

CONSULTANT TEAM

PROJECT CONSULTANT: TERRA CONSULTING GROUP, LTD.
600 BUSSE HIGHWAY
PARK RIDGE, IL 60068
(847) 698-6400

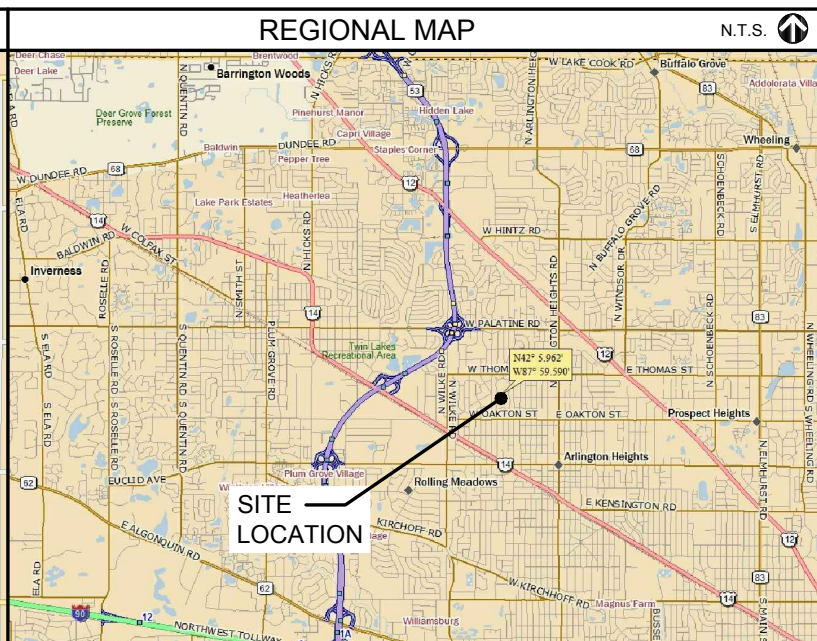
STRUCTURAL ENGINEER: HUTTER TRANKINA ENGINEERING,
PC 32 W 273 ARMY TRAIL ROAD,
SUITE 100 WAYNE, IL 60184

SURVEYOR: THOMSON SURVEYING
LTD. 9575 W. HIGGINS
ROAD SUIT 850
ROSEMONT, IL 60018
TEL: (847) 318-9790

PROJECT TYPE:
PROPOSED LESSEE ANTENNAS TO BE MOUNTED ON EXISTING
PENTHOUSE WITH PROPOSED EQUIPMENT ENCLOSURE AT BASE.

SITE COORDINATES:
LATITUDE: 42° 05' 48.05" N (FROM 1A)
LONGITUDE: 87° 59' 35.34" W (FROM 1A)
ELEVATION: ±720' (FROM 1A)

DRIVING DIRECTIONS:
1. START OUT GOING EAST ON E WOODFIELD RD TOWARD MALL DR.
2. TURN LEFT ONTO E FRONTAGE RD. 3. TURN SLIGHT LEFT TO TAKE
THE IL-53 N/I-90 W/I-290 E/I-90 E RAMP. 4. KEEP LEFT AT THE FORK IN
THE RAMP. 5. MERGE ONTO IL-53 N VIA THE RAMP ON THE LEFT. 6.
TAKE THE EUCLID AVE E EXIT. 7. MERGE ONTO EUCLID AVE. 8. TURN
LEFT ONTO N WILKE RD. N WILKE RD IS 0.6 MILES PAST SWAN LN 9.
TURN RIGHT ONTO W OAKTON ST. 10. 800 W OAKTON ST IS ON THE
LEFT.



APPROVALS

REAL ESTATE: _____

RF: _____

CONSTRUCTION: _____

OPERATIONS: _____

EQUIPMENT ENGINEERING: _____

EQUIPMENT ENCLOSURE:

FIBREBOND
1300 Davenport Drive, Minden, Louisiana 71055 318-377-1030

CHICAGO SMSA
limited partnership
d/b/a VERIZON WIRELESS

TERRA CONSULTING GROUP, LTD.
600 BUSSE HIGHWAY
PARK RIDGE, IL 60068
PH: 847-698-6400
FAX: 847-698-6401

CHICAGO SMSA

limited partnership

CHICAGO SMSA LIMITED PARTNERSHIP
d/b/a VERIZON WIRELESS
1515 WOODFIELD ROAD, SUITE 1400
SCHAUMBURG, ILLINOIS 60173
PHONE: (847) 619-5397 FAX: (847) 706-7415

LOCATION NUMBER: 282639

SITE NAME: YALE & OAKTON

800 W OAKTON ST
ARLINGTON HEIGHTS, IL 60004

OPERATES 24 HOURS
A DAY 365 DAYS A YEAR

CALL JULIE TOLL FREE
1(800) 892-0123
48 HOURS BEFORE
YOU DIG

FULL SCALE PRINT IS ON 24"x36" MEDIA

PROJECT INFORMATION

P.I.N. #: 0319400002
ADDRESS: 800 W OAKTON ST
ARLINGTON HEIGHTS, IL 60004

UTILITIES: NATURAL GAS: NICOR POWER: COMED FIBER: AT&T
ANGIE GREGOR VIKI THOMAS
(630) 878-0768

JURISDICTION: VILLAGE OF ARLINGTON HEIGHTS
OCCUPANCY: COMMERCIAL
ZONING: INSTITUTIONAL
CONSTRUCTION TYPE: ROOF TOP
PROPERTY OWNER: STEVEN DUCHENE
3150 SALT CREEK LANE
ARLINGTON HEIGHTS, IL 60005

APPLICANT: CHICAGO SMSA
limited partnership
d/b/a Verizon Wireless
1515 WOODFIELD ROAD
SCHAUMBURG, IL 60173

CONSTRUCTION MANAGER: MIKE EISENMENGER (847) 732-6053
REAL ESTATE MANAGER: LISA ESSARY (847) 619-4322

SHEET	DRAWING INDEX	REVISION
T-1	TITLE SHEET	2
LP	LOCATION PLAN	2
C-1	ENGINEERING SITE PLAN	2
C-2	SITE GRADING PLAN (SHEET 1 OF 1)	-
C-3	EQUIPMENT ENCLOSURE FOUNDATION PLAN	-
C-4	GENERATOR DETAILS	2
C-5	SCREEN WALL DETAILS	-
C-6	FENCE DETAILS	-
ANT-1	SITE ELEVATION	1
ANT-1A	SITE ELEVATION	2
ANT-2	ANTENNA INFORMATION	1
ANT-3	ANTENNA MOUNTING DETAILS	-
ANT-4	ANTENNA MOUNTING DETAILS	-
S-1	ENLARGED SITE PLAN	-
S-2	PENTHOUSE FRAMING PLAN SECTIONS AND DETAILS	-
B-1	EQUIPMENT ENCLOSURE PLAN AND SECTION	-
B-2	EQUIPMENT ENCLOSURE ELEVATIONS	-
E-1	UTILITY ROUTING PLAN	2
E-1A	UTILITY ROUTING PLAN	2
E-2	SITE GROUNDING PLAN	-
E-3	ELECTRICAL AND GROUNDING DETAILS	-
E-4	ELECTRICAL AND GROUNDING DETAILS	2
E-5	GENERATOR GROUNDING AND ROUTING LINES	-
SP-1	SPECIFICATIONS	-
SP-2	SPECIFICATIONS	-
L-1	TREE SURVEY	4
	ATTACHMENTS	
SE-1	SITE EXHIBIT	-
SE-2	SITE EXHIBIT	-

REVISIONS

NO	DATE	BY	DESCRIPTION
1	11/21/14	LRB/LS	ISSUED FOR REVIEW
2	03/20/15	LS	UPDATE ECR
3	04/30/15	LS	UPDATE PER UTILITY WALK
4	05/19/15	DMS	UPDATED NATURAL GAS
	07/07/15	JTM	ADDITION OF LANDSCAPE PLAN

LOC. #282639

YALE & OAKTON

800 W. OAKTON ST.
ARLINGTON HEIGHTS, IL 60004

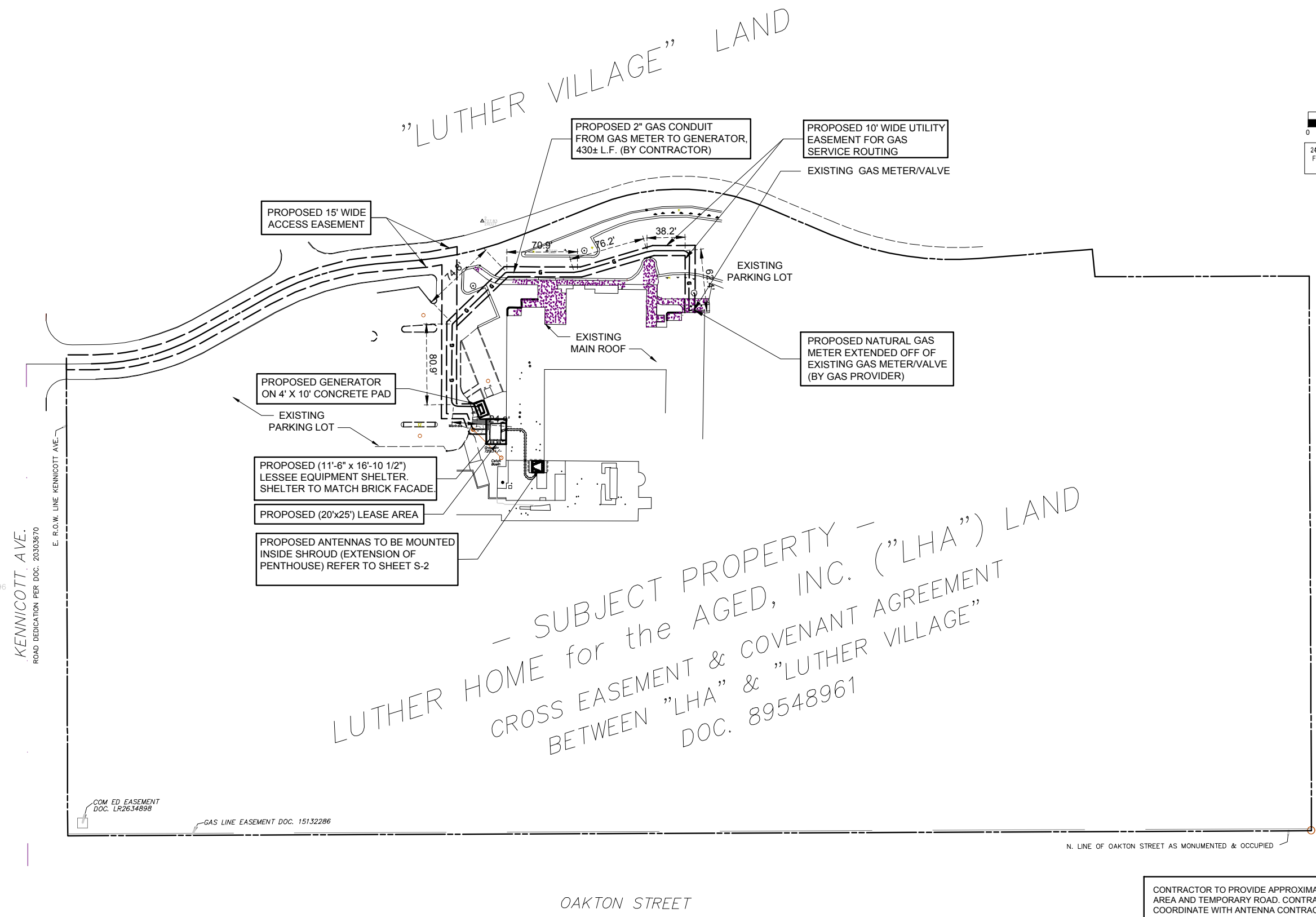
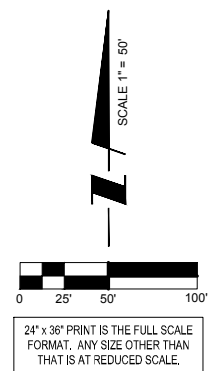
DRAWN BY: LRB
CHECKED BY: TAZ
DATE: 11/19/14
PROJECT #: 33-1607

SHEET TITLE
TITLE SHEET

SHEET NUMBER
T-1

CHICAGO SMSA
 limited partnership
 d/b/a VERIZON WIRELESS

TERRA
 CONSULTING, LTD.
 600 BUSSE HIGHWAY
 PARK RIDGE, IL 60068
 PH: 847-698-6400
 FAX: 847-698-6401



*- SUBJECT PROPERTY -
 LUTHER HOME for the AGED, INC. ("LHA") LAND
 CROSS EASEMENT & COVENANT AGREEMENT
 BETWEEN "LHA" & "LUTHER VILLAGE"
 DOC. 89548961*

REVISIONS	
NO.	DESCRIPTION
1.	ISSUED FOR REVIEW
2.	UPDATE ECR
3.	UPDATE PER UTILITY WALK
4.	UPDATE NATURAL GAS
	ADDITION OF LANDSCAPE PLAN

LOC. #282639
YALE & OAKTON
 800 W. OAKTON ST.
 ARLINGTON HEIGHTS, IL 60004

DRAWN BY: LRB
 CHECKED BY: TAZ
 DATE: 11/19/14
 PROJECT #: 33-1607

SHEET TITLE
LOCATION PLAN

SHEET NUMBER
LP

CONTRACTOR TO PROVIDE APPROXIMATE 50'x50' STAGING AREA AND TEMPORARY ROAD. CONTRACTOR SHALL COORDINATE WITH ANTENNA CONTRACTOR, A STAGING AREA AND TEMPORARY ROAD THAT IS ACCEPTABLE TO THE OWNER. STAGING AREA AND TEMPORARY ROAD SHALL BE RESTORED TO EXISTING CONDITIONS AS NECESSARY UPON COMPLETION OF THE PROJECT.

BEFORE AND DURING CONSTRUCTION, THE CONTRACTOR SHALL PROVIDE ADEQUATE EROSION CONTROL AS NECESSARY IN THE FORM OF SILT FENCES FOR THE SITE AND BALES AROUND ANY EXISTING MANHOLES, INLETS, OR CATCHBASINS SUSCEPTIBLE TO EROSION. EROSION CONTROL MEASURES SHALL BE PERIODICALLY INSPECTED TO ENSURE PROPER FUNCTION. EROSION CONTROL SHALL BE REMOVED UPON COMPLETION OF WORK.

THE CONTRACTOR WILL, UPON BECOMING AWARE OF SUBSURFACE OR LATENT PHYSICAL CONDITIONS DIFFERING FROM THOSE DISCLOSED BY THE ORIGINAL SOIL INVESTIGATION WORK, PROMPTLY NOTIFY THE OWNER VERBALLY AND IN WRITING, AS TO THE NATURE OF THE DIFFERING CONDITIONS. NO CLAIM BY THE CONTRACTOR FOR ANY CONDITIONS DIFFERING FROM THOSE ANTICIPATED IN THE PLANS AND SPECIFICATIONS AND DISCLOSED BY THE SOIL STUDIES WILL BE ALLOWED UNLESS THE CONTRACTOR HAS SO NOTIFIED THE OWNER, VERBALLY AND IN WRITING, AS REQUIRED ABOVE, OF SUCH DIFFERING SUBSURFACE CONDITIONS.

CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO EXISTING PAVEMENT. CONTRACTOR SHALL PHOTOGRAPH AND VIDEOTAPE EXISTING PAVEMENT PRIOR TO CONSTRUCTION. ANY DAMAGE CAUSED DURING CONSTRUCTION SHALL BE REPLACED TO EXISTING OR BETTER CONDITION AT NO ADDITIONAL COST.

1 LOCATION PLAN
 SCALE: 1" = 50'

Thomson Surveying Ltd.
 9575 W. Higgins Road, Suite 850
 Rosemont, IL 60018
 TEL: (847) 318-9790
 FAX: (847) 318-9792

OPERATES 24 HOURS
 A DAY 365 DAYS A YEAR
Call Before You Dig
JULIE
 ILLINOIS ONE CALL SYSTEM
 CALL JULIE TOLL FREE
 1(800) 892-0123
 48 HOURS BEFORE YOU DIG

811 SIGN

KENNICOTT AVE.
 ROAD DEDICATION PER DOC. 20303670

E. R.O.W. LINE KENNICOTT AVE.

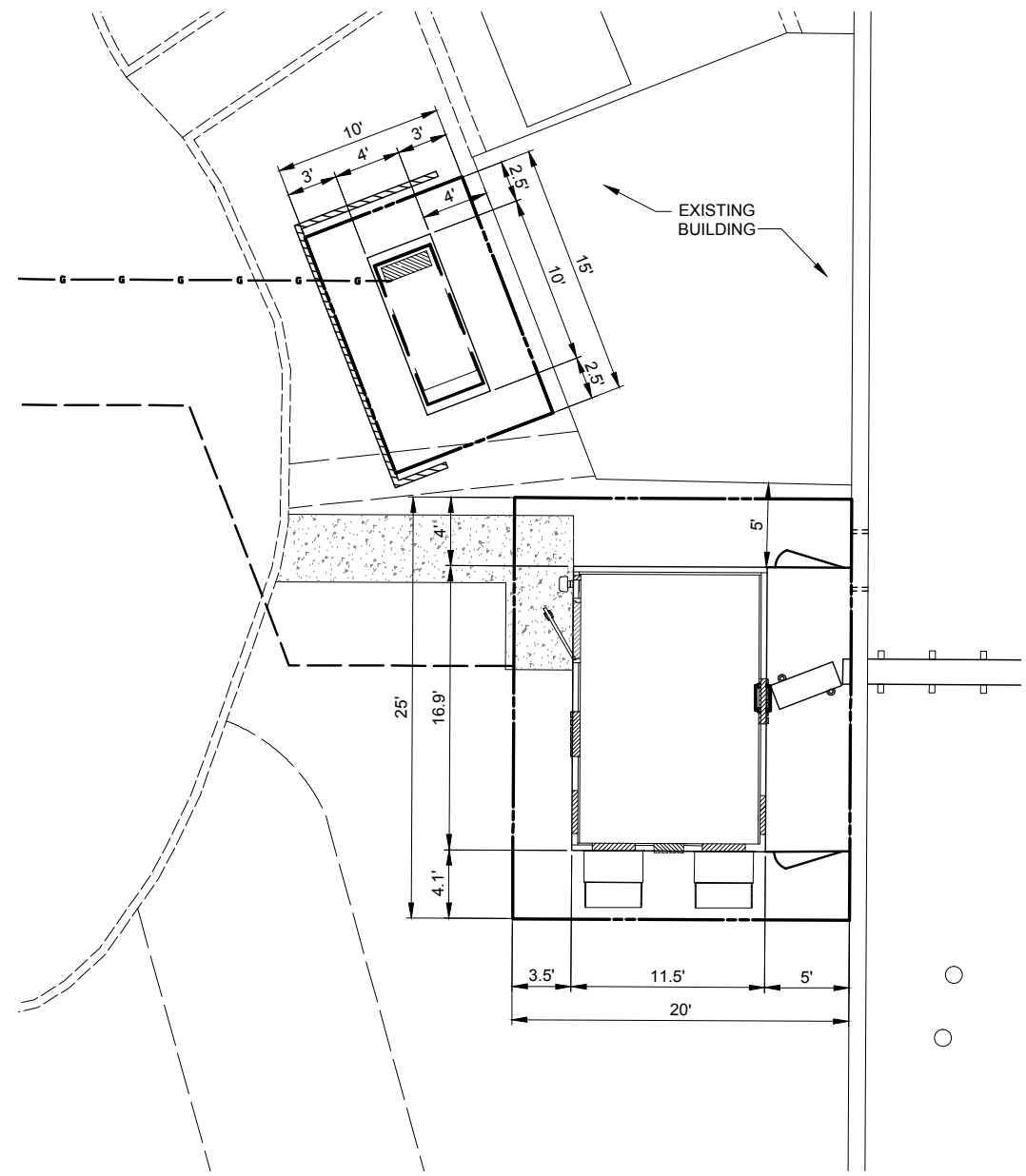
RIDGE AVE.
 ROAD DEDICATION PER DOC. 20303670

N. LINE OF OAKTON STREET AS MONUMENTED & OCCUPIED

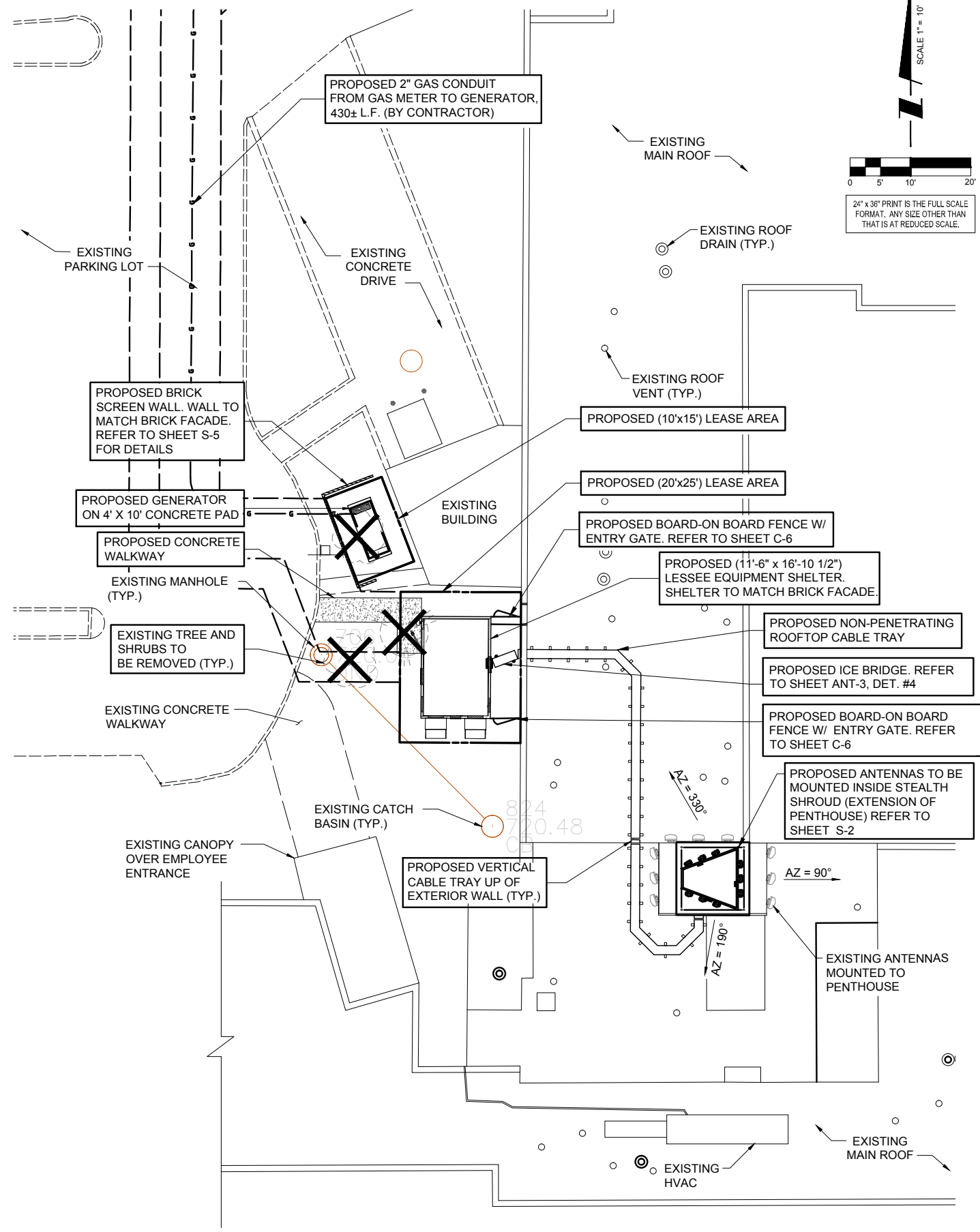
OAKTON STREET

COM. ED. EASEMENT
 DOC. LR2634898

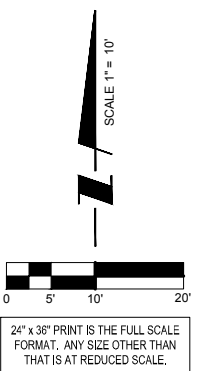
GAS LINE EASEMENT DOC. 15132286



1 SITE DIMENSION PLAN
SCALE: 1" = 5'



1 ENLARGED SITE PLAN
SCALE: 1" = 10'



CHICAGO SMSA
limited partnership
d/b/a VERIZON WIRELESS

TERRA
CONSULTING, LTD.
600 BUSSE HIGHWAY
PARK RIDGE, IL 60068
PH: 847-698-6400
FAX: 847-698-6401

REVISIONS		NO.	DESCRIPTION	DATE	BY
	ISSUED FOR REVIEW			11/21/14	LRB/LS
1.	UPDATE ECR			03/20/15	LS
2.	UPDATE PER UTILITY WALK			04/30/15	LS
3.	UPDATED NATURAL GAS			05/19/15	DMS
4.	ADDITION OF LANDSCAPE PLAN			07/07/15	JTM

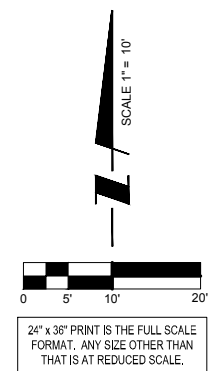
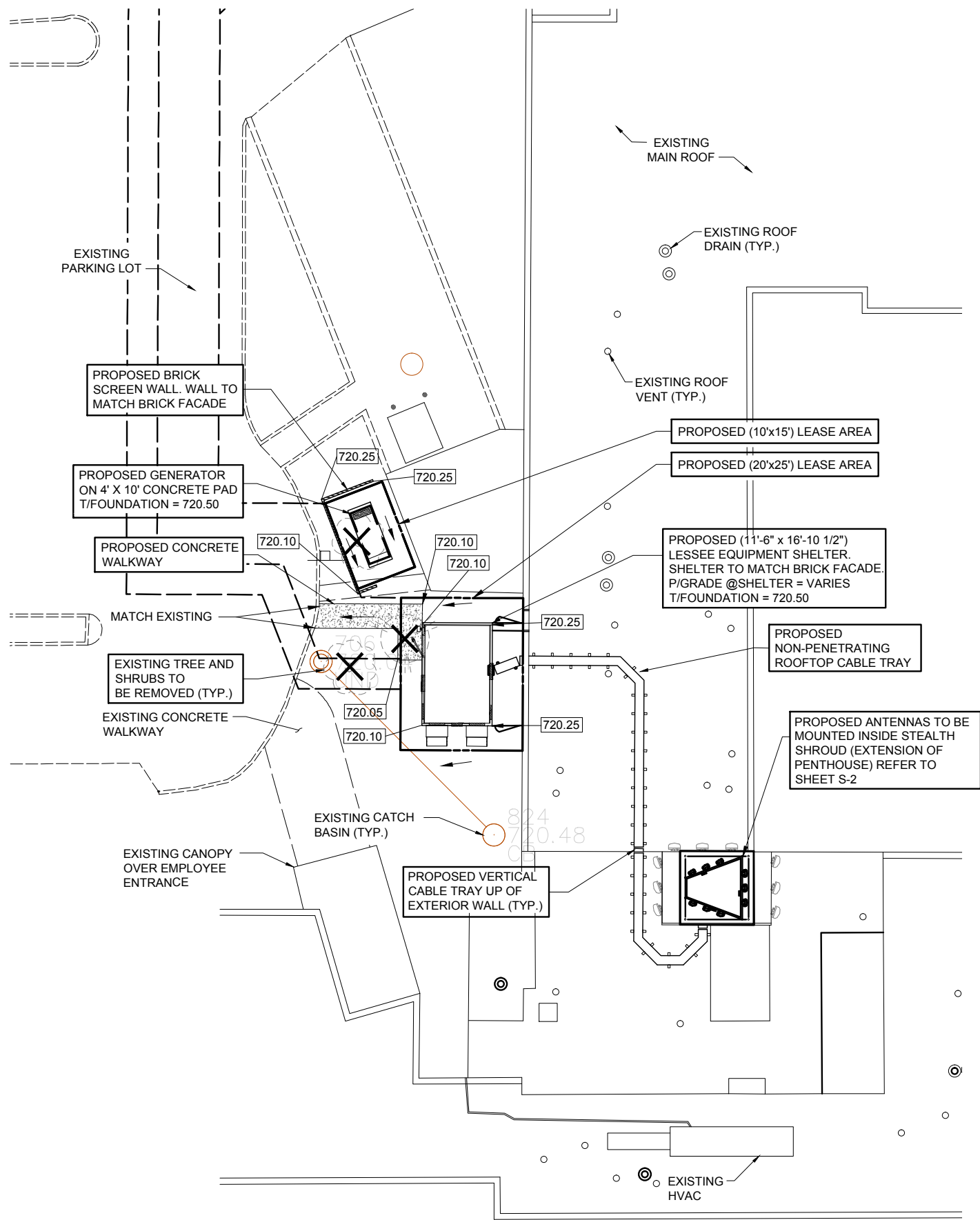
LOC. #282639
YALE & OAKTON
800 W. OAKTON ST.
ARLINGTON HEIGHTS, IL 60004

DRAWN BY: LRB
CHECKED BY: TAZ
DATE: 11/19/14
PROJECT #: 33-1607

SHEET TITLE
ENLARGED SITE PLAN

SHEET NUMBER
C-1





**CHICAGO
SMSA**
limited partnership
d/b/a VERIZON WIRELESS

TERRA
CONSTRUCTION, LTD.
600 BUSSE HIGHWAY
PARK RIDGE, IL 60068
PH: 847-698-6400
FAX: 847-698-6401

REVISIONS	
NO.	DESCRIPTION
1.	ISSUED FOR REVIEW
2.	UPDATE ECR
3.	UPDATE PER UTILITY WALK
4.	UPDATE NATURAL GAS
	ADDITION OF LANDSCAPE PLAN

LOC. #282639
YALE & OAKTON
800 W. OAKTON ST.
ARLINGTON HEIGHTS, IL 60004

DRAWN BY:	LRB
CHECKED BY:	TAZ
DATE:	11/19/14
PROJECT #:	33-1607

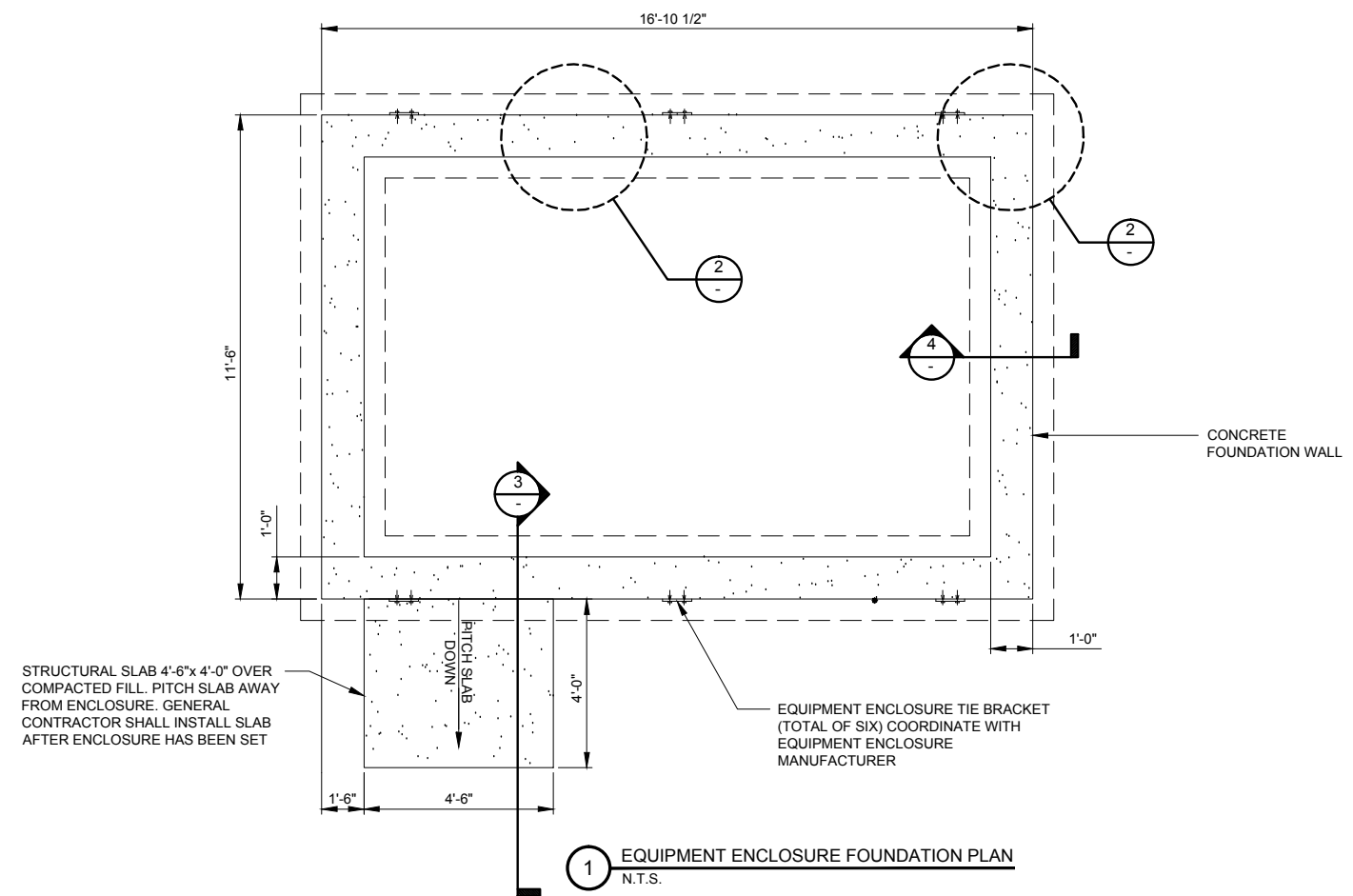
SHEET TITLE
**SITE GRADING PLAN
(SHEET 1 OF 1)**

SHEET NUMBER
C-2

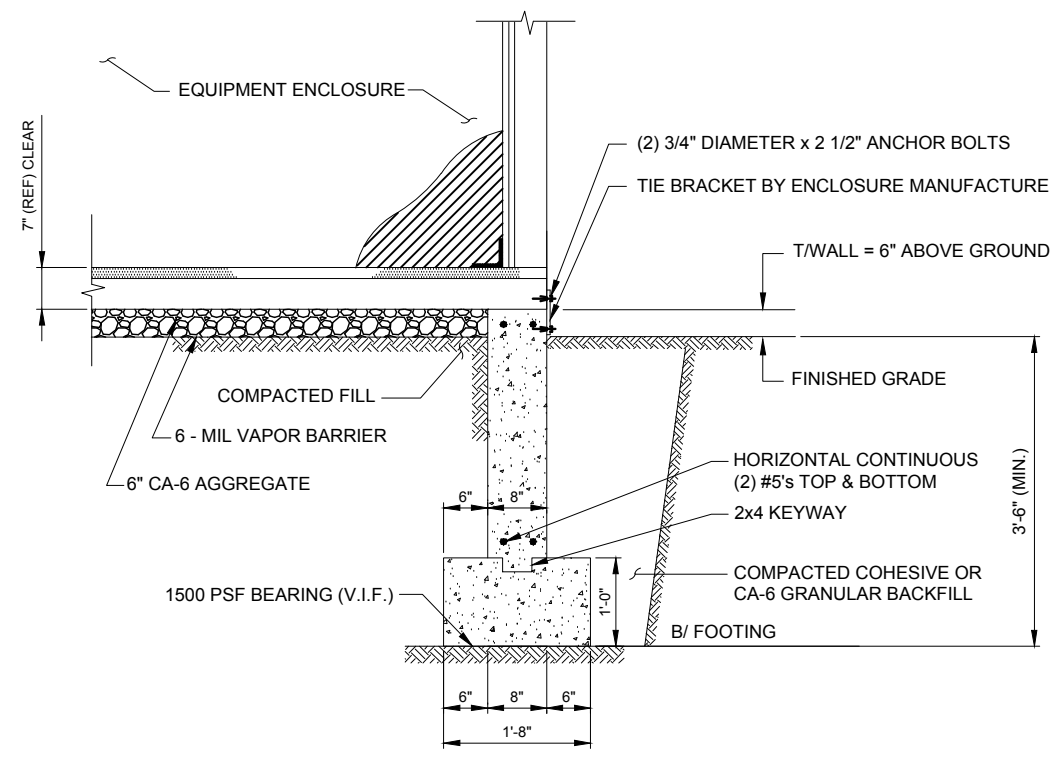
OPERATES 24 HOURS
A DAY 365 DAYS A YEAR
Call Before You Dig
JULIE
ILLINOIS
ONE CALL SYSTEM
CALL JULIE TOLL FREE
1(800) 892-0123
48 HOURS BEFORE
YOU DIG

Thomson Surveying Ltd.
9575 W. Higgins Road, Suite 850
Rosemont, IL 60018
TEL: (847) 318-9790
FAX: (847) 318-9792

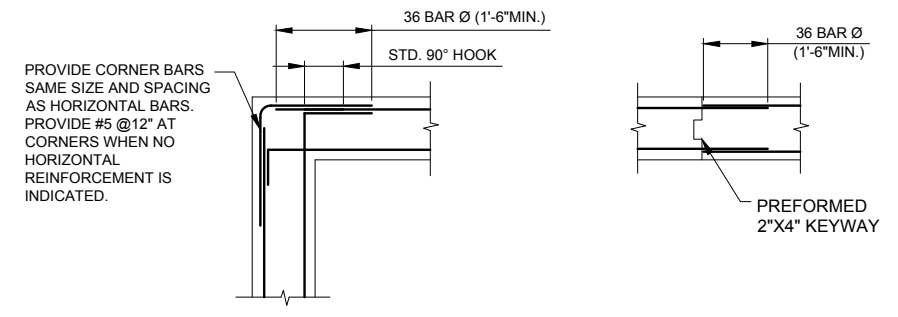
1 SITE GRADING PLAN
SCALE: 1" = 10'



1 EQUIPMENT ENCLOSURE FOUNDATION PLAN
N.T.S.

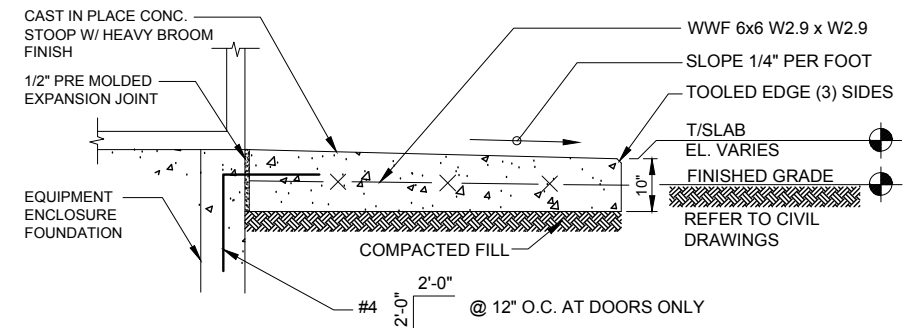


4 FOUNDATION WALL SECTION
N.T.S.



CORNER **CONSTRUCTION JOINT**

2 CONCRETE WALL REINFORCEMENT DETAILS
N.T.S.



3 STOOP DETAIL
N.T.S.

A. EQUIPMENT ENCLOSURE FOUNDATION

- REFER TO CIVIL DRAWINGS FOR ORIENTATION OF THE FOUNDATIONS.
- EQUIPMENT ENCLOSURE FOUNDATION IS DESIGNED FOR THE FOLLOWING LOADS:
ENCLOSURE DEAD LOAD: 70,000 LBS.
ROOF LIVE LOAD: 30 PSF
FLOOR LIVE LOAD: 125 PSF
- THE CONTRACTOR SHALL NOTIFY THE CLIENT'S GEOTECHNICAL ENGINEER TO COORDINATE HAVING A FIELD REPRESENTATIVE ON SITE FOR TESTING AND INSPECTION.
- FOOTINGS SHALL BEAR ON VIRGIN SOIL OR COMPACTED FILL MATERIAL CAPABLE OF SUPPORTING A MINIMUM SOIL BEARING PRESSURE OF 1500 PSF.
- SUBGRADE PREPARATION:
A. REMOVE ALL SOILS CONTAINING TOPSOIL, ORGANIC MATERIALS, AND/OR FILL MATERIALS FROM WITHIN AREA OF ENCLOSURE FOUNDATION.
B. PROOF ROLL RESULTING SUBGRADE WITH A HEAVILY LOADED SINGLE AXLE ROLLER OR SIMILAR VEHICLE. (20 TON LOAD). CONTRACTOR SHALL UNDERCUT AND REPLACE WITH ENGINEERED FILL. ALL LOOSE SOFT OR UNSTABLE AREAS REVEALED DURING PROOFROLLING AS DIRECTED BY THE TESTING AGENCY. CONTRACTOR SHALL INCLUDE ANTICIPATED UNDERCUT AND REPLACEMENT AS INDICATED IN THE GEOTECHNICAL REPORT AS PART OF THE BID.
C. BACKFILL AND COMPACT THE AREA WITHIN THE BUILDING FOUNDATION. BETWEEN RESULTANT SUBGRADE AND FOUNDATION WALL WITH APPROVED GRANULAR MATERIAL.
- FOUNDATION WALLS SHALL BE BACKFILLED EVENLY ON EACH SIDE OF THE WALL OR WALLS SHALL BE ADEQUATELY BRACED BY THE CONTRACTOR UNTIL FLOOR SLAB HAS BEEN PLACED AND CURED FOR 72 HOURS MINIMUM.
- ENCLOSURE SHALL NOT BE SET UNTIL FLOOR SLAB HAS BEEN CURED FOR 72 HOURS MINIMUM.
- CONTRACTOR TO ENSURE FOUNDATION / SLAB ARE POURED TO MEET FLATNESS LEVEL TOLERANCES AS INDICATED IN ACI 4.5.6 AND 4.5.7.

