Director's Decision

Summary of Application

FILE NUMBER:	C22-0014
PROPOSAL:	The Columbia River Gorge Commission has received an application for upgrades to an existing communication tower.
APPLICANTS:	John Pope (c/o T-Mobile)
LANDOWNERS:	Schreiner Farms Inc.
SIZE and LOCATION:	The subject parcel is 640 acres in size and is described as Tax Lot Number 02-13-0900-0000/00 in Section 9, Township 2 North, Range 13 East, Willamette Meridian, Klickitat County, Washington.
LAND USE DESIGNATION:	General Management Area (GMA) – Large-Scale Agriculture (160)

Decision

Based upon the findings of fact and conclusions of law in the staff report accompanying this decision and the conditions of approval in this decision document, the land use application by John Pope, for upgrades to an existing communication tower is consistent with Commission Rules chapter 350, division 082, and thus consistent with the *Management Plan for the Columbia River Gorge National Scenic Area* and the standards of Section 6 and the purposes of the Columbia River Gorge National Scenic Area Act, Pub. L. 99-663, 100 Stat. 4274 (1986), and is hereby **APPROVED**.

Conditions of Approval

The following conditions of approval are given to ensure that the subject request is consistent with Commission Rules chapter 350, division 082. Compliance with these conditions of approval is required. The Gorge Commission may take one or more enforcement actions at any time to ensure compliance with these conditions of approval.

1. In accordance with Commission Rule 350-082-0150(3), the applicant shall record the Executive Director's decision and conditions of approval and approved site plan and elevation drawings in county deeds and records (at the Klickitat County Auditor's Office) to ensure notice of the conditions to successors in interest. The record shall be associated with all tax lots and parcels that constitute the subject property. The applicant need not record the separate staff report document containing the relevant

findings and conclusions. Once recorded, the applicants shall submit a copy of the recorded documents to the Executive Director.

2. This decision does not exempt the proposal from other non-National Scenic Area rules and regulations. It is the applicant's responsibility to ensure the use complies with all other applicable federal, state, and county laws and to obtain necessary approvals, including utility easement approvals.

3. Inspections Required, contact the Gorge Commission office to schedule:

   A. Post-completion inspection required.

   B. Applicants may request interim inspections, and the Gorge Commission staff may, at its discretion, conduct interim inspections.

4. Any new land uses or structural development, alterations, or grading not included in the approved application or site plan will require a new application and review.

5. All aspects of the proposal shall be dark earth-tone colors. Only approved dark earth-tone colors for exterior materials shall be used. The approved color is Sherwin-Williams 'French Roast' (SW 6069).

   The color of the development shall be maintained by painting and staining as necessary to maintain the approved color. Any proposed changes to these colors shall be submitted for review by the Executive Director for consistency with this condition of approval.

6. One exterior light fixture is purposed. Exterior lighting shall be directed downward and sited, hooded, and shielded so the lighting is not highly visible as seen from Key Viewing Areas. Shielding and hooding materials shall be composed of non-reflective, opaque materials.

7. If cultural resources are discovered, all activities within 100 feet of the cultural resources shall immediately cease and the applicants shall notify the Gorge Commission within 24 hours of discovery and the State Physical Anthropologist, Dr. Guy Tasa at (360) 586-3534 or guy.tasa@dahp.wa.gov. The cultural resources shall remain as found and further disturbance is prohibited until permission is granted by the Executive Director of the Gorge Commission.

8. If human remains are discovered, all activities shall cease immediately upon their discovery. Local law enforcement, the Executive Director and Indian Tribal governments shall be contacted immediately. Further disturbance is prohibited until permission is granted by the Executive Director of the Gorge Commission.

DATED THIS 29 day of September 2022 at White Salmon, Washington.

Krystyna U. Wolniakowski

Krystyna U. Wolniakowski
Executive Director

Expiration of Approval

Commission Rule 350-082-0160 governs the expiration of this Director's Decision.

Expiration of this Director's Decision is automatic. The Executive Director does not notify applicants or landowners of decisions that are expired or may be close to expiring.

This decision of the Executive Director becomes void on the 29 day of September 2024 unless construction has commenced in accordance with Commission Rule 350-082-0160(4).

Commission Rule 350-082-0160(4) specifies that commencement of construction means actual construction of the foundation or frame of the approved structure.

Construction must be completed within two years of the date the applicant commenced construction. Commission Rule 350-082-0160(5) specifies that completion of the structure means completion of the exterior surface(s) of the structure and compliance with all conditions of approval in the National Scenic Area approval. The date of the Executive Director's preconstruction inspection to confirm the location of proposed structural development as required by this decision shall be considered the date the applicant commenced construction, unless the Gorge Commission or applicant demonstrates otherwise.

Once the applicant has commenced construction of one element in this decision, the applicant must complete all elements in this decision in accordance with Commission Rule 350-082-0160. The Gorge Commission does not use different commencement of construction dates for different elements in this decision.

The applicant may request one 12-month extension of the time period to commence construction and one 12-month extension to complete construction in accordance with Commission Rule 350-082-0160(6). The applicant must submit the request in writing prior to the expiration of the approval. If the applicant requests an extension of time to complete construction after commencing construction, the applicant shall specify the date construction commenced. The Executive Director may grant an extension upon determining that conditions, for which the applicant is not responsible, would prevent the applicant from commencing or completing the proposed development within the applicable time limitation. The Executive Director shall not grant an extension if the site characteristics or new information indicate that the proposed use may adversely affect the scenic, cultural, natural or recreation resources in the National Scenic Area.

Appeal Process

The appeal period ends on the 29 of October 2022.

The decision of the Executive Director is final unless the applicant or any other person who submitted comment files a Notice of Appeal with the Commission within thirty (30) days of the date of this decision. Commission Rule chapter 350, division 70 governs appeal of this decision. This rule is available on the Gorge Commission's website and at the Gorge Commission office. You may contact the Gorge Commission office is you have questions about appealing this decision.

Notes

1. Any new land uses or structural development such as driveways, parking areas, garages, workshops, fences or other accessory structures; or additions or alterations not included in the approved application or site plan will require a new application and review. New cultivation also requires a new application and review.
2. This decision does not address local, state, or federal requirements that may be applicable to the proposed development. The landowner is responsible for obtaining all applicable county, state, or federal permits required for the development.

_____

In accordance with Commission Rule 350-082-0150(6), the Gorge Commission staff mailed notice of this decision to the following governments, agencies, and organizations and persons who provided comment on the application:

Confederated Tribes and Bands of the Yakama Nation
Confederated Tribes of the Umatilla Indian Reservation
Confederated Tribes of Warm Springs Reservation of Oregon
Nez Perce Tribe
U.S. Forest Service National Scenic Area Office
Washington Department of Archaeology and Historic Preservation
Klickitat County Planning Department
Klickitat County Building Department
Klickitat County Public Works Department
Klickitat County Health Department
Klickitat County Assessor
Washington Natural Heritage Program
Washington Department of Fish and Wildlife
Steve McCoy, Friends of the Columbia Gorge

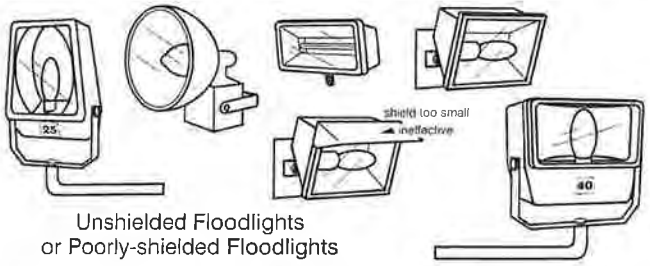
Attachments:

Staff Report for C22-0014
Approved site plans and elevation drawings
International Dark-Sky Association acceptable & unacceptable light fixtures

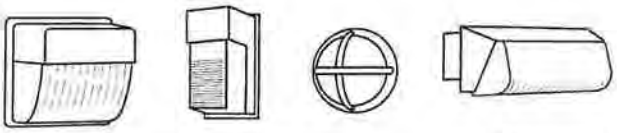
Examples of Acceptable / Unacceptable Lighting Fixtures

Unacceptable / Discouraged

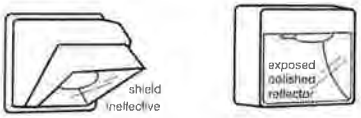
Fixtures that produce glare and light trespass

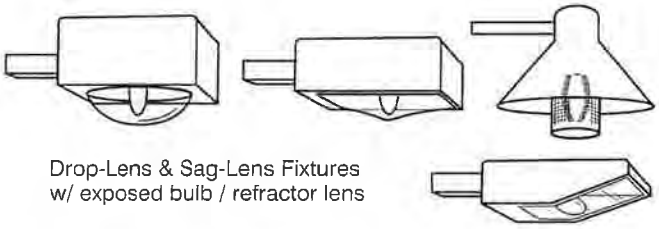


Unshielded Floodlights
or Poorly-shielded Floodlights

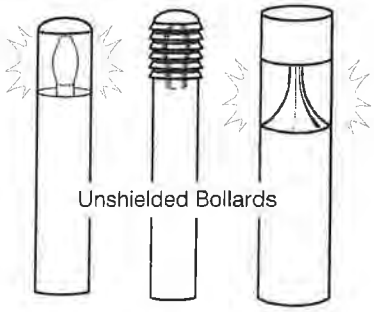


Unshielded Wallpacks
& Unshielded or
Poorly-shielded Wall
Mount Fixtures



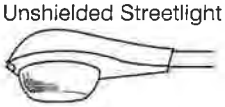


Drop-Lens & Sag-Lens Fixtures
w/ exposed bulb / refractor lens

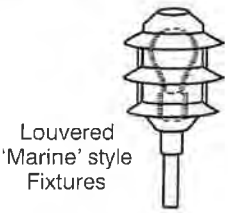


Unshielded Bollards

Unshielded Streetlight

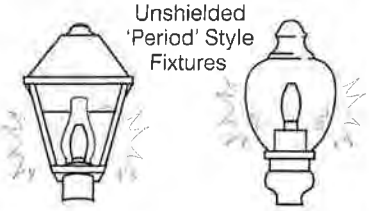


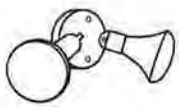
Unshielded Barn
Light



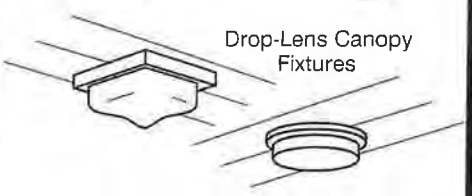
Louvered
'Marine' style
Fixtures

Unshielded
'Period' Style
Fixtures





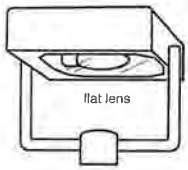
Unshielded PAR
Floodlights

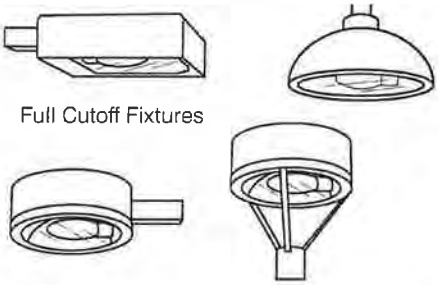


Drop-Lens Canopy
Fixtures

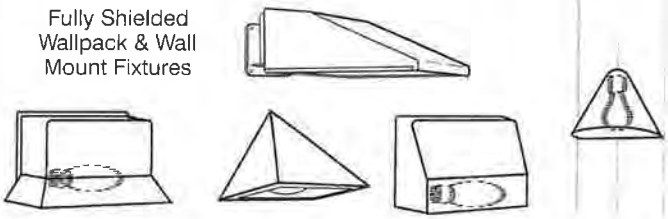
Acceptable

Fixtures that shield the light source to minimize glare and light trespass
and to facilitate better vision at night

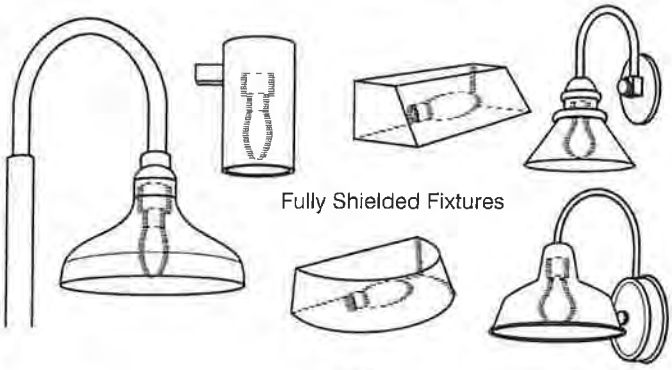




Full Cutoff Fixtures



Fully Shielded
Wallpack & Wall
Mount Fixtures



Fully Shielded Fixtures

Full Cutoff Streetlight

Fully Shielded
Barn Light

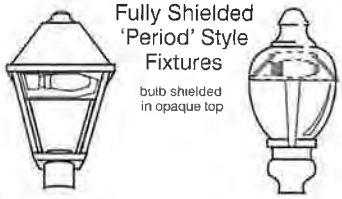
Fully Shielded
Walkway
Bollards

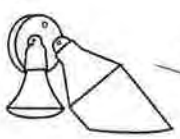
Fully Shielded
Decorative
Fixtures

bulb shielded
in opaque top

Fully Shielded
'Period' Style
Fixtures

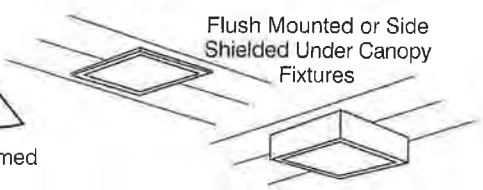
bulb shielded
in opaque top





Shielded / Properly-aimed
PAR Floodlights

Flush Mounted or Side
Shielded Under Canopy
Fixtures



Illustrations by Bob Crelin© 2005. Rendered for the Town of Southampton, NY Used with permission

APPROVED
KW

T-Mobile

THE PROJECT DEPICTED IN THESE PLANS QUALIFIES AS AN ELIGIBLE FACILITIES REQUEST ENTITLED TO EXPEDITED REVIEW UNDER 47 U.S.C. § 1455(A) AS A MODIFICATION OF AN EXISTING WIRELESS TOWER THAT INVOLVES THE COLLOCATION, REMOVAL AND/OR REPLACEMENT OF TRANSMISSION EQUIPMENT THAT IS NOT A SUBSTANTIAL CHANGE UNDER CFR § 1.61000 (B)(7).

TOPOLOGY: PO01569A DONOR TO PO08037A RECIPIENT

T-MOBILE SITE NUMBER: PO08037A
T-MOBILE SITE NAME: PO08037A
SITE TYPE: MONOPOLE
TOWER HEIGHT: 60'-0"
T-MOBILE PROJECT: REPLACEMENT
PO08037A_PO08037A_Sprint Retain_FCD_Infinigy_05.24.22

ATC SITE: 310462
SITE ADDRESS: WINDY POINT JEEP TRAIL/P.O. BOX 449 LYLE, WA 98635-9618
COUNTY: KLICKITAT
JURISDICTION: KLICKITAT COUNTY
LAT: 45° 40' 45.80" N
LONG: 121° 11' 28.40" W

SITE INFORMATION

PROPERTY INFORMATION:

SITE ADDRESS:	WINDY POINT JEEP TRAIL/P.O. BOX 449 LYLE, WA 98635-9618
COUNTY:	KLICKITAT
LATITUDE (NAD83):	45° 40' 45.80" N (45.67939166°)
LONGITUDE (NAD83):	121° 11' 28.40" W (-121.19121390°)
GROUND ELEVATION (NAVD88):	±1647.0' AMSL
JURISDICTION:	KLICKITAT COUNTY
APN:	02130900000000
ZONING:	LARGE SCALE AG
OCCUPANCY CLASSIFICATION:	U
LEGAL DESCRIPTION:	SEE SHEET A-1

CONSTRUCTION INFORMATION:

AREA OF CONSTRUCTION:	EXISTING
TYPE OF CONSTRUCTION:	V-B
PROPOSED USE:	UNMANNED TELECOMMUNICATIONS FACILITY
HANDICAP REQUIREMENTS:	FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION, HANDICAPPED ACCESS NOT REQUIRED.

PROPERTY OWNER:

COMPANY:	SCHREINER FARMS INC
ADDRESS:	WINDY POINT JEEP TRAIL/P.O. BOX 449
CITY, STATE, ZIP:	LYLE, WA 98635-9618

TOWER OPERATOR:

COMPANY:	AMERICAN TOWER CORPORATION
ADDRESS:	10 PRESIDENTIAL WAY
CITY, STATE, ZIP:	WOBURN, MA 01801

T-MOBILE SPRINT RETAIN PM:

COMPANY:	T-MOBILE
ADDRESS:	830 NE HOLLADAY ST
CITY, STATE, ZIP:	PORTLAND, OR 97232
CONTACT:	STACIE WADDLE
E-MAIL:	stacie.waddle@t-mobile.com

PROJECT TEAM

ARCHITECTURAL & ENGINEERING:

COMPANY:	INFINIGY ENGINEERING, PLLC
CONTACT:	PAUL DANNEBERG
PHONE:	(206) 375-3798
E-MAIL:	pdanneberg@infinigy.com

PLANNING APPLICANT:

COMPANY:	TILSON TECH
CONTACT:	JEFF COLANTINO
PHONE:	(360) 450-8697
E-MAIL:	jcolantino@tilsontech.com

ATC PROJECT MANAGER:

COMPANY:	AMERICAN TOWER CORPORATION
CONTACT:	TIFFANY PRETTY
PHONE:	(949) 447-2303
E-MAIL:	tiffany.pretty@americantower.com

SHEET INDEX

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T-2	SPECIFICATIONS & NOTES
T-3	SPECIFICATIONS & NOTES
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A-2	ENLARGED SITE PLANS
A-3	SOUTHWEST ELEVATIONS
A-4	ANTENNA PLANS & RF SCHEDULES
A-4.1	RF PLUMBING DIAGRAM
A-4.2	AEHC CABLING DIAGRAM
A-5	EQUIPMENT DETAILS
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A-6.2	EQUIPMENT DETAILS
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A-9	CONSTRUCTION DETAILS
E-1	UTILITY ROUTING PLAN & DETAILS
E-1.1	ELECTRICAL DIAGRAMS
E-1.2	ELECTRICAL DIAGRAMS
G-1	SCHEMATIC GROUNDING PLANS & NOTES
G-2	GROUNDING DETAILS

CONTRACTOR SHALL VERIFY ALL PLANS AND EXISTING DIMENSIONS AND CONDITIONS ON THE JOB SITE AND SHALL IMMEDIATELY NOTIFY THE ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.

APPROVALS

THE FOLLOWING PARTIES HEREBY APPROVE AND ACCEPT THESE DOCUMENTS & AUTHORIZE THE SUBCONTRACTOR TO PROCEED WITH CONSTRUCTION AS DESCRIBED HEREIN. ALL CONSTRUCTION DOCUMENTS ARE SUBJECT TO REVIEW BY THE LOCAL BUILDING DEPARTMENT & ANY CHANGES OR MODIFICATIONS THEY MAY IMPOSE.

APPROVAL:		SIGNATURE:	DATE:
PROJECT MANAGER			
SITE ACQUISITION			
CONSTRUCTION MANAGER			
SITE OWNER			
T-MOBILE	RF ENGINEER		
	DEVELOPMENT MANAGER		
	CONSTRUCTION MANAGER		
	OPS MANAGER		
	REGULATORY REVIEW		
	PROJECT MANAGER		

VICINITY MAP

DRIVING DIRECTIONS FROM T-MOBILE LOCAL OFFICE (830 NE HOLLADAY ST, PORTLAND, OR 97232): HEAD EAST ON NE HOLLADAY ST TOWARDS NE 9TH AVE, TURN RIGHT ONTO NE 11TH AVE, TURN LEFT ONTO NE LLOYD BLVD, THEN IMMEDIATELY TURN RIGHT ONTO NE 12TH AVE, TURN LEFT ONTO NE IRVING ST, TAKE THE SLIP ROAD ON THE LEFT AND FOLLOW SIGNS FOR I-84 EAST / US-30 EAST, HEAD RIGHT ON THE SLIP ROAD FOR OR-35 TOWARDS BINGEN / DMV / WHITE SALMON, TURN LEFT ONTO OR-35 / BUTTON BRIDGE RD TOWARDS BINGEN / DMV / WHITE SALMON, ENTERING WASHINGTON, TURN RIGHT ONTO WA-14 / HIGHWAY 14, BEAR LEFT ONTO SCHREINER FARMS RD, KEEP STRAIGHT TO GET ONTO ROAD, UNPAVED ROAD, TURN RIGHT, UNPAVED ROAD, ARRIVE AT WINDY POINT JEEP TRAIL/P.O. BOX 449, LYLE, WA 98635-9618

PROJECT DESCRIPTION

T-MOBILE PROPOSES TO MODIFY AN EXISTING UNMANNED TELECOMMUNICATIONS FACILITY AS FOLLOWS:

TOWER SCOPE OF WORK:
- REMOVE SPRINT ANTENNAS, RRU'S, MW DISH, ODU & HYBRID CABLES
- INSTALL (2) FFVV-65C-R3-V1 & (2) AEHC PANEL ANTENNAS
- INSTALL (1) VHLP-18/C MW DISH & (2) RFU-D-HP ODU'S
- INSTALL (2) AHLOA & (2) AHFIG RRU'S.
- INSTALL (2) HCS 2.0 PENDANT STYLE HYBRID CABLES
- PAINT TO MATCH ALL EQUIPMENT

GROUND SCOPE OF WORK:
- REMOVE SPRINT ALL EQUIPMENT CABINETS & UTILITY EQUIPMENTS
- INSTALL A 10'-0"x11'-0" ICE CANOPY
- INSTALL (1) LB3 BATTERY CABINET W/ (4) STRINGS OF BATTERIES & (1) HPL3 POWER CABINET W/ BASEBAND MODULES PER RFDS, (1) CSR IXRE ROUTER, (1) VOLTAGE BOOSTER W/ (2) AMPLIFIERS, & (1) EXTRA AMPLIFIER
- INSTALL (1) UTILITY H-FRAME W/ (1) TELCO BOX, (1) TECH LIGHT W/ TIMER, (1) PPC W/ CAM-LOK & ATS FOR SHARED GENERATOR
- INSTALL AN ICE BRIDGE, (1) GPS ANTENNA, & (2) HCS 2.0 JUNCTION BOX
- PAINT TO MATCH ALL EQUIPMENT
- UPGRADE ELECTRICAL TO 200 AMPS

DESIGN IS BASED ON: ATC APPLICATION ID 13765033, REV. #0 RFDS VERSION 1, DATED 4/27/2022 (CONFIG. 56790EZ_SR_T, 56790EZ_SR_T)

CODE COMPLIANCE

ALL WORK SHALL BE PERFORMED AND MATERIALS INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNING AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THE LATEST EDITIONS OF THESE CODES.

