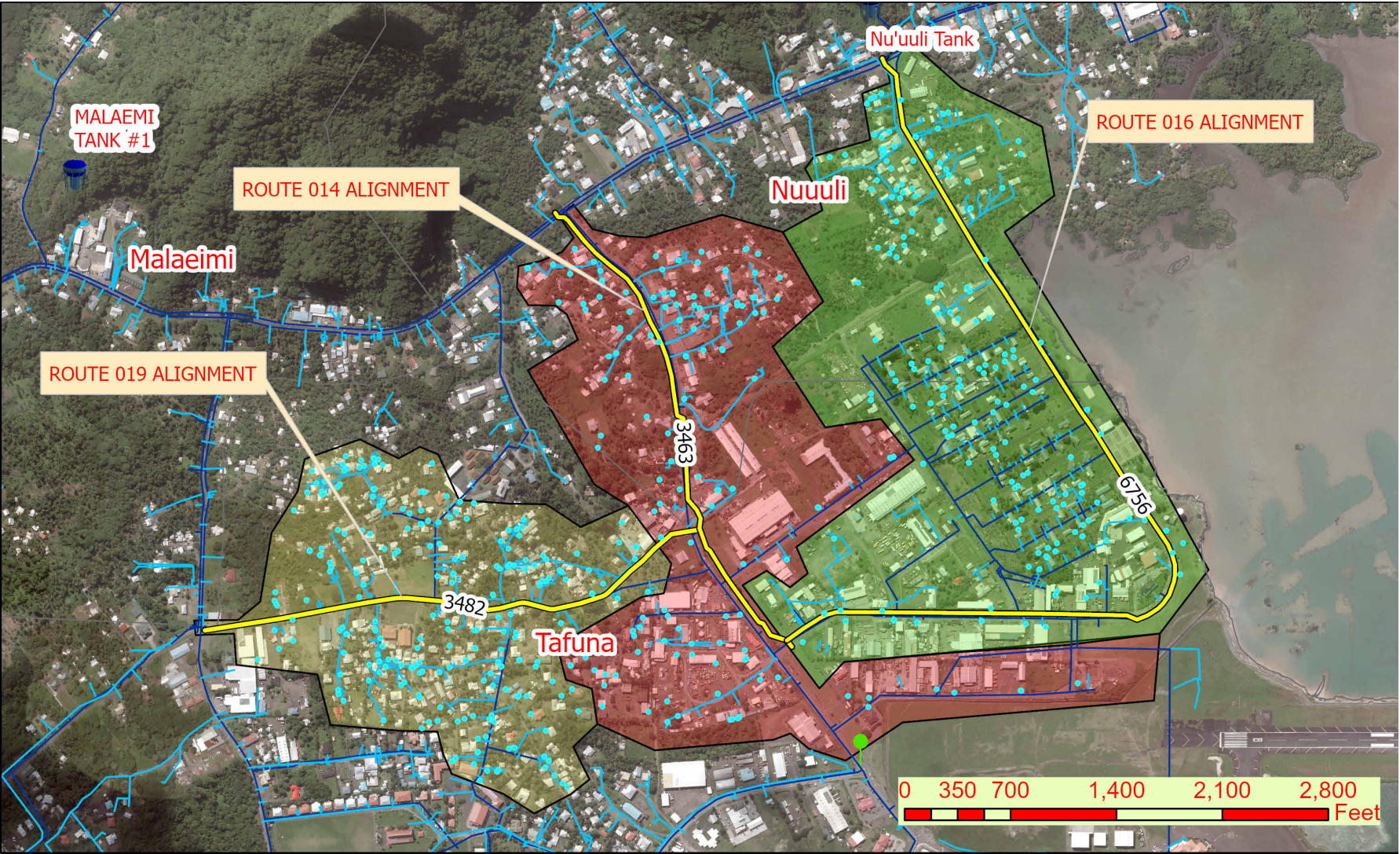


DESIGN & PLANS FOR

AMERICAN SAMOA POWER AUTHORITY

TAFUNA AC PIPE REPLACEMENT AND WATER

SYSTEM UPGRADE PROJECT



DESIGNED BY:
EDMON O. LACAULAN, P.E.
PROJECT ENGINEER

REVIEWED BY:
FIDEL AGUILA JR.
SENIOR ENGINEER

APPROVED BY:
WILLIAM SWORD, P.E.
WATER CHIEF ENGINEER

ISSUE FOR:
PERMITTING



AMERICAN SAMOA POWER AUTHORITY
WATER DIVISION
WATER ENGINEERING DEPARTMENT
P.O. BOX PPB, PAGO PAGO
AMERICAN SAMOA 96799
PH: (684)699-1234

PROJECT NAME:
**TAFUNA ACP REPLACEMENT & WATER SYSTEM
UPGRADE PROJECT**

DRAWING TITLE:
TITLE PAGE

PROJECT LOCATION:
TAFUNA, PAGO PAGO AS 96799

REVISION HISTORY:


DATE	DESCRIPTION	REV. BY

SCALE:	
AS SHOWN	
PROJECT #:	
A002021972806	
SHEET NO.	
1	
OF	10

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40	Route 019 PLAN & PROFILE 30+73.91 TO 34+81.27
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50	Route 014 PLAN & PROFILE 10+37.97' TO 15+56.96'
51	Route 014 PLAN & PROFILE 15+56.96' TO 20+75.94'
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57	Route 016 PLAN& PROFILE 10+37.97 TO 15+56.96
58	Route 016 PLAN& PROFILE 15+56.96 TO 20+75.94
59	Route 016 PLAN& PROFILE 20+75.94 TO 25+94.93
60	Route 016 PLAN& PROFILE 25+94.93 TO 31+13.91
61	Route 016 PLAN& PROFILE 31+13.91 TO 36+32.90
62	Route 016 PLAN& PROFILE 36+32.90 TO 41+51.88
63	Route 016 PLAN& PROFILE 41+51.88 TO 46+70.87
64	Route 016 PLAN& PROFILE 46+70.87 TO 51+89.85
65	Route 016 PLAN& PROFILE 51+89.85 TO 57+08.84
66	Route 016 PLAN& PROFILE 57+08.84 TO 62+27.82
67	Route 016 PLAN& PROFILE 62+27.82 TO 66+09.25

	DESIGNED BY: EDMON O. LACAULAN, P.E. PROJECT ENGINEER		AMERICAN SAMOA POWER AUTHORITY WATER DIVISION WATER ENGINEERING DEPARTMENT P.O. BOX PPB, PAGO PAGO AMERICAN SAMOA 96799 PH: (684)699-1234	PROJECT NAME:	REVISION HISTORY:			SCALE:	
	REVIEWED BY: FIDEL AGUILA JR. SENIOR ENGINEER			TAFUNA ACP REPLACEMENT & WATER SYSTEM UPGRADE PROJECT	DATE	DESCRIPTION	REV. BY	AS SHOWN	
	APPROVED BY: WILLIAM SWORD, P.E. WATER CHIEF ENGINEER			DRAWING TITLE: INDEX TO DRAWINGS	-	--		PROJECT #:	
	ISSUE FOR: PERMITTING			PROJECT LOCATION: TAFUNA, PAGO PAGO AS 96799				SHEET NO.	
								2	
								OF	10



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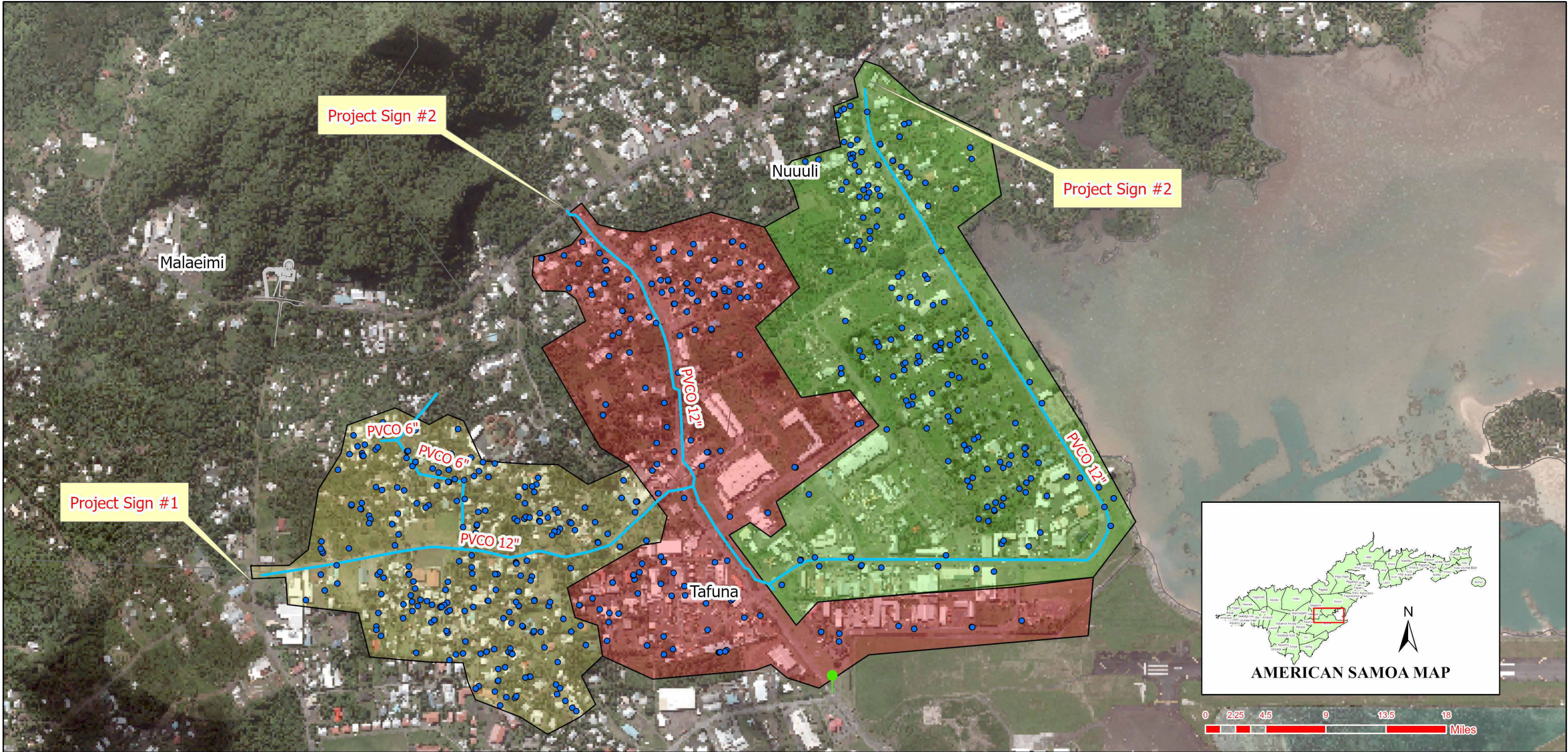
DESIGNED BY: EDMON O. LACAULAN, P.E. PROJECT ENGINEER
REVIEWED BY: FIDEL AGUILA JR. SENIOR ENGINEER
APPROVED BY: WILLIAM SWORD, P.E. WATER CHIEF ENGINEER
ISSUE FOR: PERMITTING



AMERICAN SAMOA POWER AUTHORITY
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PROJECT NAME: TAFUNA ACP REPLACEMENT & WATER SYSTEM UPGRADE PROJECT
DRAWING TITLE: SITE LOCATION PLAN
PROJECT LOCATION: TAFUNA, PAGO PAGO AS 96799

REVISION HISTORY:			SCALE:	
DATE	DESCRIPTION	REV. BY	AS SHOWN	
			PROJECT #: A002021972806	
			SHEET NO. 3	
			OF	10



PROJECT SIGNBOARD LOCATION

DESIGNED BY:
EDMON O. LACAULAN, P.E.
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PERMITTING



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WATER DIVISION
WATER ENGINEERING DEPARTMENT
P.O. BOX PPB, PAGO PAGO
AMERICAN SAMOA 96799
PH: (684)699-1234

PROJECT NAME:

TAFUNA ACP REPLACEMENT & WATER SYSTEM
UPGRADE PROJECT

DRAWING TITLE:

PROJECT IDENTIFICATION SIGN BOARD LOCATIONS

PROJECT LOCATION:

TAFUNA, PAGO PAGO AS 96799

REVISION HISTORY:

DATE	DESCRIPTION	REV. BY

SCALE:

AS SHOWN

PROJECT #:

A002021972806

SHEET NO.

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OF 10

NOTES:

1. SIZE OF SIGN IS 4' X 8' ON LANDSCAPE ORIENTATION OR 325F MAX. AREA.
2. SIGN CAN BE PAINTED OR VINYL LAMINATED PRINTED SIGN AND PASTED (NOT STAPLED) ON THE MARINE PLYWOOD.
3. SIGN WILL BE PLACED ON THE ENTRANCES OF THE PROJECT SITES, VISIBLE AND NON-OBSTRUCTIVE TO TRAFFIC AND MOTORISTS' LINE OF SIGHT.
4. TWO SIGNBOARDS SHALL BE INSTALLED, ONE AT THE BEGINNING AND ONE AT THE END OF THE PROJECT.
5. SIGNS LOCATION WILL BE DECIDED BY ASPA'S PROJECT ENGINEER WITH PROPER COORDINATION WITH THE CONTRACTOR.
6. CONTRACTOR TO SUBMIT DESIGN SUBMITTAL FOR ASPA REVIEW AND APPROVAL PRIOR TO PRINTING.
7. PROJECT SIGN SHALL INCLUDE PROJECT NAME, LOCATION, DRAWING OR RENDERED VIEW (if any), FUNDING AGENCY LOGO, ASPA & EPA LOGO, PROJECT COST, START DATE AND COMPLETION DATE.
8. SIGN PROVIDED IS FOR CONTRACTORS GUIDE ONLY, FINAL LAYOUT SHALL BE APPROVED BY ASPA.
9. TEMPORARY BILLBOARD STRUCTURE FOR PROJECT SIGNAGE, INCLUDING TIMBER POSTS, BRACING, FOOTING, AND BALLAST, TO BE DEMOLISHED POST-CONSTRUCTION
10. ENSURE ALL CONNECTIONS USE CORROSION-RESISTANT FASTENERS (MIN. 2 PER JOINT)
11. MIMIMUM RESOLUTION = 300DPI
12. THE FFG. ARE THE MINIMUM REQUIRED TEXT SIZE & LOGO DIMENSIONS:

A. ASPA : HEIGHT = 2"

B. ASPA LOGO = 10" DIAMETER

C. PROJECT NAME : HEIGHT = 3"

D. TEXT LINE SPACING = 1"

E. ASG LOGO = 6" DIAMETER

F. EPA LOGO : HEIGHT = 6"

G. OTHER TEXT HEIGHT = 2"

PROJECT IDENTIFICATION SIGNBOARD DISPLAY DETAILS

PREPARED BY:
EDMON O. LACAULAN, P.E.
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WATER CHIEF ENGINEER

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CONSTRUCTION



AMERICAN SAMOA POWER AUTHORITY

WATER DIVISION - ENGINEERING DEPT.
TAFUNA, AMERICAN SAMOA

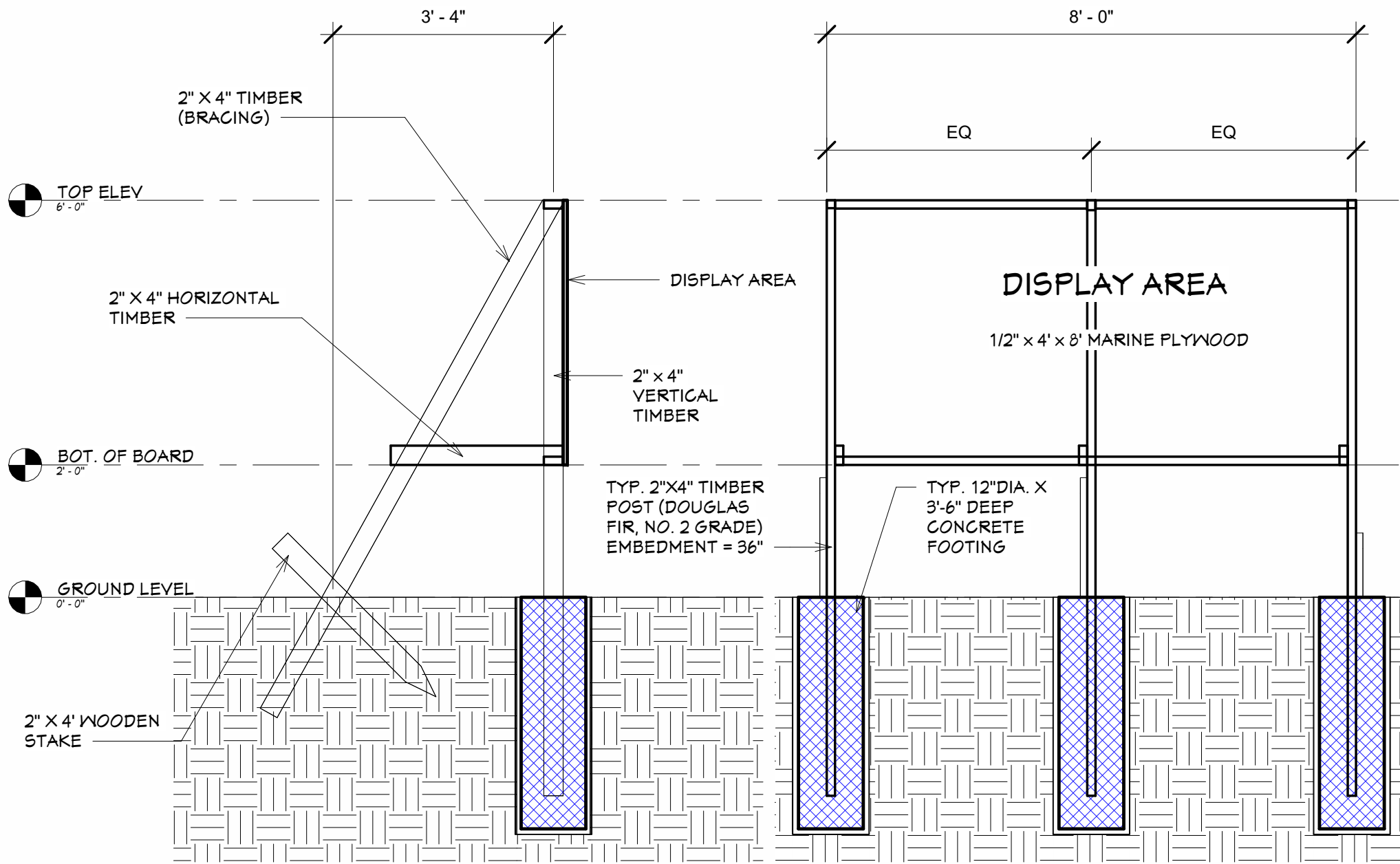
P.O.BOX PPB, PAGO PAGO AM SAMOA 96799. TEL(684) 699-7198, FAX (684) 699-9675

PROJECT NAME:
PAGO PAGO ACP REPLACEMENT & WATER SYSTEM
UPGRADE PROJECT

DRAWING TITLE:
STD. PROJECT SIGNBOARD DISPLAY DETAILS

PROJECT LOCATION:
TAFUNA, PAGO PAGO AS 96799

REVISION HISTORY:			SCALE:	
DATE	DESCRIPTION	REV. BY	AS SHOWN	
-			PROJECT #:	
			A002021972806	
			SHEET NO.	
			5	
			OF	TO



NOTE:

- DESIGN TO RESIST MAXIMUM WIND SPEED OF 40 MPH PER ASCE 7-22, BASED ON PAGO PAGO, AMERICAN SAMOA DATA (MARCH 2024-2025)
- PROVIDE SANDBAGS OR CONCRETE BLOCKS WEIGHT 245 LB PER POST TO ACHIEVED LATERAL RESISTANCE OF 300 PSF ASSUMING SOIL BEARING CAPACITY AT 1500 PSF.
- ADJUST BALLAST IF HIGHER WINDS ARE FORECAST (E.G., CYCLONE SEASON).



1 CROSS SECTION VIEW
1/2" = 1'-0"

2 FRONT ELEVATION
1/2" = 1'-0"

3 PERSPECTIVE VIEW

PREPARED BY:
EDMON O. LACAULAN, P.E.
PROJECT ENGINEER

REVIEWED BY:
FIDEL AGUILA JR.
SENIOR ENGINEER

APPROVED BY:
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ISSUE FOR:
CONSTRUCTION



AMERICAN SAMOA POWER AUTHORITY

WATER DIVISION - ENGINEERING DEPT.
TAFUNA, AMERICAN SAMOA

P.O.BOX PPB, PAGO PAGO AM SAMOA 96799. TEL(684) 699-7198, FAX (684) 699-9675

PROJECT NAME:
PAGO PAGO ACP REPLACEMENT & WATER SYSTEM UPGRADE PROJECT

DRAWING TITLE:
STD. PROJECT SIGNBOARD FRAMING DETAILS

PROJECT LOCATION:
TAFUNA, PAGO PAGO AS 96799

REVISION HISTORY:			SCALE:	
DATE	DESCRIPTION	REV. BY	AS SHOWN	
			PROJECT #:	
			A002021972806	
			SHEET NO.	
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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 PAYEMENTS, 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.

10. 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.
11. 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.
12. 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.
13. 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 WATER MAIN HAS BEEN DISINFECTED AND APPROVED BY THE AMERICAN SAMOA POWER AUTHORITY (ASPA) AND THE AMERICAN SAMOA ENVIRONMENTAL PROTECTION AGENCY.
3. ALL GATE VALVES ARE TO BE INSTALLED WITH VALVE BOXES PER DRAWINGS AND SPECIFICATIONS.
4. ALL FLUSH VALVES ARE TO BE INSTALLED IN VALVE BOXES PER DRAWINGS AND SPECIFICATIONS.

	DESIGNED BY: EDMON O. LACAULAN, P.E. PROJECT ENGINEER		AMERICAN SAMOA POWER AUTHORITY WATER DIVISION WATER ENGINEERING DEPARTMENT P.O. BOX PPB, PAGO PAGO AMERICAN SAMOA 96799 PH: (684)699-1234	PROJECT NAME:	REVISION HISTORY:			SCALE:	
	REVIEWED BY: FIDEL AGUILA JR. SENIOR ENGINEER			TAFUNA ACP REPLACEMENT & WATER SYSTEM UPGRADE PROJECT	DATE	DESCRIPTION	REV. BY	AS SHOWN	
	APPROVED BY: WILLIAM SWORD, P.E. WATER CHIEF ENGINEER			DRAWING TITLE: GENERAL NOTES - 1	-			PROJECT #: A002021972806	
	ISSUE FOR: PERMITTING			PROJECT LOCATION: TAFUNA, PAGO PAGO AS 96799				SHEET NO. 7	
								OF	10

WATER NOTES (CONT.):

5. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL NECESSARY EQUIPMENT AND MATERIALS FOR TESTING WATERLINES.

6. ALL STATION LOCATIONS ARE APPROXIMATE.

7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL WATERLINES DURING CONSTRUCTION. THE CONTRACTOR SHALL BE ESPECIALLY CAREFUL WHEN EXCAVATING BEHIND WATERLINE TEES AND BENDS WHEREVER THERE IS POSSIBILITY OF WATERLINE MOVEMENT DUE TO REMOVAL OF THE SUPPORTING EARTH BEYOND THE EXISTING REACTION BLOCKS.

8. THE CONTRACTOR SHALL TAKE WHATEVER MEASURE TO PROTECT THE WATERLINE SUCH AS CONSTRUCTING SPECIAL REACTION BLOCKS AND/OR MODIFYING HIS CONSTRUCTION METHODS.

9. NO BLASTING WILL BE ALLOWED ON THIS PROJECT.

10. THE CONTRACTOR SHALL COORDINATE WITH ASPA, ASG, BLUESKY COMMUNICATIONS AND ASTCA FOR POWER, TELEVISION AND COMMUNICATIONS POLE RELOCATION AND/OR REMOVAL. THE CONTRACTOR SHALL PROVIDE SUPPORTS FOR THE EXISTING POLES AFFECTED BY EXCAVATION.

11. THE CONTRACTOR SHALL NOTIFY AFFECTED VILLAGES AND THE UTILITY COMPANIES SEVEN (7) DAYS PRIOR TO SERVICE INTERRUPTIONS. THESE NOTIFICATIONS SHALL BE AT THE CONVENIENCE OF ASPA, ASC, BLUESKY COMMUNICATION AND ASTCA.

12. THE CONTRACTOR SHALL PROVIDE ALL LAND SURVEY CONSTRUCTION STAKEOUT SERVICES, SOIL AGGREGATE, CONCRETE AND PAVEMENT MONITORING, AND SAMPLING AND TESTING SERVICES.

13. WASTE MATERIAL WILL BE DISPOSED OF AT AN APPROVED, PNRS-COMPLIANT, OFF-SITE DISPOSAL AREA. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING DISPOSAL AREA..

14. THE CONTRACTOR SHALL REMOVE ALL EXISTING PAVEMENT AND CROSSING ALONG THE NEW ROADWAY. ALL DEMOLITION AND REMOVAL OF EXISTING PAVEMENT SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT.

15. AT THE END OF THE WORKDAY OR AS SOON AS WORK IS COMPLETED, THE CONTRACTOR SHALL TAKE NECESSARY MEASURES TO ENSURE THAT PUBLIC TRAFFIC HAS SAFE PASSAGE AND THAT ALL OPEN HOLES ARE PROPERLY COVERED AND MAINTAINED DURING THE DURATION OF THE PROJECT.

16. CONTRACTOR IS RESPONSIBLE FOR POTENTIAL DE-WATERING, FLOW DIVERSION OR TEMPORARY PUMPING FOR ALL TRENCH WORK. CONTRACTOR TO PROVIDE DEWATERING PLAN AND CONSTRUCTION METHODOLOGY FOR THE ASPA PROJECT ENGINEER APPROVAL. CONSTRUCTION DEWATERING INTO THE SEWER COLLECTION SYSTEM IS PROHIBITED.

17. TRENCHES SHALL BE EXCAVATED AND PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF SPECIFICATIONS. THE MAXIMUM ALLOWABLE TRENCH WIDTH SHALL BE EQUAL TO THE OUTSIDE DIAMETER OF THE PIPE PLUS 18 INCHES FOR PIPE UP TO 12" (I.D.). IF THE TRENCH EXCAVATION EXCEEDS THE COMPUTED MAXIMUM ALLOWABLE TRENCH WIDTH WHETHER BY EXCAVATION, CAVE-IN OR GROUND MOVEMENT, THE CONTRACTOR SHALL PROVIDE, AT HIS OWN EXPENSE, ADDITIONAL BEDDING, ANOTHER TYPE OF BEDDING, AND/OR HIGHER STRENGTH OF PIPE DESIGNATED BY THE PROJECT ENGINEER. WHERE SHORING IS REQUIRED, THE ALLOWABLE WIDTH OF THE TRENCH SHALL BE INCREASED ONLY BY THE THICKNESS OF THE SHEATHING.

18. WHERE UNSUITABLE MATERIAL IS ENCOUNTERED AT THE SUBGRADE AND ADDITIONAL EXCAVATION IS REQUIRED, THE VOID CREATED BY THE ADDITIONAL EXCAVATION SHALL BE FILLED AND COMPACTED WITH BEDDING MATERIAL AS REQUIRED.

19. USED OF FREE-DRAINING GRANULAR MATERIAL HAVING A MINIMUM SAND EQUIVALENT OF 30 OR HAVING A COEFFICIENT OF PERMEABILITY GREATER THAN 0.001 CENTIMETER PER SECOND IS ALLOWED.

20. GEOTEXTILE FABRIC TO ENVELOP THE PIPE CRADLE AND SELECT BACKFILL MATERIAL SHALL BE PROVIDED WHERE WATER OR UNSTABLE SOIL CONDITIONS ARE ENCOUNTERED.

21. CONTRACTOR SHALL PROVIDE TEMPORARY THRUST RESTRAINTS, BRACING, TEST PLUGS AND/OR OTHER DEVICES NECESSARY TO SUCCESSFULLY COMPLETE PRESSURE TESTING OF ALL PRESSURE PIPING SYSTEMS.

22. ALL BURIED PIPING SPECIFIED FOR PRESSURE SERVICE SHALL BE PROVIDED WITH RESTRAINING DEVICES AT ALL DIRECTIONAL CHANGES, UNLESS NOTED OTHERWISE.

23. ALL FASTENERS SHALL BE MANUFACTURED OF NON-CORROSIVE MATERIALS OR 316 STAINLESS STEEL.

24. PIPES ARE BASED ON NOMINAL SIZES. PIPE MEASUREMENT SHALL BE FROM CENTER TO CENTER OF FITTINGS OR VALVES, UNLESS OTHERWISE NOTED.

25. CONTRACTOR SHALL PROVIDE BOTH CONC. ANCHORS & CLAY DIKES AS REQUIRED BY THE ENGINEER AS FOLLOWS:

25.1. 10%<SLOPE<15%: ONE EVERY 200 LINEAR FEET CLAY DIKES ONLY..

25.2. 15% OR GREATER SLOPES: EVERY 100 LINEAR FEET-CONC. ANCHORS & CLAY DIKES.

25.3. CLAY DIKES SHALL EXTEND FOR THE FULL TRENCH WIDTH (USED FOR PIPE BEDDING AND COVER) AND HAVE A LENGTH OF 5 FEET. LOCATED IN THE MIDDLE OF PIPE LENGTH, AT LEAST 2 FEET FROM A PIPE JOINT. MATERIALS SHALL BE CLAY AS DESIGNATED "CL" AND DEFINED UNDER THE UNIFIED SOIL CLASSIFICATION SYSTEM.

25.4. CONC. ANCHORS SHALL BE LOCATED AT THE DOWNSTREAM SIDE OF JOINTS, SHALL BE UN-REINFORCED AND SHALL BE MINIMUM OF TRENCH WIDTH, 3 FEET HIGH (REPLACING PIPE BEDDING AND COVER) AND 2 FEET THICK.

POTHOLING NOTES:


1. CONTRACTOR SHALL BE RESPONSIBLE FOR THE INVESTIGATION, INSPECTION AND VERIFICATION OF ALL EXISTING UTILITIES SUPPLEMENTED BY ACTUAL DIGGING IN THE FIELD IF NECESSARY TO DETERMINE THE ACTUAL LOCATION OF SUCH UTILITIES WITH THEIR BRANCH AND SERVICE LINES, WHETHER INDICATED ON THE PLANS OR NOT. PERFORM POTHOLING PREFERABLY WITH A VACUUM POTHOLING EQUIPMENT.

2. CONTRACTOR SHALL PERFORM EXPLORATORY EXCAVATIONS AS REQUIRED TO COLLECT AS-BUILT INFORMATION. THE CONTRACTOR SHALL VERIFY THE DEPTH, LOCATION, ALIGNMENT, SIZE, AND MATERIAL OF EXISTING UNDERGROUND UTILITIES OR STRUCTURES EITHER SPECIFICALLY CALLED FOR OR NOT ON THE PLANS. ALL DATA SHOULD BE RECORDED AND INCLUDED IN THE AS-BUILT DRAWINGS.

3. THE CONTRACTOR SHALL USE THE INFORMATION OBTAINED BY POTHOLING TO CONFIRM CONSTRUCTION/INSTALLATION CAN BE CARRIED OUT AS PER DESIGN AND SPECIFICATIONS, OTHERWISE CONTRACTOR IS EXPECTED TO UTILIZE ITS UTMOST EFFORTS AND EXPERTISE TO MAKE CHANGES AT NO ADDITIONAL COST AND FOR ASPA APPROVAL. CONTRACTOR'S PROPOSAL TO ALTER/REVISE THE DESIGN ALIGNMENT SHOULD MINIMIZE THE OVERALL COST.

4. CONTRACTOR SHALL MAINTAIN A CLEAN WORK AREA DURING POTHOLING ACTIVITIES. THIS INCLUDES PREVENTING DIRT/ROCKS FROM LEAVING THE WORK AREA AND ENSURING THAT NORMAL ACTIVITIES/ TRAFFIC ARE NOT IMPACTED.

5. WHENEVER CONNECTIONS OF NEW UTILITIES TO EXISTING UTILITIES

	DESIGNED BY: EDMON O. LACAULAN, P.E. PROJECT ENGINEER		AMERICAN SAMOA POWER AUTHORITY WATER DIVISION WATER ENGINEERING DEPARTMENT P.O. BOX PPB, PAGO PAGO AMERICAN SAMOA 96799 PH: (684)699-1234	PROJECT NAME:	REVISION HISTORY:			SCALE:	
	REVIEWED BY: FIDEL AGUILA JR. SENIOR ENGINEER			TAFUNA ACP REPLACEMENT & WATER SYSTEM UPGRADE PROJECT	DATE	DESCRIPTION	REV. BY	AS SHOWN	
	APPROVED BY: WILLIAM SWORD, P.E. WATER CHIEF ENGINEER			DRAWING TITLE: GENERAL NOTES - 2	-			PROJECT #: A002021972806	
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POTHOLING NOTES (CONT.):

ARE SHOWN ON THE PLANS, THE CONTRACTOR SHALL EXPOSE THE EXISTING LINES AT THE PROPOSED CONNECTIONS TO VERIFY THEIR LOCATIONS, DEPTHS AND ASSURE THAT CONNECTIONS CAN BE MADE PRIOR TO EXCAVATION FOR THE NEW LINES AT NO COST TO THE ASPA.

6. ANY NECESSARY ADJUSTMENTS FOR THE NEW LINES TO ENSURE PROPER CONNECTIONS TO THE EXISTING SHALL BE THE CONTRACTOR'S RESPONSIBILITY.

7. THE CONTRACTOR SHALL RELOCATE EXISTING UTILITIES OR CABLES WHICH DIRECTLY AFFECT THE CONSTRUCTION IN COMPLIANCE WITH THE UTILITY OWNERS REQUIREMENT AT NO ADDITIONAL COST TO ASPA.

ARCHAEOLOGICAL NOTES:

1. CONTRACTOR TO EXERCISE CAUTION IN AREAS NEAR THE ARCHEOLOGICAL SITES DISCOVERED. CONTRACTOR SHALL PROVIDE SAFETY/ ORANGE FENCING TO BARRICADE MARKED ARCHEOLOGICAL SITES DURING CONSTRUCTION AROUND THESE AREAS.

2. CONTRACTOR IS REQUIRED TO CONTACT THE ASPA PROJECT ENGINEER (APE) AND COORDINATE WITH AMERICAN SAMOA HISTORIC PRESERVATION OFFICE (ASHPO) BEFORE STARTING WORK ON THE SPECIFIC AREA.

3. CONTRACTOR SHALL IMMEDIATELY NOTIFY THE APE IF ANY ARTIFACTS, SKELETAL REMAINS OR OTHER ARCHAEOLOGICAL RESOURCES ARE UNEARTHED DURING EXCAVATION OR OTHERWISE DISCOVERED ON THE SITE OF THE WORK.

4. IF DIRECTED BY THE APE, THE CONTRACTOR SHALL IMMEDIATELY SUSPEND ANY CONSTRUCTION ACTIVITY AS NEEDED. THE SUSPENSION OF WORK SHALL REMAIN IN EFFECT UNTIL PERMISSION TO PROCEED HAS BEEN OBTAINED BY THE APE FROM THE ASPA ARCHAEOLOGIST, ASPHO OR PRIVATE LANDOWNER, AS APPLICABLE.

5. IF FURTHER SITE INVESTIGATION, TESTING AND/OR APPROVAL IS NEEDED, THE CONTRACTOR SHALL MAKE ALL ARRANGEMENTS FOR AND COOPERATE WITH SUCH INSPECTIONS, TESTS, AND APPROVALS SO AS NOT TO DELAY COMPLETION OF THE CONTRACT WORK.

6. CONTRACTOR SHALL PROMPTLY FURNISH, WITHOUT ADDITIONAL CHARGE, ALL FACILITIES, LABOR, MATERIAL AND EQUIPMENT REASONABLY NEEDED FOR PERFORMING SUCH SAFE AND CONVENIENT INSPECTIONS AND TESTS AS MAY BE REQUIRED.

ENDANGERED SPECIES NOTES :

1. A SURVEY OF THE PROJECT AREA SHALL BE PERFORMED JUST PRIOR TO COMMENCEMENT OR RESUMPTION OF CONSTRUCTION ACTIVITY TO ENSURE THAT NO PROTECTED SPECIES ARE IN THE PROJECT AREA. IF PROTECTED SPECIES ARE DETECTED, CONSTRUCTION ACTIVITIES SHALL BE POSTPONED UNTIL THE ANIMAL(S) VOLUNTARILY LEAVE THE AREA.

2. IF ANY LISTED SPECIES ENTERS THE AREA DURING CONDUCT OF CONSTRUCTION ACTIVITIES, ALL ACTIVITIES SHALL CEASE UNTIL THE ANIMAL(S) VOLUNTARILY DEPART THE AREA.

3. ALL ON-SITE PROJECT PERSONNEL SHALL BE APPRISED OF THE STATUS OF ANY LISTED SPECIES POTENTIALLY PRESENT IN THE PROJECT AREA AND THE PROTECTIONS AFFORDED TO THOSE SPECIES UNDER FEDERAL LAWS. BROCHURES EXPLAINING THE LAWS AND GUIDELINES FOR LISTED SPECIES IN HAWAII, AMERICAN SAMOA, AND GUAM MAY BE DOWNLOADED FROM
http://www.nmfs.noaa.gov/prot_res/MMWatch/hawaii.html AND
<http://www.fws.gov/pacificislands/wase/endspindex.html#Hawaiian>.

4. ANY INCIDENTAL TAKE OF MARINE MAMMALS SHALL BE REPORTED IMMEDIATELY TO NOAA FISHERIES' 24-HOUR HOTLINE AT 1-888-256-9840. INFORMATION REPORTED MUST INCLUDE THE NAME AND PHONE NUMBER OF A POINT OF CONTACT, LOCATION OF THE INCIDENT, AND NATURE OF THE TAKE AND/OR INJURY.

5. PURSUANT TO THE ENDANGERED SPECIES ACT, ANY TAKE OF FEDERALLY PROTECTED SPECIES (OTHER THAN MARINE MAMMALS) MUST BE REPORTED TO THE U.S. FISH AND WILDLIFE OFFICE OF LAW ENFORCEMENT IN HONOLULU AT 1-808-861-8525.

AC PIPE HANDLING NOTES :

CONTRACTOR SHALL COMPLY WITH NATIONAL EMISSIONS STANDARDS FOR HAZARDOUS AIR POLLUTANTS (NESHAP) AND THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) REGULATIONS TO PROTECT WORKERS FROM THE HEALTH RISK ASSOCIATED WITH AIRBORNE ASBESTOS. CONTRACTOR SHALL SUBMIT PLAN AND PROCEDURES TO INCLUDE BELOW AT MINIMUM;

1. CONTRACTOR SHALL NOT BE PERMITTED TO USE GRINDERS, CARBIDE-TIPPED CUTTING BLADES, ELECTRIC DRILLS AND/OR ANY HIGH-SPEED ABRASIVE DISC SAWS AND SANDERS NOT EQUIPPED WITH POINT OF CUT VENTILATOR OR ENCLOSURES WITH HEPA FILTERED EXHAUST AIR IN CUTTING ASBESTOS CEMENT PIPES.

2. DRY SWEEPING, DRY SHOVELING, OR OTHER DRY CLEAN-UP OF DUST AND ACM DEBRIS IS STRICTLY NOT ALLOWED.

3. ALL ENGINEERS, SUPERVISORS & CREW DIRECTLY IN CONTACT WITH THE DEMOLITION JOB WILL BE PROVIDED WITH PROPER PPE'S SUCH HEPA FILTERED MASK, RUBBER GLOVES, BUNNY SUITS(FOR CREW ONLY) PRIOR TO ANY CUTTING PROCESS.

4. USING MIST SPRAYER, WET EACH PORTION OF THE PIPE TO BE REMOVE WITH THE MIXTURE OF 1OZ. DETERGENT TO 2 GALLONS OF WATER (WATER/SOAP) SOLUTION.

5. A LAYER OF WET TOWELS/BURLAP, 12-MIL PET PLASTIC, AND ANOTHER WET TOWEL/BURLAP SHALL BE USED TO WRAP THE PIPE COLLAR.

6. WITH THE FLAT HEAD END OF A SLEDGEHAMMER STRIKE THE COLLAR ON THE SIDE OF THE SECTION OF PIPE TO BE REMOVED TO PREVENT THE REMAINING SECTION OF PIPE FROM BEING BROKEN WHILE CONTINUOUSLY MISTING THE COLLAR.

7. ALL SECTIONS OF "INTACT" PIPE SHALL BE WRAPPED IN A MINIMUM OF TWO (2) LAYERS OF 6-MIL POLY SHEETS (12-MIL TOTAL) WHILE IN THE TRENCH AND LIFTED OUT OF THE TRENCH USING ONLY NYLON SLINGS.



8. ALL PULVERIZED PART OF THE AC PIPE WILL BE PUT INSIDE A 6-MIL PET DISPOSAL BAG AND LABELED WITH PROJECT NAME AND LOCATION. LIFT THE ACM WASTE BAG(S) FROM THE TRENCH AND MOVE IT/THEM TO A SECURE LOCATION TO PREVENT ACCIDENTAL CONTACT WITH THE BAG(S) THAT WOULD CAUSE IT/THEM TO TEAR.

9. ALL VISIBLE AC PIPE MATERIALS INCLUDING COLLARS, TOWELS, RUBBER GLOVES, GASKETS, AND OTHER ITEMS SUSPECTED OF CONTAINING ASBESTOS SHALL BE DOUBLE BAGGED USING TWO (2) 6-MIL AC WASTE BAGS.

10. IF THERE IS NO HAZARD WASTE FACILITY, ALL AC PIPE SHALL BE ABANDONED IN-PLACE.

SAFETY NOTES:

1. CONTRACTOR SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR THE JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT. INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS. THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER, GOVERNMENT, STATE AND ENGINEER HARMLESS FROM ALL

	PREPARED BY: EDMON O. LACAULAN, P.E. PROJECT ENGINEER	 AMERICAN SAMOA POWER AUTHORITY WATER DIVISION WATER ENGINEERING DEPARTMENT P.O. BOX PPB, PAGO PAGO AMERICAN SAMOA 96799 PH: (684)699-1234 	PROJECT NAME: TAFUNA ACP REPLACEMENT & WATER SYSTEM UPGRADE PROJECT	REVISION HISTORY:			SCALE:	
	DESIGNED BY: EDMON O. LACAULAN, PMP SENIOR ENGINEER			DATE	DESCRIPTION	REV. BY	AS SHOWN	
	APPROVED BY: FIDEL AGUILA WATER CHIEF ENGINEER			-			PROJECT #:	
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SAFETY NOTES (CONT.):


- LIABILITY, REAL OR ALLEGED, ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR THE ENGINEER.
2. CONTRACTOR MUST CONFORM WITH ALL REQUIREMENTS OF THE OSHA STANDARD FOR EXCAVATION SAFETY (29 CFR 1926 SUBPART P). INCLUDED AMONG THE OSHA STANDARDS IS A REQUIREMENT FOR PROTECTION OF WORKERS IN EXCAVATIONS 4 FEET OR GREATER IN DEPTH. PROTECTIVE SYSTEMS CAN BE SLOPING/BENCHING OF EXCAVATION WALLS, OR INSTALLATION OF SUPPORT/SHIELDING DEVICES. DESIGN OF PROTECTIVE SYSTEMS MUST BE BASED ON FIELD CLASSIFICATION OF THE SOIL BY A COMPETENT PERSON. PROTECTIVE SYSTEMS MUST BE IN ACCORDANCE WITH THE TABLES AND FIGURES SHOWN IN THE OSHA STANDARDS, OR MUST BE A MANUFACTURED PROTECTION SYSTEM USED IN STRICT CONFORMANCE WITH THE MANUFACTURER'S INSTRUCTIONS, OR MUST BE A PROTECTION SYSTEM DESIGNED BY A REGISTERED PROFESSIONAL ENGINEER. THE CONTRACTOR SHOULD STUDY THE OSHA STANDARD FOR FURTHER DETAIL.
3. THE CONTRACTOR SHALL PROVIDE SAFE ACCESS TO AND FROM ALL DRIVEWAYS AND STREETS.
4. THE CONTRACTOR SHALL PLAN OPERATIONS TO MINIMIZE THE AMOUNT OF EXCAVATED TRENCHES LEFT OPEN AT THE END OF EACH WORK DAY. OPEN TRENCHES SHALL BE COVERED WITH NON-SKID STEEL PLATES CAPABLE OF CARRYING H-20 VEHICLES IN TRAFFIC AREAS, AND 300 POUNDS PER SQUARE FOOT IN NON-TRAFFIC AREAS. PROVIDE ANCHORING OF THE PLATES IN NON-TRAFFIC AREAS. PROVIDE BARRICADES TO DELINEATE COVERED TRENCHES IN NON-TRAFFIC AREAS AND ALL STOCK/SPoil PILES. CONTRACTOR TO TEMPORARILY PATCHED ANY EXCAVATION WITHIN THE ROADWAY WITH CONCRETE/ OR THIN LAYER OF ASPHALT/ OR COLD MIX.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROPERLY SHORING, SHEETING, AND BRACING THE EXCAVATION AND STABILIZING THE EXISTING GROUND TO RENDER IT SAFE AND SECURE FROM POSSIBLE SLIDES, CAVE-INS AND SETTLEMENT AND FOR PROPERLY SUPPORTING EXISTING STRUCTURES AND FACILITIES WITH BEAMS, STRUTS OR UNDERPINNING TO FULLY PROTECT THEM FROM DAMAGE.
6. THE CONTRACTOR SHALL PROVIDE AN EXCAVATION SHORING PLAN PREPARED AND STAMPED BY A LICENSED PROFESSIONAL ENGINEER COMPETENT IN SOILS AND A LICENSED STRUCTURAL ENGINEER WHEN REQUIRED PER OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) STANDARDS.

7. BARRICADE OPEN EXCAVATIONS AND POST WITH WARNING LIGHTS. KEEP UNATTENDED EXCAVATIONS FREE OF WATER AND MAINTAIN SLOPING AND STABLE WALLS WHEN OVER 4 FEET DEEP. LEAVE A LADDER OR OTHER DEVICE TO ALLOW ESCAPE FROM EXCAVATION. WHEN PERSONNEL ARE IN THE EXCAVATION, AT LEAST 2 MEANS OF EGRESS ARE REQUIRED, WITH LADDERS PROVIDED TO REQUIRE NOT MORE THAN 25' OF LATERAL TRAVEL.
8. CONTRACTOR TO PROVIDE SAFETY FENCE AND BARRICADES FOR ANY AND ALL EQUIPMENT, STOCKPILES OR ANY OTHER CONSTRUCTION MATERIALS THAT WILL BE LEFT ON THE JOB SITE AFTER WORK HOURS AND OVER THE WEEKEND.
9. KEEP THE WORK SITE AND SURROUNDING AREAS FREE FROM DUST NUISANCE.
10. IN AREAS WHERE CONSTRUCTION ACTIVITIES RESTRICT NORMAL ACCESS TO PROPERTIES, THE CONTRACTOR SHALL PROVIDE AND MAINTAIN ALTERNATE ROUTES, WHICH ARE SUBJECT TO APPROVAL BY THE ASPA.
11. ALL PRACTICAL AND NECESSARY EFFORT SHALL BE TAKEN DURING CONSTRUCTION TO PREVENT TREE REMOVAL AT THE EXPENSE OF THE CONTRACTOR.

WATERWAY STD. BMP NOTES

1. THE FOLLOWING MEASURES (AS APPLICABLE) SHALL BE INCORPORATED INTO PROJECTS TO MINIMIZE THE DEGRADATION OF WATER QUALITY AND IMPACTS TO FISH AND WILDLIFE RESOURCES:
2. TURBIDITY AND SILTATION FROM PROJECT-RELATED WORK SHALL BE MINIMIZED AND CONTAINED TO THE IMMEDIATE VICINITY OF THE PROJECT THROUGH THE APPROPRIATE USE OF EFFECTIVE SILT CONTAINMENT DEVICES AND THE CURTAILMENT OF WORK DURING ADVERSE TIDAL AND WEATHER CONDITIONS.
3. THE WORK SHALL BE CONDUCTED IN THE DRY SEASON OR WHEN ANY AFFECTED STREAM HAS MINIMAL OR NO FLOW, TO THE EXTENT PRACTICABLE. THE WORK SHALL BE DISCONTINUED DURING FLOODING, INTENSE RAINFALL, STORM SURGE, OR HIGH SURF CONDITIONS WHERE RUNOFF AND TURBIDITY CANNOT BE CONTROLLED. SHORELINE WORK WILL BE DONE DURING LOW TIDES AS MUCH AS POSSIBLE.

4. DREDGING/FILLING IN THE MARINE/AQUATIC ENVIRONMENT SHALL BE SCHEDULED TO AVOID CORAL SPAWNING AND RECRUITMENT PERIODS.
5. DREDGING AND FILLING IN THE MARINE/AQUATIC ENVIRONMENT SHALL BE DESIGNED TO AVOID OR MINIMIZE THE LOSS OF SPECIAL AQUATIC SITES (CORAL REEFS, WETLANDS, RIFFLE-POOL COMPLEXES, ETC.) AND COMPENSATORY MITIGATION SHALL BE IMPLEMENTED FOR THE UNAVOIDABLE LOSS OF SPECIAL AQUATIC SITES.
6. ALL PROJECT-RELATED MATERIALS AND EQUIPMENT (DREDGES, BARGES, BACKHOES ETC.) TO BE PLACED IN THE WATER SHALL BE CLEANED OF POLLUTANTS PRIOR TO USE.
7. NO PROJECT-RELATED MATERIALS (FILL, REVETMENT ROCK, PIPE ETC.) SHALL BE STOCKPILED IN THE WATER (INTERTIDAL ZONES, REEF FLATS, STREAM CHANNELS, WETLANDS ETC.)
8. ALL DEBRIS REMOVED FROM THE MARINE/AQUATIC ENVIRONMENT SHALL BE DISPOSED OF AT AN APPROVED UPLAND OR OCEAN DUMPING SITE.
9. NO CONTAMINATION (TRASH OR DEBRIS DISPOSAL, ALIEN SPECIES INTRODUCTIONS ETC.) OF ADJACENT MARINE/AQUATIC ENVIRONMENTS (REEF FLATS, CHANNELS, OPEN OCEAN, STREAM CHANNELS, WETLANDS ETC.) SHALL RESULT FROM PROJECT-RELATED ACTIVITIES.
10. FUELING OF PROJECT-RELATED VEHICLES AND EQUIPMENT SHALL TAKE PLACE AWAY FROM THE WATER AND A CONTINGENCY PLAN TO CONTROL PETROLEUM PRODUCTS ACCIDENTALLY SPILLED DURING THE PROJECT SHALL BE DEVELOPED. ABSORBENT PADS AND CONTAINMENT BOOMS SHALL BE STORED ON-SITE, IF APPROPRIATE, TO FACILITATE THE CLEAN-UP OF ACCIDENTAL PETROLEUM RELEASES.
11. ANY UNDER-LAYER FILLS USED IN THE PROJECT SHALL BE PROTECTED FROM EROSION WITH SUITABLE MATERIAL (SUCH AS PRECAST CONCRETE ARMOR OR MAT UNITS) AS SOON AFTER PLACEMENT AS PRACTICABLE.
12. ANY SOIL EXPOSED NEAR WATER AS PART OF THE PROJECT SHALL BE PROTECTED FROM EROSION (WITH SUITABLE MATERIAL SUCH AS PLASTIC SHEETING, FILTER FABRIC ETC.) AFTER EXPOSURE AND STABILIZED AS SOON AS PRACTICABLE (WITH VEGETATION MATTING, HYDROSEEDING ETC.).
13. SILT FENCES, CURTAINS, AND OTHER STRUCTURES SHALL BE INSTALLED PROPERLY AND MAINTAINED IN A FUNCTIONING MANNER FOR THE LIFE OF THE CONSTRUCTION PERIOD WHERE FILL MATERIAL AND EXPOSED SOILS MIGHT CAUSE TRANSPORT OF SEDIMENT OR TURBIDITY BEYOND THE IMMEDIATE CONSTRUCTION SITE.

