



SITE ID: BLOOMINGTONDREDCOTT REPL
 SITE ID NUMBER: A1P0967C
 SITE ADDRESS: 10801 BLOOMINGTON FERRY ROAD
 BLOOMINGTON, MN 55438
 SITE COORDINATES: 44.80770238, -93.38937030
 SITE CONFIGURATION: ANCHOR- PHASE 3

SHEET INDEX	
SHEET	DESCRIPTION
T1.0	COVER SHEET
T2.0	OVERALL SITE PLAN
T2.1	ENLARGED SITE PLAN
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T3.0	EX. & NEW EQUIPMENT & ANTENNA LAYOUTS
T4.0	EX. & NEW ELEVATIONS
T4.1	EX. & NEW ELEVATIONS
T5.0	EQUIPMENT DETAILS
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E1.0	ONE LINE DIAGRAM & CALCULATIONS
E2.0	PANEL SCHEDULE & BATTERY INFO.
E3.0	ELECTRICAL DETAILS
GN1.0	GENERAL NOTES
ATTACHMENT	STRUCTURAL MODIFICATION DESIGN

PRESENTED BY:

990 S BROADWAY DENVER, CO 80209

CONSTRUCTION SERVICES, LLC

PL202500105
PL2025-105

SITE NAME:
BLOOMINGTONDREDCOTT
REPL
SITE ADDRESS:
10801 BLOOMINGTON
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SITE COUNTY:
HENNEPIN COUNTY

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SITE INFORMATION

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 BLOOMINGTON, MN 55438

COUNTY: HENNEPIN COUNTY
 JURISDICTION: CITY OF BLOOMINGTON
 ASSESSOR'S PARCEL #: 3111621430002
 LATITUDE: 44.80770238
 LONGITUDE: -93.38937030

STRUCTURE TYPE: LIGHT POLE
 STRUCTURE HEIGHT: 45'-0"±

POWER PROVIDER: XCEL ENERGY 800-628-2121

INSTALLATION IS UNMANNED AND NOT FOR HUMAN HABITATION
 PUBLIC ACCESS IS RESTRICTED A.D.A. ACCESSIBILITY NOT REQUIRED.

PROJECT DESCRIPTION

MODIFICATION OF AN EXISTING "NON-INHABITABLE" T-MOBILE TELECOMMUNICATIONS SITE CONSISTING OF:

REMOVING

- (3) EXISTING ANTENNAS
- (1) EXISTING MOUNTING MAST
- (12) EXISTING TMA'S
- (12) EXISTING COAX CABLES
- (1) EXISTING SSC & BATTERIES
- (1) EXISTING EQUIPMENT CABINET PLINTH
- (8) EXISTING BASEBAND MODULES & TABLE
- (6) EXISTING DIPLEXERS

INSTALLING

- (6) NEW ANTENNAS
- (1) NEW ANTENNA MOUNTING MAST
- (1) NEW RRU MOUNT
- (6) NEW RRU'S
- (2) NEW 6X24 TRUNK CABLES
- (1) NEW CABLE TRAY
- (1) NEW 600A SSC
- (1) NEW BATTERY CABINET & BATTERIES
- TOWER STRUCTURAL MODIFICATION

WITHIN THE EXISTING LEASE AREA.

PROJECT TEAM

PROPERTY OWNER:
 CITY OF BLOOMINGTON
 1800 W. OLD SHAKOPEE RD.
 BLOOMINGTON, MN 55431

APPLICANT:
 T-MOBILE
 990 S. BROADWAY
 DENVER, CO 80209

SITE ACQUISITION CONSULTANT:
 UCI2
 4751 FOX STREET
 DENVER, COLORADO 80216
 CHARLIE AUGELLO
 PH: 720.236.9199
 E-MAIL: CHARLIEA@UCI2.NET

A&E PROJECT MANAGER:
 UCI2
 4751 FOX STREET
 DENVER, COLORADO 80216
 COLE MOSSMAN
 PH: 970.819.0335
 E-MAIL: COLEM@UCI2.NET

ENGINEER OF RECORD:
 UCI2
 4751 FOX STREET
 DENVER, COLORADO 80216
 RYAN GUERRERO
 PH: 970.690.6921
 E-MAIL: RYANG@UCI2.NET

DRIVING DIRECTIONS

FROM ST. PAUL INTERNATIONAL AIRPORT:

HEAD NORTHWEST ON GLUMACK DR. AND FOLLOW FOR .2 MI. AND MAKE A SLIGHT LEFT AND FOLLOW FOR .1 MI. THEN TURN LEFT TOWARDS NORTHWEST DR. AND FOLLOW FOR 233 FT. MERGE ONTO NORTHWEST DR. AND FOLLOW FOR .1 MI. AT THE TRAFFIC CIRCLE, CONTINUE STRAIGHT AND FOLLOW FOR 358 FT. AND MERGE ONTO GLUMACK DR. AND FOLLOW FOR .2 MI. USE THE RIGHT TWO LANES TO MERGE ONTO MN-5 W/ STATE HWY. 5 W. VIA THE RAMP TO I-494/ BLOOMINGTON AND FOLLOW FOR 3.3 MI. AND TAKE EXIT 2C FOR MN-77 S. AND FOLLOW FOR .2 MI. AND USE THE LEFT TWO LANES TO TAKE THE KILLEBREW DR. RAMP AND FOLLOW FOR 3 MI. AND USE THE LEFT LANE TO TAKE EHT RAMP ONOT MN-77 S. AND FOLLOW FOR 1 MI. AND TAKE THE CNTY 1/ OLD SHAKOPEE RD. EXIT AND FOLLOW FOR .3 MI. KEEP RIGHT AT THE FORK AND MERGE ONTO E. OLD SHAKOPEE RD. AND FOLLOW FOR 2.9 MI. CONTINUE TO FOLLOW ONTO W. 98TH ST. AND FOLLOW FOR 295 FT. THEN USE THE LEFT TWO LANES TO TURN SLIGHTLY LEFT ONTO W. OLD SHAKOPEE RD. AND FOLLOW FOR 4.6 MI. AND TURN LEFT ONTO BLOOMINGTON FERRY RD. AND FOLLOW FOR .1 MI. AND TURN RIGHT AND YOUR DESTINATION IS STRIAIGHT AHEAD.

