

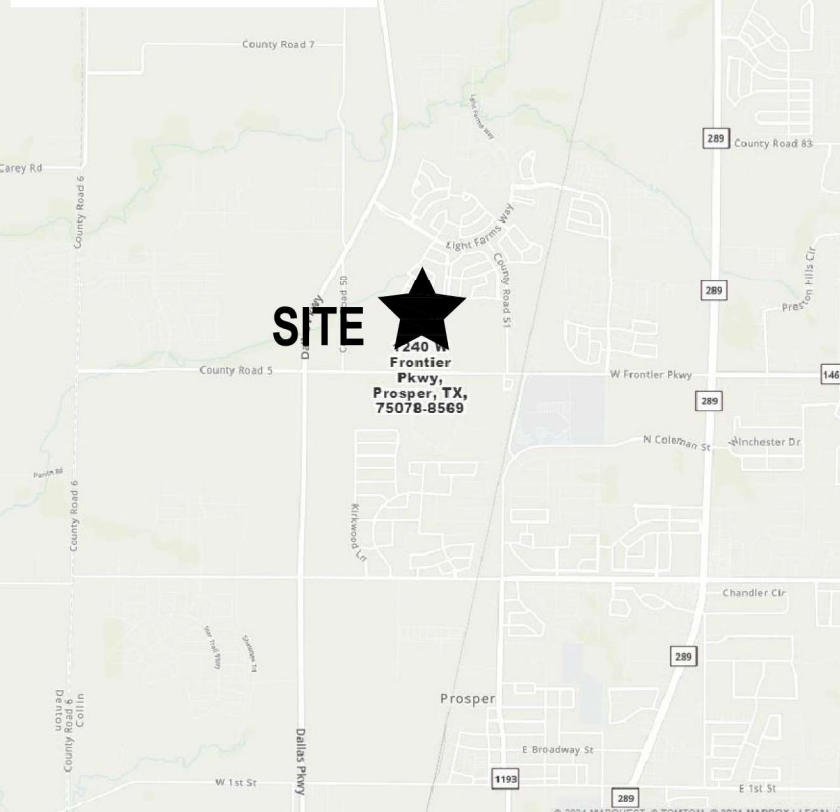
GENERAL NOTES

1. ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES. SUBCONTRACTORS SHALL ISSUE ALL APPROPRIATE NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS, AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF THE WORK.
2. ALL WORK CARRIED OUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND LOCAL JURISDICTIONAL CODES, ORDINANCES AND APPLICABLE REGULATIONS.
3. UNLESS NOTED OTHERWISE, THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES, AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.
4. THE SUBCONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.
5. IF THE SPECIFIED EQUIPMENT CANNOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE SUBCONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION SPACE FOR APPROVAL BY THE CONTRACTOR.
6. THE SUBCONTRACTOR SHALL LEGALLY AND PROPERLY DISPOSE OF ALL SCRAP MATERIALS SUCH AS COAXIAL CABLES AND OTHER ITEMS REMOVED FROM THE EXISTING FACILITY. ANTENNAS REMOVED SHALL BE RETURNED TO THE OWNER'S DESIGNATED LOCATION.
7. THE SUBCONTRACTOR SHALL LEAVE PREMISES IN CLEAN CONDITION.
8. SUBCONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS PRIOR TO COMMENCING ANY WORK. ALL DIMENSIONS OF EXISTING CONSTRUCTION SHOWN ON THE DRAWING MUST BE VERIFIED. SUBCONTRACTOR SHALL NOTIFY THE CONTRACTOR OF ANY DISCREPANCIES PRIOR TO ORDERING MATERIAL OR PROCEEDING WITH CONSTRUCTION.
9. ALL SAFETY PRECAUTIONS MUST BE TAKEN WHEN WORKING AROUND HIGH LEVELS OF ELECTROMAGNETIC RADIATION. EQUIPMENT SHOULD BE SHUTDOWN PRIOR TO PERFORMING ANY WORK THAT COULD EXPOSE THE WORKERS TO DANGER. PERSONAL RF EXPOSURE MONITORS ARE ADVISED TO BE WORK TO ALERT OF ANY DANGEROUS EXPOSURE LEVELS.

DRIVING DIRECTIONS:

7668 WARREN PKWY, FRISCO, TX 75034, GET ON DALLAS NORTH TOLLWAY N FROM MCCANDLESS WAY AND DALLAS PKWY, HEAD NORTH TOWARD MCCANDLESS WAY, TURN RIGHT TOWARD MCCANDLESS WAY, TURN LEFT TOWARD MCCANDLESS WAY, TURN RIGHT AT THE 1ST CROSS STREET ONTO MCCANDLESS WAY, TURN RIGHT ONTO DALLAS PKWY, TAKE THE DALLAS PKWY N RAMP ON THE LEFT, TOLL ROAD, MERGE ONTO DALLAS NORTH TOLLWAY N, TOLL ROAD, FOLLOW S DALLAS PKWY AND W FRONTIER PKWY TO YOUR DESTINATION, CONTINUE ONTO S DALLAS PKWY, CONTINUE STRAIGHT ONTO N DALLAS PKWY, TURN RIGHT ONTO W FRONTIER PKWY, TURN LEFT ONTO PRAIRIE XING, TURN RIGHT ONTO BERKSHIRE LN, TURN RIGHT, DESTINATION WILL BE ON THE LEFT, 1240 W FRONTIER PKWY, PROSPER, TX 75078

ENLARGED VICINITY MAP



T-MOBILE SITE NUMBER

DA03931D

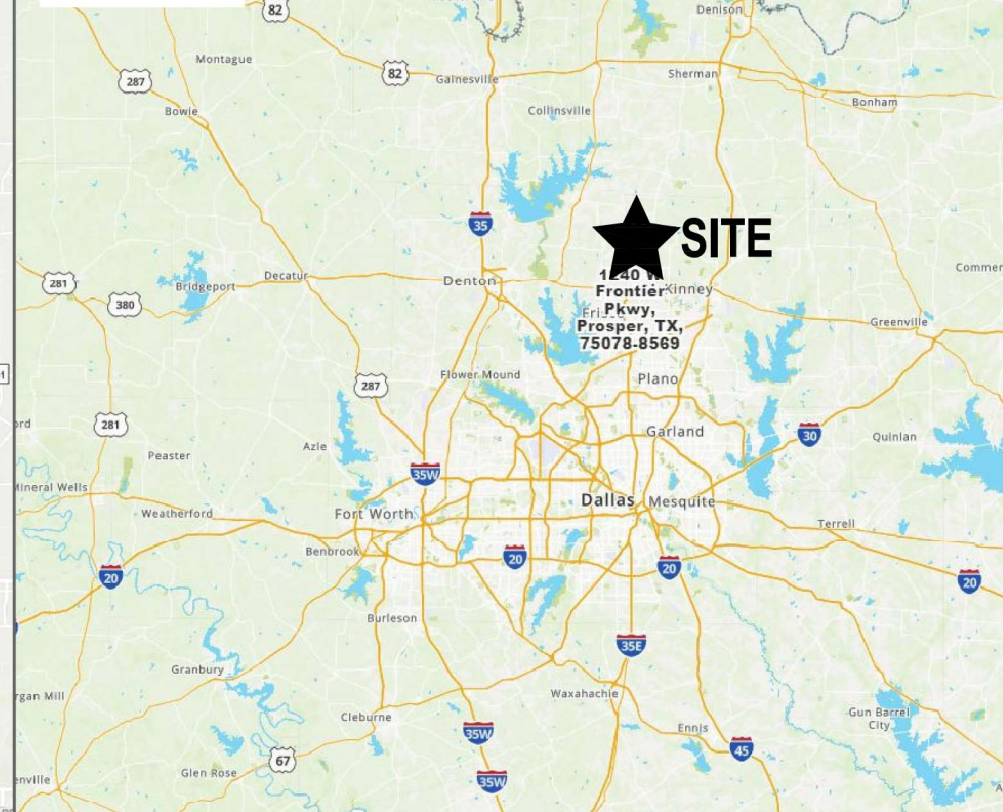
SITE ADDRESS

**1240 W FRONTIER PKWY
PROSPER, TX 75078
COLLIN COUNTY**

BUILDING CODES

- INTERNATIONAL BUILDING CODE, 2015 EDITION AS ADOPTED BY LOCAL JURISDICTION.
- NATIONAL ELECTRICAL CODE, 2017 EDITION AS ADOPTED BY LOCAL JURISDICTION.
- INTERNATIONAL MECHANICAL CODE, 2015 EDITION AS ADOPTED BY LOCAL JURISDICTION.
- INTERNATIONAL ENERGY CONSERVATION CODE, 2015 EDITION AS ADOPTED BY LOCAL JURISDICTION.

VICINITY MAP



APPROVED FOR CONSTRUCTION

PROPERTY OWNER OR REP.	RF
LAND USE PLANNER	NETWORK
T-MOBILE	BACKHAUL
OPERATIONS	CONSTRUCTION MANAGER

SHEET INDEX

- | | |
|------|-----------------------------|
| T-1 | TITLE SHEET (COVER PAGE) |
| | SURVEY |
| C-1 | OVERALL SITE PLAN |
| C-1A | ENLARGED SITE PLAN |
| C-2 | EQUIPMENT COMPOUND PLAN |
| C-3 | ELEVATION & ANTENNA LAYOUT |
| C-4 | RFIDS |
| C-5 | RFDS PLUMBING DIAGRAM |
| C-6 | EQUIPMENT SPEC SHEET |
| C-7 | EQUIPMENT SPEC SHEET |
| C-8 | EQUIPMENT SPEC SHEET |
| C-9 | EQUIPMENT SPEC SHEET |
| C-10 | EQUIPMENT SPEC SHEET |
| C-11 | EQUIPMENT SPEC SHEET |
| E-1 | POWER PLAN |
| E-2 | ELECTRICAL ONE-LINE DIAGRAM |
| G-1 | GROUNDING PLAN |
| G-2 | GROUNDING DETAILS |
| G-3 | GROUNDING DETAILS |
| S-2 | CMU WALL DESIGN |
| S-3 | PAD DETAILS |
| S-4 | MASONRY NOTES |

PROJECT SUMMARY:

SITE TYPE

EXISTING 99' LIGHT POLE
WITH EXISTING RELATED UNMANNED
COMMUNICATION EQUIPMENT
AT BASE OF TOWER

SITE INFORMATION

LAT: 33.25853629°
LONG: -96.803366°
ELEV: 633' AMSL
JURISDICTION: COLLIN COUNTY
OCCUPANCY: COLO UNMANNED
ZONING: N/A
CONSTRUCTION TYPE: LIGHT POLE

APPLICANT

T-MOBILE
DUKE BRIDGES CAMPUS
7668 WARREN PARKWAY
FRISCO, TX 75034

LANDLORD

TOWN OF PROSPER
250 WEST FIRST STREET
PROSPER, TX 75078
CONTACT: CHUCK SPRINGER

CONTRACTORS:

A&E CONTRACTOR

ALLPRO CONSULTING GROUP, INC.
9221 LYNDON B. JOHNSON FREEWAY,
SUITE 204
DALLAS, TX 75243
CONTACT: SHIQIANG ZHANG, P.E.
OFFICE: 972-231-8893
FAX: 866-364-8375

TEXAS ONE CALL

CONTRACTOR TO CALL 48
HOURS BEFORE DIGGING!
PHONE: 800-545-6005
INDEPENDENT LOCATORS
TO BE USED ON ALL SITES



ACGI NO: 21-0860

DRAWN BY: DR/TS

CHECKED BY: SZ

REVISIONS			
NO	DATE	DESCRIPTION	BY
A	01/10/23	PRELIM CD	DR
O	01/24/23	FINAL CD	TS



DA03931D
PISD SPORT COMPLEX
(STADIUM AND NATATORIUM)

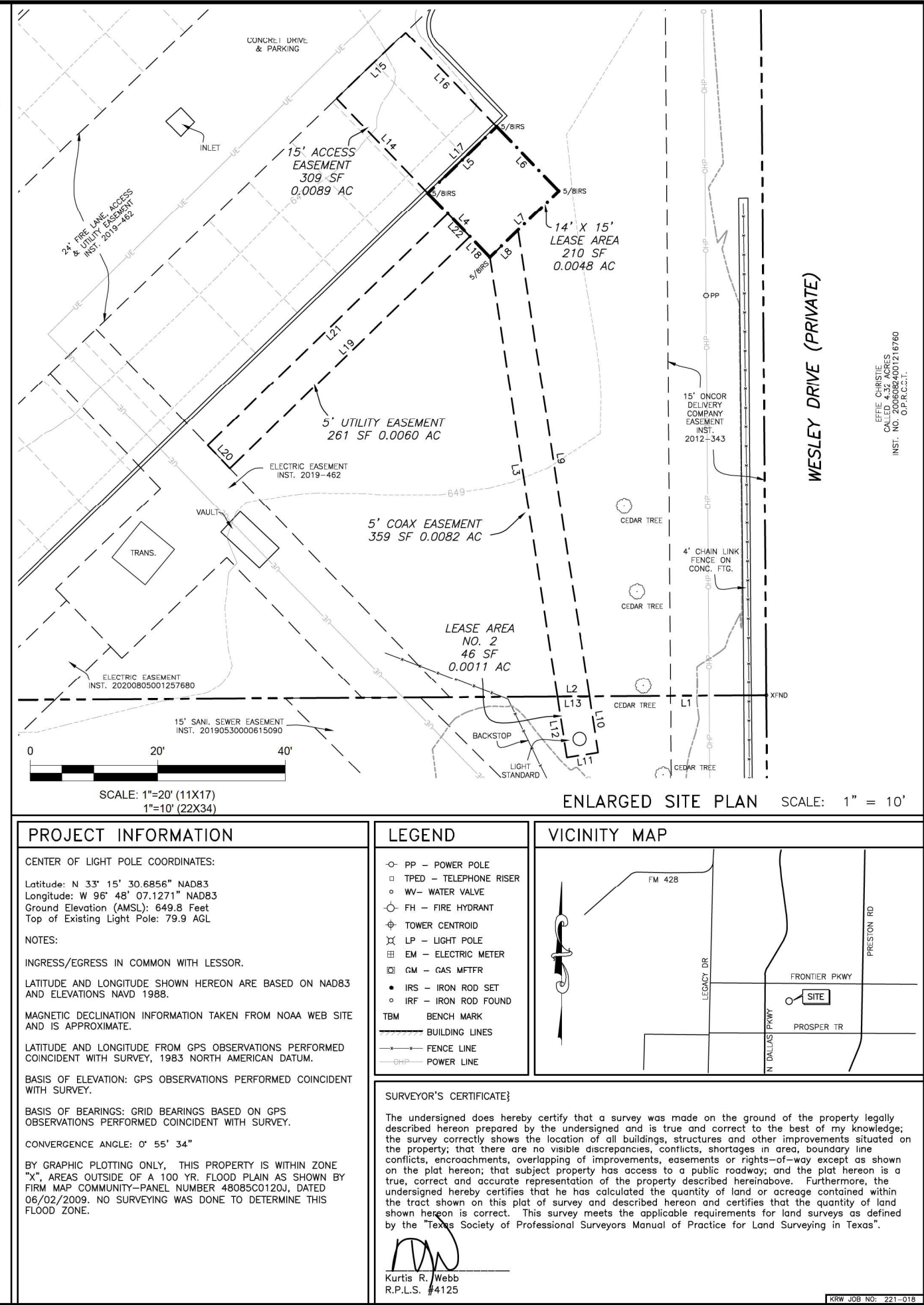
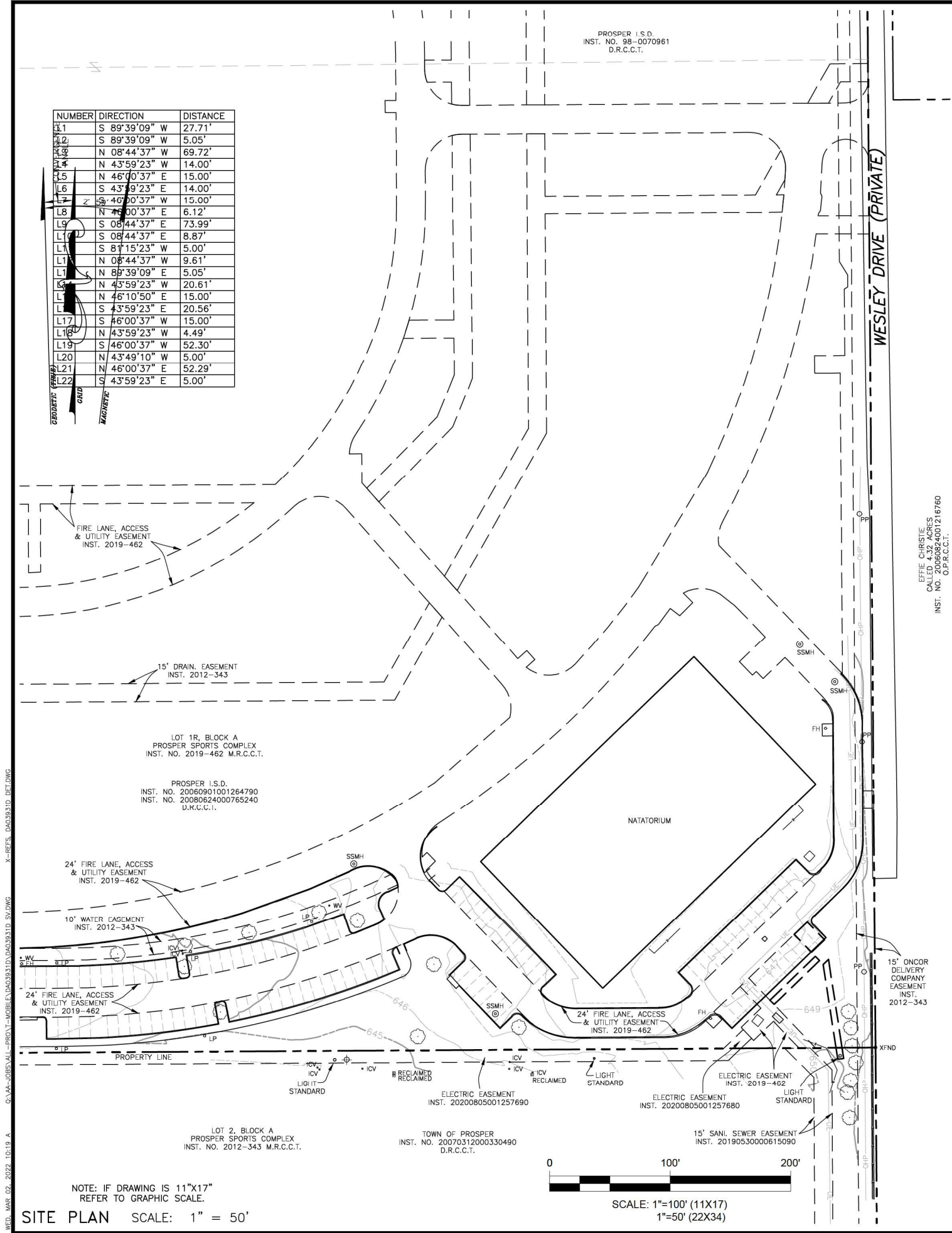
1240 W FRONTIER PKWY
PROSPER, TX 75078
COLLIN COUNTY

SHEET TITLE

TITLE SHEET

SHEET NUMBER

T-1



FLOOD NOTE:
THE PROPOSED SITE IS LOCATED IN FLOOD ZONE X, AERA OF MINIMAL FLOOD HAZARD, PER FEMA MAP# 48085C0120J EFFECTIVE ON 06/02/09. IF A PROFESSIONAL CONSULTANT HAS FINDING OF FLOODING/WETLANDS CONTACT ALLPRO CONSULTING GROUP, INC FOR A REDESIGN.

SITE LAYOUT IS BASED ON ZONING DRAWINGS BY ALLPRO CONSULTING GROUP, INC ACGI#21-5315 DATED 03/23/22 AND SITE WALK BY ALLPRO CONSULTING GROUP, INC. ACGI#21-0857 DATED 03/23/21. IF ANY DISCREPANCY IS NOTICED BETWEEN THE ACTUAL SITE LAYOUT AND THESE DRAWINGS, PLEASE NOTIFY ALLPRO CONSULTING GROUP, INC. FOR A REDESIGN.