1. 2018 INTERNATIONAL BUILDING CODE - WAC 51-50
2. 2018 INTERNATIONAL MECHANICAL CODE - WAC 51-52
3. 2018 INTERNATIONAL FIRE CODE - WAC 51-54A
4. 2018 UNIFORM PLUMBING CODE - WAC 51-56
5. 2020 NATIONAL ELECTRICAL CODE
6. 2018 INTERNATIONAL FUEL GAS CODE
7. 2018 WASHINGTON STATE ENERGY CODE - WAC 51-11C
8. TIA-EIA-222-H OR LATEST EDITION
9. ASCE 7-16
10. NFPA 780 - LIGHTNING PROTECTION CODE
11. ANY OTHER NATIONAL OR LOCAL APPLICABLE CODES, MOST RECENT EDITION
12. LOCAL AMENDMENTS TO THE ABOVE, WHERE APPLICABLE
13. CITY/COUNTY ORDINANCES
14. LIFE SAFETY CODE NFPA-101

811 Know what's below. Call before you dig. www.call811.com

THESE PLANS HAVE BEEN DEVELOPED FOR THE MODIFICATION OF AN UNMANNED TELECOMMUNICATIONS FACILITY OWNED OR LEASED BY T-MOBILE IN ACCORDANCE WITH THE PROVIDED SCOPE OF WORK, INCORPORATED IN THE PLANS BY INFINIGY. THESE PLANS ARE NOT FOR CONSTRUCTION UNLESS STAMPED & SIGNED, & ACCOMPANIED BY A PASSING STRUCTURAL STABILITY ANALYSIS FOR THE STRUCTURE AND MOUNT PREPARED BY A LICENSED PROFESSIONAL ENGINEER.

T-Mobile
830 NE HOLLADAY ST
PORTLAND, OR 97232

AMERICAN TOWER CORPORATION

INFINIGY
FROM ZERO TO INFINIGY
the solutions are endless
BELLEVUE, WA 98004

T-MOBILE SITE:
PO08037A
PO08037A

ATC SITE:
310462
MURDOCK

WINDY POINT JEEP TRAIL/P.O. BOX 449
LYLE, WA 98635-9618
KLICKITAT COUNTY

60'-0" MONOPOLE

DRAWINGS ISSUED FOR:

REV.	DATE	DRAWN	DESCRIPTION:	QA/QC
A	04/26/22	RCD	PRELIMINARY REVIEW	WJR
0	05/24/22	WJR	100% CONSTRUCTION	TT

CHRISTOPHER J WARREN
STATE OF WASHINGTON
40190
REGISTERED
PROFESSIONAL ENGINEER
5/25/22

SHEET TITLE:
TITLE SHEET

SHEET NUMBER: T-1
REVISION: 0

A. GENERAL

1. ALL PAINT PRODUCT LINES SHALL BE SHERWIN WILLIAMS UNLESS SPECIFICALLY NOTED OTHERWISE BY T-MOBILE.

2. CONTRACTOR SHALL PREPARE ALL SURFACES AND APPLY ALL FINISHES PER LATEST EDITION OF MANUFACTURER'S SPECIFICATIONS.

3. COMPLY WITH MANUFACTURER'S WRITTEN INSTRUCTIONS REGARDING SUFFICIENT DRYING TIME BETWEEN COATS WITH PROVISIONS AS RECOMMENDED BY MANUFACTURER FOR EXISTING WEATHER CONDITIONS.

4. FINISH COLOR AND TEXTURE OF ALL PAINTED SURFACES SHALL MATCH EXISTING ADJACENT SURFACES UNLESS OTHERWISE NOTED BY T-MOBILE.

5. ALL PAINT MATERIAL DATA SHEETS SHALL BE PROVIDED TO THE T-MOBILE CONSTRUCTION MANAGER.

6. PREPARE PREVIOUSLY PAINTED SURFACE BY LIGHT SANDING WITH 400 GRIT SANDPAPER AND NON-HYDROCARBON WASH. PREPARE GALVANIZED SURFACES BY ACID ETCH OR SOLVENT CLEANING IN ACCORDANCE WITH SSPC-SP1.

7. FURNISH DROP CLOTHS, SHIELDS, MASKING AND OTHER PROTECTIVE METHODS TO PREVENT SPRAY OR DROPPINGS FROM DAMAGING ADJACENT SURFACES AND FACILITIES.

8. APPLY PAINT BY AIRLESS SPRAY, SANDING LIGHTLY BETWEEN EACH SUCCEEDING ENAMEL COAT ON FLAT SURFACES. APPLY MATERIAL TO ACHIEVE A COATING NO THINNER THAN THE DRY FILM THICKNESS INDICATED.

9. APPLY BLOCK FILTER TO CONCRETE BLOCK CONSTRUCTION AND ENSURE COMPLETE COVERAGE WITH PORES COMPLETELY FILLED.

10. CONTRACTOR SHALL CORRECT RUNS, SAGS, MISSES AND OTHER DEFECTS INCLUDING INADEQUATE COVERAGE AS DIRECTED BY THE T-MOBILE CONSTRUCTION MANAGER. REPAINT AS NECESSARY TO ACHIEVE SURFACES THAT ARE SMOOTH, EVENLY COATED WITH UNIFORM SHEEN AND FREE FROM BLEMISHES.

B. PAINTING SCOPE

1. PAINT THE FOLLOWING MATERIALS AND SYSTEMS CHECKED BELOW WITH THE COATING SYSTEM INDICATED.

PAINTING SCOPE				
SURFACE TO BE PAINTED	COATING SYSTEM	PAINT	DO NOT PAINT	N/A
BTS UNIT				X
ALL EQUIPMENT & CABINETS OTHER THAN THE BTS UNIT				X
ANTENNA COVERS, TILT BRACKETS, MOUNTING BRACKETS AND ASSOCIATED HARDWARE, CABLE AND CABLE COVERS EXPOSED TO VIEW, EXPOSED CONDUIT AND HANGERS, ETC.	SEE PLANS	SEE PLANS		
FLASHING UNITS, METAL TRIM AND OTHER METAL SURFACES				X
STUCCO, CONCRETE, CONCRETE BLOCK AND CEMENTIOUS TYPE FINISH SYSTEMS.				X
PLYWOOD, LUMBER AND WOOD TRIM INCLUDING THE BACK SIDE OF ALL SCREEN WALLS				X
DRYWALL				X
CONCRETE POLES				X
METAL POLES AND METAL POLE STAND-OFF				X

C. COATING SYSTEM SPECIFICATIONS

1. DTM ACRYLIC COATING (SERIES B66) BY SHERWIN WILLIAMS CO. 1MIL DFT PER COAT APPLIED IN TWO COATS OVER DTM BONDING PRIMER (B66A50).

2. 100% ACRYLIC, LATEX COATING EQUIVALENT TO A-100 (SERIES A-82) BY SHERWIN WILLIAMS CO. 1 MIL DFT PER COAT APPLIED IN TWO COATS OVER SPECIFIED PRIMER.

D. PAINT & PRIMER

ANTENNAS
- PRIMER: KEM AQUA E61-W525
- TOPCOAT: COROTHANE II B65W200/B60V22

BTS CABINET
- PRIMER: KEM AQUA E61-W525
- TOPCOAT: COROTHANE II B65W200/B60V22

COAXIAL JUMPER CABLES
- PRIMER: AS REQUIRED FOR ADHESION. APPLY ONE COAT OF KEM AQUA WATER REDUCIBLE PRIMER E61W25 REDUCED 25%
- TOPCOAT: 2 COATS COROTHANE II POLYURETHANE B65W200/B60V2

RAW STEEL
- PRIMER: KEM BOND HS B50WZ4, DMT ACRYLIC PRIMER
- TOPCOAT: 2 COATS COROTHANE II POLYURETHANE B65W200/B60V2

GALVANIZED METAL
- ACID ETCH WITH COMMERCIAL ETCH OR VINEGAR PRIMER COAT AND FINISH COAT (GALVITE HIGH SOLIDS OR DTM PRIMER/FINISH)

STAINLESS STEEL
- PRIMER: OTM WASH PRIMER, B71Y1
- TOPCOAT: 2 COATS COROTHANE II POLYURETHANE B65W200/B60V2

PRE-PRIMED STEEL
- TOUCH UP ANY RUST OR UN-PRIMED STEEL WITH KEM BOND HS, SS0WZ4

ALUMINUM & COPPER
- PRIMER: DTM WASH PRIMER, B71Y1
- TOPCOAT: 2 COATS COROTHANE II POLYURETHANE B65W200/B60V2

CONCRETE MASONRY
- PRIMER: PRO MAR EXTERIOR BLOCK FILLER
- TOPCOAT: 2 COATS A-100 LATEX HOUSE & TRIM, SHEEN TO MATCH

CONCRETE STUCCO (EXISTING)
- 2 COATS A-100 LATEX HOUSE & TRIM, SHEEN TO MATCH

STUCCO
- PRIMER: PRO MAR MASONRY CONDITIONER B-46-W21000
- TOPCOAT: SUPERPAINT A-80 SERIES A-89 SATIN A-84 GLOSS

WOOD
- PRIMER: A-100 EXTERIOR ALKYD WOO9D PRIMER Y-24W20
- TOPCOAT: 2 COATS A-100 LATEX HOUSE & TRIM SHEEN TO MATCH ADJACENT SURFACES

2 PAINT SPECIFICATIONS

1. THE LATEST EDITION OF THE AMERICAN INSTITUTE OF ARCHITECTS DOCUMENT A201 "GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION" ARE INCLUDED IN THESE SPECIFICATIONS AS IF COMPLETELY REPRODUCED HEREIN.

2. THIS FACILITY IS AN UNOCCUPIED PCS TELECOMMUNICATIONS SITE AND IS EXEMPT FROM ADA ACCESS REQUIREMENTS.

3. PRIOR TO SUBMISSION OF BIDS, THE CONTRACTORS PARTICIPATING SHALL VISIT THE JOB SITE WITH THE CONSTRUCTION AND CONTRACT DOCUMENTS TO CONFIRM THAT THE PROJECT CAN BE ACCOMPLISHED AS DESIGNED HEREIN, AS WELL AS TO FAMILIARIZE THEMSELVES WITH ALL FIELD CONDITIONS AFFECTING THE PROPOSED PROJECT INCLUDING DEMOLITION, ELECTRICAL, MECHANICAL AND STRUCTURAL INSTALLATIONS PRIOR TO PROCEEDING WITH CONSTRUCTION. SHOULD ANY ERRORS, OMISSION, OR DISCREPANCIES BE FOUND, THE GENERAL CONTRACTOR SHALL IMMEDIATELY NOTIFY IN WRITING, THE T-MOBILE CONSTRUCTION MANAGER AND THE ARCHITECT.

4. IN THE EVENT OF DISCREPANCIES WITHIN THESE DRAWINGS, THE CONTRACTOR SHALL INCLUDE THE MORE COSTLY OR EXTENSIVE WORK IN THE BID, UNLESS SPECIFICALLY DIRECTED OTHERWISE BY T-MOBILE. IF A DISCREPANCY EXISTS AND THE PROJECT MANAGER AND ARCHITECT ARE NOT NOTIFIED, THE GENERAL CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ALL COSTS INCURRED TO REPAIR OR CORRECT ALL PROBLEMS THAT RESULT.

5. THESE DRAWINGS SHALL NOT BE SCALED AS THESE DRAWINGS ARE INTENDED TO BE FOR DIAGRAMMATIC PURPOSES ONLY. FIGURED DIMENSIONS HAVE PRECEDENCE OVER DRAWING SCALE AND DETAIL DRAWINGS HAVE PRECEDENCE OVER SMALL SCALE DRAWINGS. CONTRACTOR SHALL CHECK THE ACCURACY OF ALL DIMENSIONS IN THE FIELD. UNLESS SPECIFICALLY NOTED, DO NOT FABRICATE ANY MATERIALS, OR BEGIN ANY CONSTRUCTION UNTIL THE ACCURACY OF DRAWING DIMENSIONS HAS BEEN VERIFIED AGAINST ACTUAL FIELD DIMENSIONS.

6. THE CONTRACTOR SHALL INCLUDE IN HIS OR HER BID ALL MATERIALS, EQUIPMENT, APPURTENANCES AND LABOR NECESSARY TO COMPLETE THE WORK AS INDICATED OR IMPLIED BY THESE DRAWINGS.

7. CONTRACTOR SHALL NOTIFY THE T-MOBILE CONSTRUCTION MANAGER, THE PROPERTY OWNER AND THE ARCHITECT IF ANY DETAILS ARE CONSIDERED IMPRACTICAL, UNSUITABLE, UNSAFE, NOT WATERPROOF, OR NOT WITHIN CUSTOMARY TRADE PRACTICE. IF WORK IS PERFORMED, IT WILL BE ASSUMED THAT THERE IS NO OBJECTION TO ANY DETAIL. DETAILS ARE INTENDED TO SHOW THE END RESULT OF THE DESIGN. MINOR MODIFICATIONS MAY BE REQUIRED TO SUIT JOB CONDITIONS, AND SHALL BE INCLUDED AS PART OF THE WORK.

8. EXISTING ELEVATIONS AND LOCATIONS SHALL BE VERIFIED BY THE CONTRACTOR BEFORE CONSTRUCTION. IF THEY DIFFER FROM THOSE SHOWN ON THE PLANS, THE CONTRACTOR SHALL NOTIFY THE T-MOBILE CONSTRUCTION MANAGER AND THE ARCHITECT SO THAT MODIFICATIONS CAN BE MADE BEFORE PROCEEDING WITH THE WORK.

9. THE CONTRACTOR SHALL VERIFY ALL TELEPHONE & RADIO EQUIPMENT LAYOUTS, SPECIFICATIONS, PERFORMANCE, INSTALLATION AND FINAL LOCATIONS WITH T-MOBILE CONSTRUCTION MANAGER PRIOR TO BEGINNING WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL WORK WITH ERICSSON RADIO SYSTEMS.

10. ALL SYMBOLS & ABBREVIATIONS USED ON THESE DRAWINGS ARE CONSIDERED CONSTRUCTION STANDARDS. IF THE CONTRACTOR HAS QUESTIONS REGARDING THEIR EXACT MEANING, THE T-MOBILE CONSTRUCTION MANAGER AND THE ARCHITECT SHALL BE NOTIFIED FOR CLARIFICATION BEFORE THE CONTRACTOR PROCEEDS WITH THE WORK.

11. THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS, LICENSES AND INSPECTIONS NECESSARY FOR PERFORMANCE OF THE WORK AND INCLUDE THOSE IN THE COST OF THE WORK TO T-MOBILE.

12. THE CONTRACTOR SHALL PROVIDE CONTINUOUS SUPERVISION AND DIRECT ALL WORK WHILE ANY SUBCONTRACTORS OR WORKERS ARE ONSITE, USING HIS OR HER BEST SKILL AND ATTENTION. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, PROCEDURES, SEQUENCES, AND COORDINATION OF ALL PORTIONS OF THE CONTRACTED WORK.

13. WORKMANSHIP THROUGHOUT SHALL BE OF THE BEST QUALITY OF THE TRADE INVOLVED, AND SHALL MEET OR EXCEED THE FOLLOWING MINIMUM REFERENCE STANDARDS FOR QUALITY AND PROFESSIONAL CONSTRUCTION PRACTICE:

NRCA - NATIONAL ROOFING CONTRACTORS ASSOCIATION
O'HARE INTERNATIONAL CENTER
10255 W HIGGINS RD, SUITE 600
ROSEMONT, IL 60018-5607

SMACNA - SHEET METAL AND AIR CONDITIONING CONTRACTORS NATIONAL ASSOCIATION
4201 LAFAYETTE CENTER DR
CHANTILLY, VA 20151-1219

IILP - INTERNATIONAL INSTITUTE FOR LATH AND PLASTER
820 TRANSFER RD
ST. PAUL, MN 55114-1406

14. INSTALL ALL EQUIPMENT AND MATERIALS PER THE LATEST EDITION OF THE MANUFACTURER'S INSTALLATION SPECIFICATIONS UNLESS OTHERWISE INDICATED BY T-MOBILE, OR WHERE LOCAL CODES OR REGULATIONS TAKE PRECEDENCE.

15. THE CONTRACTOR SHALL VERIFY, COORDINATE, AND PROVIDE ALL NECESSARY BLOCKING, BACKING, FRAMING, HANGERS OR OTHER SUPPORTS FOR ALL ITEMS.

16. THE CONTRACTOR AND ALL SUBCONTRACTORS SHALL GIVE ALL REQUIRED CONSTRUCTION NOTICES AND SHALL COMPLY WITH ALL APPLICABLE LOCAL CODES, REGULATIONS, LAWS AND ORDINANCES, AS WELL AS THE STATE DEPARTMENT OF INDUSTRIAL RELATIONS REGULATIONS, INCLUDING BUT NOT LIMITED TO THE DIVISION OF OCCUPATIONAL SAFETY AND HEALTH (OSHA).

17. THE CONTRACTOR SHALL PROTECT ALL PROPERTY FROM DAMAGE THAT MAY OCCUR DURING CONSTRUCTION. ANY DAMAGE TO NEW AND EXISTING FINISHES, CONSTRUCTION, STRUCTURE, LANDSCAPING, CURBS, STAIRS, OR EQUIPMENT, ETC. SHALL BE IMMEDIATELY REPAIRED OR REPLACED TO THE SATISFACTION OF T-MOBILE AND THE PROPERTY OWNER'S REPRESENTATIVE, AT THE EXPENSE OF THE CONTRACTOR.

18. THE CONTRACTOR SHALL BE RESPONSIBLE FOR, AND SHALL REPLACE OR REMEDY, ANY FAULTY, IMPROPER, OR INFERIOR MATERIALS OR WORKMANSHIP OR ANY DAMAGE WHICH SHALL APPEAR WITHIN ONE YEAR AFTER THE COMPLETION AND ACCEPTANCE OF THE WORK BY T-MOBILE UNDER THIS CONTRACT.

19. IT SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO PROTECT AND LOCATE, OR CONTACT AN OUTSIDE AGENCY TO LOCATE, ALL EXISTING UTILITIES REGARDLESS OF WHETHER OR NOT SHOWN HEREIN. THE CONTRACTOR SHALL BEAR ALL EXPENSES FOR THE REPAIR OR REPLACEMENT OF UTILITIES OR OTHER PROPERTY DAMAGED IN CONJUNCTION WITH THE EXECUTION OF WORK.

20. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COMPLETE SECURITY OF THE PROJECT SITE WHILE THE JOB IS IN PROGRESS AND UNTIL THE JOB IS COMPLETED AND ACCEPTED BY T-MOBILE.

21. THE CONTRACTOR SHALL PROVIDE TEMPORARY WATER, POWER AND TOILET FACILITIES AS REQUIRED BY THE PROPERTY OWNER, T-MOBILE, AND THE CITY OR GOVERNING AGENCY.

22. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR REDLINING THE CONSTRUCTION DOCUMENTS TO ILLUSTRATE THE AS-BUILT CONDITION OF THE SITE. THIS SHALL BE DONE AFTER THE SITE HAS BEEN AWARDED FINAL INSPECTION BY THE RESPONSIBLE BUILDING AGENCY. ONE SET OF REDLINED DRAWINGS SHALL BE PROVIDED TO THE T-MOBILE CONSTRUCTION MANAGER.

23. THE LATEST EDITION OF ALL PERMITTED AND APPROVED PLANS PERTAINING TO THIS PROJECT SHALL BE KEPT IN A PLAN BOX AND SHALL NOT BE USED BY WORKERS. ALL CONSTRUCTION SETS SHALL REFLECT THE SAME INFORMATION. THE CONTRACTOR SHALL ALSO MAINTAIN IN GOOD CONDITION, ONE COMPLETE SET OF PLANS WITH ALL REVISIONS, ADDENDA AND CHANGE ORDERS ON THE PREMISES AT ALL TIMES. THESE ARE TO BE UNDER THE CARE OF THE CONSTRUCTION SUPERINTENDENT.

24. THE CONTRACTOR SHALL REMOVE ALL RUBBISH AND WASTE MATERIALS ON A DAILY BASIS, EXCEPT FOR THAT SPECIFIED AS THE PROPERTY OF THE BUILDING OR PROPERTY OWNER AND SHALL EXERCISE STRICT CONTROL OVER SITE CLEANING THROUGHOUT CONSTRUCTION AND FINAL CLEAN-UP UPON COMPLETION OF WORK. ALL AREAS ARE TO BE LEFT IN A BROOM CLEAN CONDITION AT THE END OF EACH DAY THEN AT A VACUUM CLEAN CONDITION, FREE FROM PAINT SPOTS, DUST OR SMUDGES OF ANY NATURE AT COMPLETION OF WORK.

25. THE GENERAL CONTRACTOR MUST PERFORM WORK DURING PROPERTY OWNER'S PREFERRED HOURS TO AVOID DISRUPTION OF NORMAL ACTIVITY.

26. ALL EXPOSED METAL SHALL BE HOT-DIPPED GALVANIZED.

27. SEAL ALL PENETRATIONS THROUGH FIRE-RATED AREAS WITH U.L. LISTED OR FIRE MARSHALL APPROVED MATERIALS IF AND WHERE APPLICABLE TO THIS FACILITY AND PROJECT SITE.

28. PROVIDE A PORTABLE FIRE EXTINGUISHER WITH A RATING OF NOT LESS THAN 2-A OR 2-A10BC WITHIN 75 FEET TRAVEL DISTANCE TO ALL PORTIONS OF THE PROJECT AREA UNDER CONSTRUCTION.

29. ELECTRICAL POWER SYSTEM SHALL BE GROUNDED PER NEC ARTICLES 250 AND 810.

30. ALL NEW OPENINGS IN THE EXTERIOR ENVELOPE OF CONDITIONED SPACES SUCH AS AT WALL AND ROOF PENETRATIONS SHALL BE CAULKED OR SEALED TO LIMIT INFILTRATION OF AIR AND MOISTURE.

31. UPON COMPLETION OF CONSTRUCTION, T-MOBILE CONSTRUCTION MANAGER SHALL CONDUCT A WALK-THRU WITH PROPERTY OWNER OR REPRESENTATIVE OF PROPERTY OWNER.

32. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL SYSTEM EQUIPMENT IN A CLEAN WORKING ORDER UNTIL ACCEPTANCE OF THE PROJECT BY T-MOBILE.

