



# Petersburg Borough

12 South Nordic Drive  
Petersburg, AK 99833

## Meeting Agenda Borough Assembly Regular Meeting

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Tuesday, May 02, 2023

12:00 PM

Assembly Chambers

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You are invited to a Zoom webinar.  
When: May 2, 2023 12:00 PM Alaska  
Topic: May 2, 2023 Assembly Meeting

Please click the link below to join the webinar:  
<https://petersburgak.gov.zoom.us/j/89771004017?pwd=eG9ReIzRbTdFTDdnUCtkZVRiVIB3UT09>  
Passcode: 495435

Or Telephone:  
(253) 215-8782  
(720) 707-2699  
Webinar ID: 897 7100 4017  
Passcode: 495435

1. **Call To Order/Roll Call**
2. **Voluntary Pledge of Allegiance**
3. **Approval of Minutes**
  - A. **April 17, 2023 Assembly Meeting Minutes**
4. **Amendment and Approval of Meeting Agenda**
5. **Public Hearings**
6. **Bid Awards**
7. **Persons to be Heard Related to Agenda**

*Persons wishing to share their views on any item on today's agenda may do so at this time.*
8. **Persons to be Heard Unrelated to Agenda**

*Persons with views on subjects not on today's agenda may share those views at this time.*
9. **Boards, Commission and Committee Reports**
10. **Consent Agenda**
11. **Report of Other Officers**

**A. Petersburg Medical Center Update**

PMC CEO Hofstetter will provide an update on the Medical Center.

**B. US Forest Service Update**

Petersburg District Ranger Born will update the Assembly on Forest Service activities and projects.

**12. Mayor's Report**

**A. May 2, 2023 Mayor's Report**

**13. Manager's Report**

**A. May 2, 2023 Manager's Report**

**14. Unfinished Business**

**A. Ordinance #2023-05: An Ordinance Updating Chapter 17.02 of the Municipal Code, Entitled "Safety Code Adoption" - Third and Final Reading**

If approved, Ordinance #2023-05 will (1) update the local amendment to the International Building Code snow load requirement, and (2) adopt a local amendment to the International Residential Code for new insulation values. The Assembly unanimously approved Ordinance #2023-05 in its first and second readings.

**15. New Business**

**A. Ordinance #2023-06: An Ordinance Updating Various Sections of Chapter 14.08 of the Municipal Code, Entitled "Sewer Utility"**

If adopted in three readings, Ordinance #2023-06 will change the FY 2024 sewer utility rate increase from 3% to 6%. An annual rate review of the utility indicates this increase is needed to keep up with increased costs and expenses to the Borough.

**B. Ordinance #2023-07: An Ordinance Amending Sections 14.20.125, 14.20.250 and 14.20.380 of Chapter 14.20, *Municipal Harbors*, of the Petersburg Municipal Code to Address Live-Aboards and Other Residential Uses of Vessels Moored in Municipal Harbors and to Increase the Penalty for Speeding or Excessive Wake**

Adoption of Ordinance #2023-07 in three readings will: (1) update the live-aboard policy to allow no more than 10% of moorage spaces to be utilized by live-aboard vessels; (2) prohibit commercial use of the harbor facilities for rental of vessels for residential purposes; and (3) increase the penalty for speeding or excessive wake in the harbors from \$50 to \$200.

**C. Ordinance #2023-08: An Ordinance of the Petersburg Borough Adopting the Budget for the Fiscal Year July 1, 2023 Through June 30, 2024**

Ordinance #2023-08 will set the Petersburg Borough budget for FY 2024 if approved in three readings.

**D. Ordinance #2023-09: An Ordinance Repealing Chapters 11.48, 11.52, 11.56, and 11.60 of the Former City Code and PMC Chapter 11.96, and Amending PMC Sections 11.12.040, 14.20.360 and 14.20.380**

If approved in three readings, Ordinance #2023-09 will repeal old traffic and parking code, update parking restrictions in current Borough code, allow for the harbor to enforce traffic and parking ordinances at Borough harbor facilities, and establish a \$25 penalty for parking in violation in harbor facilities.

**E. Ordinance #2023-10: An Ordinance Amending Section 12.12.030(A) of Chapter 16.12, *Acquisition and Disposal of Borough Owned Lands*, of the Petersburg Municipal Code to Add Federally Recognized Tribes to the List of Entities that May Purchase Borough Property for Less than Assessed Value if Determined by the Assembly to be in the Best Interest of the Borough**

Ordinance #2023-10, if approved in three readings, will allow the Assembly to determine if it is in the best interest of the Borough to sell Borough-owned land at less than assessed value to federally recognized tribes, as well as to state and federal agencies and nonprofit entities.

**F. In-Kind Services for Disposal of Material**

Assembly Member Lynn and Petersburg Medical Center request approval for the Borough to provide in-kind services for disposal of material into the Borough's mud dump if Petersburg Medical Center obtains a grant from the Denali Commission for off-site construction (for example, to improve Excel Street) in support of a new hospital.

**G. 2023 Fuel Adjustment Charge for Annual SEAPA Maintenance Shutdown**

Per PMC 14.16.720, *Rates - Fuel and Purchased Power Adjustment Charge*, the Assembly has the discretion to implement a fuel adjustment charge to all kilowatt hours sold in the billing period that includes the annual SEAPA maintenance shutdown and the resulting 10-day diesel plant run by our electric utility. Utility Director Hagerman is requesting the fuel adjustment charge be implemented for the billing period between May 27 and June 27, 2023.

**H. Community Center Sewer Line Repair Project**

Parks & Recreation Director Payne has received biddable documents (attached) for the Community Center Sewer Line Repair Project and is seeking Assembly approval to send the project out to bid.

**I. Pump Station 4 Update and Final Design Award**

Utility Director Hagerman recommends PND Engineers be awarded a contract amendment in the amount of \$245,600 to complete the project design, permitting, survey and platting for the Pump Station 4 Replacement project.

**J. Borough Hiring Procedures Review**

Assembly Members Newman and Meucci request Assembly approval to direct Borough Administration to hire an independent specialist to review the Borough's current hiring procedures.

**K. Support for SB 132: An Act Imposing an Annual Educational Facilities Maintenance Construction Tax on Net Earnings from Self-Employment and Wages; Relating to the Administration and Enforcement of the Educational Facilities Maintenance and Construction Tax; and Providing for an Effective Date**

Senator Click Bishop is sponsoring SB 132, *Alaska Education Facilities, Maintenance, and Construction Tax*, and is seeking letters of support for the bill. Assembly Member Meucci requests the Assembly determine if Petersburg should send a letter of support.

**16. Communications**

**A. Correspondence Received Since April 13, 2023**

**17. Assembly Discussion Items**

**A. Assembly Member Comments**

**B. Recognitions**

**18. Adjourn**



# Petersburg Borough

12 South Nordic Drive  
Petersburg, AK 99833

## Meeting Minutes Borough Assembly Regular Meeting

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Monday, April 17, 2023

6:00 PM

Assembly Chambers

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### 1. Call To Order/Roll Call

Mayor Jensen called the meeting to order at 6:00 p.m.

#### PRESENT

Mayor Mark Jensen  
Vice Mayor Bob Lynn  
Assembly Member Thomas Fine-Walsh  
Assembly Member David Kensinger  
Assembly Member Donna Marsh  
Assembly Member Jeff Meucci  
Assembly Member Scott Newman

### 2. Voluntary Pledge of Allegiance

The Pledge was recited.

### 3. Approval of Minutes

#### A. April 3, 2023 Assembly Meeting Minutes

The April 3, 2023 meeting minutes were unanimously approved.

Motion made by Assembly Member Meucci, Seconded by Assembly Member Kensinger.

Voting Yea: Mayor Jensen, Vice Mayor Lynn, Assembly Member Fine-Walsh, Assembly Member Kensinger, Assembly Member Marsh, Assembly Member Meucci, Assembly Member Newman

### 4. Amendment and Approval of Meeting Agenda

An amendment to move Item 11B to the next meeting agenda failed by a vote of 5-2, Members Kensinger and Meucci voting in favor of the amendment.

The agenda was approved as submitted.

Motion made by Assembly Member Meucci, Seconded by Assembly Member Kensinger.

Voting Yea: Mayor Jensen, Vice Mayor Lynn, Assembly Member Fine-Walsh, Assembly Member Kensinger, Assembly Member Marsh, Assembly Member Meucci, Assembly Member Newman

**5. Public Hearings**

**A. Public Hearing for Ordinance #2023-05: An Ordinance Updating Chapter 17.02 of the Municipal Code, Entitled "Safety Code Adoption"**

No testimony was received.

**6. Bid Awards**

There were no bid awards.

**7. Persons to be Heard Related to Agenda**

*Persons wishing to share their views on any item on today's agenda may do so at this time.*

RD and Madonna Parks spoke regarding the Human Resources Practices and Procedures Report stating they had numerous questions and a third party review is needed.

Nicole McMurren spoke regarding the Human Resources Practices and Procedures Report and supports an independent review.

Chris Medalen shared her concerns regarding the momentum of the new hospital project without the subject going to a vote of the community.

Joe Bertagnoli spoke in support of a third party review regarding the events of July 4, 2016.

Don Koenigs shared his views that Resolution #2023-04 regarding the new hospital project is premature and stated before proceeding with any construction there should be a vote of the public.

**8. Persons to be Heard Unrelated to Agenda**

*Persons with views on subjects not on today's agenda may share those views at this time.*

RD and Madonna Parks thanked Mayor Jensen and the Assembly members for reading their letter and requested an investigation of the Borough's involvement and handling of the events of July 4, 2016.

**9. Boards, Commission and Committee Reports**

No reports were given.

**10. Consent Agenda**

There were no consent agenda items.

**11. Report of Other Officers**

**A. Siren Test Report**

Fire/EMS/SAR Director Hankins shared his report on a siren test performed on March 29, 2023 and stated a siren test will occur on the first Wednesday of each month going forward.

## **B. Human Resources Practices and Procedures Report**

Assembly Member Fine-Walsh read his report on practices and procedures instituted by the Borough's HR Department to improve the safety of Borough employees and residents.

## **C. Impacts of Tourism Research Report**

Ryan Naylor, a Ph.D. student from Penn State University, has been conducting research in Petersburg, Wrangell, and Ketchikan from May 2022 to January 2023. Mr. Naylor lived in Petersburg from May to July 2022, and again in January 2023, exploring how residents in the community perceive the impacts of tourism. More specifically, Mr. Naylor is exploring 1) how tourism impacts the local culture of the community, 2) how tourism integrates into existing livelihoods, and 3) how the community can manipulate tourism to ensure appropriate forms of community development. He is repeating this process in Ketchikan and Wrangell to understand how differences in cruise tourism volume influence each community and identify community- and region-specific patterns. Mr. Naylor is trying to ensure his research can inform local decision-making and has now returned for a community engagement trip to explore preliminary ideas and explore ways to give back to the community.

Ryan Naylor gave a presentation regarding his research.

## **D. New Petersburg Medical Center Project Report**

PMC CEO Hofstetter and Project Manager Jay Farmwald reported on the status of the new hospital project.

## **12. Mayor's Report**

### **A. April 17, 2023 Mayor's Report**

Mayor Jensen read his report into the record.

## **13. Manager's Report**

### **A. April 17, 2023 Manager's Report**

Manager Giesbrecht read his report into the record, a copy of which is attached and made a permanent part of these minutes.

## **14. Unfinished Business**

### **A. Ordinance #2023-04: An Ordinance Adjusting the FY 2023 Budget for Known Changes - Third and final reading**

If approved in three readings, Ordinance #2023-04 will: 1) transfer 50% of General Fund surplus from FY 2022 to the Property Development Fund; 2) transfer \$65,432 from the Property Development Fund to the Community Center Sewer Line project; 3) transfer \$21,165.46 from the Hydro Substation project to the Blind Slough Hydro project; 4) transfer \$12,916 from the Wastewater Department reserves to the Ira II Street project; 5) transfer \$170,000 from the Electric Department reserves to the Diesel Plant Fuel budget line item to assure adequate funds for the annual SEAPA maintenance shutdown and diesel run in May/June; 6) increase the General Fund Attorney budget by \$90,000 due to unanticipated legal expenses from the Pitta Rosse, Kerr and Koenigs lawsuits; 7) increase the South Harbor Dredging project budget of \$635,000 due to encountering hard material during dredging operations; 8) increase to the Wastewater Professional Services budget of \$35,000 to cover the hire of HDR Engineering to assist in completing ADEC forms for retention of the NPDES 301h secondary treatment waiver; 9) transfer \$189,000 to a new Middle Harbor Dredging budget line item for removal of landslide debris from the Hammers Slough slide that is damaging the Middle Harbor; 10) increase of \$20,000 to the Fire Engine Motor Pool budget line item to cover various equipment needed for the new vehicle; 11) increase of \$80,000 to the Streets Department Motor Pool O&M budget line item due to increased parts costs and unanticipated necessary repairs; and 12) increase of \$10,000 each to the Motor Pool Patrol Unit #54 and Patrol Unit #96 budget line items due to increased costs of chassis and vehicle uplifts. The Ordinance was unanimously approved in its first and second readings.

By unanimous roll call vote, the Assembly amended budget adjustment number 7, South Harbor Dredging, from \$635,000 to \$1,000,000, as requested by the US Army Corps of Engineers.

Motion made by Assembly Member Newman, Seconded by Assembly Member Meucci.

Voting Yea: Mayor Jensen, Vice Mayor Lynn, Assembly Member Fine-Walsh, Assembly Member Kensinger, Assembly Member Marsh, Assembly Member Meucci, Assembly Member Newman

The Assembly unanimously approved Ordinance #2023-04, as amended, in its third and final reading.

Motion made by Assembly Member Meucci, Seconded by Vice Mayor Lynn.

Voting Yea: Mayor Jensen, Vice Mayor Lynn, Assembly Member Fine-Walsh, Assembly Member Kensinger, Assembly Member Marsh, Assembly Member Meucci, Assembly Member Newman

**B. Ordinance #2023-05: An Ordinance Updating Chapter 17.02 of the Municipal Code, Entitled "Safety Code Adoption" - Second Reading**

If approved in three readings, Ordinance #2023-05 will (1) update the local amendment to the International Building Code snow load requirement, and (2) adopt a local amendment to the International Residential Code for new insulation values. The Assembly unanimously approved Ordinance #2023-05 in its first reading.



Ordinance #2023-05 was unanimously approved in its second reading.

**15. New Business**

**A. Resolution #2023-04: A Resolution Approving the Hospital Board's Site Selection for a New Hospital Facility, Authorizing the Hospital Board's Submission of Rezoning and Subdivision Applications for the Site, and Authorizing the Hospital Board to Proceed with Contracting with Dawson Construction for Preconstruction Services Under a Construction Manager/General Contractor Agreement**

If approved, Resolution #2023-04 will approve a site for a new hospital facility, authorize the Hospital Board to submit applications to rezone the property, plat a major subdivision, and vacate portions of Fram, Gjoa and N. 12th Streets, and authorize the Hospital Board to proceed with contracting with Dawson Construction for preconstruction services.

Resolution #2023-04 was approved by a vote of 5-1.

Motion made by Assembly Member Meucci, Seconded by Assembly Member Kensinger.

Voting Yea: Mayor Jensen, Vice Mayor Lynn, Assembly Member Fine-Walsh, Assembly Member Kensinger, Assembly Member Meucci, Assembly Member Newman

Voting Nay: Assembly Member Marsh

**B. Resolution #2023-05: A Resolution Accepting \$56,322 in Grant Funding from the State of Alaska, Department of Health and Social Services, for Round 2 of the Healthy and Equitable Communities Grant Program**

If adopted, Resolution #2023-05 will accept and distribute \$56,322 in grant funds as follows: \$28,736 for local emergency planning supplies, \$17,177 for a microscope with a camera attachment for the PMC lab, and \$10,409 for chain link fencing and safety materials for the Mort Fryer Ball Fields.

By unanimous roll call vote, Resolution #2023-05 was approved.

Motion made by Assembly Member Marsh, Seconded by Assembly Member Meucci.

Voting Yea: Mayor Jensen, Vice Mayor Lynn, Assembly Member Fine-Walsh, Assembly Member Kensinger, Assembly Member Marsh, Assembly Member Meucci, Assembly Member Newman

**C. Hospital Board Appointment**

Mayor Jensen, with unanimous approval of the Assembly, appointed Jim Roberts to the Hospital Board until the October 3, 2023 Municipal Election.

**D. Reschedule May Assembly Meetings**

The Assembly rescheduled the May 1 meeting to May 2, 2023 at 12:00 p.m.

Motion made by Assembly Member Meucci, Seconded by Assembly Member Kensinger.

Voting Yea: Mayor Jensen, Vice Mayor Lynn, Assembly Member Fine-Walsh, Assembly Member Kensinger, Assembly Member Marsh, Assembly Member Meucci, Assembly Member Newman

**E. FY 2024 Budget Work Session**

A budget work session was scheduled for April 24, 2023 at 6:00 p.m.

Motion made by Assembly Member Kensinger, Seconded by Assembly Member Meucci.

Voting Yea: Mayor Jensen, Vice Mayor Lynn, Assembly Member Fine-Walsh, Assembly Member Kensinger, Assembly Member Marsh, Assembly Member Meucci, Assembly Member Newman

**16. Communications**

**A. Correspondence Received Since March 30, 2023**

**17. Assembly Discussion Items**

**A. Assembly Member Comments**

**B. Recognitions**

**18. Board of Equalization**

The Assembly, acting as the Board of Equalization, will hear 2023 property tax assessment appeals.

The Borough's Contract Assessors, Appraisal Company of Alaska, will provide information to the Board of Equalization regarding the property valuation process for Petersburg. This year 67 appeals were filed, including one appeal filed after the deadline, 46 of which have been resolved and withdrawn. The BOE will need to vote on whether to hear the late filed appeal.

State Statute AS 29.45.210(b) - Appeal Hearing, mandates:

\*The Appellant bears the burden of proof

\*A successful appeal must establish that valuation is UNEQUAL, EXCESSIVE, IMPROPER or UNDERVALUED based on facts stated in a valid written appeal or proven at the appeal hearing.

**A. Appeal Filed After the March 31, 2023 Deadline**

Steve and Desi Burrell missed the appeal filing deadline. They filed an appeal on April 10, 2023.

Borough Code Section 4.24.180 states: Notice of appeal, in writing, specifying the grounds for the appeal and in the form that the board may require shall be filed with the assessor within 30 days after the date of mailing of notice of assessment. In order to be timely filed, the appeal must be received in the offices of the borough finance department by not later than 5:00 p.m. on the thirtieth day following mailing. If notice of appeal is not given within that period, the right of appeal shall cease as to any matter within the jurisdiction of the board, unless it is shown to the satisfaction of the board that the taxpayer was unable to appeal within the specified time.

The Assembly voted to hear the Burrell's appeal by a vote of 5-2.

Motion made by Assembly Member Kensinger, Seconded by Assembly Member Newman.

Voting Yea: Mayor Jensen, Assembly Member Fine-Walsh, Assembly Member Kensinger, Assembly Member Marsh, Assembly Member Newman

Voting Nay: Vice Mayor Lynn, Assembly Member Meucci

**B. Wood, Charles Ed - Parcel #01-044-070; Appeal #2023-13**

This appeal was settled prior to the meeting.

**C. Bell, Shelyn Marie - Parcel #02-041-100; Appeal #2023-32**

This appeal was settled prior to the meeting.

**D. Ohmer, Nicholas - Parcel #01-004-010; Appeal #2023-36**

This appeal was settled prior to the meeting.

**E. Knight, Casey - Parcel #01-011-378; Appeal #2023-37**

This appeal was settled prior to the meeting.

**F. Wikan, Richard - Parcel #04-010-175; Appeal #2023-38**

The Assembly, acting as the Board of Equalization, upheld the Assessor's value of \$38,900 by a vote of 6-1.

Motion made by Vice Mayor Lynn, Seconded by Assembly Member Meucci.

Voting Yea: Mayor Jensen, Vice Mayor Lynn, Assembly Member Fine-Walsh, Assembly Member Kensinger, Assembly Member Meucci, Assembly Member Newman

Voting Nay: Assembly Member Marsh

**G. Thynes, Brandi - Parcel 01-002-351; Appeal #2023-49**

The Assembly, acting as the Board of Equalization, unanimously upheld the Assessor's value of \$289,300.

Motion made by Assembly Member Kensinger, Seconded by Assembly Member Meucci.

Voting Yea: Mayor Jensen, Vice Mayor Lynn, Assembly Member Fine-Walsh, Assembly Member Kensinger, Assembly Member Marsh, Assembly Member Meucci, Assembly Member Newman

**H. Thynes, Brandi - Parcel #01-009-202; Appeal #2023-50**

The Assembly, acting as the Board of Equalization, unanimously upheld the Assessor's value of \$195,800.

**I. Thynes, Brandi - Parcel #01-056-735; Appeal #2023-51**

The Assembly, acting as the Board of Equalization, unanimously upheld the Assessor's value of \$229,300.

Motion made by Assembly Member Kensinger, Seconded by Assembly Member Meucci.

Voting Yea: Mayor Jensen, Vice Mayor Lynn, Assembly Member Fine-Walsh, Assembly Member Kensinger, Assembly Member Marsh, Assembly Member Meucci, Assembly Member Newman

**J. Meeks, Phillip & Sandra - Parcel #04-010-120 (Point Agassiz Lot 9 Ramstead); Appeal #2023-56**

This appeal was settled prior to the meeting.

**K. Mathisen, Lenore - Parcel #01-001-270; Appeal #2023-57**

This appeal was settled prior to the meeting.

**L. Jensen, John & Pam - Parcel #04-010-110 (Point Agassiz Lot 7 Ramstead); Appeal #2023-58**

The Assembly, acting as the Board of Equalization, upheld the Assessor's value of \$37,700 by a vote of 5-1, Mayor Jensen abstaining.

Motion made by Assembly Member Kensinger, Seconded by Assembly Member Meucci.

Voting Yea: Vice Mayor Lynn, Assembly Member Kensinger, Assembly Member Marsh, Assembly Member Meucci, Assembly Member Newman

Voting Nay: Assembly Member Fine-Walsh

Voting Abstaining: Mayor Jensen

**M. Jensen, John & Pam - Parcel #04-010-125 (Point Agassiz Lot 10 Ramstead); Appeal #2023-59**

The Assembly, acting as the Board of Equalization, unanimously upheld the Assessor's value of \$22,500, Mayor Jensen abstaining..

Motion made by Assembly Member Kensinger, Seconded by Assembly Member Newman.

Voting Yea: Vice Mayor Lynn, Assembly Member Fine-Walsh, Assembly Member Kensinger, Assembly Member Marsh, Assembly Member Meucci, Assembly Member Newman

Voting Abstaining: Mayor Jensen

**N. Jensen, John & Pam - Parcel #04-010-130 (Point Agassiz Lot 11 Ramstead); Appeal #2023-60**

The Assembly, acting as the Board of Equalization, unanimously amended the Assessor's value to \$73,300, Mayor Jensen abstaining..

Motion made by Assembly Member Kensinger, Seconded by Assembly Member Meucci.

Voting Yea: Vice Mayor Lynn, Assembly Member Fine-Walsh, Assembly Member Kensinger, Assembly Member Marsh, Assembly Member Meucci, Assembly Member Newman

Voting Abstaining: Mayor Jensen

**O. Jensen, John & Pam - Parcel #04-010-135 (Point Agassiz Lot 12 Ramstead); Appeal #2023-61**

The Assembly, acting as the Board of Equalization, unanimously upheld the Assessor's value of \$39,400, Mayor Jensen abstaining.

Motion made by Assembly Member Kensinger, Seconded by Assembly Member Meucci.

Voting Yea: Vice Mayor Lynn, Assembly Member Fine-Walsh, Assembly Member Kensinger, Assembly Member Marsh, Assembly Member Meucci, Assembly Member Newman

Voting Abstaining: Mayor Jensen

**P. JHD Real Estate (John Jensen) - Parcel #04-010-095 (Point Agassiz Lot 4 Ramstead); Appeal #2023-62**

The Assembly, acting as the Board of Equalization, upheld the Assessor's value of \$40,800 by a vote of 4-2, Mayor Jensen abstaining.

Motion made by Assembly Member Kensinger, Seconded by Assembly Member Meucci.

Voting Yea: Vice Mayor Lynn, Assembly Member Kensinger, Assembly Member Marsh, Assembly Member Meucci

Voting Nay: Assembly Member Fine-Walsh, Assembly Member Newman

Voting Abstaining: Mayor Jensen

**Q. JHD Real Estate (John Jensen) - Parcel #04-010-100 (Point Agassiz Lot 5 Ramstead); Appeal #2023-63**

The Assembly, acting as the Board of Equalization, upheld the Assessor's value of \$40,400 by a vote of 4-2, Mayor Jensen abstaining.

Motion made by Assembly Member Kensinger, Seconded by Assembly Member Meucci.

Voting Yea: Vice Mayor Lynn, Assembly Member Kensinger, Assembly Member Marsh, Assembly Member Meucci

Voting Nay: Assembly Member Fine-Walsh, Assembly Member Newman

Voting Abstaining: Mayor Jensen

**R. JHD Real Estate (John Jensen) - Parcel #04-010-140 (Point Agassiz Lot 13 Ramstead); Appeal #2023-64**

The Assembly, acting as the Board of Equalization, upheld the Assessor's value of \$39,100 by a vote of 5-1, Mayor Jensen abstaining.

Motion made by Assembly Member Kensinger, Seconded by Assembly Member Meucci.

Voting Yea: Vice Mayor Lynn, Assembly Member Fine-Walsh, Assembly Member Kensinger, Assembly Member Marsh, Assembly Member Meucci

Voting Nay: Assembly Member Newman

Voting Abstaining: Mayor Jensen

**S. JHD Real Estate (John Jensen) - Parcel #04-010-145 (Point Agassiz Lot 14 Ramstead); Appeal #2023-65**

The Assembly, acting as the Board of Equalization, upheld the Assessor's value of \$37,700 by a vote of 4-2, Mayor Jensen abstaining.

Motion made by Assembly Member Kensinger, Seconded by Assembly Member Meucci.

