

GENERAL CONSTRUCTION NOTES

1. SUBMITTAL OF BID INDICATES CONTRACTOR IS COGNIZANT OF ALL JOB SITE CONDITIONS AND WORK TO BE PERFORMED UNDER THIS CONTRACT.
2. CONTRACTOR SHALL PERFORM ALL VERIFICATION OBSERVATION TESTS, AND EXAMINATION WORK PRIOR TO THE ORDERING OF THE ELECTRICAL EQUIPMENT AND THE ACTUAL CONSTRUCTION. CONTRACTOR SHALL ISSUE A WRITTEN NOTICE OF ALL FINDINGS TO THE ARCHITECT LISTING ALL MALFUNCTIONS, FAULTY EQUIPMENT AND DISCREPANCIES.
3. HEIGHTS SHALL BE VERIFIED WITH OWNER TO INSTALLATION.
4. THESE PLANS ARE DIAGRAMMATIC ONLY, FOLLOW AS CLOSELY AS POSSIBLE.
5. EACH CONDUCTOR OF EVERY SYSTEM SHALL BE PERMANENTLY TAGGED IN EACH PANELBOARD, PULLBOX, J-BOX, SWITCH BOX, ETC., IN COMPLIANCE WITH OCCUPATIONAL SAFETY AND HEALTH ACT (O.S.H.A.).
6. CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS, INSURANCE, EQUIPMENT, INSTALLATION, CONSTRUCTION TOOLS, TRANSFORMATION, ETC., FOR A COMPLETE AND PROPERLY OPERATIVE SYSTEM ENERGIZED THROUGHOUT AND AS INDICATED ON DRAWINGS, AS SPECIFIED HEREIN AND/OR AS OTHERWISE REQUIRED.
7. ALL MATERIALS AND EQUIPMENT SHALL BE NEW AND IN PERFECT CONDITION WHEN INSTALLED AND SHALL BE OF THE BEST GRADE AND OF THE SAME MANUFACTURER THROUGHOUT FOR EACH CLASS OR GROUP OF EQUIPMENT. MATERIALS SHALL BE LISTED AND APPROVED BY UNDERWRITER'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 & NBFU.
8. CONTRACTOR SHALL CARRY OUT HIS WORK IN ACCORDANCE WITH ALL GOVERNING STATE, COUNTY AND LOCAL CODES AND O.S.H.A.
9. CONTRACTOR SHALL SECURE ALL NECESSARY BUILDING PERMITS.
10. COMPLETE JOB SHALL BE GUARANTEED FOR A PRIOR OF ONE (1) YEAR AFTER THE DATE OF JOB ACCEPTANCE BY OWNER. 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 CONTRACTOR.
11. ALL CONDUIT ONLY (C.O.) SHALL HAVE A PULL WIRE OR ROPE.
12. PROVIDE PROJECT MANAGER WITH ONE SET OF COMPLETE ELECTRICAL "AS INSTALLED" DRAWINGS AT THE COMPLETION OF THE JOB, SHOWING ACTUAL DIMENSIONS, ROUTINGS, AND CIRCUITS.
13. ALL BROCHURES, OPERATING MANUALS, CATALOGS, SHOP DRAWINGS, ETC. SHALL BE TURNED OVER TO OWNER AT JOB COMPLETION.
14. USE T-TAP CONNECTIONS ON ALL MULTI -CIRCUITS WITH COMMON NEUTRAL CONDUCTOR FOR LIGHTING FIXTURE.
15. ALL CONDUCTORS SHALL BE COPPER.
16. ALL CIRCUIT BREAKERS, FUSES AND ELECTRICAL EQUIPMENT SHALL HAVE AN INTERRUPTING RATING NOT LESS THE MAXIMUM SHORT CIRCUIT CURRENT TO WHICH THEY MAY BE SUBJECTED, AND A MINIMUM OF 10,000 A.I.C.
17. THE ENTIRE ELECTRICAL INSTALLATION SHALL BE GROUNDED AS REQUIRED BY ALL APPLICABLE CODES AND DRAWINGS.
18. PATCH, REPAIR AND PAINT ANY AREA THAT HAS BEEN DAMAGED IN THE COURSE OF THE ELECTRICAL WORK.
19. 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/OR REINFORCING STEEL WILL NOT BE DRILLED INTO, CUT OR DAMAGED UNDER ANY CIRCUMSTANCES.
20. LOCATION OF TENDONS AND/OR REINFORCING STEEL 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 AND/OR STEEL TENDONS.
21. WIRE AND CABLE CONDUCTORS SHALL BE COPPER #12 AWG MINIMUM, NO BX OR ROMEX CABLE IS PERMITTED UNLESS SPECIFICALLY NOTED OTHERWISE ON DRAWINGS.
22. GROUNDING CONDUCTORS SHALL BE SOLD TINED COPPER AND ANNEALED #2.
23. GROUND RODS SHALL BE COPPER CLAD STEEL, 5/8" ROUND AND 10' LONG. COPPERWELD OR APPROVED EQUAL.
24. METER SOCKET AMPERES, VOLTAGE, NUMBER OF PHASES SHALL BE AS NOTED ON THE DRAWINGS. MANUFACTURED BY SQUARE D COMPANY OR APPROVED EQUAL. ALL MATERIALS SHALL BE U.L. LISTED.
25. CONDUIT:
- a. RIGID CONDUIT SHALL BE U.L. LABEL GALVANIZED ZINC COATED WITH INTERIOR AND SHALL BE USED WHEN INSTALLED IN OR UNDER CONCRETE SLABS, IN CONTACT WITH THE EARTH, UNDER PUBLIC ROADWAYS, IN MASONRY WALLS OR EXPOSED ON BUILDING EXTERIOR RIGIDCONDUIT IN CONTACT WITH EARTH SHALL BE 1/2 LAPPED WRAPPED WITH HUNTS WRAP PROCESS NO. 3.
- b. ELECTRICAL METALLIC TUBING SHALL HAVE U.L. LABEL, FITTINGS SHALL BE GLAND RING COMPRESSION TYPE. EMT SHALL BE USED ONLY FOR INTERIOR RUNS.
- c. FLEXIBLE METALLIC CONDUIT SHALL HAVE U.L. LISTED LABEL AND MAY BE USED WHERE PERMITTED BY CODE. FITTINGS SHALL BE "JAKE" OR "SQUEEZE" TYPE, SEAL TIGHT FLEXIBLE CONDUIT. ALL CONDUIT IN EXCESS OF SIX FEET IN LENGTH SHALL HAVE FULL SIZE GROUND WIRE.
- d. ALL UNDERGROUND CONDUIT SHALL BE PVC SCHEDULE 40 (UNLESS NOTED OTHERWISE) AT A MINIMUM DEPTH OF 24" BELOW GRADE.
26. ALL ELECTRICAL EQUIPMENT SHALL BE LABELED WITH PERMANENT ENGRAVED PLASTIC LABELS.
27. UPON COMPLETION OF WORK, CONDUCT CONTINUITY, SHORT CIRCUIT, AND FALL POTENTIAL GROUNDING TESTS FOR APPROVAL. SUBMIT TEST REPORTS TO PROJECT MANAGER. CLEAN PREMISES OF ALL DEBRIS RESULTING FROM WORK AND LEAVE WORK IN A COMPLETE AND UNDAMAGED CONDITION.
28. CONTRACTOR TO COORDINATE WITH UTILITY COMPANY FOR CONNECTION OF TEMPORARY AND PERMANENT POWER TO THE SITE. THE TEMPORARY POWER AND ALL HOOKUP COSTS TO BE PAID BY CONTRACTOR.
29. THE ELECTRICAL INSTALLATION WORK SHALL COMPLY WITH ALL LOCAL, STATE AND NATIONAL CODES, LAWS AND ORDINANCES APPLICABLE TO ELECTRICAL WORK.
30. ELECTRICAL CONTRACTOR SHALL VISIT JOB SITE AND VERIFY EXISTING CONDITIONS BEFORE BIDDING AND SHALL INCLUDE IN HIS BID THE NECESSARY COSTS TO CONSTRUCT THIS PROJECT IN ACCORDANCE WITH INTENT OF THE ELECTRICAL DRAWINGS, SPECIFICATIONS, AND ALL APPLICABLE CODES.

