

CONTRACTOR SUBMITTAL TRANSMITTAL FORM

TOwner: County of Hawaii
Contractor: Nan, Inc.
Project Name: Hilo WWTP Phase 1
Submittal Title: Pothole Workplan
To: Engineer
From: Nan Inc.

Date: 6/9/2025
Project No.: WW-4705R
Submittal Number: 2280-001.0

For Reference Only

Specification No. and Subject of Submittal / Equipment Supplier			
Spec ##:	Subject: Pothole Workplan - Subsurface Utility Engineering		
Authored By:	Brandon Farrell	Date Submitted:	6/9/2025

Submittal Certification	
Check Either (A) or (B):	
<input type="checkbox"/>	(A) We have verified that the equipment or material contained in this submittal meets all the requirements specified in the project manual or shown on the contract drawings with no exceptions.
<input checked="" type="checkbox"/>	(B) We have verified that the equipment or material contained in this submittal meets all the requirements specified in the project manual or shown on the contract drawings except for the deviations listed.
<p>Certification Statement: By this submittal, I hereby represent that I have determined and verified all field measurements, field construction criteria, materials, dimensions, catalog numbers and similar data, and I have checked and coordinated each item with other applicable approved shop drawings and all Contract requirements.</p>	
General Contractor's Reviewer's Signature: 	
Printed Name and Title: Brandon Farrell, Project Manager	
In the event, Contractor believes the Submittal response does or will cause a change to the requirements of the Contract, Contractor shall immediately give written notice stating that Contractor considers the response to be a Change Order.	
Firm:	Signature:
	Date Returned:

PM/CM Office Use
Date Received GC to PM/CM:
Date Received PM/CM to Reviewer:
Date Received Reviewer to PM/CM:
Date Sent PM/CM to GC:

SECTION 02280
SUBSURFACE UTILITY ENGINEERING

PART 1 GENERAL

1.01 SUMMARY

- A. Section Includes: Requirements for subsurface utility engineering (SUE) as part of the Work for new pipelines and structures.

1.02 REFERENCES

- A. American Society of Civil Engineers (ASCE):
 - 1. 38-22 Standard Guideline for Investigating and Documenting Existing Utilities.

1.03 DEFINITIONS

- A. General: Definitions used in this Section are in accordance with ASCE 38-22.

1.04 REQUIREMENTS

- A. Existing utilities indicated on the Drawings are approximate only and are provided based on the best information available by use of reports and records available from the Owner.
- B. Existing utilities are shown for the convenience of Contractor only.
 - 1. It is the Contractor's responsibility to field verify the vertical and horizontal location of all utilities including those not indicated or incorrectly indicated on the Drawings.
- C. Contractor is responsible to review all geotechnical reports, record drawings, and Contract Documents.
- D. Coordinate with utility locator, such as CALL BEFORE YOU DIG, and other affected entities when they have jurisdiction over the project site.
- E. Contractor is responsible for protecting all utilities encountered.
 - 1. Before any excavation, follow requirements of Section 01140 - Work Restrictions.
 - 2. If a conflict exists between what is indicated on the Drawings and what exists in the field, Contractor shall notify Engineer immediately.

F. ~~Where scheduled, provide subsurface utility engineering services by a Civil Engineer licensed in Hawaii in accordance with ASCE 38-22.~~^{AD5}

G.F. Requirements: The SUE shall entail the following as a minimum:

- 1. Review of existing record drawings.
- 2. Geophysical methods such as ground-penetrating radar.

3. Soft excavation to locate known utilities along the proposed pipeline alignment excavation areas and structure location.
4. Open trench excavation to locate unknown utilities along the proposed pipeline alignment, structure location, and evacuation area.
5. Utilization of field survey by a Professional Land Survey licensed in Hawaii for determination of vertical and horizontal locations.

