

CITY OF DULUTH PARK POINT COMMUNICATIONS TOWER

DEPARTMENT OF PUBLIC WORKS AND UTILITIES ENGINEERING DIVISION

CITY PROJECT NUMBER: 12-027

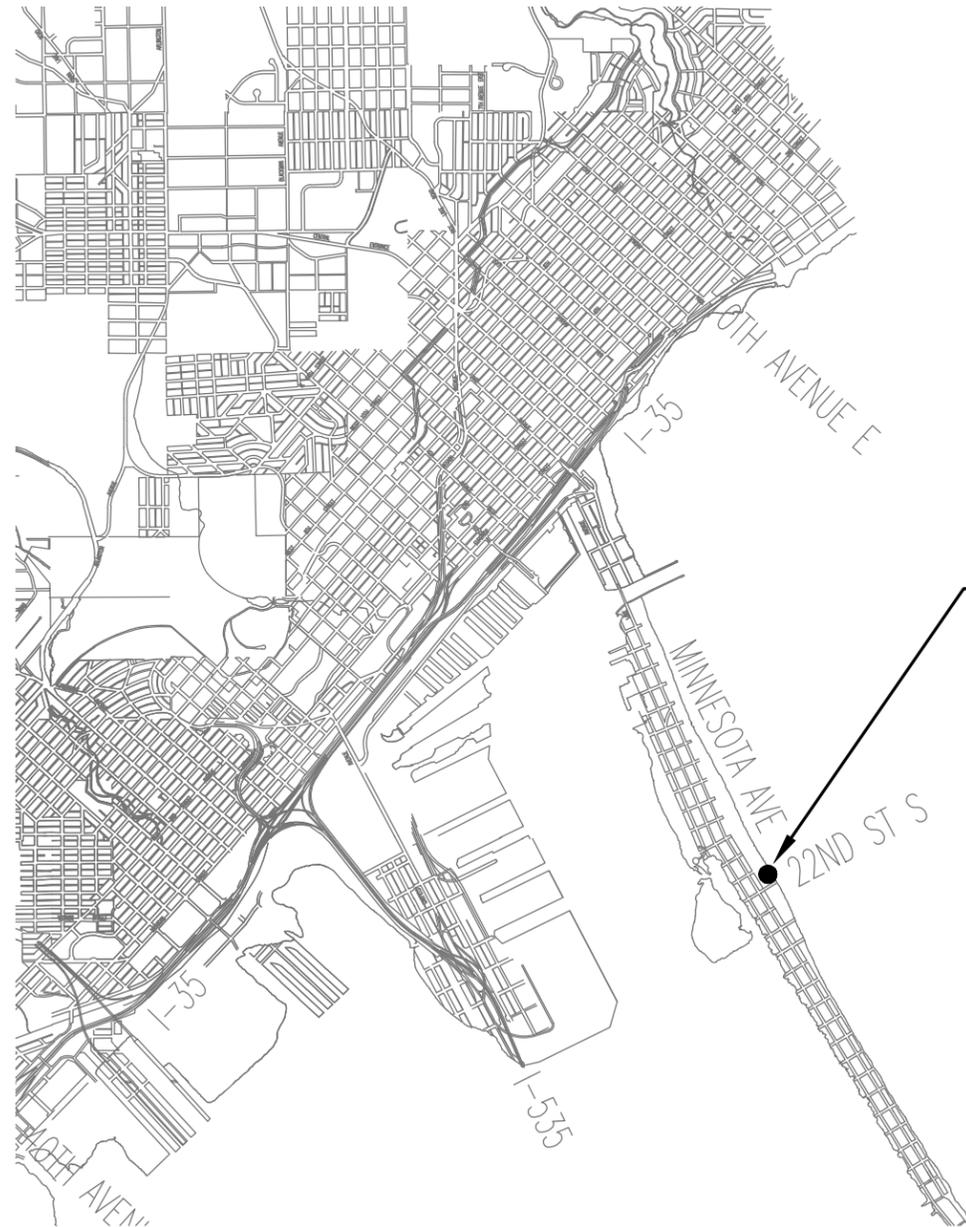
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GENERAL
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DEMOLITION
D-1 - DEMOLITION PLAN