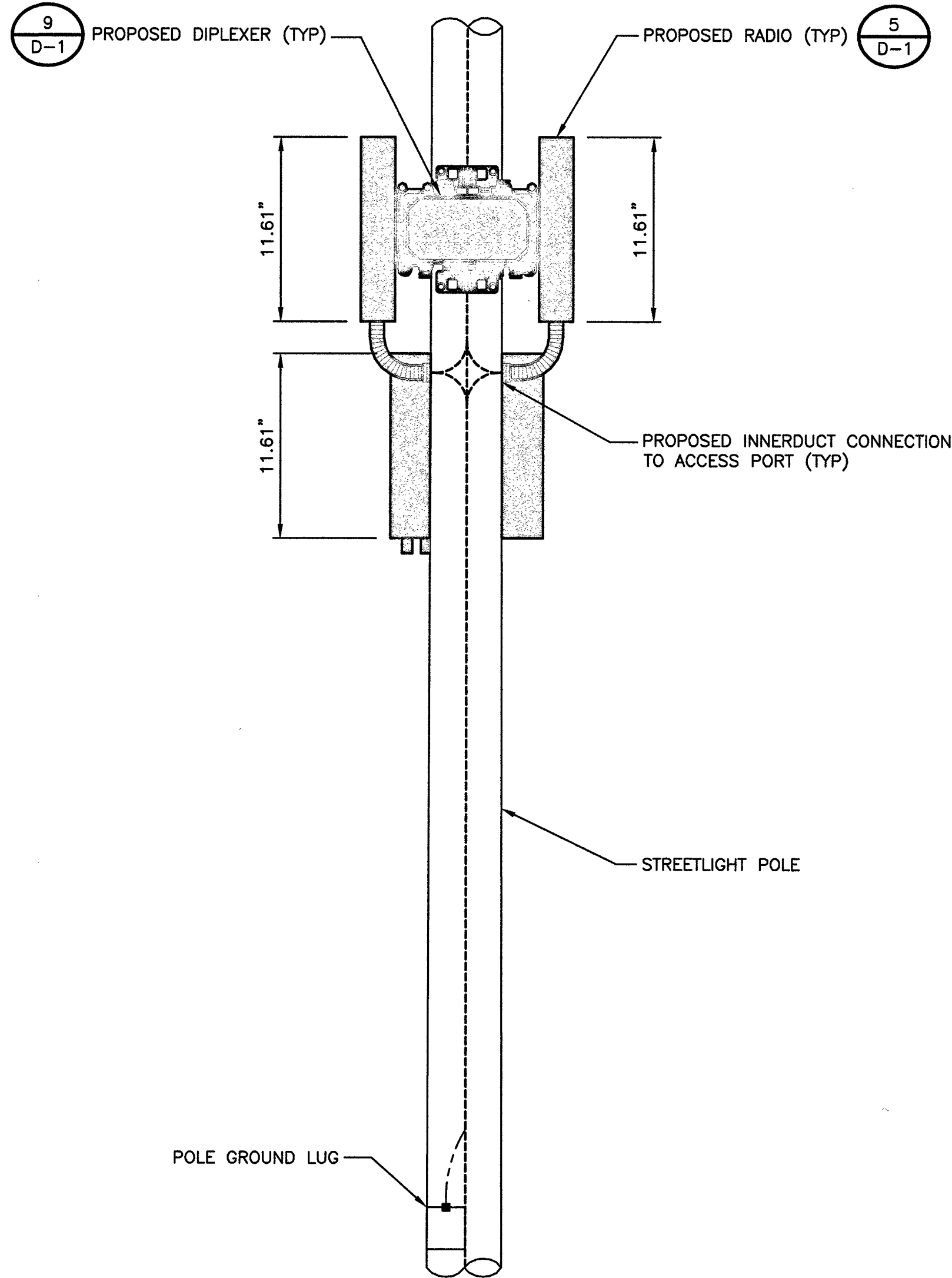
31. ALL MATERIAL AND EQUIPMENT FURNISHED AND INSTALLED UNDER THIS CONTRACT SHALL BE NEW, FREE FORM DEFECTS AND SHALL BE GUARANTEED FOR A PERIOD OF ONE YEAR FROM DATE OF FINAL ACCEPTANCE BY OWNER OR HIS REPRESENTATIVE. SHOULD ANY TROUBLE DEVELOP DURING THIS PERIOD DUE TO FAULTY WORKMANSHIP, MATERIAL OR EQUIPMENT, THE CONTRACTOR SHALL FURNISH ALL NECESSARY MATERIAL AND LABOR TO CORRECT THE TROUBLE WITHOUT COST TO THE OWNER.
32. ALL WORK TO BE EXECUTED IN WORKMANLIKE MANNER AND SHALL PRESENT A NEAT MECHANICAL APPEARANCE WHEN COMPLETED.
33. ALL ELECTRICAL MATERIALS AND EQUIPMENT SHALL BE LISTED BY UNDERWRITER'S LABORATORIES.
34. ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CUTTING AND PATCHING RELATED TO ELECTRICAL WORK, UNLESS NOTED OTHERWISE AND CO-ORDIANTED WITH THE GENERAL CONTRACTOR.
35. ELECTRICAL CONTRACTOR SHALL CO-ORINATE ALL WORK WITH CIVIL AND ARCHITECTURAL PLANS. THE REQUIREMENTS OF ALL EQUIPMENT ACTUALLY BEING INSTALLED SHALL BE VERIFIED PRIOR TO INSTALLING THE ELECTRICAL WORK.
36. ALL BRANCH CIRCUIT CONDUCTORS SHALL BE COPPER TYPE THWN-2, THW-2, RHW-2, XHHW-2 #14, #12, & #10 SOLID, #8 AND LARGER STRANDED, UNLESS NOTED OTHERWISE.
37. ON COMPLETION OF THE WORK, THE INSTALLATION SHALL BE FREE FORM GROUNDS AND SHORT CIRCUITS.
38. ELECTRICAL CONTRACTOR SHALL FURNISH AS-BUILT DRAWINGS TO THE ARCHITECT AND CUSTOMER UPON COMPLETION OF THE JOB.
39. ELECTRICAL WORK SHALL INCLUDE ALL LABOR, MATERIALS AND EQUIPMENT REQUIRED, INCLUDING BUT NOT LIMITED, TO COMPLETE ELECTRICAL SYSTEMS POWER AND LIGHTING, TELEPHONE CONDUIT SYSTEM, SIGNAL SYSTEMS, PANEL BOARDS(S), CONTROL WIRING, GROUNDING, CONDUIT ONLY SYSTEMS, ETC., AS INDICATED ON ELECTRICAL DRAWINGS AND/OR REQUIRED BY GOVERNING CODES.
40. RACEWAYS SHALL BE: RIGID STEEL CONDUIT: HOT-DIP GALVANIZED HEAVY WALL AS MANUFACTURED BY REPUBLIC, TRIANGLE OR EQUAL, RIGID POLYVINYL CHLORIDE CONDUIT (PVC): HEAVY WALLS SCHEDULE 40 AS MANUFACTURED BY CARLON ELECTRICAL, VISQUEEN OR EQUAL, ELECTRICAL METALLIC TUBING (EMT):ZINC-COATED THIN WALL AS MANUFACTURED BY TRIANGLE, REPUBLIC OR EQUAL
41. FUSE TYPE SHALL BE BUSSMANN RK-1 OR CLASS "J" FUSE.
42. PROVIDE ENGRAVED PLASTIC LABELS TO IDENTIFY ALL PANEL BOARDS, XFMRs., DISTRIBUTION PANELS, DISCONNECT SWITCHES, AND TRANSFER SWITCHES, LABELS SHALL READ IN THIS FASHION "A" 208Y/120V 3PH, 4W, 225A, CKT. BKR OR FUSES TYPE AND SIZES.
43. E.C. SHALL VERIFY AND TEST GROUND TO SOURCE TO A MAXIMUM OF 5 OHMS. IF THE GROUND TEST DOES NOT ACHIEVE THE 5 OHMS LESS, E.C. SHALL BE RESPONSIBLE FOR PROVIDING THE NECESSARY CONDUCTORS AND GROUND RODS TO ACHIEVE 5 OHMS MAXIMUM.
44. BEFORE SUBMITTING BID, VERIFY EXISTING SITE CONDITIONS, ELECTRICAL SERVICE REQUIREMENTS AND THE EXACT SERVING UTILITY POINTS OF CONNECTION.
45. THE ELECTRICAL CONTRACTOR (E.C) SHALL FURNISH AND PAY FOR ALL PERMITS AND RELATED FEES.
46. UNLESS SPECIFICALLY NOTED OTHERWISE, ALL ELECTRICAL MATERIALS, EQUIPMENT AND WORK, SHOWN ON THESE PLANS ARE TO BE PROVIDED AND INSTALLED BY THE ELECTRICAL CONTRACTOR.
47. E.C. SHALL FURNISH AND INSTALL ALL SWITCHES, CONDUITS, WIRES, BOXES, LIGHT FIXTURES (INCLUDING LAMPS), SERVICE DEVICES, RECEPTACLES, SWITCHBOARDS AND PANEL BOARDS, ETC. REQUIRED FOR A COMPLETE AND OPERATING ELECTRICAL SYSTEM.
48. SEE ARCHITECTURAL DRAWINGS FOR DIMENSIONAL/LOCATION INFORMATION RELATING TO THE ELECTRICAL DRAWINGS.
49. ELECTRICAL CONTRACTOR SHALL VERIFY VOLTAGES AND HORSEPOWER RATINGS OF ALL MECHANICAL EQUIPMENT.
50. PRIOR TO INSTALLING ANY ELECTRICAL WORK. THE ELECTRICAL CONTRACTOR SHALL VERIFY EXACT LOCATIONS AND REQUIREMENTS ON THE JOB AND BY REFERENCE TO ARCHITECTURE, MECHANICAL AND EQUIPMENT SUPPLIERS DRAWINGS. SHOULD THERE BE ANY QUESTION OR PROBLEM CONCERNING THE NECESSARY PROVISIONS TO BE MADE, PROPER DIRECTIONS SHALL BE OBTAINED BEFORE PROCEEDING WITH ANY WORK.
51. OUTLET AND JUNCTION BOXES SHALL BE SIZED PER CODE FOR THE QUANTITY OF WIRES THEY CONTAIN. SEE ARTICLE 370 OF N.E.C. PROVIDE ADDITIONAL BOXES AND EXTENSION RINGS AS REQUIRED.
52. ELECTRICAL CONTRACTOR SHALL COMPLY WITH CABLE BENDING RADIUS REQUIREMENTS PER CABLE MANUFACTURES SPECIFICATION.
53. CONDUIT LAYOUTS SHOWN ON THE PLANS ARE DIAGRAMMATIC, NOT INDICATING THE ROUTING REQUIRED, THE CONTRACTOR SHALL ROUTE CONDUITS AS REQUIRED BY THE CONDITIONS OF INSTALLATION.
54. ALL EQUIPMENT PROVIDED BY THE ELECTRICAL CONTRACTOR SHALL BE LISTED AND LABELED BY A NATIONALLY- RECOGNIZED TESTING AGENCY, ACCEPTABLE TO THE AUTHORITY HAVING JURISDICTION, FOR THE CONDITIONS OF THE INSTALLATION.
55. PLANS INDICATE THE NUMBER OF PHASE NATURAL, AND GROUND CONDUCTORS WHERE MORE THAN THREE CONDUCTORS ARE TO BE INSTALLED IN A CONDUIT (THREE OR LESS CONDUCTORS ARE NOT SHOWN). ADDITIONAL CONDUCTORS REQUIRED FOR CONTROL SHALL BE INCLUDED EVEN IF NOT EXPLICITLY SHOWN.
56. WHERE SIZE IS NOT SHOWN ON THE DRAWINGS, CIRCUITS SHALL CONSIST OF #12 PHASE AND GROUNDED (NEUTRAL CONDUCTORS) AND A #12 CU GROUND IN A 3/4" CONDUIT.
57. UNLESS SPECIFICALLY NOTED OTHERWISE, THE ELECTRICAL CONTRACTOR SHALL MAKE FINAL CONNECTIONS TO ALL UTILIZATION EQUIPMENT SHOWN ON THE DRAWINGS. VERIFY THE TYPE OF FINAL CONNECTION AND PROVIDE APPROPRIATE WIRING METHOD.
58. PRIOR TO TRENCHING IN ANY AREA THE CONTRACTOR SHALL CONTACT ELECTRICAL, COMMUNICATIONS/DATA, CABLE T.V., GAS, AND WATER UTILITY PROVIDES (BLUE STRIKE) AND HAVE ALL UTILITIES IN THE AREA IDENTIFIED. IN ADDITION, THE CONTRACTOR SHALL OBTAIN THE SERVICES OF A SUBCONTRACTOR SPECIALIZING IN THE LOCATION OF UNDERGROUND STRUCTURES TO IDENTIFY ANY OBSTACLES IN THE PATH OF TRENCHING (PRIOR TO COMMENCING WORK). DAMAGE TO ANY UNDERGROUND STRUCTURES SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE PROJECT.
59. ANY AND ALL WIRE THAT CARRIES A CURRENT MUST BE IN A CONDUIT. (GROUNDING WIRE FOR LOOPS, HALOS, ECT. IS CONSIDERED NON-CURRENT CARRYING.)

FOR SITES IN NDOT RIGHT-OF-WAY:

CONTRACTOR TO ENSURE LOCATES ARE COMPLETED PRIOR TO DIGGING IN THE ROW. IF UTILITIES ARE INDICATED WITHIN 3 FEET OF THE PROPOSED ROUTE, OR IF CROSSING EXISTING UTILITY, CONTRACTOR TO POT-HOLE EXISTING UTILITY TO DETERMINE DEPTH AND EXACT LOCATION PRIOR TO CONSTRUCTION. IF UTILITY IS DAMAGED DURING THE INSTALLATION OF THE NEW CONDUIT, IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO CONTACT THE UTILITY IMMEDIATELY AND IT IS ALSO THE CONTRACTORS RESPONSIBILITY TO HAVE ANY DAMAGE FIXED AND/OR REPAIRED PRIOR TO CLOSING THE EXCAVATION.

TYPICAL HANDHOLE NOTES

1. CONCRETE COLLARS MAY BE DESIRED FOR INSTALLATIONS IN DRIVEWAYS, PARKING LOTS AND OFF-ROADWAY APPLICATIONS WHERE SUBJECT TO OCCASIONAL NON-DELIBERATE TRAFFIC. THIS APPLIES TO BOXES MADE FROM ANY MATERIAL TO PROVIDE ADDED PROTECTION FOR THE TOP LID. THIS IS NOT NECESSARY IN GRASSY AREAS OR AREAS SUBJECT TO PEDESTRIAN TRAFFIC.
2. CONCRETE ENCASEMENT TO BE 3,000 PSI MIN.
3. CONCRETE ENCASEMENT COLLAR DIMENSION "D" TO BE EQUAL TO DESIGN PAVEMENT DEPTH.
4. PAVEMENT AND SUBGRADE TO BE SHOWN ON THE ENGINEERING PLANS.
5. EXCAVATE THE HOLE APPROXIMATELY 6 TO 8" DEEPER THAN SUGGESTED HANDHOLE BURIAL DEPTH.
6. COMPACT THE SUBSOIL WITH A BACK-HOE OR A HYDRAULIC TAMPER. ADD APPROXIMATELY 6 TO 8" OF GRAVEL TO THE BOTTOM OF HOLE.
7. PLACE THE HANDHOLE ON THE LEVELED GRAVEL BED. LEVEL THE HANDHOLE.
8. BACK-FILL WITH LOOSE EARTH MATERIAL UP TO THE TOP SURFACE OF THE HANDHOLE. DO NOT BACK-FILL WITH CHUNKS OF FROZEN MATERIAL OR LARGE ROCKS NEXT TO THE GROUND SLEEVE. PACK THE BACK-FILL MATERIAL BY FOOT TAMPING, NO MACHINE TAMPING.
9. PROVIDE BARRIER HUBBELL QUAZITE # PG 2436BC30.
10. ALL UNDERGROUND CONDUITS SHALL BE SCH 40 PVC. EXCEPT THAT ELBOWS AND RISERS SHALL BE RMC ALL UNDERGROUND ELBOWS SHALL BE SWEEPING BENDS. 2'-0" MINIMUM SHALL BE REQUIRED.
11. THREE CONDUITS ARE SHOWN BELOW, ALTHOUGH MULTIPLE CONDUITS CAN BE PLACED IN THE SAME TRENCH. A MINIMUM SEPARATION IS REQUIRED PER THE LOCAL JURISDICTIONS AND UTILITY COMPANIES. IN ALL OTHER CASES, USE THE CONDUIT SPACING SCHEDULE TO MAINTAIN MINIMUM SPACING BETWEEN THE EXTERIOR WALL TO EXTERIOR WALL SEPARATION OF CONDUITS.
12. CONTRACTOR SHALL RESTORE THE TRENCH TO ITS ORIGINAL CONDITIONS BY EITHER SEEDING OR SODDING GRASS AREAS, OR REPLACING ASPHALT OR CONCRETE AREAS TO ITS ORIGINAL CROSS SECTION.
13. TRENCHING SAFETY; INCLUDING, BUT NOT LIMITED TO SOIL CLASSIFICATION, SLOPING, AND SHORING, SHALL BE GOVERNED BY THE CURRENT OSHA TRENCHING AND EXCAVATION SAFETY STANDARDS.
14. ALL CONDUITS SHALL BE INSTALLED IN COMPLIANCE WITH THE NATIONAL ELECTRIC CODE (NEC) OR AS REQUIRED BY THE LOCAL JURISDICTION.