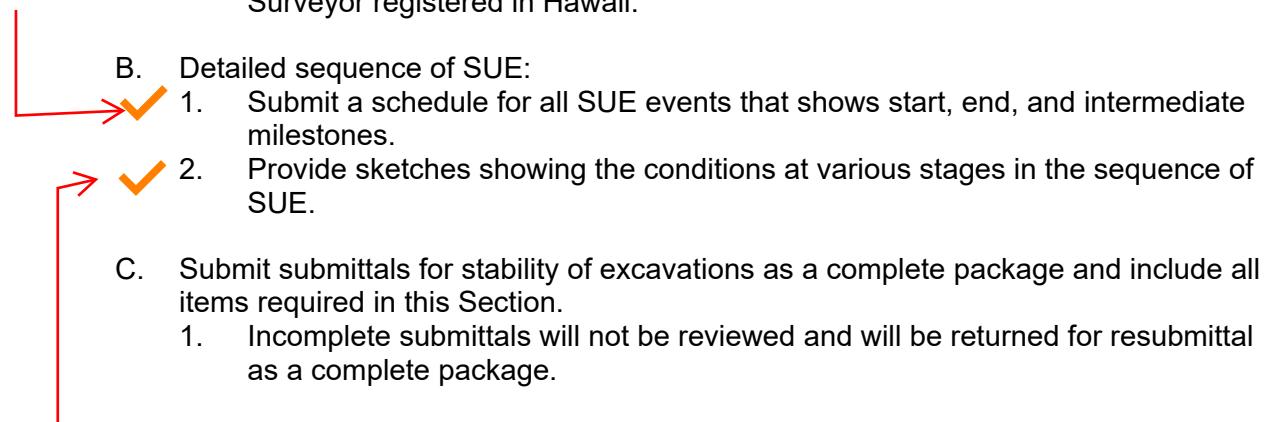
1.05 QUALIFICATIONS

- A. General: Contractor shall utilize the services of a qualified subconsultant for SUE services with minimum qualifications that include but are not limited to:
 1. Minimum of 5 years of SUE experience in Hawaii where providing vertical and horizontal locations of utilities in accordance with ASCE 38-22 utility quality level A was required.
 2. Completion of 5 SUE projects of equal or greater magnitude within the past 5 years.

1.06 SUBMITTALS

- A. Shop drawings:
 1. Contractor shall submit all SUE information as follows:
 - a. Plan drawings that clearly illustrate vertical and horizontal location of known and unknown utilities.
 - 1) Horizontal location shall include northing and easting coordinates.
 - b. Identifies size and material and service for known utilities.
 - c. Identify size and material for unknown utilities.
 2. Review of shop drawings and calculations by Engineer and Owner are for record only.
 3. Drawings shall be performed, stamped, and endorsed by a Civil Engineer licensed in Hawaii.
 4. Field survey information shall be performed, stamped, and endorsed by a Surveyor registered in Hawaii.
- B. Detailed sequence of SUE:
 1. Submit a schedule for all SUE events that shows start, end, and intermediate milestones.
 2. Provide sketches showing the conditions at various stages in the sequence of SUE.
- C. Submit submittals for stability of excavations as a complete package and include all items required in this Section.
 1. Incomplete submittals will not be reviewed and will be returned for resubmittal as a complete package.

Not really a milestone event, the exposure of the tie in for bypass was labeled to meet specifications



The conditions at various stages will be marked off on the as built

1.07 SEQUENCING AND SCHEDULING

- A. Coordinate all Work with restrictions provided in Section 01140 - Work Restrictions.
- B. Do not begin Work until submittals have been accepted by Engineer and until equipment and materials necessary for installation are on site.
- C. Submit submittals a minimum of 60 days prior to the scheduled date to begin excavation work.

PART 2 PRODUCTS (NOT USED)