B. EQUIPMENT ENCLOSURE

THE EQUIPMENT ENCLOSURE IS A PRE-FABRICATED BUILDING MANUFACTURED BY FIBREBOND, MINDEN, LOUISIANA.
THE EQUIPMENT ENCLOSURE BUILDING SHALL BE FURNISHED AND INSTALLED BY THE OWNER UNDER SEPARATE CONTRACT PER THE OWNER AND MANUFACTURER SPECIFICATIONS.

C. CONCRETE NOTES

- ALL CONCRETE WORK SHALL CONFORM TO THE REQUIREMENTS OF ACI 318 AND ACI 301, LATEST EDITION. THESE DOCUMENTS SHALL BE AVAILABLE IN THE FIELD OFFICE.
- EXCEPT WHERE OTHERWISE INDICATED, CONCRETE SHALL BE NORMAL WEIGHT AND WITH MINIMUM 28-DAY COMPRESSIVE STRENGTHS OF $F_c=4000$ PSI. ALL EXTERIOR EXPOSED CONCRETE SHALL BE AIR ENTRAINED.
- REINFORCING BARS SHALL CONFORM TO ASTM A615, GRADE 60. ALL WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185.

NOTE:
LOCALIZED AREAS OF SOFT OR LOOSE MATERIALS MAY BE ENCOUNTERED AT THE PROPOSED BEARING ELEVATION. THE SOILS MAY REQUIRE COMPACTION USING A PLATE COMPACTOR IN THE FOOTING TRENCH IF FIELD CONDITIONS INDICATE LOOSE GRANULAR SOILS. THE SOILS MAY REQUIRE REMOVAL AND REPLACEMENT WITH AN APPROVED ENGINEERED FILL. FOUNDATION DEPTH AND OVER DIG REQUIREMENTS SHALL BE VERIFIED WITH THE RECOMMENDATIONS OF THE GEOTECHNICAL REPORT AND INCLUDED IN THE BID BEFORE CONSTRUCTION. THE EVALUATION OF THE SUB GRADE AND SELECTION OF FILL MATERIALS SHALL BE MONITORED AND TESTED BY A QUALIFIED REPRESENTATIVE OF THE SOILS ENGINEER.



CHICAGO SMSA
limited partnership
d/b/a VERIZON WIRELESS



NO.	DESCRIPTION	DATE	BY
1.	ISSUED FOR REVIEW	11/21/14	LRB/LS
2.	UPDATE ECR	03/20/15	LS
3.	UPDATE PER UTILITY WALK	04/30/15	LS
4.	UPDATED NATURAL GAS	05/19/15	DMS
	ADDITION OF LANDSCAPE PLAN	07/07/15	JTM

LOC. #282639

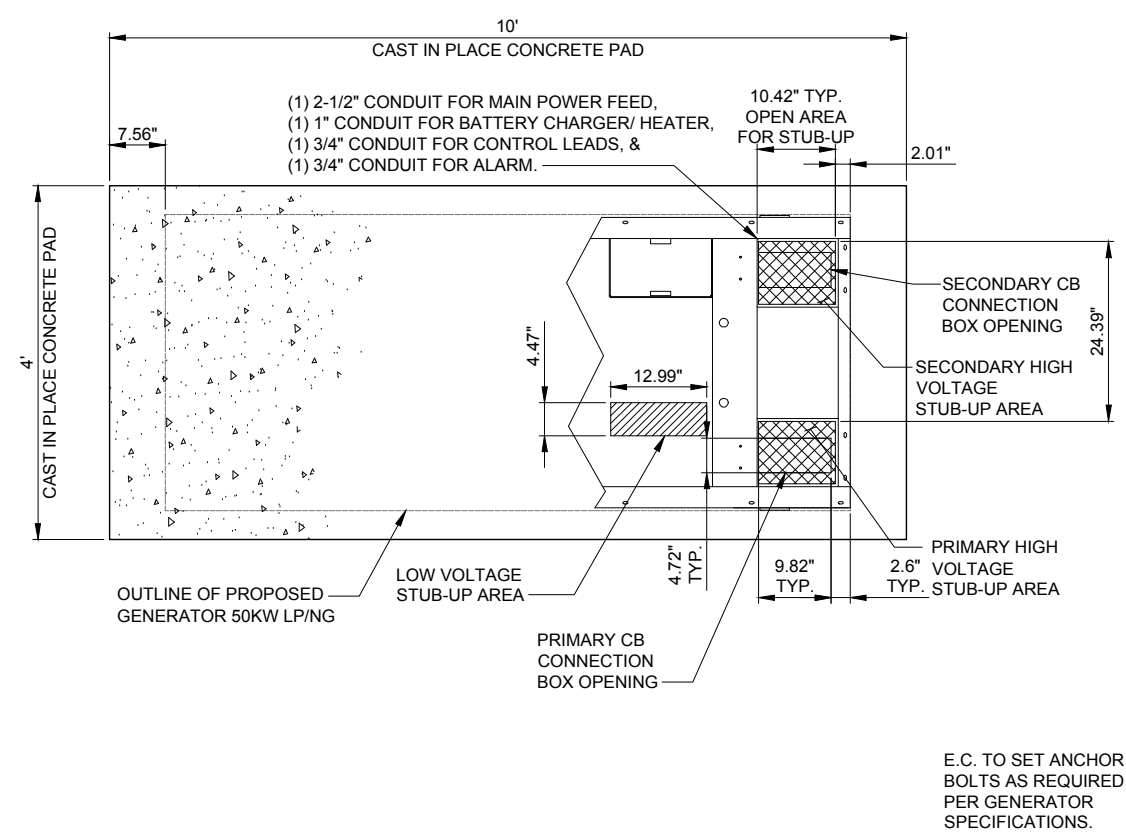
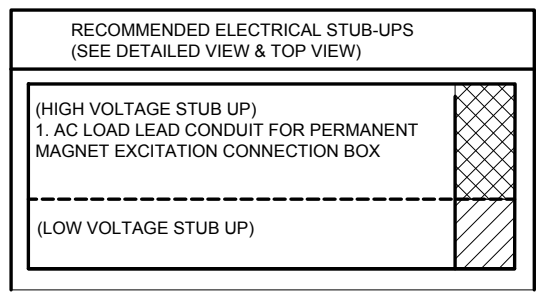
YALE & OAKTON

800 W. OAKTON ST.
ARLINGTON HEIGHTS, IL 60004

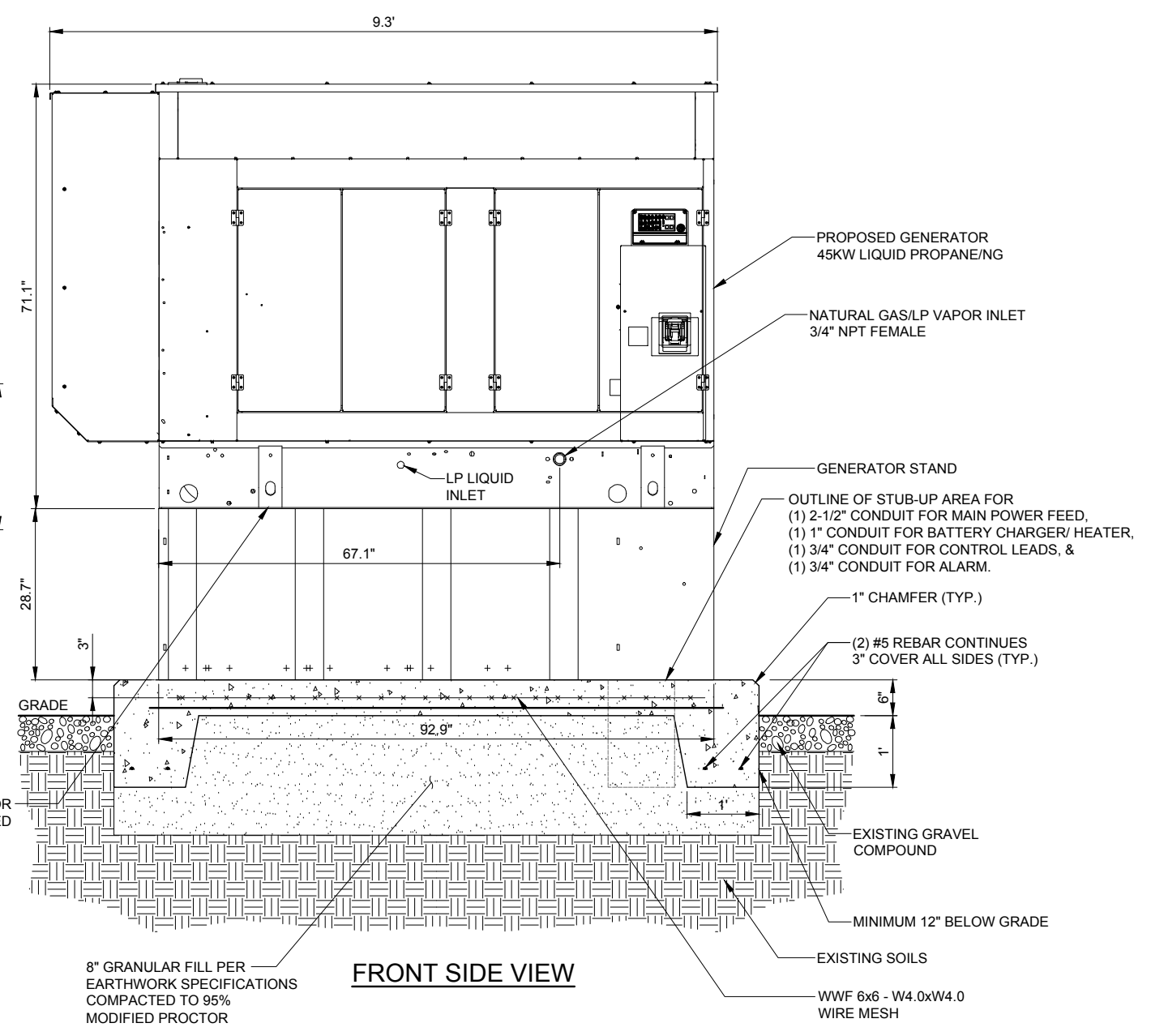
DRAWN BY:	LRB
CHECKED BY:	TAZ
DATE:	11/19/14
PROJECT #:	33-1607

SHEET TITLE
EQUIPMENT ENCLOSURE FOUNDATION PLAN

SHEET NUMBER
C-3



1 TYPICAL GENERAC FOUNDATION DETAIL
 SCALE: 1" = 1'



2 TYPICAL GENERAC FOUNDATION DETAIL
 SCALE: 1" = 1'

NOTES:

- SEE GENERATOR MANUFACTURE'S DRAWINGS FOR PHYSICAL LOCATION OF FUEL LINES, CONTROL AND POWER INTERCONNECTIONS AND OTHER INTERFACES THAT ARE TO CAST INTO THE CONCRETE. THE PREFERRED METHOD IS TO BRING THE CONDUIT THROUGH THE PAD TO THE UNDERSIDE OF THE GENERATOR (MINIMIZES RODENT DAMAGE). FINISH CONNECTIONS WITH FLEXIBLE CONDUIT PER GENERATOR MANUFACTURES SPECS. RIGID CONDUITS SHALL BE SECURED TO THE EXISTING SLAB, THEN BURIED BETWEEN SLAB AND SHELTER.
- THE GENERATOR SHALL BE LOCATED A MIN 5' AWAY FROM A COMBUSTIBLE WALL.
 -THE GENERATOR SHALL BE LOCATED A MIN OF 3' AWAY FROM A NON-COMBUSTIBLE WALL.

REVISIONS

NO.	DESCRIPTION	DATE	BY
1.	ISSUED FOR REVIEW	11/21/14	LRB/LS
2.	UPDATE ECR	03/20/15	LS
3.	UPDATE PER UTILITY WALK	04/30/15	LS
4.	UPDATE NATURAL GAS	05/19/15	DMS
	ADDITION OF LANDSCAPE PLAN	07/07/15	JTM

LOC. #282639

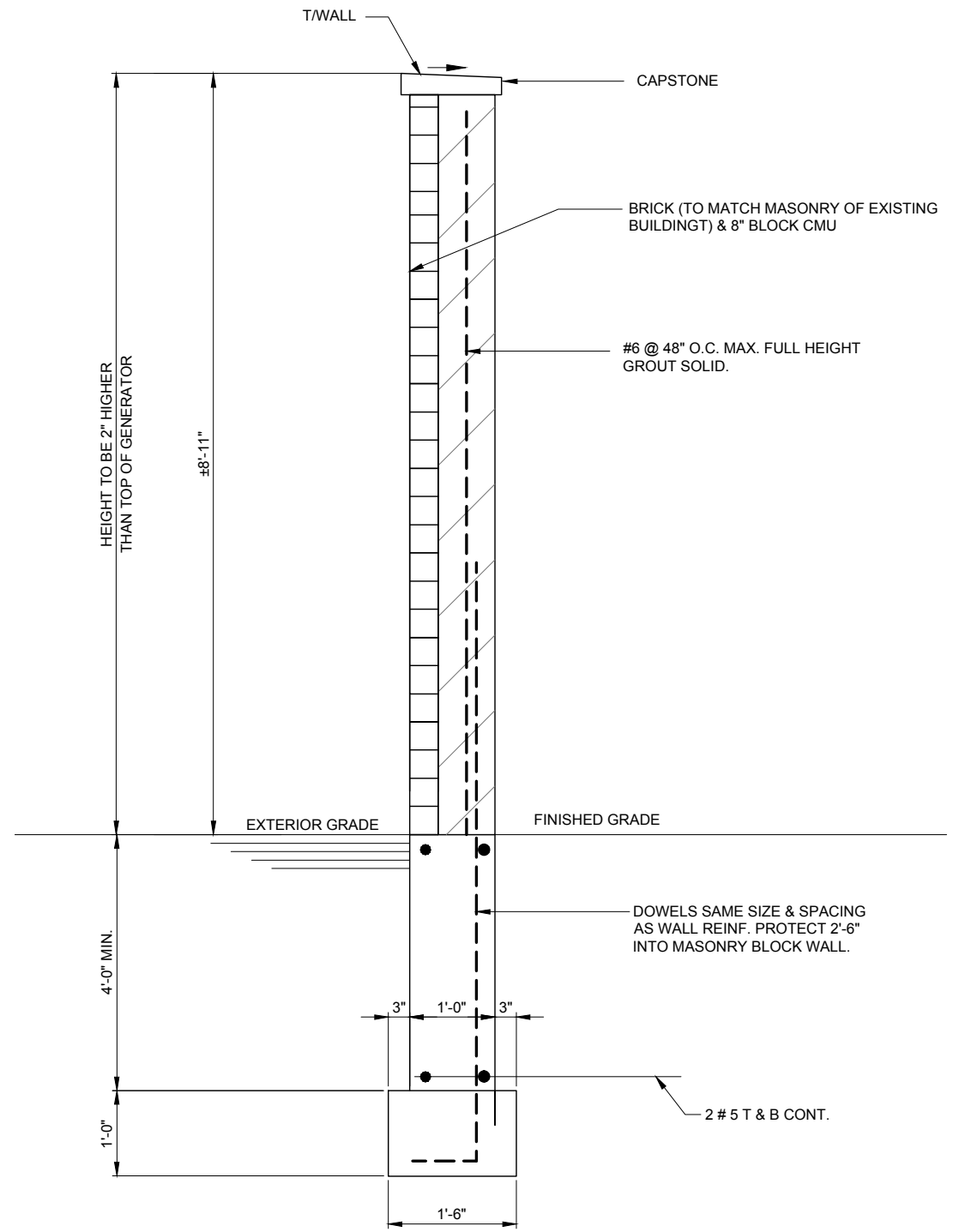
YALE & OAKTON

800 W. OAKTON ST.
 ARLINGTON HEIGHTS, IL 60004

DRAWN BY:	LRB
CHECKED BY:	TAZ
DATE:	11/19/14
PROJECT #:	33-1607

SHEET TITLE
GENERATOR DETAILS

SHEET NUMBER
C-4



1 SCREEN WALL DETAIL
SCALE: 3/32 = 1'-0"

**CHICAGO
SMSA**
limited partnership
d/b/a VERIZON WIRELESS

TERRA
LANDSCAPE ARCHITECTS, LTD.
600 BUSSE HIGHWAY
PARK RIDGE, IL 60068
PH: 847-698-6400
FAX: 847-698-6401

NO.	DESCRIPTION	DATE	BY
	ISSUED FOR REVIEW	11/21/14	LRB/LS
1.	UPDATE ECR	03/20/15	LS
2.	UPDATE PER UTILITY WALK	04/30/15	LS
3.	UPDATED NATURAL GAS	05/19/15	DMS
4.	ADDITION OF LANDSCAPE PLAN	07/07/15	JTM

LOC. #282639

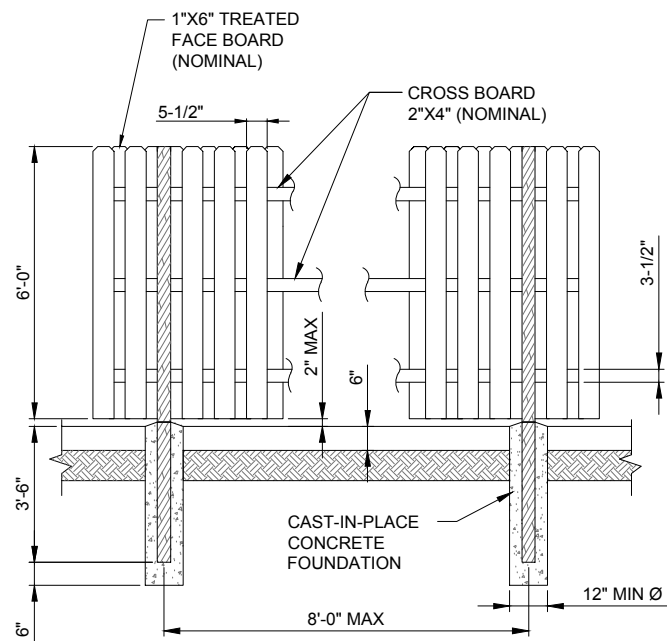
**YALE &
OAKTON**

800 W. OAKTON ST.
ARLINGTON
HEIGHTS, IL 60004

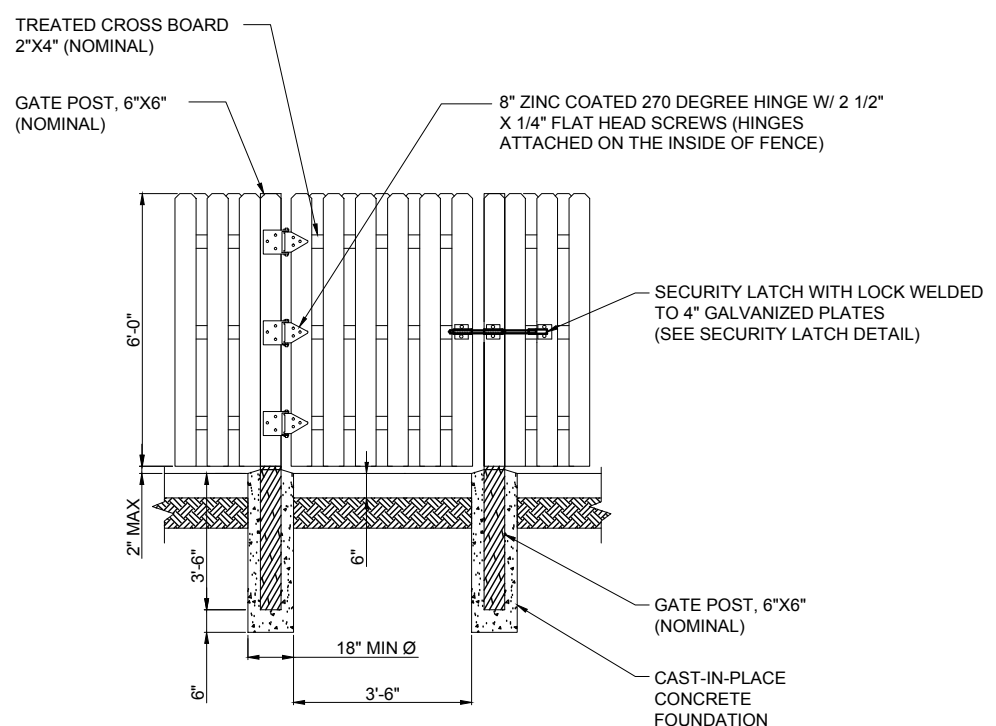
DRAWN BY:	LRB
CHECKED BY:	TAZ
DATE:	11/19/14
PROJECT #:	33-1607

SHEET TITLE
**SCREEN WALL
DETAIL**

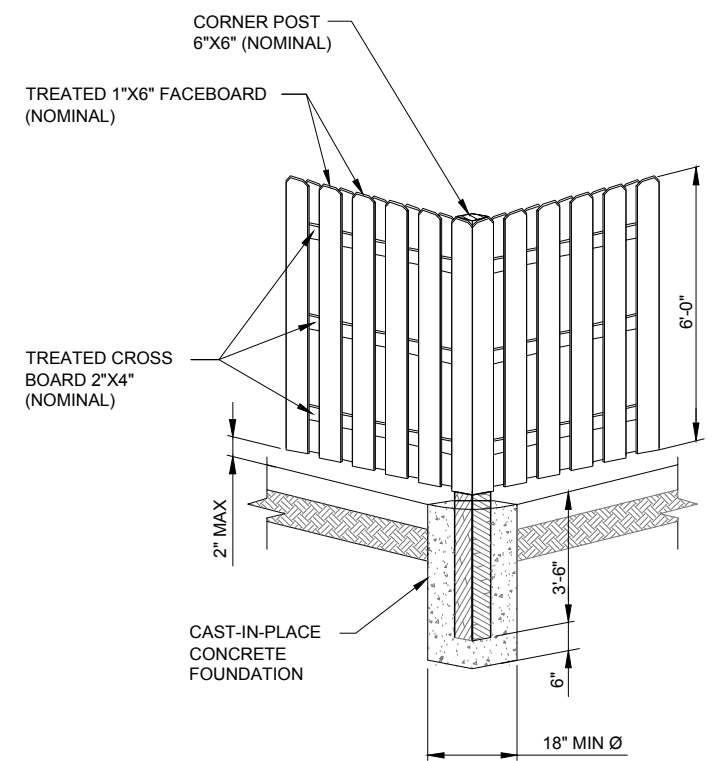
SHEET NUMBER
C-5



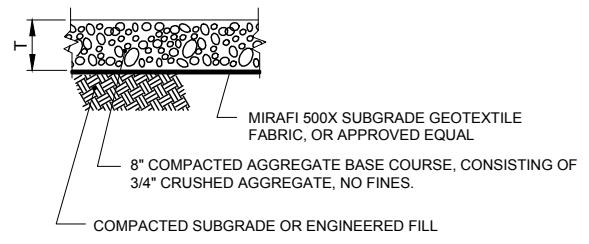
1 WOOD POST
SCALE: N.T.S.



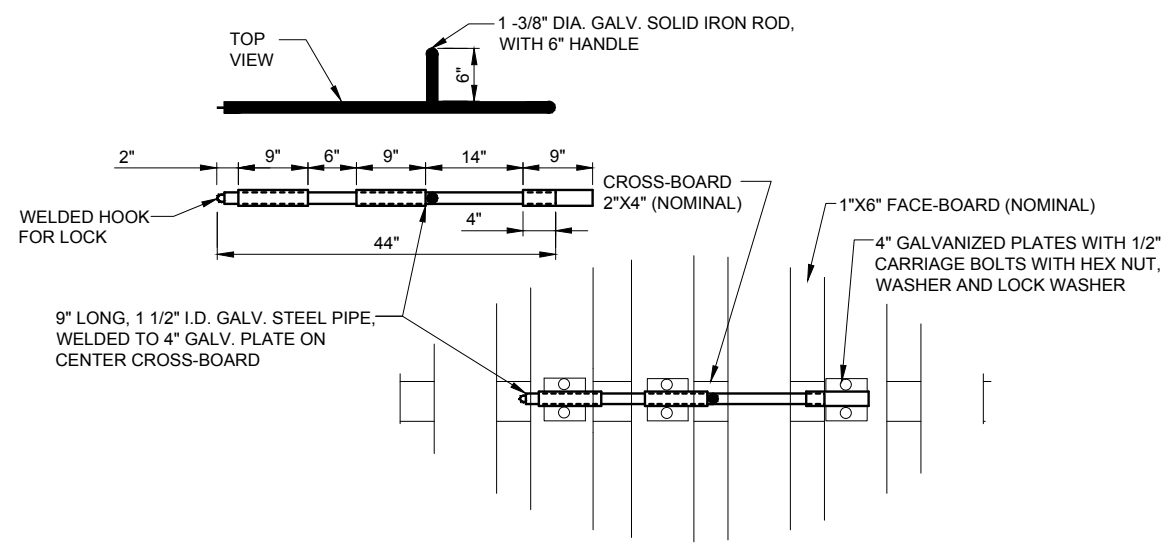
2 4'-0" SWING GATE
SCALE: N.T.S.



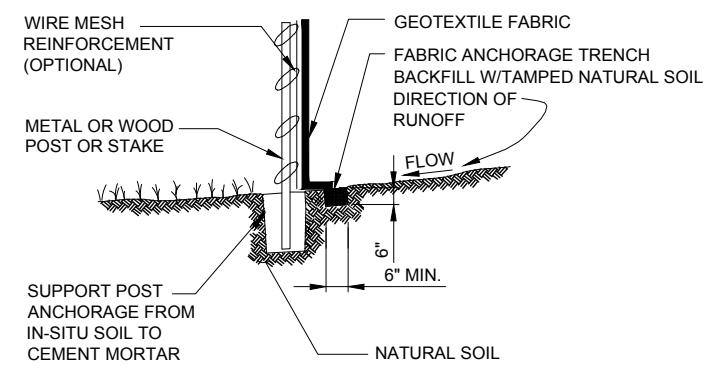
3 CORNER POST
SCALE: N.T.S.



4 AGGREGATE CROSS-SECTION
N.T.S. LEASE SITE



5 SECURITY LATCH
SCALE: N.T.S.



NOTE:
DEPENDING UPON CONFIGURATION, ATTACH FABRIC TO WIRE MESH W/HOG RINGS, STEEL POSTS W/ TIE WIRES, WOOD POSTS W/ NAILS.

6 EROSION CONTROL SILT FENCE DETAIL
N.T.S.

CONTRACTOR TO PROVIDE A 12"x12" CUT-OUT IN THE TREATED FENCING OPPOSITE THE METER LOCATION FOR METER READING. FRAME OUT THE CUT-OUT WITH TREATED 2x4's ON INSIDE OF FENCE PRIOR TO MAKING PENETRATION.

NOTE:
FACE BOARDS CAN BE NAILED OR SCREWED TO CROSS BOARDS ALL CROSS BOARDS WILL BE SCREWED TO POSTS ALL CONCRETE FOOTINGS SHALL BE 6.1 BAG MIX 2500 PSI CONCRETE

GENERAL NOTES

- REFER TO THE PROJECT MANUAL FOR ADDITIONAL INFORMATION AND REQUIREMENTS RELATED TO CONSTRUCTION.
- THE OWNER HAS CAUSED A GEOTECHNICAL EXPLORATION TO BE PERFORMED AT THE SITE.
- THE CONTRACTOR SHALL NOTIFY THE CLIENT'S GEOTECHNICAL ENGINEER TO COORDINATE HAVING A FIELD REPRESENTATIVE ON SITE FOR TESTING AND INSPECTION.

COPIES OF THE REPORT ARE ISSUED TO THE CONTRACTOR FOR CONVENIENCE ONLY. THE REPORT IS NOT A PART OF THE CONTRACT DOCUMENTS. NEITHER THE OWNER NOR THE ENGINEER/ARCHITECT GUARANTEE THE ACCURACY OR VALIDITY OF THE DATA CONTAINED THEREIN, NOR DO THEY ASSUME ANY RESPONSIBILITY FOR THE CONTRACTOR'S USE OR INTERPRETATION OF THE DATA CONTAINED THEREIN.

GEOTEXTILE PARAMETERS		
PROPERTY	MINIMUM VALUE (a)	TEST METHOD
GRAB STRENGTH	180 LBS.	ASTM D-4632-91
PUNCTURE STRENGTH	75 LBS.	ASTM D-4833-88
BURST STRENGTH	290 LBS.	ASTM D-3786
TRAPEZOIDAL TEAR	50 LBS.	ASTM D-4571-87

(a) ALL VALUES REPRESENT MINIMUM ROLL VALUES

NOTES:
THE FABRIC SHOULD BE PLACED IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS. INTERSECTIONS OF SHEETS MUST BE SEWN OR SUFFICIENTLY OVERLAPPED (AT LEAST 24 INCHES) OR AS SPECIFIED BY THE MANUFACTURER. THE GEOTEXTILE SHEETS SHOULD ALSO BE PLACED TAUT TO REDUCE WRINKLES OR FOLDS. CARE MUST BE EXERCISED TO PREVENT PHYSICAL DAMAGE OF THE GEOTEXTILE PRIOR TO, DURING AND AFTER INSTALLATION. UTILITIES SHOULD BE INSTALLED BEFORE PLACING THE FABRIC.

