American Samoa Power Authority
P.O. Box PPB
Pago Pago, American Samoa 96799
Telephone: (684) 699-3057
Email: procurement@aspower.com
Website: www.aspower.com

ISSUANCE DATE: **April 9, 2025**

RFP NO.: **RFQ No. ASPA25.030 – Materials for Pago HV ACP Replacement**

SUBJECT: **Addendum No. 1**

The American Samoa Power Authority hereby issues Addendum No. 1 to amend Request for Quotations (RFQ) requirements. This addendum is issued pursuant to the conditions of the RFQ documents and is hereby made part of the RFQ. The addendum serves to clarify, revise, and supersede information contained in the RFQ. The Offeror must acknowledge receipt of this addendum in the appropriate space provided in the Addendum Form. Failure to do so may subject the Offeror to disqualification.

1. **The closing date for this tender has been extended as follows:**

   Closing Date & Time: Wednesday, April 30 at 2:00PM

2. **This third addendum contains responses to queries received for this tender.**

Should you have any questions or need clarification, please call me at (684) 699-3057 or procurement@aspower.com.

Sincerely,

Renee Leotele Togafau
Procurement Manager

Please sign and date below to acknowledge receiving Addendum 1. You may return this document via email at procurement@aspower.com, or the ASPA Procurement Office.

ACKNOWLEDGEMENT OF RECEIVING ADDENDUM 1

Received by _____, this _____day of _____ 2025.

Company _____ Title _____

Fax No. _____ Email Address _____

RFQ NO. ASPA25.030 - Materials for Pago HV ACP Replacement		
#	**Question**	**Answer:**
1	We do need any applicable drawings for the proejct, as there are some tiems i.e., the water tanks and utility assemblies, it is necessary to have some reference drawings for some items to quote accurately and completely.	Copy. Drawings attached.
2	There are two sections of specifications included with the RFQ. We request a clarification on how to quote if we do find difference between items in these two sets of specifications. We have not completed a review of all items at this point in time.	Go with the Materials Specification.
	a. Pages 28-52 (of 248) have a title page indicating this project by name and include what seems to be a reasonably complete set of specification for the waterline items on the project.	Go with the Materials Specification.
	b. Pages 53-248 (of 248) include a comprehensive set of general specifications, including waterline products shown on pages 151-233 of this section.	Go with the Materials Specification.
3	Requesting a time extension	Will 30-days be sufficient from closing date?
4	For some of the items listed, such as fabricated pipe couplings, the descriptions on the Bill of Materials do call out different specs than the project and general specifications outline.	Go with the Materials Specification.
5	For other itmes such as the tanks - any plns, drawings, and/or details which can be provided will assist us in selecting products which will ultimately be what is needed/required.	Copy. Drawings attached.
6	Some items need additional references to type, mateirals, and dimensions among other information needed to quote.	Please clarify any specifics. Go with the Materials Specification.

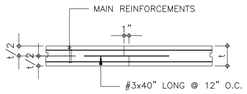
ADDENDUM #1 - ASPA25.030

No.	Description	Unit	Qty	RFI Notes	ASPA RESPONSE
1	**8" PVC MAIN WATERLINE & FITTINGS**			X	
1.01	8"x20' ULTRA BLUE PVCO AWWA C909	EA	110	Please confirm Class 235 or ?	8"x20' ULTRA BLUE PVCO AWWA C909 IPEX Inc. - BIONAX ® PVCO, or approved equal, Class 235psi
1.02	PVCO PIPE OR APPROVED EQUAL	EA	110	Is this a duplication of item 1.01 or a different size?	8"Ø PVC PIPE BELL RESTRAINT HARNESS SERIES 1600 FOR C909 PVCO PIPE OR APPROVED EQUAL
1.03	8"x5' DI Pipe	EA	5	Estimating as DI Spool - please confirm ends: FLG x FLG or FLG x PLN ?	8"x5' DI Spool FLxFL
1.04	MJ fitting, cement lined and bit coated	EA	65	Need to know size and type - bend, tee, ?	8" 11.25° DI Elbow, MJxMJ CDMJB1108 MJxMJ BEND 11 1/4° DI C153 MJ fitting, cement lined and bit coated
1.05	MJ fitting, cement lined and bit coated	EA	20	Need to know size and type - bend, tee, ?	8" 22.5° DI Elbow, MJxMJ CDMJB2208 MJxMJ BEND 22 1/2° DI C153 MJ fitting, cement lined and bit coated
1.06	fitting, cement lined and bit coated	EA	35	Need to know if Flg, MJ, Combo, and size and type - bend, tee, ?	8" 45° DI Elbow, MJxMJ CDMJB4508 MJxMJ BEND 45° DI C153 MJ fitting, cement lined and bit coated
1.12	8" Gate Valve from CLOW Valve Co. FL x FL - F-6102	EA	5	Confirm if 2" OpNut, HndWhl, or Post-Ind?	2" OpNut
1.14	8" Flange Kit with Bolts, Nuts, Washers, & Gaskets	EA	40	Confirm type Galv Steel or Stainless (304 or 316 if SSTL)	304SS
1.17	12" CR LGTH	EA	15	Please clarify what this is? - Is this Romac 501?	8" Romac Coupling Style 501 Straight PVC 8.60-9.06 x PVC 8.60-9.06 w/ 12" CR LGTH
1.18	Electronic markers, Omni Markers 66.35 KHZ or approved equal	EA	50	Confirm color (Blue or ?)	ELECTRONIC MARKERS, OMNI MARKERS 66.35 KHZ BLUE CATALOG ID OM-08 (SOLD IN CASE OF 30 BALLS PER CASE)
1.2	1000-LF Warning tape marked "Caution Buried Water Pipe Below"	EA	3	Confirm - is this 3" Wide Detectable Blue?	3" or 6" wide detectable blue
1.21	approved equal	EA	1	What does this mean?	Marker/Locator, Electronic (EML100), Marker Mate Cat No. 50607984 or approved equal
				-	
2	**6" PVC WATERLINE BRANCH & FITTINGS**			-	
2.01	6"x20' ULTRA BLUE PVCO AWWA C909	EA	10	Please confirm Class 235 or ?	6"x20' ULTRA BLUE PVCO AWWA C909 IPEX Inc. - BIONAX ® PVCO, or approved equal, Class 235
2.02	PVCO PIPE OR APPROVED EQUAL	EA	10	Is this a duplication of item 1.01 or a different size?	6"Ø PVC PIPE BELL RESTRAINT HARNESS SERIES 1600 FOR C909 PVCO PIPE OR APPROVED EQUAL, CLASS 235
2.03	MJ fitting, cement lined and bit coated	EA	20	Need to know	6" 11.25° DI Elbow, MJxMJ CDMJB1106 MJxMJ BEND 11 1/4° DI C153 MJ fitting, cement lined and bit coated
2.04	MJ fitting, cement lined and bit coated	EA	20	Need to know size and type - bend, tee, ?	6" 22.5° DI Elbow, MJxMJ CDMJB2206 MJxMJ BEND 22 1/2° DI C153 MJ fitting, cement lined and bit coated
2.05	fitting, cement lined and bit coated	EA	15	Need to know size and type - bend, tee, ?	6" 45° DI Elbow, MJxMJ CDMJB4506 MJxMJ BEND 45° DI C153 MJ fitting, cement lined and bit coated
2.06	6" Gate Valve from CLOW Valve Co. FL x MJ - F-6106	EA	10	Confirm if 2" OpNut, HndWhl, or Post-Ind?	2" OpNut
2.09	6" Flange Kit with Bolts, Nuts, Washers, & Gaskets	EA	30	Confirm type Galv Steel or Stainless (304 or 316 if SSTL)	304SS
2.11	6" Romac Coupling Style 501 Straight PVC 6.60-6.91 x PVC 6.60-6.91 w/ 12" CR LGTH	EA	5	Please confirm if Shop Coat or Epoxy, Std HSLA Steel, 304, or 316 SSTL	304SS
2.12	Electronic markers, Omni Markers 66.35 KHZ or approved equal	EA	5	Confirm color (Blue or ?)	Blue
2.14	1000-LF Warning tape marked "Caution Buried Water Pipe Below"	EA	5	Confirm - is this 3" Wide Detectable Blue?	3" or 6" wide detectable blue
	4" PRV Assy. Tie-in to 6" Waterline Branch			X	
2.16	6" Gate Valve from CLOW Valve Co. MJ x MJ - F-6100	EA	10	Please confirm if 2" OpNut or other?	2" OpNut
2.17	6"x4" DI Reducer MJxMJ CMDJR0604 DI C153 MJ fitting, cement lined and bit coated	EA	5	Please confirm: Concentric or Eccentric	Concentric

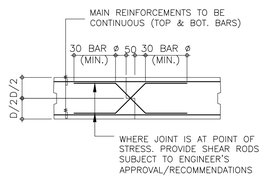
2.21	4" Romac Dismantling Joint DJ400 or ASPA approved equal	EA	5	Confirm Bolts - HSLA Steel, 304 or 316 SSTL	304
				X	
3	**2" PVC WATERLINE BRANCH & FITTINGS**			X	
3.09	Electronic markers, Omni Markers 66.35 KHZor approved equal	EA	5	Confirm color (Blue or ?)	blue
3.1	1000-LF Warning tape marked "Caution Buried Water Pipe Below"	EA	1	Confirm - is this 3" Wide Detectable Blue?	3" or 6" wide detectable blue
	2" PRV Assy. Tie-in to 2" Waterline Branch			X	
				X	
4	**SERVICE CONNECTION - (QTY: 115) All Brass fittings to be "No Lead" and conform to AWWA C800, ASTM B584, ANSI B16.15, and threads conform to ANSI/ASME B1.20.1**			X	
	1" PRV Assy. Tie-in to 1" Service Connection			X	
				X	
5	**1" WATER METER ASSEMBLY**			X	
				X	
6	**FIRE HYDRANT ASSEMBLY - (QTY: 8)**			X	
6.02	6"x20' ULTRA BLUE PVCO AWWA C909	EA	10	Please confirm Class 235 or ?	Class 235 psi
6.03	8" Gate Valve from CLOW Valve Co. FL x MJ - F-6106	EA	5	Confirm if 2" OpNut, HndWhl, or Post-Ind?	2" OpNut
6.04	6" Gate Valve from CLOW Valve Co. FL x MJ - F-6106	EA	15	Confirm if 2" OpNut, HndWhl, or Post-Ind?	2" OpNut
6.16	8" Flange Kit with Bolts, Nuts, Washers, & Gaskets	EA	15	Confirm type Galv Steel or Stainless (304 or 316 if SSTL)	304
6.17	6" Flange Kit with Bolts, Nuts, Washers, & Gaskets	EA	50	Confirm type Galv Steel or Stainless (304 or 316 if SSTL)	304
				X	
7	**1" ARV ASSEMBLY - (QTY: 13) All Brass fittings to be "No Lead" and conform to AWWA C800, ASTM B584, ANSI B16.15, and threads conform to ANSI/ASME B1.20.1**			X	
7.01	8"X1" Service Saddle, Romac Style 202S-9.7-1" IP Painted Saddle with Stainless Straps or approved equal	EA	5	Should we quote as 202NS to match others on list?	Yes.
7.02	6"X1" Service Saddle, Romac Style 202S-7.5-1" IP Painted Saddle with Stainless Straps or approved equal	EA	10	Should we quote as 202NS to match others on list?	Yes.
				X	
8	**SAMPLING STATION - (QTY: 2)**			X	
8.02	6"X1" Service Saddle, Romac Style 202S-7.5-1" IP Painted Saddle or approved equal	EA	5	Should we quote as 202NS to match others on list?	Yes.
8.11	1" Brass Piping	EA	5	Please confirm length - 10' or 20'	12"
8.14				X	
8.15	**SHIPPING & DELIVERY TO ASPA TAFUNA**			X	
8.16	Shipping & Handling to ASPA Warehouse at Tafuna via Pago Pago Port, American Samoa. (This includes but is not limited to Shipping Insurance, destination's Custom taxes and local hauling fees)	LS	1	X	
9.01	**WATERLINE & FITTINGS**			X	
	5000 US Gallon Break Tank	EA	1	Confirm Dims, Configuration, Material - specs and plans	See attached
	3" DI Pipe Break Tank Manual Drain	EA	5	Provide spec - DI seems unique for this	See attached
No.	2" DI Pipe Break Tank Overflow Drain	EA	5	Provide spec - DI seems unique for this	See attached
1	400 US Gallon Pressure Tank	EA	1	Confirm Dims, Configuration, Material - specs and plans	See attached
1.01	4" Gate Valve from CLOW Valve Co. FL x FL - F-6102	EA	5	Confirm if 2" OpNut, HndWhl, or Post-Ind?	2" OpNut
1.02	8" Gate Valve from CLOW Valve Co. MJ x MJ - F-6100	EA	5	Confirm if 2" OpNut, HndWhl, or Post-Ind?	2" OpNut

1.03	6" Steel Saddle Mount	EA	10	Provide Additional Details	Heavy Duty pipe support - saddle mount typically used in booster station piping materials similar to: https://pipelineproducts.com/product-feature-heavy-duty-pipe-support/
1.04	4" Steel Saddle Mount	EA	10	Provide Additional Details	Heavy Duty pipe support - saddle mount typically used in booster station piping materials similar to: https://pipelineproducts.com/product-feature-heavy-duty-pipe-support/
1.18	8"x20' ULTRA BLUE PVCO AWWA C909	EA	10	Please confirm Class 235 or ?	8"x20' ULTRA BLUE PVCO AWWA C909 IPEX Inc. - BIONAX ® PVCO, or approved equal, Class 235
	8" PVC MAIN WATERLINE & FITTINGS			X	
	8"x20' ULTRA BLUE PVCO AWWA C909	EA	105	Please confirm Class 235 or ?	235psi
	8"Ø PVC PIPE BELL RESTRAINT HARNESS SERIES 1600 FOR C900 PVCO PIPE OR APPROVED EQUAL	EA	105	Confirm specs for tie-rod bolt material	medium carbon steel SAE J429 Grade 5, ASTM A449
No.	8"x5' DI Pipe	EA	5	Estimating as DI Spool - please confirm ends: FLG x FLG or FLG x PLN ?	FlxFl
1	8" Gate Valve from CLOW Valve Co. FL x FL - F-6102	EA	5	Confirm if 2" OpNut, HndWhl, or Post-Ind?	2" OpNut
1.01	8" Gate Valve from CLOW Valve Co. MJ x MJ - F-6100	EA	5	Confirm if 2" OpNut, HndWhl, or Post-Ind?	2" OpNut
1.02	8" Flange Kit with Bolts, Nuts, Washers, & Gaskets	EA	25	Confirm type Galv Steel or Stainless (304 or 316 if SSTL)	304 sstl
1.03	8" Romac Coupling Style 501 Straight PVC 8.60-9.06 x PVC 8.60-9.06 w/ 12" CR LGTH	EA	15	Please confirm if Shop Coat or Epoxy, Std HSLA Steel, 304, or 316 SSTL	epoxy, 304
1.1	Electronic markers, Omni Markers 66.35 KHZ or approved equal	EA	50	Confirm color (Blue or ?)	blue
1.11	1000-LF Warning tape marked "Caution Buried Water Pipe Below"	EA	5	Confirm - is this 3" Wide Detectable Blue?	3" or 6" wide
1.12				X	
1.15	**6" PVC WATERLINE BRANCH & FITTINGS**			X	
1.16	6"x20' ULTRA BLUE PVCO AWWA C909	EA	10	Please confirm Class 235 or ?	235psi
1.18	6"Ø PVC PIPE BELL RESTRAINT HARNESS SERIES 1600 FOR C900 PVCO PIPE OR APPROVED EQUAL	EA	10	Confirm specs for tie-rod bolt material	medium carbon steel SAE J429 Grade 5, ASTM A449
	6" Gate Valve from CLOW Valve Co. FL x MJ - F-6106	EA	5	Confirm if 2" OpNut, HndWhl, or Post-Ind?	2" OpNut
2	6" Flange Kit with Bolts, Nuts, Washers, & Gaskets	EA	15	Confirm type Galv Steel or Stainless (304 or 316 if SSTL)	304
2.01	6" Romac Coupling Style 501 Straight PVC 6.60-6.91 x PVC 6.60-6.91 w/ 12" CR LGTH	EA	5	Please confirm if Shop Coat or Epoxy, Std HSLA Steel, 304, or 316 SSTL	Epoxy, 304
2.02	Electronic markers, Omni Markers 66.35 KHZ or approved equal	EA	5	Confirm color (Blue or ?)	blue
2.07	1000-LF Warning tape marked "Caution Buried Water Pipe Below"	EA	5	Confirm - is this 3" Wide Detectable Blue?	3" or 6"
2.08	***4" PRV Assy. Tie-in to 6" Waterline Branch***			X	
2.11	6" Gate Valve from CLOW Valve Co. MJ x MJ - F-6100	EA	5	Confirm if 2" OpNut, HndWhl, or Post-Ind?	2" OpNut
2.12	4" Romac Dismantling Joint DJ400 or ASPA approved equal	EA	5	Confirm Bolts - HSLA Steel, 304 or 316 SSTL	304
2.14	Electronic markers, Omni Markers 66.35 KHZor approved equal	EA	5	Confirm color (Blue or ?)	Blue
	1000-LF Warning tape marked "Caution Buried Water Pipe Below"	EA	5	Confirm - is this 3" Wide Detectable Blue?	3" or 6" wide
2.16	***2" PRV Assy. Tie-in to 2" Waterline Branch***			X	
2.21				X	
3.09	**1" WATER METER ASSEMBLY**			X	
3.1				X	
	FIRE HYDRANT ASSEMBLY - (QTY: 5)			X	
	6"x20' ULTRA BLUE PVCO AWWA C909	EA	10	Please confirm Class 235 or ?	235 psi
5	8" Gate Valve from CLOW Valve Co. FL x MJ - F-6106	EA	5	Confirm if 2" OpNut, HndWhl, or Post-Ind?	2" OpNut

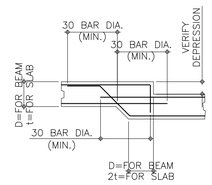
	6" Gate Valve from CLOW Valve Co. FL x MJ - F-6106	EA	10	Confirm if 2" OpNut, HndWhl, or Post-Ind?	2" OpNut
6	8" Flange Kit with Bolts, Nuts, Washers, & Gaskets	EA	15	Confirm type Galv Steel or Stainless (304 or 316 if SSTL)	304
6.02	6" Flange Kit with Bolts, Nuts, Washers, & Gaskets	EA	30	Confirm type Galv Steel or Stainless (304 or 316 if SSTL)	304
6.03				X	
6.04	**1" ARV ASSEMBLY - (QTY: 3) All Brass fittings to be "No Lead" and conform to AWWA C800, ASTM B584, ANSI B16.15, and threads conform to ANSI/ASME B1.20.1**			X	
6.16	8"X1" Service Saddle, Romac Style 202S-9.7-1" IP Painted Saddle with Stainless Straps or approved equal	EA	5	Should we quote as 202NS to match others on list?	yes
6.17	6"X1" Service Saddle, Romac Style 202S-7.5-1" IP Painted Saddle with Stainless Straps or approved equal	EA	5	Should we quote as 202NS to match others on list?	yes
				X	
7	6"X1" Service Saddle, Romac Style 202S-7.5-1" IP Painted Saddle or approved equal	EA	5	Should we quote as 202NS to match others on list?	yes
7.01	1" Brass Piping	EA	5	Please confirm length - 10' or 20'	12"
X	5000 US Gallon Break Tank	EA	1	Confirm Dims, Configuration, Material - specs and plans	03_Booster Station
	3" DI Pipe Break Tank Manual Drain	EA	5	Provide spec - DI seems unique for this	03_Booster Station
No.	2" DI Pipe Break Tank Overflow Drain	EA	5	Provide spec - DI seems unique for this	03_Booster Station
1	400 US Gallon Pressure Tank	EA	1	Confirm Dims, Configuration, Material - specs and plans	Grundfos Catalog
1.01	2"x DI Spool FLxFL Pressure Tank Drain Line	EA	5	DI pipe not avail in 2" - indicate alternate material and indicate length	03_Booster Station
1.02	4"x DI Spool FLxFL Pressure Tank Test & Drain Line	EA	5	Please indicate length	4 feet
1.03	4" Gate Valve from CLOW Valve Co. FL x FL - F-6102	EA	5	Confirm if 2" OpNut, HndWhl, or Post-Ind?	2" OpNut
1.04	8" Gate Valve from CLOW Valve Co. MJ x MJ - F-6100	EA	5	Confirm if 2" OpNut, HndWhl, or Post-Ind?	2" OpNut
1.05	6" Steel Saddle Mount	EA	10	Provide Additional Details	Heavy Duty pipe support - saddle mount typically used in booster station piping materials similar to: https://pipelineproducts.com/product-feature-heavy-duty-pipe-support/
1.06	4" Steel Saddle Mount	EA	10	Provide Additional Details	Heavy Duty pipe support - saddle mount typically used in booster station piping materials similar to: https://pipelineproducts.com/product-feature-heavy-duty-pipe-support/
1.18	8"x20' ULTRA BLUE PVCO AWWA C909	EA	10	Please confirm Class 235 or ?	235psi