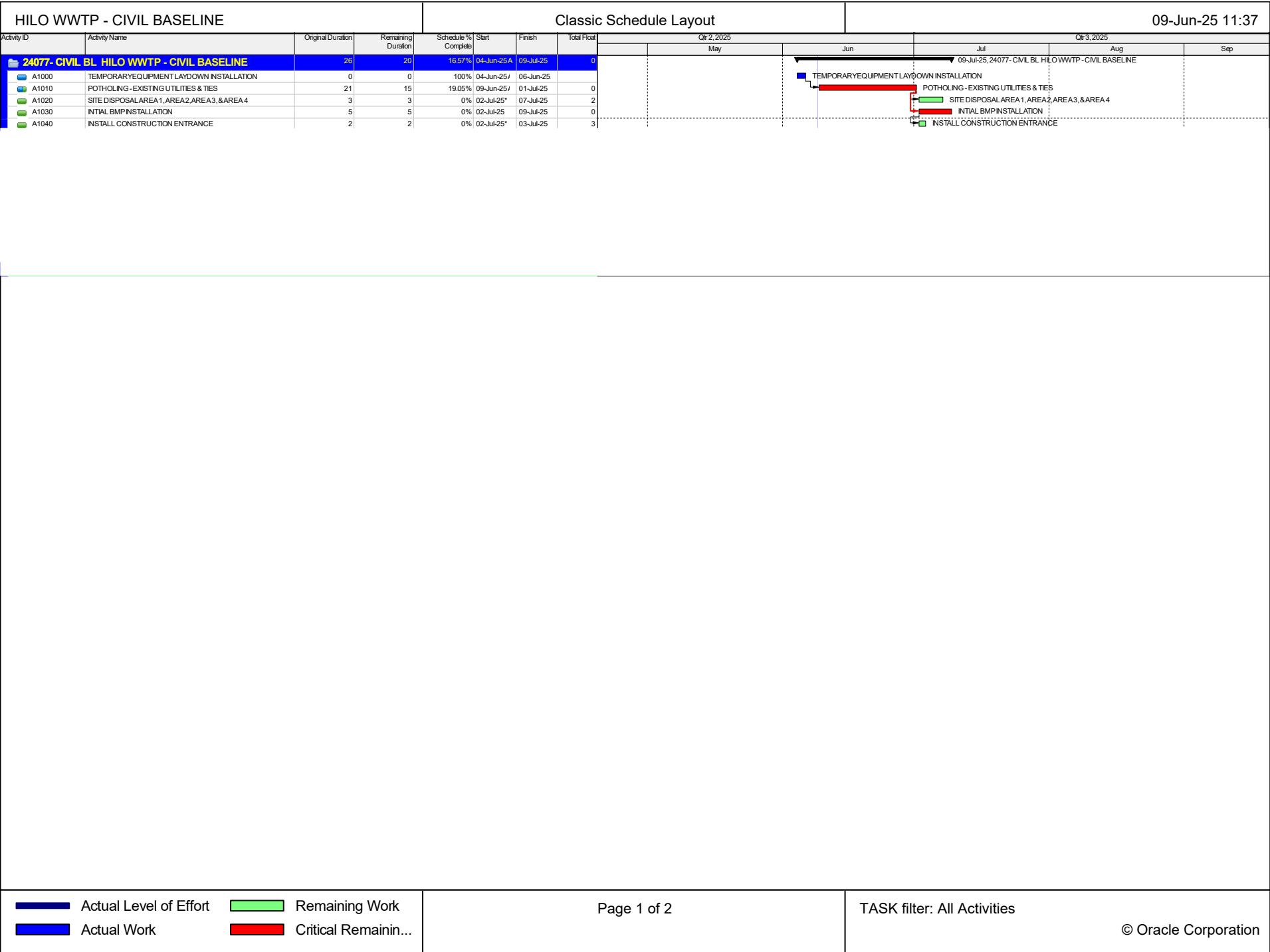
PART 3 EXECUTION (NOT USED)

