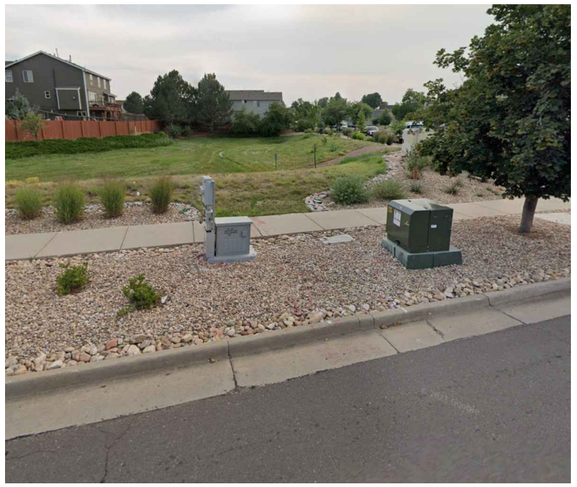
# DN03991GA
# POWER SUPPLY 2

FMPS AZHL

14922 E. GATEWAY AVE.
DENVER, CO 80239
LATITUDE: 39.784791
LONGITUDE: -104.815044

## SITE PHOTO



## PROJECT DESCRIPTION

MODIFICATION OF AN (E) "NON-INHABITABLE" CROWN CASTLE POWER SUPPLY SITE CONSISTING OF:

REMOVING
- (E) ALPHA CABINET

INSTALLING
- UPGRADING ELECTRICAL SERVICE TO 200A
- (1) (N) COLD SEQUENCE METER PEDESTAL
- (1) (N) VOLTSERVER TX-12K OUTDOOR ENCLOSURE W/ 100A MCB DISTRIBUTION PANEL
- (N) A/C ELECTRICAL CIRCUIT TO NODE DN1087 IN (E) CONDUIT (APPROX. 190 L.F.)
- (N) 100A MLO PANEL INSIDE NODE 1087 POLE BASE
- (2) INTERCEPT PITS
- PROVIDE GRAVEL/LANDSCAPE RESTORATION (APPROX. 150 S.F.)

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

## PROJECT TEAM

SITE CONTACTS:
CROWN CASTLE FIBER
116 INVERNESS DR EAST STE.300
ENGLEWOOD, CO 80112
FIBER.CROWNCASTLE.COM

JARED HINKLE
MANAGER NETWORK DESIGN & CONSTRUCTION
ROCKY MOUNTAIN REGION
T:(602) 845-1786 | M:(541) 913-5870

JUSTIN SLAWTER:
SUPERVISOR OF NETWORK CONSTRUCTION
ROCKY MOUNTAIN REGION
T: (719) 210-0584
JUSTIN.SLAWTER@CROWNCASTLE.COM

A&E ENGINEERING MANAGER:
UCI² CONSTRUCTION SERVICES
4751 FOX STREET
DENVER, CO 80216
DAN LITTLE
720.238.0402

ENGINEER:
TIM ALEXANDER, PE
602.403.8368
PROTEUSPOWER@OUTLOOK.COM

## SHEET INDEX

| SHEET | DESCRIPTION |
|---|---|
| T1.0 | COVER PAGE |
| GN1.0 | GENERAL NOTES |
| GN1.1 | GENERAL NOTES |
| GN2.0 | DOTI REQUIRED PLAN NOTES |
| GN2.1 | DOTI REQUIRED PLAN NOTES |
| A1.0 | SITE PLAN |
| A2.0 | POLE BASE DETAIL |
| A3.0 | EQUIPMENT SPECIFICATIONS |
| A4.0 | EQUIPMENT SPECIFICATIONS |
| A5.0 | EQUIPMENT SPECIFICATIONS |
| E1.0 | GENERAL NOTES |
| E2.0 | ONELINE CALCS |
| E3.0 | PANEL DETAILS |
| MHT-#2 | TRAFFIC CONTROL PLANS |

## VICINITY MAP

## DRIVING DIRECTIONS

DIRECTIONS: TAKE I-70 E TO CHAMBERS ROAD EXIT 283 IN AURORA (10.4 MILES). TURN LEFT ONTO CHAMBERS ROAD (0.7 MILES). TURN LEFT ONTO BOLLING DRIVE (0.4 MILES). TURN RIGHT ONTO ENID WAY (0.3 MILES). TURN RIGHT ONTO GATEWAY AVENUE (56 FEET). POWER SOURCE 2 WILL BE ON YOUR RIGHT AT THE CORNER OF GATEWAY AVENUE AND ENID WAY.

## SITE INFORMATION

| | |
|---|---|
| SITE TYPE: | AZHL ADD |
| SITE NAME: | DN03991GA |
| SITE NUMBER: | POWER SUPPLY 2 |
| SITE ADDRESS: | 14922 E. GATEWAY AVE. DENVER, CO 80239 |
| JURISDICTION: | CITY AND COUNTY OF DENVER |
| PARCEL NUMBER: | N/A |
| EXISTING STRUCTURE: | |
| OCCUPANCY GROUP | U |
| CONSTRUCTION TYPE | V-B |
| FULLY SPRINKLERED | NO |
| NO. STORIES | 1 |

## APPLICABLE CODES

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

GOVERNING CODES, AS APPLICABLE:
2021 IBC 2023 NEC 2021 IPC
2021 IECC 2021 IMC 2021 IFC
2022 DENVER BUILDING & FIRE CODE AMENDMENTS

A.D.A. COMPLIANCE:
NOT REQUIRED PER IBC 1103.2.9.

OSHA COMPLIANCE:
ANSI A10.48: FALL PROTECTION AND SAFETY STANDARDS

MANDATORY: CONTRACTOR TO CALL TO VERIFY UTILITIES, AT LEAST TWO WORKING DAYS PRIOR TO DIGGING.
BEFORE YOU DIG, CALL: 1-800-922-1987
HTTP://CALL811.COM/MAP-PAGE/COLORADO

811 Know what's below. Call before you dig.

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

## POWER SUPPLY POLE INVENTORY

| POLE NUMBER | LATITUDE | LONGITUDE |
|---|---|---|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

## UTILITY PROVIDER

POWER PROVIDER:
XCEL ENERGY
BUILDERS CALL LINE (800) 628-2121

## REFERENCED DOCUMENTS

DATE

T-Mobile
900 SOUTH BROADWAY, DENVER, CO 80209

PRELIMINARY

PROJECT INFORMATION:

SITE NAME:
DN03991GA

SITE ID:
POWER SUPPLY 2

SITE ADDRESS:
14922 E. GATEWAY AVE.
DENVER, CO 80239

SITE COUNTY:
DENVER COUNTY

| Rev: | Date: | Description: | By: |
|---|---|---|---|
| A | 04.23.25 | PRELIMINARY | MM |
| B | 11.04.25 | DOTI SUBMITTAL | DPL |

UCI² CONSTRUCTION SERVICES, LLC
4751 FOX STREET, DENVER, CO 80216

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

SHEET TITLE:

COVER PAGE

SHEET NUMBER:
T1.0

| DRAWN BY: | CHK BY: | APV BY: |
|---|---|---|
| MM | DL | TN |

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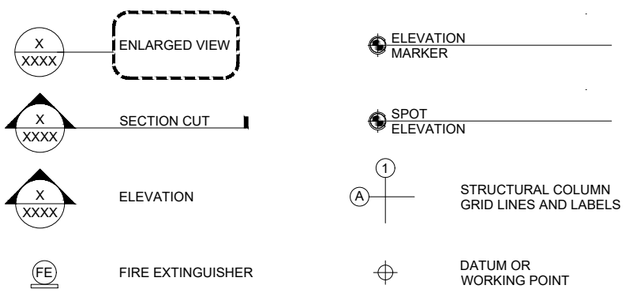
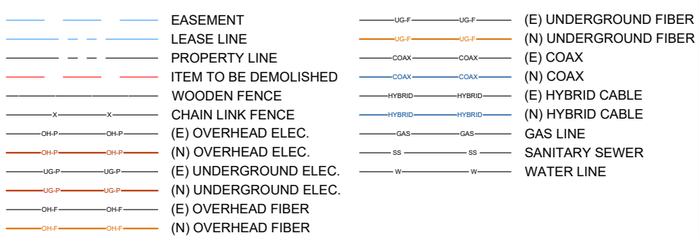
## ABBREVIATIONS

| | | | |
|---|---|---|---|
| @ | AT | HT. | HEIGHT |
| ° | DEGREES | ILC | INTEGRATED LOAD CENTER |
| Ø | DIAMETER | INT. | INTERIOR |
| A/C | AIR CONDITIONER | L.F. | LINEAR FEET |
| APPROX. | APPROXIMATE | | |
| ARCH. | ARCHITECTURAL | MAX. | MAXIMUM |
| A.F.F. | ABOVE FINISH FLOOR | MECH. | MECHANICAL |
| A.F.G. | ABOVE FINISH GRADE | MFGR. | MANUFACTURER |
| ATS | AUTOMATIC TRANSFER SWITCH | MGB | MAIN GROUND BAR |
| AWS | ADVANCED WIRELESS SYSTEM | MIN. | MINIMUM |
| | | MSDS | MATERIAL SAFETY DATA SHEET |
| BBU | BATTERY BACK UP | MTL. | METAL |
| BCEM | BASE CHANNEL ELEMENT MODULE | MTS | MANUAL TRANSFER SWITCH |
| BLDG. | BUILDING | | |
| B.O. | BOTTOM OF | (N) | NEW |
| | | N.T.S. | NOT TO SCALE |
| CLG. | CEILING | | |
| COL. | COLUMN | O.C. | ON CENTER |
| CONC. | CONCRETE | O.D. | OUTSIDE DIAMETER |
| | | OVP | OVER VOLTAGE PROTECTION |
| DBL. | DOUBLE | | |
| DIA. | DIAMETER | PCS | PERSONAL COMMUNICATIONS SERVICE |
| DIM. | DIMENSION | | |
| DISC. | DISCONNECT | RAD. | RADIUS |
| DN. | DOWN | R.O. | ROUGH OPENING |
| DWG. | DRAWING | RRU | REMOTE RADIO UNIT |
| (E) | EXISTING | SHTG. | SHEATHING |
| EA. | EACH | SIM. | SIMILAR |
| ELEV. | ELEVATION | SPEC. | SPECIFICATION |
| ELEC. | ELECTRICAL | S.S. | STAINLESS STEEL |
| EQ. | EQUAL | STL. | STEEL |
| EXT. | EXTERIOR | STRUCT. | STRUCTURAL |
| F.O. | FIRE EXTINGUISHER | T.C. | TEMPERATURE CONTROL |
| FIN. | FINISH | TELCO | TELECOMMUNICATIONS |
| FLR. | FLOOR | T.O. | TOP OF |
| FUT. | FUTURE | TYP. | TYPICAL |
| GA. | GAUGE | U.G. | UNDERGROUND |
| GALV. | GALVANIZED | U.N.O. | UNLESS NOTED OTHERWISE |
| GEN. | GENERATOR | | |
| GPS | GLOBAL POSITIONING SYSTEM | VERT. | VERTICAL |
| GWB. | GYPSUM WALLBOARD | V.I.F. | VERIFY IN FIELD |
| H.M. | HOLLOW METAL | W/ | WITH |
| HORZ. | HORIZONTAL | | |
| HR. | HOUR | | |

## ABBREVIATIONS




## LINETYPES




## GENERAL CONSTRUCTION NOTES

CODE COMPLIANCE

1. THE FACILITY IS AN UNOCCUPIED WIRELESS FACILITY. EQUIPMENT ROOMS ARE NOT MANNED, ARE NOT HABITABLE, AND DO NOT REQUIRE POTABLE WATER, SEWER CONNECTIONS OR A.D.A. ACCESS ACCOMMODATIONS.
2. ALL WORK PERFORMED AND MATERIALS INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE STANDARDS, CODES, ORDINANCES, RULES, REGULATIONS, ORDINANCES, AND MANUFACTURER'S RECOMMENDATIONS. WHEN TWO OR MORE ARE IN CONFLICT, THE MOST STRINGENT PROVISION SHALL BE FOLLOWED.
3. CONTRACTOR SHALL GIVE ALL NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF THE WORK. WHERE LICENSING IS REQUIRED, CONTRACTOR SHALL OBTAIN ALL REQUIRED LICENSES PRIOR TO BEGINNING WORK.
4. MECHANICAL AND ELECTRICAL SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS, AND LOCAL AND STATE JURISDICTIONAL CODES, ORDINANCES AND APPLICABLE REGULATIONS.
5. CONTRACTOR TO COORDINATE WITH LOCAL JURISDICTION FOR ANY CODE RELATED QUESTIONS. ALL JURISDICTION REQUIRED CHANGES ARE THE RESPONSIBILITY OF THE CONTRACTOR.

GENERAL CONDITIONS

6. DO NOT SCALE DRAWINGS.
7. THESE DESIGN DOCUMENTS ARE DIAGRAMMATIC IN NATURE AND ARE INTENDED TO SHOW FINAL CONDITIONS., UNLESS NOTED OTHERWISE.
8. THE CONTRACTORS SHALL USE DIMENSIONS SHOWN ON THE DRAWINGS AND ACTUAL FIELD MEASUREMENTS. NOTIFY THE AE PROJECT MANAGER IF ANY DISCREPANCIES ARE FOUND PRIOR TO PROCEEDING WITH WORK.
9. EXTERIOR DIMENSIONS ARE TO FACES OF EXTERIOR WALLS.
10. DIMENSIONS ON PLANS ARE TO FINISH FACES OR CENTERLINES OF COLUMNS UNLESS NOTED OTHERWISE.
11. DIMENSIONS TO DOOR OPENINGS ARE TO R.O. IN MASONRY & CONCRETE AND TO JAMB OPENING IN STUDWALLS. VERIFY DOOR SIZE W/ SCHEDULE.
12. DETAILS ARE INTENDED TO SHOW END RESULT OF DESIGN. MINOR MODIFICATIONS MAY BE REQUIRED TO SUIT JOB DIMENSIONS OR CONDITIONS, AND SUCH MODIFICATIONS SHALL BE INCLUDED AS PART OF THE WORK.
13. REPRESENTATIONS OF TRUE NORTH, OTHER THAN THOSE FOUND ON THE PLOT OF SURVEY DRAWING, SHALL NOT BE USED TO IDENTIFY OR ESTABLISH THE BEARING OF TRUE NORTH AT THE SITE. THE CONTRACTOR SHALL RELY SOLELY ON THE PLOT OF SURVEY DRAWING AND ANY SURVEYOR'S MARKINGS AT THE SITE FOR THE ESTABLISHMENT OF TRUE NORTH, AND SHALL NOTIFY THE ARCHITECT/ENGINEER PRIOR TO PROCEEDING WITH THE WORK IF ANY DISCREPANCY IS FOUND BETWEEN THE VARIOUS ELEMENTS OF THE WORKING DRAWINGS AND THE TRUE NORTH ORIENTATION AS DEPICTED ON THE PLAT OF SURVEY. THE CONTRACTOR SHALL ASSUME SOLE LIABILITY FOR ANY FAILURE TO NOTIFY THE ARCHITECT/ENGINEER.
14. EVERY EFFORT HAS BEEN MADE BY THE ARCHITECT / ENGINEERS TO PROVIDE ACCURATE AND COMPLETE DESIGN DOCUMENTS THOUGH MINOR ERRORS AND OMISSIONS MAYBE CONTAINED WITHIN THE DOCUMENTS. THESE SHALL NOT EXCUSE THE CONTRACTOR FROM PROVIDING AN ACCURATE PROPOSAL AND COMPLETING THE PROJECT IN ACCORDANCE WITH THE INTENT OF THE DESIGN DOCUMENTS.
15. IT IS THE EXPRESS INTENT OF THE PARTIES INVOLVED IN THIS PROJECT THAT THE CONTRACTOR OR SUBCONTRACTOR OR INDEPENDENT CONTRACTOR OR THEIR RESPECTIVE EMPLOYEES SHALL EXCULPATE THE ARCHITECT, THE ENGINEER, THE CONSTRUCTION MANAGER, THE OWNER, AND THEIR AGENTS, FROM ANY LIABILITY WHATSOEVER AND HOLD THEM HARMLESS AGAINST LOSS, DAMAGES, LIABILITY OR ANY EXPENSE ARISING IN ANY MATTER FROM A WRONGFUL OR NEGLIGENT ACT, OR FAILURE TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS, OR FROM THE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES, OR FAILURE TO CONFORM TO THE STATE SCAFFOLDING ACT IN CONNECTION WITH THE WORK.

CONTRACTOR'S RESPONSIBILITIES

16. PRIOR TO THE SUBMISSION OF A BID, THE CONTRACTOR SHALL VISIT THE JOB SITE, REVIEW ALL DESIGN DOCUMENTS, FIELD CONDITIONS AND DIMENSIONS, CONFIRMING THAT THE WORK CAN BE ACCOMPLISHED AS SHOWN PRIOR TO PROCEEDING WITH CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR IDENTIFYING ANY ANY DISCREPANCIES BETWEEN ACTUAL CONDITIONS AND DESIGN DOCUMENTS, NOTIFYING THE CONSTRUCTION MANAGER AND ARCHITECT/ENGINEER OF SUCH, AND SHALL OBTAIN WRITTEN CLARIFICATION PRIOR TO BEGINNING THE WORK.
17. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT EXTENT OF WORK, COORDINATION, DEMOLITION, TEMPORARY CONSTRUCTION, TEMPORARY FACILITIES, UTILITIES, ETC., NECESSARY TO COMPLETE THEIR PROJECT AS INDICATED IN THE CONTRACT DOCUMENTS.
18. WHILE REVIEWING THE DESIGN DOCUMENTS, THE CONTRACTOR SHALL IDENTIFY ANY ITEMS WHERE THE DESIGN INTENT IS UNCLEAR AND OBTAIN WRITTEN CLARIFICATIONS PRIOR TO FURNISHING A BID. THE CONTRACTOR SHALL RECEIVE, IN WRITING, AUTHORIZATION TO PROCEED BEFORE STARTING WORK ON ANY ITEM NOT CLEARLY DEFINED OR IDENTIFIED BY THE CONTRACT DOCUMENTS. ANY REQUEST FOR ALTERATIONS TO THE DESIGN INTENT SHALL BE PROVIDED IN WRITING FOR REVIEW AND APPROVAL.
19. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING THE MOST RECENT DESIGN DOCUMENTS AND ENSURING THEY ARE DISTRIBUTED AND ARE FOLLOWED BY ALL PERSONNEL INVOLVED IN THE PROJECT.
20. CONTRACTOR SHALL OBTAIN WRITTEN AUTHORIZATION FROM THE CARRIER PRIOR TO PURCHASING ANY MATERIALS OR STARTING ANY WORK.
21. CONTRACTOR SHALL, EXCEPT AS SPECIFICALLY AGREED OTHERWISE, PROVIDE ALL NECESSARY MATERIALS, LABOR AND EQUIPMENT TO COMPLETE THE INSTALLATION AS DESCRIBED IN DESIGN DOCUMENTS. CONTRACTOR TO CLARIFY PROVIDED MATERIALS PRIOR TO FURNISHING A BID.
22. ALL FURNISHED MATERIALS SHALL MEET CARRIER SPECIFICATIONS AND MINIMUM REQUIREMENTS FOR THE PROJECT. ANY SUBSTITUTIONS SHALL BE APPROVED IN WRITING BY CARRIER CONSTRUCTION MANAGER PRIOR TO PURCHASE AND INSTALLATION.
23. THE GENERAL CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK, USING THE BEST SKILLS AND ATTENTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, PROCEDURES AND MATERIALS; AND FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT INCLUDING CONTACT AND COORDINATION WITH THE CONSTRUCTION FIELD ENGINEER AND WITH THE LANDLORD'S AUTHORIZED REPRESENTATIVE , COORDINATING ACCESS, AND COMPLIANCE WITH ANY REQUIREMENTS IMPOSED BY THE LANDLORD.
24. CONTRACTOR TO PROVIDE CLOSE OUT PACKAGE WITH ALL TEST RESULTS, SETTING SCREEN SHOTS, RELEVANT CATALOGS / CUT SHEETS, INSTRUCTION SHEETS AND A SET OF RED-LINED AS-BUILT DRAWINGS PRIOR TO FINAL BILLING.