ESTIMATED DISTANCE: 13.8 MILES
 ESTIMATED TIME: 30 MINUTES

SCAN QR CODE FOR LINK TO SITE LOCATION MAP

REVISIONS

Rev:	Date:	Description:	By:
0	08/08/24	90% CONSTRUCTION	GW
1	03.26.25	FINAL STAMPED	GW
2			
3			
4			
5			
6			
7			

STAMPING SIGNATURE

Professional Engineer
 I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the state of Minnesota.
 Signature: *Ryan Thomas Guerrero*
 Typed or Printed Name: Ryan Thomas Guerrero
 Date: 03/27/2025 License Number: 63803

APPLICABLE CODES

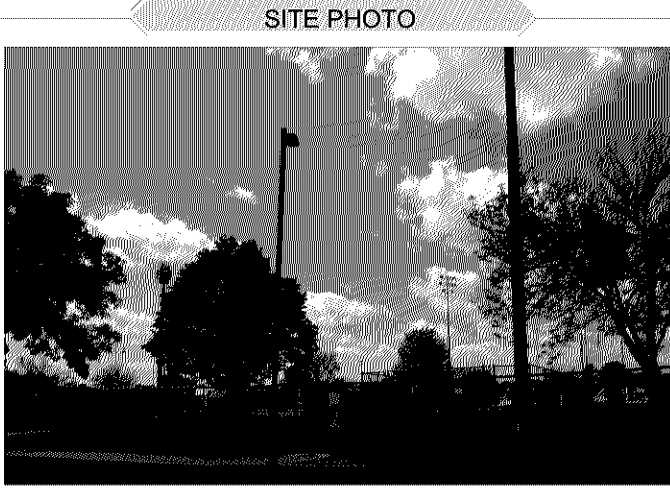
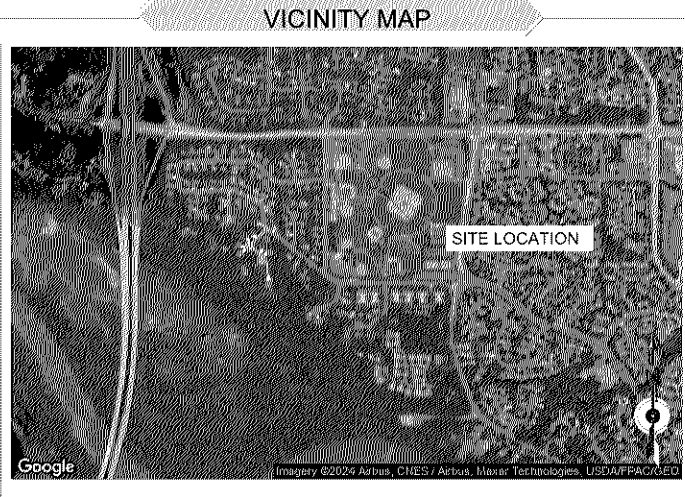
ALL CONSTRUCTION, ALTERATION, OR DEMOLITION SHALL BE PERFORMED AND MATERIALS INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNING AUTHORITIES TO INCLUDE COMPLIANCE WITH THE LATEST FEDERAL STATE, AND LOCAL AMENDMENTS, REGULATIONS AND ORDINANCES.

GOVERNING CODES AS APPLICABLE:
 2020 NBC, 2020 MRC, 2020 MCCB, 2020 MSFC, 2020 MMC, 2020 MFGC, 2020 MEC, 2020 MPC, 2023 MEC

MANDATORY: CONTRACTOR TO CALL TO VERIFY UTILITIES, AT LEAST TWO WORKING DAYS PRIOR TO DIGGING.
 BEFORE YOU DIG, CALL: 1-800-252-1166
 HTTP://811-IN-YOUR-STATE/MAP/STATE/MINNESOTA

THE INFORMATION CONTAINED IN THIS SET OF DOCUMENTS IS PROPRIETARY BY NATURE. ANY USE OR DISCLOSURE OTHER THAN THAT WHICH RELATES TO T-MOBILE SERVICES IS STRICTLY PROHIBITED.

Know what's below.
Call before you dig



REFERENCE DOCUMENTS

DOCUMENT NAME	DATE
RFDS	05.03.24
EX. CONSTRUCTION DRAWINGS; BY POWDER RIVER DEVELOP.	08.24.21
PASSING MOUNT ANALYSIS; BY UCI2	08.14.24
PASSING STRUCTURAL ANALYSIS & MODIFICATION DESIGN; BY ACCELERATED TOWER ENGINEERING	03.25.25

SHEET TITLE:
COVER SHEET

SHEET NUMBER:
T1.0

DRAWN BY: GW
CHK BY: CM
APV BY: CA

T:\Men-001A-1P0967C\Anchor\A&E\CAD\A-1P0967C-ANCHOR_A and E_CDs.dwg Plot: DATE: 3/27/2025 By: Gary Watts

YUKON AVE. S.

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PRESENTED BY:
T-Mobile
 980 S BROADWAY DENVER, CO 80209

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THIS WORK WAS PREPARED BY MYSELF OR UNDER MY SUPERVISION. CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION. ALL SCALES ARE SET FOR 11"x17"

SHEET TITLE:

OVERALL SITE PLAN

SHEET NUMBER:

T2.0

DRAWN BY: GW CHK BY: CM APV BY: CA

1 OVERALL SITE PLAN

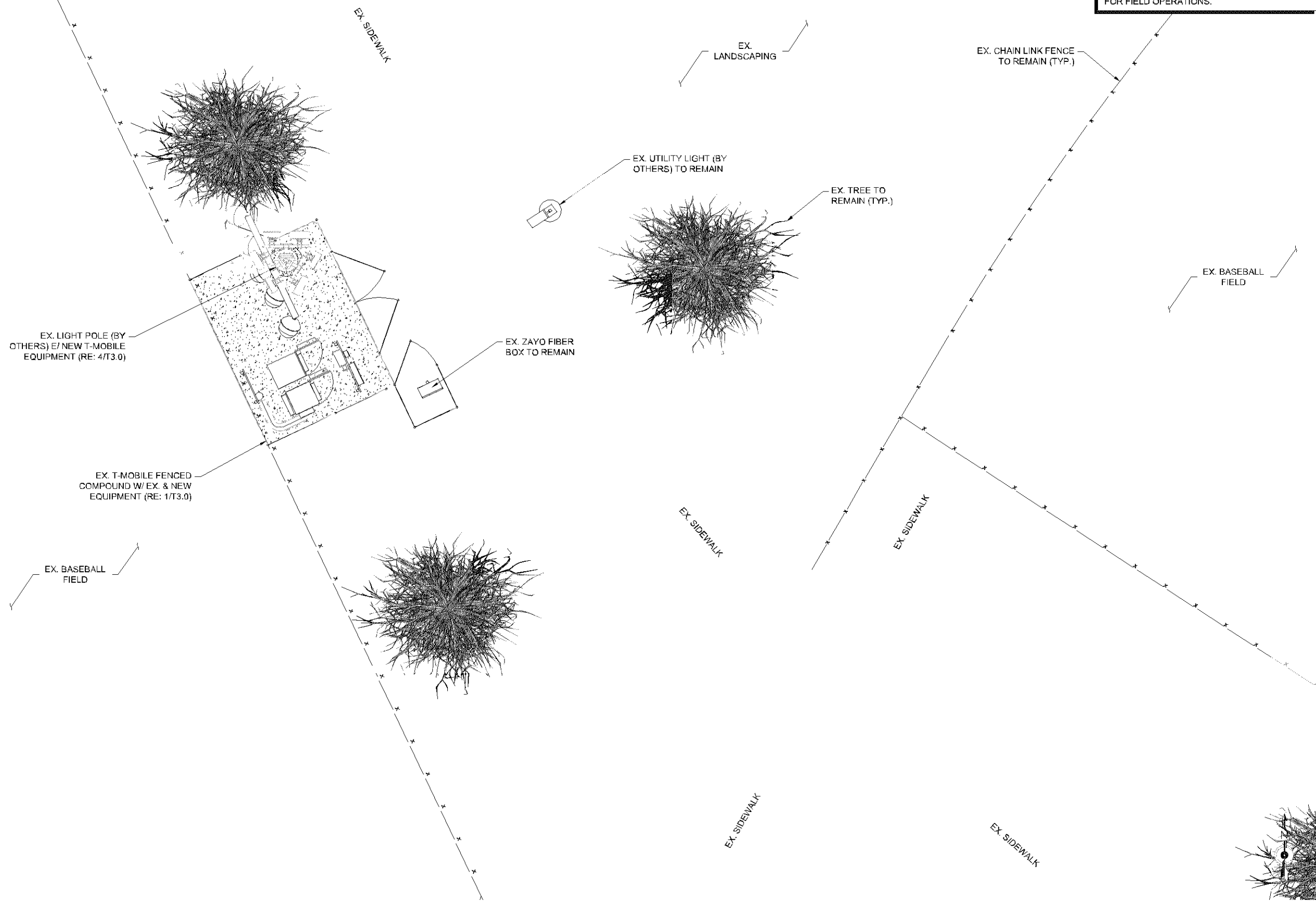
0' 25' 50' 100'
 SCALE: 1" = 50'-0" (11 X 17) - SCALE: 1" = 25'-0" (22 X 34)