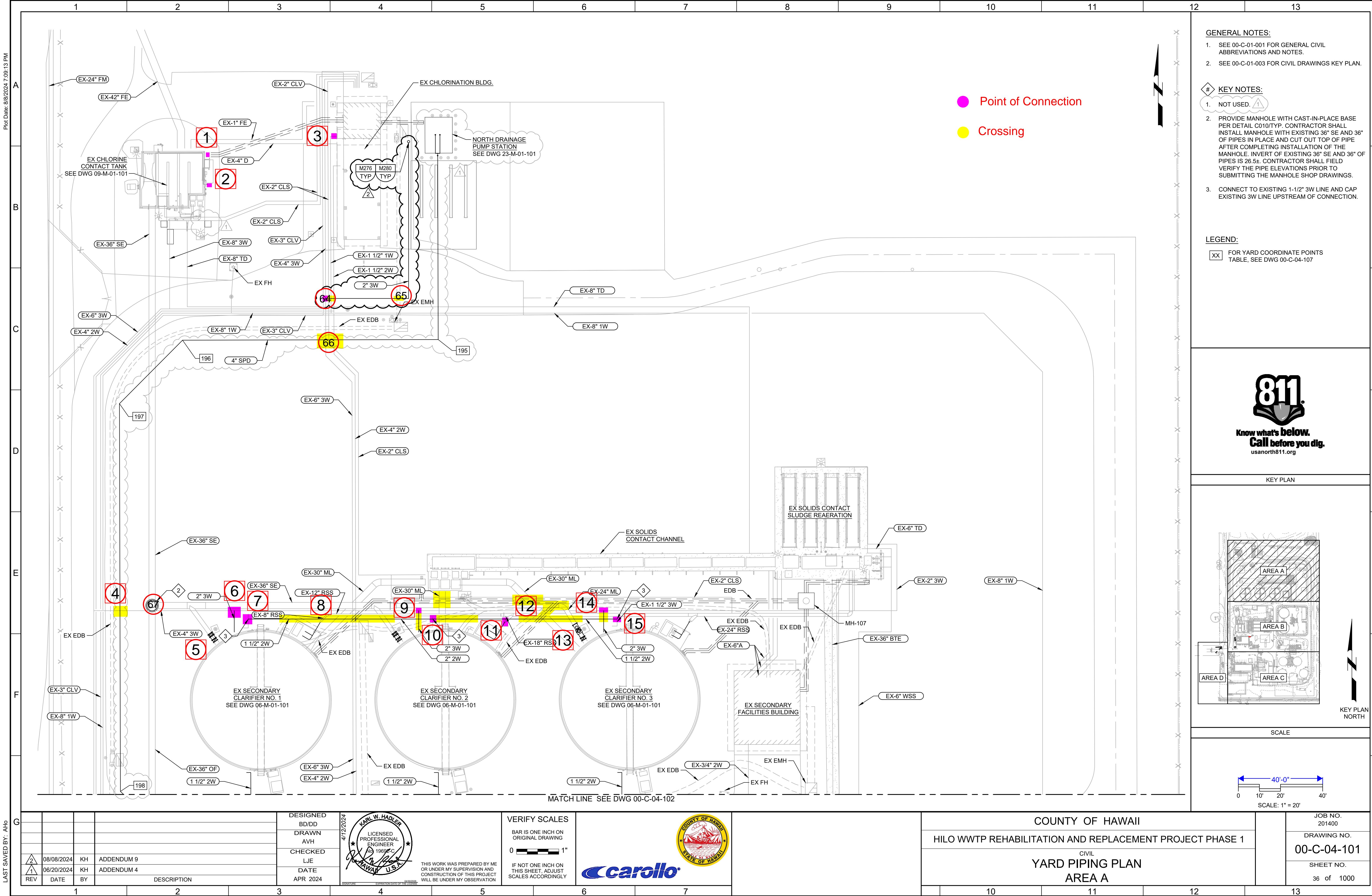
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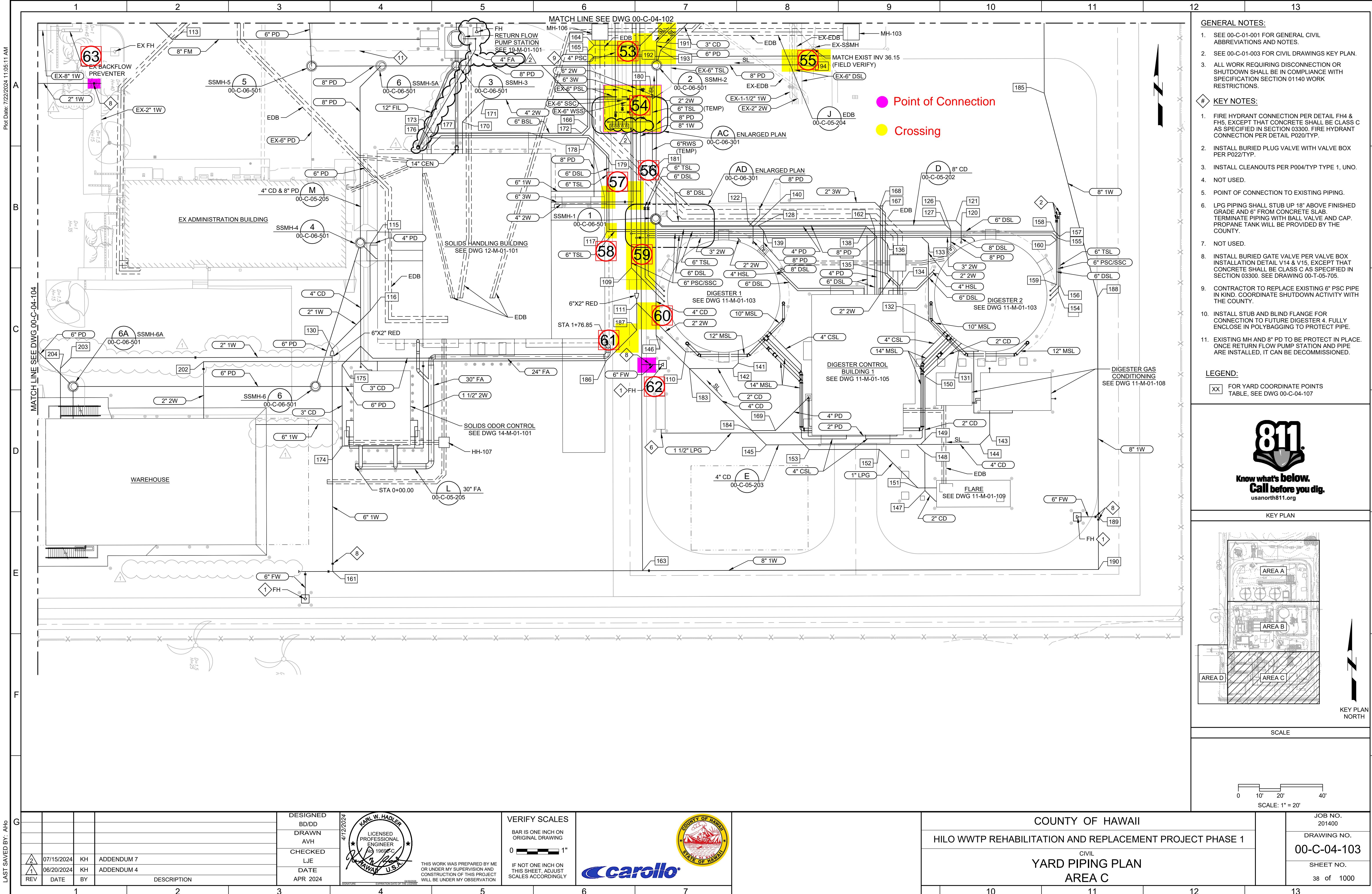
AD5 Addendum No. 5 - July 2024