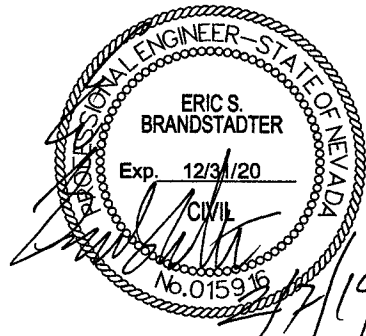
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REV	DATE	DESCRIPTION
1	11/14/18	ISSUED FOR CONSTRUCTION
0	10/01/18	ISSUED FOR CONSTRUCTION



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SITE ADDRESS

33AT0075SMC
CRAN_NVL08107F_R03
2300.25 W SAHARA AVE.
LAS VEGAS, NV 89102
SMALL CELL

SHEET TITLE

GENERAL CONSTRUCTION
NOTES

SHEET NUMBER

GN-1

GENERAL NOTES

1

TYPICAL EQUIPMENT PLACEMENT DETAIL

NO SCALE

2

THIS DRAWING IS
NOT A SITE SURVEY

THE PURPOSE OF THIS DRAWING IS
TO SHOW HOW THE DEVELOPED SITE
RELATES TO THE PARENT PARCEL
AND ADJACENT PROPERTIES.

NOTE

ALL DIMENSIONS ARE IN FEET UNLESS OTHERWISE
NOTED. STATIONING SHOWN IN METERS PER NDOT
SUPPLIED SITE MAP. STATIONING BASED OFF OF
INTERSECTION OF W SAHARA AVE & RANCHO DR
"P" 72+81.069 MP 25.35
(PROJECT NO. SPSR-0589(008))

NOTE

PAVEMENT, SIDEWALK AND CURB TO BE RESTORED
PER CLARK COUNTY UNIFORM STANDARD DETAILS.

NOTE TO CONTRACTOR:
VERIFY ROUTE AND CABLE FOOTAGE.
IF ACTUAL FIELD CONDITION IS
DIFFERENT, CONTRACTOR MAY NOTIFY
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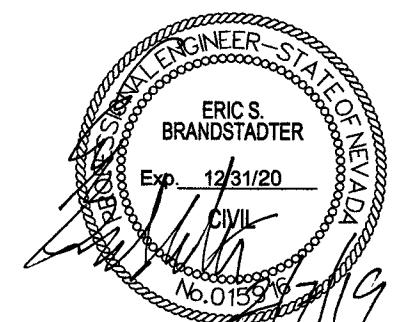
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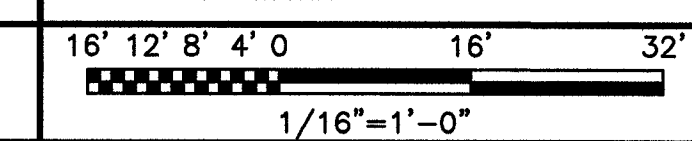
OVERALL SITE PLAN

SHEET NUMBER

A-1

LEGEND

FACILITIES TO BE INSTALLED _____
FACILITIES TO BE REMOVED, _____
ABANDONED AND/OR ADJUSTED _____
EXISTING FACILITIES _____



1

OVERALL SITE PLAN

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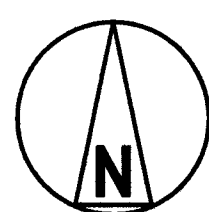
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SHEET TITLE

ENLARGED SITE PLAN

SHEET NUMBER

A-1.1



ENLARGED SITE PLAN

LEGEND

FACILITIES TO BE INSTALLED _____

FACILITIES TO BE REMOVED, _____

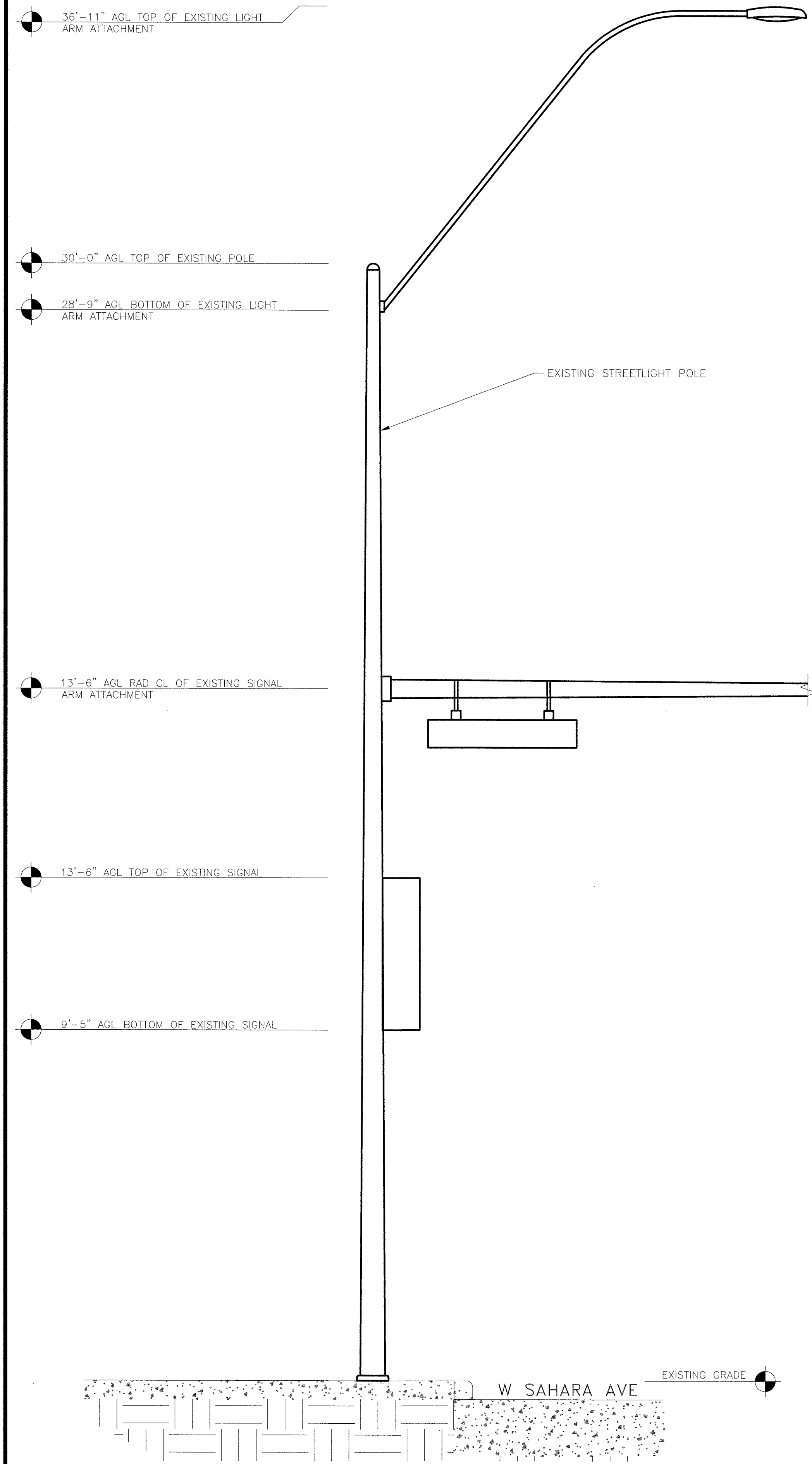
ABANDONED AND/OR ADJUSTED _____

EXISTING FACILITIES _____

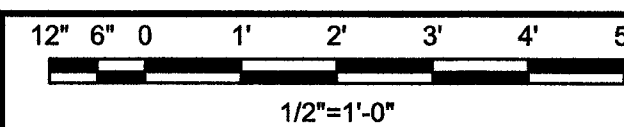
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1/4"=1'-0"

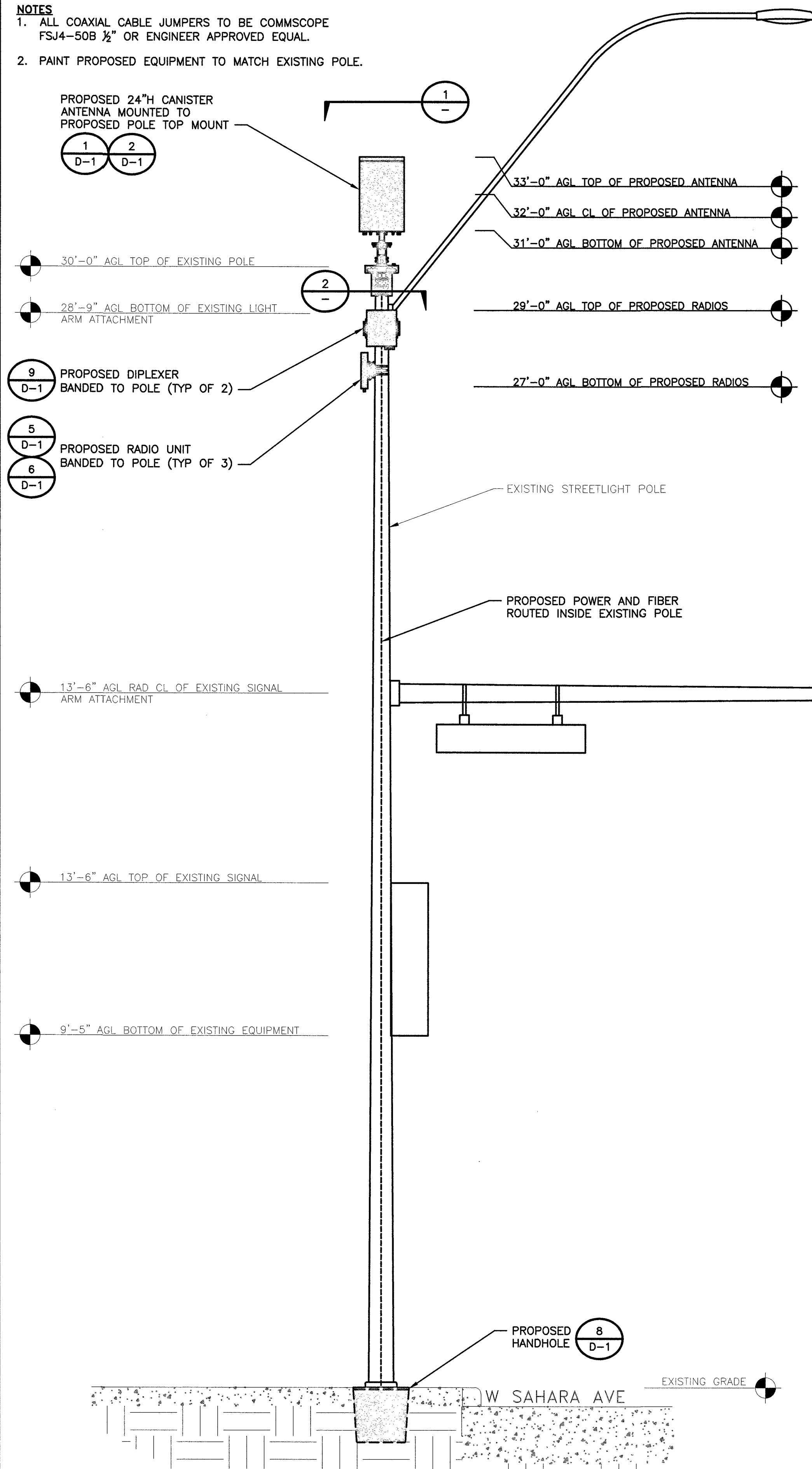
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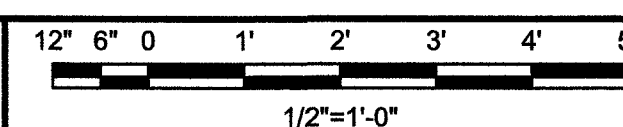
EXISTING WEST ELEVATION



