



GUAM POWER AUTHORITY

ATURIDĀT ILEKTRESEDĀT GUĀHAN
P.O.BOX 2977 • HAGĀTŊA, GUAM U.S.A. 96932-2977

October 13, 2022

AMENDMENT NO.: V

TO

INVITATION FOR MULTI-STEP BID NO.: GPA-042-22

FOR

FADIAN PUBLIC PARKING LOT SOLAR CANOPY

Prospective Bidders are hereby notified of the following inclusions and response to inquiries received from Bidder No. 8 dated September 16, 2022 and September 20, 2022, Bidder No. 6 dated September 21, 2022, October 04, 2022:

INCLUSION:

Under Volume IV – Appendices ***ADD***.

Pages 206c thru 206c.10 (Appendix T) (see attached)

CHANGES:

1. Under Volume II – Technical and Functional Requirements:

REMOVE Page 115a of 212 and ***REPLACE with*** Page 115b of 212, Under 3.3.7 Procurement and Delivery of Parking Canopy, PV System, and Other Necessary Equipment K. (see attached):

Verbiage is changed:

FROM:

K. Remote Output Monitoring:

The PV system shall include meters and other auxiliary devices to allow for the monitoring of PV system output. Also included are the necessary licenses for any software application.

TO NOW READ:

K. Remote Output Monitoring:

The PV system shall include meters and other auxiliary devices to allow for the monitoring of PV system output. Metering provision shall be installed at three location: PV batter output, and interconnection point. Also included are the necessary licenses for any software application

Bidder No. 8 inquiries dated September 16, 2022:

1. QUESTION:

Please provide followings as a pdf file format:

As-Built Drawings of all the underground facilities including but not limited to power line, water line, sewer line, drainage trenches, communication line, CATV line, etc.

As-Built Drawings of manholes / handholes for power line

As-Built Drawings of manholes / handholes for communication line

As-Built Drawings and Calculations of existing grounding system

RESPONSE:

Refer to the newly added as-built drawings in Appendix T.

See ***INCLUSION*** above

2. QUESTION:

(Page 199 of 212) APPENDIX N BID SCHEDULE

Bid Schedule/ Price Proposal – Fadian Public Access Public Parking Lot Solar Canopy										
Item	Description	Unit	Qty	Unit Cost			Total Cost			Total Cost
				Material	Labor	Equipment	Material	Labor	Equipment	
Basic Bid										
1	Mobilization	LS	1							
2	Permits, Bonds and Codes	LS	1							
3	Construction Site Survey	LS	1							
4	Foundation Design	LS	1							
5	Interconnection Equipment	LS	1							
6	Installation Design	LS	1							
7	Procurement and Delivery	LS	1							
8	On-Site PV Canopy Construction, Installation and Interconnection	LS	1							
9	Commissioning & Performance Testing	LS	1							
10	Demobilization	LS	1							
11	O&M and O&M Training	LS	1							
12	Warranties	LS	1							
13	Documentation	LS	1							
14	PV Canopy Location Option 1	LS	1							
Basic Bid Total Cost:							\$			

Please confirm that Bid Item 14 is same as Basic Bid Total Cost.

RESPONSE:

No. Bid Item 14 is not the same as the Basic Bid Total Cost. The costs for Item 14: The PV Canopy Location Option 1 encompasses all *additional* costs for Option 1 that do not fall under the other Basic Bid Items 1-13. The Basic Bid Total Cost is the sum of the costs of all the Basic Bid Items 1-14. Another purpose of item 14 is in the event the proposed basic option changes from Option 1 to another option in the future (i.e. Additive Bid Item A – Option 2), the Option 1 cost in Basic Bid Item 14 will be subtracted from the Basic Bid Total Cost and substituted with the cost of Additive Bid Item A – Option 2.

Bidder No. 8 inquiries dated September 20, 2022:

3. QUESTION:

Please confirm if ITC (Investment Tax Credit) is applicable for this bid. Based on PEC's understanding, the Contractor is NOT eligible for ITC as the Contractor is not the Owner of this asset and GPA (the Owner) is NOT eligible for ITC as GPA is NOT a taxpayer.

RESPONSE:

The Inflation Reduction Act of 2022 (IRA) allows public, non-tax paying entities, such as GPA, to receive the Investment Tax Credits associated with this renewable energy project.

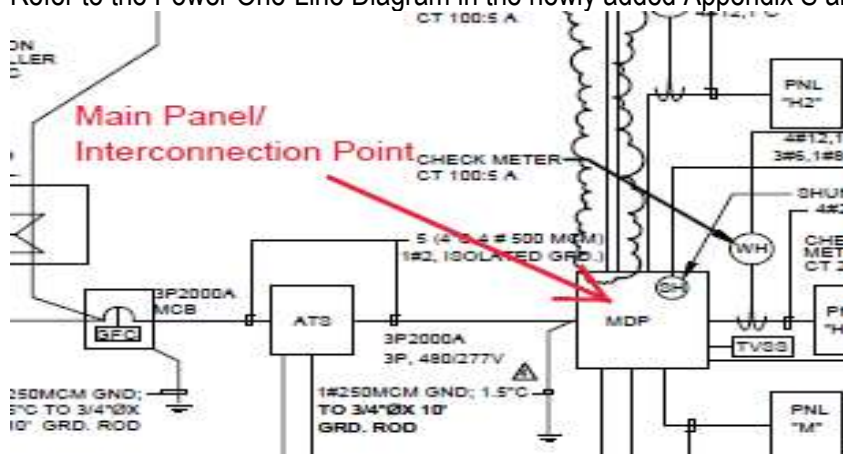
Bidder No. 6 inquiries dated September 21, 2022:

1. QUESTION:

Can GPA provide a single-line diagram on the planned interconnection point?

RESPONSE:

Refer to the Power One-Line Diagram in the newly added Appendix S and the diagram below:



2. QUESTION:

Can GPA provide the as-built drawings of the parking lot showing utilities, storm drains, electrical, water and sewer of the Fadian facility?

RESPONSE:

Refer to the newly added as-built drawings in Appendix T.
See ***INCLUSION*** above

3. QUESTION:

Has GPA determined a location for the electrical equipment shelter?

RESPONSE:

The location of the equipment shelter shall be based on the bidder's design. Note that GPA may choose not to proceed with the Electrical Shelter Additive Bid Item if it is deemed unnecessary in the final design.

4. QUESTION:

In section 2.12. Award of Contract, it reads in part, "The Contract will be awarded to the BIDDER evaluated as being qualified, with the lowest total Priced Proposal for the basic bid and additive bid (if applicable)." Because the scope of work is not specific as to what size the PV system should be only that it shall be a minimum size of 68 KWdc, certainly each bidder will be proposing different size solar canopy systems. With that, will GPA be determining lowest price by calculating price per watt proposed per option? Or, shall all bidders bid a 68 KWdc PV system size across the board for Option 1?

RESPONSE:

The PV system shall have a minimum size of 68 KWdc. Bidders may propose larger PV systems, however, the canopy aggregate footprint shall be no larger than 8,900 square feet for the Option 1 location. GPA will determine the lowest bid price based on the calculation for price per KWdc indicated on Item E on Page 200 of 212.

Bidder No. 6 inquiries dated October 04, 2022:

1. QUESTION:

On behalf of our company, I am officially requesting an extension to the submission deadline for the Invitation for Multi-Step Bid No.: GPA-042-22 Fadian Public Parking Lot Solar Canopy Design and Construction.

RESPONSE:

Kindly refer to Amendment No. III; dated October 04, 2022.

All other Terms and Conditions in the bid package shall remain unchanged and in full force.


for JOHN M. BENAVENTE, P.E.
 General Manager

**Fadian Public Parking Lot Solar Canopy Project Design and Construction
Volume II: Technical and Functional Requirements**

The CONTRACTOR shall submit to GPA the approved final design drawings in the following formats: hard copy of appropriate size, AutoCAD and PDF before construction commences.

*** 3.3.7. Procurement and Delivery of Parking Canopy, PV System, and Other Necessary Equipment**

The CONTRACTOR shall be responsible for the procurement and delivery of all PV system, PV mounting equipment, parking canopy structure materials and other necessary equipment to construct and install this project in a turn-key manner.

The solar canopy shall comply with the following general specifications:

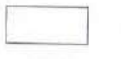
- A. System Size:
The rated capacity of the PV system shall be at minimum 68 KWdc.
- B. PV Module Tier 1:
PV Modules shall be Tier 1 PV modules
- C. High Availability
The design shall consider systems with maintenance (routing preventative maintenance, inspections, tests, & adjustments) schedules that minimize interruption to normal system operations to allow for system high availability
- D. Guarantee of Minimum Generation:
PV modules shall have at least a 10-year limited warranty that modules will generate no less than 90% and 20-year limited warranty that modules will generate no less than 80% of rated output under Standard Testing Conditions (STC).
- E. Canopy Structure Height:
The PV canopies shall have the proper height clearances for parking lot traffic, including garbage trucks and freight trucks.
- F. PV Source Circuit OCPDs:
All Overcurrent Protection Devices in the PV system shall have a minimum overcurrent size that is no less than 125% of the maximum PV circuit current
- G. Footprint:
The solar canopy structure shall be erected within the public-access parking lot of the Gloria B. Nelson Public Service Building, and all associated facilities and equipment shall be placed entirely within GPA's property.
- H. Marine, Anti-Corrosion Coating on all Metal Parts on Canopy Structure:
Any metal parts, if any, on the canopy structure must have effective protection of anti-corrosion coating suitable for wet, salty, sunny, corrosive, or abrasive environments or conditions.
- I. Typhoons and Extreme Weather:
Due to the high potential for periodic extreme winds and the parking canopy being a structure exposed to those winds, the canopy and PV racking system must be designed to withstand 170 mph (76 m/s) sustained winds, and 195 mph (87 m/s) gusts.
- J. Workmanship Warranty:
All construction and installation work under this project proposal shall include one (1) year workmanship warranty.
- * K. Remote Output Monitoring:
The PV system shall include meters and other auxiliary devices to allow for the monitoring of PV system output. Metering provision shall be installed at three location: PV batter output, and interconnection point. Also included are the necessary licenses for any software application**

APPENDIX T AS-BUILT DRAWINGS


GENERAL NOTES

1. ELECTRICAL LAYOUT DRAWINGS ARE PARTIALLY DIAGRAMMATIC. REFER TO ARCHITECTURAL, STRUCTURAL, MECHANICAL AND HVAC FOR GUIDANCE ON DIMENSIONS, CEILING HEIGHTS, DOOR SWINGS, ROOM FINISHES, STRUCTURAL AND ARCHITECTURAL DETAILS, AND LOCATIONS OF PIPES AND STRUCTURAL STEEL. INSTALL THE ELECTRICAL SYSTEMS WITHOUT INTERFERING WITH PIPES, STRUCTURAL STEEL OR OTHER SYSTEMS. LOCATE LIGHTING SYSTEMS SYMMETRICALLY IN PROPER RELATION TO FINISHED AREAS EXCEPT WHERE DIMENSIONED ON THE DRAWINGS OR LOCATED ON REFLECTED CEILING PLANS. COORDINATE WITH OTHER TRADES FOR PROPER INSTALLATION OF WORK AND FOR TIMELY EXECUTION OF CONSTRUCTION.
2. FURNISH ALL LABOR, EQUIPMENT, APPLIANCES, MATERIALS AND PERFORM OPERATIONS REQUIRED FOR COMPLETE INSTALLATION OF SYSTEMS SPECIFIED IN ACCORDANCE WITH DRAWINGS, CODES, ORDINANCES AND TERMS AND CONDITIONS OF CONTRACT.
3. COMPLY WITH THE LATEST EDITION OF ALL APPLICABLE CODES, ORDINANCES AND REGULATIONS.
4. SYMBOLS IN THE LEGEND ARE APPLICABLE GENERALLY. FOR EXACT REQUIREMENTS, REFER TO THE SCHEDULES, LAYOUTS, AND DETAILS. THE APPEARANCE OF A PARTICULAR SYMBOL DOES NOT NECESSARILY IMPLY THAT THE ITEM IS INCLUDED IN THE CONTRACT.
5. PROVIDE ADDITIONAL SUPPORTS FOR SWITCHES, STARTERS, RACEWAYS AND OTHER ELECTRICAL EQUIPMENT WHEREVER THE BUILDING STRUCTURE IS NOT SUITABLE FOR DIRECT MOUNTING.
6. VERIFY CEILING SUSPENSION SYSTEMS IN THE VARIOUS AREAS AND PROVIDE THE PROPER MOUNTING ACCESSORIES, TRIMS, ETC. TO SUIT THE PARTICULAR AREA. SUPPORT RACEWAYS WITH APPROVED TYPES OF WALL BRACKETS OR CEILING TRAPEZE HANGER. DO NOT SUSPEND FROM DROPPED CEILING, TIE WIRE OR T-BAR. PROVIDE SAFETY WIRES FOR EACH LIGHTING FIXTURE IN NEW DROPPED CEILING SO THAT IN THE EVENT OF CEILING FAILURE, NO PART OF THE FIXTURE WILL DROP MORE THAN 12" BELOW NORMAL CEILING HEIGHT.
7. PROVIDE SEAL FITTINGS IN CONDUITS THAT ENTER CONDITIONED AREAS FROM NON-CONDITIONED AREAS.
8. PROPERLY GROUND CONDUIT SYSTEM, OUTLETS, FIXTURES, ETC. IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE, SECTION 250. PROVIDE ALL BONDING JUMPERS AND WIRE, GROUNDING BUSHINGS, CLAMPS, ETC. REQUIRED FOR COMPLETE GROUNDING. PROVIDE GREEN GROUND WIRE IN EACH RACEWAY.
9. CONNECT BRANCH CIRCUIT NEUTRAL TO RECEPTACLE TERMINAL BY MEANS OF A SHORT "PIGTAIL" PERMANENTLY SPLICED TO THE NEUTRAL.
10. PROVIDE 3/4" CONDUIT FROM EACH THERMOSTAT TO THE EQUIPMENT THAT IT CONTROLS. SEE MECHANICAL PLANS FOR THERMOSTAT LOCATIONS.
11. CONTRACTOR MUST COORDINATE ALL SERVICE WORK WITH GPA. GPA MUST INSPECT AND APPROVE TRENCHING AND CONDUIT INSTALLATION PRIOR TO CONCRETE POUR. PRIOR APPROVAL FROM GPA MUST BE OBTAINED FOR ROUTING OF UNDERGROUND POWERLINE AND TRANSFORMER LOCATION.
12. APPLICATION OF POWER MUST BE SUBMITTED 8 MONTHS IN ADVANCE BEFORE ACTUAL SERVICE CONNECTION TO ALLOW FOR DELIVERY OF GPA MATERIALS AND EQUIPMENT.
13. THE OWNER MUST GRANT EASEMENT FOR THE ROUTING AND LOCATION OF UNDERGROUND POWER LINES AND EQUIPMENT.
14. COORDINATE WITH GPA FOR THE INSPECTION OF TRENCH, CONDUIT LAYOUT, HANDHOLE, RISER, PAD ETC. 48 HOURS ADVANCE NOTICE IS REQUIRED.
15. ALL CONDUIT MUST BE CLEANED AND MANDRELLED IN THE PRESENCE OF GPA INSPECTOR AND PROVIDED WITH NYLON PULL ROPE OF 200 LB MIN. PULL STRENGTH.
16. ALL UNDERGROUND DUCTS, BENDS AND ELBOWS SHALL BE CONCRETE ENCASED THROUGHOUT THE WHOLE ROUTE.
17. GPA HANDHOLE, TRANSFORMER AND METER SHALL BE ACCESSIBLE 24HRS A DAY FOR MAINTENANCE AND METER READING.
18. ALL ABOVE GROUND GPA CONDUITS SHALL BE RIGID ALUMINUM CONDUIT. ALL BELOW GRADE GPA CONDUIT SHALL BE CONCRETE ENCASED PVC SCHEDULE 40.
19. ALL ELECTRICAL WORK SHALL BE DONE IN ACCORDANCE WITH THE LATEST EDITIONS OF THE NATIONAL ELECTRICAL CODE (NEC) AND NATIONAL ELECTRICAL SAFETY CODE (NECS).
20. CONTRACTOR/OWNER SHALL IDENTIFY THE REGISTERED LAND SURVEYOR (RLS) PROPERTY MARKERS/POINTS TO THE GPA INSPECTOR AT THE JOB SITE.
21. PROVIDE 3 FEET MIN. CLEARANCE ALL AROUND HANDHOLES, TRANSFORMERS, AND METERING EQUIPMENT FROM FENCES, WALLS, AND STRUCTURES, ETC.
22. CONTRACTOR/OWNER SHALL OBTAIN A REGISTERED LAND SURVEYOR TO PROVIDE NEW POLE STAKEOUT AND DOWN-GUY LOCATIONS, IF APPLICABLE. COORDINATE WITH GPA ENGINEERING FOR SPECIFIC REQUIREMENTS.
23. CONTRACTOR/OWNER SHALL OBTAIN A REGISTERED LAND SURVEYOR TO PREPARE EASEMENT EXHIBITS FOR GPA POLES, HAND HOLES, TRANSFORMERS, OVERHEAD AND UNDERGROUND POWER LINES AND OTHER ASSOCIATED POWER FACILITIES. COORDINATE WITH GPA ENGINEERING FOR SPECIFIC REQUIREMENTS.
24. ALL SURVEY STAKEOUTS, MAPS, AND EASEMENT DOCUMENTS SHALL BE FIELD VERIFY BY THE GPA.
25. CONTRACTOR TO PROVIDE SHOP DRAWINGS FOR ALL FLOOR OUTLETS FOR DATA AND POWER.
26. ALL WIRING SHALL BE COPPER. ALL POWER WIRING #10 AND SMALLER SHALL BE SOLID. #8 AND LARGER MAY BE STRANDED. COLOR CODE ALL WIRING BY SYSTEM. FOR 120/208V SYSTEMS, PHASE A SHALL BE BLACK, PHASE B SHALL BE RED AND PHASE C SHALL BE BLUE. FOR 277/480V SYSTEMS, PHASE A SHALL BE BROWN, PHASE B SHALL ORANGE AND PHASE C SHALL BE YELLOW.