Nan Inc Construction Work Plan Template			
1. Project Overview			
Project Name:	Hilo WWTP Rehabilitation and Replacement Phase 1		
Project Location:	150 Kekawnoa Place, Hilo, Hawaii.		
Client/Owner:	County of Hawaii		
Project Manager:	Jason Tagawa		
Start Date:	6.31.2025		
Estimated Completion Date:	6.30.2030		
2. Scope of Work			
Description of the work to be performed.	Potholing		
Key deliverables and milestones.	N/A		
Any exclusions or limitations.	N/A		
3. Project Team			
Role	Name	Contact	
Project Discipline Manager	Brandon Farrell	808.850.4743	
Site Supervisor	Tracey Veincent	808.217.7859	
Safety Officer	Rodney Ishimine	808.492.0497	
Foreman	None		
Subcontractors	None		
4. Work Breakdown Structure (WBS)			
1. Site Preparation	1. Ensure 811 ticket is active. 2 Identify areas of interest and layout with paint.		
2. Excavation and Earthworks	1. Stage vac truck and pressure washer in a safe manner 2. Ensure Proper PPE is donned 3. Begin potholing operation 4. Document findings 5. Upon completion of findings back fill with suitable material		
5. Schedule			
Gantt chart or timeline (attach separately if needed).			
Key milestones and deadlines.	Pothole 68 for Carollo observation		
6. Resources Required			
Labor: Number and type of workers.	(2) Laborers (1) Operator		
Materials: List of major materials and suppliers.	3B fine/ Base course		
Equipment: Machinery and tools needed.	(1) Vacuum Truck with pressure washer (1) Hoptoe		
7. Health, Safety, and Environment (HSE) Plan			
Safety protocols and PPE requirements.	Standard PPE Face Shield Safety Pants Ear Pro		
Emergency procedures.	Follow SSSP		
Environmental protection measures.	None		
8. Quality Assurance Plan			
Inspection and testing procedures.	None		
Quality control checkpoints.	None		
Documentation and reporting.	Report findings on attached sheet for findings and measurements		
10. Risk Management			
Risk	Likelihood	Impact	Mitigation Strategy
Struck by Equipment	High	Severe	Maintain proper distance from working equipment and eye contact
11. Permits and Approvals			
List of required permits.	Grading permit	PW.ENG2023-00064	
12. Sign-Off			
Name	Role	Signature	Date
1			
2			
3			
4			
5			
6			
7			
8			

