

# MBTA WIFI PROJECT BOSTHH009 ANDOVER 2

SITE TYPE  
**RAWLAND**

STRUCTURE HEIGHT: **65'-0" AGL**  
 STRUCTURE TYPE: **MONOPOLE**  
 ANTENNA QTY: **8 WAYSIDE, 2 MW ANTENNAS**  
 ANTENNA HEIGHT (CL): **SEE SHEET C2.1**  
 EQUIPMENT MOUNTING: **POLE MOUNTED**

## SITE INFORMATION

PROPERTY OWNER: MASSACHUSETTS BAY TRANSPORTATION AUTHORITY (MBTA)  
 10 PARK PLAZA, SUITE 3910  
 BOSTON, MA 02116

SITE ADDRESS (APPROXIMATE): 2 BURNHAM RD  
 ANDOVER, MA 01810

NETWORK PROVIDER: INMOTION  
 655 W GRAND AVE  
 ELMHURST, IL 60126

PROJECT CONTACT: REZA KAZEMINIA  
 (713) 294-9901

COUNTY: ESSEX

BUILDING CODE: MBTA RAILROAD OPERATIONS DIRECTORATE

LATITUDE: 42°39'54.58"N (42.665160°N) (NAD 83)  
 LONGITUDE: 071°08'32.11"W (071.142253°W) (NAD 83)  
 GROUND ELEVATION: 75 FEET (NGVD 29)

## DRAWING INDEX

TOTAL PAGES: 4

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3	C2.1	ELEVATION	
4	C3.1	EROSION CONTROL PLAN	

## GENERAL NOTES

NOTES TO BE DOWNLOADED AT [HTTP://FORGE-INC.COM/FTP/CONSTRUCTION\\_NOTES.PDF](http://FORGE-INC.COM/FTP/CONSTRUCTION_NOTES.PDF)

IF CONTRACTOR CANNOT FOR ANY REASON DOWNLOAD THESE NOTES THEY ARE TO NOTIFY FORGE SERVICES, INC. AT [INFO\\_FORGE@FORGE-INC.COM](mailto:INFO_FORGE@FORGE-INC.COM)

## PROJECT TEAM

**forge**

FORGE SERVICES, INC.  
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**inMOTION**

INMOTION WIRELESS  
 655 WEST GRAND AVENUE  
 ELMHURST, IL 60126  
 Tel. (630) 474-6699

## APPROVALS

	PRINT NAME	SIGNATURE	DATE
MBTA REAL ESTATE			
MBTA CONSTRUCTION:			
RAIL ROAD OPERATIONS:			
INMOTION RF:			
INMOTION DEVELOPMENT:			



Know what's below.  
Call before you dig.

MASSACHUSETTS ONE-CALL SYSTEM  
CALL BEFORE YOU DIG

THIS NOTICE MUST BE AT LEAST 72 HOURS /THREE WORKING DAYS PRIOR TO THE START OF EXCAVATION

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**DRAFT**

DATE SIGNED: \_\_\_\_\_

BOSTHH009  
ANDOVER 2  
2 BURNHAM RD  
ANDOVER, MA 01810  
RAWLAND

FORGE PROJECT NO: 6830

DRAWN BY: VJ

CHECKED BY: TD

REV	DATE	DESCRIPTION
A	09/09/2015	PRELIM. MBTA APPROVAL
B	12/29/2015	ISSUED FOR REVIEW

CONSTRUCT ONLY FROM DRAWINGS  
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TITLE SHEET

