



CROWN CASTLE ID #
LV007

CROWN CASTLE
CROWN CASTLE NG WEST LLC
2055 SOUTH STEARMAN DRIVE
CHANDLER, ARIZONA 85286

PROJECT INFORMATION:
CROWN CASTLE ID #
LV007

WEST CHARLESTON BOULEVARD
LAS VEGAS, NEVADA 89138

CURRENT ISSUE DATE:
04/04/19

ISSUED FOR:
PROPOSED WORK

REV.	DATE	DESCRIPTION	BY
2	02/05/19	POLE REVISION	R.C.
1	10/16/18	100% PERMITTING	C.P.
0	09/28/18	90% PERMITTING	R.S.

PLANS PREPARED BY:
SPECTRUM

DGS
CONSULTING ENGINEERING SERVICES LLC

LICENSURE:

PROFESSIONAL ENGINEER-STATE OF NEVADA
CHRIS WENER
Exp. 06/30/20
CIVIL
No. 11930
APR 04 2019

SHEET TITLE:

TITLE SHEET

SHEET NUMBER: REVISION:

C1 2

Redlined Construction
Drawings

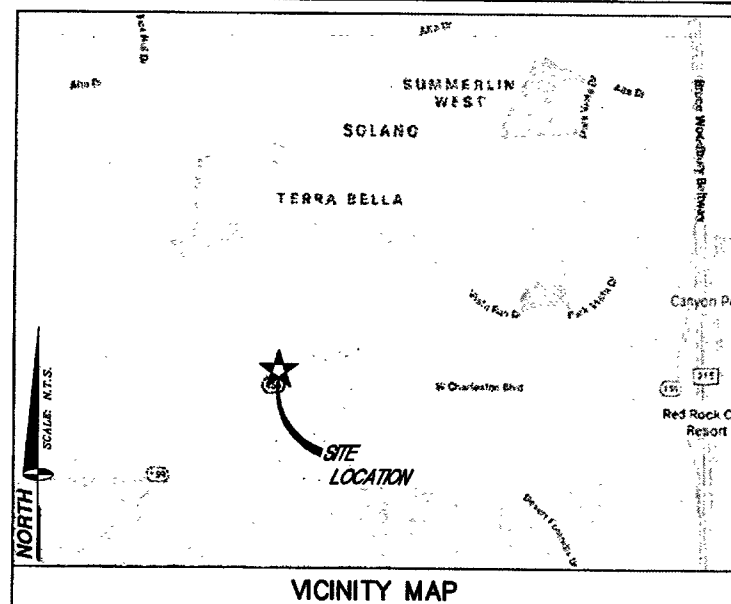
Theresa Sianez

Theresa Sianez Date
Spectrum Services 12/20/19

WEST CHARLESTON BOULEVARD
LAS VEGAS, NEVADA 89138

- REPLACEMENT OF AN EXISTING CONCRETE LIGHT POLE WITH A NEW RADIO AND ANTENNA AT THE TOP

TOTAL ENCROACHMENT NOTE



VICINITY MAP

APPLICANT/LESSEE
CROWN CASTLE NG WEST LLC
2055 SOUTH STEARMAN DRIVE
CHANDLER, ARIZONA 85286

CONTACT: MATT BOND
MOBILE: (480) 586-4306

PROPERTY INFORMATION

OWNER: PUBLIC RIGHT-OF-WAY
OCCUPANCY TYPE: U
CONSTRUCTION TYPE: V-B
CURRENT ZONING: N/A
JURISDICTION: CITY OF LAS VEGAS
APN: 137-34-899-001
LATITUDE: 36.159094
LONGITUDE: -115.356595
HANDICAP REQUIREMENTS: FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION. HANDICAPPED ACCESS NOT REQUIRED.

PROJECT SUMMARY

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

1. INTERNATIONAL BUILDING CODE 2018 W/STATE AMENDMENTS
2. INTERNATIONAL EXISTING BUILDING CODE 2018 W/STATE AMENDMENTS
3. INTERNATIONAL ENERGY CONSERVATION CODE 2018
4. UNIFORM MECHANICAL CODE 2018
5. UNIFORM PLUMBING CODE 2018
6. NATIONAL ELECTRIC CODE 2017
7. INTERNATIONAL FIRE CODE 2018
8. ANSI/EIA-222-G LIFE SAFETY CODE
9. LOCAL BUILDING CODE(S)
10. CITY AND/OR COUNTY ORDINANCES

CODE COMPLIANCE

SPECIAL INSPECTIONS ARE REQUIRED FOR THE TYPES OF WORK DESCRIBED BELOW:

1. HIGH-STRENGTH BOLTS. (IF REQUIRED)
2. WELDING: FIELD WELDING OF STRUCTURAL STEEL AND REINFORCING STEEL. (IF REQUIRED)
3. STRUCTURAL STEEL. (IF REQUIRED)
4. CONCRETE: REINFORCING STEEL AND PLACEMENT.
5. CONCRETE WITH DESIGN GREATER THAN 2500 PSI.
6. PILE, PIER OR CAISSON FOUNDATIONS.
7. SOILS: SITE PREPARATION, FILL PLACEMENT, IN-PLACE DENSITY.