Voting Yea: Vice Mayor Lynn, Assembly Member Kensinger, Assembly Member Marsh, Assembly Member Meucci

Voting Nay: Assembly Member Fine-Walsh, Assembly Member Newman

Voting Abstaining: Mayor Jensen

**T. JHD Real Estate (John Jensen) - Parcel #04-010-180 (Point Agassiz Lot 21 Ramstead); Appeal #2023-66**

The Assembly, acting as the Board of Equalization, upheld the Assessor's value of \$33,300 by a vote of 4-2, Mayor Jensen abstaining.

Motion made by Assembly Member Kensinger, Seconded by Assembly Member Meucci.

Voting Yea: Vice Mayor Lynn, Assembly Member Kensinger, Assembly Member Marsh, Assembly Member Meucci

Voting Nay: Assembly Member Fine-Walsh, Assembly Member Newman

Voting Abstaining: Mayor Jensen

**U. JHD Real Estate (John Jensen) - Parcel #04-010-185 (Point Agassiz Lot 22 Ramstead); Appeal #2023-55**

The Assembly, acting as the Board of Equalization, upheld the Assessor's value of \$29,500 by a vote of 4-2, Mayor Jensen abstaining.

Motion made by Assembly Member Kensinger, Seconded by Assembly Member Meucci.

Voting Yea: Vice Mayor Lynn, Assembly Member Kensinger, Assembly Member Marsh, Assembly Member Meucci

Voting Nay: Assembly Member Fine-Walsh, Assembly Member Newman

Voting Abstaining: Mayor Jensen

**V. Burrell, Desiree - Parcel #01-001-210; Appeal #2023-67**

This appeal was settled prior to the meeting.

**19. Adjourn**

The meeting was adjourned at 10:03 p.m.

Motion made by Assembly Member Meucci, Seconded by Assembly Member Kensinger.

Voting Yea: Mayor Jensen, Vice Mayor Lynn, Assembly Member Fine-Walsh, Assembly Member Kensinger, Assembly Member Marsh, Assembly Member Meucci, Assembly Member Newman



# Petersburg Medical Center

Borough Assembly Report – May 2023 – Phil Hofstetter, CEO

## FY24-28 Strategic Plan Goals, Priorities, and Benchmarks

### Workforce Wellness:

- On April 13, PMC hosted an employee forum for staff to learn about updates aligned with the PMC strategic plan. A total of almost 100 employees attended the three sessions offered throughout the day. The sessions also included an update on the new facility project from Bettisworth North.



### Community Engagement:

- April 3 and 17: PMC reports out at April Borough Assembly Meetings
- April 6: KFSK Radio PMC Live monthly
- April 15: Early Childhood Fair
- April 17: [PMC Newsletter](#)
- April 17: Borough Assembly approved the appointment of the vacant seat on the Hospital Board to Jim Roberts, who will serve until the October 3, 2023 Municipal Election.
- April 19: PMC provides update at PIA Council meeting on replacement facility project and home health presents on support for a grant to provide expanded home-based services to seniors in Petersburg and possibly surrounding areas.
- April 22: Petersburg Medical Foundation hosted the 2023 Circle of Life race. Proceeds benefit Beat the Odds.
- Upcoming: Educational sessions scheduled with school children to learn more about careers in imaging, laboratory, therapy and rehabilitation.
- Community cafes with the SHARE Coalition focused on childcare.
- School District partnership by providing school nursing services.
- Two designated community members participate in the quality meetings to provide input from the community. One participates in the regular CAH Quality meeting and the second participates in the regular LTC Quality meeting.





## Facility:

- May 10 Save the Date:** PMC will be hosting a public open house covering the replacement facility project at the Holy Cross House, Petersburg Lutheran Church, from 11:00 am – 7:00 pm. Representatives from Bettisworth North, project architect, will provide a brief overview of project planning and design, accompanied by draft visuals of the proposed building design and space planning. Community members will have ample opportunity to view the draft visuals, offer feedback, and ask questions about the design and planning process during this day-long open house. Several short informational sessions will be presented throughout the day and early evening.
- Assembly approved Resolution #2023-04, which included approval for the Hospital Board's Site Selection for a New Hospital Facility, Authorizing the Hospital Board's Submission of Rezoning and Subdivision Applications for the Site, and Authorizing the Hospital Board to Proceed with Contracting with Dawson Construction for Preconstruction Services Under a Construction Manager/General Contractor Agreement.



## Financial Wellness:

- PMC completely paid off the approximately \$5 million Medicare advance payment emergency COVID relief.
- PMC was just awarded a Falls Prevention grant. The grant begins May 1 and runs for 4 years.
- Borough Assembly approved Resolution #2023-05, which included \$17,177 for a microscope with a camera attachment for the PMC lab.
- The Home Health department is currently working on a grant submission to expand senior in-home services. Grant reward notification will occur in May. Being awarded this grant will allow PMC to expand support to seniors in Petersburg and possibly surrounding areas.

## Patient-Centered Care:

- CMS recertification survey for the Critical Access Hospital Designation occurred in April without any findings. This is a significant achievement.
- The collaboration for a Remote Patient Monitoring and Chronic Care Management program between Home Health, the Joy Janssen Clinic, Case Management, IT, and Billing continues. Progress has been made in the vendor evaluation and departmental recommendations will be coming soon. This patient monitoring program has the potential to increase provider access and communication for patients experiencing challenges with chronic disease and will support current quality initiatives.

**Mayor's Report  
For  
May 2, 2023 Assembly Meeting**

- 1. Appreciation for a Job Well Done:** The Alaska Water Wastewater Management Association recently selected Mike Bell, the Borough's Water Operations Supervisor, as Small System Manager of the Year, and Justin Haley, the Borough's Wastewater Operations Supervisor, as Small Wastewater System Person of the Year. They will both be recognized for their excellent work for our community at the annual conference this month in Anchorage. Congratulations to both Supervisor Bell and Supervisor Haley and thank you for your service to Petersburg.
- 2. National Marine Fisheries Service Public Hearing on Threatened Listing Determination for the Sunflower Sea Star Under the Endangered Species Act:** The NMFS will hold a public hearing in the Borough Assembly Chambers on Wednesday, May 10, 2023 from 4:00 to 7:00 p.m. related to their March 16, 2023 proposed rule to list the sunflower sea star as threatened under the Endangered Species Act. Written public comments are due no later than May 15, 2023 and may be submitted via the Federal eRulemaking Portal at [www.regulations.gov](http://www.regulations.gov) (enter NOAA-NMFS-2021-0130 in the Search box). For further information, contact Sadie Wright, NMFS Alaska Region, (907) 586-7630, [Sadie.wright@noaa.gov](mailto:Sadie.wright@noaa.gov).



**Borough Manager's Report  
Assembly Meeting 02 May 2023**

- ❖ Spring road maintenance is ongoing with grading, pothole repair, street washing and street sweeping as weather permits.
- ❖ Local contractor Rock-N-Road has acquired equipment to do chip seal surfacing for DOT's culvert replacement project at 10.8-mile Mitkof Highway. We have been discussing the possibility of doing some chip seal work on Borough streets as well if they are able to offer this type of local road maintenance in the future. This would likely require some additional funding beyond what has traditionally been provided for local street maintenance.
- ❖ The building maintenance crew has begun framing work on the new sewer parts shed at the Public Works site. Construction will be completed as time permits.
- ❖ Sirens will be tested again Wednesday, May 3<sup>rd</sup> at noon. This will be a steady-sound siren and will last for 30 seconds. The sirens will now be on a monthly test schedule on the first Wednesday of the month at noon.
- ❖ The Fire Dept hosted a Family Fun Day on April 22<sup>nd</sup>. Thanks to the many volunteers who helped run this event, we estimate about 80 people attended. Thanks to Papa bears for their long-standing support and donation of the Ice Cream.
- ❖ Aaron attended the State Emergency Operations Committee/LEPCA conference on April 17<sup>th</sup>-22<sup>nd</sup>. A separate report will be sent out regarding this event.
- ❖ Josh And Ryan attended the Arson investigator conference in Sitka, on April 17<sup>th</sup>- 21<sup>st</sup>. Ryan was able to renew his investigator credentials and Josh is just waiting to hear back if he passed his test. If Josh was successful, he will be able to fill in or assist Ryan if required.
- ❖ The PVFD will join Public Health as a Local Narcan Distributor. These kits are provided by the state and are used to counteract the effects of opiates, which in the event of an overdose can result in respiratory arrest. The kits have been delivered and PVFD has started distribution. Contact Aaron at 907-772-3355 for more information.
- ❖ We are currently working on replacing smoke detectors at Assisted Living and waiting for a new Hoyer lift. The new Med Cart arrived last week and is working beautifully.
- ❖ Derrick and I met with Phil and Kirsten Testoni to discuss the next steps with Assisted Living. The Hospital will begin helping us out with Medicaid billing using a MOA and is helping us out in the temporary absence of Nurse Mindy. Thanks to help from the Hospital, Derrick was able to find approximately \$100,000 in billing issues that should result in additional payments to the Borough.

- ❖ Congratulations to Mike Bell who is being recognized by the Alaska Water and Wastewater Management Association (AWWMA) as the **Alaskan Small System Manager of the Year**. This is a well-deserved recognition for Mike and reinforces what a huge asset he has been for the water utility. Please join me in congratulating Mike on his excellence as our Water Operations Supervisor.
- ❖ Congratulations also to Justin Haley for being recognized by the AWWMA as the **Alaska Small Wastewater System Person of the Year!** Justin does an excellent job for the department and is due this recognition by the statewide association. Justin will be traveling to the statewide AWWMA conference in Anchorage in May to accept the awards for himself and Mike Bell. Congratulations to Justin for this notable award and for his hard work on behalf of the Borough.
- ❖ The WW department is requesting a partial award for engineering work for the Pump Station 4 Replacement. A loan increase through ADEC will be needed to award bid and construction phase services required in the project and this is in the works.
- ❖ The EMD16 overhaul has been ongoing for the last couple of weeks. Various setbacks related to parts and the discovery of additional work have slowed progress. The goal is to complete all work and place the unit back into service prior to the annual SEAPA shutdown. However, parts availability may not allow for this schedule. The contractor is doing all they can to locate unanticipated parts needs and get the unit back in service.
- ❖ NC Machinery has scheduled the work to rebuild the Caterpillar 398 to begin on May 4<sup>th</sup>. This should take a couple weeks to get the generator cleaned and the engine overhauled and it should be in service prior to the shutdown as well.
- ❖ McG Constructors/Dawson Joint Venture, our contractor for the Blind Slough Hydro project, has agreed to put off the shutdown of the Blind Slough Hydro until after the SEAPA shutdown. This agreement will help to ensure that PMPL will have enough resources to provide power to the community during the SEAPA outage, regardless of whether the EMD16 is back in service. It will also dramatically reduce the diesel burn, and subsequent diesel adjustment charge, for the community.
- ❖ PMPL has rented a pole testing drill to assess the condition of our wooden power poles. The line crew will have a month to get as many poles tested as possible. The equipment will produce a report that indicates the remaining strength of the pole and will allow the department to prioritize replacements over time.
- ❖ The Borough Attorney and I continue to work with Petro and ADEC on getting a clear understanding of any environmental issues with the Mitkof Highway warehouse location. It appears the site will be closed, but we do not yet know if there will be conditional issues that will remain.
- ❖ PMEA negotiations are scheduled to begin on May 2, and will continue that week. We expect much of the conversations to be around wages and the employee costs of health insurance.
- ❖ Stephanie and her team worked through the weekend with staff from Wrangell, Petersburg, and others to renew certifications for Lifeguard instructors, Water Safety instruction and more. We brought in a trainer for this and in turn invite all interested parties to participate.
- ❖ Stephanie will be taking a trip to Juneau at some point to observe and discuss some of the rehabilitation work being done on one of their aquatic centers. We want to take the opportunity to meet some of the people supervising their rehab and make connections with contractors who could help us with some of the next phases needed for our center.

**PETERSBURG BOROUGH**  
**ORDINANCE #2023-05**  
**AN ORDINANCE UPDATING CHAPTER 17.02 OF THE MUNICIPAL CODE,**  
**ENTITLED “SAFETY CODE ADOPTION”**

**WHEREAS**, under PMC 17.02.005A(1), the Petersburg Borough has adopted by reference, and with specified local amendments, the edition of the International Building Code (IBC) adopted by regulation of the State of Alaska (13 AAC 50.020); and

**WHEREAS**, under PMC 17.02.005A(2), the Petersburg Borough has adopted, also with local amendments, the same edition of the International Residential Code (IRC) that is referenced in the adopted IBC; and

**WHEREAS**, the IBC is applicable to all buildings and structures except for those covered by the IRC, and the IRC is applicable generally to one- and two-family dwellings and townhouses; and

**WHEREAS**, the IBC is enforced by the State of Alaska, and the Borough enforces the IRC within Service Area 1; and

**WHEREAS**, the State of Alaska, under IBC Section 1608, *Ground Snow Loads Pg For Alaskan Locations*, has adopted a uniform design load of 150 pounds per square foot - ground snow load (Pg) for Petersburg; and

**WHEREAS**, in 2002, the then-City of Petersburg adopted a local amendment to Section 1608 to reduce the design load from 150 Pg to 60 pounds per square foot - roof snow load (Pf)<sup>1</sup> to better reflect local conditions, historic building practices, and snow loads in nearby communities; and

**WHEREAS**, for many years, the State Fire Marshal’s office recognized this local amendment and reviewed and approved commercial construction projects using a snow load of 60 Pf (85.7 Pg); and

**WHEREAS**, in 2019, the Snow Loads Committee of the Alaska Structural Engineers of Alaska proposed a design snow load for Petersburg of 95 Pg in its *“Alaska Snow Loads For The 2022 Updated ASCE 7”* (December 2019), and the State Fire Marshal has utilized that figure for the last several years when reviewing local commercial construction projects; and

**WHEREAS**, the Borough wishes to formally adopt this figure of 95 Pg by local amendment; and

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<sup>1</sup> Load figure can be expressed in terms of either ground snow load (Pg) or roof snow load (Pf). Through an administrative error, the City Code adopted a 60 Pg load figure, rather than the intended 60 Pf load figure, despite this, the State Fire Marshal correctly utilized the intended number of 60 Pf. 60 Pf is roughly the equivalent of 85.7 Pg.

**WHEREAS**, the State Fire Marshal's office has recently indicated that it may no longer accept and utilize load figures adopted by local amendment, but will instead utilize the figure adopted by the State of Alaska for Petersburg (150 Pg), however the Borough wishes to adopt the load figure that is appropriate for its community in the hopes that the State Fire Marshal will revert to its prior acceptance of local amendments; and

**WHEREAS**, under PMC 17.02.005(A)(2), the 2021 version of the IRC was effective within the Borough in October of 2022; and

**WHEREAS**, the 2021 edition of the IRC recommends new minimum insulation values for the climate zone in which Petersburg is located; and

**WHEREAS**, increasing insulation values within the Borough to those set out in the IRC would provide minimal energy savings for area homeowners over the life of the home, but would substantially increase the initial cost of construction for one- and two-family dwellings; and

**WHEREAS**, an analysis by the National Association of Home Builders (NAHB) shows the net present value of the new insulation requirements is negative, meaning it will cost more to implement the new minimum insulation values than the homeowner would save over the useful life of the home, and the NAHB recommends amending the insulation values for ceilings to be consistent with 2018 values.

**THEREFORE, THE PETERSBURG BOROUGH ORDAINS**, Section 17.02.005 (*Codes adopted*), of Chapter 17.02 of the Petersburg Municipal Code, is hereby amended as follows:

**Section 1. Classification:** This ordinance is of a general and permanent nature and shall be codified in the Petersburg Municipal Code.

**Section 2. Purpose:** The purpose of this ordinance is to (1) update the local amendment to Section 1608, *Ground Snow Loads Pg For Alaskan Locations* of the IBC, to bring it into line with the 2019 load figure recommended for Petersburg by the Snow Loads Committee of the Alaska Structural Engineers of Alaska and (2) adopt a local amendment to the IRC so as to adopt the 2018 required insulation values.

**Section 3. Substantive Provisions:** Chapter 17.02, Section 17.02.005, *Codes adopted*, paragraphs A(1) and (A)(2), of the Petersburg Municipal Code are hereby amended as follows. The language proposed for addition is **underlined and bold**, and the language proposed for deletion is in [brackets] and struck through.

17.02.005 Codes Adopted.

A. The following safety codes are adopted by reference:

1. The portions and version of the International Building Code (IBC) adopted by 13 AAC 50.020 with the following amendment: in IBC Section 1608 Snow Loads, Table 1608.2 *Ground Snow Loads Pg For Alaskan Locations*, delete the one hundred fifty pounds per square foot specified for Petersburg and insert a [sixty] **ninety-five** pounds per square foot Ground Snow Load for Petersburg.

2. The portions and version of the International Residential Code (IRC) for One- and Two-Family Dwellings that is the same edition as the version of the International Building Code as adopted under PMC 17.02.005(A)(1) with the following amendments:

[There are no changes to paragraphs a-b]

**c. In IRC Section N1102(R402), Table N1102.1.3 (R402.1.3), Insulation Minimum R-Values and Fenestration Requirements by Component, amend the row for CLIMATE ZONE 6, for Ceiling, Wood Frame Wall and Floor R-value columns only, to the following:**

<u>CLIMATE ZONE</u>	<u>CEILING R-VALUE</u>	<u>WOOD FRAME WALL R-VALUE</u>	<u>FLOOR R-VALUE</u>
<u>6</u>	<u>49</u>	<u>20</u> <u>or</u> <u>20&amp;5ci<sup>h</sup></u> <u>or</u> <u>13&amp;10ci<sup>h</sup></u> <u>or</u> <u>0&amp;20ci<sup>h</sup></u>	<u>38</u>

**Section 4. Severability:** If any provision of this ordinance or any application to any person or circumstance is held invalid, the remainder of this ordinance and the application to other persons or circumstances shall not be affected.

**Section 5. Effective Date:** This Ordinance shall become effective immediately upon final passage.

Passed and approved by the Petersburg Borough Assembly, Petersburg, Alaska this \_\_\_\_ day of \_\_\_\_\_, 2023.

\_\_\_\_\_  
Mark Jensen, Mayor

ATTEST:

\_\_\_\_\_  
Debra K. Thompson, Borough Clerk

Adopted:  
Noticed:  
Effective:

**PETERSBURG BOROUGH  
ORDINANCE #2023-06**

**AN ORDINANCE UPDATING VARIOUS SECTIONS OF CHAPTER  
14.08 OF THE MUNICIPAL CODE, ENTITLED “SEWER UTILITY”**

**WHEREAS**, an annual rate review of the Borough Sewer Utility indicates that a greater than anticipated rate increase is needed for FY 2024 to keep up with increased costs and expenses to the Borough.

**THEREFORE, THE PETERSBURG BOROUGH ORDAINS**, Section 14.08.320A of Chapter 14.08 of the Petersburg Municipal Code, entitled Sewer Utility, is hereby amended as follows:

**Section 1. Classification:** This ordinance is of a general and permanent nature and shall be codified in the Petersburg Municipal Code.

**Section 2. Purpose:** The purpose of this ordinance is to update the rates for FY 2024 for sewer utility service set out in Section 14.08.320A.

**Section 3. Substantive Provisions:** Section 14.08.320A of the Petersburg Borough Municipal Code is hereby amended as follows. The language proposed for addition is in red and underlined, and the language proposed for deletion is in blue and struck through.

**14.08.320 Sewer collection rates.**

- A. The sewer utility rate shall apply to the owner of all houses, buildings or other structures designed or used for human occupancy, employment, recreation or other purpose provided that the public sewer is within 150 feet of the property line. The rate for the sewer utility shall be a minimum based on a unit fee predicated on the size of the water service, plus a water commodity charge as follows. In the event municipal water service is not connected, the monthly minimum for five-eighths inch service shall apply unless it is apparent to the borough that a larger amount of water is being used on the premises.

**Sewer Utility Monthly Service Charge Rate Schedule**

		FY2022	FY2023 3% inc.	FY2024 <del>3% inc.</del> <u>6% inc.</u>	FY2025 3% inc.	FY2026 3% inc.
Service Description	Size of Water Meter	Service Charge \$/mth	Service Charge \$/mth	Service Charge \$/mth	Service Charge \$/mth	Service Charge \$/mth
Residential	3/4"	40.40	41.61	<del>42.86</del> <u>44.11</u>	<del>44.15</del> <u>45.43</u>	<del>45.47</del> <u>46.79</u>



1" Sewer	1"	90.51	93.23	<u>98.82</u> <del>96.02</del>	<u>101.79</u> <del>98.90</del>	<u>104.84</u> <del>101.87</del>
1½" Sewer	1 1/2"	217.81	224.34	<u>237.80</u> <del>231.07</del>	<u>244.93</u> <del>238.01</del>	<u>252.28</u> <del>245.15</del>
2" Sewer	2"	435.64	448.71	<u>475.63</u> <del>462.17</del>	<u>489.90</u> <del>476.04</del>	<u>504.60</u> <del>490.32</del>
3" Sewer	3"	839.16	864.33	<u>916.19</u> <del>890.26</del>	<u>943.68</u> <del>916.97</del>	<u>971.99</u> <del>944.48</del>
6" Sewer	6"	2191.66	2257.41	<u>2392.85</u> <del>2325.13</del>	<u>2464.64</u> <del>2394.89</del>	<u>2538.58</u> <del>2,006.97</del>
Industrial Sewer		528.61	544.47	<u>577.14</u> <del>560.80</del>	<u>594.45</u> <del>577.63</del>	<u>612.29</u> <del>594.96</del>
Sewer 3/Base Conspt	3/4"	121,19	124.83	<u>132.32</u> <del>128.57</del>	<u>136.29</u> <del>132.43</del>	<u>140.38</u> <del>136.40</del>
DBL Base+Conspt/Res	3/4"	80.80	83.22	<u>88.21</u> <del>85.72</del>	<u>90.86</u> <del>88.29</del>	<u>93.59</u> <del>90.94</del>
Sewer Conspt- Res	3/4"	0.00	0.00	0.00	0.00	0.00
Sewer Base	3/4"	40.40	41.61	<u>44.11</u> <del>42.86</del>	<u>45.43</u> <del>44.15</del>	<u>46.79</u> <del>45.47</del>
Sewer Conspt- Com		0.00	0.00	0.00	0.00	0.00
Sewer-Condos		363.58	374.49	<u>396.96</u> <del>385.72</del>	<u>408.87</u> <del>397.29</del>	<u>421.13</u> <del>409.21</del>
Sewer 3xBase +Conspt		121.19	124.83	<u>132.32</u> <del>128.57</del>	<u>136.29</u> <del>132.43</del>	<u>140.38</u> <del>136.40</del>
Housing Apartments	3/4"	242.39	249.66	<u>264.64</u> <del>257.15</del>	<u>272.58</u> <del>264.87</del>	<u>280.76</u> <del>272.81</del>
Commercial Swr Base		90.51	93.23	<u>98.82</u> <del>96.02</del>	<u>101.79</u> <del>98.90</del>	<u>104.84</u> <del>101.87</del>
Half Chg Senior Cit	3/4"	20.21	20.82	<u>22.07</u> <del>21.44</del>	<u>22.73</u> <del>22.08</del>	<u>23.41</u> <del>22.75</del>

**Sewer Utility Commodity Charge Rate Schedule**

		FY2022	FY2023 3% inc.	FY2024 <del>3% inc.</del> 6% inc.	FY2025 3% inc.	FY2026 3% inc.
Service Description	Size of Water Meter	\$/Kgal	\$/Kgal	\$/Kgal	\$/Kgal	\$/Kgal
All service levels	All	1.02	1.05	<del>1.08</del> 1.11	<del>1.11</del> 1.15	<del>1.15</del> 1.18

The commodity charge is billed from the rate schedule as presented in this chapter, for each unit. A unit shall be each separate residence, house, trailer, apartment, commercial or industrial premises, public restroom or any structure designed or used for dwelling or business purposes.

**Section 4. Severability:** If any provision of this ordinance or any application to any person or circumstance is held invalid, the remainder of this ordinance and the application to other persons or circumstances shall not be affected.

**Section 5. Effective Date:** This Ordinance shall become effective immediately upon final passage.

**PASSED AND APPROVED** by the Petersburg Borough Assembly, Petersburg, Alaska this \_\_\_\_ day of \_\_\_\_\_, 2023.

\_\_\_\_\_  
Mark Jensen, Mayor

ATTEST:

\_\_\_\_\_  
Debra K. Thompson, Borough Clerk

Adopted:  
Noticed:  
Effective:

**PETERSBURG BOROUGH  
ORDINANCE #2023-07**

**AN ORDINANCE AMENDING SECTIONS 14.20.125, 14.20.250 AND 14.20.380 OF CHAPTER 14.20, MUNICIPAL HARBORS, OF THE PETERSBURG MUNICIPAL CODE TO ADDRESS LIVE-ABOARDS AND OTHER RESIDENTIAL USES OF VESSELS MOORED IN MUNICIPAL HARBORS AND TO INCREASE THE PENALTY FOR SPEEDING OR EXCESSIVE WAKE**

**WHEREAS**, the current language of the borough code, in chapter 14.20, *Municipal Harbors*, does not provide any guidance on the number or type of vessels which can be utilized as live-aboards in borough harbors; and

**WHEREAS**, the borough code also does not directly address other residential uses of vessels moored in borough harbors, such as for vacation rentals or long-term residential rentals; and

**WHEREAS**, residential vessel use, by its nature, produces less movement of vessels into and out of the harbors, resulting in a reduction of available hot berthing space in the harbors; and

**WHEREAS**, the harbors of the borough are the economic driver of the community of Petersburg, and further guidance regarding harbor residential usage is necessary to ensure continued operational efficiency; and

**WHEREAS**, Municipal Code Section 14.20.380, *Fees for prohibited acts*, establishes a penalty for speeding or excessive wake of \$50 per occurrence; and

**WHEREAS**, speeding or causing excessive wake in the municipal harbors can cause damage to floats and vessels; and

**WHEREAS**, the Harbor Advisory Board recommends the penalty for speeding or excessive wake be increased to \$200 per occurrence.