T1.1

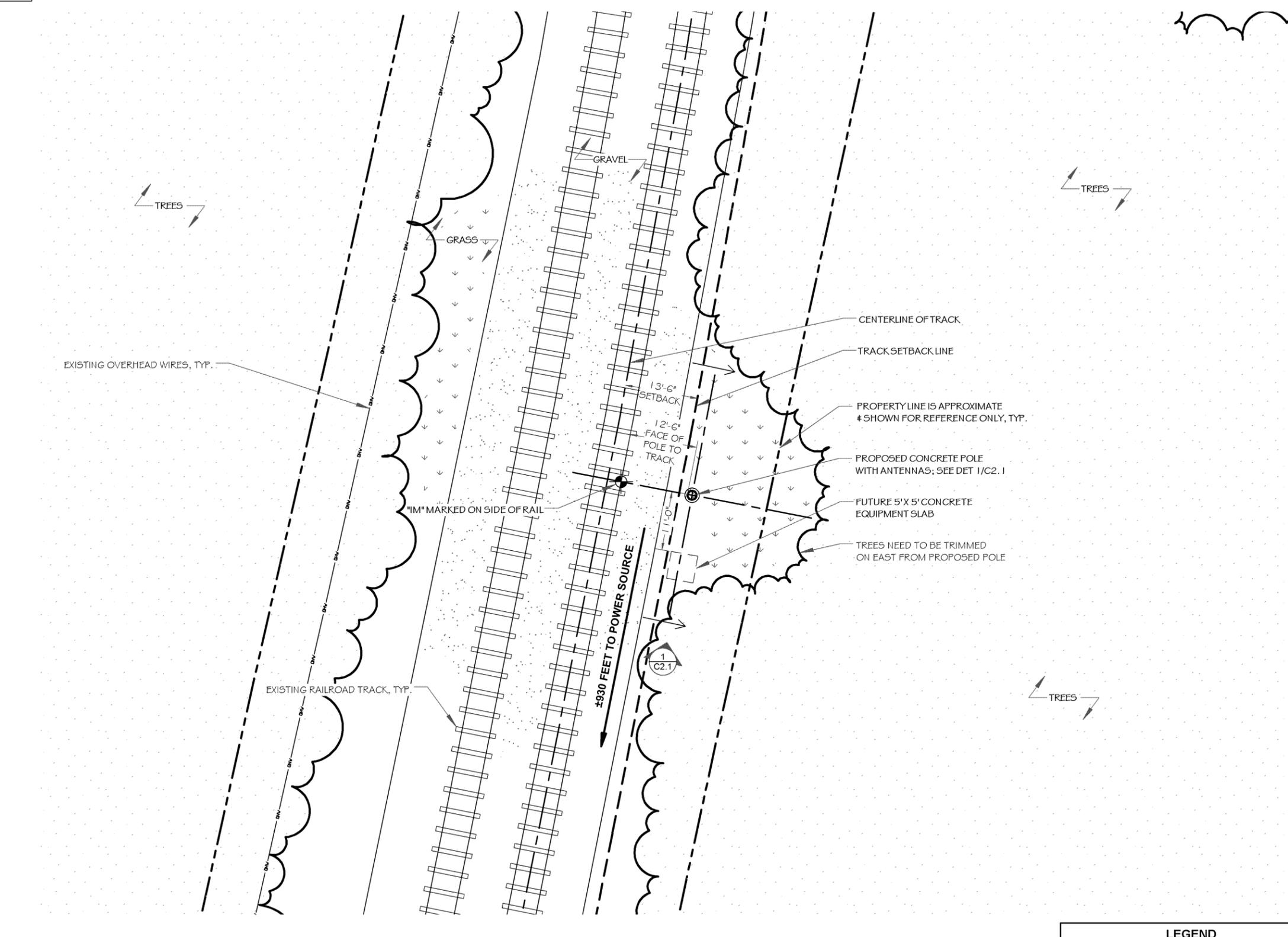
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THIS DRAWING IS SCALED FOR 11x17 PAPER (U.S. GOVT. "TABLOID")