T:\Mn-CDIA-1P1067C\Anchor\A&E\CAD\A-1P1067C-ANCHOR_A and E_CDIA.dwg Plot DATE: 3/27/25 By: Gary Watts

OSHA COMPLIANCE LEGEND

- PROPOSED OSHA COMPLIANCE PATH
- 6 FT. FROM ROOFTOP UNPROTECTED EDGE
- PROPOSED OSHA SAFETY HANDRAIL
- 15 FT. FROM ROOFTOP UNPROTECTED EDGE

1. ALPHA, BETA & GAMMA SECTOR ANTENNAS, RRH'S AND ASSOCIATED EQUIPMENT DOES NOT MEET OSHA COMPLIANCE AND IS TO BE ACCESSED BY TOWER CREWS ONLY.
 2. ACCESS TO EQUIPMENT LOCATED WITHIN EXISTING COMPOUND MEETS OSHA COMPLIANCE FOR FIELD OPERATIONS.



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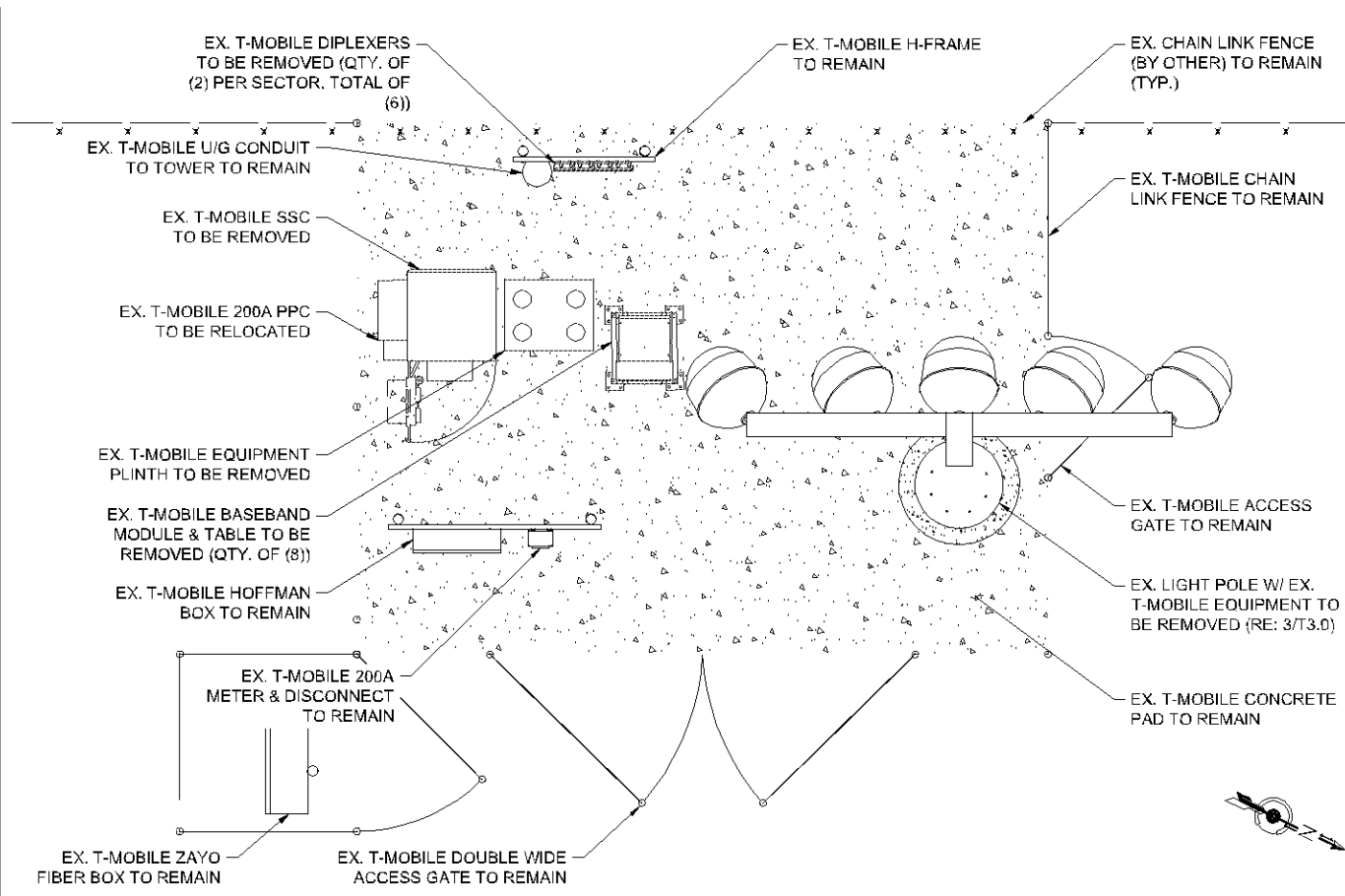
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SHEET TITLE:
PROPOSED SAFETY PLAN

