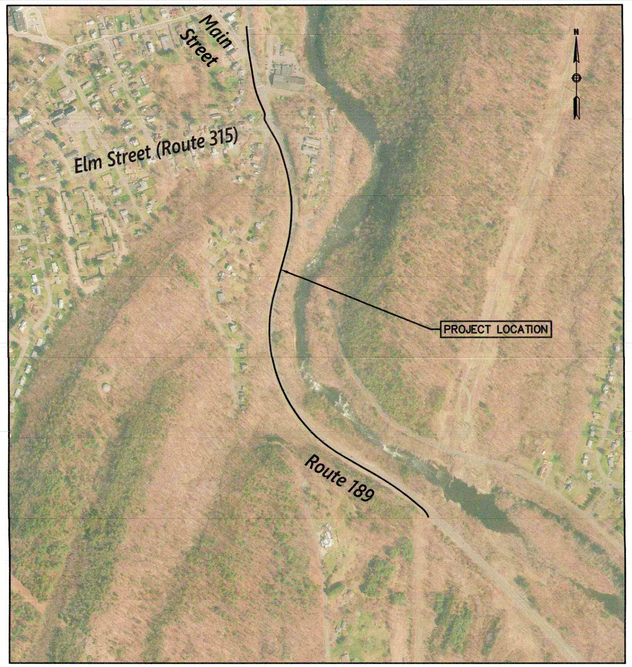
\\vhb.com\ghb\proj\Wethersfield\42373.00\cad\fe\planset\TLS-42373.00.dwg



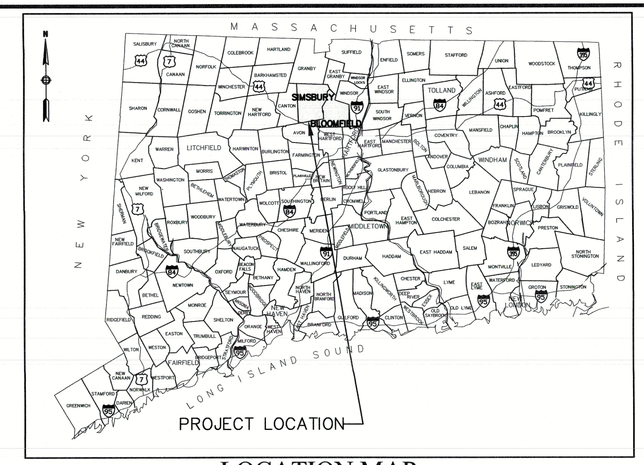
PROJECT LOCATION MAP

BLOOMFIELD-TARIFFVILLE MULTI-USE TRAIL CONNECTOR

EAST COAST GREENWAY

STATE PROJECT NO. L128-0001

Bloomfield - Simsbury, Connecticut



LOCATION MAP

2020 CONNECTICUT DEPARTMENT OF TRANSPORTATION SPECIFICATIONS FORM 818 GOVERN AND JULY 2021 SUPPLEMENTAL THERETO

DESIGNED BY: VHB
100 GREAT MEADOW ROAD, SUITE 200
WETHERSFIELD, CT 06109

BILL A. ANDERSON, PE - VHB
SENIOR PROJECT MANAGER

STATE OF CONNECTICUT
BILL A. ANDERSON
No. 25226
LICENSED PROFESSIONAL ENGINEER

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CONNDOT STANDARD DRAWINGS

HW-0286_01	DRAINAGE TRENCH EXCAVATION
HW-0586_01	CATCH BASIN AND DROP INLET TYPES "C" AND "C-L"
HW-0586_07	CATCH BASIN TOPS TYPES "C" AND "C-L"
HW-0586_08	CATCH BASIN FRAMES AND GRATES
HW-0586_10a	MANHOLE FRAME & COVER
HW-0811_01	CONCRETE CURBING
HW-0815_01	BITUMINOUS CONCRETE CURBING
HW-0910_01	W-BEAM METAL BEAM RAIL HARDWARE
HW-0910_02	METAL BEAM RAIL (TYPE R-B 350) GUIDERAIL
HW-0913_01a	CHAIN LINK FENCE
HW-0913_01b	CHAIN LINK FENCE HARDWARE
HW-0921_01	DRIVEWAY RAMPS AND SIDEWALKS
HW-0949_01a	LANDSCAPE PLANTING

CONNDOT STANDARD DRAWINGS (CONTINUED)

TR-1000_01	GENERAL CLAUSES (TEST PROCEDURES)
TR-1102_01	PEDESTAL, PEDESTRIAN SIGNALS
TR-1105_01	TRAFFIC SIGNALS AND CABLE ASSIGNMENTS
TR-1107_01	PEDESTRIAN PUSH BUTTON
TR-1111_01	LOOP VEHICLE DETECTORS AND SAWCUT
TR-1113_01	CONTROL CABLE
TR-1208_01	SIGN PLACEMENT AND RETROREFLECTIVE STRIP DETAILS
TR-1208_02	METAL SIGN POSTS AND SIGN MOUNTING DETAILS
TR-1210_04	PAVEMENT MARKING, LINES AND SYMBOLS
TR-1210_08	PAVEMENT MARKINGS ON NON FREEWAYS
TR-1220_01	SIGNS FOR CONSTRUCTION AND PERMIT OPERATIONS
TR-1220_02	CONSTRUCTION SIGN SUPPORTS AND CHANNELIZING DEVICES

ROUTE 189 ROADWAY, DRAINAGE SYSTEM, TRAFFIC SIGNALS AT THE INTERSECTION WITH ROUTE 315 (INT. #128-233), AND MAIN STREET (INT. #128-205) ARE MAINTAINED BY CTDOT. THE MULTI-USE TRAIL, CHAIN LINK FENCE, TRAIL SIGNS, GRASS BUFFER AND LANDSCAPING WILL BE MAINTAINED BY THE TOWNS OF BLOOMFIELD AND SIMSBURY.

Maria E. Capriola

MARIA E. CAPRIOLA, TOWN MANAGER
TOWN OF SIMSBURY

STANLEY D. HAWTHORNE, TOWN MANAGER
TOWN OF BLOOMFIELD

LIST OF ROADWAYS (STRUCTURAL IMPROVEMENTS)

STREET NAME	STREET CLASS
ROUTE 189	MINOR ARTERIAL
ELM STREET (ROUTE 315)	COLLECTOR
MAIN STREET	LOCAL

NOVEMBER 2021

VHB Project No. 42373.00
Route 189 Multi-Use Trail-Bloomfield, CT-Simsbury, CT
Issued: Not for Construction

Legend

- CATCH BASIN
- CATCH BASIN
- DRAIN MANHOLE
- SEWER MANHOLE
- MANHOLE
- WATER GATE
- FIRE HYDRANT
- GAS GATE
- STREET SIGN
- LIGHT POLE
- FLOOD LIGHT
- UTILITY POLE
- UTILITY POLE W/LIGHT
- GUY WIRE
- BOLLARD/POST
- 100.0 × SPOT ELEVATION
- EDGE OF PAVEMENT
- EDGE OF GRAVEL/LANDSCAPE
- BUILDING OVERHANG
- CURB
- STEEL BEAM/WIRE GUARD RAIL
- WOOD GUARD RAIL
- BOX WIRE FENCE
- CHAIN LINK FENCE
- WOOD FENCE
- UNDERGROUND DRAINAGE LINE
- UNDERGROUND SEWER LINE
- OHW — OVERHEAD WIRE
- E — UNDERGROUND ELECTRIC LINE
- G — UNDERGROUND GAS LINE
- W — UNDERGROUND WATER LINE
- T — UNDERGROUND TELEPHONE LINE
- CATV — UNDERGROUND CABLE LINE
- FO — UNDERGROUND FIBER OPTIC LINE
- STONE WALL
- TREE LINE
- STREAM
- WETLAND EDGE
- PROPERTY LINE
- EASEMENT LINE
- STATE FREEWAY LINE
- STATE HIGHWAY LINE
- CITY/TOWN LAYOUT LINE

CC	CONCRETE CURB
VGC	VERTICAL GRANITE CURB
BC	BITUMINOUS CURB
EP	EDGE OF PAVEMENT
BIT.	BITUMINOUS PAVEMENT
CONC.	CONCRETE
LS	LANDSCAPE
S/W	SIDEWALK
C.I.	CENTER INVERT
UP	UTILITY POLE
RCP	REINFORCED CONCRETE PIPE
PVC	POLYVINYLCHLORIDE PIPE
CMP	CORRUGATED METAL PIPE
CPP	CORRUGATED PLASTIC PIPE
DYL	DOUBLE YELLOW LINE
SWL	SINGLE WHITE LINE
CLF	CHAIN LINK FENCE
CB	CATCH BASIN
MH	MANHOLE
DMH	DRAIN MANHOLE
SMH	SEWER MANHOLE
GTD	GRADE TO DRAIN
OHW	OVERHEAD LINE
RIM=	RIM ELEVATION
INV=	INVERT ELEVATION
ELEV.	ELEVATION
F.F.E.	FINISH FLOOR ELEVATION
O/H	OVERHEAD
TYP.	TYPICAL
	TRANSFORMER
	ELECTRIC METER
	GAS METER
	HAND HOLE
	MAILBOX
	PEDESTRIAN PUSH BUTTON
	TRAFFIC SIGNAL
	WATER METER
	SPAN POLE
	TRAFFIC CONTROLLER
	PEDESTRIAN BUTTON
	PEDESTRIAN BUTTON WITH PEDESTAL
	SHRUB
	DECIDUOUS TREE
	EVERGREEN TREE
	DRILL HOLE FOUND
	IRON PIN/REBAR FOUND
	MONUMENT FOUND

GENERAL NOTES

SURVEY NOTES:

1. THE PROPERTY LINES SHOWN ON THIS PLAN WERE PLOTTED FROM TOWN G.I.S. THE STATE HIGHWAY MARKERS ARE BASED ON AN ACTUAL FIELD SURVEY CONDUCTED BY VHB IN APRIL 2018
2. THE EXISTING CONDITIONS DEPICTED ON THIS PLAN ARE BASED UPON AN ACTUAL ON-THE-GROUND INSTRUMENT SURVEY PERFORMED BY VHB IN APRIL 2018.
3. THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES DEPICTED ON THIS PLAN ARE BASED ON FIELD OBSERVATIONS AND INFORMATION OF RECORD. THEY ARE NOT WARRANTED TO BE EXACTLY LOCATED NOR IS IT WARRANTED THAT ALL UNDERGROUND UTILITIES OR OTHER STRUCTURES ARE DEPICTED ON THIS PLAN.
4. HORIZONTAL DATUM AND NORTH AZIMUTH DEPICTED HEREON REFER TO THE CONNECTICUT STATE PLANE COORDINATE SYSTEM - NAD 83. ELEVATIONS AND CONTOURS DEPICTED HEREON REFER TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88). BOTH DATUMS WERE COMPUTED AND MEASURED USING AVERAGED REAL TIME NETWORK (RTN) GPS SOLUTION.

UNDERGROUND UTILITY NOTES:

1. THE CONTRACTOR IS TO CONTACT "CALL BEFORE YOU DIG" AT 1-800-922-4455, 48-HOURS BEFORE EXCAVATING.
2. THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES SHOWN ON THIS PLAN ARE BASED ON FIELD OBSERVATIONS AND INFORMATION OF RECORD. THEY ARE NOT WARRANTED TO BE EXACTLY LOCATED NOR IS IT WARRANTED THAT ALL UNDERGROUND UTILITIES OR OTHER STRUCTURES ARE SHOWN ON THIS PLAN.
3. THE LOCATIONS, SIZES, AND TYPES OF EXISTING UTILITIES ARE SHOWN AS AN APPROXIMATE REPRESENTATION ONLY. THE OWNER OR IT'S REPRESENTATIVE(S) HAVE NOT INDEPENDENTLY VERIFIED THIS INFORMATION AS SHOWN ON THE PLANS. THE UTILITY INFORMATION SHOWN DOES NOT GUARANTEE THE ACTUAL EXISTENCE, SERVICEABILITY, OR OTHER DATA CONCERNING THE UTILITIES, NOR DOES IT GUARANTEE AGAINST THE POSSIBILITY THAT ADDITIONAL UTILITIES MAY BE PRESENT THAT ARE NOT SHOWN ON THE PLANS. PRIOR TO ORDERING MATERIALS AND BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL VERIFY AND DETERMINE THE EXACT LOCATIONS, SIZES, AND ELEVATIONS OF THE POINTS OF CONNECTIONS TO EXISTING UTILITIES AND, WITHIN PUBLIC RIGHTS OF WAY, CONTRACTOR SHALL CONFIRM THERE ARE NO INTERFERENCES WITH EXISTING UTILITIES AND THE PROPOSED UTILITY ROUTES.
4. BUILDING SERVICE CONNECTIONS (ELECTRIC, GAS, TELEPHONE, WATER AND SANITARY) ARE SHOWN WHEREVER POSSIBLE. THE CONTRACTOR IS TO ASSUME THAT SERVICES ARE PRESENT TO ALL BUILDINGS. THEIR LOCATIONS ARE TO BE CHECKED BY THE CONTRACTOR WITH THE APPROPRIATE UTILITY COMPANIES.
5. WHERE AN EXISTING UTILITY IS FOUND TO CONFLICT WITH THE PROPOSED WORK, OR EXISTING CONDITIONS DIFFER FROM THOSE SHOWN SUCH THAT THE WORK CANNOT BE COMPLETED AS INTENDED, THE LOCATION, ELEVATION, AND SIZE OF THE UTILITY SHALL BE ACCURATELY DETERMINED WITHOUT DELAY BY THE CONTRACTOR, AND THE INFORMATION FURNISHED IN WRITING TO THE ENGINEER FOR THE RESOLUTION OF THE CONFLICT AND CONTRACTOR'S FAILURE TO NOTIFY PRIOR TO PERFORMING ADDITIONAL WORK RELEASES OWNER FROM OBLIGATIONS FOR ADDITIONAL PAYMENTS WHICH OTHERWISE MAY BE WARRANTED TO RESOLVE THE CONFLICT.
6. THE LOCATION, SIZE, DEPTH, AND SPECIFICATIONS FOR CONSTRUCTION OF PROPOSED PRIVATE UTILITY SERVICES SHALL BE INSTALLED ACCORDING TO THE REQUIREMENTS PROVIDED BY, AND APPROVED BY, THE RESPECTIVE UTILITY COMPANY (GAS, TELEPHONE, ELECTRIC, FIRE ALARM, ETC.). FINAL DESIGN LOADS AND LOCATIONS TO BE COORDINATED WITH OWNER AND ENGINEER.
7. IN THE EVENT THE CONTRACTOR DAMAGES AN EXISTING UTILITY SERVICE CAUSING AN INTERRUPTION IN SAID SERVICE, THE CONTRACTOR SHALL IMMEDIATELY CONTACT THE AFFECTED UTILITY AND PERFORM THE WORK AS DETAILED BY THE UTILITY AS NEEDED TO RESTORE SERVICE AT NO ADDITIONAL COST TO THE OWNER. THE CONTRACTOR SHALL NOT CONTINUE WORK OPERATIONS UNTIL THE SERVICE IS RESTORED.

SEDIMENTATION AND EROSION CONTROL NOTES:

1. THE CONTRACTOR SHALL CONTROL STORMWATER RUNOFF DURING CONSTRUCTION TO PREVENT ADVERSE IMPACTS TO OFF SITE AREAS, AND SHALL BE RESPONSIBLE TO REPAIR RESULTING DAMAGES, IF ANY, AT NO COST TO OWNER.
2. THE CONTRACTOR SHALL INSTALL SEDIMENT CONTROL SYSTEMS (GEOTEXTILE SACK) AT CATCH BASINS WITHIN THE PROJECT LIMITS AS WELL AS THOSE DOWNSTREAM OF ANY CONSTRUCTION ACTIVITIES.
3. THE CONTRACTOR MUST INSPECT AND MAINTAIN EROSION CONTROL MEASURES AND REMOVE SEDIMENT THEREFROM ON A WEEKLY BASIS AND WITHIN TWELVE HOURS AFTER EACH STORM EVENT AND DISPOSE OF SEDIMENTS IN ACCORDANCE WITH THE APPLICABLE SECTIONS OF THE SPECIFICATIONS.
4. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE TO CONTROL CONSTRUCTION SUCH THAT SEDIMENTATION SHALL NOT AFFECT REGULATORY PROTECTED AREAS, WHETHER SUCH SEDIMENTATION IS CAUSED BY WATER, WIND, OR DIRECT DEPOSIT.
5. UPON COMPLETION OF CONSTRUCTION AND ESTABLISHMENT OF PERMANENT GROUND COVER, THE CONTRACTOR SHALL REMOVE AND DISPOSE OF EROSION CONTROL MEASURES AND CLEAN SEDIMENT AND DEBRIS FROM THE ENTIRE DRAINAGE STRUCTURES WITHIN THE PROJECT LIMITS. THIS WORK WILL NOT BE MEASURED FOR PAYMENT.
6. PRIOR TO STARTING ANY OTHER WORK ON THE SITE, THE CONTRACTOR SHALL NOTIFY THE APPROPRIATE AGENCIES AND SHALL INSTALL EROSION CONTROL MEASURES AT THE BOTTOM OF FILL SLOPES AND AT CATCH BASINS AND AS IDENTIFIED IN FEDERAL, STATE, AND LOCAL APPROVAL DOCUMENTS PERTAINING TO THIS PROJECT.
7. THE CONTRACTOR SHALL PERFOM CONSTRUCTION SEQUENCING SUCH THAT EARTH MATERIALS ARE EXPOSED FOR A MINUMUM OF TIME BEFORE THEY ARE COVERED, SEEDED, OR OTHERWISE STABILIZED TO PREVENT EROSION.

DRAINAGE NOTES:

1. THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION, SIZE, INVERTS, AND TYPES OF EXISTING PIPES AT ALL PROPOSED POINTS OF CONNECTION PRIOR TO ORDERING MATERIALS. WHERE AN EXISTING UTILITY IS FOUND TO CONFLICT WITH THE PROPOSED WORK, THE LOCATION, ELEVATION, AND SIZE OF THE UTILITY SHALL BE ACCURATELY DETERMINED WITHOUT DELAY BY THE CONTRACTOR. THE INFORMATION SHALL BE FURNISHED IN WRITING TO THE ENGINEER FOR THE RESOLUTION OF THE CONFLICT.
2. RIM ELEVATIONS OF PROPOSED DRAINAGE MANHOLES AND ASSOCIATED STRUCTURES ARE APPROXIMATE. FINAL ELEVATIONS ARE TO BE SET FLUSH AND CONSISTENT WITH THE GRADES SHOWN ON THE PLANS.
3. WHEN INSTALLING A NEW PIPE THAT REQUIRES A CONNECTION TO AN EXISTING PIPE, THE NEW PIPE CONNECTION SHALL BE MADE AT THE JOINT OF THE EXISTING PIPE NEAREST TO THE PROPOSED PIPE.
4. WHEN INSTALLING A NEW CATCH BASIN THAT REQUIRES A CONNECTION TO AN EXISTING PIPE, THE SECTION OF THE EXISTING PIPE DISTURBED BY CONSTRUCTION SHALL BE REPLACED WITH NEW PIPE OF SIMILAR SIZE AND TYPE EXTENDING FROM THE CATCH BASIN TO THE NEAREST JOINT OF EXISTING PIPE.
5. ALL CATCH BASIN GRATES ON ARE TO BE TYPE "A".

GENERAL CONSTRUCTION NOTES:

1. UPON AWARD OF CONTRACT, CONTRACTOR SHALL MAKE NECESSARY CONSTRUCTION NOTIFICATIONS AND APPLY FOR AND OBTAIN NECESSARY PERMITS, PAY FEES, AND POST BONDS ASSOCIATED WITH THE WORK INDICATED ON THE DRAWINGS, IN THE SPECIFICATIONS, AND IN THE CONTRACT DOCUMENTS. DO NOT CLOSE OR OBSTRUCT ROADWAYS, SIDEWALKS, AND FIRE HYDRANTS, WITHOUT APPROPRIATE PERMITS.
2. ALL WORK SHALL BE PERFORMED IN CONFORMANCE WITH THE CONDITIONS OF APPROVAL OUTLINED IN ALL STATE AND LOCAL PERMITS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REVIEWING THIS INFORMATION PRIOR TO CONSTRUCTION AND CONFORMING TO THE CONDITIONS AS REQUIRED DURING CONSTRUCTION.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SITE SECURITY AND JOB SAFETY. CONSTRUCTION ACTIVITIES SHALL BE IN ACCORDANCE WITH OSHA STANDARDS AND LOCAL REQUIREMENTS.
4. ACCESSIBLE ROUTES, PARKING SPACES, RAMPS, SIDEWALKS AND WALKWAYS SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE FEDERAL AMERICANS WITH DISABILITIES ACT AND WITH STATE AND LOCAL LAWS AND REGULATIONS (WHICHEVER ARE MORE STRINGENT).
5. ACCESS TO RESIDENCES AND BUSINESSES SHALL BE PROVIDED BY THE CONTRACTOR AT ALL TIMES DURING CONSTRUCTION. THE COSTS ASSOCIATED WITH COORDINATING AND MAINTAINING ACCESS TO RESIDENCES AND BUSINESSES SHALL BE INCLUDED IN THE LUMP SUM COST FOR "MAINTENANCE AND PROTECTION OF TRAFFIC".
6. TRAFFIC SIGNAGE AND PAVEMENT MARKINGS SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.
7. AREAS OUTSIDE THE LIMITS OF PROPOSED WORK DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED BY THE CONTRACTOR TO THEIR ORIGINAL CONDITION AT THE CONTRACTOR'S EXPENSE.
8. DAMAGE RESULTING FROM CONSTRUCTION LOADS SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO OWNER.
9. THE CONTRACTOR IS ADVISED THAT ADDITIONAL "NOTES" MAY BE FOUND ON SUBSEQUENT SHEETS OF THE CONTRACT PLANS AND SUCH "NOTES" WHILE PERTAINING TO THE SPECIFIC DRAWINGS THEY ARE PLACED ON, ALSO SUPPLEMENT THE GENERAL NOTES LISTED HEREIN.
10. EXCEPT AS NOTED, THE PROJECT SPECIFIC PLANS AND DETAILS CONTAINED HEREIN SHALL TAKE PRECEDENCE OVER THE STANDARD DETAILS.
11. MAILBOXES, BOLLARDS, ETC THAT ARE NOT NOTED TO BE REMOVED SHALL REMAIN IN PLACE AND SHALL BE PROTECTED THROUGHOUT THE DURATION OF CONSTRUCTION. ACCESS TO THESE FACILITIES SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION.
12. ALL CURB TIES (STATION AND OFFSETS) ARE TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
13. PRIOR TO SUBMITTING A BID, THE CONTRACTOR MUST VISIT THE SITE AND IDENTIFY EXISTING CONDITIONS AND DIFFICULTIES THAT WILL AFFECT THE WORK TO BE PERFORMED. NO COMPENSATION SHALL BE GRANTED FOR ADDITIONAL WORK CAUSED BY UNFAMILIARITY WITH THE SITE CONDITIONS THAT ARE VISIBLE OR READILY IDENTIFIED BY EXPERIENCED OBSERVERS.
14. THE CONTRACTOR SHALL OBTAIN A CONNECTICUT DEPARTMENT OF TRANSPORTATION ENCROACHMENT PERMIT FROM THE DISTRICT 1 AND 4 OFFICES PRIOR TO COMMENCING WORK ON STATE ROADWAYS. ALL COSTS TO OBTAIN ENCROACHMENT PERMITS SHALL BE INCLUDED IN THE COST OF THE CONTRACT WORK ITEMS.
15. IN LOCATIONS WHERE THE PROPOSED TREELINE IS DENOTED, IT IS MEANT AS A GRAPHICAL NOTATION ONLY. THE PROPOSED TREELINE SHALL BE AT THE LIMIT OF GRADING.
16. THE CONTRACTOR SHALL ESTABLISH TURN AROUND AREAS AS REQUIRED AND AS APPROVED BY THE ENGINEER. TURN AROUND AREAS SHALL BE LOCATED OUTSIDE OF ALL ENVIRONMENTALLY REGULATED AREAS.

WOOD TURTLE (GLYPTEMYS INSCULPTA)-STATE SPECIAL CONCERN NOTES:

CONSTRUCTION PROTECTION MEASURES:

FOR ANY LAND DISTURBANCE ACTIVITY WILL INCLUDE 300 FT BUFFERS OF STREAM CROSSINGS AND WETLANDS.
BETWEEN APRIL-OCTOBER 31:

- EXCLUSIONARY PRACTICES WILL BE REQUIRED TO PREVENT ANY TURTLE ACCESS INTO CONSTRUCTION AREAS. THESE MEASURES WILL NEED TO BE INSTALLED AT THE LIMITS OF DISTURBANCE AS SHOWN ON THE PLANS.
- EXCLUSIONARY FENCING BE AT LEAST 20 INCHES TALL AND MUST BE SECURED TO AND REMAIN IN CONTACT WITH THE GROUND AND BE REGULARLY MAINTAINED (AT LEAST BI-WEEKLY AND AFTER MAJOR WEATHER EVENTS) TO SECURE ANY GAPS OR OPENINGS AT GROUND LEVEL THAT MAY LET ANIMALS PASS THROUGH.
- PRIOR TO CONSTRUCTION, ALL TURTLES OCCURRING WITHIN FENCING WORK AREA WILL BE RELOCATED TO SUITABLE HABITAT OUTSIDE DISTURBANCE AREA. THIS SHOULD BE PERFORMED BY A QUALIFIED PROFESSIONAL FAMILIAR WITH HABITAT REQUIREMENTS AND BEHAVIOR OF THE SPECIES.
- THE CONTRACTOR MUST SEARCH THE WORK AREA EACH MORNING PRIOR TO ANY WORK BEING DONE.
- ALL CONSTRUCTION PERSONNEL WORKING WITHIN THE TURTLE HABITAT MUST BE APPRISED OF THE SPECIES DESCRIPTION AND THE POSSIBLE PRESENCE OF A LISTED SPECIES.
- ANY TURTLES/SNAKES ENCOUNTERED WITHIN THE IMMEDIATE WORK AREA SHALL BE CAREFULLY MOVED TO AN ADJACENT AREA OUTSIDE OF THE EXCLUDED AREA AND FENCING SHOULD BE INSPECTED TO IDENTIFY AND REMOVE ACCESS POINT. THESE ANIMALS ARE PROTECTED BY LAW AND NO TURTLES SHOULD BE RELOCATED FROM THE SITE.
- IN AREAS WHERE SILT FENCE IS USED FOR EXCLUSION, IT SHALL BE REMOVED AS SOON AS THE AREA IS STABLE TO ALLOW FOR REPTILE AND AMPHIBIAN PASSAGE TO RESUME.
- NO HEAVY MACHINERY OR VEHICLES MAY BE PARKED IN ANY TURTLE HABITAT.
- SPECIAL PRECAUTIONS MUST BE TAKEN TO AVOID DEGRADATION OF WETLAND HABITATS INCLUDING ANY WET MEADOWS AND SEASONAL VERNAL POOLS.

THROUGHOUT THE WORK AREA:
BETWEEN APRIL 1 - NOVEMBER 1:

- THE IMMEDIATE AREA WHERE HEAVY EQUIPMENT WILL BE USED EACH DAY SHOULD BE SEARCHED FOR TURTLES OR SNAKES BEFORE STARTING WORK USING MECHANICAL EQUIPMENT.
- ANY TURTLES OR SNAKES FOUND DURING WORK SHOULD BE MOVED OUT OF THE WAY. THESE ANIMALS ARE PROTECTED BY LAW AND SHOULD NEVER BE TAKEN OFF SITE.
- WORK CONDUCTED DURING EARLY MORNING AND EVENING HOURS SHOULD OCCUR WITH SPECIAL CARE NOT TO HARM BASKING INDIVIDUALS.

REV.	DATE	DESCRIPTION	SHEET. NO.
		REVISIONS	

DESIGNER: EAN
DRAFTER: JE
CHECKED BY: BAA
APPROVED BY: SON

vhb
Engineers Scientists Planners Designers
NOT ISSUED FOR CONSTRUCTION DATE:NOVEMEBER, 2022

PROJECT TITLE: BLOOMFIELD–TARIFFVLLE MULTI–USE TRAIL CONNECTOR
CADD FILENAME: GNA–4237300.DWG

TOWN: BLOOMFIELD–SIMSBURY, CONNECTICUT
DRAWING TITLE: LEGEND, ABBREVIATIONS & GENERAL NOTES

PROJECT NO.: 42373.00
DRAWING NO.: GNA–01
SHEET NO.: 02 OF 95

Jan 25, 2022

ITEM	0201001A CLEARING AND GRUBBING	0202000 EARTH EXCAVATION	0202100 ROCK EXCAVATION	0202300A DISPOSAL/RESTORATION FOR ROCK SLOPE SCALING	0202513 REMOVAL OF CONCRETE SIDEWALK	0202529 CUT BITUMINOUS CONCRETE PAVEMENT	0200000 DITCH EXCAVATION - EARTH	0200101 ROCK IN DITCH EXCAVATION	0207000 BORROW	0209001 FORMATION OF SUBGRADE	0214000 ANTI-TRACKING PAD	0213000 SUBBASE	0219001 SEDIMENTATION CONTROL SYSTEM	0219011A SEDIMENT CONTROL SYSTEM AT CATCH BASIN	0258401.10 ROCK IN DRAINAGE TRENCH EXCAVATION 0'-10' DEEP	0304002 PROCESSED AGGREGATE BASE	0406170 HMA S1	0406171 HMA S0.50	0406172 HMA S0.375	0406173 HMA S0.25	0406236 MATERIAL FOR TACK COAT	0409001 FINE MILLING OF BITUMINOUS CONCRETE (0" TO 4")	0409099A ASPHALT ADJUSTMENT COST	0500001 CONCRETE FOR STEPS AND COPINGS	0586001.10 TYPE 'C' CATCH BASIN - 0'-10' DEEP	0586040.10 TYPE "C-L" CATCH BASIN - 0' - 10' DEEP	0586500.10 MANHOLE - 0'-10' DEEP	0586601 RESET TYPE "C" CATCH BASIN	0586701 CONVERT CATCH BASIN TO TYPE "C-L" CATCH BASIN	0586703 CONVERT CATCH BASIN TO MANHOLE	0601445A EMBANKMENT WALL (SITE NO. 1)
UNIT	LS	CY	CY	LS	SY	LF	CY	CY	CY	SY	SY	CY	LF	EA	CY	CY	TON	TON	TON	TON	GAL	SY	EST	CY	EA	EA	EA	EA	EA	EA	LS
BLOOMFIELD	0.6	1,830	60	0.6	0	2,250	870	590	1,500	3,000	275	0	2,050	7	90	590	0	10	280	230	170	75	4,320	60	3	2	1	0	0	6	0
SIMSBURY	0.4	1,680	40	0.4	100	1,910	540	360	750	2,380	275	170	2,520	17	15	400	25	440	180	150	200	820	2,880	0	5	3	0	3	2	4	1
TOTAL	1	3,510	100	1	100	4,160	1,410	950	2,250	5,380	550	170	4,570	24	105	990	25	450	460	380	370	895	1	60	8	5	1	3	2	10	1

ITEM	0686000.12 12" R.C. PIPE - 0'-10' DEEP	0686000.15 15" R.C. PIPE - 0'-10' DEEP	0703012 MODIFIED RIPRAP	0728009 2" CRUSHED STONE	0841001 CONCRETE CURBING	0851001 BITUMINOUS CONCRETE LIP CURBING	0906201A ROCKFALL BARRIER	0912518 REMOVE AND RESET METAL BEAM RAIL	0913003 4' POLYVINYL CHLORIDE CHAIN LINK FENCE	0921001 CONCRETE SIDEWALK -5"	0921005 CONCRETE SIDEWALK RAMP	0921048 DETECTABLE WARNING SURFACE	0944000 FURNISHING AND PLACING TOPSOIL	0947207A BICYCLE STAND	0949000 WOOD CHIP MULCH	0949001A WEED BARRIER FABRIC	0949012 HEMEROCALLIS 'ROSY RETURNS' - DAYLILY 12"-24" HT. C.G.	0949161 ILEX GLABRA "COMPACTA" COMPACT INKBERRY 36" - 48" HT. B.B.	0949565 CALMAGROSTIS X ACUTIFOLIA 'KARL FOERSTER' - KARL FOERSTER FEATHER REED GRASS 36"-72" HT. C.G.	0950065A TURF ESTABLISHMENT	0950013 EROSION CONTROL MATTING	0950023A LANDSCAPE EDGING	0960062A CONSTRUCTION FIELD OFFICE, MEDIUM	0970006 TRAFFICPERSON (TOWN POLICE OFFICER)	0971001A MAINTENANCE AND PROTECTION OF TRAFFIC	0975004 MOBILIZATION AND PROJECT CLOSEOUT	0980020 CONSTRUCTION SURVEYING	1001001 TRENCHING AND BACKFILLING	1002103 TRAFFIC CONTROL FOUNDATION - PEDESTAL - TYPE I	1002291A MODIFICATION OF TRAFFIC CONTROL FOUNDATION
UNIT	LF	LF	CY	CY	LF	LF	LF	LF	LF	SF	SF	SF	SY	EA	SY	SY	EA	EA	EA	SY	SY	LF	MO	EST	LS	LS	LS	LF	EA	EA
BLOOMFIELD	25	40	60	20	0	2,290	150	220	290	0	0	0	5,120	0	1,250	1,250	336	84	168	3,880	1,102	2,620	4	87,000	0.6	0.6	0.6	0	0	0
SIMSBURY	35	318	0	10	110	2,856	210	500	0	3,370	250	188	4,800	3	630	630	184	46	92	4,170	600	1,640	4	58,000	0.4	0.4	0.4	215	4	1
TOTAL	60	358	60	30	110	5,146	360	720	290	3,370	250	188	9,920	3	1,880	1,880	520	130	260	8,050	1,702	4,260	8	145,000	1	1	1	215	4	1

ITEM	1006115 2" RIGID METAL CONDUIT IN TRENCH	1009008A CLEAN EXISTING CONDUIT	1014001 CONCRETE HANDHOLE	1014006A CLEAN EXISTING CONCRETE HANDHOLE	1102002 8' ALUMINUM PEDESTAL	1165180A 1 WAY, 1 SECTION BI-COLORED ARROW	1104003A 1 WAY PEDESTRIAN SIGNAL PEDESTAL MOUNTED	1107011A ACCESSIBLE PEDESTRIAN SIGNAL AND DETECTOR (TYPE A)	1108163A MODIFY EXISTING CONTROLLER	1111201A TEMPORARY DETECTION (SITE NO. 1)	1111401A LOOP VEHICLE DETECTOR	1111451A LOOP DETECTOR SAW CUT	1113050 2 CONDUCTOR NO. 14 CABLE	1113102 5 CONDUCTOR NO. 14 CABLE	1113103 7 CONDUCTOR NO. 14 CABLE	1113104 9 CONDUCTOR NO. 14 CABLE	1118012A REMOVAL AND/OR RELOCATION OF TRAFFIC SIGNAL EQUIPMENT	1118051A TEMPORARY SIGNALIZATION (SITE NO. 1)	1200013 REMOVAL OF EXISTING SIGNING	1200092A RESET SIGN	1209231A SIGN FACE - SHEET ALUMINUM-TYPE IX RETROREFLECTIVE SHEETING	1209238A PROJECT SIGN	1210101 4" WHITE EPOXY RESIN PAVEMENT MARKINGS	1210102 4" YELLOW EPOXY RESIN PAVEMENT MARKINGS	1210104 8" WHITE EPOXY RESIN PAVEMENT MARKINGS	1210105 EPOXY RESIN PAVEMENT MARKINGS, SYMBOLS AND LEGENDS	121101 REMOVAL OF PAVEMENT MARKINGS	1212001 TEMPORARY PLASTIC PAVEMENT MARKING TAPE-4" YELLOW	1403501A RESET MANHOLE (SANITARY SEWER)
UNIT	LF	LF	EA	EA	EA	EA	EA	EA	EA	LS	EA	LF	LF	LF	LF	LF	LS	LS	LS	EA	SF	EA	LF	LF	LF	SF	SF	LF	EA
BLOOMFIELD	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.6	6	55	1	4,660	4,730	0	0	2,960	5,200	0
SIMSBURY	215	70	3	1	4	1	4	4	1	1	7	375	620	70	520	120	1	1	0.4	12	200	1	3,530	3,220	100	1,130	2,215	4,440	1
TOTAL	215	70	3	1	4	1	4	4	1	1	7	375	620	70	520	120	1	1	1	18	255	2	8,190	7,950	100	1,130	5,175	9,640	1

REV.	DATE	DESCRIPTION	SHEET. NO.
		REVISIONS	

DESIGNER: EAN
DRAFTER: JE
CHECKED BY: BAA
APPROVED BY: SON

vhb
Engineers Scientists Planners Designers

NOT ISSUED FOR CONSTRUCTION DATE:NOVEMBER, 2021

PROJECT TITLE: BLOOMFIELD–TARIFFVLLE MULTI–USE TRAIL CONNECTOR

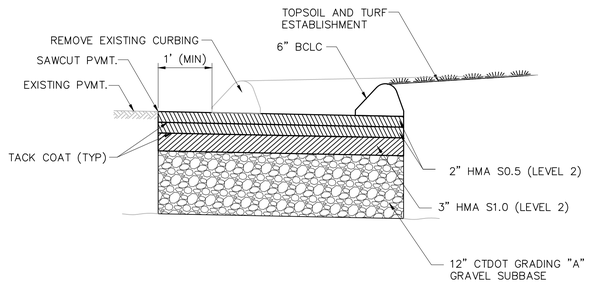
CADD FILENAME: EST–4237300.DWG

TOWN: BLOOMFIELD–SIMSBURY, CONNECTICUT

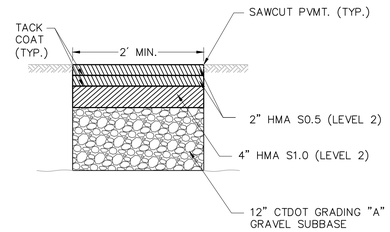
DRAWING TITLE: DETAILED ESTIMATE

PROJECT NO.: 42373.00
DRAWING NO.: EST–01
SHEET NO.: 03 OF 95

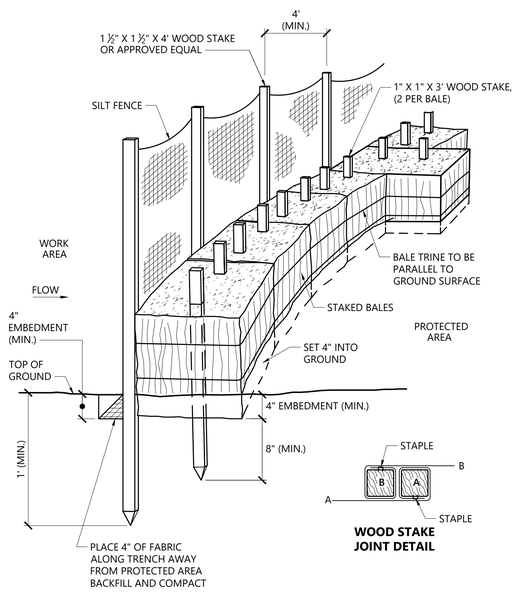
Jan 04, 2022



ELM STREET WIDENING DETAIL
N.T.S.



FULL-DEPTH PATCH REPAIR DETAIL
N.T.S.

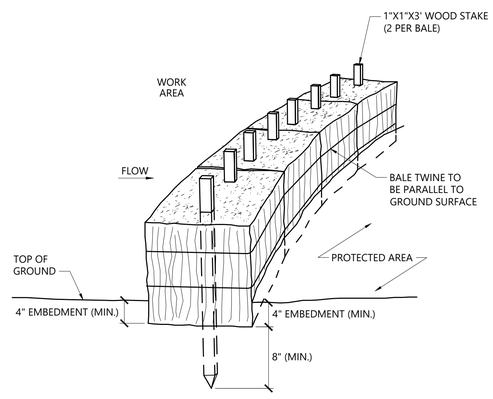


WOOD STAKE JOINT DETAIL

DETAIL NOTES:

1. THE CONTRACTOR SHALL MAINTAIN OR REPLACE THE SEDIMENTATION CONTROL SYSTEM THROUGHOUT THE CONSTRUCTION DURATION AND UNTIL ALL DISTURBED AREAS HAVE BEEN STABILIZED.
2. THE CONTRACTOR SHALL INSPECT THE SYSTEM ONCE A WEEK AND WITHIN 12 HOURS OF THE END OF A STORM WITH A RAINFALL AMOUNT OF 0.5 INCHES OR GREATER.
3. THE CONTRACTOR SHALL CLEANOUT ACCUMULATED SEDIMENT WHEN ONE HALF OF THE ORIGINAL HEIGHT OF THE SYSTEM IS FILLED WITH SEDIMENT, OR AS ORDERED BY THE ENGINEER.
4. FOLLOWING CONSTRUCTION, THE CONTRACTOR SHALL CLEAN ALL DRAINAGE FACILITIES WITHIN THE PROJECT LIMITS OF ANY ACCUMULATED SEDIMENT AND TRANSPORT SEDIMENT OFF SITE.
5. ALL COSTS ASSOCIATED WITH INSTALLING, MAINTAINING AND THE REMOVAL OF SILT FENCE/HAY BALE BARRIER SHALL BE INCLUDED IN THE CONTRACT UNIT COST PER LINEAR FOOT FOR "SEDIMENTATION CONTROL SYSTEM."
6. THE CONTRACTOR SHALL PLACE ONE BALE PERPENDICULAR ALONG BALE BARRIER (100' O.C.).

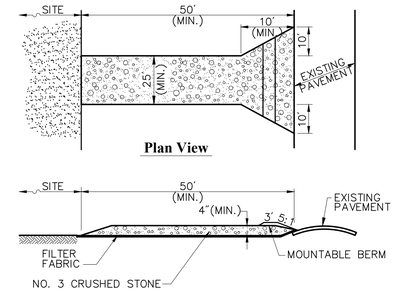
SILT FENCE/HAY BALE BARRIER
N.T.S.



DETAIL NOTES:

1. THE CONTRACTOR SHALL MAINTAIN OR REPLACE THE SEDIMENTATION CONTROL SYSTEM THROUGHOUT THE CONSTRUCTION DURATION AND UNTIL ALL DISTURBED AREAS HAVE BEEN STABILIZED.
2. THE CONTRACTOR SHALL INSPECT THE SYSTEM ONCE A WEEK AND WITHIN 12 HOURS OF THE END OF A STORM WITH A RAINFALL AMOUNT OF 0.5 INCHES OR GREATER.
3. THE CONTRACTOR SHALL CLEANOUT ACCUMULATED SEDIMENT WHEN ONE HALF OF THE ORIGINAL HEIGHT OF THE SYSTEM IS FILLED WITH SEDIMENT, OR AS ORDERED BY THE ENGINEER.
4. FOLLOWING CONSTRUCTION, THE CONTRACTOR SHALL CLEAN ALL DRAINAGE FACILITIES WITHIN THE PROJECT LIMITS OF ANY ACCUMULATED SEDIMENT AND TRANSPORT SEDIMENT OFF SITE.
5. ALL COSTS ASSOCIATED WITH INSTALLING, MAINTAINING AND THE REMOVAL OF HAY BALE BARRIER SHALL BE INCLUDED IN THE CONTRACT UNIT COST PER LINEAR FOOT FOR "SEDIMENTATION CONTROL SYSTEM."

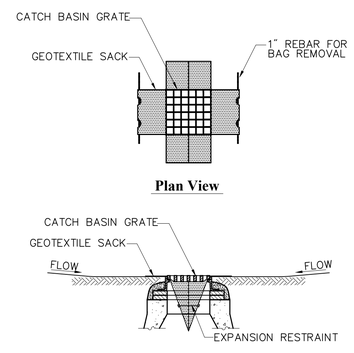
HAY BALE BARRIER
N.T.S.



DETAIL NOTES:

1. ENTRANCE WIDTH SHALL BE A TWENTY-FIVE (25) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS.
2. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH SHALL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY. BERM SHALL BE PERMITTED. PERIODIC INSPECTION AND MAINTENANCE SHALL BE PROVIDED AS NEEDED.
3. STABILIZED CONSTRUCTION EXIT SHALL BE REMOVED PRIOR TO FINAL FINISH MATERIALS BEING INSTALLED.

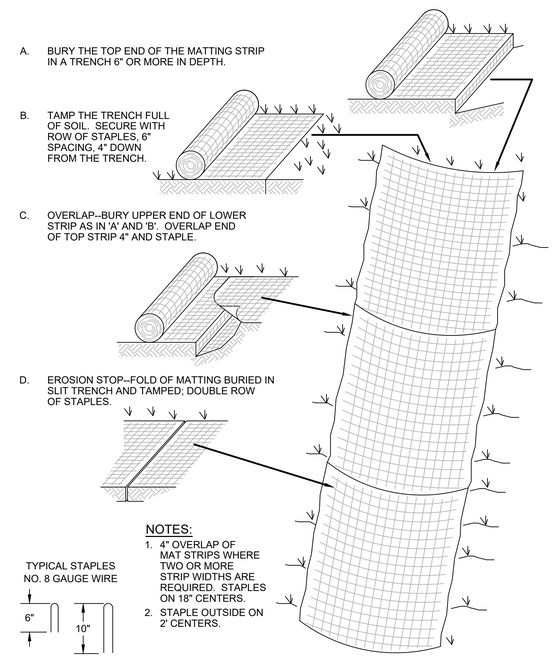
STABLIZED CONSTRUCTION ENTRANCE/EXIT
N.T.S.



DETAIL NOTES:

1. INSTALL GEOTEXTILE SACK IN ALL CATCH BASINS WHERE INDICATED ON THE PLAN OR AS DIRECTED BY THE ENGINEER BEFORE COMMENCING WORK.
2. GRATE TO BE PLACED OVER GEOTEXTILE SACK.
3. GEOTEXTILE SACK SHALL BE INSPECTED PERIODICALLY AND AFTER ALL STORM EVENTS AND CLEANING OR REPLACEMENT SHALL BE PERFORMED PROMPTLY AS NEEDED. MAINTAIN UNTIL UPSTREAM AREAS HAVE BEEN PERMANENTLY STABILIZED.
4. GEOTEXTILE SACKS INSTALLED AT LOW POINTS ALONG THE ROADWAY SHALL BE ADDITIONALLY CLEANED PRIOR TO STORM EVENTS.
5. WHEN MAINTAINING THE FUNCTIONALITY OF THE CATCH BASIN, THE CONTRACTOR IS TO ENSURE DEBRIS DOES NOT FALL INTO CATCH BASIN WHEN CLEANING.
6. ALL COSTS ASSOCIATED WITH THE INSTALLATION, MAINTENANCE, AND REMOVAL OF THE GEOTEXTILE SACK, INCLUDING THE DISPOSAL OF COLLECTED MATERIALS, SHALL BE INCLUDED IN THE CONTRACT UNIT COST PER EACH "SEDIMENT CONTROL SYSTEM AT CATCH BASIN."

SEDIMENTATION CONTROL SYSTEM AT CATCH BASIN DETAIL
N.T.S.



NOTES:

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

EROSION MATTING INSTALLATION DETAIL
N.T.S.

REV.	DATE	DESCRIPTION	SHEET. NO.
		REVISIONS	

NOT TO SCALE
N.T.S.

DESIGNER: EAN
DRAFTER: JE
CHECKED BY: BAA
APPROVED BY: SON

vhb — Engineers Scientists Planners Designers

NOT ISSUED FOR CONSTRUCTION DATE: NOVEMBER, 2021

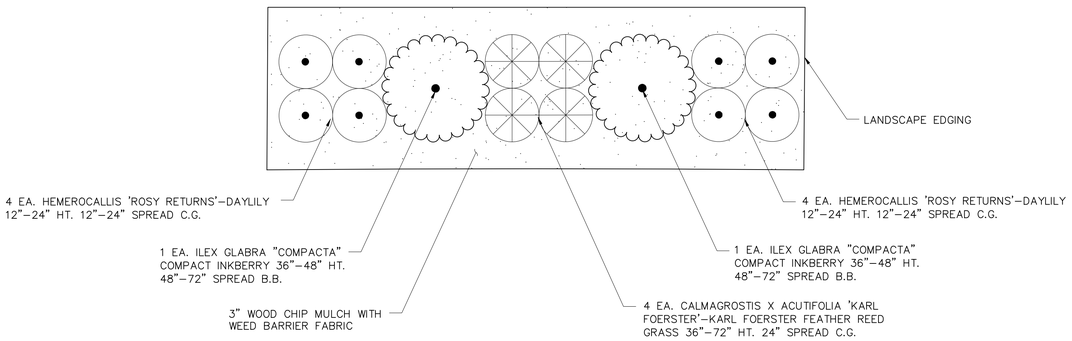
PROJECT TITLE: BLOOMFIELD-TARIFFVLLE MULTI-USE TRAIL CONNECTOR

CADD FILENAME: MDS-4237300.DWG

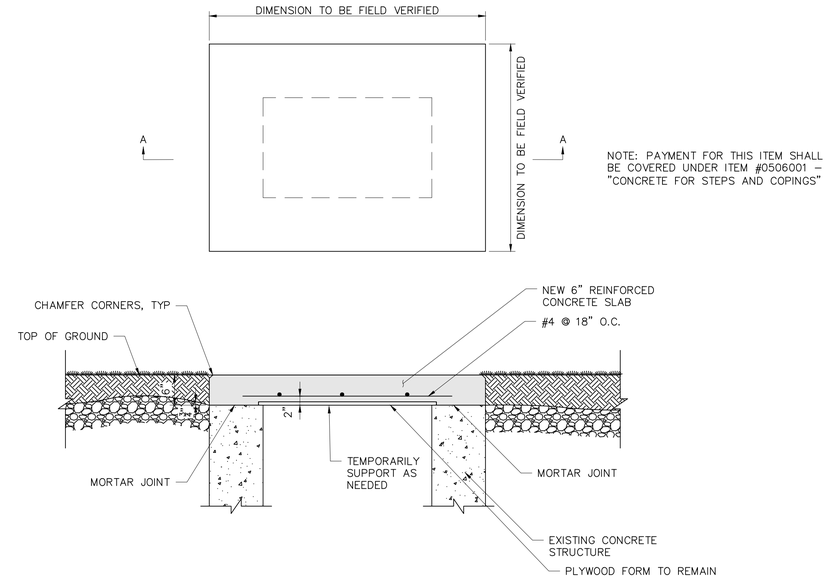
TOWN: BLOOMFIELD-SIMSBURY, CONNECTICUT

DRAWING TITLE: MISCELLANEOUS DETAILS

PROJECT NO.: 42373.00
DRAWING NO.: MDS-01
SHEET NO.: 04 OF 95

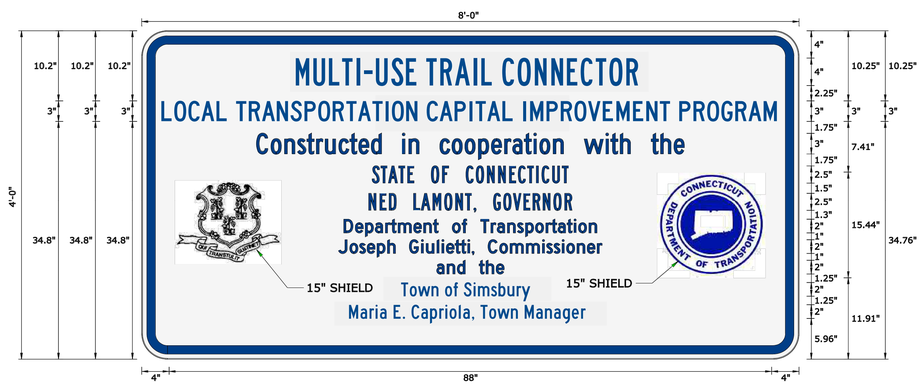


LANDSCAPE PLANTING PATTERN
N.T.S.

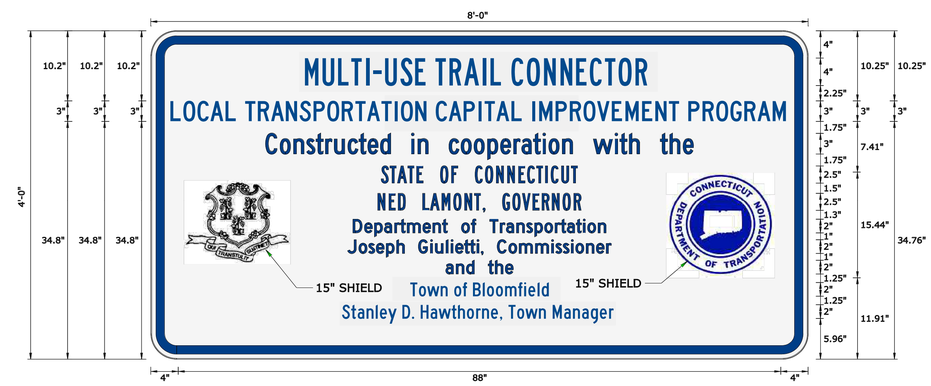


SECTION A–A

CONCRETE SLAB DETAIL
N.T.S.



LOTCIP PROJECT SIGN–SIMSBURY
N.T.S.



LOTCIP PROJECT SIGN–BLOOMFIELD
N.T.S.

REV.	DATE	DESCRIPTION REVISIONS	SHEET. NO.

NOT TO SCALE
N.T.S.

DESIGNER: EAN
DRAFTER: JE
CHECKED BY: BAA
APPROVED BY: SON

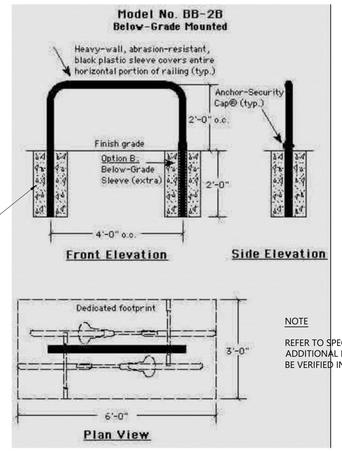
vhb
Engineers Scientists Planners Designers
NOT ISSUED FOR CONSTRUCTION DATE: NOVEMEBER, 2022

PROJECT TITLE: BLOOMFIELD–TARIFFVLLE MULTI–USE TRAIL CONNECTOR
CADD FILENAME: MDS–4237300.DWG

TOWN: BLOOMFIELD–SIMSBURY, CONNECTICUT
DRAWING TITLE: MISCELLANEOUS DETAILS

PROJECT NO.: 42373.00
DRAWING NO.: MDS–02
SHEET NO.: 05 OF 95

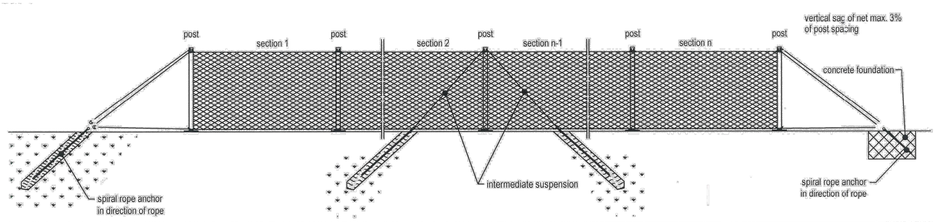
Jan 25, 2022

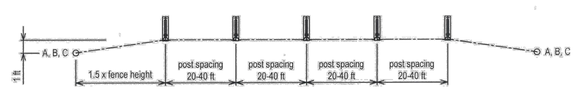


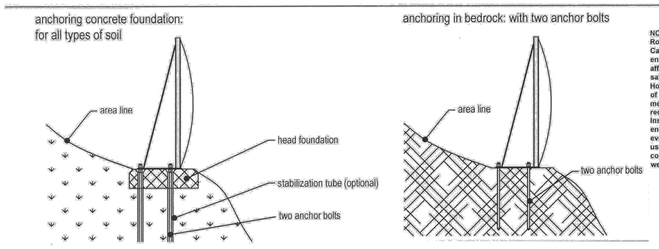
18" DIA. CONCRETE FOOTING
CLASS "A" 3000 PS, FOOTING TO EXTEND
42" BELOW FINISH GRADE

NOTE

REFER TO SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION. LOCATIONS TO BE VERIFIED IN THE FIELD BY ENGINEER.



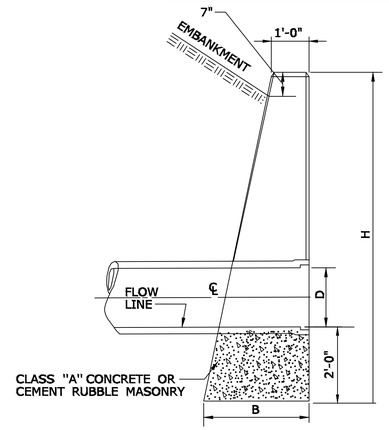




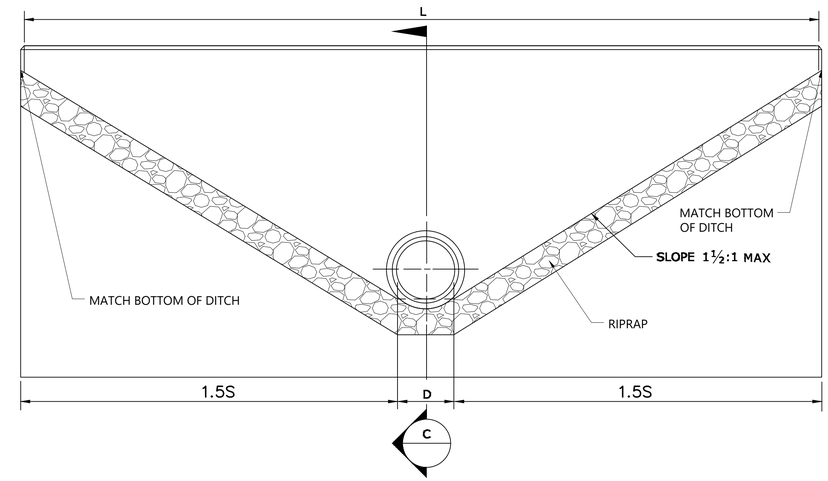
NOTE:
Rockfall, landslides, debris flows or avalanches are sporadic and unpredictable. Causes can be:e.g. human (construction, etc.) or environmental (weather, earthquakes, etc.). Due to the multiplicity of factors affecting such events it is not and cannot be an exact science that guarantees the safety of individuals and property.
However, by the application of sound engineering principles to a predictable range of parameters and by the implementation of correctly designed protection measures in identified risk areas the risks of injury and loss of property can be reduced substantially.
Inspection and maintenance of such systems are an absolute requirement to ensure the desired protection level. The system safety can also be impaired by events such as natural disasters, inadequate dimensioning parameters or failure to use the prescribed standard components, systems and original parts; and/or corrosion (caused by pollution of the environment or other man-made factors as well as other external influences).

ROCKFALL BARRIER
NOT TO SCALE

ENDWALL DIMENSIONS									
	START STA.	END STA.	D	S	H	L	BATTER (IN/FT)	B	VOL (CY)
ENDWALL 1	11+54.93	11+75.55	15"	9'-8.5"	8'-6.5"	20'-8"	0'-3"	3'-1.6"	13.6
ENDWALL 2	18+08.04	18+26.25	15"	8'-7.5"	8'-6.5"	18'-6"	0'-3"	3'-1.6"	12.1
ENDWALL 3	26+41.04	26+58.80	2'-6"	8'-2"	8'-5"	19'-0"	0'-3"	3'-1.3"	12.2
ENDWALL 4	29+91.37	30+13.09	2'-6"	9'-9"	9'-3.5"	22'-0"	0'-3"	3'-3.8"	16.3

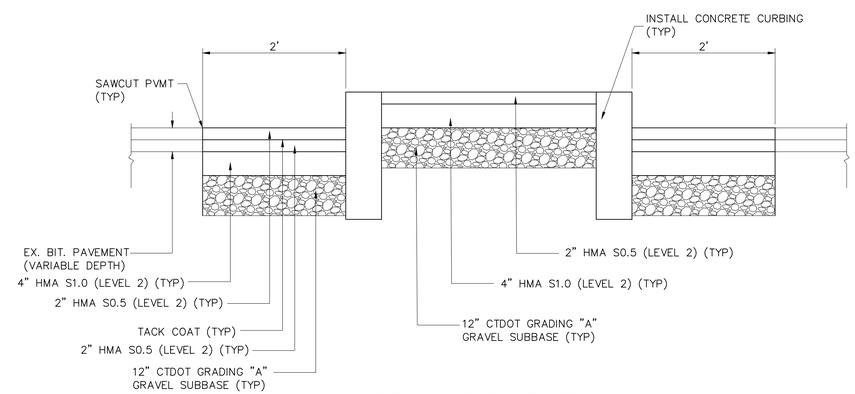


SECTION C



FRONT ELEVATION

ENDWALL



BITUMINOUS ISLAND DETAIL
N.T.S.

REV.	DATE	DESCRIPTION	SHEET. NO.
		REVISIONS	

NOT TO SCALE
N.T.S.

DESIGNER: EAN
DRAFTER: JE
CHECKED BY: BAA
APPROVED BY: SON

vhb
Engineers Scientists Planners Designers
NOT ISSUED FOR CONSTRUCTION DATE:NOVEMBER, 2021

PROJECT TITLE:
BLOOMFIELD–TARIFFVLLE
MULTI–USE TRAIL CONNECTOR

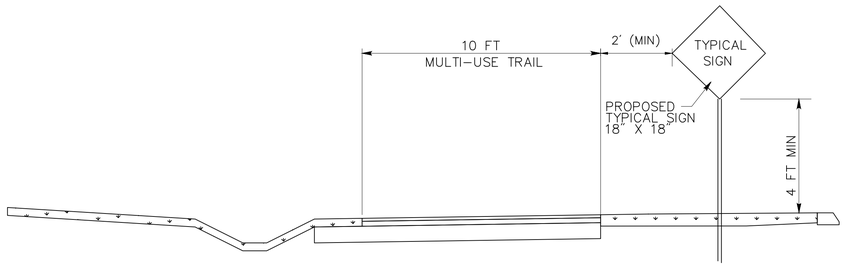
CADD FILENAME: MDS-4237300.DWG

TOWN: BLOOMFIELD–SIMSBURY, CONNECTICUT

DRAWING TITLE: MISCELLANEOUS DETAILS

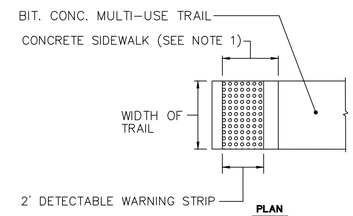
PROJECT NO.: 42373.00
DRAWING NO.: MDS–03
SHEET NO.: 06 OF 95

Nov 17, 2021



TYPICAL SIGN PLACEMENT
ON MULTI-USE PATH

NOT TO SCALE



NOTES:

1. DETECTABLE WARNING STRIP TO BE INSTALLED AS PER SIDEWALK RAMP DETAILS

CONCRETE SIDEWALK AT INTERSECTION

SCALE: NTS

REV.	DATE	DESCRIPTION	SHEET. NO.
		REVISIONS	

NOT TO SCALE
N.T.S.

DESIGNER: EAN
DRAFTER: JE
CHECKED BY: BAA
APPROVED BY: SON

vhb
Engineers Scientists Planners Designers

NOT ISSUED FOR CONSTRUCTION DATE: NOVEMBER, 2021

PROJECT TITLE:
BLOOMFIELD-TARIFFVLLE
MULTI-USE TRAIL CONNECTOR

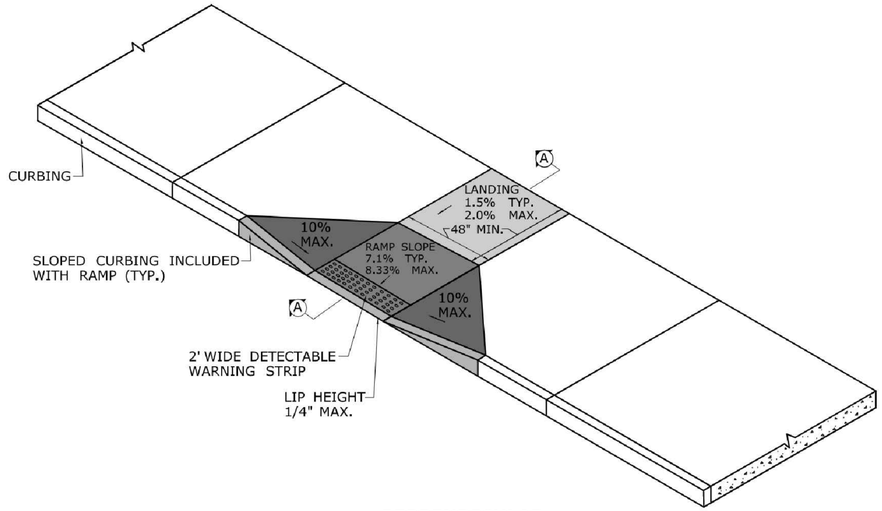
CADD FILENAME: MDS-4237300.DWG

TOWN:
BLOOMFIELD-SIMSBURY,
CONNECTICUT

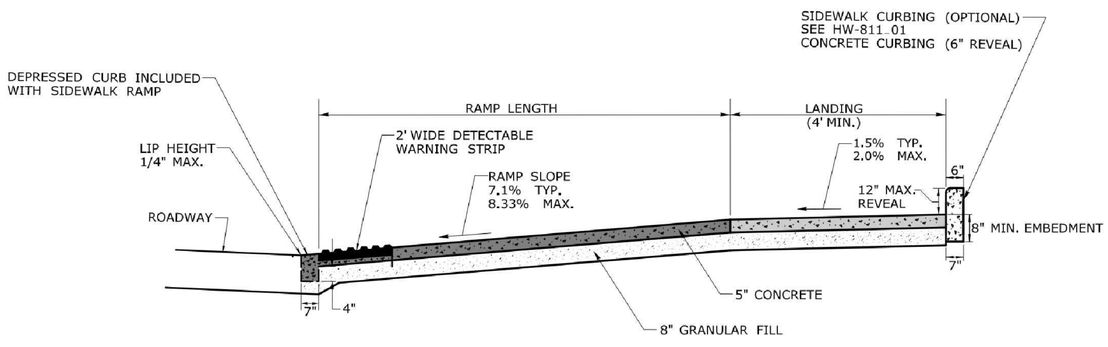
DRAWING TITLE:
MISCELLANEOUS
DETAILS

PROJECT NO.: 42373.00
DRAWING NO.: MDS-04
SHEET NO.: 07 OF 95

Nov 17, 2021



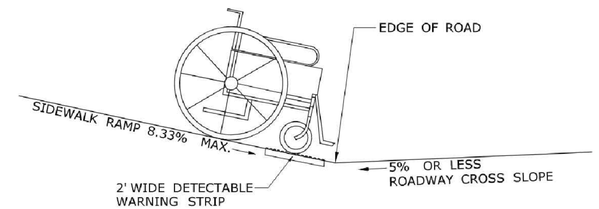
PERPENDICULAR SIDEWALK RAMP



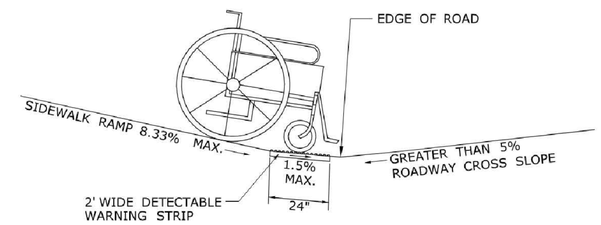
SECTION AA

GENERAL NOTES:

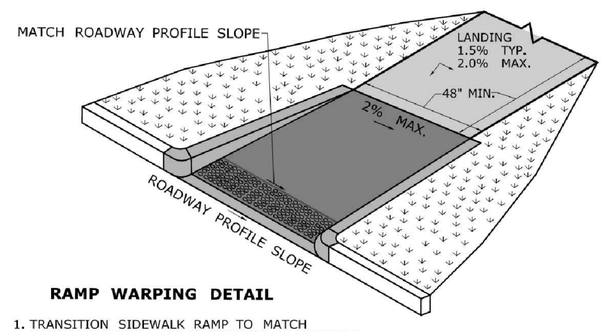
1. SIDEWALK RAMPS SHALL HAVE A COARSE BROOM FINISH TRAVERSE TO THE SLOPE OF THE RAMP.
2. VERTICAL SURFACE DISCONTINUITIES AT JOINTS SHALL NOT EXCEED $\frac{1}{4}$ INCH.
3. REMOVAL OF EXISTING SIDEWALK FOR NEW RAMP INSTALLATIONS SHALL BE TO THE NEAREST EXPANSION OR CONTRACTION JOINT.
4. THE RUNNING SLOPE OF THE CURB RAMP SHALL BE 8.3 PERCENT MAXIMUM BUT SHALL NOT REQUIRE THE RAMP LENGTH TO EXCEED 15 FEET.



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



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



RAMP WARPING DETAIL

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

REV.	DATE	DESCRIPTION REVISIONS	SHEET. NO.

NOT TO SCALE
N.T.S.

DESIGNER: EAN
DRAFTER: JE
CHECKED BY: BAA
APPROVED BY: SON

vhb
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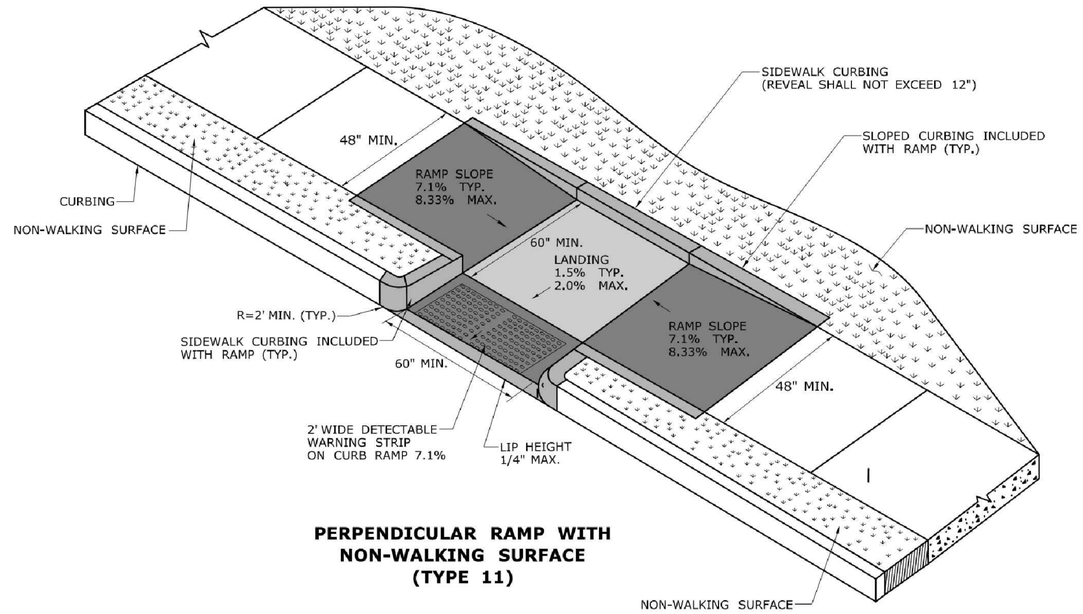
NOT ISSUED FOR CONSTRUCTION DATE: NOVEMBER, 2021

PROJECT TITLE: BLOOMFIELD–TARIFFVLLE MULTI–USE TRAIL CONNECTOR
CADD FILENAME: MDS-4237300.DWG

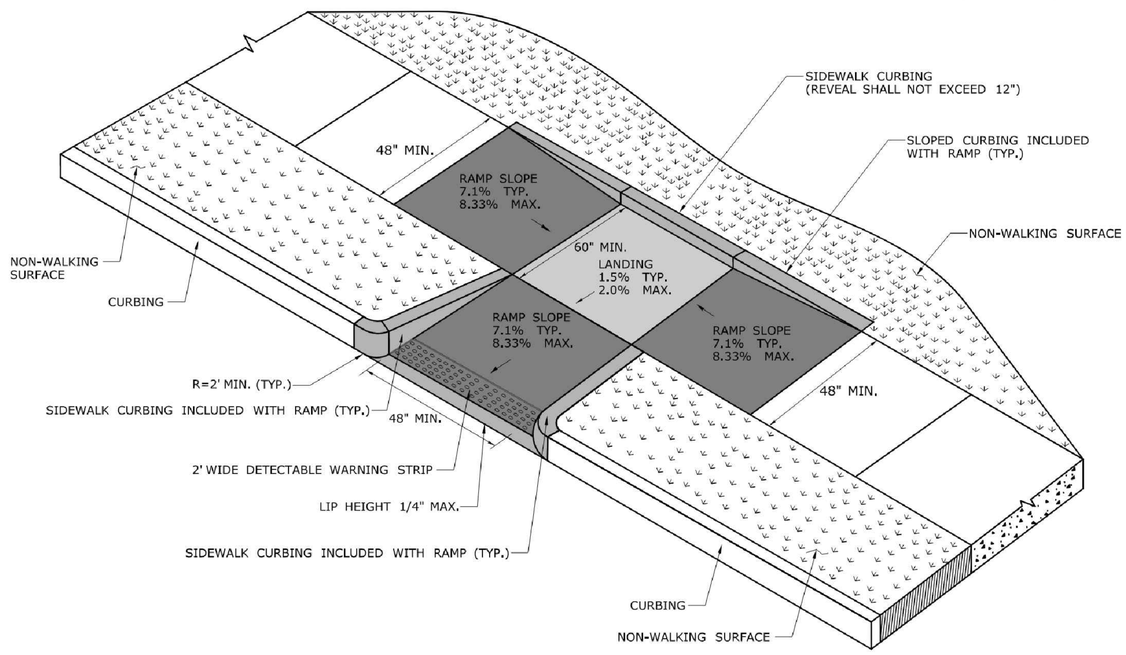
TOWN: BLOOMFIELD–SIMSBURY, CONNECTICUT
DRAWING TITLE: MISCELLANEOUS DETAILS

PROJECT NO.: 42373.00
DRAWING NO.: MDS–05
SHEET NO.: 08 OF 95

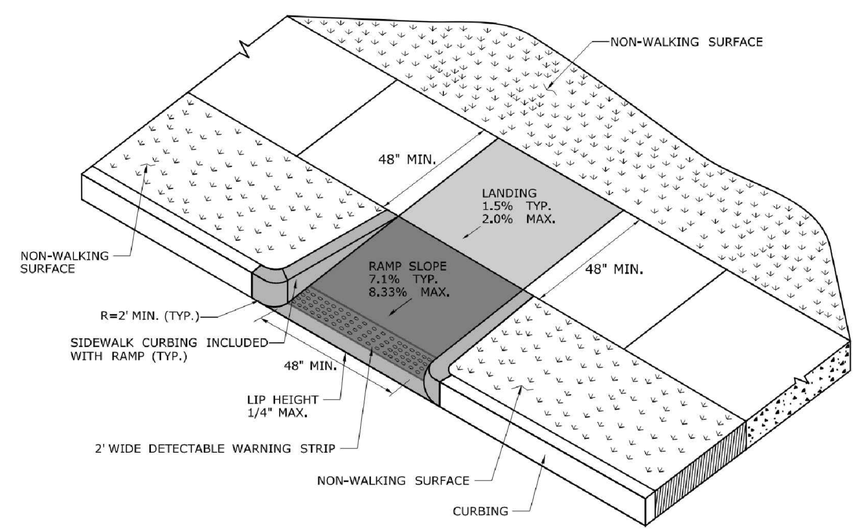
Nov 17, 2021



PERPENDICULAR RAMP WITH NON-WALKING SURFACE (TYPE 11)



PERPENDICULAR RAMP WITH SIDEWALK CURB AND NON-WALKING SURFACE (TYPE 12)



PERPENDICULAR RAMP WITH NON-WALKING SURFACE (TYPE 13)

REV.	DATE	DESCRIPTION REVISIONS	SHEET. NO.

NOT TO SCALE
N.T.S.

DESIGNER: EAN
DRAFTER: JE
CHECKED BY: BAA
APPROVED BY: SON

vhb
Engineers Scientists Planners Designers

NOT ISSUED FOR CONSTRUCTION DATE: NOVEMBER, 2021

PROJECT TITLE: BLOOMFIELD–TARIFFVLLE MULTI–USE TRAIL CONNECTOR

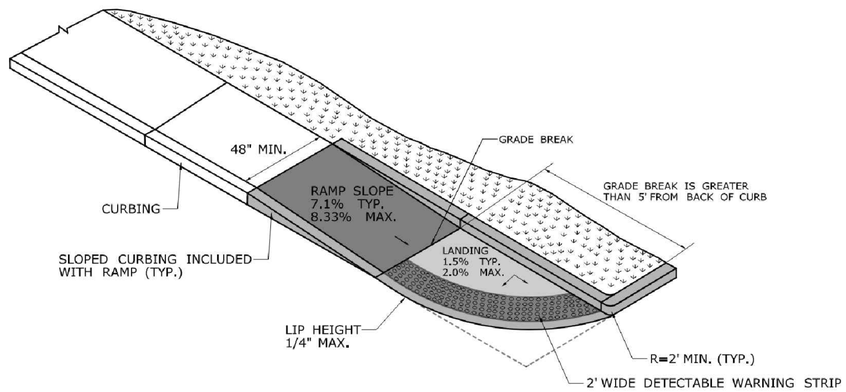
CADD FILENAME: MDS–4237300.DWG

TOWN: BLOOMFIELD–SIMSBURY, CONNECTICUT

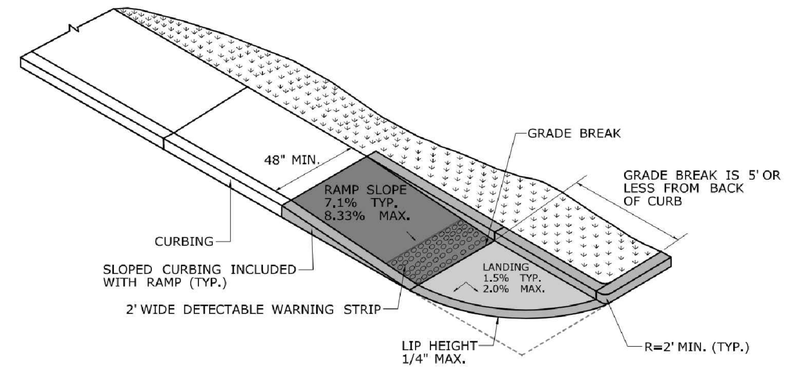
DRAWING TITLE: MISCELLANEOUS DETAILS

PROJECT NO.: 42373.00
DRAWING NO.: MDS–06
SHEET NO.: 09 OF 95

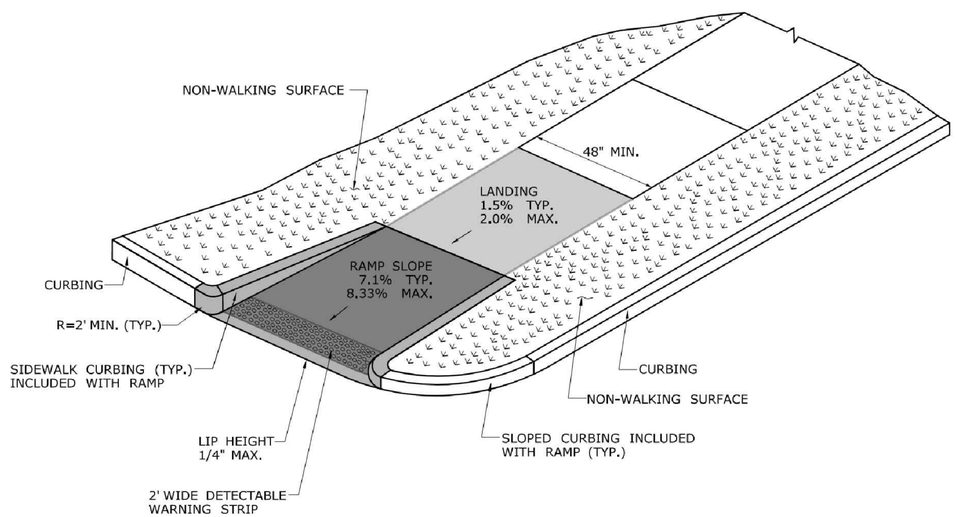
Nov 17, 2021



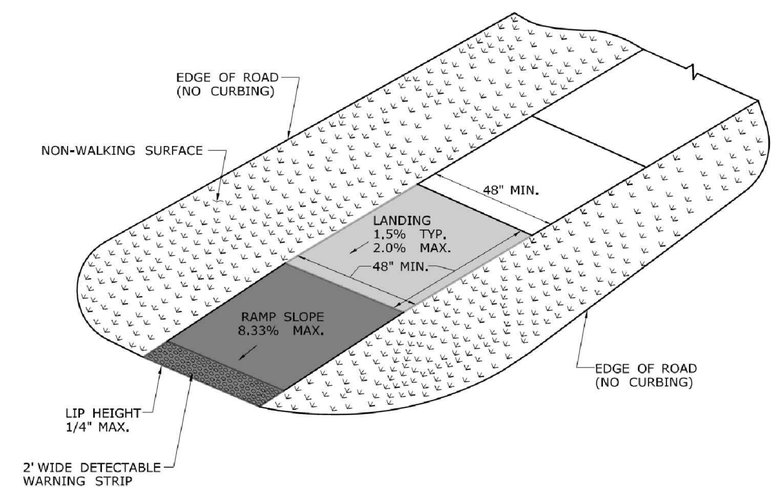
SINGLE DIRECTION RAMP
WITHOUT NON-WALKING SURFACE
GRADE BREAK GREATER THAN 5'
(TYPE 14)



SINGLE DIRECTION RAMP
WITHOUT NON-WALKING SURFACE
GRADE BREAK 5' OR LESS
(TYPE 15)



SINGLE DIRECTION - RETURN CURB
WITH NON-WALKING SURFACE
(TYPE 16)



SINGLE DIRECTION - NO CURB
WITH NON-WALKING SURFACE
(TYPE 17)

REV.	DATE	DESCRIPTION	SHEET. NO.
		REVISIONS	

NOT TO SCALE
N.T.S.

DESIGNER: EAN
DRAFTER: JE
CHECKED BY: BAA
APPROVED BY: SON

vhb
Engineers Scientists Planners Designers

NOT ISSUED FOR CONSTRUCTION DATE: NOVEMBER, 2021

PROJECT TITLE: BLOOMFIELD–TARIFFVLLE MULTI–USE TRAIL CONNECTOR

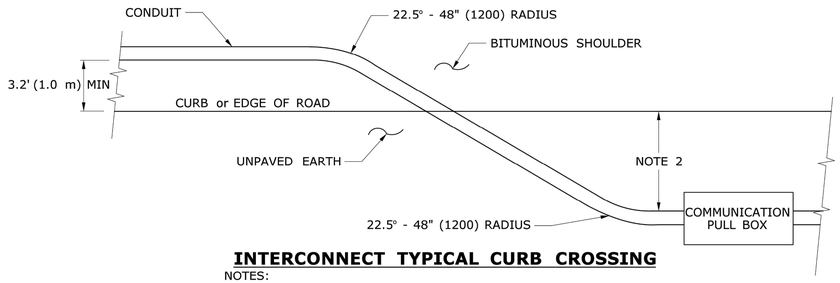
CADD FILENAME: MDS-4237300.DWG

TOWN: BLOOMFIELD–SIMSBURY, CONNECTICUT

DRAWING TITLE: MISCELLANEOUS DETAILS

PROJECT NO.: 42373.00
DRAWING NO.: MDS–07
SHEET NO.: 10 OF 95

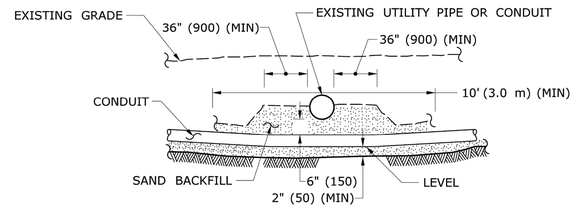
Nov 17, 2021



INTERCONNECT TYPICAL CURB CROSSING

NOTES:

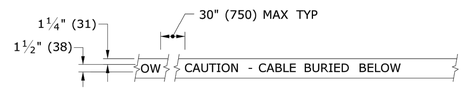
1. RESTORE AREAS DISTURBED BY TRENCH TO ORIGINAL CONDITION.
2. INSTALL PULL BOX A MINIMUM OF 10' (3.0 m) FROM CURB UNLESS OTHERWISE SHOWN ON PLANS OR DIRECTED BY ENGINEER.



CROSSING UNDER EXISTING UTILITY

NOTES:

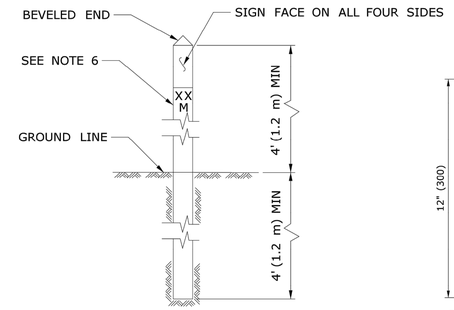
1. WHEN ENCOUNTERED AT APPROXIMATELY THE SAME DEPTH, CROSS BENEATH.
2. PROTECT & SUPPORT EXPOSED EXISTING UTILITY.



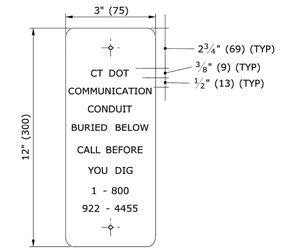
DETECTABLE WARNING TAPE

NOTE:
STANDARD SPECIFICATIONS, ARTICLE: 1.05.15

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



INTERCONNECT CONDUIT IDENTIFICATION POST

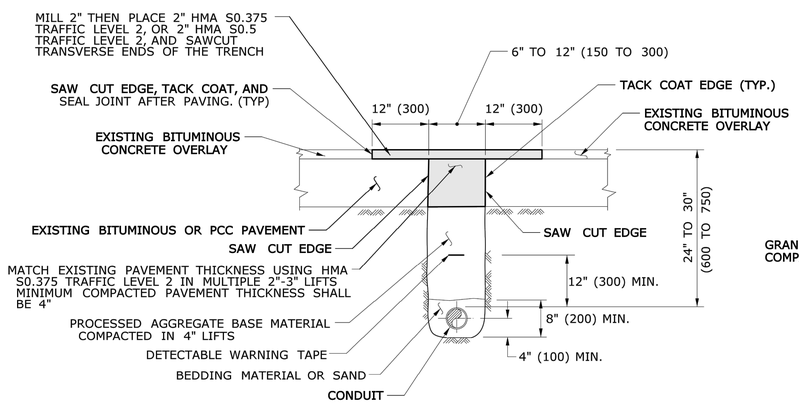


SIGN FACE DETAIL

SIGN # 41-4669

NOTES:

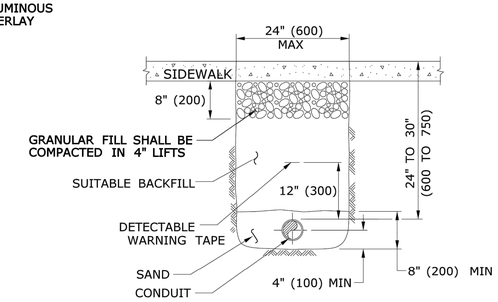
1. 4" x 4" (100 x 100) NOMINAL, PRESSURE TREATED WOOD POST.
2. ATTACH SIGN TO POST WITH ¼" x 1¼" (6 x 31) STAINLESS STEEL LAG SCREW WITH NYLON WASHER ON FACE OF SIGN.
3. SIGN COLORS: BACKGROUND - ORANGE (RETROREFLECTIVE) LEGEND - BLACK (OPAQUE).
4. INSTALL POST APPROX 24" (600) FROM RMC IN VICINITY OF EACH PULL BOX.
5. INSTALL POSTS BETWEEN PULL BOXES, APPROX 10' (3.0 m) OFF CURB. SPACE POSTS 1500'± (460 m±) APART.
6. PERMANENTLY ATTACH STAINLESS STEEL NUMBERS INDICATING DISTANCE TO TRENCH IN FEET (METERS) CONTAINING COMMUNICATION CABLE. ATTACH NUMBERS TO SIDE OF POST FACING CONDUIT. INCLUDE "M" SUFFIX IF METERS.



PAVEMENT - BITUMINOUS CONCRETE OR OVERLAYED PORTLAND CEMENT CONCRETE

NOTES:
STANDARD SPECIFICATION, ARTICLE 3.04 AND SPECIAL PROVISION, SECTION 4.06.03

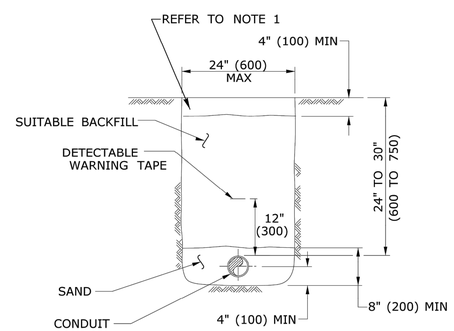
1. TOTAL HOT MIX ASPHALT (HMA) THICKNESS TO MATCH EXISTING BITUMINOUS CONCRETE AND PORTLAND CEMENT CONCRETE (PCC) THICKNESS.
2. WHEN ALLOWED BY ENGINEER, USE CONTROLLED LOW STRENGTH MATERIAL (CLSM) AS BEDDING MATERIAL. TOP OF CLSM AT LEAST 20" (500) BELOW SURFACE.



SIDEWALK

NOTES:
STANDARD SPECIFICATIONS, ARTICLE: 9.21 & 9.22

1. WHERE CONCRETE SIDEWALK DAMAGED OR CUT, REPLACE THE ENTIRE SECTION BETWEEN JOINTS. REPLACEMENT SIDEWALK IS PAID FOR AT THE CONTRACT UNIT PRICE FOR "CONCRETE SIDEWALK".



EARTH

NOTES:
STANDARD SPECIFICATIONS, ARTICLE: 9.50

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

GENERAL NOTES:

1. TOP OF CONDUIT NO LESS THAN 24" (600) DEEP.
2. COMPACT BACKFILL IN ≤6" (150) LIFTS. HAND COMPACTION NOT PERMITTED.

LEGEND AS SHOWN ON TRAFFIC CONTROL SIGNAL PLAN:
—·—·— RMC (RIGID METAL CONDUIT)

REV.	DATE	DESCRIPTION	SHEET. NO.
		REVISIONS	

NOT TO SCALE
N.T.S.

DESIGNER: EAN
DRAFTER: JE
CHECKED BY: BAA
APPROVED BY: SON

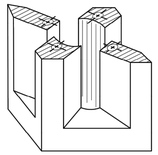
vhb
Engineers Scientists Planners Designers
NOT ISSUED FOR CONSTRUCTION DATE: NOVEMBER, 2021

PROJECT TITLE: BLOOMFIELD–TARIFFVLLE MULTI–USE TRAIL CONNECTOR
CADD FILENAME: MDS–4237300.DWG

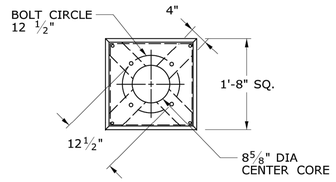
TOWN: BLOOMFIELD–SIMSBURY, CONNECTICUT
DRAWING TITLE: MISCELLANEOUS DETAILS

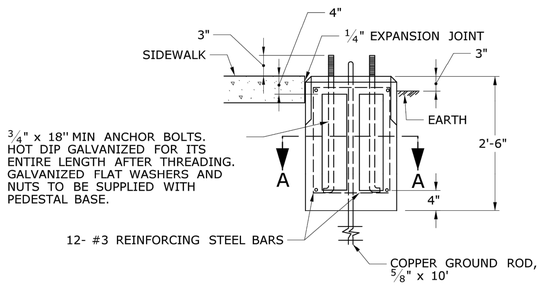
PROJECT NO.: 42373.00
DRAWING NO.: MDS–08
SHEET NO.: 11 OF 95

Nov 17, 2021



PICTORIAL
SECTION A-A

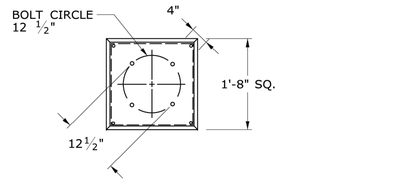


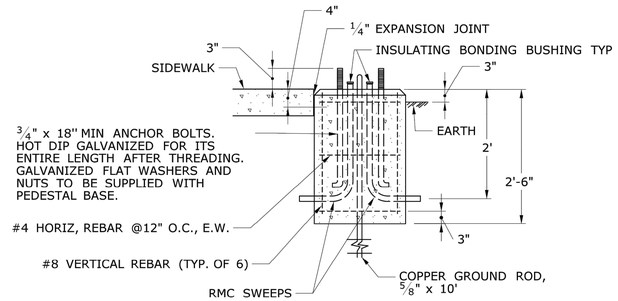


TRAFFIC CONTROL FOUNDATION
PEDESTAL - TYPE I - PRECAST

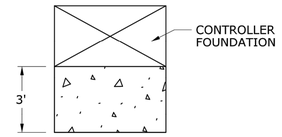
NOTES:

PLACE NO. 6 CRUSHED STONE IN CENTER OPENING AFTER CONDUITS AND GROUND ROD HAVE BEEN INSTALLED.





TRAFFIC CONTROL FOUNDATION
PEDESTAL - TYPE I - CAST IN PLACE

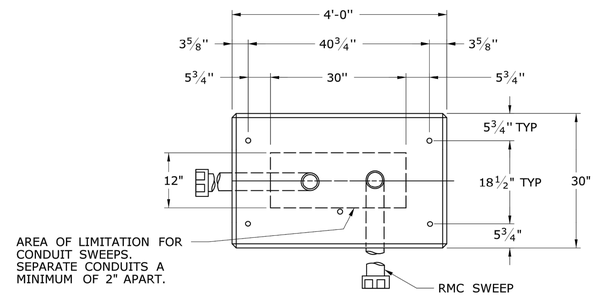


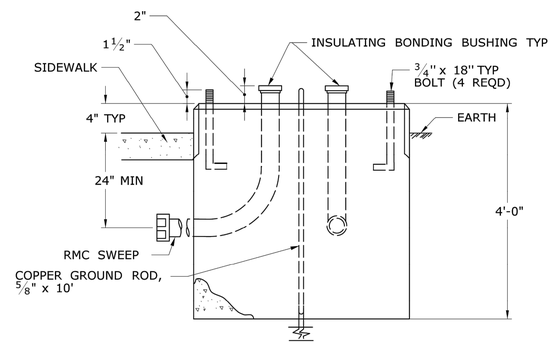
INSTALL PRECAST OR CAST IN PLACE CONCRETE SIDEWALK ON CABINET DOOR SIDE OF CONTROLLER FOUNDATION.

PITCH SIDEWALK 1/4" PER FOOT AWAY FROM THE CONTROLLER FOUNDATION.

REFER TO HIGHWAY STANDARD SHEET HW-921.01 FOR SIDEWALK CONSTRUCTION.

TYPICAL CONCRETE SIDEWALK
AT CONTROLLER FOUNDATION

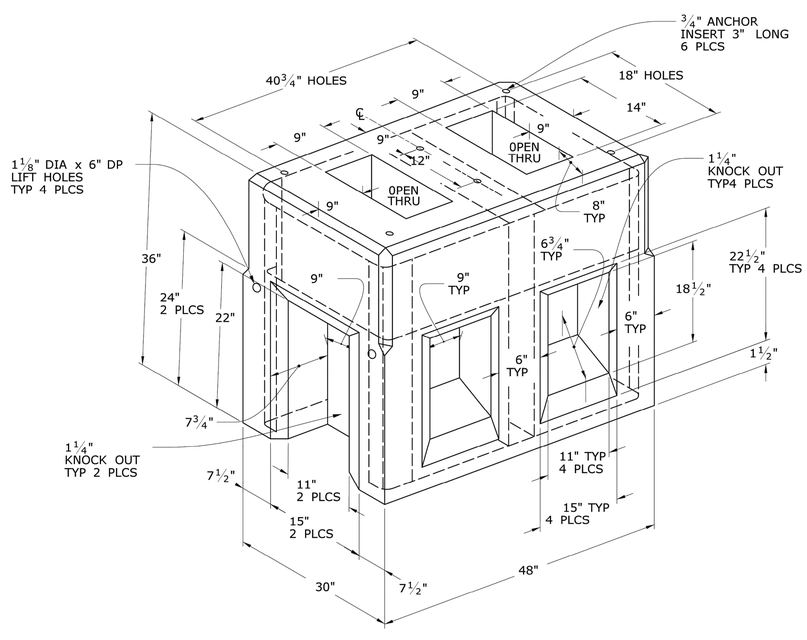




TRAFFIC CONTROL FOUNDATION
CONTROLLER - TYPE IV - CAST IN PLACE

NOTES:

INSTALL FOUNDATION ON 6" OF COMPACTED GRAVEL IN ACCORDANCE WITH SECTION 2.14.
LEVEL FOUNDATION WITH A PROJECTION OF 4" ABOVE FINISHED GRADE.
INSTALL COPPER GROUND ROD: 5#8" x 10".
PLACE NO. 6 CRUSHED STONE IN THE CENTER OPENINGS AFTER THE CONDUITS AND GROUND ROD HAVE BEEN INSTALLED. THE OPENINGS SHALL BE CAPPED WITH A 2" GROUT LEVEL WITH THE TOP OF THE FOUNDATION AND NEATLY FINISHED. THE GROUT SHALL CONFORM WITH THE REQUIREMENTS OF ARTICLE M.3.01-12.
CONCRETE: CLASS PCC04461 CONFORMING TO ARTICLE M.03.01.
#4 REBAR 2" MIN COVER AROUND ALL OPENINGS, 3-#4 REBARS IN EACH CORNER.
CONDUITS SHALL NOT PROJECT MORE THAN 2" ABOVE FOUNDATION.