NOTE:
ALL INSTALLATIONS SHOULD BE IN COMPLIANCE WITH ANSI/ASSE A10.48 AND ANY OTHER SAFETY STANDARDS.

NOTES:

1. PROPOSED BURIED OR OVERHEAD UTILITIES MUST BE CONTAINED WITHIN A DEDICATED UTILITY EASEMENT. ALL EXISTING AND NEW UTILITY EASEMENTS MUST BE VERIFIED PRIOR TO CONSTRUCTION. NO DIGGING OR TRENCHING SHALL BE ALLOWED WITHOUT PRIOR VERIFICATION OF EXISTING BURIED UTILITIES.
2. POWER & FIBER/TELCO SOURCES AND ROUTING TO BE FIELD VERIFIED.
3. ALL UTILITY RUNS TO BE LOCATED WITHIN EASEMENT

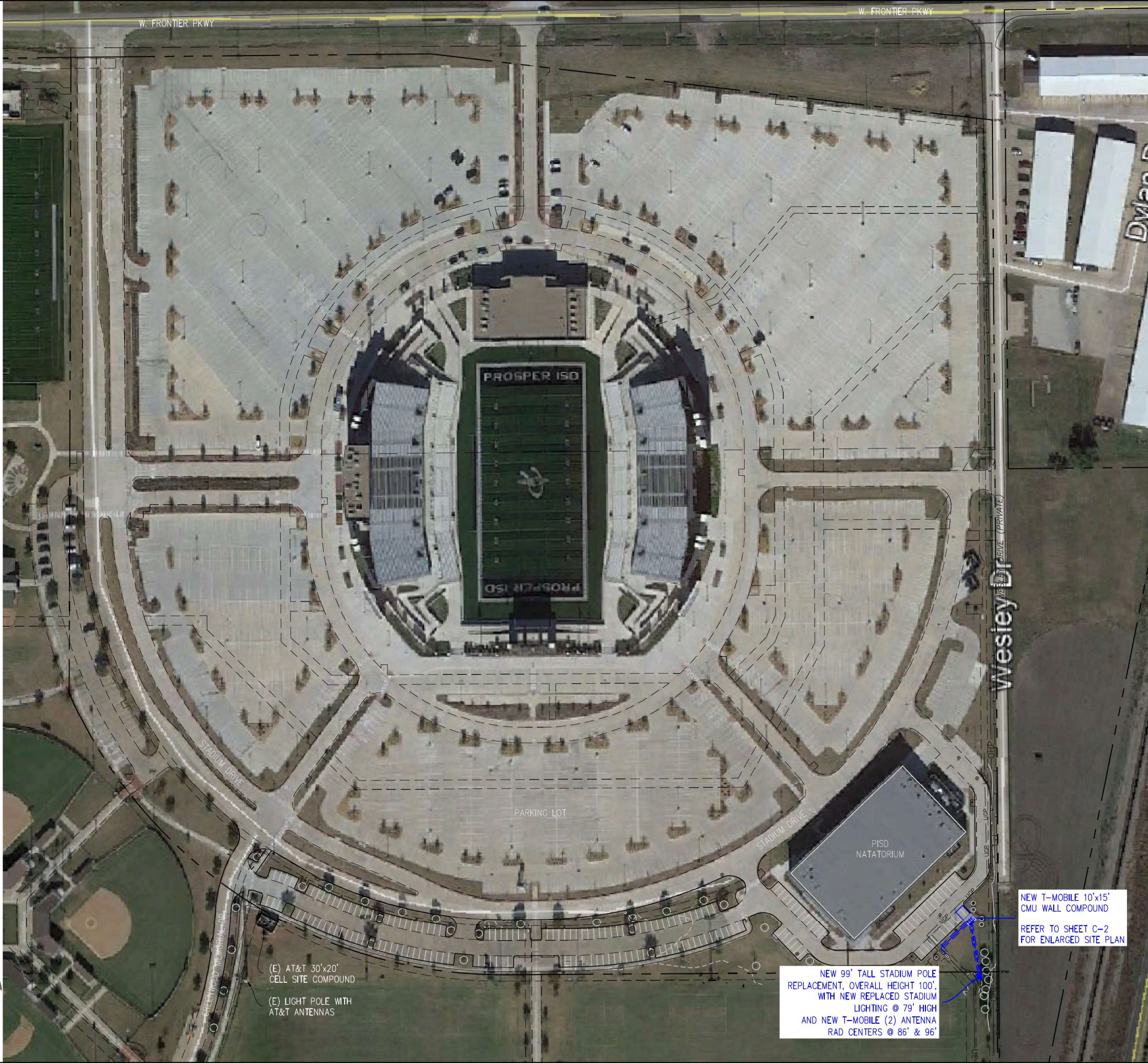
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NOTE:
CMU WALL/FOUNDATION DESIGN IS BY ALLPRO CONSULTING GROUP, INC ACGI# 22-4294 DATED 12/19/22.

LEGEND

- PP - POWER POLE
- TPED - TELEPHONE RISER
- WV- WATER VALVE
- FH - FIRE HYDRANT
- TOWER CENTROID
- LP - LIGHT POLE
- EM - ELECTRIC METER
- GM - GAS METER
- IRS - IRON ROD SET
- IRF - IRON ROD FOUND
- TBM BENCH MARK
- BUILDING LINES
- FENCE LINE
- POWER LINE

1 OVERALL SITE PLAN



T-Mobile
DUKE BRIDGES CAMPUS
7668 WARREN PARKWAY
FRISCO, TX 75034
OFFICE: (972) 464-3510

Network Real Estate LLC
5055 HIGHWAY "N"
SUITE. 200
SAINT CHARLES,
MO 63304
PHONE: 636-922-3400
600 E. JOHN
CARPENTER FWY.
STE 357
IRVING, TX 75062
PHONE: 972-717-7802

ACGI NO: 21-0860

DRAWN BY: DR/TS

CHECKED BY: SZ

REVISIONS			
NO	DATE	DESCRIPTION	BY
A	01/10/23	PRELIM CD	DR
O	01/24/23	FINAL CD	TS

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FAX: 866-364-8375
WWW.ALLPROCGI.COM
FIRM NO. F-8242



DA03931D
PISD SPORT COMPLEX
(STADIUM AND NATATORIUM)

1240 W FRONTIER PKWY
PROSPER, TX 75078
COLLIN COUNTY

SHEET TITLE
OVERALL SITE PLAN

SHEET NUMBER
C-1

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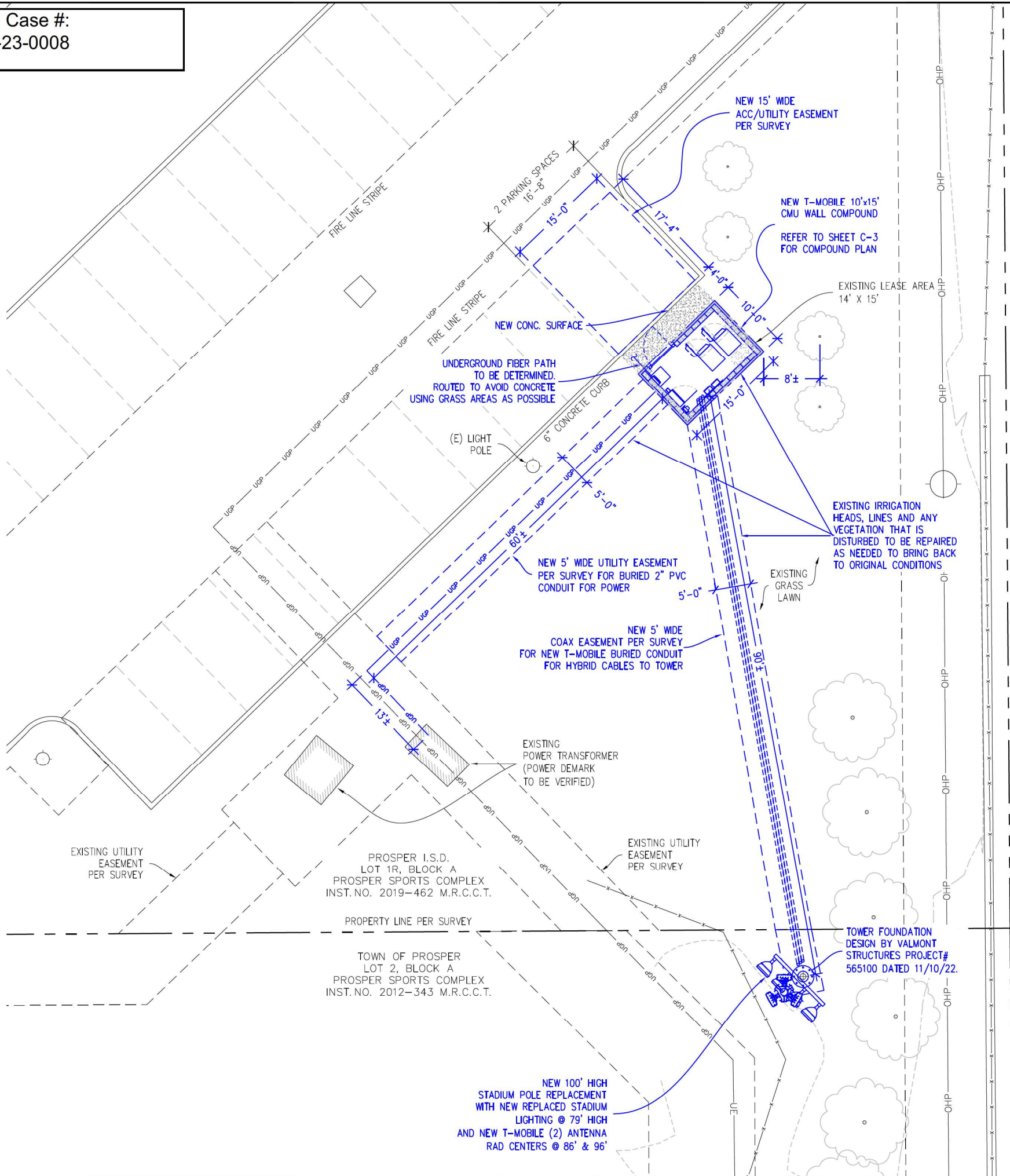
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- IRS - IRON ROD SET
- IRF - IRON ROD FOUND
- TBM BENCH MARK
- BUILDING LINES
- FENCE LINE
- POWER LINE

Zoning Case #:
ZONE-23-0008



1

ENLARGED SITE PLAN

FOR 24" X 36" PLOT - 1/8" = 1' 0' 2' 4' 8' 16'
FOR 11" X 17" PLOT - 1/16" = 1'

T-Mobile
DUKE BRIDGES CAMPUS
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OFFICE: (972) 464-3510

Network Real Estate LLC
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STE 357
IRVING, TX 75062
PHONE: 972-717-7802

ACGI NO: 21-0860

DRAWN BY: DR/TS

CHECKED BY: SZ

REVISIONS			
NO	DATE	DESCRIPTION	BY
A	01/10/23	PRELIM CD	DR
O	01/24/23	FINAL CD	TS

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DA03931D
PISD SPORT COMPLEX
(STADIUM AND NATATORIUM)

1240 W FRONTIER PKWY
PROSPER, TX 75078
COLLIN COUNTY

SHEET TITLE
ENLARGED SITE PLAN

SHEET NUMBER
C-1A

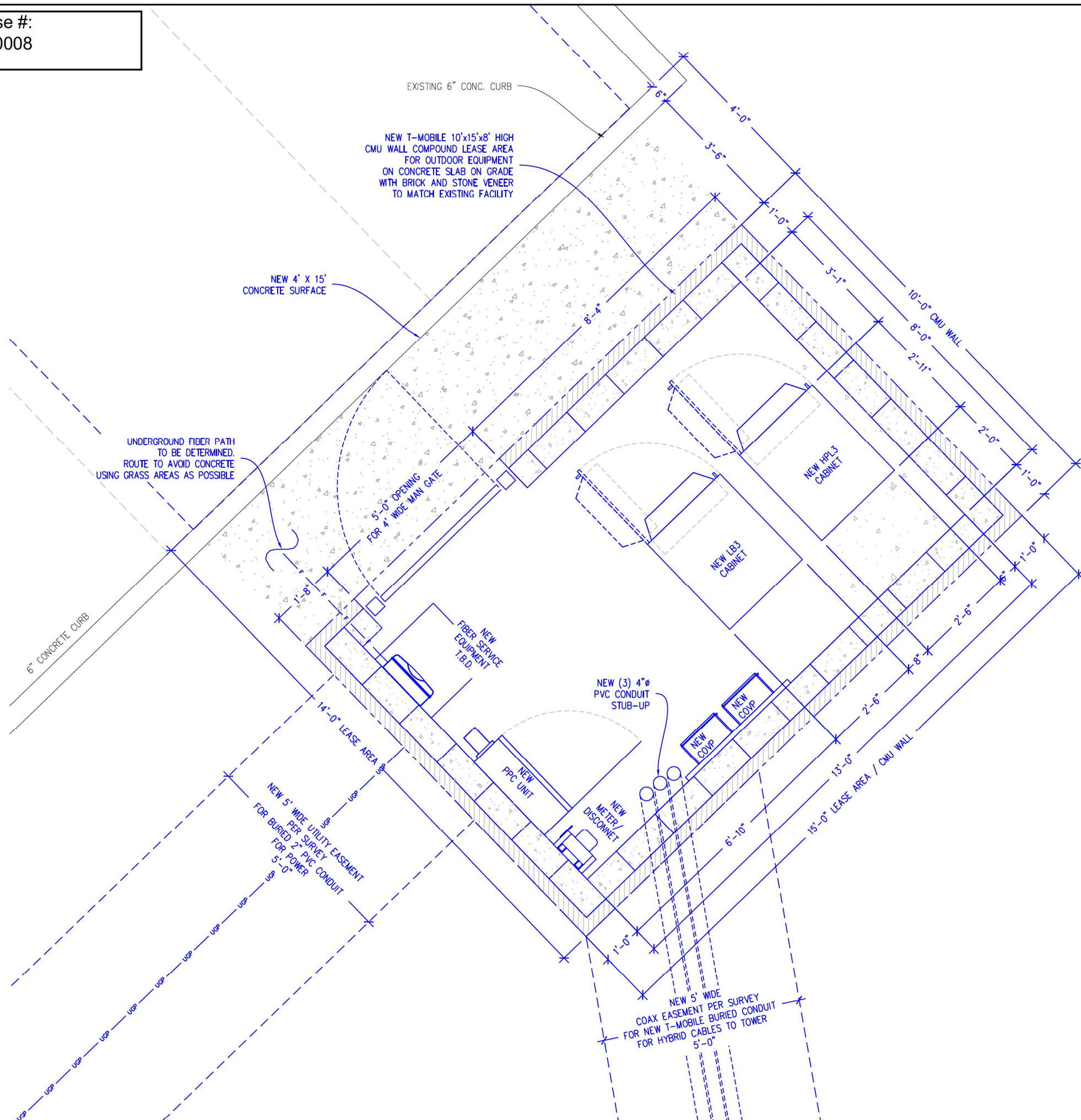
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INC ACGI# 22-4294 DATED 12/19/22.

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- WV – WATER VALVE
- FH – FIRE HYDRANT
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- ⊗ GM – GAS METER
- IRS – IRON ROD SET
- IRF – IRON ROD FOUND
- TBM BENCH MARK
- BUILDING LINES
- FENCE LINE
- GHP— POWER LINE

Zoning Case #:
ZONE-23-0008



1

EQUIPMENT COMPOUND PLAN

FOR 24" X 36" PLOT - $\frac{3}{4}" = 1'$ 0 6" 1' 2'
FOR 11" X 17" PLOT - $\frac{3}{8}" = 1'$



ACGI NO: 21-0860

DRAWN BY: DR/TS

CHECKED BY: SZ

REVISIONS			
NO	DATE	DESCRIPTION	BY
A	01/10/23	PRELIM CD	DR
O	01/24/23	FINAL CD	TS



DA03931D
PISD SPORT COMPLEX
(STADIUM AND NATATORIUM)

1240 W FRONTIER PKWY
PROSPER, TX 75078
COLLIN COUNTY

SHEET TITLE

EQUIPMENT
COMPOUND PLAN

SHEET NUMBER

C-2

NOTE:
MOUNT ANALYSIS IS BY OTHERS NO NEW EQUIPMENT TO BE
INSTALLED WITHOUT THE APPROVAL OF A STRUCTURAL
ENGINEER.

NOTE:
STRUCTURAL ANALYSIS IS BY OTHERS NO NEW EQUIPMENT
TO BE INSTALLED WITHOUT THE APPROVAL OF A
STRUCTURAL ENGINEER.

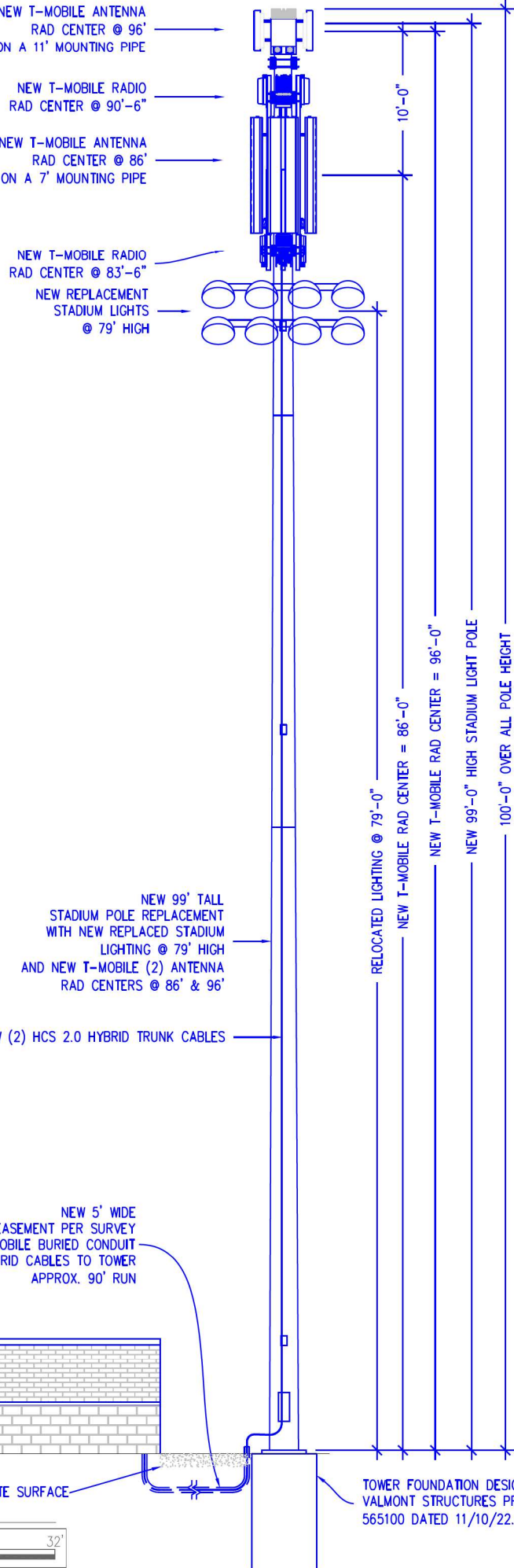
NOTE:
PROPOSED ANTENNA PLACEMENT LOCATION TO BE FIELD
VERIFIED BY GENERAL CONTRACTOR PRIOR TO CONSTRUCTION
TO AVOID ANY INTERFERENCE OR SHADOWING OF EXISTING
ANTENNAS. IF INTERFERENCE OR SHADOWING OF EXISTING
ANTENNAS IS DISCOVERED DURING FIELD VERIFICATION,
PLEASE CONTACT ALLPRO CONSULTING GROUP INC. FOR
DESIGN REVISION PRIOR TO ANY NEW ANTENNA
INSTALLATION.

NOTE:
CLIMBERS SHOULD NOT LATCH OR TIE THEIR SUPPORT
LANYARD OR GEAR ON TO ANTENNAS, RADIOS, ANTENNA
MOUNTS ETC WITHOUT PROPER EVALUATION. THEY SHOULD
ONLY TIE TO THEIR SUPPORT LANYARDS OR GEAR TO OR
ATTACH TO TOWER STRUCTURAL MEMBERS THAT HAVE
VISIBLE BOLTING AND CONNECTION TO THE LARGER
STRUCTURE.