NO.	DESCRIPTION	BY	DATE	REVISIONS
		LRB/LS	LRB/LS	
1.	ISSUED FOR REVIEW	LRB/LS	11/21/14	
2.	UPDATE ECR	LS	03/20/15	
3.	UPDATE PER UTILITY WALK	LS	04/30/15	
4.	UPDATE NATURAL GAS	DMS	05/19/15	
	ADDITION OF LANDSCAPE PLAN	JTM	07/07/15	

LOC. #282639

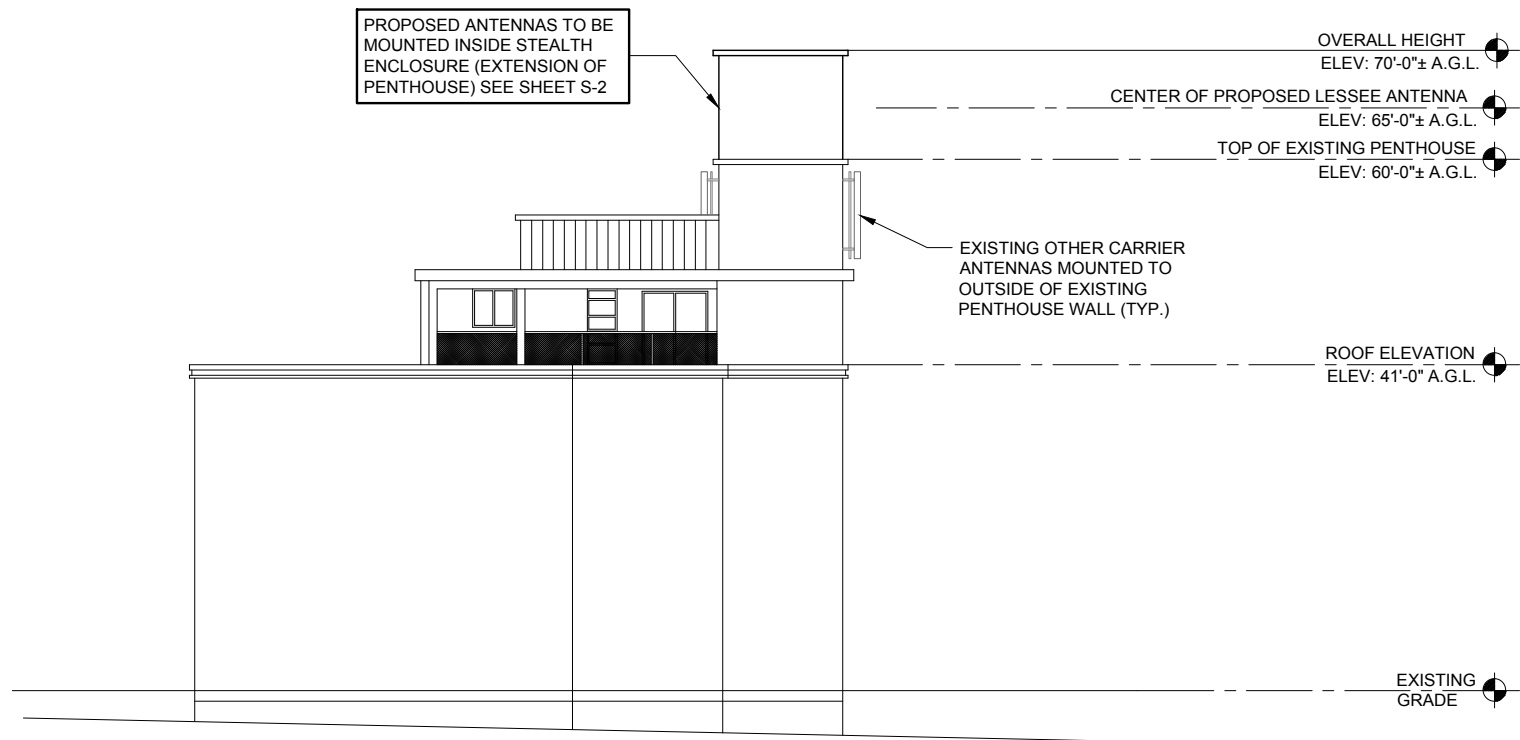
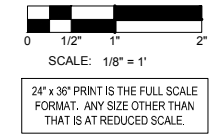
YALE & OAKTON

800 W. OAKTON ST.
ARLINGTON HEIGHTS, IL 60004

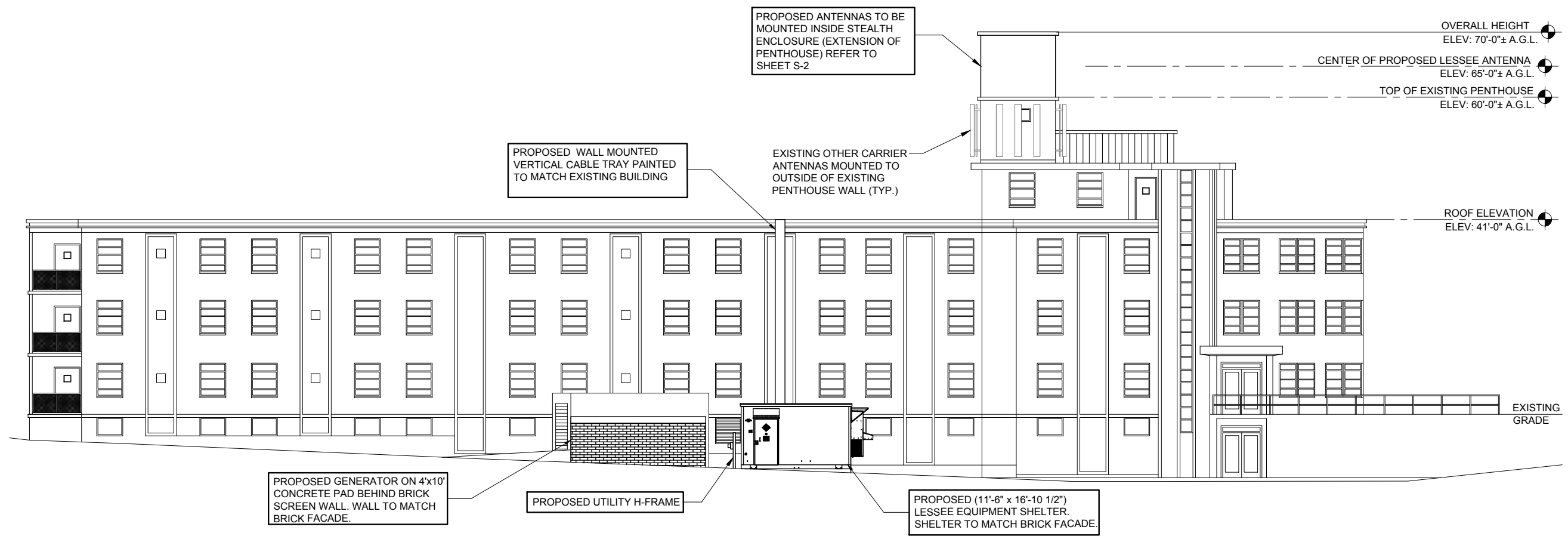
DRAWN BY:	LRB
CHECKED BY:	TAZ
DATE:	11/19/14
PROJECT #:	33-1607

SHEET TITLE
FENCE DETAIL

SHEET NUMBER
C-6



1 EAST ELEVATION
SCALE: 1/8" = 1'-0"



2 WEST ELEVATION
SCALE: 1/8" = 1'-0"

**CHICAGO
SMSA**
limited partnership
d/b/a VERIZON WIRELESS

TERRA
CONSULTING GROUP, LTD.
600 BUSSE HIGHWAY
PARK RIDGE, IL 60068
PH: 847-698-6400
FAX: 847-698-6401

NO.	DESCRIPTION	DATE	BY
1.	ISSUED FOR REVIEW	11/21/14	LRB/LS
2.	UPDATE ECR	03/20/15	LS
3.	UPDATE PER UTILITY WALK	04/30/15	LS
4.	UPDATED NATURAL GAS	05/19/15	DMS
	ADDITION OF LANDSCAPE PLAN	07/07/15	JTM

LOC. #282639

**YALE &
OAKTON**

800 W. OAKTON ST.
ARLINGTON
HEIGHTS, IL 60004

DRAWN BY: LRB
CHECKED BY: TAZ
DATE: 11/19/14
PROJECT #: 33-1607

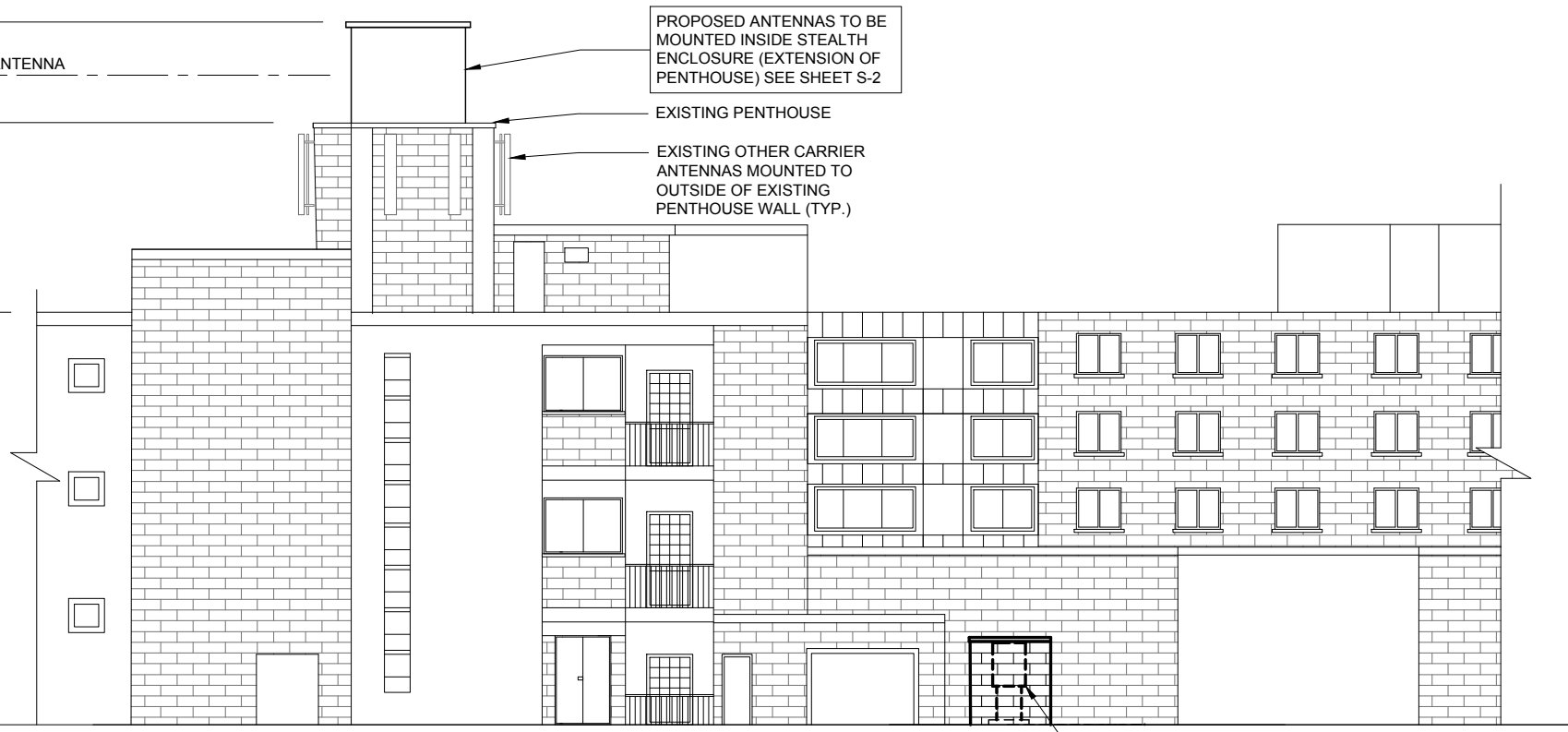
SHEET TITLE
SITE ELEVATION

SHEET NUMBER
ANT-1

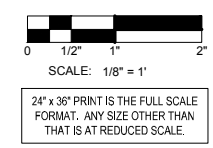
- OVERALL HEIGHT
ELEV: 70'-0"± A.G.L.
- CENTER OF PROPOSED LESSEE ANTENNA
ELEV: 65'-0"± A.G.L.
- TOP OF EXISTING PENTHOUSE
ELEV: 60'-0"± A.G.L.

ROOF ELEVATION
ELEV: 41'-0" A.G.L.

EXISTING GRADE
ELEV: ±0'-0" A.G.L.



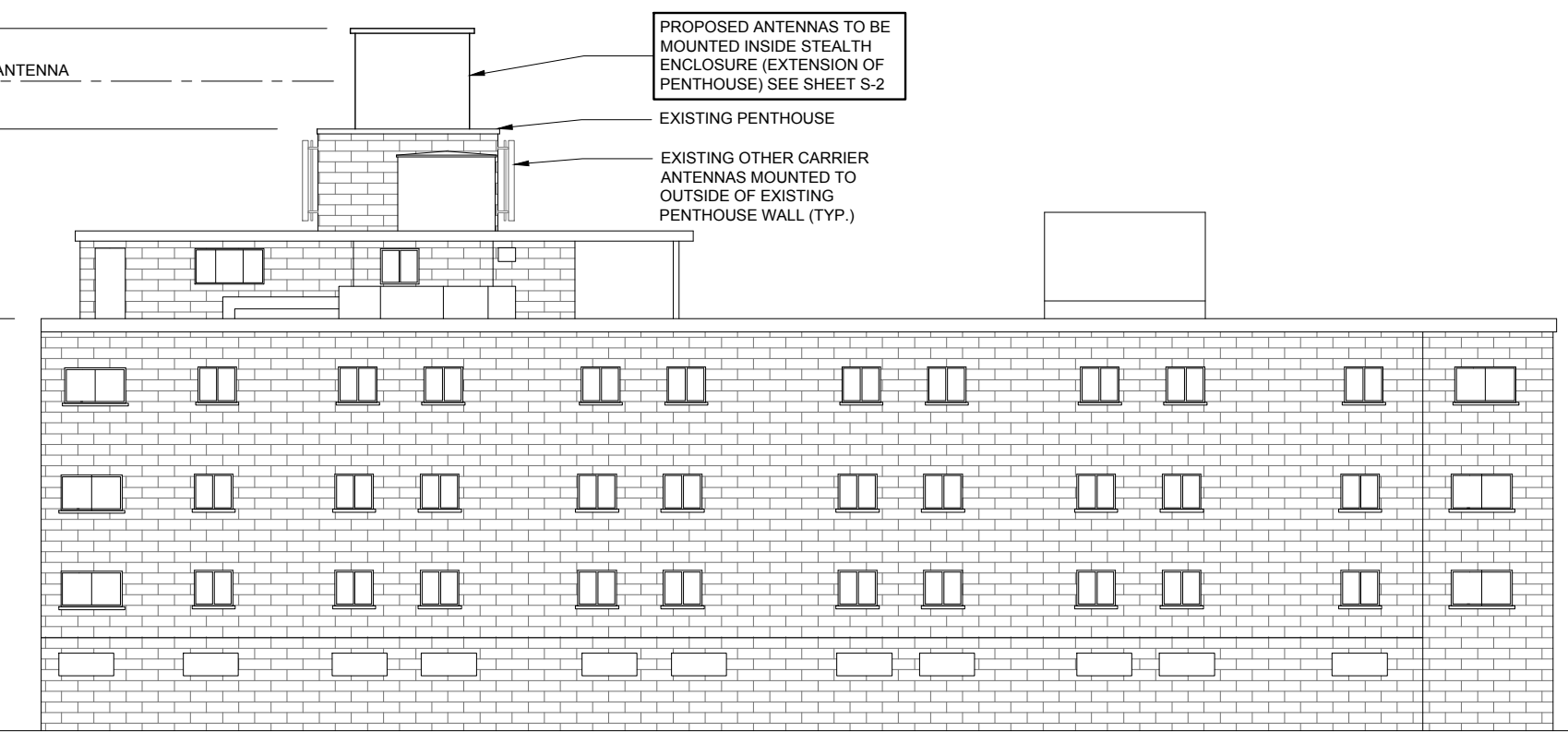
1 NORTH ELEVATION
SCALE: 1/8" = 1'-0"



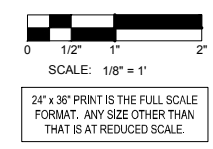
- OVERALL HEIGHT
ELEV: 70'-0"± A.G.L.
- CENTER OF PROPOSED LESSEE ANTENNA
ELEV: 65'-0"± A.G.L.
- TOP OF EXISTING PENTHOUSE
ELEV: 60'-0"± A.G.L.

ROOF ELEVATION
ELEV: 41'-0" A.G.L.

EXISTING GRADE
ELEV: ±0'-0" A.G.L.



2 SOUTH ELEVATION
SCALE: 1/8" = 1'-0"



CHICAGO SMSA
limited partnership
d/b/a VERIZON WIRELESS

TERRA
CONSULTING GROUP, LTD.
600 BUSSE HIGHWAY
PARK RIDGE, IL 60068
PH: 847-698-6400
FAX: 847-698-6401

REVISIONS		DESCRIPTION	DATE	BY
1	ISSUED FOR REVIEW	11/21/14	LRB/LS	
2	UPDATE ECR	03/20/15	LS	
3	UPDATE PER UTILITY WALK	04/30/15	LS	
4	UPDATED NATURAL GAS	05/19/15	DMS	
	ADDITION OF LANDSCAPE PLAN	07/07/15	JTM	

LOC. #282639

YALE & OAKTON

800 W. OAKTON ST.
ARLINGTON HEIGHTS, IL 60004

DRAWN BY:	LRB
CHECKED BY:	TAZ
DATE:	11/19/14
PROJECT #:	33-1607

SHEET TITLE
SITE ELEVATION

SHEET NUMBER
ANT-1A

EQUIPMENT CHANGE REQUEST FORM - ECR

Cell Name	Yale & Oakton	RF Engineer	Sabhi Siddiqui	Cell ID	3266
Location Number	282639	Market	Elgin-1	Address	1220 Village Dr Luther Lane
Date of Request	3/19/2015			City/State/Zip	Arlington Heights, IL, 60004

PROPOSED CONFIGURATION		Configuration		Option-A2							
Sector	Pos	Antenna	Antenna Manufacturer	Antenna Model	Antenna Serial Number	Centerline	Azimuth	Variable Tilt	Mechanical Tilt	Action	
Alpha	A1	L1 (-45) LTE C - RxTx0	Amphe nol	CWWX063X25G00		65	90	1	0	Add- Install	
		L2 (+45) LTE C - RxTx1									
		H1 (-45) AWS - Rx2									
		H2 (+45) AWS - Rx3									
	A2	L1 (-45) Unused at this time									Unchanged
		L2 (+45) Unused at this time									
		H1 (-45) Unused at this time									
		H2 (+45) Unused at this time									
	A3	L1 (-45) CEL - RxTx0	Amphe nol	CWWX063X25G00		65	90	0	0		Add- Install
		L2 (+45) CEL - RxTx1									
		H1 (-45) Unused at this time									
		H2 (+45) Unused at this time									
	A4	L1 (-45) LTE C - Rx2	Amphe nol	CWWX063X25G00		65	90	1	0		Add- Install
		L2 (+45) LTE C - Rx3									
		H1 (-45) AWS - RxTx0									
		H2 (+45) AWS - RxTx1									
Beta	B1	L1 (-45) LTE C - RxTx0	Amphe nol	CWWX063X25G00		65	190	1	0	Add- Install	
		L2 (+45) LTE C - RxTx1									
		H1 (-45) AWS - Rx2									
		H2 (+45) AWS - Rx3									
	B2	L1 (-45) Unused at this time									Unchanged
		L2 (+45) Unused at this time									
		H1 (-45) Unused at this time									
		H2 (+45) Unused at this time									
	B3	L1 (-45) CEL - RxTx0	Amphe nol	CWWX063X25G00		65	190	0	0		Add- Install
		L2 (+45) CEL - RxTx1									
		H1 (-45) Unused at this time									
		H2 (+45) Unused at this time									
	B4	L1 (-45) LTE C - Rx2	Amphe nol	CWWX063X25G00		65	190	1	0		Add- Install
		L2 (+45) LTE C - Rx3									
		H1 (-45) AWS - RxTx0									
		H2 (+45) AWS - RxTx1									
GAMMA	G1	L1 (-45) LTE C - RxTx0	Amphe nol	CWWX063X25G00		65	330	1	0	Add- Install	
		L2 (+45) LTE C - RxTx1									
		H1 (-45) AWS - Rx2									
		H2 (+45) AWS - Rx3									
	G2	L1 (-45) Unused at this time									Unchanged
		L2 (+45) Unused at this time									
		H1 (-45) Unused at this time									
		H2 (+45) Unused at this time									
	G3	L1 (-45) CEL - RxTx0	Amphe nol	CWWX063X25G00		65	330	0	0		Add- Install
		L2 (+45) CEL - RxTx1									
		H1 (-45) Unused at this time									
		H2 (+45) Unused at this time									
	G4	L1 (-45) LTE C - Rx2	Amphe nol	CWWX063X25G00		65	330	1	0		Add- Install
		L2 (+45) LTE C - Rx3									
		H1 (-45) AWS - RxTx0									
		H2 (+45) AWS - RxTx1									

PPC CONNECTORS ONLY

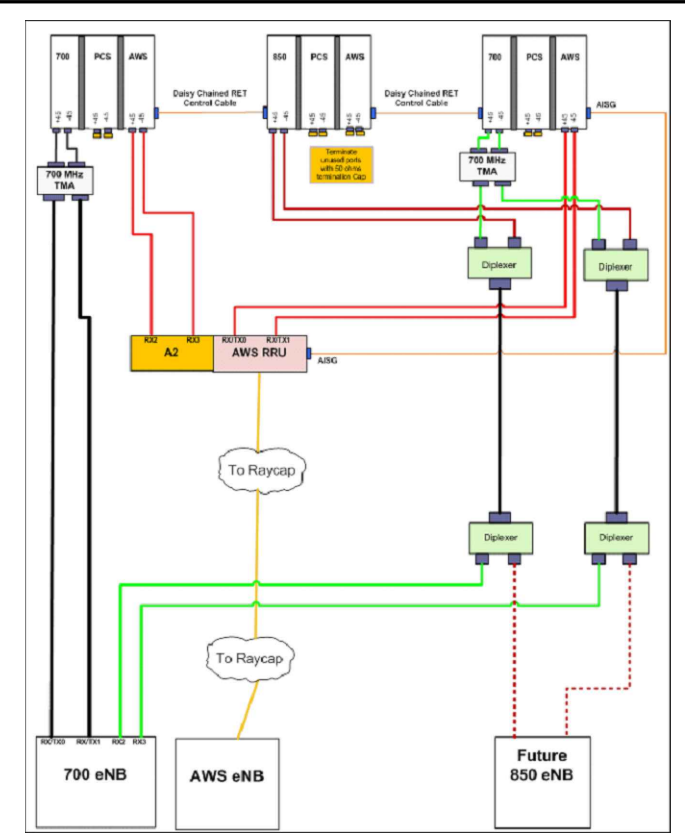
1 PROPOSED ANTENNA CONFIGURATION
N.T.S.

ESTIMATED MAIN LINE HYBRID LENGTH			
ANTENNA CENTERLINE (±)	CABLE TRAY LENGTH (±)	SHELTER (±)	TOTAL (±)
65'	100'	15'	180'

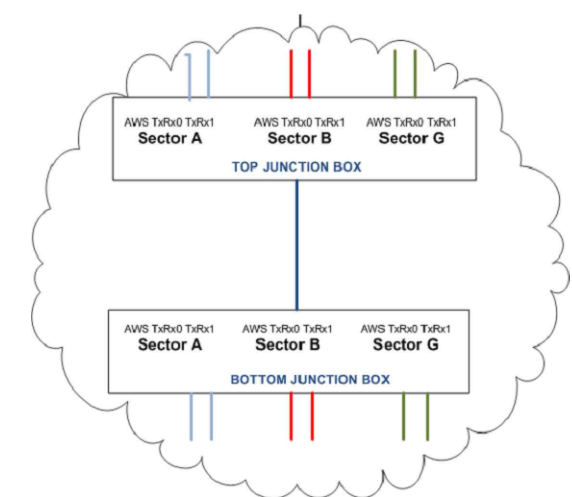
Proposed					
Passive Components	Location	Manufacturer	Component Model	Count	Action
	Top (Platform)				
	Top (Platform)	Westell	AWC-TTMA-700C-VG	6	Install
	Top (Platform)	Ericsson	RRUS 12 - AWS	3	Install
	Top (Platform)	Ericsson	A2	3	Install
	Top (Platform)	Raycap	RCMDC-3315-PF-48	1	Install
	Top (Platform)	ANDREW	CBC78-DF-8-DCB	6	Install
	Top (Platform)				
	Bottom (Shelter)	Raycap	RCMDC-3315-PF-48	1	Install
	Bottom (Shelter)	ANDREW	CBC78-DF-8-DCB	6	Install
	Bottom (Shelter)				

Coax	Sector	Coax Manufacturer	Type	Size	Count	Action
	Alpha	ANDREW		1 5/8	4	Install
	Beta	ANDREW		1 5/8	4	Install
	Gamma	ANDREW		1 5/8	4	Install
	AWS	Andrew	HFT1206-24S26-XXX	1 5/8	1	Install

2 COMBINER CABLE DATA INFORMATION
N.T.S.



3 CABLE DIAGRAM
N.T.S.



2 CABLE DIAGRAM @ JUNCTION BOX
N.T.S.

CHICAGO SMSA
limited partnership
d/b/a VERIZON WIRELESS

TERRA
600 BUSSE HIGHWAY
PARK RIDGE, IL 60068
PH: 847-698-6400
FAX: 847-698-6401

NO	DESCRIPTION	DATE	BY	LRB/LS	LRB/LS	LRB/LS	LRB/LS	LRB/LS	LRB/LS
1	ISSUED FOR REVIEW	11/21/14							
2	UPDATE ECR	03/20/15							
3	UPDATE PER UTILITY WALK	04/30/15							
4	UPDATE NATURAL GAS	05/19/15							
	ADDITION OF LANDSCAPE PLAN	07/07/15							

LOC. #282639
YALE & OAKTON
800 W. OAKTON ST.
ARLINGTON HEIGHTS, IL 60004

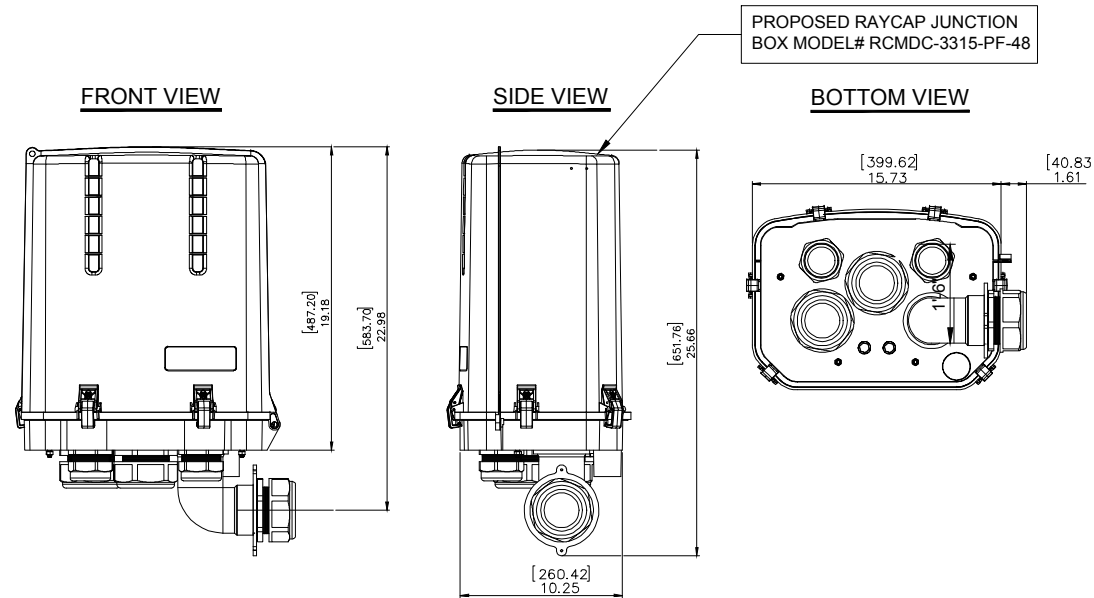
DRAWN BY: LRB
CHECKED BY: TAZ
DATE: 11/19/14
PROJECT #: 33-1607

SHEET TITLE
ANTENNA INFORMATION

SHEET NUMBER
ANT-2

SPECIFICATIONS DC SURGE PROTECTION FOR RRU/INTEGRATED ANTENNA RADIO HEAD
 APPLICATION: TOWER / BASE / ROOFTOP / ROOFTOP DISTRIBUTION MODELS
 WEIGHT: 32LBS (14.51 KG)

[mm]
 INCHES



PROPOSED RAYCAP JUNCTION BOX MODEL# RCMD-3315-PF-48

1 RAYCAP JUNCTION BOX DETAIL
 SCALE: N.T.S.

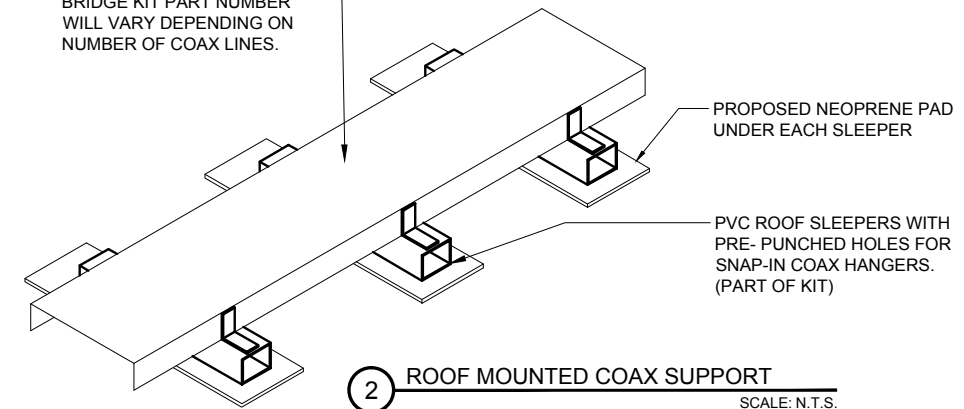
BRIDGE KIT P/N	# OF COAX LINES	BRIDGE WIDTH
B1542-11	4	11-1/2"
B1543	8	1'-9 1/2"
B1595	12	2'-9"
B3098	16	1'-9 1/2"

NOTE:
 AT TURNS USE MICROFLECT ADJUSTABLE SPLICES FOR 0° TO 45° BENDS AND 45° TO 90° BENDS

NOTE:
 • CONTRACTOR TO SUPPLY SUFFICIENT SLACK AT BOTH ENDS OF CABLE TRAY. CABLE TRAY SHOULD BE ABLE TO BE TEMPORARILY SHIFTED FOR ROOF MAINTENANCE.

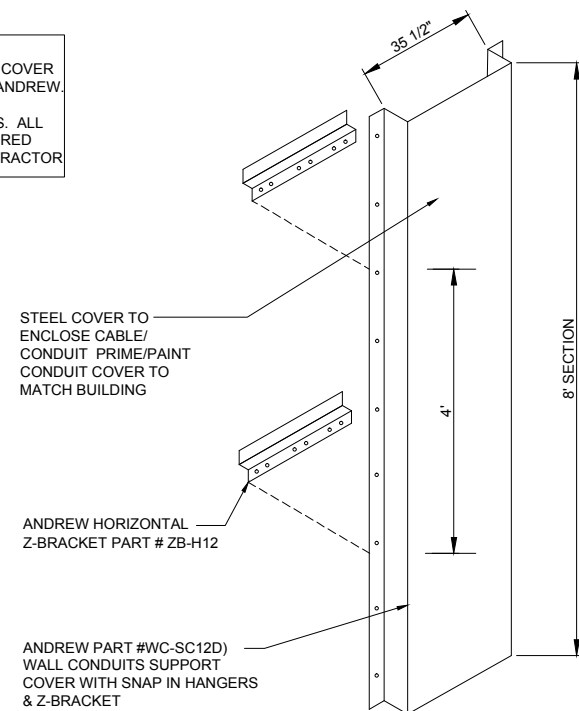
• IF CABLE BRIDGE REQUIRES TEMPORARY RELOCATION (DUE TO ROOF MAINTENANCE) REMOVE THE BRIDGE COVER TO EASE THE MOVEMENT OF THE NON-PENETRATING SLEEPERS.

MICROFLECT COAX BRIDGE KIT (NON-PENETRATING ROOFTOP INSTALLATION) BRIDGE KIT PART NUMBER WILL VARY DEPENDING ON NUMBER OF COAX LINES.

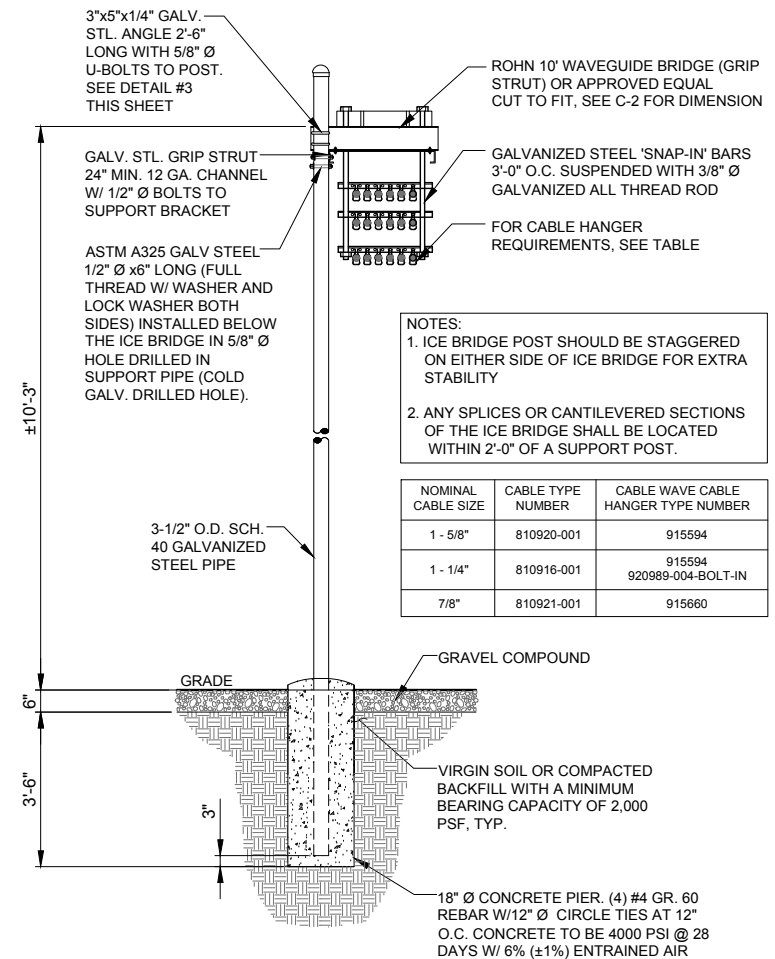


2 ROOF MOUNTED COAX SUPPORT
 SCALE: N.T.S.

NOTE:
 CABLE/CONDUIT WALL BRACKETS AND COVER CAN BE ORDERED AS A KIT THROUGH ANDREW. INSTALL BRACKETS AND COVER PER MANUFACTURERS RECOMMENDATIONS. ALL MOUNTING HARDWARE MUST BE ORDERED SEPARATELY AND INSTALLED BY CONTRACTOR



3 WALL MOUNTED CABLE/CONDUIT SUPPORT WITH COVER
 SCALE: N.T.S.



NOTES:
 1. ICE BRIDGE POST SHOULD BE STAGGERED ON EITHER SIDE OF ICE BRIDGE FOR EXTRA STABILITY
 2. ANY SPLICES OR CANTILEVERED SECTIONS OF THE ICE BRIDGE SHALL BE LOCATED WITHIN 2'-0" OF A SUPPORT POST.

NOMINAL CABLE SIZE	CABLE TYPE NUMBER	CABLE WAVE CABLE HANGER TYPE NUMBER
1 - 5/8"	810920-001	915594
1 - 1/4"	810916-001	915594
7/8"	810921-001	915660

4 ICE BRIDGE DETAIL
 N.T.S.

CHICAGO SMSA
 limited partnership
 d/b/a VERIZON WIRELESS

TERRA
 600 BUSSE HIGHWAY
 PARK RIDGE, IL 60068
 PH: 847-698-6400
 FAX: 847-698-6401

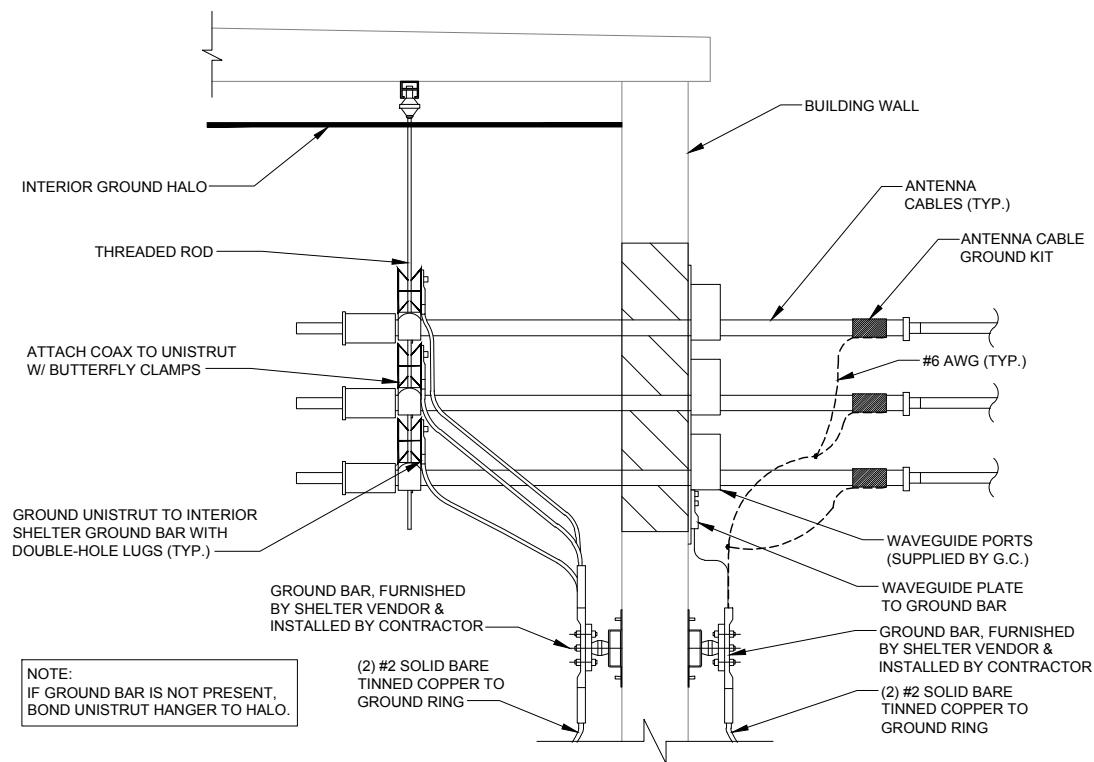
NO	DESCRIPTION	BY	DATE
1	ISSUED FOR REVIEW	LRB/LS	11/21/14
2	UPDATE ECR	LS	03/20/15
3	UPDATE PER UTILITY WALK	LS	04/30/15
4	UPDATE NATURAL GAS	DMS	05/19/15
	ADDITION OF LANDSCAPE PLAN	JTM	07/07/15

LOC. #282639
YALE & OAKTON
 800 W. OAKTON ST.
 ARLINGTON HEIGHTS, IL 60004

DRAWN BY: LRB
 CHECKED BY: TAZ
 DATE: 11/19/14
 PROJECT #: 33-1607

SHEET TITLE
 SITE DETAILS

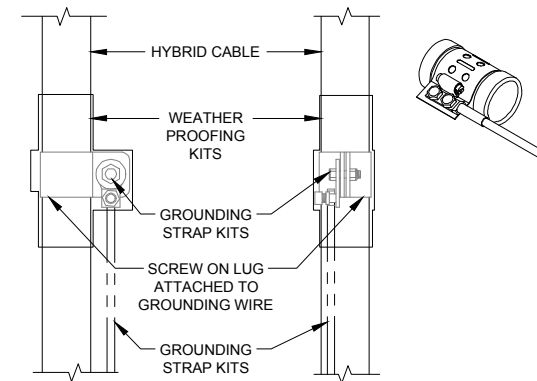
SHEET NUMBER
ANT-3



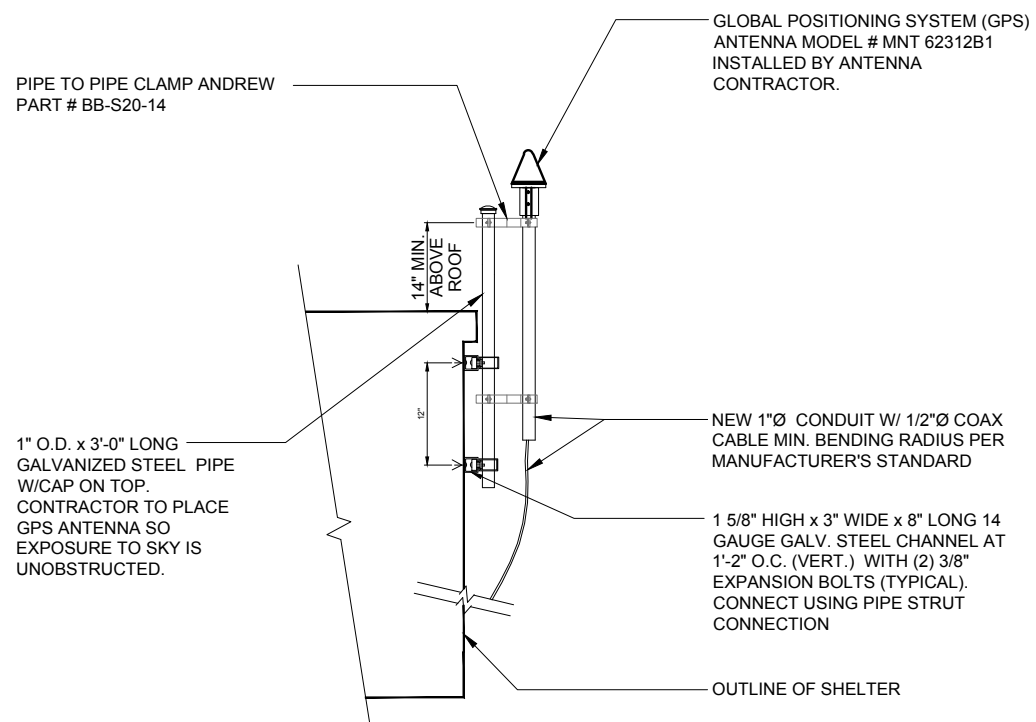
NOTE:
IF GROUND BAR IS NOT PRESENT,
BOND UNISTRUT HANGER TO HALO.

