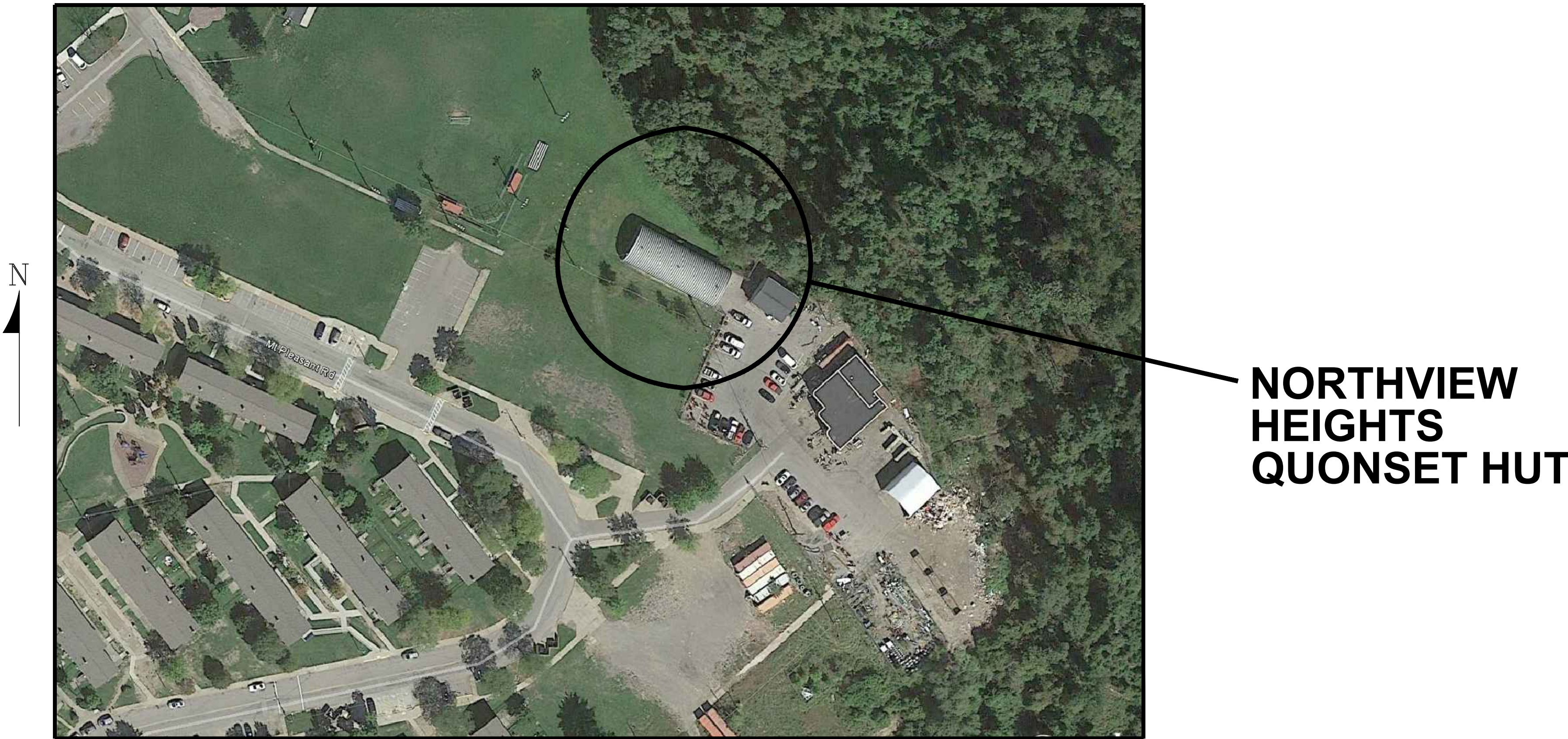


# HOUSING AUTHORITY of the CITY of PITTSBURGH

DEVELOPMENT AND MODERNIZATION DEPARTMENT  
100 ROSS STREET, 2ND FLOOR  
PITTSBURGH, PENNSYLVANIA 15219

HACP MANAGEMENT # 7381  
TASK ORDER #38  
REBUILDING  
OF THE  
QUONSET HUT  
NORTHVIEW HIGHRISE FACILITY  
SERVICES SITE

FEBRUARY 1, 2017

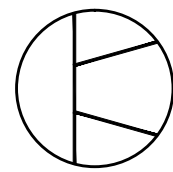


LOCATION MAP  
100 0 100 200  
SCALE IN FEET

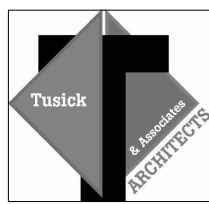
## DRAWING INDEX

DRAWING NO.	DESCRIPTION
CS	COVERSHEET
A-01	ARCHITECTURAL - REPAIR WORK FLOOR PLAN, DETAILS AND PICTURES
A-02	ARCHITECTURAL - REPAIR WORK ELEVATIONS AND DETAILS
A-03	ARCHITECTURAL - REPAIR WORK FLOOR PLAN AND DETAILS
H-01	HVAC - HVAC NOTES, SYMBOLS, LEGENDS, DETAILS AND SCHEDULES
H-02	HVAC - PLAN AND NOTES
E-01	ELECTRICAL - GENERAL NOTES, LEGEND, ABBREVIATIONS, DETAILS, BUILDING CODE, LIGHT FIXTURE SCHEDULE AND SITE PLAN
E-02	ELECTRICAL - NEW WORK FLOOR PLAN AND SECTIONS
E-03	ELECTRICAL - PICTURES, DETAILS AND PANELBOARD SCHEDULE

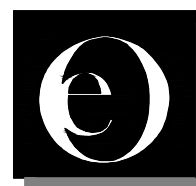
## PROJECT TEAM:



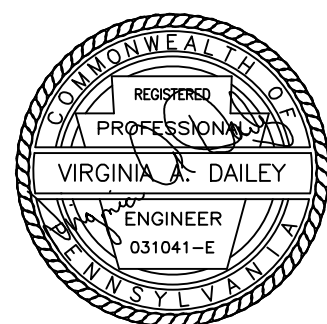
**D & D ENGINEERING, INC.**  
CONSULTING ELECTRICAL ENGINEERS  
Etna Technical Center, Suite 102  
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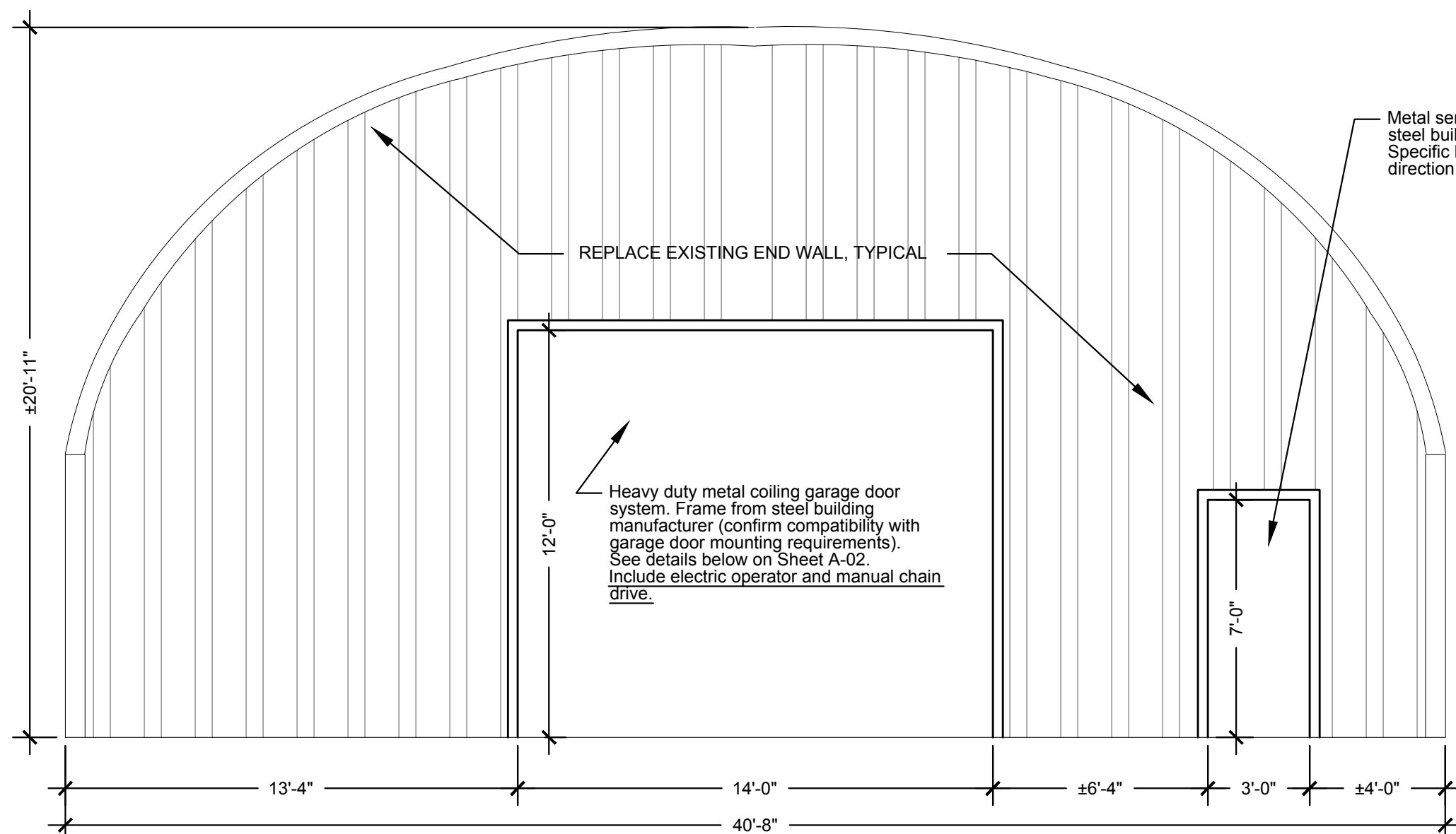


DRAWING NUMBER

CS

SHEET NUMBER  
1 OF 9





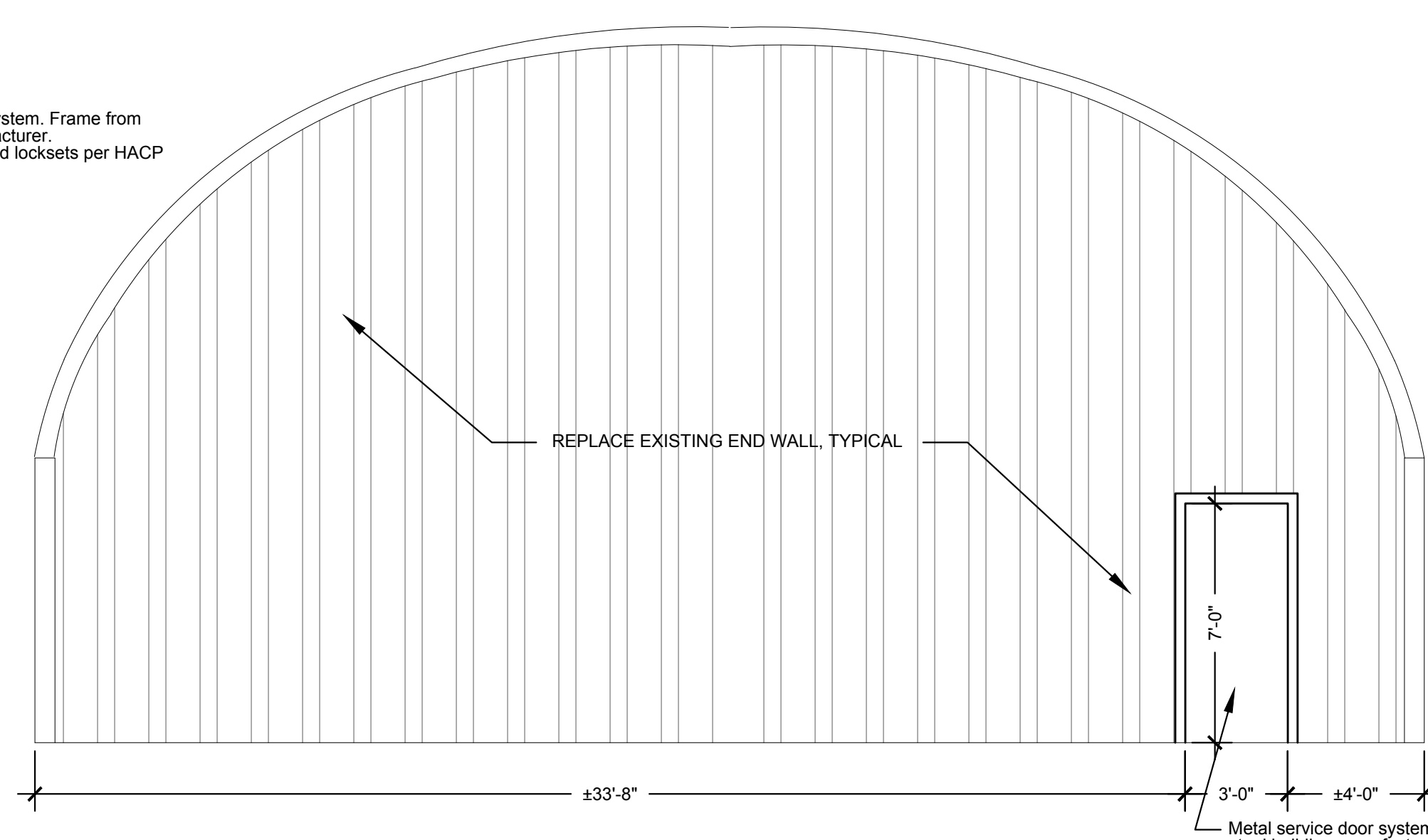
FRONT END-WALL - EXTERIOR

SCALE: 1/4"=1'-0"

(FIELD VERIFY DIMENSIONS)

1

A-02



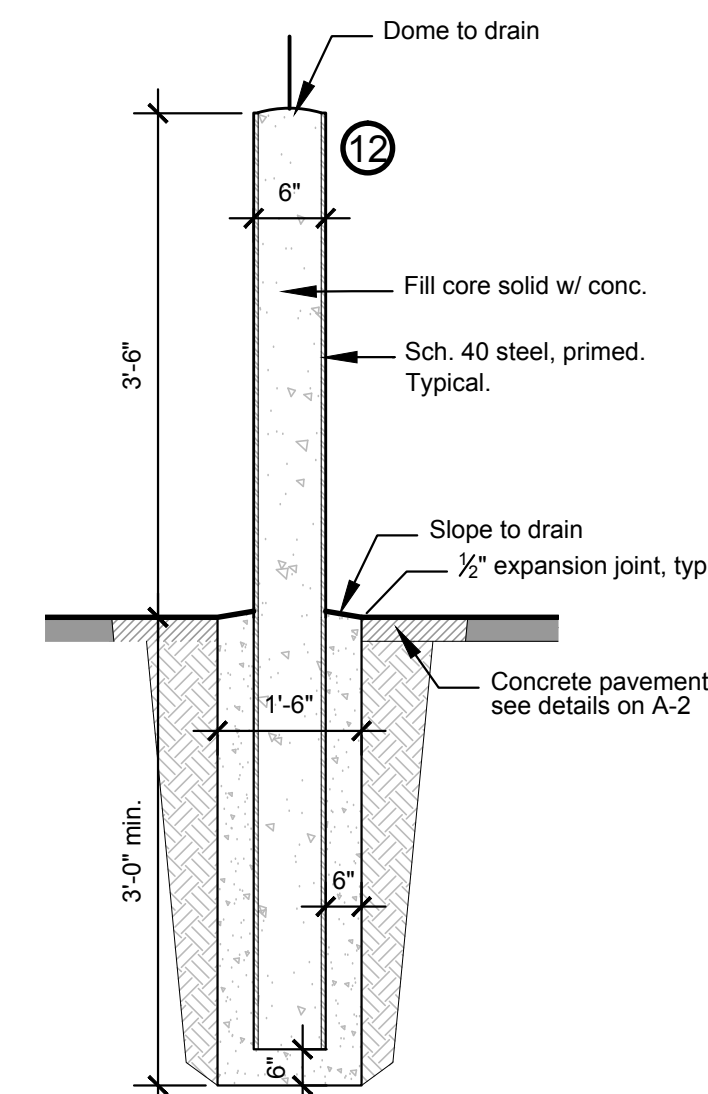
REAR END-WALL - EXTERIOR

SCALE: 1/4"=1'-0"

(FIELD VERIFY DIMENSIONS)

2

A-02



BOLLARD DETAIL

SCALE: 3/4"=1'-0"

(FIELD VERIFY DIMENSIONS)

3

A-02

GENERAL NOTES:

1. NO LOADS OTHER THAN THOSE GIVEN UNDER "DESIGN DATA" BELOW BE IMPOSED ON THE "STRUCTURE".
2. THE FOUNDATION ON THE DRAWING IS A SUGGESTED SOLUTION ONLY. CHANGES MAY BE NECESSARY DUE TO LOCAL BUILDING REGULATIONS.
3. THE FOUNDATION SHALL BE FOUNDED ON NATURAL UNDISTURBED SOIL CAPABLE OF SAFELY SUSTAINING 2000 PSF. AND AT LEAST 12 IN. BELOW FINISHED GRADE.
4. SLAB ON GRADE SHALL BE PLACED ON SOIL CAPABLE OF SUSTAINING 500 PSF. WITHOUT APPROPRIATE SETTLEMENT.
5. BUILDING MUST BE GROUTED INTO TROUGH, INSIDE AND OUT TO MAINTAIN STRUCTURAL INTEGRITY EXCEPT WHEN USING WELDED BASE PLATE CONNECTORS.
6. CROSS TIES MUST BE INCASED IN CONCRETE WHEN CONCRETE SLAB IS NOT USED.

