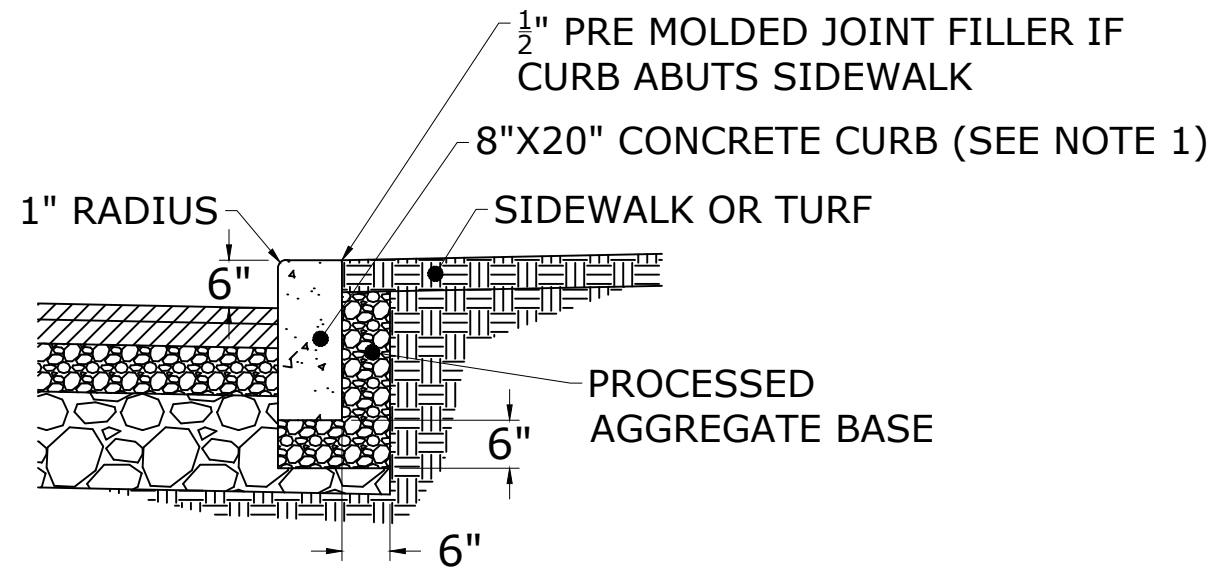
NEW BRITAIN

CONNECTICUT

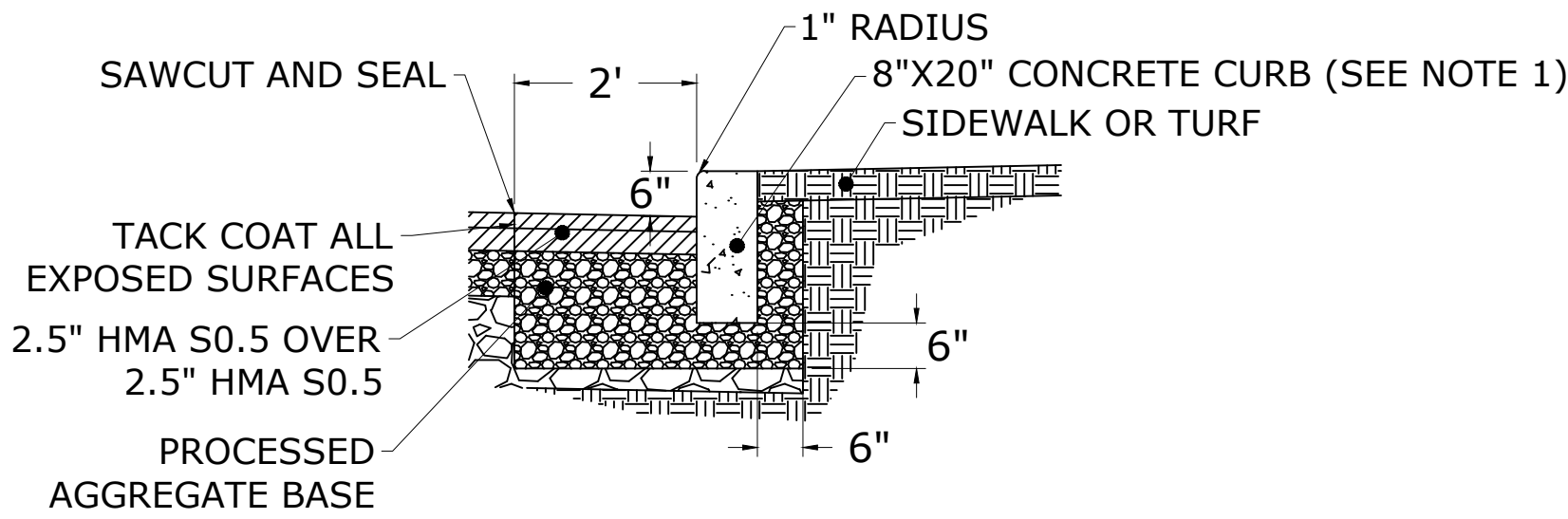
PROJ. No.: 20190754.A10
DATE: MARCH 2023

MDS-01

File Path: J:\DWG\GP20190754A10\Civil\Plan\PHASE 2\20190754A10_MDS02.dwg Layout: MDS-02 Plotted: Sat, April 01, 2023 - 10:26 AM User: shearce
MS VIEW: LAYER STATE: Plotter: DWG TO PDF.PC3 CTB File: FO.STB



EXISTING ROAD WITHOUT PAVEMENT REPAIR

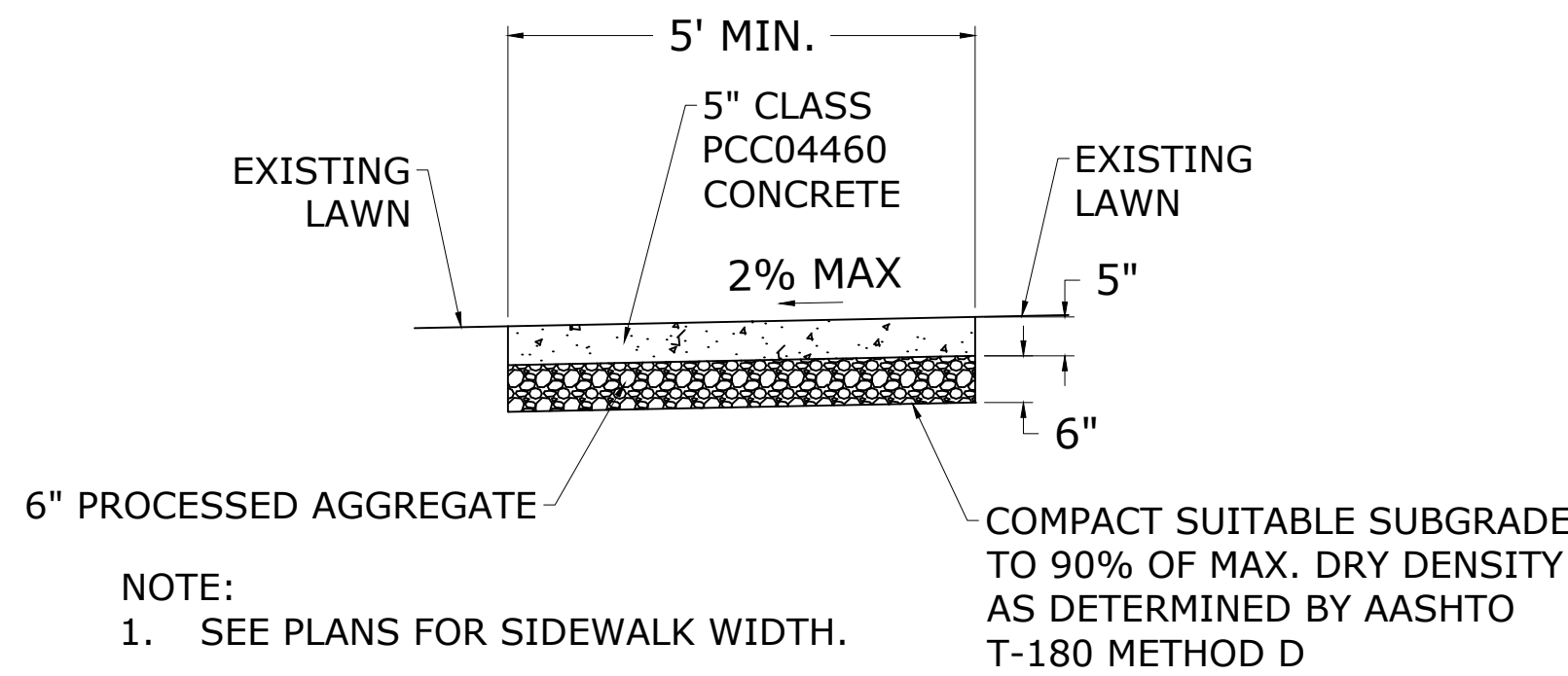


EXISTING ROAD WITH PAVEMENT REPAIR

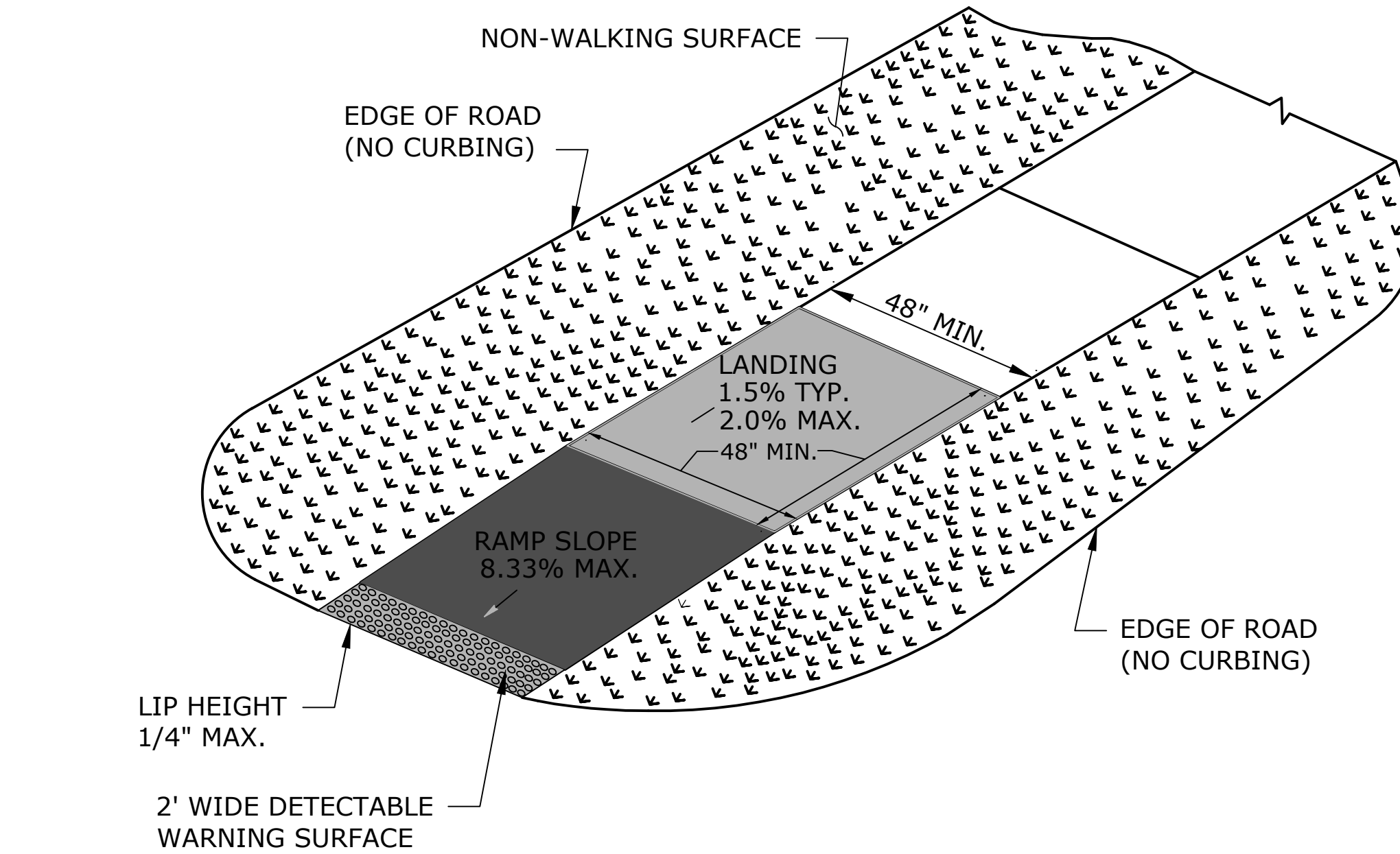
NOTES:

1. CONCRETE TYPE SHALL BE CLASS PCC04460 AS DEFINED IN CTDOT FORM 818 SEC. M.03. MINIMUM CONCRETE COMPRESSIVE STRENGTH SHALL BE 1800 PSI AT 7 DAYS AND 4400 PSI AT 28 DAYS.
2. TACK COAT REQUIRED BETWEEN PAVEMENT LIFTS WHEN BINDER COURSE IS INSTALLED MORE THAN 24 HOURS BEFORE SURFACE COURSE.
3. BITUMINOUS CONCRETE CLASS 1 MAY BE USED IN PLACE OF HMA S0.5 WHEN APPROVED BY THE CITY ENGINEER.

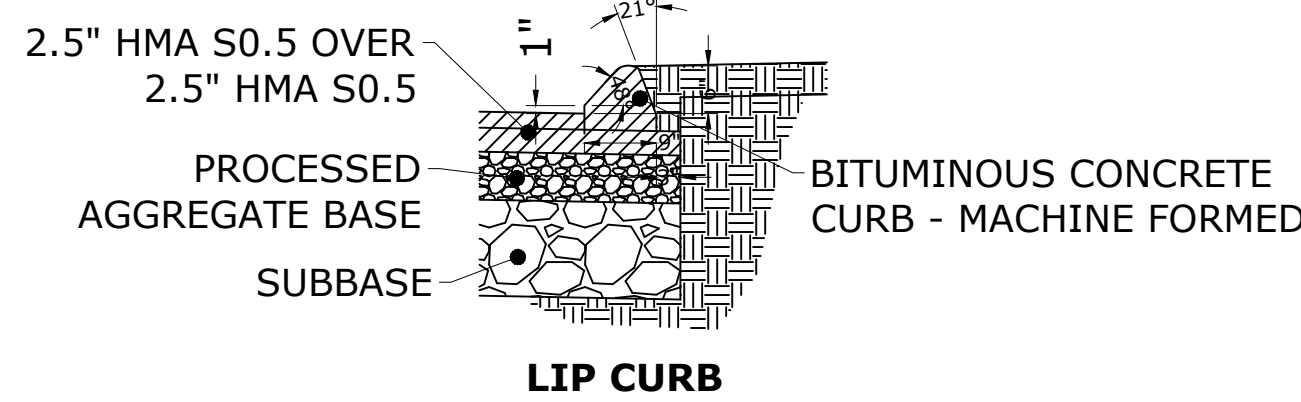
CONCRETE CURB



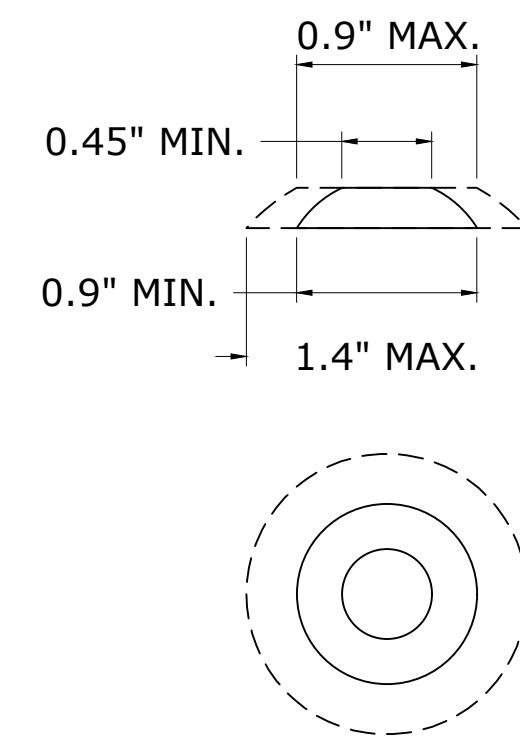
CONCRETE SIDEWALK



CONCRETE SIDEWALK RAMP (TYPE 17)



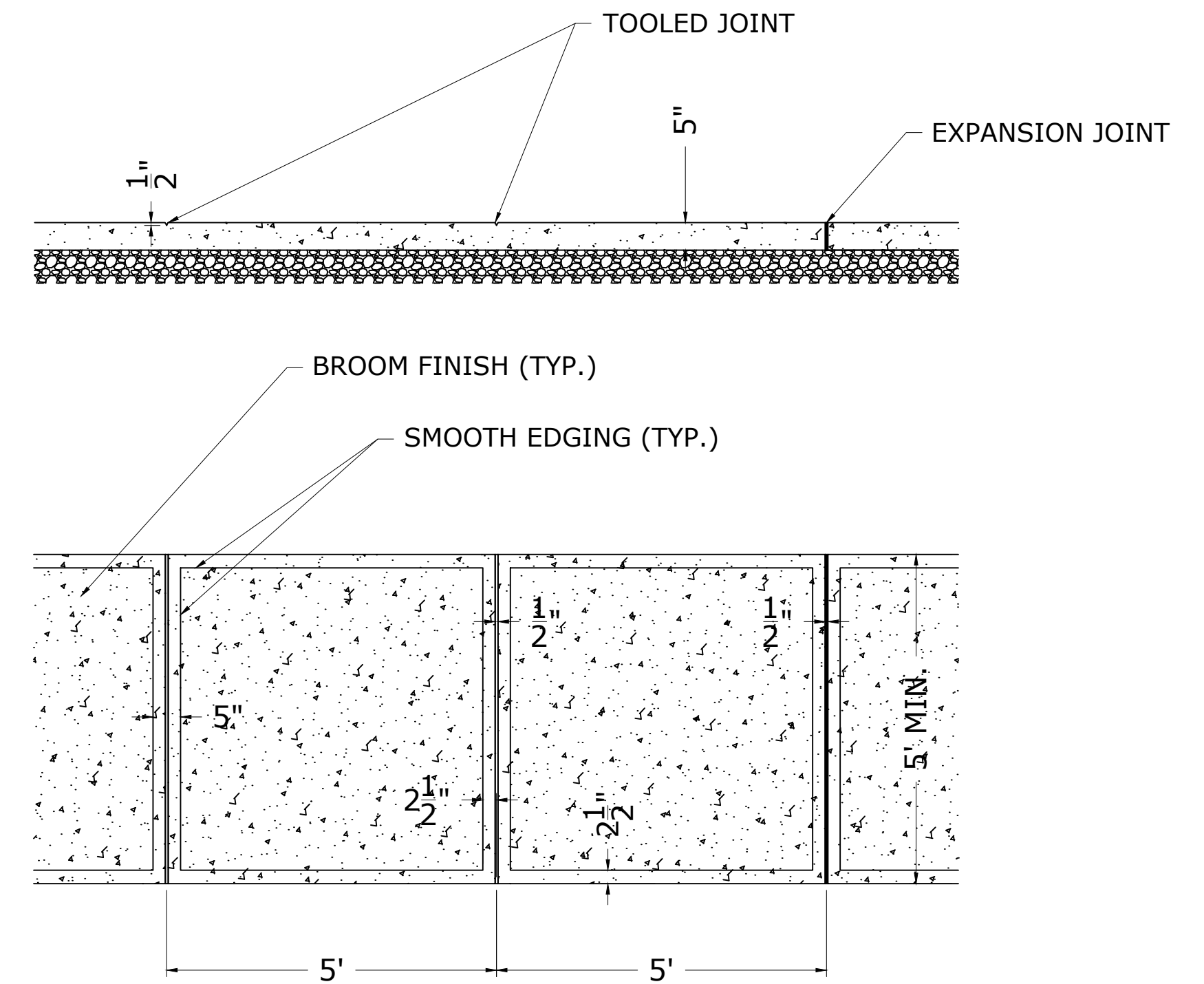
BITUMINOUS CONCRETE LIP CURB



NOTE:

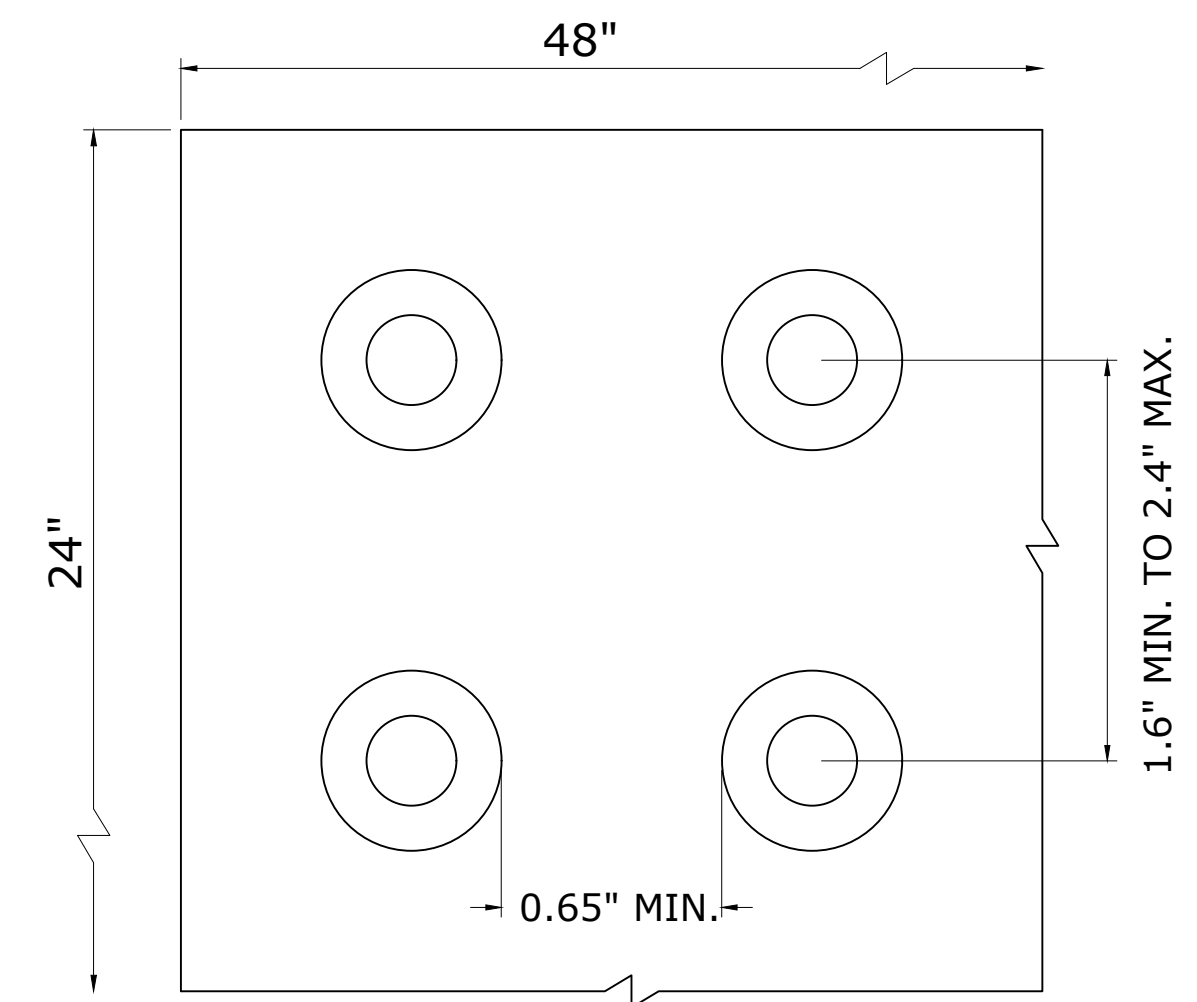
1. THE DETECTABLE WARNING SURFACE SHALL BE A PREFABRICATED DETECTABLE WARNING SURFACE TILE THAT IS CAST-IN-PLACE TYPE AS MANUFACTURED FROM ALRETTILE DETECTABLE WARNING SYSTEMS, ADA SOLUTIONS, OR APPROVED EQUAL. THE TILE SHALL HAVE A BRICK RED HOMOGENEOUS COLOR IN COMPLIANCE WITH FEDERAL STANDARD 595A COLOR #2144 OR APPROVED EQUAL.

DETECTABLE WARNING SURFACE



1. MAXIMUM 20' SPACING BETWEEN EXPANSION JOINTS FOR SIDEWALKS UP TO 7' WIDE. SIDEWALKS GREATER THAN 7' WIDE MAXIMUM SPACING OF 15'.

CONC. SIDEWALK JOINTING AND EDGING



FINAL DESIGN

No.	DATE	DESCRIPTION	DESIGNER	REVIEWER
1.			XX/XX	XX

SEAL

SEAL

--

SCALE:
HORIZ.: N.T.S.
VERT.:
DATUM:
HORIZ.:
VERT.:
0
GRAPHIC SCALE

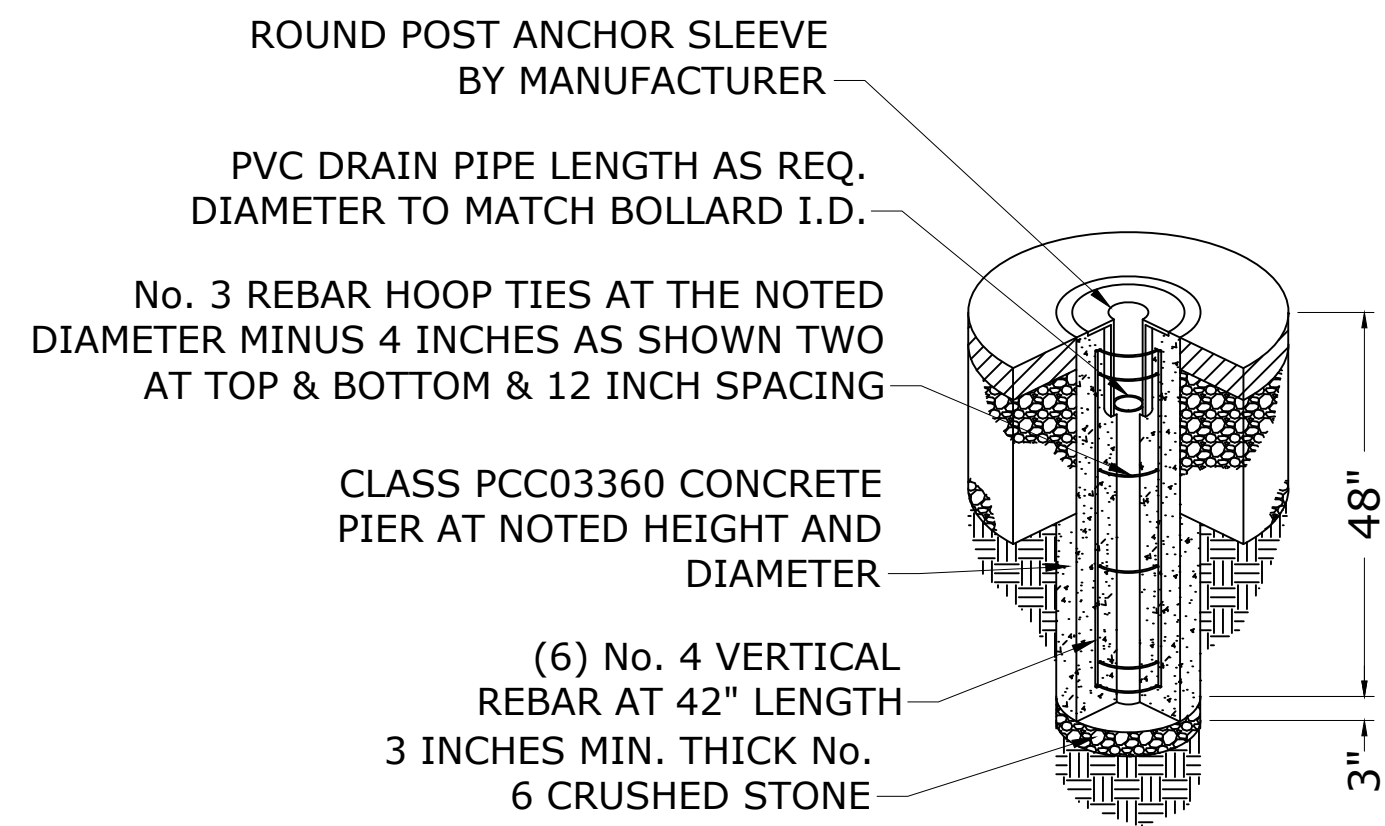


FUSS & O'NEILL
146 HARTFORD ROAD
MANCHESTER, CONNECTICUT 06040
860.646.2469
www.fando.com

CITY OF NEW BRITAIN
MISCELLANEOUS DETAILS
CONSTRUCTION OF BEELINE TRAIL - PHASE 2
NEW BRITAIN
CONNECTICUT

PROJ. No.: 20190754.A10 DATE: MARCH 2023
MDS-02

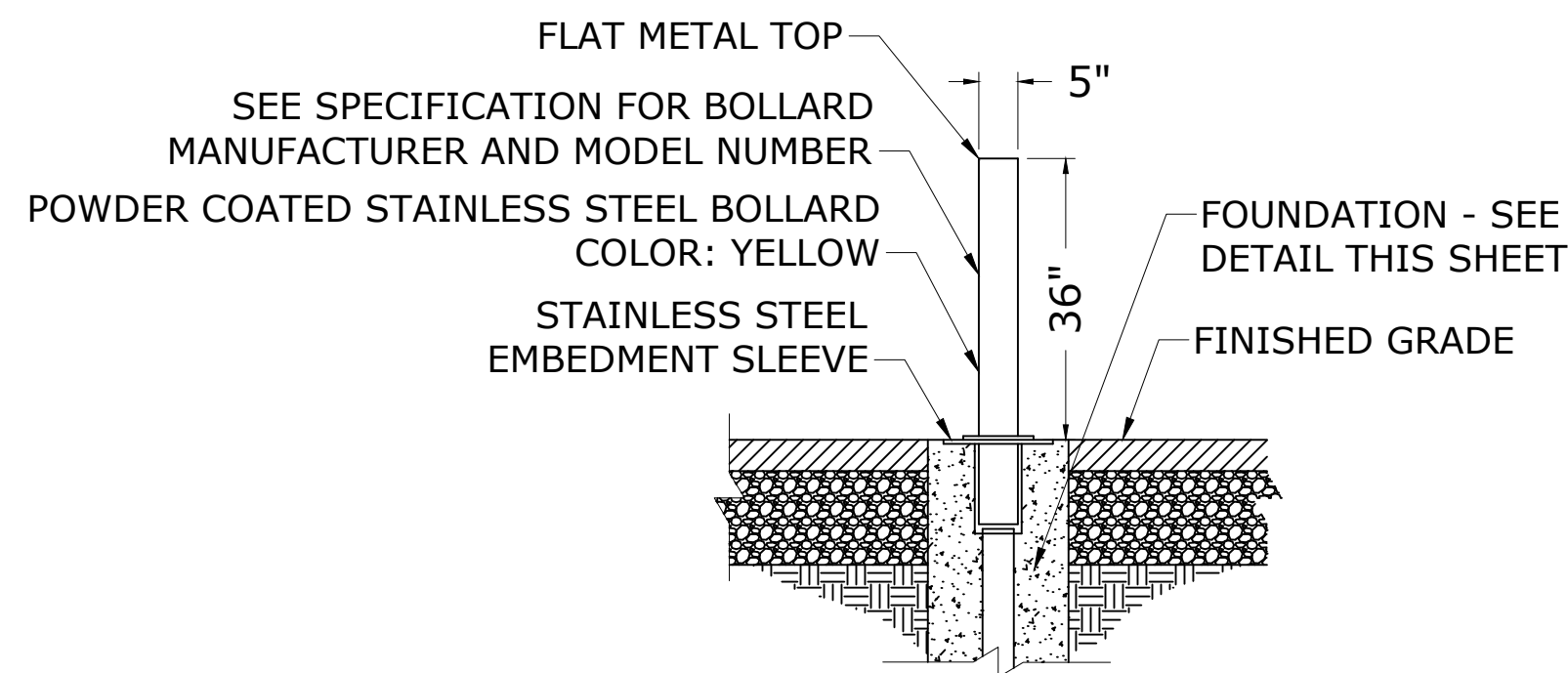
File Path: J:\DWG\GP20190754A10\Civil\Plan\PHASE 2\20190754A10_MDS02.dwg Layout: MDS-04 Plotted: Mon, April 03, 2023 - 3:48 PM User: sbarce
MS VIEW: Plotter: DWG TO PDF.PC3 CTB File: FO.STB



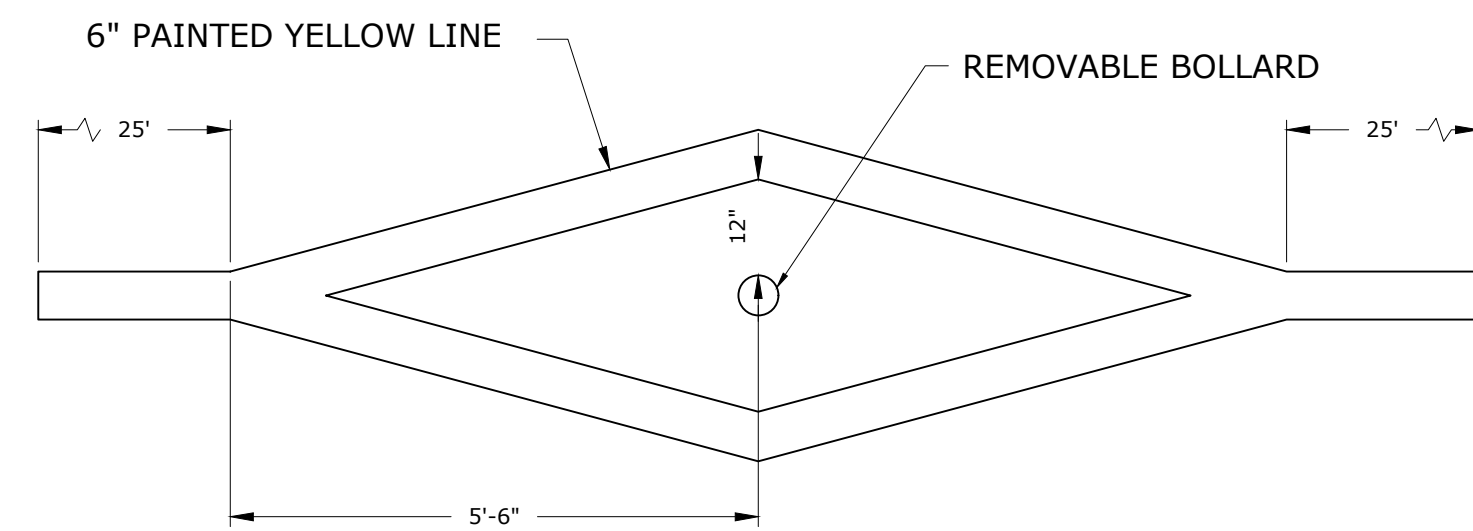
NOTE:

1. ALL CONCRETE, SLEEVE, REBAR, DRAIN PIPE, SONO-TUBE AND ANY OTHER REQUIRED MATERIAL FOR FOUNDATION IS PAID FOR UNDER PRICE OF BOLLARD.

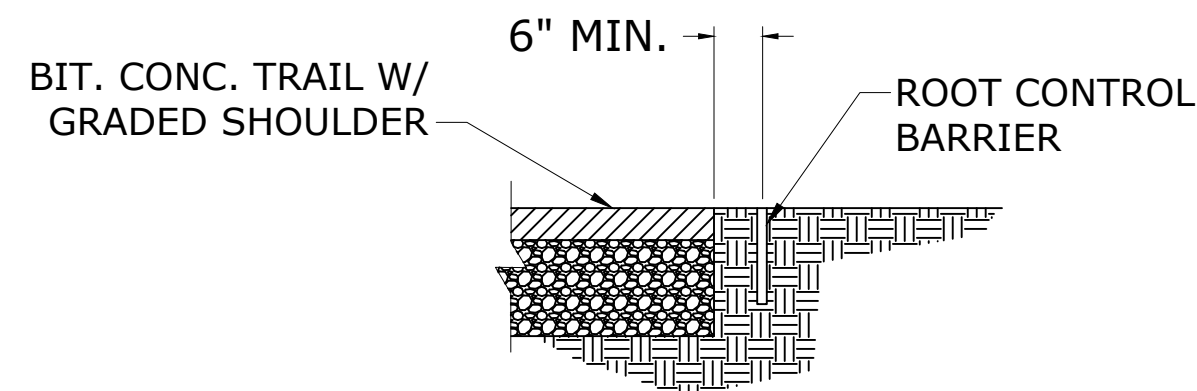
REMOVABLE STEEL BOLLARD FOUNDATION



STEEL BOLLARD - REMOVABLE



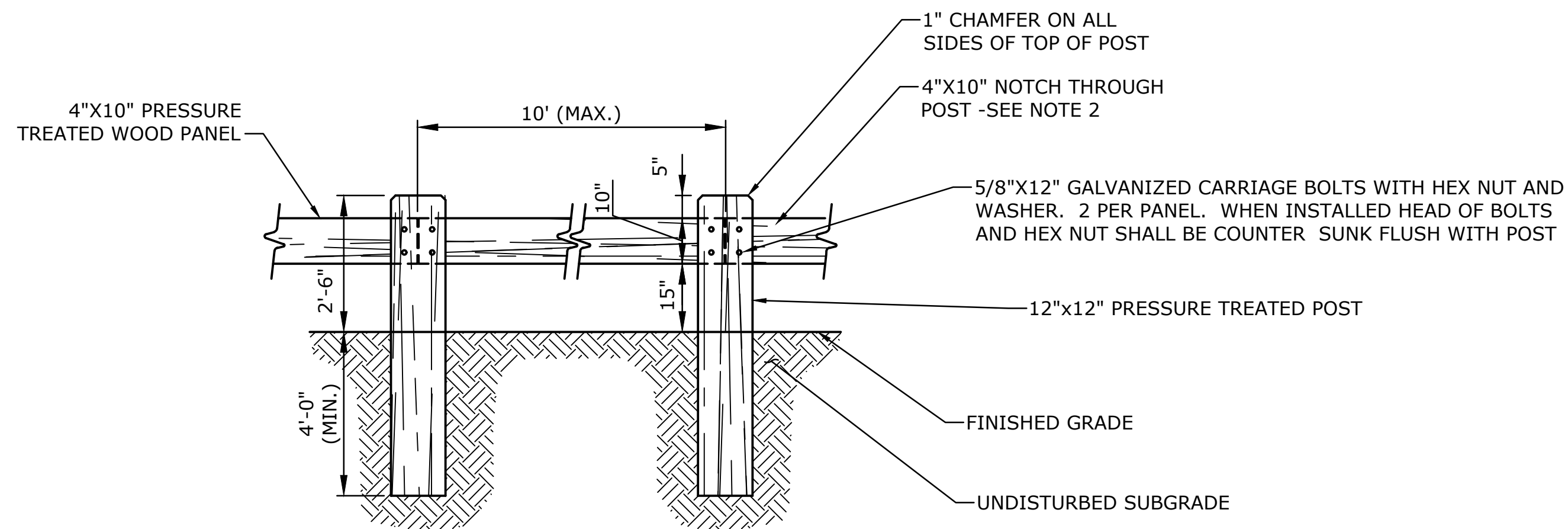
PAVEMENT MARKINGS AT BOLLARD



NOTE:

1. ROOT CONTROL SYSTEM (ROOT BARRIER) INSTALLED TO A DEPTH OF 6 INCHES AS FIELD DETERMINED BY THE CITY ENGINEER.
2. ROOT CONTROL SHALL BE INSTALLED AT A MINIMUM OF 6 INCHES AND A MAXIMUM OF 12 INCHES FROM EDGE OF TRAIL GRADED SHOULDER.

