$NEW_{D/B/A}PAR$

Verizon

SITE NAME: **RINGS 270**

VERIZON WIRELESS SITE NUMBER: CLMB-305

PROPOSED ROOFTOP INSTALLATION SITE WITH NEW ANTENNA INSTALLATIONS ATOP THE EXISTING BUILDING WITH THE INSTALLATION OF EQUIPMENT IN AN EXISTING SHELTER AND A NATURAL GAS GENERATOR



SHEET INDEX

TITLE: TITLE SHEET & PROJECT INFORMATION SURVEY:

B-1 FINAL SURVEY

CIVIL SHEETS

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ELECTRICAL

E-1 PERMANENT POWER DETAILS F-2 PANEL SCHEDULES

GROUNDING

G-1 GROUNDING PLAN G-2 GROUNDING PLAN G-3 GROUNDING DETAILS

STRUCTURAL

FOUNDATION, FLOOR FRAMING, AND ROOF FRAMING PLANS S1 1

S1.2 **EQUIPMENT SHELTER STRUCTURAL DETAILS**

S2.1 STRUCTURAL DETAILS

CONTRACTOR'S WORK SHALL COMPLY WITH THE LATEST EDITION OF THE

- AMERICAN CONCRETE INSTITUTE 318
- STRUCTURAL STANDARDS FOR STEEL ANTENNA TOWER AND SUPPORTING
- COMMERCIAL BUILDING GROUNDING AND BONDING REQUIREMENTS FOR **TELECOMMUNICATIONS**
- 1100, IEEE C62.41
- ANSI T1.311, FOR TELECOM DC POWER SYSTEMS TELECOM,

BUILDING CODES AND STANDARDS

CONTRACTOR'S WORK SHALL COMPLY WITH ALL APPLICABLE NATIONAL. STATE AND LOCAL CODES AS ADOPTED BY THE LOCAL AUTHORITY HAVING JURISDICTION FOR THE LOCATION.

FOLLOWING STANDARDS:

- AMERICAN INSTITUTE OF STEEL CONSTRUCTION'S MANUAL OF STEEL
- TELECOMMUNICATIONS INDUSTRY ASSOCIATION TIA-222
- INSTITUTE FOR ELECTRICAL AND ELECTRONICS ENGINEERS IEEE-81, IEEE
- **ENVIRONMENTAL PROTECTION**
- 2011 OBC AND AMENDMENTS

FOR ANY CONFLICTS BETWEEN SECTIONS OF LISTED CODES AND STANDARDS, THE MOST RESTRICTIVE REQUIREMENT SHALL GOVERN

PROJECT INFORMATION

VFRIZON WIRELESS SITE NAME: RINGS 270 VERIZON WIRELESS SITE NUMBER: CLMB-305

> E911 ADDRESS: 5525 PARKCENTER CIRCLE DUBLIN, OH 43017

> > COUNTY: FRANKLIN COUNTY

ELEVATION: ±949.0' (NAVD 1988) AMSL

LATITUDE: 40° 04' 49.25" LONGITUDE: 83° 08' 04.39"

ZONING CLASSIFICATION: PCD - PLANNED COMMERCE DISTRICT

APPLICANT: NEW PAR d/b/a

VERIZON WIRELESS 7575 COMMERCE COURT LEWIS CENTER, OHIO 43035

PROPERTY OWNER: DP PARKCENTER CIRCLE LLC

CONSTRUCTION MANAGER: BRENT SEYMORE REAL ESTATE MANAGER: DAN NOBLE

NON-EMERGENCY FIRE SERVICES

NORWICH TOWNSHIP FIRE DEPARTMENT

5181 NORTHWEST PKWY HILLIARD, OH 43026 PHONE: (614) 876-7694

NON-EMERGENCY POLICE SERVICES

DUBLIN POLICE DEPARTMENT

6565 COMMERCE PKWY DUBLIN, OHIO 43017 PHONE: (614) 889-1112

POWER COMPANY

COLUMBUS SOUTHERN POWER (AEP)

1 RIVERSIDE PLAZA, COLUMBUS, OHIO 43215 OFFICE: (614) 716-1000

TELEPHONE COMPANY

TBD

SPECIAL NOTES

EQUIPMENT CABINETS ON AN EQUIPMENT PLATFORM W/ CANOPY AND

ENVIRONMENTAL REQUIREMENTS

■ NOTICE TO CONTRACTOR ATTACHED

SCOPE OF WORK:

ΣΙΛΟΙΤΑ Ι ΙΔΤ2ΙΛΙ ΥΤΙ ΙΙΤΙ Ι

CONSTRUCTION DRAWINGS FOR:

FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION

PROPOSED UNMANNED TELECOMMUNICATIONS FACILITY

SITE WORK, PROPOSED TOWER AND CONCRETE FOUNDATIONS,

HANDICAPPED ACCESS REQUIREMENTS NOT REQUIRED.

PLUMBING REQUIREMENTS:

FACILITY HAS NO PLUMBING OR REFRIGERANTS.

FAA AND FCC REQUIREMENTS:

THIS FACILITY SHALL MEET ALL FAA AND FCC REQUIREMENTS.

CONSTRUCTION REQUIREMENTS:

 ALL WORK MUST CONFORM TO VERIZON WIRELESS CONSTRUCTION INSTALLATION STANDARDS & ALL APPLICABLE CODES AND ORDINANCES.

BURGESS NIPLE

5085 REED ROAD

614-459-2050

FA 614-451-1385

FULL SCALE PRINT IS

CONSTRUCTION DRAWINGS DESCRIPTION

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	RINGS 270					

5525 PARKCENTER CIRCLE

FRANKLIN COUNTY VERIZON WIRELESS SITE NUMBER

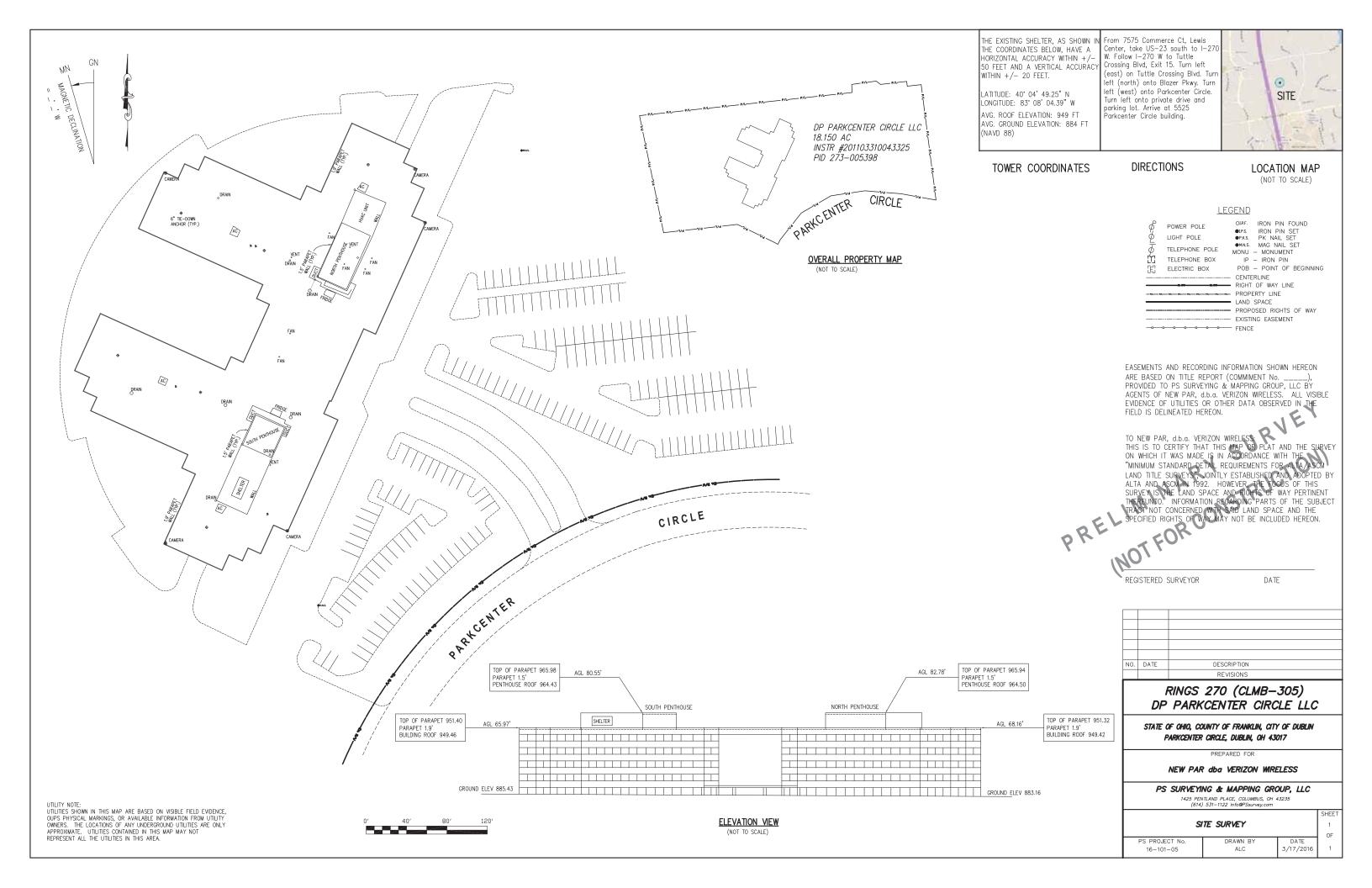
CLMB-305

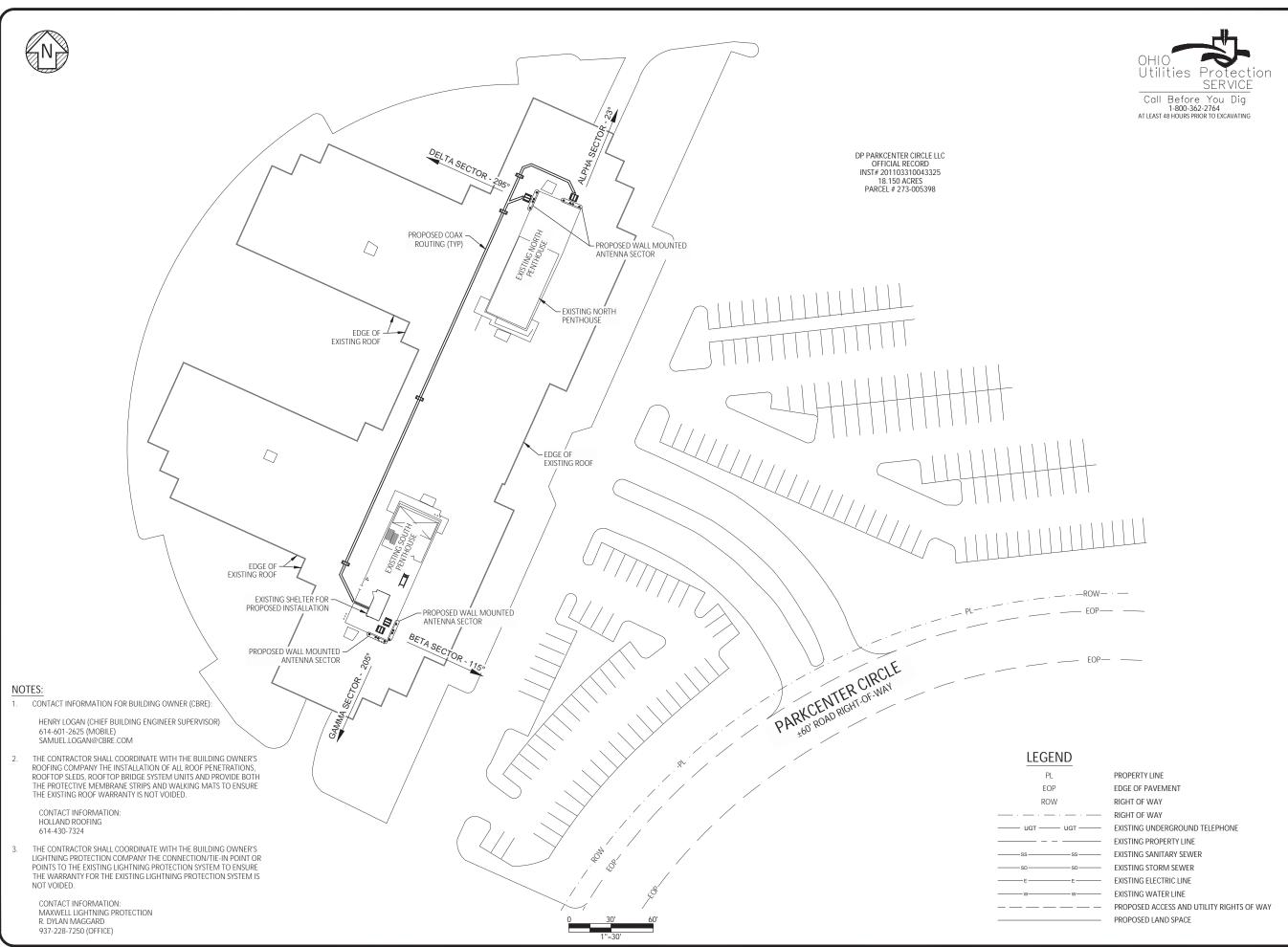
DESIGNED BY DRAWN BY:

SHEET TITLE:

TITLE SHEET & PROJECT **INFORMATION**

T-1





BURGESS NIPLE Engineers Architects Planners

5085 REED ROAD COLUMBUS OH 43220 614-459-2050 FA 614-451-1385

LIZO NEW PAR

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FULL SCALE PRINT IS ON 24" x 36" MEDIA

CONSTRUCTION DRAWINGS

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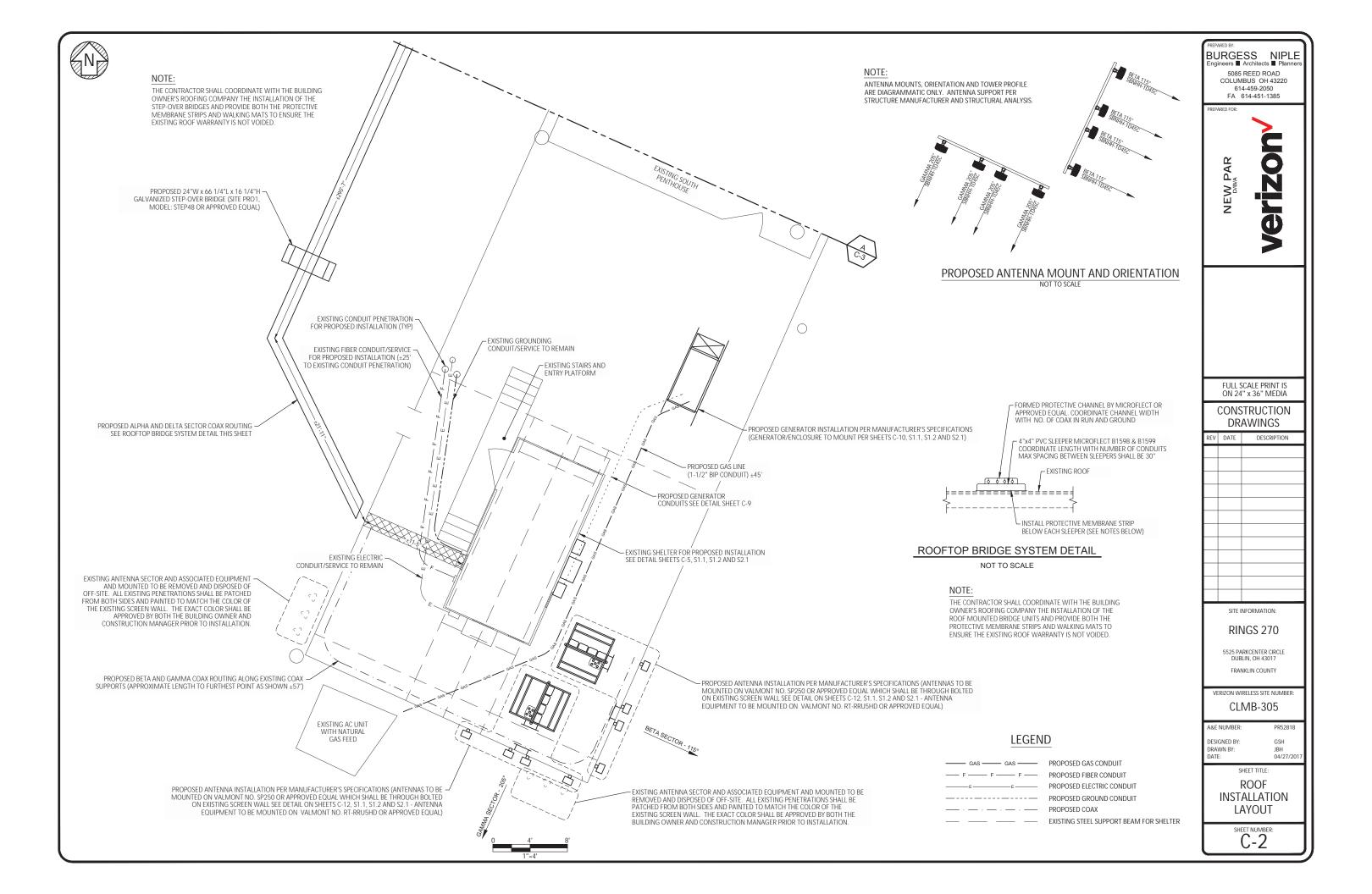
RINGS 270