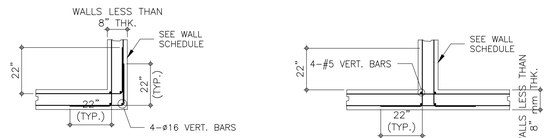
A1 N1 SUSPENDED SLAB CONSTRUCTION JOINT DETAIL
SCALE: NTS



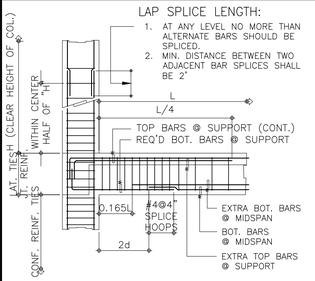
A2 N1 BEAM CONSTRUCTION JOINT DETAIL
SCALE: NTS



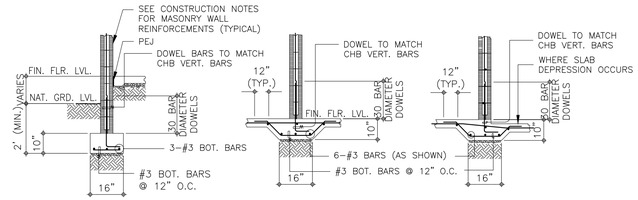
A3 N1 BEAM/SLAB CHANGE SOFFIT DETAIL
SCALE: NTS



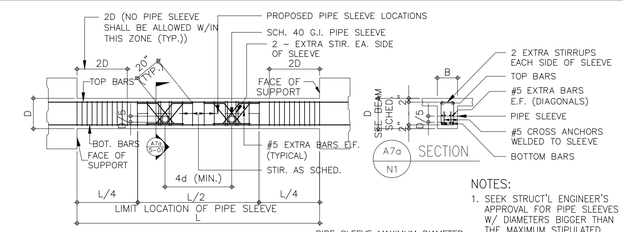
A4 N1 WALL CONNECTION AT INTERSECTION
SCALE: NTS



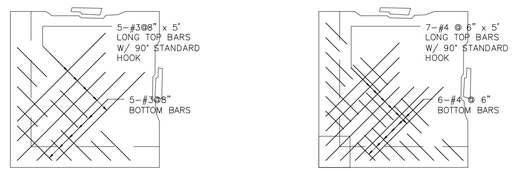
A5 N1 COLUMN LAP SPLICE & EXT. GIRDER TO COLUMN CONN. DETAIL
SCALE: NTS



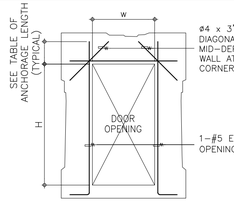
A6 N1 WALL FOOTING DETAILS (WHERE APPLICABLE)
SCALE: NTS



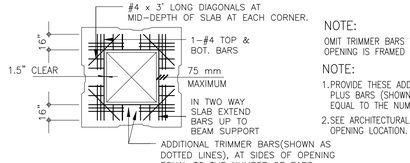
A7 N1 PIPE SLEEVE THRU BEAM DETAIL
SCALE: NTS



A8 N1 CORNER SLAB DETAIL
SCALE: NTS



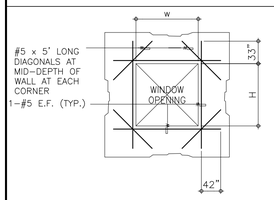
A9 N1 DOOR OPENING DETAIL
SCALE: NTS



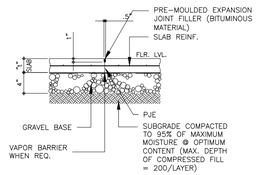
NOTE:
OMIT TRIMMER BARS WHERE OPENING IS FRAMED BY BEAMS.

NOTE:
1.PROVIDE THESE ADDITIONAL BARS FOR ALL OPENINGS PLUS BARS (SHOWN AS DOTTED LINES) PARALLEL TO SIDE OF OPENING EQUAL TO THE NUMBER OF INTERRUPTED BARS BY THE OPENING.
2.SEE ARCHITECTURAL & MECHANICAL PLANS FOR SLAB OPENING LOCATION.

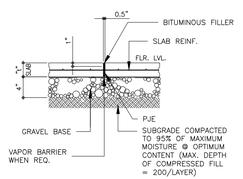
A10 N1 SLAB OPENING DETAIL
SCALE: NTS



A11 N1 WINDOW OPENING DETAIL
SCALE: NTS



A12 N1 SLAB-ON-GRADE EXPANSION JOINT DETAIL
SCALE: NTS



A13 N1 SLAB-ON-GRADE CONSTRUCTION JOINT DETAIL
SCALE: NTS

GENERAL NOTES FOR THE CONSTRUCTION OF PUMP HOUSE:

CONCRETE:

1. THE ENGINEER SHALL BE GIVEN 24 HRS NOTICE FOR REINFORCEMENT INSPECTION. CONCRETE SHALL NOT BE DELIVERED UNTIL FINAL APPROVAL HAS BEEN OBTAINED FOR THE REINFORCEMENT.
2. ALL CONCRETE SHALL HAVE THE WORKABILITY AND CONSISTENCY TO BE DEPOSITED INTO FORMS AND WORKED AROUND REINFORCEMENT WITHOUT AGGREGATION AND EXCESSIVE BLEEDING. ALL CONCRETE INCLUDING SLABS ON GROUND AND FOOTING SHALL BE COMPACTED WITH MECHANICAL VIBRATION.
3. A MINIMUM OF THREE SAMPLES SHALL BE TAKEN FROM EACH DAY OF POUR FOR TESTING. TESTING SHALL BE CARRIED OUT AT 7 DAYS AND 28 DAYS. SLUMP NOT TO EXCEED 4".
4. INTERNAL FLOOR SHALL RECEIVE A STEEL TROWELED FINISH. EXTERNAL FOOTPATH SHALL HAVE BROOM FINISH TRANSVERSAL.
5. THE FINISH TOLERANCE OF CONCRETE FLOOR SLAB SHALL BE 1/4" IN 10 FT.
6. CURING OF ALL CONCRETE IS TO BE ACHIEVED BY KEEPING SURFACE CONTINUOUSLY WET FOR A PERIOD OF SEVEN (7) DAYS. APPROVED CURING COMPOUND MAY BE USED WHERE NO FLOOR FINISH IS REQUIRED. POLYETHYLENE SHEETING MAY BE USED IF PROTECTED FROM WIND AND TRAFFIC.

LOCATION	28 DAYS STRENGTH	MAX. SIZE AGGREGATE	MAX. SLUMP
CURBS & SLAB ON GRADE	3000 PSI	1 IN. (25MM.)	4 IN. (100MM.)
FOUNDATION	3000 PSI	3/4 IN. (19MM.)	4 IN. (100MM.)
COLUMN & RETAINING WALL	3000 PSI	3/4 IN. (19MM.)	4 IN. (100MM.)
BEAMS & SLABS FDN. - ROOF	3000 PSI	1 IN. (25MM.)	4 IN. (100MM.)

MAINTAIN MINIMUM CONCRETE COVER FOR REINFORCING STEEL AS FOLLOWS:

SUSPENDED SLABS	3/4 IN. (19 MM.)
SLAB ON GRADE	1 1/2 IN. (38 MM.)
WALLS ABOVE GRADE	1 IN. (25 MM.)
BEAM STIRRUPS AND COLUMN TIES	1 1/2 IN. (38 MM.)
WHERE CONCRETE IS EXPOSED TO EARTH BUT POURED AGAINST FORMS	2 IN. (50 MM.)
WHERE CONCRETE IS DEPOSITED DIRECTLY AGAINST EARTH	3 IN. (75 MM.)

FORMWORKS CONSTRUCTIONS:

1. FORMS SHALL CONFORM TO LINES AND DIMENSION OF THE MEMBER AS REQUIRED BY DESIGN DRAWING AND SPECIFICATION.
2. FORMS SHALL BE CONSTRUCTED BY THE FOLLOWING MATERIALS:
HIDDEN SURFACE — ROUGH SAWN OR BETTER TIMBER
EXPOSED SURFACES — PLYWOOD, DRESSED T & G, OR STEEL.
DETAIL OF REINFORCEMENT:
1. ALL REINFORCEMENT SHALL BE BENT COLD. BENDING SHALL BE AS IN DESIGN.
2. ALL SPLICES SHALL BE MADE ONLY IN POSITION SHOWN ON THE DESIGN.
MIN LAP LENGTH SHALL BE AS FOLLOWS:
#3 – 2 FEET
#4 – 2 FEET
#5 – 2'–1"
#6 – 2'–8"
#7 – 2'–11"
#8 – 3'–4"
MESH – 6"
3. WELDING OF REINFORCEMENT IS NOT PERMITTED.

MASONRY:

1. ALL WORKMANSHIP AND MATERIAL SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF INTERNATIONAL BUILDING CODE (IBC) AND ACI 117–06.
2. MATERIALS:
MASONRY UNIT SHALL HAVE A MIN COMPRESSIVE STRENGTH AT 28 DAYS OF 1500 PSI. MORTAR SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS OF 1500 PSI. GROUT IN MASONRY CELL SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 2000 PSI IN 28 DAYS. COLUMNS SHALL BE FILLED WITH STRUCTURAL CONCRETE HAVING A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI IN 28 DAYS, REINFORCING STEEL BAR SHALL CONFORM TO ASTM 615 GRADE 60.
3. HANDLING:
MASONRY MATERIALS SHALL BE STORED SO THAT AT TIME OF USE, THEY ARE CLEAN AND
STRUCTURALLY SUITABLE FOR THE INTENDED USE.
ALL METAL REINFORCEMENT SHALL BE FREE FROM RUST AND OTHER COATING THAT WOULD AFFECT REINFORCING BOND. MORTAR AND GROUT MIXED AT THE JOBSITE SHALL BE MIXED FOR NOT LESS THAN 3 MINUTES AND NOT MORE THAN 10 MINUTES IN CONCRETE MIXER.

4. PLACING MASONRY UNIT:
MASONRY SHALL BE CONSTRUCTED IN RUNNING BOND PATTERNS THROUGHOUT. CONCRETE MASONRY UNIT SHALL BE WETTED DURING PLACEMENT. THE INITIAL BED JOINT SHALL NOT BE LESS THAN 1/4" IN THICKNESS OR MORE THAN 1" IN THICKNESS. SUBSEQUENT JOINT SHALL NOT BE LESS THAN 1/4" OR MORE THAN 1/2" IN THICKNESS.

5. GROUTED MASONRY:
REINFORCEMENT SHALL BE PLACED PRIOR TO GROUTING AND SECURED AGAINST DISPLACEMENT BY WIRE POSITIONERS OR OTHER SUITABLE MEANS. BOLTS SHALL
BE ACCURATELY SET WITH TEMPLATE TO PREVENT DISLOCATION DURING GROUTING. CLEANOUTS SHALL BE PROVIDED IN THE BOTTOM COURSE OF EVERY VERTICAL BAR AND SHALL BE SEALED BEFORE GROUTING. GROUTING SHALL BE CARRIED OUT IN LIFTS NOT EXCEEDING 4 FEET. ALL CELLS ARE TO BE GROUTED SOLID. GROUTING SHALL BE DONE BY MECHANICAL VIBRATION DURING PLACEMENT.

WOODS:

ALL WORKMANSHIP AND MATERIAL SHALL CONFORM WITH THE 2006 INTERNATIONAL BUILDING CODE.

MATERIAL:

1. UNLESS OTHERWISE NOTED, TIMBER SHALL BE DOUGLAS FIR NO1 GRADE.
ALL TIMBER SHALL BE CCA TREATED TO 0.25 LBS/FT. IN ACCORDANCE WITH RELEVANT
AWPA STANDARDS. A CERTIFICATE OF INSPECTION FROM A RECOGNIZED TIMBER
INSPECTION BUREAU SHALL BE SUBMITTED WITH EACH SHIPMENT OF TIMBER.
2. PLYWOOD USED FOR STRUCTURAL SHALL BE CD PANEL GRADE IN ACCORDANCE
WITH THE STANDARDS GRADING RULE OF WWPA. ALL PLYWOOD SHALL BE TREATED.
3. BOLTS SHALL BE ALL GENERAL PURPOSE BOLTS ASTM 307.
4. ALL NAILS, NAIL PLATES, BOLTS AND WASHERS SHALL BE HOT DIPPED GALVANIZED.
STORAGE OF MATERIAL:
TIMBER STORED ON THE WORK SITE SHALL BE KEPT IN ORDERLY STACKS ON SUPPORT
AT LEAST 12" ABOVE THE GROUND SURFACE. THE MATERIAL SHALL BE PROTECTED
FROM THE WEATHER BY A SUITABLE COVERING.

WORKMANSHIP:

WORKMANSHIP SHALL BE FIRST CLASS THROUGHOUT. ALL TIMBER SHALL BE ACCURATELY
CUT AND FRAMED TO FIT CLOSE IN SUCH A MANNER THAT THE JOINT SHALL HAVE BEARING
OVER THE CONTACT SURFACE. MORTISES SHALL BE TRUE TO SIZE FROM THIER FULL
DEPTH AND TENONS SHALL FIT SNUGLY. NO SHIMMING WILL BE PERMITTED IN MAKING
JOINTS, NO OPEN JOINTS WILL BE ACCEPTED. UNLESS OTHERWISE SPECIFIED, NAILS
SHALL BE DRIVEN WITH HEAD SET FLUSH WITH THE SURFACE OF THE WOOD.

BOLTS AND LAG SCREW:

1. HOLES AND BOLTS SHALL BE BORED WITH A BIT THE SAME DIAMETER AS THE BOLTS. HOLES FOR LAG SCREW SHALL BE BORED WITH A BIT NOT LARGER THAN THE BODY OF THE SCREW AT THE BASE OF THE THREAD.
2. WASHERS OF THE SIZE AND TYPE SPECIFIED SHALL BE USED UNDER ALL BOLTS
HEADS AND NUTS.

Registered Professional Engineer (Civil)
CERTIFICATE NO.
47880
WILLIAM E. SPITZENBERG
Date Signed: Aug. 25, 2023
ARIZONA, U.S.A.
Expires 3/31/2026

PREPARED BY: SIMON FRANK F. ABRAHAM
CHECKED BY: WILLIAM SPITZENBERG, P.E.
APPROVED BY: WILLIAM SPITZENBERG, P.E.
ISSUE FOR: CONSTRUCTION

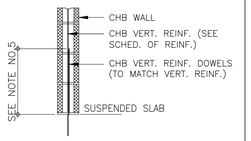
PIOA — Precision Ingenuity Outstanding Authentic — Consulting & Engineering

PROJECT NAME: PAGO PAGO HAPPY VALLEY ACP REPLACEMENT PROJECT
DRAWING TITLE: FOUNDATION PLAN AND DETAIL
PROJECT LOCATION: AMERICAN SAMOA

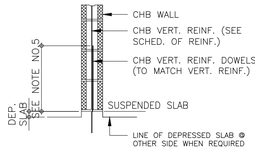
REVISION HISTORY:

NO.	DATE	DETAILS OF REVISION	REVISED BY

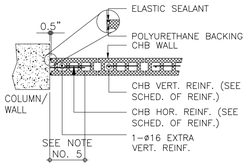
SCALE: AS SHOWN
PROJECT #:
SHEET NO.: N1 / ##



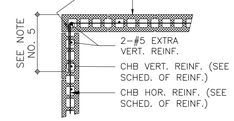
A1 / N2 WALL BASE REINFORCING AT FLAT FLOOR
SCALE: NTS



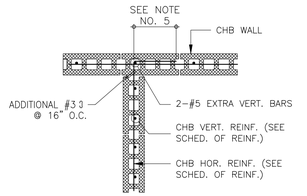
A2 / N2 WALL BASE REINFORCING AT FLOOR WITH DEPRESSION
SCALE: NTS



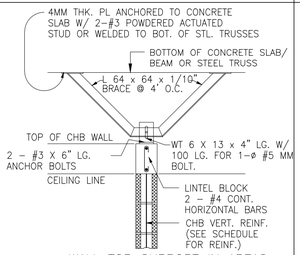
A3 / N2 WALL REINFORCING AT R.C. COLUMN/WALL
SCALE: NTS



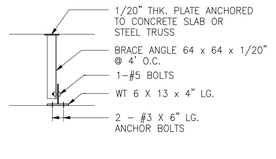
A4 / N2 WALL REINFORCONNG AT CORNER
SCALE: NTS



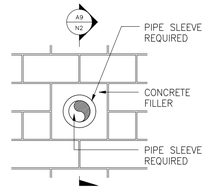
A5 / N2 WALL REINFORCING AT INTERSECTION
SCALE: NTS



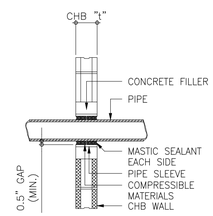
A6 / N2 WALL TOP SUPPORT IN AREAS WITH DROPPED CEILINGS
SCALE: NTS



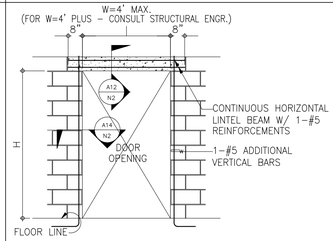
A7 / N2 SECTION
SCALE: NTS



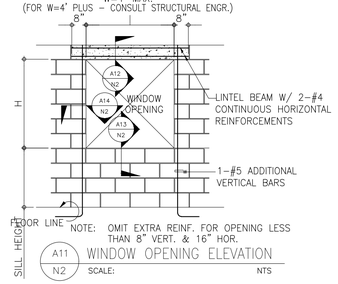
A8 / N2 PIPE SLEEVE THRU WALL
SCALE: NTS



A9 / N2 SECTION
SCALE: NTS

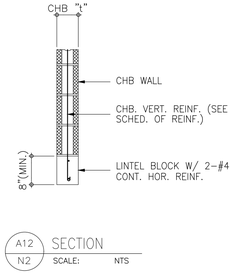


A10 / N2 DOOR OPENING ELEVATION
SCALE: NTS

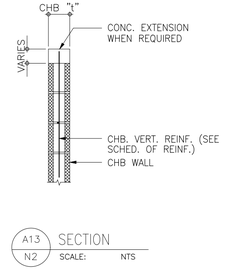


NOTE: OMIT EXTRA REINF. FOR OPENING LESS THAN 8" VERT. & 16" HOR.