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GRADING NOTES:

1. NO CONTRACTOR SHALL PERFORM ANY GRADING OPERATION SO AS TO CAUSE FALLING ROCKS, SOIL OR DEBRIS IN ANY FORM TO FALL, SLIDE OR FLOW ONTO ADJOINING PROPERTIES, STREETS OR NATURAL WATERCOURSES. SHOULD SUCH VIOLATIONS OCCUR, THE CONTRACTOR MAY BE CITED AND THE CONTRACTOR SHALL IMMEDIATELY MAKE ALL REMEDIAL ACTIONS NECESSARY.
2. THE CONTRACTOR, AT HIS OWN EXPENSE, SHALL KEEP THE PROJECT AREA AND SURROUNDING AREA FREE FROM DUST NUISANCE. THE WORK SHALL BE IN CONFORMANCE WITH THE AIR POLLUTION CONTROL STANDARDS.
3. ADEQUATE PROVISIONS SHALL BE MADE TO PREVENT SURFACE WATERS FROM DAMAGING THE CUT FACES OF AN EXCAVATION OR THE SLOPED SURFACES OF A FILL. FURTHERMORE, ADEQUATE PROVISIONS SHALL BE MADE TO PREVENT SEDIMENT-LADEN RUNOFF FROM LEAVING THE SITE.
4. ALL SLOPES AND EXPOSED AREAS SHALL BE SODDED OR PLANTED AS SOON AS FINAL GRADES HAVE BEEN ESTABLISHED. PLANTING SHALL NOT BE DELAYED UNTIL ALL GRADING WORK HAS BEEN COMPLETED. GRADING TO FINAL GRADE SHALL BE CONTINUOUS, AND ANY AREA WITHIN WHICH WORK HAS BEEN INTERRUPTED OR DELAYED SHALL BE PLANTED.
5. FILLS ON SLOPES STEEPER THAN 5:1 SHALL BE KEYED.
6. ALL GRADING OPERATIONS SHALL BE PERFORMED IN CONFORMANCE WITH THE APPLICABLE PROVISIONS OF THE WATER QUALITY AND WATER POLLUTION CONTROL STANDARDS.
7. WHERE APPLICABLE AND FEASIBLE THE MEASURES TO CONTROL EROSION AND OTHER POLLUTANTS SHALL BE IN PLACE BEFORE ANY EARTH MOVING PHASE OF THE GRADING IS INITIATED.
8. TEMPORARY EROSION CONTROLS SHALL NOT BE REMOVED BEFORE PERMANENT EROSION CONTROLS ARE IN-PLACE AND ESTABLISHED.
9. IF THE GRADING WORK INVOLVES CONTAMINATED SOIL, THEN ALL GRADING WORK SHALL BE DONE IN CONFORMANCE WITH THE APPLICABLE STATE AND FEDERAL REQUIREMENTS.
10. ALL GRADING AND CONSTRUCTION WORK SHALL IMPLEMENT MEASURES TO ENSURE THAT THE DISCHARGE OF POLLUTANTS FROM THE CONSTRUCTION SITE WILL BE REDUCED TO THE MAXIMUM EXTENT PRACTICABLE AND WILL NOT CAUSE OR CONTRIBUTE TO A VIOLATION OF WATER QUALITY STANDARDS.

11. NON-COMPLIANCE TO ANY OF THE ABOVE REQUIREMENTS MAY RESULT IN IMMEDIATE SUSPENSION OF ALL WORK, AND REMEDIAL WORK SHALL COMMENCE IMMEDIATELY. ALL COSTS INCURRED SHALL BE BILLED TO THE VIOLATOR. FURTHERMORE, VIOLATORS SHALL BE SUBJECTED TO ADMINISTRATIVE, CIVIL AND/OR CRIMINAL PENALTIES.

BMP NOTES:

1. PREVENT OR REDUCE THE DISCHARGE OF POLLUTANTS FROM PAYING OPERATIONS, USING MEASURES TO PREVENT RUNON OR RUNOFF POLLUTION, PROPERLY DISPOSING OF WATER, & TRAINING EMPLOYEES & SUBCONTRACTORS.
2. PREVENT OR REDUCE THE DISCHARGE OF POLLUTANTS TO STORM WATER FROM LEAKS & SPILLS BY REDUCING THE CHANCE FOR SPILLS, STOPPING THE SOURCE OF SPILLS, CONTAINING AND CLEANING UP SPILLS, PROPERLY DISPOSING OF SPILL MATERIALS, AND TRAINING EMPLOYEES.
3. PREVENT OR REDUCE THE DISCHARGE OF POLLUTANTS TO STORM WATER FROM SANITARY SEPTIC WASTE BY PROVIDING CONVENIENT WELL MAINTAINED FACILITIES & ARRANGING FOR REGULAR SERVICES & DISPOSAL.
4. PREVENT OR REDUCE THE DISCHARGE OF POLLUTANTS TO STORM WATER FROM DEWATERING OPERATIONS BY USING SEDIMENT CONTROLS & BY TESTING THE GROUNDWATER FOR POLLUTION.
5. MEASURES TO CONTROL EROSION AND OTHER POLLUTANTS SHALL BE IN PLACE BEFORE ANY WORK IS INITIATED. THESE MEASURES SHALL BE PROPERLY CONSTRUCTED AND MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD.
6. ALL TEMPORARY EROSION CONTROL MEASURES SHALL BE CHECKED AND REPAIRED AS NECESSARY.
7. GRASSING OR MULCHING OF EXPOSED AREAS TO BE DONE AS FINISH GRADES ARE ESTABLISHED.
8. DIVERSION OF STORM RUNOFF AWAY FROM THE FILL SLOPES UNTIL GRASSING ON THE FILL SLOPES ARE ESTABLISHED.
9. PROVIDE STABILIZED CONSTRUCTION ENTRANCE. STABILIZED CONSTRUCTION ENTRANCE SHALL BE MAINTAINED AT THE EGRESS AND INGRESS TO THE SITE.
10. TIRE WASH MAY BE USED IN LIEU OF STABILIZED CONSTRUCTION ENTRANCE. CONTRACTOR IS RESPONSIBLE TO KEEP ROADWAYS CLEAN FROM SOIL AND CONSTRUCTION DEBRIS.

11. DUST CONTROL SHOULD BE APPLIED TO REDUCE DUST EMISSIONS. WATER THE AREA DURING CONSTRUCTION TO CONTROL DUST.
12. ALL STORM DRAIN INLETS ON SITE AND THOSE OFF SITE WHICH MAY RECEIVED RUN OFF FROM THE SITE SHALL USE AN INLET PROTECTION DEVICE.
13. REFER TO EROSION AND SEDIMENTATION CONTROLS PLAN & DETAILS.


DEPARTMENT OF PUBLIC WORKS
(DPW) PUBLIC TRANSIT DIVISION
(PTD) NOTE:

THIS PROJECT WILL AFFECT BUS OPERATIONS, BUS ROUTES, BUS STOPS, AND PARA-TRANSIT OPERATIONS. AT LEAST TWO (2) WEEKS PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL PROVIDE NOTIFICATION OF THE SCOPE OF WORK, LOCATION, DETOUR, PROPOSED CLOSURE OF ANY STREET, TRAFFIC LANE, SIDEWALK, OR BUS STOP AND DURATION OF PROJECT TO:

TRANSIT DIVISION
DEPARTMENT OF PUBLIC WORKS
AMERICAN SAMOA GOVERNMENT
+1 (684) 699-5357/5367
info@dialaride.as

CABLE TELEVISION NOTES:

1. THE CONTRACTOR SHALL PROCURE AND PAY FOR ALL LICENSES AND PERMITS AND SHALL GIVE ALL NOTICES NECESSARY AND INCIDENT TO THE DUE AND LAWFULL PROSECUTION OF THE WORK.
2. THE CONTRACTOR SHALL TAKE NECESSARY PRECAUTION NOT TO DAMAGE EXISTING CABLES OR DUCTS. ANY WORK INVOLVING EXISTING CABLES OR DUCTS SHALL BE DONE IN THE PRESENCE OF THE CABLE INSPECTOR OR HIS REPRESENTATIVE.
3. THE CONTRACTOR SHALL NOTIFY THE CABLE INSPECTOR 48 HOURS PRIOR TO START OF PULLBOX ADJUSTMENTS.

DATE PLOTTED: 4/2/2025 3:40:44 PM	<div>DESIGNED BY: EDMON O. LACAULAN, P.E. PROJECT ENGINEER</div> <div>REVIEWED BY: FIDEL AGUILA JR. SENIOR ENGINEER</div> <div>APPROVED BY: WILLIAM SWORD, P.E. WATER CHIEF ENGINEER</div> <div>ISSUE FOR: PERMITTING</div>	<div></div> <div>AMERICAN SAMOA POWER AUTHORITY WATER DIVISION WATER ENGINEERING DEPARTMENT P.O. BOX PPB, PAGO PAGO AMERICAN SAMOA 96799 PH: (684)699-1234</div>	<div>PROJECT NAME: TAFUNA ACP REPLACEMENT & WATER SYSTEM UPGRADE PROJECT</div> <div>DRAWING TITLE: GENERAL NOTES - 5</div> <div>PROJECT LOCATION: TAFUNA, PAGO PAGO AS 96799</div>	REVISION HISTORY:			SCALE:	
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PUBLIC HEALTH, SAFETY AND
CONVENIENCE NOTES:

1. THE CONTRACTOR SHALL OBSERVE AND COMPLY WITH ALL GOVERNMENT AND LOCAL LAWS REQUIRED FOR THE PROTECTION OF PUBLIC HEALTH, SAFETY AND ENVIRONMENTAL QUALITY.
2. THE CONTRACTOR, AT HIS OWN EXPENSE, SHALL KEEP THE PROJECT AREA AND ITS SURROUNDING AREAS FREE FROM DUST NUISANCE. THE WORK SHALL BE IN CONFORMANCE WITH THE AIR POLLUTION CONTROL STANDARDS AND REGULATIONS OF THE AMERICAN SAMOA DEPARTMENT OF HEALTH.THE DPW AND ASPA MAY REQUIRE SUPPLEMENTARY MEASURES AS NECESSARY.
3. NO CONTRACTOR SHALL PERFORM ANY CONSTRUCTION OPERATIONS SO AS TO CAUSE FALLING ROCKS, SOIL OR DEBRIS IN ANY FORM TO FALL, SLIDE OR FLOW INTO EXISTING ASG DRAINAGE SYSTEMS, OR ADJOINING PROPERTIES, STREETS OR NATURAL WATERCOURSES. SHOULD SUCH VIOLATION OCCUR, THE CONTRACTOR MAY BE CITED AND THE CONTRACTOR SHALL IMMEDIATELY MAKE ALL REMEDIAL ACTIONS NECESSARY AT NO COST TO ASPA.
4. THE CONTRACTOR SHALL PROVIDE, INSTALL AND MAINTAIN ALL NECESSARY SIGNS, LIGHTS, FLARES, BARRICADES, MARKERS, CONES, AND OTHER PROTECTIVE FACILITIES AND SHALL TAKE ALL NECESSARY PRECAUTIONS FOR THE PROTECTION, CONVENIENCE AND SAFETY OF THE PUBLIC. THE CONTRACTOR SHALL APPLY FOR A CONSTRUCTION PERMIT WITH A NOISE POLLUTION CONTROL PLAN.
5. THE CONTRACTOR ATTENTION IS DIRECTED TO TITLE II, ADMINISTRATIVE RULES, CHAPTER 43 PUBLIC HEALTH REGULATIONS AMERICAN SAMOA DEPARTMENT OF HEALTH, "COMMUNITY NOISE CONTROL" IN WHICH MAXIMUM ALLOWABLE NOISE LEVELS HAVE BEEN SET. IF THE CONSTRUCTION ACTIVITIES FOR THIS PROJECT WILL EXCEED THE ALLOWABLE NOISE LEVELS, THE CONTRACTOR WILL BE REQUIRED TO OBTAIN A PERMIT FROM THE DIRECTOR OF THE DEPARTMENT OF PUBLIC HEALTH. THE CONTRACTOR SHALL OBTAIN A COPY OF CHAPTER 43 AND BECOME FAMILIAR WITH THE NOISE LEVEL RESTRICTIONS AND THE PROCEDURES FOR OBTAINING A PERMIT FOR CONSTRUCTION ACTIVITIES.

ADJUSTMENT TO EXISTING UTILITIES
NOTE:

1. ADJUST ALL UTILITY VALVE BOX FRAMES & COVERS, WATER METER BOXES, MANHOLE FRAMES & COVERS, STREET MONUMENT COVERS, ETC., TO NEW FINISH GRADE. COORDINATE WITH PRIVATE COMPANIES AND AGENCIES FOR WORK ON EACH RESPECTIVE UTILITY.


MECHANICAL/ELECTRICAL DIVISION
NOTES:

1. THE CONTRACTOR SHALL NOTIFY ASPA TWO (2) WEEKS IN ADVANCE OF ANY RELOCATION OF UTILITY POLE(S) THAT MAY BE NECESSARY.
2. THE CONTRACTOR SHALL NOTIFY ASPA, THREE (3) WORKING DAYS PRIOR TO ANY WORK ON THE STREET LIGHTING SYSTEM (PHONE: 699-1234).
3. THE STREET LIGHTING SYSTEM SHALL BE KEPT OPERATIONAL DURING CONSTRUCTION. ANY WORK REQUIRED SHALL BE APPROVED BY THE MECHANICAL/ELECTRICAL DESIGN AND ENGINEERING DIVISION, ASPA AND PAID FOR BY THE CONTRACTOR.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGES TO THE EXISTING STREET LIGHTING FACILITIES. ANY AND ALL DAMAGES TO THESE FACILITIES SHALL BE REPAIRED BY THE CONTRACTOR AT HIS COST IN ACCORDANCE WITH THE REQUIREMENTS OF ASPA.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGES TO THE AMERICAN SAMOA TELECOMMUNICATIONS AUTHORITY (ASTCA) EXISTING COMMUNICATIONS FIBER OPTIC CABLE SYSTEM. ANY AND ALL DAMAGES TO THESE FACILITIES SHALL BE REPAIRED BY THE CONTRACTOR AT HIS COST IN ACCORDANCE WITH THE REQUIREMENTS OF THE ASTCA.

TRAFFIC NOTES:

1. THE CONTRACTOR SHALL PROVIDE, INSTALL, AND MAINTAIN ALL NECESSARY SIGNS AND OTHER PROTECTIVE FACILITIES, WHICH SHALL CONFORM WITH THE RULES GOVERNING THE USE OF TRAFFIC CONTROL DEVICES AT WORK SITES ON OR ADJACENT TO PUBLIC STREETS AND HIGHWAYS" ADOPTED BY THE AMERICAN SAMOA GOVERNMENT (ASG) DIRECTOR OF PUBLIC SAFETY, AND THE CURRENT U.S. FEDERAL HIGHWAY ADMINISTRATION'S "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS (MUTCD), PART VI-TRAFFIC CONTROLS FOR STREET AND HIGHWAY CONSTRUCTION AND MAINTENANCE OPERATIONS."
2. DURING NON-WORKING HOURS, ALL TRENCHES SHALL BE COVERED WITH A SAFE NON-SKID BRIDGING MATERIAL AND ALL LANES SHALL BE OPEN TO TRAFFIC AS APPLICABLE.
3. WHERE PEDESTRIAN WALKWAYS EXIST, THEY SHALL BE MAINTAINED IN PASSABLE CONDITION OR OTHER FACILITIES FOR PEDESTRIANS SHALL BE PROVIDED. PASSAGE BETWEEN WALKWAYS AT INTERSECTIONS SHALL LIKEWISE BE PROVIDED.
4. DRIVEWAYS SHALL BE KEPT OPEN UNLESS THE RESIDENTS OF THE PROPERTY USING THESE RIGHT-OF-WAYS ARE OTHERWISE PROVIDED WITH ADEQUATE ALTERNATIVE INGRESS AND EGRESS TO THE AFFECTED PROPERTY.

5. FOR EMERGENCY VEHICULAR ACCESS, NO MATERIAL AND/OR EQUIPMENT SHALL BE STOCKPILED OR OTHERWISE STORED WITHIN STREET RIGHT-OF-WAY EXCEPT AT LOCATIONS DESIGNATED IN WRITING AND APPROVED BY ASPA PROJECT ENGINEER.
6. MAINTAIN TWO-WAY TRAFFIC ON HIGHWAY AT ALL TIMES UNLESS PRIOR PERMISSION TO CLOSE ONE LANE IS OBTAINED FROM THE DEPARTMENT OF PUBLIC SAFETY. IF LANE CLOSURE IS REQUIRED, PROPER ADVANCE NOTICE TO THE PUBLIC VIA NORMAL PUBLICATIONS OR RADIO ANNOUNCEMENTS IS REQUIRED. ONE LANE TRAFFIC IS NOT ALLOWED AT ANY TIME AFTER WORK HOURS.
7. AT CERTAIN LOCATIONS, "NO LANE CLOSURE" WILL BE ALLOWED DURING THE "BACK TO SCHOOL JAM", THANKSGIVING WEEKEND. CHRISTMAS/NEW YEAR PERIOD AND AT OTHER TIMES AS DIRECTED BY THE HIGHWAY DIVISION
8. DURING WORKING HOURS, THE CONTRACTOR SHALL PROVIDE FOR THROUGH TRAFFIC. DURING NON-WORKING HOURS, ALL TRENCHES SHALL BE COVERED WITH A SAFE NON-SKID BRIDGING MATERIAL AND ALL LANES SHALL BE OPEN TO TRAFFIC.
9. THE CONTRACTOR SHALL HIRE SPECIAL OFF-DUTY POLICE OFFICERS TO CONTROL THE FLOW OF TRAFFIC.
10. WHERE PEDESTRIAN WALKWAYS EXIST, THEY SHALL BE MAINTAINED IN PASSABLE CONDITION OR OTHER FACILITIES FOR PEDESTRIANS SHALL BE PROVIDED. PASSAGE BETWEEN WALKWAYS AT INTERSECTIONS SHALL LIKEWISE BE PROVIDED.
11. DRIVEWAYS SHALL BE KEPT OPEN UNLESS THE OWNERS OF THE PROPERTY USING THESE RIGHTS-OF-WAY ARE OTHERWISE PROVIDED FOR SATISFACTORILY.
12. THE CONTRACTOR SHALL REPLACE OR REPAIR ALL TRAFFIC SIGNS, POSTS AND PAVEMENT MARKINGS DISTURBED BY HIS ACTIVITIES.
13. THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS AT ONE (1) WEEK PRIOR TO ANY WORK TO BE DONE ON SIGNS, POSTS, AND PAVEMENT MARKINGS.
14. NO EQUIPMENT SHALL BE STORED WITHIN STREET RIGHTS-OF-WAY EXCEPT AT LOCATIONS DESIGNATED IN WRITING AND APPROVED BY ASPA.
15. ASPA SHALL ENSURE THAT THE CONTRACTOR INSTALLS THE CONSTRUCTION TRAFFIC CONTROL DEVICES IN ACCORDANCE WITH THE MUTCD AND THE APPROVED TRAFFIC CONTROL PLANS AS SPECIFIED IN TRAFFIC NOTE #2.
16. REFER TO TRAFFIC CONTROL PLAN FOR DETAILS.

	DESIGNED BY: EDMON O. LACAULAN, P.E. PROJECT ENGINEER		AMERICAN SAMOA POWER AUTHORITY WATER DIVISION WATER ENGINEERING DEPARTMENT P.O. BOX PPB, PAGO PAGO AMERICAN SAMOA 96799 PH: (684)699-1234	PROJECT NAME:	REVISION HISTORY:			SCALE:	
	REVIEWED BY: FIDEL AGUILA JR. SENIOR ENGINEER			TAFUNA ACP REPLACEMENT & WATER SYSTEM UPGRADE PROJECT	DATE	DESCRIPTION	REV. BY	AS SHOWN	
	APPROVED BY: WILLIAM SWORD, P.E. WATER CHIEF ENGINEER			DRAWING TITLE: GENERAL NOTES - 6	-			PROJECT #:	
	ISSUE FOR: PERMITTING			PROJECT LOCATION: TAFUNA, PAGO PAGO AS 96799				A002021972806	
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ASTCA GENERAL
CONSTRUCTION/DESIGN NOTES:

1. THE CONTRACTOR SHALL PROCURE AND PAY FOR ALL LICENSES AND PERMITS AND SHALL GIVE ALL NOTICES NECESSARY AND INCIDENT TO THE DUE AND LAWFUL PROSECUTION OF THE WORK.

2. THE CONTRACTOR SHALL OBTAIN AN EXCAVATION PERMIT AND TONING REQUEST FROM ASTCA'S EXCAVATION PERMIT SECTION, LOCATED AT _____, TWO WEEKS PRIOR TO THE START OF CONSTRUCTION. _____.

3. PRIOR TO THE EXCAVATION OF THE DUCTLINE, THE CONTRACTOR SHALL REQUEST ASTCA TO LOCATE THE EXISTING DUCTLINE WHEREVER REQUIRED. FOR UNDERGROUND CABLE LOCATING AND MARKING, FIVE (5) WORKING DAYS ADVANCE NOTICE IS REQUIRED. THREE (3) WORKING DAYS ADVANCE NOTICE IS REQUIRED FOR ANY INSPECTION BY A DESIGNATED REPRESENTATIVE.

4. THE LOCATIONS OF EXISTING UTILITIES ARE APPROXIMATE ONLY. THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION AND SHALL MAINTAIN PROPER CLEARANCES WHENEVER CONSTRUCTION CROSSES OR IS IN CLOSE PROXIMITY OF ASTCA FACILITIES. THE CONTRACTOR SHALL VERIFY THEIR LOCATIONS AND SHALL BE LIABLE FOR ANY DAMAGES TO ASTCA FACILITIES. ANY DAMAGES SHALL BE REPORTED IMMEDIATELY TO ASTCA'S REPAIR SECTION AT ____ (24 HOURS) OR TO THE EXCAVATION PERMIT SECTION AT XXX-XXXX (NORMAL WORKING HOURS, MONDAY THROUGH FRIDAY, EXCEPT HOLIDAYS). AS A RESULT OF HIS OPERATIONS, ADJUSTMENTS TO THE NEW DUCTLINE ALIGNMENT, IF REQUIRED, SHALL BE MADE TO PROVIDE THE REQUIRED CLEARANCES.

5. THE CONTRACTOR SHALL TAKE NECESSARY PRECAUTION NOT TO DAMAGE EXISTING CABLES OR DUCTS. AN ASTCA INSPECTOR OR DESIGNATED REPRESENTATIVE IS REQUIRED TO BE AT ANY JOB SITE WHENEVER THERE WILL BE A BREAKAGE INTO OR ENTRY INTO ANY STRUCTURE THAT CONTAINS ASTCA FACILITIES. TEMPORARY CABLE AND DUCT SUPPORTS SHALL BE PROVIDED WHEREVER NECESSARY.

6. THE CONTRACTOR SHALL NOTIFY ASTCA'S INSPECTOR OR DESIGNATED REPRESENTATIVE A MINIMUM OF 72 HOURS PRIOR TO EXCAVATION, BRACING, OR BACKFILLING OF ASTCA'S STRUCTURES OR FACILITIES.

7. ALL APPLICABLE CONSTRUCTION WORK SHALL BE DONE IN ACCORDANCE WITH THE ASTCA STANDARD SPECIFICATIONS FOR PLACING TELEPHONE SYSTEMS, ALL SUBSEQUENT AMENDMENTS AND ADDITIONS, AND ALL OTHER PERTINENT STANDARDS FOR TELEPHONE CONSTRUCTION. CONTRACTOR SHALL FAMILIARIZE HIS PERSONNEL BY OBTAINING APPLICABLE SPECIFICATIONS.

8. WHEN EXCAVATION IS ADJACENT TO OR BENEATH ASTCA'S EXISTING STRUCTURES OR FACILITIES, THE CONTRACTOR SHALL:

- A) SHEET AND/OR BRACE THE EXCAVATION TO PREVENT SLIDES, CAVE-INS, OR SETTLEMENTS TO ENSURE NO MOVEMENT TO ASTCA'S STRUCTURES OR FACILITIES.
- B) PROTECT EXISTING STRUCTURES AND/OR FACILITIES WITH BEAMS, STRUTS, OR UNDERPINNING WHILE EXCAVATING BENEATH THEM TO ENSURE NO MOVEMENT TO ASTCA'S STRUCTURES OR FACILITIES.

9. THE CONTRACTOR SHALL BRACE ALL POLES OR LIGHT STANDARDS NEAR THE NEW DUCTLINE, MANHOLE, OR HANDHOLE DURING HIS OPERATIONS.

10. THE CONTRACTOR SHALL SAW-CUT A.C. PAVEMENT AND CONCRETE GUTTER WHEREVER NEW MANHOLES, HANDHOLES, OR DUCTLINES ARE TO BE PLACED AND SHALL RESTORE TO EXISTING CONDITION OR BETTER.

11. THE CONTRACTOR SHALL COMPLY WITH THE POLICY ADOPTED BY THE DEPARTMENT OF PUBLIC WORKS, CONCERNING THE REPLACEMENT OF CONCRETE SIDEWALKS AFTER EXCAVATION WORK.

12. THE UNDERGROUND PIPES, CABLES, OR DUCTLINES 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 IN 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 THE NEW LINES.

13. WHEREVER CONNECTIONS TO EXISTING UTILITIES ARE SHOWN ON THE PLANS, THE CONTRACTOR SHALL EXPOSE THE EXISTING LINES PRIOR TO EXCAVATION OF THE MAIN TRENCHES TO VERIFY THEIR LOCATIONS AND DEPTHS.

14. THE CONTRACTOR, AT HIS OWN EXPENSE, SHALL KEEP THE PROJECT AND SURROUNDING AREA FREE FROM DUST NUISANCE. THE COST FOR SUPPLEMENTARY MEASURES, WHICH WILL BE REQUIRED BY ASPA, SHALL BE BORNE BY THE CONTRACTOR.

15. THE CONTRACTOR SHALL PUMP ALL MANHOLES DRY DURING FINAL INSPECTION.

16. THE CONTRACTOR SHALL NOTIFY ASTCA INSPECTOR 24 HOURS PRIOR TO THE POURING OF CONCRETE OR BACKFILLING.

17. WHEN CONNECTING TO MANHOLE WALLS, ALL EXISTING REINFORCING BARS SHALL BE LEFT INTACT. DUCTS SHALL BE ADJUSTED IN THE FIELD IN ORDER TO CLEAR REINFORCING.


18. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LAYING OUT ALL REQUIRED LINES AND GRADES AND SHALL PRESERVE ALL BENCH MARKS AND WORKING POINTS NECESSARY TO LAY OUT THE WORK CORRECTLY. THE NEW DUCTLINE SHALL BE ADJUSTED BY THE CONTRACTOR TO SUIT THE EXISTING CONDITIONS AND THE DETAILS AS DESCRIBED IN THE PLANS.

19. MINIMUM CONCRETE STRENGTH SHALL BE:
FOR DUCTLINE 2500 PSI AT 28 DAYS
FOR MANHOLE 3000 PSI AT 28 DAYS OR AS SPECIFIED IN DESIGN NOTES

20. BENDS IN THE DUCT ALIGNMENT, DUE TO CHANGES IN GRADE SHALL HAVE A MINIMUM RADIUS OF 25 FEET. ALL 90 DEGREE C-BENDS AT A POLE OR AT THE BUILDING FLOOR SLAB PENETRATION, SHALL HAVE A BEND RADIUS OF TEN TIMES THE DIAMETER OF THE DUCT OR GREATER.

21. AFTER DUCTLINE HAS BEEN COMPLETED, A MANDREL WITH A SQUARE FRONT NOT LESS THAN 12" LONG AND HAVING A DIAMETER OF 1/4" LESS THAN THE INSIDE DIAMETER OF THE DUCT, SHALL BE PULLED THROUGH EACH DUCT AFTER WHICH A BRUSH WITH STIFF BRISTLES SHALL BE PULLED THROUGH TO MAKE CERTAIN THAT NO PARTICLES OF EARTH, SAND, OR GRAVEL HAVE BEEN LEFT INSIDE. DUCTS SHALL BE COMPLETELY DRY AND CLEAN.

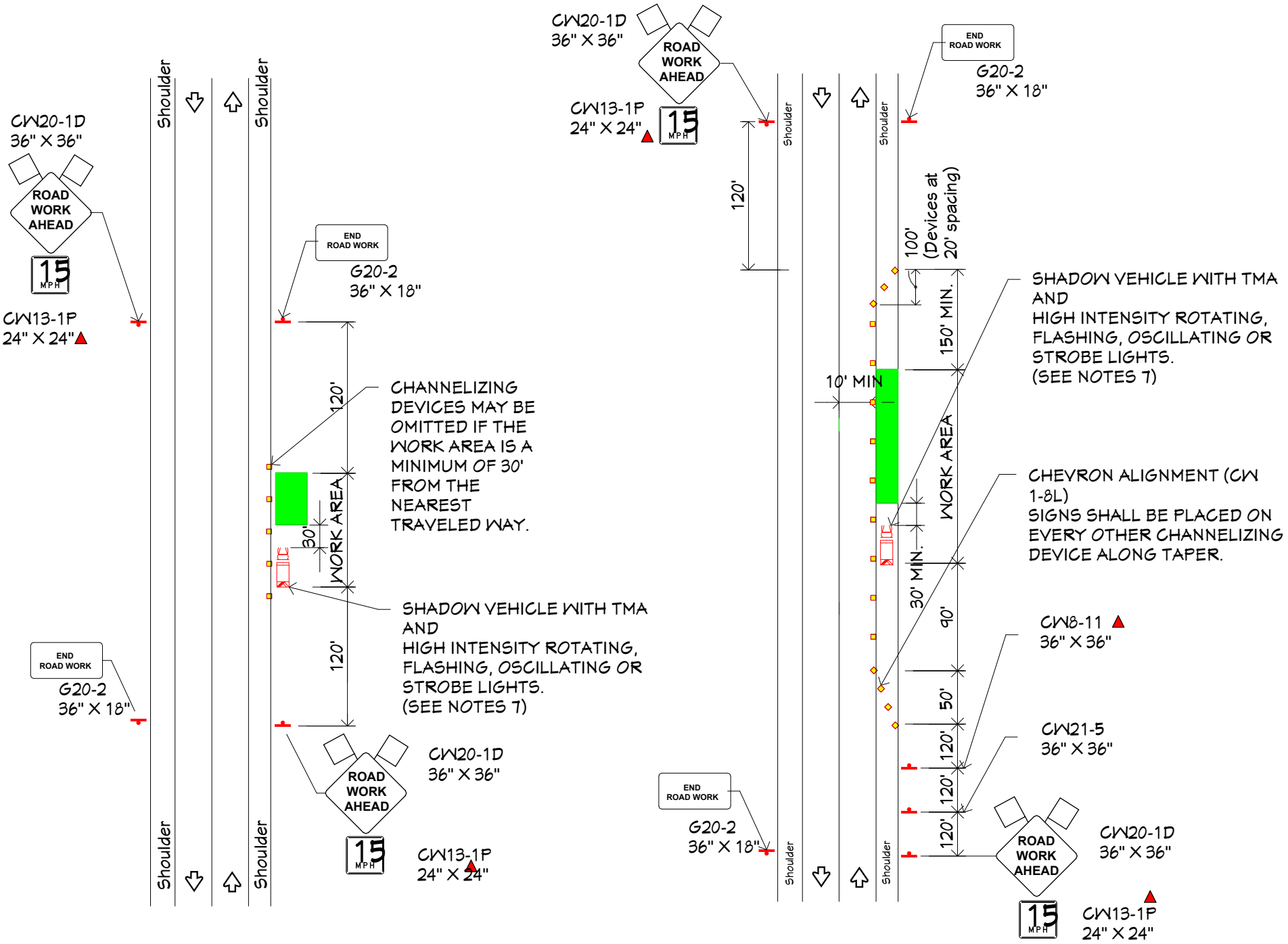
22. ALL DUCTS AND CONDUITS SHALL HAVE AN 1800# POLYESTER MULE-TAPE (NEPTCO, WP1800P,ASTCA MATERIAL CODE NO. 571154) INSTALLED THROUGHOUT ITS ENTIRE LENGTH. ALL DUCTS SHALL BE CAPPED TO PREVENT ENTRY OF FOREIGN MATERIAL DURING CONSTRUCTION AND AT THE COMPLETION OF INSTALLATION.

	DESIGNED BY: EDMON O. LACAULAN, P.E. PROJECT ENGINEER	 AMERICAN SAMOA POWER AUTHORITY WATER DIVISION WATER ENGINEERING DEPARTMENT P.O. BOX PPB, PAGO PAGO AMERICAN SAMOA 96799 PH: (684)699-1234	PROJECT NAME:	REVISION HISTORY:			SCALE:		
	REVIEWED BY: FIDEL AGUILA JR. SENIOR ENGINEER		DRAWING TITLE: GENERAL NOTES - 7	DATE	DESCRIPTION	REV. BY	AS SHOWN		
	APPROVED BY: WILLIAM SWORD, P.E. WATER CHIEF ENGINEER			-			PROJECT #:		
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TRAFFIC CONTROL PLAN NOTES:

- 1. CONTRACTOR SHALL SUBMIT TO APE A TRAFFIC CONTROL PLAN & APPROVED PERMIT FROM DPS. CONTRACTOR SHALL NOTIFY DEPARTMENT OF PUBLIC SAFETY AT LEAST 48HRS. PRIOR TO BEGINNING ANY WORK (12HRS. IF WORK IS DURING WEEKEND/HOLIDAY).
- 2. WORK MAY ONLY BE DONE DURING NON-PEAK HOUR TRAFFIC PERIODS. ALL TRAFFIC LANES SHALL BE FREE AND OPEN TO TRAFFIC DURING PEAK HOURS UNLESS OTHERWISE APPROVED BEFOREHAND.
- 3. COMPLY WITH FEDERAL HIGHWAY ADMINISTRATION REGULATIONS, THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES AND ASG TRAFFIC SAFETY REGULATIONS-DPS.
- 4. WHERE TRAFFIC IS OBSTRUCTED, TRAFFIC CONTROL SHALL BE CONTINUOUSLY MAINTAINED. PROVIDE LIGHTED WORK AREA AND FLASHING WARNING LIGHTS ON BARRICADES AT NIGHT.
- 5. DETOUR AND/OR TRAFFIC CONTROL OPERATIONS ARE SUBJECT TO REVIEW AND APPROVAL OF DEPARTMENT OF PUBLIC SAFETY.
- 6. FLAGS ATTACHED TO SIGNS WHERE SHOWN ARE OPTIONAL. ALL TRAFFIC CONTROL DEVICES ILLUSTRATED ARE REQUIRED, EXCEPT THOSE DENOTED WITH THE TRIANGLE SYMBOL ARE OPTIONAL.
- 7. A SHADOW VEHICLE WITH A TMA SHOULD BE USED ANYTIME IT CAN BE POSITIONED 30 TO 100 FEET IN ADVANCE OF THE AREA OF CREW EXPOSURE WITHOUT ADVERSELY AFFECTING THE PERFORMANCE OR QUALITY OF THE WORK. IF WORKERS ARE NO LONGER PRESENT BUT ROAD OR WORK CONDITIONS REQUIRE THE TRAFFIC CONTROL TO REMAIN IN PLACE, TYPE 3 BARRICADES OR OTHER CHANNELIZING DEVICES MAY BE SUBSTITUTED FOR THE SHADOW VEHICLE AND TMA.

LEGEND			
	Type 3 Barricade		Channelizing Devices
	Heavy Work Vehicle		Truck Mounted Attenuator (TMA)
	Trailer Mounted Flashing Arrow Board		Portable Changeable Message Sign (PCMS)
	Sign		Traffic Flow
	Flag		Flagger



1 WORK SPACE NEAR SHOULDER
Scale: NTS

2 WORK SPACE ON SHOULDER
Scale: NTS

DESIGNED BY:
EDMON O. LACAULAN, P.E.
PROJECT ENGINEER

REVIEWED BY:
FIDEL AGUILA JR.
SENIOR ENGINEER

APPROVED BY:
WILLIAM SWORD, P.E.
WATER CHIEF ENGINEER

ISSUE FOR:
PERMITTING



AMERICAN SAMOA POWER AUTHORITY
WATER DIVISION
WATER ENGINEERING DEPARTMENT
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PROJECT NAME:
TAFUNA ACP REPLACEMENT & WATER SYSTEM UPGRADE PROJECT

DRAWING TITLE:
TEMPORARY TRAFFIC CONTROL PLAN

PROJECT LOCATION:
TAFUNA, PAGO PAGO AS 96799

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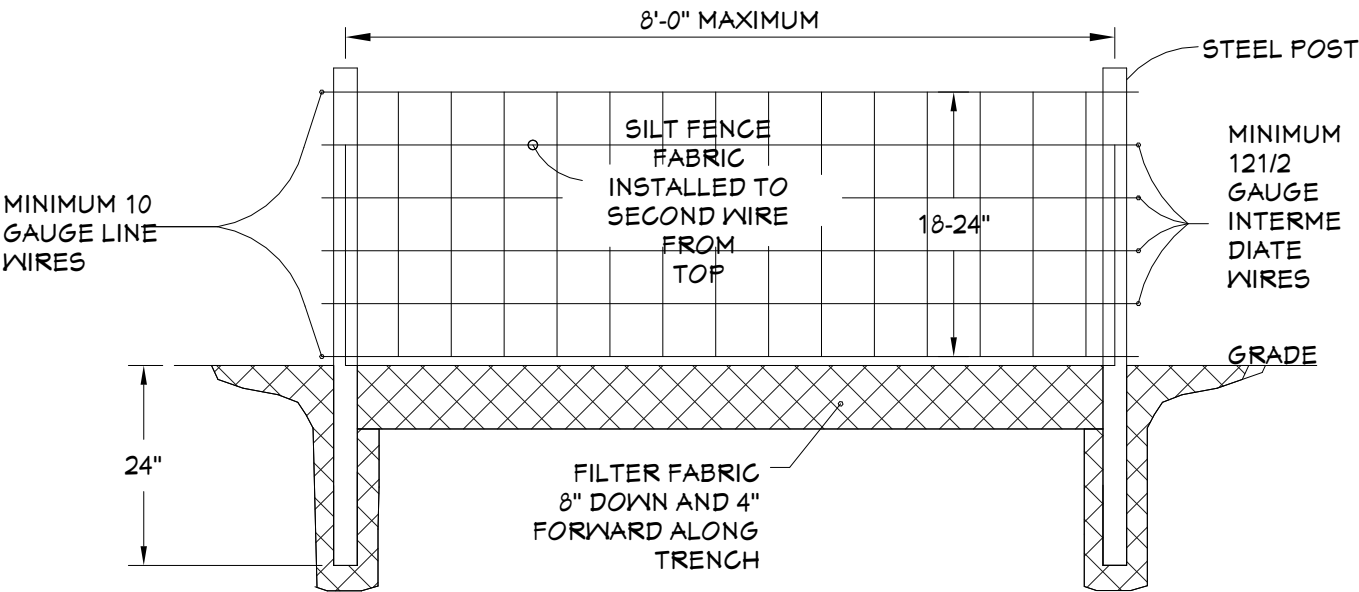
EROSION & SEDIMENTATION NOTES:

1. THE CONTRACTOR SHALL SUBMIT AN EROSION AND SEDIMENTATION CONTROL PLAN TO AMERICAN SAMOA GOVERNMENT (ASG) ENVIRONMENTAL PROTECTION AGENCY (EPA) AND IS RESPONSIBLE FOR CONFORMANCE WITH THE APPLICABLE PROVISIONS OF THE WATER QUALITY AND WATER POLLUTION CONTROL STANDARDS CONTAINED IN AMERICAN SAMOA GOVERNMENT (ASG) ENVIRONMENTAL PROTECTION AGENCY EARTHMOVING REGULATIONS 1996 AND THE INITIAL ENVIRONMENTAL ASSESSMENT SUBMITTED IN ACCORDANCE WITH THE ENVIRONMENTAL IMPACT ASSESSMENT REGULATIONS 1995. BEST MANAGEMENT PRACTICES SHALL BE EMPLOYED AT ALL TIMES DURING CONSTRUCTION.
2. CONTRACTOR OR ANY OF ITS SUBCONTRACTORS SHALL NOT PERFORM ANY WORK OPERATION SO AS TO CAUSE FALLING ROCKS, SOIL OR DEBRIS IN ANY FORM TO FALL, SLIDE OR FLOW INTO EXISTING STATE DRAINAGE SYSTEMS, OR ADJOINING PROPERTIES, STREETS OR NATURAL WATERCOURSES. SHOULD SUCH VIOLATIONS OCCUR, THE CONTRACTOR MAY BE CITED AND THE CONTRACTOR SHALL IMMEDIATELY MAKE ALL REMEDIAL ACTIONS NECESSARY AT NO COST TO ASPA.
3. THE CONTRACTOR SHALL REMOVE ALL SILT AND DEBRIS RESULTING FROM HIS WORK DEPOSITED IN DRAINAGE FACILITIES, ROADWAYS AND OTHER AREAS. THE COSTS INCURRED FOR ANY NECESSARY REMEDIAL ACTION BY ASPA PROJECT ENGINEER OR GOVERNMENT SHALL BE PAYABLE BY THE CONTRACTOR.
4. DURING CONSTRUCTION, PREVENTIVE MAINTENANCE MEASURES SHALL BE USED TO CONTROL FORESEEABLE DUST, EROSION OR SEDIMENTATION PROBLEMS WHICH MAY ARISE AS THE JOB PROGRESSES.
5. FUGITIVE DUST AND SOLID WASTE DISPOSAL DURING GRUBBING ACTIVITIES SHALL MEET REQUIREMENTS OF ADMINISTRATIVE RULES, TITLE II, CHAPTER 60, AIR POLLUTION CONTROL AND CHAPTER 58, SOLID WASTE MANAGEMENT CONTROL.

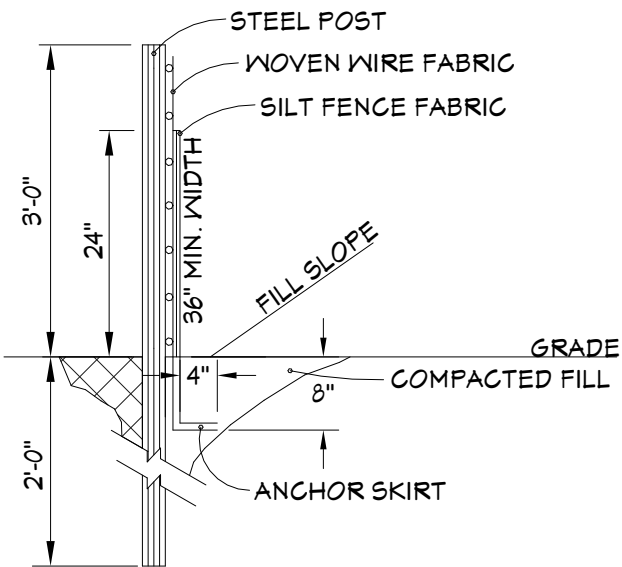
EROSION AND SEDIMENTATION CONTROLS:

THE FOLLOWING MEASURES SHALL BE INCORPORATED INTO THE PROJECTS AS APPLICABLE:

CONTROL # 1: SILT FENCE	
Description: Use silt fence as temporary perimeter controls around sites where construction activities will disturb the soil. They can also be used around the stockpile. It should consists of a length of filter fabric stretched between anchoring posts spaced at regular intervals along the site at low/downslope areas. The filter fabric should be entrenched in the ground between the support posts. When installed correctly and inspected frequently, silt fences can be an effective barrier to sediment leaving the site in stormwater runoff.	
INSTALLATION	The silt fences will be installed before construction begins at the site and around topsoil stockpiles once they have been established
MAINTENANCE REQUIREMENTS	Inspect silt fences regularly and frequently, as well as after each rainfall event, to make sure that they are intact and that there are no gaps where the fence meets the ground or tears along the length of the fence. If you find gaps or tears, repair or replace the fabric immediately. Remove accumulated sediments from the fence base when the sediment reaches one-third to one-half the fence height. Remove sediment more frequently before it has accumulated to one-half of the above-ground height of the silt fence, if accumulated sediment is creating noticeable train on the fabric and the fence might fail from a sudden storm event. When you remove the silt fence, remove the accumulated sediment as well.
RESPONSIBLE STAFF	CONTRACTOR SUPERVISOR & STAFF
DESIGN SPECIFICATIONS	The silt fence will be constructed long enough to extend across the expected flow path. The support posts will be a minimum of 4.5' and driven a minimum of 24 inches in the ground. Posts will be spaced a maximum of 8' apart. Fabric will be seurely fastened to posts with half-inch staples or 16gauge wire ties spaced a maximum of 6 inches. A 12-inch trench will be excavated along the uphill side of the silt fence posts. The bottom edge of the fabric will extend across the bottom of the trench. The trench will be backfilled to 4 inches above ground and compacted to bury and secure the bottom of the filter fabric.




FRONT VIEW



SIDE VIEW

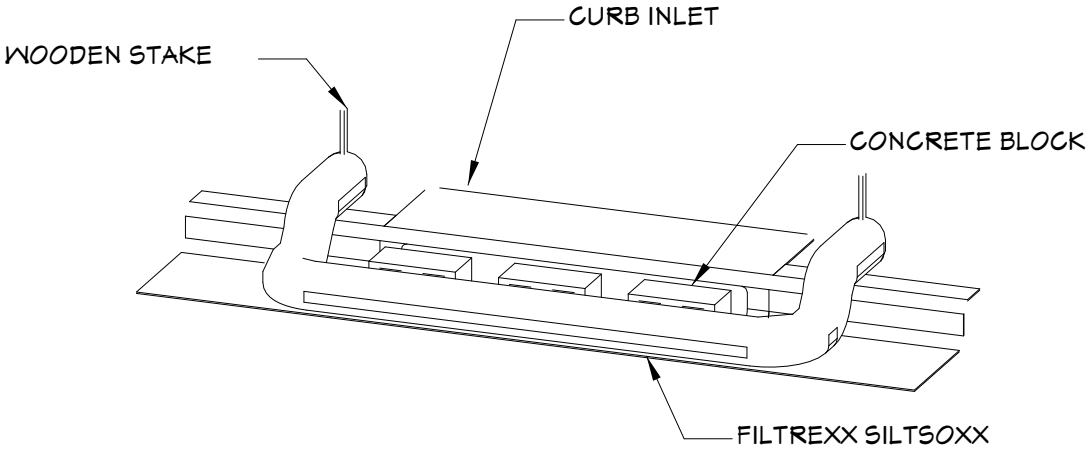
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	DESIGNED BY: EDMON O. LACAULAN, P.E. PROJECT ENGINEER		PROJECT NAME:		REVISION HISTORY:			SCALE:	
	REVIEWED BY: FIDEL AGUILA JR. SENIOR ENGINEER		TAFUNA ACP REPLACEMENT & WATER SYSTEM UPGRADE PROJECT		DATE	DESCRIPTION	REV. BY	AS SHOWN	
	APPROVED BY: WILLIAM SWORD, P.E. WATER CHIEF ENGINEER		DRAWING TITLE: E & S CONTROL #1 - SILT FENCE		-			PROJECT #:	
	ISSUE FOR: PERMITTING		PROJECT LOCATION: TAFUNA, PAGO PAGO AS 96799					SHEET NO.	
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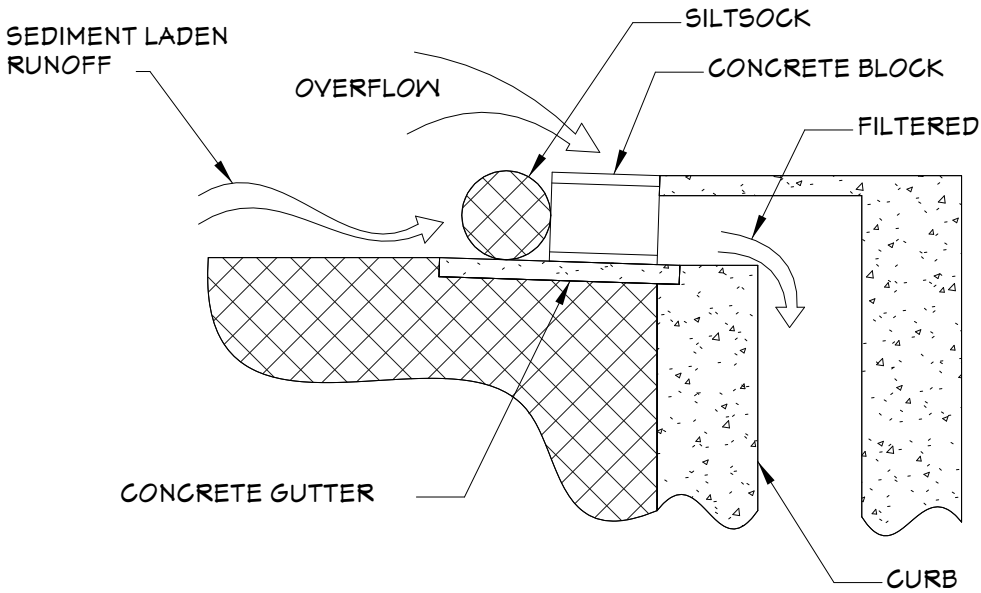
CONTROL # 2: INLET PROTECTION

Description: Use silt socks as temporary perimeter controls around sites where construction activities will disturb the soil. They can also be used around the interior of the site. Silt socks consist of a robust UV stabilized polypropylene sock with reinforced mesh for durability. The socks are filled with a suitable filter material such as sand, gravel or wood chips. They are reusable and provide flexibility for the site as they can be easily moved around to suit the constraints of the site. They are ideal for temporary sediment control, especially around culverts, drains and stormwater catch pits.

INSTALLATION	Silt socks can be easily laid out on the ground to suit the size and constraints of the site
MAINTENANCE REQUIREMENTS	Check the condition of silt socks regularly. Make sure there are no tears in the material or gaps between them. If tears or gaps are found then repair/replace/reposition as necessary. Accumulated sediment can be easily removed with the silt socks temporarily or permanently lifted out of position.
RESPONSIBLE STAFF	CONTRACTOR SUPERVISOR & STAFF
Design Specifications	Place gravel bag barriers around the storm drain inlets where water can pond and allow sediment to separate from runoff.