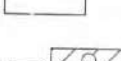
LEGEND



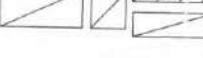
2X4 RECESS FLUORESCENT LIGHT FIXTURE



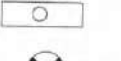
2X2 RECESS FLUORESCENT LIGHT FIXTURE




1X4 RECESS FLUORESCENT LIGHT FIXTURE



LIGHT FIXTURE WITH EMERGENCY BATTERY BACKUP




1X4 SURFACE MTD. FLUORESCENT LIGHT FIXTURE




CEILING MTD EXIT LIGHT, DOUBLE FACE, CONNECT TO UNSWITCHED CKT




WALL MTD EXIT LIGHT, DOUBLE FACE, CONNECT TO UNSWITCHED CKT



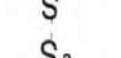
CEILING MTD EXIT LIGHT, SINGLE FACE, CONNECT TO UNSWITCHED CKT



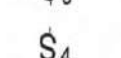
WALL MTD EXIT LIGHT, SINGLE FACE, CONNECT TO UNSWITCHED CKT




STRIP LIGHT SURFACE MTD.




DOWNLIGHT CEILING RECESS MTD.




WALL MTD LIGHT FIXTURE




S SINGLE POLE SWITCH



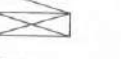
S3 THREE-WAY SWITCH




S4 FOUR-WAY SWITCH




SMS COMBINATION LIGHT SWITCH/MOTION SENSOR




C CIRCUIT BREAKER




BC BRANCH CIRCUIT PANEL




CATV CAB




FA FIRE ALARM CAB



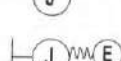
TEL TELEPHONE CAB



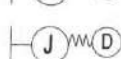
IC INTERCOM PULLBOX




SEC SECURITY PULLBOX




CCTV PULLBOX




LC LIGHTING CONTRACTOR



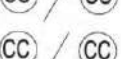
REF REFER TO NOTE INDICATED



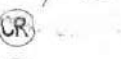
E EQUIPMENT CONNECTION



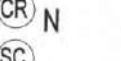
J JUNCTION BOX



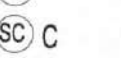
JmE WALL MTD J-BOX (POWER)



JmD WALL MTD J-BOX (DATA)




JmT WALL MTD J-BOX (TEL)



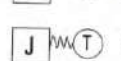
JmI WALL/CEILING MTD J-BOX (INTERCOM)



JmV WALL/CEILING MTD J-BOX (CATV)




JmC WALL/CEILING MTD J-BOX (CCTV)




JmC WALL/CEILING MTD J-BOX (CCTV)



JmB WALL MTD J-BOX (BADGE DOOR)




JmN WALL MTD J-BOX (SCREEN WALL MOUNTED)




JmC Ceiling MTD J-BOX (MOTORIZED SCREEN)




JmP Ceiling MTD J-BOX (PROJECTOR)




JmE FLR MTD JUNCTION BOX (POWER)




JmD FLR MTD JUNCTION BOX (DATA)




JmT FLR MTD JUNCTION BOX (TEL)




PP POWER POLE



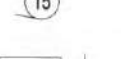
PPB WALL MTD ADA PUSH BUTTON



OS OCCUPANCY SENSOR, CEILING MTD.



PL POLE MTD LIGHT



MC MOTOR CONNECTION WITH HP INDICATED




DS DISCONNECT SWITCH - UNFUSED



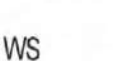
T TRANSFORMER




20A DUPLEX RECEPTACLE, ISOLATED GROUND (W/CIRCUIT NO.)




15A DUPLEX RECEPTACLE (W/CIRCUIT NO.)




ACR ABOVE COUNTER RECEPTACLE (W/GFCI)



20A DUPLEX RECEPTACLE, ISOLATED GROUND PART OF THE FURNITURE




R RECEPTACLE (W/WEATHER PROOF & GFCI)




30A SINGLE RECEPTACLE, WALL FLUSH MTD




CR CEILING MTD RECEPTACLE



FR FLOOR MTD RECEPTACLE




FR IG FLOOR MTD RECEPTACLE, ISOLATED GROUND




SD DUCT SMOKE DETECTOR (SEE MECH FOR EXACT LOCATION)




HD HEAT DETECTOR




PE PHOTO ELECTRIC SYSTEM SMOKE DETECTOR




PEL ELEVATOR PHOTO ELECTRIC SYSTEM SMOKE DETECTOR




URF UNDER RAISED FLOOR PHOTO ELECTRIC SYSTEM SMOKE DETECTOR




MS MANUAL DOUBLE ACTION PULL STATION




FA FIRE ALARM REMOTE ANNUNCIATOR



FAA F.A. AUDIO/VISUAL ALARM




FAS F.A. STROBE ALARM




FAS F.A. FLOW SWITCH




FAS F.A. TAMPER SWITCH




TO WALL TELEPHONE OUTLET WALL FLUSH MOUNTED WITH CAT6 CABLES PLENUM TYPE




DO WALL DATA OUTLET WALL FLUSH MOUNTED WITH CAT6 CABLES PLENUM TYPE




WO TEL WORKSTATION TEL OUTLET




WO DATA WORKSTATION DATA OUTLET




TO WALL TV OUTLET WALL FLUSH MOUNTED WITH PULL STRING




TO FLOOR TELEPHONE OUTLET FLOOR FLUSH MOUNTED WITH PULL STRING




DO FLOOR DATA OUTLET FLOOR FLUSH MOUNTED WITH PULL STRING




DO CEILING DATA OUTLET CEILING MOUNTED WITH PULL STRING




JB FLOOR JUNCTION BOX FLOOR FLUSH MOUNTED




FC FLEXIBLE CONDUIT




BC BRANCH CIRCUIT, -HOT, -NEUTRAL




EOL EXISTING OVERHEAD PRIMARY LINES




UL UNDERGROUND PRIMARY LINES




USL UNDERGROUND SECONDARY LINES



CR CATV RACEWAYS




TR TEL RACEWAYS VIA CABLE TRAY




DR DATA RACEWAYS VIA CABLE TRAY




FAR FIRE ALARM RACEWAYS




CCTV RACEWAYS WITH PULLCORD




IR INTRUSION RACEWAYS WITH PULLCORD




SR SECURITY RACEWAYS WITH PULLCORD




RS REVISION SYMBOL




SCADA/EMS FLOOR MTD OUTLET




DATA/TEL FLOOR MTD OUTLET



SCADA/EMS WALL MTD OUTLET



DATA/TEL WALL MTD OUTLET



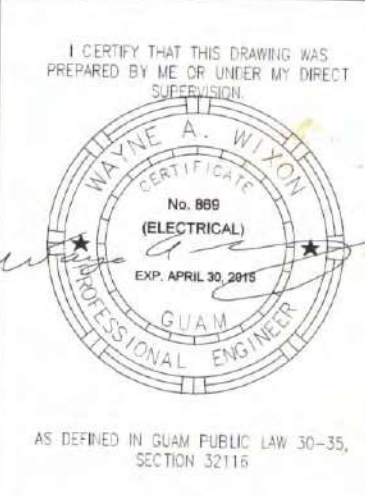
QR QUADRUPLIX RECEPTACLE

ABBREVIATIONS


A	LIGHTING FIXTURE KEY - SEE SCHEDULE
AC	ABOVE COUNTER
AF	AMP FRAME
AT	AMP TRIP
ATS	AUTOMATIC TRANSFER SWITCH
C	CONTRACTOR COIL
CL	CURFEW LIGHT
CT	CURRENT TRANSFORMER
EF	EXHAUST FAN
Em	EMERGENCY LIGHT, CIRCUIT OR PANEL
GFCI	GROUND FAULT CIRCUIT INTERRUPTER
HP	HORSE POWER
F.A.	FIRE ALARM
MCB	MAIN CIRCUIT BREAKER
MDP	MAIN DISTRIBUTION PANEL
MTS	MANUAL TRANSFER SWITCH
NL	NIGHT LIGHT
NIC	NOT IN CONTRACT
PC	PHOTO CELL
TC	TIME CLOCK
WP	AS SUBSCRIPT DENOTES "WEATHERPROOF"

AS BUILT

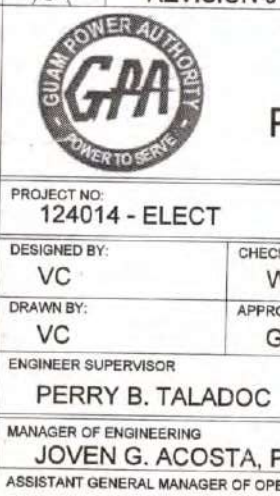
REVISION 12 JRL 03.21.2014



STATE OF GUAM
REGISTERED PROFESSIONAL ENGINEER
NO. 989
(ELECTRICAL)
EXPIRY: APRIL 30, 2015
JOAQUIN C. FLORES, P.E.



RIM
ARCHITECTS
124214 - ELECT



GUAM POWER AUTHORITY
P.O. BOX 2977, HAGATNA, GUAM, USA 96910

PROJECT TITLE: GPA - GWA MULTI PURPOSE FACILITY

DESIGNED BY: VC
CHECKED BY: WW
APPROVED BY: GPA

ENGINEER SUPERVISOR:
PIERRY B. TALADOC

MANAGER OF PROJECTS:
JOVEN G. ACOSTA, P.E.

GENERAL MANAGER:
MELINDA R. CAMACHO, P.E.

DATE: 2012.11.08
JOB NO: 100134
SCALE: 1" = 1'-0"
SHEET: 346 OF 428
SHEET: EG001

ABBREVIATIONS

A	
AB	ANCHOR BOLT
ABS	ACRYLONITRILE BUTADIENE STYRENE
ABV	ABOVE
AC	AIR CONDITIONING
ACP	ASPHALTIC CONCRETE
AD	ACOUSTICAL CEILING PANEL
ADOL	AREA DRAIN
ADF	ADDITIONAL
ADJ	ACCESSIBLE DRINKING FOUNTAIN
AFF	ADJACENT
AFS	ABOVE FINISH FLOOR
AGGR	ABOVE FINISH SLAB
ALUM	AGGREGATE
ALT	ALTERNATE
ANOD	ANODIZED
APPROX	APPROXIMATE
ARCH	ARCHITECTURAL

B	
BBQ	BARBEQUE
BD	BOARD
BFF	BELOW FINISH FLOOR
BKBD	BACK BOARD
BLDG	BUILDING
BLK	BLOCK
BLKG	BLOCKING
BM	BEAM
BOD	BOTTOM OF DECK
BOT F	BOTTOM FACE
BOT	BOTTOM
BR	BEDROOM
BRG	BEARING
BRKT	BRACKET
BSMT	BASEMENT
BTWN	BETWEEN
BUR	BUILT-UP ROOFING

C	
CAB	CABINET
CB	CATCH BASIN
CG	CORNER GUARD
CMPST	COMPOSITE
CI	CAST IRON
CIP	CAST IN PLACE
CJ	CONTROL JOINT
CL	CENTER LINE
CLG	CEILING
CLO	CLOSET
CLR	CLEAR
CMU	CONCRETE MASONRY UNIT
CNTR	COUNTER
CO	CLEAN OUT
COL	COLUMN
CONC	CONCRETE
COND	CONDITION
CONN	CONNECTION
CONSTR	CONSTRUCTION
CONT	CONTINUE/CONTINUOUS
CONTR	CONTRACTOR
COORD	COORDINATE
COP	COPPER
CORR	CORRIDOR
CPT	CARPET
CSK	COUNTERSINK
CT	CERAMIC TILE
CTR	CENTER
CUH	CABINET UNIT HEATER
CULT	CULTURED
CW	COLD WATER PIPING

D	
D	DEEP/DEPTH
DBL	DOUBLE
DEG	DEGREE
DEPT	DEPARTMENT
DET	DETAIL
DF	DRINKING FOUNTAIN
DIA	DIAMETER
DIAG	DIAGONAL
DIM	DIMENSION
DISP	DISPENSER
DN	DOWN
DR	DOOR
DS	DOWNSPOUT
DSP	DRY STANDPIPE
DW	DISHWASHER
DWG	DRAWING
DWR	DRAWER

E	
E	EAST
EA	EACH
EIFS	EXTERIOR INSULATION FINISH SYSTEM
EJ	EXPANSION JOINT
EL	ELEVATION
ELAST	ELASTOMERIC
ELEC	ELECTRICAL
ELEV	ELEVATOR
EMER	EMERGENCY
ENCL	ENCLOSURE
EPB	ELECTRICAL PANEL BOARD
EPDM	ETHYLENE PROPYLENE DIENE MONOMER
ES	EACH SIDE
EQ	EQUAL
EQUIP	EQUIPMENT
EOS	EDGE OF SLAB
EWC	ELECTRIC WATER COOLER
EXH	ELECTRIC WATER HEATER
EXP	EXHAUST
EXPN	EXPOSED
EXT	EXPANSION
(E)	EXISTING

F	
FA	FAHRENHEIT
FAB	FIRE ALARM
FB	FABRICATE
FCU	FLAT BAR
FD	FAN COIL UNIT
FDN	FLOOR DRAIN
FE	FOUNDATION
FEC	FIRE EXTINGUISHER
FF	FIRE EXTINGUISHER CABINET
FF & E	FINISH FLOOR
FUR	FURNITURE, FIXTURES AND EQUIPMENT
FGL	FIBERGLASS
FH	FIRE HYDRANT
FHC	FIRE HOSE CABINET
FIN	FINISH
FIN GR	FINISH GRADE
FIXT	FIXTURE
FLDG	FOLDING
FLG	FLOORING
FLR	FLOOR
FLUOR	FLUORESCENT
FLR SK	FLOOR SINK
FOC	FACE OF CONCRETE
FOF	FACE OF FINISH
FOM	FACE OF MASONRY
FOS	FACE OF STUD
FOW	FACE OF WALL
FP	FIRE PROOF
FR	FRAME
FRP	FIBERGLASS REINFORCED PLASTIC
FRT	FIRE RETARDANT
FRZ	FREEZER
FT	FEET
FTD	FACIAL TISSUE DISPENSER
FTG	FOOTING
FURG	FURRING
FUT	FUTURE

G	
G	NATURAL GAS
GA	GAUGE
GALV	GALVANIZED
GB	GRAB BAR
GEN	GENERAL
GFGI	GOVERNMENT FURNISHED / GOVERNMENT INSTALLED
GFRG	GLASSFIBER REINFORCED GYPSUM
GFRG	GLASSFIBER REINFORCED
CONCRETE	CONCRETE
GL	GLASS/GLAZING
GLU LAM	GLUE LAMINATED WOOD
GPM	GALLONS PER MINUTE
GRAN	GRANITE
GSB	GYPSUM SHEATHING BOARD
GTV	GATE VALVE
GYP	GLAZED WALL TILE
GWB	GYPSUM WALL BOARD

H	
H	HIGH
HB	HOSE BIBB
HC	HOLLOW CORE
HCP	HANDICAPPED
HD	HEAD
HDWD	HARDBOARD
HDW	HARDWARE
HDWD	HARDWOOD
HM	HOLLOW METAL
HORIZ	HORIZONTAL
HS	HAND SINK
HT	HEIGHT
HVAC	HEATING, VENTILATION AND AIR CONDITIONING
HW	HOT WATER
HWR	HOT WATER RETURN
HWS	HOT WATER SUPPLY

I	
ID	INSIDE DIAMETER
INCL	INCLUDED
IMP	INSULATED METAL PANEL
IN	INCH
INFO	INFORMATION
INSUL	INSULATION/INSULATED
INT	INTERIOR
INV	INVERT

J	
J-BOX	JUNCTION BOX
JAN	JANITOR
JST	JOIST
JT	JOINT

K	
KD	KNOCK DOWN
KIT	KITCHEN
KO	KNOCK-OUT
KW	KILOWATT
KWH	KILOWATT HOUR

L	
L	LENGTH
LAB	LABORATORY
LAM	LAMINATE
LAV	LAVATORY
LB	POUND
LBS/SF	POUNDS PER SQUARE FOOT
LDG	LANDING
LF	LINEAR FOOT
LH	LEFT HAND
LKR	LOCKER
LLV	LONG LEG VERTICAL
LOC	LOCATION
LT	LIGHT
LR	LIVING ROOM
LVR	LOUVER

M	
M	METER
M2	SQUARE METERS
MATL	MATERIAL
MAX	MAXIMUM
MB	MACHINE BOLT
MBR	MASTER BEDROOM
MC	MEDICINE CABINET
MECH	MECHANICAL
MEMB	MEMBRANE
MEZZ	MEZZANINE
MFR	MANUFACTURER
MH	MANHOLE
MI	MIRROR
MID	MIDDLE
MIN	MINIMUM
MISC	MISCELLANEOUS
MULD	MOLDING
MM	MILLIMETER
MO	MASONRY OPENING
MOD	MODULE
MP	METAL PANEL
MR	MOISTURE RESISTANT
MTD	MOUNTED
MTL	METAL
MTG	MOUNTING
MULL	MULLION
MUN	MUNTIN
MW	MICROWAVE

N	
N	NORTH
NFS	NON-FROST SUSCEPTIBLE
NIC	NOT IN CONTRACT
NO	NUMBER
NOM	NOMINAL
NTS	NOT TO SCALE

O	
OA	OVERALL
OBS	OBSCURER
OC	ON CENTER
OD	OUTSIDE DIAMETER
OF/CI	OWNER FURNISHED/CONTRACTOR INSTALLED
OF/OI	OWNER FURNISHED/OWNER INSTALLED
OFD	OVERFLOW DRAIN
OH	OVER HANG
OPH	OPPOSITE HAND
OPNG	OPENING
OPP	OPPOSITE
OPR	OPERABLE
OVHD	OVER HEAD