CONDITION OF SITE

25. CONTRACTOR SHALL MAKE PROVISIONS TO PROTECT EXISTING SITE FINISHES AS MUCH AS POSSIBLE. ANY IMPACT TO SITE AND SURROUNDINGS SHALL BE MITIGATED AND CONTRACTOR SHALL RETURN SITE TO PRE-CONSTRUCTION CONDITIONS.
26. WORK AREA SHALL BE KEPT FREE OF DEBRIS ACCUMULATION. KEEP WORK AREAS NEAT AND ORDERLY AS MUCH AS POSSIBLE. MEANS OF EGRESS SHALL BE KEPT CLEAR AT ALL TIMES.
27. ALL DEMOLISHED AND UNUSED MATERIALS SHALL BE REMOVED FROM SITE AND TRACKED ASSETS LOGGED AND RETURNED TO CARRIER FOR DISPOSAL OR RE-USE. CONTRACTOR TO KEEP THE SITE CLEAN, FREE OF HAZARDS, PROPERLY DISPOSE OF ALL RUBBISH, AND REMOVE TRASH AND REFUSE DAILY. BURY NOTHING ON SITE. NO SOLID WASTE RECEPTACLE WILL BE SITED.

## SITE WORK

1. CONTRACTOR TO VERIFY STATE REQUIREMENTS FOR UTILITY LOCATION SERVICES AND EXCAVATION CONTRACTOR SHALL NOTIFY STATE OR LOCAL NOTIFICATION CENTER AS REQUIRED PRIOR TO ANY SITE DISTURBANCES.
2. REASONABLE EFFORTS HAVE BEEN MADE TO IDENTIFY EXISTING UTILITIES. THE CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING ALL UTILITIES, SHOWN OR NOT, AND PROTECTING THEM FROM DAMAGE. EXCAVATION CONTRACTOR TO OBTAIN REQUIRED LOCATES PRIOR TO STARTING WORK.
3. CONTRACTOR SHALL PROTECT ALL SITE FINISHES AND IMPROVEMENTS AND RETURN ALL TO PRE WORK CONDITION. IF EXTERIOR SITE IMPROVEMENTS ARE REQUIRED, CONTRACTOR TO INSTALL AND MAINTAIN DRAINAGE / RUNOFF MITIGATION MEASURES THROUGH OUT THE PROJECT AND REVEGETATE AREA TO RETURN IT TO ORIGINAL CONDITIONS.
4. GRUB AND DISPOSE OF ALL ORGANIC MATERIAL PRIOR NO FILL OR EARTHWORK TO OCCUR WITH ON OR WITH FROZEN MATERIAL

## STRUCTURAL NOTES

1.0 GENERAL CONDITIONS

1.1 NO STRUCTURAL ALTERATIONS ARE TO BE MADE TO THE FACILITY UNLESS SPECIFICALLY NOTED.
1.2 ALL STRUCTURAL SHOP DRAWINGS SHALL BE SUBMITTED TO THE STRUCTURAL ENGINEER FOR WRITTEN APPROVAL PRIOR TO FABRICATION.

2.0 CONCRETE AND MASONRY

2.1 ALL CONCRETE WORK SHALL CONFORM WITH ACI. 318 OR LATEST. DETAIL REINFORCING IN CONFORMANCE WITH ACI. SP66 LATEST.
2.2 NO SPLICES OF REINFORCEMENT SHALL BE MADE EXCEPT AS DETAILED OR AUTHORIZED BY THE STRUCTURAL ENGINEER. LAP SPLICES WHERE PERMITTED SHALL BE A MINIMUM OF 30 BAR DIAMETERS.
2.3 PROVIDE ALL ACCESSORIES NECESSARY TO SUPPORT REINFORCING AT POSITIONS SHOW ON DRAWINGS.
2.4 WIRE FABRIC REINFORCEMENT MUST LAP ONE FULL MESH AT SIDE AND END LAPS SHALL BE TIED TOGETHER.
2.5 CURE AFTER FINISHING CONCRETE. KEEP MOIST FOR 7 DAYS AFTER POURING.
2.6 COMPACT STRUCTURAL FILL 95% PROCTOR DENSITY PRIOR TO PLACING CONCRETE UNDER SLABS.
2.7 1/4" CHAMFER ON ALL CORNERS AND EDGES.
3.8 ALL CONCRETE SHALL BE PORTLAND, TYPE 1 CEMENT WITH A MINIMUM OF 28 DAY STRENGTH OF 3000 PSI., 4" SLUMP AND A MINIMUM AIR ENTRAPMENT OF 4%.
2.9 ALL REINFORCING STEEL SHALL BE GRADE 60. ALL REINFORCING MESH SHALL CONFORM TO ASTM A 185.
2.10 CONTRACTOR TO OBTAIN X-RAY OR GPR (IF APPLICABLE) OF ANY CONCRETE OR MASONRY STRUCTURES, IDENTIFYING ALL EMBEDMENT PRIOR TO CUTTING, DRILLING OR OTHER ACTIVITY WHICH COULD CAUSE DAMAGE. AVOID ALL EMBEDMENT. OBTAIN APPROVAL FROM STRUCTURAL ENGINEER PRIOR TO IMPACTING ANY STRUCTURAL FACILITIES.

3.0 STRUCTURAL STEEL

3.1 CHANNELS, ANGLES AND PLATES SHALL BE ASTM A36 MATERIAL, UNLESS NOTED OTHERWISE.
3.2 SQUARE AND RECTANGULAR TUBE STEEL HSS SECTIONS SHALL BE ASTM A500, GRADE B (Fy = 46 ksi) MATERIAL.
3.3 ROUND PIPE SECTIONS SHALL BE ASTM A53, GRADE B (Fy =35 ksi) MATERIAL.
3.4 DESIGN, FABRICATION, AND ERECTION SHALL BE IN ACCORDANCE WITH THE "AISC SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS", WITH COMMENTARY AND THE "CODE OF STANDARD PRACTICE".
3.5 ALL STEEL SHALL HAVE ONE COAT OF SHOP PRIMER. DO NOT PAINT AREAS WITHIN 3" OF BOLTS, WELDS OR HEADED STUDS.
3.6 ALL OUTDOOR STEEL ITEMS SHALL BE HOT DIPPED GALVANIZED PER ASTM A123.
3.7 BOLTS SHALL BE HIGH STRENGTH BOLTS, A325, CONFORMING TO ASTM SPECIFICATIONS. ALL CONNECTIONS SHALL HAVE A MINIMUM OF 2 BOLTS.
3.8 WELDING SHALL BE CONDUCTED BY CERTIFIED WELDERS AND SHALL CONFORM TO THE AWS CODES FOR ARC AND GAS WELDING IN BUILDING CONSTRUCTION.
3.9 WELDS SHALL BE MADE USING E70XX ELECTRODES AND SHALL BE 3/16" MINIMUM UNLESS OTHERWISE NOTED.
3.10 WELDING SHALL BE PERFORMED IN ACCORDANCE WITH A WELDED PROCEDURE SPECIFICATION (WPS) AS PER AWS D1.1 , D1.3 AND D1.4.
3.11 ONLY PRE-QUALIFIED WELDING PROCEDURES SHALL BE USED.
3.12 UNLESS SPECIFICALLY ADDRESSED IN THE SPECIFICATIONS OR THE DETAILS, ALL STEEL ITEMS PERMANENTLY EXPOSED TO EARTH OR WEATHER SHALL BE CORROSION-RESISTANT BY GALVANIZING OR BY THE USE OF STAINLESS STEEL.
3.13 ALL FIELD WELDS ON GALVANIZED MATERIAL SHALL BE BRUSH-COATED WITH A ZINC-RICH PAINT
3.14 ANY DAMAGED GALVANIZING OR PAINT TO BE FIELD REPAIRED WITH 'COLD-GALV' OR APPROPRIATE PAINT UNDER CONDITIONS APPROVED BY PRODUCT MANUFACTURER.

4.0 FIBER REINFORCED PLASTICS

4.1 ALL FRP MATERIAL SHALL BE EXTREN SERIES 500 OR EQUIVALENT, PRODUCED BY THE PULTRUSION METHOD.
4.2 ALL ADHESIVE RESIN SHALL BE PLEXUS METHACRYLATE OR AN EQUIVALENT ADHESIVE RESIN THAT IS COMPATIBLE WITH THE RESIN MATRIX USED IN THE STRUCTURAL SHAPES.
4.3 ALL FRP CONNECTIONS SHALL BE FULLY-BONDED AT EACH SIDE WITH A 1/4" PLATE AND A MINIMUM OF (2) 3/8" DIAMETER FLATHEAD FRP SCREWS PER MEMBER.
4.4 ISOPLAST NUTS AND BOLTS SHALL BE TIGHTENED TO A SNUG-TIGHT FIT PLUS AN ADDITIONAL 1/2 TURN, PRIOR TO BEING LOCKED WITH EPOXY.
4.5 ALL PANELS / SHEATHING SHALL BE FULLY BONDED WITH 3/8" FLATHEAD FRP SCREWS AT 12" O.C.
4.6 ALL FIELD CUT AND DRILLED EDGES, HOLES AND ABRASIONS SHALL BE SEALED WITH A CATALYZED EPOXY RESIN COMPATIBLE WITH THE MANUFACTURER'S ORIGINAL RESIN.

T-Mobile
900 SOUTH BROADWAY, DENVER, CO 80209

PROJECT INFORMATION:

SITE NAME:
DN03991GA

SITE ID:
POWER SUPPLY 2

SITE ADDRESS:
14922 E. GATEWAY AVE.
DENVER, CO 80239

SITE COUNTY:
DENVER COUNTY

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UCI
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4751 FOX STREET, DENVER, CO 80216

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SHEET TITLE:

GENERAL NOTES

SHEET NUMBER:

GN1.0

| DRAWN BY: | CHK BY: | APV BY: |
|---|---|---|
| MM | DL | TN |

PRELIMINARY

U:\Colorado\DN3991GA_Power Supplies\PS-02\CAD\DN03991GA_PS-02_FMPS AZHL_permit set.dwg PLOT DATE: 11/4/2025 BY:Dan Little

ELECTRICAL NOTES

1. THESE PLANS ARE DIAGRAMMATIC ONLY, AND NOT TO BE SCALED.
2. ELECTRICAL CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS, INSURANCE, EQUIPMENT, INSTALLATION, CONSTRUCTION TOOLS, TRANSPORTATION, ETC. FOR A COMPLETE AND PROPERLY OPERATIVE SYSTEM ENERGIZED THROUGHOUT AND AS INDICATED ON DRAWINGS, AS SPECIFIED HEREIN AND/OR AS OTHERWISE REQUIRED.
3. ALL MATERIALS AND EQUIPMENT SHALL BE NEW AND IN PERFECT CONDITION WHEN INSTALLED AND SHALL BE OF THE BEST GRADE OR GROUP OF EQUIPMENT. MATERIALS SHALL BE LISTED AND APPROVED BY UNDER-WRITER'S LABORATORY AND SHALL BEAR THE INSPECTION LABEL "J" WHERE SUBJECT TO SUCH APPROVAL MATERIALS SHALL MEET WITH APPROVAL OF THE DIVISION OF INDUSTRIAL SAFETY AND ALL GOVERNING BODIES HAVING JURISDICTION. MATERIALS SHALL BE MANUFACTURED IN ACCORDANCE WITH APPLICABLE STANDARDS ESTABLISHED BY ANSI, NEMA AND NBFU.
4. ALL CONDUIT INSTALLED SHALL BE SURFACE MOUNTED UNLESS OTHERWISE NOTED.
5. ELECTRICAL CONTRACTOR SHALL CARRY OUT THE WORK WITH ACCORDANCE WITH ALL GOVERNING STATE, COUNTY, LOCAL CODES AND O.S.H.A.
6. ELECTRICAL CONTRACTOR SHALL SECURE ALL NECESSARY ELECTRICAL PERMITS, AND PAY ALL REQUIRED FEES.
7. COMPLETE JOB SHALL BE GUARANTEED FOR A PERIOD OF NO LESS THAN ONE YEAR AFTER THE DATE OF JOB COMPLETION. ANY WORK, MATERIAL, OR EQUIPMENT FOUND TO BE FAULTY DURING THAT PERIOD SHALL BE CORRECTED AT ONCE, UPON WRITTEN NOTIFICATION, AT THE EXPENSE OF THE ELECTRICAL CONTRACTOR.
8. ALL INSTALLATIONS TO MAINTAIN REQUIRED CLEARANCES
9. CONTRACTOR TO SIZE CONDUCTORS PER NEC AND CARRIER REQUIREMENTS AND UPSIZE AS REQUIRED TO MINIMIZE VOLTAGE DROP.
10. CONTRACTOR TO SIZE CONDUIT PER NEC
11. ALL CONDUIT ONLY (C.O.) SHALL HAVE A PULL WIRE OR ROPE, AND TRUE TAPE.
12. PROVIDE THE OWNER WITH ONE SET OF COMPLETE DIMENSIONS AND CIRCUITS, WITHIN 10 WORKING DAYS OF PROJECT COMPLETION. ELECTRICAL "AS BUILT" DRAWINGS, SHOWING ACTUAL LOCATION OF CONDUITS.
13. ALL BROCHURES, OPERATING MANUALS, CATALOGS, SHOP DRAWINGS, ETC. SHALL BE TURNED OVER TO PROJECT MANAGER AT JOB COMPLETION.
14. USE T-TAP CONNECTIONS ON ALL MULTI-CIRCUITS WITH COMMON NEUTRAL CONDUCTOR FOR LIGHTING FIXTURE. ALL CONDUCTORS SHALL BE COPPER.
15. ALL CIRCUIT BREAKERS, FUSES AND ELECTRICAL EQUIPMENT SHALL HAVE AN INTERRUPTING RATING NOT LESS THAN THE MAXIMUM SHORT =CIRCUIT CURRENT TO WHICH THEY MAY BE SUBJECTED, AND A MINIMUM OF 10,000 A.I.C.
16. PATCH, REPAIR, AND PAINT ANY AREA THAT HAS BEEN DAMAGED IN THE COURSE OF THE ELECTRICAL WORK.
17. IN DRILLING HOLES INTO CONCRETE (WHETHER FOR FASTENING OR ANCHORING PURPOSES OR PENETRATIONS THROUGH THE FLOOR FOR CONDUIT RUNS, PIPE RUNS, ETC.) IT MUST BE CLEARLY UNDERSTOOD THAT TENDONS AND RE-BARS WILL NOT BE DRILLED INTO, CUT, OR DAMAGED UNDER ANY CIRCUMSTANCES.
18. LOCATION OF TENDONS AND RE-BARS ARE NOT DEFINITELY KNOWN AND THEREFORE MUST BE SEARCHED FOR BY APPROPRIATE METHODS AND EQUIPMENT VIA X-RAY, OR OTHER DEVICES THAT CAN ACCURATELY LOCATE THE REINFORCING STEEL TENDONS.
19. PENETRATIONS IN FIRE RATED WALLS SHALL BE FIRE STOPPED IN ACCORDANCE WITH APPLICABLE LOCAL BUILDING CODES. USING U.L. RATED MATERIALS.
20. ELECTRICAL CONTRACTOR IS TO COORDINATE WITH UTILITY COMPANY FOR CONNECTION OF TEMPORARY AND PERMANENT POWER TO THE SITE. THE TEMPORARY POWER AND ALL HOOK-UP COSTS SHALL BE PAID BY THE CONTRACTOR.
21. ELECTRICAL CONTRACTOR SHALL SUBMIT SHOP DRAWINGS AND/OR CATALOG CUT-SHEETS ON ALL NON-SPECIFIED ORIGINAL MATERIALS AND EQUIPMENT, TO PROJECT MANAGER PRIOR TO COMMENCEMENT OF THE WORK.
22. UPON COMPLETION OF WORK, CONDUCT CONTINUITY AND SHORT CIRCUIT, AS WELL AS, GROUNDING TEST, GROUNDING TEST SHALL BE PREFORMED BY INDEPENDENT TESTING AGENCY, WITH WRITTEN REPORT SUBMITTED TO THE PROJECT MANAGER FOR REVIEW AND APPROVAL.
23. CLEAN PREMISES DAILY OF ALL DEBRIS RESULTING FROM WORK AND LEAVE WORK PREMISES IN A COMPLETE AND UNDAMAGED CONDITION.
24. ALL EXTERIOR WALL PENETRATIONS SHALL BE SEALED WITH POLYSEAM SEALANT.
25. ALL #2 TINNED BARE COPPER DOWNLEADS TO BE PROTECTED BY 1/2" P.V.C. PIPE AND SECURED.
26. COMPRESSION FITTINGS TO BE USED ON ALL CONDUITS (NO SET SCREWS).
27. ALL #6 STRANDED COPPER WITH GREEN INSULATION TO BE ATTACHED WITH CRIMPED DOUBLE LUG, ATTACHED WITH NUTS, BOLTS AND STAR WASHERS TYPICAL AND NO-OX GREASE BETWEEN LUG AND BUS BAR.
28. ALL ABOVE GROUND CONDUIT SHALL BE RIGID GALVANIZED CONDUIT WITH WEATHERPROOF FITTINGS.
29. THE ENTIRE ELECTRICAL INSTALLATION SHALL BE GROUNDED AS REQUIRED BY ALL APPLICABLE CODES.