ARCH DATA:

DESIGN DATA:

STEEL GAGE: 18/20  
50 KSI MIN. YIELD  
GALVALUME SHEET STEEL  
LIVE LOAD: 21 PSF  
BASIC WIND SPEED: 90 MPH  
SECOND GUST WIND SPEED: 100 MPH

MATERIALS:

1. CONCRETE STRENGTH AT 28 DAYS TO BE 2500 PSI
2. REINFORCING STEEL TO BE DEFORMED BARS, GRADE 60
3. ALL MATERIALS SHALL CONFORM TO THE APPROPRIATE ASTM SPECIFICATIONS.

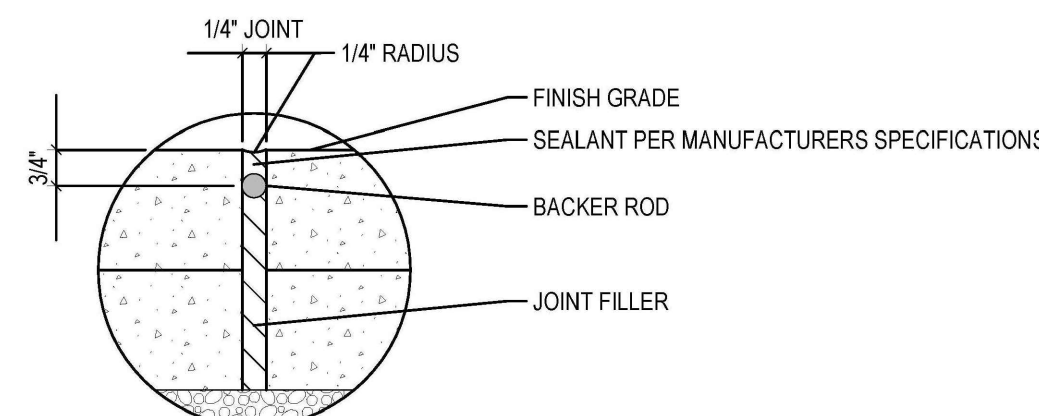
ORIGINAL MFGR. NOTES

SCALE: 1"=1'-0"

(ORIGINAL MANUFACTURER: AMERICAN STEEL SPAN)  
(www.AmericanSteelSpan.com - 800-457-2206)

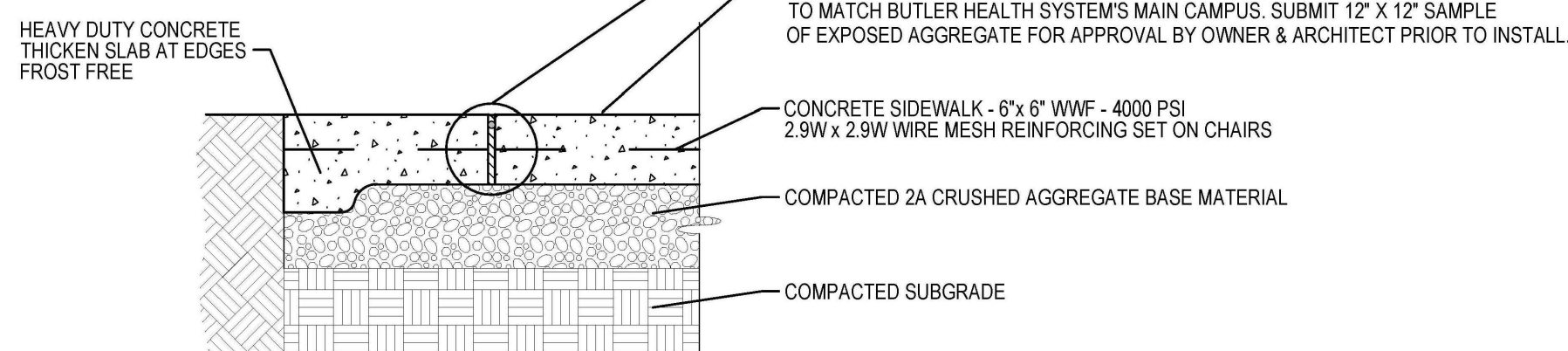
GENERAL NOTES:

- Closed-Cell Spray Foam product: CertainTeed CertaSpray Closed Cell Foam, or approved equal (approved by Architect BEFORE bids are submitted) Call 412-781-8896.
- Initial pre-coating for metal surfaces as per CertainTeed CertaSpray product, or equal, requirements.
- Fire protective coating (applied to all foam surfaces) to achieve a 15-minute fire-rated barrier, minimum. Product as recommended and approved for closed cell foam product manufacturer.



EXPANSION JOINT

SEE JOINT DETAIL

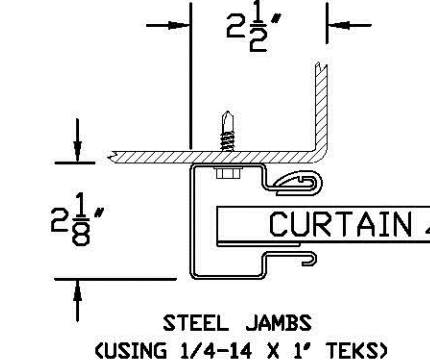


- NOTES:
1. SCORE LINES TO BE 1/8" W x 1" D.
  2. EXPANSION JOINT PATTERN AS APPROVED BY ARCHITECT.

CONCRETE PAVEMENT	CONC. WALK	DRIVEWAY
CONCRETE THICKNESS	5"	6"
CRUSHED COMPACTED AGGREGATE BASE MATERIAL	6"	8"

CONCRETE PAVEMENT

NOT TO SCALE



16 GA GUIDE MOUNTING DETAIL

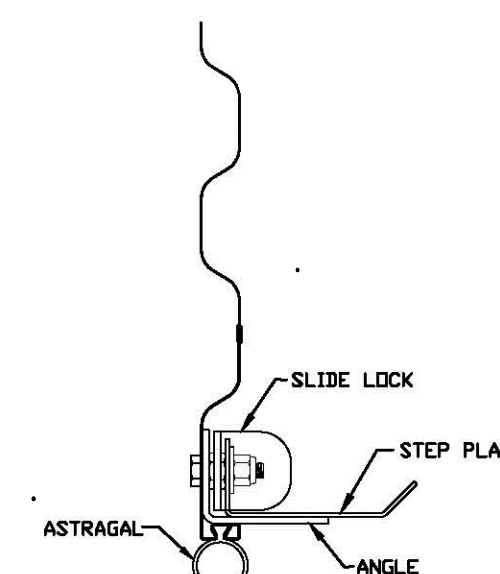
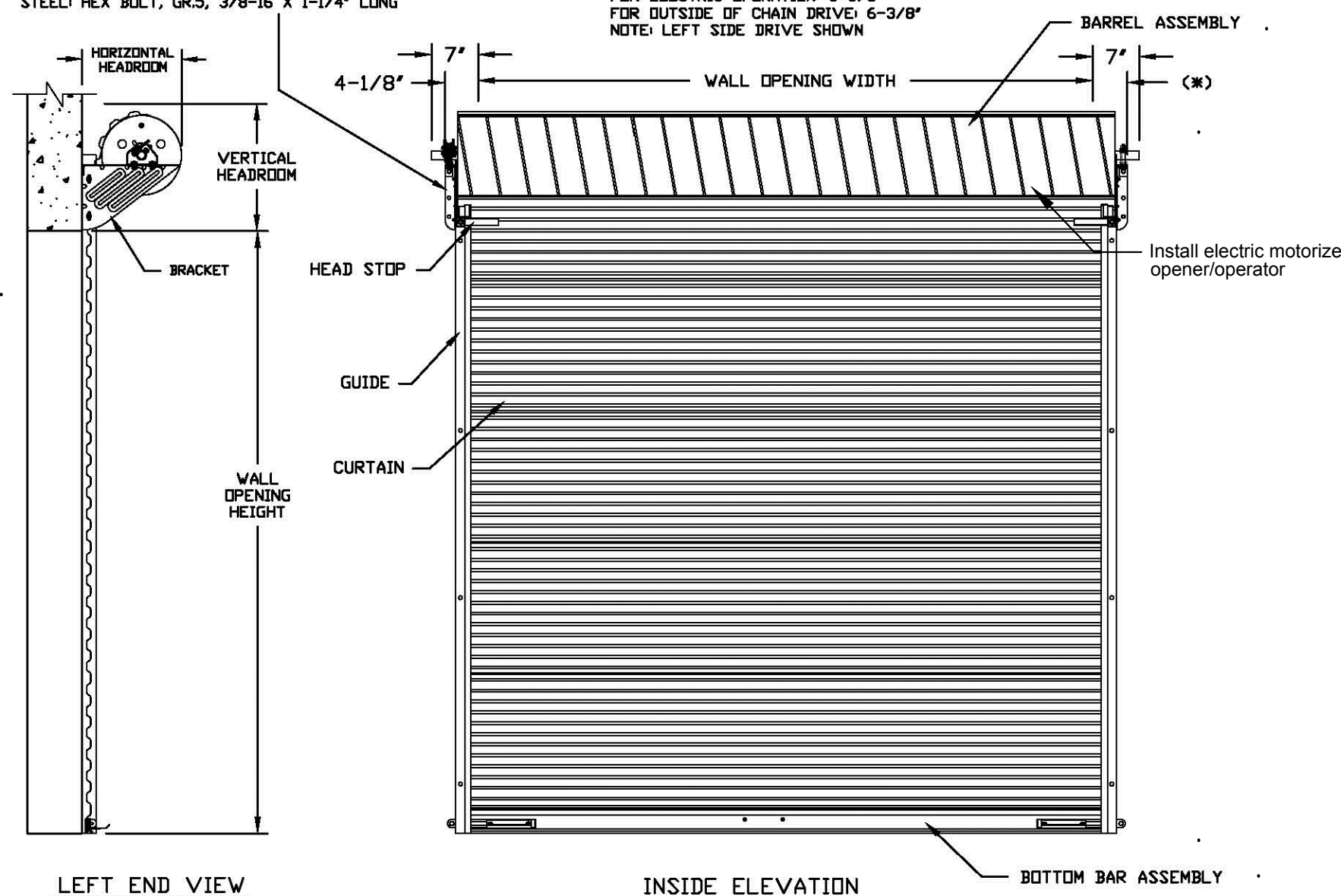
NOTES:

1. OPERATION TYPE MAY BE PUSH-UP, HAND CHAIN OR ELECTRIC.
2. CLEARANCES SHOWN ARE MAXIMUMS. LESSER CLEARANCES MAY BE POSSIBLE.
3. UNLESS OTHERWISE NOTED, DOORS SHALL BE PROVIDED WITH SLIDE LOCKS AT EACH END OF BOTTOM BAR, ENGAGING GUIDES IN THE LOCKED POSITION.
4. ALL OPENING PREPARATION, ELECTRICAL POWER AND FIELD PAINTING SHALL BE PROVIDED BY OTHERS.
5. SERIES 5601 IS AN INSULATED SERIES 5601.
6. CURTAIN FINISH SHALL BE SILICONE POLYESTER PRE-PAINT OVER GALVANIZED GRADE 60 STEEL.
7. GUIDES, BRACKETS, BOTTOM BAR ANGLE AND HEAD STOPS ARE ZINC COATED.
8. VISION PANELS ARE AVAILABLE.

BRACKET ATTACHMENT

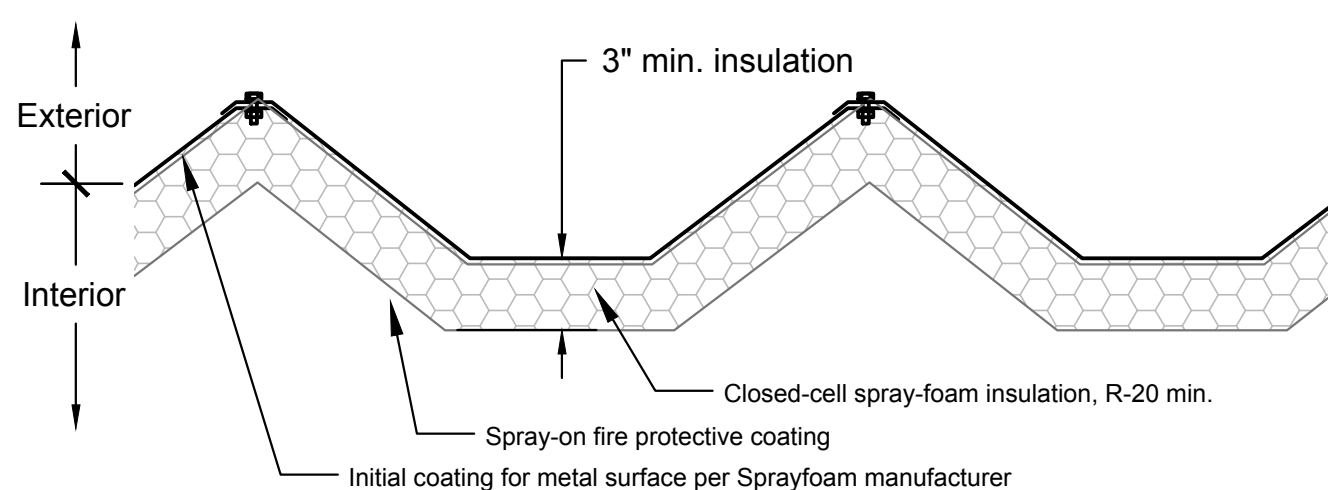
CONCRETE/MASONRY: POWERS WEDGE-BOLT, 3/8 X 1-3/4" LONG  
VOID LAG SCREW, 3/8-7 X 3" LONG  
STEEL HEX BOLT, GR5, 3/8-16 X 1-1/4" LONG

(\*) FOR PUSH-UP OPERATION 4-1/8"  
FOR HAND CHAIN OPERATION 4-7/8"  
FOR ELECTRIC OPERATION 5-5/8"  
FOR OUTSIDE OF CHAIN DRIVE 6-3/8"  
NOTE: LEFT SIDE DRIVE SHOWN



HEADROOM REQUIRED

OPENING HEIGHT	VERTICAL HEADROOM	HORIZONTAL HEADROOM
THRU 8'-0"	17"	19"
OVER 8'-0" THRU 10'-0"	19"	21"
OVER 10'-0" THRU 14'-0"	20"	22"
OVER 14'-0" THRU 16'-0"	21"	23"
OVER 16'-0" THRU 18'-0"	22"	24"
OVER 18'-0" THRU 20'-0"	23"	25"