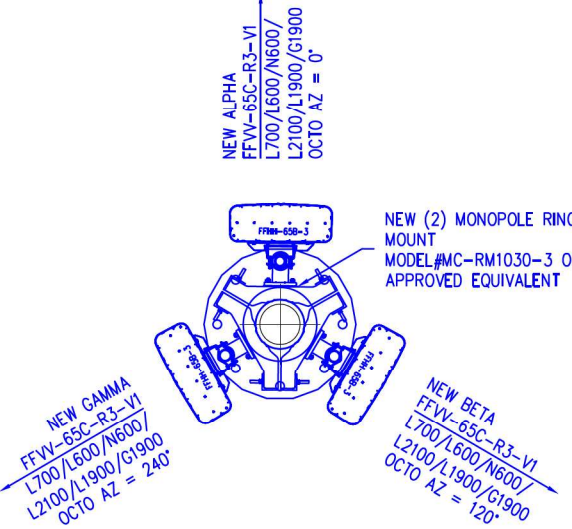
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GROUP, INC ACGI# 22-4294 DATED 12/19/22.

Zoning Case #:
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NOTE:
NEW STADIUM LIGHTS NOT SHOWN FOR CLARITY

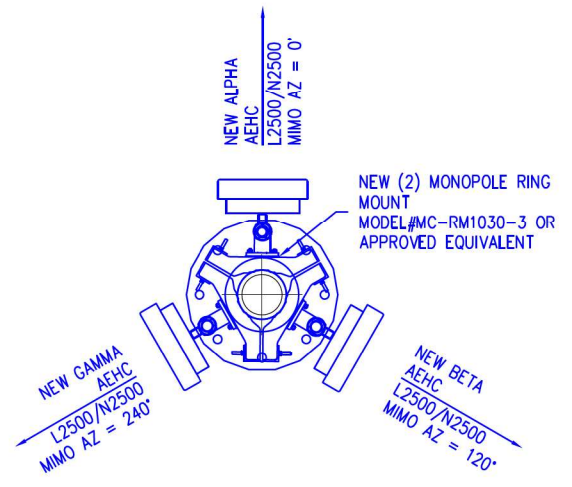


2 ANTENNA LAYOUT @ 86' RAD CENTER

FOR 24" X 36" PLOT - 1/2" = 1' 0 1' 2' 4'

FOR 11" X 17" PLOT - 1/4" = 1' 0 1' 2' 4'

NOTE:
NEW STADIUM LIGHTS NOT SHOWN FOR CLARITY

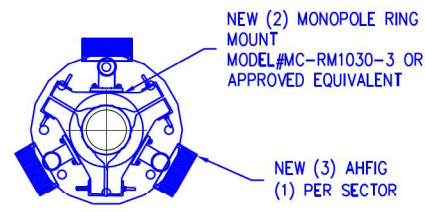


3 ANTENNA LAYOUT @ 96' RAD CENTER

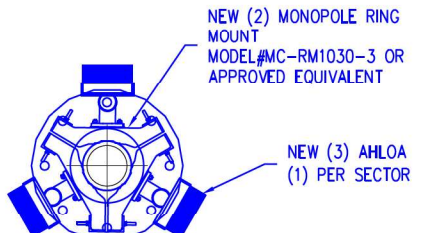
FOR 24" X 36" PLOT - 1/2" = 1' 0 1' 2' 4'

FOR 11" X 17" PLOT - 1/4" = 1' 0 1' 2' 4'

NOTE:
NEW STADIUM LIGHTS NOT SHOWN FOR CLARITY

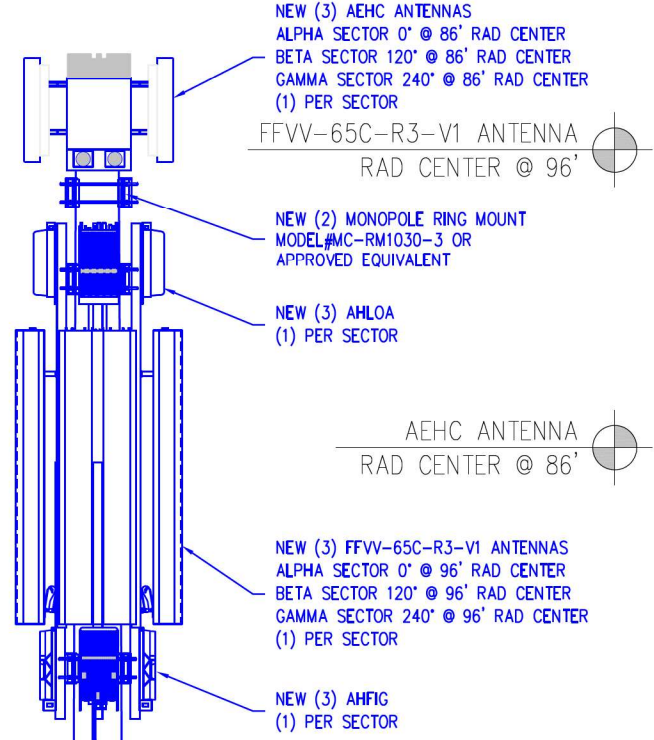


4 AHGIF RADIO LAYOUT



NOTE:
NEW STADIUM LIGHTS NOT SHOWN FOR CLARITY

5 AHLOA RADIO LAYOUT



6 ANTENNA MOUNTING DETAIL

FOR 24" X 36" PLOT - 1/2" = 1' 0 1' 2' 4'

FOR 11" X 17" PLOT - 1/4" = 1' 0 1' 2' 4'

T-Mobile

DUKE BRIDGES CAMPUS
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Network Real Estate LLC

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FIRM NO. F-8242

STATE OF TEXAS

SHIQIANG ZHANG

137482

LICENSED PROFESSIONAL ENGINEER

01/24/23

DA03931D

PISD SPORT COMPLEX
(STADIUM AND NATATORIUM)

1240 W FRONTIER PKWY
PROSPER, TX 75078
COLLIN COUNTY

SHEET TITLE

ELEVATION &
ANTENNA LAYOUT

SHEET NUMBER

C-3

Zoning Case #:
ZONE-23-0008

Section 1 - Site Information				
Site ID: DA03931D Status: Final Version: 1 Project Type: Market Infill Approved: 01/18/2023 12:23:28 PM Approved By: MILIND.GANDHI6@T-MOBILE.COM Last Modified: 01/18/2023 12:23:28 PM Last Modified By: MILIND.GANDHI6@T-MOBILE.COM		Site Name: DA03931D Site Class: Light Pole Site Type: Structure Non Building Plan Year: 2021 Market: DALLAS TX Vendor: Nokia Landlord: City of Prosper		Latitude: 33.25853629 Longitude: -96.903366 Address: City, State: <undefined>, TX Region: SOUTH
RAN Template: 56790EAH_SR_T		AL Template: 56790EAH_SR_T		
Sector Count: 3	Antenna Count: 6	Coax Line Count: 0	TMA Count: 0	RRU Count: 6
Proposed RAN Equipment				
Template: 56790EAH_SR_T				
Enclosure	1	2	3	4
Enclosure Type	Tower Top Mount (Nokia)	Purcell HPLS 600A Site Support Cabinet	Ancillary Equipment (Nokia)	Purcell LB3 Battery Cabinet (4 strings)
Radio	AHFII (x3) N1900 N2100 (DARK) L1900 L2100	AHLOA (x3) N600 L800 L700		
Baseband		ASIA L600 L700 L1900 L2100	ASIL N600 N1900 N2100 (DARK)	ASIL N2500
Baseband Submodule		ABIA (x2) L1900 L2100	ABIA L800 L700	ABIL N600 ABIL (x2) N1900 N2100 (DARK) ABIO N2500
Power subsystem				Batteries "Select size" Breakers "Select size" Rectifier Shelf "Select size"
Transport System		CSR IXRe V2 (Gen2)		
Hybrid Cable System	Nokia HCS 2.0 Jumper Cable Aircable "Select Length" (x9)	Extra Amplifier Module for Raycap PowerPlus Voltage Booster Raycap PowerPlus S2 Voltage Booster w/ 2 Modules (Only compatible with HCS 1.0/2.0)	Nokia HCS 2.0 Trunk "Select Length" (x2)	
Junction Box			Nokia HCS 2.0 Tower Junction Box (x2)	
RAN Scope of Work:				
1/18/2023: RFDS updated with 86 RAD for Octo Antenna and 96 RAD for AEHC Antenna, approved by RF and to match with CD.				
11/23/2022: RFDS updated with Purcell Cabinets and Raycap voltage booster.				
10/9/2022: RFDS updated to swap ASIB to ASIA.				
09/08/2022: RFDS updated to PH2Y config.				
8/19/2022: RFDS updated with the latest Voltage Booster Module (Delta Booster)				
1/25//2021 Market Infill POR				
Equipment on top: (3) FFVV-65C- R3-V1+ (3) AEHC (3) AHFIG + (3) AHLOA (2) HCS 2.0 trunk (9) HCS 2.0 jumpers Note: (3) AHFIG + (3) AHLOA will connect to 1st HCS 2.0, which will need a Voltage booster. (3) AEHC will connect to 2nd HCS 2.0				
TX/RX frequencies: Block - 600 Downlink (MHz) Uplink (MHz) 617-627 663-673 Block - 700 Downlink (MHz) Uplink (MHz) 729-734 699-704 Block - PCS Downlink (MHz) Uplink (MHz) 1945-1965 1865-1885 Block - AWS Downlink (MHz) Uplink (MHz) 2110-2115, 2135-2155 1710-1715, 1735-1755 Anchor Downlink (MHz) Uplink (MHz) 2496 - 2690 2496 - 2690				

Sector 1 (Proposed) view from front (Note: the images show view from behind)					
Coverage Type	A - Outdoor Macro				
Antenna	1		2		
Antenna Model	Commscope - FFVV-65C-R3-V1 (Octo)		AEHC (Active Antenna - Massive MIMO)		
Azimuth	0		0		
M. Tilt	0		0		
Height (ft)	96		96		
Ports	P1	P2	P3	P4	P5
Active Tech	L700 L600 N600	L700 L600 N600	L2100 L1900 N1900	L2100 L1900 N1900	N2500
Dark Tech			N2100	N2100	
Sector 2 (Proposed) view from front (Note: the images show view from behind)					
Coverage Type	A - Outdoor Macro				
Antenna	1		2		
Antenna Model	Commscope - FFVV-65C-R3-V1 (Octo)		AEHC (Active Antenna - Massive MIMO)		
Azimuth	120		120		
M. Tilt	0		0		
Height (ft)	96		96		
Ports	P1	P2	P3	P4	P5
Active Tech	L700 L600 N600	L700 L600 N600	L2100 L1900 N1900	L2100 L1900 N1900	N2500
Dark Tech			N2100	N2100	
Sector 3 (Proposed) view from front (Note: the images show view from behind)					
Coverage Type	A - Outdoor Macro				
Antenna	1		2		
Antenna Model	Commscope - FFVV-65C-R3-V1 (Octo)		AEHC (Active Antenna - Massive MIMO)		
Azimuth	240		240		
M. Tilt	0		0		
Height (ft)	96		96		
Ports	P1	P2	P3	P4	P5
Active Tech	L700 L600 N600	L700 L600 N600	L2100 L1900 N1900	L2100 L1900 N1900	N2500
Dark Tech			N2100	N2100	

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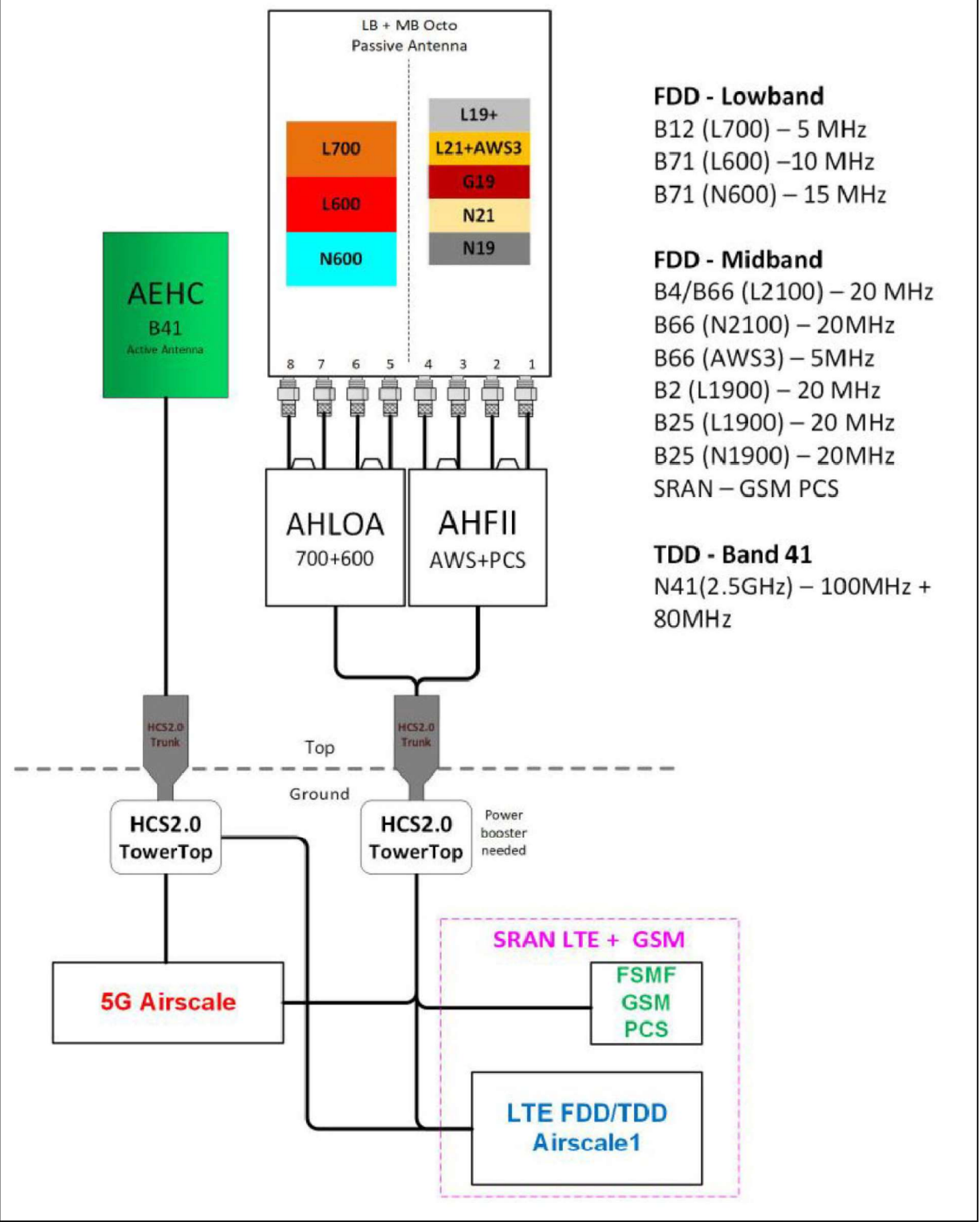
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COLLIN COUNTY

SHEET TITLE
RFDS

SHEET NUMBER
C-4

Configuration 56790EAH_SR_T

* For 5G and LTE Airtel BB dimensioning refer to Fiber Port matrices.
(Alpha, Beta & Gamma)



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SHEET TITLE
RFDS
PLUMBING DIAGRAM

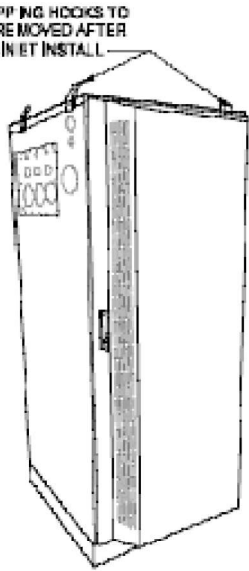
SHEET NUMBER
C-5

MANUFACTURER: DELTA
MODEL: HPL3 SITE SUPPORT
CABINET
WEIGHT: 551 LBS (WITHOUT
EQUIPMENT)
DIMENSIONS: 30.0"x35.0"x72.0"

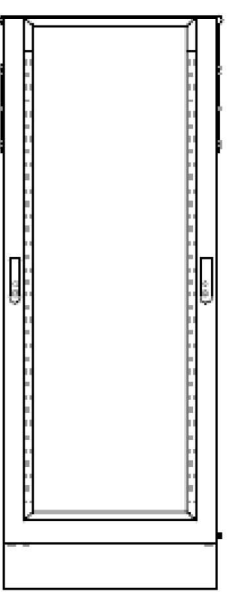
NOTE:
• CORRECT KNOCKOUT TOOL REQUIRED
FOR PUNCHING KNOCKOUTS. DO NOT
DRILL KNOCKOUTS THROUGH
• CONDUIT MUST BE PROPERLY SECURED
TO PREVENT DAMAGE TO CABINETS
AND/OR CABLING

RACK ASSIGNMENT		
RU SLOT	DESCRIPTION	DESCRIPTION
27		CSR - SARI3AS
26		
25		
24	AIRSCALE	
23		
22	FIBER MUX	
21		
20	AIRSCALE	
19		
18	FIBER MUX	
17		
16	AIRSCALE	
15		
14	FIBER MUX	
13		
12	AIRSCALE	
11		
10	FIBER MUX	
9		
8	LEGACY BASEBAND	
7		
6	LEGACY BASEBAND	
5		
4	LEGACY BASEBAND	
3		
2	LEGACY BASEBAND	
1		

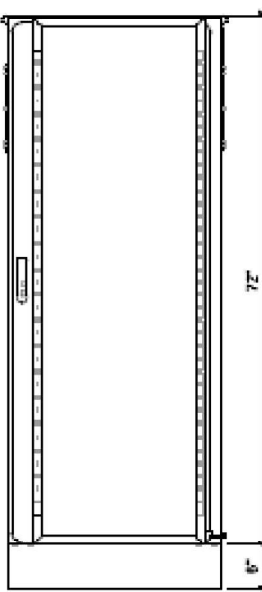
SHIPPING HOOKS TO
BE REMOVED AFTER
CABINET INSTALL



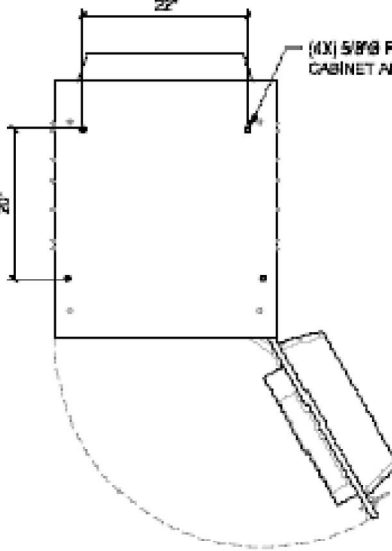
ISO VIEW N.T.S.