**LEGEND**

- ⊙ MANHOLE/VALVE VAULT
- ⊕ CATCH BASIN
- ▣ CURB INLET
- ⊕ VALVE (INDIVIDUAL SERVICE)
- ⊕ FIRE HYDRANT
- ⊗ STREET LIGHT/LIGHT POST
- ⊕ UTILITY/POWER POLE
- ↑ GUY WIRE/ANCHOR
- ⊕ TELEPHONE PEDESTAL
- ⊕ ELECTRIC METER
- ⊕ GAS METER
- ⊕ TRAFFIC SIGNAL
- ⊕ TRAFFIC SIGNAL BOX
- ⊕ SIGN
- ⊕ MAIL BOX
- ⊕ HANDHOLE
- - - DRAINPIPE
- ▽ FES (AT END OF PIPE)
- - - CHAIN LINK FENCE
- - - WOOD FENCE
- ▭ DEPRESSED CURB
- ▭ CONCRETE CURB & GUTTER
- SS SANITARY SEWER
- STS STORM SEWER
- W WATER MAIN
- OE OVERHEAD ELECTRIC
- UE UNDERGROUND ELECTRIC
- OT OVERHEAD TELEPHONE
- UT UNDERGROUND TELEPHONE
- G GAS LINE
- C CABLE LINE
- BUSH/SHRUB
- TREE DECIDUOUS
- TREE NON-DECIDUOUS
- DRAINAGE ARROW
- 570 CONTOUR LINE
- 578.45 SPOT ELEVATION
- T/F TOP OF FOUNDATION
- T/C TOP OF CONCRETE/CAISSON
- FF FINISHED FLOOR
- A.G.L. ABOVE GROUND LEVEL
- BOUNDARY LINE
- CONCRETE
- ASPHALT
- GRAVEL
- BRICK
- NEW BUILDING/EQUIPMENT
- EXISTING BUILDING
- LEASE SITE
- ACCESS EASEMENT

1 SITE PLAN  
SCALE: 1" = 20'-0"



**NOTES:**

- SITE DRAWINGS HAVE BEEN PREPARED WITHOUT A SURVEY. R.O.W. DATA AND DIMENSIONS ARE PROVIDED BY THE MBTA AND DATA GATHERED FROM FIELD MEASUREMENTS. PROPERTY LINES AND EXISTING STRUCTURES ARE APPROXIMATE.
- EXISTING GRADES TO BE RESTORED UNLESS OTHERWISE NOTED
- ALL AREA DISTURBED BY CONSTRUCTION SHALL BE RETURNED TO ITS ORIGINAL CONDITION UNLESS OTHERWISE NOTED
- ELECTRIC UTILITY FINAL PATH SUBJECT TO SITE WALK WITH UTILITY COMPANY AFTER SITE LOCATION IS APPROVED
- FIBER ROUTE TO BE PROVIDED IN SEPARATE SUBMITTAL T.B.D.

- LEGEND**
- ⊕ IM BENCHMARK
  - - - US PARCEL LINE
  - - - MBTA RIGHT OF WAY LINE
  - - - CLEARANCE LINE
  - CHW --- OVERHEAD ELECTRIC (LAND TRACKER DATA)
  - F --- PROPOSED ELECTRIC

