

**REQUEST FOR PROPOSALS FOR ARCHITECTURAL, ENGINEERING AND  
PROJECT INSPECTION SERVICES FOR THE SAINT PAUL SMALL BOAT HARBOR  
UTILITY EXPANSION PROJECT**

**BY THE**

**CITY OF SAINT PAUL, ALASKA**

**FOR THE**

**U.S. DEPARTMENT OF COMMERCE ECONOMIC DEVELOPMENT  
ADMINISTRATION**

**AWARD # 07-79-07871**

**January 17, 2023**

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## **INTRODUCTION**

The City encompasses the entire Saint Paul Island located in the Bering Sea in the Aleutians West Census Area and within the Aleutians Islands Recording District. The City is a municipal corporation organized in 1971 under the laws of the State of Alaska and a second-class city managed by a City Manager and seven member elected Council. More information can be found at: [www.stpaulak.com](http://www.stpaulak.com).

The City of Saint Paul, Alaska issues this request for proposals (“RFP”) for a qualified firm or team (the “Consultant”) to provide architectural and engineering design, and project inspections services for the Small Boat Harbor Utility Expansion Project.

## **PROJECT DESCRIPTION**

This project includes the extension and upgrade of water, sewer, and electric utility infrastructure to support commercial activity within Saint Paul Island’s small boat harbor area. Final design and environmental review and permitting are also included in this project. The proposed project includes construction of the following:

- Extension and upgrade of water, sewer, and electric utility infrastructure within Saint Paul’s small boat harbor area.
- Extension of approximately 1,120 feet in 10-inch water main with 400 feet of 6-inch hydrant laterals, 130 feet of service lines and two fire hydrants.
- Installation of approximately 860 feet of 8-inch gravity sewer main, abandonment of approximately 450 feet of existing sewer lines, installation of 500 feet of sewer force service lateral, and two sewer lift stations.
- Installation of approximately 600 feet of primary underground cable, installation of two transformers, two sectionalizing cabinets, four new lighting poles, and approximately 1,060 feet of underground service/lighting cable.

See the attached Preliminary Engineering Report for this Project. Polar Consult, who developed the PER, is excluded from proposing to this solicitation per EDA policy and Code of Federal Regulations regarding competition, 2 CFR 200.319(b).

## **PROJECT BUDGET**

The architectural, engineering and project inspection (hard cost) budget for the project is \$383,000.00.

## **PROJECT SCHEDULE**

The following is the Project scheduled based on the EDA award:

Start of Construction - September 7, 2023

Completion of Construction - September 7, 2025

The City is intending that the Project will be completed by August 31, 2024.

## **SCOPE OF SERVICES**

The successful Consultant will coordinate and work closely with City staff. The Consultant shall ensure that the final design for the Project complies with all Economic Development Administration (“EDA”) grant requirements. Pursuant to this RFP, the “Services” shall consist of, and the successful Consultant shall provide, architectural, engineering, project inspections services for the Project, including, but not limited to, the following:

### **DESIGN FIELD SURVEYING**

The Consultant shall provide the following:

- Design field surveying sufficient for the design of the proposed improvements and for preparation of construction plans.
- Horizontal and vertical control for the design shall be developed from existing monumentation and benchmark datum.
- Sufficient control points for future work in project construction.

### **PLANS AND SPECIFICATIONS**

The Consultant shall provide the following:

- Plans and specifications based on the design review comments and local conditions. The plans shall be plan and profile type drawings, prepared according to City standards.
- Plans shall include details of connections to existing facilities and shall include applicable City standards and details for bidding and construction. Additional details to clearly show any other proposed construction shall also be provided.
- Project specifications shall conform to federal, state, and local laws. The project specifications shall include general provisions that will be subject to review by EDA and the City Attorney. The specifications shall include, but not be limited to, a construction schedule, a complete description of construction items and a detailed construction cost estimate.
- Conduct all approved topographic and property surveys and combine with available topographic surveys to create base maps for the Project.
- Conduct all approved geotechnical investigations necessary for the construction of the Project.
- Establish an overall programming timetable for setting out the architectural and engineering activities.
- Prepare the final conceptual design, including a large format display board and electronic files, using the approved conceptual design and incorporating any approved revisions to the City to present at public meetings and meeting of the city council.
- Obtain all permits required for the design of the project.
- Identify and precisely locate all utilities in the footprint of new utilities.
- Determine where interferences with existing facilities may occur as a result of the

construction of this Project, and resolve any conflicts.

- Prepare construction drawings containing title sheet, general note sheet, plan sheets, typical cross section sheets, and detail sheets for the Project.
- Plot typical cross sections to illustrate existing and proposed conditions.
- Prepare complete project specifications, including special provisions and proposal forms.
- Incorporate project specifications into construction contract documents provided by the City, including a description for each bid item.
- Submit 65% construction documents, including structural calculations, to the City for review.
- Address any comments generated from the 65% submittal.
- Based on the input received from the previous submittal, complete the design and prepare final construction documents.
- Submit 95% construction documents, including structural calculations, to the City and to for review and to obtain preliminary approvals.
- Submit 95% construction documents (printed and electronic formats) with the necessary details and instructions to carry out the work in accordance with the approved construction phasing.
- Develop a schedule for construction of the Project.
- Prepare Project costs including line-by-line breakout of all fees, construction costs, and contingencies.
- Attend the pre-bid meeting, attend the pre-construction meeting, and provide assistance during procurement and management of the construction phase of the Project.
- At completion of the project, provide the City with as-built documents for its use in both print and electronic copies (PDF and DWG or shape files).

### **PROJECT INSPECTION**

The Consultant shall provide the following:

- Provide traditional construction administration services, including monitoring general contractor and subcontractor pay applications.
- Coordinate with future construction contractors on behalf of the City.
- Assist with preconstruction conferences.
- Perform periodic site inspections.
- Prepare change orders, as necessary.
- Inspect construction materials.
- Review drawings submitted by construction contractor.
- Conduct construction tests and inspections.

- Inspect all critical construction operations.
- Coordinate with City staff and to provide full time inspections and reporting.
- Participate in the final construction inspection.

## REQUEST FOR PROPOSAL CONTENT

The requested proposals shall be prepared on company stationary and shall include the following items as minimal information for consideration by the City of Saint Paul:

1. Name and address of engineering firm submitting the proposal.
2. Description of the firm's architectural, engineering, and project inspection services and abilities that relate directly to this Project. Provide examples of any prior design projects.
3. Project work plan and methodology.
4. Identify the firm's staff that will be assigned to this project and brief description of the project team's organization.
5. Identify who will design the Project.
6. State who will be assigned as the project manager for the Project.
7. Include resumes of the firm and project team members.
8. Provide a timeline for completing the project meeting the requirements of this RFP.
9. Provide references of clients for whom the firm has provided similar work.
10. Identify firms and/or consultants that will provide subcontract services for the project.
11. The proposal shall include cost of all services provided as required by this RFP. The fee for basic services must be either a fixed price or a cost reimbursement with an agreed maximum to be eligible for EDA participation. The use of the cost-plus-a-percentage-of-cost and percentage of construction cost forms of compensation are specifically prohibited. The basic fee shall not exceed that prevailing for comparable services in the project area.

## REQUEST FOR PROPOSAL SCHEDULE

Release of RFP	January 19, 2023
Proposals Due	February 17, 2023
Review of Proposals Completed	March 10, 2023
Selection of Contractor	March 31, 2023
Negotiation of Contract	April 15, 2023

## SELECTION CRITERIA

Proposals will be reviewed for completeness and qualifications. Final selection of a firm for contract negotiations will be made based on the following criteria:

<b>Criteria</b>	<b>Scoring</b>
Experience, qualifications, and ability to perform the project meeting these requirements.	maximum score <u>35</u> points
Consultant's scope of work methodology and work plan.	maximum score <u>25</u> points
Consultant's performance on other similar projects particularly quality of work, content, budget control, cooperativeness, and responsiveness.	maximum score <u>20</u> points
Project management, including project schedule.	maximum score <u>10</u> points
Proposed fee for all services.	maximum score <u>10</u> points

The final contract for these Services shall be awarded only after negotiations with the selected firm to establish a fair and reasonable price.

The City actively encourages submission of proposals from disadvantaged business enterprises and companies owned by minorities, women, immigrants, and veterans. The City does not discriminate based on race, color, religion, creed, sex, sexual orientation, gender identity, age, ancestry, national origin, disability, or veteran status in consideration of this award.



## TERMS AND CONDITIONS

The following terms and conditions apply to all proposals:

1. The City reserves the right to reject all proposals submitted; to select one or more responding parties; to void this RFP and the review process and/or terminate negotiations at any time; to select separate responding parties for various components of the scope of services; and to select a final party/parties from among the proposals received in response to this RFP. Additionally, all RFP project elements, requirements and schedules are subject to change and modification. The City also reserves the unqualified right to modify, suspend, or terminate at its sole discretion all aspects of this RFP process, to obtain further information from all responding parties, and to waive any defects as to form or content of the RFP or any responses by any party.
2. This RFP does not commit the City to award a contract, defray any costs incurred in the preparation of a response to this RFP, or contract for any services. All submitted responses to this RFP become the property of the City as public records. All proposals may be subject to public review, on request, unless exempted as discussed elsewhere in this RFP.
3. By accepting this RFP and/or submitting a proposal in response thereto, each responding party agrees for itself, its successors and assigns, to hold the City of Saint Paul, and all of their various agents, council members, consultants, attorneys, and employees harmless from and against any and all claims and demands of whatever nature or type, which any such responding company, its representatives, agents, contractors, successors or assigns may have against any of them as a result of issuing this RFP, revising this RFP, conducting the selection process and subsequent negotiations, making a final recommendation, selecting a responding party/parties or negotiating or executing an agreement incorporating the commitments of the selected responding party.
4. By submitting responses, each responding party acknowledges having read this RFP in its entirety and agrees to all terms and conditions set out in this RFP.
5. Responses shall be open and valid for a period of ninety (90) days from the due date of this RFP.
6. Funding Agency Requirements. This project is grant-funded by the Economic Development Administration (EDA) and as such, the selected bid which results in a professional services agreement (PSA) between the selected consultant the City will require the following conditions in the agreement:
  - a. The PSA provides for inspection of project construction to assure compliance with plans, specifications, and all other contract documents. If the City chooses the selected consultant as the project inspector, the requirements for inspection services shall be clearly defined and the amount the City is required to pay for such services shall be stated.
  - b. The selected consultant agrees to obtain professional liability insurance in the amount of \$2,000,000 and be responsible for any damages arising from any defects in design or negligence in the performance of the construction inspector, if the inspector is furnished by the selected consultant.
  - c. The selected consultant agrees to supervise any required subsurface explorations such as borings and soil tests to determine amounts of rock excavation or foundation

- conditions, no matter whether they are performed by the selected consultant or by others paid by the City.
- d. The selected consultant agrees to attend bid openings, prepare and submit tabulation of bids, and make a recommendation as to contract award.
  - e. The selected consultant agrees to review proof of bidder's qualifications and recommend approval or disapproval.
  - f. The City has checked the website [www.SAM.gov](http://www.SAM.gov) and has verified that the selected consultant does not appear on the Excluded Parties List.
  - g. For contracts over \$100,000, an executed copy of the Certification Regarding Lobbying has been submitted from the consultant as required by Section 1352, Title 31, of the U.S. Code.
  - h. The A/E agrees to submit a report not less frequently than quarterly to the City covering the general progress of the job and describing any problems or factors contributing to delay.
  - i. The executed PSA has been reviewed by the City's attorney.

