

Full Size or Largest Size
(site plan, landscape, elevations)



PHO ARROYOS

N.E. CORNER OF N. 92ND ST & E. CHOLLA BLVD
SCOTTSDALE, AZ 85260
MARICOPA COUNTY

**STIPULATION SET
RETAIN FOR RECORDS
APPROVED**

11-15-18 KN
DATE INITIALS

PREPARED FOR:

126 W. GEMINI DR. TEMPE, AZ 85283
PHONE: (480) 777-4300
FAX: (480) 777-4301

CONSULTING FIRM

1426 N. MARVIN STREET # 101
GILBERT, AZ 85233

PROJECT NO:	PHO ARROYOS
DRAWN BY:	CGS
CHECKED BY:	KF

REV	DATE	DESCRIPTION	BY
A	03/01/17	ISSUED FOR REVIEW	CGS
B	06/27/17	ISSUED FOR REVIEW	CDA
C	07/20/17	CLIENT COMMENTS	CGS
0	08/09/17	ISSUED FOR PERMIT	JMC
1	07/12/18	ISSUED FOR PERMIT	M.G.

PHO ARROYOS

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SCOTTSDALE, AZ 85260
MARICOPA COUNTY

SHEET TITLE

PROJECT INFORMATION

SHEET NUMBER

T-1

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PROJECT DESCRIPTION

SCOPE OF WORK

- INSTALLATION OF (1) NEW 11'-0" x 16'-0" VERIZON WIRELESS CMU COMPOUND
- REMOVAL OF EXISTING SIGNAL LIGHT POLE
- INSTALLATION OF (1) NEW SIGNAL LIGHT POLE
- INSTALLATION OF (1) NEW 6'-0" SLIDING GATE
- INSTALLATION OF (1) NEW CABINET
- INSTALLATION OF (2) OVPS AT GROUND LEVEL
- INSTALLATION OF (1) ILC MOUNTED TO WALL
- INSTALLATION OF (1) METER AND DISCONNECT MOUNTED TO WALL
- INSTALLATION OF (3) NEW ANTENNAS W/ CABLE SHROUD ON NEW SIGNAL LIGHT POLE
- INSTALLATION OF (6) NEW DIPLEXERS ON NEW SIGNAL LIGHT POLE

CLIENT

VERIZON WIRELESS
126 W. GEMINI DR.
TEMPE, AZ 85283
CONTACT: RICK MIRANDA
PHONE: (602) 390-9844

PROPERTY OWNER

R.O.W.

TOWER OWNER

CITY OF SCOTTSDALE
7447 E. INDIAN SCHOOL RD.
SCOTTSDALE, AZ 85251
CONTACT: KEITH NEIDER

SITE ACQUISITION

PINNACLE CONSULTING, INC.
1426 N. MARVIN STREET # 101
GILBERT, AZ 85233
CONTACT: MICHELLE LAMOUREUX
PHONE: (480) 664-9588 ext. 230

A&E FIRM

PINNACLE CONSULTING, INC.
1426 N. MARVIN STREET # 101
GILBERT, AZ 85233
CONTACT: KYLE FORTIN
PHONE: (623) 217-4235

PROJECT DATA

ZONING: R.O.W.
PARCEL #: N/A
USE: UNMANNED COMMUNICATIONS
NEW LEASE AREA: 176 SQ. FT
JURISDICTION: CITY OF SCOTTSDALE

GOVERNING CODES: 2015 INTERNATIONAL BUILDING CODE
2014 NATIONAL ELECTRIC CODE
2015 INTERNATIONAL MECHANICAL CODE
2015 INTERNATIONAL FIRE CODE
2015 INTERNATIONAL PLUMBING CODE

ALL BUILDING CODES LISTED ABOVE SHALL INCLUDE AMENDMENTS BY THE GOVERNING JURISDICTION

NEW SITE LOCATION

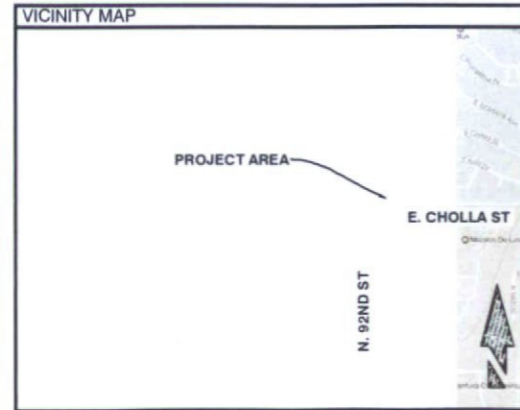
LATITUDE: 33.58989° N (NAD83)
LONGITUDE: 111.8825° W (NAD83)
GROUND ELEVATION: 1389.3' (NAVD88)

GENERAL NOTES

- THIS WIRELESS TELECOMMUNICATIONS FACILITY WILL MEET THE HEALTH AND SAFETY STANDARDS FOR ELECTROMAGNETIC FIELD EMISSIONS AS ESTABLISHED BY THE FEDERAL COMMUNICATIONS COMMISSION OR ANY SUCCESSOR THEREOF, AND ANY OTHER FEDERAL OR STATE AGENCY.
- THIS WIRELESS TELECOMMUNICATIONS FACILITY WILL MEET THE REGULATIONS OF THE FEDERAL COMMUNICATIONS COMMISSION REGARDING PHYSICAL AND ELECTROMAGNETIC INTERFERENCE.
- LIGHTING OR SIGNS WILL BE PROVIDED ONLY AS REQUIRED BY FEDERAL OR STATE AGENCIES.
- DEVELOPMENT AND CONSTRUCTION OF THIS PROJECT WILL COMPLY WITH ALL APPLICABLE CODES AND ORDINANCES.
- EXISTING PARKING IS NOT AFFECTED BY THIS PROJECT.
- THIS PROJECT DOES NOT INCLUDE WATER OR SEWER.

APPROVALS

(RF): _____ DATE: _____
(CONST.): _____ DATE: _____
(RE): _____ DATE: _____
LANDLORD: _____ DATE: _____



SITE DIRECTIONS

DEPART 126 W. GEMINI DR. TEMPE, AZ 85283 ON W. GEMINI DR (EAST). TURN RIGHT (SOUTH) ONTO S. MAPLE AVE. TURN LEFT (EAST) ONTO W. GUADALUPE RD. KEEP STRAIGHT ONTO E. GUADALUPE RD. TURN LEFT (NORTH) ONTO S. PRICE RD. TAKE RAMP (LEFT) ONTO AZ-101 LOOP (PRICE FWY). AT EXIT 41, KEEP RIGHT ONTO RAMP. TAKE RAMP (RIGHT) ONTO E. SHEA BLVD. TURN LEFT (NORTH) ONTO N. 92ND ST. ARRIVE AT THE NEW LOCATION ON RIGHT.

GENERAL NOTES:

- FOR THE PURPOSE OF CONSTRUCTION DRAWING, THE FOLLOWING DEFINITIONS SHALL APPLY:
 CONTRACTOR - CONTRACTOR
 SUBCONTRACTOR - GENERAL CONTRACTOR (CONSTRUCTION)
 OWNER - VERIZON WIRELESS
 OEM - ORIGINAL EQUIPMENT MANUFACTURE
- PRIOR TO THE SUBMISSION OF BIDS, THE BIDDING SUBCONTRACTOR SHALL VISIT THE CELL SITE TO FAMILIARIZE WITH THE EXISTING CONDITIONS AND TO CONFIRM THAT THE WORK CAN BE ACCOMPLISHED AS SHOWN ON THE CONSTRUCTION DRAWINGS. ANY DISCREPANCY FOUND SHALL BE BROUGHT TO THE ATTENTION OF CONTRACTOR.
- ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES. SUBCONTRACTOR SHALL ISSUE ALL APPROPRIATE NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF THE WORK. ALL WORK CARRIED OUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND LOCAL JURISDICTIONAL CODES, ORDINANCES AND APPLICABLE REGULATIONS.
- DRAWINGS PROVIDED HERE ARE NOT TO BE SCALED AND ARE INTENDED TO SHOW 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.
- DELETED
- THE SUBCONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.
- IF THE SPECIFIED EQUIPMENT CANNOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE SUBCONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION FOR APPROVAL BY THE CONTRACTOR.
- SUBCONTRACTOR SHALL DETERMINE ACTUAL ROUTING OF CONDUIT, POWER AND T1 CABLES, GROUNDING CABLES AS SHOWN ON THE POWER, GROUNDING AND TELCO PLAN DRAWING. SUBCONTRACTOR SHALL UTILIZE EXISTING TRAYS AND/OR SHALL ADD NEW TRAYS AS
- THE SUBCONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS, PAVEMENTS, CURBS, LANDSCAPING AND STRUCTURES. ANY DAMAGED PART SHALL BE REPAIRED AT SUBCONTRACTOR'S EXPENSE TO THE SATISFACTION OF OWNER.
- SUBCONTRACTOR SHALL LEGALLY AND PROPERLY DISPOSE OFF ALL SCRAP MATERIALS SUCH AS COAXIAL CABLES AND OTHER ITEMS REMOVED FROM THE EXISTING FACILITY. ANTENNAS REMOVED SHALL BE RETURNED TO THE OWNERS DESIGNATED LOCATION.
- SUBCONTRACTOR SHALL LEAVE PREMISES IN CLEAN CONDITION.
- ALL CONCRETE REPAIR WORK SHALL BE DONE IN ACCORDANCE WITH AMERICAN CONCRETE INSTITUTE (ACI) 301.
- ANY NEW CONCRETE NEEDED FOR THE CONSTRUCTION SHALL HAVE 4000 PSI STRENGTH AT 28 DAYS UNLESS OTHERWISE SPECIFIED. ALL CONCRETING WORK SHALL BE DONE IN ACCORDANCE WITH ACI 318 CODE REQUIREMENTS.
- ALL STRUCTURAL STEEL WORK SHALL BE DONE IN ACCORDANCE WITH AISC SPECIFICATIONS.
- CONSTRUCTION SHALL COMPLY WITH SPECIFICATION 25741-000-3AP5-AD02-00002, "GENERAL CONSTRUCTION SERVICES."
- SUBCONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS PRIOR TO COMMENCING ANY WORK. ALL DIMENSIONS OF EXISTING CONSTRUCTION SHOWN ON THE DRAWINGS MUST BE VERIFIED. SUBCONTRACTOR SHALL NOTIFY THE CONTRACTOR OF ANY DISCREPANCIES PRIOR TO ORDERING MATERIAL OR PROCEEDING WITH CONSTRUCTION.
- THE EXISTING CELL SITE IS IN FULL COMMERCIAL OPERATION. ANY CONSTRUCTION WORK BY SUBCONTRACTOR SHALL NOT DISRUPT THE EXISTING NORMAL OPERATION. ANY WORK ON EXISTING EQUIPMENT MUST BE COORDINATED WITH CONTRACTOR. ALSO, WORK MAY NEED TO BE SCHEDULED FOR AN APPROPRIATE MAINTENANCE WINDOW USUALLY IN LOW TRAFFIC PERIODS AFTER MIDNIGHT.
- SINCE THE CELL SITE MAY BE ACTIVE, ALL SAFETY PRECAUTIONS MUST BE TAKEN WHEN WORKING AROUND HIGH LEVELS OF ELECTROMAGNETIC RADIATION. EQUIPMENT SHOULD BE SHUT DOWN PRIOR TO PERFORMING ANY WORK THAT COULD EXPOSE THE WORKERS TO PERSONAL RF EXPOSURE MONITORS ARE REQUIRED TO BE WORN TO ALERT OF ANY DANGEROUS EXPOSURE LEVELS.

CONCRETE AND REINFORCING STEEL NOTES:

- ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH THE ACI 301, ACI 318, ACI 330, ASTM A184, ASTM A185 AND THE DESIGN AND CONSTRUCTION SPECIFICATION FOR CAST-IN-PLACE CONCRETE.
- ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI AT 28 DAYS UNLESS NOTED OTHERWISE.
- REINFORCING STEEL SHALL CONFORM TO ASTM A 615, GRADE 60, DEFORMED UNLESS NOTED OTHERWISE.
- THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCING STEEL UNLESS SHOWN OTHERWISE ON DRAWINGS:
 CONCRETE CAST AGAINST EARTH 3 IN.
 CONCRETE EXPOSED TO EARTH OR WEATHER #5 AND LARGER 2 IN.
 #5 AND SMALLER & WWF 1-1/2 IN.
 CONCRETE NOT EXPOSED TO EARTH OR WEATHER, NOR CAST AGAINST THE GROUND, SLAB AND WALL 3/4 IN.
 BEAMS AND COLUMNS 1-1/2 IN.
- A 3/4" CHAMFER SHALL BE PROVIDED AT ALL EXPOSED EDGES OF CONCRETE, U.N.O., IN ACCORDANCE WITH ACI 301 SECTION 4.2.4.
- POST INSTALLED ANCHORS SHALL BE PROVIDED IN ACCORDANCE WITH SPECIFICATION 3GS-T18-0013" SELECTION, DESIGN, INSTALLATION, INSPECTION AND TESTING OF ADHESIVE AND MECHANICAL EXPANSION ANCHORS FOR WIRELESS SITE FACILITIES". ANCHORS SHALL BE HELTI OR APPROVED EQUAL, INSTALLED, INSPECTED AND TESTED AS SHOWN ON THE DESIGN DRAWINGS. NO REINFORCING STEEL SHALL BE CUT WITHOUT PRIOR ENGINEERING APPROVAL.
- CONCRETE CYLINDER TEST IS NOT REQUIRED FOR SLAB ON GRADE WHEN CONCRETE IS LESS THAN 50 CUBIC YARDS (2012 IRC 1705.3(3)) IN THAT EVENT THE FOLLOWING RECORDS SHALL BE PROVIDED BY THE CONCRETE SUPPLIER:
 (A) RESULTS OF CONCRETE CYLINDER TESTS PERFORMED AT THE SUPPLIER'S PLANT.
 (B) CERTIFICATION OF MINIMUM COMPRESSIVE STRENGTH FOR THE CONCRETE GRADE SUPPLIED.
 FOR GREATER THAN 50 CUBIC YARDS THE GC SHALL PERFORM THE CONCRETE CYLINDER TEST, TAKING THREE CYLINDERS FROM EACH TRUCK.

GROUNDING NOTES:

- THE SUBCONTRACTOR SHALL REVIEW AND INSPECT THE EXISTING FACILITY GROUNDING SYSTEM AND LIGHTNING PROTECTION SYSTEM (AS DESIGNED AND INSTALLED) FOR STRICT COMPLIANCE WITH THE NEC (AS ADOPTED BY THE AHA), THE SITE-SPECIFIC (UL, LPL, OR NFPA) LIGHTING PROTECTION CODE, AND GENERAL COMPLIANCE WITH TELCORDIA AND TIA GROUNDING STANDARDS. THE SUBCONTRACTOR SHALL REPORT ANY VIOLATIONS OR ADVERSE FINDINGS TO THE CONTRACTOR FOR RESOLUTION.
- ALL GROUND ELECTRODE SYSTEMS (INCLUDING TELECOMMUNICATION, RADIO, LIGHTNING PROTECTION, AND AC POWER GSES) SHALL BE BONDED TOGETHER AT OR BELOW GRADE, BY TWO OR MORE COPPER BONDING CONDUCTORS IN ACCORDANCE WITH THE NEC.
- THE SUBCONTRACTOR SHALL PERFORM IEEE FALL-OF-POTENTIAL RESISTANCE TO EARTH TESTING (PER IEEE 1100 AND 81) FOR NEW GROUND ELECTRODE SYSTEMS. THE SUBCONTRACTOR SHALL FURNISH AND INSTALL SUPPLEMENTAL GROUND ELECTRODES AS NEEDED TO ACHIEVE A TEST RESULT OF 5 OHMS OR LESS. TESTS SHALL BE PERFORMED IN ACCORDANCE WITH 24782-000-3PS-EG000-0001, DESIGN & TESTING OF FACILITY GROUNDING FOR CELL SITES.
- METAL RACEWAY SHALL NOT BE USED AS THE NEC REQUIRED EQUIPMENT GROUND CONDUCTOR. STRANDED COPPER CONDUCTORS WITH GREEN INSULATION, SIZED IN ACCORDANCE WITH THE NEC, SHALL BE FURNISHED AND INSTALLED WITH THE POWER CIRCUITS TO BTS EQUIPMENT.
- EACH BTS CABINET FRAME SHALL BE DIRECTLY CONNECTED TO THE MASTER GROUND BAR WITH GREEN INSULATED SUPPLEMENTAL EQUIPMENT GROUND WRES, # AWG STRANDED COPPER OR LARGER FOR INDOOR BTS; 2 AWG STRANDED COPPER FOR OUTDOOR BTS.
- EXOTHERMIC WELDS SHALL BE USED FOR ALL GROUNDING CONNECTIONS BELOW GRADE.
- APPROVED ANTI-OXIDANT COATINGS (I.E., CONDUCTIVE GEL OR PASTE) SHALL BE USED ON ALL COMPRESSION AND BOLTED GROUND CONNECTIONS.
- ICE BRIDGE BONDING CONDUCTORS SHALL BE EXOTHERMICALLY BONDED OR BOLTED WITH STAINLESS STEEL HARDWARE TO THE BRIDGE AND THE TOWER GROUND BAR.
- ALUMINUM CONDUCTOR OR COPPER CLAD STEEL CONDUCTOR SHALL NOT BE USED FOR GROUNDING CONNECTIONS.
- MISCELLANEOUS ELECTRICAL AND NON-ELECTRICAL METAL BOXES, FRAMES AND SUPPORTS SHALL BE BONDED TO THE GROUND RING, IN ACCORDANCE WITH THE NEC.
- METAL CONDUIT AND TRAY SHALL BE GROUNDING AND MADE ELECTRICALLY CONTINUOUS WITH LISTED BONDING FITTINGS OR BY BONDING ACROSS THE DISCONTINUITY WITH # AWG COPPER WIRE UL APPROVED GROUNDING TYPE CONDUIT CLAMPS.
- GROUND CONDUCTORS USED IN THE FACILITY GROUND AND LIGHTNING PROTECTION SYSTEMS SHALL NOT BE ROUNDED THROUGH METALLIC OBJECTS THAT FORM A RING AROUND THE CONDUCTOR, SUCH AS METALLIC CONDUITS, METAL SUPPORT CLIPS OR SLEEVES THROUGH WALLS OR FLOORS. WHEN IT IS REQUIRED TO BE HOUSED IN CONDUIT TO MEET CODE REQUIREMENTS OR LOCAL CONDITIONS, NON-METALLIC MATERIAL SUCH AS PVC PLASTIC CONDUIT SHALL BE USED WHERE USE OF METAL CONDUIT IS UNAVOIDABLE (E.G., NON-METALLIC CONDUIT PROHIBITED BY LOCAL CODE). THE GROUND CONDUCTOR SHALL BE BONDED TO EACH END OF THE METAL CONDUIT.
- ALL TOWER GROUNDING SYSTEMS SHALL COMPLY WITH THE REQUIREMENTS OF ANSI/TIA 222. FOR TOWERS BEING BUILT TO REV Q OF THE STANDARD, THE WIRE SIZE OF THE BURIED GROUND RING AND CONNECTIONS BETWEEN THE TOWER AND THE BURIED GROUND RING SHALL BE CHANGED FROM 2 AWG TO 2/0 AWG. IN ADDITION, THE MINIMUM LENGTH OF THE GROUND RODS SHALL BE INCREASED FROM 8 FEET TO 10 FEET.