PERSPECTIVE VIEW



CROSS SECTION VIEW

DESIGNED BY: EDMON O. LACAULAN, P.E. PROJECT ENGINEER
REVIEWED BY: FIDEL AGUILA JR. SENIOR ENGINEER
APPROVED BY: WILLIAM SWORD, P.E. WATER CHIEF ENGINEER
ISSUE FOR: PERMITTING



AMERICAN SAMOA POWER AUTHORITY
WATER DIVISION
WATER ENGINEERING DEPARTMENT
P.O. BOX PPB, PAGO PAGO
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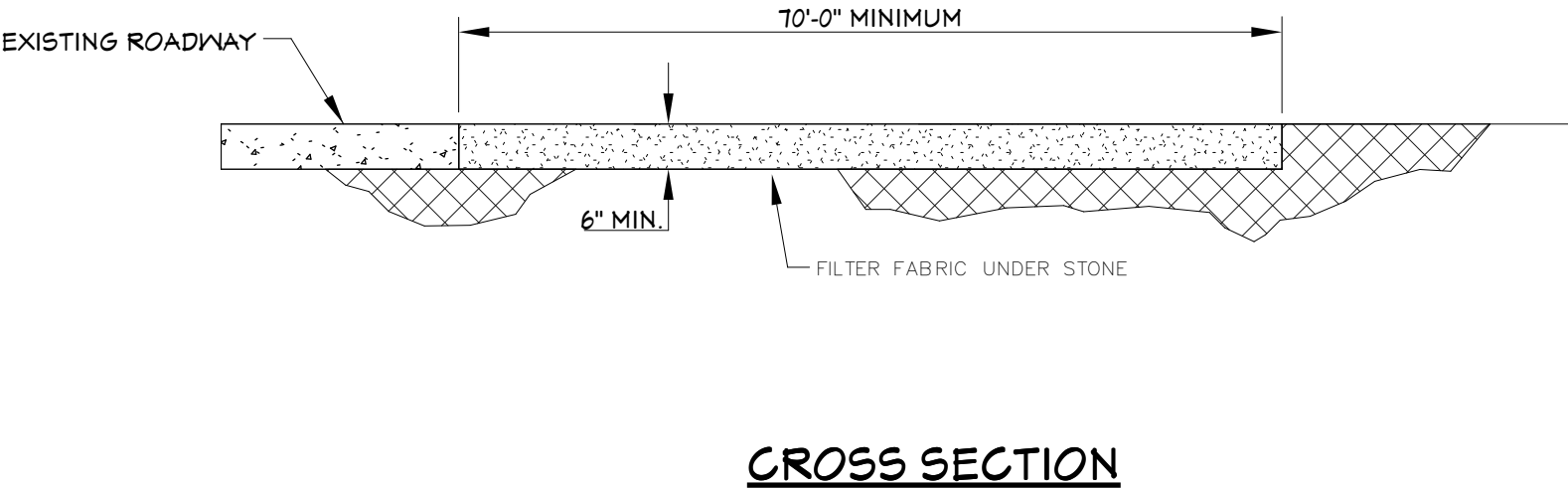
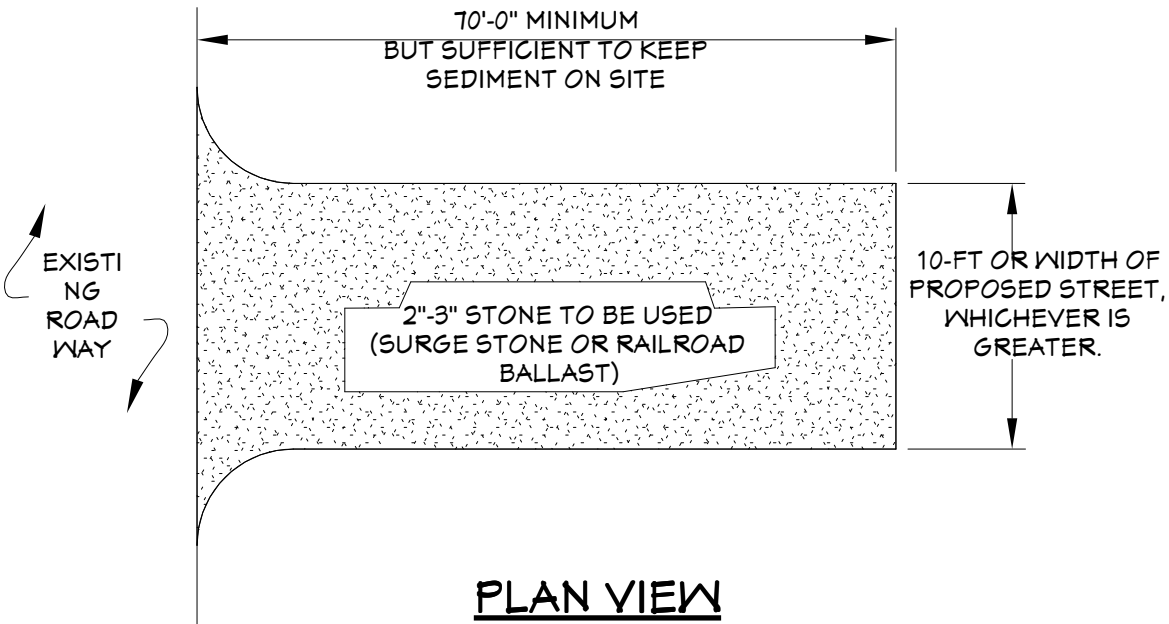
PROJECT NAME: TAFUNA ACP REPLACEMENT & WATER SYSTEM UPGRADE PROJECT
DRAWING TITLE: E & S CONTROL # 2 - INLET PROTECTION
PROJECT LOCATION: TAFUNA, PAGO PAGO AS 96799

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CONTROL # 3: SEDIMENT TRACK-OUT

Description: Use of stabilized construction entrance in areas where construction traffic leaves or enters an existing paved roads. The purpose of stabilizing entrances to a construction site is to minimize the amount of sediment leaving the area as mud and sediment attached to vehicles. Installing a pad of gravel over filter cloth where construction traffic leaves a site can help stabilize a construction entrance. As a vehicle drives over the pad, the pad removes mud and sediment from the wheels and reduces soil transport off the site. The filter cloth separates the gravel from the soil below, keeping the gravel from being ground into the soil. The fabric also reduces the amount of rutting caused by vehicle tires. It spreads the vehicle's weight over a soil area larger than the tire width. In addition to using a gravel pad, a vehicle washing station can be established at the site entrance. Using wash stations routinely can remove a lot of sediment from vehicles before they leave the site. Diverting runoff from vehicle washing stations into a sediment trap helps to make sure the sediment from vehicles stays onsite and is handled properly.

INSTALLATION	The stabilized exits will be installed before construction begins on the site.
MAINTENANCE REQUIREMENTS	Maintain stabilization of the site entrances until the rest of the construction site has been fully stabilized. You might need to add stone and gravel periodically to each stabilized construction site entrance to keep the entrance effective. Sweep up soil tracked offsite immediately for proper disposal. As a back-up and in order to make sure the road can be kept clean at all times a water cart with pump and spray attachments will be available in the yard. This will be used to wash down the area.
RESPONSIBLE STAFF	CONTRACTOR SUPERVISOR & STAFF
Design Specifications	Construct sediment barrier and channelize runoff to sediment trapping device. Stone applied to the pad will be 2 inch stone. The thickness of the pad will not be less than 6 inches. the width of the pad will be a minimum of 10 feet.



DESIGNED BY: EDMON O. LACAULAN, P.E. PROJECT ENGINEER
REVIEWED BY: FIDEL AGUILA JR. SENIOR ENGINEER
APPROVED BY: WILLIAM SWORD, P.E. WATER CHIEF ENGINEER
ISSUE FOR: PERMITTING



AMERICAN SAMOA POWER AUTHORITY
WATER DIVISION
WATER ENGINEERING DEPARTMENT
P.O. BOX PPB, PAGO PAGO
AMERICAN SAMOA 96799
PH: (684)699-1234

PROJECT NAME:

TAFUNA ACP REPLACEMENT & WATER SYSTEM UPGRADE PROJECT

DRAWING TITLE:

E & S CONTROL #3 - SEDIMENT TRACK-OUT

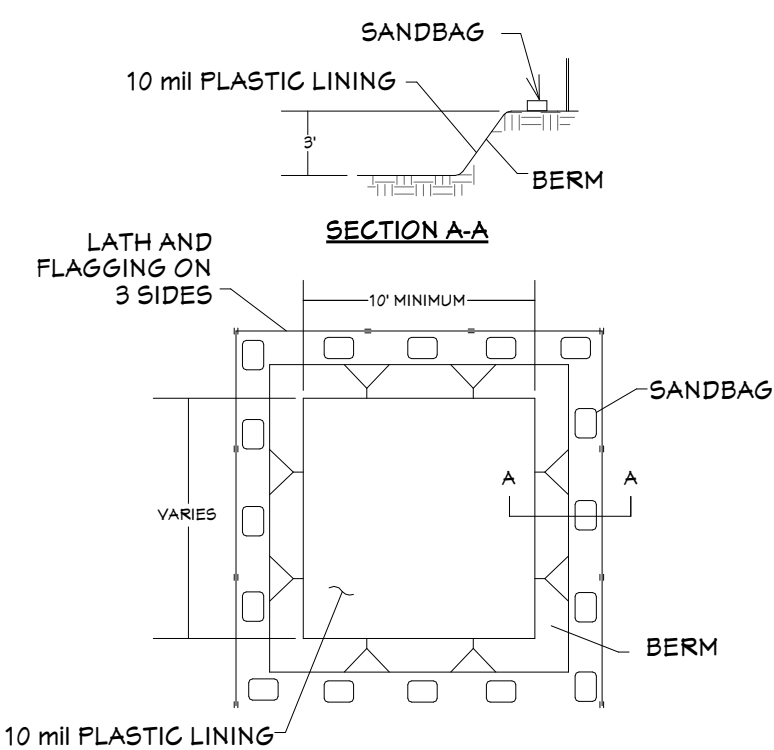
PROJECT LOCATION:

TAFUNA, PAGO PAGO AS 96799

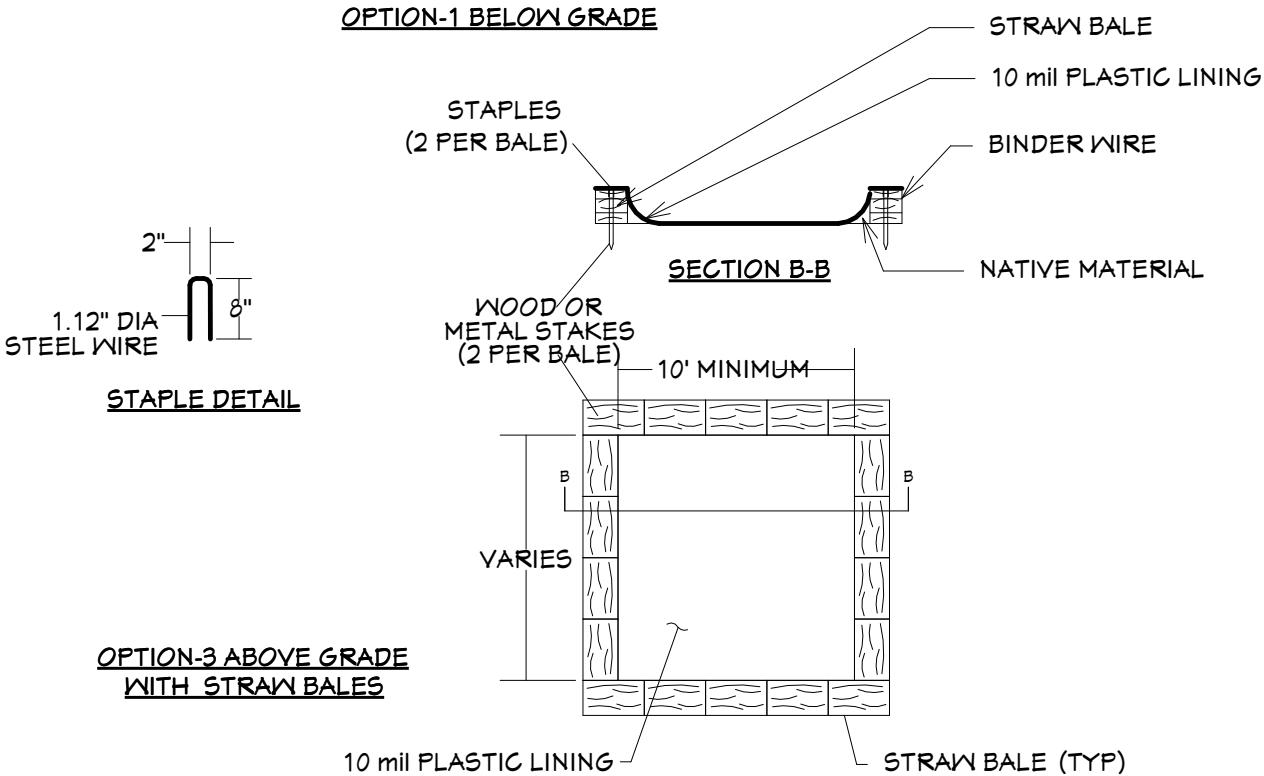
REVISION HISTORY:			SCALE:	
DATE	DESCRIPTION	REV. BY	AS SHOWN	
-			PROJECT #:	
			A002021972806	
			SHEET NO.	
			18	
			OF	10

CONCRETE WASHOUT
NOTES:

1. ACTUAL LAYOUT TO BE DETERMINED IN THE FIELD.
2. CONCRETE WASHOUT SIGN SHALL BE INSTALLED WITHIN 30' OF THE TEMPORARY CONCRETE WASHOUT FACILITY.
3. MATERIALS USED TO CONSTRUCT TEMPORARY CONCRETE WASHOUT FACILITIES SHALL BE REMOVED FROM THE SITE OF THE WORK AND DISPOSED OF OR RECYCLED.
4. HOLES, DEPRESSIONS OR OTHER GROUND DISTURBANCE CAUSED BY THE REMOVAL OF THE TEMPORARY CONCRETE WASHOUT FACILITIES SHALL BE BACKFILLED, REPAIRED, AND STABILIZED TO PREVENT EROSION.
5. MUST BE LOCATED >50 FT AWAY FROM INLETS/WATERWAYS UNLESS THERE IS NO OTHER PRACTICAL ALTERNATIVE.
6. THE CONTRACTOR SHOULD MAKE READY MIXED TRUCK DRIVERS AWARE OF WASHOUT FACILITY LOCATIONS AND BE WATCHFUL FOR IMPROPER DUMPING OF CEMENTITIOUS MATERIAL.
7. CONCRETE WASHOUT FACILITIES SHOULD BE INSPECTED DAILY AND AFTER HEAVY RAINS TO CHECK FOR LEAKS, IDENTIFY ANY PLASTIC LININGS AND SIDEWALLS HAVE BEEN DAMAGED BY CONSTRUCTION ACTIVITIES.
8. ASPA ENGINEER OR ITS REPRESENTATIVE MAY ISSUE NON-CONFORMANCE AND STOP THE WORK FOR ANY VIOLATIONS FROM THE CONTRACTOR PERSONNEL AND ITS SUBCONTRACTORS. NO WORK SHALL RESUME UNTIL PROPER BMP IS PROVIDED AND FOLLOWED.

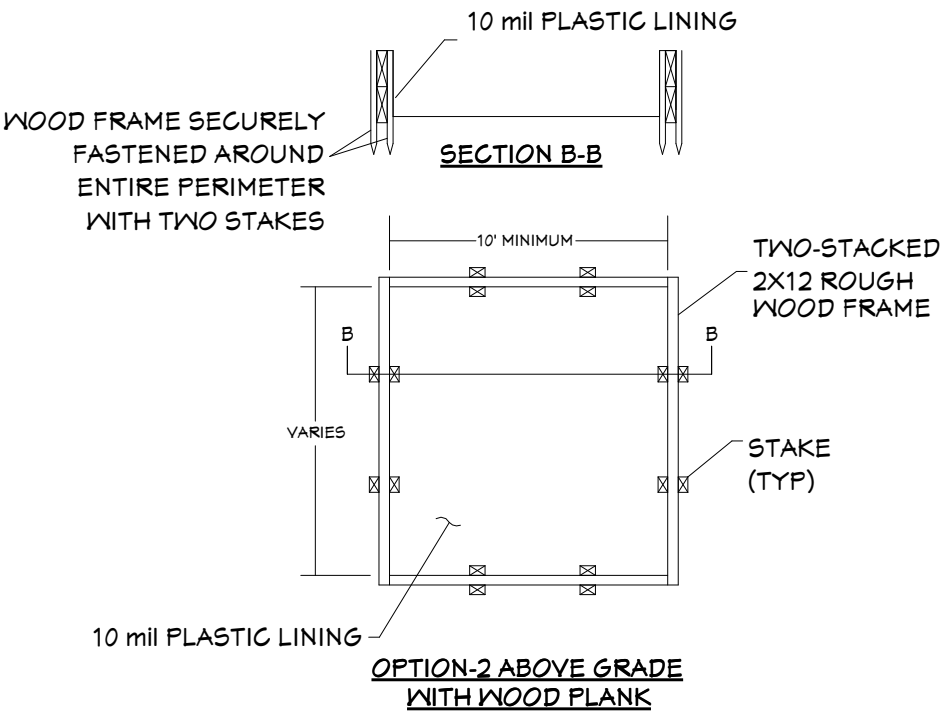


OPTION-1 BELOW GRADE

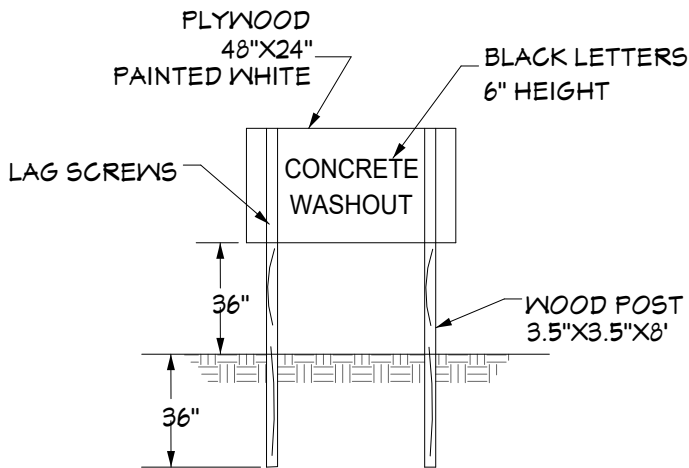


STAPLE DETAIL

OPTION-3 ABOVE GRADE WITH STRAW BALES



OPTION-2 ABOVE GRADE WITH WOOD PLANK



CONCRETE WASHOUT SIGN DETAIL (OR EQUIVALENT)

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PH: (684)699-1234

PROJECT NAME: TAFUNA ACP REPLACEMENT & WATER SYSTEM UPGRADE PROJECT
DRAWING TITLE: E & S CONTROL #4 - TEMPORARY CONCRETE WASHOUT
PROJECT LOCATION: TAFUNA, PAGO PAGO AS 96799

REVISION HISTORY:			SCALE:	
DATE	DESCRIPTION	REV. BY	AS SHOWN	
			PROJECT #: A002021972806	
			SHEET NO. 19	
			OF	10

NOTES:

1.

THERE SHALL BE NO PHYSICAL CONNECTION BETWEEN A DRINKING WATER SUPPLY LINE AND A SEWER OR SEWER APPURTENANCE.
2.

WATERLINES SHALL BE LAID ATLEAST TEN (10) FEET HORIZONTALLY FROM A SEWER OR SEWER MANHOLE WHENEVER POSSIBLE; THE DISTANCE MEASURED FROM EDGE TO EDGE. WHEN LOCAL CONDITIONS PREVENT A HORIZONTAL SEPARATION OF TEN (10) FEET, THE WATER LINE MAY BE LAID CLOSER TO A SEWER OR SEWER MANHOLE PROVIDED THAT:
- 2.1.

THE BOTTOM (INVERT) OF THE WATER MAIN SHALL BE EIGHTEEN (24) INCHES ABOVE THE SEWER AND THE EDGE TO EDGE DISTANCE SHALL BE NO LESS THAN FIVE (5) FEET.
3.

WATERLINES CROSSING ABOVE SEWERS SHALL BE LAID TO PROVIDE SEPARATION OF AT LEAST 24 INCHES BETWEEN THE BOTTOM OF THE WATERLINE AND THE TOP OF THE SEWER, WHEN EVER POSSIBLE.
4.

WATERLINES PASSING UNDER SEWERS SHALL, IN ADDITION, BE PROTECTED BY THE FOLLOWING:
- 4.1.

A VERTICAL SEPARATION OF AT LEAST EIGHTEEN (24) INCHES BETWEEN THE BOTTOM OF THE SEWER AND THE TOP OF THE WATERLINE.
- 4.2.

CONCRETE ENCASE BOTH SEWER & WATER MIN. OF 10' BOTHWAYS
- 4.3.

ONE FULL LENGTH OF WATERLINE BE CENTERED AT THE POINT OF THE CROSSING SO THAT THE JOINTS SHALL BE EQUIDISTANT AND AS FAR AS POSSIBLE FROM THE SEWER.

THE FOLLOWING MINIMUM SEPARATIONS FROM WATER MAINS SHALL BE OBSERVED AT ALL TIMES UNLESS OTHERWISE DIRECTED BY CONTRACTING OFFICER.

- HORIZONTAL SEPARATION

A. SANITARY SEWERS - REFER TO REQUIREMENTS IN THIS SECTION NOTED ABOVE.

B. STORM DRAINS - THREE (3) FEET FACE TO FACE FOR MAINS; TWELVE (12) INCHES AT CONTACT POINTS FOR

CBs AND DMHs.

- C. GAS MAINS - SIX (6) FEET FACE TO FACE.

D. UNDERGROUND ELECTRIC - SIX (6) FEET FACE TO FACE

E. UTILITY POLES - SIX (6) FEET FACE TO FACE.

F. GAS MAINS - THREE (3) FEET FACE TO FACE FOR HYDRANT BRANCHES.

G. UNDERGROUND ELECTRIC AND TELEPHONE - THREE (3) FEET BEHIND HYDRANT (NOT ALLOWED OVER HYDRANT BRANCH)

H. INSTALLED UTILITIES SHALL BE LOCATED A MINIMUM OF TEN (10) FEET HORIZONTALLY FROM STRUCTURES.

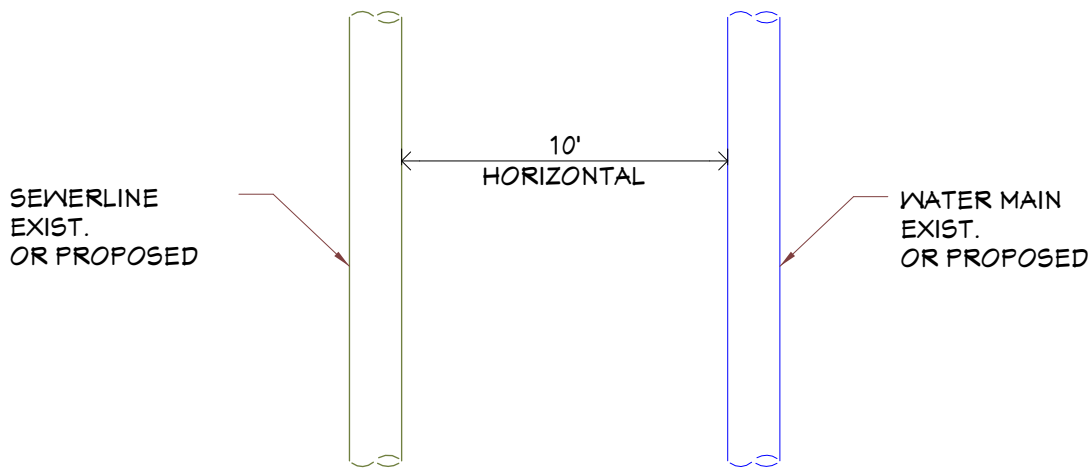
VERTICAL SEPARATION

- A. SANITARY SEWERS - 24 INCHES OVER AND UNDER

B. STORM DRAINS - SIX (6) OVER AND UNDER

C. ALL OTHER CROSSINGS - TWELVE (12) INCHES MINIMUM

WHEN PROPOSED SEWER (OR WATER) IS LOCATED 10 FEET OR MORE FROM EXISTING WATER (OR SEWER), NO SPECIAL CONSTRUCTION REQUIRED.

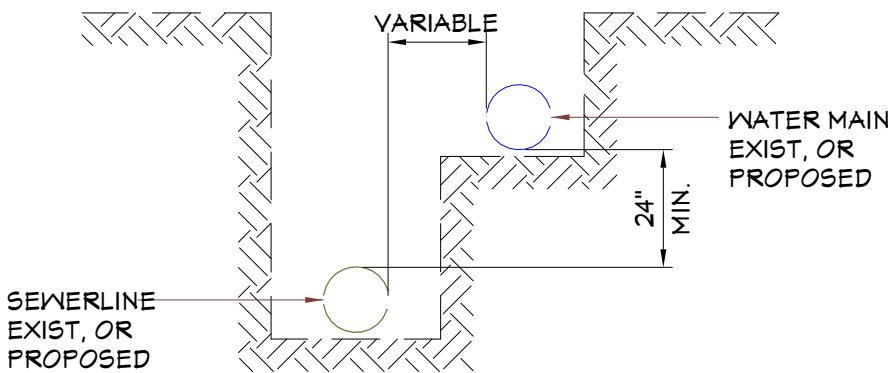


2

CONDITION - 2

Scale: 1:1

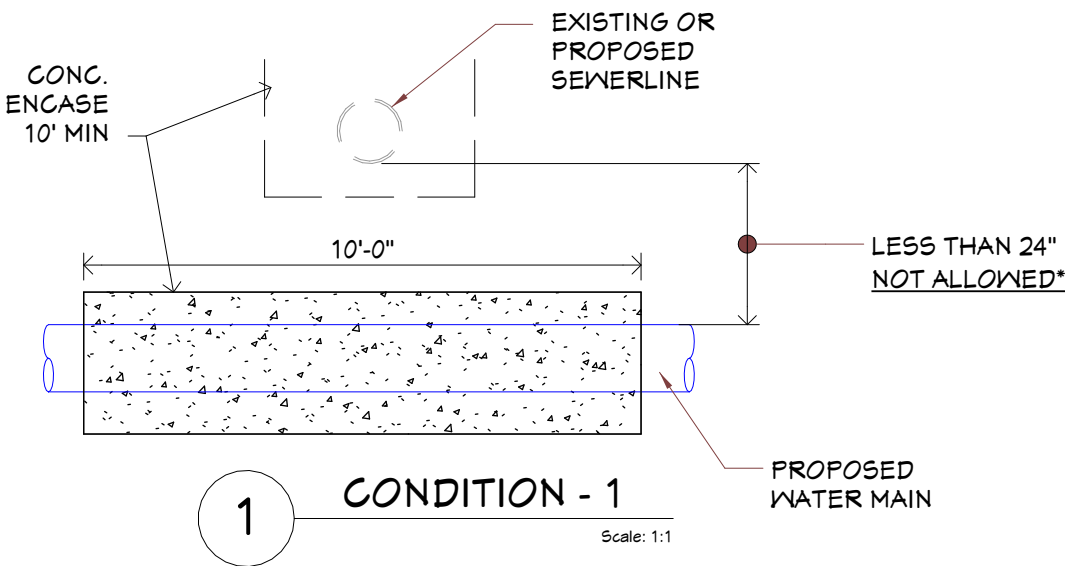
WHEN PROPOSED SEWER (OR WATER) IS LOCATED LESS THAN 10 FEET OR MORE FROM EXISTING WATER (OR SEWER), DETAILS SHOWN BELOW SHALL APPLY.



3

CONDITION - 3

Scale: 1:1



1

CONDITION - 1

Scale: 1:1



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PROJECT NAME:

TAFUNA ACP REPLACEMENT & WATER SYSTEM UPGRADE PROJECT

DRAWING TITLE:

UTILITY SEPARATION GUIDELINES -1

PROJECT LOCATION:

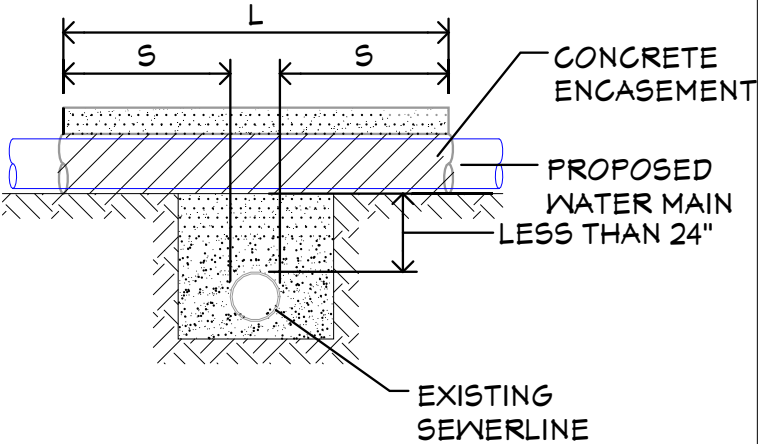
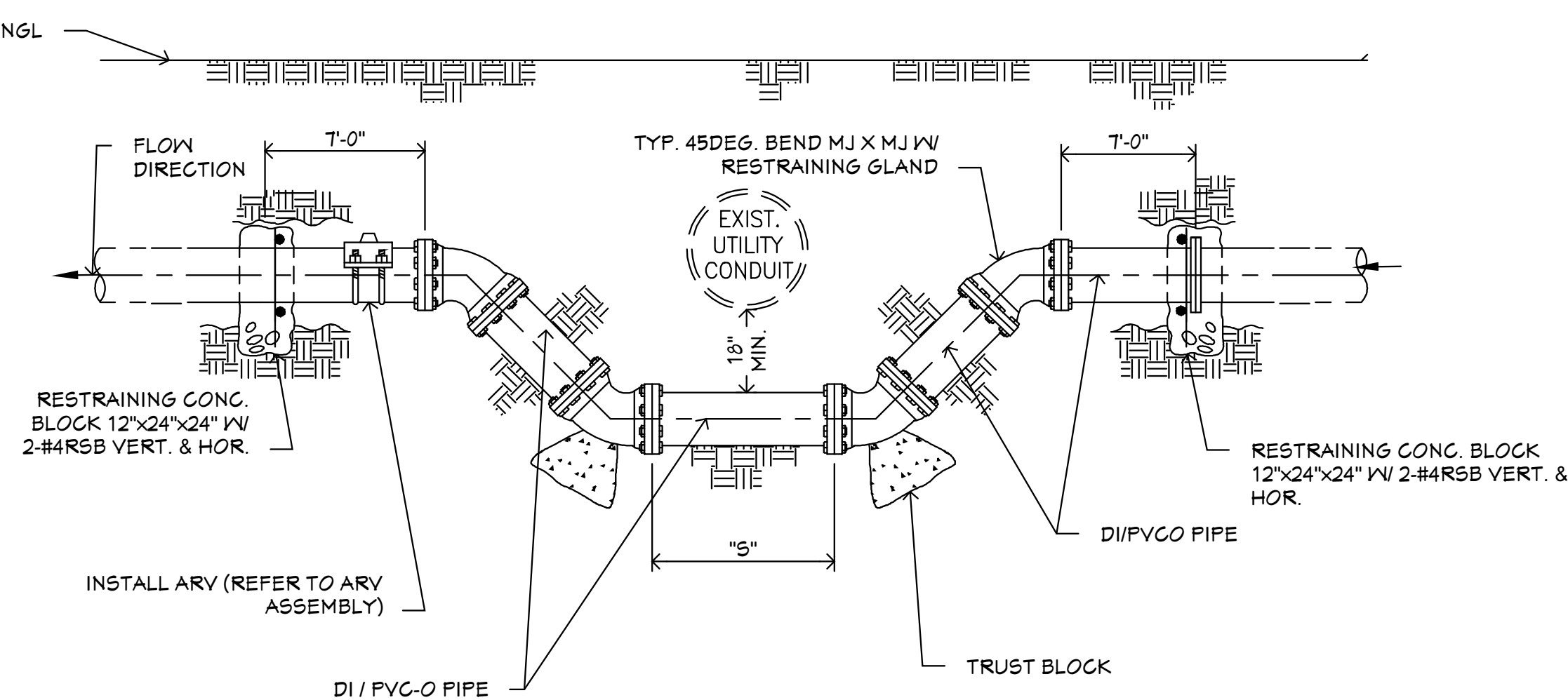
TAFUNA, PAGO PAGO AS 96799

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1

CONDITION - 4

Scale: NTS



NOTES:

- "S" IS THE LENGTH NECESSARY TO PROVIDE 10 FEET OF SEPARATION AND MEASURED PERPENDICULAR TO EXISTING UTILITY.
- S = 20' FOR WATER MAIN UNDER EXISTING SEWERLINE.
- S = UTILITY O.D. + 18" FOR NON-SEWER UTILITY.
- TRENCH & BACKFILL SHALL COMPLY WITH SPECIFICATIONS.
- ALL D.I. PIPES OR FITTINGS SHALL BE WRAPPED W/ 8 MIL POLYETHYLENE SHEET PROPERLY TAPE PRIOR TO BACKFILLING.
- ARV SHALL BE INSTALLED AT THE HIGHEST POINT.

2

TYPICAL CROSSING DETAILS UNDER EXIST. UTILITIES

Scale: NTS

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PROJECT NAME:
**TAFUNA ACP REPLACEMENT & WATER SYSTEM
UPGRADE PROJECT**

DRAWING TITLE:
UTILITY SEPARATION GUIDELINES -2

PROJECT LOCATION:
TAFUNA, PAGO PAGO AS 96799

REVISION HISTORY:

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SCALE: AS SHOWN	
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OF	10



REVISION HISTORY:		SCALE:	
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			PROJECT #:
			A00202197280
			SHEET NO.
			22
			OF 70



AC PAVEMENT DETAIL

CONC. PAYE/SIDEWALK RESTORATION DETAILS

0

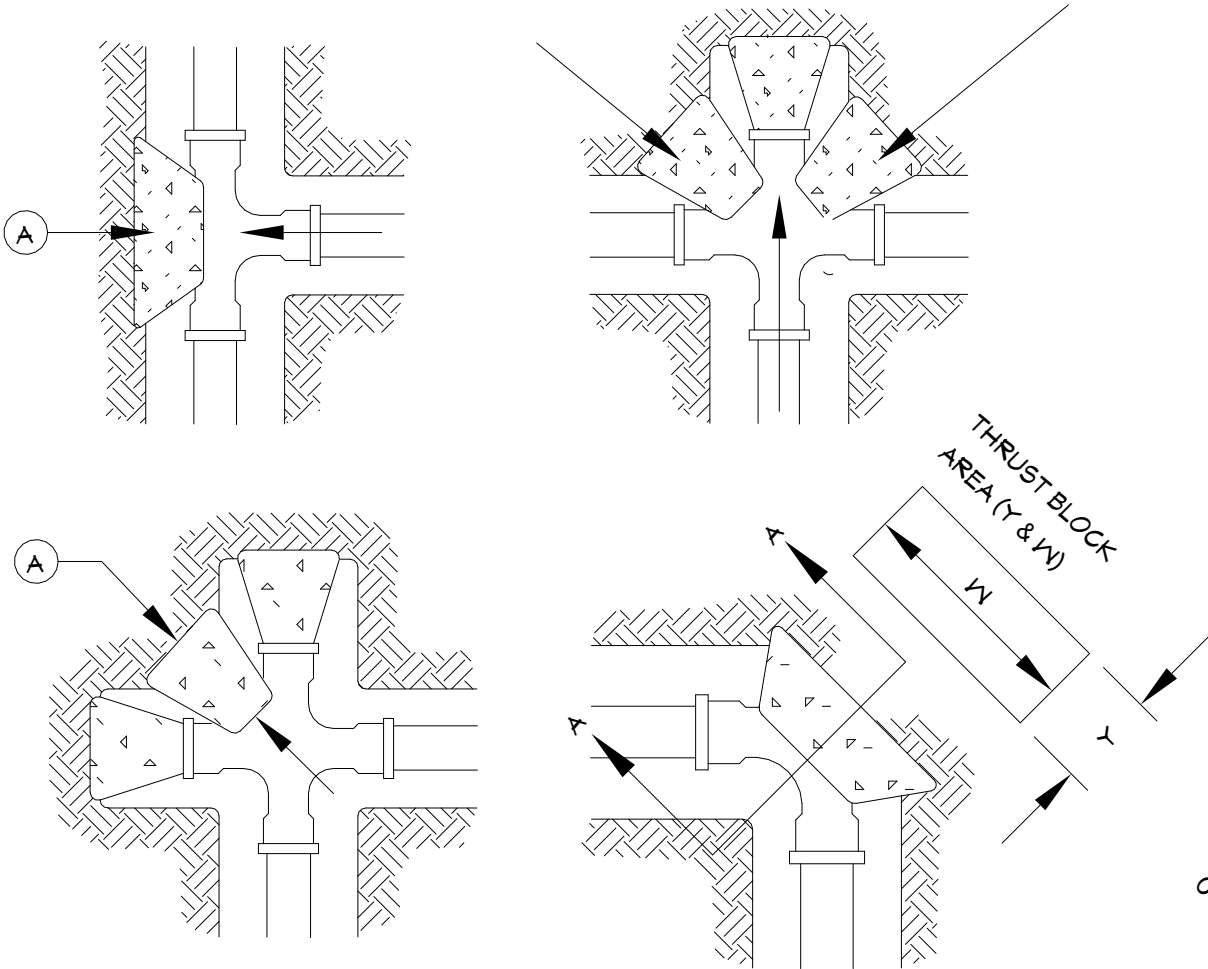
GENERAL NOTES:

- 1. TABLE IS BASED ON 2000#/SQ. FT. SOIL. IF CONDITIONS ARE FOUND TO INDICATE SOIL BEARING IS LESS, THE AREAS SHALL BE INCREASED ACCORDINGLY.
- 2. AREAS FOR PIPE LARGER THAN 18" SHALL BE CALCULATED.
- 3. CONCRETE SHALL HAVE A MINIMUM COMPRESSION STRENGTH OF 2500 PSI.
- 4. THRUST BLOCK IS TO EXTEND TO UNDISTURBED SOIL.
- 5. SIZE MAY BE DECREASED FOR LESSER DEGREE BENDS AS DETERMINED BY ENGINEER.
- 6. KEEP CONCRETE CLEAR OF M.J. OR BELL AND SPIGOT JOINTS.
- 7. BLOCK IN A SIMILAR MANNER AT TEES, HYDRANTS, PLUG OR OTHER LOCATIONS AS REQUIRED.
- 8. WHEN NECESSARY ADDITIONAL THRUST RESTRAINT METHODS MAY BE USED, SUCH AS MECHANICAL JOINT RESTRAINTS, TIE-RODS (INSTALLED PER MANUFACTURERS' RECOMMENDATIONS) OR OTHER APPROVED METHODS.

CONSTRUCTION KEY NOTES:

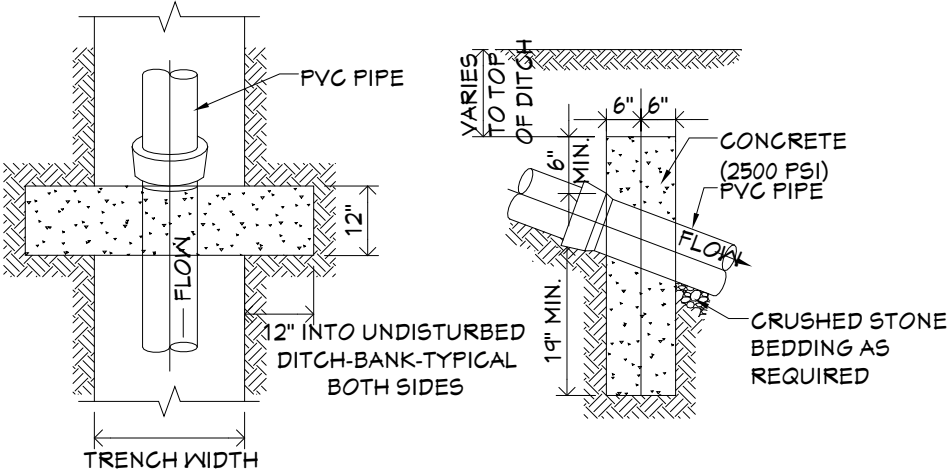
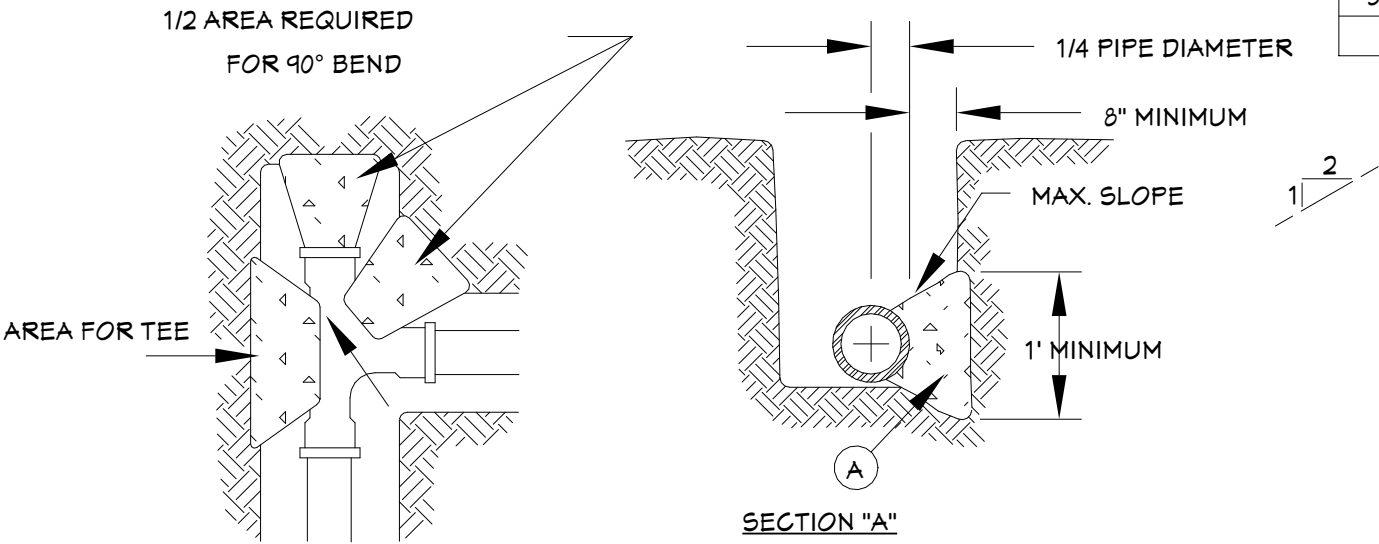
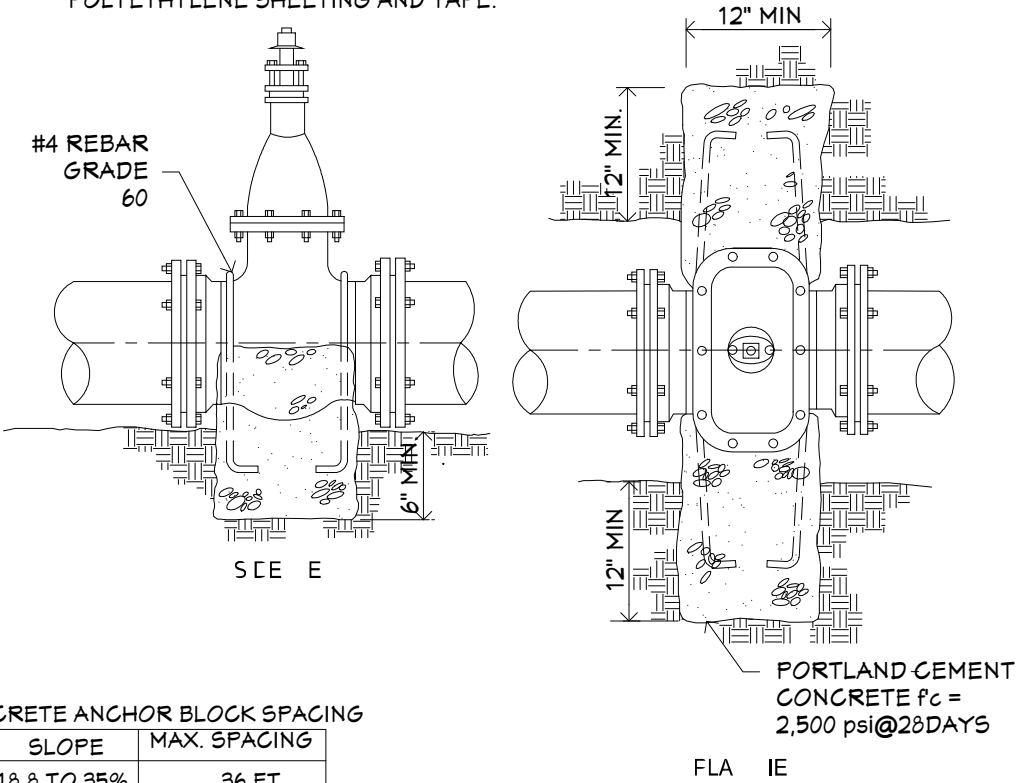
- A. LENGTH "Y & W" AS REQUIRED TO OBTAIN BEARING AREA AGAINST UNDISTURBED SOIL.
- B. ADDITIONAL EXCAVATION IF NECESSARY TO OBTAIN REQUIRED BEARING AREA.
- C. MINIMUM THRUST BLOCK AREA REQUIREMENTS FOR (Y & W) AS FOLLOWS:

PIPE SIZE	WATER PIPE	
	TEE, DEAD END 90° BEND	45° AND 22 1/2° BENDS
4" & LESS	3 SQ. FEET	3 SQ. FEET
6"	4 SQ. FEET	3 SQ. FEET
8"	6 SQ. FEET	3 SQ. FEET
10"	9 SQ. FEET	5 SQ. FEET
12"	13 SQ. FEET	7 SQ. FEET
16"	23 SQ. FEET	12 SQ. FEET
18"	29 SQ. FEET	15 SQ. FEET



NOTES:

- 1. ALL ANCHOR RODS ARE TO BE COVERED WITH 80MILS OF BITUMASTIC COMPOUND.
- 2. WRAP EXTERIOR OF VALVE, ACTUATOR AND REBAR WITH 8 MIL POLYETHYLENE SHEETING AND TAPE.



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PH: (684)699-1234

PROJECT NAME:
TAFUNA ACP REPLACEMENT & WATER SYSTEM UPGRADE PROJECT

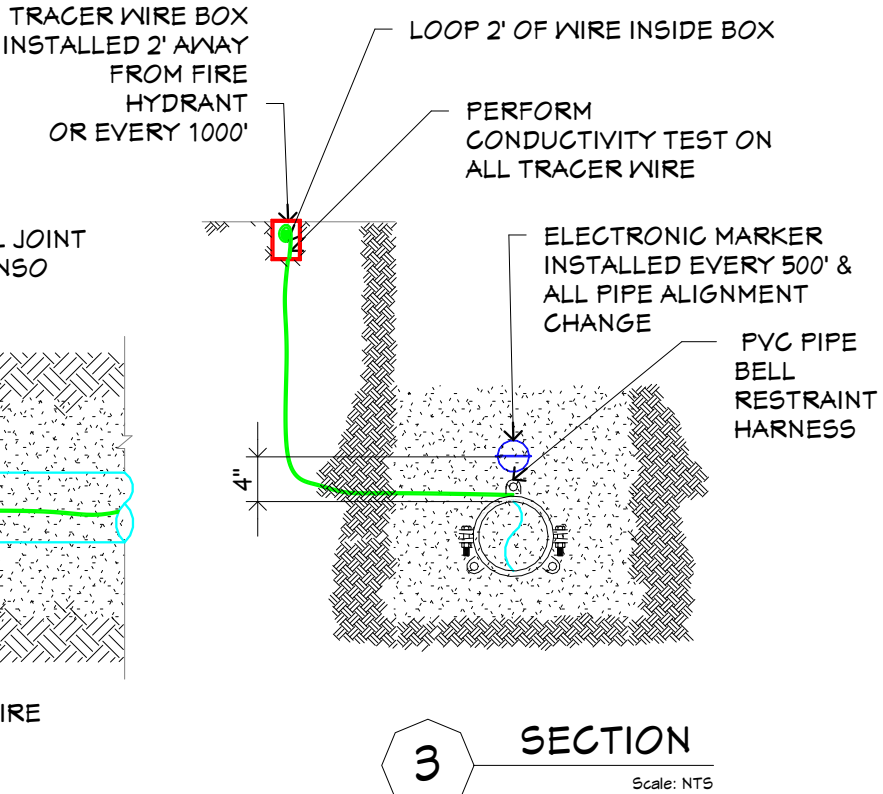
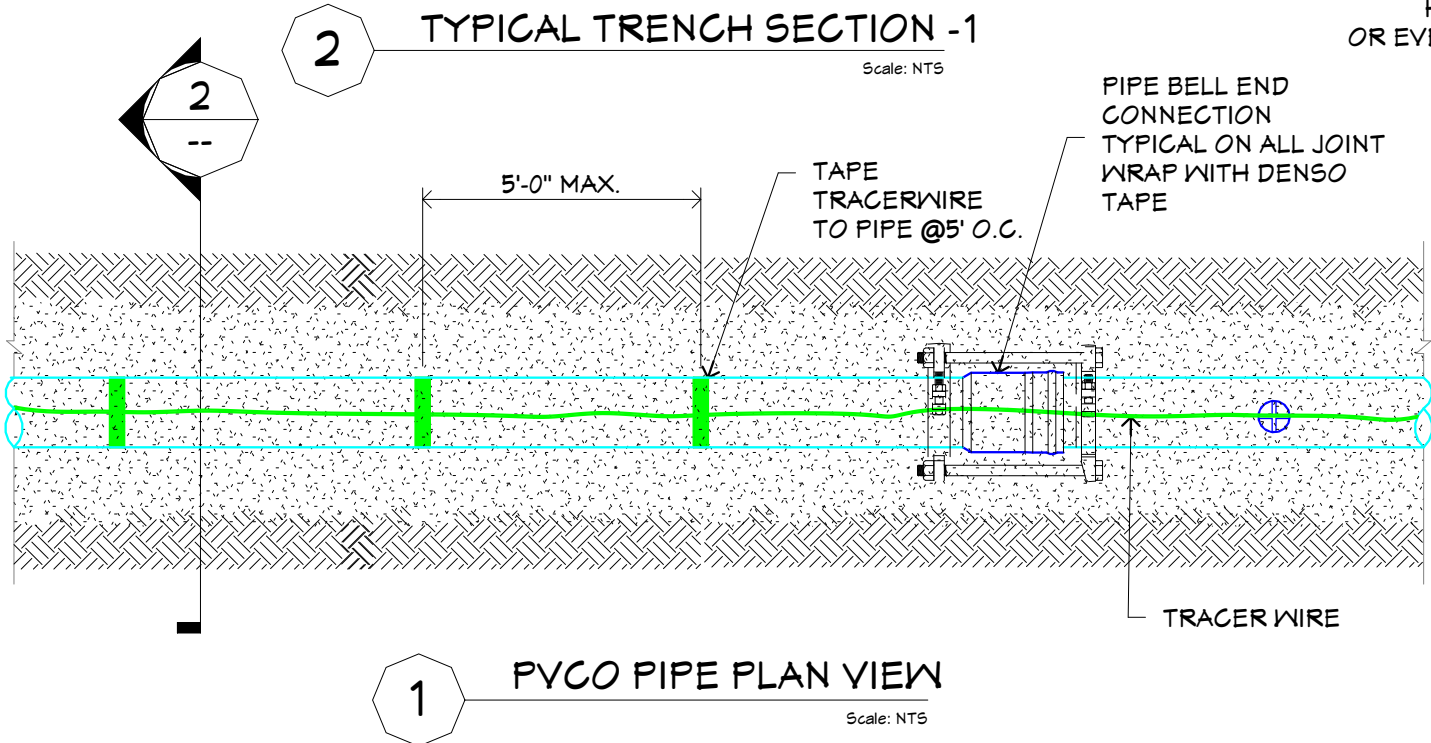
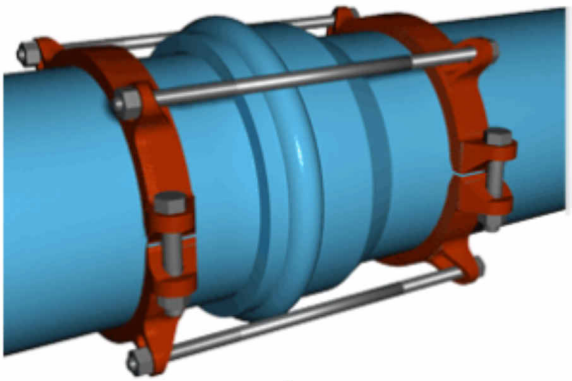
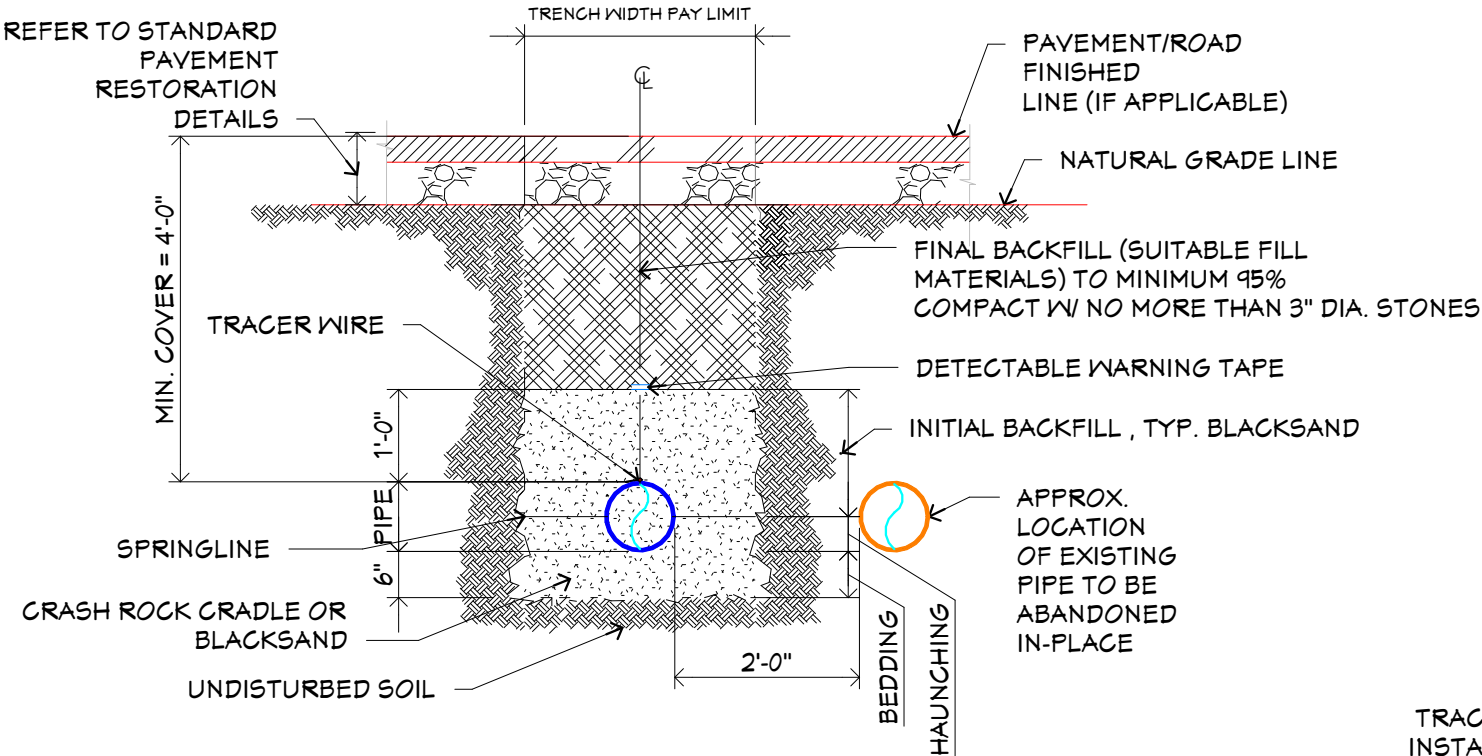
DRAWING TITLE:
STANDARD CONCRETE THRUST BLOCKING & ANCHORING DETAILS

PROJECT LOCATION:
TAFUNA, PAGO PAGO AS 96799

REVISION HISTORY:			SCALE:	
DATE	DESCRIPTION	REV. BY	AS SHOWN	
			PROJECT #:	
			A002021972806	
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NOTES:

- 1. EXCAVATE, BACKFILL AND COMPACT AT A MINIMUM OF 45FEET/DAY OR MAX. LENGTH THE CONTRACTOR CAN RESTORE AT THE END OF THE DAY.
- 2. OPEN TRENCH SHALL NOT BE ALLOWED IN ANY TIME AFTER WORKING HOURS.
- 3. SURFACE SHALL BE TEMPORARY RESTORED UP TO THE LEVEL OF EXISTING GRADE OR ROADWAY.
- 4. COMPACTION TEST SHALL BE PERFORMED FOR EVERY 6" LAYER LIFT OR AS PER DPW REQUIREMENT.
- 5. BEDDING OF AT LEAST 6 INCHES THICK OF ¾" MINUS CRASH ROCKS SHALL BE USED WHERE TRENCH BOTTOM IS UNSTABLE. THIS BEDDING MATERIAL WILL BE PLACED AT A UNIFORM DENSITY OF 95%.
- 6. HAUNCHING SHALL BE BLACK SAND TO BE PLACED IN BETWEEN THE BEDDING AND SPRINGLINE. THE LIFT THICKNESS SHALL NOT EXCEED 1 FOOT AND SHALL BE DEPOSITED AND COMPACTED TO UNIFORM DENSITY OF 95% ON EACH SIDE OF THE PIPE TO PREVENT LATERAL DISPLACEMENT OF THE PIPE.
- 7. WHERE COMPACTION IS NOT POSSIBLE DUE TO GROUNDWATER, FREE DRAINING MATERIAL SHALL BE USE FROM BEDDING UP TO INITIAL BACKFILL ENCLOSE WITH FILTER FABRIC. FREE DRAINING MATERIAL SHALL NOT EXCEED 3/4" CLEAN ROCKS.
- 8. INSTALL TRACERWIRE BOX EACH PIPE DIRECTION OR 2EA EVERY FIRE HYDRANT LOCATION.
- 9. TRACER WIRE BOX SHALL BE 4" SCH. 40 PVC PIPE AND TREADED WATERTIGHT PLUG ASSEMBLY TO BE SUPPLIED BY THE CONTRACTOR.