### **REQUESTED SUBMITTAL**

To be considered, proposals must be received no later than Friday February 17, 2023, at 5:00 PM Alaska Time.

Electronic proposals should be in PDF format and sent by email to [pazavadil@stpaulak.com](mailto:pazavadil@stpaulak.com).

If you have any questions concerning this request, please contact Phillip A. Zavadil, City Manager at 907-341-3994 or [pazavadil@stpaulak.com](mailto:pazavadil@stpaulak.com). Thank you for taking the time to respond to this request.



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## **APPLICATION SUPPLEMENT C**

### **PRELIMINARY ENGINEERING REPORT**

This Preliminary Engineering Report (PER) provides preliminary information for the Saint Paul Small Boat Harbor Utility Expansion Project proposed by the City of Saint Paul, Alaska (City). The intent of this report is to present project design information and support engineering review of the proposed project by Economic Development Administration (EDA) personnel consistent with questions and guidance within Form ED-900 and associated EDA documentation.

This report has been prepared by Polarconsult Alaska, Inc. (Polarconsult), which has served as the City’s contracted engineering consultant for the past 25+ years. The information in this PER is based on Polarconsult’s understanding of the proposed project scope, knowledge of the City’s existing utility infrastructure, general familiarity with expected conditions in the project area, and prior design, permitting, and construction engineering services for the existing water main extension to the boat repair facility and other prior City utility extension/improvement projects.

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## 1.0 DESCRIPTION OF PROJECT COMPONENTS

This project includes extension and upgrade of water, sewer, and electric utility infrastructure to support commercial activity within Saint Paul’s small boat harbor area. Estimated quantities of new and replacement utility infrastructure are tabulated below, and detailed descriptions of project components for each of these three utilities follow.

Utility buildings included in this project would mimic the architectural treatments of historic utility buildings in the harbor district to help maintain the existing character of the area. Relevant features include the characteristic 6:12 pitch of shingle-clad roofs and ship-lap siding. These elements would be mimicked with modern materials and construction methods.

### New and Replacement Utility Infrastructure Quantity Estimates for this Project

Component	Estimated Quantity
<b>Water Utility Improvements</b>	
New Water Main Extension	1,120 feet of 10-inch main
New Water Laterals	210 feet of 6-inch hydrant laterals
New Fire Hydrants	2
New Water Service Lines	110 feet (four services)
<b>Sewer Utility Improvements</b>	
New Gravity Sewer Main	665 feet of 8-inch main
Replacement Gravity Sewer Main	200 feet of 8-inch main
New Sewer Force Main	20 feet
New Gravity Sewer Service Lateral	18 feet (one service)
Replacement Gravity Service Lateral	44 feet (three services)
New Sewer Force Service Lateral	500 feet
New Sewer Main Lift Station	1
New Sewer Service Lift Station	1
<b>Electric Utility Improvements</b>	
New Electric Primary Underground Cable	720 feet
New Electric Transformers	2
New Electric Sectionalizing Cabinets	2
Remove Existing Electric Transformer	1
New Lighting	4 new poles for harbor area lighting
New Underground Service / Lighting Cable	1,060 feet

### **1.1 Water Utility Improvement Components**

Water service to the small boat harbor area would be improved by extending an existing dead-end 10-inch diameter high-density polyethylene (HDPE) water main installed to serve the boat repair facility an additional 1,120 feet to interconnect with an existing water main east of the harbor area. This new main would run within the road right-of-way through the center of the harbor subdivision, providing water service and fire protection flow to future development in this area and also providing loop feed through the harbor area, which will increase water distribution reliability, improve system circulation, and increase fire flow capacity to the existing boat repair facility and future buildings.

Alternate water service options for this area were explored during design of the water main extension to the boat repair facility. The 10-inch loop feed was determined to be the best alternative to provide adequate fire flow to the area for public safety. On-site wells in the project area are not allowed due to a Critical Watershed Management Area designation.

### **1.2 Sewer Utility Improvement Components**

Sewer service would be provided through installation of five new manholes and 865 feet of gravity collection mains feeding to a new sewer lift station discharging into the existing harbor force main. 500 feet of the existing harbor force main would be taken out of service and replaced by these new gravity mains. A lift station would be installed for the small boat harbor / harbor master's office discharging to the new gravity collection system via a 500 foot force main. This new installation provides gravity sewer service to the four existing buildings in the area, the small boat harbor, and the proposed harbor office. It also provides framework for future development in the area. The existing failing 252 feet of shallow grade main installed in the 1950s that serves three of the buildings in this area would be removed from service and abandoned in place.

Alternate installation of individual holding tanks at buildings, or individual lift stations at buildings discharging into the existing harbor force main have been found to be costly and maintenance intensive. On-site disposal is also not an option.

### **1.3 Electric Utility Improvement Components**

Approximately 230 feet of new underground 7.2 kV three phase distribution would be installed from a new sectionalizing cabinet set near the Boat Repair Facility to a new transformer to provide electric service to the new sewer lift station near the A-Dorm. Approximately 600 feet of new underground 7.2 kV single phase distribution and a new transformer would provide electric service to the small boat harbor, harbor site lighting, and the proposed harbor master office. One existing transformer would be removed from service and underground power lines adjacent to the village corporation office would be relocated/adjusted to a single sectionalizing cabinet to provide electrical service to existing buildings.

Small boat harbor lighting will consist of pole-mounted LED area lighting to illuminate the small boat harbor and adjacent upland areas. This will augment limited area lighting mounted on the existing boat repair building.

Electrical service options are limited to access to existing distribution lines. The shortest and least costly alternative was selected for this project.

## **2.0 CONFORMANCE STATEMENT**

The project components described in this Preliminary Engineering Report (PER) are consistent with the EDA investment project description that is provided in Section B.2 of Form ED-900.

## **3.0 PROJECT DRAWINGS**

Preliminary drawings that show the general layout and location of the existing site conditions and of the project components are included as Attachment C-1. These drawings also show the location of project beneficiaries identified in Section B.9 of Form ED-900. The drawings identify proposed project components including rough dimensions and quantities for major project components.

## **4.0 FEASIBILITY ANALYSIS**

This project consists of the expansion and upgrade of underground water, sewer, and electric utility mains and services within the small boat harbor area of the City of Saint Paul, Alaska. All the proposed utility extensions are similar or equal in type and construction to existing in-service utilities within the community. All utilities can be constructed using conventional construction methods, and there are no unusual features or circumstances that affect project technical feasibility.

The project site is an existing developed area consisting of (1) dredge spoils that were placed on tidelands when the harbor was developed and (2) natural upland areas. The entire site is existing developed, stable, generally level terrain.

Discussion of relevant construction considerations follows.

Portions of the project are within or adjacent to existing underground utilities. Construction work proximate to existing utilities will be conducted in accordance with accepted good practice, including locating existing utilities prior to excavation and using appropriate excavation methods when working near existing utilities to avoid damage.

Portions of the project are within a Critical Watershed Management Area (CWMA) created in March 2006 by Alaska Department of Natural Resources (ADNR) due to remaining subsurface contamination under existing buildings after a major cleanup effort was completed by the

National Oceanic and Atmospheric Administration (NOAA). The CWMA restricts development of wells or use of the groundwater in the cleanup area due to the remaining subsurface contamination. Portions of this project are within the CWMA. All utility trenching is within previously disturbed areas or new tidelands fill, and does not use or interface with groundwater. The new lift station sump will be constructed within the tidally influenced groundwater table. Appropriate measures may be necessary to manage water produced from dewatering of the lift station excavation to prevent unauthorized discharge of potentially contaminated water.

## **5.0 METHOD OF CONSTRUCTION**

The City intends to complete project construction by hiring qualified contractors for construction. Construction contractors will be selected using a sealed competitive bid / public procurement process consistent with city ordinance and applicable state and federal regulations.

## 6.0 NUMBER OF CONSTRUCTION CONTRACTS

The City anticipates it will execute two contracts for construction. One contract will include all of the water and sewer improvements included in this project, and a second contract will include all electrical and lighting improvements included in this project.

### 6.1 Useful Life Estimates

Anticipated useful life of utility infrastructure included in this project is summarized in the following table. Estimates are based on typical industry practice and local experience on Saint Paul Island. Above-ground infrastructure in Saint Paul is subject to accelerated corrosion due to severe marine exposure, which can result in reduced useful life as compared with performance in less severe climates. Where practical, the City uses materials and construction such as non-metallic materials, premium coating systems, and similar options to increase useful life.