ROOT CONTROL BARRIER



NOTES:

1. LUMBER SHALL BE ROUGH SAWN (NON-PLANED) PRESSURE TREATED SOUTHERN YELLOW PINE.
2. POSTS SHALL HAVE 4"x10" NOTCH THROUGH SIDE OF POST TO RECEIVE GUIDERAIL PANELS. TOP OF OPENING SHALL BE 5" FROM TOP OF POST.
3. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR REVIEW AND APPROVAL. ENGINEER MAY REQUEST FURNISHED SAMPLE AT NO ADDITIONAL COST.

TIMBER BEAM RAIL

FINAL DESIGN

1.	No.	DATE	DESCRIPTION	DESIGNER	REVIEWER
				XX/XX	XX

SEAL

SEAL

--

SCALE:
HORZ.: N.T.S.
VERT.:
DATUM:
HORZ.:
VERT.:
0
GRAPHIC SCALE

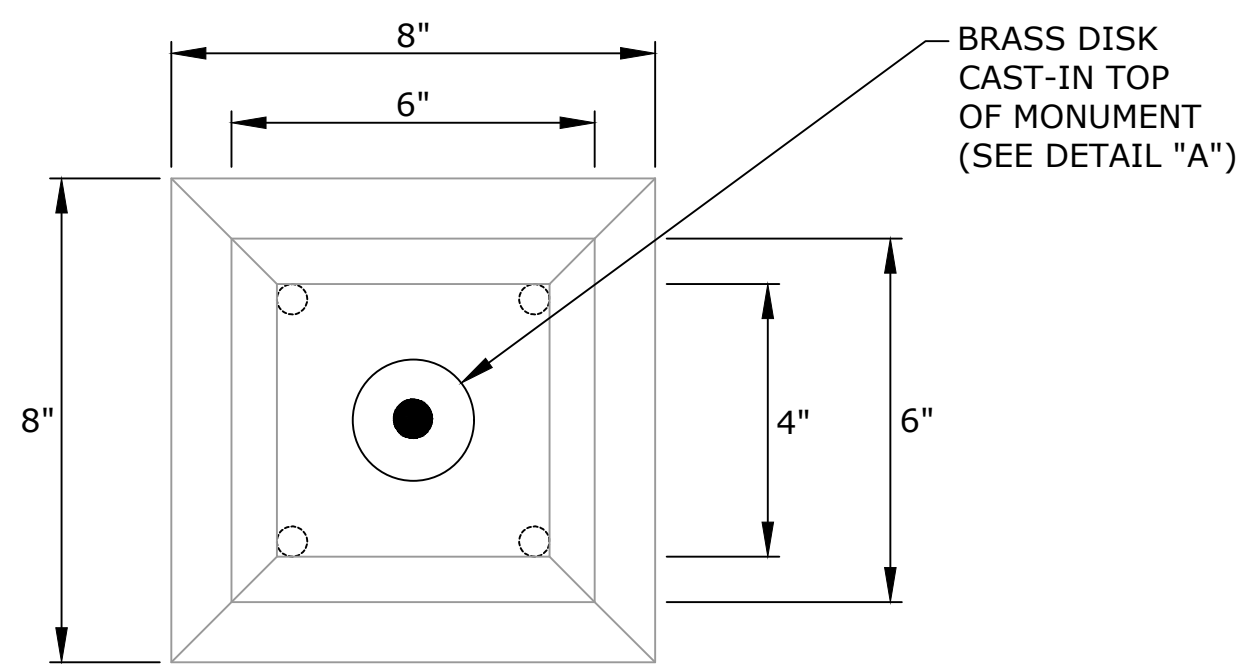


FUSS & O'NEILL
146 HARTFORD ROAD
MANCHESTER, CONNECTICUT 06040
860.646.2469
www.fando.com

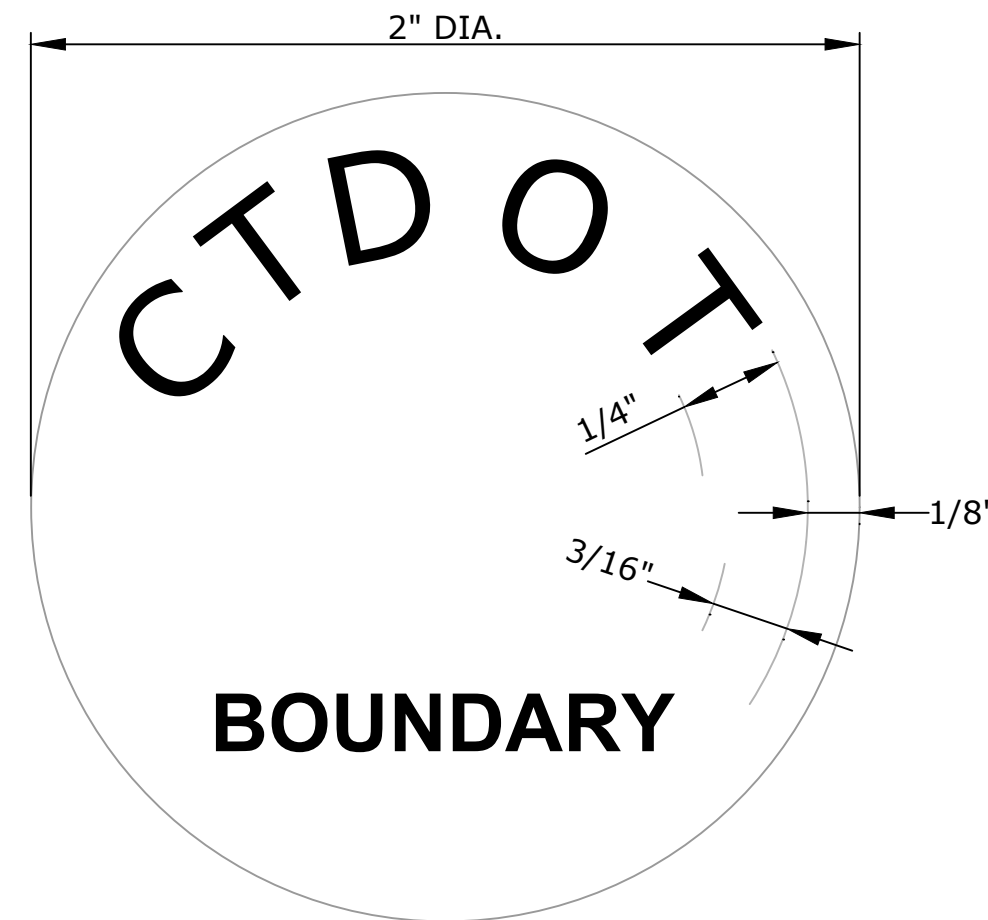
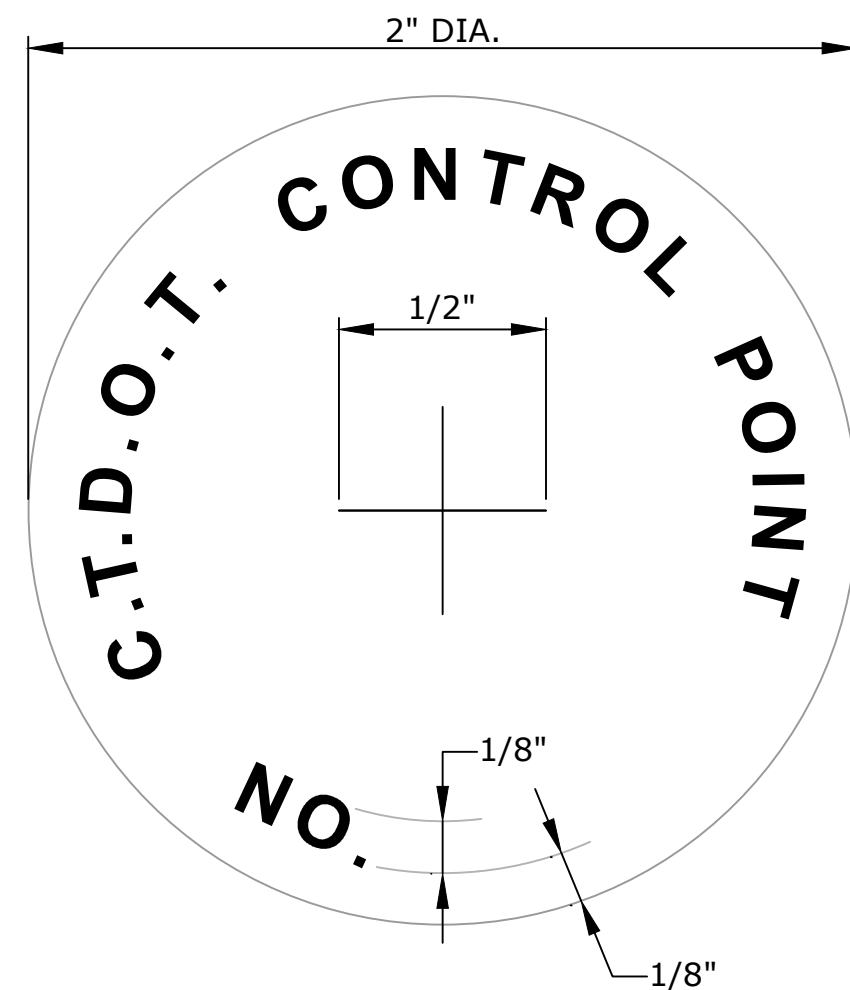
CITY OF NEW BRITAIN
MISCELLANEOUS DETAILS
CONSTRUCTION OF BEELINE TRAIL - PHASE 2
NEW BRITAIN
CONNECTICUT

PROJ. No.: 20190754.A10 DATE: MARCH 2023
MDS-04

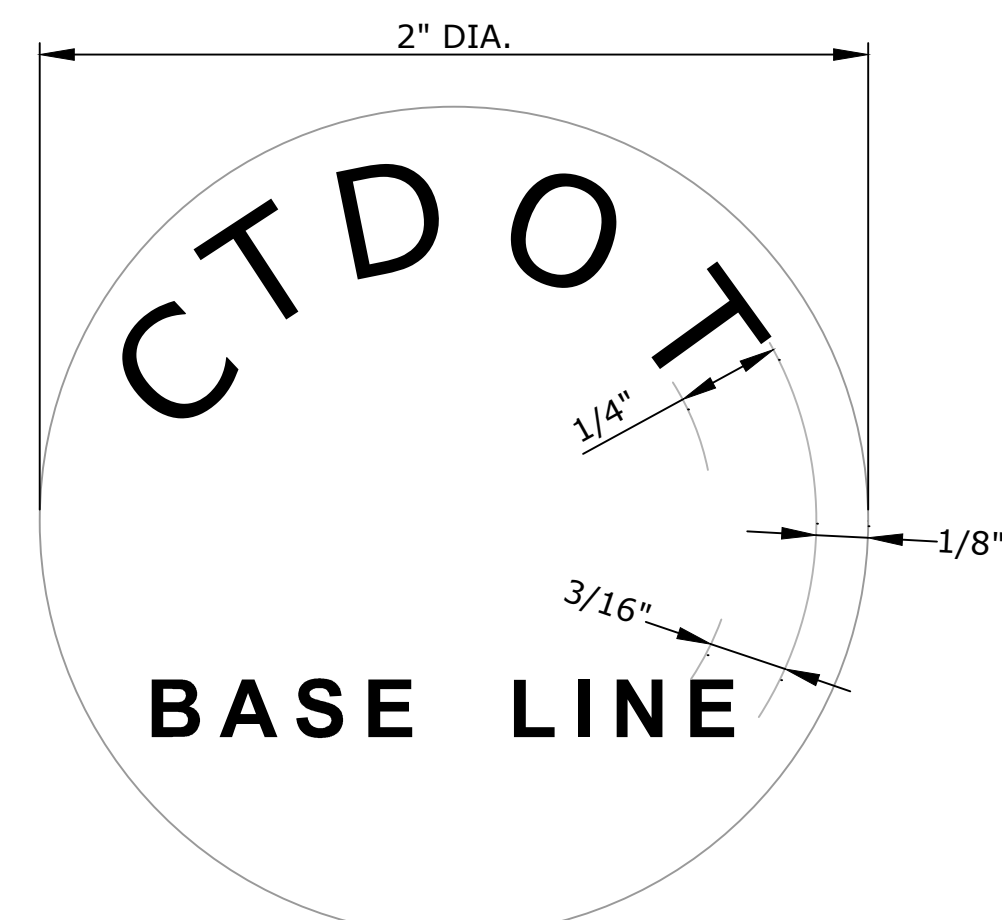
File Path: J:\DWG\GP20190754A10\Civil\Plan\PHASE 2\20190754A10_MDS02.dwg Layout: MDS-05 Plotted: Sat, April 01, 2023 - 10:30 AM User: sbeance
MS VIEW: LAYER STATE: Plotter: DWG TO PDF.PC3 CTB File: FO.STB



PLAN

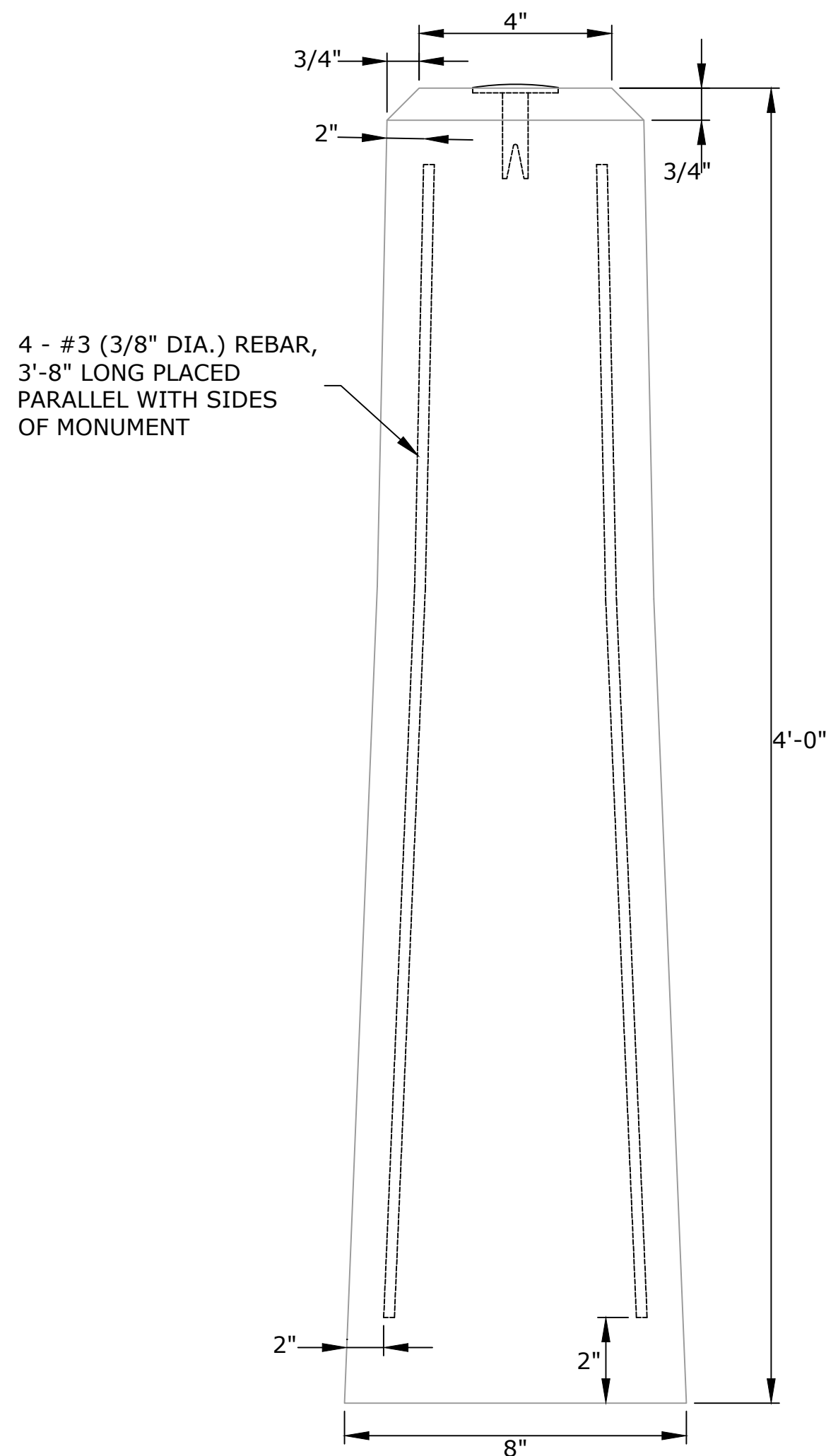


PLAN

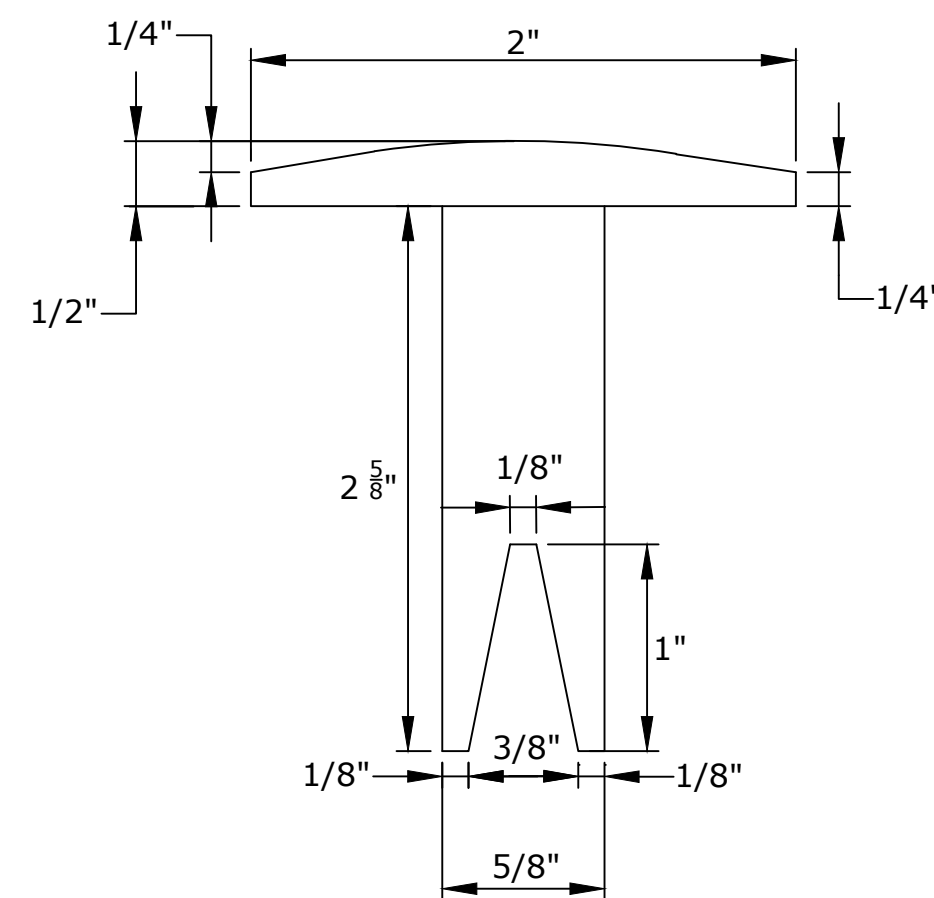


GENERAL NOTES:

1. REINFORCING STEEL DEFORMED BARS SHALL CONFORM TO LATEST ASTM SPECIFICATION A615, GRADE 60 MIN. COVER 2".
2. USE CLASS PCC 04460 CONCRETE. CONCRETE COMPRESSIVE STRENGTH 4,000 PSI AT 28 DAYS SELF COMPACTING CONCRETE MIX.
3. MANUFACTURER IS TO CONTACT DOT DISTRICT SURVEY - BOUNDARY RIGHT-OF-WAY SURVEY FOR SURVEY DISK.
4. CTDOT DISKS SHALL BE PLACED IN LEDGE AT 3" DEPTH WITH HYDRAULIC CEMENT OR ANCHORING CEMENT.
5. A #6 (3/4" DIA.) REINFORCING BAR WITH ALUMINUM CAP (PROVIDED BY DOT) 3' LONG MAY BE USED AS DIRECTED BY THE SURVEYOR.



ELEVATION



ELEVATION
DETAIL "A"

FINAL DESIGN

1.	No.	DATE	DESCRIPTION	DESIGNER	REVIEWER
				XX/XX	XX

SEAL

SEAL

SCALE:	HORZ.: N.T.S.
	VERT.:
DATUM:	HORZ.:
	VERT.:
	0
	GRAPHIC SCALE



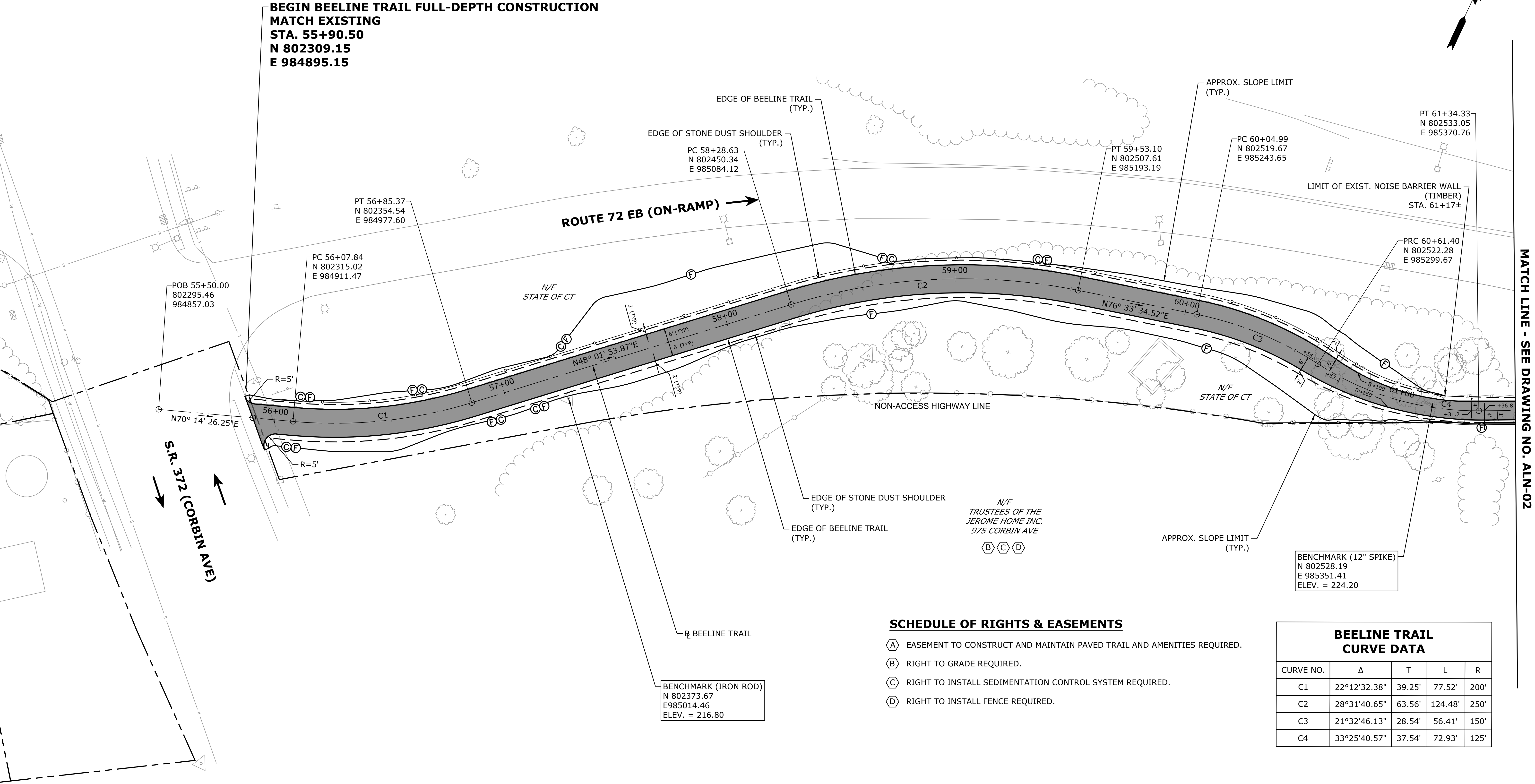
FUSS & O'NEILL
146 HARTFORD ROAD
MANCHESTER, CONNECTICUT 06040
860.646.2469
www.fando.com

CITY OF NEW BRITAIN	
MISCELLANEOUS DETAILS	
CONSTRUCTION OF BEELINE TRAIL - PHASE 2	
NEW BRITAIN	CONNECTICUT

PROJ. No.: 20190754.A10
DATE: MARCH 2023
MDS-05

NOTES:

1. LIMITS OF EXIST. NOISE BARRIER WALL (NBW) ARE SHOWN AS APPROXIMATE.
2. WHEN DISTANCE FROM PAVED EDGE OF TRAIL TO BACK OF EXIST. NBW IS LESS THAN 5', GRAVEL SHOULDER SHALL EXTEND TO BACK OF EXIST. NBW UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

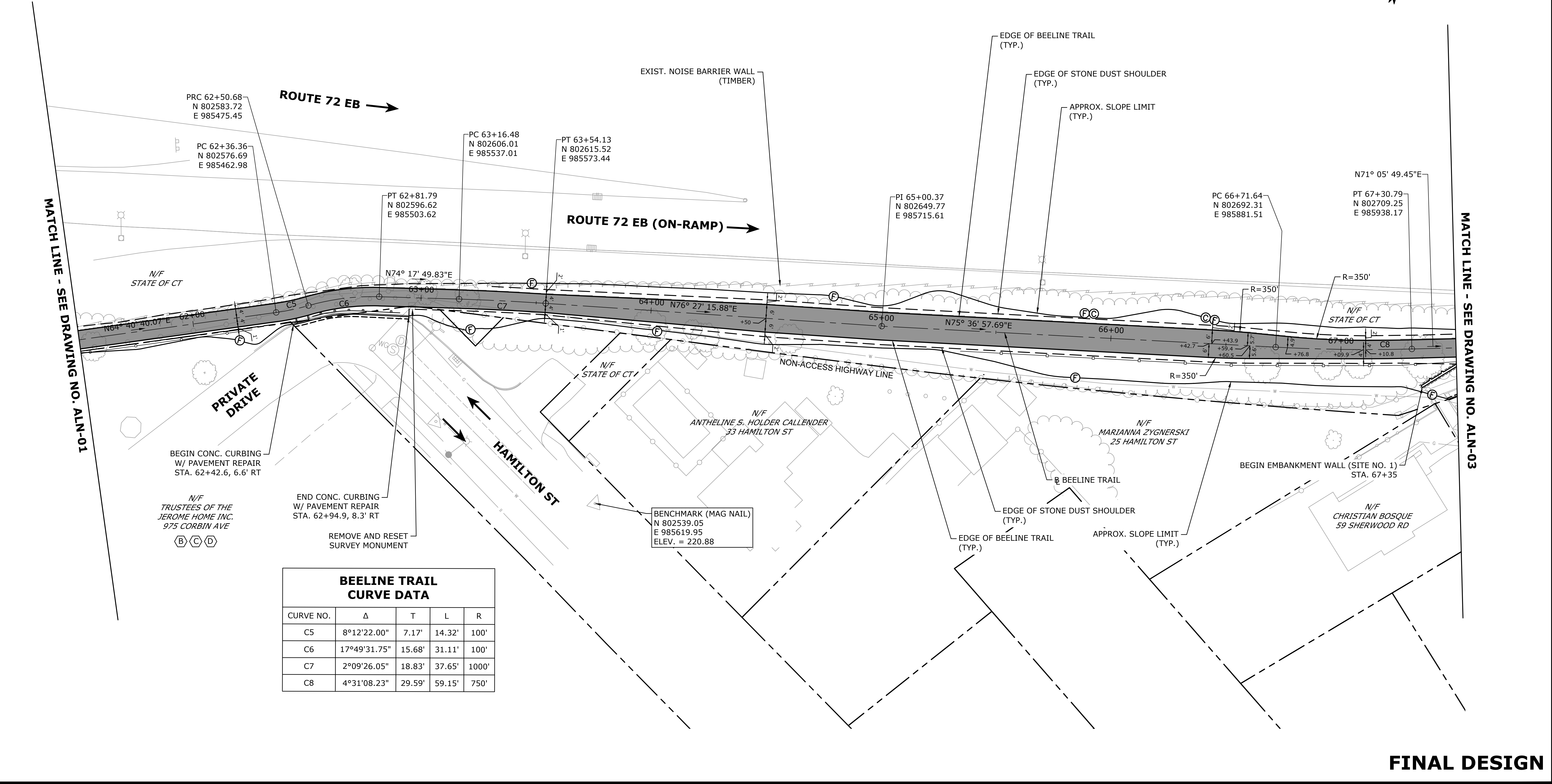


NOTES:

1. LIMITS OF EXIST. NOISE BARRIER WALL (NBW) ARE SHOWN AS APPROXIMATE.
2. WHEN DISTANCE FROM PAVED EDGE OF TRAIL TO BACK OF EXIST. NBW IS LESS THAN 5', GRAVEL SHOULDER SHALL EXTEND TO BACK OF EXIST. NBW UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

SCHEDULE OF RIGHTS & EASEMENTS

- (A) EASEMENT TO CONSTRUCT AND MAINTAIN PAVED TRAIL AND AMENITIES REQUIRED.
- (B) RIGHT TO GRADE REQUIRED.
- (C) RIGHT TO INSTALL SEDIMENTATION CONTROL SYSTEM REQUIRED.
- (D) RIGHT TO INSTALL FENCE REQUIRED.



FINAL DESIGN

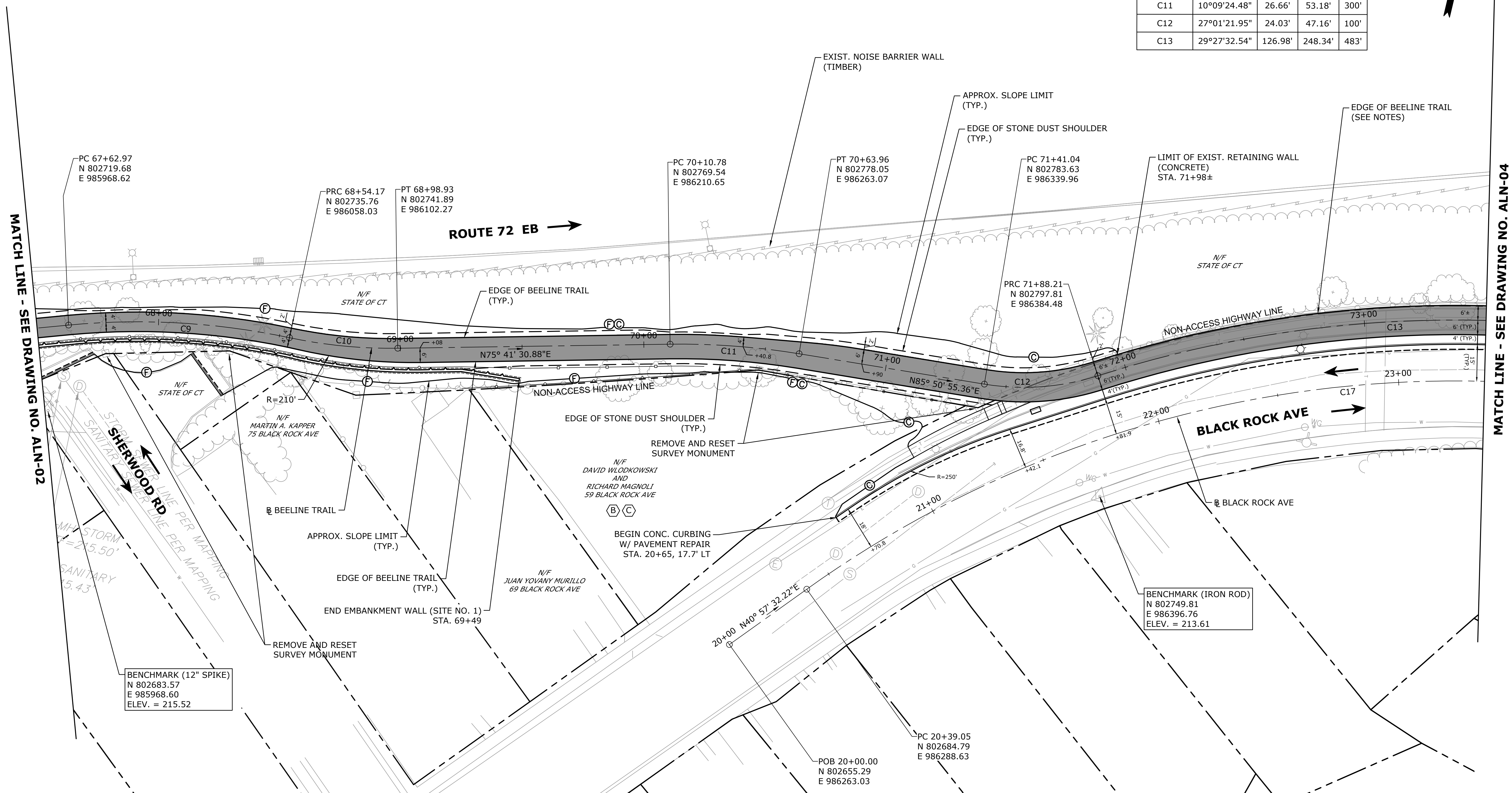
<div>MS VIEW: ALN-02</div>				<div>SEAL</div>		<div>SEAL</div>		<div>SCALE: HORZ.: 1" = 20' VERT.: DATUM: HORZ.: NAD83 VERT.: NAVD88 20 10 0 20 GRAPHIC SCALE</div>		<div>FUSS & O'NEILL 56 QUARRY ROAD TRUMBULL, CONNECTICUT 06611 203.374.3748 www.fando.com</div>		<div>CITY OF NEW BRITAIN ALIGNMENT & LAYOUT PLAN CONSTRUCTION OF BEELINE TRAIL - PHASE 2 NEW BRITAIN CONNECTICUT</div>		<div>PROJ. No.: 20190754.A10 DATE: MARCH 2023 ALN-02</div>	
No.	DATE	DESCRIPTION	DESIGNER	REVIEWER											

1. LIMITS OF EXIST. NOISE BARRIER WALL ARE SHOWN AS APPROXIMATE.
2. PAVED EDGE OF BEELINE TRAIL SHALL MATCH FACE OF EXIST. CONCRETE RETAINING WALL UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

- ☐ A EASEMENT TO CONSTRUCT AND MAINTAIN PAVED TRAIL AND AMENITIES REQUIRED.
- ☐ B RIGHT TO GRADE REQUIRED.
- ☐ C RIGHT TO INSTALL SEDIMENTATION CONTROL SYSTEM REQUIRED.
- ☐ D RIGHT TO INSTALL FENCE REQUIRED.

BLACK ROCK AVE CURVE DATA				
CURVE NO.	Δ	T	L	R
C17	64°18'43.06"	287.93'	514.08'	458'

BEELINE TRAIL CURVE DATA				
CURVE NO.	Δ	T	L	R
C9	17°25'01.38"	45.95'	91.20'	300'
C10	12°49'19.96"	22.47'	44.76'	200'
C11	10°09'24.48"	26.66'	53.18'	300'
C12	27°01'21.95"	24.03'	47.16'	100'
C13	29°27'32.54"	126.98'	248.34'	483'



FINAL DESIGN

No.	DATE	DESCRIPTION	DESIGNER	REVIEWER

SEAL

SEAL

SCALE:

HORZ.: 1" = 20'

DATUM:

HORZ.: NAD83
VERT.: NAVD88



FUSS & O'NEILL

56 QUARRY ROAD
TRUMBULL, CONNECTICUT 06611
203.374.3748
www.fando.com

CITY OF NEW BRITAIN

ALIGNMENT & LAYOUT PLAN

CONSTRUCTION OF BEELINE TRAIL - PHASE 2

NEW BRITAIN

CONNECTICUT

PROJ. No.: 20190754.A10
DATE: MARCH 2023

ALN-03

1. LIMITS OF EXIST. NOISE BARRIER WALL ARE SHOWN AS APPROXIMATE.
2. PAVED EDGE OF BEELINE TRAIL SHALL MATCH FACE OF EXIST. CONCRETE RETAINING WALL UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

☐ A) EASEMENT TO CONSTRUCT AND MAINTAIN PAVED TRAIL AND AMENITIES REQUIRED.

☐ B) RIGHT TO GRADE REQUIRED.

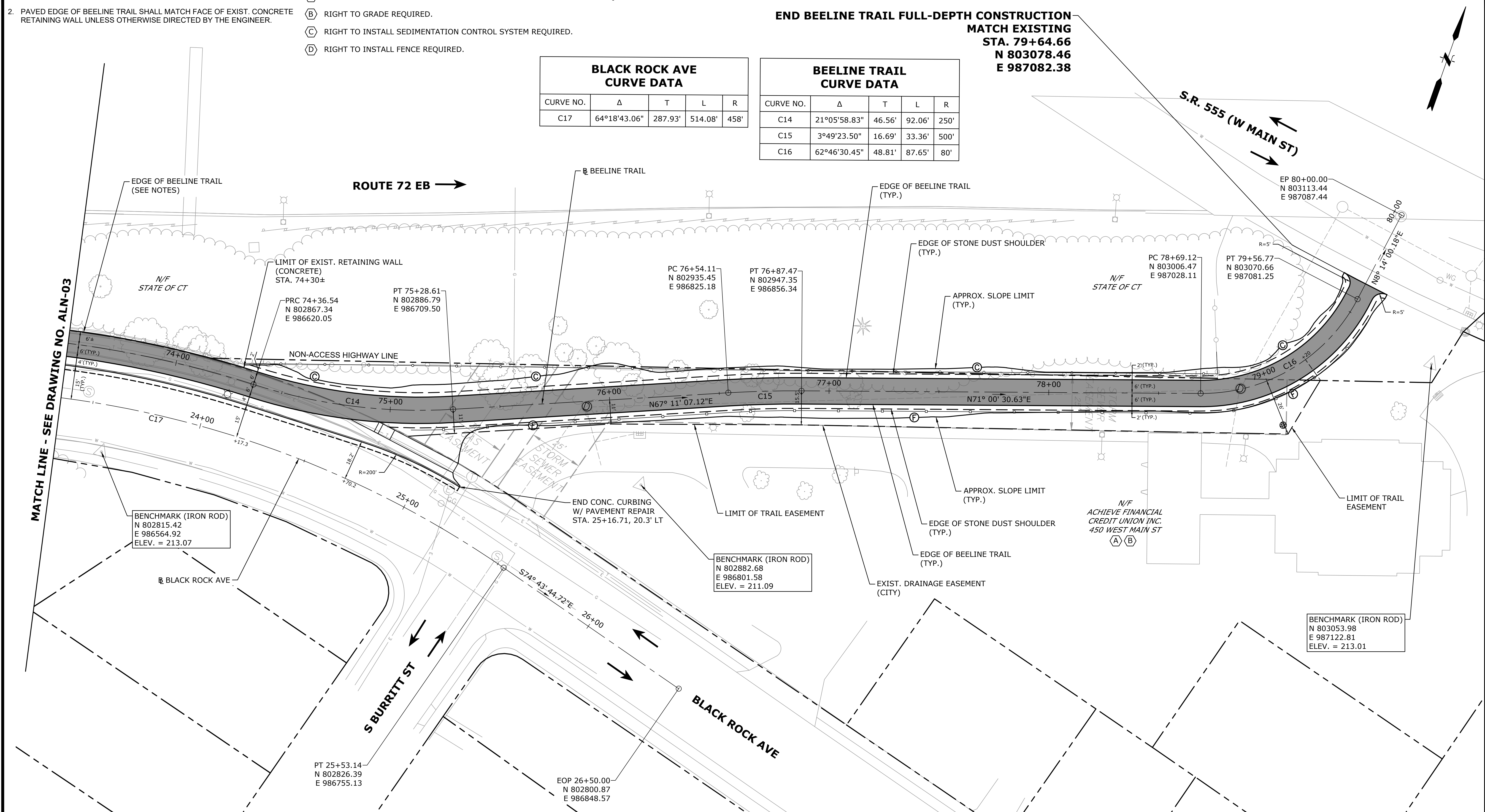
☐ C) RIGHT TO INSTALL SEDIMENTATION CONTROL SYSTEM REQUIRED.