P	
PA	PUBLIC ACCESS
PC	PIECE
PCC	PRECAST CONCRETE
PEND	PENDANT
PERIM	PERIMETER
PH	PENTHOUSE
PLAS	PLASTER
PLBG	PLUMBING
PL	PROPERTY LINE
PLAM	PLASTIC LAMINATE
PLYWD	PLYWOOD
PNL	PANEL
PR	PAIR
PROP	PROPERTY
PRFAB	PREFABRICATE
PT	PAINT
PTD	PAPER TOWEL DISPENSER
PTDR	PAPER TOWEL DISPENSER AND RECEPTACLE
PTN	PARTITION
PTR	PAPER TOWEL RECEPTACLE
PVC	POLYVINYL CHLORIDE
PVMT	PAVEMENT

Q	
QT	QUARRY TILE

R	
R	RISER
RA	RADIUS
RB	RETURN AIR
RB HK	ROBE HOOK
RCP	REFLECTED CEILING PLAN
RD	ROOF DRAIN
REC	RECESSED
REF	REFRIGERATOR
REFL	REFLECTED
REG	REGISTER
REINF	REINFORCE
RECS	RECOMMENDATIONS
REQD	REQUIRED
RESIL	RESILIENT
REST	REST ROOM
REV	REVISION
RTF	RUBBER TILE FLOOR
RFG	ROOFING
RLG	RAILING
RH	RIGHT HAND
RND	ROUND
RM	ROOM
ROU	ROUGH OPENING
RWL	RAIN WATER LEADER

S	
S	SOUTH
SA	SUPPLY AIR
SAB	SOUND ATTENUATION BLANKET
SB	SPLASH BLOCK
SC	SOLID CORE
SCHED	SCHEDULE
SCD	SEAT COVER DISPENSER
SCP	SCUPPER
SCR	SHOWER CURTAIN ROD
SCRN	SCREEN
SD	SMOKE DETECTOR
SECT	SECTION
SED	SEE ELECTRICAL DRAWINGS
SF	SQUARE FEET
SHT	SHEET
SND	SHOWER
SHTHG	SHEATHING
SHV	SHELVING
SIM	SIMILAR
SL	SLOPE
SLDG	SLIDING
SLNT	SEALANT
SM	SHEET METAL
SND	SANITARY NAPKIN DISPENSER
SNDU	SANITARY NAPKIN DISPOSAL UNIT
SPC	SPACING
SPEC	SPECIFICATION
SPKLR	SPRINKLER
SPKR	SPEAKER
SQ	SQUARE
SSD	SEE STRUCTURAL DRAWINGS
SST	STAINLESS STEEL
SMD	SEE MECHANICAL DRAWINGS
SMLS	SEAMLESS
SS	SOLID SURFACE
STA	STATION
STD	STANDARD
STL	STEEL
STR	STORAGE
STRNG	STRINGERS
STRUCT	STRUCTURAL
SURR	SURROUND
SUSP	SUSPENDED
SVCE	SERVICE
SW	SWITCH
SYMM	SYMMETRICAL
SYS	SYSTEM

T	
T	TREAD
TB	TOWEL BAR
TBD	TO BE DETERMINED
TD	TRENCH DRAIN
TEL	TELEPHONE
TEMP	TEMPERATURE
TER	TERRAZZO
T&G	TONGUE AND GROOVE
THRES	THRESHOLD
THRU	THROUGH
THK	THICKNESS
TK BD	TACK BOARD
TCC	TOP OF CURB
TOW	TOP OF MASONRY
TOM	TOP OF PARAPET
TOP	TOP OF SLAB
TOS	TOP OF WALL
TOW	TOILET PAPER DISPENSER
TPD	TOILET PAPER HOLDER
TPH	TUBE STEEL
TS	TOWEL SHELF
TSH	THERMOSTAT
TSTAT	TELEVISION
TV	TYPICAL
TLT	TOILET

U	
UBC	UNIFORM BUILDING CODE
UC	UNDERGROUND
UNGD	UNDERGROUND
UH	UNIT HEATER
UL	UNDERWRITERS LABORATORY
UNFIN	UNFINISHED
UNO	UNLESS OTHERWISE NOTED
UR	URINAL

V	
VAR	VARIABLES
VB	VALVE BOX
VCT	VINYL COMPOSITION TILE
VERT	VERTICAL
VEST	VESTIBULE
VOL	VOLUME
VP	VENEER PLASTER
VTR	VENT THROUGH ROOF
VWC	VINYL WALL COVERING

W	
W	WIDE
W/	WITH
WC	WALL COVERING
WCLR	WATER COOLER
WD	WOOD
WDSF	WASTE DISPOSER
WDW	WINDOW
WF	WIDE FLANGE
WGL	WIRED GLASS
WH	WATER HEATER
WIO	WITHOUT
WP	WATERPROOF/WATERPROOFING
WR	WATER REPELLENT
WSCST	WAINSCOT
WSP	WET STAND PIPE
WT	WEIGHT
WWF	WELDED WIRE FABRIC

PROJECT DATA

BUILDING CODE SUMMARY:

INTERNATIONAL CODES, INTERNATIONAL CODE COUNCIL
IBC INTERNATIONAL BUILDING CODE, 2009 EDITION
IFC INTERNATIONAL FIRE CODE, 2009 EDITION
IPC INTERNATIONAL PLUMBING CODE, 2009 EDITION
IMC INTERNATIONAL MECHANICAL CODE, 2009 EDITION

NATIONAL FIRE CODES, NATIONAL FIRE PROTECTION ASSOCIATION
NFPA 10 PORTABLE FIRE EXTINGUISHERS, 2010
NFPA 13 INSTALLATION OF SPRINKLER SYSTEMS, 2010
NFPA 70 NATIONAL ELECTRICAL CODE, 2011

ACTS AND REGULATIONS:

2010 ADA STANDARDS FOR ACCESSIBLE DESIGN

PROJECT DESCRIPTION: GPA-GWA MULTI-PURPOSE FACILITY
OCCUPANCY: GROUP B (BUSINESS), GROUP A-3 (ASSEMBLY), GROUP S-1 (MODERATE HAZARDOUS STORAGE), GROUP S-2 (LOW HAZARDOUS STORAGE), GROUP F-1 (MODERATE HAZARDOUS OCCUPANCY)

CONSTRUCTION: TYPE II-B
ALLOWABLE HEIGHT: 55FT + 20FT (PER IBC 504.2 FULLY SPRINKLERED) = 75FT AND 3 STORIES + 1 (PER IBC 504.2) = 4 STORIES

PROVIDED HEIGHT: 56'-9" AND 4 STORIES

ZONING: PUBLIC FACILITY (PF) PUBLIC LAW 31-77

PARKING: 436 CAR PARKING SPACES
3 MOTORCYCLE

FRONTAGE INCREASE:

If = (F/P-0.25) W/30
If = AREA INCREASE DUE TO FRONTAGE
F = BUILDINGS PERIMETER THAT FRONTS ON A PUBLIC WAY OR OPEN SPACE HAVING 20 FEET OPEN MINIMUM WIDTH:
P = PERIMETER OF ENTIRE BUILDING
W = WIDTH OF PUBLIC WAY OR OPEN SPACE IN ACCORDANCE WITH IBC SECTION 506.2.1

BUILDING:	F	P	W	If
GPA-GWA MULTI-PURPOSE BUILDING	1,263 FT	1,263F	30FT	.75

AREA MODIFICATIONS:

Aa = (A+ + (A+ x I)) + (A+ x I s)

WHERE:

Aa = ALLOWABLE AREA PER STORY.
A+ = TABULAR AREA PER STORY IN ACCORDANCE WITH IBC TABLE 503.
If = 75% AREA INCREASE FACTOR DUE TO FRONTAGE AS CALCULATED IN ACCORDANCE WITH IBC SECTION 506.2.
Is = 200% AREA INCREASE FACTOR DUE TO SPRINKLER PROTECTION FOR BUILDINGS WITH MORE THAN ONE STORY ABOVE GRADE.

ALLOWABLE AREA PER TABLE 503 FOR TYPE II-B CONSTRUCTION

GROUP B:	23, 000 S.F.
GROUP A-3:	9, 500 S.F.
GROUP S-1:	17, 500 S.F.
GROUP S-2:	26, 000 S.F.
GROUP F-1:	15, 500 S.F.

ALLOWABLE AREA PER OCCUPANCY WITH INCREASE FOR FRONTAGE AND SPRINKLER SYSTEM (per Floor)

GROUP B:	23, 000 S.F. + 17, 250 S.F. (FRONTAGE) + 46, 000 S.F. (SPRINKLER) =	86, 250 S.F.
GROUP A-3:	9, 500 S.F. + 7, 125 S.F. (FRONTAGE) + 19, 000 S.F. (SPRINKLER) =	35, 625 S.F.
GROUP S-1:	17, 500 S.F. + 13, 125 S.F. (FRONTAGE) + 35, 000 S.F. (SPRINKLER) =	65, 625 S.F.
GROUP S-2:	26, 000 S.F. + 19, 500 S.F. (FRONTAGE) + 52, 000 S.F. (SPRINKLER) =	97, 500 S.F.
GROUP F-1:	15, 500 S.F. + 11, 625 S.F. (FRONTAGE) + 31, 000 S.F. (SPRINKLER) =	58, 125 S.F.

1ST FLOOR:	30, 860 S.F.
GROUP B:	24, 230 S.F. (INCLUDES 1, 172 S.F. OF ACCESSORY USE GROUP A-3 (ASSEMBLY))
GROUP S-1:	4, 817 S.F.
GROUP F-1:	555 S.F.

2ND FLOOR:	46, 608 S.F.
GROUP B:	43, 406 S.F. (INCLUDES 2, 140 S.F. OF ACCESSORY USE GROUP A-3 (ASSEMBLY))
GROUP S-1:	3, 202 S.F.

3RD FLOOR:	39, 785 S.F.
GROUP B:	35, 540 S.F. (INCLUDES 1, 700 S.F. OF ACCESSORY USE GROUP A-3 (ASSEMBLY))
GROUP S-1:	4, 245 S.F.

4TH FLOOR:	572 S.F.
GROUP S-2:	572 S.F.

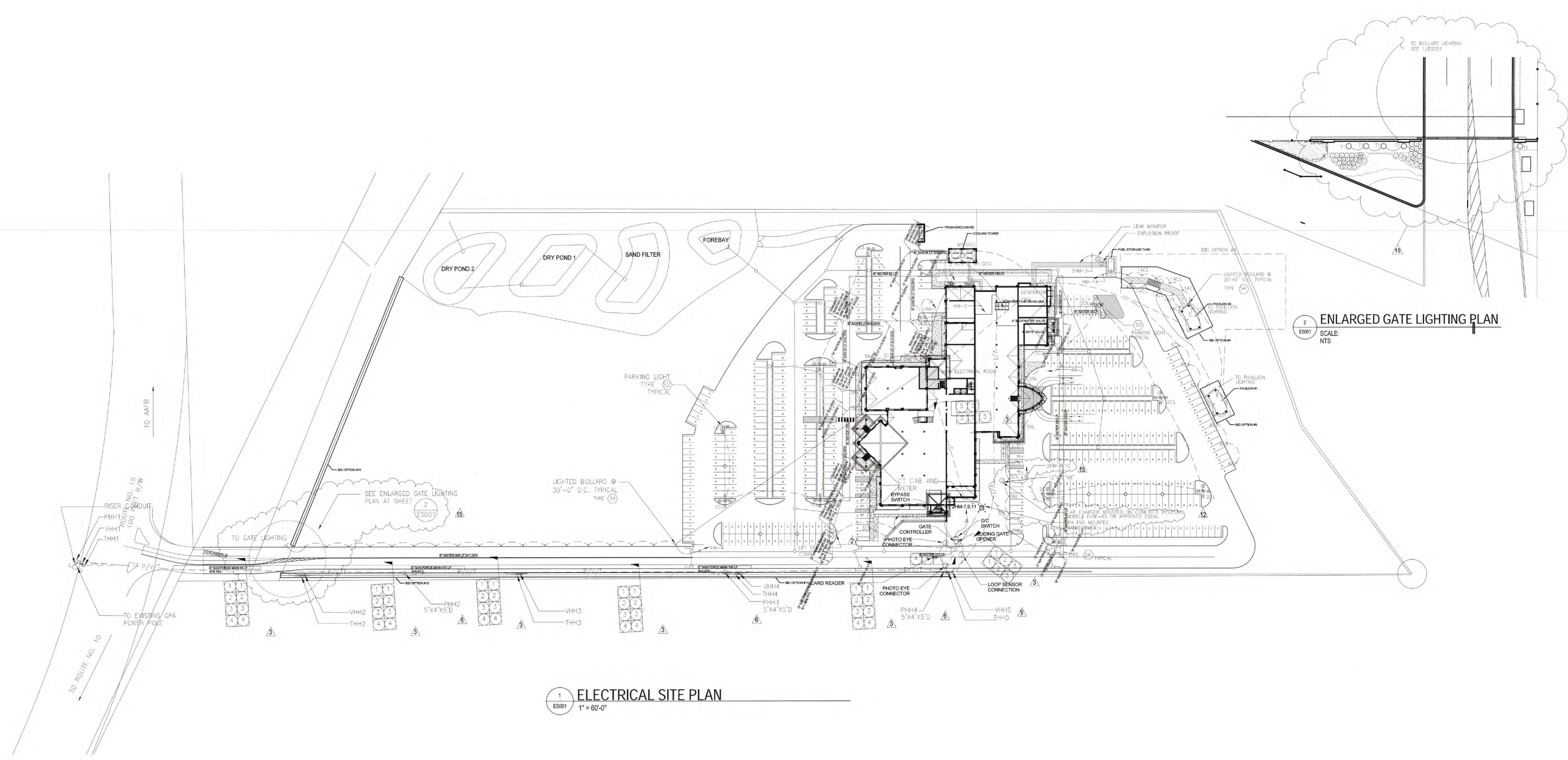
TOTAL BUILDING AREA: 117, 825 S.F.

NOTES:

- ALL ACCESSORY USES CONFORM TO SECTION 508.2.1. THE AGGREGATE ACCESSORY OCCUPANCIES SHALL NOT OCCUPY MORE THAN 10 PERCENT OF THE BUILDING AREA OF THE STORY THEY ARE LOCATED AND SHALL NOT EXCEED THE TABULAR VALUES IN TABLE 503 WITHOUT BUILDING AREA INCREASES.
- NO OCCUPANCY SEPARATION REQUIRED BETWEEN GROUPS B, F-1, AND S OCCUPANCIES PER TABLE 508.4.
- 1 HOUR OCCUPANCY SEPARATION REQUIRED BETWEEN GROUP B AND S-2 OCCUPANCIES PER TABLE 508.4.

SUM OF THE RATIOS CALCULATIONS PER STORY

1ST FLOOR:	$\frac{24,230}{86,250}$	+	$\frac{4,817}{65,625}$	+	$\frac{555}{58,125}$	=	$.28 + .073 + .001 = .354 \leq 1$
2ND FLOOR:	$\frac{43,406}{86,250}$	+	$\frac{3,202}{65,625}$	=	$.5 + .05 = .55 \leq 1$		
3RD FLOOR:	$\frac{35,540}{86,250}$	+	$\frac{4,245}{65,625}$	=	$.41 + .06 = .47 \leq 1$		
4TH FLOOR:	$\frac{527}{97,500}$	+	$\frac{2,306}{65,625}$	=	$.006 \leq 1$		

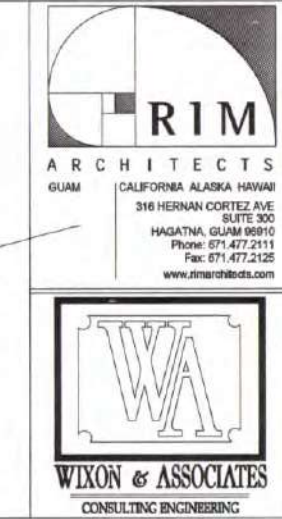
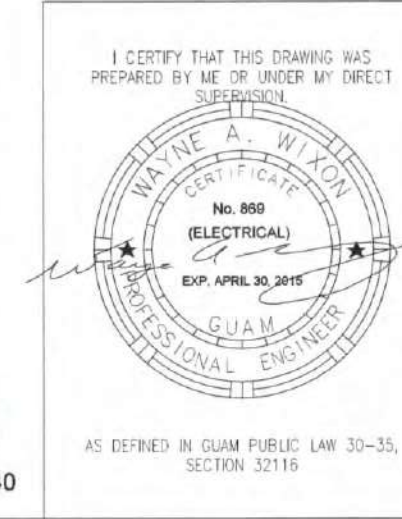
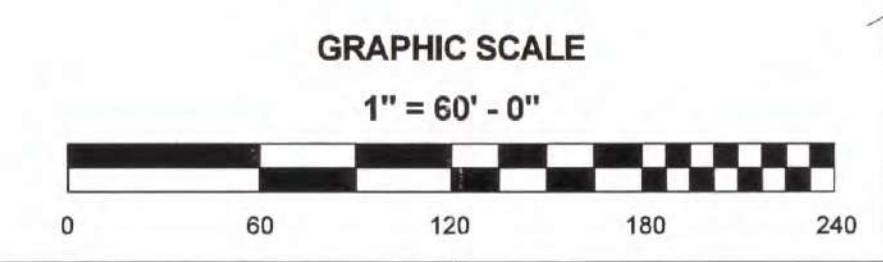