33. INSTALL ALL EQUIPMENT AND MATERIALS PER THE LATEST EDITION OF THE MANUFACTURER'S INSTALLATION SPECIFICATIONS UNLESS SPECIFICALLY OTHERWISE INDICATED, OR WHERE LOCAL CODES OR REGULATION TAKE PRECEDENCE.

1 GENERAL SPECIFICATIONS

T-Mobile
830 NE HOLLADAY ST
PORTLAND, OR 97232

AMERICAN TOWER CORPORATION

INFINIGY
FROM ZERO TO INFINIGY
the solutions are endless
BELLEVUE, WA 98004

T-MOBILE SITE:
PO08037A
PO08037A

ATC SITE:
310462
MURDOCK

WINDY POINT JEEP
TRAIL/P.O. BOX 449
LYLE, WA 98635-9618
KLICKITAT COUNTY

60'-0" MONOPOLE

DRAWINGS ISSUED FOR:

REV.	DATE	DRAWN	DESCRIPTION	QA/QC
A	04/26/22	RCD	PRELIMINARY REVIEW	WJR
0	05/24/22	WJR	100% CONSTRUCTION	TT

CHRISTOPHER J WARREN
STATE OF WASHINGTON
40190
REGISTERED
PROFESSIONAL ENGINEER
5/25/22

SHEET TITLE:
SPECIFICATIONS & NOTES

SHEET NUMBER: T-2
REVISION: 0

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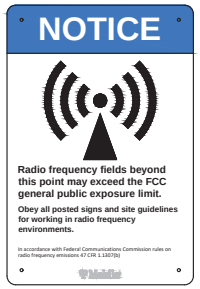

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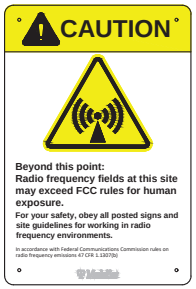

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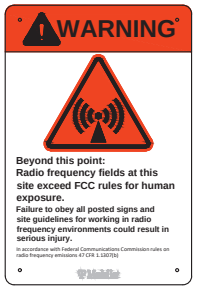

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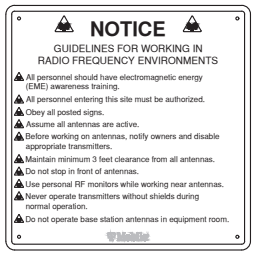

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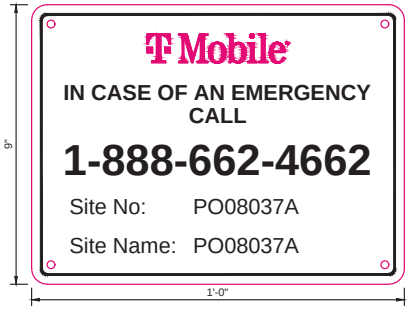

2 SIGNAGE SPECIFICATIONS

1 STRUCTURAL SPECIFICATIONS

A. GENERAL

1. PRECEDENCE: UNLESS OTHERWISE SHOWN OR SPECIFIED, THE FOLLOWING GENERAL NOTES SHALL APPLY. INFORMATION ON THESE DRAWINGS SHALL HAVE THE FOLLOWING PRECEDENCE.
   A. ALL DIMENSIONS TO TAKE PRECEDENCE OVER SCALE SHOWN ON PLANS, SECTIONS AND DETAILS.
   B. NOTES AND DETAILS ON DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL NOTES AND TYPICAL DETAILS.
   C. MATERIAL NOTES AND SPECIFICATIONS ON THE DRAWINGS SHALL TAKE PRECEDENCE OVER THE SPECIFICATIONS.
2. OTHER TRADES: SEE THE ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS NOT SHOWN.
3. GENERAL DETAILS AND NOTES ON THESE SHEETS SHALL APPLY UNLESS SPECIFICALLY SHOWN OR NOTED OTHERWISE. CONSTRUCTION DETAILS NOT FULLY SHOWN OR NOTED SHALL BE SIMILAR TO DETAILS SHOWN FOR SIMILAR CONDITIONS.
4. SHORING: IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO INSTALL ALL TEMPORARY BRACING AND SHORING TO INSURE THE SAFETY OF THE WORK UNTIL IT IS COMPLETED. THIS INCLUDES UNDERPINNING EXISTING FOOTINGS WHERE APPLICABLE.
5. SAFETY: THESE DRAWINGS REPRESENT THE FINISHED STRUCTURE. UNLESS OTHERWISE INDICATED, THEY DO NOT INDICATE THE METHOD OF CONSTRUCTION.
6. WATERPROOFING: WATERPROOFING AND DRAINAGE DETAILS OR SPECIFICATIONS SHOWN IN THESE DRAWINGS ARE FOR GENERAL INFORMATIONAL PURPOSES ONLY. CONTRACTOR TO NOTIFY THE T-MOBILE CONSTRUCTION MANAGER AND THE ARCHITECT IF ANY INADEQUATE OR IMPROPER CONDITIONS.

B. STEEL

1. ALL STRUCTURAL STEEL SECTIONS AND WELDED PLATE MEMBERS SHALL CONFORM TO ASTM A-36 AND BE FABRICATED IN ACCORDANCE WITH THE SPECIFICATIONS OF THE AISC.
2. ALL BOLTS SHALL CONFORM TO ASTM A-307 UNLESS OTHERWISE NOTED ON PLANS. HIGH STRENGTH BOLTS SHALL CONFORM TO ASTM A-325
3. STEEL PIPE COLUMNS SHALL BE GRADE "B" CONFORMING TO ASTM A53.
4. STEEL TUBING SHALL BE GRADE "B" CONFORMING TO ASTM A500.
5. ALL WELDING SHALL BE DONE BY THE SHIELDED ARC METHOD. ALL WELDERS SHALL BE PROPERLY QUALIFIED AND BE PRE-APPROVED. SURPLUS METAL SHALL BE DRESSED OFF TO SMOOTH, EVEN SURFACES WHERE WELDS ARE NOT EXPOSED TO VIEW. ALL WELDING SHALL COMPLY WITH THE LATEST A.W.S. SPECIFICATIONS.
6. THE FOLLOWING WELDING EQUIPMENT MUST BE USED:
   A. 250 AMP WELDERS.
   B. ROD OVENS.
   C. GRINDERS.
7. NO BUZZ BOXES SHALL BE USED.
8. ALL STRUCTURAL STEEL SHALL HAVE MILL CERTIFICATION. MILL CERTIFICATION SHALL BE KEPT ON THE JOB SITE FOR EXAMINATION BY THE DESIGN ENGINEER AND THE CITY INSPECTOR.
9. ALL HIGH STRENGTH BOLTS SHALL HAVE MILL CERTIFICATION. MILL CERTIFICATION SHALL BE KEPT ON THE JOB SITE FOR EXAMINATION BY THE INSPECTOR.
10. STEEL THAT HAD BEEN WELDED, CUT OR SCRATCHED IN THE FIELD SHALL BE TOUCHED UP WITH COLD GALVANIZING PAINT.
11. WELDING INDICATED IN THESE DRAWINGS IS DESIGNED FOR ONE HALF OF ALLOWABLE CODE STRESSES UNLESS NOTED "FULL STRESS" AT END OF WELD SYMBOL.

C. CONCRETE

1. STRENGTH: CONCRETE FOR THE PROJECT SHALL HAVE THE FOLLOWING ULTIMATE COMPRESSIVE STRENGTH AT AGE OF 28 DAYS:

LOCATION	STRENGTH	WT.	SLUMP	ADMIXTURE
SLAB&FOOTING	3000psi	150pcf	4"	NONE

2. INSPECTION: CONCRETE WITH SPECIFIED STRENGTH GREATER THAN 2500psi SHALL BE CONTINUOUSLY INSPECTED DURING PLACEMENT BY A DEPUTY INSPECTOR EMPLOYED BY A TESTING LABORATORY APPROVED BY THE BUILDING DEPT.
3. REBAR GRADES: REINFORCING STEEL SHALL BE CLEAN PREFORMED BARS CONFORMING TO ASTM A615 AS FOLLOWS:

   #4 & SMALLER BARS.....GRADE 40
   #5 & LARGER BARS.....GRADE 60
   ALL BARS AT CAISSON FOOTING...GRADE 60
4. FOUNDATIONS & SLABS: TYPE V, LOW ALKALI, CONFORMING TO ASTM C-150. PIER/CAISSON FOOTINGS: TYPE V, LOW ALKALI, CONFORMING TO ASTM C-150.
5. AGGREGATE: USED IN THE CONCRETE SHALL CONFORM TO ASTM C-33. USE ONLY AGGREGATES KNOWN NOT TO CAUSE EXCESSIVE SHRINKAGE. THE MAXIMUM SIZE AGGREGATE IN CONCRETE WORK SHALL BE THE FOLLOWING:

   A. FOUNDATIONS & SLABS 9" OR LESS: 3/4" GRAVEL
   B. PIER/CAISSON FOOTING: 1" GRAVEL.
6. SHALL BE CLEAN AND FREE FROM DELETERIOUS AMOUNT OF ACIDS, ALKALIS, ORGANIC MATERIALS AND SHALL BE SUITABLE FOR HUMAN CONSUMPTION.
7. MIXING: PREPARATION OF CONCRETE SHALL CONFORM TO ASTM C-94. NO MORE THAN 90 MINUTES SHALL ELAPSE BETWEEN CONCRETE BATCHING AND CONCRETE PLACEMENT UNLESS APPROVED BY A TESTING AGENCY.
8. SEGREGATION OF AGGREGATES: CONCRETE SHALL NOT BE FLOPPED THROUGH REINFORCING STEEL (AS IN WALLS, COLUMNS, CAISSON, AND DROP CAPITALS) SO AS TO CAUSE SEGREGATION OF AGGREGATES. USE HOPPERS, CHUTES, TRUNKS OR PUMP HOSE SO THAT THE FREE UNCONFINED FALL OF CONCRETE SHALL NOT EXCEED 5 FT.
9. SPLICES OF REINFORCING STEEL SHALL BE LAPPED A MINIMUM OF 30 DIAMETERS AND SECURELY WIRED TOGETHER. SPLICES OF ADJACENT REINFORCING BARS SHALL BE STAGGERED WHEREVER POSSIBLE.
10. REAR CLEARANCE: MINIMUM COVERAGE FOR JOISTS, BEAMS, GIRDERS AND COLUMNS SHALL BE TO FACE OF STIRRUPS OR TIES. UNLESS OTHERWISE NOTED, CONCRETE COVERAGE FOR REINFORCING BARS TO FACE OF BAR SHALL BE AS FOLLOWS:

    A. CONCRETE IN CONTACT WITH EARTH, UNFORMED 3"
    B. CONCRETE IN CONTACT WITH EARTH, FORMED 2"
    C. WALL, EXTERIOR FACE 1-1/2"
    D. WALL, INTERIOR FACE 1"
    E. STRUCTURAL SLABS 3/4"
    F. JOISTS 3/4"
    G. BEAMS, GIRDERS & COLUMNS 1-1/2"
11. PENETRATIONS: NO SLEEVES OR CHASES SHALL BE PLACED IN BEAMS, SLABS, WALLS AND COLUMNS, EXCEPT THOSE SHOWN ON THE PLANS. CONTRACTOR SHALL OBTAIN PRIOR APPROVAL FOR INSTALLATIONS OF ANY ADDITIONAL SLEEVES OR CHASES. ALL PLUMBING, ELECTRICAL AND MECHANICAL OPENINGS SHALL BE SLEEVES. CORING IS NOT ALLOWED UNLESS PRIOR APPROVAL IS OBTAINED FROM THE STRUCTURAL ENGINEER.
12. EMBEDDED ITEMS: CONDUIT PLACED IN A CONCRETE SLAB SHALL NOT HAVE AN OUTSIDE DIAMETER GREATER THAN 1/4 THE THICKNESS OF THE SLAB. CONDUIT SHALL NOT BE EMBBEDED IN A SLAB THAT IS LESS THAN 3-1/2" THICK, UNLESS SLAB IS LOCALLY THICKENED. MINIMUM CLEAR DISTANCE BETWEEN COUNDUITS SHALL BE SIX INCHES.
13. ANCHORING: ALL ANCHOR BOLTS, REINFORCING STEEL, DOWELS, INSERTS, ETC., SHALL BE WELL SECURED IN POSITION PRIOR TO PLACING CONCRETE. NO REPOSITIONING DURING CONCRETE POUR IS ALLOWED.
14. SLABS SHALL BE SPRAYED WITH A CURING COMPOUND IMMEDIATELY AFTER FINISHING. CURING COMPOUNDS USED ON CONCRETE WHERE TILE OR FLOOR COVERING IS TO BE BONDED TO THE CONCRETE SURFACE SHALL BE APPROVED BY THE TILE OR FLOOR COVERING MANUFACTURER. KEEP SLAB WET FOR 7 DAY MINIMUM PERIOD.
15. CONSOLIDATION: ALL CONCRETE SHALL BE VIBRATED AS IT IS BEING PLACED WITH ELECTRICALLY OPERATED VIBRATING EQUIPMENT.

D. TIMBER

1. ALL FRAMING LUMBER FOR 4X AND LARGER BEAMS SHALL BE NO. 1 GRADE DOUGLAS FIR., S45, UNLESS NOTED OTHERWISE.
2. ALL FRAMING LUMBER FOR 2X RAFTERS AND JOISTS SHALL BE NO.2 GRADE DOUGLAS FIR, S45, UNLESS NOTED OTHERWISE.
3. STRIPPING, BLOCKING, BACKING AND OTHER NON-STRUCTURAL LUMBER SHALL BE NO. 2 OR STD & BTR GRADE DOUGLAS FIR, S45. 2X4 STUD WALLS SHALL BE D.F. STANDARD & BTR.
4. ALL BEAMS, JOISTS AND RAFTERS SHALL BE INSTALLED WITH CROWN SIDE UP.
5. ROOF PLYWOOD SHALL MATCH EXISTING PLYWOOD SHEATHING WITH A SPAN INDEX RATIO 32/16. EDGE NAIL WITH8d AT 6" O.C. UNLESS NOTED OTHERWISE ON PLANS. FIELD NAIL WITH 8d AT 12" O.C.
6. PLYWOOD SHEETS SHALL BE LAID WITH THE FACE GRAIN PERPENDICULAR TO SUPPORTS AND WITH THE EDGES STAGGERED, UNLESS NOTED OTHERWISE ON THE PLANS.
7. PLYWOOD SHALL BE GRADE MARKED BY DFPA, TECO, OR PTL AND SHALL CONFORM TO PS 1-83.
8. THE MAXIMUM MOISTURE CONTENT OF ALL LUMBER SHALL NOT EXCEED 24% AT THE TIME OF INSTALLATION.
9. MINIMUM NAILING SHALL COMPLY WITH TABLE 23-1-q OF BUILDING CODE. ALL NAILS SHALL BE COMMON WIRE NAILS.
10. ALL BOLTS SHALL HAVE STANDARD CUT WASHERS UNDER HEADS AND/OR NUTS WHERE IN CONTACT WITH WOOD.
11. LAG BOLTS SHALL BE SCREWED INTO PLACE, NOT DRIVEN. LAG BOLTS SHALL BE INSTALLED IN PRE-DRILLED HOLES WITH A DIAMETER EQUAL TO 75% DIAMETER OF BOLT.
12. CONNECTORS: ALL SHEET METAL FRAMING CONNECTORS SHOWN IN THE PLANS SHALL BE STRONG CONNECTORS AS MANUFACTURED BY THE SAMSON COMPANY. SUBSTITUTIONS MAY BE MADE WHEN APPROVED BY THE STRUCTURAL ENGINEER.
13. ALL LUMBER EXPOSED TO WEATHER OR IN CONTACT WITH MASONRY OR CONCRETE SHALL BE WOLMANIZED PRESSURE TREATED LUMBER OR A NATURALLY DECAY RESISTANT LUMBER SUCH AS REDWOOD OR CEDAR.
14. ALASKAN YELLOW CEDAR GLUE-LAMINATED BEAMS
    A. LUMBER SPECIES: ALASKAN YELLOW CEDAR (A.C.) CONFORMING TO 20F-V12
    B. STRENGTH PROPERTIES:
       Fb BOTTOM FIBER BENDING STRESS 2000psi MIN.
       Fb TOP FIBER BENDING STRESS 1000psi MIN.
       Fv SHEAR STRESS 190psi MIN.
       Fc COMPRESSION STRESS PERPENDICULAR TO GRAIN 560psi MIN.
    C. MODULUS ELASTICITY 1400ksi MIN.
    D. CAMBER TO RADIUS OF 1600" U.O.N.
    E. ALL GLB'S SHALL BE FABRICATED WITH EXTERIOR GLUE.
    F. MANUFACTURE OF GLB'S SHALL CONFORM TO THE UBC.
    G. GLU-LAM MATERIAL SHALL BE IN ACCORDANCE WITH ANSI/AITC A190.1 AND ASTM D3737.

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WINDY POINT JEEP
TRAIL/P.O. BOX 449
LYLE, WA 98635-9618
KLICKITAT COUNTY

60'-0" MONOPOLE

DRAWINGS ISSUED FOR:

REV.	DATE	DRAWN	DESCRIPTION	QA/QC
A	04/26/22	RCD	PRELIMINARY REVIEW	WJR
0	05/24/22	WJR	100% CONSTRUCTION	TT

SHEET TITLE:
SPECIFICATIONS & NOTES

SHEET NUMBER: T-3
REVISION: 0

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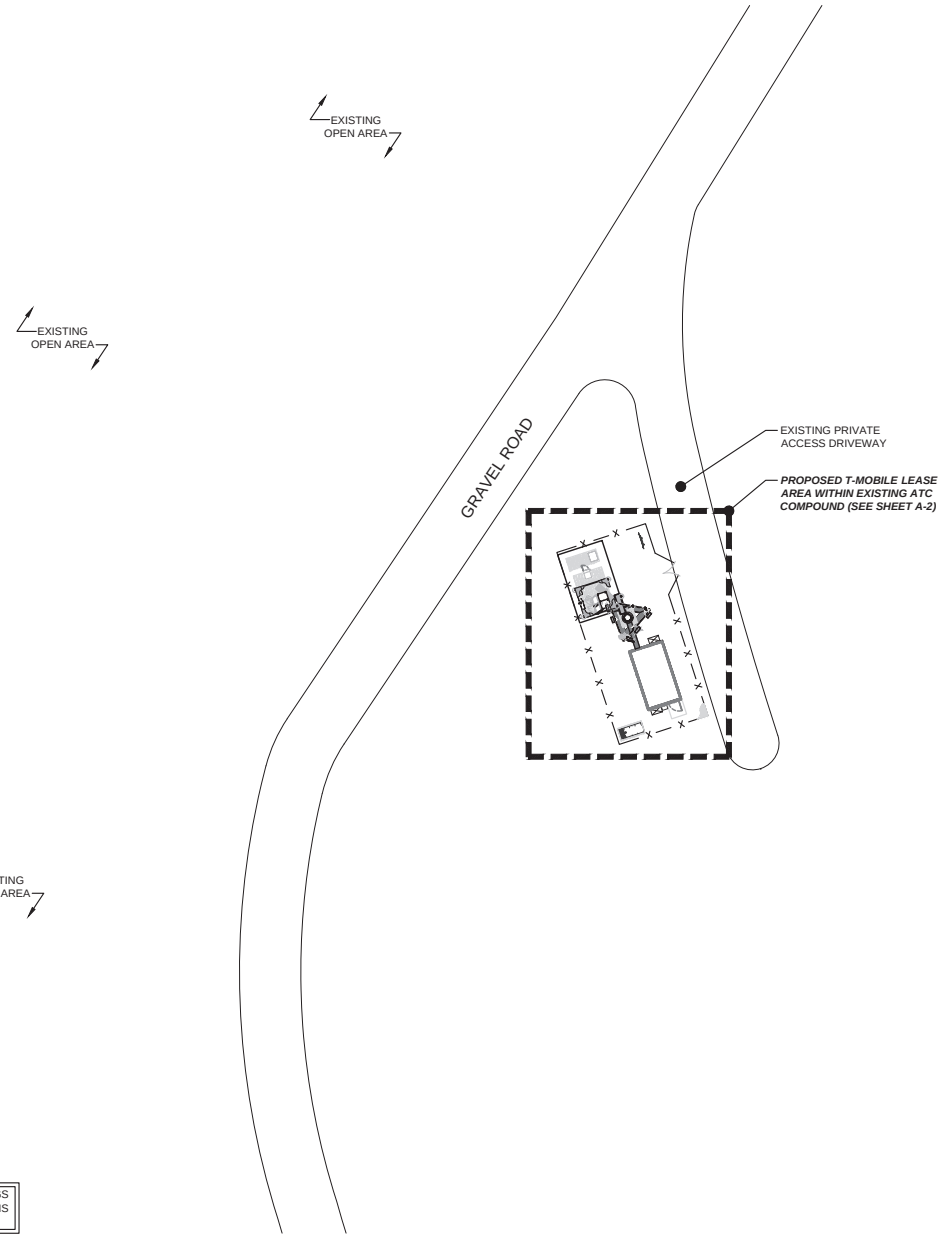
LEGAL DESCRIPTION:

SEC. 9 TOWNSHIP 2N RANGE 13E



INFORMATION CONTAINED WITHIN DRAWINGS IS BASED ON PROVIDED INFORMATION AND IS NOT THE RESULT OF A FIELD SURVEY.