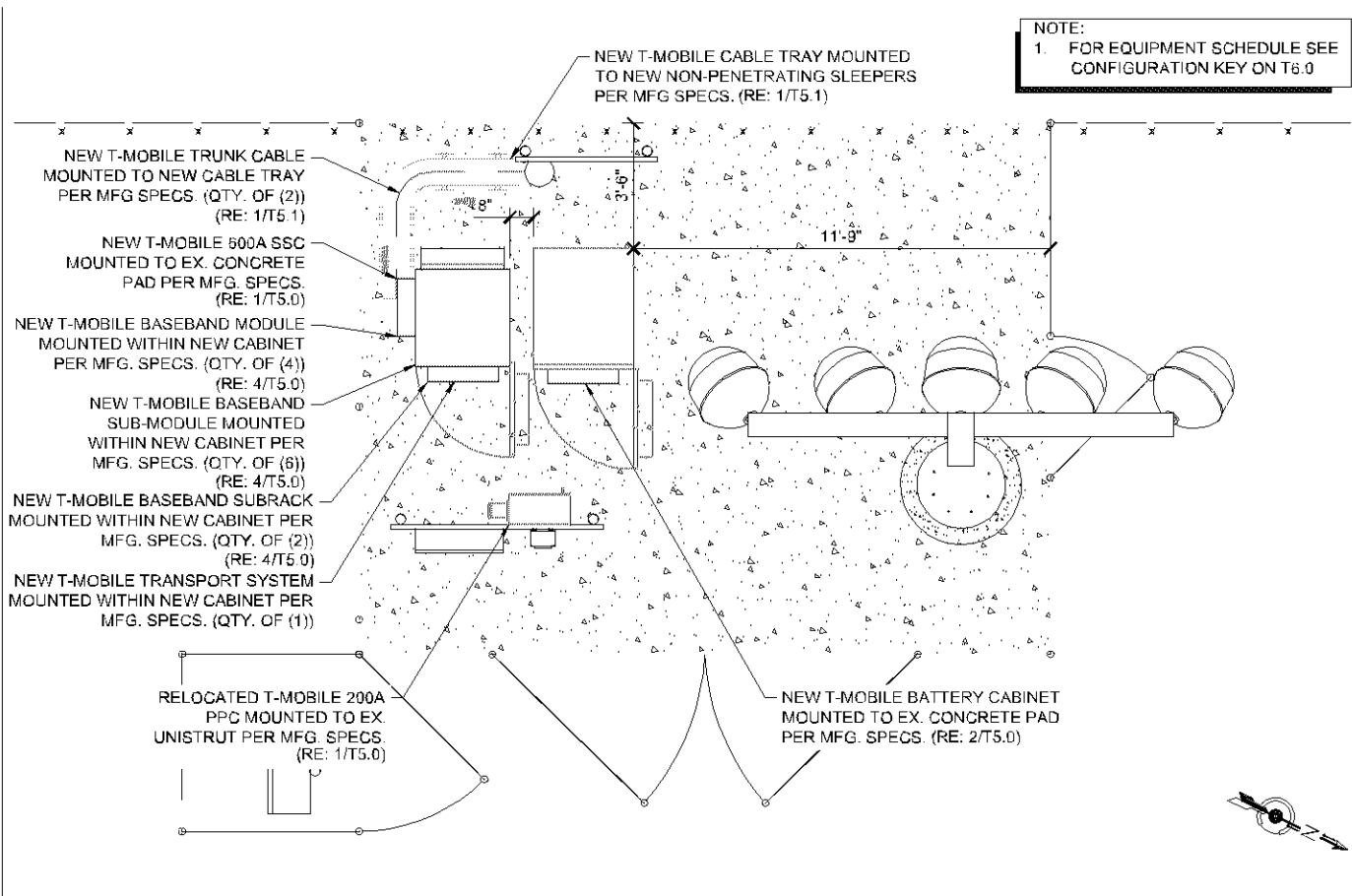
SHEET NUMBER:
T2.2

DRAWN BY: GW	CHK BY: CM	APV BY: CA
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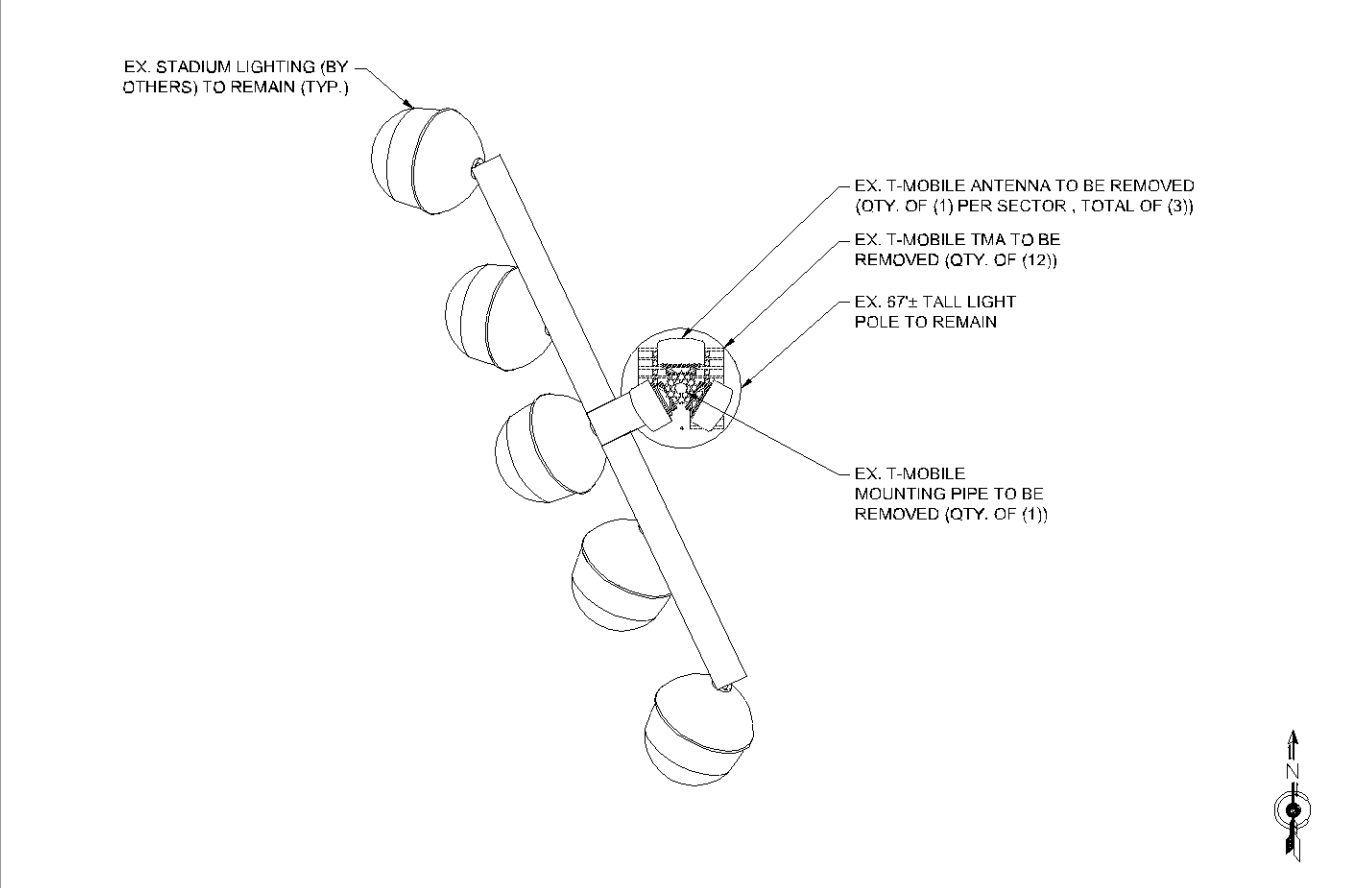
T:\Mn-001A-1P1067C\Anchor\A&E\CAD\A-1P1067C-ANCHOR_A and E_CDs.dwg Plot DATE: 3/27/25 By: Gary Watts