<b>Anticipated Useful Life of Utility Infrastructure Improvements</b>	
<b>Component</b>	<b>Anticipated Useful Life</b>
<b>Water Utility Improvements</b>	
New Water Main Extension	50 years
New Water Laterals	50 years
New Fire Hydrants	20 years
New Water Service Lines	50 years
<b>Sewer Utility Improvements</b>	
New Gravity Sewer Main	50 years
Replacement Gravity Sewer Main	50 years
New Sewer Force Main	50 years
New Gravity Sewer Service Lateral	50 years
Replacement Gravity Service Lateral	50 years
New Sewer Force Service Lateral	50 years
New Sewer Main Lift Station	50 years (sump vault, building) 20 years (pumps, controls)
New Sewer Service Lift Station	50 years (sump tank) 20 years (pumps, controls)
<b>Electric Utility Improvements</b>	
New Electric Primary Underground Cable	30 years
New Electric Transformers	20 years
New Electric Sectionalizing Cabinets	30 years
Replacement Electric Sectionalizing Cabinets	30 years
New Lighting	50 years (poles) 20 years (light fixtures)
New Underground Service / Lighting Cable	30 years



## **7.0 DETAILED CONSTRUCTION COST ESTIMATE**

A detailed construction cost estimate for this project is included as Attachment C.2 to this report. Contingencies are embedded within the unit costs used to prepare the cost estimate, therefore no separate construction contingencies are enumerated in the cost estimate.

## **8.0 REAL PROPERTY ACQUISITION**

The budget does not include cost for real property acquisition. The only real property acquisition required for this project are new easements for some of the proposed realigned utility improvements.

The City has initiated the process of obtaining easements required for this project from the land owner, Tanadgusix Corporation, Inc (TDX). The City expects that easements will be granted at no real estate cost in recognition of the fact that replacement easements are shorter than existing easements and the value added to TDX's real estate holdings in the project area from this project. This value added is reduced development costs for improving TDX properties by bringing water, sewer, and electric service closer to those properties and removing an existing easement that runs through the center of a large vacant parcel owned by TDX.

## 9.0 REQUIRED PERMITS

### 9.1 General

The general project construction requires the following permits:

- Alaska Department of Environmental Conservation (ADEC) Excavation Dewatering Permit. This has not started, but the timeline for obtaining this permit is shown in the estimated project schedule below.
- City Permits. The project will require City construction and public use permits. These have not started, but the City will work directly with its contractors to secure necessary permits. These approvals address local matters to protect the safety, health, and welfare of the public and municipal/public infrastructure.

The following permits were reviewed and determined not applicable for the project scope of work.

- ADEC Stormwater Pollution Protection Plan (SWPPP). The total project area is less than one acre so a SWPPP is not required; however, contractors will be required to develop and implement a water quality control plan to manage stormwater discharges and fugitive dust emissions associated with construction activities.
- ADEC APDES Construction General Permit. The total project area is less than one acre so this permit is not required.
- U.S. Army Corps of Engineers Section 404 Permit. The entire project area is existing developed uplands. There are no waters of the U.S. or jurisdictional wetlands present. No Section 404 permit is required.

### 9.2 Water Improvements

Alaska Department of Environmental Conservation (ADEC) Drinking Water Program Engineering Plan Review. Improvements to the water utility require plan review and approval, permit to construct, and permit to operate from the ADEC. The hired contractor will be responsible for obtaining these approvals on behalf of the City water utility after final construction plans are prepared. This has not started, but the timeline for obtaining this permit is shown in the estimated project schedule below.

### 9.3 Sewer Improvements

ADEC Engineered Wastewater Disposal System Plan. Improvements to the sewer utility require plan review and approval, permit to construct, and permit to operate from the ADEC. The hired contractor will be responsible for obtaining these approvals on behalf of the City sewer utility after final construction plans are prepared. This has not started, but the timeline for obtaining this permit is shown in the estimated project schedule below.

### 9.4 Electric Improvements

No permits specific to electric system improvements are required for this project.

## 10.0 ESTIMATED PROJECT SCHEDULE

The estimated schedule for this project is presented in the following table. The schedule presumes EDA makes a funding decision, executes a grant award, and issues notice to proceed by September 2022. The City anticipates the proposed utility improvements can be completed in a single summer construction season in 2023. Construction completion is in 2024 and the grant performance period is through December 31, 2024 to allow for unforeseen delays in design, permitting, procurement, or construction. This performance period would allow a one-year delay in construction and/or would support a two-year construction plan if such is proposed by a contractor.

### Estimated Project Schedule

Activity	Duration (months)	Completion Date
<b>Water and Sewer Utility Improvements</b>		
Grant Notice to Proceed from EDA	N/A	September 2022
Completed Designs	3	December 2022
ADEC Plan Review, Permit to Construct, City Permits	2	February 2023
Easement Agreement Executed and Recorded	1	February 2023
Procurement Process	1	March 2023
Contractor Selection and Notice to Proceed	1	April 2023
Contractor mobilized to site	3	July 2023
Construction Completed	13	August 2024
Testing and Permit to Operate, utilities in service	1	September 2024
Contract and Grant Close-out	3	Dec. 2024 or earlier
<b>Electric Utility Improvements</b>		
Completed Designs	3	December 2022
Easement Agreement Executed and Recorded	2	February 2023
Procurement Process	1	March 2023
Contractor Selection and Notice to Proceed	1	April 2023
Contractor mobilized to site	2	June 2023
Construction Completed	13	August 2024
Testing/acceptance, utilities in service	1	September 2024
Grant Close-out	3	Dec. 2024 or earlier

## 11.0 PROJECT BUDGET BREAKDOWN

A proposed project budget breakdown consistent with the cost classifications on Form SF-424C is included with the detailed construction cost estimated provided in Attachment C.2.

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**ATTACHMENT C-1: PROJECT DRAWINGS**

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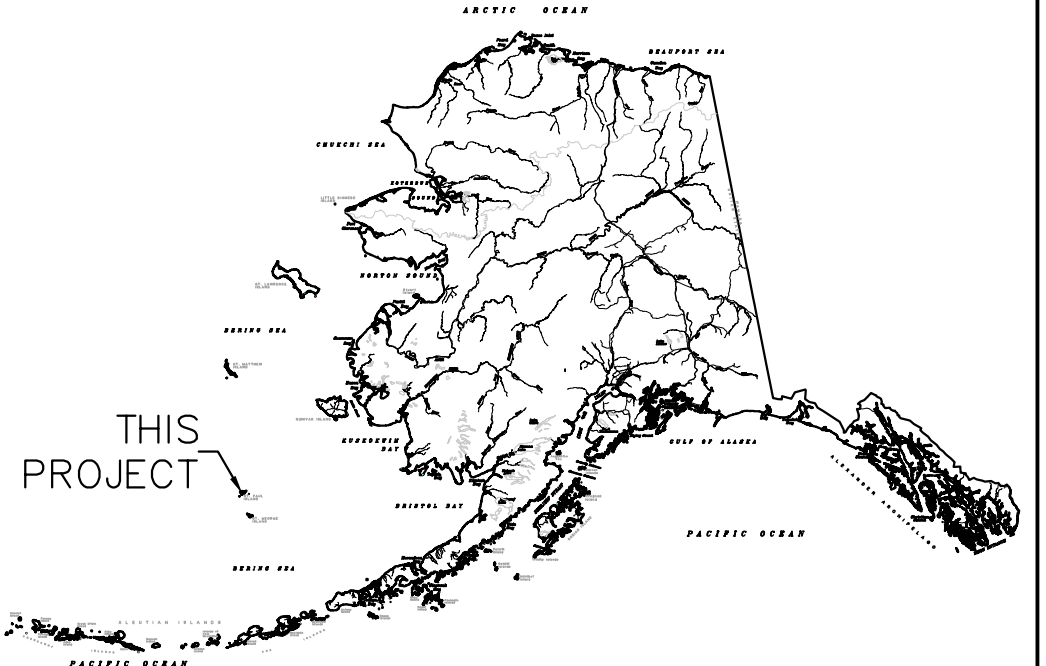
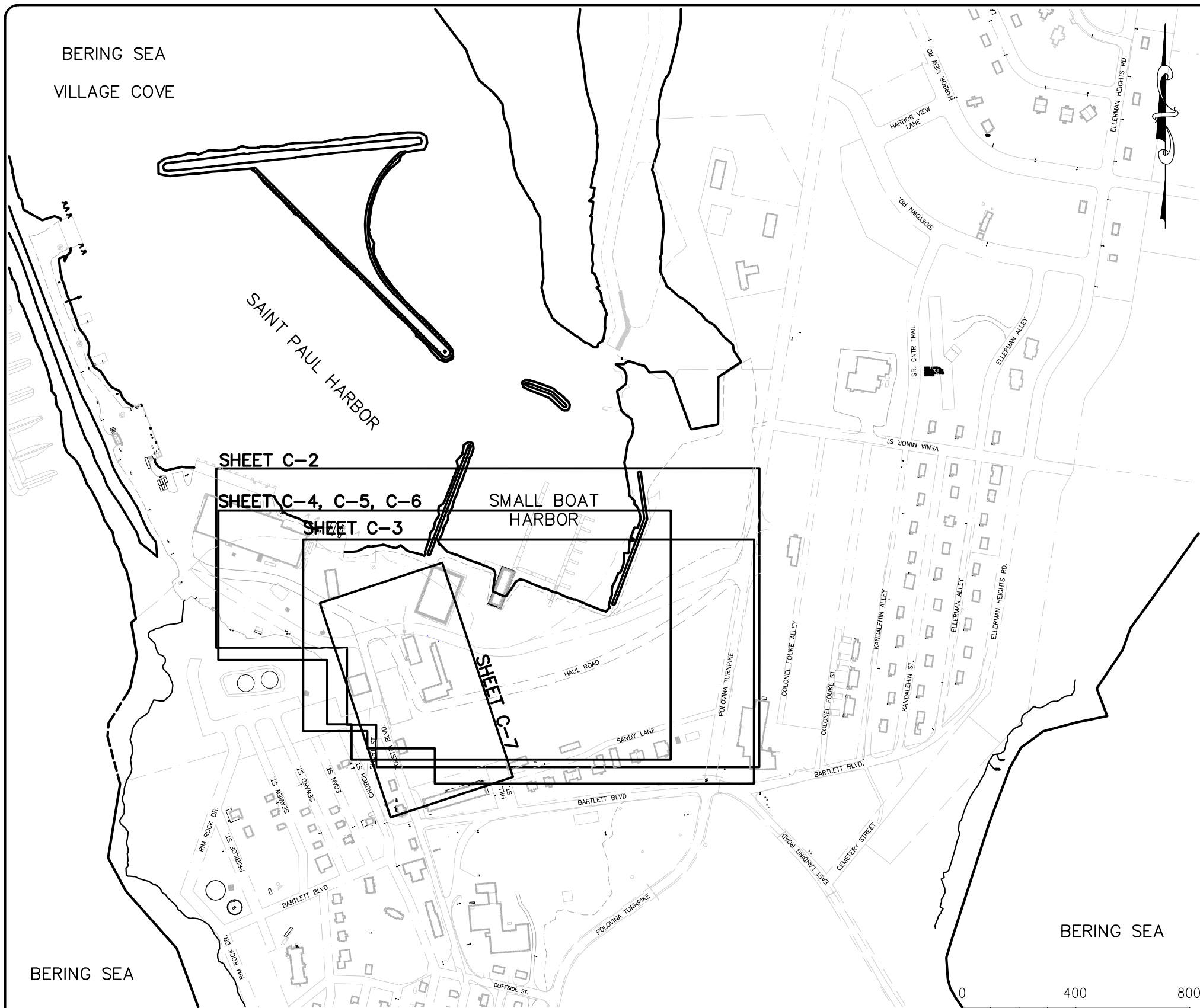
# SMALL BOAT HARBOR UTILITY EXPANSION PROJECT SAINT PAUL, ALASKA