☐ D) RIGHT TO INSTALL FENCE REQUIRED.

BLACK ROCK AVE CURVE DATA				
CURVE NO.	Δ	T	L	R
C17	64°18'43.06"	287.93'	514.08'	458'

BEELINE TRAIL CURVE DATA				
CURVE NO.	Δ	T	L	R
C14	21°05'58.83"	46.56'	92.06'	250'
C15	3°49'23.50"	16.69'	33.36'	500'
C16	62°46'30.45"	48.81'	87.65'	80'

**END BEELINE TRAIL FULL-DEPTH CONSTRUCTION
MATCH EXISTING
STA. 79+64.66
N 803078.46
E 987082.38**



FINAL DESIGN

No.	DATE	DESCRIPTION	DESIGNER	REVIEWER

SEAL

SEAL

SCALE:

HORZ.: 1" = 20'

DATUM:

HORIZ.: NAD83

VERT.: NAVD88

VERT.: NAVD83
20 10 0

Gender	Number of People
Male	10
Female	15



GRAPHIC SCALE



FUSS & O'NEILL

56 QUARRY ROAD
TRUMBULL, CONNECTICUT 06611
203.374.3748
www.fando.com

CITY OF NEW BRITAIN

ALIGNMENT & LAYOUT PLAN

CONSTRUCTION OF BEELINE TRAIL - PHASE 2

NEW BRITAIN

CONNECTICUT

PROJ. No.: 20190754.A10

DATE: MARCH 2023

ALN-04

1. CONTRACTOR SHALL FIELD VERIFY FINAL LIMITS OF CHAIN LINK FENCE REMOVAL AND INSTALLATION WITH THE ENGINEER PRIOR TO CONSTRUCTION.
2. WHEN DISTANCE FROM PAVED EDGE OF TRAIL IS LESS THAN 5', GRAVEL SHOULDER SHALL EXTEND TO BACK OF EXIST. NOISE BARRIER WALL (NBW) UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
3. PRIOR TO CONSTRUCTION, CONTRACTOR SHALL MARK FOR REMOVAL ALL TREES LOCATED WITHIN THE TRAIL CORRIDOR CLEARING LIMITS AND REVIEW EACH LOCATION WITH THE ENGINEER FOR APPROVAL PRIOR TO PERFORMING TREE REMOVALS.
4. SEE DWG. NO. ALN-01 FOR ALIGNMENT AND TRAIL LAYOUT INFORMATION.
5. SEE DWG. NO. SEC-01 FOR GRADING, DRAINAGE, AND SEDIMENTATION & EROSION CONTROL INFORMATION.



No.	DATE	DESCRIPTION	DESIGNER	REVIEWER

SEAL

GRAPHIC SCALE



CONNECTICUT

PLN-01

1. CONTRACTOR SHALL FIELD VERIFY FINAL LIMITS OF CHAIN LINK FENCE REMOVAL AND INSTALLATION WITH THE ENGINEER PRIOR TO CONSTRUCTION.
2. WHEN DISTANCE FROM PAVED EDGE OF TRAIL IS LESS THAN 5', GRAVEL SHOULDER SHALL EXTEND TO BACK OF EXIST. NOISE BARRIER WALL (NBW) UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
3. PRIOR TO CONSTRUCTION, CONTRACTOR SHALL MARK FOR REMOVAL ALL TREES LOCATED WITHIN THE TRAIL CORRIDOR CLEARING LIMITS AND REVIEW EACH LOCATION WITH THE ENGINEER FOR APPROVAL PRIOR TO PERFORMING TREE REMOVALS.
4. SEE DWG. NO. ALN-01 FOR ALIGNMENT AND TRAIL LAYOUT INFORMATION.
5. SEE DWG. NO. SEC-01 FOR GRADING, DRAINAGE, AND SEDIMENTATION & EROSION CONTROL INFORMATION.
6. CONCRETE CURBING INSTALLED AT END OF HAMILTON STREET SHALL TRANSITION FROM 6" CURB REVEAL TO FLUSH TO PROVIDE OPENING FOR CONCRETE SIDEWALK RAMP.



--

CITY OF NEW BRITAIN

TRAIL CONSTRUCTION PLAN

CONSTRUCTION OF BEELINE TRAIL - PHASE 2

NEW BRITAIN CONNECTICUT

PROJ. No.: 20190754.A10
DATE: MARCH 2023

PLN-02

1. CONTRACTOR SHALL FIELD VERIFY FINAL LIMITS OF CHAIN LINK FENCE REMOVAL AND INSTALLATION WITH THE ENGINEER PRIOR TO CONSTRUCTION.
2. LEFT EDGE OF PAVED TRAIL TO MATCH FACE OF EXIST. CONC. RETAINING WALL. TACK COAT SHALL BE APPLIED TO FACE OF WALL PRIOR TO PAVING..
3. PRIOR TO CONSTRUCTION, CONTRACTOR SHALL MARK FOR REMOVAL ALL TREES LOCATED WITHIN THE TRAIL CORRIDOR CLEARING LIMITS AND REVIEW EACH LOCATION WITH THE ENGINEER FOR APPROVAL PRIOR TO PERFORMING TREE REMOVALS.
4. SEE DWG. NO. ALN-01 FOR ALIGNMENT AND TRAIL LAYOUT INFORMATION.
5. SEE DWG. NO. SEC-01 FOR GRADING, DRAINAGE, AND SEDIMENTATION & EROSION CONTROL INFORMATION.



FINAL DESIGN

--	--



FUSS & O'NEILL

146 HARTFORD ROAD
MANCHESTER, CONNECTICUT 06040
860.646.2469
www.fando.com

PROJ. No.: 20190754.A10
DATE: MARCH 2023

PLN-03

1. CONTRACTOR SHALL FIELD VERIFY FINAL LIMITS OF CHAIN LINK FENCE REMOVAL AND INSTALLATION WITH THE ENGINEER PRIOR TO CONSTRUCTION.
2. LEFT EDGE OF PAVED TRAIL TO MATCH FACE OF EXIST. CONC. RETAINING WALL. TACK COAT SHALL BE APPLIED TO FACE OF WALL PRIOR TO PAVING.
3. DRIVEWAY ACCESS TO ACHIEVE FINANCIAL SHALL BE MAINTAINED AT ALL TIMES.
4. PRIOR TO CONSTRUCTION, CONTRACTOR SHALL MARK FOR REMOVAL ALL TREES LOCATED WITHIN THE TRAIL CORRIDOR CLEARING LIMITS AND REVIEW EACH LOCATION WITH THE ENGINEER FOR APPROVAL PRIOR TO PERFORMING TREE REMOVALS.
5. SEE DWG. NO. ALN-01 FOR ALIGNMENT AND TRAIL LAYOUT INFORMATION.
6. SEE DWG. NO. SEC-01 FOR GRADING, DRAINAGE, AND SEDIMENTATION & EROSION CONTROL INFORMATION.



No.	DATE	DESCRIPTION	DESIGNER	REVIEWER

SEAL

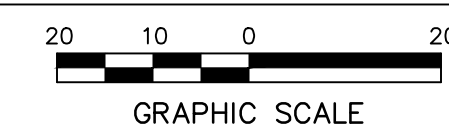
SEAL

SCALE:

HORZ.: 1" = 20'
VERT.:

DATUM:

HORZ.: NAD 83
VERT.: NAVD 83



FUSS & O'NEILL

146 HARTFORD ROAD
MANCHESTER, CONNECTICUT 06040
860.646.2469
www.fando.com

CITY OF NEW BRITAIN

TRAIL CONSTRUCTION PLAN

CONSTRUCTION OF BEELINE TRAIL - PHASE 2

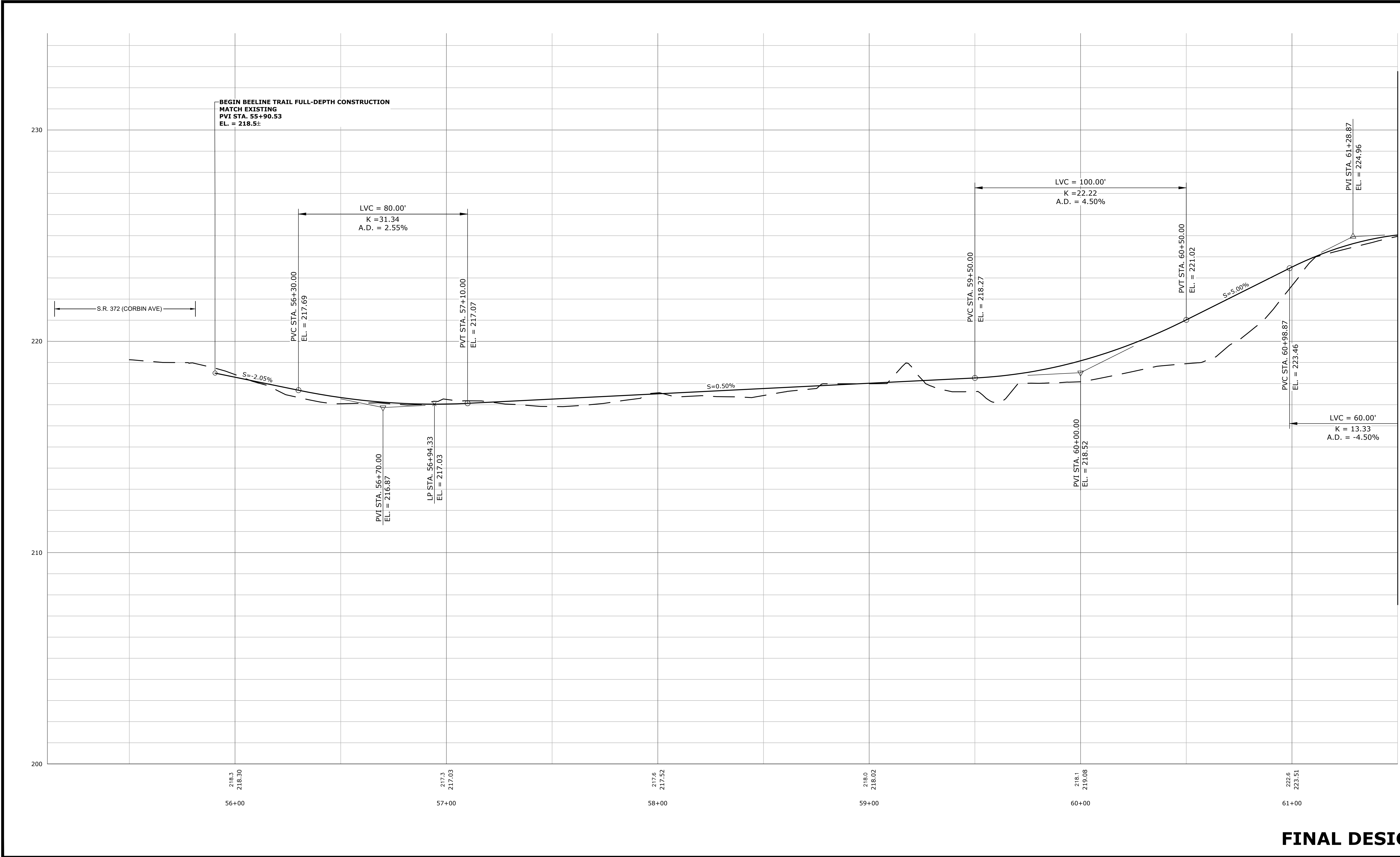
NEW BRITAIN

CONNECTICUT

PROJ. No.: 20190754.A10
DATE: MARCH 2023

PLN-04

File: J:\DWG\20190754\A10\Civil\Plan\PHASE 2\20190754A10_PRO02.dwg Layout: PRO-01 Plotted: 2023-04-03 6:39 AM Saved: 2022-12-16 5:14 PM User: SBearce
PC3: DWG TO PDF PC3 STB\CTB: FO STB
MS VIEW: LAYER STATE:



FINAL DESIGN

No.	DATE	DESCRIPTION	DESIGNER	REVIEWER

SEAL

SEAL

SCALE:
HORZ.: 1" = 20'
VERT.: 1" = 2'

DATUM:
HORZ.: NAD83
VERT.: NAVD88

20 10 0 20
GRAPHIC SCALE



FUSS & O'NEILL
56 QUARRY ROAD
TRUMBULL, CONNECTICUT 06611
203.374.3748
www.fando.com

CITY OF NEW BRITAIN

TRAIL PROFILE

CONSTRUCTION OF BEELINE TRAIL - PHASE 2

NEW BRITAIN CONNECTICUT

PROJ. No.: 20190754.A10
DATE: MARCH 2023

PRO-01



--

CITY OF NEW BRITAIN

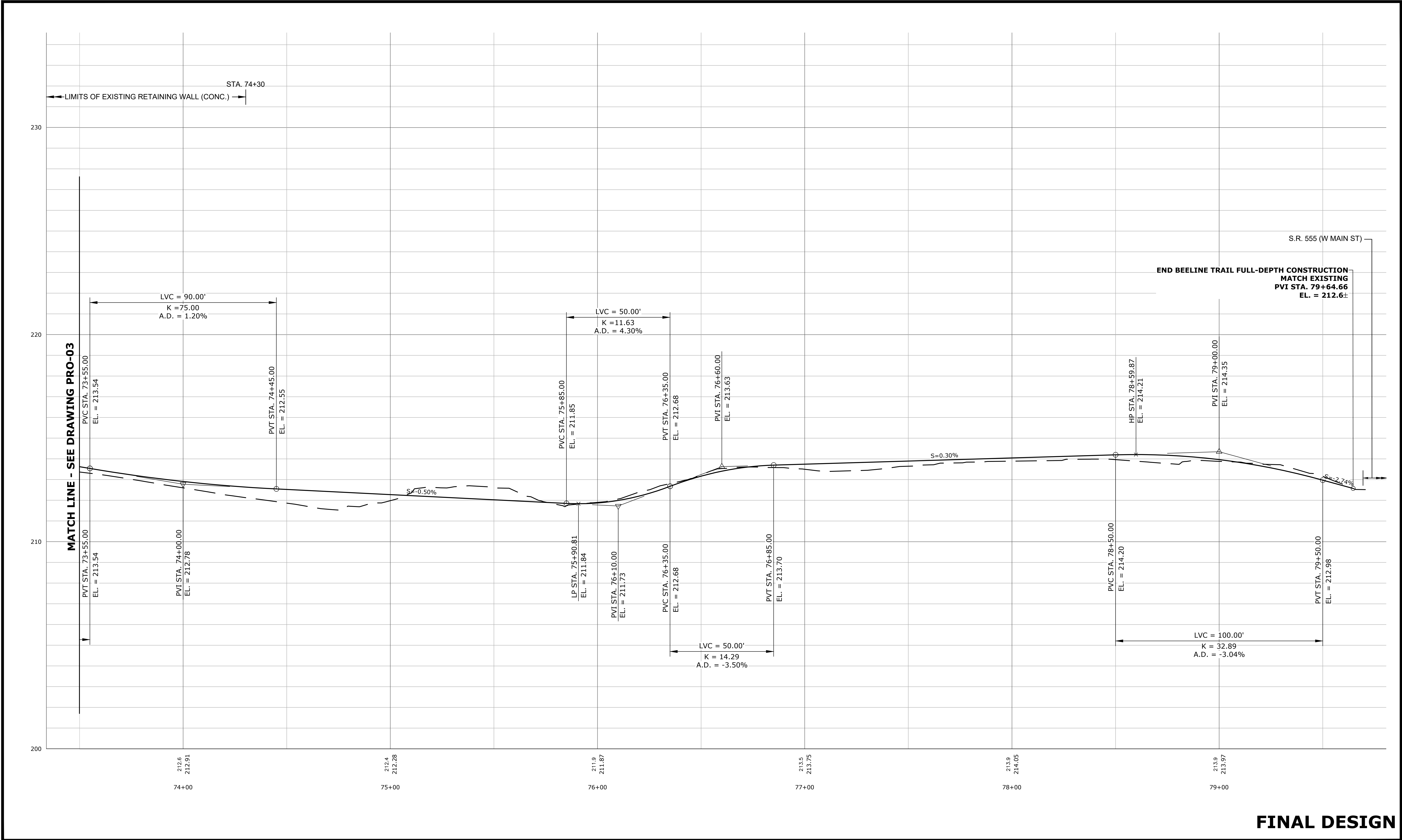
TRAIL PROFILE

CONSTRUCTION OF BEELINE TRAIL - PHASE 2

NEW BRITAIN CONNECTICUT

File: J:\DWG\GP20190754A\10\Civil\Plan\PHASE 2\20190754A\10_PROCD.dwg Layout: PRO-02 Plotted: 2023-04-03 6:39 AM Saved: 2022-12-15 5:14 PM User: SBeare

File: J:\DWG\20190754\10\Civil\Plan\PHASE 2\20190754A10_PRO02.dwg Layout: PRO-04 Plotted: 2023-04-03 6:40 AM Saved: 2022-12-16 5:14 PM User: SBearce
PC3: DWG TO PDF PC3 STB\CTB: FO STB
MS VIEW: LAYER STATE:



FINAL DESIGN

No.	DATE	DESCRIPTION	DESIGNER	REVIEWER

SEAL

SEAL

SCALE:
HORZ.: 1" = 20'
VERT.: 1" = 2'

DATUM:
HORZ.: NAD83
VERT.: NAVD88

20 10 0 20
GRAPHIC SCALE

**FUSS & O'NEILL**

56 QUARRY ROAD
TRUMBULL, CONNECTICUT 06611
203.374.3748
www.fando.com

CITY OF NEW BRITAIN

TRAIL PROFILE

CONSTRUCTION OF BEELINE TRAIL - PHASE 2

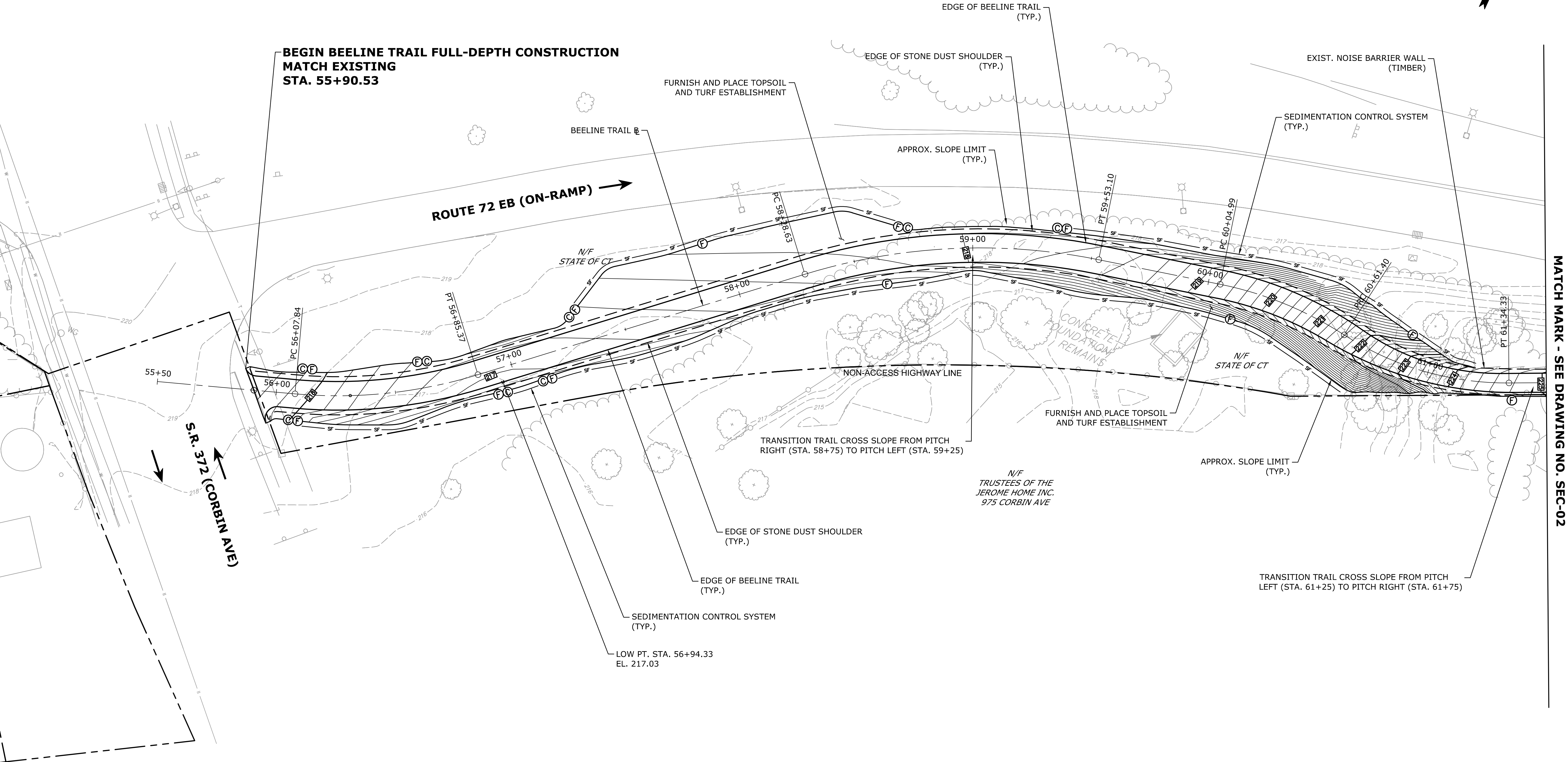
NEW BRITAINCONNECTICUT

PROJ. No.: 20190754.A10
DATE: MARCH 2023

PRO-04

NOTES:

- 1. ALL CATCH BASINS WITHIN PROJECT LIMITS SHALL BE PROTECTED WITH SEDIMENT CONTROL SYSTEM AT CATCH BASIN DURING CONSTRUCTION.
- 2. EROSION CONTROL MATTING TYPE D SHALL BE PLACED ON ALL SLOPES STEEPER THAN 3:1.



MATCH MARK - SEE DRAWING NO. SEC-02

FINAL DESIGN

No.	DATE	DESCRIPTION	DESIGNER	REVIEWER

SEAL

SEAL

SCALE:
HORZ.: 1" = 20'
VERT.:
DATUM:
HORZ.: NAD83
VERT.: NAVD88
20 10 0 20
GRAPHIC SCALE

f
FUSS & O'NEILL
146 HARTFORD ROAD
MANCHESTER, CONNECTICUT 06040
860.646.2469
www.fando.com

CITY OF NEW BRITAIN
GRADING, DRAINAGE AND SEDIMENTATION &
EROSION CONTROL PLAN
CONSTRUCTION OF BEELINE TRAIL - PHASE 2
NEW BRITAIN CONNECTICUT

PROJ. No.: 20190754.A10
DATE: MARCH 2023
SEC-01


1. ALL CATCH BASINS WITHIN PROJECT LIMITS SHALL BE PROTECTED WITH SEDIMENT CONTROL SYSTEM AT CATCH BASIN DURING CONSTRUCTION.
2. EROSION CONTROL MATTING TYPE D SHALL BE PLACED ON ALL SLOPES STEEPER THAN 3:1.



SEAL

SEAL

--	--

SCALE:	
	HORZ.: 1" = 20'
	VERT.:
DATUM:	
	HORZ.: NAD83
	VERT.: NAVD88
	
GRAPHIC SCALE	



CITY OF NEW BRITAIN
GRADING, DRAINAGE AND SEDIMENTATION &
EROSION CONTROL PLAN
CONSTRUCTION OF BEELINE TRAIL - PHASE 2
NEW BRITAIN CONNECTICUT

PROJ. No.: 20190754.A10
DATE: MARCH 2023
SEC-02

1. ALL CATCH BASINS WITHIN PROJECT LIMITS SHALL BE PROTECTED WITH SEDIMENT CONTROL SYSTEM AT CATCH BASIN DURING CONSTRUCTION.
2. EROSION CONTROL MATTING TYPE D SHALL BE PLACED ON ALL SLOPES STEEPER THAN 3:1.




CITY OF NEW BRITAIN
GRADING, DRAINAGE AND SEDIMENTATION &
EROSION CONTROL PLAN
CONSTRUCTION OF BEELINE TRAIL - PHASE 2
NEW BRITAIN CONNECTICUT

No.	DATE	DESCRIPTION	DESIGNER	REVIEWER

SEAL

SEAL

--	--

SCALE:	HORZ.: 1" = 20'
	VERT.:
DATUM:	HORZ.: NAD83
	VERT.: NAVD88
	
GRAPHIC SCALE	

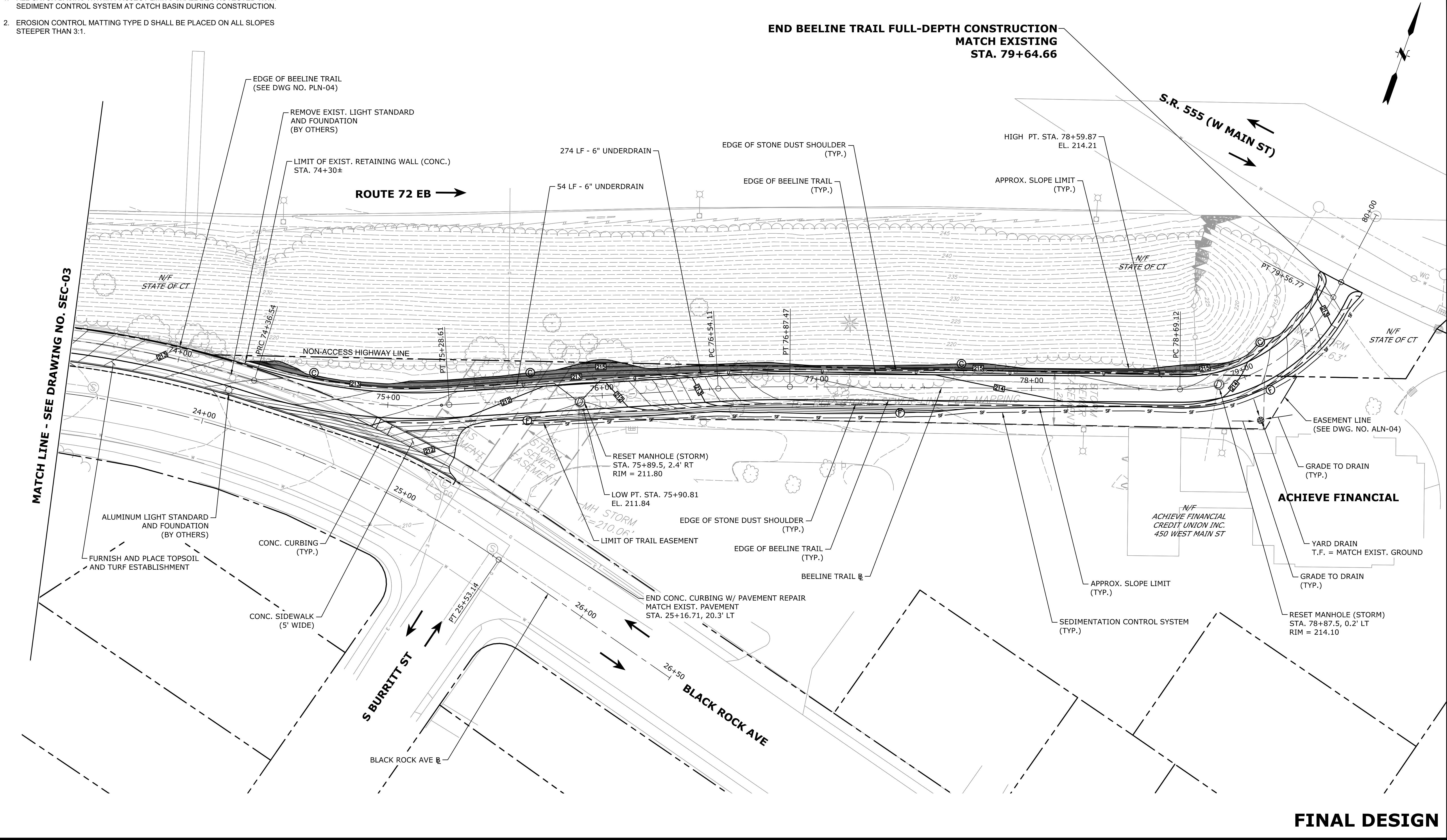


PROJ. No.: 20190754.A10
DATE: MARCH 2023

SEC-03

NOTES:

1. ALL CATCH BASINS WITHIN PROJECT LIMITS SHALL BE PROTECTED WITH SEDIMENT CONTROL SYSTEM AT CATCH BASIN DURING CONSTRUCTION.
2. EROSION CONTROL MATTING TYPE D SHALL BE PLACED ON ALL SLOPES STEEPER THAN 3:1.



FINAL DESIGN

No.	DATE	DESCRIPTION	DESIGNER	REVIEWER

SEAL

SEAL

SCALE:

HORZ.: 1" = 20'

VERT.: 1" = 10'

DATUM:

HORZ.: NAD83

VERT.: NAVD88

20 10 0 20

GRAPHIC SCALE

f

FUSS & O'NEILL

146 HARTFORD ROAD
MANCHESTER, CONNECTICUT 06040
860.646.2469
www.fando.com

CITY OF NEW BRITAIN

GRADING, DRAINAGE AND SEDIMENTATION & EROSION CONTROL PLAN

CONSTRUCTION OF BEELINE TRAIL - PHASE 2

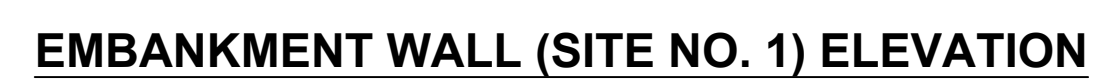
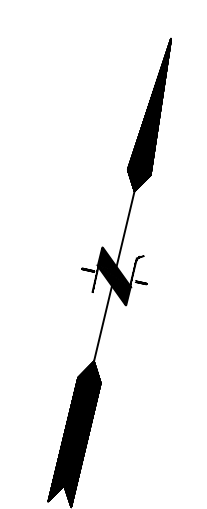
NEW BRITAIN CONNECTICUT

PROJ. No.: 20190754.A10

DATE: MARCH 2023

SEC-04

1. CONTRACTOR SHALL FIELD VERIFY FINAL LIMITS OF EMBANKMENT WALL WITH THE ENGINEER PRIOR TO CONSTRUCTION
2. SEE DWG. NO. ALN-02 AND ALN-03 FOR ALIGNMENT AND TRAIL LAYOUT INFORMATION.
3. SEE DWG. NO. PLN-02 AND PLAN-03 FOR TRAIL CONSTRUCTION INFORMATION.
4. SEE DWG. NO. SEC-01 FOR GRADING, DRAINAGE, AND SEDIMENTATION & EROSION CONTROL INFORMATION.



SCALE: 1" = 10'-0" (H)
1" = 5'-0" (V)

FINAL DESIGN

No.	DATE	DESCRIPTION	DESIGNER	REVIEWER

SEAL

SEAL

SCALE:

HORZ.: 1" = 20'

HORZ.: NAD 83

VERT.: NAVD 8

20	10	0
----	----	---



FUSS & O'NEILL

146 HARTFORD ROAD
MANCHESTER, CONNECTICUT 06040
860.646.2469
www.fando.com

CITY OF NEW BRITAIN

RETAINING WALL PLAN & ELEVATION

CONSTRUCTION OF BEELINE TRAIL - PHASE 2

NEW BRITAIN

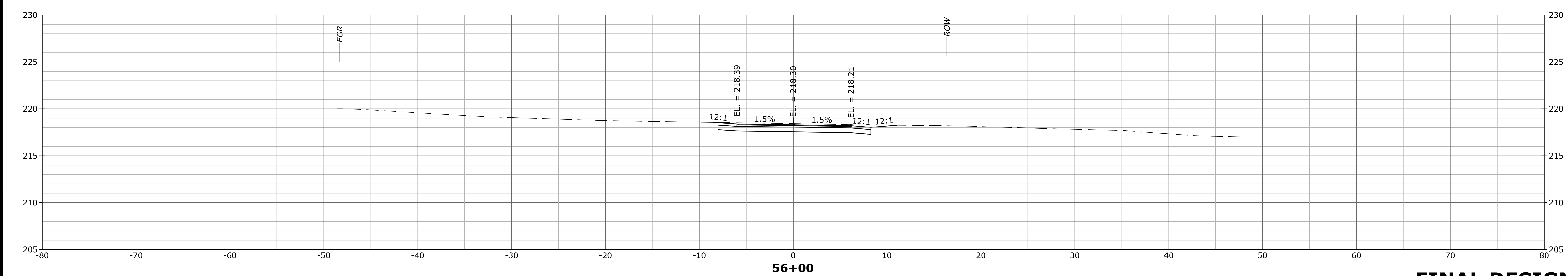
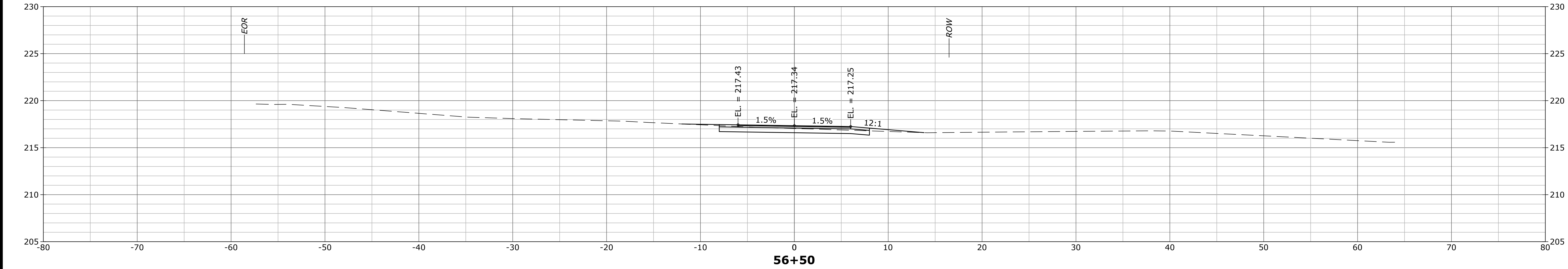
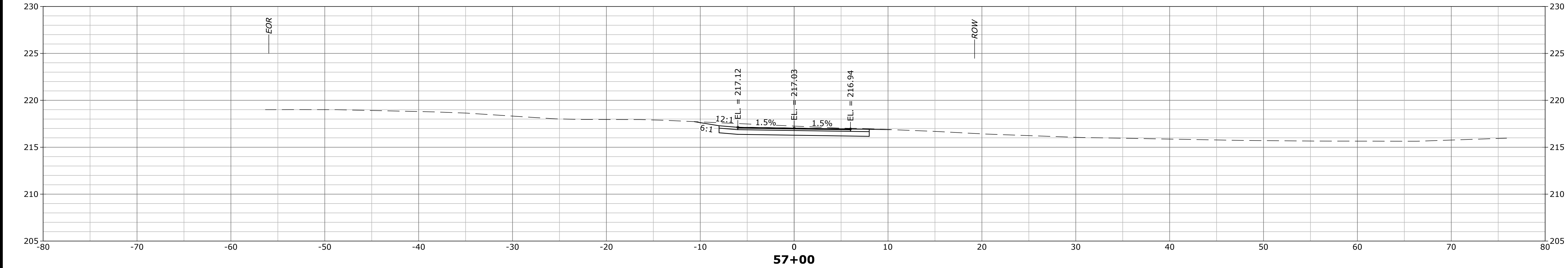
CONNECTICUT

PROJ. No.: 20190754.A10
DATE: MARCH 2023

S-1

File: J:\DWG\IP2019\0754\A10\Civil\Plan\PHASE 2\20190754A10_XSC02.dwg Layout: XSC-01 Plotted: 2023-04-03 8:38 AM Saved: 2023-04-03 8:37 AM User: SBeare
PC3: AUTOCAD PDF (GENERAL DOCUMENTATION)\PC3_STB\CTB: FO STB
LAYER STATE: XSC-01-04

MS VIEW:



FINAL DESIGN

No.	DATE	DESCRIPTION	DESIGNER	REVIEWER

SEAL

SEAL

SCALE:
HORZ.: 1" = 5'
VERT.:
DATUM:
HORZ.: NAD83
VERT.: NAVD88

52.505

GRAPHIC SCALE



FUSS & O'NEILL
146 HARTFORD ROAD
MANCHESTER, CONNECTICUT 06040
860.646.2469
www.fando.com

CITY OF NEW BRITAIN

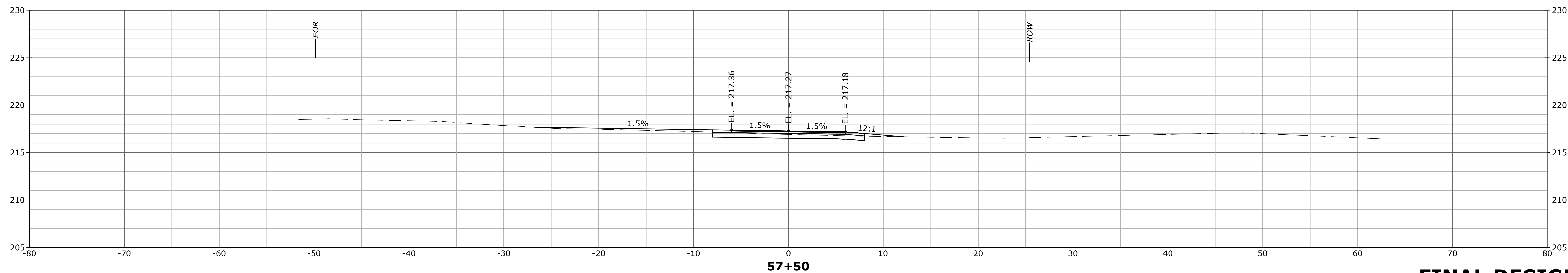
TRAIL CROSS SECTIONS

CONSTRUCTION OF BEELINE TRAIL - PHASE 2

NEW BRITAINCONNECTICUT

PROJ. No.: 20190754.A10
DATE: MARCH 2023

XSC-01



PROJ. No.: 20190754.A10
DATE: MARCH 2023
XSC-02

File: J:\DWG\20190754\A10\Civil\Plan\PHASE 2\20190754\A10_XSC02.dwg Layout: XSC-04 Plotted: 2023-04-03 8:38 AM Saved: 2023-04-03 8:37 AM User: SBeance
PC3: AUTOCAD PDF (GENERAL DOCUMENTATION) PC3: STB/CTB: FO STB
LAYER STATE: XSC-01-04

MS VIEW:

No.	DATE	DESCRIPTION	DESIGNER	REVIEWER

SEAL

SEAL

SCALE:

HORZ.: 1" = 5'

VERT.:

DATUM:

HORZ.: NAD83

VERT.: NAVD88

52.505

GRAPHIC SCALE

f

FUSS&O'NEILL

146 HARTFORD ROAD
MANCHESTER, CONNECTICUT 06040
860.646.2469
www.fando.com

CITY OF NEW BRITAIN

TRAIL CROSS SECTIONS

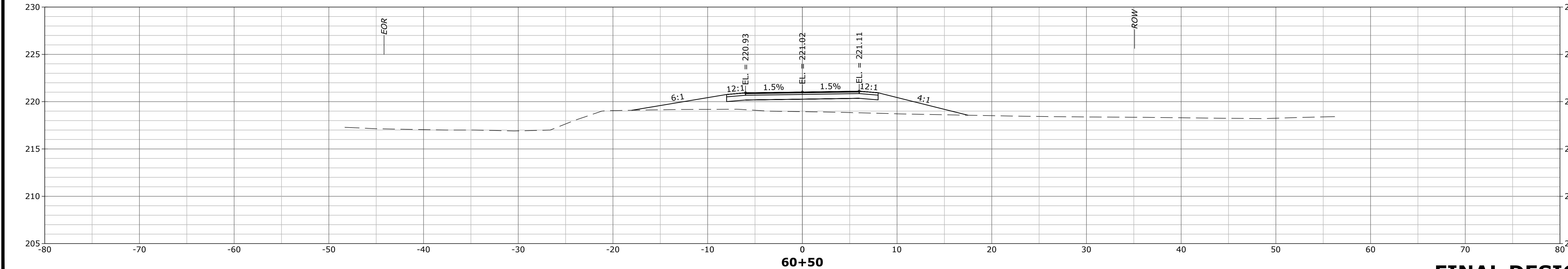
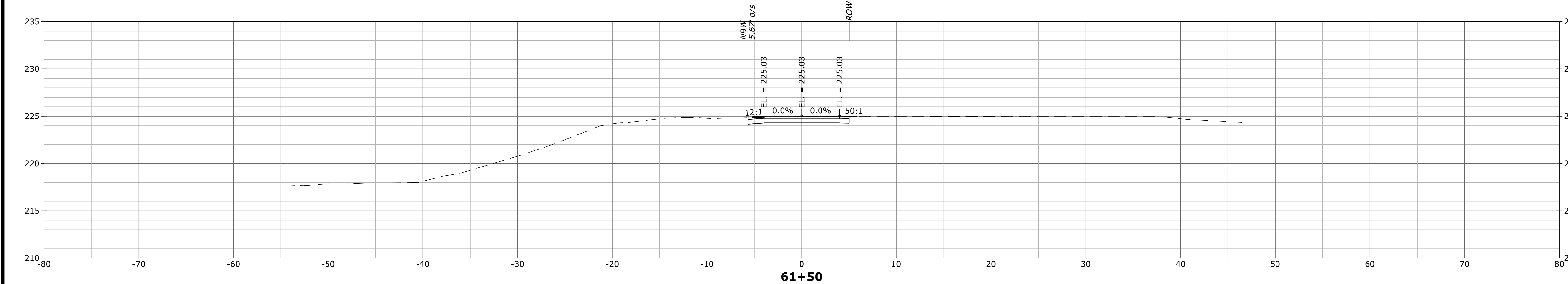
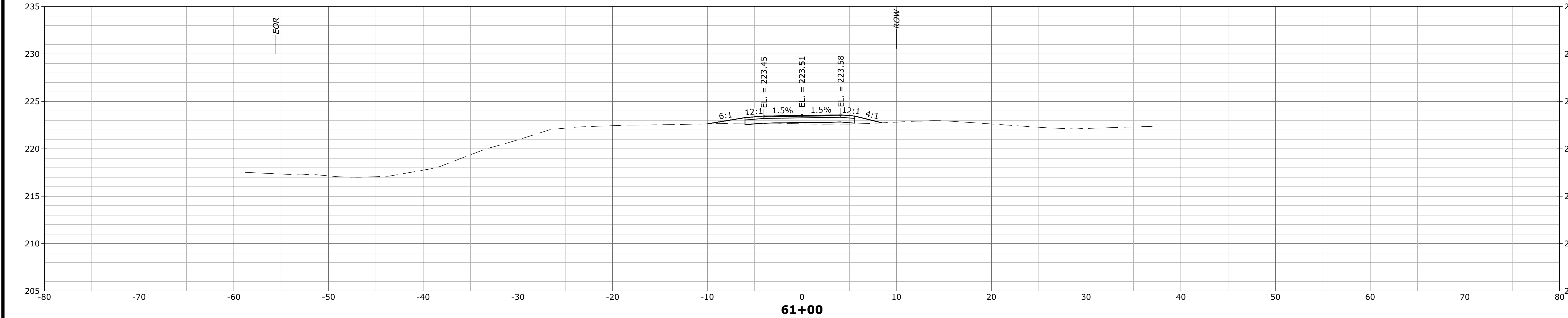
CONSTRUCTION OF BEELINE TRAIL - PHASE 2

NEW BRITAINCONNECTICUT

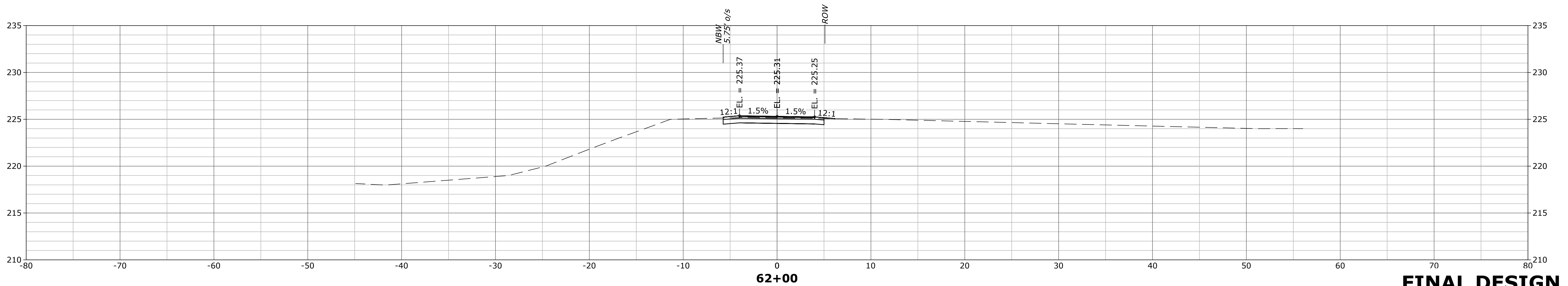
PROJ. No.: 20190754.A10

DATE: MARCH 2023

XSC-04



FINAL DESIGN



FINAL DESIGN

No.	DATE	DESCRIPTION	DESIGNER	REVIEWER

SEAL

2.5 0

GRAPHIC SCALE



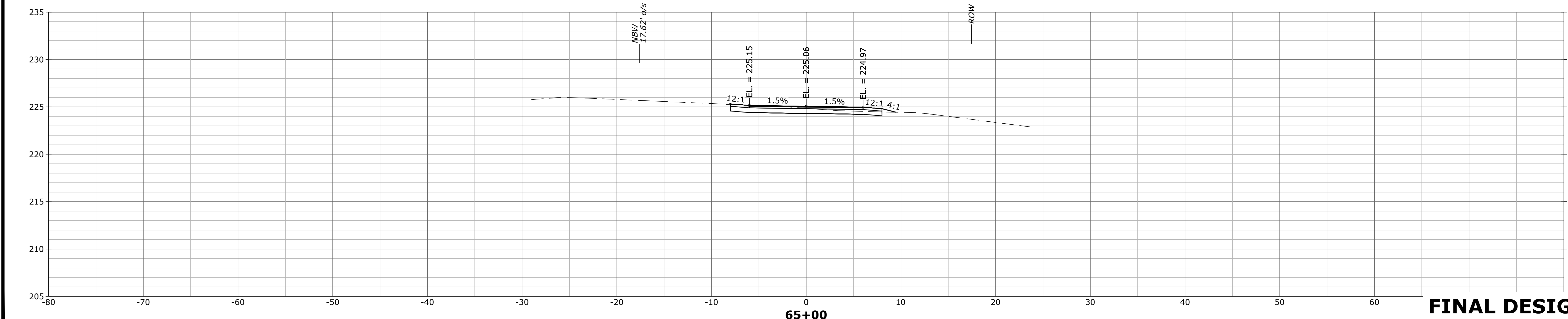
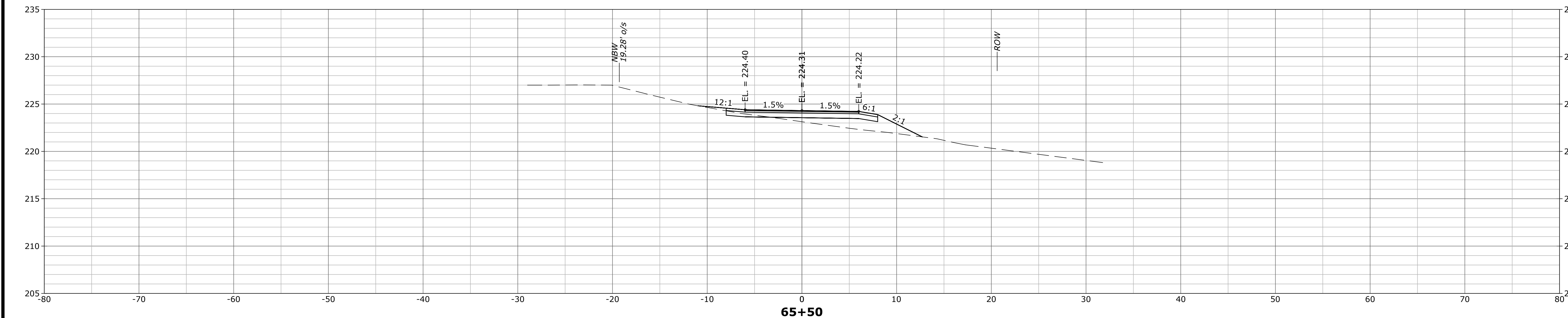
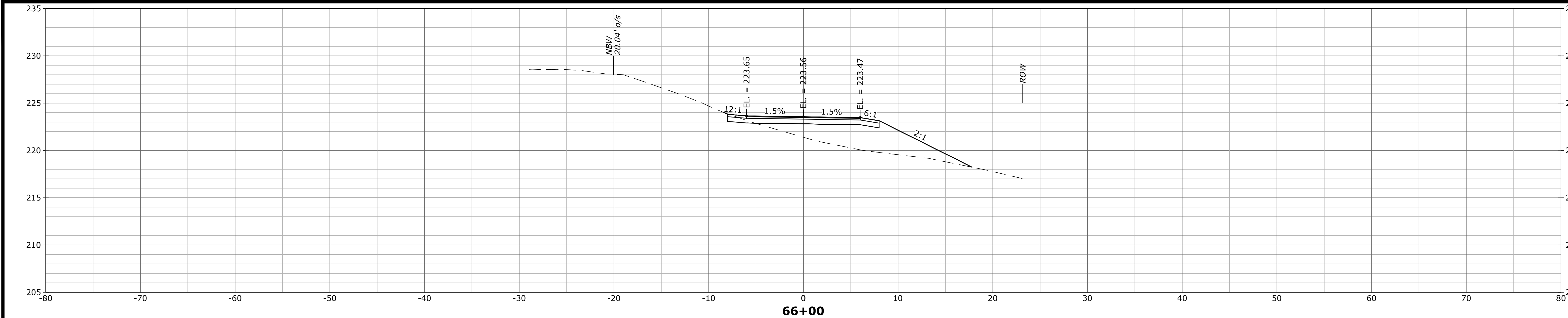
146 HARTFORD ROAD
MANCHESTER, CONNECTICUT 06040
860.646.2469
www.fando.com

NEW BRITAIN

CONNECTICUT

XSC-05

File: J:\DWG\IP20190754\A10\Civil\Plan\PHASE 2\20190754A10_XSC02.dwg Layout: XSC-07 Plotted: 2023-04-03 8:39 AM Saved: 2023-04-03 8:37 AM User: SBeaunce
MS VIEW: PC3: AUTOCAD PDF (GENERAL DOCUMENTATION) PC3: STB/CTB: FO STB



FINAL DESIGN

No.	DATE	DESCRIPTION	DESIGNER	REVIEWER

SEAL

SEAL

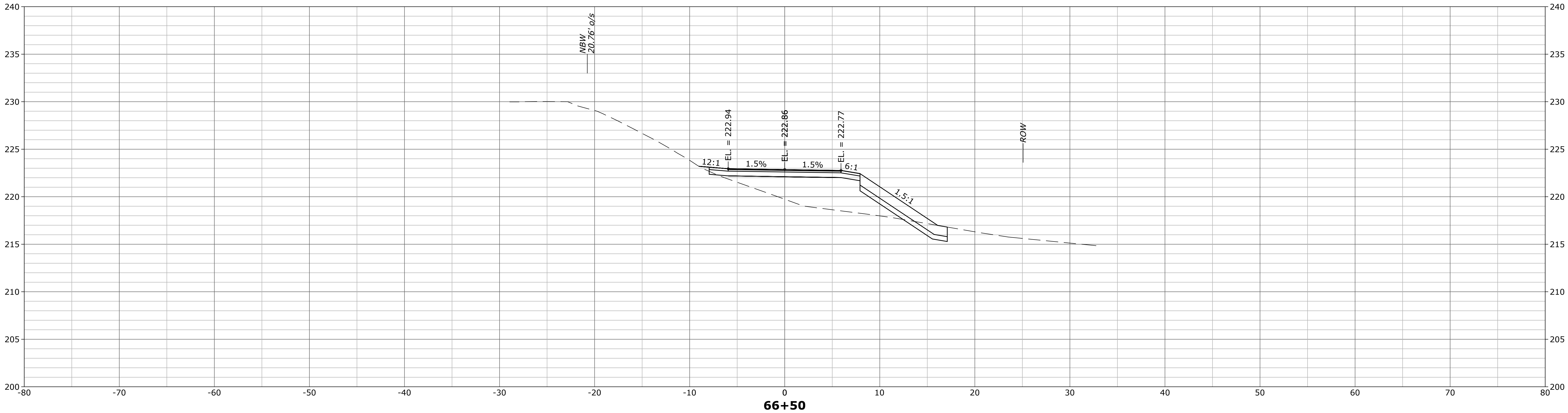
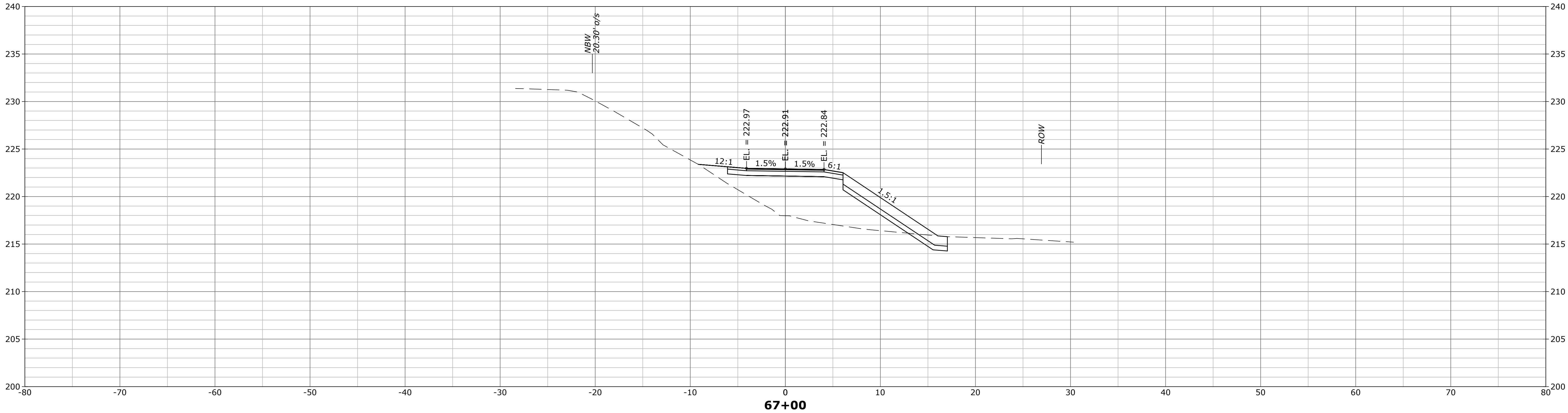
SCALE:
HORZ.: 1" = 5'
VERT.:
DATUM:
HORZ.: NAD83
VERT.: NAVD88
5 2.5 0 5
GRAPHIC SCALE

 **FUSS & O'NEILL**
146 HARTFORD ROAD
MANCHESTER, CONNECTICUT 06040
860.646.2469
www.fando.com

CITY OF NEW BRITAIN
TRAIL CROSS SECTIONS
CONSTRUCTION OF BEELINE TRAIL - PHASE 2
NEW BRITAIN CONNECTICUT

PROJ. No.: 20190754.A10
DATE: MARCH 2023
XSC-07

File: J:\DWG\IP2019\0754A10\Civil\Plan\PHASE 2\20190754A10_XSC02.dwg Layout: XSC-08 Plotted: 2023-04-03 8:39 AM Saved: 2023-04-03 8:37 AM User: SBeaer
MS VIEW: PC3: AUTOCAD PDF (GENERAL DOCUMENTATION) PC3: STE/CTB: FO STB LAYER STATE: XSC-01-04



FINAL DESIGN

No.	DATE	DESCRIPTION	DESIGNER	REVIEWER

SEAL

SEAL

SCALE:

HORZ.: 1" = 5'

VERT.:

DATUM:

HORZ.: NAD83

VERT.: NAVD88

5 2.5 0 5

GRAPHIC SCALE

f

FUSS & O'NEILL

146 HARTFORD ROAD
MANCHESTER, CONNECTICUT 06040
860.646.2469
www.fando.com

CITY OF NEW BRITAIN

TRAIL CROSS SECTIONS

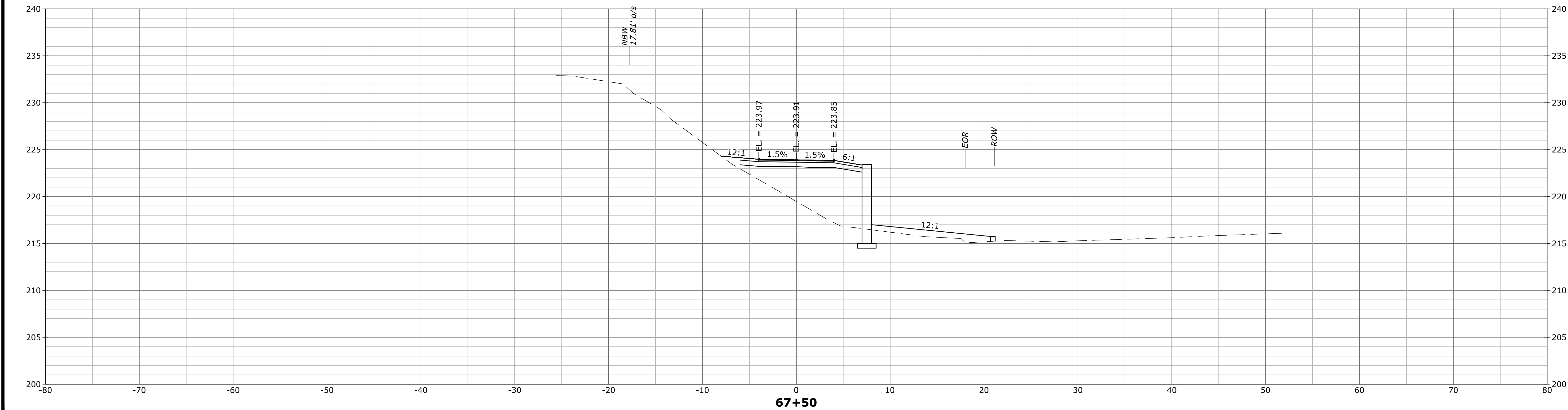
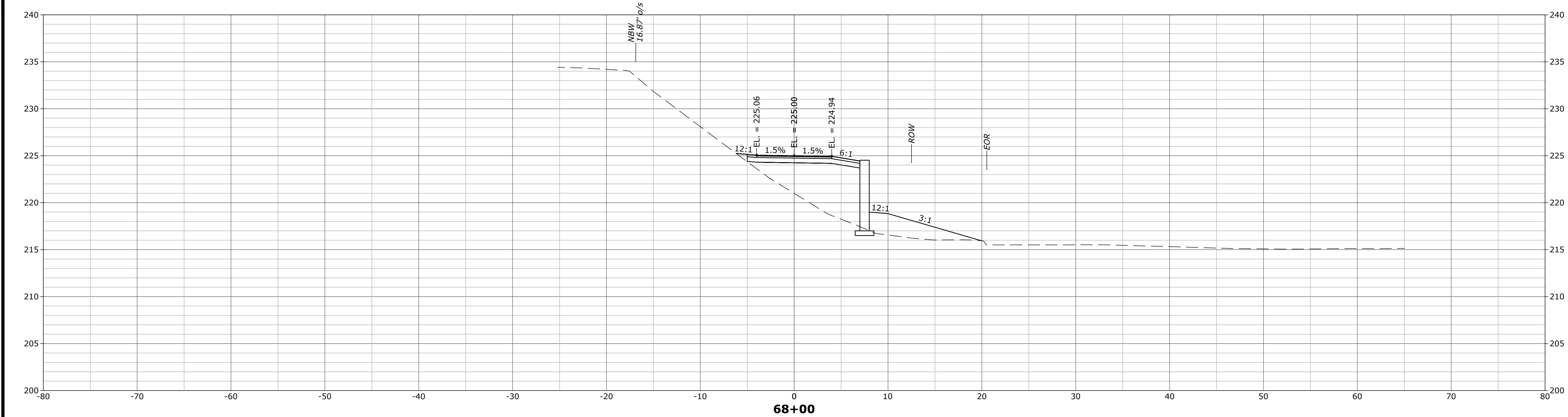
CONSTRUCTION OF BEELINE TRAIL - PHASE 2

NEW BRITAIN CONNECTICUT

PROJ. No.: 20190754.A10
DATE: MARCH 2023

XSC-08

File: J:\DWG\IP2019\0754A10\Civil\Plan\PHASE 2\20190754A10_XSC02.dwg Layout: XSC-09 Plotted: 2023-04-03 8:39 AM Saved: 2023-04-03 8:37 AM User: SBeare
MS VIEW: PC3: AUTOCAD PDF (GENERAL DOCUMENTATION) PC3: STE/CTB: FO STB



FINAL DESIGN

No.	DATE	DESCRIPTION	DESIGNER	REVIEWER

SEAL

SEAL

SCALE:

HORZ.: 1" = 5'

VERT.:

DATUM:

HORZ.: NAD83

VERT.: NAVD88

5 2.5 0 5

GRAPHIC SCALE

f

FUSS & O'NEILL

146 HARTFORD ROAD
MANCHESTER, CONNECTICUT 06040
860.646.2469
www.fando.com

CITY OF NEW BRITAIN

TRAIL CROSS SECTIONS

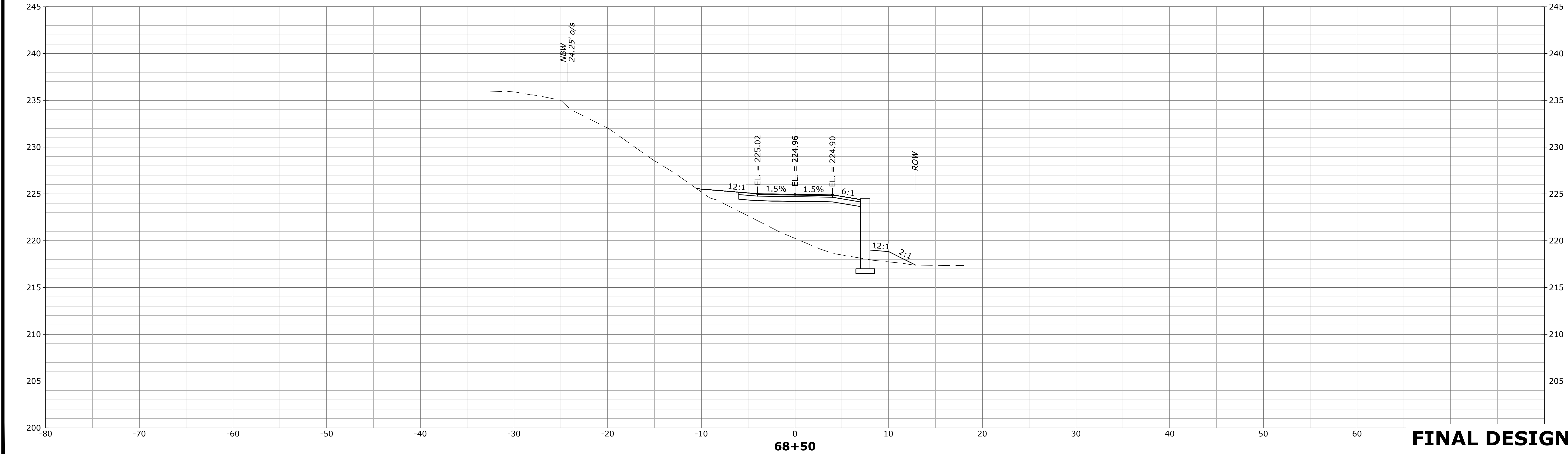
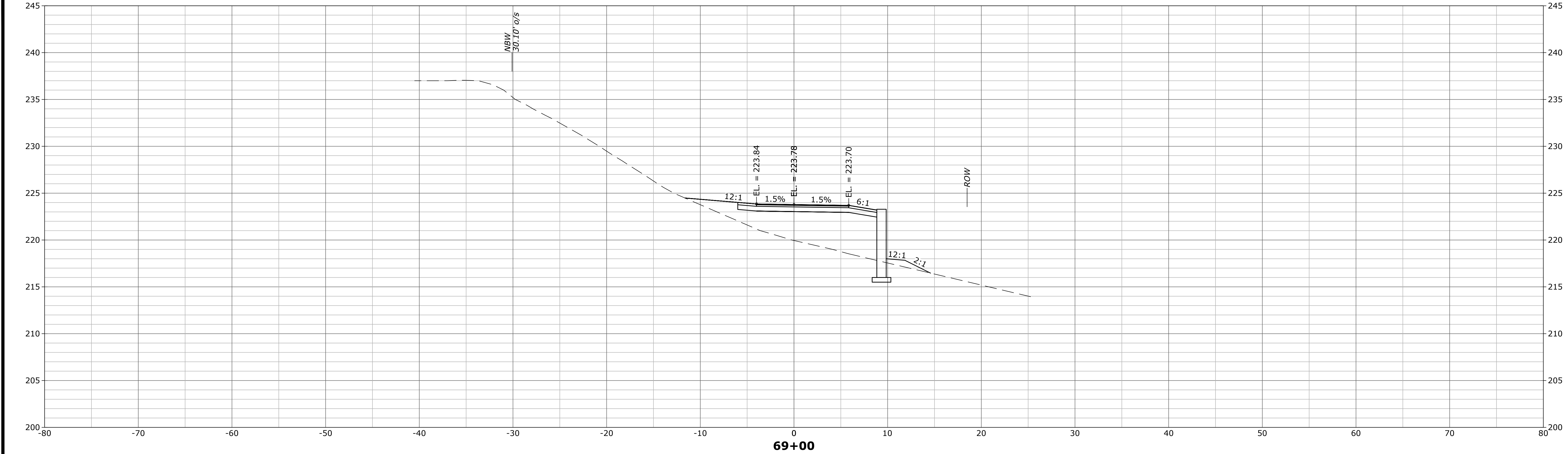
CONSTRUCTION OF BEELINE TRAIL - PHASE 2

NEW BRITAIN CONNECTICUT

PROJ. No.: 20190754.A10
DATE: MARCH 2023

XSC-09

File: J:\DWG\IP2019\0754\A10\Civil\Plan\PHASE 2\20190754A10_XSC02.dwg Layout: XSC-10 Plotted: 2023-04-03 8:39 AM Saved: 2023-04-03 8:37 AM User: SBeaer
MS VIEW: PC3: AUTOCAD PDF (GENERAL DOCUMENTATION) PC3: STB/CTB: FO STB



FINAL DESIGN

No.	DATE	DESCRIPTION	DESIGNER	REVIEWER

SEAL

SEAL

SCALE:
HORIZ.: 1" = 5'
VERT.:
DATUM:
HORIZ.: NAD83
VERT.: NAVD88

5 2.5 0 5
GRAPHIC SCALE

f **FUSS&O'NEILL**
146 HARTFORD ROAD
MANCHESTER, CONNECTICUT 06040
860.646.2469
www.fando.com

CITY OF NEW BRITAIN
TRAIL CROSS SECTIONS
CONSTRUCTION OF BEELINE TRAIL - PHASE 2
NEW BRITAIN CONNECTICUT

PROJ. No.: 20190754.A10
DATE: MARCH 2023
XSC-10



--

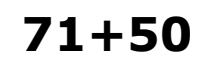
CITY OF NEW BRITAIN

TRAIL CROSS SECTIONS

CONSTRUCTION OF BEELINE TRAIL - PHASE 2

NEW BRITAIN CONNECTICUT

PROJ. No.: 20190754.A10
DATE: MARCH 2023
<h1>XSC-12</h1>



CONNECTICUT

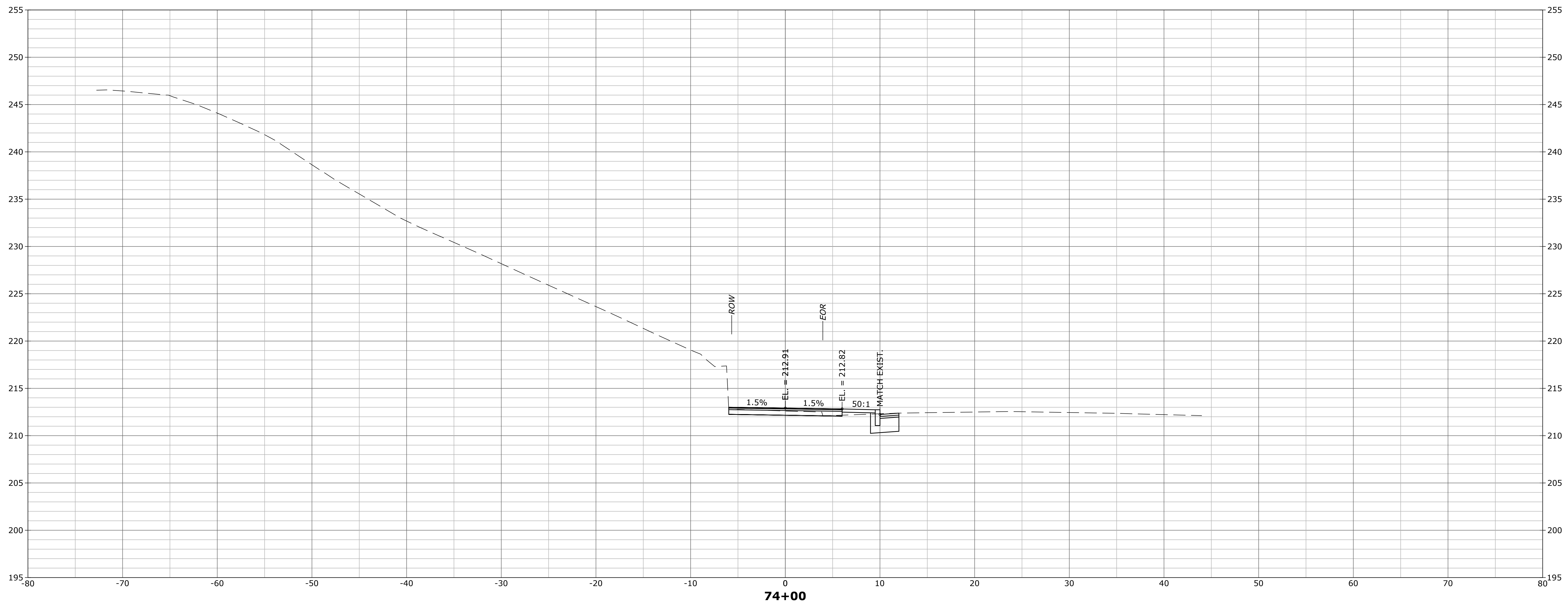
SEAL

GRAPHIC SCALE:



XSC-14

File: J:\DWG\IP2019\0754\A10\Civil\Plan\PHASE 2\20190754A10_XSC02.dwg Layout: XSC-19 Plotted: 2023-04-03 8:35 AM Saved: 2023-04-03 8:37 AM User: SBeare
PC3: AUTOCAD PDF (GENERAL DOCUMENTATION) PC3: STB/CTB: FO STB
MS VIEW: LAYER STATE: XSC-01-04



FINAL DESIGN

No.	DATE	DESCRIPTION	DESIGNER	REVIEWER	

SEAL

SEAL

SCALE:
HORZ.: 1" = 5'
VERT.:
DATUM:
HORZ.: NAD83
VERT.: NAVD88

5 2.5 0 5
GRAPHIC SCALE



FUSS & O'NEILL
146 HARTFORD ROAD
MANCHESTER, CONNECTICUT 06040
860.646.2469
www.fando.com

CITY OF NEW BRITAIN

TRAIL CROSS SECTIONS

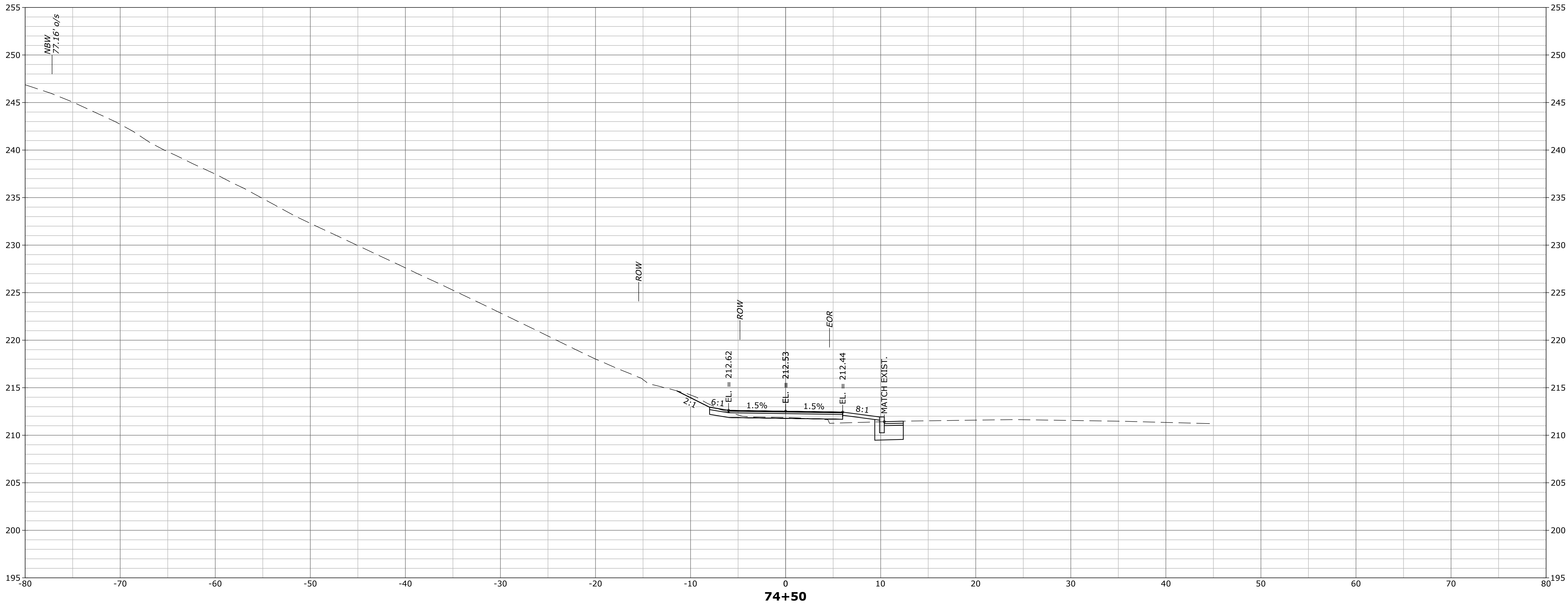
CONSTRUCTION OF BEELINE TRAIL - PHASE 2

NEW BRITAIN CONNECTICUT

PROJ. No.: 20190754.A10
DATE: MARCH 2023

XSC-19

File: J:\DWG\20190754\10\Civil\Plan\PHASE 2\20190754A10_XSC02.dwg Layout: XSC-20 Plotted: 2023-04-03 8:39 AM Saved: 2023-04-03 8:37 AM User: SBeare
PC3: AUTOCAD PDF (GENERAL DOCUMENTATION) PC3: STB/CTB: FO STB
MS VIEW: LAYER STATE: XSC-01-04



FINAL DESIGN

No.	DATE	DESCRIPTION	DESIGNER	REVIEWER	

SEAL

SEAL

SCALE:

HORIZ.: 1" = 5'
VERT.:

DATUM:

HORIZ.: NAD83
VERT.: NAVD88

5 2.5 0 5

GRAPHIC SCALE



FUSS & O'NEILL

146 HARTFORD ROAD
MANCHESTER, CONNECTICUT 06040
860.646.2469
www.fando.com

CITY OF NEW BRITAIN

TRAIL CROSS SECTIONS

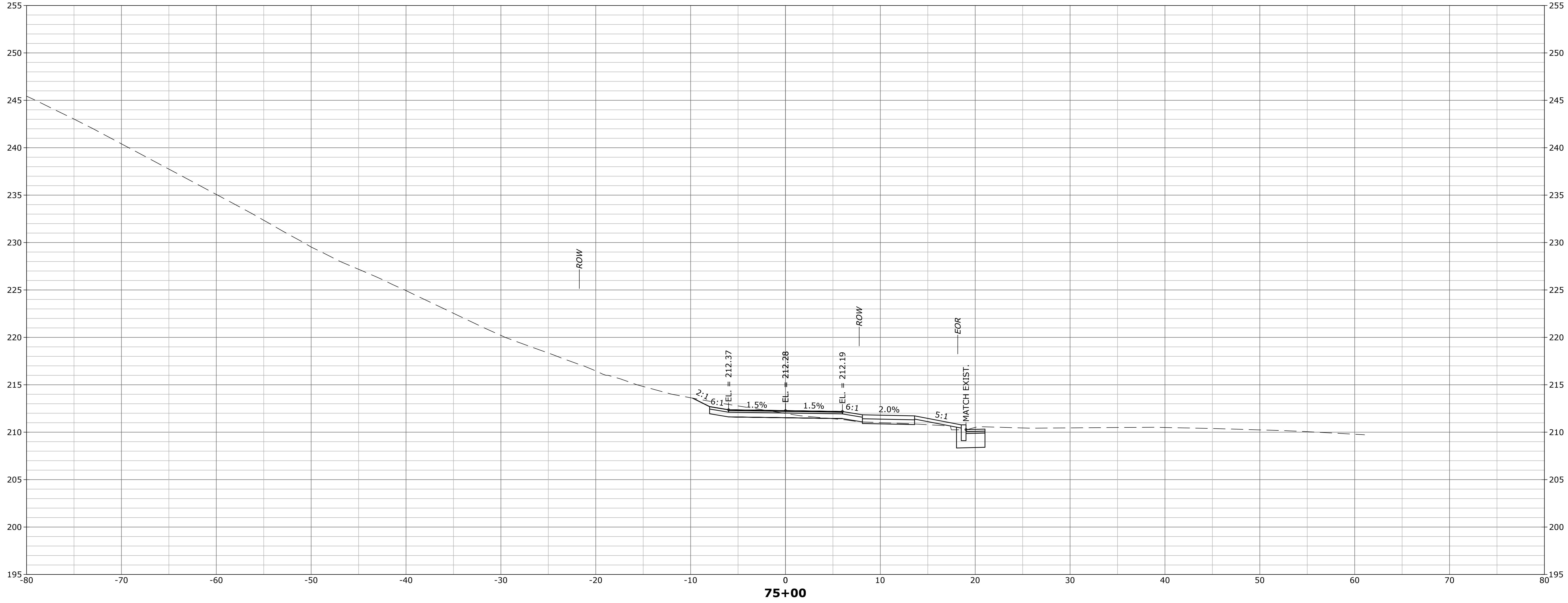
CONSTRUCTION OF BEELINE TRAIL - PHASE 2

NEW BRITAIN CONNECTICUT

PROJ. No.: 20190754.A10
DATE: MARCH 2023

XSC-20

File: J:\DWG\IP2019\0754\A10\Civil\Plan\PHASE 2\20190754A10_XSC02.dwg Layout: XSC-21 Plotted: 2023-04-03 8:40 AM Saved: 2023-04-03 8:37 AM User: SBeare
PC3: AUTOCAD PDF (GENERAL DOCUMENTATION) PC3: STB/CTB: FO STB
MS VIEW: LAYER STATE: XSC-01-04