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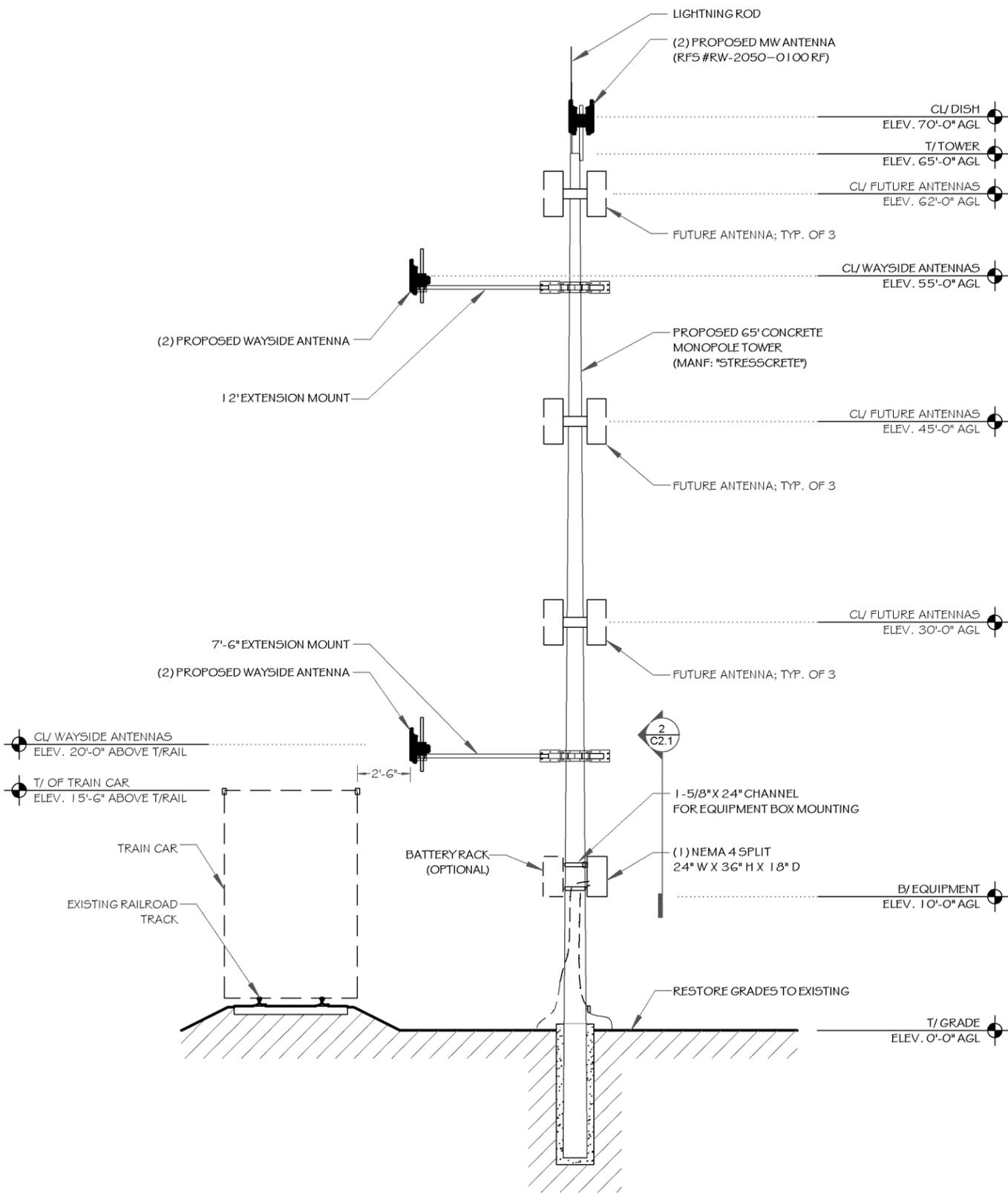
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**SITE PLAN**