A11 / N2 WINDOW OPENING ELEVATION
SCALE: NTS



A12 / N2 SECTION
SCALE: NTS



A13 / N2 SECTION
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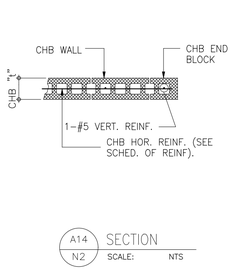
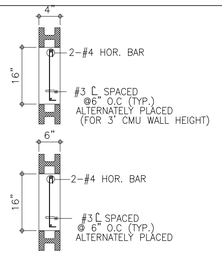
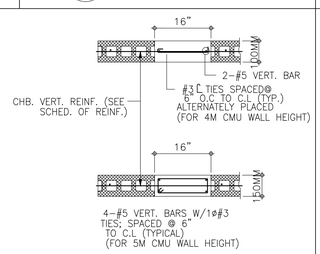


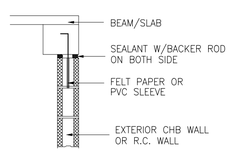
A14 / N2 SECTION
SCALE: NTS



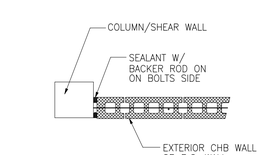
A15 / N2 TYP. CHB STIFFENER BEAM DETAIL
SCALE: NTS



A16 / N2 TYP. STIFFENER COLUMN DET. ON CHB WALLS
SCALE: NTS



A17 / N2 EXTERIOR WALL SUPPORT AT BOTT. OF BEAM/SLAB SOFFIT
SCALE: NTS



A18 / N2 EXTERIOR WALL SUPPORT AT BOTT. OF BEAM/SLAB SOFFIT
SCALE: NTS

GENERAL NOTES FOR THE CONSTRUCTION PIPE LINES AND WATER LINES

GENERAL NOTES:

1. ELEVATIONS USED IN THE DRAWINGS (IN FEET) ARE BASED ON 0.00 AT MEAN SEA LEVEL.
2. LOCATION OF UNDERGROUND UTILITIES ARE BASED ON REFERENCED DRAWINGS OR VISIBLE FITTINGS, MANHOLES, PATCHED TRENCHES AND OTHER GROUND MARKINGS AND THEREFORE ARE APPROXIMATE. CONTRACTOR SHALL VERIFY THE EXACT LOCATIONS OF UNDERGROUND EXISTING UTILITIES PRIOR TO CONSTRUCTION.
3. ALL WORKS INVOLVING UTILITIES SHALL BE COORDINATED AND CLEARED WITH THE RESPECTIVE UTILITY AGENCIES PRIOR TO ANY EXCAVATION. IT IS THE CONTRACTOR RESPONSIBILITY TO OBTAIN ALL PERMITS AND CLEARANCES PRIOR TO CONSTRUCTION.
4. CONTRACTOR SHALL LOCATE ALL WATER AND SEWER LATERALS AND ENSURE THEY REMAIN IN SERVICE DURING CONSTRUCTION. CONTRACTOR SHALL REPLACE ANY DAMAGED SURFACES AND RELOCATE ANY LATERALS DUE TO CONFLICTS WITH THE WORK. MATERIALS FOR THE INSTALLATION OF WATER OR SEWER LATERAL SHALL BE IN ACCORDANCE WITH LOCAL SPECIFICATION STANDARDS AND REQUIREMENTS.
5. THE UNDERGROUND PIPES, CABLES OR DUCT LINES KNOWN TO EXIST BY THE ENGINEER FROM HIS SEARCH OF RECORDS ARE INDICATED ON THE PLANS. THE CONTRACTOR SHALL VERIFY THE LOCATIONS AND DEPTHS OF THE FACILITIES AND EXERCISE PROPER CARE IN EXCAVATING THE AREA. WHEREVER CONNECTIONS OF NEW UTILITIES TO EXISTING UTILITIES ARE SHOWN ON THE PLANS, THE CONTRACTOR SHALL EXPOSE THE EXISTING LINES AT THE PROPOSED CONNECTIONS TO VERIFY THEIR LOCATIONS AND DEPTHS PRIOR TO EXCAVATION FOR NEW LINES.
6. THE CONTRACTOR SHALL EXERCISE CARE WHEN PERFORMING HIS WORK AND SHALL BE HELD LIABLE FOR ANY DAMAGES INCURRED TO THE EXISTING FACILITIES, UTILITIES AND OTHER FEATURES, WHETHER SHOWN OR NOT ON PLANS, AS A RESULT OF HIS OPERATIONS. ALL DAMAGED PORTIONS SHALL BE REPLACED IN ACCORDANCE WITH THE REQUIREMENTS OF THE AFFECTED OWNER OR USER AT THE CONTRACTOR'S EXPENSE. IN THE CASE WHERE THE CONTRACTOR DAMAGES AN EXISTING LINE, THE CONTRACTOR TO IMMEDIATELY REPORT THE DAMAGE TO THE UTILITY COMPANY AND TO INFORM THE ASPA PROJECT ENGINEER/ SITE REPRESENTATIVE OF THE DAMAGE.
7. CONTRACTOR SHALL RESTORE TO THEIR ORIGINAL CONDITION ALL IMPROVEMENTS DAMAGED AS A RESULT OF THE CONSTRUCTION INCLUDING BUT NOT LIMITED TO PAVEMENTS, SIDEWALK, EMBANKMENTS, CURBS, RAMPS, SIGNS, LANDSCAPING, STRUCTURES, UTILITIES, WALLS, FENCES, ETC. MATCH EXISTING INCLUDE FINISHING.

CONSTRUCTION NOTES:

1. ALL APPLICABLE CONSTRUCTION WORK SHALL BE DONE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR ROADS AND DRAINAGE AT DEPT. OF PUBLIC WORKS (AS–DPW). ASPA SHALL BE CONTACTED FOR ALL WATER, SEWER AND ELECTRICAL WORK AND ASTCA FOR CABLE AND COMMUNICATIONS LINES.
2. VERIFY AND CHECK ALL DIMENSIONS AND DETAILS SHOWN ON THE DRAWINGS PRIOR TO THE START OF CONSTRUCTION. ANY DISCREPANCY SHALL BE BROUGHT IMMEDIATELY TO THE ATTENTION OF ASPA PROJECT ENGINEER FOR CLARIFICATION.
3. THE CONTRACTOR SHALL OBSERVE AND COMPLY WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL LAWS REQUIRED FOR THE PROTECTION OF PUBLIC HEALTH, SAFETY AND ENVIRONMENTAL QUALITY.
4. THE CONTRACTOR SHALL COORDINATE HIS HAUL ROUTE STAGING AREA AND ALL ASSOCIATED REQUIREMENTS, SUCH AS, LAND USE PERMIT, WITH THE PNRS, CONTRACTING OFFICER, AND AFFECTED LANDOWNER.
5. A SEPARATE LAND USE PERMIT MUST BE OBTAINED BY THE CONTRACTOR IF THE CONTRACTOR'S STAGING AREA OR ANY WORK IS OUTSIDE THE LIMITS OF THE CONTRACT. THE EXISTING LAND USE PERMIT IS CONDITIONED ON A DIVISION OF MARINE AND WILDLIFE RESOURCES REVIEW PRIOR TO CONSTRUCTION.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CLEARING AND REMOVAL OF ALL SILT AND DEBRIS GENERATED BY HIS GRADING AND CONSTRUCTION WORK AND DEPOSITED AND ACCUMULATED ON ROADWAYS AND OTHER AREAS.
7. ALL EXISTING UTILITIES, CONCRETE WALKWAYS, STEPS AND WALLS, WHETHER OR NOT SHOWN ON THE DRAWINGS, EXCEPT THOSE DESIGNATED TO BE REMOVED, SHALL BE PROTECTED FROM DAMAGED AT ALL TIMES DURING CONSTRUCTION AND GRADING WORK. ANY DAMAGES TO THEM SHALL BE REPAIRED BY THE CONTRACTOR AT HIS EXPENSE.
8. WORK SHALL BE DONE BETWEEN 7:30AM AND 4:00PM SAMOA STANDARD TIME. NO WORK SHALL BE DONE ON SATURDAYS, SUNDAYS, FEDERAL HOLIDAYS OR AFTER NORMAL WORK HOURS AT ANY TIME, WITHOUT SPECIAL ARRANGEMENT AND PRIOR APPROVAL BY THE CONTRACTING OFFICER.
9. EXISTING UTILITIES SHALL REMAIN IN SERVICE AND IN PLACE, IF RELOCATION OF EXISTING UTILITIES IS REQUIRED FOR THE CONTRACTOR'S CONVENIENCE, INTERRUPTION OF SERVICE SHALL BE KEPT TO A MINIMUM AND SHALL BE DONE AT THE CONTRACTOR'S EXPENSE AND ONLY WITH THE APPROVAL OF ASPA PROJECT ENGINEER.
16. WHEREVER EXISTING FENCE IS REMOVED, PROVIDE CHAIN LINK FENCE AS NECESSARY TO SECURE PROTECTED AREAS PRIOR TO THE END OF EACH WORK DAY. TRENCHES CROSSING ANY FENCE, EXISTING OR NEW, SHALL NOT BE LEFT OPEN DURING NON–WORKING HOURS. BACKFILL A MINIMUM OF 10 FEET ON EACH SIDE OF FENCE AT THE END OF WORK DAY. OTHER MEASURES MAY BE UTILIZED AS APPROVED BY ASPA PROJECT ENGINEER.
17. UTILITY CUT–OVERS AND INTERRUPTIONS SHALL TAKE PLACE ONLY AFTER NORMAL WORKING HOURS OR ON SATURDAYS, SUNDAYS, AND GOVERNMENT HOLIDAYS. WITH PRIOR APPROVAL FROM ASPA PROJECT ENGINEER.
18. CONTRACTOR SHALL TAKE ALL NECESSARY MEASURES TO PREVENT DAMAGE TO EXISTING UTILITY LINES. CONTRACTORS SHALL BE EQUIPPED TO HANDLE ANY EMERGENCY INCLUDING BUT NOT LIMITED TO HAVING THE AVAILABLE REPAIR CLAMPS, PIPE FITTINGS, PIPING, CONTRACTOR SHALL NOT RELY ON THE AVAILABILITY OF THE GOVERNMENT FORCES TO HANDLE THE EMERGENCY. ANY COST ASSOCIATED TO THIS WORK SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR/SUBCONTRACTOR.
19. CONTRACTOR IS RESPONSIBLE FOR MEETING CONDITIONS OF PNRS PERMIT OBTAINED FOR PROJECTS. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING THE ROW AND CLEARANCE FOR THE SETUP SITE – CONSTRUCTION YARD. CONTRACTOR TO OBTAIN PERMITS FOR ELECTRICITY, WATER, SEWER, INTERNET, AND ALL OTHER UTILITIES FOR THE SITE OFFICES.

WATER NOTES:

1. EXISTING WATERLINE LOCATIONS ARE APPROXIMATE. CONTRACTOR SHALL COORDINATE LOCATING EXISTING UTILITY WITH ASPA OR OWNERS OF UTILITY LINES PRIOR TO EXCAVATION WITH APPROPRIATE ADVANCE NOTIFICATION.
2. ABANDON EXISTING WATER MAIN AND SERVICES IN PLACE ONLY AFTER THE NEW TER MAIN HAS BEEN DISINFECTED AND APPROVED BY THE AMERICAN SAMOA POWER AUTHORITY (ASPA) AND THE AMERICAN SAMOA ENVIRONMENTAL PROTECTION AGENCY.

Registered Professional Engineer (Civil)
CERTIFICATE NO.
47880
WILLIAM E. SPITZENBERG
Date Signed: Aug. 25, 2023
ARIZONA, U.S.A.
Expires 3/31/2026

PREPARED BY: SIMON FRANK F. ABRAHAM
CHECKED BY: WILLIAM SPITZENBERG, P.E.
APPROVED BY: WILLIAM SPITZENBERG, P.E.
ISSUE FOR: CONSTRUCTION

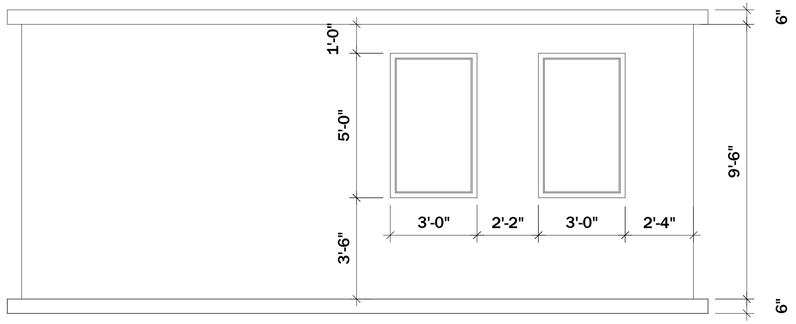
PIOA — Precision Ingenuity Outstanding Authentic — Consulting & Engineering

PROJECT NAME: PAGO PAGO HAPPY VALLEY ACP REPLACEMENT PROJECT
DRAWING TITLE: FOOTING AND TIE BEAM DETAIL
PROJECT LOCATION: AMERICAN SAMOA

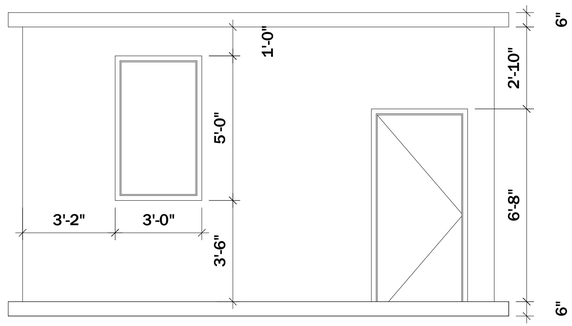
REVISION HISTORY:

NO.	DATE	DETAILS OF REVISION	REVISED BY

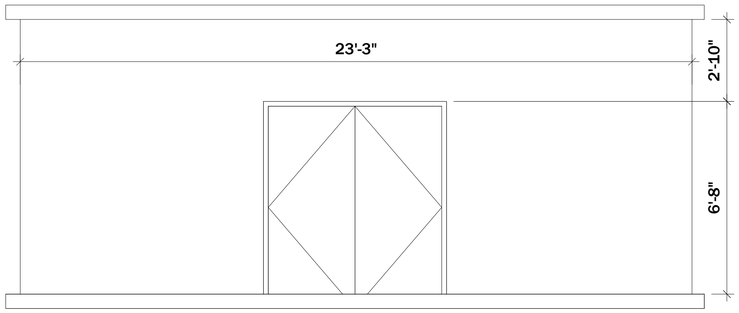
SCALE: AS SHOWN
PROJECT #:
SHEET NO.: N2 / ##



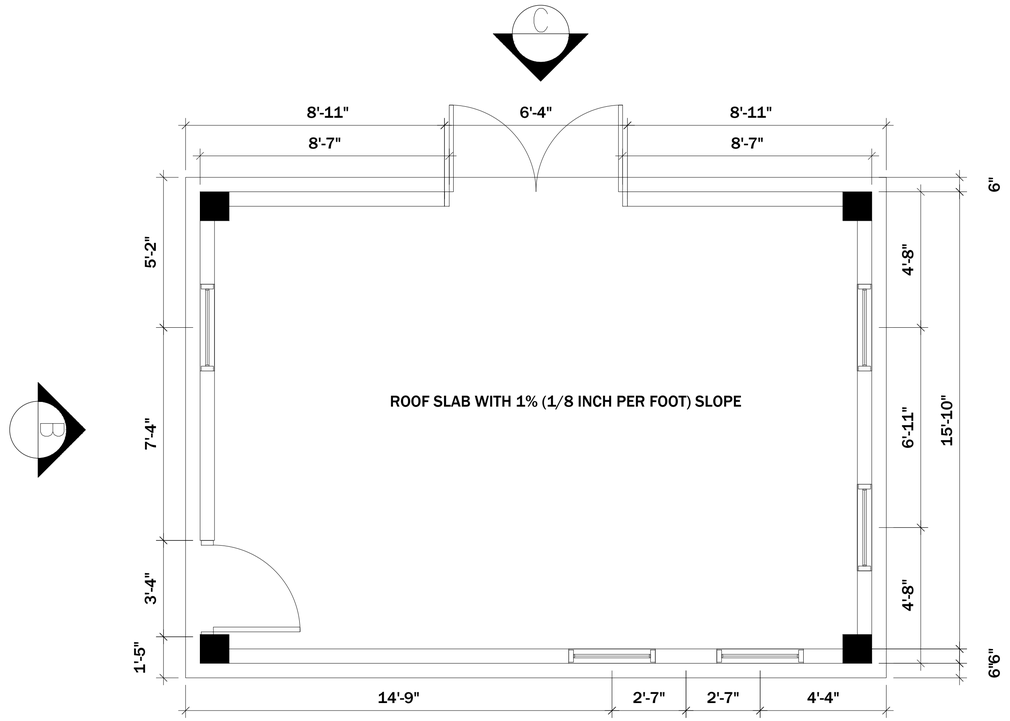
A / A1 PUMP HOUSE ELEVATION A
SCALE 3/16" – 1'–0"



B / A1 PUMP HOUSE ELEVATION B
SCALE 3/16" – 1'–0"



C / A1 PUMP HOUSE ELEVATION C
SCALE 3/16" – 1'–0"



A
D / A1 PUMP HOUSE – PLAN WITH ROOF
SCALE 3/16" – 1'–0"

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Date Signed: Aug. 25, 2023
ARIZONA, U.S.A.
Expires 3/31/2026

PREPARED BY: PETER JAMES CHIN
CHECKED BY: WILLIAM SPITZENBERG, P.E.
APPROVED BY: WILLIAM SPITZENBERG, P.E.
ISSUE FOR: CONSTRUCTION

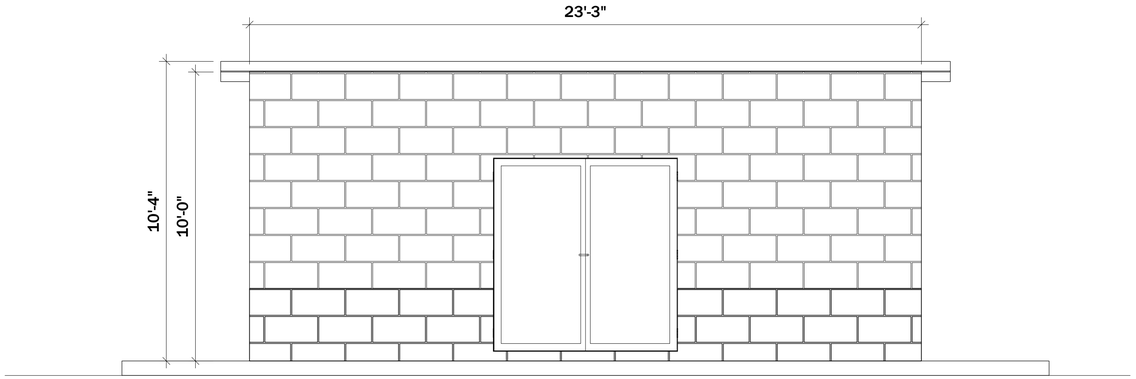
Precision Ingenuity Outstanding Authentic
PIOA
Consulting & Engineering

PROJECT NAME: PAGO PAGO HAPPY VALLEY ACP REPLACEMENT PROJECT
DRAWING TITLE: ELEVATION OF THE PUMP HOUSE
PROJECT LOCATION: AMERICAN SAMOA

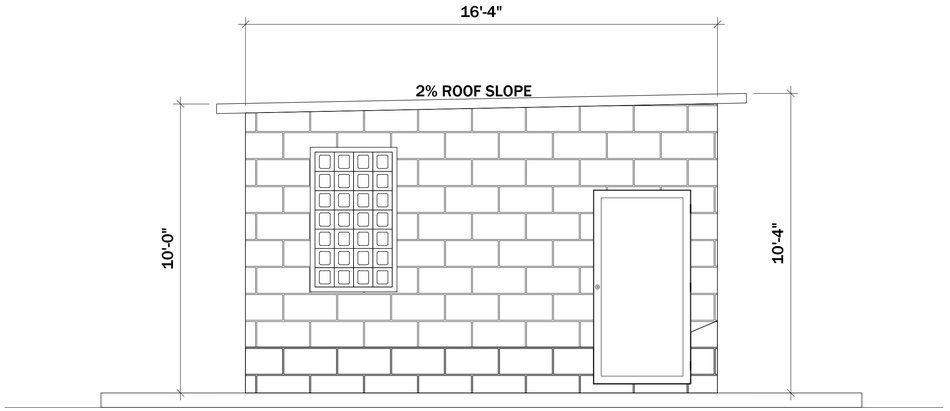
REVISION HISTORY:

NO.	DATE	DETAILS OF REVISION	REVISED BY

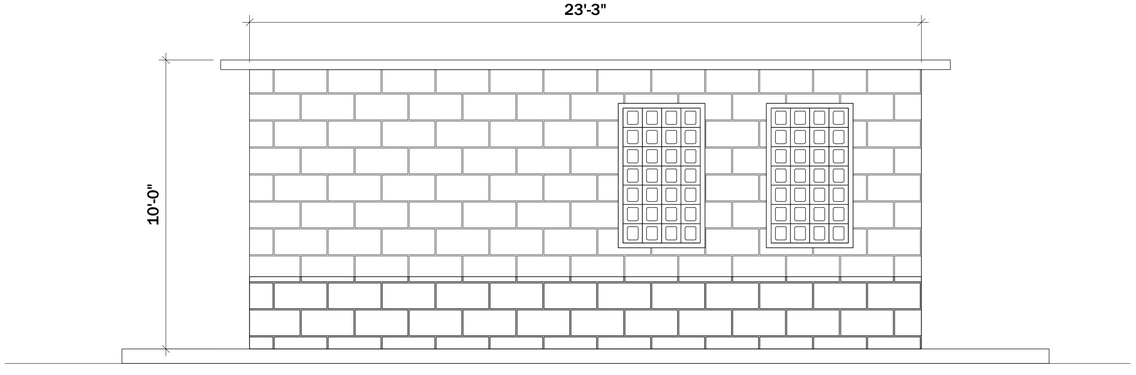
SCALE: AS SHOWN
PROJECT #:
SHEET NO. A1 / ##



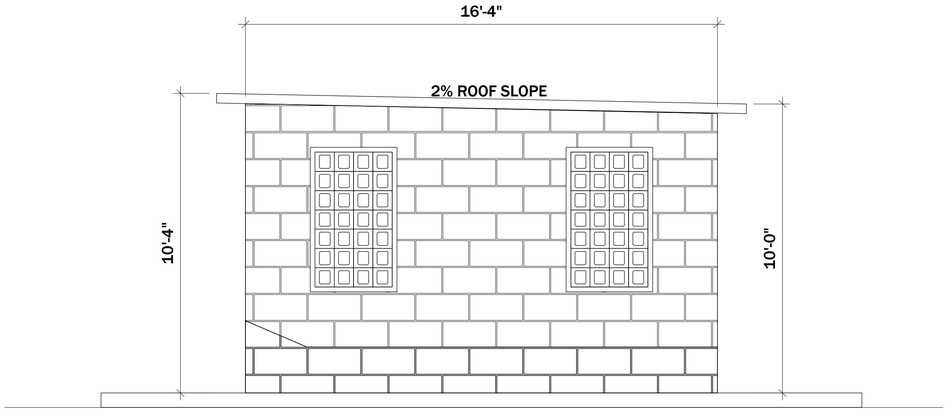
A / A2 FRONT VIEW
SCALE 3/16" = 1'-0"