**THEREFORE, THE PETERSBURG BOROUGH ORDAINS**, Sections 14.20.125, 14.20.250 and 14.20.380 of the Petersburg Municipal Code are hereby amended as follows. The language proposed for addition is in bolded red and underlined, and the language proposed for deletion is struck through.

**Section 1. Classification:** This ordinance is of a general and permanent nature and shall be codified in the Petersburg Municipal Code.

**Section 2. Purpose:** The purpose of this ordinance is to address live-aboard and other residential uses of vessels occupying moorage space in borough harbors and to increase the penalty for speeding or excessive wake.

**Section 3. Substantive Provisions:**

**14.20.030 – Definitions**

**“Boat house” means a building or structure designed or used primarily for the storage of boats or vessels.**

**“Float house” means any habitable structure or dwelling upon a barge or floats (including without limitation wood logs, foam billets, plastic or steel barrels and or tubes) whether fixed or transient, and used primarily as a residence, as contrasted with a vessel.**

#### **14.20.125 - Live-aboard policy.**

A. A person living aboard a vessel for fifteen days within any 30-day period is considered a live-aboard.

B. Pets may be kept on a live-aboard vessel pursuant to chapter 7.04 of this Code.

C. Vessels being used as live-aboards must meet all sanitary requirements as established by the United States Coast Guard or by the borough.

D. Oil, gas, electric or wood heating units must be installed and utilized in conformance with manufacturers' specifications and approved by the harbormaster as a matter of public safety.

E. Fees for live-aboard use shall be charged as established in this chapter.

**F. During the months of May through October of each year, no more than ten percent (10%) of the moorage spaces within each category of stall length may be utilized at any one time by live-aboard vessels, except at the discretion of the Harbormaster.**

#### **14.20.250 - Prohibited acts.**

The following acts are prohibited:

*[There are no changes to paragraph A]*

B. Tying or mooring pile drivers, scows, barges, boat houses, **float houses**, or other similar vessels, ~~or vessels over one hundred fifty feet in length,~~ to any float;

*[There are no changes to paragraph C through V]*

**W. Commercial use of the harbor facilities for rental of vessels for residential purposes, either on a short-term or long-term rental basis, including without limitation using the vessel as a vacation rental or bed & breakfast. This does not preclude short-term moorage of a marine passenger ship providing overnight lodging as part of a cruise, as defined in PMC 4.80.020.**

**14.20.380 – Fees for prohibited acts**

The following acts shall be unlawful within the jurisdiction of the municipal harbors and penalties shall be assessed as follows:

[No changes to A-C]

D. Speeding or excessive wake, per violation ..... ~~\$50.00~~ **200.00**

[No changes to E-L]

**Section 4. Severability:** If any provision of this ordinance or any application to any person or circumstance is held invalid, the remainder of this ordinance and application to any person and circumstance shall not be affected.

**Section 5. Effective Date:** This ordinance shall be effective immediately upon final passage.

**PASSED AND APPROVED** by the **Petersburg Borough Assembly, Petersburg, Alaska** this \_\_\_\_\_ day of \_\_\_\_\_, 2023.

\_\_\_\_\_  
**Mark Jensen, Mayor**

**ATTEST:**

\_\_\_\_\_  
**Debra K. Thompson, Borough Clerk**

Adopted:  
Published:  
Effective:

**PETERSBURG BOROUGH  
ORDINANCE #2023-08**

**AN ORDINANCE OF THE PETERSBURG BOROUGH ADOPTING THE BUDGET FOR THE FISCAL YEAR JULY 1,  
2023 THROUGH JUNE 30, 2024**

**Section 1. Classification:** This ordinance is not of a permanent nature and shall not be codified in the Petersburg Municipal Code.

**Section 2. Purpose:** The purpose of this ordinance is to set forth budgetary requirements for the operation of the various divisions, departments and organizations of the Petersburg Borough for Fiscal Year 2024. Support to the Petersburg School District has been included in the General Fund Expenditures.

**Section 3. Substantive Provisions:** In accordance with Section 11.07 of the Charter of the Petersburg Borough, the budget for the fiscal period beginning July 1, 2023 and ending June 30, 2024 is hereby approved in the amounts and for the purposes as stated below. The supporting line item budget detail, as reviewed by the Assembly, is incorporated as part of this ordinance.

**A. Fiscal Year 2024 Revenue and Expenditure Budget**

<u>FUND</u>	<u>REVENUES</u>	<u>EXPENDITURES BUDGET</u>
<b>GENERAL FUND</b>		
General Fund	\$ 12,272,922	\$ 12,272,922
<b>ENTERPRISE FUNDS</b>		
Electric Fund	\$ 7,359,248	\$ 7,925,170
Water Fund	\$ 1,245,714	\$ 2,533,163
Wastewater Fund	\$ 950,253	\$ 1,411,698
Sanitation Fund	\$ 1,355,253	\$ 1,659,744
Harbor Fund	\$ 2,207,586	\$ 4,205,213
Elderly Housing Fund	\$ 481,496	\$ 566,716
Assisted Living Fund	\$ 2,013,786	\$ 2,114,309
<b>INTERNAL SERVICE FUNDS</b>		
Motor Pool Fund	\$ 1,088,718	\$ 1,621,199
<b>DEBT SERVICE FUND</b>	\$ 835,875	\$ 1,835,875
<b>SPECIAL REVENUE FUNDS</b>		
Miscellaneous Grants	\$ 220,803	\$ 221,103
Economic Development Fund	\$ 100,000	\$ 832,843
Secure Rural Schools Fund	\$ 437,156	\$ 1,100,000
Secure Rural Roads Fund	\$ 63,150	\$ 445,000
Property Development Fund	\$ 38,806	\$ 497,000
Transient Room Tax Fund	\$ 59,495	\$ 51,500
E911 Surcharge Fund	\$ 80,000	\$ 113,500
Marine Passenger Fee	\$ 65,000	\$ 129,250
Borough Organizational Fund	\$ -	\$ 61,128
Coronavirus State and Local Recovery Fund (ARPA)	\$ -	\$ 290,000
DCRA Local Government Lost Revenue Fund (ARPA)	\$ -	\$ 302,000
Local Assistance & Tribal Consistency Fund	\$ 1,006,800	\$ -
<b>CAPITAL PROJECTS FUNDS</b>	\$ 9,080,000	\$ 17,089,014

**Section 4. Severability:** If any provision of this ordinance or any application to any person or circumstance is held invalid, the remainder of this ordinance and application to any person and circumstance shall not be affected.

**Section 5. Effective Date:** This ordinance shall become effective July 1, 2023.

**PASSED AND APPROVED by the Petersburg Borough Assembly, Petersburg, Alaska this 5<sup>th</sup> day of June, 2023.**

\_\_\_\_\_  
**Mark Jensen, Mayor**

**ATTEST:**

\_\_\_\_\_  
**Debra K. Thompson, Borough Clerk**

Adopted:  
Published:  
Effective:

**PETERSBURG BOROUGH  
ORDINANCE #2023-09**

**AN ORDINANCE REPEALING CHAPTERS 11.48, 11.52, 11.56 AND 11.60 OF THE  
FORMER CITY OF PETERSBURG CODE AND PMC CHAPTER 11.96, AND AMENDING  
PMC SECTIONS 11.12.040, 14.20.360 AND 14.20.380**

**WHEREAS**, on January 3, 2013 the Election Division for the State of Alaska certified the election results of the December 18, 2012 incorporation election for the Petersburg Borough, and

**WHEREAS**, the certified election confirmed the incorporation of the Petersburg Borough and dissolved the City of Petersburg, and

**WHEREAS**, Petersburg Borough Charter, Section 19.06 requires all ordinances, resolutions, regulations, orders and rules in effect for the former City of Petersburg to continue in full force and effect within the Petersburg Borough, Service Area 1, until expressly reaffirmed, revised or repealed by the assembly, and

**WHEREAS**, Chapters 11.48-11.60 of the ordinances of the former City of Petersburg address vehicle parking matters, including methods of parking (Chapter 11.48), stopping for loading or unloading (Chapter 11.52), miscellaneous stopping, standing and parking restrictions (Chapter 11.56) and parking lot regulations (Chapter 11.60), and

**WHEREAS**, most of these parking matters are already covered under Sections 11.08.010 and .020 of the Petersburg Municipal Code (PMC), which incorporate state law and regulations on parking matters, and thus additional, separate borough ordinances are not required;

**WHEREAS**, the various provisions which would address the borough's authority over matters not addressed in state law have already been moved over and incorporated into PMC Chapter 11.12, with the exception of section 11.56.050, which would be adopted as a new paragraph D under PMC 11.12.040, and

**WHEREAS**, PMC Chapter 11.96, at .070B, contains language calling for escalation of parking fines depending upon when the fine is paid, which is not imposed in the Borough, and, at .070C, language that contains an outdated fine for improper usage of handicapped parking spaces, and

**WHEREAS**, the harbormaster has requested additional language be included in PMC Chapter 14.20, *Municipal Harbors*, regarding parking enforcement at municipal harbors, as harbor staff generally enforces parking infractions at harbor facilities.

**THEREFORE, THE PETERSBURG BOROUGH ORDAINS**, Chapters 11.48, 11.52, 11.56 and 11.60 of the former City of Petersburg Code are hereby repealed in their entirety, a new paragraph D to PMC 11.12.040 is adopted, PMC 11.96 is repealed in its entirety, and PMC 14.20.360 and .380 are amended as set below.

**Section 1. Classification:** This ordinance is of a general and permanent nature and shall be codified in the Petersburg Municipal Code.



**Section 2. Purpose:** The purpose of this ordinance is to update the language of the municipal code.

**Section 3. Substantive Provisions:**

A. Chapter 11.48, Method of Parking, of the former City of Petersburg Code is hereby repealed in its entirety:

~~Chapter 11.48 – METHOD OF PARKING~~

~~11.48.010 – Curb parking.~~

~~Except as otherwise provided in this chapter, every vehicle stopped or parked upon a roadway where there are adjacent curbs shall be so stopped or parked with the right-hand wheels of such vehicle parallel to and within eighteen inches of the right-hand curb. Where a street or roadway has been specifically designated and reserved for one-way traffic, vehicles may be parked with the left-hand wheels adjacent to and within eighteen inches of the left-hand curb of the roadway unless prohibited by appropriate signs or marking.~~

~~11.48.020 – Unattended motor vehicle.~~

~~No person driving or in charge of a motor vehicle shall permit it to stand unattended without first stopping the engine, locking the ignition, removing the key and effectively setting the brake thereon, and when standing upon any grade, turning the front wheels to the curb or side of the highway; provided, that this section shall not prohibit delivery vehicles legally parked in a freight curb loading zone from leaving their motor vehicles running while expeditiously making their deliveries; and provided further, that this section shall not prohibit other persons leaving their vehicles running while unattended for the purpose of warming or keeping said vehicles warmed up in cold weather; and provided further, that a person, while operating or in control of a motor vehicle, may not park or willfully allow the motor vehicle to stand with its motor running if a minor child under the age of twelve years is unattended in the vehicle.~~

~~11.48.030 – Angle parking signs or markings.~~

~~The traffic authority of the city shall determine upon what streets and parts of streets angle parking shall be permitted, and shall have such streets marked or signed therefore.~~

~~11.48.040 – Obedience to angle parking signs or markings.~~

~~On those streets which have been so signed or marked for angle parking, no person shall park or stand a vehicle other than at the angle to the curb or edge of the roadway indicated by such signs or markings.~~

**11.48.050 – Parking in marked spaces.**

~~In an area where parking spaces have been marked off on the surface of the street, a driver parking a vehicle shall park it within a parking space as thus marked off, and not on or over a line delimiting a space.~~

**11.48.060 – Permits for loading or unloading at an angle to the curb.**

~~A. The traffic authority is authorized to issue special permits to permit the backing of a vehicle to the curb for the purpose of loading or unloading merchandise or materials subject to the terms and conditions of such permit. The permits may be issued either to the owner or lessee of real property or to the owner of the vehicle, and shall grant to such person the privilege as therein stated and authorized in this section. The traffic authority may revoke the permits at any time.~~

~~B. It is unlawful for any permittee or other person to violate any of the special terms or conditions of any such permit.~~

-----

**B.** Chapter 11.52, Stopping for Loading or Unloading, of the former City of Petersburg Code is hereby repealed in its entirety:

Chapter 11.52 - STOPPING FOR LOADING OR UNLOADING

**11.52.010 – Curb loading zone designation.**

~~A. The traffic authority of the city is authorized to determine the location of passenger and freight curb loading zones, and shall have placed and maintained appropriate signs indicating the same and stating the hours during which the provisions of this section are applicable. By the same authority, such loading zones may be discontinued.~~

~~B. When such a loading zone is established on request of any person, the traffic authority shall not have signs placed until the applicant has paid to the city an amount of money estimated by the traffic authority to be adequate to reimburse the city for all costs of establishing and signing the same.~~

**11.52.020 – Passenger curb loading zone.**

~~No person shall stop, stand or park a vehicle for any purpose or period of time other than for the expeditious loading or unloading of passengers in any place marked as a passenger curb loading zone during hours when the regulations applicable to such curb loading zone are effective, and then only for a period not to exceed three minutes.~~

**11.52.030 – Freight curb loading zone.**

A. ~~No person shall stop, stand or park a vehicle for any purpose or length of time other than for the expeditious unloading and delivery or pickup and loading of materials in any place marked as a freight curb loading zone during hours when the provisions applicable to such zones are in effect.~~

B. ~~The driver of a passenger vehicle may stop temporarily at a place marked as a freight curb loading zone for the purpose of and while actually engaged in loading or unloading passengers when such stopping does not interfere with any motor vehicle used for the transportation of materials which is waiting to enter or about to enter such zone.~~

**11.52.040 – Public carrier stops and stands.**

~~The traffic authority of the city is authorized and required to establish bus stops, bus stands, taxicab stands and stands for other passenger common-carrier motor vehicles on such public streets in such places and in such number as he shall determine to be of the greatest benefit and convenience to the public; and every such bus stop, bus stand, taxicab stand or other stand shall be designated by appropriate signs, or curb markings.~~

**11.52.050 – Bus stopping, standing or parking.**

A. ~~The operator of a bus shall not stand or park such vehicle upon any street at any place other than a bus stand so designated to be exclusive taxi and bus parking, standing and loading areas and shall be designated as such by the proper posted signs therein.~~

B. ~~The operator of a bus shall not stop such vehicle upon any street at any place for the purpose of loading or unloading passengers or their baggage other than at a bus stop, bus stand or passenger loading zone so designated as provided in this chapter, except in case of an emergency.~~

C. ~~The operator of a bus shall enter a bus stop, bus stand or passenger loading zone on a public street in such a manner that the bus, when stopped to load or unload passengers or baggage, shall be in a position with the right front wheel of such vehicle not further than eighteen inches from the curb and the bus approximately parallel to the curb so as not to unduly impede the movement of other vehicular traffic.~~

**11.52.060 – Taxicab stopping, standing or parking.**

A. ~~The operator of a taxicab shall not stand or park such vehicle upon any street at any place other than in a taxicab stand so designated as provided in this chapter, except if the taxicab is on charter or except that the owners of the taxicab may use said vehicle for personal business while and if the vehicle is otherwise legally parked. All street areas adjacent to any curbing painted white are designated to be exclusive taxi and bus parking, standing and loading areas and shall be designated as such by the properly posted signs therein.~~

~~B. This provision shall not prevent the operator of a taxicab from temporarily stopping in accordance with other stopping or parking regulations at any place for the purpose of and while actually engaged in the expeditious loading or unloading of passengers.~~

~~**11.52.070 - Restricted use of bus and taxicab stands.**~~

~~No person shall stop, stand or park a vehicle other than a bus in a bus stop, or other than a taxicab in a taxicab stand when any such stop or stand has been officially designated and appropriately signed, except that the driver of a passenger vehicle may temporarily stop therein for the purpose of and while actually engaged in loading or unloading passengers when such stopping does not interfere with any bus or taxicab waiting to enter or about to enter such zone.~~

-----

**C.** Chapter 11.56, Miscellaneous Stopping, Standing and Parking Restrictions, of the former City of Petersburg Code is hereby repealed in its entirety:

~~Chapter 11.56 - MISCELLANEOUS STOPPING, STANDING AND PARKING RESTRICTIONS~~

~~**11.56.010 - Places where prohibited.**~~

~~A. No person shall stop, stand or park a vehicle, except when necessary to avoid conflict with other traffic or in compliance with law, regulation or ordinance, or the directions of a police officer or traffic-control device, in any of the following places:~~

- ~~— 1. On a sidewalk;~~
- ~~— 2. In front of a public or private driveway;~~
- ~~— 3. Within an intersection;~~
- ~~— 4. Within fifteen feet of a fire hydrant when that hydrant is directly adjacent to the curb; where a fire hydrant is recessed back from the curb, within fifteen feet of that point on the curb which would be crossed by a perpendicular line from the recessed hydrant to the nearest public street;~~
- ~~— 5. On a crosswalk;~~
- ~~— 6. Within fifteen feet of a crosswalk or intersection unless changed by curb markings;~~
- ~~— 7. Within thirty feet upon the approach of any flashing beacon, stop sign or traffic-control signal located at the side of a roadway;~~

~~— 8. Between a safety zone and the adjacent curb or within thirty feet of points on the curb immediately opposite the ends of a safety zone, unless the local traffic authority indicates a different length by signs or markings;~~

~~— 9. Within twenty feet of the driveway entrance to any fire station and on the side of a street opposite the entrance to any fire station within seventy-five feet of said entrance when properly signposted;~~

~~— 10. Alongside or opposite any street excavation or obstruction when stopping, standing or parking would obstruct traffic;~~

~~— 11. On the roadway side of any vehicle stopped or parked at the edge or curb of a street, provided that this section shall not prohibit a taxicab from making brief stops;~~

~~— 12. Upon any bridge or other elevated structure upon a highway or within a highway tunnel;~~

~~— 13. At any place where official signs prohibit stopping;~~

~~— 14. All street areas adjacent to curbs painted yellow, unless the area so painted yellow is posted by signs allowing parking, such as a loading zone. This section shall not prohibit a taxicab from stopping to expeditiously load or unload passengers in residential areas;~~

~~— 15. All areas properly marked for handicapped parking unless the vehicle is registered with the state of Alaska as a vehicle of a handicapped person or a city of Petersburg handicapped parking permit is properly displayed in the lower right-hand corner of the windshield;~~

~~— 16. No person shall park any vehicle in or upon a street or area designated by signs as a fire lane.~~

~~B. No person shall move a vehicle not lawfully under his control into any such prohibited area or away from a curb such distance as is unlawful.~~

#### **~~11.56.020 – Parking in streets and alleys.~~**

~~No person shall park a vehicle in any street or alley in such a manner or under such conditions as to leave available less than ten feet of the width of the roadway for the free movement of vehicular traffic; and no person shall stop, stand or park a vehicle therein in such position as to block the driveway entrance to any abutting property.~~

#### **~~11.56.030 – Parking for certain purposes prohibited.~~**

~~No person shall park a vehicle upon any roadway for the principal purpose of:~~

~~A. Displaying such vehicle for sale;~~

~~B. Washing, greasing or repairing such vehicle except repairs necessitated by an emergency.~~

**~~11.56.040 – Parking limits established.~~**

~~A. The traffic authority of the city is authorized to establish parking time limits, prohibit parking on designated streets and parts of streets, and designate areas for permitted parking, by having appropriate signs or curb markings erected or placed thereon.~~

~~B. When such signs or markings have been erected or so placed it shall then be unlawful for any person to park a vehicle in violation thereof.~~

**~~11.56.050 – Parking more than twenty-four hours.~~**

~~A vehicle may not remain parked or standing within one location or parking space in excess of twenty-four hours upon any bridge, viaduct, causeway, street, highway or other public area within this city, and no such sign giving notice thereof is necessary for this regulation to be effective.~~

**~~11.56.060 – Stopping, standing or parking on main-traveled part of highway.~~**

~~A. No person shall stop, park or leave standing any vehicle, whether attended or unattended, upon the main-traveled part of a highway, except that this section shall not prohibit the making of brief stops for on and off loading of passengers.~~

~~B. This section shall not apply to the driver of any vehicle which is disabled while on the paved or main-traveled portion of a highway in such manner and to such extent that it is impossible to avoid stopping and temporarily leaving the disabled vehicle in such position.~~

**~~11.56.070 – Vehicles impeding snow removal operations.~~**

~~No person shall park a vehicle on any street or other public area at any time when snow removal operations are being conducted on or in the vicinity of such street or other public area, without leaving in charge of such vehicle a person authorized, competent and able to remove such a vehicle. Falling snow, the presence of un-removed snow on such street or other public area, or the conduct of snow removal operations will be sufficient to indicate this prohibition.~~

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D. Section 11.12.040 of the Petersburg Municipal Code, is hereby amended by inserting a new paragraph D, to read as follows:

**11.12.040 - Additional parking restrictions.**

[There are no changes to paragraphs A through C]

**D. A vehicle may not remain parked or standing within one location or parking space in excess of twenty-four hours upon any bridge, viaduct, causeway, street, highway or other public area within the borough, and no such sign giving notice thereof is necessary for this regulation to be effective.**

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E. Chapter 11.60 of the former City of Petersburg Code, is hereby repealed in its entirety:

Chapter 11.60 - PARKING LOT REGULATIONS

**~~11.60.010 - Parking in commercial lot.~~**

~~It is unlawful for any person to park or cause to be parked any motor vehicle in a commercial parking lot without the express permission of the owner or persons having control over such lot.~~

**~~11.60.020 - Violation of commercial parking lot provision.~~**

~~Any motor vehicle parking in violation of Section 11.60.010, upon written request of the owner or person in control of a commercial parking lot, may be impounded in accordance with the provisions of this title.~~

**~~11.60.030 - Commercial parking lot defined.~~**

~~"Commercial parking lot," as used in Sections 11.60.010 and 11.60.020, means an area devoted to parking space rented or devoted to the accommodation of the motor vehicles of the customers of the owner or owners of a nearby business and which has been posted by the owner or person in control thereof with a conspicuous and discernible sign designating the same as a commercial parking lot and setting forth the conditions under which motor vehicles may be parked therein. Such sign shall be approved as to size and lettering by the chief of police.~~

**~~11.60.040 - Off-street parking areas established.~~**

~~The city council establishes off-street parking areas.~~

**~~11.60.050 - Off-street parking area use control.~~**

~~The city council is authorized to establish parking time limits, prohibit parking, establish the charge to be made for parking or use thereof, establish the method of collection, establish speed limits, and such other matters as it deems necessary for property control and operation of municipal off-street parking areas by having appropriate signs, curb markings or a combination of the same erected or so placed. It is unlawful for any person to park or operate a vehicle in violation thereof.~~

~~**11.60.060 – Parking in public dock facilities.**~~

~~Every vehicle parked or left in a parking space on the public dock facilities shall be parked or left at the approximate angle indicated. Any person parking or leaving a vehicle in such a parking space in any manner contrary to this section is guilty of a misdemeanor.~~

~~**11.60.070 – Vehicles and objects prohibited on dock facilities.**~~

~~No person shall drive, pull, roll, push or otherwise cause to be located upon the dock facilities any of the following vehicles or objects: skateboards, roller skates, all-terrain vehicles, bicycles, tricycles, skates, wagons or sleds, except when used for moving goods to and from vessels.~~

~~**11.60.080 – Enforcement.**~~

~~The police department shall enforce the provisions of this chapter and violators thereof shall be punished as provided in Section 11.96.070.~~

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F. PMC Chapter 11.96 is hereby repealed in its entirety:

Chapter 11.96 – PENALTIES

~~**11.96.010 – Reserved.**~~

~~**11.96.020 – Reserved.**~~

~~**11.96.030 – Reserved.**~~

~~**11.96.040 – Reserved.**~~

~~**11.96.050 – Reserved.**~~

~~**11.96.060 – Reserved.**~~

~~**11.96.070 – Penalties generally.**~~

~~A. Reserved.~~



~~B. Violations of the provisions of Chapter 11.56 and 11.60 of the Petersburg Municipal Code and Chapter 13 AAC 02.340 of the Alaska Administrative Code shall be subject to escalation according to the following schedule, except as otherwise provided:~~

- ~~— 1. From ten dollars to twenty dollars if not paid within seven days;~~
- ~~— 2. From twenty dollars to fifty dollars if not paid within fifteen days;~~
- ~~— 3. From fifty dollars to one hundred dollars if not paid within thirty days.~~

~~C. Unauthorized persons parking in an area properly marked for use by handicapped persons only shall be subject to a fine of one hundred dollars.~~

~~D. Reserved.~~

~~E. Reserved.~~

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**G. PMC Sections 14.20.360 and .380 are hereby amended as follows, with the proposed new language in bolded red and underlined:**

**14.20.360 - Regulation of vehicles and parking areas.**

A. The harbormaster, **, or the harbormaster's designee, is authorized to enforce traffic and parking ordinances at borough harbor facilities. Additionally, the harbormaster** may establish **and enforce additional** reasonable traffic and parking regulations as may be required for the safe and orderly operation and parking of all vehicles within the confines of harbor facilities. This includes the posting of signs and all other regulations that may be required. Vehicles found in violation of these regulations will be subject to **fees and to** towing and placement in a designated impound lot.

*[There are no amendments to paragraphs B and C]*

**14.20.380 - Fees for prohibited acts.**

The following acts shall be unlawful within the jurisdiction of the municipal harbors and penalties shall be assessed as follows:

*[There are no amendments to paragraphs A through L]*

**M. Parking in violation of 14.20.360C or posted signage ..... \$25.00**

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**Section 4. Severability:** If any provision of this ordinance or any application to any person or circumstance is held invalid, the remainder of this ordinance and the application to other persons or circumstances shall not be affected.

**Section 5. Effective Date:** This Ordinance shall become effective immediately upon final passage.

Passed and approved by the Petersburg Borough Assembly, Petersburg, Alaska this \_\_\_\_ day of \_\_\_\_\_, 2022.