1 ENCLOSURE ENTRY PANEL GROUNDING DETAIL
N.T.S.

- NOTES:
- DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND WIRE DOWN TO GROUND BAR.
 - THIS DETAIL IS TYPICAL FOR EACH COAX CABLE WHERE IT IS SPECIFIED TO BE GROUNDED
 - CABLE TO BE GROUNDED AT ANTENNA LEVEL AND PRIOR TO ENTERING SHELTER ENTRY PANEL.
 - CABLE ALSO TO BE GROUNDED TO GROUND BAR AT TOWER BASE IF APPLICABLE.
 - USE ONLY TIN PLATED GROUNDING KITS.



2 COAX / HYBRID GROUND KIT DETAIL
N.T.S.



3 GPS ANTENNA DETAIL
SCALE: N.T.S.

CHICAGO SMSA
limited partnership
d/b/a VERIZON WIRELESS



NO.	DESCRIPTION	DATE	BY
1.	ISSUED FOR REVIEW	11/21/14	LRB/LS
2.	UPDATE ECR	03/20/15	LS
3.	UPDATE PER UTILITY WALK	04/30/15	LS
4.	UPDATE NATURAL GAS	05/19/15	DMS
	ADDITION OF LANDSCAPE PLAN	07/07/15	JTM

LOC. #282639

YALE & OAKTON

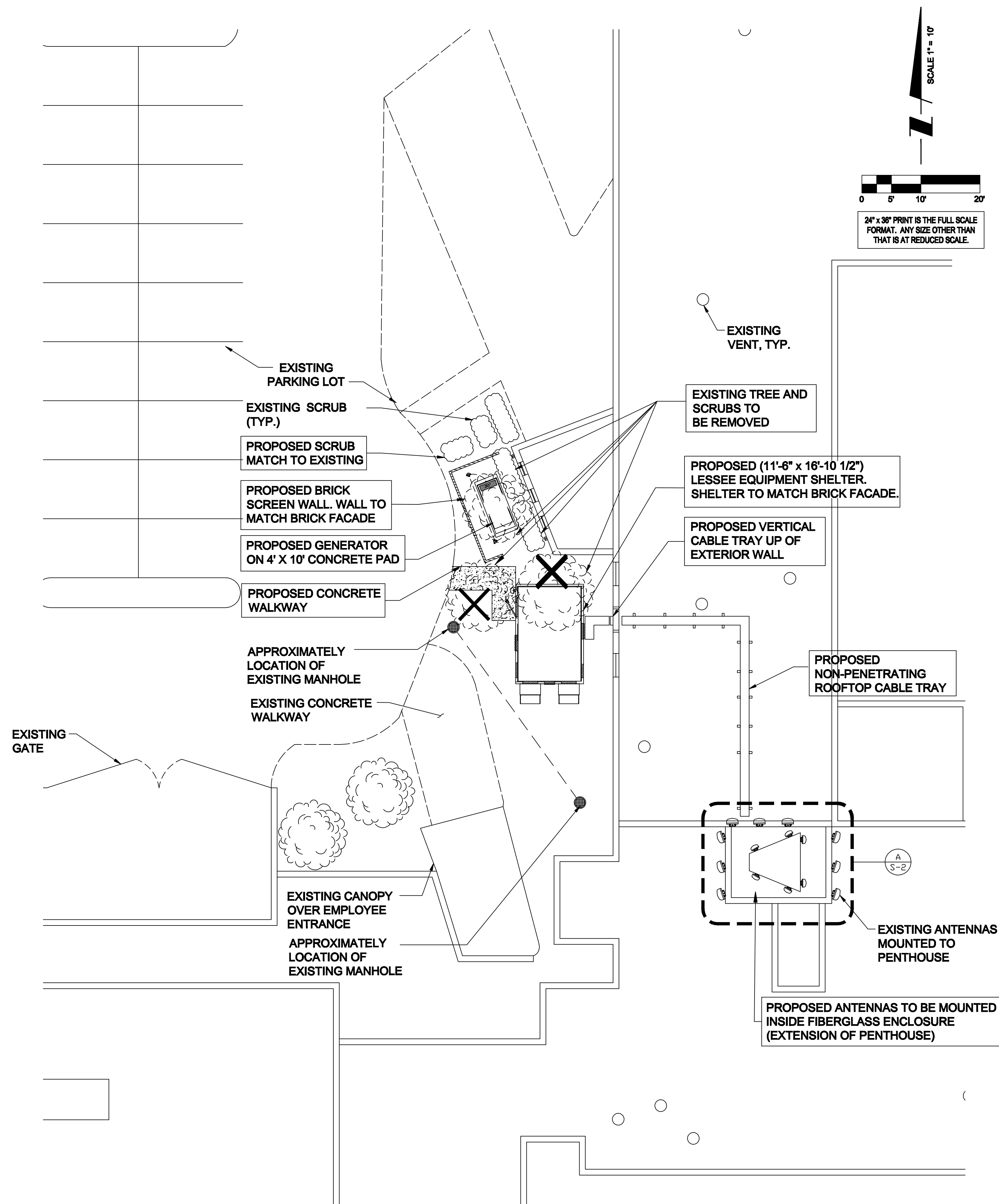
800 W. OAKTON ST.
ARLINGTON HEIGHTS, IL 60004

DRAWN BY:	LRB
CHECKED BY:	TAZ
DATE:	11/19/14
PROJECT #:	33-1607

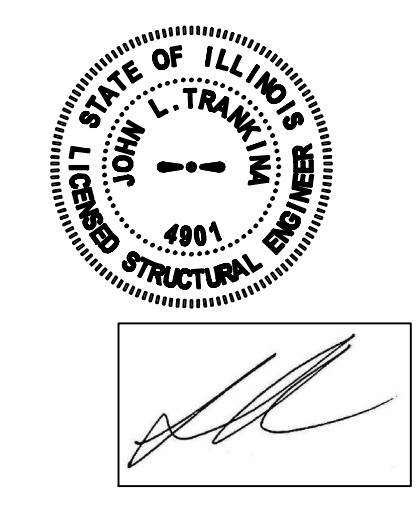
SHEET TITLE
ANTENNA MOUNTING DETAILS

SHEET NUMBER

ANT-4



1 ENLARGED SITE PLAN
SCALE: 1" = 10'



[Signature]

HUTTER TRANKINA ENGINEERING
CONSULTING STRUCTURAL ENGINEERS
HTE JOB #14438

32W273 Army Trail Road, Suite #100, Wayne, Illinois 60184
Tel: (630) 513-6711 Fax: (630) 513-2925
E-mail: gen@htedesign.com
WEB SITE: www.htedesign.com

© 2014 HUTTER TRANKINA ENGINEERING ALL RIGHTS RESERVED

CHICAGO SMSA
limited partnership
d/b/a VERIZON WIRELESS

TERRA
CONSULTING GROUP, LTD.
600 Buess Highway
Park Ridge, IL 60068
Ph: 847/698-6400
Fax: 847/698-6401

NO.	DESCRIPTION	DATE	BY
1	ISSUED FOR REVIEW	12/03/14	JAL

LOC. #282639

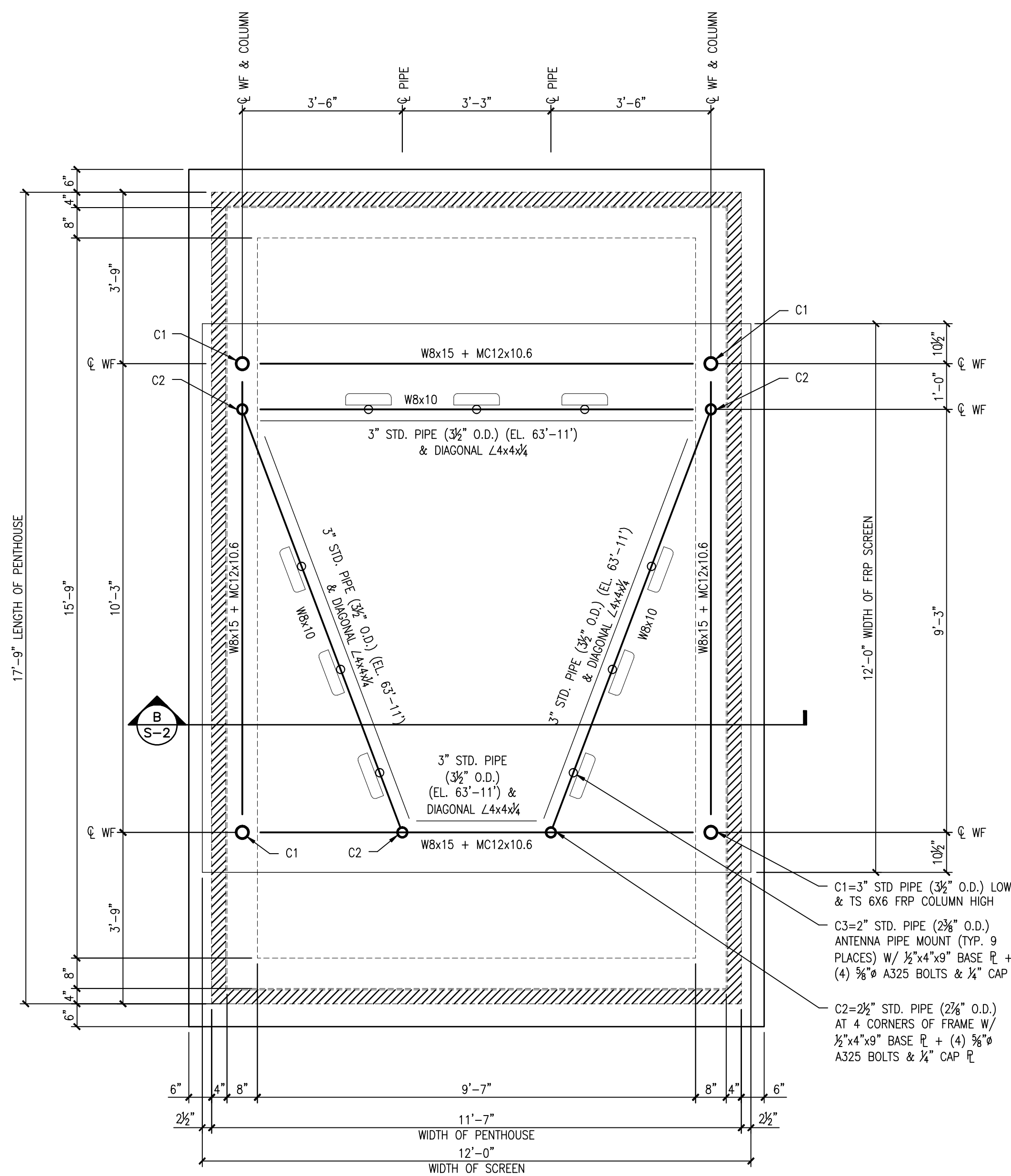
YALE & OAKTON

800 W. OAKTON ST.
ARLINGTON HEIGHTS, IL 60004

DRAWN BY:	RRO
CHECKED BY:	JAL
DATE:	12/03/14
PROJECT #:	33-1607

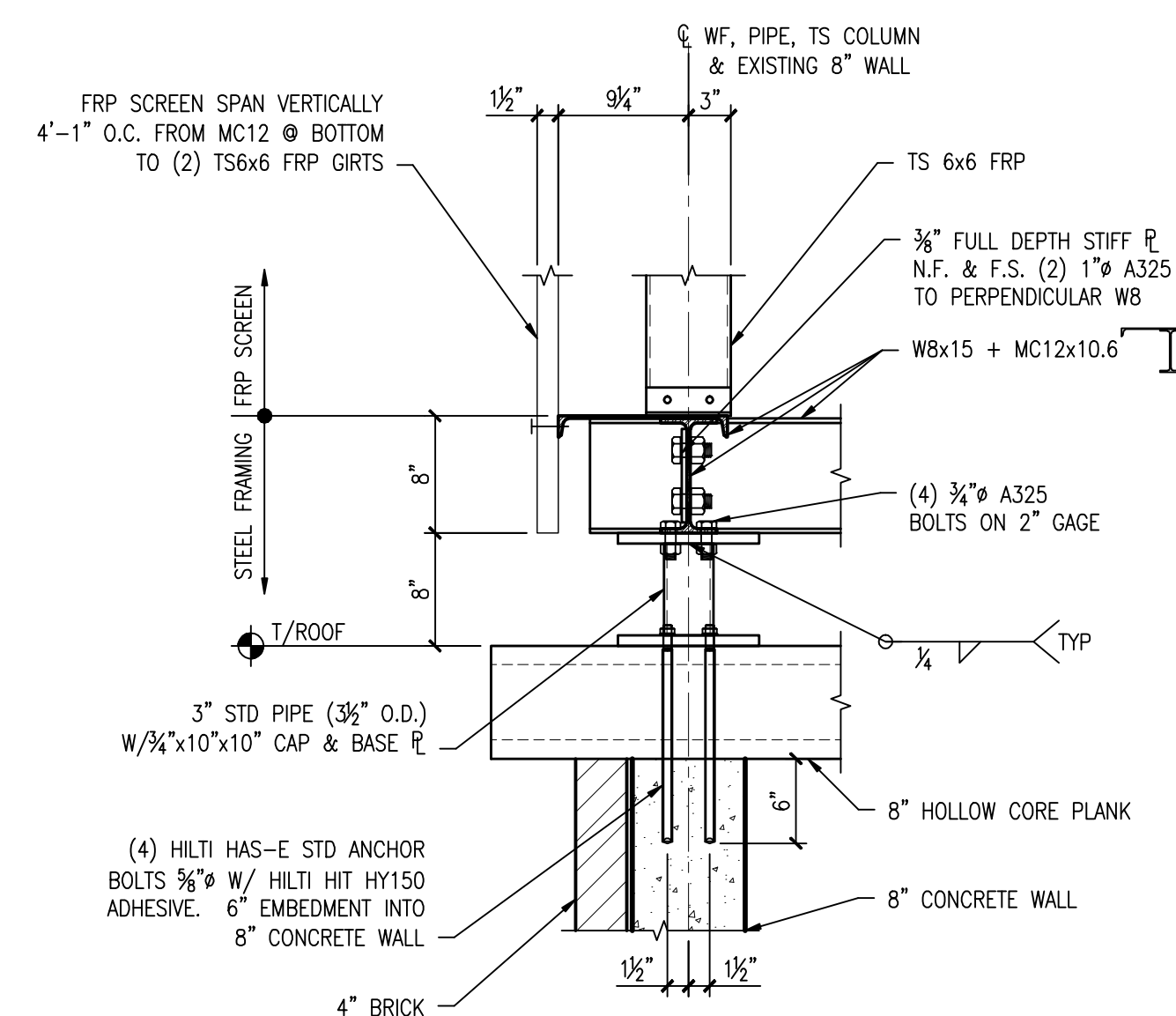
SHEET TITLE
ENLARGED SITE PLAN

SHEET NUMBER
S-1

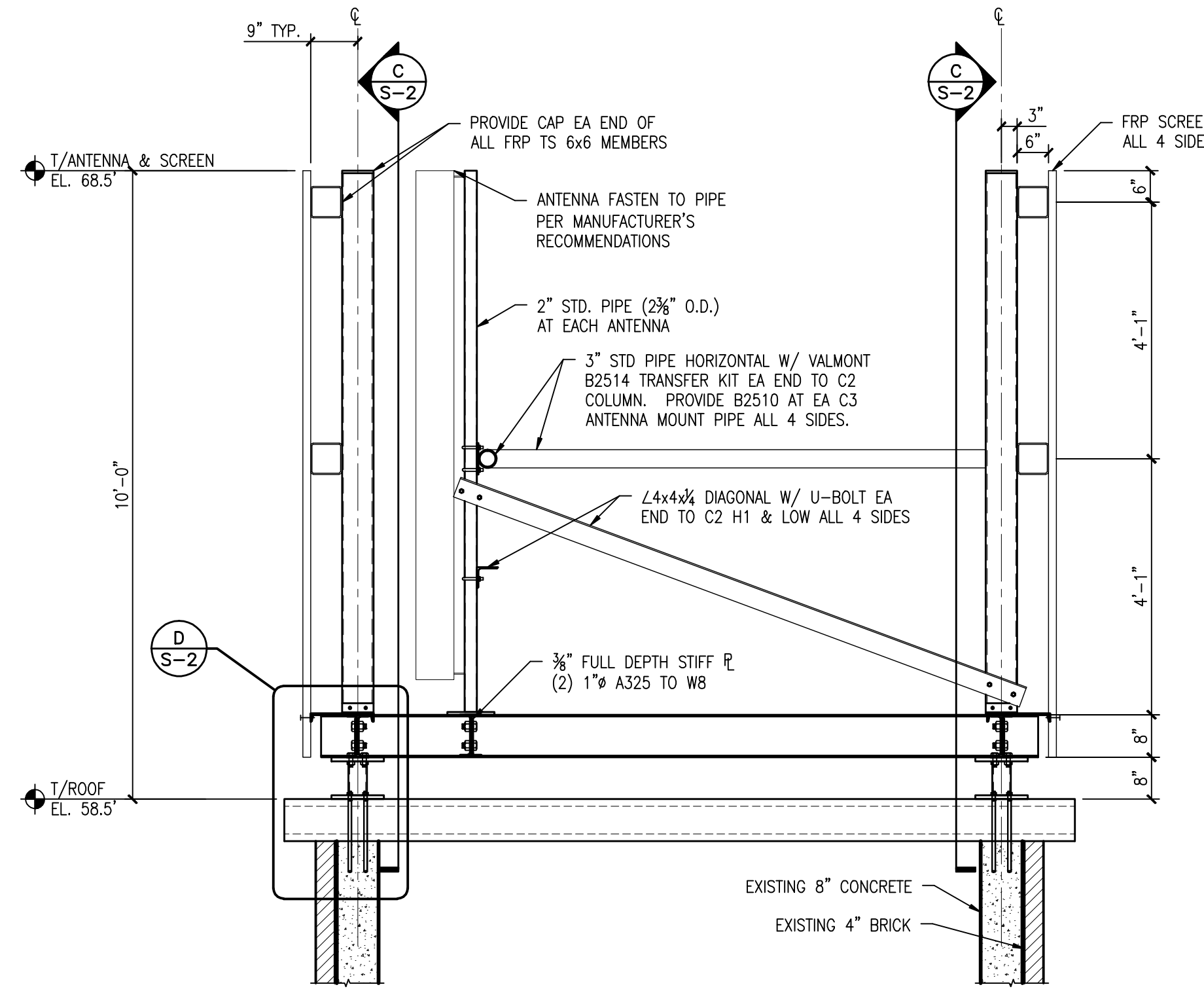


A PENTHOUSE FRAMING PLAN
SCALE: 1/2"=1'-0"

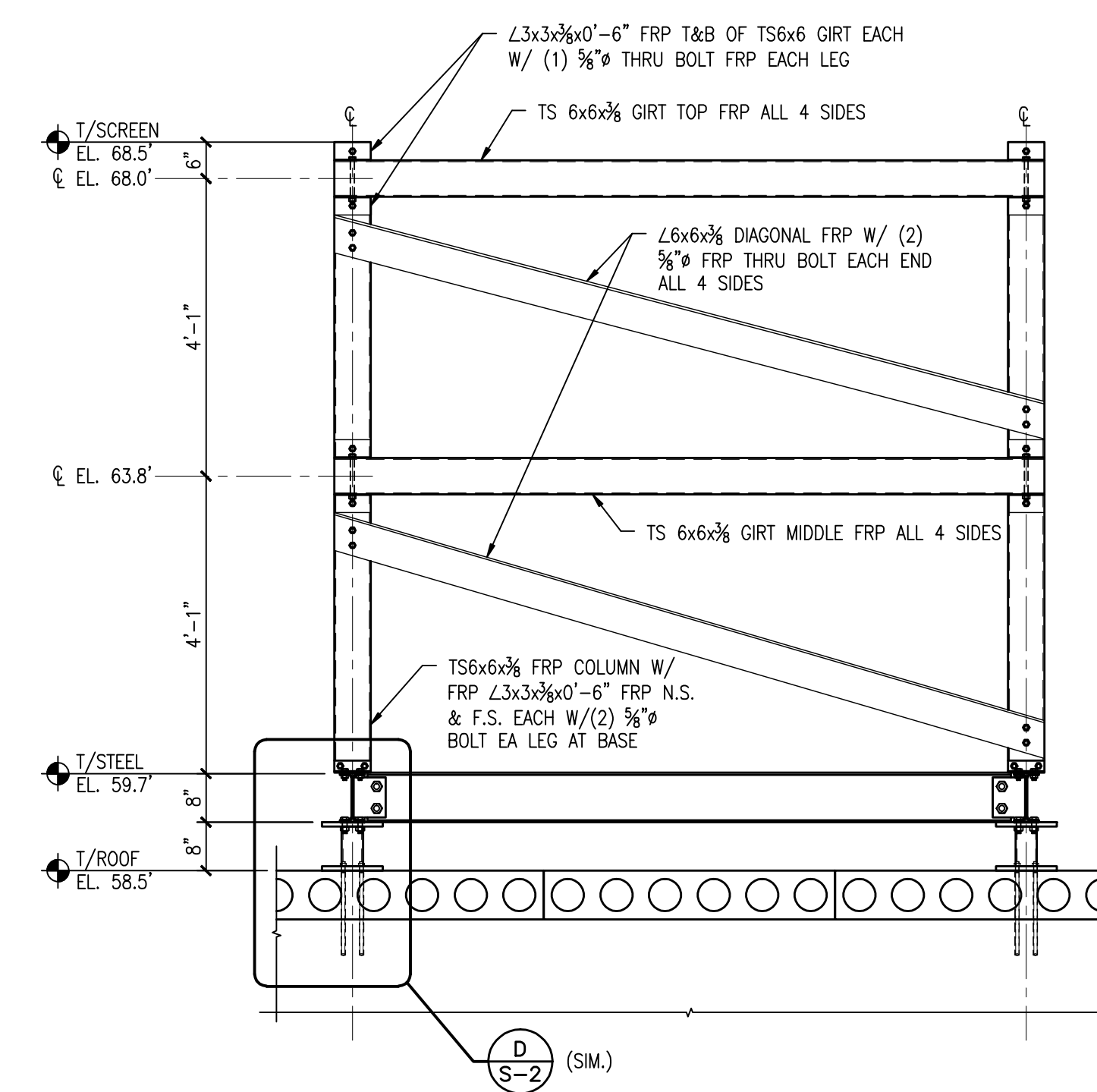
- T/ROOF = 58'-6"
- T/STEEL = 59'-10" TYP. U.N.O.



D DETAIL
SCALE: 1"=1'-0"



B SECTION
SCALE: 1/2"=1'-0"



C ELEVATION ALL 4 SIDES OF SCREEN WALL
SCALE: 1/2"=1'-0"

DESIGN LOADS:

LIVE LOAD:

SNOW: 30 PSF
WIND ON SCREEN WALL: 26 PSF

CODE: TIA/EIA REV. G
ASCE 7-05

GENERAL STEEL NOTES:

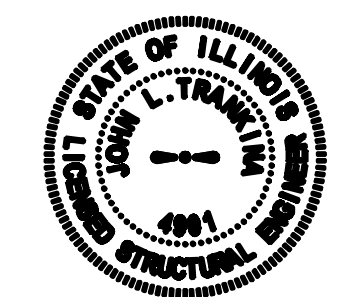
- ALL STRUCTURAL STEEL WORK SHALL CONFORM TO THE AISC "SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS", LATEST EDITION, AND THE AISC "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES", LATEST EDITION, EXCEPT AS MODIFIED BELOW OR IN THE SPECIFICATIONS.
- ALL STRUCTURAL STEEL W SHAPES SHALL CONFORM TO ASTM A572 OR A992 GRADE 50, ALL OTHER STRUCTURAL STEEL SHAPES, PLATES AND BARS SHALL CONFORM TO ASTM A36 GR 36, UNLESS NOTED OTHERWISE. COLD FORMED TUBING SHALL CONFORM TO ASTM A500 GRADE B. PIPES SHALL CONFORM TO ASTM A53 TYPE E OR S. ANCHOR BOLTS SHALL CONFORM TO ASTM F1554 GRADE 36 AND BE COMPATIBLE WITH E70XX ELECTRODES
- ALL WELDING SHALL BE DONE BY QUALIFIED WELDERS AND SHALL CONFORM TO AWS D1.1 "STRUCTURAL WELDING CODE", LATEST EDITION. ALL WELDING ELECTRODES SHALL BE E70XX.
- THE CONTRACTOR SHALL FIELD VERIFY ALL MEASUREMENTS AND EXISTING CONDITIONS.
- IF CONDITIONS VARY FROM THOSE ON THE DRAWINGS, THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY.
- THE CONTRACTOR SHALL OBSERVE ALL SAFETY RULES DICTATED BY CODE AND GOOD PRACTICE.
- SHOULD UNFORESEEN CONDITIONS OR OTHER CAUSE NECESSITATE THE CONSTRUCTION DETAILS TO BE MODIFIED, THE CONTRACTOR SHALL NOTIFY THE ENGINEER BEFORE PERFORMING THESE CHANGES.

MISCELLANEOUS NOTES:

- STRUCTURAL DRAWINGS ARE INTENDED TO BE USED WITH ARCHITECTURAL AND MECHANICAL DRAWINGS. CONTRACTOR IS RESPONSIBLE FOR COORDINATING THE REQUIREMENTS OF ALL DRAWINGS INTO THEIR SHOP DRAWINGS AND WORK.
- NO OPENINGS, OTHER THAN THOSE SHOWN ON DESIGN DRAWINGS AND APPROVED SHOP DRAWINGS, SHALL BE MADE WITHOUT THE WRITTEN APPROVAL OF THE ARCHITECT.
- NO CHANGE IN SIZE OR DIMENSION OF STRUCTURAL MEMBERS SHALL BE MADE WITHOUT THE WRITTEN APPROVAL OF THE ARCHITECT.
- OPENINGS OF 1'-4" AND LESS ON A SIDE ARE GENERALLY NOT SHOWN ON THE STRUCTURAL DRAWINGS. REFER TO ARCHITECTURAL AND MECHANICAL DRAWINGS FOR LOCATIONS AND DIMENSIONS OF THOSE OPENINGS. PROVIDE REINFORCING AROUND OPENINGS PER TYPICAL DETAILS SHOWN ON STRUCTURAL DRAWINGS.
- THE CONTRACTOR IS RESPONSIBLE FOR LIMITING THE AMOUNT OF CONSTRUCTION LOAD IMPOSED UPON STRUCTURAL FRAMING. CONSTRUCTION LOADS SHALL NOT EXCEED THE CAPACITY OF THE FRAMING AT THE TIME THE LOADS ARE IMPOSED.
- THE STRUCTURE IS DESIGNED TO FUNCTION AS A UNIT UPON COMPLETION. THE CONTRACTOR SHALL FURNISH ALL TEMPORARY BRACING AND / OR SUPPORTS REQUIRED AS THE RESULT OF THE CONTRACTOR'S CONSTRUCTION METHODS AND / OR SEQUENCES.
- DO NOT SCALE THESE DRAWINGS, USE DIMENSIONS.
- CONTRACTOR'S CONSTRUCTION AND / OR ERECTION SEQUENCES SHALL RECOGNIZE AND CONSIDER THE EFFECTS OF THERMAL MOVEMENTS OF STRUCTURAL ELEMENTS DURING THE CONSTRUCTION PERIOD. EXPANSION JOINTS SHOWN ON THE DRAWINGS HAVE BEEN DESIGNED TO ACCOMMODATE ANTICIPATED THERMAL MOVEMENT AFTER THE BUILDING IS COMPLETE.
- THE CONTRACTOR SHALL INFORM THE ARCHITECT IN WRITING OF ANY DEVIATION FROM THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL NOT BE RELIEVED OF THE RESPONSIBILITY FOR SUCH DEVIATION BY THE ARCHITECT'S APPROVAL OF SHOP DRAWINGS, PRODUCT DATA, ETC., UNLESS THE CONTRACTOR HAS SPECIFICALLY INFORMED THE ARCHITECT OF SUCH DEVIATION AT THE TIME OF SUBMISSION, AND THE ARCHITECT HAS GIVEN WRITTEN APPROVAL TO THE SPECIFIC DEVIATION.
- ALL THING WHICH, IN THE OPINION OF THE CONTRACTOR, APPEAR TO BE DEFICIENCIES, OMISSIONS, CONTRADICTIONS AND AMBIGUITIES, IN THE PLANS AND SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT. PLANS AND / OR SPECIFICATIONS WILL BE CORRECTED, OR A WRITTEN INTERPRETATION OF THE ALLEGED DEFICIENCY, OMISSION, CONTRADICTION OR AMBIGUITY WILL BE MADE BY THE ARCHITECT BEFORE THE EFFECTED WORK PROCEEDS.

FIBER REINFORCED PLASTIC NOTES (FRP)

- FIBER REINFORCED PLASTIC TO HAVE THE FOLLOWING DESIGN PROPERTIES:
E = 2,800,000 PSI
F_b = 10,000 PSI
F_v = 1,500 PSI
- ALL FIBER REINFORCED PLASTIC SHALL BE MANUFACTURED BY BEDFORD PLASTICS OR APPROVED EQUAL.
- REFER TO ARCHITECTURAL DRAWINGS FOR ADDITIONAL REQUIREMENTS.



[Signature]

HUTTER TRANKINA ENGINEERING
CONSULTING STRUCTURAL ENGINEERS
HTE JOB #14438
32W273 Army Trail Road, Suite #100, Wayne, Illinois 60184
Tel: (630) 513-6711 Fax: (630) 513-2925
E-mail: gen@htedesign.com
WEB SITE: www.htedesign.com

© 2014 HUTTER TRANKINA ENGINEERING ALL RIGHTS RESERVED

CHICAGO SMSA
limited partnership
d/b/a VERIZON WIRELESS

TERRA CONSULTING GROUP, LTD.
600 Blease Highway
Park Ridge, IL 60068
Ph: 847/688-6400
Fax: 847/688-6401

REVISIONS		BY	DATE
NO.	DESCRIPTION	JAL	12/03/14
	ISSUED FOR REVIEW		

LOC. #282639

YALE & OAKTON

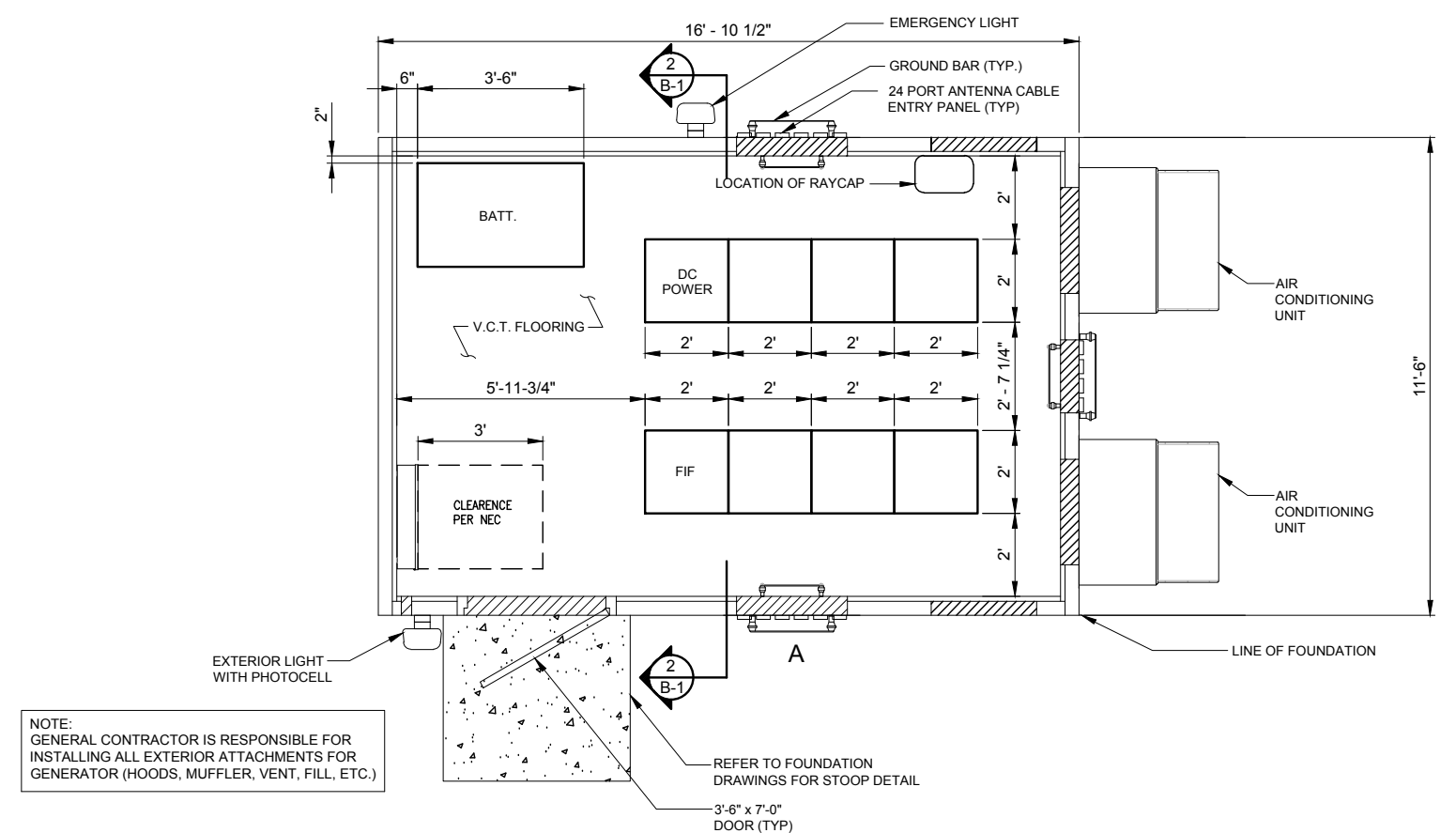
800 W. OAKTON ST.
ARLINGTON HEIGHTS, IL 60004

DRAWN BY:	RRO
CHECKED BY:	JAL
DATE:	12/03/14
PROJECT #:	33-1607

SHEET TITLE
PENTHOUSE FRAMING PLAN SECTIONS AND DETAILS

SHEET NUMBER
S-2

24" x 36" PRINT IS THE FULL SCALE
FORMAT. ANY SIZE OTHER THAN
THAT IS AT REDUCED SCALE.