SITE WORK GENERAL NOTES:

- THE SUBCONTRACTOR SHALL CONTACT UTILITY LOCATING SERVICES PRIOR TO THE START OF CONSTRUCTION.
- ALL EXISTING ACTIVE SEWER, WATER, GAS, ELECTRIC, AND OTHER UTILITIES WHERE ENCOUNTERED IN THE WORK SHALL BE PROTECTED AT ALL TIMES, AND WHERE REQUIRED FOR THE PROPER EXECUTION OF THE WORK, SHALL BE RELOCATED AS DIRECTED BY THE SUBCONTRACTOR. EXTREME CAUTION SHOULD BE USED BY THE SUBCONTRACTOR WHEN EXCAVATING OR DRILLING PIERS AROUND OR NEAR UTILITIES. SUBCONTRACTOR SHALL PROVIDE SAFETY TRAINING FOR THE WORKING CREW. THIS WILL INCLUDE BUT NOT BE LIMITED TO A) FALL PROTECTION B) CONFINED SPACE C) ELECTRICAL SAFETY D) TRENCHING & EXCAVATION.
- ALL SITE WORK SHALL BE AS INDICATED ON THE DRAWINGS AND PROJECT SPECIFICATIONS.
- IF NECESSARY, RUBBISH, STUMPS, DEBRIS, STICKS, STONES AND OTHER REFUSE SHALL BE REMOVED FROM THE SITE AND DISPOSED OF LEGALLY.
- ALL EXISTING INACTIVE SEWER, WATER, GAS, ELECTRIC AND OTHER UTILITIES WHICH INTERFERE WITH THE EXECUTION OF THE WORK, SHALL BE REMOVED AND/OR CAPPED, PLUGGED OR OTHERWISE DISCONTINUED AT POINTS WHICH WILL NOT INTERFERE WITH THE EXECUTION OF THE WORK, SUBJECT TO THE APPROVAL OF CONTRACTOR, OWNER AND/OR LOCAL UTILITIES.
- SUBCONTRACTOR SHALL MINIMIZE DISTURBANCE TO EXISTING SITE DURING CONSTRUCTION.
- THE SUBCONTRACTOR SHALL PROVIDE SITE SIGNAGE IN ACCORDANCE WITH THE VERIZON WIRELESS SPECIFICATION FOR SITE SIGNAGE.
- THE SITE SHALL BE GRADED TO CAUSE SURFACE WATER TO FLOW AWAY FROM THE BTS EQUIPMENT AND TOWER AREAS.
- NO FILL OR EMBANKMENT MATERIAL SHALL BE PLACED ON FROZEN GROUND. FROZEN MATERIALS, SNOW OR ICE SHALL NOT BE PLACED IN ANY FILL OR EMBANKMENT.
- THE SUB GRADE SHALL BE COMPACTED AND BROUGHT TO A SMOOTH UNIFORM GRADE PRIOR TO FINISHED SURFACE APPLICATION.
- THE AREAS OF THE OWNERS PROPERTY DISTURBED BY THE WORK AND NOT COVERED BY THE TOWER, EQUIPMENT OR DRIVEWAY, SHALL BE GRADED TO A UNIFORM SLOPE, AND STABILIZED TO PREVENT EROSION.
- SUBCONTRACTOR SHALL MINIMIZE DISTURBANCE TO EXISTING SITE DURING CONSTRUCTION. EROSION CONTROL MEASURES, IF REQUIRED DURING CONSTRUCTION, SHALL BE IN CONFORMANCE WITH THE LOCAL JURISDICTION'S GUIDELINES FOR EROSION AND SEDIMENT CONTROL.

MASONRY NOTES:

- MASONRY WALLS SHALL BE CONSTRUCTED OF 8" STANDARD HOLLOW CONCRETE MASONRY UNITS SHALL CONFORMING TO ASTM C90, GRADE N, TYPE 1, FM = 1,800 PSI, RUNNING BOND, MORTAR TYPE S, 1,800 PSI GROUT SHALL BE 2,000 PSI, MECHANICALLY VIBRATE GROUT IN VERTICAL SPACES IMMEDIATELY AFTER POURING AND AGAIN ABOUT 5 MINUTES LATER. PROVIDE CLEANOUTS IF GROUT LIFT EXCEEDS 4'-0" IN BLOCK WALLS. MAXIMUM GROUT LIFT SHALL BE 8'-0". CONTROL JOINTS REQUIRED IN ALL WALLS GREATER THAN 24'-0" IN LENGTH. SPACE CONTROL JOINTS AT 24'-0" MAXIMUM.

ELECTRICAL INSTALLATION NOTES:

- WIRING, RACEWAY, AND SUPPORT METHODS AND MATERIALS SHALL COMPLY WITH THE REQUIREMENTS OF THE NEC AND TELCORDIA.
- SUBCONTRACTOR SHALL MODIFY EXISTING CABLE TRAY SYSTEM AS REQUIRED TO SUPPORT RF AND TRANSPORT CABLE TO THE NEW BTS EQUIPMENT. SUBCONTRACTOR SHALL SUBMIT MODIFICATIONS TO CONTRACTOR FOR APPROVAL.
- ALL CIRCUITS SHALL BE SEGREGATED AND MAINTAIN MINIMUM CABLE SEPARATION AS REQUIRED BY THE NEC AND TELCORDIA.
- CABLES SHALL NOT BE ROUTED THROUGH LADDER-STYLE CABLE TRAY RUNGINGS.
- EACH END OF EVERY POWER, GROUNDING, AND T1 CONDUCTOR AND CABLE SHALL BE LABELED WITH COLOR-CODED INSULATION OR ELECTRICAL TAPE (3M BRAND, 1/2 INCH PLASTIC ELECTRICAL TAPE WITH UV PROTECTION, OR EQUAL). THE IDENTIFICATION METHOD SHALL CONFORM WITH NEC & OSHA, AND MATCH EXISTING INSTALLATION REQUIREMENTS.
- POWER PHASE CONDUCTORS (I.E., HOTS) SHALL BE LABELED WITH COLOR-CODED INSULATION OR ELECTRICAL TAPE (3M BRAND, 1/2 INCH PLASTIC ELECTRICAL TAPE WITH UV PROTECTION, OR EQUAL). PHASE CONDUCTOR COLOR CODES SHALL CONFORM WITH THE NEC & OSHA AND MATCH EXISTING INSTALLATION REQUIREMENTS.
- ALL ELECTRICAL COMPONENTS SHALL BE CLEARLY LABELED WITH ENGRAVED LAMACOD PLASTIC LABELS. ALL EQUIPMENT SHALL BE LABELED WITH THEIR VOLTAGE RATING, PHASE CONFIGURATION, WIRE CONFIGURATION, POWER OR AMPACITY RATING, AND BRANCH CIRCUIT ID NUMBERS (I.E., PANELBOARD AND CIRCUIT ID#).
- PANELBOARDS (ID NUMBERS) AND INTERNAL CIRCUIT BREAKERS (CIRCUIT ID NUMBERS) SHALL BE CLEARLY LABELED WITH ENGRAVED LAMACOD PLASTIC LABELS.
- ALL TIE WRAPS WHERE PERMITTED SHALL BE CUT FLUSH WITH APPROVED CUTTING TOOL TO REMOVE SHARP EDGES. USE LOW PROFILE TIE WRAPS.
- POWER, CONTROL, AND EQUIPMENT GROUND WIRING IN TUBING OR CONDUIT SHALL BE SINGLE CONDUCTOR (12 AWG OR LARGER), 600 V, OIL RESISTANT THHN OR THWN-2, CLASS B STRANDED COPPER CABLE RATED FOR 90 °C (WET AND DRY) OPERATION; LISTED OR LABELED FOR THE LOCATION AND RACEWAY SYSTEM USED, UNLESS OTHERWISE SPECIFIED.
- SUPPLEMENTAL EQUIPMENT GROUND WIRING LOCATED INDOORS SHALL BE SINGLE CONDUCTOR (12 AWG OR LARGER), 600 V, OIL RESISTANT THHN OR THWN-2, GREEN INSULATION, CLASS B STRANDED COPPER CABLE RATED FOR 90 °C (WET AND DRY) OPERATION; LISTED OR LABELED FOR THE LOCATION AND RACEWAY SYSTEM USED, UNLESS OTHERWISE SPECIFIED.
- SUPPLEMENTAL EQUIPMENT GROUND WIRING LOCATED OUTDOORS, OR BELOW GRADE, SHALL BE SINGLE CONDUCTOR 2 AWG SOLID TINNED COPPER CABLE, UNLESS OTHERWISE SPECIFIED.
- POWER WIRING, NOT IN TUBING OR CONDUIT, SHALL BE MULTI-CONDUCTOR, TYPE TC CABLE (12 AWG OR LARGER), 600 V, OIL RESISTANT THHN OR THWN-2, CLASS B STRANDED COPPER CABLE RATED FOR 90 °C (WET AND DRY) OPERATION; WITH OUTER JACKET; LISTED OR LABELED FOR THE LOCATION USED, UNLESS OTHERWISE SPECIFIED.
- ALL POWER AND GROUNDING CONNECTIONS SHALL BE CRIMP-STYLE, COMPRESSION WIRE LUGS AND WRENUTS BY THOMAS AND BETTS (OR EQUAL). LUGS AND WRENUTS SHALL BE RATED FOR OPERATION AT NO LESS THAN 75°C (90°C IF AVAILABLE).
- RACEWAY AND CABLE TRAY SHALL BE LISTED OR LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA, UL, ANSII/IEE, AND NEC.
- NEW RACEWAY OR CABLE TRAY WILL MATCH THE EXISTING INSTALLATION WHERE POSSIBLE.
- ELECTRICAL METALLIC TUBING (EMT) OR RIGID NONMETALLIC CONDUIT (I.E., RIGID PVC SCHEDULE 40, OR RIGID PVC SCHEDULE 80 FOR LOCATIONS SUBJECT TO PHYSICAL DAMAGE) SHALL BE USED FOR EXPOSED INDOOR LOCATIONS.
- ELECTRICAL METALLIC TUBING (EMT), ELECTRICAL NONMETALLIC TUBING (ENT), OR RIGID NONMETALLIC CONDUIT (RIGID PVC, SCHEDULE 40) SHALL BE USED FOR CONCEALED INDOOR LOCATIONS.
- GALVANIZED STEEL, INTERMEDIATE METALLIC CONDUIT (IMC) SHALL BE USED FOR OUTDOOR LOCATIONS ABOVE GRADE.
- RIGID NONMETALLIC CONDUIT (I.E., RIGID PVC SCHEDULE 40 OR RIGID PVC SCHEDULE 80) SHALL BE USED UNDERGROUND, DIRECT BURIED, IN AREAS OF OCCASIONAL LIGHT VEHICLE TRAFFIC OR ENCASED IN REINFORCED CONCRETE IN AREAS OF HEAVY VEHICLE TRAFFIC.
- LIQUID-TIGHT FLEXIBLE METALLIC CONDUIT (LIQUID-TITE FLEX) SHALL BE USED INDOORS AND OUTDOORS, WHERE VIBRATION OCCURS OR FLEXIBILITY IS NEEDED.
- CONDUIT AND TUBING FITTINGS SHALL BE THREADED OR COMPRESSION-TYPE AND APPROVED FOR THE LOCATION USED. SETSCREW FITTINGS ARE NOT ACCEPTABLE.
- CABINETS, BOXES, AND WIREWAYS SHALL BE LISTED OR LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA, UL, ANSII/IEE, AND NEC.
- CABINETS, BOXES, AND WIREWAYS TO MATCH THE EXISTING INSTALLATION WHERE POSSIBLE.
- WIREWAYS SHALL BE EPOXY-COATED (GRAY) AND INCLUDE A HINGED COVER, DESIGNED TO SWING OPEN DOWNWARD. SHALL BE PANDUIT TYPE E (OR EQUAL), AND RATED NEMA 1 (OR BETTER) INDOORS, OR NEMA 3R (OR BETTER) OUTDOORS.
- EQUIPMENT CABINETS, TERMINAL BOXES, JUNCTION BOXES, AND PULL BOXES SHALL BE GALVANIZED OR EPOXY-COATED SHEET STEEL, SHALL MEET OR EXCEED UL 50, AND RATED NEMA 1 (OR BETTER) INDOORS, OR NEMA 3R (OR BETTER) OUTDOORS.
- METAL RECEPTACLE SWITCH, AND DEVICE BOXES SHALL BE GALVANIZED, EPOXY-COATED, OR NON-CORRODING, SHALL MEET OR EXCEED UL 514A AND NEMA OS 1, AND RATED NEMA 1 (OR BETTER) INDOORS, OR WEATHER PROTECTED (WP OR BETTER) OUTDOORS.
- NONMETALLIC RECEPTACLE SWITCH, AND DEVICE BOXES SHALL MEET OR EXCEED NEMA OS 2, AND RATED NEMA 1 (OR BETTER) INDOORS, OR WEATHER PROTECTED (WP OR BETTER) OUTDOORS.
- THE SUBCONTRACTOR SHALL NOTIFY AND OBTAIN NECESSARY AUTHORIZATION FROM THE OWNER BEFORE COMMENCING WORK ON THE AC POWER DISTRIBUTION PANELS.
- THE SUBCONTRACTOR SHALL PROVIDE NECESSARY TAGGING ON THE BREAKERS, CABLES AND DISTRIBUTION PANELS IN ACCORDANCE WITH THE APPLICABLE CODES AND STANDARDS TO SAFEGUARD AGAINST LIFE AND PROPERTY.

SOIL COMPACTION NOTES FOR SLAB ON GRADE:

- EXCAVATE AS REQUIRED TO REMOVE VEGETATION & TOPSOIL, EXPOSE UNDISTURBED NATURAL SUBGRADE AND PLACE CRUSHED STONE AS REQUIRED.
- COMPACTION CERTIFICATION: AN INSPECTION AND WRITTEN CERTIFICATION BY A QUALIFIED GEOTECHNICAL TECHNICIAN OR ENGINEER IS ACCEPTABLE.
- AS AN ALTERNATIVE TO ITEM 2a, THE "UNDISTURBED SOIL" BASE SHALL BE COMPACTED WITH "COMPACTION EQUIPMENT", LISTED BELOW, TO AT LEAST 90% MODIFIED PROCTOR MAXIMUM DENSITY PER ASTM D 1557 METHOD C.
- AS AN ALTERNATIVE TO ITEMS 2a AND 2b, PROOFROLL THE SUBGRADE SOILS WITH 5 PASSES OF A MEDIUM SIZED VIBRATORY PLATE COMPACTOR (SUCH AS BOMAG BPR 30/38) OR HAND-OPERATED SINGLE DRUM VIBRATORY ROLLER (SUCH AS BOMAG BW 55E). ANY SOFT AREAS THAT ARE ENCOUNTERED SHOULD BE REMOVED AND REPLACED WITH A WELL-GRADED GRANULAR FILL AND COMPACTED AS STATED ABOVE.
- COMPACTED SUBBASE SHALL BE UNIFORM & LEVELLED. PROVIDE 6" MINIMUM CRUSHED STONE OR GRAVEL COMPACTED IN 3' LIFTS ABOVE COMPACTED SOIL. GRAVEL SHALL BE NATURAL OR CRUSHED WITH 100% PASSING 1" SIEVE.

COMPACTION EQUIPMENT:

HAND OPERATED DOUBLE DRUM, VIBRATORY ROLLER, VIBRATORY PLATE COMPACTOR OR JUMPING JACK COMPACTOR.