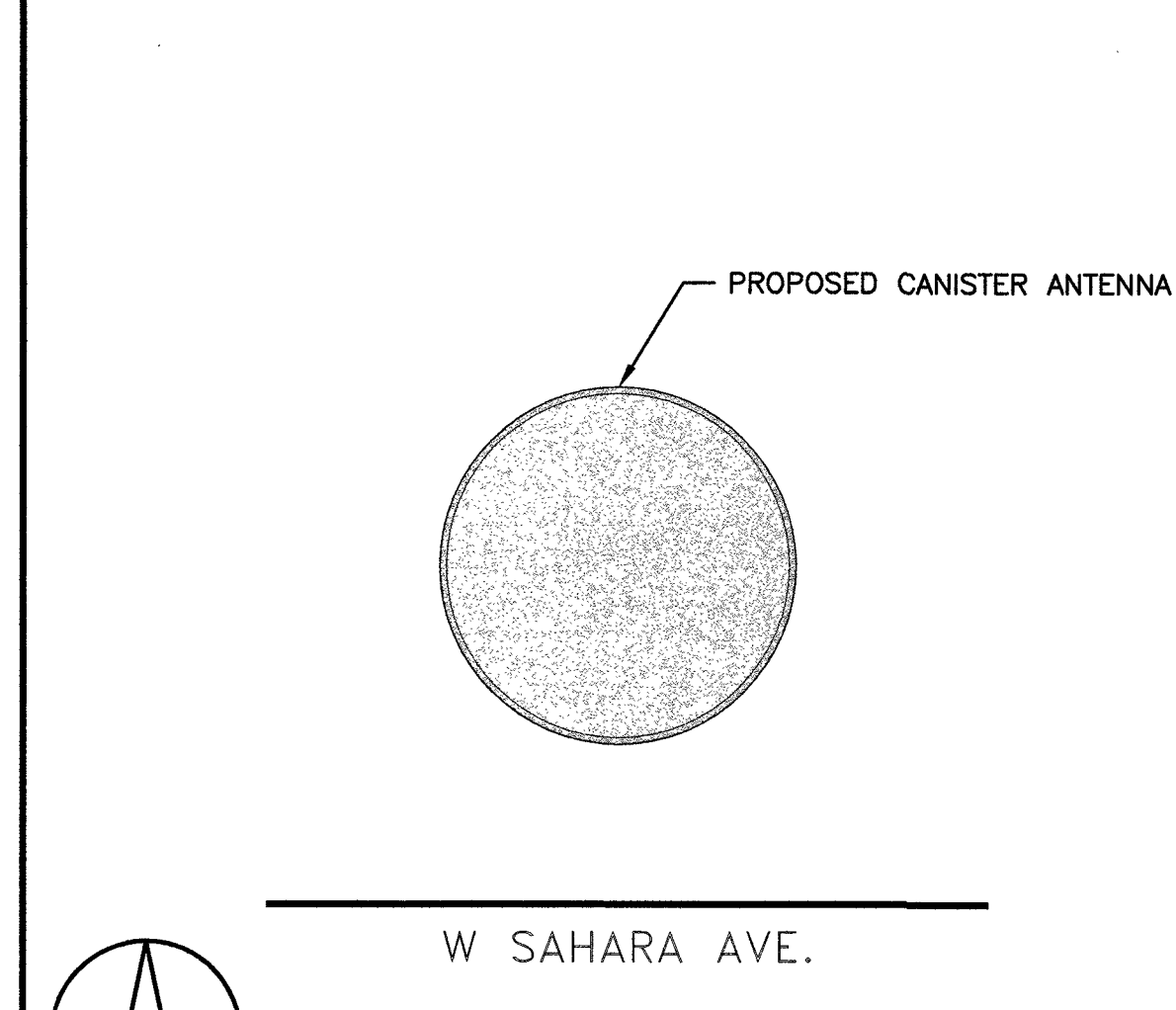
A



PROPOSED WEST ELEVATION



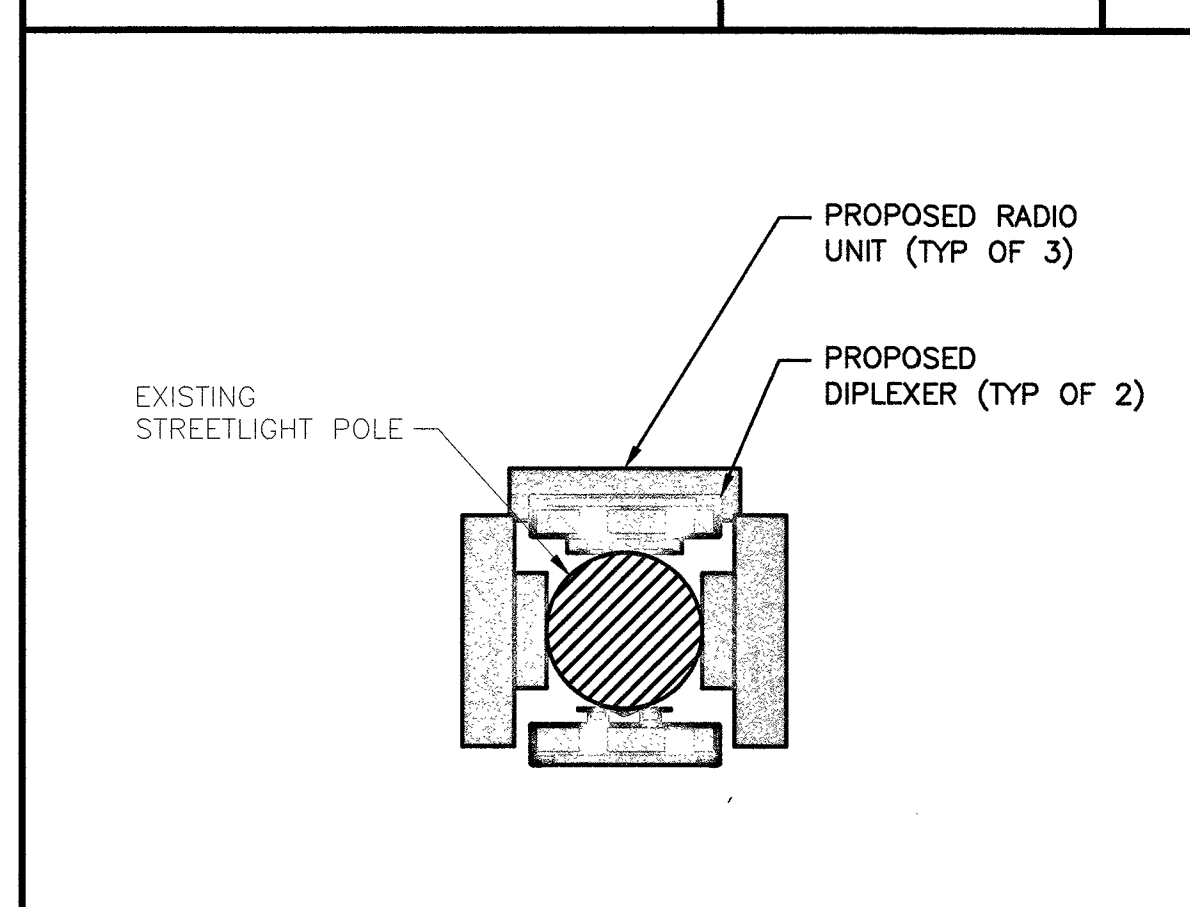
B



ANTENNA SPACE PLAN VIEW

NO SCALE

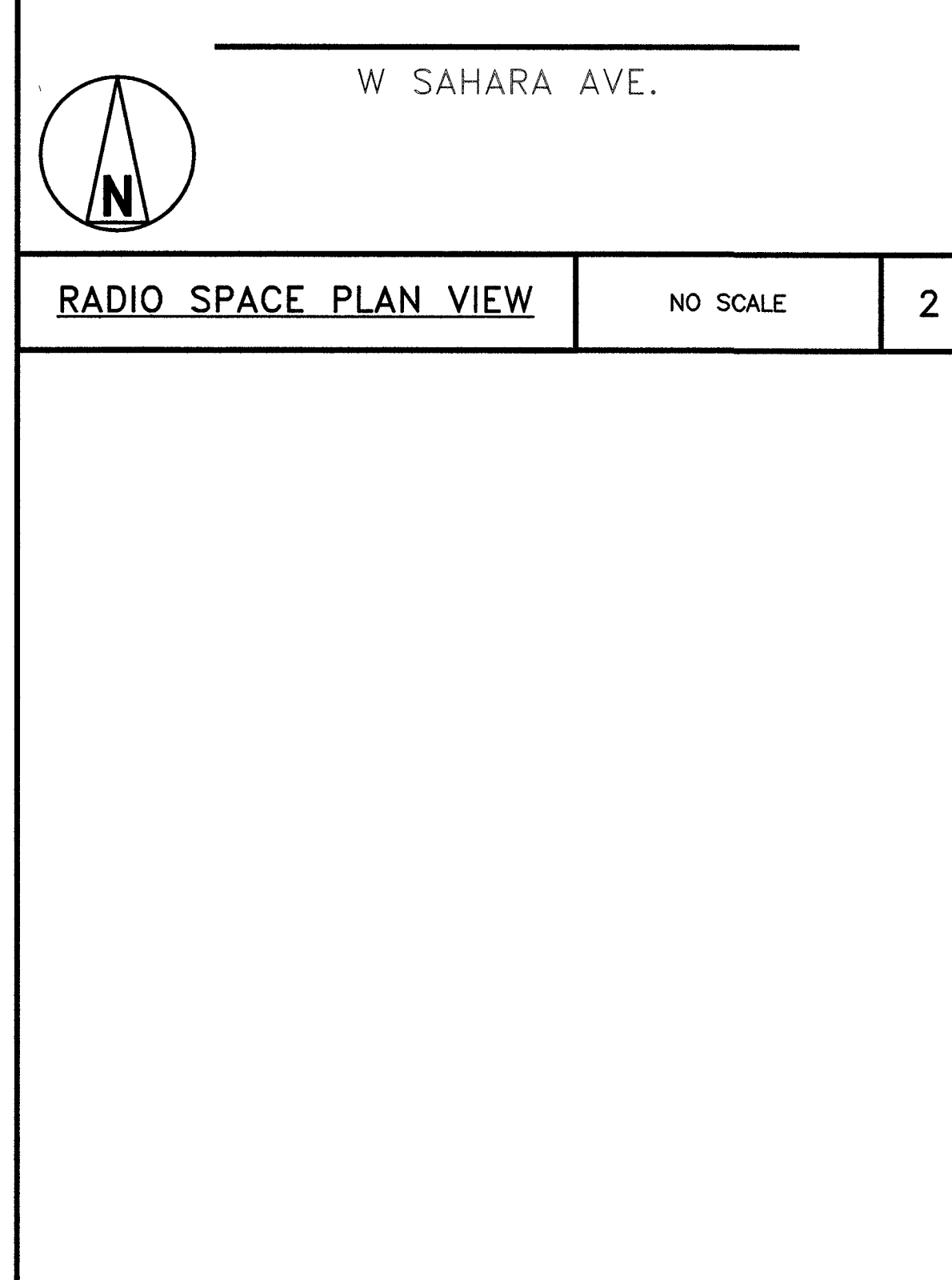
1



RADIO SPACE PLAN VIEW

NO SCALE

2



NOT USED

NO SCALE

3



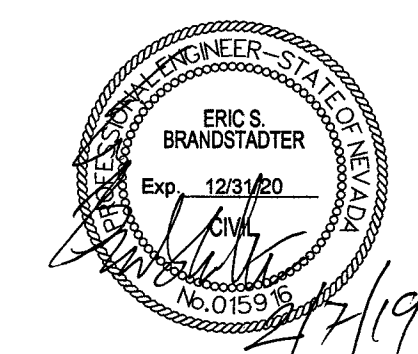
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2300.25 W SAHARA AVE.
LAS VEGAS, NV 89102
SMALL CELL

SHEET TITLE

ELEVATIONS

SHEET NUMBER

A-2

CAUTION
STAY BACK 1 ft.
TO PREVENT
RADIO FREQUENCY
EXPOSURES ABOVE FCC
LIMITS. CALL NOC
1-877-897-2475
TO POWER DOWN.
SITE ID: 33AT0075SMC

NOTICE
SMALL CELL SHUT OFF SWITCH
Push switch button turn off radio
while working within 3 ft. of the
device
Note: Once work is completed
turn switch back on

NOTES

1. CONTRACTOR IS TO FIELD VERIFY ALL EXISTING ITEMS SHOWN ON THE ELECTRICAL ONE-LINE DIAGRAM AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES.
2. ALL NEW CONDUCTOR WIRE TO BE INSTALLED SHALL BE COPPER THWN-2, THW-2, RHW-2, XHHW-2 WIRE UNLESS NOTED OTHERWISE.
3. ALL GROUNDING AND BONDING TO BE PER THE RECOGNIZED EDITION OF THE NATIONAL ELECTRIC CODE (NEC).
4. ALL INSTALLED CONDUCTORS AND SIGNAL CABLES TO BE CLEARLY MARKED "COX COMMUNICATIONS" WITH BRASS OR FIBERGLASS TAGS.