TRAFFIC CONTROL FOUNDATION
CONTROLLER - TYPE IV - PRECAST

LEGEND AS SHOWN ON TRAFFIC CONTROL SIGNAL PLAN:
- PROPOSED CONTROLLER
- EXISTING CONTROLLER
- PROPOSED STEEL SPAN POLE
- EXISTING STEEL SPAN POLE

REV.	DATE	DESCRIPTION	SHEET. NO.
		REVISIONS	

NOT TO SCALE
N.T.S.

DESIGNER: EAN
DRAFTER: JE
CHECKED BY: BAA
APPROVED BY: SON

vhb
Engineers Scientists Planners Designers

NOT ISSUED FOR CONSTRUCTION DATE: NOVEMBER, 2021

PROJECT TITLE: BLOOMFIELD–TARIFFVLLE MULTI–USE TRAIL CONNECTOR

CADD FILENAME: MDS–4237300.DWG

TOWN: BLOOMFIELD–SIMSBURY, CONNECTICUT

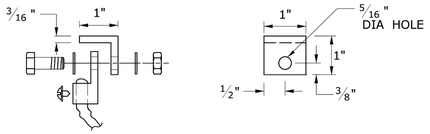
DRAWING TITLE: MISCELLANEOUS DETAILS

PROJECT NO.: 42373.00
DRAWING NO.: MDS–09
SHEET NO.: 12 OF 95

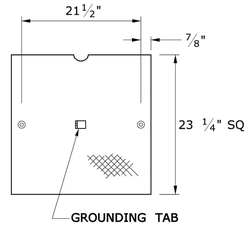
Nov 17, 2021

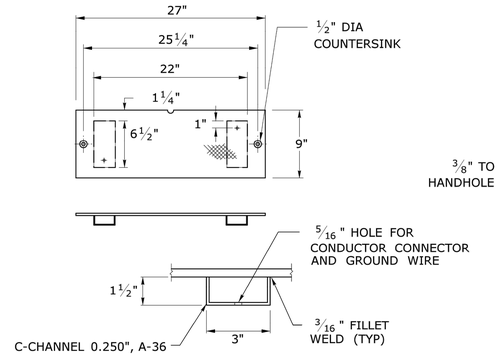
COVER NOTES:

1. GROUNDING TAB WELDED TO BOTTOM CENTER OF COVER WITH 3/16" WELD (3 SIDES).
2. ATTACH 6' LENGTH OF NO. 8 GROUND WIRE TO GROUNDING TAB WITH CONDUCTOR CONNECTOR, 1/4" - 20 X 3/4" LG SST HEX HEAD BOLT, AND SST FLAT WASHER. ATTACH FREE END OF GROUND WIRE TO CONDUIT BONDING BUSHING IN HANDHOLE.
3. CONDUCTOR CONNECTOR: COPPER ALLOY BODY, BRASS SCREW, BRASS OR COPPER ALLOY PRESSURE PLATE.
4. COVER SCREW INSERT: 3/8"-16, 1 1/2"L, STAINLESS STEEL.
5. COVER SCREW: 3/8"-16, 1"L, FLAT HEAD, SLOTTED, STAINLESS STEEL.

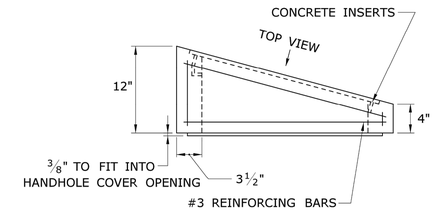


STEEL GROUNDING TAB w/ CONDUCTOR CONNECTOR

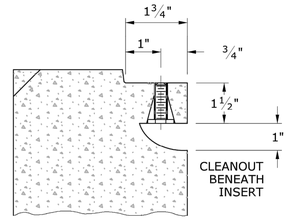




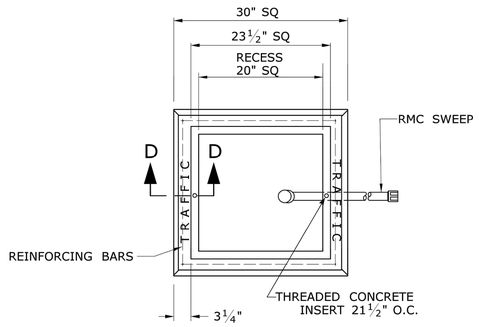
NON SKID FLOOR PLATE GALVANIZED STEEL, 3/8" (10)



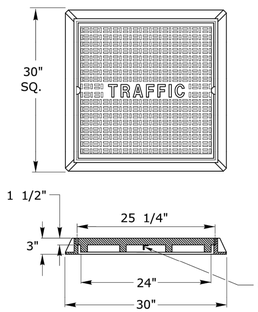
BANK ADAPTER

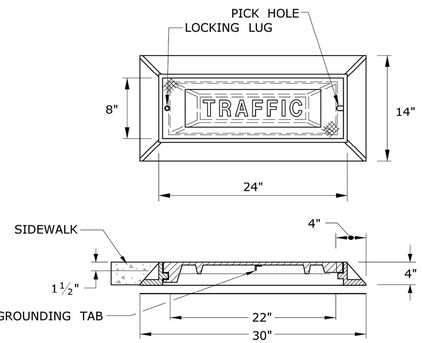


SECTION D-D

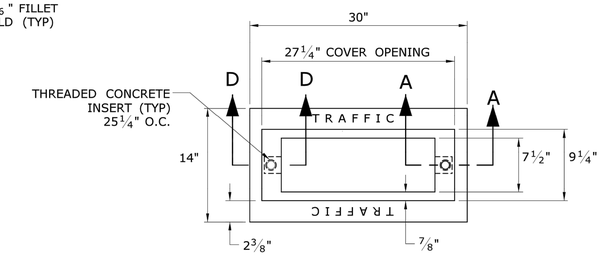


PLAN VIEW

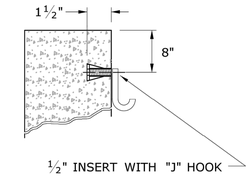




CAST IRON HANDHOLE COVERS

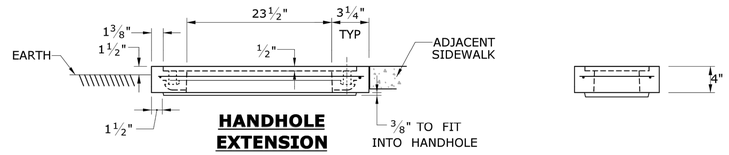


PLAN VIEW

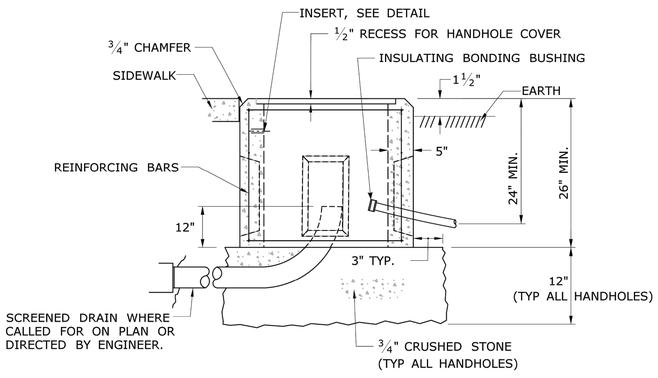


INSERT DETAIL

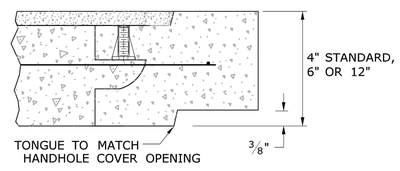
TYP IN TWO PLACES FOR ALL HANDHOLES



HANDHOLE EXTENSION

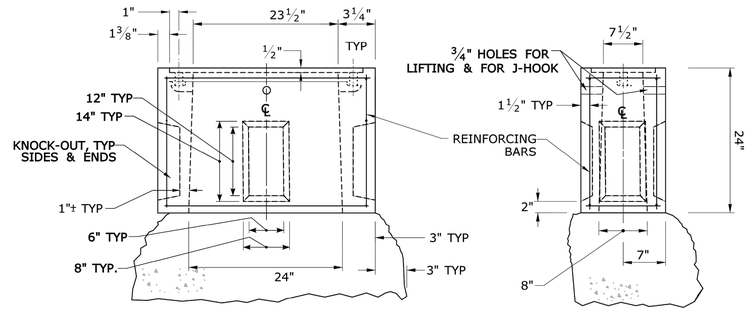


CONCRETE HANDHOLE TYPE I



SECTION A-A HANDHOLE EXTENSIONS

4 - #8 REINFORCING BARS REQ'D



BASE SECTION

CONCRETE HANDHOLE TYPE II

LEGEND AS SHOWN ON TRAFFIC CONTROL SIGNAL PLAN:

- PROPOSED HANDHOLE
- EXISTING HANDHOLE

HANDHOLE NOTES:

1. MINIMUM CLASS PCC04461 CONCRETE.
2. COMPLETE TYPE II HANDHOLE:
   IN EARTH AREAS, CONSISTS OF A BASE SECTION WITH 4" HANDHOLE EXTENSION,
   IN SIDEWALK AREAS, CONSISTS OF A BASE SECTION WITH 4" CAST IRON COVER.
3. PLAN VIEW DIMENSIONS, SECTION VIEW, & DETAILS, SAME FOR BASE SECTION, EXTENSIONS & BANK ADAPTER.
4. GROUT AROUND ALL CONDUITS.
5. INSTALL 30" SIDE PARALLEL TO ROAD UNLESS OTHERWISE NOTED.
6. INSTALL HANDHOLES APPROX. 12" BEHIND CURB OR IF NO CURB, 24" BEHIND EDGE OF ROAD UNLESS OTHERWISE SPECIFIED.
7. CAST THE WORD "TRAFFIC" INTO TOP EDGE OF HANDHOLE, 1 1/2" LETTERS.
8. WHERE AN EXISTING CONCRETE SIDEWALK SLAB ABUTTING A HANDHOLE IS DAMAGED OR CUT DURING INSTALLATION, REPLACE THE ENTIRE SIDEWALK SECTION.
9. 12-#3 REINFORCING BARS REQUIRED FOR ALL HANDHOLES. (8 HORIZONTAL, 4 VERTICAL)

REV.	DATE	DESCRIPTION REVISIONS	SHEET. NO.

NOT TO SCALE
N.T.S.

DESIGNER: EAN
DRAFTER: JE
CHECKED BY: BAA
APPROVED BY: SON

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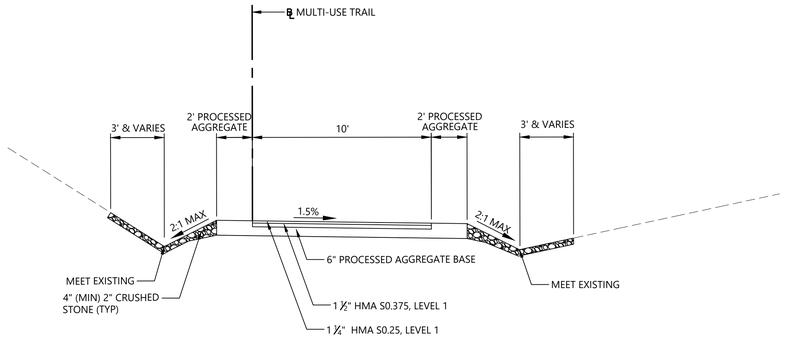
Engineers Scientists Planners Designers
NOT ISSUED FOR CONSTRUCTION DATE: NOVEMBER, 2021

PROJECT TITLE: BLOOMFIELD–TARIFFVLLE MULTI–USE TRAIL CONNECTOR
CADD FILENAME: MDS–4237300.DWG

TOWN: BLOOMFIELD–SIMSBURY, CONNECTICUT
DRAWING TITLE: MISCELLANEOUS DETAILS

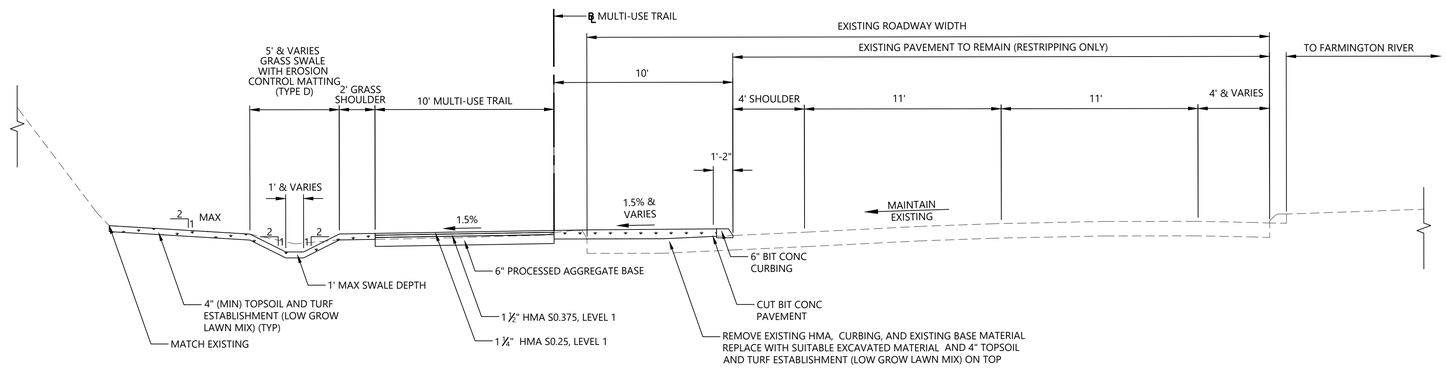
PROJECT NO.: 42373.00
DRAWING NO.: MDS–10
SHEET NO.: 13 OF 95

Nov 17, 2021



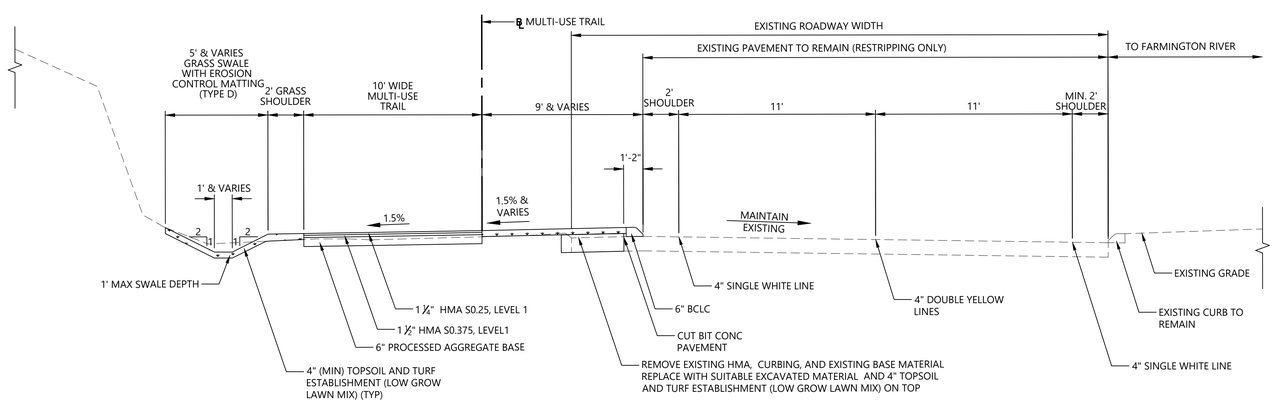
STA. 4+45.16 TO 10+03.44

SCALE: NTS



STA. 10+03.44 TO 24+44.07

SCALE: NTS



STA. 24+44.07 TO 30+91.50

SCALE: NTS

REV.	DATE	DESCRIPTION	SHEET. NO.
		REVISIONS	

DESIGNER: EAN
DRAFTER: JE
CHECKED BY: BAA
APPROVED BY: SON

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NOT ISSUED FOR CONSTRUCTION DATE:NOVEMBER, 2021

PROJECT TITLE: BLOOMFIELD–TARIFFVLLE MULTI–USE TRAIL CONNECTOR

CADD FILENAME: TYP–4237300.DWG

TOWN: BLOOMFIELD–SIMSBURY, CONNECTICUT

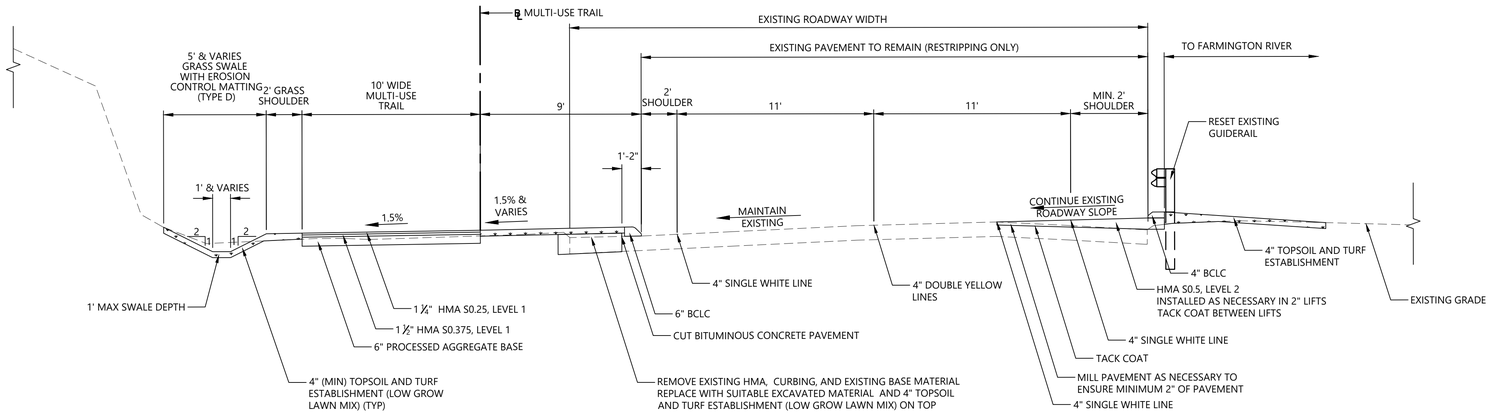
DRAWING TITLE: TYPICAL SECTION

PROJECT NO.: 42373.00

DRAWING NO.: TYP–01

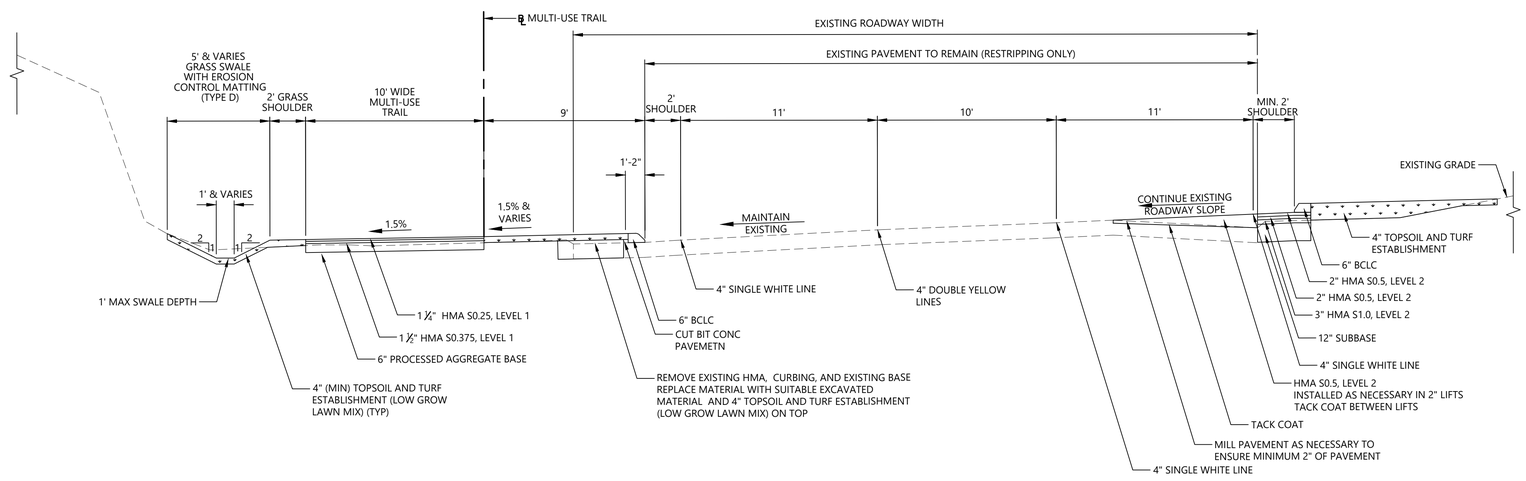
SHEET NO.: 14 OF 95

Nov 17, 2021



STA. 31+91.50 TO 39+49.15

SCALE: NTS



STA. 39+49.15 TO 42+89.31

SCALE: NTS

REV.	DATE	DESCRIPTION	SHEET. NO.
		REVISIONS	

DESIGNER: EAN
DRAFTER: JE
CHECKED BY: BAA
APPROVED BY: SON

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NOT ISSUED FOR CONSTRUCTION DATE:NOVEMBER, 2021

PROJECT TITLE:
BLOOMFIELD–TARIFFVLLE
MULTI–USE TRAIL CONNECTOR

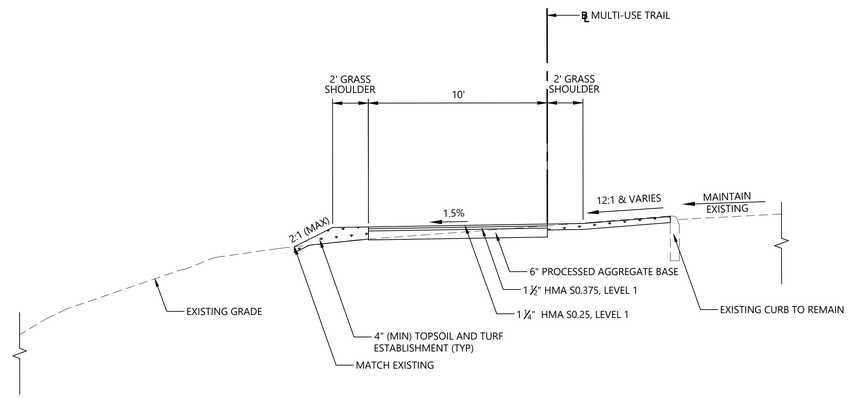
CADD FILENAME: TYP–4237300.DWG

TOWN: BLOOMFIELD–SIMSBURY, CONNECTICUT

DRAWING TITLE: TYPICAL SECTION

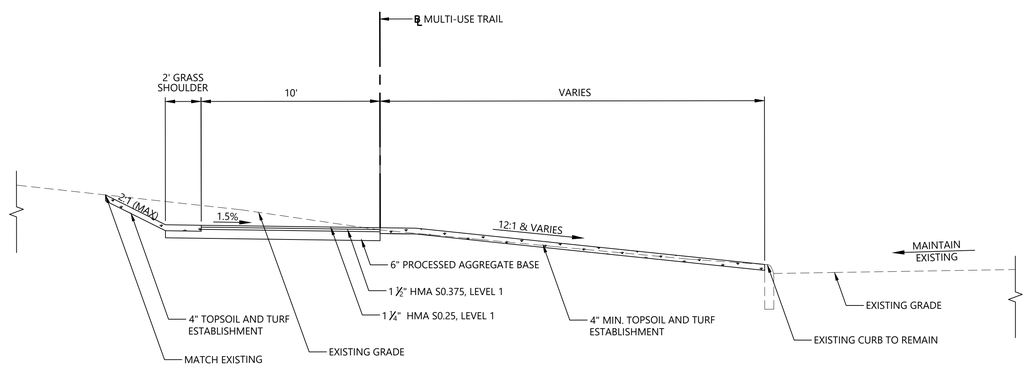
PROJECT NO.: 42373.00
DRAWING NO.: TYP–02
SHEET NO.: 15 OF 95

Nov 17, 2021



STA. 43+64.89 TO 45+54.00

SCALE: NTS



STA. 45+54.00 TO 48+16.52
STA. 48+81.79 TO 49+65.91
STA. 50+02.82 TO 50+30.59

SCALE: NTS

REV.	DATE	DESCRIPTION	SHEET. NO.
		REVISIONS	

DESIGNER: EAN
DRAFTER: JE
CHECKED BY: BAA
APPROVED BY: SON

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NOT ISSUED FOR CONSTRUCTION DATE:NOVEMBER, 2021

PROJECT TITLE:
BLOOMFIELD–TARIFFVLLE
MULTI–USE TRAIL CONNECTOR

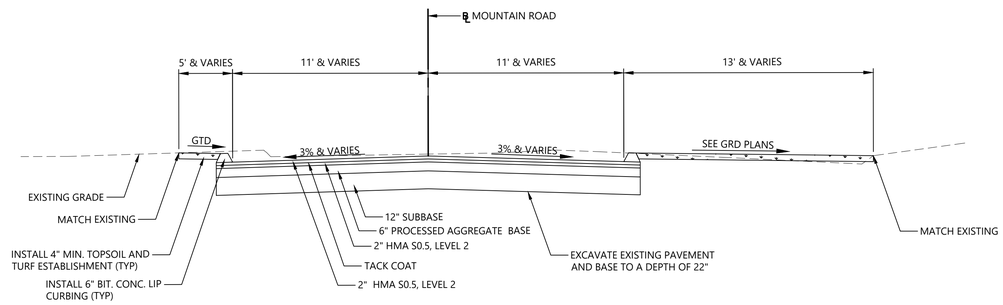
CADD FILENAME: TYP–4237300.DWG

TOWN: BLOOMFIELD–SIMSBURY, CONNECTICUT

DRAWING TITLE: TYPICAL SECTION

PROJECT NO.: 42373.00
DRAWING NO.: TYP–03
SHEET NO.: 16 OF 95

Nov 17, 2021



MOUNTAIN ROAD
STA. 100+39.11 TO 101+37.92

SCALE: NTS

REV.	DATE	DESCRIPTION	SHEET. NO.
		REVISIONS	

DESIGNER: EAN
DRAFTER: JE
CHECKED BY: BAA
APPROVED BY: SON

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NOT ISSUED FOR CONSTRUCTION DATE:NOVEMBER, 2021

PROJECT TITLE:
BLOOMFIELD-TARIFFVLLE
MULTI-USE TRAIL CONNECTOR

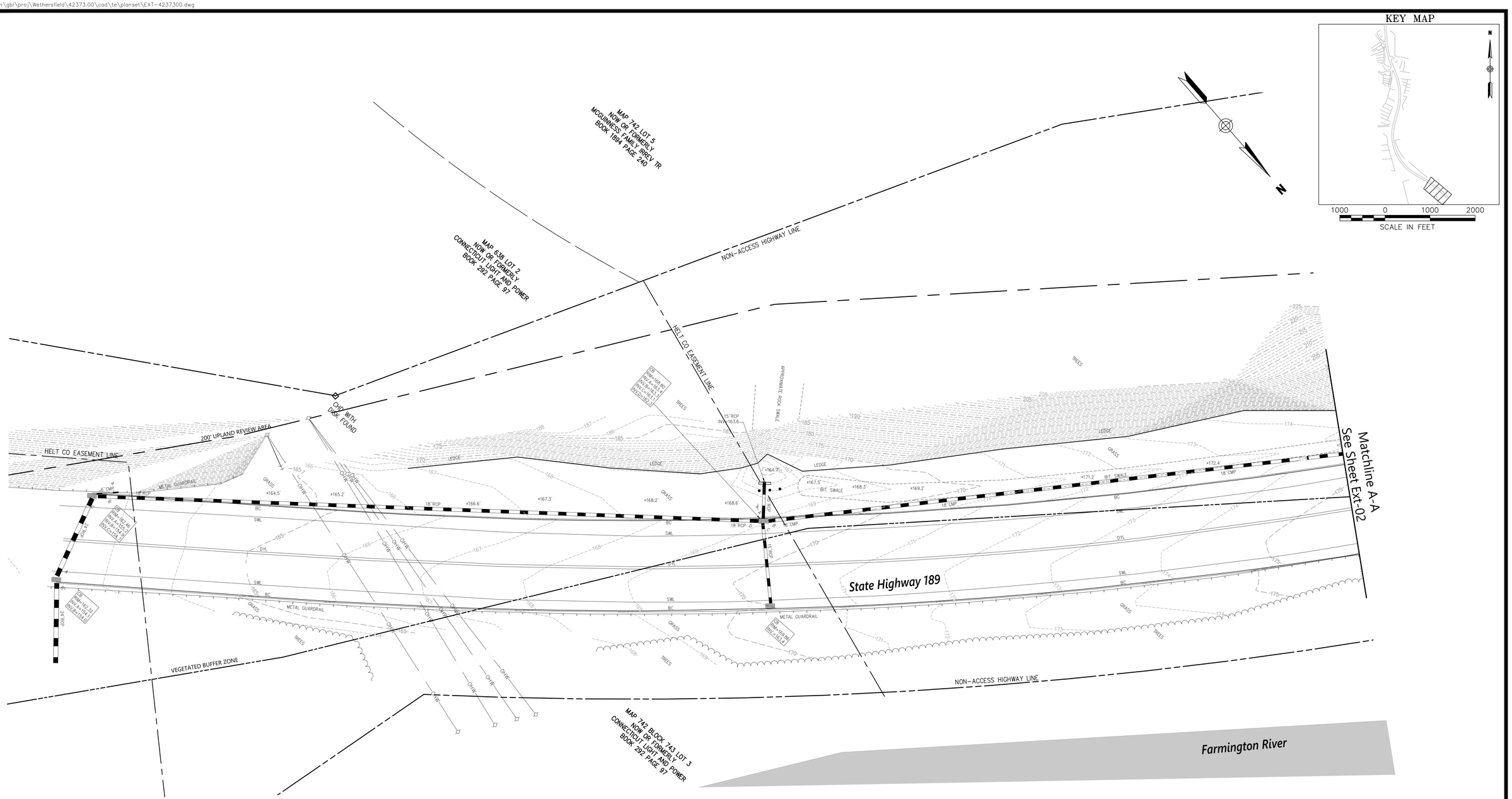
CADD FILENAME: TYP-4237300.DWG

TOWN:
BLOOMFIELD-SIMSBURY, CONNECTICUT

DRAWING TITLE:
TYPICAL SECTION

PROJECT NO.: 42373.00
DRAWING NO.: TYP-04
SHEET NO.: 17 OF 95

Nov 17, 2021



REV.	DATE	DESCRIPTION	SHEET. NO.
		REVISIONS	

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SCALE IN FEET

DESIGNER: EAN
DRAFTER: JE
CHECKED BY: BAA
APPROVED BY: SON

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NOT ISSUED FOR CONSTRUCTION DATE:NOVEMBER, 2021

PROJECT TITLE:
BLOOMFIELD–TARIFFVLLE
MULTI–USE TRAIL CONNECTOR

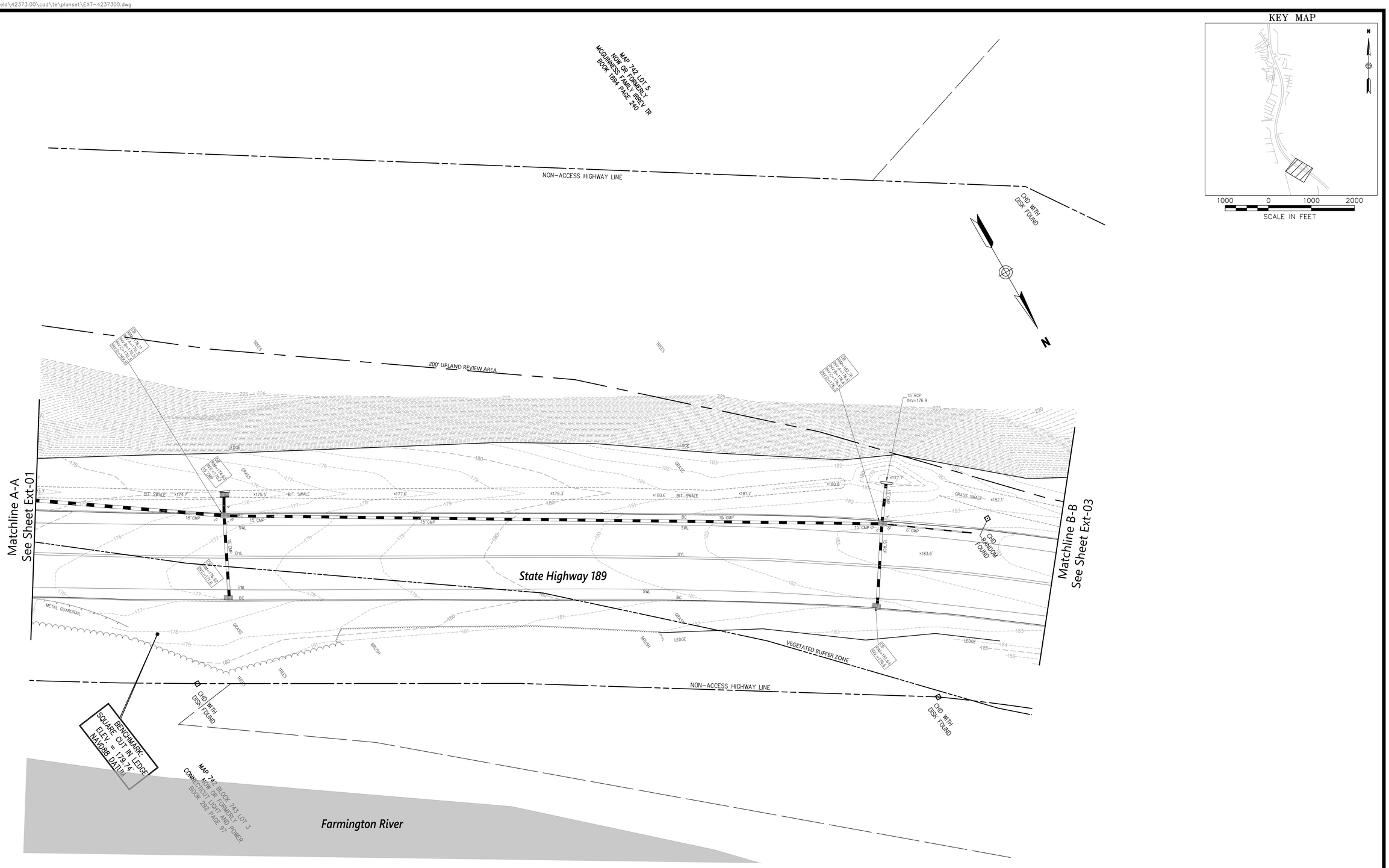
CADD FILENAME: EXT-4237300.DWG

TOWN:
BLOOMFIELD–SIMSBURY,
CONNECTICUT

DRAWING TITLE:
EXISTING
CONDITIONS

PROJECT NO.: 42373.00
DRAWING NO.: EXT–01
SHEET NO.: 18 OF 95

Nov 17, 2021



REV.	DATE	DESCRIPTION	SHEET. NO.
		REVISIONS	

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SCALE IN FEET

DESIGNER: EAN
DRAFTER: JE
CHECKED BY: BAA
APPROVED BY: SON

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NOT ISSUED FOR CONSTRUCTION DATE:NOVEMBER, 2021

PROJECT TITLE:
BLOOMFIELD–TARIFFVLLE
MULTI–USE TRAIL CONNECTOR

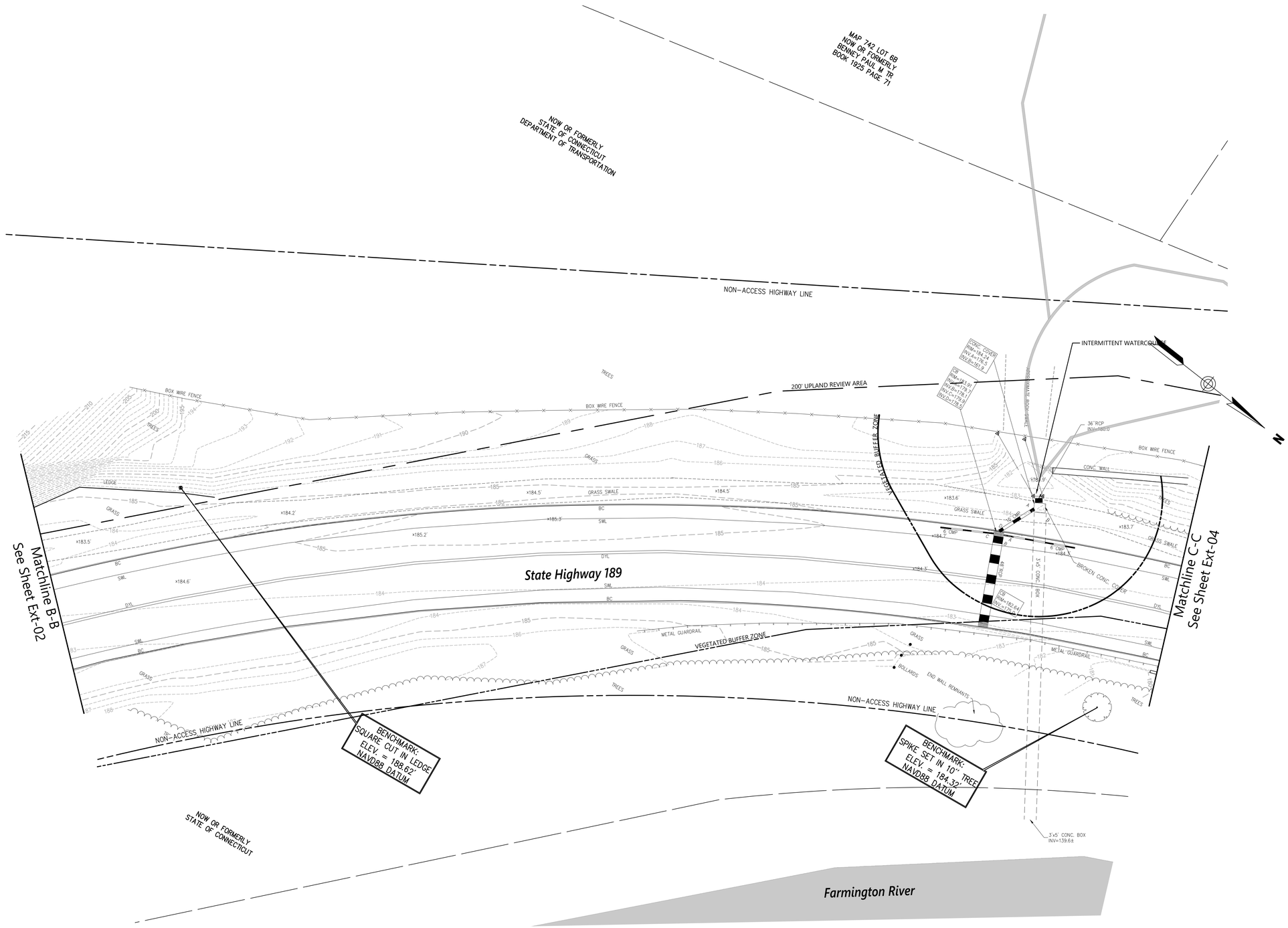
CADD FILENAME: EXT–4237300.DWG

TOWN:
BLOOMFIELD–SIMSBURY,
CONNECTICUT

DRAWING TITLE:
EXISTING
CONDITIONS

PROJECT NO.: 42373.00
DRAWING NO.: EXT–02
SHEET NO.: 19 OF 95

Nov 17, 2021



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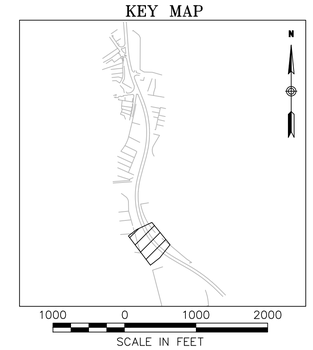

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		REVISIONS	

20 0 20
SCALE IN FEET

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NOT ISSUED FOR CONSTRUCTION DATE:NOVEMBER, 2021

PROJECT TITLE:
BLOOMFIELD–TARIFFVLLE
MULTI–USE TRAIL CONNECTOR

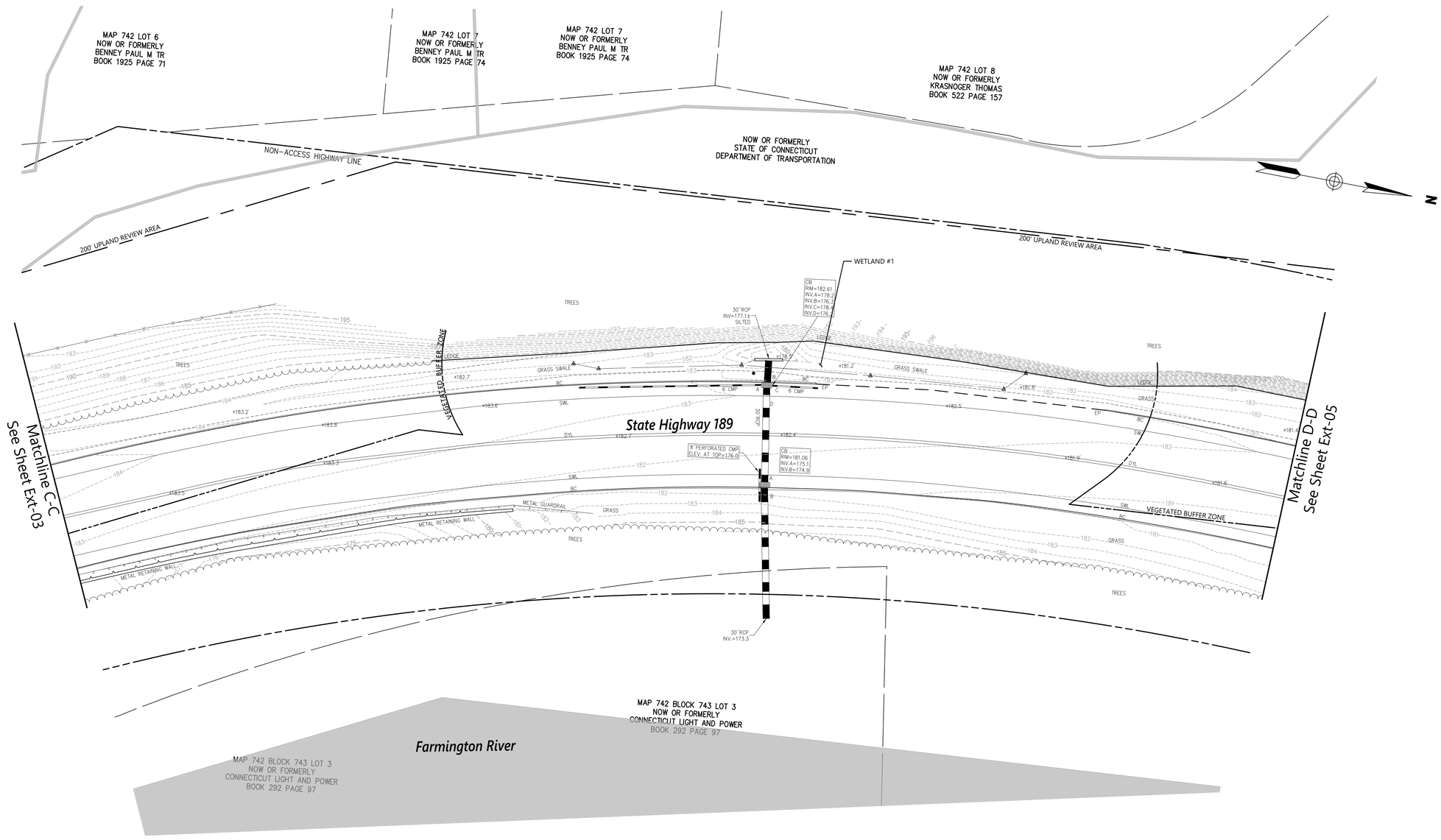
CADD FILENAME: EXT–4237300.DWG

TOWN: BLOOMFIELD–SIMSBURY, CONNECTICUT

DRAWING TITLE: EXISTING CONDITIONS

PROJECT NO.: 42373.00
DRAWING NO.: EXT–03
SHEET NO.: 20 OF 95

Nov 17, 2021



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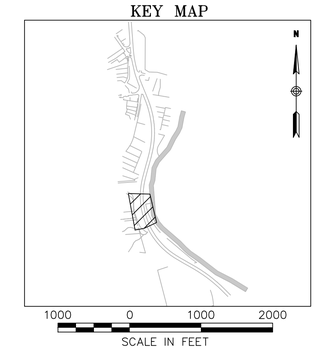

REV.	DATE	DESCRIPTION	SHEET. NO.
		REVISIONS	

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SCALE IN FEET

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PROJECT TITLE:
BLOOMFIELD–TARIFFVLLE
MULTI–USE TRAIL CONNECTOR

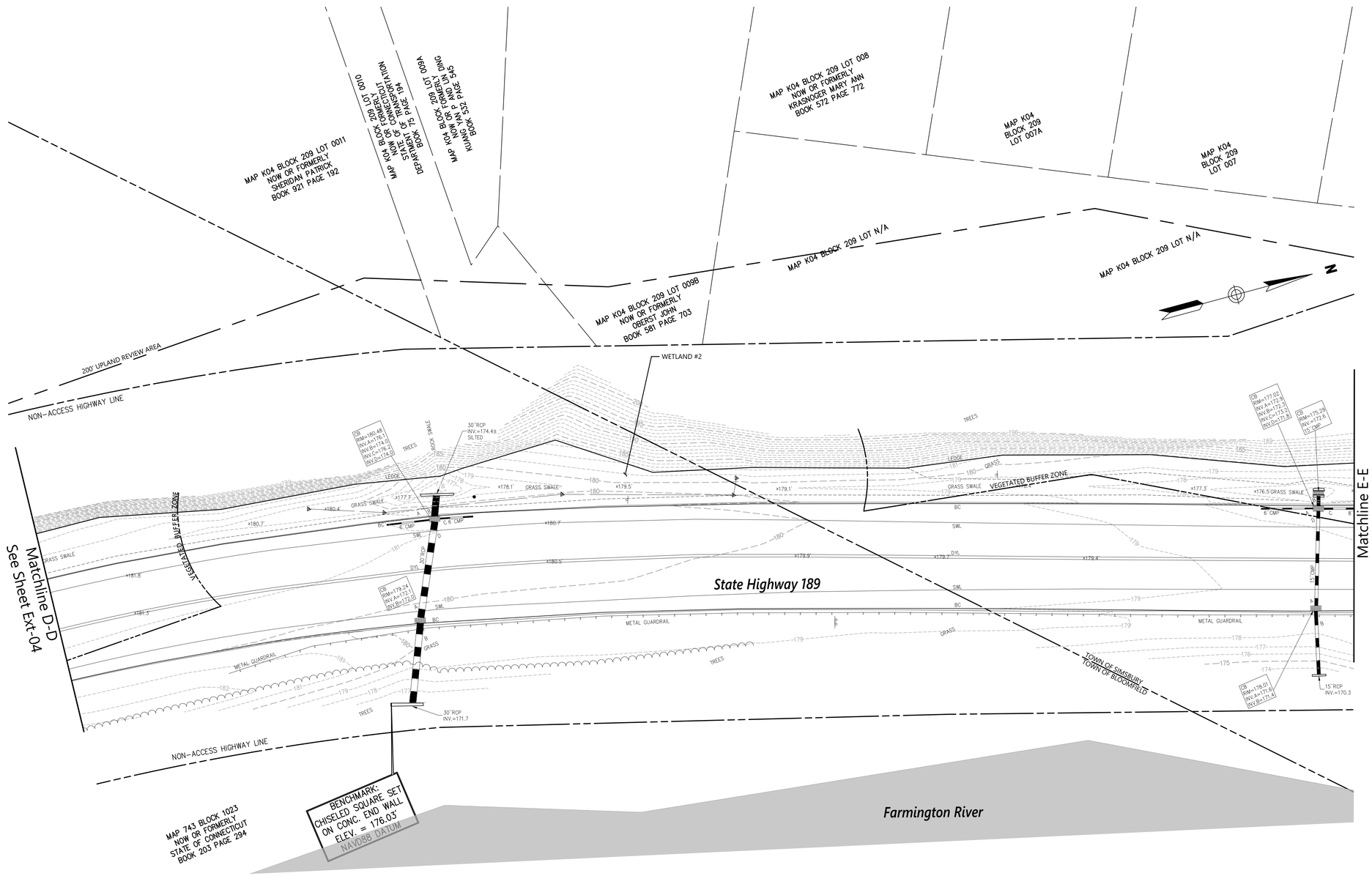
CADD FILENAME: EXT–4237300.DWG

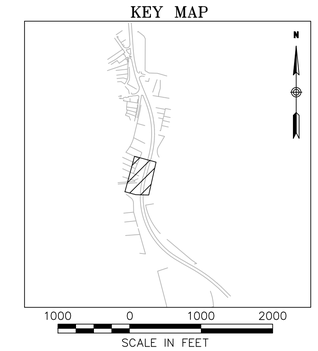
TOWN: BLOOMFIELD–SIMSBURY, CONNECTICUT

DRAWING TITLE: EXISTING CONDITIONS

PROJECT NO.: 42373.00
DRAWING NO.: EXT–04
SHEET NO.: 21 OF 95

Nov 17, 2021





REV.	DATE	DESCRIPTION	SHEET. NO.
		REVISIONS	

20 0 20
SCALE IN FEET

DESIGNER: EAN
DRAFTER: JE
CHECKED BY: BAA
APPROVED BY: SON

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NOT ISSUED FOR CONSTRUCTION DATE:NOVEMBER, 2021

PROJECT TITLE:
BLOOMFIELD–TARIFFVLLE
MULTI–USE TRAIL CONNECTOR

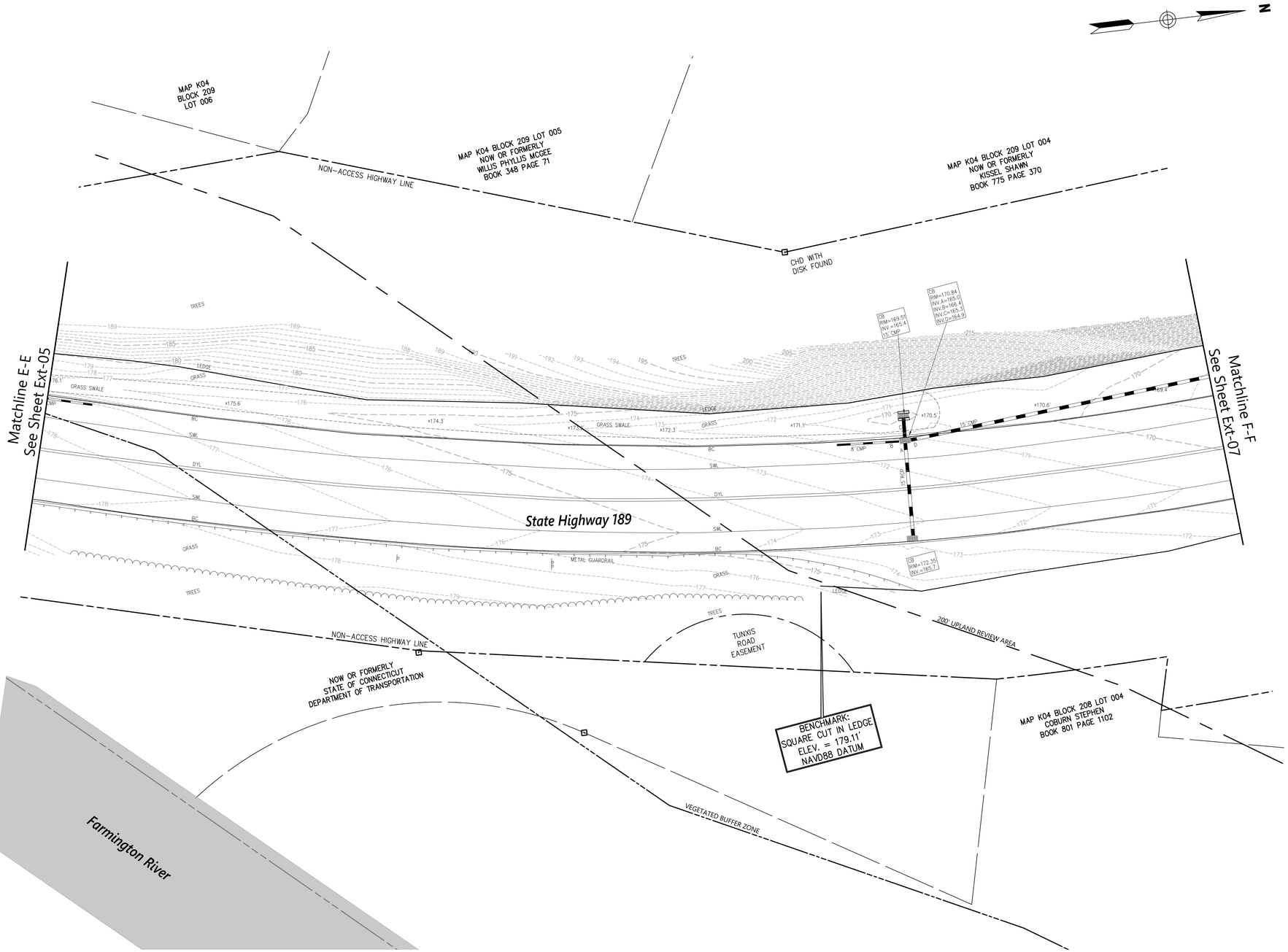
CADD FILENAME: EXT–4237300.DWG

TOWN:
BLOOMFIELD–SIMSBURY,
CONNECTICUT

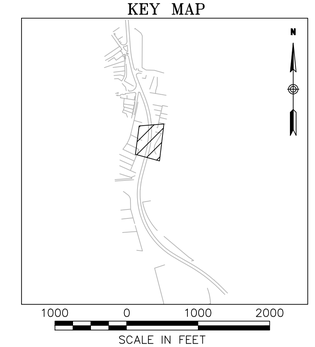
DRAWING TITLE:
EXISTING
CONDITIONS

PROJECT NO.: 42373.00
DRAWING NO.: EXT–05
SHEET NO.: 22 OF 95

Nov 17, 2021



KEY MAP



REV.	DATE	DESCRIPTION	SHEET. NO.
		REVISIONS	

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SCALE IN FEET

DESIGNER: EAN
DRAFTER: JE
CHECKED BY: BAA
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NOT ISSUED FOR CONSTRUCTION DATE:NOVEMBER, 2021

PROJECT TITLE:
BLOOMFIELD–TARIFFVLLE
MULTI–USE TRAIL CONNECTOR

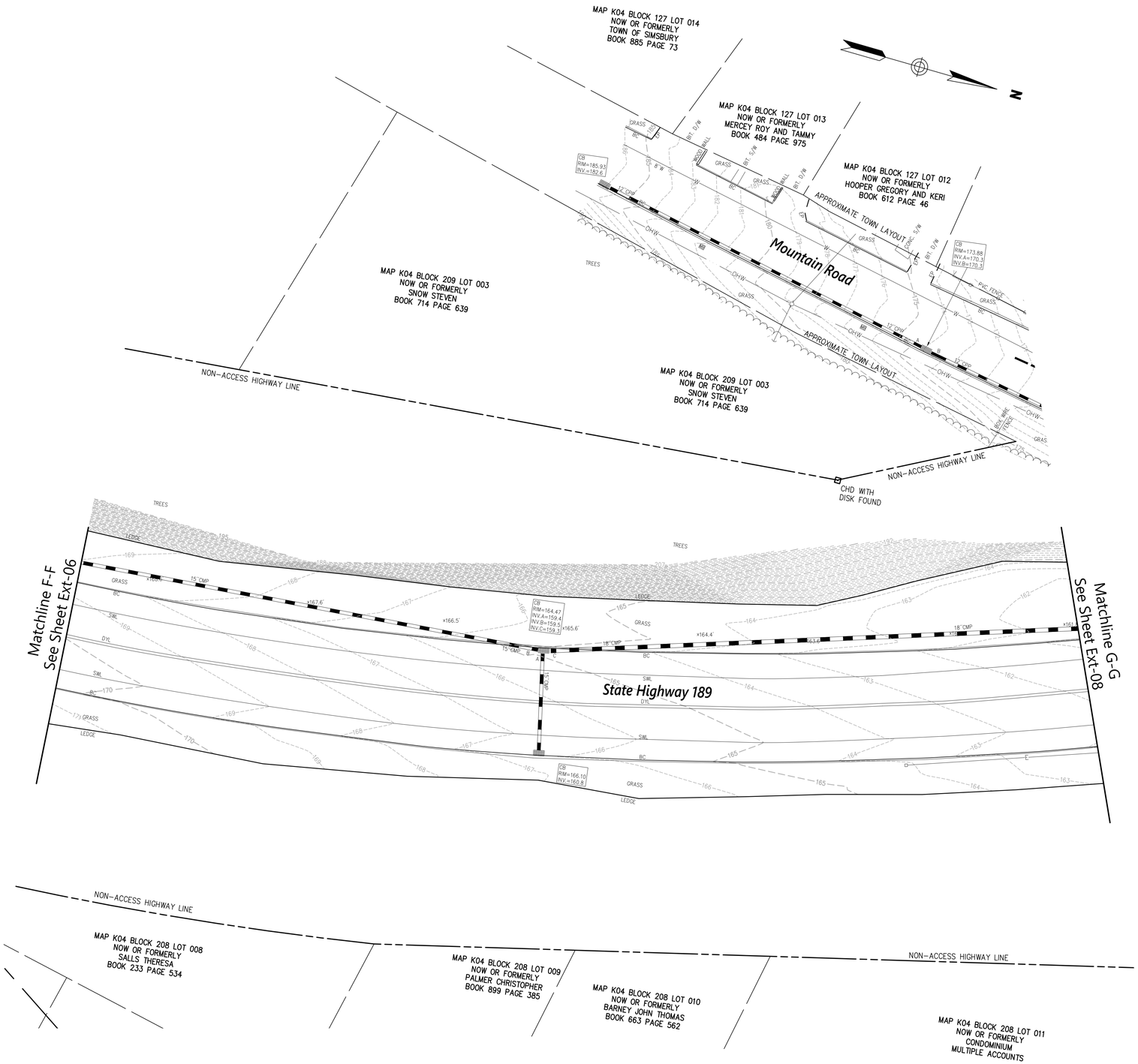
CADD FILENAME: EXT-4237300.DWG

TOWN:
BLOOMFIELD–SIMSBURY,
CONNECTICUT

DRAWING TITLE:
EXISTING
CONDITIONS

PROJECT NO.: 42373.00
DRAWING NO.: EXT–06
SHEET NO.: 23 OF 95

Nov 17, 2021



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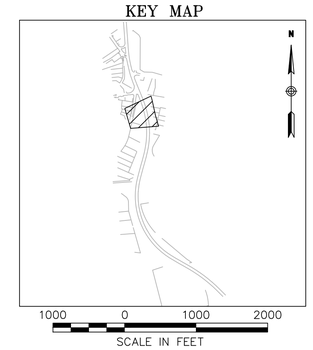

REV.	DATE	DESCRIPTION	SHEET. NO.
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SCALE IN FEET

DESIGNER: EAN
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NOT ISSUED FOR CONSTRUCTION DATE:NOVEMBER, 2021

PROJECT TITLE:
BLOOMFIELD–TARIFFVLLE
MULTI–USE TRAIL CONNECTOR

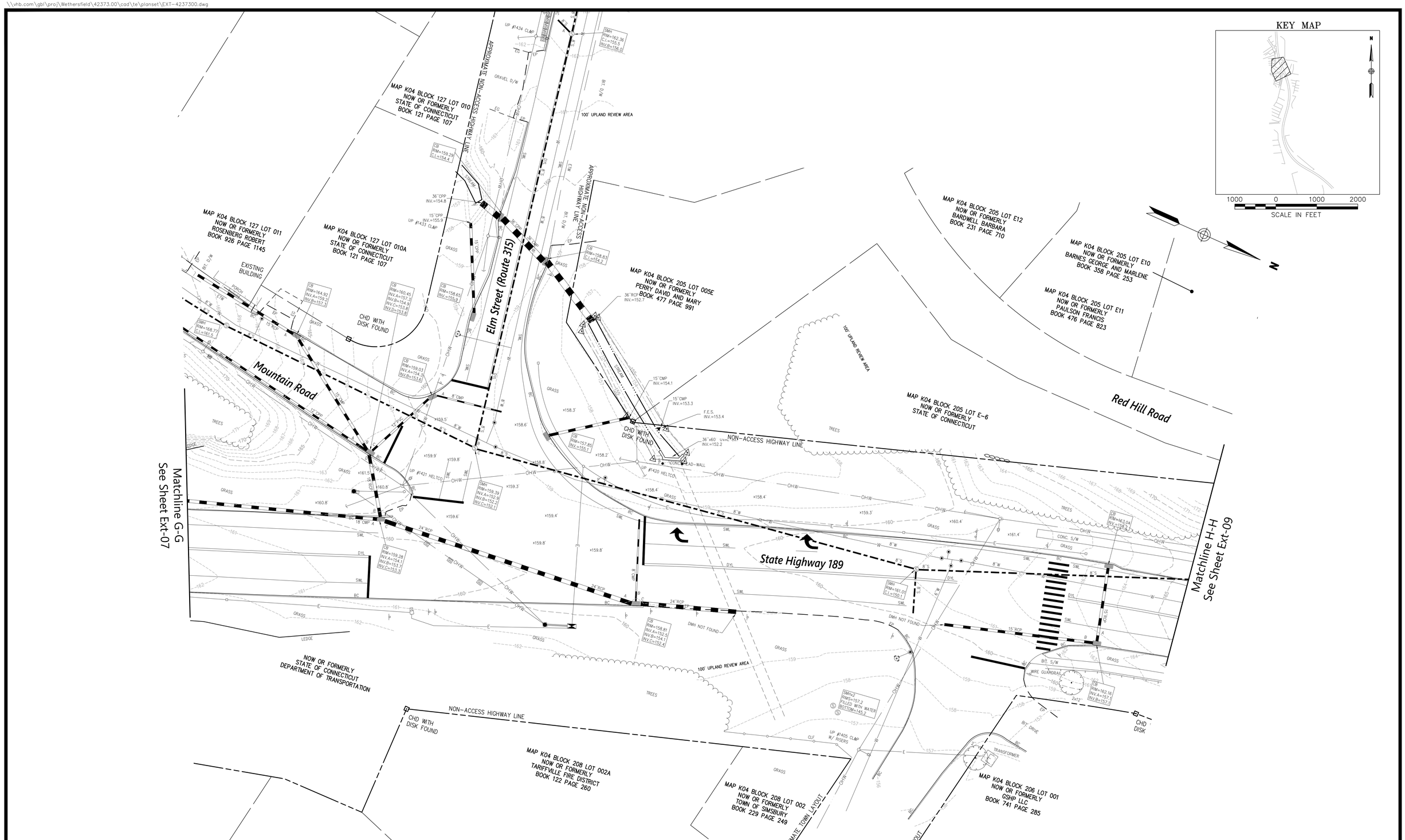
CADD FILENAME: EXT–4237300.DWG

TOWN: BLOOMFIELD–SIMSBURY, CONNECTICUT

DRAWING TITLE: EXISTING CONDITIONS

PROJECT NO.: 42373.00
DRAWING NO.: EXT–07
SHEET NO.: 24 OF 95

Nov 17, 2021



REV.	DATE	DESCRIPTION	SHEET. NO.
		REVISIONS	

20 0 20
SCALE IN FEET

DESIGNER: EAN
DRAFTER: JE
CHECKED BY: BAA
APPROVED BY: SON

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Engineers Scientists Planners Designers

NOT ISSUED FOR CONSTRUCTION DATE:NOVEMBER, 2021

PROJECT TITLE:
BLOOMFIELD–TARIFFVLLE
MULTI–USE TRAIL CONNECTOR

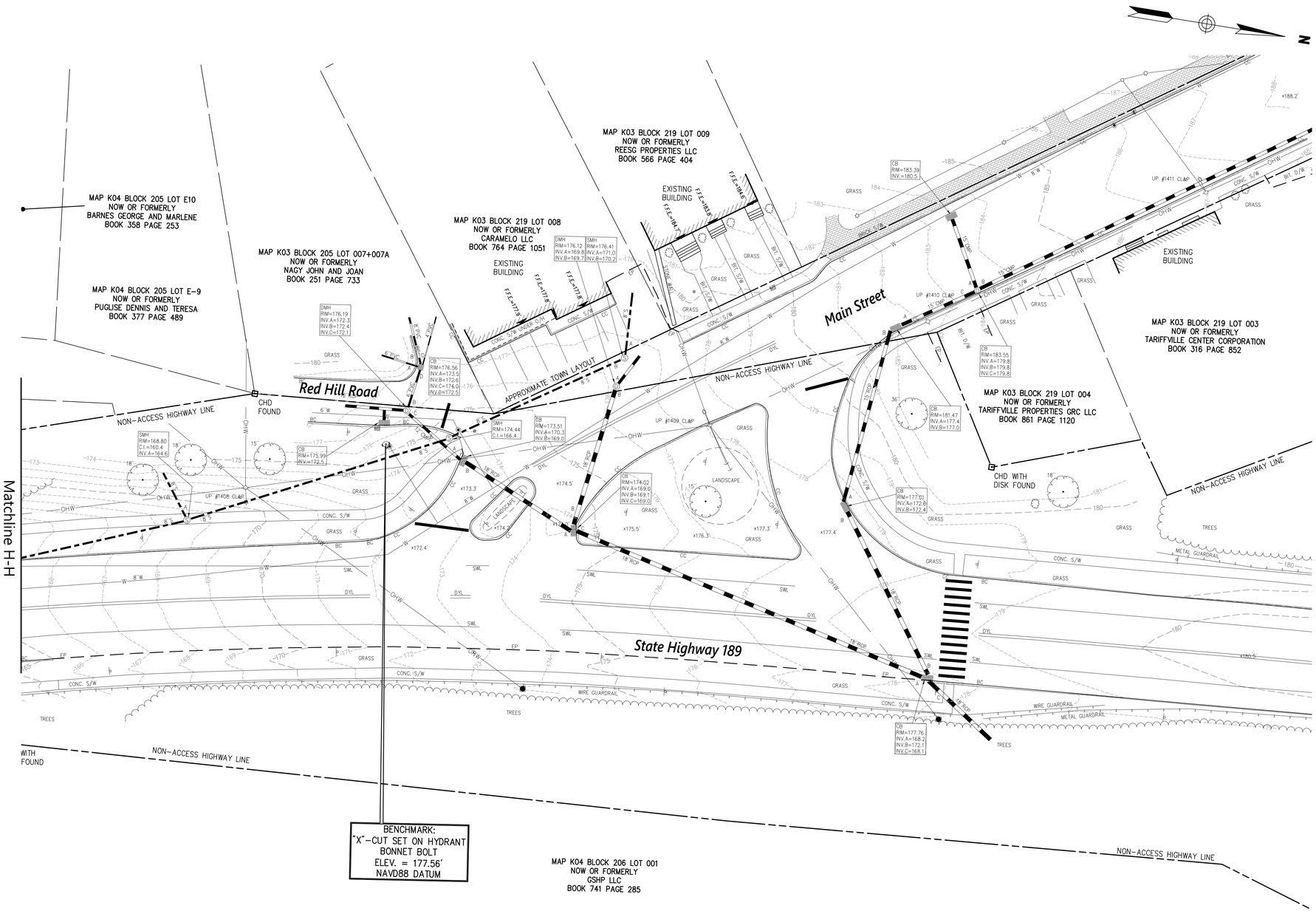
CADD FILENAME: EXT-4237300.DWG

TOWN:
BLOOMFIELD–SIMSBURY,
CONNECTICUT

DRAWING TITLE:
EXISTING
CONDITIONS

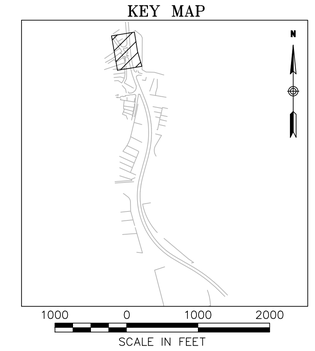
PROJECT NO.: 42373.00
DRAWING NO.: EXT–08
SHEET NO.: 25 OF 95

Nov 17, 2021



Matchline H-H
See Sheet Ext-08

KEY MAP



REV.	DATE	DESCRIPTION	SHEET. NO.
		REVISIONS	

20 0 20
SCALE IN FEET

DESIGNER: EAN
DRAFTER: JE
CHECKED BY: BAA
APPROVED BY: SON

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NOT ISSUED FOR CONSTRUCTION DATE:NOVEMBER, 2021

PROJECT TITLE:
BLOOMFIELD–TARIFFVLLE
MULTI–USE TRAIL CONNECTOR

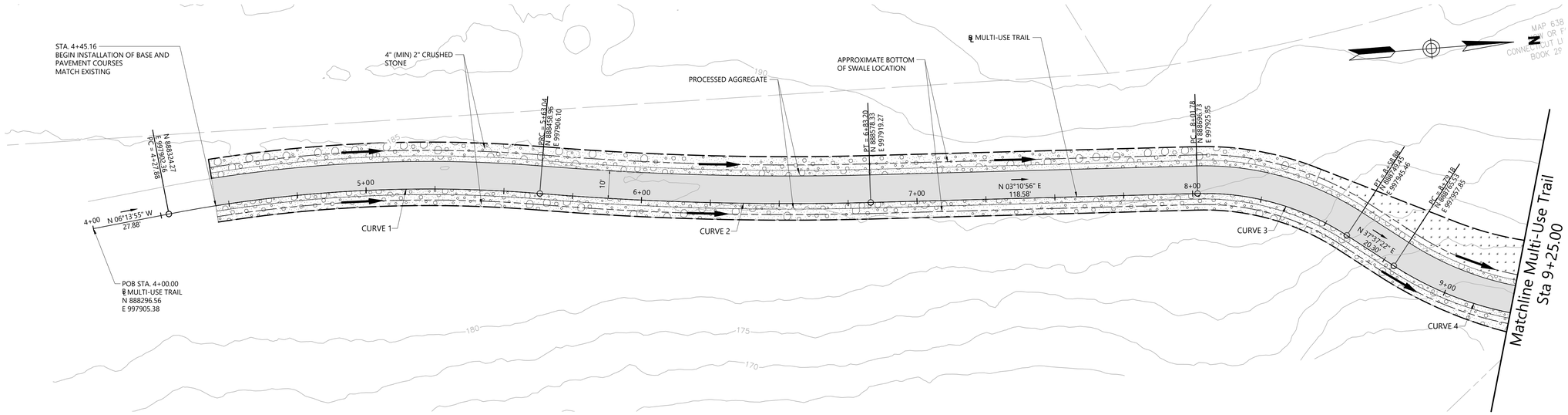
CADD FILENAME: EXT-4237300.DWG

TOWN:
BLOOMFIELD–SIMSBURY,
CONNECTICUT

DRAWING TITLE:
EXISTING
CONDITIONS

PROJECT NO.: 42373.00
DRAWING NO.: EXT–09
SHEET NO.: 26 OF 95

Nov 17, 2021



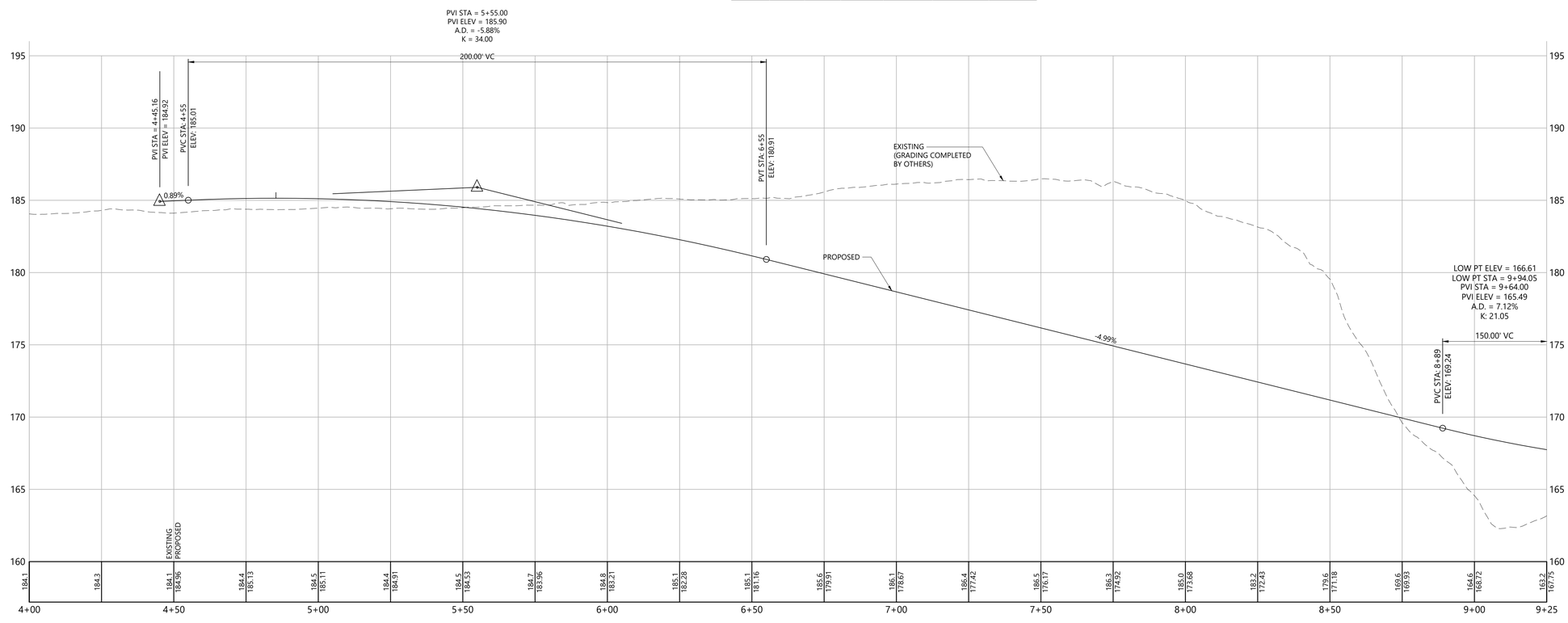
KEY MAP

1000 0 1000 2000
SCALE IN FEET

BASELINE CURVE TABLE						
CURVE	RADIUS	LENGTH	TANGENT	DELTA	PI: NORTHING	PI: EASTING
CURVE 1	495.00	135.16'	68.00	015° 38' 41"	888391.87	997894.97
CURVE 2	1105.00	120.16'	60.14	006° 13' 49"	888518.29	997915.93
CURVE 3	95.00	57.10'	29.44	034° 26' 26"	888726.13	997927.49
CURVE 4	120.00	181.87'	113.55	086° 50' 05"	888855.46	998027.17

LEGEND

- MULTI-USE TRAIL
- TOPSOIL AND TURF ESTABLISHMENT
- GRASS DRAINAGE SWALE
- MODIFIED RIP-RAP
- TRANSITION MILLING GRADE ADJUSTMENT REQUIRED
- ROADWAY WIDENING
- CUT BIT CONC PAVEMENT
- SWALE FLOW ARROW



REV.	DATE	DESCRIPTION	SHEET. NO.
		REVISIONS	

20 0 20
SCALE IN FEET

DESIGNER: EAN
DRAFTER: JE
CHECKED BY: BAA
APPROVED BY: SON

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Engineers Scientists Planners Designers

NOT ISSUED FOR CONSTRUCTION DATE:NOVEMBER, 2021

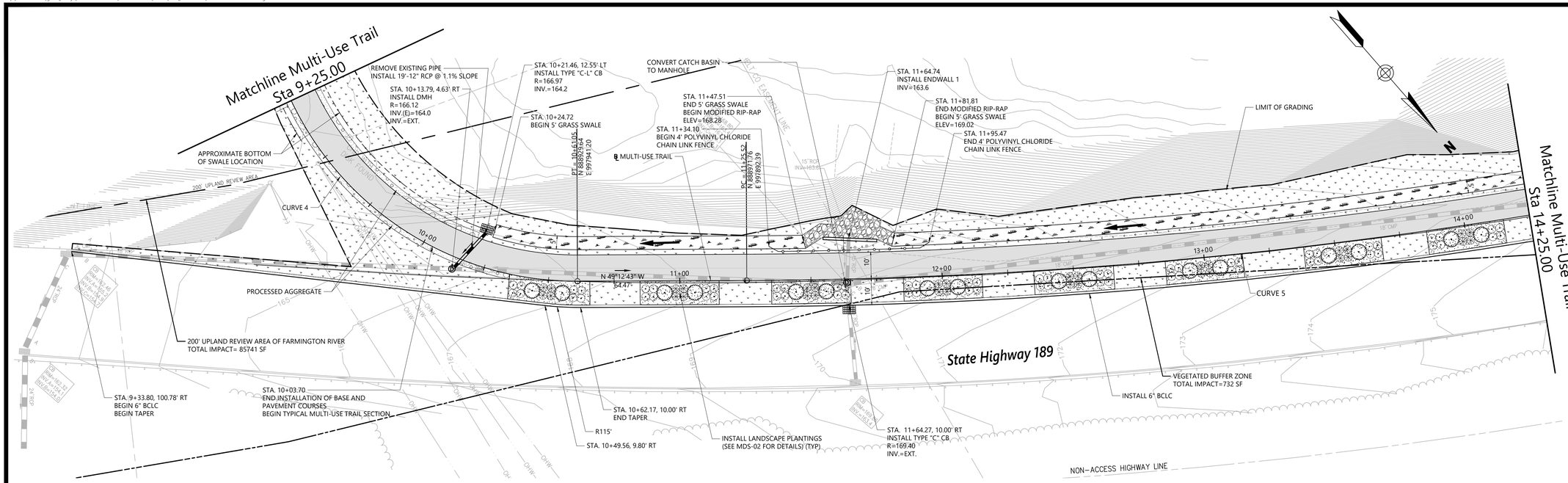
PROJECT TITLE:
BLOOMFIELD–TARIFFVLLE
MULTI–USE TRAIL CONNECTOR

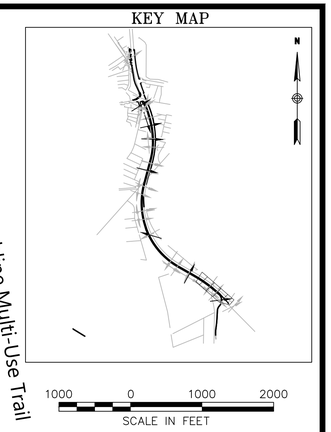
CADD FILENAME: PLN–4237300.DWG

TOWN:
BLOOMFIELD–SIMSBURY, CONNECTICUT

DRAWING TITLE:
CONSTRUCTION PLAN

PROJECT NO.: 42373.00
DRAWING NO.: PLN–01
SHEET NO.: 27 OF 95

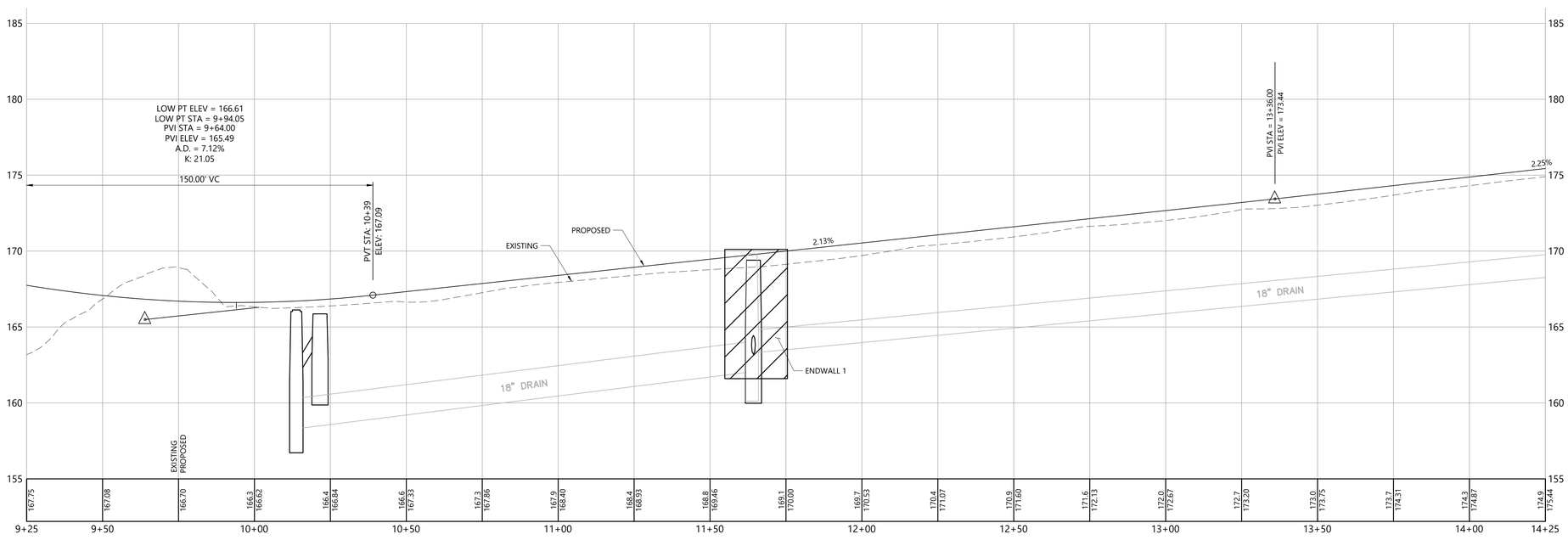




LEGEND

- MULTI-USE TRAIL
- TOPSOIL AND TURF ESTABLISHMENT
- GRASS DRAINAGE SWALE
- MODIFIED RIP-RAP
- TRANSITION MILLING GRADE ADJUSTMENT REQUIRED
- ROADWAY WIDENING
- CUT BIT CONC PAVEMENT
- SWALE FLOW ARROW

BASELINE CURVE TABLE						
CURVE	RADIUS	LENGTH	TANGENT	DELTA	PI: NORTHING	PI: EASTING
CURVE 4	120.00	181.87'	113.55	086° 50' 05"	888855.46	998027.17
CURVE 5	1895.00	366.91'	184.03	011° 05' 37"	889091.98	997753.05



REV.	DATE	DESCRIPTION	SHEET. NO.
		REVISIONS	

20 0 20
SCALE IN FEET

DESIGNER: EAN
DRAFTER: JE
CHECKED BY: BAA
APPROVED BY: SON

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Engineers Scientists Planners Designers

NOT ISSUED FOR CONSTRUCTION DATE:NOVEMBER, 2021

PROJECT TITLE:
BLOOMFIELD–TARIFFVLLE
MULTI–USE TRAIL CONNECTOR

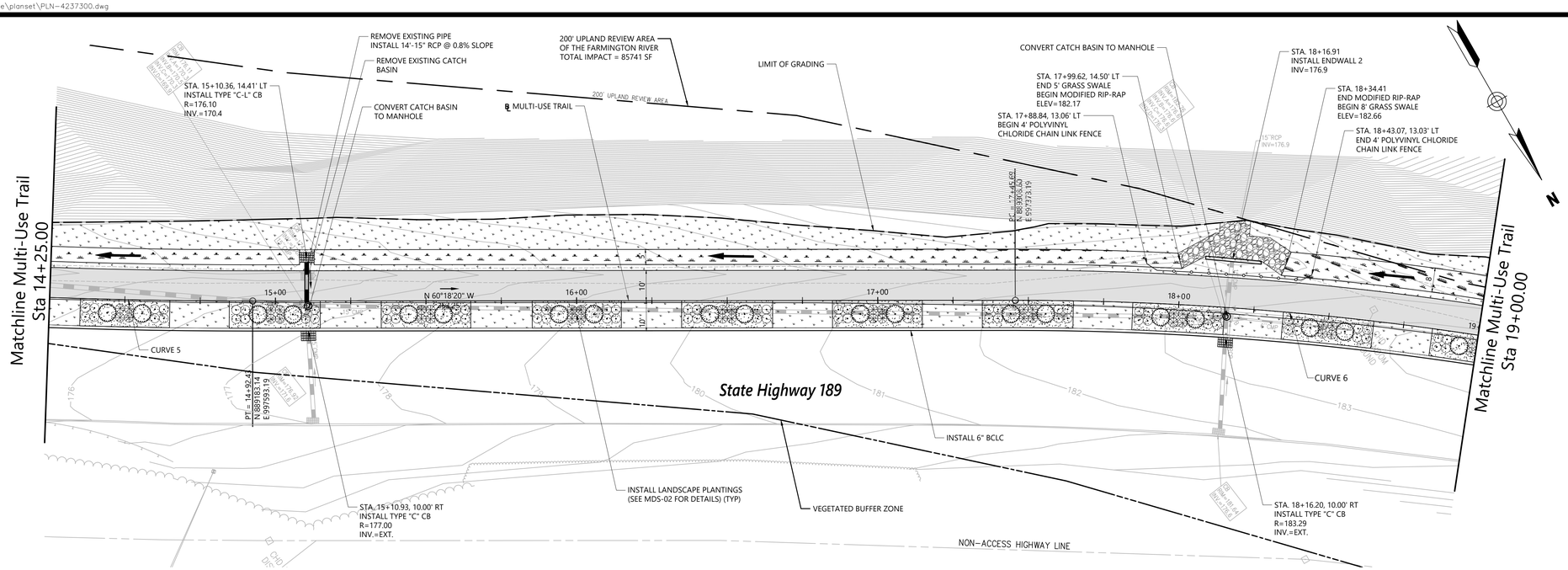
CADD FILENAME: PLN–4237300.DWG

TOWN:
BLOOMFIELD–SIMSBURY,
CONNECTICUT

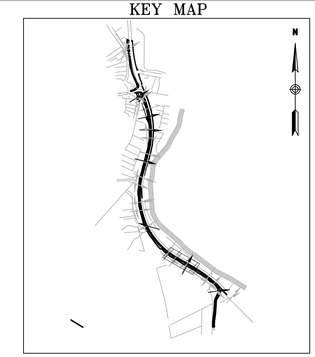
DRAWING TITLE:
CONSTRUCTION
PLAN

PROJECT NO.: 42373.00
DRAWING NO.: PLN–02
SHEET NO.: 28 OF 95

Nov 17, 2021



KEY MAP



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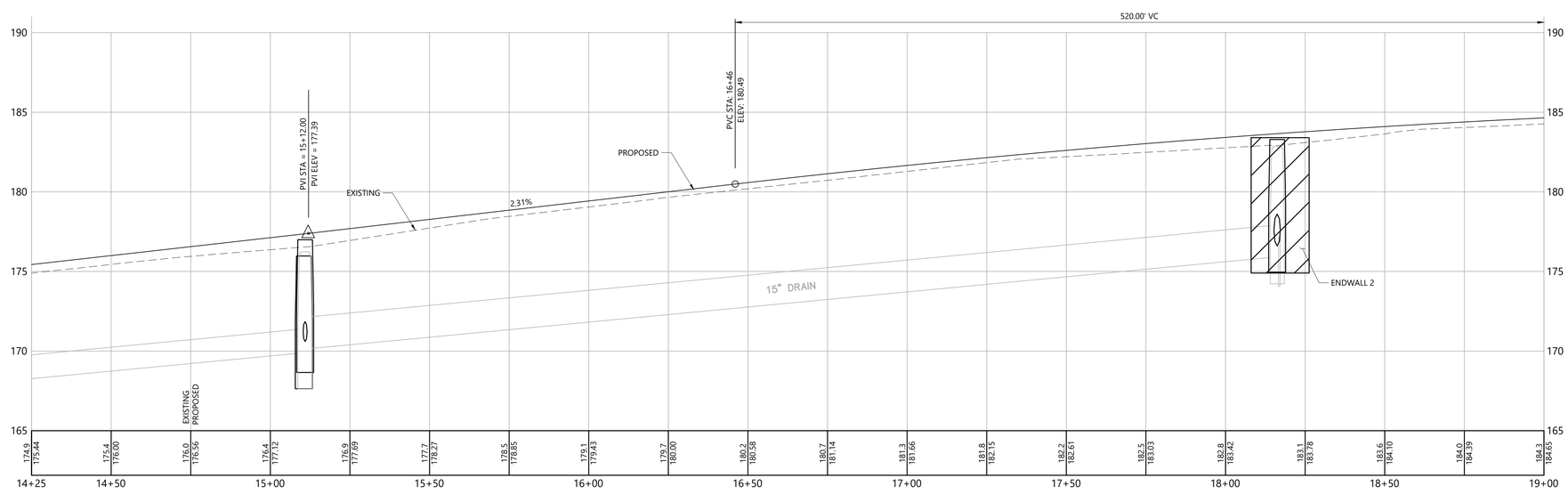
SCALE IN FEET

LEGEND

- MULTI-USE TRAIL
- TOPSOIL AND TURF ESTABLISHMENT
- GRASS DRAINAGE SWALE
- MODIFIED RIP-RAP
- TRANSITION MILLING GRADE ADJUSTMENT REQUIRED
- ROADWAY WIDENING
- CUT BIT CONC PAVEMENT
- SWALE FLOW ARROW

BASELINE CURVE TABLE						
CURVE	RADIUS	LENGTH	TANGENT	DELTA	PI: NORTHING	PI: EASTING
CURVE 5	1895.00	366.91'	184.03	011° 05' 37"	889091.98	997753.05
CURVE 6	1015.00	475.46'	242.18	026° 50' 22"	889428.57	997162.82

HIGH PT STA: 20+80.21
HIGH PT ELEV: 185.51
PVI STA = 19+06.00
PVI ELEV = 186.51
A.D. = -2.77%
K = 187.67



REV.	DATE	DESCRIPTION	SHEET. NO.
		REVISIONS	

20 0 20
SCALE IN FEET

DESIGNER: EAN
DRAFTER: JE
CHECKED BY: BAA
APPROVED BY: SON

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NOT ISSUED FOR CONSTRUCTION DATE:NOVEMBER, 2021

PROJECT TITLE:
BLOOMFIELD-TARIFFVLLE
MULTI-USE TRAIL CONNECTOR

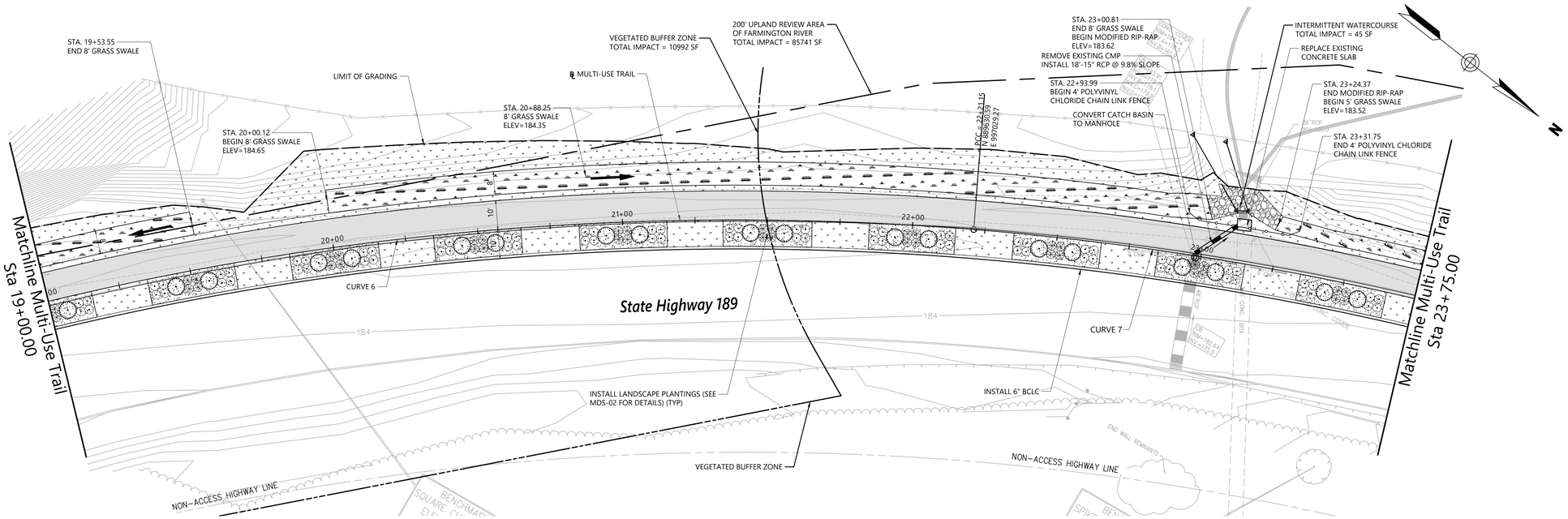
CADD FILENAME: PLN-4237300.DWG

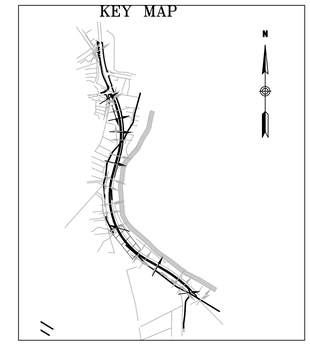
TOWN: BLOOMFIELD-SIMSBURY, CONNECTICUT

DRAWING TITLE: CONSTRUCTION PLAN

PROJECT NO.: 42373.00
DRAWING NO.: PLN-03
SHEET NO.: 29 OF 95

Nov 17, 2021



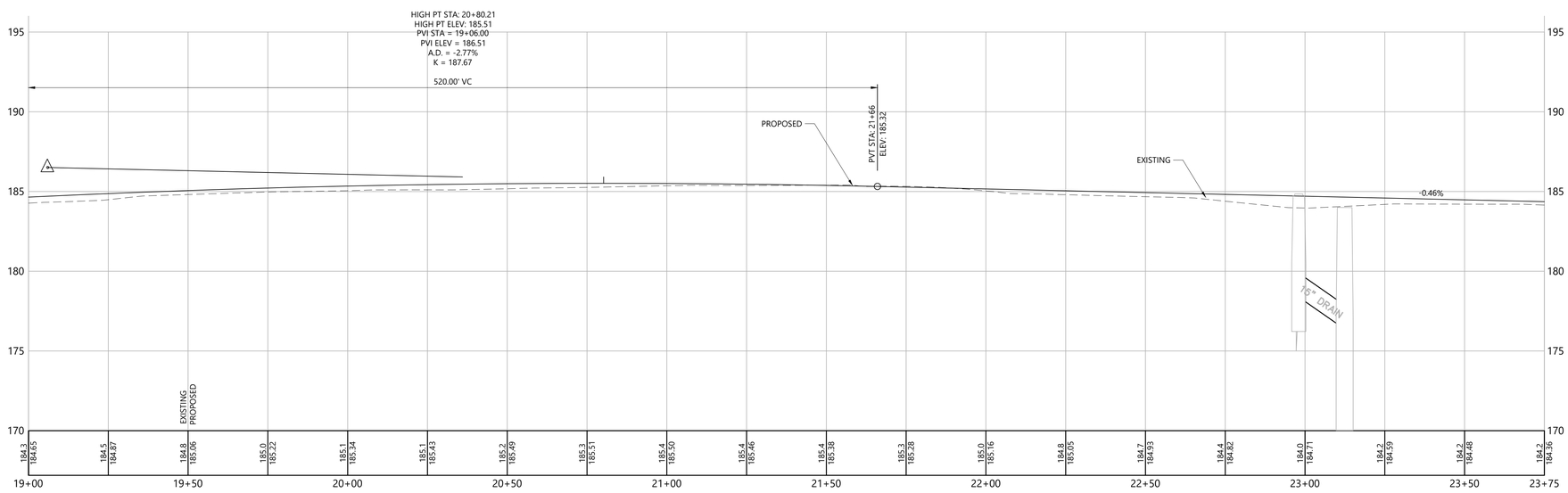


1000 0 1000 2000
SCALE IN FEET

LEGEND

- MULTI-USE TRAIL
- TOPSOIL AND TURF ESTABLISHMENT
- GRASS DRAINAGE SWALE
- MODIFIED RIP-RAP
- TRANSITION MILLING GRADE ADJUSTMENT REQUIRED
- ROADWAY WIDENING
- CUT BIT CONC PAVEMENT
- SWALE FLOW ARROW

BASELINE CURVE TABLE						
CURVE	RADIUS	LENGTH	TANGENT	DELTA	PI: NORTHING	PI: EASTING
CURVE 6	1015.00	475.46'	242.18	026° 50' 22"	889428.57	997162.82
CURVE 7	1030.00	222.92'	111.90	012° 24' 02"	889723.94	996967.57