GROUNDING

1. ALL METALLIC PARTS OF ELECTRICAL EQUIPMENT WHICH DO NOT CARRY CURRENT SHALL BE GROUNDED IN ACCORDANCE WITH THE REQUIREMENTS OF THE BUILDING MANUFACTURER, CARRIER'S AND LANDLORD'S GROUNDING AND BONDING STANDARDS, AND THE NATIONAL ELECTRICAL CODE.
2. PROVIDE ELECTRICAL GROUNDING AND BONDING SYSTEM INDICATED WITH ASSEMBLY OF MATERIALS, INCLUDING GROUNDING ELECTRODES, BONDING JUMPERS AND ADDITIONAL ACCESSORIES AS REQUIRED FOR A COMPLETE INSTALLATION.
3. ALL GROUNDING CONDUCTORS SHALL PROVIDE A STRAIGHT DOWNWARD PATH TO GROUND WITH GRADUAL BEND AS REQUIRED. GROUNDING CONDUCTORS SHALL NOT BE LOOPED OR SHARPLY BENT. ROUTE GROUNDING CONNECTIONS AND CONDUCTORS TO GROUND IN THE SHORTEST AND STRAIGHTEST PATHS POSSIBLE TO MINIMIZE TRANSIENT VOLTAGE RISES.
4. IN BUILDINGS AND/OR NEW TOWERS GREATER THAN 75 FEET IN HEIGHT AND WHERE THE MAIN GROUNDING CONDUCTORS ARE REQUIRED TO BE ROUTED TO GRADE, THE CONTRACTOR SHALL ROUTE TWO GROUNDING CONDUCTORS FROM THE ROOFTOP'S, OR TOWER'S GROUND RING, TO THE EXISTING GROUNDING SYSTEM, THE GROUNDING CONDUCTORS SHALL NOT BE SMALLER THAN #2 AWG COPPER. ROOFTOP GROUND RING SHALL BE BONDED TO THE EXISTING GROUNDING SYSTEM, THE BUILDING STEEL COLUMNS, LIGHTNING PROTECTION SYSTEM, AND BUILDING MAIN WATER LINE (FERROUS OR NONFERROUS METAL PIPING ONLY).
5. TIGHTEN GROUNDING AND BONDING CONNECTORS, INCLUDING SCREWS AND BOLTS, IN ACCORDANCE WITH MANUFACTURER'S PUBLISHED TORQUE TIGHTENING VALUES FOR CONNECTORS AND BOLTS. WHERE MANUFACTURER'S TORQUING REQUIREMENTS ARE NOT AVAILABLE, TIGHTEN CONNECTIONS TO COMPLY WITH TIGHTENING TORQUE VALUES SPECIFIED IN UL TO ASSURE PERMANENT AND EFFECTIVE GROUNDING. CONTRACTOR SHALL VERIFY THE LOCATIONS OF GROUNDING TIE-IN-POINTS TO THE EXISTING.
6. ALL UNDERGROUND GROUNDING CONNECTIONS SHALL BE MADE BY THE GROUNDING SYSTEM. EXOTHERMIC WELD PROCESS AND INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.
7. ALL GROUNDING CONNECTIONS SHALL BE INSPECTED FOR TIGHTNESS. EXOTHERMIC WELDED CONNECTIONS SHALL BE APPROVED BY THE INSPECTOR HAVING JURISDICTION BEFORE BEING PERMANENTLY CONCEALED.
8. APPLY CORROSION-RESISTANCE FINISH TO FIELD CONNECTIONS AND PLACES WHERE FACTORY APPLIED PROTECTIVE COATINGS HAVE BEEN DESTROYED.
9. A SEPARATE, CONTINUOUS, INSULATED EQUIPMENT GROUNDING CONDUCTOR SHALL BE INSTALLED IN ALL FEEDER AND BRANCH CIRCUITS.
10. BOND ALL INSULATED GROUNDING BUSHINGS WITH A BARE 6 AWG GROUNDING CONDUCTOR TO A GROUND BUS.
11. DIRECT BURIED GROUNDING CONDUCTORS SHALL BE INSTALLED AT A NOMINAL DEPTH OF 36" MINIMUM BELOW GRADE, OR 6" BELOW THE FROST LINE, USE THE GREATER OF THE TWO DISTANCES.
12. ALL GROUNDING CONDUCTORS EMBEDDED IN OR PENETRATING CONCRETE SHALL BE INSTALLED IN SCHEDULE 40 PVC CONDUIT.
13. THE INSTALLATION OF A CHEMICAL ELECTROLYTIC GROUNDING SYSTEM IS NOT PERMITTED UNLESS SPECIFICALLY NOTED.
14. DRIVE GROUND RODS UNTIL TOPS ARE A MINIMUM DISTANCE OF 36" DEPTH OR 6" BELOW FROST LINE, USING THE GREATER OF THE TWO DISTANCES.
15. IF COAX ON THE ICE BRIDGE IS MORE THAN 6 FT. FROM THE GROUND BAR AT THE BASE OF THE TOWER, A SECOND GROUND BAR WILL BE NEEDED AT THE END OF THE ICE BRIDGE, TO GROUND THE COAX CABLE GROUNDING KITS AND IN-LINE ARRESTORS
16. CONTRACTOR SHALL REPAIR, AND/OR REPLACE, EXISTING GROUNDING SYSTEM COMPONENTS DAMAGED DURING CONSTRUCTION AT THE CONTRACTORS EXPENSE.
17. EXTERIOR GROUND RINGS SHALL BE TESTED AND SHALL HAVE A RESISTANCE TO EARTH OF 5 OHMS OR LESS. IF NOT NOTIFY ENGINEER.

T-Mobile
900 SOUTH BROADWAY, DENVER, CO 80209

PROJECT INFORMATION:

SITE NAME:
DN03991GA

SITE ID:
POWER SUPPLY 2

SITE ADDRESS:
14922 E. GATEWAY AVE.
DENVER, CO 80239

SITE COUNTY:
DENVER COUNTY

| Rev: | Date: | Description: | By: |
|---|---|---|---|
| A | 04.23.25 | PRELIMINARY | MM |
| B | 11.04.25 | DOTI SUBMITTAL | DPL |

UCI
CONSTRUCTION SERVICES, LLC
4751 FOX STREET, DENVER, CO 80216

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

SHEET TITLE:

GENERAL NOTES

SHEET NUMBER:

GN1.1

| DRAWN BY: | CHK BY: | APV BY: |
|---|---|---|
| MM | DL | TN |

PRELIMINARY

U:\Colorado\DN3991GA_Power Supplies\PS-02\CAD\DN03991GA_PS-02_FMPS AZHL_permit set.dwg PLOT DATE: 11/4/2025 BY:Dan Little

**1. DENVER FIBER OUTSIDE PLANT NOTES**

1. BY APPROVAL OF THESE DRAWINGS, THE APPLICANT ACKNOWLEDGES THAT THE CITY AND COUNTY OF DENVER OPERATES ITS OWN OUTSIDE PLANT (OSP) FIBER OPTIC INFRASTRUCTURE THROUGHOUT THE CITY, AND THAT SAID INFRASTRUCTURE SERVES TO PROMOTE THE HEALTH, SAFETY, AND WELFARE OF THE CITY. SAID FACILITIES ARE CRITICAL TO CITY OPERATIONS, ARE CONTINUALLY BEING ENHANCED AND EXTENDED, AND CANNOT BE DISTURBED.
2. APPLICANT ASSUMES FULL RESPONSIBILITY FOR ALL DAMAGES INCURRED TO THE DENVER FIBER OSP INFRASTRUCTURE DUE TO ACTIVITIES AUTHORIZED BY THE APPROVED PLANS.
3. IF DAMAGE OCCURS TO THE DENVER FIBER OSP THE APPLICANT MUST IMMEDIATELY CONTACT TRANSPORTATION OPERATIONS AT 720-865-4000. INITIAL RESTORATION MUST BE COMPLETED WITHIN A MAXIMUM OF 24 HOURS.
4. DENVER FIBER OSP STAFF OR APPROVED PERMITTEE, AT THE SOLE EXPENSE OF THE APPLICANT, WILL MAKE ALL REPLACEMENT OR REPAIR OF DENVER FIBER OSP CABLING INFRASTRUCTURE ATTRIBUTED TO THE WORK.
5. IF DURING REPAIR DAMAGE IS SUSTAINED TO ANY OTHER INFRASTRUCTURE, REPAIRS SHALL BE MADE AT THE SOLE EXPENSE OF THE APPLICANT.
6. ADDITIONAL EMPTY CONDUIT MAY BE REQUIRED BY THE CITY TO BE INSTALLED BY THE APPLICANT, AT THE SOLE EXPENSE OF THE APPLICANT, AND ACKNOWLEDGED ON THESE DRAWINGS, IF DEEMED APPROPRIATE TO ADVANCE CITY OSP PURPOSES.
7. LOCATES AND POTHOLES SHALL BE REQUIRED FOR ALL CROSSINGS INVOLVING ALL DENVER FIBER OSP CABLING INFRASTRUCTURE INCLUDING BUT NOT LIMITED TO ACCESS VAULTS AND CONDUIT. CONTACT COLORADO 811 FOR OSP FACILITY LOCATES.

**DENVER PARKS NOTES**

1. PARK LANDS AND DESIGNATED PARKWAYS ARE PRIMARY COMMUNITY AND NEIGHBORHOOD AMENITY FEATURES THAT DEFINE COMMUNITY CHARACTER, SUPPORTS PUBLIC USE, ENHANCES MANAGEMENT OF AIR AND WATER AND PROMOTES ENVIRONMENTAL HEALTH. IN CONSIDERATION OF THE SIGNIFICANCE OF THESE AREAS AS PUBLIC AMENITIES, DENVER PARKS UTILITY POLICY LIMITS SURFACE AND SUBSURFACE UTILITIES ON PARK LANDS AND PARKWAYS AND PUBLIC ROW ADJACENT TO THEM.
2. UTILITY CORRIDOR ALIGNMENTS, SURFACE BOXES AND TRANSMISSION POLES SHALL AVOID BEING PLANNED ON OR UNDER PARK LANDS, DESIGNATED PARKWAYS, OR PUBLIC ROW ADJACENT TO PARK LANDS.
3. UTILITY CORRIDOR ALIGNMENTS AND SURFACE BOXES LOCATED ON PARKS LANDS AND DESIGNATED PARKWAYS SHOULD BE AVOIDED. ANY UTILITY CORRIDOR ALIGNMENT LOCATED ON PARKS LAND OR DESIGNATED PARKWAYS SHALL BE COORDINATED WITH DENVER PARKS.
4. UTILITY CORRIDOR ALIGNMENTS AND SURFACE BOXES LOCATED IN PUBLIC ROW ADJACENT TO PARKS LAND SHALL LOCATED ACROSS THE STREET FROM PARKS LANDS IF POSSIBLE. IF UTILITY CORRIDOR ALIGNMENT CAN NOT BE LOCATED ACROSS THE STREET FROM PARK LANDS, THE UTILITY CORRIDOR ALIGNMENT AND ALL SURFACE BOX LOCATIONS ADJACENT TO PARKS LANDS SHALL BE COORDINATED WITH DENVER PARKS.

**ENVIRONMENTAL NOTES**

1. REGULATED ASBESTOS CONTAMINATED SOILS (RACS) MAY BE ENCOUNTERED IN BUILDING DEBRIS THROUGHOUT THE CITY DURING EXCAVATION. ALL RACS MUST BE MANAGED, DOCUMENTED, AND DISPOSED IN ACCORDANCE WITH STATE REGULATIONS PERTAINING TO SOLID WASTE SITES AND FACILITIES, SECTION 5 ASBESTOS WASTE MANAGEMENT. STATE REGULATIONS REQUIRE ANY DISTURBED DEBRIS BE CHARACTERIZED TO DETERMINE APPLICABILITY OF THE REGULATION. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING COMPETENT TRAINED PERSONNEL CAPABLE OF IDENTIFYING RACS IN DEBRIS AND HAVING ACCESS TO AN ONSITE CERTIFIED ASBESTOS BUILDING INSPECTOR (CABI) IN CASE OF RACS DISCOVERY.
2. CONTRACT OR SHALL TAKE REASONABLE MEASURES TO PREVENT PARTICULATE MATTER FROM BECOMING AIRBORNE AND TO PREVENT THE VISIBLE DISCHARGE OF FUGITIVE PARTICULATE EMISSIONS BEYOND THE PROPERTY LINE FROM WHICH THE EMISSIONS ORIGINATE. THE MEASURES TAKEN MUST BE EFFECTIVE AT ALL TIMES ON THE SITE, INCLUDING PERIODS OF INACTIVITY SUCH AS EVENINGS, WEEKENDS, AND HOLIDAYS AS WELL AS ANY OTHER PERIOD OF INACTIVITY.
3. DURING ANY SOIL DISTURBING ACTIVITIES, IF UNKNOWN/UNIDENTIFIED UNDERGROUND STORAGE TANKS, DRUMS, ODOROUS SOIL, STAINED SOIL, ASBESTOS-CEMENT PIPE (TRANSIT), BUILDING DEBRIS, OR WASTE MATERIALS ARE ENCOUNTERED, CONTRACTOR SHALL IMMEDIATELY STOP WORK IN THE AREA OF THE DISCOVERY UNTIL DENVER DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT (DDPHE) MAKES A DETERMINATION OF HOW TO PROCEED. CONTRACTOR SHALL IMMEDIATELY NOTIFY DDPHE OF THE DISCOVERY AT (720) 460-8376.
4. ANY SOIL EXCAVATED AND REUSED ON THE PROPERTY OR IMPORTED TO THE PROPERTY MUST MEET APPLICABLE SOIL REUSE ACCEPTANCE CRITERIA AS EXPLAINED IN THE DDPHE OCTOBER 10, 2017 MEMORANDUM TITLED “GUIDANCE FOR REUSE OF SOIL ON CITY PROJECTS” LOCATED ON THE DENVER DDPHE WEBSITE UNDER THE “ABOUT” TAB FOR ENVIRONMENTAL REVIEW AND ASSESSMENT: HTTPS://WWW.DENVERGOV.ORG/CONTENT/DENVERGOV/EN/ENVIRONMENTAL-HEALTH/ENVIRONMENTAL-QUALITY/LAND-USE-ANDPLANNING.HTML
5. THE CONTRACTOR SHALL DIRECT NON-RECYCLABLE, NON-HAZARDOUS WASTES FROM CITY-OWNED OR CONTROLLED PROPERTY OR FACILITIES TO THE DENVER ARAPAHOE DISPOSAL SITE (DADS) LANDFILL FOR DISPOSAL, FOLLOWING THE REQUIREMENT AND PROCEDURAL GUIDANCE PER CITY EXECUTIVE ORDER 115. LABORATORY ANALYTICAL RESULTS WILL BE REQUIRED PRIOR TO DADS ACCEPTANCE FOR SOIL AND POSSIBLY OTHER MATERIALS. EARLY TESTING IS RECOMMENDED; DDPHE CAN ASSIST. CONTACT DDPHE AT (720) 865-5448 WITH QUESTIONS.
6. NOISE CONTROL. ALL NOISE CAUSED BY CONSTRUCTION OF, OR RESULTING FROM COMPLETED PROJECTS, MUST COMPLY WITH DENVER'S NOISE ORDINANCE, DENVER REVISED MUNICIPAL CODE CHAPTER 36 “NOISE CONTROL”. EXEMPTED HOURS FOR CONSTRUCTION IN THE CITY AND COUNTY OF DENVER ARE FROM 7 AM TO 9 PM MONDAY THROUGH FRIDAY AND 8 AM TO 5 PM ON SATURDAYS AND SUNDAYS. IF THERE IS A NEED TO WORK OUTSIDE OF THE EXEMPTED 1) THE CONTRACTOR SHALL REQUEST A VARIANCE, AND 2) THE VARIANCE PROCESS NEEDS TO BE STARTED A MINIMUM OF THREE MONTHS PRIOR TO THE DESIRED START DATE. ANY QUESTIONS SHOULD BE DIRECTED TO DDPHE COMMUNITY NOISE PROGRAM AT (720) 865-5410.

| DENVER TRANSPORTATION & INFRASTRUCTURE | City and County of Denver | Date: 05/18/20 |
|---|---|---|
| | REQUIRED PLAN NOTES | SHEET NO. 3 |

**EROSION CONTROL NOTES**

THE OWNER, SITE DEVELOPER, CONTRACTOR AND/OR THEIR AUTHORIZED AGENTS SHALL ENSURE THAT ALL POTENTIAL POLLUTANTS GENERATED DURING DEMOLITION OR CONSTRUCTION WORK ASSOCIATED WITH THIS PROJECT, BE PREVENTED FROM DISCHARGE TO STORMWATER CONVEYANCE SYSTEMS IN THE VICINITY OF THIS PROJECT SITE IN ACCORDANCE WITH THE FOLLOWING:

1. THE OWNER, SITE DEVELOPER, CONTRACTOR AND/OR THEIR AUTHORIZED AGENTS SHALL PREVENT SEDIMENT, DEBRIS AND ALL OTHER POLLUTANTS FROM ENTERING THE STORM SEWER SYSTEM DURING ALL DEMOLITION, EXCAVATION, TRENCHING, BORING, GRADING, OR OTHER CONSTRUCTION OPERATIONS THAT ARE PART OF THIS PROJECT. THE OWNER, SITE DEVELOPER, CONTRACTOR AND/OR THEIR AUTHORIZED AGENTS SHALL BE HELD RESPONSIBLE FOR REMEDIATION OF ANY ADVERSE IMPACTS TO THE MUNICIPAL SEPARATE STORM SEWER SYSTEM, RECEIVING WATERS, WATERWAYS, WETLANDS, AND OR OTHER PUBLIC OR PRIVATE PROPERTIES, RESULTING FROM WORK DONE AS PART OF THIS PROJECT.
2. THE OWNER, SITE DEVELOPER, CONTRACTOR AND/OR THEIR AUTHORIZED AGENTS SHALL REMOVE ALL SEDIMENT, MUD, CONSTRUCTION DEBRIS, OR OTHER POTENTIAL POLLUTANTS THAT MAY HAVE BEEN DISCHARGED TO OR, ACCUMULATE IN THE FLOW LINES OF STORM DRAINAGE APPURTENANCES, AND PUBLIC RIGHTS OF WAYS OF THE CITY AND COUNTY OF DENVER, AS A RESULT OF CONSTRUCTION ACTIVITIES ASSOCIATED WITH THIS PROJECT. ALL REMOVALS SHALL BE CONDUCTED IN A TIMELY MANNER.
3. THE OWNER, SITE DEVELOPER, CONTRACTOR AND/OR THEIR AUTHORIZED AGENTS SHALL INSURE THAT ALL LOADS OF CUT AND FILL MATERIAL IMPORTED TO OR EXPORTED FROM THIS SITE SHALL BE PROPERLY COVERED TO PREVENT LOSS OF THE MATERIAL DURING TRANSPORT ON PUBLIC RIGHTS OF WAY. (SEC.49-552; REVISED MUNICIPAL CODE).
4. THE USE OF REBAR TO ANCHOR BEST MANAGEMENT PRACTICES, OTHER THAN PORTABLE TOILETS, IS PROHIBITED.
5. THE OWNER, SITE DEVELOPER, CONTRACTOR AND/OR THEIR AUTHORIZED AGENTS SHALL IMPLEMENT THE FOLLOWING BEST MANAGEMENT PRACTICES (BMPS) ON SITE DURING CONSTRUCTION:
   A) VEHICLE TRACKING CONTROL: THIS BMP IS REQUIRED AT ALL ACCESS POINTS FOR INGRESS/EGRESS FROM OFF-SITE IMPERVIOUS SURFACES TO CONSTRUCTION SITE PERVIOUS AREAS THAT ARE USED BY VEHICULAR TRAFFIC OR CONSTRUCTION EQUIPMENT.
   B) INLET PROTECTION: THIS BMP IS REQUIRED ON ALL EXISTING OR PROPOSED STORM SEWER INLETS IN THE VICINITY OF THE CONSTRUCTION SITE THAT MAY RECEIVE SITE RUNOFF. THE BMP MUST BE APPROPRIATE TO THE TYPE OF STORM INLET AND APPROPRIATE FOR THE GROUND SURFACE AT THE INLET.
   C) INTERIM SITE STABILIZATION: THIS BMP IS REQUIRED TO PROVIDE A MEASURE FOR PREVENTING THE DISCHARGE OF SEDIMENT FROM CONSTRUCTION \SITES WHERE OVERLOT GRADING OR OTHER SITE DISTURBANCE HAS OCCURRED. THIS BMP IS PARTICULARLY NECESSARY ON SITES WHERE CONSTRUCTION ACTIVITIES/DISTURBANCE WILL BE LIMITED TO SMALL AREAS OF THE PROJECT SITE. ACCEPTABLE BMPS INCLUDE:
      i. PRESERVING EXISTING VEGETATION
      ii. SEEDING AND PLANTING
      iii. MULCHING
      iv. MULCHING AND SEEDING
      v. TEMPORARY/PERMANENT RE-VEGETATION OPERATIONS
      vi. CHEMICAL SOIL STABILIZER APPLICATION (REQUIRES WMD APPROVAL)
   D) WASTE MANAGEMENT/CONTAINMENT: THIS BMP REQUIRES THAT ALL CONSTRUCTION WASTES, FUELS, LUBRICANTS, CHEMICAL WASTES, TRASH, SANITARY WASTES, CONTAMINATED SOILS OR DEBRIS SHALL BE CONTAINED ON SITE, PROTECTED FROM CONTACT WITH PRECIPITATION OR SURFACE RUNOFF, PERIODICALLY REMOVED FROM THE CONSTRUCTION SITE, AND PROPERLY DISPOSED OF.
   E) SPILL PREVENTION /CONTAINMENT: THIS BMP DEFINES THE MEASURES PROPOSED FOR PREVENTING, CONTROLLING, OR CONTAINING SPILLS OF FUEL, LUBRICANTS, OR OTHER POLLUTANTS; AND PROTECTING POTENTIAL POLLUTANTS FROM CONTACT WITH PRECIPITATION OR RUNOFF.
   F) CHUTE WASHOUT CONTAINMENT: WATER USED IN THE CLEANING OF CEMENT TRUCK DELIVERY CHUTES SHALL BE DISCHARGED INTO A PREDEFINED, BERMED CONTAINMENT AREA ON THE JOB SITE. THE REQUIRED CONTAINMENT AREA IS TO BE BERMED SO THAT WASH WATER IS TOTALLY CONTAINED. WASH WATER DISCHARGED INTO THE CONTAINMENT AREA SHALL BE ALLOWED TO INFILTRATE OR EVAPORATE. DRIED CEMENT WASTE IS REMOVED FROM THE CONTAINMENT AREA AND PROPERLY DISPOSED OF.
      i. THE DIRECT OR INDIRECT DISCHARGE OF WATER CONTAINING WASTE CEMENT TO THE STORM SEWER SYSTEM IS PROHIBITED (SEC.56-102A, C; REVISED MUNICIPAL CODE, CITY AND COUNTY OF DENVER).
   G) SWEEPING: THIS BMP REQUIRES THAT IMPERVIOUS SURFACES WHICH ARE ADJACENT TO OR CONTAINED WITHIN CONSTRUCTION SITES BE SWEPT ON A DAILY BASIS OR AS NEEDED DURING THE DAY WHEN SEDIMENT AND OTHER MATERIALS ARE TRACKED OR DISCHARGED ON TO THEM. EITHER SWEEPING BY HAND OR USE OF STREET SWEEPERS IS ACCEPTABLE. STREET SWEEPERS USING WATER WHILE SWEEPING IS PREFERRED IN ORDER TO MINIMIZE DUST. FLUSHING OFF PAVED SURFACES WITH WATER IS PROHIBITED.
   H) PERIMETER CONTROL: THIS BMP REQUIRES THAT A CONSTRUCTION SITE INSTALL A PERIMETER CONTROL MEASURE ALONG THE EDGE OF THE CONSTRUCTION SITE, TO PREVENT, OR FILTER THE DISCHARGE OF SURFACE RUNOFF FROM THE CONSTRUCTION SITE. THE TYPE OF PERIMETER CONTROL USED SHALL BE DETERMINED BASED ON-SITE CONDITIONS AND LOCATION. MAINTENANCE AND REPAIR OF THE CONTROL MEASURE SHALL OCCUR AS NEEDED, IN A TIMELY MANNER.
   I) STOCK PILES: SOILS THAT WILL BE STOCKPILED FOR MORE THAN THIRTY (30) DAYS SHALL BE PROTECTED FROM WIND AND WATER EROSION WITHIN FOURTEEN (14) DAYS OF STOCKPILE CONSTRUCTION. STABILIZATION OF STOCKPILES LOCATED WITHIN 100 FEET OF RECEIVING WATERS, OR WITH SLOPES 3 TO 1 OR GREATER SHALL BE COMPLETED WITHIN SEVEN (7) DAYS FOLLOWING STOCKPILE CONSTRUCTION. STABILIZATION AND PROTECTION OF THE STOCKPILE MAY BE ACCOMPLISHED BY ANY OF THE FOLLOWING: MULCHING, TEMPORARY/PERMANENT REVEGETATION OPERATIONS, CHEMICAL SOIL STABILIZER APPLICATION (REQUIRES DENVER DOTI APPROVAL), OR EROSION CONTROL MATTING/GEOTEXTILES. IF STOCKPILES ARE LOCATED WITHIN 100 FEET OF RECEIVING WATERS, A DRAINAGEWAY OR THE SITE PERIMETER, ADDITIONAL SEDIMENT CONTROLS SHALL BE REQUIRED.
   J) SAW CUTTING OPERATIONS: THE CONTRACTOR SHALL PROTECT ALL STORM SEWER FACILITIES ADJACENT TO ANY LOCATION WHERE PAVEMENT CUTTING OPERATIONS INVOLVING WHEEL CUTTING, SAW CUTTING, OR ABRASIVE WATER JET CUTTING ARE TO TAKE PLACE. THE CONTRACTOR SHALL REMOVE AND PROPERLY DISPOSE OF ALL WASTE PRODUCTS GENERATED BY SAID CUTTING OPERATIONS ON A DAILY BASIS OR AS NEEDED THROUGHOUT THE WORK DAY. THE DISCHARGE OF ANY WATER CONTAMINATED BY WASTE PRODUCTS FROM CUTTING OPERATIONS TO THE STORM SEWER SYSTEM IS PROHIBITED. (SEC.56-102A, C; REVISED MUNICIPAL CODE, CITY AND COUNTY OF DENVER).
   K) STRUCTURAL CONTROLS: DEVELOPMENT SITES THAT ARE REQUIRED TO PROVIDE DETENTION AND WATER QUALITY ENHANCEMENT FACILITIES FOR STORM RUNOFF NEED TO INSTALL THE DETENTION FACILITIES EARLY IN THE CONSTRUCTION BUILD-OUT OF THE SITE. PROJECTS THAT ARE USING UNDERGROUND DETENTION ARE REQUIRED TO INSTALL A PRETREATMENT STRUCTURE(S) OR SEDIMENTATION BASIN(S) AS A MEANS OF TREATING POTENTIALLY POLLUTED STORM WATER PRIOR TO ENTERING THE DETENTION STRUCTURE. USE OF THESE STRUCTURES IS REQUIRED FOR ENTRAPPING SEDIMENT AND CONSTRUCTION DEBRIS DURING THE ACTIVE CONSTRUCTION PHASE OF THE PROJECT. A NARRATIVE SECTION OF A MANAGEMENT PLAN SHOULD ADDRESS OPERATION AND MAINTENANCE OF THE STRUCTURAL CONTROLS BEING USED AS AN ACTIVE CONSTRUCTION BMP.
6. EROSION AND SEDIMENT CONTROL 'BEST MANAGEMENT PRACTICES' SHALL BE MAINTAINED AND KEPT IN EFFECTIVE OPERATING CONDITION FOR THE DURATION OF THIS PROJECT. ALL NECESSARY MAINTENANCE AND REPAIR SHALL BE COMPLETED IMMEDIATELY UPON DISCOVERY OF ANY DEFICIENCY OR DEFECT.

| DENVER TRANSPORTATION & INFRASTRUCTURE | City and County of Denver | Date: 05/18/20 |
|---|---|---|
| | REQUIRED PLAN NOTES | SHEET NO. 4 |

T-Mobile
900 SOUTH BROADWAY, DENVER, CO 80209

PROJECT INFORMATION:

SITE NAME:
DN03991GA

SITE ID:
POWER SUPPLY 2

SITE ADDRESS:
14922 E. GATEWAY AVE.
DENVER, CO 80239

SITE COUNTY:
DENVER COUNTY

| Rev: | Date: | Description: | By: |
|---|---|---|---|
| A | 04.23.25 | PRELIMINARY | MM |
| B | 11.04.25 | DOTI SUBMITTAL | DPL |

UCI CONSTRUCTION SERVICES, LLC
4751 FOX STREET, DENVER, CO 80216

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

SHEET TITLE:

DOTI REQUIRED PLAN NOTES

SHEET NUMBER:
GN2.0

| DRAWN BY: | CHK BY: | APV BY: |
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| MM | DL | TN |

PRELIMINARY

U:\Colorado\DN3991GA_Power Supplies\PS-02\CAD\DN03991GA_PS-02_FMPS AZHL_permit set.dwg PLOT DATE: 11/4/2025 BY:Dan Little

**OFFICE OF THE FORESTER UTILITY PLAN NOTES**

1. UTILITY PROJECTS THAT DO NOT GO THROUGH THE OFFICE OF THE CITY FORESTER (OCF) REVIEW PROCESS OR DO NOT RECEIVE OCF APPROVAL; OCF RESERVES THE RIGHT TO PLANT IN THE PRW AND CANNOT BE HELD LIABLE FOR ANY DAMAGE THAT OCCURS TO UTILITY WITHIN PRW WHERE UTILITY IS NOT PLACED AT A MINIMUM DEPTH OF 36 INCHES.
2. OCF RESERVES THE RIGHT TO DECLARE UNENCUMBERED SPACE IN THE PRW FOR FUTURE AND REPLACEMENT PRW TREES. SHOULD THESE AREAS BE VIOLATED BY ANY UTILITY, THE UTILITY OWNER SHALL (RE)MOVE UTILITY AT OWNER'S EXPENSE.
3. THE CONTRACTOR SHALL NOT CUT, PRUNE, PLANT, REMOVE, INJECT OR SPRAY TREES OR OTHER LANDSCAPING ELEMENTS WITHIN ROW, UNLESS SUCH WORK IS OTHERWISE SPECIFIED ON THE APPROVED PLANS OR RECEIVES PRIOR WRITTEN AUTHORIZATION FROM THE OCF.
4. ANY DISTURBED LANDSCAPING WILL BE REPLACED TO EQUAL OR BETTER CONDITION THAN THAT WHICH EXISTED PRIOR TO WORK.
5. SEEDING, SODDING, AND PLANTING SHALL BE AS SPECIFIED OR OTHERWISE APPROVED BY THE CITY. CONSTRUCTION, MAINTENANCE, AND WATERING REQUIREMENTS SHALL CONFORM TO THE CITY STANDARD SPECIFICATIONS. WHERE LANDSCAPE RESTORATION MUST BE DELAYED DUE TO SEASONAL REQUIREMENTS, A SEPARATE PERMIT MAY AUTHORIZE SUCH WORK.
6. THE CITY REQUIRES COMPLIANCE WITH THE FOLLOWING WHEN WORK IS NECESSARY AND/OR REQUIRED ADJACENT TO TREES IN THE PRW OR OTHER PUBLIC SPACES:
   - A) TREE PROTECTION ZONE (TPZ) IS THE AREA EQUAL TO 1.5 FEET PER 1-INCH DIAMETER TREE MEASURED AT 4.5 FEET ABOVE GRADE OR THE DRIPLINE OF THE TREE, WHICHEVER IS GREATER.
     - i. TPZ FENCING SHALL BE ESTABLISHED PRIOR TO WORK COMMENCING, SEE TREE PROTECTION DETAIL AVAILABLE ON WEBSITE
     - ii. ALL WORK WITHIN TPZ MUST BE AUTHORIZED IN WRITING BY OCF, INCLUDING BUT NOT LIMITED TO:
       - a. ENTRANCE AND/OR ACCESS
       - b. MOVING, RESIZING, REMOVING, OR ALTERING IN ANY MANNER
       - c. STORAGE OF SOILS/MATERIALS/DEBRIS/EQUIPMENT
       - d. CHANGES IN GRADE
     - iii. ALL PIT LOCATIONS MUST BE STAKED AND APPROVED PRIOR TO AN EXCAVATION.
     - iv. EXCAVATION; INCLUDING BUT NOT LIMITED TO TRENCHING, POTHOLING, BORE PITS, AND HAND HOLE INSTALLATION; SHALL NOT OCCUR WITHIN THE TPZ WITHOUT PRIOR WRITTEN AUTHORIZATION FROM OCF AND VERIFYING LOCATION OF EXISTING ROOTS THAT MAY BE IMPACTED BY EXCAVATION:
       - a. APPROVED ROOT DISCOVERY METHODS INCLUDE: HAND WORK, PNEUMATIC EXCAVATION, GROUND PENETRATING RADAR, OR OTHER OCF APPROVED METHOD.
       - b. ADJUST THE ROUTE TO AVOID ROOTS AS MUCH AS POSSIBLE.
       - c. ROOTS 2 INCHES IN DIAMETER AND LARGER SHALL NOT BE CUT, PRUNED, SEVERED, OR DAMAGED. IF CONFLICT ARISES, CONTRACTOR MUST CONTACT OCF PRIOR TO CONTINUANCE OF WORK.
     - i. ROOTS OF ANY SIZE SHALL BE PRUNED PRIOR TO EXACTION TO MINIMIZE DAMAGE FROM RIPPING OR TEARING
       - d. MINIMIZE THE WORK PIT TO NO WIDER THAN THE TRENCH.
       - e. STORE SOIL OPPOSITE THE TREE SIDE OF THE TRENCH.
       - f. BACKFILL QUICKLY AND CLEANLY, AND WATER ROOTS DEEPLY.
       - g. EXPOSED ROOTS MUST BE KEPT MOIST AT ALL TIMES. COVER EXPOSED ROOTS WITH BURLAP OR OTHER MATERIAL THAT WILL HOLD MOISTURE AGAINST EXPOSED ROOTS.
     - v. TUNNELING/DIRECTIONAL BORING MUST BE AT LEAST 36 INCHES BELOW GRADE, 48 INCHES PREFERRED.
       - a. FINAL DEPTH OF INSTALLED UTILITY MUST BE AT A MINIMUM OF 36 INCHES BELOW FINAL GRADE. DUE TO THE INABILITY TO CONSISTENTLY MAINTAIN ACCURATE BORING DEPTHS, IT IS STRONGLY RECOMMENDED TO TARGET A DEPTH OF 48 INCHES TO ENSURE NO VIOLATION OF THE 36-INCH MINIMUM DEPTH OCCURS. THE CITY MAY ORDER THE LOWERING OF INSTALLED UTILITIES WHEN THEY ARE DISCOVERED NOT TO BE DEEPER THAN THE 36-INCH MINIMUM.
   - B) THE CRITICAL ROOT ZONE (CRZ) IS THE AREA WITHIN THE TPZ AND EQUAL TO 1 LINEAR FOOT RADIUS PER 1-INCH DIAMETER OF TREE TRUNK MEASURED AT 4.5 FEET ABOVE THE GROUND.
     - i. NO ROOT DISTURBANCE SHALL OCCUR WITHIN THIS AREA.
       - a. IF NOT POSSIBLE, CONTRACTOR MUST MEET WITH OCF PERSONNEL ON SITE.
     - i. WHEN WORK OCCURS WITHIN CRZ, EXCAVATION MUST BE PERFORMED WITH HAND-TOOLS, PNEUMATIC EXCAVATION OR OTHER OCF APPROVED METHOD.
   - C) THE STRUCTURAL ROOT ZONE (SRZ) IS THE AREA WITHIN THE TPZ AND EQUAL TO 0.9 TIMES PER INCH DIAMETER OF THE TREE MEASURED AT 4.5 FEET ABOVE THE GROUND (0.9*X).
     - i. NO ACTIVITY SHALL OCCUR WITHIN THIS ZONE WITH THE EXCEPTION OF DIRECTIONAL BORING AT A MINIMUM DEPTH OF 36 INCHES BELOW GRADE, 48 INCHES PREFERRED.
       - a. FINAL DEPTH OF INSTALLED UTILITY MUST BE AT A MINIMUM OF 36 INCHES BELOW FINAL GRADE. DUE TO THE INABILITY TO CONSISTENTLY MAINTAIN ACCURATE BORING DEPTHS, IT IS STRONGLY RECOMMENDED TO TARGET A DEPTH OF 48 INCHES TO ENSURE NO VIOLATION OF THE 36-INCH MINIMUM DEPTH OCCURS. THE CITY MAY ORDER THE LOWERING OF INSTALLED UTILITIES WHEN THEY ARE DISCOVERED NOT TO BE DEEPER THAN THE 36-INCH MINIMUM.
7. SHOULD ANY TREE DAMAGE OCCUR, CONTRACTOR SHALL CONTACT THE OCF IMMEDIATELY
   - A) OCF SHALL ISSUE AN ORDER DIRECTING THE RESPONSIBLE PARTY TO PRUNE, REMOVE, OR OTHERWISE TAKE SUCH ACTION AS IS NECESSARY TO REPAIR SAID DAMAGE
   - B) IF DAMAGE IS BEYOND REPAIR, THE RESPONSIBLE PARTY SHALL COMPENSATE THE CITY FOR THE LOST MONETARY VALUE OF THE TREE AND MAY INCLUDE REPLACEMENT
8. THE CITY & COUNTY OF DENVER TREE RETENTION AND PROTECTION SPECIFICATIONS MUST BE FOLLOWED. FOR A COPY OF THE TREE PROTECTION SPECIFICATIONS PLEASE CONTACT THE OFFICE OF THE CITY FORESTER AT (720) 913-0651 OR EMAIL AT FORESTRY@DENVERGOV.ORG

| DENVER TRANSPORTATION & INFRASTRUCTURE | City and County of Denver | Date: 12/17/19 |
|---|---|---|
| | OCF REQUIRED NOTES ALL UTILITY PLANS | SHEET NO. 1 |