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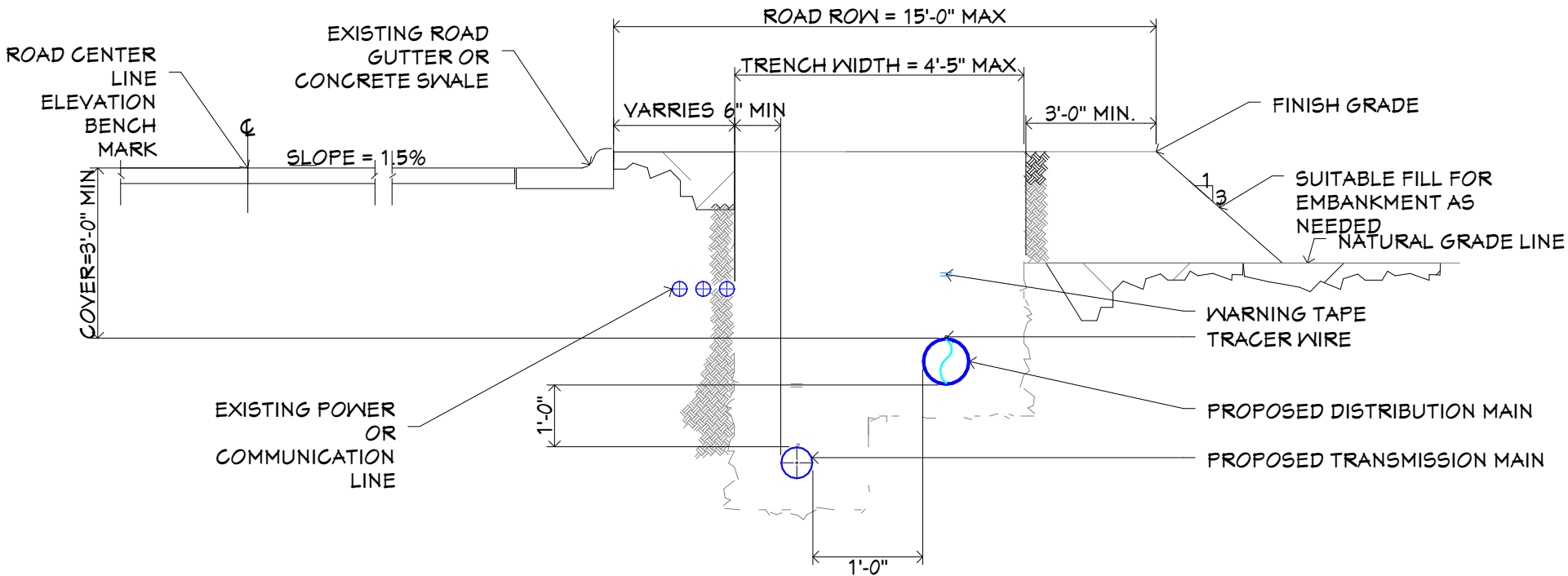
PROJECT NAME: TAFUNA ACP REPLACEMENT & WATER SYSTEM UPGRADE PROJECT
DRAWING TITLE: PVCO PIPE INSTALLATION DETAILS
PROJECT LOCATION: TAFUNA, PAGO PAGO AS 96799

REVISION HISTORY:		
DATE	DESCRIPTION	REV. BY

SCALE: AS SHOWN	
PROJECT #: A002021972806	
SHEET NO. 25	
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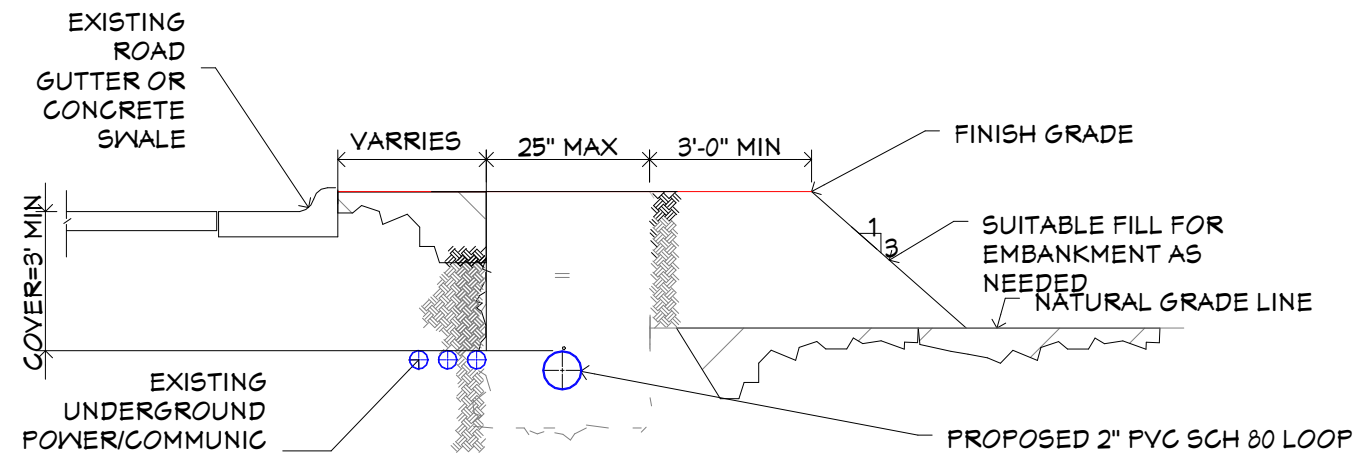
NOTES:

- 1. UNLESS OTHERWISE NOTED, MINIMUM COVER SHALL BE IN REFERENCE TO ROAD CENTERLINE FINISHED ELEVATION.
- 2. CUT OR FILL/EMBANKMENT SHALL BE THE CONTRACTOR'S RESPONSIBILITY.
- 3. DISTRIBUTION AND TRANSMISSION PIPE RUNNING IN PARALLEL UNDER A SINGLE TRENCH/EXCAVATION SHALL BE ALLOWED PROVIDED THAT HORIZONTAL AND VERTICAL CLEARANCE ARE SATISFIED WHICH IS 1' and 1' RESPECTIVELY. TRANSMISSION LINE BEING THE LOWER IN ELEVATION



1 TYP. TRENCH SECTION - 2 & EMBANKMENT DETAILS

Scale: NTS



2 TYP. TRENCH SECTION - 3

Scale: NTS

- 4. HORIZONTAL SEPARATION BETWEEN POWER/COMMUNICATON LINE AND PROPOSED WATERLINE SHALL BE 6" MIN BOTH SIDES OF WATER PIPES.
- 5. LOCATION OF EXIST UNDERGROUND POWER/COMMUNICATION LINE SHALL BE CONFIRMED BY THE CONTRACTOR DURING THE POTHOLING ACTIVITIES.
- 6. FILL/EMBANKMENT SHALL HAVE A MINIMUM OF 3' FLAT SURFACE AND SLOPING GROUND TO MINIMUM SLOPE AS SHOWN.

DESIGNED BY: EDMON O. LACAULAN, P.E. PROJECT ENGINEER
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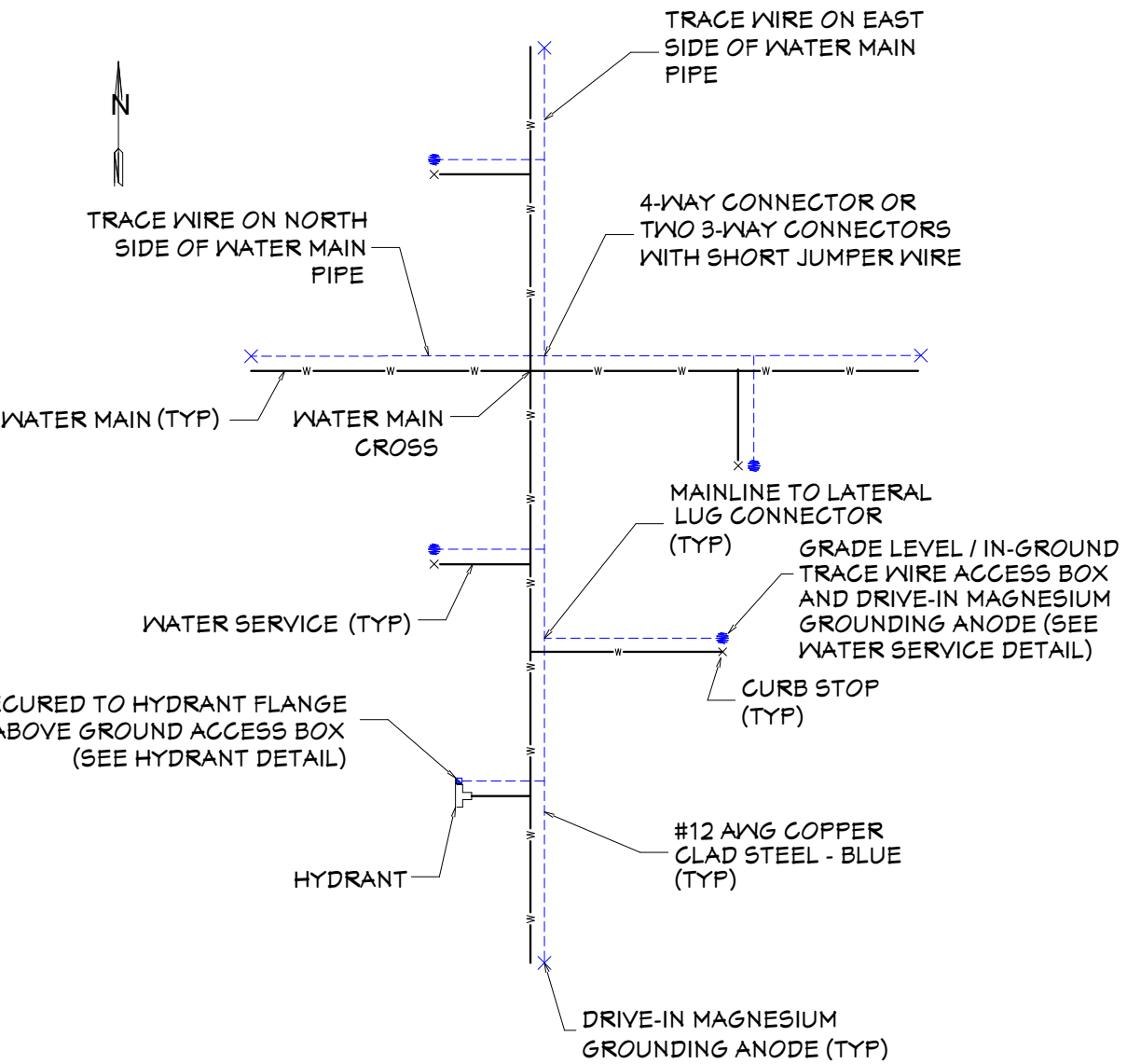
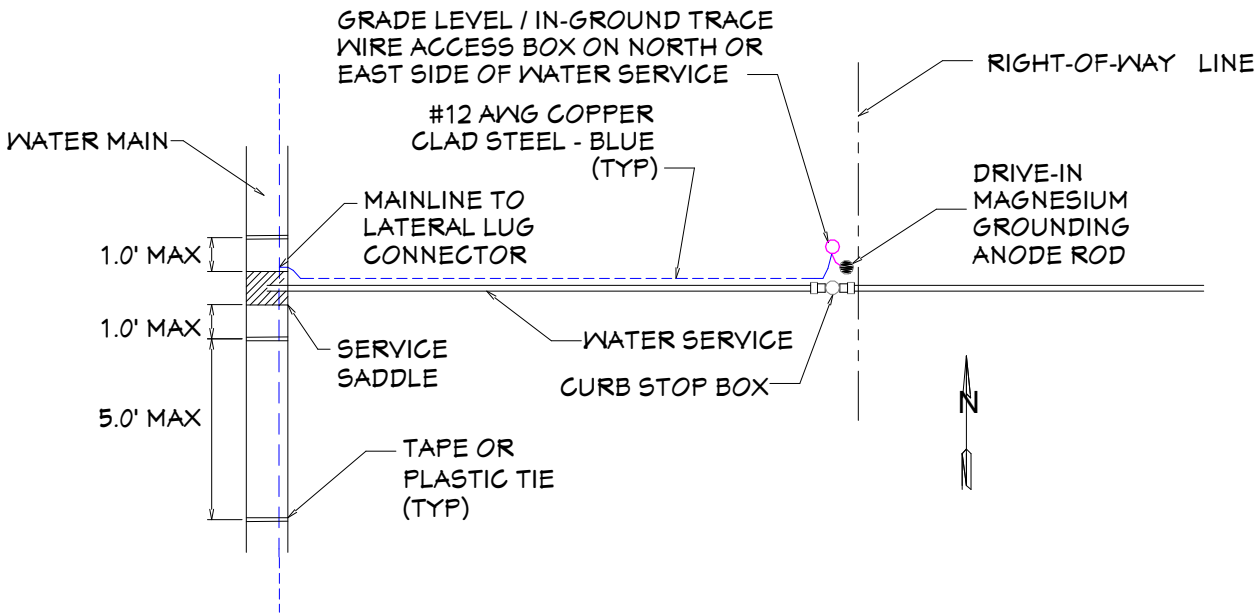
PROJECT NAME: TAFUNA ACP REPLACEMENT & WATER SYSTEM UPGRADE PROJECT
DRAWING TITLE: TYPICAL TRENCH EXCAVATION DETAILS
PROJECT LOCATION: TAFUNA, PAGO PAGO AS 96799

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PROJECT #: A002021972806	
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NOTES:

1. WIRE SHOWN AWAY FROM PIPE FOR CLARITY. WIRE SHALL BE INSTALLED ON THE BOTTOM SIDE OF THE PIPE BELOW THE SPRING LINE. THE WIRE SHALL BE FASTENED TO THE PIPE WITH TAPE OR PLASTIC TIES AT 5' INTERVALS.



1 TRACER WIRE SECTION (SERVICE LINE)
Scale: NTS

2 TRACER WIRE PLAN (WATERMAIN)
Scale: NTS

PREPARED BY: EDMON O. LACAULAN, P.E. PROJECT ENGINEER
DESIGNED BY: EDMON O. LACAULAN, PMP SENIOR ENGINEER
APPROVED BY: FIDEL AGUILA WATER CHIEF ENGINEER
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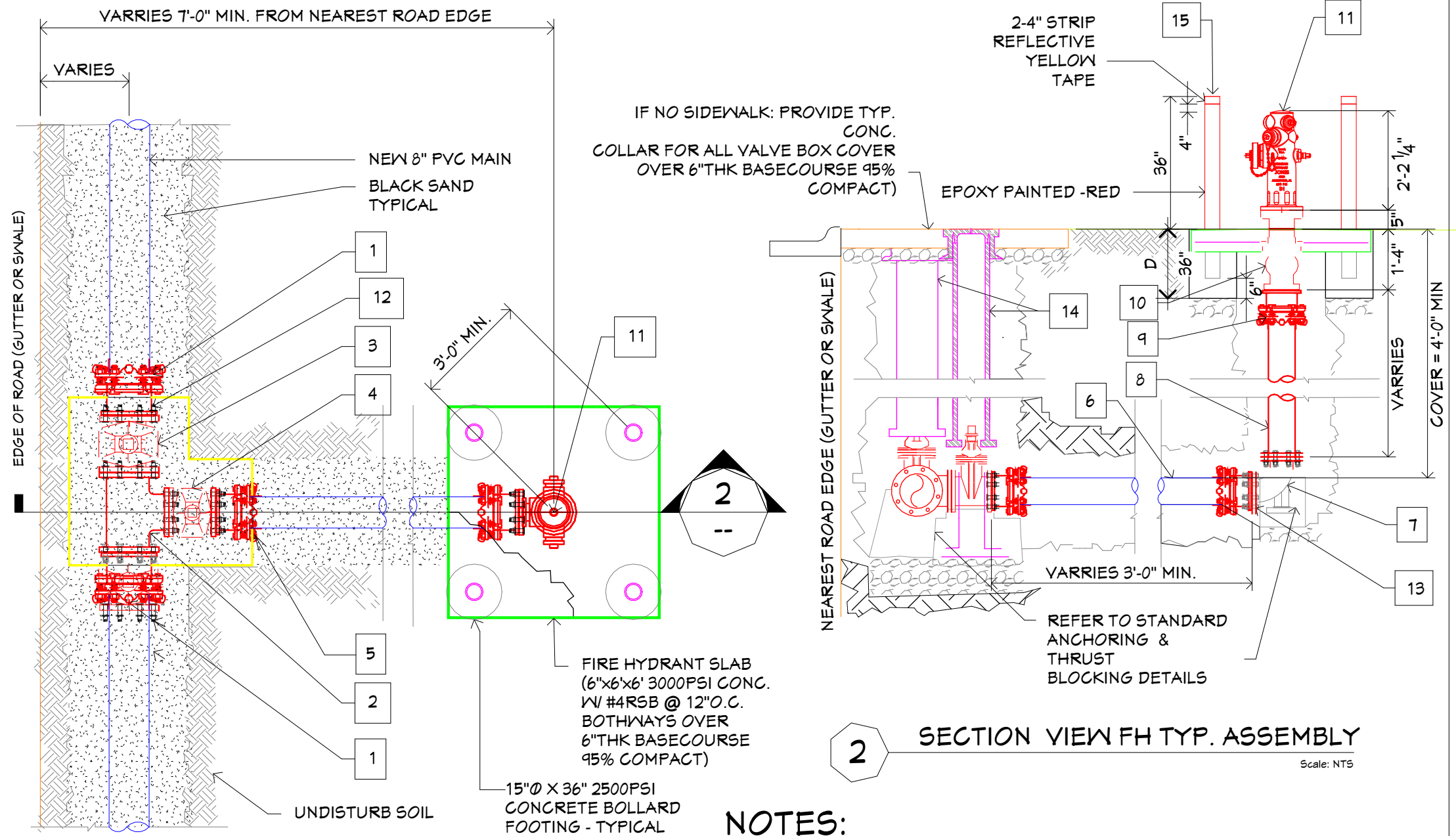
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PROJECT NAME: TAFUNA ACP REPLACEMENT & WATER SYSTEM UPGRADE PROJECT
DRAWING TITLE: TRACE WIRE STANDARD DETAILS
PROJECT LOCATION: TAFUNA, PAGO PAGO AS 96799

REVISION HISTORY:		
DATE	DESCRIPTION	REV. BY

SCALE: AS SHOWN	
PROJECT #: A002021972806	
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OF	10

ITEM NO.	DESCRIPTION	QTY.
1	IN-LINE RESTRAINED FLANGE COUPLING ADAPTER FOR PVC PIPE	2 EA
2	DI FL x FL x FL 8HOLES-TEE	1 EA
3	IN-LINE GATE VALVE C509/C515 FLxFL	1 EA
4	BRANCH GATE VALVE C509/C515 FLxFL (LOCATION - SIDEWALK OR SITE SPECIFIC)	1 EA
5	BRANCH RESTRAINED FLANGE COUPLING ADAPTER FOR PVC PIPE	2 EA
6	6"Ø X 20' GASKETED BIONAX PVCØ PIPE CLASS 200	VARRIES
7	6"Ø X 90° DI HYDRANT BASE/SEAT TYP. FLXFL	1 EA
8	6"Ø X 24" FL X PE D.I. HYDRANT BURY/SPOOL	1 EA
9	6" RESTRAINED FLANGE COUPLING ADAPTER FOR DI PIPE	1 EA
10	6"Ø X 21" LONG DI TELL-TAIL BREAK CHECK VALVE	1 EA
11	6"Ø x 26-1/4" 3-NOZZLE DI FIRE HYDRANT WET BARREL ,	1 EA
12	IN-LINE FLANGE PACK, INCLUDES 1/8" FULL-FACE GASKET & 8 316 SS BOLTS & NUTS & WASHERS	3 PACK
13	BRANCH FLANGE PACK, INCLUDES 1/8" FULL-FACE GASKET & 8 316 SS BOLTS & NUTS & WASHERS	6 PACK
14	SLIP TYPE CI VALVE BOX 2PC. ASSEMBLY W/ BASE, 4' RISER AND COVER "WATER"	2 EA
15	4"Ø X 72" DI PIPE W/ DOME CAP CONCRETE FILLED FIRE HYDRANT BOLLARD	4 EA



1. NO OBSTRUCTIONS WILL BE PERMITTED WITHIN 5 FT. IN ALL DIRECTIONS OF FIRE HYDRANT.
2. PUMPER NOZZLE 4" TO BE FACING THE TRAVELED WAY, UNLESS OTHERWISE NOTED IN THE PLANS.
3. HYDRANT SHALL BE LOCATED ON ASG-DPW ROAD RIGHT OF WAY.
4. ALL NON-ASPA SUPPLIED MATERIALS WHICH ARE REQUIRED IN THE PLAN SHALL BE PROVIDED BY THE CONTRACTOR
5. CUT OR FILL/EMBANKMENT REQUIRED TO LEVEL THE FH CONC. PAD TO EXIST. SIDEWALK SHALL BE THE CONTRACTORS RESPONSIBILITY PER STANDARD DETAILS.

DESIGNED BY:
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FIDEL AGUILA JR.
SENIOR ENGINEER

APPROVED BY:
WILLIAM SWORD, P.E.
WATER CHIEF ENGINEER

ISSUE FOR:
PERMITTING



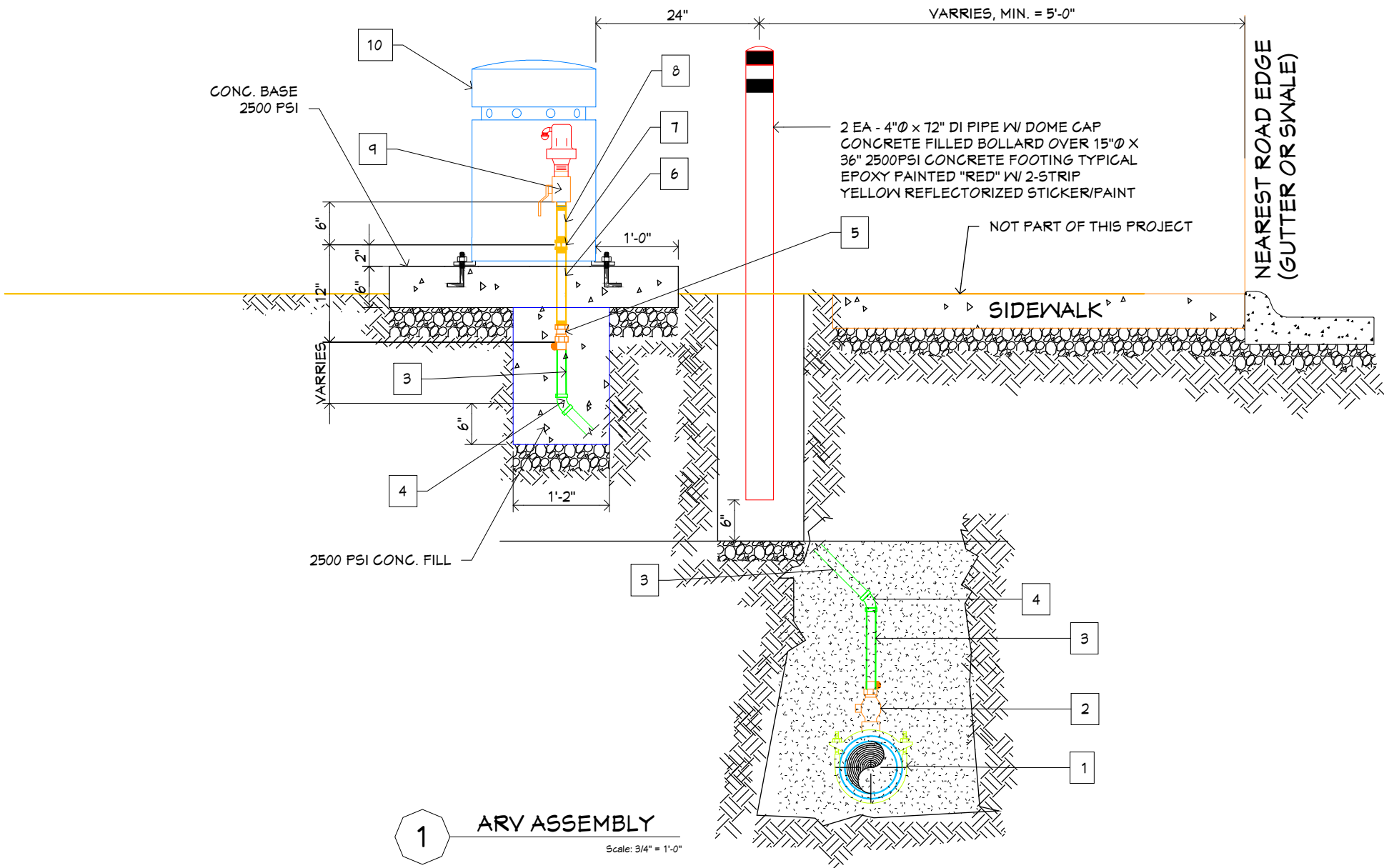
AMERICAN SAMOA POWER AUTHORITY
WATER DIVISION
WATER ENGINEERING DEPARTMENT
P.O. BOX PFB, PAGO PAGO
AMERICAN SAMOA 96799
PH: (684)699-1234

PROJECT NAME:	TAFUNA ACP REPLACEMENT & WATER SYSTEM UPGRADE PROJECT
DRAWING TITLE:	FIRE HYDRANT ASSEMBLY
PROJECT LOCATION:	TAFUNA, PAGO PAGO AS 96799

REVISION HISTORY:			SCALE:	
DATE	DESCRIPTION	REV. BY	AS SHOWN	
-			PROJECT #:	
			A002021972806	
			SHEET NO.	
			28	
			OF	70

NOTES:

1. MAINTAIN POSITIVE SLOPE FROM MAIN TO ARV.
2. INSTALL ARV IN ALL HIGHEST POINT OF THE WATER LINES OR WHERE AIR LOCK MAY OCCUR.
3. IT IS THE CONTRACTOR RESPONSIBILITY TO SUBMIT PROPOSED ACTUAL LOCATIONS OF ARV FOR ASPA REVIEW AND APPROVAL.



ARV ASSEMBLY PART LIST		
ITEM NO.	DESCRIPTION	QTY.
1	1"Ø DI SERVICE SADDLE WITH DOUBLE SS STRAPS AND NUTS AND BOLTS	1 EA
2	1"Ø BRASS BALLCORP AWWA/PVC PJ	1 EA
3	1"Ø X 20' SCHEDULE 80 PVC PIPE	1 EA
4	1"Ø SCHEDULE 80 PVC 45 DEG ELBOW SOCKET	2 EA
5	1"Ø BRASS COUPLING FIPT x PJ PVC	1 EA
6	1"Ø X12" BRASS NIPPLE THREADEDXTHREADED	1 EA
7	1"Ø BRASS UNION FIPT x FIPT	1 EA
8	1"Ø X6" BRASS NIPPLE THREADEDXTHREADED	1 EA
9	1"Ø BRASS BALL VALVE FIP/FIP W/ HANDLE	1 EA
10	1"Ø COMBINATION AIR RELIEF VALVE W/ ENCLOSURE	1 EA

DESIGNED BY: EDMON O. LACAULAN, P.E. PROJECT ENGINEER
REVIEWED BY: FIDEL AGUILA JR. SENIOR ENGINEER
APPROVED BY: WILLIAM SWORD, P.E. WATER CHIEF ENGINEER
ISSUE FOR: PERMITTING



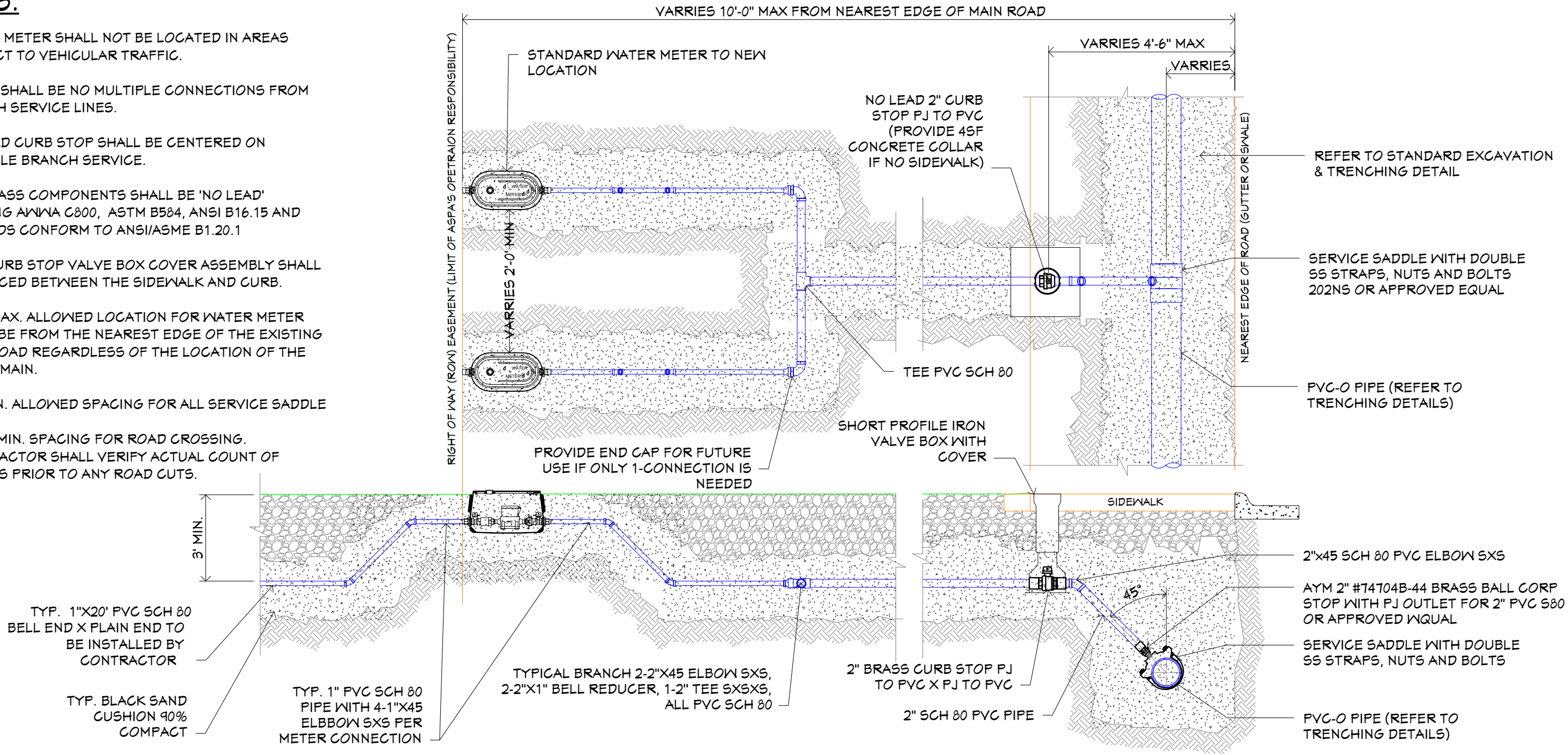
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WATER DIVISION
WATER ENGINEERING DEPARTMENT
P.O. BOX PPB, PAGO PAGO
AMERICAN SAMOA 96799
PH: (684)699-1234

PROJECT NAME: TAFUNA ACP REPLACEMENT & WATER SYSTEM UPGRADE PROJECT
DRAWING TITLE: COMBINATION AIR RELIEF VALVE ASSEMBLY
PROJECT LOCATION: TAFUNA, PAGO PAGO AS 96799

REVISION HISTORY:			SCALE:	
DATE	DESCRIPTION	REV. BY	AS SHOWN	
			PROJECT #: A002021972806	
			SHEET NO. 29	
			OF	10

NOTES:

- 1. WATER METER SHALL NOT BE LOCATED IN AREAS SUBJECT TO VEHICULAR TRAFFIC.
- 2. THERE SHALL BE NO MULTIPLE CONNECTIONS FROM 3/4 INCH SERVICE LINES.
- 3. NO LEAD CURB STOP SHALL BE CENTERED ON MULTIPLE BRANCH SERVICE.
- 4. ALL BRASS COMPONENTS SHALL BE 'NO LEAD' MEETING ANNA C800, ASTM B584, ANSI B16.15 AND THREADS CONFORM TO ANSI/ASME B1.20.1
- 5. TYP. CURB STOP VALVE BOX COVER ASSEMBLY SHALL BE PLACED BETWEEN THE SIDEWALK AND CURB.
- 6. 10'-0" MAX. ALLOWED LOCATION FOR WATER METER SHALL BE FROM THE NEAREST EDGE OF THE EXISTING MAIN ROAD REGARDLESS OF THE LOCATION OF THE WATERMAIN.
- 7. 4'-0" MIN. ALLOWED SPACING FOR ALL SERVICE SADDLE
- 8. 500'-0" MIN. SPACING FOR ROAD CROSSING. CONTRACTOR SHALL VERIFY ACTUAL COUNT OF HOUSES PRIOR TO ANY ROAD CUTS.



1 TYPICAL SERVICE STUB & METER CONNECTION DETAILS

Scale: NTS

DESIGNED BY: EDMON O. LACAULAN, P.E. PROJECT ENGINEER
REVIEWED BY: FIDEL AGUILA JR. SENIOR ENGINEER
APPROVED BY: WILLIAM SWORD, P.E. WATER CHIEF ENGINEER
ISSUE FOR: PERMITTING

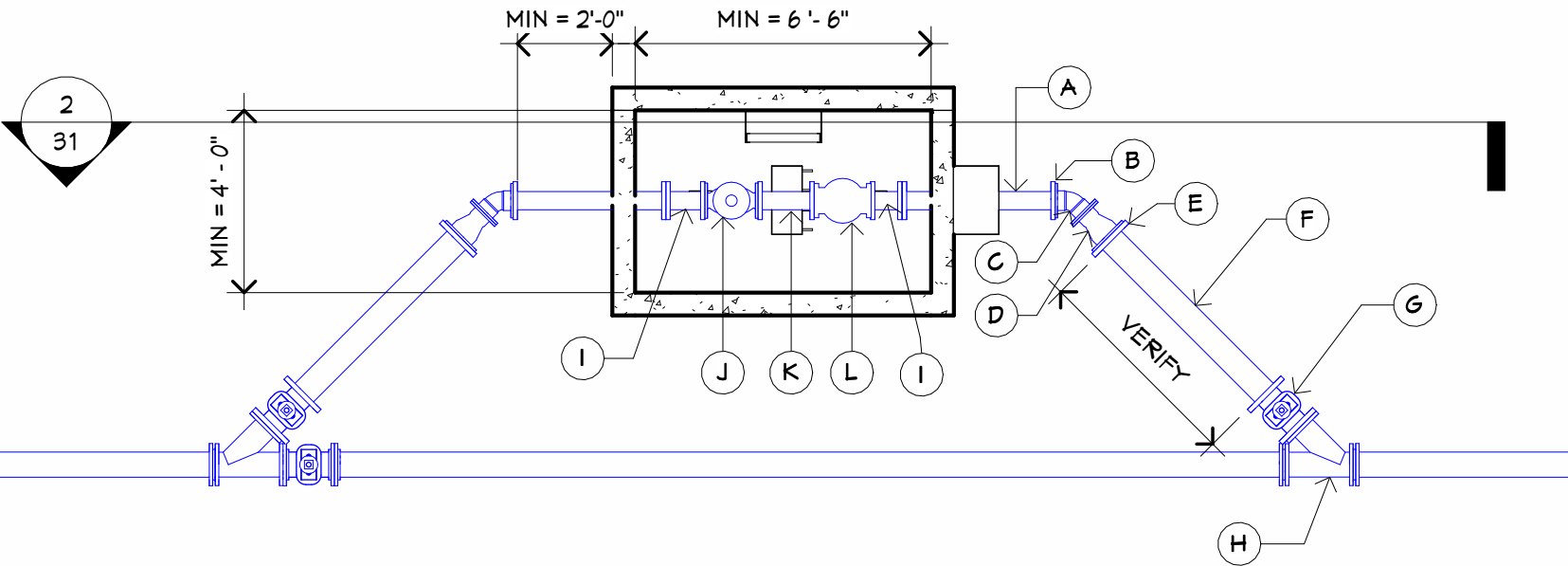


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WATER ENGINEERING DEPARTMENT
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PH: (684)699-1234

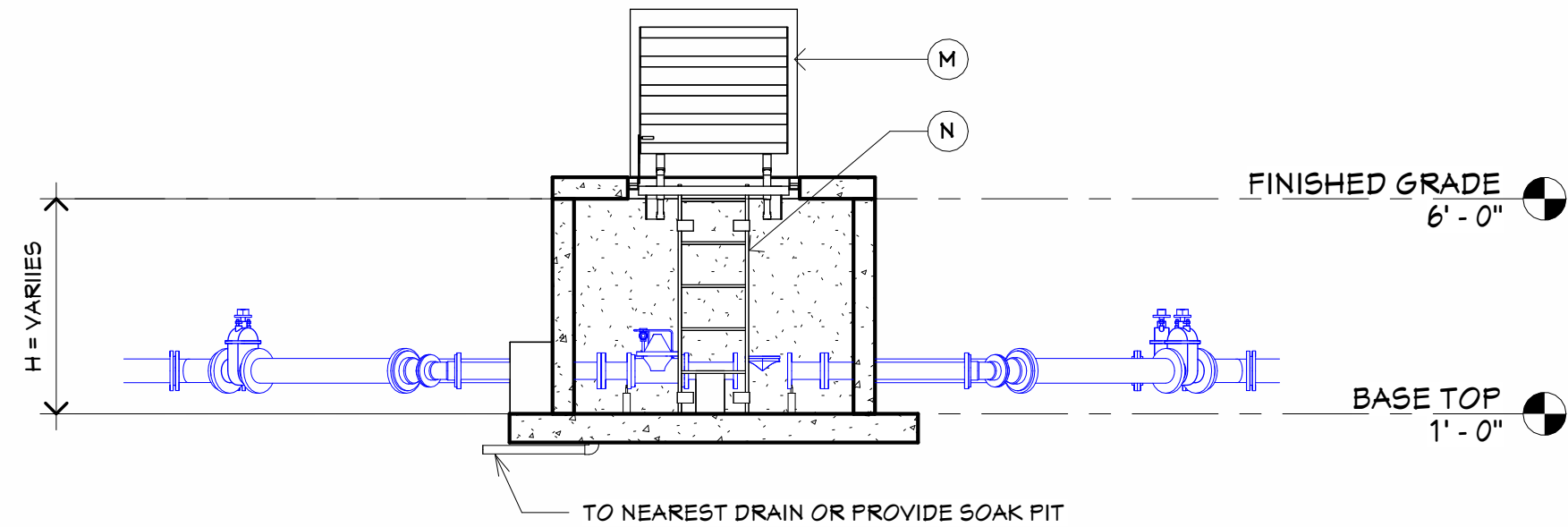
PROJECT NAME: TAFUNA ACP REPLACEMENT & WATER SYSTEM UPGRADE PROJECT
DRAWING TITLE: TYPICAL SERVICE STUB
PROJECT LOCATION: TAFUNA, PAGO PAGO AS 96799

REVISION HISTORY:			SCALE:	
DATE	DESCRIPTION	REV. BY	AS SHOWN	
			PROJECT #: A002021972806	
			SHEET NO. 30	
			OF	10

1 PLAN VIEW
1/4" = 1'-0"



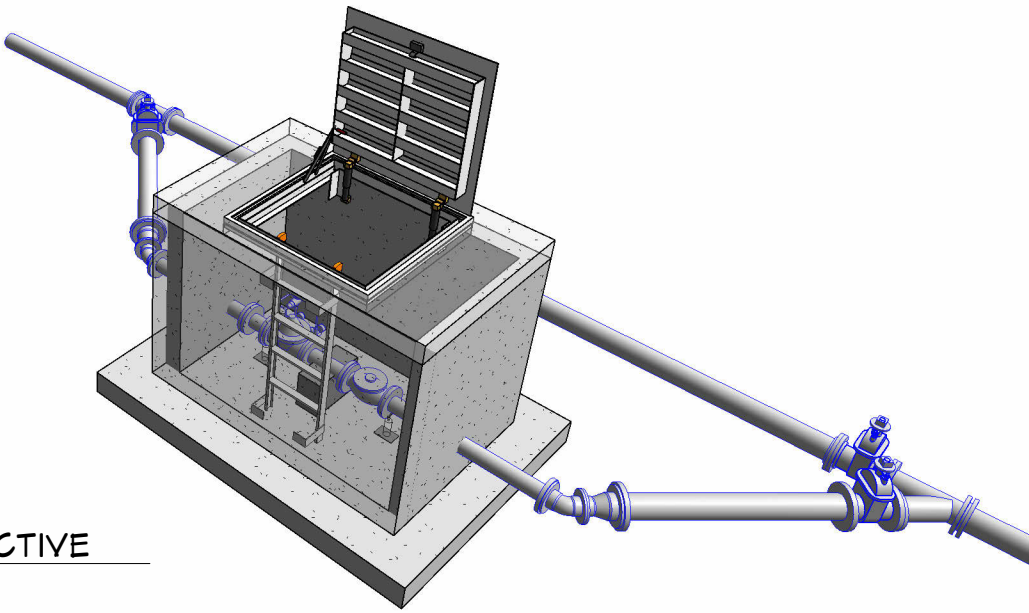
METER-PRV ASSY. PARTLIST		
TAG	DESCRIPTION	QTY.
A	SPOOL_DI FL X PE TYP. BOTHSIDE	1
B	RFCA_TO DI	2
C	BEND_45 DI FL X FL TYP. BOTHSIDE	2
D	REDUCER_DI FL X FL TYP. BOTHSIDE	2
E	RFCA_TO PVC TYP. TO FL X MJ CONNECTION	8
F	SPOOL_PVCO BY BIONAX	2
G	GATE VALVE_DI FL X FL TYP.	3
H	WYE_DI FL X FL	2
I	DISMANTLING JOINT	2
J	WATER METER_SENSUS OMNI T2 W/ STRAINER	1
K	SPOOL_DI FL X FL	1
L	PRV_DI FL X FL, FULL PORT, CLA-VAL 90-01 WITH PRESSURE GAUGE	1
M	HEAVY DUTY ALUMINUM ACCESS HATCH H20 LOAD RATING BY HALLIDAYPRODUCTS.COM / FOR H > 5' = H2R4848; FOR H < 5' = H2R7248	1
N	ALUMINUM LADDERS SAFETY EXTENSION FLAT WALL & FLOOR MOUNTED MODEL L1H BY HALLIDAYPRODUCTS	1



2 LONGITUDINAL SECTION
1/4" = 1'-0"

NOTE:
QUANTITY, SIZES, AND TYPES OF PIPES, FITTINGS, APPURTENANCES, AND VAULTS, AS WELL AS THEIR ALIGNMENT, DEPTH, AND LOCATION, SHALL BE SITE-SPECIFIC AND BASED ON MATERIAL AVAILABILITY. THE CONTRACTOR SHALL SUBMIT AN INSTALLATION PLAN FOR ASPA APPROVAL.