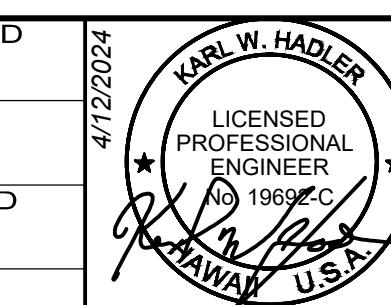
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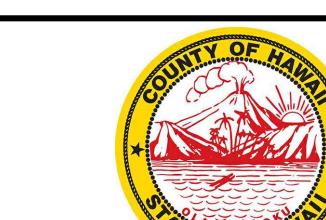
LAST SAVED BY: AHo	07/15/2024 KH ADDENDUM 7	06/20/2024 KH ADDENDUM 4
REV DATE BY	DESCRIPTION	

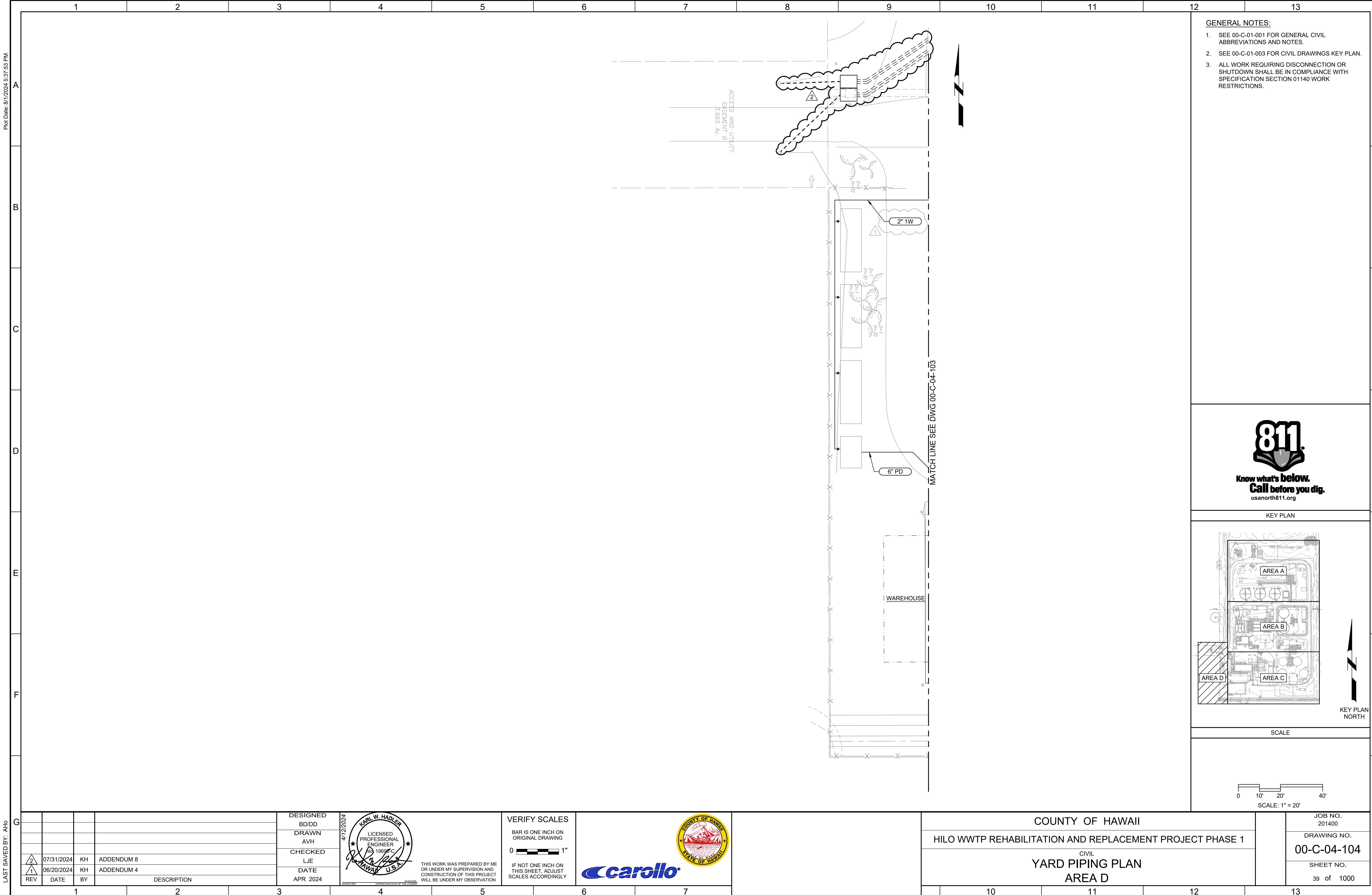


THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION
EXPIRATION DATE OF THE LICENSE: APR 2024

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

carollo





Know what's below.
Call before you dig.
usnorth811.org

Activity/Work Task: Excavation and Trenching, Back fill		Overall Risk Assessment Code (RAC) (Use highest code)					L
Project Location: WWTP		Risk Assessment Code (RAC) Matrix					
Contract Number: 24-077		Severity	Probability				
Date Prepared: 3/11/2024			Frequent	Likely	Occasional	Seldom	Unlikely
Prepared by (Name/Title): Rodney Ishimine, SSHO		Catastrophic	E	E	H	H	M
		Critical	E	H	H	M	L
Reviewed by (Name/Title):		Marginal	H	M	M	L	L
		Negligible	M	L	L	L	L
Notes:		Step 1: Review each "Hazard" with identified safety "Controls" and determine RAC (See "Probability" is the likelihood to cause an incident, near miss, or accident and identified as: Frequent, Likely, Occasional, Seldom or Unlikely.					RAC Chart
1 - This AHA is to be discussed with the crew doing the work prior to the start of the activity and signed/ initialed by each worker.		"Severity" is the outcome/degree if an incident, near miss, or accident did occur and identified as: Catastrophic, Critical, Marginal, or Negligible.					E = Extremely High Risk
2 - Any change/addition/deletion to this AHA requires that the crew be re-trained on this AHA.		Step 2: Identify the RAC (Probability/Severity) as E, H, M, or L for each "Hazard" on AHA. Annotate the overall highest RAC at the top of AHA.					H = High Risk
							M = Moderate Risk
							L = Low Risk
General Safety Requirements		Site Specific Safety Concerns					
Safety is a condition of employment and continued employment.		1. A Safety Indoctrination is required of each and every individual coming on to this worksite. This indoctrination wil be done by the Safety Manager of the project or his/her designee.					
Each individual on the worksite is responsible for ensuring full compliance with the established safety standard (CFR 1926).		2. You will be working with different people from different trades. Make necessary allowances.					