SYMBOLS

- SOLID GROUND BUS BAR
- SOLID NEUTRAL BUS BAR
- SUPPLEMENTAL GROUND BAR
- 2-POLE THERMAL-MAGNETIC CIRCUIT BREAKER
- SINGLE-POLE THERMAL-MAGNETIC CIRCUIT BREAKER
- CHEMICAL GROUND ROD
- GROUND ROD
- DISCONNECT SWITCH
- METER
- CADWELD TYPE CONNECTION
- COMPRESSION TYPE CONNECTION
- GROUNDING WIRE

ABBREVIATIONS

- AGL ABOVE GRADE LEVEL
- BTS BASE TRANSCEIVER STATION
- (E) EXISTING
- NEW NEW
- MIN MINIMUM
- N.T.S NOT TO SCALE
- REF REFERENCE
- RF RADIO FREQUENCY
- TYP TYPICAL
- REQ REQUIRED
- ESR EQUIPMENT GROUND RING
- AWG AMERICAN WIRE GAUGE
- CRGB MASTER GROUND BAR (MASTER GROUND BAR)
- EG EQUIPMENT GROUND
- BCW BARE COPPER WIRE
- SIAD SMART INTEGRATED ACCESS DEVICE
- GEN GENERATOR
- IGR INTERIOR GROUND RING (HALO)
- RBS RADIO BASE STATION

PREPARED FOR:

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 FAX: (480) 777-4361

CONSULTING FIRM

1426 N. MARVIN STREET # 101
 GILBERT, AZ 85233

PROJECT NO:	PHO ARROYOS
DRAWN BY:	CGS
CHECKED BY:	KF

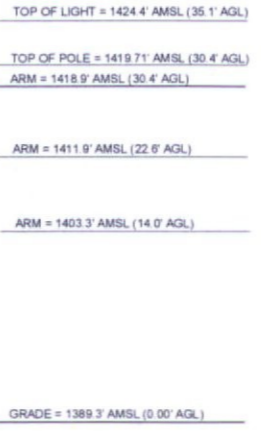
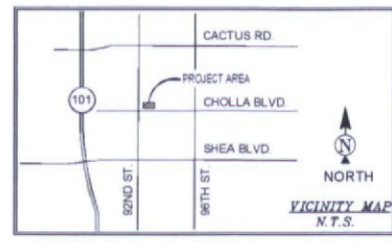
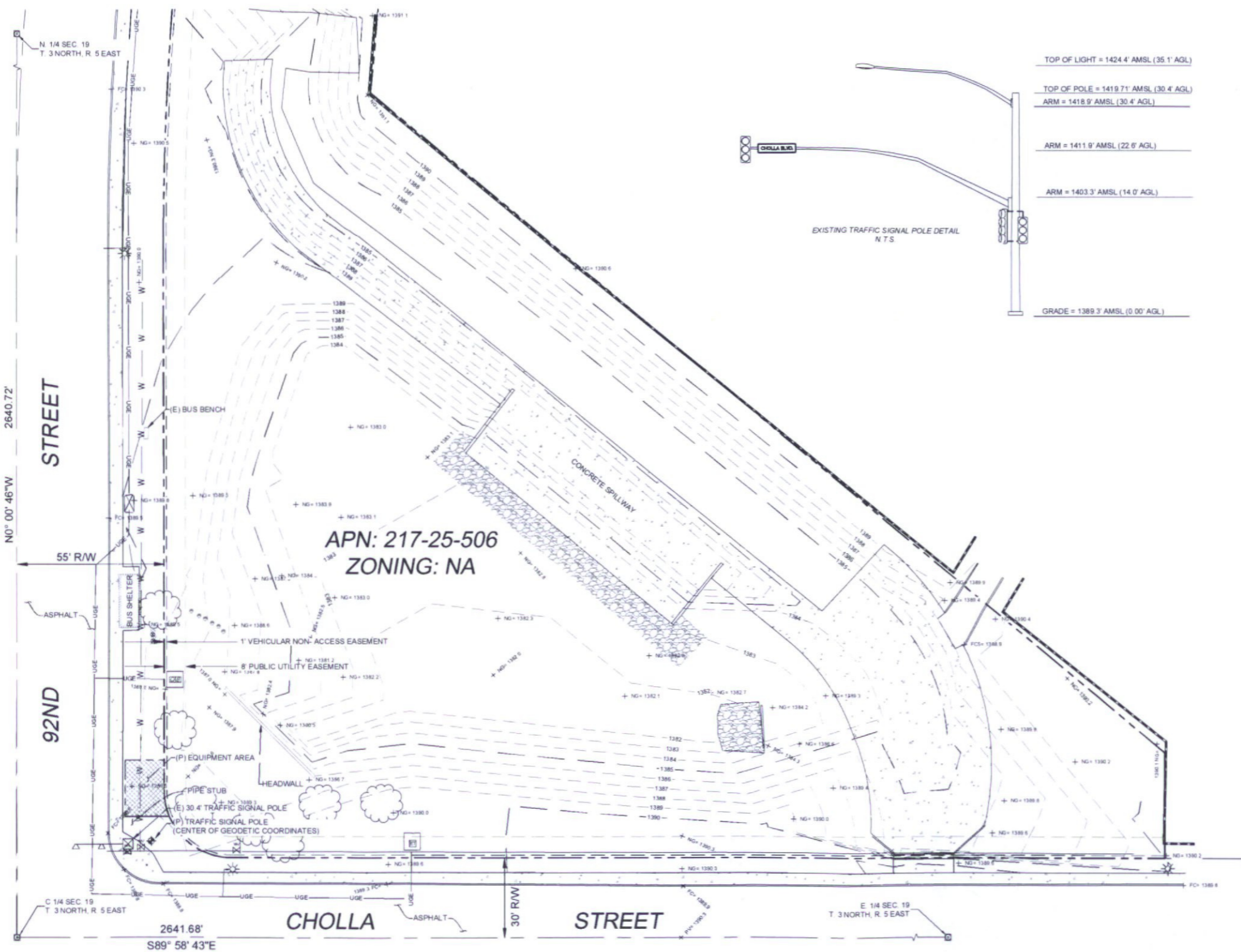
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A	03/01/17	ISSUED FOR REVIEW	CGS
B	06/27/17	ISSUED FOR REVIEW	CDA
C	07/20/17	CLIENT COMMENTS	CGS
0	08/09/17	ISSUED FOR PERMIT	JMC
1	07/12/18	ISSUED FOR PERMIT	M.G.

PHO ARROYOS

N.E. CORNER OF N. 92ND ST & E. CHOLLA BLVD
 SCOTTSDALE, AZ 85260
 MARICOPA COUNTY

SHEET TITLE
GENERAL NOTES

SHEET NUMBER
GN-1



LEGEND

- NG NATURAL GRADE
- FC FACE OF CURB
- R/W RIGHT OF WAY
- PV ASPHALT
- DW ACCESS DRIVEWAY
- TOP TOP OF SLOPE
- TOE TOE OF SLOPE
- WF WROUGHT IRON FENCE
- SW SIDEWALK
- PRPT TOP OF PARAPET
- WL TOP OF WALL
- CLF CHAIN LINK FENCE
- CMU CONCRETE MASONRY UNIT
- C CONCRETE
- SPOT ELEVATION
- WATER METER
- WATER CONTROL VALVE
- FIRE HYDRANT
- DOWN GUY
- POWER POLE
- LIGHT POLE
- STREET LIGHT WIMAST
- ELECTRICAL TRANSFORMER
- ELECTRICAL PULL BOX
- ELECTRICAL METER
- BREAKLINE
- IRRIGATION CONTROL VALVE
- BOLLARD
- SIGN
- POSITION OF GEODETIC COORDINATES
- PROPERTY LINE
- PROPERTY LINE (OTHER)
- CENTERLINE
- EASEMENT LINE
- LEASE LINE
- OHE OVERHEAD ELECTRIC LINE
- UGE U/G ELECTRIC LINE
- UTG U/G TELECOMMUNICATION LINE
- FO U/G FIBER OPTIC LINE
- GAS U/G GAS LINE
- SS SANITARY SEWER LINE
- W U/G WATER LINE

POSITION OF GEODETIC COORDINATES
 LATITUDE 33° 35' 23.591" NORTH (NAD83)
 LONGITUDE 111° 52' 57.080" WEST (NAD83)
 ELEVATION @ GROUND= 1389.3' (NAVD88)

LESSOR'S LEGAL DESCRIPTION
 CITY OF SCOTTSDALE RIGHT-OF-WAY



- PROJECT META DATA**
- ELEVATIONS SHOWN HEREON ARE REPRESENTED IN NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88) ESTABLISHED FROM GPS DERIVED ELLIPSOID HEIGHTS, APPLYING GEOID 09 SEPARATIONS CONSTRAINING TO NGS CORS STATIONS PROVIDED IN THE "ONLINE POSITIONING USER SERVICE" (OPUS) SOLUTION FOR THIS SPECIFIC SITE.
 - BEARINGS SHOWN HEREON ARE BASED UPON U.S. STATE PLANE NAD83 COORDINATE SYSTEM ARIZONA STATE PLANE COORDINATE ZONE CENTRAL, DETERMINED BY GPS OBSERVATIONS.
 - FIELD WORK FOR THIS PROJECT WAS PERFORMED ON 01/21/15

- SURVEYOR NOTES**
- A TITLE REPORT WAS NOT PROVIDED AT THE TIME OF THE SURVEY.
 - SURVEYOR HAS NOT PERFORMED A SEARCH OF PUBLIC RECORDS TO DETERMINE ANY DEFECT IN TITLE.
 - THE BOUNDARY SHOWN HEREON IS PLOTTED FROM RECORD INFORMATION AND DOES NOT CONSTITUTE A BOUNDARY SURVEY OF THE PROPERTY.
 - SURVEYOR DOES NOT GUARANTEE THAT ALL UTILITIES ARE SHOWN OR THEIR LOCATIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR AND DEVELOPER TO CONTACT BLUE STAKE AND ANY OTHER INVOLVED AGENCIES TO LOCATE ALL UTILITIES PRIOR TO CONSTRUCTION. REMOVAL, RELOCATION AND/OR REPLACEMENT IS THE RESPONSIBILITY OF THE CONTRACTOR.

verizon
 126 W. GEMINI DR.
 TEMPE, AZ 85283

PINNACLE CONSULTING, INC.
 Construction - Project Management - Site Development

1426 N. MARVIN STREET # 101
 GILBERT, AZ 85233

REUSE OF DOCUMENT
 THE IDEAS & DESIGN INCORPORATED HEREON AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF RLF CONSULTING, LLC & IS NOT TO BE USED FOR ANY OTHER PROJECT WITHOUT WRITTEN AUTHORIZATION OF RLF CONSULTING, LLC

FIELD BY:	JTS
DRAWN BY:	RJG
CHECKED BY:	RLF

REVISIONS		
NO.	DATE	DESCRIPTION
3	07/11/18	REVISION
2	04/01/15	FINAL
1	01/23/15	PRELIMINARY

RLF CONSULTING
 LAND SURVEY • MAPPING SOLUTIONS
 24 N. STADIUM DR. • TEMPE, AZ 85281
 WWW.RLFCONSULTING.COM • 480-445-9180

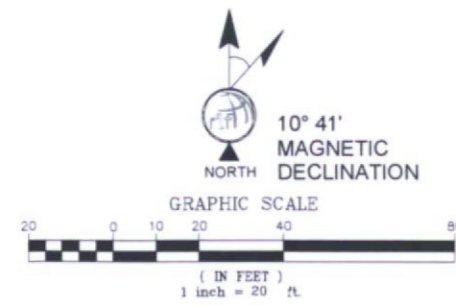
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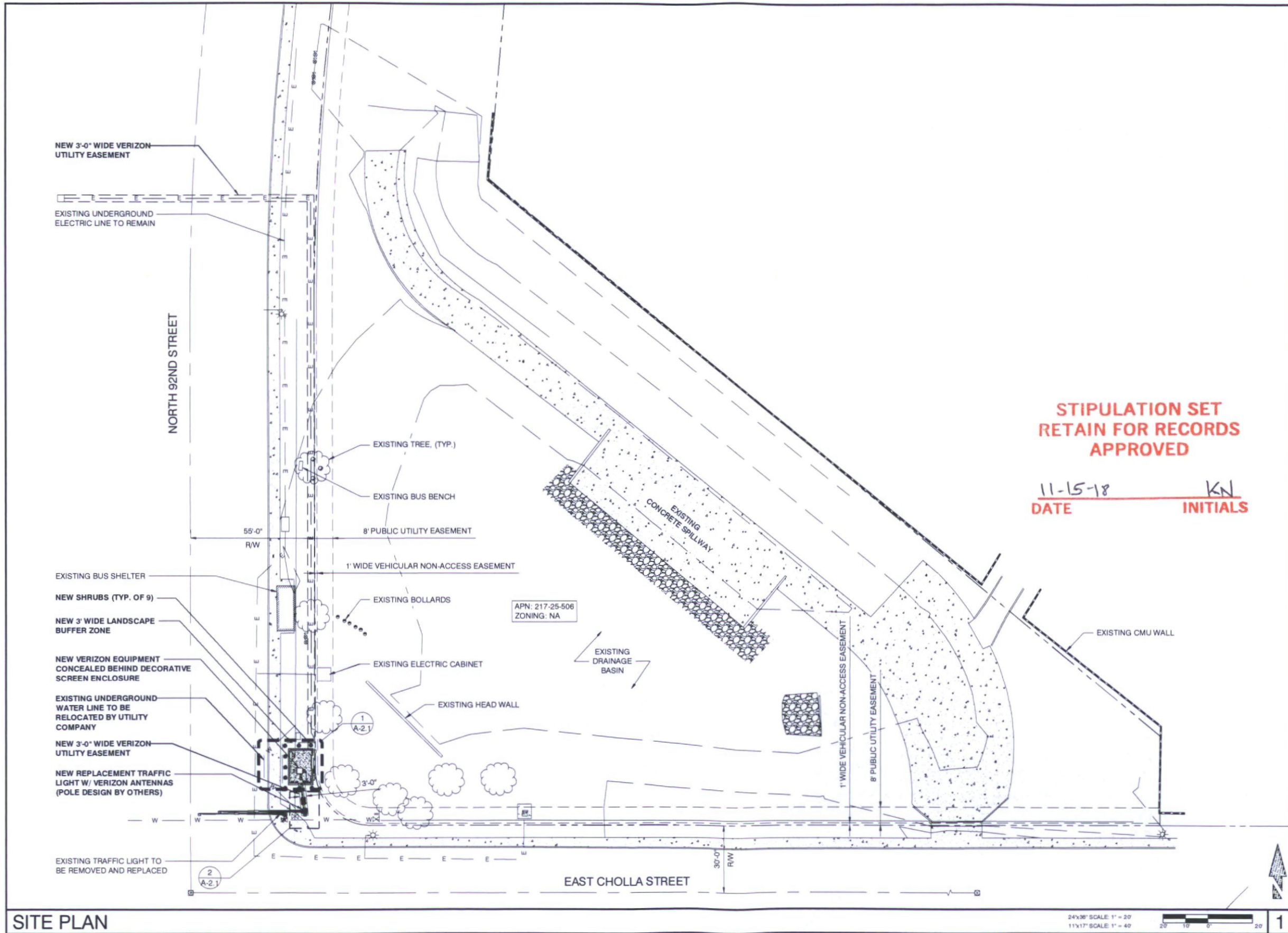
SITE NAME:
PHO ARROYOS

SITE ADDRESS:
**CHOLLA BLVD. AND 92ND ST.
 SCOTTSDALE, AZ 85260**

SHEET TITLE:
SITE SURVEY

SHEET NO.	REVISION
LS-1	





**STIPULATION SET
RETAIN FOR RECORDS
APPROVED**

11-15-18 KN
DATE INITIALS

PREPARED FOR:

verizon

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CONSULTING FIRM

PINNACLE
CONSULTING, INC.

Construction • Project Management • Site Development

1426 N. MARVIN STREET # 101
GILBERT, AZ 85233

PROJECT NO: PHO ARROYOS
DRAWN BY: CGS
CHECKED BY: KP

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PHO ARROYOS

N.E. CORNER OF N. 92ND ST & E. CHOLLA BLVD
SCOTTSDALE, AZ 85260
MARICOPA COUNTY

SHEET TITLE

FINAL SITE PLAN

SHEET NUMBER

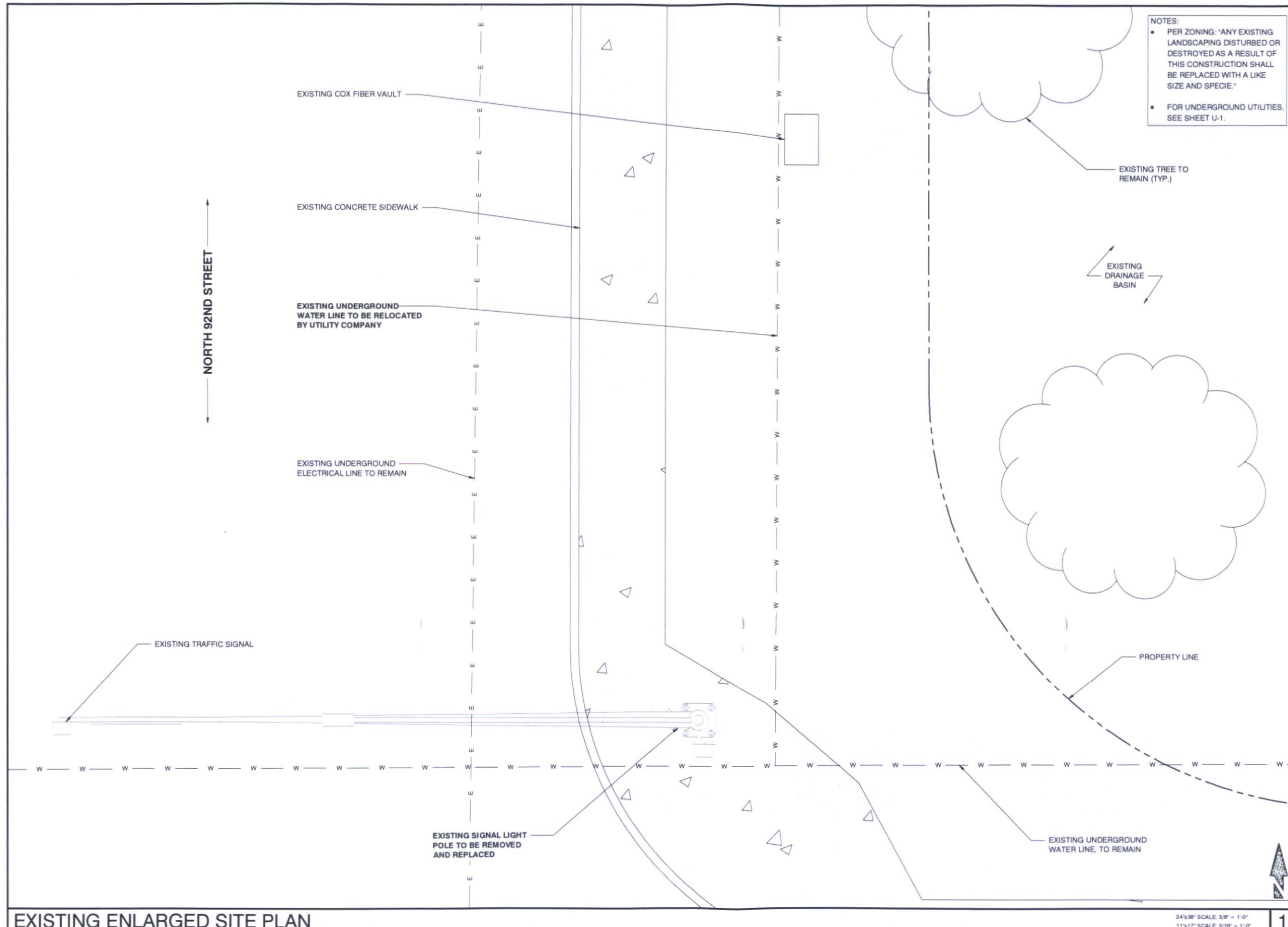
A-1

SITE PLAN

24'x36" SCALE: 1" = 20'
11'x17" SCALE: 1" = 40'

20 10 0 20

1



NOTES:

- PER ZONING: "ANY EXISTING LANDSCAPING DISTURBED OR DESTROYED AS A RESULT OF THIS CONSTRUCTION SHALL BE REPLACED WITH A LIKE SIZE AND SPECIE."
- FOR UNDERGROUND UTILITIES, SEE SHEET U-1.