REV.	DATE	DESCRIPTION	SHEET. NO.
		REVISIONS	

20 0 20
SCALE IN FEET

DESIGNER: EAN
DRAFTER: JE
CHECKED BY: BAA
APPROVED BY: SON

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NOT ISSUED FOR CONSTRUCTION DATE:NOVEMBER, 2021

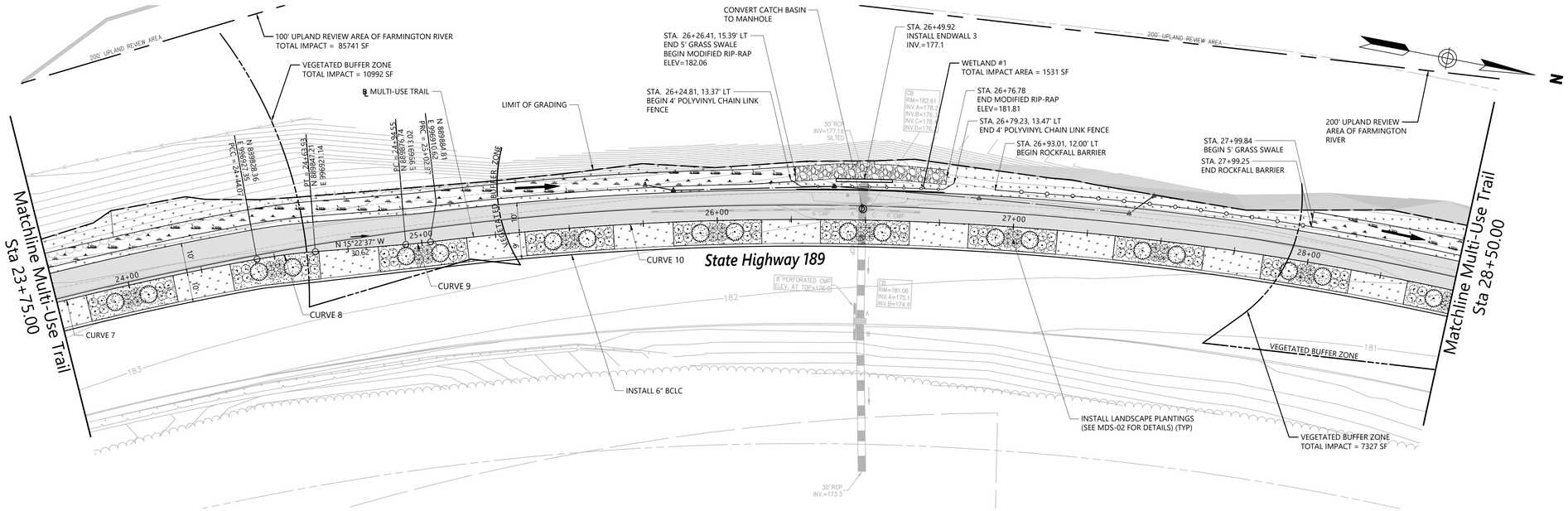
PROJECT TITLE:
BLOOMFIELD–TARIFFVLLE
MULTI–USE TRAIL CONNECTOR

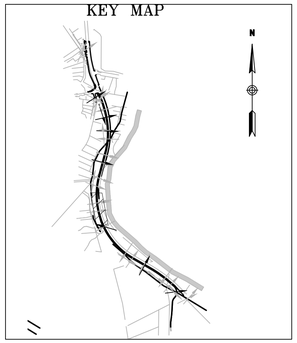
CADD FILENAME: PLN–4237300.DWG

TOWN:
BLOOMFIELD–SIMSBURY,
CONNECTICUT

DRAWING TITLE:
CONSTRUCTION
PLAN

PROJECT NO.: 42373.00
DRAWING NO.: PLN–04
SHEET NO.: 30 OF 95



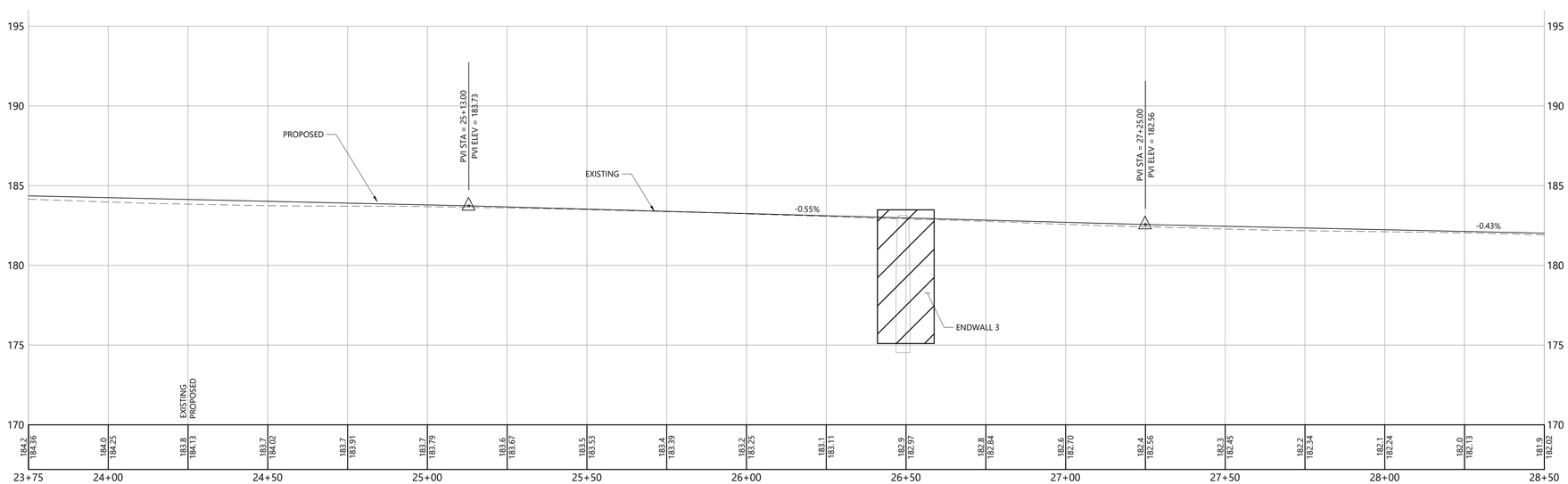


1000 0 1000 2000
SCALE IN FEET

LEGEND

- MULTI-USE TRAIL
- TOPSOIL AND TURF ESTABLISHMENT
- GRASS DRAINAGE SWALE
- MODIFIED RIP-RAP
- TRANSITION MILLING GRADE ADJUSTMENT REQUIRED
- ROADWAY WIDENING
- CUT BIT CONC PAVEMENT
- SWALE FLOW ARROW

BASELINE CURVE TABLE						
CURVE	RADIUS	LENGTH	TANGENT	DELTA	PI: NORTHING	PI: EASTING
CURVE 7	1030.00	222.92'	111.90	012° 24' 02"	889723.94	996967.57
CURVE 8	200.00	19.86'	9.94	005° 41' 19"	889837.63	996923.77
CURVE 9	200.00	8.42'	4.21	002° 24' 45"	889880.80	996911.90
CURVE 10	1027.00	586.21'	301.33	032° 42' 15"	890171.73	996818.55



REV.	DATE	DESCRIPTION	SHEET. NO.
		REVISIONS	

20 0 20
SCALE IN FEET

DESIGNER: EAN
DRAFTER: JE
CHECKED BY: BAA
APPROVED BY: SON

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NOT ISSUED FOR CONSTRUCTION DATE:NOVEMBER, 2021

PROJECT TITLE:
BLOOMFIELD–TARIFFVLLE
MULTI–USE TRAIL CONNECTOR

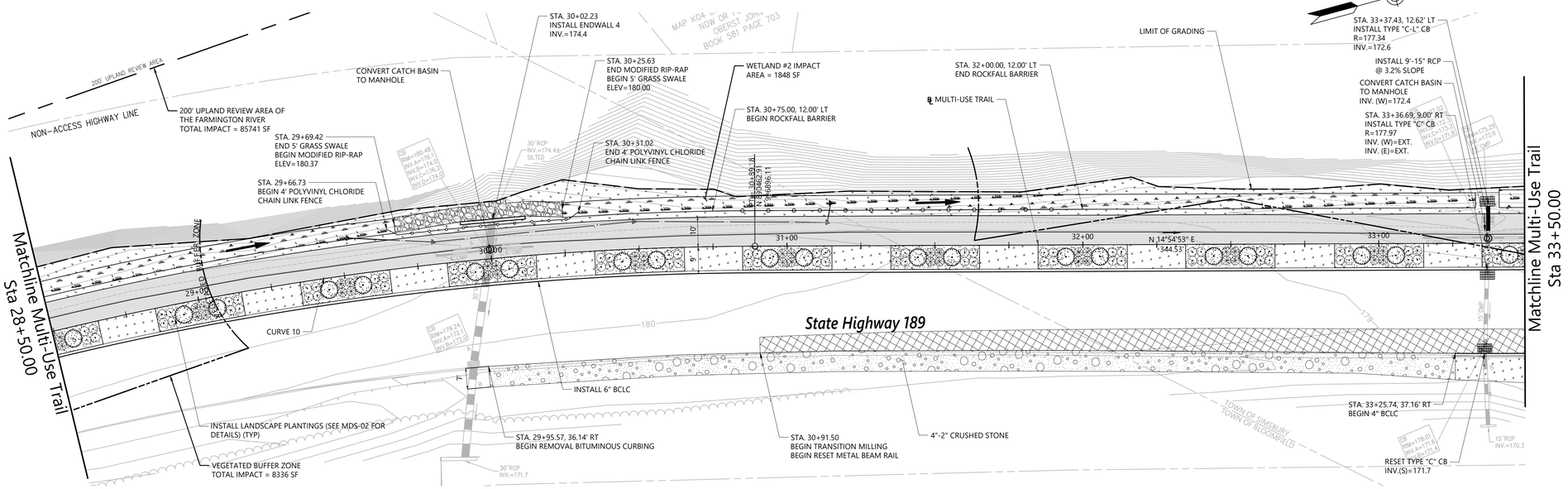
CADD FILENAME: PLN–4237300.DWG

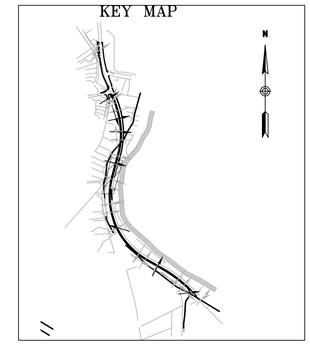
TOWN:
BLOOMFIELD–SIMSBURY,
CONNECTICUT

DRAWING TITLE:
CONSTRUCTION
PLAN

PROJECT NO.: 42373.00
DRAWING NO.: PLN–05
SHEET NO.: 31 OF 95

Nov 17, 2021



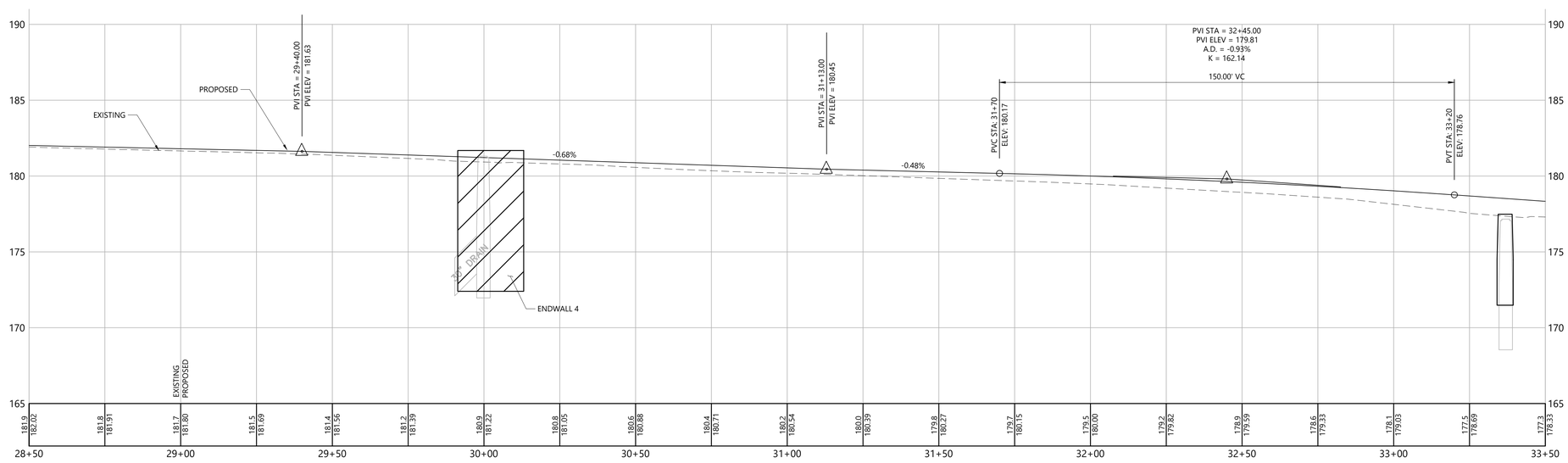


1000 0 1000 2000
SCALE IN FEET

LEGEND

- MULTI-USE TRAIL
- TOPSOIL AND TURF ESTABLISHMENT
- GRASS DRAINAGE SWALE
- MODIFIED RIP-RAP
- TRANSITION MILLING GRADE ADJUSTMENT REQUIRED
- ROADWAY WIDENING
- CUT BIT CONC PAVEMENT
- SWALE FLOW ARROW

BASELINE CURVE TABLE						
CURVE	RADIUS	LENGTH	TANGENT	DELTA	PI: NORTHING	PI: EASTING
CURVE 10	1027.00	586.21'	301.33	032° 42' 15"	890171.73	996818.55



REV.	DATE	DESCRIPTION	SHEET. NO.
		REVISIONS	

20 0 20
SCALE IN FEET

DESIGNER: EAN
DRAFTER: JE
CHECKED BY: BAA
APPROVED BY: SON

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Engineers Scientists Planners Designers

NOT ISSUED FOR CONSTRUCTION DATE:NOVEMBER, 2021

PROJECT TITLE: BLOOMFIELD–TARIFFVLLE MULTI–USE TRAIL CONNECTOR

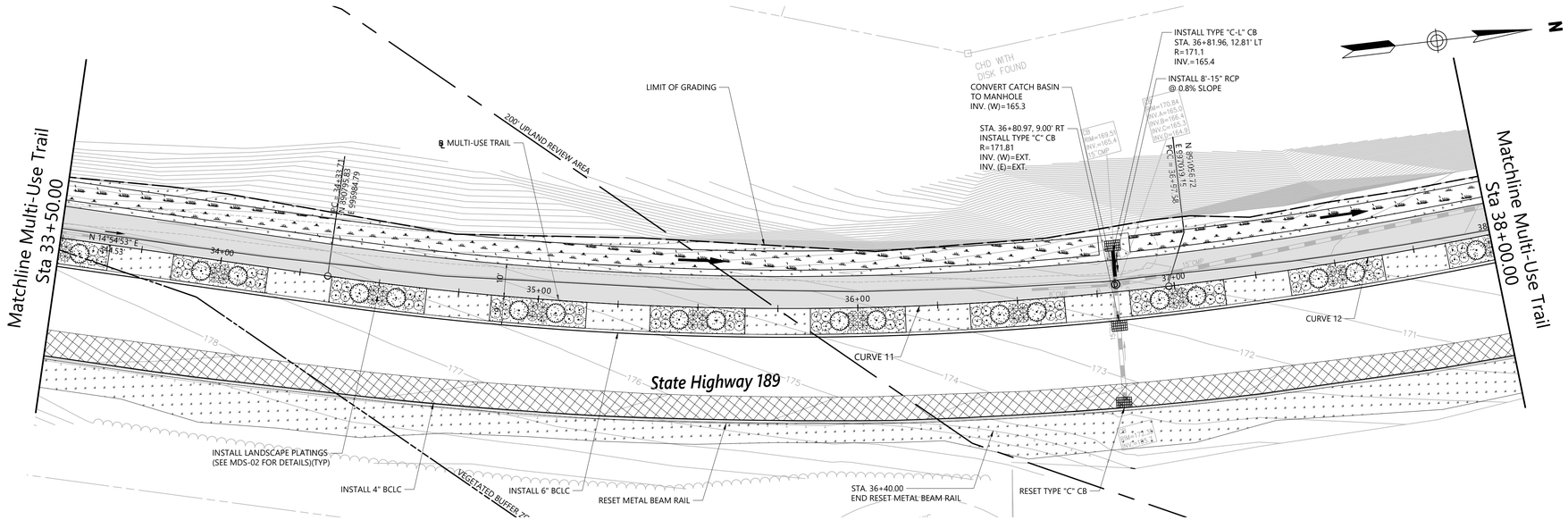
CADD FILENAME: PLN–4237300.DWG

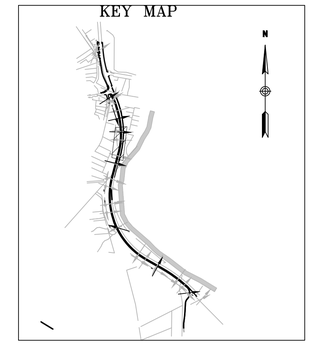
TOWN: BLOOMFIELD–SIMSBURY, CONNECTICUT

DRAWING TITLE: CONSTRUCTION PLAN

PROJECT NO.: 42373.00
DRAWING NO.: PLN–06
SHEET NO.: 32 OF 95

Nov 17, 2021



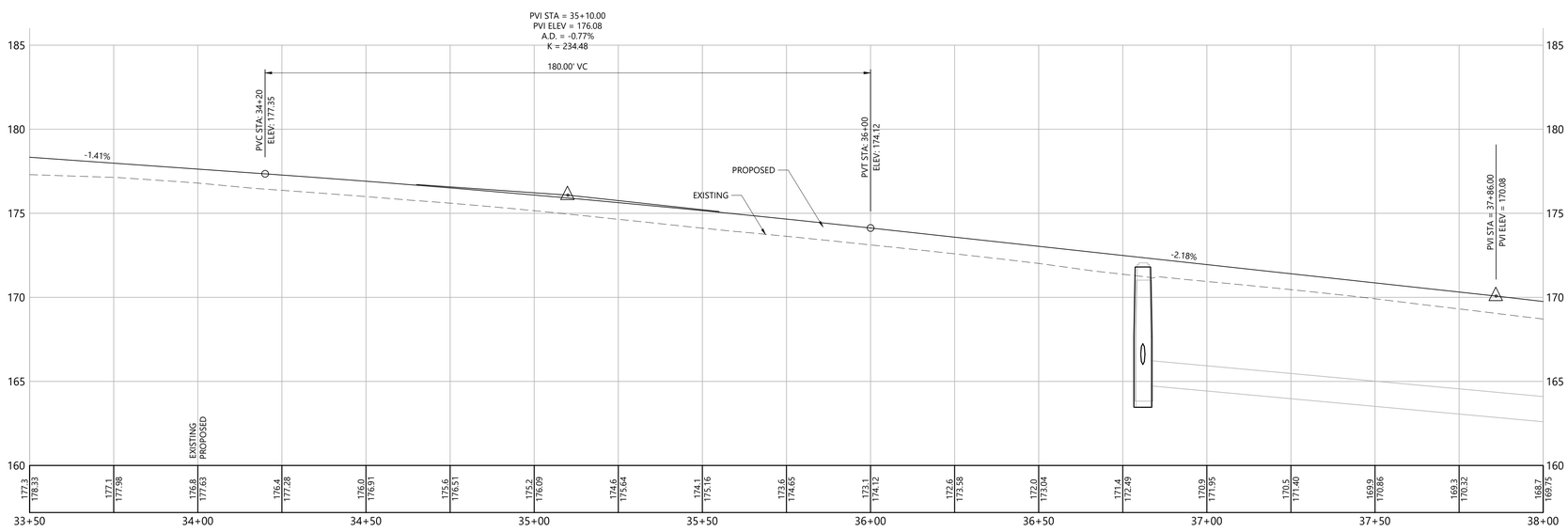


1000 0 1000 2000
SCALE IN FEET

LEGEND

- MULTI-USE TRAIL
- TOPSOIL AND TURF ESTABLISHMENT
- GRASS DRAINAGE SWALE
- MODIFIED RIP-RAP
- TRANSITION MILLING GRADE ADJUSTMENT REQUIRED
- ROADWAY WIDENING
- CUT BIT CONC PAVEMENT
- SWALE FLOW ARROW

BASELINE CURVE TABLE						
CURVE	RADIUS	LENGTH	TANGENT	DELTA	PI: NORTHING	PI: EASTING
CURVE 11	1020.00	263.87'	132.68	014° 49' 21"	890924.04	997018.94
CURVE 12	1190.00	352.98'	177.79	016° 59' 42"	891234.51	997019.44



REV.	DATE	DESCRIPTION	SHEET. NO.
		REVISIONS	

20 0 20
SCALE IN FEET

DESIGNER: EAN
DRAFTER: JE
CHECKED BY: BAA
APPROVED BY: SON

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NOT ISSUED FOR CONSTRUCTION DATE:NOVEMBER, 2021

PROJECT TITLE:
BLOOMFIELD–TARIFFVLLE
MULTI–USE TRAIL CONNECTOR

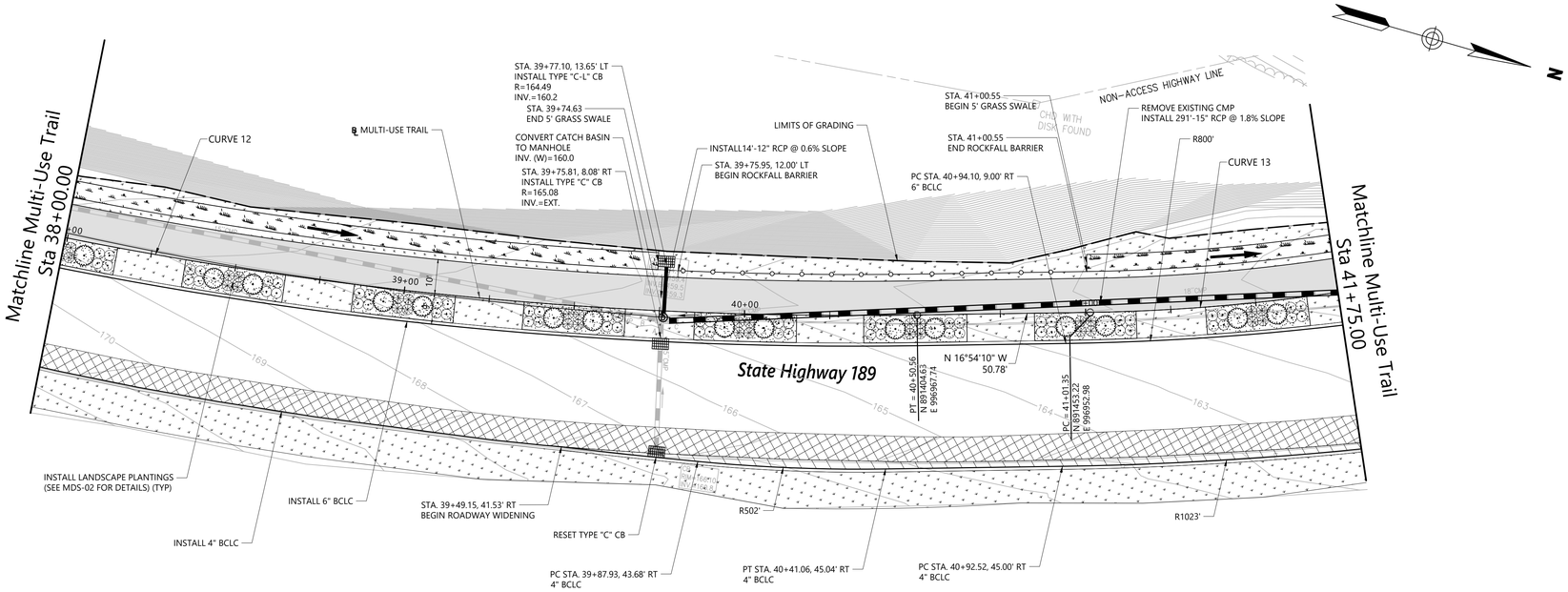
CADD FILENAME: PLN–4237300.DWG

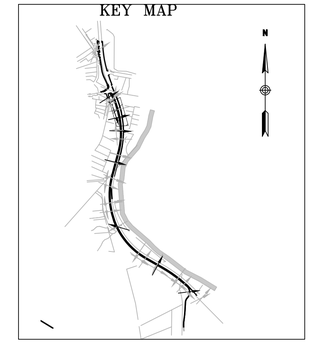
TOWN:
BLOOMFIELD–SIMSBURY, CONNECTICUT

DRAWING TITLE:
CONSTRUCTION PLAN

PROJECT NO.: 42373.00
DRAWING NO.: PLN–07
SHEET NO.: 33 OF 95

Nov 17, 2021



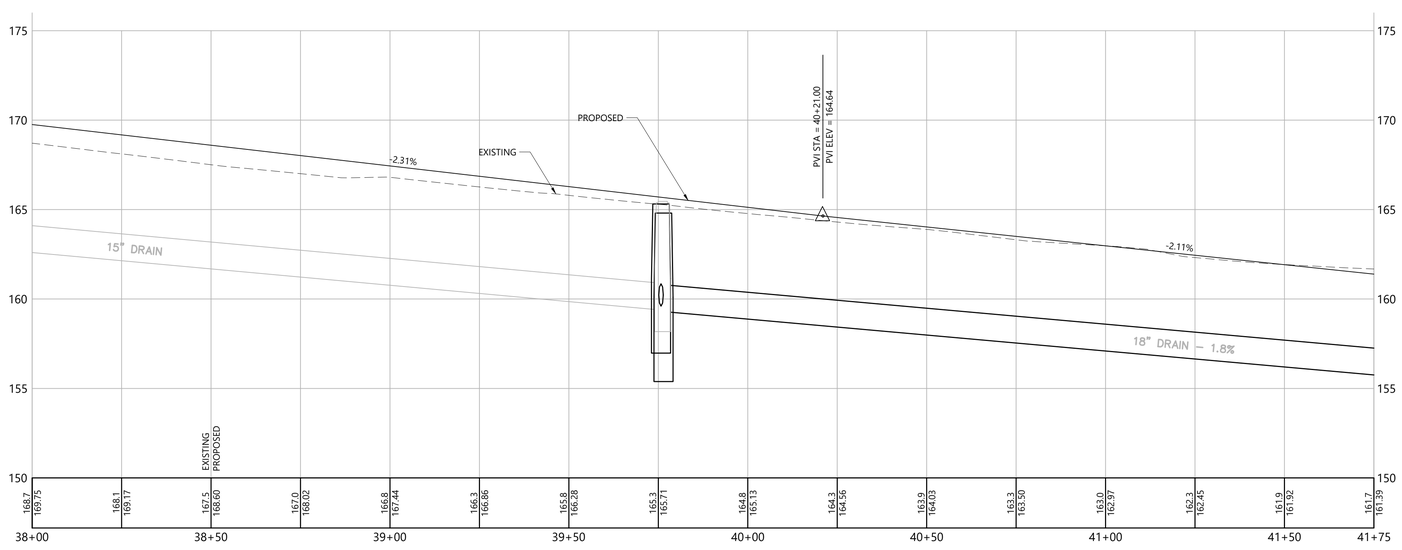


1000 0 1000 2000
SCALE IN FEET

LEGEND

- MULTI-USE TRAIL
- TOPSOIL AND TURF ESTABLISHMENT
- GRASS DRAINAGE SWALE
- MODIFIED RIP-RAP
- TRANSITION MILLING GRADE ADJUSTMENT REQUIRED
- ROADWAY WIDENING
- CUT BIT CONC PAVEMENT
- SWALE FLOW ARROW

BASELINE CURVE TABLE						
CURVE	RADIUS	LENGTH	TANGENT	DELTA	PI: NORTHING	PI: EASTING
CURVE 12	1190.00	352.98'	177.79	016° 59' 42"	891234.51	997019.44
CURVE 13	550.00	163.51'	82.36	017° 02' 01"	891532.02	996929.03



REV.	DATE	DESCRIPTION	SHEET. NO.
		REVISIONS	

20 0 20
SCALE IN FEET

DESIGNER: EAN
DRAFTER: JE
CHECKED BY: BAA
APPROVED BY: SON

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Engineers Scientists Planners Designers

NOT ISSUED FOR CONSTRUCTION DATE:NOVEMBER, 2021

PROJECT TITLE:
BLOOMFIELD–TARIFFVLLE
MULTI–USE TRAIL CONNECTOR

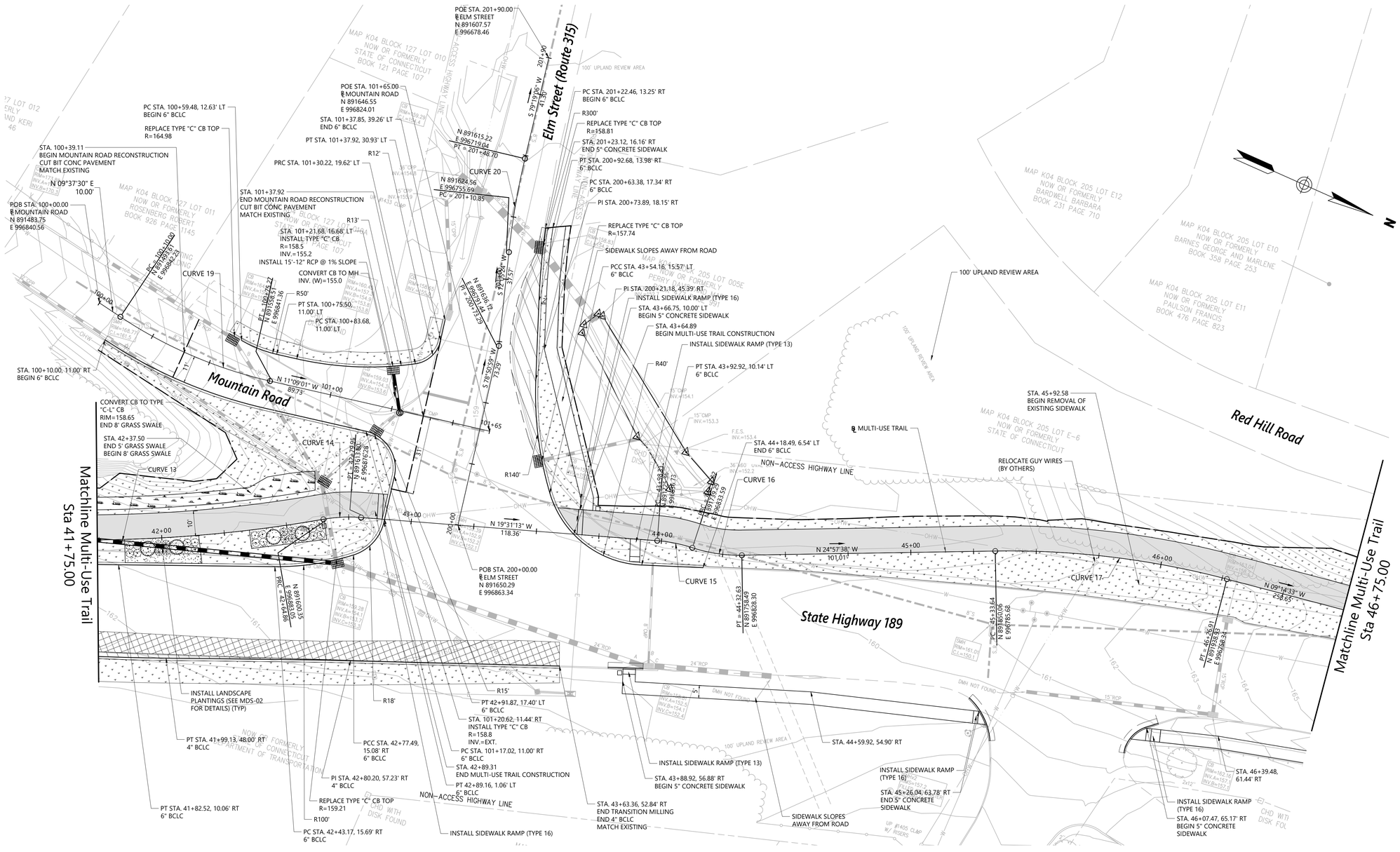
CADD FILENAME: PLN–4237300.DWG

TOWN: BLOOMFIELD–SIMSBURY, CONNECTICUT

DRAWING TITLE: CONSTRUCTION PLAN

PROJECT NO.: 42373.00
DRAWING NO.: PLN–08
SHEET NO.: 34 OF 95

Nov 17, 2021



BASELINE CURVE TABLE

CURVE	RADIUS	LENGTH	TANGENT	DELTA	PI: NORTHING	PI: EASTING
CURVE 19	180.00	65.27'	33.00	020° 46' 30"	891526.14	996847.75
CURVE 20	300.00	37.85'	18.95	007° 13' 43"	891618.73	996737.66
CURVE 13	550.00	163.51'	82.36	017° 02' 01"	891532.02	996929.03
CURVE 14	60.00	15.10'	7.59	014° 24' 57"	891606.65	996878.81
CURVE 15	60.00	14.31'	7.19	013° 39' 57"	891732.13	996834.33
CURVE 16	60.00	20.01'	10.10	019° 06' 22"	891749.33	996832.56
CURVE 17	340.00	93.27'	46.93	015° 43' 05"	891892.61	996765.87

REV.	DATE	DESCRIPTION	SHEET. NO.
		REVISIONS	

20 0 20
SCALE IN FEET

DESIGNER: EAN
DRAFTER: JE
CHECKED BY: BAA
APPROVED BY: SON

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Engineers Scientists Planners Designers

NOT ISSUED FOR CONSTRUCTION DATE:NOVEMBER, 2021

PROJECT TITLE:
BLOOMFIELD–TARIFFVLLE MULTI–USE TRAIL CONNECTOR

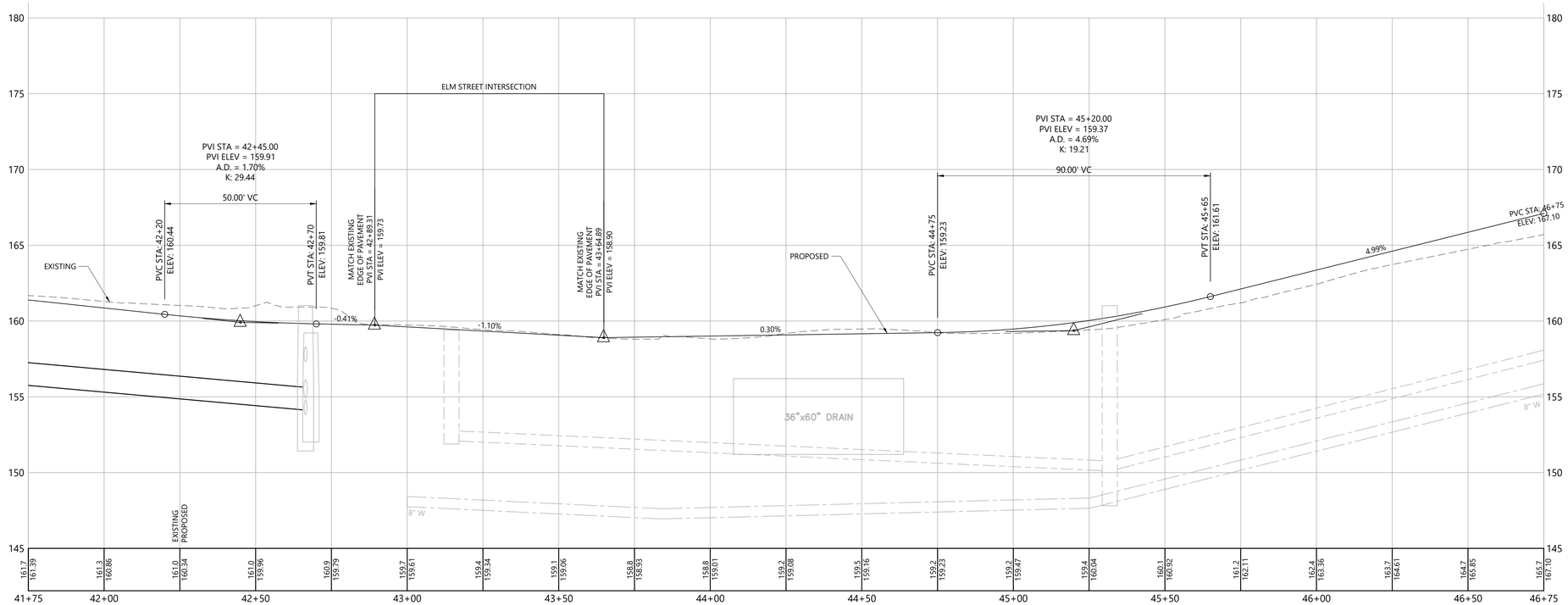
CADD FILENAME: PLN–4237300.DWG

TOWN: BLOOMFIELD–SIMSBURY, CONNECTICUT

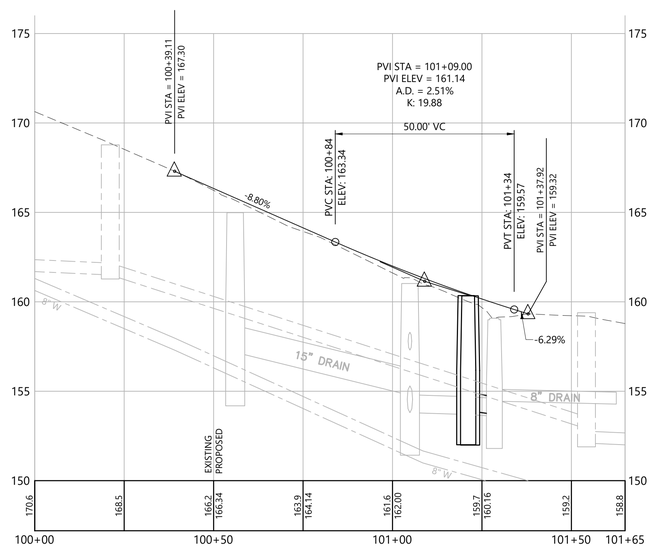
DRAWING TITLE: CONSTRUCTION PLAN

PROJECT NO.: 42373.00
DRAWING NO.: PLN–09
SHEET NO.: 35 OF 95

Nov 17, 2021



PROFILE - MULTI-USE TRAIL



PROFILE - MOUNTAIN ROAD

REV.	DATE	DESCRIPTION	SHEET. NO.
		REVISIONS	

20 0 20
SCALE IN FEET

DESIGNER: EAN
DRAFTER: JE
CHECKED BY: BAA
APPROVED BY: SON

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Engineers Scientists Planners Designers

NOT ISSUED FOR CONSTRUCTION DATE:NOVEMBER, 2021

PROJECT TITLE:
BLOOMFIELD–TARIFFVLLE
MULTI–USE TRAIL CONNECTOR

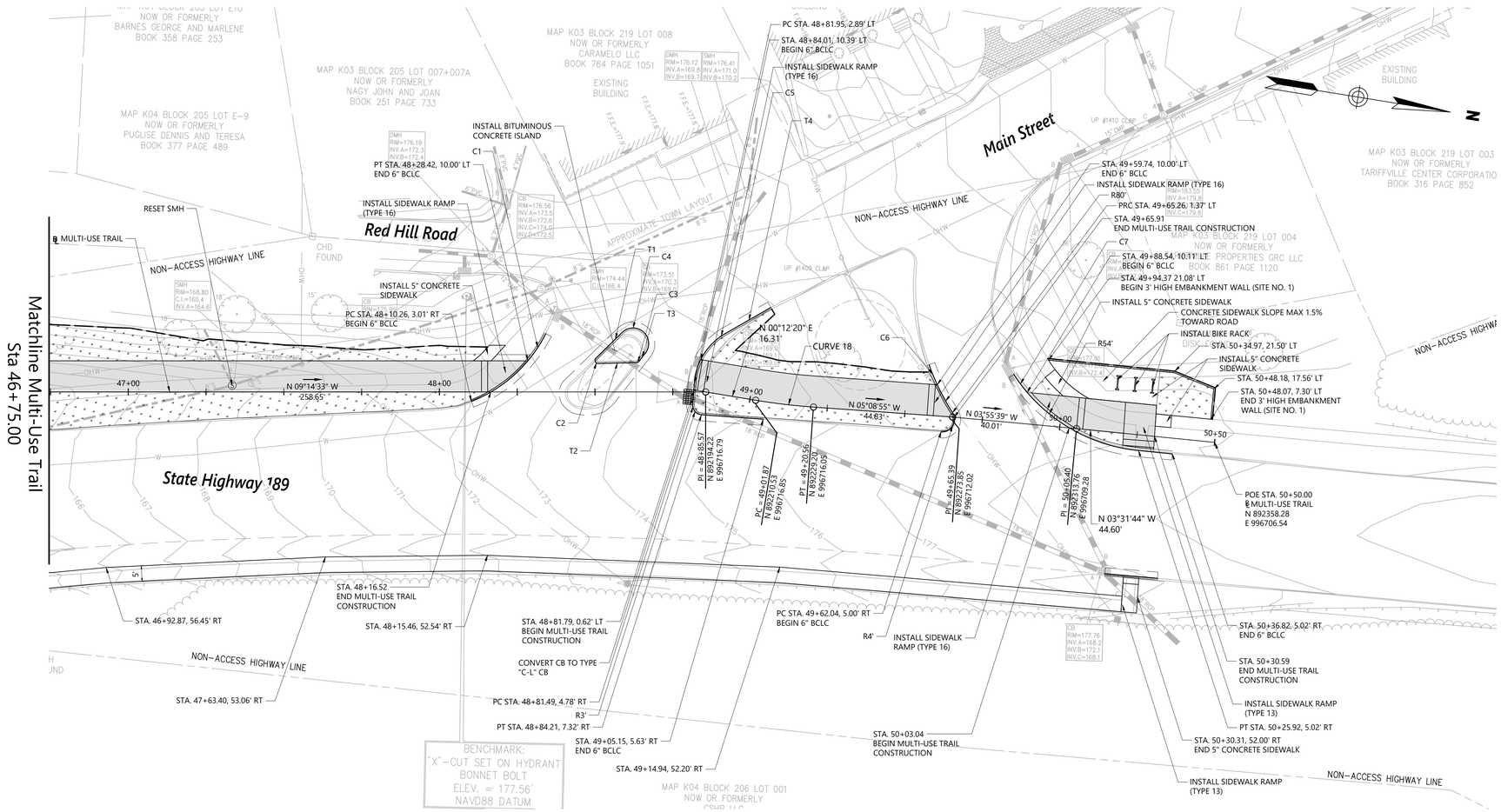
CADD FILENAME: PLN–4237300.DWG

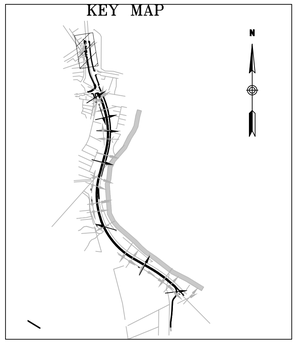
TOWN:
BLOOMFIELD–SIMSBURY,
CONNECTICUT

DRAWING TITLE:
CONSTRUCTION
PLAN

PROJECT NO.: 42373.00
DRAWING NO.: PRF–01
SHEET NO.: 36 OF 95

Nov 17, 2021





1000 0 1000 2000
SCALE IN FEET

LEGEND

- MULTI-USE TRAIL
- TOPSOIL AND TURF ESTABLISHMENT
- GRASS DRAINAGE SWALE
- MODIFIED RIP-RAP
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- SWALE FLOW ARROW

STRAIGHT CONCRETE CURB TABLE							
TAN/CURVE	START STA	START OFFSET	END STA	END OFFSET	RADIUS	LENGTH	REVEAL
T1	48+58.74	19.11' LT	48+50.33	10.87' LT	N/A	11.78'	6"
T2	48+51.05	9.16' LT	48+63.38	9.47' LT	N/A	12.33'	6"
T3	48+64.15	9.85' LT	48+66.18	12.46' LT	N/A	3.31'	6"
T4	48+88.78	19.58' LT	49+01.78	30.22' LT	N/A	16.80'	6"

BASELINE CURVE TABLE						
CURVE	RADIUS	LENGTH	TANGENT	DELTA	PI: NORTHING	PI: EASTING
CURVE 18	200.00	18.69'	9.35	005° 21' 15"	892219.88	996716.89

CURVE CONCRETE CURB TABLE							
TAN/CURVE	START STA	START OFFSET	END STA	END OFFSET	RADIUS	LENGTH	REVEAL
C1	48+28.42	10.00' LT	48+34.17	18.75' LT	45'	10.49'	TRANSITION
C2	48+50.33	10.87' LT	48+51.05	9.16' LT	1'	2.39'	6"
C3	48+63.38	9.47' LT	48+64.15	9.85' LT	1'	0.88'	6"
C4	48+66.18	12.46' LT	48+58.74	19.11' LT	5'	15.04'	6"
C5	48+84.01	10.39' LT	48+88.78	19.58' LT	20'	11.72'	TRANSITION
C6	49+56.63	16.27' LT	49+59.74	10.00' LT	80'	7.00'	TRANSITION
C7	49+83.67	15.58' LT	49+88.54	10.11' LT	54'	7.33'	TRANSITION

REV.	DATE	DESCRIPTION	SHEET. NO.
		REVISIONS	

20 0 20
SCALE IN FEET

DESIGNER: EAN
DRAFTER: JE
CHECKED BY: BAA
APPROVED BY: SON

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Engineers Scientists Planners Designers

NOT ISSUED FOR CONSTRUCTION DATE:NOVEMBER, 2021

PROJECT TITLE:
BLOOMFIELD-TARIFFVLLE
MULTI-USE TRAIL CONNECTOR

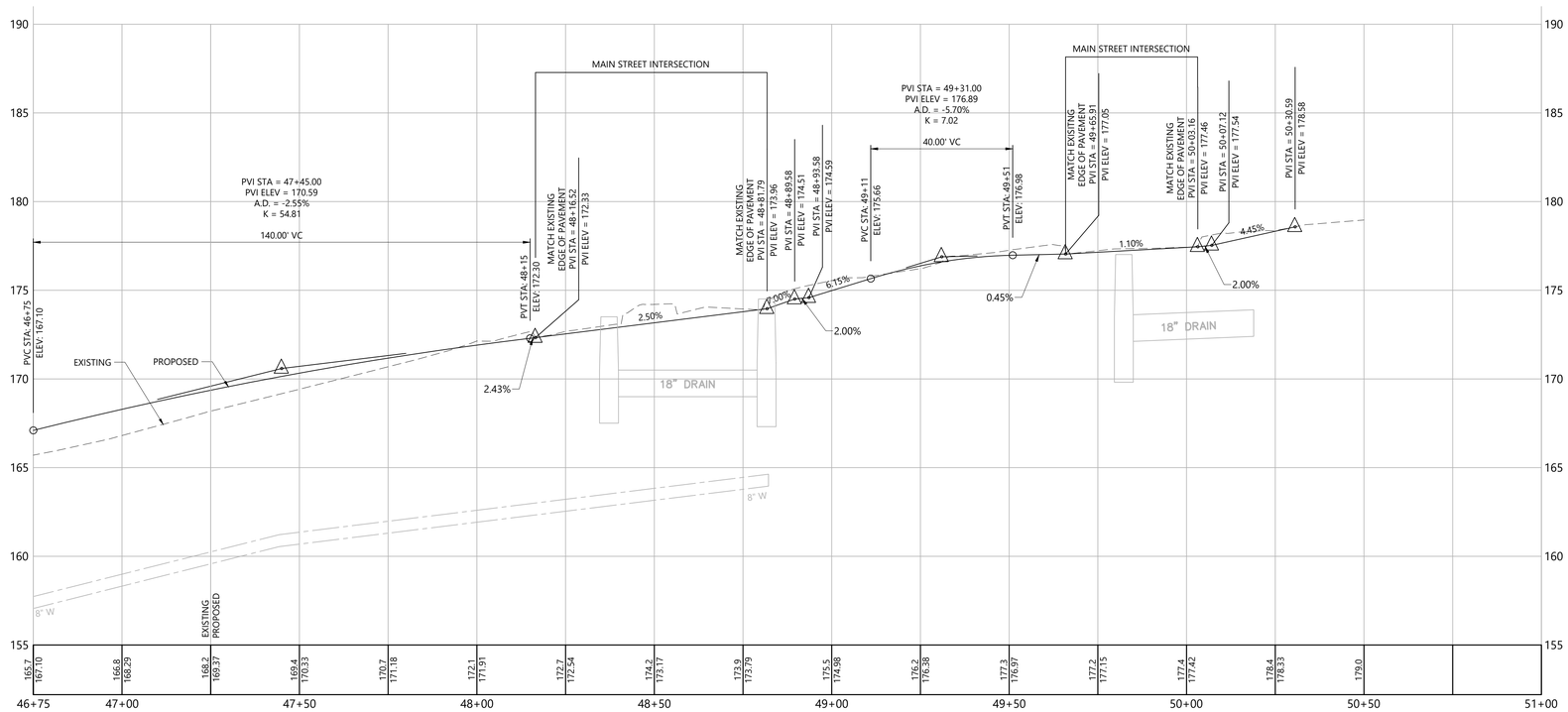
CADD FILENAME: PLN-4237300.DWG

TOWN: BLOOMFIELD-SIMSBURY, CONNECTICUT

DRAWING TITLE: CONSTRUCTION PLAN

PROJECT NO.: 42373.00
DRAWING NO.: PLN-10
SHEET NO.: 37 OF 95

Nov 17, 2021



PROFILE - MULTI-USE TRAIL

REV.	DATE	DESCRIPTION	SHEET. NO.
		REVISIONS	

20 0 20
SCALE IN FEET

DESIGNER: EAN
DRAFTER: JE
CHECKED BY: BAA
APPROVED BY: SON

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Engineers Scientists Planners Designers

NOT ISSUED FOR CONSTRUCTION DATE:NOVEMBER, 2021

PROJECT TITLE:
BLOOMFIELD–TARIFFVLLE
MULTI–USE TRAIL CONNECTOR

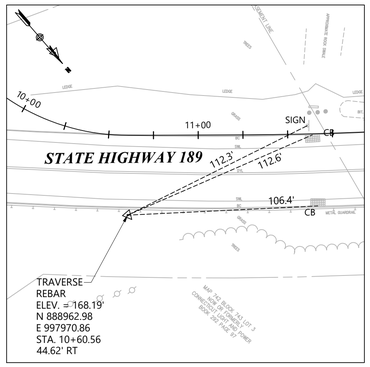
CADD FILENAME: PLN–4237300.DWG

TOWN:
BLOOMFIELD–SIMSBURY,
CONNECTICUT

DRAWING TITLE:
CONSTRUCTION
PLAN

PROJECT NO.: 42373.00
DRAWING NO.: PRF–02
SHEET NO.: 38 OF 95

Nov 17, 2021



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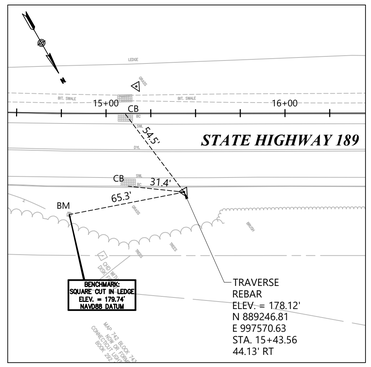

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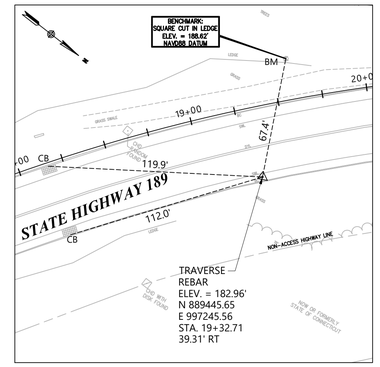

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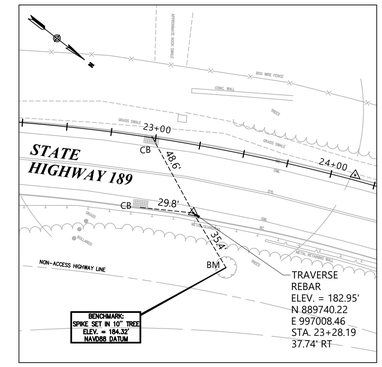

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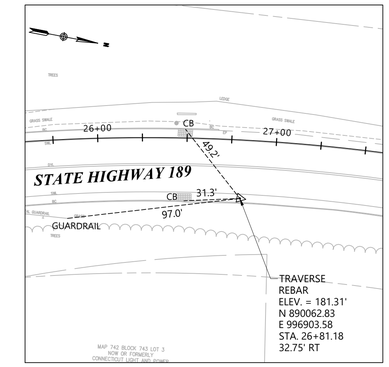

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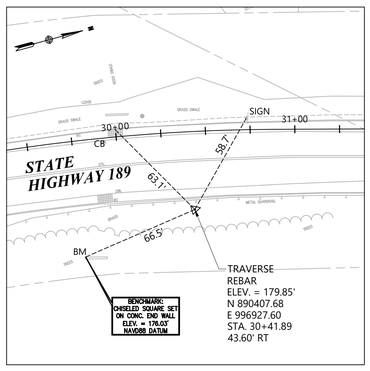

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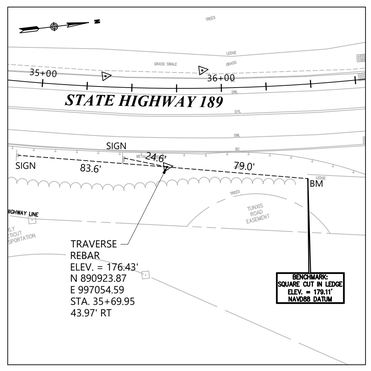

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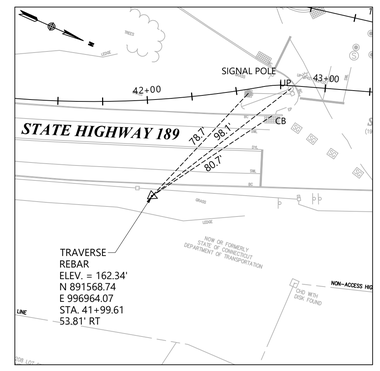

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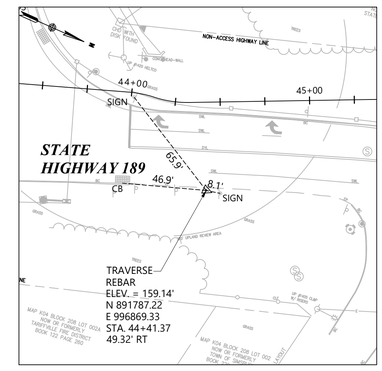

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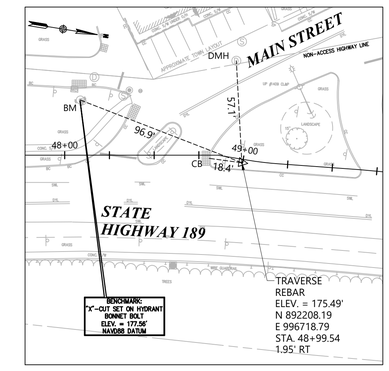


CONTROL POINT # 10
N.T.S.

REV.	DATE	DESCRIPTION	SHEET. NO.
		REVISIONS	

DESIGNER: EAN
DRAFTER: JE
CHECKED BY: BAA
APPROVED BY: SON

vhb
Engineers Scientists Planners Designers

NOT ISSUED FOR CONSTRUCTION DATE:NOVEMBER, 2021

PROJECT TITLE:
BLOOMFIELD–TARIFFVLLE
MULTI–USE TRAIL CONNECTOR

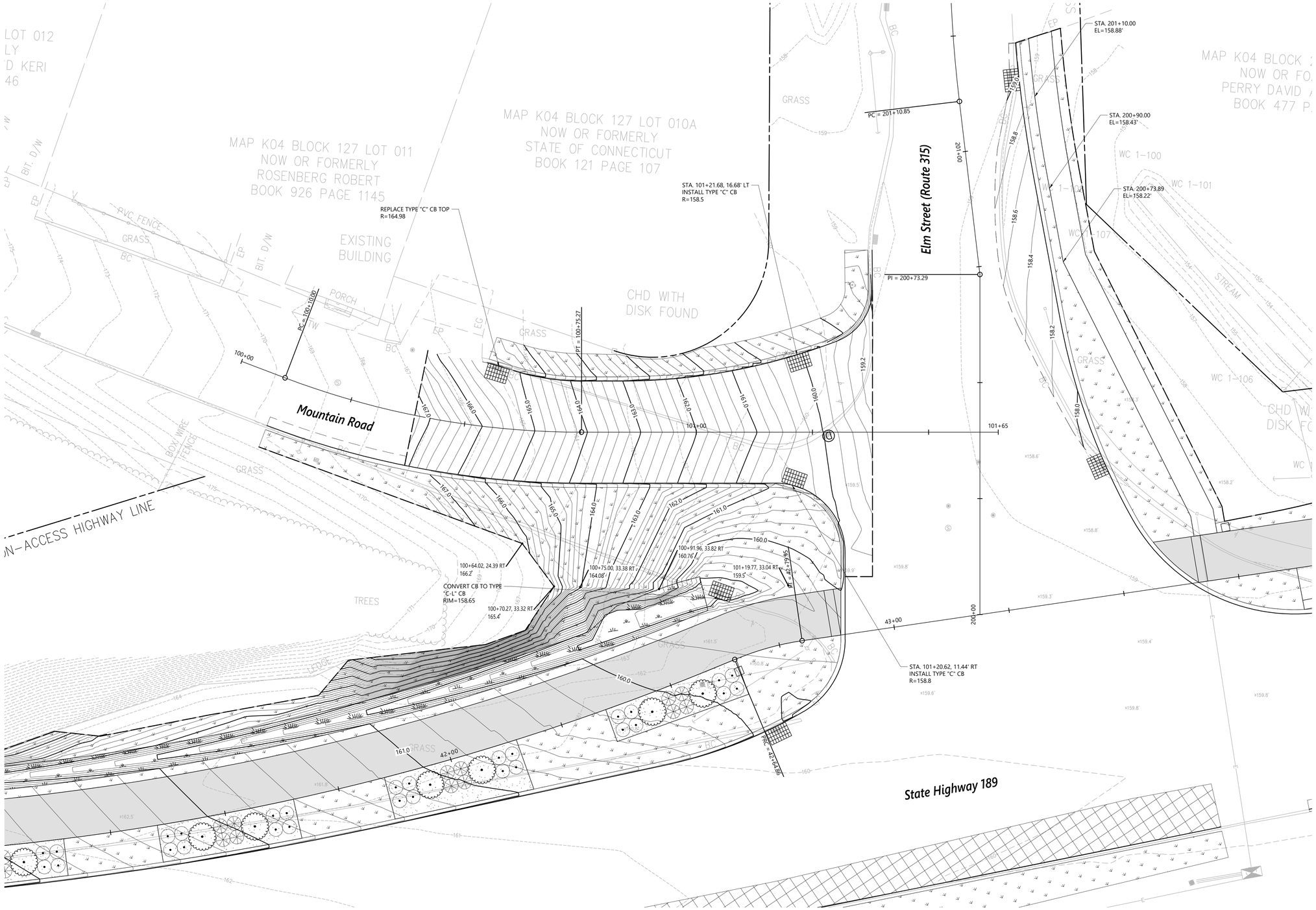
CADD FILENAME: CTR–4237300.DWG

TOWN:
BLOOMFIELD–SIMSBURY,
CONNECTICUT

DRAWING TITLE:
CONTROL POINT
TIE PLAN

PROJECT NO.: 42373.00
DRAWING NO.: CTR–01
SHEET NO.: 39 OF 95

Nov 17, 2021



REV.	DATE	DESCRIPTION	SHEET. NO.
		REVISIONS	

10 0 10
SCALE IN FEET

DESIGNER: EAN
DRAFTER: EAN
CHECKED BY: BAA
APPROVED BY: SON

vhb
Engineers Scientists Planners Designers

NOT ISSUED FOR CONSTRUCTION DATE:NOVEMBER, 2021

PROJECT TITLE:
BLOOMFIELD–TARIFFVLLE
MULTI–USE TRAIL CONNECTOR

CADD FILENAME: GRD–4237300.DWG

TOWN:
BLOOMFIELD–SIMSBURY,
CONNECTICUT

DRAWING TITLE:
INTERSECTION GRADING
PLANS

PROJECT NO.: 42373.00
DRAWING NO.: GRD–01
SHEET NO.: 40 OF 95

Nov 18, 2021

SIGN LEGEND

SIGN	MUTCD DESIGNATION	CTDOT DESIGNATION	SIZE	SHEETING TYPE	MAINTAINED BY
	R3-8	31-0222	30" X 30"	SIGN FACE - SHEET ALUMINUM (TYPE IX RETROREFLECTIVE SHEETING)	CT DOT
	R1-1	31-0532	18" X 18"	SIGN FACE - SHEET ALUMINUM (TYPE IX RETROREFLECTIVE SHEETING)	TOWN
	R1-1	31-0552	30" X 30"	SIGN FACE - SHEET ALUMINUM (TYPE IX RETROREFLECTIVE SHEETING)	TOWN
	R4-7	31-1526	24" X 30"	SIGN FACE - SHEET ALUMINUM (TYPE IX RETROREFLECTIVE SHEETING)	TOWN
	R2-1	31-5505	24" X 30"	SIGN FACE - SHEET ALUMINUM (TYPE IX RETROREFLECTIVE SHEETING)	CT DOT
	R2-1	31-5505	24" X 30"	SIGN FACE - SHEET ALUMINUM (TYPE IX RETROREFLECTIVE SHEETING)	CT DOT
	W3-1	41-0507	18" X 18"	SIGN FACE - SHEET ALUMINUM (TYPE IX RETROREFLECTIVE SHEETING)	TOWN
	W4-4P	41-0564	30" X 18"	SIGN FACE - SHEET ALUMINUM (TYPE IX RETROREFLECTIVE SHEETING)	TOWN
	W14-2A	41-1702	30" X 30"	SIGN FACE - SHEET ALUMINUM (TYPE IX RETROREFLECTIVE SHEETING)	TOWN
	M6-4	41-4207	24" X 18"	SIGN FACE - SHEET ALUMINUM (TYPE IX RETROREFLECTIVE SHEETING)	CT DOT
	N/A	41-4615	30" X 30"	SIGN FACE - SHEET ALUMINUM (TYPE IX RETROREFLECTIVE SHEETING)	CT DOT
	W16-2AP	41-6130	24" X 18"	SIGN FACE - SHEET ALUMINUM (TYPE IX RETROREFLECTIVE SHEETING)	TOWN
	W11-15	41-4832	30" X 30"	SIGN FACE - SHEET ALUMINUM (TYPE IX RETROREFLECTIVE SHEETING)	TOWN
	W11-15P	41-4839	24" X 18"	SIGN FACE - SHEET ALUMINUM (TYPE IX RETROREFLECTIVE SHEETING)	TOWN
	D11-1	51-1354	24" X 18"	SIGN FACE - SHEET ALUMINUM (TYPE IX RETROREFLECTIVE SHEETING)	TOWN
	D2-1	51-2001	60" X 18"	SIGN FACE - SHEET ALUMINUM (TYPE IX RETROREFLECTIVE SHEETING)	CT DOT
	M1-5	51-6647	30" X 24"	SIGN FACE - SHEET ALUMINUM (TYPE IX RETROREFLECTIVE SHEETING)	CT DOT
	R5-3	31-1727	24" X 24"	SIGN FACE - SHEET ALUMINUM (TYPE IX RETROREFLECTIVE SHEETING)	TOWN

NOTES:

1. TRAFFIC SIGNS AND PAVEMENT MARKINGS SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION AND THE JULY 3, 2019 CONNECTICUT STATE DEPARTMENT OF TRANSPORTATION (CTDOT) CATALOG OF SIGNS.
2. ALL PAVEMENT MARKINGS SHALL BE EPOXY RESIN PAVEMENT MARKINGS.
3. ANY EXISTING PAVEMENT MARKINGS AND SIGNS THAT CONFLICT WITH THE PROPOSED MARKINGS AND SIGNS SHALL BE REMOVED BY THE CONTRACTOR, AS DIRECTED BY THE ENGINEER.
4. THE CONTRACTOR SHALL REMOVE EXISTING SIGNS AND POSTS AT THE LOCATIONS WHERE NEW SIGNS ARE TO BE INSTALLED.
5. A NON-DESTRUCTIVE METHOD ACCEPTABLE TO THE TOWN OF BLOOMFIELD AND THE TOWN OF SIMSBURY SHALL BE USED TO REMOVE EXISTING PAVEMENT MARKINGS. NO BLACKOUT PAINT SHALL BE USED.
6. ANY DAMAGE TO THE PAVEMENT SURFACE CAUSED BY PAVEMENT MARKING REMOVAL SHALL BE REPAIRED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE BY METHODS ACCEPTABLE TO THE TOWN.
7. ALL EXISTING PAVEMENT MARKINGS DISTURBED BY THE ROADWAY CONSTRUCTION BEYOND THE CONSTRUCTION LIMITS SHALL BE REPLACED IN KIND.
8. REFER TO MISCELLANEOUS DETAILS DRAWINGS FOR ADDITIONAL DETAILS.
9. ALL SIGNS TO BE NEW UNLESS OTHERWISE NOTED ON PLAN. ALL SIGNS THAT ARE TO BE RELOCATED SHALL BE STORED IN A MANNER ACCEPTABLE TO THE ENGINEER AND RESET BY THE CONTRACTOR. ALL RELOCATED SIGNS SHALL BE PLACED ON NEW SIGN POSTS.
10. CONTRACTOR SHALL MAINTAIN SIGNS DURING CONSTRUCTION ACTIVITIES.
11. ALL SIGNS THAT ARE TO BE RESET SHALL BE PLACED ON NEW SIGN POSTS.

REV.	DATE	DESCRIPTION	SHEET. NO.
		REVISIONS	

DESIGNER: EAN
DRAFTER: JE
CHECKED BY: BAA
APPROVED BY: SON

vhb
Engineers Scientists Planners Designers

NOT ISSUED FOR CONSTRUCTION DATE:NOVEMBER, 2021

PROJECT TITLE: BLOOMFIELD-TARIFFVLLE MULTI-USE TRAIL CONNECTOR

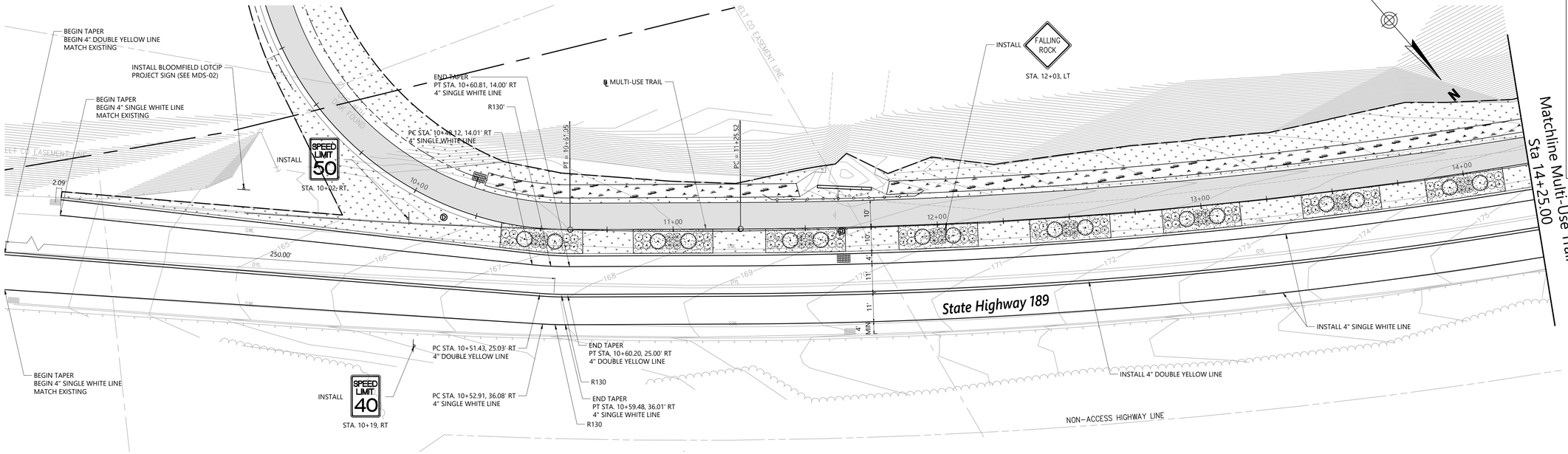
CADD FILENAME: SPM-LEGEND-4237300.DWG

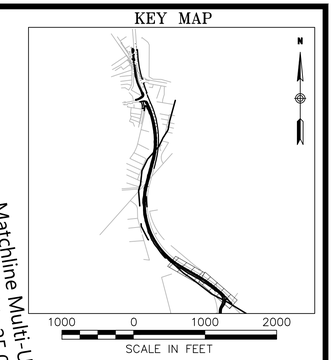
TOWN: BLOOMFIELD-SIMSBURY, CONNECTICUT

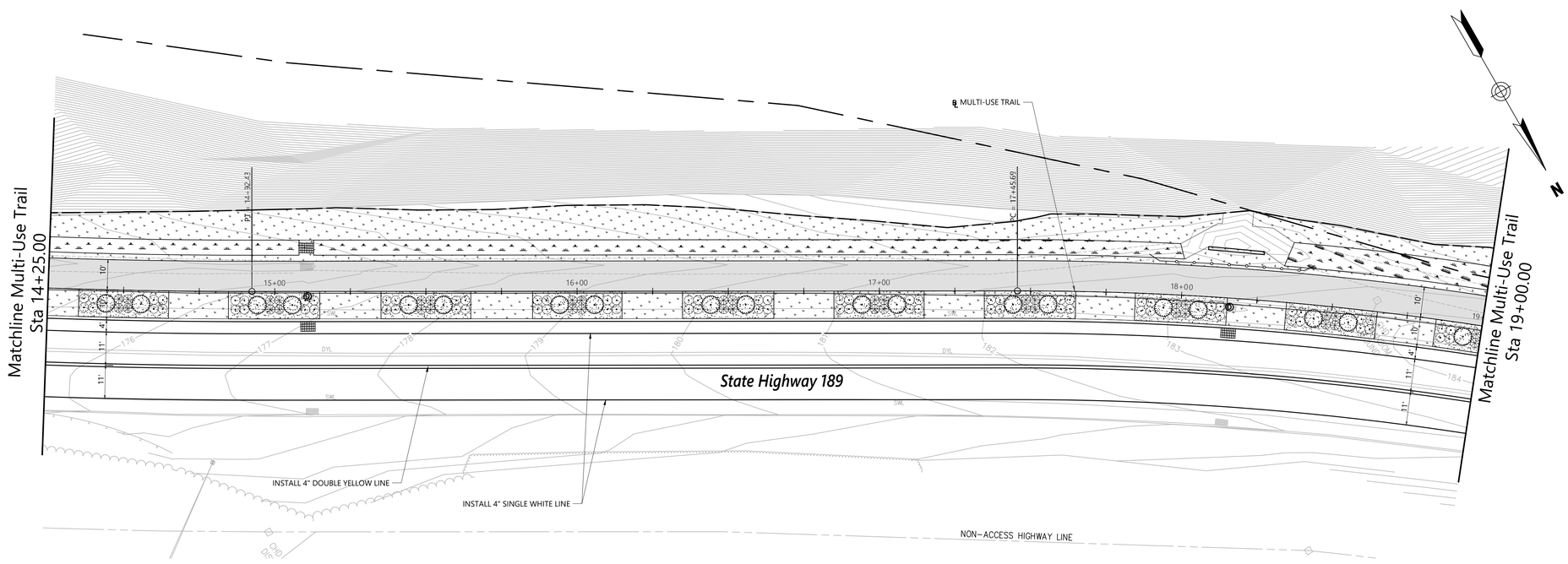
DRAWING TITLE: SIGN AND PAVEMENT MARKING LEGEND

PROJECT NO.: 42373.00
DRAWING NO.: SPM-01
SHEET NO.: 41 OF 95

Nov 17, 2021







REV.	DATE	DESCRIPTION REVISIONS	SHEET. NO.

20 0 20
SCALE IN FEET

DESIGNER: EAN
DRAFTER: EAN
CHECKED BY: BAA
APPROVED BY: SON

vhb
Engineers Scientists Planners Designers

NOT ISSUED FOR CONSTRUCTION DATE:NOVEMBER, 2021

PROJECT TITLE:
BLOOMFIELD-TARIFFVLLE
MULTI-USE TRAIL CONNECTOR

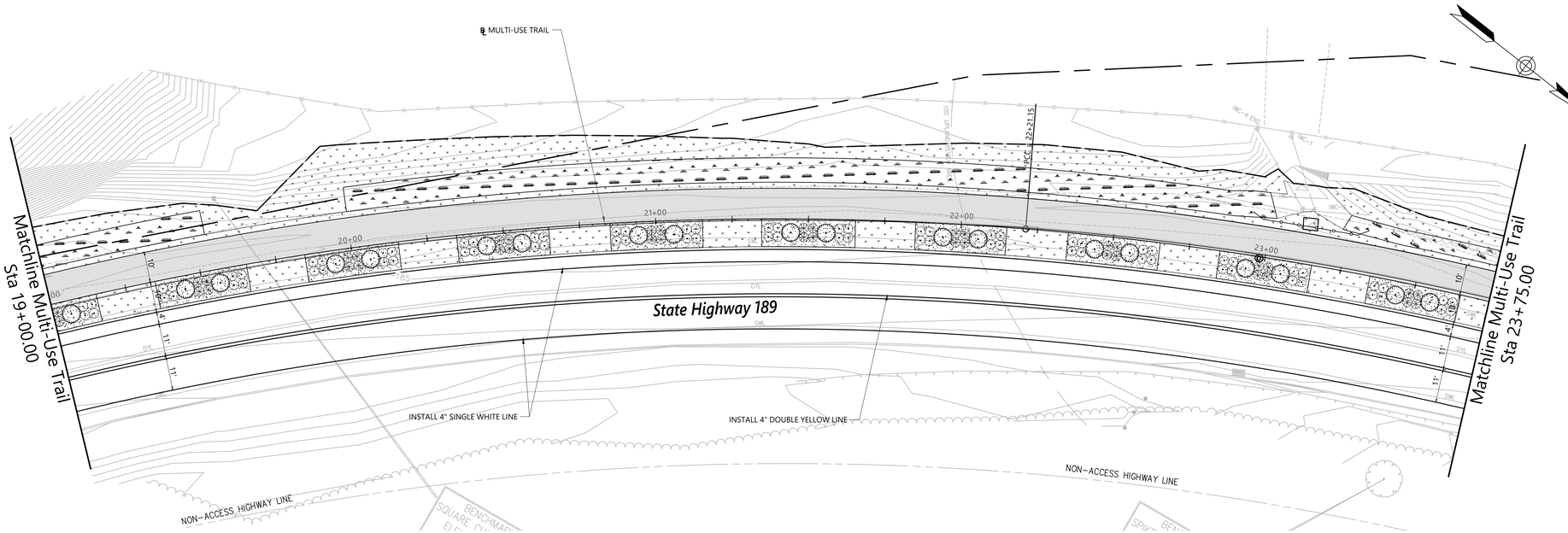
CADD FILENAME: SPM-4237300.DWG

TOWN:
BLOOMFIELD-SIMSBURY,
CONNECTICUT

DRAWING TITLE:
SIGN & PAVEMENT
MARKING PLAN

PROJECT NO.: 42373.00
DRAWING NO.: SPM-02
SHEET NO.: 42 OF 95

Nov 17, 2021



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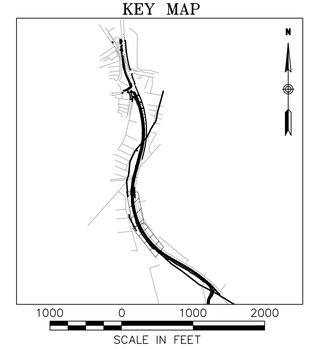

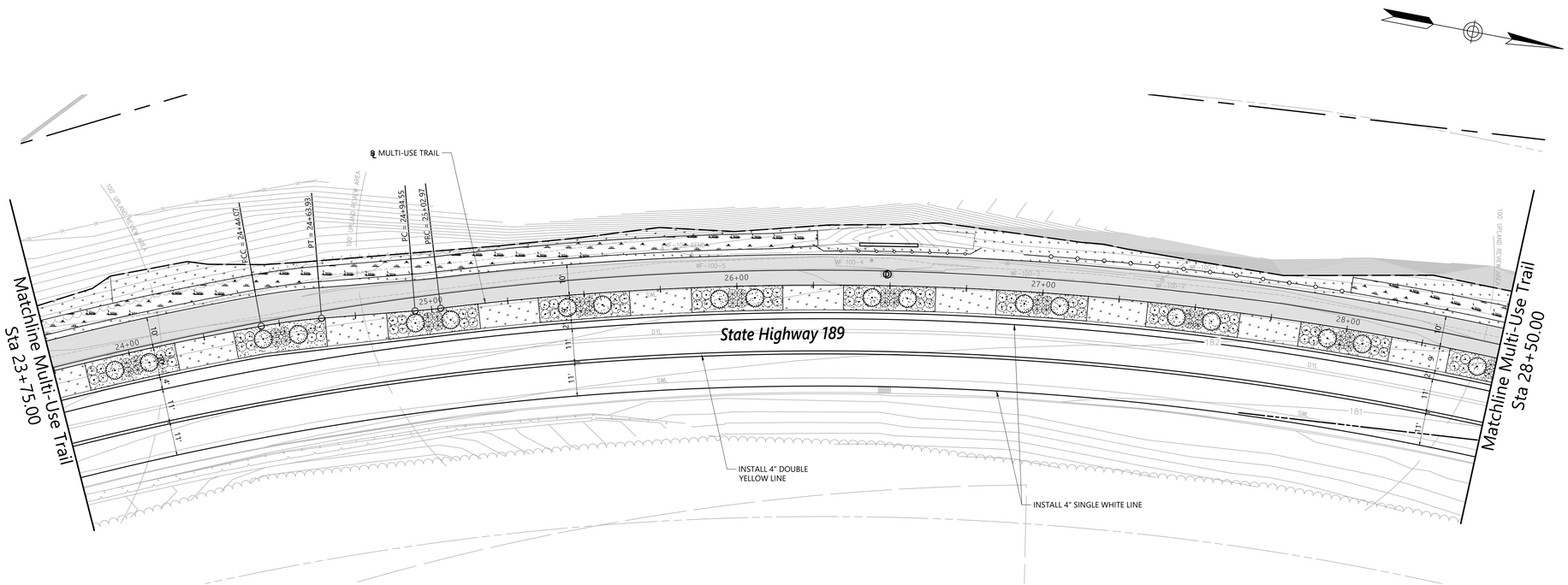

REV.	DATE	DESCRIPTION	SHEET. NO.
		REVISIONS	

20 0 20
SCALE IN FEET

DESIGNER: EAN
DRAFTER: JE
CHECKED BY: BAA
APPROVED BY: SON

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Engineers Scientists Planners Designers

NOT ISSUED FOR CONSTRUCTION DATE:NOVEMBER, 2021

PROJECT TITLE:
BLOOMFIELD–TARIFFVLLE
MULTI–USE TRAIL CONNECTOR

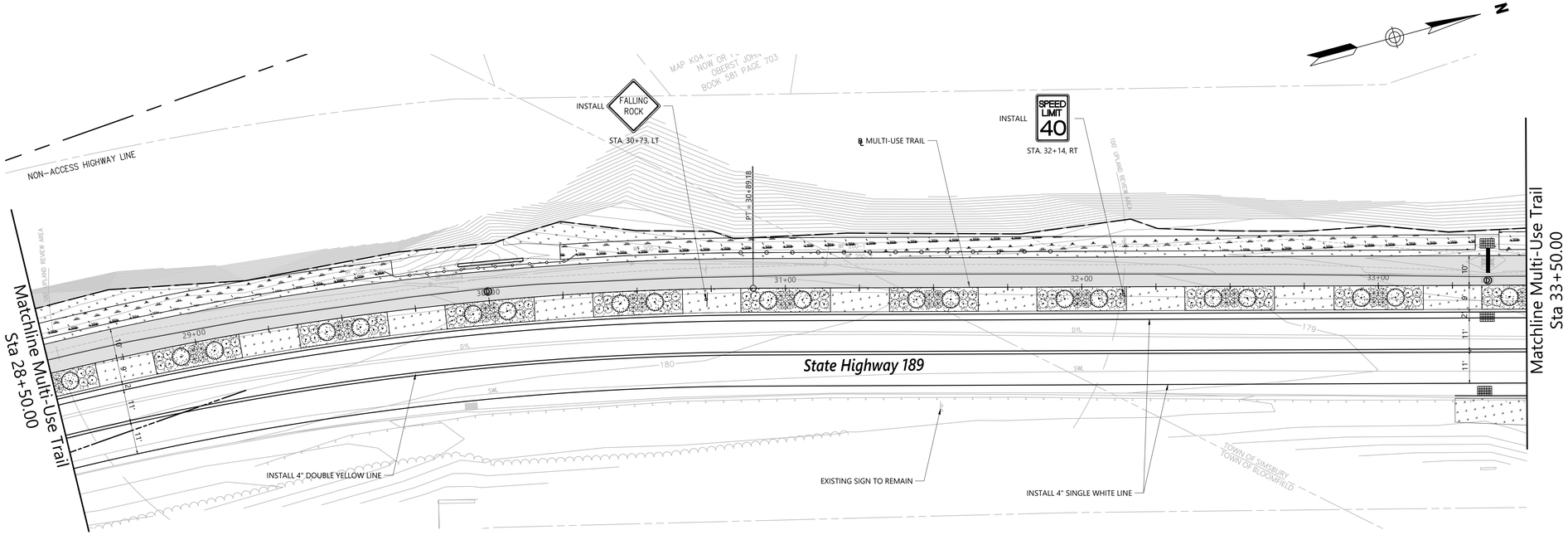
CADD FILENAME: SPM–4237300.DWG

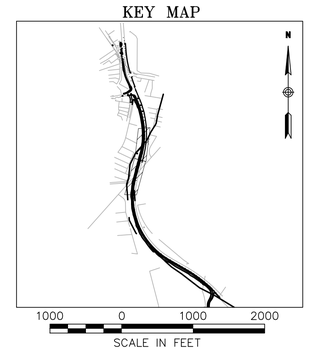
TOWN:
BLOOMFIELD–SIMSBURY,
CONNECTICUT

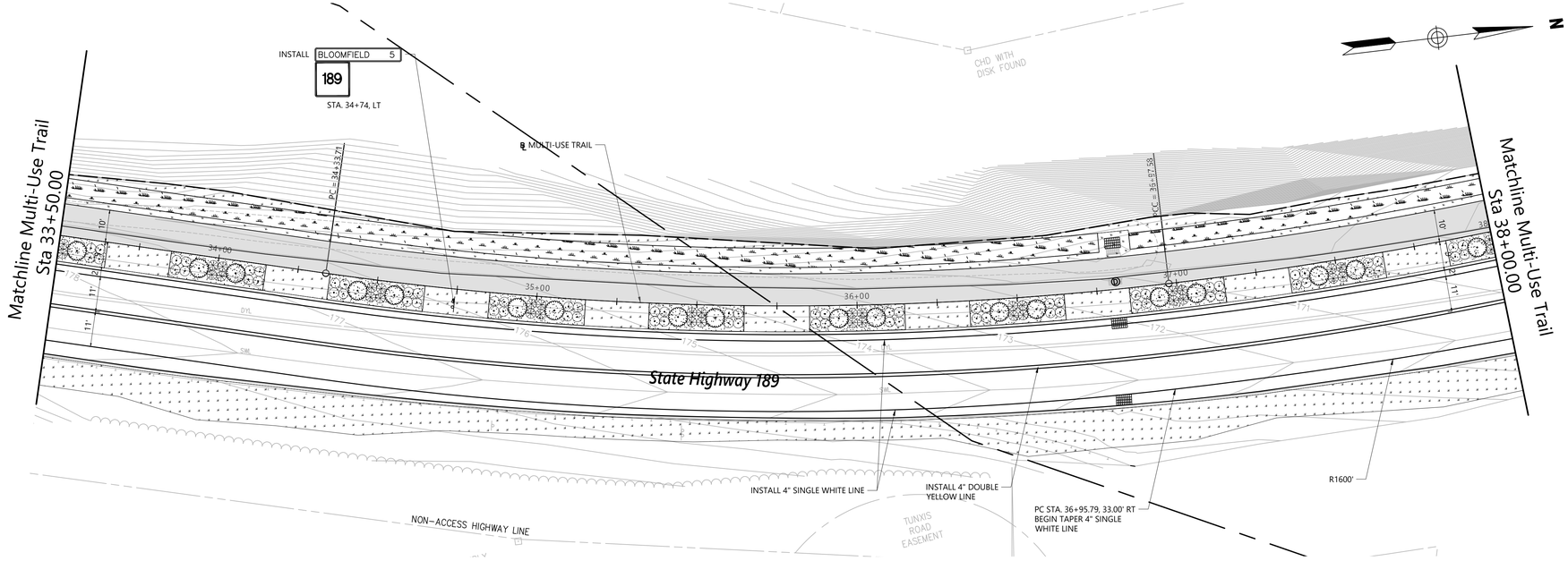
DRAWING TITLE:
SIGN & PAVEMENT
MARKING PLAN

PROJECT NO.: 42373.00
DRAWING NO.: SPM–03
SHEET NO.: 43 OF 95

Nov 17, 2021







REV.	DATE	DESCRIPTION	SHEET. NO.
		REVISIONS	

20 0 20
SCALE IN FEET

DESIGNER: EAN
DRAFTER: EAN
CHECKED BY: BAA
APPROVED BY: SON

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Engineers Scientists Planners Designers

NOT ISSUED FOR CONSTRUCTION DATE:NOVEMBER, 2021

PROJECT TITLE:
BLOOMFIELD–TARIFFVLLE
MULTI–USE TRAIL CONNECTOR

CADD FILENAME: SPM–4237300.DWG

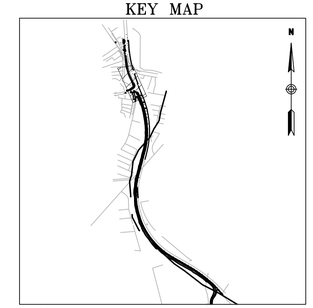
TOWN:
BLOOMFIELD–SIMSBURY,
CONNECTICUT

DRAWING TITLE:
SIGN & PAVEMENT
MARKING PLAN

PROJECT NO.: 42373.00
DRAWING NO.: SPM–04
SHEET NO.: 44 OF 95

Nov 17, 2021

KEY MAP



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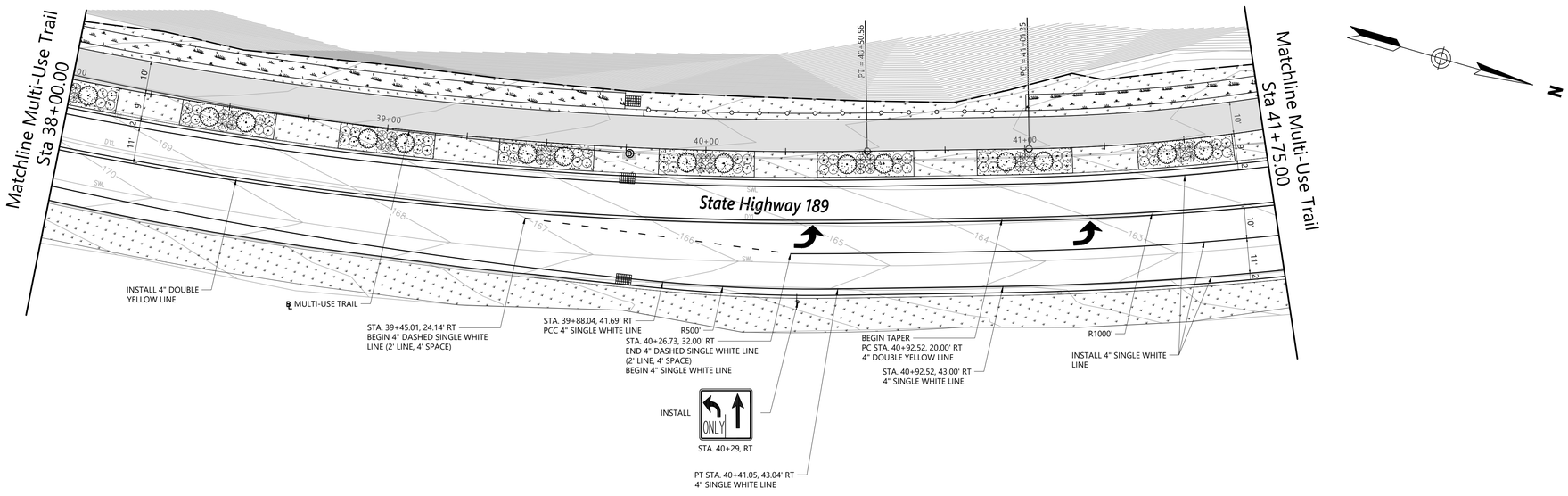


REV.	DATE	DESCRIPTION	SHEET. NO.
		REVISIONS	

20 0 20
SCALE IN FEET

DESIGNER: EAN
DRAFTER: EAN
CHECKED BY: BAA
APPROVED BY: SON

vhb
Engineers Scientists Planners Designers

NOT ISSUED FOR CONSTRUCTION DATE:NOVEMBER, 2021

PROJECT TITLE:
BLOOMFIELD–TARIFFVLLE
MULTI–USE TRAIL CONNECTOR

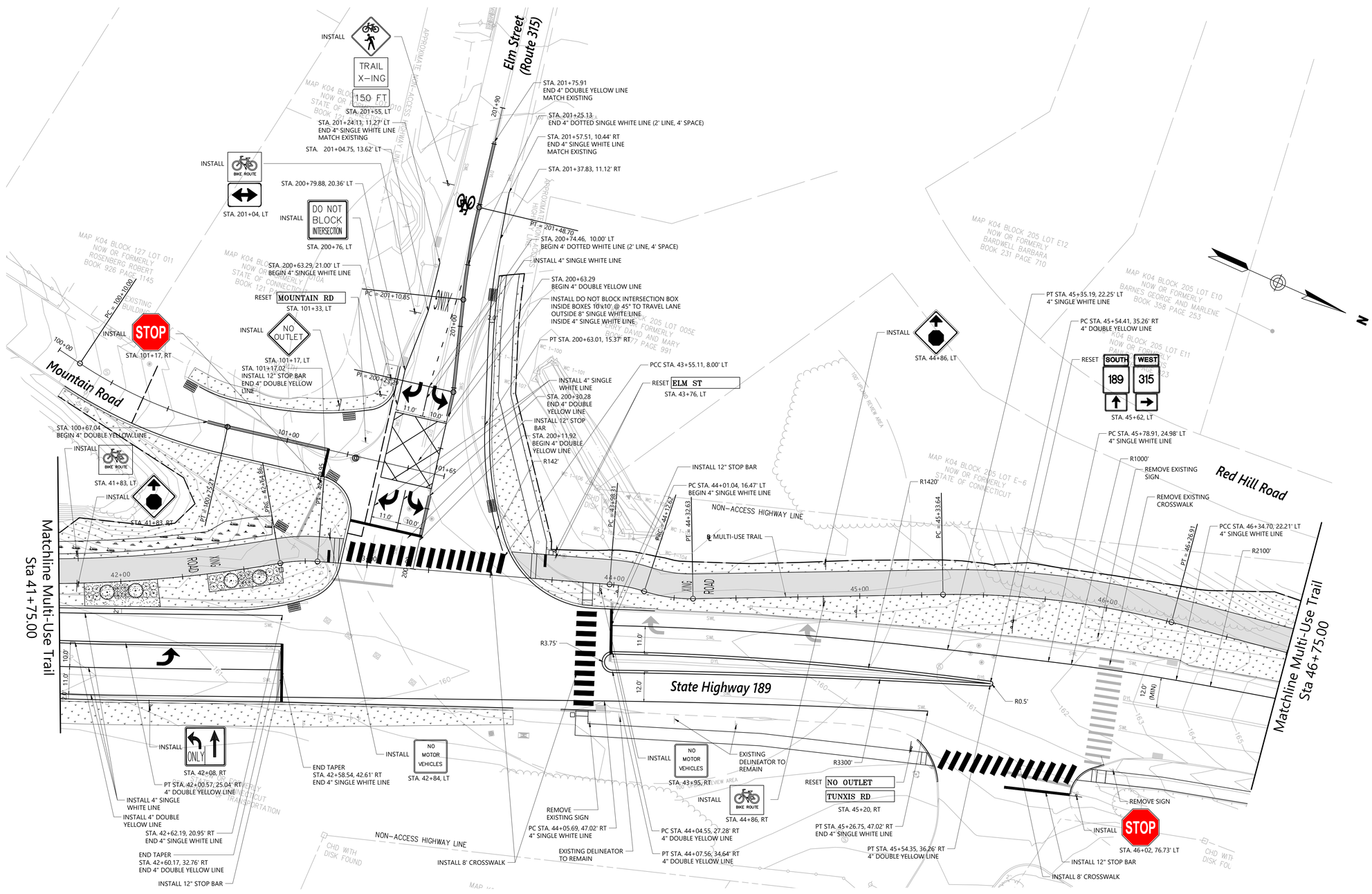
CADD FILENAME: SPM–4237300.DWG

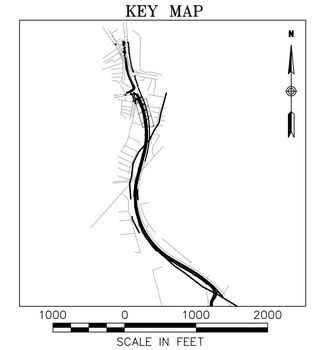
TOWN:
BLOOMFIELD–SIMSBURY,
CONNECTICUT

DRAWING TITLE:
SIGN & PAVEMENT
MARKING PLAN

PROJECT NO.: 42373.00
DRAWING NO.: SPM–05
SHEET NO.: 45 OF 95

Nov 17, 2021





REV.	DATE	DESCRIPTION REVISIONS	SHEET. NO.

20 0 20
SCALE IN FEET

DESIGNER: EAN
DRAFTER: EAN
CHECKED BY: BAA
APPROVED BY: SON

vhb
Engineers Scientists Planners Designers

NOT ISSUED FOR CONSTRUCTION DATE:NOVEMBER, 2021

PROJECT TITLE:
BLOOMFIELD–TARIFFVLLE MULTI–USE TRAIL CONNECTOR

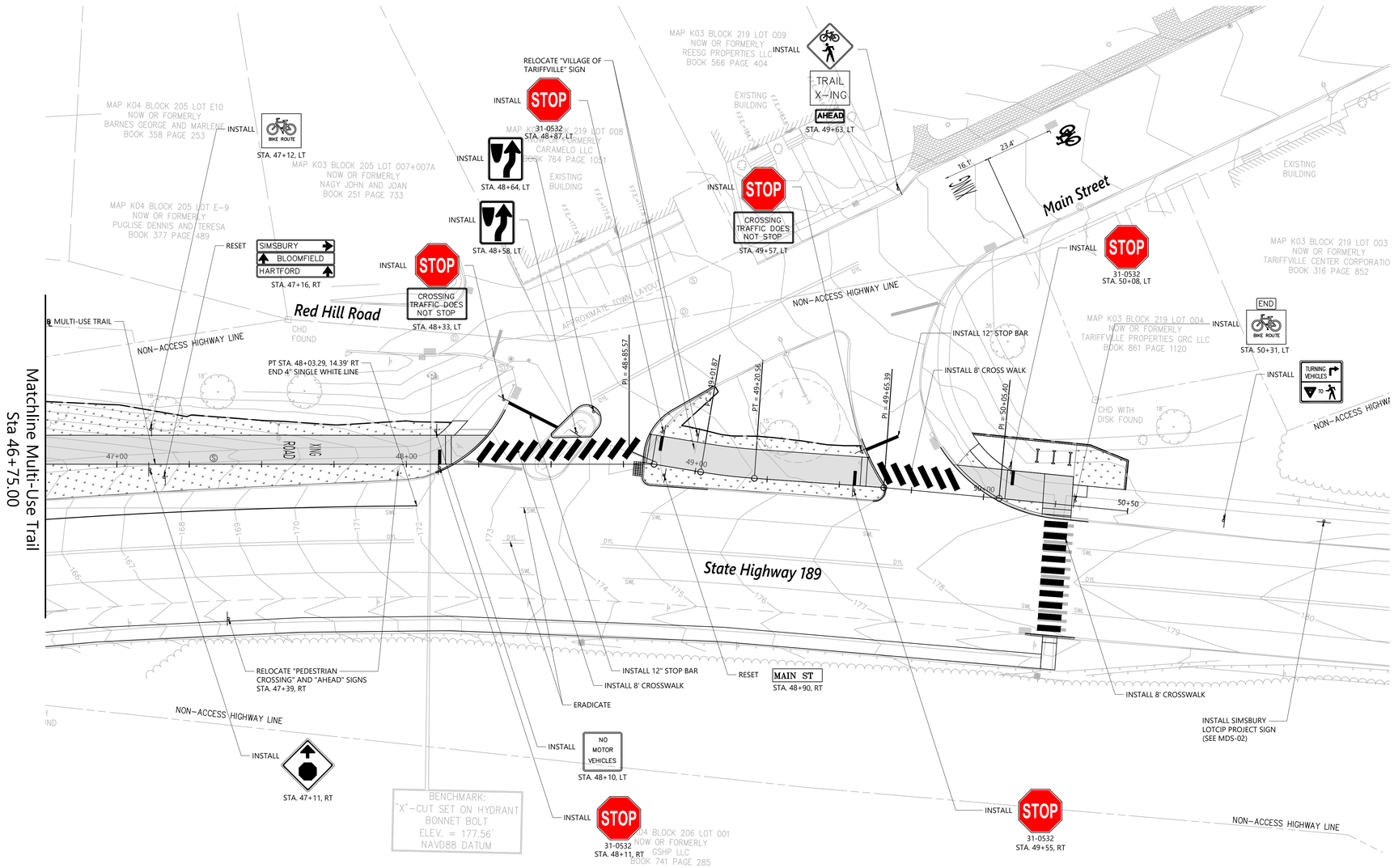
CADD FILENAME: SPM–4237300.DWG

TOWN: BLOOMFIELD–SIMSBURY, CONNECTICUT

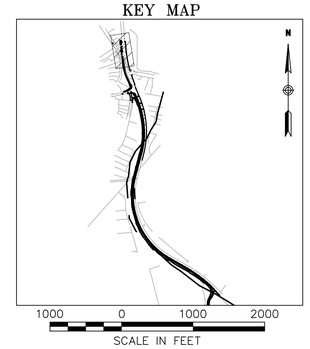
DRAWING TITLE: SIGN & PAVEMENT MARKING PLAN

PROJECT NO.: 42373.00
DRAWING NO.: SPM–06
SHEET NO.: 46 OF 95

Nov 17, 2021



KEY MAP



REV.	DATE	DESCRIPTION	SHEET. NO.
		REVISIONS	

20 0 20
SCALE IN FEET

DESIGNER: EAN
DRAFTER: JE
CHECKED BY: BAA
APPROVED BY: SON

vhb
Engineers Scientists Planners Designers

NOT ISSUED FOR CONSTRUCTION DATE:NOVEMBER, 2021

PROJECT TITLE:
BLOOMFIELD-TARIFFVLLE
MULTI-USE TRAIL CONNECTOR

CADD FILENAME: SPM-4237300.DWG

TOWN:
BLOOMFIELD-SIMSBURY, CONNECTICUT

DRAWING TITLE:
SIGN & PAVEMENT MARKING PLAN

PROJECT NO.: 42373.00
DRAWING NO.: SPM-06
SHEET NO.: 47 OF 95

Nov 17, 2021

MOVEMENT DIAGRAM

	NTOR	PHASE 1	PHASE 2	PHASE 3	PHASE 4	PHASE 5	PHASE 6	PHASE 7	PHASE 8	
		6, 1, 2	1, 2, 3, 4	P	6, 5					

FACE #	FLASH	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL
1	Y	← G	←Y G	G	G	Y	R	R	R	R	R	R	R															
2	Y	G	G	G	G	Y	R	R	R	R	R	R	R															
3	Y	R	R	R	G	Y	R	R	R	R	R	R	R															
4	Y	R	R	R	G	Y	R	R	R	R	R	R	R															
5	R	R	R	R	R	R	R	R	R	R	G	Y	R															
6	R	R →	R →Y	R	R	R	R	R	R	R	R ③G	R ③G	R ④G															
8	R	R	R	R	R	R	R	R	R	R	G	Y	R															
P		←		DW			→	WØ	←	DW			→															

INTERVALS	PHASE 1	PHASE 2	PHASE 3	PHASE 4	PHASE 5	PHASE 6	PHASE 7	PHASE 8	
MIN GRN	5	15		5					
WALK			7 ①						
PED CLR			20 ②						
VEH EXT	2	2.5	ACCESSIBLE PEDESTRIAN SIGNAL	2					
MAX 1	7	39		29					
MAX 2	15	35		34					
YELLOW	3.0	4.8	4	3.0					
RED	1.0	2.5	0	1.0					
ADD INIT									
MAX INIT			COUNTDOWN PEDESTRIAN SIGNAL						
TBR									
TTR									
MIN GAP									
MODE	NON-LOCK	MIN RECALL	NON-LOCK	NON-LOCK	OFF	OFF	OFF	OFF	OFF
INT START		THIS PHASE							

TECHNICAL NOTES

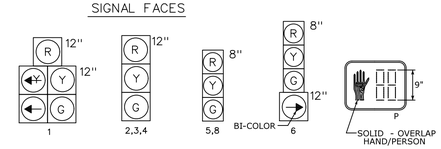
STANDARD OVERLAP SKIP FEATURES APPLY
① PERCUSSIVE TONE ONLY DURING WALK INTERVAL.
② COUNTDOWN ONLY DURING FLASHING PEDESTRIAN CHANGE INTERVAL.
③ TO BE Y →R▶ IF FOLLOWED BY PHASE 2.
④ TO BE R IF FOLLOWED BY PHASE 2.