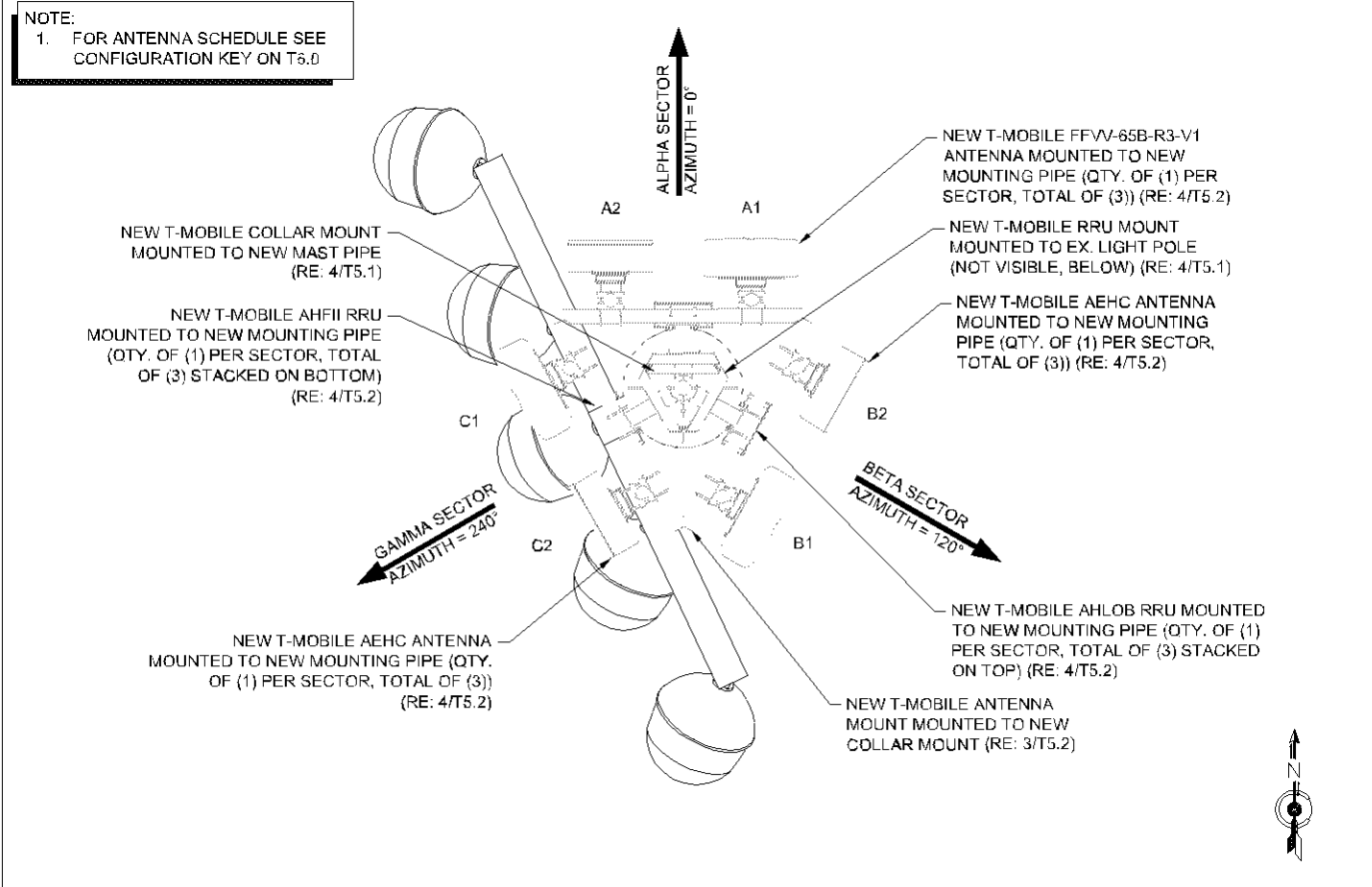
1 EX. EQUIPMENT LAYOUT



2 NEW EQUIPMENT LAYOUT



3 EX. ANTENNA LAYOUT



4 NEW ANTENNA LAYOUT

NOTE:
1. FOR EQUIPMENT SCHEDULE SEE CONFIGURATION KEY ON T6.0

NOTE:
1. FOR ANTENNA SCHEDULE SEE CONFIGURATION KEY ON T6.0

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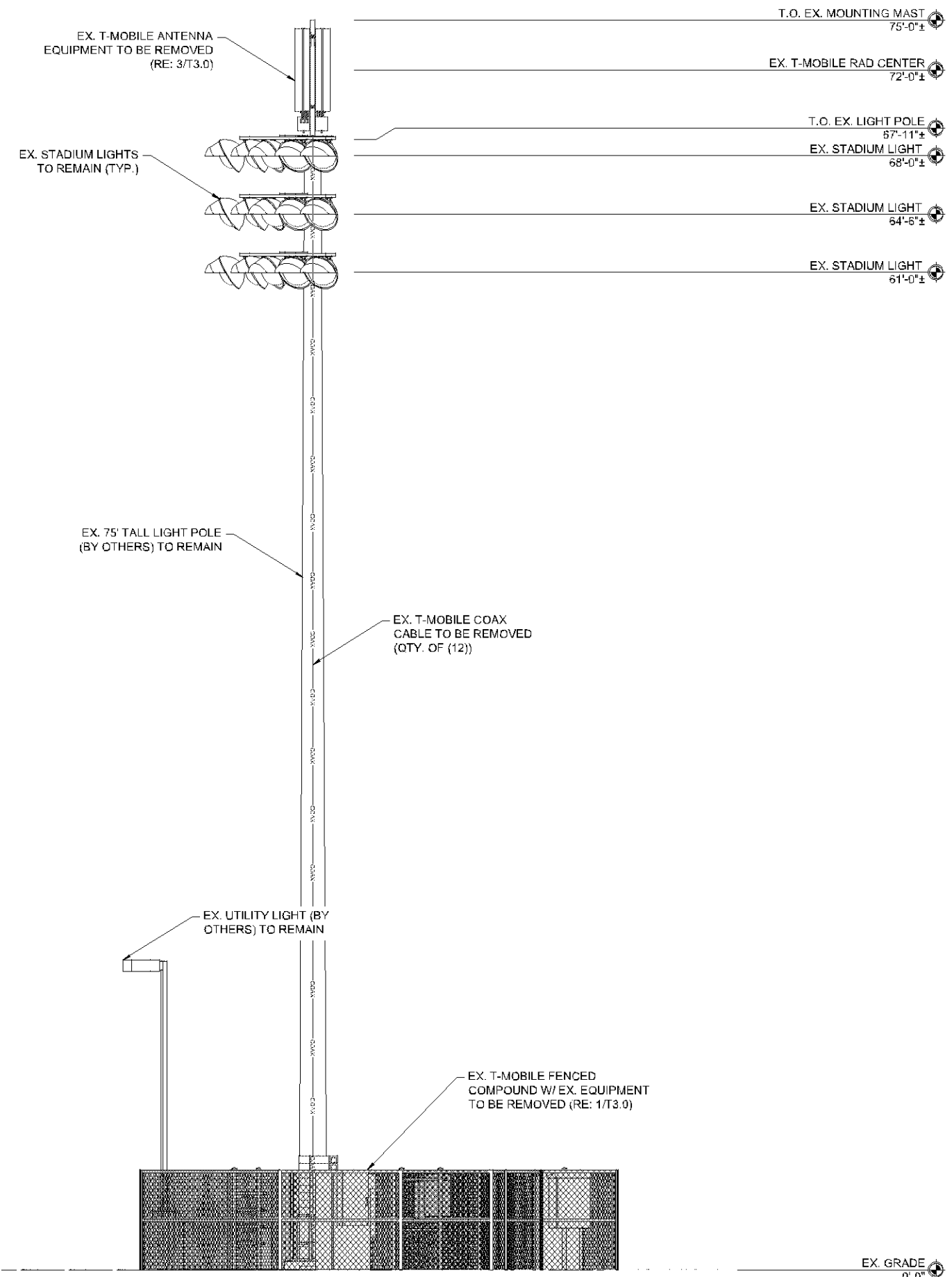
EX. & NEW EQUIPMENT & ANTENNA LAYOUTS