FINAL DESIGN

No.	DATE	DESCRIPTION	DESIGNER	REVIEWER	

SEAL

SEAL

SCALE:
HORZ.: 1" = 5'
VERT.:
DATUM:
HORZ.: NAD83
VERT.: NAVD88

5 2.5 0 5
GRAPHIC SCALE

**FUSS&O'NEILL**

146 HARTFORD ROAD
MANCHESTER, CONNECTICUT 06040
860.646.2469
www.fando.com

CITY OF NEW BRITAIN

TRAIL CROSS SECTIONS

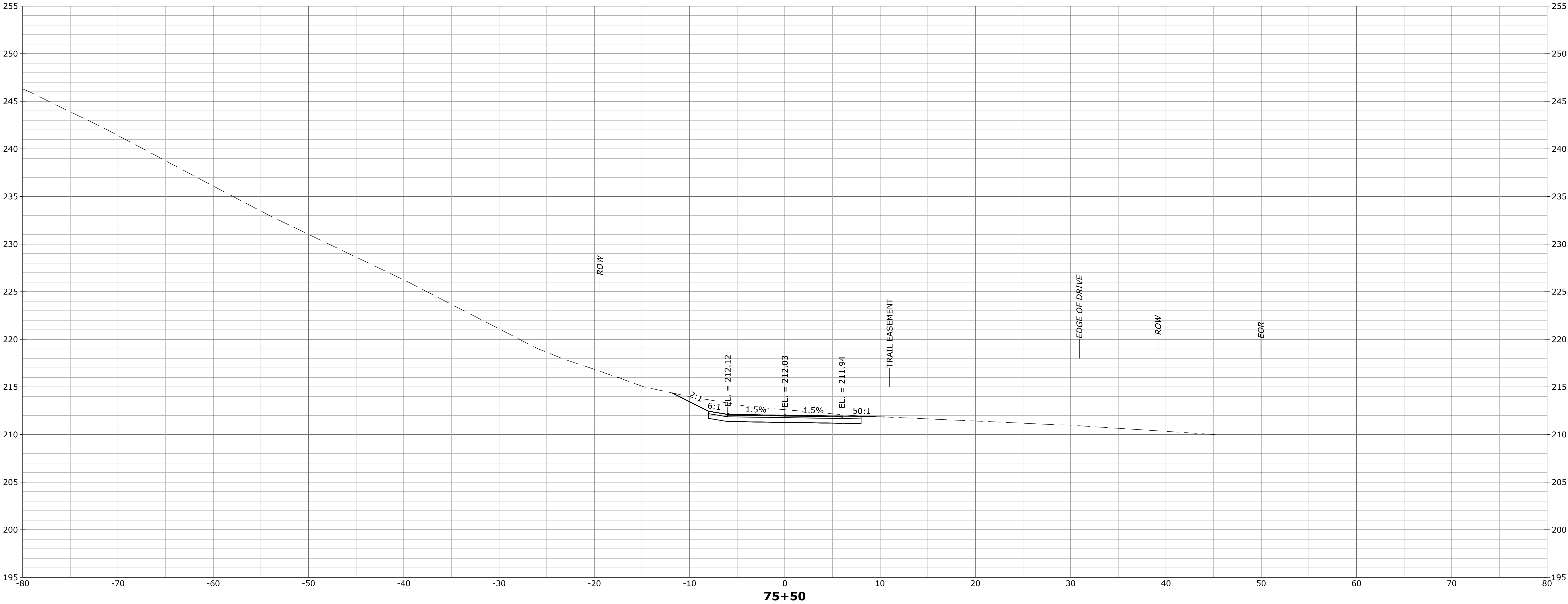
CONSTRUCTION OF BEELINE TRAIL - PHASE 2

NEW BRITAINCONNECTICUT

PROJ. No.: 20190754.A10
DATE: MARCH 2023

XSC-21

File: J:\DWG\190754\10\Civil\Plan\PHASE 2\20190754A10_XSC02.dwg Layout: XSC-22 Plotted: 2023-04-03 8:40 AM Saved: 2023-04-03 8:37 AM User: SBeaer
PC3: AUTOCAD PDF (GENERAL DOCUMENTATION) PC3: STB/CTB: FO STB
MS VIEW: LAYER STATE: XSC-01-04



FINAL DESIGN

No.	DATE	DESCRIPTION	DESIGNER	REVIEWER

SEAL

SEAL

SCALE:
HORZ.: 1" = 5'
VERT.:
DATUM:
HORZ.: NAD83
VERT.: NAVD88
5 2.5 0 5
GRAPHIC SCALE



FUSS & O'NEILL
146 HARTFORD ROAD
MANCHESTER, CONNECTICUT 06040
860.646.2469
www.fando.com

CITY OF NEW BRITAIN

TRAIL CROSS SECTIONS

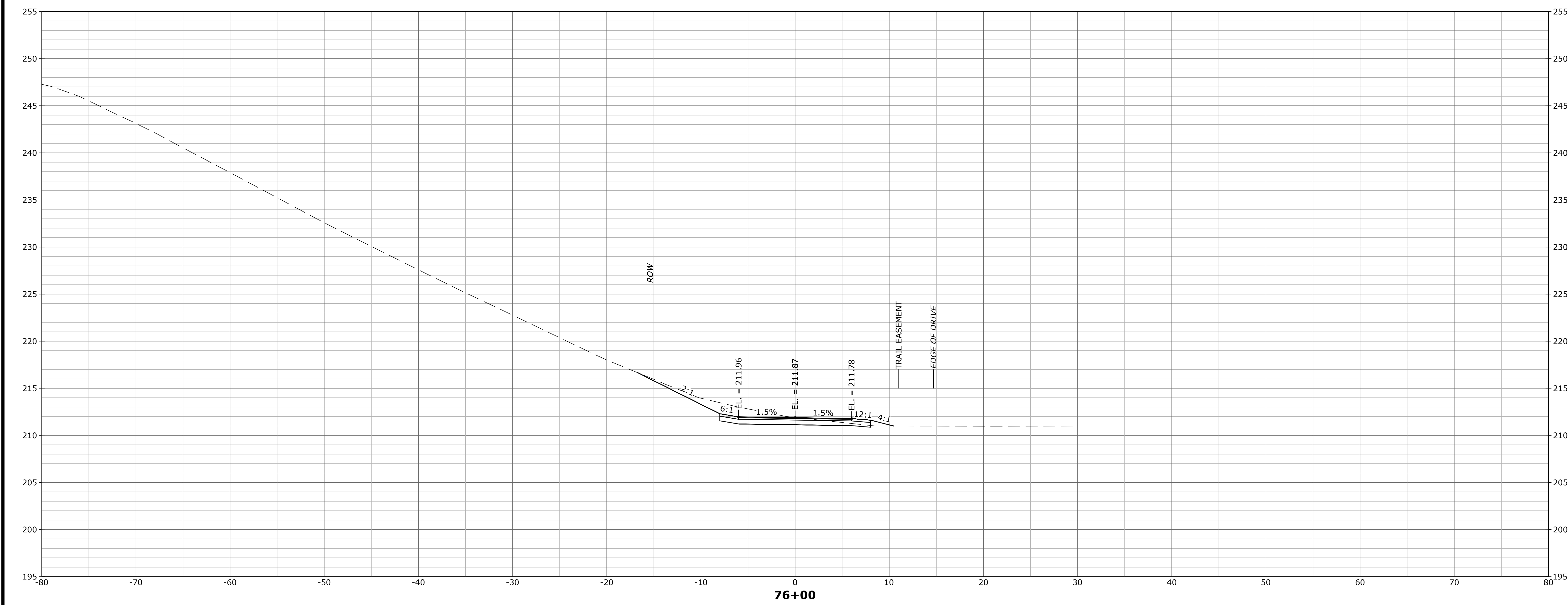
CONSTRUCTION OF BEELINE TRAIL - PHASE 2

NEW BRITAIN CONNECTICUT

PROJ. No.: 20190754.A10
DATE: MARCH 2023

XSC-22

File: J:\DWG\IP2019\0754\A10\Civil\Plan\PHASE 2\20190754A10_XSC02.dwg Layout: XSC-23 Plotted: 2023-04-03 8:40 AM Saved: 2023-04-03 8:37 AM User: SBeare
MS VIEW: PC3: AUTOCAD PDF (GENERAL DOCUMENTATION) PC3: STB/CTB: FO STB LAYER STATE: XSC-01-04



FINAL DESIGN

No.	DATE	DESCRIPTION	DESIGNER	REVIEWER	

SEAL

SEAL

SCALE:
HORZ.: 1" = 5'
VERT.:
DATUM:
HORZ.: NAD83
VERT.: NAVD88
5 2.5 0 5
GRAPHIC SCALE



FUSS & O'NEILL
146 HARTFORD ROAD
MANCHESTER, CONNECTICUT 06040
860.646.2469
www.fando.com

CITY OF NEW BRITAIN

TRAIL CROSS SECTIONS

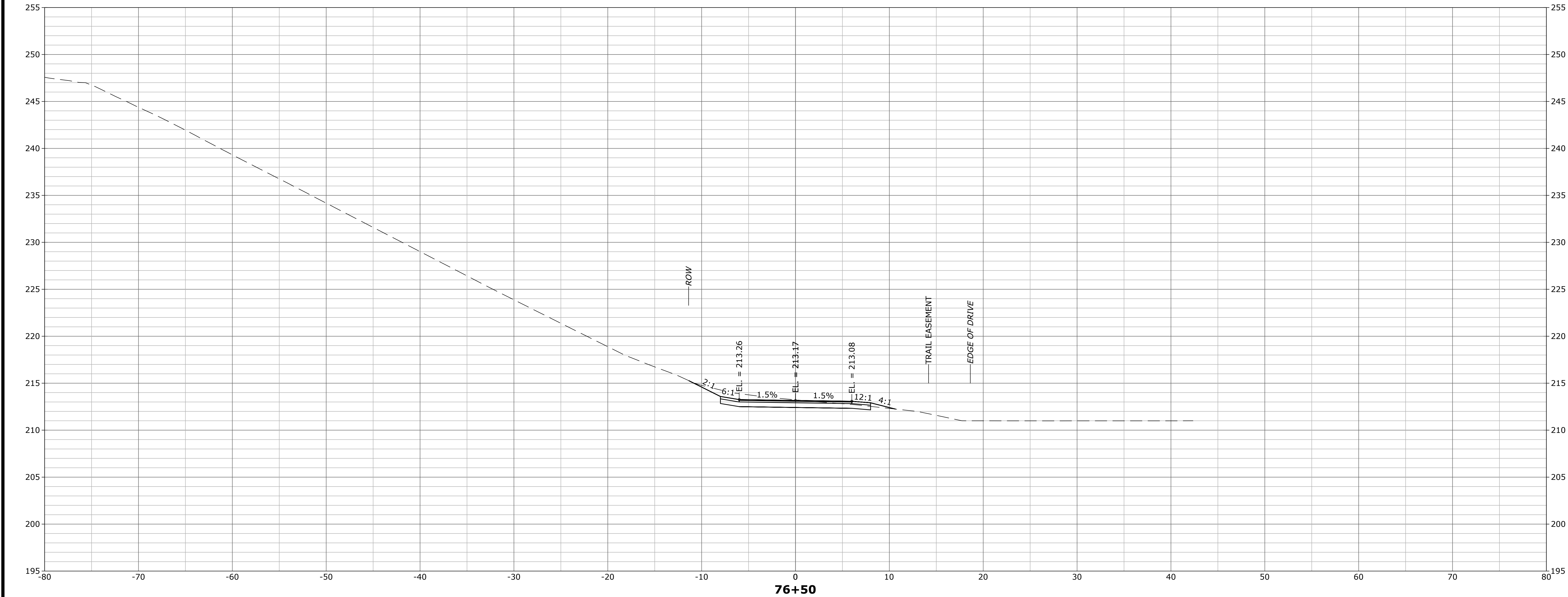
CONSTRUCTION OF BEELINE TRAIL - PHASE 2

NEW BRITAINCONNECTICUT

PROJ. No.: 20190754.A10
DATE: MARCH 2023

XSC-23

File: J:\DWG\IP2019\0754\A10\Civil\Plan\PHASE 2\20190754A10_XSC02.dwg Layout: XSC-24 Plotted: 2023-04-03 8:40 AM Saved: 2023-04-03 8:37 AM User: SBeaer
PC3: AUTOCAD PDF (GENERAL DOCUMENTATION) PC3: STB/CTB: FO STB
MS VIEW: LAYER STATE: XSC-01-04



FINAL DESIGN

No.	DATE	DESCRIPTION	DESIGNER	REVIEWER	

SEAL

SEAL

SCALE:
HORZ.: 1" = 5'
VERT.:
DATUM:
HORZ.: NAD83
VERT.: NAVD88
5 2.5 0 5
GRAPHIC SCALE

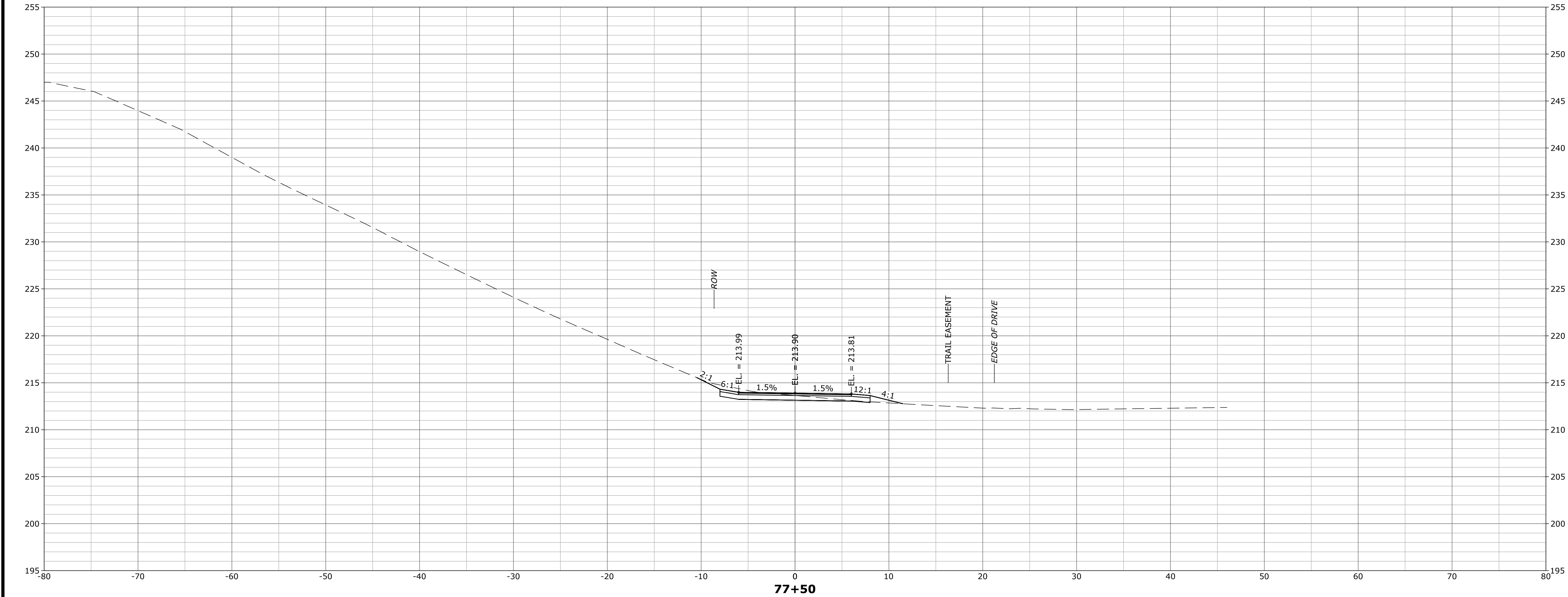
 **FUSS & O'NEILL**
146 HARTFORD ROAD
MANCHESTER, CONNECTICUT 06040
860.646.2469
www.fando.com

CITY OF NEW BRITAIN
TRAIL CROSS SECTIONS
CONSTRUCTION OF BEELINE TRAIL - PHASE 2
NEW BRITAIN CONNECTICUT

PROJ. No.: 20190754.A10
DATE: MARCH 2023
XSC-24

File: J:\DWG\IP2019\0754\A10\Civil\Plan\PHASE 2\20190754A10_XSC02.dwg Layout: XSC-26 Plotted: 2023-04-03 8:40 AM Saved: 2023-04-03 8:37 AM User: SBeaer
PC3: AUTOCAD PDF (GENERAL DOCUMENTATION) PC3: STB/CTB: FO STB
LAYER STATE: XSC-01-04

MS VIEW:



FINAL DESIGN

No.	DATE	DESCRIPTION	DESIGNER	REVIEWER

SEAL

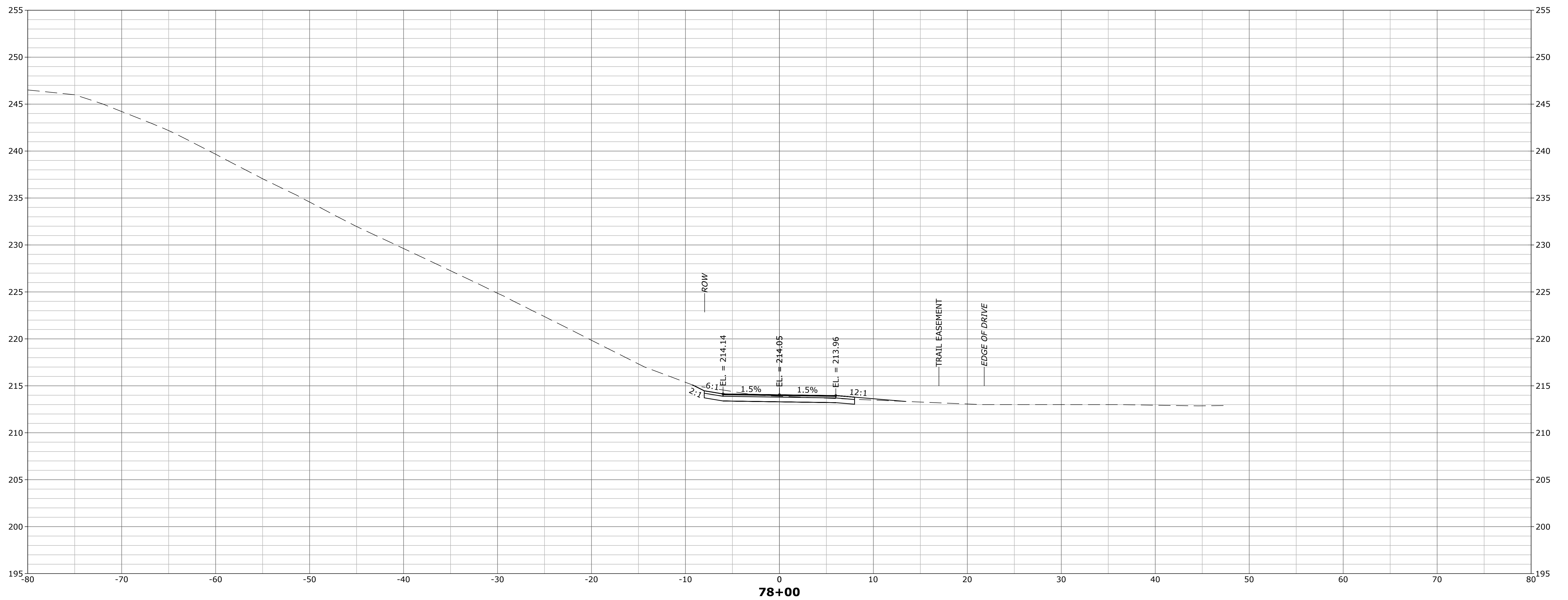
SEAL

SCALE:
HORZ.: 1" = 5'
VERT.:
DATUM:
HORZ.: NAD83
VERT.: NAVD88
5 2.5 0 5
GRAPHIC SCALE

 **FUSS & O'NEILL**
146 HARTFORD ROAD
MANCHESTER, CONNECTICUT 06040
860.646.2469
www.fando.com

CITY OF NEW BRITAIN
TRAIL CROSS SECTIONS
CONSTRUCTION OF BEELINE TRAIL - PHASE 2
NEW BRITAIN CONNECTICUT

PROJ. No.: 20190754.A10
DATE: MARCH 2023
XSC-26




FINAL DESIGN

No.	DATE	DESCRIPTION	DESIGNER	REVIEWER

SEAL

SEAL

SCALE:	HORZ.: 1" = 5'
	VERT.:
DATUM:	HORZ.: NAD83
	VERT.: NAVD88
	
GRAPHIC SCALE	



FUSS & O'NEILL

146 HARTFORD ROAD
MANCHESTER, CONNECTICUT 06040
860.646.2469
www.fando.com

CITY OF NEW BRITAIN

TRAIL CROSS SECTIONS

CONSTRUCTION OF BEELINE TRAIL - PHASE 2

NEW BRITAIN

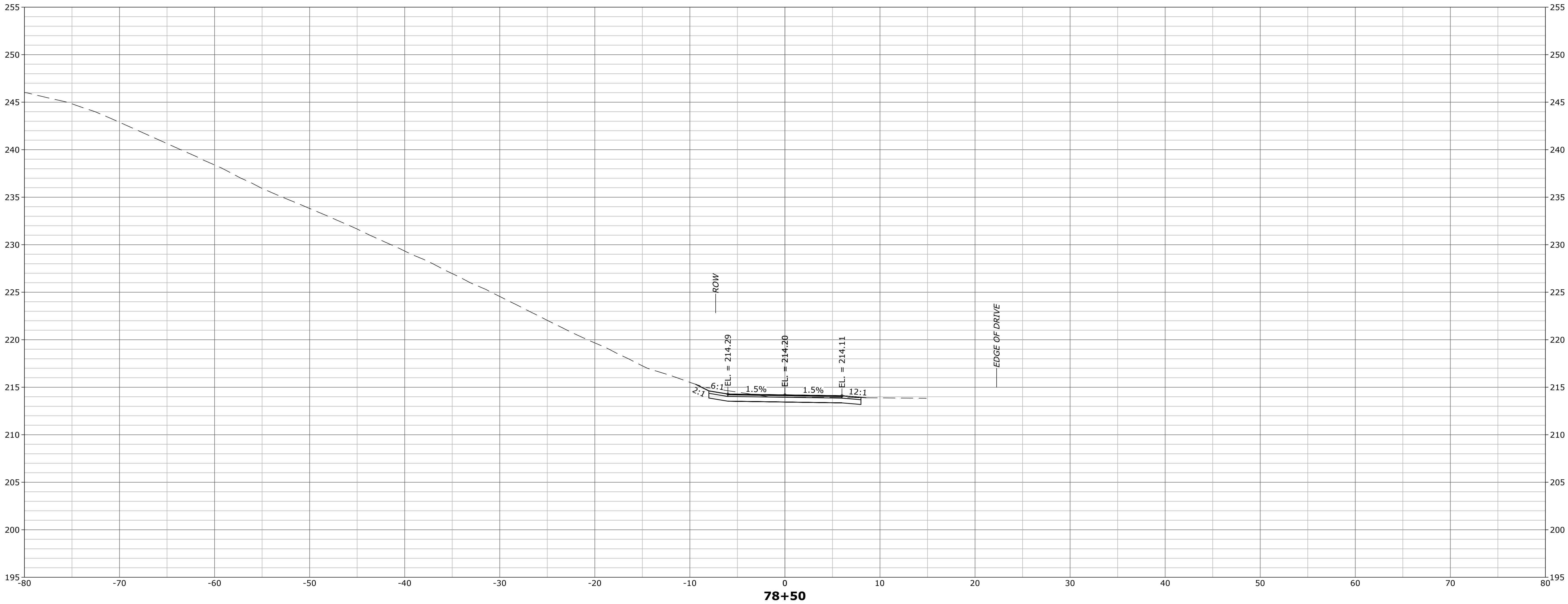
CONNECTICUT

PROJ. No.: 20190754.A10
DATE: MARCH 2023

XSC-27

File: J:\DWG\IP2019\0754A10\Civil\Plan\PHASE 2\20190754A10_XSC02.dwg Layout: XSC-28 Plotted: 2023-04-03 8:40 AM Saved: 2023-04-03 8:37 AM User: SBeare
PC3: AUTOCAD PDF (GENERAL DOCUMENTATION) PC3: STB/CTB: FO STB

MS VIEW: LAYER STATE: XSC-01-04



FINAL DESIGN

No.	DATE	DESCRIPTION	DESIGNER	REVIEWER

SEAL

SEAL

SCALE:
HORZ.: 1" = 5'
VERT.:
DATUM:
HORZ.: NAD83
VERT.: NAVD88

5 2.5 0 5
GRAPHIC SCALE

 **FUSS & O'NEILL**
146 HARTFORD ROAD
MANCHESTER, CONNECTICUT 06040
860.646.2469
www.fando.com

CITY OF NEW BRITAIN
TRAIL CROSS SECTIONS
CONSTRUCTION OF BEELINE TRAIL - PHASE 2
NEW BRITAIN CONNECTICUT

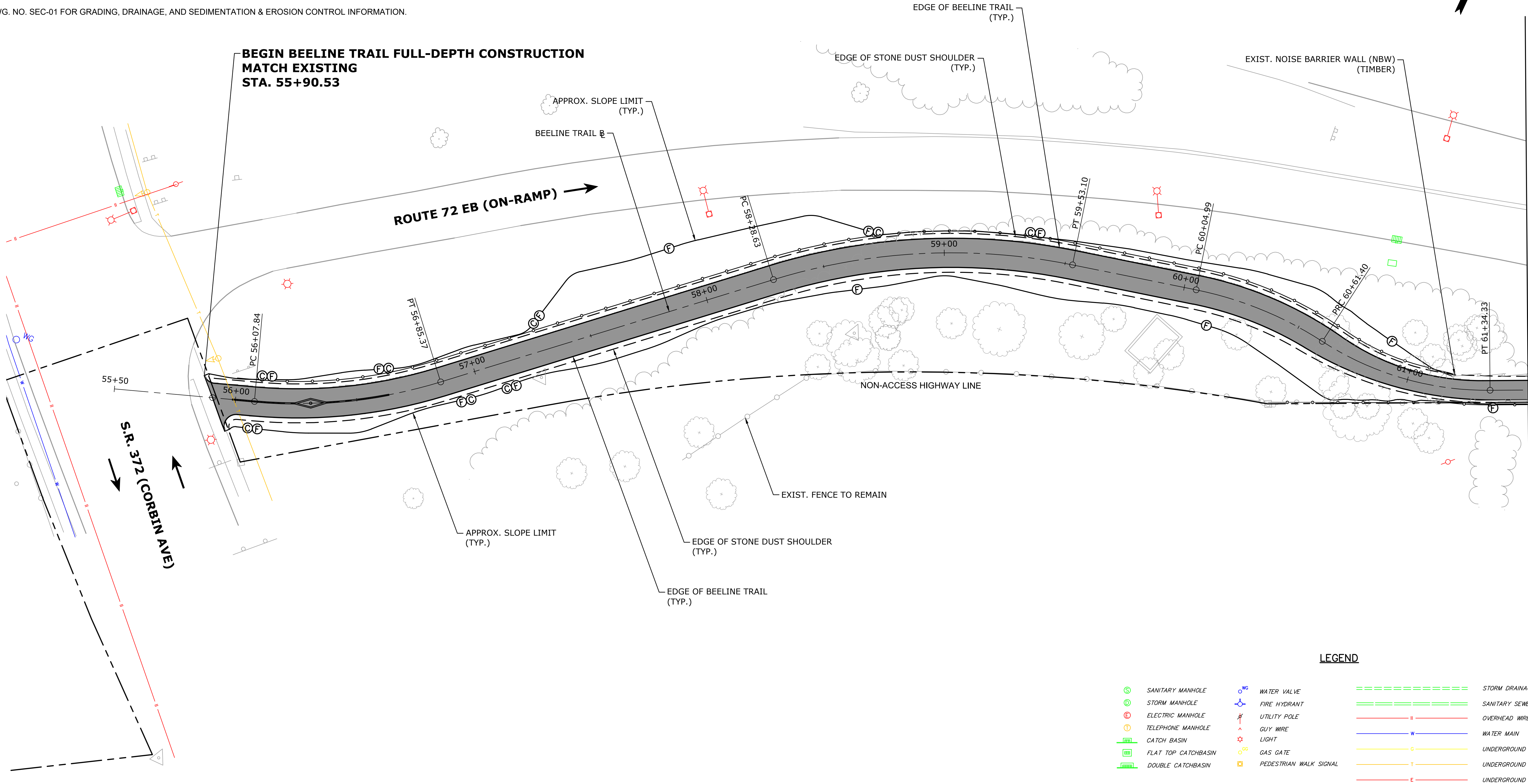
PROJ. No.: 20190754.A10
DATE: MARCH 2023
XSC-28

NOTES:

1. CONTRACTOR SHALL FIELD VERIFY FINAL LIMITS OF CHAIN LINK FENCE REMOVAL AND INSTALLATION WITH THE ENGINEER PRIOR TO CONSTRUCTION.
2. WHEN DISTANCE FROM PAVED EDGE OF TRAIL IS LESS THAN 5', GRAVEL SHOULDER SHALL EXTEND TO BACK OF EXIST. NOISE BARRIER WALL (NBW) UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
3. PRIOR TO CONSTRUCTION, CONTRACTOR SHALL MARK FOR REMOVAL ALL TREES LOCATED WITHIN THE TRAIL CORRIDOR CLEARING LIMITS AND REVIEW EACH LOCATION WITH THE ENGINEER FOR APPROVAL PRIOR TO PERFORMING TREE REMOVALS.
4. SEE DWG. NO. ALN-01 FOR ALIGNMENT AND CONSTRUCTION LAYOUT INFORMATION.
5. SEE DWG. NO. SEC-01 FOR GRADING, DRAINAGE, AND SEDIMENTATION & EROSION CONTROL INFORMATION.

UNDERGROUND UTILITY NOTE

THE UNDERGROUND UTILITIES DEPICTED HEREON ARE BASED ON FIELD LOCATION OF VISIBLE FEATURES, MAPS AND PLANS OF RECORD, UTILITY MAPPING OR OTHER SOURCES OF INFORMATION. THE ENGINEER MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE ENGINEER FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE DOES DECLARE THAT THEY ARE DEPICTED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE ENGINEER HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES.



LEGEND

- | | | | | | |
|--|---------------------|--|------------------------|--|-----------------------|
| | SANITARY MANHOLE | | WATER VALVE | | STORM DRAINAGE PIPE |
| | STORM MANHOLE | | FIRE HYDRANT | | SANITARY SEWER PIPE |
| | ELECTRIC MANHOLE | | UTILITY POLE | | OVERHEAD WIRES |
| | TELEPHONE MANHOLE | | GUY WIRE | | WATER MAIN |
| | CATCH BASIN | | LIGHT | | UNDERGROUND GAS |
| | FLAT TOP CATCHBASIN | | GAS GATE | | UNDERGROUND TELEPHONE |
| | DOUBLE CATCHBASIN | | PEDESTRIAN WALK SIGNAL | | UNDERGROUND ELECTRIC |

FOR INFORMATION ONLY

No.	DATE	DESCRIPTION	DESIGNER	REVIEWER

SEAL

SEAL

SCALE:

HORZ.: 1" = 20'
VERT.:

DATUM:

HORZ.: NAD 83
VERT.: NAVD 88

20 10 0 20

GRAPHIC SCALE

FUSS & O'NEILL

146 HARTFORD ROAD
MANCHESTER, CONNECTICUT 06040
860.646.2469
www.fando.com

CITY OF NEW BRITAIN

UTILITY PLANS
(FOR INFORMATION ONLY)

CONSTRUCTION OF BEELINE TRAIL - PHASE 2

NEW BRITAIN CONNECTICUT

PROJ. No.: 20190754.A10
DATE: MARCH 2023

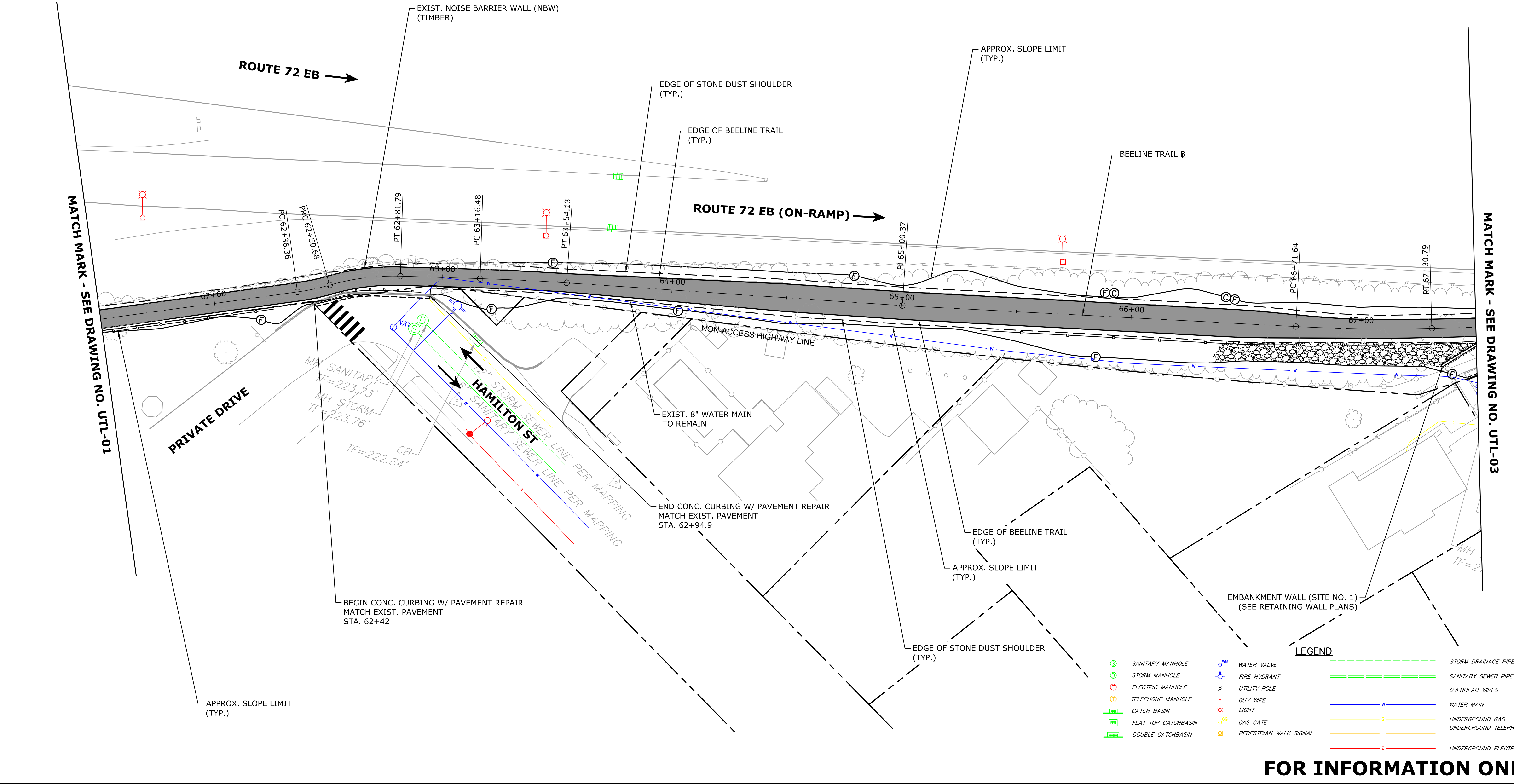
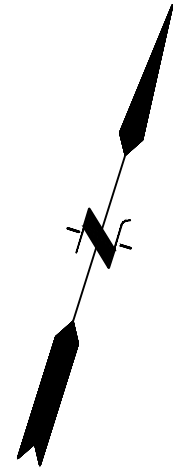
UTL-01

NOTES:

- CONTRACTOR SHALL FIELD VERIFY FINAL LIMITS OF CHAIN LINK FENCE REMOVAL AND INSTALLATION WITH THE ENGINEER PRIOR TO CONSTRUCTION.
- WHEN DISTANCE FROM PAVED EDGE OF TRAIL IS LESS THAN 5', GRAVEL SHOULDER SHALL EXTEND TO BACK OF EXIST. NOISE BARRIER WALL (NBW) UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
- PRIOR TO CONSTRUCTION, CONTRACTOR SHALL MARK FOR REMOVAL ALL TREES LOCATED WITHIN THE TRAIL CORRIDOR CLEARING LIMITS AND REVIEW EACH LOCATION WITH THE ENGINEER FOR APPROVAL PRIOR TO PERFORMING TREE REMOVALS.
- SEE DWG. NO. ALN-01 FOR ALIGNMENT AND CONSTRUCTION LAYOUT INFORMATION.
- SEE DWG. NO. SEC-01 FOR GRADING, DRAINAGE, AND SEDIMENTATION & EROSION CONTROL INFORMATION.

UNDERGROUND UTILITY NOTE

THE UNDERGROUND UTILITIES DEPICTED HEREON ARE BASED ON FIELD LOCATION OF VISIBLE FEATURES, MAPS AND PLANS OF RECORD, UTILITY MAPPING OR OTHER SOURCES OF INFORMATION. THE ENGINEER MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE ENGINEER FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE DOES DECLARE THAT THEY ARE DEPICTED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE ENGINEER HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES.



FOR INFORMATION ONLY

File: J:\DWG\2019\0754\A10\Civil\Plan\PHASE 2\20190754A10_UTL02.dwg Layout: UTL-02 Plotted: 2023-04-03 8:50 AM Saved: 2023-04-03 8:14 AM User: SBeance
PC3: DWG TO PDF PC3 STB\CTB FO STB
LAYER STATE: UTL-01-04 COLOR
MS VIEW: UTL-02

No.	DATE	DESCRIPTION	DESIGNER	REVIEWER

SEAL

SEAL

SCALE:
HORZ.: 1" = 20'
VERT.:
DATUM:
HORZ.: NAD 83
VERT.: NAVD 88
20 10 0 20
GRAPHIC SCALE



FUSS & O'NEILL
146 HARTFORD ROAD
MANCHESTER, CONNECTICUT 06040
860.646.2469
www.fando.com

CITY OF NEW BRITAIN
UTILITY PLANS
(FOR INFORMATION ONLY)
CONSTRUCTION OF BEELINE TRAIL - PHASE 2
NEW BRITAINCONNECTICUT

PROJ. No.: 20190754.A10
DATE: MARCH 2023
UTL-02

1. CONTRACTOR SHALL FIELD VERIFY FINAL LIMITS OF CHAIN LINK FENCE REMOVAL AND INSTALLATION WITH THE ENGINEER PRIOR TO CONSTRUCTION.
2. LEFT EDGE OF PAVED TRAIL TO MATCH FACE OF EXIST. CONC. RETAINING WALL. TACK COAT SHALL BE APPLIED TO FACE OF WALL PRIOR TO PAVING..
3. PRIOR TO CONSTRUCTION, CONTRACTOR SHALL MARK FOR REMOVAL ALL TREES LOCATED WITHIN THE TRAIL CORRIDOR CLEARING LIMITS AND REVIEW EACH LOCATION WITH THE ENGINEER FOR APPROVAL PRIOR TO PERFORMING TREE REMOVALS.
4. SEE DWG. NO. ALN-01 FOR ALIGNMENT AND CONSTRUCTION LAYOUT INFORMATION.
5. SEE DWG. NO. SEC-01 FOR GRADING, DRAINAGE, AND SEDIMENTATION & EROSION CONTROL INFORMATION.