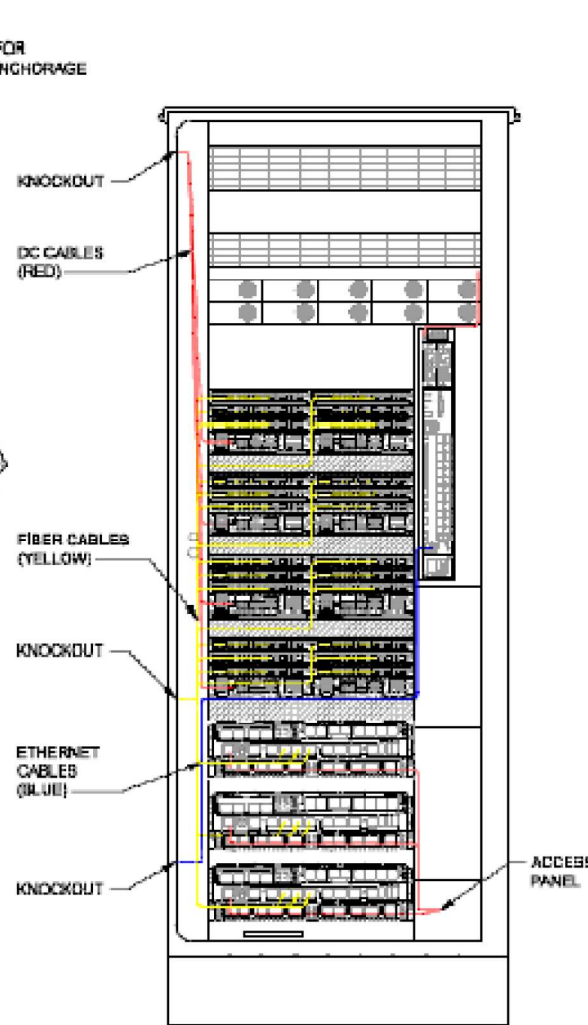
REAR VIEW



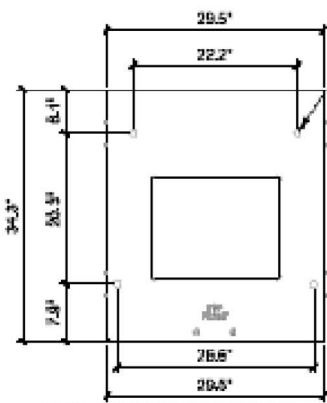
FRONT VIEW



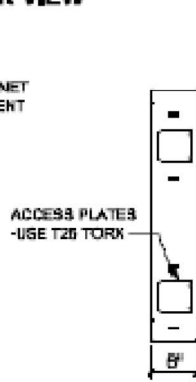
PLAN VIEW



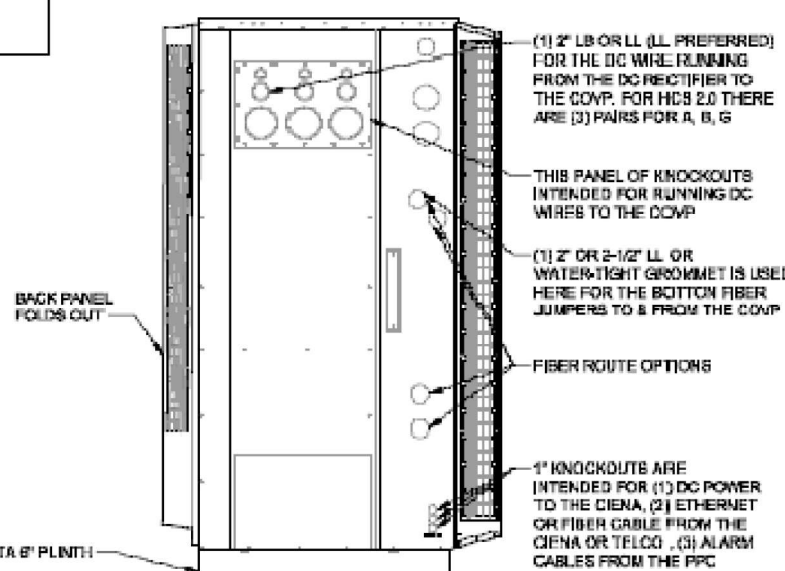
INTERNAL ROUTING



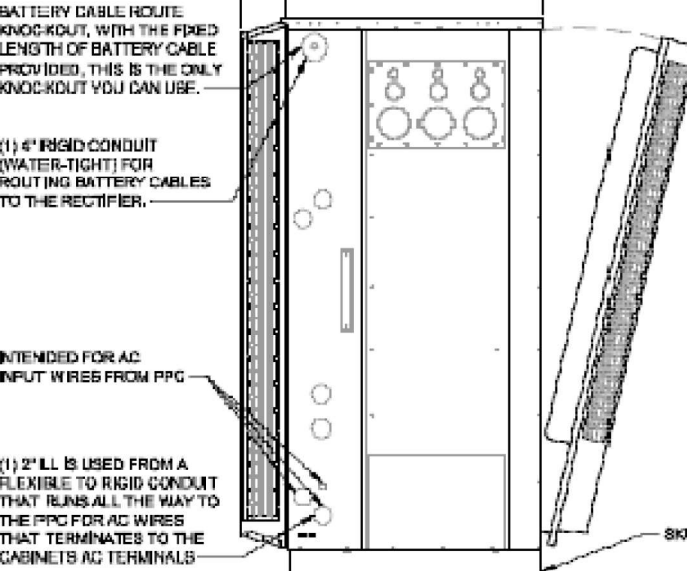
SKU# 33554 DELTA 6in PLINTH
PLAN VIEW



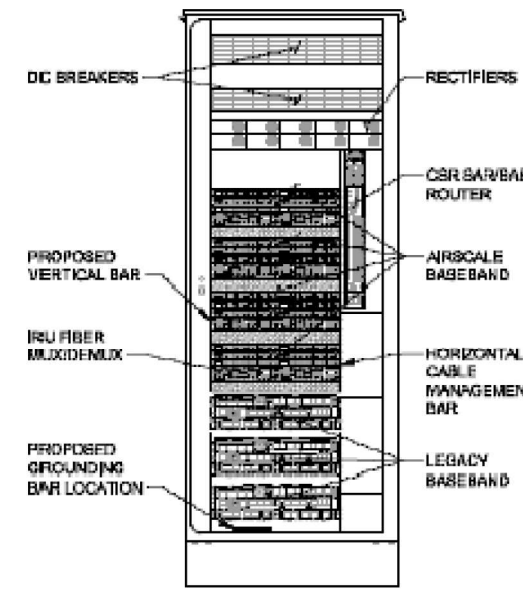
SKU# 33554 DELTA 6in PLINTH
SIDE VIEW



LEFT VIEW



RIGHT VIEW



FRONT VIEW
(OPEN)

SKU# 33929 - DELTA HPL3 SITE SUPPORT CABINET

1

22"x34" SCALE: N.T.S. 11"x17" SCALE: N.T.S.

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PISD SPORT COMPLEX
(STADIUM AND NATATORIUM)

1240 W FRONTIER PKWY
PROSPER, TX 75078
COLLIN COUNTY

SHEET TITLE
EQUIPMENT
SPEC SHEET

SHEET NUMBER
C-6

MANUFACTURER: DELTA

MODEL: LB3 BATTERY SUPPORT CABINET

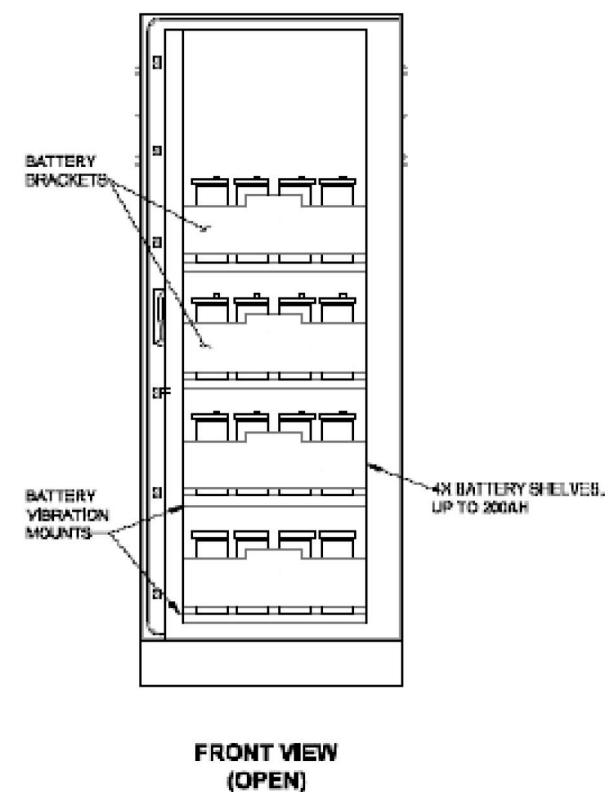
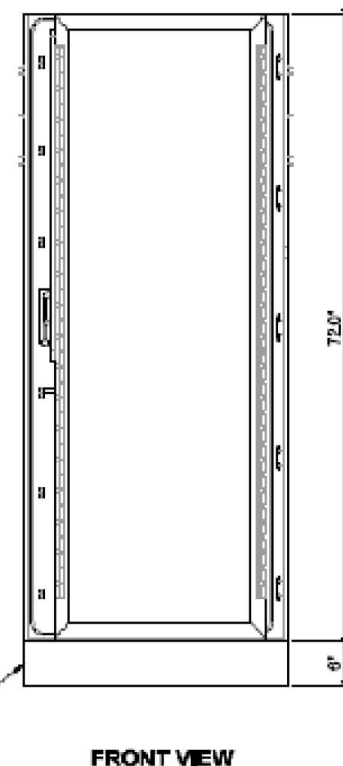
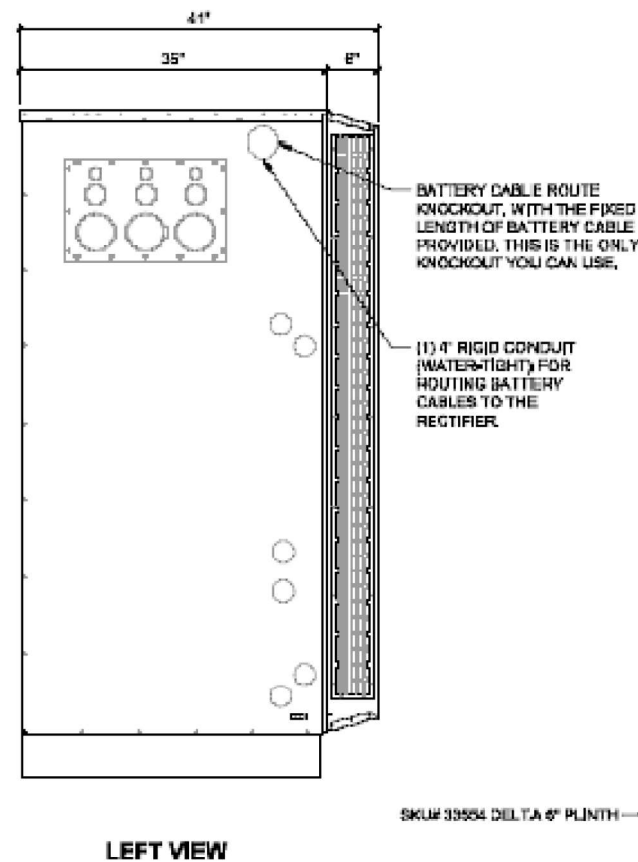
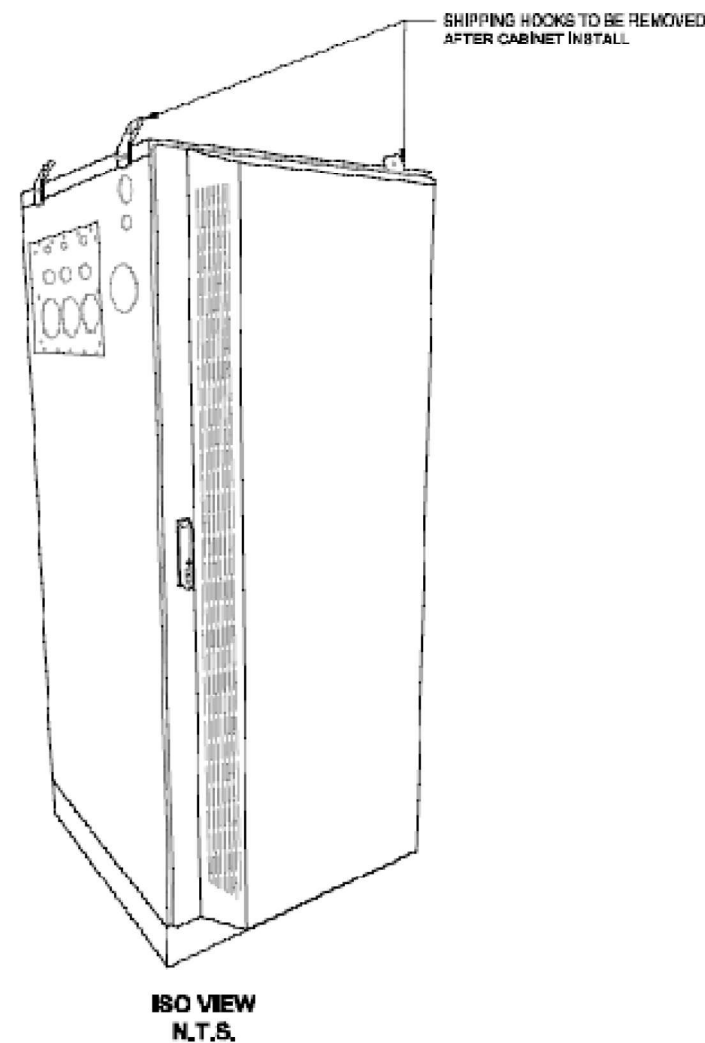
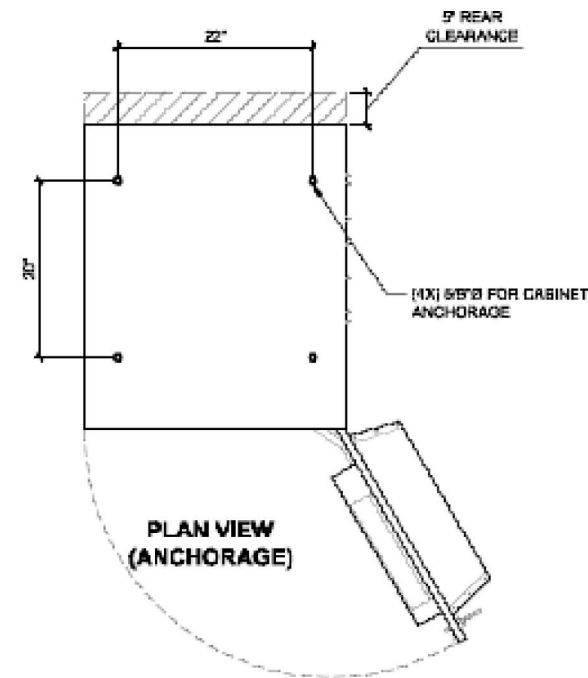
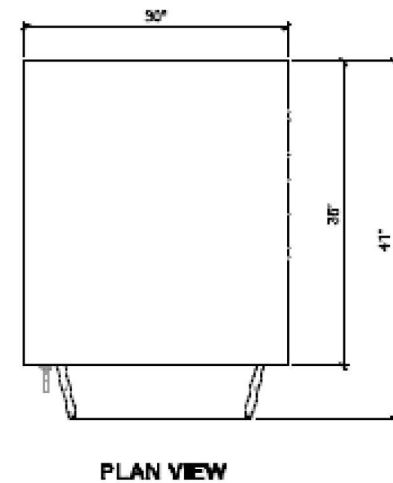
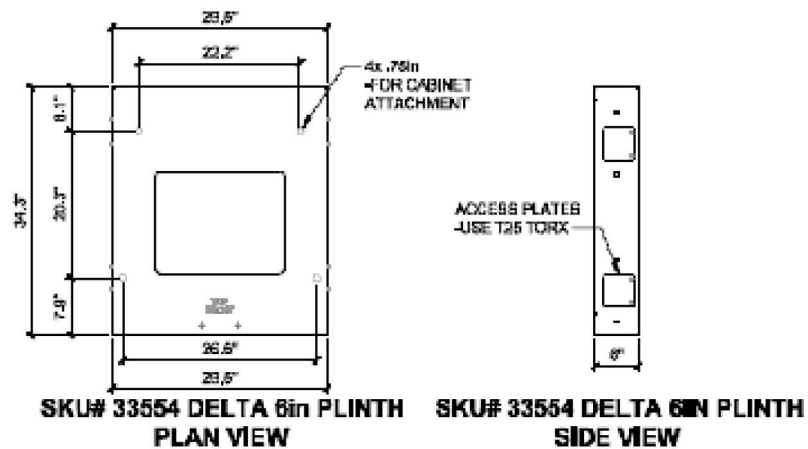
WEIGHT: 509 LBS (WITHOUT EQUIPMENT)

DIMENSIONS: 30.0"x35.0"x72.0"

NOTE:

CORRECT KNOCKOUT TOOL REQUIRED FOR PUNCHING KNOCKOUTS. DO NOT DRILL KNOCKOUTS THROUGH

CONDUIT MUST BE PROPERLY SECURED TO PREVENT DAMAGE TO CABINETS AND/OR CABLING



SKU# 33932 - DELTA LB3 BATTERY SUPPORT CABINET

22"x34" SCALE: N.T.S. 11"x11" SCALE: N.T.S.

1

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1240 W FRONTIER PKWY
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COLLIN COUNTY

SHEET TITLE

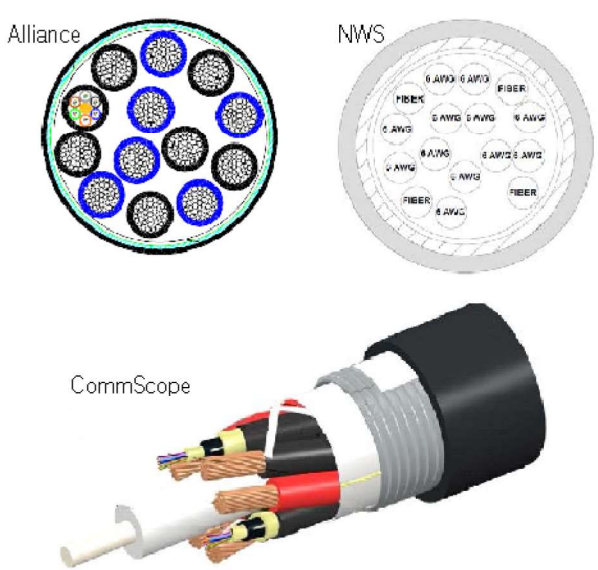
EQUIPMENT
SPEC SHEET

SHEET NUMBER

C-7

Trunk Cable General Specifications (6AWG) >250'

Characteristics	Alliance	CommScope	NWS
Outer Diam.	1.46"	1.55"	1.48"
Weight	1.61 lb/ft	1.71 lb/ft	1.61 lb/ft
Min. Bend Rad	14.6"	18.6"	21.5"
DC Conductors	12 x 6AWG	12 x 6AWG	12 x 6AWG
Armor	Corrugated Cu	Corrugated Al	Cu tape, PVC
Conductor Termination	None	None	None
Single Mode Fibers	48	48	48
Fiber Termination	LC pair	LC pair	LC pair



Characteristics	Alliance	CommScope	NWS
Dimensions, in.	9.3x14.9x5.8	6.7x16.9x4.7	10.2x16.0x3.2
Weight	1.61 lb/ft	0.970 lb/ft	1.61 lb/ft
Port Interface	Senko U	Senko U	Senko U
Hybrid Ports	12	12	12
Conductor Termination	None	None	None
Single Mode Fibers	48	48	48
Fiber Termination	LC pair	LC pair	LC pair
Max RRU	12	12	12

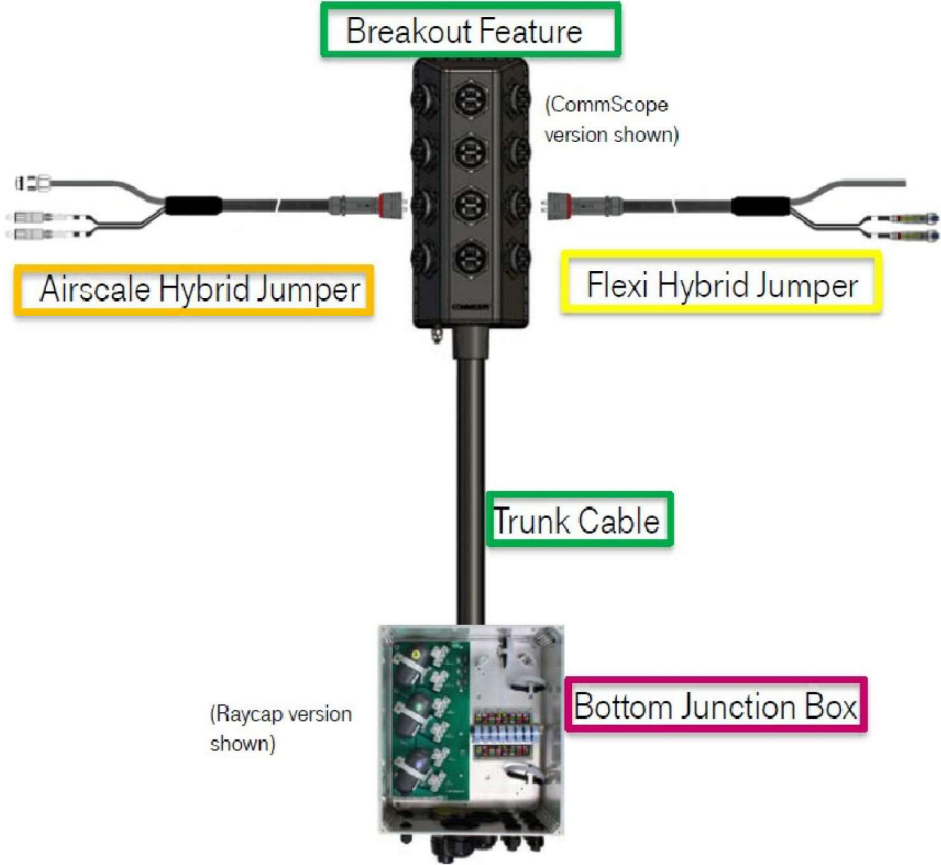


Note: Permanently attached to trunk cable, not field removable

Slide / 13

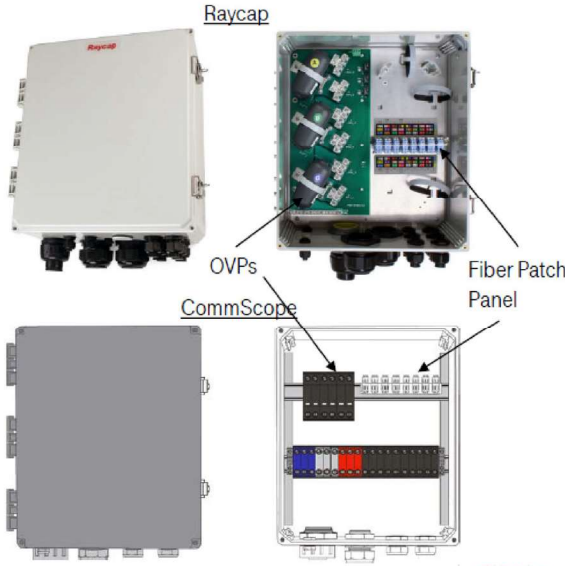
T-Mobile Internal

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Bottom Junction Box General Specifications