**SHEET INDEX:**

- C-1 SITE PLAN, VICINITY MAP, NOTES
- C-2 SMALL BOAT HARBOR WATER, SEWER, ELECTRIC SUMMARY
- C-3 SMALL BOAT HARBOR WATER UTILITY EXTENSION
- C-4 SMALL BOAT HARBOR SEWER UTILITY EXTENSION
- C-5 SMALL BOAT HARBOR ELECTRIC UTILITY EXTENSION
- C-6 UTILITY EXTENSION EASEMENTS
- C-7 UTILITY EXTENSION EASEMENTS DETAIL

**PROPERTY NOTES:**

1. PROJECT WITHIN ARD PLAT #2013-19 "HARBOR SUBDIVISION", AND ARD PLAT #2019-2 "ALASKA TIDELAND SURVEY 1667."
2. EXISTING UTILITY EASEMENTS WITHING HARBOR SUBDIVISION ARE SHOWN IN ARD DOC. #2013-000447-0 "HARBOR UTILITY EASEMENTS".
3. PROPOSED UTILITY EXTENSIONS ARE WITHIN HARBOR SUBDIVISION ROAD RIGHT-OF-WAY, OR ACQUIRED EASEMENTS AS SHOWN ON SHEETS C-5 AND C-6.



**1** COMMUNITY -- SITE PLAN  
SCALE: 1 INCH = 400 FEET

**2** PACIFIC OCEAN  
VICINITY MAP  
SCALE: NTS

DATE	NO.	DATE	REVISIONS
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CHECKED: JG			
SCALE: AsNoted			
FILE: HarUtil121			

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ENERGY SYSTEMS • ENGINEERING DESIGN • PERMITTING

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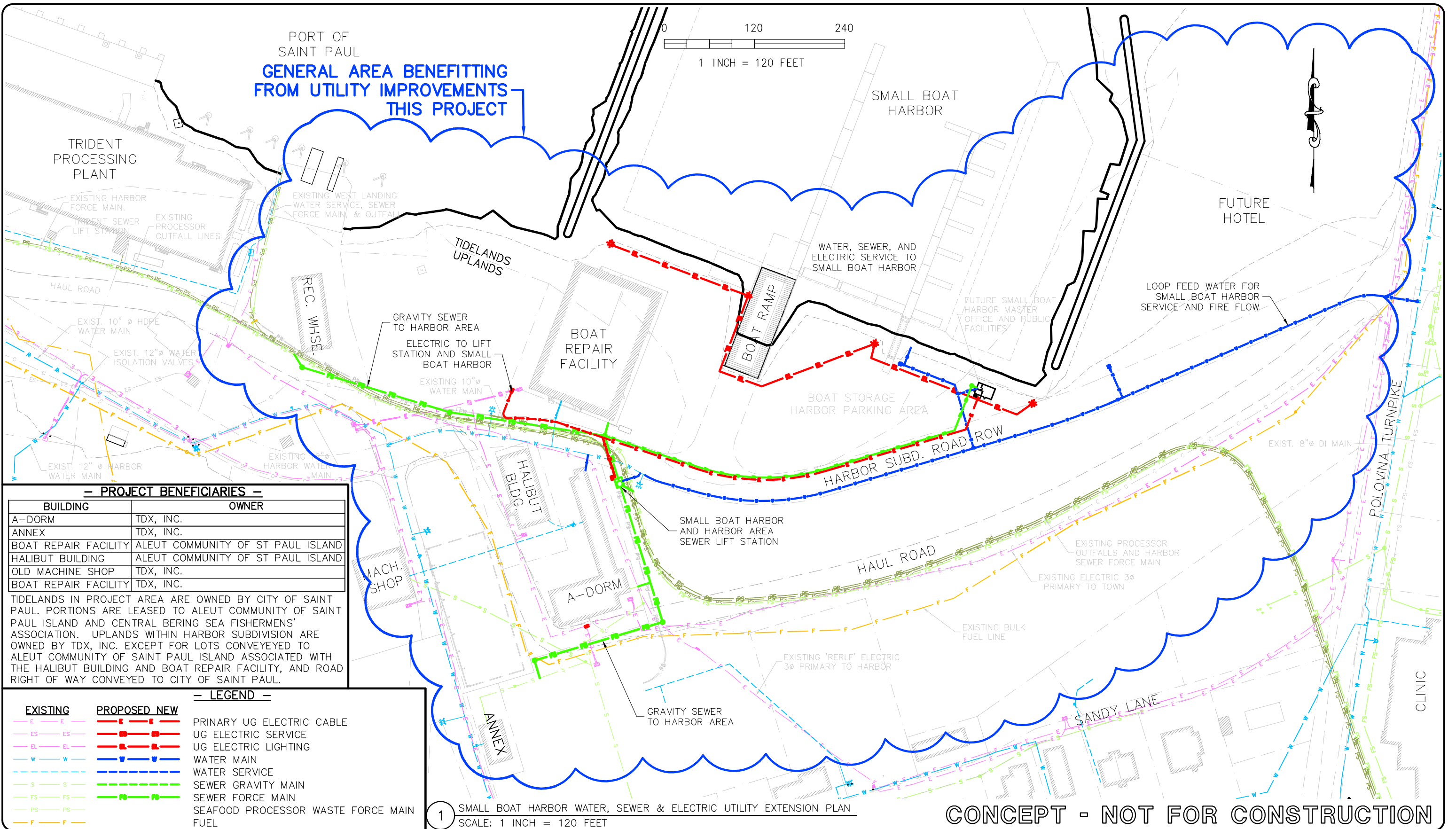
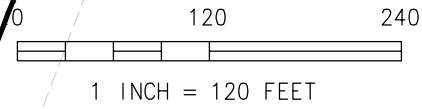
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**SITE PLAN, VICINITY MAP & INDEX**

PROJECT  
**SAINT PAUL SMALL BOAT HARBOR  
UTILITY EXPANSION PROJECT**  
ST. PAUL ISLAND, AK

SHEET  
**C-1**  
OF 7



PORT OF SAINT PAUL  
**GENERAL AREA BENEFITTING FROM UTILITY IMPROVEMENTS THIS PROJECT**



**- PROJECT BENEFICIARIES -**

BUILDING	OWNER
A-DORM	TDX, INC.
ANNEX	TDX, INC.
BOAT REPAIR FACILITY	ALEUT COMMUNITY OF ST PAUL ISLAND
HALIBUT BUILDING	ALEUT COMMUNITY OF ST PAUL ISLAND
OLD MACHINE SHOP	TDX, INC.
BOAT REPAIR FACILITY	TDX, INC.

TIDELANDS IN PROJECT AREA ARE OWNED BY CITY OF SAINT PAUL. PORTIONS ARE LEASED TO ALEUT COMMUNITY OF SAINT PAUL ISLAND AND CENTRAL BERING SEA FISHERMENS' ASSOCIATION. UPLANDS WITHIN HARBOR SUBDIVISION ARE OWNED BY TDX, INC. EXCEPT FOR LOTS CONVEYED TO ALEUT COMMUNITY OF SAINT PAUL ISLAND ASSOCIATED WITH THE HALIBUT BUILDING AND BOAT REPAIR FACILITY, AND ROAD RIGHT OF WAY CONVEYED TO CITY OF SAINT PAUL.

**- LEGEND -**

EXISTING	PROPOSED NEW	
— E — E —	— E — E —	PRIMARY UG ELECTRIC CABLE
— ES — ES —	— E — E —	UG ELECTRIC SERVICE
— EL — EL —	— E — E —	UG ELECTRIC LIGHTING
— W — W —	— W — W —	WATER MAIN
— W — W —	— W — W —	WATER SERVICE
— S — S —	— S — S —	SEWER GRAVITY MAIN
— FS — FS —	— S — S —	SEWER FORCE MAIN
— PS — PS —	— S — S —	SEAFOOD PROCESSOR WASTE FORCE MAIN
— F — F —	— S — S —	FUEL