5525 PARKCENTER CIRCLE DUBLIN, OH 43017 FRANKLIN COUNTY

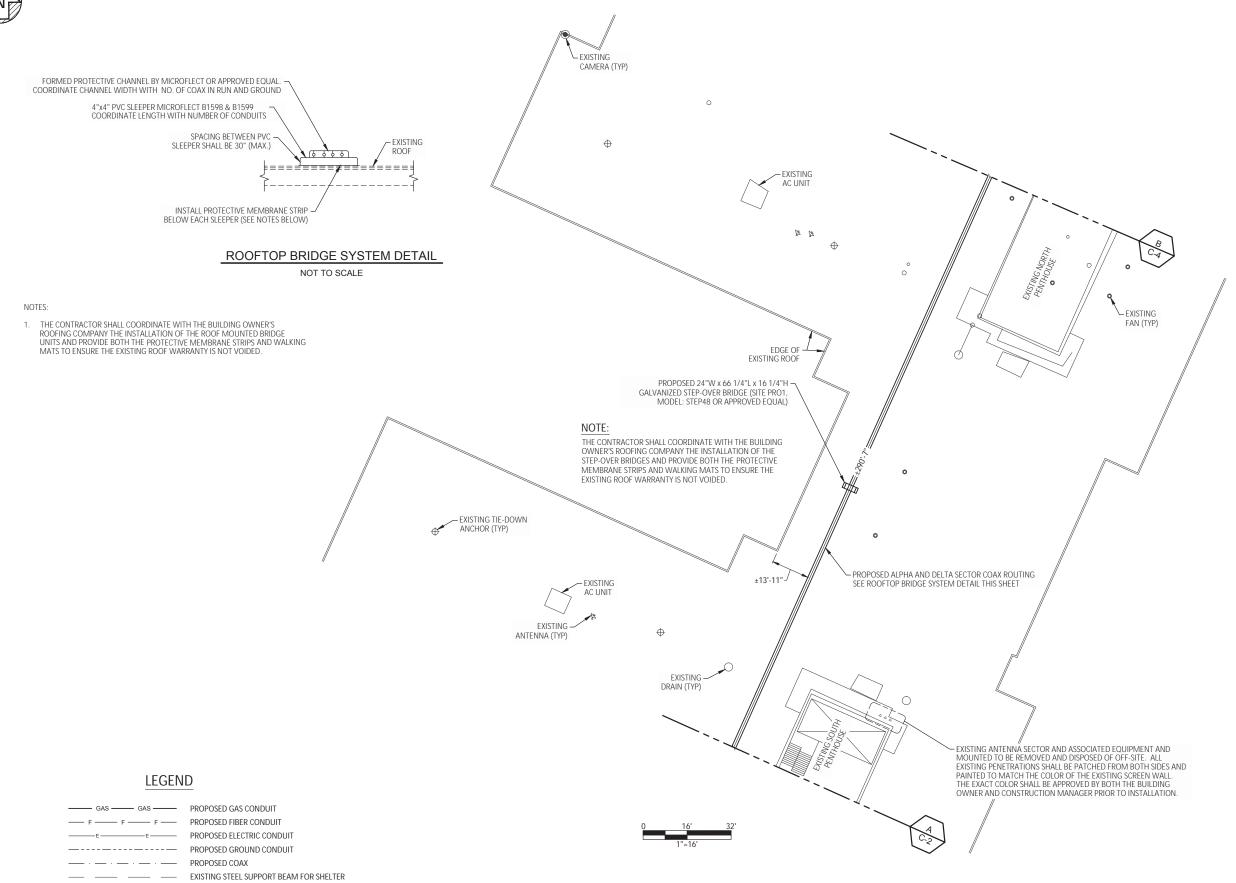
VERIZON WIRELESS SITE NUMBER: CLMB-305

PR52818 DESIGNED BY: GSH DRAWN BY: 04/27/20 SHEET TITLE:

OVERALL SITE LAYOUT







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NEW PAR

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FULL SCALE PRINT IS ON 24" x 36" MEDIA

CONSTRUCTION DRAWINGS

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SITE INFORMATION:

RINGS 270

5525 PARKCENTER CIRCLE DUBLIN, OH 43017 FRANKLIN COUNTY

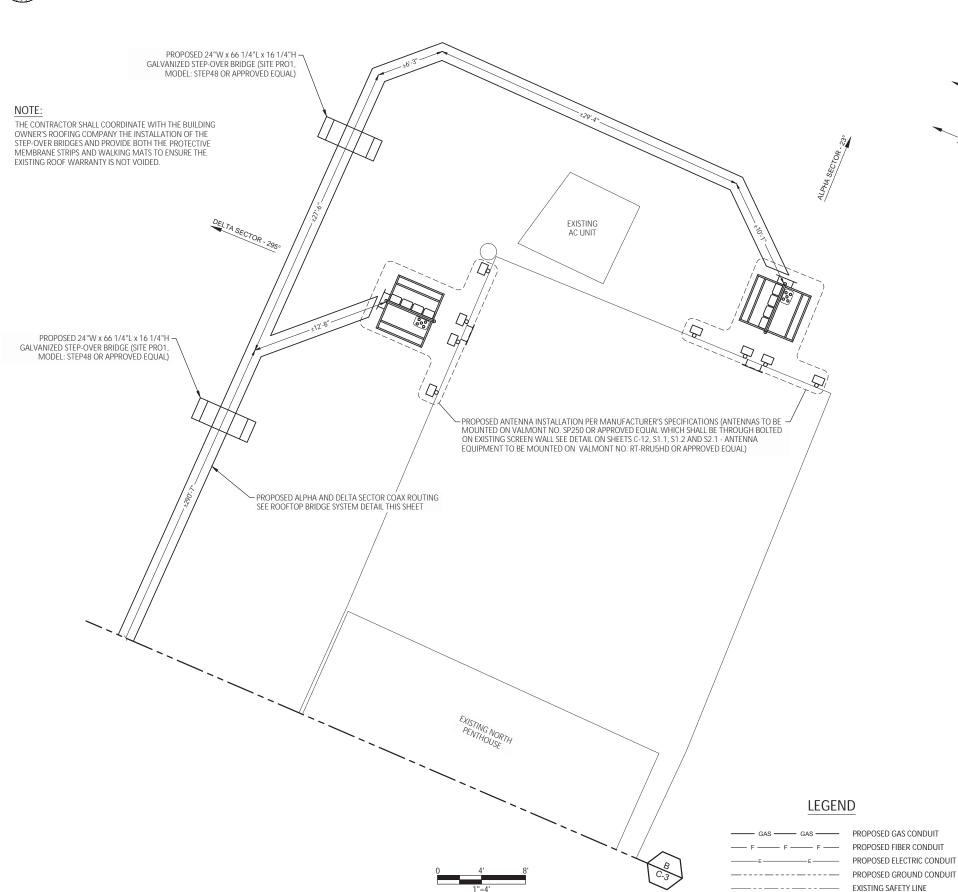
VERIZON WIRELESS SITE NUMBER: CLMB-305

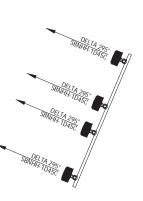
PR52818 DESIGNED BY: GSH DRAWN BY: 04/27/20

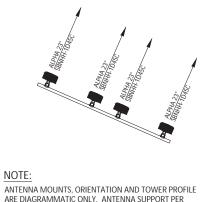
> SHEET TITLE: **ROOF**

INSTALLATION LAYOUT



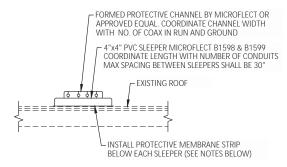






STRUCTURE MANUFACTURER AND STRUCTURAL ANALYSIS.

PROPOSED ANTENNA MOUNT AND ORIENTATION



ROOFTOP BRIDGE SYSTEM DETAIL

NOT TO SCALE

NOTE:

THE CONTRACTOR SHALL COORDINATE WITH THE BUILDING OWNER'S ROOFING COMPANY THE INSTALLATION OF THE ROOF MOUNTED BRIDGE UNITS AND PROVIDE BOTH THE PROTECTIVE MEMBRANE STRIPS AND WALKING MATS TO ENSURE THE EXISTING ROOF WARRANTY IS NOT VOIDED.

PREPARED BY:

BURGESS NIPLE
Engineers
Architects
Planners

5085 REED ROAD COLUMBUS OH 43220 614-459-2050 FA 614-451-1385

PREPARED FO

NEW PAR VETZON

FULL SCALE PRINT IS ON 24" x 36" MEDIA

CONSTRUCTION DRAWINGS

REV	DATE	DESCRIPTION

SITE INFORMATION:

RINGS 270

5525 PARKCENTER CIRCLE DUBLIN, OH 43017 FRANKLIN COUNTY

VERIZON WIRELESS SITE NUMBER: CLMB-305

 A&E NUMBER:
 PR52818

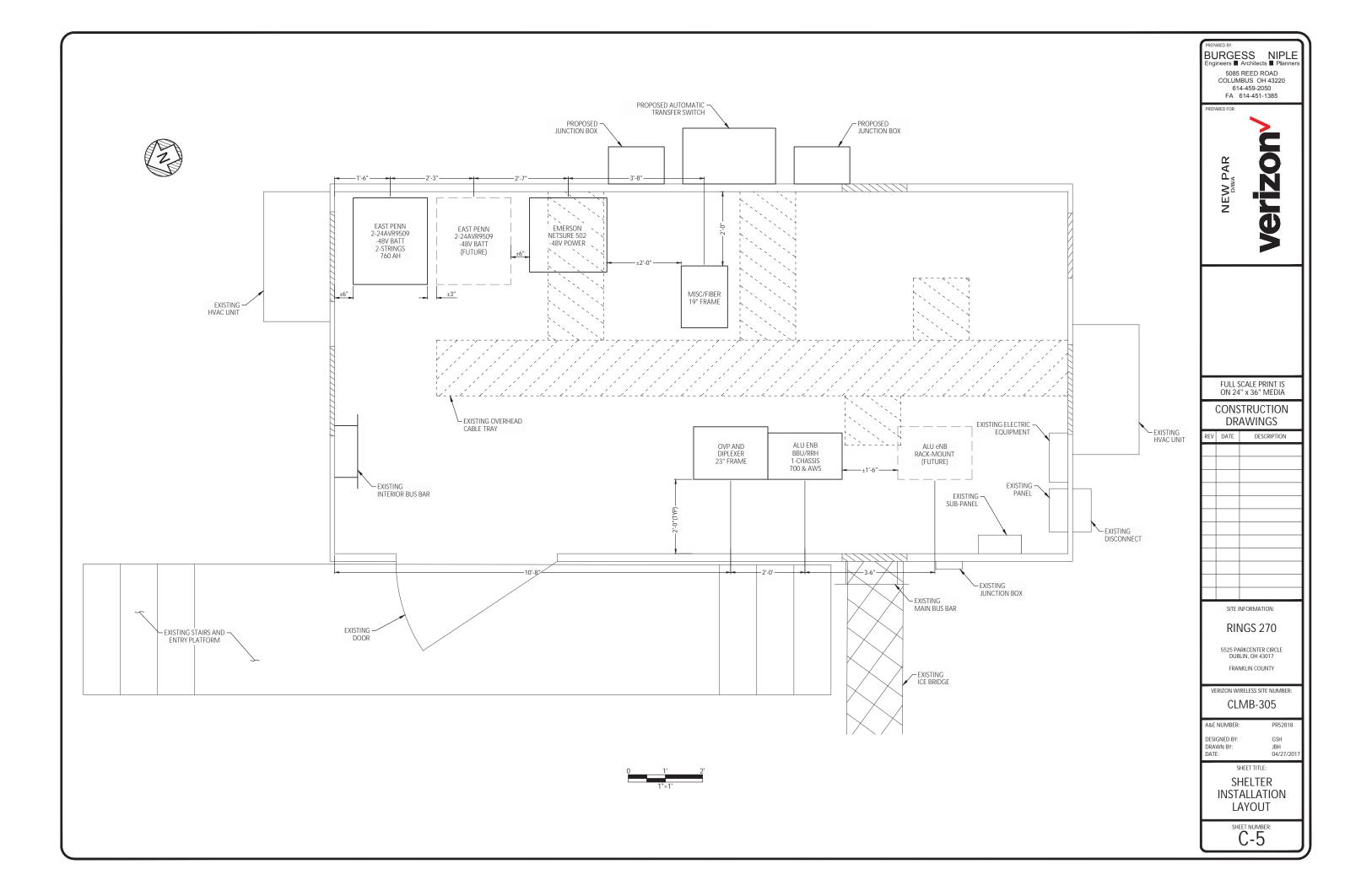
 DESIGNED BY:
 GSH

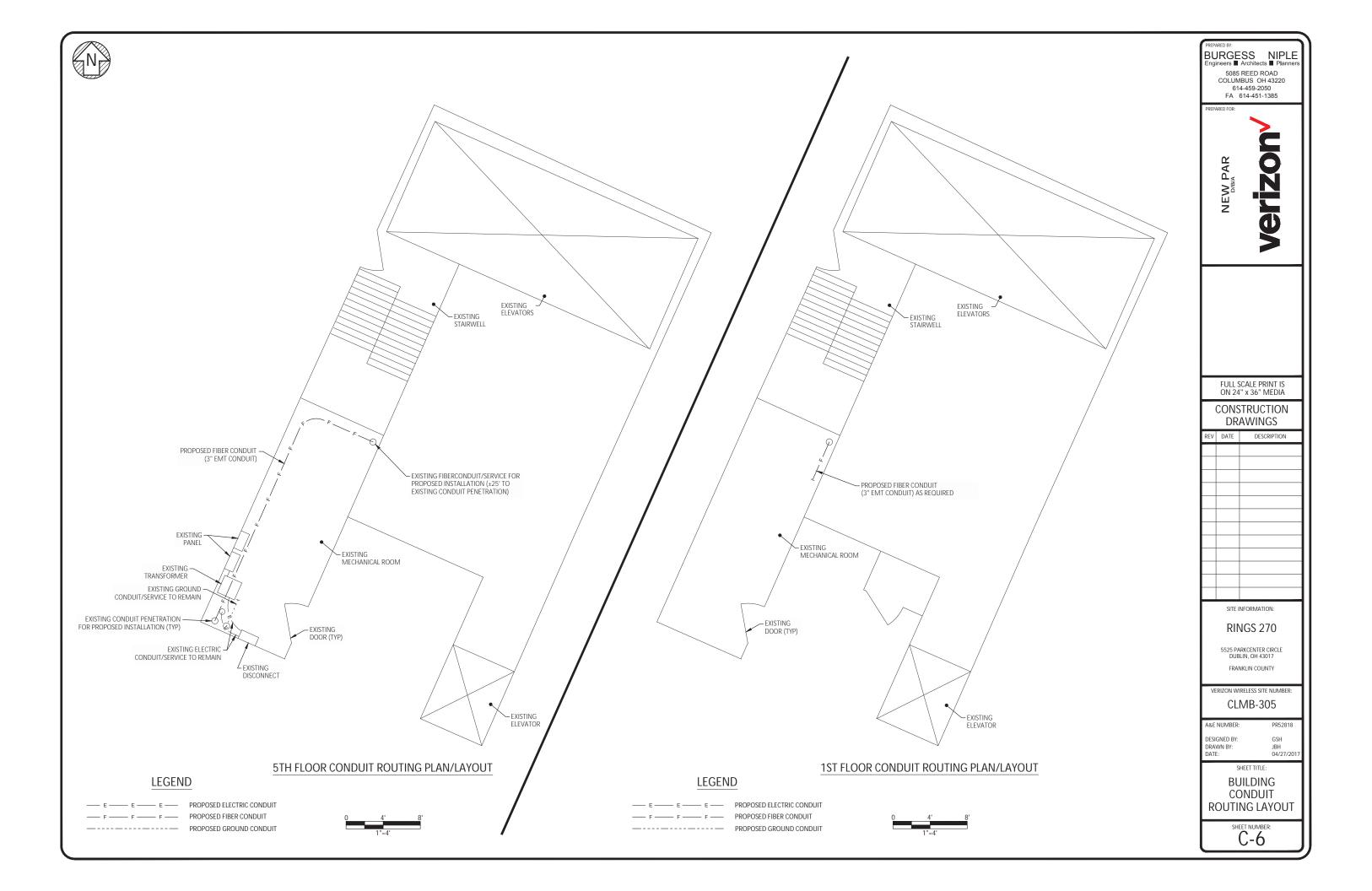
 DRAWN BY:
 JBH

 DATE:
 04/27/20

SHEET TITLE:

ROOF INSTALLATION LAYOUT





VERIZON WIRELESS

GENERATOR RETROFFE GENERAL SCOPE OF WORK

This document does not cover the initial of a natural gas or liquid propute interior generator. If this motal is encountered, contact angineering for a separte initialistic package.

This General Scope is for the installation and testing of the control and duess cabling for

It is important to note that there are two versions of the Generac commignosis. The Hegand is the fatout systians. This panel cannot be installed with the same assumance and except legs panels so the folder style E-panel. It the generator is a outpined with the Hegands is offered to the style E-panel. It the generator is a outpined with the Hegands (with your first that the Hemsel-Annotation pasel to the 21 high part of 0014440. If it is not, slortly that the Hemsel-Annotation pasel to the 21 high part of 0014440. If it is not, alort Various project management to have the unit replaced. Picasi more that this mit does not require an external RRP (remain only panel) to extend alors as with the older 20 light punch.

It has been determined from Verticen's corporate documentation that the generator is to be consecuted to the only's ground ring. Common practice has been to install an solidarid ground red for the generator generating. This is listed as an oping a adde not in place of, the grounding connection.