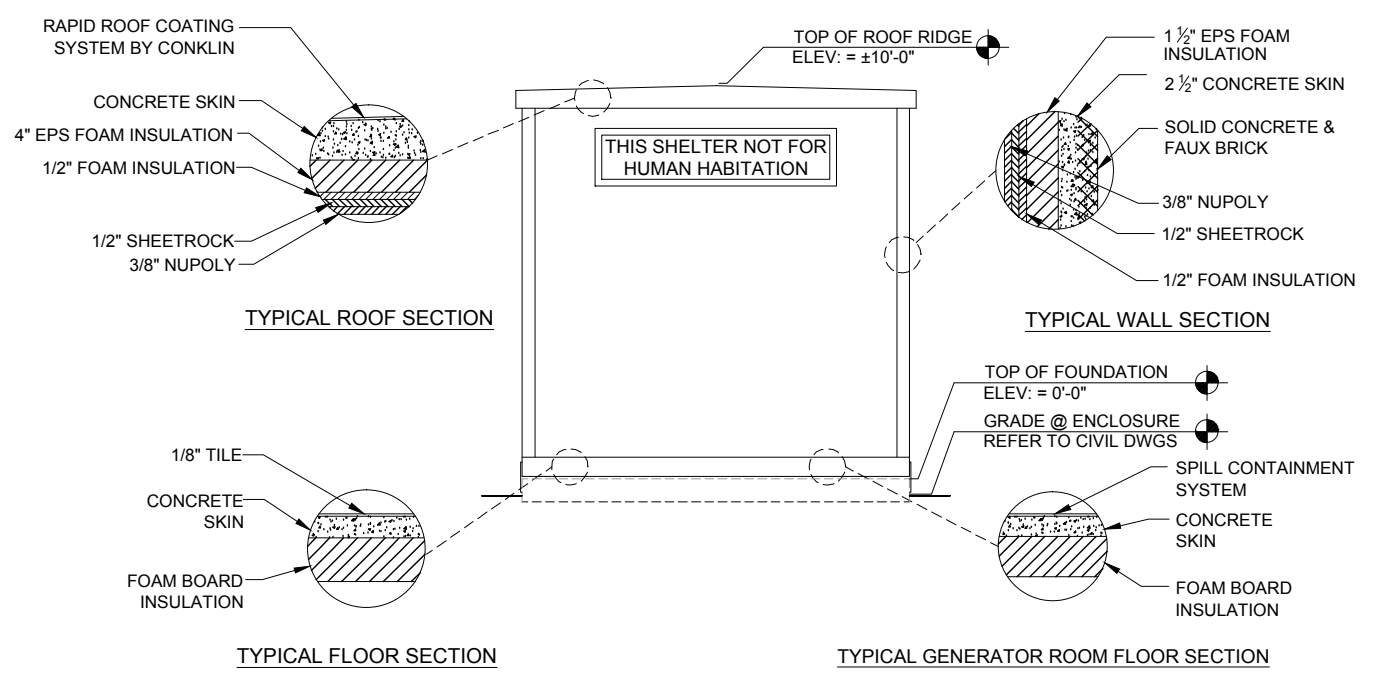


NOTE:
GENERAL CONTRACTOR IS RESPONSIBLE FOR
INSTALLING ALL EXTERIOR ATTACHMENTS FOR
GENERATOR (HOODS, MUFFLER, VENT, FILL, ETC.)

VENTILATION NOTES:

- AIR CONDITIONING IS PROVIDED BY A BARD WALL MOUNTED SELF-CONTAINED ENERGY EFFICIENT COOLING SYSTEM, MODEL # WA602-A05EX2X1.5 TON, 120/240 VOLT, 30 AMP, SINGLE PHASE, 57,500 BTUH COOLING CAPACITY, 10.20 SEER, 24" DIA. FAN, 2600 CFM WITH FILTER
- ELECTRIC HEAT IS PROVIDED BY 5 KW, 18,840 BTUH, 240 VOLT, SINGLE PHASE HEAT STRIP, WITHIN BARD UNIT LISTED ABOVE.

1 FLOOR PLAN-EQUIPMENT ENCLOSURE
SCALE: 1/2" = 1'-0"



2 TRANSVERSE SECTION
N.T.S.

ROOM PURPOSE	AREA	VENTILATION				REMARKS
		NATURAL		MECHANICAL		
		ACTUAL	REQUIRED	ACTUAL	REQUIRED	
WIRELESS TELEPHONE EQUIPMENT ENCLOSURE (NON-INHABITED)	194.1 S.F.	0 CFM	0 CFM	2600 CFM	0 CFM	SEE NOTE 1.

NOTES:

- EQUIPMENT ENCLOSURE IS PRE MANUFACTURED. THIS SHEET IS PROVIDED AS GUIDE ONLY. REFER TO ACTUAL DRAWINGS BY SHELTER MANUFACTURE FOR FULL BUILDING PLANS.
- EPS BOARD INSULATION IS LISTED TO HAVE A FLAME SPREAD OF 25 OR LESS AND SMOKE DEVELOPED OF 450 OR LESS WITH A MAXIMUM THICKNESS OF 2 INCHES AT 1 PCF DENSITY. POLYISOCYANURATE FOAM INSULATION HAS BEEN TESTED TO A MAXIMUM THICKNESS OF 3 INCHES AT 1.9 PCF AND HAS A FLAME SPREAD OF 25 AND A SMOKE PRODUCT OF 395.
- INTERIOR PANELING IS LISTED TO HAVE A FLAMESPREAD OF 200 OR LESS.
- THIS ENCLOSURE IS CLASSIFIED AS USE GROUP B, TYPE 5B CONSTRUCTION; PER 1999 BOCA AND IS IN COMPLIANCE WITH 1999 BOCA BUILDING CODE, 1996 INTERNATIONAL MECHANICAL CODE, 2002 NEC AND ILLINOIS ASHRAE 90.1.
- DESIGN CRITERIA
WIND LOAD = 125 MPH FLOOR DEAD LOAD = 35 PSF
ROOF LIVE LOAD = 100 PSF WALL DEAD LOAD = 35 PSF
FLOOR LIVE LOAD = 135 PSF SNOW LOAD = 80 PSF
ROOF DEAD LOAD = 45 PSF SEISMIC EXPOSURE GROUP = III
- $F_c' = 5000$ PSI @ 28 DAYS (EQUIPMENT ENCLOSURE)
- ENCLOSURE AND ASSOCIATED EQUIPMENT IS PROVIDED BY OWNER UNDER SEPARATE CONTRACT. EQUIPMENT ENCLOSURE INFORMATION INDICATED HEREIN IS PROVIDED FOR REFERENCE ONLY AND IS TAKEN FROM MANUFACTURER'S AVAILABLE DATA. REFER TO CIVIL, STRUCTURAL AND ELECTRICAL DRAWINGS FOR WORK TO BE PERFORMED UNDER THIS CONTRACT.
- PRIOR TO PROJECT CLOSE OUT AND SHELTER INSTALLATION, THE GENERAL CONTRACTOR IS TO CLEAN THE SHELTER FLOOR AND APPLY A STATIC-FREE WAX TO THE FLOORS.

CHICAGO SMSA
limited partnership
d/b/a VERIZON WIRELESS

TERRA
600 BUSSE HIGHWAY
PARK RIDGE, IL 60068
PH: 847-698-6400
FAX: 847-698-6401

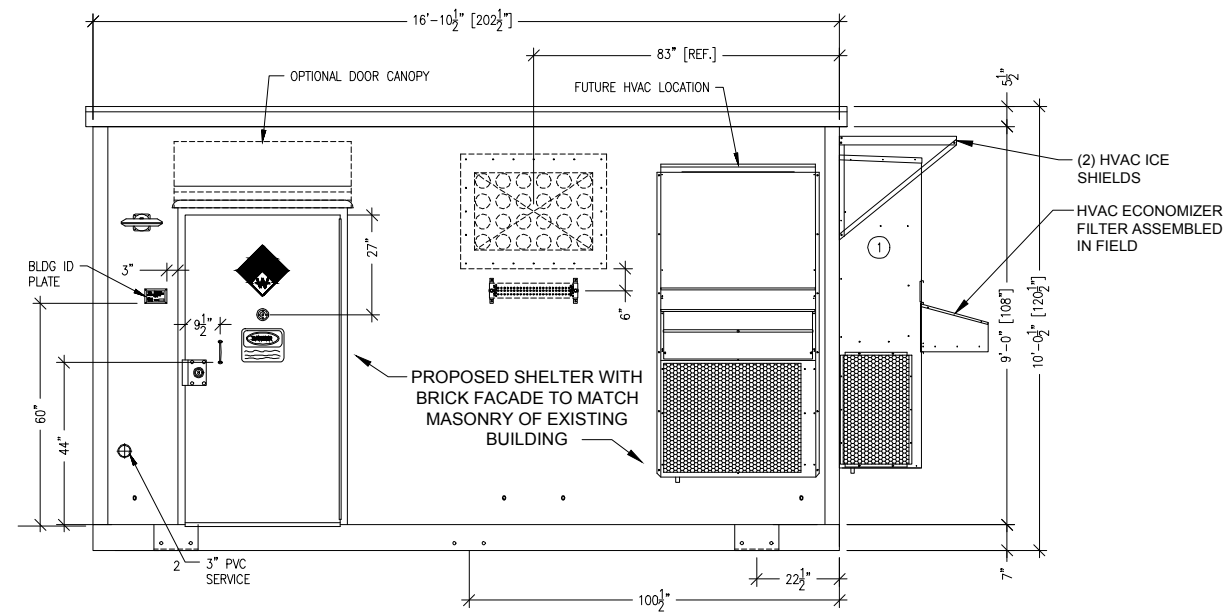
NO.	DESCRIPTION	BY	DATE
		LRB/LS	LS
1.	ISSUED FOR REVIEW	LRB/LS	11/21/14
2.	UPDATE ECR	LS	03/20/15
3.	UPDATE PER UTILITY WALK	LS	04/30/15
4.	UPDATED NATURAL GAS	DMS	05/19/15
5.	ADDITION OF LANDSCAPE PLAN	JTM	07/07/15

LOC. #282639
YALE & OAKTON
800 W. OAKTON ST.
ARLINGTON HEIGHTS, IL 60004

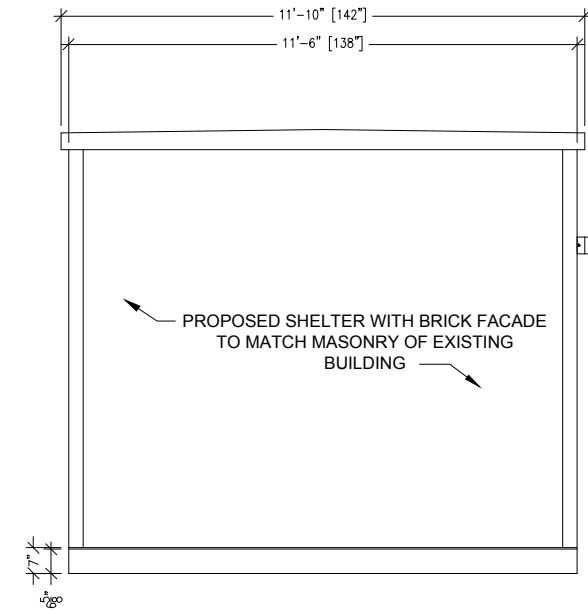
DRAWN BY: LRB
CHECKED BY: TAZ
DATE: 11/19/14
PROJECT #: 33-1607

EQUIPMENT ENCLOSURE PLAN & SECTION

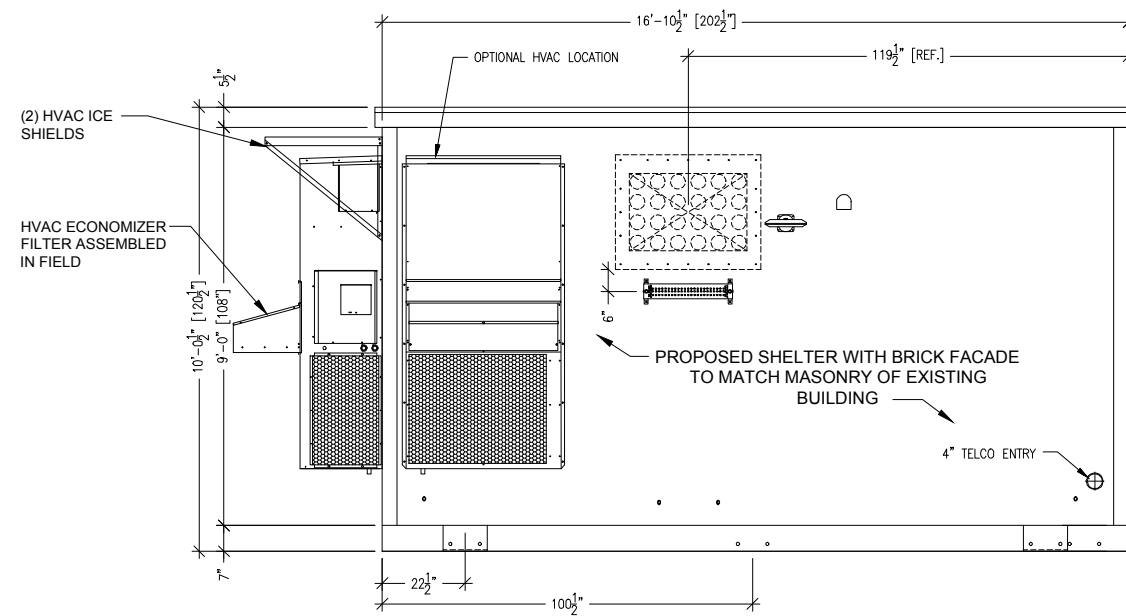
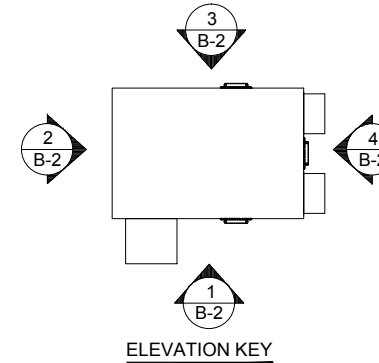
SHEET NUMBER
B-1



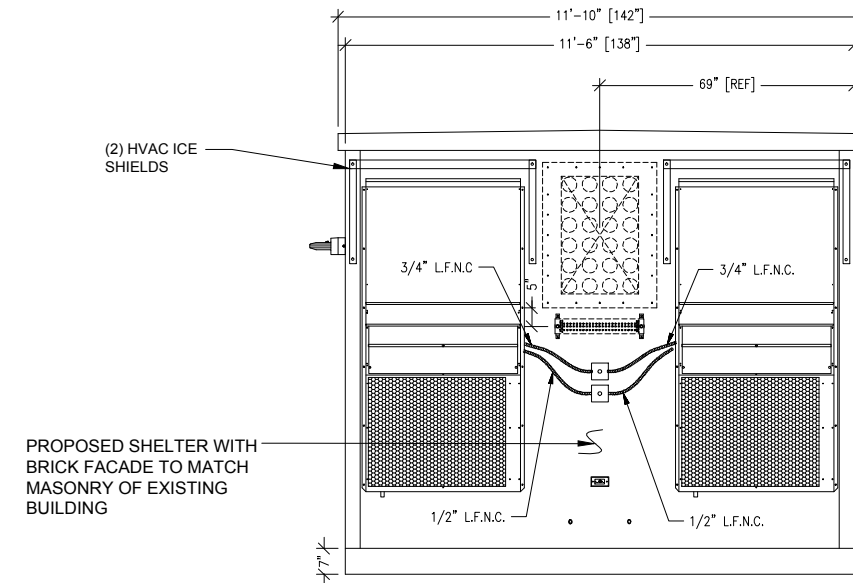
1 ELEVATION-EQUIPMENT ENCLOSURE
SCALE: 1/2" = 1'-0"



2 ELEVATION-EQUIPMENT ENCLOSURE
SCALE: 1/2" = 1'-0"



3 ELEVATION-EQUIPMENT ENCLOSURE
SCALE: 1/2" = 1'-0"



4 ELEVATION-EQUIPMENT ENCLOSURE
SCALE: 1/2" = 1'-0"

CHICAGO SMSA
limited partnership
d/b/a VERIZON WIRELESS



REVISIONS	
NO.	DESCRIPTION
1.	ISSUED FOR REVIEW
2.	UPDATE ECR
3.	UPDATE PER UTILITY WALK
4.	UPDATE NATURAL GAS
	ADDITION OF LANDSCAPE PLAN

DATE	BY	LRB/LS	LS	DMS	JTM
11/21/14	LRB/LS	LS			
03/20/15			LS		
04/30/15				DMS	
05/19/15					JTM
07/07/15					

LOC. #282639

YALE & OAKTON

800 W. OAKTON ST.
ARLINGTON
HEIGHTS, IL 60004

DRAWN BY:	LRB
CHECKED BY:	TAZ
DATE:	11/19/14
PROJECT #:	33-1607

SHEET TITLE
EQUIPMENT
ENCLOSURE
ELEVATIONS

SHEET NUMBER

B-2

UTILITY NOTES:

WORK INCLUDES:

THESE NOTES AND ACCOMPANYING DRAWINGS COMPLEMENT THE PROVISIONS AND INSTALLATIONS BY THE ELECTRICAL CONTRACTOR, OF ALL LABOR, MATERIALS AND EQUIPMENT REQUIRED TO INSTALL THE ELECTRICAL WORK COMPLETE IN CONNECTION WITH THIS VERIZON WIRELESS SITE AND SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING:

1. THE PROVISIONS, INSTALLATION, AND CONNECTION OF A GROUNDING ELECTRODE SYSTEM COMPLETE WITH A BUILDING AND SECONDARY GROUNDING, CELLULAR TELEPHONE COMMUNICATIONS TOWER AND CONNECTIONS TO THE INCOMING ELECTRICAL DISTRIBUTION EQUIPMENT.
2. THE PROVISION AND INSTALLATION OF AN OVERHEAD ELECTRICAL SERVICE OR UNDERGROUND ELECTRICAL SERVICE AND ALL ASSOCIATED WIRE AND CONDUIT AS REQUIRED AND/OR INDICATED ON PLANS.
3. THE PROVISION, INSTALLATION OF CONDUIT AND CONNECTIONS FOR LOCAL TELEPHONE SERVICE.
4. THE FURNISHING AND INSTALLATION OF THE ELECTRICAL SERVICE ENTRANCE CONDUCTORS, CONDUITS, METER SOCKET, AND CONNECTIONS TO THE SERVICE EQUIPMENT WITHIN THE ENCLOSURE.
5. TWO INCH (2") AND THREE INCH (3") DIAMETER PVC CONDUITS SCHEDULE 40.
6. ALL PVC CONDUITS SHOULD BE LEFT WITH NYLON PULL CORD FOR FUTURE USE.
7. EXCAVATION, TRENCHING, AND BACKFILLING FOR CONDUIT(S), CABLE(S), AND EXTERNAL GROUNDING SYSTEM.

CODES, PERMITS, AND FEES:

1. ALL REQUIRED PERMITS, LICENSES, INSPECTIONS AND APPROVALS SHALL BE SECURED AND ALL FEES FOR SAME PAID BY CONTRACTOR.
2. THE INSTALLATION SHALL COMPLY WITH ALL APPLICABLE CODES: STATE, LOCAL AND NATIONAL, AND THE DESIGN, PERFORMANCE CHARACTERISTICS AND METHODS OF CONSTRUCTION OF ALL ITEMS AND EQUIPMENT SHALL BE IN ACCORDANCE WITH THE LATEST ISSUE OF THE VARIOUS APPLICABLE STANDARD SPECIFICATIONS OF THE FOLLOWING AUTHORITIES:

N.E.C.	NATIONAL ELECTRIC CODE
A.N.S.I.	AMERICAN NATIONAL STANDARDS INSTITUTE
I.E.E.E.	INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS
A.S.T.M.	AMERICAN SOCIETY FOR TESTING MATERIALS
N.E.M.A.	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
U.L.	UNDERWRITERS LABORATORIES, INC.
N.F.P.A.	NATIONAL FIRE PROTECTION ASSOCIATION

RACEWAYS AND WIRING:

1. WIRING OF EVERY KIND MUST BE INSTALLED IN CONDUIT, UNLESS NOTED OTHERWISE, OR AS APPROVED BY THE ENGINEER.
2. UNLESS OTHERWISE SPECIFIED, ALL WIRING SHALL BE COPPER (CU) TYPE THWN, SIZED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE.
3. RACEWAYS SHALL BE GALVANIZED STEEL, SIZED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE, UNLESS OTHERWISE NOTED. ALL RACEWAYS SHALL BE APPROVED FOR THE INSTALLATION.
4. PULL OR JUNCTION BOXES SHALL BE PROVIDED AS REQUIRED TO FACILITATE INSTALLATION OF RACEWAYS AND WIRING. PROVIDE JUNCTION AND PULLBOXES FOR CONDUIT RUNS WITH MORE THAN (360) DEGREES OF BENDS.
5. PROVIDE A COMPLETE RACEWAY AND WIRING INSTALLATION, PERMANENTLY AND EFFECTIVELY GROUNDED IN ACCORDANCE WITH ARTICLE 250 OF THE NATIONAL ELECTRICAL CODE AND LOCAL CODES.
6. ELECTRICAL PANELBOARD SHALL BE FURNISHED AND INSTALLED BY OTHERS. ELECTRICAL CONTRACTOR SHALL FIELD VERIFY EXACT LOCATION.
7. ALL STEEL CONDUIT SHALL BE BONDED AT BOTH ENDS WITH GROUNDING BUSHING.

GENERAL NOTES:

SEE DETAILS AND SCHEDULES ON DRAWINGS AND SPECIFICATIONS FOR MEANING OF ABBREVIATIONS AND ADDITIONAL REQUIREMENTS AND INFORMATION. CHECK ARCHITECTURAL, STRUCTURAL AND OTHER MECHANICAL AND ELECTRICAL DRAWINGS FOR SCALE, SPACE LIMITATIONS, COORDINATION, AND ADDITIONAL INFORMATION, ETC. REPORT ANY DISCREPANCIES, CONFLICTS, ETC. TO ENGINEER BEFORE SUBMITTING BID. ALL EQUIPMENT FURNISHED BY OTHERS (FBO) SHALL BE PROVIDED WITH PROPER MOTOR STARTERS, DISCONNECTS, CONTROLS, ETC. BY THE ELECTRICAL CONTRACTOR UNLESS SPECIFICALLY NOTED OTHERWISE. THE ELECTRICAL CONTRACTOR SHALL INSTALL AND COMPLETELY WIRE ALL ASSOCIATED EQUIPMENT IN ACCORDANCE WITH MANUFACTURER'S WIRE DIAGRAMS AND AS REQUIRED FOR A COMPLETE OPERATING INSTALLATION. ELECTRICAL CONTRACTOR SHALL VERIFY AND COORDINATE ELECTRICAL CHARACTERISTICS AND REQUIREMENTS OF (FBO) EQUIPMENT PRIOR TO ROUGH-IN OF CONDUIT AND WIRING TO AVOID CONFLICTS.

COORDINATION WITH UTILITY COMPANY:

THE ELECTRICAL CONTRACTOR SHALL COORDINATE COMPLETE ELECTRICAL SERVICE WITH LOCAL UTILITY COMPANY FOR A COMPLETE OPERATIONS SYSTEM, INCLUDING TRANSFORMER CONNECTIONS, CONCRETE TRANSFORMER PADS, IF REQUIRED, METER SOCKETS, PRIMARY CABLE RACEWAY REQUIREMENTS, SECONDARY SERVICE, ETC. PRIOR TO SUBMITTING BID TO INCLUDE ALL LABOR AND MATERIALS. THE ELECTRICAL CONTRACTOR SHALL INCLUDE IN THE BID ANY OPTIONAL OR EXCESS FACILITY CHARGES ASSOCIATED WITH PROVIDING ELECTRICAL SERVICE FROM LOCAL UTILITY COMPANY. VERIFY BEFORE BIDDING TO INCLUDE ALL COSTS. THE ELECTRICAL CONTRACTOR SHALL VERIFY THE AVAILABLE FAULT CURRENT WITH THE LOCAL UTILITY COMPANY PRIOR TO SUBMITTING BID. ADJUST A.I.C. RATINGS OF ALL OVER CURRENT PROTECTION DEVICES IN DISTRIBUTION EQUIPMENT AS REQUIRED TO COORDINATE WITH AVAILABLE FAULT CURRENT FROM LOCAL UTILITY COMPANY. ALL GROUNDING RODS PROVIDED BY THE POWER OR TELEPHONE UTILITY COMPANIES MUST BE TIED INTO THE MAIN EXTERNAL GROUND RING.

UTILITY CONTACTS:

POWER: COMED
FIBER: AT&T
VIKI THOMAS

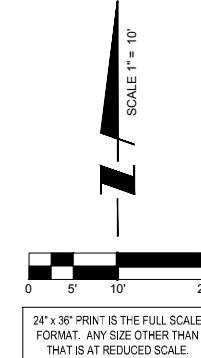
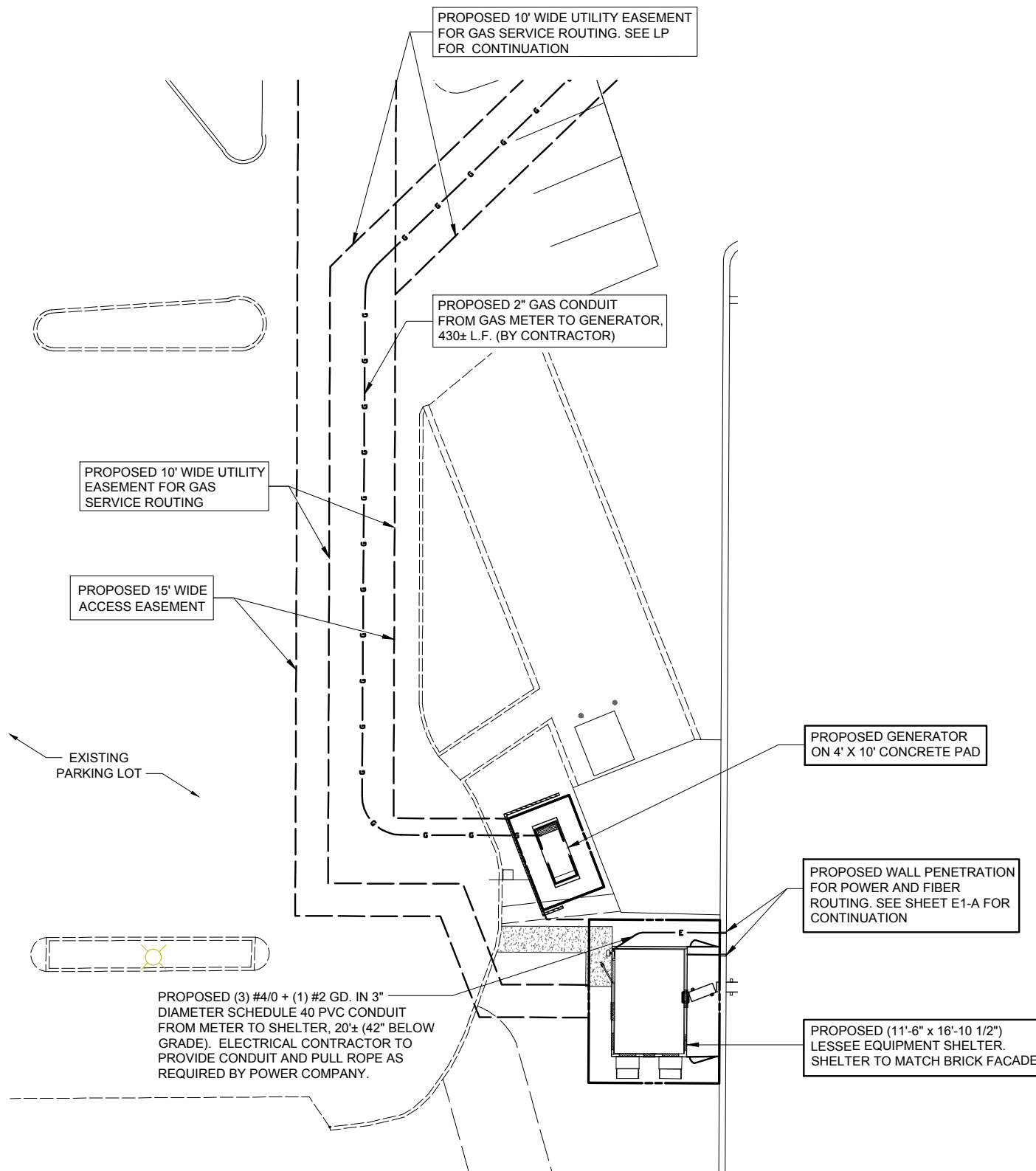
ELECTRICAL CONTRACTOR SHALL COORDINATE WITH POWER COMPANY FOR ENTRY INTO FENCED AREA BY EITHER MAILING A KEY TO A SLAVE LOCKED CHAIN AT THE FENCE GATE OR CALLING AND LEAVING A COMBINATION.

FOR CONTINUATION AND CONNECTION OF ELECTRIC AND TELEPHONE SERVICE. COORDINATE WITH ELECTRIC AND PHONE COMPANY

OPERATES 24 HOURS
A DAY 365 DAYS A YEAR



NOTE:
CONTRACTOR TO VERIFY ROUTES
WITH LOCAL UTILITY COMPANY
PRIOR TO INSTALLATION.



CHICAGO SMSA
limited partnership
d/b/a VERIZON WIRELESS

TERRA
CONSULTING, LTD.
600 BUSSE HIGHWAY
PARK RIDGE, IL 60068
PH: 847-698-6400
FAX: 847-698-6401

REVISIONS	
NO.	DESCRIPTION
1.	ISSUED FOR REVIEW
2.	UPDATE ECR
3.	UPDATE PER UTILITY WALK
4.	UPDATE NATURAL GAS
	ADDITION OF LANDSCAPE PLAN

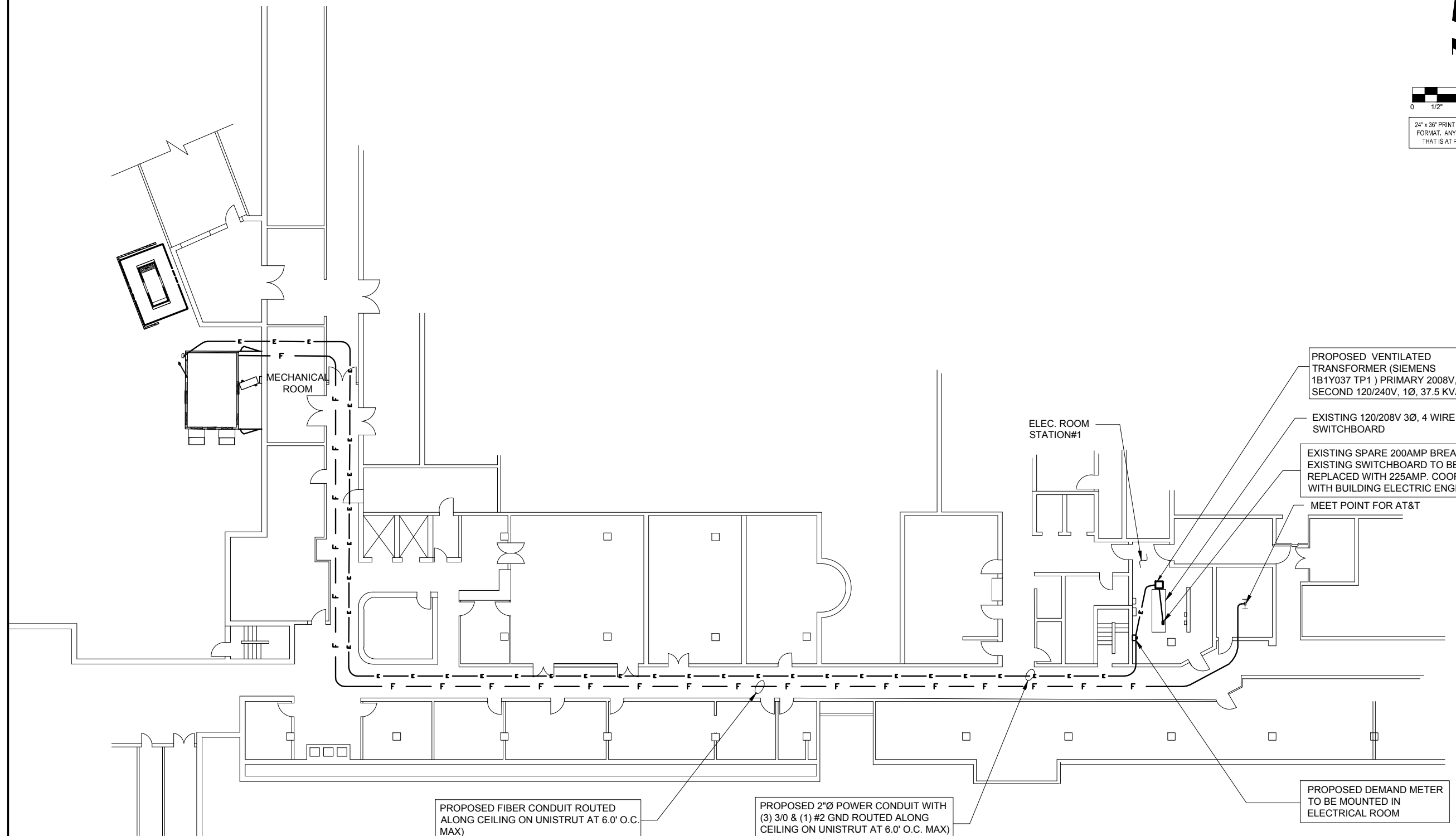
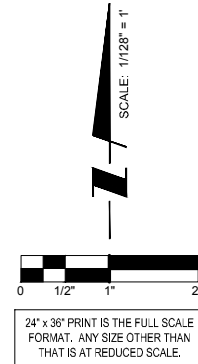
LOC. #282639
YALE & OAKTON
800 W. OAKTON ST.
ARLINGTON HEIGHTS, IL 60004

DRAWN BY: LRB
CHECKED BY: TAZ
DATE: 11/19/14
PROJECT #: 33-1607

SHEET TITLE
UTILITY ROUTING PLAN

SHEET NUMBER
E-1

1 SITE UTILITY ROUTING PLAN
SCALE: 1" = 10'



PROPOSED FIBER CONDUIT ROUTED ALONG CEILING ON UNISTRUT AT 6.0' O.C. MAX)

PROPOSED 2"Ø POWER CONDUIT WITH (3) 3/0 & (1) #2 GND ROUTED ALONG CEILING ON UNISTRUT AT 6.0' O.C. MAX)

PROPOSED DEMAND METER TO BE MOUNTED IN ELECTRICAL ROOM

PROPOSED VENTILATED TRANSFORMER (SIEMENS 1B1Y037 TP1) PRIMARY 2008V, SECOND 120/240V, 1Ø, 37.5 KVA

EXISTING 120/208V 3Ø, 4 WIRE SWITCHBOARD

EXISTING SPARE 200AMP BREAKER IN EXISTING SWITCHBOARD TO BE REPLACED WITH 225AMP. COORDINATE WITH BUILDING ELECTRIC ENGINEER

MEET POINT FOR AT&T

ELEC. ROOM STATION#1

MECHANICAL ROOM

CHICAGO SMSA
limited partnership
d/b/a VERIZON WIRELESS

TERRA CONSULTING, LTD.
600 BUSSE HIGHWAY
PARK RIDGE, IL 60068
PH: 847-698-6400
FAX: 847-698-6401

NO.	DESCRIPTION	BY	DATE
1.	ISSUED FOR REVIEW	LRB/LS	11/21/14
2.	UPDATE ECR	LS	03/20/15
3.	UPDATE PER UTILITY WALK	LS	04/30/15
4.	UPDATE NATURAL GAS	DMS	05/19/15
	ADDITION OF LANDSCAPE PLAN	JTM	07/07/15