AS BUILT

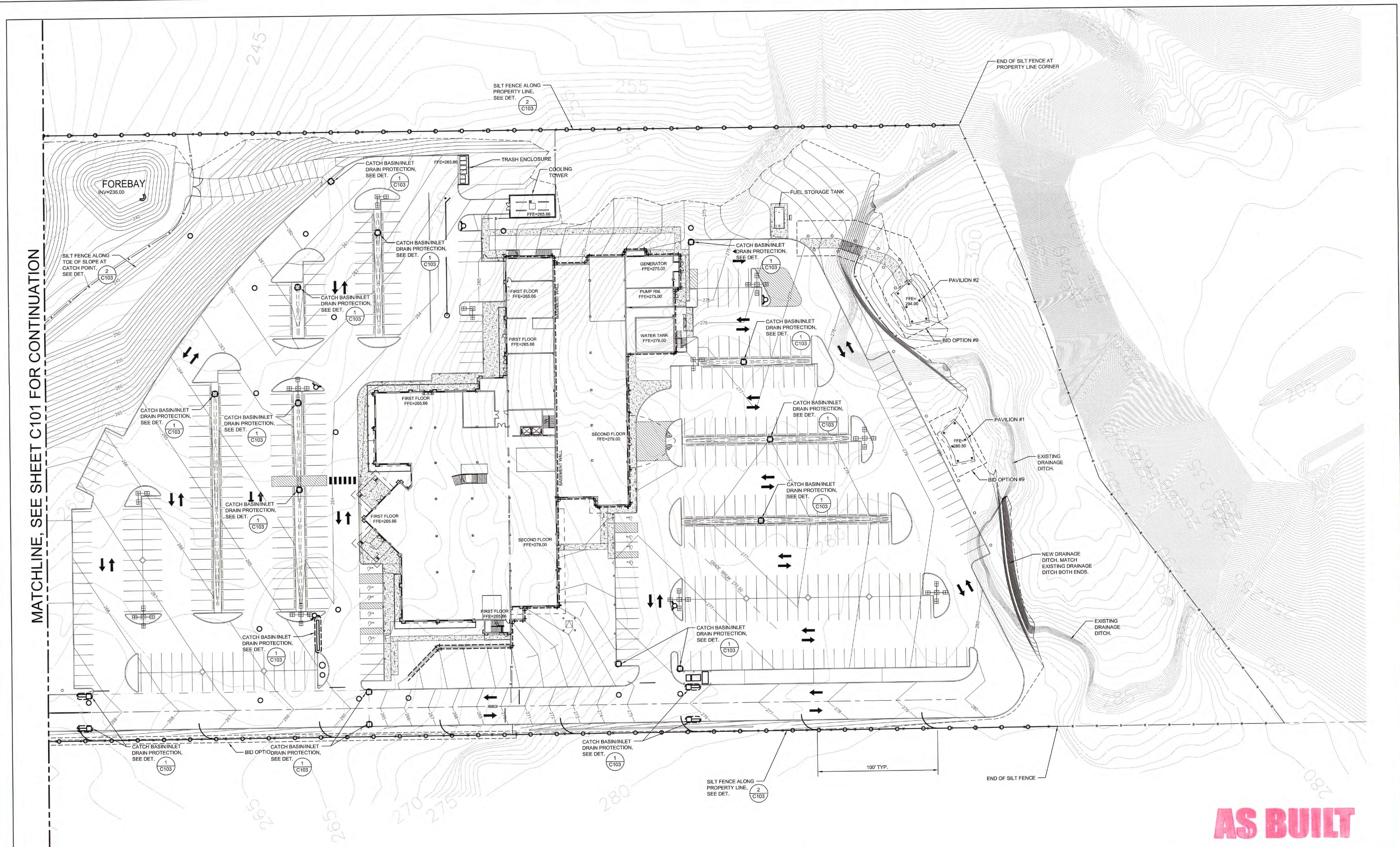
15	REVISION 15	VCC	08/05/2014
12	REVISION 12	JRL	03/21/2014
9	REVISION 9	VCC	11/07/2013
6	REVISION 6	VCC	08/06/2013

SYMBOL	DESCRIPTION	DATE
2	REVISION 2	VCC
3	REVISION 3	VCC

GUAM POWER AUTHORITY P.O. BOX 2977, HAGATNA, GUAM	
PROJECT NO. 124014 - ELECT	PROJECT TITLE GPA - G
DESIGNED BY VC	CHECKED BY VC
DRAWN BY PERRY B. TALADOC	APPROVED BY JOVEN G. ACOSTA, P.E.
ENGINEER SUPERVISOR JOVEN G. ACOSTA, P.E.	DATE 2012.11.06
MANAGER OF OPERATIONS MELINDA R. CAMACHO, P.E.	DATE 2012.11.06



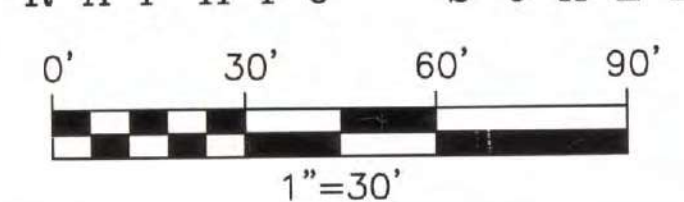
MATCHLINE, SEE SHEET C101 FOR CONTINUATION



LEGEND

- SILT FENCE
- GRAVEL CONSTRUCTION ENTRANCE

GRAPHIC SCALES



AS BUILT

REVISIONS			
NO.	DESCRIPTION	BY	DATE

GUAM POWER AUTHORITY
P.O. BOX 2977, HAGATNA, GUAM, USA 96910

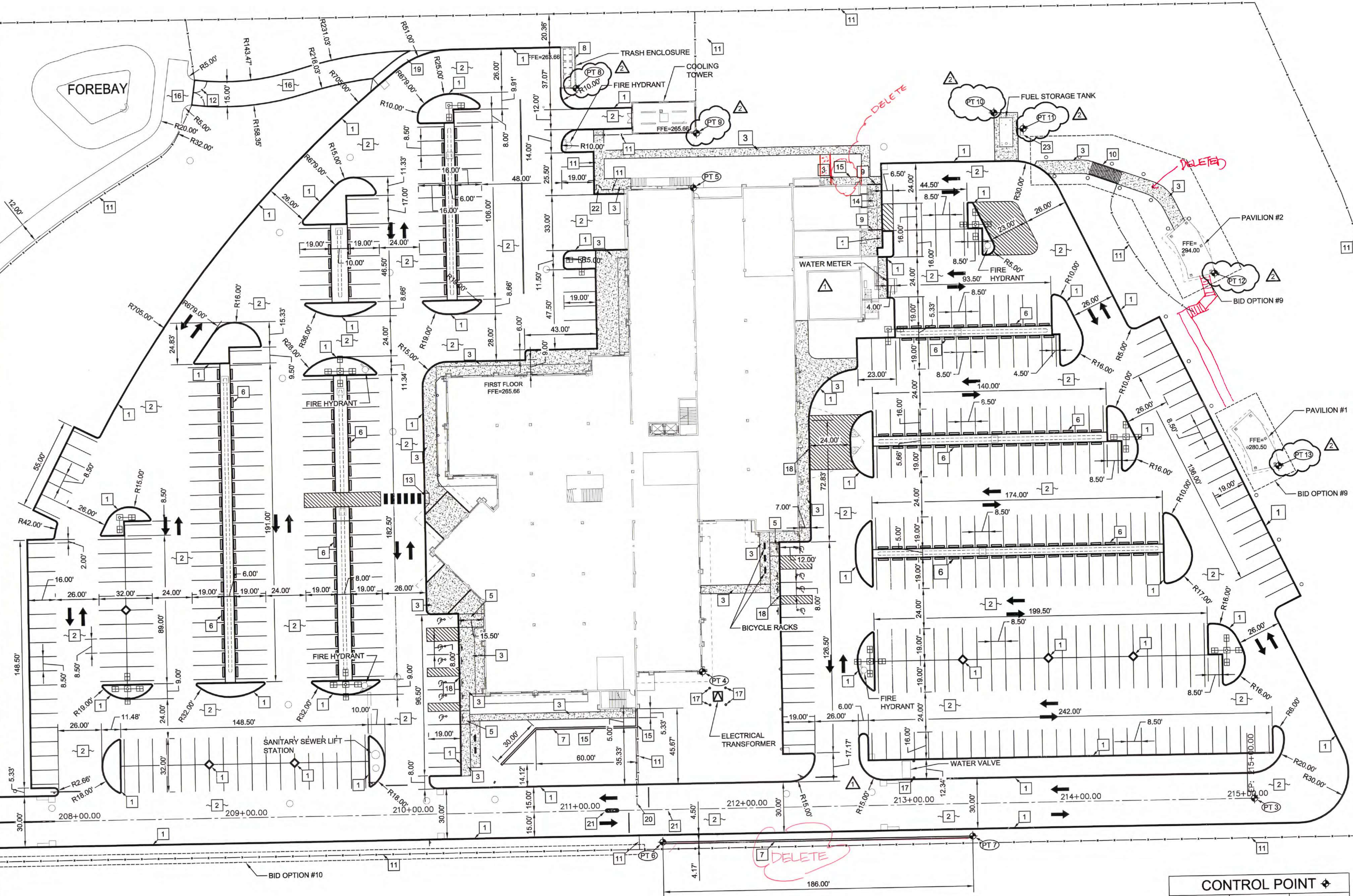
PROJECT NO. 124014	PROJECT TITLE GPA - GWA MULTI-PURPOSE FACILITY
DESIGNED BY PRT	DRAWN BY DMV
CHECKED BY KPT	APPROVED BY SKM
EROSION CONTROL PLAN	
FORWARD SUBMITTER PERRY B. TALADOC	DATE 2012.11.08
FORWARD REVIEWER JOVEN G. ACOSTA, P.E.	DATE 11/1/12
FORWARD REVIEWER MELINDA R. CAMACHO, P.E.	DATE 11/1/12

JOAQUIN C. FLORES, P.E.

10 OF 438

C102

MATCHLINE, SEE SHEET C121 FOR CONTINUATION

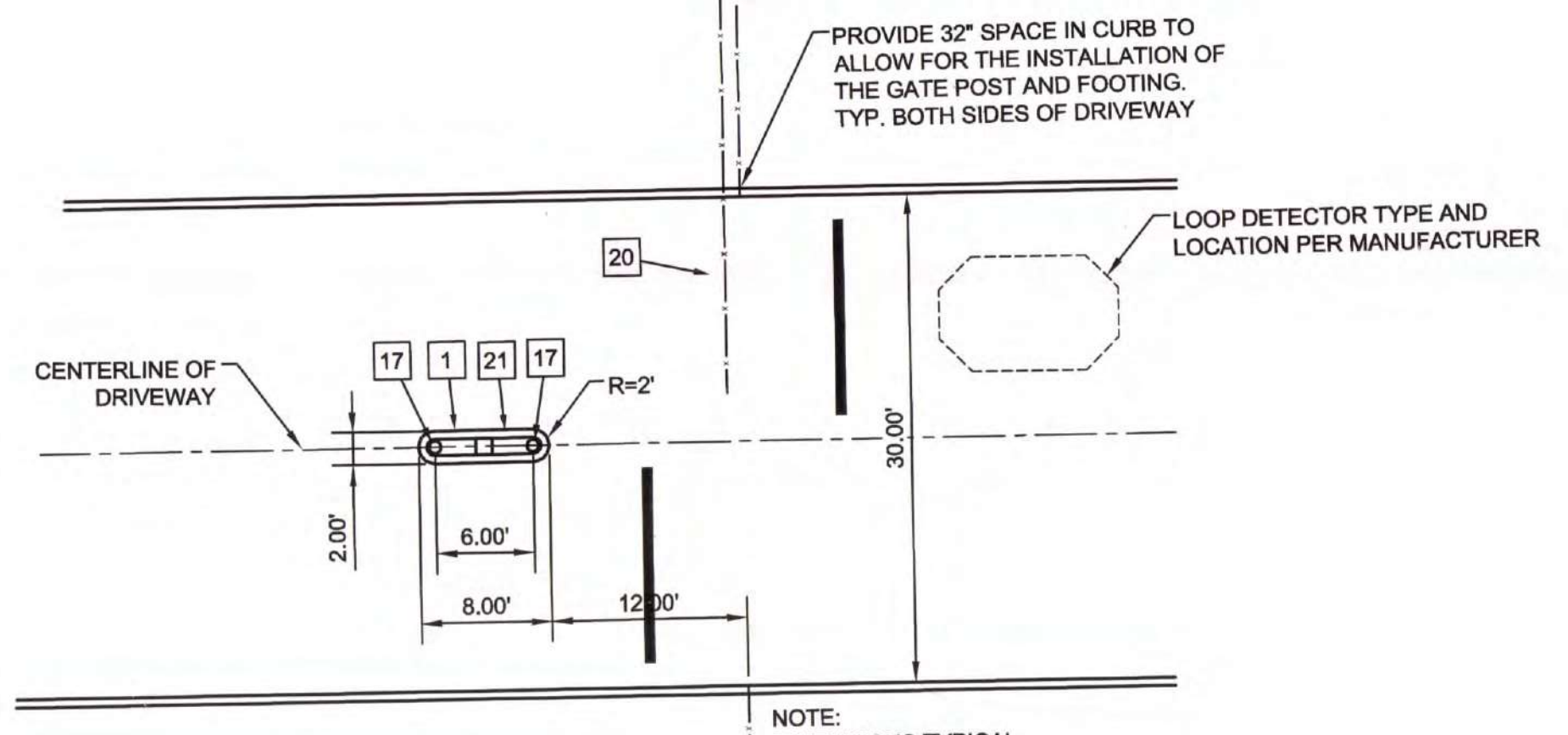


- KEYED NOTES
(NOT ALL NOTES USED ON THIS SHEET)
- 1 CONSTRUCT CONCRETE CURB SEE DETAIL (2) C810
 - 2 CONSTRUCT ASPHALT PAVEMENT SECTION SEE DETAIL (4) C810
 - 3 CONSTRUCT CONCRETE SIDEWALK SEE ARCHITECTURAL SITE PLAN A001 SEE DETAIL (7) C810 (8) C910
 - 4 CONCRETE SCORE LINE, TYPICAL SEE ARCHITECTURAL DRAWINGS.
 - 5 CONSTRUCT ADA RAMP SEE DETAIL (2) C812
 - 6 INSTALL TYPICAL WHEEL GUARD SEE DETAIL (1) C910
 - 7 CONSTRUCT RETAINING WALL - SEE SHEET C132 FOR GRADES (1) C910
 - 8 CONSTRUCT TRASH ENCLOSURE SEE STRUCTURAL AND ARCHITECTURAL PLANS.
 - 9 CONTRACTION JOINT SEE DETAIL (3) C810
 - 10 CONSTRUCT CONCRETE STAIRS SEE DETAIL (4) C812
 - 11 INSTALL CHAIN LINK FENCE SEE DETAIL (1) C909
 - 12 INSTALL 15' WIDE DOUBLE LEAF SWING GATE SEE DETAIL (3) C909
 - 13 CONSTRUCT CURB RAMP SEE DETAIL (1) C812
 - 14 CONSTRUCT CONCRETE PAVEMENT SEE DETAIL (5) C810
 - 15 ~~INSTALL PEDESTRIAN RAILING SEE DETAIL (1) C908~~
 - 16 CONSTRUCT GRAVEL ACCESS ROAD SEE DETAIL (12) C910
 - 17 INSTALL BOLLARDS SEE DETAIL (10) C910
 - 18 CONSTRUCT CURB AND SIDEWALK FLUSH WITH ASPHALT (ZERO CURB EXPOSURE ONLY AT ACCESSIBLE PARKING AND COVERED ENTRY)
 - 19 CONSTRUCT 20' WIDE CONCRETE DRIVEWAY SEE DETAIL (13) C910
 - 20 INSTALL NEW 30' WIDE AUTOMATED SLIDE GATE SEE DETAIL (2) C909
 - 21 CONSTRUCT CONCRETE MEDIAN AND INSTALL NEW CARD READER/KEYPAD ACCESS CONTROL PANEL FOR AUTOMATIC GATE. SEE DETAIL THIS SHEET AND ELECTRICAL PLANS FOR ADDITIONAL INFORMATION.
 - 22 INSTALL 3' PEDESTRIAN GATE SEE DETAIL (3) C909
 - 23 FUEL STORAGE TANK PEDESTAL SEE DETAIL (5) C812

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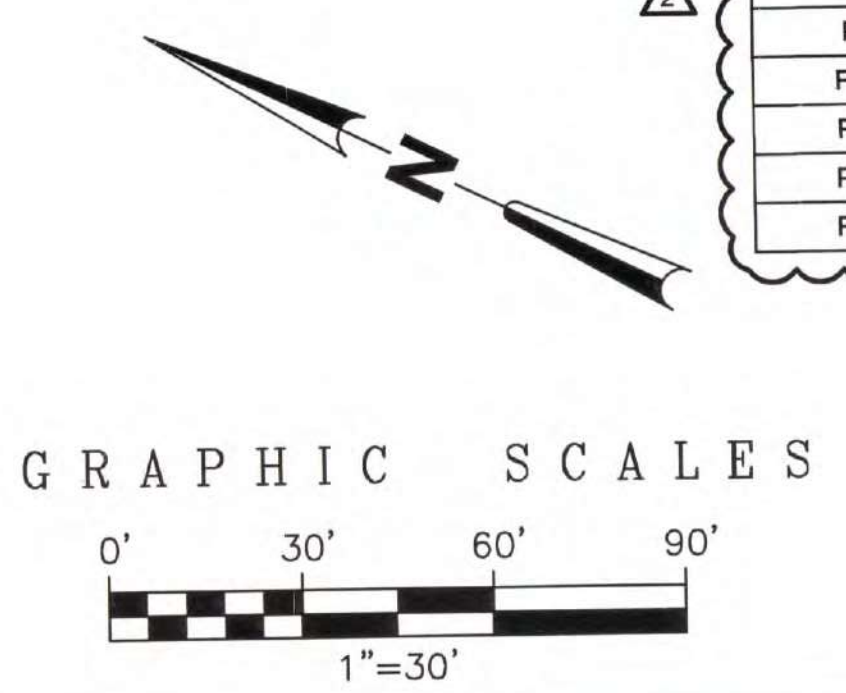
DELETE

DELETE



1 GATED ENTRY WITH CARD READER AND KEYPAD
C122 1"=10'

CONTROL POINT		
POINT	NORTHING	EASTING
PT 1	637737.6404	35278067.12
PT 2	637609.3668	352847.1850
PT 3	636490.1961	353398.3342
PT 4	636822.1742	353326.4374
PT 5	636950.2949	353586.6009
PT 6	636799.9444	353224.0585
PT 7	636633.2796	353306.1347
PT 8	637039.3262	353810.8309
PT 9	636962.8675	353617.0022
PT 10	636806.4513	353703.6906
PT 11	636786.7155	353702.4951
PT 12	636646.0128	353672.8423
PT 13	636561.9680	353584.8065



AS BUILT

PROJECT NO. 124014

DESIGNED BY: DMW

DRAWN BY: SKM

ENGINEER SUPERVISOR: PERRY B. TALADOC

MANAGER OF ENGINEERING: JOVEN G. ACOSTA, P.E.