STRUCTURAL
S-1 TOWER BASE
S-2 TOWER REQUIREMENTS

CONSTRUCTION PLANS FOR: PARK POINT COMMUNICATIONS TOWER



PROJECT SITE



UTILITIES

SANITARY SEWER
WATER & GAS
STORM SEWER
CITY OF DULUTH- ENGINEERING DEPT
211 CITY HALL
DULUTH, MN 55802
TEL. (218) 723-3278

ELECTRIC
MINNESOTA POWER
30 WEST SUPERIOR ST.
DULUTH, MN 55802
TEL (218) 722-2641

TELEPHONE
QWEST TELEPHONE CO.
322 WEST FIRST ST.
DULUTH, MN 55802
TEL (218) 723-4210 (MANAGER)

CABLE TV
CHARTER COMMUNICATIONS INC.
302 EAST SUPERIOR ST.
DULUTH, MN 55802
TEL (218) 722-1086

STREET LIGHTS
CITY OF DULUTH- TRAFFIC OPERATIONS
1532 WEST MICHIGAN ST.
DULUTH, MN 55802
TEL (218) 723-3580

WARNING

LOCATION OF UNDERGROUND UTILITIES
TO BE VERIFIED BY CONTRACTOR
GOPHER STATE ONE CALL
CALL BEFORE DIGGING,
1-800-252-1166
REQUIRED BY LAW

NOTE:
THE SUBSURFACE UTILITY INFORMATION IN THIS PLAN IS UTILITY QUALITY LEVEL D. THIS QUALITY LEVEL WAS DETERMINED ACCORDING TO THE GUIDELINES OF C/ASCE 38-2, ENTITLED "STANDARD GUIDELINES FOR THE COLLECTION AND DEPICTION OF EXISTING SUBSURFACE UTILITY DATA."

GOVERNING SPECIFICATIONS

THE 2005 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION" SHALL GOVERN (AVAILABLE AT: <http://www.dot.state.mn.us/tecsup/>)

ALL TRAFFIC CONTROL DEVICES AND SIGNING SHALL CONFORM TO THE MMUTCD, INCLUDING FIELD MANUAL DATED : FEBRUARY 2011 (AVAILABLE AT: <http://www.dot.state.mn.us/trafficeng/otepubl/mutcd/index.html>)

THE 2360 PLANT MIXED ASPHALT PAVEMENT COMBINED 2360/2350 (GYRATORY/MARSHALL DESIGN) SPECIFICATION FOR 2008 CONSTRUCTION SEASON SHALL GOVERN (AVAILABLE AT: <http://mnroad.dot.state.mn.us/pavement/bituminous/bituminous.asp>)

CITY OF DULUTH ENGINEERING DIVISION STANDARD SPECIFICATION FOR CONSTRUCTION 2011 EDITION SHALL APPLY

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

Paul Miller 11/01/2012 48815
PROJECT ENGINEER DATE REG NO.

CITY OF DULUTH CONTACT
JOE MILLER
OFFICE: 218-730-4432
CELL: 218-348-3199

PLAN SYMBOLS

- PRESENT RIGHT OF WAY LINE
- CONTROL OF ACCESS LINE
- PROPERTY LINE
- VACATED PLATTED PROPERTY
- WATER LINE
- MEANDER CORNER
- DRAINAGE DITCH
- DRAIN TILE
- CULVERT
- GUARD RAIL
- BARBED WIRE FENCE
- CHAIN LINK FENCE
- STONE WALL OR FENCE
- HEDGE
- RAILROAD CROSSING SIGN
- MARSH
- TIMBER
- ORCHARD
- BRUSH
- NURSERY
- BUILDING
- F FRAME C CONCRETE
- S STONE T TILE
- B BRICK ST STUCCO
- DECIDUOUS TREE
- CONIFEROUS TREE
- FRUIT TREE
- IRON PIPE OR ROD
- MONUMENT (STONE, CONCRETE OR METAL)
- SMALL SIGN
- SLOPE EASEMENT