PREPARED FOR

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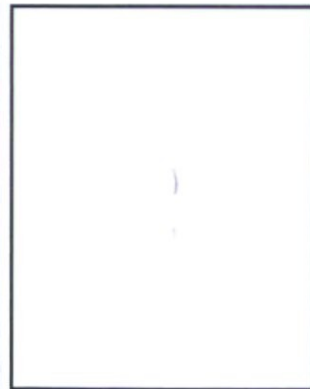
CONSULTING FIRM

Construction: Project Management Site Development

1426 N. MARVIN STREET # 101
GILBERT, AZ 85233

PROJECT NO.	PHO ARROYOS
DRAWN BY:	CGS
CHECKED BY:	KF

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1	07/12/18	ISSUED FOR PERMIT	M.G.



PHO ARROYOS

N.E. CORNER OF N. 92ND ST & E. CHOLLA BLVD
SCOTTSDALE, AZ 85260
MARICOPA COUNTY

SHEET TITLE

EXISTING ENLARGED SITE PLAN

SHEET NUMBER

A-2

EXISTING ENLARGED SITE PLAN

24x36" SCALE 3/8" = 1'-0"
11x17" SCALE 3/16" = 1'-0"



NEW COAXIAL CABLE TABLE					
SECTOR	AZIMUTH	LENGTH	QTY.	SIZE	TYPE
ALPHA	40°	±186'	4	7/8"	AVAS-50A
BETA	130°	±186'	4	7/8"	AVAS-50A
GAMMA	280°	±186'	4	7/8"	AVAS-50A

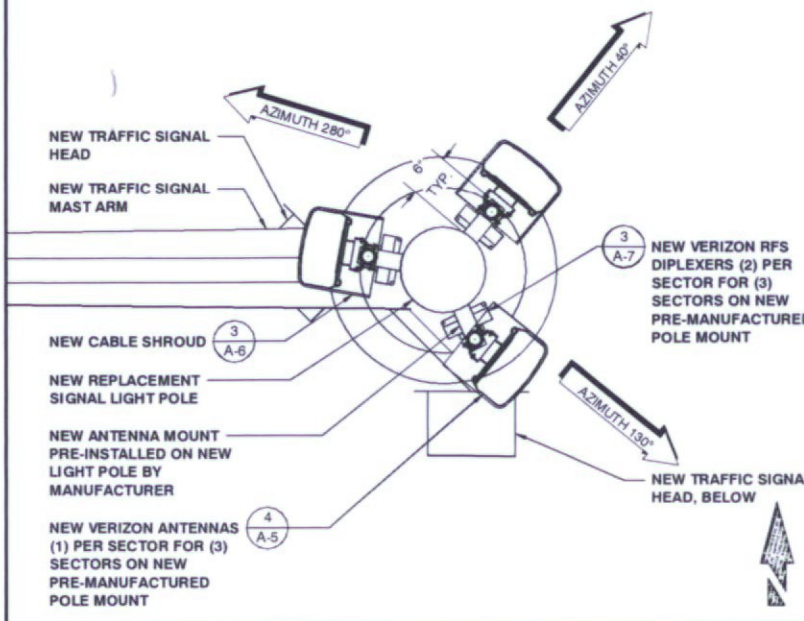
NOTE:
ALL AZIMUTHS SHOWN ARE RELATIVE TO TRUE NORTH, UNLESS NOTED OTHERWISE

*IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO VERIFY AZIMUTHS DEPICTED HEREIN WITH RF DEPARTMENT PRIOR TO INSTALLING ANTENNAS.

CABLING DETAIL

*NOTE:
ALL AZIMUTHS SHOWN ARE RELATIVE TO TRUE NORTH, UNLESS NOTED OTHERWISE

IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO VERIFY AZIMUTHS DEPICTED HEREIN WITH RF DEPARTMENT PRIOR TO INSTALLING ANTENNAS

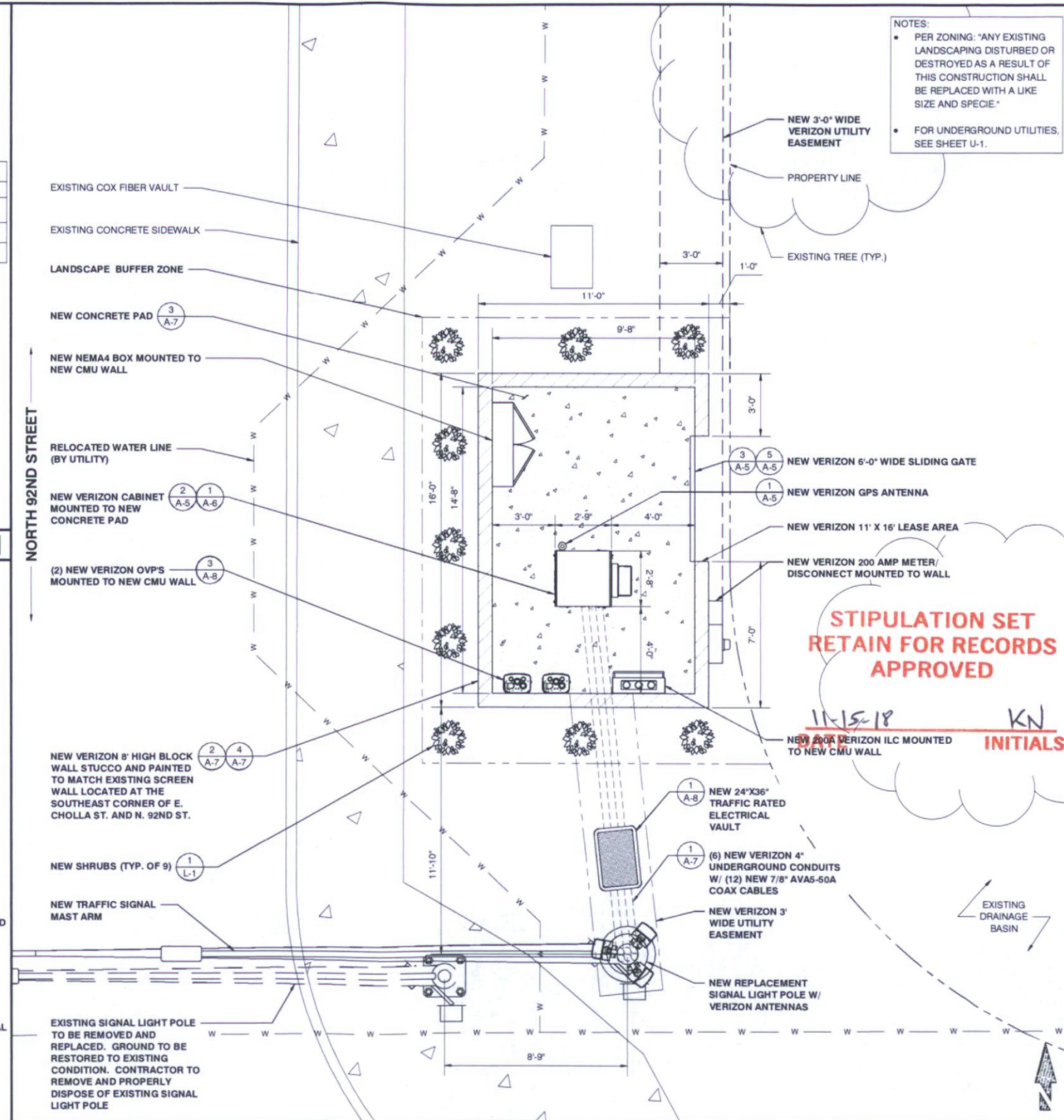


NEW ANTENNA PLAN

24x36' SCALE: 1" = 1'-0"
11x17' SCALE: 1/2" = 1'-0"

3

NEW ENLARGED SITE PLAN



NOTES:
• PER ZONING: "ANY EXISTING LANDSCAPING DISTURBED OR DESTROYED AS A RESULT OF THIS CONSTRUCTION SHALL BE REPLACED WITH A LIKE SIZE AND SPECIE."
• FOR UNDERGROUND UTILITIES, SEE SHEET U-1.

PREPARED FOR

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CONSULTING FIRM

1426 N. MARVIN STREET # 101
GILBERT, AZ 85233

PROJECT NO: PHO ARROYOS
DRAWN BY: CGS
CHECKED BY: KF

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PHO ARROYOS

N.E. CORNER OF N. 92ND ST & E. CHOLLA BLVD
SCOTTSDALE, AZ 85260
MARICOPA COUNTY

SHEET TITLE
NEW ENLARGED SITE PLAN AND NEW ANTENNA PLAN


SHEET NUMBER
A-2.1

24x36' SCALE: 3/8" = 1'-0"
11x17' SCALE: 3/16" = 1'-0"

2

NOTE:
 • PER ZONING: "ANY EXISTING LANDSCAPING DISTURBED OR DESTROYED AS A RESULT OF THIS CONSTRUCTION SHALL BE REPLACED WITH A LIKE SIZE AND SPECIE."
 • ANTENNAS AND CABLE SHROUDS TO BE PAINTED TO MATCH

PREPARED FOR:



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CONSULTING FIRM



Construction: Project Management Site Development

1426 N. MARVIN STREET # 101
 GILBERT, AZ 85233

**STIPULATION SET
 RETAIN FOR RECORDS
 APPROVED**

11-15-18 KN
 DATE INITIALS

PROJECT NO. PHO ARROYOS
 DRAWN BY: CGS
 CHECKED BY: WF

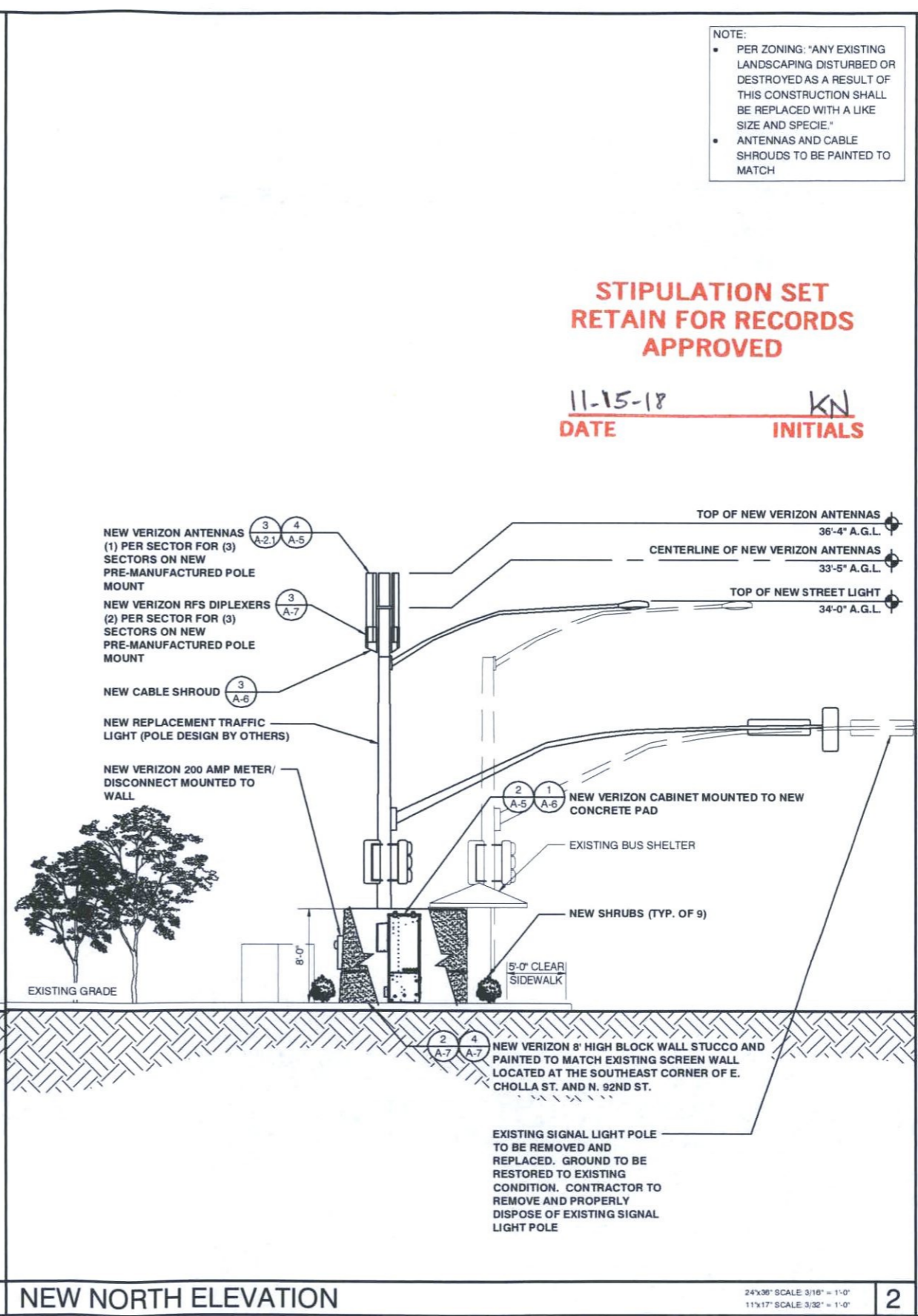
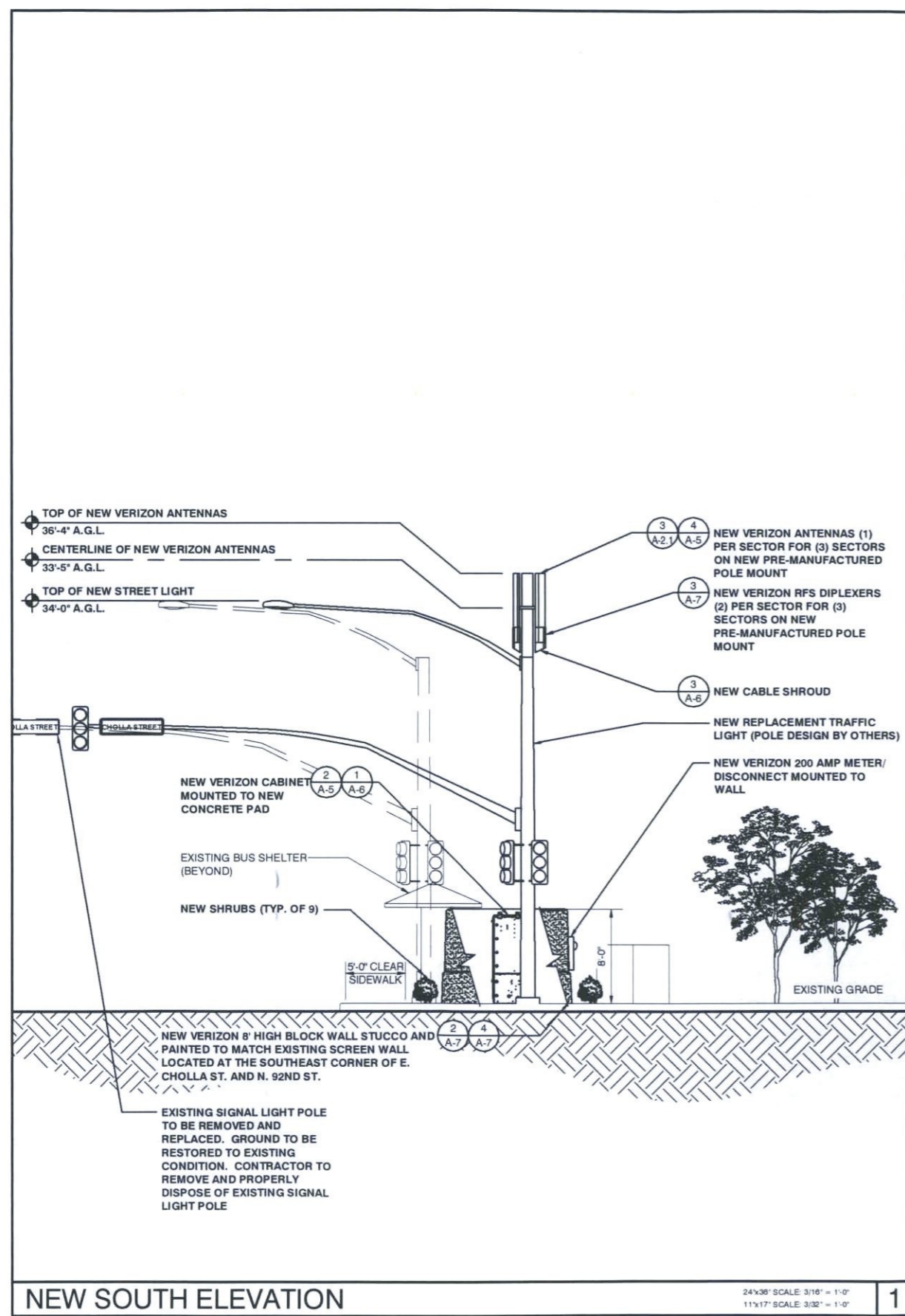
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PHO ARROYOS