Label all cables with origin, termination and one

All conduits ostroids of the Vermon's shafter are to be Sch. 40 PVC.

Vertices Wireless will supply: • Generator (stays per site's power rec

- Auto Transfer revich (sized to the generator)
 Zilk Remote Associator Panel

Contractor #3 will supply:

Ber 12 GER 11 05/2013

#2 to increasance the 23pe cable of the 66 blinck per 2019 generator alarm Sepont for new 2017 amanciator and install fielding clips for all 30 tows of the block.

[16] Label the 66 blocks for raw, judy installer to bouchos and alarts designation.

"1-GEN PROG ALARM 13 GEN OVERCRANCE"

"2-GEN PROG ALARM 13 GEN OVERCRANCE"

[7] Complete Contractor #2 closes out package when this portion of the proport to

- OEM to complete:

 (1) Terminate the plane, youngelows to the alarm vernical block.

 (2) Cross connect slatters and complete dualiff as required.

 (3) Test all new alarms.

 (4) Jelium propost manager when project in ready for guarchist.

Electrical One-Line Diagram:











Rev. 12 GEH 11/05/2013

- 9'A55'x3" generator pad. Pad to have one 12" opening for conducts and ground
 centered on the tab 15" center from the one (10" from sold of circles. Pad may be
 proceed in pount).
 ACData 24W, AC surger arteriors part # AAE2000, V-0".
 ACData 26W, AC surger arteriors part # AAE2000, V-0".
 ACData 26my promotion 58bbb (10F-160-17W) Kin will include 66 block,
 introduct, curper armission, general when and hardware.
 Serious 58bbb (1-0) pount), down block with 5800 standorff, 5A 155-50 bedge
 clips and MC4Eb (4) course.

- Eight positive exceed rated brooker panel such as the SquareD (XX-IALIDHER CU.
- (2) 20A 125V single pole breaken
- (1) 50A. Dual pole 240V breaker to fit artisting primary breaker page (1) SNA, Dual pole, 260V breaker to fit new sub-panel if panel is to be located on
- Polaris blocks (IPL4-5) and a #"x12" utility enclosure.
- All conduits, PVC and miscella
- 2 PR-4 conductor 12/24 ga, solid. 240V SPST ruley, hand, infine 1A fase.
- 6 PR extentor rated cable General Cable #7525751.
- If required, drill and growner a wireway from the AC Distribution flox of the generator for the AIRconois RS232 cable and RS403 21L1 remove panel.
- · All rodest control to include back filling and scaling all openings

- Contractor #2 will supply:

 25 pr cable Calvot #433/425

 12 pr cable Calvot #433/425

 12 pr cable Calvot #433/425

 4 pr 22 grupt CA'S fieldon 1533/8996, BELDHOEL, SHEEDHO cable.

Contractor #3 to install the following:

- (a) Install the Enthering:
 (1) Install the generating no. Justice transitor which, Polary, Mockie, suego artestor, sub-point, AC fail only, Riccotch Ammonisms Pamil aid the 66 Nocks.
 (2) Lifting valides are to be entired over whet exterior surface of the pol.
 (3) All power wiring, conducts, fact primit as required are consistent under a separate corresponded stope.
 (4) Existing generated plug, maintail transitior switch and using arteriors under a remain strate. Existing allows wiring for the existing AC gover fail and TVSS salarites for the pinter. The Autoritations which will within this hardwood the manual transition with. See allowhol use fine diagram.
 (5) Carosoft file generator files in inside the humality glovestyli the poal window and attack to the side ground ring with SS X-10V variations under stop describes more that 20° from the generator files in inside the humalities under ground ring install SX-X-10V variations under stop of root to be faired in 10° and to transitions. (2) apres. General were and up of root to be divisor to believe the frest line.

Rev. 12 GERF 11/05/2013

Contractor #1 Close-out Package; Provide the close-out package is electronic format for this project milities! business days of the completion of the insist. Next completed package to the project manage. Format the subject line as follows:

ONTE NUMBERO ONTE NAMES GENERATOR INSTALL CLOSE OUT PACKAGE. (CONTRACTOR NAME)

14. "CLABBR2 WORTHINGTON GENERATOR ENTALL CLOSE OUT PACKAGE
[Institutes 81]."

- D Provide copy of all permits obtained for projects in individual pdf formatted

- Fire.

 Generator pad intidled, leveled and lifting cables trimmend.

 Generator installed with all beh-deve positions belond innepad.

 Redition of the power panel to include breaker are and designation.

 Deptad picture to be softentiate in including log planted files.

 Overall generator tradit, correpciond views and tasks and grounding sometimes (before backfill).

 Auto-transfer switch, manual transfer switch, ourge arrows unit, prover

 - I Allo-Emerica revens, many parties of the pad (if general) parties.

 Lift tables removed from both sides of the pad (if general).

 Install of the 21th Remove Assumentance Paste.

 Alarm block installation.

 Alarm block installation.

 Terminations and roofing of all cables, as applicable, to include conduct penetrations into shelter, cardking of those penetrations and sealing of the
- All redom control measures completed.

Constructor #2 Close-onl Packages:
Portish the time-onl package in obstruction for man for this project within 3 business days of the completion of the insula. Send completed package to the project manager. Format the adopted line as follows:

(SITE NUMBER) (MTE NAME) GENERATOR INSTALL CLOSE OUTPACKAGE (CONTRACTOR NAME) La. "CLABBRIC VORTHENGTON GENERATOR INSTALL CLOSE OUT FACKAGE (Campaigne 82)"

Rev. 12 (89) 11 (822013)

- a. Install the ACDsta grounding resolutes on the block per block layout, is isstall ground wire (uncluded in 46) from the ground but is the closest output arrests on the block. Apply son-endelving compound to the junction. Lost the proper sized log for the outsidely position on the ground last. Use the provided copper hardware.
 b. Install cobbs management on the well and serious deep ground wire.
- in tended.

 If Do not run with, or bundle with any other cubies.

 (7) Selvet Excition and measure the Pediate block unliny how, ACCDate AM2000 surge arterior, power full relay and underpaned.

 a. lontal (4) behave blocks, (1) for each places, return and other ground.
- Install ACData AMOSO surge arrestor.
 Install Proper the 200's SPST relay in the Polaria block utility box.

- Institut ACData ANDOOS surge arrowse.
 Institut Nace the 240°Y SPST relays in the Polaria Mock untity ben.
 Were the power supers of the selling across the phases. Use a 1A shifter flow or one log of the princip.
 Institut share cache from artity box us the 64 shelling alarm block.
 Were met the alarms street or ACD has song a retrieve to alarms salide.
 Content alarms salide for relay base. Coordinate with sine technician to electroma NC or NO conditionate with sine technician to electroma NC or NO conditionate with sine technician to electroma NC or NO conditionate with sine technician to electroma NC or NO conditionate with sine technician.
 Preferred install if the sub-panel is meade the shallor, were plannes to fill result in the self-the shallor of the NOSI using a fare as 40° ANG at the shallor of the panel. Then the normal control of the NOSI using a fare as 40° ANG at the shallor of the panel of the

- for posts: 2 makes (consecutive to the AT&ILC and the generator AC distribution from the AT&ILC and the generator AC distribution from (11) Install one 2° conduct (conduct #3) between the AT&ILC and the location of the sugge arrantor block.

 [12] Install only horse or required to keep from using the AT&ILC as a ways around the AT&ILC as a ways about the AT&ILC as a ways are also as a second and a second accordance to the AT&ILC and the generator ACC.

(12) Install offility-bore as respect to keep from using the ATS/IL. 3.8 x three shows fix within pain since the mixturing inside the ATS/IL. 3.8 x three shows fix within the pain side that the property of the conduct of the conduct and Buncry Chapter Conduct. Whis known for weaply with convent ONC & NYC and the TARSE 8.9 Cablic Description and Assignment Table. Install pail how at revisit location and brank out the AC circuis for the exceptack and sharper to they do not up through the transfer revish. 1" Creakle from pall how to raw

Rev. 12 GEH 11/05/2013

- Q. Provide the following information in Email Remat to the project manager
- Committee Model
 First Type
 Size (Na) 8
 Generator Serial number
 Generator Menallacture Date
- Engine Manufacturer /Cateryillar Commiss/Dornat Diesal Detroit Densel MT1 Doman Don't Front Sameral Manuschmisteren FFT John Dense Kabutah Stradt side Nissan Volve (Phys.)
- Engine Molel
 Engine Hosepower
 Engine Manufacture Date
 Engine Senal number

- 6 Startup Date 6 Indoor Outdoor | Indoor Outdoor Unitroon
- Location (On gradeOn playlameths roughly Other).
 Hour Moto Present? Yes No.

- Manafacture Date
 Was a determination on integrity testing completed? Yes No
 Dates the task have according continement? Yes No
 Secondary Contaminated Type (Realisting intervier
 contaminated Carloud hormatilization scaled if Sacked Unknown, Cel
 Union the task have an overfill despire? Yes No
 Does the task have lask destroited? Yes No
 Construction puterial? Seed Fiberglass Unknown
 Learning

- Send the following to the project manager

 List of all parameters and settings for generator operation.

 Digital privates to be submitted in authorizing format files:

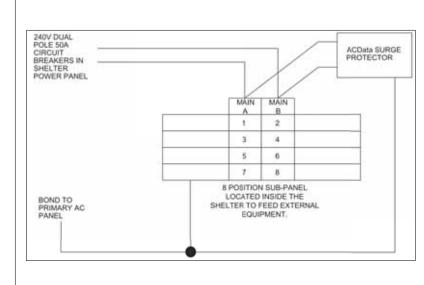
 Alum block labeling.

 Colling purpose for the Alu to menumen at alum blocks.

Rev. 12 GEH 11/05/2013

- Install (2) 20X 120V circuit breakers in the sub-ranel. (1) for the block.

- a. If single contractor selected, continue cables 4.5 and 6 and restall cable 7



- house and (1) for the hostery charge railiny outlet.

 b. Provide pull using through conduct for future power calling.

 Label the circuit breaker assignments. Euroof all breaker railines and assignments and return in the dose-your package.
- (14) In conduit #2, install the Generator Start Stop circuit using 16 page THHS
- wire.

 a. If ringle contractor selected, install cables 4, 3 and 6 and one pull string.

 b. If multiple contractors were selected, pull 2 pull strings.
- a. If single contrainer selected, reserves extend 4, and 8 and 1 such available 7 to the swap procures block.
 b. If readuple contractors selected, restinue run of the pull straigs fiven the generated denugle to the surge proteons block, local 3 second pull string between the ATSTIC and the surge proteon block.
 [18] Lable cate oaths with called monther, segin and termination (17) bentilt polyoci control measures to include back that filling the pail without expensing well concepts rate.
- (18) Complete Contractor #1 abso-out puckage once project is finalized.
- Contractor, E.Z. to complete:

 (1) Install cubes 4.2, 6, 7, 8 and 9 per stracked CONTROLALARM IN 46R4M and the 2418 generator alone layout for over 2117 association file.

 a. For cable 8, install through the ATS, through the generator AT, described in the Contractor of the 18 and 1
 - all remaining locations.

 Dress public to the DBH comments on H-Panel and poil 3" slack.
 - b. Dross addies in the DIMS connection on 14 Functional and youl 3' slapek.
 ii. Terrorisation calls for the output principles block.
 iii. If the Allements is initialled, farms table to the Allement location and cost 8' of faste.
 iii. If Allement is not installed loave consugh exists 80 reach this for each of the shother place 15°. Coult at the teles bound and their both ends for Allement E. Could and the should all their both ends for Allement Couldman Pool.
 Terminatic connections for the programmable relays to the AC fortiflation box. Label this calls: Set PRG RELAY ALARMS.

- Larbet lites cable for PRO RELAY ALARMS.

 [1] Tammine the EMSE base between the AC, distribution hose and the sorge arrestor block, and from the sorge arrestor block to the 21st assumenter panel.

 [4] Issuall and remnante [2]pt cable between the 21LT assumedates jurnel and the new to their. Between twaterhold stars block layers.

 [5] Instalt 25pt cable between the new 66 block and miscellaneous finante alians blocks. Tage, label and call enough earlier to each the floor at the finance location. OAM will make the terminations to the witnessay blocks. Contrastor.

Rev. 12 GEH (1185/2013)

BURGESS NIPLE

Ingineers 🛮 Architects 🖈 Pla 5085 REED ROAD COLUMBUS OH 43220 614-459-2050 FA 614-451-1385

PREPARED FOR:

PAR

NEW D/B

ON

FULL SCALE PRINT IS ON 24" x 36" MEDIA

CONSTRUCTION DRAWINGS

REV DATE DESCRIPTION

SITE INFORMATION:

RINGS 270

5525 PARKCENTER CIRCLE FRANKLIN COUNTY

VERIZON WIRELESS SITE NUMBER:

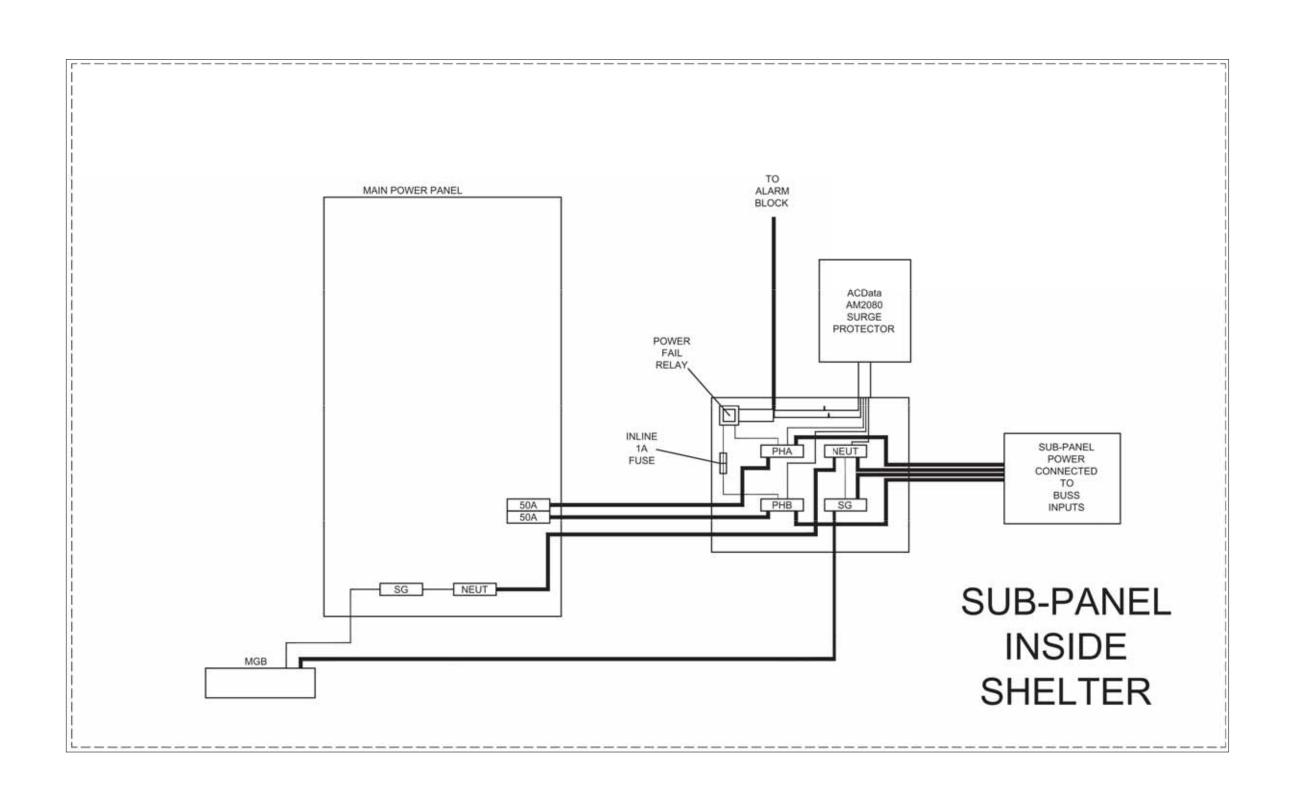
CLMB-305

A&E NUMBER PR52818 DESIGNED BY: GSH DRAWN BY: DATE: 04/27/201

> SHEET TITLE: **GENERATOR**

NOTES SHEET NUMBER:

C-7



BURGESS NIPLE
Engineers Architects Planners

5085 REED ROAD COLUMBUS OH 43220 614-459-2050 FA 614-451-1385

PREPARED FO

NEW PAR

NUMBER

FULL SCALE PRINT IS ON 24" x 36" MEDIA

CONSTRUCTION DRAWINGS

REV	DATE	DESCRIPTION		

SITE INFORMATION:

RINGS 270

5525 PARKCENTER CIRCLE DUBLIN, OH 43017

FRANKLIN COUNTY

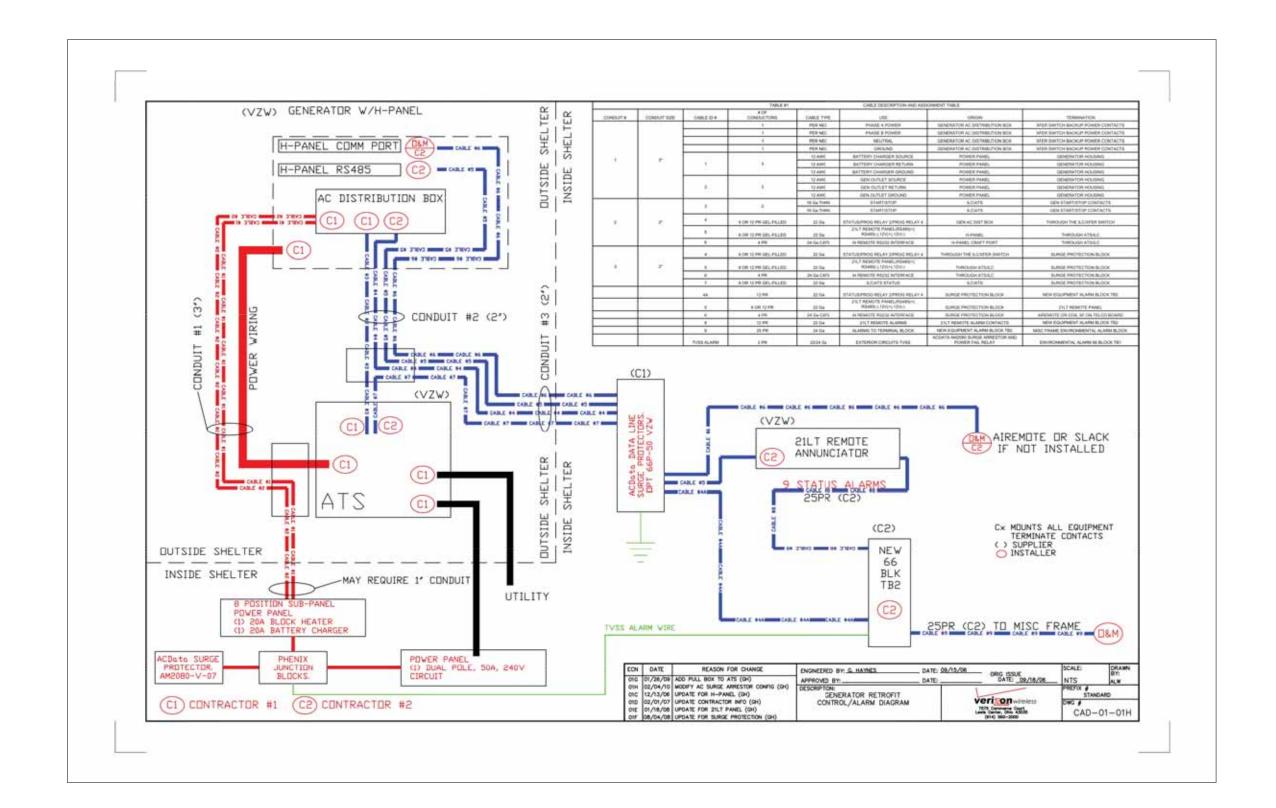
VERIZON WIRELESS SITE NUMBER: CLMB-305

A&E NUMBER: PR5281
DESIGNED BY: GSH

DESIGNED BY: DRAWN BY: DATE:

SHEET TITLE:

GENERATOR PROTECTION DETAILS



BURGESS NIPLE
Engineers Architects Planners

5085 REED ROAD
COLUMBUS OH 43220
614-459-2050
FA 614-451-1385

PREPARED FOR:

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REV	DATE	DESCRIPTION

SITE INFORMATION:

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5525 PARKCENTER CIRCLE DUBLIN, OH 43017

FRANKLIN COUN

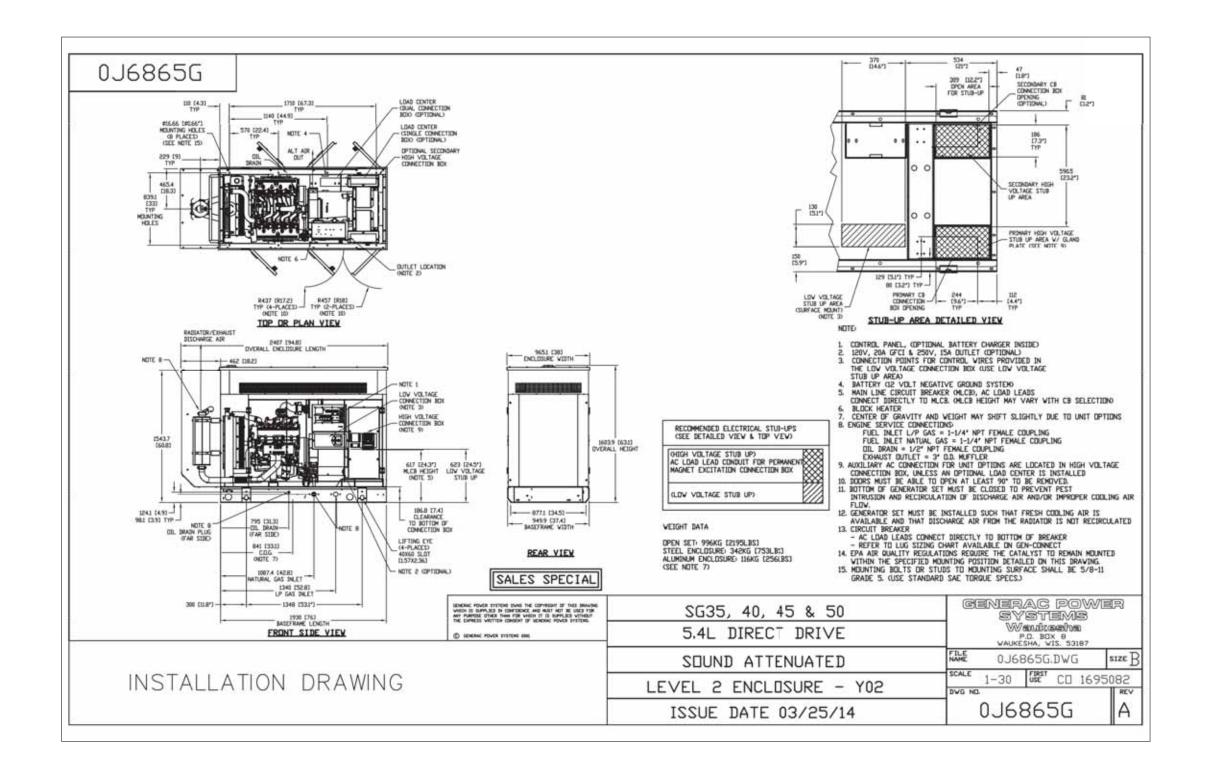
VERIZON WIRELESS SITE NUMBER: CLMB-305

A&E NUMBER: PR52818

DESIGNED BY: GSH
DRAWN BY: JBH
DATE: 04/27/20

SHEET TITLE:

GENERATOR ONE-LINE DIAGRAM



BURGESS NIPLE

5085 REED ROAD COLUMBUS OH 43220 614-459-2050 FA 614-451-1385

PREPARED FOR

NEW PAR

Verizon

FULL SCALE PRINT IS ON 24" x 36" MEDIA

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SITE INFORMATION:

RINGS 270

5525 PARKCENTER CIRCLE DUBLIN, OH 43017 FRANKLIN COUNTY

VERIZON WIRELESS SITE NUMBER:

CLMB-305

A&E NUMBER: PR52818

DESIGNED BY: GSH
DRAWN BY: JBH
DATE: 04/27/20

SHEET TITLE:

GENERATOR SPECIFICATIONS

VZW GENERATOR RETROFIT ALARM LAYOUT

02/04/2010 GFH

New GEN PROG ALARM layout

Replaces existing alarm positions on BLK#2

All GEN PROG ALARMs on BLK#1 to remain the same

ROW	DESIGNATION	NOMENCLATURE	RELAY	CONTACT	COLOR	
-	GEN PROG ALARM J1	GEN OVERCRANK	1	- 1	With	
	GEN PROG ALARM J1	GEN OVERCRANK	1 1	2	BL/W	1
	GEN PROG ALARM 12	HIGH WATER TEMP	2	1	WO	1
	GEN PROG ALARM J2	HIGH WATER TEMP	2	7	OW	ł
	GEN PROG ALARM JO	PRE-LOW OIL PRESSURE	3	1	WGR	1
	GEN PROG ALARM JD	PRE-LOW OIL PRESSURE	3	2	GRW	1
	GEN PROG ALARM J4	PRE-HIGH WATER TEMP	4	1	WBR	1
	GEN PROG ALARM J4	PRE-HIGH WATER TEMP	4	- 2	BRW	1
	GEN PROG ALARM JS	PRE-LOW FUEL	- 5	1	W/SL	1
	GEN PROG ALARM JS	PRE-LOW FUEL	- 5	2	SLAV	1
	GEN PROG ALARM JE	BATTERY CHARGER FAIL	- 0	7	RR.	
12	GEN PROG ALARM J6	BATTERY CHARGER FAIL	- 6	2	BLIR	1
13	GEN PROG ALARM J7	GEN RUN	7	1	RIO	1
14	GEN PROG ALARM J7	GEN RUN	- 7	2	OR	1
15	GEN PROG ALARM JE	GEN NOT IN AUTO	- 8	1	RIGH	1
10	GEN PROG ALARM JE	GEN NOT IN AUTO	- 8	2	GRA	1
17	GENERATOR SUMMARY ALARM	SUMMARY	- 9	C	R/BR	1
18	GENERATOR SUMMARY ALARM	SUMMARY	. 9	NC.	BR/R	1
119						1
20						1
21						1
22						1
23						1
24						1
25						1
26						1
27						1
26						1
- 29						
- 30				1]
31						1
32]
33						1
- 34						
	SUB-PANEL AC POWER FAIL	EXT AC CKT BUB-PANEL	RELAY	NO	WIBL	ALARM
	SUB-PANEL AC POWER FAIL	EXT AC CKT SUB-PANEL	RELAY	C	BLW	A 50
	EXTERNAL AC CIRCUIT TVSS	LAE(TVSS3)	5A	NO	W/O	F 3 5
	EXTERNAL AC CIRCUIT TVSS	LAE(TVSS3)	SA		OW	4.
	GEN. FAIL COMMON (PROG RELAY		GEN	NO	W/BL	
	GEN, FAIL COMMON (PROG RELAY		GEN	C	BLW	
	CATCH BASIN (PROG RELAY #4)	GPR4	GEN	NO.	W/O	
	CATCH BASIN (PROG RELAY #4)	GPR4	GEN	C	OW	4
	LITELITY POWER FAIL	PFA	ATS.	NO	WGR	
	UTILITY POWER FAIL	PFA	ATS	C	GR/W	CABLE
	ATS/UTILITY SURGE ARREST	LAU (TVSS1)	ATS	NC	WER	9
	ATSUTILITY SURGE ARREST	LAU (TVSS1)	ATS	Č.	BRW	0
	ATS/GEN SURGE ARREST	LAG(TVSS2)	ATS	NC.	W/SL SLAW	

NOTE: This document pertains to the install of the generator related alarms only. Adjust the placement of the alarms on TB1 as required based on current site configuration. For LP or Natural Gas generators substitute Pre-Low Water Temp for Pre-Low Fuel alarm on J5.

SURGE ARRESTOR BLOCK

ROW	CABLE #		DESIGNATION	CONTACT	ARRESTOR MODEL	
-1	-				-	
-		_				-
- 1					1	
- 6						_
- 6						
. 7					7	\neg
- 0						
- 9						
-10						
- 11						
12					V.	
13						
14						-
- 11						
10						_
17					1	
16			Mary Park Charles Special Street Avenue	5000	-	-
20		2	GEN. FAIL COMMON (PROG RELAY 82) GEN. FAIL COMMON (PROG RELAY 82)	GPR2 GPR2		
21					56PO60	
22		3	CATCH BASIN (PROG RELAY #4) CATCH BASIN (PROG RELAY #4)	GPR4 GPR4	66P060	
23			UTILITY POWER FAIL	PFA	505-060	- 5
24	4	- 1	UTILITY POWER FAIL	PFA	66P060	l w
- 24	7	3	ATSUTILITY SURGE ARREST.	LAU (TVSS1)	66F-060	CABLE 4A
25	9	4	ATS/UTILITY SURGE ARREST	LAU (TVSS1)	66P060	A W
27	7	- 5	ATSIGEN SURGE ARREST.	LAG(TVSS2)	. 964-060	- 0
28		6	ATSIGEN SURGE ARREST.	LAG(TVSS2)	66P060	1000
29	7	7	ATS/ILC NOT IN AUTO	ATS/ILC	BEF-DEC.	_
30	7	8	ATS/LC NOT IN AUTO	ATS/ILC	86P060	
31		-				_
32					1	
30		- 1	AI REMOTE RS232 PORT	D89 PIN 2		BWH
34	6	2	ALREMOTE RS232 PORT	DB9 PIN 3	66PO15	WO
35		3	AI REMOTE RS232 PORT	DB9 PIN 5		WG
36			Self-Self-Self-Self-Self-Self-Self-Self-	25-2(3)023	66P015	
37						7.7
36						
39						
40						
43						
42						
43					-	
44		100	E. at gramma managers are seen	.i 19/3/27/03/20		4.0
45		1	21LT ANNUNCIATOR PANEL	RS485 (+)	n processo	
46		. 2	21LT ANNUNCIATOR PANEL	RS485(-)	88PO15	
47				1000000	1 = 1 = 1 = 1	
48		4	21LT ANNUNCIATOR PANEL	12V (-)	66P060	
49			The control of the Co	a Salama	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
50	5	3	21LT ANNUNCIATOR PANEL	12V (+)	66PO60	

PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL VERIFY WITH THE VERIZON
WIRELESS FIELD REPRESENTATIVE AND/OR THE OWNER THAT THE ABOVE SCHEDULE IS STILL CURRENT.
IN THE EVENT OF AN UPDATE, THE CONTRACTOR SHALL USE THE MOST CURRENT SCHEDULE.

5085 REED ROAD COLUMBUS OH 43220 614-459-2050 FA 614-451-1385

NEW PAR

BURGESS NIPLE Engineers Architects Planners

Verizon

FULL SCALE PRINT IS ON 24" x 36" MEDIA

CONSTRUCTION **DRAWINGS**

REV	DATE	DESCRIPTION

SITE INFORMATION:

RINGS 270

5525 PARKCENTER CIRCLE DUBLIN, OH 43017 FRANKLIN COUNTY

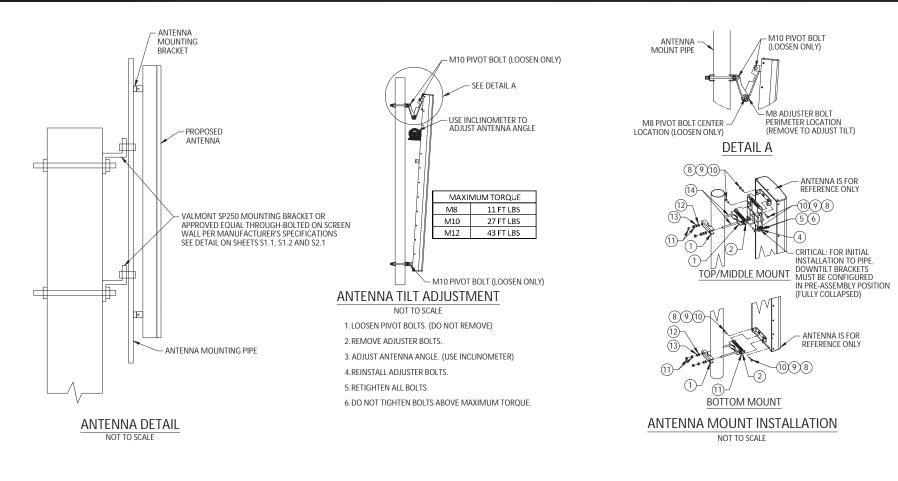
VERIZON WIRELESS SITE NUMBER:

CLMB-305

PR52818 DESIGNED BY: DRAWN BY: DATE:

SHEET TITLE:

GENERATOR CIRCUIT SCHEDULE



Item#	Description	Qty	U/M
1	PIPE CLAMP BRACKET, NO FLANGE	4	EA
2	BRACKET, PIPE CLAMP INTERFACE	2	EA
3	NOTCHED BRACKET	1	EA
4	BRACKET	1	EA
5	M8 BOLT	4	EΑ
6	M8 WASHER	4	EA
8	M10 NUT	12	EA
9	M10 LOCK WASHER	6	EA
10	M10 BOLT	6	EA
11	M12 NUT	12	EA
12	M12 WASHER	4	EA
13	M12 LOCK WASHER	4	EA
14	M12 CARRIAGE BOLT	4	EA

ANTENNA MOLINTS, ORIENTATION AND TOWER PROFILE ARE DIAGRAMMATIC ONLY ANTENNA SUPPORT PER STRUCTURE MANUFACTURER AND STRUCTURAL ANALYSIS.