UTILITY SYMBOLS

- POWER POLE
- TELEPHONE POLE
- GUY
- SOIL BORING
- STREET LIGHT
- PEDESTAL (TELEPHONE CABLE TERMINAL)
- SIGNAL WITH STREET LIGHT
- GAS MAIN / WATER MAIN
- CONDUIT
- TELEPHONE CABLE IN CONDUIT
- ELECTRIC CABLE IN CONDUIT
- TELEPHONE MANHOLE
- ELECTRIC MANHOLE
- STORM MANHOLE
- SANITARY MANHOLE
- WATER & GAS MANHOLE
- STEAM MANHOLE
- HANDHOLD
- CATCH BASIN
- CATCH BASIN (DESIGN "G")
- FIRE HYDRANT
- NEW WATERMAIN
- NEW STORM SEWER
- PVC PERFORATED PIPE
- BURIED TELEPHONE CABLE
- BURIED ELECTRIC CABLE
- STORM SEWER
- SANITARY SEWER
- GAS MAIN
- TELEVISION CABLE
- EXTRA BRANCH
- FURNISH & INSTALL
- CUT OFF WATER AT MAIN

ABBREVIATIONS

- N.O. NORMALLY OPEN
- N.C. NORMALLY CLOSED
- NIC NOT IN THIS CONTRACT PRV
- RESSURE REDUCING VALVE
- BFV BUTTERFLY VALVE
- DIP DUCTILE IRON PIPE
- MJ MECHANICAL JOINT
- UNO UNLESS NOTED OTHERWISE

- WATER & GAS MAIN JOINT
- WATER & GAS BELL JOINT
- WATER & GAS MECHANICAL JOINT
- WATER & GAS TRANSITION COUPLING
- COPPER WATER SERVICE
- WATER & GAS VALVE (NEW)
- WATER & GAS SHUTOFF VALVE

- C/O
- L
- +BJ
- +MJ
- COP
- +
- ⊗



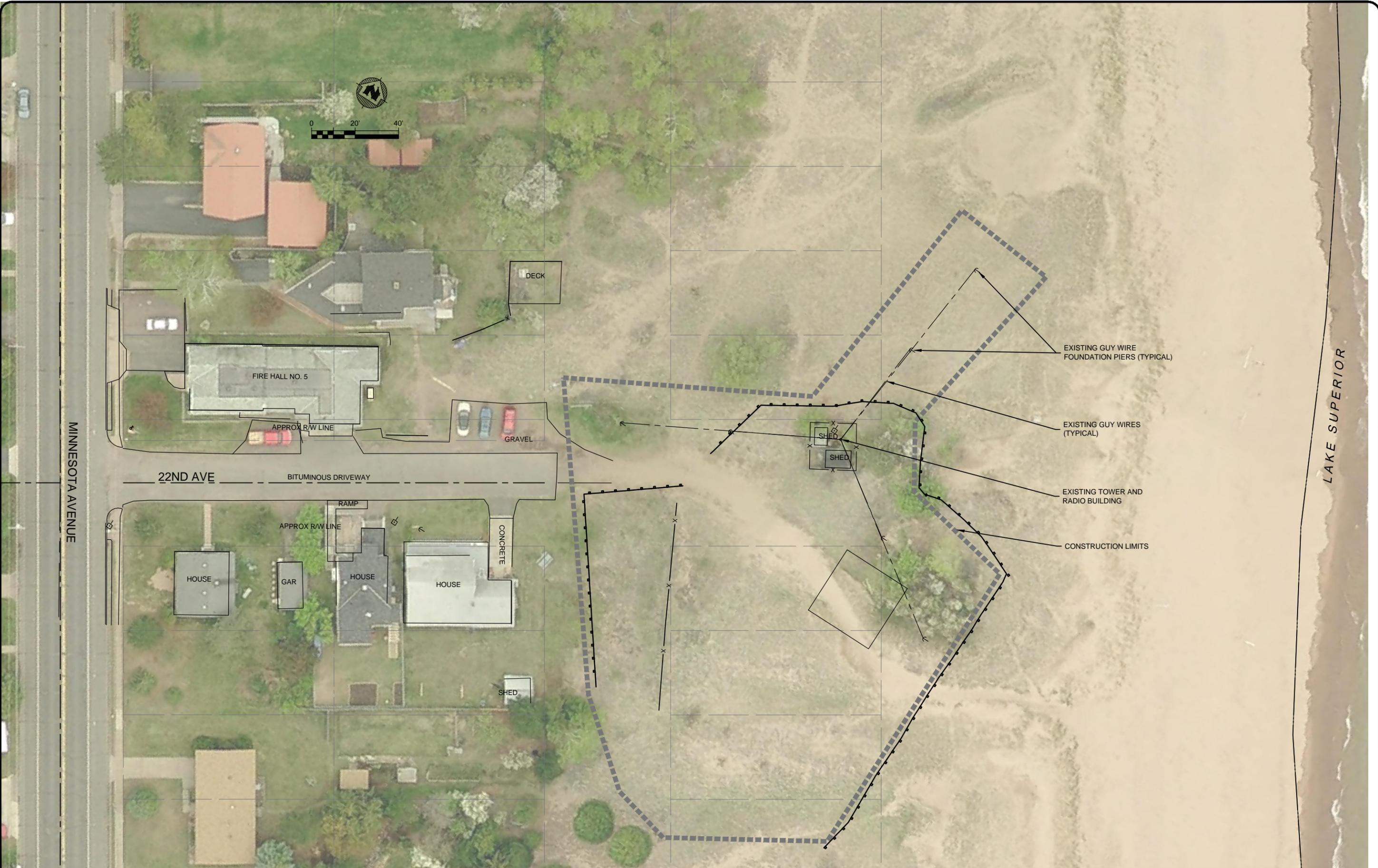
Designed By: JWD
Drawn By: RWM
Checked By: JWD

HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
SIGNATURE: *Jared W. Demaster* REG. NO. 48815 DATE 11/01/2012

CITY PROJ. NO. 12-027 PARK POINT COMMUNICATIONS TOWER

SHEET NO. G-1 - TITLE SHEET

7:21 am 01 Nov 2012
P:\6103616\00616038\CADD\Construction Documents\G-1.dwg
1-1
1-1



Plot time & date: 7:23am 01 Nov 2012

Plot name: P:\6\0346\6\0346\16\0346\16\0346\CADD\C3D\basemap.dwg

Scale: 1"=1'



TRAFFIC CONTROL NOTES

1. CONTRACTOR TO INSTALL AND MAINTAIN TRAFFIC CONTROL AS NEEDED WHEN UNLOADING MATERIALS AND EQUIPMENT. TRAFFIC CONTROL MEASURES SHOWN ARE THE MINIMUM REQUIRED. CONTRACTOR SHALL COMPLY WITH PARAGRAPH S-111 OF THE CITY OF DULUTH 2011 EDITION OF THE "STANDARD CONSTRUCTION SPECIFICATIONS".
2. TRAFFIC CONTROL DEVICES, LAYOUTS, AND PRACTICES SHALL COMPLY WITH MNDOT MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).

EROSION CONTROL NOTES

1. EROSION CONTROL MEASURES SHOWN ARE THE MINIMUM REQUIRED. CONTRACTOR SHALL COMPLY WITH MNDOT SPEC. 1803.5. CONTRACTOR SHALL REFER TO APPENDIX D OF THE CITY OF DULUTH 2011 EDITION OF THE "STANDARD CONSTRUCTION SPECIFICATIONS" FOR DETAILS OF EROSION CONTROL MEASURES.
2. EROSION BLANKETS SHALL BE MNDOT CAT 4 WITH 11 GA. STEEL ANCHORS INSTALLED ACCORDING TO MNDOT 2575.3J. TO BE INSTALLED AS FINAL RESTORATION AFTER TOPSOIL AND SEED ARE APPLIED.
3. SILT FENCE SHALL MEET THE REQUIREMENTS OF MNDOT 3886 STANDARD MACHINE SLICED. INSTALL PRIOR TO ANY EXCAVATION ACTIVITIES ON SITE.
4. SILT FENCE CAN BE TEMPORARILY REMOVED TO FACILITATE CONSTRUCTION ACTIVITIES BUT MUST BE REINSTALLED BEFORE THE END OF EACH WORKING DAY.