N.E. CORNER OF N. 92ND ST & E. CHOLLA BLVD
 SCOTTSDALE, AZ 85280
 MARICOPA COUNTY

SHEET TITLE
ELEVATIONS

SHEET NUMBER
A-3

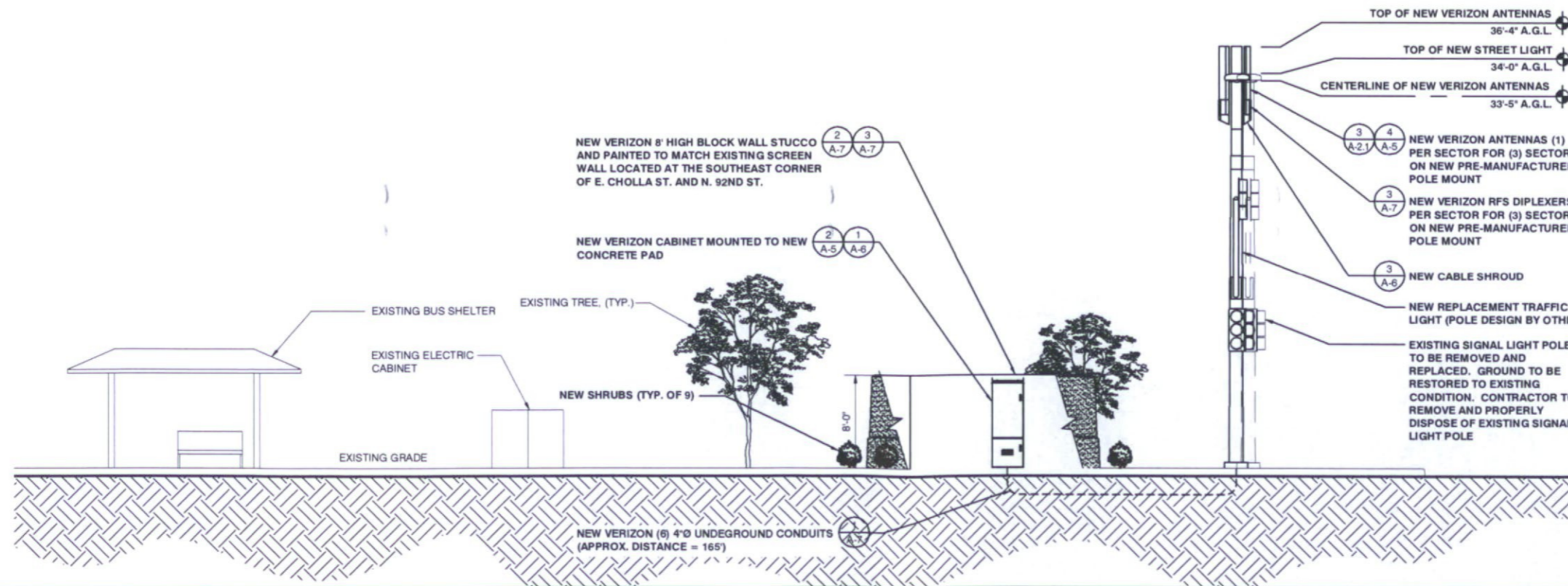
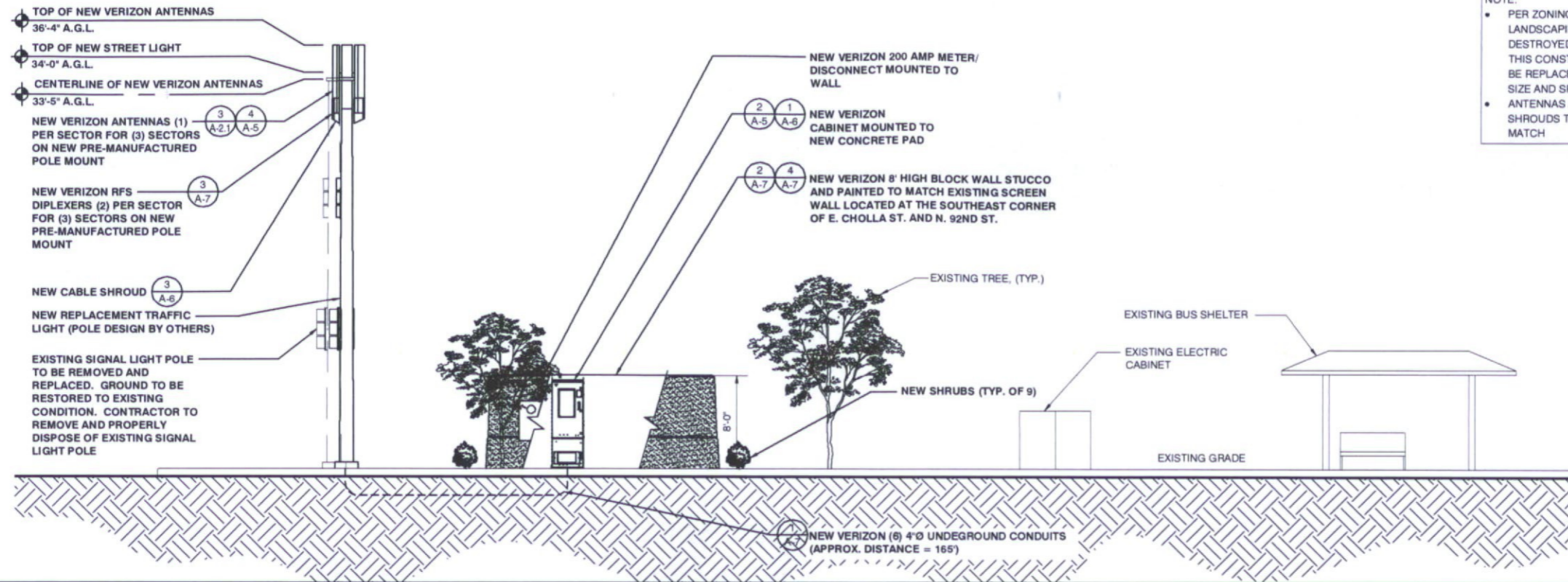


NEW SOUTH ELEVATION

24'x36" SCALE 3/16" = 1'-0"
 11'x17" SCALE 3/32" = 1'-0"

NEW NORTH ELEVATION

24'x36" SCALE 3/16" = 1'-0"
 11'x17" SCALE 3/32" = 1'-0"



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CONSULTING FIRM

Construction, Project Management, Site Development

1426 N. MARVIN STREET # 101
GILBERT, AZ 85233

PROJECT NO: PHO ARROYOS

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**STIPULATION SET
RETAIN FOR RECORDS
APPROVED**

11-15-18
DATE

KN
INITIALS

PHO ARROYOS

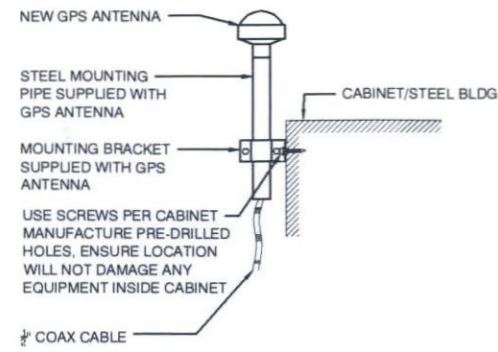
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SCOTTSDALE, AZ 85260
MARICOPA COUNTY

SHEET TITLE

ELEVATIONS

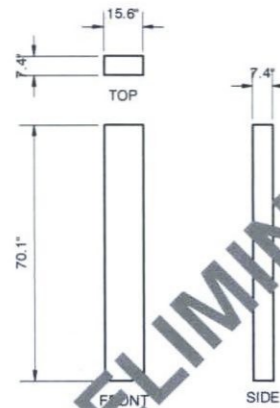
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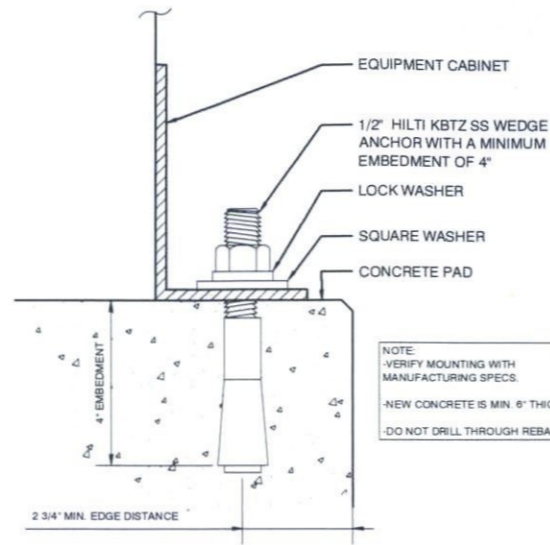
GPS ANTENNA DETAIL

SCALE NTS 1



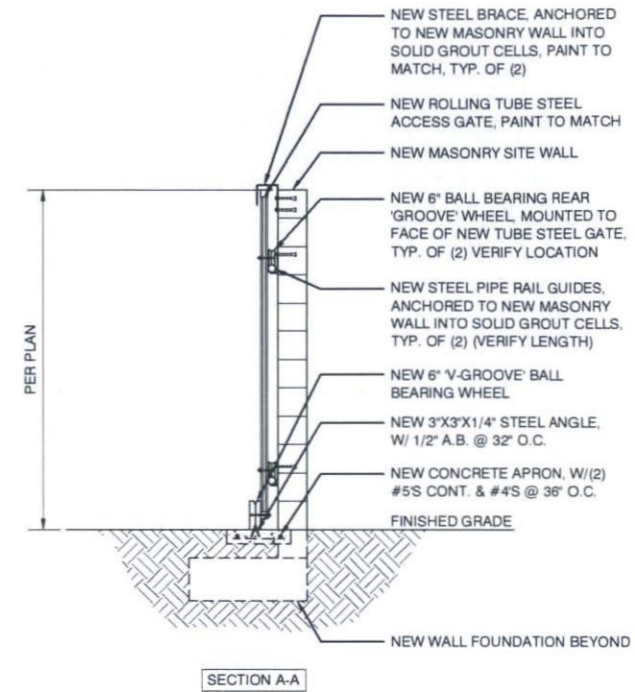
NEW ANTENNA SPECIFICATIONS

DESCRIPTION	HEIGHT	WIDTH	DEPTH	ANTENNA ONLY WEIGHT	ANTENNA W/MOUNTING BRACKET KIT WEIGHT
PANEL ANTENNA	70.1"	15.6"	7.4"	33.5 LBS.	54.2 LBS.