ASSISTANT GENERAL MANAGER OF OPERATIONS: MELINDA R. CAMACHO, P.E.

REVISIONS

NO.	DESCRIPTION	INT.	DATE	APPD.
1	REVISED CALLOUTS, RELOCATE WATER METER	MP	01/10/13	PB
2	ADDED CONTROL POINTS	MP	01/18/13	PB

GUAM POWER AUTHORITY
P.O. BOX 2977, HAGATNA, GUAM, USA 96910

PROJECT TITLE: GPA - GWA MULTI-PURPOSE FACILITY

SHEET CONTENTS: SITE LAYOUT PLAN

DATE: 2012.11.06

ISS. NO.: 100134

SCALE: 1" = 30'-0"

SHT: 14 OF 438

DATE: 2012.11.06

ISS. NO.: 100134

SCALE: 1" = 30'-0"

SHT: 14 OF 438

DATE: 2012.11.06

ISS. NO.: 100134

SCALE: 1" = 30'-0"

SHT: 14 OF 438



GRAPHIC SCALES

0' 30' 60' 90'

1"=30'





RETAINING WALL SCHEDULE:			
A	BEGIN RETAINING WALL STA 0+00 TOW = 274.5 BOW = 271.5	D	RETAINING WALL (3/4) STA 1+39.5 TOW = 279.5 BOW = 277.5
B	RETAINING WALL (1/4 PT.) STA 0+46.5 TOW = 278.5 BOW = 275.0	E	END RETAINING WALL STA 1+48 TOW = 279.75 BOW = 278.25
C	RETAINING WALL (1/2 PT.) STA 0+93 TOW = 279.25 BOW = 277.0	G	END RETAINING WALL STA 0+10.5 TOW = 271.5 BOW = 265.5
		F	BEGIN RETAINING WALL STA 0+00 TOW = 272.5 BOW = 265.5
		H	RETAINING WALL STA 0+70.33 TOW = 268.5 BOW = 265.5
		I	END RETAINING WALL STA 1+00.33 TOW = 267.5 BOW = 265.5

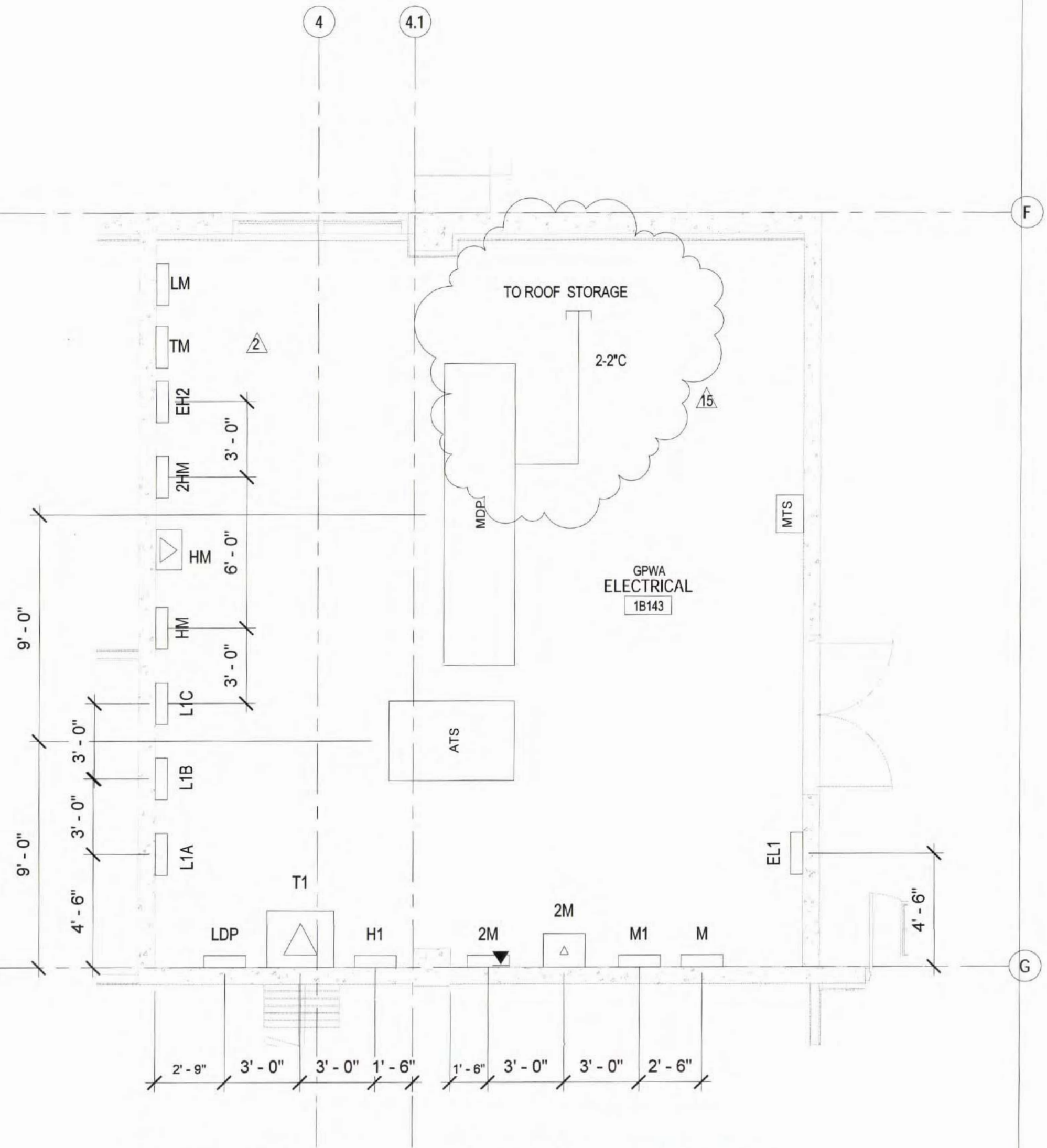
REVISIONS

TOW = TOP OF RETAINING WALL
BOW = BOTTOM OF RETAINING WALL (FINISHED GRADE)
DS = DOWNSPOUT

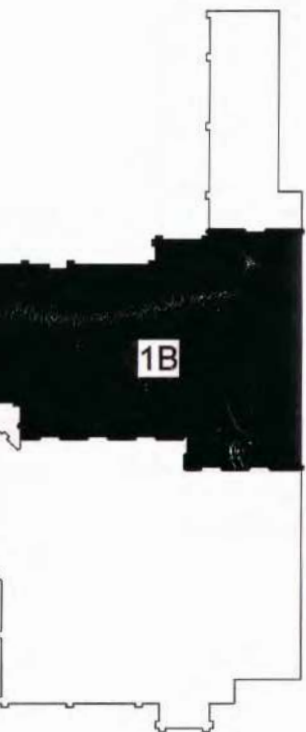
GRADING NOTES:

- 1 PROVIDE POSITIVE DRAINAGE AROUND TREE ISLANDS.
- 2 PROVIDE POSITIVE DRAINAGE AROUND LANDSCAPE ISLANDS.
- 3 ZERO CURB EXPOSURE AT ACCESSIBLE PARKING SPACES AND COVERED ENTRY.
- 4 CONSTRUCT DOWNSPOUT CONNECTION.
- 5 CONNECT FOUNDATION DRAINS TO BACKWATER VALVE AND CONNECT TO STORM DRAIN MANHOLE.
- 6 INSTALL GRATED INLET.
- 7 INSTALL GRATED INLET WITH 6" TRENCH DRAIN.
- 8 INSTALL STORM MANHOLE.
- 9 CONSTRUCT DRY SWALE.
- 10 CONSTRUCT HEADWALL AND RIPRAP OUTFALL.
- 11 INSTALL TRENCH DRAIN.
- 12 INSTALL BACKWATER VALVE.
- 13 CONSTRUCT CONCRETE WEIR (CHANNEL) FROM FOREBAY TO SANDFILTER.
- 14 CONSTRUCT EMERGENCY SPILLWAY DOWN STREAM AND UPSTREAM OF CONCRETE WEIR.
- 15 6" WIDE MIN. BENCH ON EMBANKMENTS BETWEEN PONDS AND TO ADJACENT PROPERTY.
- 16 CONSTRUCT RETAINING WALL. SEE RETAINING WALL SCHEDULE THIS SHEET.
- 17 INSTALL FRENCH DRAIN AT RETAINING WALL.
- 18 DOWNSPOUT TO SPLASH BLOCK. SEE ARCHITECTURAL DRAWINGS.

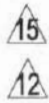
 REMOVE PERF. PIPE, ADJUST MATCHLINE STATION		HHC		11-09-2013		PB	
REVISIONS							
SYMBOL		DESCRIPTION		INT		DATE	
		REMOVE WATERLINE, ADJUST MATCHLINE STATION		MP		01-10-2013	
		GRADING REVISIONS				09-19-2013	
 <div style="text-align: center;"> <h2 style="margin: 0;">GUAM POWER AUTHORITY</h2> <p style="margin: 0;">P.O. BOX 2977, HAGATNA, GUAM, USA 96910</p> </div>							
PROJECT TITLE				<h1 style="margin: 0;">GPA - GWA MULTI-PURPOSE FACILITY</h1>			
PROJECT NO.							
124514							
DESIGN BY: PRT CHECKED BY: DMW DRAWN BY: KET APPROVED BY: SKM							
ENGINEER SUPERVISOR				<h2 style="margin: 0;">GRADING AND DRAINAGE PLAN</h2>			
PERRY B. TALADOC MANAGER OF ENGINEERING: JOVEN G. ACOSTA, P.E. ASSISTANT GENERAL MANAGER OF OPERATIONS: LUIS M. DE LA CASHA, P.E. ASSISTANT GENERAL MANAGER OF FINANCE: JOAQUIN C. FLORES, P.E.							
DATE							
DATE		2012.11.06		JOB NO.		100134	
				SCALE		1" = 30'-0"	
				SHEET		16 OF 436	
				SHEET		C132	



2 POWER PLAN - ELECTRICAL ROOM 1B143
E-302 1/4" = 1'-0"



AS BUILT



REVISION 15

VCC 08/05/2014 WAW



REVISION 12

JRL 03.21.2014 WAW

REVISIONS

SYMBOL	DESCRIPTION	INT.	DATE	APPD.
2	REVISION 2		01/18/2013	WAW
9	REVISION 9	JRL	11.07.2013	WAW

SECTOR KEY PLAN

I CERTIFY THAT THIS DRAWING WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION.

WAYNE A. WIXON
No. 969
(ELECTRICAL)
EXP. APRIL 30, 2015
PROFESSIONAL ENGINEER
GUAM

AS DEFINED IN GUAM PUBLIC LAW 30-35, SECTION 32116

RIM
ARCHITECTS
GUAM
CALIFORNIA ALASKA HAWAII
316 HERMAN CORTEZ AVE
SUITE 300
HAGATNA, GUAM 96910
Phone: 671.477.2111
Fax: 671.477.2125
www.rimarchitects.com

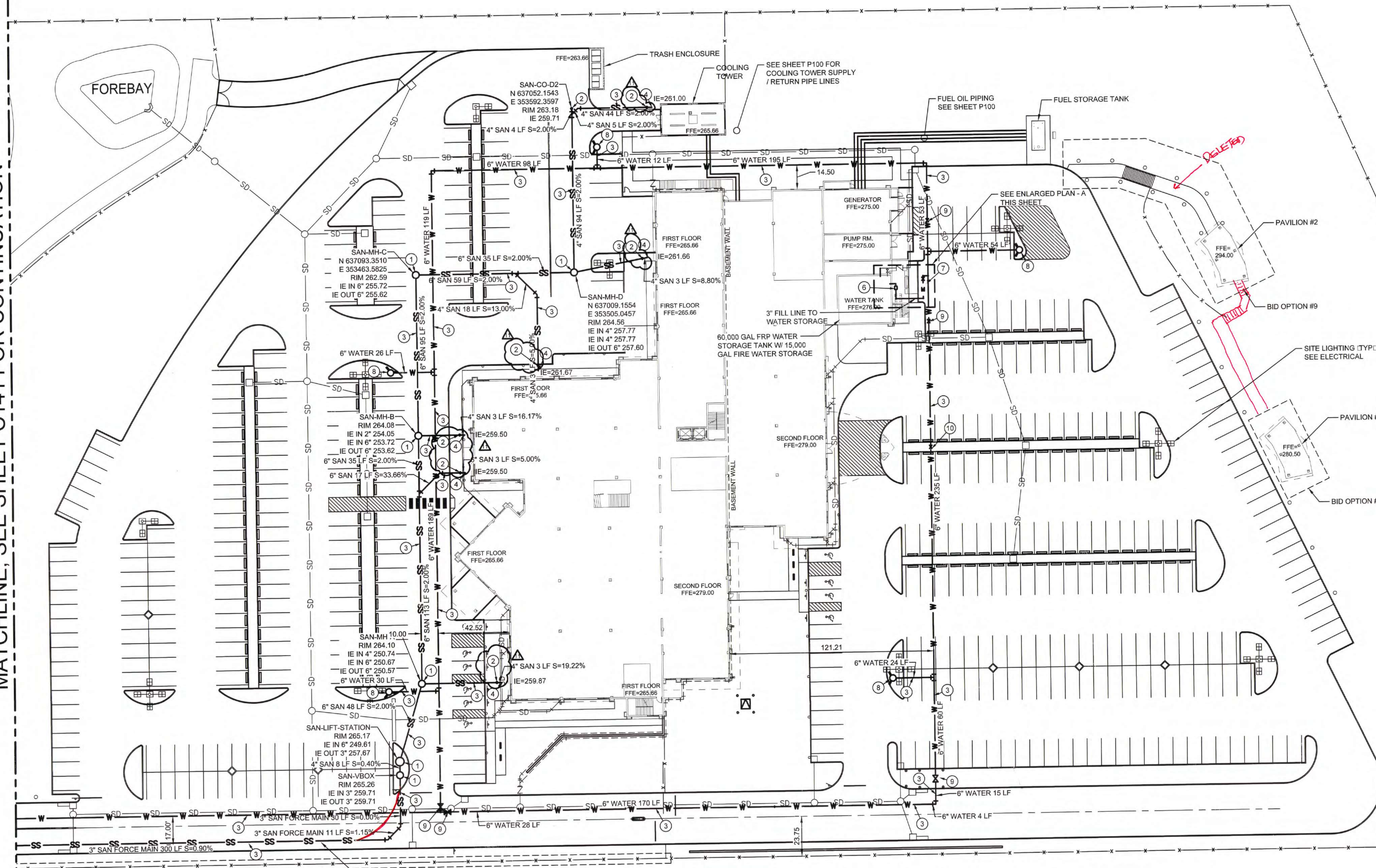
WAW
WIXON & ASSOCIATES
CONSULTING ENGINEERING



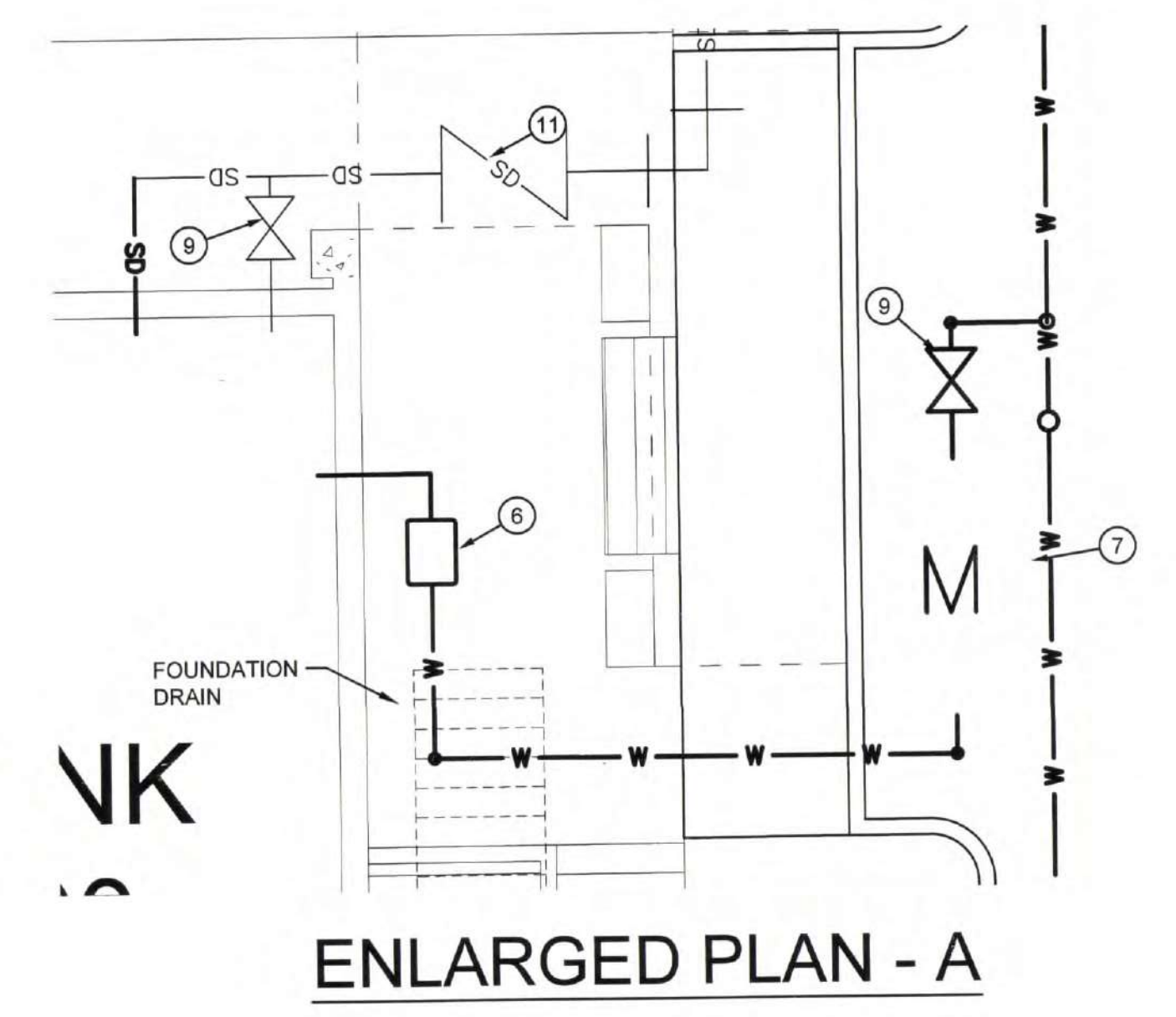
GUAM POWER AUTHORITY
P.O. BOX 2977, HAGATNA, GUAM, USA 96910