SPECIAL INSPECTIONS

CIVIL ENGINEER

SPECTRUM SERVICES, INC.
4850 WEST OQUENDO ROAD
LAS VEGAS, NEVADA 89118
CHRIS WENER
PHONE: (702) 367-7705
FAX: (702) 367-8733

ELECTRICAL ENGINEER

DGS CONSULTING ENGINEERING SERVICES LLC
9811 W. CHARLESTON BOULEVARD, SUITE 2539
LAS VEGAS, NEVADA 89117
PHONE: (702) 885-1552

PROJECT TEAM

SHEET	DESCRIPTION	REV.
C1	TITLE SHEET	2
C2	SITE PHOTO, GENERAL & CONSTRUCTION NOTES	2
C3	SITE PLAN	2
C4	EXISTING AND PROPOSED WEST ELEVATIONS	2
C5	CONSTRUCTION DETAILS	2
C6	CONCRETE FOUNDATION DETAILS	3
E1	GROUNDING LAYOUT, NOTES & DETAILS	2

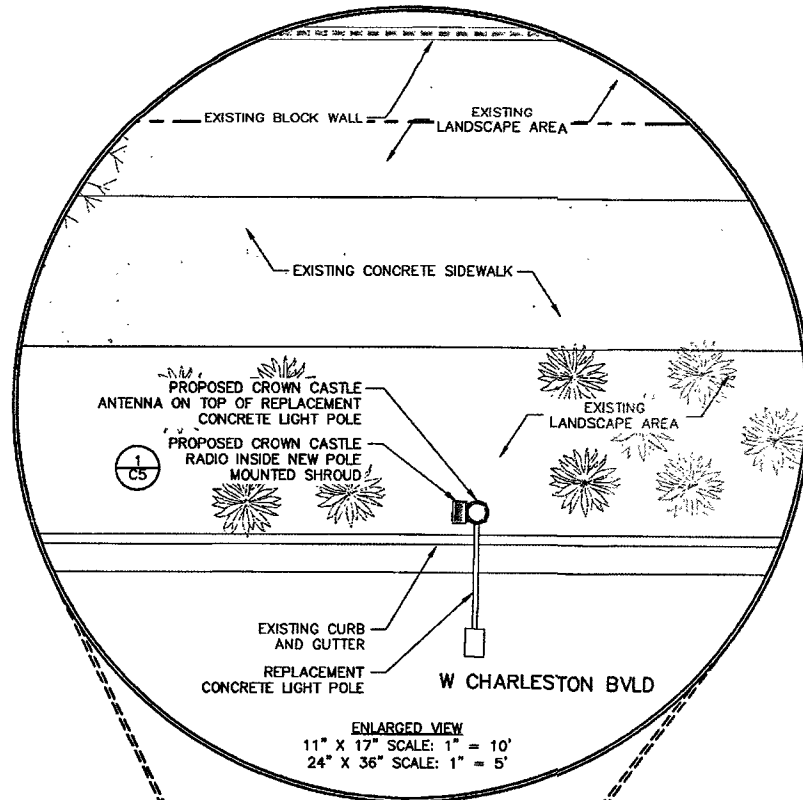
ISSUED FOR:

SHEET INDEX	PERMIT
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CITY OF LAS VEGAS
APPROVED FOR CONSTRUCTION

THIS APPROVAL IS FOR WORK IN CITY OF LAS VEGAS EASEMENT ONLY. OBTAINING PERMISSION OR EASEMENTS FOR WORK SHOWN ON PRIVATE PROPERTY IS THE RESPONSIBILITY OF THE UTILITY.

APPROVAL
L19-00251
DATE
5 23 19
100V7720-FIB



LEGEND

- CENTERLINE
- - - EASEMENT
- - - RIGHT-OF-WAY
- - - CURB AND CUTTER
- - - EDGE OF SIDEWALK
- - - F - UNDERGROUND FIBER ROUTE
- ⊕ FIRE HYDRANT
- STREET LIGHT

FAST
 Call before you Dig
 UnderGround
 1-702-432-5300
FREEWAY AND ARTERIAL SYSTEM OF TRANSPORTATION

AVOID HITTING OVERHEAD POWER LINES. IT'S COSTLY.
 CALL BEFORE YOU DO OVERHEAD
 1-702-227-2929

Call before you Dig
 811
AVOID CUTTING UNDERGROUND UTILITY LINES. IT'S COSTLY.
 1-800-227-2600

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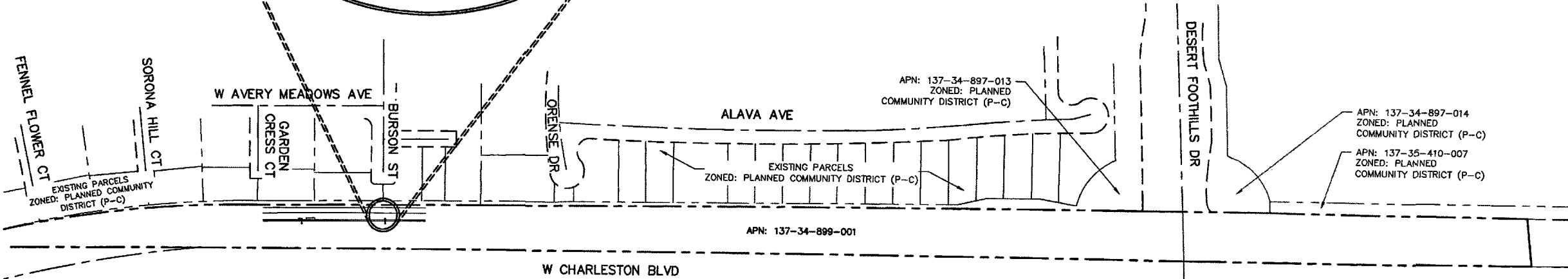
PLANS PREPARED BY:
SPECTRUM
 SPECTRUM SERVICES, INC.
 4850 WEST OQUENDO ROAD
 LAS VEGAS, NEVADA 89118
 PHONE: (702) 367-7705
 FAX: (702) 367-8733

LICENSURE:

 APR 04 2019

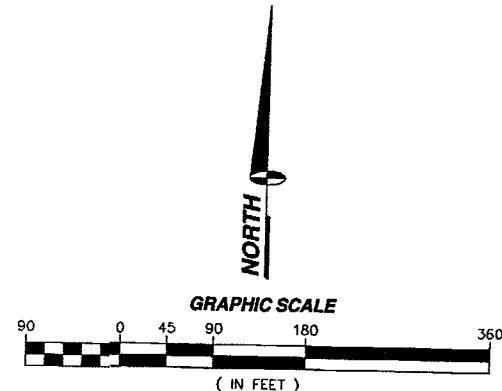
SHEET TITLE:
 SITE PLAN

SHEET NUMBER: C3 **REVISION:** 2



Redlined Construction Drawings
Theresa Sianez
 Theresa Sianez Date
 Spectrum Services 12/20/19

SITE PLAN



11" X 17" SCALE 24" X 36" SCALE
 1" = 180' 1" = 90' 1

Redlined Construction Drawings

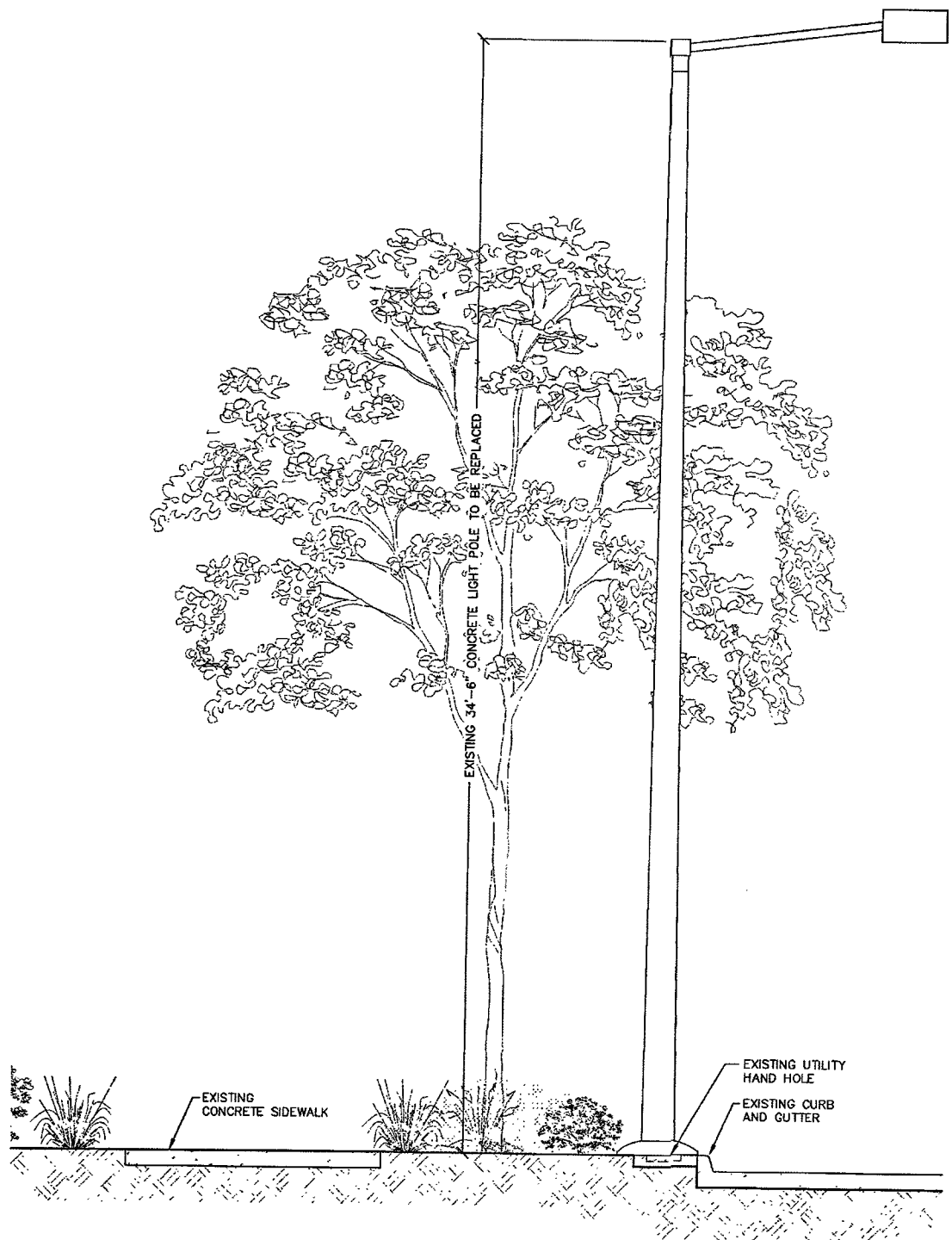
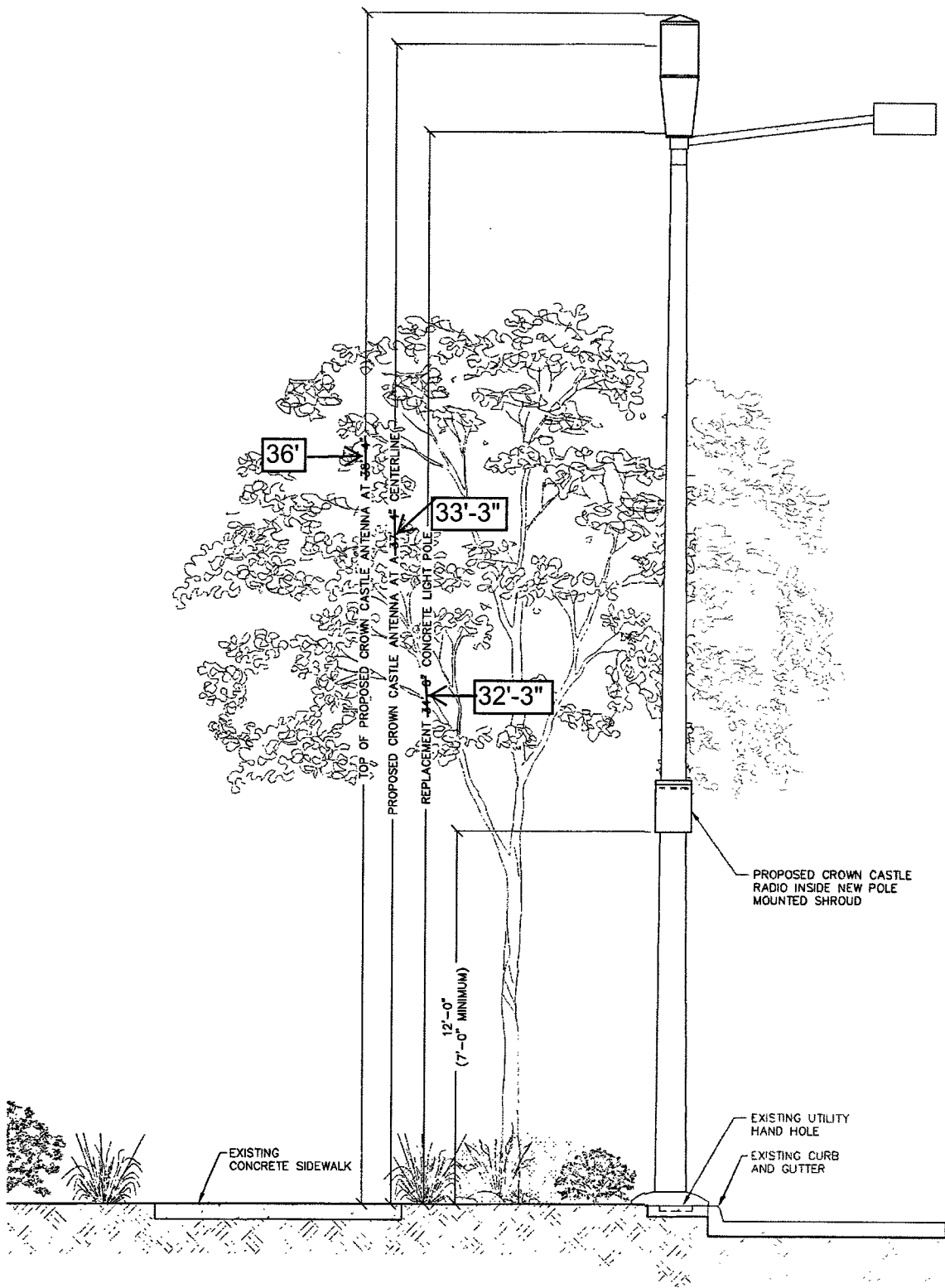
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Spectrum Services