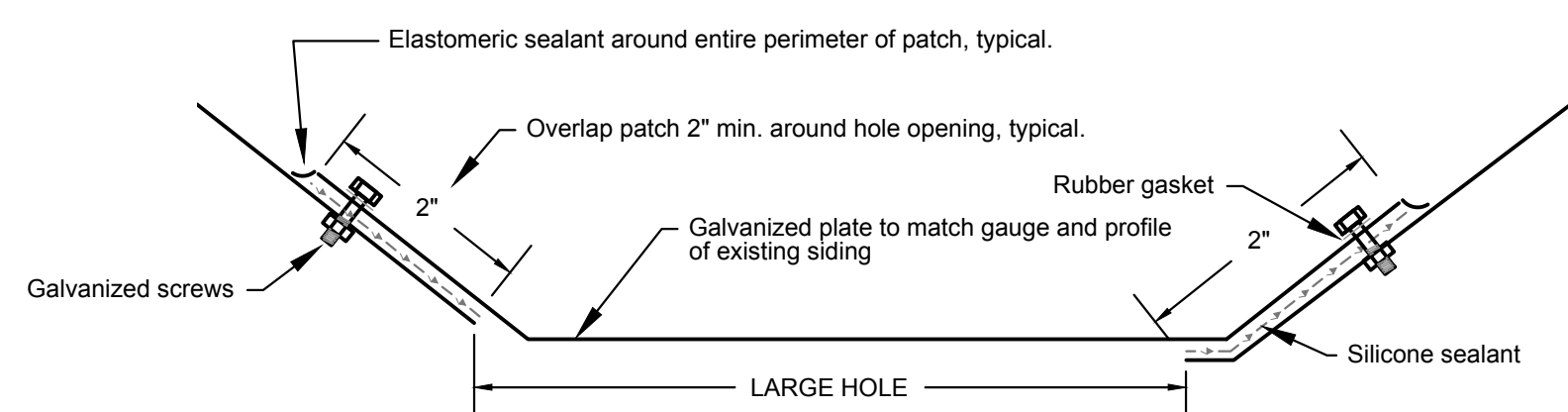
METAL SIDING INSULATION

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

(FIELD VERIFY DIMENSIONS)

4

A-02



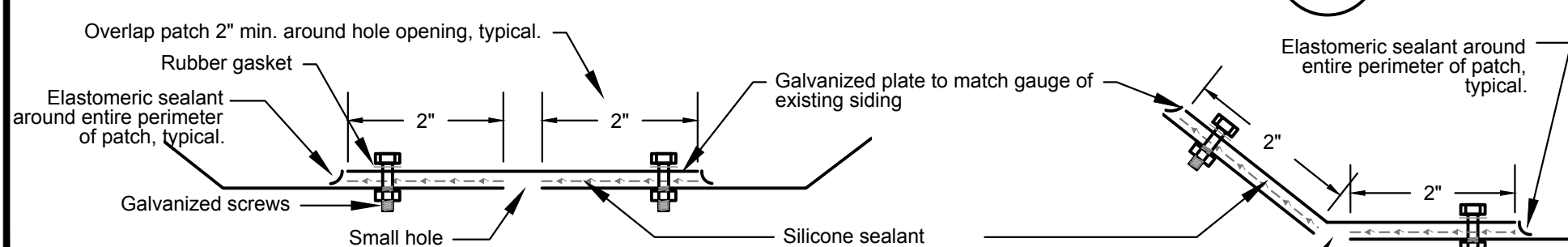
PATCHING DETAIL - LARGE HOLES (2" - 10" DIAMETER)

SCALE: 6"=1'-0"

(FIELD VERIFY DIMENSIONS)

6

A-02



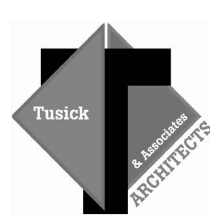
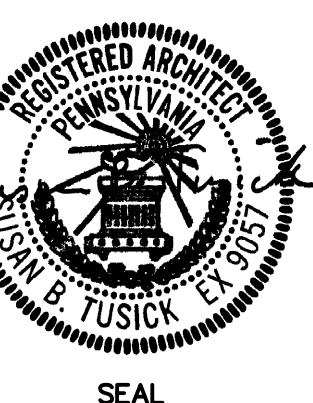
PATCHING DETAIL - SMALL HOLES (1/8" - 2" DIAMETER)

SCALE: 6"=1'-0"

(FIELD VERIFY DIMENSIONS)

5

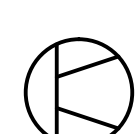
A-02



**Tusick & Associates**  
Architects, Inc.

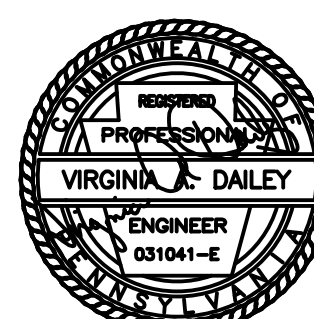
21 WINDSOR ROAD  
PITTSBURGH, PA 15225

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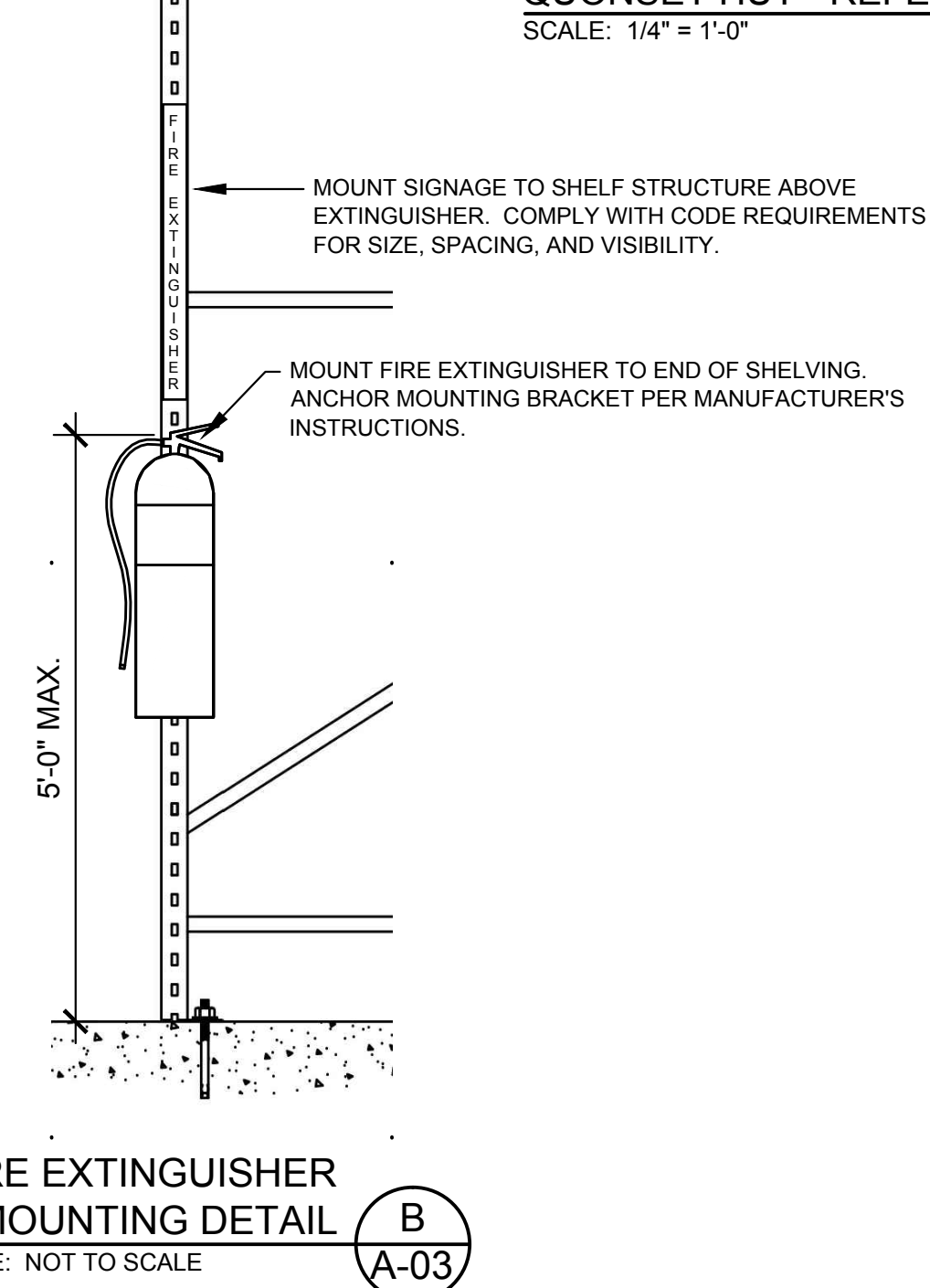
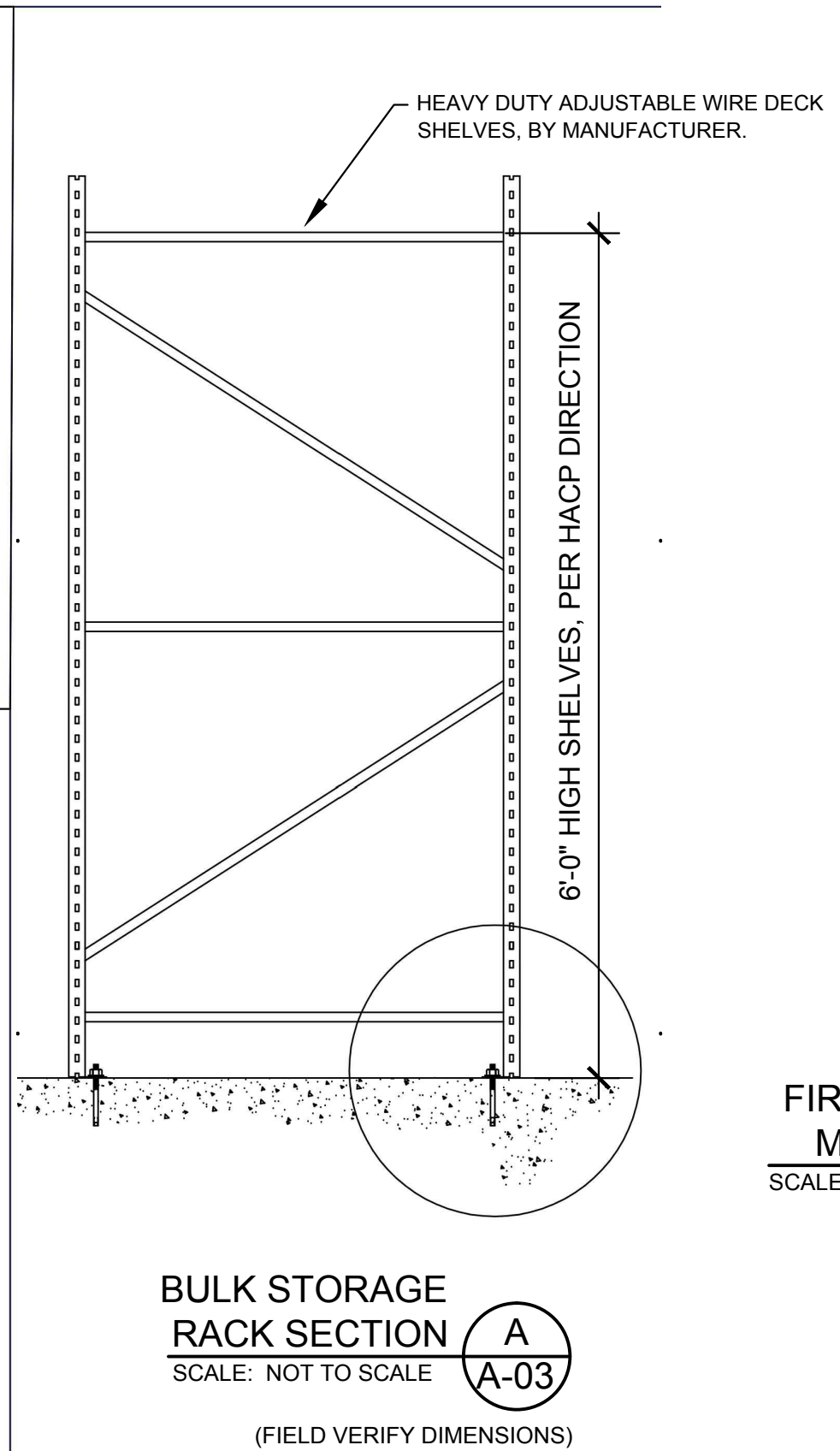
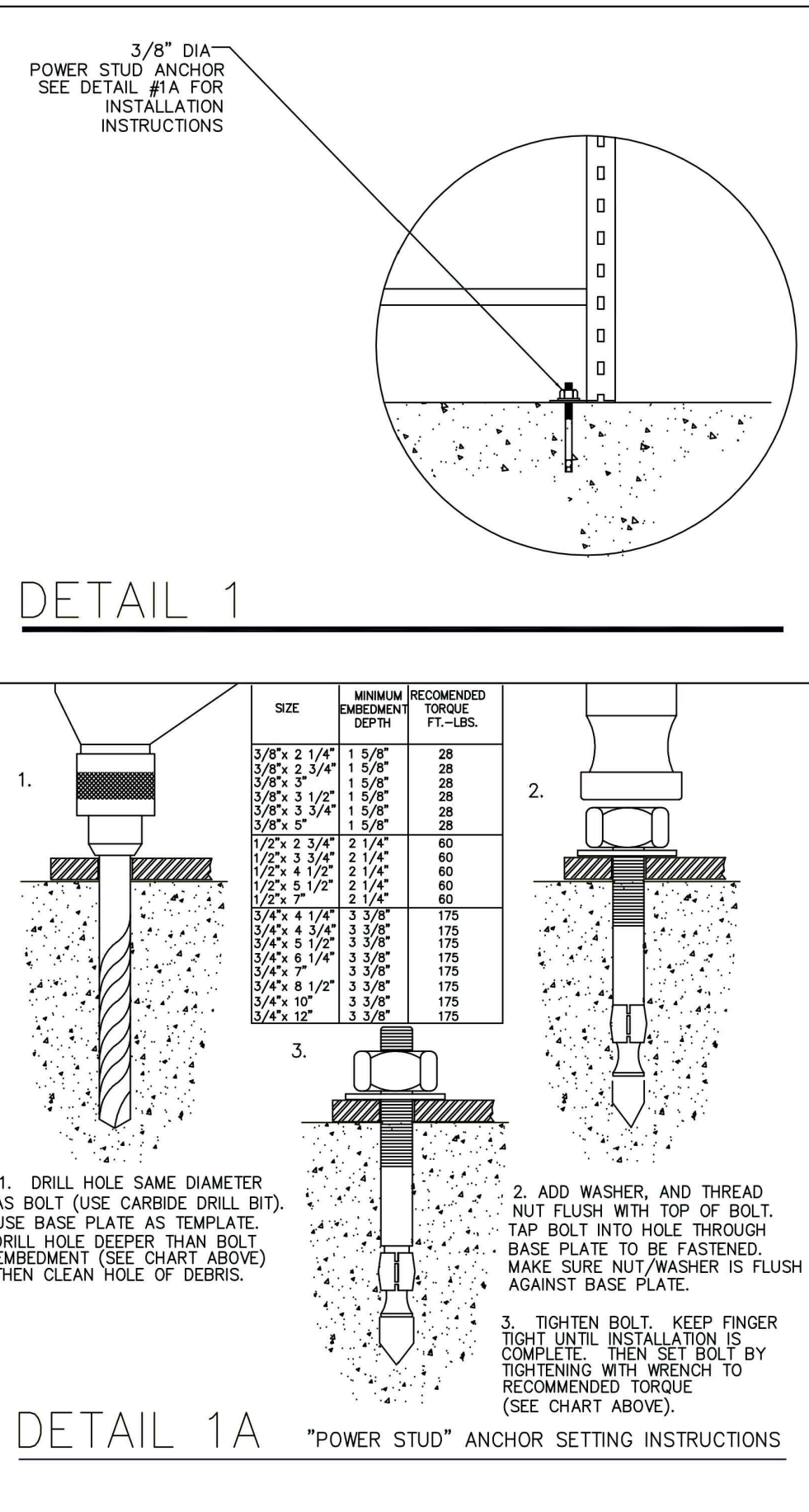
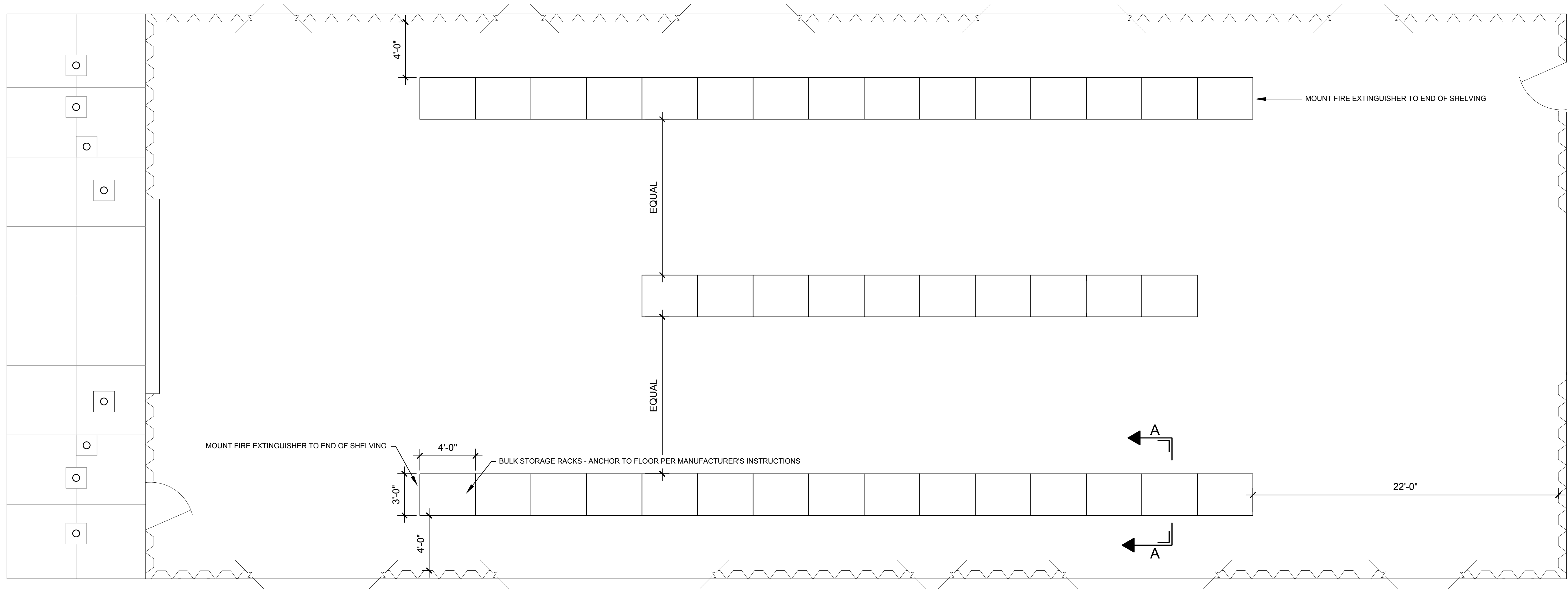
PROJECT  
REBUILDING OF THE QUONSET HUT  
NORTHVIEW HEIGHTS  
FACILITY SERVICES SITE