All workers are required to report safety violations or potential safety issues that may result in an incident.		3. Keep your area clean and do not allow rubbish to accumulate.					
All workers are expected to know and understand the safety process and procedures for their individual tasks as spelled out in this AHA		4. Make sure that your tools are in safe working condition.					
Safety is the responsibility of each and every individual on this worksite. Deliberately ignoring or failing to point out an unsafe act may result in disciplinary action.		5. If you find human remains or traces of historical value, stop work and inform a supervisor.					
All workers must adhere to the Accident Prevention Plan. (APP)		6. Take a minute to stretch and loosen your muscles before you begin work.					
Basic Personal Protective Equipment (PPE) includes: safety hardhats, safety glasses, steel-toed shoes, Class II high-visibility vests and gloves.		7. It's hot and will probably get hotter, drink water often and take a minute to cool off when you are overheated.					
Report all injuries/near misses immediately to a supervisor regardless of how insignificant it may appear.		8. Damage to your hearing cannot be undone. Use hearing protection for noise levels louder than a circular saw.					
		9. Shirts must have at least ¼ length sleeves. No bare skin, shorts or tank tops.					
		10. Use of gloves is mandatory. The job task determines the type of glove that should be worn.					
		11. Whatever you breath goes into your lungs. Determine appropriate breathing protection for the current hazard.					
		12. Safety Data Sheets must be provided for all chemical compounds used as part of the work tasks. Familiarize yourself with the hazards each chemical compound presents as documented in the SDS.					
		13. Watch where you walk and be aware of open trenches, excavations and slipping/tripping hazards.					
		14. If an incident occurs on the site, regardless of severity, the foreman or site authority shall immediately call a stand down. The situation shall be assessed, hazards identified and corrective actions taken to ensure a safe resolution of the incident before work resumes.					
Job Steps	Hazards	Controls					RA C
Layout	1. Uneven ground 2. Tripping hazards	1a - Test ground before placing your weight on it. There may be holes or crevices not readily visible. 1b - Sloping ground will affect balance and stability of machines. 2a - Be cautious of vines, branches or roots that may cause tripping hazards.					L