OFFICE RECORD

REV # 10 TIR # N/A SM # 100777 SIGNAL REVISED: 7/5/2017
REVISED TIMINGS UNDER PROJECT 174-387
REV # TIR # N/A SM # SIGNAL REVISED:
REVISED SIGNAL HEAD LOCATION, INTERSECTION GEOMETRY, AND PED FACILITIES BY PERMIT.

DETECTORS				SYSTEM LOC	COORDINATION TYPE: NONE					
					PROGRAM			CYCLE	OFFSET	
IDENT	SIZE (WXL)	TURNS	MODE	MASTER	FUNCTION	TIME	DAYS		SEC	%
D1	20'X6'	4	PRESENCE		FLASH	NONE	DAILY			
D2, D2A	14'X6'	3	PRESENCE		MAX 1	ALL OTHER TIMES				
D2B, D2C	14'X6'	3	PRESENCE			0700-0900				
D4	6'X6'	3	PRESENCE		MAX 2	1500-1800	M-F			
D4A	6'X6'	3	PRESENCE							

SIGNAL FACES



FACE 8 HAS TUNNEL VISORS

ALL INDICATIONS HAVE LED LAMPS

CONSTRUCTION NOTES:

ALL MATERIAL AND CONSTRUCTION METHODS SHALL CONFORM TO THE FOLLOW CURRENT D.O.T. DOCUMENTS WHICH CAN BE ACCESSED ON THE D.O.T. WEBSITE:
* STANDARD SPECIFICATIONS FOR ROADS, BRIDGES AND INCIDENTAL CONSTRUCTION,
* SUPPLEMENTAL SPECIFICATIONS TO THE STANDARD SPECIFICATIONS,
* SPECIAL PROVISIONS TO THE STANDARD SPECIFICATIONS,
* STANDARD INSTALLATION AND GUIDE DETAIL SHEETS.

ALL TRAFFIC SIGNAL EQUIPMENT IS EXISTING EXCEPT AS NOTED.

REMOVE ALL ABANDONED TRAFFIC SIGNAL EQUIPMENT PER SPECIAL PROVISION.

STAKE R.O.W PRIOR TO EXCAVATION.

THE LOCATION OF TRAFFIC SIGNAL FOUNDATIONS WHEN IN OR ADJACENT TO SIDEWALKS SHALL BE VERIFIED PRIOR TO INSTALLATION TO PROVIDE A FREE PATH OF NOT LESS THAN 4 FEET. IF A MINIMUM 4 FOOT FREE PATH IS UNAVAILABLE NOTIFY THE ENGINEER AND CONTACT THE DIVISION OF TRAFFIC ENGINEERING.

ANY PROPOSED REVISIONS TO THE LOCATION OF THE APPURTENANCES SHOWN ON THE PLAN MUST BE SUBMITTED FOR REVIEW AND APPROVAL BY THE DIVISION OF TRAFFIC ENGINEERING PRIOR TO INSTALLATION.

SIDEWALK RAMPS TO BE CONSTRUCTED PER PLAN SHEET PLN-09.

(X) UTILITY POLE HELT #1421 TO BE RELOCATED BY OTHERS.

(Y) INSTALL PEDESTAL FOUNDATION ADJACENT TO LANDING AREA. INSTALL 8' ALUMINUM PEDESTAL, COUNTDOWN PEDESTRIAN SIGNAL, APS PUSHBUTTON AND SIGN (31-0856).

MODIFY CONTROLLER FOUNDATION TO ACCEPT NEW CONDUIT.

(Z) MODIFY EXISTING HANDHOLE TO ACCEPT NEW CONDUIT.

MODIFY EXISTING CONTROLLER TO ACCOMMODATE CHANGES. SUPPLY 5 COPIES OF REVISED CABINET WIRING DIAGRAMS AND A DIGITAL PDF COPY TO DOT.TRAFFICELECTRICAL@CT.GOV.

(U) LOCATE EXISTING CONDUIT. EXTEND INTO PROPOSED HANDHOLE.

CLEAN EXISTING CONDUIT WHERE REQUIRED.

CLEAN EXISTING HANDHOLE WHERE REQUIRED.

INSTALL NEW LOOP DETECTORS D4 AND D4A CENTERED IN LANE AS SHOWN ON THE PLAN AND 8' APART UNLESS OTHERWISE SPECIFIED.

SERIES SPLICE SEGMENTED LOOPS PER LANE.
CONNECT NEW LOOP DETECTORS TO EXISTING CONTROLLER WITH NEW 14/2 CABLES.

IF EXISTING LOOP AMPLIFIERS FOR LOOP D4 AND D4A DO NOT WORK, REPLACE THEM WITH NEW.

COORDINATE WITH UTILITY COMPANY REPRESENTATIVES LISTED IN THE SPECIAL PROVISION, 1.07 LEGAL RELATIONS AND RESPONSIBILITIES.

RELOCATE EXISTING SIGNAL HEADS 3, 4, & 5 AS SHOWN ON THE PLAN.

(P) REMOVE EXISTING SIGNAL HEAD FACING EAST SIDE OF ROUTE 189 AND REMOVE ASSOCIATED WIRING.

(Q) REMOVE EXISTING PUSH BUTTONS, SIGNS, AND ASSOCIATED WIRING FROM EXISTING SPAN POLE. INSTALL TOGGLE BOLT AND WASHER TO SEAL HOLES.

INSTALL BI-COLOR RIGHT ARROW ON SIGNAL HEAD 6. ENSURE BOTTOM OF SIGNAL HEAD 6 IS BETWEEN 16' AND 18' ABOVE THE ROAD.

SIGN LEGEND

(A) INSTALL. 31-0802 (STOP HERE ON RED)
(C) INSTALL. 31-0552 (STOP)
(D) INSTALL. 41-0317 AND 41-0436 (SIG. AH. - 750')
(E) EXIST. SPAN MTD. 31-0823 (NTOR)
(F) INSTALL 31-0290 (↖,↗) AND SUBMOUNT 31-0806 (DO NOT BLOCK INTERSECTION)
(G) INSTALL 31-0222 (↖↑)
(H) INSTALL 31-0290 (↖,↗)

NOTES

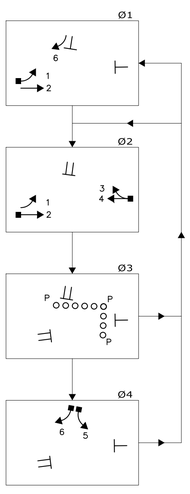
TOWN OF SIMSBURY TO MAINTAIN "DO NOT BLOCK THE BOX" PAVEMENT MARKINGS ON ROUTE 315.

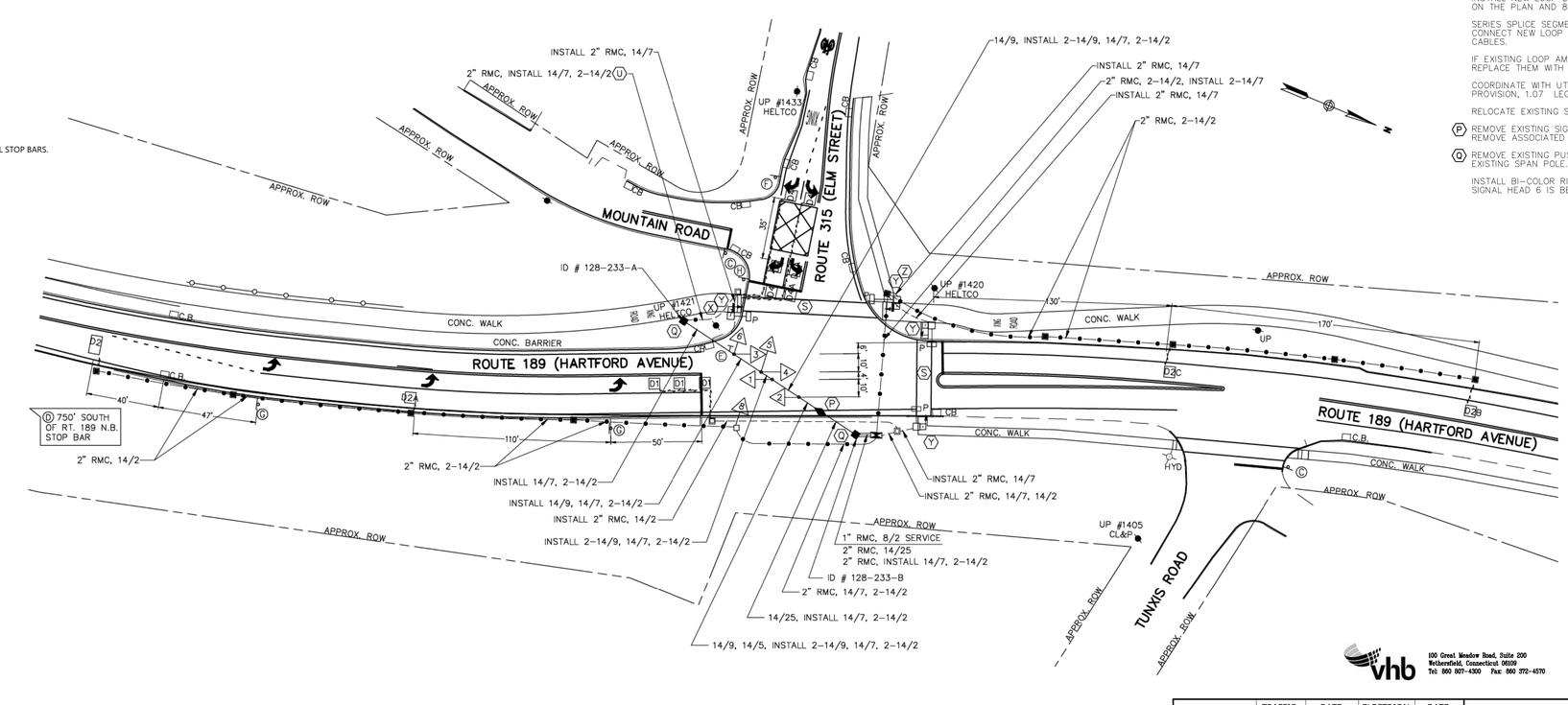
STATE TO MAINTAIN ALL OTHER PAVEMENT MARKINGS AND SIGNS ON ROUTE 189 AND ROUTE 315 AND ALL STOP BARS.

REFER TO SEPARATE PLAN FOR PAVEMENT MARKINGS AND ADDITIONAL SIGNING.

(S) BAR TYPE CROSSWALK - STATE MAINTAINED

PHASE DIAGRAM





OCTOBER 2016 AM PEAK HOUR				JANUARY 2018 PM PEAK HOUR			
558	112			155	160		
205		51		627		191	
148		814		683		204	

vhb
100 Great Meadow Road, Suite 200
Wethersfield, Connecticut 06109
Tel: 860 807-4300 Fax: 860 372-4570

SPAN POLE INFORMATION

ID #	POLE LENGTH	BOLT CIRCLE	YEAR INSTALLED
128-233-A	30'	16"	1989
128-233-B	30'	16"	1989

	TRAFFIC	DATE	ELECTRICAL	DATE
ENGINEER				
DRAWN BY				
CHECKED BY				
SUBMITTED BY				
APPROVED BY				
APPROVED DATE				

REV # INTERSECTION # 128-233

ENERGY BY- STATE	ADDRESS #
MAINT LEVEL 2	SERVICE POLE - HELT 1421
	UNMETERED SERVICE

NO.	DATE	REVISION DESCRIPTION

LEGEND:
R RED
Y YELLOW
G GREEN
R RED ARROW
Y YELLOW ARROW
GREEN ARROW
WØ WALK/ PED. CLR
D.W. DON'T WALK
FL. FLASHING

PROPOSED WOOD SPAN POLE
EXISTING WOOD SPAN POLE
PROPOSED STEEL SPAN POLE
EXISTING STEEL SPAN POLE
PROPOSED UTILITY POLE
EXISTING UTILITY POLE
PEDESTAL MOUNTING
PEDESTRIAN PUSH BUTTON & SIGN
DIRECTIONAL ARW. FOR PUSH BUTTON

TRAFFIC SIGNAL FACE
PEDESTRIAN SIGNAL FACE
DET. LEADS IN SAW CUT
PROPOSED RMC (RIGID METAL CONDUIT)
EXISTING RMC (RIGID METAL CONDUIT)
AUXILIARY TERMINATION CABINET
AUXILIARY EQUIPMENT CABINET
VIDEO DETECTION ZONE

PROPOSED CONTROLLER
EXISTING CONTROLLER
LOOP DETECTOR
SD SYSTEM DETECTOR
MAGNETIC DETECTOR
OPTICAL DETECTOR
VIDEO DETECTOR
AUDIO DETECTOR

SIDEWALK RAMP
CABLE CLOSURE
WIRELESS SENSOR
WIRELESS RECEIVER
WIRELESS TRANSMITTER
GUY WIRE
PROPOSED HANDHOLE
EXISTING HANDHOLE

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

ROUTE 189 AT ROUTE 315 (ELM ST) AND MOUNTAIN RD

DATE PLOTTED : 9/9/2021 \\vhb\gbl\proj\Wethersfield\42373.00\cad\ts\planset\010_TR_ASSET_128-233_modified MERGED.dgn

SCALE 1" = 40'

TOWN: SIMSBURY

DRAWING TITLE: TRAFFIC CONTROL SIGNAL PLAN

PROJECT NO.

DRAWING NO. TCS-01

SHEET NO. 48 OF 95

MOVEMENT DIAGRAM

NTOR	PHASE 1	PHASE 2	PHASE 3	PHASE 4	PHASE 5	PHASE 6	PHASE 7	PHASE 8	
	FL. R 2, FL. R 2, FL. Y 1, FL. Y 1								

FACE #	FLASH	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL
1	Y	FL,Y	FL,Y	FL,Y																								
2	R	FL,R	FL,R	FL,R																								

INTERVALS	PHASE 1	PHASE 2	PHASE 3	PHASE 4	PHASE 5	PHASE 6	PHASE 7	PHASE 8	
MIN GRN									
WALK									
PED CLR									
VEH EXT									
MAX 1									
MAX 2									
YELLOW									
RED									
ADD INIT									
MAX INIT									
TBR									
TTR									
MIN GAP									
MODE									
INIT START									

TECHNICAL NOTES

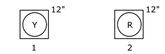
STANDARD OVERLAP SKIP FEATURES APPLY

OFFICE RECORD

REV # TIR # N/A SM # SIGNAL REVISED:

INSTALLED SHARED-USE PATH; REVISED SIGNS AND PAVEMENT MARKINGS UNDER LOTCIP PROJECT L028-0001 VIA ENCROACHMENT PERMIT.

SIGNAL FACES



FACE 2 HAVE TUNNEL VISORS
ALL INDICATIONS ARE LED

SIGN LEGEND

(A) RELOCATE 31-0552 (STOP) WITH SUBMOUNTED 41-0564 (CROSSING TRAFFIC DOES NOT STOP)

(B) INSTALL 31-0526 (KEEP RT.)

(C) EXISTING 31-0552Z (STOP) WITH SUBMOUNTED 41-0564Z (CROSSING TRAFFIC DOES NOT STOP)

(D) INSTALL 31-0532 (STOP)

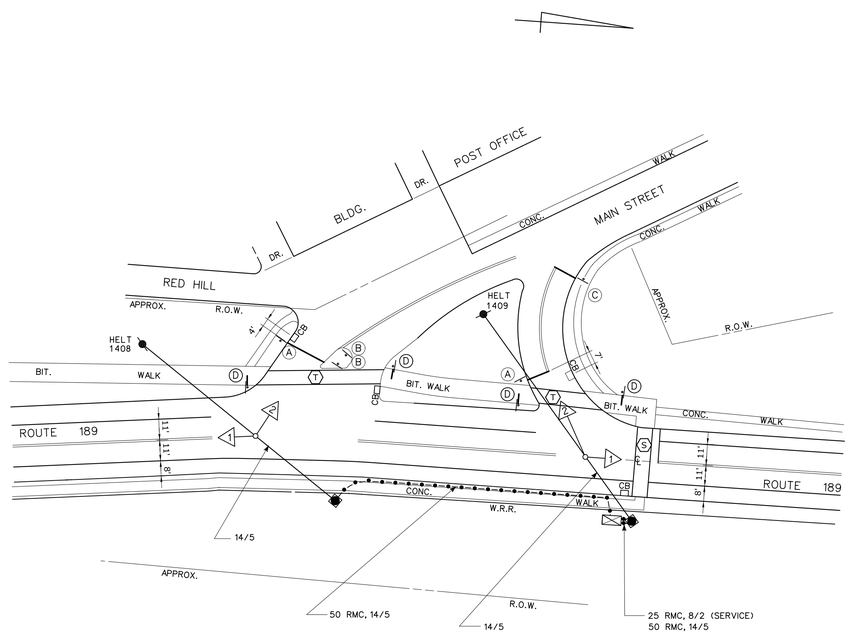
NOTES :

STATE TO MAINTAIN PAVEMENT MARKINGS ON ROUTE 189 AND STOP BARS ON THE MAIN ST. APPROACH TO ROUTE 189.

TOWN TO MAINTAIN ALL OTHER PAVEMENT MARKINGS ON MAIN STREET.

(S) BAR TYPE CROSSWALK - STATE MAINTAINED

(T) BAR TYPE CROSSWALK - TOWN MAINTAINED



SPAN POLE INFORMATION

8000 mm, B.C. 510 mm, LOAD AT YIELD 27,150 NEWTONS

vhb
100 Great Meadow Road, Suite 200
Wethersfield, Connecticut 06109
Tel: 860 807-4300 Fax: 860 272-4570

	TRAFFIC DESIGN	ELECTRICAL DESIGN
ENGINEER		
DRAWN BY		
CHECKED BY		
SUBMITTED BY		
APPROVED BY		
APPROVED DATE		

REV # INTERSECTION # 128-205

ENERGY BY STATE	ADDRESS #
MAINT LEVEL 5	SERVICE POLE 1409
	UNMETERED SERVICE

NO.	DATE	REVISION DESCRIPTION

LEGEND:
R, Y, G RED, YEL, GRN
R RED ARROW
Y YELLOW ARROW
G GREEN ARROW
W WALK/ PED. CLR
D.W. DON'T WALK
FL. FLASHING

PROPOSED WOOD SPAN POLE
EXISTING WOOD SPAN POLE
PROPOSED STEEL SPAN POLE
EXISTING STEEL SPAN POLE
PROPOSED UTILITY POLE
EXISTING UTILITY POLE
PEDESTAL MOUNTING
PEDESTRIAN PUSH BUTTON & SIGN
DIRECTIONAL ARW. FOR PUSH BUTTON

TRAFFIC SIGNAL FACE
PEDESTRIAN SIGNAL FACE
DET. LEADS IN SAW CUT
PROPOSED RMC (RIGID METAL CONDUIT)
EXISTING RMC (RIGID METAL CONDUIT)
AUXILIARY TERMINATION CABINET
AUXILIARY EQUIPMENT CABINET
VIDEO DETECTION ZONE

PROPOSED CONTROLLER
EXISTING CONTROLLER
LOOP DETECTOR
SD SYSTEM DETECTOR
MAGNETIC DETECTOR
OPTICAL DETECTOR
VIDEO DETECTOR
AUDIO DETECTOR

VC VIDEO CAMERA CABLE
CABLE CLOSURE
WIRELESS SENSOR
WIRELESS RECEIVER
WIRELESS TRANSCEIVER
GUY WIRE
PROPOSED HANDHOLE
EXISTING HANDHOLE

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

ROUTE 189 (HARTFORD AVENUE)
AT MAIN STREET

TOWN:
TOWN OF SIMSBURY

DRAWING TITLE:
TRAFFIC CONTROL SIGNAL PLAN

PROJECT NO.

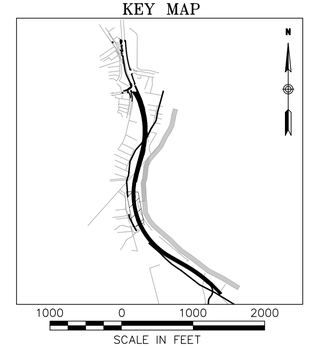
DRAWING NO. TCS-02

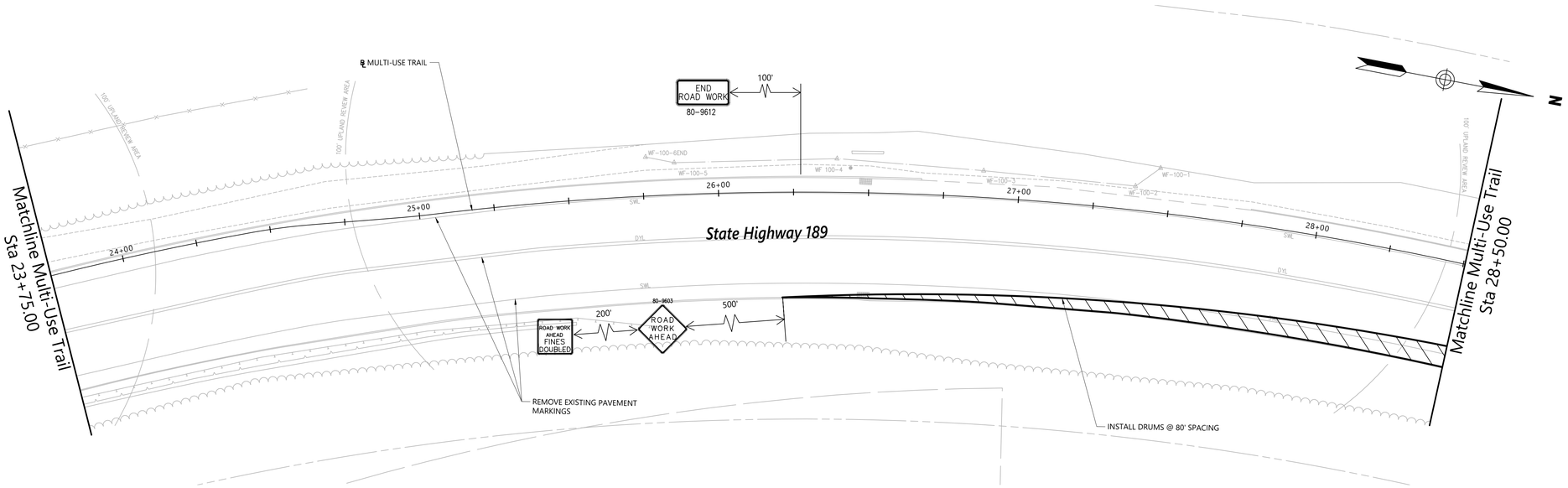
SHEET NO. 49 OF 95

DATE PLOTTED : 8/6/2021 \\vhb\gbl\proj\Wethersfield\42373.00\cad\ts\planset\002_TR_ASSET_128-205 - modified.dgn

SCALE 1" = 40'

KEY MAP





WORK AREA

NOTES:

1. ALL SIGN LOCATIONS INDICATED ON THE PLAN ARE APPROXIMATE. EXACT LOCATIONS SHALL BE DETERMINED IN FIELD AS DIRECTED BY THE ENGINEER
2. SEE SPECIAL PROVISION "ITEM #0971001A-MAINTENANCE AND PROTECTION OF TRAFFIC", CONSTRUCTION TRAFFIC CONTROL PLAN 15 FOR SIGN AND DRUM LAYOUT
3. ACTUAL LENGTH OF WORK AREA IS VARIABLE
4. ALL POST MOUNTED CONSTRUCTION SIGNS TO HAVE BARRICADE WARNING LIGHTS (HIGH INTENSITY) MOUNTED ON THE TOP EDGE OF SIGN

SUGGESTED PHASE 1 CONSTRUCTION SEQUENCE:

1. REMOVE EXISTING PAVEMENT MARKINGS THAT CONFLICT WITH TEMPORARY LANE SHIFT.
2. INSTALL SIGNS, TEMPORARY PAVEMENT MARKINGS, CONES OR DRUMS WHERE REQUIRED.
3. INSTALL EROSION AND SEDIMENTATION CONTROL MEASURES.
4. PERFORM ROADWAY WIDENING.
5. PERFORM MILL AND WIDENING.
6. INSTALL BITUMINOUS CONCRETE LIP CURING.
7. RESET METAL BEAM RAIL.
8. PLACE TOPSOIL AND TURF ESTABLISHMENT.
9. REMOVE TEMPORARY TRAFFIC CONTROL MEASURES.

PHASE 1

REV.	DATE	DESCRIPTION	SHEET. NO.
		REVISIONS	

20 0 20
SCALE IN FEET

DESIGNER: EAN
DRAFTER: EAN
CHECKED BY: BAA
APPROVED BY: SON

vhb
Engineers Scientists Planners Designers

NOT ISSUED FOR CONSTRUCTION DATE:NOVEMBER, 2021

PROJECT TITLE: BLOOMFIELD-TARIFFVLLE MULTI-USE TRAIL CONNECTOR

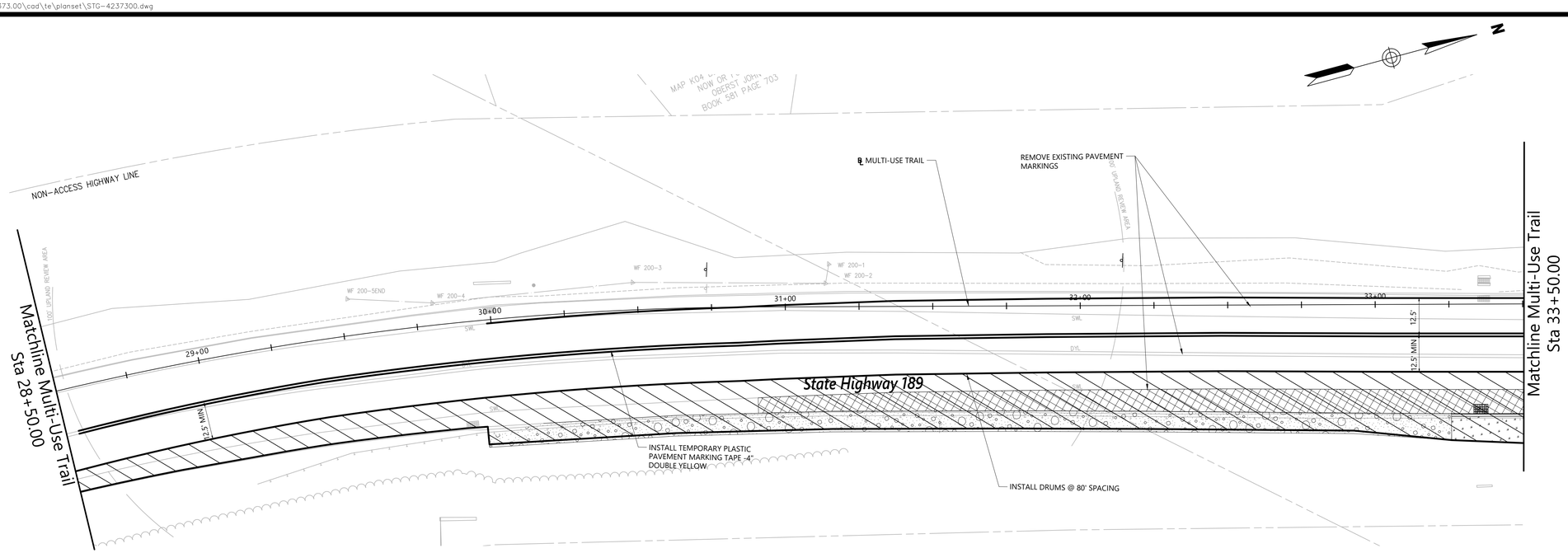
CADD FILENAME: STG-4237300.DWG

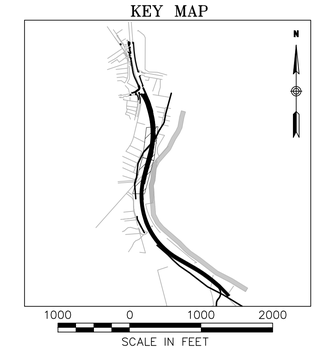
TOWN: BLOOMFIELD-SIMSBURY, CONNECTICUT

DRAWING TITLE: STAGING PLANS

PROJECT NO.: 42373.00
DRAWING NO.: STG-01
SHEET NO.: 50 OF 95

Nov 17, 2021





WORK AREA

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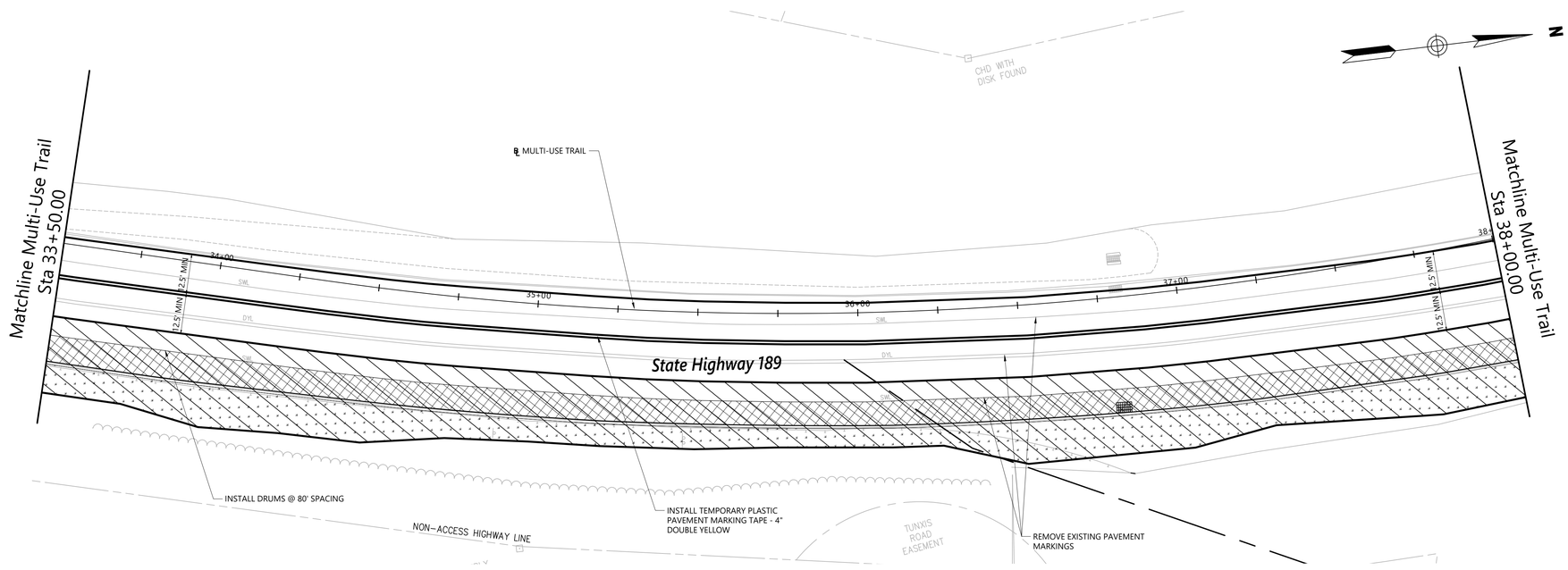
2. SEE SPECIAL PROVISION "ITEM #0971001A-MAINTENANCE AND PROTECTION OF TRAFFIC", CONSTRUCTION TRAFFIC CONTROL PLAN 15 FOR SIGN AND DRUM LAYOUT
3. ACTUAL LENGTH OF WORK AREA IS VARIABLE
4. ALL POST MOUNTED CONSTRUCTION SIGNS TO HAVE BARRICADE WARNING LIGHTS (HIGH INTENSITY) MOUNTED ON THE TOP EDGE OF SIGN



SUGGESTED PHASE 1 CONSTRUCTION SEQUENCE:

1. REMOVE EXISTING PAVEMENT MARKINGS THAT CONFLICT WITH TEMPORARY LANE SHIFT.
2. INSTALL SIGNS, TEMPORARY PAVEMENT MARKINGS, CONES OR DRUMS WHERE REQUIRED.
3. INSTALL EROSION AND SEDIMENTATION CONTROL MEASURES.
4. PERFORM ROADWAY WIDENING.
5. PERFORM MILL AND WIDENING.
6. INSTALL BITUMINOUS CONCRETE LIP CURING.
7. RESET METAL BEAM RAIL.
8. PLACE TOPSOIL AND TURF ESTABLISHMENT.
9. REMOVE TEMPORARY TRAFFIC CONTROL MEASURES.

PHASE 1

REV.	DATE	DESCRIPTION	SHEET. NO.
		REVISIONS	

20 0 20
SCALE IN FEET

DESIGNER: EAN
DRAFTER: EAN
CHECKED BY: BAA
APPROVED BY: SON

vhb
Engineers Scientists Planners Designers

NOT ISSUED FOR CONSTRUCTION DATE:NOVEMBER, 2021

PROJECT TITLE: BLOOMFIELD–TARIFFVLLE MULTI–USE TRAIL CONNECTOR

CADD FILENAME: STG–4237300.DWG

TOWN: BLOOMFIELD–SIMSBURY, CONNECTICUT

DRAWING TITLE: STAGING PLANS

PROJECT NO.: 42373.00
DRAWING NO.: STG–02
SHEET NO.: 51 OF 95

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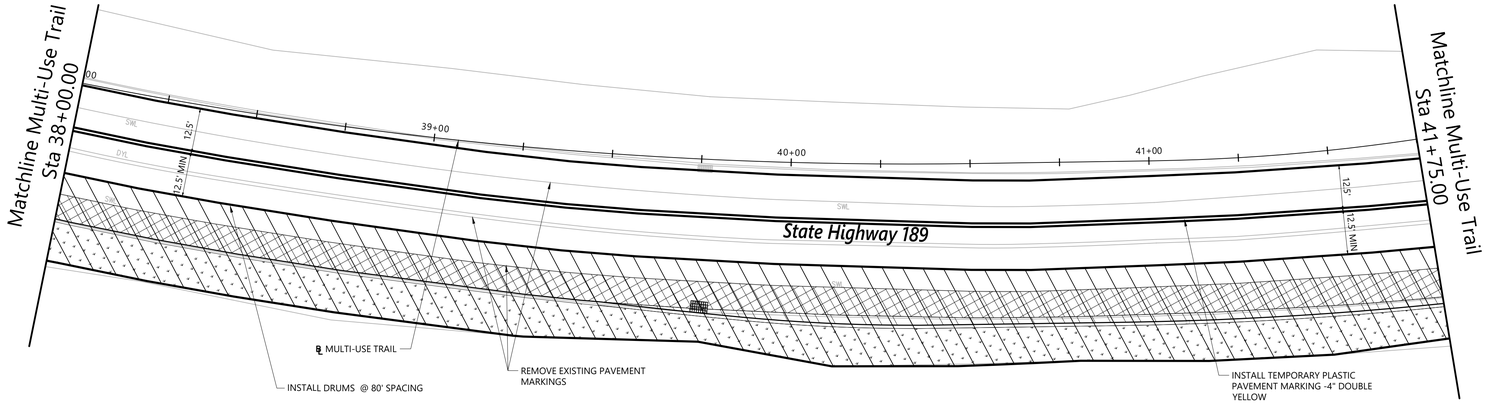
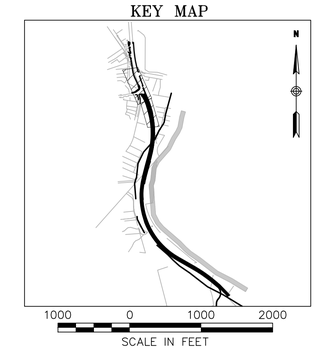
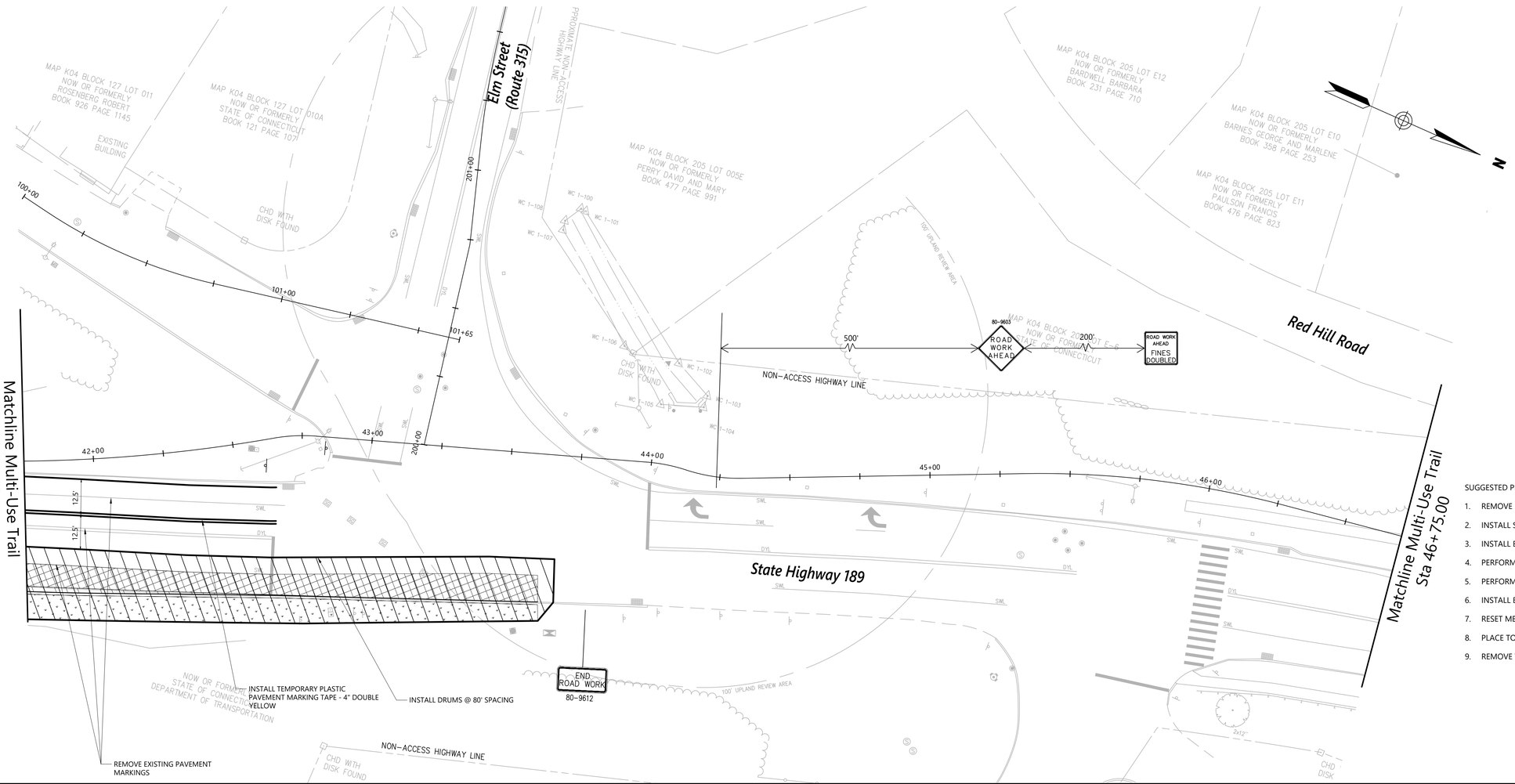






WORK AREA

NOTES:

1. ALL SIGN LOCATIONS INDICATED ON THE PLAN ARE APPROXIMATE. EXACT LOCATIONS SHALL BE DETERMINED IN FIELD AS DIRECTED BY THE ENGINEER
2. SEE SPECIAL PROVISION "ITEM #0971001A-MAINTENANCE AND PROTECTION OF TRAFFIC", CONSTRUCTION TRAFFIC CONTROL PLAN 15 FOR SIGN AND DRUM LAYOUT
3. ACTUAL LENGTH OF WORK AREA IS VARIABLE
4. ALL POST MOUNTED CONSTRUCTION SIGNS TO HAVE BARRICADE WARNING LIGHTS (HIGH INTENSITY) MOUNTED ON THE TOP EDGE OF SIGN

SUGGESTED PHASE 1 CONSTRUCTION SEQUENCE:

1. REMOVE EXISTING PAVEMENT MARKINGS THAT CONFLICT WITH TEMPORARY LANE SHIFT.
2. INSTALL SIGNS, TEMPORARY PAVEMENT MARKINGS, CONES OR DRUMS WHERE REQUIRED.
3. INSTALL EROSION AND SEDIMENTATION CONTROL MEASURES.
4. PERFORM ROADWAY WIDENING.
5. PERFORM MILL AND WIDENING.
6. INSTALL BITUMINOUS CONCRETE LIP CURING.
7. RESET METAL BEAM RAIL.
8. PLACE TOPSOIL AND TURF ESTABLISHMENT.
9. REMOVE TEMPORARY TRAFFIC CONTROL MEASURES.

PHASE 1

REV.	DATE	DESCRIPTION	SHEET. NO.
		REVISIONS	

20 0 20
SCALE IN FEET

DESIGNER: EAN
DRAFTER: EAN
CHECKED BY: BAA
APPROVED BY: SON

vhb
Engineers Scientists Planners Designers

NOT ISSUED FOR CONSTRUCTION DATE:NOVEMBER, 2021

PROJECT TITLE:
BLOOMFIELD–TARIFFVLLE
MULTI–USE TRAIL CONNECTOR

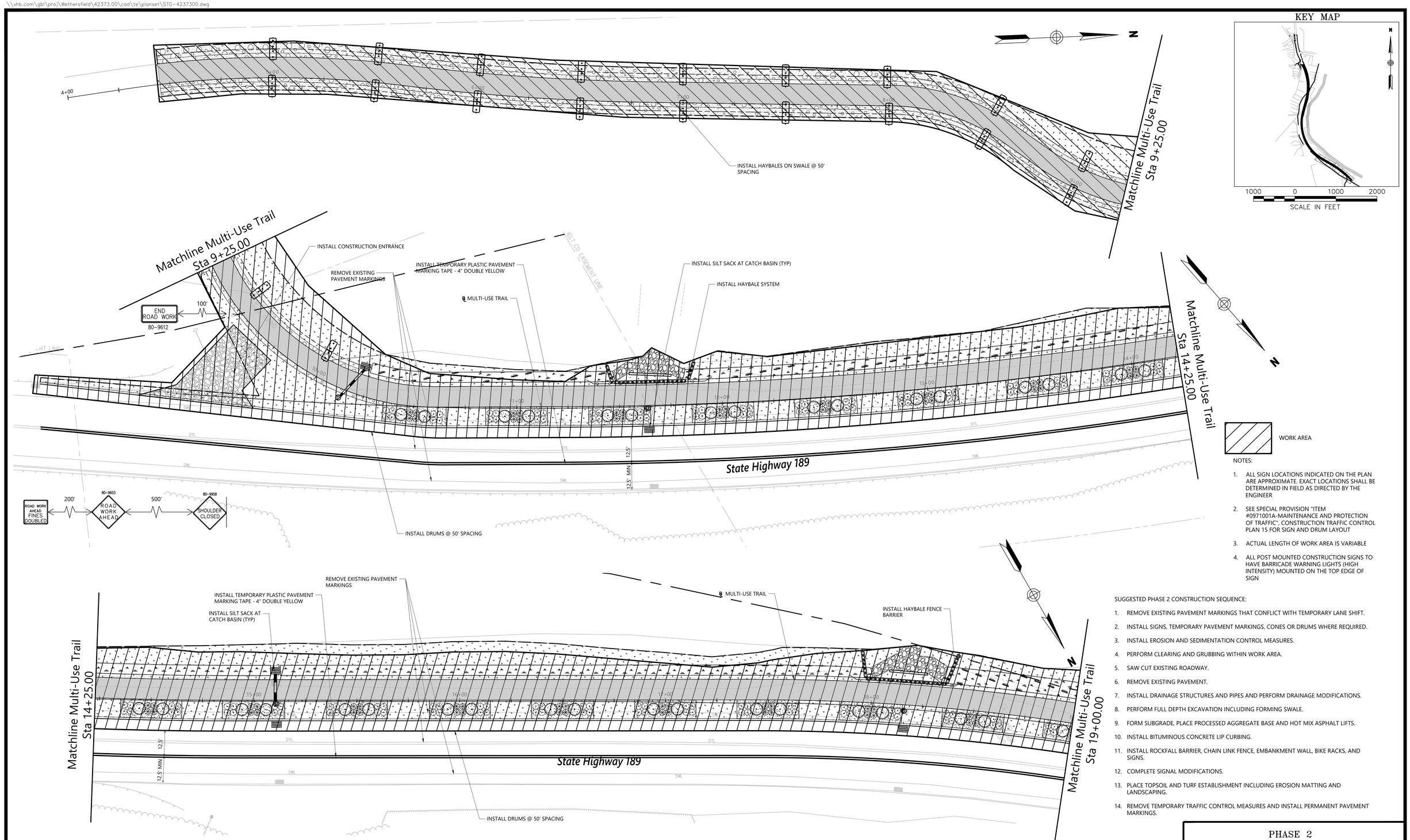
CADD FILENAME: STG-4237300.DWG

TOWN:
BLOOMFIELD–SIMSBURY,
CONNECTICUT

DRAWING TITLE:
STAGING
PLANS

PROJECT NO.: 42373.00
DRAWING NO.: STG–03
SHEET NO.: 52 OF 95

Nov 17, 2021



NOTES:

1. ALL SIGN LOCATIONS INDICATED ON THE PLAN ARE APPROXIMATE. EXACT LOCATIONS SHALL BE DETERMINED IN FIELD AS DIRECTED BY THE ENGINEER
2. SEE SPECIAL PROVISION "ITEM #0971001A-MAINTENANCE AND PROTECTION OF TRAFFIC", CONSTRUCTION TRAFFIC CONTROL PLAN 15 FOR SIGN AND DRUM LAYOUT
3. ACTUAL LENGTH OF WORK AREA IS VARIABLE
4. ALL POST MOUNTED CONSTRUCTION SIGNS TO HAVE BARRICADE WARNING LIGHTS (HIGH INTENSITY) MOUNTED ON THE TOP EDGE OF SIGN

SUGGESTED PHASE 2 CONSTRUCTION SEQUENCE:

1. REMOVE EXISTING PAVEMENT MARKINGS THAT CONFLICT WITH TEMPORARY LANE SHIFT.
2. INSTALL SIGNS, TEMPORARY PAVEMENT MARKINGS, CONES OR DRUMS WHERE REQUIRED.
3. INSTALL EROSION AND SEDIMENTATION CONTROL MEASURES.
4. PERFORM CLEARING AND GRUBBING WITHIN WORK AREA.
5. SAW CUT EXISTING ROADWAY.
6. REMOVE EXISTING PAVEMENT.
7. INSTALL DRAINAGE STRUCTURES AND PIPES AND PERFORM DRAINAGE MODIFICATIONS.
8. PERFORM FULL DEPTH EXCAVATION INCLUDING FORMING SWALE.
9. FORM SUBGRADE, PLACE PROCESSED AGGREGATE BASE AND HOT MIX ASPHALT LIFTS.
10. INSTALL BITUMINOUS CONCRETE LIP CURBING.
11. INSTALL ROCKFALL BARRIER, CHAIN LINK FENCE, EMBANKMENT WALL, BIKE RACKS, AND SIGNS.
12. COMPLETE SIGNAL MODIFICATIONS.
13. PLACE TOPSOIL AND TURF ESTABLISHMENT INCLUDING EROSION MATTING AND LANDSCAPING.
14. REMOVE TEMPORARY TRAFFIC CONTROL MEASURES AND INSTALL PERMANENT PAVEMENT MARKINGS.

PHASE 2

REV.	DATE	DESCRIPTION	SHEET. NO.
		REVISIONS	

20 0 20
SCALE IN FEET

DESIGNER: EAN
DRAFTER: EAN
CHECKED BY: BAA
APPROVED BY: SON

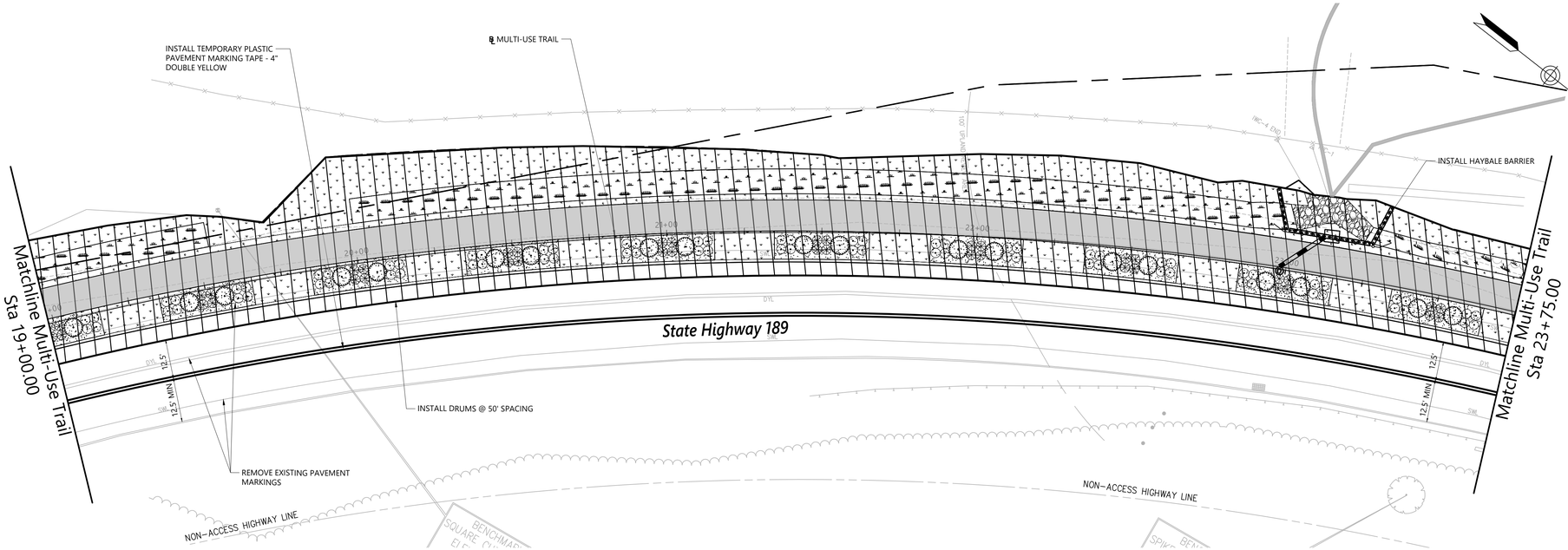
vhb
Engineers Scientists Planners Designers
NOT ISSUED FOR CONSTRUCTION DATE:NOVEMBER, 2021

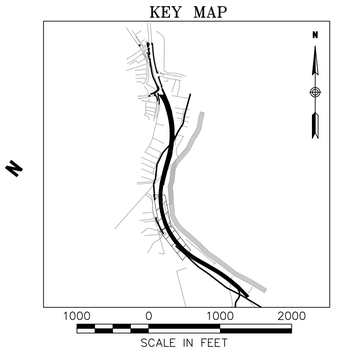
PROJECT TITLE: BLOOMFIELD–TARIFFVLLE MULTI–USE TRAIL CONNECTOR
CADD FILENAME: STG–4237300.DWG

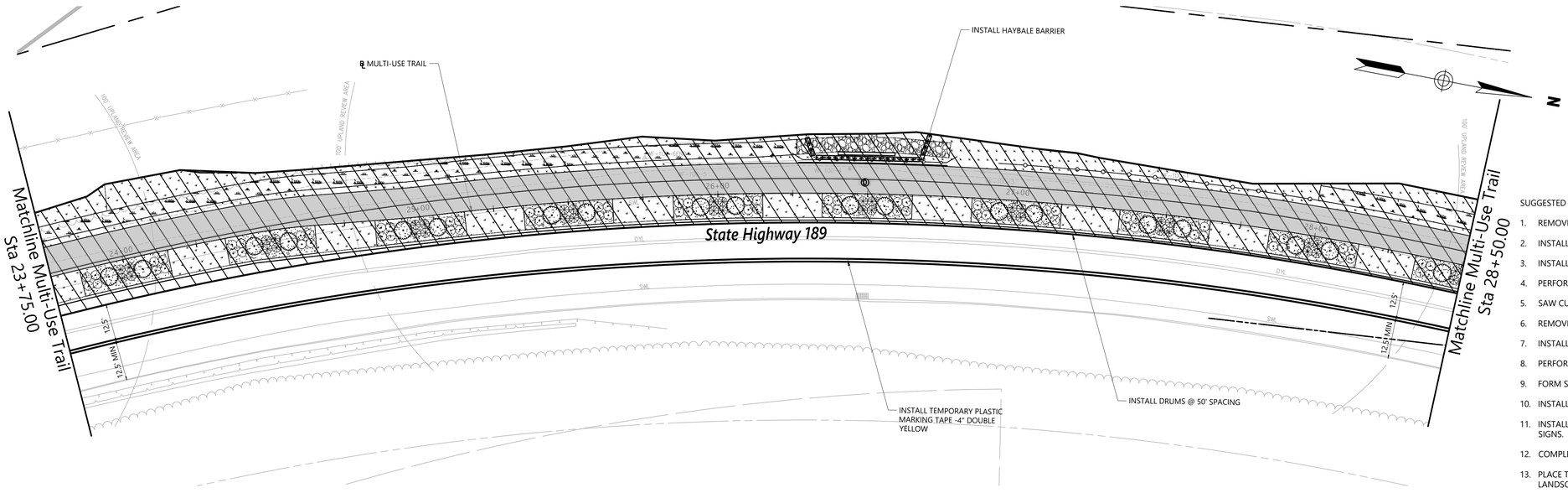
TOWN: BLOOMFIELD–SIMSBURY, CONNECTICUT
DRAWING TITLE: STAGING PLANS

PROJECT NO.: 42373.00
DRAWING NO.: STG–04
SHEET NO.: 53 OF 95

Nov 17, 2021







WORK AREA

NOTES:

1. ALL SIGN LOCATIONS INDICATED ON THE PLAN ARE APPROXIMATE. EXACT LOCATIONS SHALL BE DETERMINED IN FIELD AS DIRECTED BY THE ENGINEER
2. SEE SPECIAL PROVISION "ITEM #0971001A-MAINTENANCE AND PROTECTION OF TRAFFIC", CONSTRUCTION TRAFFIC CONTROL PLAN 15 FOR SIGN AND DRUM LAYOUT
3. ACTUAL LENGTH OF WORK AREA IS VARIABLE
4. ALL POST MOUNTED CONSTRUCTION SIGNS TO HAVE BARRICADE WARNING LIGHTS (HIGH INTENSITY) MOUNTED ON THE TOP EDGE OF SIGN

SUGGESTED PHASE 2 CONSTRUCTION SEQUENCE:

1. REMOVE EXISTING PAVEMENT MARKINGS THAT CONFLICT WITH TEMPORARY LANE SHIFT.
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14. REMOVE TEMPORARY TRAFFIC CONTROL MEASURES AND INSTALL PERMANENT PAVEMENT MARKINGS.

PHASE 2

REV.	DATE	DESCRIPTION	SHEET. NO.
		REVISIONS	

20 0 20
SCALE IN FEET

DESIGNER: EAN
DRAFTER: EAN
CHECKED BY: BAA
APPROVED BY: SON

vhb
Engineers Scientists Planners Designers

NOT ISSUED FOR CONSTRUCTION DATE:NOVEMBER, 2021

PROJECT TITLE:
BLOOMFIELD–TARIFFVLLE MULTI–USE TRAIL CONNECTOR

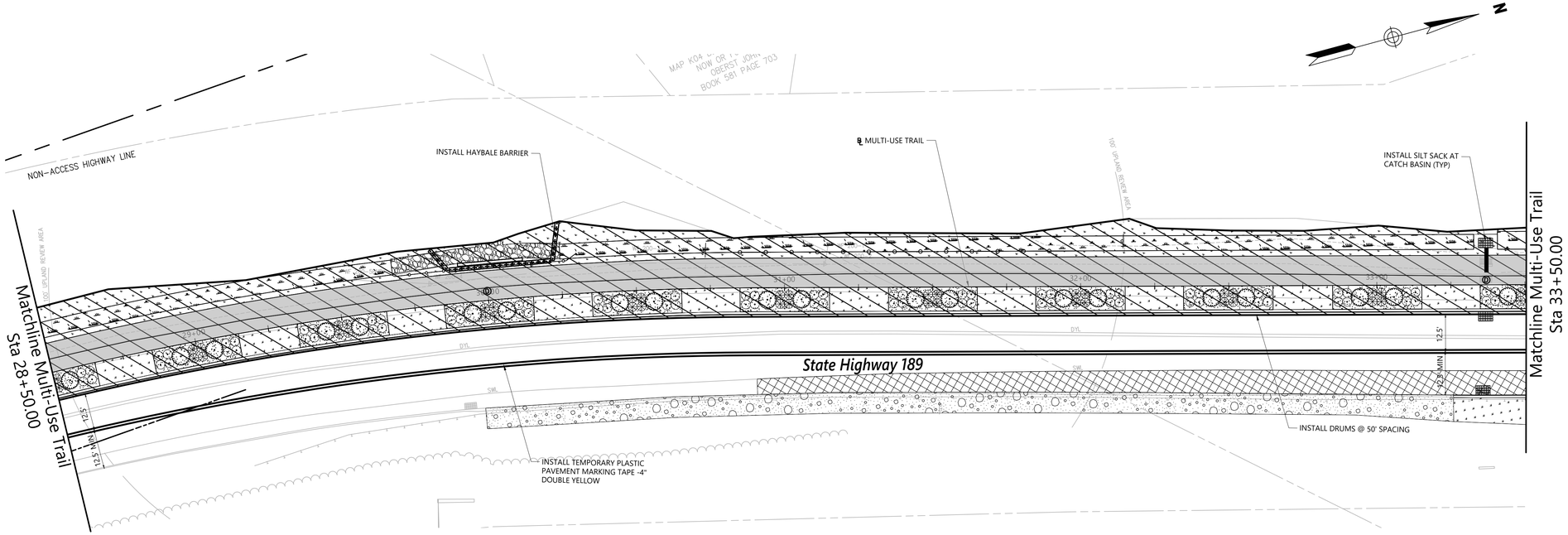
CADD FILENAME: STG-4237300.DWG

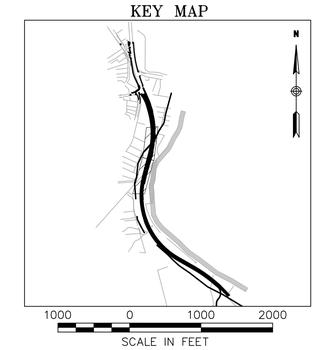
TOWN: BLOOMFIELD–SIMSBURY, CONNECTICUT

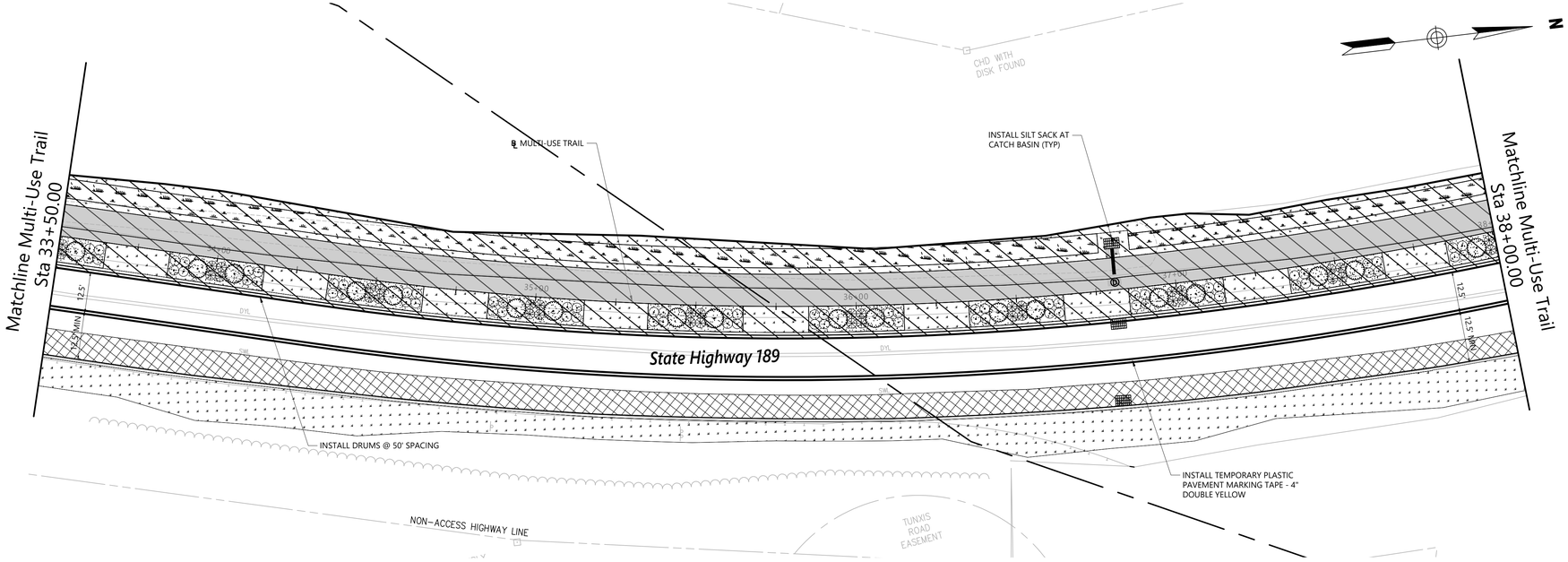
DRAWING TITLE: STAGING PLANS

PROJECT NO.: 42373.00
DRAWING NO.: STG–05
SHEET NO.: 54 OF 95

Nov 17, 2021







WORK AREA

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SUGGESTED PHASE 2 CONSTRUCTION SEQUENCE:

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PHASE 2

REV.	DATE	DESCRIPTION	SHEET. NO.
		REVISIONS	

20 0 20
SCALE IN FEET

DESIGNER: EAN
DRAFTER: EAN
CHECKED BY: BAA
APPROVED BY: SON

vhb
Engineers Scientists Planners Designers

NOT ISSUED FOR CONSTRUCTION DATE:NOVEMBER, 2021

PROJECT TITLE: BLOOMFIELD–TARIFFVLLE MULTI–USE TRAIL CONNECTOR

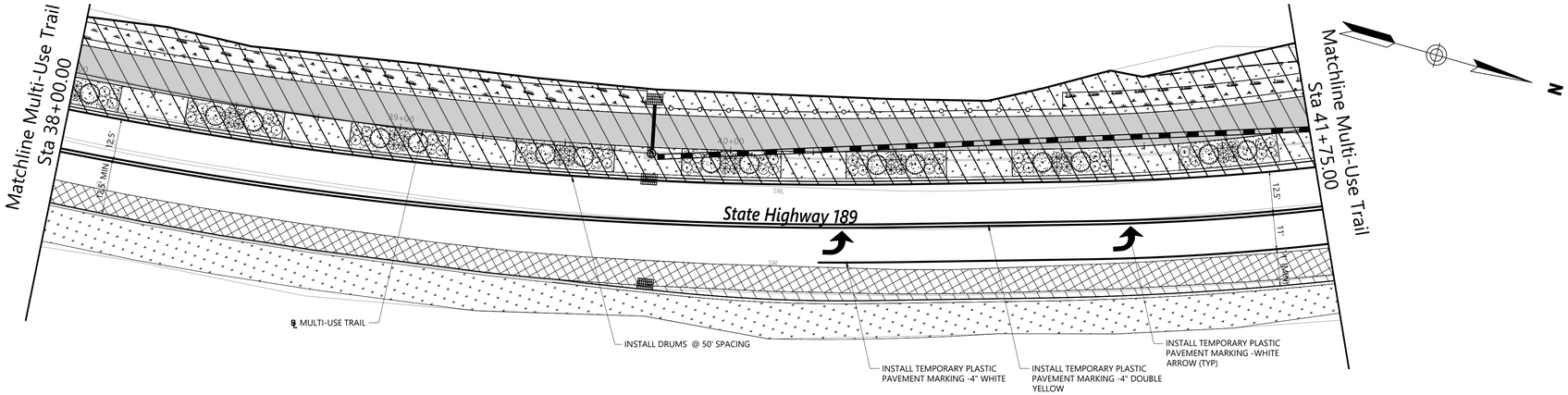
CADD FILENAME: STG–4237300.DWG

TOWN: BLOOMFIELD–SIMSBURY, CONNECTICUT

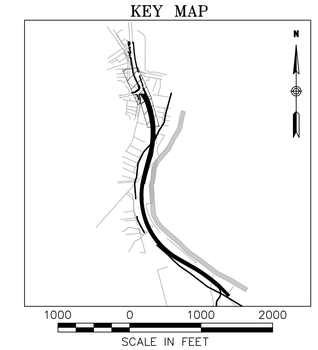
DRAWING TITLE: STAGING PLANS

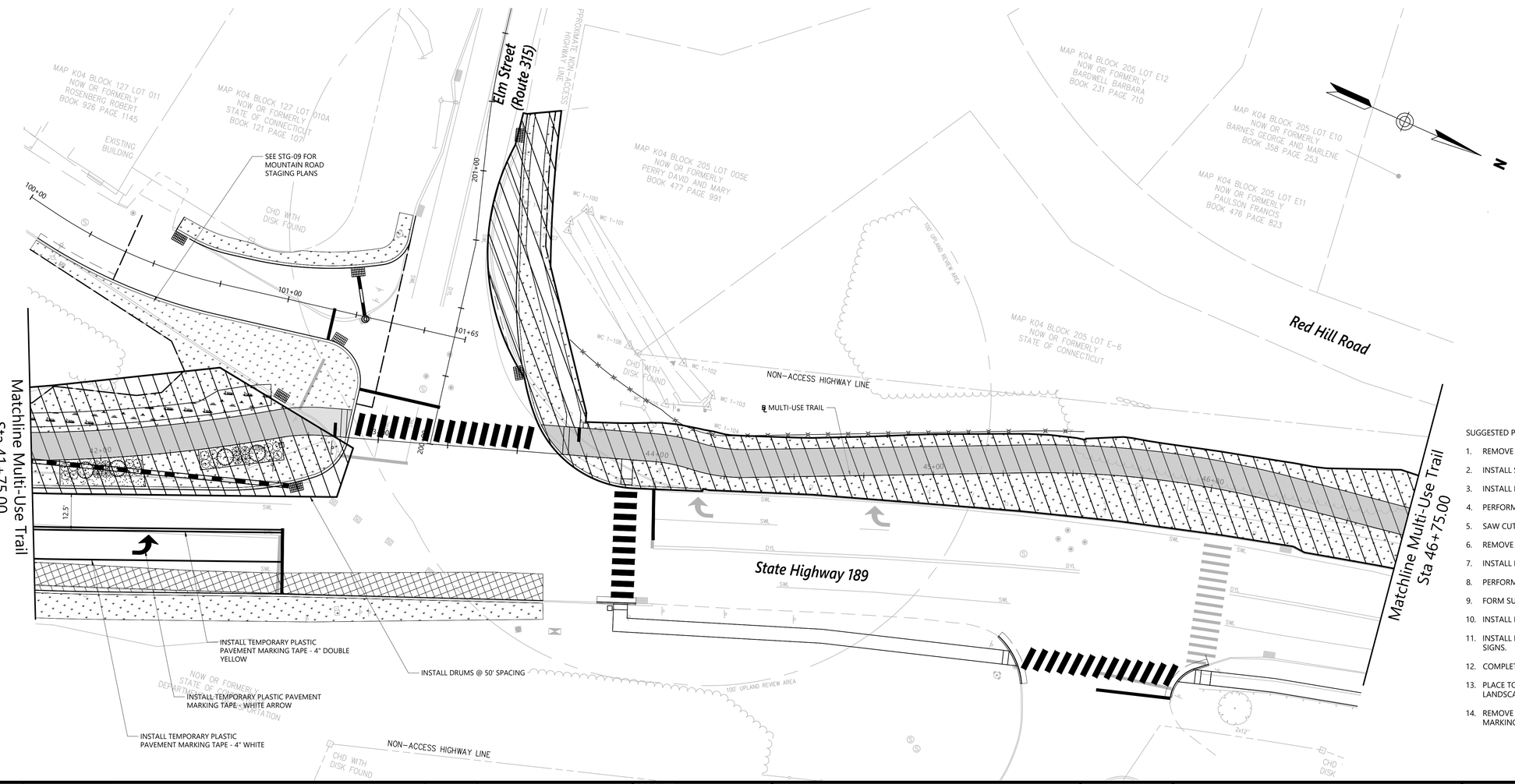
PROJECT NO.: 42373.00
DRAWING NO.: STG–06
SHEET NO.: 55 OF 95

Nov 17, 2021



KEY MAP





WORK AREA

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SUGGESTED PHASE 2 CONSTRUCTION SEQUENCE:

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PHASE 2

REV.	DATE	DESCRIPTION	SHEET. NO.
		REVISIONS	

20 0 20
SCALE IN FEET

DESIGNER: EAN
DRAFTER: EAN
CHECKED BY: BAA
APPROVED BY: SON

vhb
Engineers Scientists Planners Designers

NOT ISSUED FOR CONSTRUCTION DATE:NOVEMBER, 2021

PROJECT TITLE:
BLOOMFIELD–TARIFFVLLE
MULTI–USE TRAIL CONNECTOR

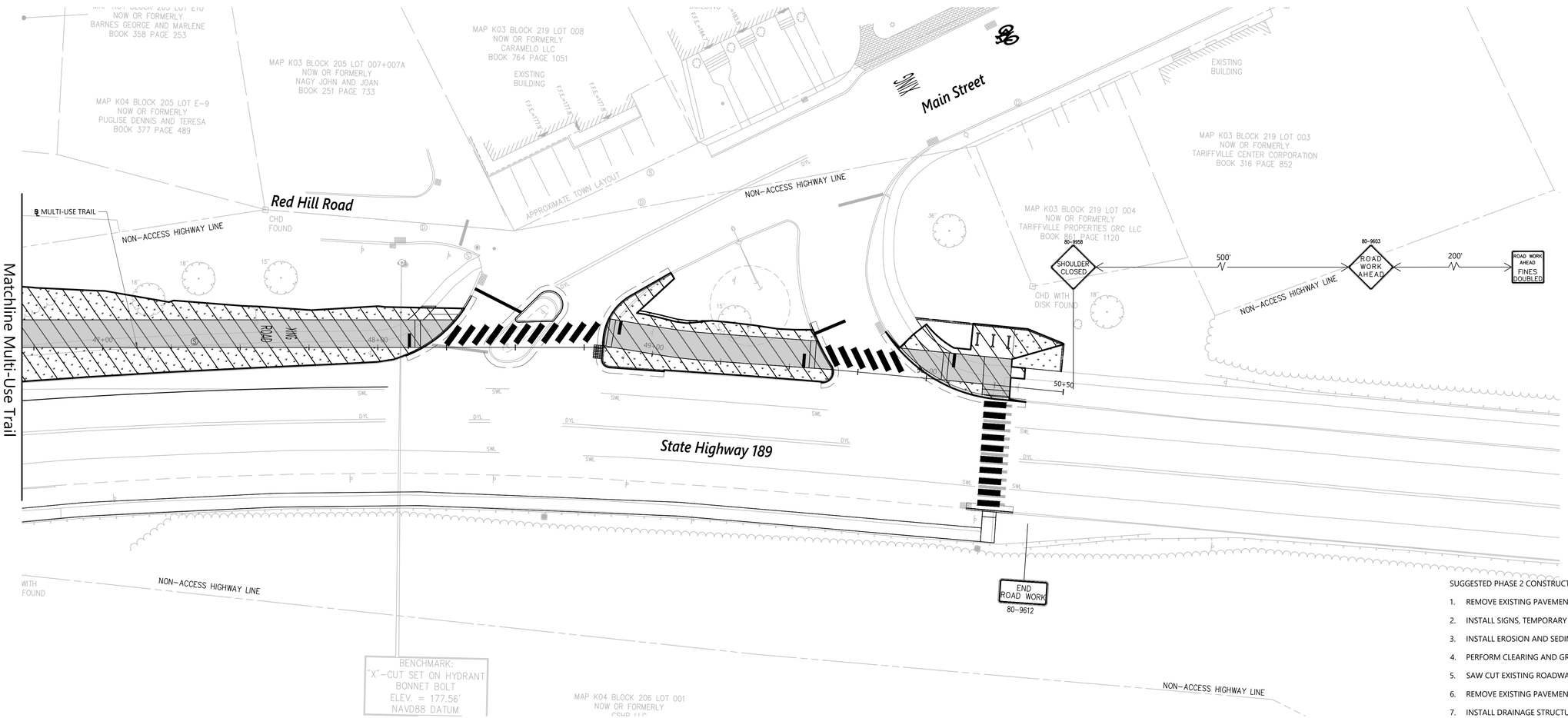
CADD FILENAME: STG–4237300.DWG

TOWN: BLOOMFIELD–SIMSBURY, CONNECTICUT

DRAWING TITLE: STAGING PLANS

PROJECT NO.: 42373.00
DRAWING NO.: STG–07
SHEET NO.: 56 OF 95

Nov 17, 2021



KEY MAP

WORK AREA

NOTES:

1. ALL SIGN LOCATIONS INDICATED ON THE PLAN ARE APPROXIMATE. EXACT LOCATIONS SHALL BE DETERMINED IN FIELD AS DIRECTED BY THE ENGINEER
2. SEE SPECIAL PROVISION "ITEM #0971001A-MAINTENANCE AND PROTECTION OF TRAFFIC", CONSTRUCTION TRAFFIC CONTROL PLAN 15 FOR SIGN AND DRUM LAYOUT
3. ACTUAL LENGTH OF WORK AREA IS VARIABLE
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SUGGESTED PHASE 2 CONSTRUCTION SEQUENCE:

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12. COMPLETE SIGNAL MODIFICATIONS.
13. PLACE TOPSOIL AND TURF ESTABLISHMENT INCLUDING EROSION MATTING AND LANDSCAPING.
14. REMOVE TEMPORARY TRAFFIC CONTROL MEASURES AND INSTALL PERMANENT PAVEMENT MARKINGS.

PHASE 2

REV.	DATE	DESCRIPTION	SHEET. NO.
		REVISIONS	

20 0 20
SCALE IN FEET

DESIGNER: EAN
DRAFTER: EAN
CHECKED BY: BAA
APPROVED BY: SON

vhb
Engineers Scientists Planners Designers

NOT ISSUED FOR CONSTRUCTION DATE:NOVEMBER, 2021

PROJECT TITLE:
BLOOMFIELD-TARIFFVLLE
MULTI-USE TRAIL CONNECTOR

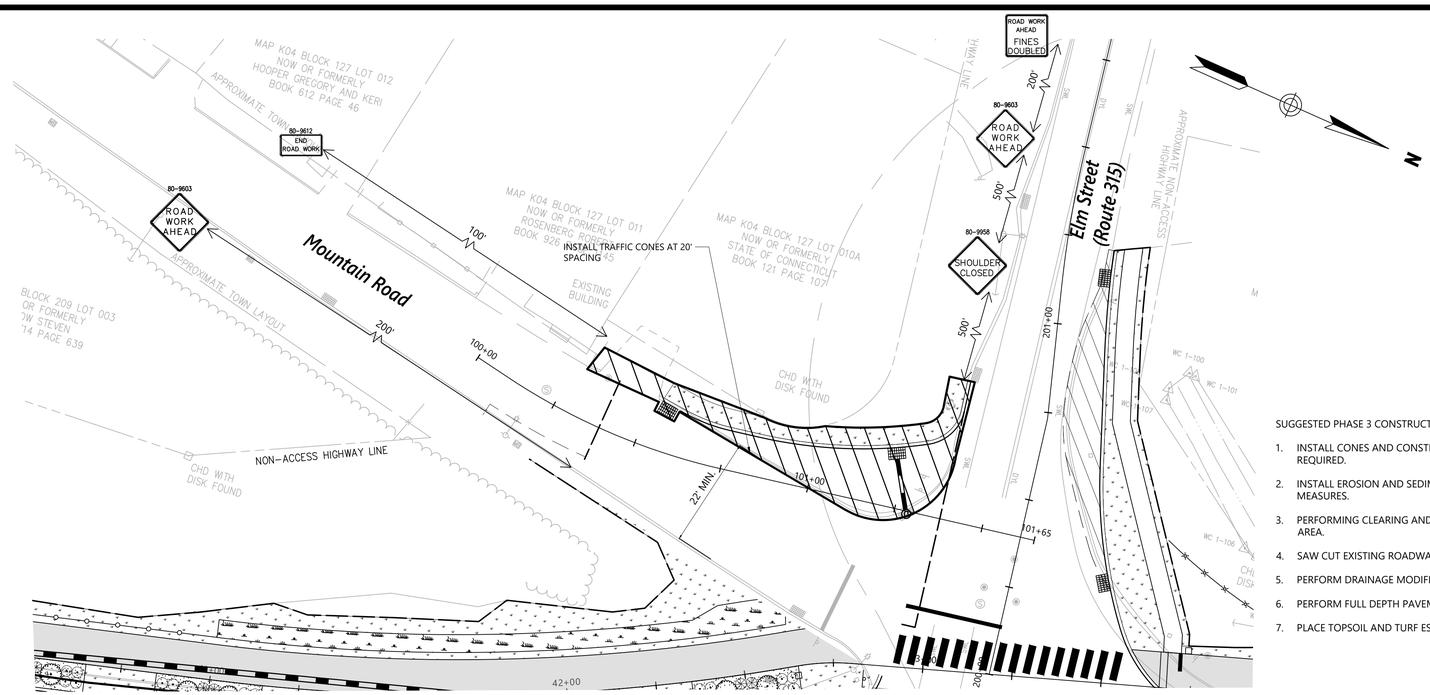
CADD FILENAME: STG-4237300.DWG

TOWN:
BLOOMFIELD-SIMSBURY, CONNECTICUT

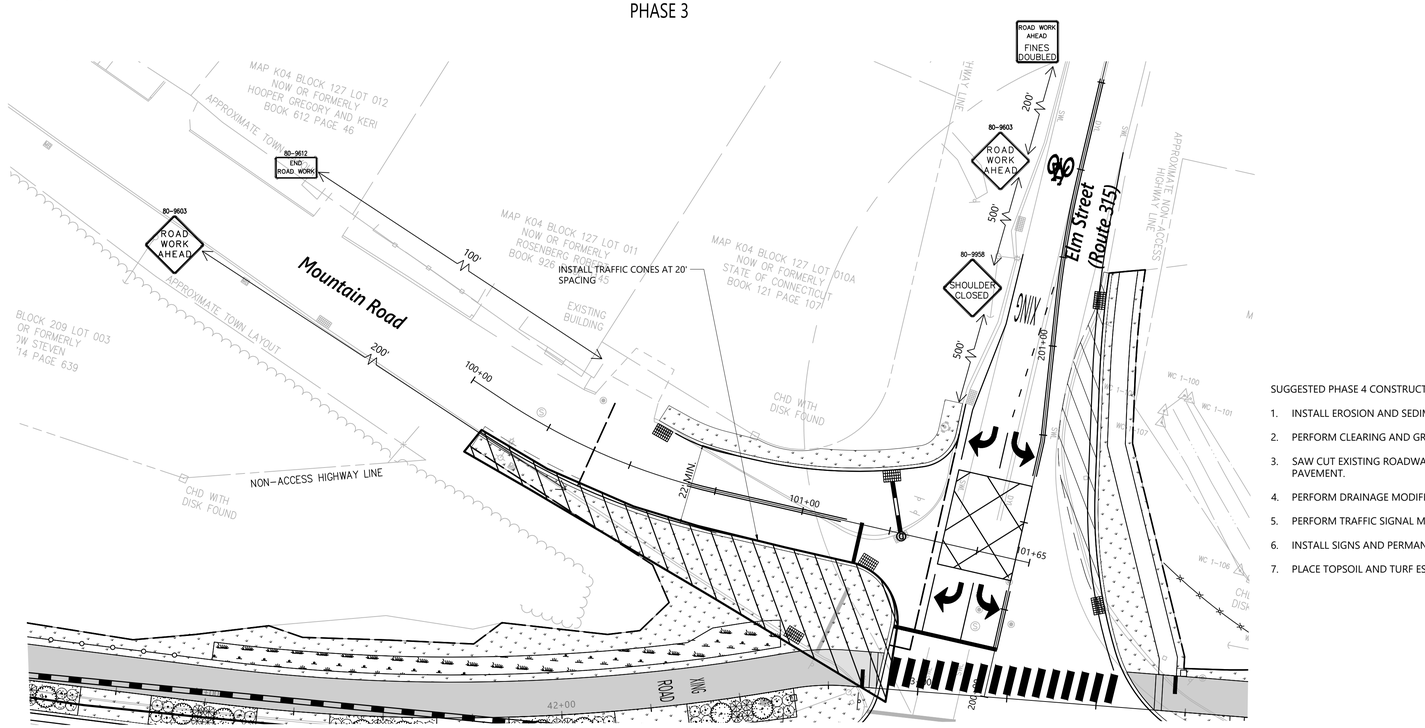
DRAWING TITLE:
STAGING PLANS

PROJECT NO.: 42373.00
DRAWING NO.: STG-08
SHEET NO.: 57 OF 95

Nov 17, 2021

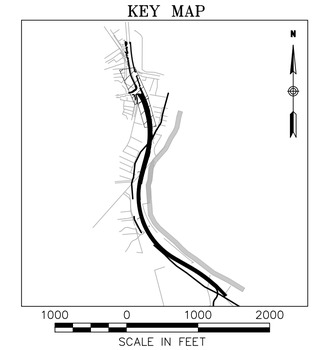


PHASE 3



PHASE 4

KEY MAP



SUGGESTED PHASE 3 CONSTRUCTION SEQUENCE

1. INSTALL CONES AND CONSTRUCTION SIGNS WHERE REQUIRED.
2. INSTALL EROSION AND SEDIMENTATION CONTROL MEASURES.
3. PERFORMING CLEARING AND GRUBBING WITHIN WORK AREA.
4. SAW CUT EXISTING ROADWAY.
5. PERFORM DRAINAGE MODIFICATIONS.
6. PERFORM FULL DEPTH PAVEMENT CONSTRUCTION.
7. PLACE TOPSOIL AND TURF ESTABLISHMENT.

WORK AREA

NOTES:

1. ALL SIGN LOCATIONS INDICATED ON THE PLAN ARE APPROXIMATE. EXACT LOCATIONS SHALL BE DETERMINE IN FIELD AS DIRECTED BY THE ENGINEER
2. ACTUAL LENGTH OF WORK AREA IS VARIABLE
3. ALL POST MOUNTED CONSTRUCTION SIGNS TO HAVE BARRICADE WARNING LIGHTS (HIGH INTENSITY) MOUNTED ON THE TOP EDGE OF SIGN

SUGGESTED PHASE 4 CONSTRUCTION SEQUENCE

1. INSTALL EROSION AND SEDIMENTATION CONTROL MEASURES.
2. PERFORM CLEARING AND GRUBBING WITHIN WORK AREA.
3. SAW CUT EXISTING ROADWAY AND REMOVE EXISTING PAVEMENT.
4. PERFORM DRAINAGE MODIFICATIONS.
5. PERFORM TRAFFIC SIGNAL MODIFICATIONS.
6. INSTALL SIGNS AND PERMANENT PAVEMENT MARKINGS.
7. PLACE TOPSOIL AND TURF ESTABLISHMENT.