1 OVERALL SITE PLAN

22"x34" SCALE: 1" = 20'-0"
11"x17" SCALE: 1" = 40'-0"
20' 10' 20'

N

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CHRISTOPHER J WARREN
STATE OF WASHINGTON
40190
REGISTERED
PROFESSIONAL ENGINEER
5/25/22

SHEET TITLE:
OVERALL
SITE PLAN

SHEET NUMBER: A-1

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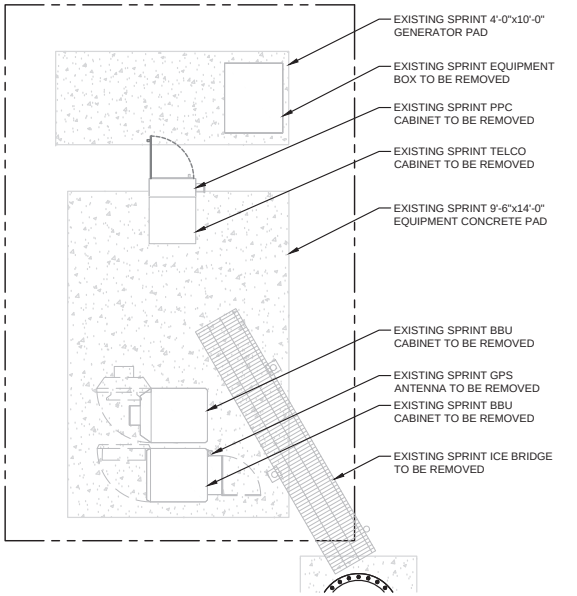
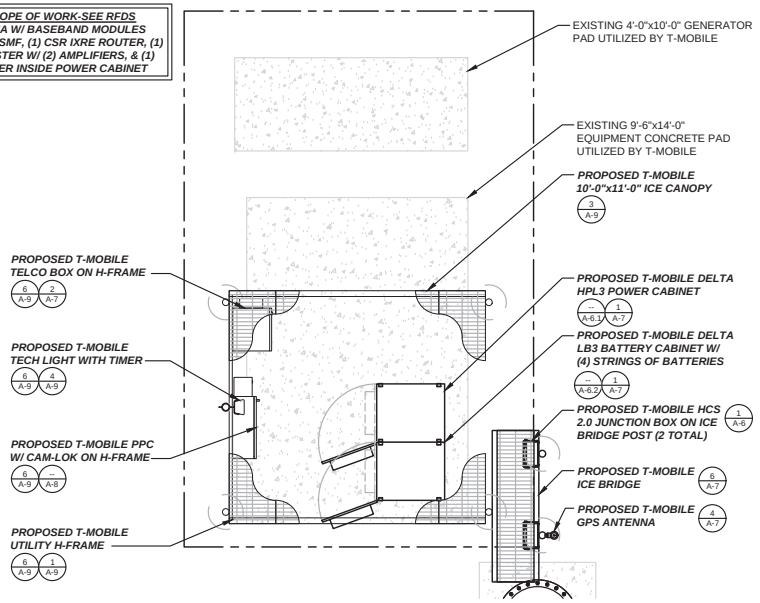
NOTE:
IF EXISTING CONCRETE PAD DOES NOT EXTEND BELOW FROST LINE, IT MUST BE REMOVED AND REPLACED WITH NEW CONCRETE PAD. IF FOOTING DOES EXTEND BELOW FROST LINE, IT WILL NEED TO BE ENCASED AND EXPANDED WITH NEW CONCRETE PAD.



3 EXISTING ENLARGED EQUIPMENT PLAN

22"x34" SCALE: 3/8" = 1'-0"
11"x17" SCALE: 3/16" = 1'-0"
2' 1' 0' 2'

RF EQUIPMENT SCOPE OF WORK-SEE RFDS
- ***INSTALL (2) AMIA W/ BASEBAND MODULES PER RFDS, (1) FSMF, (1) CSR IXRE ROUTER, (1) VOLTAGE BOOSTER W/ (2) AMPLIFIERS, & (1) EXTRA AMPLIFIER INSIDE POWER CABINET***



2 PROPOSED ENLARGED EQUIPMENT PLAN

22"x34" SCALE: 3/8" = 1'-0"
11"x17" SCALE: 3/16" = 1'-0"
2' 1' 0' 2'

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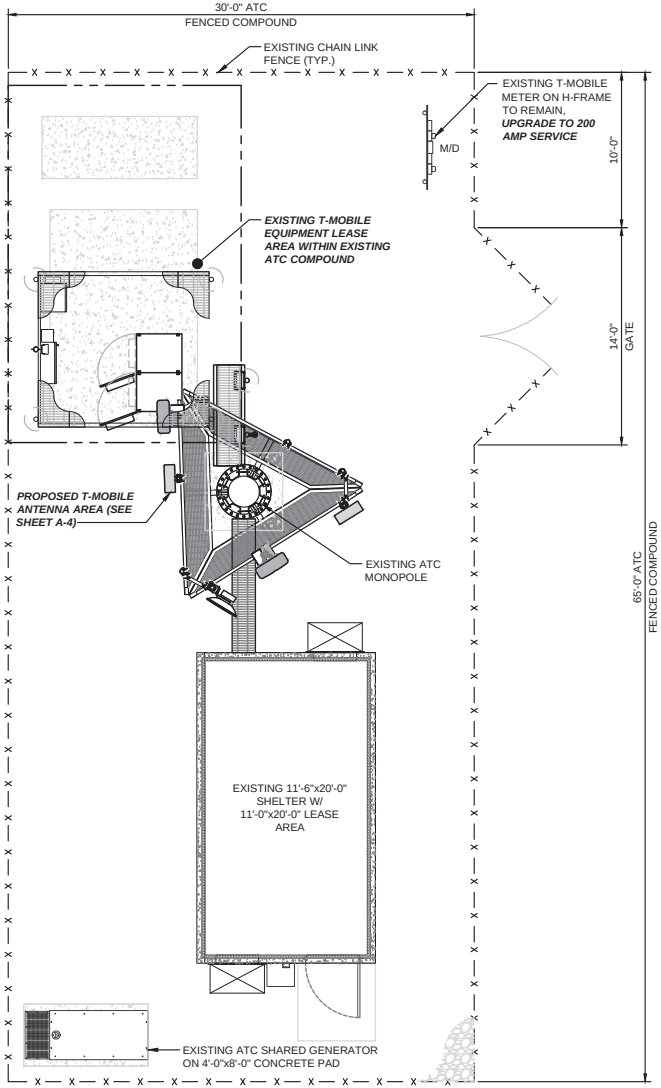

1 ENLARGED SITE PLAN

22"x34" SCALE: 1/4" = 1'-0"
11"x17" SCALE: 1/8" = 1'-0"
4' 3' 2' 1' 0' 4'

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SHEET TITLE:
ENLARGED
SITE PLANS

SHEET NUMBER: A-2
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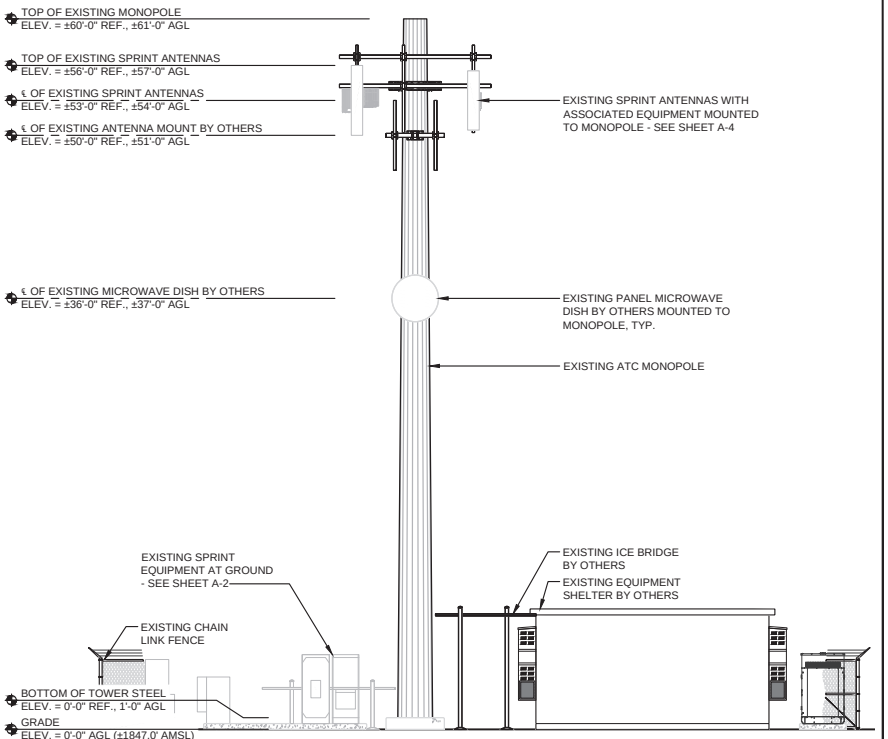
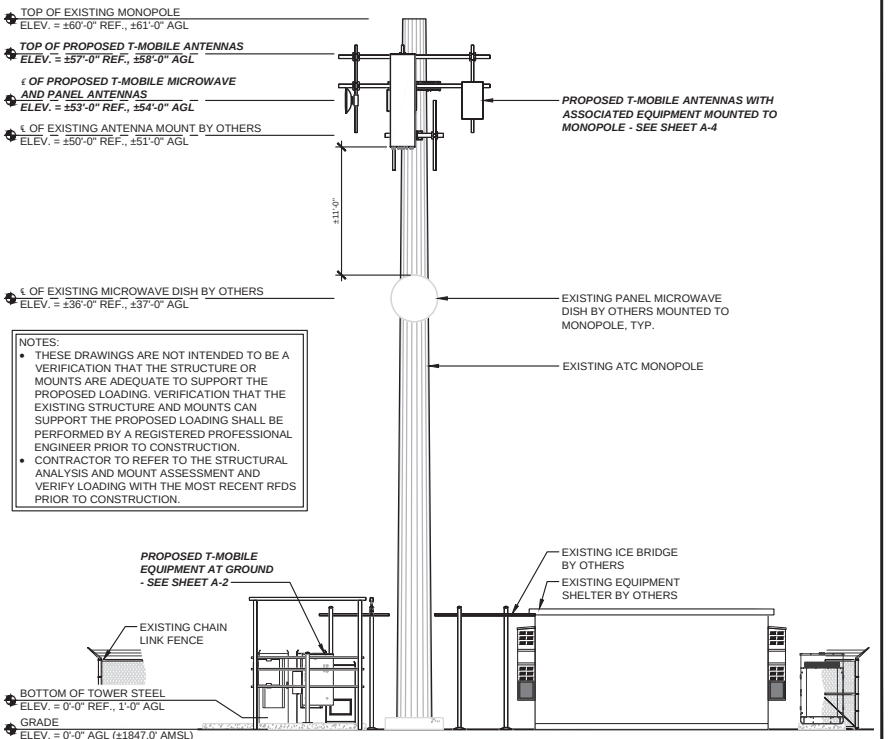


2 EXISTING SOUTHWEST ELEVATION

22"x34" SCALE: 3/16" = 1'-0"
11"x17" SCALE: 3/32" = 1'-0"
4' 2' 0' 4'



NOTES:
- THESE DRAWINGS ARE NOT INTENDED TO BE A VERIFICATION THAT THE STRUCTURE OR MOUNTS ARE ADEQUATE TO SUPPORT THE PROPOSED LOADING. VERIFICATION THAT THE EXISTING STRUCTURE AND MOUNTS CAN SUPPORT THE PROPOSED LOADING SHALL BE PERFORMED BY A REGISTERED PROFESSIONAL ENGINEER PRIOR TO CONSTRUCTION.
- CONTRACTOR TO REFER TO THE STRUCTURAL ANALYSIS AND MOUNT ASSESSMENT AND VERIFY LOADING WITH THE MOST RECENT RFDS PRIOR TO CONSTRUCTION.

1 PROPOSED SOUTHWEST ELEVATION

22"x34" SCALE: 3/16" = 1'-0"
11"x17" SCALE: 3/32" = 1'-0"
4' 2' 0' 4'

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REGISTERED
PROFESSIONAL ENGINEER
5/25/22

SHEET TITLE:
SOUTHWEST ELEVATIONS

SHEET NUMBER: A-3
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EXISTING ANTENNA / CABLE SCHEDULE

MOUNT SECTOR	MOUNT POSITION		RAD CENTER	ANTENNA					RRU		TMA/COMBINER/FILTER		HYBRID JUMPER CABLE			FEEDLINE CABLE (HYBRID / COAX)		
				TECH	MODEL	SIZE	AZIMUTH	M. TILT	QTY.	MODEL	QTY.	MODEL	QTY.	TYPE	LENGTH	QTY.	TYPE	LENGTH
ALPHA	A1		53'-0"	--	ET-X-WM-18-65-8P	61.0"	130°	--	--	RRH-V3 (2500)	--	--						
	A2		--	--	--	--	--	--	--	--	--	--	--	--	--			
	A3		53'-0"	--	APXVSPP18-C-A20	72.0"	130°	--	--	RRH-C2A (800), RRH-P4 (1900)	--	--						
BETA	B1		53'-0"	--	ET-X-WM-18-65-8P	61.0"	250°	--	--	RRH-V3 (2500)	--	--						
	B2		--	--	--	--	--	--	--	--	--	--	--	--	--	2	1-7/16" HYBRID	±75'-0"
	B3		53'-0"	--	APXVSPP18-C-A20	72.0"	250°	--	--	RRH-C2A (800), RRH-P4 (1900)	--	--						
GAMMA	--		--	--	--	--	--	--	--	--	--	--						
	--		--	--	--	--	--	--	--	--	--	--	--	--	--			
	--		--	--	--	--	--	--	--	--	--	--						

NOTES

1. CONTRACTOR IS TO REFER TO T-MOBILE'S MOST CURRENT RADIO FREQUENCY DATA SHEET (RFDS) PRIOR TO CONSTRUCTION.
2. CABLE LENGTH IS APPROXIMATE. CONTRACTOR TO FIELD VERIFY CABLE LENGTHS PRIOR TO ORDERING, FABRICATION, OR INSTALLATION OF CABLES.
3. PROPOSED EQUIPMENT IS INDICATED BY ***BOLD*** TEXT.

PROPOSED ANTENNA / CABLE SCHEDULE

MOUNT SECTOR		RFDS POSITION	RAD CENTER	ANTENNA					RRU		TMA/COMBINER/COVP		HYBRID JUMPER CABLE			FEEDLINE CABLE (HYBRID / COAX)		
				TECH	MODEL	SIZE	AZIMUTH	M. TILT	QTY.	MODEL	QTY.	MODEL	QTY.	TYPE	LENGTH	QTY.	TYPE	LENGTH
ALPHA		A2	***53'-0"***	***L2500/N2500***	***AEHC***	***38.2"***	***130°***	***-***	--	--	--	--						
		--	--	--	--	--	--	--	--	--	--	--	3	HCS 2.0 (AIRSCALE)	±15'-0"			
		A1	***53'-0"***	L700/L600/N600/L1900/L2100 G1900/N1900/N2100	***FFVV-65C-R3-V1***	***95.9"***	***130°***	***-***	***1,1***	***AHLOA, AHFIG***	--	--						
BETA		--	--	--	--	--	--	--	--	--	--	--						
		B2	***53'-0"***	***L2500/N2500***	***AEHC***	***38.2"***	***250°***	***-***	--	--	--	--	3	HCS 2.0 (AIRSCALE)	±15'-0"	***2***	***FD21206-48S55-XXX (HCS 2.0 PENDANT STYLE)***	***±75'-0"***
		B1	***53'-0"***	L700/L600/N600/L1900/L2100 G1900/N1900/N2100	***FFVV-65C-R3-V1***	***95.9"***	***250°***	***-***	***1,1***	***AHLOA, AHFIG***	--	--						
GAMMA		--	--	--	--	--	--	--	--	--	--	--						
		--	--	--	--	--	--	--	--	--	--	--	-	--	--			
		--	--	--	--	--	--	--	--	--	--	--						

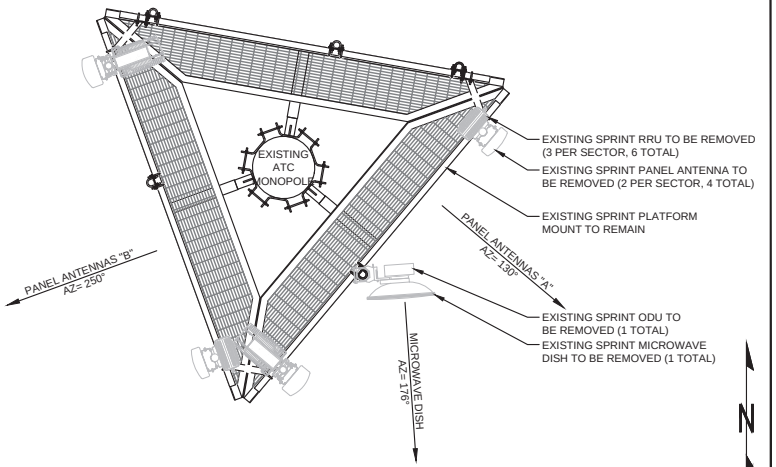
NOTE: MOUNT SECTORS ARE CLOCKWISE.
RFDS POSITIONS ARE THE ANTENNA POSITIONS LISTED IN THE RFDS, AND MAY DIFFER FROM THE ORDER IN WHICH EXISTING ANTENNAS ARE INSTALLED. THE METHOD FOR WHAT ORDER ANTENNAS ARE LISTED IN THE RFDS VARIES DEPENDING ON THE MARKET.

MW	***MW1***	--	***53'-0"***	***VHLP2-18/C***	***24.0"***	***193.21°***	--	***2***	***RFU-D-HP***	--	--	--	--	--	***2***	***(0.41") LMR-400***	***±75'-0"***

ANTENNAS SHOULD BE LISTED IN CLOCKWISE ORDER (PER PHOTOS FOR EXISTING, PER RF WIRING DIAGRAMS LEFT TO RIGHT FOR PROPOSED), BUT RFDS POSITION SHOULD BE PER SECTION 6 OF THE RFDS (SOMETIMES LISTED BACKWARD/INVERTED, DEPENDING ON THE REGION/MARKET)

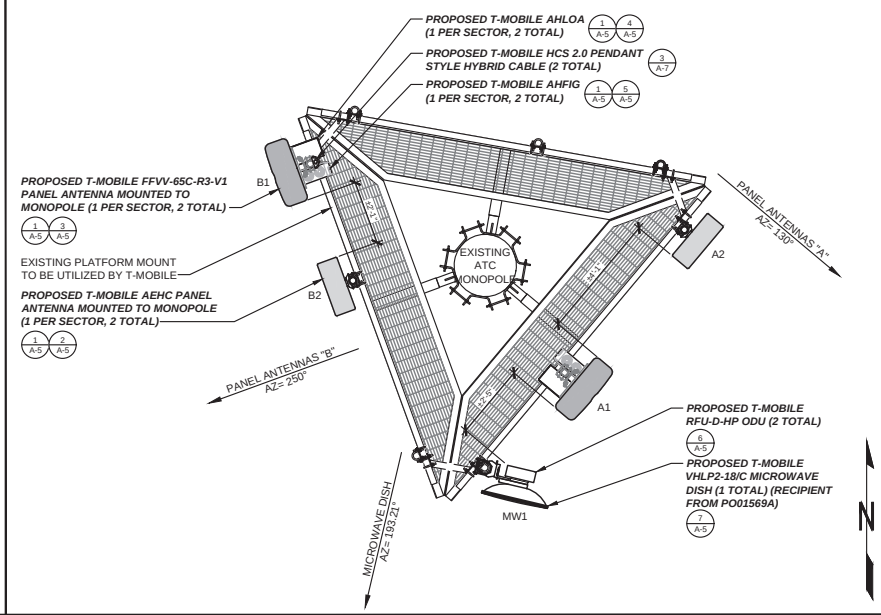
3 RF SCHEDULE

NOT TO SCALE



2 EXISTING ANTENNA PLAN

22"x34" SCALE: 1/2" = 1'-0"
11"x17" SCALE: 1/4" = 1'-0"
2' 1' 0' 2'



1 PROPOSED ANTENNA PLAN

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11"x17" SCALE: 1/4" = 1'-0"
2' 1' 0' 2'

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CHRISTOPHER J WARREN
STATE OF WASHINGTON
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5/25/22

SHEET TITLE:
ANTENNA PLANS
& RF SCHEDULES

SHEET NUMBER: A-4
REVISION: 0

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Transmission details		
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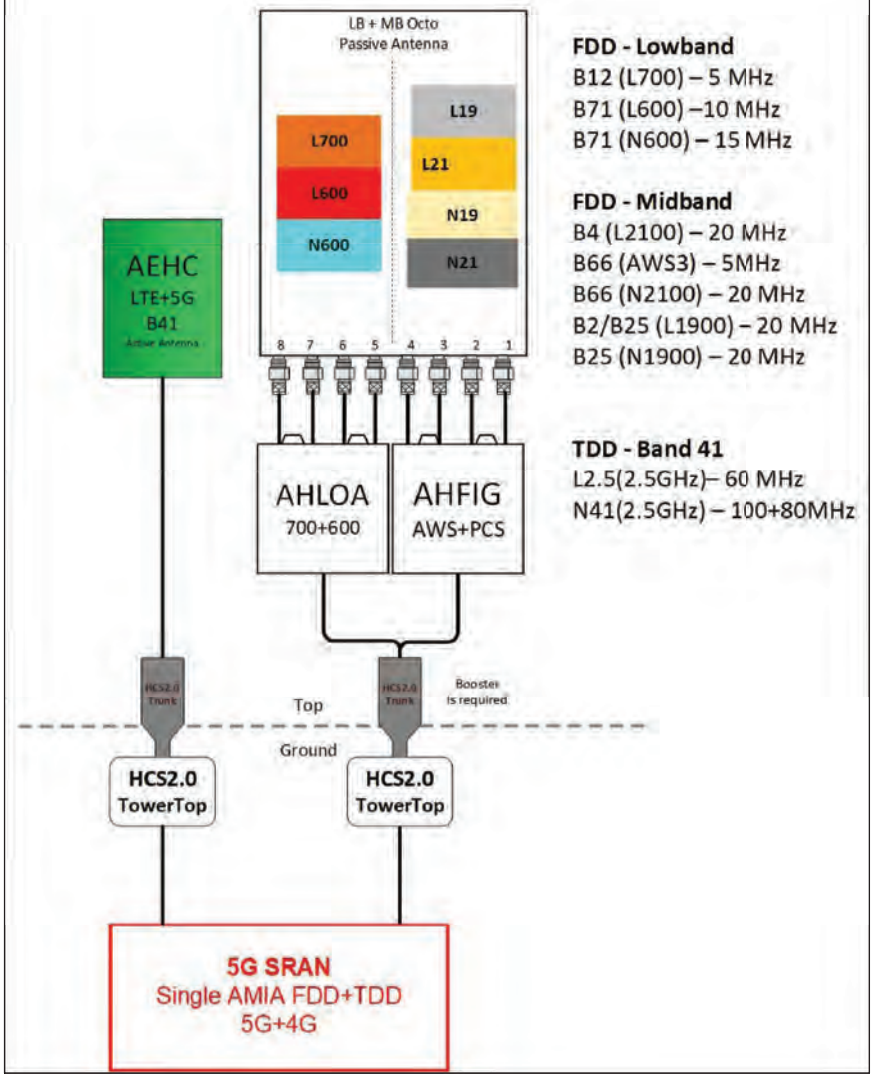
[CLUSTER_ID_LABEL]:	[CLUSTER_ID_A]	[CLUSTER_ID_B]
[CALL_SIGN_LABEL]:	[CALL_SIGN_A]	[CALL_SIGN_B]
ASR #:		
AAV_CONTRACT_ID:	[AAV_CONTRACT_ID_A]	STT09
AAV_CONTRACT_STATUS:	Not Available	Selected
Ethernet Installed:	No	Ethernet
Latitude:	45-40-45.8 N	45-37-56.5 N
Longitude:	121-11-28.4 W	121-12-25.0 W
Azimuth (deg):	193.21 Deg	13.20 Deg
Vertical angle (deg):	5.49 Down	5.46 Up
Elevation:	1847.11 ft	104.99 ft
Antenna model:	VHLP2-18C	VHLP2-18C
Antenna manufacturer:	ANDREW CORPORATION	ANDREW CORPORATION
Antenna Id:	212	212
Antenna gain (dBi):	39.00 dBi	39.00 dBi
Antenna diameter:	1.97 ft	1.97 ft
Antenna CL:	56.00 ft AGL	110.00 ft AGL
Diversity Antenna model:		
Diversity Antenna manufacturer:		
Diversity Antenna Id:		
Diversity Antenna gain (dBi):		
Diversity Antenna diameter:		
Diversity Antenna CL:		
Branch Loss Tx/Rx (dB):	4.20/4.20	4.20/4.20
Attenuator Common/Tx/Rx (dB):		
Waveguide #1 Model, Len, Loss(dB):		
Waveguide #2 Model, Len, Loss(dB):		
Waveguide #3 Model, Len, Loss(dB):		
Total Waveguide Loss (dB):		
Other Losses (dB):	0.00	0.00
Frequency (GHz):	18.00 GHz	
Path length:	3.34 mi	
Free space loss (dB):	132.15 dB	
Atmospheric absorption loss (dB):	0.29 dB	
Obstruction Loss (dB):	0.00 dB (pLOS)	
Field margin (dB):	1.00 dB	
Net path loss (dB):	59.64 dB	59.64 dB
Configuration:	4+0/DP/DM	4+0/DP/DM
Radio model:	IP20D-D18-80X-A_4501	IP20D-D18-80X-A_4501
Radio manufacturer:	Ceragon Networks	Ceragon Networks
Radio Id:	749	749
Frequency Plan: Frequency (MHz):	High: 19300.000 /19300.000 /19380.000 /19380.000	Low: 17740.000 /17740.000 /17820.000 /17820.000
Polarization:	H/V/H/V	H/V/H/V
Emission designator:	80M0D7W	80M0D7W