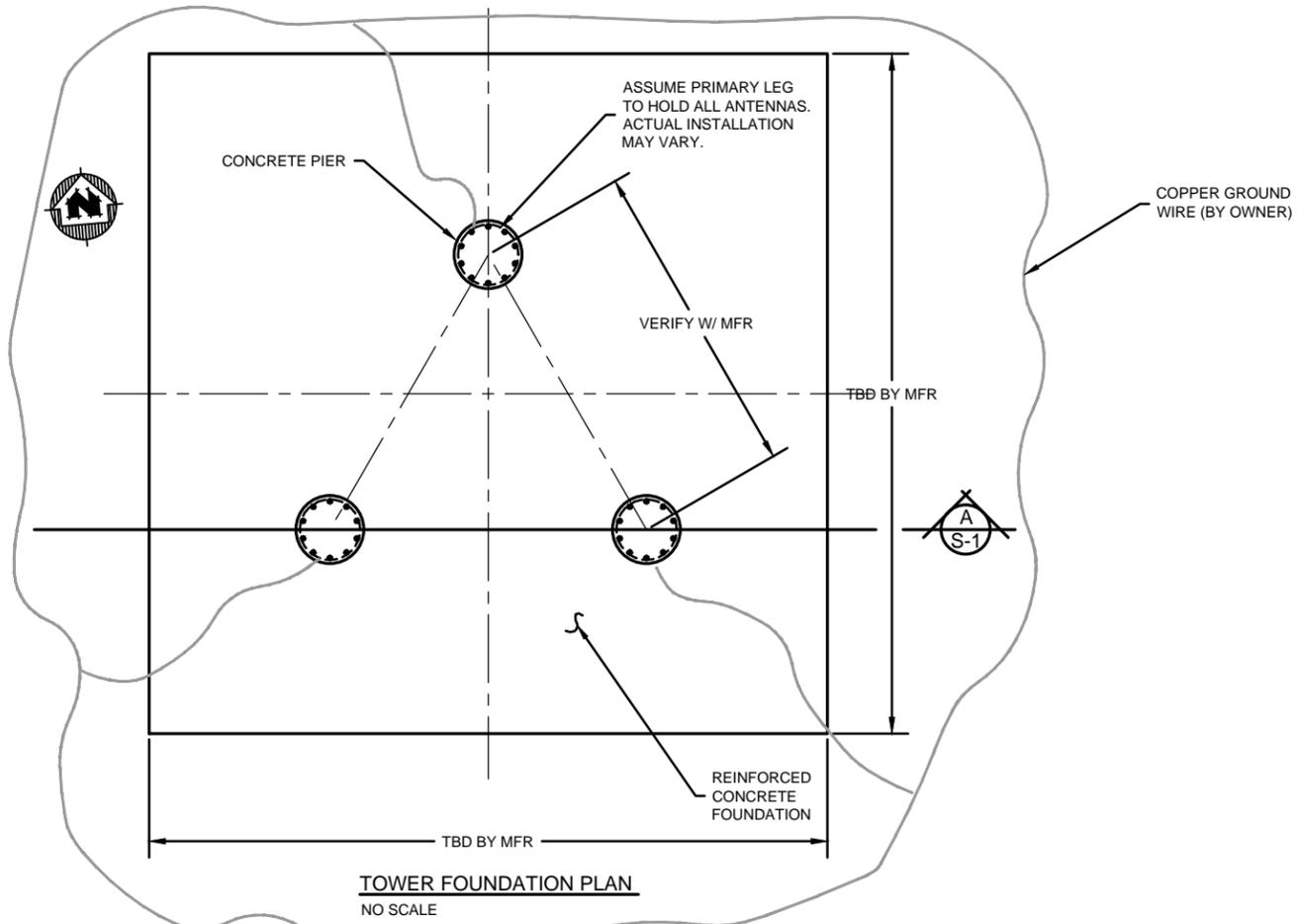


Designed By: JWD
 Drawn By: RWM
 Checked By: JWD