REV.	DATE	DESCRIPTION	SHEET. NO.
		REVISIONS	

20 0 20
SCALE IN FEET

DESIGNER: EAN
DRAFTER: EAN
CHECKED BY: BAA
APPROVED BY: SON

vhb
Engineers Scientists Planners Designers

NOT ISSUED FOR CONSTRUCTION DATE:NOVEMBER, 2021

PROJECT TITLE:
BLOOMFIELD–TARIFFVLLE
MULTI–USE TRAIL CONNECTOR

CADD FILENAME: STG-4237300.DWG

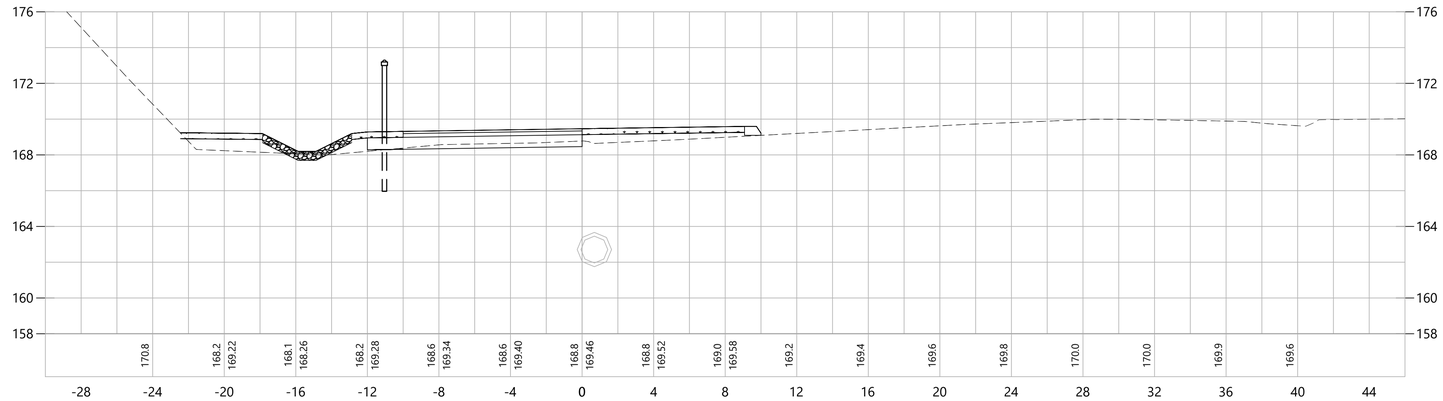
TOWN:
BLOOMFIELD–SIMSBURY, CONNECTICUT

DRAWING TITLE:
STAGING PLANS

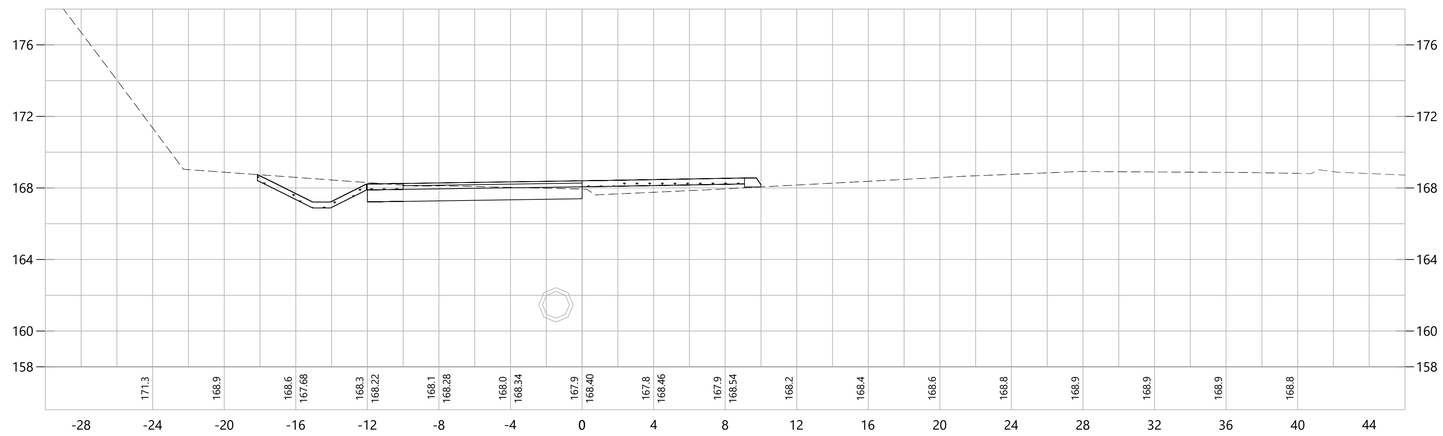
PROJECT NO.: 42373.00
DRAWING NO.: STG–09
SHEET NO.: 58 OF 95

Nov 17, 2021

11+50.00



11+00.00



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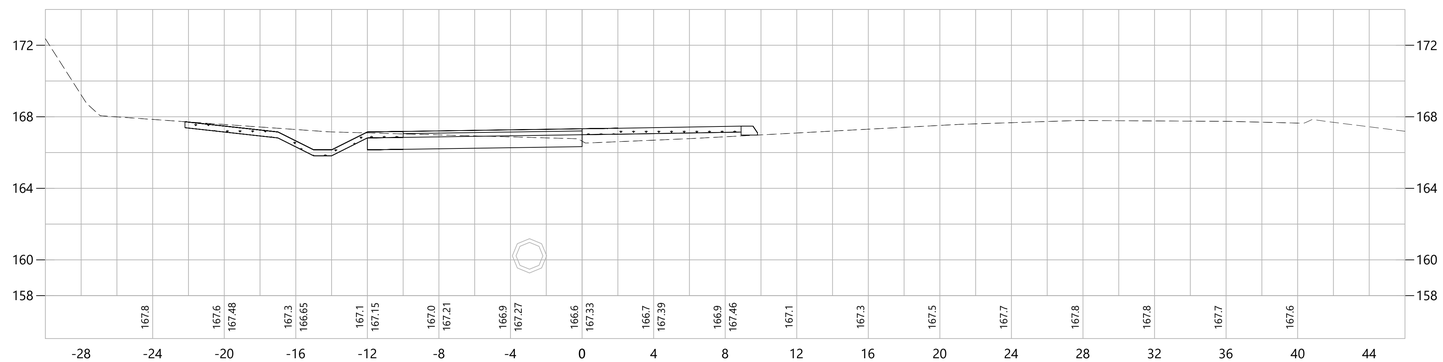


REV.	DATE	DESCRIPTION	SHEET. NO.
		REVISIONS	

4 0 4
SCALE IN FEET

DESIGNER: EAN
DRAFTER: EAN
CHECKED BY: BAA
APPROVED BY: SON

vhb
Engineers Scientists Planners Designers

NOT ISSUED FOR CONSTRUCTION DATE:NOVEMBER, 2021

PROJECT TITLE:
BLOOMFIELD–TARIFFVLLE
MULTI–USE TRAIL CONNECTOR

CADD FILENAME: CRO-4237300.DWG

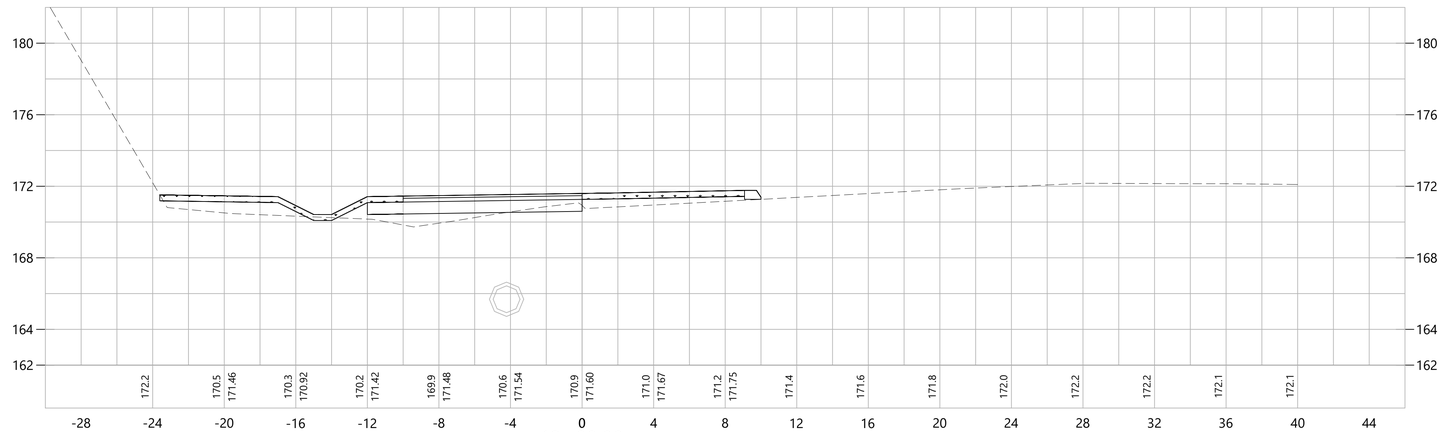
TOWN:
BLOOMFIELD–SIMSBURY,
CONNECTICUT

DRAWING TITLE:
CROSS SECTIONS
MULTI–USE TRAIL

PROJECT NO.: 42373.00
DRAWING NO.: CRO–01
SHEET NO.: 59 OF 95

Nov 17, 2021

12+50.00



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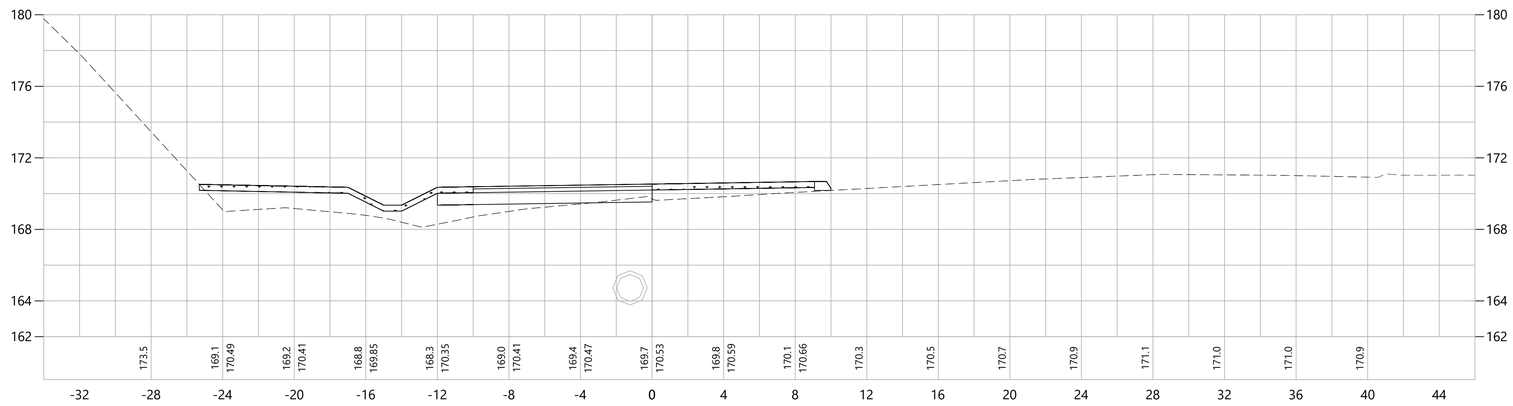

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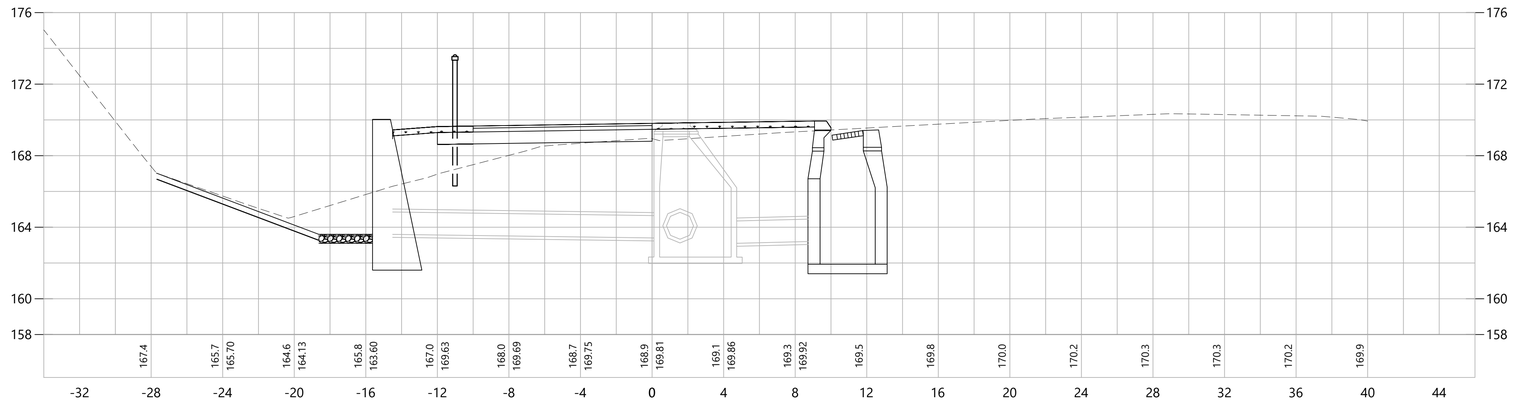


REV.	DATE	DESCRIPTION	SHEET. NO.
		REVISIONS	

4 0 4
SCALE IN FEET

DESIGNER: EAN
DRAFTER: EAN
CHECKED BY: BAA
APPROVED BY: SON

vhb
Engineers Scientists Planners Designers

NOT ISSUED FOR CONSTRUCTION DATE:NOVEMBER, 2021

PROJECT TITLE:
BLOOMFIELD–TARIFFVLLE
MULTI–USE TRAIL CONNECTOR

CADD FILENAME: CRO-4237300.DWG

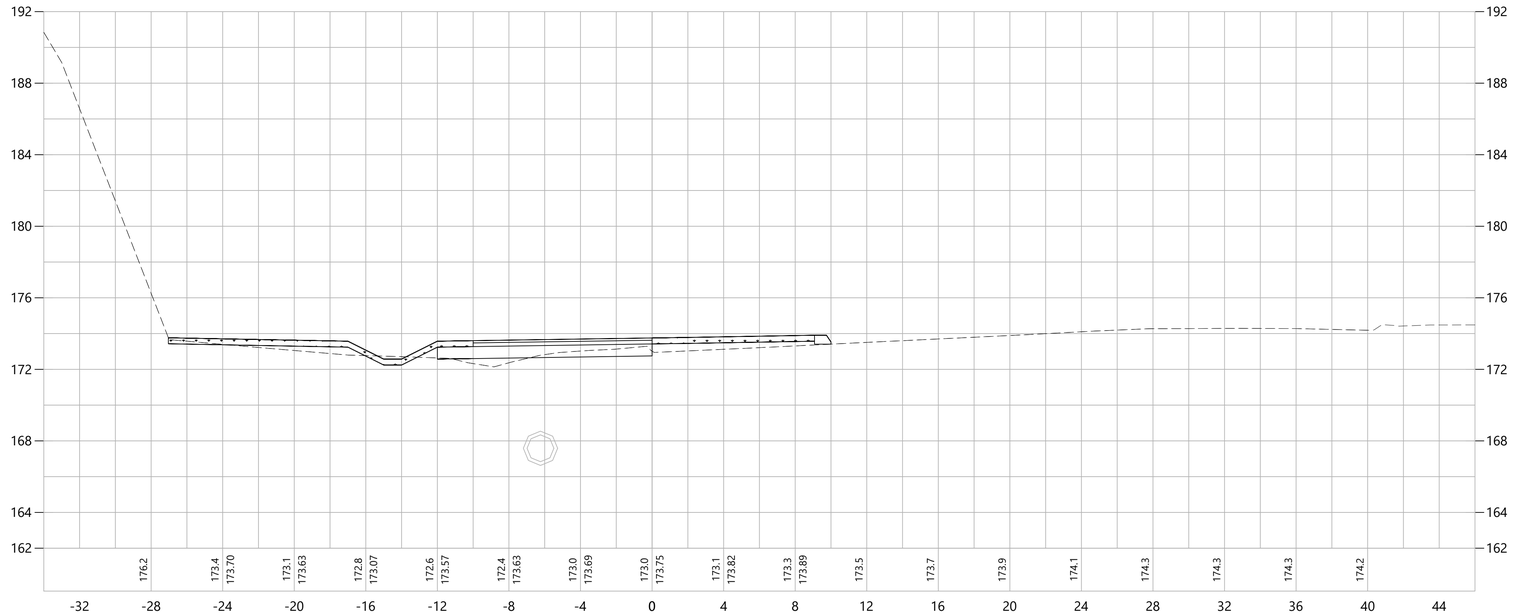
TOWN:
BLOOMFIELD–SIMSBURY,
CONNECTICUT

DRAWING TITLE:
CROSS SECTIONS
MULTI–USE TRAIL

PROJECT NO.: 42373.00
DRAWING NO.: CRO–02
SHEET NO.: 60 OF 95

Nov 17, 2021

13+50.00



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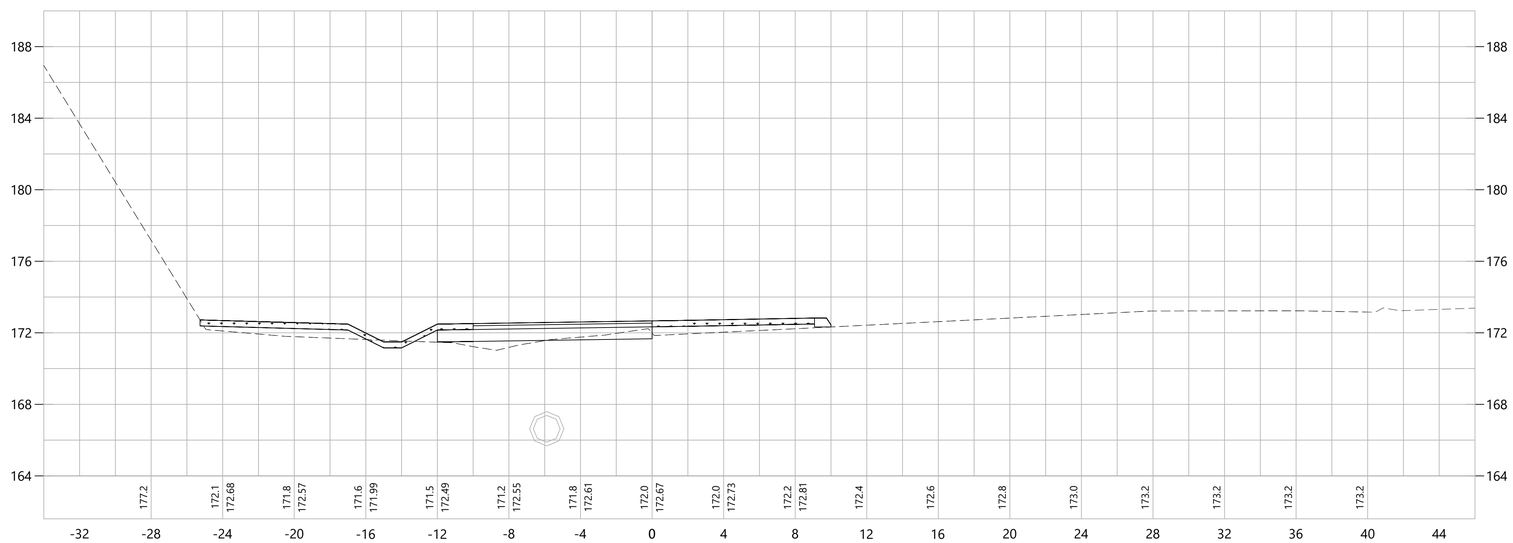


REV.	DATE	DESCRIPTION	SHEET. NO.
		REVISIONS	

4 0 4
SCALE IN FEET

DESIGNER: EAN
DRAFTER: EAN
CHECKED BY: BAA
APPROVED BY: SON

vhb
Engineers Scientists Planners Designers

NOT ISSUED FOR CONSTRUCTION DATE:NOVEMBER, 2021

PROJECT TITLE:
BLOOMFIELD–TARIFFVLLE
MULTI–USE TRAIL CONNECTOR

CADD FILENAME: CRO-4237300.DWG

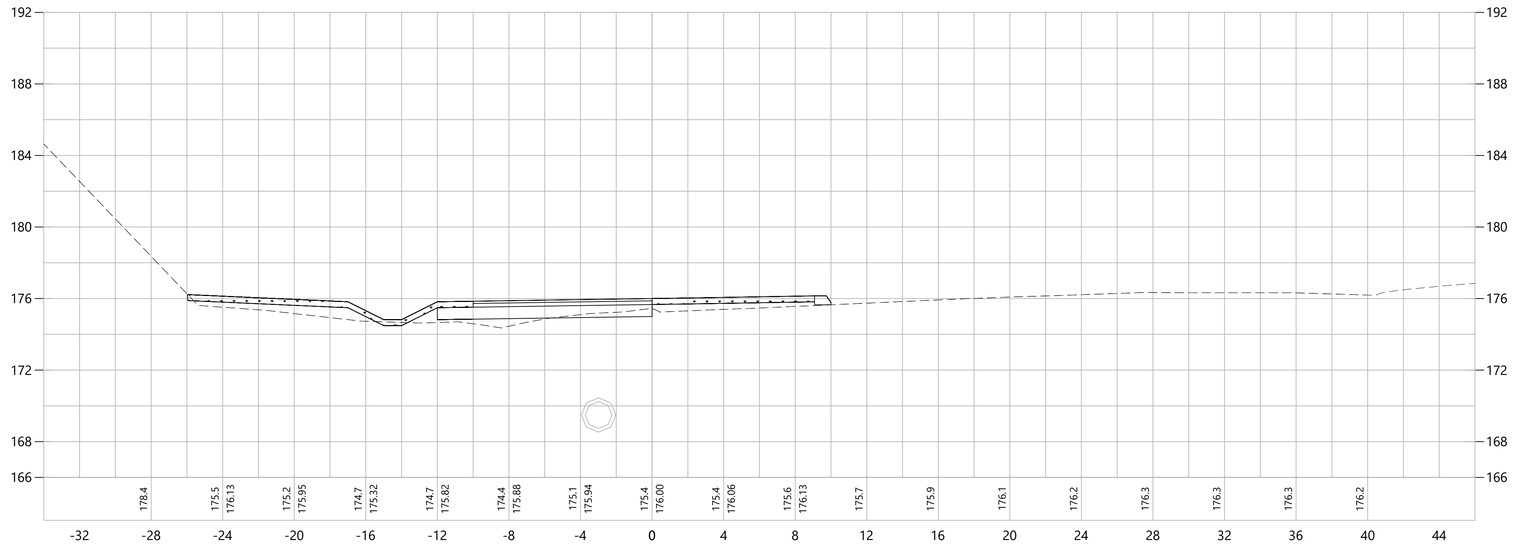
TOWN:
BLOOMFIELD–SIMSBURY,
CONNECTICUT

DRAWING TITLE:
CROSS SECTIONS
MULTI–USE TRAIL

PROJECT NO.: 42373.00
DRAWING NO.: CRO–03
SHEET NO.: 61 OF 95

Nov 17, 2021

14+50.00



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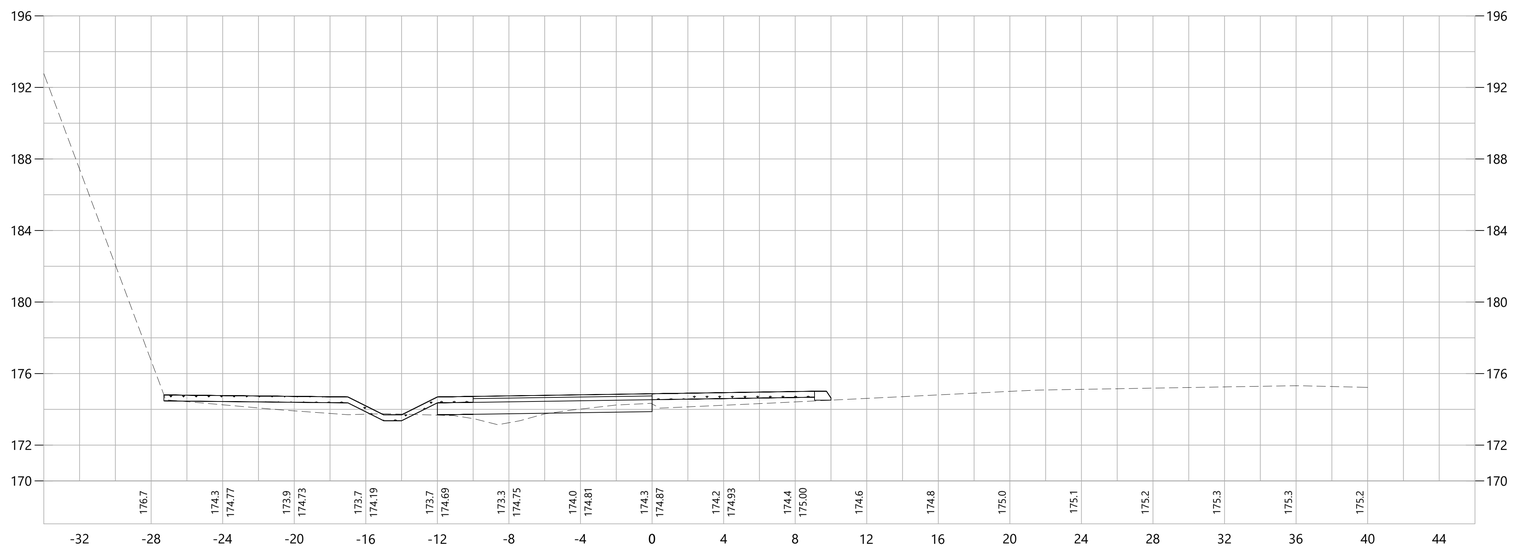

REV.	DATE	DESCRIPTION	SHEET. NO.
		REVISIONS	

4 0 4
SCALE IN FEET

DESIGNER: EAN
DRAFTER: EAN
CHECKED BY: BAA
APPROVED BY: SON

vhb
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NOT ISSUED FOR CONSTRUCTION DATE:NOVEMBER, 2021

PROJECT TITLE:
BLOOMFIELD-TARIFFVLLE
MULTI-USE TRAIL CONNECTOR

CADD FILENAME: CRO-4237300.DWG

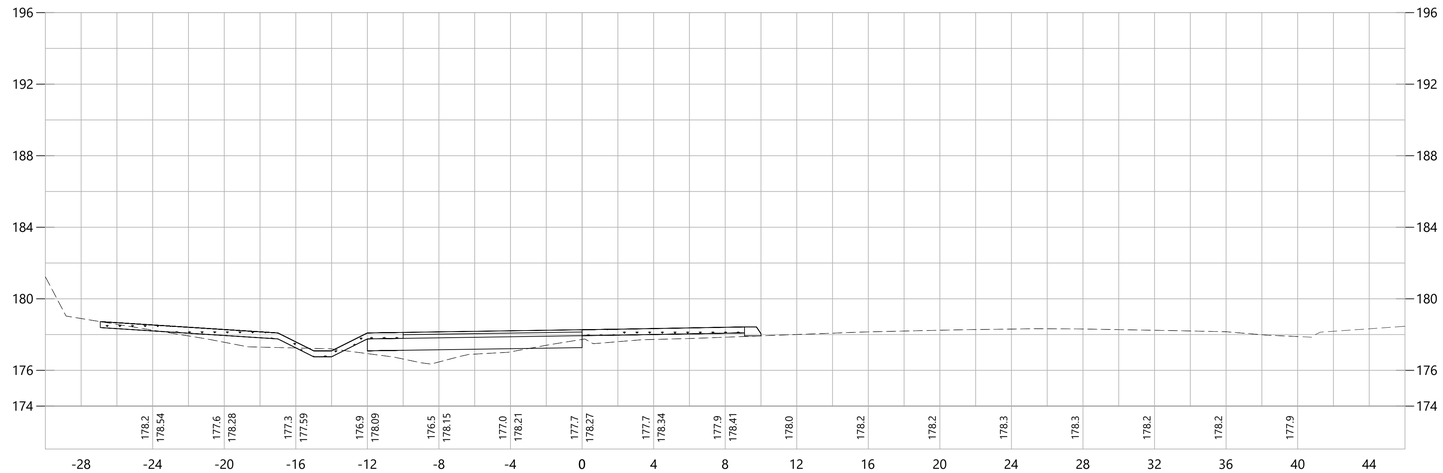
TOWN:
BLOOMFIELD-SIMSBURY,
CONNECTICUT

DRAWING TITLE:
CROSS SECTIONS
MULTI-USE TRAIL

PROJECT NO.: 42373.00
DRAWING NO.: CRO-04
SHEET NO.: 62 OF 95

Nov 17, 2021

15+50.00



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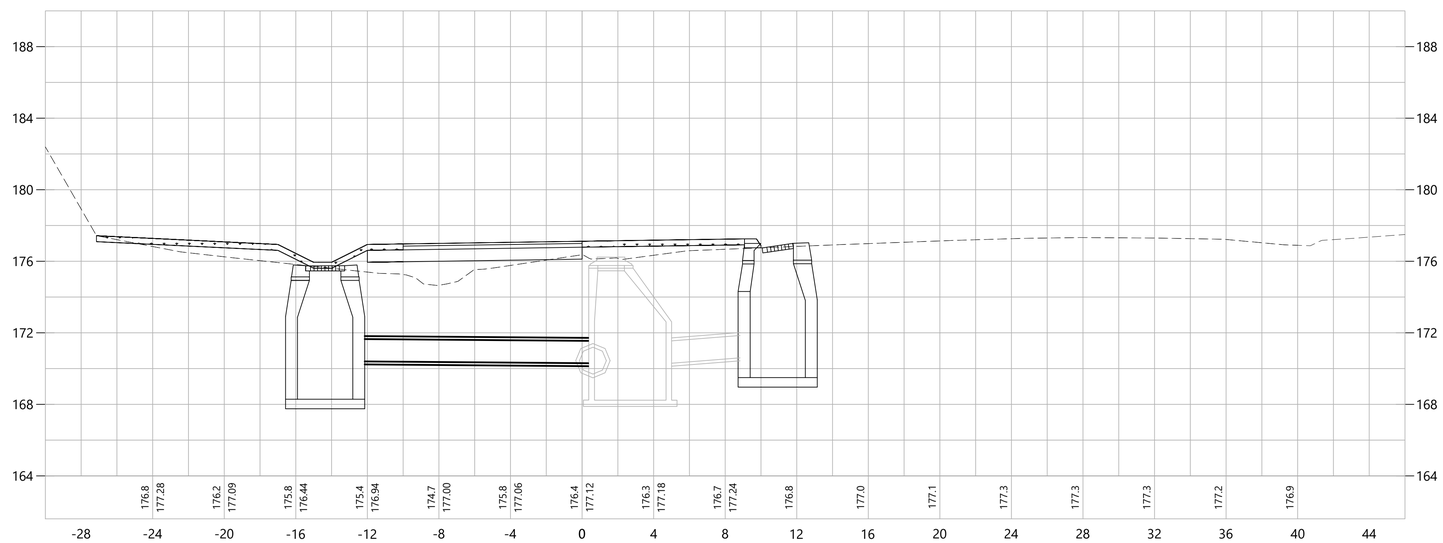

REV.	DATE	DESCRIPTION	SHEET. NO.
		REVISIONS	

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SCALE IN FEET

DESIGNER: EAN
DRAFTER: EAN
CHECKED BY: BAA
APPROVED BY: SON

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NOT ISSUED FOR CONSTRUCTION DATE:NOVEMBER, 2021

PROJECT TITLE:
BLOOMFIELD-TARIFFVLLE
MULTI-USE TRAIL CONNECTOR

CADD FILENAME: CRO-4237300.DWG

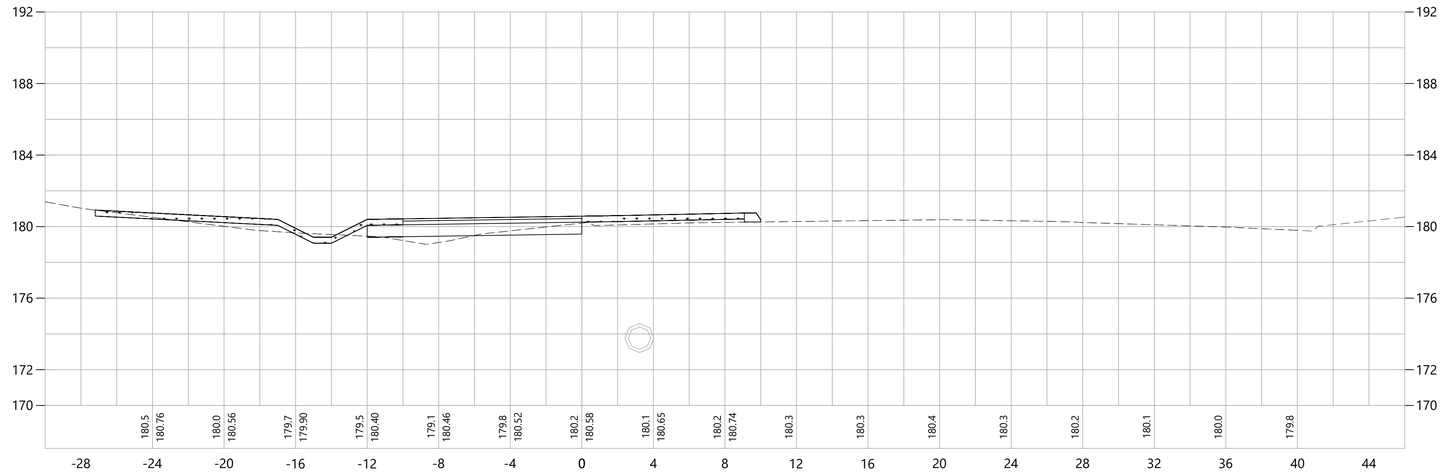
TOWN:
BLOOMFIELD-SIMSBURY,
CONNECTICUT

DRAWING TITLE:
CROSS SECTIONS
MULTI-USE TRAIL

PROJECT NO.: 42373.00
DRAWING NO.: CRO-05
SHEET NO.: 63 OF 95

Nov 17, 2021

16+50.00



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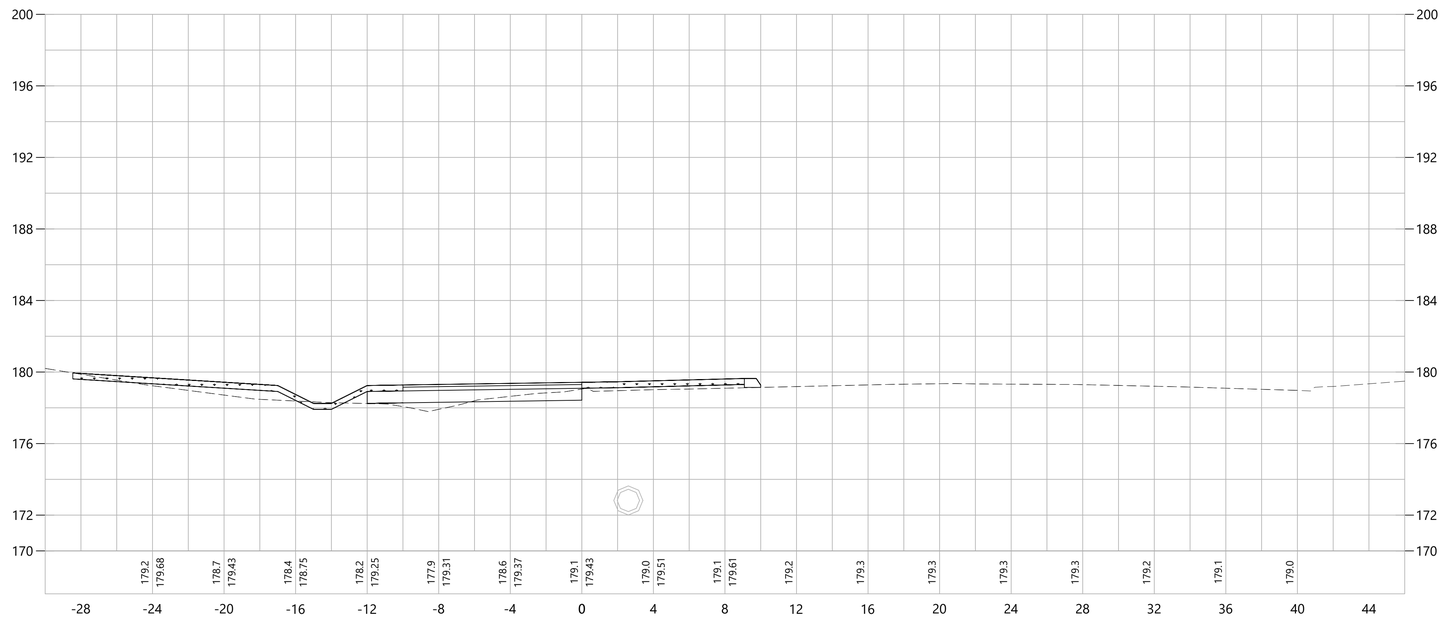

REV.	DATE	DESCRIPTION	SHEET. NO.
		REVISIONS	

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SCALE IN FEET

DESIGNER: EAN
DRAFTER: EAN
CHECKED BY: BAA
APPROVED BY: SON

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NOT ISSUED FOR CONSTRUCTION DATE:NOVEMBER, 2021

PROJECT TITLE:
BLOOMFIELD–TARIFFVLLE
MULTI–USE TRAIL CONNECTOR

CADD FILENAME: CRO-4237300.DWG

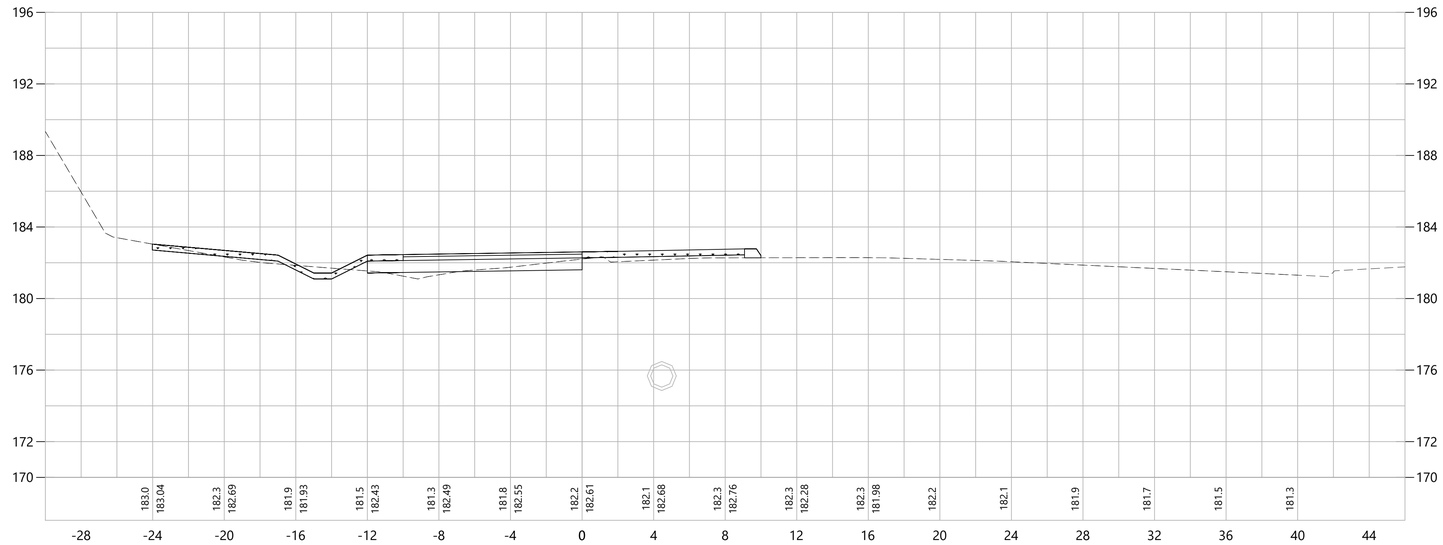
TOWN:
BLOOMFIELD–SIMSBURY,
CONNECTICUT

DRAWING TITLE:
CROSS SECTIONS
MULTI–USE TRAIL

PROJECT NO.: 42373.00
DRAWING NO.: CRO–06
SHEET NO.: 64 OF 95

Nov 17, 2021

17+50.00



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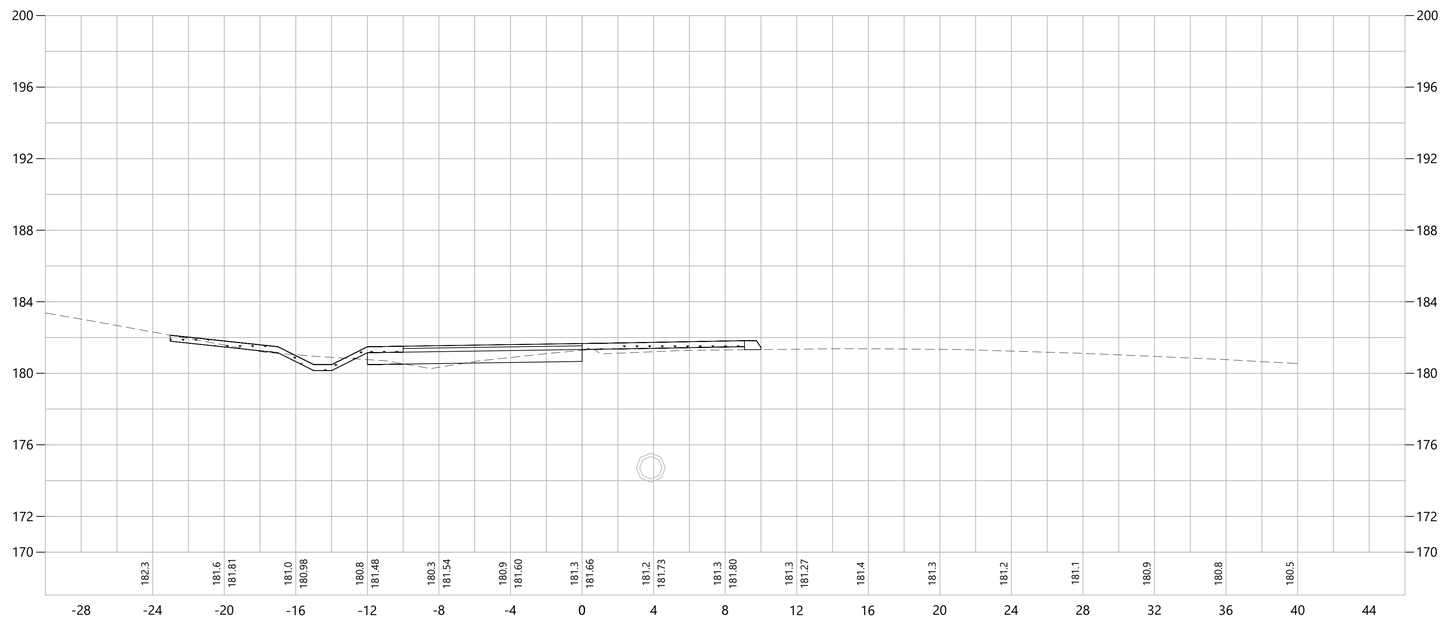

REV.	DATE	DESCRIPTION	SHEET. NO.
		REVISIONS	

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SCALE IN FEET

DESIGNER: EAN
DRAFTER: EAN
CHECKED BY: BAA
APPROVED BY: SON

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NOT ISSUED FOR CONSTRUCTION DATE:NOVEMBER, 2021

PROJECT TITLE:
BLOOMFIELD–TARIFFVLLE
MULTI–USE TRAIL CONNECTOR

CADD FILENAME: CRO-4237300.DWG

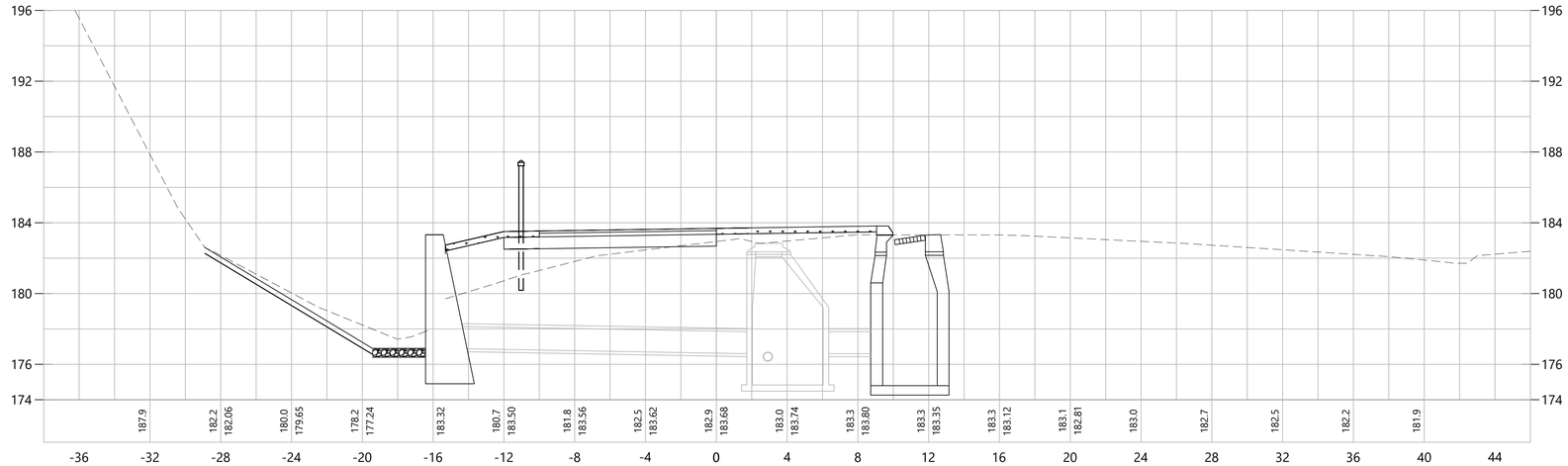
TOWN:
BLOOMFIELD–SIMSBURY,
CONNECTICUT

DRAWING TITLE:
CROSS SECTIONS
MULTI–USE TRAIL

PROJECT NO.: 42373.00
DRAWING NO.: CRO–07
SHEET NO.: 65 OF 95

Nov 17, 2021

18+18.00



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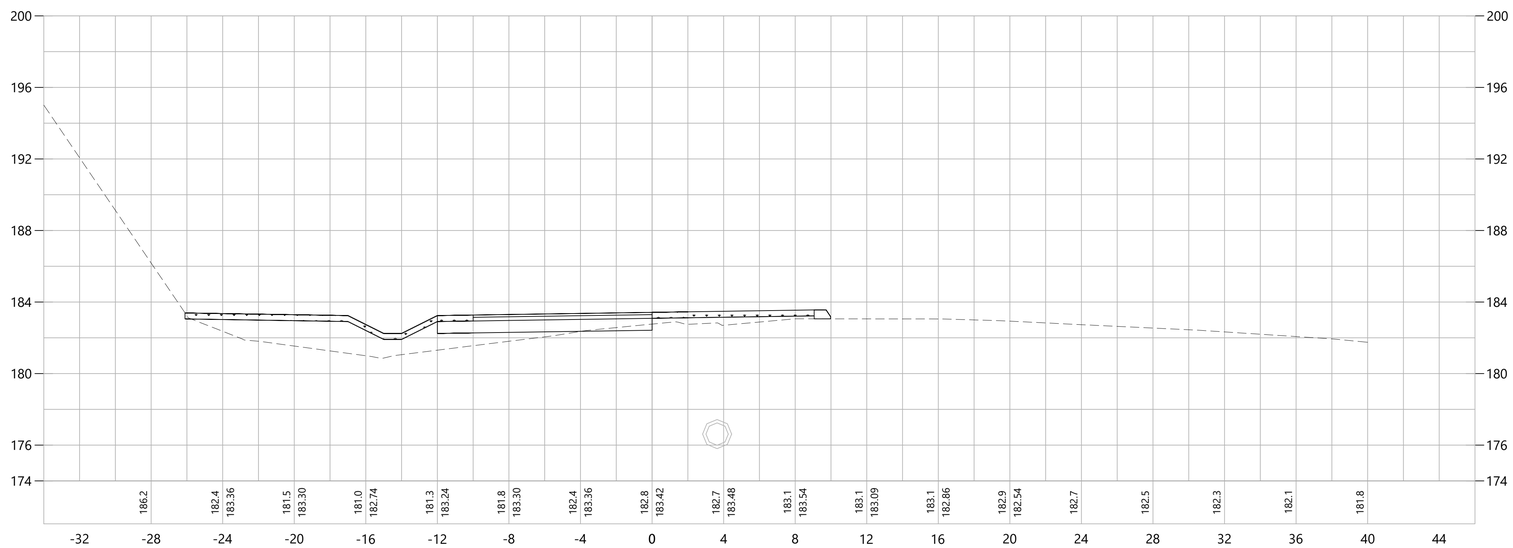

REV.	DATE	DESCRIPTION	SHEET. NO.
		REVISIONS	

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SCALE IN FEET

DESIGNER: EAN
DRAFTER: EAN
CHECKED BY: BAA
APPROVED BY: SON

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NOT ISSUED FOR CONSTRUCTION DATE:NOVEMBER, 2021

PROJECT TITLE:
BLOOMFIELD–TARIFFVLLE
MULTI–USE TRAIL CONNECTOR

CADD FILENAME: CRO-4237300.DWG

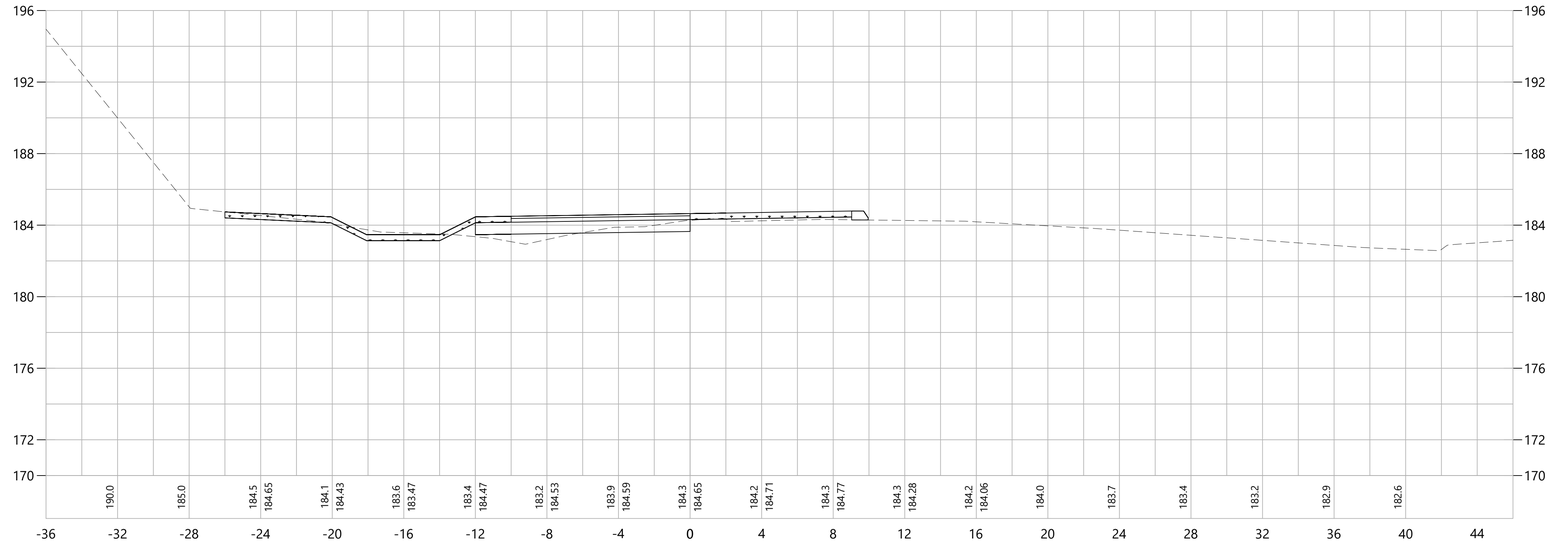
TOWN:
BLOOMFIELD–SIMSBURY,
CONNECTICUT

DRAWING TITLE:
CROSS SECTIONS
MULTI–USE TRAIL

PROJECT NO.: 42373.00
DRAWING NO.: CRO–08
SHEET NO.: 66 OF 95

Nov 17, 2021

19+00.00



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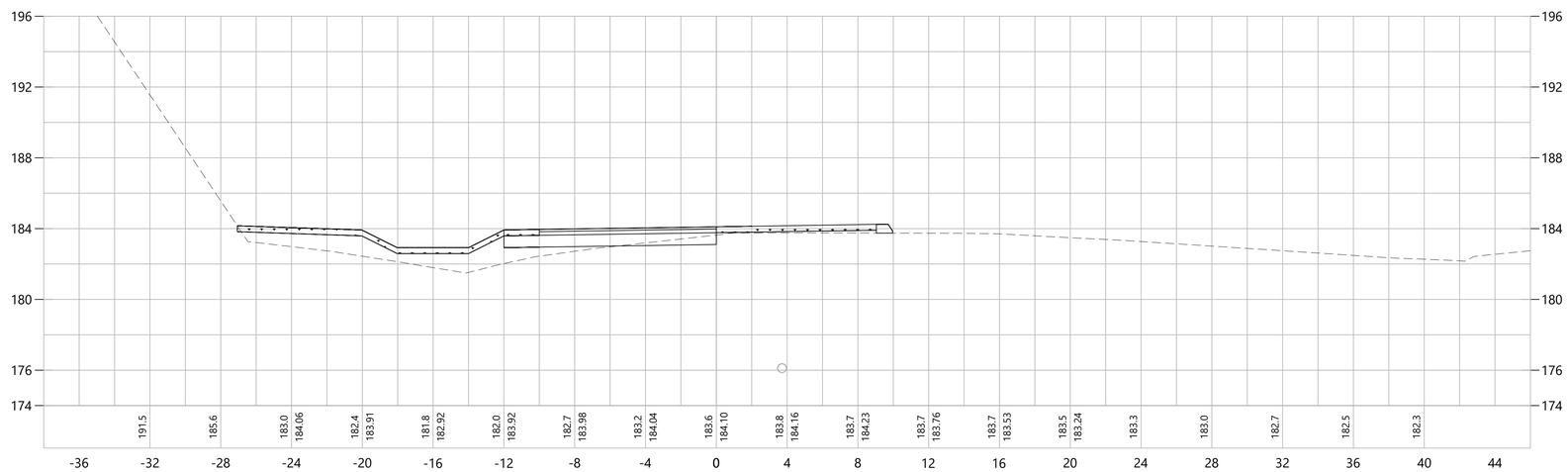

REV.	DATE	DESCRIPTION	SHEET. NO.
		REVISIONS	

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SCALE IN FEET

DESIGNER: EAN
DRAFTER: EAN
CHECKED BY: BAA
APPROVED BY: SON

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NOT ISSUED FOR CONSTRUCTION DATE:NOVEMBER, 2021

PROJECT TITLE:
BLOOMFIELD–TARIFFVLLE
MULTI–USE TRAIL CONNECTOR

CADD FILENAME: CRO-4237300.DWG

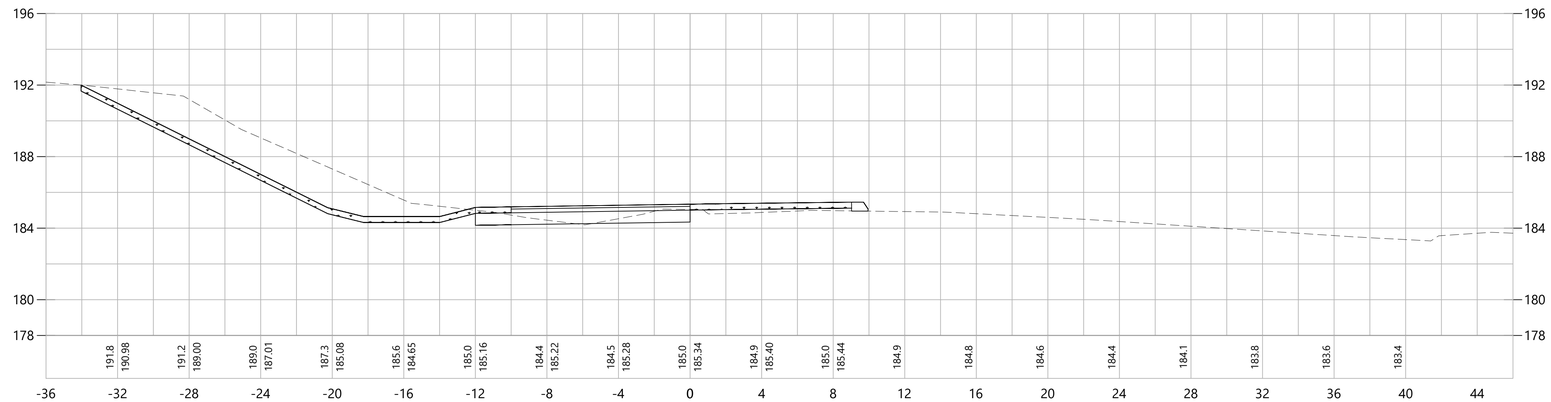
TOWN:
BLOOMFIELD–SIMSBURY,
CONNECTICUT

DRAWING TITLE:
CROSS SECTIONS
MULTI–USE TRAIL

PROJECT NO.: 42373.00
DRAWING NO.: CRO–09
SHEET NO.: 67 OF 95

Nov 17, 2021

20+00.00



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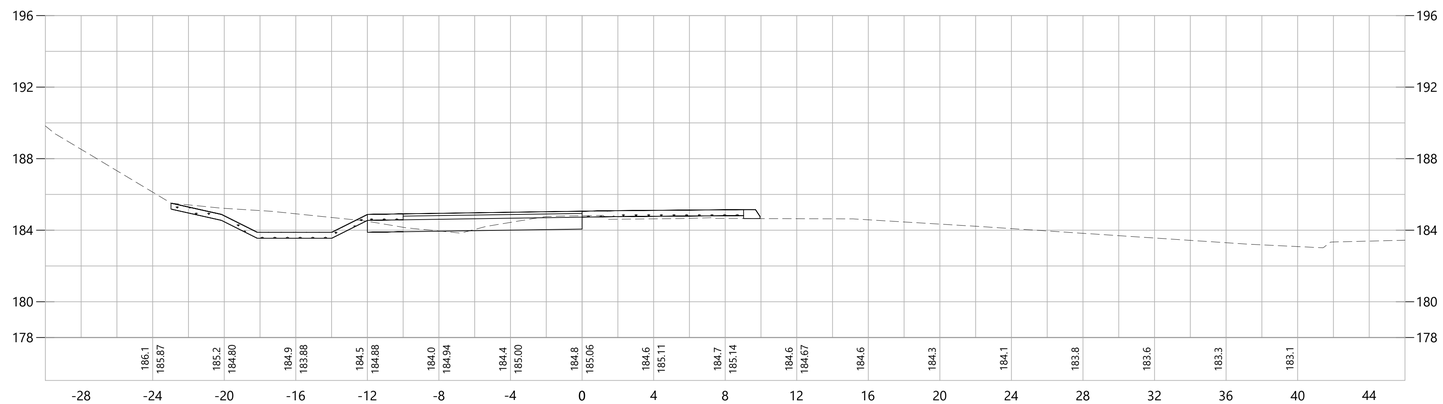

REV.	DATE	DESCRIPTION	SHEET. NO.
		REVISIONS	

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SCALE IN FEET

DESIGNER: EAN
DRAFTER: EAN
CHECKED BY: BAA
APPROVED BY: SON

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NOT ISSUED FOR CONSTRUCTION DATE:NOVEMBER, 2021

PROJECT TITLE:
BLOOMFIELD–TARIFFVLLE
MULTI–USE TRAIL CONNECTOR

CADD FILENAME: CRO–4237300.DWG

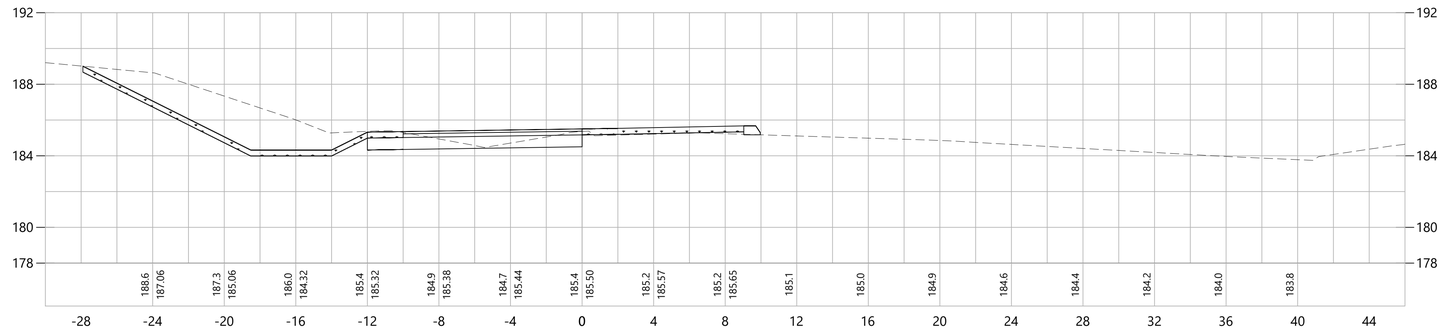
TOWN:
BLOOMFIELD–SIMSBURY,
CONNECTICUT

DRAWING TITLE:
CROSS SECTIONS
MULTI–USE TRAIL

PROJECT NO.: 42373.00
DRAWING NO.: CRO–10
SHEET NO.: 68 OF 95

Nov 17, 2021

21+00.00



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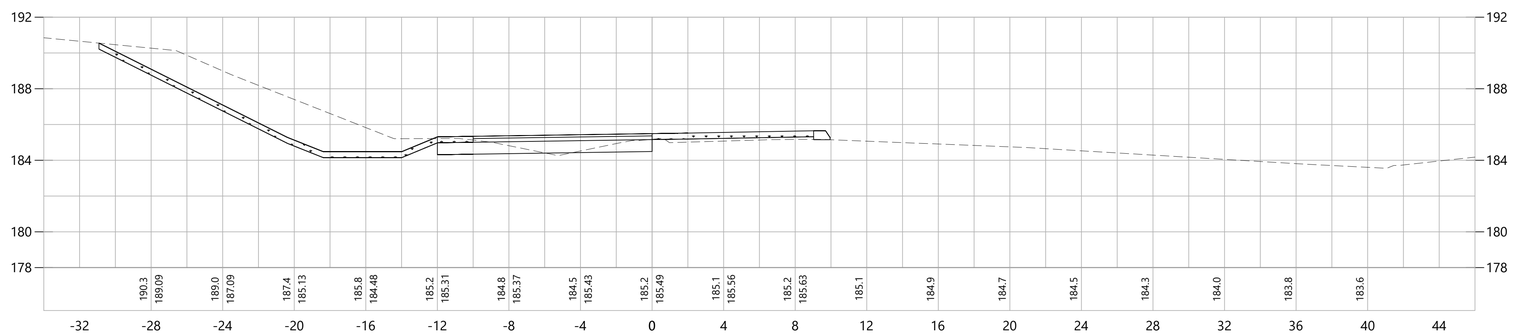

REV.	DATE	DESCRIPTION	SHEET. NO.
		REVISIONS	

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SCALE IN FEET

DESIGNER: EAN
DRAFTER: EAN
CHECKED BY: BAA
APPROVED BY: SON

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NOT ISSUED FOR CONSTRUCTION DATE:NOVEMBER, 2021

PROJECT TITLE:
BLOOMFIELD–TARIFFVLLE
MULTI–USE TRAIL CONNECTOR

CADD FILENAME: CRO-4237300.DWG

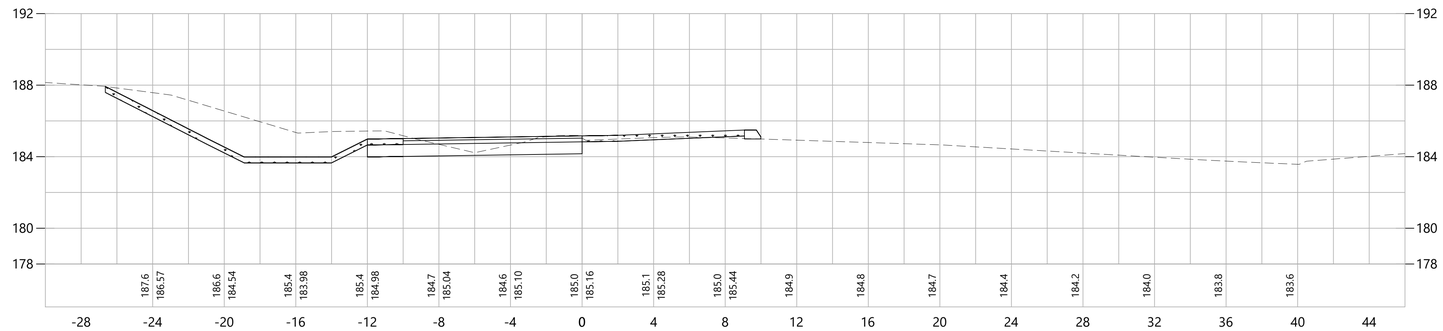
TOWN:
BLOOMFIELD–SIMSBURY,
CONNECTICUT

DRAWING TITLE:
CROSS SECTIONS
MULTI–USE TRAIL

PROJECT NO.: 42373.00
DRAWING NO.: CRO–11
SHEET NO.: 69 OF 95

Nov 17, 2021

22+00.00



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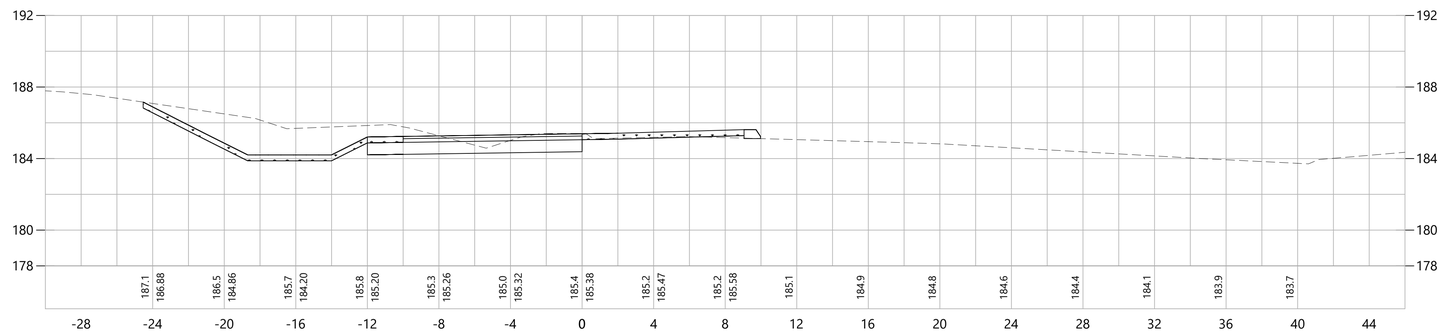

REV.	DATE	DESCRIPTION	SHEET. NO.
		REVISIONS	

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SCALE IN FEET

DESIGNER: EAN
DRAFTER: EAN
CHECKED BY: BAA
APPROVED BY: SON

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Engineers Scientists Planners Designers

NOT ISSUED FOR CONSTRUCTION DATE:NOVEMBER, 2021

PROJECT TITLE:
BLOOMFIELD–TARIFFVLLE
MULTI–USE TRAIL CONNECTOR

CADD FILENAME: CRO-4237300.DWG

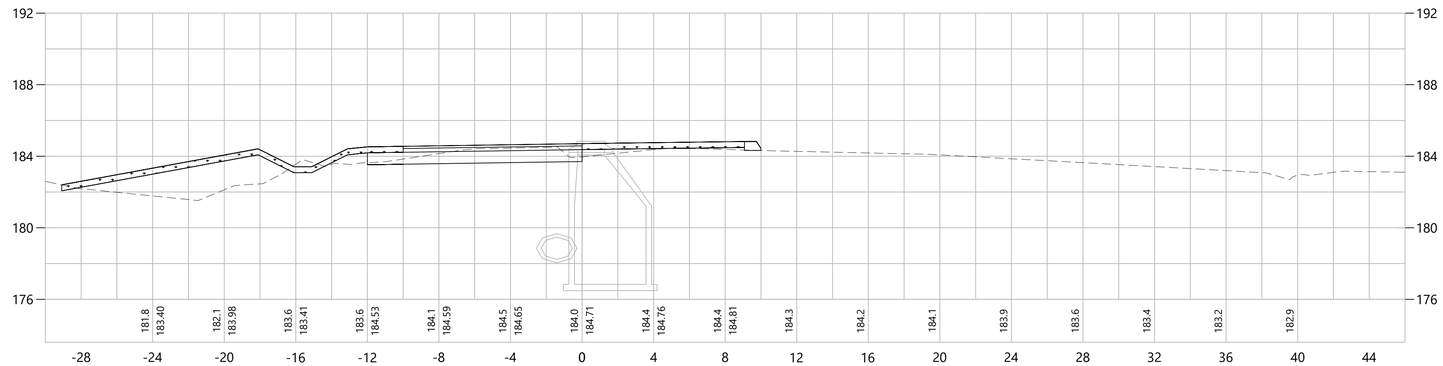
TOWN:
BLOOMFIELD–SIMSBURY,
CONNECTICUT

DRAWING TITLE:
CROSS SECTIONS
MULTI–USE TRAIL

PROJECT NO.: 42373.00
DRAWING NO.: CRO–12
SHEET NO.: 70 OF 95

Nov 17, 2021

23+00.00



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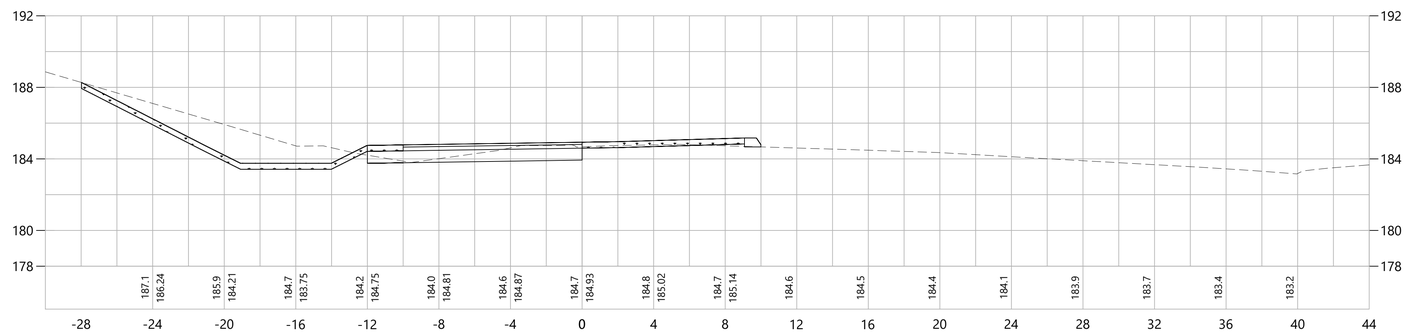

REV.	DATE	DESCRIPTION	SHEET. NO.
		REVISIONS	

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SCALE IN FEET

DESIGNER: EAN
DRAFTER: EAN
CHECKED BY: BAA
APPROVED BY: SON

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Engineers Scientists Planners Designers

NOT ISSUED FOR CONSTRUCTION DATE:NOVEMBER, 2021

PROJECT TITLE:
BLOOMFIELD–TARIFFVLLE
MULTI–USE TRAIL CONNECTOR

CADD FILENAME: CRO–4237300.DWG

TOWN:
BLOOMFIELD–SIMSBURY,
CONNECTICUT

DRAWING TITLE:
CROSS SECTIONS
MULTI–USE TRAIL

PROJECT NO.: 42373.00
DRAWING NO.: CRO–13
SHEET NO.: 71 OF 95

Nov 17, 2021

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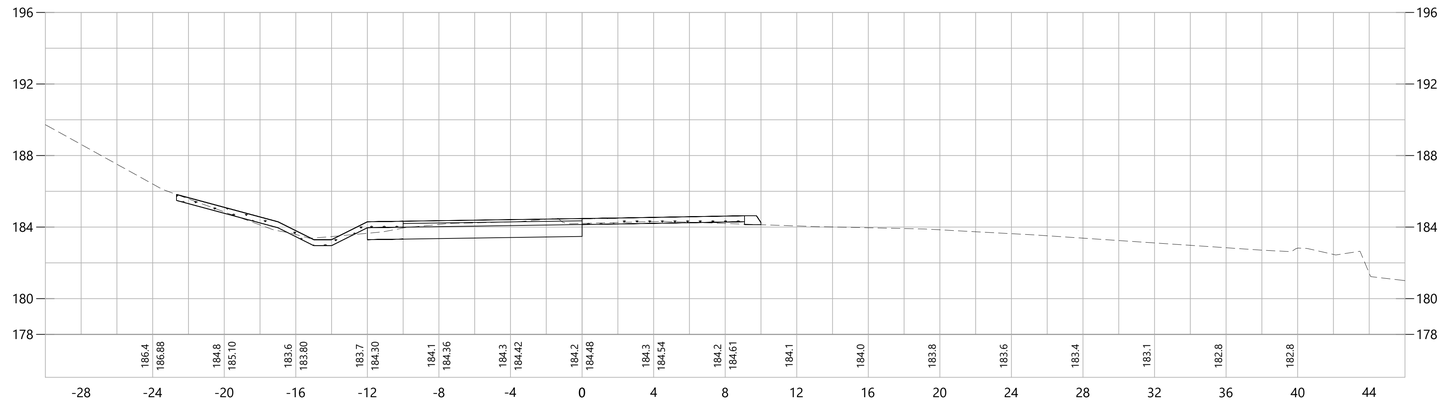

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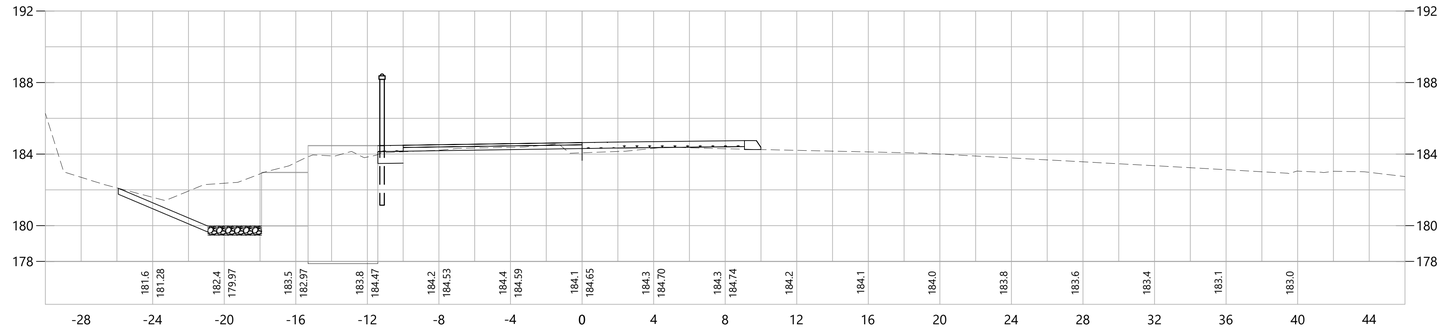

REV.	DATE	DESCRIPTION	SHEET. NO.
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SCALE IN FEET

DESIGNER: EAN
DRAFTER: EAN
CHECKED BY: BAA
APPROVED BY: SON

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NOT ISSUED FOR CONSTRUCTION DATE:NOVEMBER, 2021

PROJECT TITLE:
BLOOMFIELD–TARIFFVLLE
MULTI–USE TRAIL CONNECTOR

CADD FILENAME: CRO-4237300.DWG

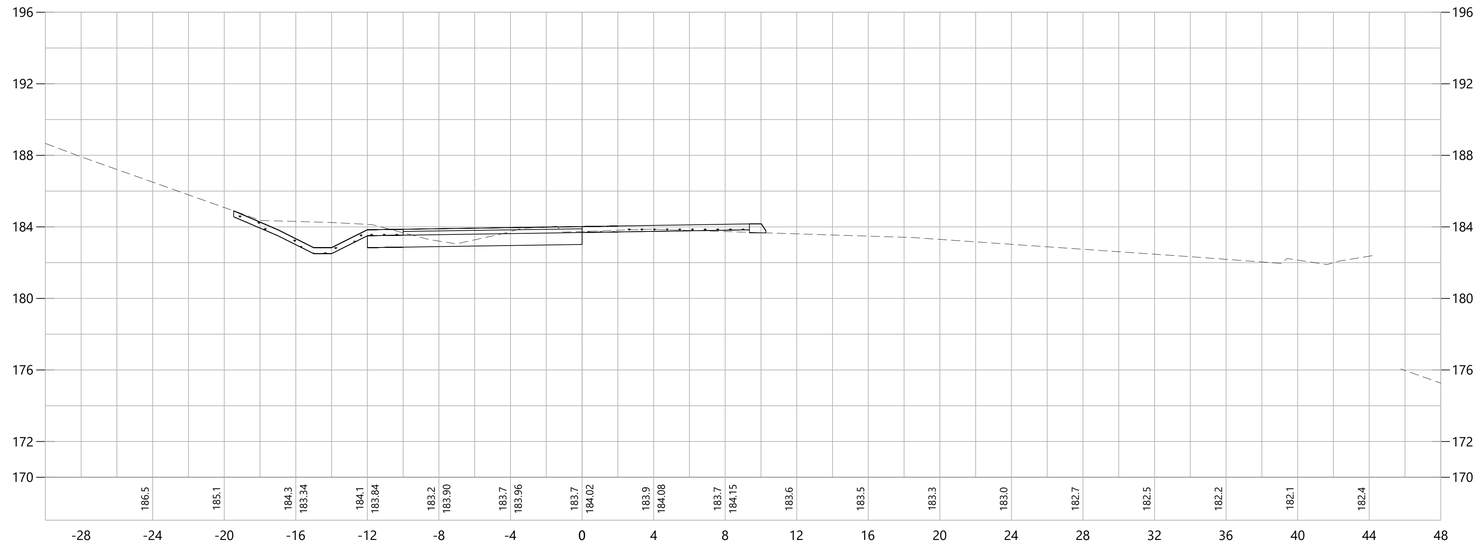
TOWN:
BLOOMFIELD–SIMSBURY,
CONNECTICUT

DRAWING TITLE:
CROSS SECTIONS
MULTI–USE TRAIL

PROJECT NO.: 42373.00
DRAWING NO.: CRO–14
SHEET NO.: 72 OF 95

Nov 17, 2021

24+50.00



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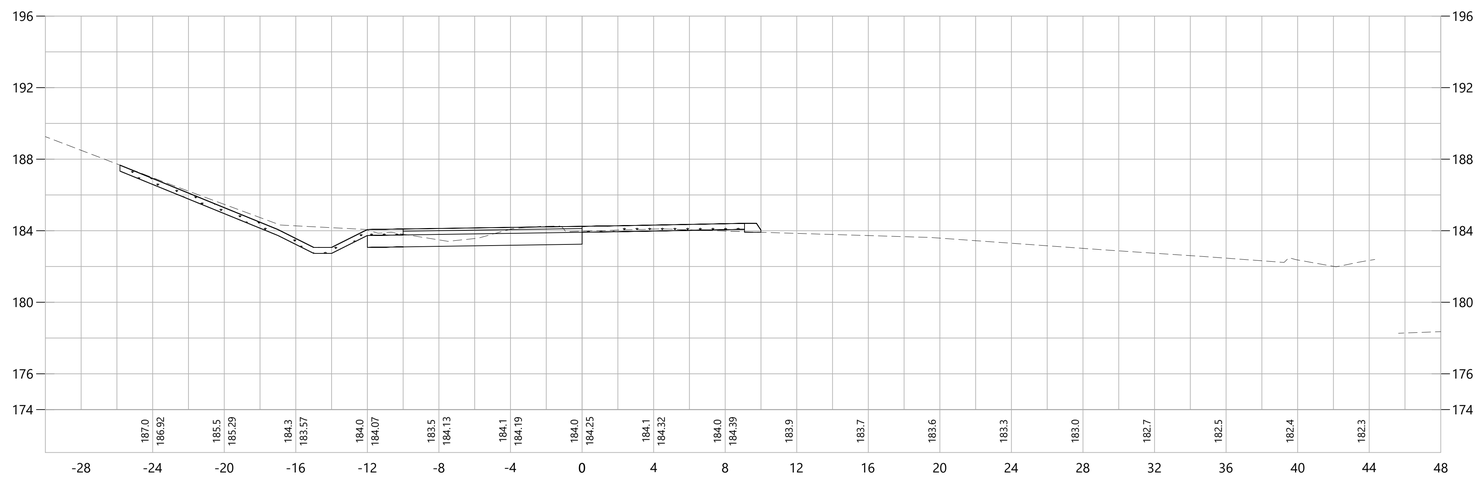

REV.	DATE	DESCRIPTION	SHEET. NO.
		REVISIONS	

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SCALE IN FEET

DESIGNER: EAN
DRAFTER: EAN
CHECKED BY: BAA
APPROVED BY: SON

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Engineers Scientists Planners Designers

NOT ISSUED FOR CONSTRUCTION DATE:NOVEMBER, 2021

PROJECT TITLE:
BLOOMFIELD-TARIFFVLLE
MULTI-USE TRAIL CONNECTOR

CADD FILENAME: CRO-4237300.DWG

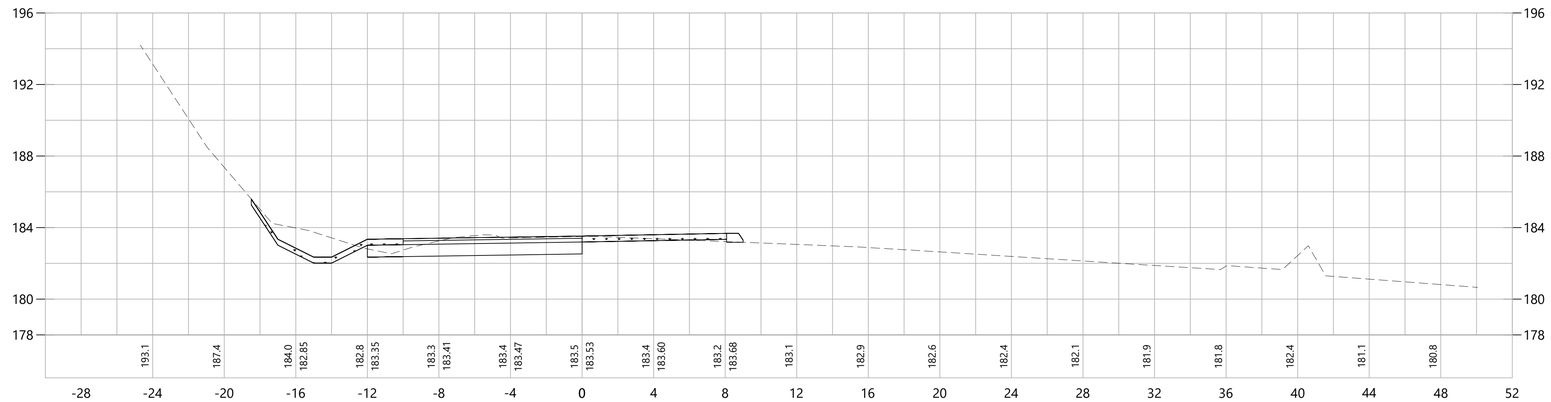
TOWN:
BLOOMFIELD-SIMSBURY,
CONNECTICUT

DRAWING TITLE:
CROSS SECTIONS
MULTI-USE TRAIL

PROJECT NO.: 42373.00
DRAWING NO.: CRO-15
SHEET NO.: 73 OF 95

Nov 17, 2021

25+50.00



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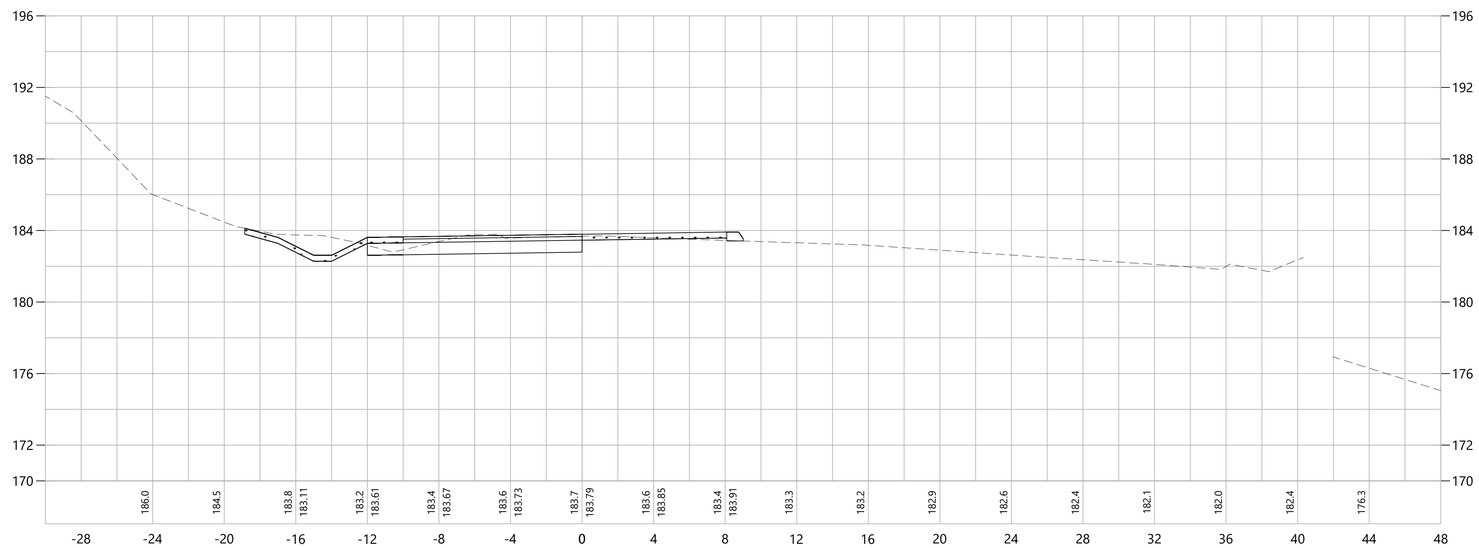

REV.	DATE	DESCRIPTION	SHEET. NO.
		REVISIONS	

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SCALE IN FEET

DESIGNER: EAN
DRAFTER: EAN
CHECKED BY: BAA
APPROVED BY: SON

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Engineers Scientists Planners Designers

NOT ISSUED FOR CONSTRUCTION DATE:NOVEMBER, 2021

PROJECT TITLE:
BLOOMFIELD-TARIFFVLLE
MULTI-USE TRAIL CONNECTOR

CADD FILENAME: CRO-4237300.DWG

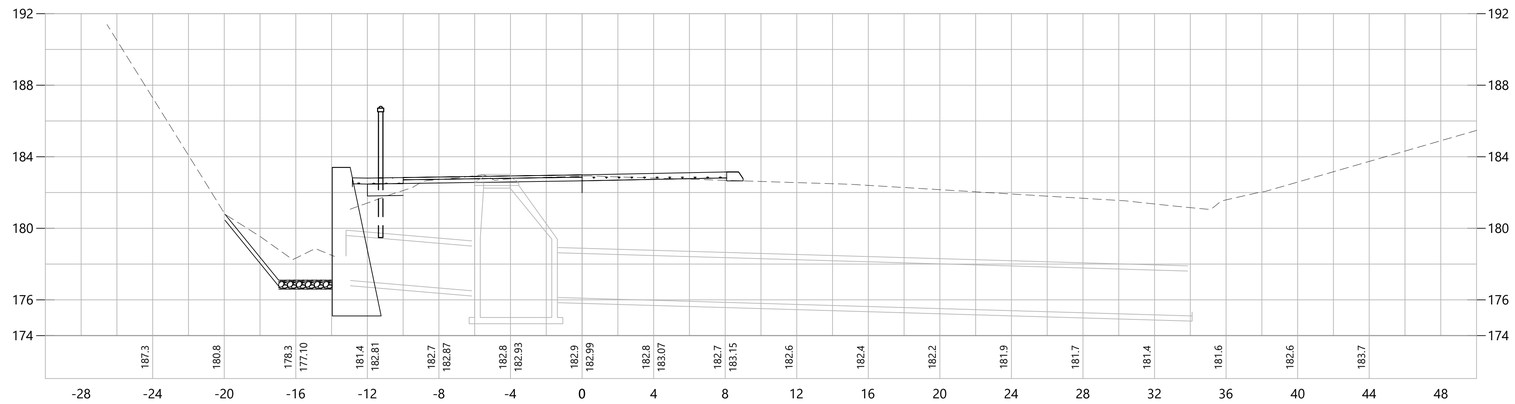
TOWN:
BLOOMFIELD-SIMSBURY,
CONNECTICUT

DRAWING TITLE:
CROSS SECTIONS
MULTI-USE TRAIL

PROJECT NO.: 42373.00
DRAWING NO.: CRO-16
SHEET NO.: 74 OF 95

Nov 17, 2021

26+48.00



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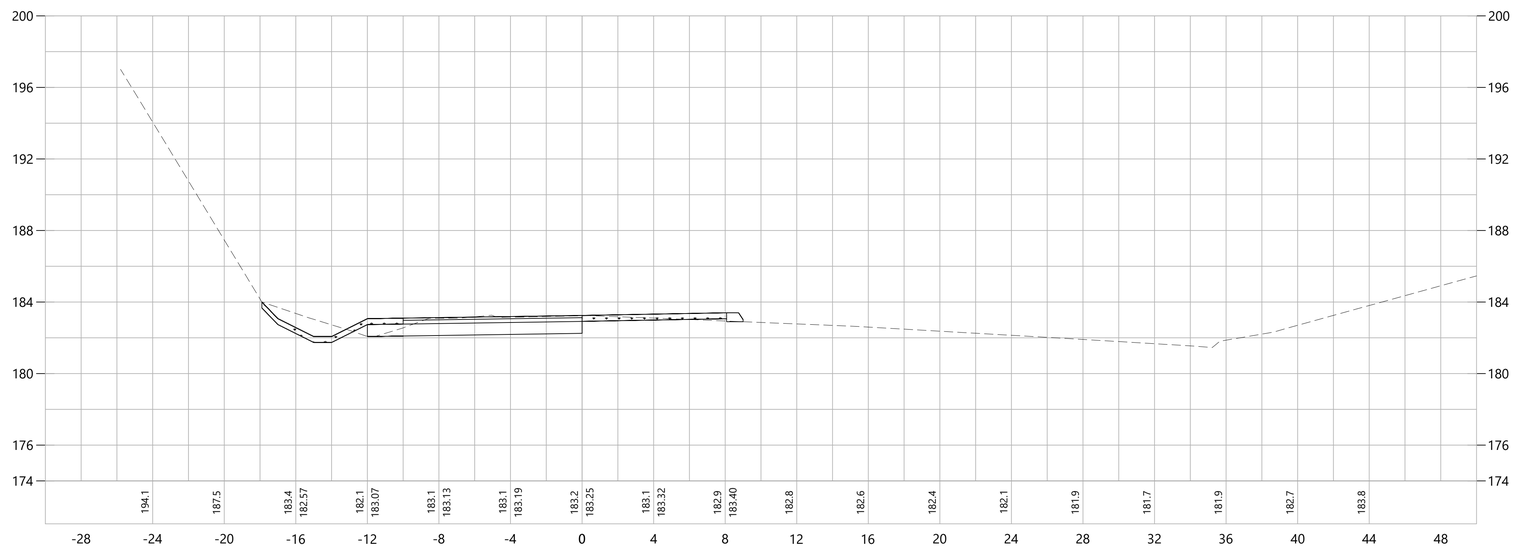

REV.	DATE	DESCRIPTION	SHEET. NO.
		REVISIONS	

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SCALE IN FEET

DESIGNER: EAN
DRAFTER: EAN
CHECKED BY: BAA
APPROVED BY: SON

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Engineers Scientists Planners Designers

NOT ISSUED FOR CONSTRUCTION DATE:NOVEMBER, 2021

PROJECT TITLE:
BLOOMFIELD–TARIFFVLLE
MULTI–USE TRAIL CONNECTOR

CADD FILENAME: CRO-4237300.DWG

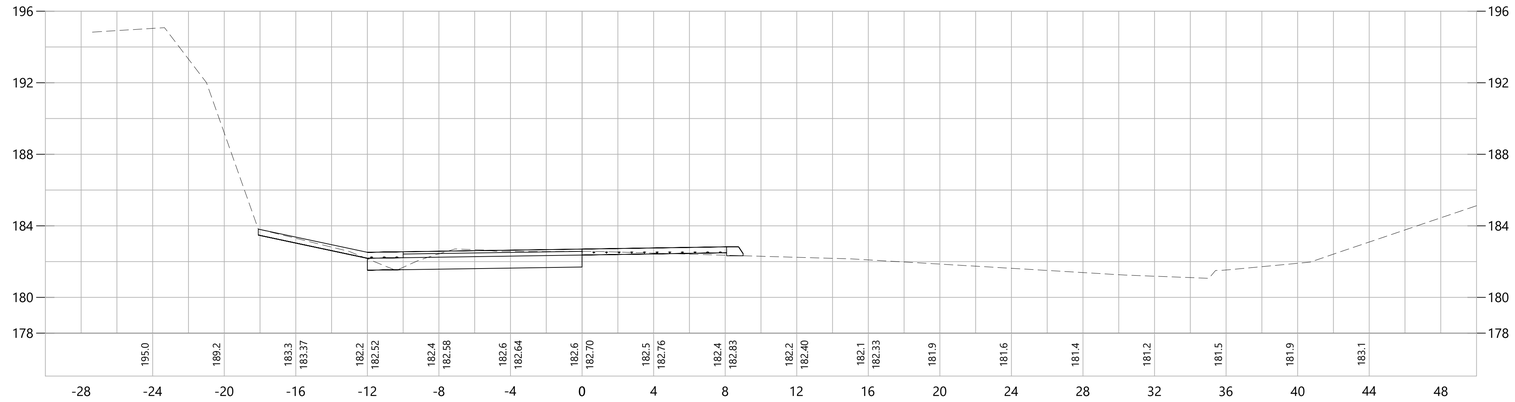
TOWN:
BLOOMFIELD–SIMSBURY,
CONNECTICUT

DRAWING TITLE:
CROSS SECTIONS
MULTI–USE TRAIL

PROJECT NO.: 42373.00
DRAWING NO.: CRO–17
SHEET NO.: 75 OF 95

Nov 17, 2021

27+00.00



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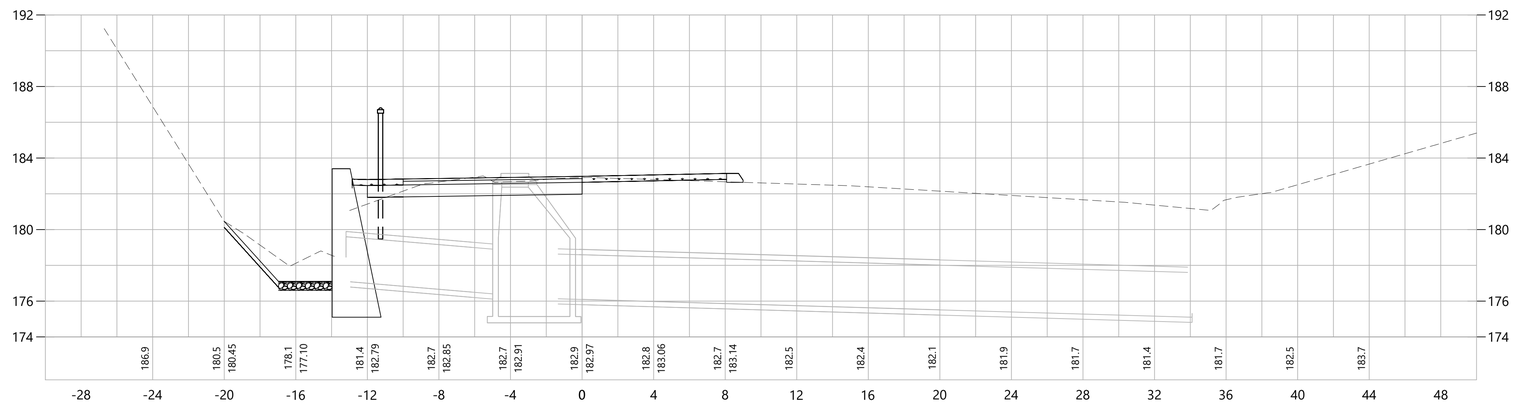

REV.	DATE	DESCRIPTION	SHEET. NO.
		REVISIONS	

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SCALE IN FEET

DESIGNER: EAN
DRAFTER: EAN
CHECKED BY: BAA
APPROVED BY: SON

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Engineers Scientists Planners Designers

NOT ISSUED FOR CONSTRUCTION DATE:NOVEMBER, 2021

PROJECT TITLE:
BLOOMFIELD–TARIFFVLLE
MULTI–USE TRAIL CONNECTOR

CADD FILENAME: CRO-4237300.DWG

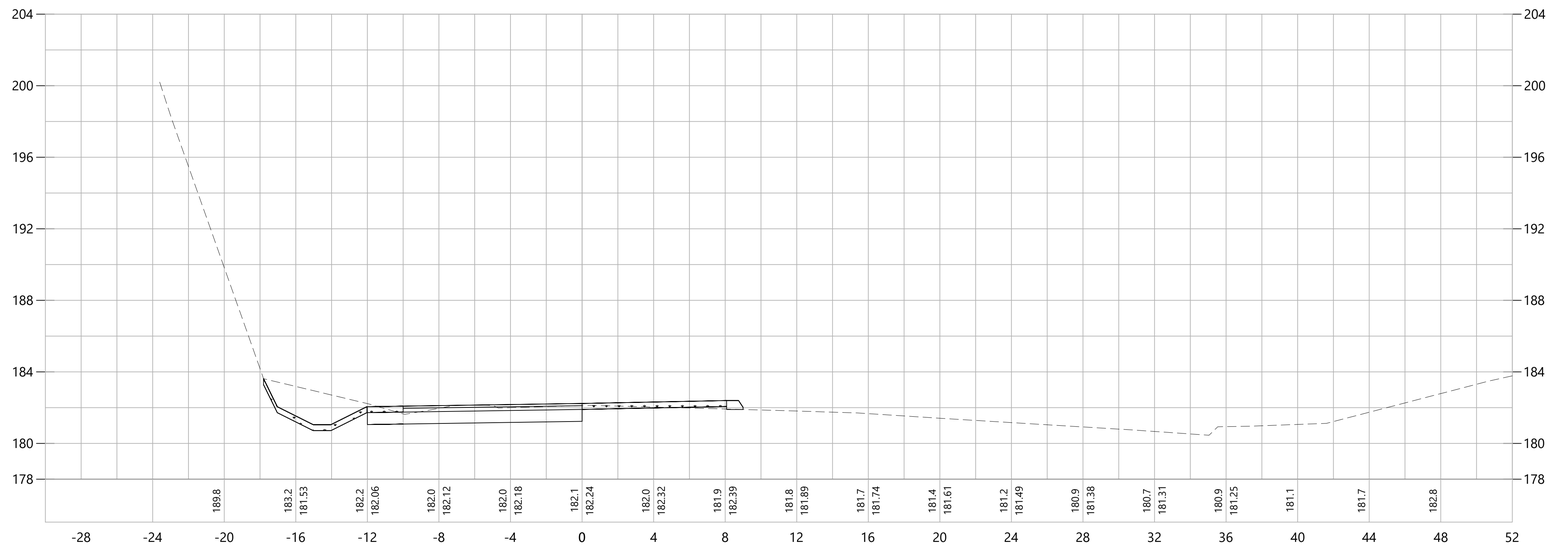
TOWN:
BLOOMFIELD–SIMSBURY,
CONNECTICUT

DRAWING TITLE:
CROSS SECTIONS
MULTI–USE TRAIL

PROJECT NO.: 42373.00
DRAWING NO.: CRO–18
SHEET NO.: 76 OF 95

Nov 17, 2021

28+00.00



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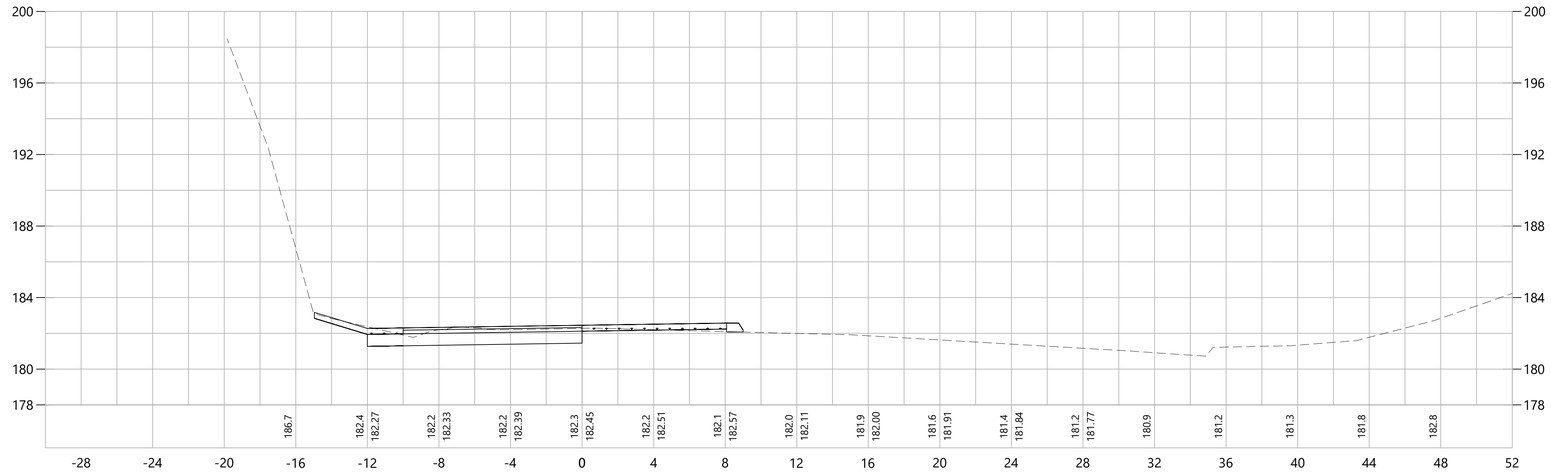

REV.	DATE	DESCRIPTION	SHEET. NO.
		REVISIONS	

4 0 4
SCALE IN FEET

DESIGNER: EAN
DRAFTER: EAN
CHECKED BY: BAA
APPROVED BY: SON

vhb
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NOT ISSUED FOR CONSTRUCTION DATE:NOVEMBER, 2021

PROJECT TITLE:
BLOOMFIELD–TARIFFVLLE
MULTI–USE TRAIL CONNECTOR

CADD FILENAME: CRO-4237300.DWG

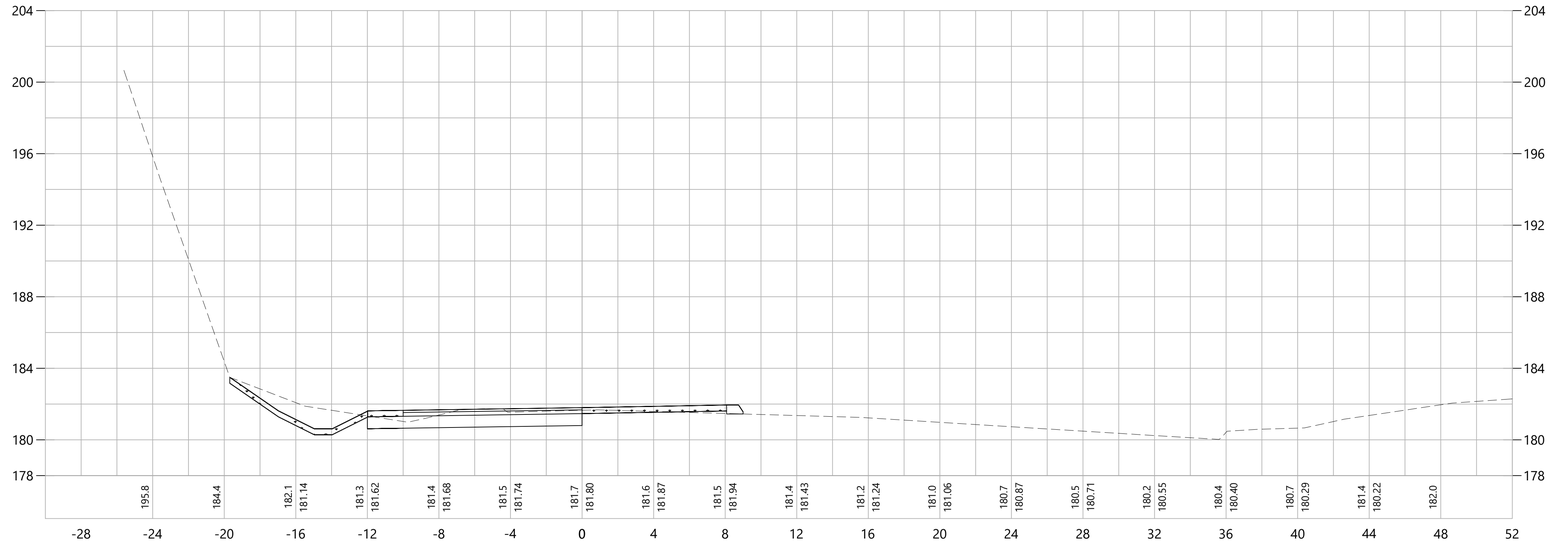
TOWN:
BLOOMFIELD–SIMSBURY,
CONNECTICUT

DRAWING TITLE:
CROSS SECTIONS
MULTI–USE TRAIL

PROJECT NO.: 42373.00
DRAWING NO.: CRO–19
SHEET NO.: 77 OF 95

Nov 17, 2021

29+00.00



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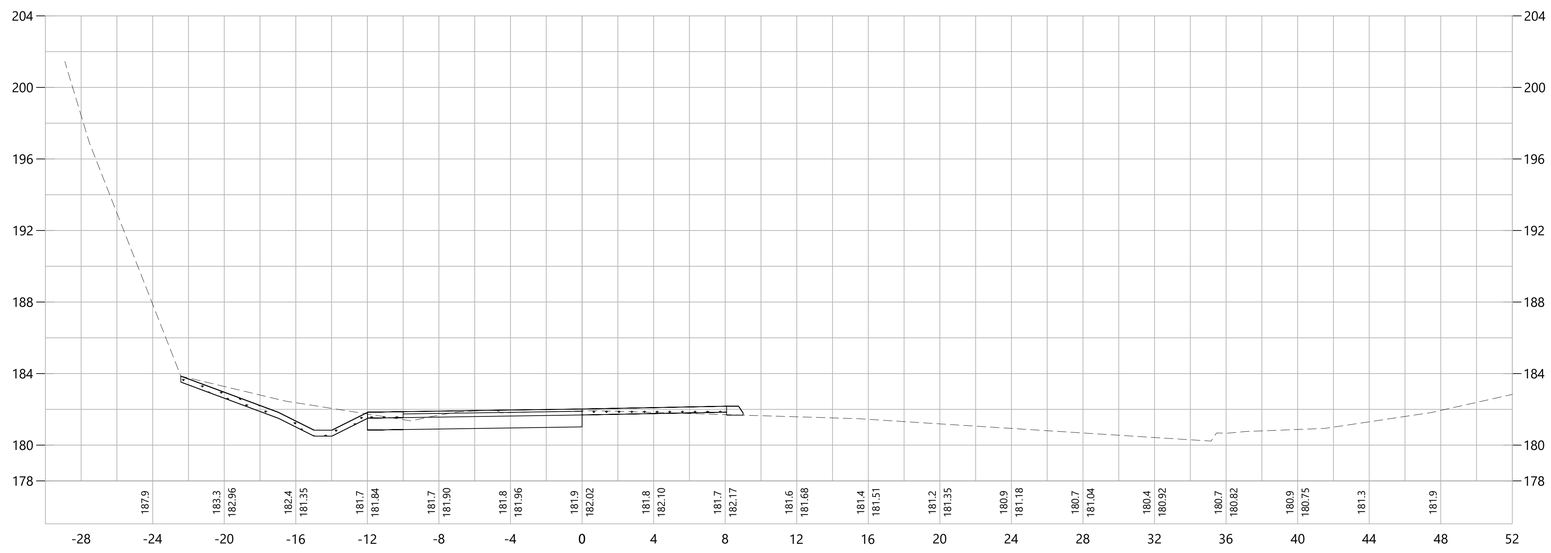