DRAWING TITLE  
ARCHITECTURAL  
REPAIR WORK  
ELEVATIONS & DETAILS

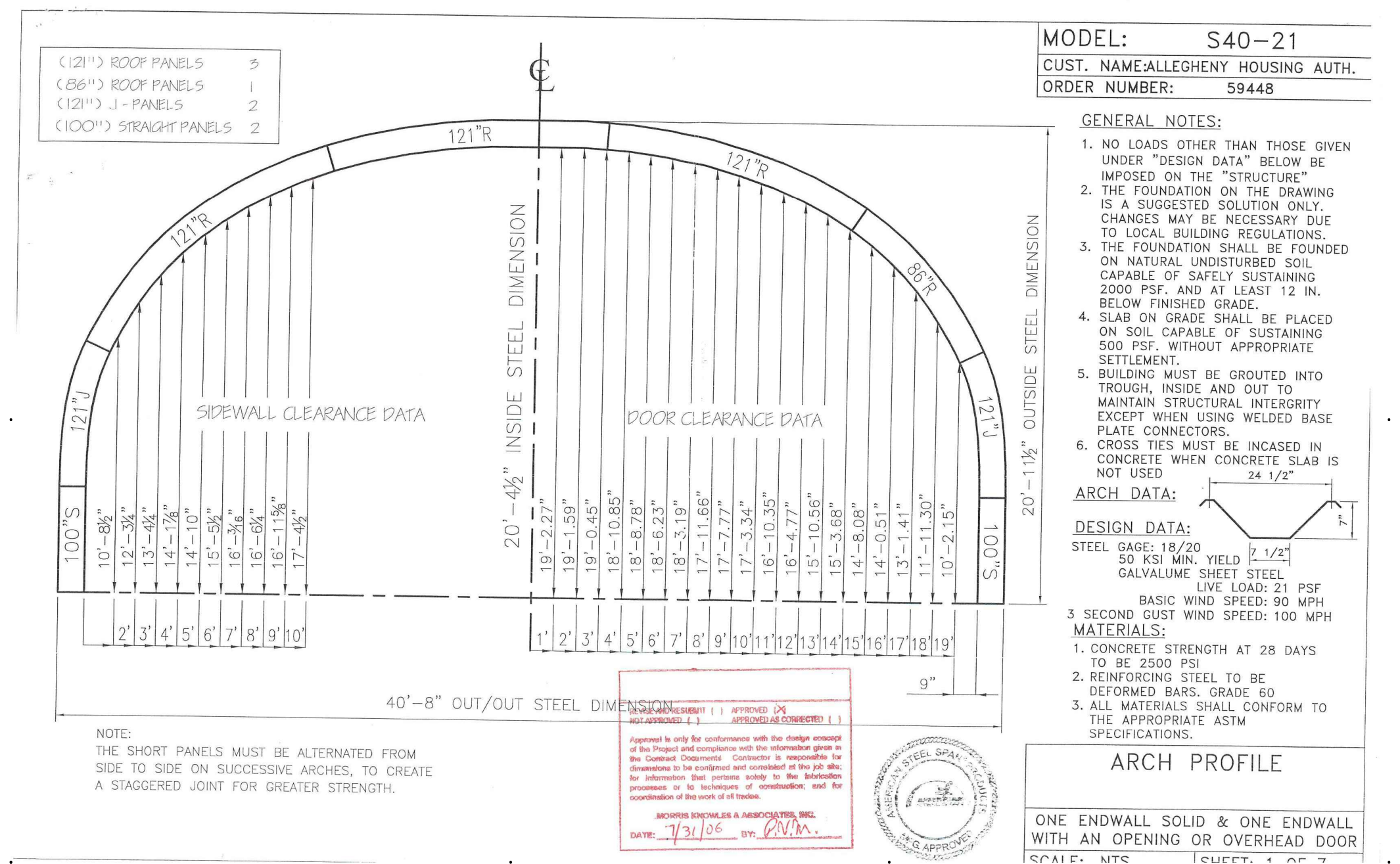
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CHECKED BY: VAD  
DATE: 2/1/2017  
SCALE: AS SHOWN  
PROJECT NO.: 16008

A-02

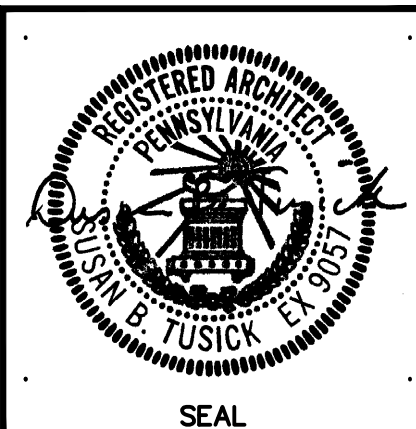
DRAWING NO.  
3 OF 9



QUONSET HUT - REFERENCE PLAN  
SCALE: 1/4" = 1'-0"

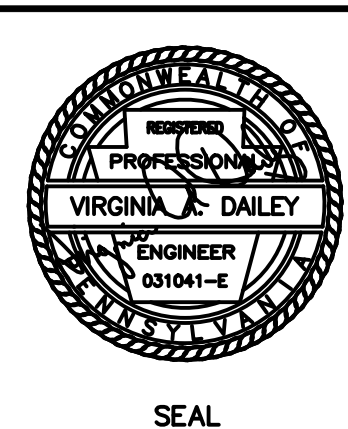


QUONSET HUT - EXISTING BUILDING ORIGINAL SHOP DRAWING  
SCALE: NOT TO SCALE  
FOR REFERENCE ONLY



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PROJECT  
REBUILDING OF THE QUONSET HUT  
NORTHVIEW HEIGHTS  
FACILITY SERVICES SITE

DRAWING TITLE  
ARCHITECTURAL  
REPAIR WORK  
FLOOR PLAN & DETAILS

SCALE: NTS 1/4" = 1'-0"

ONE ENDWALL SOLID & ONE ENDWALL WITH AN OPENING OR OVERHEAD DOOR  
SCALE: NTS 1/4" = 1'-0"

A-03  
DRAWING NO. 4 OF 9

GENERAL NOTES:

1. THE MECHANICAL DRAWINGS ARE DIAGRAMMATIC AND ARE NOT INTENDED TO SHOW EXACT LOCATION OF EQUIPMENT, PIPING, DUCTWORK AND OTHER DEVICES UNLESS DIMENSIONS ARE GIVEN OR OTHERWISE IMPLIED. CONTRACTOR SHALL CONFORM TO ACTUAL BUILDING CONDITIONS.
2. TRANSITIONS, OFFSETS, DROPS, ETC. SHALL BE PROVIDED AS REQUIRED FOR DUCTWORK AND PIPING, WHETHER SHOWN OR NOT ON PLANS. THE CONTRACTOR SHALL FULLY COORDINATE THE MECHANICAL WORK WITHIN ITSELF AND WITH THE WORK OF ALL OTHER TRADES TO PROVIDE COMPLETE AND OPERABLE SYSTEMS WITHOUT INTERFERENCES.
3. PROVIDE ACCESS PANELS/DOORS WHERE REQUIRED FOR ADEQUATE ACCESS TO ALL CONCEALED EQUIPMENT, VALVES, DAMPERS AND CONTROLS WHETHER SHOWN OR NOT ON DRAWINGS.
4. INSTALL DUCTWORK AND PIPING MAINS TIGHT TO UNDERSIDE OF STRUCTURE UNLESS OTHERWISE INDICATED.
5. ALL WORK SHALL BE PERFORMED IN AN ORDERLY MANNER WITHOUT DAMAGE TO EXISTING SYSTEMS/STRUCTURES.
6. AS AN INTEGRAL PART OF THESE DOCUMENTS, THE CONTRACTOR SHALL REFER TO THE SPECIFICATIONS FOR ADDITIONAL INFORMATION.
7. SYSTEMS SHALL BE DESIGNED AND INSTALLED FOR EFFICIENT UTILIZATION OF ENERGY IN ACCORDANCE WITH THE INTERNATIONAL ENERGY CONSERVATION CODE (IECC).
8. PIPING SHALL NOT BE INSTALLED ABOVE ELECTRICAL PANELS.
9. ALL PIPING DISCONNECTED AND INTENDED FOR RE-USE SHALL BE TEMPORARILY CAPPED UNTIL NEW CONNECTIONS ARE COMPLETED.
10. CONTRACTOR SHALL REFER TO FLOW DIAGRAMS, DETAILS, PLANS AND SPECIFICATIONS FOR ALL MECHANICAL SYSTEM CONNECTIONS.
11. SLEEVES SHALL BE INSTALLED AT ALL WALL AND FLOOR PENETRATIONS FOR PIPING AND DUCTWORK WHETHER SHOWN ON DRAWINGS OR NOT.
12. PATCH AND SEAL ALL OPENINGS IN FLOORS, WALLS AND ROOF RESULTING FROM DEMOLITION OR NEW WORK WITH MATERIALS AND FINISHES TO MATCH EXISTING.
13. CONTRACTOR SHALL VISIT THE SITE AND VERIFY EXISTING CONDITIONS PRIOR TO THE BEGINNING OF ANY WORK. FAILURE TO VISIT THE SITE SHALL IN NO WAY RELIEVE THE CONTRACTOR FROM ANY RESPONSIBILITY.
14. ALL WORK SHALL BE INSTALLED IN ACCORDANCE WITH APPLICABLE CODES AND REGULATIONS.
15. CONTRACTOR SHALL USE CARE WHEN PERFORMING SELECTIVE DEMOLITION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE TO BUILDING FINISHES, EQUIPMENT, STRUCTURE, AND MEP SYSTEMS AND EQUIPMENT. SHOULD ANY DAMAGE OCCUR, THE CONTRACTOR SHALL RESTORE ITEMS/AREA TO ITS ORIGINAL CONDITION.
16. CONTRACTOR SHALL NOTIFY AND COORDINATE WITH THE OWNER ANY UTILITY OUTAGES.

GENERAL SYMBOLS



PIPEING SYMBOLS:



ABBREVIATIONS:

CFM	CUBIC FEET PER MINUTE
DB	DRY BULB
EAT	ENTERING AIR TEMPERATURE
EF	EXHAUST FAN
EFF	EFFICIENCY
EX SP	EXTERNAL STATIC PRESSURE
FPM	FEET PER MINUTE
HP	HORSEPOWER
IN WC	INCHES OF WATER COLUMN
IR	INFRARED HEATER
KW	KILOWATT
L	LOUVER
LAT	LEAVING AIR TEMPERATURE
MBH	1000 BTU/H
MCA	MAXIMUM CIRCUIT AMPACITY
MOCp	MAX. OVERCURRENT PROTECTION
OA	OUTSIDE AIR
REF	REFRIGERANT
RPM	REVOLUTIONS PER MINUTE
RTU	ROOFTOP UNIT
SENS	SENSIBLE
SD	SMOKE DETECTOR
TYP	TYPICAL
WB	WET BULB

OUTSIDE COMBUSTION AIR DETAIL



GAS CONNECTION DETAIL



HORIZONTAL VENTING DETAIL



LOUVER & DAMPER DETAIL



ROOF EXHAUST FAN DETAIL



INFRARED HEATER BURNER SCHEDULE					
MARK	MODEL	INPUT (MBH)	MOUNTING HT.	FUEL TYPE	VOLTAGE
					V Ø HZ
IR-1	BH115N-30H	115.0	16' AFF	NATURAL GAS	115 1 60
IR-2	BH115N-30H	115.0	16' AFF	NATURAL GAS	115 1 60

LOUVER SCHEDULE						
TAG	SERVICE	SIZE (W X H)	SF FREE AREA	FACE VEL. (FPM)	MFGR./MODEL NO.	REMARKS
L-1	EF-1/2 EXHAUST	34 X 20	2.07	600	GREENHECK ESD-403	①②
L-2	EF-1/2 EXHAUST	34 X 20	2.07	600	GREENHECK ESD-403	①②
L-3	EF-1/2 EXHAUST	34 X 20	2.07	600	GREENHECK ESD-403	①②
L-4	EF-1/2 EXHAUST	34 X 20	2.07	600	GREENHECK ESD-403	①②
① BIRDSCREEN ② MOTORIZED DAMPER						

EXHAUST FAN SCHEDULE (EF)											
MARK	SERVICE	C.F.M	TYPE	EXT. S.P.	DRIVE	FAN R.P.M.	H.P.	VOLTAGE			WT. LBS.
								V	Ø	HZ	
EF-1	QUONSET HUT	2,500	ROOF CENT. EXH.	0.375	DIRECT	1140	3/4	208	3	60	101
EF-2	QUONSET HUT	2,500	ROOF CENT. EXH.	0.375	DIRECT	1140	3/4	208	3	60	101
① DISCONNECT SWITCH ② BACKDRAFT DAMPER											