THE UNDERGROUND UTILITIES DEPICTED HEREON ARE BASED ON FIELD LOCATION OF VISIBLE FEATURES, MAPS AND PLANS OF RECORD, UTILITY MAPPING OR OTHER SOURCES OF INFORMATION. THE ENGINEER MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE ENGINEER FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED. ALTHOUGH HE DOES DECLARE THAT THEY ARE DEPICTED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE, THE ENGINEER HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES.

[illegible]

1. CONTRACTOR SHALL FIELD VERIFY FINAL LIMITS OF CHAIN LINK FENCE REMOVAL AND INSTALLATION WITH THE ENGINEER PRIOR TO CONSTRUCTION.
2. LEFT EDGE OF PAVED TRAIL TO MATCH FACE OF EXIST. CONC. RETAINING WALL. TACK COAT SHALL BE APPLIED TO FACE OF WALL PRIOR TO PAVING.
3. DRIVEWAY ACCESS TO ACHIEVE FINANCIAL SHALL BE MAINTAINED AT ALL TIMES.
4. PRIOR TO CONSTRUCTION, CONTRACTOR SHALL MARK FOR REMOVAL ALL TREES LOCATED WITHIN THE TRAIL CORRIDOR CLEARING LIMITS AND REVIEW EACH LOCATION WITH THE ENGINEER FOR APPROVAL PRIOR TO PERFORMING TREE REMOVALS.
5. SEE DWG. NO. ALN-01 FOR ALIGNMENT AND CONSTRUCTION LAYOUT INFORMATION.
6. SEE DWG. NO. SEC-01 FOR GRADING, DRAINAGE, AND SEDIMENTATION & EROSION CONTROL INFORMATION.

THE UNDERGROUND UTILITIES DEPICTED HEREON ARE BASED ON FIELD LOCATION OF VISIBLE FEATURES, MAPS AND PLANS OF RECORD, UTILITY MAPPING OR OTHER SOURCES OF INFORMATION. THE ENGINEER MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE ENGINEER FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED. ALTHOUGH HE DOES DECLARE THAT THEY ARE DEPICTED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE ENGINEER HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES.

[illegible]

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

**REVISED OR ADDED

✓*	SHEET NO.	TITLE	APPROVAL DATE**
	HW-211_01	ANTI-TRACKING PAD	11-01-21
	HW-286_01	DRAINAGE TRENCH EXCAVATION	7-15-20
	HW-506_01a	ENDWALLS	11-01-21
	HW-506_01b	STEEL REINFORCEMENT FOR ENDWALLS	11-01-21
	HW-506_02	TYPE "D-G" & "L" ENDWALLS	7-13-12
	HW-506_03	ENDWALLS FOR PIPE - ARCH	9-18-09
	HW-586_01	CATCH BASIN AND DROP INLET TYPES "C" AND "C-L"	7-15-20
	HW-586_02	CATCH BASIN TOPS (TYPES "C" AND "C-L") FOR DOUBLE GRATE TYPE I	7-15-20
	HW-586_03	CATCH BASIN TOPS (TYPES "C" AND "C-L") FOR DOUBLE GRATE TYPE II	7-15-20
	HW-586_04	PRECAST CATCH BASIN AND ROUND STRUCTURE	7-15-20
	HW-586_05	PRECAST CATCH BASIN TYPES FOR DOUBLE GRATE TYPE I	7-15-20
	HW-586_06	PRECAST CATCH BASIN TYPES FOR DOUBLE GRATE TYPE II	7-15-20
	HW-586_07a	CATCH BASIN TOPS TYPE "C" AND "C-L"	11-01-21
	HW-586_07b	CATCH BASIN TYPE "C" AND "C-L" DOUBLE GRATE TYPE I TOPS	11-01-21
	HW-586_07c	CATCH BASIN TYPE "C" AND "C-L" DOUBLE GRATE TYPE II TOPS	11-01-21
	HW-586_07d	CATCH BASIN TYPE "C-G" AND "C-M" BARRIER CURB TOPS	11-01-21
	HW-586_08	CATCH BASIN FRAMES AND GRATES	7-15-20
	HW-586_09	CATCH BASIN LOCK DOWN TOPS	7-15-20
	HW-586_10a	MANHOLE FRAME AND COVER	7-15-20
	HW-586_10b	MANHOLE FRAME AND GRATE	7-15-20
	HW-586_10c	REINFORCED PRECAST CONCRETE MANHOLE	11-01-21
	HW-586_10d	MANHOLE NON-PRECAST CONCRETE UNIT	7-15-20
	HW-686_01	C.C.M. PIPE INSTALLATION	7-15-20
	HW-686_02	PIPE ENDS	7-15-20
	HW-751_01	UNDERDRAINS AND UNDERDRAIN OUTLETS	7-12-12
	HW-803_01	PAVED APRONS	11-01-21
	HW-811_01	CONCRETE CURBING	6-07-17
	HW-813_01	GRANITE STONE TRANSITION CURBING	7-24-13
	HW-813_02	STONE CURBING	6-07-17
	HW-815_01	BITUMINOUS CONCRETE CURBING	6-07-17

✓*	SHEET NO.	TITLE	APPROVAL DATE**
	HW-821_01a	TRANSITION - 45" (1145) F-SHAPE TO 45" (1145) VERTICAL SHAPE SHEET 1	1-26-12
	HW-821_01b	TRANSITION - 45" (1145) F-SHAPE TO 45" (1145) VERTICAL SHAPE SHEET 2	10-18-10
	HW-821_01c	TRANSITION - 45" (1145) F-SHAPE TO 45" (1145) VERTICAL SHAPE SHEET 3	1-26-12
	HW-821_02a	45" F-SHAPE PRECAST CONCRETE BARRIER CURB SHEET 1	1-27-20
	HW-821_02b	45" F-SHAPE PRECAST CONCRETE BARRIER CURB SHEET 2	1-27-20
	HW-821_03a	TRANSITION - 32" (813) JERSEY SHAPE TO 45" (1145) VERTICAL SHAPE SHEET 1	1-26-12
	HW-821_03b	TRANSITION - 32" (813) JERSEY SHAPE TO 45" (1145) VERTICAL SHAPE SHEET 2	10-18-10
	HW-821_03c	TRANSITION - 32" (813) JERSEY SHAPE TO 45" (1145) VERTICAL SHAPE SHEET 3	10-18-10
	HW-821_03d	TRANSITION - 32" (813) JERSEY SHAPE TO 45" (1145) VERTICAL SHAPE SHEET 4	10-18-10
	HW-821_03e	TRANSITION - 32" (813) JERSEY SHAPE TO 45" (1145) F-SHAPE	7-24-13
	HW-821_04a	MERRITT PARKWAY NARROW MEDIAN BARRIER	6-09-11
	HW-821_04b	MERRITT PARKWAY - 2' (610) WIDE MEDIAN BARRIER AND ROADSIDE BARRIER	7-24-13
	HW-821_05a	TRANSITION - 45" (1145) F-SHAPE TO 54" (1372) VERTICAL SHAPE SHEET 1	1-26-12
	HW-821_05b	TRANSITION - 45" (1145) F-SHAPE TO 54" (1372) VERTICAL SHAPE SHEET 2	1-26-12
	HW-821_06	54" (1372) VERTICAL SHAPE BARRIER	2-06-12
	HW-821_07	MISCELLANOUS DETAILS FOR BARRIER TRANSITIONS	7-12-12
	HW-821_08a	F-SHAPE CONC. BARRIER CURB (21"x45") TRANSITION FOR THRIE-BEAM	1-09-20
	HW-821_08b	F-SHAPE CONC. BARRIER CURB (21"x45") TRANSITION FOR THRIE-BEAM - REINF.	1-09-20
	HW-821_09a	SINGLE SLOPE CONC. BARRIER CURB (20"x42") TRANS. FOR THRIE-BEAM	1-09-20
	HW-821_09b	SINGLE SLOPE CONC. BARRIER CURB (20"x42") TRANS. FOR THRIE-BEAM - REINF.	1-09-20
	HW-821_10a	VERTICAL FACE CONC. (21"x54") TRANSITION FOR THRIE-BEAM	1-09-20
	HW-821_10b	VERTICAL FACE CONC. (21"X54") TRANSITION FOR THRIE-BEAM REINF	11-01-21
	HW-821_11a	42" SINGLE SLOPE PRECAST CONCRETE BARRIER CURB -SHEET 1	1-27-20
	HW-821_11b	42" SINGLE SLOPE PRECAST CONCRETE BARRIER CURB -SHEET 2	1-27-20
	HW-822_01	TEMPORARY PRECAST CONCRETE BARRIER CURB	7-24-13
	HW-822_02a	TEMPORARY TRAFFIC BARRIER - DETAILS	3-18-21
	HW-822_02b	TEMPORARY TRAFFIC BARRIER (BOLTED)	3-18-21
	HW-822_02c	TEMPORARY TRAFFIC BARRIER & TEMPORARY TRAFFIC BARRIER (PINNED)	3-18-21
	HW-905_01	STONE WALL FENCE	1-25-19
	HW-906_01	WIRE FENCE	1-25-19

✓*

SHEET NO.

TITLE

APPROVAL DATE**

✓*

SHEET NO.

TITLE

APPROVAL DATE**

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

**REVISED OR ADDED

	HW-910_01	W-BEAM METAL BEAM RAIL HARDWARE	6-09-11		HW-910_26	THRIE-BEAM ATTACHMENT HARDWARE	1-09-20
	HW-910_02	METAL BEAM RAIL (TYPE R-B 350) GUIDERAIL	6-09-11		HW-910_27	THRIE-BEAM ATTACHMENT	1-09-20
	HW-910_03	METAL BEAM RAIL (TYPE MD-B 350) GUIDERAIL	6-09-11		HW-911_01	R-B END ANCHORAGE TYPE I AND II	1-25-19
	HW-910_04	METAL BEAM RAIL (TYPE R-B 350) SYSTEMS 5, 5A, & 6	6-09-11		HW-911_02	MD-B END ANCHORAGE TYPE I	1-05-18
	HW-910_05	METAL BEAM RAIL R-B 350 SPAN TYPE I, II, III SECTIONS	7-24-13		HW-911_03	ANCHOR IN EARTH CUT SLOPE & ANCHOR IN ROCK CUT SLOPE	10-18-10
	HW-910_06	R-B 350 BRIDGE ATTACHMENT SAFETY SHAPE PARAPET	6-09-11		HW-911_05	MERRITT PARKWAY GUIDERAIL END ANCHORS	7-24-13
	HW-910_07	R-B 350 BRIDGE ATTACHMENT VERTICAL SHAPE PARAPET	1-25-19		HW-913_01a	CHAIN LINK FENCE	5-06-19
	HW-910_08	R-B 350 BRIDGE ATTACHMENT TRAILING END	6-09-11		HW-913_01b	CHAIN LINK FENCE HARDWARE	5-06-19
	HW-910_09a	MISCELLANEOUS GUIDERAIL TRANSITIONS SHEET 1	7-15-20		HW-913_02	CHAIN LINK FENCE GATES	5-06-19
	HW-910_09b	MISCELLANEOUS GUIDERAIL TRANSITIONS SHEET 2	7-15-20		HW-918_01a	THREE CABLE GUIDERAIL (I-BEAM POSTS) SHEET 1	7-24-13
	HW-910_10	METAL BEAM RAIL 8" (203) x 6" (152) BOX BEAM	7-24-13		HW-918_01b	THREE CABLE GUIDERAIL (I-BEAM POSTS) SHEET 2	1-26-12
	HW-910_11	CURVED GUIDERAIL TREATMENT DETAIL	7-25-12		HW-918_01c	THREE CABLE GUIDERAIL (I-BEAM POSTS) SHEET 3	7-24-13
	HW-910_12a	MERRITT PARKWAY GUIDERAIL LEADING END ATTACHMENTS AND SYSTEMS 2&3	7-24-13		HW-921_01	DRIVEWAY RAMPS AND SIDEWALKS	6-07-17
	HW-910_12b	MERRITT PARKWAY GUIDERAIL HARDWARE DETAILS	7-24-13		HW-949_01a	LANDSCAPE PLANTING	6-15-19
	HW-910_12c	MERRITT PARKWAY GUIDERAIL TRAILING END ATTACHMENTS	7-24-13		HW-949_01b	TREE STAKING	6-15-19
	HW-910_12d	MERRITT PARKWAY MEDIAN GUIDERAIL AND END ANCHOR	6-09-11		HW-1800_01	GRADING PLAN FOR IMPACT ATTENUATION SYSTEMS (FLARED AND TANGENTIAL)	1-25-19
	HW-910_13a	THRIE-BEAM METAL BEAM RAIL HARDWARE	7-24-13		HW-1800_02	GRADING PLAN FOR IMPACT ATTENUATION SYSTEMS (MEDIAN/GORE)	1-25-20
	HW-910_13b	THRIE-BEAM TRANSITIONS	7-24-13				
	HW-910_14a	THRIE-BEAM 350 BRIDGE ATTACHMENT	6-09-11				
	HW-910_14b	THRIE-BEAM 350 GUIDERAIL TRANSITION TO R-B 350 GUIDERAIL	6-09-11				
	HW-910_15	MD-B 350 MEDIAN BARRIER SAFETY SHAPE ATTACHMENT TYPE I	6-09-11				
	HW-910_16	MD-B 350 MEDIAN BARRIER SAFETY SHAPE ATTACHMENT TYPE II	6-09-11				
	HW-910_17	R-B TERMINAL SECTION	11-01-21				
	HW-910_18	METAL BEAM RAIL (TYPE MD-I) GUIDERAIL	10-18-10				
	HW-910_19a	METAL BEAM RAIL (MODIFIED TYPE R-I) AND END ANCHORAGE TYPE I	7-24-13				
	HW-910_19b	METAL BEAM RAIL (MODIFIED TYPE R-I) AND END ANCHORAGE TYPE II	7-24-13				
	HW-910_19c	METAL BEAM RAIL (MODIFIED TYPE R-I) SYSTEMS 2 AND 3	7-24-13				
	HW-910_20	MASH W-BEAM HARDWARE	1-05-18				
	HW-910_21	METAL BEAM RAIL (R-B MASH) GUIDERAIL	1-25-19				
	HW-910_22	METAL BEAM RAIL (MD-B MASH) GUIDERAIL	1-05-18				
	HW-910_23	METAL BEAM RAIL (R-B MASH) HALF & QUARTER POST SPACING GUIDERAIL	1-05-18				
	HW-910_24	METAL BEAM RAIL SPAN SECTION TYPES II AND III	1-05-18				
	HW-910_25	METAL BEAM RAIL TRANSITION 350 TO MASH	1-05-18				

NOT TO SCALE
####

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

SUBMITTED BY: _____

APPROVED BY: _____



STATE OF CONNECTICUT
DEPARTMENT
OF
TRANSPORTATION

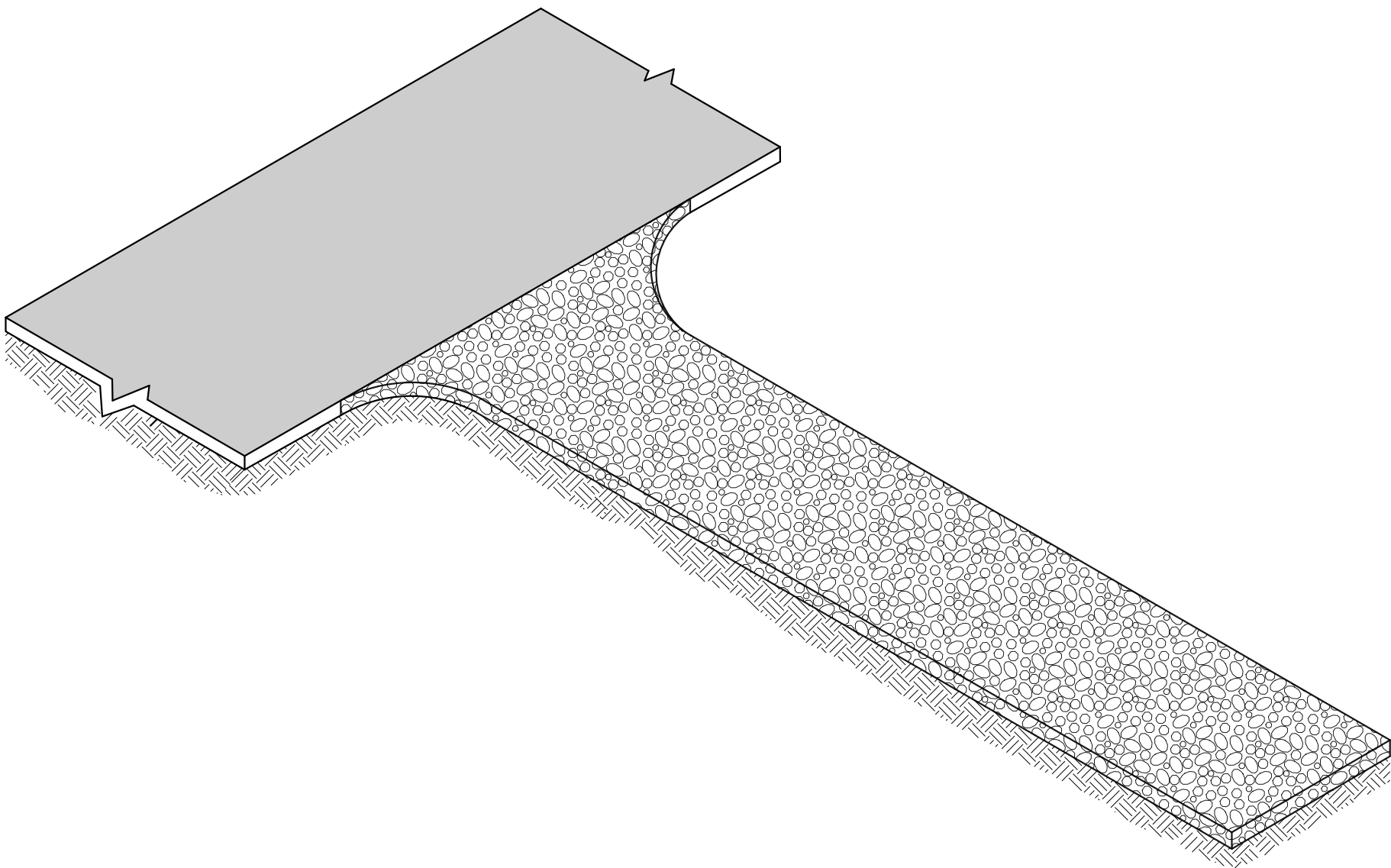
CTDOT
STANDARD SHEET

STANDARD SHEET TITLE:
HIGHWAY STANDARD SHEET INDEX

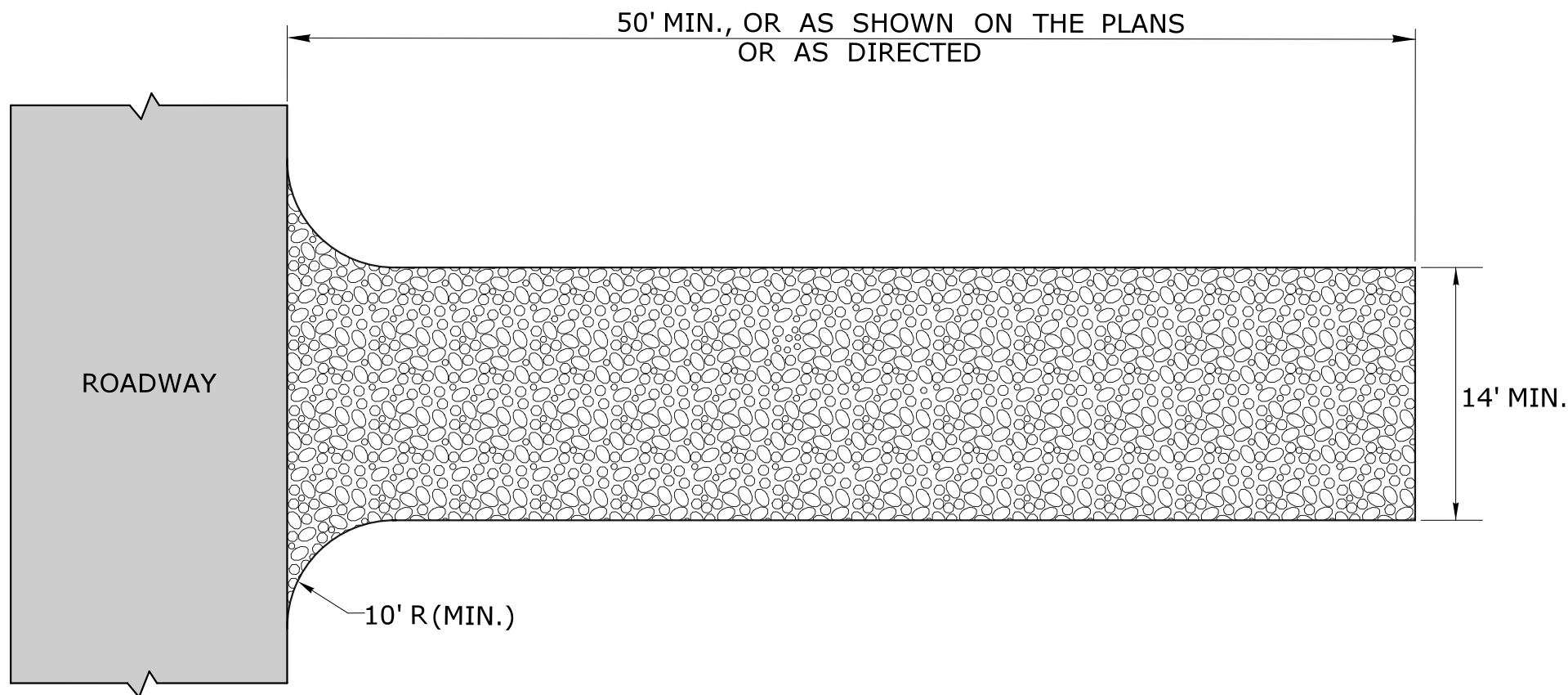
STANDARD SHEET NO.:
2 OF 2

PLOTTED DATE: 11/1/2021

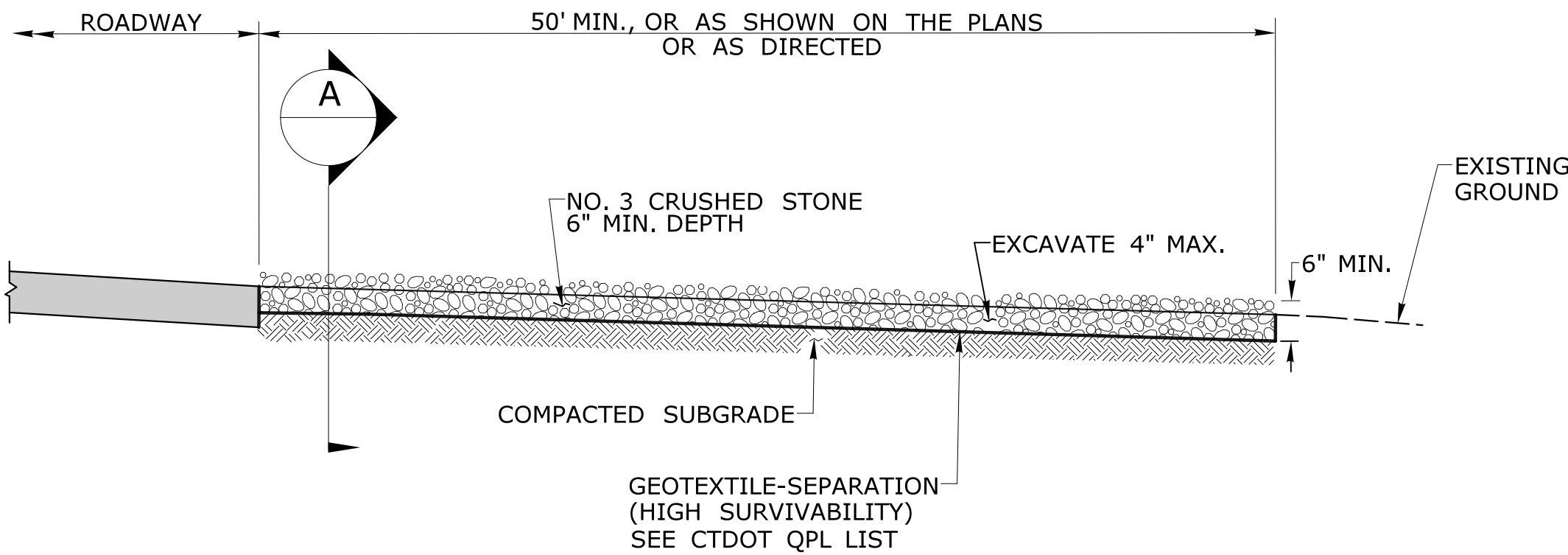
GENERAL NOTE:
1. THE LENGTH OF THE ANTI-TRACKING PAD SHALL BE INCREASED AS DIRECTED FOR SITES COMPOSED OF CLAY OR SILTS.



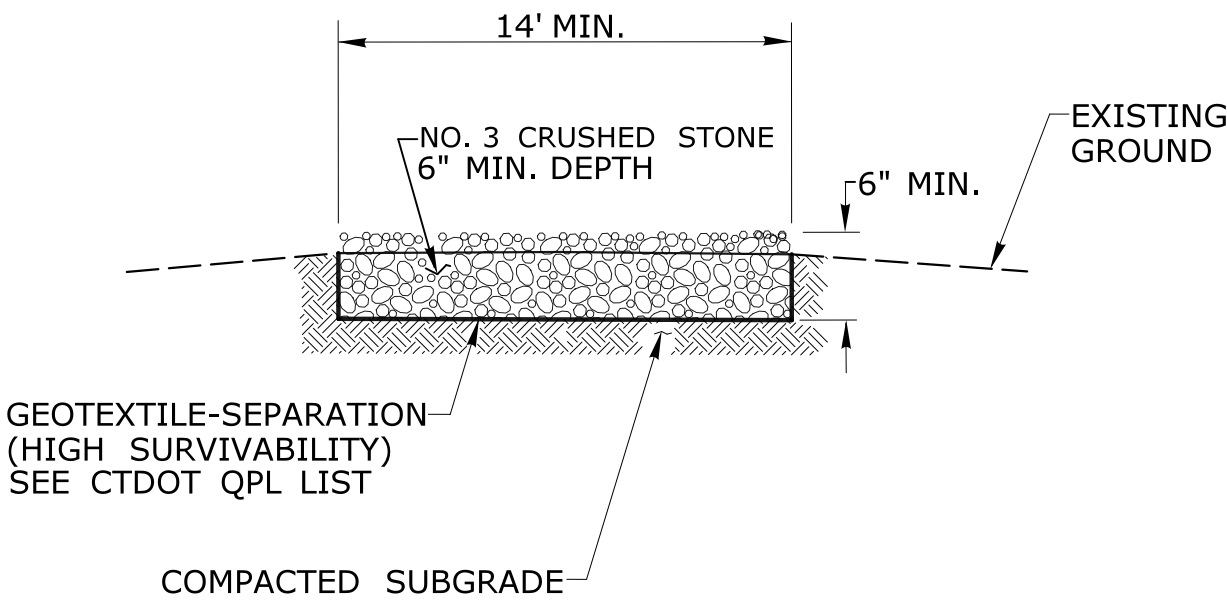
ANTI-TRACKING PAD




PLAN



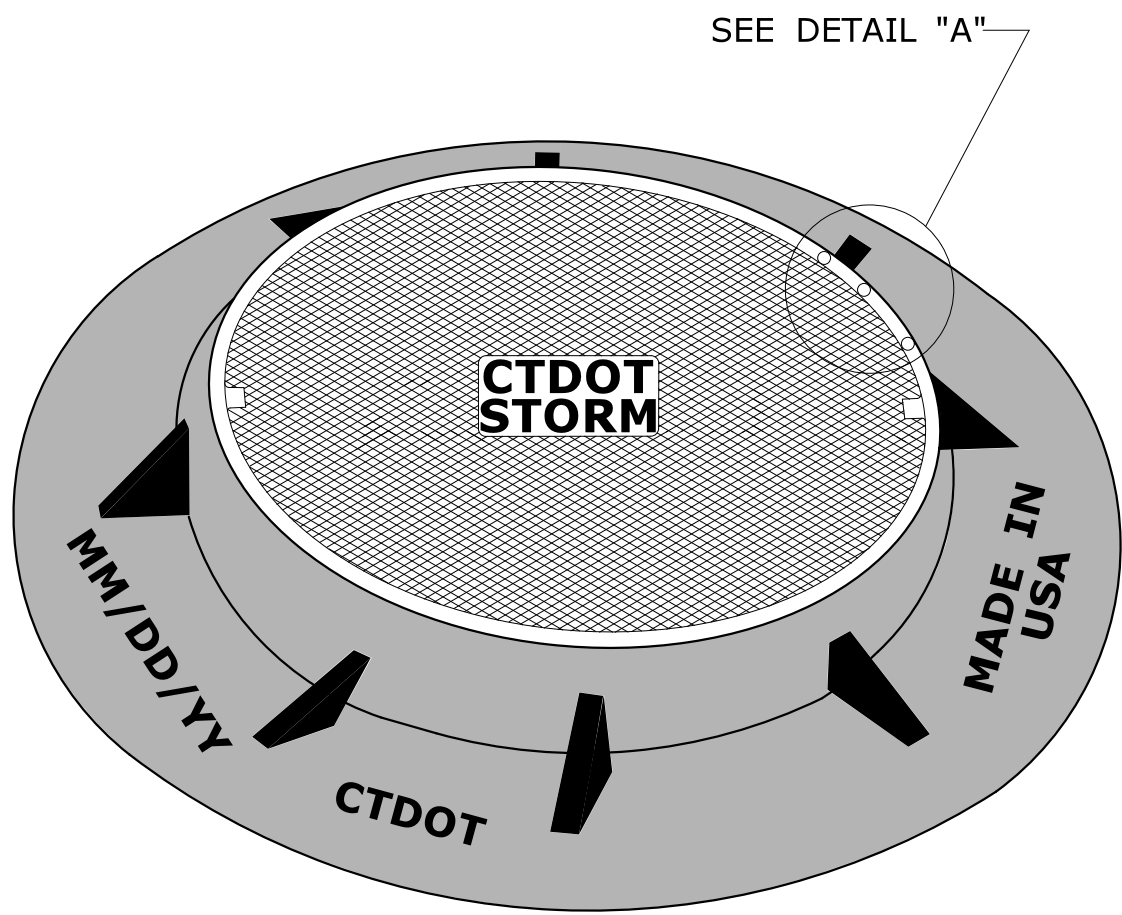
ELEVATION



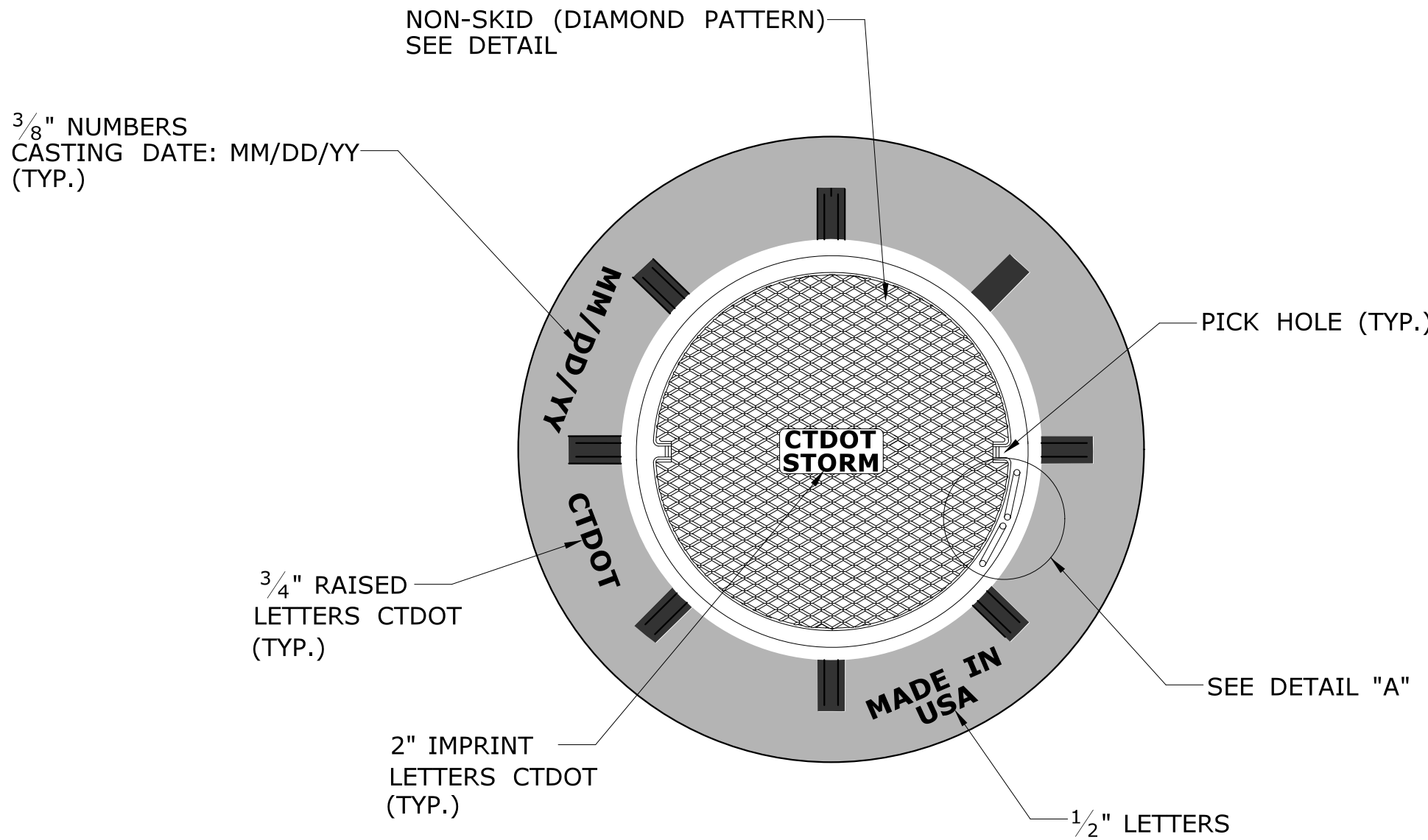
SECTION A

	NOT TO SCALE ####	SIGNATURE BLOCK: OFFICE OF ENGINEERING 2800 BERLIN TURNPIKE NEWINGTON, CT 06111	SUBMITTED BY: _____	APPROVED BY: _____	 STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION	CTDOT STANDARD SHEET	STANDARD SHEET TITLE: ANTI-TRACKING PAD	STANDARD SHEET NO.: HW-211_01
--	----------------------	--	------------------------	-----------------------	--	-------------------------	---	---

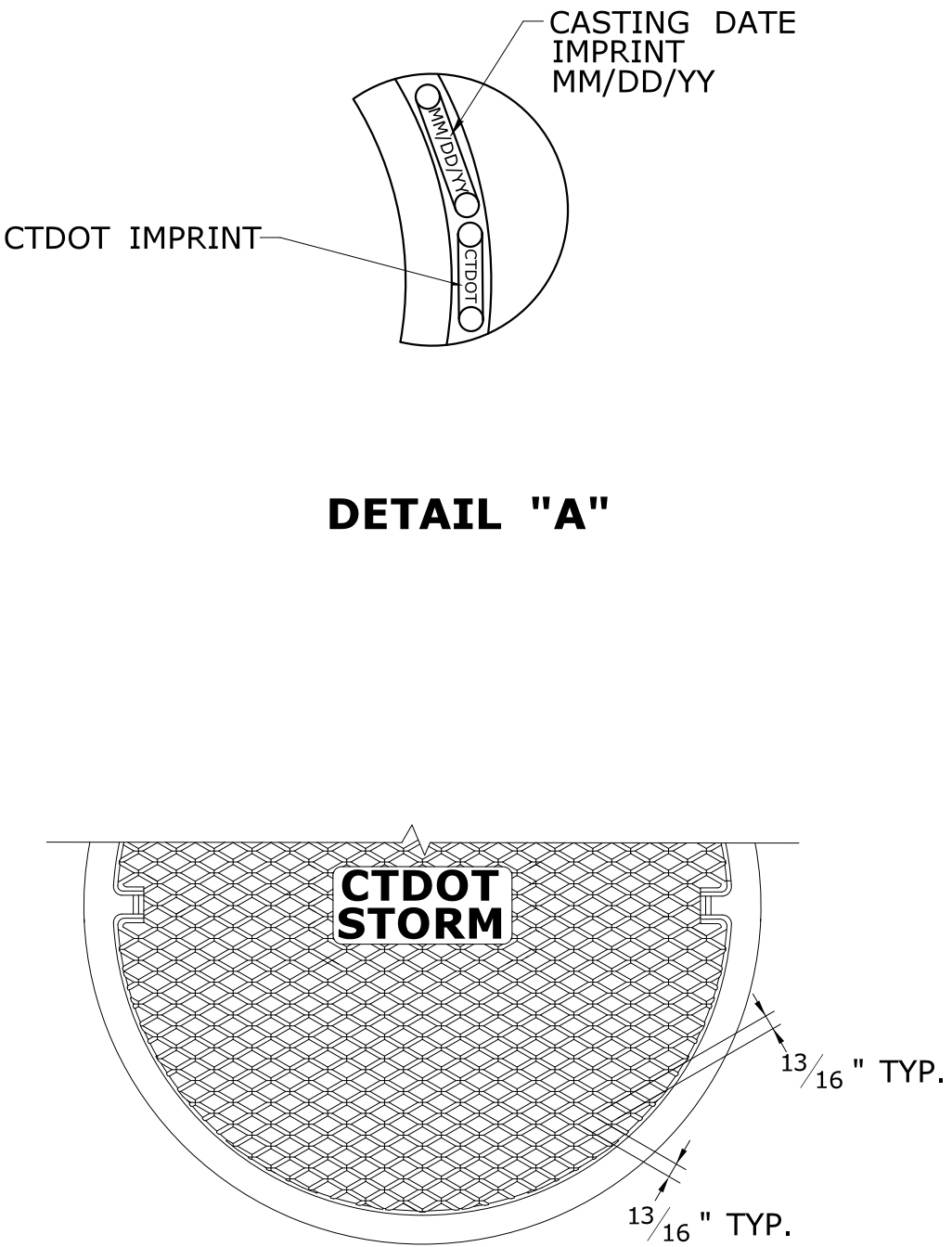
GENERAL NOTES:
1. ALL DIMENSIONS ARE SUBJECT TO MANUFACTURING TOLERANCES.