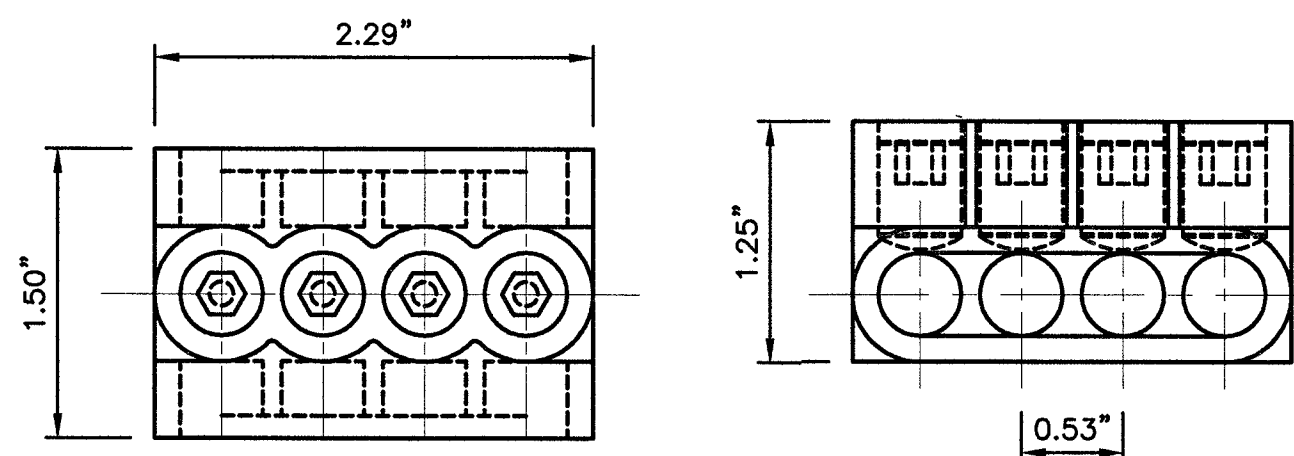
120VAC FEEDER CONDUCTOR MAXIMUM DISTANCE		
#12 AWG	400'-0"	3% VOLT DROP @ 2.5A
#10 AWG	675'-0"	3% VOLT DROP @ 2.5A

RF WARNING PLACARDS

NO SCALE

1

MULTI-TAP CONNECTOR WITH CLEAR INSULATION,
DOUBLE-SIDED (PCSB4-4-6Y)



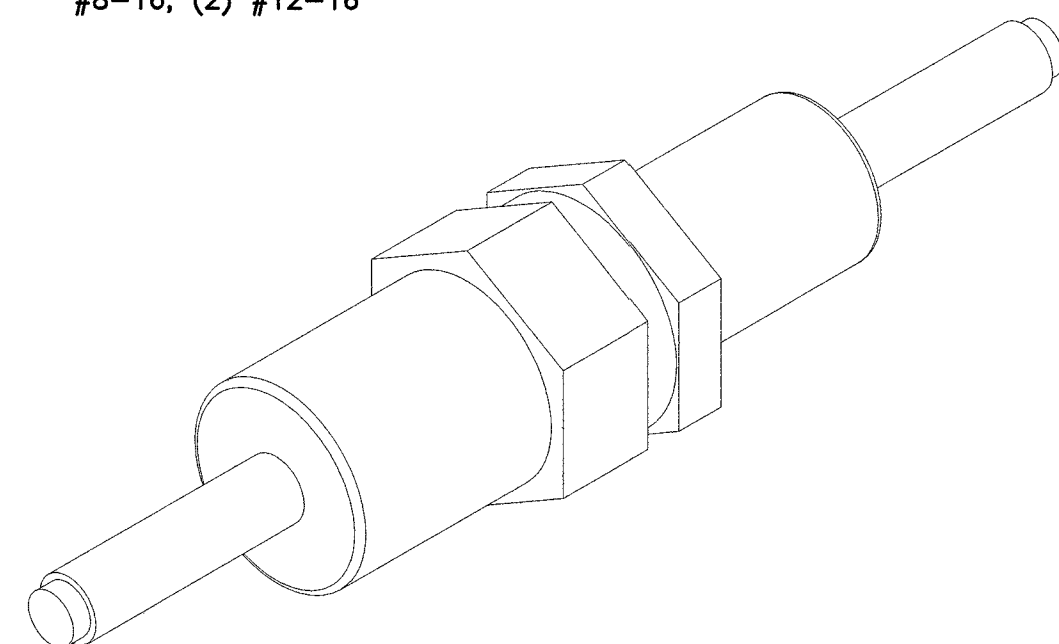
CONNECTOR DETAIL

NO SCALE

2

BUSSMAN HEB-AW-RLC-A

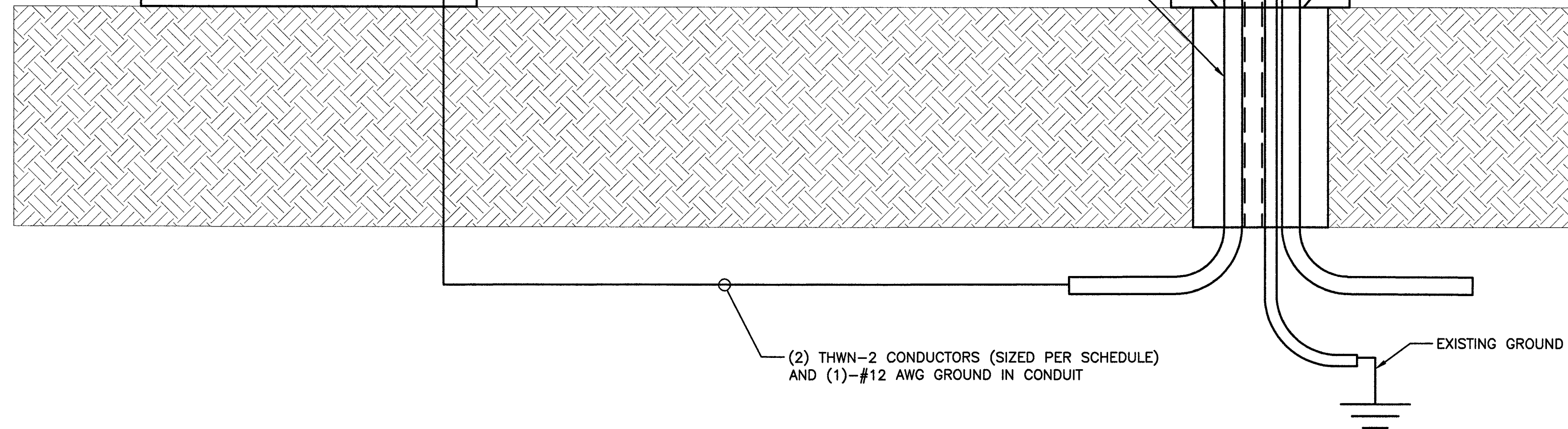
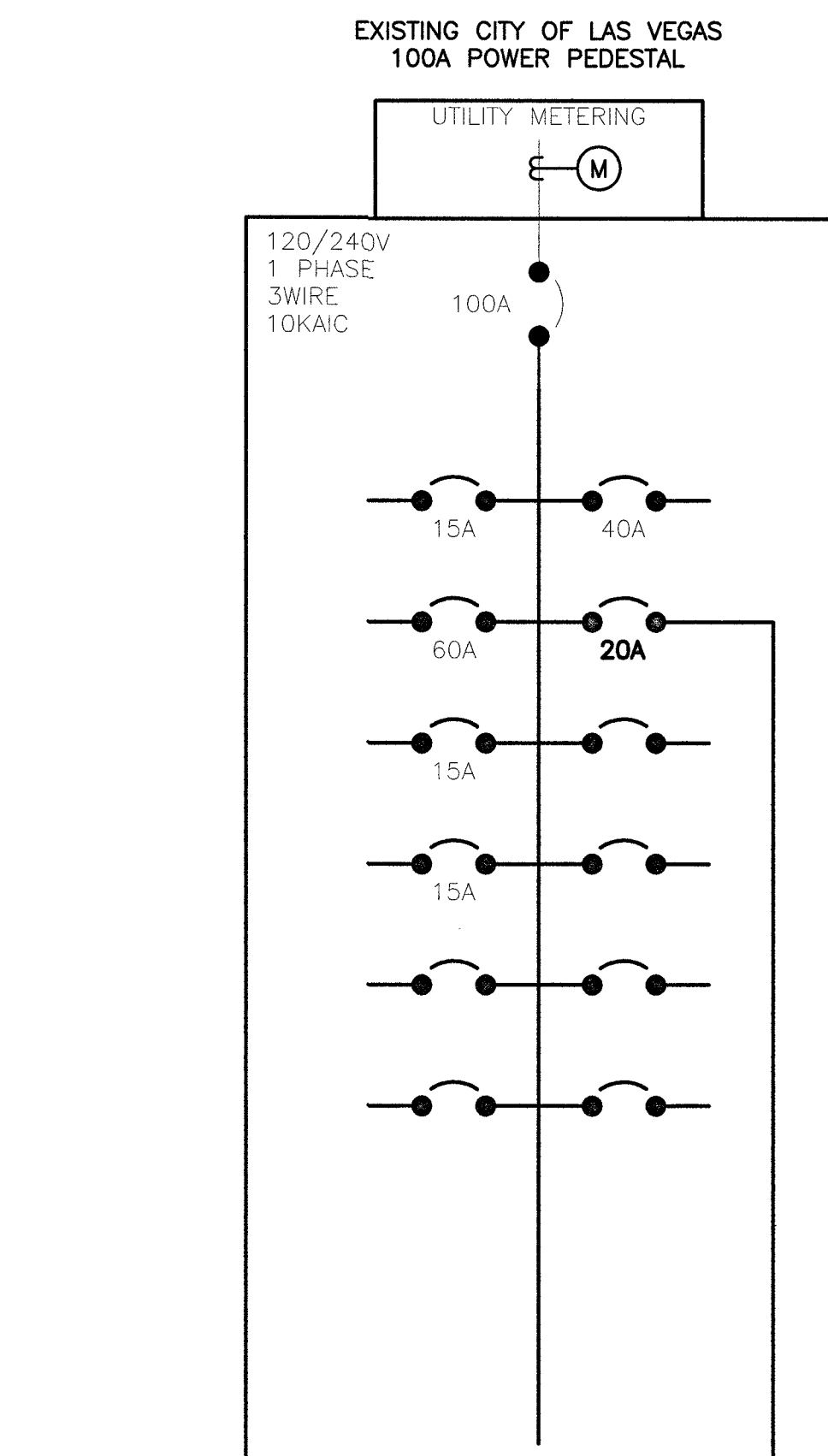
DIMENSIONS, LENGTH: 4.4"
WIRE RANGE: #8-16; (2) #12-16



BREAKAWAY FUSE DETAIL

NO SCALE

3



EXISTING POLE GROUND LUG

EXISTING STREETLIGHT CONDUCTORS (TYP)