**1** SMALL BOAT HARBOR WATER, SEWER & ELECTRIC UTILITY EXTENSION PLAN  
 SCALE: 1 INCH = 120 FEET

**CONCEPT - NOT FOR CONSTRUCTION**

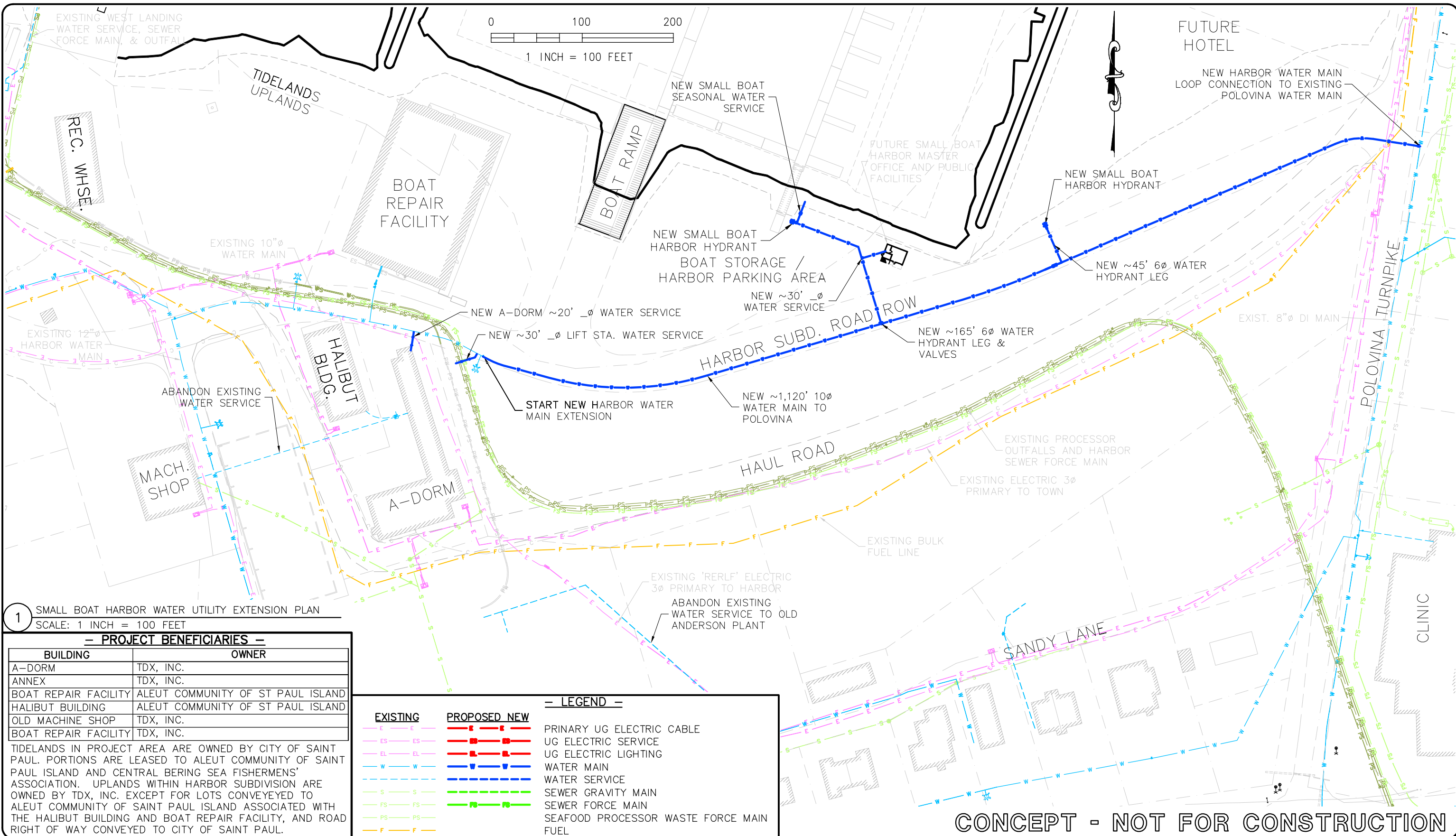
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DRAWING  
**UTILITY EXTENSION LAYOUT  
 WATER, SEWER AND ELECTRIC  
 WITHIN HARBOR SUBDIVISION**

PROJECT  
**SAINT PAUL SMALL BOAT HARBOR  
 UTILITY EXPANSION PROJECT**  
 ST. PAUL ISLAND, AK

Sheet  
**C-2**  
 OF 7



1 SMALL BOAT HARBOR WATER UTILITY EXTENSION PLAN  
SCALE: 1 INCH = 100 FEET

**- PROJECT BENEFICIARIES -**

BUILDING	OWNER
A-DORM	TDX, INC.
ANNEX	TDX, INC.
BOAT REPAIR FACILITY	ALEUT COMMUNITY OF SAINT PAUL ISLAND
HALIBUT BUILDING	ALEUT COMMUNITY OF SAINT PAUL ISLAND
OLD MACHINE SHOP	TDX, INC.
BOAT REPAIR FACILITY	TDX, INC.

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**- LEGEND -**

<b>EXISTING</b>	<b>PROPOSED NEW</b>	
		PRIMARY UG ELECTRIC CABLE
		UG ELECTRIC SERVICE
		UG ELECTRIC LIGHTING
		WATER MAIN
		WATER SERVICE
		SEWER GRAVITY MAIN
		SEWER FORCE MAIN
		SEAFOOD PROCESSOR WASTE FORCE MAIN
		FUEL

**CONCEPT - NOT FOR CONSTRUCTION**

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**WATER UTILITY EXTENSION LAYOUT  
WITHIN HARBOR SUBDIVISION**

PROJECT

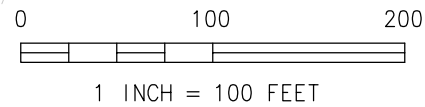
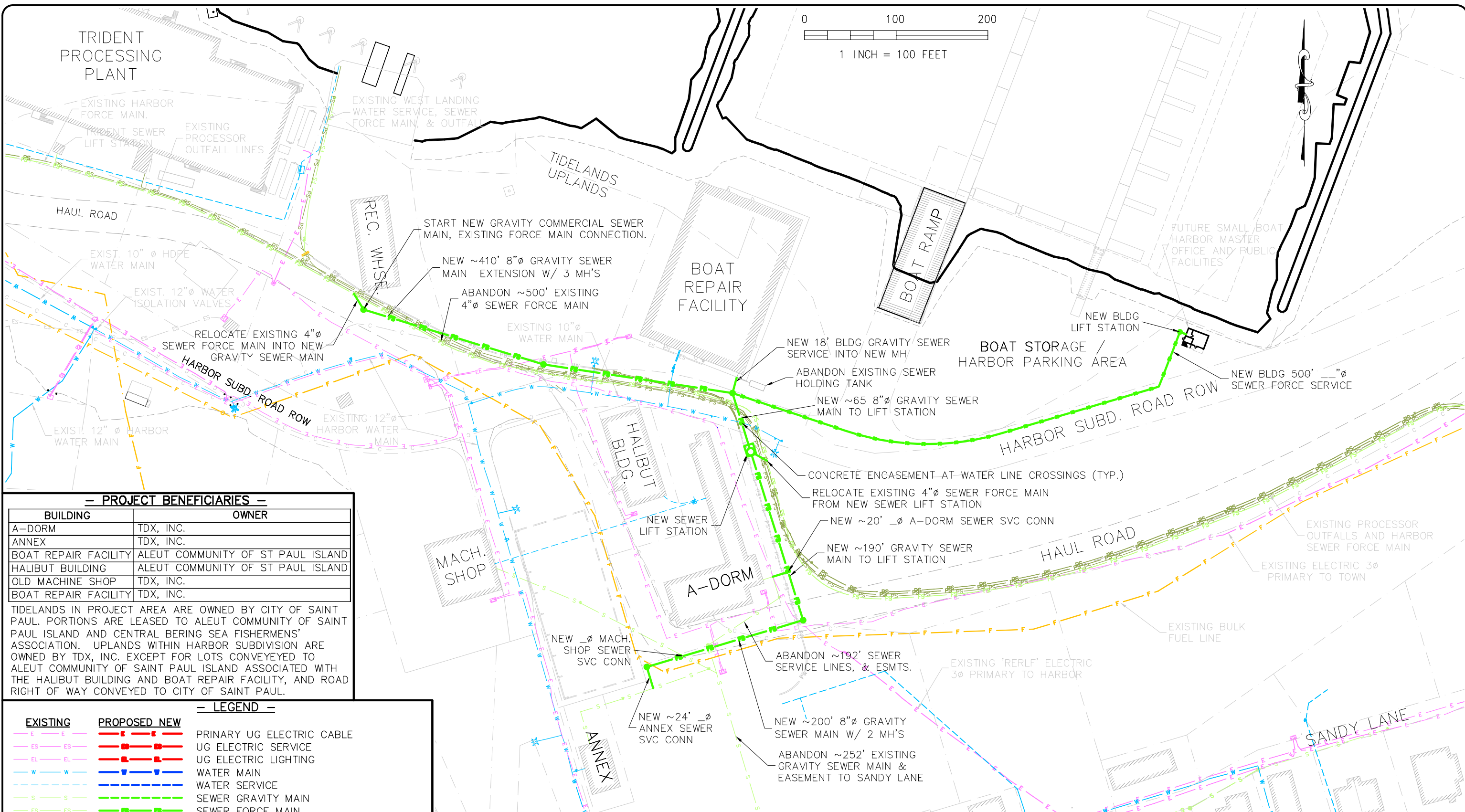
**SAINT PAUL SMALL BOAT HARBOR  
UTILITY EXPANSION PROJECT**

ST. PAUL ISLAND, AK

Sheet

**C-3**

OF 7



**- PROJECT BENEFICIARIES -**

BUILDING	OWNER
A-DORM	TDX, INC.
ANNEX	TDX, INC.
BOAT REPAIR FACILITY	ALEUT COMMUNITY OF ST PAUL ISLAND
HALIBUT BUILDING	ALEUT COMMUNITY OF ST PAUL ISLAND
OLD MACHINE SHOP	TDX, INC.
BOAT REPAIR FACILITY	TDX, INC.