LOC. #282639

YALE & OAKTON

800 W. OAKTON ST.
ARLINGTON HEIGHTS, IL 60004

DRAWN BY:	LRB
CHECKED BY:	TAZ
DATE:	11/19/14
PROJECT #:	33-1607

SHEET TITLE
UTILITY ROUTING PLAN

SHEET NUMBER
E-1A

1 PARTIAL GROUND FLOOR
SCALE: 1/128" = 1'

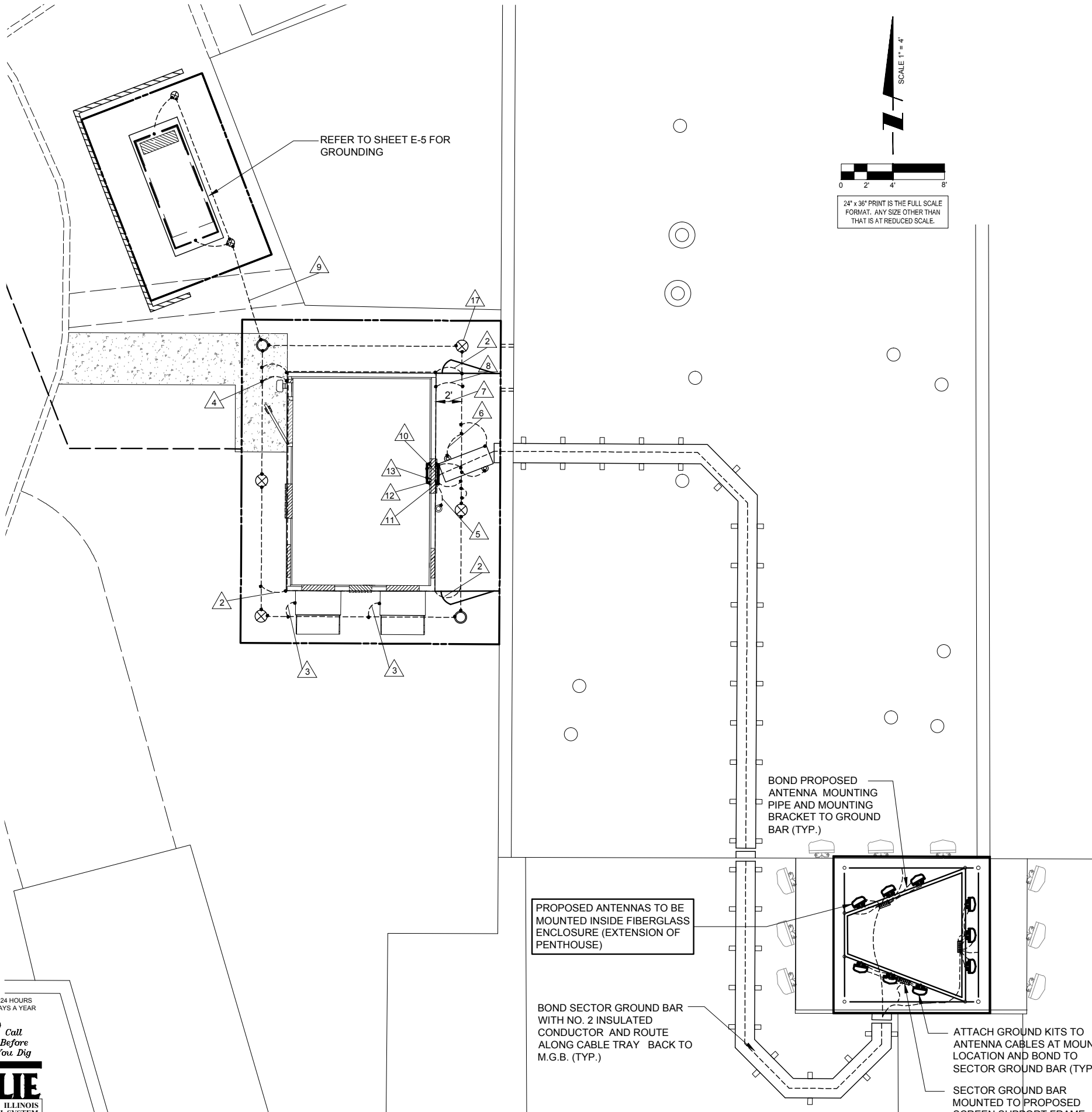
1. ALL GROUNDING CONNECTIONS SHALL BE MADE BY THE EXOTHERMIC PROCESS CONNECTIONS SHALL INCLUDE ALL CABLE TO CABLE, SPLICES, ETC. ALL CABLE TO GROUND RODS, GROUND RODS SPLICES AND LIGHTNING PROTECTION SYSTEM AS INDICATED. GROUND FOUNDATION ONLY AS INDICATED BY PM. ALL MATERIALS USED (MOLDS, WELDING, METAL, TOOLS, ETC.) SHALL BE BY EXOTHERMIC PROCESS AND INSTALLED PER MANUFACTURERS RECOMMENDATIONS AND PROCEDURES. GROUND CONDUCTOR SHALL HAVE A MINIMUM 24" BENDING RADIUS.
2. ALL EXOTHERMIC CONNECTIONS ON GALVANIZED SURFACES SHALL BE CLEANED THOROUGHLY AND COLORED TO MATCH SURFACE WITH (2) TWO COATS OF SHERWIN-WILLIAMS GALVITE (WHITE) PAINT B50W3 (OR EQUAL) OR SHERWIN-WILLIAMS SILVERBRITE (ALUMINUM) B59S11 (OR EQUAL).
3. ALL ELECTRICAL & MECHANICAL GROUND CONNECTIONS SHALL HAVE ANTI-OXIDANT COMPOUND APPLIED TO CONNECTION

LEGEND

SYMBOL	DESCRIPTION
⊗	5/8" DIAMETER x 10'-0" LONG COPPER CLAD GROUND ROD (HARGER-5810)
○	5/8" DIAMETER x 10'-0" LONG COPPER CLAD GROUND ROD WITH INSPECTION WELL
---	#2 AWG T1ND SOLID BARE COPPER WIRE MINIMUM 42" BELOW GRADE (HARGER-L2)
---UE---	UNDERGROUND ELECTRICAL
---UT---	UNDERGROUND TELEPHONE
---F---	UNDERGROUND FIBER
—●—	EXOTHERMIC WELD
—OE—	OVERHEAD ELECTRICAL SERVICE
—OT—	OVERHEAD TELEPHONE SERVICE

4. FENCE/GATE: GROUND FENCE POSTS WITHIN 6 FEET OF ENCLOSURE AND 25 FEET OF TOWER AS INDICATED ON DRAWINGS. GROUND EACH GATE POST AND CORNER POST. GROUND CONNECTIONS TO FENCE POSTS SHALL BE MADE BY THE EXOTHERMIC PROCESS AND INSTALLED PER MANUFACTURERS RECOMMENDATIONS AND PROCEDURES. ALL OTHER CONNECTIONS FOR THE GROUND GRID SYSTEM SHALL BE MADE BY THE EXOTHERMIC PROCESS, AND INSTALLED PER MANUFACTURERS RECOMMENDATIONS AND PROCEDURES.
5. AFTER INSTALLATION OF THE CANOPY AT THE DOOR, GC/EC IS TO BOND THE CANOPY TO THE DOOR FRAME WITH A #2 CONDUCTOR. USE DOUBLE-LUG CONNECTION. PREP AND PAINT SURFACE TO MATCH AFTER INSTALLATION.
6. UTILITY COMPANY COORDINATION: ELECTRICAL CONTRACTOR SHALL CONFIRM THAT ALL WORK IS IN ACCORDANCE WITH THE RULES OF THE LOCAL UTILITY COMPANY BEFORE SUBMITTING THE BID. THE CONTRACTOR SHALL CHECK WITH THE UTILITY COMPANIES SUPPLYING SERVICE TO THIS PROJECT AND SHALL DETERMINE FROM THEM ALL EQUIPMENT AND CHARGES WHICH THEY WILL REQUIRE AND SHALL INCLUDE THE COST IN THE BID.
7. GROUND TEST: GROUND TESTS SHALL BE PERFORMED AS REQUIRED BY LESSEE STANDARD PROCEDURES. GROUND GRID RESISTANCE SHALL NOT EXCEED 5 OHMS.
8. CONTRACTOR SHALL SUBMIT THE GROUND RESISTANCE TEST REPORT AS FOLLOWS:
 1. ONE (1) COPY TO OWNER REPRESENTATIVE
 2. ONE (1) COPY TO ENGINEER
 3. ONE (1) COPY TO KEEP INSIDE EQUIPMENT ENCLOSURE

- ⚠️ #2 AWG T1ND SOLID BARE COPPER CONDUCTOR 42" BELOW GRADE (TYPICAL) MINIMUM 24" BENDING RADIUS
- ⚠️ ENCLOSURE GROUND (TYP.) IN 1/2" DIAMETER SCHEDULE 40 PVC CONDUIT
- ⚠️ GROUND EQUIPMENT ENCLOSURE CONDENSING UNIT WITH MECHANICAL CLAMP
- ⚠️ GROUND ELECTRIC SERVICE ENTRANCE
- ⚠️ BOUND GPS ANTENNA TO GROUND BAR
- ⚠️ BOUND PIPE POST OF ICE BRIDGE TO GROUND RING
- ⚠️ MAINTAIN TWO FOOT DISTANCE OFF OF STRUCTURES.
- ⚠️ GROUND TELEPHONE SERVICE ENTRANCE
- ⚠️ THE GENERATOR GROUND INTO THE SHELTER RING
- ⚠️ GROUND COAXIAL ANTENNA CABLES TO GROUND BAR BY ANTENNA CONTRACTOR TERMINATE CABLES 1'-0" FROM ENCLOSURE AND INSTALL LIGHTNING SURGE ARRESTORS ON EACH CABLE GROUND.
- ⚠️ EXOTHERMICALLY WELD COPPER GROUND BAR TAIL TO EXTERIOR HALO GROUND RING (EXOTHERMIC CONNECTION TYPE TA) BY ANTENNA CONTRACTOR. FINAL CONNECTION BY ELECTRICAL CONTRACTOR.
- ⚠️ 4"x20"x1/4" T1ND INSULATED COPPER GROUND BA. NON ISOLATED WITH 10.0' LONG #2 AWG T1ND SOLID COPPER WIRE WELDED TAILS (HARGER GBIT 14420VW)
- ⚠️ TWO #2 LEADS FROM THE EGR TO THE MGB LOCATED IN THE SHELTER. CADWELD AT EGR AND DOUBLE HOLE LUGS IN SHELTER.
- ⚠️ 10' LONG GROUND ROD
- ⚠️ GROUND ANTENNA CABLES TO GROUND BAR AT ANTENNA ELEVATION OF TOWER. GROUND BASE GROUND BAR TO GROUND HALO.
- ⚠️ EXISTING TOWER GROUND RING
- ⚠️ 5/8" DIAMETER x 10'-0" LONG COPPER CLAD GROUND ROD (HARGER-5810) WITH EXOTHERMIC CONNECTION



1 SITE GROUNDING PLAN
SCALE: 1" = 4"

CHICAGO SMSA
limited partnership
d/b/a VERIZON WIRELESS



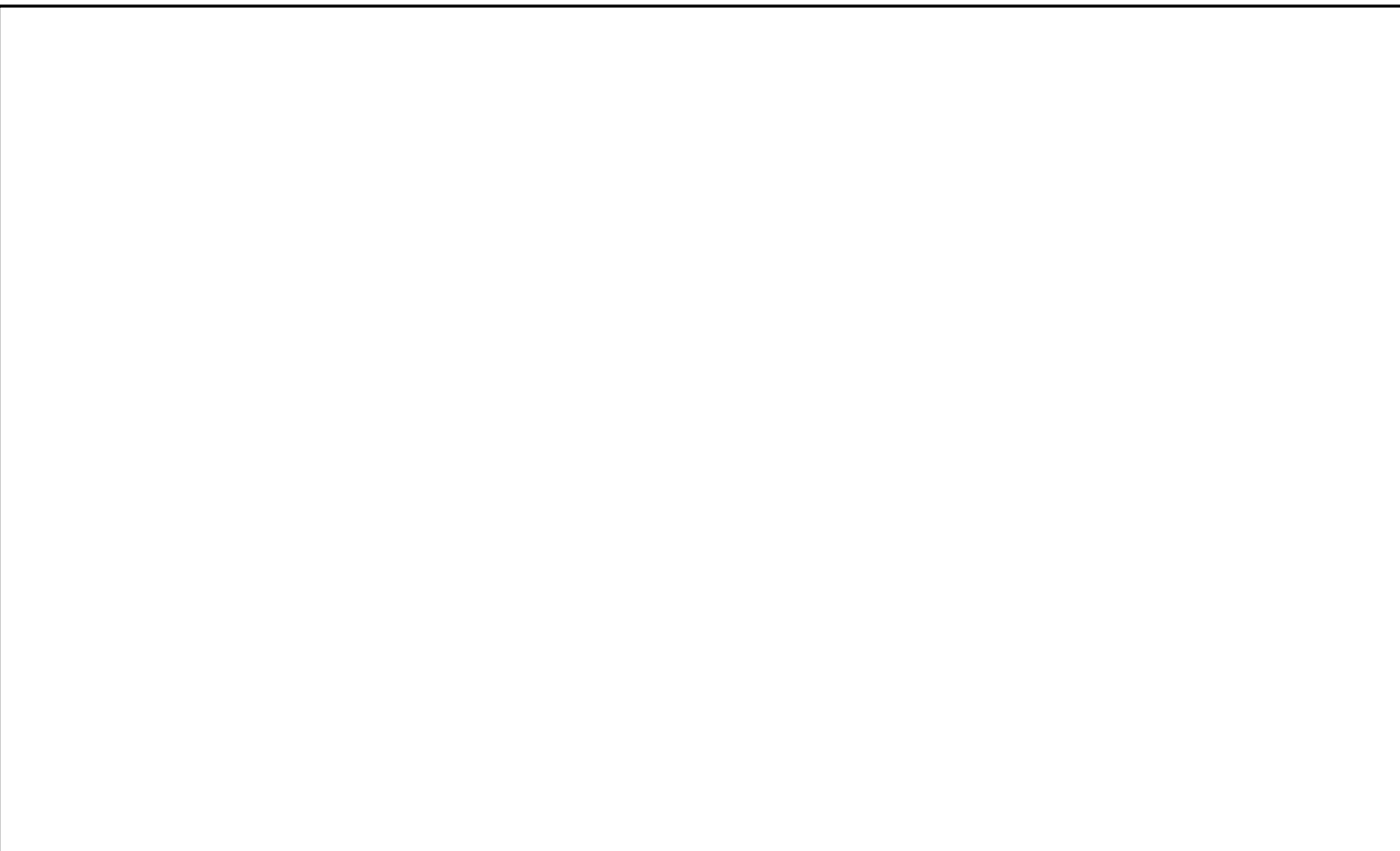
NO.	DESCRIPTION	BY	DATE	LRB/LS	LS	DNS	JTM
		LRB/LS	DATE				
1.	ISSUED FOR REVIEW	LRB/LS	11/21/14	LRB/LS	LS		
2.	UPDATE ECR	LRB/LS	03/20/15	LRB/LS	LS		
3.	UPDATE PER UTILITY WALK	LRB/LS	04/30/15	LRB/LS	LS		
4.	UPDATE NATURAL GAS	LRB/LS	05/19/15	LRB/LS	LS		
	ADDITION OF LANDSCAPE PLAN	LRB/LS	07/07/15	LRB/LS	LS		

LOC. #282639
YALE & OAKTON
800 W. OAKTON ST.
ARLINGTON HEIGHTS, IL 60004

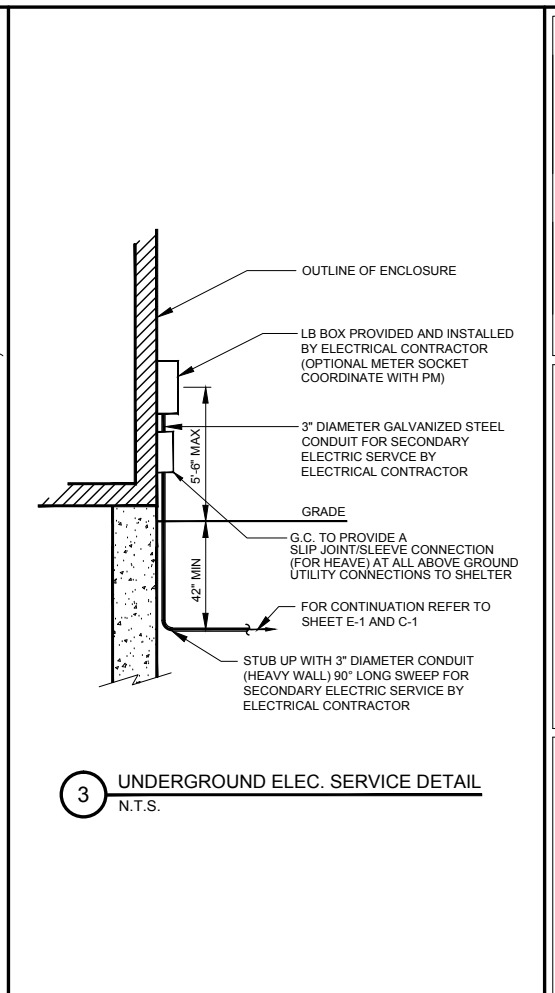
DRAWN BY:	LRB
CHECKED BY:	TAZ
DATE:	11/19/14
PROJECT #:	33-1607

SHEET TITLE
SITE GROUNDING PLAN

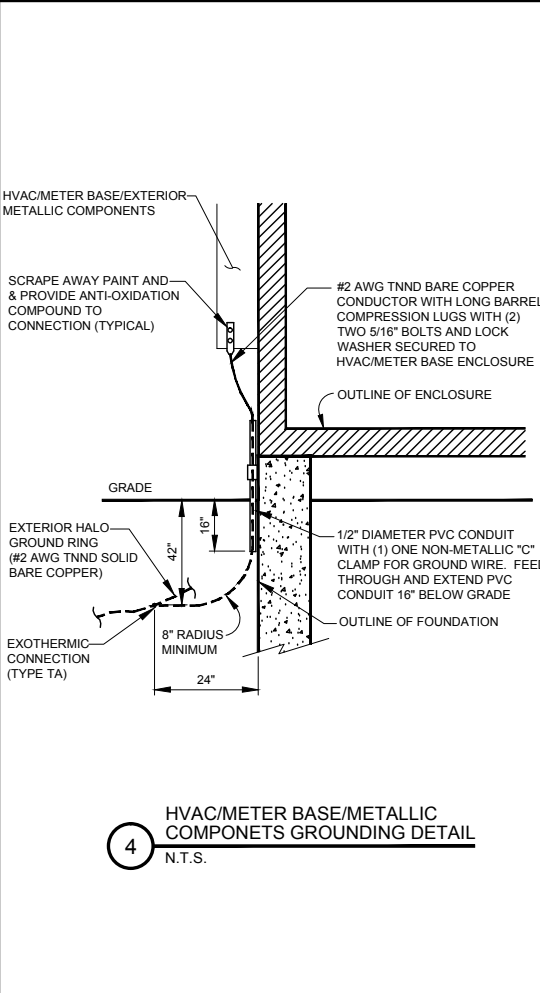
SHEET NUMBER
E-2



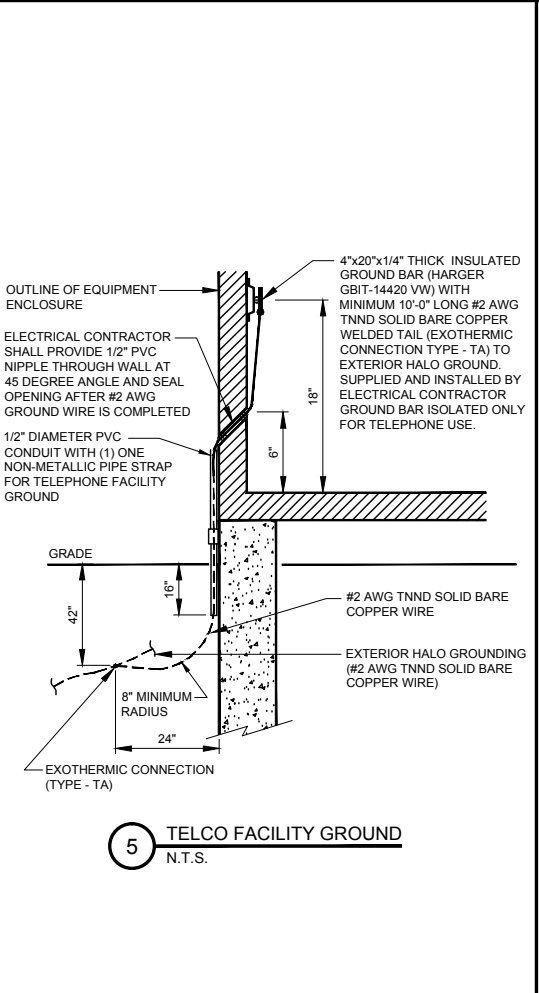
2 TELEPHONE SERVICE ENTRANCE
N.T.S.



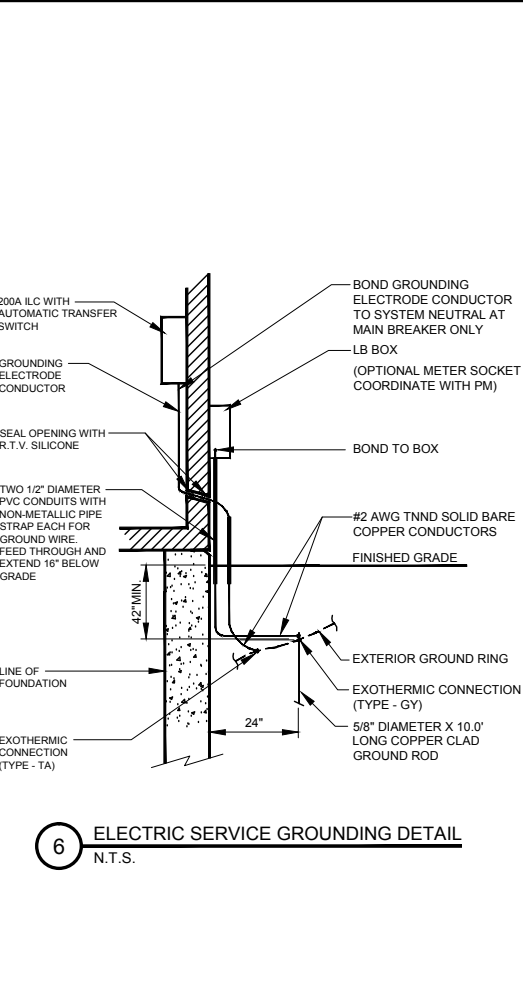
3 UNDERGROUND ELEC. SERVICE DETAIL
N.T.S.



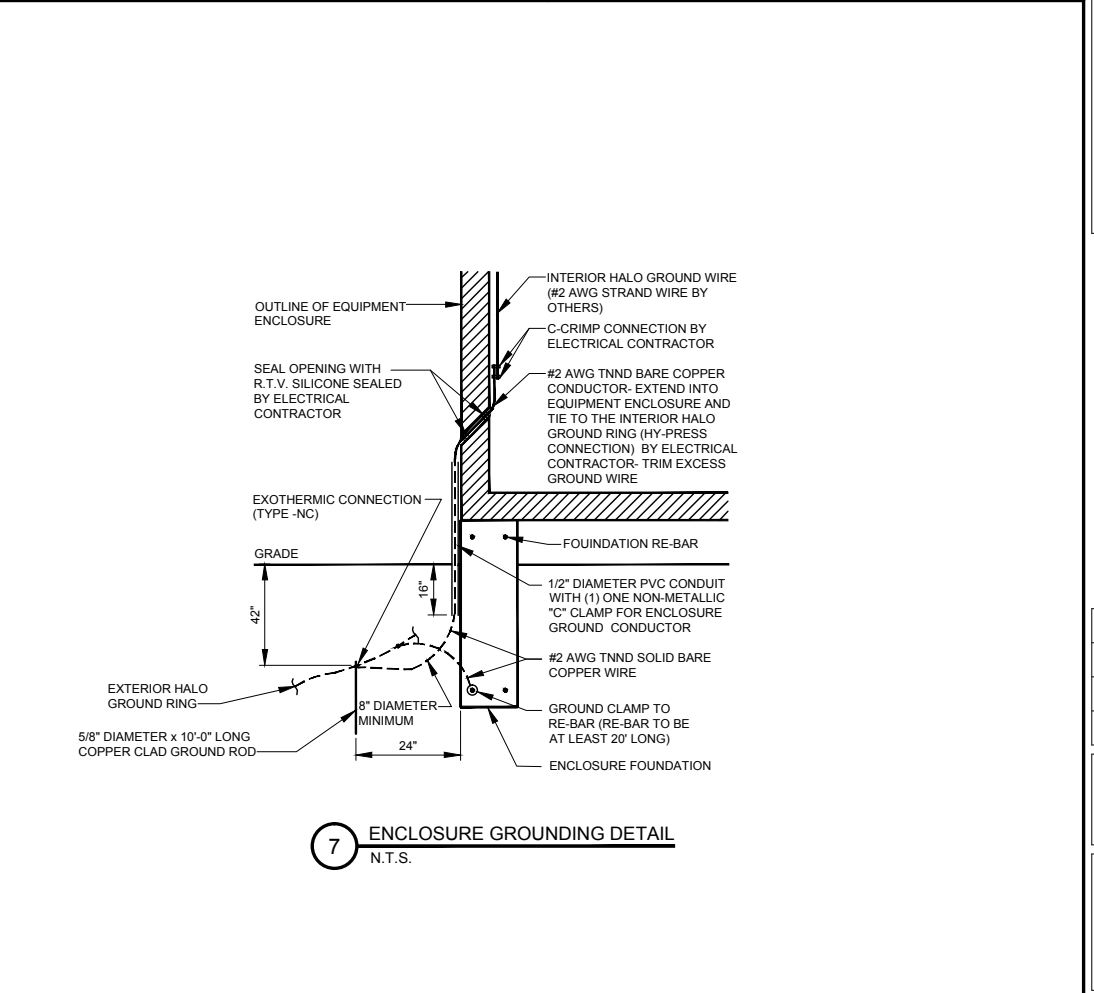
4 HVAC/METER BASE/METALLIC COMPONENTS GROUNDING DETAIL
N.T.S.



5 TELCO FACILITY GROUND
N.T.S.



6 ELECTRIC SERVICE GROUNDING DETAIL
N.T.S.



7 ENCLOSURE GROUNDING DETAIL
N.T.S.

CHICAGO SMSA
limited partnership
d/b/a VERIZON WIRELESS

TERRA
CONSULTING, LTD.
600 BUSSE HIGHWAY
PARK RIDGE, IL 60068
PH: 847-698-6400
FAX: 847-698-6401

NO.	DESCRIPTION	DATE	BY
1.	ISSUED FOR REVIEW	11/21/14	LRB/LS
2.	UPDATE ECR	03/20/15	LS
3.	UPDATE PER UTILITY WALK	04/30/15	LS
4.	UPDATED NATURAL GAS	05/19/15	DMS
	ADDITION OF LANDSCAPE PLAN	07/07/15	JTM

LOC. #282639

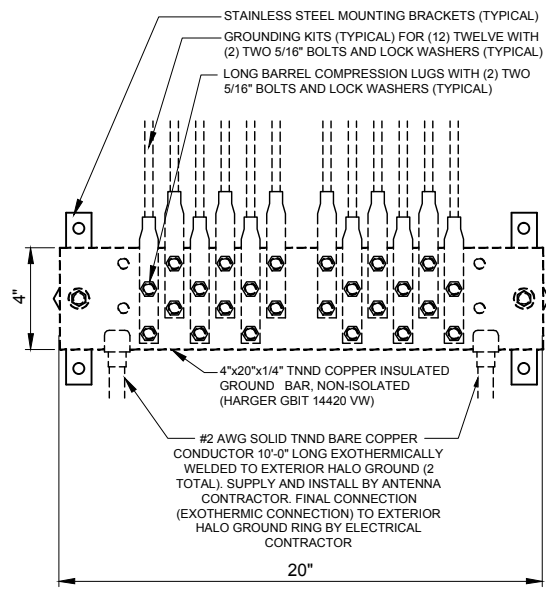
YALE & OAKTON

800 W. OAKTON ST.
ARLINGTON HEIGHTS, IL 60004

DRAWN BY:	LRB
CHECKED BY:	TAZ
DATE:	11/19/14
PROJECT #:	33-1607

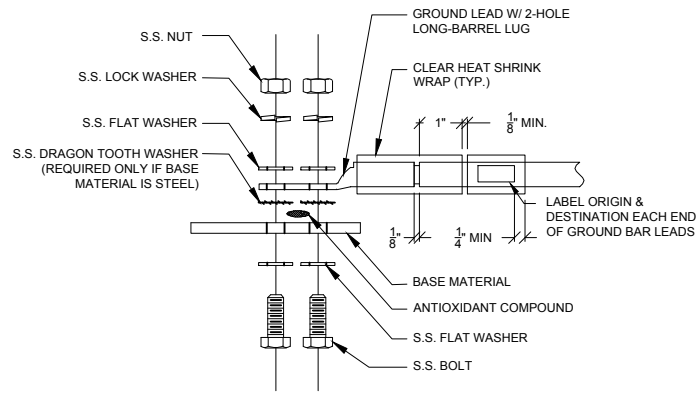
SHEET TITLE
ELECTRICAL AND GROUNDING DETAILS

SHEET NUMBER
E-3

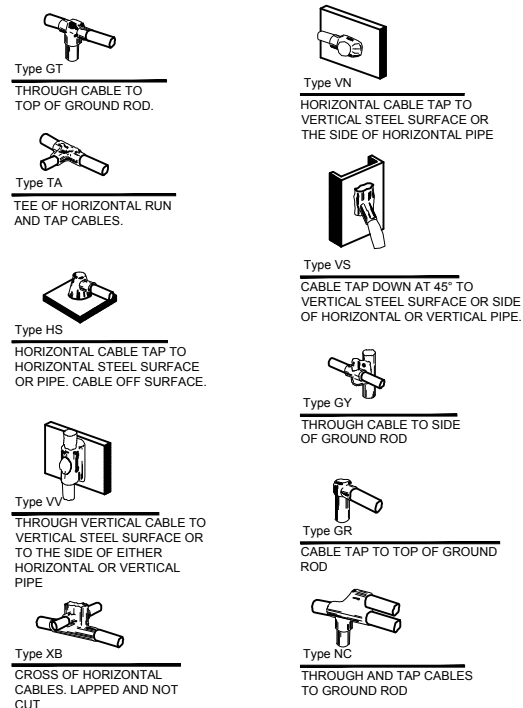


1 EXTERIOR GROUND BAR DETAIL
N.T.S.

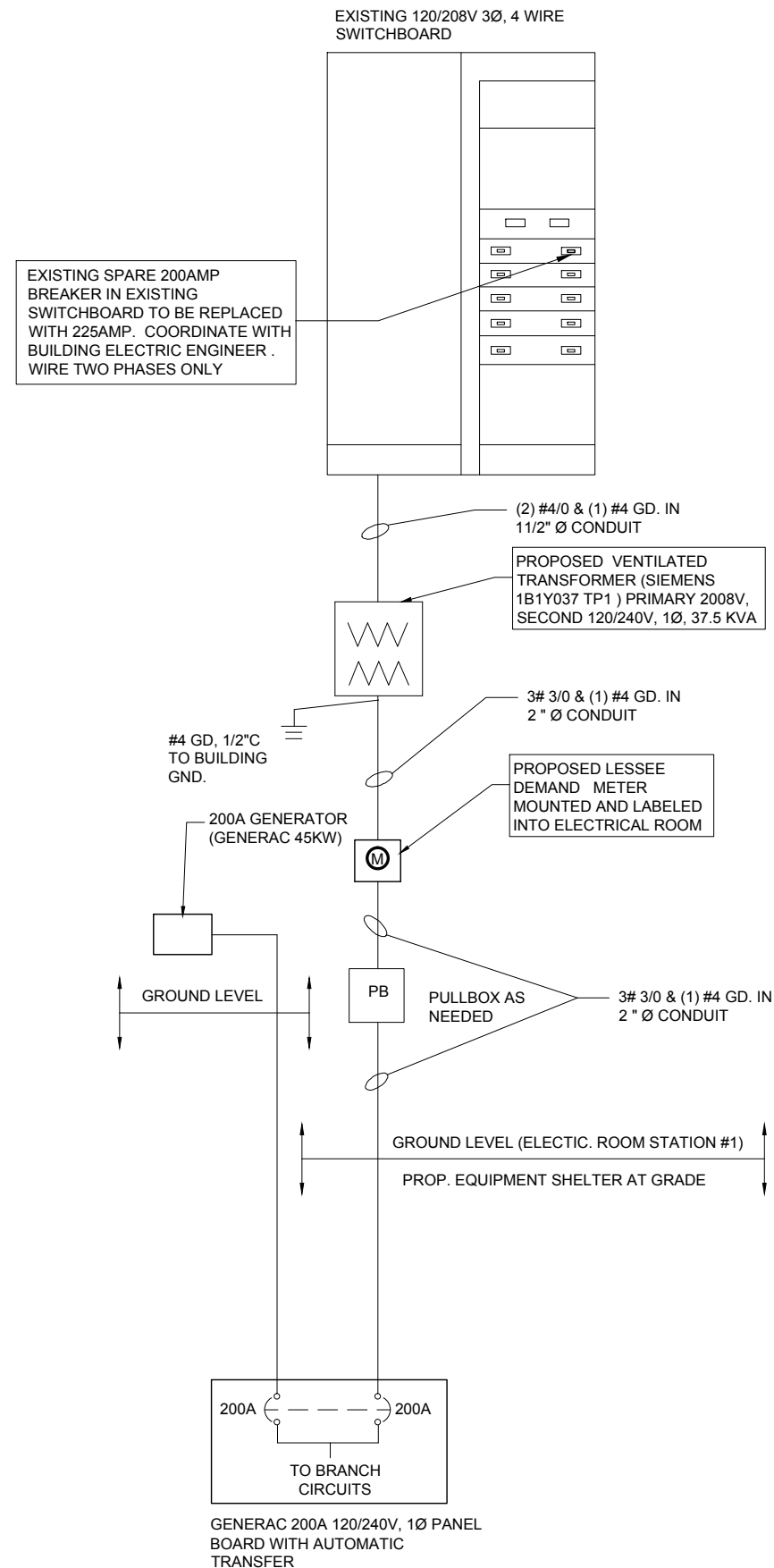
- NOTES:
1. ALL HARDWARE 18-8 STAINLESS STEEL INCLUDING BELLEVILLES. COAT ALL SURFACES WITH KOPR-SHIELD BEFORE MATING.
 2. FOR GROUND BOND TO STEEL ONLY: INSERT A DRAGON TOOTH WASHER BETWEEN LUG AND STEEL, COAT ALL SURFACES WITH KOPR-SHIELD.
 3. GROUND BARS, INSTALL BOLT HEAD TOWARD WALL
 4. ENCLOSURES, INSTALL BOLT HEAD ON OUTSIDE OF ENCLOSURE



2 GROUND LIG INSTALLATION DETAIL
N.T.S.



3 EXOTHERMIC WELD DETAILS
EXOTHERMIC AND HARGER ULTRAWELD OR APPROVED EQUAL



4 SINGLE LINE DIAGRAM
N.T.S.

CHICAGO SMSA
limited partnership
d/b/a VERIZON WIRELESS

TERRA
CONSULTING ENGINEERS, LTD.
600 BUSSE HIGHWAY
PARK RIDGE, IL 60068
PH: 847-698-6400
FAX: 847-698-6401

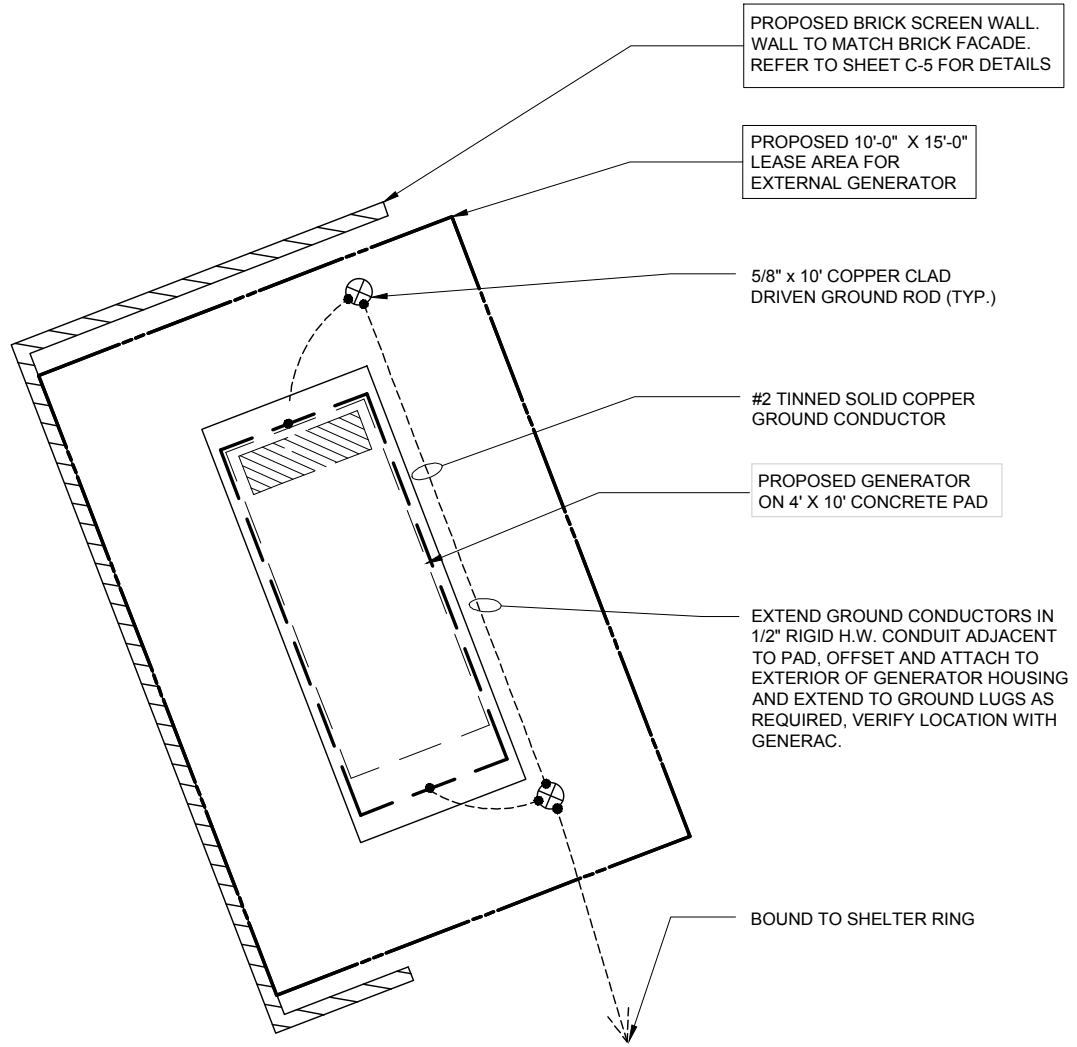
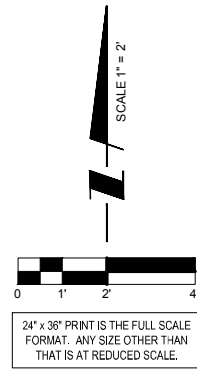
REVISIONS		DATE	BY	DESCRIPTION
NO.			LRB/LS	ISSUED FOR REVIEW
1.		03/20/15	LS	UPDATE ECR
2.		04/30/15	LS	UPDATE PER UTILITY WALK
3.		05/19/15	DMS	UPDATED NATURAL GAS
4.		07/07/15	JTM	ADDITION OF LANDSCAPE PLAN