2 MICROWAVE PATH INFO — NOT TO SCALE

Configuration 56790EZ_SR_T

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



FDD - Lowband
B12 (L700) – 5 MHz
B71 (L600) –10 MHz
B71 (N600) – 15 MHz

FDD - Midband
B4 (L2100) – 20 MHz
B66 (AWS3) – 5MHz
B66 (N2100) – 20 MHz
B2/B25 (L1900) – 20 MHz
B25 (N1900) – 20 MHz

TDD - Band 41
L2.5(2.5GHz)– 60 MHz
N41(2.5GHz) – 100+80MHz

1 PROPOSED RF PLUMBING DIAGRAM — NOT TO SCALE

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5/25/22

SHEET TITLE:
RF PLUMBING DIAGRAM

SHEET NUMBER: A-4.1
REVISION: 0

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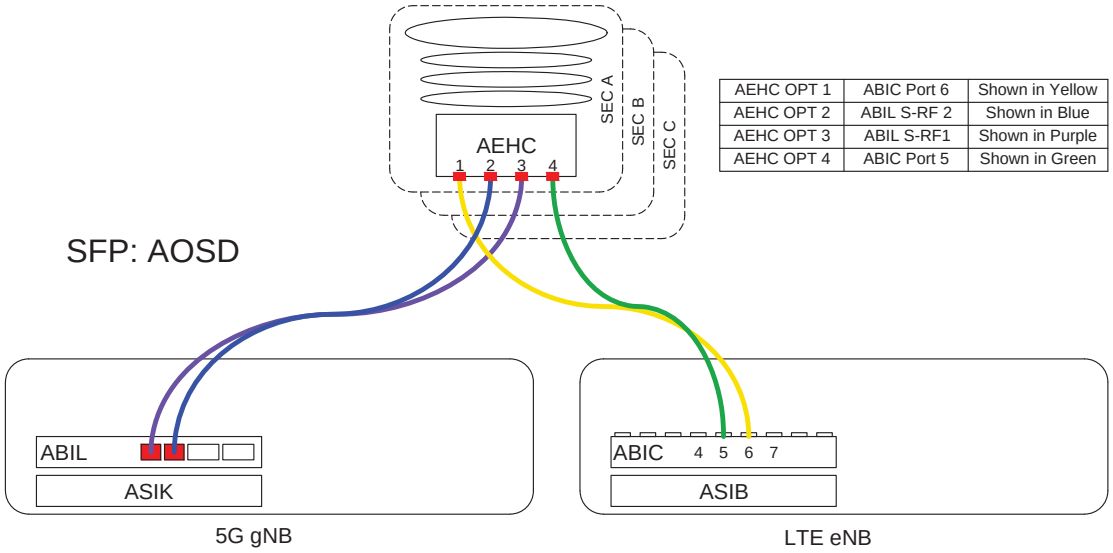
INSTALL LOWER AND UPPER JUMPERS TO PROPER BB AND RF PORTS.



AEHC OPT 1	ABIC Port 6	Shown in Yellow
AEHC OPT 2	ABIL S-RF 2	Shown in Blue
AEHC OPT 3	ABIL S-RF1	Shown in Purple
AEHC OPT 4	ABIC Port 5	Shown in Green

LTE TDD - B41 (2.5GHz)				
RF Module	Port	Baseband	Port	Technology
AEHC1	OPT4	ABIC1	RF5	L41 - Alpha
AEHC1	OPT1	ABIC1	RF6	L41 - Alpha
AEHC2	OPT4	ABIC2	RF5	L41 - Beta
AEHC2	OPT1	ABIC2	RF6	L41 - Beta
AEHC3	OPT4	ABIC3	RF5	L41 - Gamma
AEHC3	OPT1	ABIC3	RF6	L41 - Gamma

NR TDD - B41 (2.5GHz)				
RF Module	Port	Baseband	Port	Technology
AEHC1	OPT3	ABIC1	S-RF1	N41 - Alpha
AEHC1	OPT2	ABIC1	S-RF2	N41 - Alpha
AEHC2	OPT3	ABIC2	S-RF1	N41 - Beta
AEHC2	OPT2	ABIC2	S-RF2	N41 - Beta
AEHC3	OPT3	ABIC3	S-RF1	N41 - Gamma
AEHC3	OPT2	ABIC3	S-RF2	N41 - Gamma

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DRAWINGS ISSUED FOR:

REV.	DATE	DRAWN	DESCRIPTION	QA/QC
A	04/26/22	RCD	PRELIMINARY REVIEW	WJR
0	05/24/22	WJR	100% CONSTRUCTION	TT

FOR REFERENCE ONLY

SHEET TITLE:
AEHC CABLING DIAGRAM

SHEET NUMBER: A-4.2
REVISION: 0

1 AEHC CABLING DIAGRAM

NOT TO SCALE

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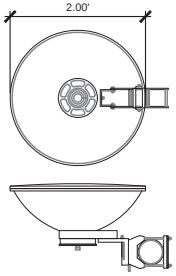
MANUFACTURER: COMMSCOPE
PART # VHLP2-18/C
DIAMETER: 2.00'
DEPTH: -
OFFSET: -
WEIGHT: 17.6 LBS



7 MICROWAVE DETAIL

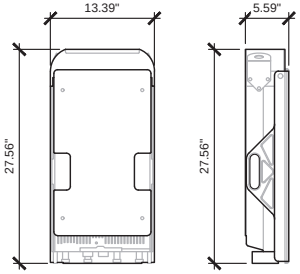
NOT TO SCALE

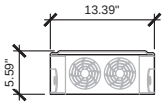
MANUFACTURER: CERAGON
MODEL: RFU-D-HP
HEIGHT: 12.6"
WIDTH: 11.3"
DEPTH: 4.2"
WEIGHT: 26.5 LBS

6 RADIO/ODU DETAIL

NOT TO SCALE

AHFIG RADIO MODULE
HEIGHT: 27.56"
WIDTH: 13.39"
DEPTH: 5.59"
WEIGHT: 79.4 LBS

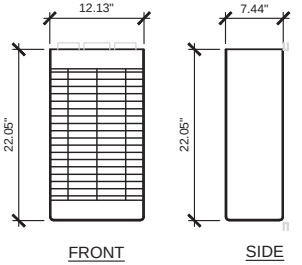


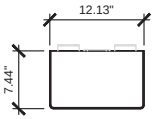


5 AHFIG DETAIL

NOT TO SCALE

AHLOA RADIO MODULE
HEIGHT: 22.05"
WIDTH: 12.13"
DEPTH: 7.44"
WEIGHT: 83.8 LBS

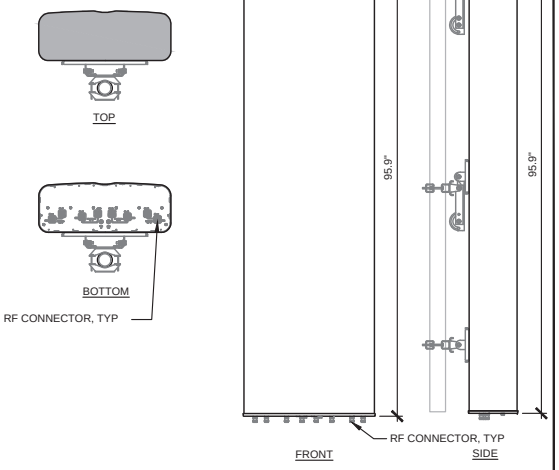




4 AHLOA DETAIL

NOT TO SCALE

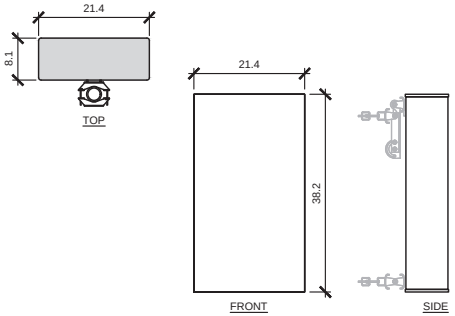
MANUFACTURER: COMMSCOPE
MODEL: FFVV-65C-R3-V1
WEIGHT: 124.6 LBS; BRACKETS: 14.6 LBS
DIMENSIONS: 95.9" X 25.2" X 9.3"
FREQUENCY: REFER TO RF DATA SHEET



3 ANTENNA DETAIL

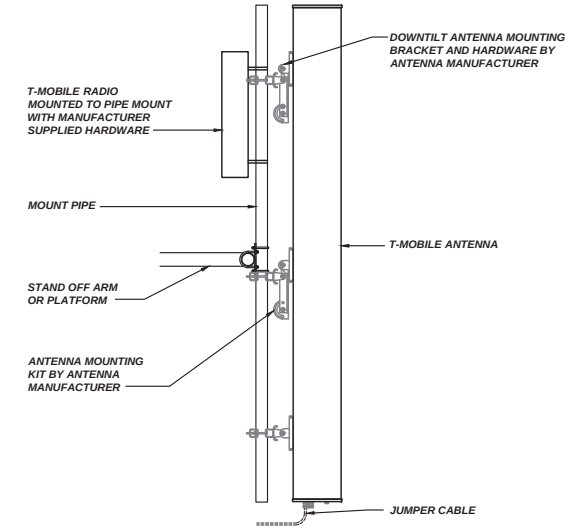
NOT TO SCALE

MANUFACTURER: NOKIA
MODEL: AEHC
WEIGHT: 108 LBS
DIMENSIONS: 38.2" X 21.4" X 8.1"
FREQUENCY: REFER TO RF DATA SHEET



2 ANTENNA DETAIL

NOT TO SCALE



NOTE: ROTATE FRAME OF MOUNT TO MATCH DEGREE LINE WHERE APPLICABLE.

1 MOUNTING DETAIL

NOT TO SCALE

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SHEET TITLE:
EQUIPMENT DETAILS

SHEET NUMBER: A-5

REVISION: 0

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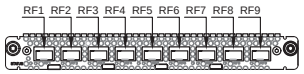
11 NOT USED — NOT TO SCALE

10 NOT USED — NOT TO SCALE

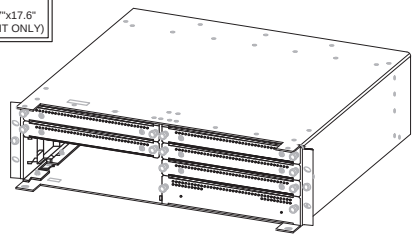
9 ABIO DETAIL — NOT TO SCALE

MANUFACTURER: NOKIA
MODEL: ABIO UNIT
DIMENSIONS: 8.62"x14.33"x0.98"
WEIGHT: 5.84 LBS



8 AMIA DETAIL — NOT TO SCALE

MANUFACTURER: NOKIA
MODEL: AMIA UNIT
DIMENSIONS: 5.1"x15.7"x17.6"
WEIGHT: 11.2 LBS (UNIT ONLY)



7 NOT USED — NOT TO SCALE

6 ASIL DETAIL — NOT TO SCALE

NO SPEC SHEET FOUND OR PROVIDED;
APPROXIMATELY EQUIVALENT TO ASIK

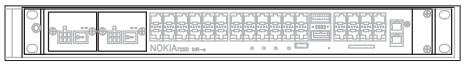
5 VOLTAGE BOOSTER DETAIL — NOT TO SCALE

MANUFACTURER: RAYCAP
MODEL: 100-3-1U
DIMENSIONS: 1.7"x17.6"x13.5"
WEIGHT: 11.2"

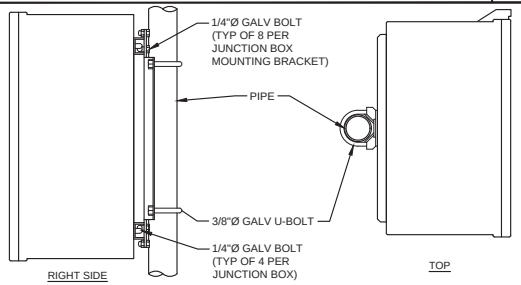
4 NOT USED — NOT TO SCALE

3 ROUTER DETAIL — NOT TO SCALE

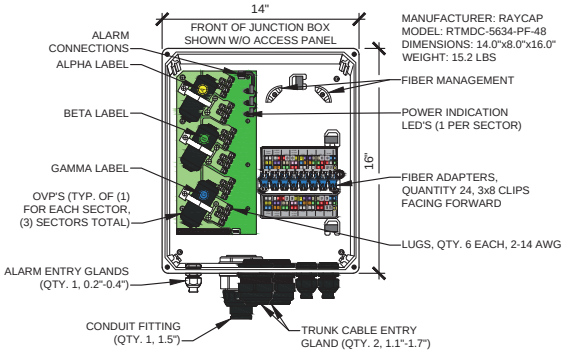
MANUFACTURER: NOKIA
MODEL: IXR-e
DIMENSIONS: 17.25"x10.0"x1.75"
WEIGHT: TBD

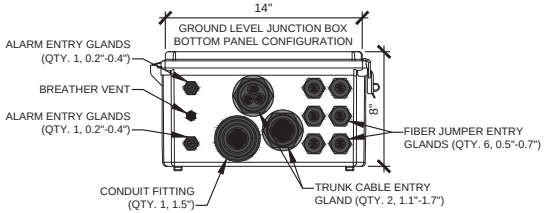


2 HCS 2.0 JUNCTION BOX MOUNTING DETAIL — NOT TO SCALE



1 HCS 2.0 JUNCTION BOX DETAIL — NOT TO SCALE





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CHRISTOPHER J WARREN
STATE OF WASHINGTON
40190
REGISTERED
PROFESSIONAL ENGINEER
5/25/22

SHEET TITLE:
EQUIPMENT DETAILS

SHEET NUMBER: A-6
REVISION: 0

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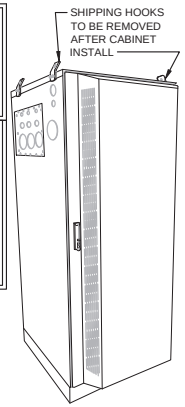
MANUFACTURER:	DELTA
MODEL:	HPL3 SITE SUPPORT CABINET
WEIGHT:	551 LBS (WITHOUT EQUIPMENT) 1800 LBS (MAX.)
DIMENSIONS:	30.0"x35.0"x72.0"

NOTE:

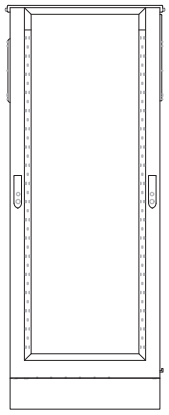
- CORRECT KNOCKOUT TOOL REQUIRED FOR PUNCHING KNOCKOUTS. DO NOT DRILL KNOCKOUTS THROUGH.
- CONDUIT MUST BE PROPERLY SECURED TO PREVENT DAMAGE TO CABINETS AND/OR CABLING.

RACK ASSIGNMENT

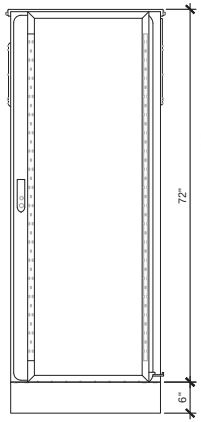
RU SLOT	DESCRIPTION	DESCRIPTION
1	RAYCAP BOOSTER #1	CSR - SAR/SAS
2	RAYCAP BOOSTER #2	
3	AIRSCALE #1	
4		
5		
6	FIBER MUX #1 FIBER MUX #2	
7	AIRSCALE #2	
8		
9		
10	FIBER MUX #1 FIBER MUX #2	
11	AIRSCALE #3	
12		
13		
14	FIBER MUX #1 FIBER MUX #2	
15	FUTURE EQUIPMENT	
16		
17		
18		
19		
20		
21	LEGACY BB #2	
22		
23		
24	LEGACY BB #1	
25		
26		
27	FSEE ON FMAB	



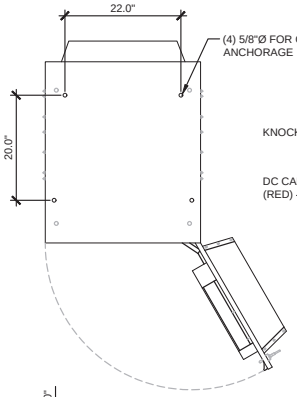
ISO VIEW N.T.S.

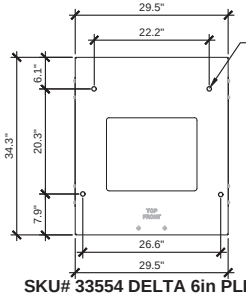


REAR VIEW

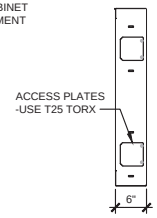


FRONT VIEW

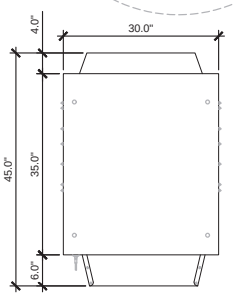




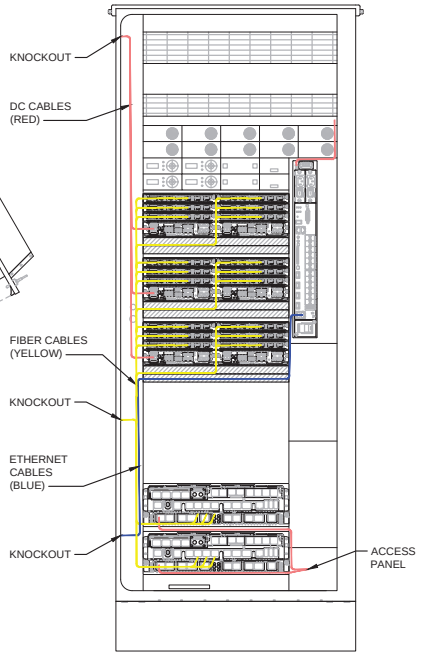
SKU# 33554 DELTA 6in PLINTH PLAN VIEW



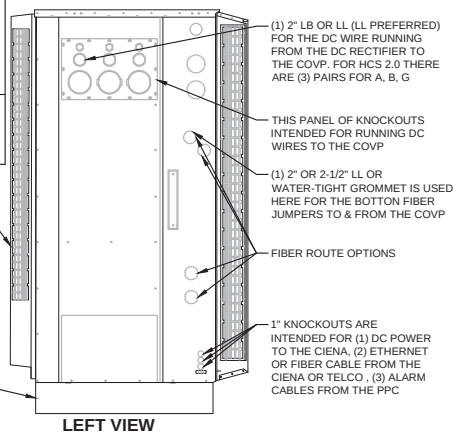
SKU# 33554 DELTA 6IN PLINTH SIDE VIEW



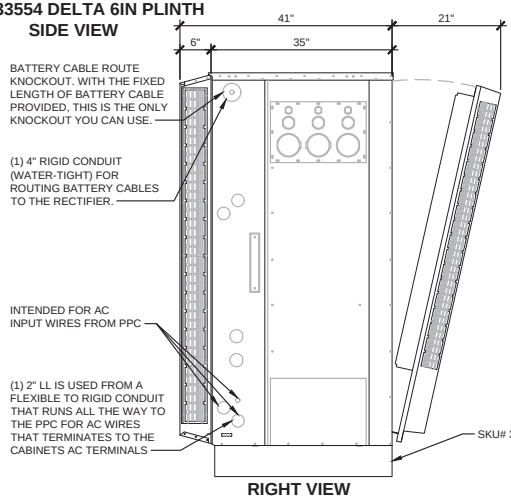
PLAN VIEW



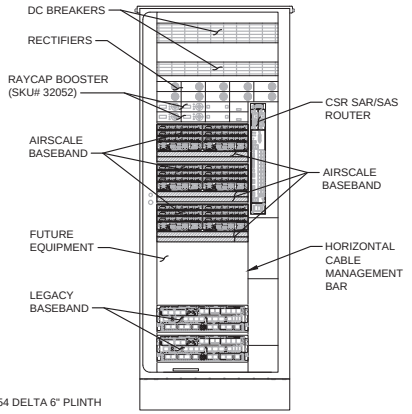
INTERNAL ROUTING



LEFT VIEW



RIGHT VIEW



FRONT VIEW (OPEN)

1 DELTA HPL3 POWER CABINET DETAILS

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CHRISTOPHER J WARREN
STATE OF WASHINGTON
40190
REGISTERED
PROFESSIONAL ENGINEER
5/25/22

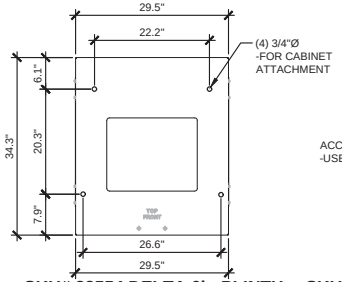
SHEET TITLE:
EQUIPMENT DETAILS

SHEET NUMBER: A-6.1
REVISION: 0

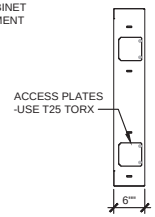
MANUFACTURER:	DELTA
MODEL:	LB3 BATTERY SUPPORT CABINET
WEIGHT:	509 LBS (WITHOUT EQUIPMENT) 2750 LBS (MAX.)
DIMENSIONS:	30.0"x35.0"x72.0"

NOTE:

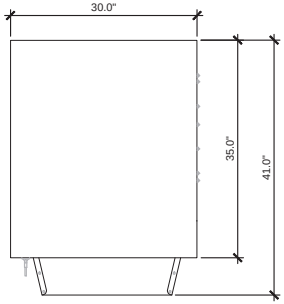
- CORRECT KNOCKOUT TOOL REQUIRED FOR PUNCHING KNOCKOUTS. DO NOT DRILL KNOCKOUTS THROUGH.
- CONDUIT MUST BE PROPERLY SECURED TO PREVENT DAMAGE TO CABINETS AND/OR CABLING.