Characteristics	CommScope	Raycap
Dimensions	14"x16"x8"	14"x16"x8"
Weight	23.5 lb	21.9 lb
OVP, IEC 61643-1	24"	Class I SPD (3)
UL Rating		1449, 4 th Ed.
OVP Monitoring	Dry contact	Dry contact
Fiber Patch Panel	24 LC pairs	24 LC pairs
Environmental Rating	IP67	IP66
Operating Temperature	-40 °C to +75 °C	-40 °C to +80 °C



Slide / 16

T-Mobile Internal

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SHEET TITLE
**EQUIPMENT
SPEC SHEET**

SHEET NUMBER
C-8

AirScale Dual RRH 4T4R B12/71 240W AHLOA

AHLOA

AirScale Dual RRH
4T4R B12/71 240W

32.6l

38kg



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Product Code: 474331A	
Supported Frequency bands	3GPP Band 12/71
Frequencies	Band 12 adjusted: UL 698 – 716 MHz, DL 728 – 746 MHz Band 71: UL 663 MHz – 698 MHz, DL 617 MHz – 652 MHz
Number of TX/RX paths/pipes	4 pipes; 2T2R, 2T4R, 4T4R for both bands
Instantaneous Bandwidth IBW	17 MHz for B12 and 35MHz for B71 1 MHz below B12 NB IoT future use
Occupied Bandwidth OBW	UL 53MHz contiguous DL B12 17MHz + 1 MHz NB IoT future use, B71 35MHz
Output Power	60W per TX shared between bands
Supply Voltage / Range	DC -48 V / -36 V to -60 V
Typical Power Consumption	640W [ETSI Busy Hour Load at 4TX@60W] 450W [ETSI Busy Hour Load at 4TX@20W]
Antenna Ports	4 ports, 4:3-10+
Optical Ports	2 x eCPRI 9.8 Gbps
ALD Control Interfaces	AISG3.0 and RET (DC on ANT1 & ANT3)
Other Interfaces	External Alarm MDR-26 (4 inputs, 1 Output) DC Circular Power Connector
Physical	560 mm x 308 mm x 189 mm Approximately 38kg with no covers or brackets
Operating Temperature Range	-40°C to 55°C (with no solar load)
Surge Protection	Class II 5A
Installation Options	Pole, Wall, Rack Mount

NOKIA

DRAFT

FFVV-65C-R3-V1



8-port sector antenna, 4x 617-894 and 4x 1695–2690 MHz, 65° HPBW, 3x RET

General Specifications

Antenna Type	Sector
Band	Multiband
Color	Light gray
Effective Projective Area (EPA), frontal	0.99 m² 10.656 ft²
Effective Projective Area (EPA), lateral	0.33 m² 3.552 ft²
Grounding Type	RF connector inner conductor and body grounded to reflector and mounting bracket
Performance Note	Outdoor usage
Radome Material	Fiberglass, UV resistant
Radiator Material	Low loss circuit board
Reflector Material	Aluminum
RF Connector Interface	4:3-10 Female
RF Connector Location	Bottom
RF Connector Quantity, high band	4
RF Connector Quantity, low band	4
RF Connector Quantity, total	8

Remote Electrical Tilt (RET) Information, General

RET Interface	8-pin DIN Female 8-pin DIN Male
RET Interface, quantity	1 female 1 male

Dimensions

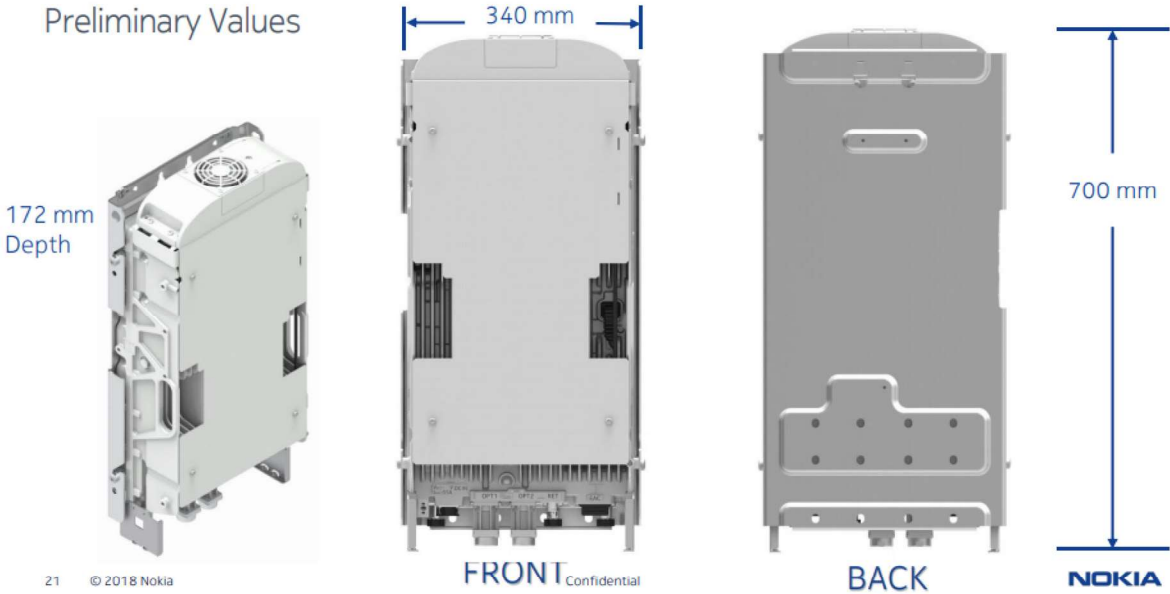
Width	640 mm 25.197 in
Depth	235 mm 9.252 in

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Page 1 of 5

Full Dimensions of AHFIG
Preliminary Values

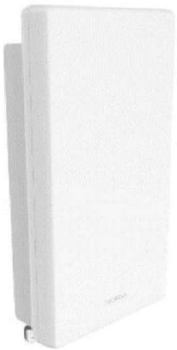


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AEHC AirScale MAA 64T64R 192AE n41 240W

Preliminary Technical datasheet

Specification	3GPP/FCC compliant, TDD
Frequency range	2496 - 2690 MHz
Max. supported modulation	256 QAM
Number of TX/RX paths	64T / 64R
MIMO streams	16
Instantaneous bandwidth IBW	194 MHz
Occupied bandwidth OBW	194 MHz
Total average EIRP	79.3 dBm
Max. output power per TRX	3.75 W / TRX (240 W total)
Antenna configuration	12 rows, 8 columns, 2 (±45° X-polarized)
Max. Antenna gain	25.5dBi
Horizontal beamwidth	15° (boresight)
Vertical beamwidth	6° (boresight)
Horizontal coverage angle	±45° (3 dB), ±60° (5 dB)
Vertical steering angle	±6°
Dimensions	TBD: 900 mm (H) x 580 mm (W) x 210 mm (D)
Volume / Windward area	TBD: ~110 L / ~0.6m²
Weight	<45kg (without mounting brackets)
Supply voltage / Connector type	DC -40.5 V ... -57 V / 2 pole connector
Power consumption	900 W typical (75% DL duty cycle, 30% RF load) 1300 W max (75% DL duty cycle, 100% RF load)



Optical ports	4 x SFP28, 10/25GE eCPRI (with R2CT)
Other interfaces / Connector type	Control AISG RF monitor port / SMA Female External Alarms / MDR26 status LED
Operational temperature range	-40 °C ... +55 °C
Cooling	Natural convection cooling
Ingress protection class	IP65
Installation options	Pole / Wall, ± 5° vertical adjustment
Surge protection	Class II 20 kA

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1240 W FRONTIER PKWY
PROSPER, TX 75078
COLLIN COUNTY

SHEET TITLE
EQUIPMENT
SPEC SHEET

SHEET NUMBER
C-9

System Weight

Before you start, ensure that the mounting surface is capable of supporting the weight of the system. The weight of the various components of the 3931 is described in 39XX/51XX *Product Fundamentals*. [Table 2-1](#) summarizes the weight of the mounting kits.

Table 2-1
Mounting System Weight Summary

Component	Weight (lbs)	Weight (kg)
H-Frame Mounting Kit	3.90	1.77
Pole Mount Kit	9.77	4.43
3931 (with all internal components)	28.5	12.96

Chassis Size

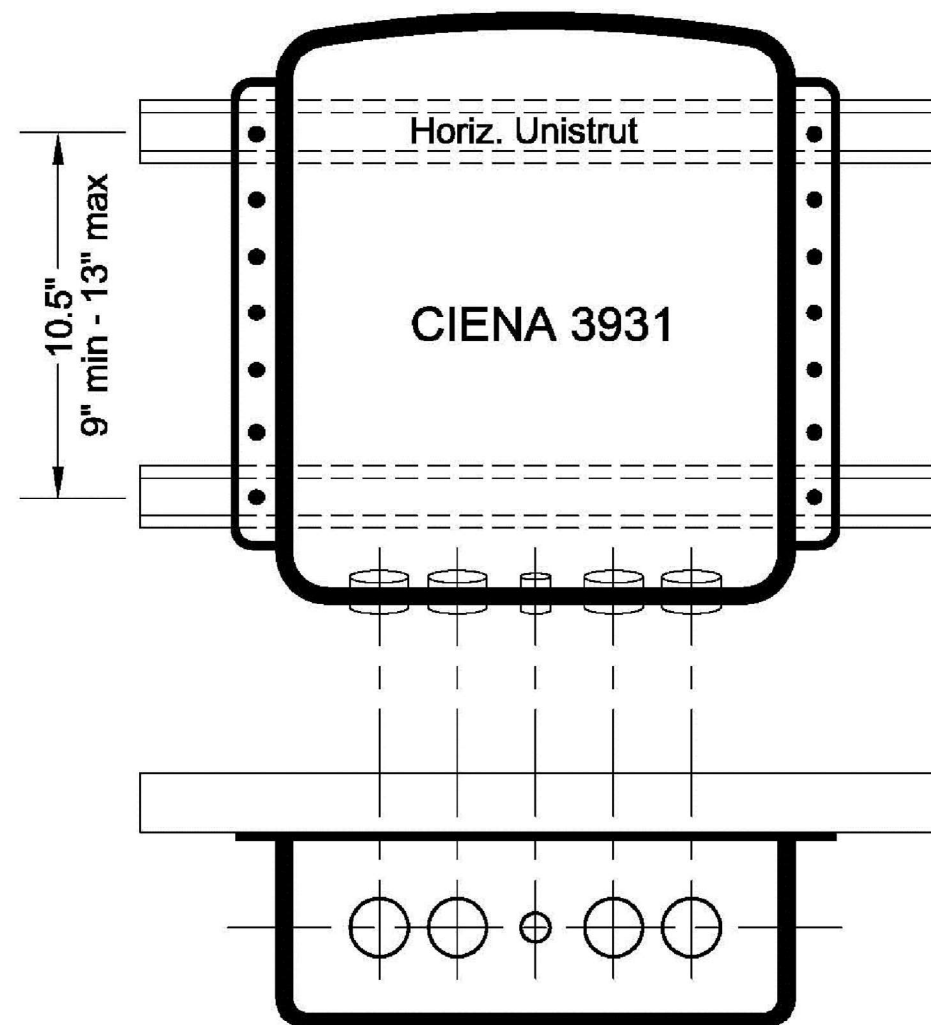
The size of the 3931 enclosure and attached mounting bracket are summarized in [Table 2-2](#).

Table 2-2
3931 Dimension Summary

Dimension	Size (inches)	Size (cm)
Width	16.8	42.67
Height	17	43.18
Depth	7	17.78
Door clearance	17.5	44.45
Note: The chassis should be mounted a minimum of 2 feet 6 inches (76.2 cm) above grade.		

Mounting Height Requirement

The unit should be installed so that the bottom of the 3931 is at least 2 feet 6 inches (76.2 cm) above grade.



Note: If horizontal Unistrut distance exceeds 13", the Ciena 3931 may be mounted on an H-Frame.

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A	01/10/23	PRELIM CD	DR	
O	01/24/23	FINAL CD	TS	

ALLPRO
CONSULTING GROUP, INC.
9221 LYNDON B JOHNSON FWY
SUITE 204, DALLAS, TX 75243
PHONE: 972-231-8893
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FIRM NO. F-8242

STATE OF TEXAS
SHIQIANG ZHANG
137482
LICENSED
PROFESSIONAL ENGINEER
01/24/23

DA03931D
PISD SPORT COMPLEX
(STADIUM AND NATATORIUM)
1240 W FRONTIER PKWY
PROSPER, TX 75078
COLLIN COUNTY

SHEET TITLE
**EQUIPMENT
SPEC SHEET**

SHEET NUMBER
C-10

MC-RM1030-3



Universal Ring Mount, 10 in to 30 in OD

Product Classification

Product Type Universal ring mount

General Specifications

Mounting Monopole, 254–762 mm (10–30 in) OD
Pipe, quantity 0
Sectors, quantity 3

Dimensions

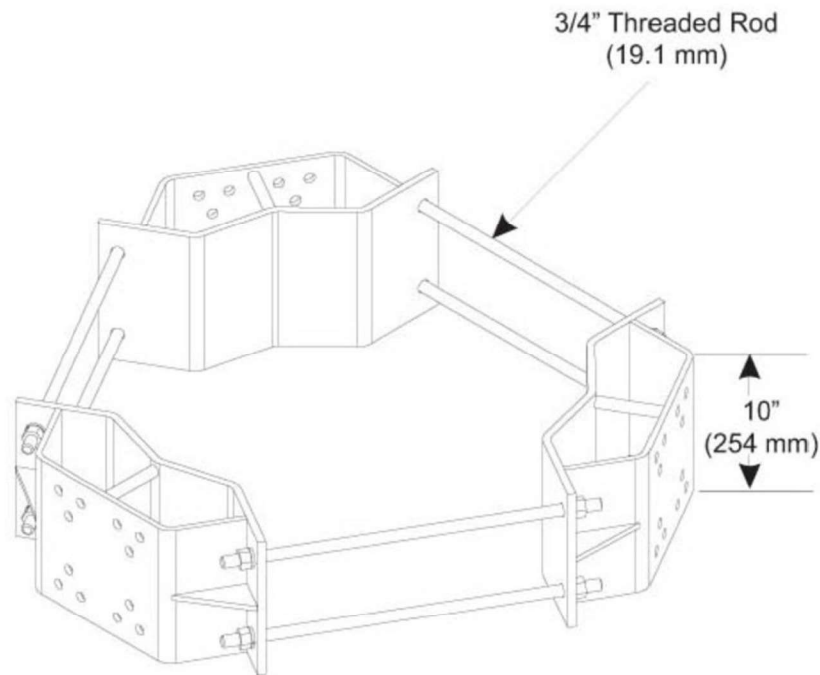
Height 254 mm | 10 in
Length 152.4 mm | 6 in
Mounting Diameter, maximum 762 mm | 30 in
Mounting Diameter, minimum 254 mm | 10 in
Pipe Outer Diameter 0 mm | 0 in
Mounting Circumference, maximum 2,392.68 mm | 94.2 in
Mounting Circumference, minimum 797.56 mm | 31.4 in

NOTE:
FOR REFERENCE ONLY

NOTE:
MOUNT ANALYSIS IS BY OTHERS NO NEW EQUIPMENT TO BE
INSTALLED WITHOUT THE APPROVAL OF A STRUCTURAL
ENGINEER.

MC-RM1030-3

Outline Drawing



Material Specifications

Material Type Hot dip galvanized steel

Mechanical Specifications

Wind Rating 140 mph (BWS) at 150 ft AGL | 160 mph (3-second gust) at 150 ft AGL using Exposure D per FBC
Wind Rating Criteria Four 72 in x 8 in panel antennas per sector
Wind Rating Test Method TIA/EIA-222

Packaging and Weights

Included Mount | Threaded rod
Packaging quantity 1
Weight, net 86.319 kg | 190.3 lb

T-Mobile
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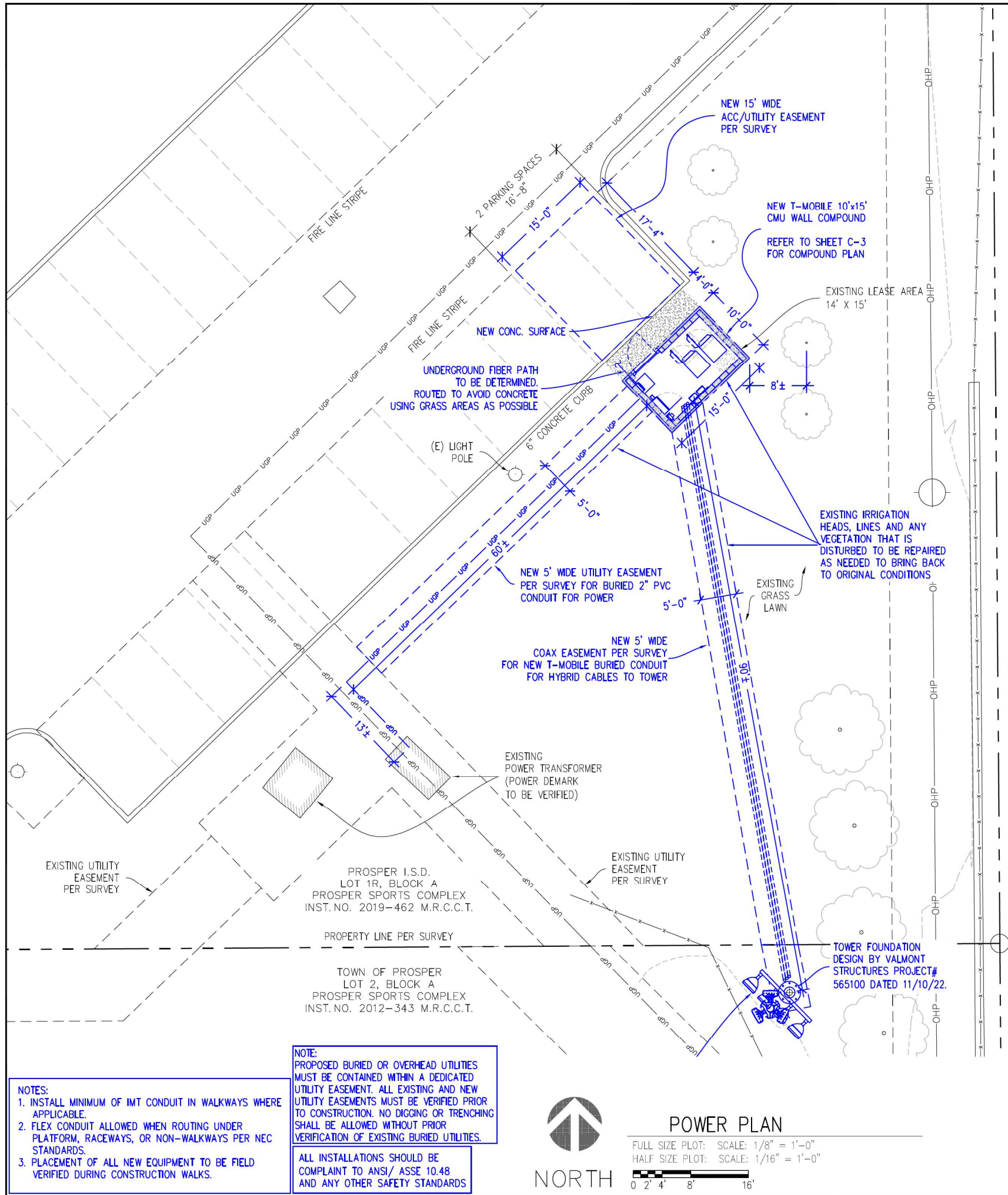
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DA03931D
PISD SPORT COMPLEX
(STADIUM AND NATATORIUM)