3 PERSPECTIVE



DESIGNED BY: EDMON O. LACAULAN, P.E. PROJECT ENGINEER
REVIEWED BY: FIDEL AGUILA JR. SENIOR ENGINEER
APPROVED BY: WILLIAM SWORD, P.E. WATER CHIEF ENGINEER
ISSUE FOR: PERMITTING



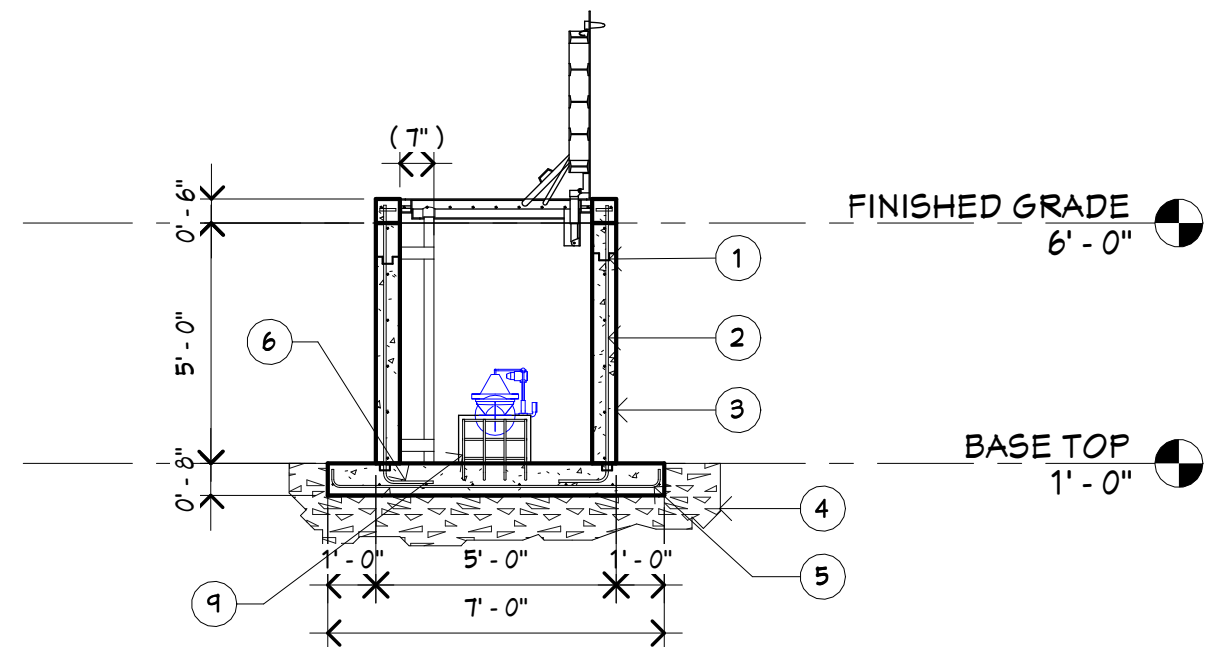
AMERICAN SAMOA POWER AUTHORITY
WATER DIVISION
WATER ENGINEERING DEPARTMENT
P.O. BOX PPB, PAGO PAGO
AMERICAN SAMOA 96799
PH: (684)699-1234

PROJECT NAME: TAFUNA ACP REPLACEMENT & WATER SYSTEM UPGRADE PROJECT
DRAWING TITLE: PRV-METER ASSEMBLY 1
PROJECT LOCATION: TAFUNA, PAGO PAGO AS 96799

REVISION HISTORY:			SCALE:	
DATE	DESCRIPTION	REV. BY	AS SHOWN	
			PROJECT #: A002021972806	
			SHEET NO. 31	
			OF	10



3 CROSS SECTION
1/4" = 1'-0"



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WATER ENGINEERING DEPARTMENT
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AMERICAN SAMOA 96799
PH: (684)699-1234

PROJECT NAME:

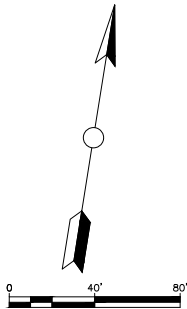
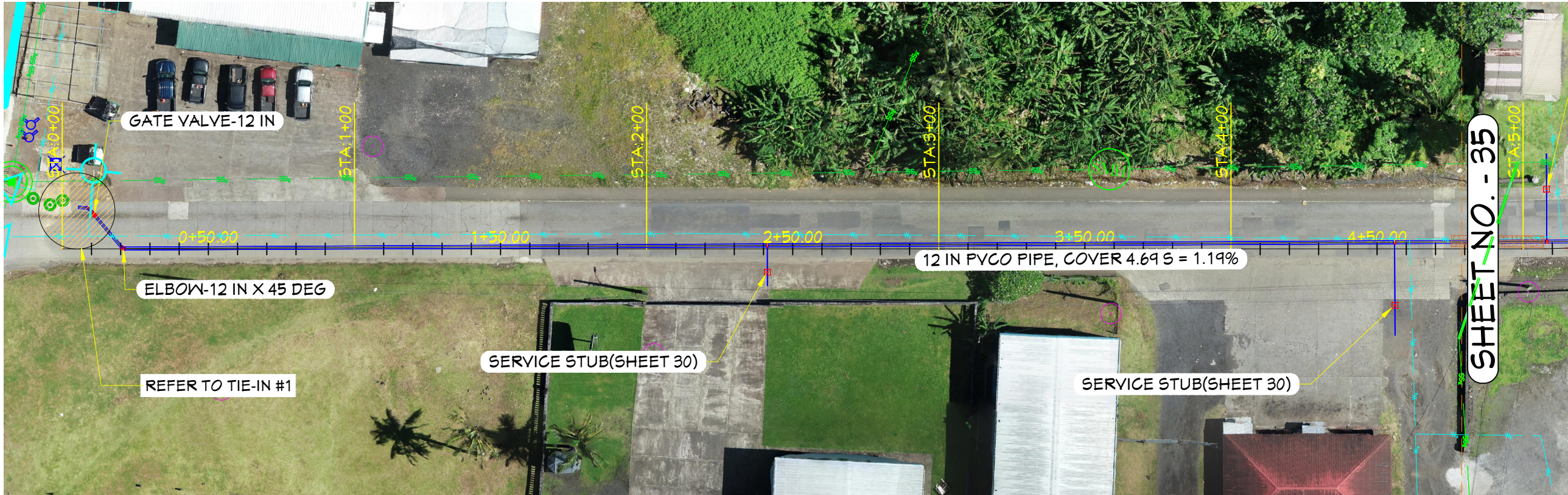
TAFUNA ACP REPLACEMENT & WATER SYSTEM
UPGRADE PROJECT

DRAWING TITLE:

PRY-METER ASSEMBLY 2

PROJECT LOCATION:
TAFUNA, PAGO PAGO AS 96799

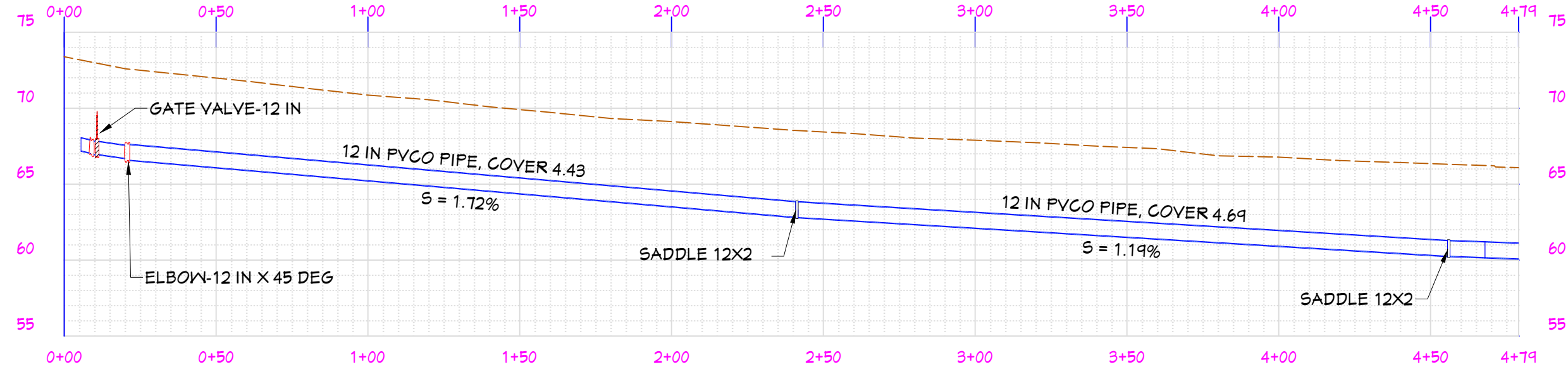
REVISION HISTORY:			SCALE:	
DATE	DESCRIPTION	REV. BY	AS SHOWN	
-			PROJECT #:	
			A002021972806	
			SHEET NO.	
			32	
			OF	10



SCALE IN FEET 1" = 40'
VERTICAL EXAGGERATION = 5

LEGEND:

- Wx EXIST. WATER LINES
- SSx EXIST. SEWER LINES
- SMH SEWER MANHOLE
- EXIST. UNDERGROUND ASTCA
- UTILITY POLE W/ OVHD POWER LINE
- EXIST. WATER METER
- PROPOSED PVC WATER MAIN
- PROP. 2" SERVICE LINE
- PROP. TEE-FITTINGS
- 11.25 ELBOW
- 22.50 ELBOW
- PROPOSED AIR RELIEF VALVE
- PROPOSED FIRE HYDRANT-PLAN
- PROPOSED GATE VALVE-PLAN



DATE PLOTTED: Thursday, April 3, 2025 2:51:31 PM

PREPARED BY:
EDMON O. LACAULAN, P.E.
PROJECT ENGINEER

CHECKED BY:
FIDEL AGUILA
SENIOR ENGINEER

APPROVED BY:
WILLIAM SWORD, P.E.
CHIEF ENGINEER

ISSUE FOR:
CONSTRUCTION



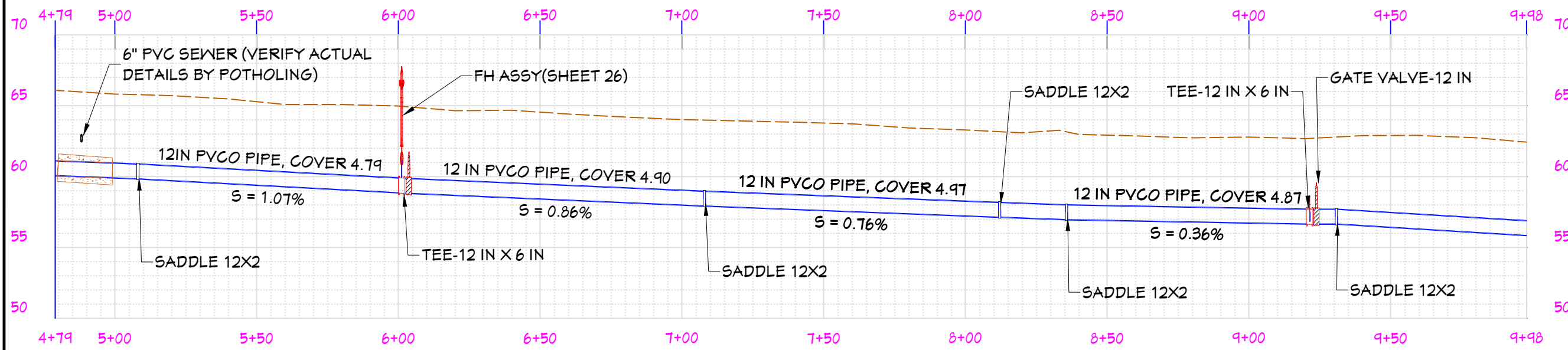
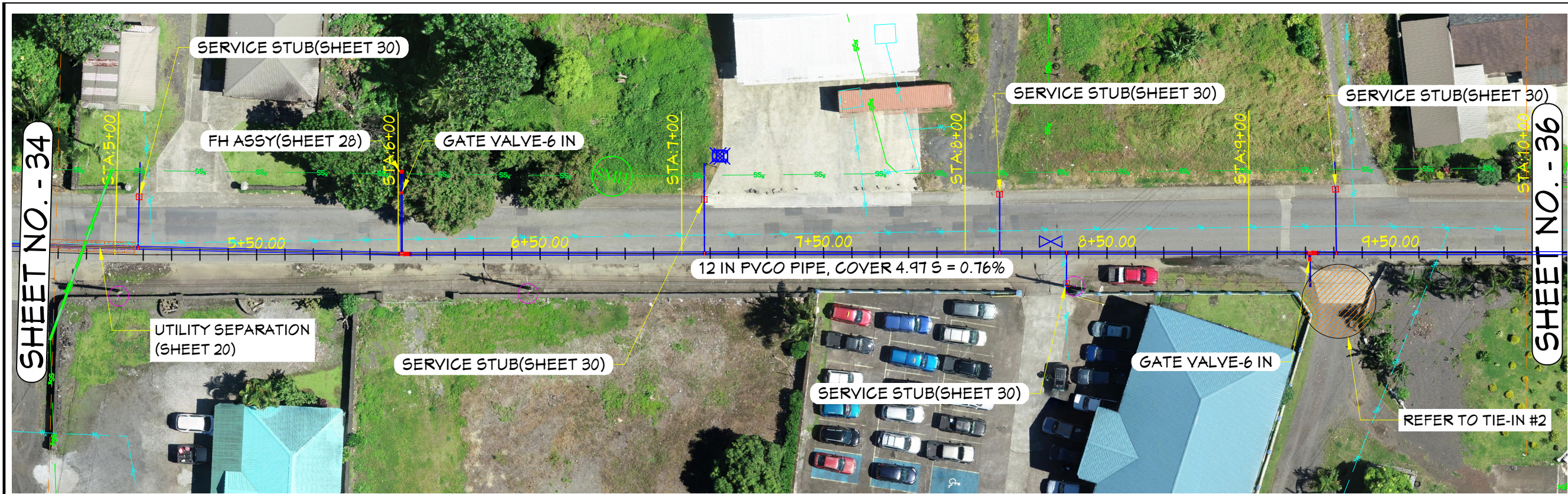
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WATER DIVISION
ENGINEERING DEPARTMENT
P.O. BOX PPB, PAGO PAGO
AMERICAN SAMOA 96799
PH:(684)699-7199
www.aspower.com

PROJECT NAME:
TAFUNA ACP REPLACEMENT & WATER SYSTEM UPGRADE PROJECT

DRAWING TITLE:
ROUTE 019 PLAN & PROFILE 0+00 TO 4+79.99

PROJECT LOCATION:
FAGAIMA, KOKOLAND AND MALAEMI, AS 96799

REVISION HISTORY:				SCALE:	
NO.	DATE	DETAILS OF REVISION	REVISED BY	AS SHOWN	
				PROJECT #: 1867749G319	
				SHEET NO. 34	
				of	49



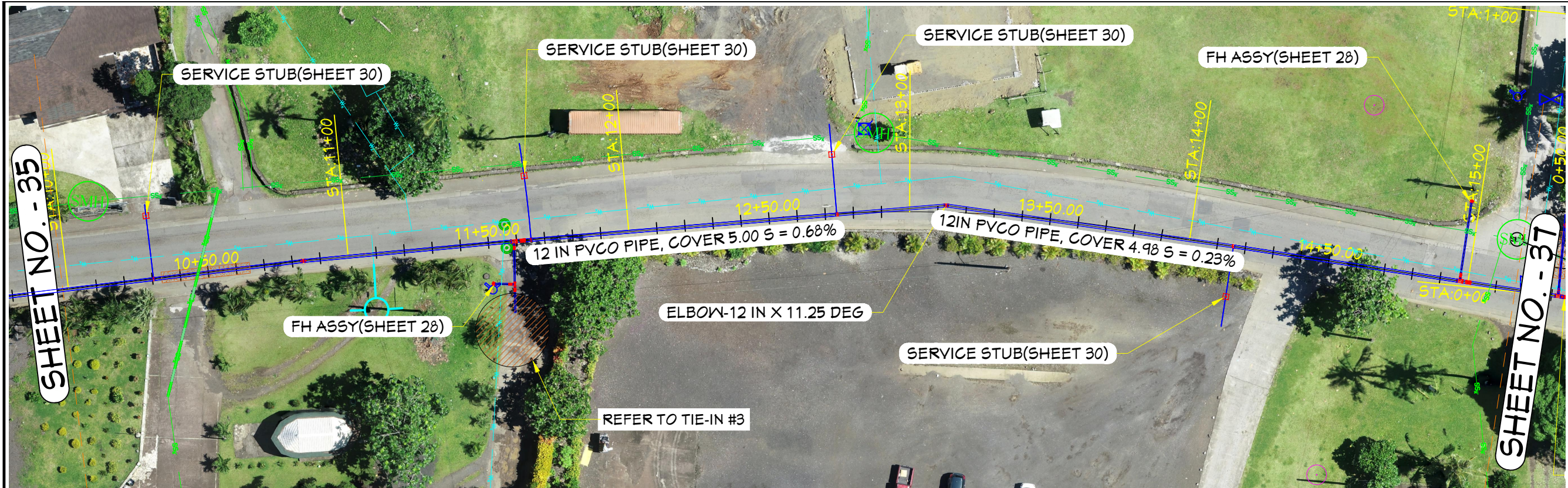
SCALE IN FEET 1" = 40'
VERTICAL EXAGGERATION = 5

LEGEND:

- Wx EXIST. WATER LINES
- SSx EXIST. SEWER LINES
- SMH SEWER MANHOLE
- EXIST. UNDERGROUND ASTCA
- UTILITY POLE W/ OVHD POWER LINE
- EXIST. WATER METER
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- PROPOSE GATE VALVE-PLAN

DATE PLOTTED: Thursday, April 3, 2025 2:58:13 PM

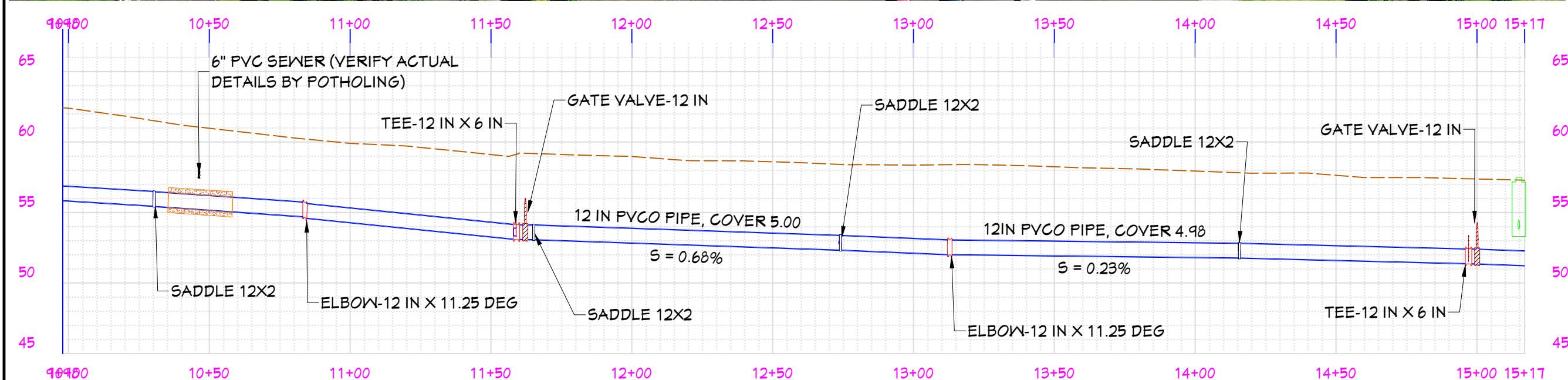
<div><div>PREPARED BY: EDMON O. LACAULAN, P.E. PROJECT ENGINEER</div><div>CHECKED BY: FIDEL AGUILA SENIOR ENGINEER</div><div>APPROVED BY: WILLIAM SWORD, P.E. CHIEF ENGINEER</div><div>ISSUE FOR: CONSTRUCTION</div></div>		<div>AMERICAN SAMOA POWER AUTHORITY WATER DIVISION ENGINEERING DEPARTMENT P.O. BOX PPB, PAGO PAGO AMERICAN SAMOA 96799 PH:(684)699-7199 www.aspower.com</div>	PROJECT NAME: TAFUNA ACP REPLACEMENT & WATER SYSTEM UPGRADE PROJECT		REVISION HISTORY:			SCALE: AS SHOWN	
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			PROJECT LOCATION: FAGAIMA, KOKOLAND AND MALAEMI, AS 96799						SHEET NO. 35
									of 49




SCALE IN FEET 1" = 40'
VERTICAL EXAGGERATION = 5

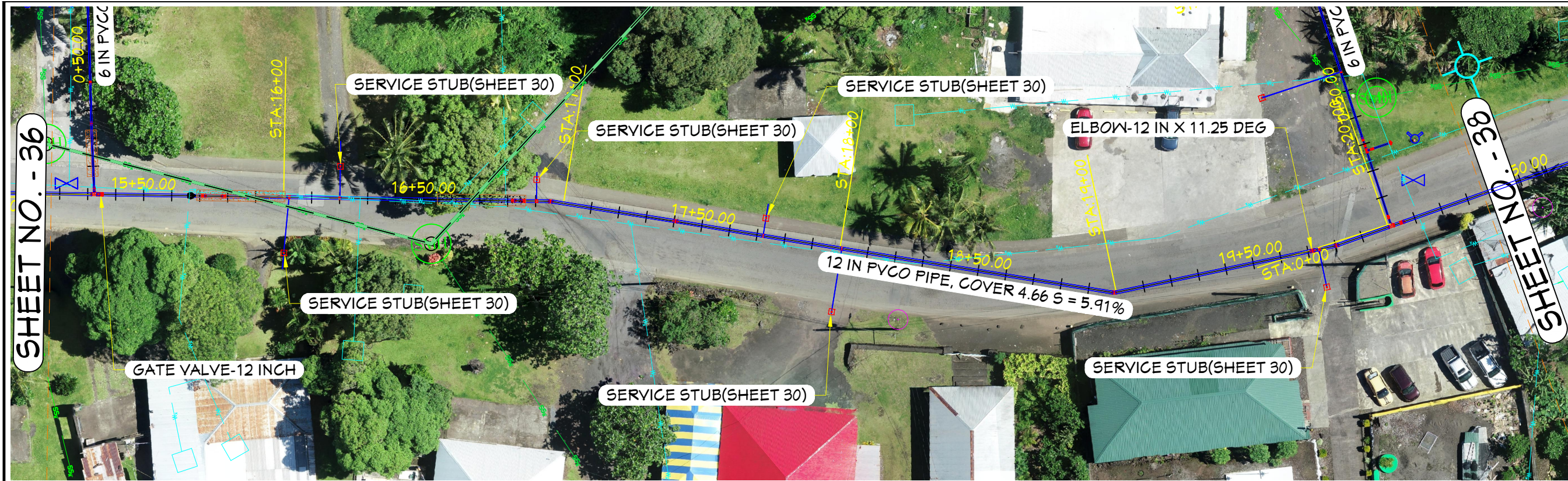
LEGEND:

- Wx EXIST. WATER LINES
- SSx EXIST. SEWER LINES
- SMH SEWER MANHOLE
- EXIST. UNDERGROUND ASTCA
- UTILITY POLE W/ OVHD POWER LINE
- EXIST. WATER METER
- PROPOSED PVC WATER MAIN
- PROP. 2" SERVICE LINE
- PROP. TEE-FITTINGS
- 11.25 ELBOW
- 22.50 ELBOW
- PROPOSED AIR RELIEF VALVE
- PROPOSED FIRE HYDRANT-PLAN
- PROPOSE GATE VALVE-PLAN



DATE PLOTTED: Thursday, April 3, 2025 2:58:54 PM

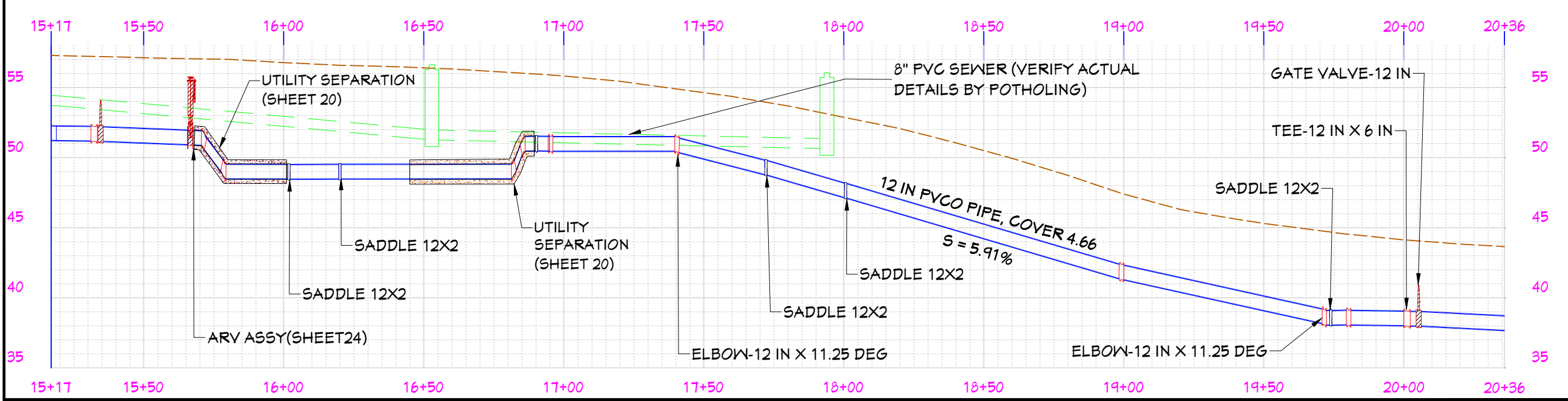
	PREPARED BY: EDMON O. LACAULAN, P.E. PROJECT ENGINEER	 AMERICAN SAMOA POWER AUTHORITY WATER DIVISION ENGINEERING DEPARTMENT P.O. BOX PPB, PAGO PAGO AMERICAN SAMOA 96799 PH:(684)699-7199 www.aspower.com	PROJECT NAME: TAFUNA ACP REPLACEMENT & WATER SYSTEM UPGRADE PROJECT	REVISION HISTORY:			SCALE:		
	CHECKED BY: FIDEL AGUILA SENIOR ENGINEER		DRAWING TITLE: ROUTE 019 PLAN & PROFILE 9+97.97 TO 15+16.96	NO.	DATE	DETAILS OF REVISION	REVISED BY	AS SHOWN	
	APPROVED BY: WILLIAM SWORD, P.E. CHIEF ENGINEER							PROJECT #: 18677496319	
	ISSUE FOR: CONSTRUCTION							SHEET NO.	
	36								
		PROJECT LOCATION: FAGAIMA, KOKOLAND AND MALAEMI, AS 96799				of	49		



SCALE IN FEET 1" = 40'
VERTICAL EXAGGERATION = 5

LEGEND:

- Wx EXIST. WATER LINES
- SSx EXIST. SEWER LINES
- SMH SEWER MANHOLE
- EXIST. UNDERGROUND ASTCA
- UTILITY POLE W/ OVHD POWER LINE
- EXIST. WATER METER
- PROPOSED PVCO WATER MAIN
- PROP. 2" SERVICE LINE
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- 11.25 ELBOW
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- PROPOSED FIRE HYDRANT-PLAN
- PROPOSED GATE VALVE-PLAN



PREPARED BY:
EDMON O. LACAULAN, P.E.
PROJECT ENGINEER

CHECKED BY:
FIDEL AGUILA
SENIOR ENGINEER

APPROVED BY:
WILLIAM SWORD, P.E.
CHIEF ENGINEER

ISSUE FOR:
CONSTRUCTION



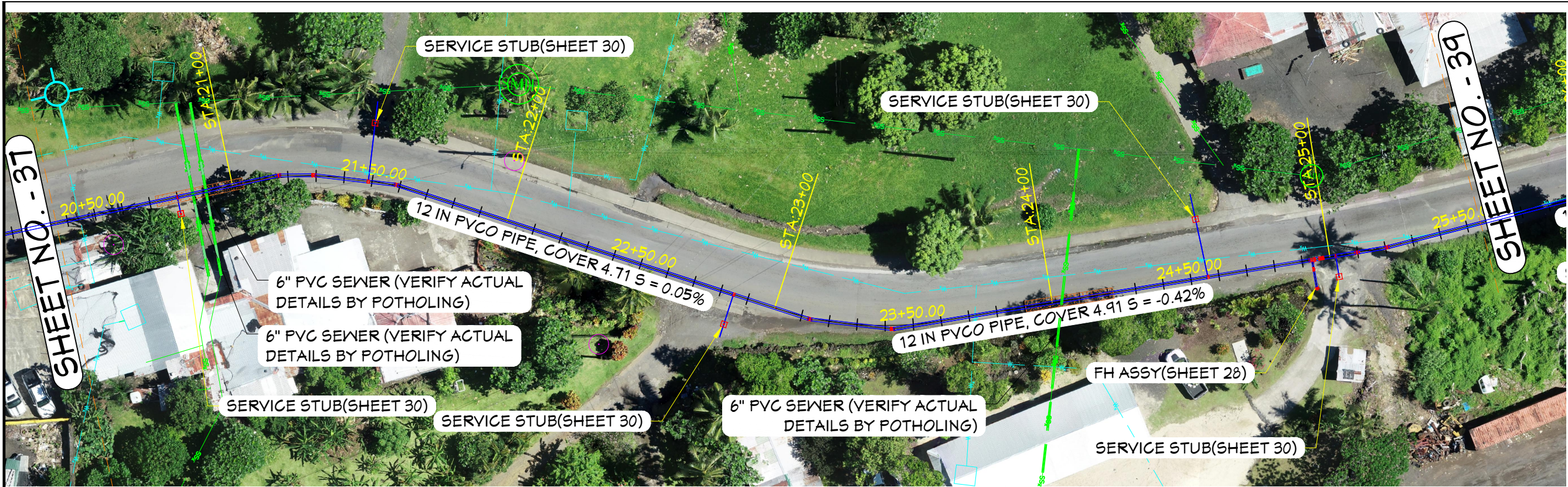
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WATER DIVISION
ENGINEERING DEPARTMENT
P.O. BOX PPB, PAGO PAGO
AMERICAN SAMOA 96799
PH:(684)699-7199
www.aspower.com

PROJECT NAME:
TAFUNA ACP REPLACEMENT & WATER SYSTEM UPGRADE PROJECT

DRAWING TITLE:
ROUTE 019 PLAN & PROFILE 15+16.96 TO 20+35.94

PROJECT LOCATION:
FAGAIMA, KOKOLAND AND MALAEMI, AS 96799

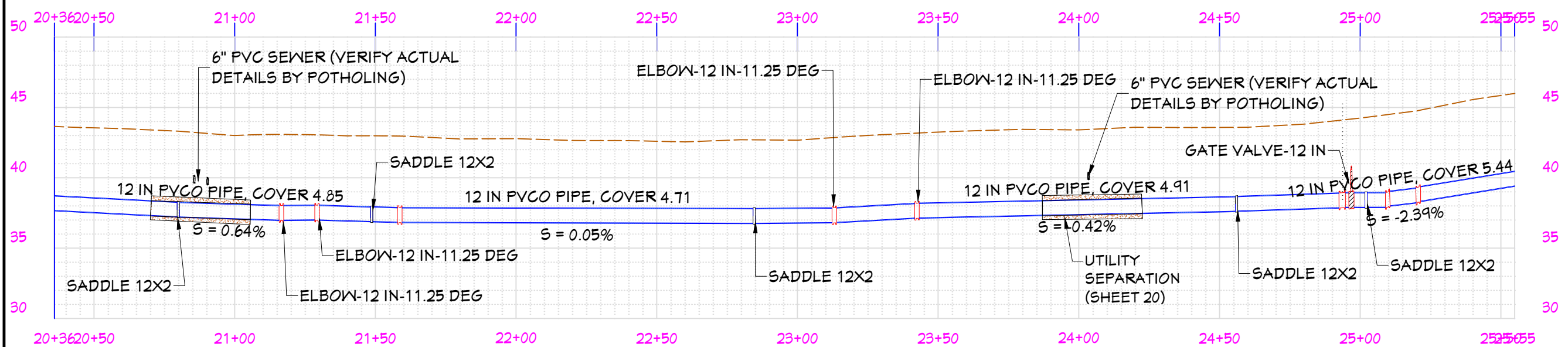
REVISION HISTORY:				SCALE:	
NO.	DATE	DETAILS OF REVISION	REVISED BY	AS SHOWN	
				PROJECT #:	
				1867749G319	
				SHEET NO.	
				37	
				of	49




SCALE IN FEET 1" = 40'
VERTICAL EXAGGERATION = 5

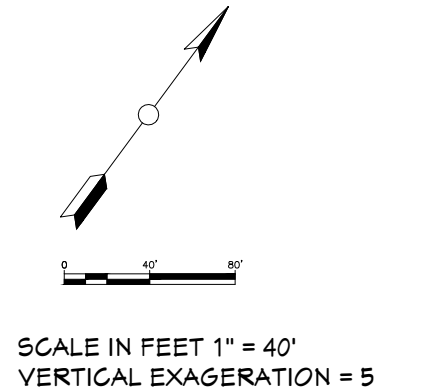
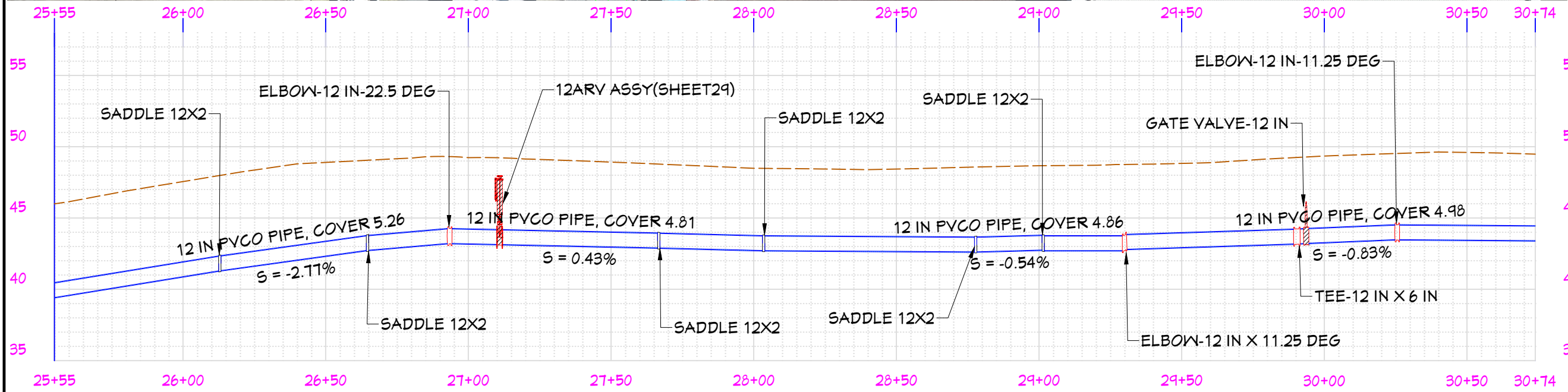
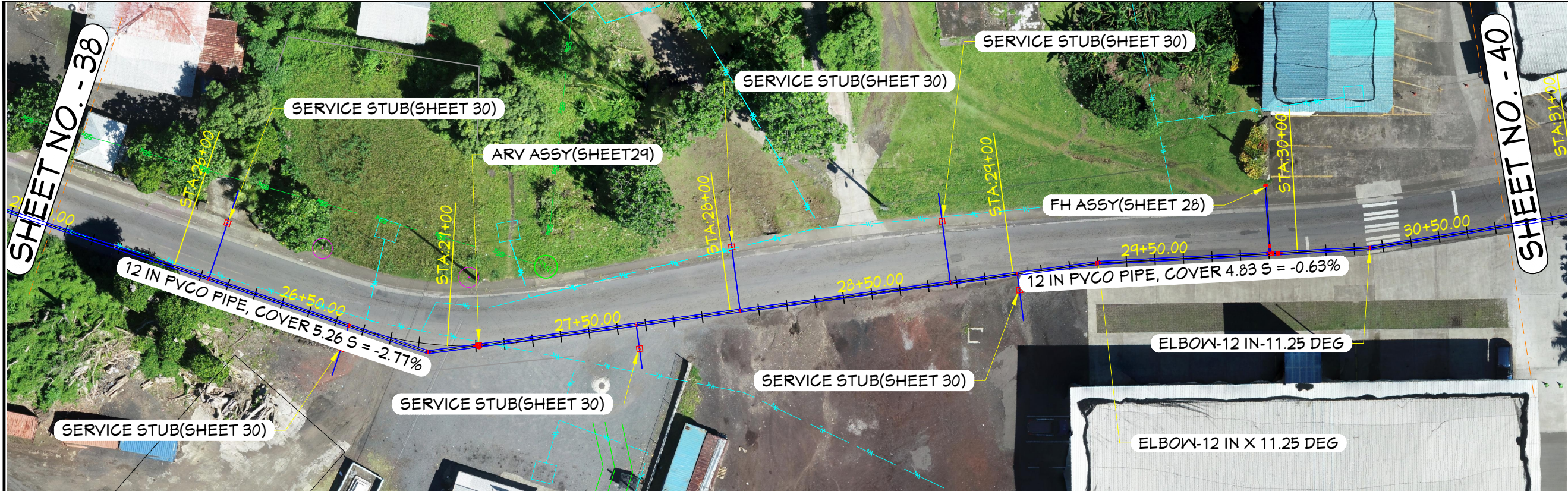
LEGEND:

- Wx EXIST. WATER LINES
- SSx EXIST. SEWER LINES
- SMH SEWER MANHOLE
- EXIST. UNDERGROUND ASTCA
- UTILITY POLE W/ OVHD POWER LINE
- EXIST. WATER METER
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- 11.25 ELBOW
- 22.50 ELBOW
- PROPOSED AIR RELIEF VALVE
- PROPOSED FIRE HYDRANT-PLAN
- PROPOSE GATE VALVE-PLAN



DATE PLOTTED: Thursday, April 3, 2025 3:00:16 PM

	PREPARED BY: EDMON O. LACAULAN, P.E. PROJECT ENGINEER	 AMERICAN SAMOA POWER AUTHORITY WATER DIVISION ENGINEERING DEPARTMENT P.O. BOX PPB, PAGO PAGO AMERICAN SAMOA 96799 PH:(684)699-7199 www.aspower.com	PROJECT NAME: TAFUNA ACP REPLACEMENT & WATER SYSTEM UPGRADE PROJECT	REVISION HISTORY:			SCALE: AS SHOWN		
	CHECKED BY: FIDEL AGUILA SENIOR ENGINEER		DRAWING TITLE: ROUTE 019 PLAN & PROFILE 20+35.94 TO 25+54.93	NO.	DATE	DETAILS OF REVISION	REVISED BY	PROJECT #: 1867749G319	
	APPROVED BY: WILLIAM SWORD, P.E. CHIEF ENGINEER		PROJECT LOCATION: FAGAIMA, KOKOLAND AND MALAEMI, AS 96799					SHEET NO. 38	
	ISSUE FOR: CONSTRUCTION							of	49



LEGEND:

- Wx EXIST. WATER LINES
- SSx EXIST. SEWER LINES
- SMH SEWER MANHOLE
- EXIST. UNDERGROUND ASTCA
- UTILITY POLE W/ OVHD POWER LINE
- EXIST. WATER METER
- PROPOSED PVC WATER MAIN
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- 11.25 ELBOW
- 22.50 ELBOW
- PROPOSED AIR RELIEF VALVE
- PROPOSED FIRE HYDRANT-PLAN
- PROPOSED GATE VALVE-PLAN

DATE PLOTTED: Thursday, April 3, 2025 3:01:01 PM

PREPARED BY:
EDMON O. LACAULAN, P.E.
PROJECT ENGINEER

CHECKED BY:
FIDEL AGUILA
SENIOR ENGINEER

APPROVED BY:
WILLIAM SWORD, P.E.
CHIEF ENGINEER

ISSUE FOR:
CONSTRUCTION



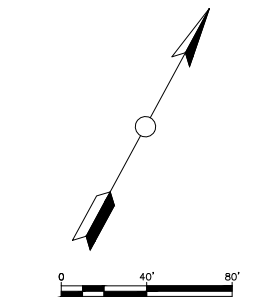
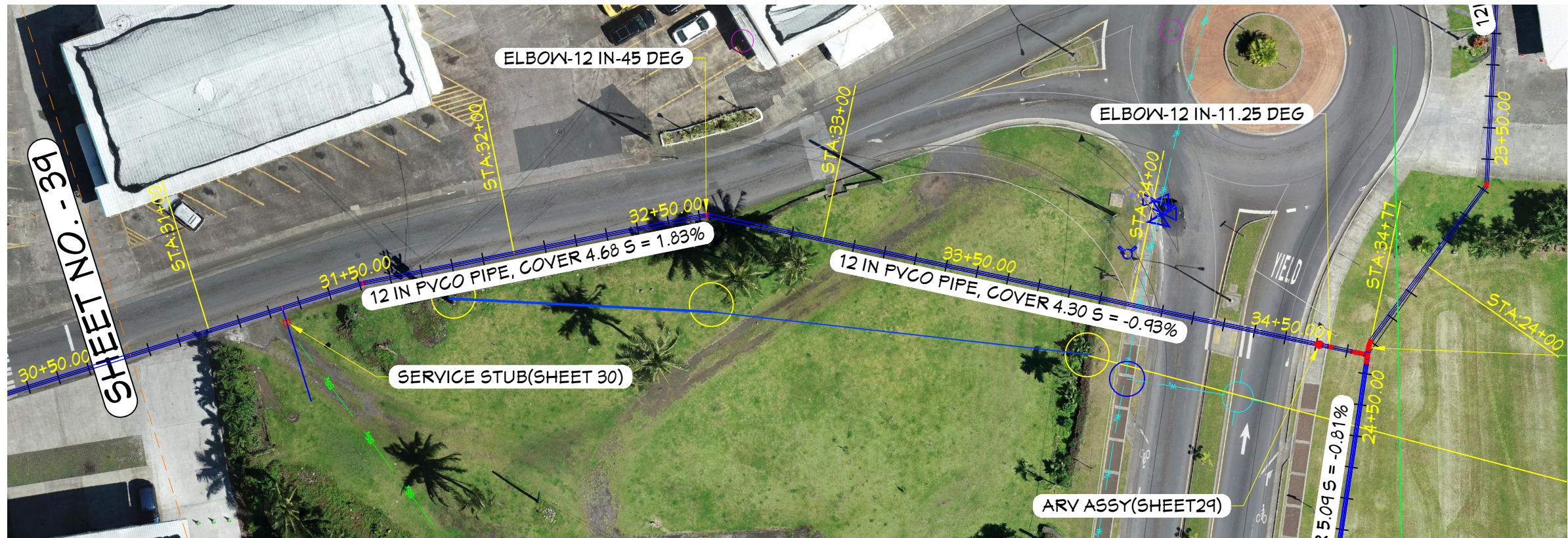
AMERICAN SAMOA POWER AUTHORITY
WATER DIVISION
ENGINEERING DEPARTMENT
P.O. BOX PPB, PAGO PAGO
AMERICAN SAMOA 96799
PH:(684)699-7199
www.aspower.com

PROJECT NAME:
TAFUNA ACP REPLACEMENT & WATER SYSTEM UPGRADE PROJECT

DRAWING TITLE:
ROUTE 019 PLAN & PROFILE 25+54.93 TO 30+73.91

PROJECT LOCATION:
FAGAIMA, KOKOLAND AND MALAEMI, AS 96799

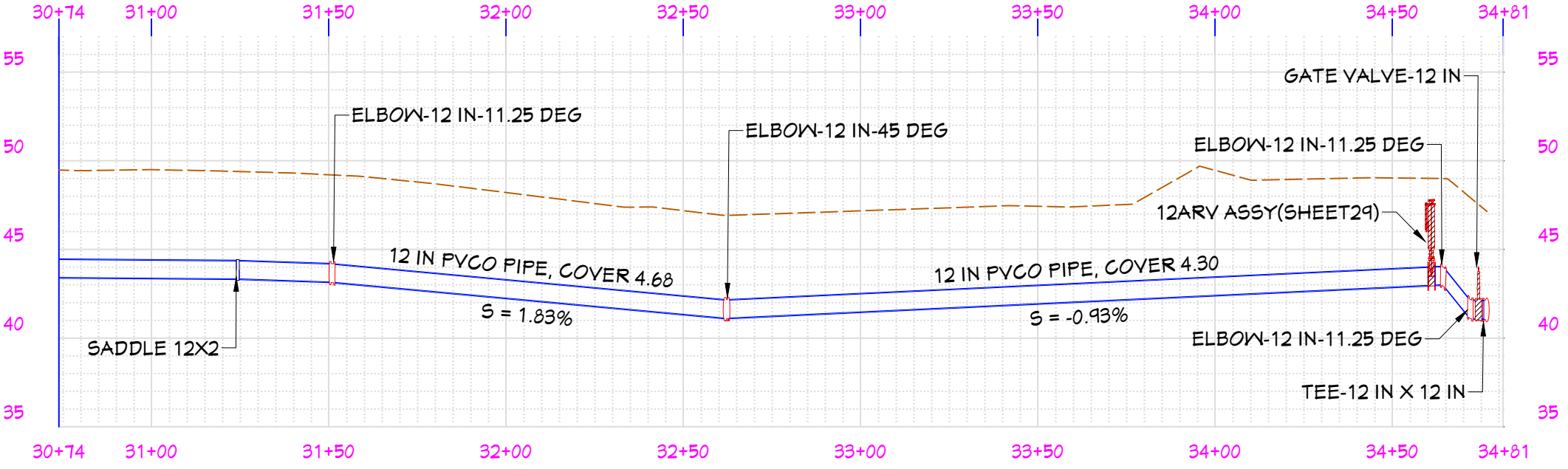
REVISION HISTORY:				SCALE:	
NO.	DATE	DETAILS OF REVISION	REVISED BY	AS SHOWN	
				PROJECT #: 18677496319	
				SHEET NO. 39	
				of	49



SCALE IN FEET 1" = 40'
VERTICAL EXAGGERATION = 5

LEGEND:

- Wx EXIST. WATER LINES
- SSx EXIST. SEWER LINES
- SMH SEWER MANHOLE
- EXIST. UNDERGROUND ASTCA
- UTILITY POLE W/ OVHD POWER LINE
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- 11.25 ELBOW
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- PROPOSED AIR RELIEF VALVE
- PROPOSED FIRE HYDRANT-PLAN
- PROPOSED GATE VALVE-PLAN



DATE PLOTTED: Thursday, April 3, 2025 3:01:46 PM

PREPARED BY:
EDMON O. LACAULAN, P.E.
PROJECT ENGINEER

CHECKED BY:
FIDEL AGUILA
SENIOR ENGINEER

APPROVED BY:
WILLIAM SWORD, P.E.
CHIEF ENGINEER

ISSUE FOR:
CONSTRUCTION



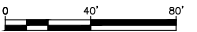
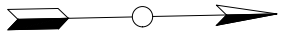
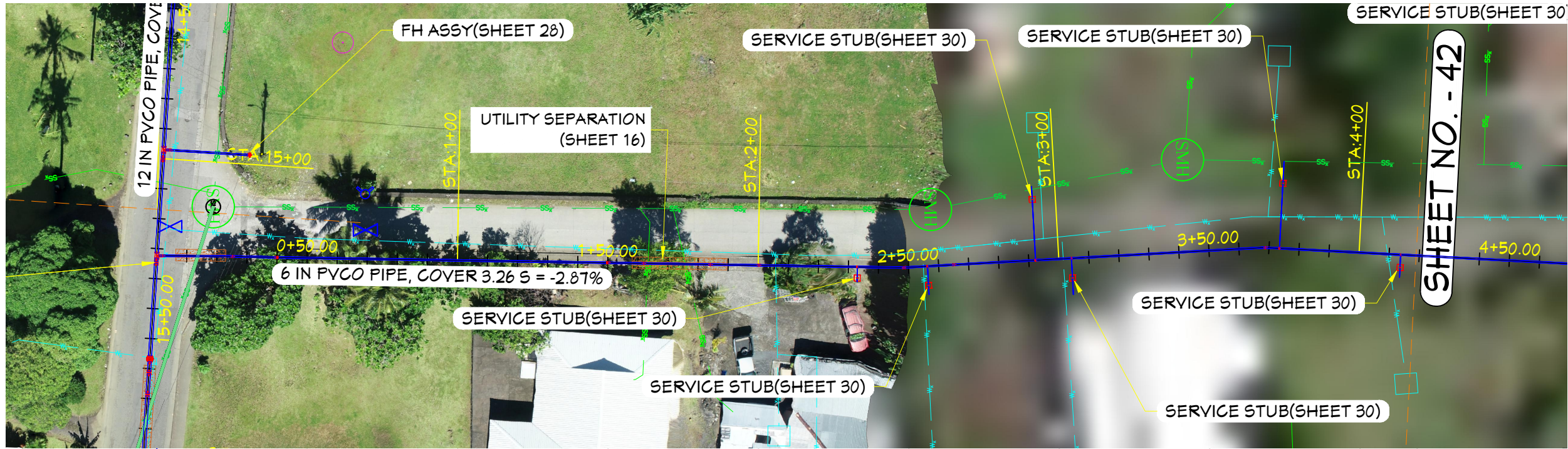
AMERICAN SAMOA POWER AUTHORITY
WATER DIVISION
ENGINEERING DEPARTMENT
P.O. BOX PPB, PAGO PAGO
AMERICAN SAMOA 96799
PH:(684)699-7199
www.aspower.com

PROJECT NAME:
TAFUNA ACP REPLACEMENT & WATER SYSTEM UPGRADE PROJECT

DRAWING TITLE:
ROUTE 019 PLAN & PROFILE 30+73.91 TO 34+81.27

PROJECT LOCATION:
FAGAIMA, KOKOLAND AND MALAEMI, AS 96799

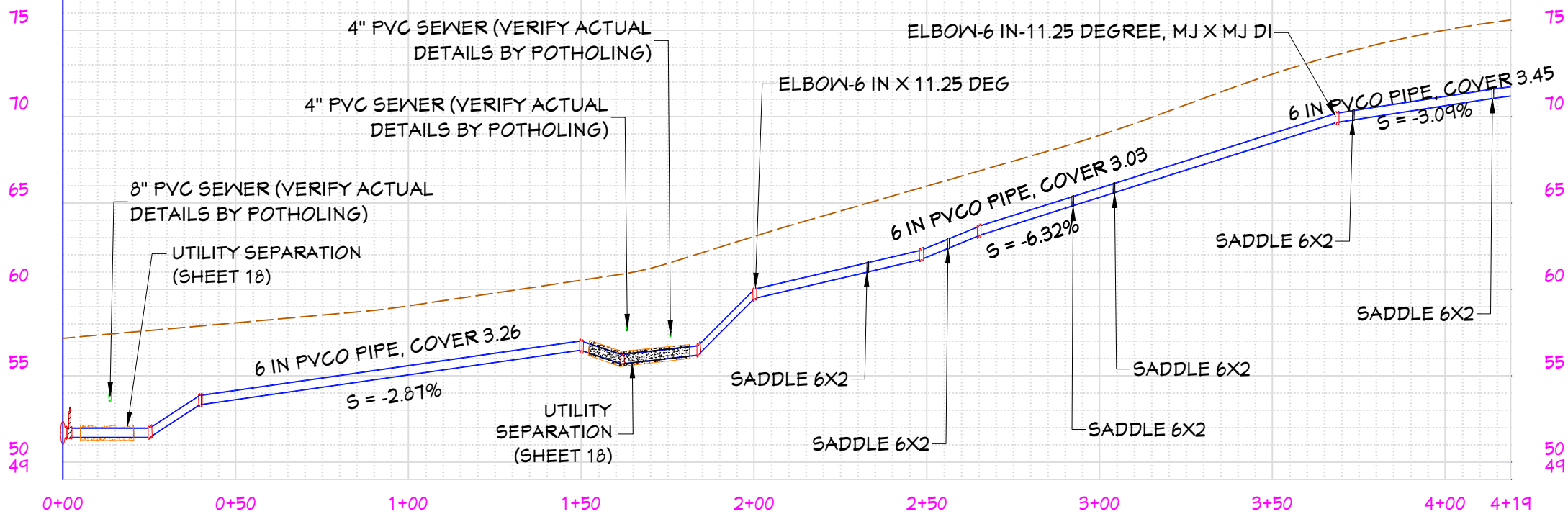
REVISION HISTORY:				SCALE:	
NO.	DATE	DETAILS OF REVISION	REVISED BY	AS SHOWN	
				PROJECT #: 1867749G319	
				SHEET NO. 40	
				of	49



SCALE IN FEET 1" = 40'
VERTICAL EXAGGERATION = 5

LEGEND:

- EXIST. WATER LINES
- EXIST. SEWER LINES
- SEWER MANHOLE
- EXIST. UNDERGROUND ASTCA
- UTILITY POLE W/ OVHD POWER LINE
- EXIST. WATER METER
- PROPOSED PVCO WATER MAIN
- PROP. 2" SERVICE LINE
- PROP. TEE-FITTINGS
- 11.25 ELBOW
- 22.50 ELBOW
- PROPOSED AIR RELIEF VALVE
- PROPOSED FIRE HYDRANT-PLAN
- PROPOSED GATE VALVE-PLAN



PREPARED BY:
EDMON O. LACAULAN, P.E.
PROJECT ENGINEER

CHECKED BY:
FIDEL AGUILA
SENIOR ENGINEER

APPROVED BY:
WILLIAM SWORD, P.E.
CHIEF ENGINEER

ISSUE FOR:
CONSTRUCTION



AMERICAN SAMOA POWER AUTHORITY
WATER DIVISION
ENGINEERING DEPARTMENT
P.O. BOX PPB, PAGO PAGO
AMERICAN SAMOA 96799
PH:(684)699-7199
www.aspower.com

PROJECT NAME:
TAFUNA ACP REPLACEMENT & WATER SYSTEM UPGRADE PROJECT

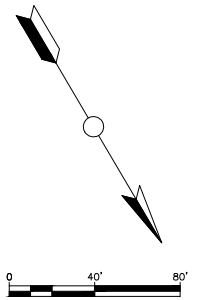
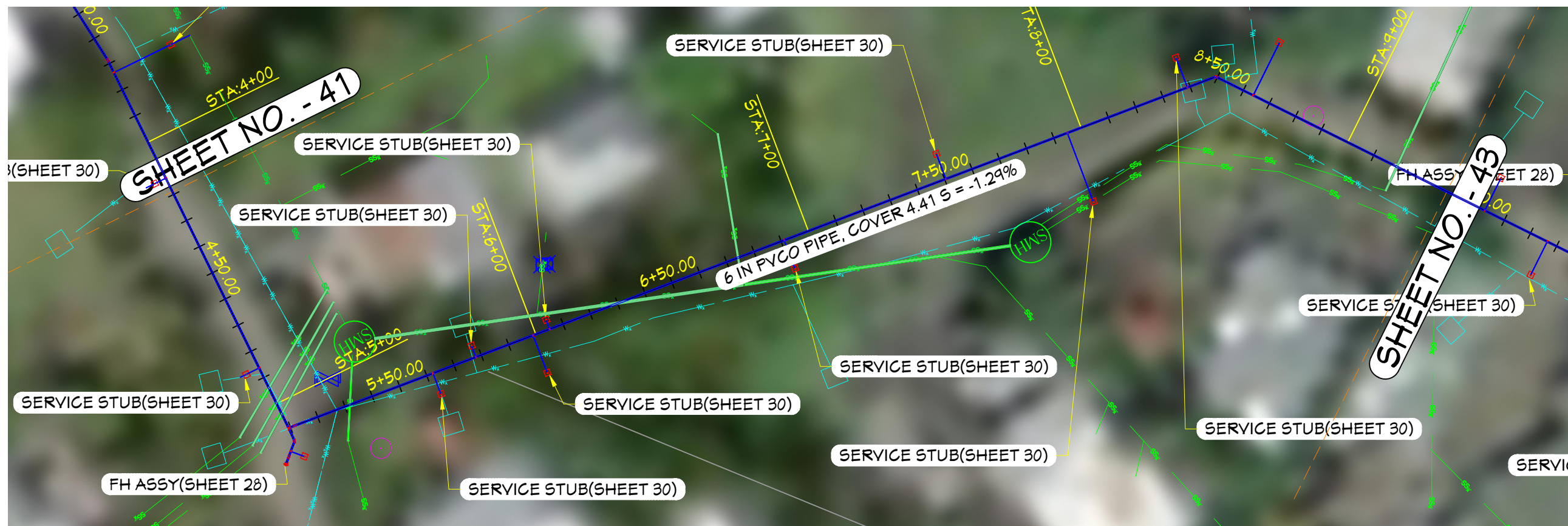
DRAWING TITLE:
ROUTE 019A PLAN & PROFILE 0+00 TO 4+18.99

PROJECT LOCATION:
FAGAIMA, KOKOLAND AND MALAEMI, AS 96799

REVISION HISTORY:

NO.	DATE	DETAILS OF REVISION	REVISED BY	SCALE:	
				AS SHOWN	
				PROJECT #:	1867749G319
				SHEET NO.	41
				of	49

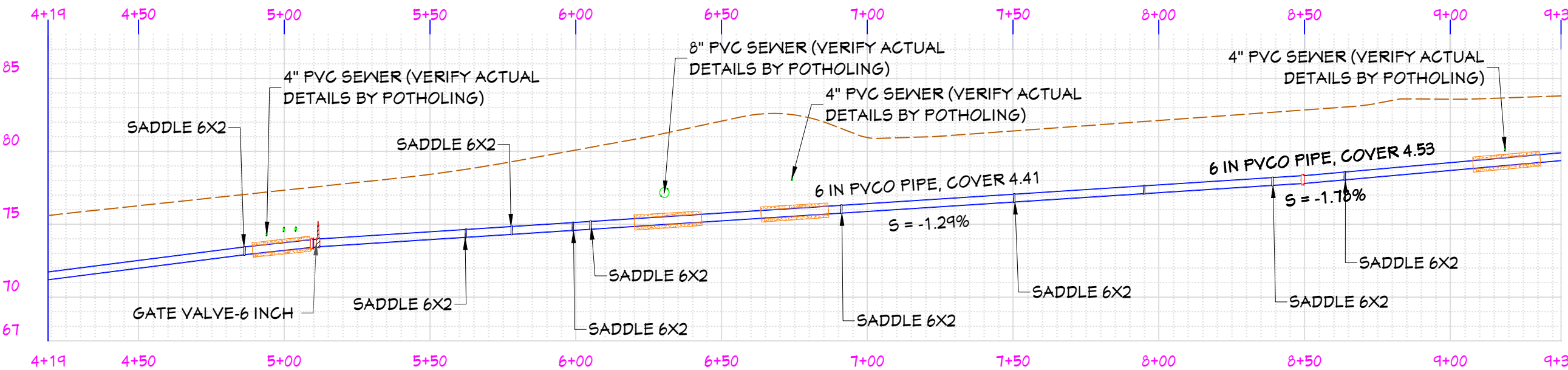
DATE PLOTTED: Thursday, April 3, 2025 3:14:51 PM



SCALE IN FEET 1" = 40'
VERTICAL EXAGGERATION = 5

LEGEND:

- Wx EXIST. WATER LINES
- SSx EXIST. SEWER LINES
- SMH SEWER MANHOLE
- EXIST. UNDERGROUND ASTCA
- UTILITY POLE W/ OVHD POWER LINE
- EXIST. WATER METER
- PROPOSED PVC WATER MAIN
- PROP. 2" SERVICE LINE
- PROP. TEE-FITTINGS
- 11.25 ELBOW
- 22.50 ELBOW
- PROPOSED AIR RELIEF VALVE
- PROPOSED FIRE HYDRANT-PLAN
- PROPOSED GATE VALVE-PLAN



PREPARED BY:
EDMON O. LACAULAN, P.E.
PROJECT ENGINEER

CHECKED BY:
FIDEL AGUILA
SENIOR ENGINEER

APPROVED BY:
WILLIAM SWORD, P.E.
CHIEF ENGINEER

ISSUE FOR:
CONSTRUCTION



AMERICAN SAMOA POWER AUTHORITY
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ENGINEERING DEPARTMENT
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AMERICAN SAMOA 96799
PH:(684)699-7199
www.aspower.com

PROJECT NAME:
TAFUNA ACP REPLACEMENT & WATER SYSTEM UPGRADE
PROJECT

DRAWING TITLE:
ROUTE 019A PLAN & PROFILE 4+18.99 TO 9+37.97

PROJECT LOCATION:
FAGAIMA, KOKOLAND AND MALAEMI, AS 96799

REVISION HISTORY:

NO.	DATE	DETAILS OF REVISION	REVISED BY

SCALE:

AS SHOWN

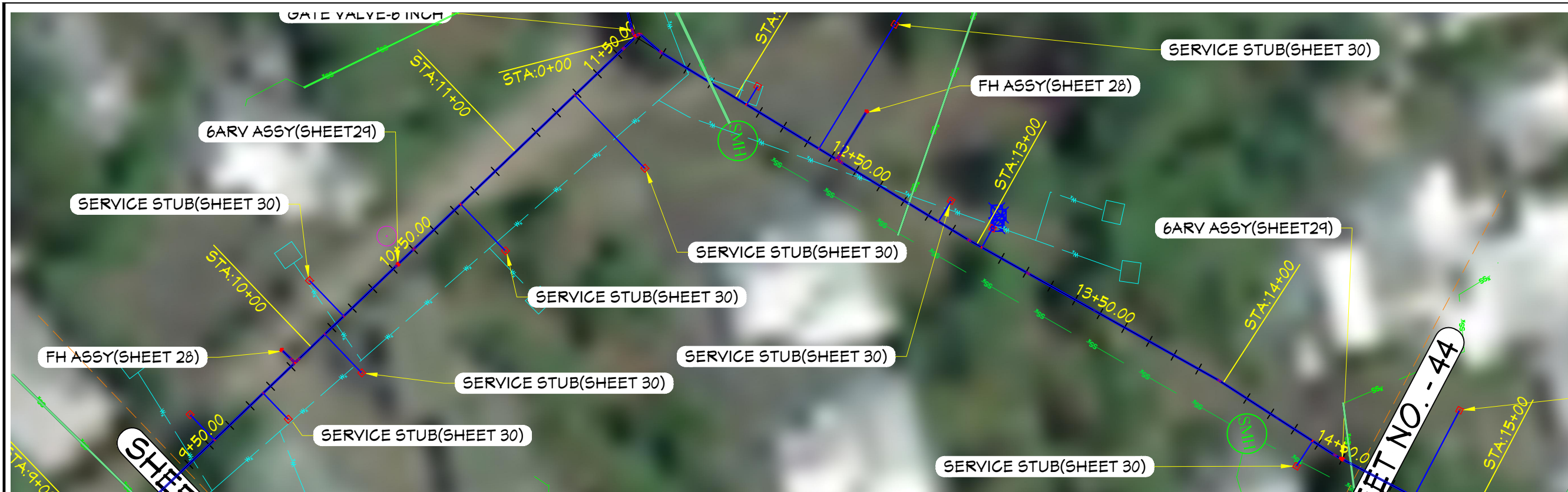
PROJECT #:

1867749G319

SHEET NO.