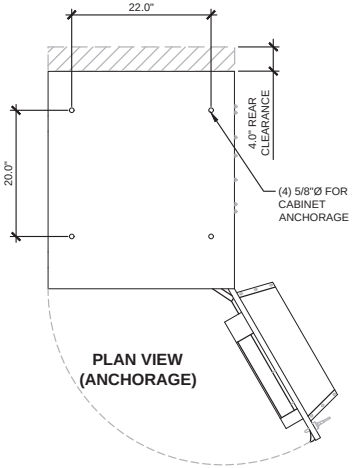
SKU# 33554 DELTA 6in PLINTH PLAN VIEW



SKU# 33554 DELTA 6IN PLINTH SIDE VIEW

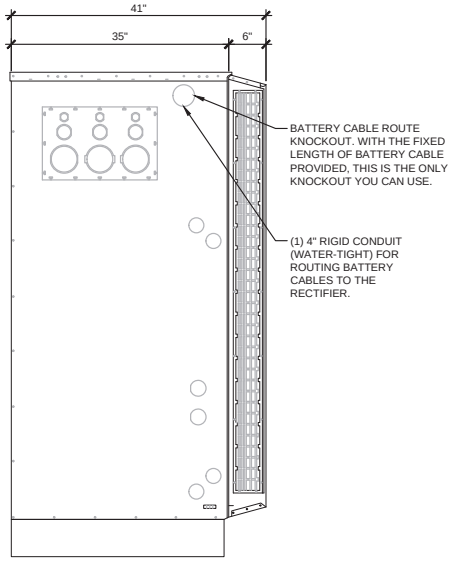


PLAN VIEW

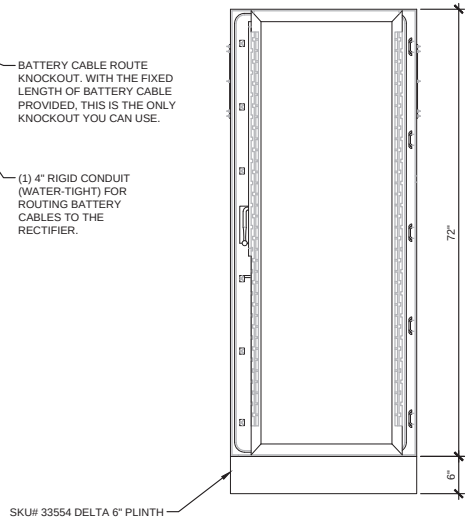


PLAN VIEW (ANCHORAGE)

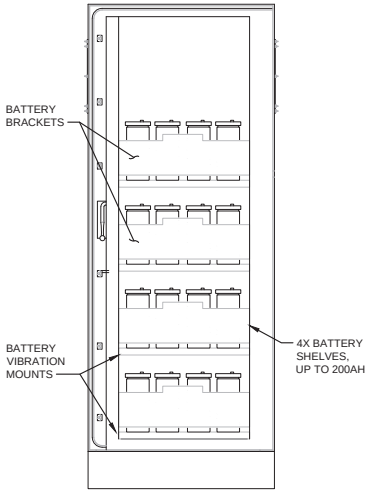
ISO VIEW N.T.S.



LEFT VIEW



FRONT VIEW



FRONT VIEW (OPEN)

1 DELTA LB3 BATTERY CABINET DETAILS

NOT TO SCALE

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TRAIL/P.O. BOX 449
LYLE, WA 98635-9618
KLICKITAT COUNTY

60'-0" MONOPOLE

DRAWINGS ISSUED FOR:

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CHRISTOPHER J WARREN
STATE OF WASHINGTON
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REGISTERED
PROFESSIONAL ENGINEER
5/25/22

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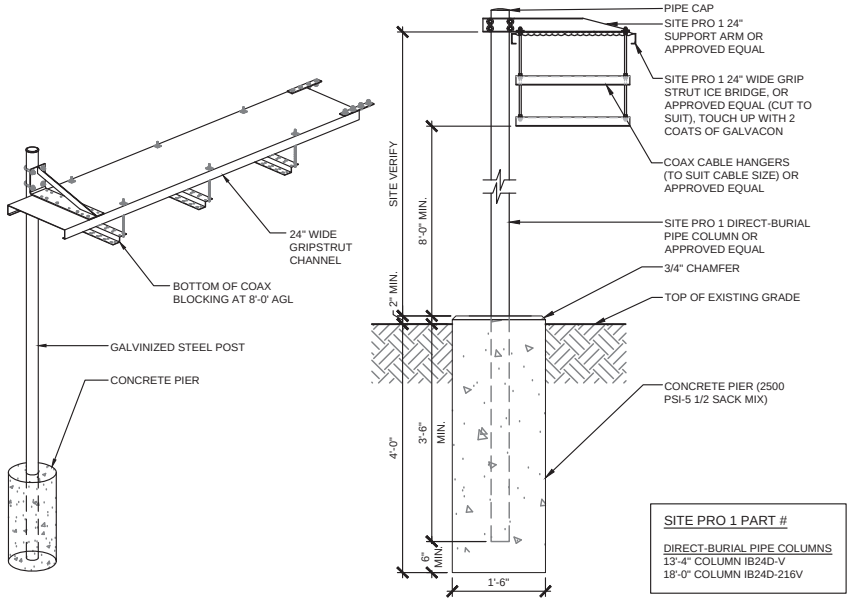
SHEET NUMBER: A-6.2

REVISION: 0

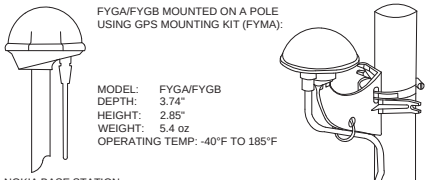


6 ICE BRIDGE SPECIFICATION

NOT TO SCALE

5 NOT USED

NOT TO SCALE



FYGA/FYGB MOUNTED ON A POLE USING GPS MOUNTING KIT (FYMA):

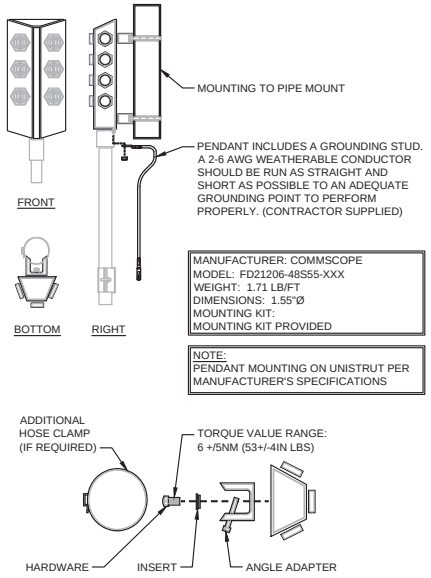
MODEL: FYGA/FYGB
DEPTH: 3.74"
HEIGHT: 2.85"
WEIGHT: 5.4 oz
OPERATING TEMP: -40°F TO 185°F

NOKIA BASE STATION:
GPS GLONASS RECEIVER ANTENNA (FYGA/FYGB) OPERATION

FLEXI MULTIRADIO BTS USES GPS (GLOBAL POSITIONING SYSTEM) OR GNSS (GLOBAL NAVIGATION SATELLITE SYSTEM) AS A SOURCE FOR FREQUENCY AND TIME SYNCHRONIZATION. A GPS/GLONASS ANTENNA WITH AN INTEGRATED RECEIVER IS INSTALLED OUTSIDE FOR SATELLITE VISIBILITY, AND IS DIRECTLY CONNECTED TO THE SYSTEM MODULE. DC POWER FEED FOR THE RECEIVER IS SUPPLIED THROUGH THE COMBINED POWER AND DATA CABLE. THE OPERATING TEMPERATURE RANGE ID FROM -40C TO +85C (-40F TO +185F). NOTE: FYGA/FYGB IS SET TO SUPPORT BOTH GPS AND GLONASS SATELLITE SYSTEMS. TO SUPPORT GLONASS ONLY MODE, FYGA/FYGB HAS TO OPERATE WITH NOKIA APPROVED FIRMWARE V2.11 OR LATER.

4 GPS ANTENNA DETAIL

NOT TO SCALE

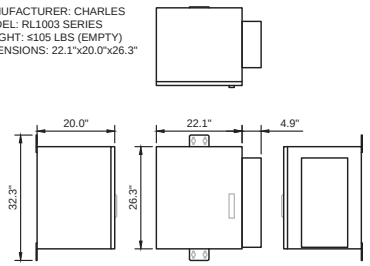


MANUFACTURER: COMMSCOPE
MODEL: FD21206-48S55-XXX
WEIGHT: 1.71 LB/FT
DIMENSIONS: 1.55"Ø
MOUNTING KIT:
MOUNTING KIT PROVIDED

NOTE:
PENDANT MOUNTING ON UNISTRUT PER MANUFACTURER'S SPECIFICATIONS

3 HYBRID W/ PENDANT DETAIL

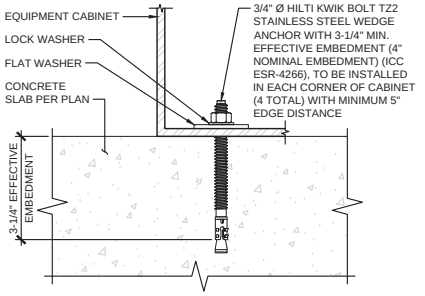
NOT TO SCALE



MANUFACTURER: CHARLES
MODEL: RL1003 SERIES
WEIGHT: ≤105 LBS (EMPTY)
DIMENSIONS: 22.1"x20.0"x26.3"

2 TELCO BOX DETAIL

NOT TO SCALE



1 CABINET ATTACHMENT DETAIL

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5/25/22

SHEET TITLE:
EQUIPMENT DETAILS

SHEET NUMBER: A-7
REVISION: 0

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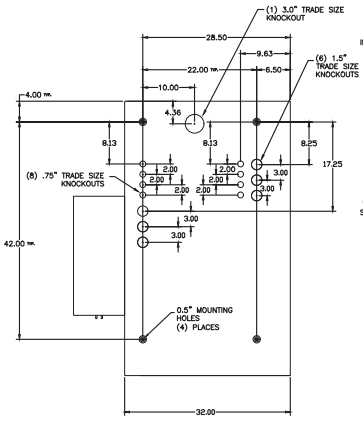
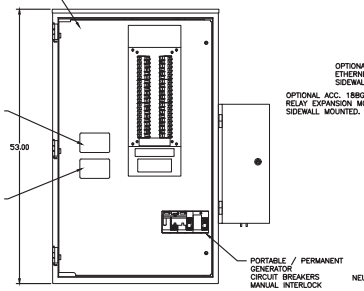
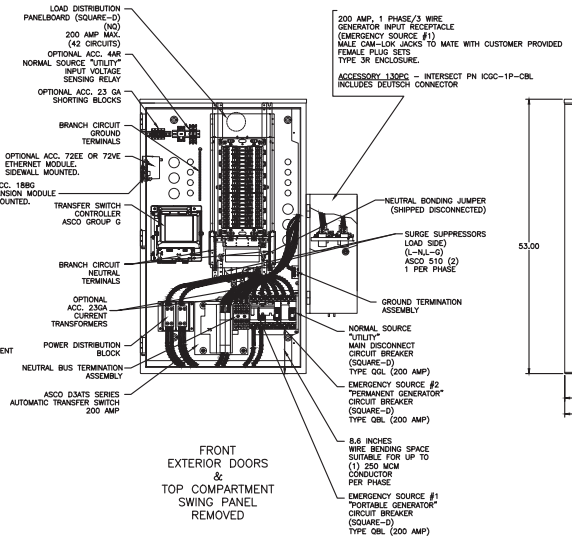
ASCO D300L Series Power Transfer Load Center Rated 200 Amps, 240 Vac max., Single Phase/3 Wire, Type 3R Enclosure



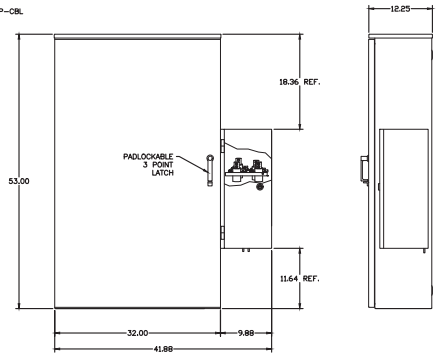
REAR



FRONT
EXTERIOR DOORS
REMOVED

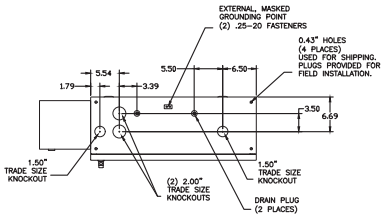


FRONT
EXTERIOR DOORS
&
TOP COMPARTMENT
SWING PANEL
REMOVED



FRONT
WITH EXTERIOR
DOOR

RIGHT SIDE



BOTTOM

Notes:

1) Power Transfer Load Center constructed in accordance with UL 67 Standard for Paneboards Suitable for Use as Service Equipment.

2) Automatic Power Transfer Switch: ASCO D3ATS, 2 Pole, 200 Amp, 240 Vac max. UL Listed to UL 1008 Standard for Transfer Switching Equipment.

   Transfer Controller – ASCO Group G Automatic Transfer Switch Controller Including:
   Automatic Engine Starting Contacts
   Single Phase voltage sensing of Normal and Emergency sources.
   Frequency sensing of Emergency source.

3) Short Circuit Ratings: Accessory 117CB10 (Standard)

   (Mains): Normal Source – 42kA at 240 Vac max. (Utility Main Disconnect circuit breaker), Square-D Cat. Type QG, 2 pole, 200 amps.

   Emergency Source #1 (Portable Generator Input circuit breaker) – Using Standard Acc. 130PL Generator Input Receptacle: 10kA at 240 Vac, INTERSECT PN ICGC-1P-CBL
   (UL 1008 Listed Transfer Switch Accessory)
   connected to Square-D Cat. Type QB, 2 Pole, 200 Amps.

   Emergency Source #2 (Permanent Generator Input circuit breaker) – 10kA at 240 Vac, Square-D Cat. Type QB, 2 Pole, 200 Amps.

   (Branch): Branch ratings as follows when used with the specified branch devices.
   42kA using Sq-D QH or QHB rated: 1 pole 15–30a, 2 pole 15–30a, 3 pole 15–30a.
   22kA using Sq-D QO–VH or QOB–VH rated: 2 pole 150a, 3 pole 35–150a.
   10kA using Sq-D QO or QOB rated: 1 pole 15–70a, 2 pole 15–125a, 3 pole 15–30a.

4) Panelboard: Square–D NQ, 225 amps max., 240 Vac, single phase with 100% rated neutral. 42 Circuits, accepts bolt–on or plug–on branch devices.

5) Accessory 4AR (Optional) – Voltage Sensing Relay to indicate the presence of the Normal Source "Utility" voltage ahead of the Normal Source main disconnect circuit breaker, regardless of the position of the circuit breaker.

6) Accessory 11BE (Optional) – A Four–Function Software Bundle that provides the following functions;
   – Serial Communications (RS–485)
   – Programmable Engine Exerciser with Battery Back–up
   – Event Log
   – Common alarm signal capability on group g controller "OP1" output.

7) Accessory 18BG (Optional) – Signals the availability of the Normal & Emergency sources when provided. Output contacts "RLS" (Emergency Source Available) and "RLS" (Normal Source Available) change position when the source is acceptable.

8) Accessory 23GA (Optional) – Single Phase Current Sensing Module with current transformers and shorting blocks. Phase current measurements are available for display on the Group G Controller.

9) Accessory 72EE OR 72VE (Optional) – ASCO 5140 Ethernet Connectivity Module. Provides remote ATS and Generator control, Monitoring and Connectivity Features via integrated web page dashboards.

10) Accessory 73TL1 (Standard) – Transient Surge Protection – Connected to line side of panelboard for L–N (L–G if used as service equipment) mode protection. ASCO 510 Series TVSS with phase monitoring, alarm module, and load phase voltage availability indicator's (LED).

11) Accessory 117IB (Standard) – Generator Selector Circuit Breakers (Emergency Source #1 & Emergency Source #2) – One each two pole, 200A circuit breaker for two separate generator inputs. UL 1008 approved manual slide type interlock to permit connection of only one generator to the transfer switch Emergency Source input.

12) Accessory 130PC (Standard) – Generator Input Receptacle (Emergency Source #1) Rated 200 amps, 1 phase/3 wire with ground. Constructed with male Cam–Lok connectors, 1 per phase, neutral and ground. Color coded (Line 1–Black, Line 2–Red, Neutral–White, ground–Green). Accepts mating female plugs, (customer provided), for (1) #2–4/0 Cu conductor. Type 3R enclosure with bottom conductor entry. Includes Deutsch brand, 12 pin receptacle wired to engine starting signal contacts. UL 1008 Listed transfer Switch Accessory. UL 1008 Listed Withstand Current Rating: 10,000 amps at 240 VAC max. with any molded case circuit breaker.

13) Enclosure:
   Type 3R Listed to UL 50/50E & UL 67. Single Compartment Wall Mount Compartment provides Type 1 protection with exterior open and swing panels closed.
   Box & Doors – Constructed of 0.095 thick aluminum alloy (5052–H32).
   Finishes – All interior and exterior surfaces: Textured Polyester Powder Coat, Light Gray (RAL 7035)

14) Grounding provisions for Normal, Emergency & Load.

15) Overall Dimensions:
   53"H x 32"W x 12.3"D (excluding side mount receptacle)
   53"H x 41.88"W x 12.3"D (including side mount receptacle)

17) Weight: Approx. 200 lbs.

REV. TO SHEET	REV. NO.	BY	APP.	DATE
B	253463	DL	JPB	03/02/15
	SEE ECN– BOTTOM VIEW			
A	253353	DL	JPB	02/25/15
	SEE ECN– ADDED ACC's			
—	248849	DL	JPB	06/14
	NEW ISSUE			

PROJECT NAME:
OUTLINE and MOUNTING — TYPE 3R, ALUM
D300L SERIES, SINGLE PHASE, 200 AMP
POWER TRANSFER LOAD CENTER

THIRD ANGLE PROJECTION

	BY	DATE
DRAWN BY	DL	06/14
CHECKED		
PROJECT APPROVAL		
FINAL APPROVAL	JPB	06/14

MANUFACTURING TOLERANCES TO BE IN ACCORDANCE WITH ASCO SPEC 95–003. FOR PLASTIC PARTS SEE SP–009

ASSEM. REF. NO.

COMPUTER GENERATED DRAWING

SCALE 3/32" = 1" SIZE DS

DWG. NO. 1015683–004–R

DRAWING REV. B ECN NO. 253463 SHEET 1 OF 1

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ASCO Power Technologies, L.P.
Florham Park, New Jersey 07932 U.S.A.

1 PPC WITH CAM-LOK DETAIL

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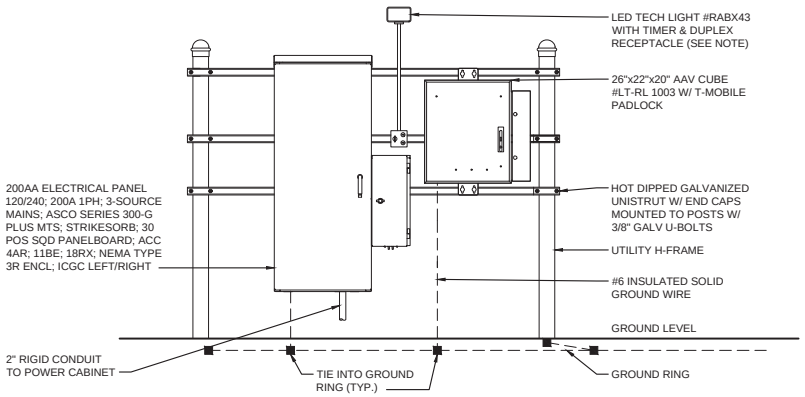
NOTE:
ANYTHING EXPOSED TO WEATHER SHALL BE STAINLESS AND/OR GALVANIZED.