**OFFICE OF THE FORESTER TREE PROTECTION NOTES**

1. EXISTING TREES TO BE PRESERVED IN PUBLIC RIGHT OF WAY (ROW) OR PUBLIC PLACE SHALL BE PROTECTED PER OCF STANDARDS AND PRACTICES. TREE PROTECTION SHALL BE;
   - A) INSTALLED PRIOR TO COMMENCEMENT OF DEMOLITION AND/OR CONSTRUCTION ACTIVITIES
   - B) INSPECTED AND APPROVED BY OCF STAFF
   - C) REMAIN IN PLACE AND AS APPROVED UNTIL CERTIFICATE OF OCCUPANCY OR SUBSTANTIAL COMPLETION AND FINAL ACCEPTANCE IS ISSUED
2. TREE PROTECTION REQUIREMENTS;
   - A) TREE PROTECTION ZONE (TPZ) SHALL BE INSTALLED AT THE DRIPLINE, FURTHEST EXTENT OF TREE CANOPY, OR IS EQUAL TO EIGHTEEN INCHES RADIALLY FROM THE TREE FOR EVERY ONE INCH OF TRUNK DIAMETER AT BREAST HEIGHT (DBH = 4.5' ABOVE SOIL LINE), WHICHEVER IS GREATER
   - B) INSTALL SIX FOOT (6') CHAIN LINK FENCING PRIOR TO COMMENCEMENT OF PROJECT CONSTRUCTION ACTIVITIES
   - C) OCF STAFF SHALL INSPECT AND APPROVE BOUNDARIES OF TREE PROTECTION ZONE(S) PRIOR TO COMMENCEMENT OF DEMOLITION OR CONSTRUCTION A ACTIVITIES
   - D) ONCE TPZ IS IN PLACE, THE FOLLOWING ARE NOT PERMITTED WITHIN TPZ WITHOUT PRIOR WRITTEN APPROVAL FROM OCF:
     - i. ENTRANCE AND/OR ACCESS
     - ii. MOVING, RESIZING, REMOVING, OR ALTERING IN ANY MANNER
     - iii. STORAGE OF MATERIALS/DEBRIS/EQUIPMENT
     - iv. CONSTRUCTION ACTIVITIES INCLUDING BUT NOT LIMITED TO; ROTOTILLING, TRENCHING, GRADING, INSTALLATION OF UNDERGROUND UTILITIES AND/OR SITE IMPROVEMENTS, LANDSCAPING, IRRIGATION WORK
       - a. IRRIGATION LINE WORK SHALL BE COMPLETED BY DIRECTIONAL BORE
   - E) "TREE PROTECTION ZONE" SIGNS SHALL REMAIN IN PLACE AS POSTED BY OCF AND SHALL BE MAINTAINED IN THE CONDITION IN WHICH THEY WERE INSTALLED
   - F) TREE PRUNING FOR CLEARANCE ISSUES MUST HAVE PRIOR AUTHORIZATION BY OCF STAFF
   - G) NO ROOT 2 INCHES OR LARGER SHALL BE CUT; CONSULT WITH OCF STAFF
3. EXISTING ROW OR PUBLIC PLACE TREES APPROVED FOR REMOVAL BY OCF MUST BE PROTECTED IN PLACE UNTIL REMOVED BY AN OCF-LICENSED TREE CONTRACTOR;
   - A) AN OCF TREE REMOVAL PERMIT IS REQUIRED
   - B) TREE REMOVAL PERMITS ARE NOT INCLUDED WITH BUILDING PERMITS AND/OR PLAN APPROVAL AND MUST BE OBTAINED SEPARATELY FROM THE OCF
   - C) FAILURE TO PROTECT TREES UNTIL REMOVAL OR REMOVING WITHOUT A OCF-ISSUED PERMIT WILL RESULT IN NOTICE OF VIOLATION AND/OR MAY INCLUDE CITATIONS/FINES
4. CLEAR VISIBILITY INTO TPZ MUST BE MAINTAINED. ALL CONSTRUCTION BANNERS, SCREENS, BARRIERS, AND/OR SIGNS (EXCEPT OCF-POSTED TPZ SIGNS) MUST BE SEMI-TRANSPARENT AND NOT IMPEDE INSPECTION OF TPZ BY OCF STAFF
5. FOR PROJECTS WITH A DURATION OF 5 DAYS OR LONGER;
   - A) PROTECTED TREES SHALL BE DEEP-ROOT WATERED AT A MINIMUM INTERVAL OF ONCE PER WEEK WHEN TEMPERATURES ARE AT OR ABOVE 40-DEGREES F
   - B) TREES SHALL BE WATERED AT THE RATE OF 20 GALLONS PER INCH CALIPER
   - C) INSECT AND DISEASE TREATMENTS SHALL BE APPLIED WHEN NECESSARY OR AS ORDERED BY OCF
     - i. OCF MAY ASK FOR DOCUMENTED PROOF OF WATERING AND/OR TREATMENT.

| DENVER TRANSPORTATION & INFRASTRUCTURE | City and County of Denver | Date: 12/17/19 |
|---|---|---|
| | OCF REQUIRED NOTES ALL NON-UTILITY PLANS | SHEET NO. 4 |

T-Mobile
900 SOUTH BROADWAY, DENVER, CO 80209

PROJECT INFORMATION:

SITE NAME:
DN03991GA

SITE ID:
POWER SUPPLY 2

SITE ADDRESS:
14922 E. GATEWAY AVE.
DENVER, CO 80239

SITE COUNTY:
DENVER COUNTY

| Rev: | Date: | Description: | By: |
|---|---|---|---|
| A | 04.23.25 | PRELIMINARY | MM |
| B | 11.04.25 | DOTI SUBMITTAL | DPL |

UCI
CONSTRUCTION SERVICES, LLC
4751 FOX STREET, DENVER, CO 80216

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

SHEET TITLE:

DOTI REQUIRED PLAN NOTES

SHEET NUMBER:

GN2.1

| DRAWN BY: | CHK BY: | APV BY: |
|---|---|---|
| MM | DL | TN |

PRELIMINARY

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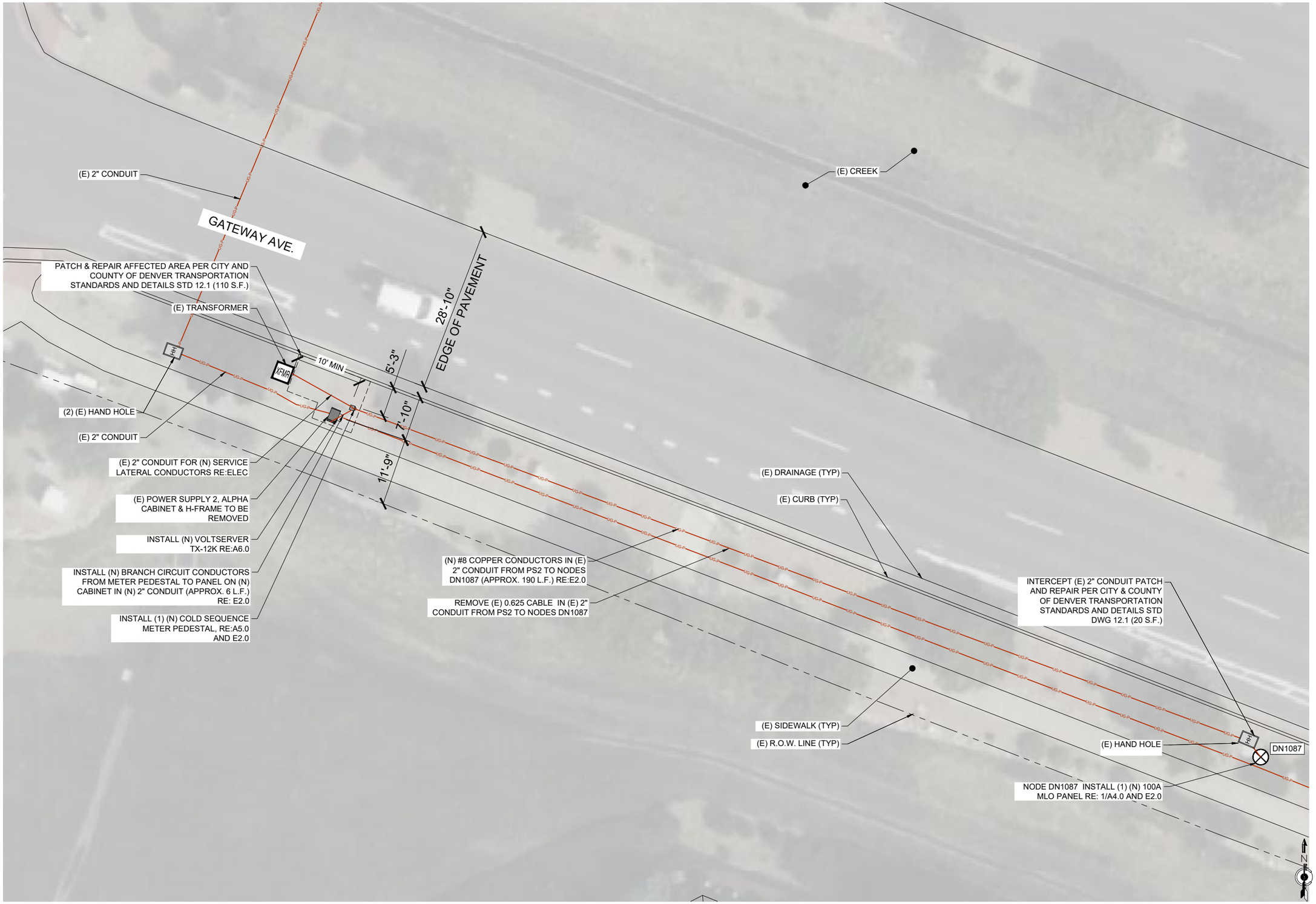


1 SITE PLAN

0' 8' 16' 32'
SCALE: 1/16" = 1'-0"

T-Mobile
900 SOUTH BROADWAY, DENVER, CO 80209

PROJECT INFORMATION:

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DENVER, CO 80239

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SHEET TITLE:

SITE PLAN

SHEET NUMBER:
A1.0

| DRAWN BY: | CHK BY: | APV BY: |
|---|---|---|
| MM | DL | TN |

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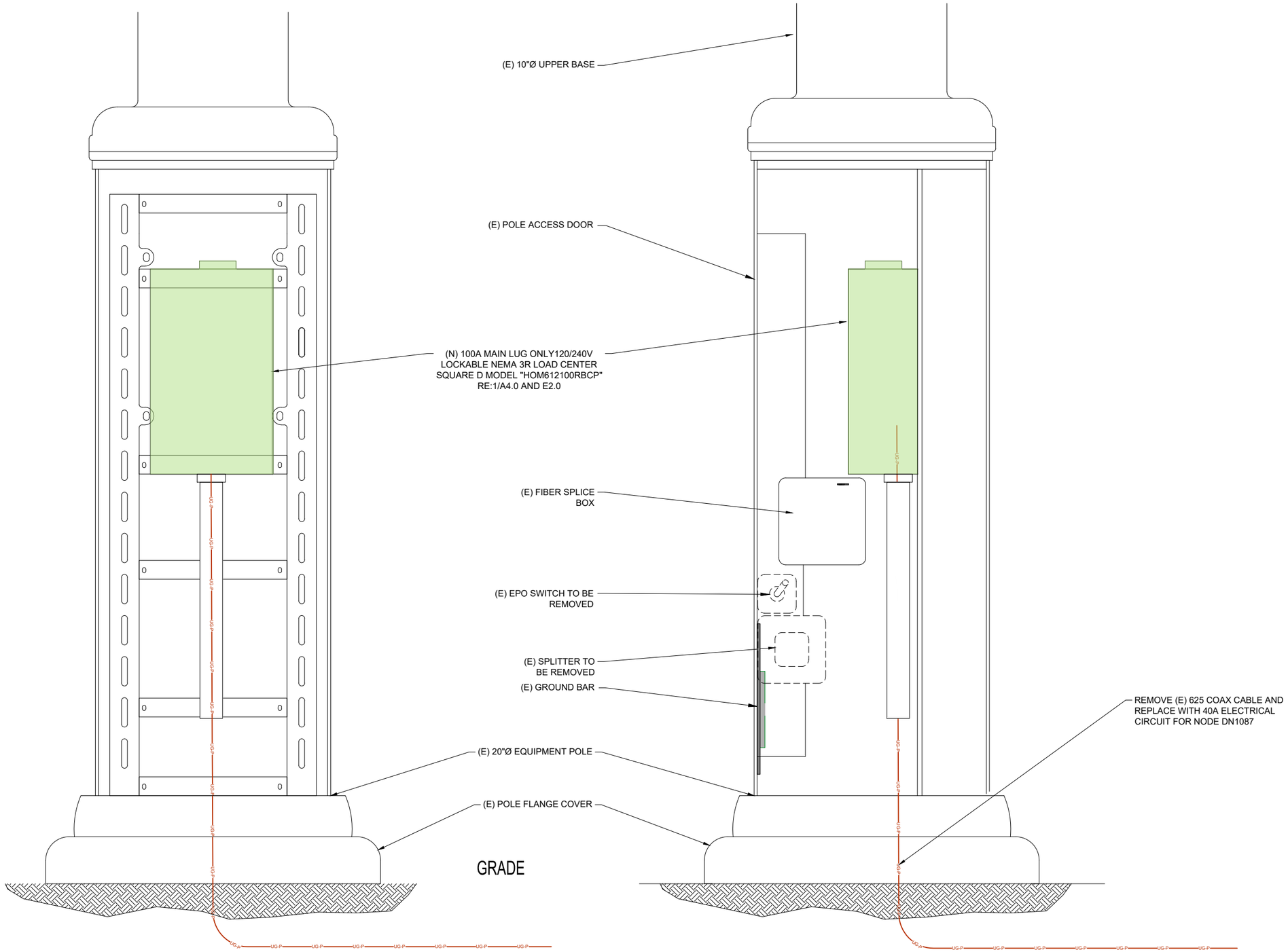
PRELIMINARY




1 POLE BASE DETAIL

T-Mobile
900 SOUTH BROADWAY, DENVER, CO 80209

PROJECT INFORMATION:

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DN03991GA

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SITE ADDRESS:
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SHEET TITLE:

POLE BASE DETAIL

SHEET NUMBER:

A2.0

| DRAWN BY: | CHK BY: | APV BY: |
|---|---|---|
| MM | DL | TN |

PRELIMINARY

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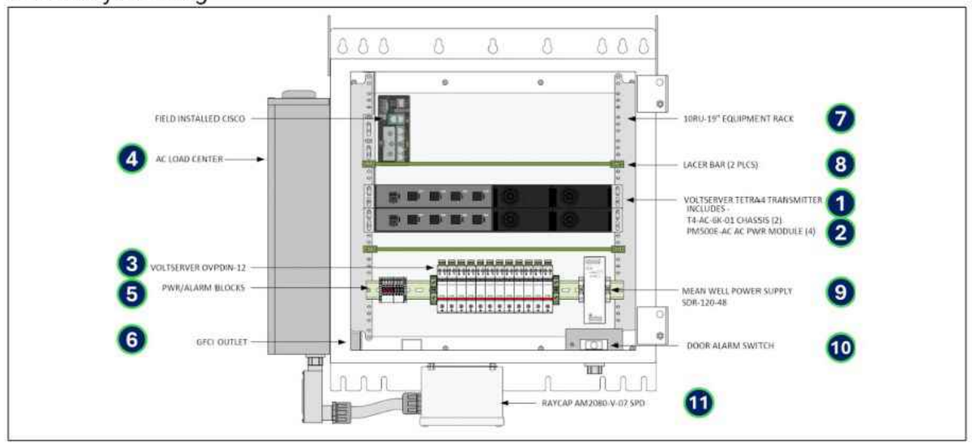
## Specifications

| TYPE | PARAMETER | SPECIFICATION | NOTES |
|---|---|---|---|
| AC Load | Rated Voltage | 100-250 Vac | For full power operation, input voltage must be 208 Vac or greater |
| Center | Rated Current | 100 A | Total input current |
| Input | Number of spaces | 12 | |
| Mechanical | Dimensions | See page 3 | |
| | Weight | 160 lbs | |
| | | | |
| Class 4 | Voltage | 315-350 Vdc | Digital Electricity / FMP / Clas 4 output |
| Output | Total Power | 6kW<br>12kW | TX-6K-OD-OVP-SOLN<br>TX-12K-OD-OVP-SOLN |
| | Number of Output Channels | 4<br>8 | TX-6K-OD-OVP-SOLN<br>TX-12K-OD-OVP-SOLN |
| | Max Current per Channel | 4.68 A | |
| | Output Wiring Size | 18 -12 AWG | |
| | Output Wire Type | CL4Z | Remee, DE#PxxISOSP, Shielded, CL4Z<br>Remee, DE#PxxOSP, Unshielded, CL4Z<br># Denotes number of pairs<br>xx denotes cable gauge (AWG) |
| | Max distance | 6,000 ft | |
| | Cable capacitance | 40 pF/ft (131.2 pF/m) max. | Higher capacitance cables may reduce performance. |
| | Access Location | Operator Accessible | |
| | Operating Temperature | -20 °C (-4 °F) to 50 °C (122 °F) | |
| GFI | Voltage | 125 Vac | |
| Output | Output Connector | NEMA 5-15R | |
| Approvals | | | Assembly is not rated as a system. Refer to the manufacturer datasheet of each component for approvals. |



VOLTSERVER DIGITAL ELECTRICITY™
TX-6/12K-OD-OVP-SOLN
FMP TX Outdoor Cabinet Assembly
6/12 kW, 4/8 channels, NEMA 4

## Assembly Drawing




## Included Parts List

| ITEM # | MANUFACTURER | PART NUMBER | QTY | DESCRIPTION |
|---|---|---|---|---|
| 1 | VoltServer | T4-AC-6K-01 | 1 or 2 | Tetra4 Class 4 FMP Transmitter, 6kW, 4-pair, 1U |
| 2 | VoltServer | PM500-AC | 2 or 4 | 3kW Power Module, installed in Tetra4 Transmitters |
| 3 | VoltServer | OVPDIN-12 | 1 | Class 4 circuit Surge Protection Device (SPD), 12-pair |
| 4 | Square D | Q0112M100PRB | 1 | AC Load Center, 100A, 24 circuits, NEMA 3R |
| 5 | Phoenix Contact | 3044076 | 7 | Power and Alarm relay terminal blocks |
| 6 | Leviton | 7599-I | 1 | Convenience outlet, GFI, 125V/15A, NEMA 5-15R |
| 7 | Westell | A99-BXM1019-NHE3 | 1 | 10RU 19in cabinet, NEMA 4, Temperature controlled |
| 8 | Westell | 021-002610 | 2 | Lacing bar, 19in |
| 9 | Meanwell | SDR-120-48 | 1 | AC/DC Power Supply, 120W, 48Vdc, DIN rail mount |
| 10 | Cherry Corporation | E68-30A | 2 | Door alarm, Single pole, Panel Mount, Pushbutton |
| 11 | Raycap | AM2080-V-07-SPD | 1 | AC Power Surge Protection Device (SPD) |