\_\_\_\_\_  
Mark Jensen, Mayor

ATTEST:

\_\_\_\_\_  
Debra K. Thompson, Clerk

Adopted:  
Noticed:  
Effective:

**PETERSBURG BOROUGH  
ORDINANCE #2023-10**

**AN ORDINANCE AMENDING SECTION 16.12.030(A) OF CHAPTER 16.12, ACQUISITION AND DISPOSAL OF BOROUGH OWNED LANDS, OF THE PETERSBURG MUNICIPAL CODE TO ADD FEDERALLY RECOGNIZED TRIBES TO THE LIST OF ENTITIES THAT MAY PURCHASE BOROUGH PROPERTY FOR LESS THAN ASSESSED VALUE IF DETERMINED BY THE ASSEMBLY TO BE IN THE BEST INTEREST OF THE BOROUGH**

**WHEREAS**, PMC Section 16.12.030(A) provides for the sale of Borough-owned land to a state or federal agency or nonprofit entity for less than assessed value if determined by the Assembly to be in the best interest of the Borough; and

**WHEREAS**, the Petersburg Indian Association requests to be added to this section so they may purchase Borough property at a price lower than assessed value and construct housing units to rent to Petersburg residents; and

**WHEREAS**, there is a recognized shortage of available housing in Petersburg for residents and to address this, in part, the Assembly recently established a Housing Task Force to study the housing shortage and present their findings along with ideas to increase available/affordable housing opportunities.

**THEREFORE, THE PETERSBURG BOROUGH ORDAINS**, Section 16.12.030(A) of the Petersburg Municipal Code is hereby amended as follows. The language proposed for addition is in bolded red and underlined.

**Section 1. Classification:** This ordinance is of a general and permanent nature and shall be codified in the Petersburg Municipal Code.

**Section 2. Purpose:** The purpose of this ordinance is to amend Section 16.12.030(A) to add federally recognized tribes to the list of entities that may purchase Borough property for less than assessed value if determined by the Assembly to be in the best interest of the Borough.

**Section 3. Substantive Provisions:**

**16.12.030 – Disposal to state or federal agency, **federally recognized tribe**, or nonprofit entity, or for purposes of economic development.**

A. The borough may dispose of borough real property for less than the assessed value to a state or federal agency, **federally recognized tribe**, or nonprofit entity, for considerations determined by the borough assembly to be in the best interest of the borough.

**Section 4. Severability:** If any provision of this ordinance or any application to any person or circumstance is held invalid, the remainder of this ordinance and application to any person and circumstance shall not be affected.

**Section 5. Effective Date:** This ordinance shall be effective immediately upon final passage.

**PASSED AND APPROVED** by the Petersburg Borough Assembly, Petersburg, Alaska this \_\_\_\_\_ day of \_\_\_\_\_, 2023.

\_\_\_\_\_  
**Mark Jensen, Mayor**

**ATTEST:**

\_\_\_\_\_  
**Debra K. Thompson, Borough Clerk**

Adopted:  
Published:  
Effective:

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MEMORANDUM

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**TO:** MAYOR JENSEN AND BOROUGH ASSEMBLY  
**FROM:** KARL HAGERMAN, UTILITY DIRECTOR   
**SUBJECT:** REQUEST FOR APPLICATION OF A FUEL ADJUSTMENT CHARGE  
**DATE:** 4/27/2023  
**CC:** STEVE GIESBRECHT, BOROUGH MANAGER

Per the Municipal Code, Chapter 14.16.720, titled Rates – Fuel and Purchased Power Adjustment Charge, the Assembly has the discretion to implement a fuel adjustment to all kilowatt hours sold in the billing period that also includes the annual SEAPA maintenance shutdown and the resulting 10-day diesel plant run by the utility.

With this memorandum, I am requesting that the Assembly consider implementing the codified rate adjustment for the billing period between May 27<sup>th</sup> and June 27<sup>th</sup> of 2023. The adjustment was approved last year to recoup fuel costs above \$2.40 per gallon (the price noted in the code) for the annual SEAPA maintenance shutdown. With fuel costs even higher this year, the utility would appreciate the Assembly's support. The SEAPA maintenance period is scheduled for May 31<sup>st</sup> – June 9<sup>th</sup>.

As specified in the municipal code, the adjustment would take fuel burn expenses above \$2.40 per gallon and spread out those costs to all kilowatt hours sold during the affected billing period. If fuel is not above \$2.40, there is no adjustment. Pricing as of the writing of this memo is \$4.47 per gallon.

As an example of potential adjustment per kwh, a hypothetical scenario is presented below, with 2022 generation levels and current pricing for fuel. Actual fuel prices at the time of the diesel run and generation data would be used to calculate the final billing adjustment for 2023.

$$\text{Fuel Adjustment} = (F-240)/13.5 \times D/G$$

*F = Cost in cent/gal of current fuel price = 447 (As of April 19, 2023)*

*D= kwh generated during prior month by diesel plant = 518,465 (June 2022)*

*G = Total generation during prior month, in kwh = 3,209,823 kwh (June 2022)*

$$\text{Adjustment} = (447-240)/13.5 \times (518,465/3,209,823) = 2.471 \text{ cents/kwh}$$

***In this hypothetical scenario, the utility would be seeking to recover \$77,099 in unanticipated fuel costs and a customer that used 1,000 kwh in the billing period would see an adjustment of \$24.71 added to their bill.***

If approved, the utility will begin a public information campaign to make our customers aware of the power adjustment and the billing period in which it will be applied. Conservation of power at households and businesses during the subject billing period will lessen the amount of power generation and fuel usage during the shutdown, but also the total amount of usage by the community that is factored into the adjustment formula. Concerted conservation efforts will help every customer to lessen the impacts of the adjustment.

Thank you for your consideration.

APRIL 7, 2023

CONSTRUCTION DRAWINGS

# PETERSBURG PARKS AND RECREATION

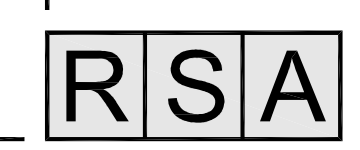
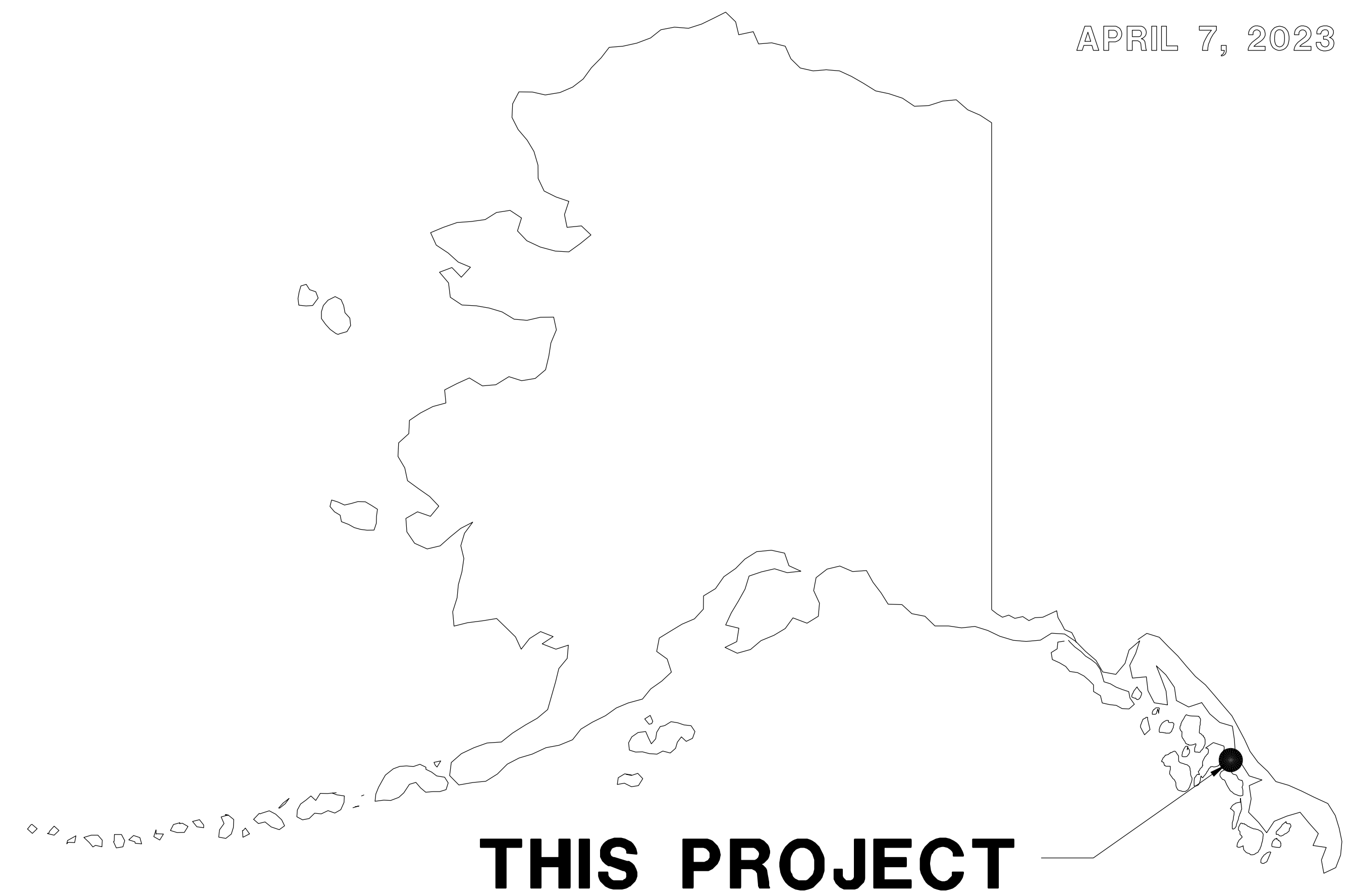
WASTE LINE REPAIR

FOR THE

## PETERSBURG BOROUGH PARKS AND RECREATION

500 N 3RD ST.

PETERSBURG, ALASKA



**Engineering, Inc.**

MECHANICAL AND ELECTRICAL CONSULTING ENGINEERS  
 670 West Fireweed Lane, Suite 200  
 Anchorage, AK 99503  
 Phone (907) 276-0521  
 Corporate No.: AECC542



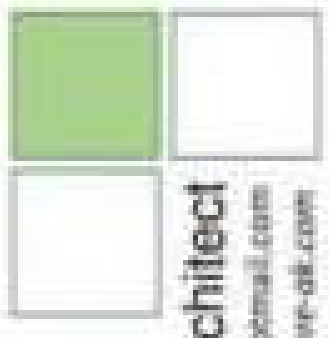
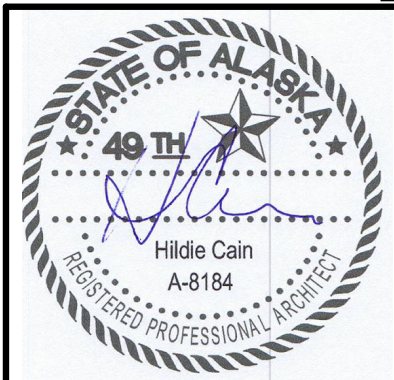
9360 Glacier Highway, Ste 100 Phone: 907.586.2093  
 Juneau, Alaska 99801 Fax: 907.586.2099



**Hildie A. Cain, Architect**  
 (907)529-5167 ccsak@hotmail.com  
 www.hcarchitecture-ok.com

### INDEX TO DRAWINGS:

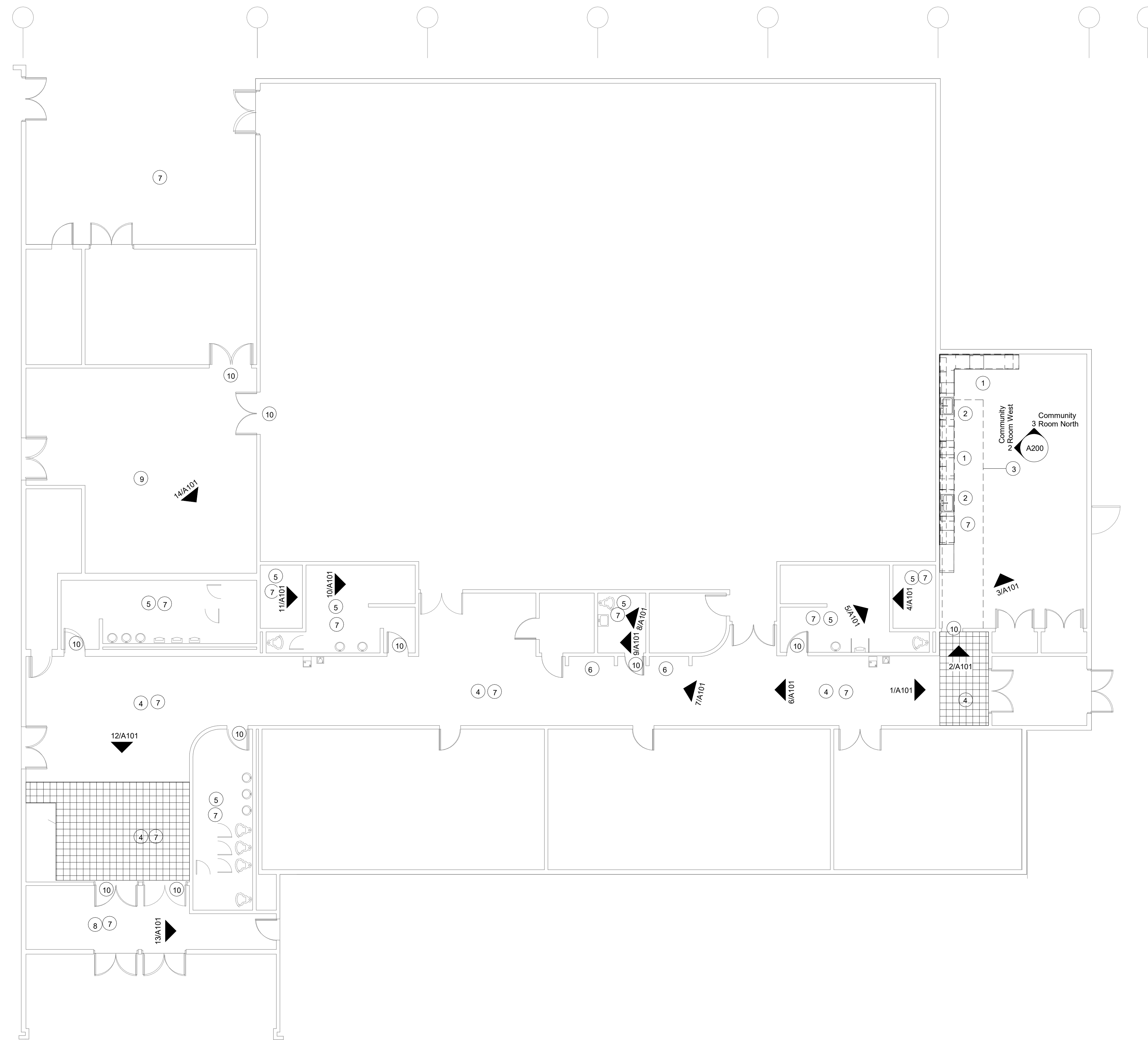
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- A100 FINISHES DEMOLITION
- A101 PHOTOS
- A200 FINISHES SCHEDULE DETAILS
- A300 ARCHITECTURAL SPECIFICATIONS
- A301 ARCHITECTURAL SPECIFICATIONS
  
- S100 STRUCTURAL GENERAL NOTES, PLAN AND DETAIL
  
- M001 LEGENDS, SCHEDULES, AND ABBREVIATIONS
- M002 MECHANICAL SPECIFICATIONS
- M101 UNDER SLAB PLUMBING DEMOLITION PLAN
- M102 ABOVE FLOOR PLUMBING DEMOLITION PLAN
- M201 UNDER SLAB PLUMBING REMODEL PLAN
- M202 ABOVE FLOOR PLUMBING REMODEL PLAN



Hildie A. Cain, Architect  
1007525-5187 ccain@hacmail.com  
www.hacarchitecture-ak.com

DEMOLITION NOTES

- 1 Remove existing upper and lower casework, complete.
- 2 Remove existing sink, supply and drain lines. Leave drain in place in wall to accommodate new sink. Reference new work.
- 3 Remove and salvage existing elevated floor tile as required. Retain floor tiles for reinstallation. Reference new work.
- 4 Remove existing flooring and adhesive, complete. Retain existing wood base where it occurs.
- 5 Remove existing floor tile, base and adhesive if required for underfloor work, complete room. At areas where flooring and base are removed, prepare floor for new finishes. Reference new work.
- 6 Remove and salvage existing bench. Reinstall bench and base when work is complete. Reference new work.
- 7 Demolish concrete floor as required to complete underfloor work.
- 8 Demolish existing flooring, adhesive and rubber base.
- 9 Remove and salvage existing rubber tile as required to accomplish under-floor work. Reference new work.
- 10 Remove existing door and hardware as required to accomplish under-floor work. Reinstall at completion.



1 Demolition Plan  
1/8" = 1'-0"

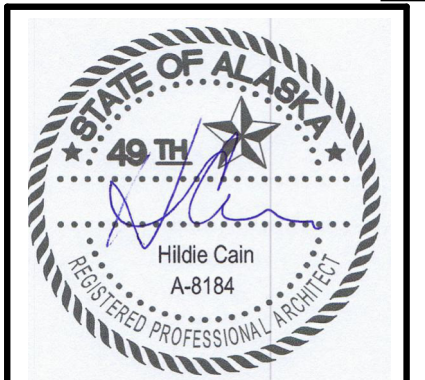
**PARKS & REC. WASTE PIPE REPAIR**  
**PETERSBURG BOROUGH**  
**500 N. 3RD. ST.**  
**PETERSBURG ALASKA 99833**

REVISIONS:

DRAWN BY:  
 CHECKED BY:  
 DATE: 4/7/2023  
 JOB NUMBER: 2311

DRAWING TITLE:  
**FINISHES  
 DEMOLITION**

SHEET:  
**A100**



Hildie A. Cain, Architect  
PHOTOGRAPHY: 907-273-5187, ccain@hacmail.com  
www.hacarchitecture-ak.com

**PARKS & REC. WASTE PIPE REPAIR**  
PETERSBURG BOROUGH  
500 N. 3RD. ST.  
PETERSBURG ALASKA 99833

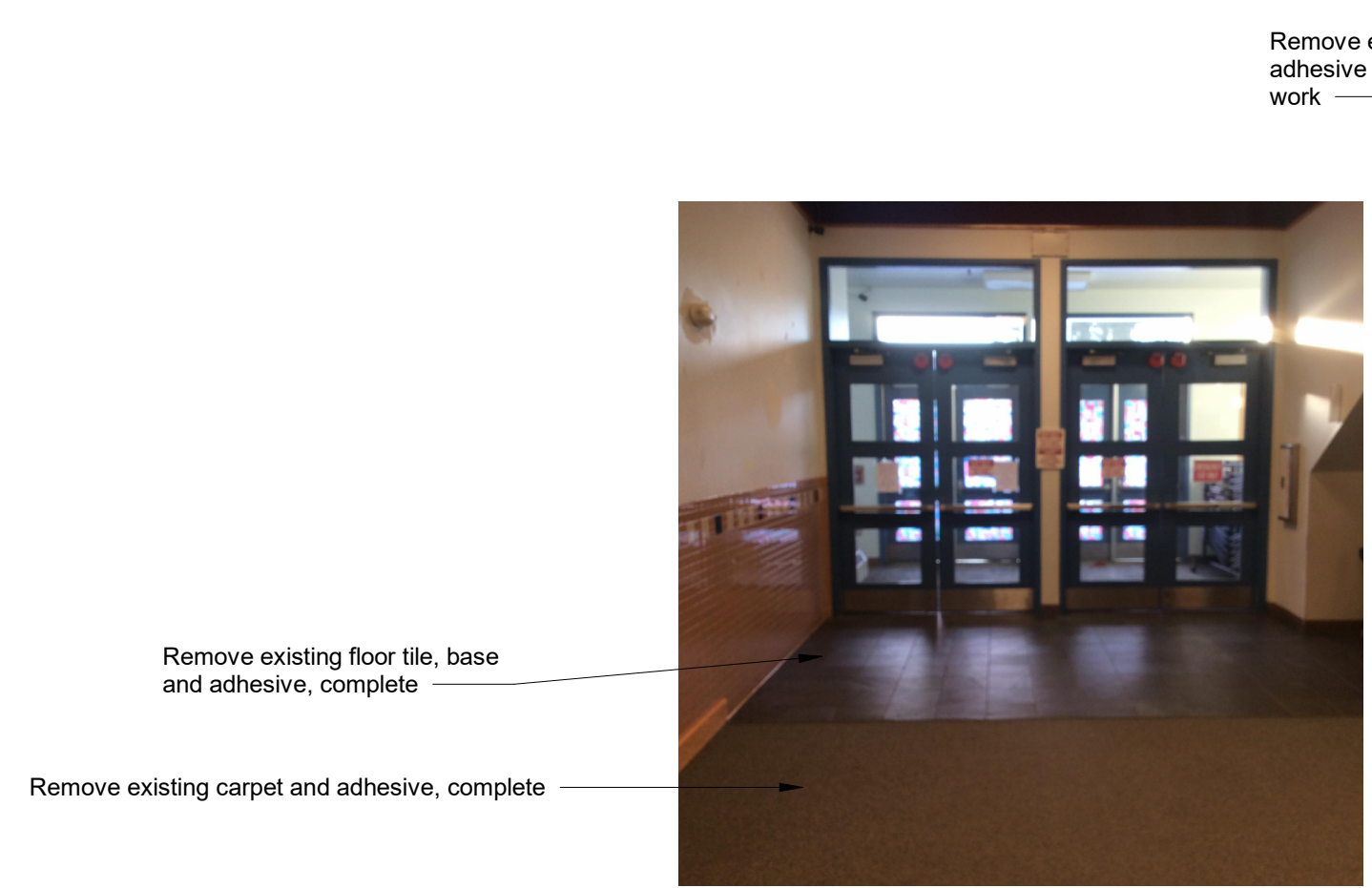
REVISIONS:

DRAWN BY:  
CHECKED BY:  
DATE: 4/7/2023  
JOB NUMBER: 2311

DRAWING TITLE:  
PHOTOS

SHEET:  
A101

1"  
2"  
3"



Remove existing floor tile, base and adhesive, complete  
Remove existing carpet and adhesive, complete

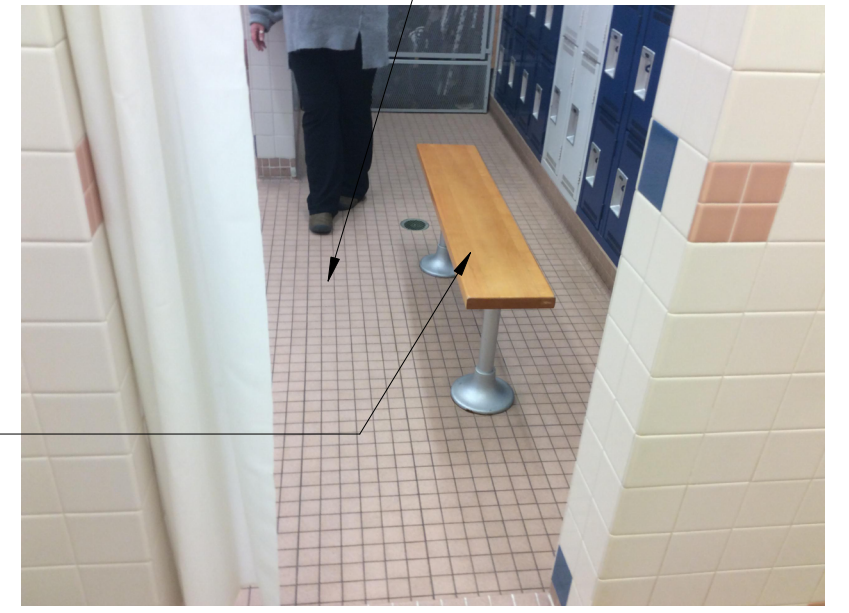
PH 12 - West Entry



Remove existing floor tile, base tile and adhesive as required to accomplish under-floor work

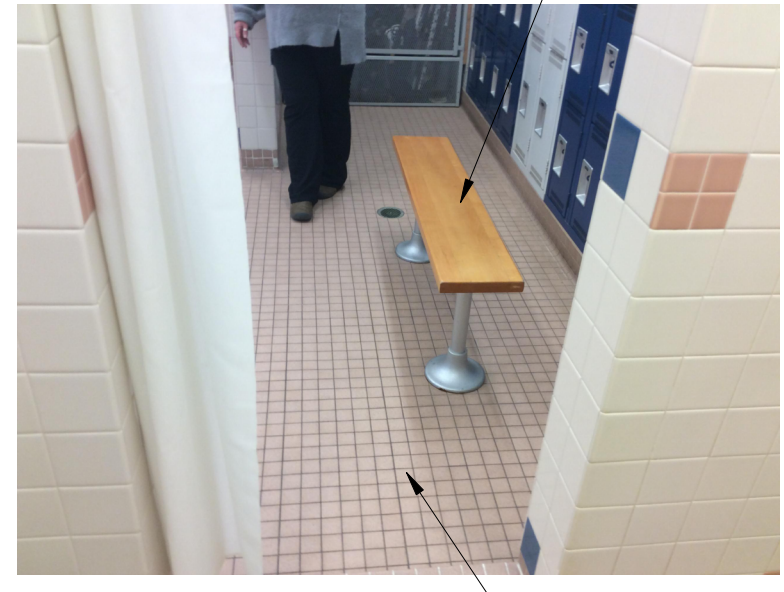
PH 8 - Accessible Restroom

Remove floor mounted equipment, reinstall at completion



Remove existing floor tiles, base tiles and adhesive as required to accomplish under-floor work

PH 4 - Boys Locker Room



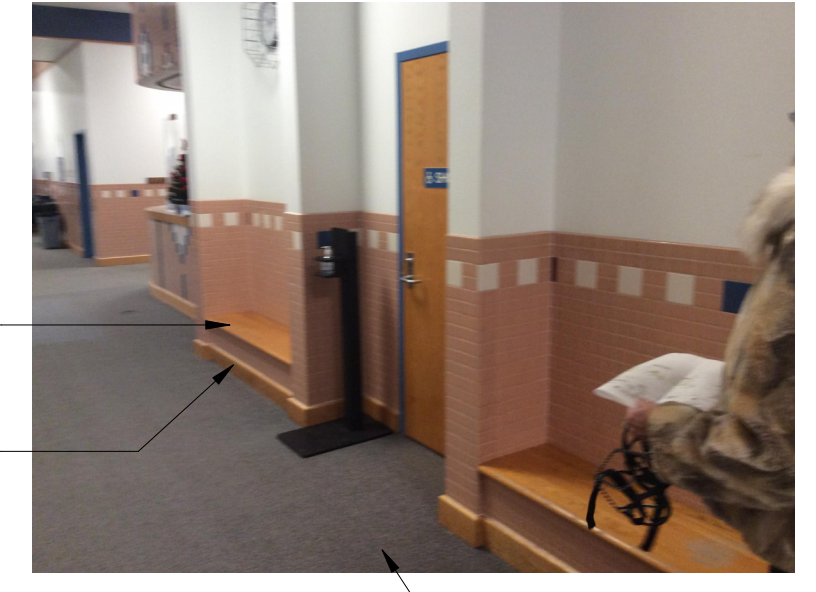
Remove all floor mounted equipment. Reinstall at completion.