Mobilization	1. General site security - 2. Struck-by - 3. Caught in -between	1a - Set up boundary markers to delineate security fence and access gate(s). 1b - Hang appropriate "Caution, Danger, Warning" signs 2a - Use caution when working around moving objects. Be prepared for sudden movements. 2b - Look in three (3) dimensions, objects may move vertically, horizontally and diagonally. 3a - Use extreme caution when approaching heavy machinery. Make sure the operator sees you; communicate your intent, get approval from operator, proceed, signal clear. 3b - Avoid passing between stored material, check situation before proceeding. 3c - Always ensure you have sufficient space to pass between objects. 3d - Communicate with others and ensure they know what you intend on doing.	L
Excavation/ Back fill	1. Unauthorized entry 2. Damage to underground utilities 3. Struck-by - - - 4. Excessive dust 5. Crushing 6. Spolis falling into excavation 7. Insufficient access - 8. Cave-in 9. Falls to lower levels - 10. Excessive water	1a - Visitors must check in at project office before proceeding to work area 2a - Tone prior to digging, Probe slowly, hand dig to reveal lines. 3a - Use caution when working around moving objects. Be prepared for sudden movements. 3b - Look in three (3) dimensions, objects may move vertically, horizontally and diagonally. 3c - Use extreme caution when approaching heavy machinery. Make sure the operator sees you; communicate your intent, get approval from operator, proceed, signal clear. 4a - Utilize sufficient water to keep dust to a minimum, avoid excessive water to prevent mud. 5a - All workers shall keep clear of material being dumped, whether in piles or into trucks. 6a - All spoils shall be a minimum of 2' from the edge of the excavation. 7a - Access ladders shall be no more than 25' from workers, ladders shall be extend 3' above landing and secured at the top and bottom. 8a - Sides of trenches deeper than 5' shall be shored, benched or shielded. 9a - Excavations shall have visible warnings if the excavation is not visible to foot traffic. 9b - Workers at the edge of an excavation greater than 6' shall utilize fall protection. 10a - Take measures to keep water from accumulating in bottom of excavation 10b - The excavation shall be inspected at the beginning of the day by the assigned Competent Person 10c - Results of the inspection are to be documented and saved until the excavation is back filled	L
End of day	1. Unauthorized entry, falls into excavation	1a - Appropriate Perimeter Hazard (Type I, II, III). See Appendix Q, Perimeter Protection	L

Equipment to be Used	Training Requirements/Competent or Qualified Personnel	Inspection Requirements
Excavator, Backhoe, Loader, Skid steer, Dump trucks. Barricades, deadman, signage	Only certified operators to operate the machines - Deadman must be capable of 5000 lbs static weight	Daily checklist - Ensure readability of all signs