C / A2 LEFT SIDE VIEW
SCALE 3/16" = 1'-0"



B / A2 REAR VIEW
SCALE 3/16" = 1'-0"



D / A2 RIGHT SIDE VIEW
SCALE 3/16" = 1'-0"

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PROJECT NAME:
PAGO PAGO HAPPY VALLEY ACP REPLACEMENT PROJECT

DRAWING TITLE:
ELEVATION OF THE PUMP HOUSE – DETAIL 1

PROJECT LOCATION:
AMERICAN SAMOA

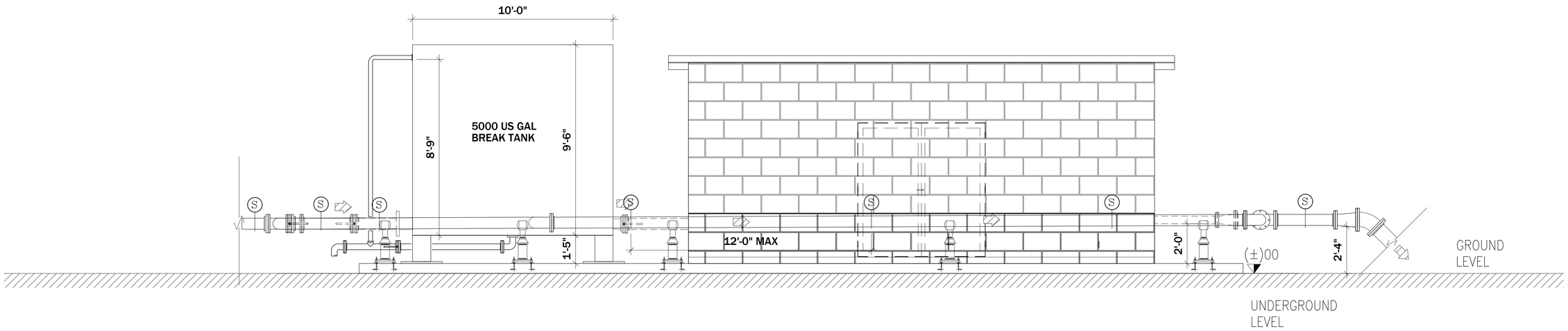
REVISION HISTORY:

NO.	DATE	DETAILS OF REVISION	REVISED BY

SCALE:
AS SHOWN

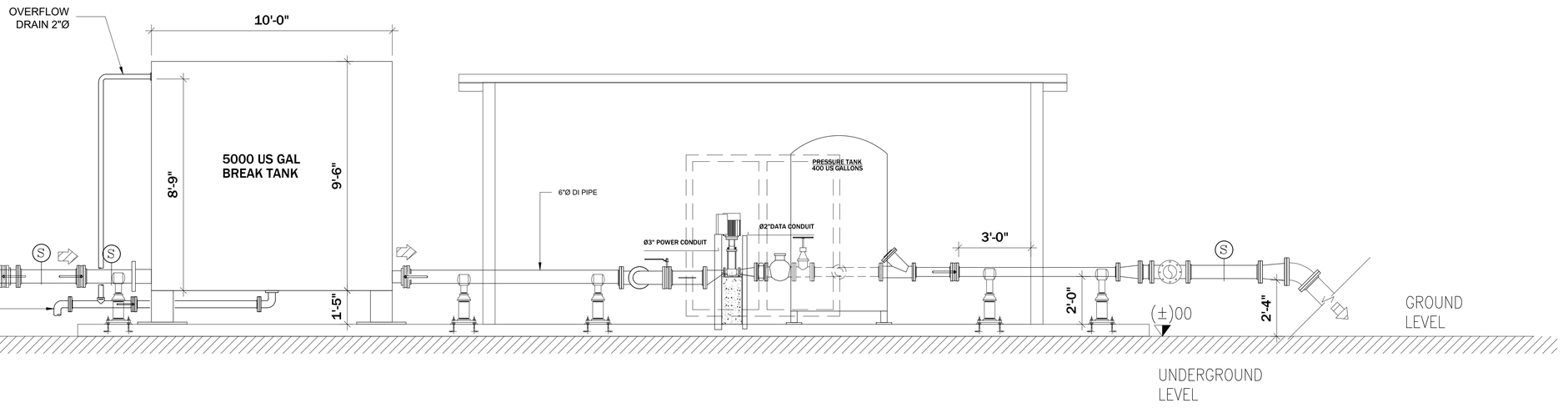
PROJECT #:

SHEET NO.
A2
##



A / A3 ELEVATION VIEW – WITH PUMP HOUSE VIEW

SCALE 3/16" = 1'-0"



B / A3 ELEVATION VIEW – WITH INSIDE VIEW

SCALE 3/16" = 1'-0"

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PROJECT NAME: PAGO PAGO HAPPY VALLEY ACP REPLACEMENT PROJECT

DRAWING TITLE: ELEVATION OF THE PUMP HOUSE – DETAIL 2

PROJECT LOCATION: AMERICAN SAMOA

REVISION HISTORY:

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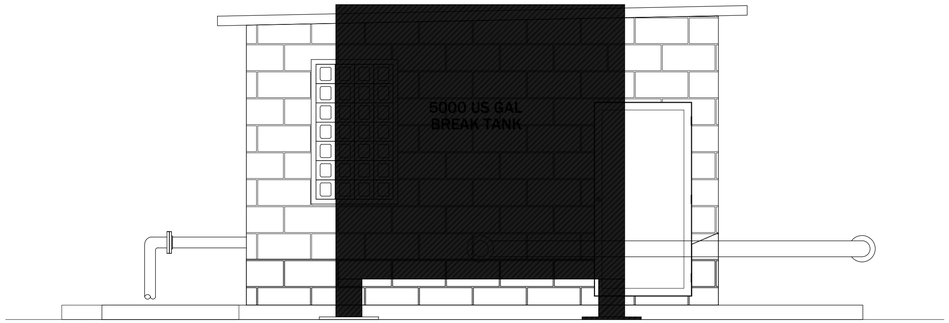
SCALE: AS SHOWN

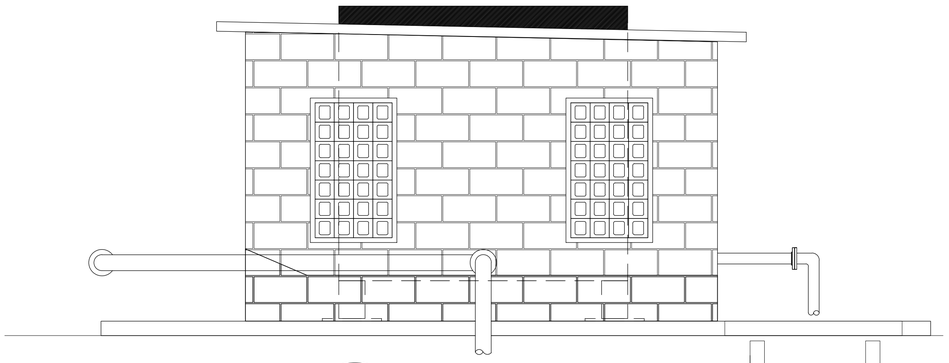
PROJECT #:

SHEET NO.: A3 / ##



A
A4
LEFT SIDE VIEW
SCALE 3/16" = 1'-0"

TEST LINE DRAIN
CONCRETE VAULT



B
A4
RIGHT SIDE VIEW
SCALE 3/16" = 1'-0"

TEST LINE DRAIN
CONCRETE VAULT

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PROJECT NAME:
PAGO PAGO HAPPY VALLEY ACP REPLACEMENT PROJECT

DRAWING TITLE:
ELEVATION OF THE PUMP HOUSE – DETAIL 3

PROJECT LOCATION:
AMERICAN SAMOA

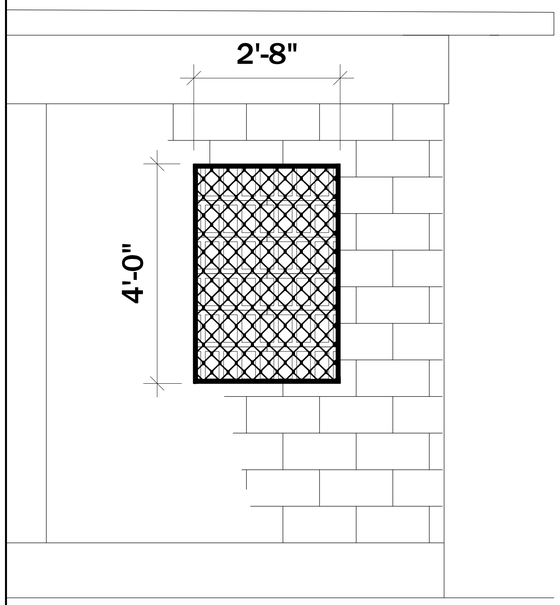
REVISION HISTORY:

NO.	DATE	DETAILS OF REVISION	REVISED BY

SCALE:
AS SHOWN

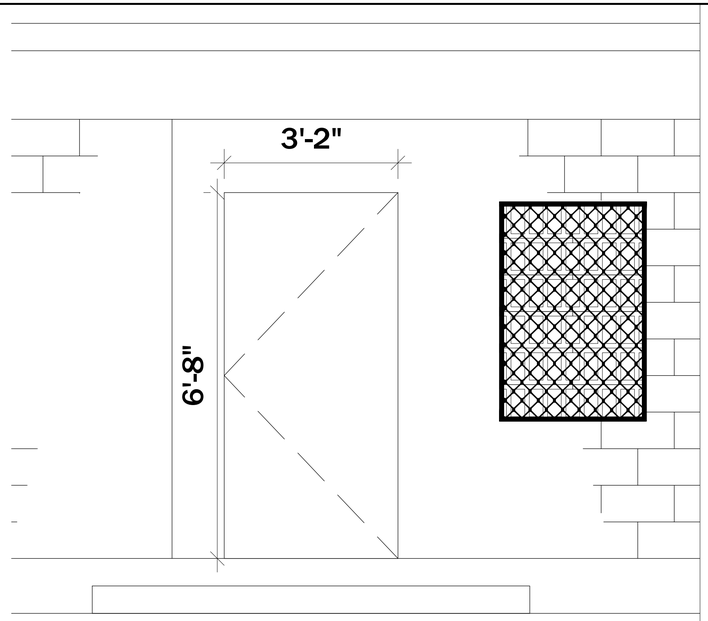
PROJECT #:

SHEET NO.
A4
##



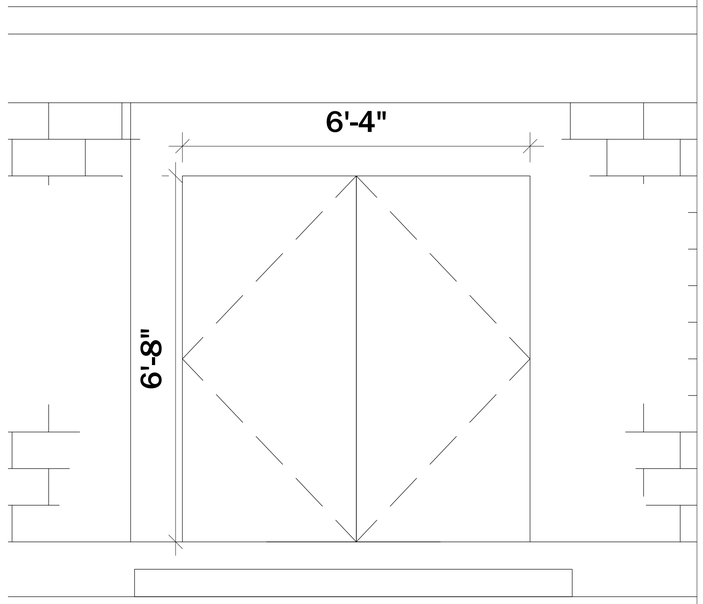
W1

a. TYPE: FIXED CMU LAY HORIZONTALLY
b. COLOR: SAME AS WALL
c. SIZE: AS SHOWN
d. MOUNTING HEIGHT: AS SHOWN
e. GLASS: NO GLASS
f. OTHER: COMPLETE WITH ALUMINUM SECURITY GRILL (AMPLEMESH) WITH ALUMINUM INSECT SCREEN



D1 – SINGLE DOOR

a. TYPE: ALUMINUM SWING DOOR
b. COLOR: BRONZE ANODIZED
c. SIZE: AS SHOWN
d. FRAME: ALUMINUM TO MATCH DOOR SYSTEM
e. LOCKS: AS SUPPLIED BY ALUMINUM FABRICATOR TO BE APPROVED BY THE PROJECT ENGINEER
f. CLOSER: AS SUPPLIED BY ALUMINUM FABRICATOR TO BE APPROVED BY THE PROJECT ENGINEER
g. HINGES: HEAVY DUTY, CONTINUES AS RECOMMENDED BY ALUMINUM FABRICATOR TO BE APPROVED BY THE PROJECT ENGINEER
h. GLASS– NO GLASS. DOOR MUST BE MADE TO RESIST 160MPH WIND VELOCITY



D2 – DOUBLE DOOR

a. TYPE: ALUMINUM SWING DOOR
b. COLOR: BRONZE ANODIZED
c. SIZE: AS SHOWN
d. FRAME: ALUMINUM TO MATCH DOOR SYSTEM
e. LOCKS: AS SUPPLIED BY ALUMINUM FABRICATOR TO BE APPROVED BY THE PROJECT ENGINEER
f. CLOSER: AS SUPPLIED BY ALUMINUM FABRICATOR TO BE APPROVED BY THE PROJECT ENGINEER
g. HINGES: HEAVY DUTY, CONTINUES AS RECOMMENDED BY ALUMINUM FABRICATOR TO BE APPROVED BY THE PROJECT ENGINEER
h. GLASS– NO GLASS. DOOR MUST BE MADE TO RESIST 160MPH WIND VELOCITY

FINISH SCHEDULE

1. EXTERIOR FINISH

1.1. FLOOR SLAB OUTSIDE: – CEMENT BROOM FINISH

1.2. EXTERIOR WALL: BLOCK WALL TOOLED FINISHED, 1– COAT PRIMER, 2– COATS FINISH PAINT

1.3. SOFFIT CEILING: CEMENT SMOOTH FINISH PAINT FINISH, 1–COAT PRIMER 2– COATS FINISH PAINT INTERIOR

2. INTERIOR FINISH

2.1. FLOOR: CEMENT SMOOTH FINISH, PAINTED WITH 2–COATS EPOXY PAINT

2.2. WALL: CMU WALL TOOLED FINISHED, 1– COAT PRIMER, 2– COATS FINISH PAINT

2.3. BASE: 1–FOOT HIGH BASE PAINTED WITH 2–COATS EPOXY PAINT

2.4. CEILING: CEMENT SMOOTH FINISH PAINT FINISH, 1–COAT PRIMER 2– COATS FINISH PAINT INTERIOR. COLOR TO BE SELECTED BY PROJECT MANAGER

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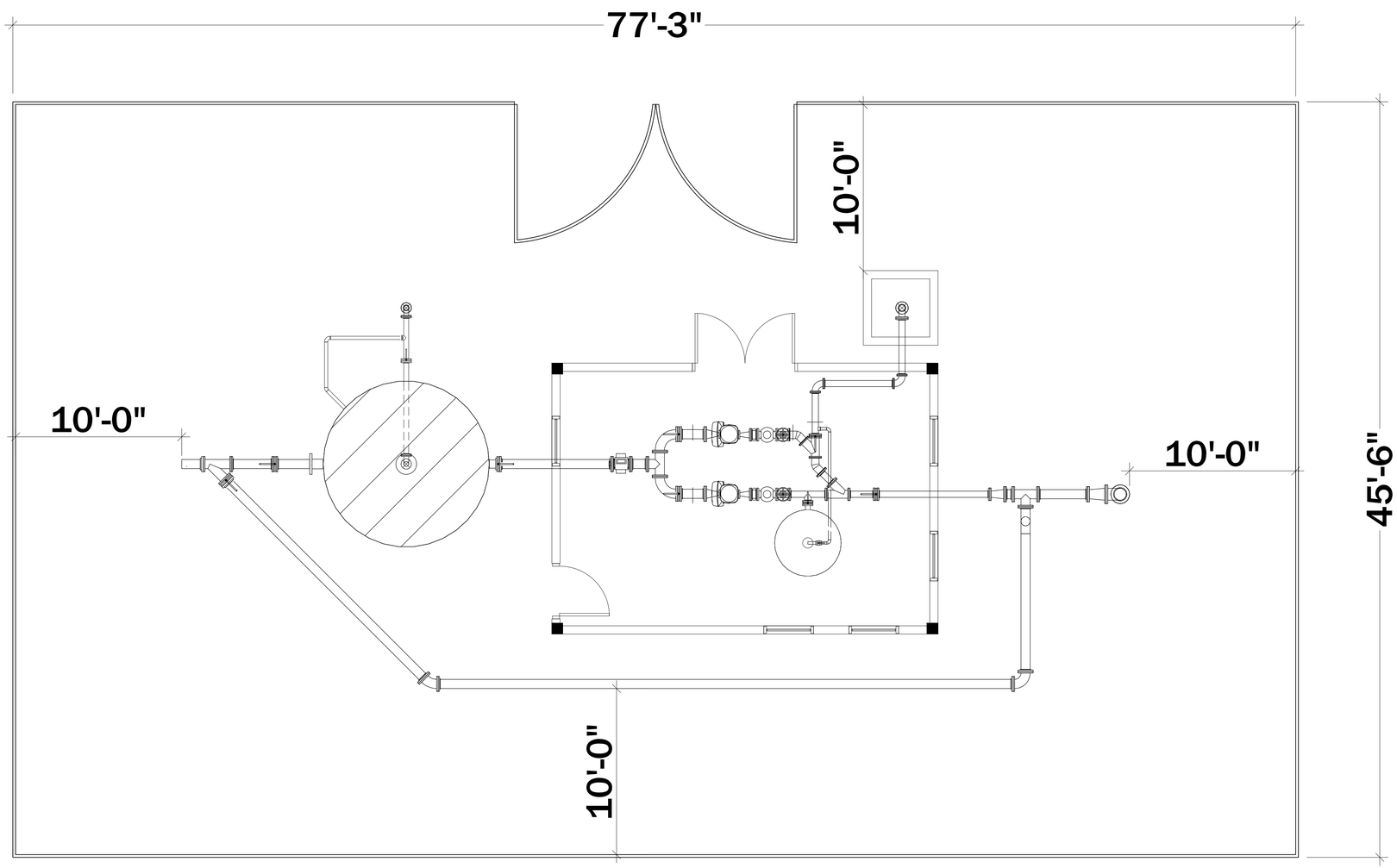
PROJECT NAME: PAGO PAGO HAPPY VALLEY ACP REPLACEMENT PROJECT
DRAWING TITLE: WINDOW AND DOOR SCHEDULE FINISHING SCHEDULE
PROJECT LOCATION: AMERICAN SAMOA

REVISION HISTORY:

NO.	DATE	DETAILS OF REVISION	REVISED BY

SCALE: AS SHOWN
PROJECT #:
SHEET NO. A5 ##



A / A6 PROPOSED PUMP HOUSE FENCE

SCALE 1/4" = 1'-0"

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PROJECT NAME:
PAGO PAGO HAPPY VALLEY ACP REPLACEMENT PROJECT

DRAWING TITLE:
PUMP HOUSE FENCE

PROJECT LOCATION:
AMERICAN SAMOA

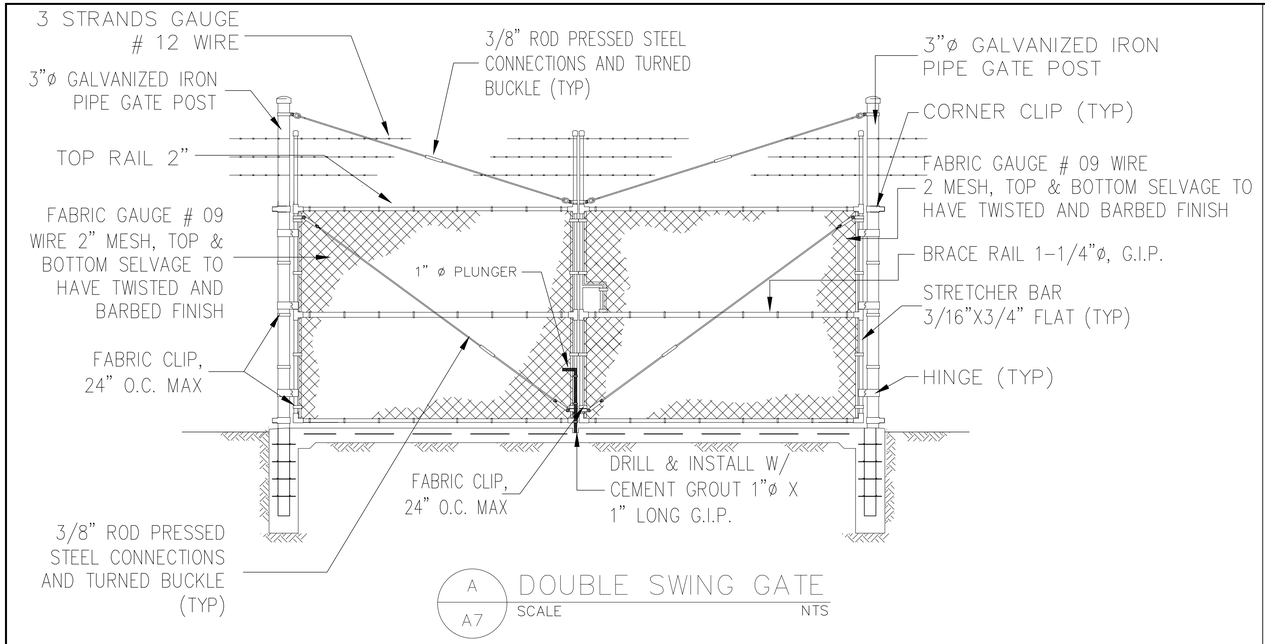
REVISION HISTORY:

NO.	DATE	DETAILS OF REVISION	REVISED BY

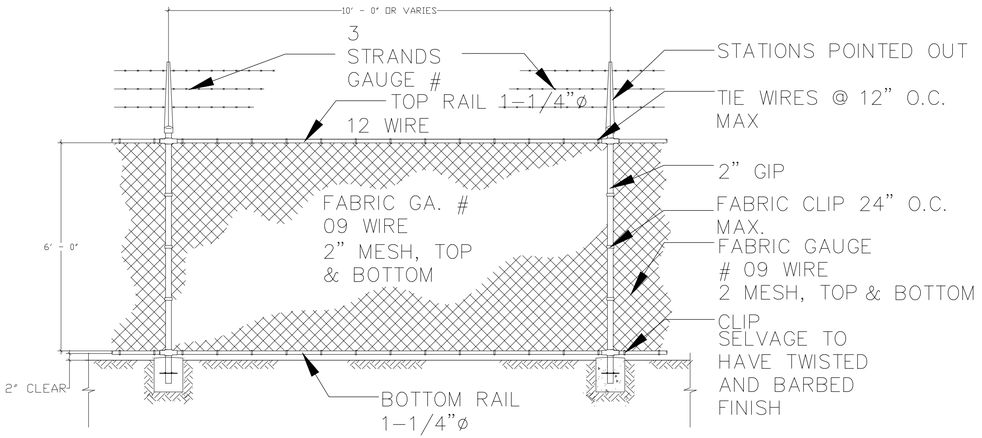
SCALE:
AS SHOWN

PROJECT #:

SHEET NO.
A6
##



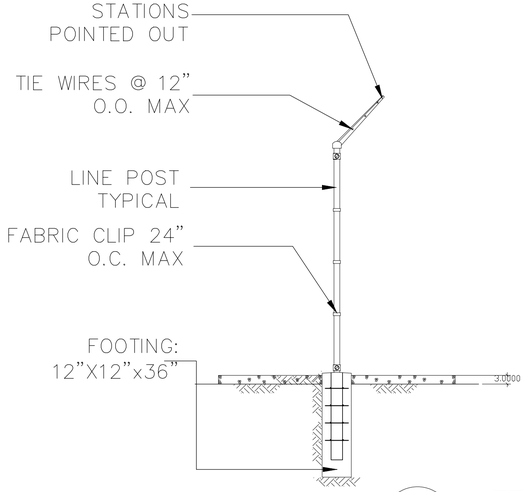
A / A7 DOUBLE SWING GATE
SCALE NTS

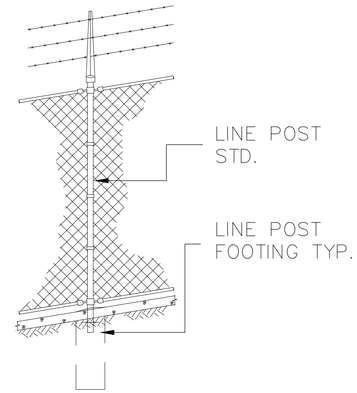


NOTE:
SPAN @ 10 FT. MAXIMUM
HEIGHT OF CHAIN LINK = 6 FT.
PROVIDE DIAGONAL BRACE @ CORNERS = 1-1/2"
FOR SPAN & GATE, REFER TO STANDARDS

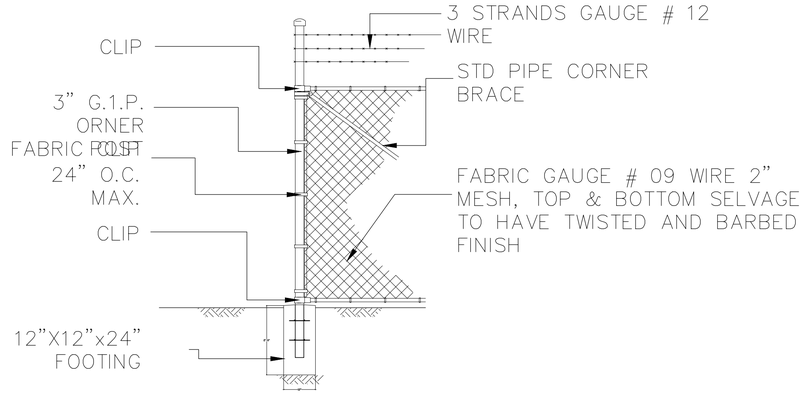
B / A7 TYPICAL SPAN
SCALE NTS

NOTE:
1. SPAN VARIES SLIGHTLY PER SECTION
2. THERE SHALL BE NO WELDED JOINTTS UNLESS SPECIFIED.
3. POST AT CORNER MUST BE 3"ø





C / A7 INTERMEDIATE POST
SCALE NTS



D / A7 CORNER POST
SCALE NTS

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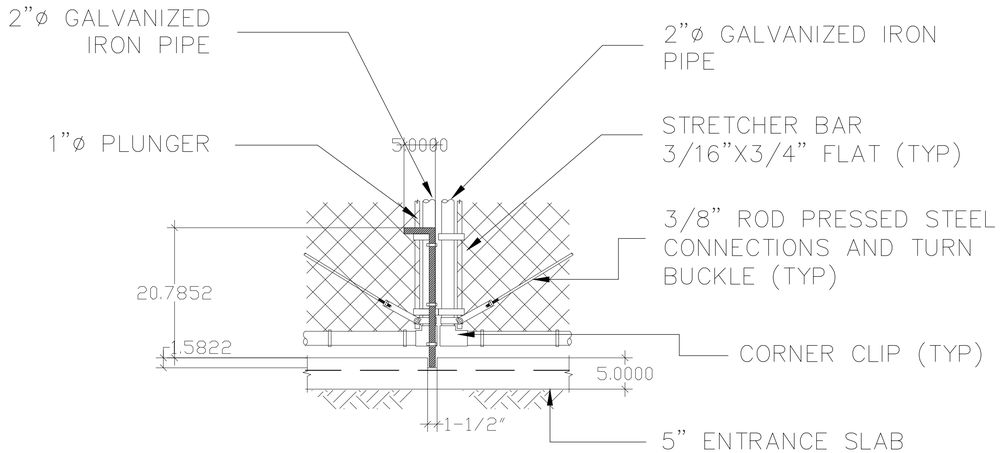
PROJECT NAME: PAGO PAGO HAPPY VALLEY ACP REPLACEMENT PROJECT
DRAWING TITLE: FENCE DETAILS – 1
PROJECT LOCATION: AMERICAN SAMOA

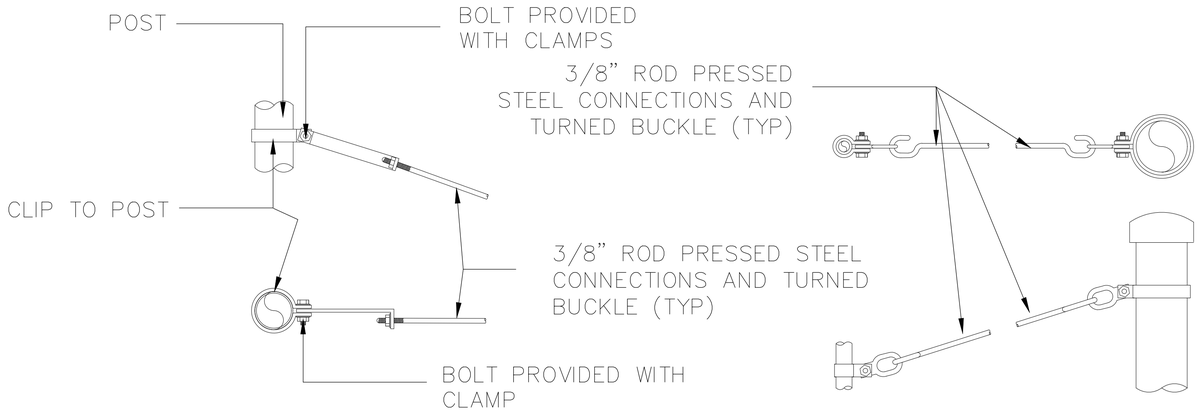
REVISION HISTORY:

NO.	DATE	DETAILS OF REVISION	REVISED BY

SCALE: AS SHOWN
PROJECT #:
SHEET NO.: A7 / ##

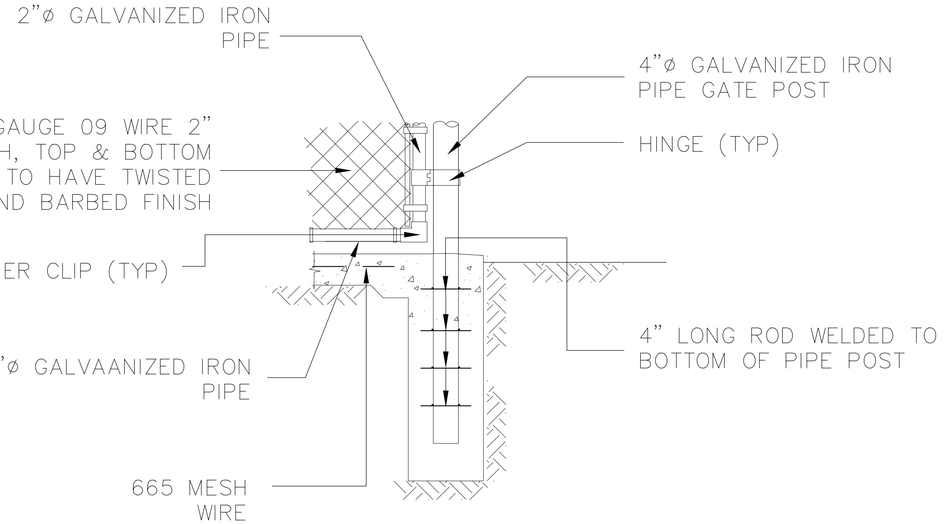


A / A8 PLUNGER DETAIL
SCALE NTS

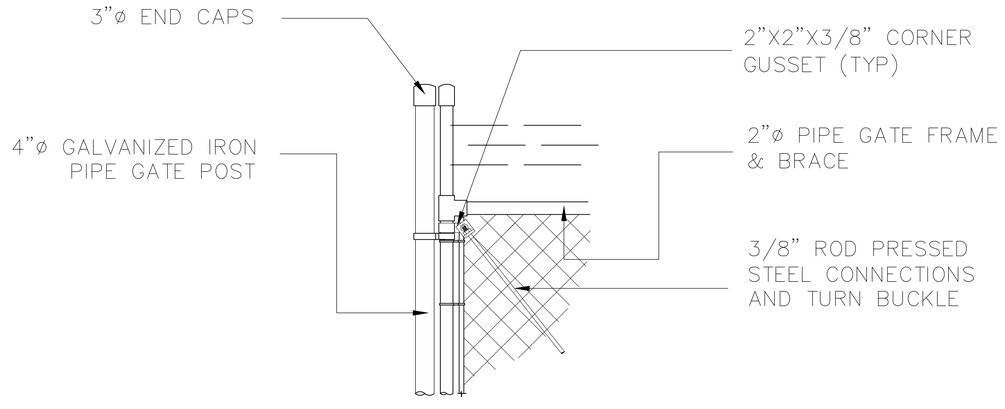


C / A8 3/8" ROD CONNECTION (TYP.)
SCALE NTS

D / A8 3/8" ROD CONNECTION TO GATE POST (TYP.)
SCALE NTS



B / A8 GATE POST FOOTING
SCALE NTS



E / A8 TOP OF GATE POST
SCALE NTS

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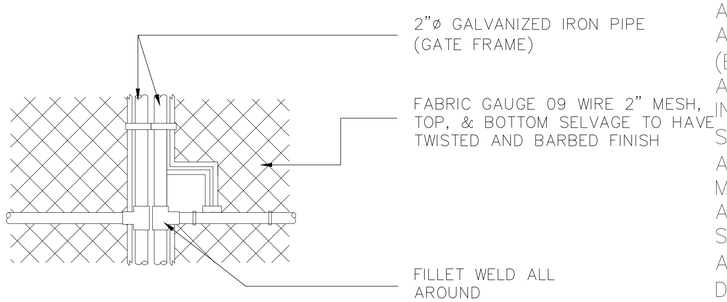
PROJECT NAME: PAGO PAGO HAPPY VALLEY ACP REPLACEMENT PROJECT
DRAWING TITLE: FENCE DETAILS – 2
PROJECT LOCATION: AMERICAN SAMOA

REVISION HISTORY:

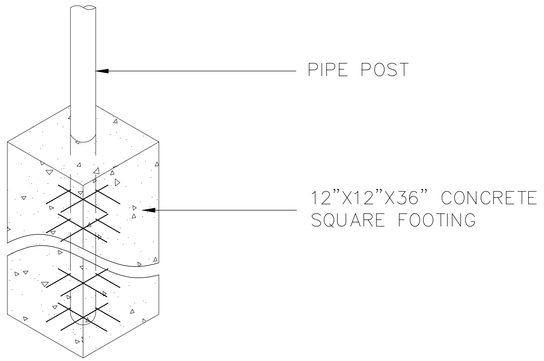
NO.	DATE	DETAILS OF REVISION	REVISED BY

SCALE: AS SHOWN
PROJECT #:
SHEET NO. A8 / ##



A / A9 CHAIN CUT–OUT
SCALE NTS

APPLY FOOTING FOUNDATION FOR
THE FOLLOWING POST TYPE:
3"ø POST AT CORNER
4"ø POST AT GATE
2"ø INTERMEDIATE POST (TYPICAL)



B / A9 TYPICAL FOOTNG FOR PIPE POST
SCALE NTS

SPECIFICATIONS

1. CHAIN LINK FENCING:

(A) GENERAL.

UNLESS STATED OTHERWISE, ALL MATERIALS FOR CHAIN LINK FENCING AND GATES, ABOVE AND BELOW GROUND, SHALL BE PVC COATED GALVANIZED AS SPECIFIED IN THE CURRENT ASTM F 668.

(B) POSTS

ALL POSTS SHALL BE OF SUFFICIENT LENGTH TO PROVIDE A 36–INCH MINIMUM SETTING IN CONCRETE FOOTINGS, AT A DEPTH AND SPACING SPECIFIED ON THE PLANS. POSTS SHALL BE SET AT A MINIMUM SPACING OF 10' O.C. POSTS SHALL BE IN PROPER ALIGNMENT SO THAT THERE IS A MINIMUM OF 4" ON ALL SIDES OF THE POST. NO MATERIAL SHALL BE INSTALLED ON THE POST NOR SHALL THE POST BE DISTURBED IN ANY MANNER WITHIN 7 DAYS AFTER THE INDIVIDUAL POST FOOTING IS COMPLETED. SHOULD ROCK BE ENCOUNTERED AT A DEPTH LESS THAN THE PLANNED FOOTING DEPTH A HOLE 2" LARGER THAN GREATEST DIMENSION OF THE POST SHALL BE DRILLED TO A DEPTH OF 12". NO EXTRA COMPENSATION SHALL BE MADE FOR ROCK EXCAVATION.

(1) ALL POSTS SHALL BE PVC COATED GALVANIZED STEEL, 35 PERCENT MINIMUM CARBON CONTENT, 60,000 POUNDS PER SQUARE INCH MINIMUM TENSILE STRENGTH (SCHEDULE 40).

(2) LINE POSTS SHALL BE 2–3/8 INCH O.D. PIPE WEIGHING 3.65 POUNDS PER LINEAR FOOT OR 2 INCH X 2–1/4 INCH H SECTION WEIGHING 4.10 POUNDS PER LINEAR FOOT UNLESS OTHERWISE SPECIFIED ON DRAWINGS.

(3) END, CORNER AND PULL POSTS SHALL BE 2–7/8 INCH O.D. PIPE WEIGHING 5.79 POUNDS PER LINEAR FOOT UNLESS OTHERWISE SPECIFIED ON DRAWINGS.

(4) GATE POSTS. FOR SINGLE GATE OR ONE LEAF OF DOUBLE GATES:

(AA) UP TO 6 FEET WIDE. 3 INCH O.D. PIPE WEIGHT 5.79 POUNDS PER LINEAR FOOT UNLESS OTHERWISE SPECIFIED ON DRAWINGS.

(AB) 6 FEET TO 15 FEET WIDE. 4 O.D. PIPE WEIGHING 9.11 POUND PER LINEAR FOOT.

(5) POST TOPS. TUBULAR POST TOPS DESIGNED TO PREVENT MOISTURE FROM ENTERING POSTS AND TO SUPPORT TOP RAIL.

(C) TOP RAILS.

(1) 1–1/2 INCH I.D. PVC COATED GALVANIZED STEEL PIPE WEIGHING 2.27 POUNDS PER LINEAR FOOT.

(2) PROVIDED WITH PVC GALVANIZED GALVANIZED, OUTSIDE SLEEVE, SELF–CENTERING 7–INCH LONG COUPLINGS APPROXIMATELY EVERY 20 FEET.

(D) HORIZONTAL BRACES.

(1) BRACES SHALL BE 1–1/2 INCH I.D. PVC COATED GALVANIZED STEEL PIPE WEIGHING 2.27 POUNDS PER LINEAR FOOT WITH PLAIN ENDS.

(E) DIAGONAL BRACES.

(1) DIAGONAL BRACES SHALL BE 3/8 O.D. INCH DIAMETER GALVANIZED STEEL RODS OR AS SPECIFIED ON DRAWING.

(2) DIAGONAL BRACES SHALL BE PROVIDED WITH HEAVY GALVANIZED IRON TURNBUCKLES TO ADJUST THE TENSION.

(F) FENCE FABRIC.

(1) WIRE. 9 GAUGE GALVANIZED STEEL WIRE, OF MEDIUM HIGH CARBON QUALITY, MINIMUM TENSILE STRENGTH OF 70,000 POUNDS PER SQUARE INCH, INTERWOVEN INTO 2 INCH DIAMOND MESH.

(2) FABRIC. 72 INCHES WIDE, SELVAGE SHALL BE KNUCKLED AT BOTTOM AND TWISTED AND BARBED AT TOP.

(G) BARBED WIRE

PVC COATED BARBED WIRE SHALL BE 10 GAUGE WITH 10 GAUGE BARBS. ALL BARBS SHALL BE 4 POINTS AND SPACING OF BARBS SHALL BE 4 TO 6 INCHES.

(H) FABRIC CONNECTIONS AND INSTALLATION.

(1) TERMINAL POST SHALL BE FASTENED BY 3/16 INCH X 3/4 INCH STAINLESS STEEL STRECHER BARS WITH 11 GAUGE STAINLESS STEEL OR ALUMINUM BANDS UNLESS OTHERWISE SPECIFIED ON DRAWINGS.

(2) ALL LINE POSTS SHALL BE FASTENED WITH 9 STAINLESS STEEL OR ALUMINUM WIRE CLIPS WIRE CLIPS UNLESS OTHERWISE SPECIFIED ON DRAWINGS.

(3) ALL TOP RAILS SHALL BE FASTENED WITH 9 GAGE STAINLESS STEEL OR ALUMINUM TIE WIRES

(4) THE BOTTOM EDGE OF THE FABRIC SHALL BE FASTENED BY 1/8 INCH PVC GALVANIZED TENSION BARS WITH 11 GAGE STAINLESS STEEL OR ALUMINUM BANDS UNLESS OTHERWISE SPECIFIED ON DRAWINGS.

(5) THE FENCE SHALL GENERALLY FOLLOW THE CONTOUR OF THE GROUND, WITH THE BOTTOM OF THE FENCE NO MORE THAN 2" FROM GROUND SURFACE. AT LOCATIONS OF SMALL NATURAL SWALES AND WHERE IT IS NOT PRACTICAL TO HAVE THE FENCE CONFORM TO THE GENERAL CONTOUR OF GROUND SURFACE, LONGER POST MAY BE USED AND MULTIPLE STRANDS OF BARBED WIRE STRETCHED THEREON TO SPAN THE OPENING BELOW FENCE. VERTICAL CLEARANCE BETWEEN STRANDS OF BARBED WIRE SHALL BE 4" OR LESS.