1240 W FRONTIER PKWY
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COLLIN COUNTY

SHEET TITLE
**ANTENNA MOUNT
SPECIFICATION**

SHEET NUMBER
C-11



ELECTRICAL NOTES

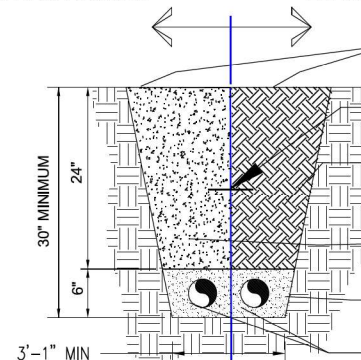
- ALL WORK IS TO COMPLY WITH THE LATEST EDITION OF THE NATIONAL ELECTRIC CODE (N.E.C.) AND ANY LOCAL ORDINANCES, CODES, AND ALL OTHER ADMINISTRATIVE AUTHORITIES HAVING JURISDICTION. THE CONTRACTOR SHALL FURNISH AND PAY FOR ALL PERMITS AND RELATED FEES.
- ALL EQUIPMENT AND MATERIAL FURNISHED AND INSTALLED UNDER THIS CONTRACT SHALL BE UNDERWRITERS LABORATORIES (U.L.) LISTED, NEW, FREE FROM DEFECTS, AND SHALL BE GUARANTEED FOR A PERIOD OF ONE YEAR FROM DATE OF FINAL ACCEPTANCE BY OWNER OR HIS REPRESENTATIVE. SHOULD ANY TROUBLE DEVELOP DURING THIS PERIOD DUE TO FAULTY WORKMANSHIP, MATERIAL OR EQUIPMENT, THE CONTRACTOR SHALL FURNISH ALL NECESSARY MATERIALS AND LABOR TO CORRECT THE TROUBLE WITHOUT COST TO THE OWNER
- ALL WORK SHALL BE EXECUTED IN A WORKMAN LIKE MANNER AND SHALL PRESENT A NEAT MECHANICAL APPEARANCE WHEN COMPLETED. CONTRACTOR SHOULD AVOID DAMAGE TO EXISTING UTILITIES WHEREVER POSSIBLE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CUTTING AND PATCHING RELATED TO ELECTRICAL WORK, AND SHALL RESTORE ALL EXISTING LANDSCAPING, SPRINKLER SYSTEMS, CONDUITS, WIRING, PIPING, ETC. DAMAGED BY THE ELECTRICAL WORK TO MATCH EXISTING CONDITIONS.
- ELECTRICAL WORK SHALL INCLUDE, BUT NOT BE LIMITED TO, ALL LABOR, MATERIALS AND EQUIPMENT REQUIRED TO COMPLETE ELECTRICAL POWER AND LIGHTING SYSTEMS, TELEPHONE AND COMMUNICATION SYSTEMS, PANEL BOARDS, CONDUIT, CONTROL WIRING, GROUNDING, ETC. AS INDICATED ON ELECTRICAL DRAWINGS AND/OR AS REQUIRED BY GOVERNING CODES.
- PRIOR TO INSTALLING ANY ELECTRICAL WORK, THE CONTRACTOR SHALL VISIT THE JOB SITE AND VERIFY EXISTING SITE LOCATIONS AND CONDITIONS AND UTILITY SERVICE REQUIREMENTS OF THE JOB, AND BY REFERENCE TO ENGINEERING AND EQUIPMENT SUPPLIERS DRAWINGS. SHOULD THERE BE ANY QUESTION OR PROBLEM CONCERNING THE NECESSARY PROVISIONS TO BE MADE, PROPER DIRECTIONS SHALL BE OBTAINED BEFORE PROCEEDING WITH ANY WORK.
- PROVIDE POWER AND TELEPHONE TO SERVICE POINTS PER UTILITY COMPANY REQUIREMENTS. CONTRACTOR SHALL CONTACT UTILITY SERVICE PLANNERS AND OBTAIN ALL SERVICE REQUIREMENTS AND INCLUDE COSTS FOR SUCH IN THEIR BID.
- SERVICE EQUIPMENT SHALL HAVE A SHORT CIRCUIT WITHSTAND RATING EQUAL TO OR EXCEEDING THE MAXIMUM AVAILABLE FAULT CURRENT AT THE SUPPLY TERMINAL ON THE UTILITY TRANSFORMER SECONDARY, THE INSULATION SHALL BE FREE FROM ANY SHORT CIRCUITS AND GROUNDS.
- ALL WIRES SHALL BE STRANDED COPPER WITH THHN/THWN AND 600 VOLTS INSULATION. ALL GROUND CONDUCTORS TO BE PROPERLY SIZED COPPER. (STRANDED OR SOLID).
- IN THE EVENT OF ANY CONFLICT OR INCONSISTENCY BETWEEN ITEMS SHOWN ON THE PLANS AND/OR SPECIFICATIONS, THE NOTE, SPECIFICATION OR CODE WHICH PRESCRIBES AND ESTABLISHES THE HIGHEST STANDARD OF PERFORMANCE SHALL PREVAIL.
- SERVICE CONDUITS SHALL HAVE NO MORE THAN (2) -90° BENDS IN ANY SINGLE RUN. THE CONTRACTOR SHALL PROVIDE PULL BOXES AS NEEDED WHERE CONDUIT REQUIREMENTS EXCEED THESE CONDITIONS. PULL WIRES AND CAPS SHALL BE PROVIDED AT ALL SPARE CONDUITS FOR FUTURE USE.
- ALL ELECTRICAL EQUIPMENT SHALL BE ANCHORED TO WITHSTAND 100 M.P.H. WIND SPEED AND DESIGNED FOR OUTDOOR EXPOSURE.
- ALL COAX, POWER AND TELEPHONE SYSTEM CONDUITS SHALL HAVE A MINIMUM 24" SCH. 80 PVC RADIUS SWEEPS TO EQUIPMENT, PULLBOXES, MONOPOLE, ETC., UNLESS OTHERWISE NOTED, OR AS REQUIRED BY UTILITY COMPANIES.
- FUSE TYPE SHALL BE BUSSMAN RKI LOW PEAK FUSE (LPU-RK-100).
- UPON COMPLETION OF THE JOB, THE CONTRACTOR SHALL FURNISH AS-BUILT DRAWINGS TO THE OWNER
- GENERAL GROUNDING CRITERIA 1ST STEP: GROUND TO EXISTING BUILDING STRUCTURAL STEEL AND TO THE EXISTING COLD WATER LINE. (WHERE APPLICABLE) THEN TEST GROUNDING RESISTANCE TO WITHIN 1 TO 5 OHMS OVERALL GROUND RESISTANCE. WHERE THE EFFECTIVE RESISTANCE DOES NOT MEET THIS CRITERIA, PROVIDE SUPPLEMENTAL GROUNDING AND RE-TEST UNTIL GROUND RESISTANCE FALLS BELOW THIS LEVEL. SUPPLEMENTAL GROUND MAY CONSIST OF ONE OR MORE OF THE FOLLOWING:
 - COUNTERPOISE,
 - UFER GROUND,
 - GROUND ROD AND/OR GROUND WELL IN EXTREMELY ADVERSE SOIL CONDITIONS. WHERE THE EXISTING BUILDING STEEL DOES NOT PROVIDE AN EFFECTIVE GROUND RESISTANCE, THEN THE CONTRACTOR SHALL PROVIDE A SEPARATE GROUND CONDUCTOR FROM ROOF MOUNTED BTS EQUIPMENT LOCATIONS EITHER DOWN THROUGH THE INSIDE OF THE BUILDING OR DOWN THE OUTSIDE OF THE BUILDING, DEPENDING UPON OWNER PREFERENCE. WHERE THE GROUND CONDUCTOR FROM THE ROOF MOUNTED EQUIPMENT IS ROUTED IN CONDUIT, THE CONDUIT SHALL BE EFFECTIVELY GROUND TO THE GROUND CONDUCTOR AT BOTH ENDS OF THE CONDUIT. (MONOPOLE INSTALLATIONS): FOR INSTALLATIONS WHERE WOODEN STRUCTURES, TOWERS, CONCRETE SILOS ETC. ARE ENCOUNTERED A SEPARATE DOWNLEAD SHALL BE PROVIDED FROM THE 3 ANTENNAS SEPARATED BY A MINIMUM OF 12 INCHES FROM THE COAXIAL CABLES. THE GROUND CONDUCTOR SHALL BE SECURELY FASTENED TO THE EXTERIOR OF OUTSIDE STRUCTURES WITH NONMETALLIC GROUND STRAPS EVERY 10 FEET. AGAIN, AS FOR TENANT IMPROVEMENT PROJECTS, TEST THE GROUND RESISTANCE FOR MONOPOLE INSTALLATIONS AND PROCEED PER THE ABOVE STEPS.
- CONTRACTOR TO COLOR PHASE CONDUCTORS BLACK (B PHASE), RED (A PHASE), WHITE (NEUTRAL), AND GREEN (GROUND).
- CONTRACTOR TO PROVIDE GUTTER TAP.

ELECTRICAL NOTES

2

USE THIS SECTION
UNDER PAVEMENT OR
VEHICLE TRAFFIC AREA

USE THIS SECTION
UNDER GRASS OR
LAWN AREA



RESTORE SURFACE TO
ORIGINAL CONDITION PRIOR
TO WORK

6" WIDE WARNING TAPE AT 10"
ABOVE CONDUIT
RETURN ORIGINAL MATERIAL TO
TRENCH, COMPACT AS
NECESSARY TO PREVENT
SERIOUS SETTLEMENT
GRADE 9 GRAVEL
COMPACTED TO 95%
STANDARD PROCTOR
SAND

SEE UTILITY AND SITE PLANS FOR NEW ELECTRICAL AND TELEPHONE
SERVICES. PROVIDE APPROVED PULL BOXES AS REQUIRED AND
COORDINATE INSTALLATION WITH ALL UTILITY COMPANIES FOR INTERFACING
AT TERMINATION POINTS. PROVIDE FULL LENGTH MULE TAPE (TYP)

BURIED CONDUIT DETAILS

3

1. ALL WORK IS TO COMPLY WITH THE LATEST EDITION OF THE NATIONAL ELECTRIC CODE (N.E.C.) AND ANY LOCAL ORDINANCES, CODES, AND ALL OTHER ADMINISTRATIVE AUTHORITIES HAVING JURISDICTION. THE CONTRACTOR SHALL FURNISH AND PAY FOR ALL PERMITS AND RELATED FEES.
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7. SERVICE EQUIPMENT SHALL HAVE A SHORT CIRCUIT WITHSTAND RATING EQUAL TO OR EXCEEDING THE MAXIMUM AVAILABLE FAULT CURRENT AT THE SUPPLY TERMINAL ON THE UTILITY TRANSFORMER SECONDARY, THE INSULATION SHALL BE FREE FROM ANY SHORT CIRCUITS AND GROUNDS.
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13. FUSE TYPE SHALL BE BUSSMAN RKI LOW PEAK FUSE (LPU-RK-100).
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15. GENERAL GROUNDING CRITERIA 1ST STEP: GROUND TO EXISTING BUILDING STRUCTURAL STEEL AND TO THE EXISTING COLD WATER LINE. (WHERE APPLICABLE) THEN TEST GROUNDING RESISTANCE TO WITHIN 1 TO 5 OHMS OVERALL GROUND RESISTANCE. WHERE THE EFFECTIVE RESISTANCE DOES NOT MEET THIS CRITERIA, PROVIDE SUPPLEMENTAL GROUNDING AND RE-TEST UNTIL GROUND RESISTANCE FALLS BELOW THIS LEVEL. SUPPLEMENTAL GROUND MAY CONSIST OF ONE OR MORE OF THE FOLLOWING:

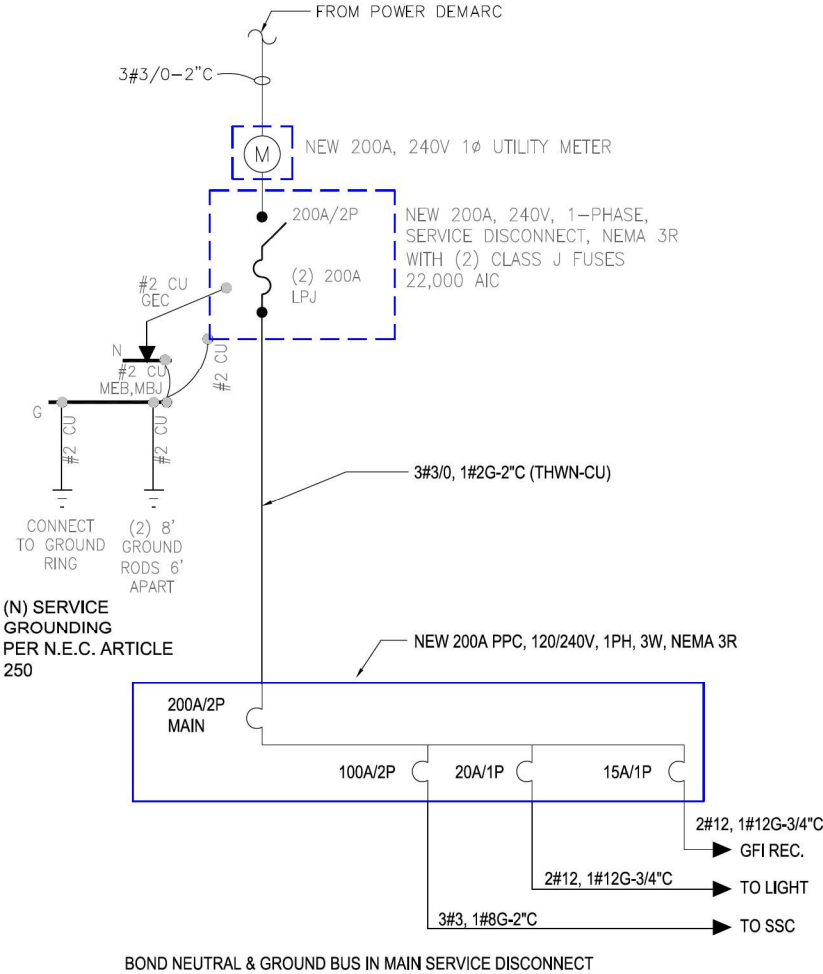
1) COUNTERPOISE,

2) UFER GROUND,

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16. CONTRACTOR TO COLOR PHASE CONDUCTORS BLACK (B PHASE), RED (A PHASE), WHITE (NEUTRAL), AND GREEN (GROUND).
17. CONTRACTOR TO PROVIDE GUTTER TAP.

- NOTES:
1. ALL DC POWER CONDUCTORS MUST MEET LDO RATING.
2. CONDUCTORS USED MUST BE SIZED APPROPRIATELY FOR BREAKERS TO BE INSTALLED.

ELECTRIC LOAD SUMMARY					
AREA OF SPACE (164) SF			SERVICE VOLTAGE 120/240 V 1Ø		
	CONNECTED LOAD		DEMAND FACTOR	DEMAND LOAD	
	KVA	AMPS		KVA	AMPS
LIGHTING (175W HPS)	0.57	2.38	1.0	0.57	2.38
RECEPTACLES (1)	1.06	4.42	1.0	1.06	4.42
SITE SUPPORT CABINET	9.0	37.6	1.0	9.0	37.6
TELCO PANEL	0.12	1.0	1.0	0.12	1.0
DEMAND LOAD				19.75	45.4
LIGHTING x 0.25				0.14	0.6
TOTAL LOAD					46.0
TOTAL SERVICE CAP.					200



T-Mobile

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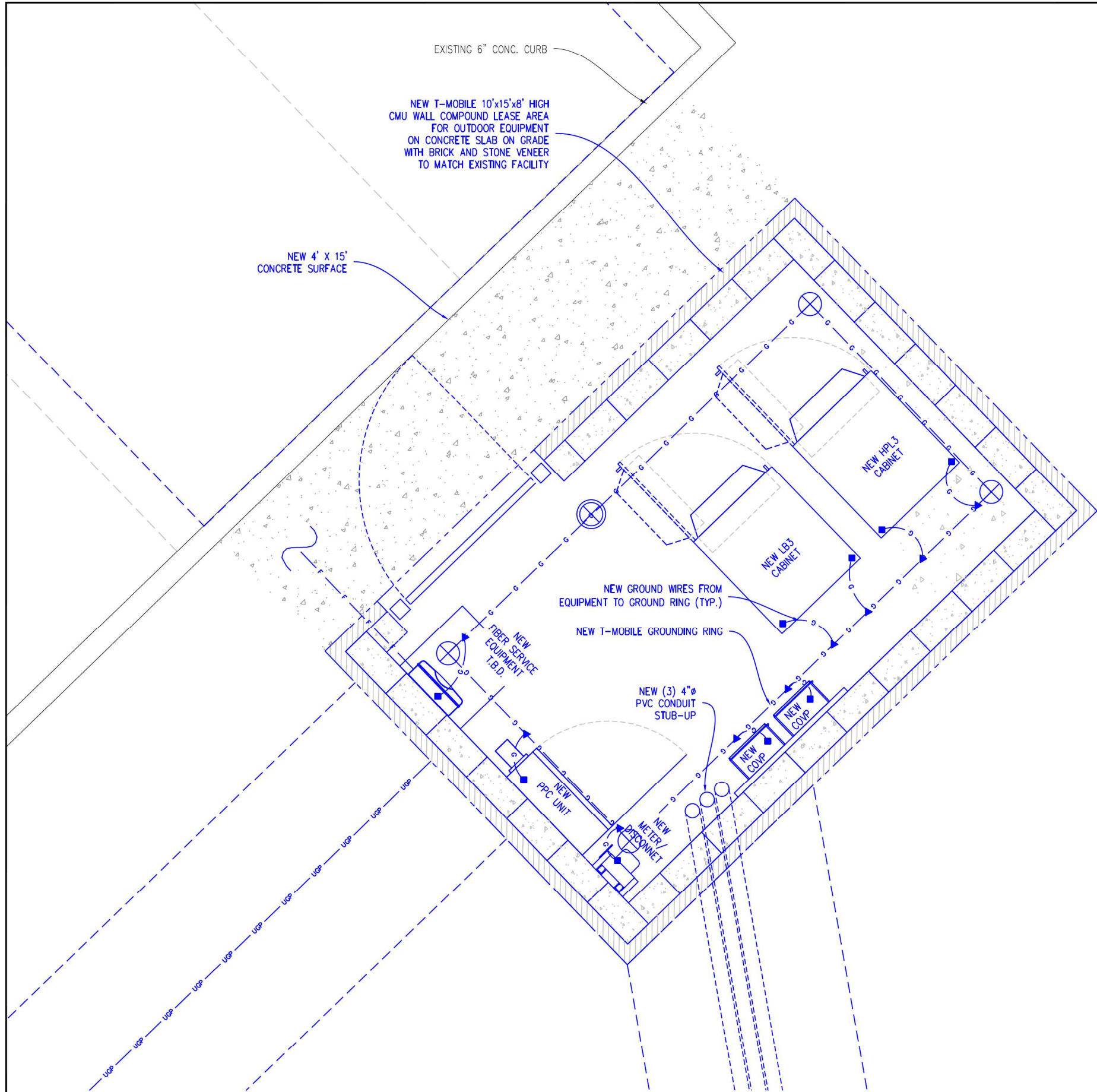
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SHEET TITLE

ELECTRICAL
ONE-LINE DIAGRAM

SHEET NUMBER

E-2



GROUNDING PLAN LEGEND:			
	GROUND WIRE		COPPER GROUND ROD
	GROUND WIRE		TEST WELL
	EXOTHERMIC WELD		
	MECHANICAL CONNECTION		

CAD WELD CONNECTIONS

NO.	DESCRIPTION	MOLD NO.	WELD NO.
1	#2 SOLID TO #2 SOLID	PTC-1T1T	65
2	#2 SOLID TO GROUND ROD	GTC-161T	90
3	#2 SOLID TO FENCE POST	VBC	

BURNDY CONNECTIONS

NO.	DESCRIPTION	PART NO.
4	#6 GREEN STRANDED 2-HOLE COMPRESSION LUG	
5	#2 SOLID TO POST	KC
6	BRAIDED STRAP BOLTED TO GATE POSTS	BD18G92

* CHECK WITH PROJECT MANAGER FOR CONNECTION TYPE
IF TABS ARE NOT PRESENT ON MONOPOLE OR TOWER.