REV.	DATE	DESCRIPTION	SHEET. NO.
		REVISIONS	

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SCALE IN FEET

DESIGNER: EAN
DRAFTER: EAN
CHECKED BY: BAA
APPROVED BY: SON

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NOT ISSUED FOR CONSTRUCTION DATE:NOVEMBER, 2021

PROJECT TITLE:
BLOOMFIELD–TARIFFVLLE
MULTI–USE TRAIL CONNECTOR

CADD FILENAME: CRO-4237300.DWG

TOWN:
BLOOMFIELD–SIMSBURY,
CONNECTICUT

DRAWING TITLE:
CROSS SECTIONS
MULTI–USE TRAIL

PROJECT NO.: 42373.00
DRAWING NO.: CRO–20
SHEET NO.: 78 OF 95

Nov 17, 2021

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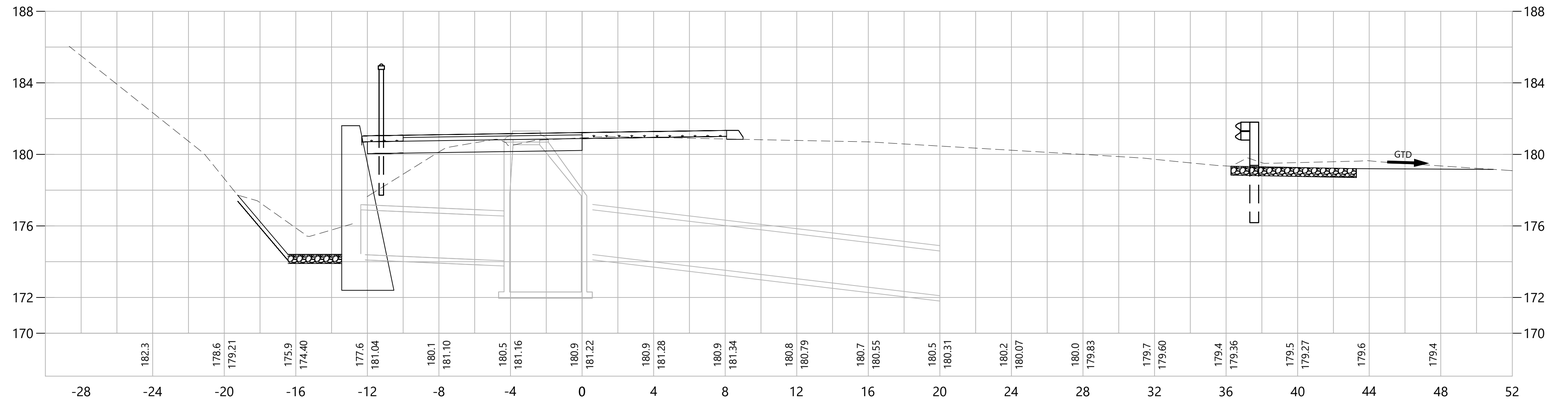

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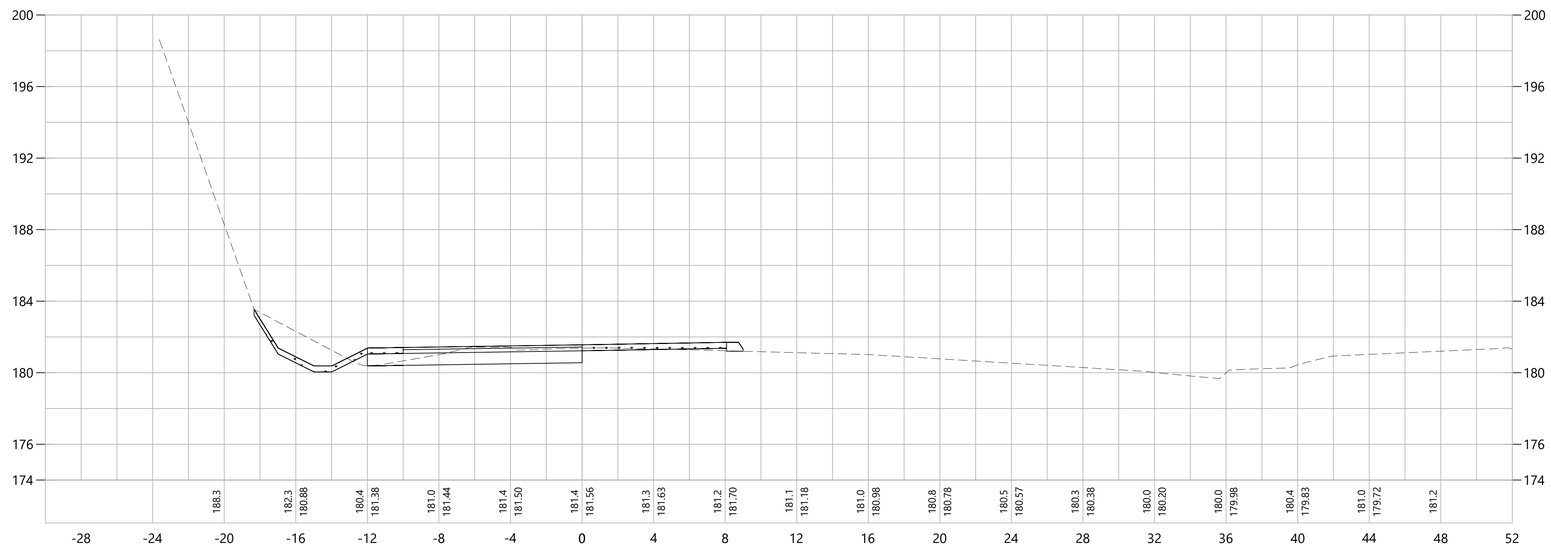

REV.	DATE	DESCRIPTION	SHEET. NO.
		REVISIONS	

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SCALE IN FEET

DESIGNER: EAN
DRAFTER: EAN
CHECKED BY: BAA
APPROVED BY: SON

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NOT ISSUED FOR CONSTRUCTION DATE:NOVEMBER, 2021

PROJECT TITLE:
BLOOMFIELD–TARIFFVLLE
MULTI–USE TRAIL CONNECTOR

CADD FILENAME: CRO-4237300.DWG

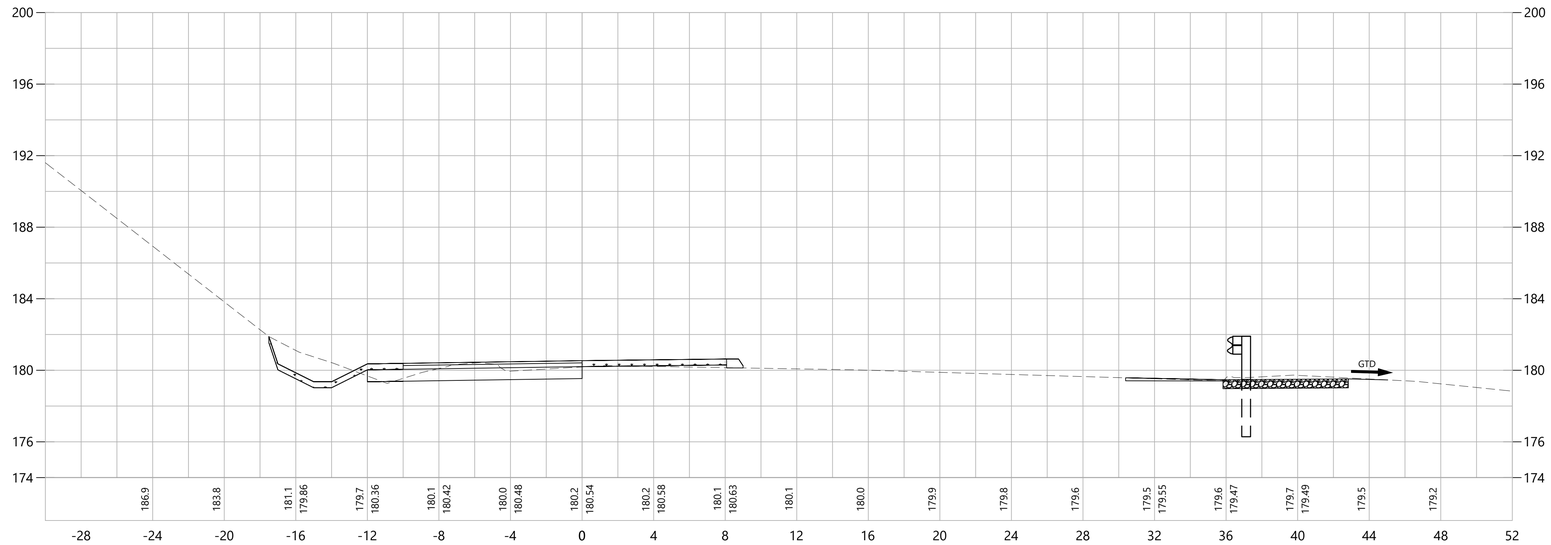
TOWN:
BLOOMFIELD–SIMSBURY,
CONNECTICUT

DRAWING TITLE:
CROSS SECTIONS
MULTI–USE TRAIL

PROJECT NO.: 42373.00
DRAWING NO.: CRO–21
SHEET NO.: 79 OF 95

Nov 17, 2021

31+00.00



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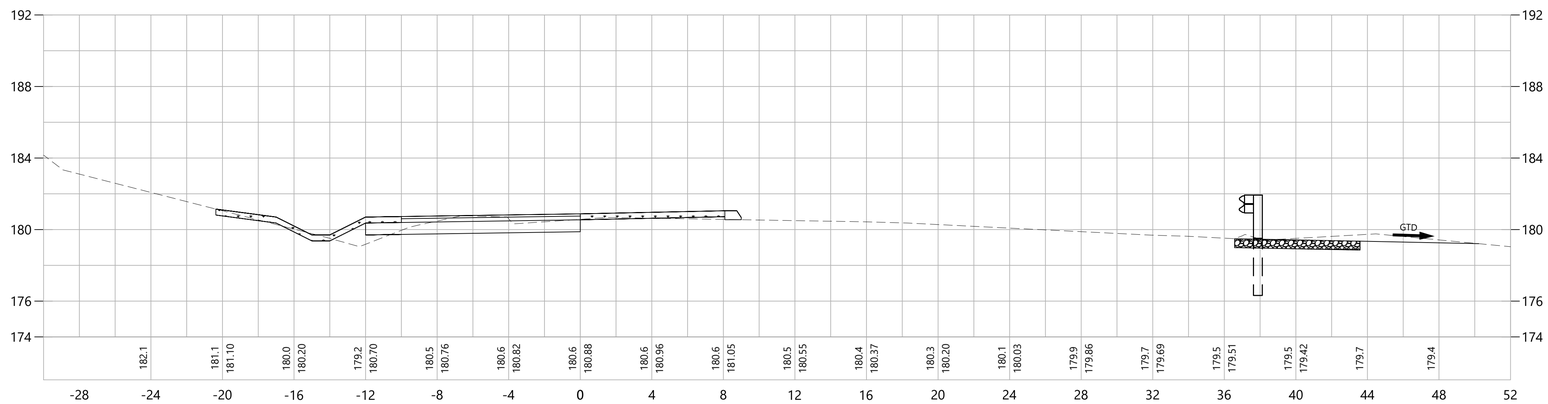

REV.	DATE	DESCRIPTION	SHEET. NO.
		REVISIONS	

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SCALE IN FEET

DESIGNER: EAN
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CHECKED BY: BAA
APPROVED BY: SON

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NOT ISSUED FOR CONSTRUCTION DATE:NOVEMBER, 2021

PROJECT TITLE:
BLOOMFIELD–TARIFFVLLE
MULTI–USE TRAIL CONNECTOR

CADD FILENAME: CRO-4237300.DWG

TOWN:
BLOOMFIELD–SIMSBURY,
CONNECTICUT

DRAWING TITLE:
CROSS SECTIONS
MULTI–USE TRAIL

PROJECT NO.: 42373.00
DRAWING NO.: CRO–22
SHEET NO.: 80 OF 95

Nov 17, 2021

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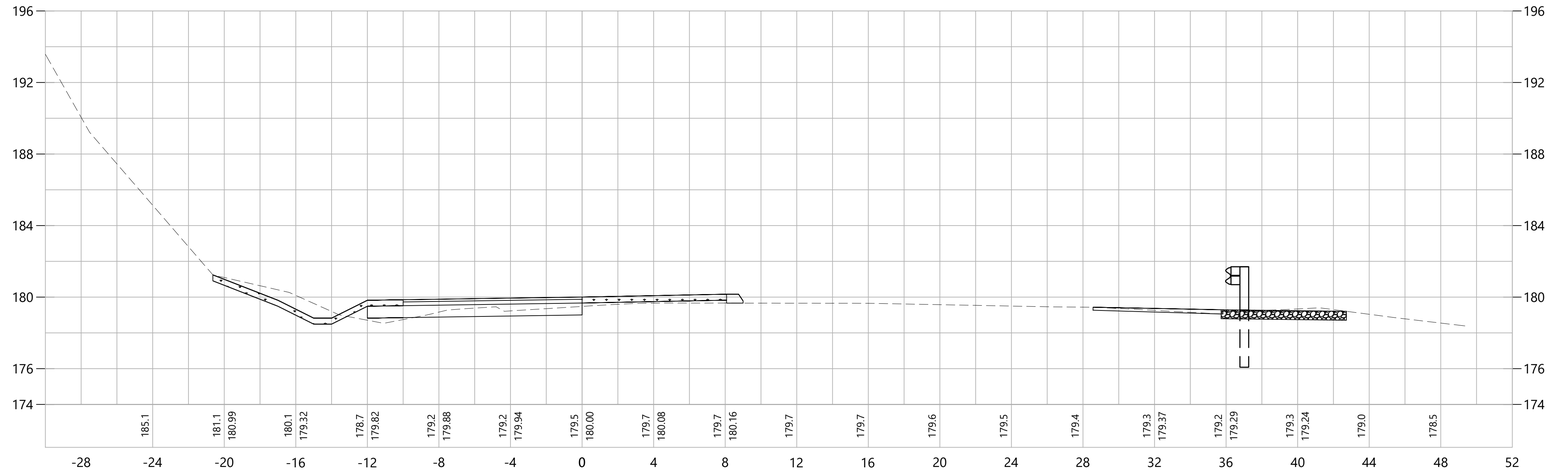

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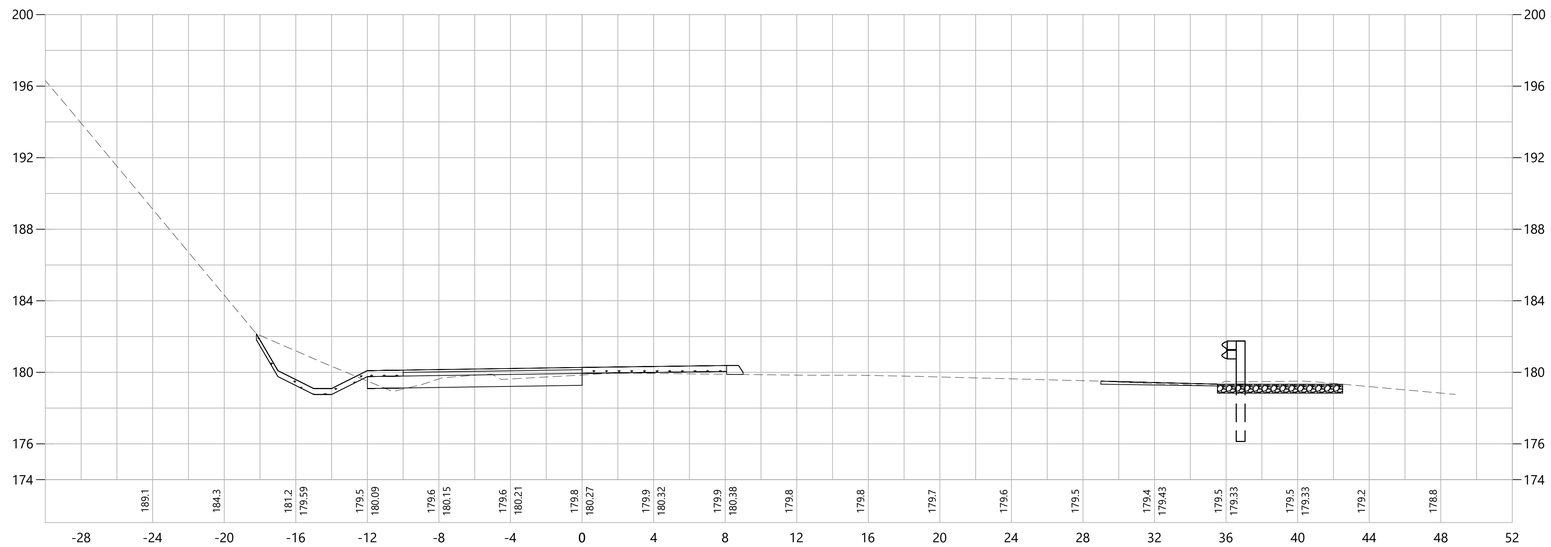

REV.	DATE	DESCRIPTION	SHEET. NO.
		REVISIONS	

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SCALE IN FEET

DESIGNER: EAN
DRAFTER: EAN
CHECKED BY: BAA
APPROVED BY: SON

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NOT ISSUED FOR CONSTRUCTION DATE:NOVEMBER, 2021

PROJECT TITLE:
BLOOMFIELD–TARIFFVLLE
MULTI–USE TRAIL CONNECTOR

CADD FILENAME: CRO-4237300.DWG

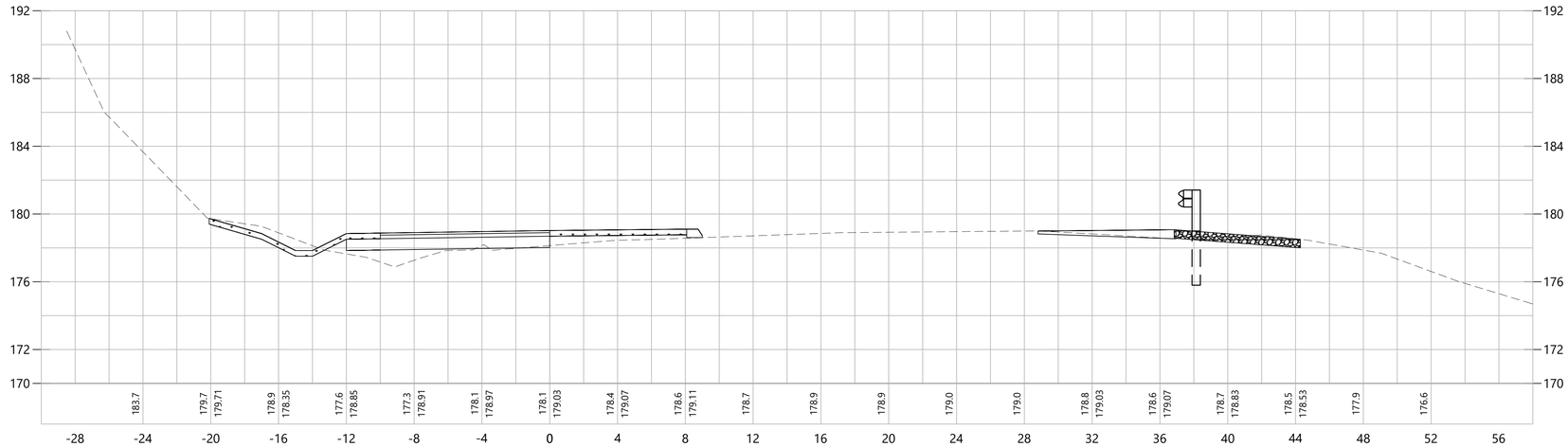
TOWN:
BLOOMFIELD–SIMSBURY,
CONNECTICUT

DRAWING TITLE:
CROSS SECTIONS
MULTI–USE TRAIL

PROJECT NO.: 42373.00
DRAWING NO.: CRO–23
SHEET NO.: 81 OF 95

Nov 17, 2021

33+00.00



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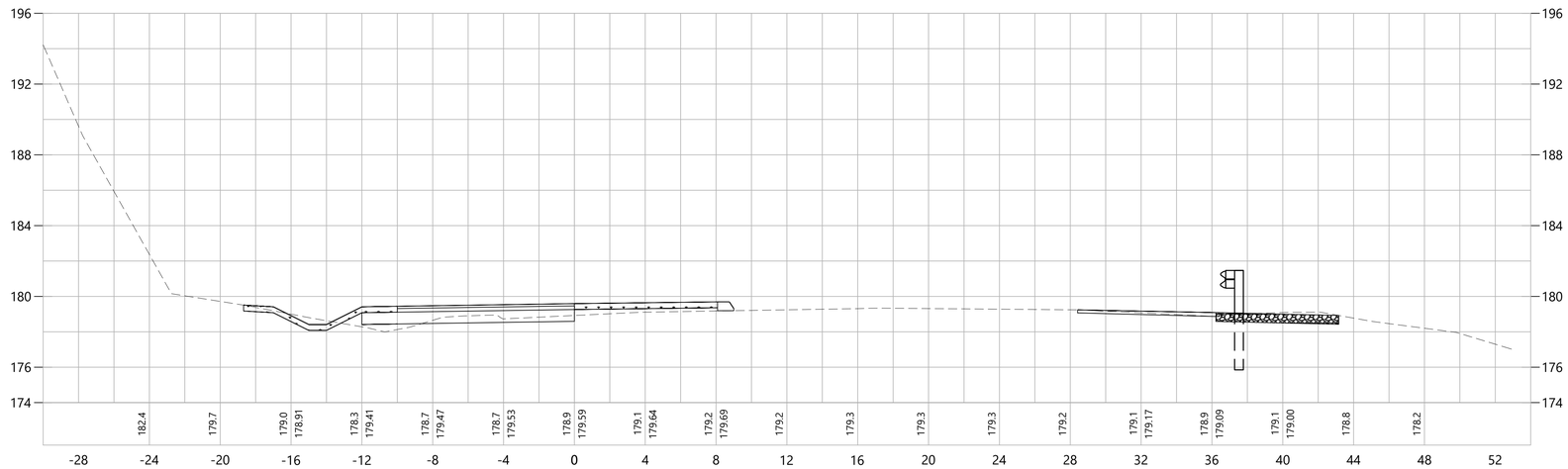

REV.	DATE	DESCRIPTION	SHEET. NO.
		REVISIONS	

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SCALE IN FEET

DESIGNER: EAN
DRAFTER: EAN
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NOT ISSUED FOR CONSTRUCTION DATE:NOVEMBER, 2021

PROJECT TITLE:
BLOOMFIELD–TARIFFVLLE
MULTI–USE TRAIL CONNECTOR

CADD FILENAME: CRO-4237300.DWG

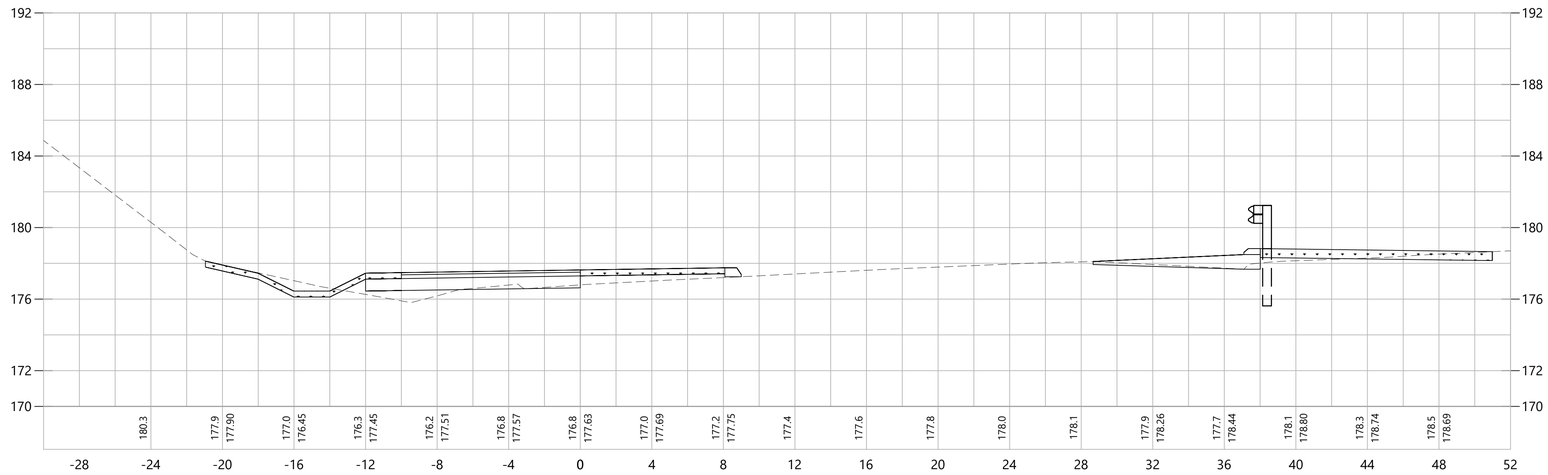
TOWN:
BLOOMFIELD–SIMSBURY,
CONNECTICUT

DRAWING TITLE:
CROSS SECTIONS
MULTI–USE TRAIL

PROJECT NO.: 42373.00
DRAWING NO.: CRO–24
SHEET NO.: 82 OF 95

Nov 17, 2021

34+00.00



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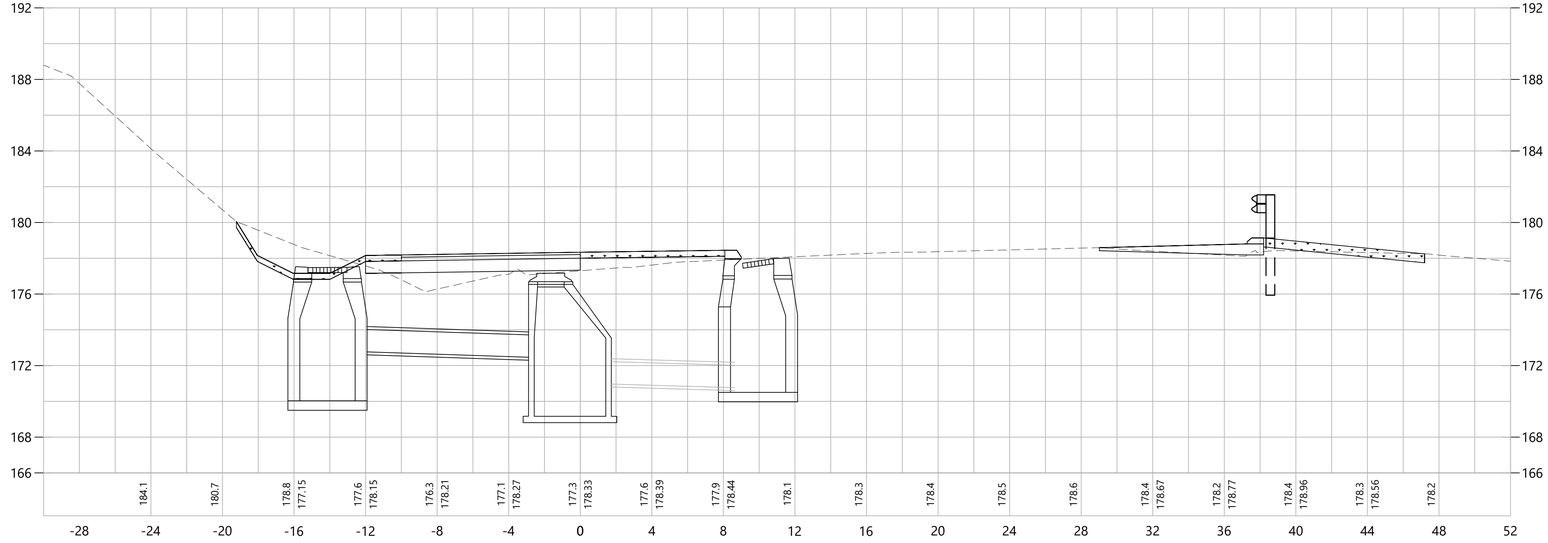

REV.	DATE	DESCRIPTION	SHEET. NO.
		REVISIONS	

4 0 4
SCALE IN FEET

DESIGNER: EAN
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CHECKED BY: BAA
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NOT ISSUED FOR CONSTRUCTION DATE:NOVEMBER, 2021

PROJECT TITLE:
BLOOMFIELD-TARIFFVLLE
MULTI-USE TRAIL CONNECTOR

CADD FILENAME: CRO-4237300.DWG

TOWN:
BLOOMFIELD-SIMSBURY,
CONNECTICUT

DRAWING TITLE:
CROSS SECTIONS
MULTI-USE TRAIL

PROJECT NO.: 42373.00
DRAWING NO.: CRO-25
SHEET NO.: 83 OF 95

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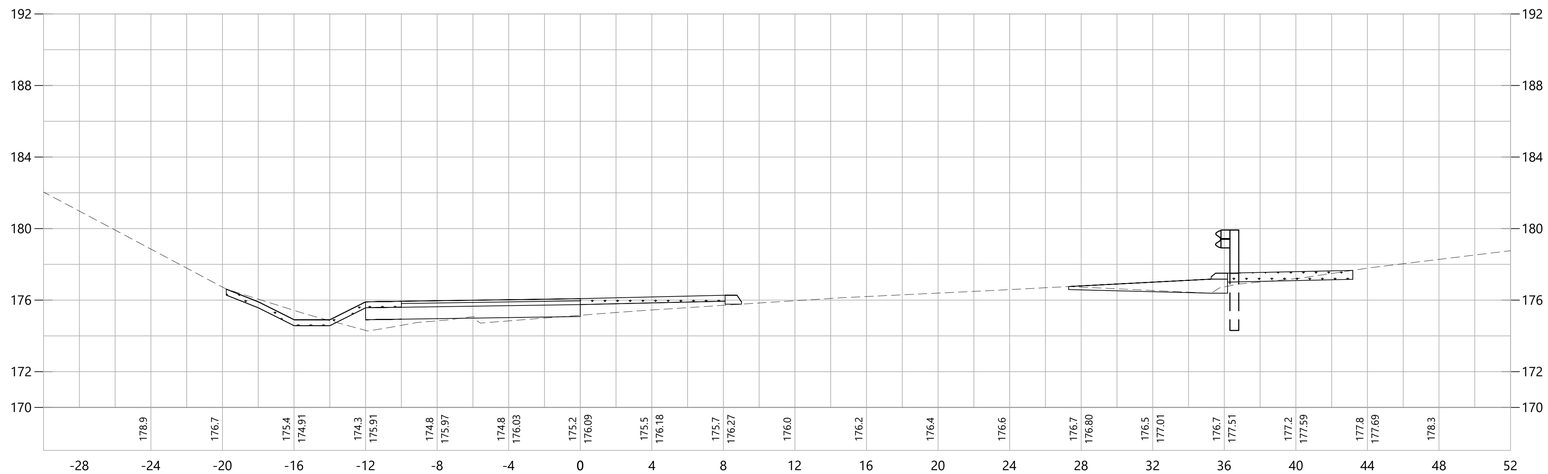

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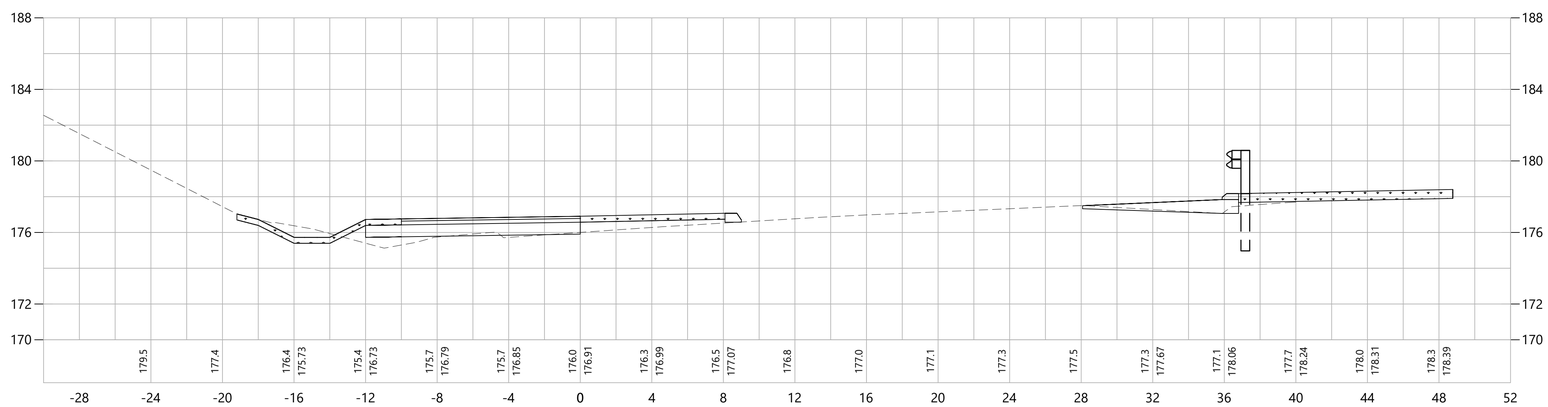

REV.	DATE	DESCRIPTION	SHEET. NO.
		REVISIONS	

4 0 4
SCALE IN FEET

DESIGNER: EAN
DRAFTER: EAN
CHECKED BY: BAA
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NOT ISSUED FOR CONSTRUCTION DATE:NOVEMBER, 2021

PROJECT TITLE:
BLOOMFIELD–TARIFFVLLE
MULTI–USE TRAIL CONNECTOR

CADD FILENAME: CRO-4237300.DWG

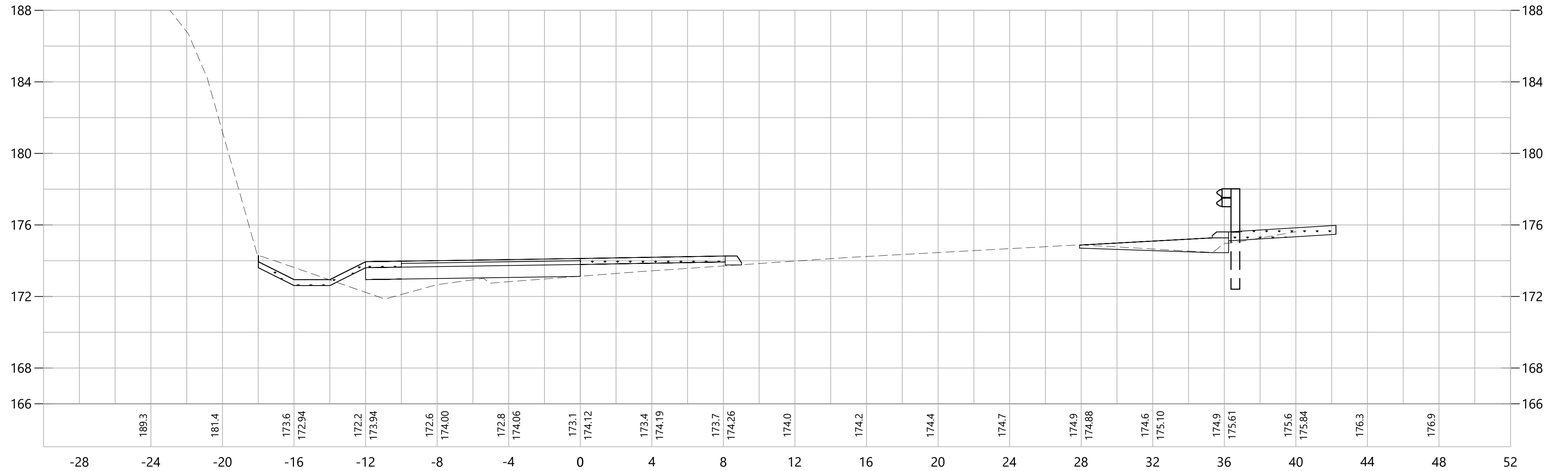
TOWN:
BLOOMFIELD–SIMSBURY,
CONNECTICUT

DRAWING TITLE:
CROSS SECTIONS
MULTI–USE TRAIL

PROJECT NO.: 42373.00
DRAWING NO.: CRO–26
SHEET NO.: 84 OF 95

Nov 17, 2021

36+00.00



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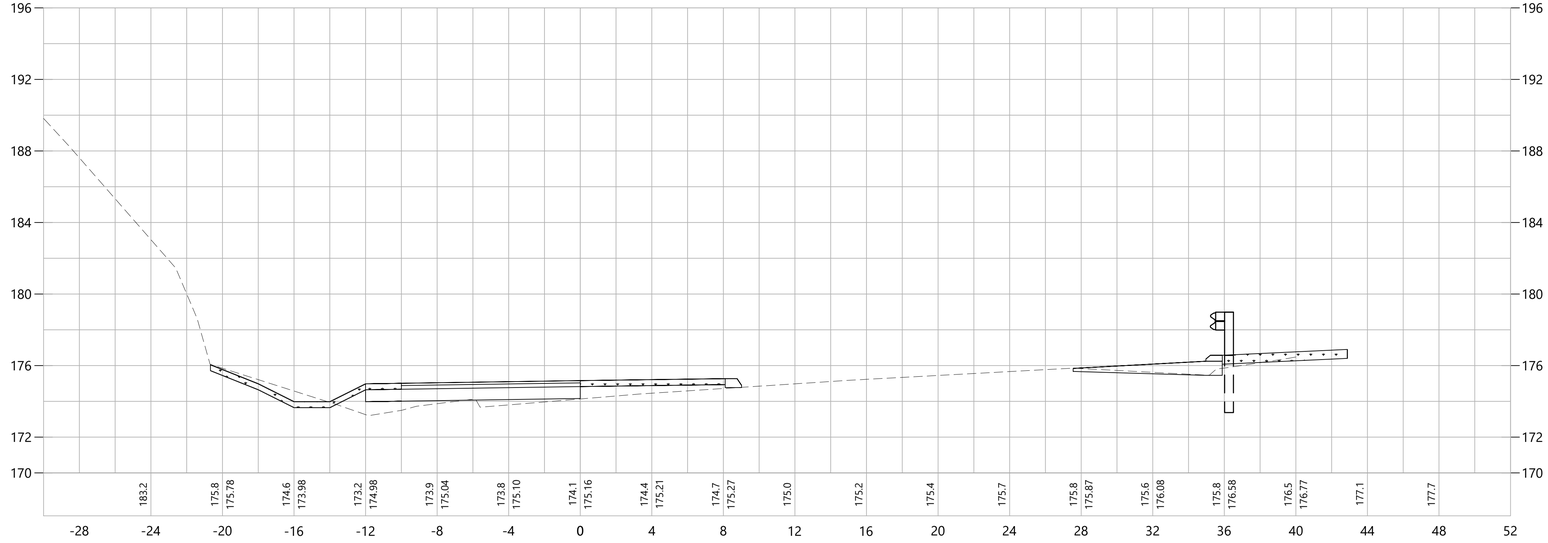

REV.	DATE	DESCRIPTION	SHEET. NO.
		REVISIONS	

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SCALE IN FEET

DESIGNER: EAN
DRAFTER: EAN
CHECKED BY: BAA
APPROVED BY: SON

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NOT ISSUED FOR CONSTRUCTION DATE:NOVEMBER, 2021

PROJECT TITLE:
BLOOMFIELD-TARIFFVLLE
MULTI-USE TRAIL CONNECTOR

CADD FILENAME: CRO-4237300.DWG

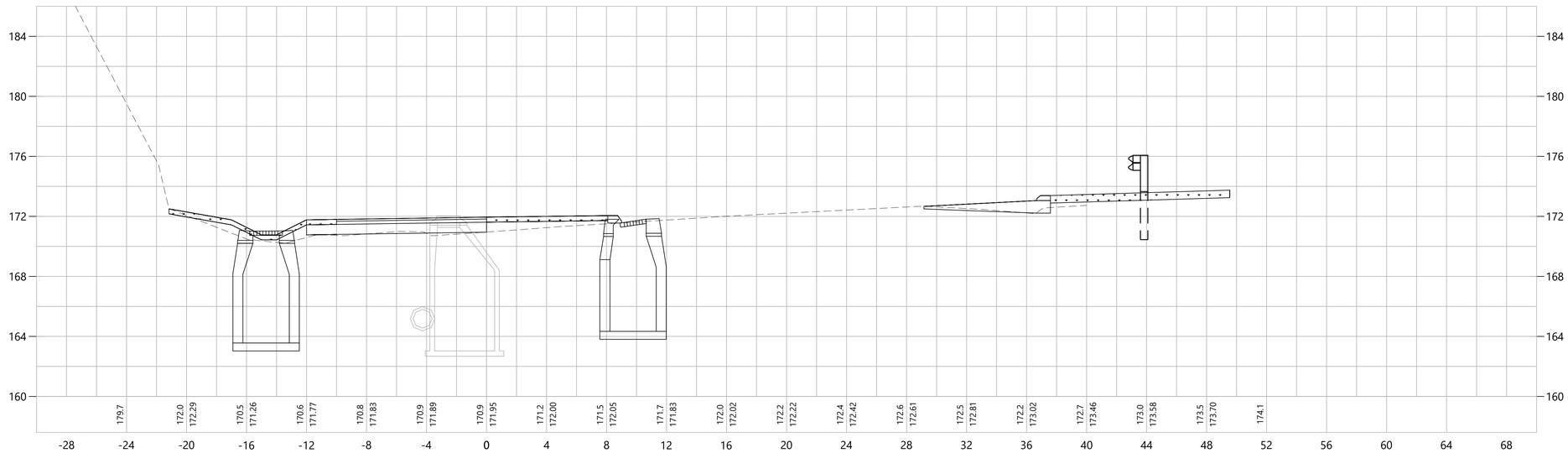
TOWN:
BLOOMFIELD-SIMSBURY,
CONNECTICUT

DRAWING TITLE:
CROSS SECTIONS
MULTI-USE TRAIL

PROJECT NO.: 42373.00
DRAWING NO.: CRO-27
SHEET NO.: 85 OF 95

Nov 17, 2021

37+00.00



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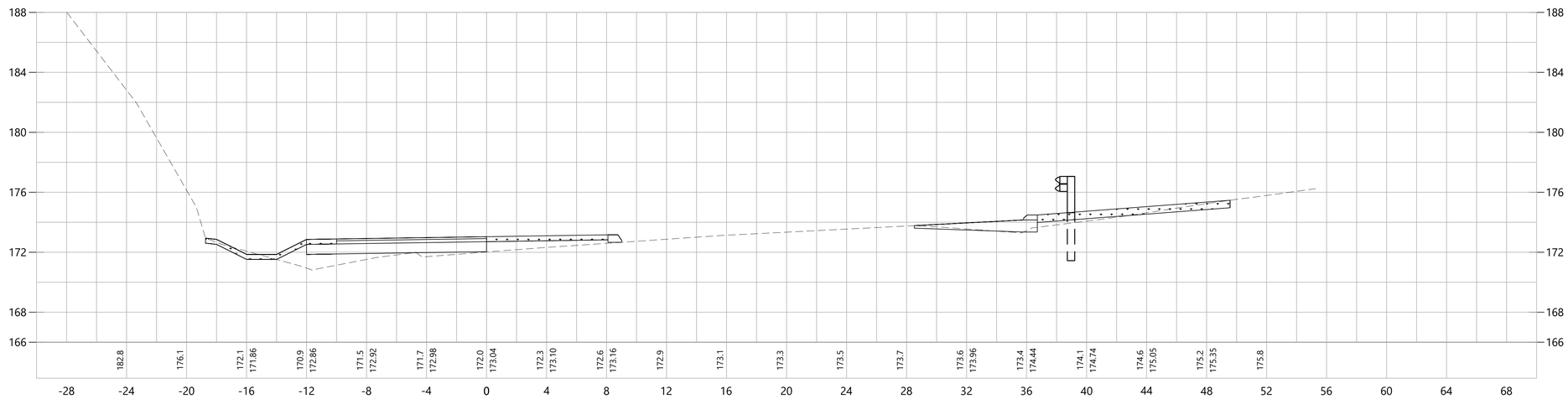

REV.	DATE	DESCRIPTION	SHEET. NO.
		REVISIONS	

4 0 4
SCALE IN FEET

DESIGNER: EAN
DRAFTER: EAN
CHECKED BY: BAA
APPROVED BY: SON

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NOT ISSUED FOR CONSTRUCTION DATE:NOVEMBER, 2021

PROJECT TITLE:
BLOOMFIELD–TARIFFVLLE
MULTI–USE TRAIL CONNECTOR

CADD FILENAME: CRO-4237300.DWG

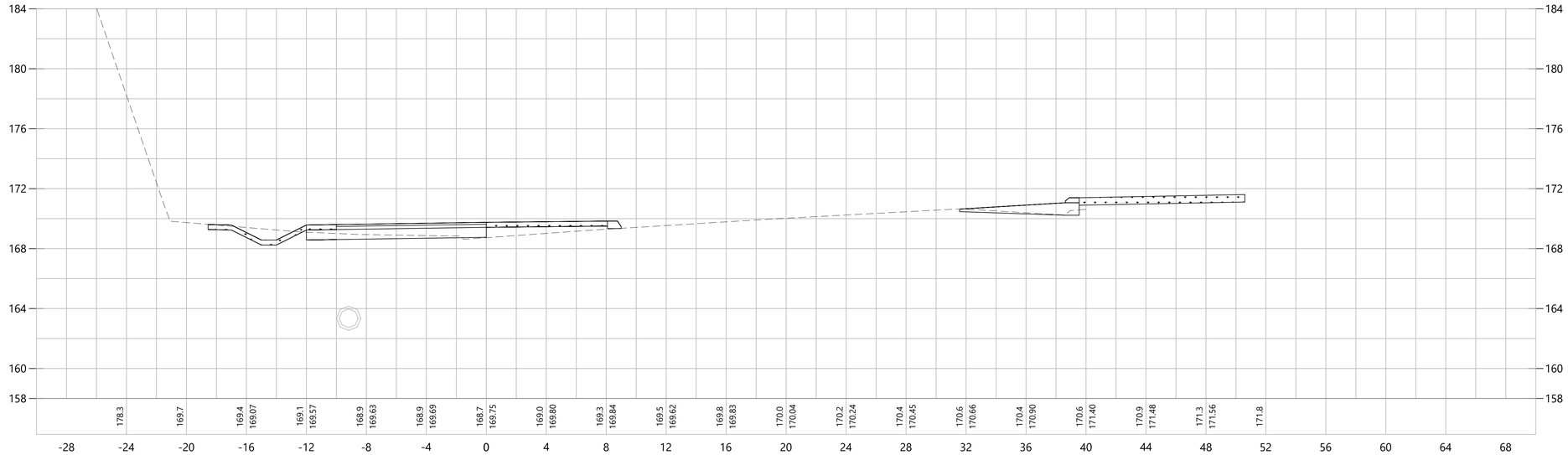
TOWN:
BLOOMFIELD–SIMSBURY,
CONNECTICUT

DRAWING TITLE:
CROSS SECTIONS
MULTI–USE TRAIL

PROJECT NO.: 42373.00
DRAWING NO.: CRO–28
SHEET NO.: 86 OF 95

Nov 17, 2021

38+00.00



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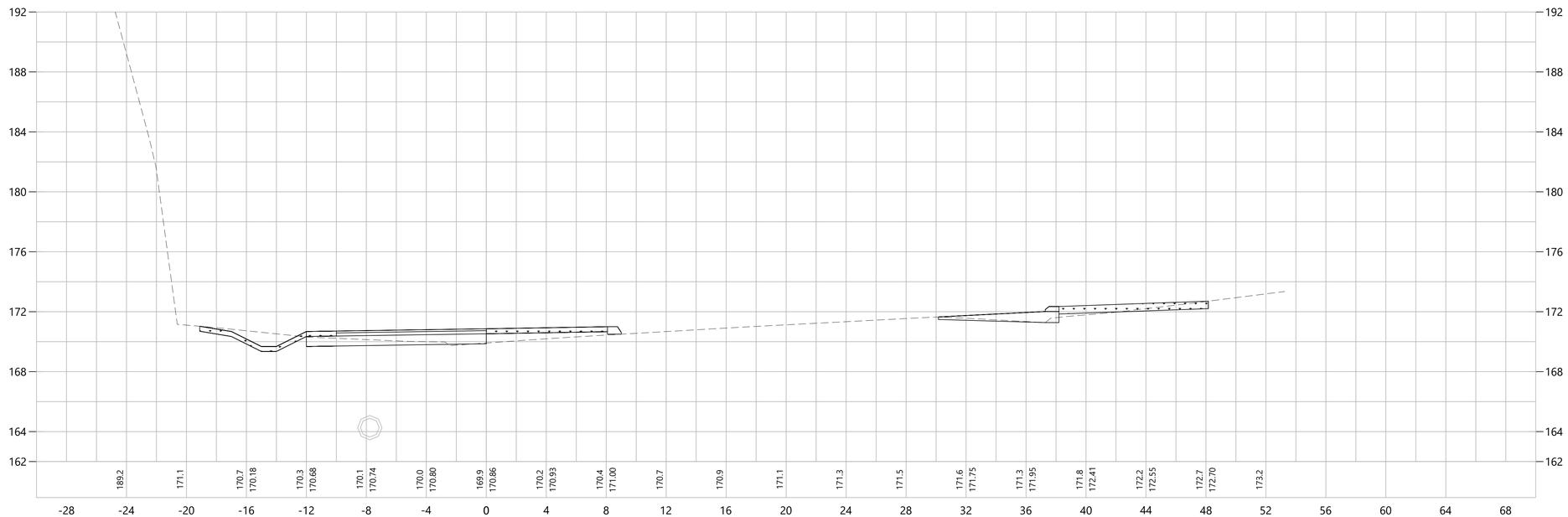

REV.	DATE	DESCRIPTION	SHEET. NO.
		REVISIONS	

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SCALE IN FEET

DESIGNER: EAN
DRAFTER: EAN
CHECKED BY: BAA
APPROVED BY: SON

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NOT ISSUED FOR CONSTRUCTION DATE:NOVEMBER, 2021

PROJECT TITLE:
BLOOMFIELD–TARIFFVLLE
MULTI–USE TRAIL CONNECTOR

CADD FILENAME: CRO–4237300.DWG

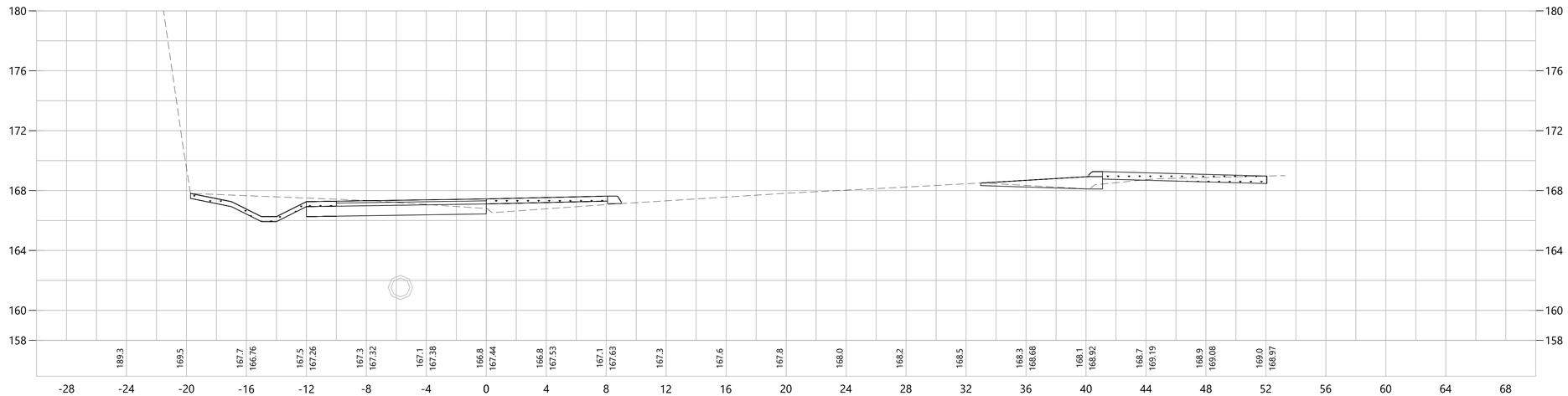
TOWN:
BLOOMFIELD–SIMSBURY,
CONNECTICUT

DRAWING TITLE:
CROSS SECTIONS
MULTI–USE TRAIL

PROJECT NO.: 42373.00
DRAWING NO.: CRO–29
SHEET NO.: 87 OF 95

Nov 17, 2021

39+00.00



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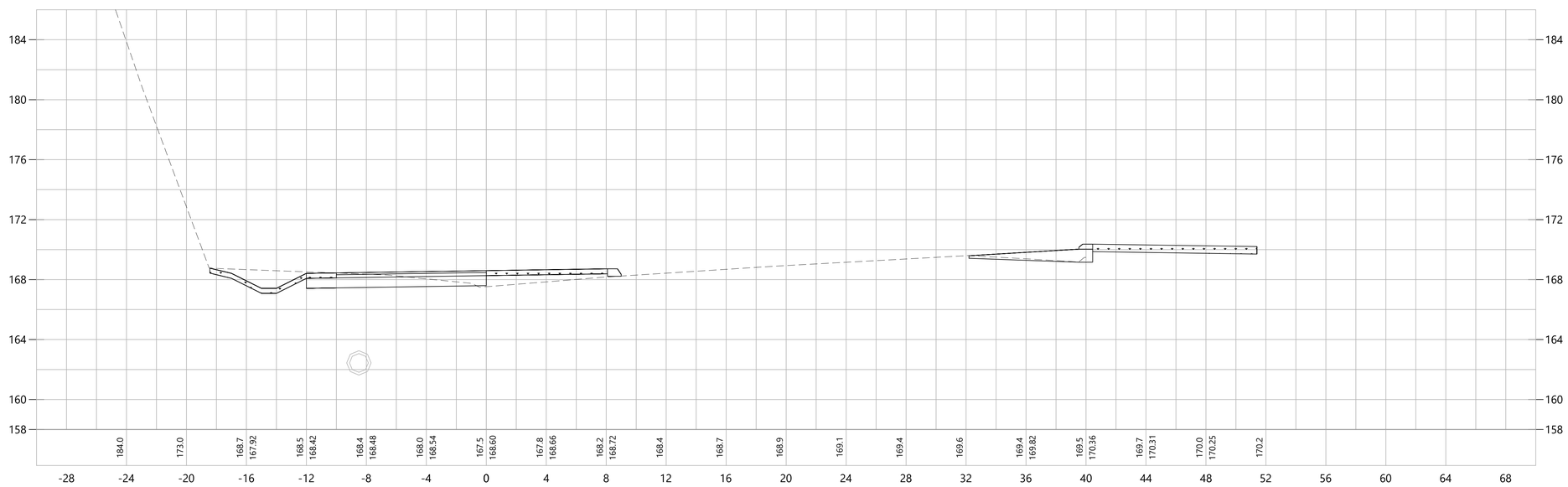

REV.	DATE	DESCRIPTION	SHEET. NO.
		REVISIONS	

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SCALE IN FEET

DESIGNER: EAN
DRAFTER: EAN
CHECKED BY: BAA
APPROVED BY: SON

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Engineers Scientists Planners Designers

NOT ISSUED FOR CONSTRUCTION DATE:NOVEMBER, 2021

PROJECT TITLE:
BLOOMFIELD–TARIFFVLLE
MULTI–USE TRAIL CONNECTOR

CADD FILENAME: CRO-4237300.DWG

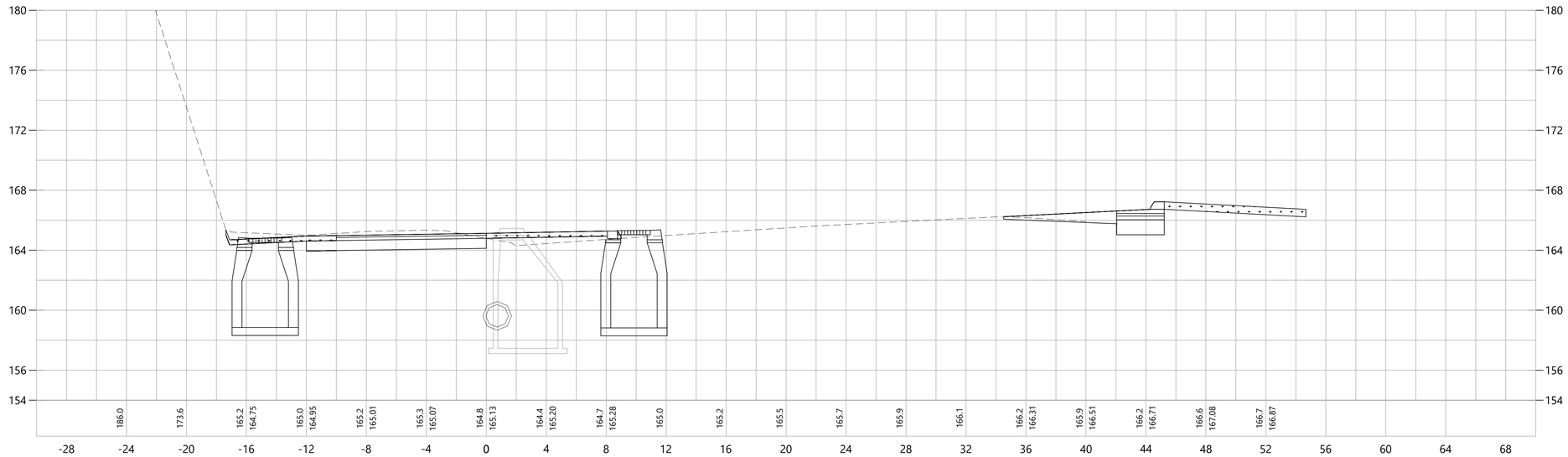
TOWN:
BLOOMFIELD–SIMSBURY,
CONNECTICUT

DRAWING TITLE:
CROSS SECTIONS
MULTI–USE TRAIL

PROJECT NO.: 42373.00
DRAWING NO.: CRO–30
SHEET NO.: 88 OF 95

Nov 17, 2021

40+00.00



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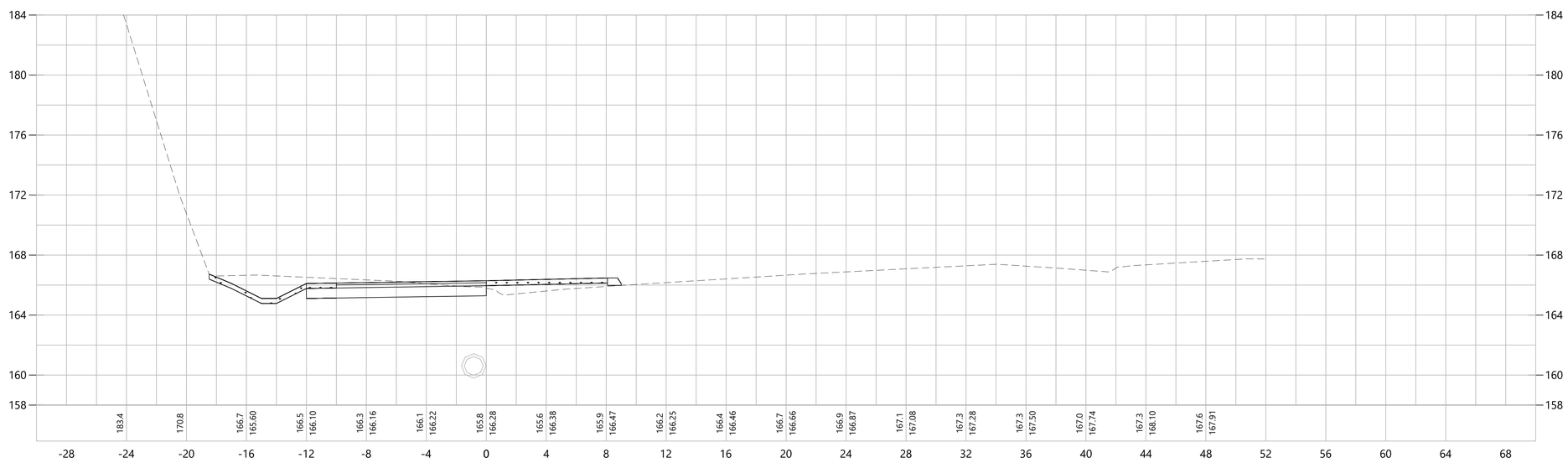

REV.	DATE	DESCRIPTION	SHEET. NO.
		REVISIONS	

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SCALE IN FEET

DESIGNER: EAN
DRAFTER: EAN
CHECKED BY: BAA
APPROVED BY: SON

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NOT ISSUED FOR CONSTRUCTION DATE:NOVEMBER, 2021

PROJECT TITLE:
BLOOMFIELD–TARIFFVLLE
MULTI–USE TRAIL CONNECTOR

CADD FILENAME: CRO-4237300.DWG

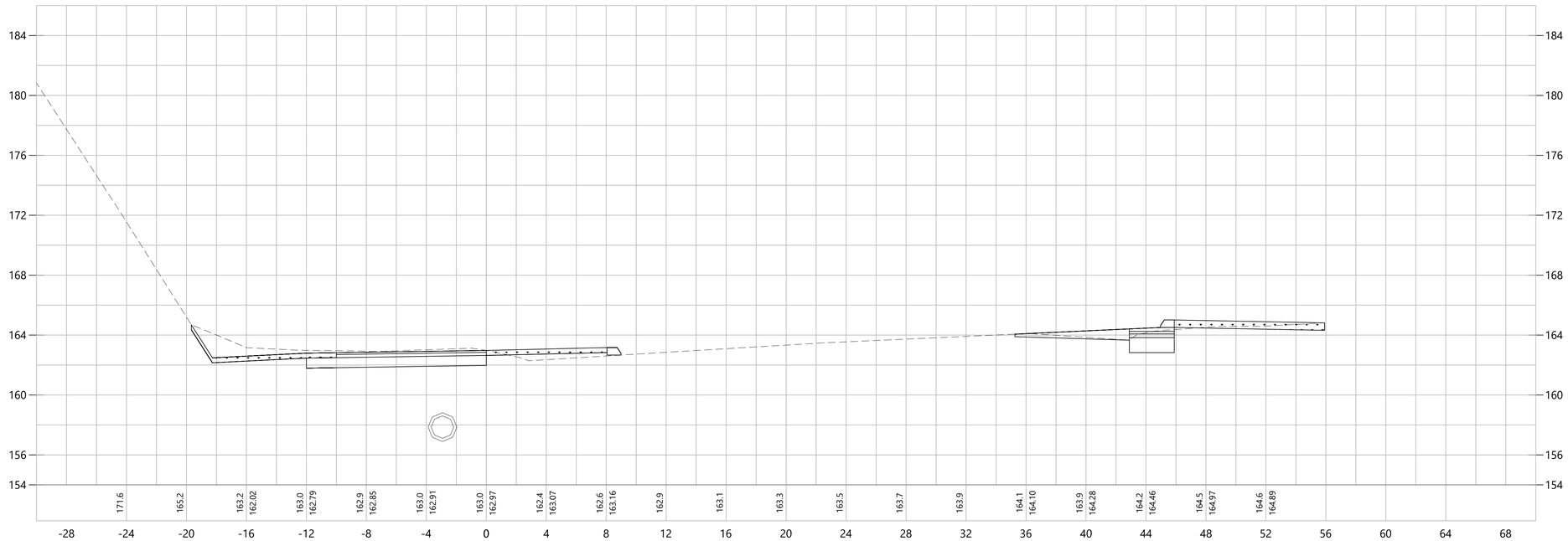
TOWN:
BLOOMFIELD–SIMSBURY,
CONNECTICUT

DRAWING TITLE:
CROSS SECTIONS
MULTI–USE TRAIL

PROJECT NO.: 42373.00
DRAWING NO.: CRO–31
SHEET NO.: 89 OF 95

Nov 17, 2021

41+00.00



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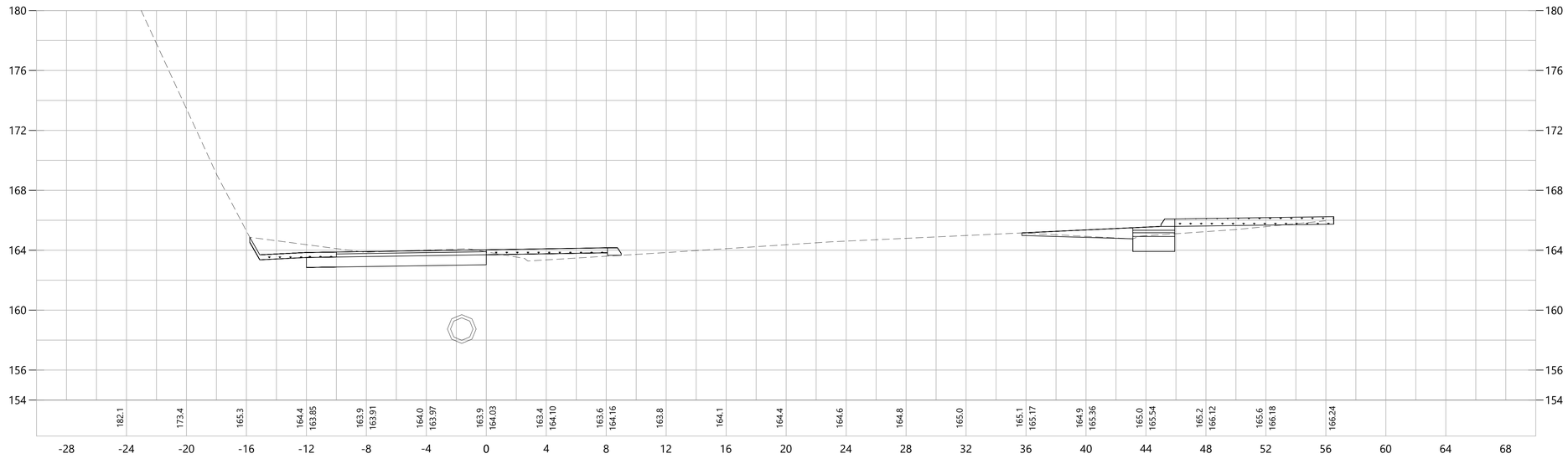

REV.	DATE	DESCRIPTION	SHEET. NO.
		REVISIONS	

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SCALE IN FEET

DESIGNER: EAN
DRAFTER: EAN
CHECKED BY: BAA
APPROVED BY: SON

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NOT ISSUED FOR CONSTRUCTION DATE:NOVEMBER, 2021

PROJECT TITLE:
BLOOMFIELD–TARIFFVLLE
MULTI–USE TRAIL CONNECTOR

CADD FILENAME: CRO-4237300.DWG

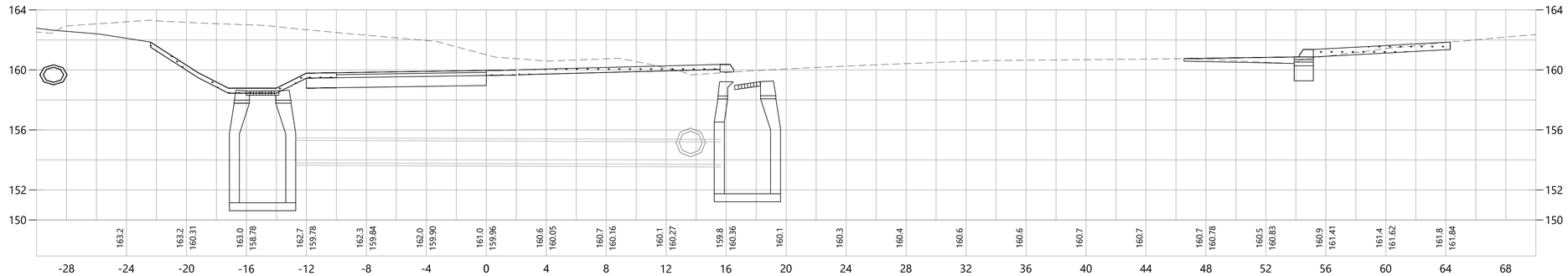
TOWN:
BLOOMFIELD–SIMSBURY,
CONNECTICUT

DRAWING TITLE:
CROSS SECTIONS
MULTI–USE TRAIL

PROJECT NO.: 42373.00
DRAWING NO.: CRO–32
SHEET NO.: 90 OF 95

Nov 17, 2021

42+50.00



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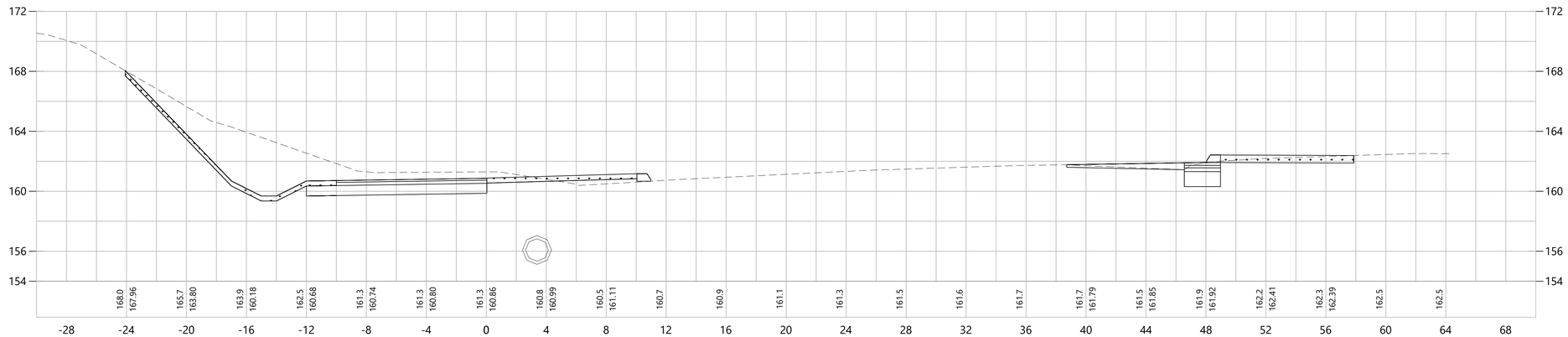

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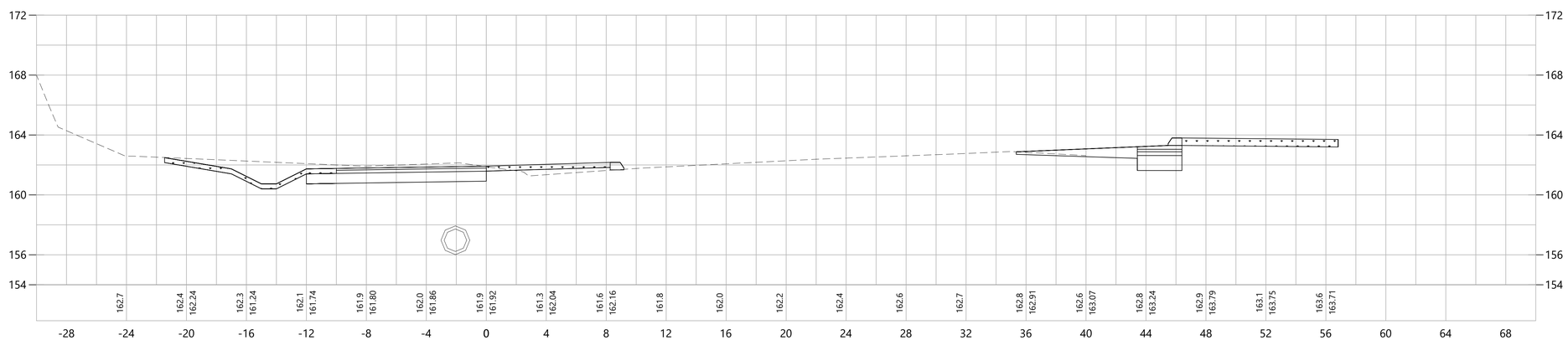

REV.	DATE	DESCRIPTION	SHEET. NO.
		REVISIONS	

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SCALE IN FEET

DESIGNER: EAN
DRAFTER: EAN
CHECKED BY: BAA
APPROVED BY: SON

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NOT ISSUED FOR CONSTRUCTION DATE:NOVEMBER, 2021

PROJECT TITLE:
BLOOMFIELD–TARIFFVLLE
MULTI–USE TRAIL CONNECTOR

CADD FILENAME: CRO-4237300.DWG

TOWN:
BLOOMFIELD–SIMSBURY,
CONNECTICUT

DRAWING TITLE:
CROSS SECTIONS
MULTI–USE TRAIL

PROJECT NO.: 42373.00
DRAWING NO.: CRO–33
SHEET NO.: 91 OF 95

Nov 17, 2021

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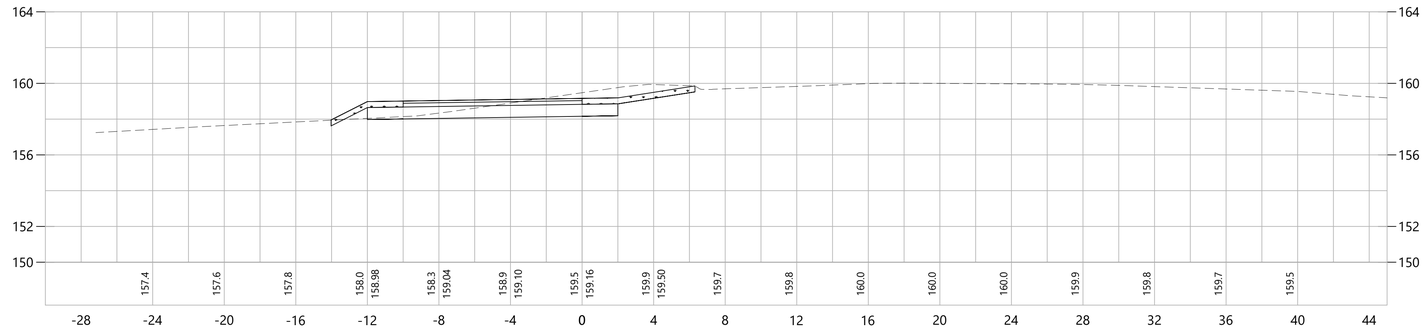

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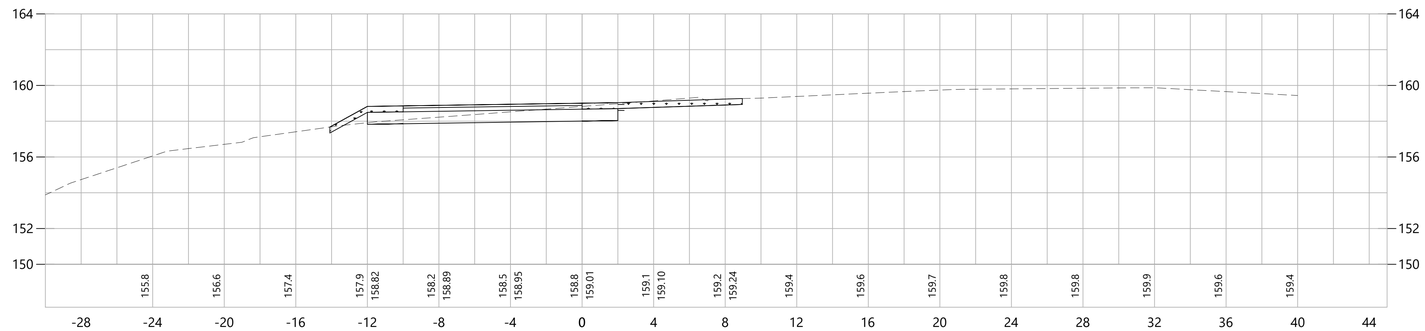

REV.	DATE	DESCRIPTION	SHEET. NO.
		REVISIONS	

4 0 4
SCALE IN FEET

DESIGNER: EAN
DRAFTER: EAN
CHECKED BY: BAA
APPROVED BY: SON

vhb
Engineers Scientists Planners Designers
NOT ISSUED FOR CONSTRUCTION DATE:NOVEMBER, 2021

PROJECT TITLE:
BLOOMFIELD–TARIFFVLLE
MULTI–USE TRAIL CONNECTOR

CADD FILENAME: CRO–4237300.DWG

TOWN:
BLOOMFIELD–SIMSBURY,
CONNECTICUT

DRAWING TITLE:
CROSS SECTIONS
MULTI–USE TRAIL

PROJECT NO.: 42373.00
DRAWING NO.: CRO–34
SHEET NO.: 92 OF 95

Nov 17, 2021

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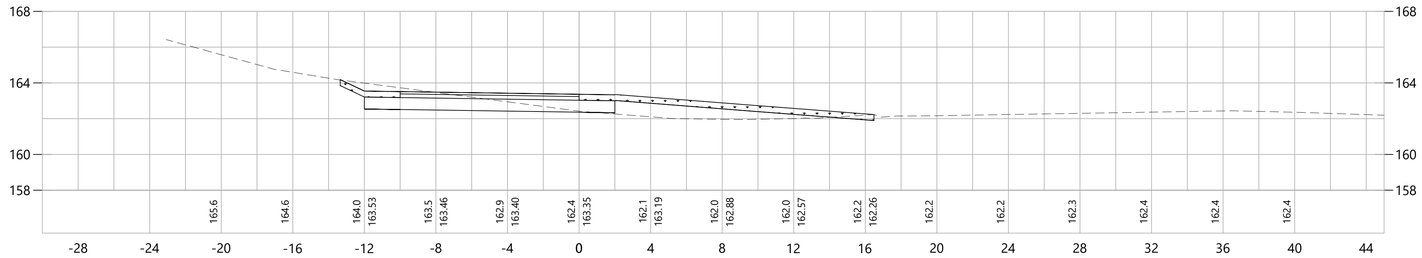

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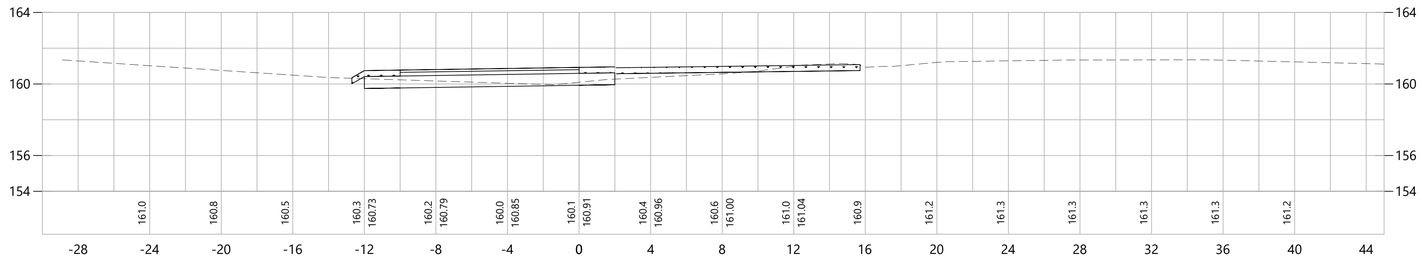

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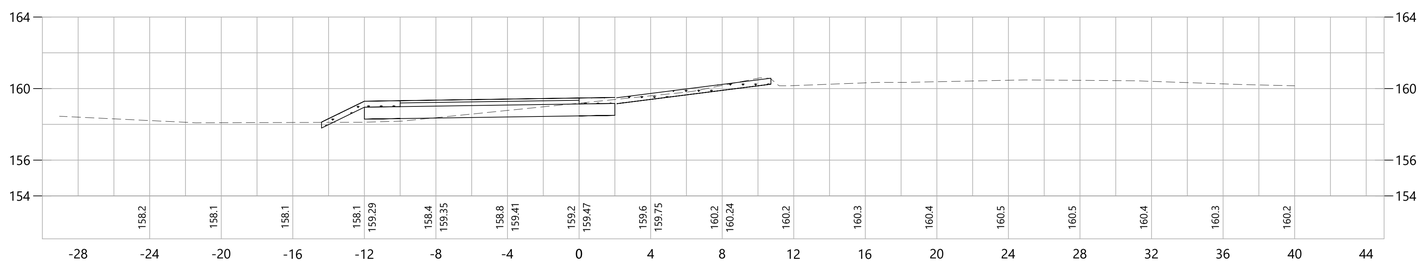

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		REVISIONS	

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DRAFTER: EAN
CHECKED BY: BAA
APPROVED BY: SON

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PROJECT TITLE:
BLOOMFIELD–TARIFFVLLE
MULTI–USE TRAIL CONNECTOR

CADD FILENAME: CRO–4237300.DWG

TOWN:
BLOOMFIELD–SIMSBURY,
CONNECTICUT

DRAWING TITLE:
CROSS SECTIONS
MULTI–USE TRAIL

PROJECT NO.: 42373.00
DRAWING NO.: CRO–35
SHEET NO.: 93 OF 95

Nov 17, 2021

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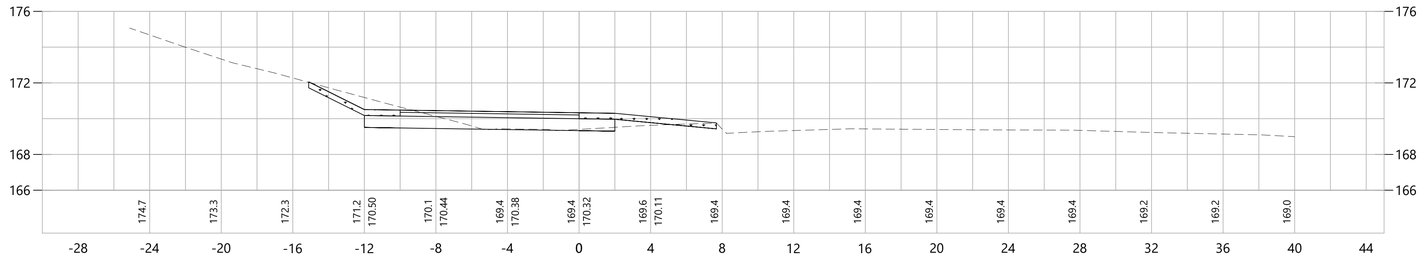

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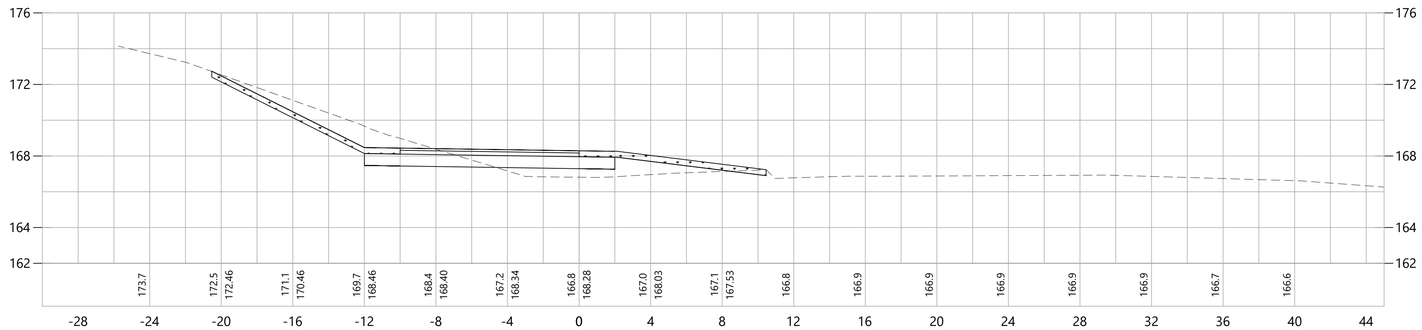

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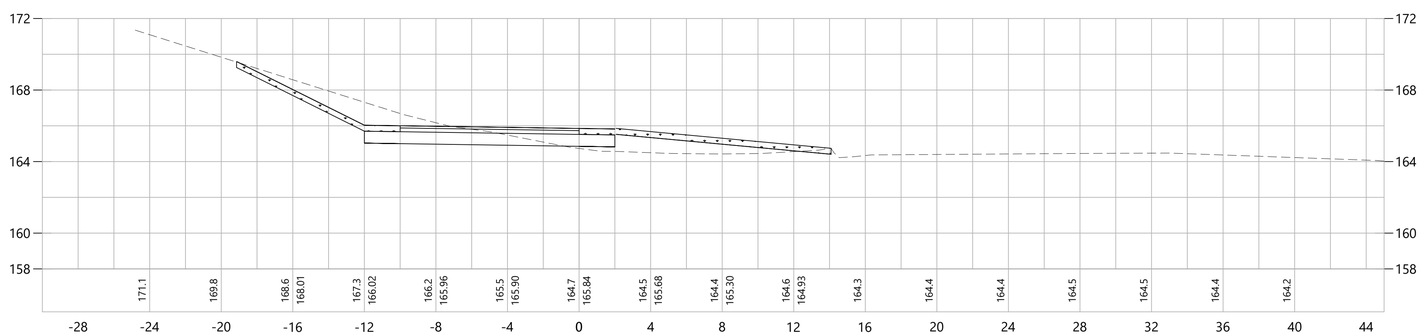

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DESIGNER: EAN
DRAFTER: EAN
CHECKED BY: BAA
APPROVED BY: SON

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Engineers Scientists Planners Designers

NOT ISSUED FOR CONSTRUCTION DATE:NOVEMBER, 2021

PROJECT TITLE:
BLOOMFIELD–TARIFFVLLE
MULTI–USE TRAIL CONNECTOR

CADD FILENAME: CRO–4237300.DWG

TOWN:
BLOOMFIELD–SIMSBURY,
CONNECTICUT

DRAWING TITLE:
CROSS SECTIONS
MULTI–USE TRAIL

PROJECT NO.: 42373.00
DRAWING NO.: CRO–36
SHEET NO.: 94 OF 95

Nov 17, 2021

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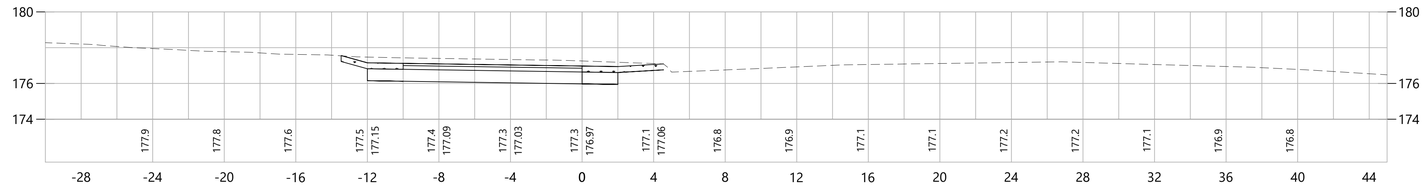

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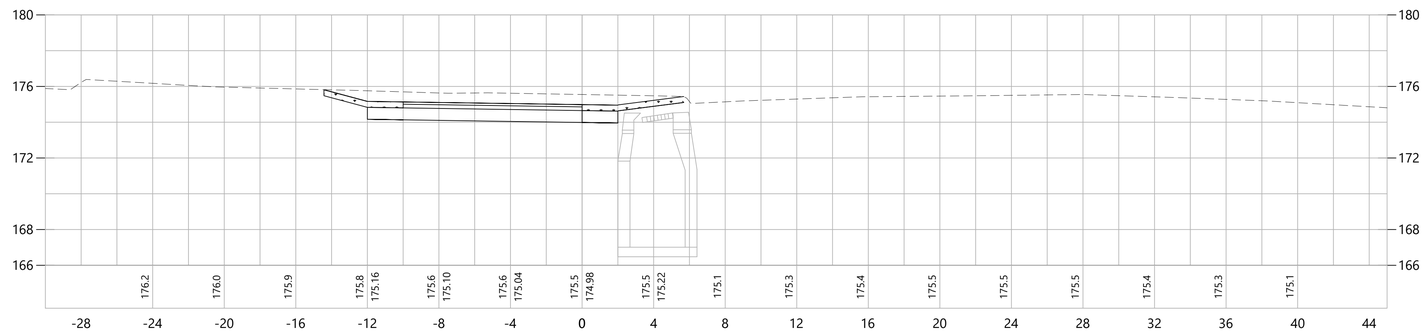

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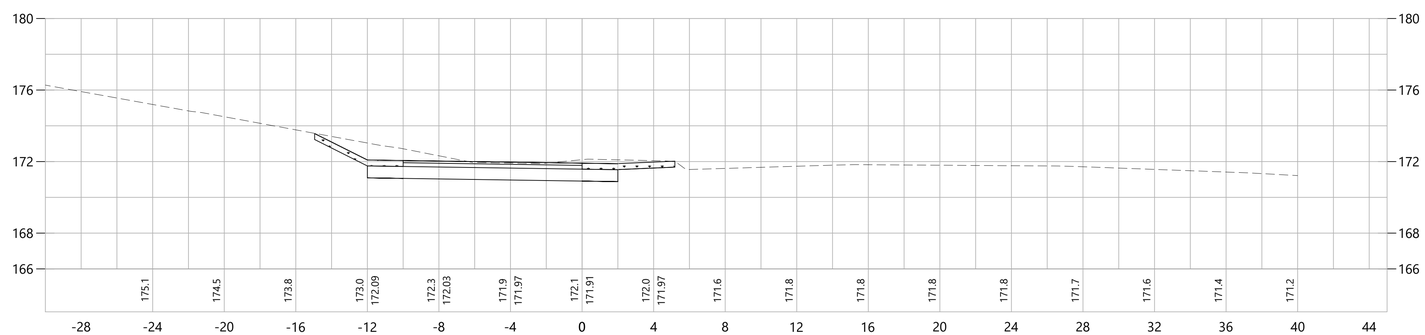

REV.	DATE	DESCRIPTION	SHEET. NO.
		REVISIONS	

4 0 4
SCALE IN FEET

DESIGNER: EAN
DRAFTER: EAN
CHECKED BY: BAA
APPROVED BY: SON

vhb
Engineers Scientists Planners Designers

NOT ISSUED FOR CONSTRUCTION DATE:NOVEMBER, 2021

PROJECT TITLE:
BLOOMFIELD–TARIFFVLLE
MULTI–USE TRAIL CONNECTOR

CADD FILENAME: CRO–4237300.DWG

TOWN:
BLOOMFIELD–SIMSBURY,
CONNECTICUT

DRAWING TITLE:
CROSS SECTIONS
MULTI–USE TRAIL

PROJECT NO.: 42373.00
DRAWING NO.: CRO–37
SHEET NO.: 95 OF 95

Nov 17, 2021

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

**REVISED OR ADDED

✓*	SHEET NO.	TITLE	APPROVAL DATE**
	HW-211_01	ANTI-TRACKING PAD	11-09-21
✓	HW-286_01	DRAINAGE TRENCH EXCAVATION	7-15-20
	HW-506 01a	ENDWALLS	11-09-21
	HW-506 01b	STEEL REINFORCEMENT FOR ENDWALLS	11-09-21
	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"	11-09-21
	HW-586 07b	CATCH BASIN TYPE "C" AND "C-L" DOUBLE GRATE TYPE I TOPS	11-09-21
	HW-586 07c	CATCH BASIN TYPE "C" AND "C-L" DOUBLE GRATE TYPE II TOPS	11-09-21
	HW-586 07d	CATCH BASIN TYPE "C-G" AND "C-M" BARRIER CURB TOPS	11-09-21
✓	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	11-09-21
	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	11-09-21
✓	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	11-09-21
	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

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.:
1 OF 2

PLOTTED DATE: 11/18/2021

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

**REVISED OR ADDED

✓*	SHEET NO.	TITLE	APPROVAL DATE**
✓	HW-910_01	W-BEAM METAL BEAM RAIL HARDWARE	6-09-11
✓	HW-910_02	METAL BEAM RAIL (TYPE R-B 350) GUIDERAIL	6-09-11
	HW-910_03	METAL BEAM RAIL (TYPE MD-B 350) GUIDERAIL	6-09-11
	HW-910_04	METAL BEAM RAIL (TYPE R-B 350) SYSTEMS 5, 5A, & 6	6-09-11
	HW-910_05	METAL BEAM RAIL R-B 350 SPAN TYPE I, II, III SECTIONS	7-24-13
	HW-910_06	R-B 350 BRIDGE ATTACHMENT SAFETY SHAPE PARAPET	6-09-11
	HW-910_07	R-B 350 BRIDGE ATTACHMENT VERTICAL SHAPE PARAPET	1-25-19
	HW-910_08	R-B 350 BRIDGE ATTACHMENT TRAILING END	6-09-11
	HW-910 09a	MISCELLANEOUS GUIDERAIL TRANSITIONS SHEET 1	7-15-20
	HW-910 09b	MISCELLANEOUS GUIDERAIL TRANSITIONS SHEET 2	7-15-20
	HW-910 10	METAL BEAM RAIL 8" (203) x 6" (152) BOX BEAM	7-24-13
	HW-910 11	CURVED GUIDERAIL TREATMENT DETAIL	7-25-12
	HW-910_12a	MERRITT PARKWAY GUIDERAIL LEADING END ATTACHMENTS AND SYSTEMS 2&3	7-24-13
	HW-910_12b	MERRITT PARKWAY GUIDERAIL HARDWARE DETAILS	7-24-13
	HW-910_12c	MERRITT PARKWAY GUIDERAIL TRAILING END ATTACHMENTS	7-24-13
	HW-910_12d	MERRITT PARKWAY MEDIAN GUIDERAIL AND END ANCHOR	6-09-11
	HW-910_13a	THRIE-BEAM METAL BEAM RAIL HARDWARE	7-24-13
	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	11-09-21
	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

✓*	SHEET NO.	TITLE	APPROVAL DATE**
	HW-910_26	THRIE-BEAM ATTACHMENT HARDWARE	1-09-20
	HW-910_27	THRIE-BEAM ATTACHMENT	1-09-20
	HW-911_01	R-B END ANCHORAGE TYPE I AND II	1-25-19
	HW-911_02	MD-B END ANCHORAGE TYPE I	1-05-18
	HW-911_03	ANCHOR IN EARTH CUT SLOPE & ANCHOR IN ROCK CUT SLOPE	10-18-10
	HW-911_05	MERRITT PARKWAY GUIDERAIL END ANCHORS	7-24-13
✓	HW-913_01a	CHAIN LINK FENCE	5-06-19
✓	HW-913_01b	CHAIN LINK FENCE HARDWARE	5-06-19
	HW-913_02	CHAIN LINK FENCE GATES	5-06-19
	HW-918_01a	THREE CABLE GUIDERAIL (I-BEAM POSTS) SHEET 1	7-24-13
	HW-918_01b	THREE CABLE GUIDERAIL (I-BEAM POSTS) SHEET 2	1-26-12
	HW-918_01c	THREE CABLE GUIDERAIL (I-BEAM POSTS) SHEET 3	7-24-13
✓	HW-921_01	DRIVEWAY RAMPS AND SIDEWALKS	6-07-17
✓	HW-949_01a	LANDSCAPE PLANTING	6-15-19
	HW-949_01b	TREE STAKING	6-15-19
	HW-1800_01	GRADING PLAN FOR IMPACT ATTENUATION SYSTEMS (FLARED AND TANGENTIAL)	1-25-19
	HW-1800 02	GRADING PLAN FOR IMPACT ATTENUATION SYSTEMS (MEDIAN/GORE)	1-25-20

NOT TO SCALE
####

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OFFICE OF ENGINEERING
2800 BERLIN TURNPIKE
NEWINGTON, CT 06111

SUBMITTED BY:

APPROVED BY:

STATE OF CONNECTICUT
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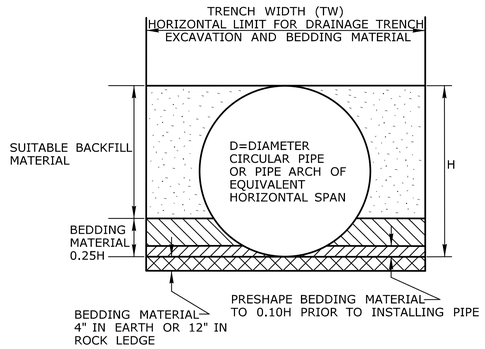
CTDOT
STANDARD SHEET

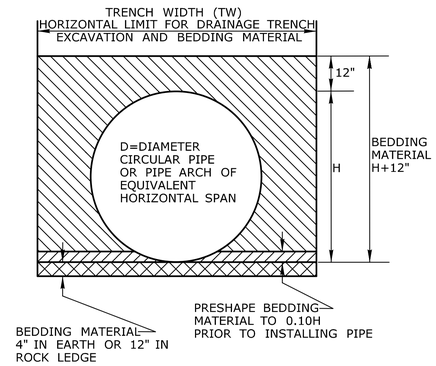
STANDARD SHEET TITLE:
HIGHWAY STANDARD SHEET INDEX

STANDARD SHEET NO.:
2 OF 2

PLOTTED DATE: 11/18/2021



PIPE TRENCH FOR PIPES LESS THAN 48"



PIPE TRENCH FOR PIPES GREATER THAN OR EQUAL TO 48"

TRENCH WIDTH (TW) CHART

PIPE, PIPE-ARCH, OR DRAINAGE STRUCTURE	TRENCH WIDTH
PIPE OR PIPE-ARCH WITH NOMINAL INSIDE HORIZONTAL SPAN LESS THAN 30"	2' GREATER THAN NOMINAL INSIDE HORIZONTAL SPAN
PIPE OR PIPE-ARCH WITH NOMINAL INSIDE HORIZONTAL SPAN GREATER THAN OR EQUAL TO 30"	3' GREATER THAN NOMINAL INSIDE HORIZONTAL SPAN
PIPE OR PIPE-ARCH FABRICATED FROM STRUCTURAL PLATES	4' GREATER THAN NOMINAL INSIDE HORIZONTAL SPAN
DRAINAGE STRUCTURES	2' BEYOND ALL EXTERIOR OR FOUNDATION WALLS

NOT TO SCALE
####

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

SUBMITTED BY:
Leo Fontaine, P.E.
2020.07.08
09:20:49-04'00'

APPROVED BY:
James Fallon, P.E.
Digitally signed by James Fallon, P.E.
DN: cn=James Fallon, P.E., o=State of Connecticut, ou=Department of Transportation, ou=Bureau of Engineering and Construction, o=State of Connecticut, c=US, 0.9.2342.19200300.100.1.1=jfallon
Date: 2020.07.14 08:07:19 -04'00'

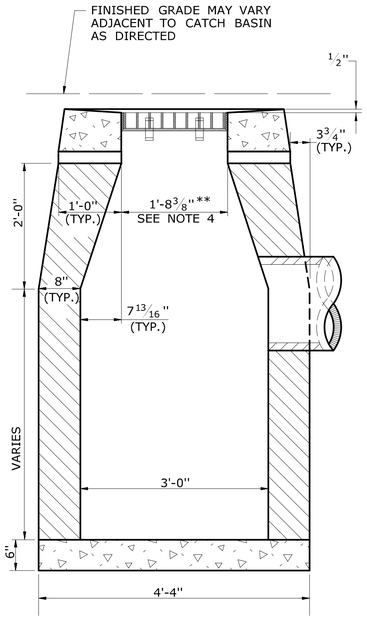
STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

CTDOT
STANDARD SHEET

STANDARD SHEET TITLE:
DRAINAGE TRENCH EXCAVATION

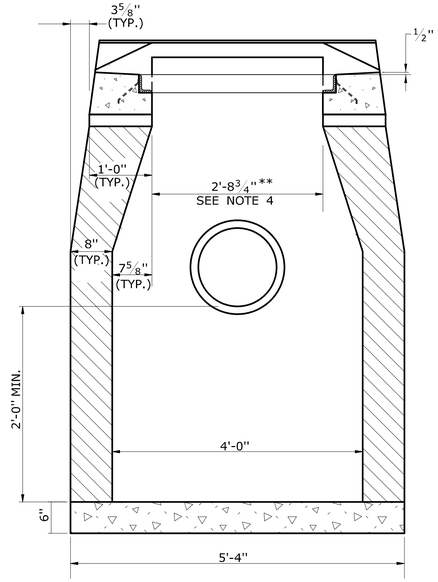
STANDARD SHEET NO.:
HW-286_01

PLOTTED DATE: 7/7/2020



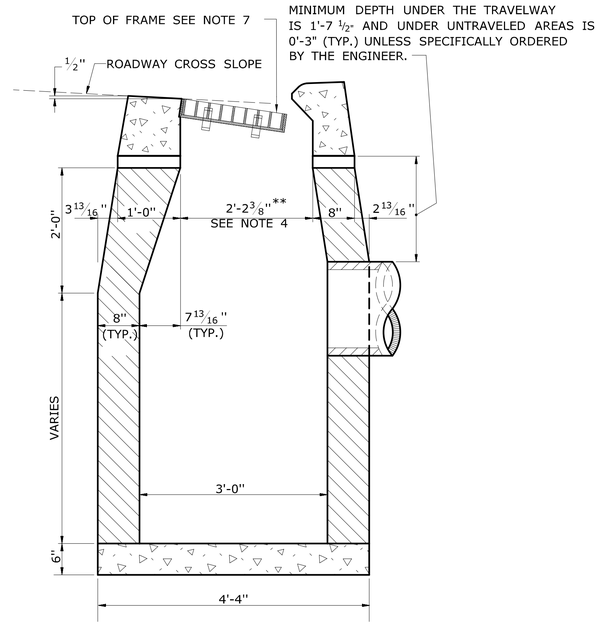
SECTION B

TYPE "C-L" CATCH BASIN



SECTION A

TYPE "C" & "C-L" CATCH BASIN (TYPE "C" TOP SHOWN)

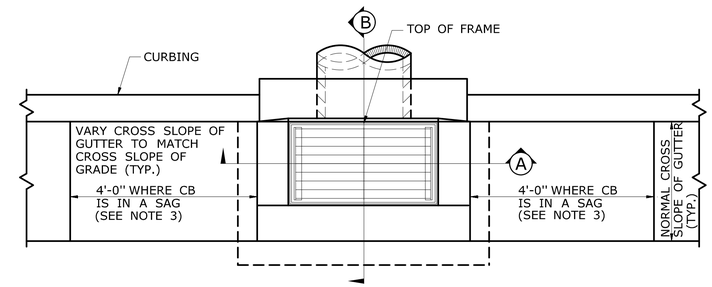


SECTION B

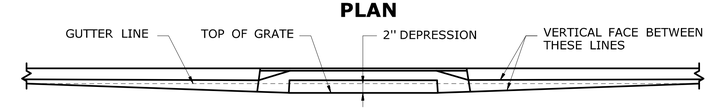
TYPE "C" CATCH BASIN

GENERAL NOTES:

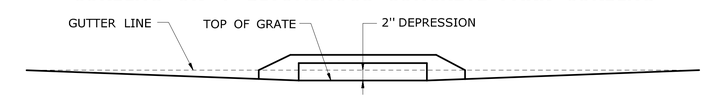
1. FOR CATCH BASIN TOPS, SEE SHEET NO. HW-586_07.
2. ALL FACES OF STRUCTURES IN CONTACT WITH CONCRETE PAVEMENT SHALL BE COVERED WITH A LAYER OF TAR PAPER OR APPROVED EQUAL.
3. USE 6'-0" ON UPGRADE SIDE (SEE PLAN VIEW) OF CONTINUOUS GRADE AND 1'-0" ON DOWNGRADE SIDE OF CONTINUOUS GRADE OR AS DIRECTED BY THE ENGINEER.
4. IF MASONRY UNITS ARE REQUIRED, THE BASIN SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE DIMENSIONS SHOWN. CORBELLING SHALL BE PERMITTED TO A MAXIMUM OF 3". NO PROJECTION SHALL EXTEND INSIDE THE LIMITS FOR THE CATCH BASIN OPENINGS SHOWN IN THE SECTION VIEWS **.
5. WALL THICKNESS OF ALL CATCH BASINS OVER 10' DEEP SHALL BE INCREASED TO 12" THICK. INSIDE DIMENSION SHALL REMAIN THE SAME. 12" THICKNESS SHALL START AFTER THE FIRST 10'.
6. SPACERS CAN BE EITHER CONCRETE MASONRY UNIT OR PRECAST WITH THE REQUIRED REINFORCING (RECOMMENDED BY THE MANUFACTURER) AS NEEDED TO PROVIDE THE PROPER GRADE SHOWN ON THE PLANS.
7. TOP OF FRAME ELEVATION SHALL BE MEASURED IN THE CENTER OF GRATE AT GUTTER LINE.