SHEET NUMBER

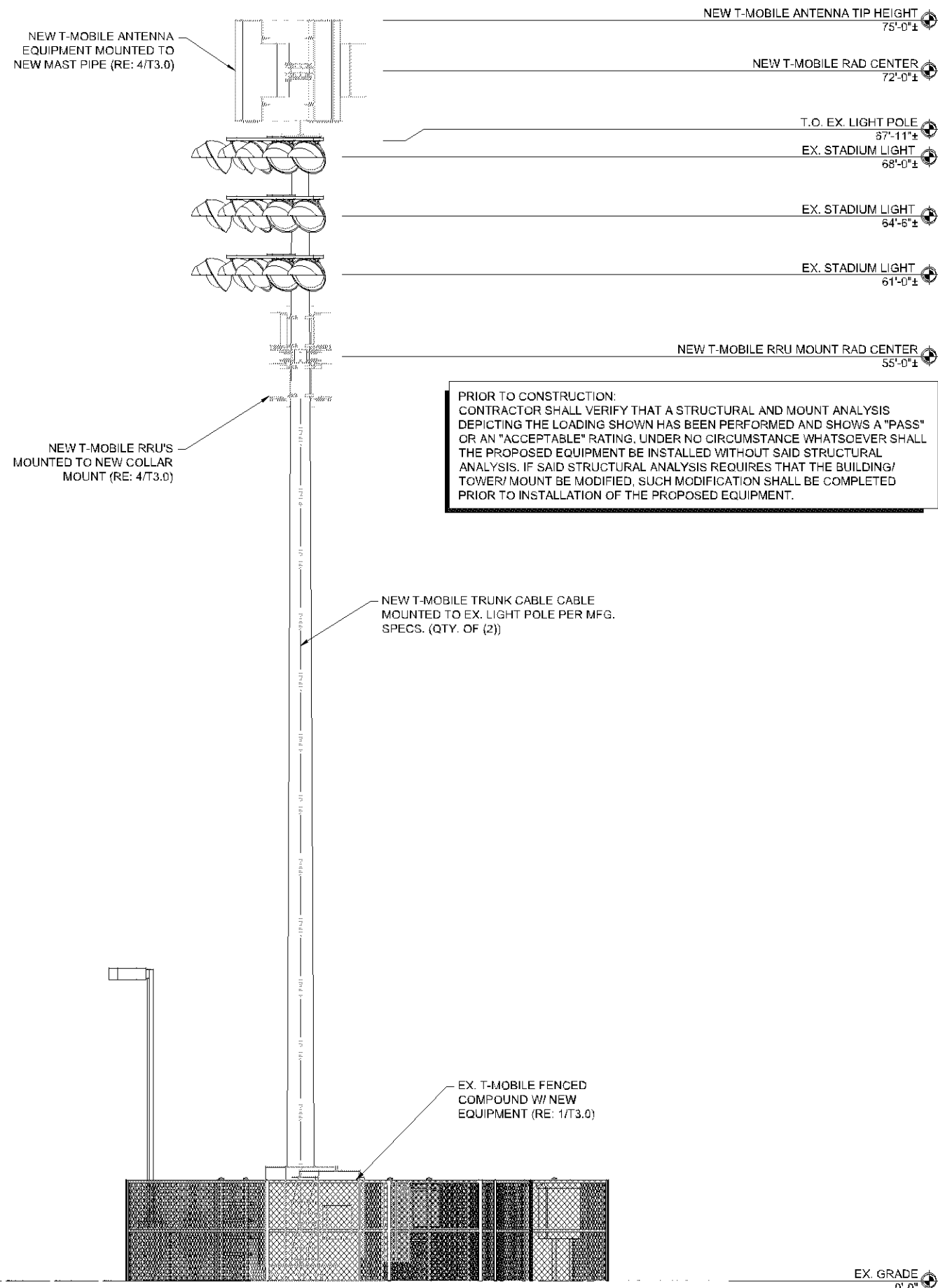
T3.0

DRAWN BY: GW CHK BY: CM APV BY: CA

T:\Mn-CDIA-1P1867C\Anchor\A&EG\DATA-1P1867C-ANCHOR_A and E_CDs.dwg PLOT DATE: 3/26/2025 BY: Cole Moseman



1 EX. SOUTH ELEVATION



2 NEW SOUTH ELEVATION

PRIOR TO CONSTRUCTION:
 CONTRACTOR SHALL VERIFY THAT A STRUCTURAL AND MOUNT ANALYSIS DEPICTING THE LOADING SHOWN HAS BEEN PERFORMED AND SHOWS A "PASS" OR AN "ACCEPTABLE" RATING. UNDER NO CIRCUMSTANCE WHATSOEVER SHALL THE PROPOSED EQUIPMENT BE INSTALLED WITHOUT SAID STRUCTURAL ANALYSIS. IF SAID STRUCTURAL ANALYSIS REQUIRES THAT THE BUILDING/ TOWER/ MOUNT BE MODIFIED, SUCH MODIFICATION SHALL BE COMPLETED PRIOR TO INSTALLATION OF THE PROPOSED EQUIPMENT.