NOTE:
PLACEMENT OF ALL NEW EQUIPMENT
AND GROUNDING TO BE FIELD VERIFIED
DURING CONSTRUCTION WALKS



NORTH

GROUNDING PLAN

FULL SIZE PLOT: SCALE: 3/4" = 1'-0"
HALF SIZE PLOT: SCALE: 3/8" = 1'-0"



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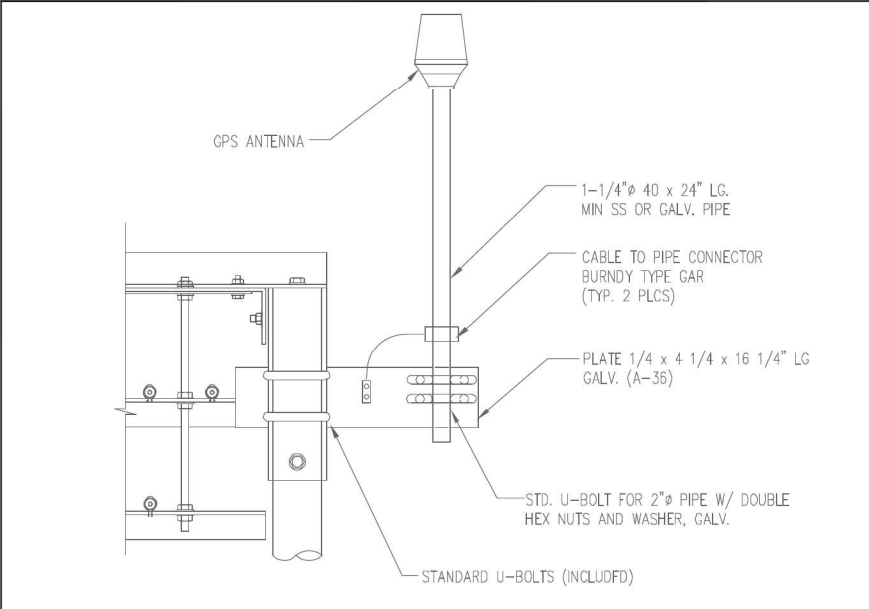
1240 W FRONTIER PKWY

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SHEET TITLE
GROUNDING PLAN

SHEET NUMBER
G-1



GPS GROUNDING DETAIL

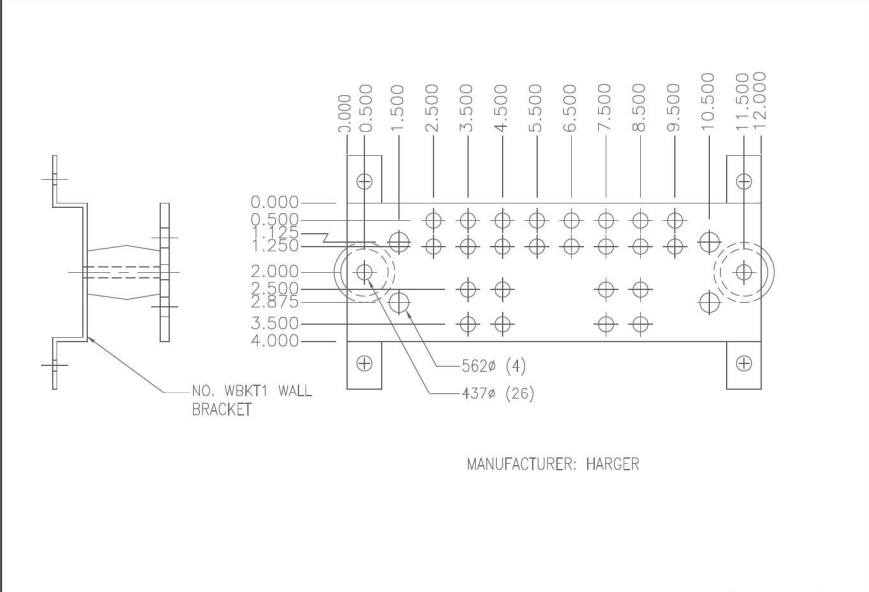
SCALE:
N.T.S.

1

COAX CABLE GROUND KIT DETAIL

SCALE:
N.T.S.

4



12" GROUND BAR

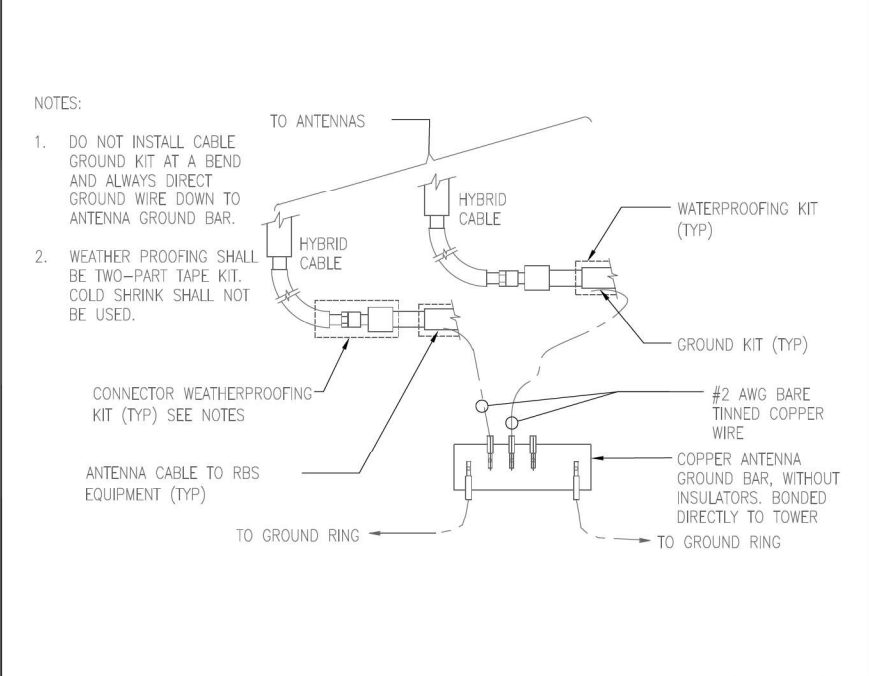
SCALE:
N.T.S.

2

GROUND WIRE INSTALLATION

SCALE:
N.T.S.

5



ANTENNA GROUNDING KIT

SCALE:
N.T.S.

3

TWO HOLE MECHANICAL LUG CONNECTION

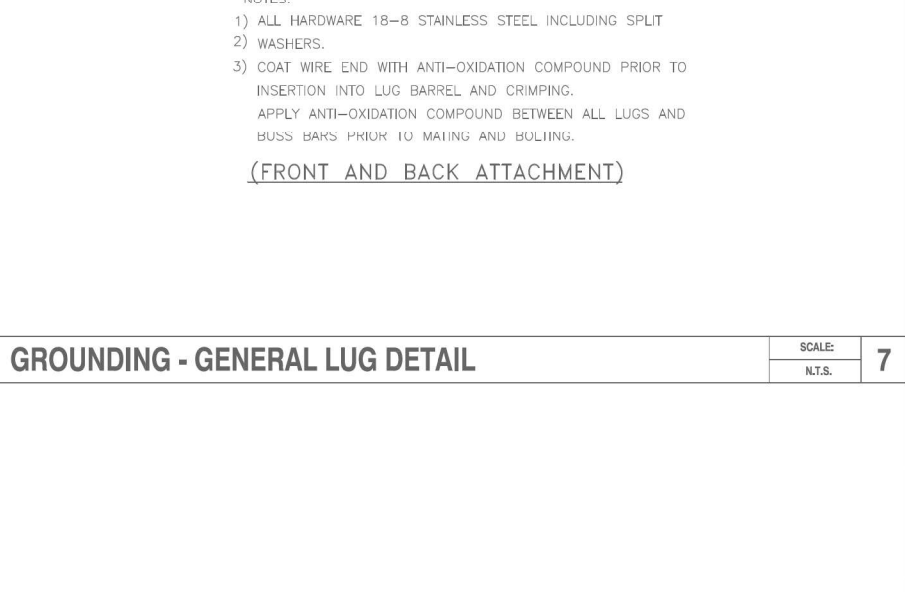
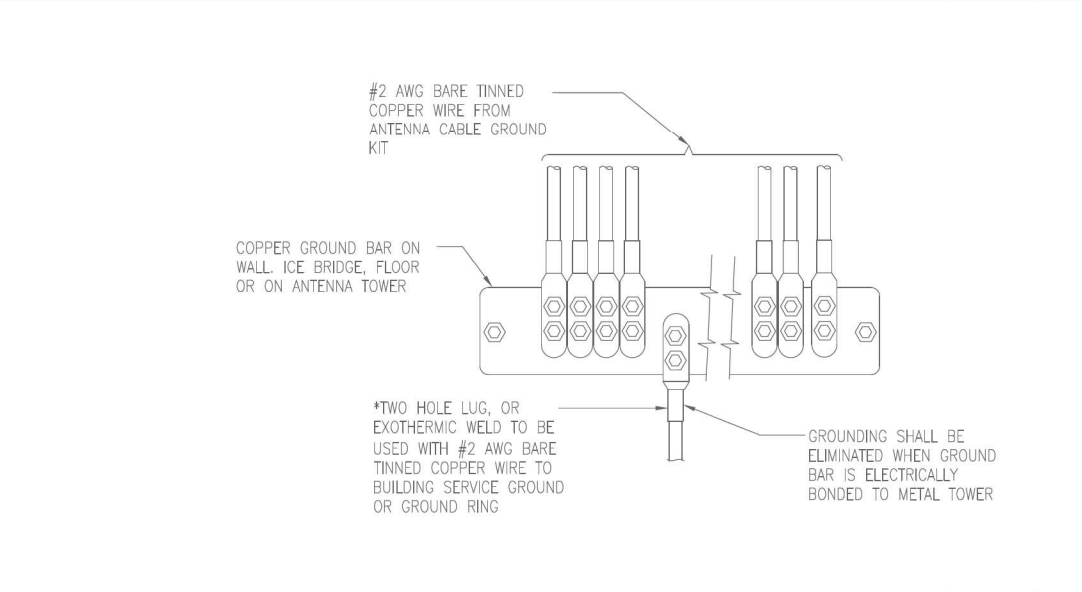
SCALE:
N.T.S.

6

GROUND BAR

SCALE:
N.T.S.

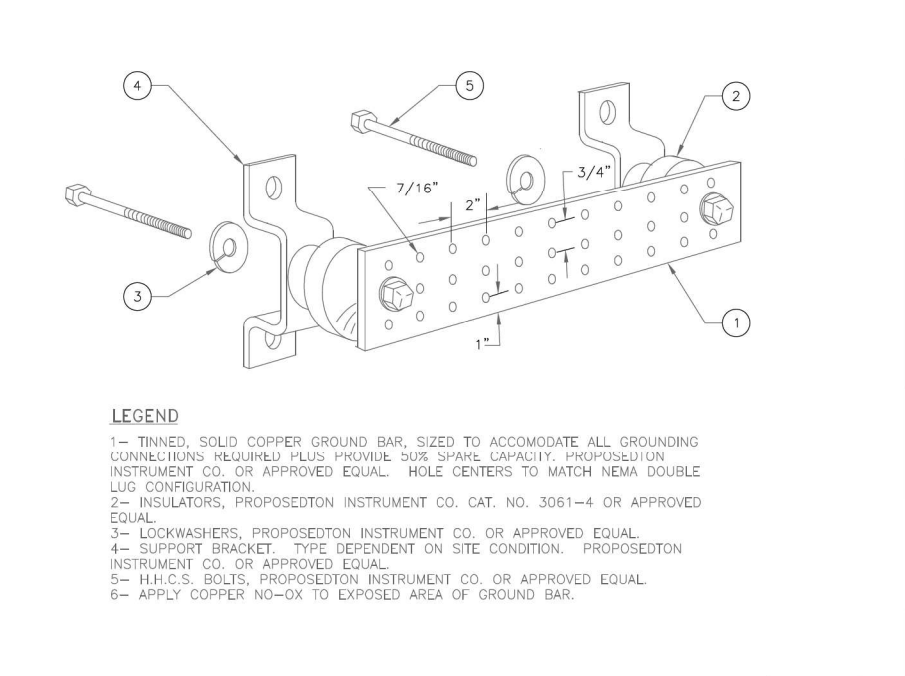
8



GROUNDING - GENERAL LUG DETAIL

SCALE:
N.T.S.

7



LEGEND

- 1- TINNED, SOLID COPPER GROUND BAR, SIZED TO ACCOMMODATE ALL GROUNDING CONNECTIONS REQUIRED PLUS PROVIDE 50% SPARE CAPACITY. PROPOSEDTON INSTRUMENT CO. OR APPROVED EQUAL. HOLE CENTERS TO MATCH NEMA DOUBLE LUG CONFIGURATION.
- 2- INSULATORS, PROPOSEDTON INSTRUMENT CO. CAT. NO. 3061-4 OR APPROVED EQUAL.
- 3- LOCKWASHERS, PROPOSEDTON INSTRUMENT CO. OR APPROVED EQUAL.
- 4- SUPPORT BRACKET, TYPE DEPENDENT ON SITE CONDITION. PROPOSEDTON INSTRUMENT CO. OR APPROVED EQUAL.
- 5- H.H.C.S. BOLTS, PROPOSEDTON INSTRUMENT CO. OR APPROVED EQUAL.
- 6- APPLY COPPER NO-OX TO EXPOSED AREA OF GROUND BAR.

- NOTES:
- 1) ALL HARDWARE 18-8 STAINLESS STEEL INCLUDING SPLIT
- 2) WASHERS.
- 3) COAT WIRE END WITH ANTI-OXIDATION COMPOUND PRIOR TO INSERTION INTO LUG BARREL AND CRIMPING. APPLY ANTI-OXIDATION COMPOUND BETWEEN ALL LUGS AND BUSS BARS PRIOR TO MATING AND BOLTING.

(FRONT AND BACK ATTACHMENT)

THE DETAILS ON THIS SHEET APPLY ONLY AS CALLED OUT ON SITE PLANS OR SITE SPECIFIC DRAWINGS.



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SHEET TITLE

GROUNDING DETAILS

SHEET NUMBER

G-2

GENERAL NOTES

1. ALL ELECTRICAL WORK SHALL CONFORM TO THE NATIONAL ELECTRICAL CODE (EDITION ACCEPTED BY LOCAL JURISDICTION) AND APPLICABLE LOCAL CODES.
2. GROUNDING SHALL COMPLY WITH ARTICLE 250 OF THE NATIONAL ELECTRICAL CODE.
3. ALL ELECTRICAL ITEMS SHALL BE U.L. APPROVED OR LISTED.
4. WIRES AND CABLES FOR POWER AND LIGHTING SHALL BE COPPER WITH TYPE XHHW,THWN, OR THHN INSULATION. SOLID CONDUCTORS FOR #10 AWG AND SMALLER, STRANDED FOR LARGER THAN #10 AWG. MINIMUM SIZE #12 AWG.
5. WIRES AND CABLES FOR POWER SHALL BE INSTALLED IN GALVANIZED RIGID STEEL CONDUIT OR FLEXIBLE LIQUID TIGHT CONDUIT AS INDICATED ON DRAWING.
6. CONTRACTOR TO OBTAIN ALL PERMITS, PAY PERMIT FEES, AND BE RESPONSIBLE FOR SCHEDULING INSPECTIONS.
7. CONTRACTOR TO OBTAIN LOCAL POWER AND TELEPHONE COMPANY APPROVAL AND COORDINATE WITH UTILITY COMPANIES SERVICE ENTRANCE REQUIREMENTS.
8. PROVIDE ALL LABOR AND MATERIAL DESCRIBED ON THIS DRAWING, AND ALL ITEMS INCIDENTAL TO COMPLETING AND PRESENTING THIS PROJECT AS FULLY OPERATIONAL.
9. GROUNDING CONNECTIONS SHALL BE MECHANICAL TYPE ("BURNDY" OR "COMPRESSION") FITTINGS FOR ALL CONNECTIONS.
10. GROUND COAXIAL CABLE SHIELDS AT BOTH ENDS WITH COAX CABLE GROUNDING KITS & INSTALL WEATHER PROOFING KIT AT EACH CONNECTION
11. ROUTE GROUNDING CONDUCTORS ALONG THE SHORTEST AND STRAIGHTEST PATH POSSIBLE, EXCEPT AS OTHERWISE INDICATED. GROUNDING LEADS SHOULD NEVER BE BENT AT RIGHT ANGLE, ALWAYS MAKE AT LEAST 12" RADIUS BENDS. #6 WIRE CAN BE BENT AT 6" RADIUS WHEN NECESSARY.
12. CONTRACTOR TO PROVIDE GROUND RING AS SHOWN ON GROUNDING SITE PLAN AND GROUNDING RISER DIAGRAM. CONTRACTOR SHALL TEST AND VERIFY THAT THE IMPEDANCE DOES NOT EXCEED 5 OHMS TO GROUND BY MEANS OF A BIDDLE-MEGGER TESTER. GROUNDING AND OTHER OPERATIONAL TESTING SHALL SHALL BE WITNESSED BY THE OWNER'S REPRESENTATIVE.
13. CONTRACTOR TO PROVIDE TELEPHONE CONDUIT AS SHOWN ON PLANS
14. CONTRACTOR TO PROVIDE ELECTRIC CONDUIT AS SHOWN ON PLANS
15. NOTIFY LOCAL UTILITY SERVICE PRIOR TO ANY INSTALLATION.
16. ALL EQUIPMENT FURNISHED BY OTHERS SHALL BE PROVIDED WITH PROPER MOTOR STARTERS, DISCONNECTS, CONTROLS, ETC. BY THE ELECTRICAL CONTRACTOR UNLESS SPECIFICALLY NOTED OTHERWISE. THE ELECTRICAL CONTRACTOR SHALL INSTALL AND COMPLETELY WIRE ALL ASSOCIATED EQUIPMENT IN ACCORDANCE WITH MANUFACTURER'S WIRE DIAGRAMS AND AS REQUIRED FOR A COMPLETE OPERATING INSTALLATION. ELECTRICAL CONTRACTOR SHALL VERIFY AND COORDINATE ELECTRICAL CHARACTERISTICS AND REQUIREMENTS OF EQUIPMENT PRIOR TO ROUGH-IN OF CONDUIT AND WIRING TO AVOID CONFLICTS. WHERE APPLICABLE
17. GROUNDING CONDUCTORS SHALL BE COPPER ONLY. ABOVE GROUND EITHER SOLID OR STRANDED CONDUCTORS ARE PERMITTED. IGR AND ALL EXTERNAL CONDUCTORS (WITH THE EXCEPTION FOR GROUND WIRE BETWEEN THE TOP AND THE BOTTOM OF THE ANTENNA TOWER) MUST BE BARE. EQUIPMENT GROUND LEADS IN CABLE TRAYS MUST BE GREEN INSULATED
18. UTILITY COMPANY COORDINATION: ELECTRICAL CONTRACTOR SHALL CONFIRM THAT ALL WORK IS IN ACCORDANCE WITH THE RULES OF THE LOCAL UTILITY COMPANY BEFORE SUBMITTING HIS BID, THE CONTRACTOR SHALL CHECK WITH THE UTILITY COMPANIES SUPPLYING SERVICE TO THIS PROJECT AND SHALL DETERMINE FROM THEM ALL EQUIPMENT AND CHARGES WHICH THEY WILL REQUIRE AND SHALL INCLUDE THE COST IN HIS BID











CONDUITS AND WIRING

- 1.WIRING OF EVERY KIND MUST BE INSTALLED IN CONDUIT, UNLESS NOTED OTHERWISE, OR AS APPROVED BY THE ENGINEER
- 2.UNLESS OTHERWISE SPECIFIED, ALL WIRING SHALL BE COPPER (CU) TYPE THWN, SIZED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE
- 3.RACEWAYS SHALL BE GALVANIZED STEEL, SIZED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE, UNLESS OTHERWISE NOTED. ALL RACEWAYS SHALL BE APPROVED FOR THE INSTALLATION
- 4.PULL OR JUNCTION BOXES SHALL BE PROVIDED AS REQUIRED TO FACILITATE INSTALLATION OF RACEWAYS AND WIRING
- 5.PROVIDE A COMPLETE RACEWAY AND WIRING INSTALLATION, PERMANENTLY AND EFFECTIVELY GROUNDED IN ACCORDANCE WITH ARTICLE 250 OF THE NATIONAL ELECTRICAL CODE AND LOCAL CODES

COORDINATION WITH UTILITY COMPANY

THE ELECTRICAL CONTRACTOR SHALL COORDINATE COMPLETE ELECTRICAL SERVICE WITH LOCAL UTILITY COMPANY FOR COMPLETE OPERATIONS SYSTEM, INCLUDING TRANSFORMER CONNECTIONS, CONCRETE TRANSFORMER PADS, IF REQUIRED, METER SOCKETS, PRIMARY CABLE RACEWAY REQUIREMENTS, SECONDARY SERVICE, ETC. PRIOR TO SUBMITTING BID TO INCLUDE ALL LABOR AND MATERIALS.