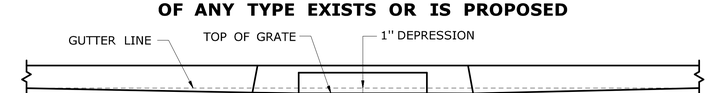
PLAN



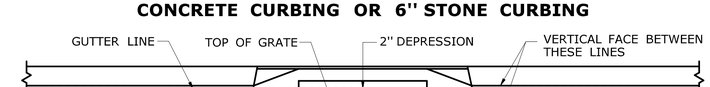
CATCH BASINS IN A LINE WITH 4" CONCRETE PARK CURBING OR 4" BITUMINOUS CONCRETE PARK CURBING



CATCH BASINS WHERE NO CURBING OF ANY TYPE EXISTS OR IS PROPOSED

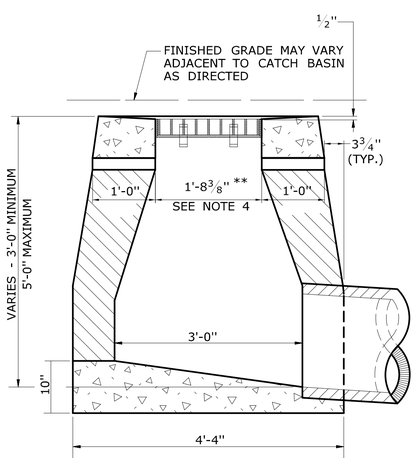


CATCH BASINS IN A LINE WITH 6" CONCRETE CURBING OR 6" STONE CURBING



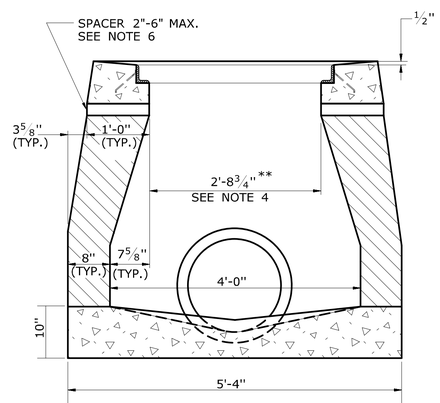
CATCH BASINS IN A LINE WITH 6" BITUMINOUS CONCRETE LIP CURBING (MACHINE FORMED)

DETAILS OF DEPRESSED GUTTER STRIP FOR TYPE "C" CATCH BASIN



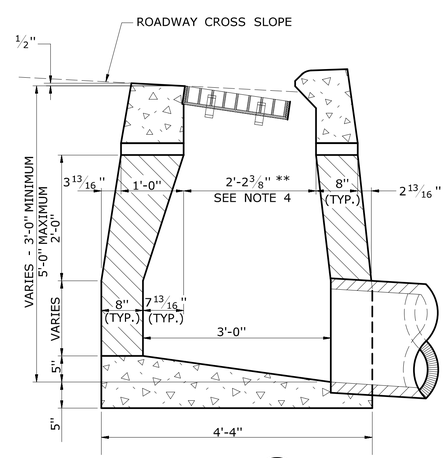
SECTION B

TYPE "C-L" DROP INLET



SECTION A

TYPE "C" & "C-L" DROP INLET (TYPE "C-L" TOP SHOWN)



SECTION B

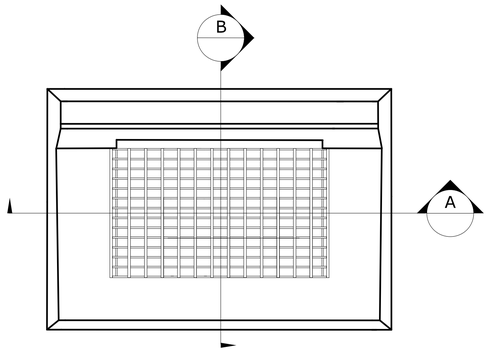
TYPE "C" DROP INLET

	NOT TO SCALE ####	SIGNATURE BLOCK: OFFICE OF ENGINEERING 2800 BERLIN TURNPIKE NEWINGTON, CT 06111	SUBMITTED BY: Leo Fontaine, P.E. 2020.07.08 09:22:22-04'00'	APPROVED BY: James Fallon, P.E.	STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION	CTDOT STANDARD SHEET	STANDARD SHEET TITLE: CATCH BASIN AND DROP INLET TYPES "C" AND "C-L"	STANDARD SHEET NO.: HW-586_01

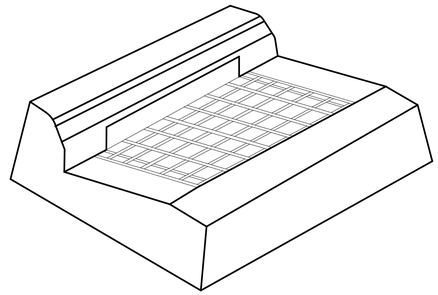
PLOTTED DATE: 7/7/2020

GENERAL NOTES:

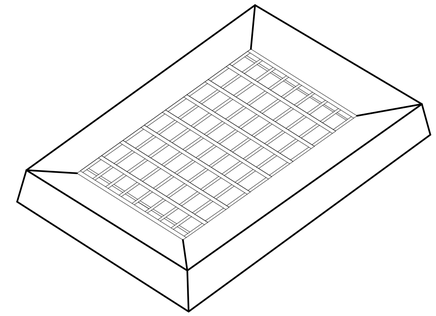
1. SEE SHEET HW-586_08, FOR CATCH BASIN FRAMES AND GRATES AND HW-586_09 FOR CATCH BASIN LOCK DOWN TOPS.
2. SEE SHEET HW-586_01, CATCH BASIN AND DROP INLET TYPES "C" AND "C-L" TO DETERMINE THE TOP OF FRAME DEPRESSION AT THE GUTTER.
3. ALL BARS SHALL HAVE A MINIMUM 2" COVER.



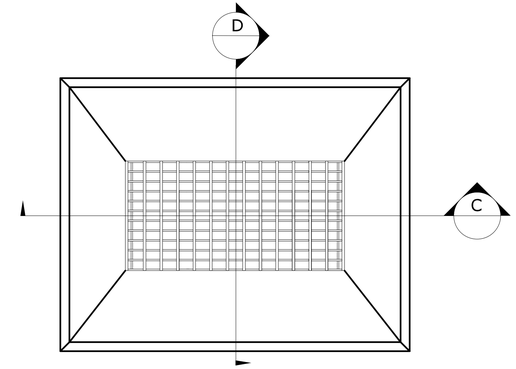
TYPE "C" CATCH BASIN TOP PLAN



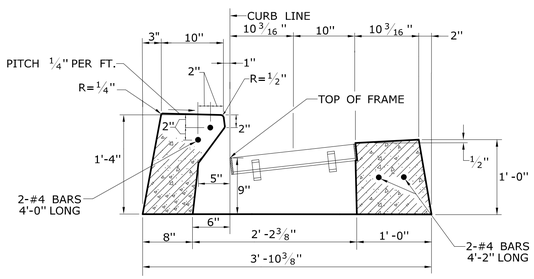
TYPE "C" CATCH BASIN TOP



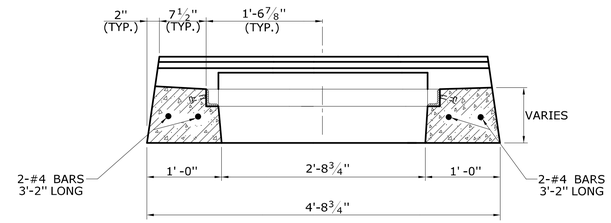
TYPE "C-L" CATCH BASIN TOP



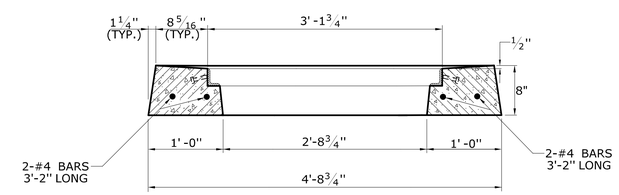
TYPE "C-L" CATCH BASIN TOP PLAN



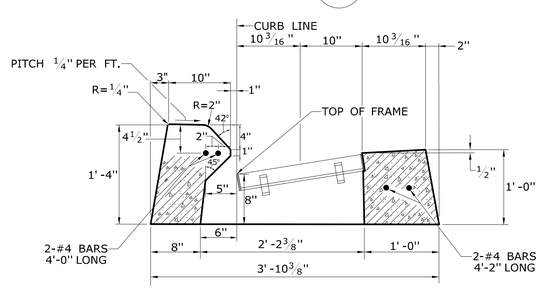
TYPE "C" CATCH BASIN TOP FOR 6" CONCRETE CURBING OR 6" STONE CURBING
SECTION B



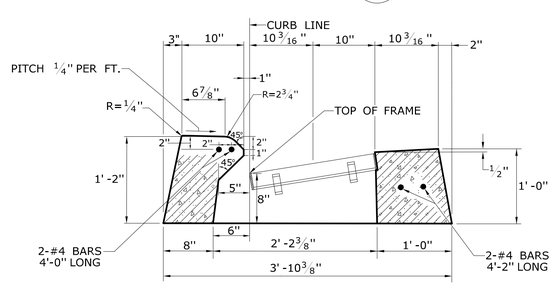
TYPE "C" CATCH BASIN TOP
SECTION A



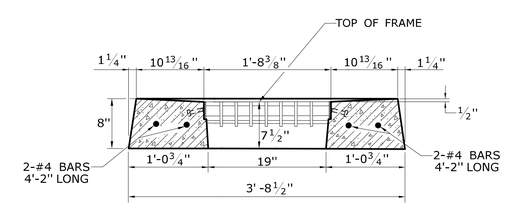
TYPE "C-L" CATCH BASIN TOP
SECTION C



TYPE "C" CATCH BASIN TOP FOR 6" BITUMINOUS CONCRETE LIP CURBING
SECTION B



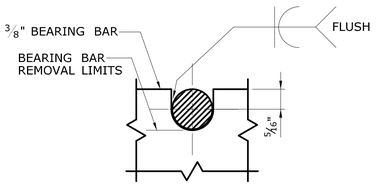
TYPE "C" CATCH BASIN TOP FOR 4" CONCRETE PARK CURBING OR 4" BITUMINOUS CONCRETE PARK CURBING
SECTION B



TYPE "C-L" CATCH BASIN TOP
SECTION D

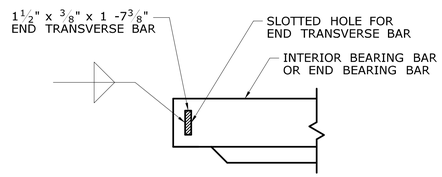
	NOT TO SCALE ####	SIGNATURE BLOCK: OFFICE OF ENGINEERING 2800 BERLIN TURNPIKE NEWINGTON, CT 06111	SUBMITTED BY: Digitally signed by Leo Fontaine, P.E. Date: 2021.11.02 09:34:05-04'00'	APPROVED BY: Digitally signed by Calabrese, Michael Date: 2021.11.09 07:41:08-05'00'	STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION	CTDOT STANDARD SHEET	STANDARD SHEET TITLE: CATCH BASIN TOPS TYPE "C" AND "C-L"	STANDARD SHEET NO.: HW-586_07a

PLOTTED DATE: 10/29/2021

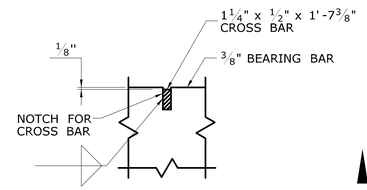


NOTE:
5/8" DIA. ROUND BAR SHALL CONTACT BEARING BAR AT BOTTOM AND BE FLUSH AT TOP.

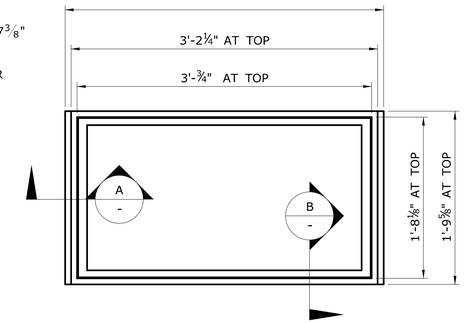
ROUND BAR ATTACHMENT
CATCH BASIN GRATE TYPE A



END TRANSVERSE BAR ATTACHMENT
CATCH BASIN GRATE TYPE A AND B



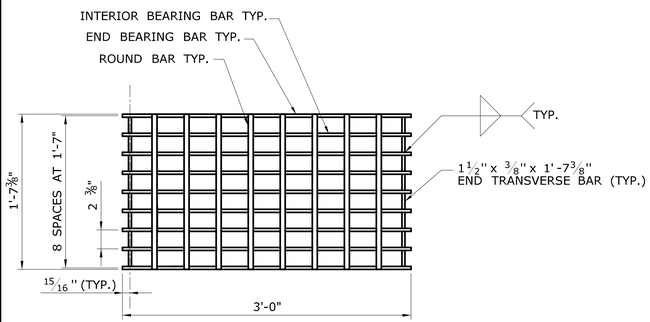
CROSS BAR ATTACHMENT
CATCH BASIN GRATE TYPE B



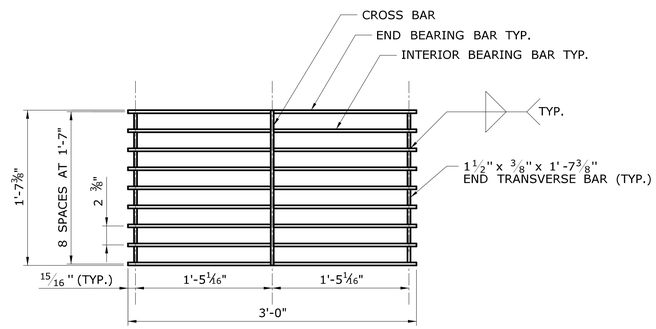
PLAN

GENERAL NOTES:

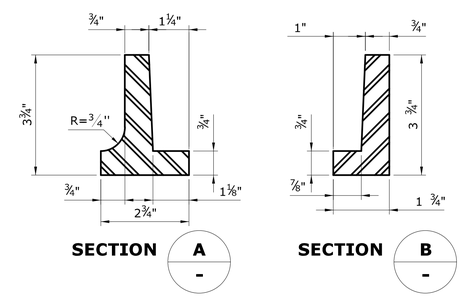
1. STEEL OR CAST IRON SHALL BE USED FOR FRAMES. STEEL SHALL BE USED FOR TYPE "A" AND "B" GRATES.
2. TYPE "A" GRATES SHALL BE USED ON ALL ROADWAYS WHERE BICYCLE TRAFFIC IS ALLOWED OR ON HEAVY DUTY LOCK DOWN TOPS AS DIRECTED BY THE ENGINEER.
3. TYPE "B" GRATES SHALL BE USED ON ALL LIMITED ACCESS HIGHWAYS, RAMPS AND WHERE BICYCLE TRAFFIC IS NOT ALLOWED OR AS DIRECTED BY THE ENGINEER.
4. DO NOT GALVANIZE CAST IRON FRAMES.
5. DIMENSIONAL TOLERANCES SHALL BE ± 1/16 INCH.
6. ALL STEEL BARS SHALL BE WELDED AT ALL INTERSECTIONS.



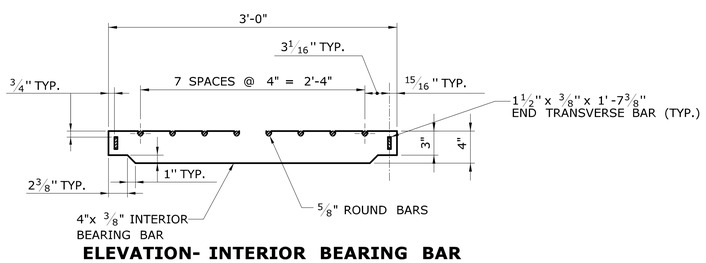
PLAN



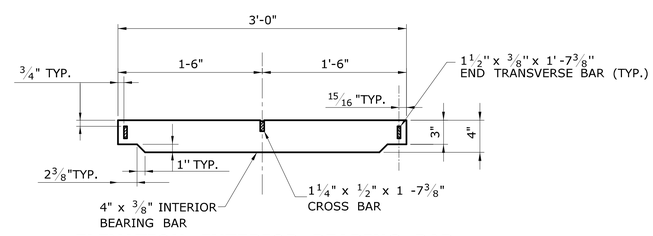
PLAN



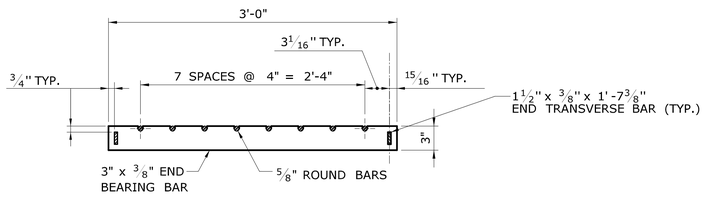
CAST IRON FRAME ALTERNATE



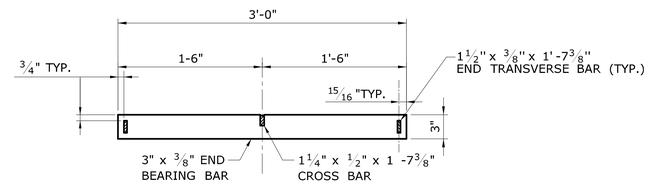
ELEVATION- INTERIOR BEARING BAR



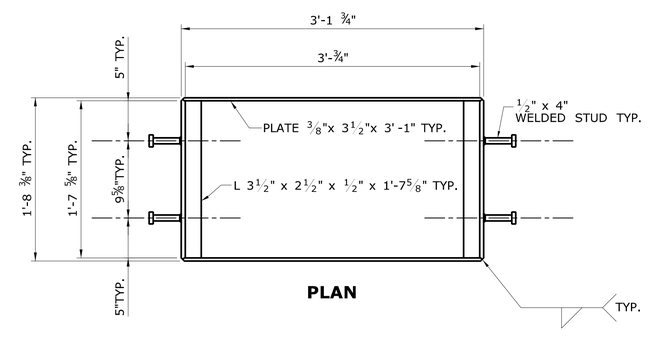
ELEVATION- INTERIOR BEARING BAR



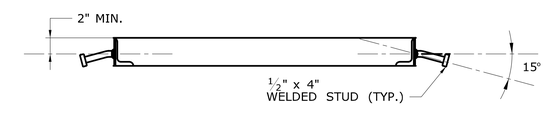
ELEVATION- END BEARING BAR
CATCH BASIN GRATE TYPE A



ELEVATION- END BEARING BAR
CATCH BASIN GRATE TYPE B



PLAN



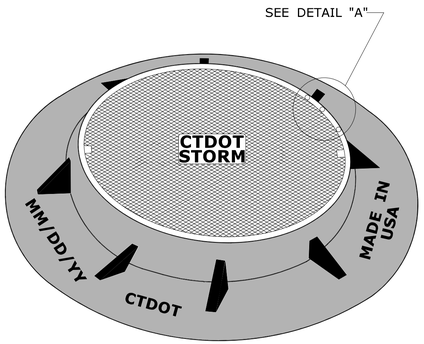
WELDED STUD ANCHOR DETAILS
STEEL FRAME

	NOT TO SCALE ####	SIGNATURE BLOCK: OFFICE OF ENGINEERING 2800 BERLIN TURNPIKE NEWINGTON, CT 06111	SUBMITTED BY: Leo Fontaine, P.E. 2020.07.08 09:25:23-04'00'	APPROVED BY: James Fallon, P.E.	STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION	CTDOT STANDARD SHEET	STANDARD SHEET TITLE: CATCH BASIN FRAMES AND GRATES	STANDARD SHEET NO.: HW-586_08

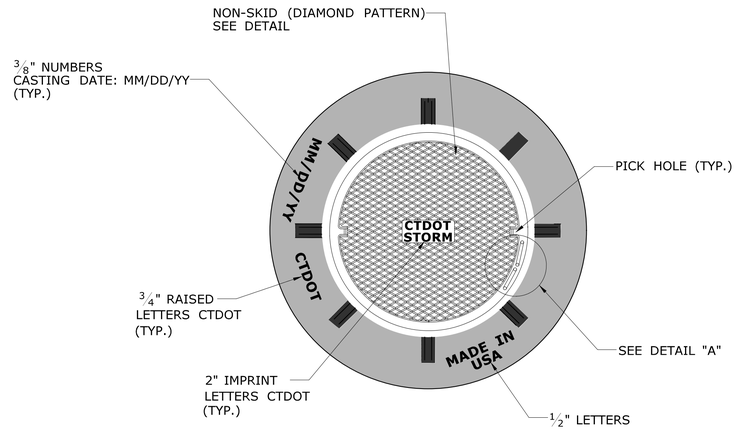
PLOTTED DATE: 6/30/2020

GENERAL NOTES:

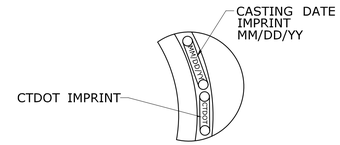
1. ALL DIMENSIONS ARE SUBJECT TO MANUFACTURING TOLERANCES.



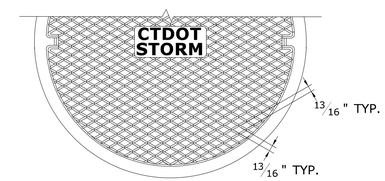
MANHOLE FRAME AND COVER



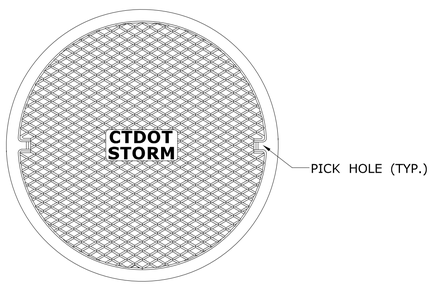
PLAN



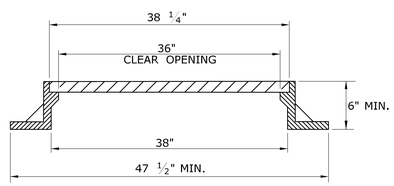
DETAIL "A"



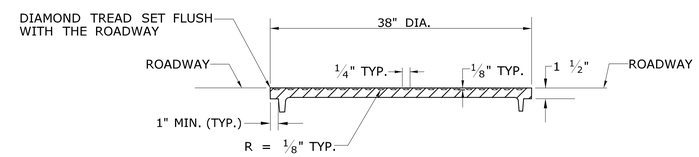
DIAMOND PATTERN PLAN



MANHOLE COVER PLAN



MANHOLE FRAME AND COVER



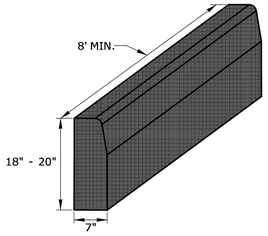
MANHOLE COVER WITH DIAMOND PATTERN

	NOT TO SCALE ####	SIGNATURE BLOCK: OFFICE OF ENGINEERING 2800 BERLIN TURNPIKE NEWINGTON, CT 06111	SUBMITTED BY: Leo Fontaine, P.E. 2020.07.08 09:26:08-04'00'	APPROVED BY: James Fallon, P.E.	STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION	CTDOT STANDARD SHEET	STANDARD SHEET TITLE: MANHOLE FRAME AND COVER	STANDARD SHEET NO.: HW-586_10a

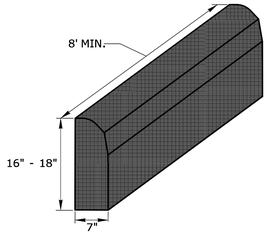
PLOTTED DATE: 6/30/2020

GENERAL NOTE:

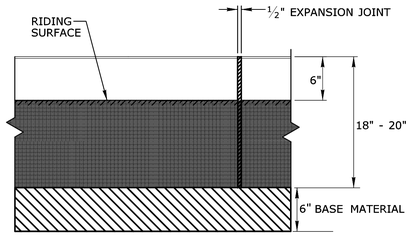
1. PRECAST CONCRETE CURBING MAY BE CAST BY THE MANUFACTURER WITH OPTIONAL LIFTING AND DOWEL BAR HOLES.



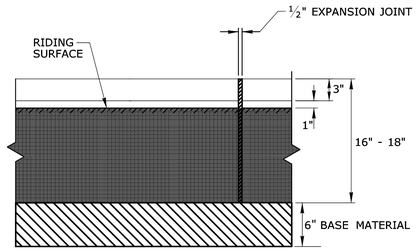
CONCRETE CURBING (6" REVEAL)



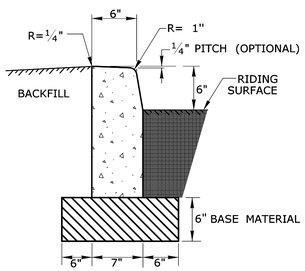
CONCRETE PARK CURBING (4" REVEAL)



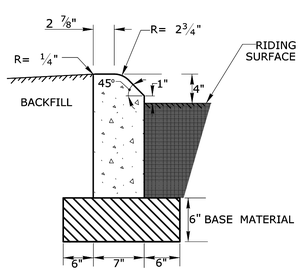
FRONT ELEVATION



FRONT ELEVATION



SECTION



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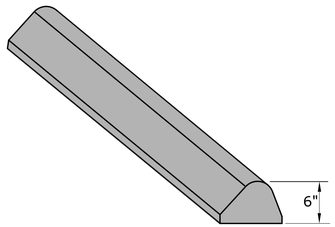
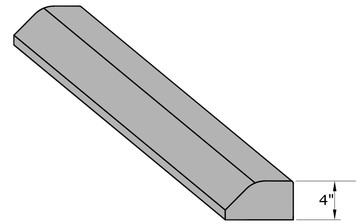
	NOT TO SCALE ####	SIGNATURE BLOCK: OFFICE OF ENGINEERING 2800 BERLIN TURNPIKE NEWINGTON, CT 06111	SUBMITTED BY: Leo Fontaine, P.E. 2020.07.15 14:21:26-04'00'	APPROVED BY: James Fallon, P.E. 2020.07.15 14:24:21-04'00'	STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION	CTDOT STANDARD SHEET	STANDARD SHEET TITLE: CONCRETE CURBING	STANDARD SHEET NO.: HW-811_01

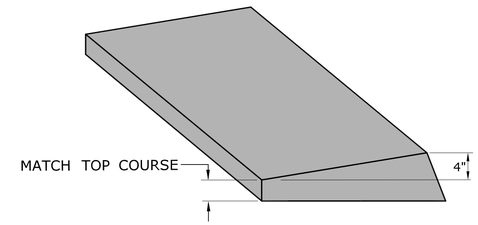
PLOTTED DATE: 7/15/2020



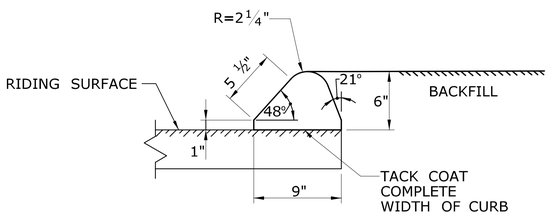
BITUMINOUS CONCRETE LIP CURBING
(6" HIGH)



BITUMINOUS CONCRETE PARK CURBING
(4" HIGH)



BITUMINOUS CONCRETE BERM CURBING
(4" HIGH)



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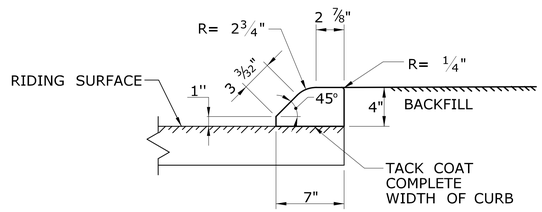

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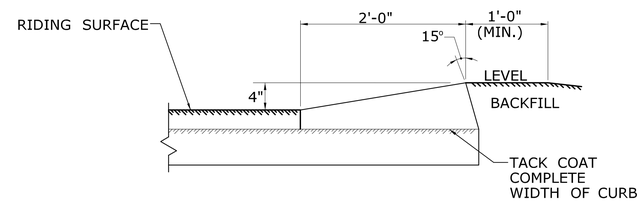

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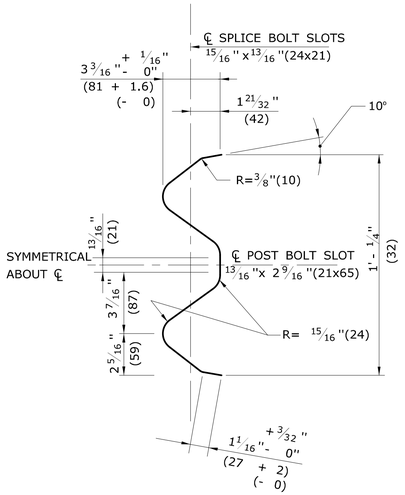
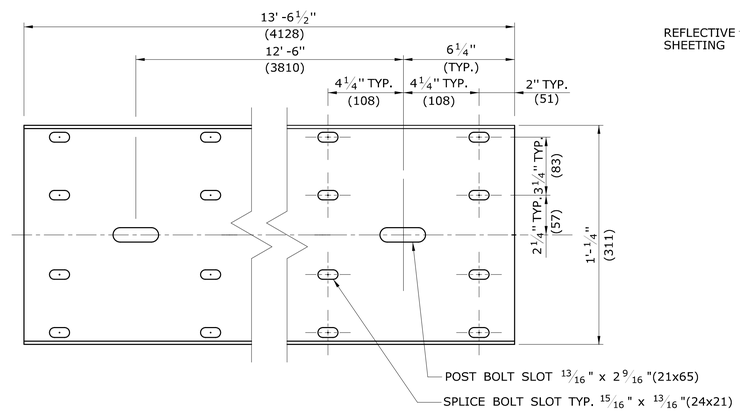
	NOT TO SCALE ####	SIGNATURE BLOCK: OFFICE OF ENGINEERING 2800 BERLIN TURNPIKE NEWINGTON, CT 06111	SUBMITTED BY: Leo Fontaine, P.E. 2020.07.08 09:34:54-04'00'	APPROVED BY: James Fallon, P.E. Digitally signed by James Fallon, P.E. DN: cn=James Fallon, c=US, o=Connecticut Department of Transportation, ou=Bureau of Engineering and Construction, ou=State of Connecticut, email=James.Fallon@ct.gov Date: 2020.07.14 08:45:11 -04'00'	STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION	CTDOT STANDARD SHEET	STANDARD SHEET TITLE: BITUMINOUS CONCRETE CURBING	STANDARD SHEET NO.: HW-815_01

PLOTTED DATE: 7/7/2020

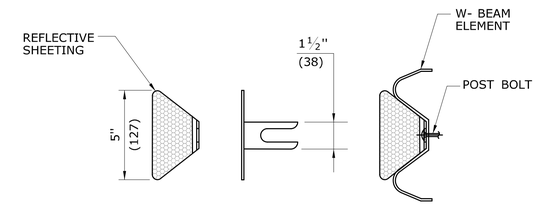


SELECTION THRU RAIL ELEMENT END VIEW

NOTE: ALL DIMENSIONS SUBJECT TO MANUFACTURING TOLERANCES



TYPICAL W-BEAM RAIL ELEMENT CLASS A, TYPE II



DELINEATOR DETAIL

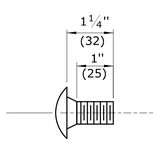
GENERAL NOTES:

1. NEW R-B 350 GUIDERAIL INCLUDING SYSTEMS, ANCHORS AND TRANSITIONS INSTALLED ON EXPRESSWAYS AND RAMPS SHALL USE CLASS B TYPE II (10 GAUGE) W-BEAM RAIL ELEMENTS.
2. W6x9 (W150x14) POSTS MAY BE USED IN PLACE OF W6 x 8.5(W150x13) POSTS.
3. W8x13 (W200x19) POSTS, 7'-6"(2286) LONG, ARE USED WITH TRANSITIONS TO VERTICAL OR SAFETY SHAPE PARAPETS (POSTS 1 AND 2) AND SYSTEM 6.
4. W6x8.5 (W150x13) POSTS, 6'-0"(1829) LONG, ARE USED WITH TRANSITIONS TO VERTICAL OR SAFETY SHAPE PARAPETS (POSTS 3 THOUGH 6), MD-B 350, SYSTEM 5 & 5A, AND STANDARD R-B 350 GUIDERAIL.

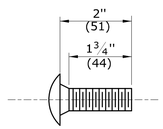
DELINEATOR NOTES:

1. DELINEATORS SHALL BE FORMED OF .080 POLY-CARBONATE OR .080 SHEET ALUMINUM IN ACCORDANCE WITH M.18.13.
2. REFLECTIVE SHEETING SHALL CONFORM TO M.18.09.2.
3. DELINEATORS SHALL BE INSTALLED ON THE POST CLOSEST TO THE DESIGNATED SPACING.
4. REFLECTIVE SHEETING SHALL BE WHITE EXCEPT ON THE LEFT SIDE OF DIVIDED STREETS, HIGHWAYS, RAMPS, AND ONE WAY ROADS IN THE DIRECTION OF TRAVEL WHERE IT SHALL BE YELLOW.
5. INSTALL DELINEATORS ON RAIL THAT IS PARALLEL TO AND NOT GREATER THAN 6'(1829) FROM THE EDGE OF THE ROADWAY. A MINIMUM OF THREE DELINEATORS MUST BE INSTALLED ON ANY RUN OF RAIL.

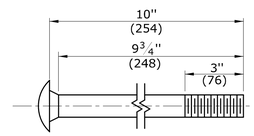
DELINEATOR SPACING:
RADIUS ≥ 300'(91440) - SPACE EVERY 50'(15.24m)
RADIUS < 300'(91440) - SPACE EVERY 25'(7.62m)



W-BEAM SPLICE BOLT DETAIL

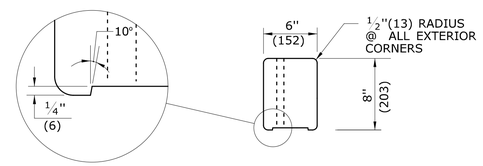


POST BOLT DETAIL FOR R-B 350 SYSTEM 6 RUBRAIL

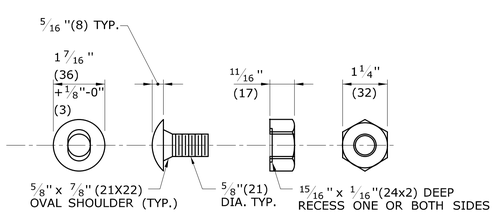


POST BOLT DETAIL FOR R-B 350 AND MD-B 350 GUIDERAIL

(UNTHREADED PORTION NOT TO EXCEED 6 3/4"(171))



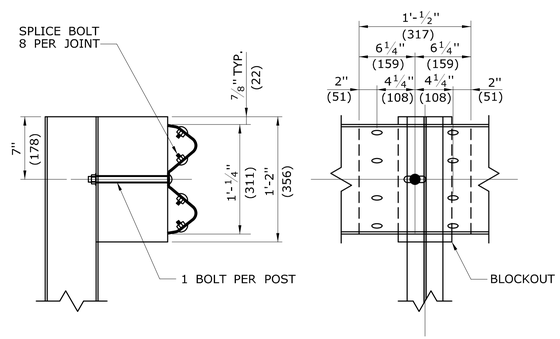
PLAN



BUTTONHEAD BOLT

HEX NUT

NOTE: AFTER GALVANIZING, THE NUT SHALL BE FREE RUNNING ON THE BOLT. DIAMETER SHOWN IS TYPICAL FOR ALL GUIDERAIL BOLTS. SEE DETAILS ABOVE FOR SPECIFIC LENGTHS.

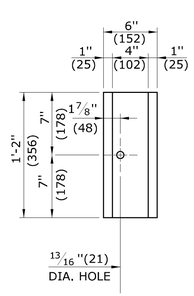


SECTION

ELEVATION

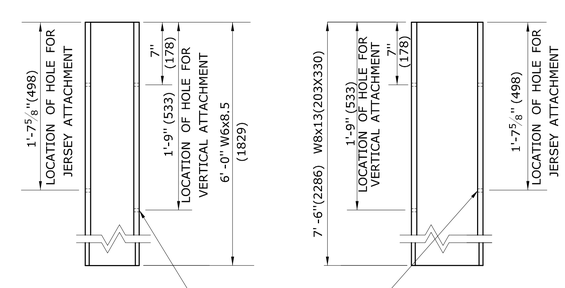
LAP DETAIL

NOTE:
LAP RAIL SECTION IN DIRECTION OF TRAFFIC



ELEVATION

R-B 350 PLASTIC BLOCKOUT DETAIL



W6x8.5 POST (W150x13) 6'-0"(1829) LONG

W8x13 POST (W200x19) 7'-6"(2286) LONG

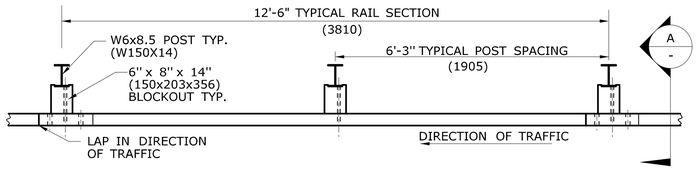
BOLT HOLE LAYOUT FOR W8x13(W200x19) AND W6x8.5 (W150x13)UNIFORM POST

(REFER TO GENERAL NOTES)

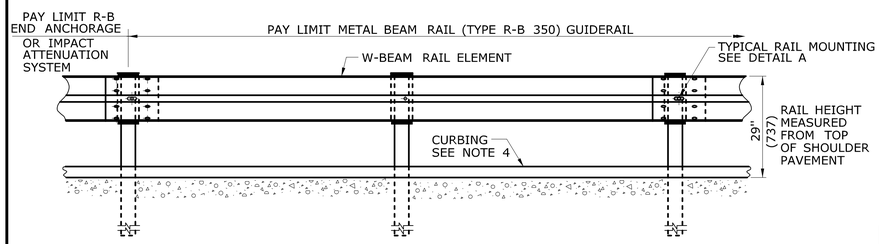
ALL METRIC DIMENSIONS ARE IN MILLIMETERS (mm) UNLESS OTHERWISE NOTED.

	NOT TO SCALE ####	SIGNATURE BLOCK: OFFICE OF ENGINEERING 2800 BERLIN TURNPIKE NEWINGTON, CT 06111	SUBMITTED BY: Leo Fontaine, P.E. 2020.07.08 09:57:29-04'00'	APPROVED BY: James Fallon, P.E. 2020.07.15 09:56:50-04'00'	STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION	CTDOT STANDARD SHEET	STANDARD SHEET TITLE: W-BEAM METAL BEAM RAIL HARDWARE	STANDARD SHEET NO.: HW-910_01

PLOTTED DATE: 7/1/2020

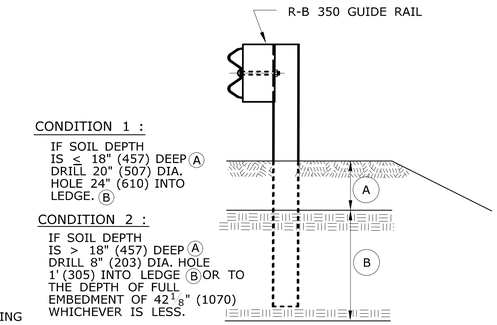


PLAN



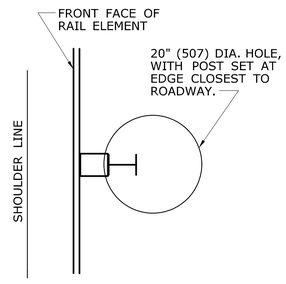
ELEVATION

METAL BEAM RAIL (TYPE R-B 350)



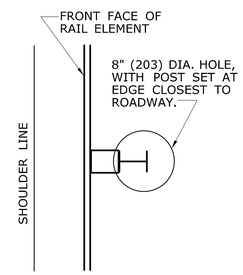
ELEVATION

(SEE NOTE 8)



PLAN
CONDITION 1

(SEE NOTE 8)



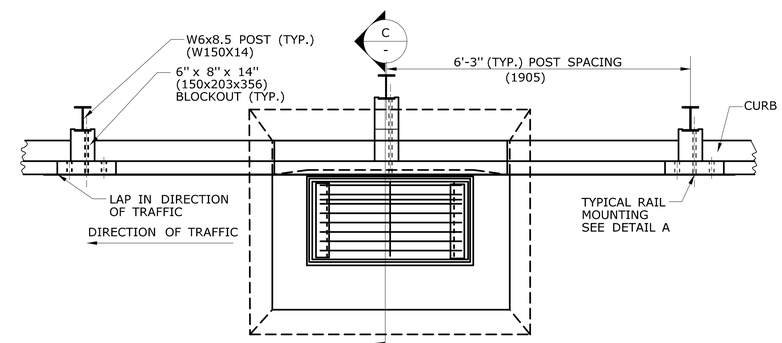
PLAN
CONDITION 2

(SEE NOTE 8)

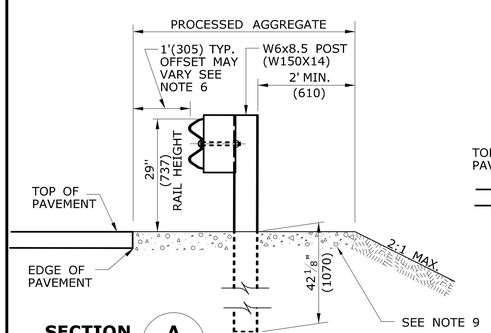
DRILLING IN ROCK FOR GUIDERAIL POSTS

GENERAL NOTES:

1. SEE SHEET HW-910_01 FOR HARDWARE AND DELINEATOR DETAILS.
2. MAXIMUM DESIGN DEFLECTION FOR R-B 350 GUIDERAIL AT THE STANDARD POST SPACING OF 6'-3"(1905) IS 4'-3"(1295). DEFLECTION REQUIREMENT IS MEASURED FROM THE BACK OF POST TO THE FACE OF OBJECT.
3. FOR CURVES WITH RADII OF 150'(45.7m) OR LESS, ALL RAIL ELEMENTS SHALL BE SHOP FABRICATED TO THE PROPER RADIUS AND GALVANIZED AFTER FABRICATION. RADIUS RAIL WHEN REQUIRED AND NOTED ON THE PLANS, IS INCLUDED IN THE PAY ITEM FOR GUIDERAIL.
4. RAIL HEIGHT WITH CURBING SHALL BE MEASURED FROM THE TOP OF PAVEMENT. ON HIGH SPEED ROADWAYS (≥45mph 72.4kph), 4"(102) CURBING MAY BE USED IN CONJUNCTION WITH GUIDERAIL AND THE RAIL ELEMENT SHALL BE PLACED FLUSH WITH THE FACE OF CURB. ON LOW SPEED ROADWAYS (<45mph 72.4kph), 6"(152) CURBING MAY BE USED IN CONJUNCTION WITH GUIDERAIL AND THE RAIL ELEMENT SHALL BE PLACED A MAXIMUM OF 9"(229) BEHIND THE FACE OF CURB.
5. THREE BLOCKOUTS MAY BE USED FOR ONE POST ONLY. TWO BLOCKOUTS MAY BE USED FOR A SERIES OF POSTS. THE COST OF ADDITIONAL BLOCKOUTS AND LONGER BOLTS SHALL BE INCLUDED IN THE BID PRICE PER FOOT OF GUIDERAIL. EXTRA BLOCKOUTS AT TRANSITION TO BRIDGE PARAPETS SHOULD BE AVOIDED.
6. W-BEAM GUIDERAIL MAY BE PLACED 1' (305) OR MORE FROM THE EDGE OF PAVEMENT ONLY ON SLOPES 10:1 OR FLATTER AND WITHOUT CURBING. IF THE RAIL IS INSTALLED WITHIN 2'(610) OF THE EDGE OF PAVEMENT, THE RAIL HEIGHT IS MEASURED FROM THE SHOULDER SLOPE EXTENDED TO THE RAIL. IF THE RAIL IS INSTALLED BEYOND 2'(610) FROM THE EDGE OF PAVEMENT, THE RAIL HEIGHT IS MEASURED FROM THE GROUND DIRECTLY BELOW THE RAIL.
7. ALL R-B 350 GUIDERAIL TYPES INSTALLED ON EXPRESSWAYS AND RAMPS SHALL USE CLASS B, TYPE-II (10 GAUGE) W-BEAM RAIL ELEMENTS.
8. 20" (507) DIA. EXCAVATED HOLE SHALL BE BACKFILLED WITH SUITABLE MATERIAL, OR GRANULAR FILL COMPACTED IN 6" (150) LIFTS BEFORE DRIVING POST OR POSTS MAY BE SET IN EXCAVATED HOLE AND BACKFILLED WITH CONTROLLED LOW STRENGTH MATERIAL (CLSM). 8" (203) DIA. HOLE SHALL BE BACKFILLED WITH SUITABLE MATERIAL.
9. AS DIRECTED BY THE ENGINEER AND WHERE PAVEMENT FOR RAILING IS NOT BEING INSTALLED, A MIN. 6" DEPTH OF PROCESSED AGGREGATE SHALL BE INSTALLED FROM THE PAVEMENT EDGE OR BACK OF CURB TO A MINIMUM OF 2' (610) BEHIND THE GUIDERAIL POST AND COMPACTED IN 6" (150) LIFTS.
10. MINIMUM RAIL HEIGHT FOR NEW CONSTRUCTION SHALL BE 29" (737) ± 1" (25).

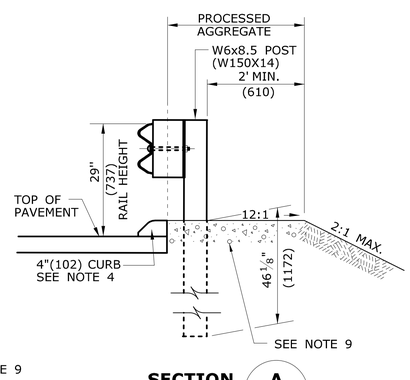


PLAN



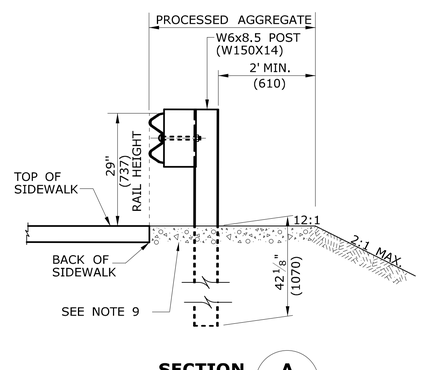
SECTION A -

NO CURB APPLICATION



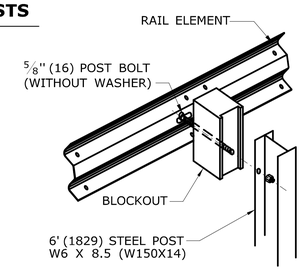
SECTION A -

CURB APPLICATION



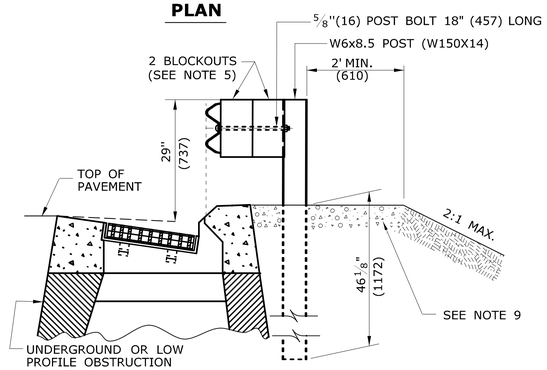
SECTION A -

SIDEWALK APPLICATION



DETAIL A

RAIL MOUNTING



SECTION C -

MULTIPLE BLOCKOUT APPLICATION (MAY BE USED TO AVOID UNDERGROUND OR LOW PROFILE OBSTRUCTION)

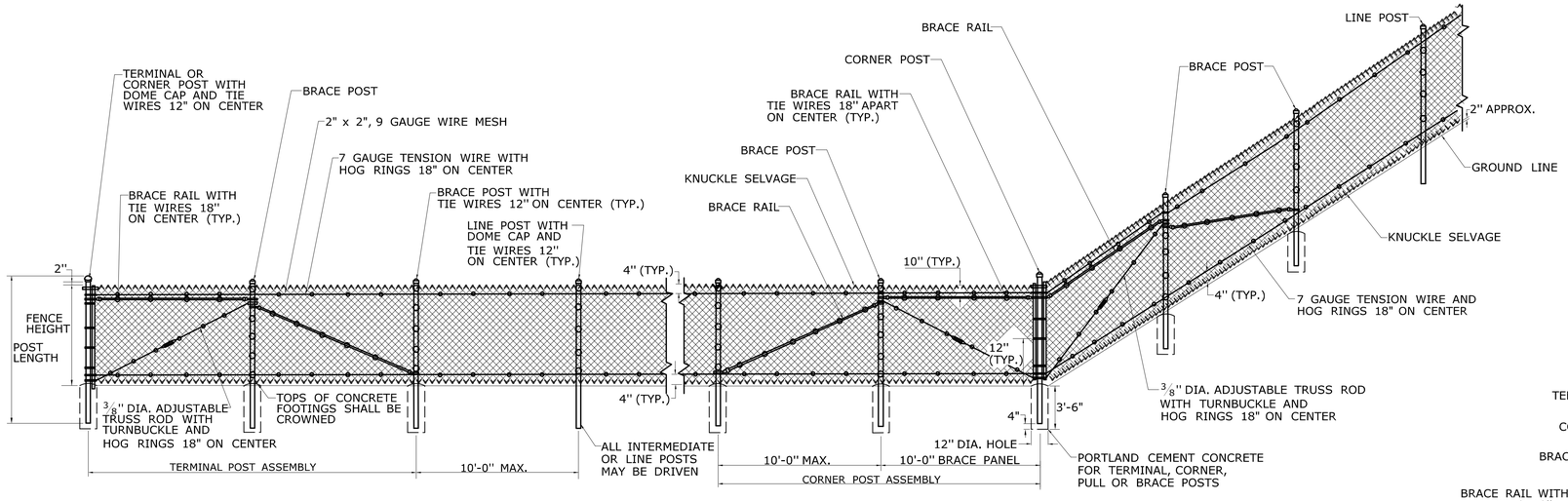
ALL METRIC DIMENSIONS ARE IN MILLIMETERS (mm) UNLESS OTHERWISE NOTED.

	NOT TO SCALE ####	SIGNATURE BLOCK: OFFICE OF ENGINEERING 2800 BERLIN TURNPIKE NEWINGTON, CT 06111	SUBMITTED BY: Leo Fontaine, P.E. 2020.07.08 09:58:10-04'00'	APPROVED BY: James Fallon, P.E. 2020.07.15 09:57:05-04'00'	STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION	CTDOT STANDARD SHEET	STANDARD SHEET TITLE: METAL BEAM RAIL (TYPE R-B 350) GUIDERAIL	STANDARD SHEET NO.: HW-910_02

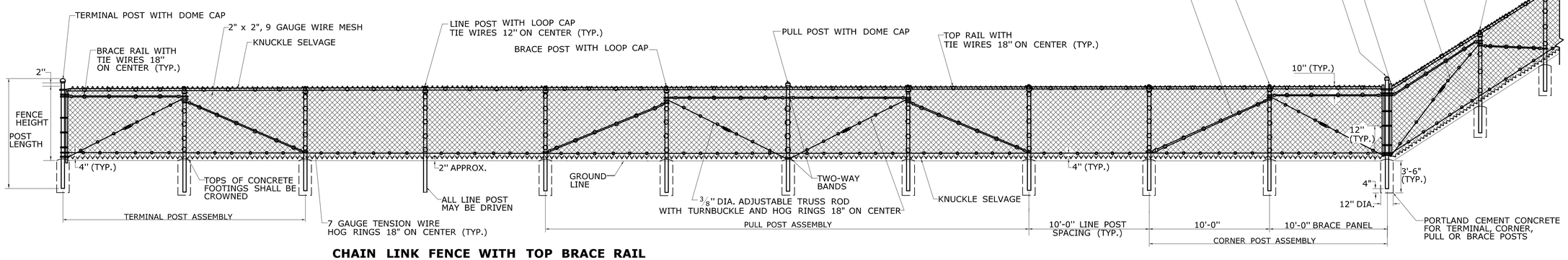
PLOTTED DATE: 7/1/2020

GENERAL NOTES:

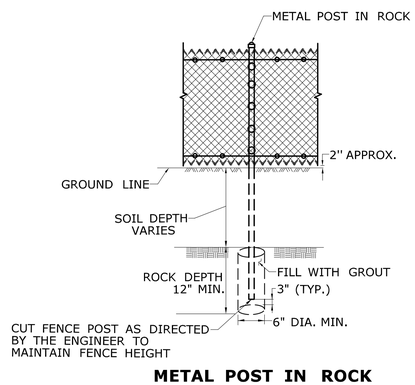
1. INSTALL PULL POST ASSEMBLIES AT ALL CHANGES IN VERTICAL TO HORIZONTAL OF 10 DEGREES OR MORE.
2. ALL POSTS WILL BE CAPPED.
3. WHERE ROCK IS ENCOUNTERED, IT SHALL BE DRILLED AND THE POSTS SET IN MORTAR.
4. FENCE SHALL BE PLACED WITH FABRIC FACING OUTSIDE HIGHWAY RIGHT OF WAY OR AS DIRECTED BY THE ENGINEER.
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
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"

NOT TO SCALE

####

SIGNATURE BLOCK:

OFFICE OF ENGINEERING
2800 BERLIN TURNPIKE
NEWINGTON, CT 06111

SUBMITTED BY:

Leo Fontaine, P.E.
2020.07.08
10:29:52-04'00'

APPROVED BY:

James Fallon, P.E.
2020.07.15
10:20:40-04'00'

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

CTDOT STANDARD SHEET

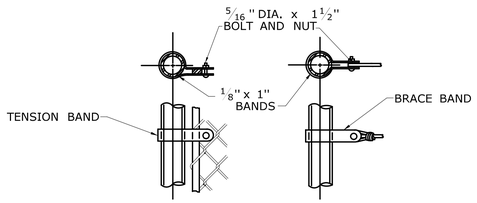
STANDARD SHEET TITLE:

CHAIN LINK FENCE

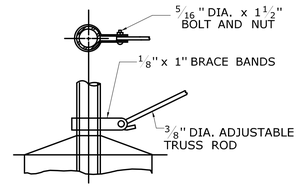
STANDARD SHEET NO.:

HW-913_01a

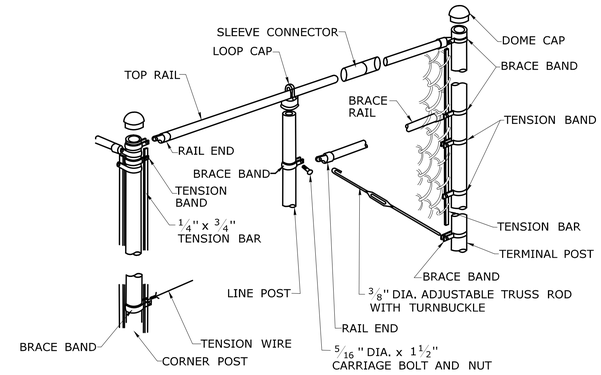
PLOTTED DATE: 7/1/2020



TENSION BAR **TENSION WIRE**

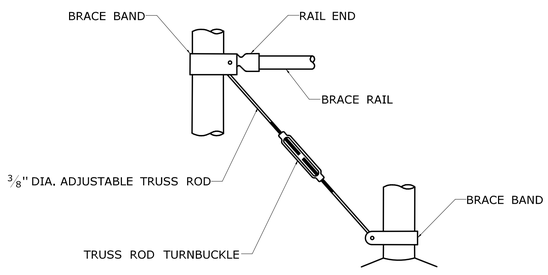


ADJUSTABLE TRUSS ROD

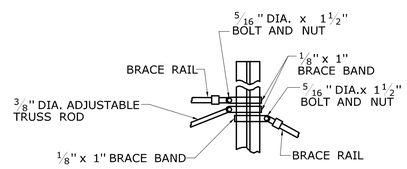


TOP RAIL / TRUSSED BRACE RAIL WITH BOTTOM TENSION WIRE

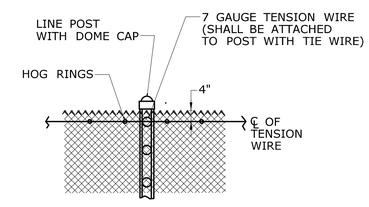
TIE WIRE



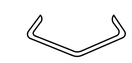
BRACE & TRUSS CONNECTIONS



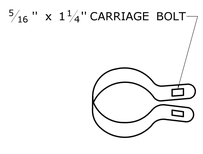
BRACE RAILS ATTACHMENT TO LINE POSTS



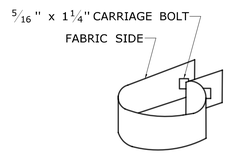
TENSION WIRE



HOG RING

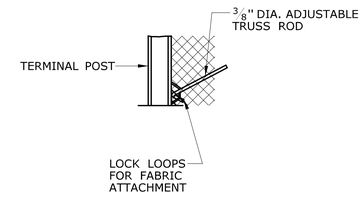


1/8" x 1" BRACE BAND

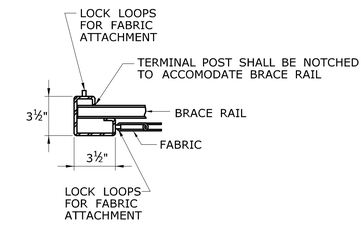


1/8" x 1" TENSION BAND

KNUCKLE SELVAGE



TRUSS ROD ATTACHMENT



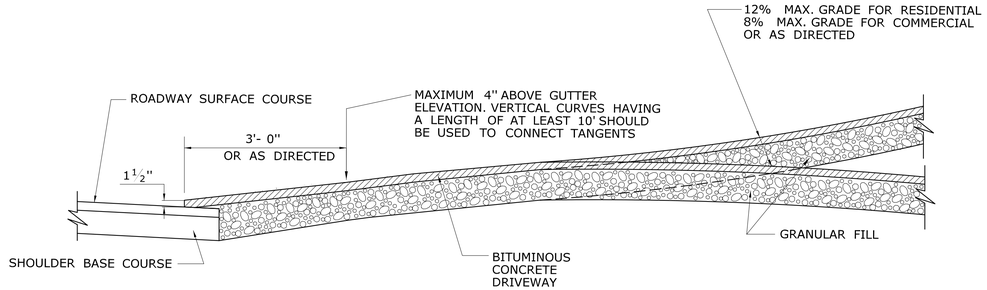
FABRIC AND BRACE RAIL ATTACHMENT

	NOT TO SCALE ####	SIGNATURE BLOCK: OFFICE OF ENGINEERING 2800 BERLIN TURNPIKE NEWINGTON, CT 06111	SUBMITTED BY: Leo Fontaine, P.E. 2020.07.08 10:30:09-04'00'	APPROVED BY: James Fallon, P.E. 2020.07.15 10:20:57-04'00'	STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION	CTDOT STANDARD SHEET	STANDARD SHEET TITLE: CHAIN LINK FENCE HARDWARE	STANDARD SHEET NO.: HW-913_01b

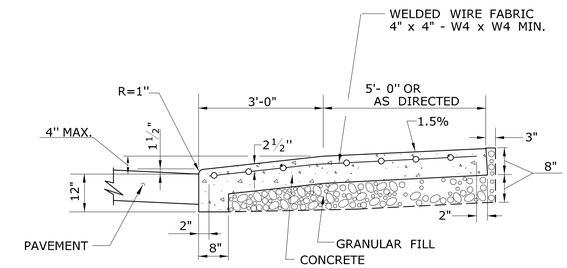
PLOTTED DATE: 7/1/2020

GENERAL NOTES:

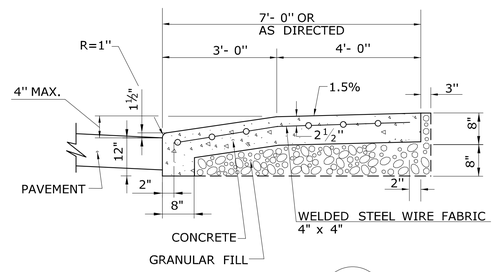
1. DRIVEWAY ENTRANCE SHALL BE A MINIMUM OF 12' WIDE, EXCLUDING CURBING WHEN PRESENT.
2. WELDED WIRE FABRIC MATS WITH REINFORCING AT CLOSER SPACING MAY BE USED.
3. SURFACE HMA S0.375 TO BE PLACED IN TWO EQUAL LIFTS FOR BOTH RESIDENTIAL AND COMMERCIAL DRIVEWAYS.



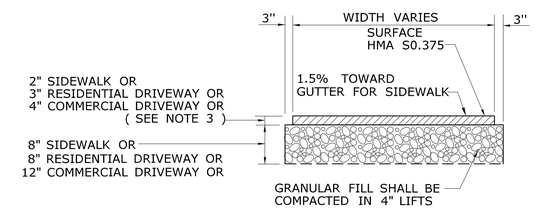
SECTION A



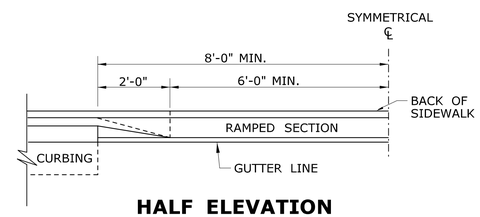
SECTION C



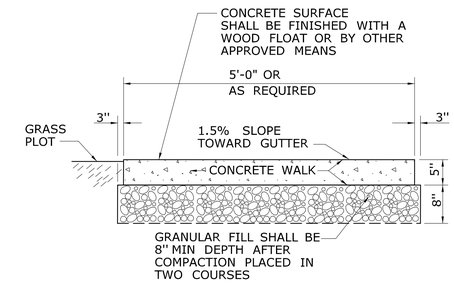
SECTION B



TYPICAL SECTION
BITUMINOUS CONCRETE
SIDEWALK AND DRIVEWAY

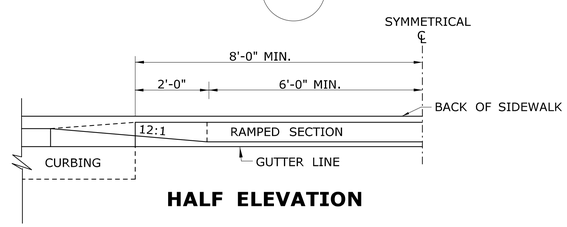


HALF ELEVATION

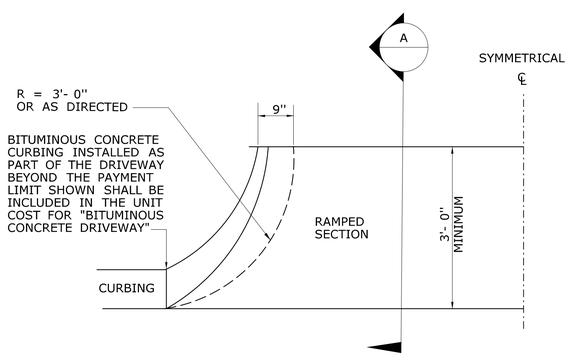


SECTION D

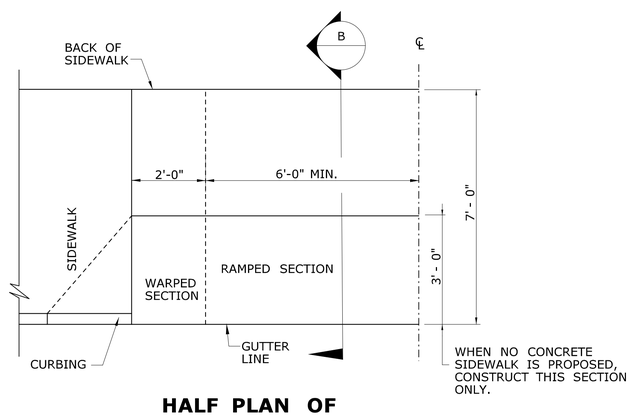
5' WIDE CONCRETE
SIDEWALK WITH GRASS PLOT



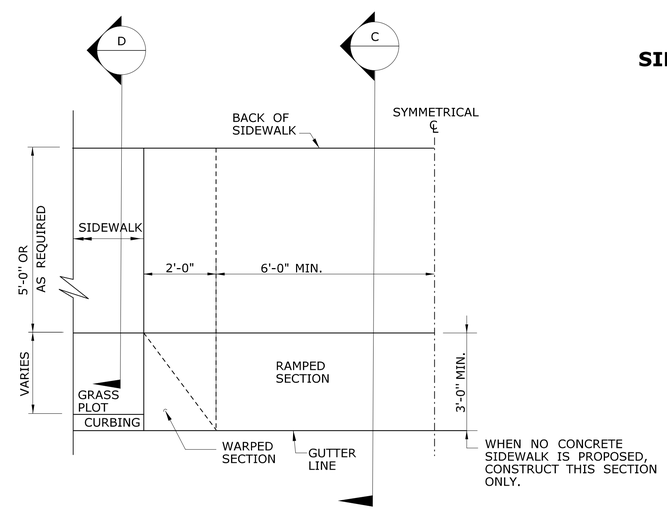
HALF ELEVATION



HALF BITUMINOUS CONCRETE
DRIVEWAY PLAN



HALF PLAN OF
CONCRETE DRIVEWAY RAMP WHERE
SIDEWALK ADJOINS CURBING



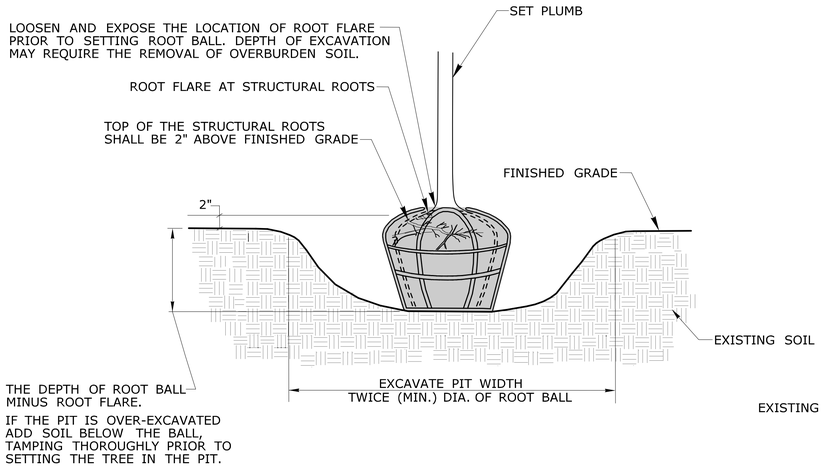
HALF PLAN OF
CONCRETE DRIVEWAY RAMP WHERE
CURB IS SEPARATED FROM
SIDEWALK BY GRASS PLOT

	NOT TO SCALE ####	SIGNATURE BLOCK: OFFICE OF ENGINEERING 2800 BERLIN TURNPIKE NEWINGTON, CT 06111	SUBMITTED BY: Leo Fontaine, P.E. 2020.07.08 10:32:47-04'00'	APPROVED BY: James Fallon, P.E. 2020.07.15 12:16:04-04'00'	STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION	CTDOT STANDARD SHEET	STANDARD SHEET TITLE: DRIVEWAY RAMPS AND SIDEWALKS	STANDARD SHEET NO.: HW-921_01

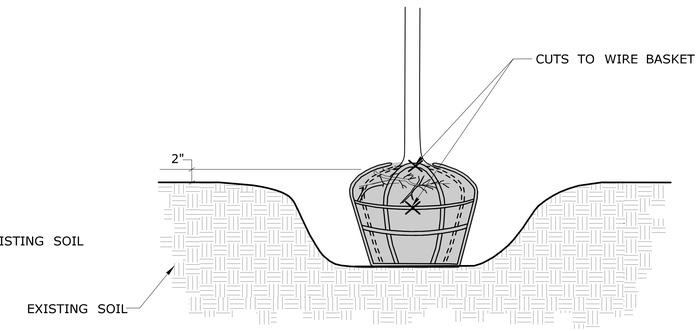
PLOTTED DATE: 7/1/2020

GENERAL NOTES:

1. ALL EXTERIOR PACKAGING MATERIAL APPLIED TO PLANTS SHALL BE REMOVED AFTER THE PLANT IS LOCATED IN THE PIT EXCAVATION. CUT AND REMOVE TWINE, BURLAP OR WIRE BASKETS FROM THE TOP TWO-THIRDS OF THE ROOT BALL.
2. PLANT MALUS SPECIES (DECIDUOUS APPLE TREES OR SHRUBS) DEEP ENOUGH IN PIT TO COVER THE GRAFT TO PREVENT SPROUTING FROM THE ROOT STOCK.

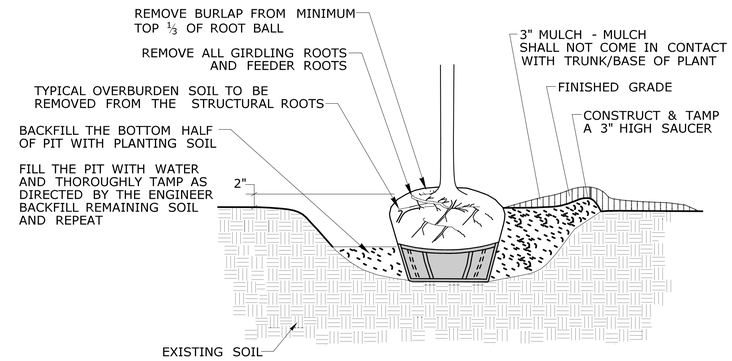


PIT EXCAVATION AND SETTING OF PLANTING

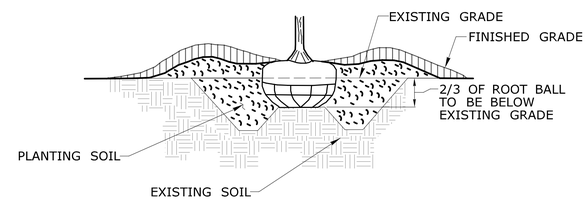


WIRE BASKET REMOVAL

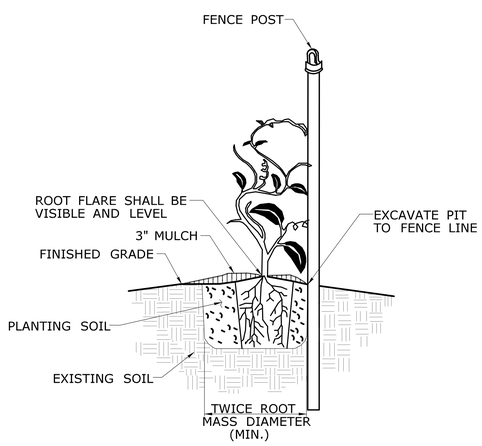
NOTE: IF WIRE BASKETS ARE USED, THE CONTRACTOR SHALL CUT ALL OF THE HORIZONTAL WIRES IN THE TOP $\frac{2}{3}$ OF THE ROOT BALL AND BEND DOWN OR REMOVE THE TOP $\frac{1}{3}$ OF THE WIRE BASKET



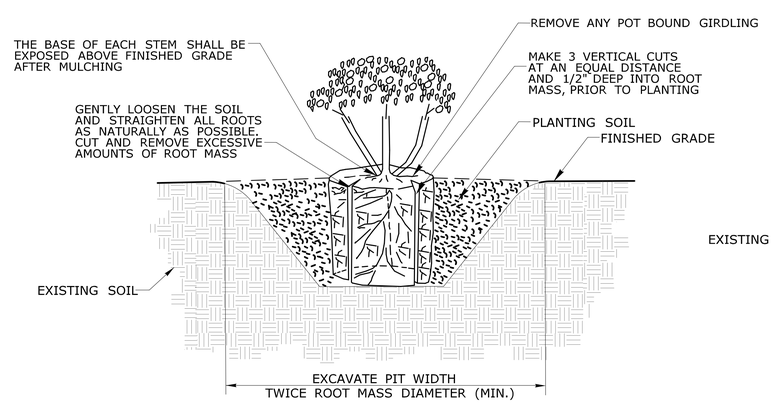
BACKFILL AND MULCH FOR PLANTING



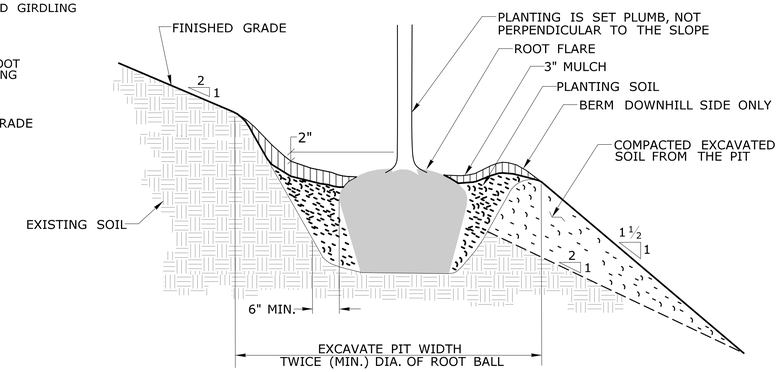
HEAVY CLAY PLANTINGS



VINE PLANTING



CONTAINER GROWN PLANTING



SLOPE PLANTING

	NOT TO SCALE ####	SIGNATURE BLOCK: OFFICE OF ENGINEERING 2800 BERLIN TURNPIKE NEWINGTON, CT 06111	SUBMITTED BY: Leo Fontaine, P.E. 2020.07.08 10:33:07-04'00'	APPROVED BY: James Fallon, P.E. 2020.07.15 12:16:22-04'00'	STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION	CTDOT STANDARD SHEET	STANDARD SHEET TITLE: LANDSCAPE PLANTING	STANDARD SHEET NO.: HW-949_01a

PLOTTED DATE: 7/1/2020

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

	SHEET NO.	TITLE	APPROVAL DATE
✓	TR-1000_01	GENERAL CLAUSES (TEST PROCEDURES)	1/2014
	TR-1001_01	TRENCHING & BACKFILLING, ELECTRICAL CONDUIT	4/2012
	TR-1002_01	TRAFFIC CONTROL FOUNDATIONS	1/2014
	TR-1010_01	CONCRETE HANDHOLE	4/2014
✓	TR-1102_01	PEDESTALS, PEDESTRIAN SIGNALS	4/2012
✓	TR-1105_01	TRAFFIC SIGNALS AND CABLE ASSIGNMENTS	8/2018
✓	TR-1107_01	PEDESTRIAN PUSH BUTTON	8/2018
	TR-1108_01	CONTROLLERS	5/2013
✓	TR-1111_01	LOOP VEHICLE DETECTOR AND SAWCUT	4/2014
✓	TR-1113_01	CONTROL CABLE	4/2014
	TR-1114_01	BONDING & UTILITY POLE ATTACHMENT DETAILS, SIGN HANGER, "Y" CLAMP DETAILS	8/2018

	SHEET NO.	TITLE	APPROVAL DATE
	TR-1205_01	DELINEATION, DELINEATORS AND OBJECT MARKER DETAILS	8/2018
✓	TR-1208_01	SIGN PLACEMENT AND RETROREFLECTIVE STRIP DETAILS	8/2018
✓	TR-1208_02	METAL SIGN POSTS AND SIGN MOUNTING DETAILS	6/2017
	TR-1210_01	PAVEMENT MARKINGS (DURABLE MARKINGS) FOR DIVIDED HIGHWAYS	OBSOLETE
	TR-1210_02	PAVEMENT MARKINGS (DURABLE MARKINGS) FOR DIVIDED HIGHWAYS	OBSOLETE
	TR-1210_03	SPECIAL DETAILS & TYPICAL PAVEMENT MARKINGS FOR TWO-WAY HIGHWAYS	OBSOLETE
✓	TR-1210_04	PAVEMENT MARKING LINES AND SYMBOLS	8/2018
	TR-1210_05	PAVEMENT MARKINGS FOR DIVIDED HIGHWAYS	4/2017
	TR-1210_06	PAVEMENT MARKINGS FOR DIVIDED HIGHWAYS	8/2018
	TR-1210_07	PAVEMENT MARKINGS FOR EXIT RAMPS	4/2017
✓	TR-1210_08	PAVEMENT MARKINGS FOR NON FREEWAYS	8/2018
	TR-1210_09	PAVEMENT MARKINGS FOR BICYCLE LANES, PARKING STALLS, AND RR CROSSINGS	4/2017
✓	TR-1220_01	SIGNS FOR CONSTRUCTION AND PERMIT OPERATIONS	8/2018
✓	TR-1220_02	CONSTRUCTION SIGN SUPPORTS AND CHANNELIZING DEVICES	8/2018

STANDARD SHEETS SHALL BE USED WITH STANDARD SPECIFICATIONS

REV.	DATE	REVISION DESCRIPTION
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.

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.

Plotted Date: 8/16/2018

NOT TO SCALE

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: CTDOT_TRAFFIC_STD_DGN.DGN Model: TR-01-STD_INDEX

SUBMITTED BY: NAME/DATE/TIME:

CTDOT
STANDARD SHEET

OFFICE OF ENGINEERING

STANDARD SHEET TITLE:

TRAFFIC
STANDARD SHEET INDEX

STANDARD SHEET NO.:

TR-STD_INDEX

DOCUMENT ALL LOOP DETECTOR VALUES BOTH CALCULATED AND MEASURED.

DEFINITIONS:

LOOP: #14 AWG WIRE IN SAWCUT, TERMINATED IN HANDHOLE, IMSA SPEC 51-7.
LEAD-IN: 14/2 SHIELDED TWISTED PAIR CABLE FROM HANDHOLE TO CONTROLLER, IMSA SPEC 50-2.
LOOP CIRCUIT: LOOP SAWCUT WIRE SPLICED TO 14/2 LEAD-IN CABLE.
AMPLIFIER: ELECTRONIC DEVICE CONNECTED TO LOOP CIRCUIT. SENSES CHANGE IN RESONANT FREQUENCY AND CREATES AN OUTPUT TO THE CONTROLLER.
MEGOHMETER: INSTRUMENT SPECIFICALLY DESIGNED TO TEST THE INSULATION RESISTANCE OF A CIRCUIT. COMMON MANUFACTURERS: AMEC®, AMPROBE®, FLUKE®, MEGGER®.

1: RESISTANCE:

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

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

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

2: LOOP CIRCUIT INDUCTANCE:

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

LOOP INDUCTANCE (ENGLISH)

$L_{LOOP} = (P/4)(N^2 + N)$

LEAD-IN INDUCTANCE

$L_{14/2} = (0.24\,\mu h/FT)(D)$

LOOP INDUCTANCE (METRIC)

$L_{LOOP} = (3.28P/4)(N^2 + N)$

LEAD-IN INDUCTANCE

$L_{14/2} = (0.78\,\mu h/m)(D)$

WHERE:

L_{LOOP} = INDUCTANCE OF INDIVIDUAL LOOP SEGMENTS IN MICROHENRIES (μh).
$L_{14/2}$ = INDUCTANCE OF LEAD-IN CABLE.
P = PERIMETER OF INDIVIDUAL LOOP SEGMENT, IN FEET OR METERS.
N = NUMBER OF TURNS.
D = LENGTH OF LEAD-IN CABLE FROM SPLICE IN HANDHOLE TO CONTROLLER, IN FEET OR METERS.

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

$L_T = 1 / [(1 / L_1) + (1 / L_2) + (1 / L_3) + \text{etc.}]$,
(TOTAL INDUCTANCE OF SEGMENTED LOOP SPLICED IN PARALLEL.

WHERE:

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

EXAMPLE: (IN ENGLISH)

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

$L_{LOOP} = (24/4)(4^2 + 4)$
$L_{LOOP} = (6)(20)$
$L_{LOOP} = 120\ \mu h$

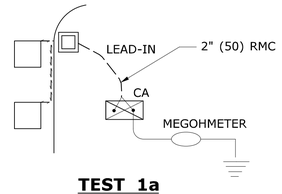
$L_{14/2} = (0.24\,\mu h/FT)(300)$
$L_{14/2} = (0.24)(300)$
$L_{14/2} = 72\ \mu h$

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

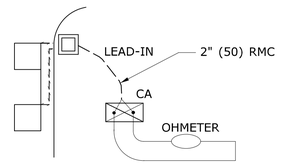
3: POWER INTERRUPTION:

AFTER THE AMPLIFIER HAS TUNED AND IS OPERATING, DISCONNECT POWER BY REMOVING FUSE OR HARNESS CONNECTOR. RETURN POWER TO THE AMPLIFIER AND CONFIRM IT RE-TUNES AUTOMATICALLY WITHOUT ANY MANUAL ADJUSTMENTS.

INDUCTIVE LOOP TEST PROCEDURE



TEST 1a



TEST 1b

PROJECT:
TOWN:
LOCATION:

LOOP NUMBER	RESISTANCE OHMS		INDUCTANCE MICROHENRIES (μh)		AMPLIFIER POWER INTERRUPTION
	TO GROUND (1a)	LOOP WIRE (1b)	CALCULATED (2a)	MEASURED (2b)	PASS/FAIL (3)
D1 FRONT					
D1 REAR					
D2A					
D2B					
D4A FRONT					
D4B REAR					
D5					
D6A					
D6B					

LOOP CIRCUIT TEST DATA (EXAMPLE)

PIN	COLOR	FUNCTION
A	WHITE	110 VAC Neutral
B	BROWN	Output Relay Common (moving contact)
C	BLACK	110 VAC (Fused)
D	RED	Loop
E	ORANGE	Loop
F	YELLOW	Output Relay Contact (Closes with moving contact when detecting vehicle)
G	BLUE	Output Relay Contact (Opens with moving contact when detecting vehicle)
H	GREEN	Chassis Ground
J	GREY	110 VAC Delay/Extend Override
Shell		Ground (shall be connected to pin H in the connector)

DETECTOR AMPLIFIER PIN DESIGNATION

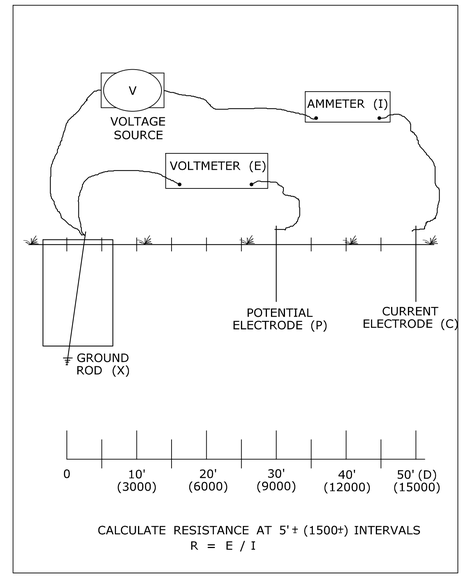
TEST PROCEDURE:

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

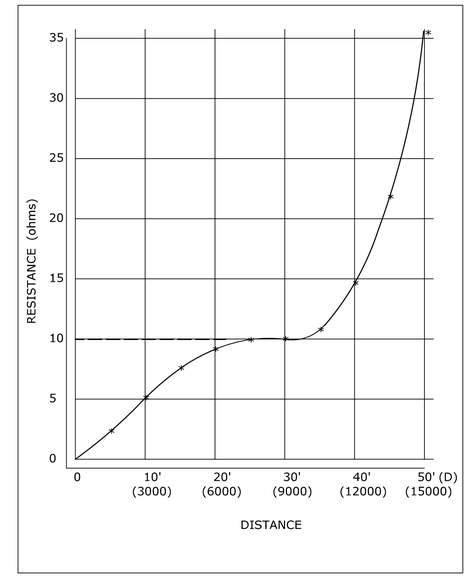
SUGGESTED CORRECTIVE ACTION:

A. INSTALL ADDITIONAL 10' (3000) GROUND ROD(S).
REFER TO NESC SECTION 09, RULE 94.B.2.
DRIVE ADDITIONAL GROUND RODS NO CLOSER TO FOUNDATION THAN 6' (1800). IF MORE THAN ONE IS NEEDED, SPACE MINIMUM 6' (1800) APART.
BONDS TO ADDITIONAL GROUND ROD(S) SHALL BE MADE BY A CLAMP DESIGN FOR DIRECT BURIAL OR BY EXOTHERMIC WELDING TECHNIQUE.
TOP OF ADDITIONAL GROUND ROD(S) SHALL BE 6" (150) BELOW GRADE.

B. IN AREAS OF SHALLOW BEDROCK, INSTALL A GROUND GRID OR ARRAY CONSISTING OF BURIED WIRE, RODS, STRIPS OR PLATES.
REFER TO NESC SECTION 09, RULE 94.B.3.
REFER TO NEC SECTION 250.
MINIMUM DEPTH OF 18" (450).
GRID CONNECTIONS AND BONDS ON GROUND GRID SHALL BE MADE BY CLAMPS DESIGNED FOR DIRECT BURIAL OR BY EXOTHERMIC WELDING TECHNIQUE.



3 POINT GROUND RESISTANCE TEST CIRCUIT



GROUND RESISTANCE CHART (EXAMPLE)

NOTES:

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

3 POINT FALL-OF-POTENTIAL GROUND RESISTANCE TEST

LEGEND AS SHOWN ON TRAFFIC CONTROL SIGNAL PLAN:
INDUCTIVE LOOP DETECTOR
SAW CUT
RIGID METAL CONDUIT
HANDHOLE

REV.	DATE	REVISION DESCRIPTION
2	1-2014	REVISED GROUND RESISTANCE NOTES.
1	4-2012	MINOR REVISIONS.

THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.

Plotted Date: 1/7/2014

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

NOT TO SCALE

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

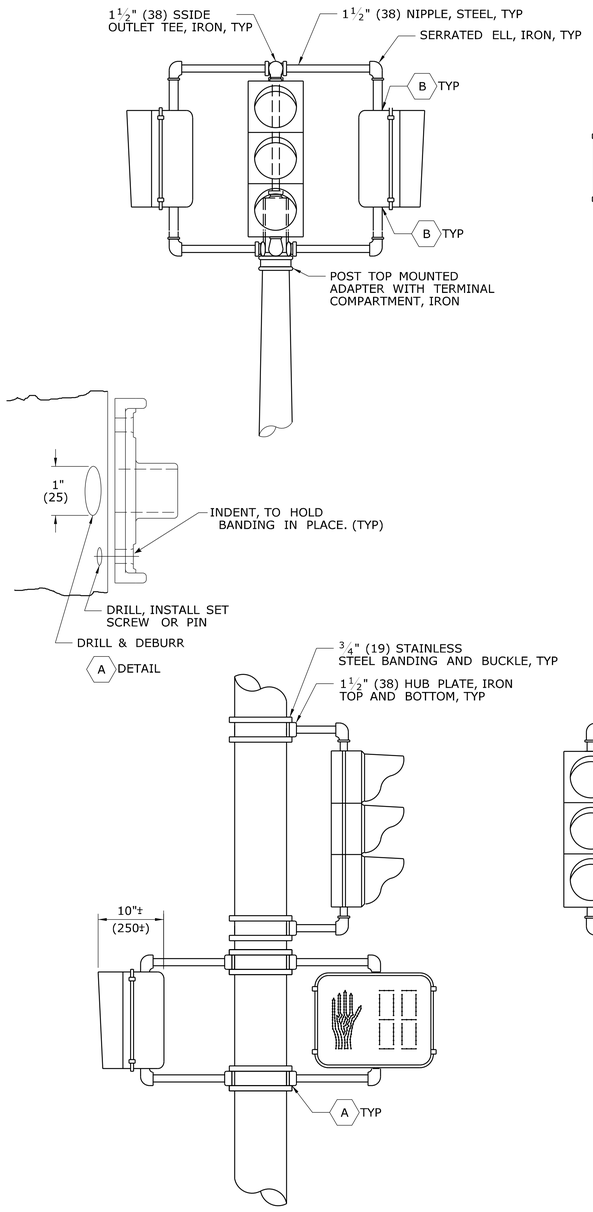
Filename: CTDOT_TRAFFIC_STD.DGN Model: TR-1000_01

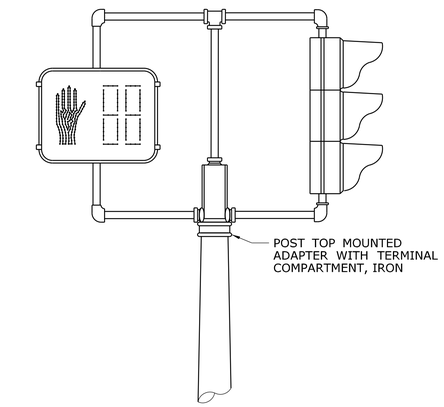
SUBMITTED BY: NAME/DATE/TIME: Tracy L. Fogarty 2014.01.07 16:11:26-05'00'
APPROVED BY: NAME/DATE/TIME: Charles S. Harlow 2014.01.08 09:02:11-05'00'

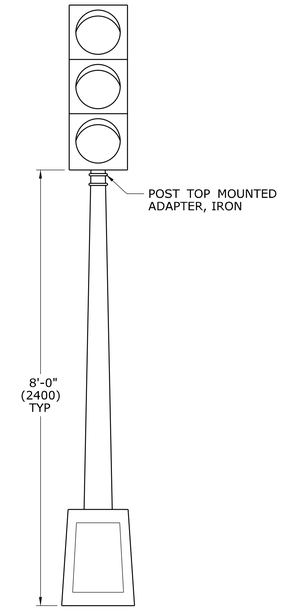
CTDOT STANDARD SHEET
OFFICE OF ENGINEERING

STANDARD SHEET TITLE: GENERAL CLAUSES (TEST PROCEDURES)

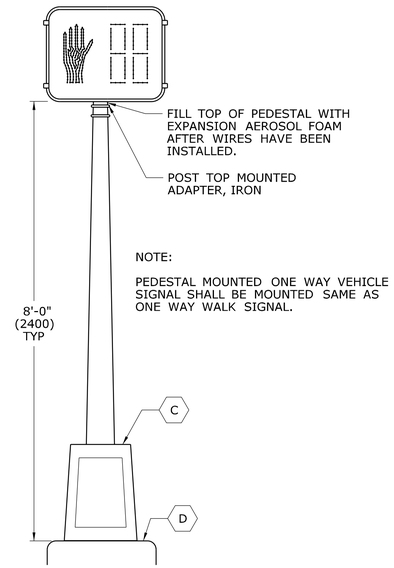
STANDARD SHEET NO.: TR-1000_01







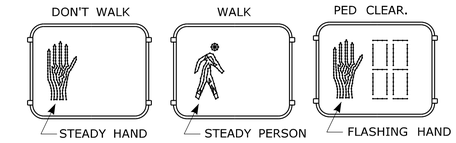
ONE WAY TRAFFIC SIGNAL PEDESTAL MOUNTED



NOTE:

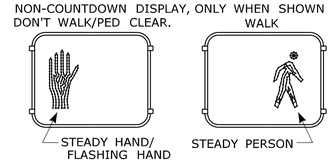
PEDESTAL MOUNTED ONE WAY VEHICLE SIGNAL SHALL BE MOUNTED SAME AS ONE WAY WALK SIGNAL.

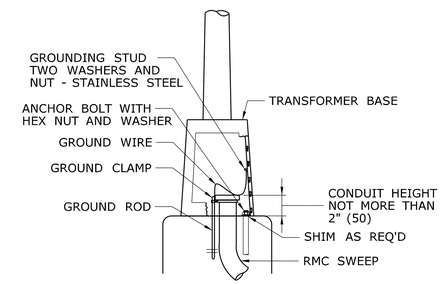
ONE WAY WALK SIGNAL PEDESTAL MOUNTED



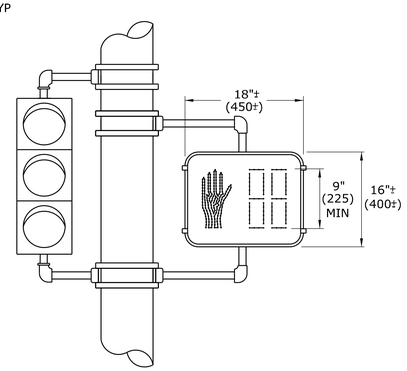
TYPICAL INDICATION WHEN LIT

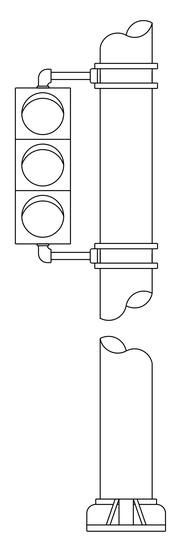
NON-COUNTDOWN DISPLAY, ONLY WHEN SHOWN ON PLAN.