PROJECT NO: 124014 - ELECT		PROJECT TITLE GPA - GWA MULTI PURPOSE FACILITY			
DESIGNED BY: VC	CHECKED BY: WW				
DRAWN BY: VC	APPROVED BY: GPA	SHEET CONTENTS POWER PLAN - 1ST FLOOR SECTOR 1B			
ENGINEER SUPERVISOR PERRY B. TALADOC					
MANAGER OF ENGINEERING JOVEN G. ACOSTA, P.E.		DATE 2012.11.06	J.O. NO. 100134	SCALE As indicated	SHT 364 OF 428
ASSISTANT GENERAL MANAGER OF OPERATIONS MELINDA R. CAMACHO, P.E.		DATE	GENERAL MANAGER JOAQUIN C. FLORES, P.E.		SHEET E-302

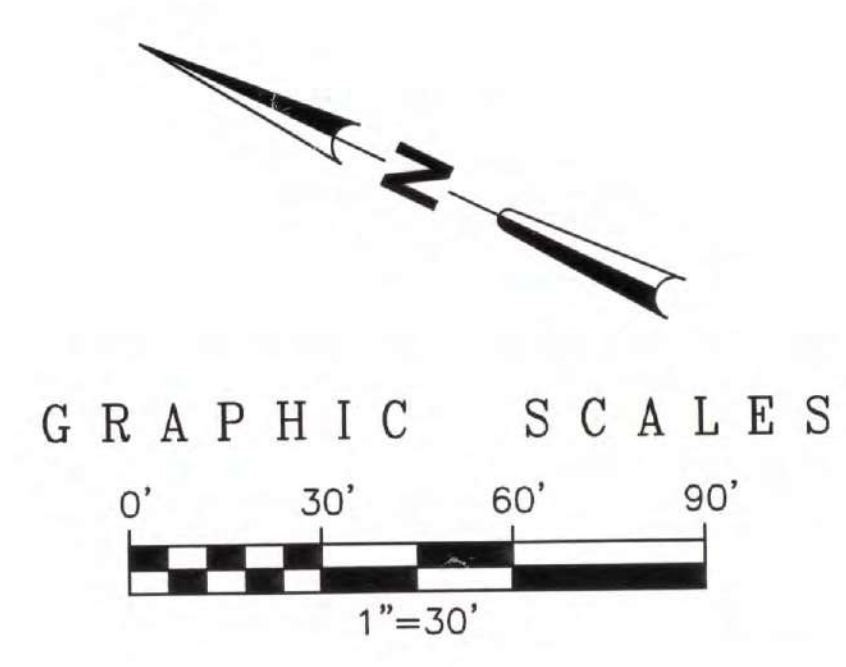
MATCHLINE, SEE SHEET C141 FOR CONTINUATION



- UTILITY NOTES
- 1. INSTALL SANITARY SEWER MANHOLE. (C806)
 - 2. INSTALL SANITARY SEWER CLEANOUT. (C906)
 - 3. INSTALL UTILITY PIPE, SIZE AND TYPE PER PLANS. (C804)
 - 4. CONNECT TO BUILDING. SEE PLUMBING PLANS.
 - 5. INSTALL 6" BACKFLOW PREVENTER (RPBP). (C804)
 - 6. INSTALL 3" BACKFLOW PREVENTER (RPBP). (C804)
 - 7. INSTALL 3" WATER METER. (C803)
 - 8. INSTALL FIRE HYDRANT. (C805)
 - 9. INSTALL GATE VALVE AND BOX. (C803)
 - 10. INSTALL AIR RELIEF VALVE AT HIGH POINT. (C805)
 - 11. INSTALL 4" BACKWATER VALVE. (C801)
 - 12. INSTALL 6" BACKWATER VALVE. (C801)



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GUAM POWER AUTHORITY
P.O. BOX 2977, HAGATNA, GUAM, USA 96910

GPA - GWA MULTI-PURPOSE FACILITY

SITE UTILITY PLAN

SYMBOL	DESCRIPTION	REV.	DATE	APPROVED
▲	ADDED CLEANOUTS	MP	02/13/14	PB
▲	REVISE WATERLINE	MP	05/28/13	PB
▲	REVISE WATERLINE, SEWERLINE AND CALLOUTS	MP	01/13/13	PB
▲	REVISE WATERLINE	MP	02/05/13	PB

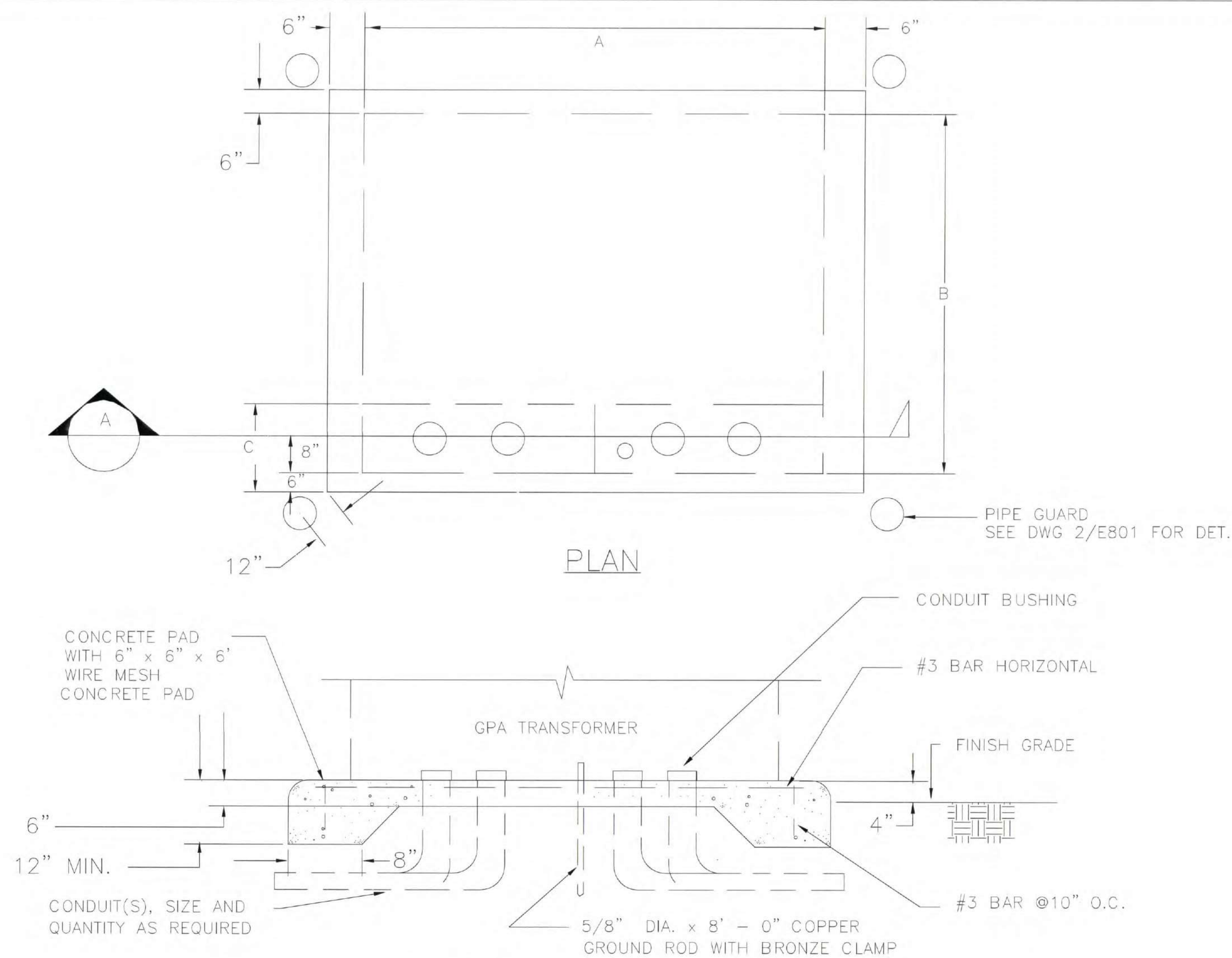
PROJECT NO.	DESIGNED BY	CHECKED BY	DATE	SCALE	SHT
124014	DMN	SXM	2012.11.06	1" = 30'-0"	23 OF 438

MANAGER OF ENGINEERING: JOVEN S. ACOSTA, P.E.
ASSISTANT GENERAL MANAGER OF OPERATIONS: MELINDA R. CAMACHO, P.E.

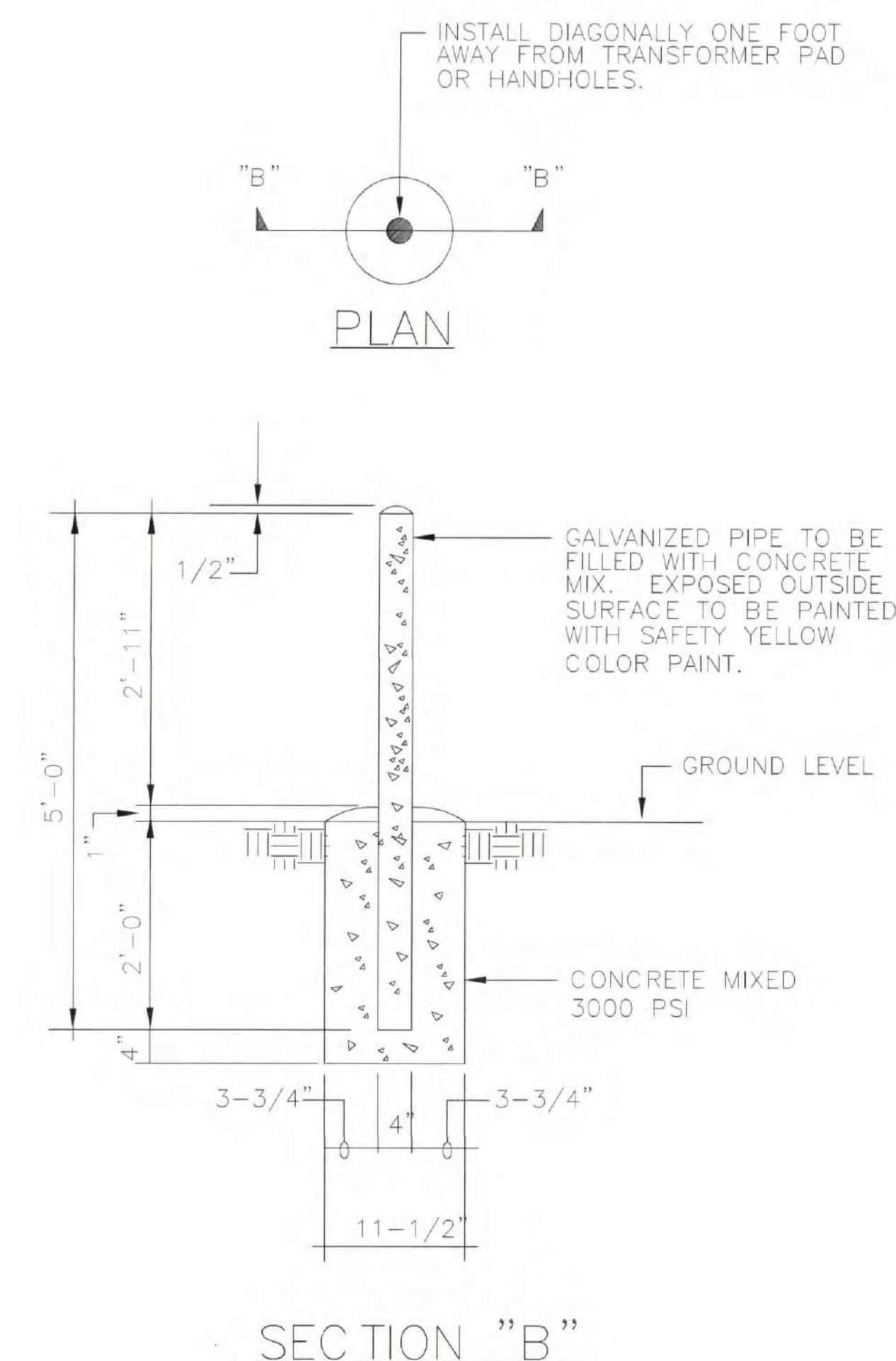
DATE: 2012.11.06
GENERAL MANAGER: JOAQUIN C. FLORES, P.E.

SHEET: **C142**

1. GRADE AND COMPACT THE PAD SITE SO THAT THE TOP FRONT CORNER MATCHES THE CONCRETE SIDEWALK GRADE. THE GROUND SHALL HAVE A SLOPE NOT GREATER THAN 1/2" PER FOOT TOWARDS THE SIDEWALK.
2. GRADE SUFFICIENTLY AROUND THE PAD SITE TO PREVENT FUTURE FILLING OF THE AREA. WHEN REQUIRED, CONSTRUCT A RETAINING WALL APPROVED BY GPA ENGINEERING.
3. COMPACT BY ROLLING THE AREA IN ACCORDANCE WITH GPA ENGINEERING STANDARD SPECIFICATIONS FOR COMPACTING SIDEWALK AREAS.
4. THE DIMENSIONS SHOWN ON THE TABLE ARE GUIDES ONLY. COORDINATE WITH GPA ENGINEERING FOR VERIFICATION OF DIMENSIONS, AS THESE DEPEND ON THE TYPE OF TRANSFORMER BEING SUPPLIED.