(I) CONCRETE.

CONCRETE SHALL BE OF A COMMERCIAL GRADE WITH A MIN 28–DAY COMPRESSION STRENGTH OF 2500PSI. ALL CONCRETE SHALL BE PLACED AGAINST SOLID, UNDISTURBED OR RE–COMPACTED 95% FILL MATERIALS. ALL AGGREGATES SHALL COMPLY WITH LATEST ACI REQUIREMENTS. CEMENT SHALL BE TYPE II PORTLAND. CONCRETE MIX DESIGN (PROPORTION) SHALL BE SUBMITTED TO ASPA FOR APPROVAL PRIOR TO ANY CONCRETE PLACEMENT.

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Precision Ingenuity Outstanding Authentic
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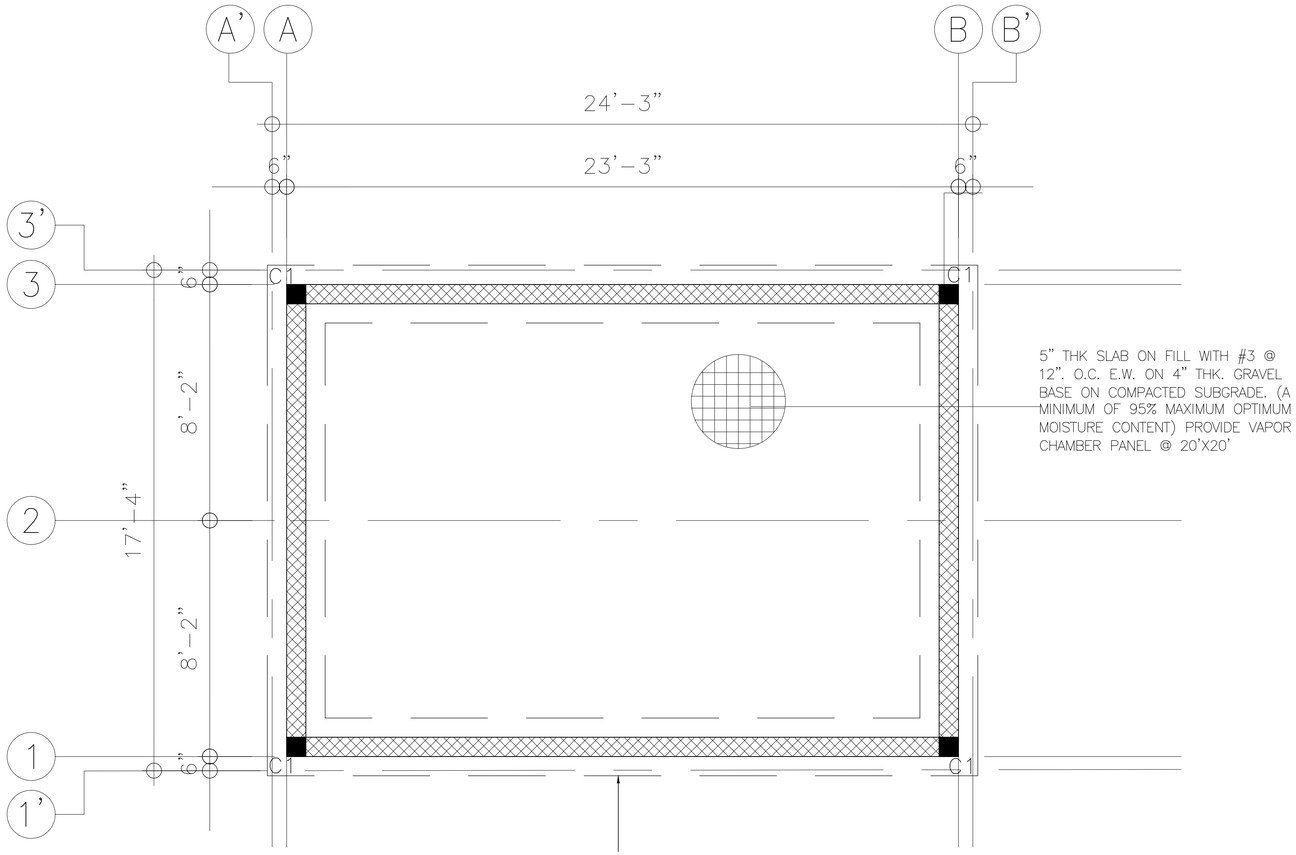
Consulting & Engineering

PROJECT NAME: PAGO PAGO HAPPY VALLEY ACP REPLACEMENT PROJECT
DRAWING TITLE: FENCE DETAILS – 3
PROJECT LOCATION: AMERICAN SAMOA

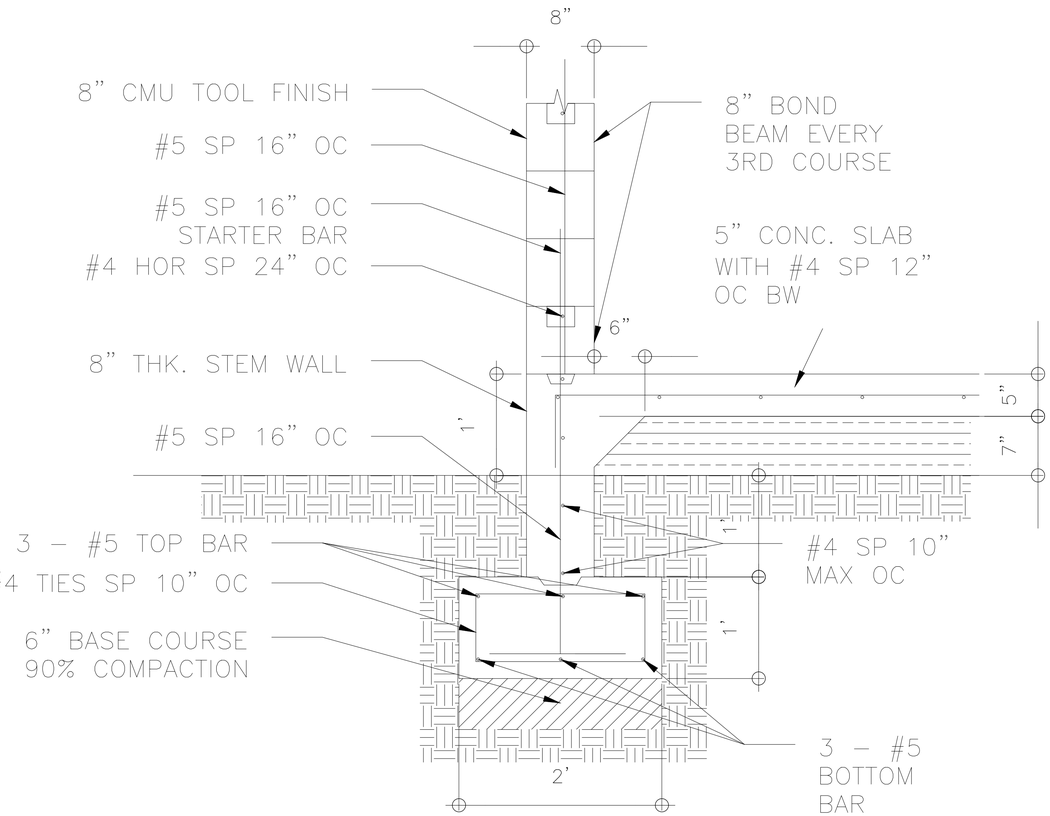
REVISION HISTORY:

NO.	DATE	DETAILS OF REVISION	REVISED BY

SCALE: AS SHOWN
PROJECT #:
SHEET NO.: A9 / ##



A / S1 FOUNDATION PLAN
SCALE 3/16" = 1'-0"



B / S1 TYPICAL WALL FOOTING SECTION
SCALE NTS

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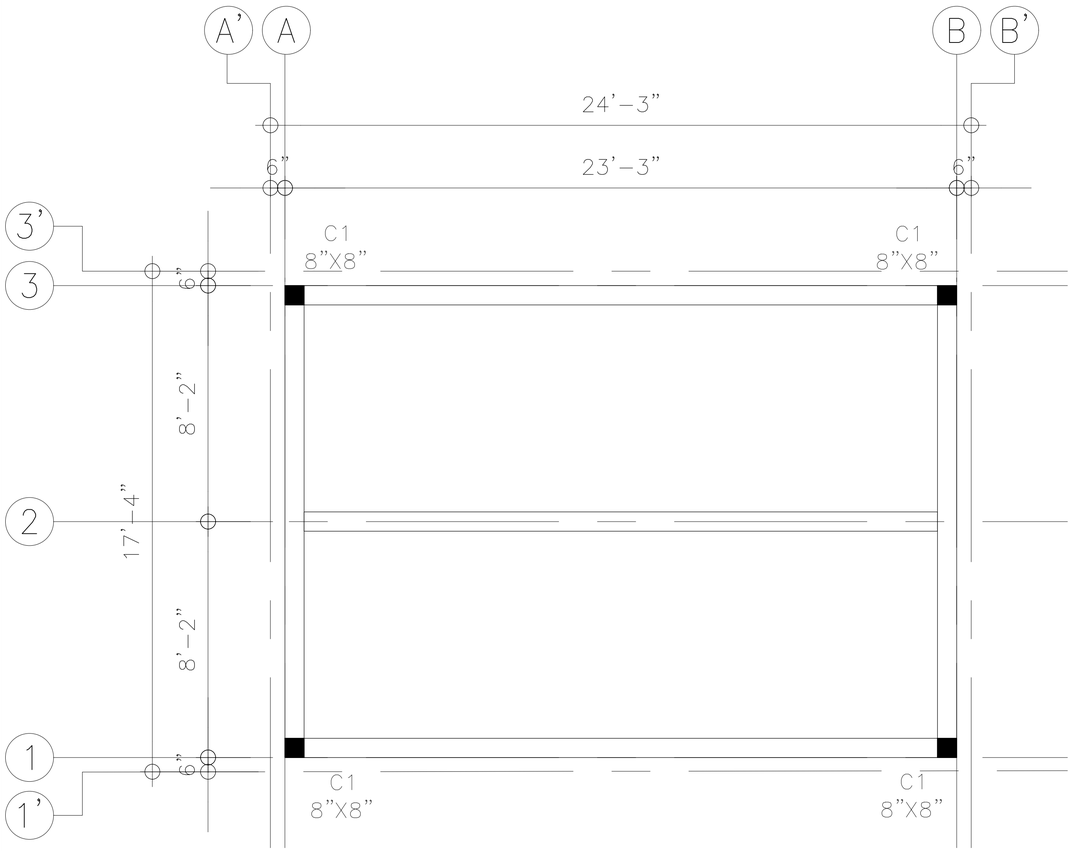
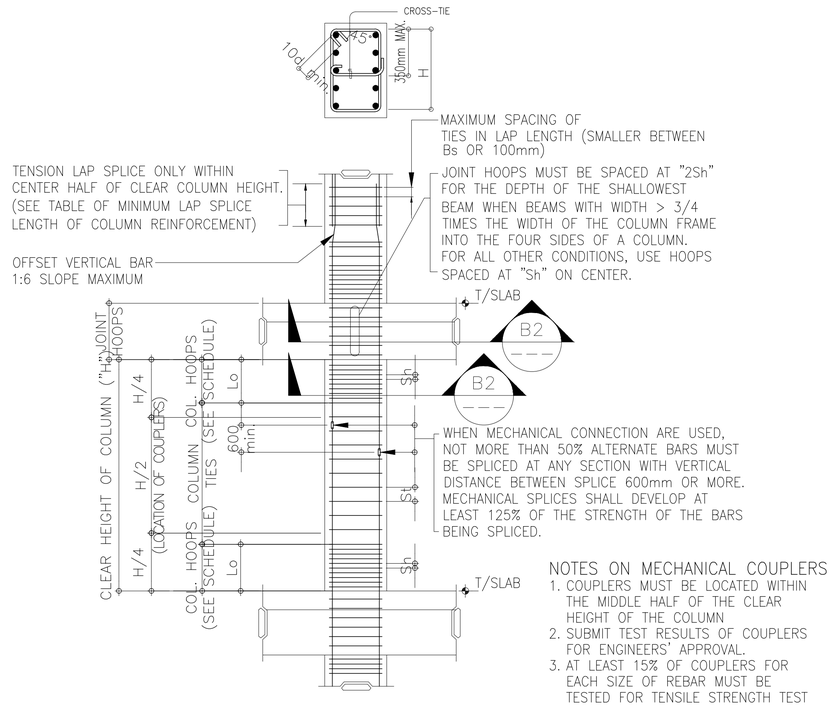
PROJECT NAME: PAGO PAGO HAPPY VALLEY ACP REPLACEMENT PROJECT
DRAWING TITLE: FOUNDATION PLAN AND DETAIL
PROJECT LOCATION: AMERICAN SAMOA

REVISION HISTORY:			
NO.	DATE	DETAILS OF REVISION	REVISED BY

SCALE: AS SHOWN
PROJECT #:
SHEET NO.: S1 / ##

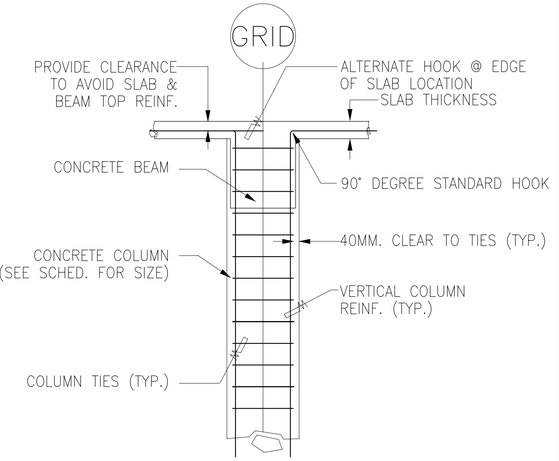


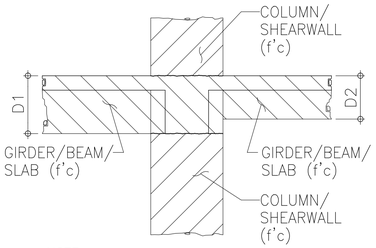
A S2 COLUMNATION PLAN
SCALE 3/16" = 1'-0"



NOTES ON MECHANICAL COUPLERS
1. COUPLERS MUST BE LOCATED WITHIN THE MIDDLE HALF OF THE CLEAR HEIGHT OF THE COLUMN
2. SUBMIT TEST RESULTS OF COUPLERS FOR ENGINEERS' APPROVAL.
3. AT LEAST 15% OF COUPLERS FOR EACH SIZE OF REBAR MUST BE TESTED FOR TENSILE STRENGTH TEST

NOTES:
Sh = HOOP AND SUPPLEMENTARY CROSSTIE SPACING NOT TO EXCEED Bs/4 OR 100m.
St = COLUMN TIE SPACING, NOT TO EXCEED 16db OF VERTICALS, 48db OF TIES, Bs OR 150mm, WHICHEVER IS LESSER.
Bs = SMALLER DIMENSION OF COLUMN CROSS SECTION.
Lo = LARGEST COLUMN DIMENSION, $\frac{1}{6}$ OF CLEAR HEIGHT OR 450mm, WHICHEVER IS GREATER.
H = CLEAR HEIGHT OF COLUMN.





NOTE:
REFER TO GENERAL NOTES FOR f'c DETAILS.

B S2 TYPICAL COLUMN DETAIL
SCALE NTS

SCHEDULE OF RC COLUMN

fc'	FLOOR LEVEL	MARK	C-1
3,000 PSI	FDN. - ROOF LEVEL	SECTION DETAIL	
		SIZE (WxD)	8" X 8"
		VERTICAL BARS	4-#5
		TIES:	2-#3 @ 4"
		CONF. REINF.	2-#3 @ 4"
		JOINT REINF.	2-#3 @ 4"

Expires 3/31/2026

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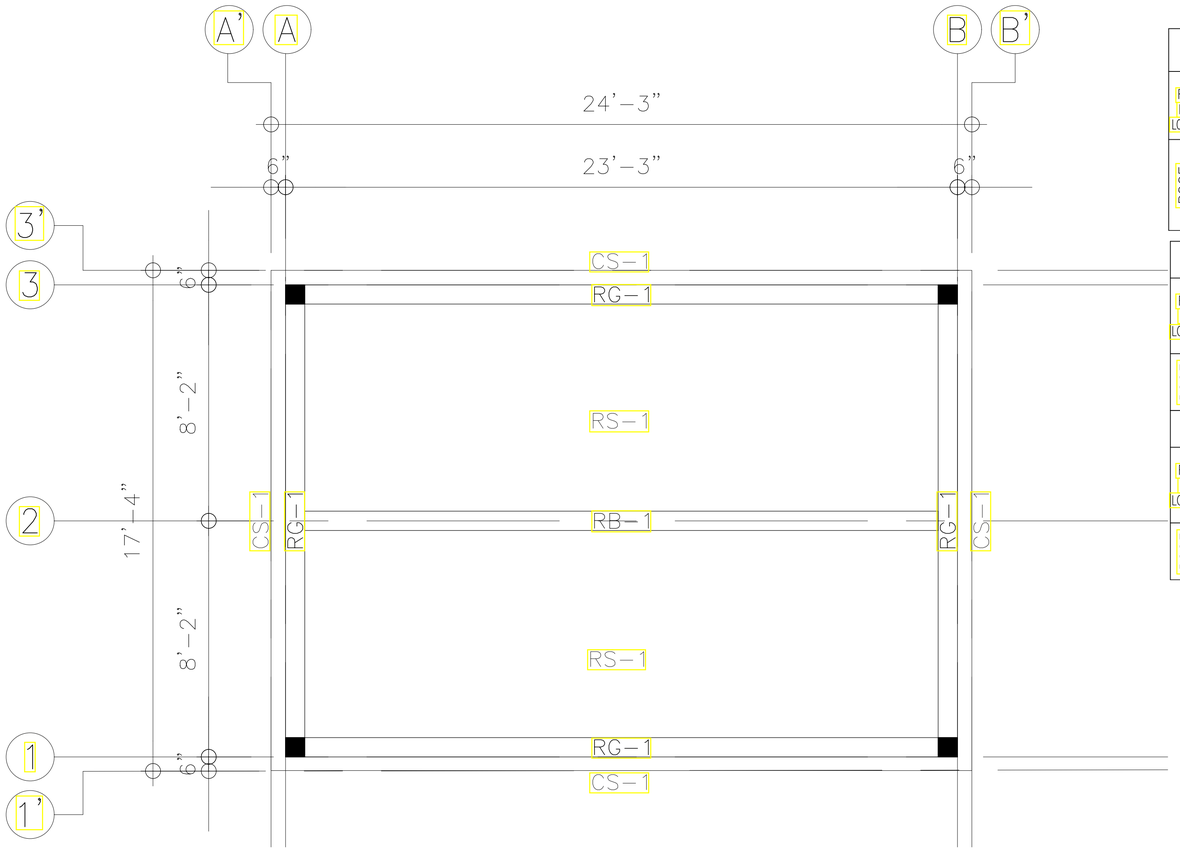
PROJECT NAME: PAGO PAGO HAPPY VALLEY ACP REPLACEMENT PROJECT
DRAWING TITLE: COLUMNATION PLAN AND DETAIL
PROJECT LOCATION: AMERICAN SAMOA

REVISION HISTORY:

NO.	DATE	DETAILS OF REVISION	REVISED BY

SCALE: AS SHOWN
PROJECT #:
SHEET NO. S2 ##



A / S3 ROOF FRAMING PLAN

SCALE 3/16" = 1'-0"

SCHEDULE OF SLAB REINFORCEMENT

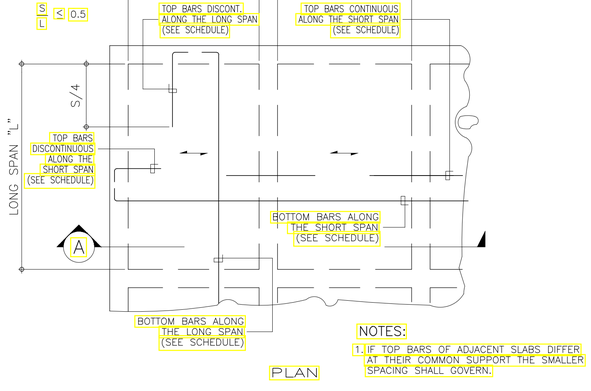
FLOOR LEVEL LOCATION	SLAB MARK	THICKNESS ("t")	BAR ø UNLESS OTHERWISE SPECIFIED	SHORT SPAN (mm)			LONG SPAN (mm)			REMARKS A– ONE WAY SLAB B– TWO WAY SLAB C– CANTILEVER SLAB
				TOP BARS DISCONT. (TBD)	BOTTOM BARS (BB)	TOP BARS CONT. (TBC)	TOP BARS DISCONT. (TBD)	BOTTOM BARS (BB)	TOP BARS CONT. (TBC)	
ROOF LEVEL	RS–1	5"	#3	14"	14"	14"	14"	14"	14"	A
ROOF LEVEL	CS–1	5"	#3	14"	14"	14"	14"	14"	14"	C