Date

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LICENSURE:

PROFESSIONAL ENGINEER STATE OF NEVADA
CHRIS WENER
Exp. 06/30/20
CIVIL
No. 11930
APR 04 2019

SHEET TITLE:

EXISTING AND PROPOSED
WEST ELEVATION

SHEET NUMBER: REVISION:

C4

2

PROPOSED WEST ELEVATION

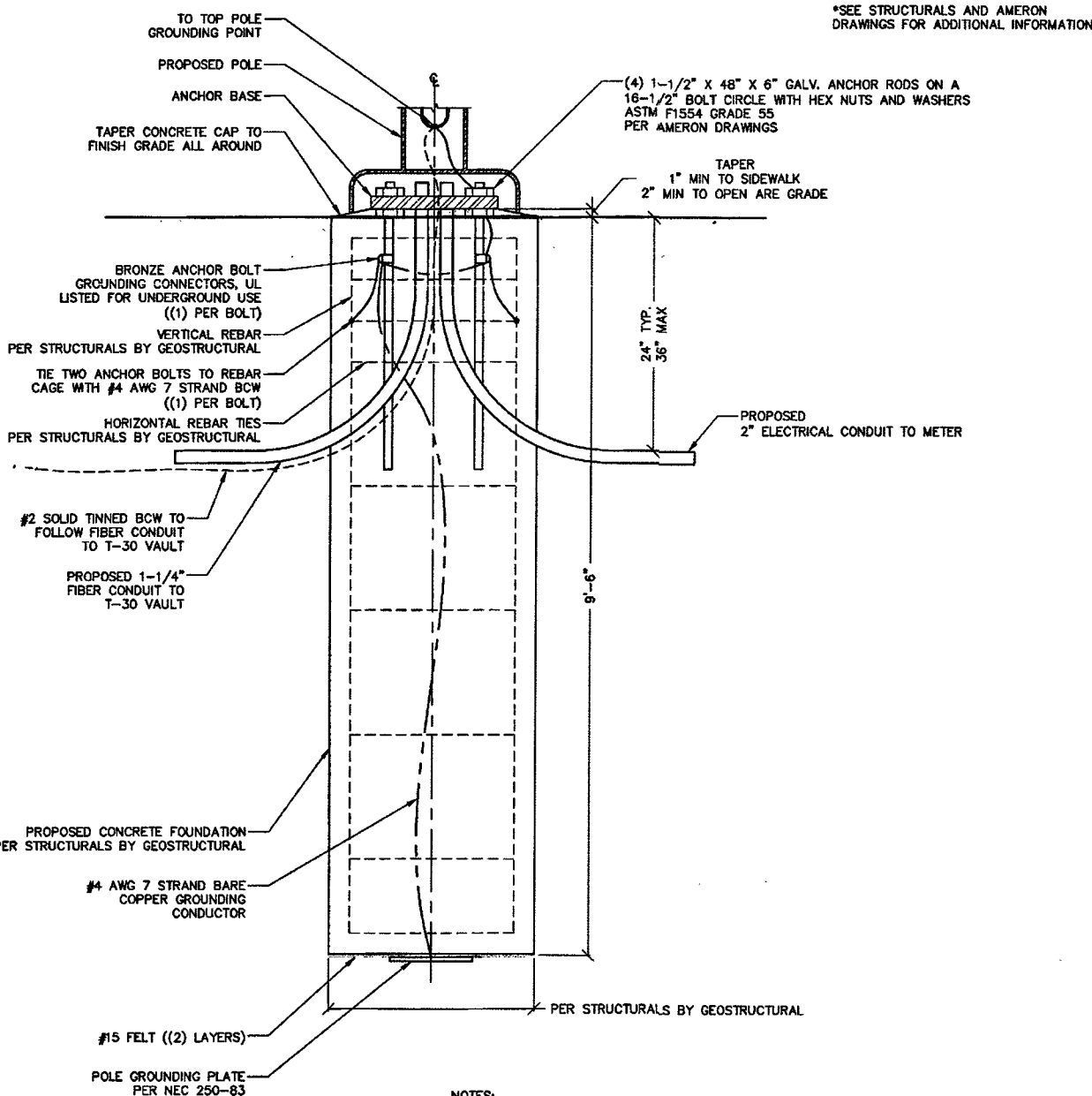
11" X 17" SCALE 24" X 36" SCALE
1" = 5' 1" = 2'-6"