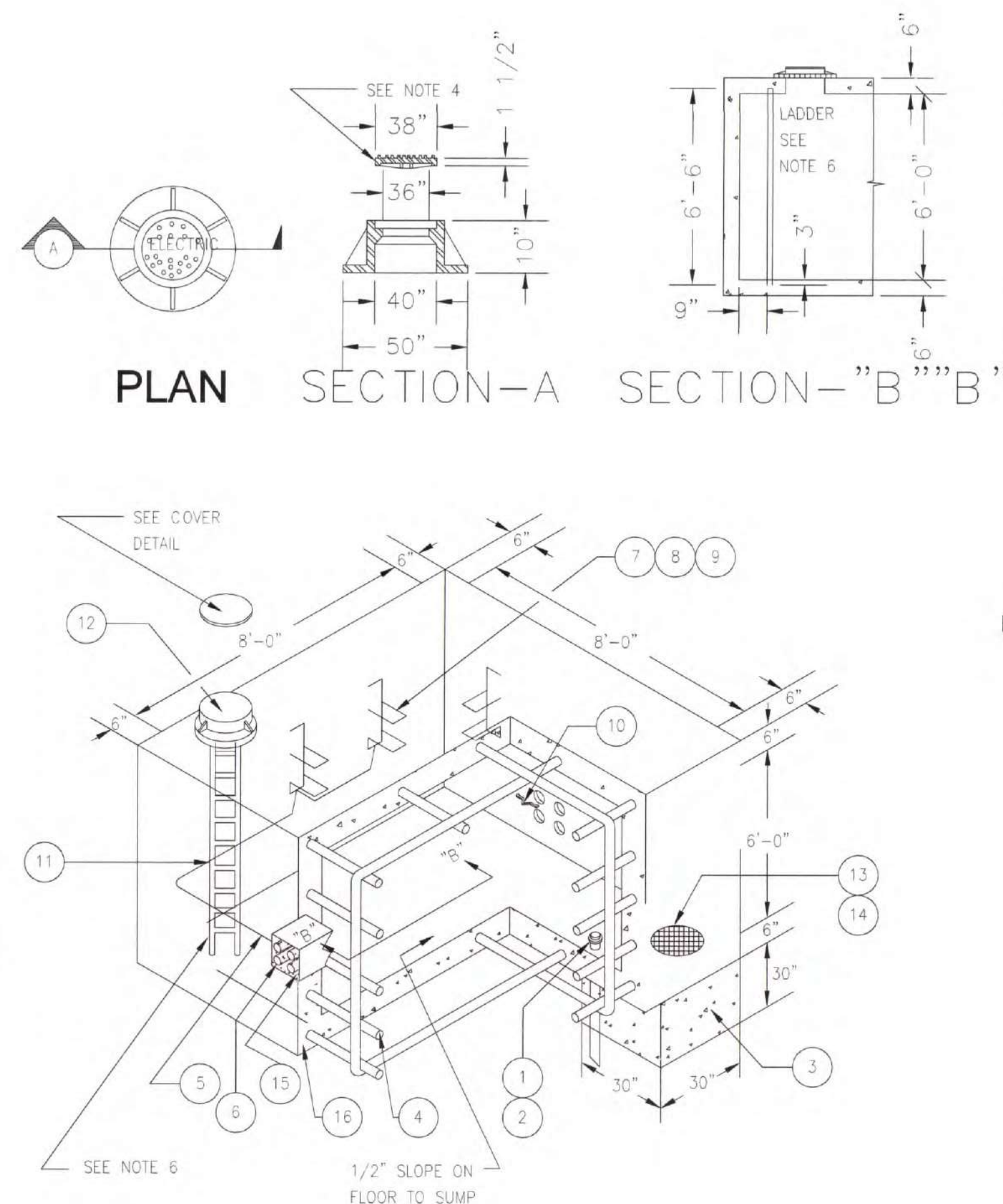


1 TRANSFORMER PAD DETAIL
SCALE N.T.S.

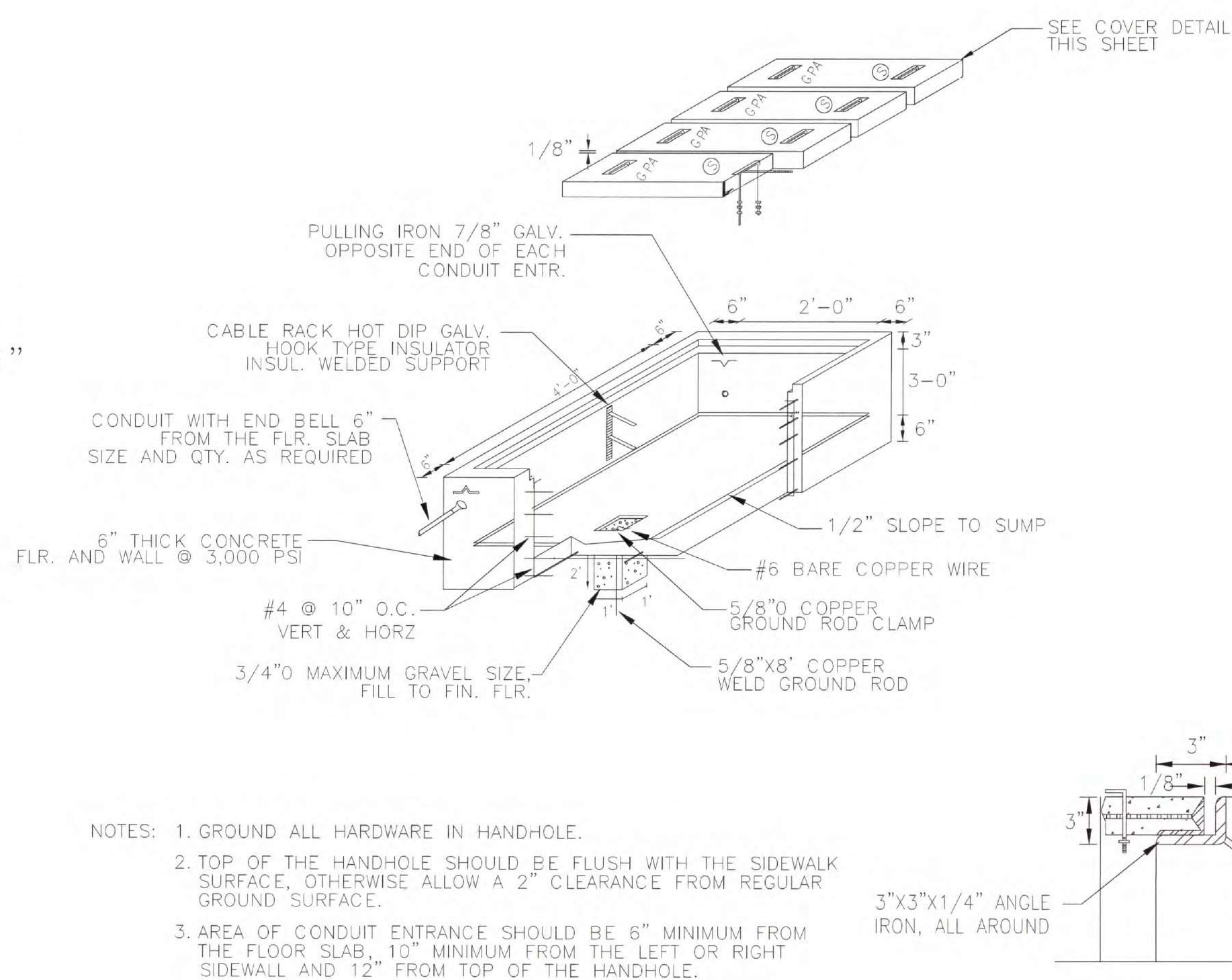


2 GALVANIZED PIPE GUARD
SCALE N.T.S.

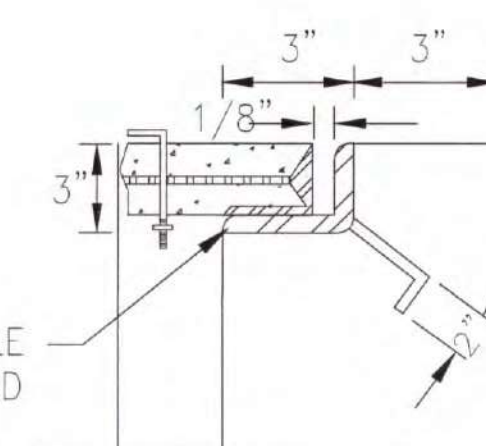
1. GROUND ALL HARDWARES IN THE MANHOLE.
2. AREA OF CONTACT ENTRANCES SHOULD BE 3'-4" MIN. FROM THE FLOOR SLAB 12" MIN. FROM THE LEFT OR RIGHT SIDE WALL AND 2' MIN. FROM TOP OF THE MANHOLE.
3. THE MANHOLE COVER SHALL BE FLUSH WITH THE ROADWAYS OR SIDEWALK SURFACE, OTHERWISE THERE SHALL BE A 2" CLEARANCE FROM SURROUNDING GROUND SURFACE.
4. USE A HEAVY DUTY NON-RATTLING MANHOLE COVER AND FRAME SHALL BE CONSTRUCTED OF CORROSION RESISTANT GRAY IRON AND BUILT TO WITHSTAND HITS AND SHOCKS. WEIGHT ADJUSTMENT SHALL ELIMINATE NOISE AND LID DISPLACEMENT. COVER SHALL NOT RATTLE OR BECOME LOOSE AND SHOULD REMAIN SECURELY IN FRAME WITHOUT THE USE OF ASPHALT OR OTHER FILLING. USE A CAST CLEATS TYPE SURFACE MANHOLE COVER.
5. COVER SHALL BE LOCATED 1' FROM THE CORNER OF THE WALL AND AWAY FROM THE CONDUIT ENTRANCES ON THE SAME WALL.
6. STEEL GALVANIZED LADDER SHALL BE CONSTRUCTED TO OBTAIN MAXIMUM STRENGTH AND LONG LIFE UNDER SEVERE CORROSION CONDITIONS IN MANHOLES. USE 5/8" UNDER RUNGERS EXTENDING THROUGH THE RAILS AND WELD BOTH INSIDE AND OUT. SIDE RAIL SHALL BE 1 1/2" x 9 x 16". 5/8" STEEL. LADDER SHALL BE 12' LONG. LADDER END IS TO BE EMBEDDED 3" IN TO THE CONCRETE FLOOR SLAB.



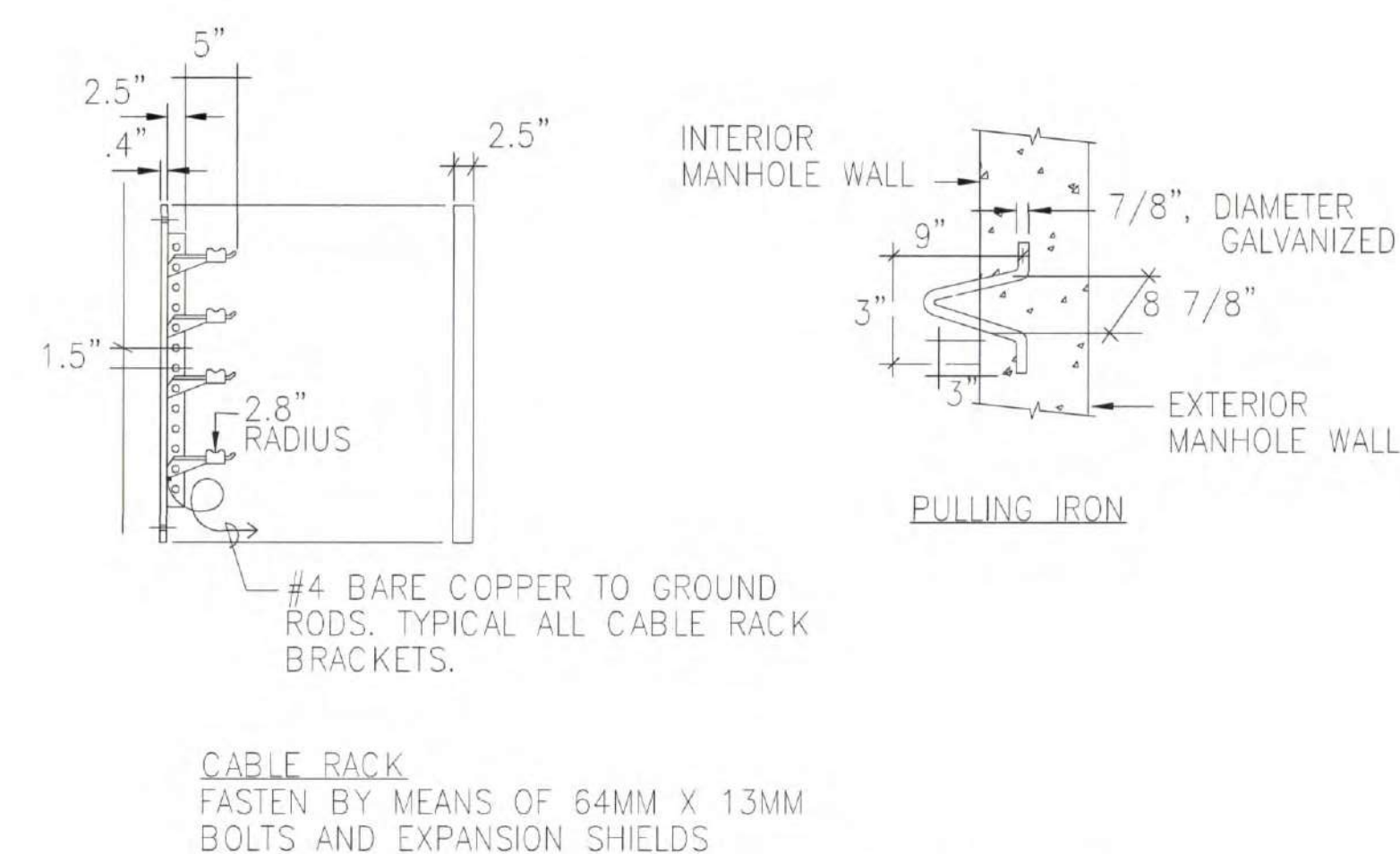
3 8'x8'x6' PRIMARY MANHOLE
SCALE N.T.S.



4 TV/TEL HANDHOLE DETAIL
SCALE N.T.S.




6 HANDHOLE COVER DETAIL
SCALE N.T.S.



5 MANHOLE/HANDHOLE HARDWARE
SCALE N.T.S.

AS BUILT

REVISIONS				
REVISION	DESCRIPTION	BY	DATE	APPRO.



GUAM POWER AUTHORITY

P.O. BOX 2977, HAGATNA, GUAM, USA 96910

PROJECT NO. 124014 - ELECT

DESIGNED BY VC CHECKED BY WW

DRAWN BY VC APPROVED BY GPA

ENGINEER SUPERVISOR PERRY B. TALADOC

PROJECT TITLE

GPA - GWA MULTI PURPOSE FACILITY

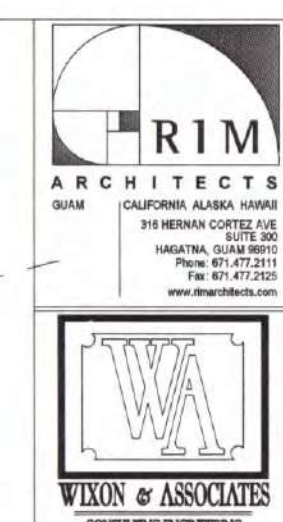
SHEET CONTENTS

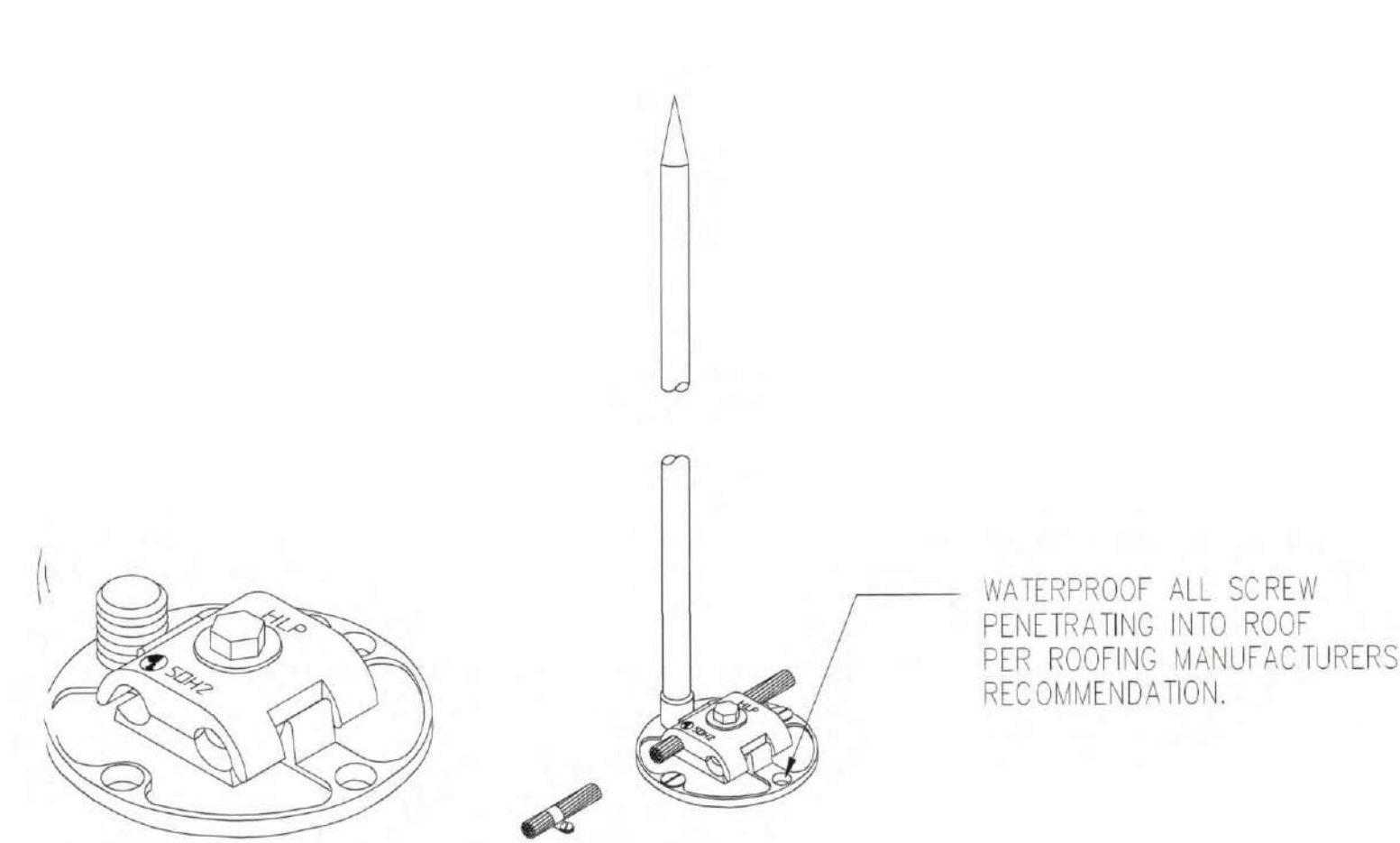
DETAILS

MANAGER OF INDEPENDENT JOVEN G. ACOSTA P.E.

ASSISTANT GENERAL MANAGER MEL INTIA R. CAMACHO P.E.