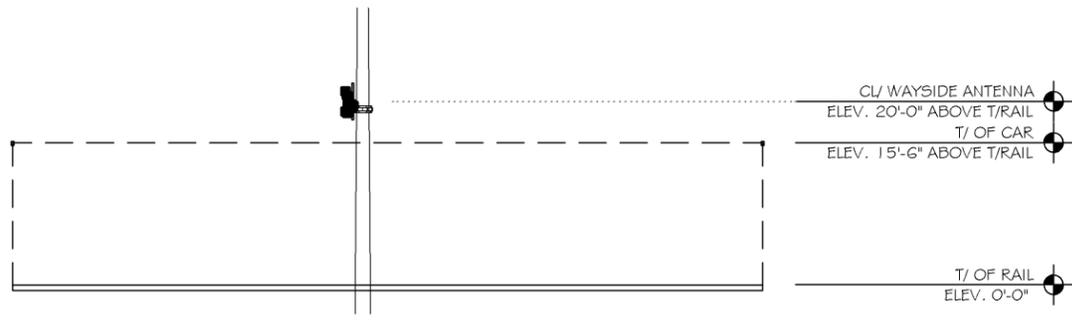
**C1.1**

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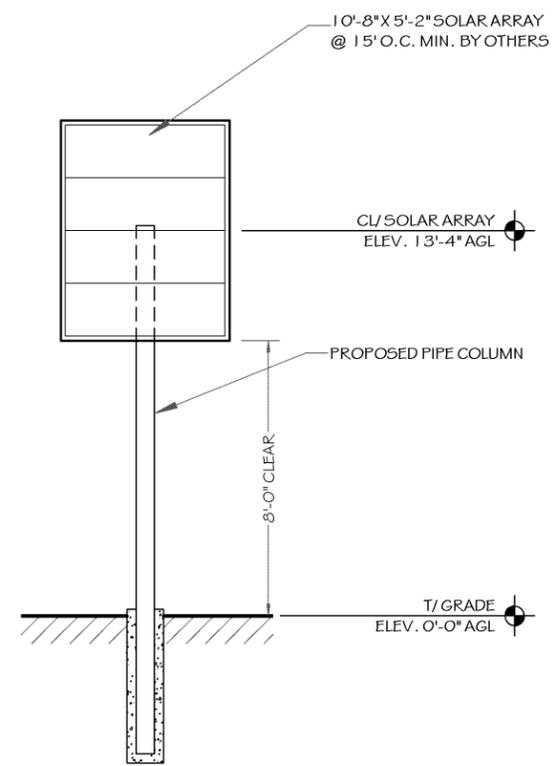
1 ELEVATION  
SCALE: NTS



2 ELEVATION  
SCALE: NTS



3 STANDARD SOLAR ELEVATION (OPTION)  
SCALE: NTS



- NOTES:
- ALL BANDING TO BE 3/4" SS BANDING W/ SINGLE BOLT FLARED LEG BRACKET (MANF. "BAND-IT" OR EQUAL); CONTRACTOR TO USE MANF. RECOMMENDED PARTS FOR DIAMETER OF POLE AND APPLICATION
  - ALL MOUNTING STEEL INCLUDING BOLTS, NUTS, WASHERS, BANDING, PIPES, CLAMPS, CHANNEL, ETC. TO BE HOT-DIPPED GALVANIZED OR STAINLESS STEEL
  - AN ANALYSIS OF THE TOWER HAS NOT BEEN PERFORMED. AN ANALYSIS SHALL BE PROVIDED AND ANTENNA ELEVATIONS WILL SUPERCEDE THIS ELEVATION.
  - ELEVATION DEPICTS TOWER HEIGHT AND IS NOT TO BE USED FOR CONSTRUCTION. SEE TOWER DRAWINGS PREPARED BY OTHERS.
  - POWER TO BE VERIFIED WITH LOCAL POWER COMPANY. THE SOLAR PANEL OPTION MAY BE USED IF EXISTING POWER IS NOT AVAILABLE.
  - THE STRUCTURAL ENGINEERING OF THE TOWER AND ITS FOUNDATION IS UNDER A SEPARATE CONTRACT. REQUIREMENTS SET FORTH BY THIS ENGINEER MAY OR MAY NOT BE KNOWN OR REFLECTED IN THESE DRAWINGS.
  - CONTRACTOR SHALL MODIFY TOWER ONLY IN ACCORDANCE WITH TOWER STRUCTURAL DESIGN, DETAILS, AND REPORT UNDER SEPARATE CONTRACT AND UNDER SEPARATE COVER.
  - ANY CHANGE OR OMISSION MUST BE APPROVED IN WRITING BY TOWER STRUCTURAL ENGINEER; ALL REPRESENTATIONS OF TOWER AND TOWER FOUNDATION ARE FOR REPRESENTATIONAL PURPOSES ONLY