Existing bench to remain. Remove wood surface and store for reinstallation.

Remove existing wood base, complete

PH 11 - Girls Locker Room

Demolish existing floor tiles, base tiles, and adhesive as required to accomplish under floor work.



Remove existing carpet, underlayment and adhesive, complete.

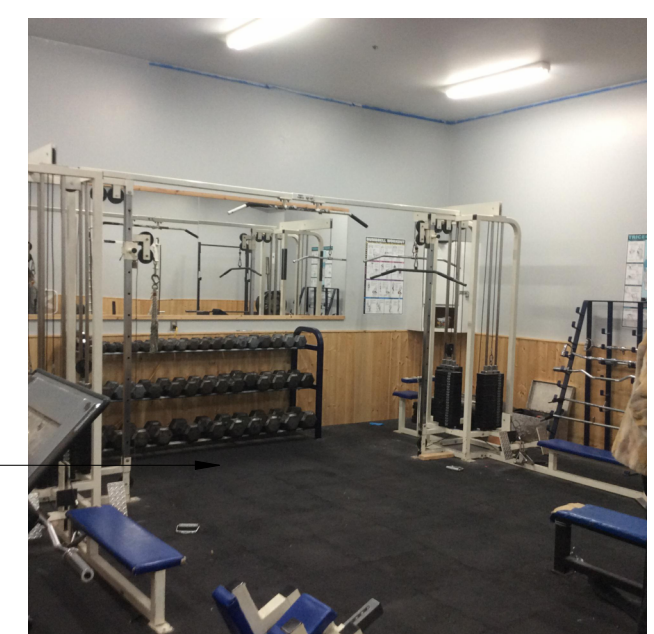
PH 7 - Corridor Benches

Demolish existing casework



Remove existing elevated floor tiles as required for under-floor work. Reinstall at completion.

PH 3 - Community Room



Remove existing rubber flooring tiles as required to accomplish under-floor work. Reinstall at completion

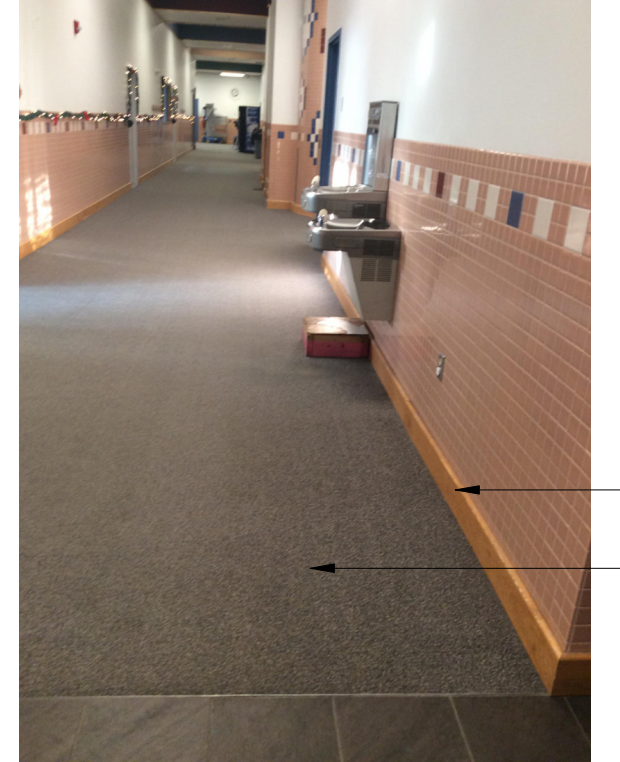
PH 14 - Weight Room



Demolish existing floor tiles, base tiles and adhesive as required to accomplish under-floor work

PH 10 - Girls Locker Room

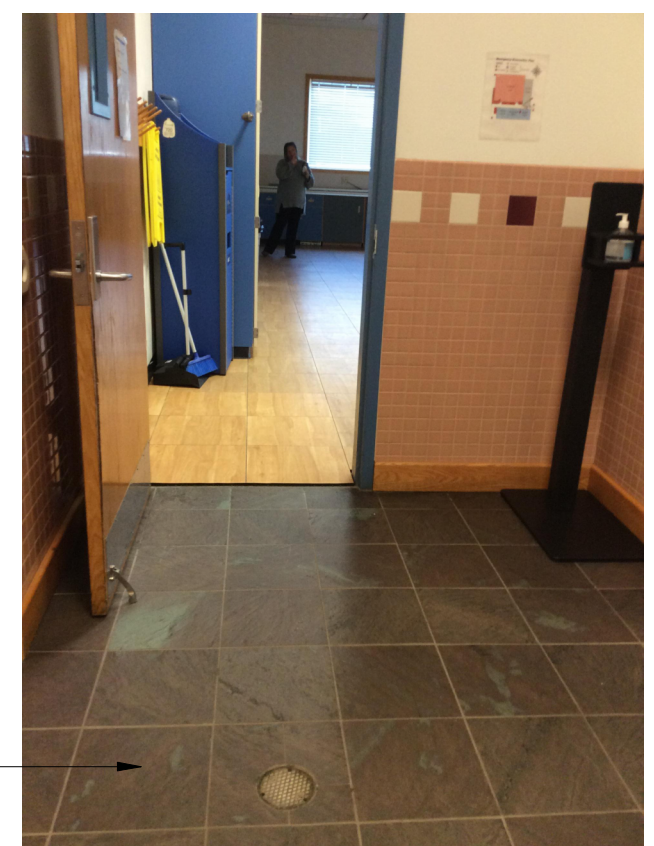
Remove all floor mounted equipment. Reinstall at completion



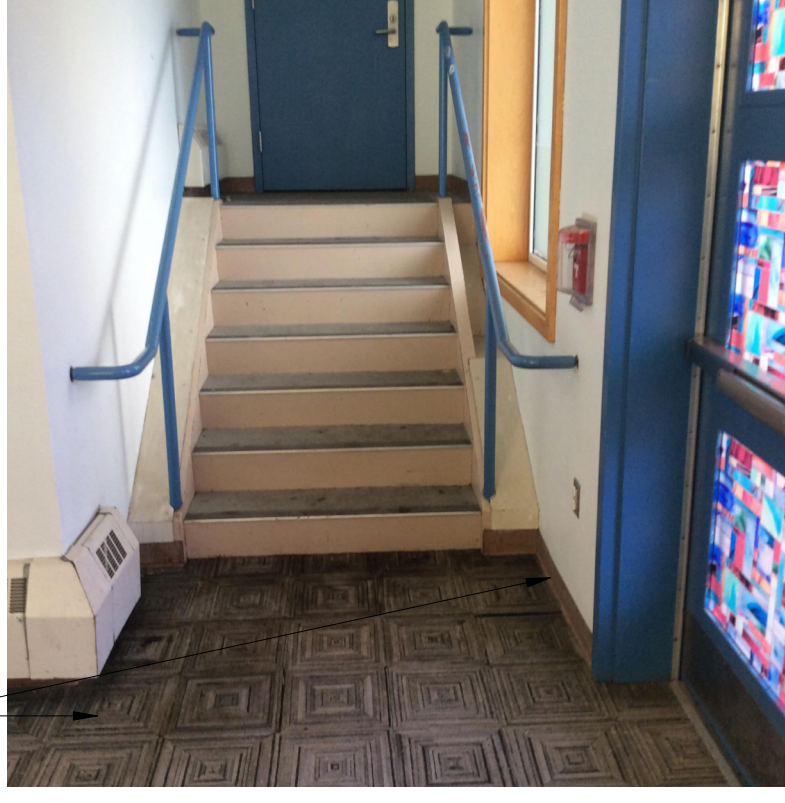
Existing wood base to be removed, complete  
Existing carpet, underlayment and adhesive to be removed, complete.

PH 6 - Corridor

Remove existing floor tile, wood base and adhesive, complete

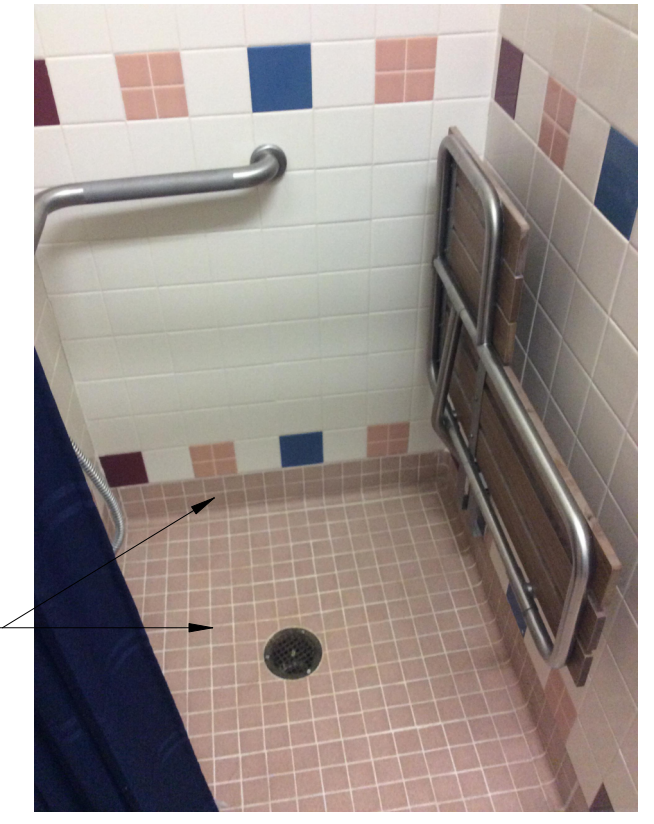


Ph 2-East Entry to Community Room



Remove existing walk-off tiles and rubber base

PH 13 - West Entry Stair



Demolish existing floor tiles, base tiles and adhesive as required to accomplish under-floor work

PH 9 - Accessible Shower



Remove existing floor tile, wood base and adhesive, complete

PH 5 - Boys Locker Room

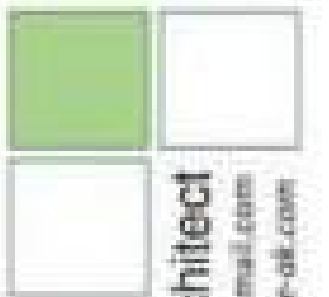
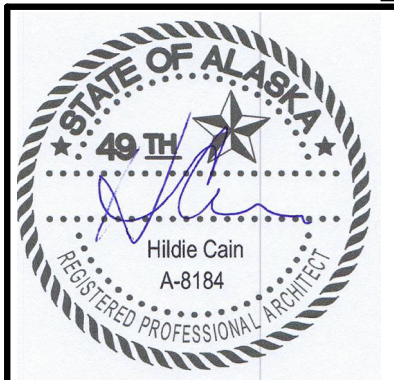
Remove existing floor tiles at shower curb. Retain curb.

Existing floor tiles, base tiles and adhesive to be removed, complete.



Ph 1-East Entry





Hildie A. Cain, Architect  
 (907) 339-5187 hcaia@protonmail.com  
 www.hcaiaarchitecture.com

**PARKS & REC. WASTE PIPE REPAIR**  
 PETERSBURG BOROUGH  
 500 N. 3RD. ST.  
 PETERSBURG ALASKA 99833

REVISIONS:

DRAWN BY:  
 CHECKED BY:  
 DATE: 4/7/2023  
 JOB NUMBER: 2311

DRAWING TITLE:  
 FINISH SCHEDULE,  
 DETAILS

SHEET:  
**A200**

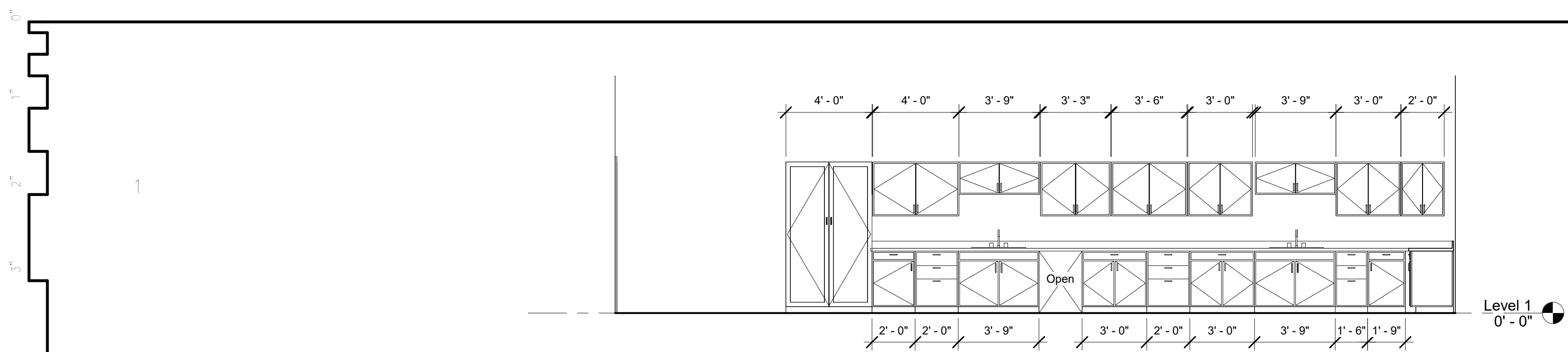
GENERAL FINISHES REPLACEMENT NOTES

- The overall scope of work requires removal and replacement of the primary underfloor drain and branch lines.
- Care shall be taken not to disturb existing fixtures and finishes that are scheduled to remain. If any items scheduled to remain are damaged, contractor shall replace those items with new items.
- All floor mounted items in areas where floor finishes are to be replaced shall be removed and stored for reinstallation.
- When branch lines must be replaced, existing floor finishes shall be removed in the entire room, complete. Sub-floor shall be patched and repaired once work is complete, and the entire sub-floor shall be prepared to accept new finishes.

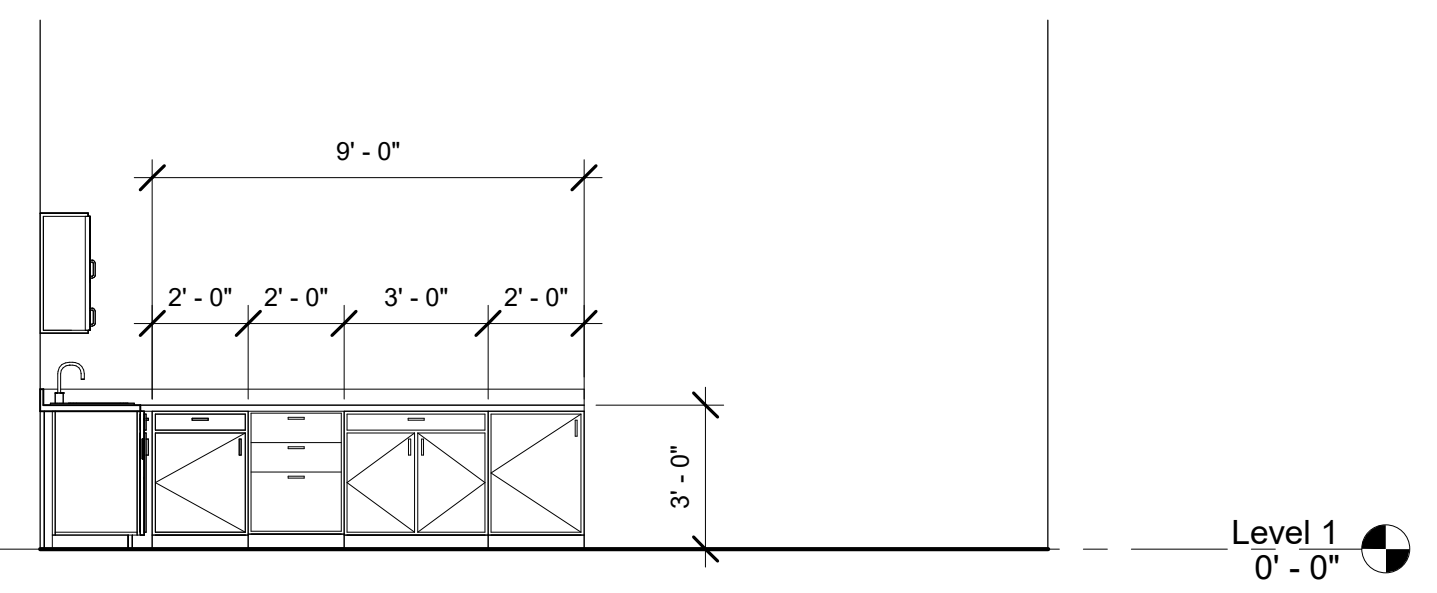
Room Schedule				
Number	Name	Floor Finish	Base Finish	Comments
100	Community	Existing	-	See Note 1
101	Corridor	Carpet Tile	Wood	
102	Boys Locker	Resin	Self Cove	See Notes 2,3
103	Shower	Resin	Self Cove	See Notes 2,3
104	Accessible Restroom	Resin	Self Cove	See Notes 2,3
105	Girls Locker Room	Resin	Self Cove	See Notes 2,3
106	Boys Toilet	Resin	Self Cove	See Notes 2,3
107	Weight Room	Existing	-	See Note 1
108	Storage	Existing	-	No Work this room
109	Girls Toilet	Resin	Self Cove	See Notes 2,3
110	Vestibule	Walkoff Mat	Wood	

ROOM SCHEDULE NOTES

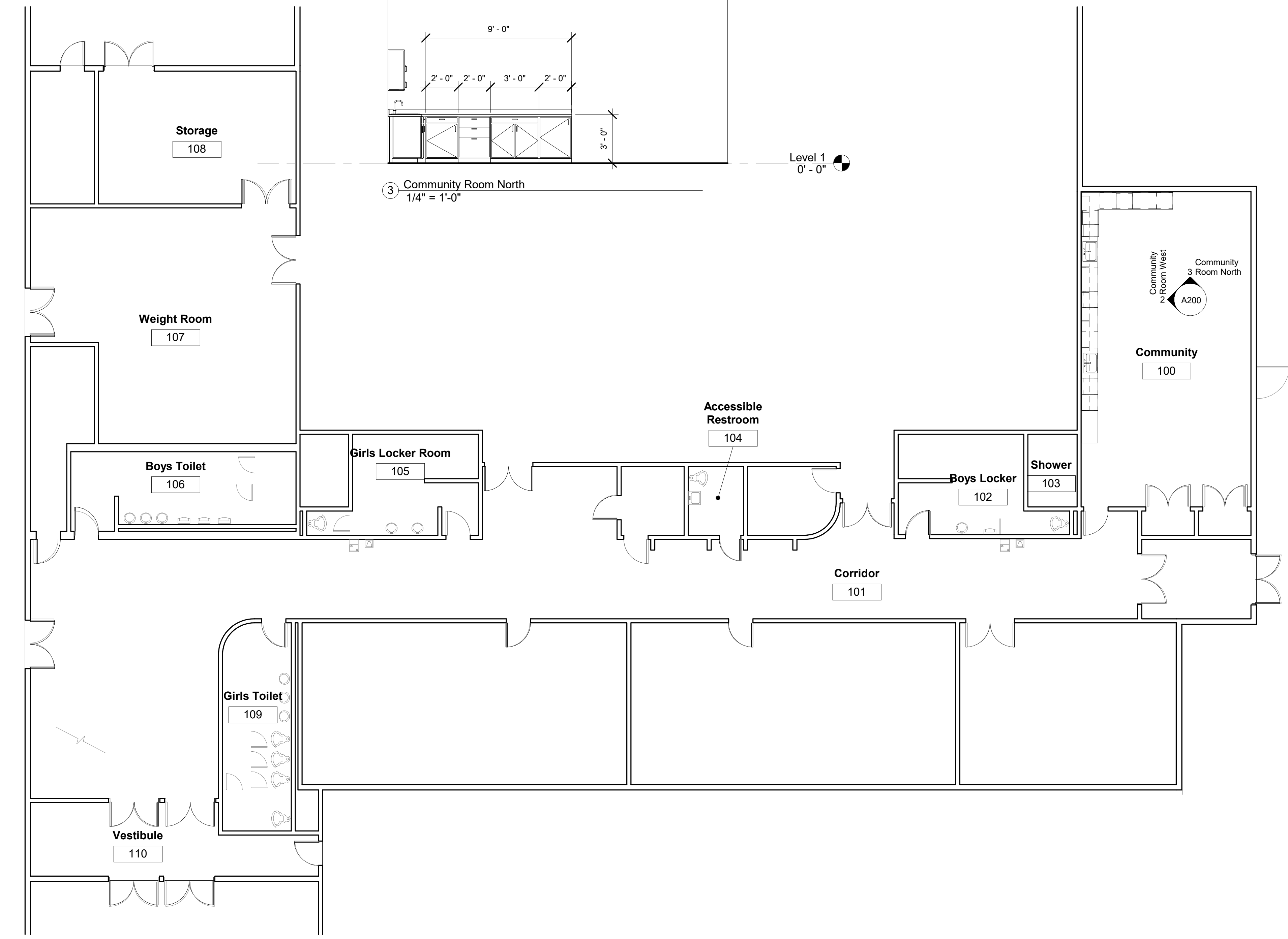
- Existing flooring to be removed as required to accomplish underfloor work. Reinstall when complete.
- Flake color(s) to be selected by Owner.
- Evaluation of existing under-floor branch drain to be accomplished in the field prior to demolition of existing flooring and base. If branch lines need replacement, existing flooring and base to be removed in entire room, complete.
- Patch and repair existing concrete floor after branch drain replacement.



② Community Room West  
 1/4" = 1'-0"



③ Community Room North  
 1/4" = 1'-0"



① New Work  
 1/8" = 1'-0"

**SECTION 03 54 13  
GYPSUM CEMENT UNDERLAYMENT**

**PART 1 - GENERAL**

## 1.1 SUMMARY – DESIGN BASIS ARDEX LU 100

## A. Section Includes:

1. This Section includes a self-leveling underlayment that consists of a blend of high strength cements and powdered polymers used to level and smooth interior, above-grade concrete, wood, VCT, existing patching and leveling materials and non-water soluble adhesive residue on concrete.

## B. Related Sections:

1. Drawings, general provisions of the Contract, and other related construction documents such as Division 01 specifications apply to this Section.

## 1.2 REFERENCES

- A. ASTM C109M, Compressive Strength Air-Cure Only  
 B. ASTM C348, Flexural Strength of Hydraulic-Cement Mortars  
 C. ASTM F2170, Relative Humidity in Concrete Floor Slabs Using in situ Probes  
 D. ASTM F710, Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring  
 E. ASTM D4263, Standard Test Method for Indicating Moisture in Concrete by the Plastic Sheet Method

## 1.4 SUBMITTALS

A. Product Data: Submit manufacturer's product data and installation instructions for each material and product used. Include manufacturer's Safety Data Sheets.

B. Qualification Data: For Installer

## 1.5 QUALITY ASSURANCE

A. Installation of the ARDEX product must be completed by a factory-trained applicator, such as an ARDEX LevelMaster® Elite, Choice Contractor or INSTALL Substrate Prep Certified Installer, using mixing equipment and tools approved by the manufacturer. Please contact ARDEX Engineered Cements (724) 203-5000 for a list of recommended installers.

B. Manufacturer Experience: Provide products of this section by companies which have successfully specialized in production of this type of work for not less than 5 years. Contact Manufacturer Representative prior to installation.

## 1.6 WARRANTY

A. ARDEX LU 100™ installed as part of a floor system, shall be installed in conjunction with the recommended ARDEX Tile & Stone Installation Materials or WW HENRY Flooring Adhesive, as appropriate, to provide the ARDEX SystemOne 5- or 10-year comprehensive warranty, depending on the system installed.

## 1.7 DELIVERY, STORAGE AND HANDLING

- A. Deliver products in original packaging, labeled with product identification, manufacturer, batch number and shelf life.  
 B. Store products in a dry area with temperature maintained between 50° and 85°F (10° and 29°C and protect from direct sunlight.  
 C. Handle products in accordance with manufacturer's printed recommendations.

## 1.8 PROJECT CONDITIONS

A. ARDEX LU 100™ is a gypsum-based material. Do not install in applications on or below grade or in any areas subject to high moisture conditions. Do not install material below 50°F (10°C) surface and air temperatures. These temperatures must also be maintained during and for 48 hours after the installation of products included in this section. Install quickly if substrate is warm and follow warm weather instructions available from the ARDEX Technical Service Department.