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**- LEGEND -**

EXISTING	PROPOSED NEW	
— E — E —	— E — E —	PRIMARY UG ELECTRIC CABLE
— ES — ES —	— ES — ES —	UG ELECTRIC SERVICE
— EL — EL —	— EL — EL —	UG ELECTRIC LIGHTING
— W — W —	— W — W —	WATER MAIN
— W — W —	— W — W —	WATER SERVICE
— S — S —	— S — S —	SEWER GRAVITY MAIN
— FS — FS —	— FS — FS —	SEWER FORCE MAIN
— PS — PS —	— PS — PS —	SEAFOOD PROCESSOR WASTE FORCE MAIN
— F — F —	— F — F —	FUEL

1 SMALL BOAT HARBOR SEWER UTILITY EXTENSION PLAN  
SCALE: 1 INCH = 100 FEET

**CONCEPT - NOT FOR CONSTRUCTION**

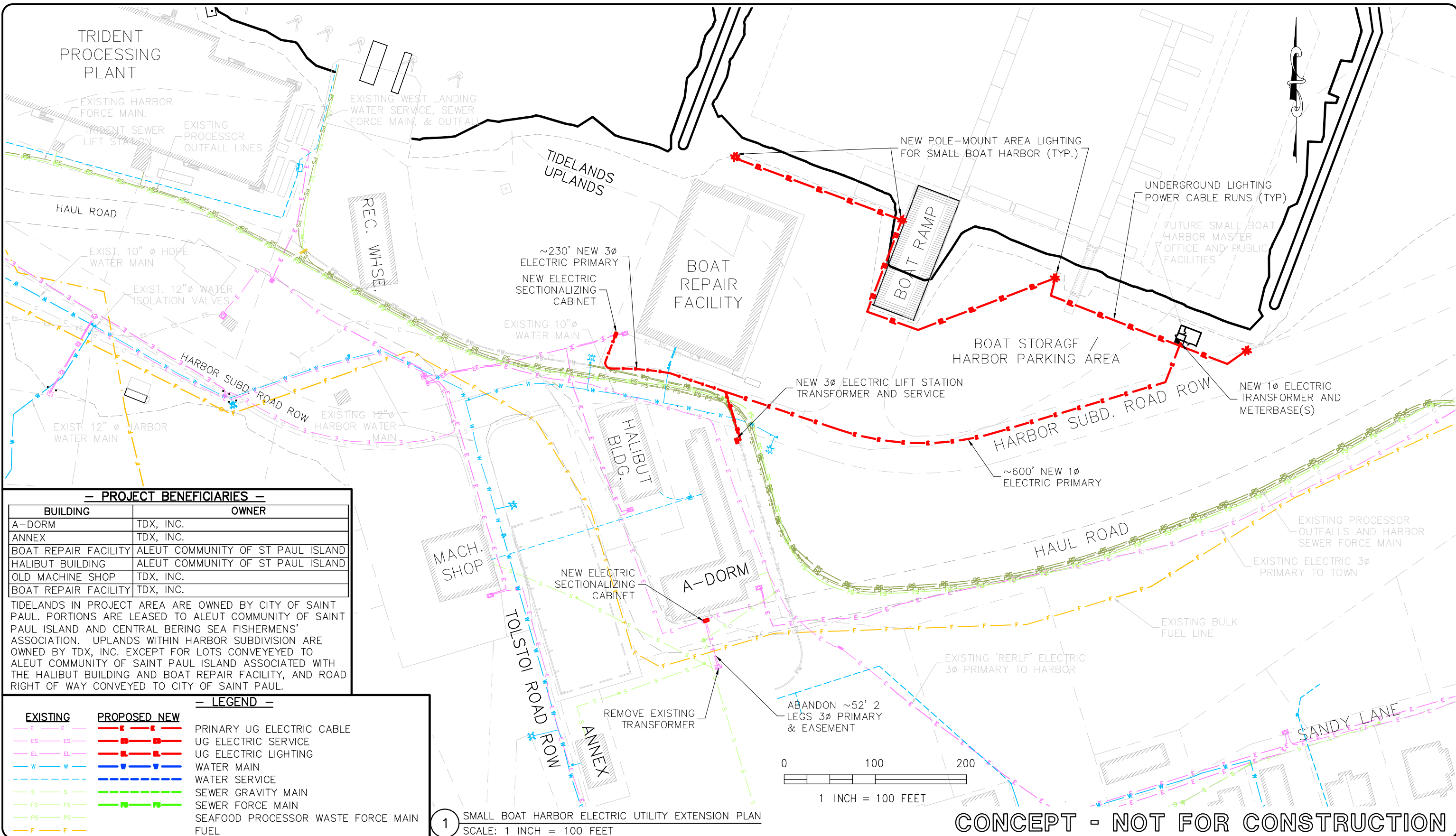
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DRAWING  
**SEWER UTILITY EXTENSION LAYOUT  
 WITHIN HARBOR SUBDIVISION**

PROJECT  
**SAINT PAUL SMALL BOAT HARBOR  
 UTILITY EXPANSION PROJECT**  
 ST. PAUL ISLAND, AK

Sheet  
**C-4**  
 OF 7



**- PROJECT BENEFICIARIES -**

BUILDING	OWNER
A-DORM	TDX, INC.
ANNEX	TDX, INC.
BOAT REPAIR FACILITY	ALEUT COMMUNITY OF ST PAUL ISLAND
HALIBUT BUILDING	ALEUT COMMUNITY OF ST PAUL ISLAND
OLD MACHINE SHOP	TDX, INC.
BOAT REPAIR FACILITY	TDX, INC.

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**- LEGEND -**

EXISTING	PROPOSED NEW	
— E — E —	— E — E —	PRIMARY UG ELECTRIC CABLE
— ES — ES —	— E — E —	UG ELECTRIC SERVICE
— EL — EL —	— E — E —	UG ELECTRIC LIGHTING
— W — W —	— W — W —	WATER MAIN
— W — W —	— W — W —	WATER SERVICE
— S — S —	— S — S —	SEWER GRAVITY MAIN
— FS — FS —	— S — S —	SEWER FORCE MAIN
— PS — PS —	— S — S —	SEAFOOD PROCESSOR WASTE FORCE MAIN
— F — F —	— S — S —	FUEL

1 SMALL BOAT HARBOR ELECTRIC UTILITY EXTENSION PLAN  
SCALE: 1 INCH = 100 FEET

**CONCEPT - NOT FOR CONSTRUCTION**

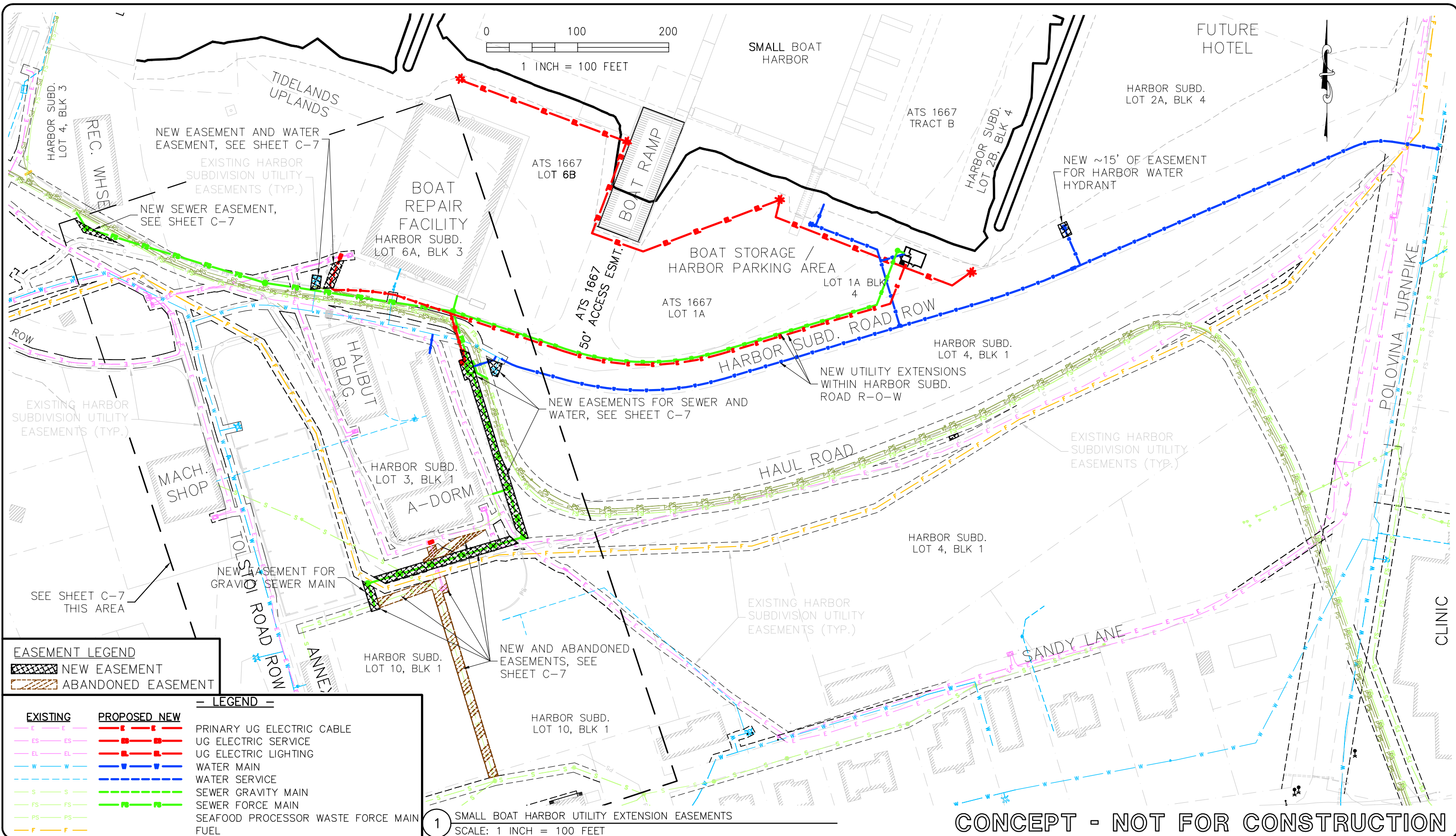
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SCALE: AsNoted			
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DRAWING  
**ELECTRIC UTILITY EXTENSION LAYOUT  
WITHIN HARBOR SUBDIVISION**

PROJECT  
**SAINT PAUL SMALL BOAT HARBOR  
UTILITY EXPANSION PROJECT**  
ST. PAUL ISLAND, AK

Sheet  
**C-5**  
OF 7



**EASEMENT LEGEND**  
 NEW EASEMENT  
 ABANDONED EASEMENT

**LEGEND**

EXISTING	PROPOSED NEW	
		PRIMARY UG ELECTRIC CABLE
		UG ELECTRIC SERVICE
		UG ELECTRIC LIGHTING
		WATER MAIN
		WATER SERVICE
		SEWER GRAVITY MAIN
		SEWER FORCE MAIN
		SEAFOOD PROCESSOR WASTE FORCE MAIN
		FUEL