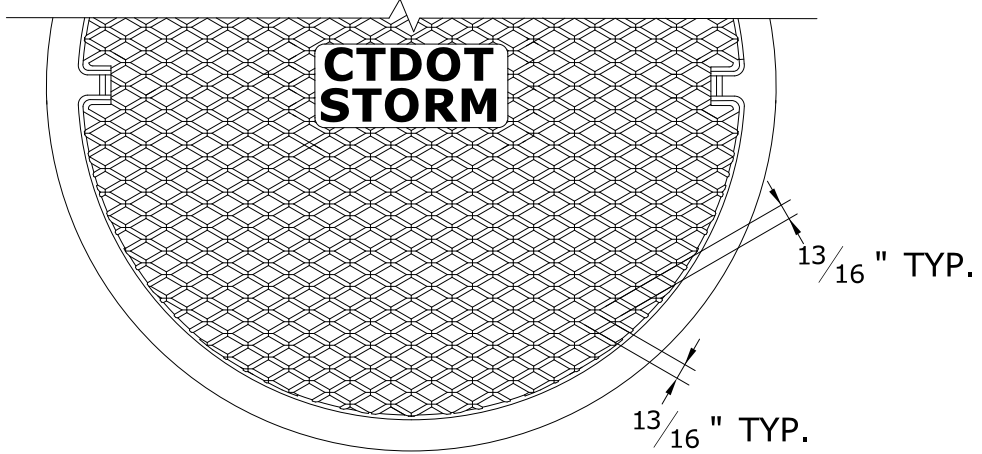
MANHOLE FRAME AND COVER



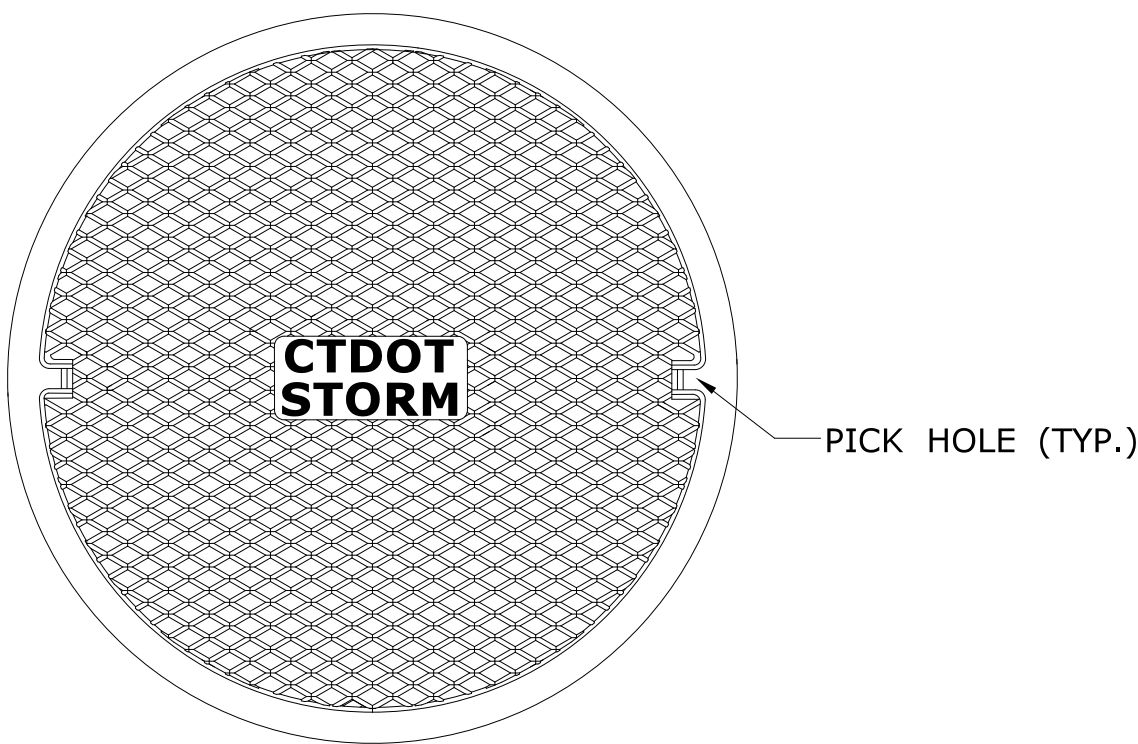
PLAN



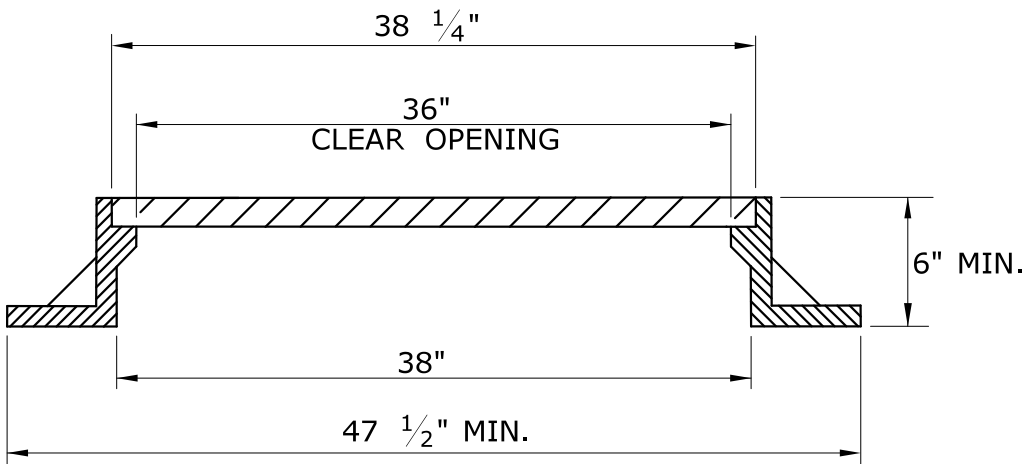
DETAIL "A"



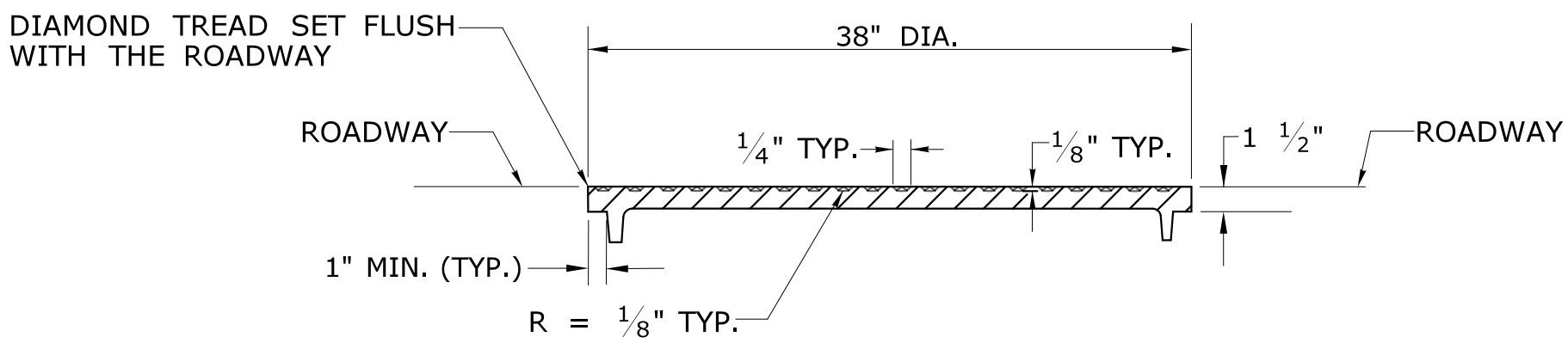
DIAMOND PATTERN PLAN



MANHOLE COVER PLAN



MANHOLE FRAME AND COVER



MANHOLE COVER WITH DIAMOND PATTERN

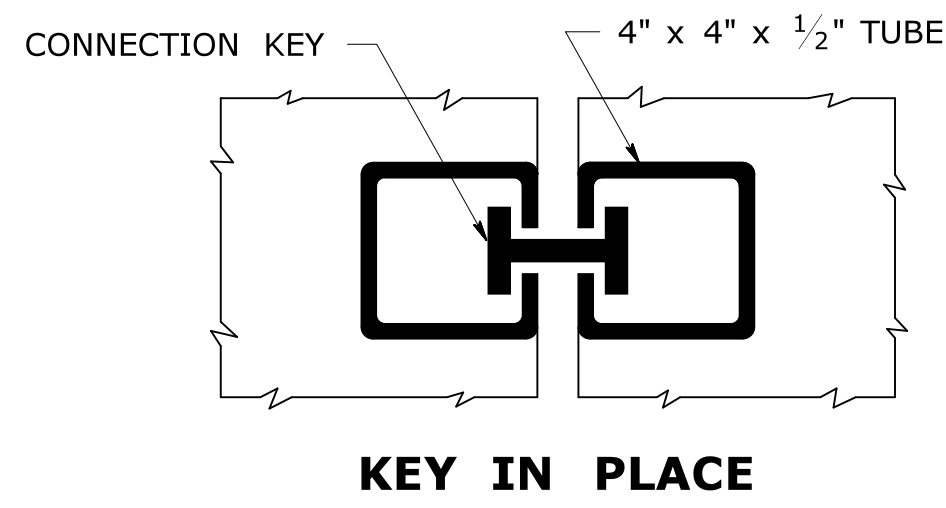
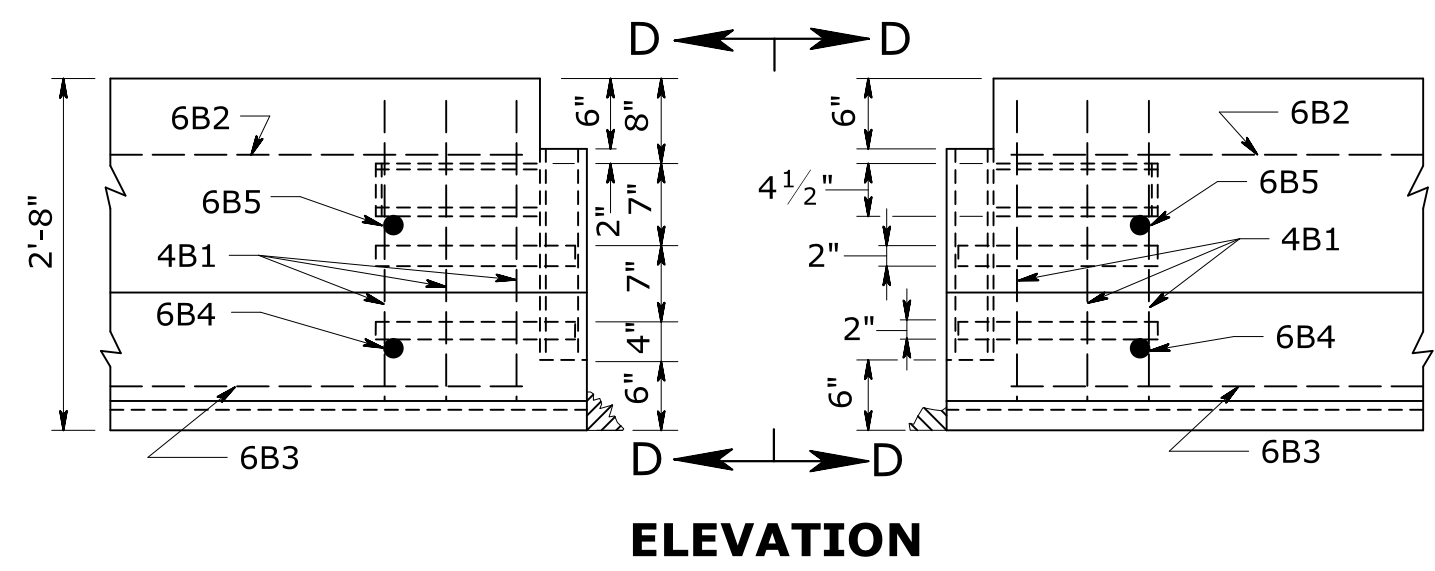
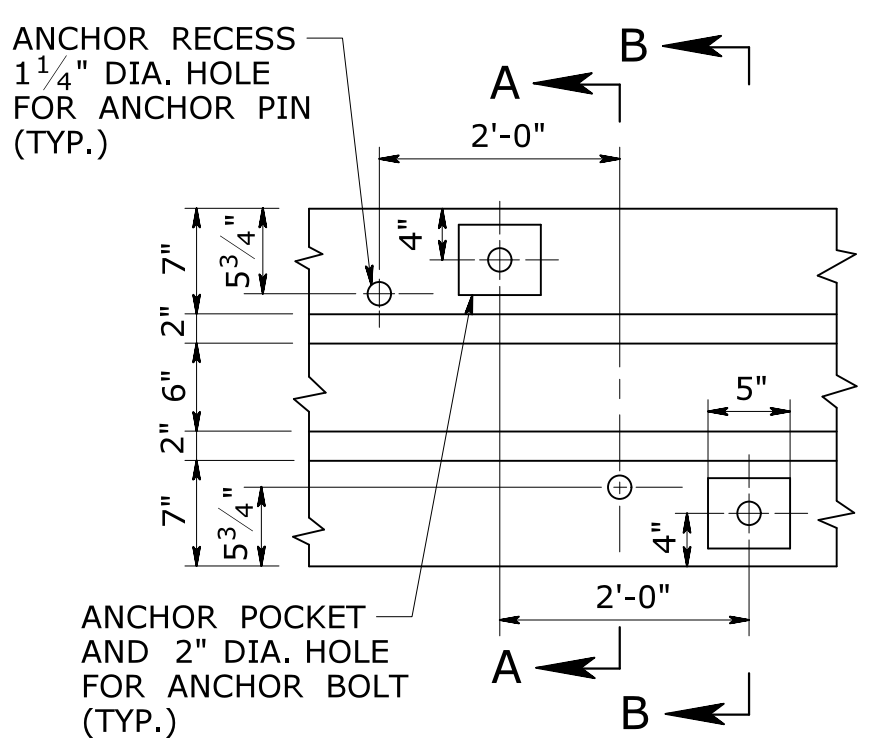
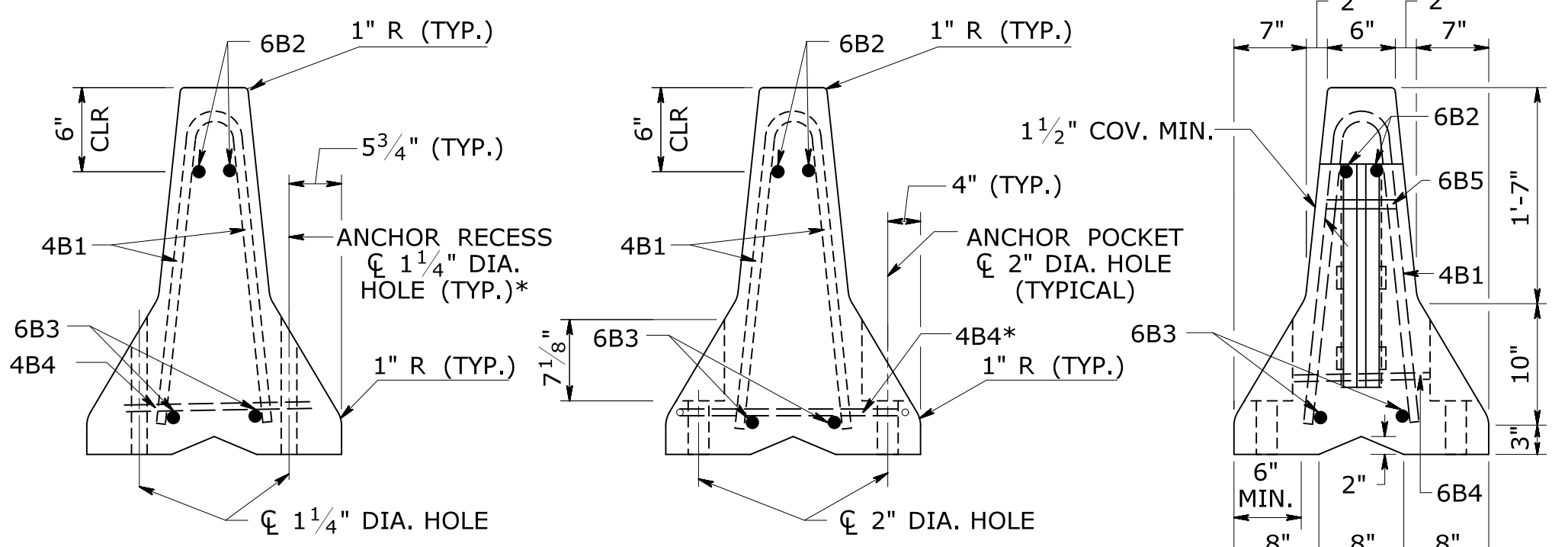
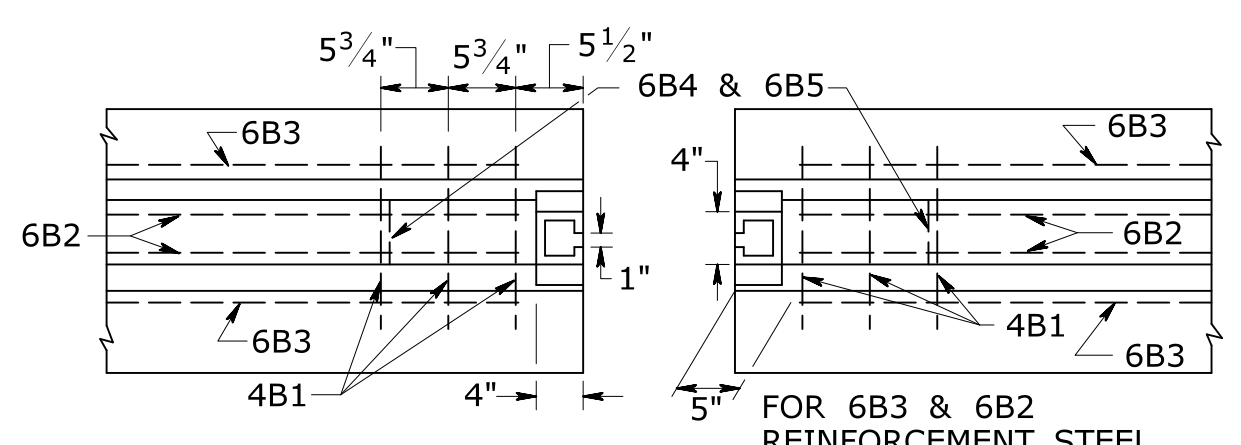
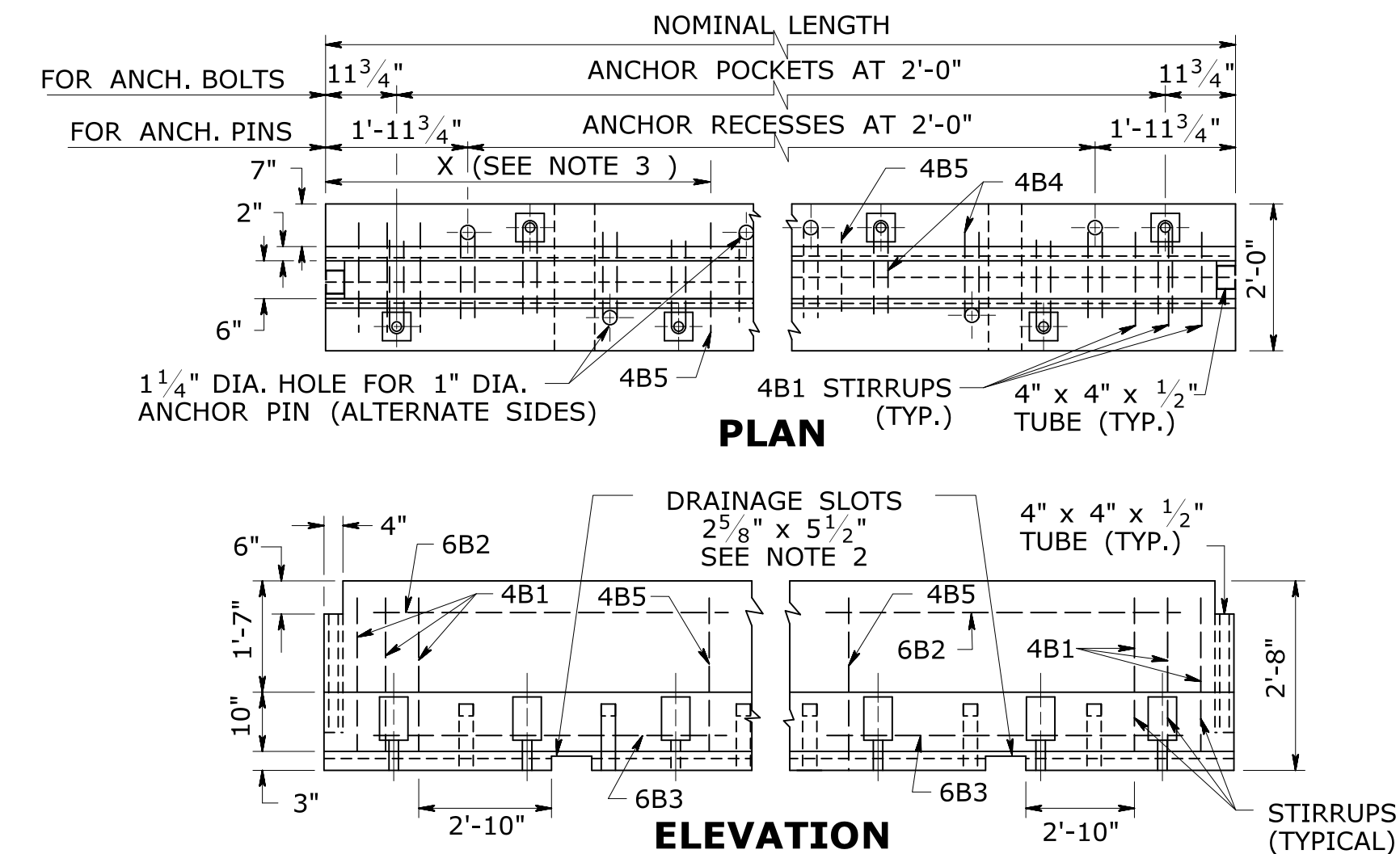
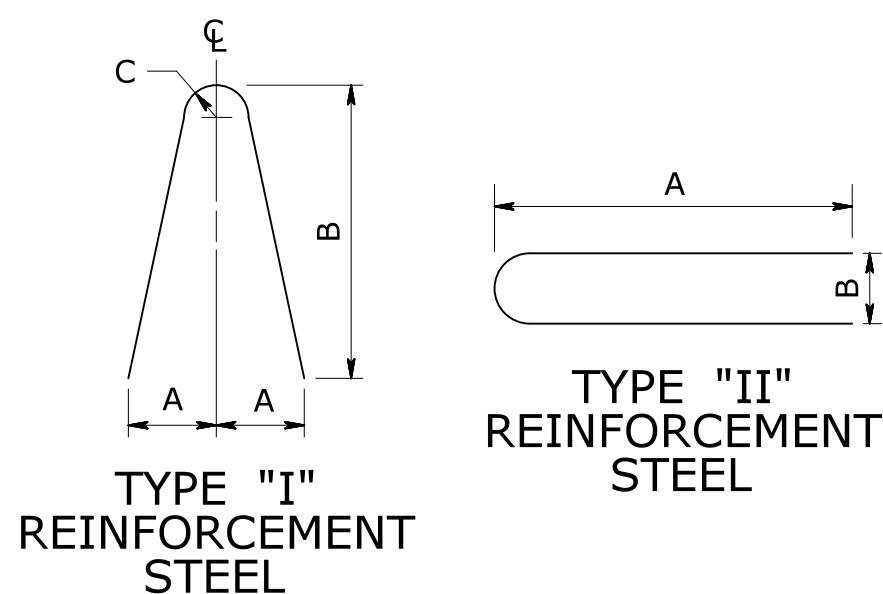


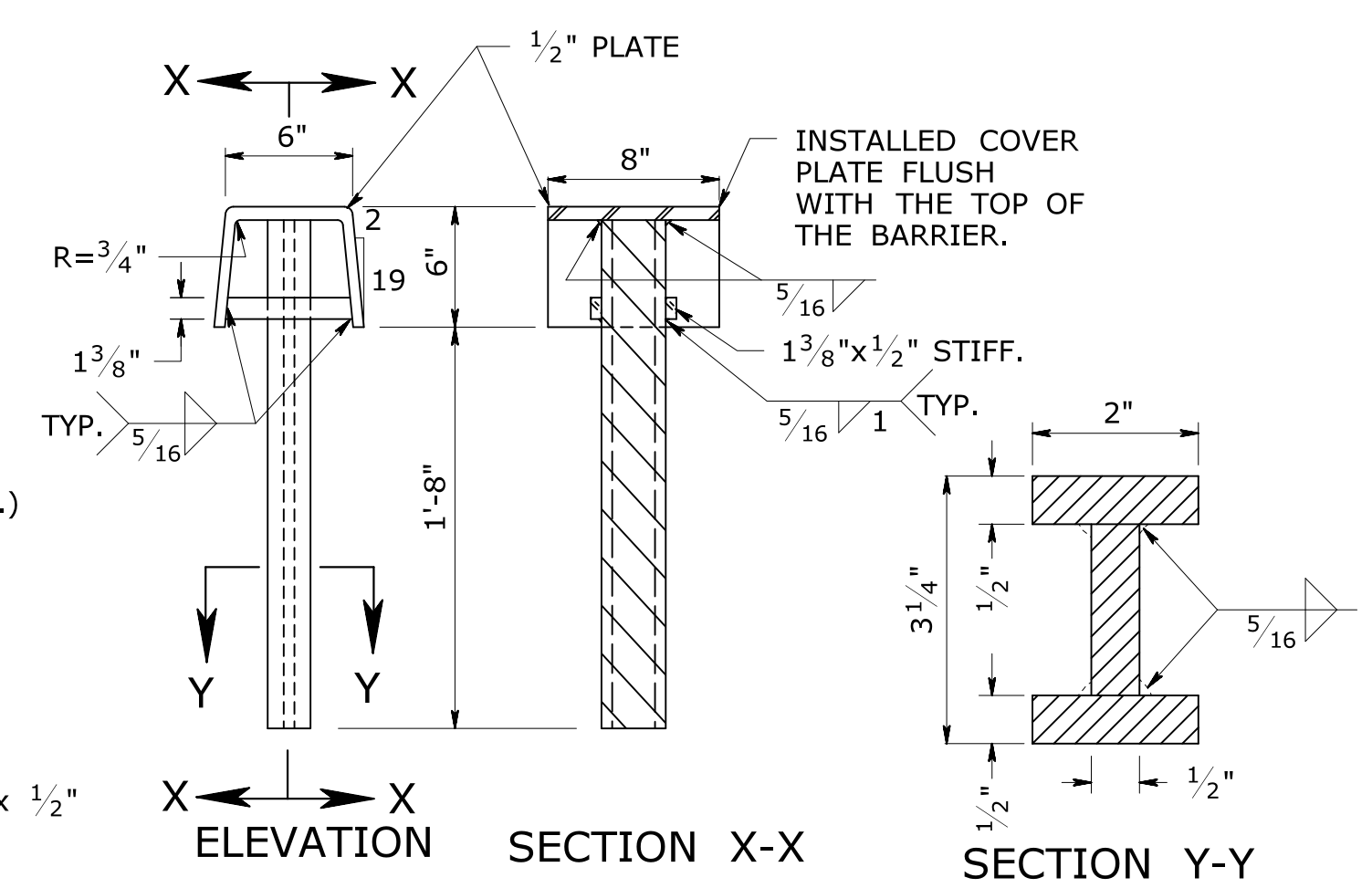
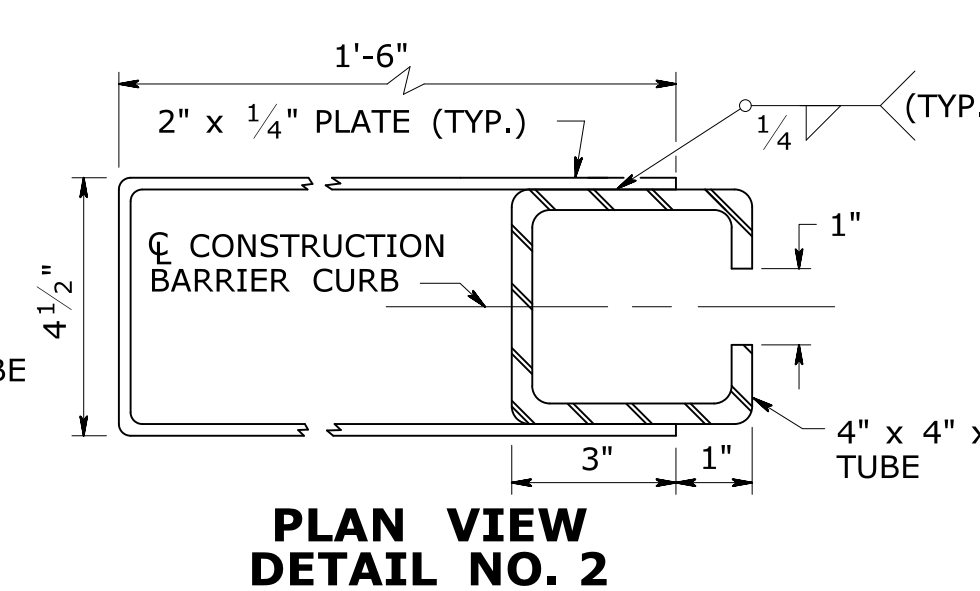
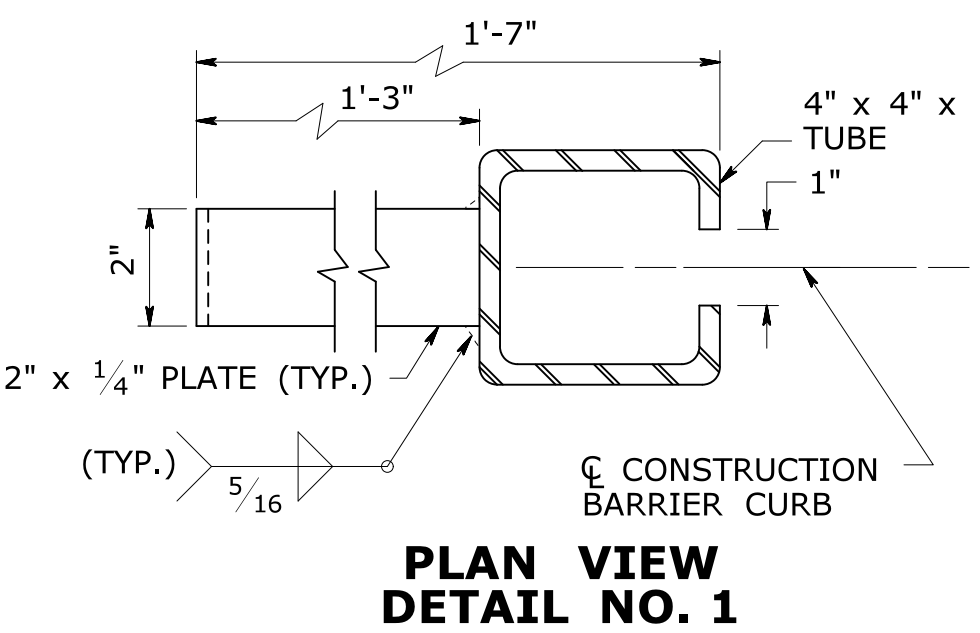
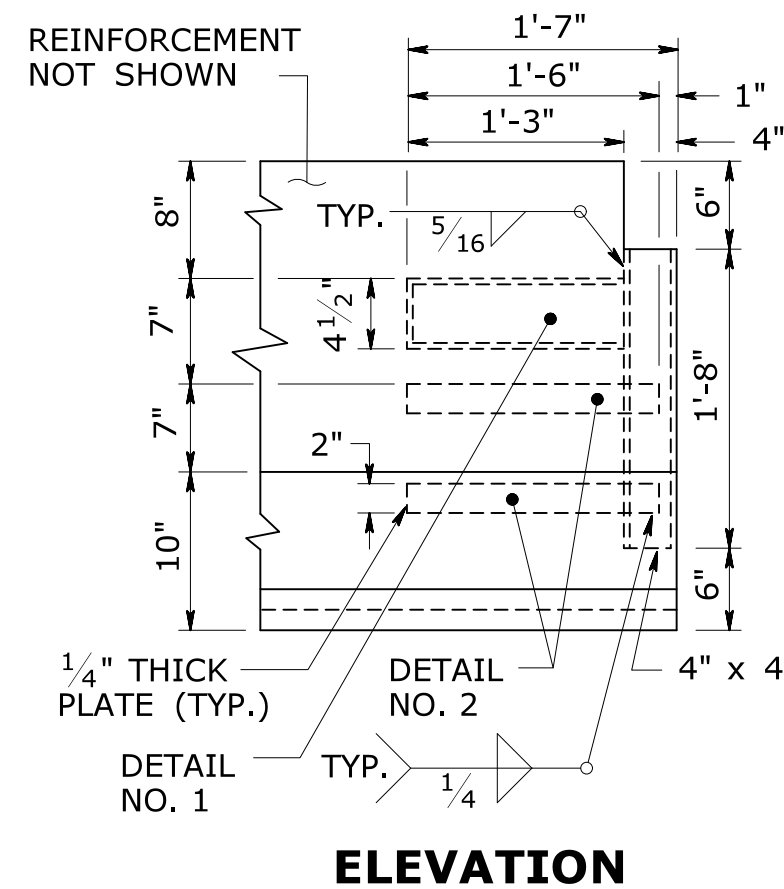
TABLE OF VARIABLE REINFORCEMENT STEEL			
NOMINAL LENGTH OF BARRIER UNIT	MARK	"X"	NO. EACH SECTION
20'	4B4	N.A.	19
20'	4B5	6'-11"	2
18'	4B4	N.A.	17
18'	4B5	6'-5"	2
16'	4B4	N.A.	15
16'	4B5	5'-11"	2
14'	4B4	N.A.	13
14'	4B5	7'-0"	1
12'	4B4	N.A.	11
12'	4B5	6'-0"	1
10'	4B4	N.A.	9
10'	4B5	5'-0"	1
8'	4B4	N.A.	7
8'	4B5	-	0

"X" DISTANCE FROM END OF BARRIER TO 4B5 REINFORCEMENT STEEL

TEMPORARY TRAFFIC BARRIER



REINFORCEMENT STEEL LIST (EACH BARRIER SECTION)							
MARK	SIZE	NUMBER IN EACH SECTION	LENGTH	TYPE	A	B	C
4B1	#4	6	4'-11"	I	5"	26"	2"
4B4	#4	SEE NOTE 3	3'-1"	II	15 1/2"	4"	
4B5	#4	SEE NOTE 3	4'-11"	I	5"	26"	2"
6B2	#6	2	SEE NOTE 3	STR.			
6B3	#6	2	SEE NOTE 3	STR.			
6B4	#6	2	1'-2"	STR.			
6B5	#6	2	0'-6"	STR.			