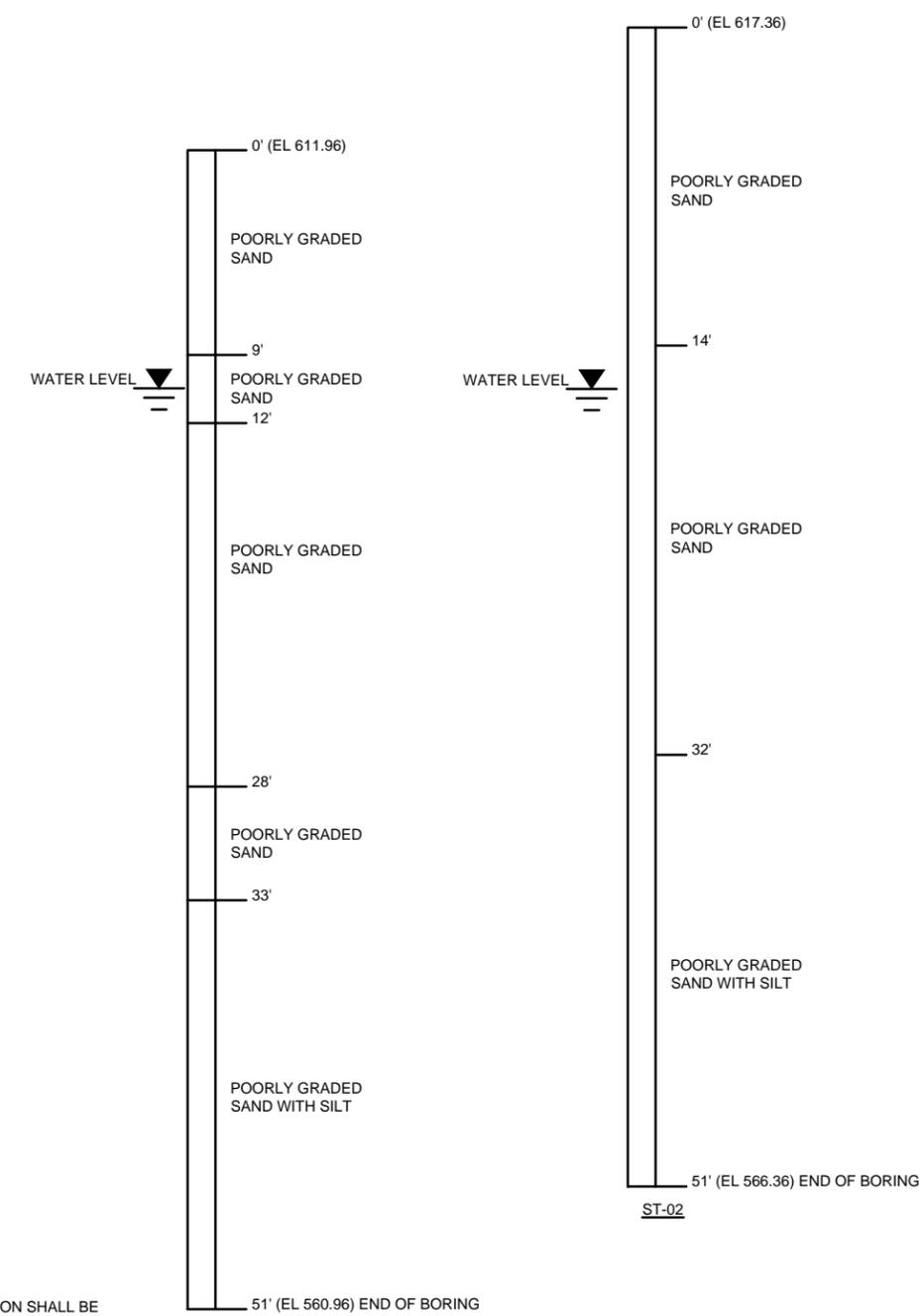
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 REG. NO. 48815 DATE 11/01/2012