EXISTING CONDUIT ROUTED FROM POWER
PEDESTAL TO BE USED FOR PROPOSED RADIOS

(2) THWN-2 CONDUCTORS (SIZED PER SCHEDULE)
AND (1) #12 AWG GROUND IN CONDUIT

EXISTING GROUND ROD



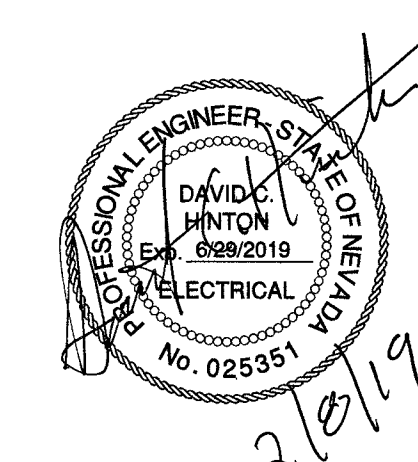
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PROJECT NO.	DRAWN BY	CHECKED BY
199064.####	SRB	LEW

REV	DATE	DESCRIPTION
1	11/14/18	ISSUED FOR CONSTRUCTION
0	10/01/18	ISSUED FOR CONSTRUCTION



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SITE ADDRESS

33AT0075SMC
CRAN_NVL08107F_R03
2300.25 W SAHARA AVE.
LAS VEGAS, NV 89102
SMALL CELL

SHEET TITLE

ELECTRICAL DETAILS
AND DIAGRAMS

SHEET NUMBER

E-1

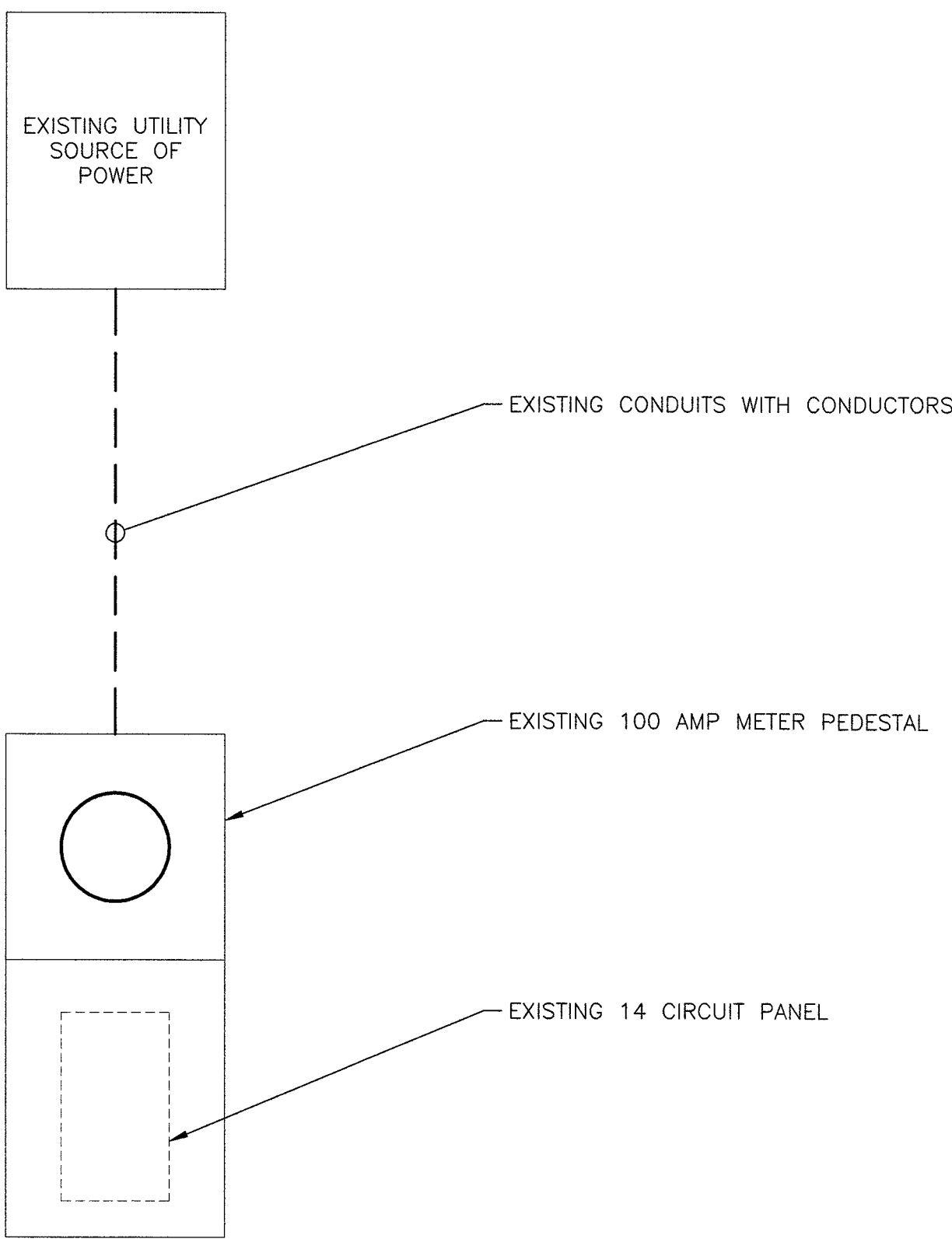
TYPICAL POLE SITE TEMPLATE

NO SCALE

4

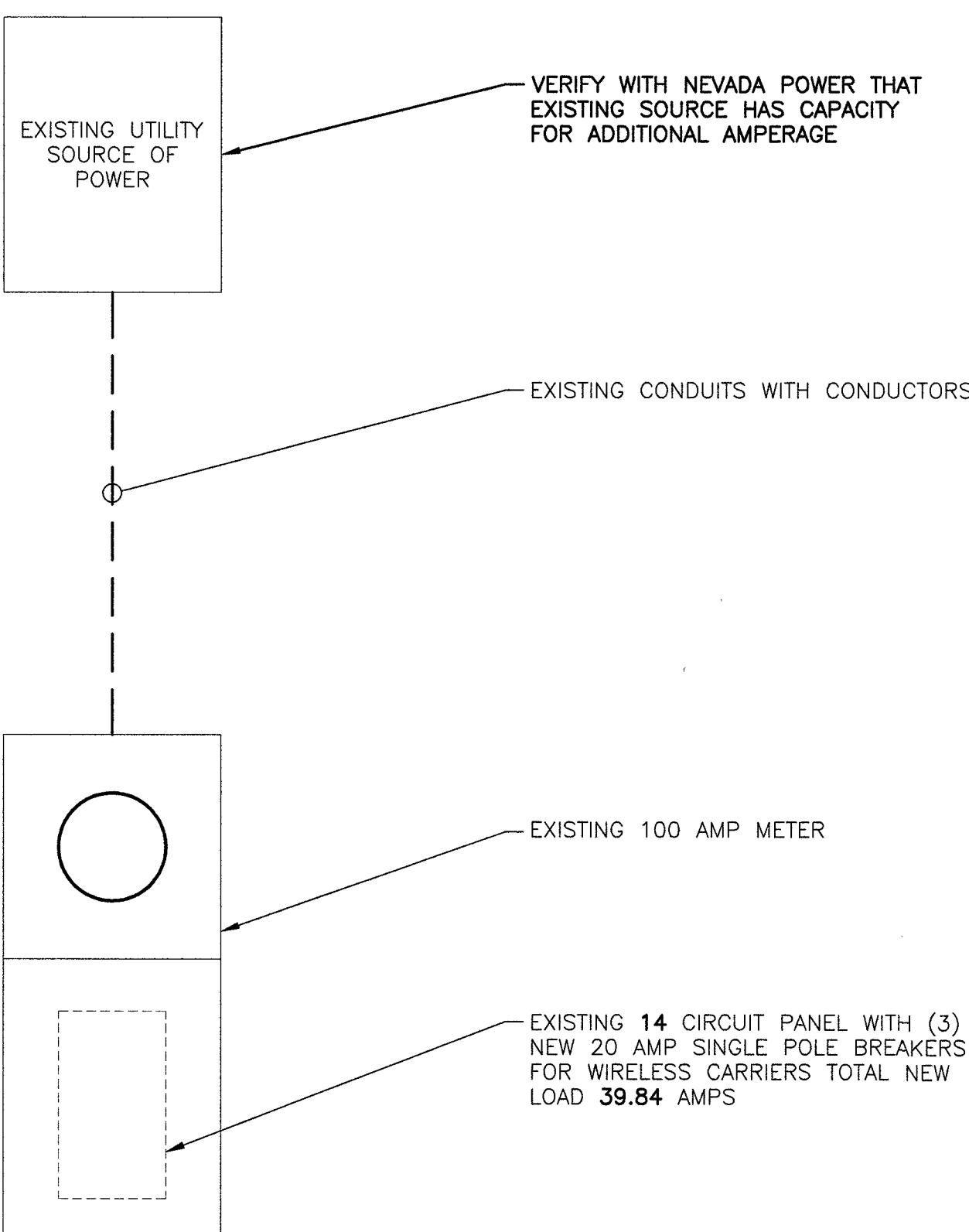
EXISTING ELECTRICAL LOAD STUDY

EXISTING LOAD.....30.0 AMPS
ALLOWED LOAD 80%.....80 AMPS



PROPOSED ELECTRICAL LOAD STUDY

EXISTING LOAD.....30.0 AMPS
SAFETY FACTOR 125%.....37.50 AMPS
PROPOSED LOAD.....2.34 AMPS
TOTAL LOAD.....39.84 AMPS
ALLOWED LOAD 80% OF 200 AMPS.....80 AMPS



EXISTING SINGLE LINE DIAGRAM

NO SCALE

1

PROPOSED SINGLE LINE DIAGRAM

NO SCALE

2

Site Name:		2300 W. SAHARA AVE						MODEL NUMBER:		TESCO METER PEDESTAL										
SITE NUMBER:		33AT0075SMC						PHASE:		1		WIRE:						3		
VOLTAGE:		240 /120		Volts AC				BUSS RATING:		100		AMPS								
MAIN BREAKER:		100 AMPS																		
MOUNT:		SURFACE																		
ENCLOSURE TYPE:		NEMA 3R																		
PANEL STATUS:		EXISTING																		
CKT	LOAD DESCRIPTION	BREAKE R AMPS	BREAKER POLES	BREAKER STATUS	SERVICE LOAD VA	Demand Factor	USAGE FACTOR	PHASE A VA	PHASE B VA	USAGE FACTOR	Demand Factor	SERVICE LOAD VA	BREAKER STATUS	BREAKER POLES	BREAKER AMPS	LOAD DESCRIPTION	CKT			
1	MAIN BREAKER	100	2	ON	0	1.00	1.00	7065		1.25	1.00	5652	ON	1	40	STREET LIGHTS	2			
3					0	1.00	1.00		563	1.25	1.00	450	NEW	1	20	PROPOSED COX SMALL CELL	4			
5								0		1.00	1.00	0	OFF	1	20	TELECOM (FUTURE)	6			
7	CONTROLS	15	1	ON	780	1.00	1.25		975	1.00	1.00	0	OFF	1	20	TELECOM (FUTURE)	8			
9	SIGNAL	60	1	ON	612	1.00	1.25	765									10			
11	SPARE	15	1	OFF	0	1.00	1.00		0								12			
13	SIGN	15	1	ON	156	1.00	1.25	195									14			
								PHASE A	PHASE B											
								8025	1538	VA										
									TOTAL	KVA	9.56									
										AMPS	39.84	≤ 80% OF MAIN BREAKER								

PROPOSED PANEL SCHEDULE AND CALCS

NO SCALE

3



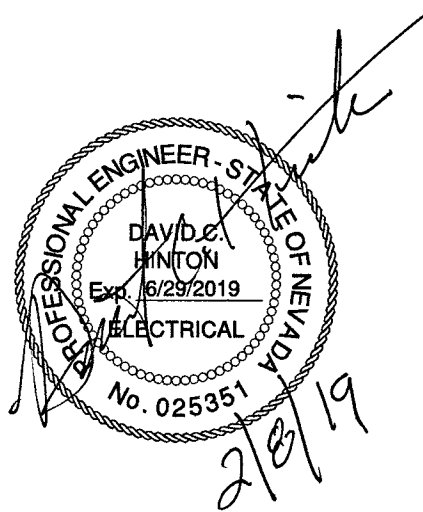
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PROJECT NO.	DRAWN BY	CHECKED BY
199064.####	SRB	LEW

REV	DATE	DESCRIPTION
1	11/14/18	ISSUED FOR CONSTRUCTION
0	10/01/18	ISSUED FOR CONSTRUCTION



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SITE ADDRESS
33AT0075SMC
CRAN_NVL08107F_R03
2300.25 W SAHARA AVE.
LAS VEGAS, NV 89102
SMALL CELL