**PART 2 - PRODUCTS**

## 2.1 GYPSUM CEMENT UNDERLAYMENT

## A. Self-leveling, gypsum-cement-based underlayment

## 1. Acceptable Products:

- a. ARDEX LU 100™: Manufactured by ARDEX Engineered Cements: 400 Ardex Park Drive, Aliquippa, PA, 15001, USA 724-203-5000, www.ardexamericas.com  
 2. Performance and Physical Properties: Meet or exceed the following values for material cured at 73° F (23° C) and 50 percent relative humidity:  
 a. Primer:  
 i. Standard Absorbent Concrete: ARDEX P 51™ Primer diluted 1:1 with water  
 ii. Extremely Absorbent Concrete: May require two applications of ARDEX P 51 to minimize the potential for pinholes forming in the ARDEX LU 100.  
 iii. Wood and Non-Water-Soluble Adhesive Residue on Concrete: ARDEX P 51™ Primer undiluted  
 iv. Other Non-Porous Substrates, such as burnished concrete, terrazzo, VCT, ceramic, quarry and porcelain tiles, epoxy coating systems and concrete treated with silicate compounds: ARDEX P 82™ Ultra Prime

- b. Application: Barrel Mix or Pump  
 c. Compressive Strength: 5,000 psi (350 kg/cm2) at 28 days, ASTM C109M  
 d. Flexural Strength: 1,000 psi (70 kg/cm2) at 28 days, ASTM C348  
 e. Walkable: 2 – 3 hours  
 f. VOC: 0

## 2.2 WATER

A. Water shall be clean, potable and sufficient cool (not warmer than 70°F).

**PART 3 – EXECUTION**

## 3.1 PREPARATION

## A. General: Prepare substrate in accordance with manufacturer's instructions.

1. Concrete Subfloors: Prepare substrate in accordance with manufacturer's instructions.  
 a. Prior to proceeding please refer to ASTM F710 Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring. All concrete subfloors must be sound, solid, clean, and free of all oil, grease, dirt, curing compounds and any substance that might act as a bond breaker before priming. Mechanically clean if necessary using shot blasting or other. Acid etching and use of sweeping compounds and solvents are not acceptable.

## B. Crack and Joint Preparation

1. Moving Joints and Moving Cracks – honor all moving joints such as expansion joints, isolation joints as well as all moving cracks up through the underlayment.

C. Adhesive residues on concrete must first be tested to make certain they are not water-soluble. Water-soluble adhesives must be completely mechanically removed down to clean concrete. Non-water-soluble adhesives should be prepared to a thin, well-bonded residue using the wet-scrapping technique as recommended by the Resilient Floor Covering Institute (www.rfci.com). The prepared residue should appear as nothing more than a transparent stain on the concrete after scraping.

D. Non-porous subfloors such as terrazzo, burnished concrete, epoxy coating systems, VCT, ceramic quarry and porcelain tiles must be clean and free of all waxes, sealers dust, dirt, debris and any other contaminant that may act as a bond breaker. If necessary, clean by mechanical methods such as shot blasting.

## 3.2 APPLICATION OF ARDEX LU100™:

A. Examine substrates and conditions under which materials will be installed. Do not proceed with installation until unsatisfactory conditions are corrected.

B. Coordinate installation with adjacent work to ensure proper sequence of construction. Protect adjacent areas from contact due to mixing and handling of materials.

## C. Priming:.

1. Primer for standard absorbent concrete substrates: Dilute ARDEX P-51 1:1 with water and apply evenly with a soft bristled push broom. Do not leave any bare spots. Remove all puddles and excess primer. Allow to dry to a clear, thin film (min. 3 hours, max. 24 hours). Underlayment shall not be applied until the primer is dry. Primer coverage is approximately 400 to 600 sq. ft. per gallon.  
 2. Primer for extremely absorbent concrete substrates: Make an initial application of ARDEX P-51 mixed with 3 parts water using a soft push broom. Do not leave any bare spots. Remove all puddles and excess primer. Allow to dry thoroughly (1 to 3 hours) before proceeding with the standard application of primer as described above for standard absorbent concrete.  
 3. Primer for wood and non-water-soluble adhesive residue on concrete: Prime with undiluted ARDEX P 51. Apply directly to the prepared wood or non-water-soluble adhesive residue with a short-nap or sponge paint roller, leaving a thin coat of primer. Do not use a push broom. Do not leave any bare spots. Backroll with a dry roller to remove excess primer. Allow primer to dry to a clear, thin film (min. 3 hours, max. 24 hours).

## D. Mixing: Comply with manufacturer's printed instructions and the following.

1. Add 4 quarts (3.8 L) of clean potable water per 50 lb. (22.7 kg) bag.  
 2. Mix using a 1/2" (12 mm, 650 rpm) low speed heavy-duty mixing drill with an ARDEX T-1 mixing paddle. Do not overwater.  
 3. Aggregate mix: For areas to be installed over 2" (5 cm) thick, aggregate may be added to reduce material costs. Mix ARDEX LU 100 with water first, then add 1 part aggregate by volume of washed, well graded 1/8" to 3/8" (3 – 9.5 mm) pea gravel. Please note that the aggregate size must not exceed 1/3 the depth of the pour. Do not use sand. Note: The addition of aggregate will diminish the workability of the make it necessary to install a finish coat to obtain a smooth surface. Ardex recommends a 1/4" application of ARDEX LU 100 neat to be installed as the finish coat.  
 4. For pump installations, ARDEX LU 100™ shall be mixed using the ARDEX ARDIFLO™ Automatic Mixing Pumps. Contact the ARDEX Technical Service Department (888) 512-7339 for complete pump operation instructions. When installing ARDEX LU 100 with the ARDEX T-5 Smoother, install at a minimum thickness of 1/8" (3 mm) over the highest point in the floor, which typically results in an average thickness of 1/4" (6 mm) or more over the entire floor. When installing ARDEX LU 100 with the ARDEX T-6 Spiked Roller, it is possible to install a minimum thickness of 1/16" (1.5 mm) over the highest point, which typically results in an average thickness of 1/8" (3 mm). ARDEX LU 100 can be installed up to 2 inch existing elevations, ARDEX LU 100 can be tapered to as thin an application as the sand in the material will allow. If a true featheredge is needed, ARDEX recommends using ARDEX FEATHER FINISH for transitions.  
 5. Pour the mix onto the floor and spread with the ARDEX T-4 Spreader. Immediately smooth the material with the ARDEX T-5 Smoother, or spike roll the material with the ARDEX T-6 Spiked Roller. Work in a continuo" (5 cm) thick neat, and up to 5" (12.7 cm) with the addition of proper aggregate. To ma us manner during the entire self-leveling installation. Wear baseball or soccer shoes with non-metallic cleats to avoid leaving marks in the liquid ARDEX LU 100.  
 ARDEX LU 100.

## F. Curing

1. Floor coverings can be installed after the underlayment has dried thoroughly. Allow the installation to dry a minimum of 48 hours prior to mat testing in accordance with ASTM D4263. To do this, place a piece of heavy plastic or a smooth rubber mat down over a 2' X 2' area. After 24 hours, lift the barrier material and inspect for surface darkening. A darkened area indicates excessive moisture is still present, and further drying time is required. Repeat the above test at regular intervals until no darkening is observed.  
 2. Once the installation is deemed dry, prime the entire area with ARDEX P 51 mixed with 3 parts water by volume. Apply the primer as outlined in the Priming section. Allow drying to a clear, thin film (min. 3 hours, max. 24 hours) before applying the thin set mortar or adhesive and floor covering. The application of ARDEX P 51 will help ensure that the adhesive or setting material has sufficient open time prior to placing the floor covering.  
 3. Drying time is a function of jobsite temperature and humidity conditions. While a 1/4" (6 mm) thick installation may be dry enough for some types of floor covering after only a few days, additional drying time may be necessary for deeper installations or for the installation of more moisture-sensitive flooring. Low substrate temperatures and/or high ambient humidity will extend the drying time. Adequate ventilation and heat will aid drying. Forced drying can dry the surface of the underlayment prematurely and is not recommended.

## 3.3 FIELD QUALITY CONTROL

A. Where specified, field sampling of the Ardex underlayment is to be done by taking an entire unopened bag of the product being installed to an independent testing facility to perform compressive strength testing in accordance with ASTM C 109/modified: air-cure only. There are no in situ test procedures for the evaluation of compressive strength.

## 3.4 PROTECTION

A. Prior to the installation of the finish flooring, the surface of the underlayment should be protected from abuse by other trades by the use of plywood, Masonite or other suitable protection course.

END OF SECTION

## SECTION 064100

## ARCHITECTURAL WOOD CASEWORK

**PART 1 GENERAL**

## 1.1 SUMMARY

## A. Section Includes:

1. Special fabricated cabinet units.  
 2. Plastic laminate countertops.  
 3. Shop finishing.  
 4. Cabinet hardware.

## B. Related Sections:

1. Division 01 - Administrative, procedural, and temporary work requirements.  
 2. Section 066116 - Solid Surfacing Fabrications.  
 3. Section 079200 - Joint Sealers.  
 4. Section 123640 - Stone Countertops.

## 1.2 REFERENCES

- A. Architectural Woodwork Institute/Architectural Woodwork Manufacturers of Canada/Woodwork Institute (AWI/AWMAC/WI) - Architectural Woodwork Standards.  
 B. Association of Electrical and Medical Imaging Equipment Manufacturers (NEMA) LD-3 - High Pressure Decorative Laminates.  
 C. Forest Stewardship Council (FSC) STD-40-004 - Chain of Custody Standard.

## 1.3 SUBMITTALS

## A. Submittals for Review:

1. Shop Drawings:  
 a. Include dimensioned plan, sections, elevations, and details, including interface with adjacent work.  
 b. Designate wood species and finishes.  
 2. Samples:  
 a. 3 x 3 inch plastic laminate samples showing available colors and finishes.  
 b. Each hardware component.

## 1.4 QUALITY ASSURANCE

- A. Fabricator Qualifications:  
 1. Minimum 5 years documented experience in work of this Section.  
 2. Certified under AWI/AWMAC/WI Quality Certification Program.

## 1.5 DELIVERY, STORAGE AND HANDLING

A. Do not deliver materials until proper protection can be provided, and until needed for installation.

## 1.6 PROJECT CONDITIONS

- A. Environmental Requirements: Maintain following conditions in building for minimum 7 days prior to, during, and after installation of casework:  
 1. Temperature: 60 to 80 degrees F.  
 2. Humidity: 17 to 50 percent.

**PART 2 PRODUCTS**

## 2.1 MANUFACTURERS

- A. Acceptable Manufacturers - Plastic Laminate:  
 1. Formica Corp. ([www.formica.com](http://www.formica.com))  
 2. Nevamar Co. ([www.nevamar.com](http://www.nevamar.com))  
 3. Wilsonart International, Inc. ([www.wilsonart.com](http://www.wilsonart.com))  
 4. Approved Equal.

B. Substitutions: Under provisions of Division 01.

## 2.2 MATERIALS

## A. Sheet Products:

1. Exposed and semi-exposed veneers: Close grain hardwood, of quality suitable for opaque finish.  
 2. Sheet core: Particleboard.

## B. Lumber:

1. Graded in accordance with AWI/AWMAC/WI Architectural Woodwork Standards, Section 3 requirements for quality grade specified, average moisture content of 6 percent.  
 2. Exposed and semi-exposed locations: Close grain hardwood, of quality suitable for opaque finish.

## C. Hardboard: Pressed wood fiber with resin binder; standard grade, 1/4 inch thick, smooth one side.

## D. Plastic Laminate: NEMA LD-3.

1. High pressure decorative laminate:  
 a. Horizontal surfaces:  
 1) Backing sheet: Grade BGF.  
 2) Postformed surfaces: Grade HGP.  
 3) Acid resisting: Grade LGP.  
 4) Other surfaces: Grade HGS.  
 b. Vertical surfaces:  
 1) Backing sheet: Grade BLF.  
 2) Cabinet liner: Grade CLS.  
 3) Other surfaces: Grade VGP.  
 2. Low pressure decorative laminate: Grade VGL.  
 3. Colors: To be selected from manufacturer's full color range.  
 4. Finish: Matte.

## 2.3 ACCESSORIES

A. Fasteners: Type and size as required by conditions of use.

## B. Adhesives:

1. Waterproof, water based type, compatible with backing and laminate materials.

C. Finish Hardware: As scheduled at end of Section [or approved substitute].

D. Joint Sealers: Specified in Section 079200.

## 2.4 FABRICATION

## A. Cabinets - Plastic Laminate Finish:

1. Quality: AWI/AWMAC/WI Architectural Woodwork Standards, Section 10, Custom Grade.  
 2. Construction type: Frameless.  
 3. Interface style: Overlay.

4. Semi-exposed surfaces: High pressure decorative laminate.  
 5. Fit exposed and semi-exposed sheet edges with matching PVC edging.  
 6. Fabricate drawer bodies to full depth of drawer fronts less 1/2 inch.

## B. Plastic Laminate Countertops:

1. Quality: AWI/AWMAC/WI Architectural Woodwork Standards, Section 11, Custom Grade.  
 2. Fabricate from sheet product with lumber fronts.  
 3. Locate end joints centered or symmetrical. Join sections with concealed clamp fasteners. Locate plastic laminate butt joints minimum 2 feet away from sinks.  
 4. Provide holes and cutouts for mounting of sinks, trim, and accessories.

C. Shop assemble for delivery to project site in units easily handled.

D. Prior to fabrication, field verify dimensions to ensure correct fit.

E. Apply plastic laminate in full uninterrupted sheets; fit corners and joints to hairline. Slightly bevel arses. Apply laminate backing sheet to reverse side of laminate faced surfaces.

F. Where field fitting is required, provide ample allowance for cutting. Provide trim for scribing and site conditions.  
 G. Provide cutouts and reinforcement for [plumbing,] [electrical,] [appliances,] [and] [accessories]. Prime paint surfaces of cut edges.

## 2.5 FINISHES

## A. Factory Finishing:

1. Factory finish casework in accordance with AWI/AWMAC/WI Architectural Woodwork Standards, Section 5.  
 2. Finish system: Polyurethane, Water-based.  
 3. Color: To be selected from manufacturer's full color range.  
 4. Sheen: Satin.

**PART 3 EXECUTION**

## 3.1 PREPARATION

A. Prior to installation, condition cabinets to average humidity that will prevail after installation.

## 3.2 INSTALLATION

A. Install in accordance with AWI/AWMAC/WI Architectural Woodwork Standards.

B. Set plumb, rigid and level.

C. Scribe to adjacent construction with maximum 1/8 inch gaps.

D. Adhere countertops, splashes, and skirts with beads of adhesive.

E. Fill joints between cabinets, tops, splashes, and adjacent construction with joint sealer as specified in Section 079200; finish flush.

END OF SECTION

## SECTION 064600

## WOOD TRIM

**PART 1 GENERAL**

## 1.1 SUMMARY

A. Section Includes:  
 1. Interior wood trim.  
 2. Shop finishing.

## B. Related Sections:

1. Division 01: Administrative, procedural, and temporary work requirements.

## 1.2 REFERENCES

- A. American Wood Protection Association (AWPA) U1 - Use Category System - User Specification for Treated Wood.  
 B. Architectural Woodwork Institute/Architectural Woodwork Manufacturers of Canada/Woodwork Institute (AWI/AWMAC/WI) - Architectural Woodwork Standards.  
 C. ASTM International (ASTM) E84 - Standard Test Method for Surface Burning Characteristics of Materials.  
 D. Forest Stewardship Council (FSC) STD-40-004 - Chain of Custody Standard.

## 1.3 SUBMITTALS

## A. Submittals for Review:

1. Shop Drawings:  
 a. Include dimensioned plans, sections, elevations, and details, including interface with adjacent work.  
 b. Designate wood species and finishes.  
 2. Samples: 6 inch long samples of each profile.

## 1.4 QUALITY ASSURANCE

- A. Fabricator Qualifications:  
 1. Minimum 5 years documented experience in work of this Section.  
 2. Certified under AWI/AWMAC/WI Quality Certification Program.

## 1.5 DELIVERY, STORAGE AND HANDLING

A. Do not deliver materials until proper protection can be provided, and until needed for installation.

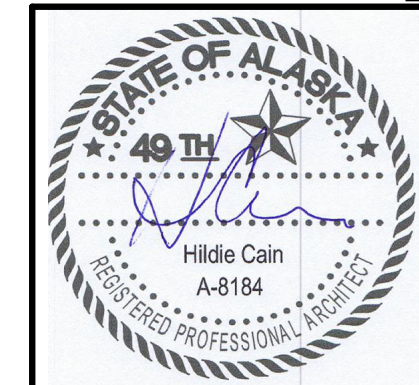
## 1.6 PROJECT CONDITIONS

- A. Environmental Requirements: Maintain following conditions in building for minimum 7 days prior to, during, and after installation of interior trim:  
 1. Temperature: 60 to 80 degrees F.  
 2. Humidity: 17 to 50 percent.

**PART 2 PRODUCTS**

## 2.1 MANUFACTURERS

A. Acceptable Manufacturers:



**Hildie A. Cain, Architect**  
 (907) 733-5187 [hacain@hacain.com](mailto:hacain@hacain.com)  
[www.hacainarchitecture.com](http://www.hacainarchitecture.com)

**PARKS & REC. WASTE PIPE REPAIR**

**PETERSBURG BOROUGH**

**500 N. 3RD. ST.**

**PETERSBURG ALASKA 99833**

## REVISIONS:

## DRAWN BY:

## CHECKED BY:

DATE: 4/7/2023

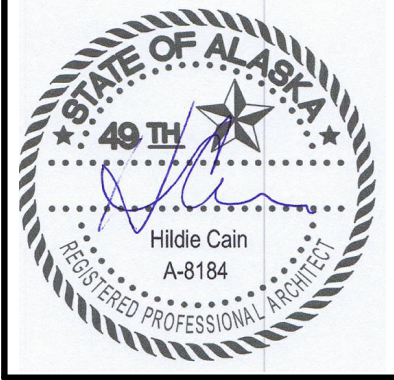
JOB NUMBER: 2311

## DRAWING TITLE:

**ARCHITECTURAL  
SPECIFICATIONS**

## SHEET:

**A300**



PARKS & REC. WASTE PIPE REPAIR  
PETERSBURG BOROUGH  
500 N. 3RD. ST.  
PETERSBURG ALASKA 99833

REVISIONS:

DRAWN BY:  
CHECKED BY:  
DATE: 4/7/2023  
JOB NUMBER: 2311

DRAWING TITLE:  
ARCHITECTURAL  
SPECIFICATIONS

SHEET:  
A301

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Acceptable Manufacturers - Carpet Tiles:
  1. Interface, Inc. ([www.interfaceinc.com](http://www.interfaceinc.com))
  2. Mohawk International ([www.mohawkinternational.com](http://www.mohawkinternational.com))
  3. Shaw. ([www.shawcontract.com](http://www.shawcontract.com))
  4. Approved Equal.
- B. Substitutions: Under provisions of Division 01.

2.2 MATERIALS

- A. Carpet Tiles:
  1. Source: To Be Selected.
  2. Pattern: To Be Selected.
  3. Color: To Be Selected.
  4. Construction: Multi level loop.
  5. Face yarn type: Nylon.
  6. Face yarn weight: 40 ounces per square yard.
  7. Backing: Unitary.
  8. Total Density: Minimum 3100.
  9. Size: To Be Selected.

2.3 ACCESSORIES

- A. Adhesive:
  1. Waterproof, latex based cement formulated specifically for installing carpet tiles; recommended by carpet tile manufacturer.
- B. Edgings: Preformed rubber, profile required to suit conditions, color to be selected from manufacturer's full color range.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify that concrete floors have cured a minimum 28 days and do not exhibit negative alkalinity, carbonization, or dusting.

3.2 PREPARATION

- A. Clean substrate; remove loose and foreign matter that could impede adhesion or performance of flooring.
- B. Fill cracks, voids, and depressions with leveling compound.
- C. Grind ridges and high spots smooth.
- D. Test Substrate:
  1. Moisture vapor: Test to ASTM F1869; do not install carpet tiles until moisture emission level is acceptable to carpet tile manufacturer.
  2. Humidity: Test to ASTM F2170; do not install carpet tiles until relative humidity is acceptable to carpet tile manufacturer.
  3. Alkalinity: Test to ASTM F710; do not install carpet tiles unless pH is acceptable to carpet tile manufacturer.
- E. Cut tile clean. Fit tiles tight to intersection with vertical surfaces without gaps.
- F. Lay carpet tile to manufacturer's recommended pattern, with tile direction as selected to next unit, set parallel to building lines.
- G. Locate change of color or pattern between rooms under door centerline.
- H. Fully adhere carpet tiles to substrate.
- I. Adhere tiles in one row in each direction at 30 feet on center maximum. Adhere perimeter and cut tiles. Lay remaining tiles loose.
- J. Bind cut edges where not concealed by edge strips.

3.4 INSTALLATION OF EDGINGS

- A. Install strips where carpet tiles abut dissimilar flooring materials; secure to subfloor.
- B. Center strips under doors where carpet tiles terminate at door openings.
- C. Install in longest practical lengths; butt ends tight.
- D. Scribe to abutting surfaces.

3.5 CLEANING

- A. Clean spots as recommended by carpet tile manufacturer.
- B. Cut off loose threads flush with top surface.
- C. Clean with commercial vacuum cleaner.

END OF SECTION

3.4 COMPLETED WORK

- A. Cleaning: Upon completion of the Work, clean up and remove from the premises surplus materials, tools, appliances, empty cans, cartons and rubbish resulting from the Work. Clean up all spattering and drippings, and all resulting stains.
- B. Protection: Protect Work in accordance with manufacturer's directions from damage and wear during the remainder of the construction period. Use protective methods and materials, including temporary covering, recommended in writing by resinous flooring manufacturer.
- C. Contractor shall insure that coating is protected from any traffic until it is fully cured to the satisfaction of the coating manufacturer.

END OF SECTION

SECTION 096813  
TILE CARPETING

GENERAL

1.1 SUMMARY

- A. Section Includes:
  1. Tile carpeting.
  2. Edgings.
- B. Related Sections:
  1. Division 01: Administrative, procedural, and temporary work requirements.

1.2 REFERENCES

- A. ASTM International (ASTM):
  1. D2859 - Standard Test Method for Flammability of Finished Textile Floor Covering Materials.
  2. D4258 - Standard Practice for Surface Cleaning Concrete for Coating.
  3. E84 - Standard Test Method for Surface Burning Characteristics of Building Materials.
  4. E648 - Standard Test Method for Critical Radiant Flux of Floor Covering Systems Using a Radiant Heat Energy Source.
  5. E662 - Standard Test Method for Specific Optical Density of Smoke Generated by Solid Materials.
  6. F710 - Standard Practice for Preparing Concrete to Receive Resilient Flooring.
  7. F1869 - Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride.
  8. F2170 - Standard Test Method for Determining Relative Humidity in Concrete Floor Slabs Using in situ Probes.
- B. Carpet and Rug Institute (CRI):
  1. 104 - Standard for Installation Specification of Commercial Carpet.
  2. Indoor Air Quality Testing Program.
- C. National Fire Protection Association (NFPA) 253 - Test for Critical Radiant Flux of Floor Covering Systems Using a Radiant Heat Energy Source.

1.3 SUBMITTALS

- A. Submittals for Review:
  1. Shop Drawings: Indicate carpet tile locations, dye lot limitations, direction of carpet tile in each room or area, and type and location of edgings.
  2. Samples:
    - a. Carpet tile: Full size samples in each color and pattern.
    - b. Edgings: 4 inch long samples showing available colors.
  3. Warranty: Sample warranty form.
- B. Quality Control Submittals:
  1. Certificates of Compliance: Certification from an independent testing laboratory that carpet tiles meet fire hazard classification requirements.

1.4 QUALITY ASSURANCE

- A. Installer Qualifications: Minimum two years documented experience in work of this Section.
- B. Fire Hazard Classification: Class I rated, tested to ASTM E648.
- C. Mockup:
  1. Size: Minimum 12 x 12 feet.
  2. Show: Carpet tile color and pattern, and edgings.
  3. Locate where directed.
  4. Approved mockup may not remain as part of the Work.

1.5 PROJECT CONDITIONS

- A. Do not begin installation until painting and finishing work have been completed.
- B. Environmental Requirements:
  1. Temperature of spaces and subfloor between 65 and 90 degrees F.
  2. Humidity in spaces to receive carpet tiles between 20 and 65 percent.

1.6 WARRANTIES

- A. Furnish installer's one year warranty providing coverage against:
  1. Defective materials and workmanship.
  2. Excessive fading.
  3. Loss of static control.
  4. Edge raveling.
  5. Runs.
  6. Loss of tuft bind strength.
  7. Loss of face fiber.
  8. Excessive wear.

1.7 MAINTENANCE

- A. Extra Materials: Two unopened cartons of each tile.

1.5 PROJECT CONDITIONS

- A. Environmental Limitations: Comply with resinous flooring manufacturer's written instructions for substrate temperature, ambient temperature, moisture, ventilation, and other conditions affecting resinous flooring application.
- B. Lighting: Provide permanent lighting or, if permanent lighting is not in place, simulate permanent lighting conditions during resinous flooring application.
- C. Close spaces to traffic during resinous flooring application and for not less than 24 hours after application unless manufacturer recommends a longer period.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Manufacturers: Design Basis: Subject to compliance with requirements, provide products by:
  1. The Sherwin Williams Company, Cleveland, OH. Representative Contact: Michael Starner (484) 624-2360 [michael.starner@sherwin.com](mailto:michael.starner@sherwin.com).
- B. Resufloor Screed Deco Flake, 3/16" - 1/4" nominal thickness.
  1. Primer: Resufloor 3579 at 250 sq. ft. per gallon.
  2. Mortar at 3/16": Resufloor 3561 with 5115 70 lbs. per 1.25 gallons resin spread at 44 sq. ft. per kit.
  3. Bonding Coat: Resufloor 3746 at 100 sq. ft. per gallon.
  4. Broadcast: Colored Flake 6750DB/6755DB to excess at 200 lbs. per 1,000 sq. ft.
  5. Seal Coat: Resufloor 3746 at 100 sq. ft. per gallon.

2.2 MATERIALS

- A. VOC Content of Resinous Flooring: Provide resinous flooring systems, for use inside the weatherproofing system, that comply with the following limits for VOC content when calculated according to 40 CFR 59, Subpart D (EPA Method 24J).
  1. Resinous Flooring: 100 g/L.