BOLT DOWN DETAIL

SCALE NTS 2

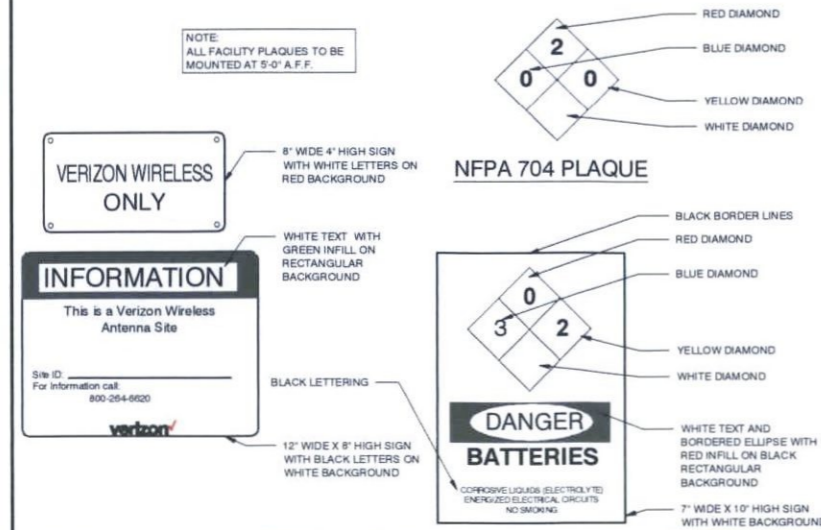


SLIDING GATE SECTION

SCALE NTS 3

ANTENNA DETAIL

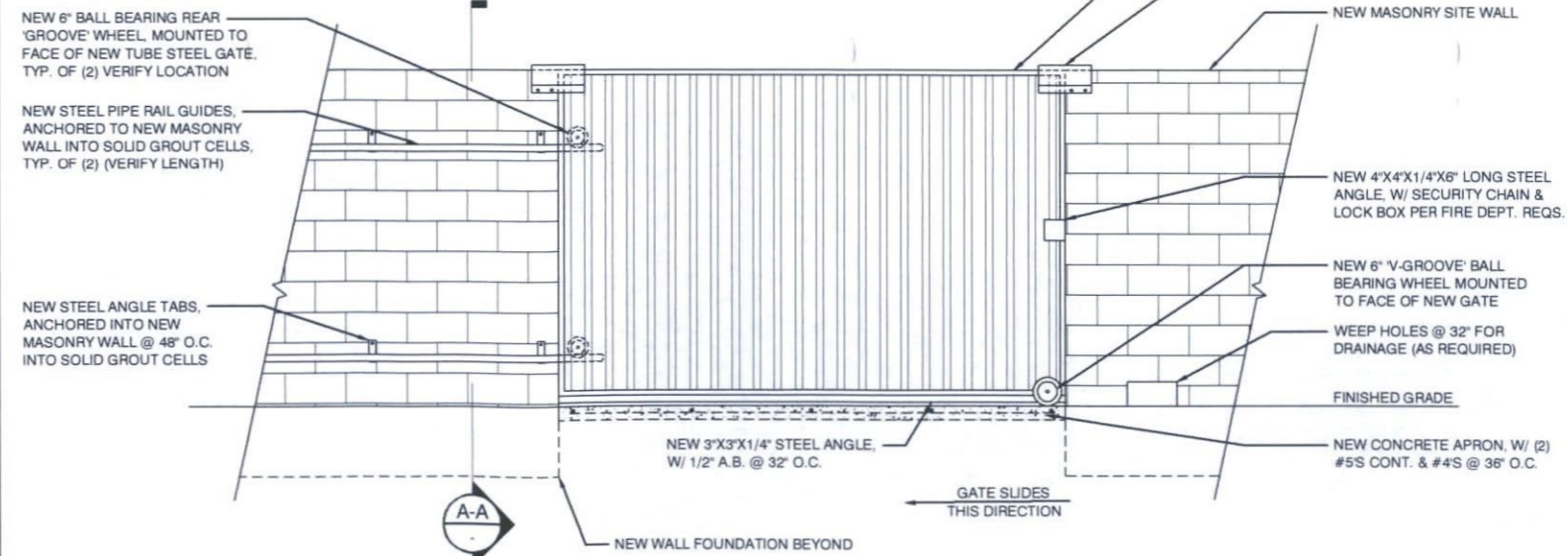
SCALE NTS 4



EMERGENCY PLAQUE DETAIL

SCALE NTS 6

NOTE: PROVIDE SHOP DRAWINGS FOR APPROVAL PRIOR TO FABRICATION



SLIDING GATE DETAIL - FROM INTERIOR

SCALE NTS 5

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CONSULTING FIRM

1426 N. MARVIN STREET # 101
GILBERT, AZ 85233

PROJECT NO: PHO ARROYOS
DRAWN BY: CGS
CHECKED BY: KF

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**STIPULATION SET
RETAIN FOR RECORDS
APPROVED**

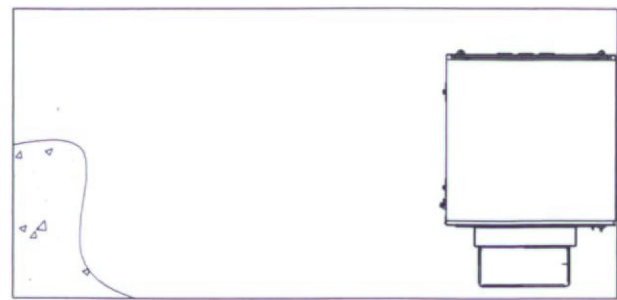
11-15-18
DATE

KN
INITIALS

PHO ARROYOS
N.E. CORNER OF N. 92ND ST & E. CHOLLA BLVD
SCOTTSDALE, AZ 85260
MARICOPA COUNTY

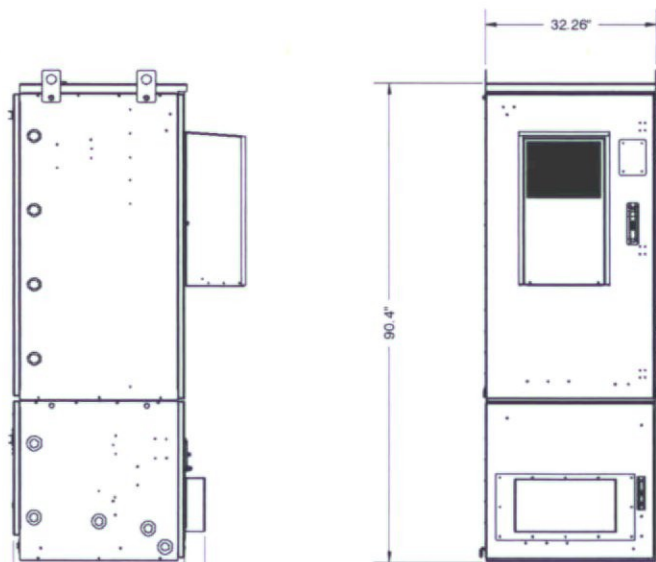
SHEET TITLE
DETAILS

SHEET NUMBER
A-5



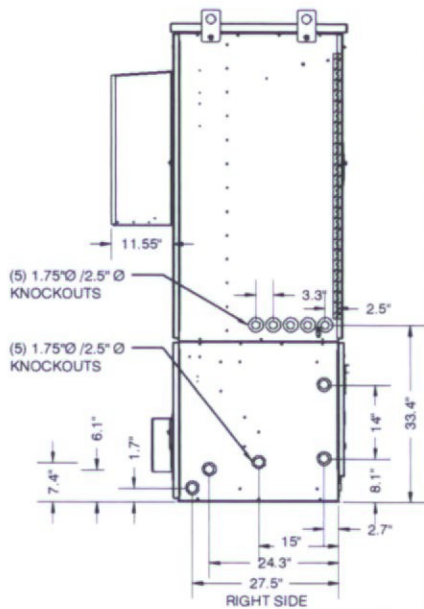
4x10' CONCRETE PAD TOP

POSITION CABINET FLUSH TO EDGE OF PAD WITH PANEL OVERHANGING AS SHOWN

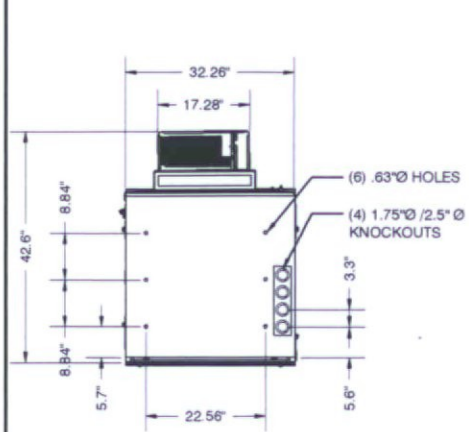


LEFT SIDE

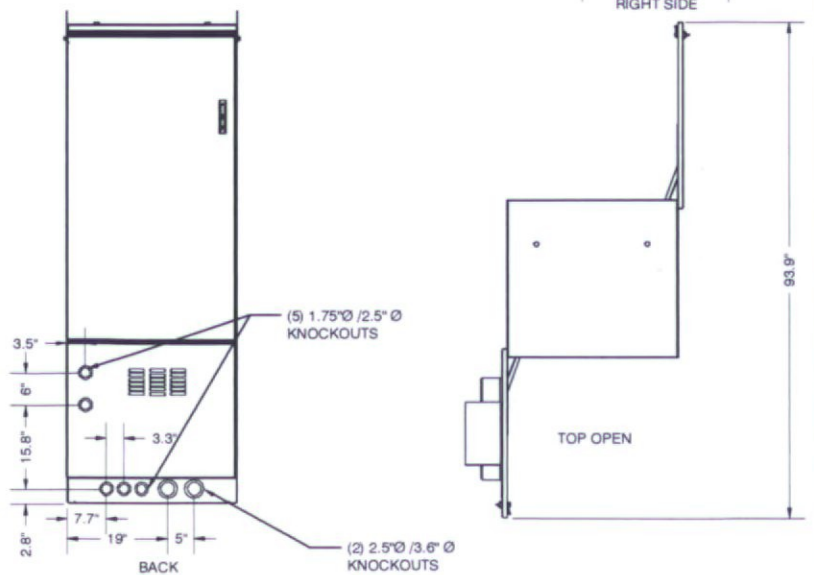
FRONT



RIGHT SIDE



BOTTOM

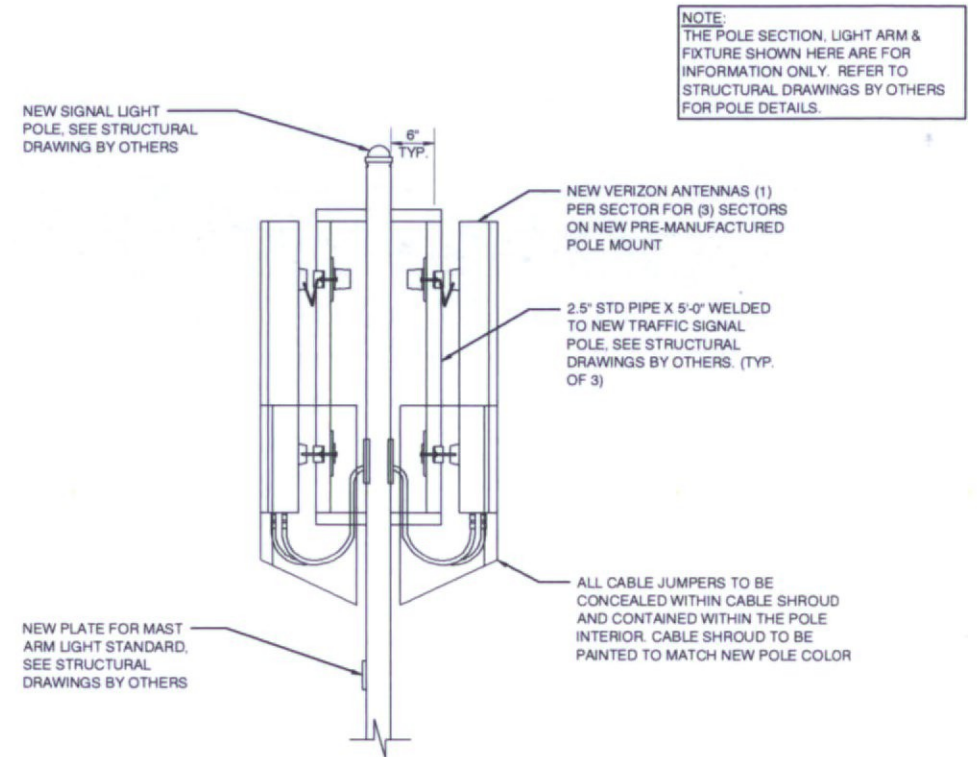


BACK

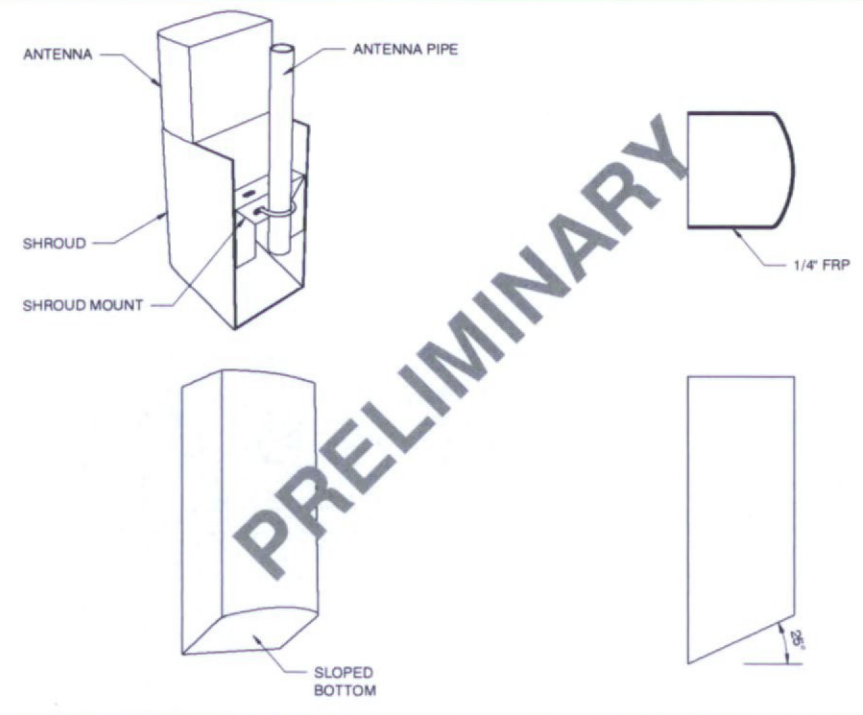
TOP OPEN

ANTENNA MOUNTING DETAIL

SCALE NTS 2



NOTE: THE POLE SECTION, LIGHT ARM & FIXTURE SHOWN HERE ARE FOR INFORMATION ONLY. REFER TO STRUCTURAL DRAWINGS BY OTHERS FOR POLE DETAILS.



SCALE NTS 3

EQUIPMENT CABINET DETAIL

SCALE NTS 1

CABLING SHROUD

PREPARED FOR

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CONSULTING FIRM

Construction Project Management Site Development

1426 N. MARVIN STREET # 101
GILBERT, AZ 85233

PROJECT NO:	PHO ARROYOS
DRAWN BY:	CGS
CHECKED BY:	MF

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PHO ARROYOS

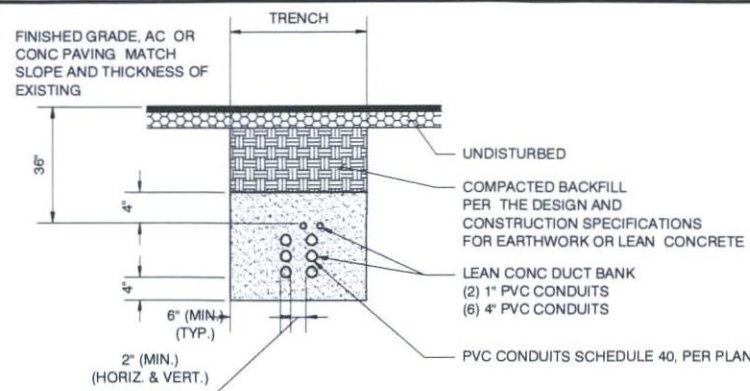
N.E. CORNER OF N. 82ND ST & E. CHOLLA BLVD
SCOTTSDALE, AZ 85260
MARICOPA COUNTY

SHEET TITLE

DETAILS

SHEET NUMBER

A-6



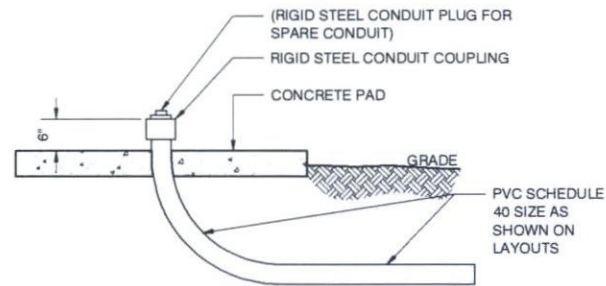
CABLE COAX CONDUIT DETAIL

NOTE: TRENCH BACKFILL SHALL BE COMPACTED TO 90% PRIOR TO DRESS ROCK INSTALLATION

MATCH TO EXISTING OR FINISH TO NEW GRADES (SEE PLAN)

COAXIAL CABLE SIZE & MINIMUM BEND RADIUS IN 6" CONDUIT	
CABLE SIZE	MINIMUM BEND RADIUS
1/2"	10"
7/8"	18"
1-1/4"	22"
1-5/8"	28"

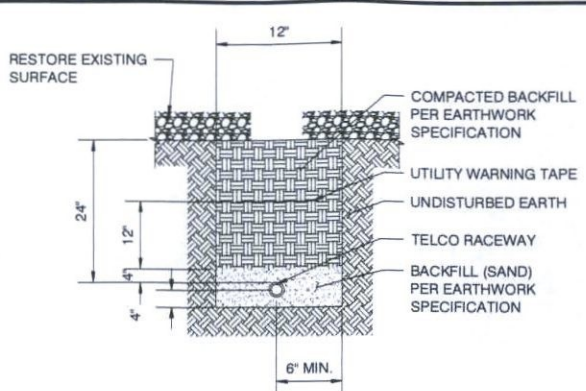
NOTE: PROVIDE PROPER BENDING RADIUS FOR CONDUITS AS REQUIRED BY THE COAXIAL CABLE MFR.



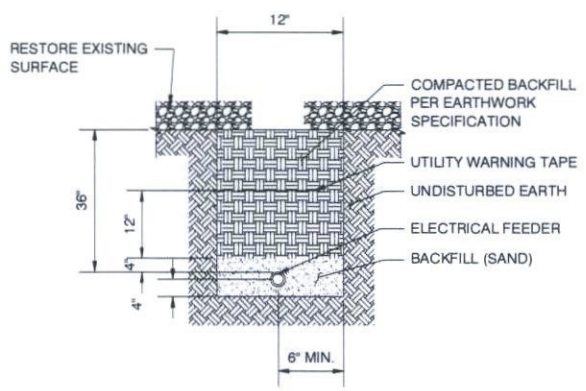
NOTE: RIGID STEEL CONDUIT MAY NOT BE USED WITH COAXIAL ANTENNA CABLE. USE PVC SCHEDULE 40 PIPE.

SITE SPECIFIC DETAIL - SEE PLANS TO DETERMINE IF STUB UP IS REQUIRED

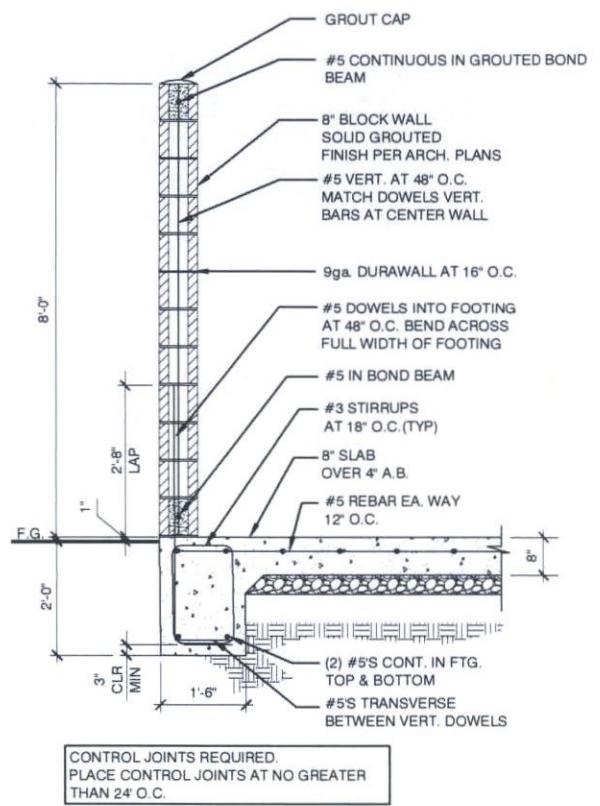
UNDERGROUND CONDUIT STUB-UP



TELCO TRENCH DETAIL

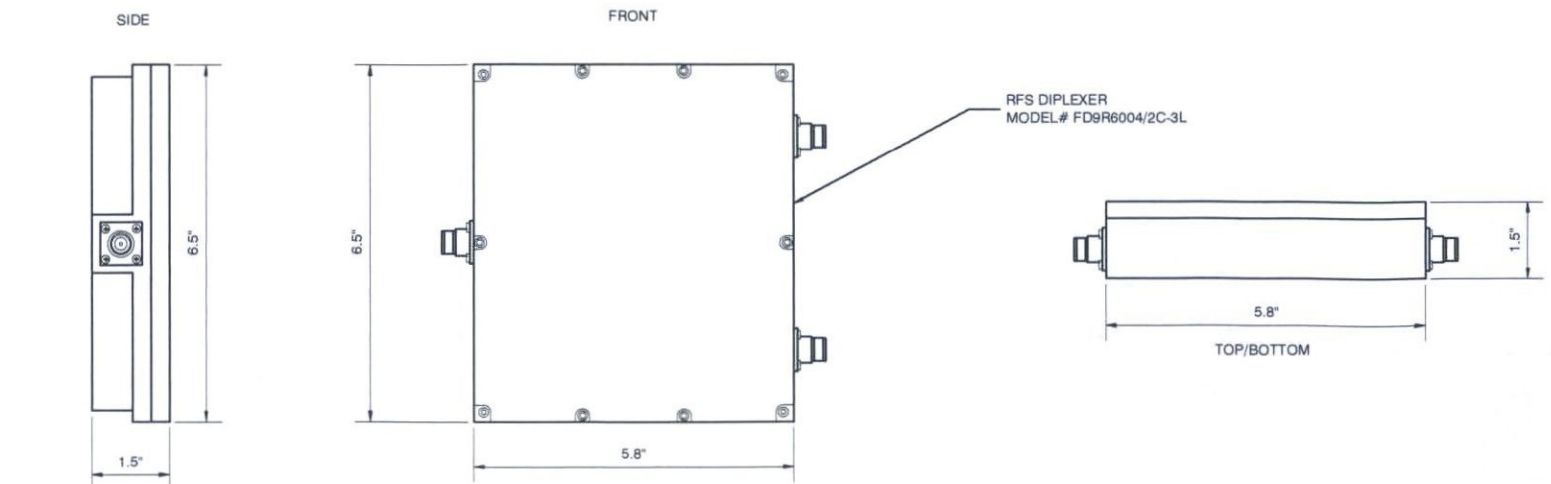


ELECTRICAL TRENCH DETAIL

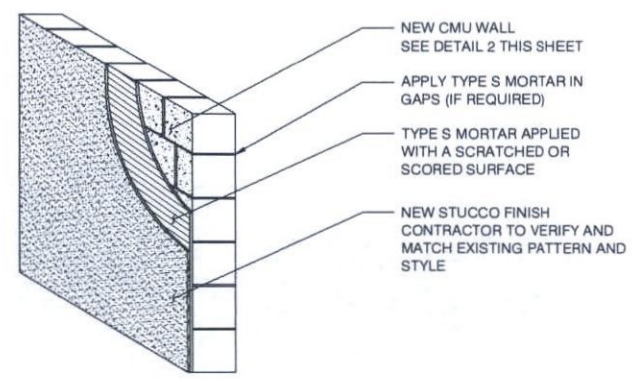


1 COMPOUND ENCLOSURE DETAIL

TRENCH DETAILS



RFS DIPLEXER DETAIL



3 STUCCO DETAIL

PREPARED FOR:

128 W. GEMINI DR. TEMPE, AZ 85283
PHONE: (480) 777-4360
FAX: (480) 777-4361

CONSULTING FIRM

Construction · Project Management · Site Development

1426 N. MARVIN STREET # 101
GILBERT, AZ 85233

PROJECT NO:	PHO ARROYOS
DRAWN BY:	CGS
CHECKED BY:	KF

REV	DATE	DESCRIPTION	BY
A	03/01/17	ISSUED FOR REVIEW	CGS
B	06/27/17	ISSUED FOR REVIEW	CDA
C	07/20/17	CLIENT COMMENTS	CGS
D	08/09/17	ISSUED FOR PERMIT	JMC
1	07/12/18	ISSUED FOR PERMIT	M.G.