614-459-2050 FA 614-451-1385 NEW PAR

FULL SCALE PRINT IS ON 24" x 36" MEDIA

BURGESS NIPLE

5085 REED ROAD COLUMBUS OH 43220

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CONSTRUCTION DRAWINGS

REV	DATE	DESCRIPTION	
SITE INFORMATION:			

RINGS 270

5525 PARKCENTER CIRCLE DUBLIN, OH 43017 FRANKLIN COUNTY

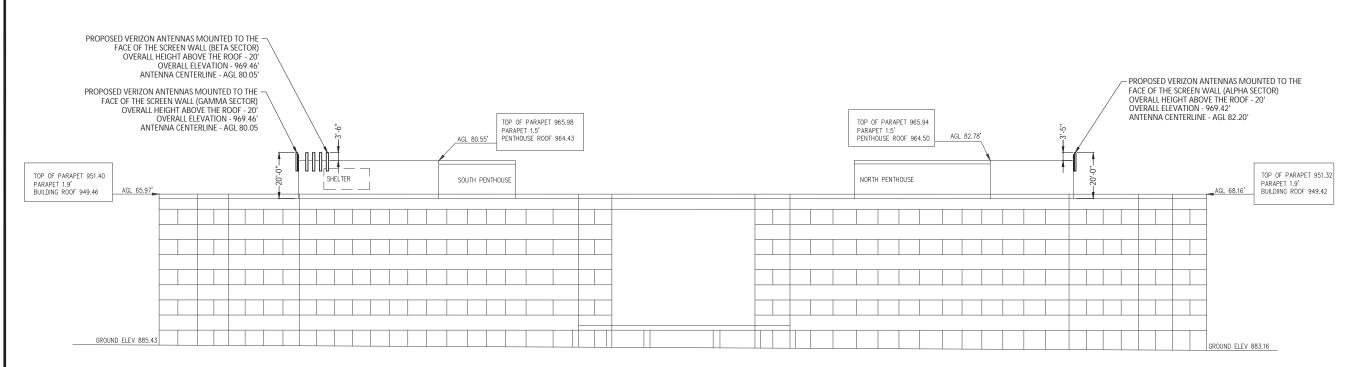
VERIZON WIRELESS SITE NUMBER:

CLMB-305

PR52818 DESIGNED BY: GSH DRAWN BY: 04/27/20

> BUILDING **ELEVATIONS &** ANTENNA **DETAILS**

> > C-12



EAST BUILDING ELEVATION NOT TO SCALE

GENERAL NOTES:

- 1. THE FACILITY IS AN UNOCCUPIED SPECIALIZED MOBILE RADIO FACILITY.
- PLANS ARE NOT TO BE SCALED AND ARE INTENDED TO BE A DIAGRAMMATIC OUTLINE ONLY, UNLESS NOTED OTHERWISE. THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE PRAWMIGS.
- PRIOR TO THE SUBMISSION OF THE BIDS, THE CONTRACTOR SHALL VISIT THE JOB SITE AND BECOME FAMILIAR WITH THE FIELD CONDITIONS. ANY DISCREPANCIES ARE TO BE BROUGHT TO THE ATTENTION OF THE OWNER'S REPRESENTATIVE
- 4. THE CONTRACTOR SHALL RECEIVE IN WRITING, AUTHORIZATION TO PROCEED BEFORE STARTING WORK ON ANY ITEM NOT CLEARLY IDENTIFIED BY THE CONTRACT DOCUMENTS.
- THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY OTHERWISE NOTED.
- 6. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK, USING BEST SKILLED PERSONNEL. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES AND FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT INCLUDING CONTACT AND COORDINATION WITH THE LANDLORD'S AUTHORIZED REPRESENTATIVE.
- THE CONTRACTOR SHALL ACQUIRE SURVEYOR SERVICES TO PROVIDE CONSTRUCTION STAKING PRIOR
 TO START OF CONSTRUCTION. CONSTRUCTION STAKING SHALL IDENTIFY EASEMENT BOUNDARIES,
 LEASE BOUNDARIES, TOWER FOUNDATION CENTERS/BOUNDARIES, EQUIPMENT PAD CORNERS,
 FENCE CORNERS, ETC. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH
 CONSTRUCTION STAKING
- THE CONTRACTOR SHALL MAKE NECESSARY PROVISIONS TO PROTECT EXISTING IMPROVEMENTS, PAVING, CURBS. GALVANIZED SURFACES, ETC., AND UPON COMPLETION OF WORK, REPAIR ANY DAMAGE THAT OCCURRED DURING CONSTRUCTION.
- THE CONTRACTOR SHALL KEEP THE CONSTRUCTION SITE CLEAN, HAZARD FREE, AND DISPOSE OF ALL DIRT, DEBRIS, RUBBISH AND REMOVE EQUIPMENT NOT SPECIFIED AS REMAINING ON THE PROPERTY. LEAVE PREMISES IN CLEAN CONDITION AND FREE FROM PAINT SPOTS, DUST, OR SMUDGES OF ANY NATURE.
- 10. THE CONTRACTOR SHALL PROVIDE A COMPLETE SET OF AS BUILT DRAWINGS TO THE OWNER AFTER COMPLETION OF THE IOR
- 11. MEANS AND METHODS OF CONSTRUCTION INCLUDING, BUT NOT LIMITED TO, THE DESIGN AND PLACEMENT OF FORMS AND SHORING ARE THE RESPONSIBILITY OF THE CONTRACTOR.
- 12. ALL EARTHWORK, GRADING AND PAVING SHALL BE PERFORMED IN ACCORDANCE WITH THE CURRENT STATE DEPARTMENT OF TRANSPORTATION STANDARDS FOR ROAD AND BRIDGE CONSTRUCTION.
- 13. ALL WORK PERFORMED BY THE CONTRACTOR SHALL BE GUARANTEED BY THE CONTRACTOR FOR A PERIOD OF TWELVE (12) MONTHS FROM THE DATE OF FINAL ACCEPTANCE. THIS GUARANTEE SHALL INCLUDE ALL DEFECTS IN MATERIALS AND WORKMANSHIP.
- 14. ALL DIRT WILL BE DISPOSED OF OFFSITE BY THE CONTRACTOR.
- 15. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ADEQUATE SIGNS, BARRICADES, FENCING, TRAFFIC CONTROL DEVICES AND MEASURES, AND ALL OTHER MEASURES THAT ARE NECESSARY TO PROTECT THE SAFETY OF THE SITE AT ALL TIMES.
- 16. THE CONTRACTOR, BY AGREEING TO PERFORM THE WORK, AGREES TO INDEMNIFY AND HOLD HARMLESS THE OWNER, THE ENGINEER, THE MUNICIPALITY, AND ALL AGENTS AND ASSIGNS OF THOSE PARTIES, FROM ALL SUITS AND CLAIMS ARISING OUT OF THE PERFORMANCE OF SAID WORK, AND FURTHER AGREES TO DEFEND OR OTHERWISE PAY ALL LEGAL FEES ARISING OUT OF THE DEFENSE OF SAID PARTIES
- 17. EXISTING UTILITIES, IF ANY, ARE SHOWN AS A GUIDE ONLY. THE CONTRACTOR SHALL VERIFY THE LOCATION OF EXISTING UTILITIES PRIOR TO EXCAVATING ANYWHERE ON THE SITE.
- 18. ALL ADDENDA, IF ANY, MUST BE ACKNOWLEDGED WITH THE BID.

EXCAVATION/BACKFILL & COMPACTION NOTES:

- 1. THE OWNER HAS REQUESTED A GEOTECHNICAL EXPLORATION TO BE PERFORMED AT THE SITE. COPIES OF THE REPORT ARE AVAILABLE TO THE CONTRACTOR FOR REFERENCE ONLY, NEITHER THE OWNER OR THE ENGINEER GUARANTEE THE ACCURACY OR THE VALIDITY OF THE DATA CONTAINED THEREIN, NOR DO THEY ASSUME ANY RESPONSIBILITY FOR THE CONTRACTORS USE OR INTERPRETATION OF THE DATA CONTAINED THEREIN. THE CONTRACTOR SHOULD FAMILIARIZE HIMSELF WITH THE CONTENTS OF THE ABOVE REFERENCED REPORT PRIOR TO THE SUBMITTAL OF HIS RIDS.
- REFER TO GEOTECHNICAL REPORT PROVIDED BY THE OWNER. FOUNDATION SHALL BEAR ON VIRGIN SOIL OR COMPACTED FILL MATERIAL CAPABLE OF SUPPORTING A MINIMUM SOIL BEARING PRESSURE AS STATED IN THE GEOTECHNICAL REPORT.
- FOUNDATIONS SHALL BE BACKFILLED EVENLY AND BE ADEQUATELY BRACED ON ALL SIDES BY THE CONTRACTOR UNTIL IT HAS CURED FOR 72 HOURS (MINIMUM).
- EXPANSIVE SOILS (CLAY) MAY REQUIRE SPECIAL CARE AT POINTS WHERE RIGID CONNECTIONS ARE
 MADE TO THE FOUNDATIONS (IE UNDERGROUND CONDUIT FEEDS, RIGID WAVEGUIDE BRIDGES ETC)
 ALLOWING FOR ADEQUATE DRAINAGE WILL LESSEN THIS EFFECT.
- 5. REMOVE ALL SOILS CONTAINING TOPSOIL, ORGANIC MATERIALS AND OR FILL MATERIALS FROM WITHIN THE AREA OF THE FOLINDATIONS.
- PROOF ROLL RESULTING SUB-GRADE WITH A HEAVILY LOADED SINGLE AXLE DUMP TRUCK OR SIMILAR VEHICLE (20 TON LOAD). CONTRACTOR SHALL UNDERCUT AND REPLACE WITH ENGINEERED FILL (COMPACTED MATERIAL) ALL LOOSE SOFT OR UNSTABLE AREAS REVEALED DURING PROOF ROLLING AS DIRECTED BY THE TESTING AGENCY.
- 7. BACKFILL AND COMPACT THE AREA WITHIN THE FOUNDATIONS WITH GRANULAR MATERIALS.
- 8. THE CONTRACTOR SHALL EXCAVATE 8" BELOW GRADE AND SPRAY WITH WEED CONTROL AND PLACE GEOTEXTILE FABRIC, CLASS LL AGGREGATE BASE AND CLEAN ROCK AROUND THE ENTIRE FENCE APEA.
- ENGINEERED FILL SHOULD CONSIST OF ENVIRONMENTALLY CLEAN APPROVED MATERIAL, FREE OF LUMPS, FROZEN SOIL, TOPSOIL OR OTHER DELETERIOUS MATERIAL.
- 10. ALL FILL MATERIALS REQUIRING COMPACTION SHALL BE PLACED IN LIFTS NOT EXCEEDING 9 INCHES AND COMPACTED TO A MINIMUM OF 95 PERCENT OF MAXIMUM DRY DENSITY AS DETERMINED IN ACCORDANCE WITH ASTM D 1557 (MODIFIED PROCTOR) FILL MATERIALS NOT REQUIRING COMPACTION SHALL BE PLACED IN LIFTS NOT TO EXCEED 12 INCHES.
- 11. CONTRACTOR SHALL PROVIDE ADEQUATE SHORING AND SPACING FOR THE EXCAVATION WORK IN ACCORDANCE WITH THE APPLICABLE SAFFTY ORDINANCES.
- 12. LOOSE MATERIAL SHALL BE REMOVED FROM THE BOTTOM OF THE EXCAVATION AREA PRIOR TO PLACEMENT OF THE CONCRETE.
- 13. CONTRACTOR IS RESPONSIBLE FOR ALL COLD WEATHER EQUIPMENT SUCH AS GROUND THAWING EQUIPMENT AND FROST TEETH EQUIPPED TRENCHERS TO AVOID COLD WEATHER DELAYS, THESE SHALL BE INCLUDED IN THE ORIGINAL BID FOR THIS PROJECT. CHANGE ORDER REQUESTS AFTER CONSTRUCTION HAS STARTED SHALL BE COMPLETED AT THE CONTRACTOR'S EXPENSE.
- 14. CONTRACTOR IS RESPONSIBLE FOR ALL DE-WATERING COSTS ASSOCIATED WITH THIS PROJECT, WHETHER WATER IS SHOWN AS BEING PRESENT ON THE SOIL REPORT OR NOT. DE-WATERING COSTS MUST BE INCLUDED IN THE ORIGINAL BID FOR THIS PROJECT. CHANGE ORDERS SUBMITTED FOR DE-WATERING COSTS AFTER CONSTRUCTION HAS STARTED SHALL BE COMPLETED AT THE CONTRACTOR'S EYPENSE

SOIL EROSION & SEDIMENT CONTROL NOTES:

- REASONABLE CARE MUST BE TAKEN TO MINIMIZE SOIL EROSION. REFER TO PROCEDURES AND STANDARDS FOR URBAN SOIL EROSION AND SEDIMENTATION CONTROL PREPARED BY THE U.S. SOIL AND CONSERVATION SERVICE.
- ALL INLETS, PIPES, STRUCTURES, ROADS AND SWALES MUST BE FREE OF DIRT AND SILT, AND MAINTAINED DURING CONSTRUCTION ACTIVITY.
- SOIL STOCKPILES SHALL HAVE A BERM OR TRENCH AROUND THE CIRCUMFERENCE TO CONTROL SILT
 IF REQUIRED, IF THE SOIL STOCKPILE IS TO REMAIN FOR NINE MONTHS OR LONGER, IT MUST HAVE
 FAVOIGH VEGETATION TO CONTROL WATER AND WIND FROSION
- STRAW BALES MUST BE PLACED AND FIRMLY ANCHORED AROUND ALL INLETS, CATCH BASINS AND SWALES THAT ARE OR COULD RECEIVE SILT DURING THE COURSE OF CONSTRUCTION ACTIVITIES.
- $5. \quad \text{SILT FENCE SHALL BE USED TO CONTROL RUNOFF} \ \ \text{ASSOCIATED WITH SITE CONSTRUCTION}.$
- 6. ONCE CONSTRUCTION IS COMPLETE, REPLACE EROSION CONTROL DEVICES WITH SOD AND TOPSOIL.
- 7. ALL ADJACENT ROADWAYS MUST BE CLEAN AT ALL TIMES.
- ADDITIONAL SOIL EROSION CONTROL DEVICES SHALL BE UNDERTAKEN IF DEEMED NECESSARY BY
 THE ENGINEERING INSPECTOR ANYTIME DURING THE COURSE OF CONSTRUCTION.

CONCRETE AND STEEL REINFORCEMENT NOTES:

- ALL CONCRETE SHALL BE NORMAL WEIGHT AND SHALL ACHIEVE A COMPRESSIVE STRENGTH, FC = 4000 PSI A7 7 DAYS, UNLESS NOTED OTHERWISE. CEMENT SHALL CONFORM TO ASTM C150 TYPE LL A11 EXPOSED CONCRETE SHALL BE FNTRAINED.
- MAXIMUM AGGREGATE SIZE SHALL NOT EXCEED 3/4".
- 3. SLUMP OF CONCRETE SHALL BE 2" TO 5".
- 4. NO ADMIXTURES SHALL BE USED WITHOUT THE PRIOR WRITTEN AUTHORIZATION OF THE ENGINEER.
- 5. ALL CONSTRUCTION AND EXPANSION JOINTS SHALL BE INSTALLED PER THE DRAWINGS.
- 6. ALL EXPOSED CORNERS OF CONCRETE WORK SHALL BE CHAMFERED 3/4" UNLESS NOTED OTHERWISE
- 7. CURING OF CONCRETE SHALL BE PER ACI 308_89, STANDARD PRACTICE FOR CURING CONCRETE
- 8. PLACE CONCRETE IN ACCORDANCE WITH ACI 304 89.
- 9. HOT WEATHER CONCRETE SHALL BE PER ACI 305R_89, COLD WEATHER CONCRETING SHALL BE PER ACI 306R_89.
- 10. PRIOR TO THE PLACEMENT OF THE CONCRETE. THE CONTRACTOR SHALL PROVIDE A MINIMUM 24 HOUR WRITTEN NOTICE TO THE OWNERS REPRESENTATIVE AND THE TESTING AGENCY.
- 11. PROVIDE TEST CYLINDERS AS FOLLOWS:
- A. EQUIPMENT PAD FOUNDATION: (1) CYLINDER @ 7 DAYS, (1) CYLINDER @ 28 DAYS.
- B. TOWER FOUNDATION (IF APPLICABLE): (1) CYLINDER @ 7 DAYS, (1) CYLINDER @ 28 DAYS.
- 12. REINFORCED STEEL SHALL BE DEFORMED AND CONFORM TO THE REQUIREMENTS OF ASTM A615 GRADE 60.
- 13. ALL WELDED WIRE FABRIC MUST CONFORM TO ASTM A 185.
- 14. UNLESS NOTED OTHERWISE ALL REINFORCING STEEL SHALL BE LAPPED PER ACI CODE 318.
- ALL FORM WORK SHALL BE RIGID, TIGHT, LEVEL, PLUMB AND SUFFICIENTLY SHORED TO RESIST CONSTRUCTION LOAD CONDITIONS.
- 16. WELDING OF REINFORCING STEEL IS PROHIBITED.
- 17. ALL REBAR SPLICES SHALL BE CLASS "C", NO WELDING WILL BE ALLOWED.
- ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH THE ACI 301, ACI 318, ACI 336, ASTM-A184 AND ASTM-A185 FOR CAST IN PLACE CONCRETE.

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BURGESS NIPLE

5085 REED ROAD COLUMBUS OH 43220 614-459-2050 FA 614-451-1385

PREPARED FOI

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NEW

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FULL SCALE PRINT IS ON 24" x 36" MEDIA

CONSTRUCTION DRAWINGS

REV	DATE	DESCRIPTION

SITE INFORMATION

RINGS 270

5525 PARKCENTER CIRCLE DUBLIN, OH 43017 FRANKLIN COUNTY

VERIZON WIRELESS SITE NUMBER

CLMB-305

A&E NUMBER: PR52818

DESIGNED BY: GSH
DRAWN BY: JBH
DATE: ######

SHEET TITLE:

GENERAL NOTES

C-13A

ELECTRICAL - GENERAL NOTES:

THE GENERAL NOTES AND ACCOMPANYING DRAWINGS ARE TO INDICATE THE PROVISIONS AND REQUIREMENTS BY THE ELECTRICAL CONTRACTOR OF ALL LABOR, MATERIALS, AND EQUIPMENT REQUIRED TO INSTALL THE ELECTRICAL WORK COMPLETE IN CONNECTION WITH THIS SITE AND SHALL INCLUDE, BUT NOT BE LIMITED TO, THE FOLLOWING:

- 1. THE INSTALLATION, PROVISIONS, AND CONNECTION OF A GROUND ROD (ELECTRODE) SYSTEM AS
- 2. THE INSTALLATION AND PROVISION OF AN ELECTRICAL SERVICE (OVERHEAD OR UNDERGROUND) AND ALL CONDUIT AND WIRE ASSOCIATED WITH IT AS INDICATED AND/OR REQUIRED ON PLANS.
- 3. THE INSTALLATION, PROVISION OF CONDUIT AND CONNECTIONS FOR LOCAL TELEPHONE SERVICE.
- 4. UNDERGROUND CONDUITS SHALL BE PVC SCH 40 UNLESS OTHERWISE NOTED. ALL EXPOSED EXTERIOR CONDUITS SHALL BE RGC AND ALL INTERIOR CONDUITS SHALL BE EMT.
- 5. ALL PULL STRINGS SHALL BE LEFT IN CONDUITS (PVC, RGC, AND EMT) FOR FUTURE USE
- THE CONTRACTOR SHALL FURNISH AND INSTALL ELECTRICAL SERVICE ENTRANCE CONDUCTORS, CONDUIT AND METER SOCKET AND MAKE THE NECESSARY CONNECTION TO THE SERVICE EQUIPMENT WITHIN THE CABINETS.