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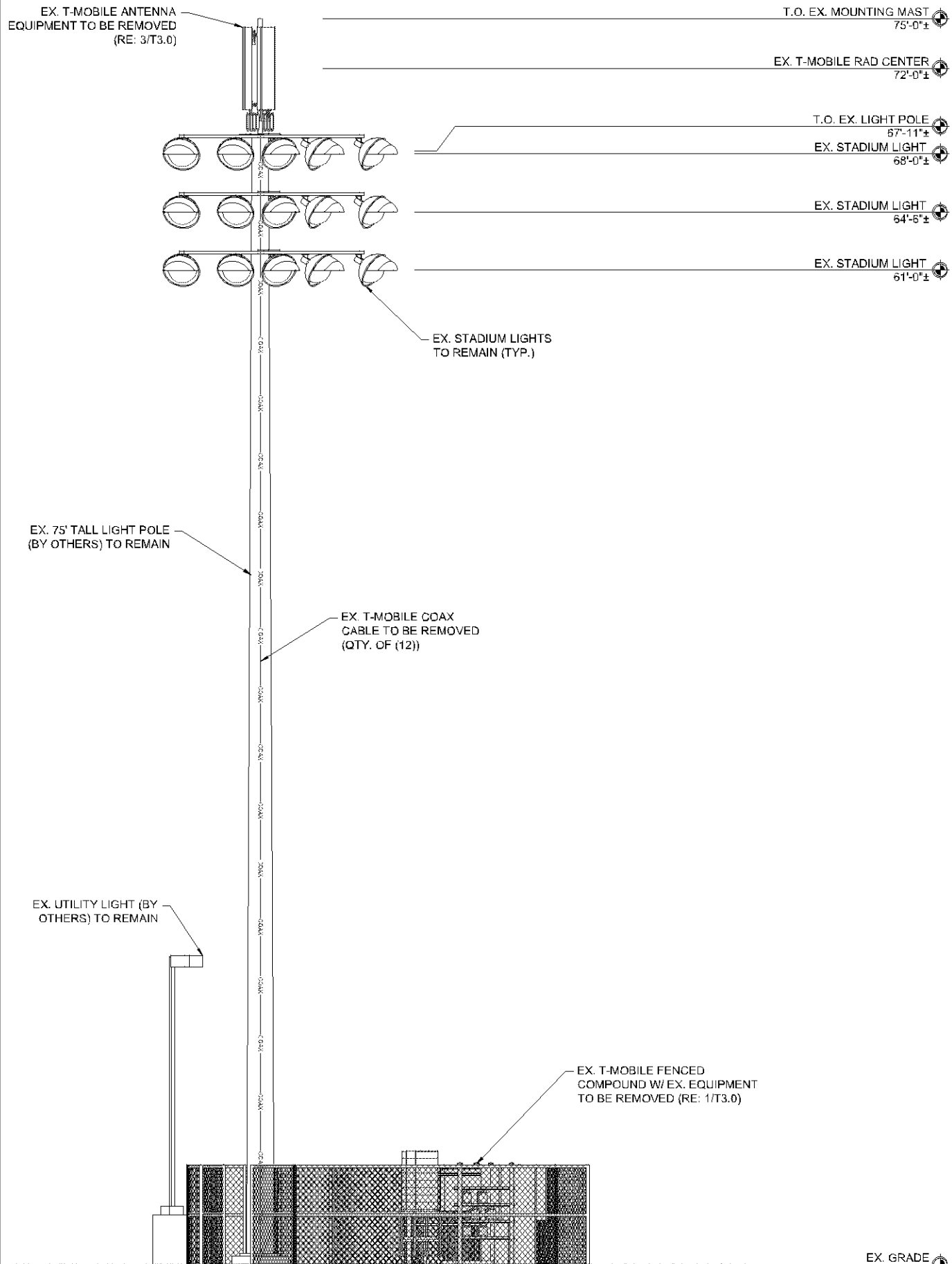
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SHEET TITLE:
EX. & NEW ELEVATIONS

SHEET NUMBER:
T4.0

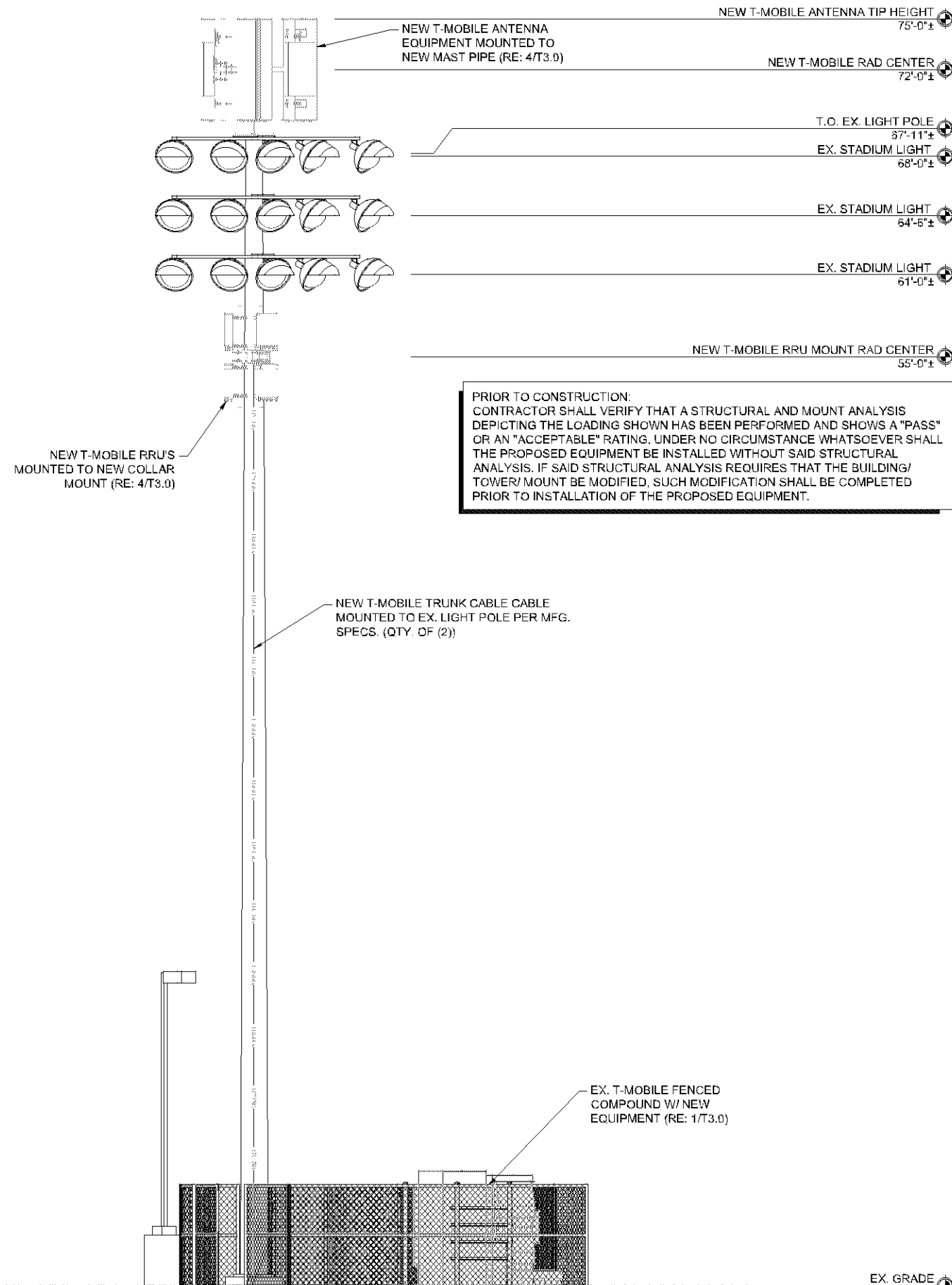
DRAWN BY: **GW** CHK BY: **CM** APV BY: **CA**