PHO ARROYOS

N.E. CORNER OF N. 82ND ST & E. CHOLLA BLVD
SCOTTSDALE, AZ 85260
MARICOPA COUNTY

SHEET TITLE

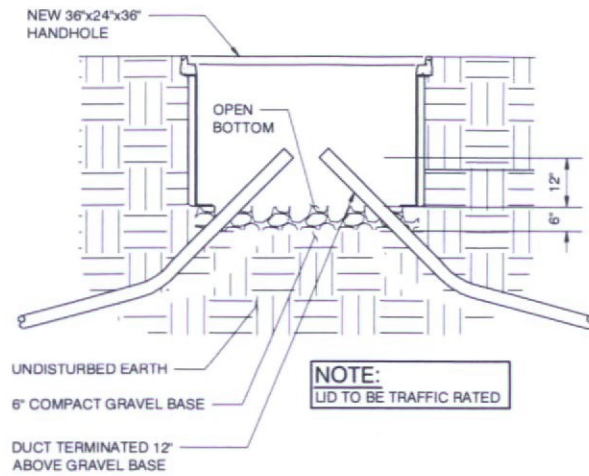
DETAILS

SHEET NUMBER

A-7

SCALE NTS 2

SCALE NTS 4



- C.O. = CONDUIT ONLY
- EMT. = ELEC. METALLIC TUBING (THIN WALL)
- PVC. = SCHEDULE 40 PLASTIC CONDUIT
- GRC. = GALVANIZED RIGID CONDUIT
- FXT. = FIXTURE
- MTD. = MOUNTED
- W.A. = WEATHERPROOF
- U.O.N. = UNLESS OTHERWISE NOTED
- G. OR GRD. = GROUND
- N. OR NEUT. = NEUTRAL
- A. OR AMP. = AMPERE
- KW. = KILOWATTS
- W. = WATTS
- LV. = LOW VOLTAGE
- = PHASE
- DEF = DUAL ELEMENT FUSES
- DIA = DIAMETER
- H.P. OR HP = HORSEPOWER
- XFMR = TRANSFORMER
- C.A. = 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, & THREE POLE
- EGB = EQUIPMENT GROUND BUS
- MGB = MAIN GROUND BUS
- AFC = AVAILABLE FAULT CURRENT
- CLF = CURRENT LIMITING FUSE
- AWG = AMERICAN WIRE GAUGE
- BCW = BARE COPPER WIRE
- GPS = GLOBAL POSITIONING SYSTEM
- PCS = PERSONAL COMMUNICATION SERVICE
- PPC = POWER PROTECTION CABINET
- RWY = RACEWAY
- TYP. = TYPICAL
- RGS = RIGID GALVANIZED STEEL
- EMT = ELECTRICAL METALLIC TUBING
- DWG = DRAWING
- IGR = INTERIOR GROUND RING (HALO)
- CCA = ANTENNA CABLE COVER ASSEMBLY
- BTS = BASE TRANSMISSION SYSTEM
- GEN = GENERATOR
- GR = GROWTH
- BSCW = BARE STRANDED COPPER WIRE
- ISCW = INSULATED STRANDED COPPER WIRE

PREPARED FOR:

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PHO ARROYOS

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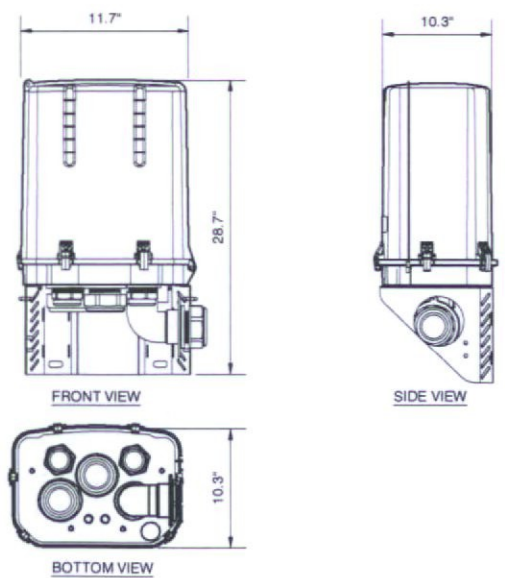
SHEET NUMBER
A-8

VAULT DETAIL

SCALE 1
NTS

ABBREVIATIONS

SCALE 2
NTS



OVP DETAIL

SCALE 3
NTS

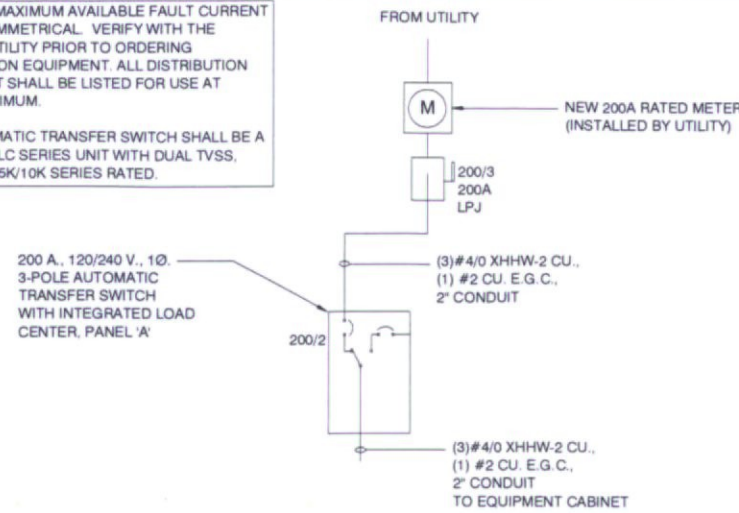
NOT USED

SCALE 4
NTS



ASSUMED MAXIMUM AVAILABLE FAULT CURRENT 22,000A SYMMETRICAL. VERIFY WITH THE SERVING UTILITY PRIOR TO ORDERING DISTRIBUTION EQUIPMENT. ALL DISTRIBUTION EQUIPMENT SHALL BE LISTED FOR USE AT 22KAIC MINIMUM.

THE AUTOMATIC TRANSFER SWITCH SHALL BE A GENERAC ILC SERIES UNIT WITH DUAL TVSS, NEMA 3R, 25K/10K SERIES RATED.



PANEL A	200 AMP	120/240V, 1Ø, 3W	MAN 200/2	NEMA 3R	SURF MTG	
LOCATION	AT SERVICE	TYPE	P.O.	BREAKER RATING	25K/10K	
USE/AREA SERVED	CB	No	Load	No	CB	USE/AREA SERVED
RECTIFIERS 1 & 2	40	1	1452	15	1	GFCI #1
		2	180	15		GFCI #2
		3	1452	40		RECTIFIER 3 & 4
RECTIFIER 5 & 6	40	5	1452	8	1	RECTIFIER 7 & 8
		7	1452	8		SPACE
AIR CONDITIONER	20	9	360	10	1	SPACE
		11	1452	10		SPACE
SPACE		13	-	14		SPACE
SPACE		15	-	16		SPACE
SPACE		17	-	18		SPACE
SPACE		19	-	20		SPACE
SPACE		21	-	22		SPACE
SPACE		23	-	24		SPACE
TOTAL (CONNECTED)			9856	9856		
25% CONTINUOUS			1977	1977		
TOTAL (CODE)			8565	8565		8565 VA / 120 V = 71.4 A

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PHO ARROYOS

N.E. CORNER OF N. 92ND ST & E. CHOLLA BLVD
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MARICOPA COUNTY

SHEET TITLE

ELECTRICAL DETAILS

SHEET NUMBER

E-2

ONE LINE DIAGRAM

1 PANEL SCHEDULES

2

WIRE & CONDUIT

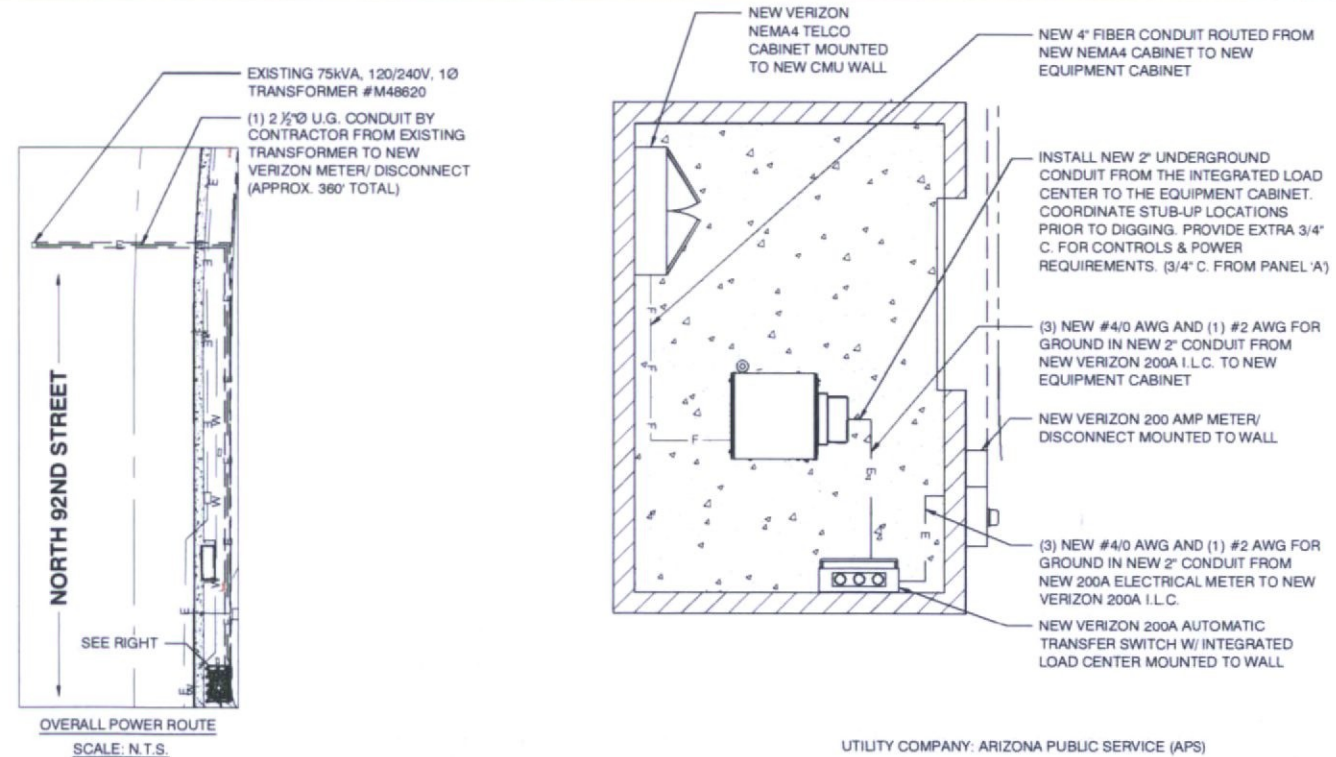
---	CONDUIT CONCEALED IN WALLS OR ABOVE CEILING W/ 2 #12, #12 GND, 3/4" C., UNLESS NOTED OTHERWISE.
---	CONDUIT ROUTED UNDER FLOOR OR BELOW GRADE W/ 2 #12, #12 GRD, 3/4" C., UNLESS NOTED OTHERWISE.
---	CONDUIT TURNING UP
---	CONDUIT TURNING DOWN
---	INDICATES A PHASE CONDUCTOR
---	INDICATES A GROUNDED (NEUTRAL) CONDUCTOR
---	INDICATES AN EQUIPMENT GROUNDING CONDUCTOR
---	INDICATES AN ISOLATED GROUND CONDUCTOR (SAME SIZE AS EQUIPMENT GROUNDING CONDUCTOR)
⊙	GROUND LEAD COILED ABOVE SLAB

ELECTRICAL SYMBOLS

⊕	TEST WELL/GROUND ROD
⊗	GROUND ROD - 5/8" x 10' COPPER CLAD
■	CADWELD CONNECTION
●	MECHANICAL CONNECTION
---	GROUNDING WIRE
---	GROUND BAR
---	SURGE SUPPRESSOR GROUND BAR
⊏	FUSED DISCONNECT SWITCH
⊕	METER AND MAIN BREAKER
⊕	MANUAL XFR SWITCH AND GEN. RECP.T.
⊕	GPS ANTENNA
⊕	TELCO BOARD
---	ELECTRICAL POWER
---	T-1 LINE
---	SURFACE MOUNTED PANEL BOARD

1-LINE DIAGRAM

⊏	CIRCUIT BREAKER, FIXED MOUNTED.
⊏	CIRCUIT BREAKER, DRAWOUT MOUNTING.
⊏	FUSIBLE SWITCH, SIZE AS INDICATED ON DRAWINGS.
⊏	DISTRIBUTION TRANSFORMER
⊏	CURRENT TRANSFORMER
⊕	METERING DEVICE
---	PANELBOARD, MAIN LUG ONLY
---	PANELBOARD, MAIN CIRCUIT BREAKER
---	TRANSFER SWITCH - MANUAL OR AUTOMATIC



UTILITY COMPANY: ARIZONA PUBLIC SERVICE (APS)
UTILITY ADDRESS: 1521 N. PROJECT DR
TEMPE, AZ 85281-1298
UTILITY CONTACT: AUSTIN PRUSAK
UTILITY PHONE: (O) 602.493.4456
(C) 480.586.5416
PRE-CONSTRUCTION MEETING CONTACT:
COMPANY: ARIZONA WEST BUILDERS AND COMM
CONTACT: FREDDIE CHISM
PHONE: 602.919.0527

NOTES:

- ONLY UTILITY NOTES SHOWN FOR CLARITY. SEE SHEET A-2/ A-2.1 FOR ALL SITE SPECIFIC CALL OUTS
- FIBER DESIGN TO NEW VERIZON COMPOUND TO BE DETERMINED

least two full egin excavation

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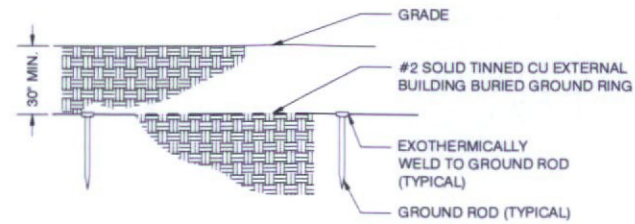
ELECTRICAL SYMBOLS

3 SITE UTILITY PLAN

24x36" SCALE 3/8" = 1'-0"
11x17" SCALE 3/16" = 1'-0"

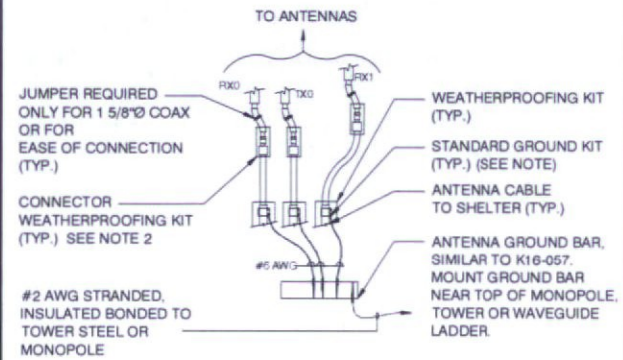
4

1. ALL GROUNDING LEADS INSTALLED TO ENSURE A SMOOTH PATH TO COUNTERPOISE WITHOUT KINKS OR SHARP BENDS OR RETURN UPWARDS.
2. CONTRACTOR WILL UTILIZE THE "FALL OF POTENTIAL MEASUREMENT METHOD" PER NETA STANDARDS, UTILIZING THE AEMC-4500 MEASURING DEVICE OR APPROVED VERIZON EQUAL. ALL GROUND TESTING TO BE PERFORMED BEFORE CONNECTING TO POWER UTILITY GROUND AND PRIOR TO ANY BACKFILL OF GROUNDING TRENCHES. ELECTRICAL CONTRACTOR WILL PROVIDE A MINIMUM OF ONE (1) INSPECTION PORT FOR TESTING GROUNDING RESISTANCE. CONTRACTOR WILL INSTALL THE MINIMUM OF ONE (1) INSPECTION PORT FOR TESTING GROUNDING RESISTANCE. CONTRACTOR WILL INSTALL THE MINIMUM NUMBER OF GROUND RODS INDICATED. SEE GROUNDING PLAN FOR APPROX. LOCATIONS. CONTRACTOR WILL INSTALL ADDITIONAL GROUNDING AS REQUIRED TO ACHIEVE 5 OHMS OR LESS TO GROUND.
3. 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.
4. THE CONTRACTOR WILL DOCUMENT MEGGER TEST RESULTS, REDLINE THE DRAWINGS FOR THE LOCATION OF ALL UNDERGROUND GROUNDING COMPONENTS AND PHOTOGRAPH WITH A DIGITAL CAMERA THE ENTIRE NEWLY INSTALLED GROUNDING SYSTEM PRIOR TO BACKFILL OF ANY OPEN TRENCHES.
5. ANY EXCEPTIONS TO THIS BASIC GROUNDING DESIGN GUIDELINE, ROUTING DESIGN, OR MODIFICATIONS, WILL BE DOCUMENTED AND DIMENSIONED BY THE WAY OF RED LINE DRAWINGS. IT IS THE RESPONSIBILITY OF THE SELECTED CONTRACTOR TO ENSURE THE NEWLY INSTALLED GROUNDING SYSTEM MEETS THE VERIZON WIRELESS STANDARDS OF 5 OHMS OR LESS.



NOTES:

1. DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND WIRE DOWN TO ANTENNA GROUND BAR.
2. WEATHER PROOFING SHALL BE ANDREWS. (TYPE & PART NUMBER AS SUPPLIED OR RECOMMENDED BY CABLE MANUFACTURER.)