TEMPORARY TRAFFIC BARRIER CONNECTION DETAILS

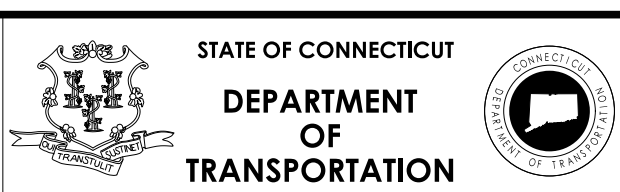
MASH 2016 COMPLIANT
APPROVAL ID. 2021-01

NOT TO SCALE
####

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

SUBMITTED BY: _____

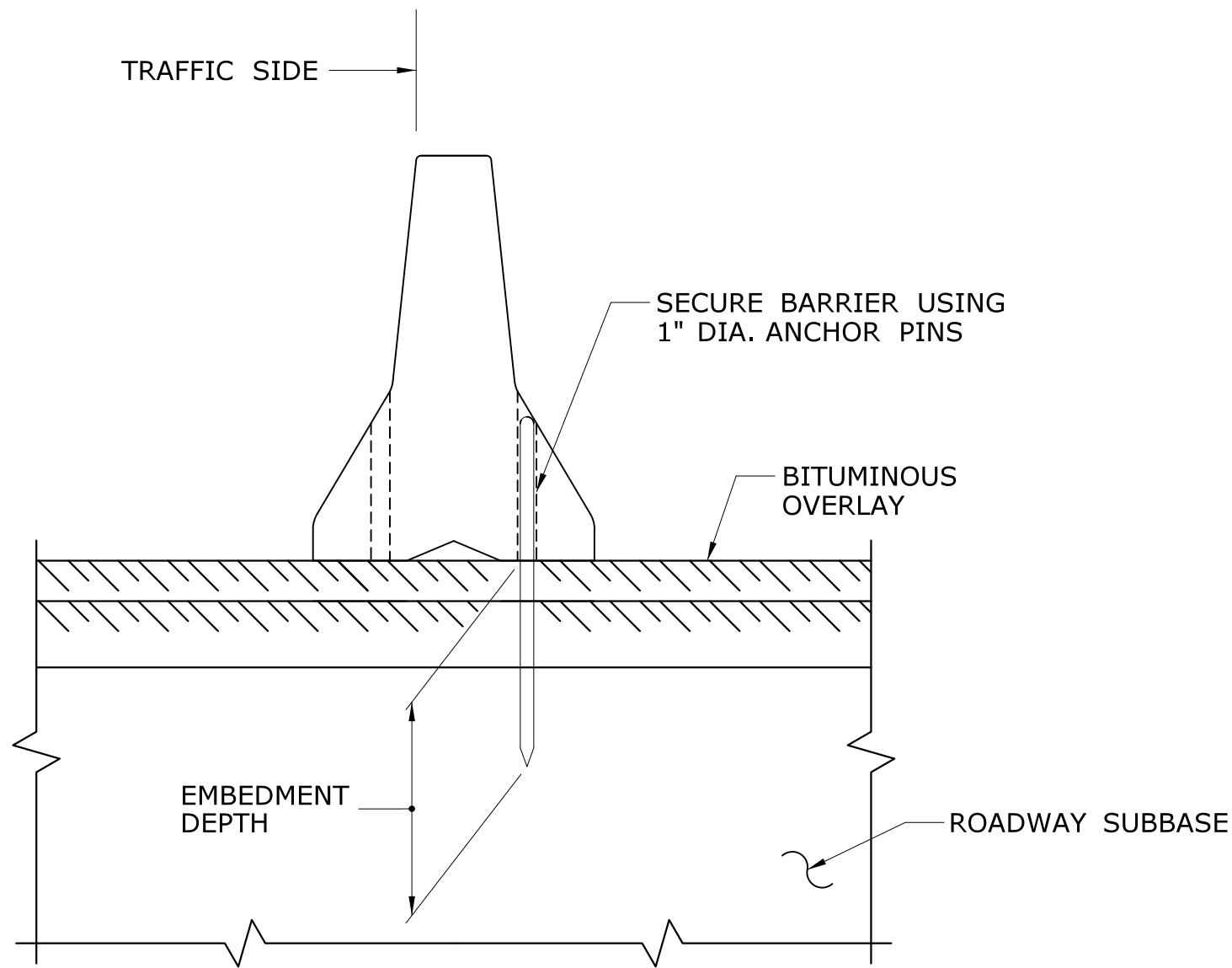
APPROVED BY: _____



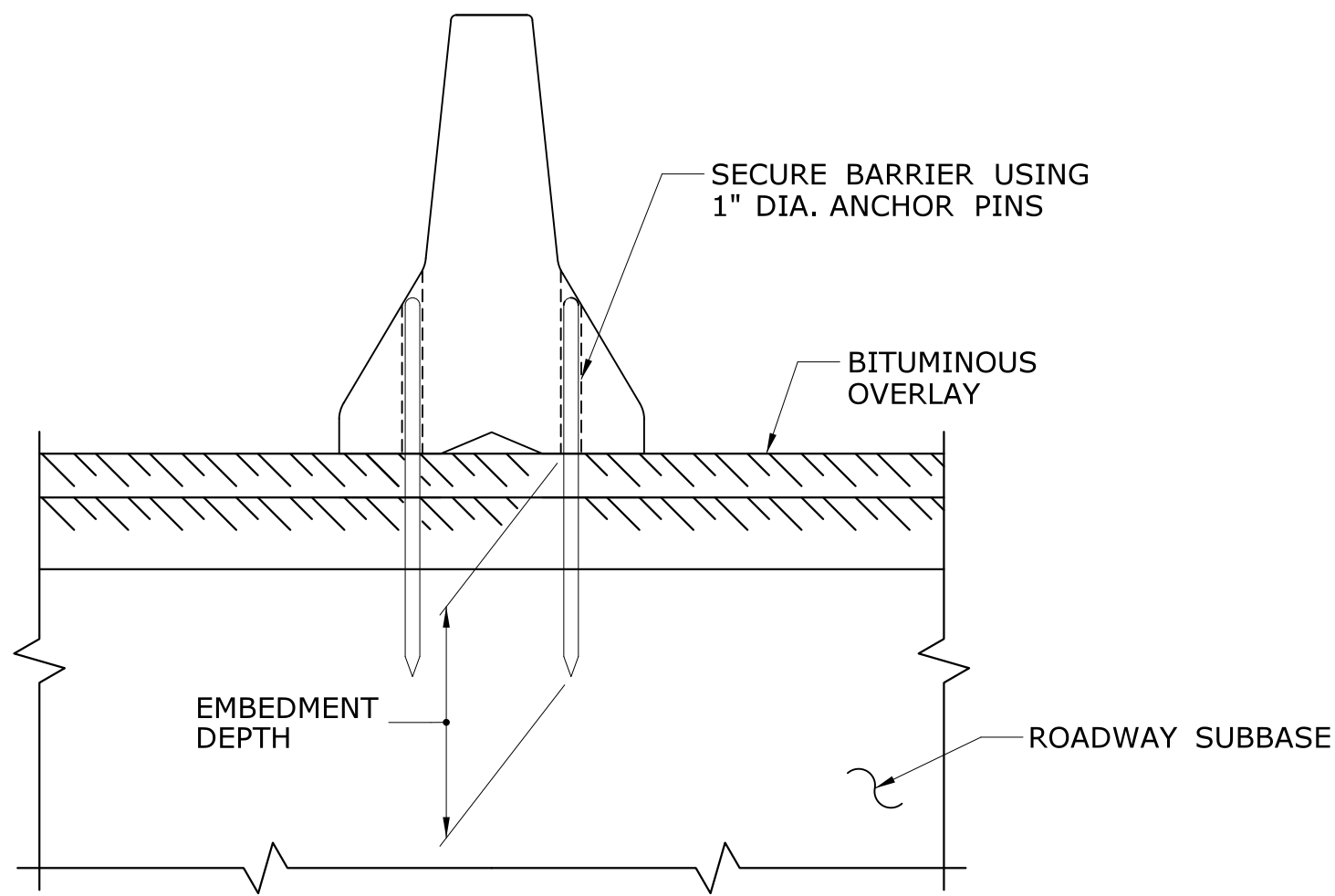
CTDOT
STANDARD SHEET

STANDARD SHEET TITLE:
TEMPORARY TRAFFIC BARRIER - DETAILS

STANDARD SHEET NO.:
HW-822_02a

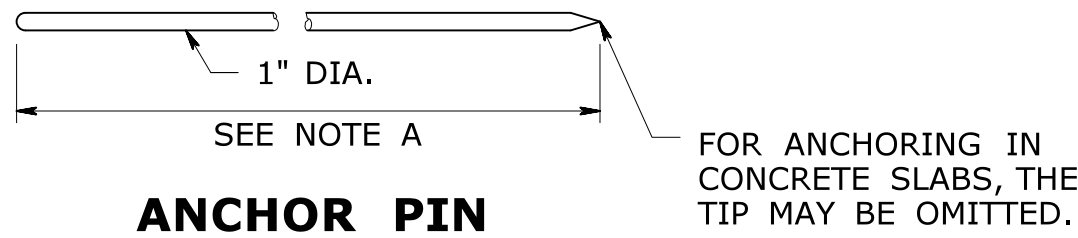


END VIEW - TEMPORARY TRAFFIC BARRIER (PINNED)
SEE NOTES 2 & 3 FOR PIN OPTIONS
ROADSIDE APPLICATION SHOWN



END VIEW - TERMINAL UNIT

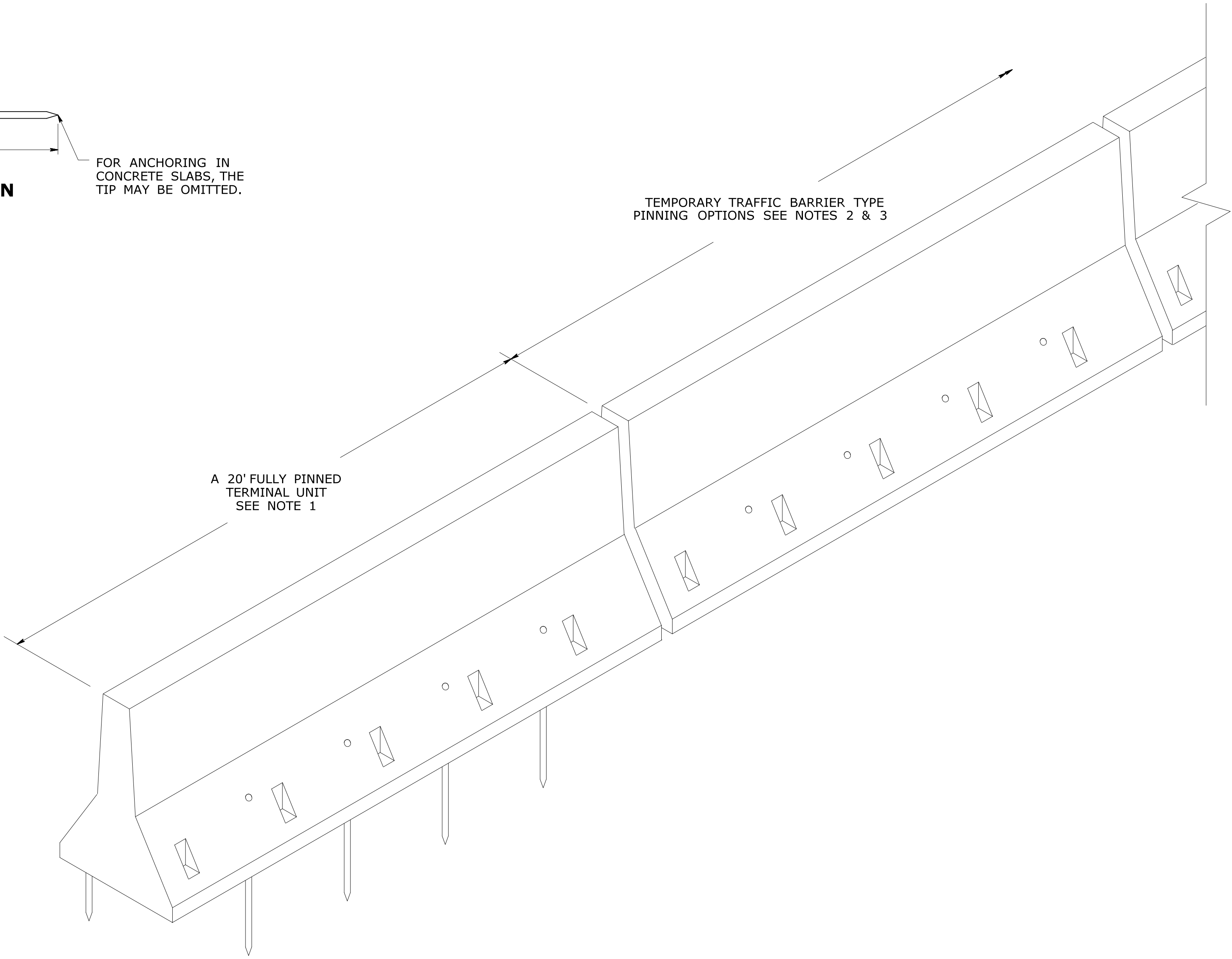
NOTE A
ENSURE THAT THE LENGTH OF THE ANCHOR PIN IS SUCH THAT THE FOLLOWING MINIMUM EMBEDMENT LENGTH IS OBTAINED:
(A) INTO CONCRETE PAVEMENT 0'-5"
(B) INTO FLEXIBLE PAVEMENT 1'-6"
(C) INTO UNPAVED AREA 2'-6"



FOR ANCHORING IN CONCRETE SLABS, THE TIP MAY BE OMITTED.

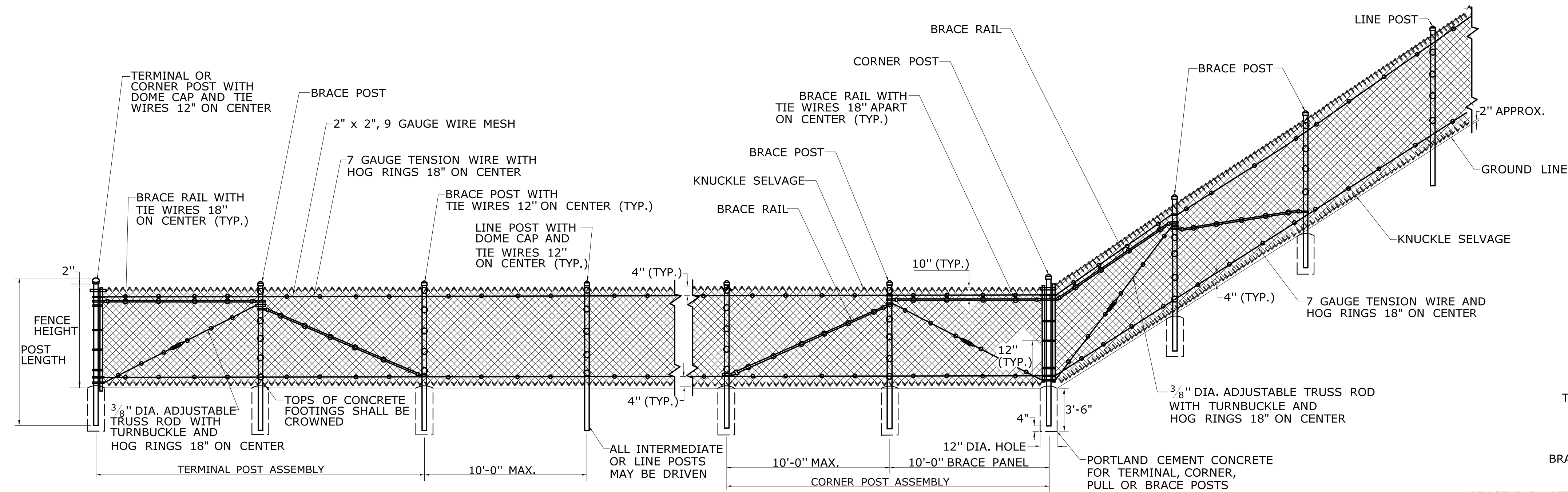
- GENERAL NOTES:**
1. THE FIRST AND LAST TEMPORARY TRAFFIC BARRIER SHALL BE 20 FOOT IN LENGTH FOR EACH BARRIER RUN LAYOUT SHALL BE FULLY PINNED (9 PINS) ON BOTH SIDES.
 2. TEMPORARY TRAFFIC BARRIER (PINNED) SHALL ONLY BE PINNED ON THE WORK AREA SIDE OF THE BARRIER AFTER THE REQUIRED LENGTH OF BARRIER IS PLACED.
 3. TEMPORARY TRAFFIC BARRIER (PINNED) SHALL BE FULLY PINNED (9 PINS) IN LOCATIONS WHERE THE BARRIERS ARE DIVIDING OPPOSING TRAFFIC.
 4. ALL ANCHOR PINS INSTALLED SHALL NOT PROJECT BEYOND THE TEMPORARY TRAFFIC BARRIER'S SURFACE.
 5. INSTALL DELINEATORS AS REQUIRED, REFER TO TRAFFIC STANDARD SHEET NO. TR-1205-01.
 7. TEMPORARY TRAFFIC BARRIER DESIGN DEFLECTION DISTANCES BY TYPE;

BARRIER TYPE	**DEFLECTION
UNPINNED	40"
PINNED	20"
- ** MASH STANDARD DEFLECTION CAUSED BY 5,000 LB VEHICLE TRAVELING 62 MPH IMPACTING THE BARRIER AT 25 DEGREE ANGLE.

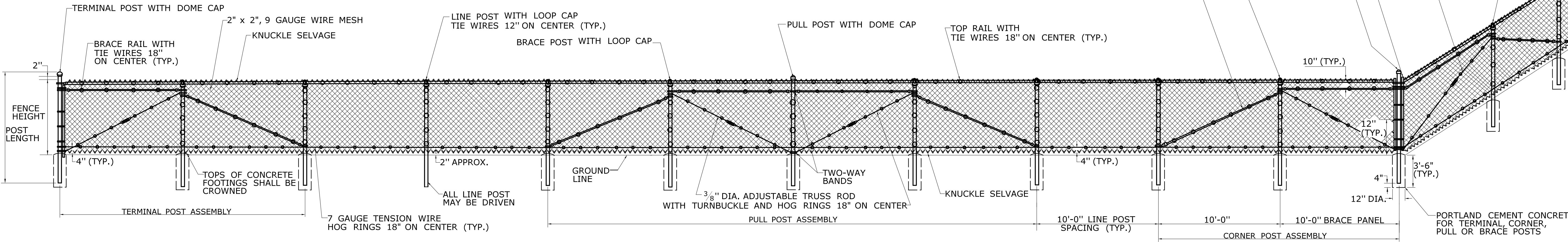


TEMPORARY TRAFFIC BARRIER

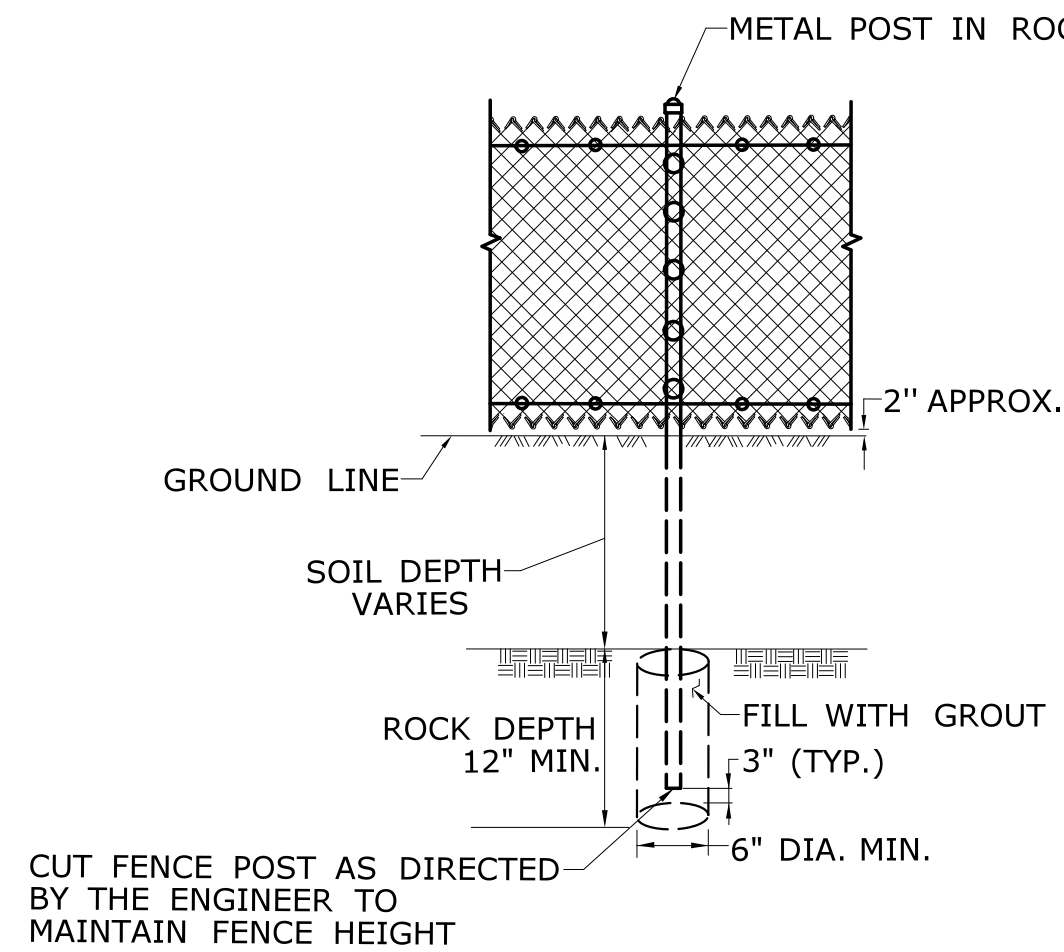
- GENERAL NOTES:**
1. INSTALL PULL POST ASSEMBLIES AT ALL CHANGES IN VERTICAL TO HORIZONTAL OF 10 DEGREES OR MORE.
 2. ALL POSTS WILL BE CAPPED.
 3. WHERE ROCK IS ENCOUNTERED, IT SHALL BE DRILLED AND THE POSTS SET IN MORTAR.
 4. FENCE SHALL BE PLACED WITH FABRIC FACING OUTSIDE HIGHWAY RIGHT OF WAY OR AS DIRECTED BY THE ENGINEER.
 5. SEE HW-913.01b FOR CHAIN LINK FENCE HARDWARE.



CHAIN LINK FENCE WITH TOP TENSION WIRE

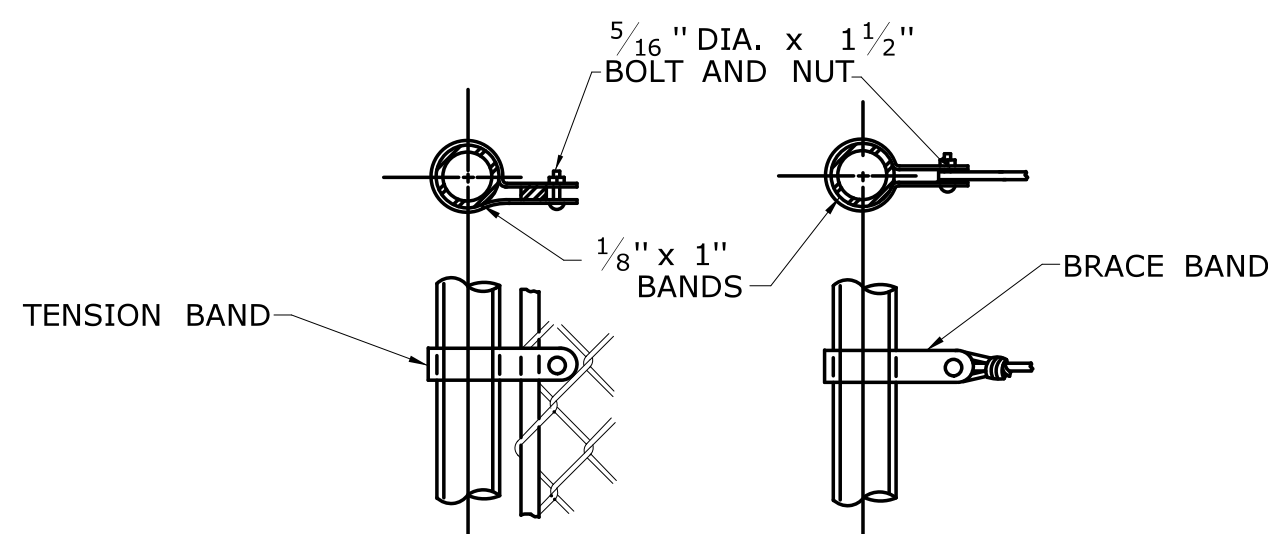


CHAIN LINK FENCE WITH TOP BRACE RAIL AND INTERMEDIATE OR BOTTOM TENSION WIRE

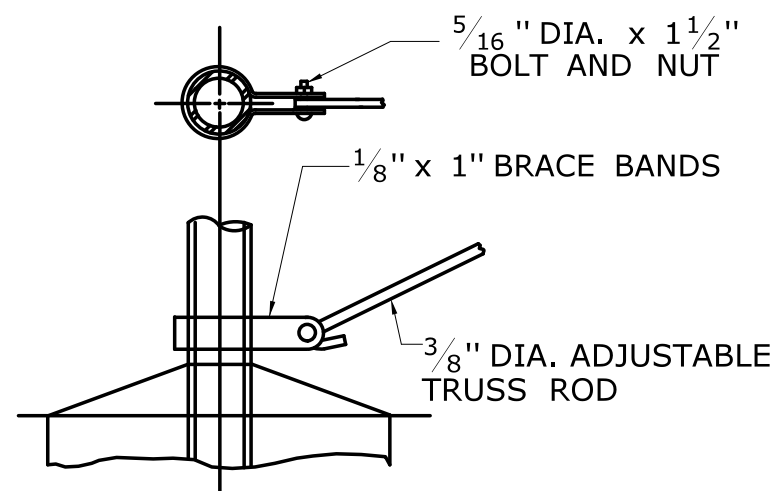


METAL POST IN ROCK

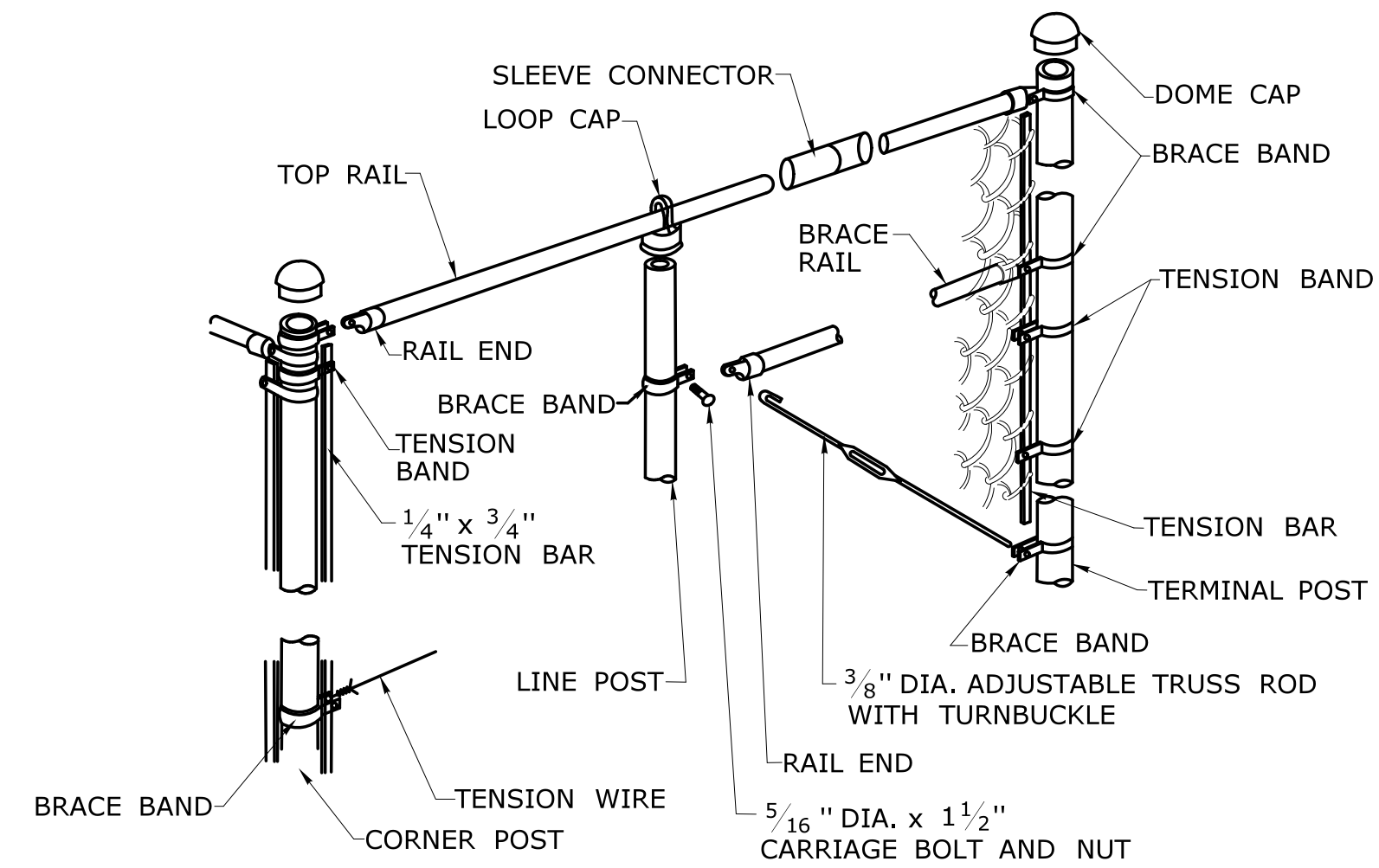
FENCE FABRIC HEIGHT	GROUP 1A ASTM F1083 SCH. 40 PIPE 50,000 PSI DIAMETER	GROUP 1C ASTM F1043 ELEC. RESISTANCE WELDED PIPE 50,000 PSI DIAMETER
	DIAMETER	DIAMETER
LINE OR INTERMEDIATE POST		
UP TO 5'-0"	1 ⁷ / ₈ "	1 ⁷ / ₈ "
6'-0" TO 7'-0"	2 ³ / ₈ "	2 ³ / ₈ "
8'-0" TO 9'-0"	2 ⁷ / ₈ "	2 ⁷ / ₈ "
10'-0"	3 ¹ / ₂ "	3 ¹ / ₂ "
12'-0" OR HIGHER	4"	4"
TERMINAL, CORNER OR PULL POST		
UP TO 5'-0"	2 ³ / ₈ "	2 ³ / ₈ "
6'-0" TO 7'-0"	2 ⁷ / ₈ "	2 ⁷ / ₈ "
8'-0" TO 9'-0"	3 ¹ / ₂ "	3 ¹ / ₂ "
10'-0" OR HIGHER	4"	4"
TOP OR BRACE RAIL POSTS UP TO 6'-0"	1 ⁵ / ₈ "	1 ⁵ / ₈ "
POSTS HIGHER THAN 6'-0"	1 ⁷ / ₈ "	1 ⁷ / ₈ "



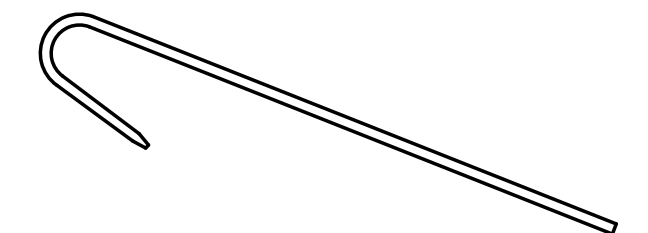
TENSION BAR TENSION WIRE



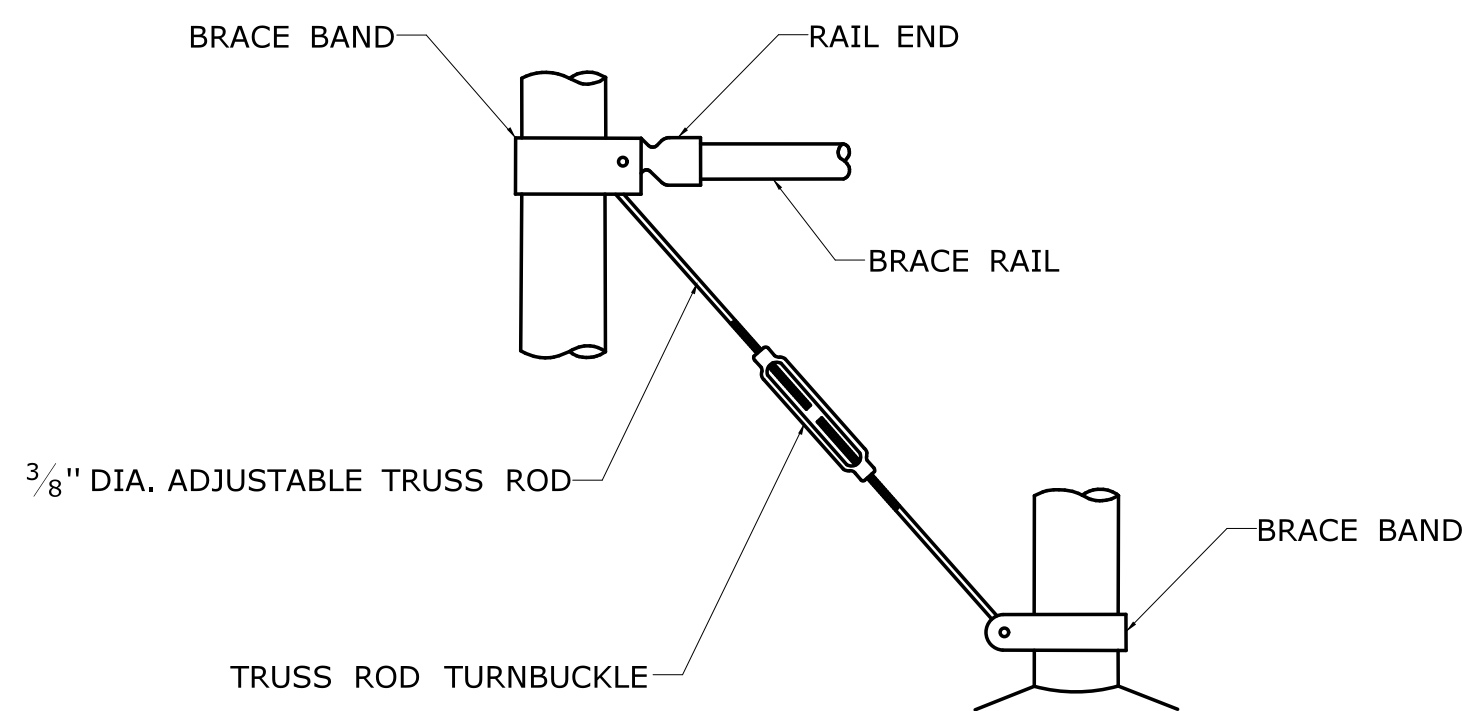
ADJUSTABLE TRUSS ROD



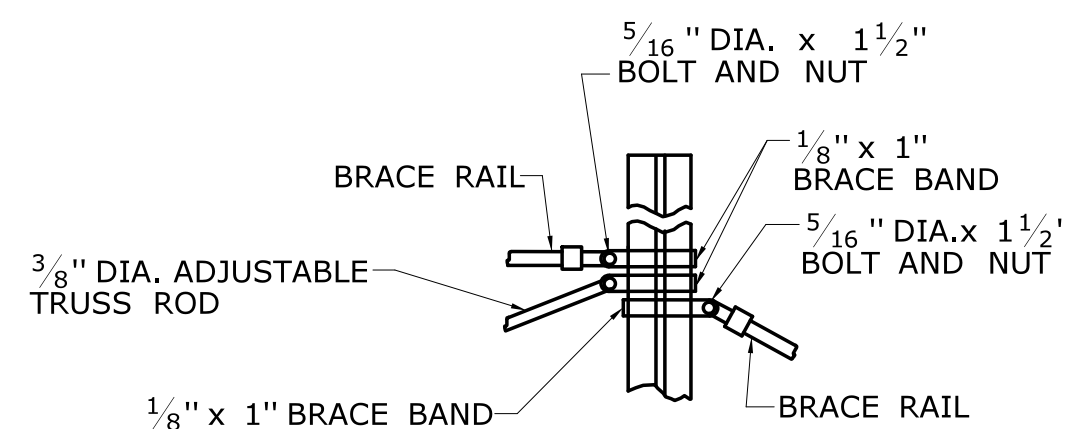
**TOP RAIL / TRUSSED BRACE RAIL
WITH BOTTOM TENSION WIRE**



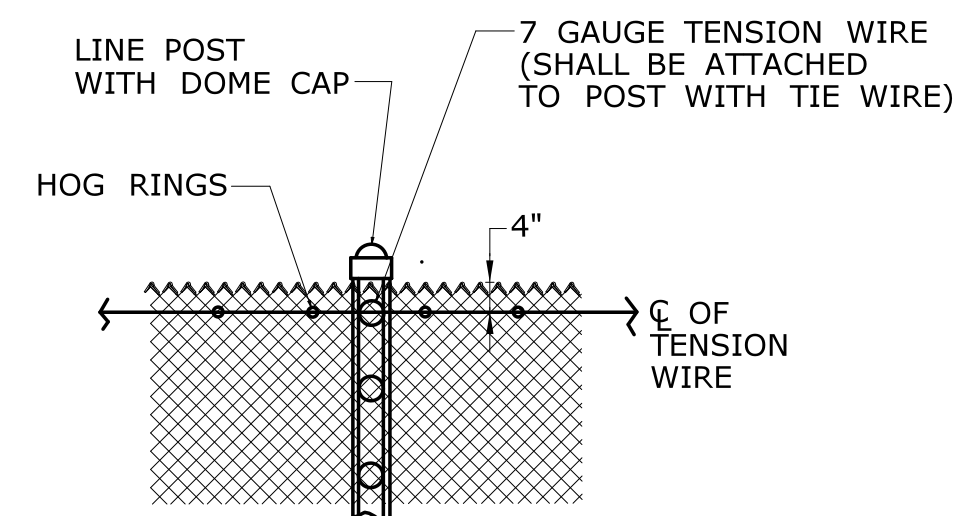
TIE WIRE



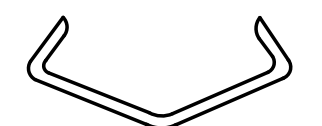
BRACE & TRUSS CONNECTIONS



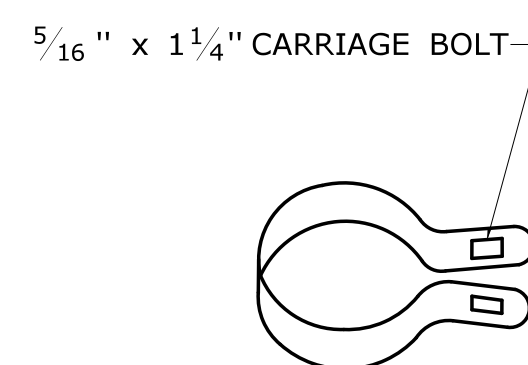
**BRACE RAILS ATTACHMENT
TO LINE POSTS**



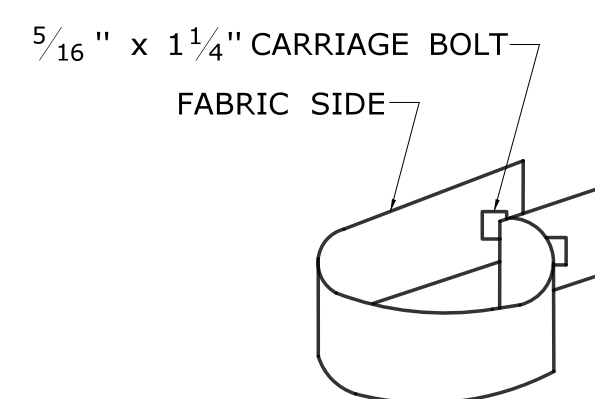
TENSION WIRE



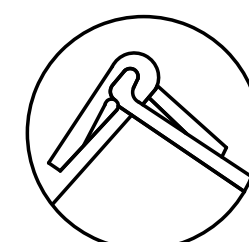
HOG RING



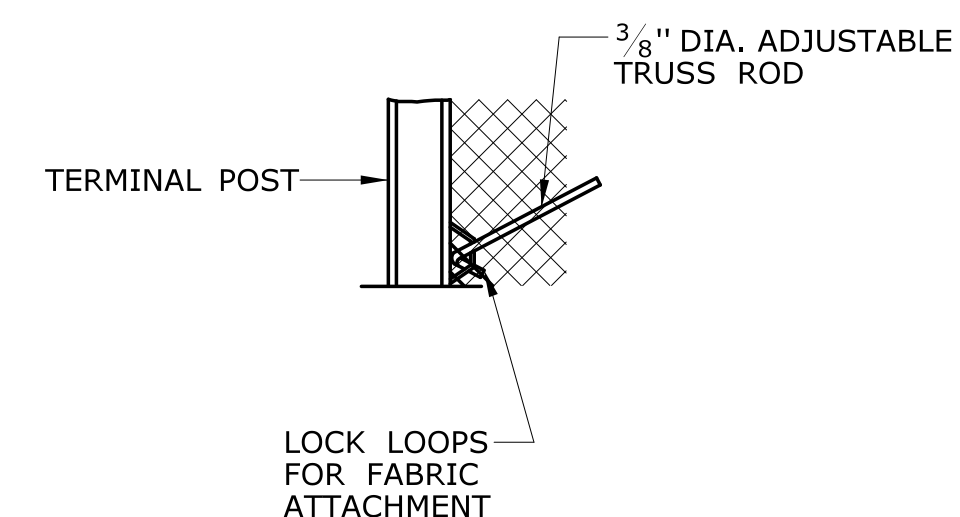
1/8" x 1" BRACE BAND



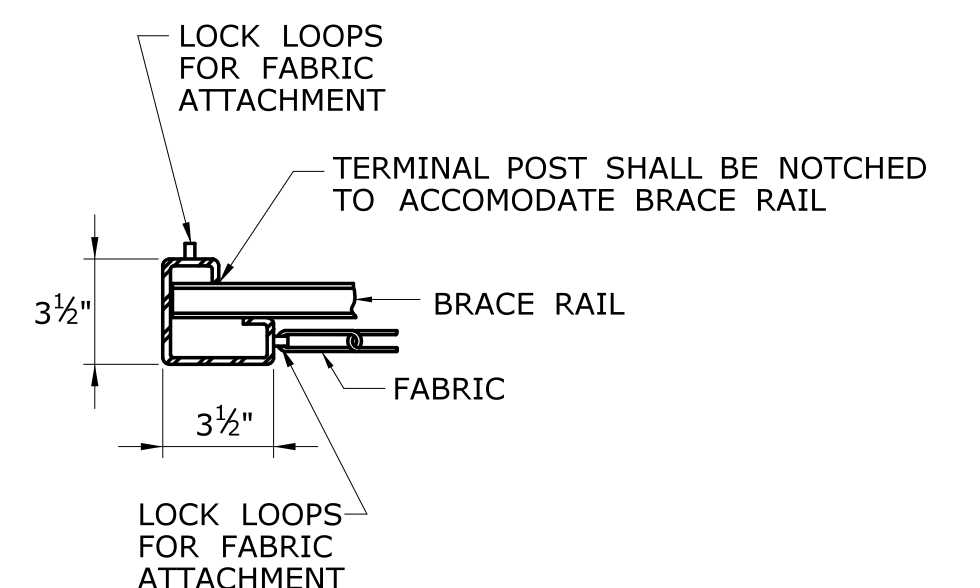
1/8" x 1" TENSION BAND



KNUCKLE SELVAGE



**TRUSS ROD
ATTACHMENT**





**FABRIC AND BRACE
RAIL ATTACHMENT**

ONLY STANDARD SHEETS MARKED WITH AN "✓" ARE IN THIS PROJECT #

[illegible][illegible]

STANDARD SHEETS SHALL BE USED WITH STANDARD SPECIFICATIONS

			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> <div>Filename: CTDOT_TRAFFIC_STD_DGN.DGN Model: TR-01-STD_INDEX</div>	SUBMITTED BY:	NAME/DATE/TIME:	<div>CTDOT STANDARD SHEET</div> <div>OFFICE OF ENGINEERING</div>	STANDARD SHEET TITLE:	STANDARD SHEET NO.:		
4	4-2017	REMOVED TR-1210_01 TO TR-1210_03. ADDED TR-1210_04 TO TR-1210_09										
3	4-2014	REMOVED TR-1111_02.										
2	1-2014	REMOVED TR-1103_01.										
1	4-2012	RENUMBERED TR-1107_02 TO TR-1114_01. REMOVED TR-1116_01.										
REV.	DATE	REVISION DESCRIPTION	Plotted Date: 8/16/2018									
TRAFFIC STANDARD SHEET INDEX										TR-STD_INDEX		