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JEFFREY A. OLANDER  
REGISTERED PROFESSIONAL ENGINEER  
NO. 045239-1  
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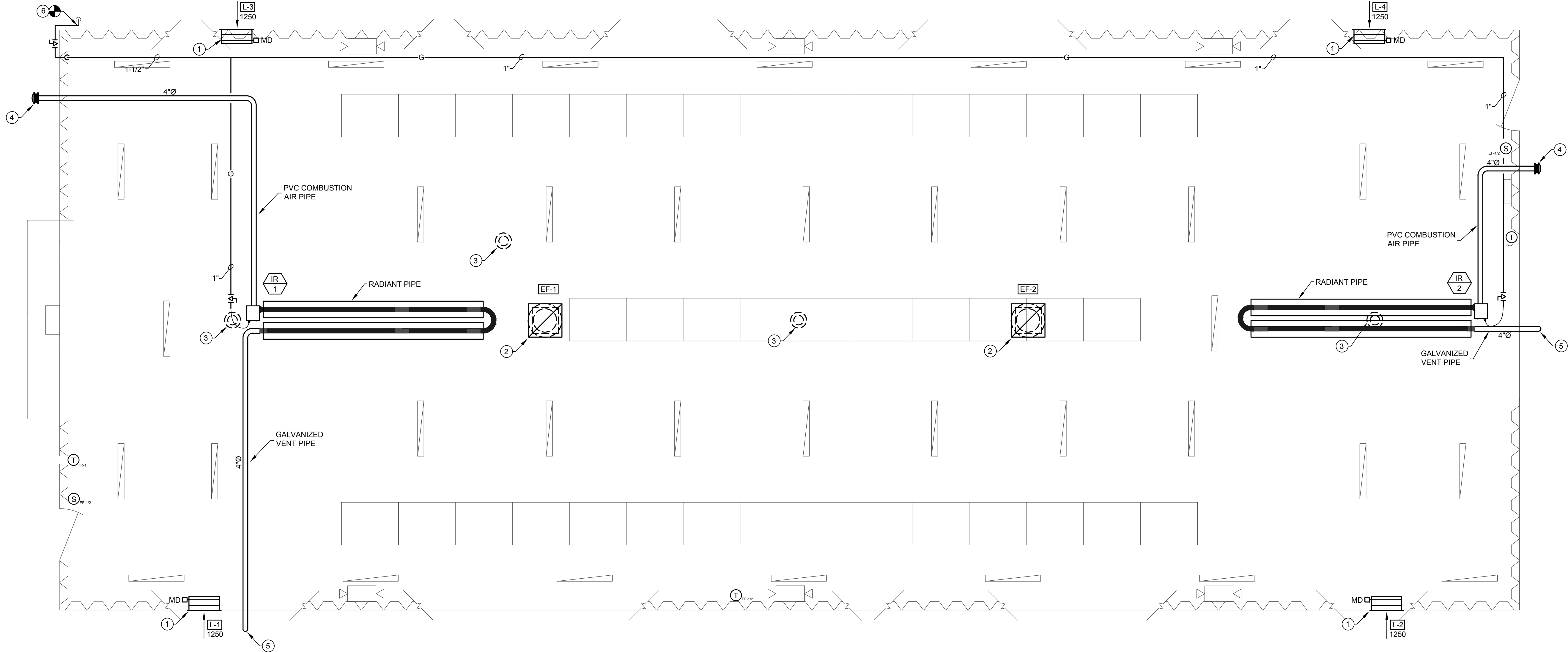
PROJECT  
REBUILDING OF THE QUONSET HUT  
NORTHVIEW HIGHRISE  
FACILITY SERVICES SITE

DRAWING TITLE  
HVAC NOTES, SYMBOLS, LEGENDS,  
DETAILS AND SCHEDULES

DRAWN BY JAO  
CHECKED BY JAO  
DATE 2/01/2017  
SCALE AS SHOWN  
PROJECT NO. 16008

H-01  
DRAWING NO. 5 of 9


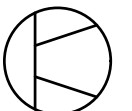
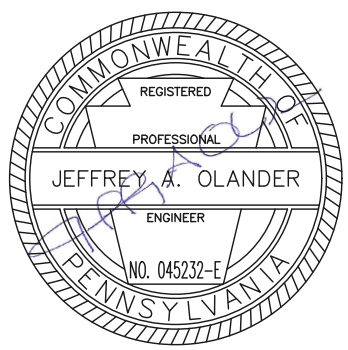
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1 HVAC PLAN  
H-02 SCALE: 1/4"=1'-0"

NEW WORK CODED NOTES:

1. INSTALL NEW LOUVER W/ MOTORIZED DAMPER IN WALL ACCORDING TO MANUFACTURERS INSTRUCTIONS FOR METAL BUILDINGS. PROVIDE WALL OPENING TO ACCOMMODATE NEW EQUIPMENT, MIN. 18" ABOVE GRADE.
2. INSTALL NEW EXHAUST FAN ON ROOF ON CURB, ACCORDING TO MANUFACTURERS INSTRUCTIONS FOR METAL BUILDINGS, WITH BACKDRAFT DAMPER. TRANSITION FROM FAN CONNECTION DOWN THRU ROOF AND TRANSITION TO 28/28 HIGH TO CEILING WITH SCREEN ON OPEN END. FIELD VERIFY FAN LOCATION AND ROOF OPENING PRIOR TO INSTALLATION.
3. REMOVE VENT ON ROOF IN ITS ENTIRETY AND SEAL ROOF AIR/WATER TIGHT WITH LIKE MATERIALS. REFER TO ARCHITECTURAL DRAWINGS FOR SEALING INFORMATION.
4. INFRARED HEATER COMBUSTION AIR INTAKE. SEE DETAIL NO. 1, DWG. H1 AND REFER TO MANUFACTURERS INSTRUCTIONS.
5. INFRARED HEATER HORIZONTAL VENT SYSTEM. SEE DETAIL NO. 3, DWG. H1 AND REFER TO MANUFACTURERS INSTRUCTIONS.
6. CONNECT NEW 1-1/2" NATURAL GAS PIPING TO EXISTING AND ROUTE THRU WALL THRU EXISTING OPENING. SEAL OPENING AIRTIGHT.

 <b>Olander Engineering, Inc.</b> 227 E. Main Street • Carnegie, PA 15106 Ph: (412) 279-1810 Fax: (412) 279-1865 e-mail: jolander@olanderengineering.com	 <b>D &amp; D ENGINEERING, INC.</b> CONSULTING ELECTRICAL ENGINEERS  Etna Technical Center - Suite 102 35 Wilson Street, Pittsburgh, PA 15223 Phone: (412) 784-1560 • Fax: (412) 784-1561 E-Mail: info@ddengr.com • Web: www.ddengr.com	<table border="1"><tr><td>10</td><td></td><td></td><td></td></tr><tr><td>9</td><td></td><td></td><td></td></tr><tr><td>8</td><td></td><td></td><td></td></tr><tr><td>7</td><td></td><td></td><td></td></tr><tr><td>6</td><td></td><td></td><td></td></tr><tr><td>5</td><td></td><td></td><td></td></tr><tr><td>4</td><td></td><td></td><td></td></tr><tr><td>3</td><td></td><td></td><td></td></tr><tr><td>2</td><td></td><td></td><td></td></tr><tr><td>1</td><td></td><td></td><td></td></tr><tr><td>NO.</td><td>DESCRIPTION</td><td>DATE</td><td>BY</td></tr></table>	10				9				8				7				6				5				4				3				2				1				NO.	DESCRIPTION	DATE	BY	 SEAL	PROJECT REBUILDING OF THE QUONSET HUT NORTHVIEW HIGHRISE FACILITY SERVICES SITE	
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NO.	DESCRIPTION	DATE	BY																																														
DRAWING TITLE HVAC PLAN AND NOTES		DRAWN BY JAO	CHECKED BY JAO	DATE 2/01/2017	SCALE AS SHOWN	PROJECT NO. 16008	DRAWING NO. 6 OF 9																																										

Z:\D+D\_Engineering\Projects\Jobs\_2016\16008 - HACP Open Ended\TO #38 - Quonset Hut\DRAWINGS\SHEETS\Bid Drawings\_111016\Bld\_E-01 Quonset Hut\_111016.dwg  
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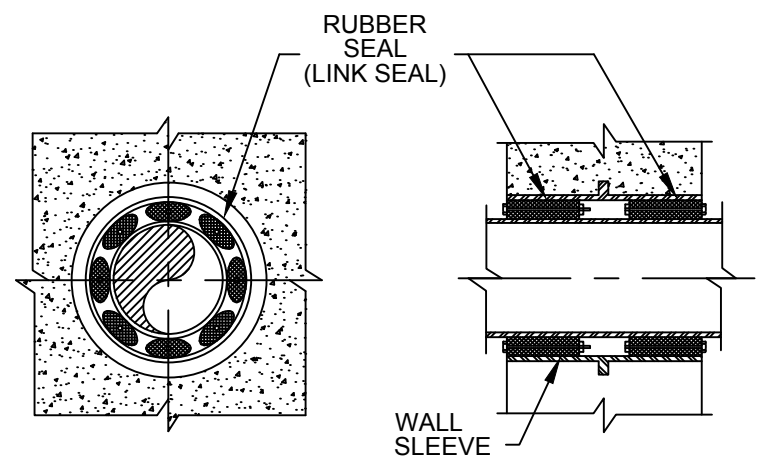
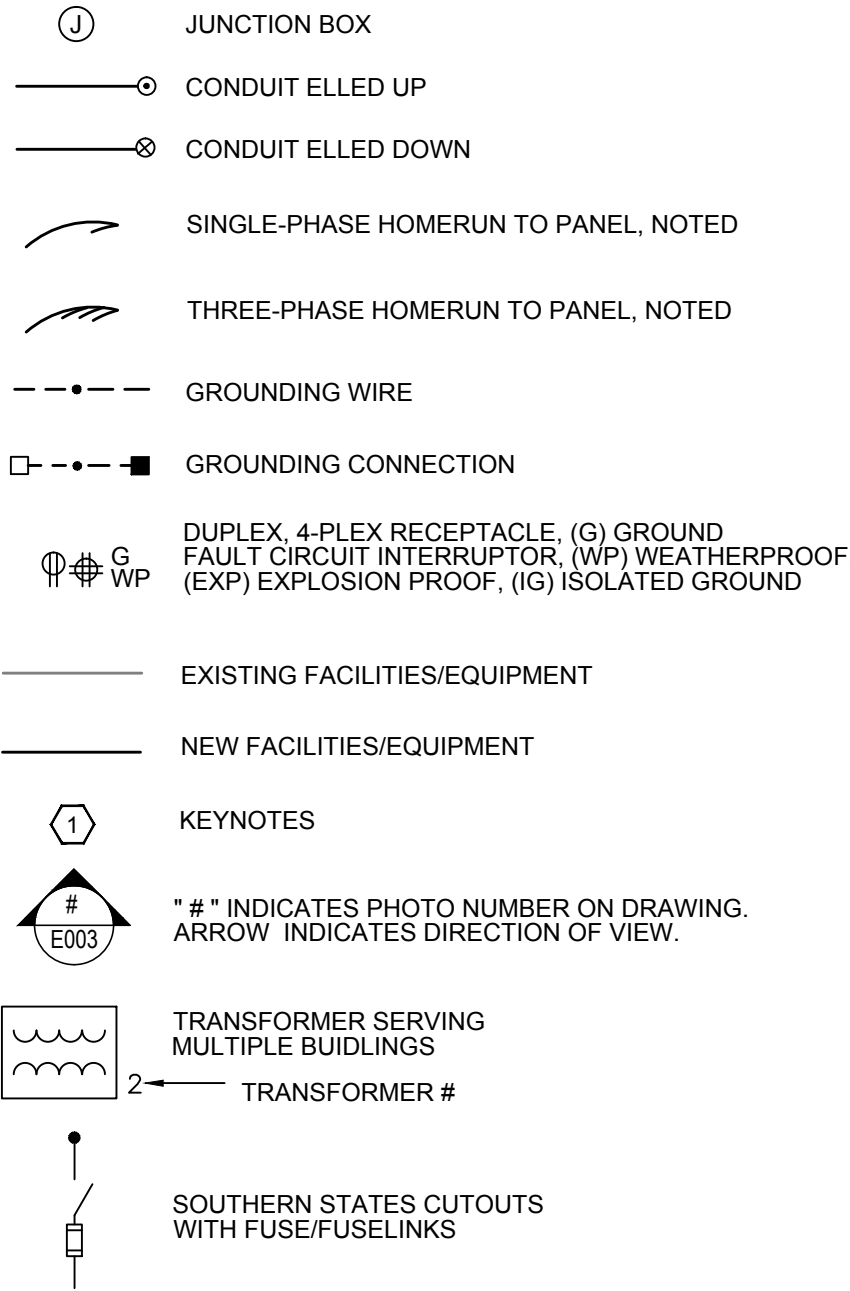
GENERAL NOTES:

1. ALL WORK EXECUTED AND MATERIALS USED SHALL BE IN STRICT CONFORMANCE TO THE REQUIREMENTS OF THE LATEST EDITIONS OF THE FOLLOWING CODES AND STANDARDS:
- A. NATIONAL ELECTRICAL CODE
  - B. NATIONAL BUREAU OF STANDARDS HANDBOOK H-30
  - C. STATE CODES, LOCAL CODES, AND ALL OTHER JURISDICTIONS HAVING AUTHORITY
  - D. UNDERWRITER'S LABORATORIES, INC.
  - E. AMERICAN NATIONAL STANDARDS INSTITUTE, INC.
  - F. INSTITUTE OF ELECTRICAL AND ELECTRONIC ENGINEERS
  - G. NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION
  - H. NATIONAL BOARD OF FIRE UNDERWRITERS
  - I. INSULATED POWER CABLE ENGINEERS ASSOCIATED SPECIFICATIONS
  - J. AMERICAN SOCIETY FOR TESTING MATERIALS AND SPECIFICATIONS
  - K. FEDERAL DEPARTMENT OF LABOR OCCUPATIONAL SAFETY AND HEALTH STANDARDS AS CONTAINED IN THE FEDERAL REGISTER VOLUME 36, NUMBER 105, DATED MAY 29, 1971 OR THE LATEST REVISION THEREOF.
- IF THE ELECTRICAL CONTRACTOR PERFORMS ANY WORK CONTRARY TO ANY OF THE ABOVE CODES AND REGULATIONS, THE CONTRACTOR SHALL BE HELD FULLY RESPONSIBLE FOR SUCH VIOLATIONS, AND SHALL ASSUME ANY AND ALL COSTS ASSOCIATED IN CORRECTING THE VIOLATIONS.
2. ELECTRICAL CONTRACTOR SHALL VISIT THE SITE TO LEARN OF ALL EXISTING CONDITIONS, WHICH IN ANY WAY WILL AFFECT THE EXECUTION OF THIS WORK AND THE REQUIREMENTS OF THIS CONTRACT AS SHOWN OR REASONABLY INFERRED ON THE DRAWINGS AND IN THE PROJECT SPECIFICATIONS.
3. ELECTRICAL CONTRACTOR SHALL DOCUMENT ANY REQUEST OR DEVIATION FROM THE CONTRACT DOCUMENTS ON ANY ITEM THAT MAY HAVE BEEN DISCUSSED IN THE FIELD, OR DIRECTED BY OTHERS, REGARDING MATERIALS OR INSTALLATION METHODS.
4. ELECTRICAL CONTRACTOR SHALL COORDINATE ALL ELECTRICAL WORK (AS DESCRIBED ON THE DRAWINGS AND IN THE PROJECT SPECIFICATIONS) WITH ALL OTHER TRADES AND SUBCONTRACTORS ON THE PROJECT. THIS WORK SHALL NOT BE LIMITED TO PROVIDING COMPLETE DRAWINGS AND SPECIFICATIONS TO GENERAL TRADES TO ENSURE COORDINATION WITH ALL TRADES AND CONSTRUCTION INSPECTORS.
5. ELECTRICAL CONTRACTOR SHALL PROVIDE TEMPORARY WIRING AS NECESSARY, TO ENSURE THAT NO DISRUPTION IN SERVICE OCCURS. TEMPORARY WIRING SHALL BE OF SIMILAR TYPE AND INSULATION WITH EXISTING WIRING.
6. PROVIDE TYPE OF CONDUIT FOR THE FOLLOWING:
- A. BUILDING EXTERIOR - RGS
  - B. BUILDING INTERIOR - EMT
7. ANY CUTTING, ROUGH AND FINISHED PATCHING, AS WELL AS ALL PAINTING FOR ALL WORK IS TO BE PERFORMED BY THE ELECTRICAL CONTRACTOR.
8. LINKSEAL ALL CONDUIT PENETRATIONS OF EXTERIOR WALLS ABOVE AND BELOW GRADE.
9. ALL MATERIALS SHALL BEAR THE LABEL OF UNDERWRITER'S LABORATORIES AND MEET THE CURRENT U.L. STANDARD FOR THAT TYPE OF MATERIAL.
10. ELECTRICAL CONTRACTOR SHALL OBTAIN AND PAY FOR ALL LICENSES, PERMITS, AND INSPECTIONS, INCLUDING BUT NOT LIMITED TO THE CERTIFICATE OF FINAL INSPECTION AND APPROVAL FROM THE LOCAL INSPECTION AUTHORITIES. FEES SHALL BE INCLUSIVE FOR ALL WORK TO BE PERFORMED WHETHER ONE OR MORE THAN ONE PERMIT/LICENSE IS REQUIRED.
11. ALL CONDUCTORS SHALL BE COPPER WITH TYPE THHN/THWN INSULATION. CONDUCTORS (#10 AND SMALLER) SHALL BE SOLID. CONDUCTORS (#8 AND LARGER) SHALL BE STRANDED. THE MINIMUM CONDUIT SIZE FOR POWER CONDUCTORS SHALL BE #12.
12. ALL GROUND CONDUCTORS SHALL BE FULLY INSULATED WITH GREEN INSULATION.
13. THE WIRING METHODS FOR THIS PROJECT SHALL BE WIRE IN CONDUIT IN EXPOSED AREAS. THE CONDUIT SHALL BE ELECTRIC METALLIC TUBING (EMT) AND THE MINIMUM SIZE SHALL BE 3/4". CONDUIT PLACED BELOW GRADE AND/OR CONCRETE ENCASED SHALL BE SCHEDULE 40 PVC AND A MINIMUM SIZE SHALL BE 1". ALL EXPOSED WIRING CONDITIONS SHALL BE INSTALLED IN CONDUIT IN UNFINISHED SPACES.
14. ELECTRICAL CONTRACTOR SHALL PROVIDE ADEQUATELY SIZED WIREWAYS, JUNCTION BOXES, AND OUTLET BOXES FOR RESPECTIVE APPLICATIONS. THESE ITEMS SHALL BE SIZED IN ACCORDANCE WITH THE LATEST EDITION OF THE 2008 NATIONAL ELECTRICAL CODE AND BE READILY ACCESSIBLE. THESE ITEMS SHALL BE OF GALVANIZED STEEL CONSTRUCTION UNLESS SPECIFIED OTHERWISE.
15. CONDUCTORS, EQUIPMENT AND/OR DEVICES OF DIFFERENT VOLTAGES SHALL NOT BE INSTALLED IN THE SAME OUTLET OR JUNCTION BOX. EACH CIRCUIT SHALL HAVE ITS OWN CIRCUIT CONDUCTOR. DO NOT SHARE NEUTRALS. COVER PLATES SHALL BE PROVIDED ON ALL BLANK OUTLET BOXES FOR FUTURE USE. PROVIDE ADDITIONAL INSULATION BEHIND EACH JUNCTION OR OUTLET BOX LOCATED ON EXTERIOR WALLS.
16. LOCATION OF ITEMS AND DIMENSIONS SHOWN ON DRAWINGS ARE APPROXIMATE. MOUNTING HEIGHTS OF EQUIPMENT AND ROUTING OF RACEWAYS SHALL BE COORDINATED WITH THE EQUIPMENT REQUIREMENTS, FIELD CONDITIONS AND APPROVED BY THE OWNER/ENGINEER.
17. EXACT LOCATIONS OF ELECTRICAL DEVICES AND EQUIPMENT SHALL BE VERIFIED.
18. ALL DIMENSIONS AND EXISTING CONDITIONS SHALL BE CHECKED AND VERIFIED BY THE CONTRACTOR AT THE SITE.
19. THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS OR INSTRUCTIONS FOR CONSTRUCTION SAFETY. THE ELECTRICAL ENGINEER ASSUMES NO RESPONSIBILITY FOR ANY WORKER'S OR TRANSIENT'S SAFETY, OR FOR THE ADEQUACY OF EQUIPMENT, BUILDING COMPONENTS, SCAFFOLDS, FORMS, OR OTHER WORK AID, OR ANY NECESSITY TO WORK ON "LIVE" ELECTRICAL COMPONENTS. FURTHER, NO SUPERINTENDENCE IS INCLUDED OR INTENDED.
20. THE ELECTRICAL CONTRACTOR SHALL BE REQUIRED TO PROTECT ALL OPEN EXCAVATIONS DURING ANY DEMOLITION AND/OR CONSTRUCTION.
21. DEVIATION FROM MANUFACTURER'S NAMES, CATALOG/MODEL/PARTS NUMBERS SHOWN ON THE DRAWINGS AND IN THE PROJECT SPECIFICATIONS SHALL NOT BE PERMITTED WITHOUT PRIOR WRITTEN APPROVAL FROM THE OWNER AND/OR ENGINEER.
22. ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR ANY CUTTING AND/OR PATCHING REQUIRED BY ELECTRICAL WORK RESULTING FROM THE FAILURE TO INSTALL EMBEDDED OR BUILT-IN ITEMS AS AND WHEN REQUIRED.
23. ELECTRICAL CONTRACTOR SHALL VERIFY THAT THE WORK IS FEASIBLE AS SHOWN ON THE DRAWINGS AND IN THE PROJECT SPECIFICATIONS. ELECTRICAL CONTRACTOR SHALL VERIFY LOCATION OF ELECTRICAL ITEMS IN RELATION TO ARCHITECTURAL AND STRUCTURAL ITEMS AS REQUIRED. ELECTRICAL CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES BEFORE PROCEEDING WITH WORK.
24. ELECTRICAL CONTRACTOR SHALL PROVIDE ANY ADDITIONAL JUNCTION BOXES AND/OR HANDHOLES, NOT SHOWN ON THE PLANS, BUT REQUIRED TO COMPLETE CONSTRUCTION. THESE ITEMS SHALL BE IN STRICT CONFORMANCE TO THE REQUIREMENTS OF THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE. LOCATIONS OF ADDITIONAL HANDHOLES SHALL REQUIRE APPROVAL BY THE ENGINEER BEFORE INSTALLATION. ELECTRICAL CONTRACTOR MAY BE REQUIRED TO REMOVE OR RELOCATE ANY INSTALLATION OF ADDITIONAL HANDHOLES THAT ARE NOT APPROVED, AND AT NO ADDITIONAL COST TO THE OWNER.
25. POWER AND CONTROL CABLES ARE TO BE SEPARATED AT ALL TIMES. SOME JUNCTIN BOXES MAY REQUIRE A MECHANICAL BARRIER TO MAINTAIN SEPARATION OF POWER FROM CONTROL.

BUILDING CODE COMPLIANCE

BUILDING DATA	
BUILDING NAME:	QUONSET HUT
PROJECT NAME:	ELECTRICAL WORK AT QUONSET HUT
BUILDING ADDRESS:	525 MOUNT PLEASANT ROAD PITTSBURGH, PA. 15214-2427
BUILDING CODE:	NATIONAL ELECTRICAL CODE 2011 HVAC INT'L MECHANICAL, FUEL GAS, ENERGY CONSERVATION CODE 2009 INT'L BUILDING CODE 2009 & 2012 INT'L EXISTING (1-STORY) SINGLE-USE BUILDING TYPE: V8 (OR MOST CURRENT CODE ENFORCED BY CITY OF PITTSBURGH)
BUILDING OCCUPANCY	
USE AND OCCUPANCY CLASSIFICATION:	S-1
LOCAL CODE REVIEW	
JURISDICTION:	CITY OF PITTSBURGH BUREAU OF BUILDING INSPECTION

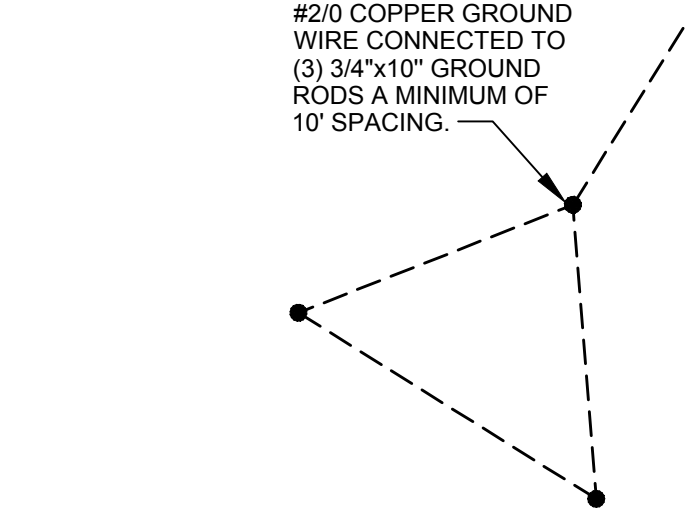
ELECTRICAL LEGEND



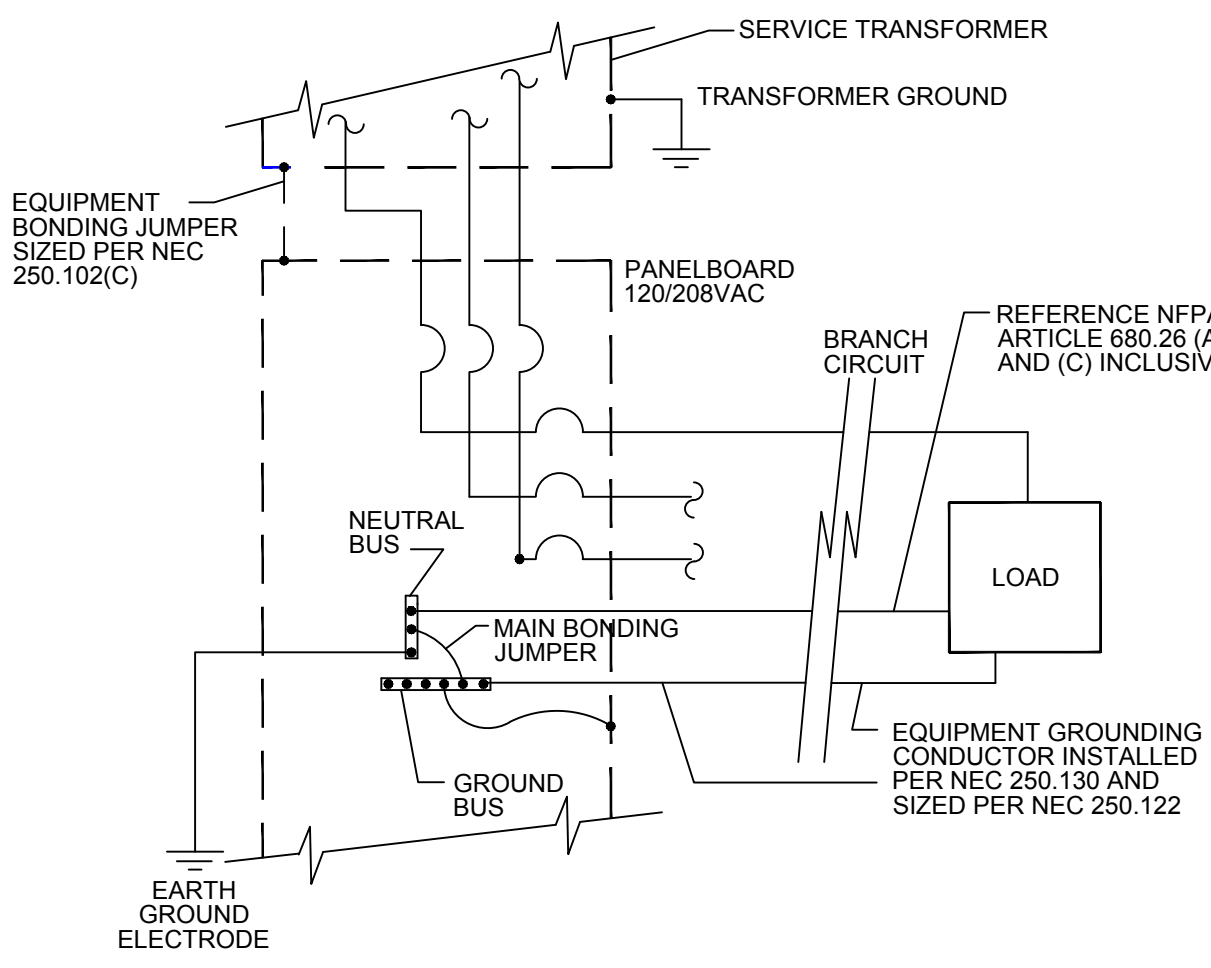
2 WALL SLEEVE / LINK SEAL DETAIL  
SCALE: NONE

ABBREVIATIONS

A	AMPERES
A/C	AIR CONDITIONING
AFF	ABOVE FINISHED FLOOR
C	CONDUIT
CB	CIRCUIT BREAKER
CKT	CIRCUIT
E	EMERGENCY
EC	ELECTRICAL CONTRACTOR
ER	EXISTING TO BE REMOVED AND RELOCATED
FH	FIRE HOSE
FU	FUSE(S)
G OR GND	GROUND
GFI	GROUND FAULT INTERRUPTING
HP	HORSEPOWER
L	LAMP
MCB	MAIN CIRCUIT BREAKER
MLO	MAIN LUG ONLY
NC	NORMALLY CLOSED
NEC	NATIONAL ELECTRIC CODE
NE	NORMAL/EMERGENCY
NF	NON FUSED
NO	NORMALLY OPEN
P	PUMP OR POLE
PNL	PANEL
PP	POWER PANEL
RE	REMOVED AND RELOCATED EQUIPMENT IN NEW LOCATION
SM	SURFACE MOUNT
SW	SWITCH
V	VOLTS
W	WATTS OR WIRE
WI	WITH
WG	WIRE GUARD
WP	WEATHERPROOF



3 GROUNDING COUNTERPOISE DETAIL  
SCALE: NONE

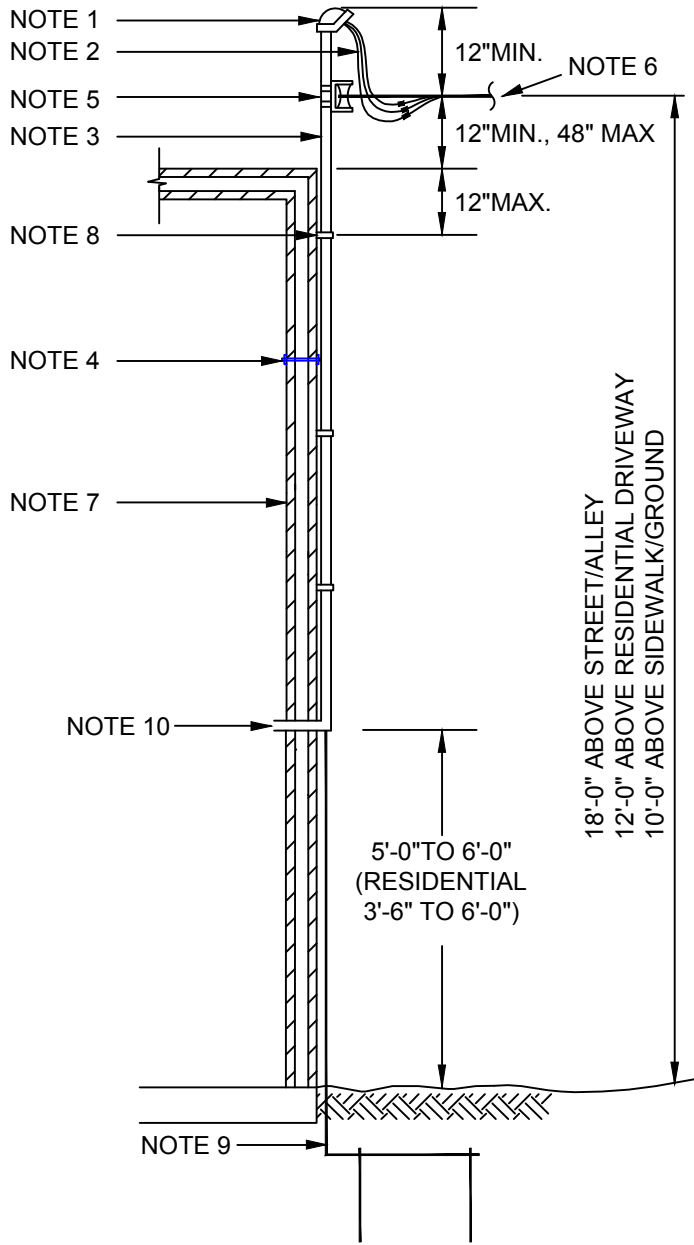


5 BUILDING AND EQUIPMENT GROUNDING SYSTEM DETAIL  
SCALE: NONE

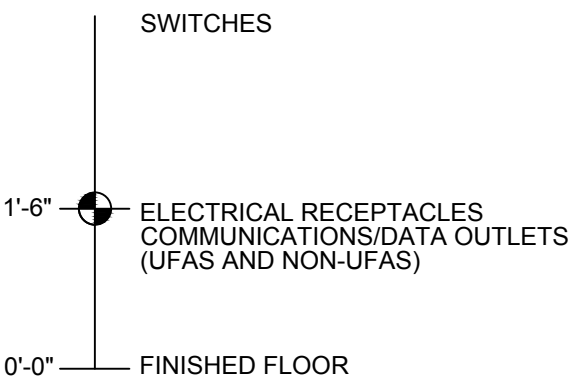
LIGHTING FIXTURE SCHEDULE								
FIXTURE No.	SYMBOL	MANUFACTURER	SERIES NAME	CATALOG No.	BALLAST	LAMP	LLF	WATTS
A		LITHONIA LIGHTING	MSL SERIES	MSL-800LM-L/LV-120V-35K-80CRI-PLR22G-WH	-	LED	-	75
B		LITHONIA LIGHTING	WALLPACK	TWH-LED-20C-1000-50K-T3M-MVOLT-PE-TP	2 ENGINE	LED	-	72
EM		LITHONIA LIGHTING	EMERGENCY LIGHT	ELM2 LED	-	LED	-	1.44
EX		LITHONIA LIGHTING	EXIT SIGN	EXR LED EL M6	-	LED	-	.8