LOC. #282639
YALE & OAKTON
800 W. OAKTON ST.
ARLINGTON HEIGHTS, IL 60004

DRAWN BY: LRB
CHECKED BY: TAZ
DATE: 11/19/14
PROJECT #: 33-1607

SHEET TITLE
ELECTRICAL AND GROUNDING DETAILS

SHEET NUMBER
E-4



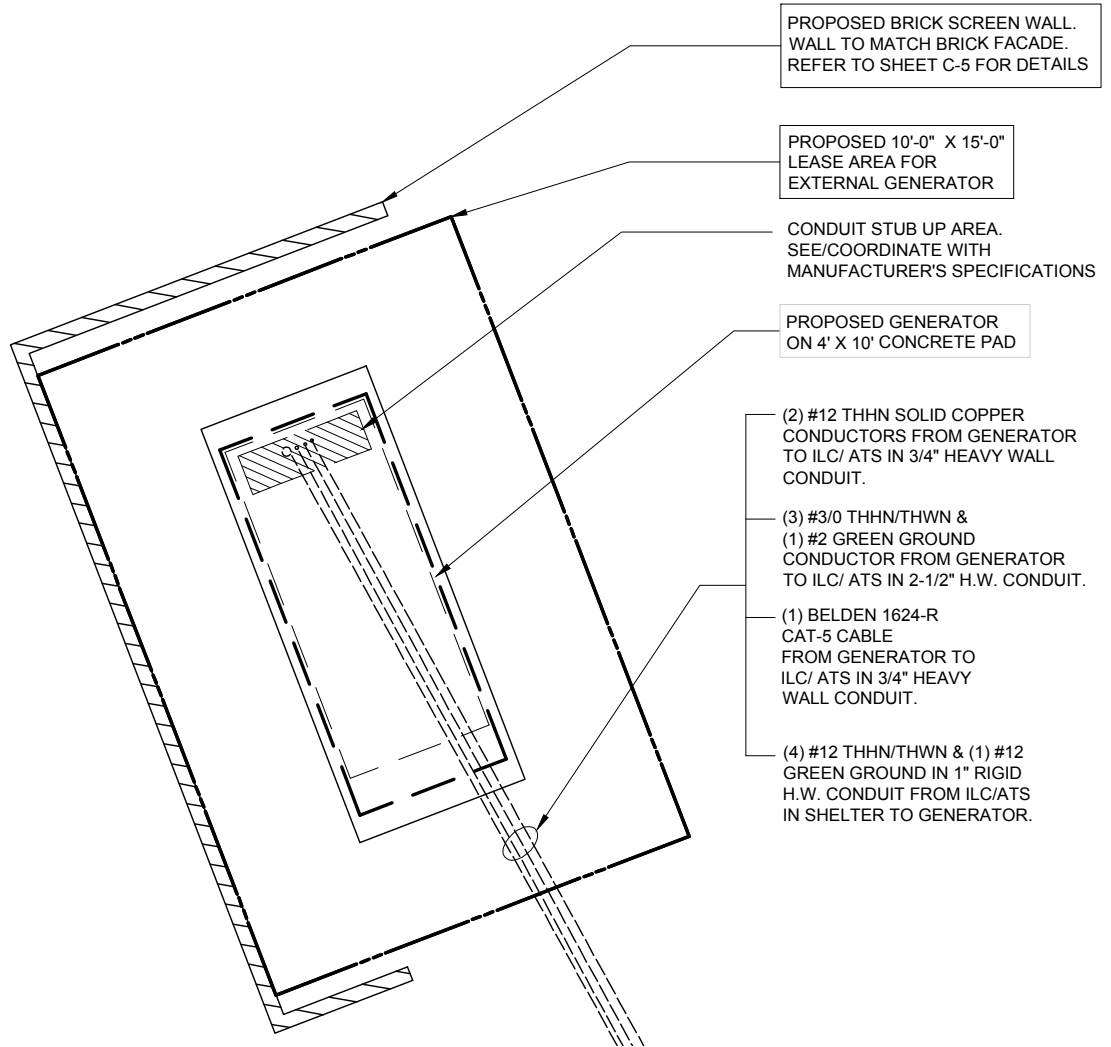
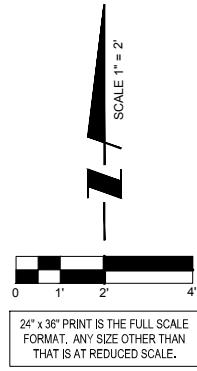
1 GENERATOR GROUNDING PLAN
SCALE: 1"=2'-0"

OPERATES 24 HOURS
A DAY 365 DAYS A YEAR

Call Before You Dig

JULIE
ILLINOIS
ONE CALL SYSTEM

CALL JULIE TOLL FREE
1(800) 892-0123
48 HOURS BEFORE
YOU DIG



2 GENERATOR ROUTING LINES
SCALE: 1"=2'-0"

OPERATES 24 HOURS
A DAY 365 DAYS A YEAR

Call Before You Dig

JULIE
ILLINOIS
ONE CALL SYSTEM

CALL JULIE TOLL FREE
1(800) 892-0123
48 HOURS BEFORE
YOU DIG

CHICAGO SMSA
limited partnership
d/b/a VERIZON WIRELESS

TERRA
CONSULTING, LTD.
600 BUSSE HIGHWAY
PARK RIDGE, IL 60068
PH: 847-698-6400
FAX: 847-698-6401

REVISIONS		DATE	BY	DESCRIPTION
NO.			LRB/LS	
1.	ISSUED FOR REVIEW	11/21/14	LRB/LS	
2.	UPDATE ECR	03/20/15	LS	
3.	UPDATE PER UTILITY WALK	04/30/15	LS	
4.	UPDATE NATURAL GAS	05/19/15	DMS	
	ADDITION OF LANDSCAPE PLAN	07/07/15	JTM	

LOC. #282639

YALE & OAKTON

800 W. OAKTON ST.
ARLINGTON
HEIGHTS, IL 60004

DRAWN BY:	LRB
CHECKED BY:	TAZ
DATE:	11/19/14
PROJECT #:	33-1607

SHEET TITLE
**GENERATOR
GROUNDING AND
ROUTING LINES**

SHEET NUMBER
E-5

DIVISION 5: METALS

SECTION 05000 - METALS

PART 1 - GENERAL

- SECTION INCLUDES: STRUCTURAL STEEL FRAMING MEMBERS, BASE PLATES, PLATES, BARS AND GROUTING UNDER BASE PLATES.
- SUBMITTALS: SHOP DRAWINGS: INDICATE SIZES, SPACING, AND LOCATIONS OF STRUCTURAL MEMBERS, OPENINGS, CONNECTIONS, CAMBERS, LOADS, AND WELDED SECTIONS.
- QUALITY ASSURANCE
 - FABRICATE STRUCTURAL STEEL MEMBERS IN ACCORDANCE WITH AISC SPECIFICATIONS FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS.
 - PERFORM DESIGN UNDER DIRECT SUPERVISION OF A PROFESSIONAL STRUCTURAL ENGINEER LICENSED IN THE STATE.

PART 2 - PRODUCTS

- MATERIALS:
 - STRUCTURAL STEEL MEMBERS: ASTM A572, GRADE 50
 - STRUCTURAL TUBING: ASTM A500, GRADE B
 - PIPE: ASTM A53, TYPE E OR S, GRADE B
 - BOLTS, NUTS, AND WASHERS: ASTM A325
 - ANCHOR BOLTS: ASTM A307
 - WELDING MATERIALS: AWS D1.1, TYPE REQUIRED FOR MATERIALS BEING WELDED
 - GROUT: NON-SHRINK TYPE, PREMIXED COMPOUND CONSISTING OF NONMETALLIC AGGREGATE, CEMENT, WATER REDUCING AND PLASTICIZING ADDITIVES, CAPABLE OF DEVELOPING A MINIMUM COMPRESSIVE STRENGTH OF 7000 psi AT 28 DAYS.
 - SHOP AND TOUCH-UP PRIMER: SSPC 15, TYPE 1, RED OXIDE
 - TOUCH-UP PRIMER FOR GALV. SURFACES: ZINC RICH TYPE
- FABRICATION: CONTINUOUSLY SEAL JOINTED MEMBERS BY CONTINUOUS WELDS. GRIND EXPOSED WELDS SMOOTH.
 - FINISH:
 - PREPARE STRUCTURAL COMPONENT SURFACES IN ACCORDANCE WITH SSPC SP-1 TO SP-10 PROCEDURES.
 - STRUCTURAL STEEL MEMBERS SHALL BE HOT DIPPED GALVANIZED.

PART 3 - EXECUTION

- EXAMINATION AND PREPARATION: VERIFY THAT THE FIELD CONDITIONS ARE ACCEPTABLE.
- ERECTION:
 - ALLOW FOR ERECTION LOADS. PROVIDE TEMPORARY BRACING TO MAINTAIN FRAMING IN ALIGNMENT UNTIL COMPLETION OF ERECTION AND INSTALLATION OF PERMANENT BRIDGING AND BRACING.
 - FIELD WELD COMPONENTS INDICATED ON SHOP DRAWINGS.
 - DO NOT FIELD CUT OR ALTER STRUCTURAL MEMBERS WITHOUT APPROVAL OF THE ARCHITECT/ENGINEER.
 - AFTER ERECTION, TOUCH-UP WELDS, ABRASIONS, AND SURFACES NOT SHOP PRIMED OR GALVANIZED WITH TOUCH-UP PRIMERS AS SPECIFIED UNDER SECTION 05000-METALS, PART 2 - PRODUCTS, H & I. SURFACES TO BE IN CONTACT WITH CONCRETE NOT INCLUDED.
- FIELD QUALITY CONTROL: FIELD INSPECTION OF MEMBERS, CONNECTIONS, WELDS AND TORQUING.

DIVISION 16: ELECTRICAL

SECTION 16050 - BASIC ELECTRICAL MATERIALS AND METHODS

- CONTRACTOR SHALL REVIEW THE CONTRACT DOCUMENTS PRIOR TO ORDERING THE ELECTRICAL EQUIPMENT AND STARTING THE ACTUAL CONSTRUCTION. CONTRACTOR SHALL ISSUE A WRITTEN NOTICE OF ALL FINDINGS TO THE ARCHITECT LISTING ANY DISCREPANCIES OR CONFLICTING INFORMATION.
- ELECTRICAL PLANS, DETAILS AND DIAGRAMS ARE DIAGRAMMATIC ONLY. VERIFY EXACT LOCATIONS AND MOUNTING HEIGHTS OF ELECTRICAL EQUIPMENT WITH OWNER PRIOR TO INSTALLATION.
- EACH CONDUCTOR OF EVERY SYSTEM SHALL BE PERMANENTLY TAGGED IN EACH PANELBOARD, PULLBOX, JUNCTION BOX, SWITCH BOX, ETC. THE TYPE OF TAGGING METHODS SHALL BE IN COMPLIANCE WITH OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (O.S.H.A.).
- ALL MATERIALS AND EQUIPMENT SHALL BE NEW AND IN GOOD WORKING 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 "J" WHERE APPLICABLE. MATERIALS SHALL MEET WITH APPROVAL OF ALL GOVERNING BODIES HAVING JURISDICTION. MATERIALS SHALL BE MANUFACTURED IN ACCORDANCE WITH APPLICABLE STANDARDS ESTABLISHED BY ANSI, NEMA, NBFU AND "UL" LISTED.
- ALL CONDUIT SHALL HAVE A PULL CORD.
- PROVIDE PROJECT MANAGER WITH ONE SET OF COMPLETE ELECTRICAL "AS INSTALLED" DRAWINGS AT THE COMPLETION OF THE JOB, SHOWING ACTUAL DIMENSIONS, ROUTINGS, AND CIRCUITS.
- ALL CIRCUIT BREAKERS, FUSES AND ELECTRICAL EQUIPMENT SHALL HAVE AN INTERRUPTING SHORT CIRCUIT CURRENT TO WHICH THEY MAY BE SUBJECTED, AND A MINIMUM OF 10,000 A.I.C.
- THE ENTIRE ELECTRICAL INSTALLATION SHALL BE GROUNDED AS REQUIRED BY UBC, NEC AND ALL APPLICABLE CODES.
- PATCH, REPAIR AND PAINT ANY AREA THAT HAS BEEN DAMAGED IN THE COURSE OF THE ELECTRICAL WORK.
- PLASTIC PLATES FOR ALL SWITCHES, RECEPTACLES, TELEPHONE AND BLANKED OUTLETS SHALL HAVE ENGRAVED LETTERING WHERE INDICATED ON THE DRAWINGS. WEATHERPROOF RECEPTACLES SHALL HAVE SIERRA #WPD-8 LIFT COVERPLATES.

SECTION 16400 - SERVICE AND DISTRIBUTION

- WIRE AND CABLE CONDUCTORS SHALL BE COPPER, 600V, TYPE THHN OR THWN, WITH A MIN. SIZE OF #12 AWG, COLOR CODED. ALL RECTIFIER DROPS SHALL BE STRANDED TO ACCEPT CRIMP CONNECTORS.
- ALL CHEMICAL GROUND RODS SHALL BE "UL" APPROVED.
- METER SOCKET AMPERES, VOLTAGE, NUMBER OF PHASES SHALL BE AS NOTED ON THE DRAWINGS. MANUFACTURED BY MILBANK OR APPROVED EQUAL, AND SHALL BE UTILITY COMPANY APPROVED.
- CONDUIT:
 - RIGID CONDUIT SHALL BE U.L. LABEL GALVANIZED ZINC COATED WITH GALVANIZED ZINC 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. RIGID CONDUIT IN CONTACT WITH EARTH SHALL BE 1/2 LAPPED WRAPPED WITH HUNTS WRAP PROCESS NO. 3.
 - ELECTRICAL METALLIC TUBING SHALL HAVE U.L. LABEL, FITTING SHALL BE GLAND RING COMPRESSION TYPE.
 - FLEXIBLE METALLIC CONDUIT SHALL HAVE U.L. LISTED LABEL AND MAY BE USED WHERE PERMITTED BY CODE. FITTINGS SHALL BE "JAKE" OR "SQUEEZE" TYPE. ALL FLEXIBLE CONDUITS SHALL HAVE FULL LENGTH GROUND WIRE.
 - ALL UNDERGROUND CONDUIT SHALL BE AS NOTED ON THE DRAWINGS AT A MINIMUM DEPTH OF 42" BELOW GRADE. IT IS REQUIRED AND WILL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR TO NOTIFY J.U.L.I.E. AT 1-800-892-0123 OR OTHER SUCH NOTIFYING AGENCY FORTY-EIGHT (48) HOURS PRIOR TO DIGGING.
- CONTRACTOR TO COORDINATE WITH UTILITY COMPANY FOR CONNECTION OF TEMPORARY AND PERMANENT POWER TO THE SITE. THE TEMPORARY POWER AND ALL HOOKUP COSTS ARE TO BE PAID BY THE CONTRACTOR.
- ALL ELECTRICAL EQUIPMENT SHALL BE LABELED WITH PERMANENT ENGRAVED PLATE LABELS WITH WHITE ON BLUE BACKGROUND LETTERING (MINIMUM LETTER HEIGHT SHALL BE ONE FORTH INCH (1/4"). NAMEPLATES SHALL BE FASTENED WITH STAINLESS STEEL SCREWS, NOT ADHESIVE.
- UPON COMPLETION OF WORK, CONDUCT CONTINUITY, SHORT CIRCUIT, AND FALL POTENTIAL GROUNDING TESTS BY AN INDEPENDENT TESTING SERVICE ENGAGED BY THE CONTRACTOR SHALL BE SUBMITTED 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.
- GROUNDING ELECTRODE SYSTEM
 - PREPARATION:
 - SURFACE PREPARATION: ALL CONNECTIONS SHALL BE MADE TO BARE METAL. ALL PAINTED SURFACES SHALL BE FIELD INSPECTED AND MODIFIED TO ENSURE PROPER CONTACT. NO WASHERS ARE ALLOWED BETWEEN THE ITEMS BEING GROUNDED. ALL CONNECTIONS ARE TO HAVE A NON-OXIDIZING AGENT APPLIED PRIOR TO INSTALLATION.
 - GROUND BAR PREPARATION: ALL COPPER GROUND BARS SHALL BE CLEANED, POLISHED AND A NON-OXIDIZING AGENT APPLIED. NO FINGERPRINTS OR DISCOLORED COPPER WILL BE PERMITTED.
 - SLEEVES: ALL GROUNDING CONDUCTORS SHALL RUN THROUGH PVC SLEEVES WHEREVER CONDUCTORS RUN THROUGH WALLS, FLOORS OR CEILINGS. IF CONDUCTORS MUST RUN THROUGH EMT, BOTH ENDS OF CONDUIT SHALL BE GROUNDED. SEAL BOTH ENDS OF CONDUIT WITH SILICONE CAULK.
 - GROUND BARS
 - ALL GROUND BARS SHALL BE ONE FORTH INCH (1/4") THICK TINNED COPPER PLATE AND OF SIZE INDICATED ON DRAWINGS.
 - ALL CONNECTIONS TO THE GROUND BAR SHALL OBSERVE THE FOLLOWING SEQUENCE:
 - BOLT-HEAD
 - 2-HOLE LUG
 - TINNED COPPER BUSS BAR
 - STAR WASHER
 - NUT
 - EXTERNAL CONNECTIONS
 - ALL BURIED GROUNDING CONNECTIONS SHALL BE MADE BY THE EXOTHERMIC WELD PROCESS. CONNECTIONS SHALL INCLUDE ALL CABLE TO CABLE, SPLICES, TEE'S, CROSSES, ETC. ALL CABLE TO GROUND RODS, GROUND ROD SPLICES AND LIGHTNING PROTECTION SYSTEMS ARE TO BE AS INDICATED. ALL MATERIALS USED (MOLDS, WELDING METAL, TOOLS, ETC.) SHALL BE BY "CADWELD" AND INSTALLED PER MANUFACTURER'S RECOMMENDED PROCEDURES.
 - ALL ABOVE GRADE GROUNDING AND BONDING CONDUCTORS SHALL BE CONNECTED BY TWO HOLE CRIMP TYPE (COMPRESSION) CONNECTIONS (EXCEPT FOR THE ACEG AND GROUND ROD) MECHANICAL CONNECTIONS, FITTINGS OR CONNECTIONS THAT DEPEND SOLELY ON SOLDER SHALL NOT BE USED. ALL CABLE TO CABLE CONNECTIONS SHALL BE HIGH PRESSURE DOUBLE CRIMP TYPE CONNECTIONS. CONNECTIONS TO STRUCTURAL STEEL SHALL BE EXOTHERMIC WELDS.
 - GROUND RODS
 - ALL GROUND RODS SHALL BE 5/8-INCH DIAMETER X 10'-0" LONG "COPPERWELD" OR APPROVED EQUAL, OF THE NUMBER AND LOCATIONS INDICATED. GROUND RODS SHALL BE DRIVEN FULL LENGTH VERTICAL IN UNDISTURBED EARTH.
 - GROUND CONDUCTORS
 - ALL GROUND CONDUCTORS SHALL BE STANDARD TINNED SOLID BARE COPPER ANNEALED, AND OF SIZE INDICATED ON DRAWINGS UNLESS NOTED OTHERWISE.
 - LUGS
 - LUGS SHALL BE 2-HOLE, LONG BARREL, STRAND COPPER UNLESS OTHERWISE SPECIFIED IN THE CONTRACT DOCUMENTS. LUGS SHALL BE THOMAS AND BETTS SERIES #548_ _BE OR EQUIVALENT

A.	535 MCM DLO	54880BE
B.	262 MCM DLO	54872BE
C.	#1/0 DLO	54862BE
D.	#4/0 THWN AND BARE	54866BE
E.	#2/0 THWN	54862BE
F.	#2 THHN	54207BE
G.	#6 DLO	54205BE
 - WHEN THE DIRECTION OF THE CONDUCTOR MUST CHANGE, IT SHALL BE DONE GRADUALLY. THE CURVATURE OF THE TURN SHALL BE DONE IN ACCORDANCE WITH THE FOLLOWING CHART:

GROUNDING CONDUCTOR SIZE	MINIMUM BENDING RADIUS TO INSIDE EDGE
NO. 6 AWG TO NO. 4 AWG	6 INCHES
NO. 2 AWG TO NO. 1/0 AWG	8 INCHES
NO. 2/0 AWG TO 4/0 MCM	12 INCHES
250 MCM TO 750 MCM	24 INCHES

G. GROUND RING

- THE EXTERNAL GROUND RING ENCIRCLING THE TOWER (IF APPLICABLE) AND BETWEEN THE EQUIPMENT SHELTER PLATFORM ANCHORS SHALL BE MINIMUM NO. 2 A.W.G. SOLID TINNED BARE COPPER CONDUCTOR IN DIRECT CONTACT WITH THE EARTH AT THE DEPTH INDICATED ON THE DRAWINGS. CONDUCTOR BENDS SHALL HAVE A MINIMUM BENDING RADIUS OF EIGHT INCHES (8").
- ALL EXTERNAL GROUND RINGS ARE TO BE JOINED TOGETHER AND ALL CONNECTIONS MUST BE CADWELDED. NO LUGS OR CLAMPS WILL BE ACCEPTED.

H. FENCE/GATE

- GROUND EACH GATE POST, CORNER POST AND GATE AS INDICATED ON DRAWING GROUND CONNECTIONS TO FENCE POSTS AND ALL OTHER CONNECTIONS FOR THE GROUND GRID SYSTEM SHALL BE MADE BY EXOTHERMIC WELD PROCESS, AND INSTALLED PER MANUFACTURER'S RECOMMENDATIONS AND PROCEDURES, AND SPRAYED WITH COLD-GALVANIZED PAINT.

9. I.E.E.E. FALL POTENTIAL TESTS

A. FOR RAW LAND SITE

- GROUND TESTS SHALL BE PERFORMED AS INDICATED ON DRAWINGS. A BIDDLE GROUND OHMER OR THE METHOD OF USING TWO AUXILIARY GROUND RODS (AS DESCRIBED IN I.E.E.E. STANDARDS NO. 81-1983, PART 1) MAY BE USED. THE I.E.E.E. METHOD REQUIRES THE USE OF AN A.C. TEST CURRENT. THE AUXILIARY TEST RODS MUST BE SUFFICIENTLY FAR AWAY FROM THE ROD UNDER TEST SO THAT THE REGIONS IN WHICH THEIR RESISTANCE IS LOCALIZED DO NOT OVERLAP. THE TEST POINT WILL BE THE GROUND ROD AND WILL CONSIST OF THE THREE POINT FALL OF POTENTIAL MEGGER TEST METHOD, USING THE BIDDLE NULL-BALANCE EARTH TESTER (MEGGER #250220-2 OR EQUIVALENT)
- CONTRACTOR TO CONDUCT GROUND RESISTANCE TEST IN THE FORMAT AS FOLLOWS:

B. EQUIPMENT PAD

- FIRST TEST - SHALL BE WITH FOUR GROUND RODS INSTALLED, ONE AT EACH CORNER OF THE PAD BUT NOT CONNECTED TO THE MAIN GROUNDING BUS. FURNISH WIRE TO CONNECT (TEMPORARY CLAMP) ALL FOUR GROUND RODS TOGETHER TO MAKE A SYSTEM TEST AFTER EACH ROD IS INDIVIDUALLY TESTED. IF ANY INDIVIDUAL ROD TESTS 25 OHMS OR MORE, THE ELECTRICAL CONTRACTOR AND OWNER'S REPRESENTATIVE SHOULD BE NOTIFIED SO THAT THE ROD CAN BE DRIVEN DEEPER UNTIL ALL FOUR RODS HAVE A RESISTANCE OF 10 OHMS OR LESS ON A DRY DAY.
- SECOND TEST - SHALL BE WITH THE GROUND RODS CONNECTED, WITH DRY SOIL AND WHEN NO STANDING WATER HAS BEEN PRESENT FOR THE PAST TEN (10) DAYS. THE MAXIMUM ALLOWABLE READING IS 5 OHMS TO GROUND. IF THE RESISTANCE OF THE ENTIRE SYSTEM EXCEEDS 5 OHMS, NOTIFY THE CONTRACTOR AND OWNER'S REPRESENTATIVE SO THAT ADDITIONAL AND/OR DEEPER RODS CAN BE INSTALLED.

C. TOWER

- FIRST TEST - SHALL BE WITH THREE GROUND RODS INSTALLED (MINIMUM), EQUALLY SPACED AROUND THE TOWER FOUNDATION, BUT NOT CONNECTED TO THE SHELTER PAD EXTERNAL GROUND RING. FURNISH WIRE TO CONNECT (TEMPORARY CLAMP) ALL THREE GROUND RODS TOGETHER TO MAKE A SYSTEM TEST AFTER EACH ROD IS INDIVIDUALLY TESTED. IF ANY INDIVIDUAL ROD TESTS 25 OHMS OR MORE, NOTIFY THE CONTRACTOR AND OWNER'S REPRESENTATIVE SO THAT THE ROD CAN BE DRIVEN DEEPER UNTIL ALL THREE (3) RODS HAVE A RESISTANCE OF 10 OHMS OR LESS ON A DRY DAY.
- SECOND TEST - SHALL BE WITH THE GROUND RODS CONNECTED, WITH DRY SOIL AND WHEN NO STANDING WATER HAS BEEN PRESENT FOR THE PAST TEN (10) DAYS. THE MAXIMUM ALLOWABLE READING IS 5 OHMS TO GROUND. IF THE RESISTANCE OF THE ENTIRE SYSTEM EXCEEDS 5 OHMS THE ELECTRICAL CONTRACTOR AND OWNER'S REPRESENTATIVE SHOULD BE NOTIFIED SO THAT EITHER ADDITIONAL AND/OR DEEPER RODS CAN BE INSTALLED.

D. EQUIPMENT PAD AND TOWER

- AFTER THE EQUIPMENT PAD AND TOWER GROUND RESISTANCE TEST IS COMPLETED, CONTRACTOR SHALL TIE EQUIPMENT PAD EXTERNAL GROUND RING AND TOWER EXTERNAL GROUND RING TOGETHER. AFTER FIRST AND SECOND TEST ALL CONNECTIONS MUST BE MADE USING EXOTHERMIC WELD. NO LUGS OR CLAMPS WILL BE ACCEPTED.
- AFTER ALL THE EXTERNAL GROUND RINGS ARE TIED TOGETHER, COMPLETE A MEGGER CHECK OF THE GROUND SYSTEM SHOULD BE DONE. THE MAXIMUM ALLOWABLE LEADING IS 5 OHMS TO GROUND.

10. GROUNDING RESISTANCE TEST REPORT

UPON COMPLETION OF THE TESTING FOR EACH SITE, A TEST REPORT SHOWING RESISTANCE IN OHMS WITH AUXILIARY POTENTIAL ELECTRODES AT 5 FEET AND 10 FEET INTERVALS UNTIL THE AVERAGE RESISTANCE STARTS INCREASING AND ALSO NOTE THAT 10-15 PHOTOS MUST BE TAKEN TO PROOF ENTIRE EXTERNAL GROUND RING SYSTEM BEFORE BACKFILL. TWO (2) SETS OF TEST DOCUMENTS ARE OF THE INDEPENDENT TESTING SERVICE TO BE BOUND AND SUBMITTED WITHIN ONE (1) WEEK OF WORK COMPLETION.

SECTION 16503 - POLES, POSTS, AND STANDARDS (SINGLE MAST AND SELF SUPPORTING TOWERS)

1. GENERAL

- LIGHTNING ROD AND EXTENSION PIPE INCLUDING ALL APPURTENANCES, TO BE FURNISHED BY OWNER, IF REQUIRED.
- PROVIDE TEMPORARY LIGHTING FOR TOWER AS PER FAA REGULATIONS DURING CONSTRUCTION, IF REQUIRED.
- GROUNDING: GROUND TOWER WITH A MINIMUM OF #2 AWG TINNED SOLID BARE COPPER CONDUCTOR CADWELDED TO TOWER BASE PLATE. TWO (2) GROUNDING LEADS PER TOWER BASE PLATE. NO EXOTHERMIC WELDS SHALL BE ATTACHED DIRECTLY TO THE MONOPOLE TOWER SHAFT.

SECTION 16745 - TELECOMMUNICATIONS WIRING COMPONENTS (COAXIAL ANTENNA CABLE)

1. GENERAL

- ALL MATERIALS, PRODUCTS OR PROCEDURES INCORPORATED INTO WORK SHALL BE NEW AND OF STANDARD COMMERCIAL QUALITY.
- CERTAIN MATERIALS AND PRODUCTS WILL BE SUPPLIED BY THE OWNER (REFER TO GENERAL CONDITIONS FOR THE LIST OF OWNER FURNISHED EQUIPMENT, MATERIALS AND SUPPLIES FOR THESE ITEMS). THE CONTRACTOR IS RESPONSIBLE FOR PICKUP AND DELIVERY OF ALL SUCH MATERIALS
- ALL OTHER MATERIALS AND PRODUCTS SPECIFIED IN THE CONTRACT DOCUMENTS SHALL BE SUPPLIED BY THE CONTRACTOR.

2. MATERIALS:

A. COAXIAL CABLE:

- INSTALL COAXIAL CABLE AND TERMINATIONS BETWEEN ANTENNAS AND EQUIPMENT PER MANUFACTURER'S RECOMMENDATIONS WITH COAXIAL CABLES SUPPORTED AT NO MORE THAN 3'-0" O.C. WEATHERPROOF ALL CONNECTORS BETWEEN THE ANTENNA AND EQUIPMENT PER MANUFACTURER'S REQUIREMENTS. TERMINATE ALL COAXIAL CABLE THREE FEET (3') IN EXCESS OF EQUIPMENT LOCATION UNLESS OTHERWISE STATED.
- ALL COAX RUN LENGTHS GREATER THAN 175 FEET SHALL BE 1-5/8", ALL COAX. RUN LENGTH BETWEEN 101 FEET AND 174 FEET SHALL BE 1-1/4", AND IN LENGTH LESS THAN OR EQUAL TO 100 FEET SHALL BE 7/8".

3. ANTENNA AND COAXIAL CABLE GROUNDING

- ALL COAXIAL CABLE GROUNDING KITS ARE TO BE INSTALLED ON STRAIGHT RUNS OF COAXIAL CABLE (NOT WITHIN BENDS)

4. COAXIAL CABLE IDENTIFICATION

- TO PROVIDE EASY IDENTIFICATION AND UNIFORM MARKING OF ANTENNA CABLING, PLASTIC TAGS SHALL BE USED AT THE FOLLOWING LOCATIONS:
 - FIRST LOCATION IS AT THE END OF THE COAX NEAREST THE ANTENNA (WHERE THE COAXIAL CABLE AND JUMPER ARE CONNECTED).
 - SECOND LOCATION IS INSIDE THE EQUIPMENT SHELTER NEAR THE WAVEGUIDE ENTRY PORT.
- USE ANDREW CABLE TIES (PT.# 27290) TO SECURE IDENTIFICATION TAGS.

5. TESTING

LESSEE SHALL PROVIDE AN INDEPENDENT TESTING AGENCY TO PERFORM THE COAXIAL SWEEP TEST & REPORT. THE CONTRACTOR IS TO PROVIDE ONE CLIMBER / QUALIFIED PERSONNEL TO ASSIST IN ANY REPAIRS AND WEATHERPROOFING ONCE THE TEST IS COMPLETE. THE CONTRACTOR IS TO PROVIDE LESSEE WITH A MINIMUM OF 48 HOURS NOTICE PRIOR TO THE TIME OF THE SWEEP TEST.

REVISIONS

NO	DESCRIPTION	DATE	BY	LRB/LS	LS	LS	DMS	JTM
1	ISSUED FOR REVIEW	11/21/14						
2	UPDATE ECR	03/20/15						
3	UPDATE PER UTILITY WALK	04/30/15						
4	UPDATED NATURAL GAS ADDITION OF LANDSCAPE PLAN	05/19/15						
		07/07/15						

LOC. #282639

YALE & OAKTON

800 W. OAKTON ST. ARLINGTON HEIGHTS, IL 60004

DRAWN BY:	LRB
CHECKED BY:	TAZ
DATE:	11/19/14
PROJECT #:	33-1607

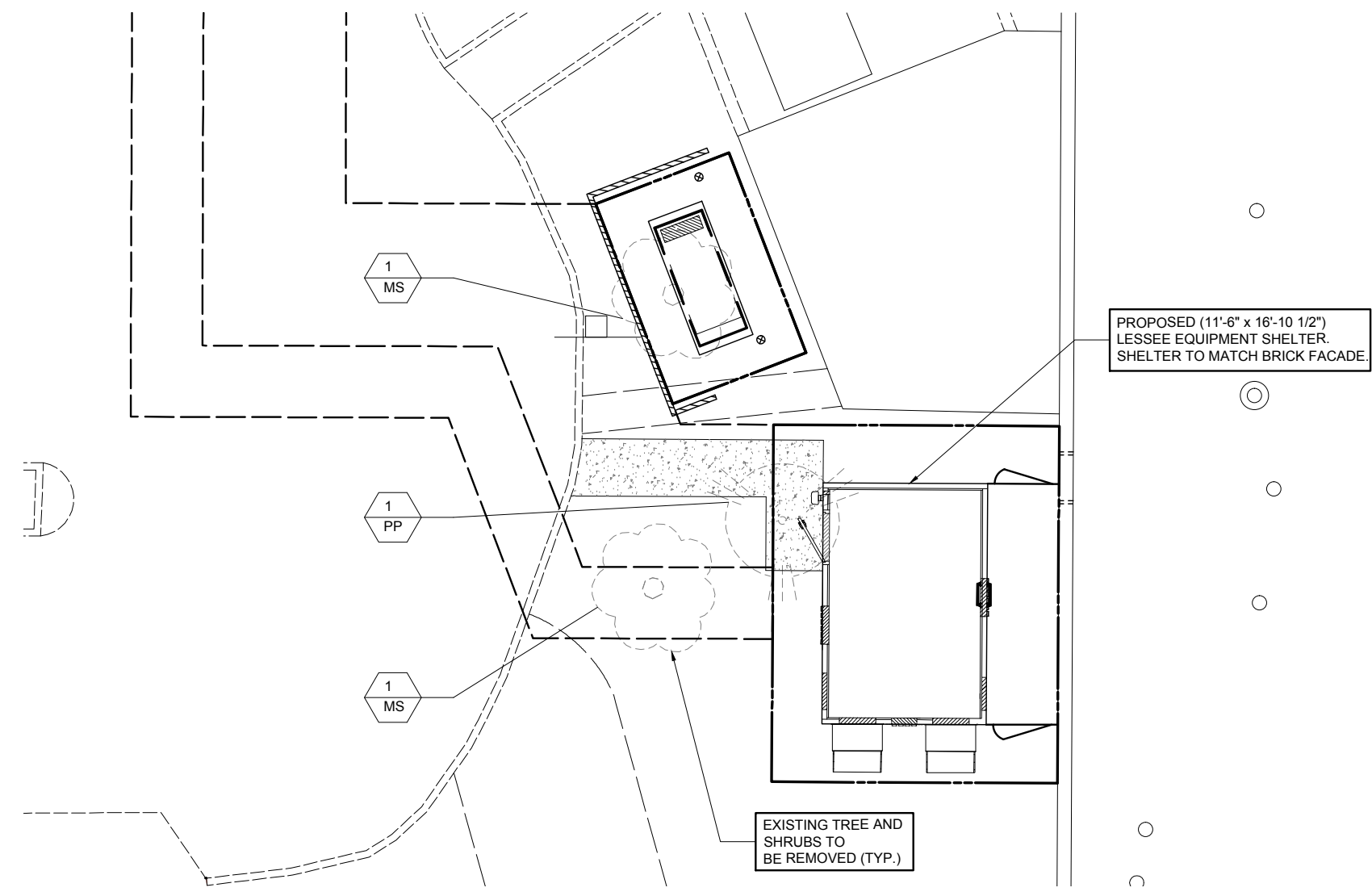
SHEET TITLE
SPECIFICATIONS

SHEET NUMBER

SP-2

CHICAGO SMSA
limited partnership
d/b/a VERIZON WIRELESS





NO.	DESCRIPTION	DATE	BY
	ISSUED FOR REVIEW	11/21/14	LRB/LS
1.	UPDATE ECR	03/20/15	LS
2.	UPDATE PER UTILITY WALK	04/30/15	LS
3.	UPDATED NATURAL GAS	05/19/15	DMS
4.	ADDITION OF LANDSCAPE PLAN	07/07/15	JTM

LOC. #282639
YALE & OAKTON
800 W. OAKTON ST.
ARLINGTON
HEIGHTS, IL 60004

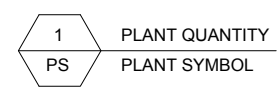
DRAWN BY:	LRB
CHECKED BY:	TAZ
DATE:	11/19/14
PROJECT #:	33-1607

SHEET TITLE
TREE SURVEY

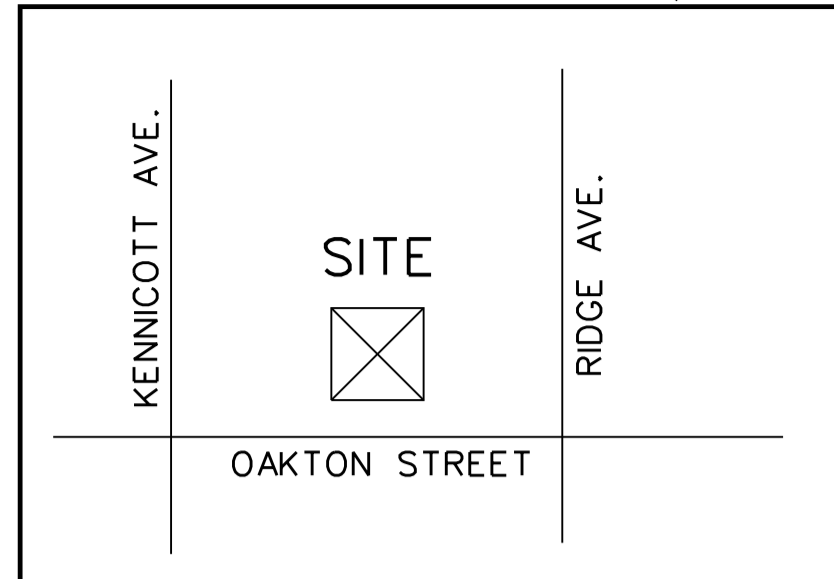
SHEET NUMBER
L-1

TREE LIST

SYMBOL	BOTANICAL NAME	COMMON NAME	QUANTITY	SIZE	DIAMETER @ 6" ABOVE GRADE
MS	MALUS SPP.	CRABAPPLE	2	APPROX. 20'	5"
PP	PICEA PUNGENS	COLORADO SPRUCE	1	APPROX. 20'	6"



VICINITY MAP
(ARLINGTON HEIGHTS, IL)



SURVEYORS NOTES:

1. BEARINGS BASED UPON STATE PLANE COORDINATES ILLINOIS EAST ZONE.
2. EXHIBIT BASED ON FIELD WORK COMPLETED 03-21-2014.
3. ALL UTILITIES AS SHOWN ARE APPROXIMATE LOCATIONS DERIVED FROM ACTUAL MEASUREMENTS. THEY SHOULD NOT BE INTERPRETED TO BE EXACT LOCATION NOR SHOULD IT BE ASSUMED THAT THEY ARE THE ONLY UTILITIES IN THE AREA.
4. HORIZONTAL (NAD 83) & VERTICAL (NAVD 88) BASED C.O.R.S NETWORK.
5. CHICAGO TITLE INSURANCE COMPANY COMMITMENT FOR TITLE INSURANCE ORDER NO. 1401 008963809 01 EFFECTIVE DATE JUNE 30, 2014 WAS REVIEWED FOR THIS EXHIBIT.