SCHEDULE OF REINFORCED CONCRETE GIRDERS

FLOOR LEVEL LOCATION	BEAM MARK	BEAM CROSS WIDTH	BEAM CROSS DEPTH	BAR ø		LONGITUDINAL REINFORCEMENTS DISCONT. 'A'	CONT. 'A'	MIDSPAN	CONT. 'B'	DISCONT. 'B'	WEB BARS EACH FACE	STIRRUPS NO./SET	STIRRUPS ø	STIRRUP SPACING	REMARKS
ROOF LEVEL	RG–1	10"	16"	#5	TB	3		3		3		1	#3	1@2"; 8 @ 4"; REST@ 8" TO C.L.	
					BB	3		4		3					

SCHEDULE OF REINFORCED CONCRETE BEAMS

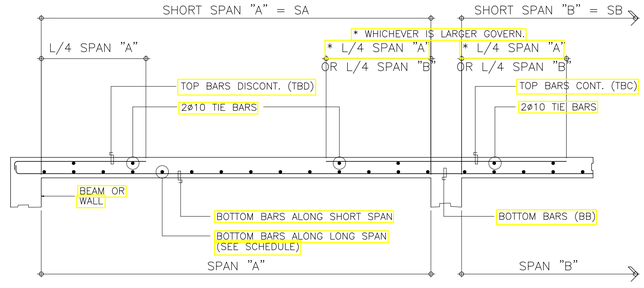
FLOOR LEVEL LOCATION	BEAM MARK	BEAM CROSS WIDTH	BEAM CROSS DEPTH	BAR ø		LONGITUDINAL REINFORCEMENTS DISCONT. 'A'	CONT. 'A'	MIDSPAN	CONT. 'B'	DISCONT. 'B'	WEB BARS EACH FACE	STIRRUPS NO./SET	STIRRUPS ø	STIRRUP SPACING	REMARKS
ROOF LEVEL	RB–1	10"	16"	#5	TB	3		3		3		1	#3	1@2"; 8 @ 4"; REST@ 8" TO C.L.	
					BB	3		4		3					



PLAN

NOTES:

1. IF TOP BARS OF ADJACENT SLABS DIFFER AT THEIR COMMON SUPPORT THE SMALLER SPACING SHALL GOVERN.



B / S3 TYPICAL ONE–WAY SLAB DETAIL

SCALE NTS

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ISSUE FOR: CONSTRUCTION

PIOA — Precision Ingenuity Outstanding Authentic — Consulting & Engineering

PROJECT NAME: PAGO PAGO HAPPY VALLEY ACP REPLACEMENT PROJECT

DRAWING TITLE: FRAMING PLAN
SCHEDULE OF SLAB, GIRDER AND BEAM

PROJECT LOCATION: AMERICAN SAMOA

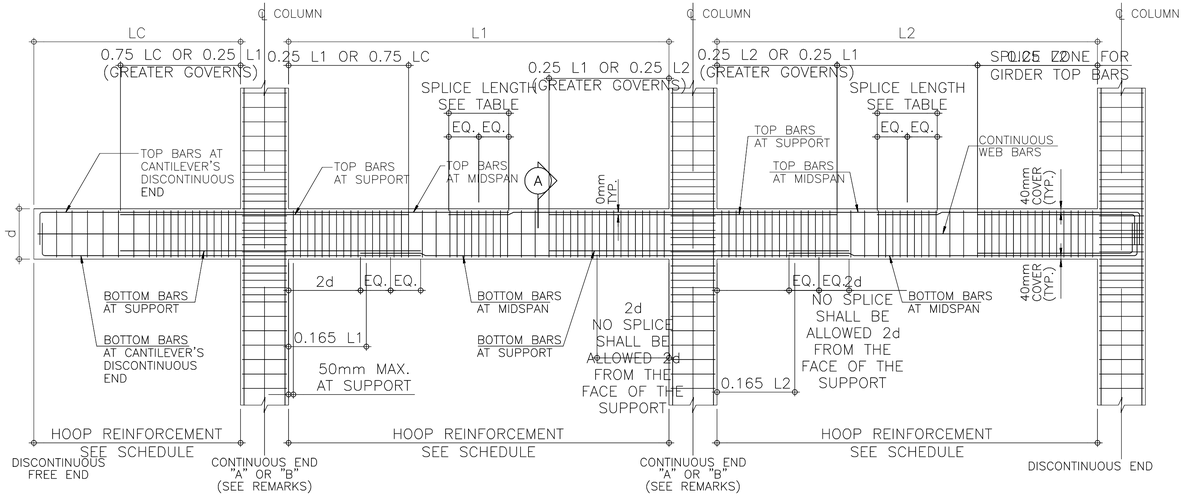
REVISION HISTORY:

NO.	DATE	DETAILS OF REVISION	REVISED BY

SCALE: AS SHOWN

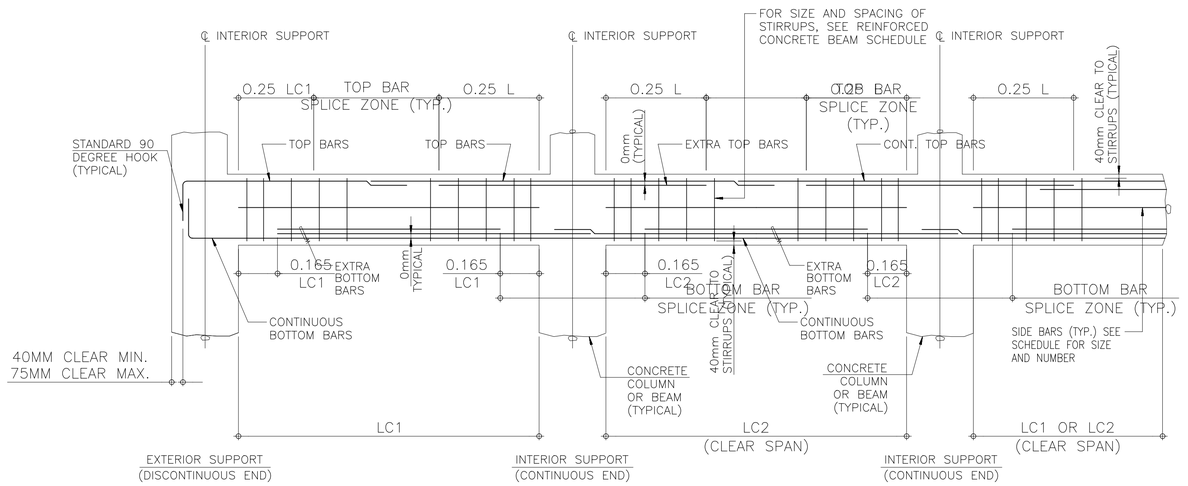
PROJECT #:

SHEET NO. S3 ##



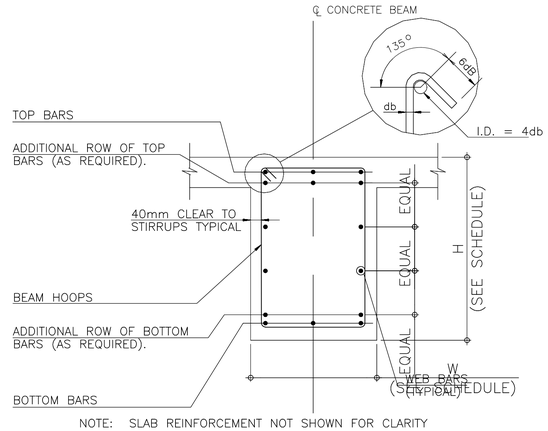
NOTE: AT INTERIOR SUPPORT (CONTINUOUS END) PROVIDE LARGER SIZE AND NUMBER OF TOP AND BOTTOM BARS FROM ADJACENT SPAN.

ELEVATION



ELEVATION

NOTES:
1. LC1, LC2 = LENGTH OF CLEAR SPANS 1, 2 (FACE OF SUPPORT TO FACE OF SUPPORT)
2. L = THE GREATER LENGTH OF CLEARSPAN LC1 OR LC2
3. AT INTERIOR SUPPORT (CONTINUOUS END) PROVIDE LARGER SIZE AND NUMBER OF TOP BARS FROM ADJACENT SPANS.
4. EXTERIOR AND INTERIOR SUPPORT REINFORCEMENT NOT SHOWN FOR CLARITY



NOTE: SLAB REINFORCEMENT NOT SHOWN FOR CLARITY

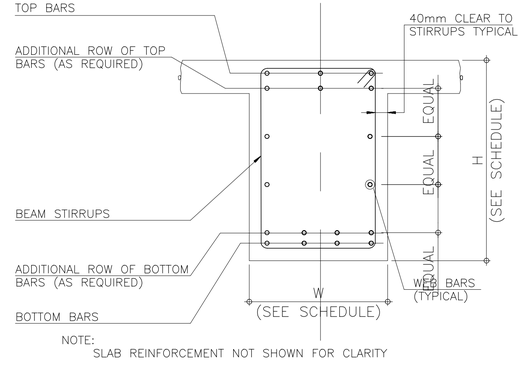
SECTION

A / S4 TYPICAL GIRDER DETAIL

SCALE NTS

STRUCTURAL NOTES :

1. SEE TABLE OF LAP SPLICE & ANCHORAGE LENGTHS SHOWN ON SHEET
2. LAP SPLICE SHALL BE LOCATED ONLY WITHIN THE LAP SPLICE ZONE.
3. TOP & BOTTOM BARS MAY BE LAP SPLICED ONLY ON ONE LOCATION FOR EACH STRING OF BEAMS.
4. CLOSED HOOPS WITH A 135° BEND SHALL BE SPACED AT 100 O.C. MAXIMUM AT A DISTANCE 2D FROM THE FACE OF THE SUPPORT. FIRST STIRRUP SHALL 5D FROM THE FACE OF THE SUPPORT.



NOTE:
SLAB REINFORCEMENT NOT SHOWN FOR CLARITY

SECTION

B / S4 TYPICAL BEAM DETAIL

SCALE NTS

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ISSUE FOR: CONSTRUCTION

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PROJECT NAME: PAGO PAGO HAPPY VALLEY ACP REPLACEMENT PROJECT

DRAWING TITLE: TYPICAL GIRDER AND BEAM DETAIL

PROJECT LOCATION: AMERICAN SAMOA

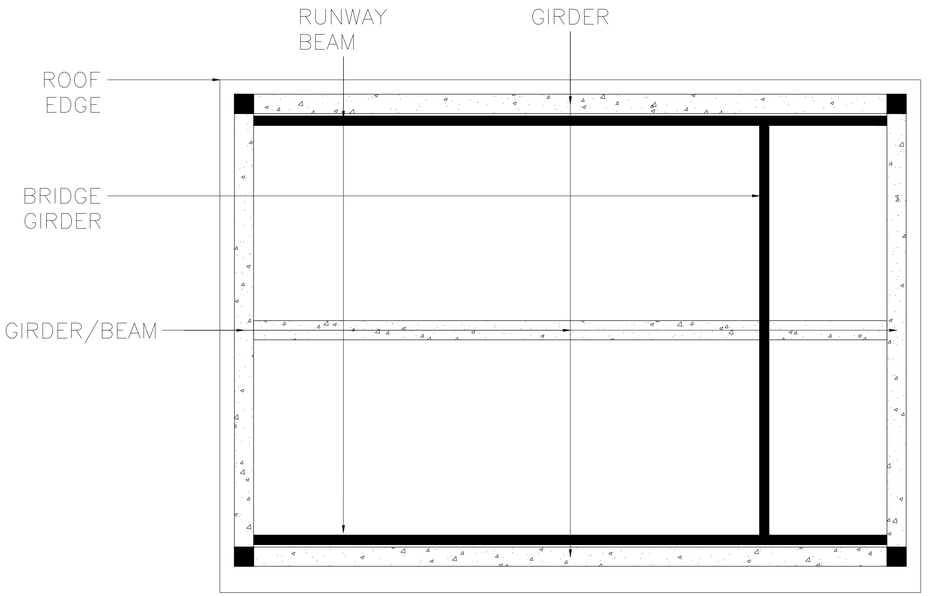
REVISION HISTORY:

NO.	DATE	DETAILS OF REVISION	REVISED BY

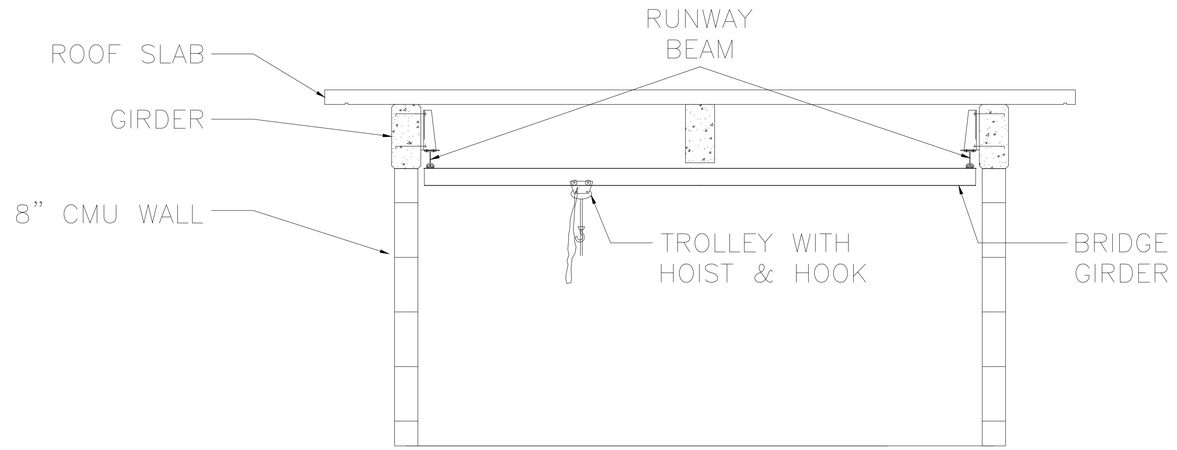
SCALE: AS SHOWN

PROJECT #:

SHEET NO. S4 / ##



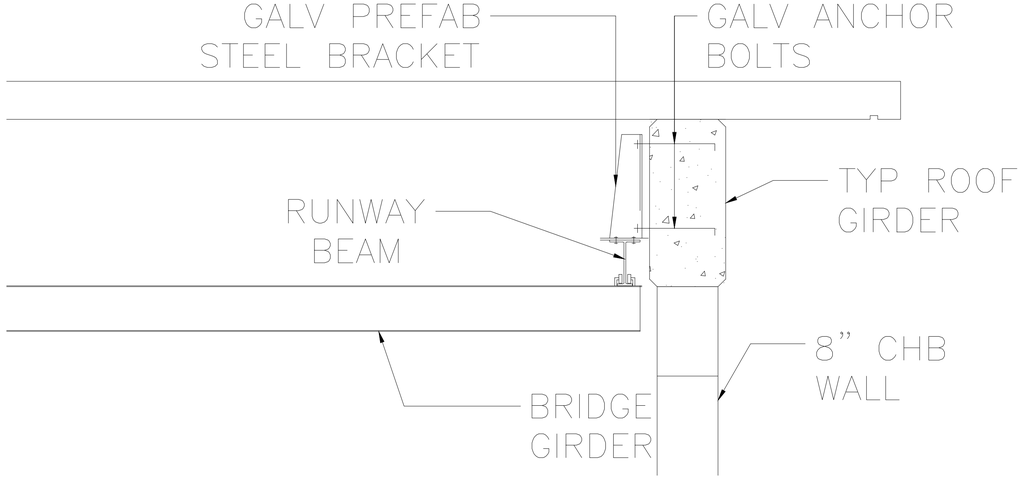
A / S5 OVERHEAD CRANE PLAN
SCALE 3/16" = 1'-0"



B / S5 OVERHEAD CRANE SECTION
SCALE NTS

NOTE:

1. OVERHEAD CRANE TO BE PROVIDED MUST CONFORM TO CONFIGURATION SHOWN ON THE DRAWING
2. OVERHEAD CRANE MUST HAVE A MAXIMUM CAPACITY OF 1 TON
3. OVERHEAD CRANE DESIGN & PRODUCT SUBMITTAL MUST BE APPROVED PRIOR TO PROCUREMENT
4. OVERHEAD CRANE TO BE PROVIDED MUST BE MANUALLY OPERATED
5. COST FOR PROVIDING OVERHEAD CRANE MUST BE INCIDENTAL TO THE COST OF BOOSTER STATION CONSTRUCTION
6. COATING MUST HAVE STRONG RESISTANCE TO SALTY INVIRONMENT
7. OPERATION MANUAL MUST BE PROVIDED AT END OF PROJECT



C / S5 OVERHEAD CRANE MOUNTING BRACKET
SCALE NTS

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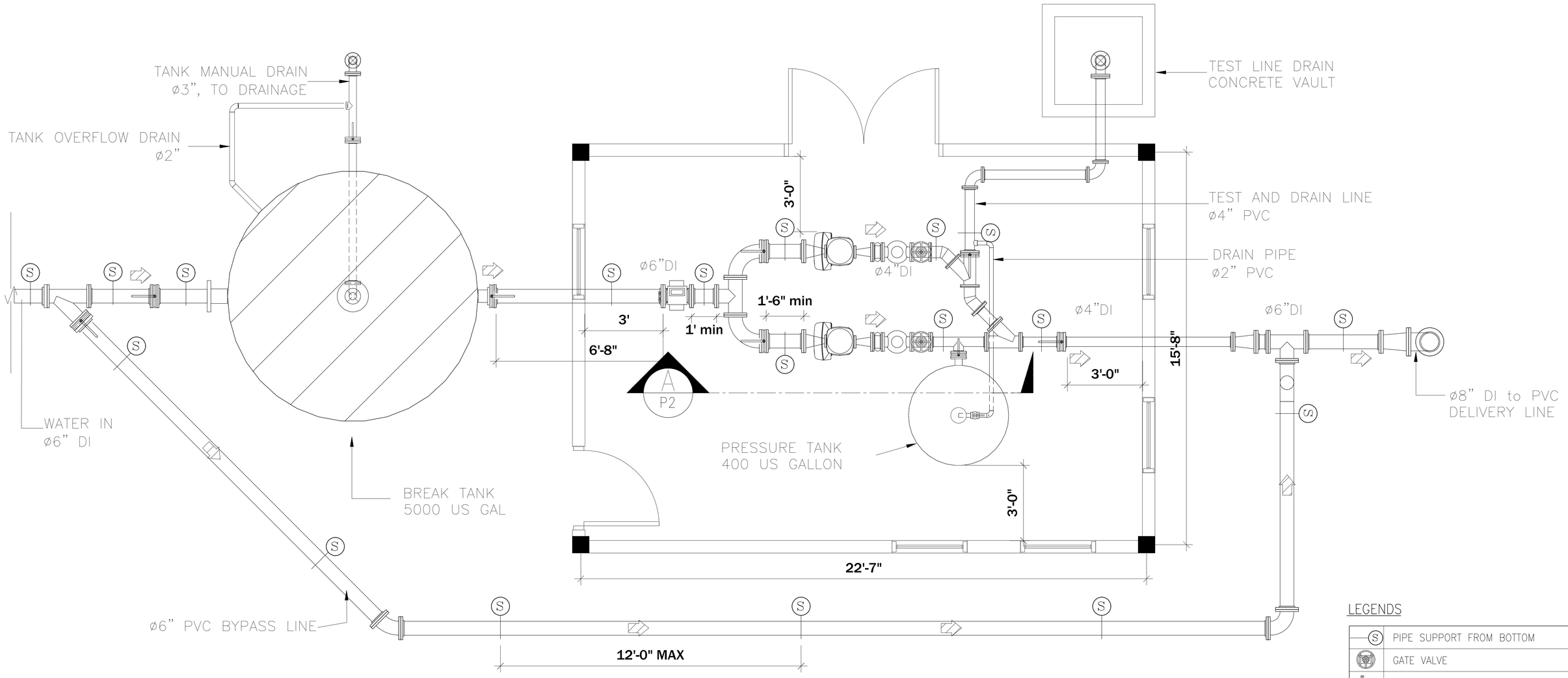
PROJECT NAME: PAGO PAGO HAPPY VALLEY ACP REPLACEMENT PROJECT
DRAWING TITLE: OVERHEAD CRANE PLAN AND DETAIL
PROJECT LOCATION: AMERICAN SAMOA

REVISION HISTORY:			
NO.	DATE	DETAILS OF REVISION	REVISED BY

SCALE: AS SHOWN
PROJECT #:
SHEET NO. S5 / ##



A M1 PROPOSED PUMP HOUSE PLAN

SCALE 1/4" = 1'-0"