## Accessories (Sold Separately)

| PART NUMBER | DESCRIPTION | Purpose |
|---|---|---|
| A90-BXB19-AZ | Outdoor battery box for TX-6/12K-OD-OVP-SOLN | Backup power |
| A90-BXB-PLNTH | Mounting plinth for TX-6/12K-OD-OVP-SOLN | Raise cabinet off the ground |
| A90-BXA-PM02 | Pole mount kit for TX-6/12K-OD-OVP-SOLN | Bracket kit for 8-18in poles |
| T4-AC-6K-01 | Tetra4 Class 4 FMP Transmitter, 6kW, 4-pair, 1U | Add additional nodes |
| OVPMODULE-4 | Output PDU kit for RXDC-56-2K-03 | For >2 loads or to change cable gauge |
| PM500-AC | 3kW AC/DC Power Supply Module for T4-AC-6K-01 | When additional Tetra4 installed |



1 VOLTSERVER SPECIFICATIONS

T-Mobile
900 SOUTH BROADWAY, DENVER, CO 80209

PROJECT INFORMATION:

SITE NAME:
DN03991GA

SITE ID:
POWER SUPPLY 2

SITE ADDRESS:
14922 E. GATEWAY AVE.
DENVER, CO 80239

SITE COUNTY:
DENVER COUNTY

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| B | 11.04.25 | DOTI SUBMITTAL | DPL |

UCI CONSTRUCTION SERVICES, LLC
4751 FOX STREET, DENVER, CO 80216

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SHEET TITLE:

EQUIPMENT SPECIFICATIONS

SHEET NUMBER:
A3.0

| DRAWN BY: | CHK BY: | APV BY: |
|---|---|---|
| MM | DL | TN |

PRELIMINARY

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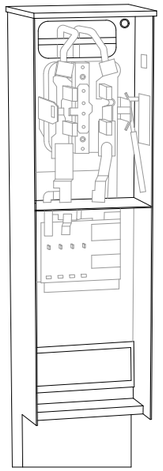
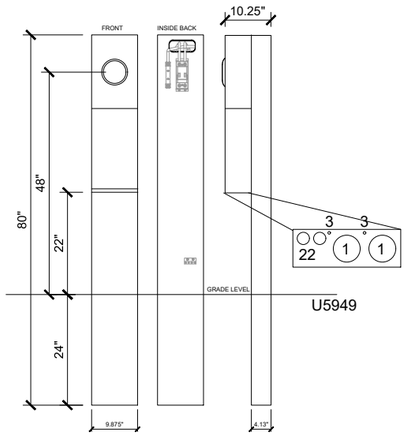
MILBANK
ENERGY AT WORK

COLD SEQUENCE METER MAIN PEDESTALS

60-200 AMPS | 240 VAC | 4 TERMINALS | LEVER BYPASS | RINGLESS






U5949-O-5T9

Overview

THE U5949 COLD SEQUENCE METER MAIN PROVIDES THE UTILITY A UL LISTED SYSTEM THAT INCLUDES A HEAVY DUTY LEVER BYPASS METER SOCKET AND LOAD CENTER WITH A FUSED DISCONNECT AHEAD OF THE METER. BEING ABLE TO TURN OFF THE POWER AHEAD OF THE METER ALLOWS THE UTILITY TO INSTALL, MAINTAIN OR REPLACE THE METER WHILE IT IS "COLD."

60-200 FUSED PULLOUT AMPS | 4 TERMINALS | METER MAIN PEDESTALS | LEVER BYPASS | RINGLESS

| CATALOG NUMBER | SERVICE | AMPS | BYPASS | CONNECTORS CU/AL | | KNOCKOUTS | | |
|---|---|---|---|---|---|---|---|---|
| | | | | LINE | LOAD | 1 | 2 | 3 |
| U5949-O-5T9-CDOT | UG | 60 | LEVER | #6-350 | CB | 2 | 1/2,3/4 | 1/4 |
| U5949-O-5T9-1PO | UG | 100 | LEVER | #6-350 | CB | 2 | 1/2,3/4 | 1/4 |
| U5949-O-5T9 | UG | 200 | LEVER | #6-350 | CB | 2 | 1/2,3/4 | 1/4 |

NOTES

- PARALLEL TO SERIES CONVERSION: WHEN ORDERED WITHOUT BREAKER, CENTER IS PARALLEL WIRED. FOR FIELD CONVERTING FROM PARALLEL WIRED TO SERIES WIRED, ORDER K5194.
- FIFTH TERMINAL: FOR FIELD-INSTALLABLE FIFTH TERMINAL, ORDER K3865.
- STABILIZER FOOT: FOR FIELD-INSTALLABLE STABILIZER FOOT, ORDER K5415.
- RECEPTACLES: CONSULT FACTORY FOR INSTALLED RECEPTACLE ASSEMBLIES.
- BREAKERS: THE MAIN BREAKERS TO BE USED ARE THE UQFP AND UQFPM SERIES BREAKERS.

PLEASE CONSULT SERVING UTILITY FOR THEIR REQUIREMENTS PRIOR TO ORDERING OR INSTALLING, AS SPECIFICATIONS AND APPROVALS VARY BY UTILITY, AND MAY REQUIRE LOCAL ELECTRICAL INSPECTOR APPROVAL. ALL INSTALLATIONS MUST BE INSTALLED BY A LICENSED ELECTRICIAN AND MUST COMPLY WITH ALL NATIONAL AND LOCAL CODES, LAWS AND REGULATIONS. MILBANK RESERVES THE RIGHT TO MAKE CHANGES IN SPECIFICATIONS AND FEATURES SHOWN WITHOUT NOTICE OR OBLIGATION.



2 METER PEDESTAL SPECIFICATION

# Product data sheet

Specifications

SQUARE D

## Load center, Homeline, 1 phase, 6 spaces, 12 circuits, 100A fixed main lugs, NEMA3R, consumer pack

HOM612L100RBCP

**Product availability: Stock - Normally stocked in distribution facility**

## Main

| | |
|---|---|
| **Product Type** | Load Center |
| **Marketing Trade Name** | Homeline |
| **Load Center Type** | Fixed Mains (lugs) |
| **Rated Current** | 100 A |
| **Number of Spaces** | 6 |
| **Maximum Number of Single Pole Circuits** | 12 |
| **Enclosure Rating** | NEMA 3R weatherproof enclosure |
| **Cover Type** | Surface cover |
| **Electrical Connection** | Lugs |

## Complementary

| | |
|---|---|
| **Max Short Circuit Current Rating** | 10 kA |
| **Maximum Number of Tandem Breakers** | 6 |
| **Number of Phases** | 1 phase 3 wires |
| **Voltage Rating** | 120/240 V AC |
| **Wire Size** | AWG 8...AWG 1 copper or aluminium |
| **Busbar Material** | Tin plated aluminium: busbar |
| **Enclosure Material** | Welded galvannealed steel |
| **Surface Finish** | Baked enamel Gray |
| **Box Number** | 2R |
| **Type of Packing** | Consumer packaging |
| **Bus Rated Current** | 100.0 A |
| **Height** | 12.6 in (321 mm) |
| **Width** | 8.9 in (226 mm) |
| **Depth** | 4.3 in (108 mm) |

1 PANEL SPECIFICATION

T-Mobile
900 SOUTH BROADWAY, DENVER, CO 80209

PROJECT INFORMATION:

SITE NAME:
DN03991GA

SITE ID:
POWER SUPPLY 2

SITE ADDRESS:
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DENVER, CO 80239

SITE COUNTY:
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| Rev: | Date: | Description: | By: |
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SHEET TITLE:

EQUIPMENT SPECIFICATIONS

SHEET NUMBER:

A4.0

| DRAWN BY: | CHK BY: | APV BY: |
|---|---|---|
| MM | DL | TN |

PRELIMINARY

U:\Colorado\DN03991GA_Power Supplies\PS-02\CAD\DN03991GA_PS-02_FMPS AZHL_permit set.dwg PLOT DATE: 11/4/2025 BY:Dan Little

# Product data sheet

Specifications

## Load center, QO, 1 phase, 20 spaces, 24 circuits, 100A convertible main breaker, PoN, NEMA3R

QO120M100PRB

**Product availability: Stock - Normally stocked in distribution facility**

## Main

| | |
|---|---|
| **Marketing Trade Name** | QO |
| **Product Type** | Load Center |

## Complementary

| | |
|---|---|
| **PoN Convertible Mains (lugs)** | PoN Convertible Mains (breaker) |
| **Rated Current** | 100 A |
| **Number of Spaces** | 20 |
| **Max Short Circuit Current Rating** | 22 kA |
| **Maximum Number of Single Pole Circuits** | 24 |
| **Maximum Number of Tandem Breakers** | 4 |
| **Number of Phases** | 1 phase |
| **Ground Bar** | Grounding bar (ordered separately) |
| **Box Number** | 4R |
| **Height** | 22.05 in (560 mm) |
| **Width** | 14.8 in (375 mm) |
| **Depth** | 4.5 in (115 mm) |
| **Net Weight** | 25.0004 lb(US) (11.340 kg) |

## Environment

| | |
|---|---|
| **Enclosure Rating** | NEMA 3R weatherproof enclosure |
| **Ambient Air Temperature for Operation** | 23 °F (-5 °C)<br>104 °F (40 °C) |
| **Product Certifications** | UL Listed |

## Ordering and shipping details

| | |
|---|---|
| **Category** | US1DE3A10002 |
| **Discount Schedule** | DE3A |
| **GTIN** | 785901609513 |
| **Returnability** | Yes |
| **Country of origin** | MX |

| | |
|---|---|
| 2 | NOT USED |
| 1 | PANEL SPECIFICATION |

T-Mobile
900 SOUTH BROADWAY, DENVER, CO 80209

UCI CONSTRUCTION SERVICES, LLC
4751 FOX STREET, DENVER, CO 80216

PROJECT INFORMATION:

SITE NAME:
DN03991GA

SITE ID:
POWER SUPPLY 2

SITE ADDRESS:
14922 E. GATEWAY AVE.
DENVER, CO 80239

SITE COUNTY:
DENVER COUNTY

| Rev: | Date: | Description: | By: |
|---|---|---|---|
| A | 04.23.25 | PRELIMINARY | MM |
| B | 11.04.25 | DOTI SUBMITTAL | DPL |

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

SHEET TITLE:

EQUIPMENT SPECIFICATIONS

SHEET NUMBER:

A4.0

| DRAWN BY: | CHK BY: | APV BY: |
|---|---|---|
| MM | DL | TN |

PRELIMINARY

U:\Colorado\DN3991GA_Power Supplies\PS-02\CAD\DN03991GA_PS-02_FMPS AZHL_permit set.dwg PLOT DATE: 11/4/2025 BY:Dan Little

GENERAL CONSTRUCTION NOTES

1.THE FACILITY IS AN UNOCCUPIED WIRELESS FACILITY.
2.PLANS ARE NOT TO BE SCALED AND ARE INTENDED TO BE A DIAGRAMMATIC OUTLINE ONLY, UNLESS NOTED OTHERWISE. THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.
3.PRIOR TO THE SUBMISSION OF BIDS, THE CONTRACTORS SHALL VISIT THE JOB SITE AND BE RESPONSIBLE FOR ALL CONTRACT DOCUMENTS, FIELD CONDITIONS AND DIMENSIONS, AND CONFIRMING THAT THE WORK MAY BE ACCOMPLISHED AS SHOWN PRIOR TO PROCEEDING WITH CONSTRUCTION. ANY DISCREPANCIES ARE TO BE BROUGHT TO THE ATTENTION OF THE IMPLEMENTATION ENGINEER AND ARCHITECT/ENGINEER PRIOR TO PROCEEDING WITH THE WORK.
4.THE CONTRACTOR SHALL RECEIVE, IN WRITING, AUTHORIZATION TO PROCEED BEFORE STARTING WORK ON ANY ITEM NOT CLEARLY DEFINED OR IDENTIFIED BY THE CONTRACT DOCUMENTS.
5.CONTRACTOR SHALL CONTACT LOCAL DIGGERS HOTLINE 48 HOURS PRIOR TO PROCEEDING WITH ANY EXCAVATION, SITE WORK OR CONSTRUCTION.
6.THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY INDICATED OTHERWISE OR WHERE LOCAL CODES OR REGULATIONS TAKE PRECEDENCE.
7.ALL WORK PERFORMED AND MATERIALS INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS AND ORDINANCES. CONTRACTOR SHALL GIVE ALL NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF THE WORK. MECHANICAL AND ELECTRICAL SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS, AND LOCAL AND STATE JURISDICTIONAL CODES, ORDINANCES AND APPLICABLE REGULATIONS.
8.THE GENERAL CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK, USING THE BEST SKILLS AND ATTENTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES AND FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT INCLUDING CONTACT AND COORDINATION WITH THE CONSTRUCTION FIELD ENGINEER AND WITH THE LANDLORD'S AUTHORIZED REPRESENTATIVE.
9.DETAILS ARE INTENDED TO SHOW END RESULT OF DESIGN. MINOR MODIFICATIONS MAY BE REQUIRED TO SUIT JOB DIMENSIONS OR CONDITIONS, AND SUCH MODIFICATIONS SHALL BE INCLUDED AS PART OF THE WORK.
10.REPRESENTATIONS OF TRUE NORTH, OTHER THAN THOSE FOUND ON THE PLOT OF SURVEY DRAWING, SHALL NOT BE USED TO IDENTIFY OR ESTABLISH THE BEARING OF TRUE NORTH AT THE SITE. THE CONTRACTOR SHALL RELY SOLELY ON THE PLOT OF SURVEY DRAWING AND ANY SURVEYOR'S MARKINGS AT THE SITE FOR THE ESTABLISHMENT OF TRUE NORTH, AND SHALL NOTIFY THE ARCHITECT/ENGINEER PRIOR TO PROCEEDING WITH THE WORK IF ANY DISCREPANCY IS FOUND BETWEEN THE VARIOUS ELEMENTS OF THE WORKING DRAWINGS AND THE TRUE NORTH ORIENTATION AS DEPICTED ON THE PLAT OF SURVEY. THE CONTRACTOR SHALL ASSUME SOLE LIABILITY FOR ANY FAILURE TO NOTIFY THE ARCHITECT/ENGINEER.
11.WHILE REVIEWING THE DESIGN DOCUMENTS, THE CONTRACTOR SHALL IDENTIFY ANY ITEMS WHERE THE DESIGN INTENT IS UNCLEAR AND OBTAIN WRITTEN CLARIFICATIONS PRIOR TO FURNISHING A BID.
12.THESE DESIGN DOCUMENTS ARE DIAGRAMMATIC IN NATURE AND ARE INTENDED TO SHOW FINAL CONDITIONS. MULTIPLE PHASING STEPS MAYBE NEEDED TO MAINTAIN SITE OPERATION DURING CONSTRUCTION AND IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PLAN AND COORDINATE PHASING WITH CARRIER OPERATIONS.
13.CONTRACTOR SHALL, UNLESS OTHERWISE NOTED, INCLUDE IN THEIR SCOPE OF WORK ALL NECESSARY MATERIALS, LABOR AND EQUIPMENT TO COMPLETE THE INSTALLATION AS DESCRIBED IN DESIGN DOCUMENTS.
14.NO STRUCTURAL ALTERATIONS ARE TO BE MADE TO THE FACILITY UNLESS SPECIFICALLY NOTED.
15.CONTRACTOR SHALL MAKE PROVISIONS TO PROTECT EXISTING SITE FINISHES AS MUCH AS POSSIBLE. ANY IMPACT TO SITE AND SURROUNDINGS SHALL BE MITIGATED AND CONTRACTOR SHALL RETURN SITE TO PRE-CONSTRUCTION CONDITIONS.
16.ALL DEMOLISHED AND UNUSED MATERIALS SHALL BE REMOVED FROM SITE AND TRACKED ASSETS LOGGED AND RETURNED TO CARRIER FOR DISPOSAL OR RE-USE. CONTRACTOR TO KEEP THE SITE CLEAN, FREE OF HAZARDS AND TO PROPERLY DISPOSE OF ALL RUBBISH.
17.PLANS ARE NOT TO BE SCALED. UTILIZE DIMENSION CALL-OUTS FOR ESTIMATES. ALL CABLE LENGTHS ARE SHOWN FOR INFORMATIONAL PURPOSES AND IT IS THE CONTRACTORS RESPONSIBILITY TO FILED VERIFY ALL LENGTHS PRIOR TO ORDERING.
18.CONTRACTOR TO OBTAIN X-RAY OR GPR (IF APPLICABLE) OF ANY MASONRY STRUCTURES IDENTIFYING ALL EMBEDMENT PRIOR TO CUTTING, DRILLING OR OTHER ACTIVITY WHICH COULD CAUSE DAMAGE. AVOID ALL EMBEDMENT. OBTAIN APPROVAL FROM STRUCTURAL ENGINEER PRIOR TO IMPACTING ANY STRUCTURAL FACILITIES.
19.THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING THE MOST RECENT DESIGN DOCUMENTS AND ENSURING THEY ARE DISTRIBUTED AND ARE FOLLOWED BY ALL PERSONAL INVOLVED IN THE PROJECT.
20.EVERY EFFORT HAS BEEN MADE BY THE ARCHITECT / ENGINEERS TO PROVIDE ACCURATE AND COMPLETE DESIGN DOCUMENTS THOUGH MINOR ERRORS AND OMISSIONS MAYBE CONTAINED WITHIN THE DOCUMENTS. THESE SHALL NOT EXCUSE THE CONTRACTOR FROM PROVIDING AN ACCURATE PROPOSAL AND COMPLETING THE PROJECT IN ACCORDANCE WITH THE INTENT OF THE DESIGN DOCUMENTS.
21.THE CONTRACTOR SHALL BEAR THE RESPONSIBILITY OF IDENTIFYING ANY ISSUES AND NOTIFYING THE CONSTRUCTION MANAGER AND ARCHITECT / ENGINEER IN WRITING PRIOR TO SUBMITTING PRICING. IN THE EVENT OF DISCREPANCIES OR CONFLICTING ITEMS, THE CONTRACTOR SHALL PRICE THE MOST COSTLY OR EXPANSIVE OPTION UNLESS DIRECTED IN WRITING OTHERWISE.
22.THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING ACCESS WITH VENUE MANAGEMENT FOR ALL NECESSARY WORK AND TO COMPLY WITH ANY REQUIREMENTS IMPOSED BY THE VENUE
23.CONTRACTOR TO PROVIDE CLOSE OUT PACKAGE WITH ALL TEST RESULTS, SETTING SCREEN SHOTS, RELEVANT CATALOGS / CUT SHEETS, INSTRUCTION SHEETS AND A SET OF RED-LINED AS-BUILT DRAWINGS PRIOR TO FINAL BILLING.