**1** SMALL BOAT HARBOR UTILITY EXTENSION EASEMENTS  
 SCALE: 1 INCH = 100 FEET

**CONCEPT - NOT FOR CONSTRUCTION**

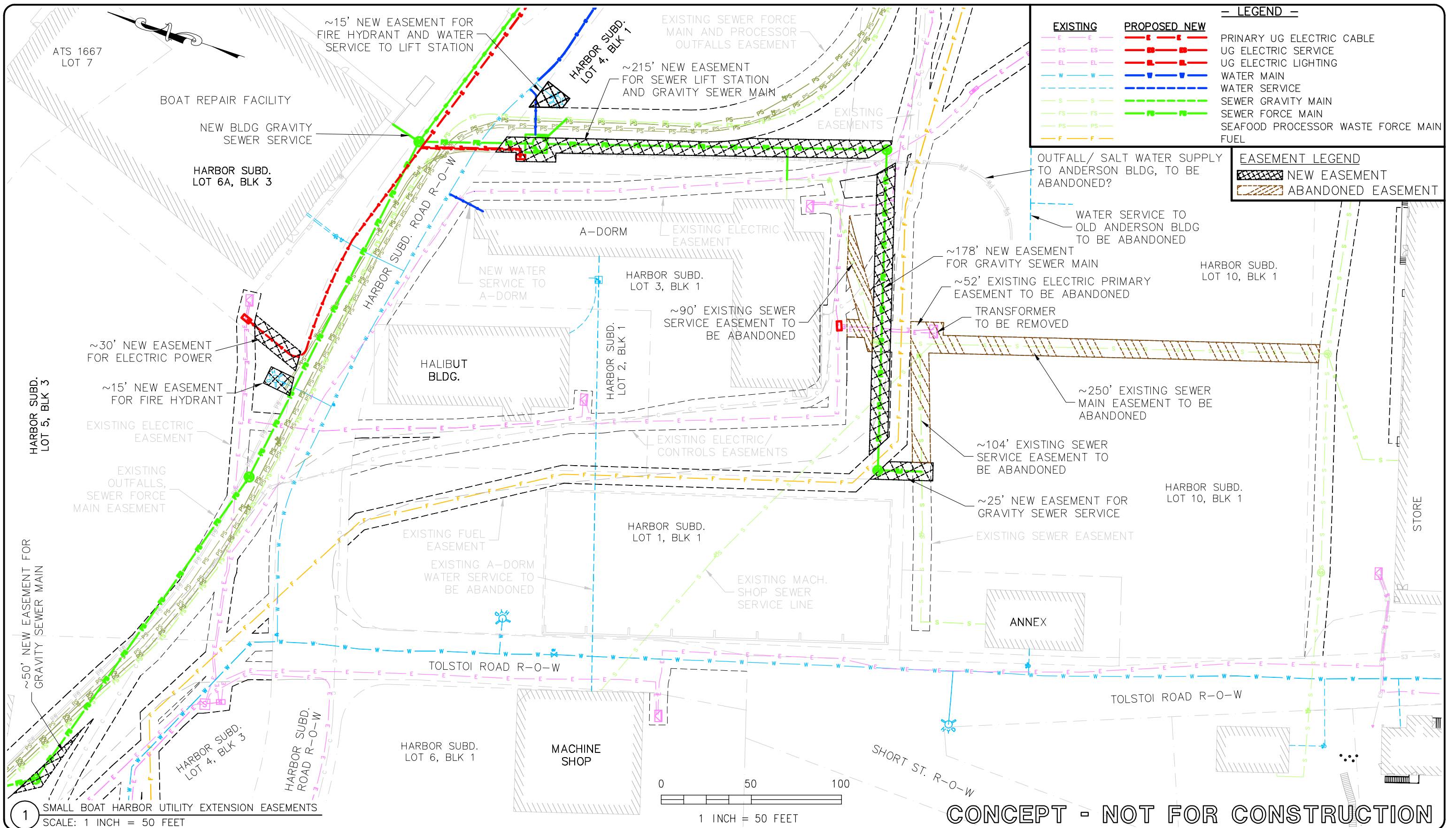
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DRAWING  
**UTILITY EXTENSION EASEMENTS**  
**HARBOR SUBDIVISION**  
**ARD PLAT #2013-19**

PROJECT  
**SAINT PAUL SMALL BOAT HARBOR**  
**UTILITY EXPANSION PROJECT**  
 ST. PAUL ISLAND, AK

Sheet  
**C-6**  
 OF 7



**LEGEND**

EXISTING	PROPOSED NEW	
— E — E	— E — E	PRIMARY UG ELECTRIC CABLE
— ES — ES	— ES — ES	UG ELECTRIC SERVICE
— EL — EL	— EL — EL	UG ELECTRIC LIGHTING
— W — W	— W — W	WATER MAIN
— S — S	— S — S	WATER SERVICE
— FS — FS	— FS — FS	SEWER GRAVITY MAIN
— PS — PS	— PS — PS	SEWER FORCE MAIN
— F — F	— F — F	SEAFOOD PROCESSOR WASTE FORCE MAIN FUEL

**EASEMENT LEGEND**

	NEW EASEMENT
	ABANDONED EASEMENT

1 SMALL BOAT HARBOR UTILITY EXTENSION EASEMENTS  
SCALE: 1 INCH = 50 FEET

CONCEPT - NOT FOR CONSTRUCTION

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**UTILITY EXTENSION EASEMENTS DETAIL**  
HARBOR SUBDIVISION  
ARD PLAT #2013-19

PROJECT

**SAINT PAUL SMALL BOAT HARBOR**  
UTILITY EXPANSION PROJECT

ST. PAUL ISLAND, AK

Sheet

**C-7**  
OF 7

**ATTACHMENT C-2: DETAILED CONSTRUCTION COST ESTIMATE AND  
PROJECT BUDGET BREAKDOWN**

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ATTACHMENT C-2  
CONSTRUCTION COST ESTIMATE  
AND PROJECT BUDGET BREAKDOWN

OVERALL PROJECT BUDGET BREAKDOWN

#	DESCRIPTION	Sewer	Water	Electric	TOTAL COST	COSTS NOT ALLOWABLE	ALLOWABLE COSTS
1	Administrative and legal expenses	\$ 76,000	\$ 33,000	\$ 28,000	\$137,000		\$137,000
2	Land, structures, rights-of-way, appraisals, etc.	\$0	\$0	\$0	\$0		\$0
3	Relocation expenses and payments	\$0	\$0	\$0	\$0		\$0
4	Architectural and engineering fees	\$78,000	\$45,000	\$24,000	\$147,000		\$147,000
5	Other architectural and engineering fees	\$0	\$0	\$0	\$0		\$0
6	Project inspection fees	\$ 118,000	\$ 58,000	\$ 35,000	\$211,000		\$211,000
7	Site work	\$0	\$0	\$0	\$0		\$0
8	Demolition and removal	\$0	\$0	\$0	\$0		\$0
9	Construction						
	<i>Labor</i>	\$ 520,500	\$ 278,200	\$ 170,900	\$ 969,600		\$969,600
	<i>Airfare / Per Diem</i>	\$ 157,900	\$ 78,700	\$ 54,300	\$ 290,900		\$290,900
	<i>Materials</i>	\$ 299,900	\$ 104,900	\$ 65,400	\$ 470,200		\$470,200
	<i>Construction Equipment Rental / Lease</i>	\$ 128,600	\$ 84,100	\$ 42,000	\$ 254,700		\$254,700
	<i>Contractor Bond / Profit</i>	\$ 199,200	\$ 98,500	\$ 59,900	\$ 357,600		\$357,600
9	Construction Subtotal	\$ 1,306,100	\$ 644,400	\$ 392,500	\$2,343,000		\$2,343,000
10	Equipment	\$0	\$0	\$0	\$0		\$0
11	Miscellaneous	\$0	\$0	\$0	\$0		\$0
12	<b>SUBTOTAL</b>	<b>\$1,578,100</b>	<b>\$780,400</b>	<b>\$479,500</b>	<b>\$2,838,000</b>	<b>\$0</b>	<b>\$2,838,000</b>
13	Contingencies	\$0	\$0	\$0	\$0		\$0
14	<b>SUBTOTAL</b>	<b>\$1,578,100</b>	<b>\$780,400</b>	<b>\$479,500</b>	<b>\$2,838,000</b>	<b>\$0</b>	<b>\$2,838,000</b>
15	Project Income	\$0	\$0	\$0	\$0		\$0
16	<b>TOTAL PROJECT COSTS</b>	<b>\$1,578,100</b>	<b>\$780,400</b>	<b>\$479,500</b>	<b>\$2,838,000</b>	<b>\$0</b>	<b>\$2,838,000</b>

**Small Boat Harbor Sewer Upgrade Project  
Engineers Cost Estimate**

18-Oct-22

11

Labor	Qty	Units	Unit Cost	Ext Cost
Proj Manager	6.7	wks	\$ 8,100	\$ 54,300
Superintendent	6.7	wks	\$ 8,100	\$ 54,300
Foreman	11	wks	\$ 9,400	\$ 103,400
Surveyor	1	wks	\$ 8,100	\$ 8,100
Expeditor	2	wks	\$ 6,500	\$ 13,000
Operator	11	wks	\$ 6,500	\$ 71,500
Laborer (2 ea)	22	wks	\$ 6,500	\$ 143,000
Carpenter (2 ea)	4	wks	\$ 8,100	\$ 32,400
Electrician	3	wks	\$ 8,100	\$ 24,300
Mechanical	2	wks	\$ 8,100	\$ 16,200
				\$ 520,500

General	Qty	units	Unit Cost	Ext Cost
RT Airfares	20	ea	\$ 1,500	\$ 30,000
PerDiem	67.4	man wks	\$ 1,400	\$ 94,400
Misc AirFreight	1	ls	\$ 6,700	\$ 6,700
Erosion Control	1	ls	\$ 13,400	\$ 13,400
Environmental Controls	1	ls	\$ 13,400	\$ 13,400
				\$ 157,900