NOTES

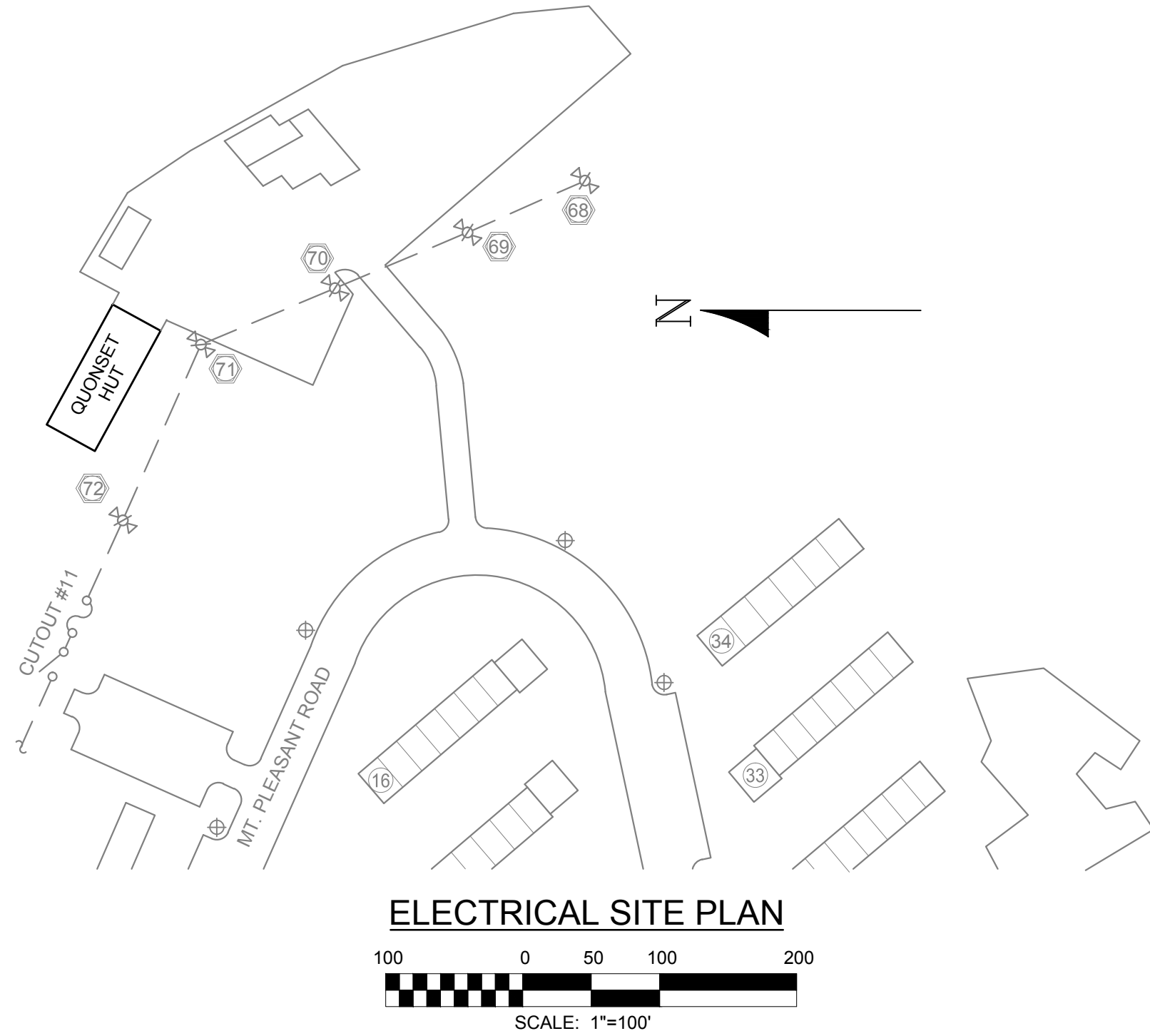
- NOTE 1 RAINLIGHT SERVICE HEAD BY CONTRACTOR. MAINTAIN 3'-0" CLEARANCE FROM WINDOWS, DOORS, AND SIMILAR ACCESSIBLE AREAS.
- NOTE 2 LEAVE A MINIMUM 36" OF SERVICE ENTRANCE CONDUCTORS FOR SERVICE DROP CONNECTION BY CONTRACTOR.
- NOTE 3 RIGID GALVANIZED STEEL CONDUIT RISER MAST BY CONTRACTOR. COUPLINGS SHALL NOT BE USED IN TOP 10' OF MAST OR ABOVE ROOF. PROVIDE 2" MAST FOR UP TO 2'-6" EXTENSION, 2 1/2" MAST FOR UP TO 4'-0" EXTENSION.
- NOTE 4 SECURELY ANCHOR SERVICE BRACKET TO STRUCTURAL FRAME MEMBERS OF WALL, BY CONTRACTOR.
- NOTE 5 SERVICE BRACKET SUPPLIED AND INSTALLED BY CONTRACTOR. ABOVE 100A, 5/8" THRU BOLT MAY BE REQUIRED FOR ADEQUATE SUPPORT.
- NOTE 6 ROOF EAVE/OVERHANG NOT TO EXCEED 8". LENGTH OF SERVICE DROP CROSSING OVER ROOF PERPENDICULAR TO 8" EAVE NOT TO EXCEED 4'. FOR SERVICE DROP CROSSING OVER ROOF >4', MAST SHALL BE SUFFICIENT HEIGHT TO PROVIDE CLEARANCES SPECIFIED IN NEC SECTION 230.24.
- NOTE 7 WALL MUST BE DESIGNED TO WITHSTAND STRAINS IMPOSED BY SERVICE DROP, OR MODIFIED WITH SUPPORTS.
- NOTE 8 2-HOLE CONDUIT STRAPS AT NOT MORE THAN 32" INTERVALS ANCHORED BY 5/16" MINIMUM DIAMETER LAG SCREW OF SUFFICIENT LENGTH TO HOLD MAST SECURELY. TOP STRAP TO LOCATED WITHIN 12" OF ROOF.
- NOTE 9 CONTINUOUS GROUNDING CONDUCTOR, #6 INSULATED COPPER MINIMUM, CONNECTED TO (2) 5/8" x 8" COPPER GROUNDING RODS SPACED 6', BY CONTRACTOR.
- NOTE 10 TO SERVICE EQUIPMENT, INSTALL GROUNDING SYSTEM IN ACCORDANCE WITH N.E.C. REQUIREMENTS BY CONTRACTOR.



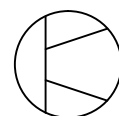
1 SERVICE ENTRANCE DETAIL  
SCALE: NONE



4 DETAIL - MOUNTING HEIGHT SCHEDULE  
N.T.S.



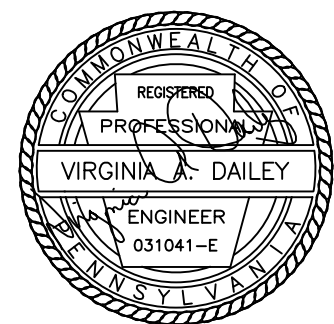
ELECTRICAL SITE PLAN  
SCALE: 1"=100'



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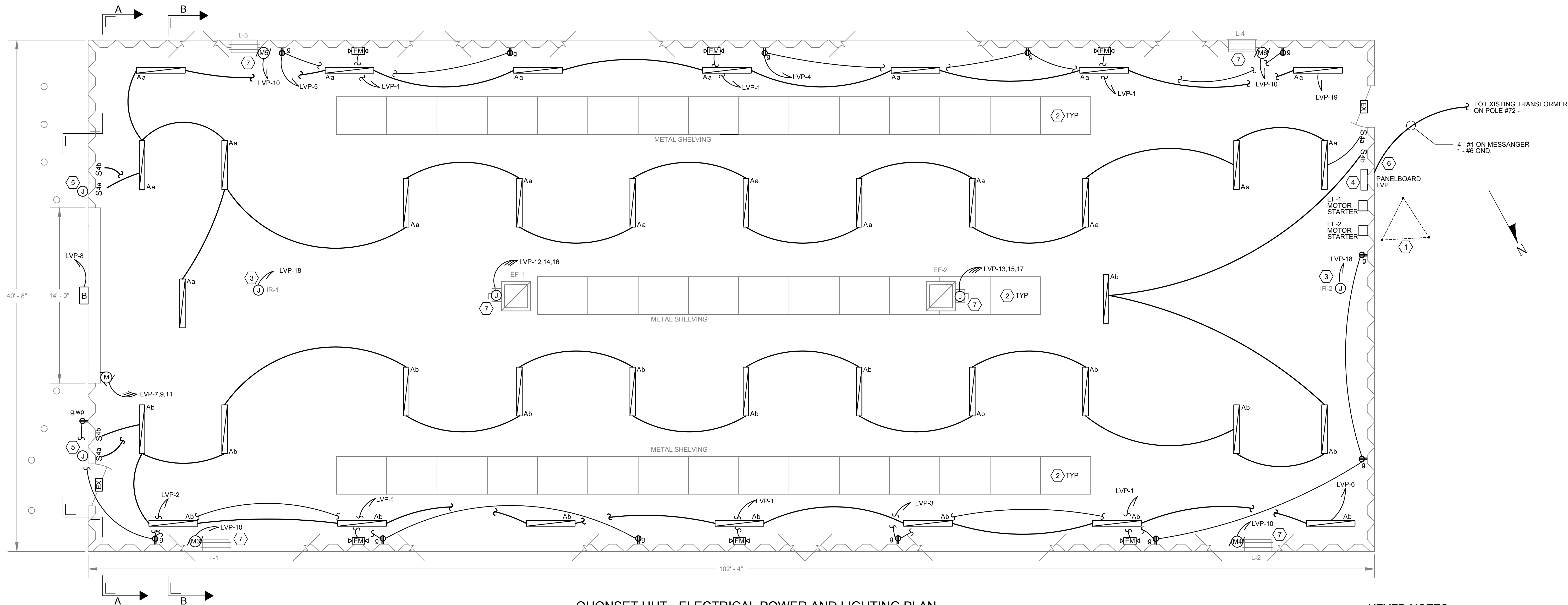
PROJECT  
REBUILDING OF THE QUONSET HUT  
NORTHVIEW HIGHRISE  
FACILITY SERVICES SITE

DRAWING TITLE ELECTRICAL GENERAL NOTES, LEGEND, ABBREVIATIONS, DETAILS, BUILDING CODE, LIGHT FIXTURE SCHEDULE AND SITE PLAN				
DRAWN BY JEMoier	CHECKED BY VAD	DATE 11/10/2016	SCALE AS SHOWN	PROJECT NO. 16008

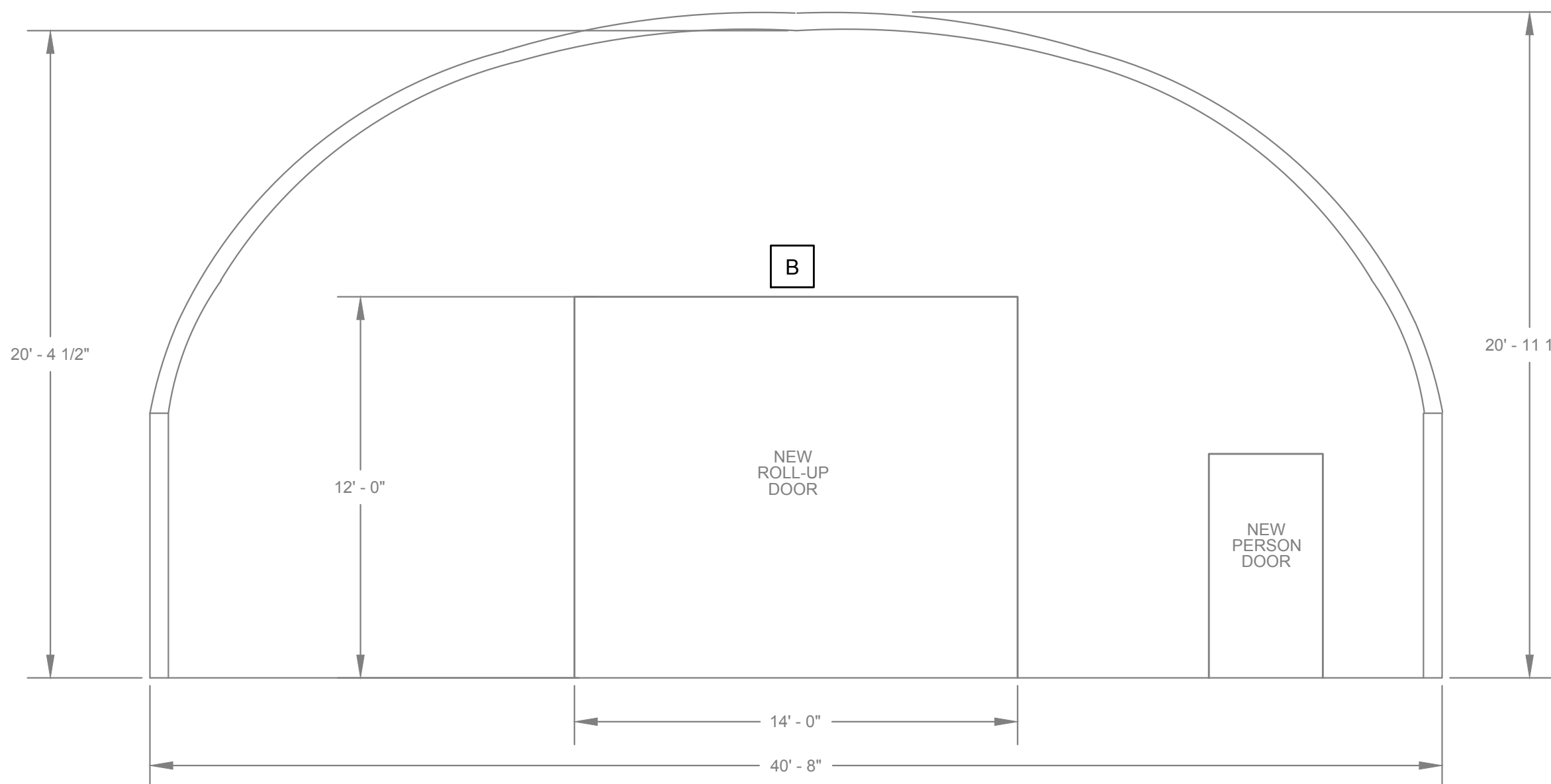
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DRAWING NO.  
7 OF 9