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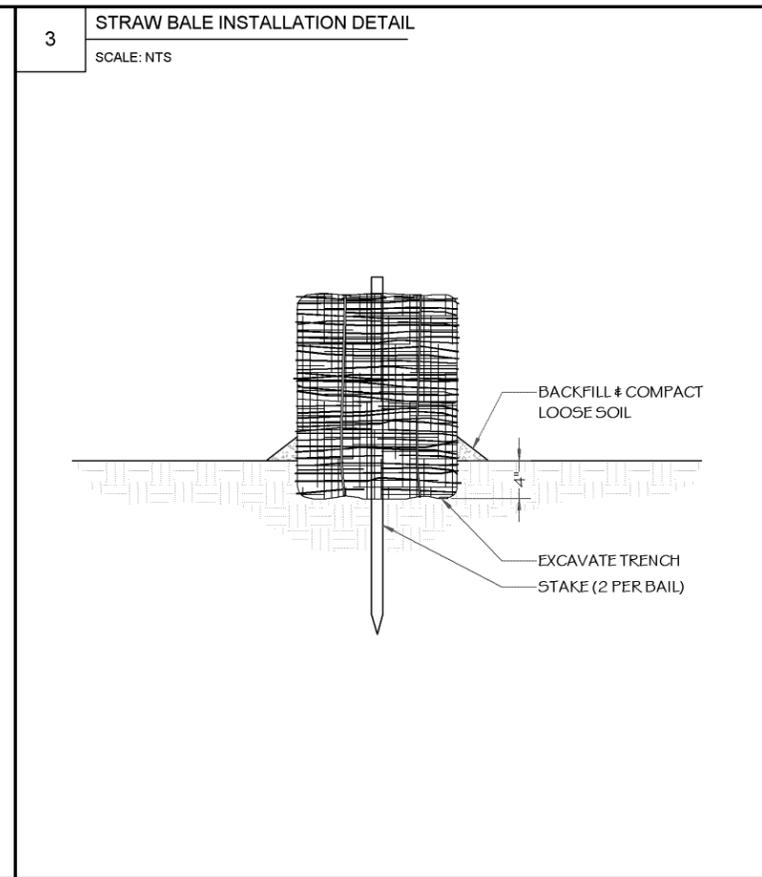
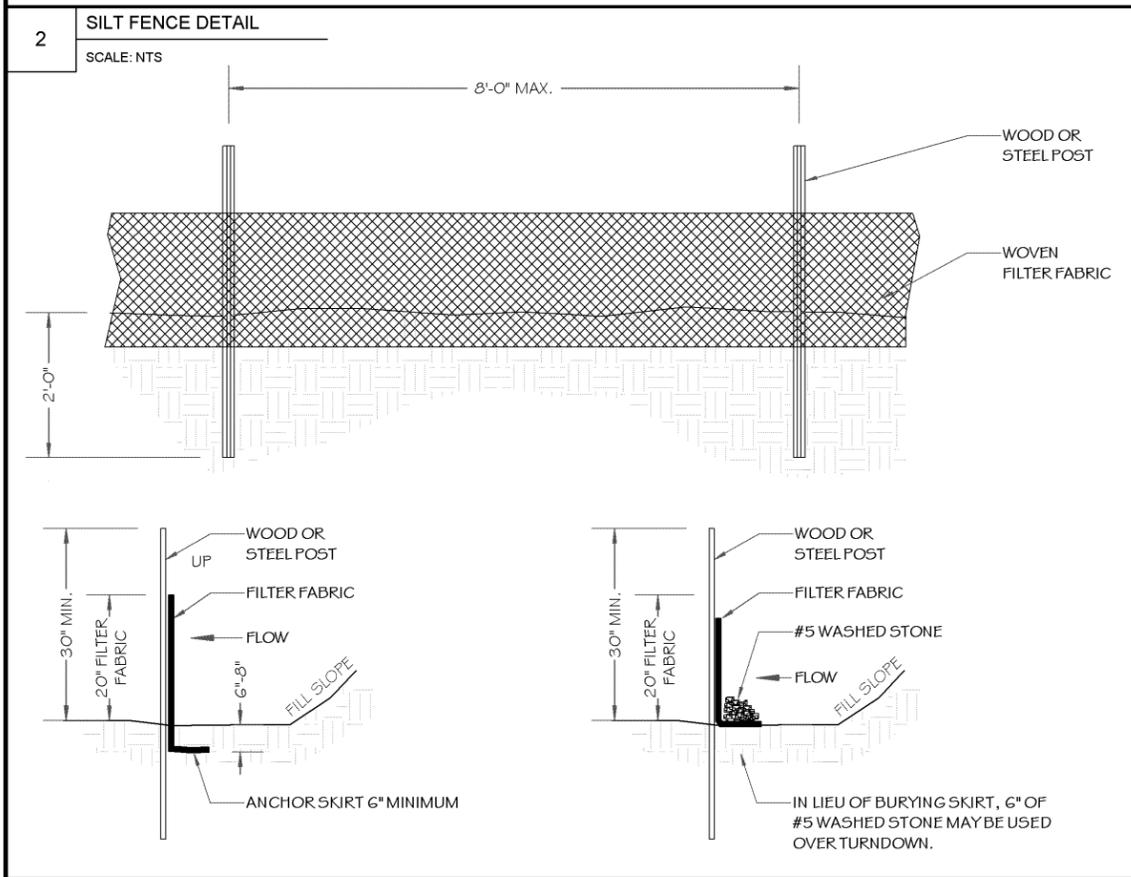