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1 EX. WEST ELEVATION

SCALE: 1/8" = 1'-0" (11 X 17) - SCALE: 1/4" = 1'-0" (22 X 34)



2 NEW WEST ELEVATION

SCALE: 1/8" = 1'-0" (11 X 17) - SCALE: 1/4" = 1'-0" (22 X 34)

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SHEET TITLE:
 EX. & NEW ELEVATIONS

SHEET NUMBER:
 T4.1

DRAWN BY: GW
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 APV BY: CA

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POLE SPECIFICATIONS	
POLE SHAPE TYPE:	16-Sided POLYGON
TAPER:	0.1245 IN/FT
SHAFT STEEL:	ASTM A36
BASE PL STEEL:	ASTM A36
ANCHOR RODS:	F1554-55

SHAFT SECTION	SECTION LENGTH (FT)	PLATE THICKNESS (IN)	LAP SPLICE (FT)	DIAMETER ACROSS FLATS (IN)	
				@ TOP	@ BOTTOM
1	7.04	0.3750	0.00	12.750	12.750
2	15.50	0.1875	1.72	12.200	14.130
3	53.39	0.1875	0.00	13.541	20.188

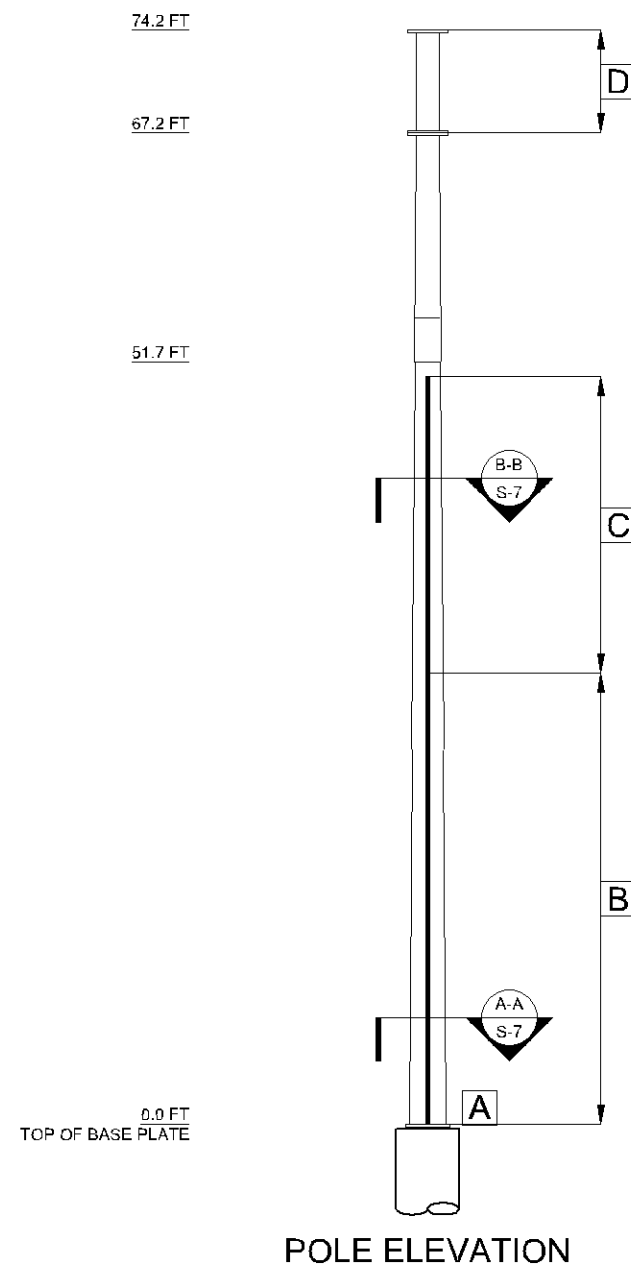
NOTE: DIMENSIONS SHOWN DO NOT INCLUDE GALVANIZING TOLERANCES

POLE MODIFICATION SCHEDULE			
	ELEVATION (FT)	MODIFICATION	REFERENCE SHEET
A	0.0	Added Anchor Rods	S-9
B	0.5-30.5	Shaft Reinforcement	S-9
C	30.5-50.5	Shaft Reinforcement	S-9
D	67.2-74.2	Replace Extension	S-12

REINFORCING SCHEDULE											
BOTTOM ELEVATION (FT)	TOP ELEVATION (FT)	Ref QTY	PART NUMBER	FLAT/DEGREE	TERMINATION BOLTS (BOTTOM)	TERMINATION BOLTS (TOP)	MAX INTERMEDIATE BOLT SPACING	AJAX BOLT QUANTITY PER PLATE	STEEL WEIGHT PER PLATE (BLACK) (LB)	TOTAL AJAX BOLT QUANTITY	TOTAL STEEL WEIGHT (BLACK) (LB)
30.50	50.50	3	PL0750400STD	1,6,12	6	6	1'-4"	24	204.0	72	612.0
0.50	30.50	3	PL1000600STD	1,6,12	10	10	1'-4"	38	612.0	114	1836.0
TOTAL STEEL WEIGHT:											2448.0

NOTES FOR (65 KSI) MATERIAL:

- DO NOT WELD WITHOUT APPROVAL FROM THE EOR.
- ALL SHIMS TO BE MADE OF ASTM A36 STEEL
- ALL FLAT PLATE REINFORCEMENT IS TO BE INSTALLED CENTERED ON ITS DESIGNATED FLAT, UNO.
- AS AN ALTERNATIVE TO USING DTI WASHERS, AJAX BOLTS MAY BE PRETENSIONED PER THE AISC TURN-OF-NUT METHOD.



General Notes

Accelerated Tower Engineering

4710 Portofino Drive
Longmont, CO 80501
(479) 530-8627
www.atowereng.com

Report Prepared For:

UCI²
CONSTRUCTION SERVICES, LLC

4751 Fox St
Denver, CO 80216

ENGINEER of RECORD SEAL

SHAWN D. COOK
LICENSED PROFESSIONAL ENGINEER
50923
3/25/25
STATE OF MINNESOTA

No.	Revision/Issue	Date
0	Construction	03/25/25

Project Name and Address

A1P0967C
Bloomingtonredscott Repl
10801 Bloomington Ferry Rd
Bloomington, MN 55438
Hennepin County

Sheet Title

ELEVATION

Project	038920250008	Sheet	S-8
Date	03/25/2025		
Drawn By:	BU	Checked By:	SC