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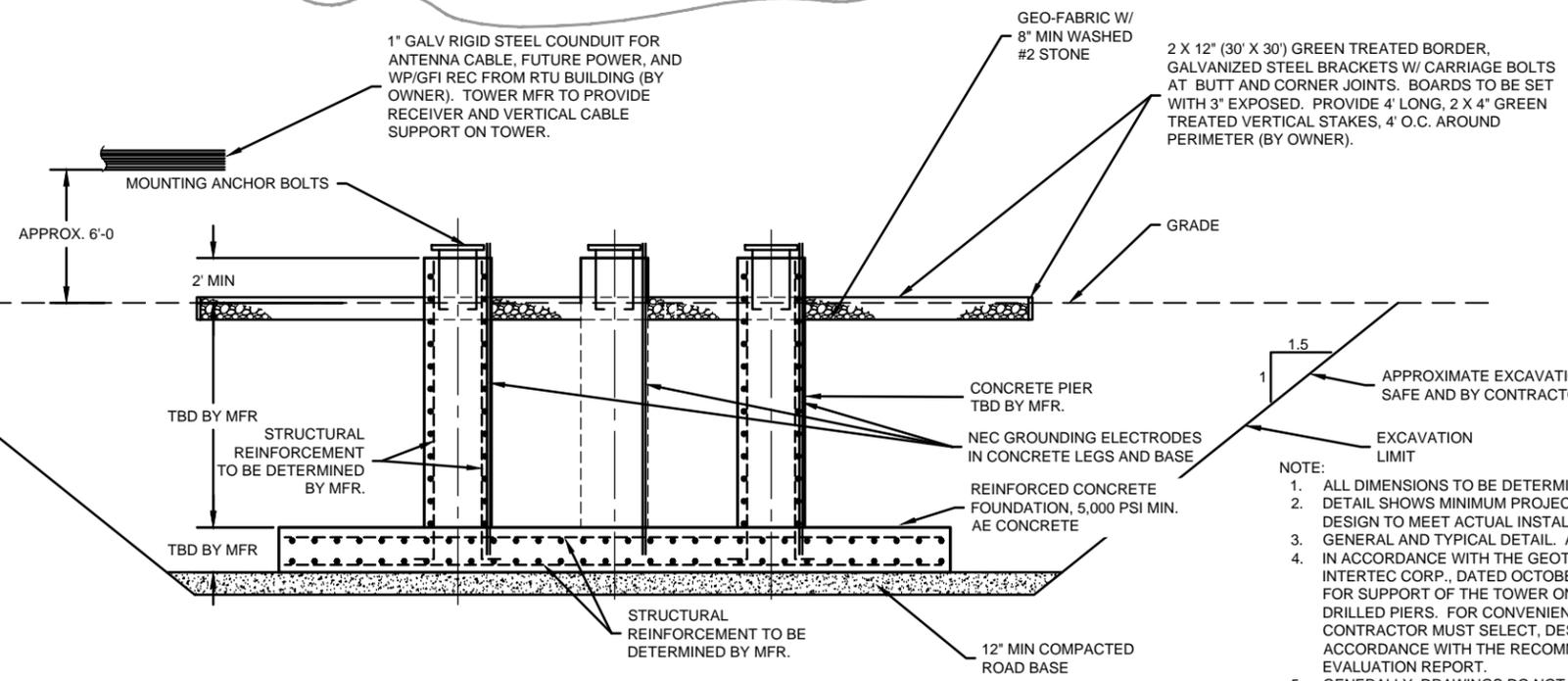
SHEET NO. G-3 - SITE PLAN



TOWER FOUNDATION PLAN
NO SCALE



SOIL BORINGS
NO SCALE



TYPICAL TOWER FOUNDATION
NO SCALE

NOTE:

1. ALL DIMENSIONS TO BE DETERMINED (TBD) BY MANUFACTURER
2. DETAIL SHOWS MINIMUM PROJECT REQUIREMENTS. TOWER MANUFACTURER SHALL PROVIDE DESIGN TO MEET ACTUAL INSTALLATION REQUIREMENTS. DESIGN SHALL BE SEALED BY P.E.
3. GENERAL AND TYPICAL DETAIL. ACTUAL INSTALLATION MAY VARY.
4. IN ACCORDANCE WITH THE GEOTECHNICAL EVALUATION REPORT PREPARED BY BRAUN INTERTEC CORP., DATED OCTOBER 16, 2012, THE GEOLOGIC PROFILE APPEARS TO BE SUITABLE FOR SUPPORT OF THE TOWER ON A MAT FOOTING (PAN AND PIER) FOUNDATION TYPE, OR ON DRILLED PIERS. FOR CONVENIENCE, THE DRAWINGS DEPICT A MAT FOUNDATION. THE CONTRACTOR MUST SELECT, DESIGN, AND CONSTRUCT THE MOST EFFICIENT FOUNDATION IN ACCORDANCE WITH THE RECOMMENDATIONS CONTAINED WITHIN THE GEOTECHNICAL EVALUATION REPORT.
5. GENERALLY, DRAWINGS DO NOT INDICATE TEMPORARY REQUIREMENTS. NEED FOR TEMPORARY DEWATERING, TEMPORARY EARTH RETENTION, TEMPORARY ELECTRICITY CUTOFF OR OTHER TEMPORARY MEASURES MAY BE INDICATED ON DRAWINGS AT SELECTED AREAS AS SUGGESTIONS FOR CONTRACTOR'S CONVENIENCE. DRAWINGS DO NOT IDENTIFY ALL AREAS OR CONDITIONS REQUIRING TEMPORARY MEASURES. IT IS CONTRACTOR'S RESPONSIBILITY TO CONFIRM TEMPORARY MEASURES INDICATED ON DRAWINGS, IDENTIFY OTHER AREAS OR CONDITIONS REQUIRING TEMPORARY MEASURES, DETERMINE MOST EFFICIENT TEMPORARY SYSTEMS AND DESIGN AND CONSTRUCT TEMPORARY SYSTEMS.