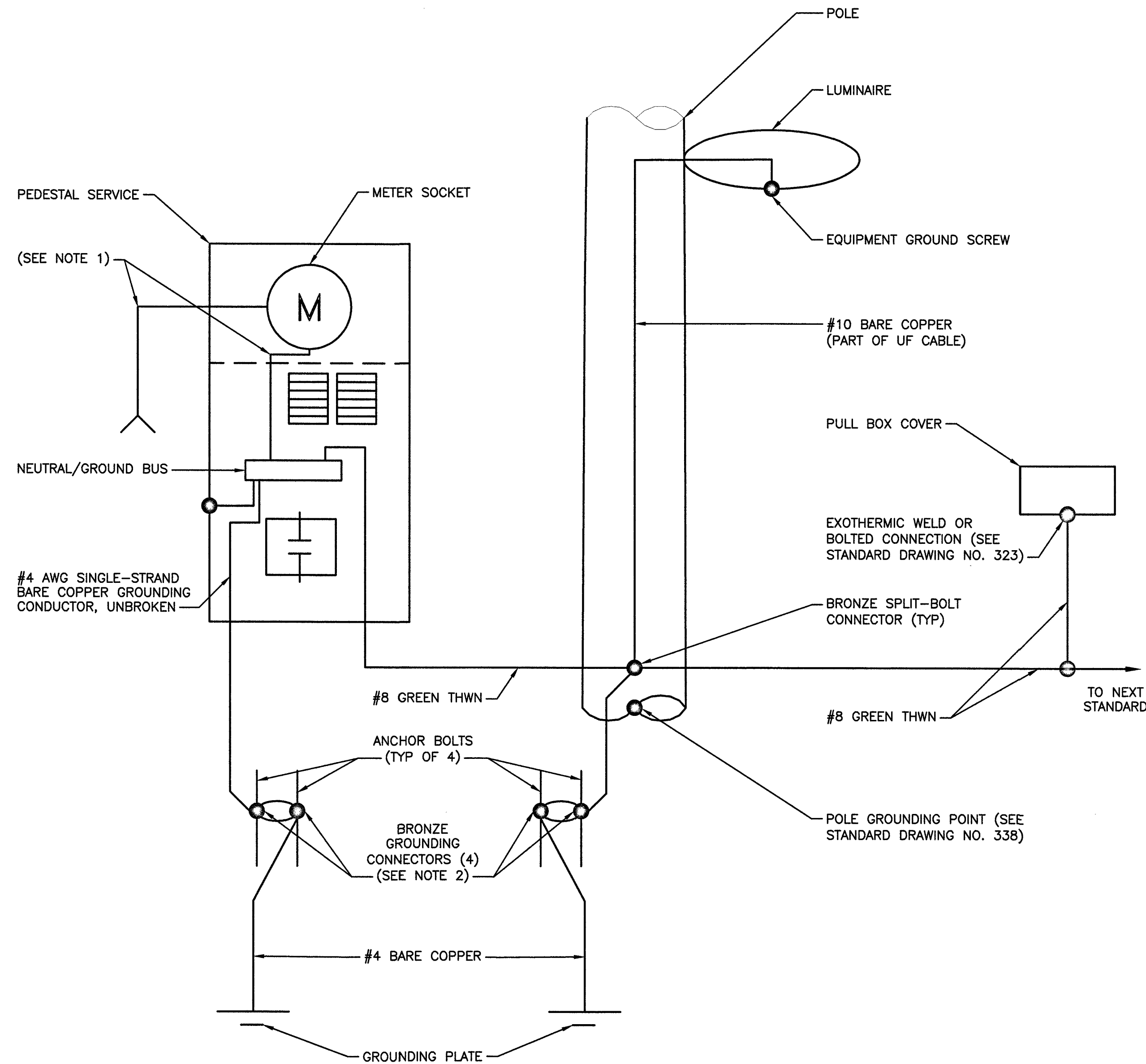
SHEET TITLE
ELECTRICAL SINGLE
LINE DIAGRAMS

SHEET NUMBER

E-2

NOTES

1. FOR CONDUIT SIZE AND WIRING REQUIREMENTS FOR STREETLIGHT SERVICE, SEE STANDARD DRAWING NO. 332.S2 FOR LAS VEGAS AND CLARK COUNTY ONLY AND 332.S1 FOR ALL OTHER ENTITIES.
2. SEE STANDARD DRAWING NO. 321, 332.S1, OR 332.S2.



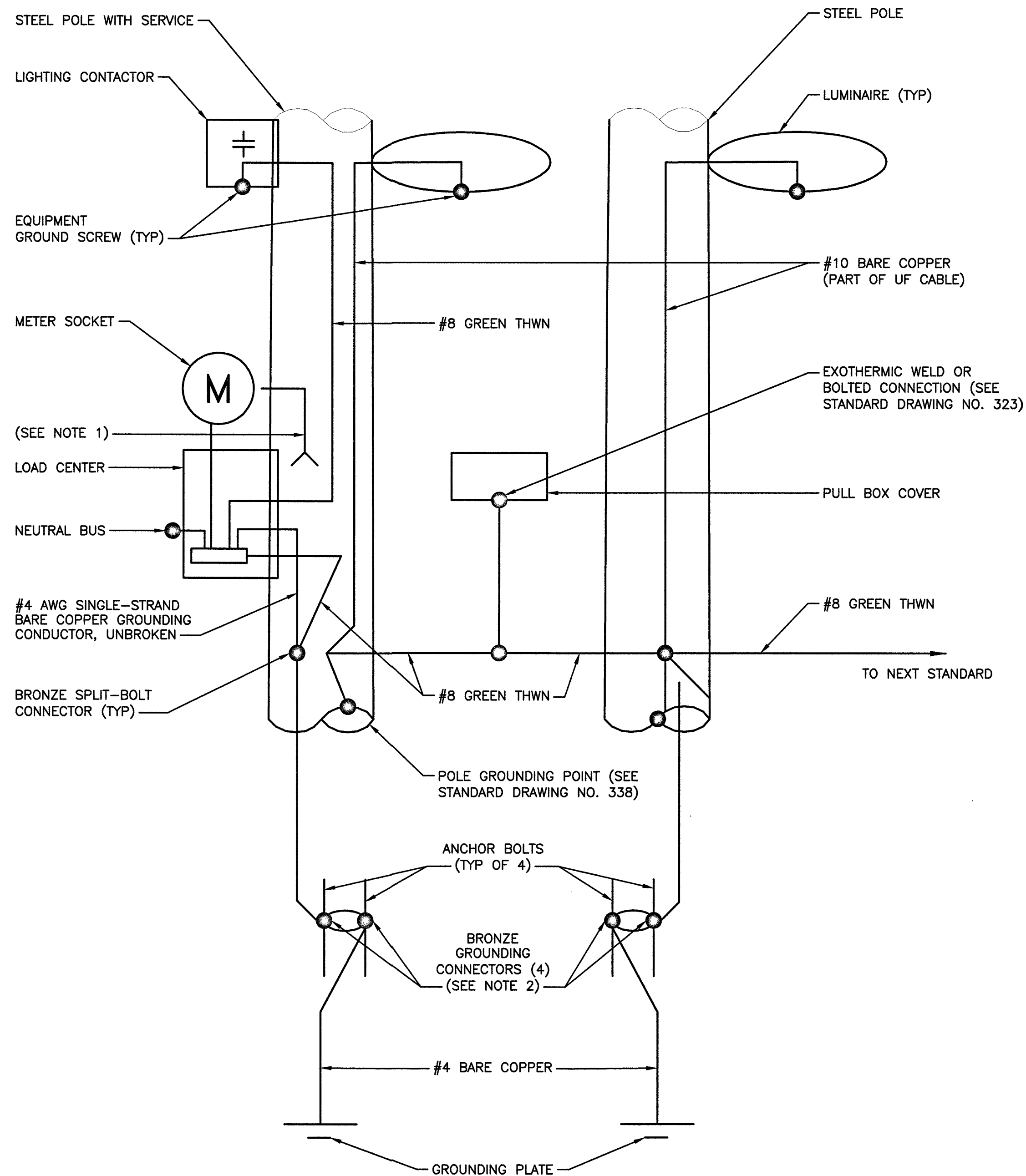
METER PEDESTAL GROUNDING DIAGRAM

NO SCALE

1

NOTES

1. 125 AMP SERVICE: 1 #4 WHITE THW
200 AMP SERVICE: 1 #1/0 WHITE THW



POLE EQUIPMENT GROUNDING DIAGRAM

NO SCALE

2



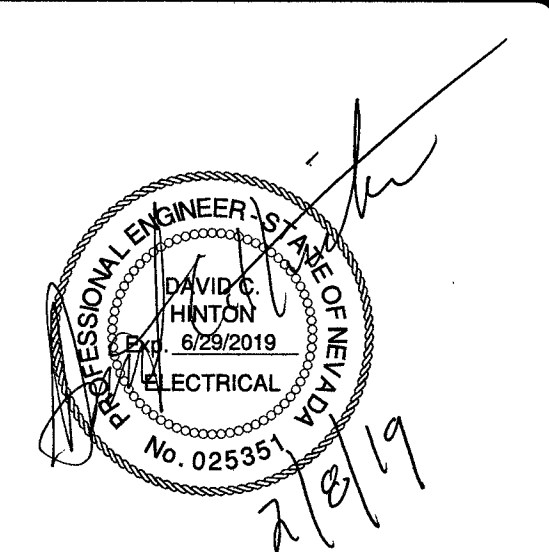
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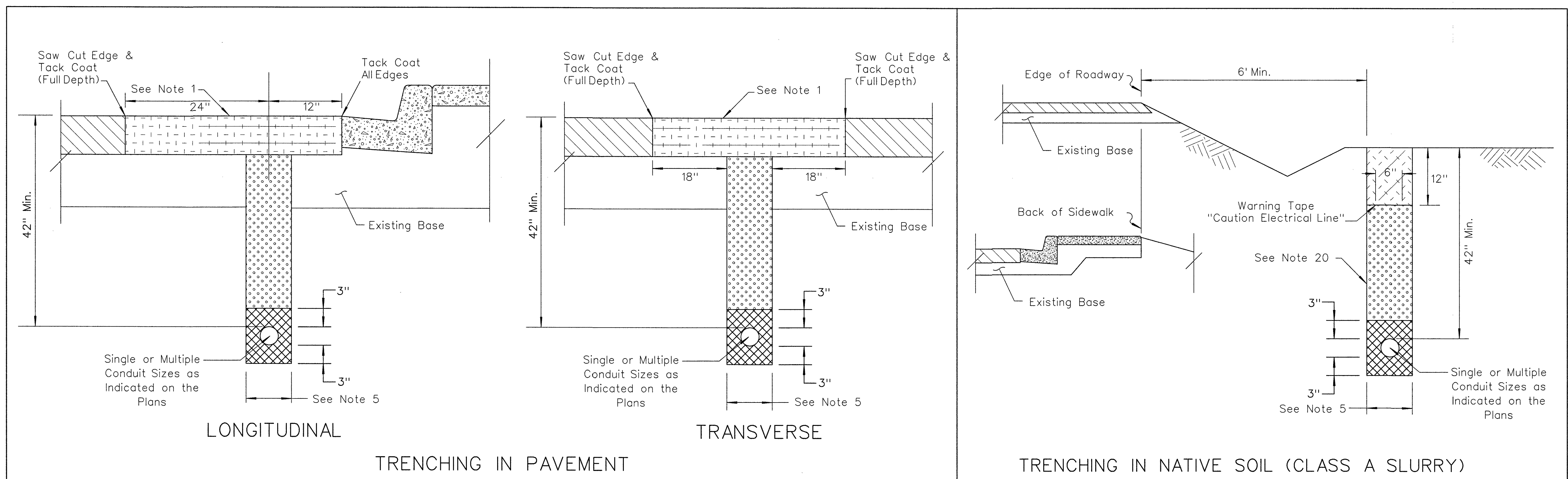
33AT0075SMC
CRAN_NVL08107F_R03
2300.25 W SAHARA AVE.
LAS VEGAS, NV 89102
SMALL CELL

SHEET TITLE

GROUNDING DIAGRAMS

SHEET NUMBER

G-1



NOTES:

1. Remove existing pavement and replace with new approved material of same type. Match existing structural section (including open grade) and existing pavement depth but not less than 6 inches, and seal new surface as directed by the Engineer.
2. Recompact existing base material around trench to meet compaction requirements for that material type and location.
3. New asphalt and concrete pavement material shall be approved by the Engineer and obtained from an approved source.
4. Unless otherwise provided for in the base and surface summaries new pavement material and trenching shall not be paid for directly but included in the price for the conduit.
5. Total trench width shall be 6 inches wider than the outside edges of conduit(s) installed. Use conduit spacers to separate multiple conduits in trench by at least 1 inch. Place spacers at intervals of 5 feet maximum. Conduits shall be centered in trench.
6. For trenching in a non NDOT-owned facility, use the owner's standards for trenching, compaction, and patching.
7. Longitudinal trenching in shoulder: If shoulder is 4 feet wide or less, remove all surface material from edge of oil to shoulder stripe and replace.
8. Engineer may, for good cause, require wider patch sections or otherwise alter the requirements.
9. If saw cut is within 2 feet of an existing pavement edge or existing patch, remove existing pavement to that edge and replace entire section.
10. If sawcut edges for trench fall within a wheel path, sawcut shall be extended to, and removal made to edge of the travel lane. Optionally the entire travel lane can be rotomilled to a depth of 2 inches and overlaid with 2 inches of bituminous plantmix as directed by the Engineer.
11. Contractor shall be responsible for replacement of loop detectors, adjustments of utilities and survey monuments to grade and installation of temporary pavement markings.
12. Permanent resurfacing shall not be placed on trenches backfilled with concrete slurry for a minimum of 7 days after placement of the concrete slurry or similar material. Provide temporary cover or backfill as directed by the Engineer.