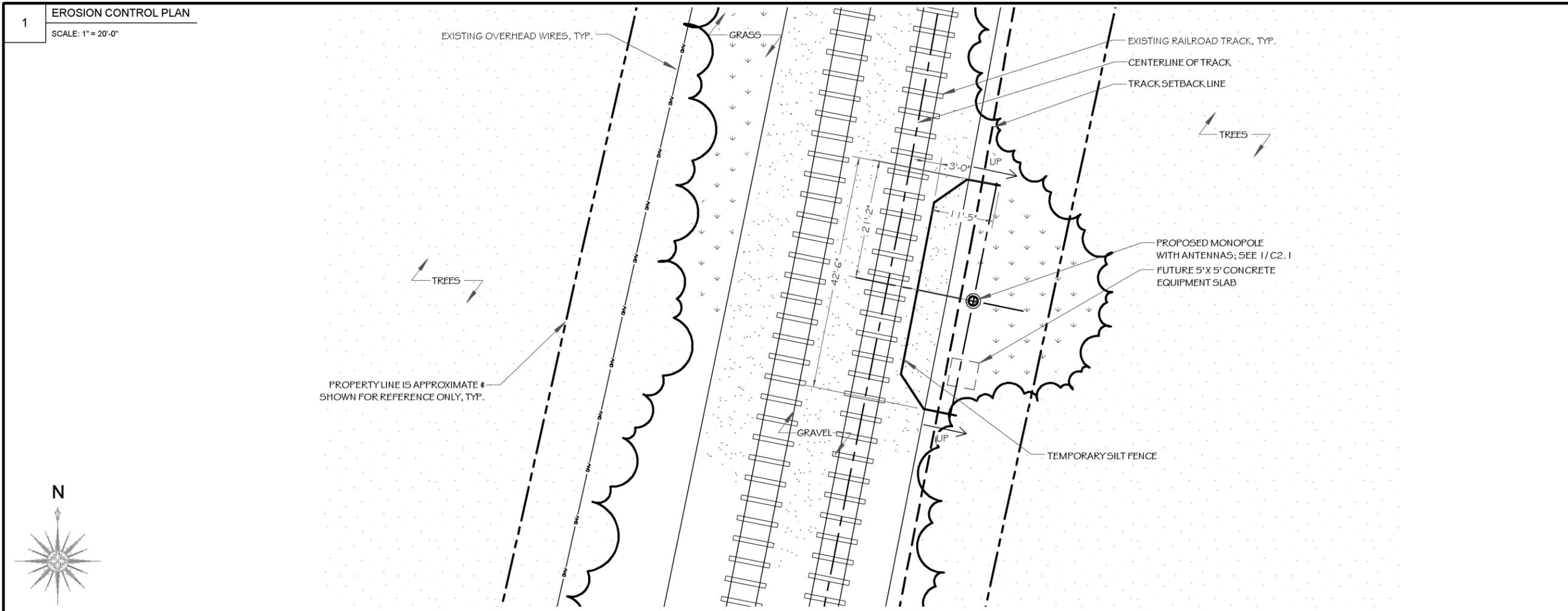
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**ELEVATION**