Materials	1 LS Qty	units	Unit Cost	Ext Cost
Sheet Piling, 20' L	100	lf	\$ 134	\$ 13,400
Precast 8'Øx4' Base	1	ea	\$ 3,800	\$ 3,800
Precast 8'Øx4' Sections	2	ea	\$ 2,200	\$ 4,400
Precast 8'Ø Lid x5'Ø	1	ea	\$ 1,600	\$ 1,600
Precast 5'Øx5' Section	1	ea	\$ 1,500	\$ 1,500
Precast 4'Øx7' Manhole	5	ea	\$ 1,500	\$ 7,500
Hbr Mstr Bldg Septic Tank	1	ea	\$ 4,000	\$ 4,000
Sewer Sewer Main (8")	660	feet	\$ 46	\$ 30,400
Sewer Service Line (4")	40	feet	\$ 20	\$ 800
Sewer Service Line (1-1/2")	500	feet	\$ 2.20	\$ 1,100
D-1	20	cyd	\$ 100	\$ 2,000
Scoria Borrow	125	cyd	\$ 13	\$ 1,600
Sand Borrow	60	cyd	\$ -	\$ -
Concrete Ftg & Slabs	10	cyd	\$ 340	\$ 3,400
Concrete Wet Well Misc	8	cyd	\$ 340	\$ 2,700
Concrete Casement	6	cyd	\$ 340	\$ 2,000
Lift Station Pump & Controls - Main	1	ea	\$ 33,600	\$ 33,600
Lift Station Pump & Controls - 50 gpm H	1	ea	\$ 6,000	\$ 6,000
SCADA System	1	ea	\$ 13,400	\$ 13,400
Building Packages	168	sq ft	\$ 134	\$ 22,500
Lift Sta. electric service ext.	200	LF	\$ 56	\$ 11,200
Building Elec/Mech	210	sq ft	\$ 101	\$ 21,200
Water Pipe & Ftgs	80	ft	\$ 27	\$ 2,200
Sewer Force Main P&F	20	ft	\$ 27	\$ 500
Shipping	202000	lbs	\$ 0.54	\$ 109,100
				\$ 299,900

Equipment	Qty	units	Unit Cost	Ext Cost
Pickup (2 each)	22	wks	\$ 400	\$ 8,800
Flatbed	5.5	wks	\$ 1,340	\$ 7,400
Hydraulic Excavator, Large	5.5	wks	\$ 4,170	\$ 22,900
Hydraulic Excavator, Medium	11	wks	\$ 2,490	\$ 27,400
Loader	5.5	wks	\$ 3,490	\$ 19,200
Dump Truck (2 ea)	1	wks	\$ 2,890	\$ 2,900
Compactor	1	wks	\$ 2,420	\$ 2,400
Grader	0.5	wks	\$ 4,170	\$ 2,100
Forklift	3	wks	\$ 4,030	\$ 12,100
Cement Truck	1.75	wks	\$ 7,260	\$ 12,700
Fusion Machine	0.5	wks	\$ 2,690	\$ 1,300
Sewer Pumper Truck	2	wks	\$ 4,700	\$ 9,400
				\$ 128,600

\$ 1,106,900

General Contractor Profit	15%	\$ 166,000
Bond & Insurance	3%	\$ 33,200

**CONSTRUCTION TOTAL \$ 1,306,100**

**Small Boat Harbor Water Upgrade Project  
Engineers Cost Estimate**

18-Oct-22

8			
Labor	Qty units	Unit Cost	Ext Cost
Proj Manager	2 wks	\$ 8,100	\$ 16,200
Superintendent	2 wks	\$ 8,100	\$ 16,200
Foreman	8 wks	\$ 9,400	\$ 75,200
Surveyor	1.0 wks	\$ 8,100	\$ 8,100
Expeditor	1 wks	\$ 6,500	\$ 6,500
Operator	8 wks	\$ 6,500	\$ 52,000
Laborer (2 ea)	16 wks	\$ 6,500	\$ 104,000
			\$ 278,200

General	Qty units	Unit Cost	Ext Cost
RT Airfares	9 ea	\$ 1,500	\$ 13,500
PerDiem	37 man wks	\$ 1,400	\$ 51,800
Misc AirFreight	1 ls	\$ 6,700	\$ 6,700
Erosion Control	1 ls	\$ 6,700	\$ 6,700
			\$ 78,700

Materials	1 LS Qty units	Unit Cost	Ext Cost
Existing DI Water Main Connection	1 ea	\$ 1,300	\$ 1,300
Water Main (10")	1120 feet	\$ 34	\$ 38,100
Hydrant Legs (6")	209 feet	\$ 11	\$ 2,300
Service Line (1-1/2")	130 feet	\$ 11	\$ 1,400
Remove/Cap Old Anderson Plant Sv	1 ea	\$ 700	\$ 700
Flanges (10")	6 ea	\$ 200	\$ 1,200
Flanges (6")	6 ea	\$ 200	\$ 1,200
Couplings (10")	29 ea	\$ 300	\$ 8,700
Couplings (6")	6 ea	\$ 100	\$ 600
Tees (10"x6")	2 ea	\$ 700	\$ 1,400
Tapping Tees (10"x1")	4 ea	\$ 100	\$ 400
Hydrants	2 ea	\$ 3,600	\$ 7,200
Valve (10")	2 ea	\$ 3,400	\$ 6,800
Valve (6")	3 ea	\$ 1,600	\$ 4,800
Valves, Corp/Curb	8 ea	\$ 100	\$ 800
Valve Boxes	9 ea	\$ 200	\$ 1,800
Misc Fittings/Bolts	1 ls	\$ 1,100	\$ 1,100
Locate Wire/Tape/Misc	1 ls	\$ 300	\$ 300
Scoria Borrow	50 cyd	\$ 11	\$ 600
Concrete Thrust Blocks	1 cyd	\$ 300	\$ 300
Concrete Casement	6 cyd	\$ 300	\$ 1,800
Shipping	41000 lbs	\$ 0.54	\$ 22,100
			\$ 104,900

Equipment	Qty units	Unit Cost	Ext Cost
Pickup (2 each)	16 wks	\$ 400	\$ 6,400
Flatbed	2.9 wks	\$ 1,300	\$ 3,800
Hydraulic Excavator, Large	4 wks	\$ 4,200	\$ 16,800
Hydraulic Excavator, Medium	8 wks	\$ 2,500	\$ 20,000
Loader	4 wks	\$ 3,500	\$ 14,000
Dump Truck (2 ea)	0.5 wks	\$ 2,900	\$ 1,500
Compactor	1 wks	\$ 2,400	\$ 2,400
Grader	0.5 wks	\$ 4,200	\$ 2,100
Forklift	2 wks	\$ 4,000	\$ 8,000
Cement Truck	0.5 wks	\$ 7,300	\$ 3,700
Electrofusion Machine	2 wks	\$ 2,700	\$ 5,400
Sewer Pumper Truck	0 wks	\$ 4,700	\$ -
			\$ 84,100

\$ 545,900

General Contractor Profit 15% \$ 81,900  
Bond & Insurance 3% \$ 16,600

**CONSTRUCTION TOTAL \$ 644,400**

**Small Boat Harbor Electrical Upgrade Project  
Engineers Cost Estimate**

18-Oct-22

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Labor	Qty	units	Unit Cost	Ext Cost
Proj Manager	1.0	wks	\$ 8,100	\$ 8,100
Superintendent	1.0	wks	\$ 8,100	\$ 8,100
Foreman	1.0	wks	\$ 9,400	\$ 9,400
Surveyor	0.5	wks	\$ 8,100	\$ 4,100
Expeditor	1	wks	\$ 6,500	\$ 6,500
Operator	6	wks	\$ 6,500	\$ 39,000
Laborer	6	wks	\$ 6,500	\$ 39,000
Electrician	7	wks	\$ 8,100	\$ 56,700
				\$ 170,900

General	Qty	units	Unit Cost	Ext Cost
RT Airfares	8	ea	\$ 1,500	\$ 12,100
PerDiem	22.5	man wks	\$ 1,420	\$ 32,000
Misc AirFreight	1	ls	\$ 6,750	\$ 6,800
Erosion Control	1	ls	\$ 3,400	\$ 3,400
				\$ 54,300

Materials	1 LS Qty	units	Unit Cost	Ext Cost
Sectionalizing Cabinet	2	ea	\$ 3,500	\$ 7,000
Splice 3Ph 7.2 kV	3	ea	\$ 500	\$ 1,500
25 kVa Transformer	1	ea	\$ 5,400	\$ 5,400
15 kVa misc Connections	1	ls	\$ 2,060	\$ 2,100
Remove Existing Anderson Xfmr	1	ls	\$ 270	\$ 300
4" conduit	830	ft	\$ 5	\$ 3,700
4" conduit ells/ftgs	1	ls	\$ 540	\$ 500
#2 15 kV JCN	1070	ft	\$ 7	\$ 7,500
Meterbase	2	ea	\$ 700	\$ 1,400
Service Conductor	30	feet	\$ 7	\$ 200
10-3 Lighting Conductor in 1.5in duct	1060	LF	\$ 11	\$ 11,700
Light Pole (Composite)	4	ea	\$ 3,400	\$ 13,600
Light Fixture	8	ea	\$ 700	\$ 5,600
Scoria Borrow	160	cyd	\$ 13.5	\$ 2,200
Shipping	5000	lbs	\$ 0.54	\$ 2,700
				\$ 65,400

Equipment	Qty	units	Unit Cost	Ext Cost
Pickup (2 each)	14	wks	\$ 400	\$ 5,600
Flatbed	3.5	wks	\$ 1,350	\$ 4,700
Hydraulic Excavator, Large	1	wks	\$ 4,180	\$ 4,200
Hydraulic Excavator, Medium	6	wks	\$ 2,500	\$ 15,000
Loader	1	wks	\$ 3,510	\$ 3,500
Dump Truck (2 ea)	0.2	wks	\$ 2,900	\$ 600
Compactor	0.2	wks	\$ 2,430	\$ 500
Grader	0.2	wks	\$ 4,180	\$ 800
Forklift	1.75	wks	\$ 4,050	\$ 7,100
				\$ 42,000

\$ 332,600

General Contractor Profit 15% \$ 49,900  
Bond & Insurance 3% \$ 10,000

**\$ 392,500**