LEGENDS

(S)	PIPE SUPPORT FROM BOTTOM
	GATE VALVE
	BUTTERFLY VALVE
	RUBBER BELLOW
	CHECK VALVE
	DIRECTION OF FLOW
	CLASS 150 FLANGE

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PROJECT NAME: PAGO PAGO HAPPY VALLEY ACP REPLACEMENT PROJECT

DRAWING TITLE: PUMP HOUSE PLAN

PROJECT LOCATION: AMERICAN SAMOA

REVISION HISTORY:

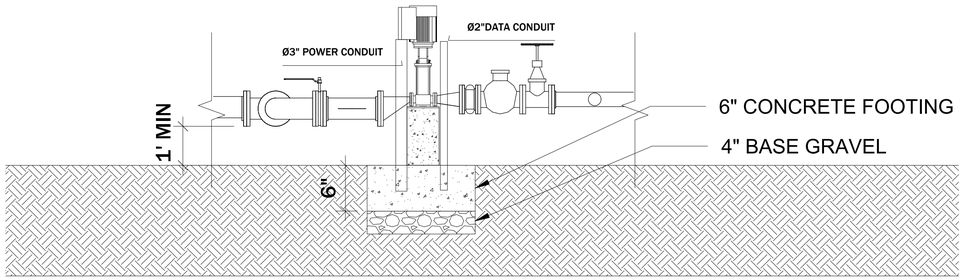
NO.	DATE	DETAILS OF REVISION	REVISED BY

SCALE: AS SHOWN

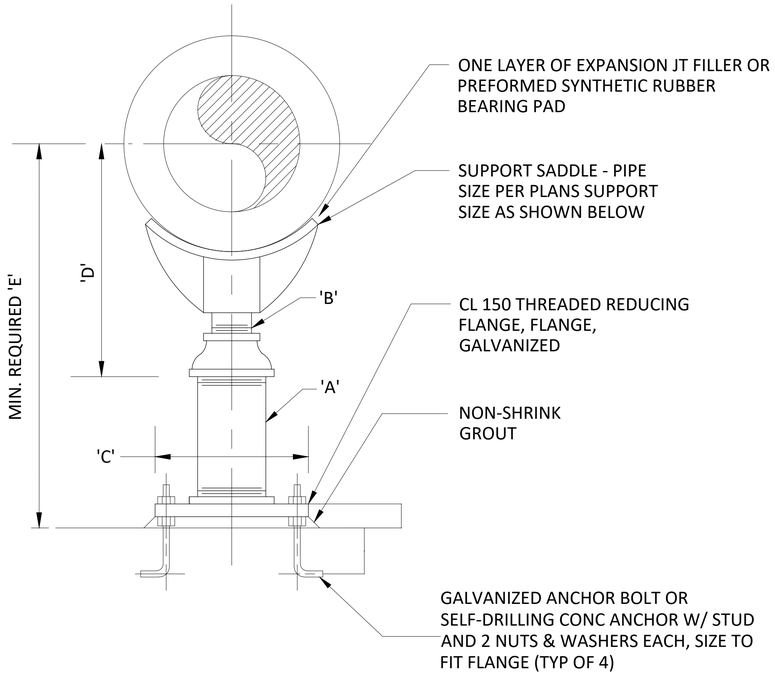
PROJECT #:

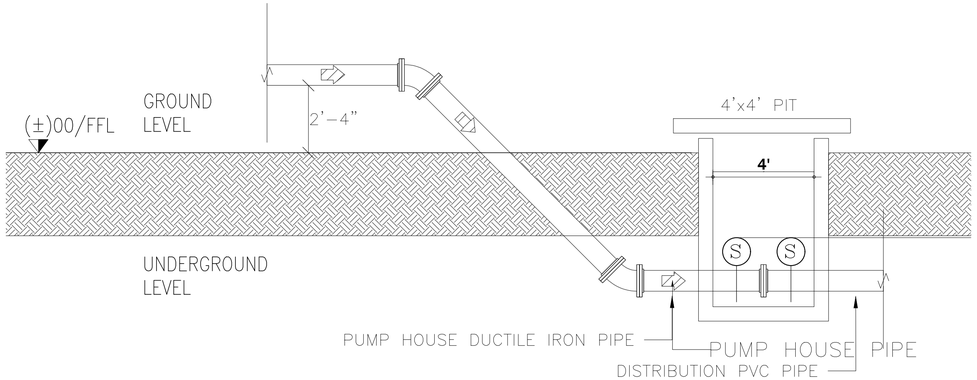
SHEET NO.

M1
##



A / M2 SECTION A
SCALE 3/16" = 1'-0"





B / M2 DISTRIBUTION PIPELINE CONNECTION
SCALE 3/16" = 1'-0"

UNDER FLANGE ADJUSTABLE SUPPORT
APPROXIMATE DIMENSIONS IN INCHES

PIPE SIZE	FLG OD	SUPPORT SIZE	A	B	C	D	E MIN
4	9	10	3	2-1/2	9	13	17
6	11	12	3	2-1/2	9	14	19
8	13-1/2	14	4	3	11	16	21
10	16	16	4	3	11	17	22
12	19	20	6	3-1/2	13-1/2	21	26

C / M2 SUPPORT DETAILS
SCALE NTS

LEGENDS

(S)	PIPE SUPPORT FROM BOTTOM
	GATE VALVE
	BUTTERFLY VALVE
	RUBBER BELLOW
	CHECK VALVE
	DIRECTION OF FLOW
	CLASS 150 FLANGE

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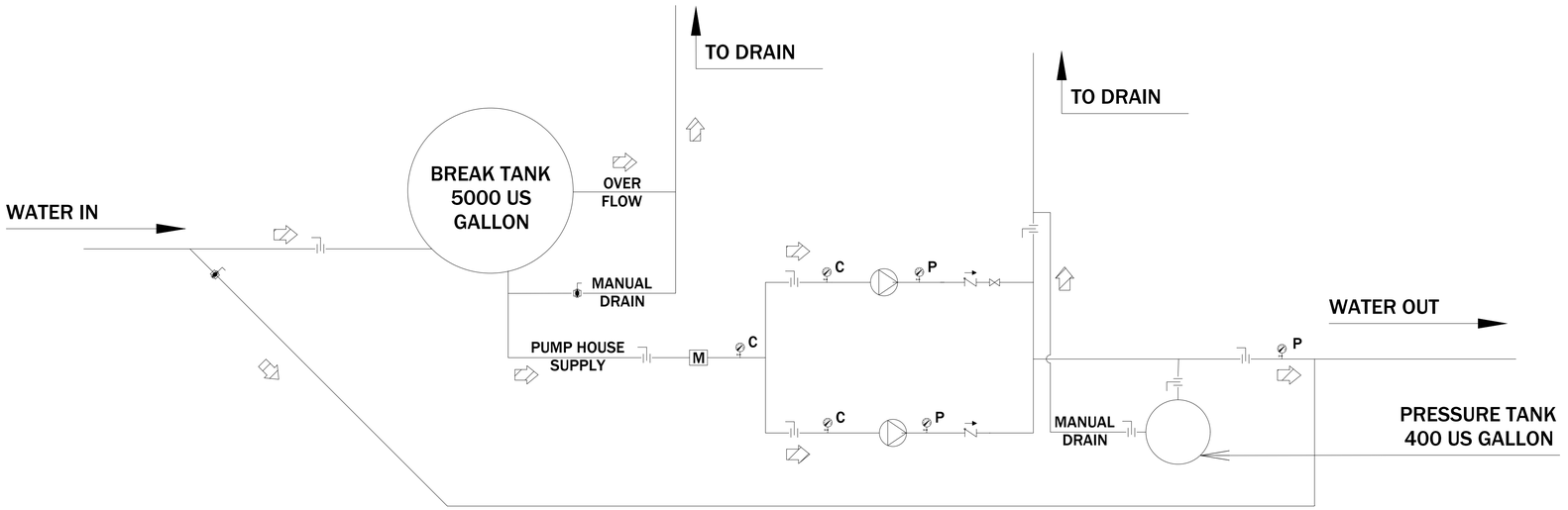
PROJECT NAME: PAGO PAGO HAPPY VALLEY ACP REPLACEMENT PROJECT
DRAWING TITLE: SECTIONS AND DETAILS
PROJECT LOCATION: AMERICAN SAMOA

REVISION HISTORY:

NO.	DATE	DETAILS OF REVISION	REVISED BY

SCALE: AS SHOWN
PROJECT #:
SHEET NO. M2 / ##



A / M3 SCHEMATIC OF PUMP HOUSE
SCALE NTS

LEGENDS

C	COMPOUND GAUGE (VACUUM & PRESSURE)
P	PRESSURE GAUGE
⋈	GATE VALVE
	BUTTERFLY LEVER NORMALLY OPEN
	BUTTERFLY LEVER NORMALLY CLOSED
	CHECK VALVE
M	WATER FLOW METER
	DIRECTION OF FLOW

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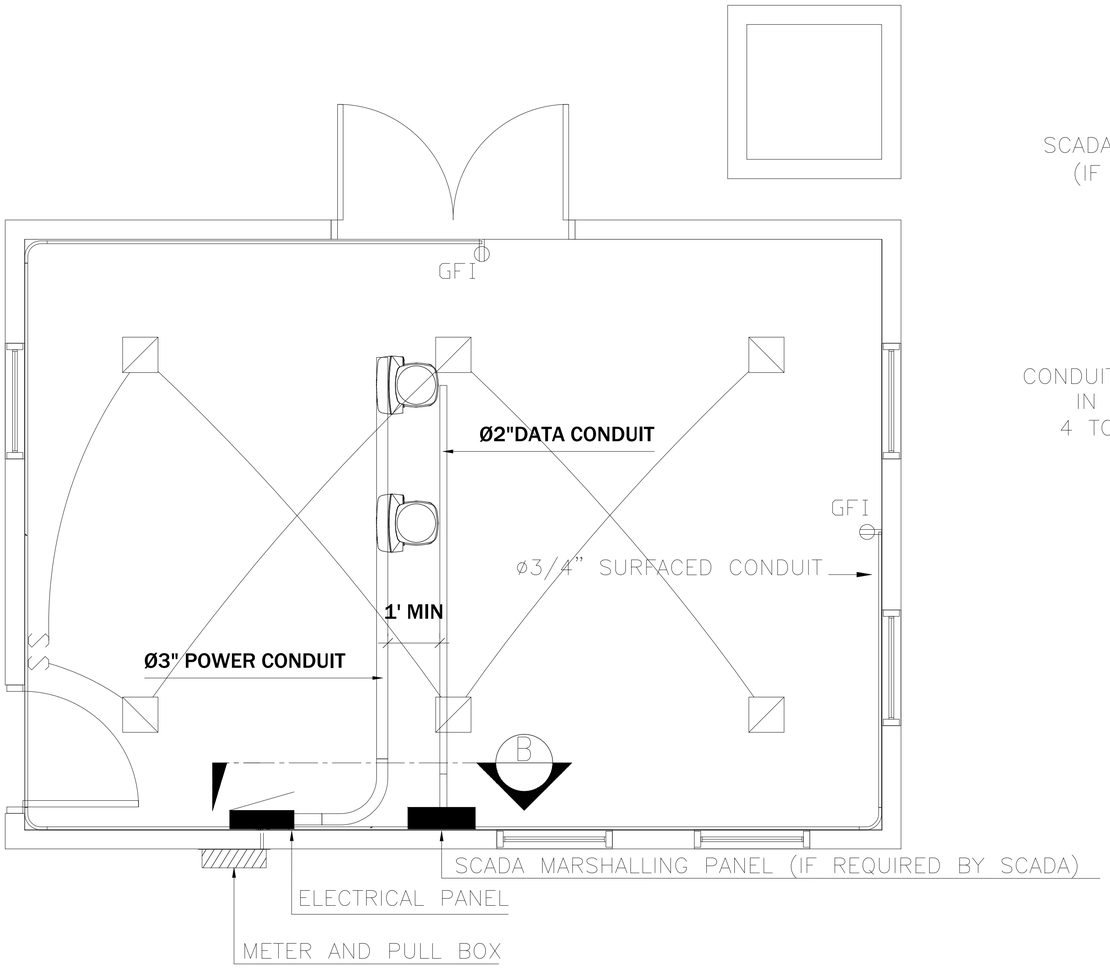
PROJECT NAME: PAGO PAGO HAPPY VALLEY ACP REPLACEMENT PROJECT
DRAWING TITLE: SCHEMATIC OF THE PUMP HOUSE
PROJECT LOCATION: AMERICAN SAMOA

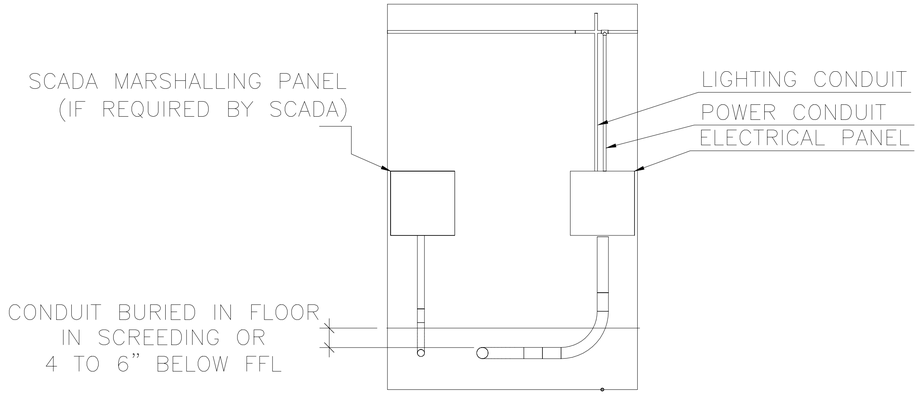
REVISION HISTORY:

NO.	DATE	DETAILS OF REVISION	REVISED BY

SCALE: AS SHOWN
PROJECT #:
SHEET NO.: M3 / ##



A / E1 LAYOUT OF ELECTRICAL SYSTEM
SCALE NTS



SECTION- B
SCALE: 3/16"=1'-0"

LEGENDS

	ELECTRICAL DISTRIBUTION PANEL
	6"X3" POWER & DATA CABLE TRAY
	ELECTRICAL CONDUIT
	LIGHTING CABLE INSIDE ø1/2" CONDUIT
	2'X2' RECESSED LIGHT
	SWITCH FOR LIGHT
	RECEPTACLE WITH GROUND FAULT INTERRUPTER

Registered Professional Engineer (Civil)
CERTIFICATE NO.
47880
WILLIAM E.
SPITZENBERG
Date Signed: Aug. 25, 2023
ARIZONA, U.S.A.
Expires 3/31/2026

PREPARED BY:
PETER JAMES CHIN

CHECKED BY:
WILLIAM SPITZENBERG, P.E.

APPROVED BY:
WILLIAM SPITZENBERG, P.E.

ISSUE FOR:
CONSTRUCTION

Precision Ingenuity Outstanding Authentic
PIOA
Consulting & Engineering

PROJECT NAME:
PAGO PAGO HAPPY VALLEY ACP REPLACEMENT PROJECT

DRAWING TITLE:
LAYOUT OF THE ELECTRICAL SYSTEM

PROJECT LOCATION:
AMERICAN SAMOA

REVISION HISTORY:

NO.	DATE	DETAILS OF REVISION	REVISED BY

SCALE:
AS SHOWN

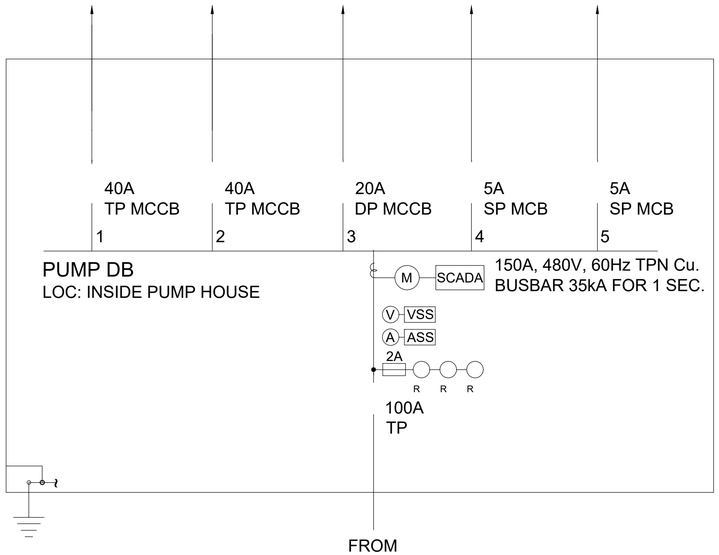
PROJECT #:

SHEET NO.
E1
##

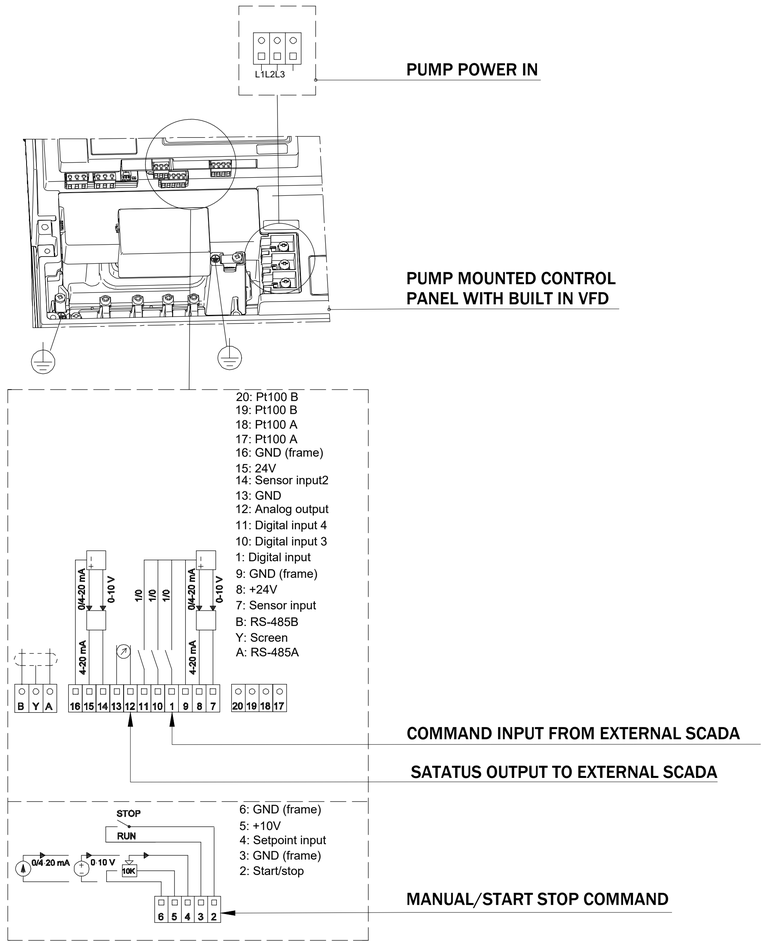
FEEDER NUMBER	F1	F2	F3	F4	F5
CONNECTED LOAD IN kW	14.9 kW	14.9 kW	-	-	-
MAX. DEMAND LOAD IN kW	14.9 kW	14.9 kW	-	-	100 W
BREAKER RATING IN AMPS	40 A	40 A	20 A	10 A	5 A
BREAKER TYPE	TP MCCB	TP MCCB	DP MCCB	SP MCB	SP MCB
BREAKING CAPACITY IN kA	35 kA	35 kA	35 kA	35 kA	35 kA
GROUND CABLE SIZE IN AWG	# 10	# 10	-	# 12	# 14
MAIN CABLE SIZE IN AWG	# 8	# 8	-	# 12	# 14
FEEDER DESCRIPTION	PUMP-1 VFD	PUMP-2 VFD	SPARE	POWER OUTLET	LIGHTING
LOCATION	PUMP ROOM	PUMP ROOM	PUMP ROOM	PUMP ROOM	PUMP ROOM

LEGENDS

	CIRCUIT BREAKER
M	MULTIFUNCTION METER
V	VOLTMETER
A	AMMETER
VSS	VOLTAGE SELECTOR SWITCH
ASS	AMPERE SELECTOR SWITCH
2A	2 AMP INSTRUMENTATION MCB
R R R	INDICATION LAMPS
TP	THREE POLE
DP	DOUBLE POLE
SP	SINGLE POLE



A E2 SINGLE LINE DIAGRAM OF ELECTRICAL PANEL
SCALE NTS



B E2 SCADA CONNECTION DIAGRAM
SCALE NTS

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PROJECT NAME: PAGO PAGO HAPPY VALLEY ACP REPLACEMENT PROJECT
DRAWING TITLE: SINGLE LINE AND SCADA CONNECTION DIAGRAM OF THE ELECTRICAL SYSTEM
PROJECT LOCATION: AMERICAN SAMOA

REVISION HISTORY:

NO.	DATE	DETAILS OF REVISION	REVISED BY

SCALE: AS SHOWN
PROJECT #:
SHEET NO. E2 ##