PRIOR TO THE SUBMISSION OF BIDS, THE ELECTRICAL CONTRACTOR SHALL VERIFY ALL DETAILS AND SCHEDULES ON THE DRAWINGS AND SPECIFICATIONS PROVIDED BY THE OWNER, FOR MEANING OF ABBREVIATIONS AND ADDITIONAL REQUIREMENTS AND INFORMATION, CHECK STRUCTURAL AND OTHER MECHANICAL AND ELECTRICAL DRAWINGS FOR SCALE, SPACE LIMITATIONS, BEAMS, DOOR SWINGS, WINDOWS, COORDINATION, AND ADDITIONAL INFORMATION, ETC. REPORT ANY DISCREPANCIES, CONFLICTS, ETC. TO THE OWNER BEFORE SUBMITTING BID.

UNLESS OTHERWISE NOTED, THE ELECTRICAL CONTRACTOR SHALL PROVIDE THE NECESSARY MOTOR STARTERS, DISCONNECTS, CONTROLS, ETC. FOR ALL EQUIPMENT FURNISHED BY OTHERS (FBO). ALL ASSOCIATED EQUIPMENT SHALL BE INSTALLED AND COMPLETELY WIRED BY THE ELECTRICAL CONTRACTOR IN ACCORDANCE WITH MANUFACTURER'S WIRE DIAGRAMS AND AS REQUIRED FOR A COMPLETE OPERATING INSTALLATION. ELECTRICAL CONTRACTOR SHALL VERIFY AND COORDINATE CHARACTERISTICS AND REQUIREMENTS OF (FBO) EQUIPMENT PRIOR TO ROUGH-IN OF CONDUIT AND

CONTRACTOR RESPONSIBILITIES

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND SECURING ALL REQUIRED PERMITS, LICENSES, INSPECTIONS. APPROVALS, AND PAYMENT OF ALL FEES.
- THE INSTALLATION SHALL BE IN ACCORDANCE WITH ALL APPLICABLE: STATE, LOCAL, AND NATIONAL CODES AS WELL AS THE LATEST ISSUE OF THE VARIOUS APPLICABLE STANDARD SPECIFICATIONS OF THE FOLLOWING RECOGNIZED AUTHORITIES:

NATIONAL ELECTRIC CODE

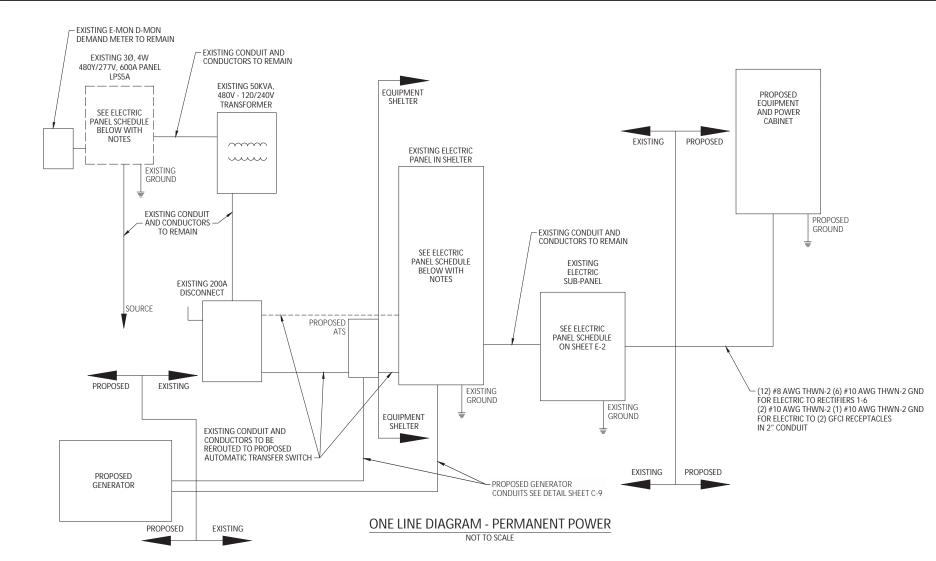
AMERICAN NATIONAL STANDARD INSTITUTE ANSI

INSTITUTE OF ELECTRICAL AND ELECTRONIC ENGINEERS IEEE

AMERICAN SOCIETY FOR TESTING MATERIALS
NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION NFMA

UNDERWRITERS LABORATORY, INC

PRIOR TO COMMENCING WORK, THE ELECTRICAL CONTRACTOR SHALL CONFORM TO THE LOCAL UTILITY COMPANY'S REGULATIONS AND SHALL GET THE APPROVAL FROM SAME, BEFORE SUBMITTING HIS BID, TO DETERMINE FROM EACH UTILITY ADDITIONAL COSTS THEY MAY REQUIRE,



400V /077V 74 4W COO A	PANEL LOADING SCHEDULE											
480Y/277V, 3Ø, 4W, 600 AMP BUS 600A MAIN: CB () SW () LUGS (X)												
600A MAIN: CB () SW () LUG	S (X)								DEMAND		
FEED THRU LUGS ()							PHASE	Α	В	C	TOTAL	\geq
. ()	LUMN)				<va< td=""><td></td><td></td><td>\geq</td><td></td><td></td></va<>			\geq		
ENCLOSURE: NEMA 1() 3R	` ' ') 4X(AMPS			\geq	$\geq \leq$	
CIRCUIT DESCRIPTION	LOAD KVA	BKR./ POLES	CKT. NO.		ASE B	CKT. NO.	BKR./ POLES				RCUIT RIPTION	
LTS-CORE & BRIDGE			1	Х		2			LTS-	PENTH	OUSE	
ROOF-LIGHT			3		Χ	4			LTS-	EAST N	NORTH	
LTS-ATRIUM			5	Х		6			SPAR	E		
LTS-SOUTHWEST			7		Х	8			LTS-	NORTH	CENTE	7
LTS-SOUTHEAST CENTER			9	Х		10			LTS-LOBBY & VENDING			DING
LTS-SOUTH			11		Χ	12			LTS-NORTH WEST			
LTS-CENTER WEST			13	Х		14			LTS-500			
LTS-CENTER WEST			15		Χ	16			LTS-501 -> 510			
LTS-EAST SOUTH			17	Х		18			SPACE			
NORTH ATRIUM LTS			19		Χ	20					EVTE	
SOUTH ATRIUM LTS			21	Х		22				N	EXTEL	
SPACE			23		Χ	24			SPAC	E		
SPACE			25	Х		26					EVTE	
SPACE			27		Χ	28			NEXTEL			
SPACE			29	Х		30			SPACE			
			31		Х	32						
RPS5B			33	Х		34			HEAT	PUMP		
			35		Х	36						
			37	Х		38			SPAR	E		
RPS5A			39		Х	40			SPAR	E		
			41	Х		42			LTS-	EMERG	ENCY	

EXISTING ELECTRICAL EQUIPMENT TO REMAIN AS PART OF THE PROPOSED INSTALLATION. AT THE COMPLETION OF THE PROJECT ALL BREAKERS AND DISCONNECTS SHALL BE ENERGIZED TO PROVIDE THE EXISTING SHELTER WITH POWER

EXISTING 3Ø, 4W 480Y/277V, 600A PANEL LPS5A SCHEDULE

(LOCATED IN THE 5TH FLOOR MECHANICAL ROOM)

240/120V, 1ø, 3W, 200 AMP BUS							PANEL LOADING SCHEDULE						
200A MAIN: CB (X) SW ()	CONNECTED DEMA						DEMAND						
FEED THRU LUGS ()						PHASE A B C TOTAL					> <		
SURFACE (X) FLUSH () COI	LUMN	TYPE ()			ŀ	<va< td=""><td></td><td></td><td>></td><td></td><td></td></va<>			>			
ENCLOSURE: NEMA 1() 3R(<) 12() 4X()			A	AMPS			\supset	$\supset \subset$		
CIRCUIT DESCRIPTION	LOAD KVA	BKR./ POLES	CKT. NO.		ASE B	CKT. NO.	BKR./ POLES	LOAD KVA		CIRCUIT DESCRIPTION			
LIGHTING + EXIT LIGHT		20/1	1	Х		2	30/2			0.5			
LEAD LAG CONTROLLER		20/1	3		Χ	4	XXX		FUTU	KE			
RECEPTACLE		20/1	5	Х		6	30/2			0.5			
SMOKE DETECTOR		20/1	7		Χ	8	XXX		FUTU	KE			
RECEPTACLE		20/1	9	Х		10	30/2		CUTU	DE			
CUDOE DESTESSOR		60/2	11		Χ	12	XXX		FUTURE				
SURGE PROTECTOR		XXX	13	Х		14	30/2		ELTUDE				
FUTURF		30/2	15		Χ	16	XXX		FUTURE				
FUTURE		XXX	17	Х		18	30/2						
FUTURF		30/2	19		Χ	20	XXX		FUTU	KE			
FOTORE		XXX	21	Х		22	30/2		FUTU	DE			
HVAC UNIT #1		35/2	23		Χ	24	XXX		1 1010	KE			
HVAC UNII #1		XXX	25	Х		26	125/2		CLID	-PANEL			
LINAS LINIT #S		35/2	27		Χ	28	XXX		208-	-PANEL	-		
HVAC UNIT #2		XXX	29	Χ		30			SPAC	E			

EXISTING ELECTRICAL FOUIPMENT TO REMAIN AS PART OF THE PROPOSED INSTALLATION. AT THE COMPLETION OF THE PROJECT ALL BREAKERS AND DISCONNECTS SHALL BE ENERGIZED TO PROVIDE THE EXISTING SHELTER WITH POWER EXISTING 1Ø, 3W 240/120V, 200A PANEL SCHEDULE

(LOCATED IN THE EXISTING SHELTER)

BURGESS NIPLE

5085 REED ROAD COLUMBUS OH 43220 614-459-2050 FA 614-451-1385

NEW PAR

S

FULL SCALE PRINT IS ON 24" x 36" MEDIA

CONSTRUCTION DRAWINGS

REV	DATE	DESCRIPTION			
SITE INFORMATION:					

RINGS 270

5525 PARKCENTER CIRCLE DUBLIN, OH 43017

VERIZON WIRELESS SITE NUMBER: CLMB-305

PR52818 GSH

DRAWN BY:

SHEET TITLE: PERMANENT

POWER DETAILS

240/120V, 1ø, 3W, 100 AMP BUS							PANEL LOADING SCHEDULE						
100A MAIN: CB () SW () LUGS (X)							CONNECTED DE						
FEED THRU LUGS ()						Р	HASE	Α	В	С	TOTAL	> <	
SURFACE (X) FLUSH () CO	DLUMN	TYPE ()			ŀ	<va< td=""><td></td><td></td><td>></td><td></td><td></td></va<>			>			
ENCLOSURE: NEMA 1() 3R	(X) 12(() 4X()			F	AMPS			\supset	\supset		
CIRCUIT DESCRIPTION	LOAD KVA	BKR./ POLES	CKT. NO.		ASE B	CKT. NO.					IRCUIT CRIPTION		
RECTIFIER #1		30/2	1	Х		2	30/2		RECT	IFIER	#2		
"		XXX	3		Х	4	XXX				"		
RECTIFIER #3		30/2	5	Х		6	30/2		RECT	IFIER	#4		
"-		XXX	7		Х	8	XXX				"		
RECTIFIER #5		30/2	9	Х		10	30/2		RECT	IFIER	#6		
		XXX	11		Χ	12	XXX						
RECTIFIER #7		30/2	13 15	Х	X	14 16	30/2		RECTIFIER #8				
SPACE		XXX	17	X	^	18	XXX		SPAC	_			
SPACE			19	_^	X	20			SPAC				
SPACE			21	X	<u> </u>	22			SPAC				
SPACE			23	^	X	24			SPAC	_			
SFACE			23		Ŕ	24			SFAC				
					<u> </u>							_/	
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		1									/		
\times									>				

EXISTING ELECTRICAL EQUIPMENT TO REMAIN AS PART OF THE PROPOSED INSTALLATION. AT THE COMPLETION OF THE PROJECT ALL BREAKERS AND DISCONNECTS SHALL BE ENERGIZED TO PROVIDE THE EXISTING SHELTER WITH POWER EXISTING SUB-PANEL SCHEDULE

(LOCATED IN THE EXISTING SHELTER)

240/120V, 1ø, 3W, 100 AMP BUS							PANEL LOADING SCHEDULE						
100A MAIN: CB () SW ()		CONNECTED DEMA						DEMAND					
FEED THRU LUGS ()						F	'HASE	Α	В	С	TOTAL	><	
SURFACE (X) FLUSH () COI	_UMN	TYPE ()			ŀ	(VA	5.72	5.72	$\overline{}$	11.44	11.44	
ENCLOSURE: NEMA 1() 3R(X) 12() 4X()			AMPS 47.7 47.7 47			47.7				
CIRCUIT DESCRIPTION	LOAD KVA	BKR./ POLES	CKT. NO.	PH/ A		CKT. NO.	BKR./ POLES	LOAD KVA			RCUIT RIPTION		
	1.43	30/2	1	Х		2	30/2	1.43	5505		10		
RECTIFIER #1	1.43	XXX	3		Χ	4	XXX	1.43	RECH	IFIER #	.2		
	1.43	30/2	5	Х		6	30/2	1.43	5505				
RECTIFIER #3	1.43	XXX	7		Χ	8	XXX	1.43	RECH	IFIER #	‡4		
5.17.105		30/2	9	Χ		10	30/2			D.F.			
FUTURE		XXX	11		Χ	12	XXX		FUTURE				
5.15.165		30/2	13	Χ		14	30/2			FUTURE			
FUTURE		XXX	15		Χ	16	XXX		110101	KE			
SPACE			17	Χ		18			SPAC	E			
SPACE			19		Χ	20			SPAC	E			
SPACE			21	Χ		22			SPAC	E			
SPACE			23		Χ	24			SPAC	E			
									\supset				

EXISTING ELECTRICAL EQUIPMENT TO REMAIN AS PART OF THE PROPOSED INSTALLATION. AT THE COMPLETION OF THE PROJECT ALL BREAKERS AND DISCONNECTS SHALL BE ENERGIZED TO PROVIDE THE EXISTING SHELTER WITH POWER

UPDATED SUB-PANEL SCHEDULE

(LOCATED IN THE EXISTING SHELTER)

PREPARED BY:

BURGESS NIPLE
Engineers Architects Planners

ngineers ■ Architects ■ Plann 5085 REED ROAD COLUMBUS OH 43220 614-459-2050 FA 614-451-1385

PREPARED FOI

NEW PAR

verizon

FULL SCALE PRINT IS ON 24" x 36" MEDIA

CONSTRUCTION DRAWINGS

REV	DATE	DESCRIPTION

SITE INFORMATION:

RINGS 270

5525 PARKCENTER CIRCLE DUBLIN, OH 43017

FRANKLIN COUNTY

VERIZON WIRELESS SITE NUMBER: CLMB-305

A&E NUMBER: PR52818

DESIGNED BY: GSH
DRAWN BY: JBH
DATE: 04/27/20

SHEET TITLE:

PANEL SCHEDULES

F_2

CODED DRAWING NOTES

- 1 EXISTING MAIN BUS BAR MOUNTED TO EXTERIOR OF SHELTER
- (2) EXISTING SECONDARY BUS BAR MOUNTED TO INTERIOR OF SHELTER
- 3) EXISTING SECONDARY BUS BAR GROUNDED TO MAIN BUS BAR WITH #2 AWG GREEN INSULATED GROUND WIRE
- (4) PROPOSED EQUIPMENT GROUNDED TO SECONDARY BUS BAR WITH #2 AWG GREEN INSULTED GROUND WIRE
- (5) PROPOSED GENERATOR BUS BAR MOUNTED AT GENERATOR ENCLOSURE LOCATION
- PROPOSED GENERATOR ENCLOSURE GROUNDED TO GENERATOR BUS BAR AT TWO LOCATIONS (6) WITH #2 AWG SBTC GROUND WIRE IN 3/4" SCH 40 PVC CONDUIT
- PROPOSED GENERATOR BUS BAR GROUNDED TO MAIN BUS BAR WITH #2 AWG SBTC GROUND WIRE IN 3/4" SCH 40 PVC CONDUIT
- 8 PROPOSED AUTOMATIC TRANSFER SWITCH (ATS) GROUNDED TO MAIN BUS BAR WITH #2 AWG SBTC GROUND WIRE IN 3/4" SCH 40 PVC CONDUIT
- (9) EXISTING MAIN BUS BAR PREVIOUSLY GROUNDED TO BUILDING STEEL TO REMAIN AS PART OF THE INSTALLATION
- (10) EXISTING MAIN BUS BAR ADDITIONALLY GROUNDED TO EXISTING ROOF-TOP LIGHTING PROTECTION SYSTEM. CONTRACTOR TO COORDINATE THE LIGHTNING PROTECTION COMPANY NOTED ON SHEET C-1



- SERVICE BOND IS TO BE MADE BY DEVICES (STRAPS, SCREWS, ETC.) SUPPLIED BY EQUIPMENT MANUFACTURER. IF NO SUCH DEVICE IS SUPPLIED, BOND IS TO BE MADE IN ACCORDANCE WITH NEC ARTICLE 250.
- 2. WHEN SERVICE OVERCURRENT DISCONNECT IS FIELD INSTALLED AND HAS A NEUTRAL TO GROUND CONNECTION ESTABLISHED, REMOVE NEUTRAL TO GROUND CONNECTION IN MANUAL TRANSFER.
- ALL LUGS THAT HOLD MORE THAN ONE WIRE SHALL BE LISTED FOR MULTI-BARRELL CONNECTIONS.
- 4. CONNECT ONE #2 GREEN INSULATED COPPER WIRE TO PANEL GROUND BUS.
- 5. PROVIDE "ELECTRIC MOTION" TAMPER RESISTANT BUS BARS AT BULKHEAD AND ABOVE THE TURN AT THE ICE BRIDGE. UTILITY H-FRAME BUS BAR (IF REQUIRED) WILL BE AN ELECTRIC MOTION TINNED COPPER BUS BAR ON RED SEAL INSULATORS & STAINLESS STEEL BRACKET. COAT WITH ELECTRIC MOTION ANTI-THEFT COMPOUND.
- 6. IF A FENCE IS LOCATED WITHIN 25 FEET OF THE TOWER RING GROUND, OR 6 FEET FROM THE EQUIPMENT PAD GROUND RING, BOND THE:

 **** FENCE TO THE RING

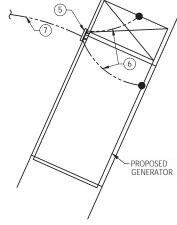
 - FENCE POSTS TO THE RING AT DISTANCES NOT TO EXCEED 20 FEET OPENINGS (E.G. GATES) ACROSS THE FENCE

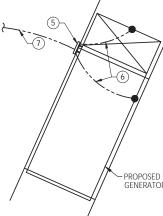
NOTE: ACTUAL RESISTANCE MUST BE MEASURED PRIOR TO CONNECTION TO THE POWER GRID.