42

of 49

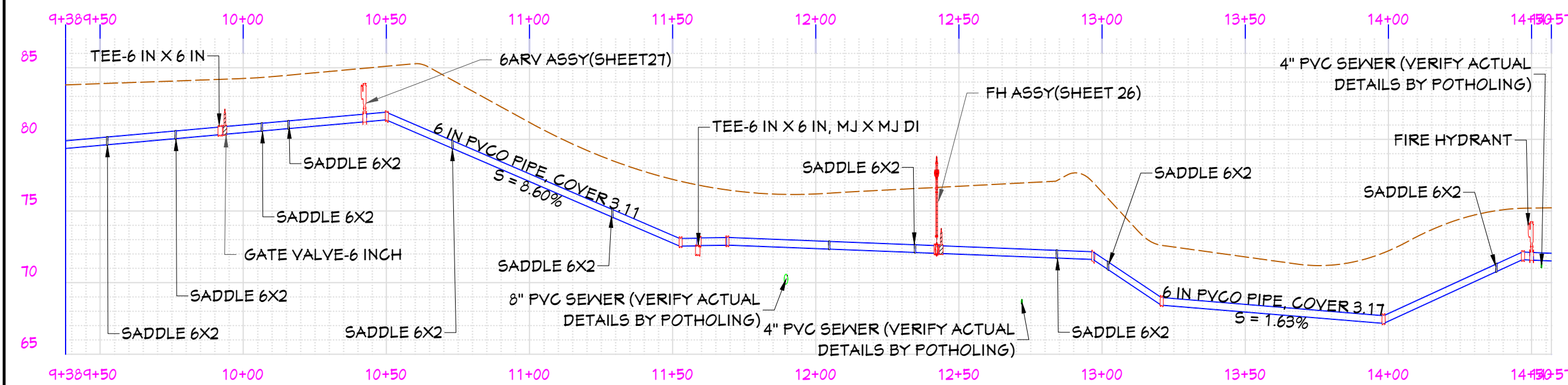


0 40' 80'

SCALE IN FEET 1" = 40'
VERTICAL EXAGGERATION = 5

LEGEND:

- Wx EXIST. WATER LINES
- SSx EXIST. SEWER LINES
- SMH SEWER MANHOLE
- EXIST. UNDERGROUND ASTCA
- UTILITY POLE W/ OVHD POWER LINE
- EXIST. WATER METER
- PROPOSED PVC/O WATER MAIN
- PROP. 2" SERVICE LINE
- PROP. TEE-FITTINGS
- 11.25 ELBOW
- 22.50 ELBOW
- PROPOSED AIR RELIEF VALVE
- PROPOSED FIRE HYDRANT-PLAN
- PROPOSE GATE VALVE-PLAN



PREPARED BY:
EDMON O. LACAULAN, P.E.
PROJECT ENGINEER

CHECKED BY:
FIDEL AGUILA
SENIOR ENGINEER

APPROVED BY:
WILLIAM SWORD, P.E.
CHIEF ENGINEER

ISSUE FOR:
CONSTRUCTION



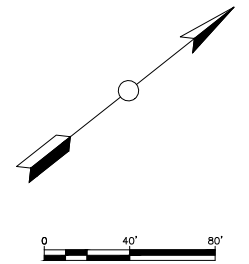
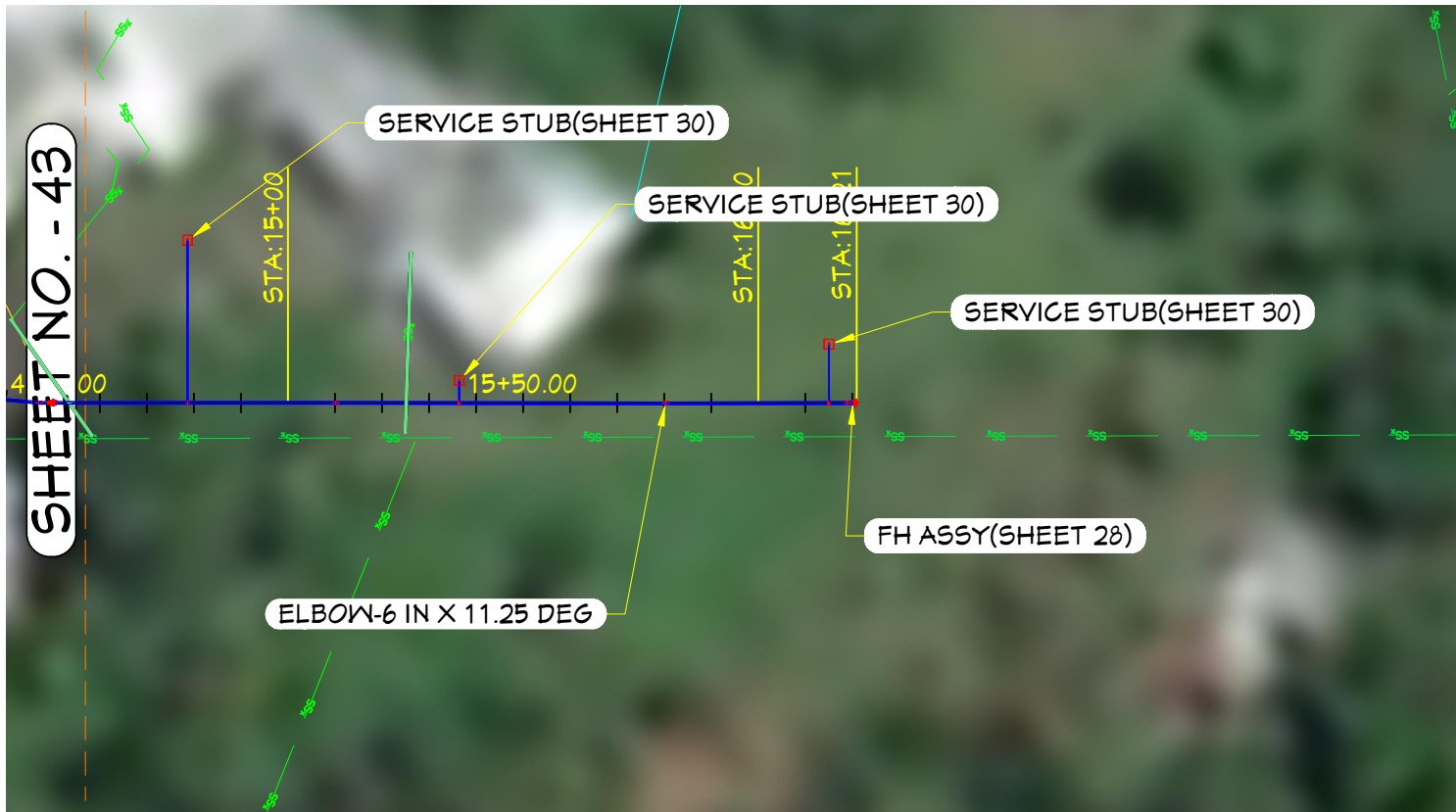
AMERICAN SAMOA POWER AUTHORITY
WATER DIVISION
ENGINEERING DEPARTMENT
P.O. BOX PPB, PAGO PAGO
AMERICAN SAMOA 96799
PH:(684)699-7199
www.aspower.com

PROJECT NAME:
TAFUNA ACP REPLACEMENT & WATER SYSTEM UPGRADE PROJECT

DRAWING TITLE:
ROUTE 019A PLAN & PROFILE 9+37.97 TO 14+56.96

PROJECT LOCATION:
FAGAIMA, KOKOLAND AND MALAEMI, AS 96799

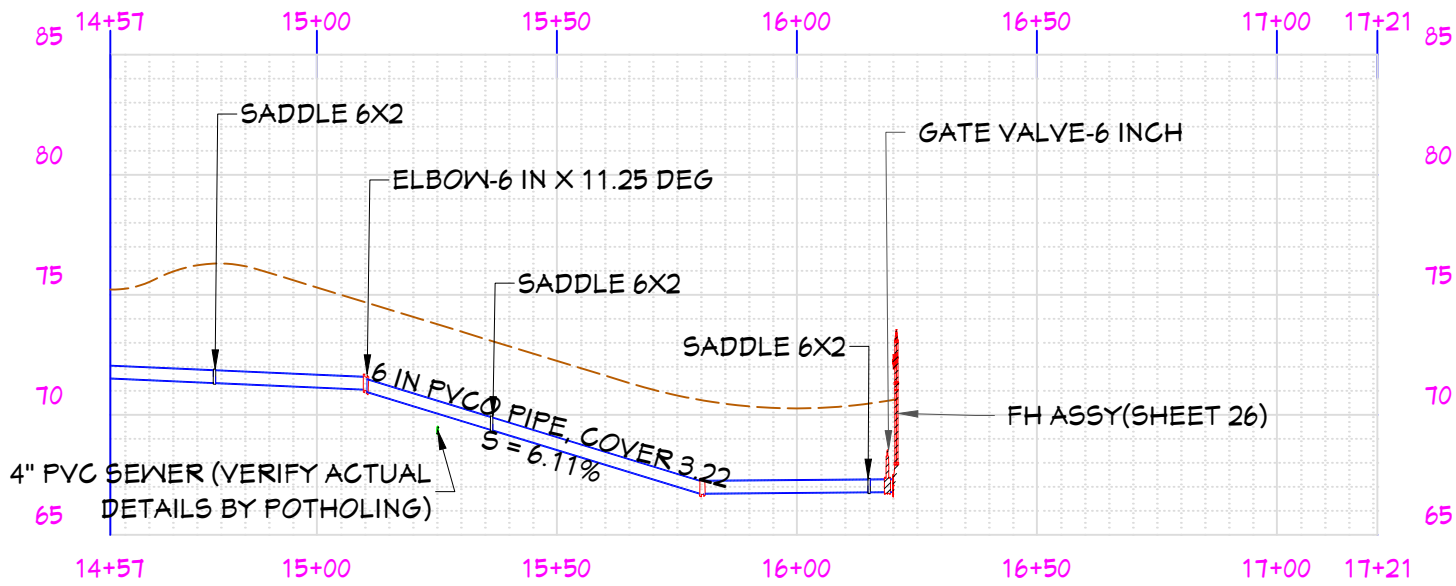
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NO.	DATE	DETAILS OF REVISION	REVISED BY	AS SHOWN	
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				SHEET NO. 43	
				of	49




SCALE IN FEET 1" = 40'
VERTICAL EXAGGERATION = 5

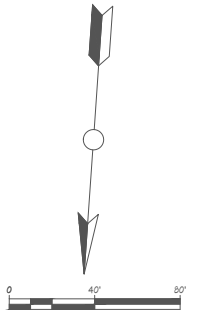
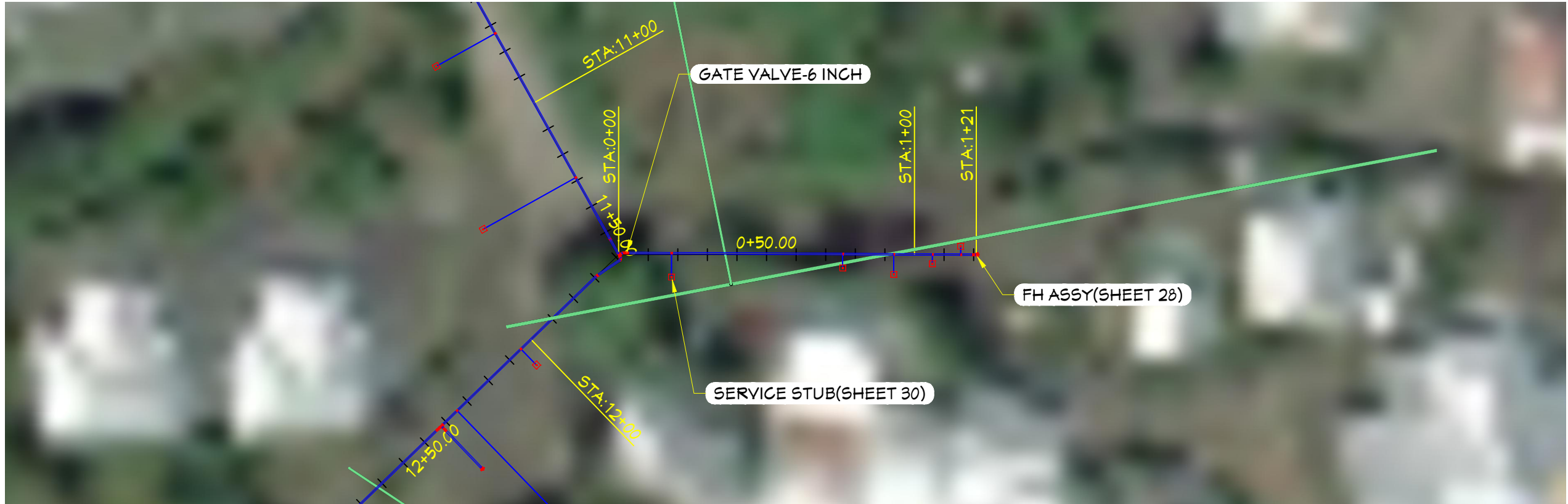
LEGEND:

- EXIST. WATER LINES
- EXIST. SEWER LINES
- SEWER MANHOLE
- EXIST. UNDERGROUND ASTCA
- UTILITY POLE W/ OVHD POWER LINE
- EXIST. WATER METER
- PROPOSED PVC0 WATER MAIN
- PROP. 2" SERVICE LINE
- PROP. TEE-FITTINGS
- 11.25 ELBOW
- 22.50 ELBOW
- PROPOSED AIR RELIEF VALVE
- PROPOSED FIRE HYDRANT-PLAN
- PROPOSE GATE VALVE-PLAN



DATE PLOTTED: Thursday, April 3, 2025 3:16:35 PM

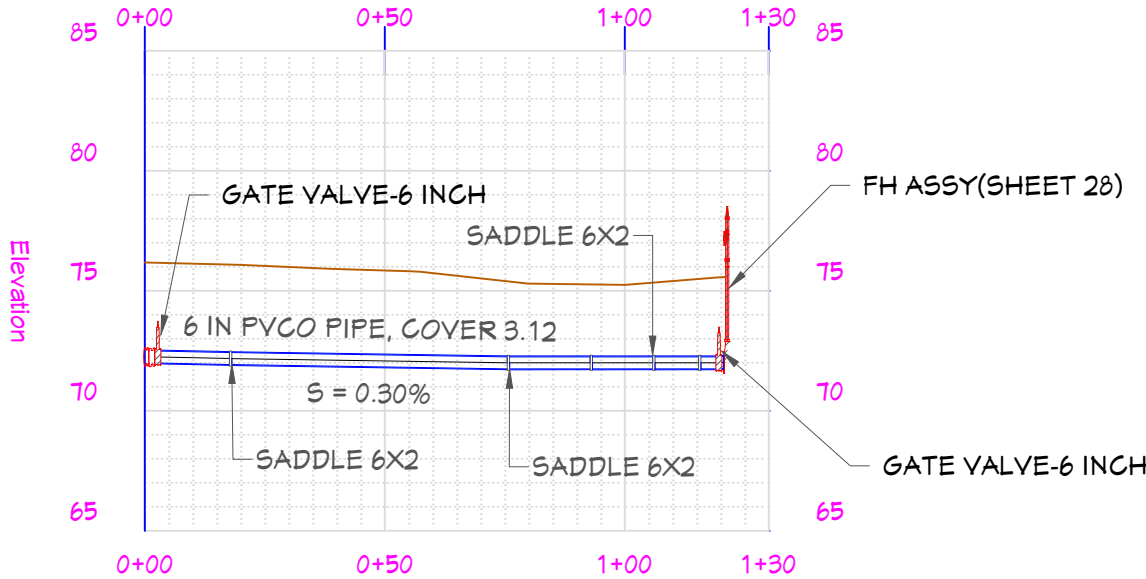
<div><div>PREPARED BY: EDMON O. LACAULAN, P.E. PROJECT ENGINEER</div><div>CHECKED BY: FIDEL AGUILA SENIOR ENGINEER</div><div>APPROVED BY: WILLIAM SWORD, P.E. CHIEF ENGINEER</div><div>ISSUE FOR: CONSTRUCTION</div></div> <div><div>AMERICAN SAMOA POWER AUTHORITY WATER DIVISION ENGINEERING DEPARTMENT P.O. BOX PPB, PAGO PAGO AMERICAN SAMOA 96799 PH:(684)699-7199 www.aspower.com</div></div>	<div>PROJECT NAME: TAFUNA ACP REPLACEMENT & WATER SYSTEM UPGRADE PROJECT</div> <div>DRAWING TITLE: ROUTE 019A PLAN & PROFILE 14+56.96 TO 16+20.94</div> <div>PROJECT LOCATION: FAGAIMA, KOKOLAND AND MALAEMI, AS 96799</div>	<table><tr><th colspan="4">REVISION HISTORY:</th></tr><tr><th>NO.</th><th>DATE</th><th>DETAILS OF REVISION</th><th>REVISED BY</th></tr><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr></table>	REVISION HISTORY:				NO.	DATE	DETAILS OF REVISION	REVISED BY													<table><tr><th colspan="2">SCALE:</th></tr><tr><td colspan="2">AS SHOWN</td></tr><tr><td colspan="2">PROJECT #:</td></tr><tr><td colspan="2">1867749G319</td></tr><tr><td colspan="2">SHEET NO.</td></tr><tr><td colspan="2">44</td></tr><tr><td>of</td><td>49</td></tr></table>	SCALE:		AS SHOWN		PROJECT #:		1867749G319		SHEET NO.		44		of	49
	REVISION HISTORY:																																				
	NO.	DATE	DETAILS OF REVISION	REVISED BY																																	
SCALE:																																					
AS SHOWN																																					
PROJECT #:																																					
1867749G319																																					
SHEET NO.																																					
44																																					
of	49																																				



SCALE IN FEET 1" = 40'
VERTICAL EXAGGERATION = 5

LEGEND:

- EXIST. WATER LINES
- EXIST. SEWER LINES
- SEWER MANHOLE
- EXIST. UNDERGROUND ASTCA
- UTILITY POLE W/ OVHD POWER LINE
- EXIST. WATER METER
- PROPOSED PVCO WATER MAIN
- PROP. 2" SERVICE LINE
- PROP. TEE-FITTINGS
- 11.25 ELBOW
- 22.50 ELBOW
- PROPOSED AIR RELIEF VALVE
- PROPOSED FIRE HYDRANT-PLAN
- PROPOSE GATE VALVE-PLAN



DATE PLOTTED: Thursday, April 3, 2025 3:50:37 PM

PREPARED BY:
EDMON O. LACAULAN, P.E.
WATER ENGINEER

CHECKED BY:
FIDEL AGUILA
SENIOR ENGINEER

APPROVED BY:
WILLIAM SWORD, P.E.
CHIEF ENGINEER

ISSUE FOR:
CONSTRUCTION



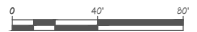
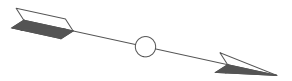
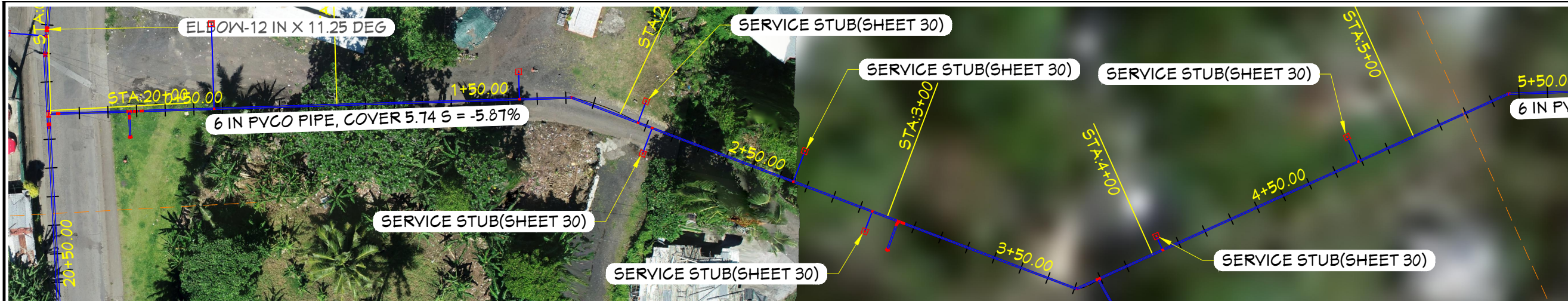
AMERICAN SAMOA POWER AUTHORITY
WATER DIVISION
ENGINEERING DEPARTMENT
P.O. BOX PPB, PAGO PAGO
AMERICAN SAMOA 96799
PH:(684)699-7199
www.aspower.com

PROJECT NAME:
TAFUNA ACP REPLACEMENT & WATER SYSTEM UPGRADE PROJECT

DRAWING TITLE:
ROUTE 019-A-1 PLAN & PROFILE 0+00' TO 1+20.89'

PROJECT LOCATION:
FAGAIMA, KOKOLAND AND MALAEMI, AS 96799

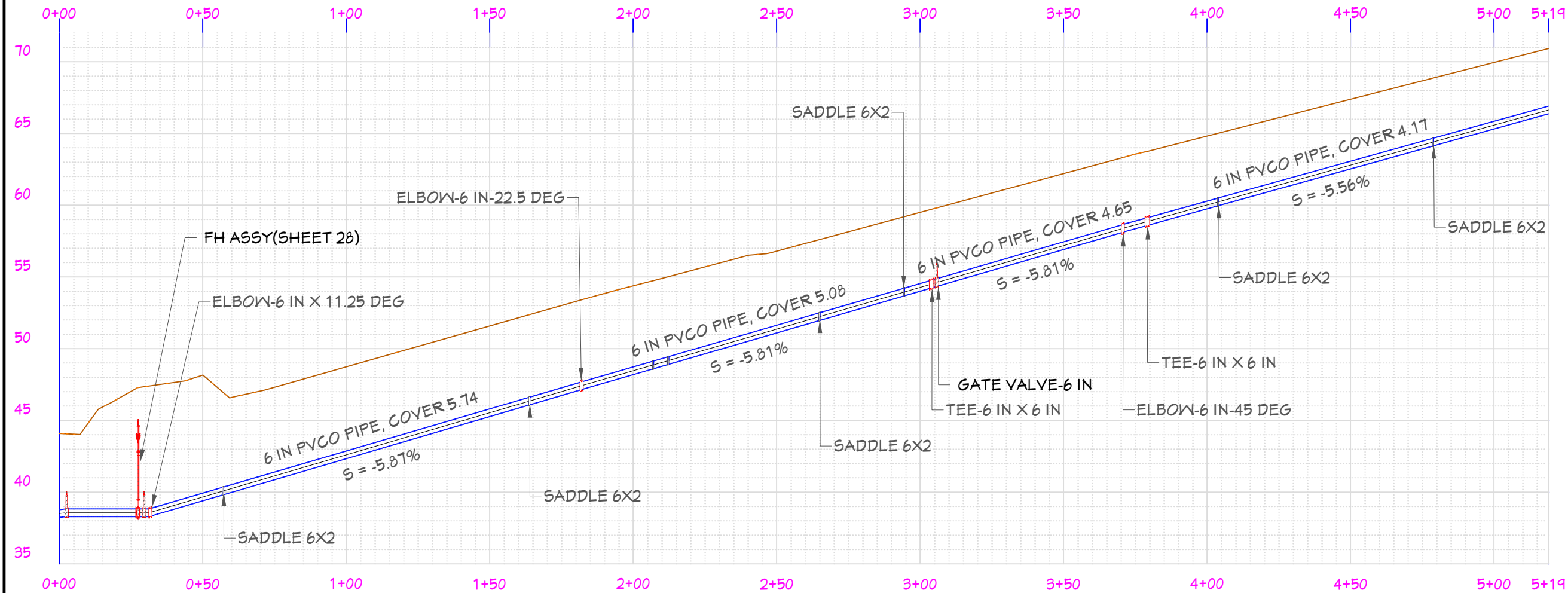
REVISION HISTORY:				SCALE:	
NO.	DATE	DETAILS OF REVISION	REVISED BY	AS SHOWN	
				PROJECT #: 18677496319	
				SHEET NO. 45	
				of	49



SCALE IN FEET 1" = 40'
VERTICAL EXAGGERATION = 5

LEGEND:

- EXIST. WATER LINES
- EXIST. SEWER LINES
- SEWER MANHOLE
- EXIST. UNDERGROUND ASTCA
- UTILITY POLE W/ OVHD POWER LINE
- EXIST. WATER METER
- PROPOSED PVCO WATER MAIN
- PROP. 2" SERVICE LINE
- PROP. TEE-FITTINGS
- 11.25 ELBOW
- 22.50 ELBOW
- PROPOSED AIR RELIEF VALVE
- PROPOSED FIRE HYDRANT-PLAN
- PROPOSED GATE VALVE-PLAN



DATE PLOTTED: Thursday, April 3, 2025 3:53:05 PM

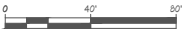
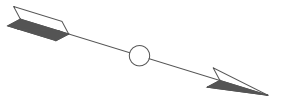
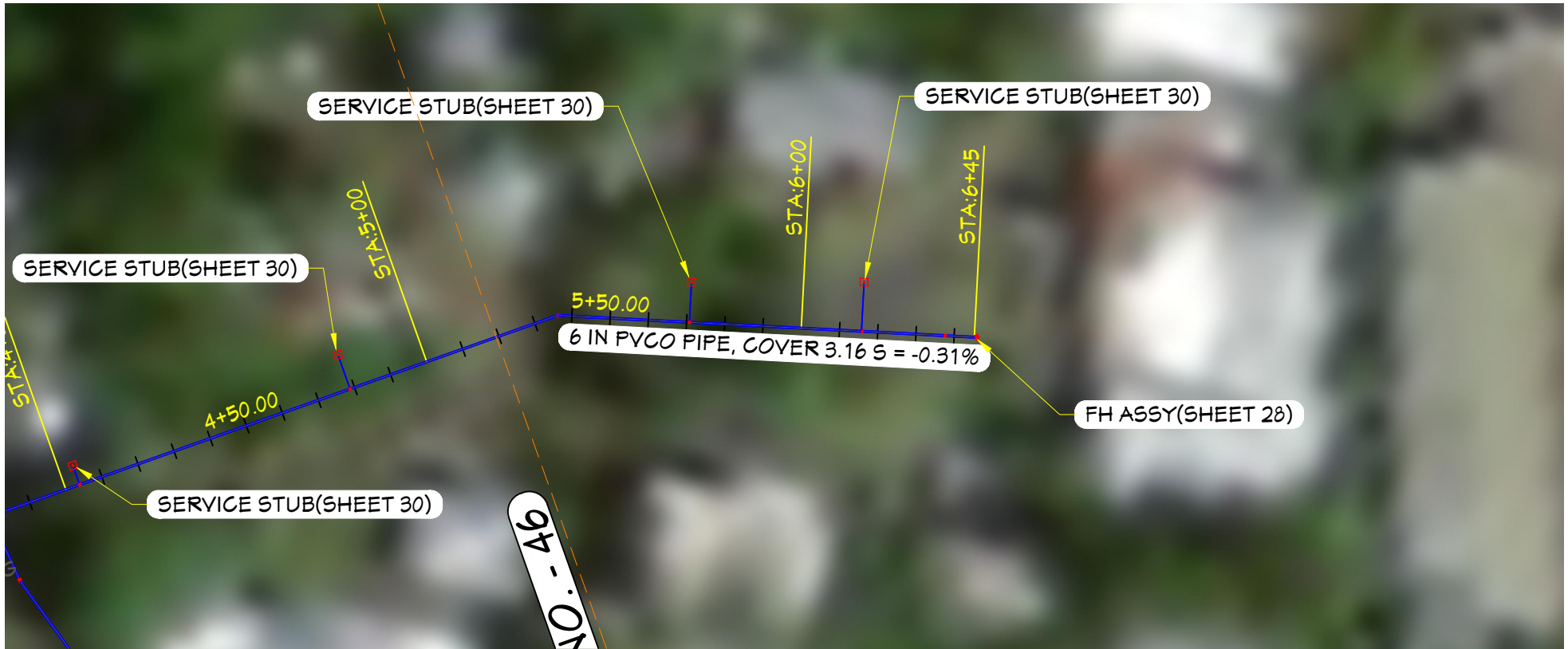
PREPARED BY: EDMON O. LACAULAN, P.E. WATER ENGINEER
CHECKED BY: FIDEL AGUILA SENIOR ENGINEER
APPROVED BY: WILLIAM SWORD, P.E. CHIEF ENGINEER
ISSUE FOR: CONSTRUCTION



AMERICAN SAMOA POWER AUTHORITY
WATER DIVISION
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P.O. BOX PPB, PAGO PAGO
AMERICAN SAMOA 96799
PH:(684)699-7199
www.aspower.com

PROJECT NAME: TAFUNA ACP REPLACEMENT & WATER SYSTEM UPGRADE PROJECT
DRAWING TITLE: ROUTE 019-B PLAN & PROFILE 0+00' TO 5+18.99'
PROJECT LOCATION: FAGAIMA, KOKOLAND AND MALAEMI, AS 96799

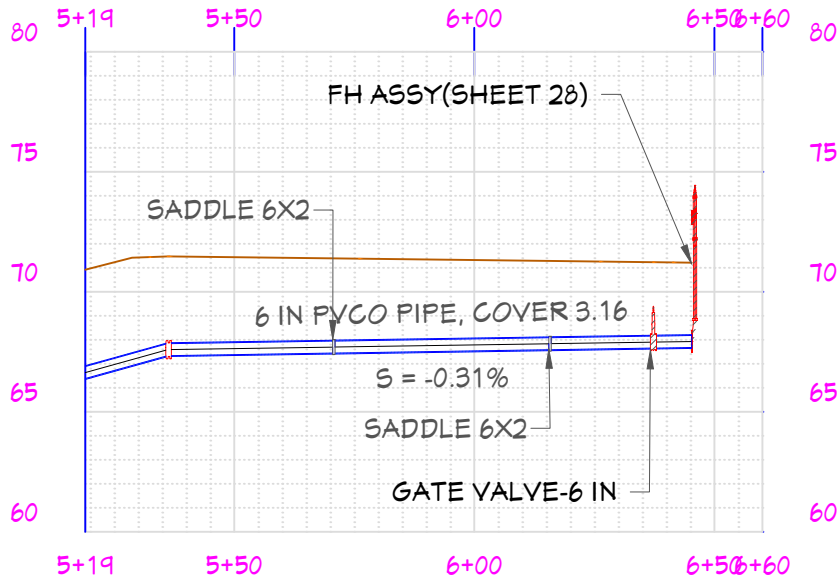
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NO.	DATE	DETAILS OF REVISION	REVISED BY	AS SHOWN	
				PROJECT #: 1867749G319	
				SHEET NO. 46	
				of	49



SCALE IN FEET 1" = 40'
VERTICAL EXAGGERATION = 5

LEGEND:

- EXIST. WATER LINES
- EXIST. SEWER LINES
- SEWER MANHOLE
- EXIST. UNDERGROUND ASTCA
- UTILITY POLE W/ OVHD POWER LINE
- EXIST. WATER METER
- PROPOSED PVC WATER MAIN
- PROP. 2" SERVICE LINE
- PROP. TEE-FITTINGS
- 11.25 ELBOW
- 22.50 ELBOW
- PROPOSED AIR RELIEF VALVE
- PROPOSED FIRE HYDRANT-PLAN
- PROPOSE GATE VALVE-PLAN



DATE PLOTTED: Thursday, April 3, 2025 3:53:13 PM

PREPARED BY:
EDMON O. LACAULAN, P.E.
WATER ENGINEER

CHECKED BY:
FIDEL AGUILA
SENIOR ENGINEER

APPROVED BY:
WILLIAM SWORD, P.E.
CHIEF ENGINEER

ISSUE FOR:
CONSTRUCTION



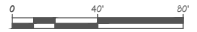
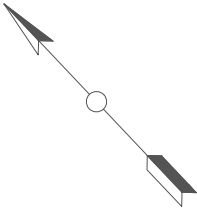
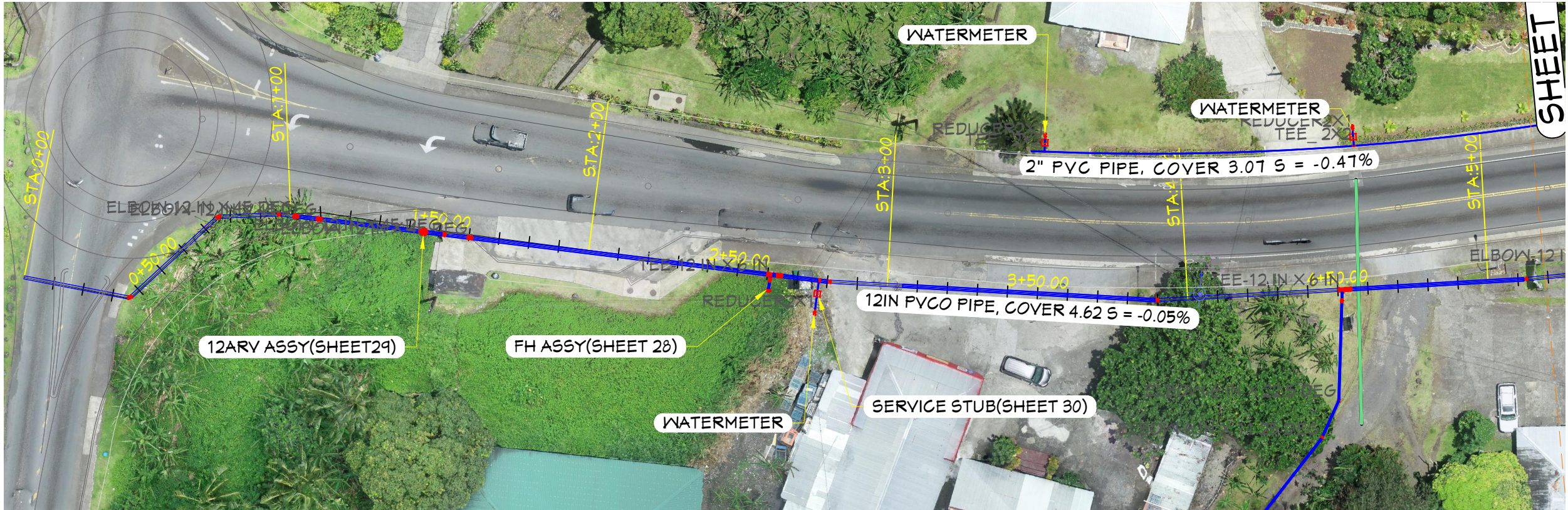
AMERICAN SAMOA POWER AUTHORITY
WATER DIVISION
ENGINEERING DEPARTMENT
P.O. BOX PPB, PAGO PAGO
AMERICAN SAMOA 96799
PH:(684)699-7199
www.aspower.com

PROJECT NAME:
TAFUNA ACP REPLACEMENT & WATER SYSTEM UPGRADE PROJECT

DRAWING TITLE:
ROUTE 019-B PLAN & PROFILE 5+18.99' TO 6+44.98'

PROJECT LOCATION:
FAGAIMA, KOKOLAND AND MALAEMI, AS 96799

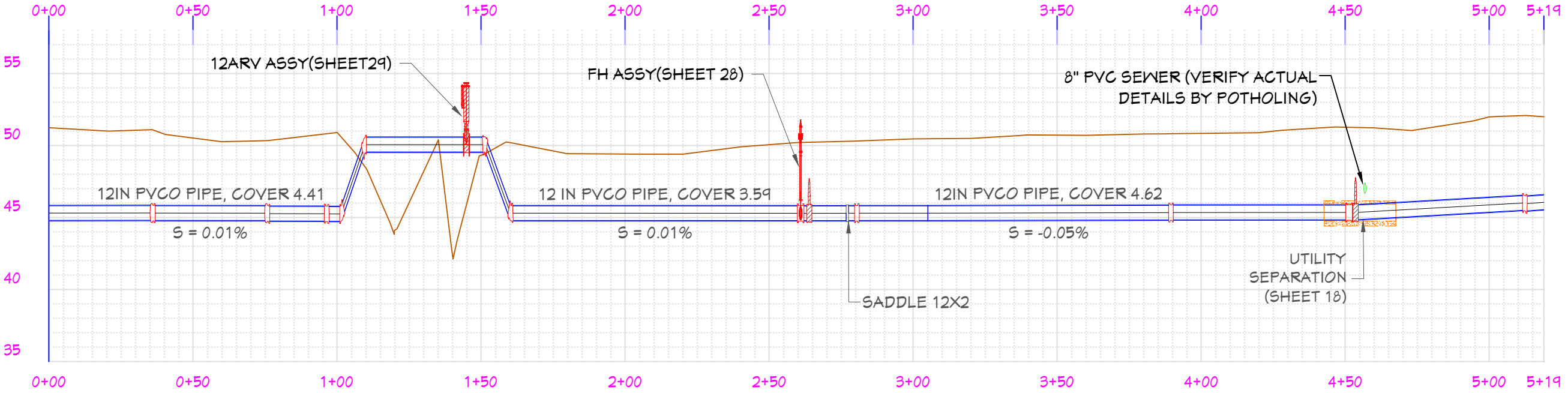
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NO.	DATE	DETAILS OF REVISION	REVISED BY	AS SHOWN	
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				SHEET NO. 47	
				of	49



SCALE IN FEET 1" = 40'
VERTICAL EXAGGERATION = 5

LEGEND:

- EXIST. WATER LINES
- EXIST. SEWER LINES
- SEWER MANHOLE
- EXIST. UNDERGROUND ASTCA
- UTILITY POLE W/ OVHD POWER LINE
- EXIST. WATER METER
- PROPOSED PVC WATER MAIN
- PROP. 2" SERVICE LINE
- PROP. TEE-FITTINGS
- 11.25 ELBOW
- 22.50 ELBOW
- PROPOSED AIR RELIEF VALVE
- PROPOSED FIRE HYDRANT-PLAN
- PROPOSE GATE VALVE-PLAN



PREPARED BY:
EDMON O. LACAULAN, PMP
WATER ENGINEER

CHECKED BY:
FIDEL AGUILA
SENIOR ENGINEER

APPROVED BY:
WILLIAM SWORD, P.E.
CHIEF ENGINEER

ISSUE FOR:
CONSTRUCTION



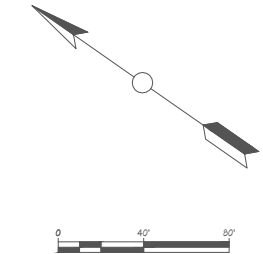
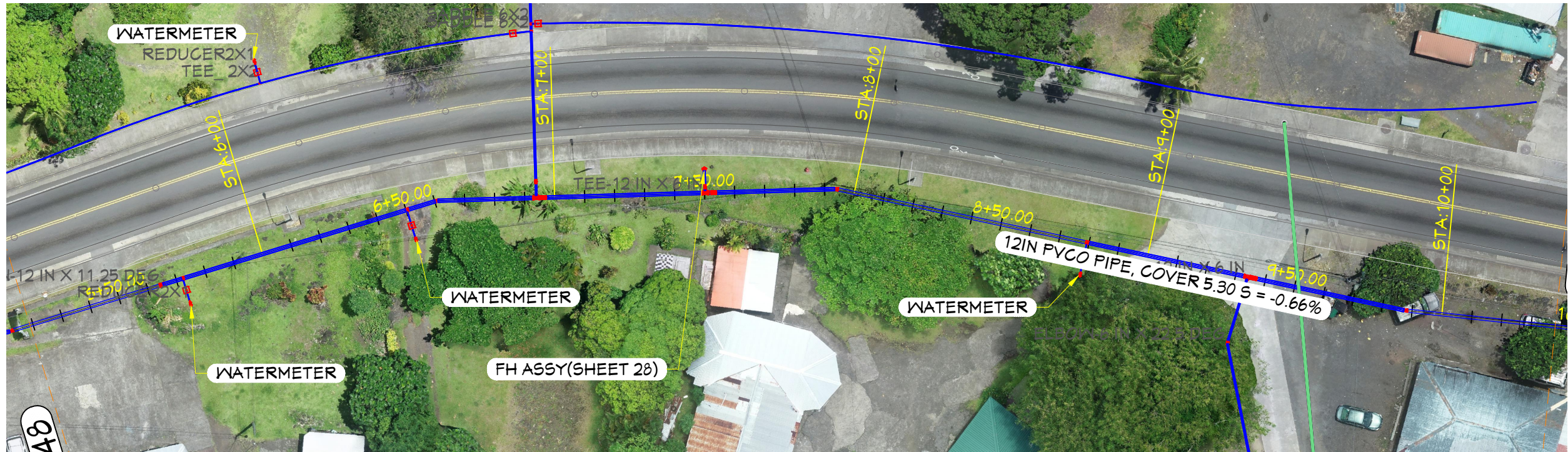
AMERICAN SAMOA POWER AUTHORITY
WATER DIVISION
ENGINEERING DEPARTMENT
P.O. BOX PPB, PAGO PAGO
AMERICAN SAMOA 96799
PH:(684)699-7199
www.aspower.com

PROJECT NAME:
TAFUNA ACP REPLACEMENT & WATER SYSTEM UPGRADE PROJECT

DRAWING TITLE:
ROUTE 014 PLAN & PROFILE 0+00' TO 5+18.99'

PROJECT LOCATION:
FAGAIMA, KOKOLAND AND MALAEMI, AS 96799

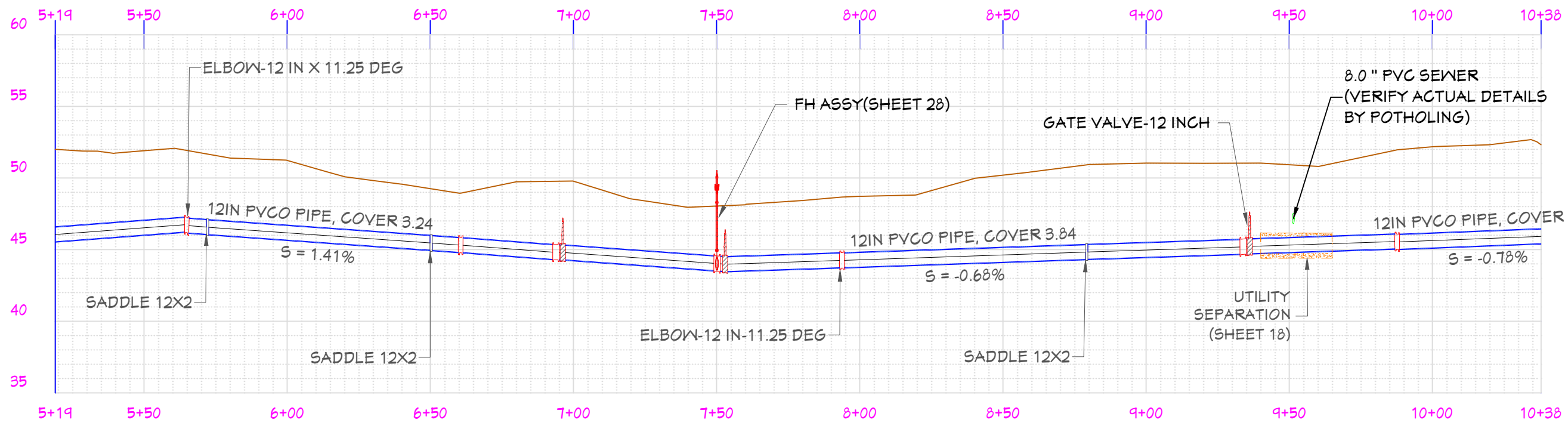
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NO.	DATE	DETAILS OF REVISION	REVISED BY	AS SHOWN	
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				SHEET NO. 48	
				of	49



SCALE IN FEET 1" = 40'
VERTICAL EXAGGERATION = 5

LEGEND:

- EXIST. WATER LINES
- EXIST. SEWER LINES
- SEWER MANHOLE
- EXIST. UNDERGROUND ASTCA
- UTILITY POLE W/ OVHD POWER LINE
- EXIST. WATER METER
- PROPOSED PVC WATER MAIN
- PROP. 2" SERVICE LINE
- PROP. TEE-FITTINGS
- 11.25 ELBOW
- 22.50 ELBOW
- PROPOSED AIR RELIEF VALVE
- PROPOSED FIRE HYDRANT-PLAN
- PROPOSE GATE VALVE-PLAN



PREPARED BY:
EDMON O. LACAULAN, PMP
WATER ENGINEER

CHECKED BY:
FIDEL AGUILA
SENIOR ENGINEER

APPROVED BY:
WILLIAM SWORD, P.E.
CHIEF ENGINEER

ISSUE FOR:
CONSTRUCTION



AMERICAN SAMOA POWER AUTHORITY
WATER DIVISION
ENGINEERING DEPARTMENT
P.O. BOX PPB, PAGO PAGO
AMERICAN SAMOA 96799
PH:(684)699-7199
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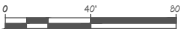
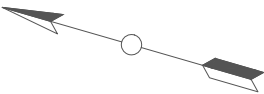
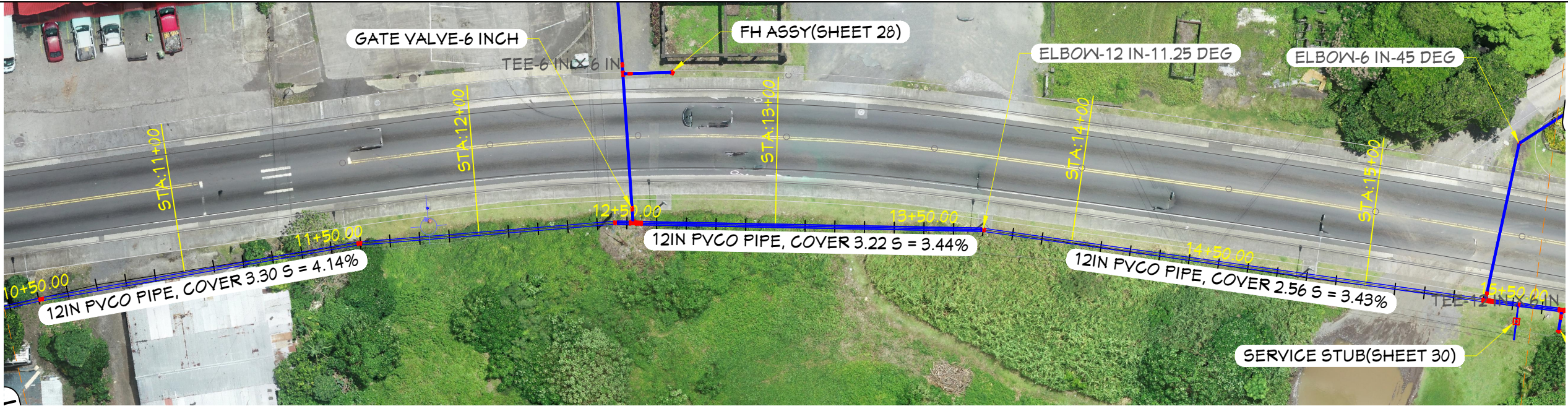
PROJECT NAME:
TAFUNA ACP REPLACEMENT & WATER SYSTEM UPGRADE PROJECT