PREPARED FOR

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CONSULTING FIRM

1426 N. MARVIN STREET # 101
GILBERT, AZ 85233

PROJECT NO: PHO ARROYOS
DRAWN BY: CGS
CHECKED BY: KF

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PHO ARROYOS

N.E. CORNER OF N. 82ND ST & E. CHOLLA BLVD
SCOTTSDALE, AZ 85260
MARICOPA COUNTY

SHEET TITLE
GROUNDING PLAN AND
GROUNDING DETAILS

SHEET NUMBER
E-3

GROUNDING NOTES

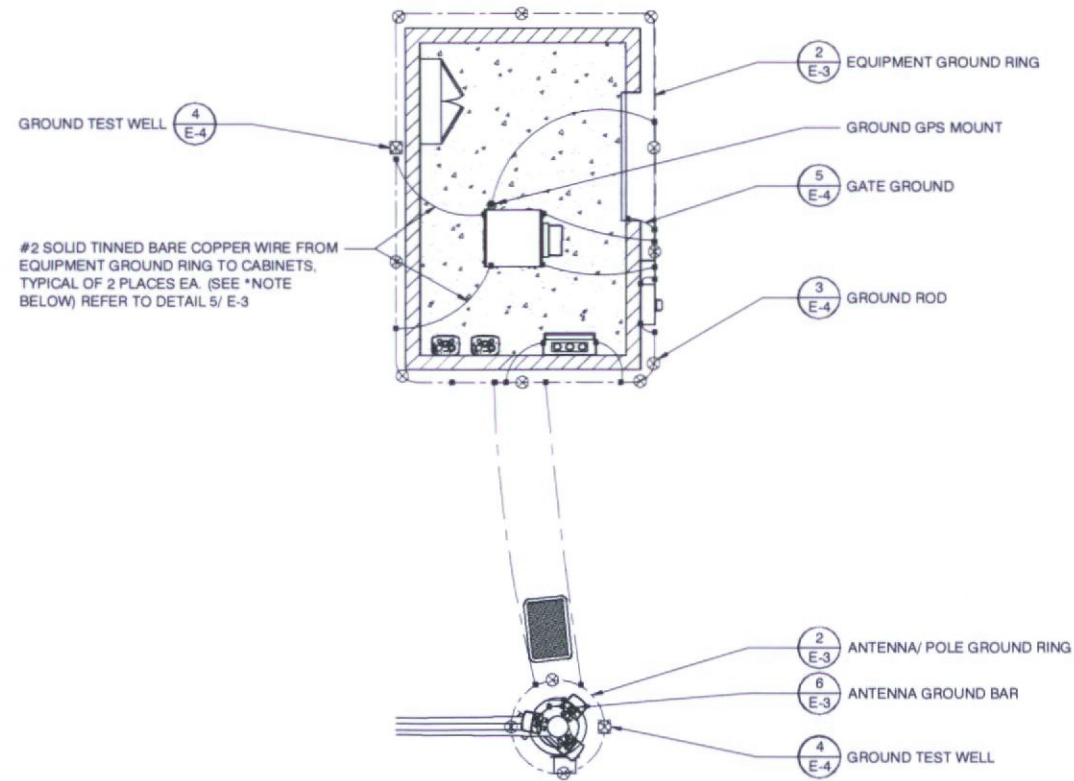
SCALE NTS 1

EXTERIOR GROUND RING

SCALE NTS 2

ANT. GROUND BAR DETAIL

SCALE NTS 3



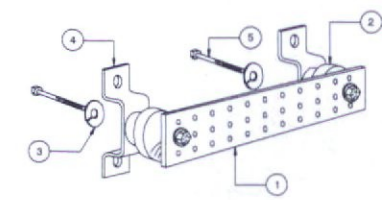
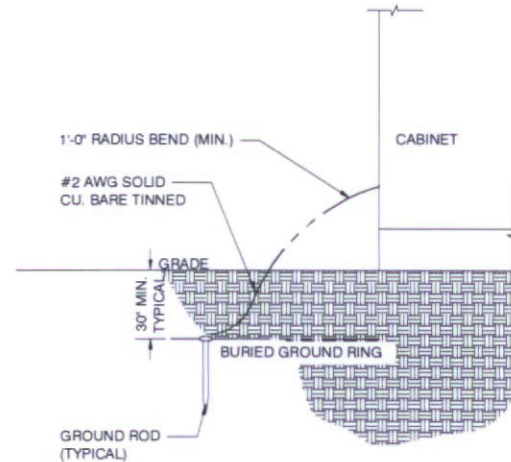
*NOTE:
CONTRACTOR RESPONSIBLE FOR GROUNDING VERIZON WIRELESS EQUIPMENT ONLY. LANDLORD TO LEAVE EXCESS GROUND LEADS ABOVE GRADE FOR USE BY VERIZON CONTRACTOR. SEE 1/ E-3 FOR GENERAL GROUNDING NOTES

izona 811 at least two full before you begin excavation

click Arizona811.com

CABINET GROUND DETAIL

SCALE NTS 5



- NOTES:
- 1) COPPER GROUND BAR OR APPROVED EQUAL, 1/4" x 4" X 12". HOLE CENTERS TO MATCH NEMA DOUBLE LUG CONFIGURATION.
 - 2) SPACERS AS REQUIRED
 - 3) 5/8" LOCKWASHERS
 - 4) WALL MOUNTING BRACKET
 - 5) 5/8" -11 x 1" H.H.C.S. BOLTS
 - 6) GROUND BAR TO BE PURCHASED FROM ROHN.



GROUNDING PLAN

24'x36" SCALE 1/4" = 1'-0"
11'x17" SCALE 1/8" = 1'-0"

4 GROUND BAR DETAIL

SCALE NTS 6

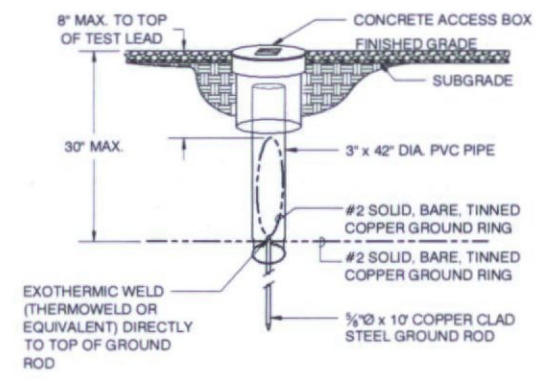
GROUNDING SCHEMATIC

SCALE NTS 7

WIRE & CONDUIT	
—	CONDUIT CONCEALED IN WALLS OR ABOVE CEILING W/ 2 #12, #12 GRD, 3/4" C., UNLESS NOTED OTHERWISE.
- - - - -	CONDUIT ROUTED UNDER FLOOR OR BELOW GRADE W/ 2 #12, #12 GRD, 3/4" C., UNLESS NOTED OTHERWISE.
↖	CONDUIT TURNING UP
↘	CONDUIT TURNING DOWN
⊕	INDICATES A PHASE CONDUCTOR INDICATES A GROUNDED (NEUTRAL) CONDUCTOR INDICATES AN EQUIPMENT GROUNDING CONDUCTOR INDICATES AN ISOLATED GROUND CONDUCTOR (SAME SIZE AS EQUIPMENT GROUNDING CONDUCTOR)
⊙	GROUND LEAD COILED ABOVE SLAB

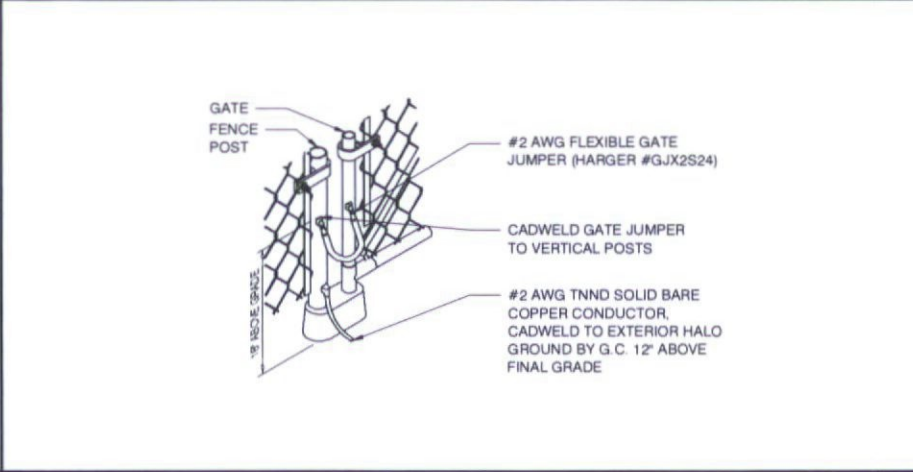
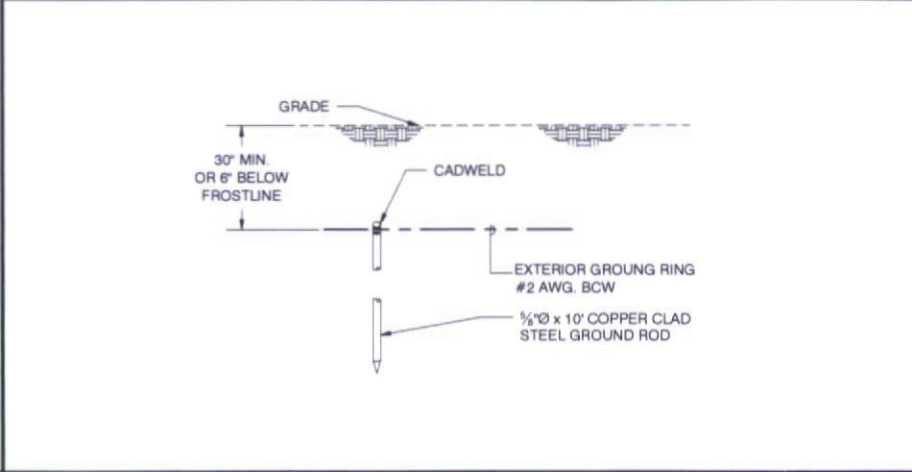
ELECTRICAL SYMBOLS	
⊕	TEST WELL/GROUND ROD
⊙	GROUND ROD - 5/8" x 10' COPPER CLAD
■	CADWELD CONNECTION
●	MECHANICAL CONNECTION
—	GROUNDING WIRE
—	GROUND BAR
—	SURGE SUPPRESSOR GROUND BAR
□	FUSED DISCONNECT SWITCH
⊕	METER AND MAIN BREAKER
↔	MANUAL XFR SWITCH AND GEN. RECPT.
⊙	GPS ANTENNA
⊙	TELCO BOARD
- - - - -	ELECTRICAL POWER
- - - - -	T-1 LINE
■	SURFACE MOUNTED PANEL BOARD

C.O.	= CONDUIT ONLY	E.C.	= ELECTRIC CONTRACTOR
EMT.	= ELEC. METALLIC TUBING (THIN WALL)	G.C.	= GENERAL CONTRACTOR
PVC.	= SCHEDULE 40 PLASTIC CONDUIT	1P, 2P, & 3P	= SINGLE POLE, TWO, & THREE POLE
GRC.	= GALVANIZED RIGID CONDUIT	EGB	= EQUIPMENT GROUND BUS
FIXT.	= FIXTURE	MGB	= MAIN GROUND BUS
MTD.	= MOUNTED	AFC	= AVAILABLE FAULT CURRENT
W.A.	= WEATHERPROOF	CLF	= CURRENT LIMITING FUSE
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G. OR GRD.	= GROUND	BCW	= BARE COPPER WIRE
N. OR NEUT.	= NEUTRAL	GPS	= GLOBAL POSITIONING SYSTEM
A. OR AMP.	= AMPERE	PCS	= PERSONAL COMMUNICATION SERVICE
KW.	= KILOWATTS	PPC	= POWER PROTECTION CABINET
W.	= WATTS	RWY	= RACEWAY
LV.	= LOW VOLTAGE	TYP.	= TYPICAL
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F.A.	= FIRE ALARM	ISCW	= INSULATED STRANDED COPPER WIRE
RECPT.	= RECEPTACLE		



ABBREVIATIONS

2 GROUND TEST WELL DETAIL



PREPARED FOR:

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CONSULTING FIRM

Construction Project Management Site Development

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GILBERT, AZ 85233

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1	07/12/18	ISSUED FOR PERMIT	M.G.

SYMBOLS

1 GROUND ROD DETAIL

3 GATE GROUND DETAIL

PHO ARROYOS

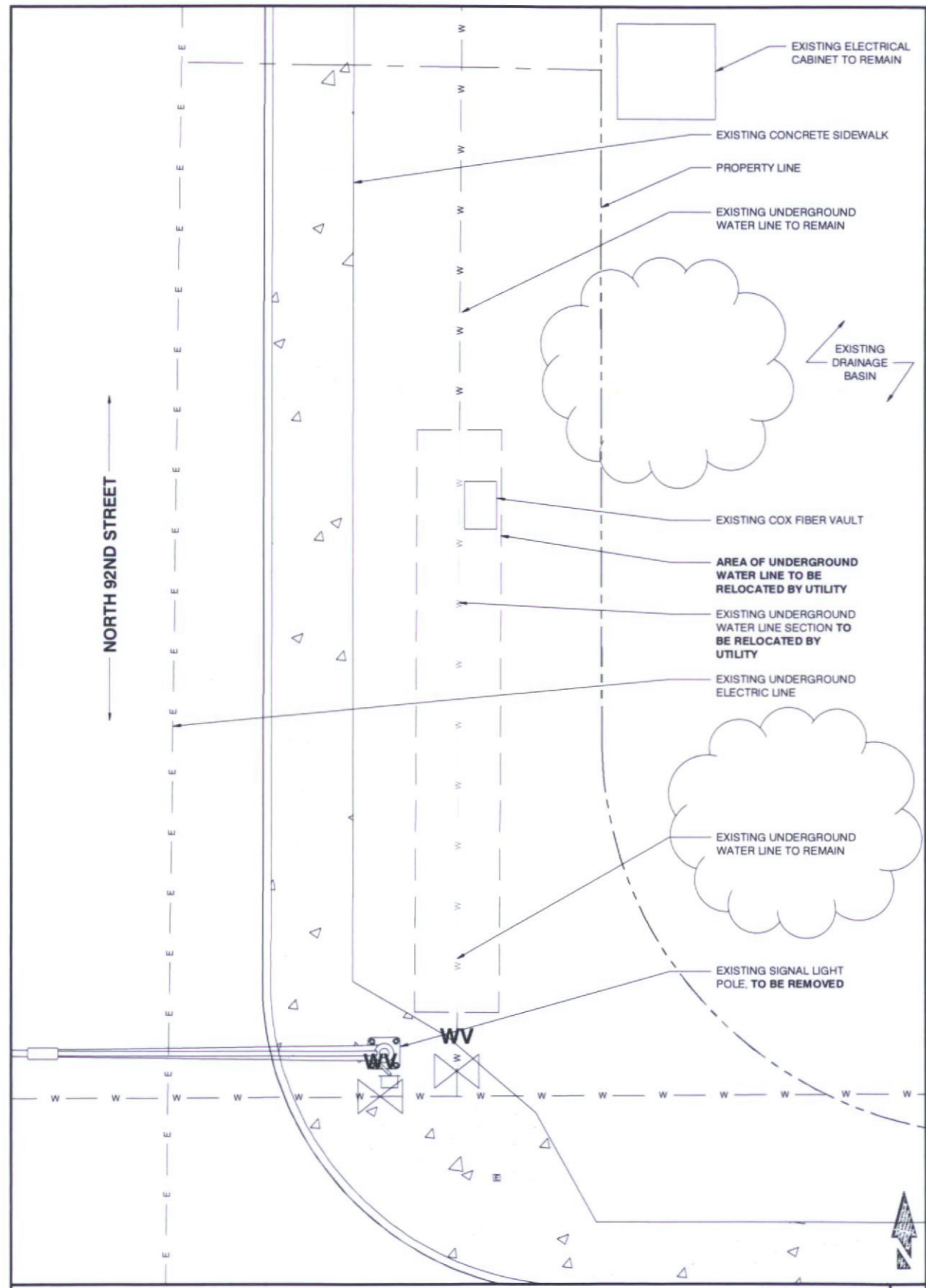
N.E. CORNER OF N. 92ND ST & E. CHOLLA BLVD
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MARICOPA COUNTY

SHEET TITLE
GROUNDING DETAILS

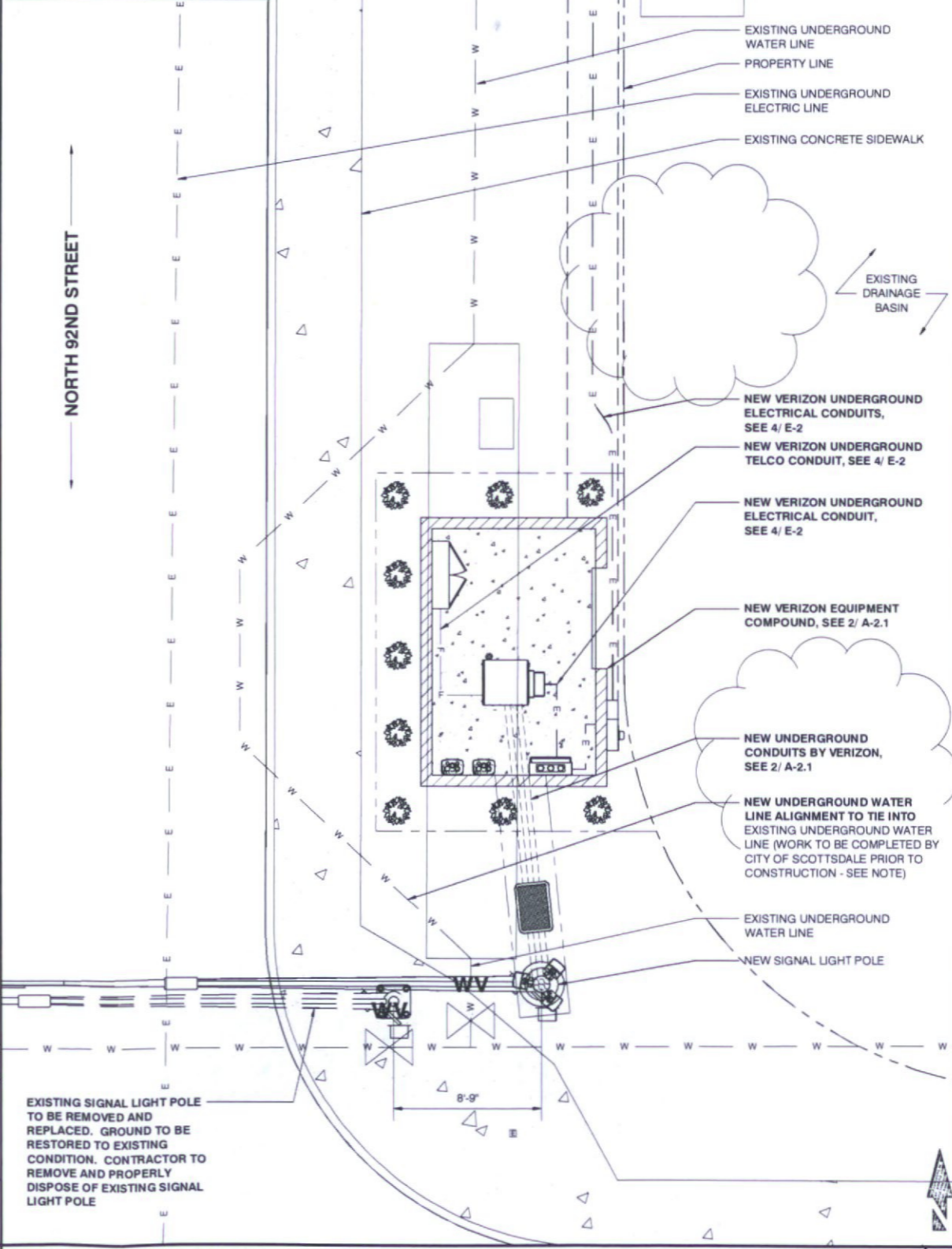
SHEET NUMBER
E-4

NOT USED

6



NOTE:
 CONTRACTOR TO CONTACT BILL KALBER
 PRIOR TO CONSTRUCTION FOR RELOCATION
 OF EXISTING WATER LINE.
 PHONE: 480-312-8122
 EMAIL: BKALBER@SCOTTSDALEAZ.GOV



EXISTING UTILITY PLAN

24'x36' SCALE: 1/4" = 1'-0"
 11'x17' SCALE: 1/8" = 1'-0"

1 NEW UTILITY PLAN

24'x36' SCALE: 1/4" = 1'-0"
 11'x17' SCALE: 1/8" = 1'-0"

2

PREPARED FOR

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UTILITY PLANS

SHEET NUMBER

U-1