**C2.1**



- GENERAL NOTES:**
- FILTER FABRIC FENCE SHALL BE A MINIMUM OF 32" IN WIDTH AND SHALL HAVE A MINIMUM OF 6 LINE WIRES WITH 12" STAYS SPACING.
  - WOVEN FILTER FABRIC TO BE USED WHERE SILT FENCE IS TO REMAIN FOR A PERIOD OF MORE THAN 30 DAYS.
  - STEEL POSTS SHALL BE 5'-0" IN HEIGHT AND BE OF THE SELF-FASTENER ANGLE STEEL TYPE.
  - TURN SILT FENCE UP SLOPE AT ENDS.
  - ORANGE SAFETY FENCE IS REQUIRED AT BACK OF SILT FENCE WHEN GRADING IS ADJACENT TO SWIM BUFFERS, STREAMS OR WETLANDS (REFER TO SWIM BUFFER GUIDELINES). THE COLOR ORANGE IS RESEVED FOR VISUAL IDENTIFICATION OF ENVIRONMENTALLY SENSITIVE AREAS.
  - DRAINAGE AREA CAN NOT BE GREATER THAN 1/4 ACRE PER 100 FT OF FENCE.
  - DO NOT INSTALL SEDIMENT FENCE ACROSS STREAMS, DITCHES, WATERWAYS OR OTHER AREAS OF CONCENTRATED FLOW.
  - SILT FENCE TO BE PLACED ACCORDING TO PLAN PRIOR TO START OF CONSTRUCTION AND BE IN PLACE UNTIL ALL EARTHWORK IS COMPLETE; FOLLOW ALL LOCAL CODES REGARDING SILT FENCE REQUIREMENTS.
- MAINTENANCE NOTES:**
- FILTER BARRIERS SHALL BE INSPECTED BY THE FINANCIALLY RESPONSIBLE PARTY OR HIS AGENT IMMEDIATELY AFTER EACH RAIN FALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REPAIRS NEEDED SHALL BE MADE IMMEDIATELY.
  - SHOULD THE FABRIC DECOMPOSE OR BECOME INEFFECTIVE PRIOR TO THE END OF THE EXPECTED USABLE LIFE AND THE BARRIER STILL IS NECESSARY, THE FABRIC SHALL BE REPLACED PROMPTLY.
  - SEDIMENT DEPOSITS SHOULD BE REMOVED WHEN DEPOSITS REACH APPROX. HALF THE HEIGHT OF THE BARRIER. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE SILT FENCE IS REMOVED SHALL BE DRESSED TO CONFORM TO THE EXISTING GRADE, PREPARED AND SEEDED.

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**EROSION CONTROL PLAN**

**C3.1**

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