PROPOSED 15' ACCESS EASEMENT LEGAL DESCRIPTION:

A 15.00 FOOT WIDE ACCESS EASEMENT, 7.50' FEET ON EACH SIDE OF THE FOLLOWING DESCRIBED LINE OVER THAT PART OF THE SOUTH 1/2 OF THE WEST 1/2 OF THE SOUTHEAST 1/4 OF SECTION 19, TOWNSHIP 42 NORTH, RANGE 11, EAST OF THE THIRD PRINCIPAL MERIDIAN DESCRIBED AS FOLLOWS:
COMMENCING AT THE INTERSECTION OF THE EAST RIGHT-OF-WAY LINE OF KENNICOTT AVENUE DEDICATED PER DOCUMENT 20303670 AND THE NORTH LINE OF A STRIP OF LAND 8 FEET WIDE TAKEN BY JUDGMENT ORDER, CASE NUMBER 62C05215, FILED IN THE OFFICE OF THE REGISTRAR OF TITLES ON AUGUST 1, 1966 AS DOCUMENT LR-2284261; THENCE NORTH 00 DEGREES 09 MINUTES 51 SECONDS WEST ALONG SAID EAST RIGHT-OF-WAY LINE 465.11 FEET TO THE POINT OF BEGINNING; THENCE NORTH 89 DEGREES 50 MINUTES 09 SECONDS EAST 25.00 FEET; THENCE EASTERLY ALONG A CURVE TO THE LEFT, HAVING A RADIUS OF 223.03 FEET, AN ARC DISTANCE OF 112.78 FEET; THENCE NORTH 60 DEGREES 52 MINUTES 49 SECONDS EAST 81.25 FEET; THENCE EASTERLY ALONG A CURVE TO THE RIGHT, HAVING A RADIUS OF 263.62 FEET, AN ARC DISTANCE OF 111.73 FEET; THENCE NORTH 85 DEGREES 08 MINUTES 43 SECONDS EAST 41.44 FEET; THENCE EASTERLY ALONG A CURVE TO THE LEFT, HAVING A RADIUS OF 355.60 FEET, AN ARC DISTANCE OF 33.17 FEET; THENCE SOUTH 00 DEGREES 11 MINUTES 50 SECONDS WEST 155.53 FEET; THENCE SOUTH 89 DEGREES 48 MINUTES 10 SECONDS EAST 19.87 FEET; THENCE SOUTH 21 DEGREES 01 MINUTES 34 SECONDS EAST 16.53 FEET; THENCE SOUTH 89 DEGREES 48 MINUTES 10 SECONDS EAST 11.39 FEET TO THE POINT OF TERMINUS, IN COOK COUNTY, ILLINOIS.

PROPOSED 20.00' x 25.00' LEASE AREA LEGAL DESCRIPTION:

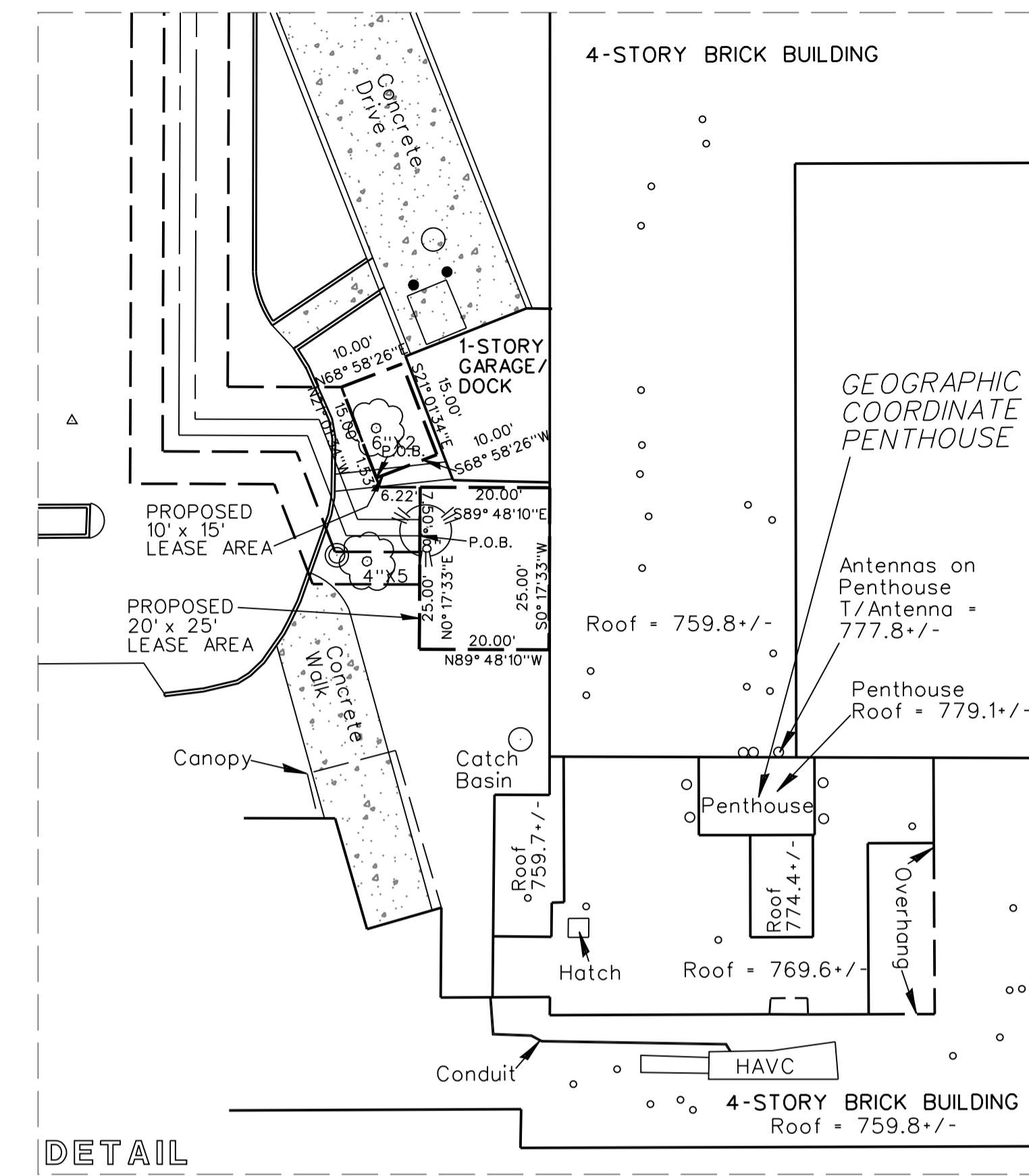
THAT PART OF THE SOUTH 1/2 OF THE WEST 1/2 OF THE SOUTHEAST 1/4 OF SECTION 19, TOWNSHIP 42 NORTH, RANGE 11, EAST OF THE THIRD PRINCIPAL MERIDIAN DESCRIBED AS FOLLOWS:
COMMENCING AT THE INTERSECTION OF THE EAST RIGHT-OF-WAY LINE OF KENNICOTT AVENUE DEDICATED PER DOCUMENT 20303670 AND THE NORTH LINE OF A STRIP OF LAND 8 FEET WIDE TAKEN BY JUDGMENT ORDER, CASE NUMBER 62C05215, FILED IN THE OFFICE OF THE REGISTRAR OF TITLES ON AUGUST 1, 1966 AS DOCUMENT LR-2284261; THENCE NORTH 00 DEGREES 09 MINUTES 51 SECONDS WEST ALONG SAID EAST RIGHT-OF-WAY LINE 465.11 FEET; THENCE NORTH 89 DEGREES 50 MINUTES 09 SECONDS EAST 25.00 FEET; THENCE EASTERLY ALONG A CURVE TO THE LEFT, HAVING A RADIUS OF 223.03 FEET, AN ARC DISTANCE OF 112.78 FEET; THENCE NORTH 60 DEGREES 52 MINUTES 49 SECONDS EAST 81.25 FEET; THENCE EASTERLY ALONG A CURVE TO THE RIGHT, HAVING A RADIUS OF 263.62 FEET, AN ARC DISTANCE OF 111.73 FEET; THENCE NORTH 85 DEGREES 08 MINUTES 43 SECONDS EAST 41.44 FEET; THENCE EASTERLY ALONG A CURVE TO THE LEFT, HAVING A RADIUS OF 355.60 FEET, AN ARC DISTANCE OF 33.17 FEET; THENCE SOUTH 00 DEGREES 11 MINUTES 50 SECONDS WEST 155.53 FEET; THENCE SOUTH 89 DEGREES 48 MINUTES 10 SECONDS EAST 19.87 FEET; THENCE SOUTH 21 DEGREES 01 MINUTES 34 SECONDS EAST 16.53 FEET; THENCE SOUTH 89 DEGREES 48 MINUTES 10 SECONDS EAST 11.39 FEET TO THE POINT OF BEGINNING; THENCE NORTH 00 DEGREES 17 MINUTES 33 SECONDS EAST 7.50 FEET; THENCE SOUTH 89 DEGREES 48 MINUTES 10 SECONDS EAST 20.00 FEET; THENCE SOUTH 00 DEGREES 17 MINUTES 33 SECONDS WEST 25.00 FEET; THENCE NORTH 89 DEGREES 48 MINUTES 10 SECONDS WEST 20.00 FEET; THENCE NORTH 00 DEGREES 17 MINUTES 33 SECONDS EAST 17.50 FEET TO THE POINT OF BEGINNING, IN COOK COUNTY, ILLINOIS, CONTAINING 500 SQUARE FEET, MORE OR LESS

PROPOSED 10.00' x 15.00' LEASE AREA LEGAL DESCRIPTION:

THAT PART OF THE SOUTH 1/2 OF THE WEST 1/2 OF THE SOUTHEAST 1/4 OF SECTION 19, TOWNSHIP 42 NORTH, RANGE 11, EAST OF THE THIRD PRINCIPAL MERIDIAN DESCRIBED AS FOLLOWS:
COMMENCING AT THE INTERSECTION OF THE EAST RIGHT-OF-WAY LINE OF KENNICOTT AVENUE DEDICATED PER DOCUMENT 20303670 AND THE NORTH LINE OF A STRIP OF LAND 8 FEET WIDE TAKEN BY JUDGMENT ORDER, CASE NUMBER 62C05215, FILED IN THE OFFICE OF THE REGISTRAR OF TITLES ON AUGUST 1, 1966 AS DOCUMENT LR-2284261; THENCE NORTH 00 DEGREES 09 MINUTES 51 SECONDS WEST ALONG SAID EAST RIGHT-OF-WAY LINE 465.11 FEET; THENCE NORTH 89 DEGREES 50 MINUTES 09 SECONDS EAST 25.00 FEET; THENCE EASTERLY ALONG A CURVE TO THE LEFT, HAVING A RADIUS OF 223.03 FEET, AN ARC DISTANCE OF 112.78 FEET; THENCE NORTH 60 DEGREES 52 MINUTES 49 SECONDS EAST 81.25 FEET; THENCE EASTERLY ALONG A CURVE TO THE RIGHT, HAVING A RADIUS OF 263.62 FEET, AN ARC DISTANCE OF 111.73 FEET; THENCE NORTH 85 DEGREES 08 MINUTES 43 SECONDS EAST 41.44 FEET; THENCE EASTERLY ALONG A CURVE TO THE LEFT, HAVING A RADIUS OF 355.60 FEET, AN ARC DISTANCE OF 33.17 FEET; THENCE SOUTH 00 DEGREES 11 MINUTES 50 SECONDS WEST 155.53 FEET; THENCE SOUTH 89 DEGREES 48 MINUTES 10 SECONDS EAST 19.87 FEET; THENCE SOUTH 21 DEGREES 01 MINUTES 34 SECONDS EAST 16.53 FEET; THENCE SOUTH 89 DEGREES 48 MINUTES 10 SECONDS EAST 11.39 FEET; THENCE NORTH 00 DEGREES 17 MINUTES 33 SECONDS EAST 7.50 FEET; THENCE NORTH 89 DEGREES 48 MINUTES 10 SECONDS WEST 6.22 FEET; THENCE NORTH 21 DEGREES 01 MINUTES 34 SECONDS WEST 15.3 FEET TO THE POINT OF BEGINNING; THENCE CONTINUING NORTH 21 DEGREES 01 MINUTES 34 SECONDS WEST 15.00 FEET; THENCE NORTH 89 DEGREES 58 MINUTES 26 SECONDS EAST 10.00 FEET; THENCE SOUTH 21 DEGREES 01 MINUTES 34 SECONDS EAST 15.00 FEET; THENCE SOUTH 68 DEGREES 58 MINUTES 26 SECONDS WEST 10.00 FEET TO THE POINT OF BEGINNING, IN COOK COUNTY, ILLINOIS, CONTAINING 150 SQUARE FEET, MORE OR LESS

PROPOSED 10' ACCESS EASEMENT LEGAL DESCRIPTION:

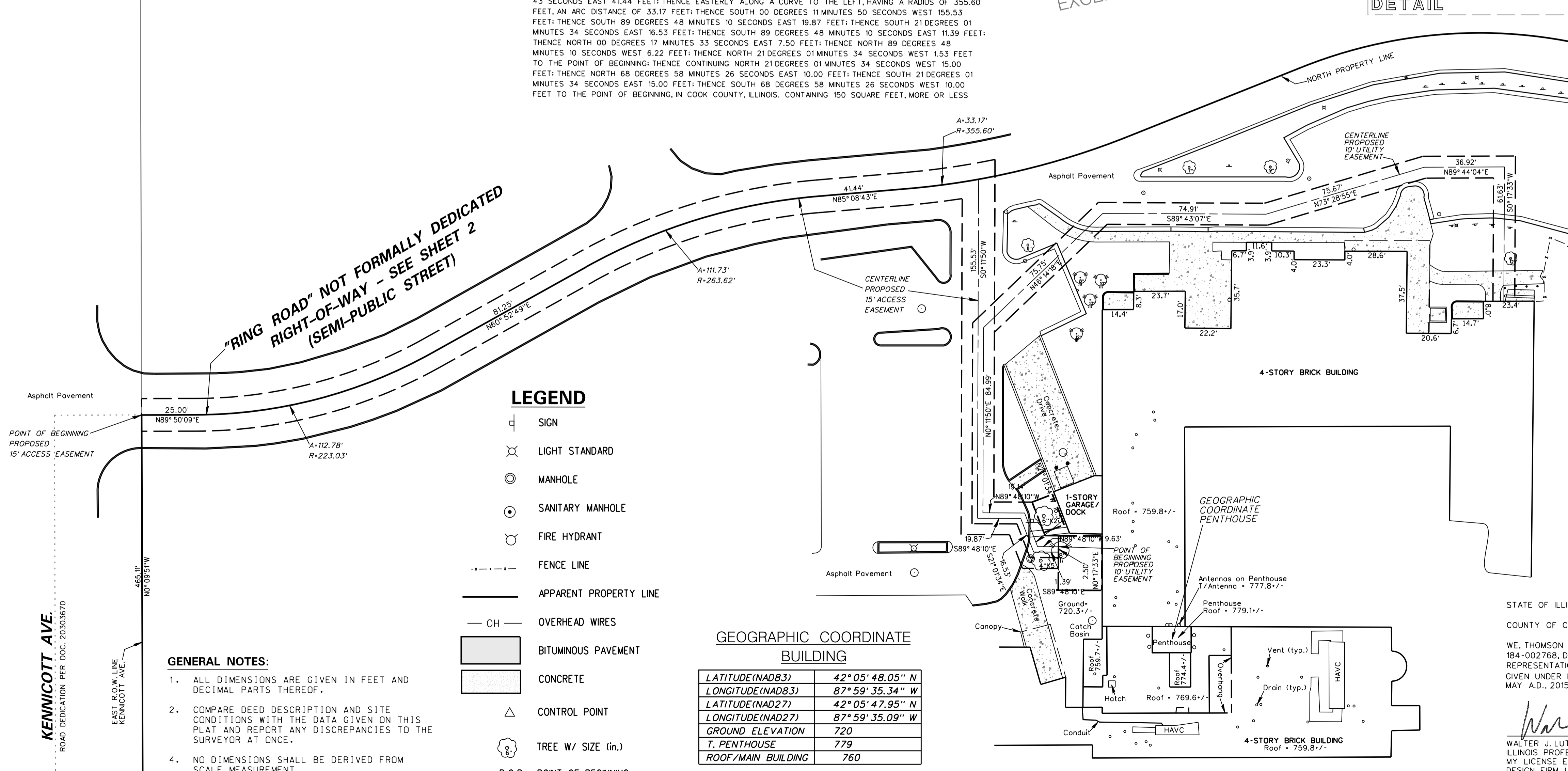
A 10.00 FOOT WIDE UTILITY EASEMENT, 5.00' FEET ON EACH SIDE OF THE FOLLOWING DESCRIBED LINE OVER THAT PART OF THE SOUTH 1/2 OF THE WEST 1/2 OF THE SOUTHEAST 1/4 OF SECTION 19, TOWNSHIP 42 NORTH, RANGE 11, EAST OF THE THIRD PRINCIPAL MERIDIAN DESCRIBED AS FOLLOWS:
COMMENCING AT THE INTERSECTION OF THE EAST RIGHT-OF-WAY LINE OF KENNICOTT AVENUE DEDICATED PER DOCUMENT 20303670 AND THE NORTH LINE OF A STRIP OF LAND 8 FEET WIDE TAKEN BY JUDGMENT ORDER, CASE NUMBER 62C05215, FILED IN THE OFFICE OF THE REGISTRAR OF TITLES ON AUGUST 1, 1966 AS DOCUMENT LR-2284261; THENCE NORTH 00 DEGREES 09 MINUTES 51 SECONDS WEST ALONG SAID EAST RIGHT-OF-WAY LINE 465.11 FEET; THENCE NORTH 89 DEGREES 50 MINUTES 09 SECONDS EAST 25.00 FEET; THENCE EASTERLY ALONG A CURVE TO THE LEFT, HAVING A RADIUS OF 223.03 FEET, AN ARC DISTANCE OF 112.78 FEET; THENCE NORTH 60 DEGREES 52 MINUTES 49 SECONDS EAST 81.25 FEET; THENCE EASTERLY ALONG A CURVE TO THE RIGHT, HAVING A RADIUS OF 263.62 FEET, AN ARC DISTANCE OF 111.73 FEET; THENCE NORTH 85 DEGREES 08 MINUTES 43 SECONDS EAST 41.44 FEET; THENCE EASTERLY ALONG A CURVE TO THE LEFT, HAVING A RADIUS OF 355.60 FEET, AN ARC DISTANCE OF 33.17 FEET; THENCE SOUTH 00 DEGREES 11 MINUTES 50 SECONDS WEST 155.53 FEET; THENCE SOUTH 89 DEGREES 48 MINUTES 10 SECONDS EAST 19.87 FEET; THENCE SOUTH 21 DEGREES 01 MINUTES 34 SECONDS EAST 16.53 FEET; THENCE SOUTH 89 DEGREES 48 MINUTES 10 SECONDS EAST 11.39 FEET; THENCE NORTH 00 DEGREES 17 MINUTES 33 SECONDS EAST 2.50 FEET TO THE POINT OF BEGINNING; THENCE NORTH 89 DEGREES 48 MINUTES 10 SECONDS WEST 9.63 FEET; THENCE NORTH 21 DEGREES 01 MINUTES 34 SECONDS WEST 16.53 FEET; THENCE NORTH 89 DEGREES 48 MINUTES 10 SECONDS WEST 19.14 FEET; THENCE NORTH 00 DEGREES 11 MINUTES 50 SECONDS EAST 84.99 FEET; THENCE NORTH 46 DEGREES 14 MINUTES 18 SECONDS EAST 75.75 FEET; THENCE SOUTH 89 DEGREES 43 MINUTES 07 SECONDS EAST 74.91 FEET; THENCE NORTH 73 DEGREES 28 MINUTES 55 SECONDS EAST 75.67 FEET; THENCE NORTH 89 DEGREES 44 MINUTES 04 SECONDS EAST 36.92 FEET; THENCE SOUTH 00 DEGREES 17 MINUTES 33 SECONDS WEST 61.63 FEET TO THE POINT OF TERMINUS, IN COOK COUNTY, ILLINOIS.



EXCEPTION - NOT INCLUDED

SUBDIVISION

"RING ROAD" NOT FORMALLY DEDICATED
RIGHT-OF-WAY - SEE SHEET 2
(SEMI-PUBLIC STREET)



LEGEND

- SIGN
- ⊗ LIGHT STANDARD
- ⊙ MANHOLE
- ⊙ SANITARY MANHOLE
- ⊙ FIRE HYDRANT
- - - FENCE LINE
- - - APPARENT PROPERTY LINE
- OH - OVERHEAD WIRES
- BITUMINOUS PAVEMENT
- CONCRETE
- △ CONTROL POINT
- ⊗ TREE W/ SIZE (in.)
- P.O.B. POINT OF BEGINNING

GEOGRAPHIC COORDINATE BUILDING

LATITUDE(NAD83)	42° 05' 48.05" N
LONGITUDE(NAD83)	87° 59' 35.34" W
LATITUDE(NAD27)	42° 05' 47.95" N
LONGITUDE(NAD27)	87° 59' 35.09" W
GROUND ELEVATION	720
T. PENTHOUSE	779
ROOF/MAIN BUILDING	760

GENERAL NOTES:

1. ALL DIMENSIONS ARE GIVEN IN FEET AND DECIMAL PARTS THEREOF.
2. COMPARE DEED DESCRIPTION AND SITE CONDITIONS WITH THE DATA GIVEN ON THIS PLAN AND REPORT ANY DISCREPANCIES TO THE SURVEYOR AT ONCE.
4. NO DIMENSIONS SHALL BE DERIVED FROM SCALE MEASUREMENT.

CHICAGO SMSA
limited partnership
dba VERIZON WIRELESS

Thomson Surveying Ltd.
9575 W. Higgins Road
Suite 650 IL 60018
Tel: (847) 318-9790
Fax: (847) 318-9792
wilzethomsonid.com

NO.	DATE	DESCRIPTION

SITE NAME:
YALE & OAKTON

SITE LOCATION:
1200 VILLAGE DR./
LUTHER LN.
ARLINGTON HEIGHTS, ILLINOIS
(A.K.A. 800 W. OAKTON ST.)

DRAWN BY: W.J.L.
CHECKED BY: DMS
DATE: 5-11-2015
PROJECT #: 5068

SHEET TITLE
SITE EXHIBIT

SHEET NUMBER
SE-1 OF 2

STATE OF ILLINOIS)
COUNTY OF COOK) SS

WE, THOMSON SURVEYING, LIMITED, ILLINOIS PROFESSIONAL DESIGN FIRM NUMBER 184-002768, DO HEREBY DECLARE THAT THE EXHIBIT SHOWN HEREON IS A CORRECT REPRESENTATION OF A SITE EXHIBIT PERFORMED AT AND UNDER MY DIRECTION. GIVEN UNDER MY HAND AND SEAL THIS 11 DAY OF MAY A.D., 2015 AT ROSEMONT, ILLINOIS.

Walter J. Lutz
WALTER J. LUTZ
3576 PROFESSIONAL LAND SURVEYOR
STATE OF ILLINOIS
ROSEMONT, ILLINOIS

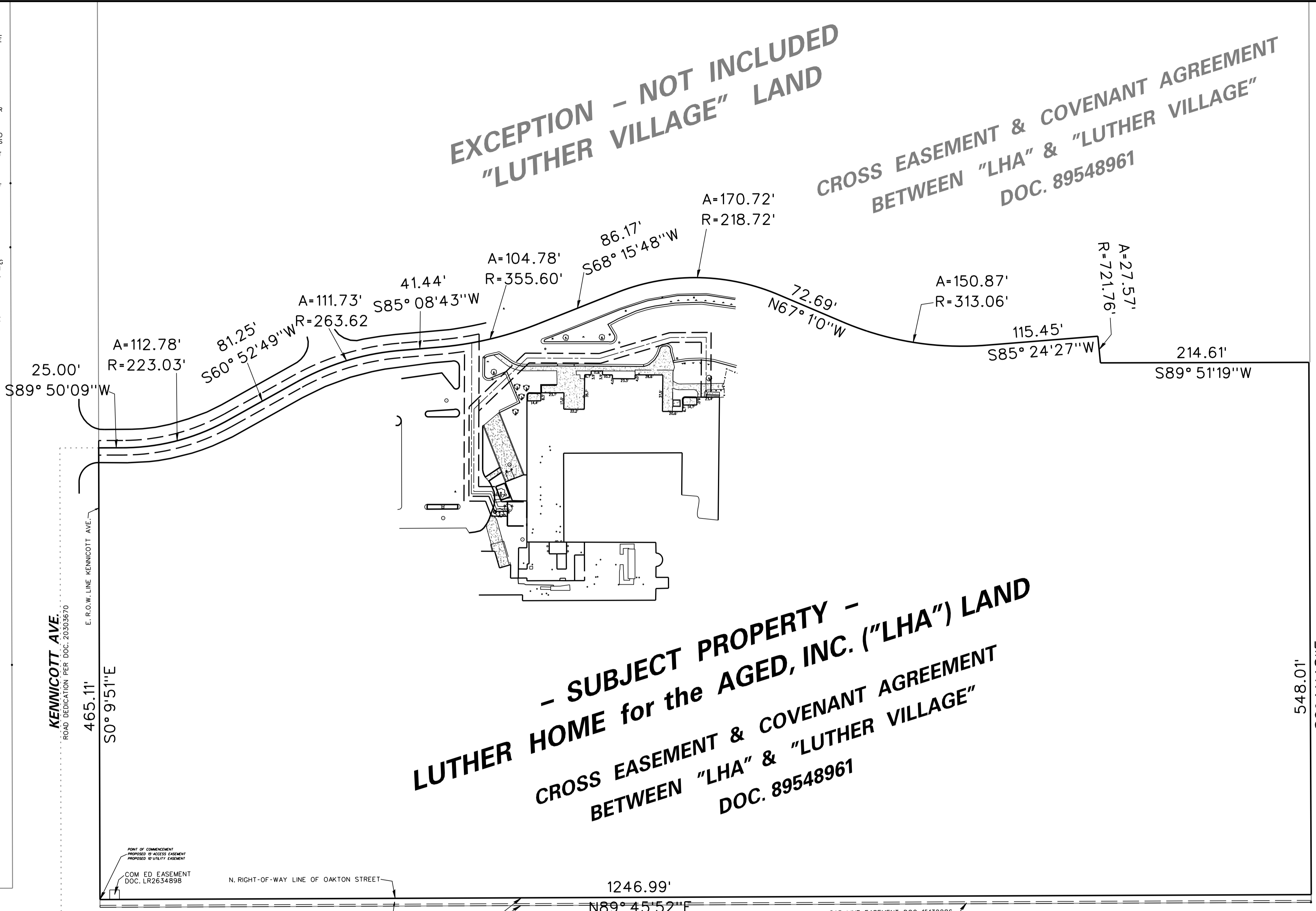
ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 3576
MY LICENSE EXPIRES NOVEMBER 30, 2016
DESIGN FIRM LICENSE EXPIRES APRIL 30, 2017

PARENT PARCEL LEGAL DESCRIPTION:

THE WEST 1/2 OF THE SOUTHEAST 1/4 OF SECTION 19, TOWNSHIP 42 NORTH, RANGE 11, EAST OF THE THIRD PRINCIPAL MERIDIAN (EXCEPT THAT PART THEREOF LYING SOUTH OF THE NORTH LINE OF A STRIP OF LAND 8 FEET WIDE, TAKEN BY JUDGEMENT ORDER, CASE NUMBER 62C05215, FILED IN THE OFFICE OF THE REGISTRAR OF TITLES ON AUGUST 1, 1986, AS DOCUMENT LR-2284261 AND EXCEPT THAT PART DEDICATED FOR KENNICOTT AVENUE, THOMAS STREET AND RIDGE AVENUE BY PLAT OF DEDICATION RECORDED OCTOBER 26, 1987 AS DOCUMENT 203036701, IN COOK COUNTY, ILLINOIS.

EXCEPT FOR:

THAT PART OF THE WEST HALF OF THE SOUTHEAST QUARTER OF SECTION 19, TOWNSHIP 42 NORTH, RANGE 11, EAST OF THE THIRD PRINCIPAL MERIDIAN IN COOK COUNTY, ILLINOIS, DESCRIBED AS FOLLOWS: COMMENCING AT THE SOUTHWEST CORNER OF THE WEST 1/2 THE SOUTHWEST 1/4 OF THE SAID SECTION THENCE NORTH 0 DEGREES 00 MINUTES 00 SECONDS EAST ALONG THE WEST LINE OF THE WEST 1/2 OF THE SOUTHEAST 1/4 OF SAID SECTION 503.24 FEET THENCE EAST ALONG A LINE NORMAL TO THE LAST DESCRIBED COURSE, 40.00 FEET TO THE POINT OF BEGINNING ON THE EAST LINE OF KENNICOTT BOULEVARD; THENCE NORTH 0 DEGREES 00 MINUTES 00 SECONDS EAST ALONG SAID EAST LINE OF KENNICOTT BOULEVARD, 2100.06 FEET TO THE SOUTH LINE OF THOMAS STREET; THENCE NORTH 89 DEGREES 59 MINUTES 08 SECONDS EAST ALONG SAID SOUTH LINE OF THOMAS STREET, 1247.28 FEET TO THE WEST LINE OF RIDGE AVENUE; THENCE SOUTH 0 DEGREES 00 MINUTES 06 SECONDS WEST ALONG SAID WEST LINE OF RIDGE AVENUE, 2015.92 FEET THENCE NORTH 89 DEGREES 59 MINUTES 50 SECONDS WEST, 210.63 FEET, THENCE NORTHERLY ALONG A CURVE HAVING A CHORD BEARING OF NORTH 5 DEGREES 31 MINUTES 21 SECONDS WEST WITH A CHORD LENGTH OF 27.57 FEET, A RADIUS OF 721.76 FEET, AND AN ARC DISTANCE OF 27.57 FEET; THENCE SOUTH 89 DEGREES 59 MINUTES 18 SECONDS WEST, 155.45 FEET; THENCE WESTERLY ALONG A CURVE HAVING A CHORD BEARING OF NORTH 80 DEGREES 38 MINUTES 25 SECONDS WEST, WITH A CHORD LENGTH OF 149.22 FEET, A RADIUS OF 313.06 FEET, AND AN ARC DISTANCE OF 150.67 FEET; THENCE NORTH 86 DEGREES 51 MINUTES 09 SECONDS WEST, 72.69 FEET; THENCE WESTERLY ALONG A CURVE HAVING A CHORD BEARING OF NORTH 89 DEGREES 12 MINUTES 43 SECONDS WEST WITH A CHORD LENGTH OF 166.42 FEET, A RADIUS OF 218.72 FEET, AND AN ARC DISTANCE OF 170.72 FEET; THENCE SOUTH 68 DEGREES 25 MINUTES 30 SECONDS WEST, 86.17 FEET; THENCE WESTERLY ALONG A CURVE HAVING A CHORD BEARING OF SOUTH 76 DEGREES 52 MINUTES 07 SECONDS WEST WITH A CHORD LENGTH OF 104.40 FEET, A RADIUS OF 355.60 FEET, AND AN ARC DISTANCE OF 104.78 FEET; THENCE SOUTH 85 DEGREES 10 MINUTES 04 SECONDS WEST WITH A CHORD LENGTH OF 110.89 FEET, A RADIUS OF 263.62 FEET, AND AN ARC DISTANCE OF 111.73 FEET; THENCE SOUTH 61 DEGREES 01 MINUTES 35 SECONDS WEST, 81.25 FEET; THENCE WESTERLY ALONG A CURVE HAVING A CHORD BEARING OF SOUTH 75 DEGREES 30 MINUTES 48 SECONDS WEST WITH A CHORD LENGTH OF 111.59 FEET, A RADIUS OF 223.03 FEET, AND AN ARC DISTANCE OF 112.78 FEET; THENCE NORTH 90 DEGREES 00 MINUTES 00 SECONDS WEST, 25.00 FEET TO THE POINT OF BEGINNING.



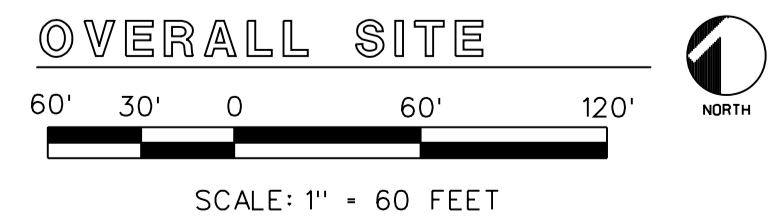
EXCEPTION - NOT INCLUDED
"LUTHER VILLAGE" LAND
CROSS EASEMENT & COVENANT AGREEMENT
BETWEEN "LHA" & "LUTHER VILLAGE"
DOC. 89548961

- SUBJECT PROPERTY -
LUTHER HOME for the AGED, INC. ("LHA") LAND
CROSS EASEMENT & COVENANT AGREEMENT
BETWEEN "LHA" & "LUTHER VILLAGE"
DOC. 89548961

8' EXCEPTION - NOT INCLUDED
(8' STRIP TAKEN BY JUDGEMENT ORDER, CASE #62C05215)

LEGEND

- ⊥ SIGN
- ⊗ LIGHT STANDARD
- ⊙ MANHOLE
- ⊙ SANITARY MANHOLE
- ⊗ FIRE HYDRANT
- - - FENCE LINE
- APPARENT PROPERTY LINE
- OH — OVERHEAD WIRES
- ▒ BITUMINOUS PAVEMENT
- ▒ CONCRETE
- △ CONTROL POINT



CHICAGO SMSA
limited partnership
dba VERIZON WIRELESS

9575 W. Higgins Road
Suite 650 IL 60018
TEL: (847) 318-9790
FAX: (847) 318-9792
wilz@thomsonil.com

Thomson Surveying Ltd.

NO.	REVISIONS	DESCRIPTION	DATE

SITE NAME:
YALE & OAKTON

SITE LOCATION:
1200 VILLAGE DR./
LUTHER LN.
ARLINGTON HEIGHTS, ILLINOIS
(A.K.A. 800 W. OAKTON ST.)

DRAWN BY:	W.J.L.
CHECKED BY:	D.M.S.
DATE:	5-11-2015
PROJECT #:	5068

SHEET TITLE
SITE EXHIBIT

SHEET NUMBER
SE-2 OF 2