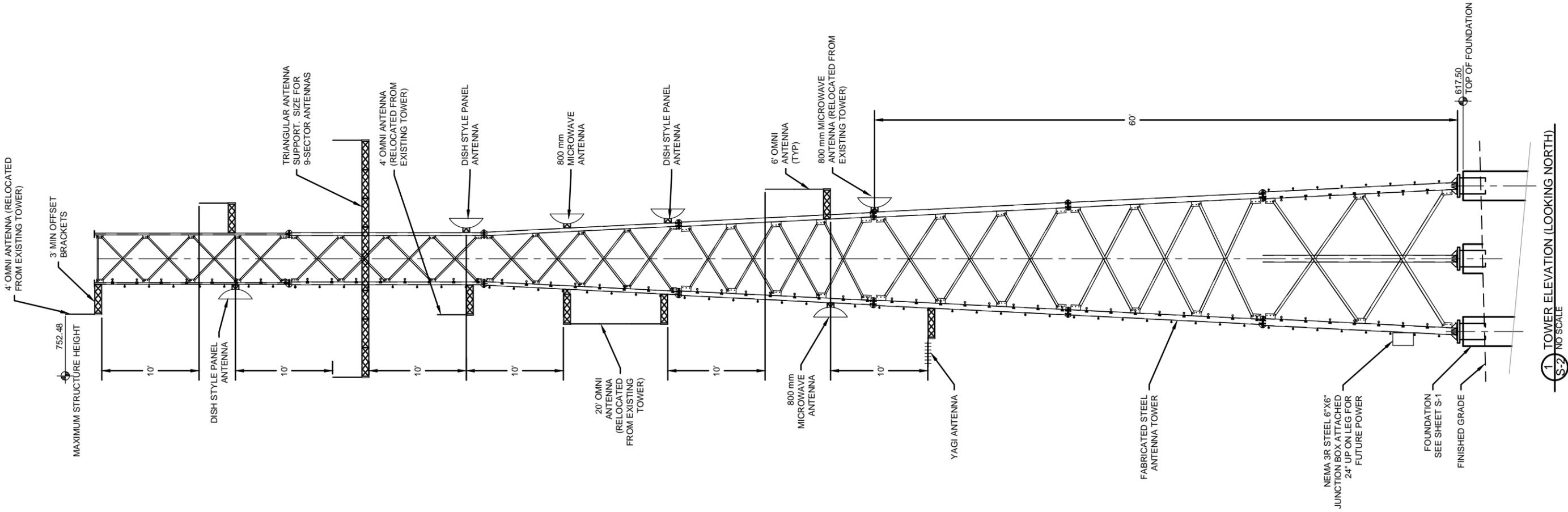


Designed By:	JWD	
Drawn By:	RWM	
Checked By:	JWD	
NUM	REVISIONS	DATE

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SIGNATURE: JARED W. DEMASTER, REG. NO. 48815, DATE: 11/01/2012

CITY PROJ. NO. 12-027 PARK POINT COMMUNICATIONS TOWER

SHEET NO. S-1 TOWER BASE



- NOTE:
1. ALL DIMENSIONS TO BE DETERMINED (TBD) BY MANUFACTURER DETAIL SHOWS MINIMUM PROJECT REQUIREMENTS. TOWER MANUFACTURER SHALL PROVIDE DESIGN TO MEET ACTUAL INSTALLATION REQUIREMENTS. DESIGN SHALL BE SEALED BY P.E. GENERAL AND TYPICAL DETAIL. ACTUAL INSTALLATION MAY VARY.
 2. ASSUME ALL CABLE TO BE 7/8" DIA.
 - 3.
 - 4.

1
S-2
TOWER ELEVATION (LOOKING NORTH)
NO SCALE