2

EXISTING WEST ELEVATION

11" X 17" SCALE 24" X 36" SCALE
1" = 5' 1" = 2'-6"

1



- NOTES:
1. CONCRETE SHALL HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 4500 PSI, IN ACCORDANCE WITH ACI 318-11. BASE PLATE GROUT STRENGTH AT 8000 PSI.
 2. USE TYPE V PORTLAND CEMENT AND A MAXIMUM WATER-CEMENT RATIO OF 0.45.
 3. REBAR TO CONFORM TO ASTM SPECIFICATION A615 GRADE 60.
 4. ALL REBAR TO HAVE A MINIMUM OF 3" CONCRETE COVER.
 5. ALL EXPOSED CONCRETE CORNERS TO BE CHAMFERED 3/4".
 6. SEE THE GEOTECHNICAL REPORT FOR DRILLED PIER INSTALLATION REQUIREMENTS, IF SPECIFIED.
 7. ANCHOR RODS ARE TO BE (4) 1-1/2" DIAMETER ASTM F1554 GRADE 55 ON A 16"-1/2" DIAMETER BOLT CIRCLE. MINIMUM LENGTH OF ANCHOR RODS IS 48", WITH A MAXIMUM PROJECTION OF 5" ABOVE CONCRETE. AMERON DRAWINGS TO SUPERCEDE THIS NOTE.

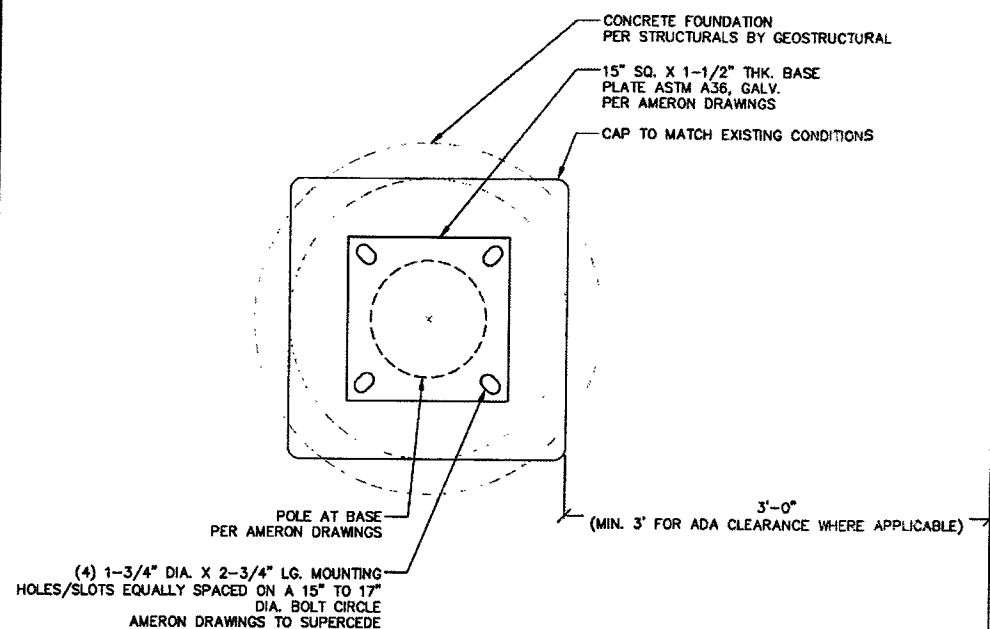
Redlined Construction Drawings

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*SEE STRUCTURALS AND AMERON
DRAWINGS FOR ADDITIONAL INFORMATION



EXISTING TOP BACK OF CURB
(T.B.C.)
EXISTING FLOW LINE
EXISTING GUTTER



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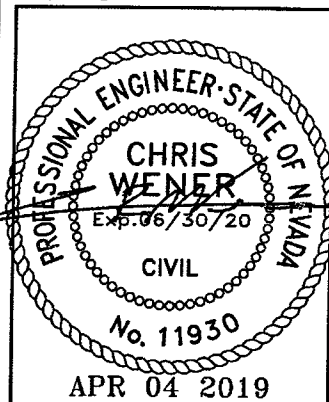
REV.	DATE	DESCRIPTION	BY
3	04/04/19	LAND DEV. COMMENTS	R.S.
2	02/05/19	POLE REVISION	R.C.
1	10/16/18	100% PERMITTING	C.P.
0	09/26/18	90% PERMITTING	R.S.