NOTE:
GFCI RECEPTACLE: LEVITON #GFWR1-W 4HR
TIMER: INTERMATIC #FD4H RECEPTACLE
COVER: INTERMATIC #WP5220C DOUBLE GANG
JUNCTION BOX: #2IHD5-2

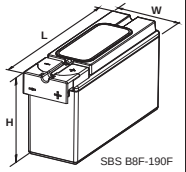


6 UTILITY H-FRAME ELEVATION — NOT TO SCALE

BATTERY QUANTITY:
(4) STRINGS (MAXIMUM) IN BATTERY CABINET,
(4) BATTERIES PER STRING, (16) BATTERIES TOTAL
ELECTROLYTE & ACID:
(3) GALLONS PER BATTERY, (48) GALLONS TOTAL

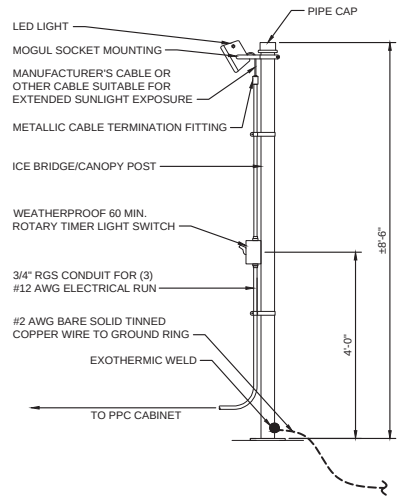
BATTERY SPECIFICATIONS:

MANUFACTURER:	ENERSYS
PRODUCT:	POWERSAFE SBS-190F
CHEMISTRY:	VALVE REGULATED LEAD ACID
NUMBER OF CELLS:	6
NOMINAL VOLTAGE:	12 V
NOMINAL CAPACITY:	
8HR RATE 1.75Vpc @ 77°F (25°C):	190 Ah
10HR RATE 1.80Vpc @ 68°F (20°C):	190 Ah
NOMINAL DIMENSIONS:	
LENGTH:	22.1" (561 mm)
WIDTH:	4.9" (125 mm)
HEIGHT:	12.4" (316 mm)
WEIGHT:	132 LBS (60.0 kg)
SHORT CIRCUIT CURRENT:	3990 AMPS
INTERNAL RESISTANCE:	3.20 MILLI-OHMS
TERMINALS:	M6 M
ELECTROLYTE (PER BLOC)	
VOLUME:	2.34 GAL (8.86 L)
WEIGHT:	25.3 LBS (11.5 kg)
PURE H_2SO_4 ACID (PER BLOC)	
VOLUME:	0.66 GAL (2.49 L)
WEIGHT:	10.1 LBS (4.56 kg)
LEAD WEIGHT (PER BLOC):	95.8 LBS (43.4 kg)

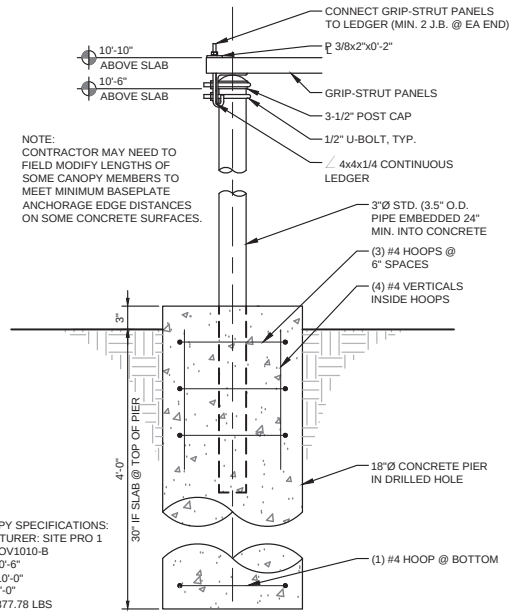


SBS B8F-190F
Front Terminal

5 BATTERY SPECIFICATIONS — NOT TO SCALE



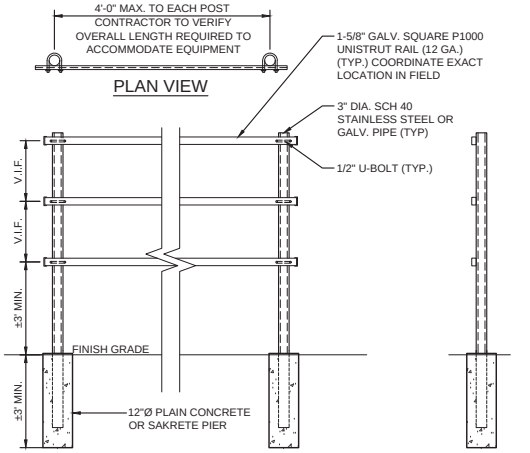
4 WORK LIGHT W/ TIMER DETAIL — NOT TO SCALE



ICE CANOPY SPECIFICATIONS:
MANUFACTURER: SITE PRO 1
MODEL: COV1010-B
HEIGHT: 10'-6"
LENGTH: 10'-0"
WIDTH: 11'-0"
WEIGHT: 877.78 LBS

3 ICE CANOPY DETAIL — NOT TO SCALE

2 NOT USED — NOT TO SCALE



1 H-FRAME DETAIL — NOT TO SCALE

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PANEL ID: A
LOCATION: ON H-FRAME
FED FROM: SERVICE DISCONNECT

PANEL SCHEDULE

SINGLE PHASE

BUS: 200A
MAIN: 200A BREAKER
VOLTAGE: 120/240V
PHASE/WIRE: 1Ø/3 WIRE
AIC: --
SPECIALS:

P#	CIRCUIT DESCRIPTION	AMPS / POLES	Ø	AMPS / POLES	CIRCUIT DESCRIPTION	P#
1	***DELTA HPL3 POWER CABINET***	***200A***	A	20A 1P	LIGHT	2
3	--		B	20A 1P	GFCI	4
5	--		A		SPACE	6
7	--	***2P***	B		SPACE	8
9	SPACE		A		SPACE	10
11	SPACE		B		SPACE	12
13	SPACE		A		SPACE	14
15	SPACE		B		SPACE	16
17	SPACE		A		SPACE	18
19	SPACE		B		SPACE	20
21	SPACE		A		SPACE	22
23	SPACE		B		SPACE	24
25	SPACE		A		SPACE	26
27	SPACE		B		SPACE	28
29	SPACE		A		SPACE	30
31	SPACE		B		SPACE	32
33	SPACE		A		SPACE	34
35	SPACE		B		SPACE	36
37	SPACE		A		SPACE	38
39	SPACE		B		SPACE	40
41	SPACE		A		SPACE	42

1. UTILITY POINTS OF SERVICE AND WORK / MATERIALS SHOWN ARE BASED UPON PRELIMINARY INFORMATION PROVIDED BY THE UTILITY COMPANIES AND ARE FOR BID PURPOSES ONLY.
2. CONTRACTOR SHALL COORDINATE WITH UTILITY COMPANY FOR FINAL AND EXACT WORK / MATERIALS REQUIREMENTS AND CONSTRUCT TO UTILITY COMPANY ENGINEERING PLANS AND SPECIFICATIONS ONLY. CONTRACTOR SHALL FURNISH AND INSTALL ALL CONDUIT, PULL ROPES, CABLES, PULL BOXES, CONCRETE ENCASEMENT OF CONDUIT (IF REQUIRED), TRANSFORMER PAD, BARRIERS, POLE RISERS, TRENCHING, BACKFILL, PAY ALL UTILITY COMPANY FEES AND INCLUDE ALL REQUIREMENTS IN SCOPE OF WORK.

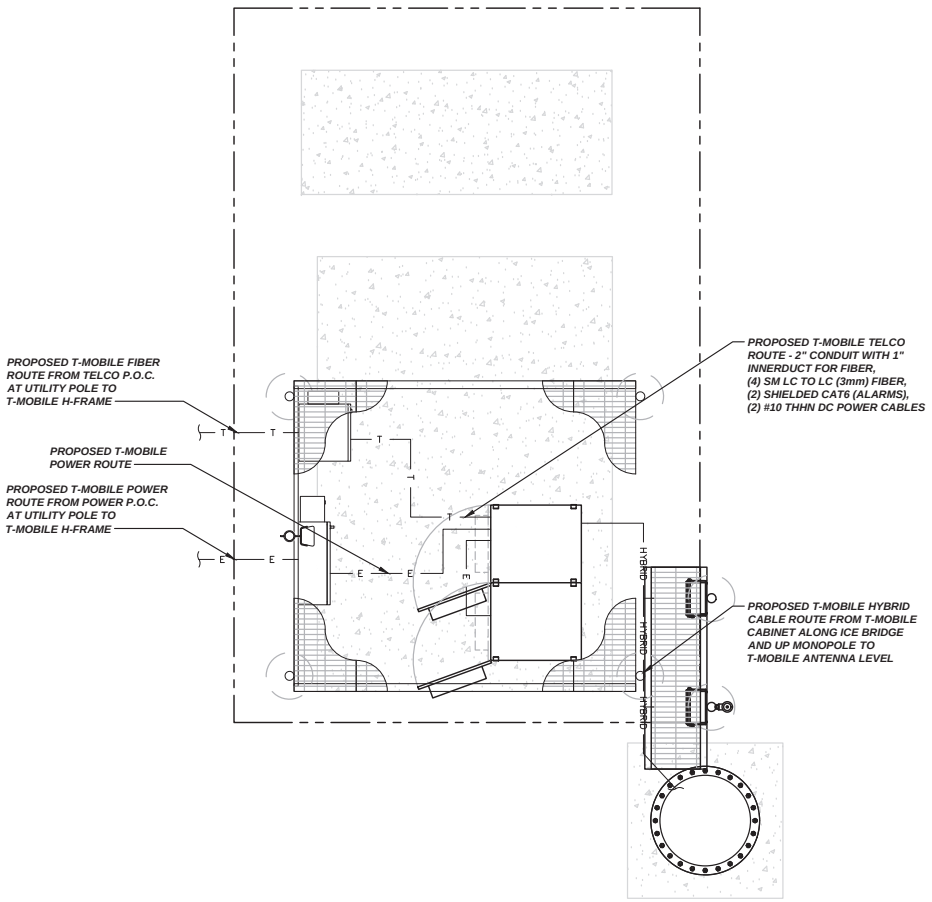
3 PROPOSED PANEL SCHEDULE

NOT TO SCALE

2 NOT USED

NOT TO SCALE

NOTE:
DESIGN IS PRELIMINARY, REFER TO UCR.



1 UTILITY ROUTING PLAN

22"x34" SCALE: 1/2" = 1'-0"
11"x17" SCALE: 1/4" = 1'-0"

2' 1' 0' 2'

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KLICKITAT COUNTY

60'-0" MONOPOLE

DRAWINGS ISSUED FOR:

REV.	DATE	DRAWN	DESCRIPTION	QA/QC
A	04/26/22	RCD	PRELIMINARY REVIEW	WJR
0	05/24/22	WJR	100% CONSTRUCTION	TT

CHRISTOPHER J WARREN
STATE OF WASHINGTON
40190
REGISTERED
PROFESSIONAL ENGINEER
5/25/22

SHEET TITLE:
UTILITY ROUTING PLAN & DETAILS

SHEET NUMBER: E-1

REVISION: 0

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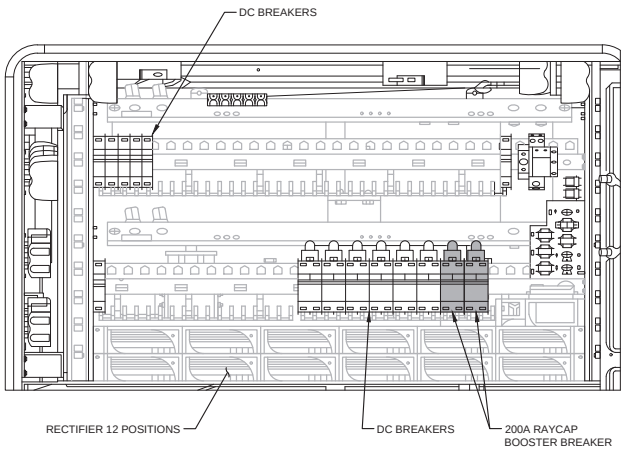
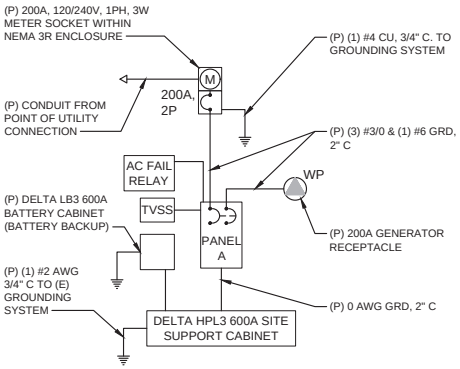


3 DELTA HPL3 POWER CABINET POWER SYSTEM

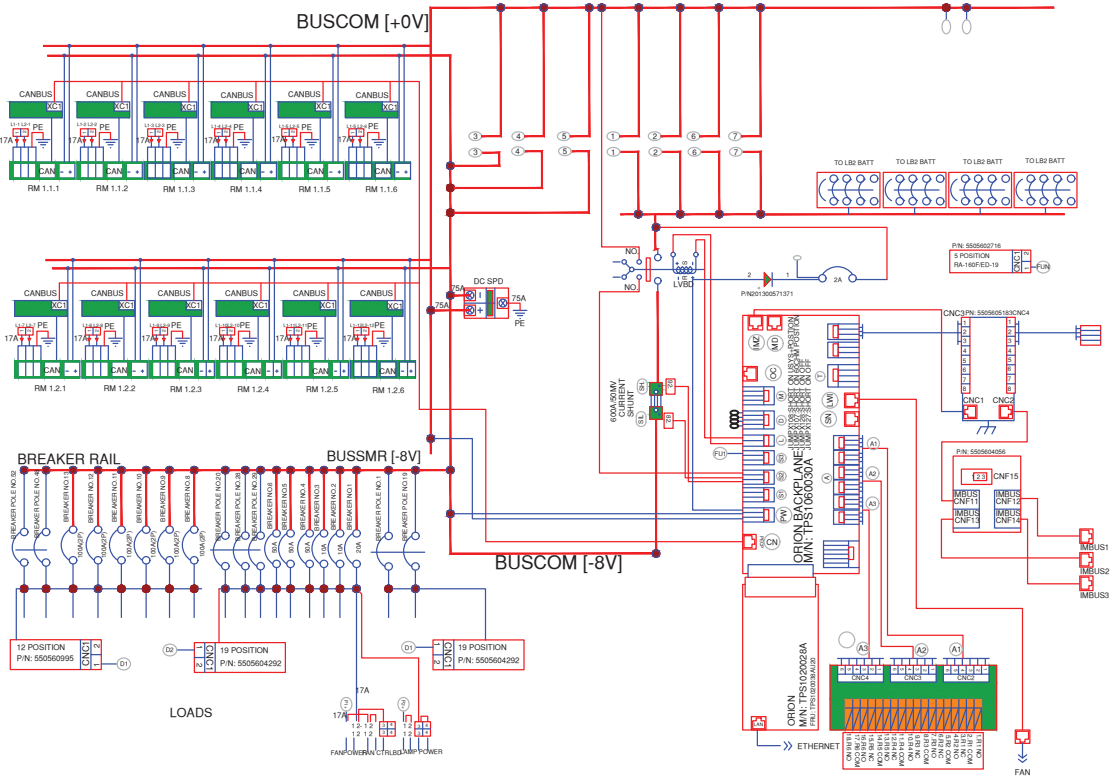
NOT TO SCALE



2 ONE-LINE DIAGRAM

NOT TO SCALE

NOTE:
DIAGRAMS PROVIDED ARE PER
MANUFACTURER INSTALLATION GUIDE



1 DELTA HPL3 POWER CABINET DC BREAKER WIRING DIAGRAM

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SHEET TITLE:
ELECTRICAL
DIAGRAMS

SHEET NUMBER: E-1.1

REVISION: 0

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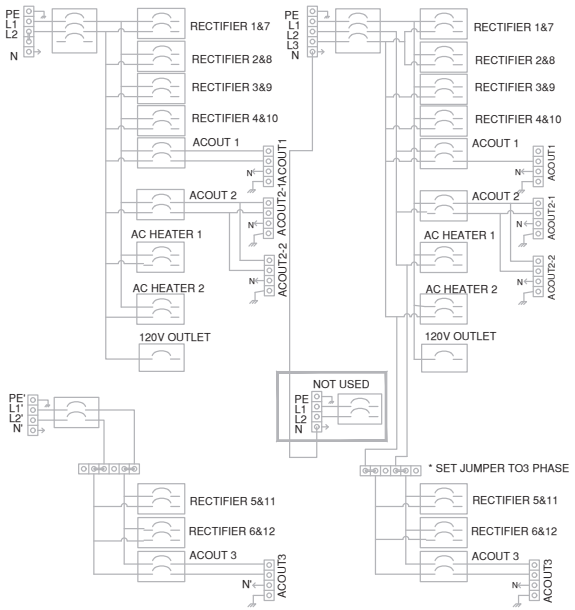
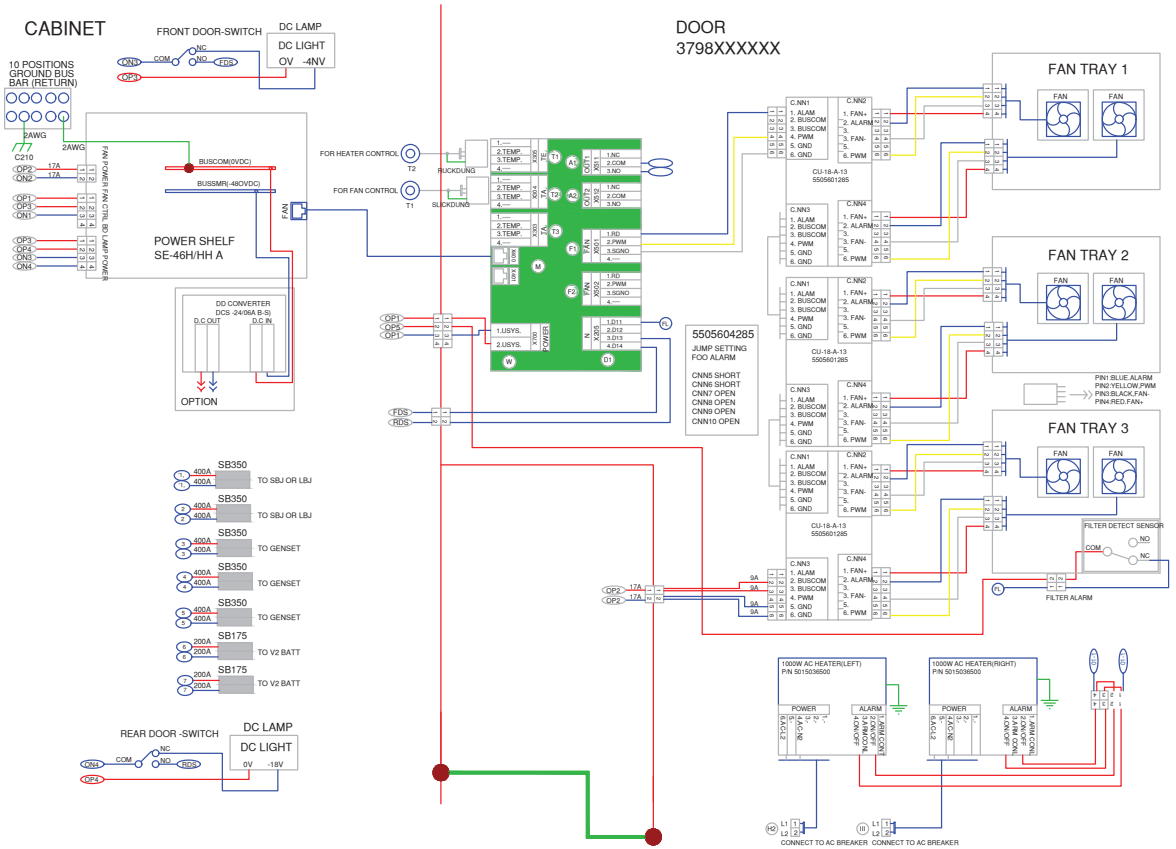


1 DELTA HPL3 CABINET RECTIFIER DIAGRAM — NOT TO SCALE



1 DELTA HPL3 POWER CABINET INTERNAL CABINET DIAGRAM — NOT TO SCALE

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5/25/22

SHEET TITLE:
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SHEET NUMBER: E-1.2

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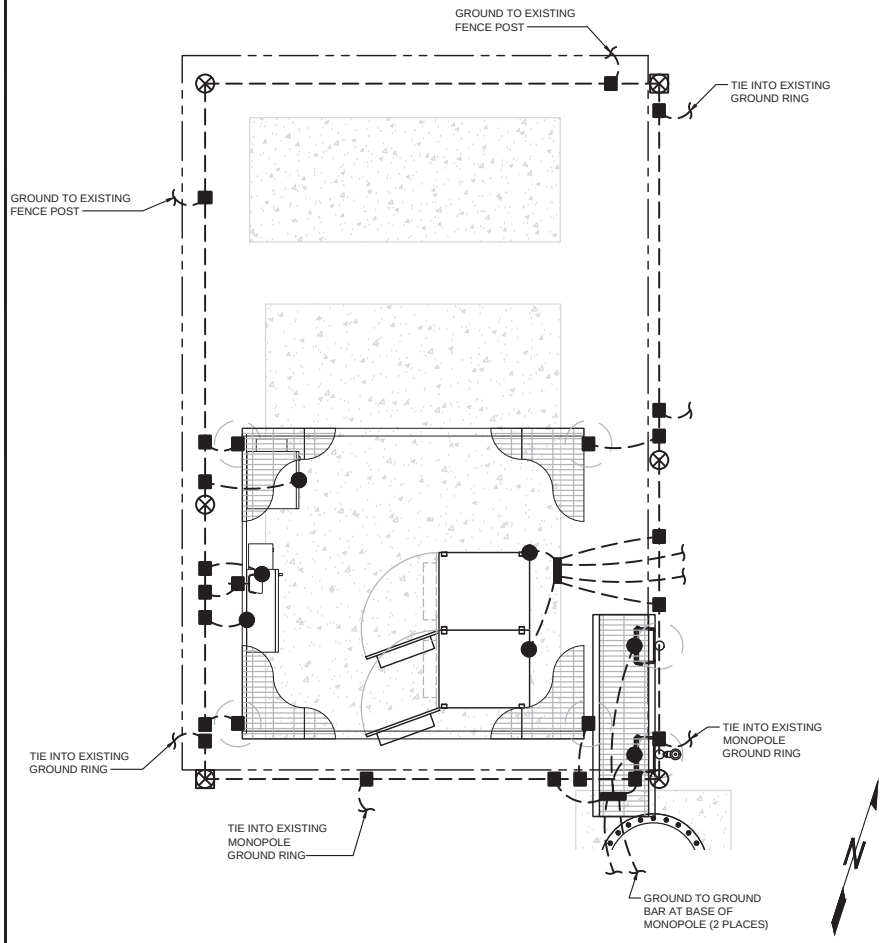
GROUNDING SYMBOLS

- GROUND BAR
- GROUND ROD WITH ACCESS
- CHEMICAL GROUND ROD
- GROUND ROD
- CADWELD TYPE CONNECTION
- COMPRESSION TYPE CONNECTION
- GROUNDING WIRE

TYPICAL: #6 AWG FROM EQUIPMENT TO GROUND BAR; #2 FROM GROUND BAR TO GROUND RING, FROM METER TO GROUND RING, AND FOR GROUND RING.