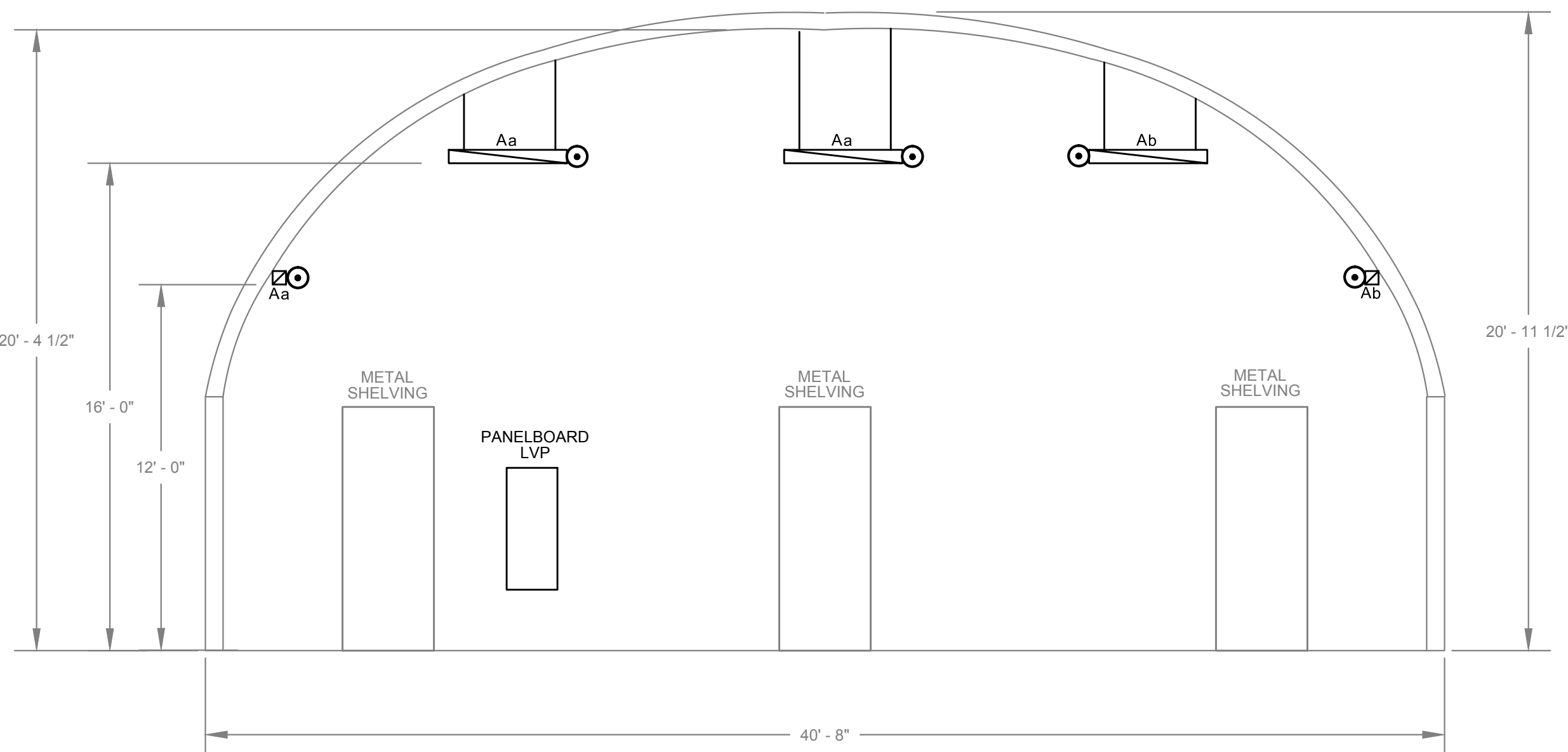
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QUONSET HUT - ELECTRICAL POWER AND LIGHTING PLAN  
SCALE: 1/4" = 1'-0"



SECTION A  
SCALE: 1/4" = 1'-0"

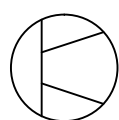


SECTION B  
SCALE: 1/4" = 1'-0"

KEYED NOTES:

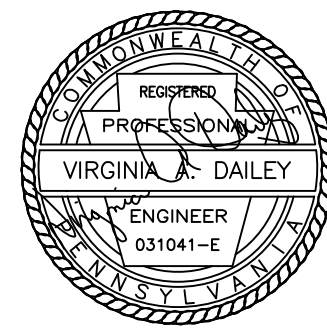
- SEE GROUNDING DETAILS, DRAWING E-01.
- SHELVING TO BE PROVIDED AND INSTALLED PER SPECIFICATION SECTION.
- SEE DRAWING H-02 FOR LOCATION OF ELECTRICAL CONNECTION FOR RADIANT HEAT.
- SEE DRAWING E-03 FOR PANELBOARD SCHEDULE.
- LOCATION FOR CONNECTION INTO EXISTING HACP SECURITY ACCESS, AND LOCATION OF DOOR CONTROL ACCESS.
- SEE DRAWING E-01 FOR SERVICE ENTRANCE DETAIL.
- SEE DRAWING H-02 FOR CONTROLS OF LOUVERS AND EXHAUST FANS.

MOTOR SCHEDULE										
MOTOR NO.	MOTOR DESCRIPTION	MOTOR VOLTS	F.L.A.	HP	BREAKER		STARTER SIZE	MOTOR CIRCUIT		CONTROL
					FRAME	TRIP SETTING		WIRE	CONDUIT	
1	EF-1 EXHAUST FAN NO. 1	208	1.6	3/4	20	-		4 - #12	3/4"	SEE HVAC DRAWINGS/SPECS
2	EF-2 EXHAUST FAN NO. 2	208	1.6	3/4	20	-		4 - #12	3/4"	SEE HVAC DRAWINGS/SPECS
3	L-1 LOUVER	120	-	-	20	-		3 - #12	3/4"	SEE HVAC DRAWINGS/SPECS
4	L-2 LOUVER	120	-	-	20	-		3 - #12	3/4"	SEE HVAC DRAWINGS/SPECS
5	L-3 LOUVER	120	-	-	20	-		3 - #12	3/4"	SEE HVAC DRAWINGS/SPECS
6	L-4 LOUVER	120	-	-	20	-		3 - #12	3/4"	SEE HVAC DRAWINGS/SPECS



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PROJECT  
REBUILDING OF THE QUONSET HUT  
NORTHVIEW HIGHRISE  
FACILITY SERVICES SITE

DRAWING TITLE  
ELECTRICAL  
NEW WORK  
FLOOR PLAN AND SECTIONS

E-02

DRAWN BY JEM/aler	CHECKED BY VAD	DATE 02/01/2017	SCALE AS SHOWN	PROJECT NO. 16008	DRAWING NO. 8 OF 9
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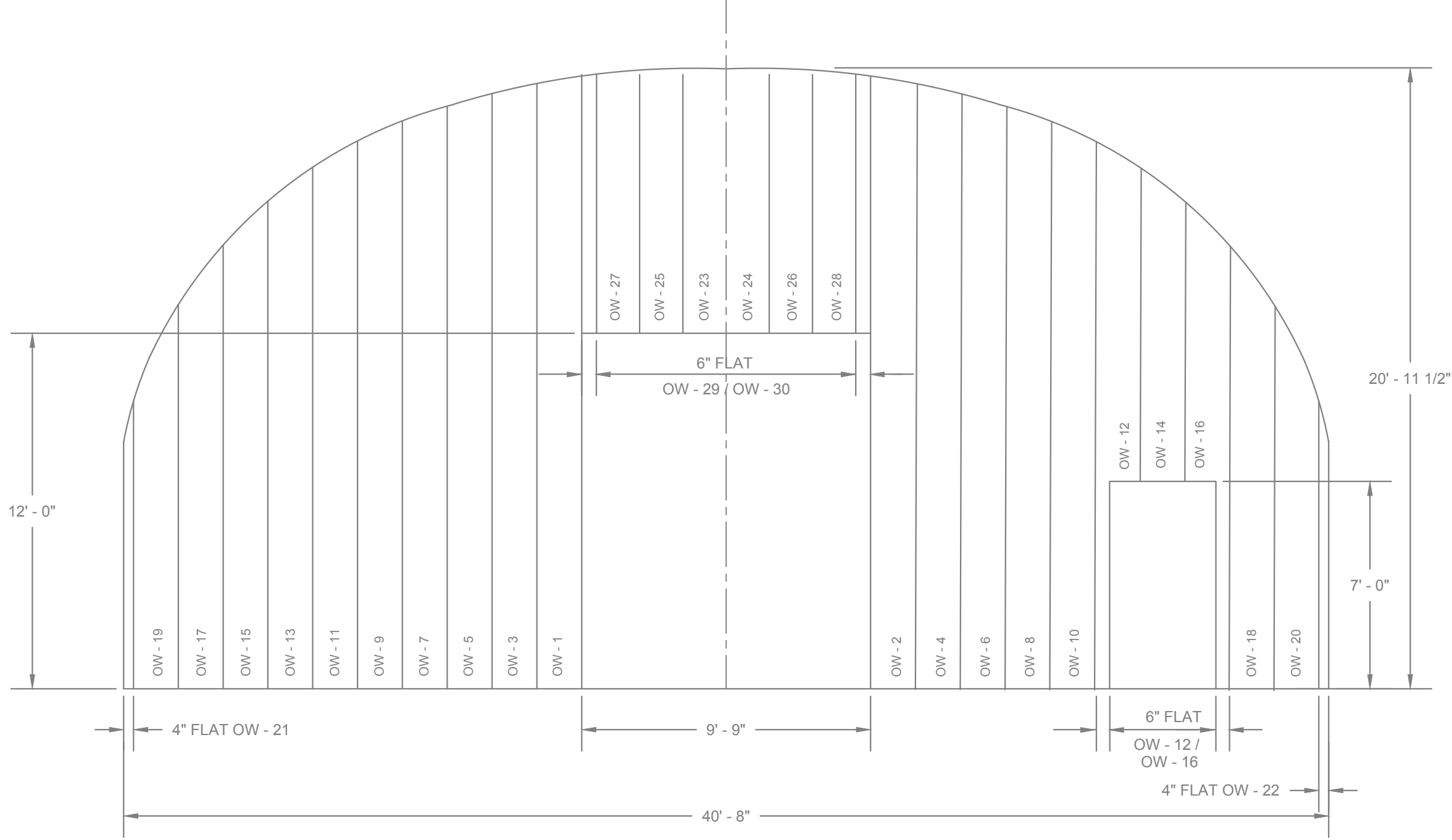
REAR WALL 1  
SCALE: NONE



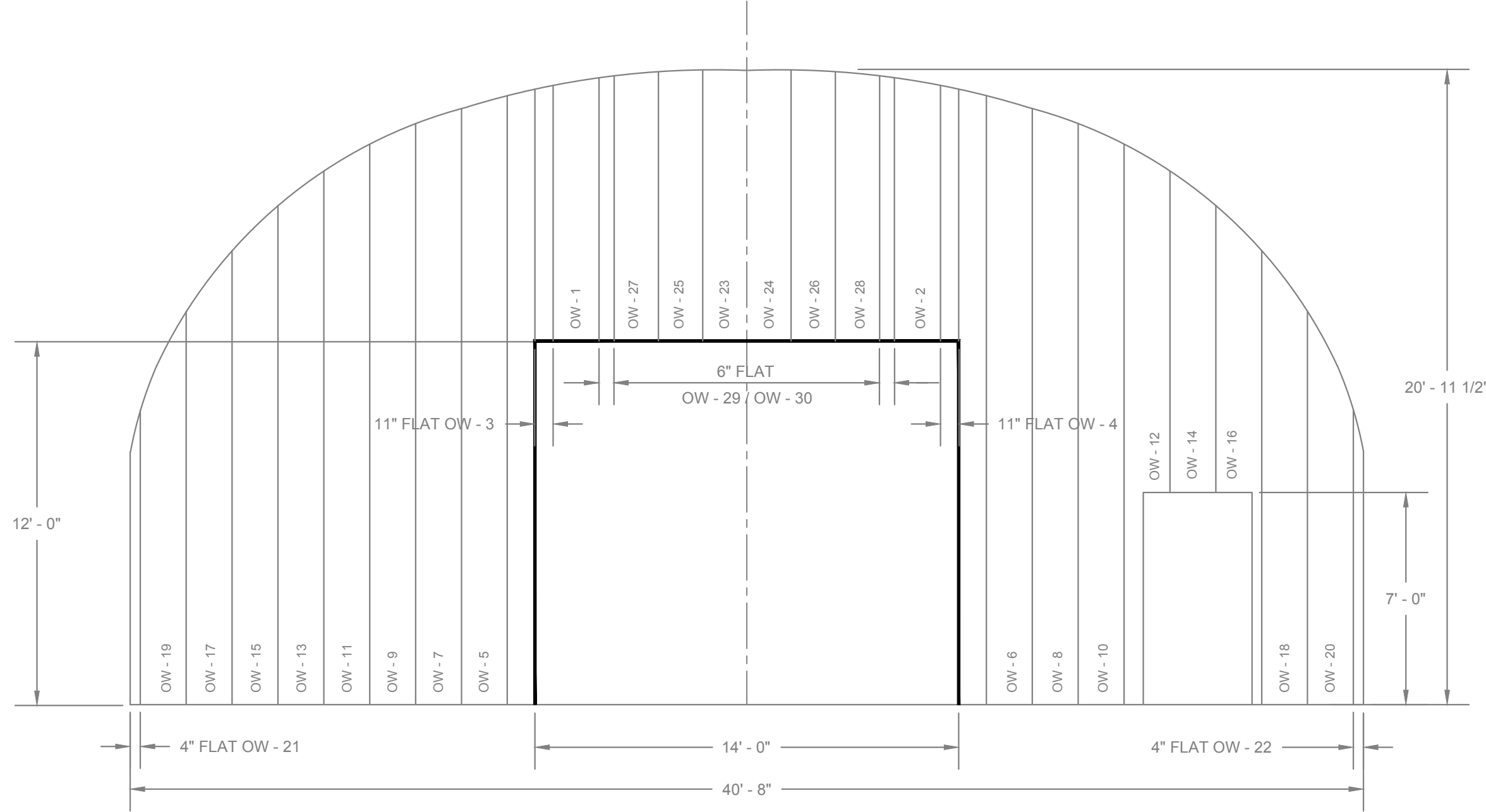
EXISTING MAIN FRONT ROLL-UP  
AND PERSON DOOR 2  
SCALE: NONE

KEYED NOTES:

- 1 EXISTING SERVICE ENTRANCE AND PANEL TO BE DEMOLISHED AND REPLACED.  
SEE THIS DRAWING FOR NEW PANELBOARD SCHEDULE.
- 2 EXISTING FRONT ROLL-UP DOOR TO BE REPLACED WITH NEW 14-FOOT WIDE DOOR.  
ALL MODIFICATIONS TO EXISTING OPENING TO BE MADE TO MAINTAIN INTEGRITY OF  
STRUCTURE.
- 3 EXISTING BOLLARDS TO BE REMOVED AND REPLACED ONCE NEW DOOR IS  
INSTALLED. ADDITIONAL BOLLARDS TO BE INSTALLED AT THREE-FOOT  
INTERVALS ALONG ENTIRE FRONT OF BUILDING.
- 4 THIS DRAWING INFORMATION PROVIDED BY SHOP DRAWINGS SUPPLIED BY  
HOUSING AUTHORITY, CITY OF PITTSBURGH. CONTRACTOR SHALL VERIFY  
INFORMATION AS IT PERTAINS TO INSTALLATION OF NEW ROLL-UP DOOR.



DETAIL - FRONT ENDWALL WITH EXISTING DOOR SIZE - 12'H X 10'W OPENING 4  
SCALE: 1/4" = 1'-0"



2 DETAIL - FRONT ENDWALL WITH NEW DOOR SIZE - 12'H X 14'W OPENING 4  
SCALE: 1/4" = 1'-0"

PANELBOARD SCHEDULE LVP											
MAINS: 100A MCB			MOUNTING: SURFACE								
VOLTAGE: 208/120V			AIC 10000								
PHASE: 3 WIRES: 4			REMARKS								
NO	PH	KW	DESCRIPTION	C/B	C/B	KW	DESCRIPTION	PH	NO		
1	A	1.20	EMERGENCY LIGHTING	20/1	20/1	0.80	OUTLETS	A	2		
3	B	0.80	OUTLETS	20/1	20/1	0.80	OUTLETS	B	4		
5	C	0.80	OUTLETS	20/1	20/1	0.80	LIGHTING	C	6		
7	A				20/1	0.40	EXTERIOR LIGHTING	A	8		
9	B	1.50	ROLL UP DOOR	20/3	20/1	0.10	LOUVERS	B	10		
11	C							C	12		
13	A				20/3	1.50	EF-1	A	14		
15	B	1.50	EF-2	20/3				B	16		
17	C				20/1	0.20	IR CONTROL BOXES	C	18		
19	A	0.80	LIGHTING	20/1	20/1		SPARE	A	20		
21	B		SPARE	20/1	20/1		SPARE	B	22		
23	C		SPARE	20/1	20/1		SPARE	C	24		
25	A		SPARE	20/1	20/1		SPARE	A	26		
27	B		SPARE	20/1	20/1		SPARE	B	28		
29	C		SPARE	20/1	20/1		SPARE	C	30		
		A 2.00	TOTALS		A	4.70			2.70	A	
		B 3.80			B	4.70			0.90	B	
		C 0.80			C	1.80			1.00	C	
NOTES:											
LOCATION: CONNECTED LOAD 11.20 KW CONNECTED AMPS 31.12 A											

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NO. DESCRIPTION DATE BY

SEAL

PROJECT  
REBUILDING OF THE QUONSET HUT  
NORTHVIEW HIGHRISE  
FACILITY SERVICES SITE

DRAWING TITLE  
ELECTRICAL  
PICTURES, DETAILS AND  
PANELBOARD SCHEDULE

DRAWN BY JEMatier CHECKED BY VAD DATE 02/01/2017 SCALE AS SHOWN PROJECT NO. 16008

E-03  
DRAWING NO. 9 OF 9