2.3 HIGH-PERFORMANCE RESINOUS FLOORING

- A. Resinous Flooring: Abrasion-, impact- and chemical-resistant, high-performance, resin-based, monolithic floor surfacing designed to produce a seamless floor.
- B. System Characteristics:
  1. Color and Pattern: As indicated from manufacturers listed above.
  2. Slip Resistance: Provide slip resistant finish.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Inspection: Prior to commencing Work, thoroughly examine all underlying and adjoining work, surfaces and conditions upon which Work is in any way dependent for perfect results. Report all conditions which affect Work. No "waiver of responsibility" for incomplete, inadequate or defective underlying and adjoining work, surfaces and conditions will be considered, unless notice of such unsatisfactory conditions has been filed and agreed to in writing before Work begins. Commencement of Work constitutes acceptance of surfaces.
- B. Surface Preparation: Remove all surface contamination, loose or weakly adherent particles, laitance, grease, oil, curing compounds, paint, dust and debris by blast track method or approved mechanical means (acid etch not allowed). If surface is questionable try a test patch. Create a minimum surface profile for the system specified in accordance with the methods described in ICR No. 03732 to achieve profile numbers as follows:
  1. Thin film, to 10 mils CSP-1 to CSP-3
  2. Thin and medium films, 10 to 40 mils CSP-3 to CSP-5
  3. Self-leveling mortars, to 3/16" CSP-4 to CSP-6
  4. Mortars and laminates, to 1/4" or more CSP-5 to CSP-10
- D. Verify that concrete substrates are dry and moisture-vapor emissions are within acceptable levels according to manufacturer's written instructions.
  1. Moisture Testing: Perform tests indicated below.
    - a. Calcium Chloride Test: Perform anhydrous calcium chloride test per ASTM F 1869. Proceed with installation only after substrates have maximum moisture-vapor-emission rate of 3 lb of water/1000 sq. ft. in 24 hours. Perform tests so that each test area does not exceed 1000 sq. ft. and perform 3 tests for the first 1000 sq. ft. and one additional test for every additional 1000 sq. ft.
    - b. In-Situ Probe Test: Perform relative-humidity test using in-situ probes per ASTM F 2170. Proceed with installation only after substrates have a maximum 75 percent relative-humidity-level measurement.

3.2 ENVIRONMENTAL CONDITIONS

- A. All applicators and all other personnel in the area of the RF installation shall take all required and necessary safety precautions. All manufacturers' installation instructions shall be implicitly followed.
- B. Repair damaged and deteriorated concrete according to resinous flooring manufacturer's written instructions.
- C. Alkalinity and Adhesion Testing: Verify that concrete substrates have pH within acceptable range. Perform tests recommended by manufacturer. Proceed with application only after substrates pass testing.
- D. Resinous Materials: Mix components and prepare materials according to resinous flooring manufacturer's written instructions.
- E. Use patching and fill material to fill holes and depressions in substrates according to manufacturer's written instructions.
- F. Treat control joints and other nonmoving substrate cracks to prevent cracks from reflecting through resinous flooring according to manufacturer's written instructions.

3.3 APPLICATIONS

- A. Install resinous floor over properly prepared concrete surface in strict accordance with the manufacturer's directions.
  1. Install the primer and/or base coats over thoroughly cleaned and prepared concrete.
  2. Install topcoat over flooring after excess aggregate has been removed.
  3. Maintain a slab temperature of 60°F to 80°F for 24 hours minimum before applying floor topping, or as instructed by manufacturer.
- B. Apply components of resinous flooring system according to manufacturer's written instructions to produce a uniform, monolithic wearing surface of thickness indicated.
  1. Coordinate application of components to provide optimum adhesion of resinous flooring system to substrate, and optimum intercoat adhesion.
  2. Cure resinous flooring components according to manufacturer's written instructions. Prevent contamination during application and curing processes.
  3. At substrate expansion and isolation joints, comply with resinous flooring manufacturer's written instructions.
- C. Sealant: Saw cut resinous floor topping at expansion joints in concrete slab. Fill sawcuts with sealant prior to final seal coat application. Follow manufacturer's written recommendations.
- D. Apply primer over prepared substrate at manufacturer's recommended spreading rate.
- E. Slip Resistant Finish: Provide grit for slip resistance.
- F. Apply topcoats in number indicated for flooring system and at spreading rates recommended in writing by manufacturer.

- 1. To be selected.
- 2.2 MATERIALS
  - A. Interior Trim:
    1. Graded in accordance with AWI/AWMAC/WI Architectural Woodwork Standards, Section 3 requirements for quality grade specified, average moisture content of 6 percent.
  - 2. Close grain hardwood, of quality suitable for opaque finish.
- 2.3 ACCESSORIES
  - A. Fasteners: Type and size as required by conditions of use; plain steel for interior use; hot dip galvanized steel for exterior use.
  - B. Adhesives:
    1. Waterproof, water based type, compatible with trim and substrate materials.
- 2.4 FABRICATION
  - A. Quality: AWI/AWMAC/WI Architectural Woodwork Standards, Section 6, Custom Grade.
  - B. Where field fitting is required, provide ample allowance for cutting.
  - C. Groove back of trim applied to flat substrate, except do not groove exposed ends.
- 2.5 FINISHES
  - A. Factory Finishing:
    1. Factory finish interior trim in accordance with AWI/AWMAC/WI Architectural Woodwork Standards, Section 5.
    2. Finish system: Polyurethane, Water-based.
    3. Color: To be selected from manufacturer's full color range.
    4. Sheen: Satin.

PART 3 EXECUTION

3.1 PREPARATION

- A. Prior to installation, condition wood to average humidity that will prevail after installation.
- B. Back prime wood installed against cementitious materials prior to installation.

3.2 INSTALLATION

- A. Install in accordance with AWI/AWMAC/WI Architectural Woodwork Standards.
- B. Install in longest practical lengths.
- C. Set plumb and level.
- D. Miter ends, corners, and intersections.
- E. Scribe to adjacent construction with maximum 1/8 inch gaps.
- F. Fasten to supporting construction.

END OF SECTION

SECTION 096723 - RESINOUS FLOORING

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes:
  1. High-performance resinous flooring systems.

1.2 SUBMITTALS

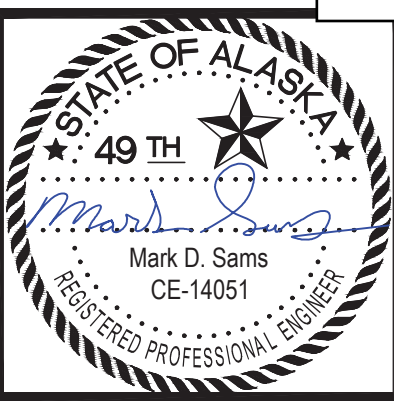
- A. Product Data: For each type of product indicated.
- B. Installer Certificates for Qualification: Signed by manufacturer stating that installers comply with specified requirements.
- C. Material Certificates: For each resinous flooring component, from manufacturer.
- D. Maintenance Data: For maintenance manuals.
- E. Samples: Submit two 6" X 6" samples of each resinous flooring system applied to a rigid backing. Provide sample which is a true representation of proposed field applied finish. Provide sample color and texture for approval from Owner in writing or approved by General Contractor prior to installation.
- F. Product Schedule: For resinous flooring.

1.3 QUALITY ASSURANCE

- A. Installer Qualifications: Manufacturer's authorized representative who is trained and approved for installation of flooring systems required for this Project.
  1. Engage an installer who is approved in writing by resinous flooring manufacturer as qualified to apply resinous flooring systems indicated.
  2. Installer Letter of Qualification: Installer to provide letter stating that they have been in business for at least 5 years and listing 5 projects in the last 2 years of similar scope. For each project provide: project name, location, date of installation, contact information, size of project, and manufacturer of materials with system information.
- B. Source Limitations: Obtain primary resinous flooring materials, including primers, resins, hardening agents, grouting coats, and topcoats, from single source from single manufacturer. Provide secondary materials, including patching and fill material, joint sealant, and repair materials, of type and from source recommended by manufacturer of primary materials.
- C. Pre-installation Conference: Conduct conference at Project site before work and mockups begin.
- D. Mockups: Apply mockups to verify selections made under sample submittals and to demonstrate aesthetic effects and set quality standards for materials and execution. Do not cover up mockup area.
  1. Apply full-thickness mockups on 16 square foot floor area selected by Architect.
  2. Finish surfaces for verification of products, color, texture, and sheen.
  3. Simulate finished lighting conditions for Architect's review of mockups.
  4. Approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.
  5. Mockup shall demonstrate desired slip resistance for review and approval by Owner's representative in writing.

1.4 DELIVERY, STORAGE, AND HANDLING

- A. Deliver materials in original packages and containers, with seals unbroken, bearing manufacturer's labels indicating brand name and directions for storage and mixing with other components.
  1. Maintain containers in clean condition, free of foreign materials and residue.
  2. Remove rags and waste from storage areas daily.



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9560 Glacier Highway, Ste 100 Juneau, Alaska 99801  
Phone: 907.586.2093 Fax: 907.586.2099  
PND# 222128

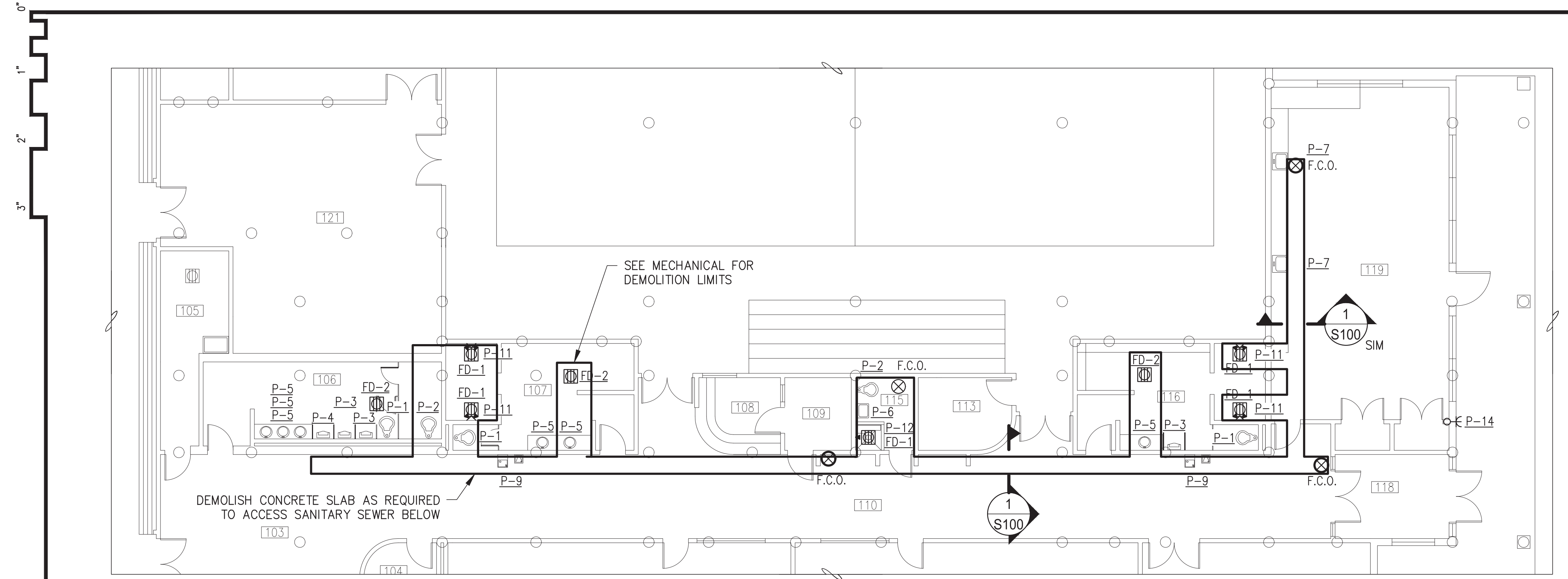
PARKS & REC. WASTE PIPE REPAIR  
PETERSBURG BOROUGH  
500 N. 3RD. ST.  
PETERSBURG ALASKA 99833

REVISIONS:

DRAWN BY: PJD  
CHECKED BY: MDS  
DATE: 4/7/2023  
JOB NUMBER: M2219.00  
DWG FILE: MSERIES

DRAWING TITLE:  
STRUCTURAL GENERAL  
NOTES, PLAN & DETAIL

SHEET:  
S100



1 SLAB MODIFICATION PLAN  
1/8" = 1'-0"

GENERAL NOTES

**CRITERIA**  
2012 EDITION OF INTERNATIONAL BUILDING CODE (IBC) AS AMENDED BY THE STATE OF ALASKA AND CITY AND BOROUGH OF PETERSBURG

STRUCTURAL RISK CATEGORY: II

**LOADS:**  
LIVE LOAD = 100 PSF

**FOUNDATION**  
FOUNDATION HAS BEEN DESIGNED FOR AN ALLOWABLE SOIL PRESSURE OF 1500 PSF BASED UPON THE ASSUMPTION OF ENCOUNTERING TYPE 4 SOILS AS DEFINED IN TABLE 1806.2 OF THE IBC. CONTRACTOR SHALL VERIFY CONDITIONS AT THE LIMIT OF EXCAVATION AND REPORT TO ENGINEER.

**MATERIALS AND CONSTRUCTION**

**BASE COURSE**  
BASE COURSE SHALL BE WELL-GRADED SANDS AND GRAVELS WITH MINIMUM SILT. PLACE BASE COURSE IN LIFTS NO GREATER THAN 6 INCHES IN LOOSE THICKNESS AND COMPACT WITH A MINIMUM LEVEL OF EFFORT OF 6 PASSES WITH A WALK-BEHIND VIBRATORY PLATE COMPACTOR WITH A MINIMUM RATED FORCE LEVEL OF 14,000 POUNDS.

**FILL**  
FILL SHALL BE WELL-GRADED SANDS AND GRAVELS WITH LESS THAN 6% FINES. PLACE FILL IN LIFTS NO GREATER THAN TWICE THE DIAMETER OF THE LARGEST PARTICLE OR 6 INCHES OF LOOSE THICKNESS AND COMPACT WITH A MINIMUM LEVEL OF EFFORT OF 6 PASSES WITH A WALK-BEHIND VIBRATORY PLATE COMPACTOR WITH A MINIMUM RATED FORCE LEVEL OF 14,000 LBS.

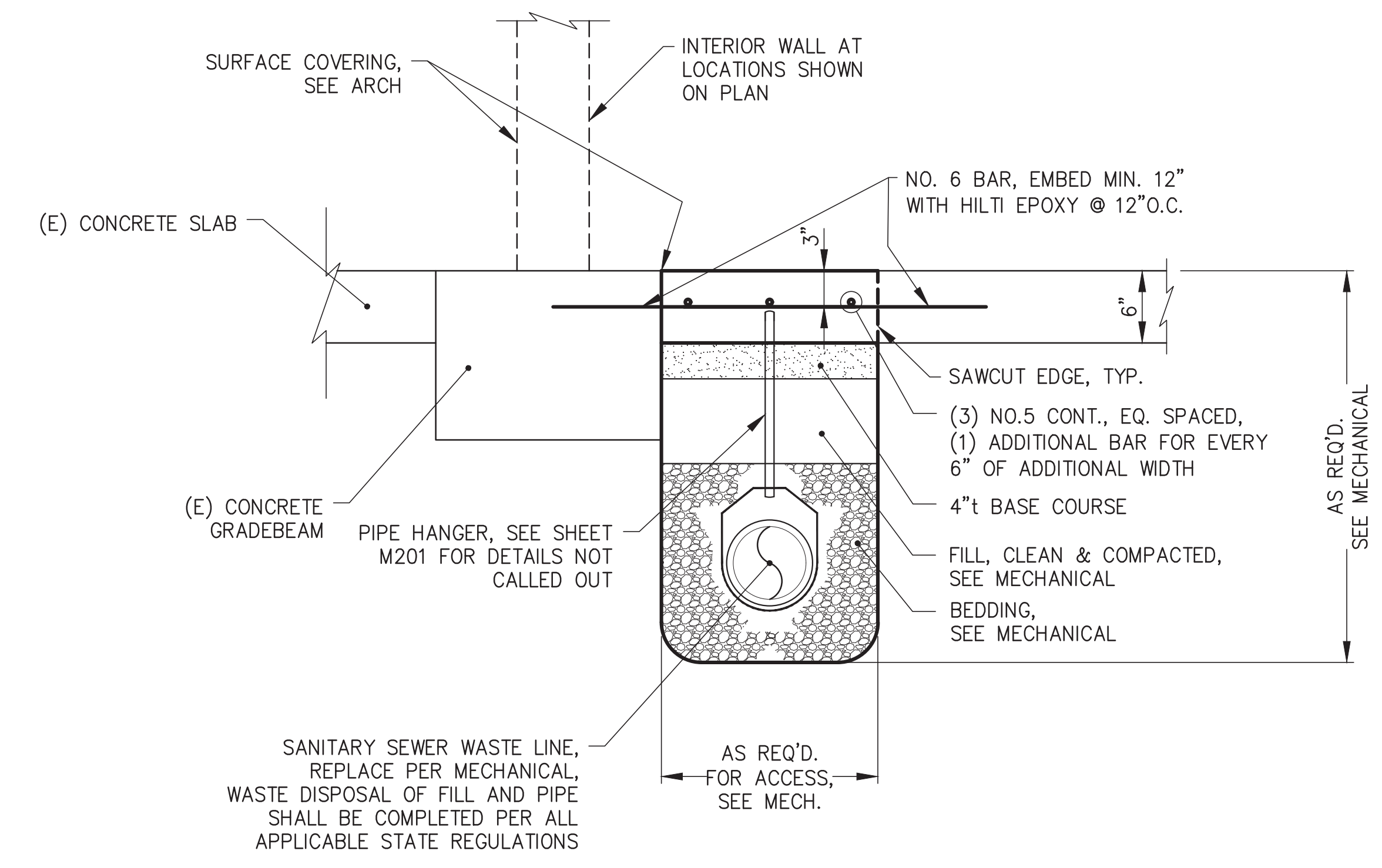
**CONCRETE**  
MIXING, PLACING, AND CURING OF CONCRETE AND SELECTION OF MATERIALS SHALL BE IN ACCORDANCE WITH THE IBC. PROPORTIONS OF AGGREGATE, CEMENT AND WATER SHALL BE SUCH TO RESULT IN A DENSE WORKABLE MIX WHICH CAN BE PLACED WITHOUT EXCESS SURFACE WATER. A MIX DESIGN, WITH RECORDED CYLINDER TEST RESULTS SHALL BE SUBMITTED FOR REVIEW AND APPROVAL PRIOR TO MOBILIZING CONCRETE EQUIPMENT TO THE SITE. MAXIMUM SLUMP SHALL BE 4 INCHES PRIOR TO ADDING PLASTICISERS OR WATER REDUCERS ON SITE. 28-DAY COMPRESSIVE STRENGTH (f<sub>c</sub>) SHALL BE 4,000 PSI.

CONCRETE REINFORCING SHALL COMPLY WITH ASTM A705 GRADE 60. LAP REINFORCING STEEL 50 BAR DIAMETERS UNLESS OTHERWISE NOTED. AT CORNERS ADD CORNER BARS AT EACH HORIZONTAL BARS WITH LEG LENGTH AT LEAST 50 DIAMETER LAP LENGTH OR EXTEND THE HORIZONTAL BARS WITH A 90 DEGREE HOOK WITH A 50 DIAMETER LAP LENGTH.

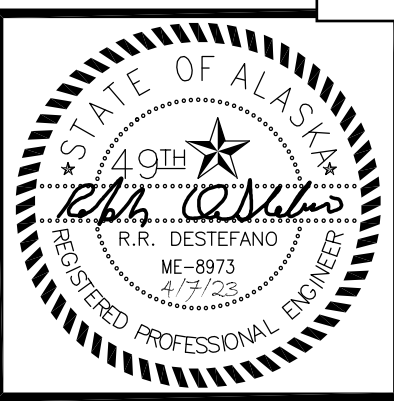
REINFORCING SHALL BE SUPPORTED AND SECURED IN PLACE PRIOR TO CONCRETE PLACEMENT USING WELL-CURED CONCRETE BLOCKS OR APPROVED STEEL CHAIRS. WELDING OF REINFORCING IS PROHIBITED UNLESS SPECIFICALLY NOTED.

PROVIDE MINIMUM COVER AT REINFORCING BARS AS FOLLOWS: CAST AGAINST EARTH 3 INCHES, EXPOSED TO EARTH OR WEATHER 2 INCHES.

**ANCHOR EPOXY**  
ANCHOR EPOXY SHALL BE HILTI HIT-RE 500, PREPARE HOLE AND INSTALL PER MANUFACTURER'S INSTRUCTIONS.



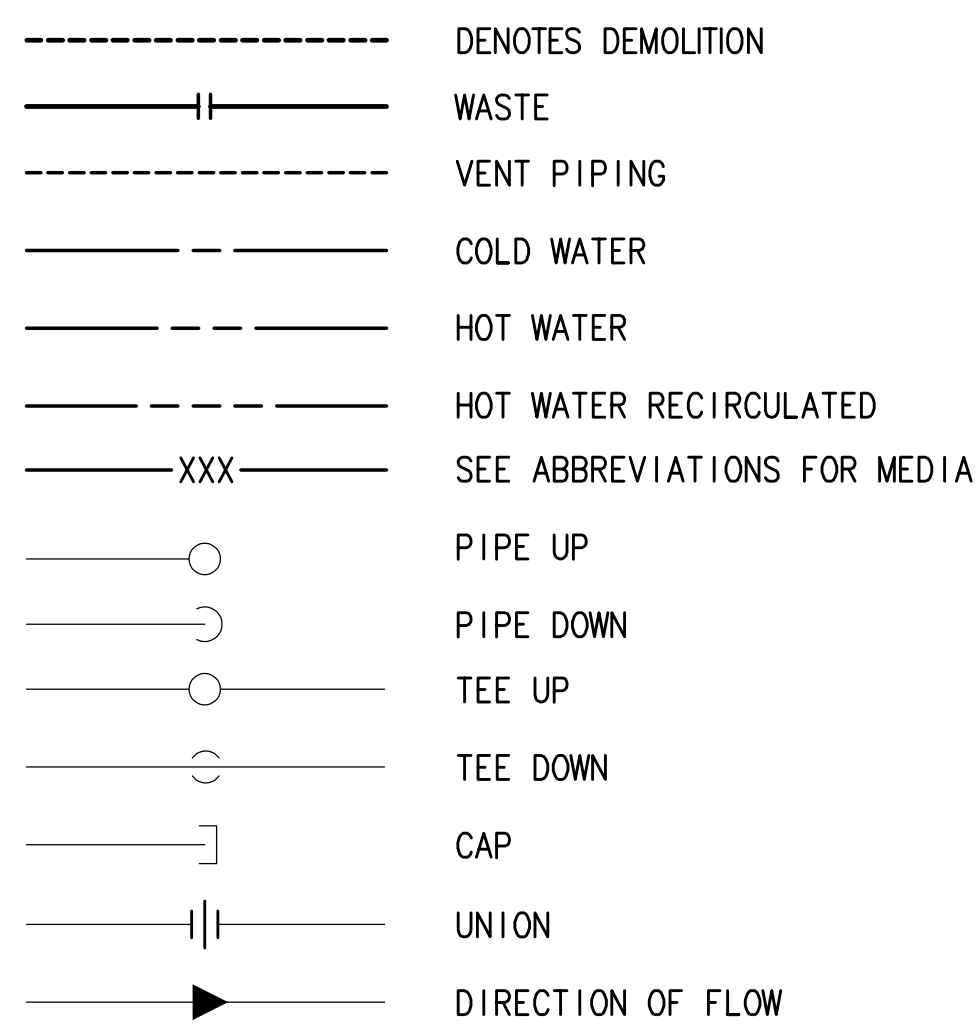
1 TYPICAL TRENCH DETAIL  
NOT TO SCALE



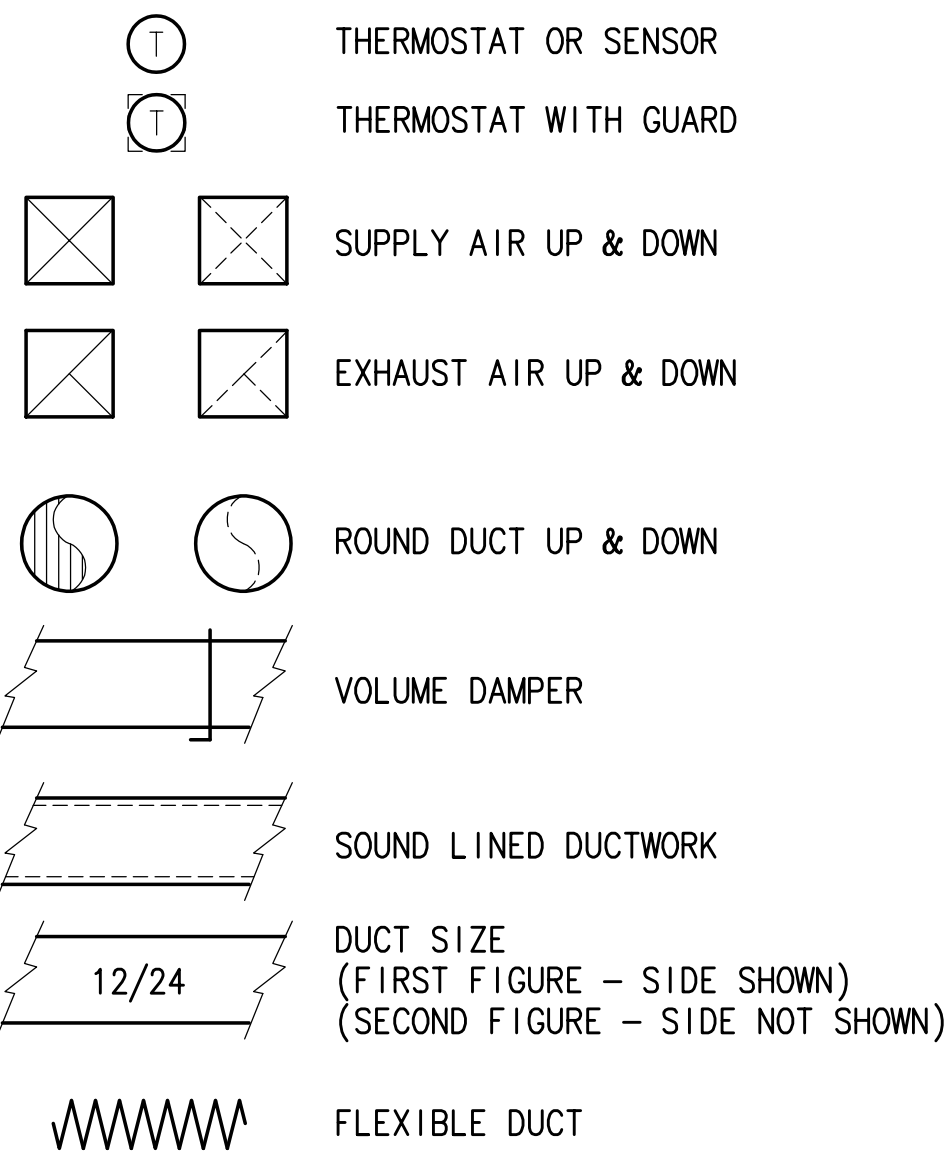
**RSA**  
**Engineering, Inc.**  
 MECHANICAL AND ELECTRICAL CONSULTING ENGINEERS  
 670 West Friedland Lane, Suite 200  
 Anchorage, AK 99503  
 Phone (907) 276-0521  
 Corporate No.: AECC542