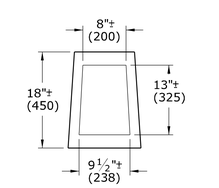


ALUMINUM PEDESTAL INSTALLATION DETAIL

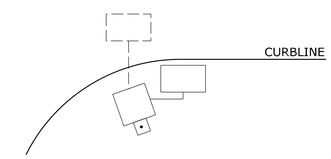




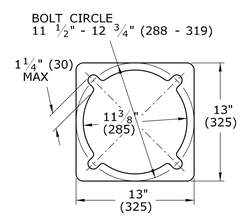
ONE WAY TRAFFIC SIGNAL POLE MOUNTED



ALUMINUM PEDESTAL DOOR OPENING DETAIL



WHEN PEDESTALS OR SPAN POLES ARE INSTALLED CLOSE TO THE CURB, SIDE MOUNT PEDESTRIAN OR TRAFFIC SIGNALS TO AVOID VISOR DAMAGE FROM TURNING VEHICLES.



PEDESTAL BASE PLAN

NOTES:

- (A) SECURE LOWER HUB PLATE WITH STAINLESS STEEL SET SCREW OR PIN PRIOR TO BANDING TO PREVENT MOVEMENT. INSTALL CABLE THROUGH BOTTOM OF HUB PLATE.
- (B) REFER TO CTDOT TRAFFIC STANDARD SHEET, TR-1105_01, TRAFFIC SIGNALS & CABLE ASSIGNMENTS.
- (C) IF THREADED, MIN 1" (25) THREADED INTO BASE, SECURED WITH STAINLESS STEEL SET SCREWS.
- (D) BASE DESIGNED AS BREAK-AWAY.

INCANDESCENT WALK SIGNAL LAMPS ARE 67 WATTS, RATED AT 8000 HOURS LAMP LIFE. LED WALK SIGNAL LAMPS ARE MAXIMUM 15 WATTS, WARRANTEED AT 5 YEAR LIFE.

LEGEND AS SHOWN ON TRAFFIC CONTROL SIGNAL PLAN:
- STEEL SPAN POLE, MAST ARM ASSEMBLY SHAFT
- ALUMINM PEDESTAL
- TRAFFIC SIGNAL
- PEDESTRIAN SIGNAL
- PEDESTAL MOUNTED, TRAFFIC & PEDESTRIAN SIGNALS
- POLE MOUNTED, TRAFFIC & PEDESTRIAN SIGNALS

REV.	DATE	REVISION DESCRIPTION
2	4-2012	MINOR REVISIONS.
1	1-2010	INCLUDED COUNTDOWN PEDESTRIAN SIGNALS.

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.

Plotted Date: 4/14/2012

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

NOT TO SCALE

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: CTDOT_TRAFFIC_STD.dgn Model: TR-1102_01

SUBMITTED BY: NAME/DATE/TIME: Tracy L. Fogarty 2012.05.01 12:55:27-04'00'

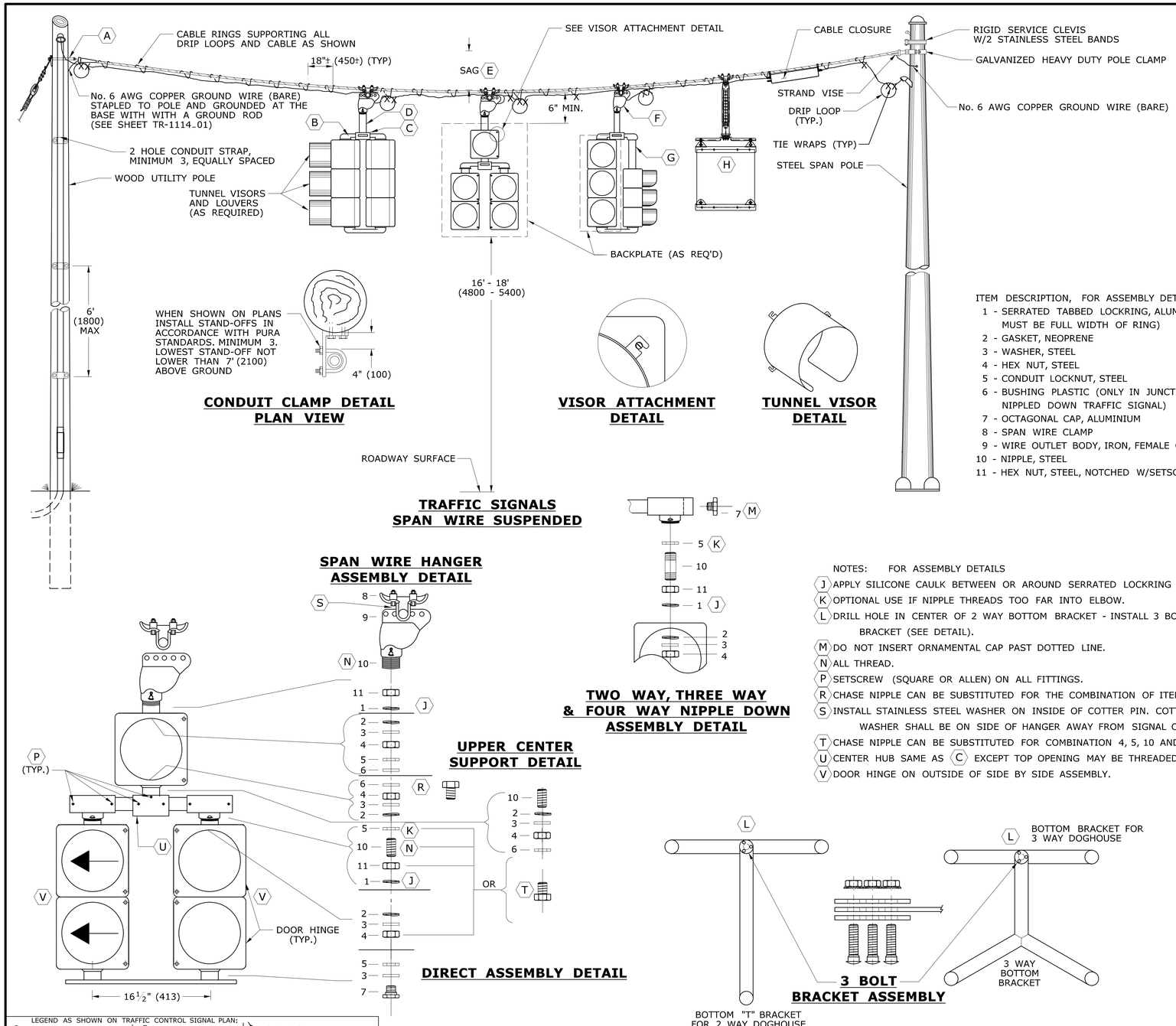
APPROVED BY: NAME/DATE/TIME: Timothy M. Wilson 2012.05.09 10:24:58-04'00'

CTDOT STANDARD SHEET

OFFICE OF ENGINEERING

STANDARD SHEET TITLE: **PEDESTALS, PEDESTRIAN SIGNALS**

STANDARD SHEET NO.: **TR-1102_01**



ITEM DESCRIPTION, FOR ASSEMBLY DETAILS

1 - SERRATED TABBED LOCKRING, ALUMINUM (TAB MUST BE FULL WIDTH OF RING)
2 - GASKET, NEOPRENE
3 - WASHER, STEEL
4 - HEX NUT, STEEL
5 - CONDUIT LOCKNUT, STEEL
6 - BUSHING PLASTIC (ONLY IN JUNCTION BOX OR NIPPLED DOWN TRAFFIC SIGNAL)
7 - OCTAGONAL CAP, ALUMINIUM
8 - SPAN WIRE CLAMP
9 - WIRE OUTLET BODY, IRON, FEMALE ONLY
10 - NIPPLE, STEEL
11 - HEX NUT, STEEL, NOTCHED W/SETSCREWS

TRAFFIC SIGNAL CABLE COLOR ASSIGNMENTS

SIGNAL ASSEMBLY & CABLE USED	SIGNAL FUNCTION	ARTERY 1	ARTERY 2	SIDE STREET 1	SIDE STREET 2
2 - WAY 9 CONDUCTOR	RED	RED		BLACK	
	YELLOW	ORANGE		WHITE \ BLACK	
	GREEN	GREEN		BLUE	
	SPARE	GREEN\BLACK		RED \ BLACK	
	NEUTRAL	WHITE			
3 - WAY 12 CONDUCTOR	RED	RED	RED \ BLACK	BLACK	
	YELLOW	ORANGE	ORANGE \ BLACK	WHITE \ BLACK	
	GREEN	GREEN	GREEN \ BLACK	BLUE	
	SPARE	BLUE\BLACK	BLACK \ WHITE		
	NEUTRAL	WHITE			
4 - WAY 15 CONDUCTOR	RED	RED	RED \ BLACK	BLACK	RED \ WHITE
	YELLOW	ORANGE	ORANGE \ BLACK	WHITE \ BLACK	BLACK \ WHITE
	GREEN	GREEN	GREEN \ BLACK	BLUE	GREEN \ WHITE
	SPARE	BLUE\BLACK		BLUE \ WHITE	
	NEUTRAL	WHITE			

PEDESTRIAN SIGNAL CABLE COLOR ASSIGNMENTS

SIGNAL ASSEMBLY & CABLE USED	SIGNAL FUNCTION	WIRE COLOR
WALK SIGNAL W/ PUSHBUTTON 7 CONDUCTOR	DON'T WALK	RED
	WALK	GREEN
	NEUTRAL FOR WALK SIGNAL	WHITE
	PEDESTRIAN PUSHBUTTON	BLACK
	NEUTRAL FOR PUSHBUTTON	ORANGE
	SPARE CONDUCTOR	WHITE \ BLACK
	SPARE CONDUCTOR *	BLUE \ BLACK
WALK SIGNAL W/ PUSHBUTTON 7 CONDUCTOR	RED	RED
	YELLOW	ORANGE
	GREEN	GREEN
	NEUTRAL FOR TRAFFIC SIGNAL	WHITE
	PEDESTRIAN PUSHBUTTON	BLACK
	NEUTRAL FOR PUSHBUTTON	WHITE \ BLACK
	SPARE CONDUCTOR *	BLUE \ BLACK

* IF 14/7 FEEDS MORE THAN ONE BUTTON, SPLIT THE BUTTONS AND USE BLUE WITH BLACK TRACER FOR THE ADDITIONAL BUTTON.

TABLE NOTES:

1. INSTALL SEPARATE CABLE BETWEEN CLOSURE AND EACH TRAFFIC SIGNAL ASSEMBLY. WIRE EACH TRAFFIC SIGNAL SECTION SEPARATELY BACK TO CABLE CLOSURE. JUMPERS BETWEEN TERMINALS ARE NOT ALLOWED EXCEPT ON NEUTRAL CONDUCTORS.
2. WIRE ALL SIGNALS, SAME DIRECTION FROM CONTROLLER, SEPARATELY WITH CONDUCTORS IN 21 CONDUCTOR CABLE, EVEN IF INDICATIONS ARE IDENTICAL.
3. CABLES THAT FEED PEDESTRIAN INDICATIONS, PUSH BUTTONS, AND DETECTORS BYPASS CABLE CLOSURE.
4. REFER TO STANDARD SHEET TR-1113_01 FOR CABLE CLOSURE - TYPE A.

TWO WAY, THREE WAY & FOUR WAY NIPPLE DOWN ASSEMBLY DETAIL

NOTES: FOR ASSEMBLY DETAILS

J APPLY SILICONE CAULK BETWEEN OR AROUND SERRATED LOCKRING AND HOUSING.
K OPTIONAL USE IF NIPPLE THREADS TOO FAR INTO ELBOW.
L DRILL HOLE IN CENTER OF 2 WAY BOTTOM BRACKET - INSTALL 3 BOLT BRACKET (SEE DETAIL).
M DO NOT INSERT ORNAMENTAL CAP PAST DOTTED LINE.
N ALL THREAD.
P SETSCREW (SQUARE OR ALLEN) ON ALL FITTINGS.
R CHASE NIPPLE CAN BE SUBSTITUTED FOR THE COMBINATION OF ITEMS 6, 5 AND 10.
S INSTALL STAINLESS STEEL WASHER ON INSIDE OF COTTER PIN. COTTER PIN AND WASHER SHALL BE ON SIDE OF HANGER AWAY FROM SIGNAL CABLES.
T CHASE NIPPLE CAN BE SUBSTITUTED FOR COMBINATION 4, 5, 10 AND 11.
U CENTER HUB SAME AS C EXCEPT TOP OPENING MAY BE THREADED.
V DOOR HINGE ON OUTSIDE OF SIDE BY SIDE ASSEMBLY.

NOTES:

SERVICE CONDUCTORS: THW, THWN OR XHHW. INDIVIDUAL WIRES MAY BE USED IN LIEU OF MULTI-CONDUCTOR CABLE.

ALL WORK ON UTILITY POLES MUST COMPLY WITH CURRENT PURA REGULATIONS AND NESC RULES.

A ATTACH SPAN AT LEAST 12" (300) BELOW LOWEST POWER COMPANY ATTACHMENT, AND AT LEAST 40" (1000) ABOVE HIGHEST COMMUNICATIONS ATTACHMENT, UNLESS OTHERWISE DIRECTED ON PLANS.
B ELBOW OR "T" FITTING MUST HAVE NOTCH FOR SERRATED TABBED LOCKRING.
C TOP BRACKET CENTER HUB SHALL BE MIN 4" (100) ROUND AND 3" (75) DEEP OR EQUAL VOLUME. SERRATION CAST IN HUB OR TABBED OR SERRATED LOCKRING, TOP OPENING NOT THREADED.
D NIPPLE LENGTH DEPENDS ON SPAN HEIGHT.
E SAG OF SPAN TO BE 5%± LENGTH, UNLESS OTHERWISE ALLOWED BY ENGINEER.
F FACE ALL ENTRANCE FITTINGS TOWARD CABLE CLOSURE.
G INSTALL EXTENSION NIPPLE ON TOP OF SIGNAL HOUSING SO BOTTOM OF ALL SIGNALS ARE EVEN.
H REFER TO TR-GS_01 "SIGN FACE SHEET ALUMINUM, R-SERIES SIGNS TYPICAL DETAILS", AND TO TR-1114_01 FOR SIGN HANGER ASSEMBLY. MAXIMUM SIGN SIZE 36" X 36" (900 X 900). ALL STAINLESS STEEL HARDWARE.

SECURE LOUVERS TO TUNNEL VISORS WITH 3 STAINLESS STEEL SCREWS.

LEGEND AS SHOWN ON TRAFFIC CONTROL SIGNAL PLAN:

- PROPOSED WOOD SPAN POLE
- EXISTING WOOD SPAN POLE
- PROPOSED STEEL SPAN POLE
- EXISTING STEEL SPAN POLE
- PROPOSED UTILITY POLE
- EXISTING UTILITY POLE
- POLE ANCHOR & GUY
- CABLE CLOSURE
- SPAN MOUNTED SIGN
- SPAN MOUNTED TRAFFIC SIGNAL

REV.	DATE	REVISION DESCRIPTION
4	1-2018	REVISED GROUNDING NOTE FOR SPAN AND OTHER MINOR REVISIONS.
3	3-2015	REMOVED STRAIN INSULATOR.
2	5-2013	MINOR REVISIONS.
1	4-2012	MINOR REVISIONS.

THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.

Plotted Date: 5/22/2018

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

NOT TO SCALE

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: CTDOT_TRAFFIC_STD_2018-05-21.dgn Model: TR-1105_01

SUBMITTED BY: NAME/DATE/TIME: Tracy L. Fogarty, P.E. 2018.08.16 12:13:06-04'00'

APPROVED BY: NAME/DATE/TIME: Mark F. Carlino, P.E. 2018.08.21 07:46:03-04'00'

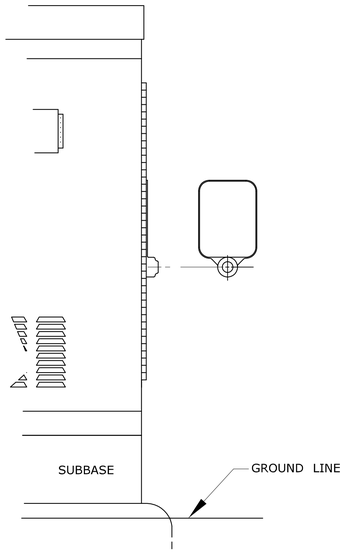
CTDOT STANDARD SHEET

OFFICE OF ENGINEERING

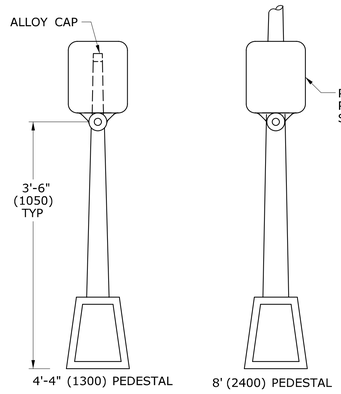
STANDARD SHEET TITLE:

TRAFFIC SIGNALS & CABLE ASSIGNMENTS

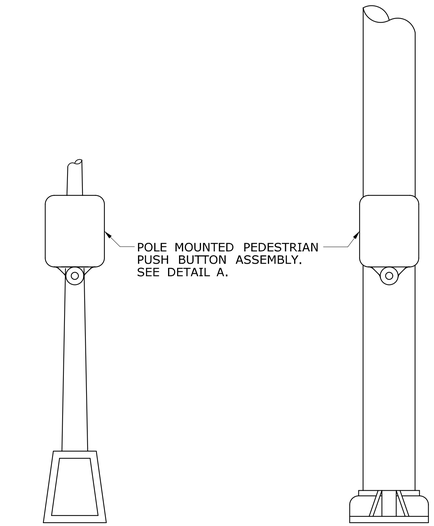
STANDARD SHEET NO.: TR-1105_01



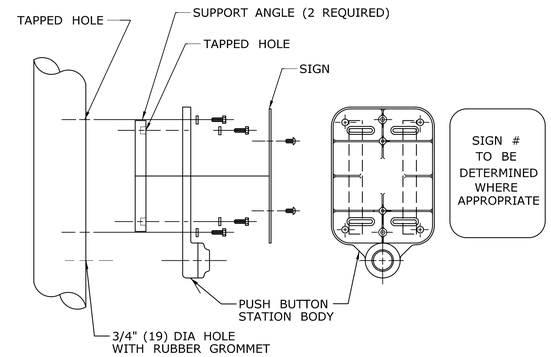
SURFACE MOUNTED



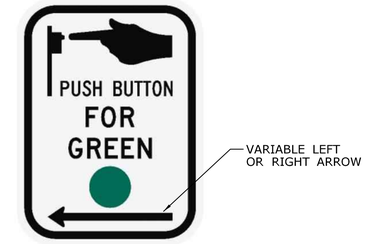
PEDESTAL MOUNTED



SPAN POLE/MAST ARM MOUNTED



DETAIL A



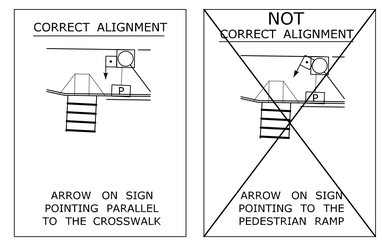
SIGN # 31-0833
USE APPROPRIATE LEFT OR RIGHT ARROW

SIGN # 31-0835

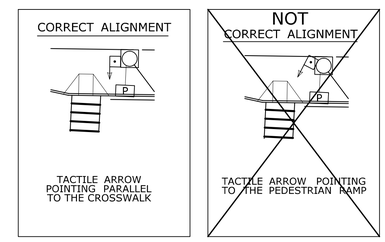
FOR CROSSING WITH SIDE STREET GREEN

GENERAL NOTES:

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



PEDESTRIAN PUSH BUTTON ALIGNMENT



ACCESSIBLE PEDESTRIAN SIGNAL AND DETECTOR

EXAMPLE ALIGNMENTS FOR EXCLUSIVE PEDESTRIAN PHASE

*USE APPROPRIATE ARROW UNLESS OTHERWISE NOTED ON PLAN.

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

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

LEGEND AS SHOWN ON TRAFFIC CONTROL SIGNAL PLAN:
- PEDESTRIAN PUSH BUTTON
- PEDESTRIAN PUSH BUTTON, PEDESTAL MOUNTED
- PEDESTRIAN PUSH BUTTON, POLE MOUNTED

REV.	DATE	REVISION DESCRIPTION
3	8-2018	UPDATED PEDESTRIAN SIGN LEGENDS AND NOTES.
2	4-2014	ADDED PEDESTRIAN EXAMPLE ALIGNMENTS
1	4-2012	MINOR REVISIONS & UPDATED SIGN #31-0845.

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.

Plotted Date: 8/9/2018

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

NOT TO SCALE

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

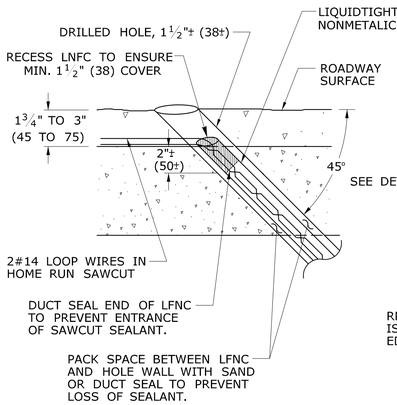
Filename: CTDOT_TRAFFIC_STD_2018-01-25.dgn Model: TR-1107_01

SUBMITTED BY: NAME/DATE/TIME: Tracy L. Fogarty, P.E. 2018.08.16 12:13:35-04'00'
APPROVED BY: NAME/DATE/TIME: Mark F. Carlino, P.E. 2018.08.21 07:46:57-04'00'

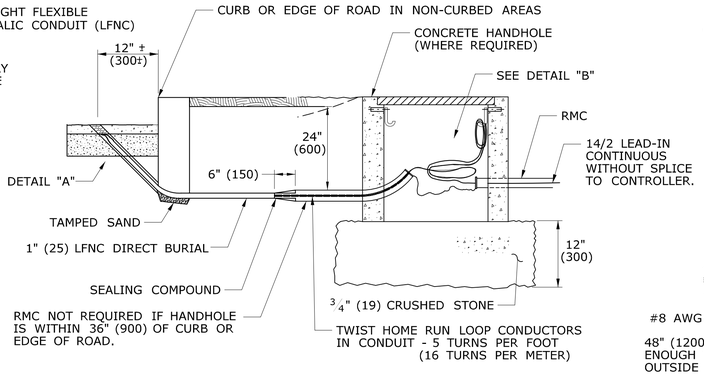
CTDOT STANDARD SHEET
OFFICE OF ENGINEERING

STANDARD SHEET TITLE: **PEDESTRIAN PUSH BUTTONS**

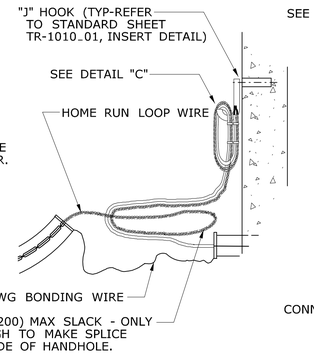
STANDARD SHEET NO.: **TR-1107_01**



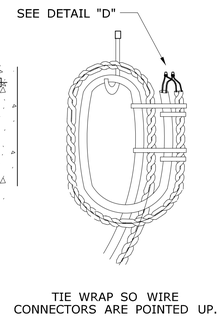
DETAIL "A"



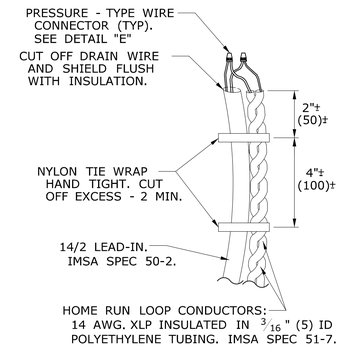
TYPICAL ELEVATION VIEW
LOOP DETECTOR LEAD-IN



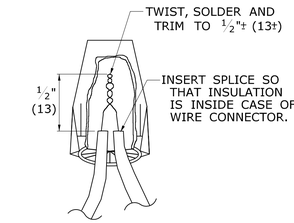
DETAIL "B"



DETAIL "C"
FRONT VIEW



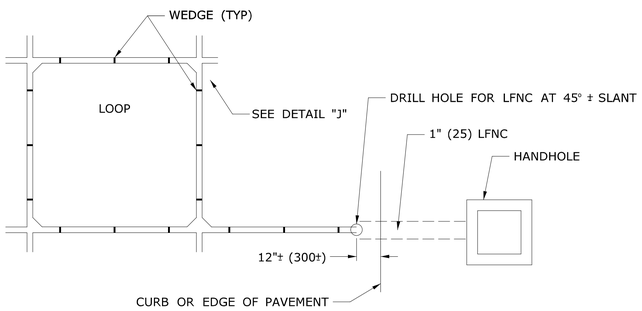
DETAIL "D"



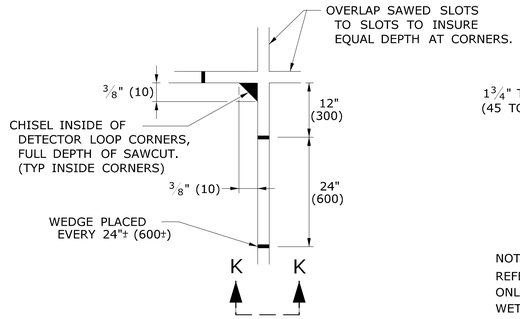
NOTE:

WATER RESISTANT CONNECTOR DESIGNED FOR WET, DAMP AND CORROSIVE APPLICATIONS. ONE TIME USE ONLY. DISCARD ALL REMOVED CONNECTORS.

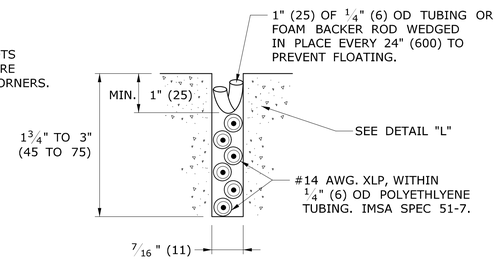
DETAIL "E"



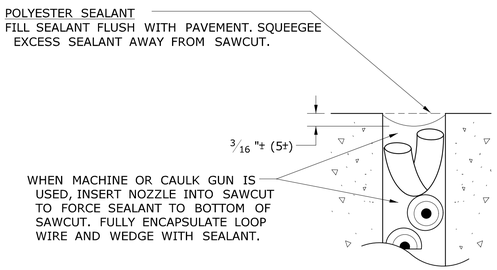
TYPICAL PLAN VIEW
LOOP DETECTOR SAWCUT AND LEAD-IN



DETAIL "J"

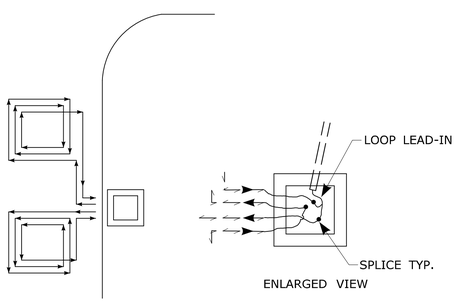


DETAIL "K"



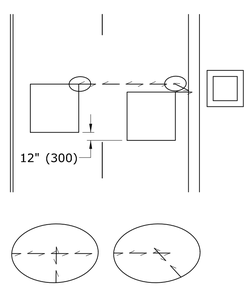
DETAIL "L"

NOTES:
REFER TO STANDARD SPECIFICATIONS, SECTION 11-11.
ONLY USE POLYESTER COMPOUND AS SEALANT, UNLESS OTHER TYPE IS APPROVED BY ENGINEER.
WET SAW CUT ONLY, DRY SAW CUT NOT PERMITTED.
RECOMMENDED SAW BLADE: 14" x 3/8" (350 x 10) PRODUCES 7/16" (11) SLOT.
SAW CUT LOOP & HOME RUN DEPTH TO ENSURE MIN. 1" (25) SEALANT COVERAGE.

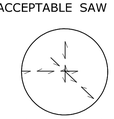


TYPICAL WINDING
SEGMENTED LOOPS, 3 TURNS EACH

TO CREATE A UNIFORM MAGNETIC FIELD, WIND ADJACENT LOOPS IN OPPOSITE DIRECTIONS.

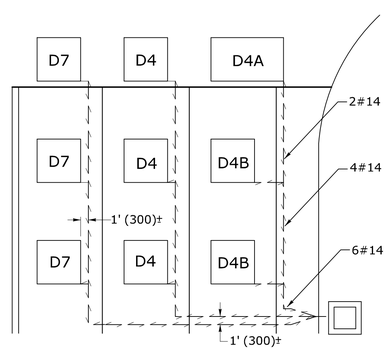


ACCEPTABLE SAW CUT

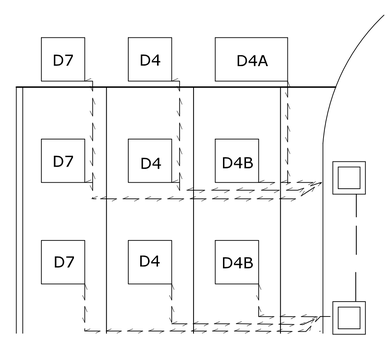


NOT ACCEPTABLE SAW CUT

DO NOT OVERLAP MORE THAN TWO SAWCUTS.



EXAMPLE A



EXAMPLE B

REAR SEGMENTS ALSO USED FOR VOLUME COUNTS

SEE TRAFFIC SIGNAL PLAN FOR ACTUAL LOOP PLACEMENT, NUMBERS, ETC...
LOOP SEGMENTS ON SAME AMPLIFIERS MAY SHARE HOME RUN SAW CUT. SPLICE SEGMENTS IN SERIES.
LOOP SEGMENTS ON DIFFERENT AMPLIFIERS MUST BE IN SEPARATE HOME RUN SAW CUT.

LEGEND AS SHOWN ON TRAFFIC CONTROL SIGNAL PLAN:
- INDUCTIVE LOOP DETECTOR
- SAW CUT
- RIGID METAL CONDUIT
- HANDHOLE

REV.	DATE	REVISION DESCRIPTION
3	4-2014	DETAIL "B" - REVISED "J" HOOK NOTE.
2	7-2012	DELETED URETHANE SEALANT NOTE FROM DETAIL "L"
1	4-2012	MINOR REVISIONS.

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Plotted Date: 4/21/2014

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- UNDER 1" TO NEAREST 1 mm.

NOT TO SCALE

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: CTDOT_TRAFFIC_STD.DGN Model: TR-1111_01

SUBMITTED BY: NAME/DATE/TIME: Tracy L. Fogarty, P.E. 2014.04.25 16:02:20-04'00'
APPROVED BY: NAME/DATE/TIME: Digitally signed by Charles S. Harlow, P.E. Date: 2014.04.29 14:27:33-04'00'

CTDOT STANDARD SHEET

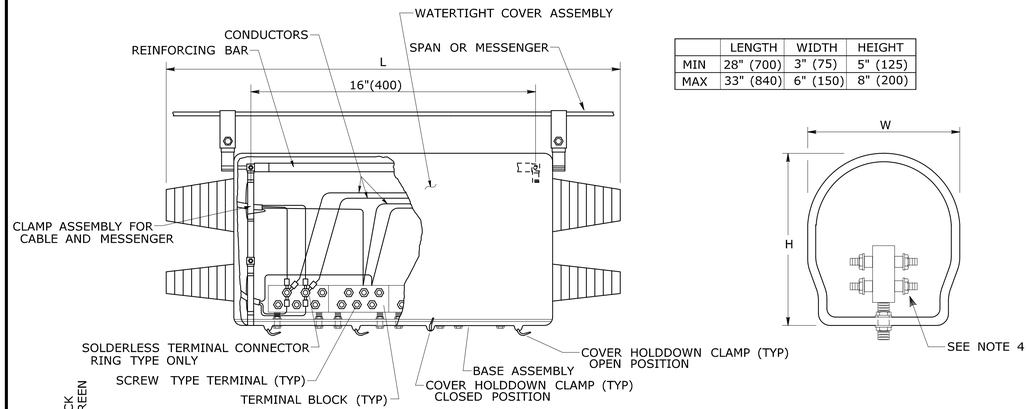
OFFICE OF ENGINEERING

STANDARD SHEET TITLE:

LOOP VEHICLE DETECTOR AND SAWCUT

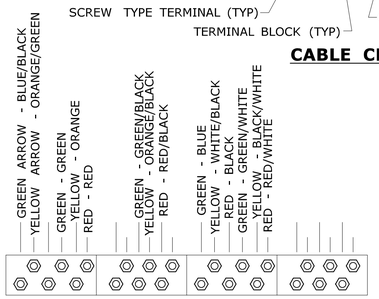
STANDARD SHEET NO.:

TR-1111_01



	LENGTH	WIDTH	HEIGHT
MIN	28" (700)	3" (75)	5" (125)
MAX	33" (840)	6" (150)	8" (200)

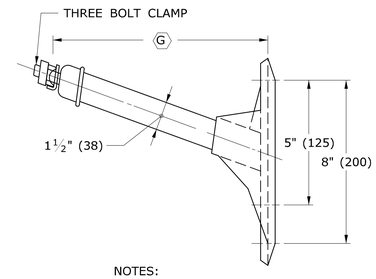
CABLE CLOSURE FOR TRAFFIC SIGNALS



RECOMMENDED CONNECTION OF 21 CONDUCTOR CABLE IN CLOSURE

NOTES:

1. PROVIDE A MINIMUM OF FOUR TERMINAL BLOCKS WITH SEPARATE SCREW TYPE TERMINALS, SIX ON EACH SIDE.
2. INSTALL SEPARATE CABLE BETWEEN CLOSURE & EACH TRAFFIC SIGNAL ASSEMBLY. WIRE EACH TRAFFIC SIGNAL SECTION SEPARATELY BACK TO CABLE CLOSURE. JUMPERS BETWEEN TERMINALS ARE NOT ALLOWED EXCEPT ON NEUTRAL CONDUCTORS.
3. WIRE ALL SIGNALS, SAME DIRECTION FROM CONTROLLER, SEPARATELY WITH CONDUCTORS IN 21 OR 25 CONDUCTOR CABLE, EVEN IF INDICATIONS ARE IDENTICAL.
4. PREVENT CONNECTORS, TERMINAL POSTS AND CONDUCTORS FROM CONTACT WITH CLOSURE COVER AND SECURELY WRAP WITH ELECTRICAL TAPE OR RUBBER MASTIC TAPE.
5. CABLES THAT FEED PEDESTRIAN INDICATIONS, PUSH BUTTONS, AND DETECTORS BYPASS CABLE CLOSURE.
6. INSTALL TRAFFIC SIGNAL CABLE CLOSURE ON THE SPAN ±5' (±1.5 m) FROM CURBLINE.



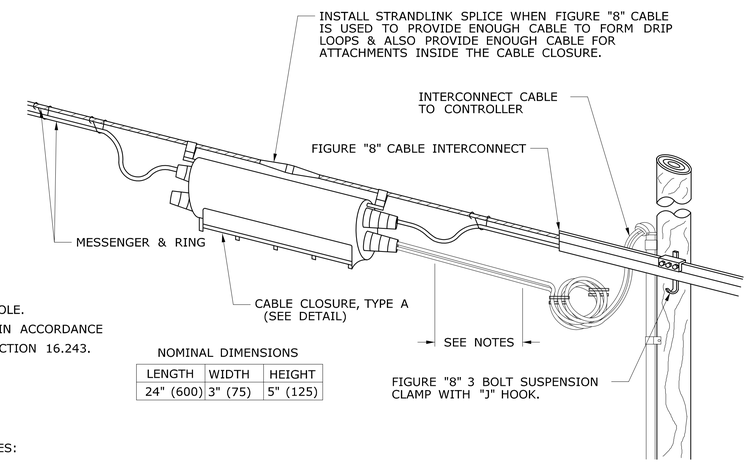
NOTES:

⅝" (16) THROUGH BOLT IN TOP HOLE.

½" (13) X 4" (100) LAG BOLT IN BOTTOM HOLE.

(G) LENGTH REQUIRED TO PROVIDE CLEARANCE IN ACCORDANCE WITH PURA CONSTRUCTION STANDARD SECTION 16.243.

COMMUNICATION CABLE EXTENSION BRACKET



NOMINAL DIMENSIONS

LENGTH	WIDTH	HEIGHT
24" (600)	3" (75)	5" (125)

NOTES:

CABLE LENGTH IS SHOWN EXTENDED TO CLARIFY DRIP LOOP LEADING TO ENTRANCE FITTINGS.

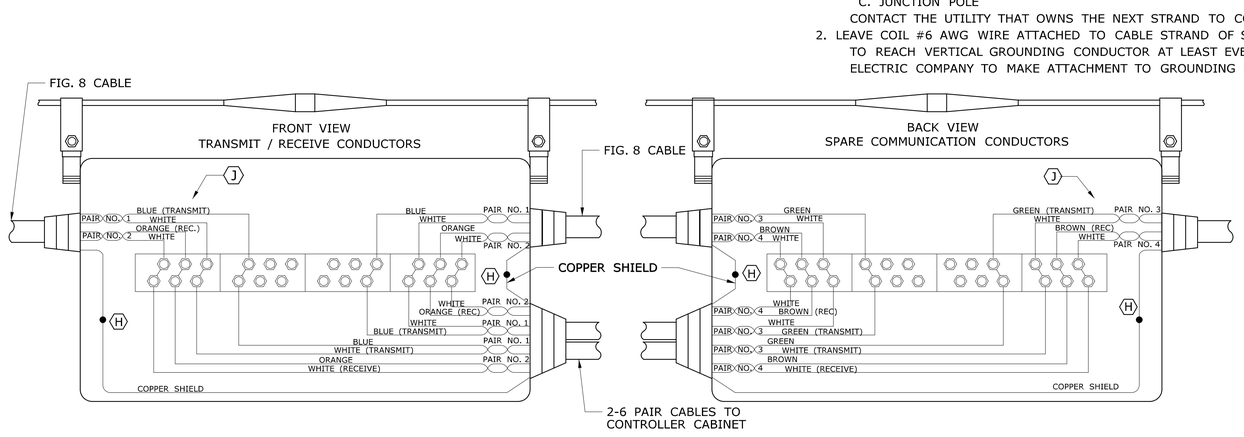
WHEN CABLE IS TOO LARGE TO FORM DRIP LOOPS, INSTALL DIRECTLY INTO CLOSURE WITHOUT DRIP LOOPS.

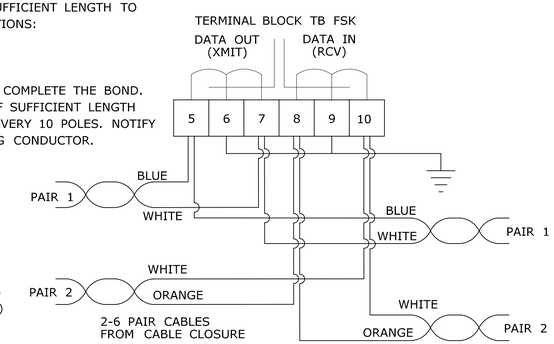
OVERHEAD INTERCONNECT INSTALLATION

BONDING AND GROUNDING REQUIREMENTS FOR COMMUNICATION CABLES

1. PLACE BOND ON STRAND USING #6 AWG LEAVE COIL OF SUFFICIENT LENGTH TO REACH THE NEXT STRAND AT ALL OF THE FOLLOWING LOCATIONS:
   A. FIRST POLE
   B. LAST POLE
   C. JUNCTION POLE

   CONTACT THE UTILITY THAT OWNS THE NEXT STRAND TO COMPLETE THE BOND.
2. LEAVE COIL #6 AWG WIRE ATTACHED TO CABLE STRAND OF SUFFICIENT LENGTH TO REACH VERTICAL GROUNDING CONDUCTOR AT LEAST EVERY 10 POLES. NOTIFY ELECTRIC COMPANY TO MAKE ATTACHMENT TO GROUNDING CONDUCTOR.





NOTES:

CONNECT SHIELDS TO GROUND ONLY AT EVERY OTHER CABINET, LEAVE SHIELD OPEN AT ALTERNATE CABINETS.
TAG 6 PAIR CABLES WITH INTERSECTION DESTINATION.
SPARE PAIRS TO BE FOLDED BACK AND NEATLY TIED ADJACENT TO TERMINAL BLOCK.

TYPICAL COMMUNICATION CABLE CONNECTION IN CONTROLLER CABINET

FIG. 8 CABLE			
PAIR #	DOT SPARE	PAIR #	MUNICIPAL SPARES
3	GREEN - WHITE	5	SLATE - WHITE
4	BROWN - WHITE	6	BLUE - RED

6 PAIR, CABLE	
PAIR #	DOT SPARE
5	SLATE - WHITE
6	BLUE - RED

NOTES:

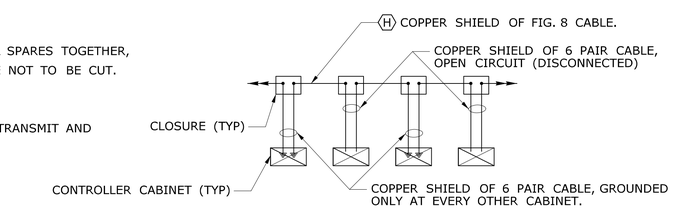
SPARE PAIRS TO BE FOLDED BACK AND NEATLY TIED. GROUP MUNICIPAL SPARES TOGETHER, SEPARATE FROM THOSE RESERVED FOR D.O.T. MUNICIPAL SPARES ARE NOT TO BE CUT.

DO NOT BOND THE CABLE SHEATH TO THE SUPPORT STRAND.

(H) CONNECT ONLY TO SHIELD OF CORRESPONDING 6 PAIR CABLE.

(J) WHEN CONNECTING TO AN EXISTING SYSTEM, VERIFY COLOR CODE OF TRANSMIT AND RECEIVE CONDUCTORS.

TYPICAL COMMUNICATION CABLE CONNECTION IN CABLE CLOSURE, TYPE A



LEGEND AS SHOWN ON TRAFFIC CONTROL SIGNAL PLAN:
- PROPOSED UTILITY POLE
- EXISTING UTILITY POLE
- POLE ANCHOR & GUY
- CABLE CLOSURE

REV.	DATE	REVISION DESCRIPTION
2	4-2014	ADDED CABLE CLOSURE FOR TRAFFIC SIGNALS, NOTE #6.
1	4-2012	MINOR REVISIONS.

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Plotted Date: 4/12/2014

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

NOT TO SCALE

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: CTDOT_TRAFFIC_STD.DGN Model: TR-1113_01

SUBMITTED BY: NAME/DATE/TIME: Tracy L. Fogarty, P.E. 2014.25 16:02:38-04'00'

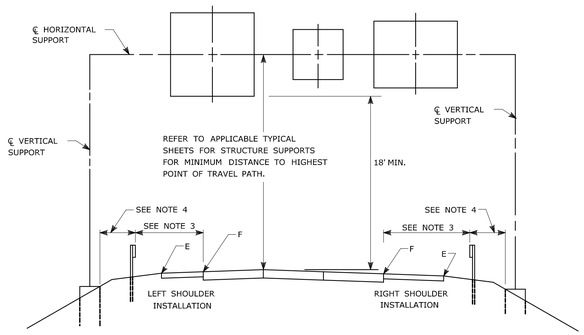
APPROVED BY: NAME/DATE/TIME: Digitally signed by Charles S. Harlow, P.E. Date: 2014.04.29 14:31:58-04'00'

CTDOT STANDARD SHEET

OFFICE OF ENGINEERING

STANDARD SHEET TITLE: CONTROL CABLE

STANDARD SHEET NO.: TR-1113_01



TYPICAL PLACEMENT OF OVERHEAD SIGNS ON SIGN SUPPORTS

NOTES:

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

FOR MAXIMUM EFFECTIVENESS, POSITION SIDE MOUNTED SIGNS ON STRUCTURAL STEEL BREAKAWAY SIGN SUPPORTS AS FOLLOWS:

ON A TANGENT SECTION, POSITION THE SIGN SO THE VERTICAL AXIS IS PLUMB AND THE HORIZONTAL AXIS IS AT AN ANGLE OF 90° WITH THE TRAFFIC LANE WHICH THE SIGN SERVES. SIGNS LOCATED 30 FT OR MORE FROM THE EDGE OF THE ROAD SHALL BE TURNED APPROXIMATELY 3° TOWARD THE ROAD.

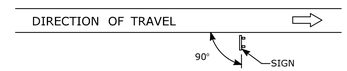


DIAGRAM "A"

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

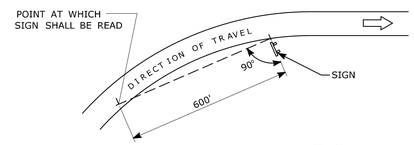
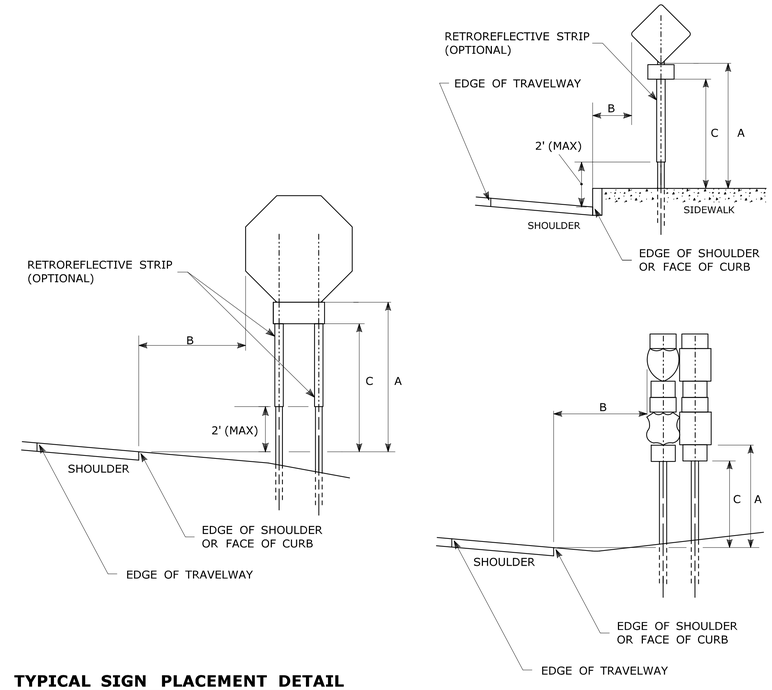


DIAGRAM "B"

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



TYPICAL SIGN PLACEMENT DETAIL

NOTES:

ALL SIGNS AND SHIELDS ON DIRECTIONAL ASSEMBLIES SHALL ABUT VERTICALLY.

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

IF A RETFOREFLECTIVE STRIP IS USED ON SIGN SUPPORT, IT SHALL BE PLACED FOR THE FULL LENGTH OF THE SUPPORT FROM THE BOTTOM OF THE SIGN TO WITHIN 2 FT ABOVE THE EDGE OF THE ROADWAY.

PARKING SIGNS TYPICALLY USE 45° MOUNTING BRACKET.

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

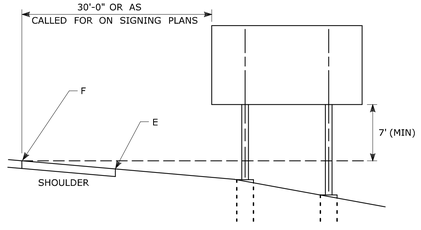
(1) OR AS DIRECTED BY THE ENGINEER

(2) 8 FT MINIMUM HEIGHT REQUIRED IF A SUPPLEMENTAL PLAQUE IS SUBMOUNTED BELOW THE MAJOR SIGN.

(3) 6 FT FROM EDGE OF SHOULDER, WHEN SHOULDER IS OVER 6 FT WIDE
12 FT FROM EDGE OF TRAVELWAY, WHEN SHOULDER IS LESS THAN 6 FT WIDE.

(4) A LATERAL OFFSET OF AT LEAST 1 FT FROM THE FACE OF THE CURB MAY BE USED WHERE SIDEWALK WIDTH IS LIMITED OR WHERE EXISTING UTILITY POLES ARE CLOSE TO THE CURB.

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



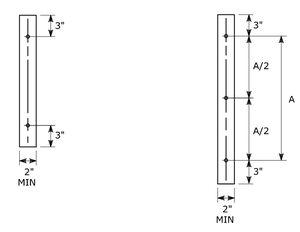
TYPICAL PLACEMENT OF SIDE MOUNTED SIGNS ON STRUCTURAL STEEL BREAKAWAY SIGN SUPPORTS

NOTES:

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

RETROREFLECTIVE STRIPS 48" LONG OR LESS:

RETROREFLECTIVE STRIPS OVER 48" LONG:



RETROREFLECTIVE STRIP DETAIL

NOTES:

RETROREFLECTIVE STRIPS WHICH ARE 48 IN LONG OR LESS SHALL BE ATTACHED USING 2 BOLTS AND RETROREFLECTIVE STRIPS OVER 48 IN LONG SHALL BE ATTACHED USING 3 BOLTS AS SHOWN ON THE DETAILS ABOVE.
REFER TO STANDARD SHEET No. TR-1208_02 "METAL SIGN POSTS AND SIGN MOUNTING DETAILS" FOR MOUNTING DETAILS.

RETROREFLECTIVE STRIP COLOR SHALL MATCH THE BACKGROUND COLOR OF THE SIGN, EXCEPT THAT THE COLOR OF THE STRIP FOR "YIELD" AND "DO NOT ENTER" SIGNS SHALL BE RED.

REV.	DATE	REVISION DESCRIPTION
3	8-2018	INCLUDED INCIDENT MANAGEMENT AND MILE MARKER SIGNS.
2	4-2017	MINOR REVISIONS.
1	2-2011	MINOR REVISIONS.

THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.

Plotted Date: 8/10/2018

NOT TO SCALE

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: TR_1208_01_1_2018.dgn Model: TR-1208_01

SUBMITTED BY: NAME/DATE/TIME: Mark F. Makuch, P.E. 2018.08.17 09:06:06-04'00'

APPROVED BY: NAME/DATE/TIME: Mark F. Carlino, P.E. 2018.08.21 07:48:06-04'00'

CTDOT STANDARD SHEET

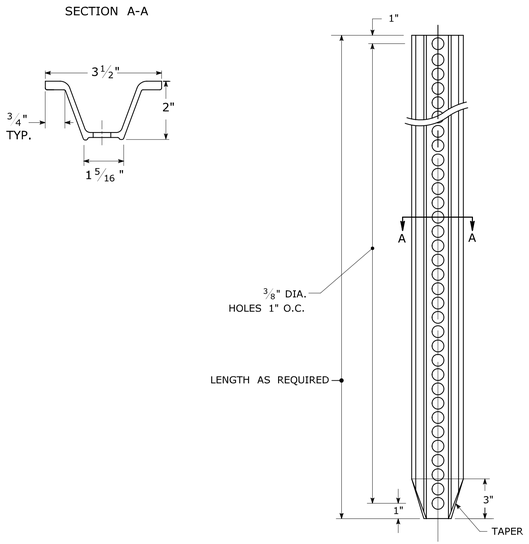
OFFICE OF ENGINEERING

STANDARD SHEET TITLE:

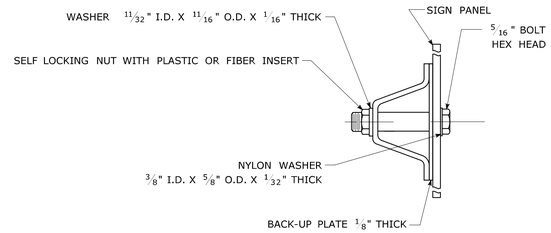
SIGN PLACEMENT AND RETROREFLECTIVE STRIP DETAILS

STANDARD SHEET NO.: TR-1208_01

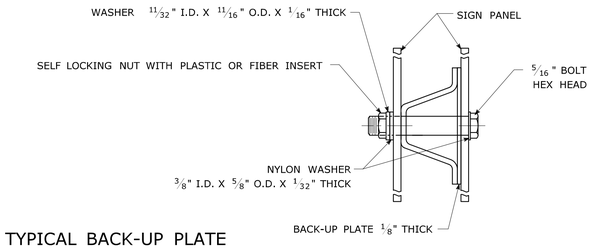
TYPICAL METAL SIGN POSTS



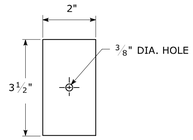
TYPICAL SIGN PANEL ATTACHMENT



TYPICAL BACK TO BACK SIGN PANEL ATTACHMENT



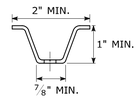
TYPICAL BACK-UP PLATE



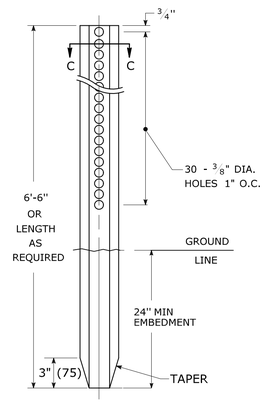
BOLTS - STAINLESS STEEL CONFORMING TO ASTM F593, ALLOY GROUP 1 OR 2 (ALLOY TYPES 304 OR 316).
SELF LOCKING NUTS - STAINLESS STEEL CONFORMING TO ASTM F594, ALLOY GROUP 1 OR 2 (ALLOY TYPES 304 OR 316).
WASHERS - STAINLESS STEEL CONFORMING TO ASTM A240, (ALLOY TYPES 304 OR 316).

METAL DELINEATOR POST

WT./FT. = 1.12 LBS./FT. MIN.



SECTION C-C

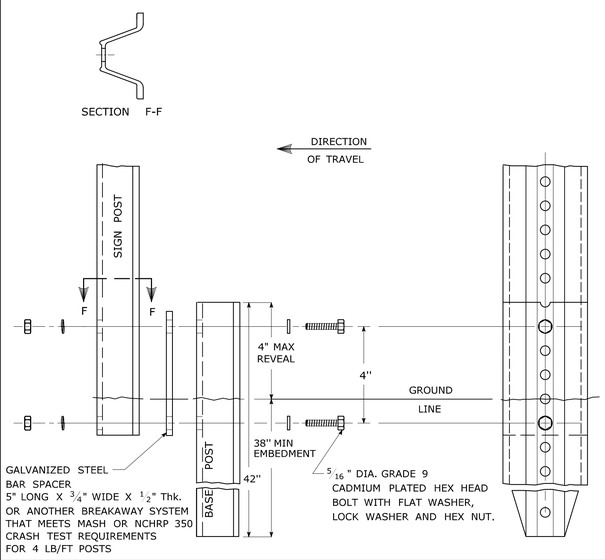


GENERAL NOTES:

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

BREAKAWAY INSTALLATION

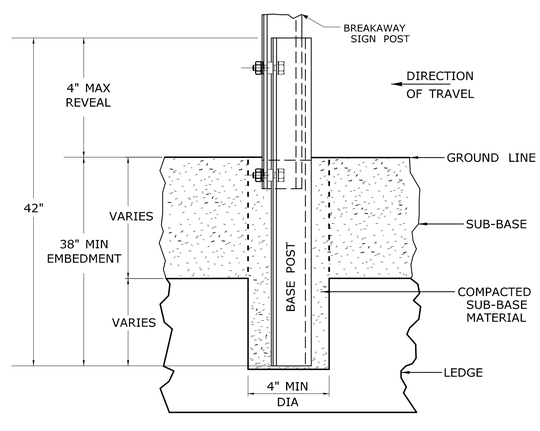
FOR 4 LBS./FT. POSTS



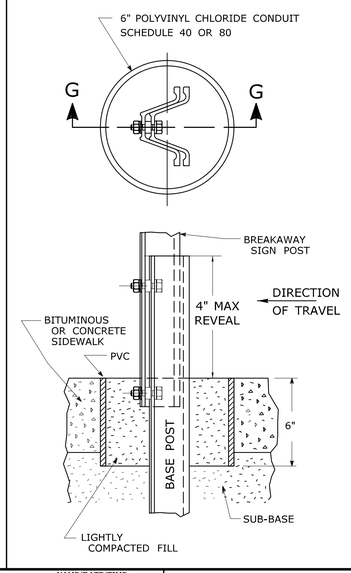
TYPICAL SIGN POST INSTALLATION IN LEDGE

LEDGE SHALL BE REMOVED TO DRIVE THE BASE POST TO A DEPTH OF 38".

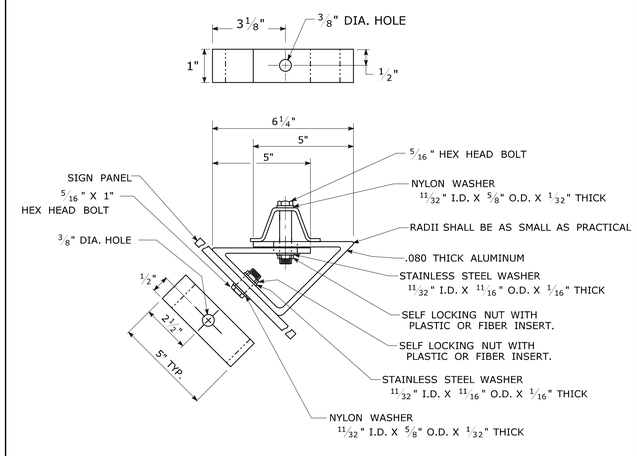
HOLE SHALL BE FILLED WITH SUB-BASE MATERIAL AND COMPACTED WITH A TAMPING BAR, OR TECHNIQUE APPROVED BY THE ENGINEER, PRIOR TO BASE POST INSTALLATION.



TYPICAL SLEEVE FOR PAVED AREAS



45° MOUNTING BRACKET FOR INSTALLATION OF PARKING SIGNS



REV.	DATE	REVISION DESCRIPTION
2	6-2017	SIGN POST REVISIONS.
1	2-2011	MINOR REVISIONS.

THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.

Plotted Date: 6/6/2017

NOT TO SCALE

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: TR-1208_02_May_2017_Revision.dgn Model: TR-1208_02

SUBMITTED BY:	NAME/DATE/TIME:
	Mark F. Makuch, P.E. 2017.06.07 07:30:30-04'00'
	Mary E. Baker, P.E. 2017.06.13 15:28:14-04'00'
APPROVED BY:	NAME/DATE/TIME:
	Gregory M. Dorosh, P.E. 2017.06.15 09:27:29-04'00'

CTDOT STANDARD SHEET

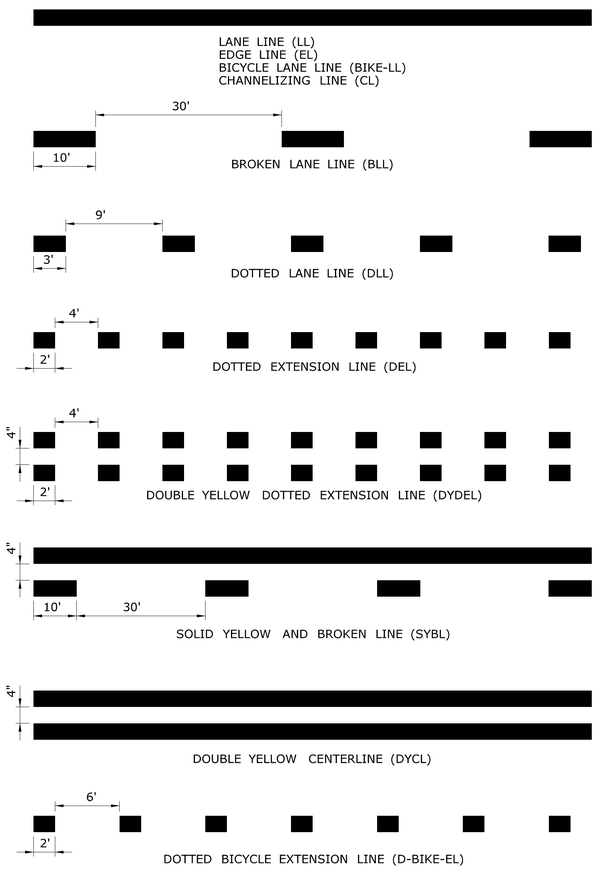
OFFICE OF ENGINEERING

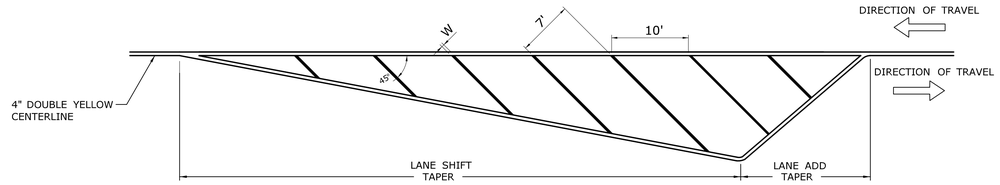
STANDARD SHEET TITLE:

METAL SIGN POSTS AND SIGN MOUNTING DETAILS

GUIDE SHEET NO.:

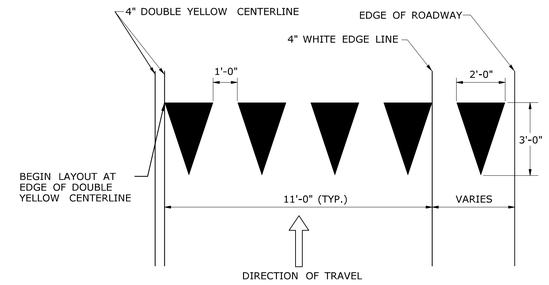
TR-1208_02



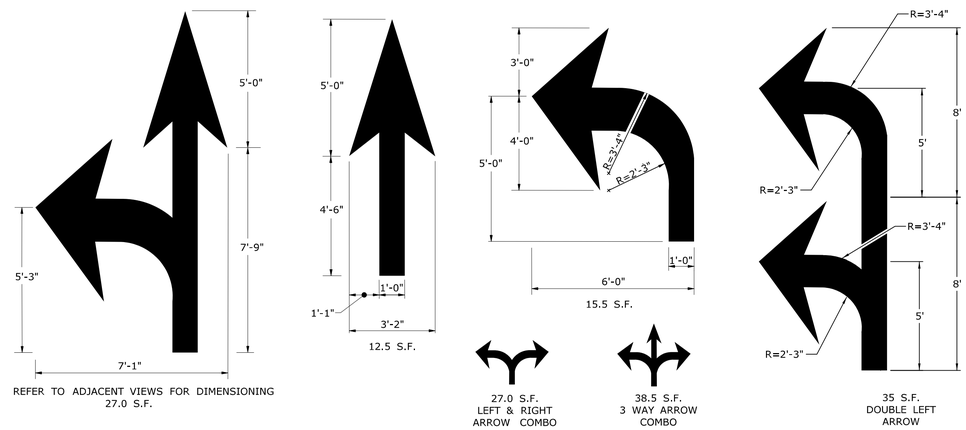


CROSS HATCHED ISLAND DETAIL
(YELLOW)

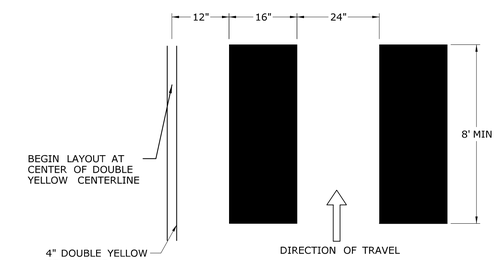
W IS TO BE 6" WHEN POSTED SPEED ≤ 45 MPH
W IS TO BE 12" WHEN POSTED SPEED > 45 MPH
CROSS HATCHED ISLANDS ARE TO BE INSTALLED WHERE CALLED FOR ON THE PLANS



YIELD LINE DETAIL
(WHITE)



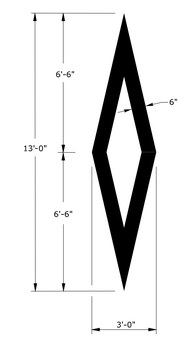
PAVEMENT ARROW DETAILS
(WHITE)
ARROWS SHALL BE CENTERED IN TRAVEL LANE



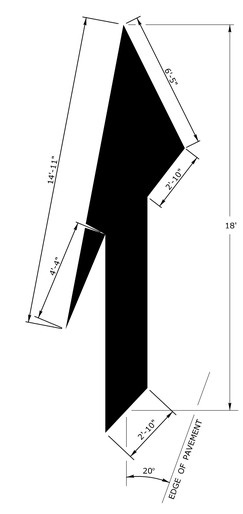
CROSSWALK DETAIL
(WHITE)

NOTES :

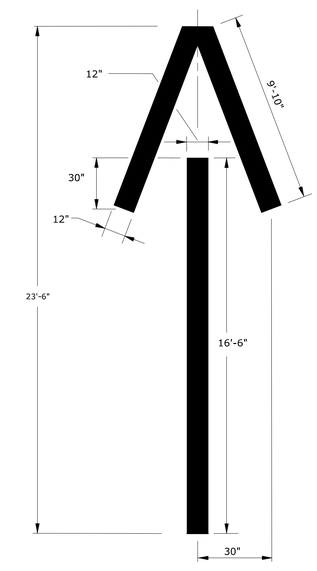
1. AREA OF PAVEMENT MARKINGS AS INDICATED IS APPROXIMATE.
2. RIGHT TURN PAVEMENT MARKING ARROWS ARE MIRROR IMAGE OF LEFT TURN PAVEMENT MARKING ARROWS.



WHITE PREFERENTIAL LANE SYMBOL
13.0 S.F.



WHITE LANE REDUCTION ARROW
41.8 S.F.



WHITE WRONG WAY PAVEMENT ARROW
36.2 S.F.

REV.	DATE	REVISION DESCRIPTION
1	8-2018	REMOVED ROUNDABOUT MARKINGS.

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Plotted Date: 8/10/2018

NOT TO SCALE

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: TR-1210_04.dgn Model: CT_Civil_2D_Sheet

SUBMITTED BY: NAME/DATE/TIME: Mark F. Makuch, P.E. 2018.08.17 09:07:44-04'00'

APPROVED BY: NAME/DATE/TIME: Mark F. Carlino, P.E. 2018.08.21 07:48:45-04'00'

CTDOT
STANDARD SHEET

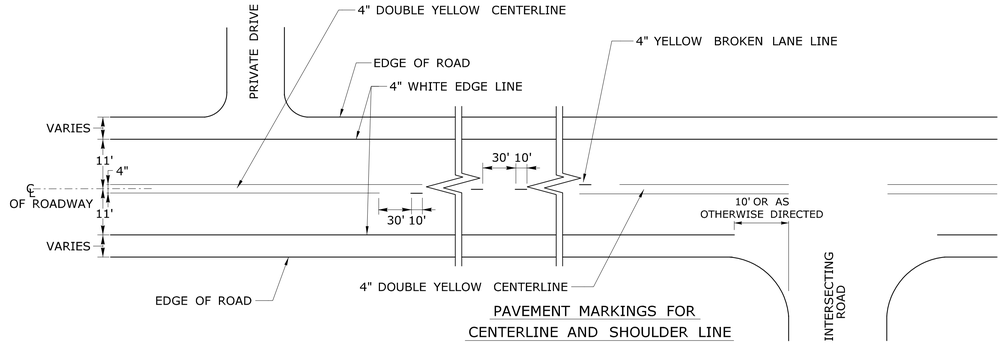
OFFICE OF ENGINEERING

STANDARD SHEET TITLE:

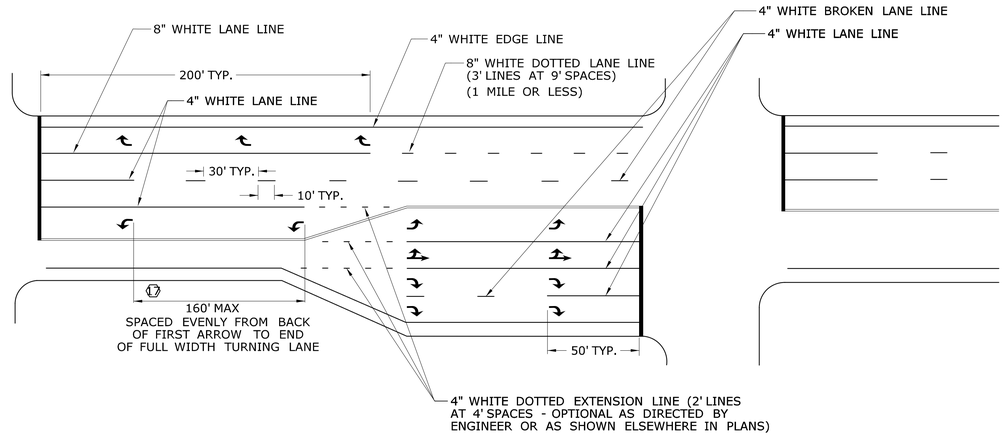
PAVEMENT MARKING LINES AND SYMBOLS

STANDARD SHEET NO.:

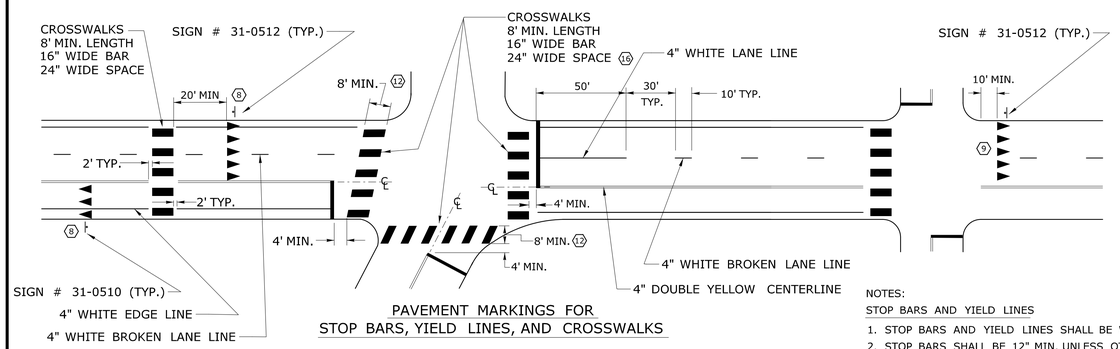
TR-1210_04



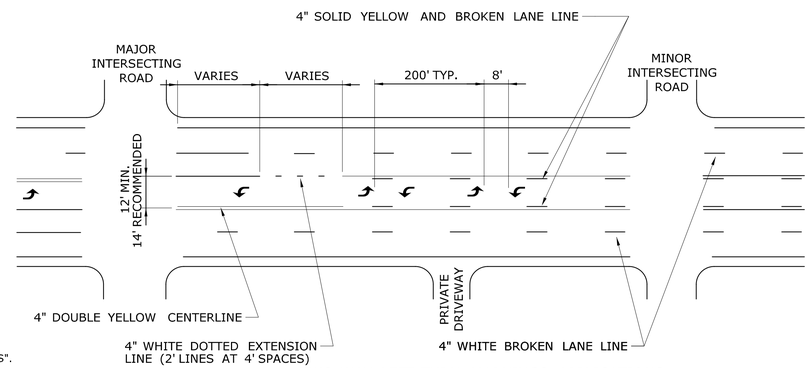
PAVEMENT MARKINGS FOR CENTERLINE AND SHOULDER LINE



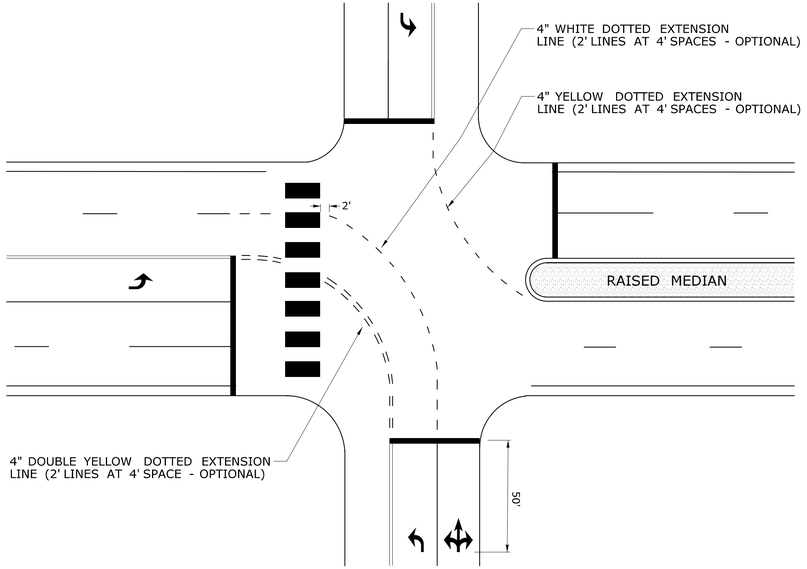
PAVEMENT MARKINGS FOR TURNING LANES AND ROAD LANE-DROP



PAVEMENT MARKINGS FOR STOP BARS, YIELD LINES, AND CROSSWALKS



TWO-WAY LEFT-TURN MARKINGS APPLICATIONS



TURNING EXTENSIONS

NOTES:

STOP BARS AND YIELD LINES

1. STOP BARS AND YIELD LINES SHALL BE WHITE.
2. STOP BARS SHALL BE 12" MIN. UNLESS OTHERWISE NOTED ON PLANS.
3. STOP BARS TO BE PLACED A MINIMUM OF 4' IN ADVANCE OF THE NEAREST EDGE OF CROSSWALK AND SHOULD BE PLACED 90° TO THE CENTERLINE OF THE ROADWAY.
4. IN THE ABSENCE OF A MARKED CROSSWALK THE STOP BAR SHOULD BE PLACED 90° TO THE CENTERLINE OF THE ROADWAY, AT THE DESIRED STOPPING POINT AT LEAST 5' AND NO MORE THAN 30' FROM THE NEAREST EDGE OF THE INTERSECTING ROADWAY.
5. THE STOP SIGN SHOULD BE PLACED IN LINE WITH THE STOP BAR. HOWEVER, IF THE STOP SIGN CANNOT BE LOCATED EXACTLY WHERE VEHICLES ARE EXPECTED TO STOP, THE STOP BAR SHOULD BE PLACED AT THE STOPPING POINT.
6. FOR STOP BARS AT RAMPS SEE DETAILS "R", "S", "T", & "U" AND NOTES ON TRAFFIC STANDARD SHEET TR-1210 07 "PAVEMENT MARKINGS FOR DIVIDED HIGHWAYS EXIT RAMPS".
7. FOR YIELD LINE INSTALLATIONS, ONLY FULL TRIANGLES ARE TO BE INSTALLED.

8. MID-BLOCK CROSSWALKS ARE CROSSWALKS LOCATED MORE THAN 50 FEET FROM A SIGNALIZED OR UNSIGNALIZED INTERSECTION. YIELD LINES ASSOCIATED WITH MIDBLOCK CROSSWALKS SHALL BE INSTALLED AND SHOULD BE LOCATED 20 TO 50 FEET IN ADVANCE OF THE NEAREST CROSSWALK LINE OR AS DIRECTED BY THE ENGINEER.
WHERE A YIELD LINE EXISTS ON AN APPROACH TO A CROSSWALK, THE APPROAPRIATE "YIELD TO PEDESTRIANS" SIGN IS REQUIRED.

9. FOR CROSSWALKS AT UNSIGNALIZED INTERSECTIONS WITH MINOR STREET STOP CONTROL, YIELD LINES SHALL BE INSTALLED ON MULTI-LANE APPROACHES, BUT NOT SINGLE LANE APPROACHES.

10. THE YIELD SIGN SHOULD BE PLACED IN LINE WITH A YIELD LINE. HOWEVER, IF THE YIELD SIGN CANNOT BE LOCATED EXACTLY WHERE VEHICLES ARE EXPECTED TO YIELD, THE YIELD LINE SHOULD BE PLACED AT THE YIELDING POINT.

CROSSWALKS

11. CROSSWALK MARKINGS SHALL BE WHITE.

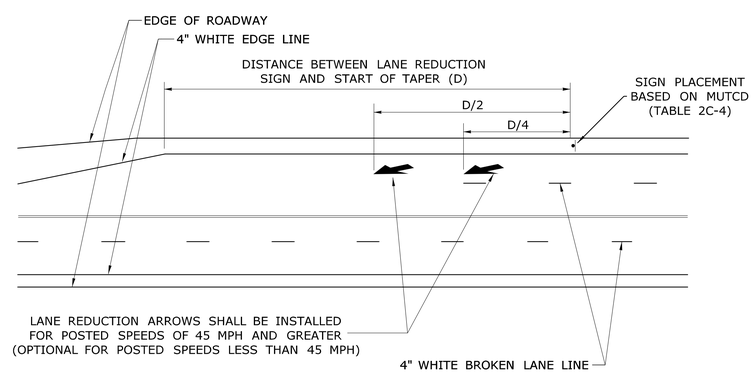
12. AT LOCATIONS WHERE THE CROSSWALK IS SKEWED, BARS TO BE PARALLEL TO ℄ AND ENDS OF BARS TO BE PARALLEL. THE LENGTH OF THE BARS WILL VARY DEPENDING ON THE ANGLE OF SKEW.

13. BARS SHOULD BE NO CLOSER THAN 1' FROM EDGE OF ROAD.
14. ONLY FULL LENGTH BARS ARE TO BE INSTALLED.
15. DECORATIVE CROSSWALKS SHALL BE BANDED FROM CURB TO CURB WITH A MINIMUM 12" WIDE WHITE TRANSVERSE LINE ALONG EACH EDGE.

16. 24" WIDE SPACE TO BE CENTERED ON YELLOW CENTERLINE.

PAVEMENT MARKINGS FOR TURNING LANES

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



LANE REDUCTION TRANSITIONS

REV.	DATE	REVISION DESCRIPTION
1	8-2018	REVISED YIELD LINE SIGNAGE AND NOTES.

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.

Plotted Date: 8/10/2018

NOT TO SCALE

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: TR-1210_08.DGN Model: TR-1210_05

SUBMITTED BY: NAME/DATE/TIME: Mark F. Makuch, P.E. 2018.08.17 09:10:18-04'00'

APPROVED BY: NAME/DATE/TIME: Mark F. Carlino, P.E. 2018.08.21 07:49:18-04'00'

CTDOT STANDARD SHEET

OFFICE OF ENGINEERING

STANDARD SHEET TITLE:

PAVEMENT MARKINGS FOR NON FREEWAYS

STANDARD SHEET NO.: TR-1210_08

E5 - SERIES

E5-1

EXIT

COPY & BORDER - WHITE
BACKGROUND - GREEN

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	16.0	48	51-6147	2

16 - SERIES

CONSTRUCTION AHEAD
ROAD USE RESTRICTED
STATE LIABILITY LIMITED
GENERAL STATUTES SEC 13a-115, 13a-145
COMMISSIONER OF TRANSPORTATION

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
16-M	5.0	30X24	80-1613	1
16-H	17.5	60X42	80-1608	2
16-E	35.0	84X60	80-1605	2

CONSTRUCTION AHEAD
SIDEWALK USE RESTRICTED
STATE LIABILITY LIMITED
GENERAL STATUTES SEC 13a-115, 13a-145
COMMISSIONER OF TRANSPORTATION

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
16-S	10.0	48X30	80-1619	2

G20 - SERIES

G20-2a

END ROAD WORK

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	8.0	48X24	80-9612	2

ROAD WORK NEXT 0 MILE(S) BE PREPARED TO STOP

VARIABLE MILEAGE

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	90.0	120X108	80-9728	

WORK AREA BE PREPARED TO STOP

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	9.0	36	80-9711	1
	16.0	48	80-9712	2

NEXT 0 MILES

VARIABLE MILEAGE

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	7.0	72X14	80-9720	

BUSINESS ACCESS

VARIABLE ARROW
COPY & BORDER - WHITE
BACKGROUND - BLUE

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	9.0	36	50-5934	2

M4 - SERIES

M4-8

DETOUR

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	2.0	24X12	80-9707	1

M4-9b

DETOUR

VARIABLE ARROW

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	5.0	30X24	80-9703	1

M4-8a

END DETOUR

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	3.0	24X18	80-9708	1

M4-9b

DETOUR

VARIABLE ARROW

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	6.25	30X30	80-9706	1

M4-10

(R) DETOUR

(L) DETOUR

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	6.0	48X18	80-9701R	2
	6.0	48X18	80-9702L	2

DETOUR

VARIABLE ARROW

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	5.0	30X24	80-9710	1

R1 - SERIES

R1-1

STOP

COPY & BORDER - WHITE
BACKGROUND - RED

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	5.19	30	31-0552	1
	13.30	48	31-0557	2

R1-2

YIELD

COPY & BORDER - RED
BACKGROUND - WHITE

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	3.90	36	31-0523	1
	10.83	60	31-0528	2

R4 - SERIES

R4-7

COPY & BORDER - BLACK
BACKGROUND - WHITE

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	5.0	24X30	31-1526	1

R4-9

STAY IN LANE

COPY & BORDER - BLACK
BACKGROUND - WHITE

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	5.0	24X30	31-1517	1
	12.0	36X48	31-1518	1
	20.0	48X60	31-1519	2

R9 & R11 - SERIES

R9-9

SIDEWALK CLOSED

COPY & BORDER - BLACK
BACKGROUND - WHITE

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	3.75	30X18	80-9076	1

R11-3a

ROAD CLOSED
00 MILES AHEAD
LOCAL TRAFFIC ONLY

VARIABLE MILEAGE
COPY & BORDER - BLACK
BACKGROUND - WHITE

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	12.5	60X30	80-9077	2

R9-11

SIDEWALK CLOSED AHEAD
CROSS HERE

VARIABLE ARROW
COPY & BORDER - BLACK
BACKGROUND - WHITE

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	3.0	24X18	80-9074	1

R11-3b

BRIDGE CLOSED
00 MILES AHEAD
LOCAL TRAFFIC ONLY

VARIABLE MILEAGE
COPY & BORDER - BLACK
BACKGROUND - WHITE

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	12.5	60X30	80-9078	2

R9-11a

SIDEWALK CLOSED
CROSS HERE

VARIABLE ARROW
COPY & BORDER - BLACK
BACKGROUND - WHITE

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	2.0	24X12	80-9075	1

R11-3b

ROAD CLOSED TO THRU TRAFFIC

COPY & BORDER - BLACK
BACKGROUND - WHITE

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	12.5	60X30	80-9081	2

R11-2

ROAD CLOSED

COPY & BORDER - BLACK
BACKGROUND - WHITE

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	10.0	48X30	80-9080	2

ROAD WORK AHEAD
FINES DOUBLED

COPY & BORDER - BLACK
BACKGROUND - WHITE

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	14.0	48X42	31-1906	2
	22.5	60X54	31-1907	2

W1 - SERIES

W1-4

(L) (R)

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	9.0	36	80-9432L	1
	9.0	36	80-9431R	1
	16.0	48	80-9452L	2
	16.0	48	80-9451R	2

W1-6

(L or R)

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	8.0	48X24	80-9424	2
	12.5	60X30	80-9423	2

W1-8

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	3.0	18X24	80-9401	1
	5.0	24X30	80-9403	1
	7.5	30X36	80-9404	1

BOTH LANES SHIFT LEFT AHEAD (L)

BOTH LANES SHIFT RIGHT AHEAD (R)

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	16.0	48	80-9433L	2
	16.0	48	80-9435R	2

AHEAD (L) AHEAD (R)

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	25.0	60	80-9483L	2
	25.0	60	80-9485R	2

BOTH LANES SHIFT LEFT (L)

BOTH LANES SHIFT RIGHT (R)

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	16.0	48	80-9434L	2
	16.0	48	80-9436R	2

W1-4c

(L) (R)

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	25.0	60	80-9484L	2
	25.0	60	80-9486R	2

AHEAD (L) AHEAD (R)

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	25.0	60	80-9443L	2
	25.0	60	80-9445R	2

W1-4b

(L) (R)

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	25.0	60	80-9444L	2
	25.0	60	80-9446R	2

W3 - SERIES

W3-1

OCTAGON - RED W/ WHITE BORDER
ARROW & BORDER - BLACK
BACKGROUND - FLUORESCENT ORANGE

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	9.0	36	80-9050	1
	16.0	48	80-9051	2

W3-2

TRIANGLE - RED W/ WHITE BORDER
ARROW & BORDER - BLACK
BACKGROUND - FLUORESCENT ORANGE

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	9.0	36	80-9054	1
	16.0	48	80-9055	2

W3-3

TOP CIRCLE - RED
MIDDLE CIRCLE - YELLOW
BOTTOM CIRCLE - GREEN
COPY & BORDER - BLACK
BACKGROUND - FLUORESCENT ORANGE

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	9.0	36	80-9052	1
	16.0	48	80-9053	2

W4-W6 - SERIES

W4-2

(L) (R)

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	16.0	48	80-9918L	2
	16.0	48	80-9917R	2

W6-3

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	16.0	48	80-9945	2

W8-W9 - SERIES

W8-1

BUMP

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	9.0	36	80-9901	1
	16.0	48	80-9902	2

BUMP AHEAD

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	9.0	36	80-9801	1
	16.0	48	80-9802	2

W9-2

LANE ENDS MERGE LEFT (L)

LANE ENDS MERGE RIGHT (R)

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	16.0	48	80-9910L	2
	16.0	48	80-9911R	2

W13 - SERIES

W13-1

00 M.P.H.

SUBPLATE
VARIABLE SPEED

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	4.0	24	80-9569	1
	6.25	30	80-9567	1

REDUCE SPEED TO 00 MPH

VARIABLE SPEED

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	9.0	36	80-9506	1
	16.0	48	80-9508	2

W3-5

SPEED LIMIT 00

VARIABLE SPEED

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	9.0	36	80-9520	1
	16.0	48	80-9521	2

W-16 - SERIES

W16-15P

NEW

COPY & BORDER - BLACK
BACKGROUND - ORANGE

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	2.0	24X12	80-9049	

W20 - SERIES

W20-1

ROAD WORK AHEAD

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	6.25	30	80-9602	1
	9.0	36	80-9603	1
	16.0	48	80-9604	2

LEFT LANES CLOSED (L)

RIGHT LANES CLOSED (R)

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
(L)	16.0	48	80-9836	2
(R)	16.0	48	80-9839	2

W20-7a

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	9.0	36	80-9803	1
	16.0	48	80-9804	2

W20-1

ROAD WORK 0000 FT

VARIABLE DISTANCE

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	9.0	36	80-9614	1
	16.0	48	80-9615	2

LEFT TWO LANES CLOSED AHEAD (L)

RIGHT TWO LANES CLOSED AHEAD (R)

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
(L)	16.0	48	80-9837	2
(R)	16.0	48	80-9838	2

SLOW MOVING TRUCKS AHEAD

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	32.0	96X48	80-9815	2

W20-2

DETOUR 1000 FT

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	9.0	36	80-9805	1
	16.0	48	80-9806	2

LEFT LANE CLOSED AHEAD (L)

RIGHT LANE CLOSED AHEAD (R)

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
(L)	16.0	48	80-9847	2
(R)	16.0	48	80-9848	2

W16-9P

AHEAD

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	2.0	24X12	80-9870	
	3.75	30X18	80-9871	

ONE LANE ROAD AHEAD

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	9.0	36	80-9834	1
	16.0	48	80-9835	2

LEFT LANE CLOSED (L)

RIGHT LANE CLOSED (R)

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
(L)	16.0	48	80-9846	2
(R)	16.0	48	80-9849	2

W16-3aP

1 MILE

VARIABLE MILEAGE

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	2.5	30X12	80-9872	
	4.5	36X18	80-9873	

W21 - SERIES

W21-6

SURVEY CREW

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	9.0	36	80-9607	1

W22 - SERIES

W22-1

BLASTING ZONE 1000 FT

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	9.0	36	80-9620	1
	16.0	48	80-9625	2

W22-2

TURN OFF 2-WAY RADIO AND CELL PHONE

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	10.5	42X36	80-9623	2

W22-3

END BLASTING ZONE

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	10.5	42X36	80-9621	2

(VARIABLE LEGEND)

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	4.17	60X10	80-9913	2
	12.0	96X18	80-9914	2
	3.33	48X10	80-9916	2

BLANK OR VARIABLE LEGEND

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	9.0	36	80-9933	1
	16.0	48	80-9934	2

USE SHOULDER

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	16.0	48	80-9956	2

(VARIABLE LEGEND)

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	12.5	60X30	80-9928	2
	24.0	72X48	80-9929	2

SHOULDER CLOSED AHEAD (1)

SHOULDER CLOSED (2)

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
(1)	16.0	48	80-9957	2
(2)	9.0	36	80-9958	1
(2)	16.0	48	80-9959	2

STOP-SLOW PADDLE

SIDE A STOP

SIDE B SLOW

SIDE A
BACKGROUND - RED
COPY & BORDER - WHITE
SIDE B
BACKGROUND - ORANGE
COPY & BORDER - BLACK PLAIN

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	2.25	18	80-9950	PADDLE

NOTES:

1. R1-SERIES SIGN THE LEGEND "O.S.T.A." SHALL APPEAR.
2. POSTS - SEE STANDARD SHEET TR-1208_02 - "METAL SIGN POSTS AND SIGN MOUNTING DETAILS".
3. POSTS SHALL BE 4 LBS./FT.
4. ALL POSTS NOTED ARE FOR LONG TERM INSTALLATION. SEE STANDARD SHEET TR-1208_02.
5. FOR TEMPORARY SUPPORTS SEE STANDARD SHEET TR-1220_02 - "CONSTRUCTION SIGN SUPPORTS AND CHANNELIZING DEVICES".
6. FOR SPECIFIC SIGN DESIGN, CONTACT CONN. D.O.T., DIVISION OF TRAFFIC ENGINEERING. FOR BOLT HOLE PATTERN REFER TO FHWA PUBLICATION "STANDARD HIGHWAY SIGNS". SIGNS OF DIFFERENT DIMENSIONS TO BE ERECTED ON THE SAME POSTS, OR SPAN/MAST ARM MOUNTED, MAY REQUIRE SPECIAL BOLT HOLE PATTERNS.
7. ALL CONSTRUCTION SIGNS TO BE PAID FOR UNDER THE CONSTRUCTION SIGNS ITEM IN THE CONTRACT.
8. MATERIALS & COLORS SHALL CONFORM TO STATE SPECIFICATIONS.

MATERIALS:

SIGNS AND THEIR PORTABLE SUPPORTS SHALL CONFORM TO THE REQUIREMENTS OF NCHRP REPORT 350 (TL-3) OR THE AASHTO MASH FOR CATEGORY 2 DEVICES. ALUMINUM THICKNESS FOR POST MOUNTED SIGNS SHALL BE .100" EXCEPT SIGN #s. 80-1605, 80-9914, 80-9815, 80-9728, 80-9519, & 51-6147 (L OR R) WHICH SHALL BE .125", PLYWOOD THICKNESS FOR POST MOUNTED SIGNS SHALL BE 1/2" EXTERIOR GRADE A-C OR BETTER. SIGN BLANKS SHALL HAVE ONE COAT OF PRIMER PAINT PRIOR TO APPLICATION OF RETROREFLECTIVE SHEETING & COPY.

COLORS:

BACKGROUND - FLUORESCENT ORANGE - EXCEPT AS NOTED.
LEGEND - BLACK - EXCEPT AS NOTED.
ALL SIGNS WITH FLUORESCENT ORANGE BACKGROUND TO USE TYPE VIII RETROREFLECTIVE SHEETING.
ALL OTHER SIGNS TO USE TYPE IX RETROREFLECTIVE SHEETING.

REV.	DATE	REVISION DESCRIPTION
6	8-2018	REVISED POST REQUIREMENTS AND SHEETING TYPE.
5	8-2015	UPDATED PER MUTCD AND FORM 816 JAN 2015 REVISION.
4	6-2012	REVISED NOTE #1 TO REFERENCE "O.S.T.A."
3	4-2012	REVISED NEW SIGNAL SIGN(S) TO CONFORM TO 2009 MUTCD.
2	2-2011	MINOR REVISIONS.
1	3-2010	REMOVED OBSOLETE SIGNS (50-5925, 50-5935).

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.

Plotted Date: 8/10/2018

NOT TO SCALE

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: TR-1220_01_1_2018.dgn Model: TR-1220_01

SUBMITTED BY: NAME/DATE/TIME: Mark F. Makuch, P.E. 2018.08.17 09:11:08-04'00'

APPROVED BY: NAME/DATE/TIME: Mark F. Carlino, P.E. 2018.08.21 07:49:34-04'00'

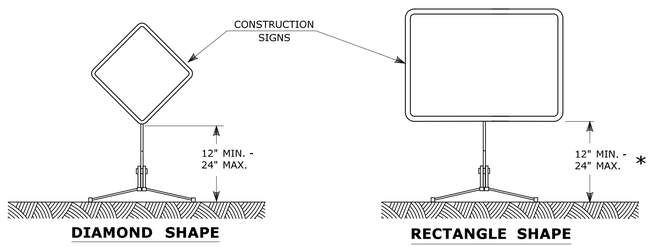
CTDOT STANDARD SHEET

OFFICE OF ENGINEERING

STANDARD SHEET TITLE:

SIGNS FOR CONSTRUCTION AND PERMIT OPERATIONS

STANDARD SHEET NO.: TR-1220_01

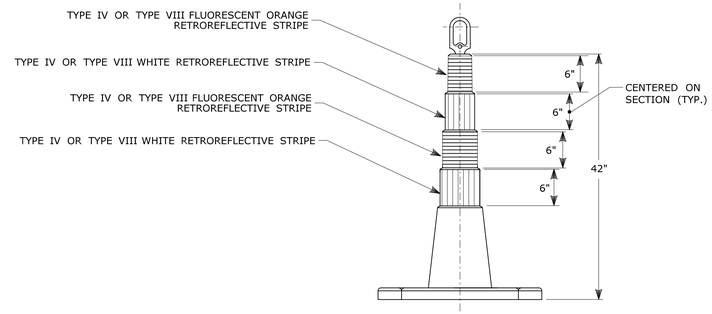


PORTABLE CONSTRUCTION SIGNS

NOTES FOR PORTABLE SIGN SUPPORTS:

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

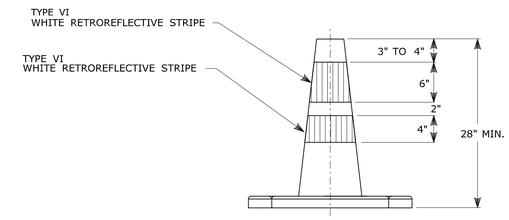
* FOR E5-1 (EXIT SIGNS) USE MIN 48".



42" TRAFFIC CONE

NOTES:

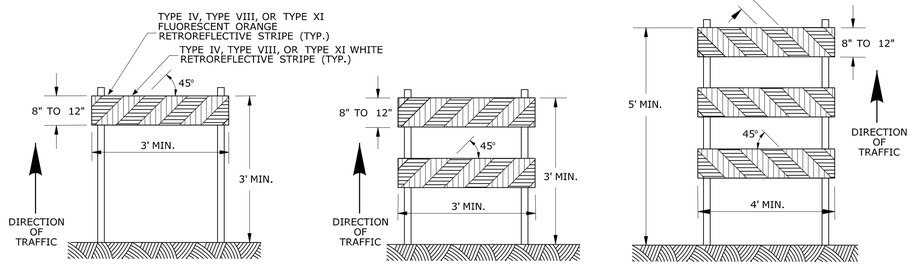
1. TRAFFIC CONES SHALL CONFORM TO THE REQUIREMENTS OF NCHRP REPORT 350 (TL-3) OR THE AASHTO MASH FOR CATEGORY 1 DEVICES AND THE LATEST EDITION OF THE MUTCD.
2. IF RUBBER CONES ARE USED, THEY SHALL HAVE INTERIOR RIBS FOR RIGIDITY.
3. IF PLASTIC CONES ARE USED, THEY SHALL BE COLOR IMPREGNATED.
4. THE ENGINEER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



TRAFFIC CONE

NOTES:

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

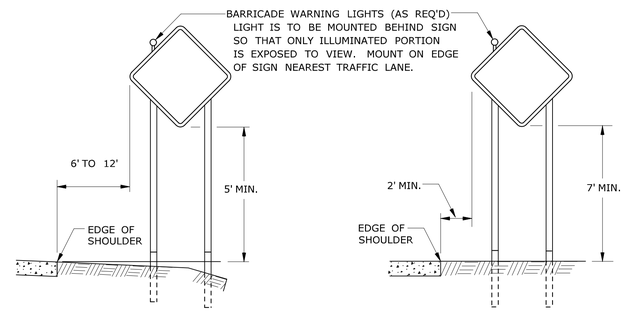


TYPE I BARRICADE **TYPE II BARRICADE** **TYPE III BARRICADE**

CONSTRUCTION BARRICADES

NOTES:

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



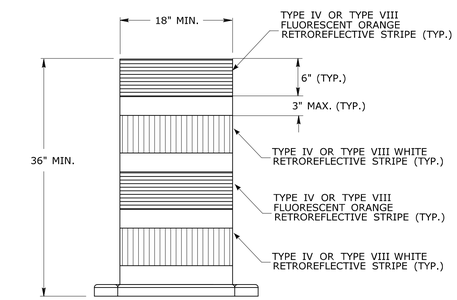
RURAL AREA **URBAN AREA**

PLACEMENT OF CONSTRUCTION SIGNS TYPICAL LONG TERM INSTALLATION

NOTES:

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

REFER TO STANDARD SHEETS:
TR-1208.01 - "SIGN PLACEMENT AND RETROREFLECTIVE STRIP DETAILS."
TR-1208.02 - "METAL SIGN POSTS AND SIGN MOUNTING DETAILS."



TRAFFIC DRUM FRONT VIEW

NOTES:

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

REV.	DATE	REVISION DESCRIPTION
3	8-2018	UPDATED SHEETING TYPE AND COLOR.
2	8-2015	UPDATED PER MUTCD AND FORM 816 JAN 2015 REVISION.
1	2-2011	MINOR REVISIONS.

THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.

Plotted Date: 8/10/2018

NOT TO SCALE

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: TR-1220_02_3_2018.dgn Model: TR-1220_02

SUBMITTED BY: NAME/DATE/TIME: Mark F. Makuch, P.E. 2018.08.17 09:12:43-04'00'
APPROVED BY: NAME/DATE/TIME: Mark F. Carlino, P.E. 2018.08.21 07:49:51-04'00'

CTDOT STANDARD SHEET
OFFICE OF ENGINEERING

STANDARD SHEET TITLE:
CONSTRUCTION SIGN SUPPORTS AND CHANNELIZING DEVICES

STANDARD SHEET NO.: **TR-1220_02**