811
Know what's below.
Call before you dig.

ELECTRICAL NOTES

1.SUBMITTAL OF BID INDICATES CONTRACTOR IS COGNIZANT OF ALL JOB SITE CONDITIONS AND WORK TO BE PREFORMED UNDER THIS CONTRACT. CONTRACTOR IS RESPONSIBLE FOR ALL FIELD VERIFICATION.
2.THESE PLANS ARE DIAGRAMMATIC ONLY, AND NOT TO BE SCALED.
3.ELECTRICAL CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS, INSURANCE, EQUIPMENT, INSTALLATION, CONSTRUCTION TOOLS, TRANSPORTATION, ETC. FOR A COMPLETE AND PROPERLY OPERATIVE SYSTEM ENERGIZED THROUGHOUT AND AS INDICATED ON DRAWINGS, AS SPECIFIED HEREIN AND/OR AS OTHERWISE REQUIRED.
4.ALL MATERIALS AND EQUIPMENT SHALL BE NEW AND IN PERFECT CONDITION WHEN INSTALLED AND SHALL BE OF THE BEST GRADE OR GROUP OF EQUIPMENT. MATERIALS SHALL BE LISTED AND APPROVED BY UNDER-WRITER'S LABORATORY AND SHALL BEAR THE INSPECTION LABEL "J" WHERE SUBJECT TO SUCH APPROVAL MATERIALS SHALL MEET WITH APPROVAL OF THE DIVISION OF INDUSTRIAL SAFETY AND ALL GOVERNING BODIES HAVING JURISDICTION. MATERIALS SHALL BE MANUFACTURED IN ACCORDANCE WITH APPLICABLE STANDARDS ESTABLISHED BY ANSI, NEMA AND NBFU.
5.ALL CONDUIT INSTALLED SHALL BE SURFACE MOUNTED UNLESS OTHERWISE NOTED.
6.ELECTRICAL CONTRACTOR SHALL CARRY OUT THEIR WORK WITH ACCORDANCE WITH ALL GOVERNING STATE, COUNTY, LOCAL CODES AND O.S.H.A.
7.ELECTRICAL CONTRACTOR SHALL SECURE ALL NECESSARY ELECTRICAL PERMITS, AND PAY ALL REQUIRED FEES.
8.COMPLETE JOB SHALL BE GUARANTEED FOR A PERIOD OF NO LESS THAN ONE YEAR AFTER THE DATE OF JOB COMPLETION. ANY WORK, MATERIAL, OR EQUIPMENT FOUND TO BE FAULTY DURING THAT PERIOD SHALL BE CORRECTED AT ONCE, UPON WRITTEN NOTIFICATION, AT THE EXPENSE OF THE ELECTRICAL CONTRACTOR.
9.ALL CONDUIT ONLY (C.O.) SHALL HAVE A PULL WIRE OR ROPE, AND TRUE TAPE.
10.PROVIDE THE OWNER WITH ONE SET OF COMPLETE DIMENSIONS AND CIRCUITS, WITHIN 10 WORKING DAYS OF PROJECT COMPLETION. ELECTRICAL "AS BUILT" DRAWINGS, SHOWING ACTUAL LOCATION OF CONDUITS.
11.ALL BROCHURES, OPERATING MANUALS, CATALOGS, SHOP DRAWINGS, ETC. SHALL BE TURNED OVER TO PROJECT MANAGER AT JOB COMPLETION.
12.USE T-TAP CONNECTIONS ON ALL MULTI-CIRCUITS WITH COMMON NEUTRAL CONDUCTOR FOR LIGHTING FIXTURE. ALL CONDUCTORS SHALL BE COPPER.
13.THE EXTERIOR GROUND RING SHALL BE TESTED PER CCI SPECIFICATIONS AND SHALL HAVE A RESISTANCE TO EARTH OF 5 OHMS OR LESS. IF NOT NOTIFY ENGINEER.
14.ALL CIRCUIT BREAKERS, FUSES AND ELECTRICAL EQUIPMENT SHALL HAVE AN INTERRUPTING RATING NOT LESS THAN THE MAXIMUM SHORT =CIRCUIT CURRENT TO WHICH THEY MAY BE SUBJECTED, AND A MINIMUM OF 10,000 A.I.C.
15.THE ENTIRE ELECTRICAL INSTALLATION SHALL BE GROUNDED AS REQUIRED BY ALL APPLICABLE CODES.
16.PATCH, REPAIR, AND PAINT ANY AREA THAT HAS BEEN DAMAGED IN THE COURSE OF THE ELECTRICAL WORK.
17.IN DRILLING HOLES INTO CONCRETE (WHETHER FOR FASTENING OR ANCHORING PURPOSES OR PENETRATIONS THROUGH THE FLOOR FOR CONDUIT RUNS, PIPE RUNS, ETC.) IT MUST BE CLEARLY UNDERSTOOD THAT TENDONS AND RE-BARS WILL NOT BE DRILLED INTO, CUT, OR DAMAGED UNDER ANY CIRCUMSTANCES.
18.LOCATION OF TENDONS AN RE-BARS ARE NOT DEFINITELY KNOWN AND THEREFORE MUST BE SEARCHED FOR BY APPROPRIATE METHODS AND EQUIPMENT VIA X-RAY, OR OTHER DEVICES THAT CAN ACCURATELY LOCATE THE REINFORCING STEEL TENDONS.
19.PENETRATIONS IN FIRE RATED WALLS SHALL BE FIRE STOPPED IN ACCORDANCE WITH APPLICABLE LOCAL BUILDING CODES. USING U.L. RATED MATERIALS.
20.ELECTRICAL CONTRACTOR IS TO COORDINATE WITH UTILITY COMPANY FOR CONNECTION OF TEMPORARY AND PERMANENT POWER TO THE SITE. THE TEMPORARY POWER AND ALL HOOK-UP COSTS SHALL BE PAID BY THE CONTRACTOR.
21.ELECTRICAL CONTRACTOR SHALL SUBMIT SHOP DRAWINGS AND/OR CATALOG CUT-SHEETS ON ALL NON-SPECIFIED ORIGINAL MATERIALS AND EQUIPMENT, TO PROJECT MANAGER PRIOR TO COMMENCEMENT OF THE WORK.
22.UPON COMPLETION OF WORK, CONDUCT CONTINUITY AND SHORT CIRCUIT, AS WELL AS, GROUNDING TEST, GROUNDING TEST SHALL BE PREFORMED BY INDEPENDENT TESTING AGENCY, WITH WRITTEN REPORT SUBMITTED TO THE PROJECT MANAGER FOR REVIEW AND APPROVAL.
23.CLEAN PREMISES DAILY OF ALL DEBRIS RESULTING FROM WORK AND LEAVE WORK PREMISES IN A COMPLETE AND UNDAMAGED CONDITION.
24.ALL EXTERIOR WALL PENETRATIONS SHALL BE SEALED WITH POLYSEAM SEALANT.
25.ALL #2 TINNED BARE COPPER DOWNLEADS TO BE PROTECTED BY 1/2" P.V.C. PIPE AND SECURED.
26.COMPRESSION FITTINGS TO BE USED ON ALL CONDUITS (NO SET SCREWS).
27.ALL #6 STRANDED COPPER WITH GREEN INSULATION TO BE ATTACHED WITH CRIMPED DOUBLE LUG, ATTACHED WITH NUTS, BOLTS AND STAR WASHERS TYPICAL AND NO-OX GREASE BETWEEN LUG AND BUS BAR.
28.ALL ABOVE GROUND CONDUIT SHALL BE RIGID GALVANIZED CONDUIT WITH WEATHERPROOF FITTINGS

CODE COMPLIANCE

1.ALL WORK TO BE MEET OR EXCEED ALL APPLICABLE STANDARDS, CODES, ORDINANCES, RULES AND REGULATIONS. WHEN TWO OR MORE ARE IN CONFLICT, THE MOST STRINGENT SHALL BE FOLLOWED. WHERE LICENSING IS REQUIRED, CONTRACTOR SHALL OBTAIN ALL REQUIRED LICENSES PRIOR TO START OF WORK.
2.CONTRACTOR TO COORDINATE WITH LOCAL JURISDICTION FOR ANY CODE RELATED QUESTIONS. ALL JURISDICTION REQUIRED CHANGES ARE THE RESPONSIBILITY OF THE CONTRACTOR.
3.EQUIPMENT ROOMS ARE NOT MANNED, ARE NOT HABITABLE, AND DO NOT REQUIRE POTABLE WATER, SEWER CONNECTION OR A.D.A. ACCESS ACCOMMODATIONS.
4.CONTRACTOR TO REMOVE TRASH AND REFUSE ON A DAILY BASIS AND NO SOLID WASTE RECEPTACLE WILL BE SITED.

SITE WORK

1.ALL EFFORT HAS BEEN MADE TO IDENTIFY EXISTING UTILITIES. THE CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING ALL UTILITIES SHOWN OR NOT AND PROTECT FROM DAMAGE. EXCAVATION CONTRACTOR TO OBTAIN REQUIRED LOCATED PRIOR TO STARTING WORK.
2.CONTRACTOR TO VERIFY STATE REQUIREMENTS FOR UTILITY LOCATION SERVICES AND EXCAVATION CONTRACTOR SHALL NOTIFY STATE OR LOCAL NOTIFICATION CENTER AS REQUIRED PRIOR TO ANY SITE DISTURBANCES.
3.CONTRACTOR SHALL PROTECT ALL SITE FINISHES AND IMPROVEMENTS AND RETURN ALL TO PRE WORK CONDITION. IF EXTERIOR SITE IMPROVEMENTS ARE REQUIRED, CONTRACTOR TO INSTALL AND MAINTAIN DRAINAGE / RUNOFF MITIGATION MEASURES THROUGH OUT THE PROJECT AND REVEGETATE AREA TO RETURN IT TO ORIGINAL CONDITIONS.
4.GRUB AND DISPOSE OF ALL ORGANIC MATERIAL PRIOR
5.NO FILL OR EARTHWORK TO OCCUR WITH ON OR WITH FROZEN MATERIAL

MATERIALS

1.CONTRACTOR SHALL PROVIDE ALL NECESSARY MATERIALS AND SUPPLIES TO COMPLETE THE PROJECT NOT SPECIFICALLY PROVIDED BY CARRIER. CONTRACTOR TO CLARIFY PROVIDED MATERIALS PRIOR TO FURNISHING A BID.
2.ALL FURNISHED MATERIALS SHALL MEET CARRIER SPECIFICATIONS AND MINIMUM REQUIREMENTS FOR THE PROJECT. ANY SUBSTITUTIONS SHALL BE APPROVED IN WRITING BY CARRIER CONSTRUCTION MANAGER PRIOR TO PURCHASE AND INSTALLATION.
3.ALL OUTDOOR STEEL ITEMS SHALL BE HOT DIPPED GALVANIZED PER ASTM A123.
4.ALL BOLTS AND HARDWARE TO BE STAINLESS STEEL UNLESS SPECIFICALLY REQUIRED TO BE OTHERWISE BY CODE OR CARRIER REQUIREMENT.
5.ANY DAMAGED GALVANIZING OR PAINT TO BE FIELD REPAIRED WITH 'COLD-GALV' OR APPROPRIATE PAINT UNDER CONDITIONS APPROVED BY PRODUCT MANUFACTURER.

ELECTRICAL AND GROUNDING

1.ALL INSTALLATIONS TO MAINTAIN REQUIRED CLEARANCES
2.CONTRACTOR TO SIZE CONDUCTORS PER NEC AND CARRIER REQUIREMENTS AND UPSIZE AS REQUIRED TO MINIMIZE VOLTAGE DROP.
3.CONTRACTOR TO SIZE CONDUIT PER NEC
4.CONTRACTOR TO BOND METALLIC ITEMS TO GROUNDING SYSTEM WITHIN SITE PER CARRIER REQUIREMENTS.

IT IS THE CONTRACTOR'S RESPONSIBILITY

1.TO VISIT THE SITE AND DETERMINE THE EXACT EXTENT OF WORK, COORDINATION, DEMOLITION, TEMPORARY CONSTRUCTION, TEMPORARY FACILITIES, UTILITIES, ETC. NECESSARY TO COMPLETE THIS PROJECT AS INDICATED IN THE CONTRACT DOCUMENTS.

## *ABBREVIATIONS*

| | |
|---|---|
| C.O. | = CONDUIT ONLY |
| PVC | = SCHEDULE 40 PLASTIC CONDUIT |
| GRC. | = GALVANIZED RIGID CONDUIT |
| MTD. | = MOUNTED |
| W.A. | = WEATHERPROOF |
| U.O.N. | = UNLESS OTHERWISE NOTED |
| G. OR GRN. | = GROUND |
| N. OR NEUT. | = NEUTRAL |
| A. OR AMP. | = AMPERE |
| KW. | = KILOWATTS |
| W. | = WATTS |
| ~ | = PHASE |
| DIA | = DIAMETER |
| H.P. OR HP | = HORSEPOWER |
| XFMR | = TRANSFORMER |
| C.B. | = CIRCUIT BREAKER |
| CKT. | = CIRCUIT |
| SW. | = SWITCH |
| MTS | = MANUAL TRANSFORMER SWITCH |
| F.A. | = FIRE ALARM |
| RECPT. | = RECEPTACLE |
| E.C. | = ELECTRIC CONTRACTOR |
| G.C. | = GENERAL CONTRACTOR |
| 1P, 2P, 3P | = SINGLE POLE, TWO POLE, THREE POLE |
| EGB | = EQUIPMENT GROUND BUS |
| MGB | = MAIN GROUND BUS |
| AFC | = AVAILABLE FAULT CURRENT |
| AWG | = AMERICAN WIRE GAUGE |
| BTCW | = BARE TIN COPPER WIRE |
| GPS | = GLOBAL POSITIONING SYSTEM |
| PPC | = POWER PROTECTION CABINET |
| TYP. | = TYPICAL |
| RGS | = RIGID GALVANIZED STEEL |
| EMT | = ELECTRICAL METALLIC TUBING |
| DWG | = DRAWING |
| BTS | = BASE TRANSFORMER SWITCH |
| GEN | = GENERATOR |
| BSCW | = BARE STRANDED COPPER WIRE |
| ISCW | = INSULATED STRANDED COPPER WIRE |
| MEB | = MAIN ELECTRIC BUS |
| MBJ | MAIN BONDING JUMPER |

CODE INFORMATION:
2023 NEC, 2021 IECC, ALL SYSTEM SHALL BE IN COMPLIANCE WITH ABOVE CODES AS ADOPTED BY THE CITY OF DENVER, COLORADO.

ENGINEER
TIM ALEXANDER, PE
602.403.8368
PROTEUSPOWER@OUTLOOK.COM

## DRAWING INDEX


| | |
|---|---|
| E1.0 | GENERAL NOTES / SHEET INDEX |
| E2.0 | ONE-LINE DIAGRAM / CALCULATIONS / GROUNDING PLAN |
| E3.0 | PANEL SCHEDULES |


T-Mobile
900 SOUTH BROADWAY, DENVER, CO 80209

PROJECT INFORMATION:

SITE NAME:
DN03991GA

SITE ID:
POWER SUPPLY 2

SITE ADDRESS:
14922 E. GATEWAY AVE.
DENVER, CO 80239

SITE COUNTY:
DENVER COUNTY

| Rev: | Date: | Description: | By: |
|---|---|---|---|
| A | 04.23.25 | PRELIMINARY | MM |
| B | 11.04.25 | DOTI SUBMITTAL | DPL |

UCI
CONSTRUCTION SERVICES, LLC
4751 FOX STREET, DENVER, CO 80216

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

SHEET TITLE:

GENERAL NOTES

SHEET NUMBER:
E1.0

| DRAWN BY: | CHK BY: | APV BY: |
|---|---|---|
| MM | DL | TN |

PRELIMINARY

U:\Colorado\DN03991GA_Power Supplies\PS-02\CAD\DN03991GA_PS-02_FMPS AZHL_permit set.dwg PLOT DATE: 11/4/2025 BY:Dan Little

POWER COMPANY: XCEL ENERGY

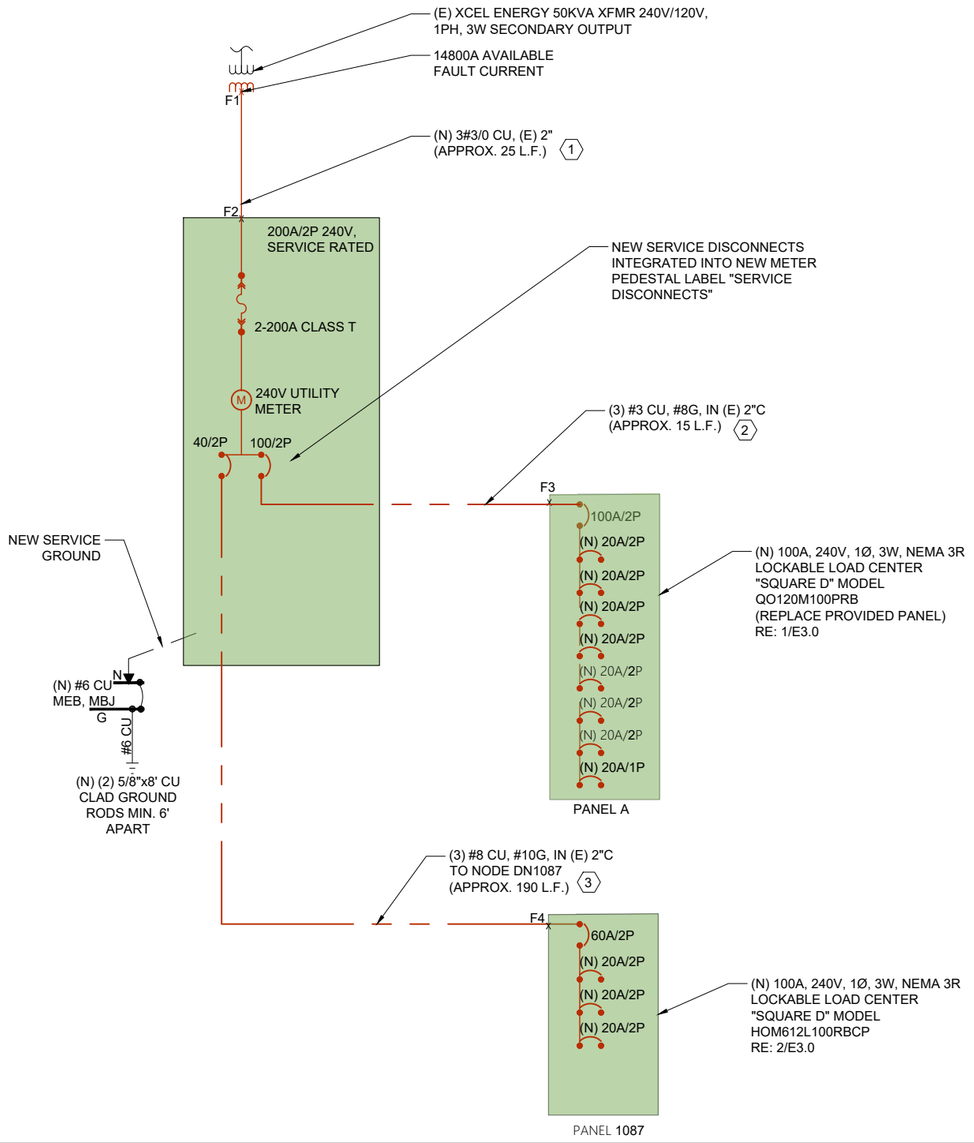
PROVIDE APPROVED ARC-FLASH HAZARD WARNING ON ALL REQUIRED ELECTRICAL EQUIPMENT PER NEC 110.16

**⚠ WARNING**

ELECTRIC ARC FLASH HAZARD WILL CAUSE SEVERE INJURY OR DEATH

WEAR PROPER PROTECTIVE EQUIPMENT BEFORE OPENING OR PERFORMING DIAGNOSTIC MEASUREMENTS WHILE ENERGIZED. (SEE NFPA 70E)

NOTES:
1. PRIOR TO RUNNING CONDUIT ROUTE - CONTRACTOR SHALL CONTACT THE CROWN CASTLE PROJECT MANGER AND VERIFY THE EQUIPMENT CABINET LAYOUT CONFIGURATION AND ROUTE CONDUITS ACCORDINGLY.
2. CONTRACTOR SHALL TAG EACH CIRCUIT CONDUCTOR AT EACH J-BOX OUTLET, SWITCH, ETC. WITH THE CIRCUITS IDENTIFICATION.
3. ELECTRICAL CONTRACTOR SHALL PROVIDE LABELING OF THE AVAILABLE FAULT CURRENT FOR EACH PANEL AS NOTED, PER NEC 110.24.
4. INSULATED CONDUCTORS SHALL BE TYPE THWN OR THWN-2 CU.