LEGEND:

- | | | | |
|--|--|--|----------------------------------|
| | - EXISTING PAVEMENT | | - SAND BEDDING (SEE NOTE 14) |
| | - LIMITS OF REMOVAL & REPAIR OF PAVEMENT | | - CLASS A SLURRY CEMENT BACKFILL |
| | | | - BACKFILL |

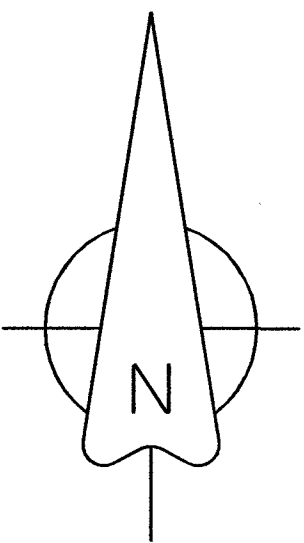
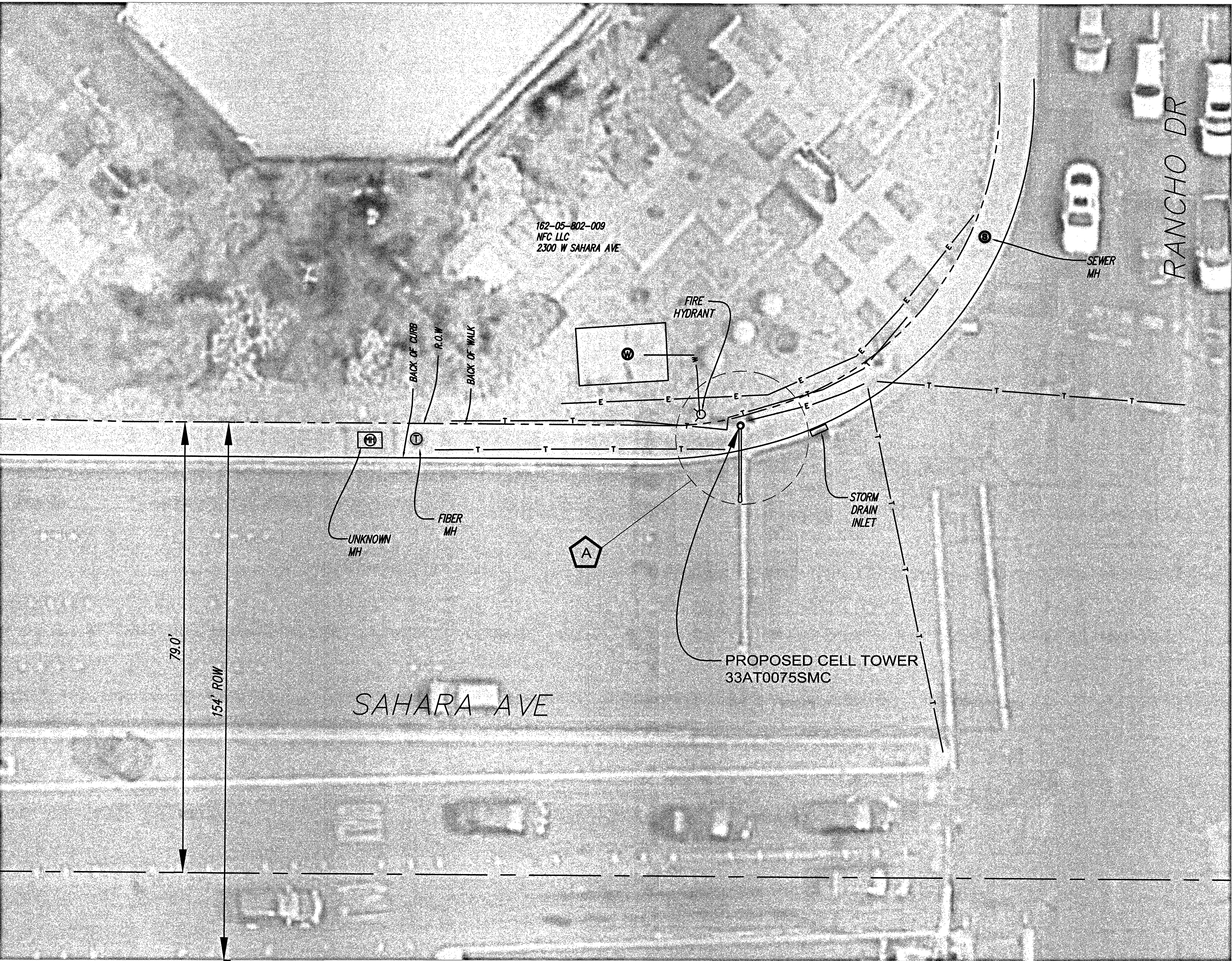
13. Use of rock wheel trenching machines or similar equipment may be permitted within paved areas or within 1 foot of the edge of paving, as directed by the Engineer.
14. Sand bedding shall conform to gradation requirements in Subsection 706.03.03.
15. If installing underground electrical facilities or supplies, refer to NAC 408.447 and 408.453.
16. Slurry backfill in accordance with Section 207 if within the roadside slope or ditches.
17. Conduit couplings shall be staggered.
18. Detectable pull tape shall be installed inside all conduits.
19. Return disturbed area to match existing grade.
20. Native backfill acceptable when specified on plans or approved in writing by the Engineer. Native backfill shall not contain rocks larger than 3 inches.

STATE OF NEVADA
DEPARTMENT OF TRANSPORTATION

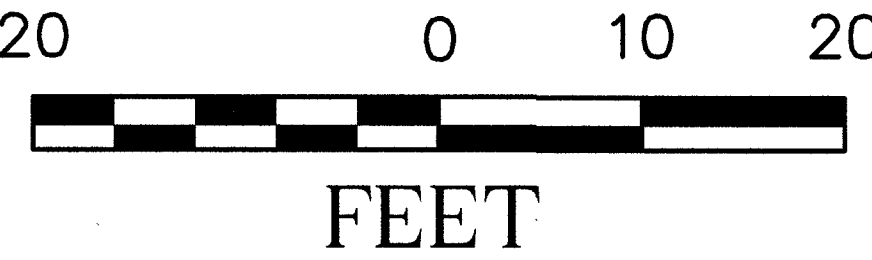
TRAFFIC CONDUIT TRENCHING DETAIL

T-30.2.4	(623)	Signed Original On File
ADOPTED 2/71	REVISED 10/15	CHIEF TRAFFIC OPS ENGR.

SMALL CELL SITE SURVEY
SITE: 33AT0075SMC
SE $\frac{1}{4}$ SE $\frac{1}{4}$ SECTION 5, TOWNSHIP 21 SOUTH, RANGE 61 EAST



GRAPHIC SCALE

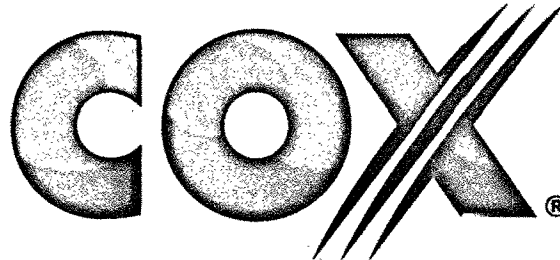


A LATITUDE: 36°08'40.19"N
LONGITUDE: 115°10'24.42"W
GROUND ELEVATION: 2076.46'
NAVD '88

Legend

- MONUMENT
- POLE
- DOWN GUY
- GAS VALVE
- PEDASTAL
- LAMP POST
- WATER VALVE
- FIRE HYDRANT
- WATER MANHOLE
- WATER METER
- SEWER MANHOLE
- UNKNOWN OR LABELED MANHOLE
- SANITARY SEWER MANHOLE
- STORM WATER MANHOLE
- ELECTRIC MANHOLE
- TELECOM MANHOLE
- TREE

- FENCELINE
- ROW LINE
- CENTER LINE
- SEWER
- TELEPHONE
- WATER
- ELECTRIC
- GAS LINE
- OVERHEAD ELEC
- FENCE BARB
- PROPERTY LINE



6205-B Peachtree Dunwoody Road NE
Atlanta, GA 30328

ENGINEERS:



BLACK & VEATCH

6 SUNSET WAY
SUITE B108
HENDERSON, NV 89014

SITE NO: 33AT0075SMC

DRAWN BY: KJC

CHECKED BY: CIS

REV	DATE	DESCRIPTION
A	8/25/18	PRELIMINARY SUBMITTAL

SURVEYOR:



CIS JOB NO:

CIS 315-2-1-18

SHEET TITLE

**SMALL CELL
SITE SURVEY**

SHEET NUMBER

1 OF 1



CITY OF LAS VEGAS

TRAFFIC ENGINEERING
FIELD OPERATIONS
3001 RONEMUS DRIVE
LAS VEGAS, NV 89128
PHONE: (702) 229-6331

SMALL CELL SITE SURVEY

- THIS FORM IDENTIFIES THE POTENTIAL POWER SUPPLY SOURCE FOR A PROPOSED SMALL CELL SITE
- THIS ONLY REPRESENTS THE CONDITIONS AT TIME OF SITE SURVEY
- FIELD CONDITIONS MAY CHANGE FROM THE TIME OF THE SITE SURVEY UNTIL THE START OF CONSTRUCTION

CONTRACTOR'S NAME: Black & Veatch WIRELESS USE AGREEMENT _____
WIRELESS SERVICE PROVIDER: AT&T CONTACT NAME: _____
OFFICE: _____ MOBILE: _____ FAX: _____
POLE LOCATION & ID: 2300 W. Sahara Ave TS: northwest corner of Sahara & Ranch/1-15 South
CIRCLE ONE : NEW POLE EXISTING POLE

PROPOSED SERVICE INFORMATION

Service Location	2500 Ranch Dr.		ID# none
Existing Meter #	CC030096565		
Existing Service Size	60 Amp	<u>100 Amp</u>	125 Amp 200 Amp
Street Light Circuit			
Service Type	<u>Pedestal</u>	Pole Mount	
Current Application	<u>Traffic Signal</u>	St. Lighting	Both
Existing Load	60.0 Amps		Amps
Field Tested By:	T. Azbill		Date: 05/23/2018
Notes: Suitable for use to serve small cell site without upgrade.			

CLV REPRESENTATIVE

- TO BE COMPLETED BY TEFO STAFF

CLV FIELD REVIEWER'S NAME: T. Azbill FIELD REVIEW DATE: 05/23/2018
SENIOR/SUPervisor REVIEW SIGNATURE: [Signature] DATE REVIEWED BY SENIOR TECH: _____

BACKUP DOCUMENTATION

- DRAWINGS, PHOTOS, ETC

FILE NAME: _____ CREATION DATE: _____
FILE NAME: _____ CREATION DATE: _____
FILE NAME: _____ CREATION DATE: _____
Service Size _____ CREATION DATE: _____

NV POWER SERVICE ADDRESS

LOAD BAY DOCUMENTATION FOR SPACE UTILIZATION