2 EQUIPMENT GROUNDING PLAN

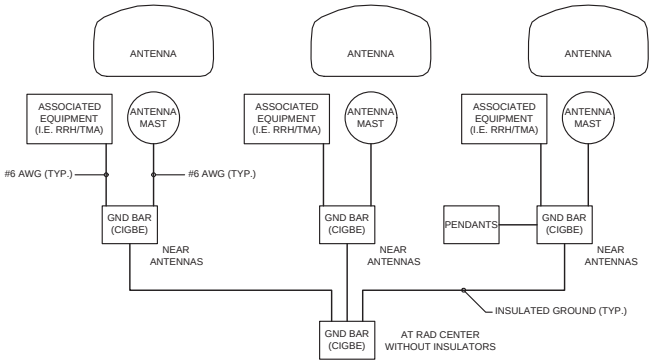
22"x34" SCALE: 1/2" = 1'-0"
11"x17" SCALE: 1/4" = 1'-0"
2' 1' 0' 2'

3 NOT USED

NOT TO SCALE

GENERAL GROUNDING NOTES:

1. TO ENSURE PROPER BONDING, ALL CONNECTIONS SHALL BE AS FOLLOWS:
   - #2/0 BARE TINNED SOLID COPPER CONDUCTOR: CADWELD TO RODS OR GROUND RING
   - LUGS AND BUS BAR (UNLESS NOTED OTHERWISE): SANDED CLEAN, COATED WITH OXIDE INHIBITOR AND BOLTED FOR MAXIMUM SURFACE CONTACT. ALL LUGS SHALL BE COPPER (NO ALUMINUM SHALL BE PERMITTED). PROVIDE LOCK WASHERS FOR ALL MECHANICAL CONNECTIONS FOR GROUND CONDUCTORS. USE STAINLESS STEEL HARDWARE THROUGHOUT.
2. ALL GROUNDING CABLE IN CONCRETE OR THROUGH WALLS SHALL BE IN 3/4" PVC CONDUIT. SEAL AROUND CONDUIT THROUGH WALLS. NO METALLIC CONDUIT SHALL BE USED FOR GROUNDING CONDUCTORS.
3. OWNER'S REPRESENTATIVE WILL INSPECT CADWELDS AND CONDUCT MEGGER TEST PRIOR TO BURIAL. MAXIMUM 5 OHMS RESISTANCE IS REQUIRED.
4. MAKE ALL GROUND CONNECTIONS AS SHORT AND DIRECT AS POSSIBLE. AVOID SHARP BENDS. ALL BENDS SHALL BE A MINIMUM 8" RADIUS AND NO GREATER THAN 90 DEGREES.
5. THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION MANAGER WHEN THE GROUNDING SYSTEM IS COMPLETE. THE CONSTRUCTION MANAGER SHALL INSPECT THE GROUNDING SYSTEM.
6. THE PREFERRED LOCATION FOR COAX GROUNDING IS AT THE BASE OF THE TOWER PRIOR TO THE COAX BEND. BONDING IS SHOWN ON THE ICE BRIDGE DUE TO DIFFICULTY WITH WELDING OR ATTACHING TO TOWER LEGS. CONTRACTOR SHALL ADVISE CONSTRUCTION MANAGER PRIOR TO PLACING CIGBE ON ICE BRIDGE IF MOUNTING TO TOWER LEG IS POSSIBLE.
7. BONDING OF THE GROUNDED CONDUCTOR (NEUTRAL) AND THE GROUNDING CONDUCTOR SHALL BE AT THE SERVICE DISCONNECTING MEANS. BONDING JUMPER SHALL BE INSTALLED PER N.E.C. ARTICLE 250-30.



1 ANTENNA SCHEMATIC GROUNDING SYSTEM & NOTES

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CHRISTOPHER J WARREN
STATE OF WASHINGTON
40190
REGISTERED
PROFESSIONAL ENGINEER
5/25/22

SHEET TITLE:
SCHEMATIC GROUNDING PLANS & NOTES

SHEET NUMBER: G-1
REVISION: 0

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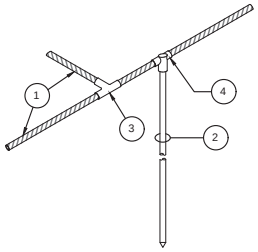
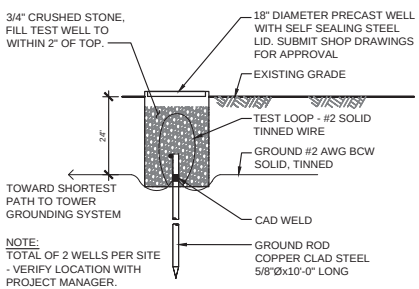


1. MAIN CONDUCTOR, COPPER CABLE
2. 5/8"x10' COPPER CLAD STEEL GROUND ROD
3. CADWELD TYPE "TA"
4. CADWELD TYPE "GT"

12 GROUND RING BONDING

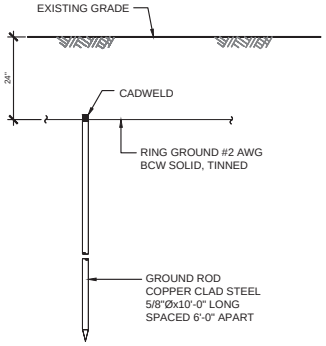
NOT TO SCALE



NOTE:
TOTAL OF 2 WELLS PER SITE - VERIFY LOCATION WITH PROJECT MANAGER.

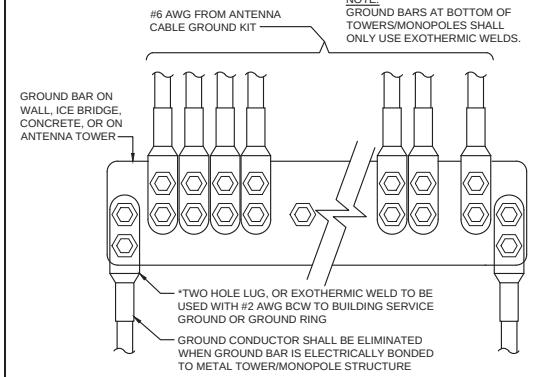
11 TEST WELL

NOT TO SCALE



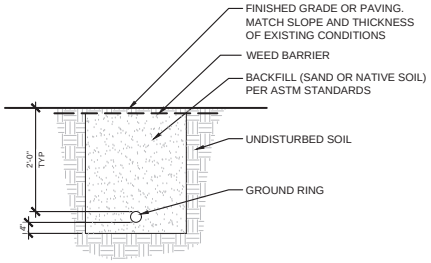
10 GROUND ROD

NOT TO SCALE



9 GROUND WIRE INSTALLATION

NOT TO SCALE

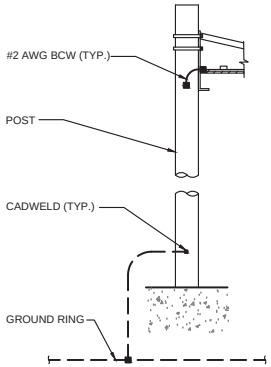


8 GROUND RING TRENCH

NOT TO SCALE

7 NOT USED

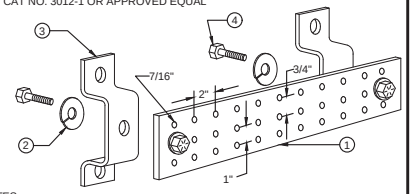
NOT TO SCALE



6 SUPPORT POST GROUNDING

NOT TO SCALE

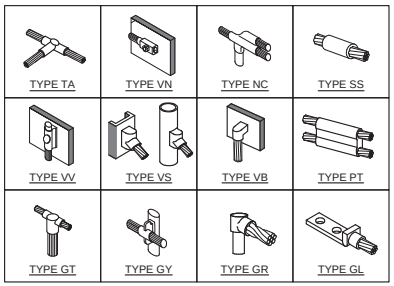
1.) COPPER GROUND BAR, 1/4"x 4"x 20", NEWTON INSTRUMENT CO. CAT. NO. B-6142 OR APPROVED EQUAL. HOLE CENTERS TO MATCH NEMA DOUBLE LUG CONFIGURATION. (ACTUAL GROUND BAR SIZE WILL VARY BASED ON NUMBER OF GROUND CONNECTIONS)
2.) 5/8" LOCK WASHERS, NEWTON INSTRUMENT CO. CAT. NO. 3015-8 OR APPROVED EQUAL
3.) WALL MOUNTING BRACKET, NEWTON INSTRUMENT CO. CAT NO. A-6056 OR APPROVED EQUAL
4.) 5/8-11 X 1" HHCS BOLTS, NEWTON INSTRUMENT CO. CAT NO. 3012-1 OR APPROVED EQUAL



NOTES:
GROUND BAR AT ANTENNA LEVEL TO BE BONDED DIRECTLY TO TOWER STRUCTURE; NO INSULATORS USED. GROUND BAR AT BASE OF TOWER STRUCTURE TO BE ATTACHED WITH INSULATORS. CONNECTION TO TOWER STRUCTURE SHALL BE PER MANUFACTURERS RECOMMENDATIONS.

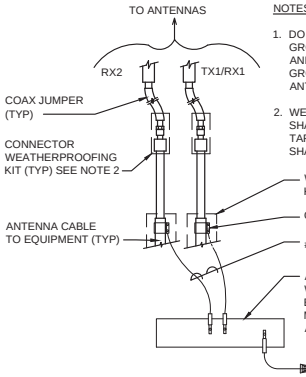
5 TYPICAL GROUND BAR

NOT TO SCALE



4 EXOTHERMIC CONNECTIONS

NOT TO SCALE

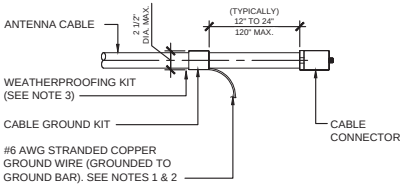


NOTES:

1. DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND WIRE DOWN TO ANTENNA GROUND BAR.
2. WEATHERPROOFING SHALL BE TWO-PART TAPE KIT. COLD SHRINK SHALL NOT BE USED.

3 CABLE GROUND CONNECTIONS

NOT TO SCALE

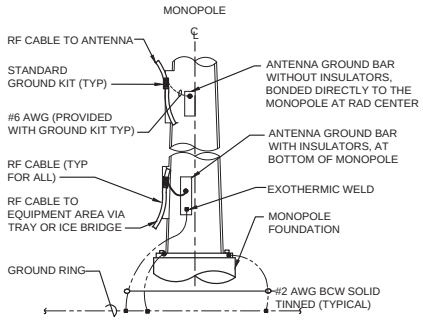


NOTES:

1. DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND WIRE DOWN TO GROUND BAR.
2. GROUNDING KIT SHALL BE TYPE AND PART NUMBER AS SUPPLIED OR RECOMMENDED BY CABLE MANUFACTURER.
3. WEATHERPROOFING SHALL BE TWO-PART TAPE KIT, COLD SHRINK SHALL NOT BE USED.

2 CABLE GROUND KIT

NOT TO SCALE



1 RF CABLE GROUND

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SHEET TITLE:
GROUNDING DETAILS

SHEET NUMBER: G-2
REVISION: 0

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Development Review Staff Report

Summary of Application

FILE NUMBER:	C22-0014
PROPOSAL:	The Columbia River Gorge Commission has received an application for upgrades to an existing communication tower.
APPLICANTS:	John Pope (c/o T-Mobile)
LANDOWNERS:	Schreiner Farms Inc.
SIZE and LOCATION:	The subject parcel is 640 acres in size and is described as Tax Lot Number 02-13-0900-0000/00 in Section 9, Township 2 North, Range 13 East, Willamette Meridian, Klickitat County, Washington.
LAND USE DESIGNATION:	General Management Area (GMA) – Large-Scale Agriculture (160)

Notice of Application Mailed to:

In accordance with Commission Rule 350-082-0110, the Gorge Commission staff mailed notice of this application to property owners within 200 feet of the subject parcel and sent email notice of this application to the following governments, agencies, and organizations:

Confederated Tribes and Bands of the Yakama Nation
Confederated Tribes of the Umatilla Indian Reservation
Confederated Tribes of Warm Springs
Nez Perce Tribe
U.S. Forest Service National Scenic Area Office (USFS CRGNSA)
Washington Department of Archaeology and Historic Preservation (DAHP)
Klickitat County Planning Department
Klickitat County Building Department
Klickitat County Public Works Department
Klickitat County Health Department
Klickitat County Assessor
Skamania County
Washington Natural Heritage Program
Washington Department of Fish and Wildlife (WDFW)
Friends of the Columbia Gorge

Written Comments Received From:

Friends of the Columbia Gorge (Steve McCoy, Staff Attorney)
USFS CRGNSA (Chris Donnermeyer, Heritage Resource Program manager)

Findings of Fact

A. Land Use

1. John Pope, work on behalf of T-Mobile is seeking approval for upgrades to an existing communications tower. No grading is proposed. The property is designated GMA Large-Scale Agriculture.

2. The project consists of installing four antennas, three ODUs, two AHLOAs and two RRUs and two hybrid cables on the tower. All of the equipment is located within a fenced enclosure. The tower is 60 ft tall, and the equipment will be mounted on the tower at 57 ft. The proposed antennas are 96" x 25" x 9", the ODUs are 13'' x 11'' x 4'', the AHLOAs are 22'' x 12'' x 7'', and the RRUs are 28'' x 13'' x 6''. The hybrid cable will be located vertically along the tower. At the ground level, a 10 ft x 11 ft ice canopy will be installed top protect a new 30'' x 35" x 72" battery cabinet and a 30'' x 35" x 72" power cabinet. An ice bridge will be installed to protect the hybrid cable and other equipment and a one new exterior light is proposed. All the existing equipment currently owned by Sprint will be removed. The application indicates that all equipment will be painted dark brown to match the color of the existing tower.

3. Commission Rule 350-082-0240(2) allows uses listed in Commission Rule 350-082-0220 'Development and Uses Eligible for Expedited Review' on lands designated Large-Scale Agriculture in the GMA. Commission Rule 350-082-0220(1)(r)(C) allows new antennas and associated support structures for existing communication towers through the expedited review process. It states:

   > *New antennas and associated support structures necessary for public service on existing wireless communication poles and towers other than those allowed outright, provided the size is the minimum necessary to provide the service.*

   The existing tower was constructed in 1998 under the approval of Director's Decision C98-0023-K-G-21. The proposed new antennas will provide improved public service. There will be no change to the tower height. The equipment is designed and sized to be adequate to provide coverage to meet public service communication needs. The proposal meets the Federal Communications Commission (FCC) rules for Eligible Facilities Requests because the proposal does not constitute a Substantial Change to the facility. The proposed antennas and support structures are eligible for expedited review, consistent with Commission Rule 350-082-0220(1)(r)(C).

Land Use Conclusion:

The proposed development is an allowed expedited review use, subject to compliance with the guidelines in Commission Rule 350-082-0220 that protect scenic, cultural, natural and recreation resource treaty rights.

B. SCENIC RESOURCES

1. Commission Rule 350-082-0220(2)(a) includes scenic resource protection guidelines for uses eligible for the expedited review process. Commission Rule 350-082-0220(2)(a)(B) states:

   Except signs, the colors of structures topographically visible from key viewing areas shall be dark earth-tones found at the specific site or the surrounding landscape. The specific colors approved by the reviewing agency shall be included as a condition of approval. This guideline shall not apply to additions to existing buildings smaller in total area in square feet than the existing building, which may be the same color as the existing building.

   The development site is located on a south-facing hillside at an elevation of 1,840 ft. The tower is topographically visible in the middle ground (1 to 4 miles) and background (greater than 4 miles) from three Key Viewing Areas (KVAs) to the south: the Columbia River, I-84, and the Historic Columbia River Highway, all of which are located at much lower elevations. The applicant has proposed to paint the proposed antennas a dark brown color to match the existing tower. Previous Decisions for the communication tower required the tower and antennas to be painted Sherwin-Williams 'French Roast' (SW 6069). A condition of approval is included in the Director's Decision requiring all elements of the proposal to be this color, consistent with Commission Rule 350-082-0220(2)(a)(B).

2. Commission Rule 350-082-0220(2)(a)(C) states:

   Except signs, structures topographically visible from key viewing areas shall use low or non-reflective building materials, including roofing, gutters, vents, and chimneys.

   A condition of approval is included in the Director's Decision requiring a flat, low-reflective finish consistent with Commission Rule 350-082-0220(2)(a)(C).

3. Commission Rule 350-082-0220(2)(a)(D) states:

   Any exterior lighting shall be sited, limited in intensity, hooded, and shielded in a manner that prevents lights from being highly visible from key viewing areas and from noticeably contrasting with the surrounding landscape setting, except for road lighting necessary for safety purposes. Shielding and hooding materials shall be composed of non-reflective, opaque materials.

   One exterior light fixture is proposed. According to the application materials, the light fixture uses LED bulbs and is on a timer. The fixture in the application materials is not limited in intensity, hooded, and shielded in a manner that prevents lights from being

highly visible from KVAs. A condition of approval is included that requires the fixture to meet these standards.

4. Commission Rule 350-082-0220(2)(a)(E) states signs shall comply with 350-082-0520.

   No new signs are proposed.

5. Commission Rule 350-082-0220(2)(a)(F) states:

   > *Structures within one-half mile of a key viewing area and topographically visible from the key viewing area shall be sited, screened and designed to achieve the applicable scenic standard (e.g., visual subordinance, not visually evident).*

   The proposed development is located over a mile north of SR 14 and is not located within a half mile of any KVA. Commission Rule 350-82-0220(2)(a)(F) is not applicable.

Scenic Resources Conclusion:

The proposed development is consistent with the expedited review guidelines for scenic resources in Commission Rule 350-81-0220.

C. CULTURAL RESOURCES

1. Commission Rule 350-082-0220(2)(b) includes cultural resource protection provisions for uses eligible for the expedited review process. Commission Rule 350-082-0220(2)(b)(A) states:

   > *The expedited development review process shall only be used to review proposed development that does not require a reconnaissance survey or historic survey as determined by 350-082-0620(2)(a)(A).*

   Chris Donnermeyer, Heritage Resources Program Manage for the Columbia River Gorge National Scenic Area, provided a cultural resources survey determination for the proposed development on August 11, 2022. Mr. Donnermeyer determined that the proposed development does not require a reconnaissance survey or historic survey pursuant to Commission Rules 350-81-540(1)(c)(A) and (B) because the proposal would occur on a site that has been adequately surveyed in the past, would not alter the exterior architectural appearance of significant buildings and structures that are 50 years old or older, and would not compromise features of the surrounding area that are important in defining the historic or architectural character of significant buildings or structures that are 50 years old or older.

2. Commission Rule 350-082-0220(2)(b)(B) states:

   > *The GMA guidelines that protect cultural resources and human remains discovered during construction (350-082-0620(6) and (7)) shall be applied as conditions of approval for all development approved under the expedited development review process, including development in the SMAs.*

Commission Rule 350-082-0620(6) protects cultural resources discovered during construction, and Commission Rule 350-082-0620(7) contains provisions addressing discovery of human remains during construction. Conditions of approval are included in the director's decision consistent with these rules.

Cultural Resources Conclusion

With conditions protecting unknown cultural resources and human remains discovered during construction, the proposed development is consistent with the expedited review guidelines for cultural resources in Commission Rule 350-82-0220.

D. NATURAL RESOURCES

1. Commission Rule 350-082-0220(2)(d) includes natural resource protection provisions for uses eligible for the expedited review process. Proposed developments reviewed using the expedited review process must comply with the resource protection guidelines to be eligible for expedited review.

2. Commission Rule 350-082-0220(2)(d)(A) contains guidelines for the protection of water resources. It states:

> *The development is outside buffer zones for wetlands, streams, rivers, ponds, and lakes. This guideline shall not apply to lot line adjustments or development located inside road, utility or railroad rights-of-way or easements that have been previously disturbed and regularly maintained.*

Intermittent streams originate above the communication site and pass to the west and east. Pursuant to Commission Rule 350-082-0640(6)(g), intermittent streams have 50-foot buffers. The proposal is located more than 400 feet from any stream and outside buffer zones. The proposal will not be located within the vicinity of any wetlands, rivers, ponds, or lakes. Given this information, the proposed development is consistent with 350-082-0220(2)(d)(A)

3. Commission Rule 350-082-0220(2)(d)(B) contains guidelines for consistency with the expedited review process for the protection of sensitive wildlife and sensitive plants. It states:

> *Sensitive Wildlife and Rare Plants*
> *The development meets one of the following:*
> *(I) The development is at least 1,000 feet from known Priority Habitats or sensitive wildlife sites (excluding sensitive aquatic species and deer and elk winter range) and known rare plants.*
> *(II) The development does not disturb the ground or is inside road, utility or railroad rights-of-way or easements or other areas that have been previously disturbed and regularly maintained.*
> *(III) For sensitive wildlife, the development is within 1,000 feet of known Priority Habitats or sensitive wildlife sites (excluding sensitive aquatic species and deer and elk winter range), but an appropriate federal or state wildlife agency determines the Priority Habitat or sensitive wildlife site is not active,*

the proposed development would not compromise the integrity of the Priority Habitat or wildlife area, or the proposed development would not occur during the time of the year when wildlife species are sensitive to disturbance.
(IV) For rare plants, the development is within 1,000 feet of known rare plants, but the Oregon Biodiversity Information Center or Washington Natural Heritage Program or a person with recognized expertise in botany or plant ecology hired by the applicant has determined that the development would be at least 200 feet from the rare plants.
Development eligible for expedited review shall be exempt from the field survey requirements for sensitive wildlife or rare plants in 350-082-0650(1)(d) and (2) and 350-082-0660(1)(d) and (2).

There are no known sensitive plants or wildlife areas or sites on the subject property or within 1,000 feet. The development will occur within a fenced area that has been used and maintained as a telecommunications site. As such, the site has been previously disturbed and regularly maintained. The proposed addition is consistent with the natural resource protection measures in Commission Rule 350-082-0220(2)(d)(B).

Natural Resources Conclusion:

The proposed development is consistent with the expedited review use guidelines in Commission Rule 350-082-0220(1)(d) that protects natural resources in the National Scenic Area.

E. RECREATION RESOURCES

1. Commission Rule 350-082-0220(2)(c)(A) requires new development approved under the expedited review process to not detract from the use and enjoyment of recreation sites on adjacent parcels.

   No established recreation sites exist on adjacent properties.

Recreation Resources Conclusion:

The proposed development is consistent with Commission Rule 350-082-0220(1)(c)(A) that protects recreation resources in the National Scenic Area.

F. TREATY RIGHTS PROTECTION

1. Commission Rule 350-082-0220(2)(e) describes the treaty rights protection guidelines for expedited review uses.
2. Commission Rule 350-082-0220(2)(e)(A) states:

   Proposed developments shall not affect or modify any treaty or other rights of any Indian tribe.

   The proposal will not affect or modify treaty or other rights of any Indian tribe, consistent with this rule.

3. Commission Rule 350-082-0220 (2)(e)(B) states:

   The expedited development review process shall cease and the proposed development shall be reviewed using the full development review process if a tribal government submits substantive written comments during the comment period that identify the treaty rights that exist in the project vicinity and explain how they would be affected or modified by the proposed development.

   No substantive comments were received.

Treaty Rights Conclusion:

The proposed development is consistent with the treaty rights protection guidelines for expedited review uses in Commission Rule 350-082-0220(2)(e).

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