## 3 ONE-LINE DIAGRAM

## 1-PHASE, LINE-TO-LINE SHORT CIRCUIT CALCULATIONS BASED ON THE "POINT-BY-POINT" METHOD

M = 1/(1+F) | CABLE: F= 2xLxI / CxE | XFMR: F=IPSC x VP x %Z/100000 x KVA / IS (SCA) = VP /VS x M x IS

ICS=THE AVAIBLE SHORT CIRCUIT CURRENT, IN AMPERES, AT THE BEGINNING OF THE CIRCUIT
L = THE LENGTH OF THE CIRCUIT TO THE FAULT IN FEET.
C = THE CONSTANT FROM TABLE C FOR THE TYPE OF CONDUCTORS AND THE CIRCUIT ARRANGEMENT.
FOR PARALLEL RUNS MULTIPLY "C" VALUE BY THE NUMBER OF CONDUCTORS PER PHASE.
E = LINE-TO-LINE VOLTAGE OR LINE-TO-GROUND VOLTAGE, WHERE APPLICABLE.

IP = PRIMARY CURRENT IN AMPERES
VP = PRIMARY LINE-TO-LINE VOLTAGE OF TRANSFORMER IN VOLTS
E = LINE-TO-LINE VOLTAGE OR LINE-TO-GROUND VOLTAGE, WHERE APPLICABLE.
%Z IMPEDANCE OF TRANSFORMER
* USE ROW 'CA' FOR FEEDER CABLES AND ROW 'XF' FOR TRANSFORMERS

| FAULT POINT | DESCRIPTION | SOURCE ICS (AMPS) | WIRE / CABLE SIZE | TYPE OF CONDUIT | TYPE OF WIRE | "C" VALUE | E (VOLTS) | L (LENGTH) IN FEET | F | M | I SCA (AMPS) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| F1 | 50KVA XFMR | 14,800 | | | | N/A | 0 | 0 | N/A | N/A | 14800 |
| F2 | 200A DISCONNECT | 14,800 | #3/0 | NON-MAG | CU | 13,923 | 240 | 25 | 0.2215 | 0.8187 | 12116 |
| F3 | TO PANEL A | 12,116 | #3 | NON MAG | CU | 4,811 | 240 | 15 | 0.3148 | 0.7606 | 9215 |
| F4 | PANEL 1087 | 12,116 | #8 | NON MAG | CU | 1,559 | 240 | 190 | 12.3051 | 0.0752 | 910 |
| ILt | JJN-200 FUSE | | | | | | | | | | 3000 |

NOTE:
THE ABOVE CALCULATIONS NEGLECTED MOTOR SHORT-CIRCUIT CONTRIBUTIONS. IF SIGNIFICANT, MOTOR SHORT-CIRCUIT CONTRIBUTION MAY BE ADDED TO THE TRANSFORMER SECONDARY SHORT-CIRCUIT CURRENT VALUE. A PRACTICAL ESTIMATE OF MOTOR CONTRIBUTIONS IS TO MULTIPLY THE TOTAL MOTOR LOAD IN AMPERES BY 4. LENGTHS ARE FOR CALCULATIONS ONLY. DO NOT USE FOR COST ESTIMATING OR TAKE-OFF PURPOSES.

### JJN - 300VAC, 1-1200A, FAST-ACTING CLASS T FUSES

CURRENT - LIMITING EFFECTS

PROSP. S.C.C. | LET-THROUGH CURRENT (APPARENT RMS SYM. VS. FUSE RATING)

| | 15A | 30A | 60A | 100A | 200A | 400A | 600A | 800A | 1200A |
|---|---|---|---|---|---|---|---|---|---|
| 500 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 |
| 1,000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 |
| 5,000 | 1000 | 1000 | 1000 | 1000 | 2000 | 3000 | 5000 | 5000 | 5000 |
| 10,000 | 1000 | 1000 | 1000 | 2000 | 2000 | 4000 | 6000 | 7000 | 9000 |
| 15,000 | 1000 | 1000 | 1000 | 2000 | 3000 | 4000 | 6000 | 9000 | 10000 |
| 20,000 | 1000 | 1000 | 1000 | 2000 | 3000 | 5000 | 7000 | 10000 | 11000 |

### FEEDER / VOLTAGE DROP SCHEDULE - 1 PHASE

| FEEDER I.D. | WIRE / CABLE SIZE | COND. PER PHASE | CONDUIT & TYPE | TYPE OF WIRE | LENGTH (FEET)* | LOAD (AMPS) | VOLTAGE (L-VOLTS) | R/1000' (OHMS) | VOLTAGE DROP (VOLTS) | % V.D. |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | #3/0 | 1 | NON-MAG | CU | 25 | 105A | 240 | 0.0766 | 0.45 | 0.19 |
| 2 | #3 | 1 | NON-MAG | CU | 15 | 76 | 240 | 0.2450 | 0.55 | 0.23 |
| 3 | #8 | 1 | NON-MAG | CU | 190 | 20A | 240 | 0.7780 | 5.49 | 2.29 |

* FOR VOLTAGE DROP CALCULATIONS ONLY; DO NOT USE FOR COST ESTIMATING PURPOSES.
** CALCULATIONS BASED ON NEC 215-2 (V.D. FORMULA). VD= (2 X L X R X I) / 1000

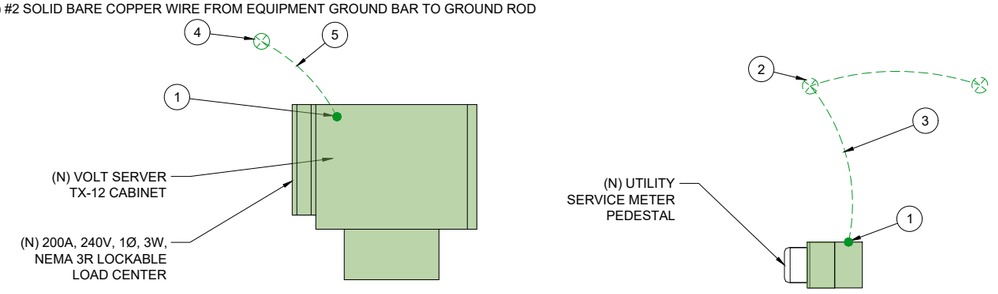
## 2 CALCULATIONS

### GENERAL GROUNDING NOTES

A. ALL GROUNDING LEADS INSTALLED TO ENSURE A SMOOTH PATH TO COUNTERPOISE WITHOUT KINKS OR SHARP BENDS OR RETURN UPWARDS.
B. IT IS THE INTENT THAT AT NO TIME ARE THE GROUND LEADS TO BE INSTALLED BELOW THE SURFACE OF THOSE AREAS DESIGNATED FOR FUTURE DISASSOCIATED PADS OR SHELTERS.
C. ANY EXCEPTIONS TO THIS BASIC GROUND DESIGN GUIDELINE, ROUTE DESIGN, OR MODIFICATIONS, WILL BE DOCUMENTED AND DIMENSIONED BY WAY OF RED LINE DRAWINGS. IT IS THE RESPONSIBILITY OF THE SELECTED CONTRACTOR TO ENSURE THE NEWLY INSTALLED GROUNDING SYSTEM MEETS THE CROWN STANDARD OF 5 OHMS OR LESS.

### GROUNDING KEY NOTES (#)

1. MECHANICAL CONNECTION TYPICAL.
2. (N) ELECTRICAL SERVICE ENTRANCE SECTION GROUND RODS, REFER TO ONE-LINE ON THIS SHEET FOR DETAILS. SERVICE GROUND RODS ARE SEPARATED FROM EQUIPMENT GROUND RODS. (TYP OF 2 PLACES).
3. (N) #2 SOLID BARE COPPER WIRE FROM THE SERVICE DISCONNECT TO THE SERVICE GROUND RODS.
4. (N) 5/8" X 10' COPPER GROUND ROD
5. (N) #2 SOLID BARE COPPER WIRE FROM EQUIPMENT GROUND BAR TO GROUND ROD




## 1 GROUNDING PLAN NTS

T-Mobile
900 SOUTH BROADWAY, DENVER, CO 80209

PROJECT INFORMATION:

SITE NAME:
DN03991GA

SITE ID:
POWER SUPPLY 2

SITE ADDRESS:
14922 E. GATEWAY AVE.
DENVER, CO 80239

SITE COUNTY:
DENVER COUNTY

| Rev: | Date: | Description: | By: |
|---|---|---|---|
| A | 04.23.25 | PRELIMINARY | MM |
| B | 11.04.25 | DOTI SUBMITTAL | DPL |

UCI CONSTRUCTION SERVICES, LLC
4751 FOX STREET, DENVER, CO 80216

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

SHEET TITLE:
ONELINE CALCS

SHEET NUMBER:
E2.0

| DRAWN BY: | CHK BY: | APV BY: |
|---|---|---|
| MM | DL | TN |

PRELIMINARY

U:\Colorado\DN3991GA_Power Supplies\PS-02\CAD\DN03991GA_PS-02_FMPS AZHL_permit set.dwg PLOT DATE: 11/4/2025 BY:Dan Little

3 NOT USED

## NEW ELECTRICAL PANEL SCHEDULE

**PANEL: NODE DN1087** **10KAIC FULLY RATED** VOLTAGE: 240/120V, 1Ø, 3W

LOCATION: PER PLAN MAINS: 100A MLO

MOUNTING: SURFACE NEMA RATING: N3R BUS: 100A CU

| MAIN | 1 | 2 | 3 | 4 | 5 | 6 | TOTAL PER PHASE | TOTAL VA |
|---|---|---|---|---|---|---|---|---|
| | SURGE PROTECTION DEVICE | | APAM UNIT | | FUTURE APAM UNIT | | | |
| PHASE A VA | 0 | | 1150 | | 1150 | | 2300 | 4600 |
| PHASE B VA | | 0 | | 1150 | | 1150 | 2300 | |
| BREAKER SIZE | 2P/60 | | 2P/20 | | 2P/20 | | | |
| PHASE/NEUTRAL SIZE | | | 12 | | | | | |
| GROUND SIZE | | | 12 | | | | | |

NEC DEMAND LOAD: 4600 VA x 1.25 = 5750 VA (24A)

NOTES:
1. PANEL SHALL HAVE MIN. SCCR & AIC RATING OF 10,000A
2. USE SQUARE D MODEL HOM612L100RB

2 NODE DN1087 PANEL SCHEDULE

## LOAD CENTER PANEL "A"

VOLTS: 120 / 240 PHASE: 1 # OF WIRES: 3 BUS SIZE: 100A MAIN SIZE: 100A MAIN TYPE: MCB

MINIMUM AIC RATING: 10,000 AIC NEMA 3R ENCLOSURE MOUNT STYLE: SURFACE

| DESCRIPTION | POS | BREAKER | VOLT AMPS | Ø | VOLT AMPS | BREAKER | POS | DESCRIPTION |
|---|---|---|---|---|---|---|---|---|
| SURGE PROTECTION DEVICE | 1 | 60A/2P | 0 | A | 1500 | 20A/2P | 2 | PDM 1 |
| | 3 | | 0 | B | 1500 | | 4 | |
| PDM 2 | 5 | 20A/2P | 1500 | A | 1500 | | 6 | PDM 3 |
| | 7 | | 1500 | B | 1500 | | 8 | |
| PDM 4 | 9 | 20A/2P | 1500 | A | 1500 | 200A/2P | 10 | PDM 5 |
| | 11 | | 1500 | B | 1500 | | 12 | |
| PDM 6 | 13 | 20A/2P | 1500 | A | 180 | 20A/1P | 14 | GFCI OUTLET |
| | 15 | | 1500 | B | 0 | | 16 | |
| SPACE | 17 | | 0 | A | 0 | | 18 | SPACE |
| SPACE | 19 | | 0 | B | 0 | | 20 | SPACE |
| SPACE | 21 | | 0 | A | 0 | | 22 | SPACE |
| SPACE | 23 | | 0 | B | 0 | | 24 | SPACE |

PHASE LOAD TOTALS: PHASE A: 9180 PHASE B: 9000

PANEL LOAD CALCULATIONS

| | | | | |
|---|---|---|---|---|
| LIGHTS | 0 | VOLT AMPS X 1.25 | 0.00 | VOLT AMPS |
| RECEPTACLES 1ST 10KVA | 180 | VOLT AMPS X 1.00 | 180 | VOLT AMPS |
| LARGEST MOTOR | 0 | VOLT AMPS X 1.25 | 0.00 | VOLT AMPS |
| REMAINDER MOTOR | 0 | VOLT AMPS X 1.00 | 0 | VOLT AMPS |
| RECTIFIER | 0 | VOLT AMPS X 1.00 | 0 | VOLT AMPS |
| OTHER | 18000 | VOLT AMPS X 1.00 | 18000 | VOLT AMPS |
| | | | 18180 | TOTAL DEMAND |
| | | | 76 | AMPS, 1Ø 3W |

NEC DEMAND LOAD: 18,180 VA x 1.25 = 22,725 VA (95A)

NOTES:
1. PANEL SHALL HAVE MIN. SCCR & AIC RATING OF 10,000A
2. USE SQUARE D MODEL QO120M100PRB

1 FMPS PANEL SCHEDULE "A" NTS

T-Mobile
900 SOUTH BROADWAY, DENVER, CO 80209

PROJECT INFORMATION:

SITE NAME:
DN03991GA

SITE ID:
POWER SUPPLY 2

SITE ADDRESS:
14922 E. GATEWAY AVE.
DENVER, CO 80239

SITE COUNTY:
DENVER COUNTY

| Rev: | Date: | Description: | By: |
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| A | 04.23.25 | PRELIMINARY | MM |
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UCI
CONSTRUCTION SERVICES, LLC
4751 FOX STREET, DENVER, CO 80216

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SHEET TITLE:

PANEL DETAILS

SHEET NUMBER:

E2.0

| DRAWN BY: | CHK BY: | APV BY: |
|---|---|---|
| MM | DL | TN |

PRELIMINARY

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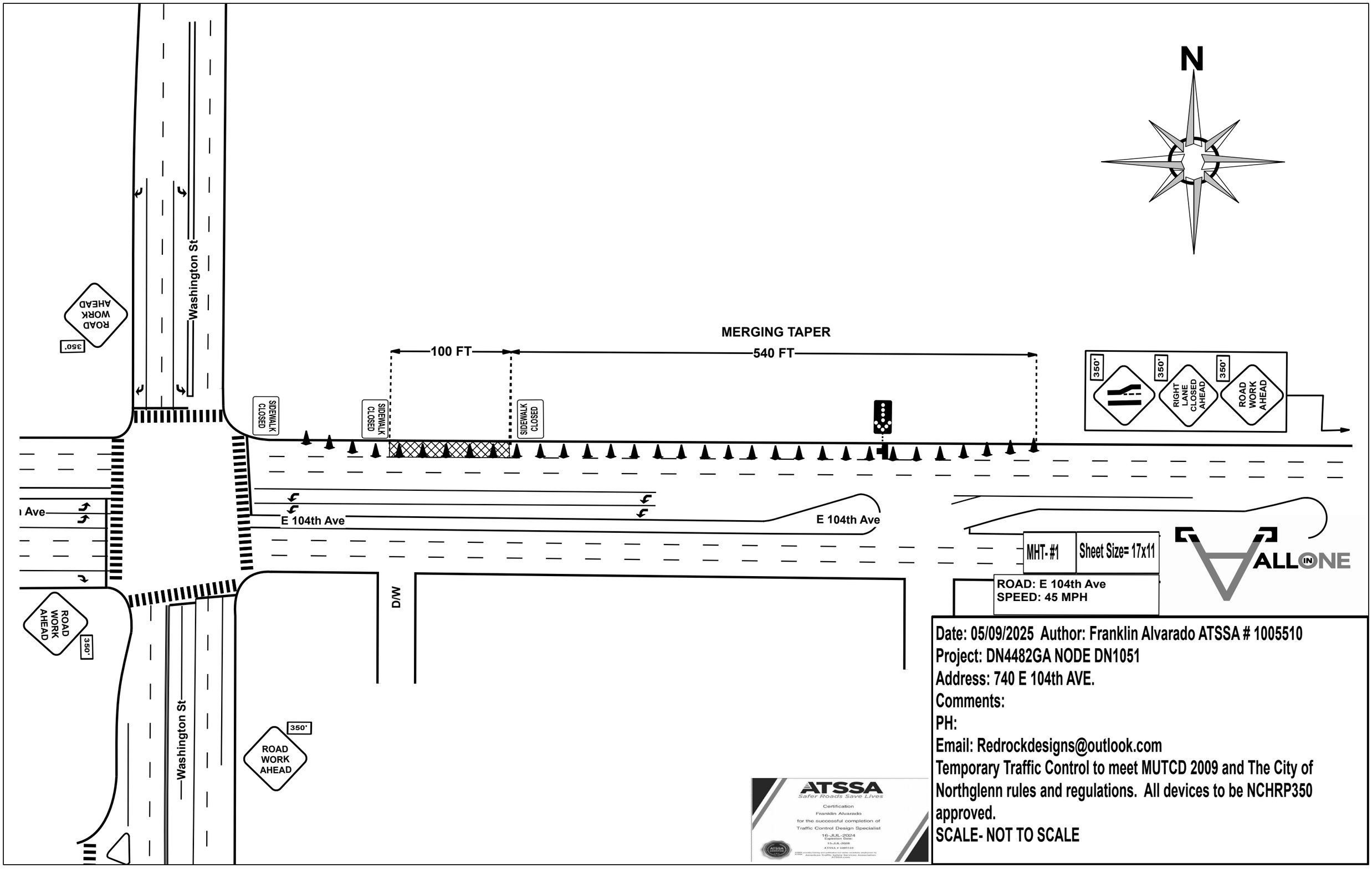





Date: 05/09/2025 Author: Franklin Alvarado ATSSA # 1005510
Project: DN4482GA NODE DN1051
Address: 740 E 104th AVE.
Comments:
PH:
Email: Redrockdesigns@outlook.com
Temporary Traffic Control to meet MUTCD 2009 and The City of Northglenn rules and regulations. All devices to be NCHRP350 approved.
SCALE- NOT TO SCALE