DRAWING TITLE:
ROUTE 014 PLAN & PROFILE 5+18.99' TO 10+37.97'

PROJECT LOCATION:
FAGAIMA, KOKOLAND AND MALAEMI, AS 96799

REVISION HISTORY:			
NO.	DATE	DETAILS OF REVISION	REVISED BY

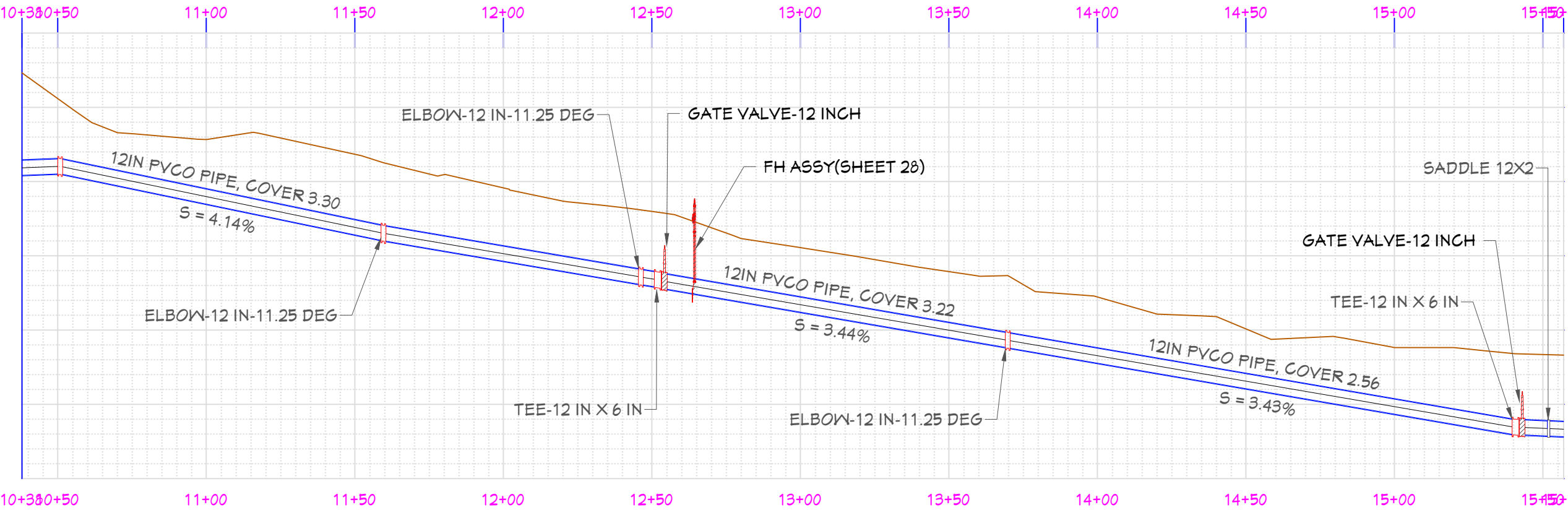
SCALE:	
AS SHOWN	
PROJECT #: 1867749G319	
SHEET NO. 49	
of	49



SCALE IN FEET 1" = 40'
VERTICAL EXAGGERATION = 5

LEGEND:

- EXIST. WATER LINES
- EXIST. SEWER LINES
- SEWER MANHOLE
- EXIST. UNDERGROUND ASTCA
- UTILITY POLE W/ OVHD POWER LINE
- EXIST. WATER METER
- PROPOSED PVC WATER MAIN
- PROP. 2" SERVICE LINE
- PROP. TEE-FITTINGS
- 11.25 ELBOW
- 22.50 ELBOW
- PROPOSED AIR RELIEF VALVE
- PROPOSED FIRE HYDRANT-PLAN
- PROPOSED GATE VALVE-PLAN



DATE PLOTTED: Thursday, April 3, 2025 4:00:08 PM

PREPARED BY:
EDMON O. LACAULAN, P.E.
WATER ENGINEER

CHECKED BY:
FIDEL AGUILA
SENIOR ENGINEER

APPROVED BY:
WILLIAM SWORD, P.E.
CHIEF ENGINEER

ISSUE FOR:
CONSTRUCTION



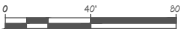
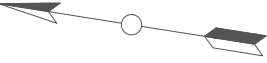
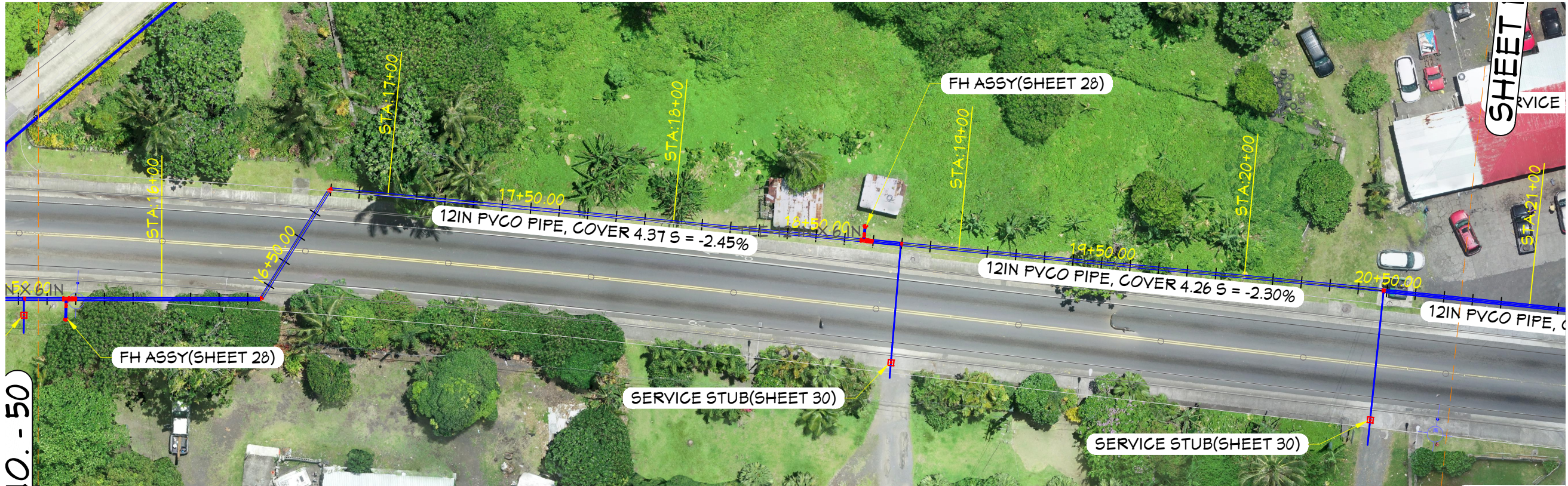
AMERICAN SAMOA POWER AUTHORITY
WATER DIVISION
ENGINEERING DEPARTMENT
P.O. BOX PPB, PAGO PAGO
AMERICAN SAMOA 96799
PH:(684)699-7199
www.aspower.com

PROJECT NAME:
TAFUNA ACP REPLACEMENT & WATER SYSTEM UPGRADE PROJECT

DRAWING TITLE:
ROUTE 014 PLAN & PROFILE 10+37.97' TO 15+56.96'

PROJECT LOCATION:
FAGAIMA, KOKOLAND AND MALAEMI, AS 96799

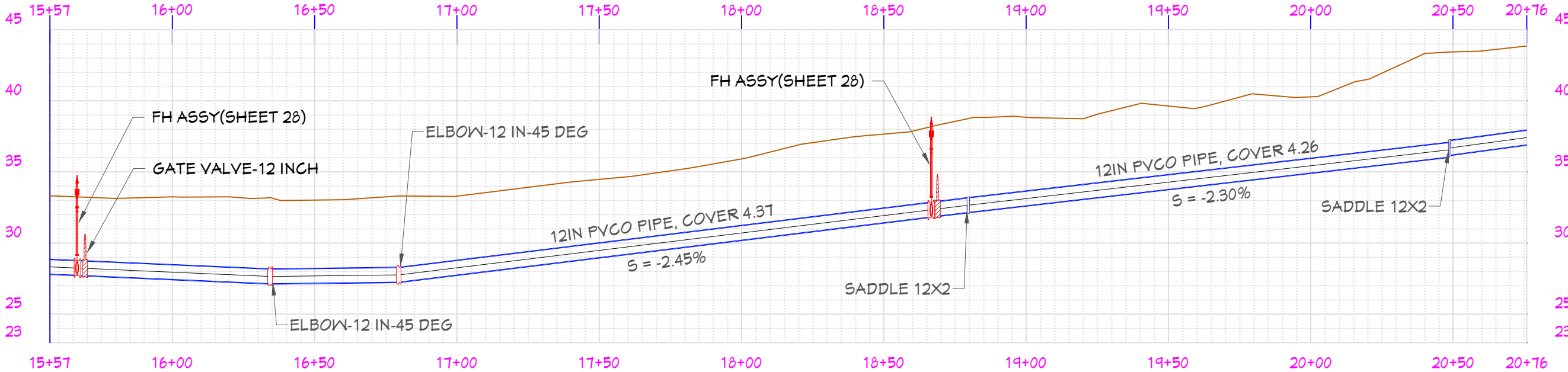
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NO.	DATE	DETAILS OF REVISION	REVISED BY	AS SHOWN	
				PROJECT #:	
				18677496319	
				SHEET NO.	
				50	
				of	49



SCALE IN FEET 1" = 40'
VERTICAL EXAGGERATION = 5

LEGEND:

- EXIST. WATER LINES
- EXIST. SEWER LINES
- SEWER MANHOLE
- EXIST. UNDERGROUND ASTCA
- UTILITY POLE W/ OVHD POWER LINE
- EXIST. WATER METER
- PROPOSED PVC WATER MAIN
- PROP. 2" SERVICE LINE
- PROP. TEE-FITTINGS
- 11.25 ELBOW
- 22.50 ELBOW
- PROPOSED AIR RELIEF VALVE
- PROPOSED FIRE HYDRANT-PLAN
- PROPOSE GATE VALVE-PLAN



PREPARED BY:
EDMON O. LACAULAN, P.E.
WATER ENGINEER

CHECKED BY:
FIDEL AGUILA
SENIOR ENGINEER

APPROVED BY:
WILLIAM SWORD, P.E.
CHIEF ENGINEER

ISSUE FOR:
CONSTRUCTION



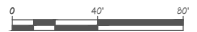
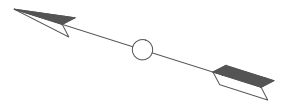
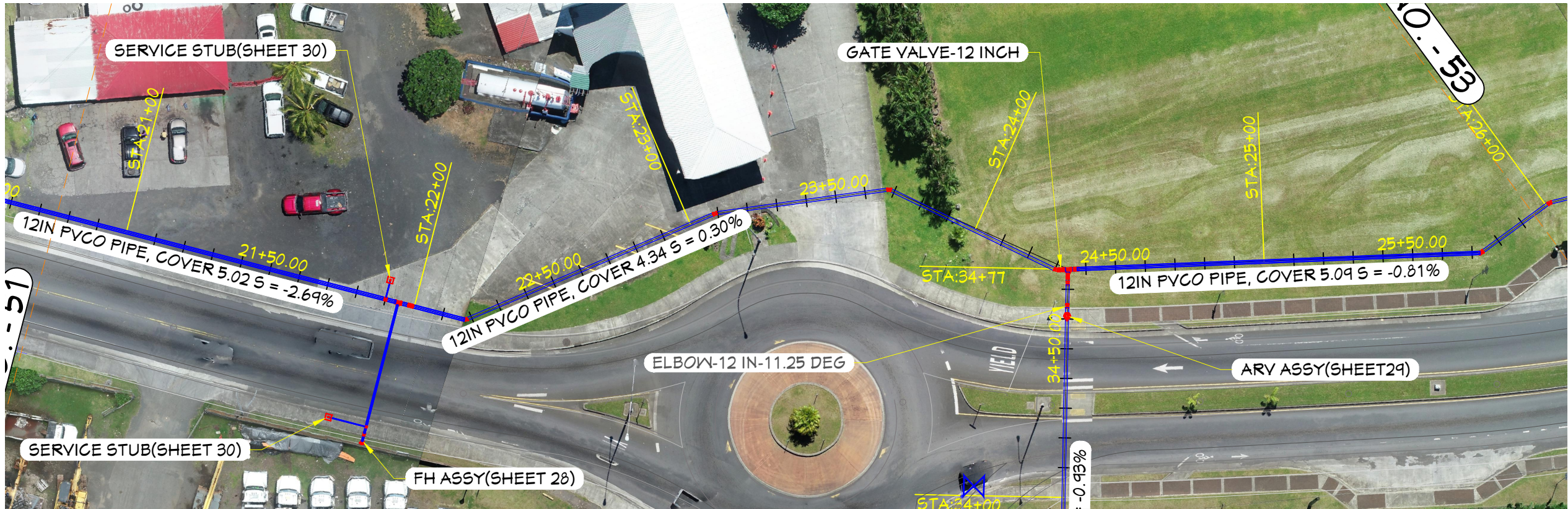
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WATER DIVISION
ENGINEERING DEPARTMENT
P.O. BOX PPB, PAGO PAGO
AMERICAN SAMOA 96799
PH:(684)699-7199
www.aspower.com

PROJECT NAME:
TAFUNA ACP REPLACEMENT & WATER SYSTEM UPGRADE PROJECT

DRAWING TITLE:
ROUTE 014 PLAN & PROFILE 15+56.96' TO 20+75.94'

PROJECT LOCATION:
FAGAIMA, KOKOLAND AND MALAEMI, AS 96799

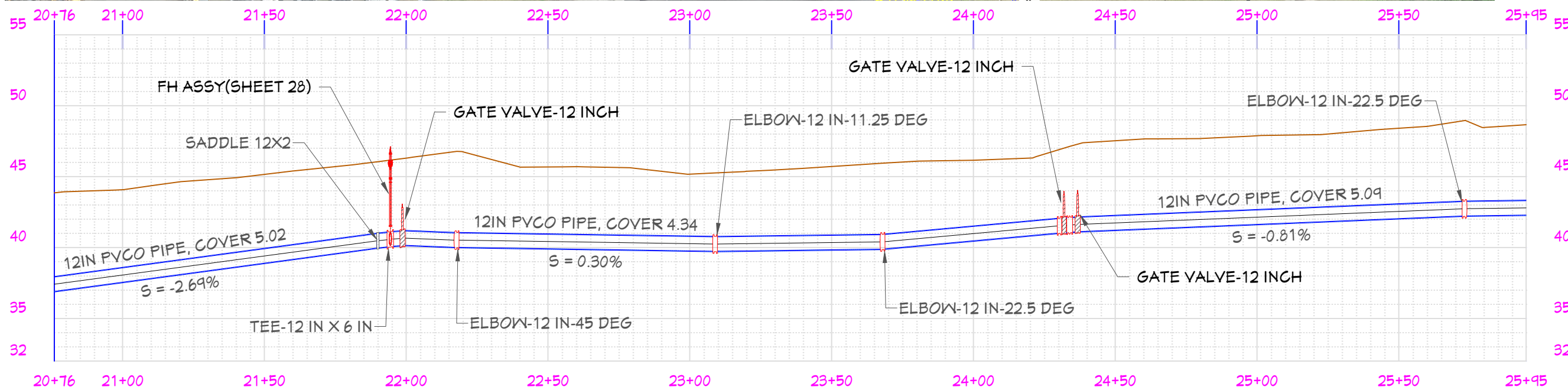
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NO.	DATE	DETAILS OF REVISION	REVISED BY	AS SHOWN	
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				SHEET NO. 51	
				of	49



SCALE IN FEET 1" = 40'
VERTICAL EXAGGERATION = 5

LEGEND:

- EXIST. WATER LINES
- EXIST. SEWER LINES
- SEWER MANHOLE
- EXIST. UNDERGROUND ASTCA
- UTILITY POLE W/ OVHD POWER LINE
- EXIST. WATER METER
- PROPOSED PVCO WATER MAIN
- PROP. 2" SERVICE LINE
- PROP. TEE-FITTINGS
- 11.25 ELBOW
- 22.50 ELBOW
- PROPOSED AIR RELIEF VALVE
- PROPOSED FIRE HYDRANT-PLAN
- PROPOSE GATE VALVE-PLAN



DATE PLOTTED: Thursday, April 3, 2025 4:00:28 PM

PREPARED BY:
EDMON O. LACAULAN, P.E.
WATER ENGINEER

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FIDEL AGUILA
SENIOR ENGINEER

APPROVED BY:
WILLIAM SWORD, P.E.
CHIEF ENGINEER

ISSUE FOR:
CONSTRUCTION



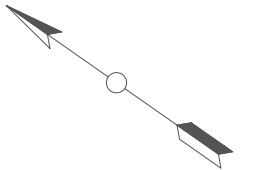
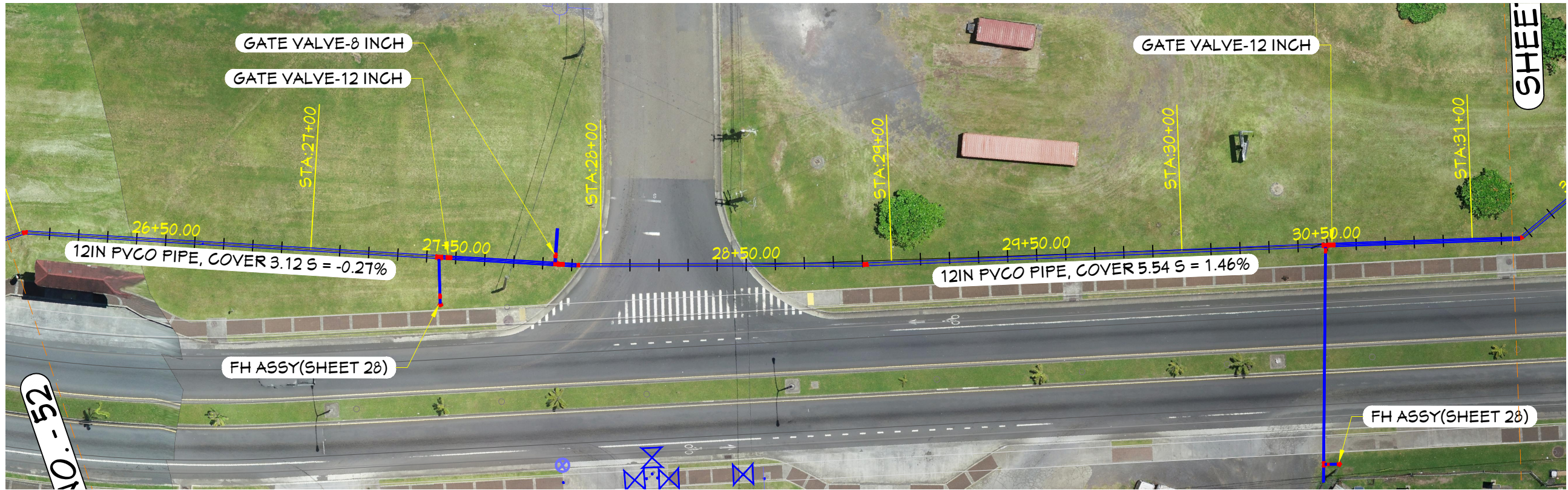
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WATER DIVISION
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P.O. BOX PPB, PAGO PAGO
AMERICAN SAMOA 96799
PH:(684)699-7199
www.aspower.com

PROJECT NAME:
TAFUNA ACP REPLACEMENT & WATER SYSTEM UPGRADE PROJECT

DRAWING TITLE:
ROUTE 014 PLAN & PROFILE 20+75.94' TO 25+94.93'

PROJECT LOCATION:
FAGAIMA, KOKOLAND AND MALAEMI, AS 96799

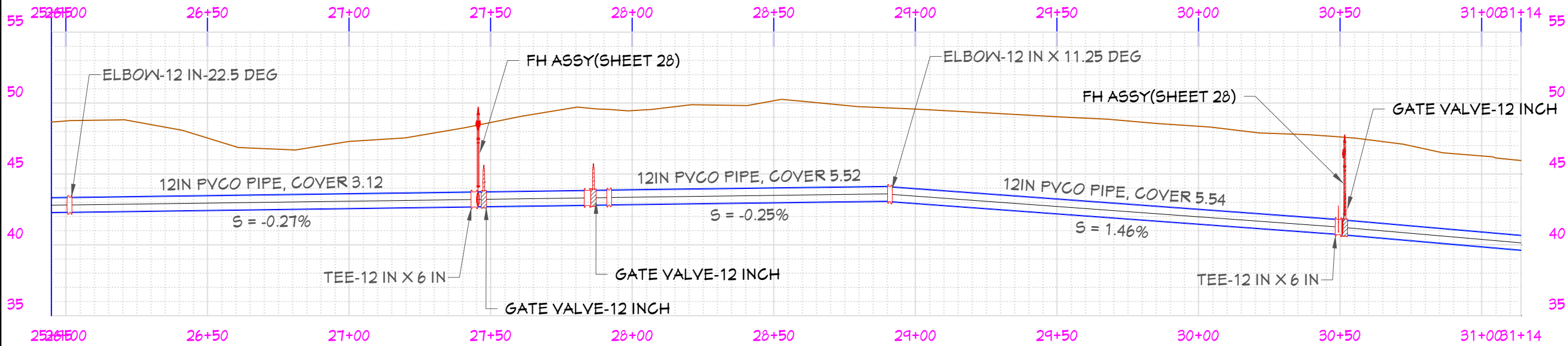
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NO.	DATE	DETAILS OF REVISION	REVISED BY	AS SHOWN	
				PROJECT #: 1867749G319	
				SHEET NO. 52	
				of	49



SCALE IN FEET 1" = 40'
VERTICAL EXAGGERATION = 5

LEGEND:

- EXIST. WATER LINES
- EXIST. SEWER LINES
- SEWER MANHOLE
- EXIST. UNDERGROUND ASTCA
- UTILITY POLE W/ OVHD POWER LINE
- EXIST. WATER METER
- PROPOSED PVCO WATER MAIN
- PROP. 2" SERVICE LINE
- PROP. TEE-FITTINGS
- 11.25 ELBOW
- 22.50 ELBOW
- PROPOSED AIR RELIEF VALVE
- PROPOSED FIRE HYDRANT-PLAN
- PROPOSE GATE VALVE-PLAN



DATE PLOTTED: Thursday, April 3, 2025 4:01:10 PM

PREPARED BY:
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CHIEF ENGINEER

ISSUE FOR:
CONSTRUCTION



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PH:(684)699-7199
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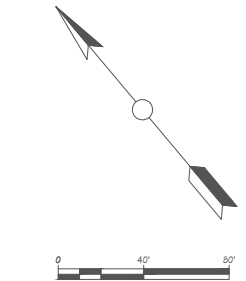
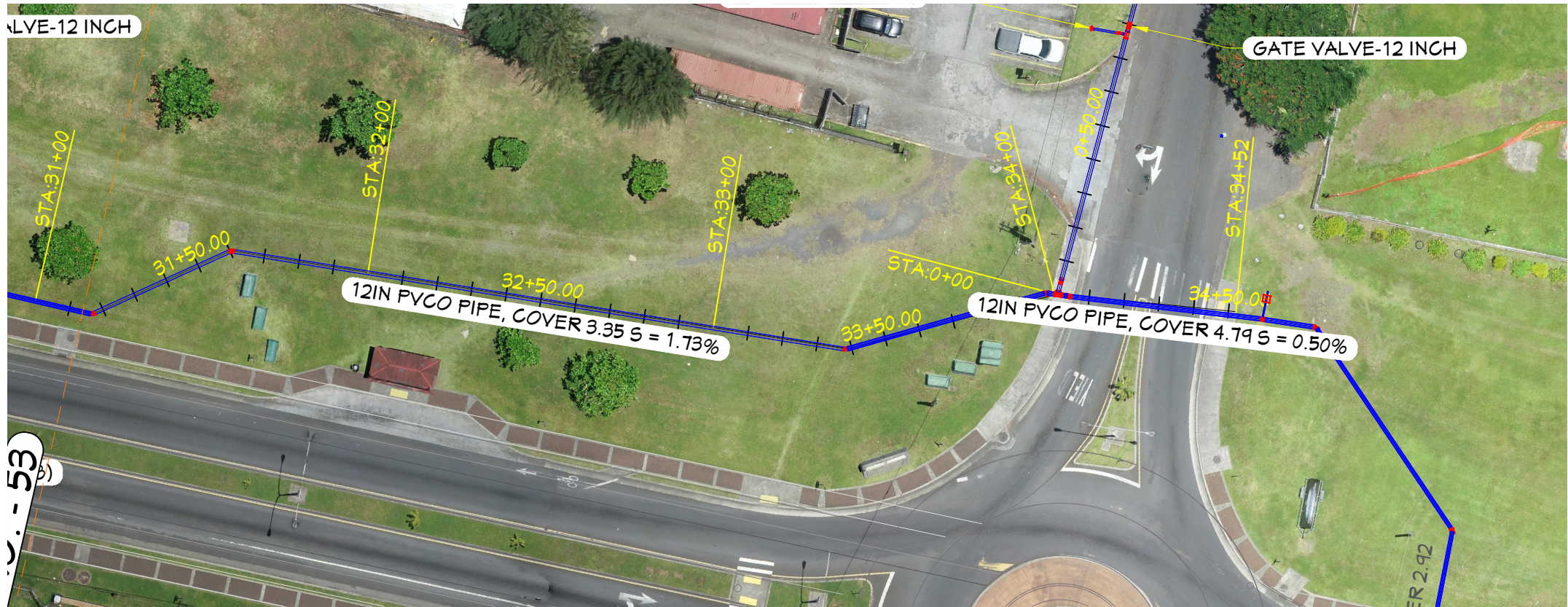
PROJECT NAME:
TAFUNA ACP REPLACEMENT & WATER SYSTEM UPGRADE PROJECT

DRAWING TITLE:
ROUTE 014 PLAN & PROFILE 25+94.93' TO 31+13.91'

PROJECT LOCATION:
FAGAIMA, KOKOLAND AND MALAEMI, AS 96799

REVISION HISTORY:				SCALE:	
NO.	DATE	DETAILS OF REVISION	REVISED BY	AS SHOWN	
				PROJECT #:	
				1867749G319	
				SHEET NO.	
				53	
				of	49

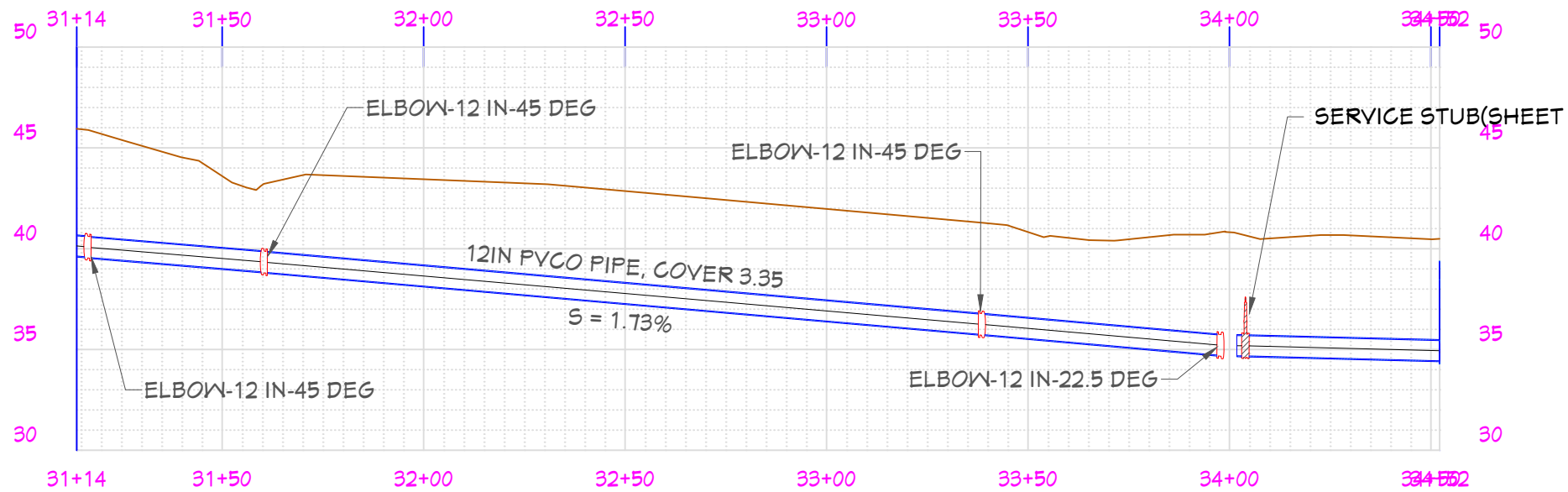
DATE PLOTTED: Thursday, April 3, 2025 4:01:26 PM



SCALE IN FEET 1" = 40'
VERTICAL EXAGGERATION = 5

LEGEND:

- EXIST. WATER LINES
- EXIST. SEWER LINES
- SEWER MANHOLE
- EXIST. UNDERGROUND ASTCA
- UTILITY POLE W/ OVHD POWER LINE
- EXIST. WATER METER
- PROPOSED PYCO WATER MAIN
- PROP. 2" SERVICE LINE
- PROP. TEE-FITTINGS
- 11.25 ELBOW
- 22.50 ELBOW
- PROPOSED AIR RELIEF VALVE
- PROPOSED FIRE HYDRANT-PLAN
- PROPOSE GATE VALVE-PLAN



PREPARED BY:
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FIDEL AGUILA
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WILLIAM SWORD, P.E.
CHIEF ENGINEER

ISSUE FOR:
CONSTRUCTION



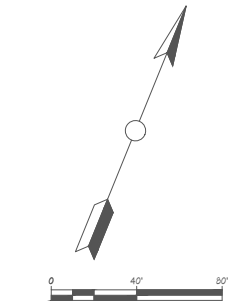
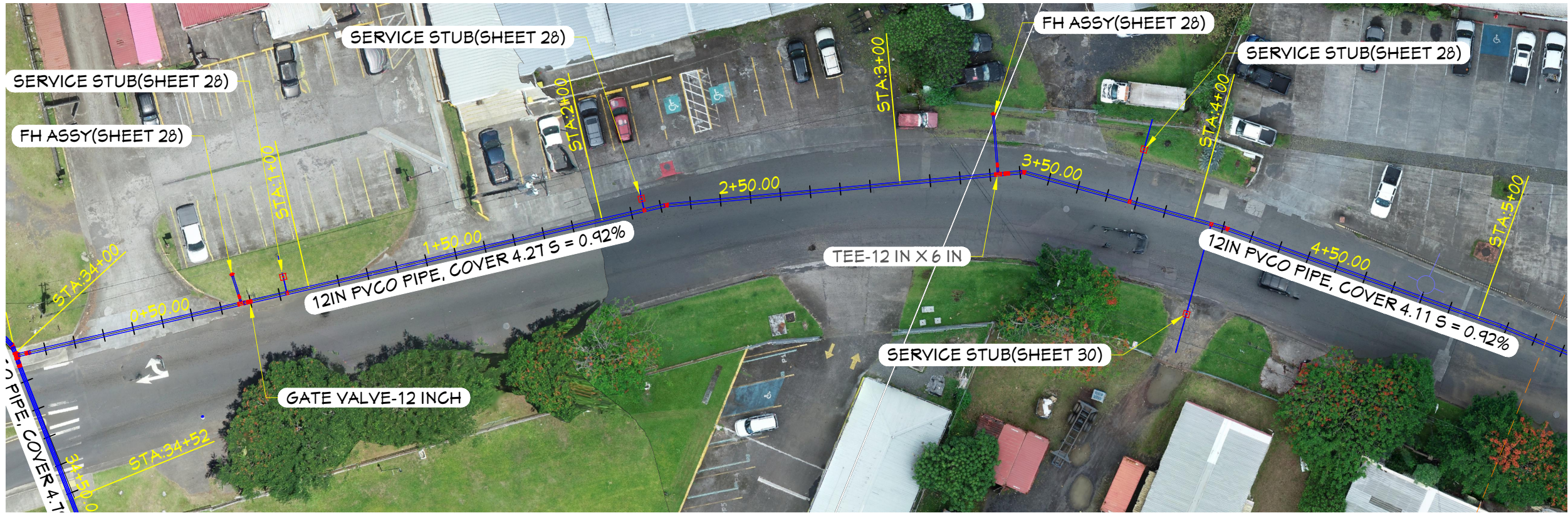
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WATER DIVISION
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P.O. BOX PPB, PAGO PAGO
AMERICAN SAMOA 96799
PH:(684)699-7199
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PROJECT NAME:
TAFUNA ACP REPLACEMENT & WATER SYSTEM UPGRADE PROJECT

DRAWING TITLE:
ROUTE 014 PLAN & PROFILE 31+13.91' TO 34+52.17'

PROJECT LOCATION:
FAGAIMA, KOKOLAND AND MALAEMI, AS 96799

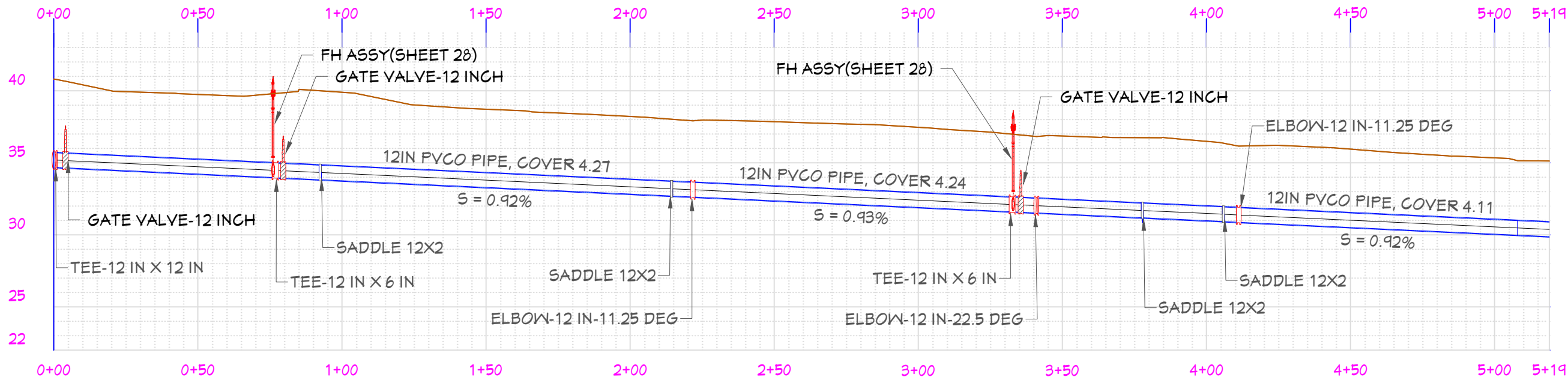
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NO.	DATE	DETAILS OF REVISION	REVISED BY	AS SHOWN	
				PROJECT #: 1867749G319	
				SHEET NO. 54	
				of	49



SCALE IN FEET 1" = 40'
VERTICAL EXAGGERATION = 5

LEGEND:

- EXIST. WATER LINES
- EXIST. SEWER LINES
- SEWER MANHOLE
- EXIST. UNDERGROUND ASTCA
- UTILITY POLE W/ OVHD POWER LINE
- EXIST. WATER METER
- PROPOSED PVCO WATER MAIN
- PROP. 2" SERVICE LINE
- PROP. TEE-FITTINGS
- 11.25 ELBOW
- 22.50 ELBOW
- PROPOSED AIR RELIEF VALVE
- PROPOSED FIRE HYDRANT-PLAN
- PROPOSE GATE VALVE-PLAN



DATE PLOTTED: Thursday, April 3, 2025 4:22:13 PM

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CHIEF ENGINEER

ISSUE FOR:
CONSTRUCTION



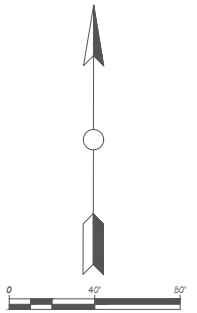
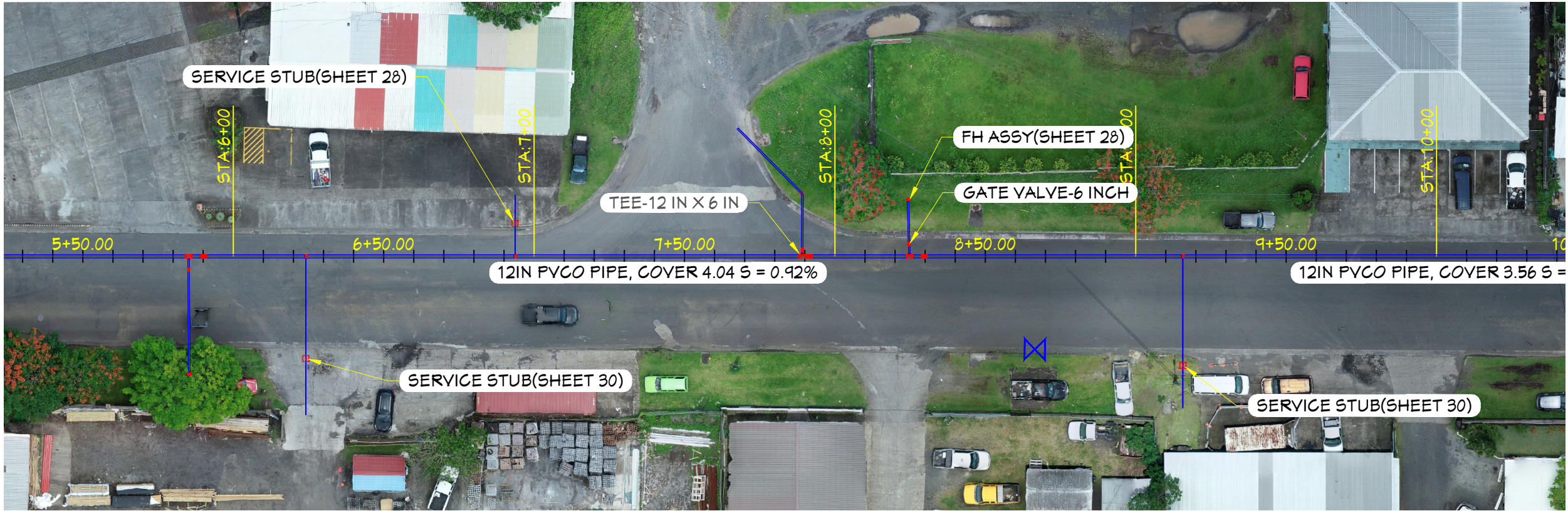
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WATER DIVISION
ENGINEERING DEPARTMENT
P.O. BOX PPB, PAGO PAGO
AMERICAN SAMOA 96799
PH:(684)699-7199
www.aspower.com

PROJECT NAME:
TAFUNA ACP REPLACEMENT & WATER SYSTEM UPGRADE PROJECT

DRAWING TITLE:
ROUTE 016 PLAN& PROFILE 0+00 TO 5+18.99

PROJECT LOCATION:
FAGAIMA, KOKOLAND AND MALAEMI, AS 96799

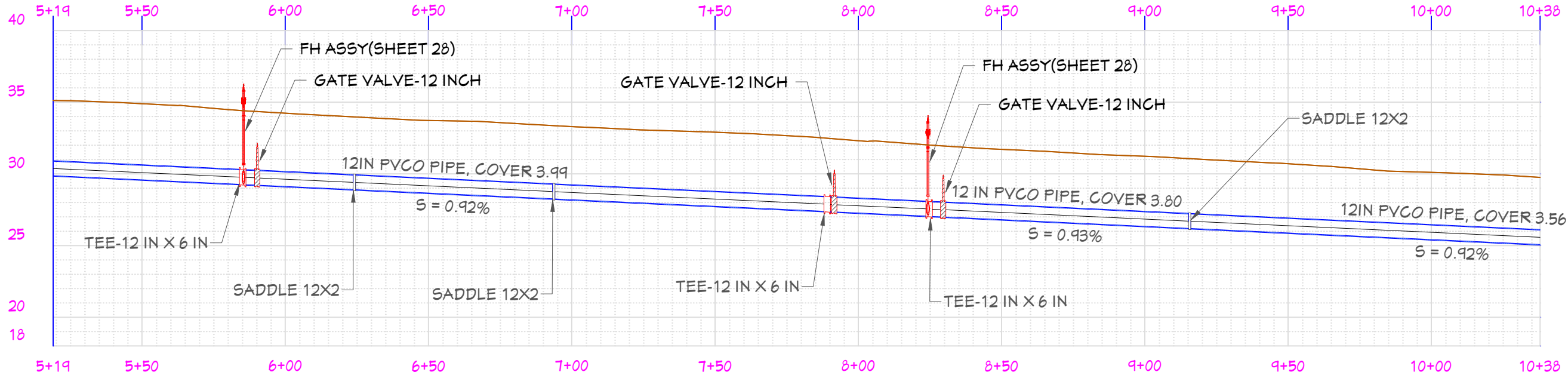
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NO.	DATE	DETAILS OF REVISION	REVISED BY	AS SHOWN	
				PROJECT #: 1867749G319	
				SHEET NO. 55	
				of	49



SCALE IN FEET 1" = 40'
VERTICAL EXAGGERATION = 5

LEGEND:

- EXIST. WATER LINES
- EXIST. SEWER LINES
- SEWER MANHOLE
- EXIST. UNDERGROUND ASTCA
- UTILITY POLE W/ OVHD POWER LINE
- EXIST. WATER METER
- PROPOSED PVC-O WATER MAIN
- PROP. 2" SERVICE LINE
- PROP. TEE-FITTINGS
- 11.25 ELBOW
- 22.50 ELBOW
- PROPOSED AIR RELIEF VALVE
- PROPOSED FIRE HYDRANT-PLAN
- PROPOSE GATE VALVE-PLAN



DATE PLOTTED: Thursday, April 3, 2025 4:22:25 PM

PREPARED BY:
EDMON O. LACAULAN, P.E.
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SENIOR ENGINEER

APPROVED BY:
WILLIAM SWORD, P.E.
CHIEF ENGINEER

ISSUE FOR:
CONSTRUCTION



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ENGINEERING DEPARTMENT
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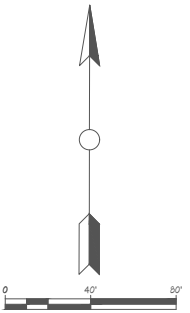
PROJECT NAME:
TAFUNA ACP REPLACEMENT & WATER SYSTEM UPGRADE PROJECT

DRAWING TITLE:
ROUTE 016 PLAN& PROFILE 5+18.99 TO 10+37.97

PROJECT LOCATION:
FAGAIMA, KOKOLAND AND MALAEMI, AS 96799

REVISION HISTORY:				SCALE:	
NO.	DATE	DETAILS OF REVISION	REVISED BY	AS SHOWN	
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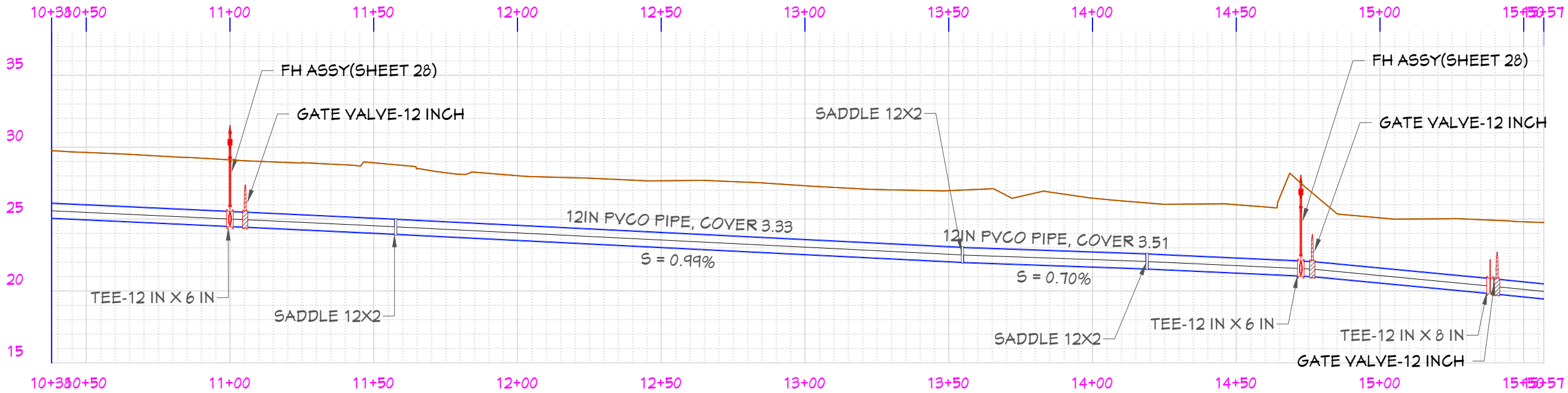
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SCALE IN FEET 1" = 40'
VERTICAL EXAGGERATION = 5

LEGEND:

- EXIST. WATER LINES
- EXIST. SEWER LINES
- SEWER MANHOLE
- EXIST. UNDERGROUND ASTCA
- UTILITY POLE W/ OVHD POWER LINE
- EXIST. WATER METER
- PROPOSED PVCO WATER MAIN
- PROP. 2" SERVICE LINE
- PROP. TEE-FITTINGS
- 11.25 ELBOW
- 22.50 ELBOW
- PROPOSED AIR RELIEF VALVE
- PROPOSED FIRE HYDRANT-PLAN
- PROPOSED GATE VALVE-PLAN



PREPARED BY:
EDMON O. LACAULAN, P.E.
WATER ENGINEER

CHECKED BY:
FIDEL AGUILA
SENIOR ENGINEER

APPROVED BY:
WILLIAM SWORD, P.E.
CHIEF ENGINEER

ISSUE FOR:
CONSTRUCTION



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P.O. BOX PPB, PAGO PAGO
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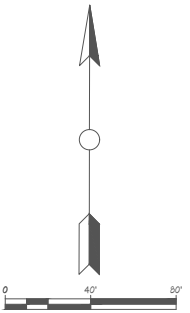
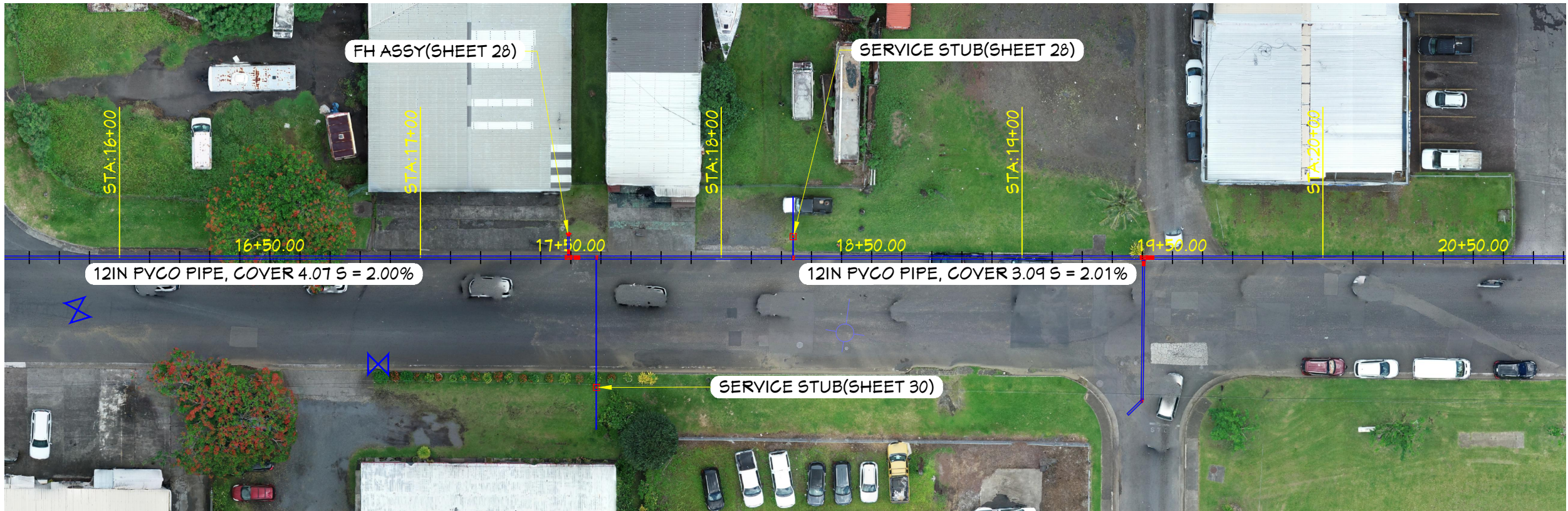
PROJECT NAME:
TAFUNA ACP REPLACEMENT & WATER SYSTEM UPGRADE PROJECT

DRAWING TITLE:
ROUTE 016 PLAN& PROFILE 10+37.97 TO 15+56.96

PROJECT LOCATION:
FAGAIMA, KOKOLAND AND MALAEMI, AS 96799

REVISION HISTORY:				SCALE:	
NO.	DATE	DETAILS OF REVISION	REVISED BY	AS SHOWN	
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				SHEET NO. 57	
				of	49

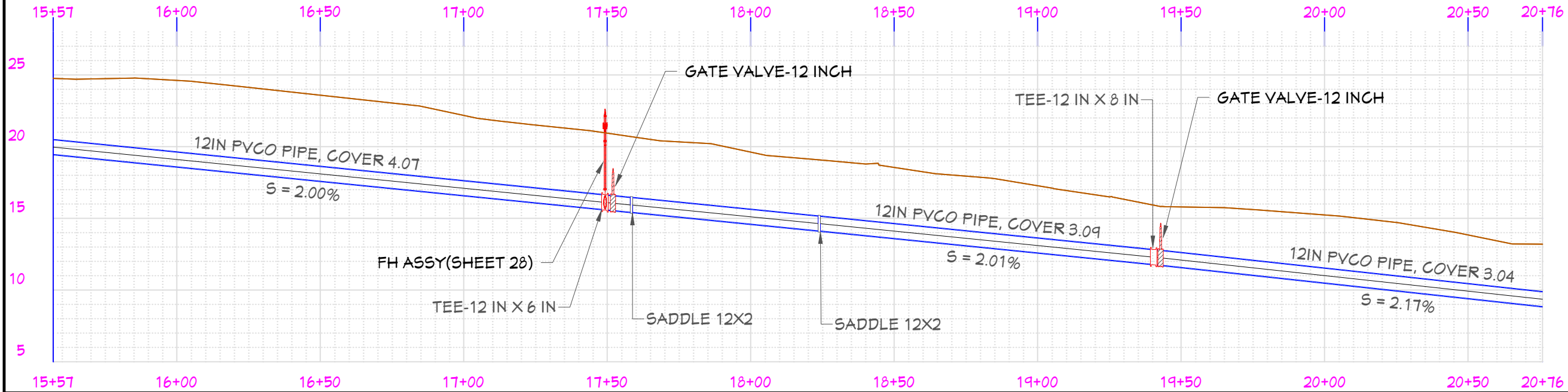
DATE PLOTTED: Thursday, April 3, 2025 4:22:45 PM



SCALE IN FEET 1" = 40'
VERTICAL EXAGGERATION = 5

LEGEND:

- EXIST. WATER LINES
- EXIST. SEWER LINES
- SEWER MANHOLE
- EXIST. UNDERGROUND ASTCA
- UTILITY POLE W/ OVHD POWER LINE
- EXIST. WATER METER
- PROPOSED PVCO WATER MAIN
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- PROP. TEE-FITTINGS
- 11.25 ELBOW
- 22.50 ELBOW
- PROPOSED AIR RELIEF VALVE
- PROPOSED FIRE HYDRANT-PLAN
- PROPOSE GATE VALVE-PLAN



PREPARED BY:
EDMON O. LACAULAN, P.E.
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CHECKED BY:
FIDEL AGUILA
SENIOR ENGINEER