NOTE: "NO-OX-ID" SANCHEM INC. IS THE APPROVED GROUNDING COMPOUND

NOTE: FOR ALL ABOVE GRADE CONNECTIONS TO TOWER, ICE BRIDGE, UTILITY H-FRAME, FENCE POSTS, GATE POSTS, GENERATORS, ETC... ALL OF THESE EXPOSED PIGTAILS SHALL BE WITH EMC MODEL #2223-TMC THEFT RESISTANT CABLE. THESE PIGTAILS SHALL THEN HAVE THE SHIELDS STRIPPED BACK AND CADWELDED TO THE TOWER AND EQUIPMENT PAD GROUND RING. ON LONG BELOW GRADE RUNS ONLY, THE ABOVE GROUND PORTIONS (FROM 24" BELOW GRADE UP TO ABOVE GRADE) SHALL BE IN THE EM THEFT RESISTANT CABLE. CADWELD CONNECTIONS FOR IN-LINE BUT SPLICE FROM #2 TO THE EM CABLE SHALL BE WITH SSC-1T.







BURGESS NIPLE 5085 REED ROAD COLUMBUS OH 43220 614-459-2050

FA 614-451-1385

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FULL SCALE PRINT IS ON 24" x 36" MEDIA

CONSTRUCTION DRAWINGS

REV	DATE	DESCRIPTION				
	CITE INFORMATION.					

RINGS 270

5525 PARKCENTER CIRCLE DUBLIN, OH 43017

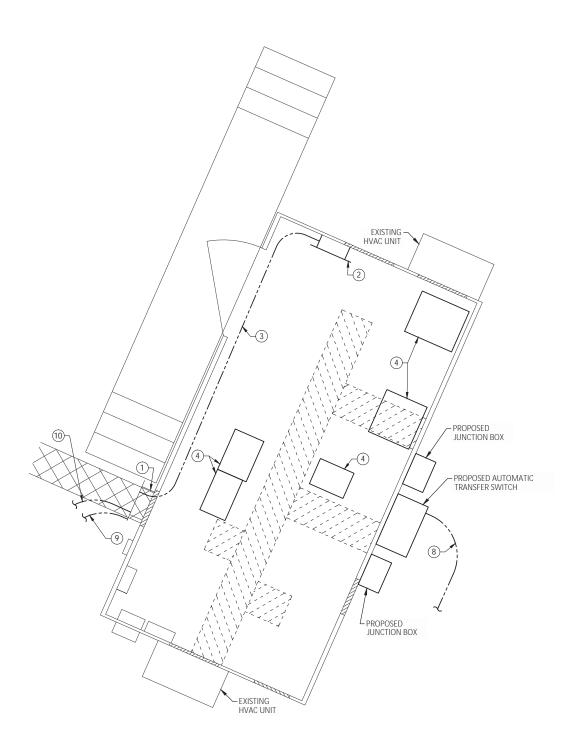
VERIZON WIRELESS SITE NUMBER:

CLMB-305

DRAWN BY:

GROUNDING PLAN

G-1







CODED DRAWING NOTES

- PROPOSED SECTOR BUS BAR MOUNTED AT ROOFTOP EQUIPMENT SLED
 I OCATION
- (2) PROPOSED ANTENNA AND ANTENNA MOUNT (TYP OF 4 PER SECTOR)
 GROUNDED PER MANUFACTURER'S SPECIFICATIONS TO THE ANTENNA
 BUS BAR
- PROPOSED REMOTE RADIOHEAD UNIT (RRU) (TYP OF 4 PER SECTOR)
 GROUNDED PER MANUFACTURER'S SPECIFICATIONS TO THE SECTOR
 BUS BAR
- 4 Proposed overvoltage protection unit (ovp) grounded per manufacturer's specifications to the sector bus bar
- 5 PROPOSED SECTOR BUS BAR GROUNDED TO MAIN BUS BAR WITH #2 AWG SBTC GROUND WIRE IN 3/4" SCH 40 PVC CONDUIT
- PROPOSED ANTENNA BUS BAR MOUNTED TO THE BACK OF THE EXISTING SCREEN WALL
- PROPOSED ANTENNA BUS BAR GROUNDED TO THE SECTOR BUS BAR AT THE ROOFTOP EQUIPMENT SLED WITH #2 AWG SBTC GROUND WIRE IN 3/4" SCH 40 PVC CONDUIT
 - PROPOSED 1/2" DIAMETER SOLID COPPER AIR TERMINAL ATTACHED TO ANTENNA MOUNT. THE AIR TERMINAL SHALL BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS AND AT A HEIGHT AT LEAST 1' ABOVE THE PROPOSED ANTENNAS. THE GROUND WIRE FOR THE AIR TERMINAL SHALL BE CONNECTED TO THE AIR TERMINAL SHALL BE TO THE TERMINAL SHALL BE TO THE AIR TERMINAL SHALL BE TO THE T
- PROPOSED SECTOR BUS BAR ADDITIONALLY GROUNDED TO EXISTING ROOF-TOP LIGHTING PROTECTION SYSTEM. CONTRACTOR TO COORDINATE THE LIGHTNING PROTECTION COMPANY NOTED ON SHEET C. 1

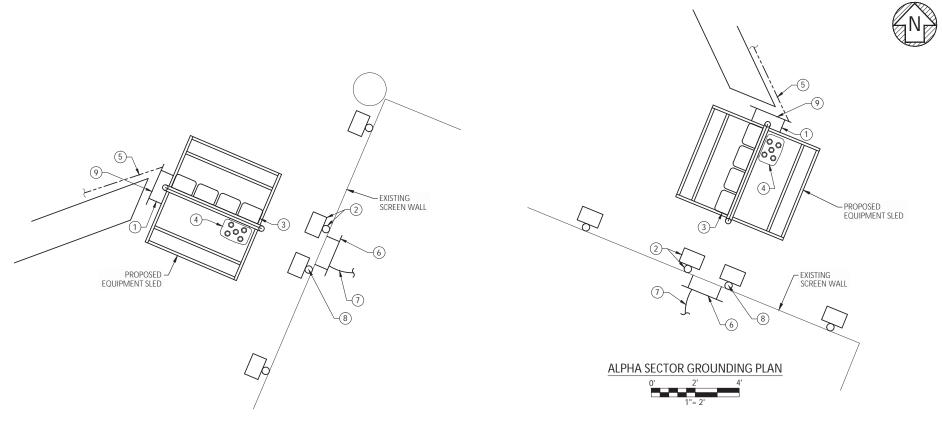
NOTES:

- SERVICE BOND IS TO BE MADE BY DEVICES (STRAPS, SCREWS, ETC.) SUPPLIED BY EQUIPMENT MANUFACTURER. IF NO SUCH DEVICE IS SUPPLIED, BOND IS TO BE MADE IN ACCORDANCE WITH NEC ARTICLE 250.
- 2. WHEN SERVICE OVERCURRENT DISCONNECT IS FIELD INSTALLED AND HAS A NEUTRAL TO GROUND CONNECTION ESTABLISHED, REMOVE NEUTRAL TO GROUND CONNECTION IN MANUAL TRANSFER.
- 3. ALL LUGS THAT HOLD MORE THAN ONE WIRE SHALL BE LISTED FOR MULTI-BARRELL CONNECTIONS.
- 4. CONNECT ONE #2 GREEN INSULATED COPPER WIRE TO PANEL GROUND BUS.
- 5. PROVIDE "ELECTRIC MOTION" TAMPER RESISTANT BUS BARS AT BULKHEAD AND ABOVE THE TURN AT THE ICE BRIDGE. UTILITY H-FRAME BUS BAR (IF REQUIRED) WILL BE AN ELECTRIC MOTION TINNED COPPER BUS BAR ON RED SEAL INSULATORS & STAINLESS STEEL BRACKET. COAT WITH ELECTRIC MOTION ANTI-THEFT COMPOUND.
- 6. IF A FENCE IS LOCATED WITHIN 25 FEET OF THE TOWER RING GROUND, OR 6 FEET FROM THE EQUIPMENT PAD GROUND RING, BOND THE:
 - **** FENCE POSTS TO THE RING AT DISTANCES NOT TO EXCEED 20 FEET OPENINGS (E.G. GATES) ACROSS THE FENCE

NOTE: ACTUAL RESISTANCE MUST BE MEASURED PRIOR TO CONNECTION TO THE POWER GRID.

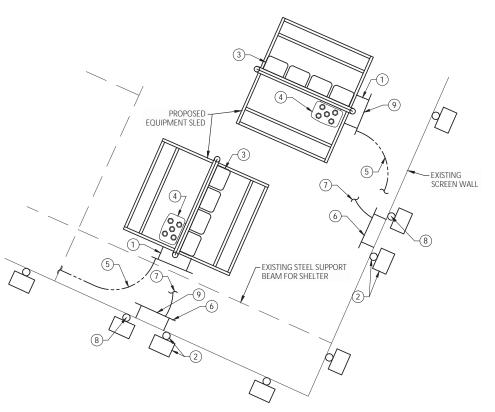
NOTE: "NO-OX-ID" SANCHEM INC. IS THE APPROVED GROUNDING COMPOUND

NOTE: FOR ALL ABOVE GRADE CONNECTIONS TO TOWER, ICE BRIDGE, UTILITY H-FRAME, FENCE POSTS, GATE POSTS, GENERATORS, ETC... ALL OF THESE EXPOSED PIGTAILS SHALL BE WITH EMC MODEL #2223-TMC THEFT RESISTANT CABLE. THESE PIGTAILS SHALL THEN HAVE THE SHIELDS STRIPPED BACK AND CADWELDED TO THE TOWER AND EQUIPMENT PAD GROUND RING. ON LONG BELOW GRADE RUNS ONLY, THE ABOVE GROUND PORTIONS (FROM 24" BELOW GRADE UP TO ABOVE GRADE) SHALL BE IN THE EM THEFT RESISTANT CABLE. CADWELD CONNECTIONS FOR IN-LINE BUT SPLICE FROM #2 TO THE EM CABLE SHALL BE WITH SSC-1T.









BETA AND GAMMA SECTORS GROUNDING PLAN



PREPARED BY:

BURGESS NIPLE
Engineers Architects Planners

5085 REED ROAD COLUMBUS OH 43220 614-459-2050 FA 614-451-1385

PREPARED FOR

NEW PAR

Verizo

FULL SCALE PRINT IS ON 24" x 36" MEDIA

CONSTRUCTION DRAWINGS

REV	DATE	DESCRIPTION

SITE INFORMATION:

RINGS 270

5525 PARKCENTER CIRCLE DUBLIN, OH 43017

VERIZON WIRELESS SITE NUMBER:

A&E NUMBER: PR52818

DESIGNED BY: GSH
DRAWN BY: JBH
DATE: 04/37/07

SHEET TITLE:

GROUNDING PLAN

G-2



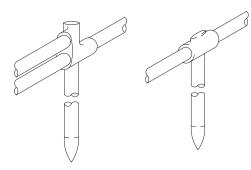
PART NUMBER	NOMINAL PIPE SIZE RANGE	PIPE OUTSIDE DIAMETER
EM FGC 1.5/2	1.5"-2"	2.5"-3"
EM FGC 2.5/3	2.5"-3"	3.5"-4"
		110 CDODDO DDIVE CT 06000

ELECTRIC MOTION COMPANY, INC.

(860) 379-8515 WWW.ELECTRICMOTIONCOMPANY.COM

GROUND CLAMP DETAIL

NOT TO SCALE

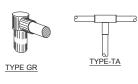


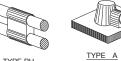
GROUND CADWELDS

NOT TO SCALE

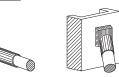
CADWELD TYPE NC THERMOWELD TYPE CR-17

CADWELD TYPE GT THERMOWELD TYPE CR-2



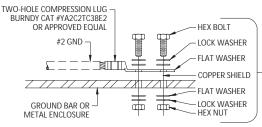






TYPE S TYPE S

CADWELDS (TYPICAL) NOT TO SCALE



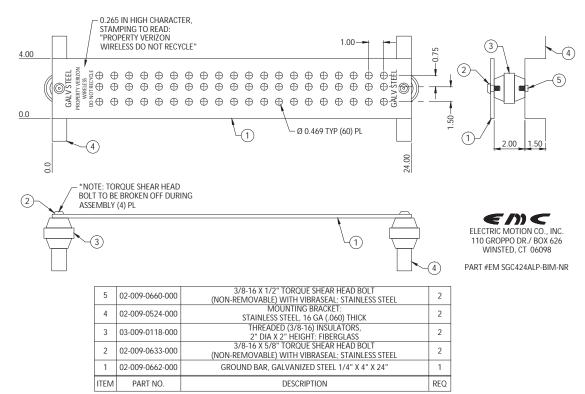
USE 1/4" FOR ATTACHMENT TO METAL ENCLOSURES & 3/8" FOR ATTACHMENT TO GROUND BARS

INSTALLATION NOTES:

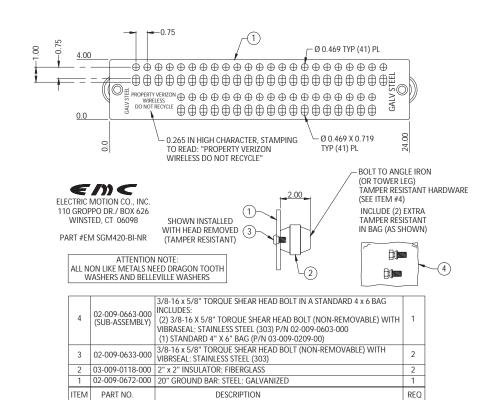
- 1. BOLTS, WASHERS, AND NUTS SHALL BE STAINLESS STEEL.
- 2. SELECT BOLT LENGTH TO PROVIDE A MINIMUM OF TWO EXPOSED
- 3. BURNISH MOUNTING SURFACE TO REMOVE PAINT IN THE AREA OF
- 4. APPLY COPPER-SHIELD COMPOUND TO MATING SURFACE OF LUG AND WIPE CLEAN EXCESS COMPOUND.
- 5. ALL METAL ELECTRICAL EQUIPMENT SHALL BE EXTERNALLY GROUNDED TO THE TOWER EGR. (PAINTED METAL SURFACES MUST HAVE SMALL SECTION OF PAINT REMOVED BEFORE INSTALLATION, AND SHALL BE SPRAYED LIGHTLY WITH CLEAR COAT

GROUNDING TO FLAT SURFACE TYPICAL

NOT TO SCALE



MICROFLECT PORT BUS BAR NOT TO SCALE



TOWER LEG BUS BAR

NOT TO SCALE

BURGESS NIPLE 5085 REED ROAD COLUMBUS OH 43220 614-459-2050 FA 614-451-1385

NEW PAR

1

FULL SCALE PRINT IS

CONSTRUCTION **DRAWINGS**

REV	DATE	DESCRIPTION			
SITE INFORMATION:					

RINGS 270

5525 PARKCENTER CIRCLE FRANKLIN COUNTY

VERIZON WIRELESS SITE NUMBER:

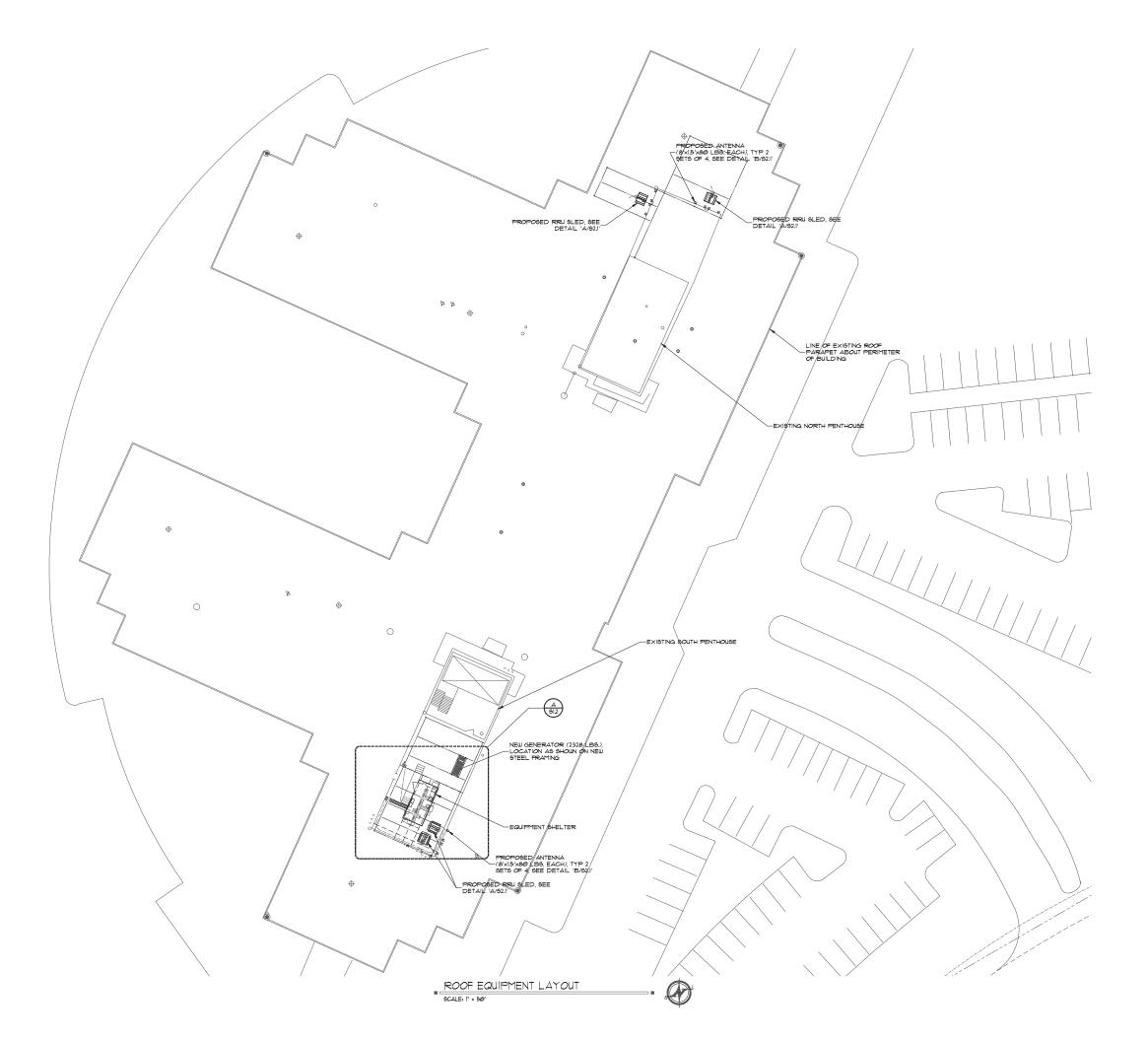
CLMB-305

PR52818 DESIGNED BY: GSH DRAWN BY: ##/##/##

SHEET TITLE:

GROUNDING DETAILS

G-2





NEW AVENUE architects - engineers

www.new-avenue.net

4740 REED ROAD, SUITE 201 UPPER ARLINGTON, OHIO 43220 INFO@NEW-AVENUE.NET

614 . 884 . 8888

PERMIT READY SET Ø2/13/2		
	REVIEW SET	Ø1/3Ø/2Ø
REVISIONS TO PERMIT SET 03/03/2	PERMIT READY SET	Ø2/13/2Ø
	REVISIONS TO PERMIT SET	Ø3/Ø3/2Ø

Verizon

Rooftop Equipment and Antenna Mounts

Rings 270 5525 Parkcenter Circle Dublin, Ohio 43017

Project No:

17-(

ORIGINAL SIGNATURE IN RED REQUIRED FOR AUTHENTICITY OF ROBERT

FOUNDATION, FLOOR FRAMING, AND ROOF FRAMING PLANS

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ALL DRAWINGS ARE AND SHALL REMAIN THE PROPERTY OF
AVENUE, LLC AND MAY NOT BE USED, DUPLICATED OR ALTH
WITHOUT THE WRITTEN CONSENT OF NEW AVENUE,

S1.1

STRUCTURAL SPECIFICATIONS

GENERAL

- 1. THESE REQUIREMENTS MAY BE SUPERCEDED BY MORE STRINGENT INFORMATION CONTAINED WITHIN THE DRAWINGS. THE MORE STRINGENT SHALL BE FOLLOWED.
- 2. DUE TO NEW AVENUE, LLC (ENSINEER) HAVING LIMITED ACCESS TO THE PROJECT SITE DURING THE DESIGN PHASE, THE CONTRACTOR SHALL VISIT THE SITE TO VERRY ALL PLAN AND EXISTING DIMENSIONS AND CONDITIONS. IF THERE ARE ANY DISCREPANCIES, NEW AVENUE, LLC SHALL BE NOTHIED PRIOR TO PROCEEDING CONSTRUCTION OR THE CONTRACTOR SHALE BY BESPONSIBLE FOR SAFIE.
- 3, CONTRACTOR SHALL BE FAMILIAR WITH PROVISIONS OF ALL APPLICABLE CODES AND SHALL INSURE COMPLIANCE OF WORK TO THOSE CODES.
- 4. THESE DOCUMENTS DO NOT INCLUDE THE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY, SAFETY, CARE OF ADJACENT PROPERTIES DURING CONSTRUCTION, COMPLIANCE WITH STATE AND FEDERAL REGULATIONS REGARDING SAFETY, AND COMPLIANCE WITH REQUIREMENTS SPECIFIED IN THE OWNER/CONTRACTOR CONTRACT IS, AND SHALL BE, THE CONTRACTOR'S RESPONSIBILITY.
- 5, CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK AND SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, AND SAFETY PROCEDURES AND FOR COORDINATING ALL PORTIONS OF THE WORK.
- 6.IF IN THE EVENT OF CONFLICT BETWEEN LOCAL, STATE, AND NATIONAL CODES, THE MORE STRINGENT SHALL GOVERN
- 1, ALL CONSTRUCTION IS TO BE IN COMPLIANCE WITH THE FOLLOWING CODE: 2011 OHIO BUILDING CODE
- 8. THE TERM "WORK" AS USED IN THESE NOTES SHALL INCLUDE ALL PROVISIONS AS DRAWN OR SPECIFIED IN THESE DOCUMENTS AS PROVIDED BY NEW AVENUE, LLC.
- 9. THE MINIMUM DESIGN LIVE LOADS USED IN THE CALCULATIONS FOR THIS SET OF DRAWINGS ARE AS FOLLOUS.

 ROOF LIVE LOAD 20 ppf
 WIND (v = 90 mph, EXP, B) 14.8 ppf
 GENERATOR W ENCLOSURE 2326 LBS.

(Ø. THE STRUCTURAL ELEMENTS OF THIS BUILDING HAVE BEEN DESIGNED TO MEET STANDARD DEFLECTION CRITERIA AS FOLLOUS: (MAXIMUM LIVE LOAD DEFLECTION OF 1/2-INCH FOR ALL CASES WITH ATTACHED DRYWALL)

BEAMS ALL OTHER STRUCT, ELEMENTS

SEISMIC PARAMETERS

SEIGMIC SPECITAL ACCELERATION, 96: SEIGMIC SPECITAL ACCELERATION, 96: SITE CLASSISITE CLASSISITE COEFFICIENT, Fa:
SITE COEFFICIENT, Fa:
DESIGN SPECITAL ACCELERATION, 9ds:
DESIGN SPECITAL ACCELERATION, 9ds:
DESIGN SPECITAL ACCELERATION, 9ds:
DESIGN CATEGORY;
DASIC SEIGMIC FORCE RESISTING SYSTEM;
DUILDING PERIOD:
SEIGMIC RESPONSE COEFFICIENT; 14.82% 5.92% D 160 2.40 15.8% 9.5% 0.34 K

MOMENT RESISTING FRAME SYSTEM (RESPONSE COEFF 'R' = 3,50)

0.404 SECONDS 0.0452

STEEL

1. ALL STRUCTURAL STEEL SHAPES SPECIFIED IN THESE DRAWINGS SHALL CONFORM TO ALISC, STEEL CONSTRUCTION MANUAL (IBIN EDITION) AND THE FOLLOWING:

10. W (WIDE FLANCE SHAPES) - ASTM A-992 (50° ksi)

12. L (ANGLE) C (CHANDEL) SHAPES - ASTM A-360 (36° ksi)

13. HSS (SQUARE / RECT. TURE) SHAPES - ASTM A-360 (36° ksi)

15. FLATES - ASTM A-36 (36° ksi)

- 2. ALL WELDS SHALL COMPLY WITH THE STRUCTURAL WELDING CODE, AWS DLI-10.
- 3. ALL BOLTS IN BOLTED CONNECTIONS SHALL CONFORM TO ASTM A-325 EXCEPT FOR THE SMALLER BOLTS IN THE STAIR TREAD CONNECTION, AND EXCEPT CAST-IN-PLACE ANCHOR BOLTS INTO CONCRETE SHALL CONFORM TO ASTM A-301 AND BE GALVANIZED. TITEN HO'S SHALL BE BY SIMPBON STRONG-TIE.
- 4. ALL STEEL TO STEEL CONNECTIONS SHALL CONFORM TO AISC STANDARDS.

METAL DECKING

ALL ROOF DECKING OF BUILDING SHALL BE TYPE 'B', I\(\) DEEP, 2\(\text{O}\) GAIGE, MANUFACTURED FROM STEEL CONFORMING TO ASTM Allow-000 GRADES C, D, OR E OR FROM A6931A 65341-600 STRUCTURAL CAIALITY GRADE 5033 OR HIGHER (33 ksi MIN, YIELD) OR EQUAL AS SPECIFIED ON THESE DRAWINGS, DECKING SHALL HEET FACTORY MUTUAL REQUIREMENTS.

2. LIVE LOAD = 20 PSF

3. MAXIMUM DEFLECTION - L/240

- 4. DECKING SHALL BE GAL VANIZED IN SHOP WITH FINISH COLOR PAINTED IN FIELD (IF APPLICABLE) AND SELECTED BY BUSINESS OWNER WITH COORDINATION WITH ARCHITECT.
- 5. DECKING SHALL BE FASTENED TO STEEL CHANNELS (GIRDERS AND JOISTS) * 12" o.c. w/ *12 TEK (SIMPSON XGII491224 OR EGUAL) SCREUS (OR § * RUDDLE WELDS) IN 36/4 PATTERN, SIDE LAPS WITH *100 TEK (XIS)016) FASTENERS REQUIRED * 30" SPACING FOR DIAPHRADI (JOADING.
- 6.DECKING SHALL BE PROVIDED WITH 3 SPANS OR MORE WHERE APPLICABLE.

FIELD MODIFICATIONS

I. GALVANIZATION AREAS WHICH ARE MODIFIED IN THE FIELD LEAVING BARE METAL SHALL BE TOUCHED UP AND REPAIRED IN ACCORDANCE WITH ASTM ATBO (WITH A HINIMUM THICKNESS OF 20 MILG) TO MAINTAIN UNIFORM BARRIER FROM THE ELEMENTS, USE OF STRONG-RICH PAINT, ZING SPRAY, AND ZING-BASED SOLDERS ARE ALL ACCEPTABLE METHODS.



New Avenue

www.new-avenue.net

4740 REED ROAD, SUITE 201 UPPER ARLINGTON, OHIO 43220 INFO@NEW-AVENUE.NET

614 . 884 . 8888

REVIEW SET	Ø1/3Ø/2Ø
PERMIT READY SET	Ø2/13/2Ø
REVISIONS TO PERMIT SET	03/03/20

Verizon

Rooftop Equipment and Antenna Mounts

Rings 270 5525 Parkcenter Circle Dublin, Ohio 43017

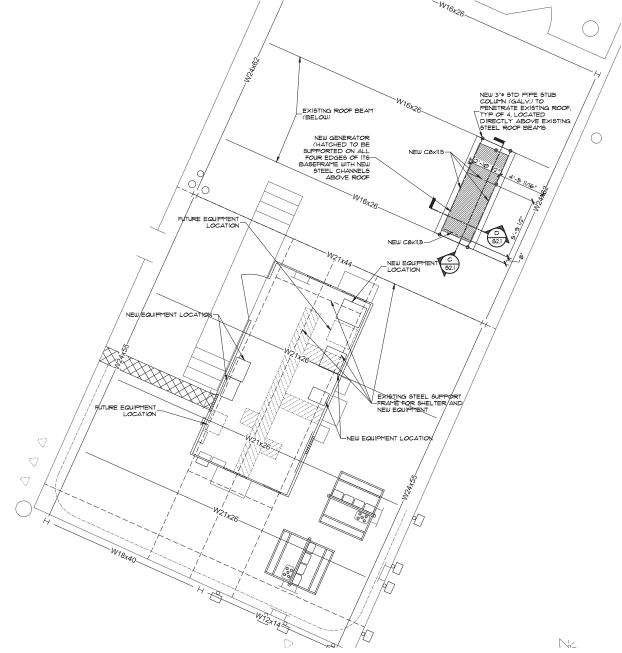
Proj	ect	No:

17-0004



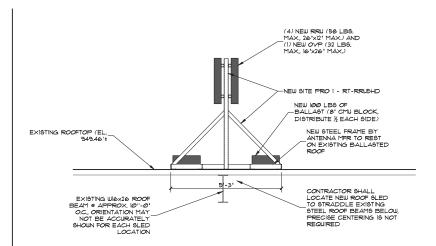
EQUIPMENT SHELTER STRUCTURAL DETAILS

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EQUIPMENT SHELTER & GENERATOR SUPPORT PLAN DETAIL SCALE: 1/4" = 1'-0







NEW ANTENNA

NEW SITE PRO 1 -CANTILEVER WALL MOUNT WITH HARDWARE

EXISTING PRECAST SCREEN WALL PANEL

NEW STEEL IE 1/2'x6'x15',

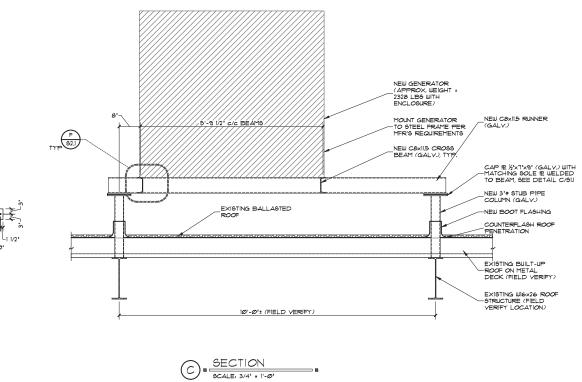
NEW ½"+ A3ØT THRU BOLT -WITH WASHERS AND NUT, GALV.

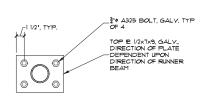
NEW ½* A3ØT THRU BOLT -WITH WASHERS AND NUT, GALV.

EXISTING ROOFTOP (EL. 949.46'±

SCREEN WALL MOUNT DETAIL

_NEW STEEL fil ½'x6'x15', GAL V 1 1/2"-









 /-¾'¢ A325 BOLT, GALV. TYP.

4×4×1/4' × 6' LONG

-C8xII.5 BEYOND



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	REVIEW SET	Ø1/3Ø/2Ø17
	PERMIT READY SET	Ø2/13/2Ø17
	REVISIONS TO PERMIT SET	Ø3/Ø3/2ØIT
NEW GENERATOR (APPROX. WEIGHT = 2328 LB9 WITH ENCLOSURE)		

NEW C8xII.5 CROSS BEAM (GALV.)

NEW 3" & STUB PIPE COLUMN (GALV.)

-NEW BOOT FLASHING

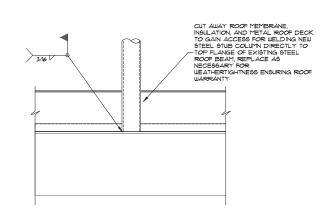
EXISTING WI6x26 ROOF -STRUCTURE (FIELD VERIFY LOCATION)

CAP IE ("x1"x9" (GALV.)
WELDED POST, SEE DETAIL
G/SI,I FOR CONNECTION TO
EXISTING STRUCTURE, TYP.

Verizon

Rooftop Equipment and Antenna Mounts

Rings 270 5525 Parkcenter Circle Dublin, Ohio 43017



SECTION
9CALE: 3/4' = 1'-0'

TYP 62.1

G 62.1 TYF

> G=DETAIL 6CALE: 1-1/2' = 1'-0'

ORIGINAL SIGNATURE IN RED
REQUIRED FOR AUTHENTICITY

OFF
ROBERT
WILLER
E-58904

ONAL
E-58904

STRUCTURAL DETAILS

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S2.1