PLANS PREPARED BY:



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LAS VEGAS, NEVADA 89118
PHONE: (702) 367-7705
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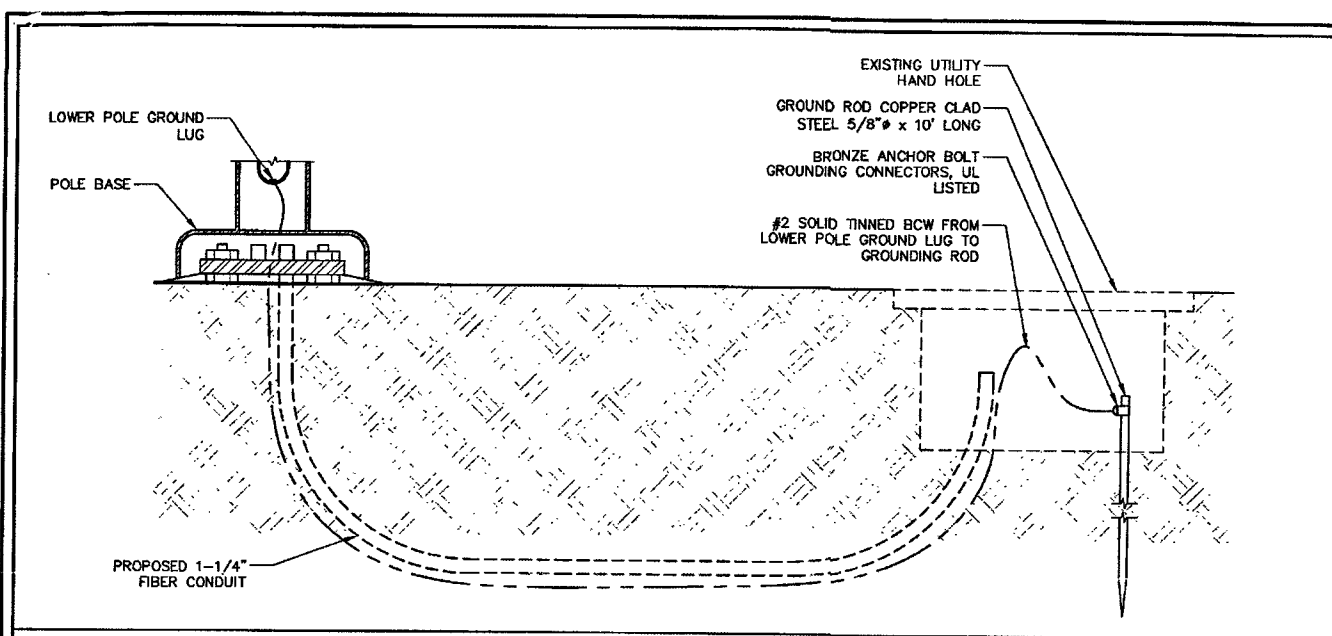


SHEET TITLE:

CONSTRUCTION DETAILS

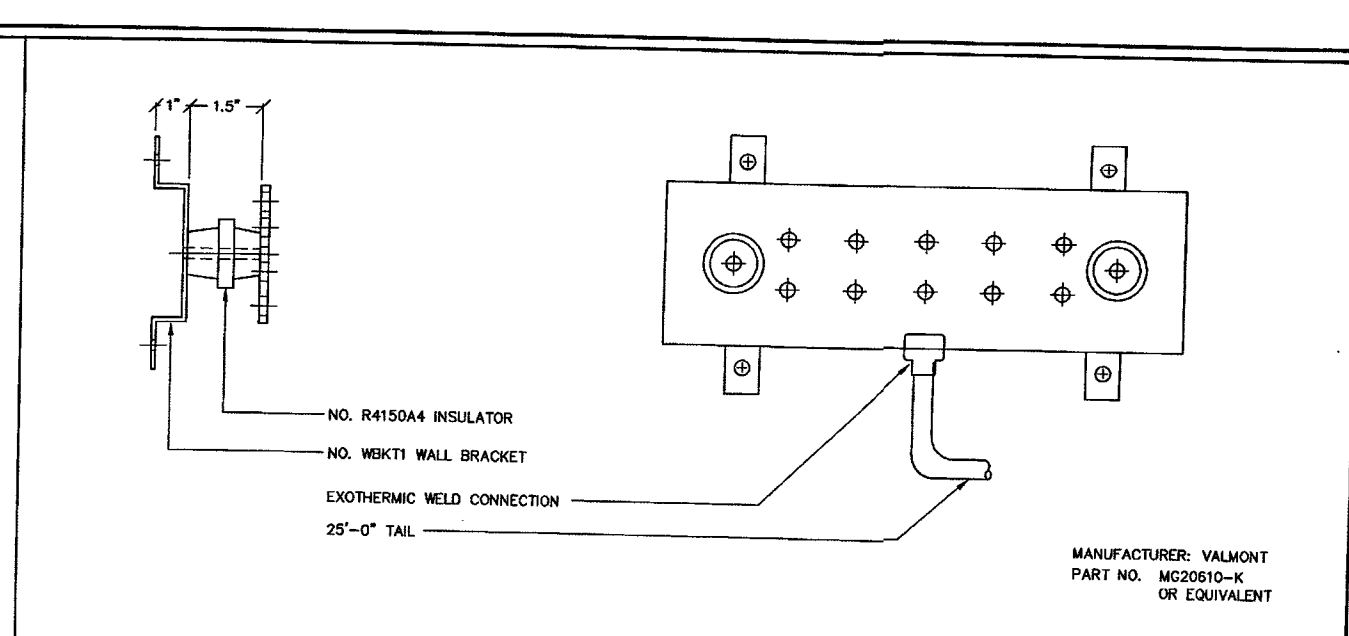
SHEET NUMBER: REVISION:

C6 3



GROUND ROD

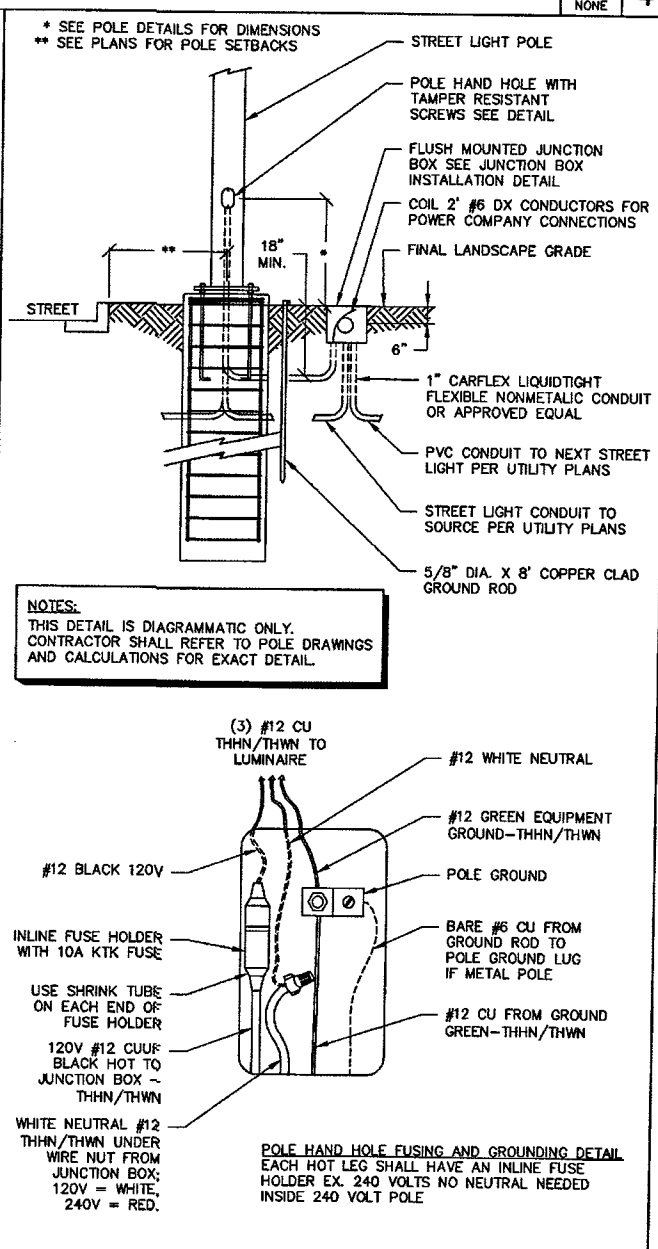
SCALE: NONE 4



GROUND BAR

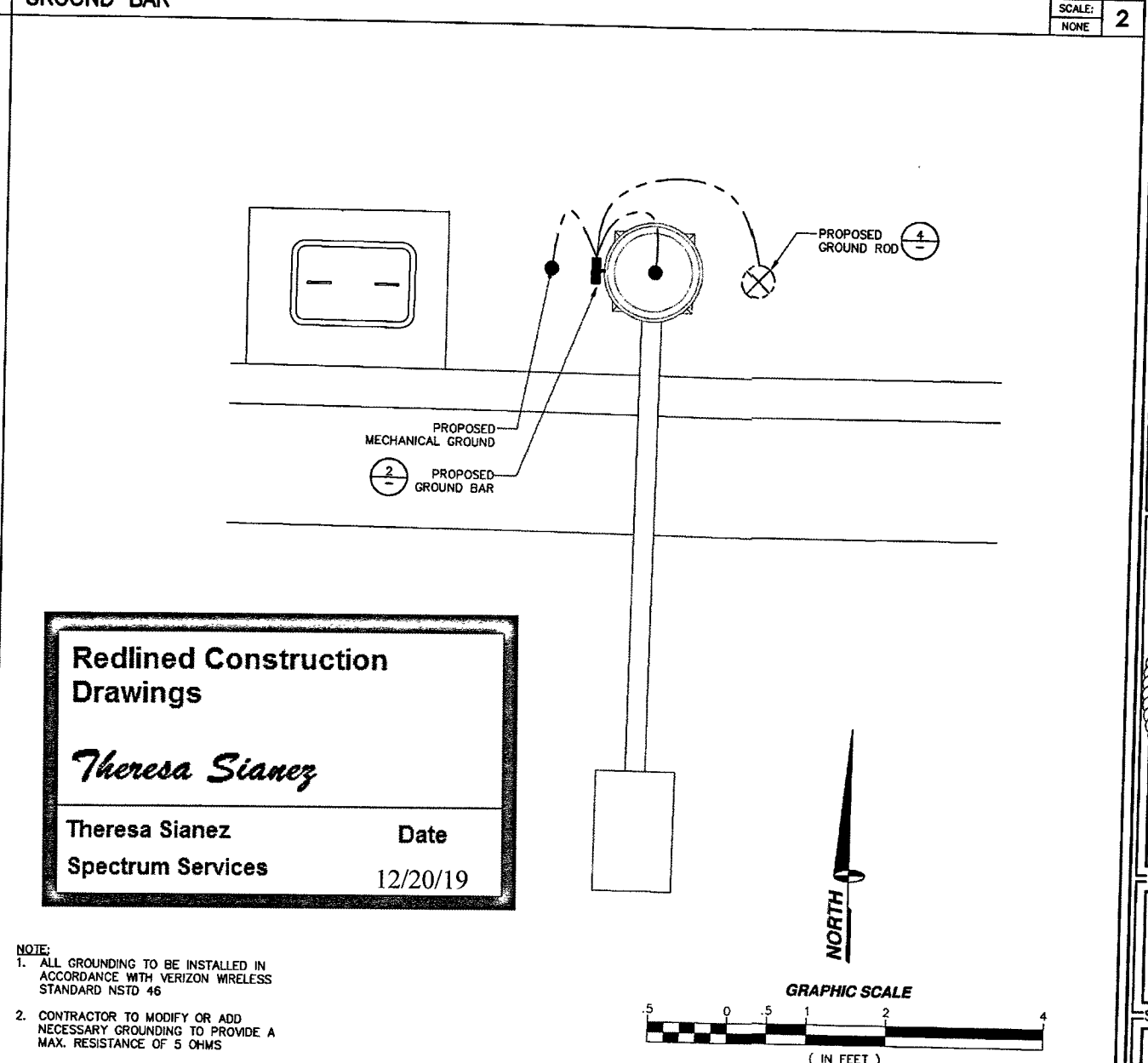
SCALE: NONE 2

- ALL DETAILS ARE SHOWN IN GENERAL TERMS. ACTUAL GROUNDING INSTALLATION REQUIREMENTS AND CONSTRUCTION ACCORDING TO SITE CONDITIONS AND CARRIER GROUNDING STANDARD, LATEST REVISION.
- ALL GROUNDING CONDUCTORS: #2 AWG SOLID BARE TINNED COPPER WIRE UNLESS OTHERWISE NOTED.
- GROUND RING TO GROUND BAR CONNECTIONS SHALL BE CADWELED QTY. (2) #2 AWG SOLID BARE TINNED COPPER WIRE UNLESS OTHERWISE NOTED.
- GROUND BAR TO EQUIPMENT AND CABLES SHALL BE #2 AWG BTCW W/ DOUBLE LUG CONNECTIONS.
- GROUND BAR LOCATED IN BASE OF EQUIPMENT WILL BE PROVIDED, FURNISHED AND INSTALLED BY THE VENDOR.
- GROUND BAR LOCATED BELOW WAVEGUIDE ENTRY PORT. CABLES SHALL BE #2 AWG BTCW/DOUBLE LUG CONNECTIONS. TWO PATHS TO GROUND RING.
- ALL BELOW GRADE CONNECTIONS: EXOTHERMIC WELD TYPE, ABOVE GRADE CONNECTIONS: EXOTHERMIC WELD TYPE.
- EXTERIOR GROUNDING CONDUCTORS: BURIED TO A MINIMUM DEPTH OF 1'-6" BELOW FINISHED GRADE TO ALLOW FOR FUTURE CONSTRUCTION.
- INSTALL GROUND CONDUCTORS AND GROUND ROD MINIMUM OF 1'-0" FROM EQUIPMENT CONCRETE SLAB, SPREAD FOOTING, OR FENCE.
- EXOTHERMIC WELD GROUND CONNECTION TO FENCE POST: TREAT WITH A COLD GALVANIZED SPRAY.
- GROUND BARS:
EQUIPMENT GROUND BUSS BAR (EGB) LOCATED AT BOTTOM OF ANTENNA POLE/MAST FOR MAKING GROUNDING JUMPER CONNECTIONS TO COAX FEEDER CABLES SHALL BE FURNISHED AND INSTALLED BY ELECTRICAL CONTRACTOR. JUMPERS (FURNISHED BY OWNERS) SHALL BE INSTALLED AND CONNECTED BY ELECTRICAL CONTRACTOR.
MAIN GROUND BUSS BAR (MGB) LOCATED NEAR THE BASE OF THE RADIO EQUIPMENT CABINET(S) SHALL BE FURNISHED AND INSTALLED BY ELECTRICAL CONTRACTOR.
- ALL GROUNDING INSTALLATIONS AND CONNECTIONS SHALL BE MADE BY ELECTRICAL CONTRACTOR.
- ALL BOLTED TORQUE CONNECTORS SHALL BE LONG-BARRELED TYPES AND HAVE TWO HOLES FOR CONNECTION TO SURFACE AND NON-OXIDIZING AGENT APPLIED TO INHIBIT CORROSION.



GROUNDING NOTES

SCALE: NONE 5 STREET LIGHT WIRING AND GROUNDING



GROUNDING LAYOUT

SCALE: NONE 3

Redlined Construction Drawings

Theresa Sianez

Theresa Sianez
Spectrum Services

Date
12/20/19

- NOTE:
- ALL GROUNDING TO BE INSTALLED IN ACCORDANCE WITH VERIZON WIRELESS STANDARD NSTD 46
 - CONTRACTOR TO MODIFY OR ADD NECESSARY GROUNDING TO PROVIDE A MAX. RESISTANCE OF 5 OHMS

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SPECTRUM

DGS

CONSULTING ENGINEERING SERVICES LLC

LICENSURE:

DEREK G. STEFUREAC
Exp. 06-30-20
ELECTRICAL
No. 17805
APR 04 2019

SHEET TITLE:

GROUNDING LAYOUT, NOTES & DETAILS

SHEET NUMBER: REVISION:

E1 2