APPROVED BY:
WILLIAM SWORD, P.E.
CHIEF ENGINEER

ISSUE FOR:
CONSTRUCTION



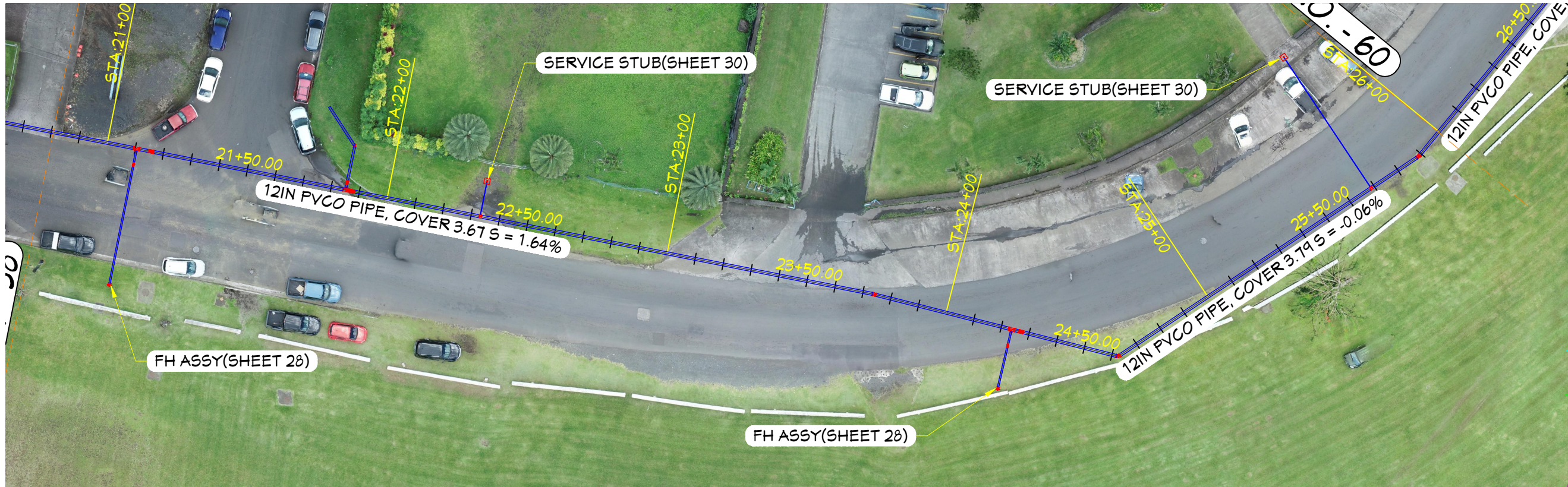
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WATER DIVISION
ENGINEERING DEPARTMENT
P.O. BOX PPB, PAGO PAGO
AMERICAN SAMOA 96799
PH:(684)699-7199
www.aspower.com

PROJECT NAME:
TAFUNA ACP REPLACEMENT & WATER SYSTEM UPGRADE PROJECT

DRAWING TITLE:
ROUTE 016 PLAN& PROFILE 15+56.96 TO 20+75.94

PROJECT LOCATION:
FAGAIMA, KOKOLAND AND MALAEMI, AS 96799

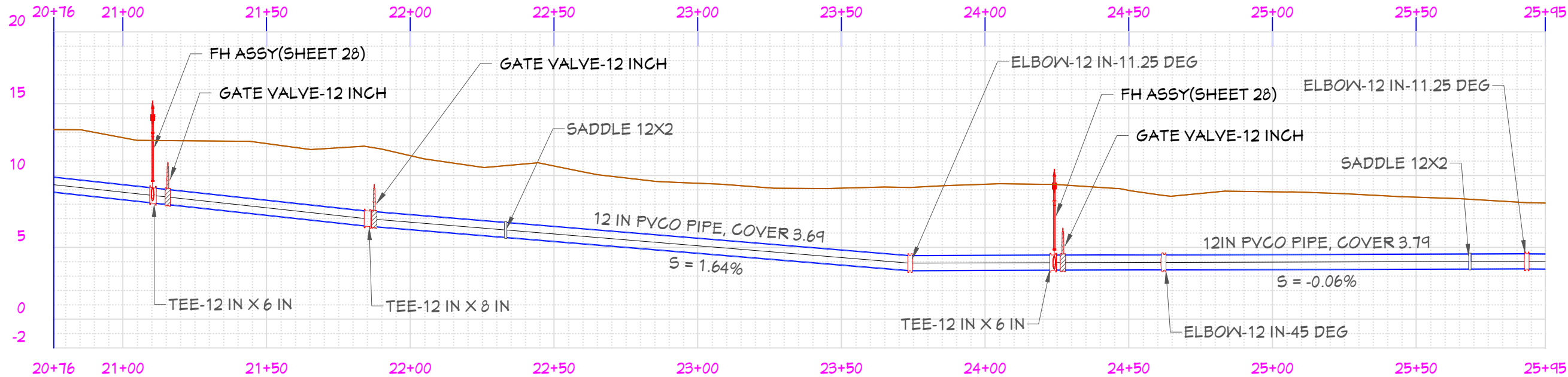
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NO.	DATE	DETAILS OF REVISION	REVISED BY	AS SHOWN	
				PROJECT #: 18677496319	
				SHEET NO. 58	
				of	49



SCALE IN FEET 1" = 40'
VERTICAL EXAGGERATION = 5

LEGEND:

- EXIST. WATER LINES
- EXIST. SEWER LINES
- SEWER MANHOLE
- EXIST. UNDERGROUND ASTCA
- UTILITY POLE W/ OVHD POWER LINE
- EXIST. WATER METER
- PROPOSED PVCO WATER MAIN
- PROP. 2" SERVICE LINE
- PROP. TEE-FITTINGS
- 11.25 ELBOW
- 22.50 ELBOW
- PROPOSED AIR RELIEF VALVE
- PROPOSED FIRE HYDRANT-PLAN
- PROPOSE GATE VALVE-PLAN



DATE PLOTTED: Thursday, April 3, 2025 4:22:55 PM

PREPARED BY:
EDMON O. LACAULAN, P.E.
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CHECKED BY:
FIDEL AGUILA
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APPROVED BY:
WILLIAM SWORD, P.E.
CHIEF ENGINEER

ISSUE FOR:
CONSTRUCTION



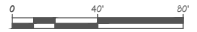
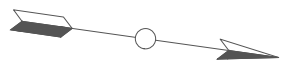
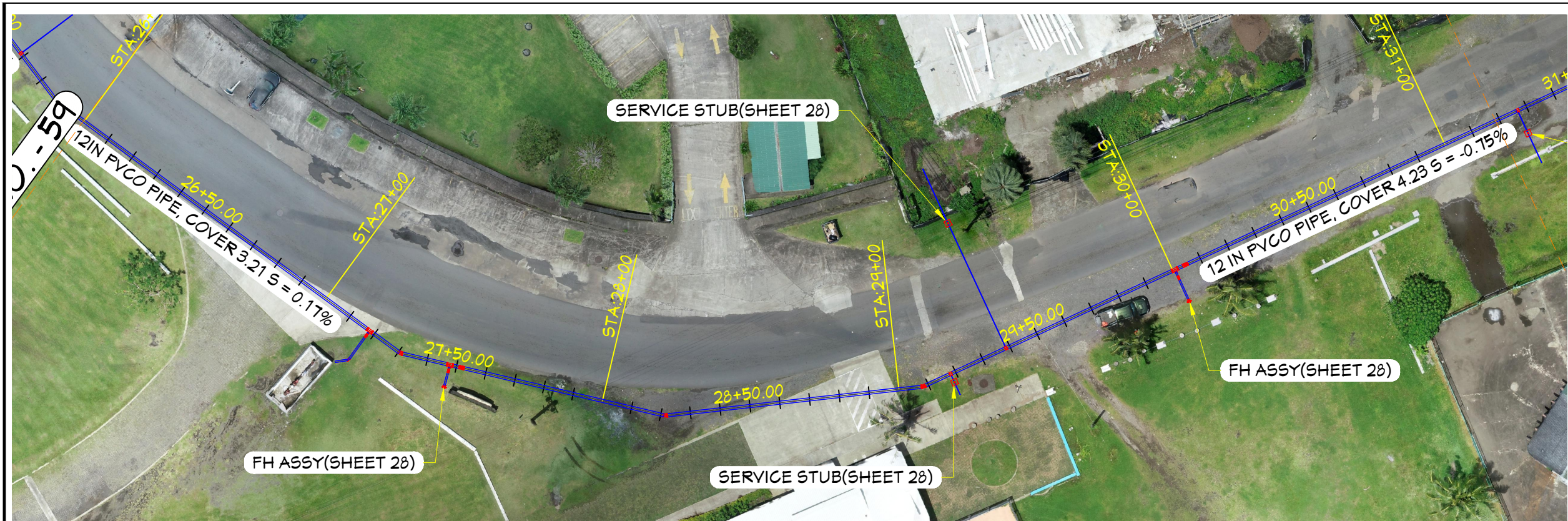
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WATER DIVISION
ENGINEERING DEPARTMENT
P.O. BOX PPB, PAGO PAGO
AMERICAN SAMOA 96799
PH:(684)699-7199
www.aspower.com

PROJECT NAME:
TAFUNA ACP REPLACEMENT & WATER SYSTEM UPGRADE
PROJECT

DRAWING TITLE:
ROUTE 016 PLAN& PROFILE 20+75.94 TO 25+94.93

PROJECT LOCATION:
FAGAIMA, KOKOLAND AND MALAEMI, AS 96799

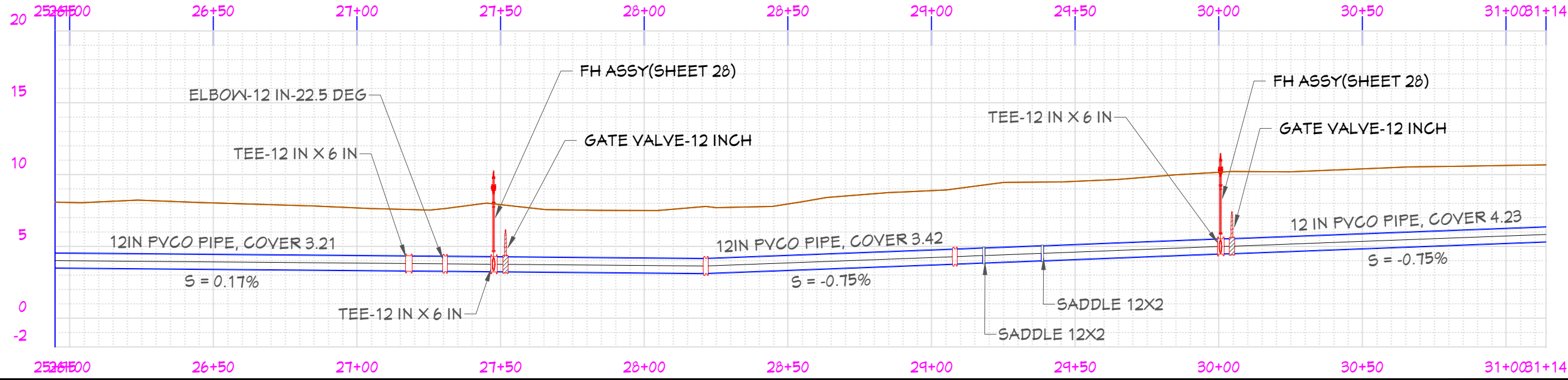
REVISION HISTORY:				SCALE:	
NO.	DATE	DETAILS OF REVISION	REVISED BY	AS SHOWN	
				PROJECT #:	
				1867749G319	
				SHEET NO.	
				59	
				of	49



SCALE IN FEET 1" = 40'
VERTICAL EXAGGERATION = 5

LEGEND:

- EXIST. WATER LINES
- EXIST. SEWER LINES
- SEWER MANHOLE
- EXIST. UNDERGROUND ASTCA
- UTILITY POLE W/ OVHD POWER LINE
- EXIST. WATER METER
- PROPOSED PVCO WATER MAIN
- PROP. 2" SERVICE LINE
- PROP. TEE-FITTINGS
- 11.25 ELBOW
- 22.50 ELBOW
- PROPOSED AIR RELIEF VALVE
- PROPOSED FIRE HYDRANT-PLAN
- PROPOSED GATE VALVE-PLAN



DATE PLOTTED: Thursday, April 3, 2025 4:23:06 PM

PREPARED BY:
EDMON O. LACAULAN, P.E.
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CHECKED BY:
FIDEL AGUILA
SENIOR ENGINEER

APPROVED BY:
WILLIAM SWORD, P.E.
CHIEF ENGINEER

ISSUE FOR:
CONSTRUCTION



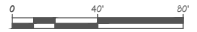
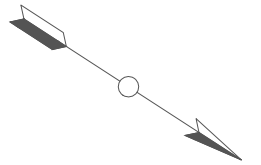
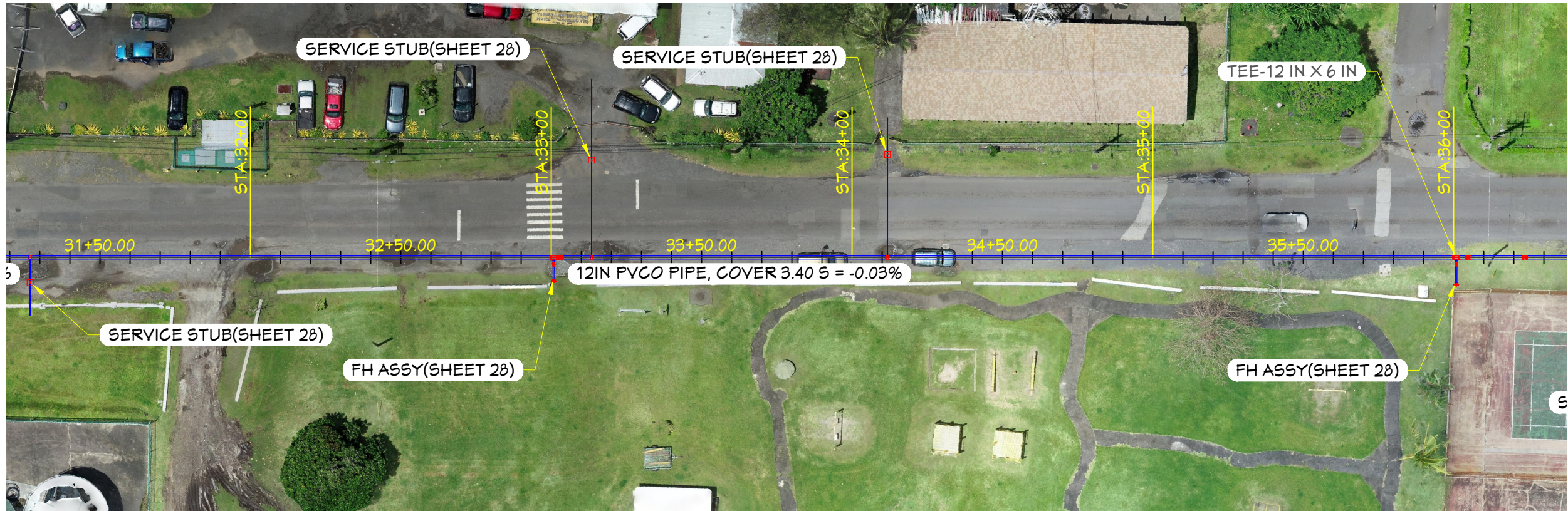
AMERICAN SAMOA POWER AUTHORITY
WATER DIVISION
ENGINEERING DEPARTMENT
P.O. BOX PPB, PAGO PAGO
AMERICAN SAMOA 96799
PH:(684)699-7199
www.aspower.com

PROJECT NAME:
TAFUNA ACP REPLACEMENT & WATER SYSTEM UPGRADE PROJECT

DRAWING TITLE:
ROUTE 016 PLAN& PROFILE 25+94.93 TO 31+13.91

PROJECT LOCATION:
FAGAIMA, KOKOLAND AND MALAEMI, AS 96799

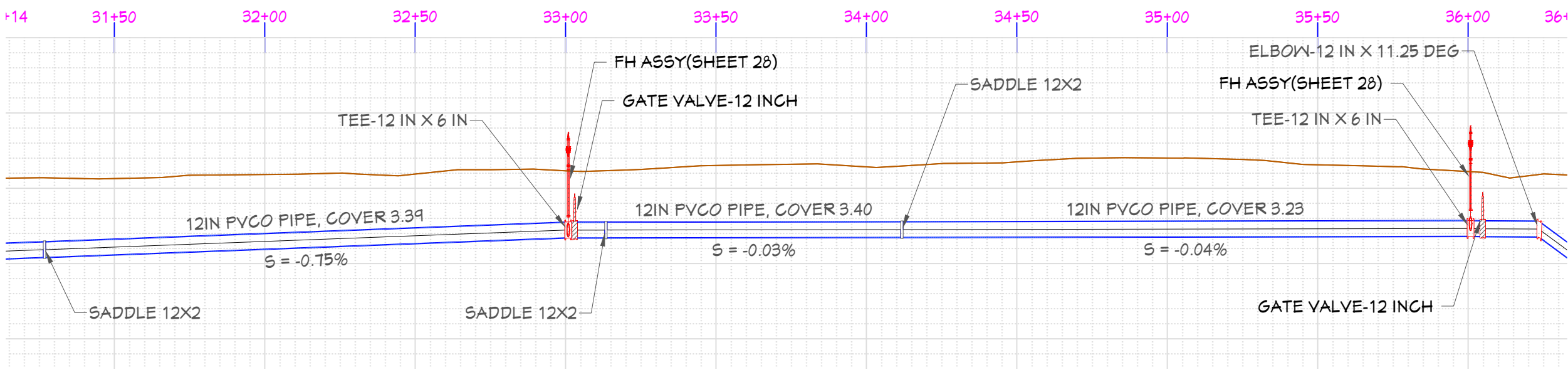
REVISION HISTORY:				SCALE:	
NO.	DATE	DETAILS OF REVISION	REVISED BY	AS SHOWN	
				PROJECT #: 1867749G319	
				SHEET NO. 60	
				of	49



SCALE IN FEET 1" = 40'
VERTICAL EXAGGERATION = 5

LEGEND:

- EXIST. WATER LINES
- EXIST. SEWER LINES
- SEWER MANHOLE
- EXIST. UNDERGROUND ASTCA
- UTILITY POLE W/ OVHD POWER LINE
- EXIST. WATER METER
- PROPOSED PVC WATER MAIN
- PROP. 2" SERVICE LINE
- PROP. TEE-FITTINGS
- 11.25 ELBOW
- 22.50 ELBOW
- PROPOSED AIR RELIEF VALVE
- PROPOSED FIRE HYDRANT-PLAN
- PROPOSED GATE VALVE-PLAN



DATE PLOTTED: Thursday, April 3, 2025 4:23:16 PM

PREPARED BY:
EDMON O. LACAULAN, P.E.
WATER ENGINEER

CHECKED BY:
FIDEL AGUILA
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WILLIAM SWORD, P.E.
CHIEF ENGINEER

ISSUE FOR:
CONSTRUCTION



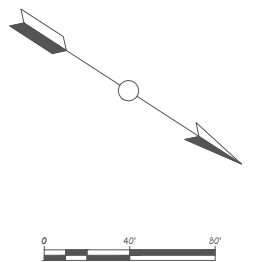
AMERICAN SAMOA POWER AUTHORITY
WATER DIVISION
ENGINEERING DEPARTMENT
P.O. BOX PPB, PAGO PAGO
AMERICAN SAMOA 96799
PH:(684)699-7199
www.aspower.com

PROJECT NAME:
TAFUNA ACP REPLACEMENT & WATER SYSTEM UPGRADE PROJECT

DRAWING TITLE:
ROUTE 016 PLAN& PROFILE 31+13.91 TO 36+32.90

PROJECT LOCATION:
FAGAIMA, KOKOLAND AND MALAEMI, AS 96799

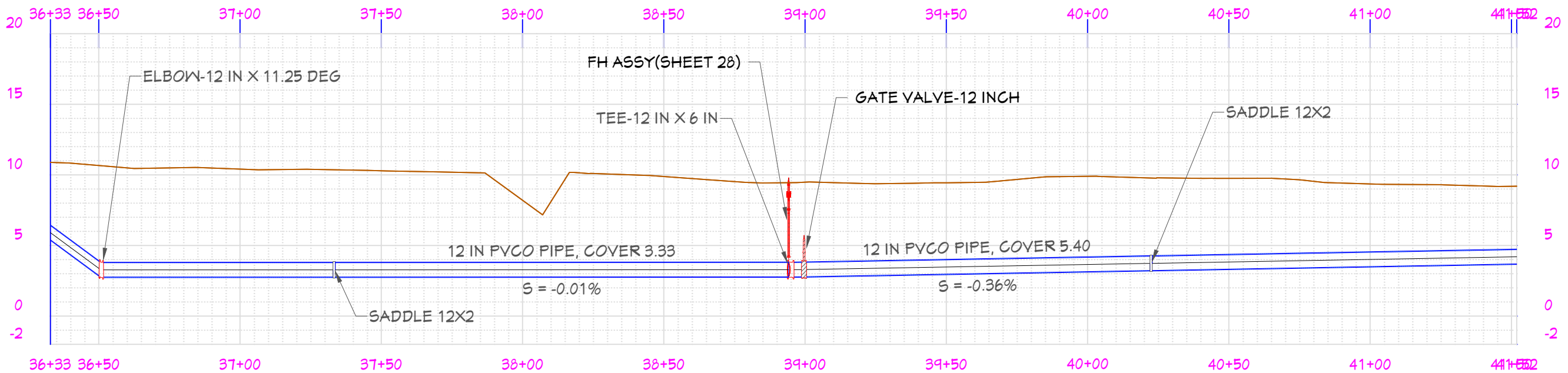
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NO.	DATE	DETAILS OF REVISION	REVISED BY	AS SHOWN	
				PROJECT #: 1867749G319	
				SHEET NO. 61	
				of	49



SCALE IN FEET 1" = 40'
VERTICAL EXAGGERATION = 5

LEGEND:

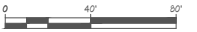
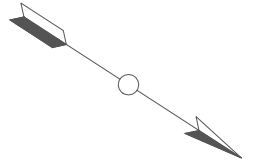
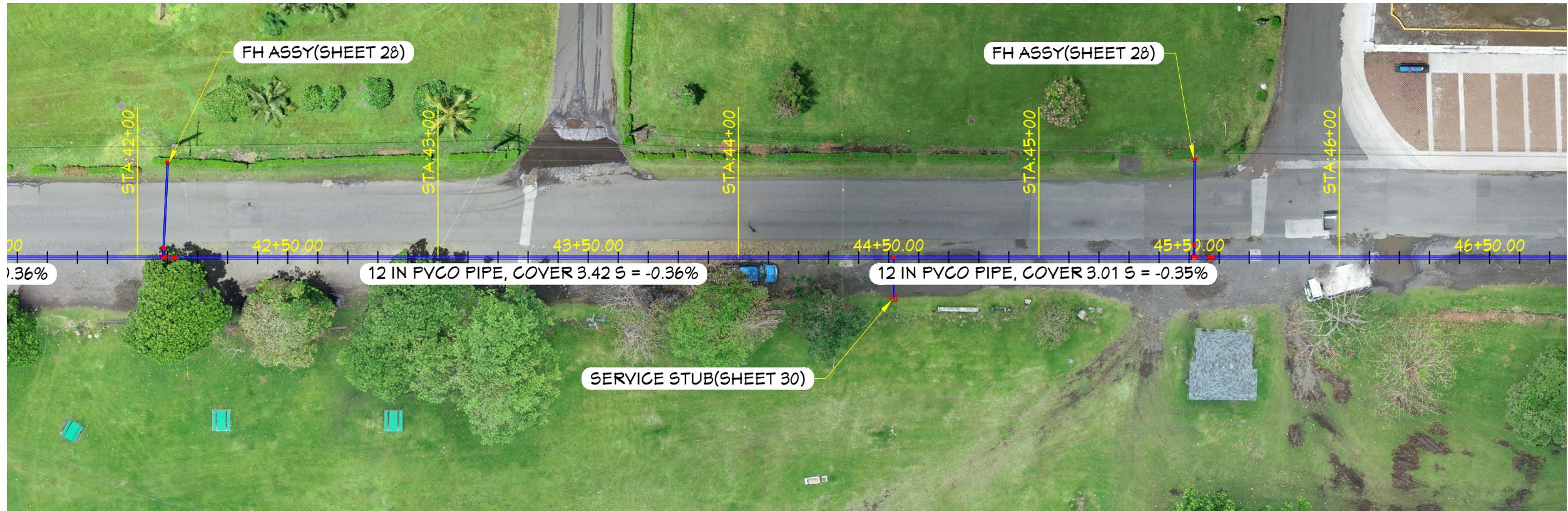
- EXIST. WATER LINES
- EXIST. SEWER LINES
- SEWER MANHOLE
- EXIST. UNDERGROUND ASTCA
- UTILITY POLE W/ OVHD POWER LINE
- EXIST. WATER METER
- PROPOSED PVCO WATER MAIN
- PROP. 2" SERVICE LINE
- PROP. TEE-FITTINGS
- 11.25 ELBOW
- 22.50 ELBOW
- PROPOSED AIR RELIEF VALVE
- PROPOSED FIRE HYDRANT-PLAN
- PROPOSED GATE VALVE-PLAN



DATE PLOTTED: Thursday, April 3, 2025 4:23:27 PM

<div>PREPARED BY: EDMON O. LACAULAN, P.E. WATER ENGINEER</div> <div>CHECKED BY: FIDEL AGUILA SENIOR ENGINEER</div> <div>APPROVED BY: WILLIAM SWORD, P.E. CHIEF ENGINEER</div> <div>ISSUE FOR: CONSTRUCTION</div>		<div>AMERICAN SAMOA POWER AUTHORITY</div> <div>WATER DIVISION</div> <div>ENGINEERING DEPARTMENT</div> <div>P.O. BOX PPB, PAGO PAGO</div> <div>AMERICAN SAMOA 96799</div> <div>PH:(684)699-7199</div> <div>www.aspower.com</div>	PROJECT NAME:	TAFUNA ACP REPLACEMENT & WATER SYSTEM UPGRADE PROJECT	REVISION HISTORY:				SCALE:			
							NO.	DATE	DETAILS OF REVISION	REVISED BY	AS SHOWN	
											PROJECT #:	
											1867749G319	
											SHEET NO.	
								62				
								of	49			

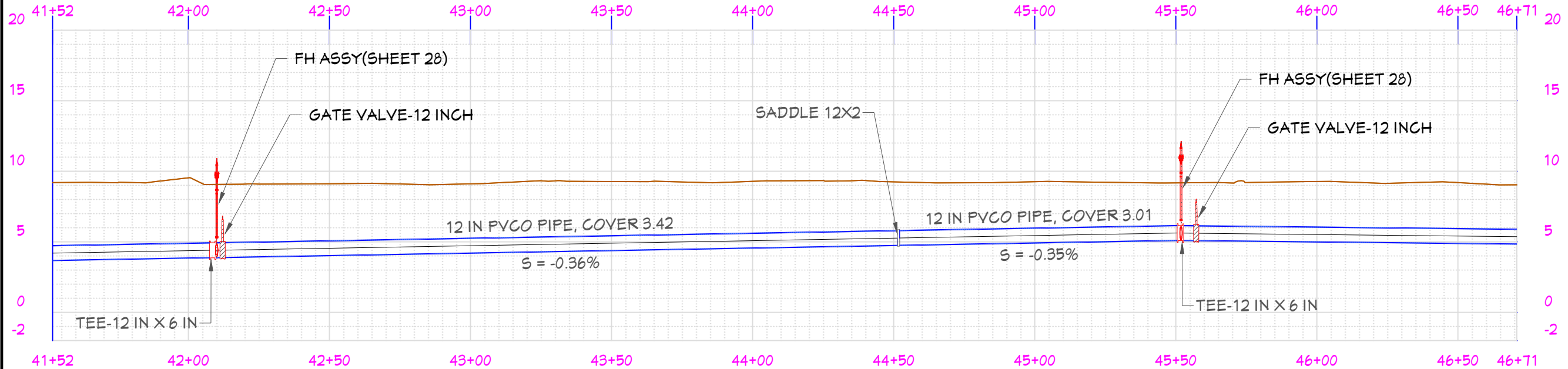
DATE PLOTTED: Thursday, April 3, 2025 4:23:36 PM



SCALE IN FEET 1" = 40'
VERTICAL EXAGGERATION = 5

LEGEND:

- EXIST. WATER LINES
- EXIST. SEWER LINES
- SEWER MANHOLE
- EXIST. UNDERGROUND ASTCA
- UTILITY POLE W/ OVHD POWER LINE
- EXIST. WATER METER
- PROPOSED PVCO WATER MAIN
- PROP. 2" SERVICE LINE
- PROP. TEE-FITTINGS
- 11.25 ELBOW
- 22.50 ELBOW
- PROPOSED AIR RELIEF VALVE
- PROPOSED FIRE HYDRANT-PLAN
- PROPOSE GATE VALVE-PLAN



PREPARED BY:
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ISSUE FOR:
CONSTRUCTION



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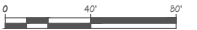
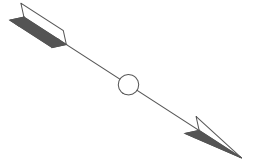
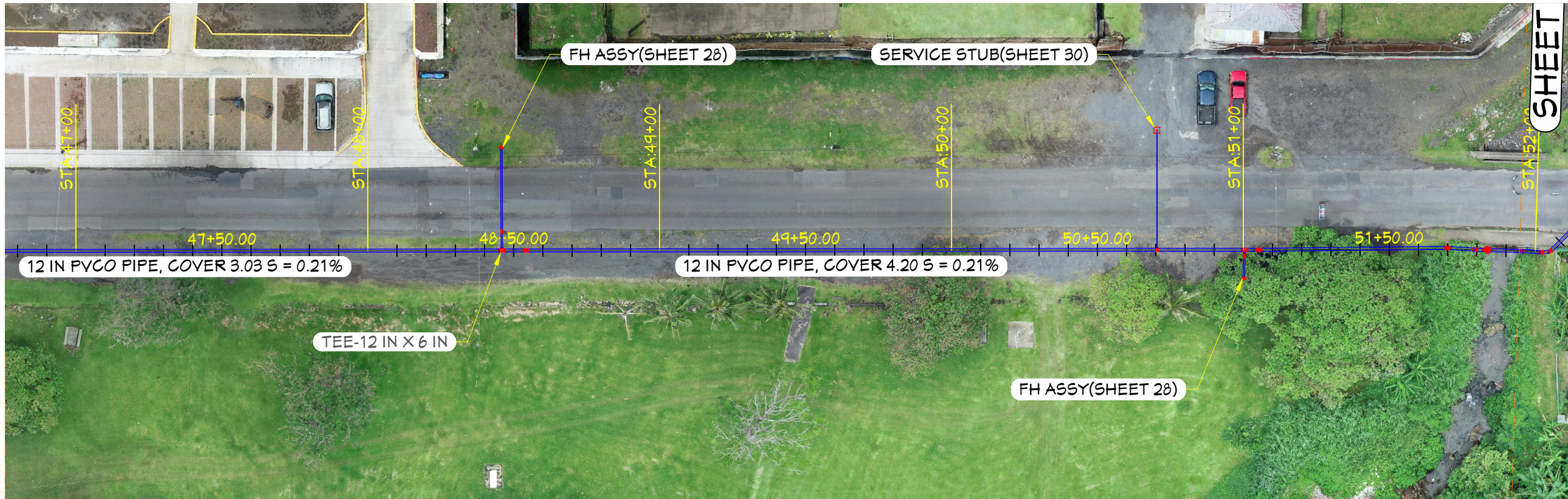
PROJECT NAME:
TAFUNA ACP REPLACEMENT & WATER SYSTEM UPGRADE PROJECT

DRAWING TITLE:
ROUTE 016 PLAN& PROFILE 41+51.88 TO 46+70.87

PROJECT LOCATION:
FAGAIMA, KOKOLAND AND MALAEMI, AS 96799

REVISION HISTORY:				SCALE:	
NO.	DATE	DETAILS OF REVISION	REVISED BY	AS SHOWN	
				PROJECT #: 1867749G319	
				SHEET NO. 63	
				of	49

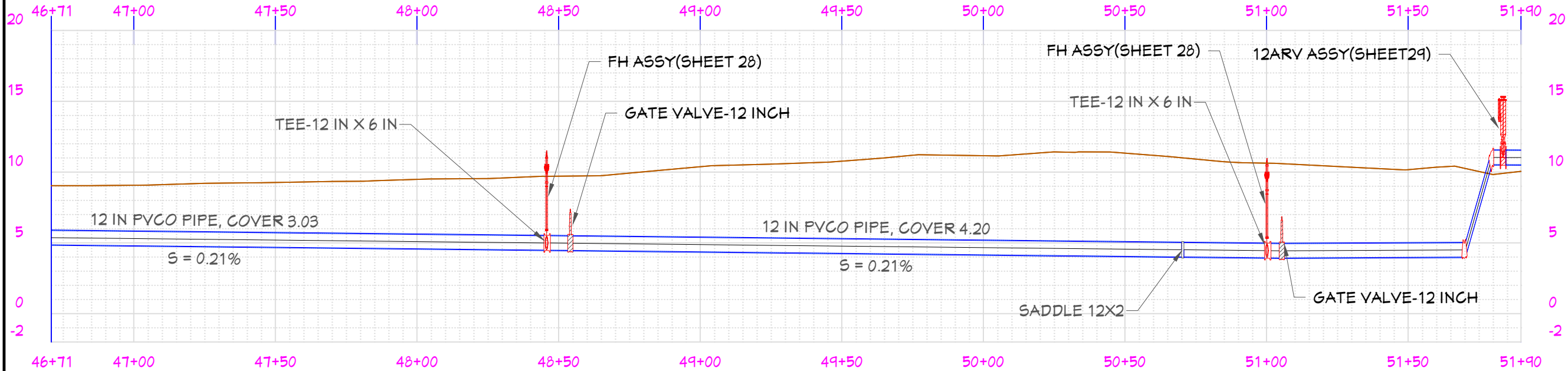
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SCALE IN FEET 1" = 40'
VERTICAL EXAGGERATION = 5

LEGEND:

- EXIST. WATER LINES
- EXIST. SEWER LINES
- SEWER MANHOLE
- EXIST. UNDERGROUND ASTCA
- UTILITY POLE W/ OVHD POWER LINE
- EXIST. WATER METER
- PROPOSED PVC WATER MAIN
- PROP. 2" SERVICE LINE
- PROP. TEE-FITTINGS
- 11.25 ELBOW
- 22.50 ELBOW
- PROPOSED AIR RELIEF VALVE
- PROPOSED FIRE HYDRANT-PLAN
- PROPOSED GATE VALVE-PLAN



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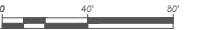
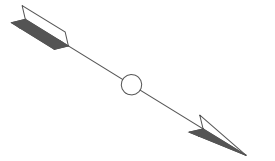
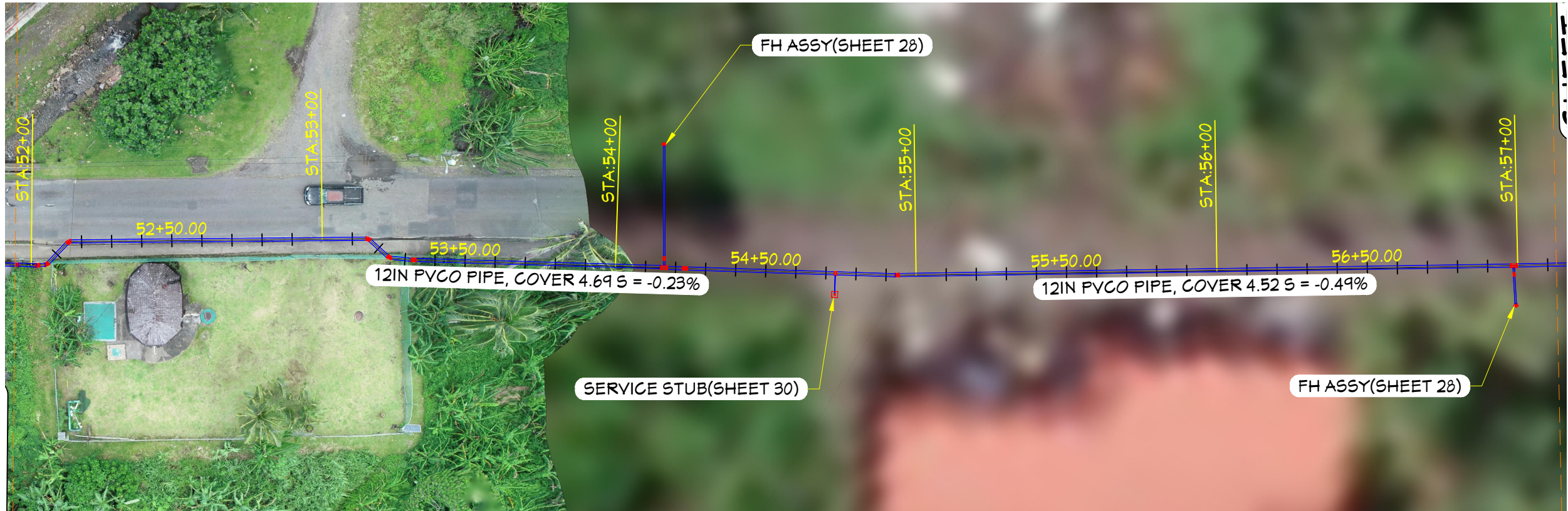
PROJECT NAME:
TAFUNA ACP REPLACEMENT & WATER SYSTEM UPGRADE PROJECT

DRAWING TITLE:
ROUTE 016 PLAN& PROFILE 46+70.87 TO 51+89.85

PROJECT LOCATION:
FAGAIMA, KOKOLAND AND MALAEMI, AS 96799

REVISION HISTORY:				SCALE:	
NO.	DATE	DETAILS OF REVISION	REVISED BY	AS SHOWN	
				PROJECT #:	
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				SHEET NO.	
				64	
				of	49

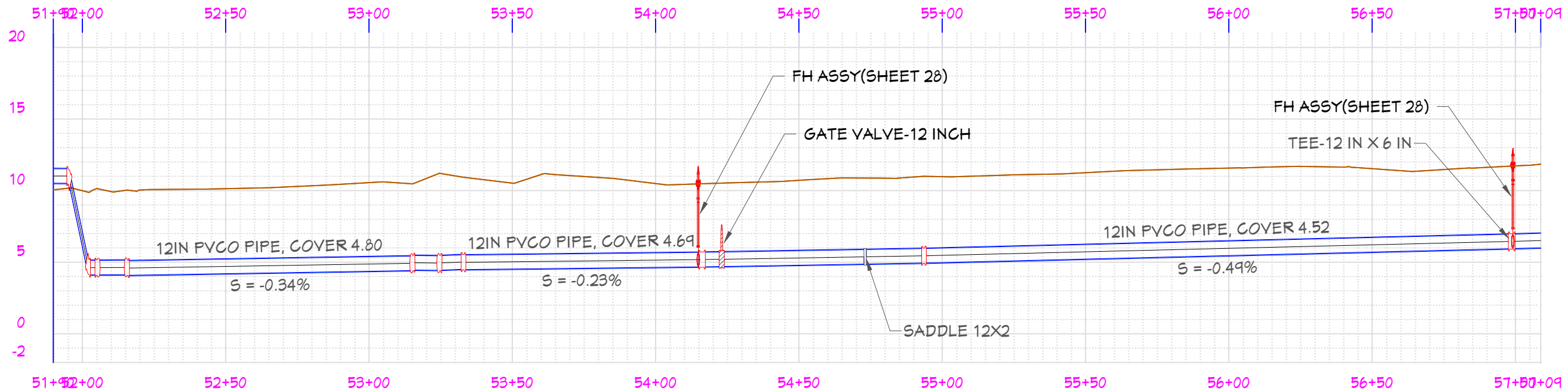
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SCALE IN FEET 1" = 40'
VERTICAL EXAGGERATION = 5

LEGEND:

- EXIST. WATER LINES
- EXIST. SEWER LINES
- SEWER MANHOLE
- EXIST. UNDERGROUND ASTCA
- UTILITY POLE W/ OVHD POWER LINE
- EXIST. WATER METER
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- PROPOSED GATE VALVE-PLAN



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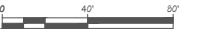
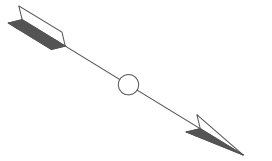
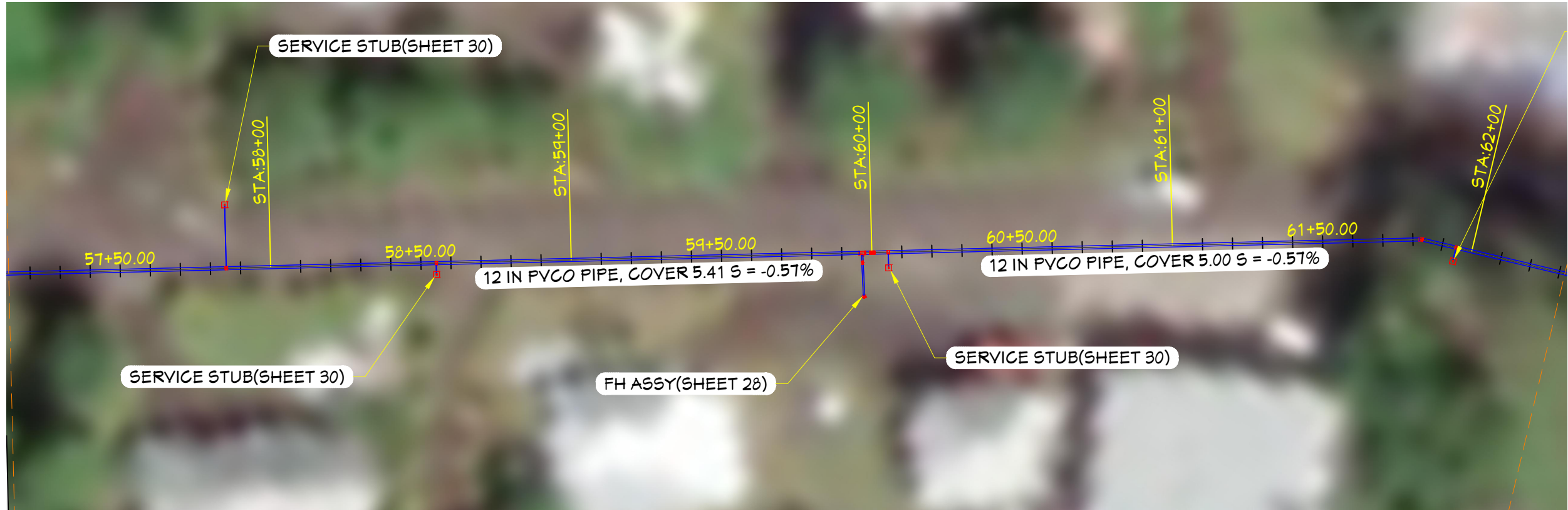
PROJECT NAME:
TAFUNA ACP REPLACEMENT & WATER SYSTEM UPGRADE PROJECT

DRAWING TITLE:
ROUTE 016 PLAN& PROFILE 51+89.85 TO 57+08.84

PROJECT LOCATION:
FAGAIMA, KOKOLAND AND MALAEMI, AS 96799

REVISION HISTORY:				SCALE:	
NO.	DATE	DETAILS OF REVISION	REVISED BY	AS SHOWN	
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				SHEET NO. 65	
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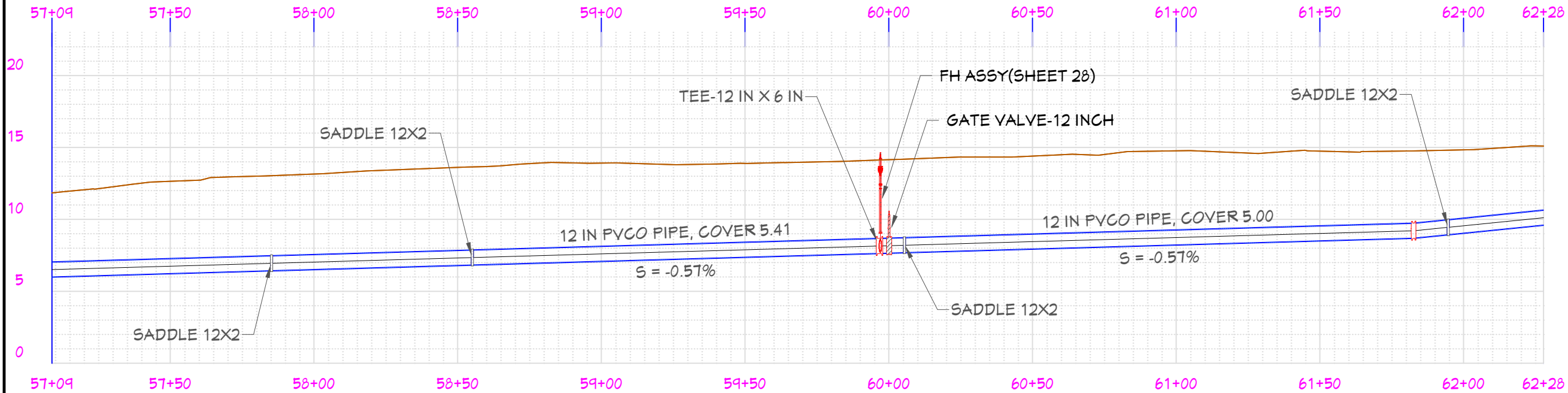
DATE PLOTTED: Thursday, April 3, 2025 4:24:17 PM



SCALE IN FEET 1" = 40'
VERTICAL EXAGGERATION = 5

LEGEND:

- EXIST. WATER LINES
- EXIST. SEWER LINES
- SEWER MANHOLE
- EXIST. UNDERGROUND ASTCA
- UTILITY POLE W/ OVHD POWER LINE
- EXIST. WATER METER
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PREPARED BY:
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FIDEL AGUILA
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APPROVED BY:
WILLIAM SWORD, P.E.
CHIEF ENGINEER

ISSUE FOR:
CONSTRUCTION



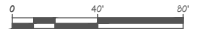
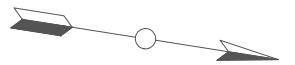
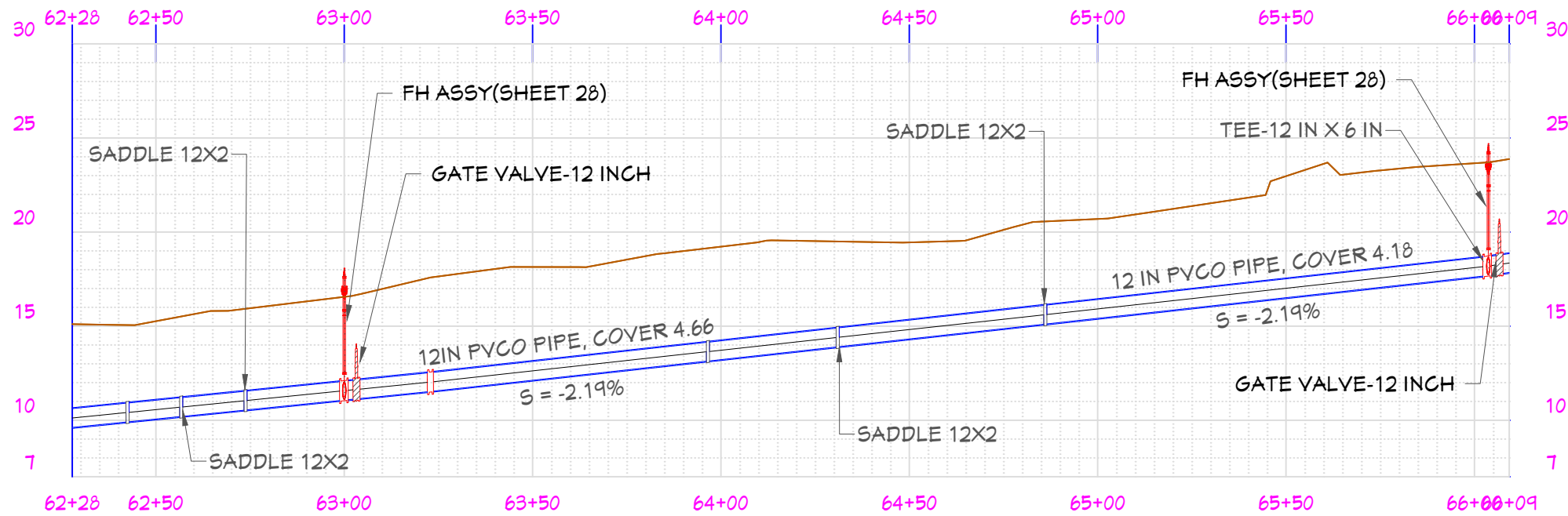
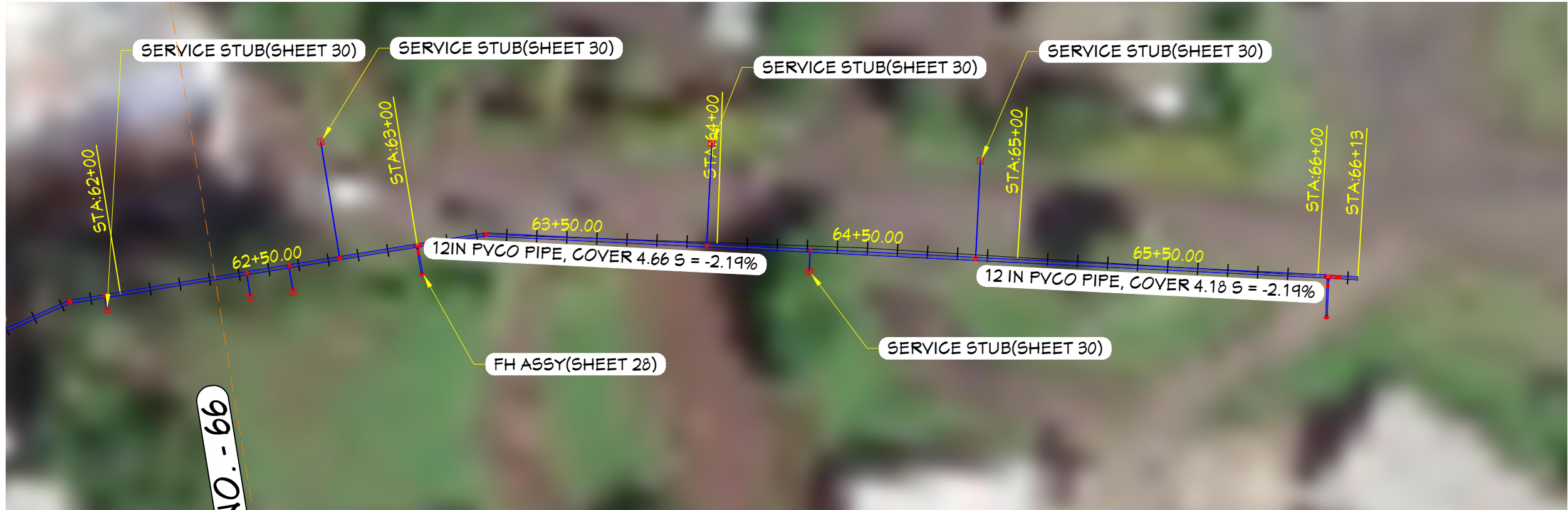
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P.O. BOX PPB, PAGO PAGO
AMERICAN SAMOA 96799
PH:(684)699-7199
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PROJECT NAME:
TAFUNA ACP REPLACEMENT & WATER SYSTEM UPGRADE PROJECT

DRAWING TITLE:
ROUTE 016 PLAN& PROFILE 57+08.84 TO 62+27.82

PROJECT LOCATION:
FAGAIMA, KOKOLAND AND MALAEMI, AS 96799

REVISION HISTORY:				SCALE:	
NO.	DATE	DETAILS OF REVISION	REVISED BY	AS SHOWN	
				PROJECT #:	
				1867749G319	
				SHEET NO.	
				66	
				of	49



SCALE IN FEET 1" = 40'
VERTICAL EXAGGERATION = 5

LEGEND:

- EXIST. WATER LINES
- EXIST. SEWER LINES
- SEWER MANHOLE
- EXIST. UNDERGROUND ASTCA
- UTILITY POLE W/ OVHD POWER LINE
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- PROPOSE GATE VALVE-PLAN

PREPARED BY:
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APPROVED BY:
WILLIAM SWORD, P.E.
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ISSUE FOR:
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PROJECT NAME:
TAFUNA ACP REPLACEMENT & WATER SYSTEM UPGRADE PROJECT

DRAWING TITLE:
ROUTE 016 PLAN& PROFILE 62+27.82 TO 66+09.25

PROJECT LOCATION:
FAGAIMA, KOKOLAND AND MALAEMI, AS 96799

REVISION HISTORY:				SCALE:	
NO.	DATE	DETAILS OF REVISION	REVISED BY	AS SHOWN	
				PROJECT #:	
				1867749G319	
				SHEET NO.	
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