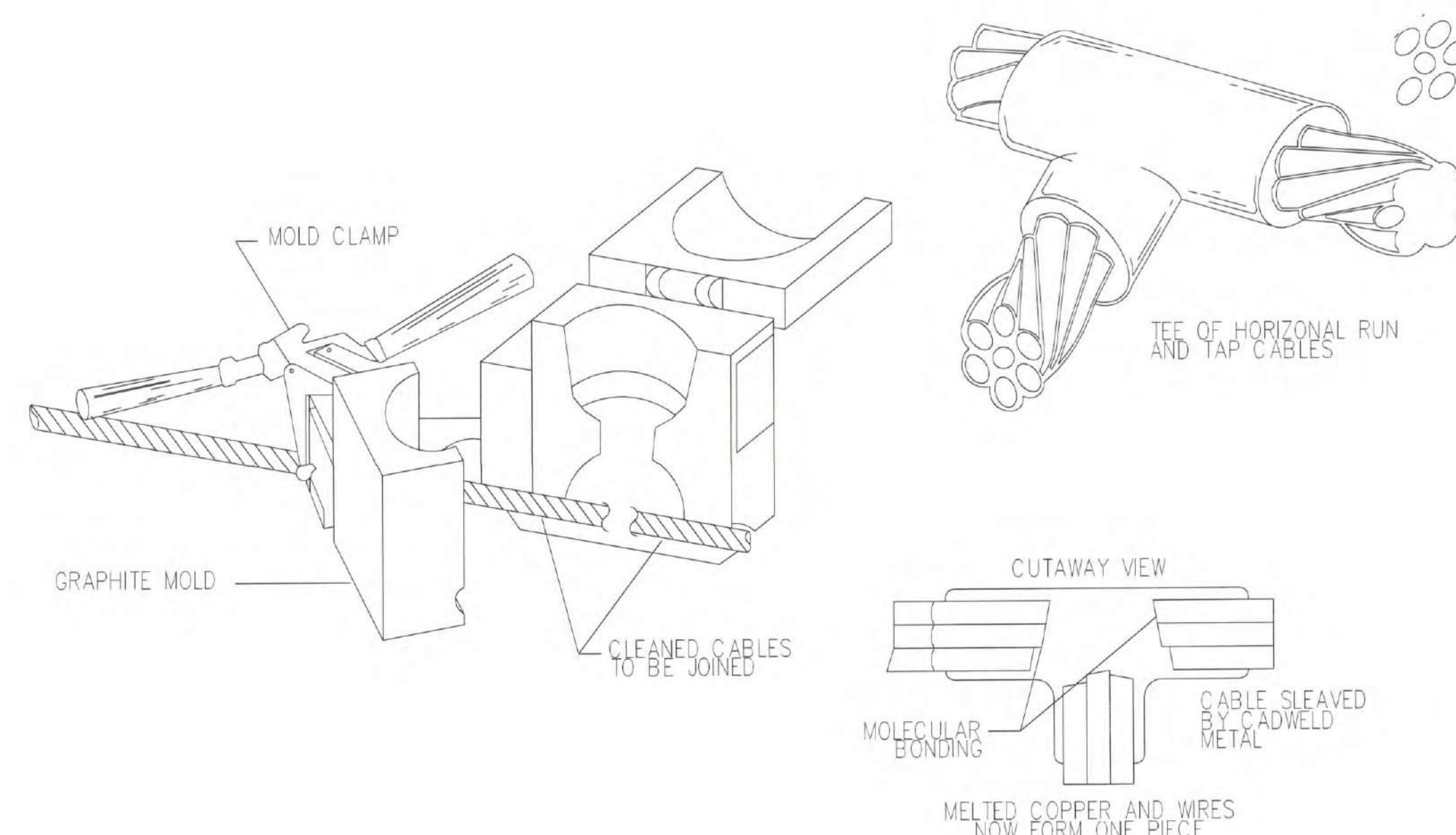
DATE	J.O. NO.	SCALE	SHT
2012.11.06	100134	1" = 1'-0"	427 OF 43
DATE 11/11/12	GENERAL MANAGER JOSEACUIN C. BRESNAHAN		SHEET E-901



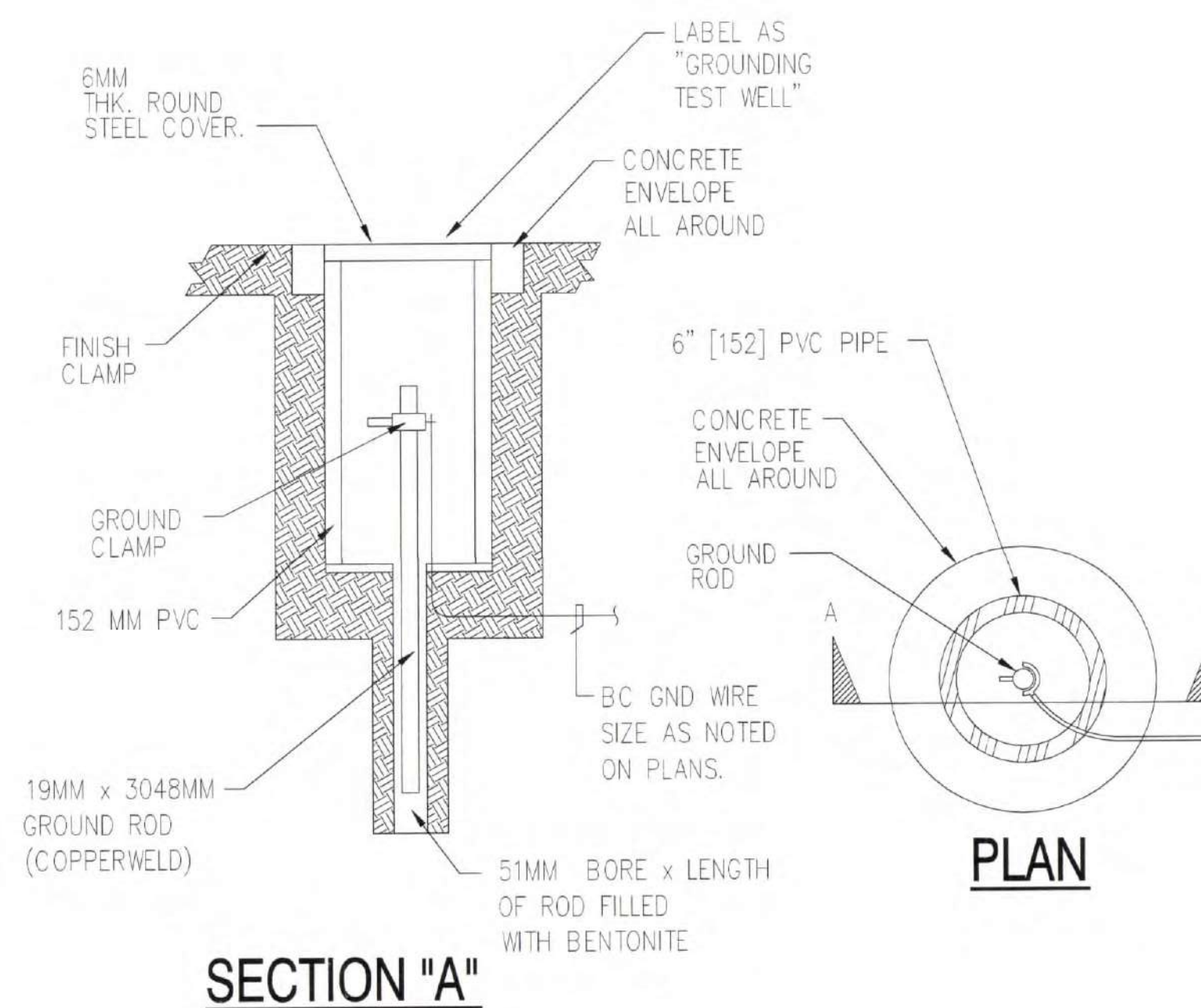


PRESSURE CABLE CONNECTOR ACCOMMODATES ONE OR TWO LIGHTNING CONDUCTORS. 10MM MOUNTING HOLES ARE PROVIDED FOR SECURE MOUNTING TO ANY FLAT SURFACE. 16MM STUD ENGAGES ALL AIR TERMINAL ADAPTERS.

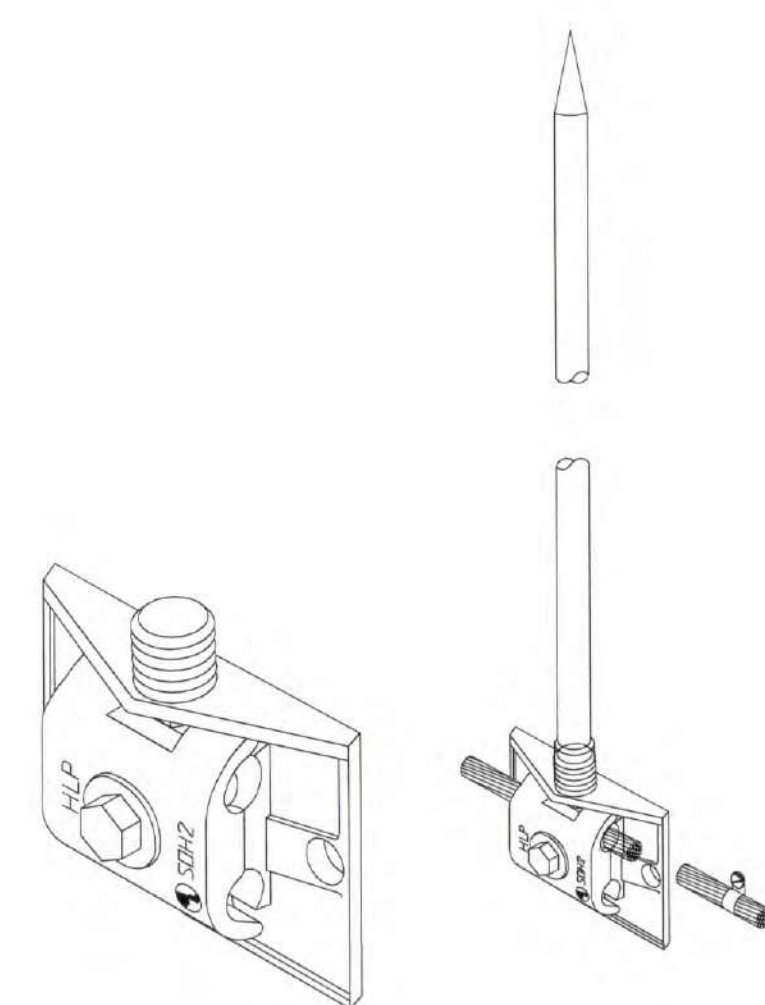
1 AIR TERMINAL MOUNTING DETAIL
SCALE N.T.S.



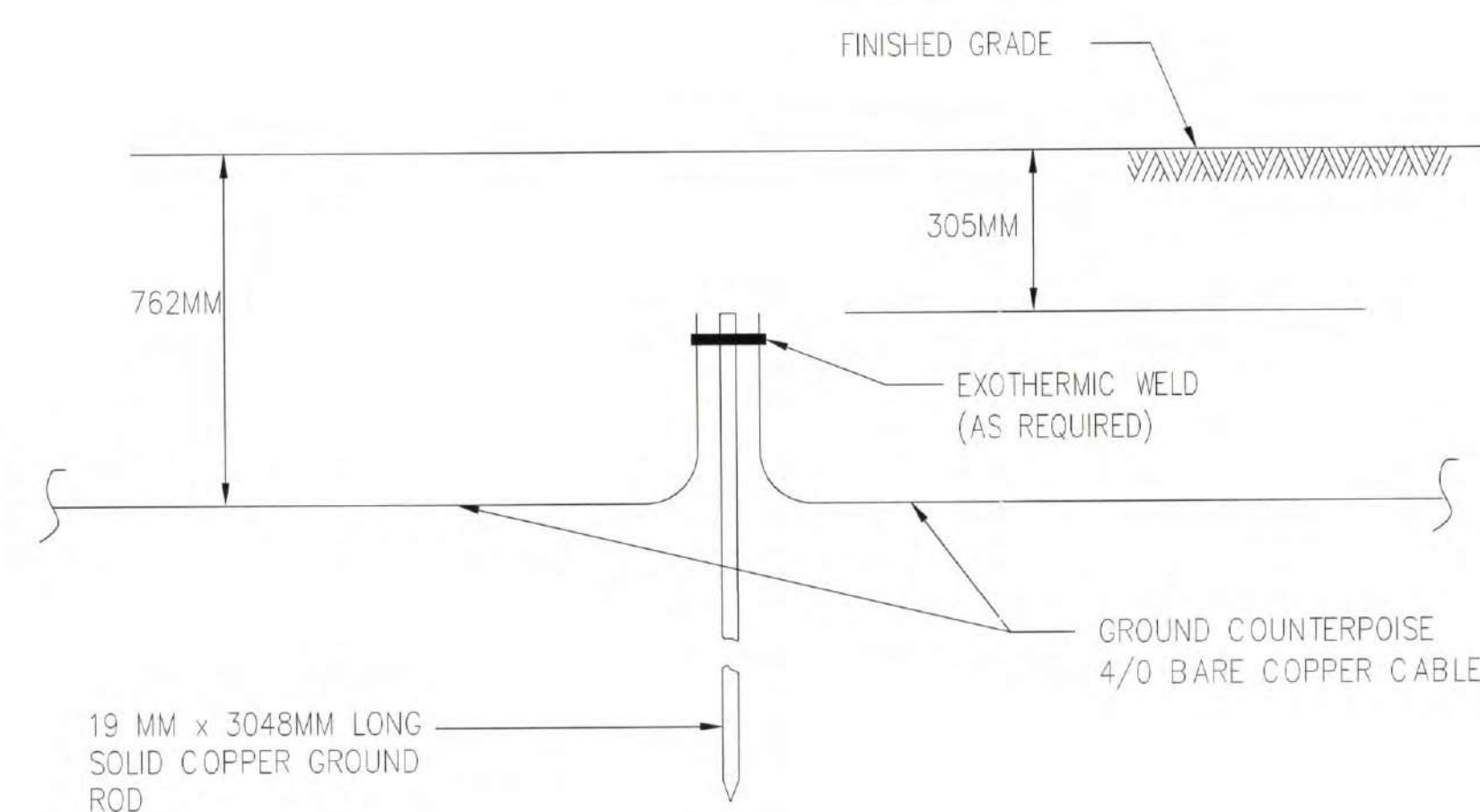
2 EXOTHERMIC WELD DETAIL
SCALE N.T.S.



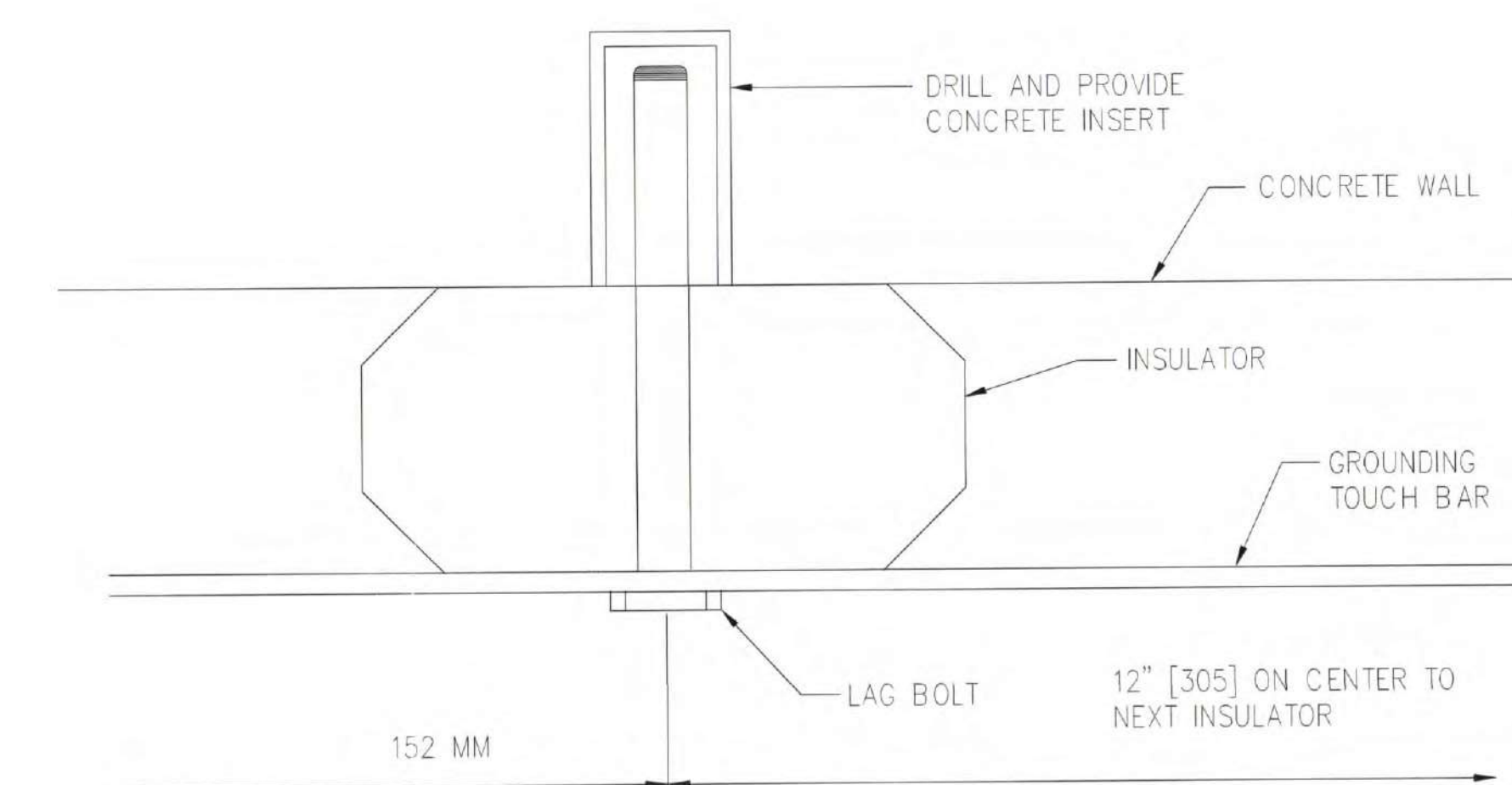
3 GROUND ROD TEST WELD DETAIL
SCALE N.T.S.



4 PARAPET AIR TERMINAL MOUNTING DETAIL
SCALE N.T.S.



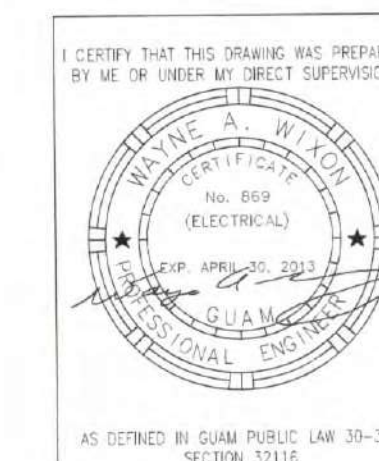
5 GROUNDING ROD DETAIL
SCALE N.T.S.



* GROUND TOUCH BAR SHALL BE 6MM THICKx 51MM WIDE x 610MM LONG FLAT COPPER BAR. SOLDERLESS 2-HOLE BOLTED CONNECTION LUGS SHALL BE PROVIDED FOR CONNECTIONS TO THE GROUND GRID. LUGS SHALL BE SIZED FOR A 4/0 BARE COPPER CABLE. MOUNT 1016 MM AFF.

6 GROUNDING BAR DETAIL
SCALE N.T.S.

AS BUILT



REVISIONS				
SYMBOL	DESCRIPTION	INT.	DATE	APP'D.

GUAM POWER AUTHORITY P.O. BOX 2977, HAGATNA, GUAM, USA 96910	
PROJECT NO. 124014 - ELECT	PROJECT TITLE GPA - GWA MULTI PURPOSE FACILITY
DESIGNED BY VC	CHECKED BY WW
DRAWN BY VC	APPROVED BY GPA
ENGINEER SUPERVISOR PERRY B. TALADOC	
MANAGER OF ENGINEERING JOVEN G. ACOSTA	
ASSISTANT GENERAL MANAGER MELINDA R. CAMACHO, P.E.	
DATE 2012.11.06	SCALE 1/8" = 1'-0"
DATE 11/1/12	GENERAL MANAGER JOAQUIN C. FLORES, P.E.
SHT 429 OF 438	SHEET E-903