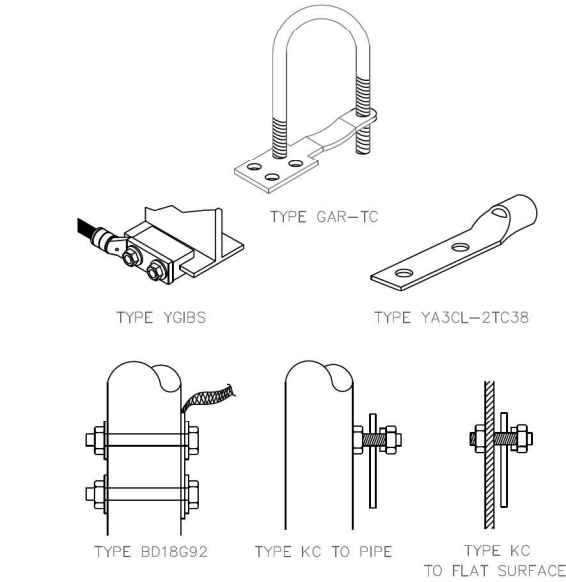
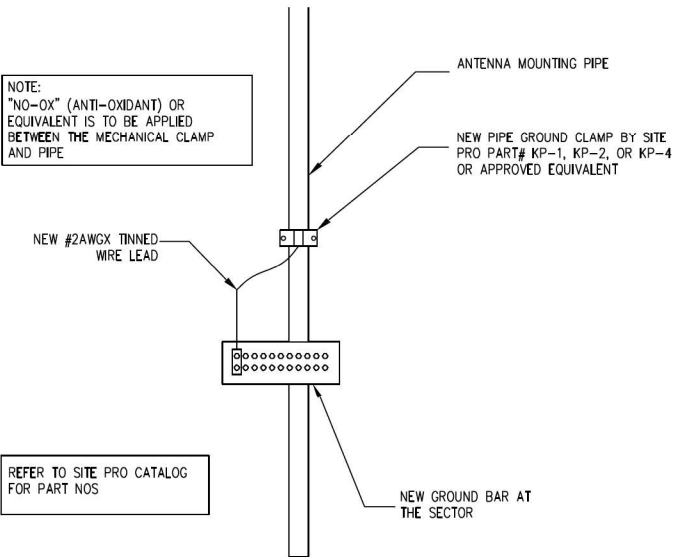
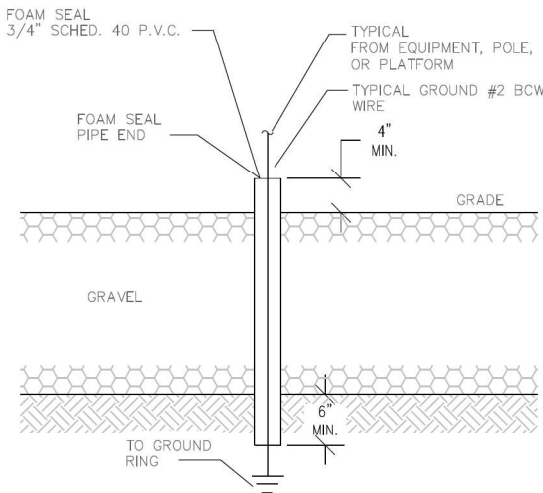
LEGEND

	SAFETY DISCONNECT SWITCH, SIZED AS NOTED	A	AMPERE
	PANELBOARD	V	VOLT
	KILOWATT HOUR METER	W	WIRE
	TRANSFORMER	C	CONDUIT
	CIRCUIT BREAKER	G	GROUND
	LIGHTING FIXTURE, SIZE AS NOTED	P	POLE
	COPPER GROUND BAR, SIZED AS NOTED	SPGB	SURGE PROTECTOR GROUND BAR (1/4"x2"x24")
	POWER WIRING, SIZED AS NOTED	CGB	COLLECTOR GROUND BAR (1/4"x4"x12")
	TELCO WIRING, SIZED AS NOTED	EGB	EXTERNAL GROUND BAR (1/4"x8"x24")
	GROUND WIRING, SIZED AS NOTED	MGB	MASTER GROUND BAR (1/4"x8"x24")
		IGR	INTERNAL GROUND RING ("HALO" GROUND)
		EGR	EXTERNAL GROUND RING
		ACU	AIR CONDITIONER UNIT
		HWGC	HEAVY WALLED GALVANIZED CONDUIT

NOT USED

SCALE:
N.T.S.

5



BURNDY DETAILS

SCALE:
N.T.S.

1

GROUND ROD

SCALE:
N.T.S.

2

GROUND WIRE SLEEVE

SCALE:
N.T.S.

3

ANTENNA PIPE GROUNDING

SCALE:
N.T.S.

4



DUKE BRIDGES CAMPUS
7668 WARREN PARKWAY
FRISCO, TX 75034
OFFICE: (972) 464-3510



5055 HIGHWAY "N"
SUITE. 200
SAINT CHARLES,
MO 63304
PHONE: 636-922-3400

600 E. JOHN
CARPENTER FWY.
STE 357
IRVING, TX 75062
PHONE: 972-717-7802

ACGI NO: 21-0860


DRAWN BY: DR/TS

CHECKED BY: SZ

REVISIONS			
NO	DATE	DESCRIPTION	BY
A	01/10/23	PRELIM CD	DR
O	01/24/23	FINAL CD	TS



CONSULTING GROUP, INC.
9221 LYNDON B JOHNSON FWY
SUITE 204, DALLAS, TX 75243
PHONE: 972-231-8893
FAX: 866-364-8375
WWW.ALLPROCGL.COM
FIRM NO. F-B242



01/24/23

DA03931D
PISD SPORT COMPLEX
(STADIUM AND NATATORIUM)

1240 W FRONTIER PKWY
PROSPER, TX 75078
COLLIN COUNTY

SHEET TITLE
GROUNDING DETAILS

SHEET NUMBER
G-3

1. EXISTING CONDITIONS WILL BE CHECKED AND VERIFIED IN FIELD BY THE CONTRACTOR PRIOR TO FABRICATION AND INSTALLATION. IF SIGNIFICANT DEVIATIONS OR DETERIORATION ARE ENCOUNTERED AT THE TIME OF CONSTRUCTION, A REPAIR PERMIT WILL BE OBTAINED AND CONTRACTOR SHALL NOTIFY STRUCTURAL ENGINEER IMMEDIATELY.

3. DO NOT SCALE DRAWINGS.

4"

8"

1'-4"

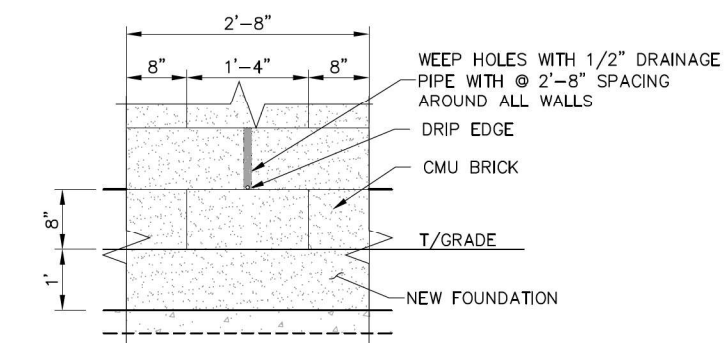
CONTRACTOR TO USE
BRICK & STONE FACADE

CMU BRICK

#5 BARS @ 16" SPACING
REFER TO DETAIL

GROUT-FILLED CMU ALL CELLS
WITH VERTICAL REBAR
(SEE DETAIL 1 FOR GROUT LOCATION)

2 SCALE : 1/2"=1'-0"



3 SCALE : 1"=1'-0"



SCALE : 1/2"=1'-0"

T-Mobile

DUKE BRIDGES CAMPUS
7668 WARREN PARKWAY
FRISCO, TX 75034
OFFICE: (972) 464-3510

ACGI NO: 22-4294

DRAWN BY: SP

CHECKED BY: SZ

0	12/19/22	CMU WALL DESIGN
---	----------	-----------------

 ALLPRO
CONSULTING GROUP, INC.
9221 Lyndon B Johnson Fwy
Suite 204, Dallas, TX 75243
Phone: 972-231-8893
Fax: 866-364-8375
www.allprocgi.com
registration no. 8242



12/19/22

SITE ID:
DA0931D
SITE NAME:
PISD SPORT
COMPLEX

1240 FRONTIER PKWY PARK RD,
PROSPER, TX 75078
COLLIN COUNTY

SHEET TITLE

CMU WALL DETAIL

SHEET NUMBER

S-2

1. EXISTING CONDITIONS WILL BE CHECKED AND VERIFIED IN FIELD BY THE CONTRACTOR PRIOR TO FABRICATION AND INSTALLATION. IF SIGNIFICANT DEVIATIONS OR DETERIORATION ARE ENCOUNTERED AT THE TIME OF CONSTRUCTION, A REPAIR PERMIT WILL BE OBTAINED AND CONTRACTOR SHALL NOTIFY STRUCTURAL ENGINEER IMMEDIATELY.

3. DO NOT SCALE DRAWINGS.

2. GENERAL CONTRACTOR TO VERIFY WITH GENERATOR MANUFACTURER FOR FIT PRIOR TO POURING CONCRETE AND INSTALLATION.

- ### 3. GENERATOR DESIGN AND DRAWINGS BY OTHERS



1. MANUFACTURE TO PROVIDE RUST INHIBITIVE PAINT OR GALVANIZATION
2. EXISTING SITE MATERIAL.
3. WELD ON HEAVY DUTY HINGE (4) PER LENGTH OF TUBE WITH FINISH TO MATCH FRAME.
4. (1) GATE STOP
5. HSS4x4x3/8 FINISH TO MATCH GATE FRAME. WELDED TO BASEPLATE W/ 3/16" WELD ALL AROUND.
6. 3/4" BASEPLATE W/ (4) 3/4" DIAMETER BOLTS EMBEDDED 4 1/2" INTO FOUNDATION W/ HILTI HY200 ADHESIVE ANCHOR. 1 1/2" 5000 PSI NON SHRINK GROUT BELOW.
7. 1/2" CAP PLATE. WELD TO TOP OF POST W/ 3/16" WELD ALL AROUND.
8. GATE STOP SUPPORT 12" DIAMETER BY 2'-0" DEEP 3000 PSI CONCRETE W/ MUSHROOM GATE STOP EMBEDDED ON TOP OF CONCRETE.
9. REMOVABLE 1/2" DIAMETER BENT BAR WITH CASING EMBEDDED IN GATE STOP CONCRETE.
10. BASE BLOCK TRIMMED AROUND BASE AND GROUTED FROM TOP W/ 5000 PSI NON SHRINK GROUT OVER BASEPLATE.
11. LAST TWO CELLS FULLY GROUTED. ONE CELL AWAY FROM END TO BE FULLY GROUTED W/ (2) #5 BARS.
12. 2 SQ. IN. STEEL FRAME ALL AROUND.
13. 1 SQ. IN. STEEL PICKETS @ 4" O.C.
14. KNOX BOX
15. 13" TALL BY 12" CONCRETE VERTICAL EXTENSION FROM FOOTING FOR STEEL GATE BASE PLATE ANCHOR

1. COMPRESSIVE STRENGTH OF CONCRETE SHALL BE 4000-PSI AT 28-DAY CURE, AND SHALL MEET SPECIFICATION FOR READY-MIXED CONCRETE (ASTM C94-96). CONCRETE SHALL BE PLACED AND CURED AS PER ACI-318 "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE".

3. ALL CONCRETE WORK SHALL CONFORM TO ACI 318 BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE.

5. CONCRETE SHALL BE PLACED IN A MANNER THAT WILL PREVENT SEGREGATION OF CONCRETE MATERIALS AND OTHER OCCURRENCES THAT MAY DECREASE THE STRENGTH OR DURABILITY OF THE FOUNDATION.

7. ALL REINFORCING STEEL BARS SHALL BE DOMESTIC, NEW BILLET STEEL, ASTM A-615, GRADE 60. REINFORCING SHALL BE DETAILED AND FABRICATED IN ACCORDANCE WITH ACI 315-LATEST EDITION - "MANUAL OF STANDARD FOR DETAILING REINFORCED CONCRETE".

9. WELDING OF REINFORCING BARS AND DOWEL BARS IS PROHIBITED UNLESS OTHERWISE APPROVED BY ENGINEER.

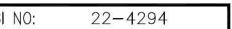
11. ALLOWABLE SOIL BEARING PRESSURE SHALL BE 1500 PSF MINIMUM. IF DIFFERENT, PLEASE NOTIFY ALLPRO CONSULTING GROUP, INC FOR A REDESIGN.

12. SOIL DATA AS PER PRESUMPTIVE SOIL PARAMETERS FROM IBC 2015 CODE, TABLE 1806.2.



CONCRETE FOUNDATION PLAN VIEW

SCALE : 1/2"=1'-0"



OWN BY: SP

CKED BY: SZ

/19/22 | CMU WALL DESIGN



/19/22

1240 FRONTIER PKWY PARK RD,
PROSPER, TX 75078
COLLIN COUNTY

SHEET TITLE

PAD DETAILS

SHEET NUMBER

S-3

MASONRY

1. MASONRY STRENGTH

A. HOLLOW CONCRETE MASONRY UNITS: GRADE N, LIGHTWEIGHT WITH A COMPRESSIVE STRENGTH OF F = 1500 PSI ON THE NET AREA.

B. GROUT: 2000 PSI, MINIMUM 28 DAY COMPRESSIVE STRENGTH. VIBRATE GROUT IMMEDIATELY AFTER POURING AND AGAIN AFTER 5 MINUTES. GROUT SHALL CONFORM TO TO ASTM C476 AND UBC 2103. MIX GROUT FOR AT LEAST FIVE MINUTES AND UNTIL MIX HAS BEEN ATTAINED. GROUT SHALL HAVE SUFFICIENT WATER ADDED TO PRODUCE A CONSISTENCY FOR POURING WITHOUT SEGREGATION USE GROUT WITHIN 1.5 HOURS OF ADDITION OF MIXING WATER.

C. MORTAR: CEMENT-LIME TYPES, 1800 PSI MINIMUM 28 DAY COMPRESSIVE STRENGTH. CONFORM TO UBC 2103.

D. 4,000 PSI STRENGTH CONCRETE AT 28 DAY 3” TO 5” SLUMP.

LAY UNITS IN RUNNING BOND. CORNERS SHALL HAVE A STANDARD BOND BY OVER- LAPPING UNITS.

MAXIMUM GROUT LIFT WITHOUT CLEAN-OUTS SHALL BE 4’-0”.

TIE VERTICAL REINFORCING AT EACH END OF BAR AND AT 4’-0” MAXIMUM VERTICAL SPACING USING SINGLE WIRE LOOP TYPE TIES AS MANUFACTURED BY A.A. WIRE PRODUCTS COMPANY OR APPROVED ALTERNATE.

SEE ARCHITECTURAL DRAWINGS FOR LOCATIONS OF EXPANSION AND CONTROL JOINTS.

GROUT SOLID ALL WALLS IN CONTACT WITH EARTH, RETAINING WALLS, STEM WALLS, AND AS NOTED ON DRAWINGS.

GROUTED MASONRY SHALL BE CONSTRUCTED IN SUCH A MANNER THAT ALL ELEMENTS OF THE MASONRY ACT TOGETHER AS A STRUCTURAL ELEMENT.

8. PRIOR TO GROUTING, THE CROUT SPACE SHALL BE CLEAN SO THAT ALL SPACES TO BE FILLED WITH GROUT DO NOT CONTAIN MORTAR PROJECTIONS GREATER THAN 1/2 INCH, MORTAR DROPPINGS OR OTHER FOREIGN MATERIAL. GROUT SHALL BE PLACED SO THAT ALL SPACES DESIGNATED TO BE GROUTED SHALL BE FILLED WITH GROUT AND THE GROUT SHALL BE CONFINED TO THOSE SPECIFIC SPACES.

9. GROUT MATERIALS AND WATER CONTENT SHALL BE CONTROLLED TO PROVIDE ADEQUATE FLUIDITY FOR PLACEMENT, WITHOUT SEGREGATION OF THE CONSTITUENTS, AND SHALL BE MIXED THOROUGHLY.

10. THE GROUTING OF ANY SECTION OF WALL SHALL BE COMPLETED IN ONE DAY WITH NO INTERRUPTIONS GREATER THAN ONE HOUR.

12. BETWEEN GROUT POURS, A HORIZONTAL CONSTRUCTION JOINT SHALL BE FORMED BY STOPPING ALL C.M.U. AT THE SAME ELEVATION AND WITH THE GROUT STOPPING A MORTAR DROPPINGS OR OTHER FOREIGN MATERIAL. GROUT SHALL BE PLACED SO THAT WHERE BOND BEAMS OCCUR, THE GROUT POUR SHALL BE STOPPED A MINIMUM OF 1/2 INCH BELOW THE TOP OF THE MASONRY.

13. SEGREGATION OF GROUT MATERIALS AND DAMAGE TO THE MASONRY SHALL BE AVOIDED DURING THE GROUTING PROCESS.

14. GROUT SHALL BE CONSOLIDATED BY MECHANICAL VIBRATION DURING PLACEMENT BEFORE LOSS OF PLASTICITY IN A MANNER TO FILL THE GROUT SPACE. GROUT POURS GREATER THAN 12 INCHES IN HEIGHT WILL BE RECONSOLIDATED BY MECHANICAL VIBRATION TO WHERE BOND BEAMS OCCUR, THE GROUT POUR SHALL BE STOPPED A MINIMUM OF 1/2 MECHANICALLY VIBRATED OR PUDDLED AND RODDED WITH SMOOTH BAR.

15. GROUT SHALL NOT BE HANDLED NOR PUMPED UTILIZING ALUMINUM EQUIPMENT UNLESS IT CAN BE DEMONSTRATED WITH THE MATERIAL AND EQUIPMENT TO BE USED THAT THERE WILL BE NO DELETERIOUS EFFECT ON THE STRENGTH OF THE GROUT.

16. PLACE #4 VERTICAL REINFORCEMENT @ EACH CORNER AND @ EACH SIDE OF AN OPENING

T-Mobile

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ACGI NO: 22-4294

DRAWN BY: SP

CHECKED BY: SZ

01/12/19/22	CMU WALL DESIGN

ALLPRO

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registration no. 8242

STATE OF TEXAS
SHI QIANG ZHANG
137482
LICENSED PROFESSIONAL ENGINEER



12/19/22

SITE ID:
DA0931D
SITE NAME:
PISD SPORT
COMPLEX

1240 FRONTIER PKWY PARK RD,
PROSPER, TX 75078
COLLIN COUNTY

SHEET TITLE

MASONRY NOTES

SHEET NUMBER

S- 4