**PARKS & REC. WASTE PIPE REPAIR**  
**PETERSBURG BOROUGH**  
**500 N. 3RD. ST.**  
**PETERSBURG ALASKA 99833**

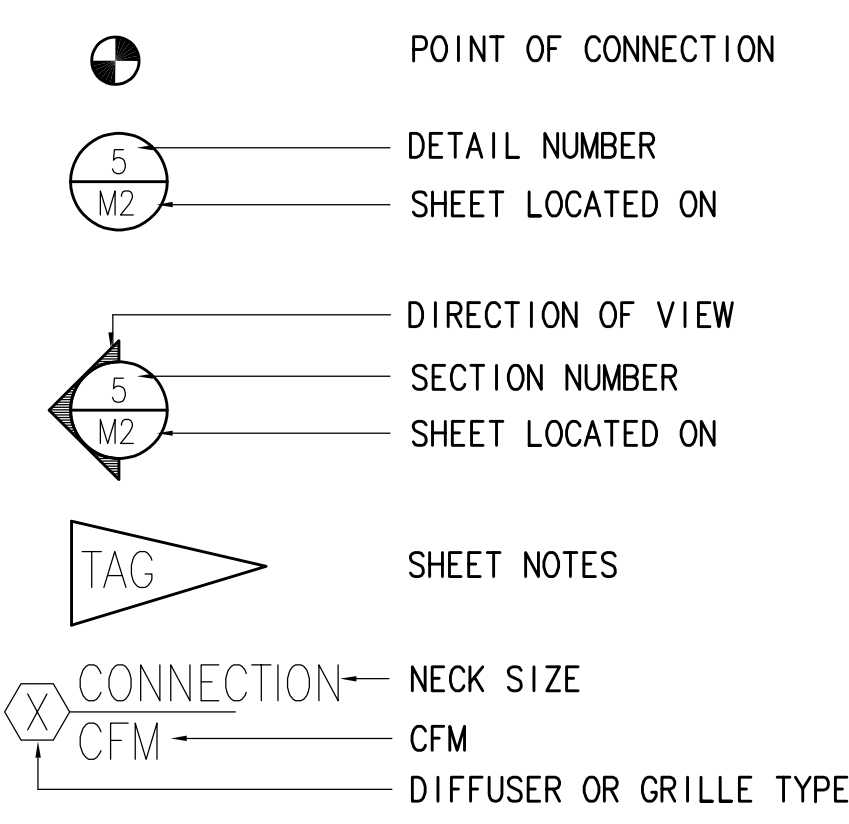
**PIPING LEGEND**



**DUCTWORK LEGEND**



**LOGIC**



**ABBREVIATIONS**

ADA	AMERICAN WITH DISABILITIES ACT GUIDELINES	HWR	HOT WATER RETURN
AMPS	AMPERES	IN	INCHES
ARCH	ARCHITECTURAL	IN. WC.	INCHES WATER COLUMN
BLDG	BUILDING	LAT	LEAVING AIR TEMPERATURE
BTUH	BRITISH THERMAL UNIT/HOUR	LWT	LEAVING WATER TEMPERATURE
CAP	CAPACITY	MBH	THOUSAND BTUH
CFM	CUBIC FEET PER MINUTE	MFR	MANUFACTURER
CIRC	CIRCULATING	MIN	MINIMUM
C.O./CO	CLEANOUT	MTD	MOUNTED
CONN	CONNECTION	NC	NOISE CRITERIA
CW	COLD WATER	N.C.	NORMALLY CLOSED
dB	DECIBELS	NO.	NUMBER
DDC	DIRECT DIGITAL CONTROL	N.O.	NORMALLY OPEN
DEG	DEGREE	P-X	PLUMBING FIXTURE DESIGNATOR
DIA	DIAMETER	PD	PRESSURE DROP
DN	DOWN	PH	PHASE
E/A	EXHAUST AIR	PSI	POUND PER SQUARE INCH
EAT	ENTERING AIR TEMPERATURE	R/A	RETURN AIR
EF-X	EXHAUST FAN DESIGNATOR	RPM	REVOLUTIONS PER MINUTE
ESP	EXTERNAL STATIC PRESSURE	S/A	SUPPLY AIR
EXIST	EXISTING	SP	STATIC PRESSURE
F	FAHRENHEIT	TEMP	TEMPERATURE
FT	FEET	T'STAT	THERMOSTAT
FT-X	FINNED TUBE RADIATION DESIGNATOR	TYP	TYPICAL
FCO	FLOOR CLEAN OUT	V	VENT
FLA	FULL LOAD AMPS	VTR	VENT THRU ROOF
FT	FEET	W	WASTE
GA	GAUGE	W/	WITH
GAL	GALLONS	WC	WATER COLUMN
GPH	GALLONS PER HOUR	WG	WATER GAUGE
GPM	GALLONS PER MINUTE	WHA	WATER HAMMER ARRESTOR
HD	HEAD	WPD	WATER PRESSURE DROP
HP	HORSEPOWER		
HW	HOT WATER		
HWC	HOT WATER CIRCULATED		
HWS	HOT WATER SUPPLY		

**PLUMBING FIXTURE SCHEDULE**

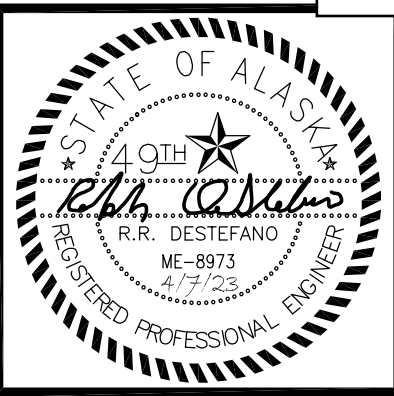
SYMBOL	FIXTURE	MANUFACTURER	MODEL	CW	HW/TW	WASTE	VENT	TRAP	COLOR/FINISH	TRIM/REMARKS
P-1	WATER CLOSET	EXISTING	EXISTING	1	--	4	2	--	WHITE	EXISTING WATER CLOSET WITH FLUSH VALVE
P-2	WATER CLOSET - ADA	EXISTING	EXISTING	1	--	4	2	--	WHITE	EXISTING ADA WATER CLOSET WITH FLUSH VALVE
P-3	URINAL	EXISTING	EXISTING	1/2	--	2	1-1/2	1-1/2	WHITE	EXISTING URINAL WITH FLUSH VALVE
P-4	URINAL - ADA	EXISTING	EXISTING	1/2	--	2	1-1/2	1-1/2	WHITE	EXISTING ADA URINAL WITH FLUSH VALVE
P-5	LAVATORY - COUNTER	EXISTING	EXISTING	1/2	1/2	1-1/2	1-1/4	1-1/4	WHITE	EXISTING COUNTER MOUNTED LAVATORY
P-6	LAVATORY - WALL	EXISTING	EXISTING	1/2	1/2	1-1/2	1-1/4	1-1/4	WHITE	EXISTING WALL MOUNTED LAVATORY
P-7	ARTS AND CRAFT SINK	JUST	SL-2122-A-GR	1/2	1/2	1-1/2	1-1/2	1-1/2	STAINLESS	COUNTER MOUNTED SINK, CHICAGO FAUCET 786-GNAE3ABCP, 8" CENTERS, 8" GOOSE NECK
P-8	NOT USED	--	--							
P-9	DRINKING FOUNTAIN	EXISTING	EXISTING	1/2	1/2	1-1/2	1-1/4	1-1/4	STAINLESS	EXISTING WALL MOUNTED DRINKING FOUNTAIN
P-10	NOT USED	--	--							
P-11	SHOWER HEAD	EXISTING	EXISTING	1/2	1/2				---	EXISTING SHOWER HEAD
P-12	SHOWER STALL - ADA	EXISTING	EXISTING	1/2	1/2	2	1-1/2	2	---	EXISTING SHOWER
FD-1	FLOOR DRAIN	J.R. SMITH	2005	--	--	2	1-1/2	2	NICKEL/BRONZE	FLOOR DRAIN, RECONNECT EXISTING TRAP PRIMER IN NON-SHOWER AREAS. IF NO TRAP PRIMER EXISTS, PROVIDE JR SMITH 2692 QUAD CLOSE TRAP SEAL.

REVISIONS:

DRAWN BY: ARN  
 CHECKED BY: RRD  
 DATE: 4/7/2023  
 JOB NUMBER: M2219.00  
 DWG FILE: MSERIES

DRAWING TITLE:  
 LEGEND, SCHEDULES  
 AND ABBREVIATIONS

SHEET:  
**M001**



**R S A**  
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**PARKS & REC. WASTE PIPE REPAIR**  
**PETERSBURG BOROUGH**  
**500 N. 3RD. ST.**  
**PETERSBURG ALASKA 99833**

REVISIONS:

DRAWN BY: ARN  
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DATE: 4/7/2023  
JOB NUMBER: M2219.00  
DWG FILE: MSERIES

DRAWING TITLE:  
MECHANICAL  
SPECIFICATIONS

SHEET:  
**M002**

**SECTION 22 10 00 - PLUMBING PIPING**

- A. SUBMITTALS: SUBMIT PRODUCT DATA FOR APPROVAL, PIPING SYSTEM PRESSURE TEST RESULTS.
- B. PIPING:
  - 1. WASTE PIPING, BELOW GRADE - ABS SCHEDULE 40 CELLULAR CORE. PIPE AND FITTINGS SHALL BE MANUFACTURED FROM ABS COMPOUND WITH A CELL CLASS OF 42222 FOR PIPE AND 32222 FOR FITTINGS PER ASTM D 3965 AND CONFORM WITH NATIONAL SANITATION FOUNDATION STANDARD 14. ASTM D 2661 FITTINGS. ASTM D 2235 SOLVENT WELDED JOINTS.
  - 2. WASTE PIPING, ABOVE GRADE:  
ABS SCHEDULE 40 CELLULAR CORE. PIPE AND FITTINGS SHALL BE MANUFACTURED FROM ABS COMPOUND WITH A CELL CLASS OF 42222 FOR PIPE AND 32222 FOR FITTINGS PER ASTM D 3965 AND CONFORM WITH NATIONAL SANITATION FOUNDATION STANDARD 14. ASTM D 2661 FITTINGS. ASTM D 2235 SOLVENT WELDED JOINTS.
- C. FLOOR CLEANOUT:
  - 1. ENAMEL PAINT COATED CAST IRON, TWO PIECE BODY WITH DOUBLE DRAINAGE FLANGE, WEEP HOLES, REVERSIBLE CLAMPING COLLAR, BRONZE PLUG, AND ADJUSTABLE ROUND NICKEL BRONZE SCORIATED COVER. J.R. SMITH MODEL 4021 OR APPROVED EQUAL.
- D. INSTALLATION
  - 1. TEST ALL NEW PORTIONS OF PIPING IN ACCORDANCE WITH THE UPC.
  - 2. INSTALL ALL PIPING IN CRAFTSMANLIKE MANNER, PLUMB AND PARALLEL TO BUILDING LINES. GROUP PIPING AT COMMON ELEVATIONS WHERE PRACTICAL.
  - 3. PROVIDE CLEARANCE FOR INSTALLATION OF INSULATION AND ACCESS TO VALVES AND FITTINGS.

**SECTION 22 05 29: 23 05 29 - HANGERS & SUPPORTS FOR PIPING & EQUIPMENT**

- A. SUBMITTALS: SUBMIT PRODUCT DATA FOR APPROVAL.
- B. MATERIALS:
  - 1. PIPE HANGERS AND SUPPORTS - BELOW GRADE
    - 1.1. HANGERS FOR PIPES 1/2" TO 1-1/2" - TYPE 316 STAINLESS, ADJUSTABLE SWIVEL, SPLIT RING, TYPE 316 STAINLESS STEEL HARDWARE AND SUPPORT ROD.
    - 1.2. HANGERS FOR PIPES 2" TO 4" - TYPE 316 STAINLESS STEEL, ADJUSTABLE CLEVIS, TYPE 316 STAINLESS STEEL HARDWARE AND SUPPORT ROD .
    - 1.3. MULTIPLE OR TRAPEZE HANGERS - TYPE 316 STAINLESS STEEL CHANNELS WITH WELDED SPACERS AND HANGER RODS.
    - 1.4. WALL SUPPORTS FOR PIPES 1/2" TO 3" - TYPE 316 STAINLESS STEEL HOOK.
    - 1.5. WALL SUPPORTS FOR PIPES 4" AND LARGER - WELDED TYPE 316 STAINLESS STEEL BRACKET, STAINLESS STEEL CLAMP.
- C. INSTALLATION
  - 1. DESIGNED AND INSTALLED IN ACCORDANCE WITH THE UNIFORM PLUMBING CODE (UPC) FOR DOMESTIC WASTE, VENT, AND WATER PIPING
  - 2. INSTALLED AS PER THE MANUFACTURERS INSTRUCTIONS. PROVIDE SEISMIC SUPPORT FOR ALL PIPING AND EQUIPMENT IN ACCORDANCE WITH IBC.

BUILDING. SHOW COMPLETE ROUTING AND SIZING OF ANY SIGNIFICANT REVISIONS TO THE SYSTEMS SHOWN. SUBMIT ORIGINAL COPY TO OWNER AT THE COMPLETION OF WORK AND PRIOR TO SUBSTANTIAL COMPLETION INSPECTION.

DEMOLITION DRAWINGS ARE BASED ON AS-BUILT DRAWINGS AND A NON-DESTRUCTIVE WALK-THROUGH OF THE FACILITY. REPORT DISCREPANCIES TO OWNER BEFORE DISTURBING THE EXISTING INSTALLATION. DISABLE SYSTEMS ONLY TO MAKE SWITCH OVERS AND CONNECTIONS. COORDINATE WITH PHASING PLAN TO PERFORM WORK IN SEQUENCE WITH OTHER TRADES AND MAINTAIN CODE MINIMUM MECHANICAL SERVICE CLEARANCES TO ALL AREAS IMPACTED BY WORK AND STILL OCCUPIED. OBTAIN PERMISSION FROM OWNER AT LEAST 72 HOURS PRIOR TO PARTIALLY OR COMPLETELY DISABLING SYSTEM. MINIMIZE OUTAGE DURATION AND MAKE TEMPORARY CONNECTIONS TO MAINTAIN SERVICE IN AREAS ADJACENT TO WORK AREAS. REMOVE EXPOSED ABANDONED PIPING, INSULATION, HANGERS AND SUPPORTS, CONTROLS AND CONTROL WIRING, AND ANY OTHER ABANDONED MECHANICAL EQUIPMENT. WHERE ABANDONED PIPE ENTERS EXISTING SURFACES TO REMAIN, CUT PIPE FLUSH WITH WALLS, AND FLOORS, CAP/PLUG PIPE AND PATCH SURFACES. REPAIR ADJACENT CONSTRUCTION AND FINISHES DAMAGED DURING DEMOLITION AND REMODEL WORK. MAINTAIN ACCESS TO EXISTING MECHANICAL INSTALLATIONS WHICH REMAIN ACTIVE.

**SECTION 22 05 00: 23 05 00 - COMMON WORK RESULTS FOR MECHANICAL**

THE INFORMATION SHOWN ON THESE PLANS FOR EXISTING CONDITIONS IS TAKEN FROM AS-BUILT DRAWINGS AND A NON-DESTRUCTIVE INVESTIGATION OF THE FACILITY. THE INFORMATION SHOWN FOR EXISTING CONDITIONS MAY OR MAY NOT BE ACCURATE OR COMPLETE. THE CONTRACTOR SHALL FIELD VERIFY ALL ITEMS SCHEDULED FOR DEMOLITION PRIOR TO START OF WORK.

PLANS - THE CONTRACTOR SHALL PROVIDE ALL MATERIALS AND LABOR NECESSARY FOR A COMPLETE AND OPERABLE SYSTEM. THE DRAWINGS ARE PARTLY DIAGRAMMATIC, NOT NECESSARILY SHOWING ALL OFFSETS OR EXACT LOCATIONS OF PIPING AND DUCTS UNLESS SPECIFICALLY DIMENSIONED. CONTRACTOR IS TO COORDINATE PIPING AND EQUIPMENT LOCATIONS WITH ARCHITECTURAL, STRUCTURAL, AND ELECTRICAL PLANS TO AVOID CONFLICTS. REVIEW THE DRAWINGS AND SPECIFICATIONS FOR EQUIPMENT FURNISHED BY OTHER CRAFTS BUT INSTALLED IN ACCORDANCE WITH THIS SECTION. BRING QUESTIONABLE OR OBSCURE ITEMS, APPARENT CONFLICTS BETWEEN PLANS AND SPECIFICATIONS, GOVERNING CODES OR UTILITY REGULATIONS TO THE ATTENTION OF THE OWNER. CODES, ORDINANCES, REGULATIONS, STANDARDS, OR MANUFACTURER'S INSTRUCTIONS TAKE PRECEDENCE WHEN THEY ARE MORE STRINGENT OR CONFLICT WITH THE DRAWINGS AND SPECIFICATIONS. COORDINATE WITH PHASING PLAN TO PERFORM COORDINATED WORK IN SEQUENCE WITH OTHER TRADES. MAINTAIN CODE MINIMUM MECHANICAL SERVICE TO ALL AREAS IMPACTED BY WORK WHERE STILL OCCUPIED BY THE OWNER.

STANDARDS, CODES, AND REGULATIONS - ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE LATEST ADOPTED EDITION OF THE INTERNATIONAL BUILDING CODE (IBC), INTERNATIONAL MECHANICAL CODE (IMC), UNIFORM PLUMBING CODE(UPC), AS AMENDED BY THE STATE OF ALASKA.

PERMITS - THE CONTRACTOR SHALL SECURE AND PAY FOR ALL NECESSARY PERMITS AND FEES. NOT PROVIDED BY THE OWNER.

SUBMITTALS - SUBMITTALS SHALL BE IN ELECTRONIC FORM. THE DATA SHALL BE ARRANGED AND BOOKMARKED BY SPECIFICATION SECTION. SUBMIT ON ALL SCHEDULED EQUIPMENT AND ALL MATERIALS AND EQUIPMENT AS NOTED IN THE SPECIFICATIONS.

MATERIALS - ALL MATERIALS OTHER THAN OWNER SUPPLIED SHALL BE NEW AND UNUSED, INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S DIRECTIONS AND IN THE BEST PRACTICE OF THE CRAFT. OBTAIN OWNER APPROVAL OF ALL PRODUCTS PRIOR TO ORDERING OR INSTALLING ANY PART OF ANY SYSTEM.

EQUIPMENT SUBSTITUTIONS - ALL EQUIPMENT LISTED AND SCHEDULED ARE REPRESENTATIVE OF THE STANDARD OF QUALITY AND PERFORMANCE REQUIRED. "OR EQUAL" SUBSTITUTIONS WILL BE CONSIDERED IF SUBSTITUTE DATA SHEETS ARE SUBMITTED AND ARE SHOWN TO BE OF EQUAL OR BETTER QUALITY, INCLUDING EFFICIENCY OF PERFORMANCE, AND SIZE AND WEIGHT. OWNER SHALL HAVE FIRST RIGHT OF REFUSAL FOR ALL SUBSTITUTIONS.

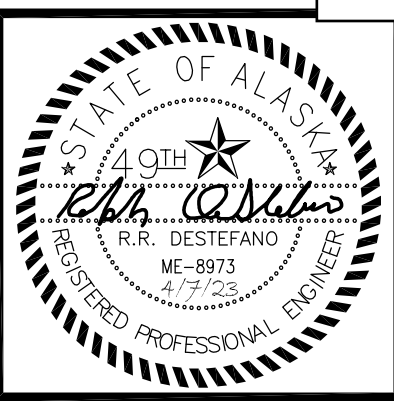
WORKMANSHIP - INSTALLATION OF ALL WORK SHALL BE MADE SO THAT ITS SEVERAL COMPONENT PARTS SHALL FUNCTION AS A WORKABLE SYSTEM COMPLETE WITH ALL ACCESSORIES NECESSARY FOR ITS OPERATION. ALL MATERIAL AND EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS, INSTRUCTIONS AND/OR INSTALLATION DRAWINGS. MATERIALS AND EQUIPMENT SHALL BE NEW AND SHALL CONFORM WITH APPLICABLE INDUSTRY STANDARDS, AND THIRD PARTY LISTINGS WHERE APPLICABLE.

WARRANTY - ALL WORK PERFORMED UNDER THIS CONTRACT SHALL BE FREE FROM DEFECTS IN MATERIALS AND WORKMANSHIP FOR A PERIOD OF ONE YEAR FROM PROJECT COMPLETION AND OWNER ACCEPTANCE. ANY FAULTY MATERIALS OR WORKMANSHIP SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE OWNER DURING THE WARRANTY PERIOD.

EQUIPMENT INSTALLATION AND ACCESS - INSTALL ALL EQUIPMENT WHERE NOTED ON THE DRAWINGS IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. PROVIDE MISCELLANEOUS APPURTENANCES IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS INCLUDING ACCESSORIES, SUPPORTS AND CONTROL CONNECTIONS REQUIRED FOR COMPLETE AND OPERATING SYSTEMS. MAINTAIN MANUFACTURER'S RECOMMENDED SERVICE CLEARANCES AND PROVIDE WORKABLE ACCESS TO ALL SERVICEABLE AND/OR OPERABLE EQUIPMENT.

TEST AND START-UP - TEST ALL PLUMBING AND PIPING SYSTEMS IN ACCORDANCE WITH THE UNIFORM PLUMBING CODE (UPC).

RECORD DRAWINGS - PROVIDE ACCURATE PROJECT RECORD DRAWINGS, SHOWN IN RED INK ON A CLEAN SET OF PRINTS. SHOWING ALL CHANGES FROM THE ORIGINAL PLANS MADE DURING INSTALLATION OF THE WORK. SHOW THE DIMENSIONED LOCATION AND ROUTING OF ALL MECHANICAL WORK THAT IS PERMANENTLY CONCEALED. SHOW ROUTING OF WORK IN PERMANENTLY CONCEALED BLIND SPACES WITHIN THE



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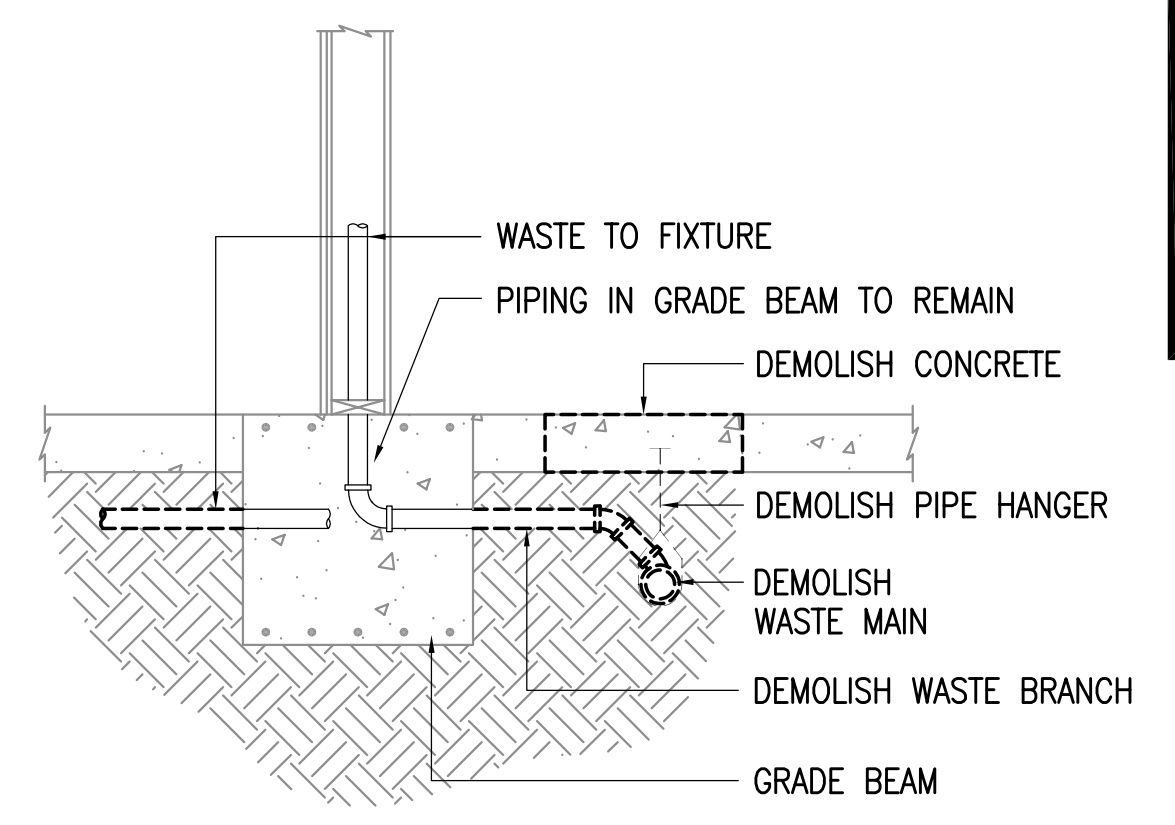
**PARKS & REC. WASTE PIPE REPAIR**  
**PETERSBURG BOROUGH**  
**500 N. 3RD. ST.**  
**PETERSBURG ALASKA 99833**

REVISIONS:

DRAWN BY: ARN  
CHECKED BY: RRD  
DATE: 4/7/2023  
JOB NUMBER: M2219.00  
DWG FILE: MSERIES

DRAWING TITLE:  
UNDERSLAB PLUMBING  
DEMOLITION PLAN

SHEET:  
**M101**



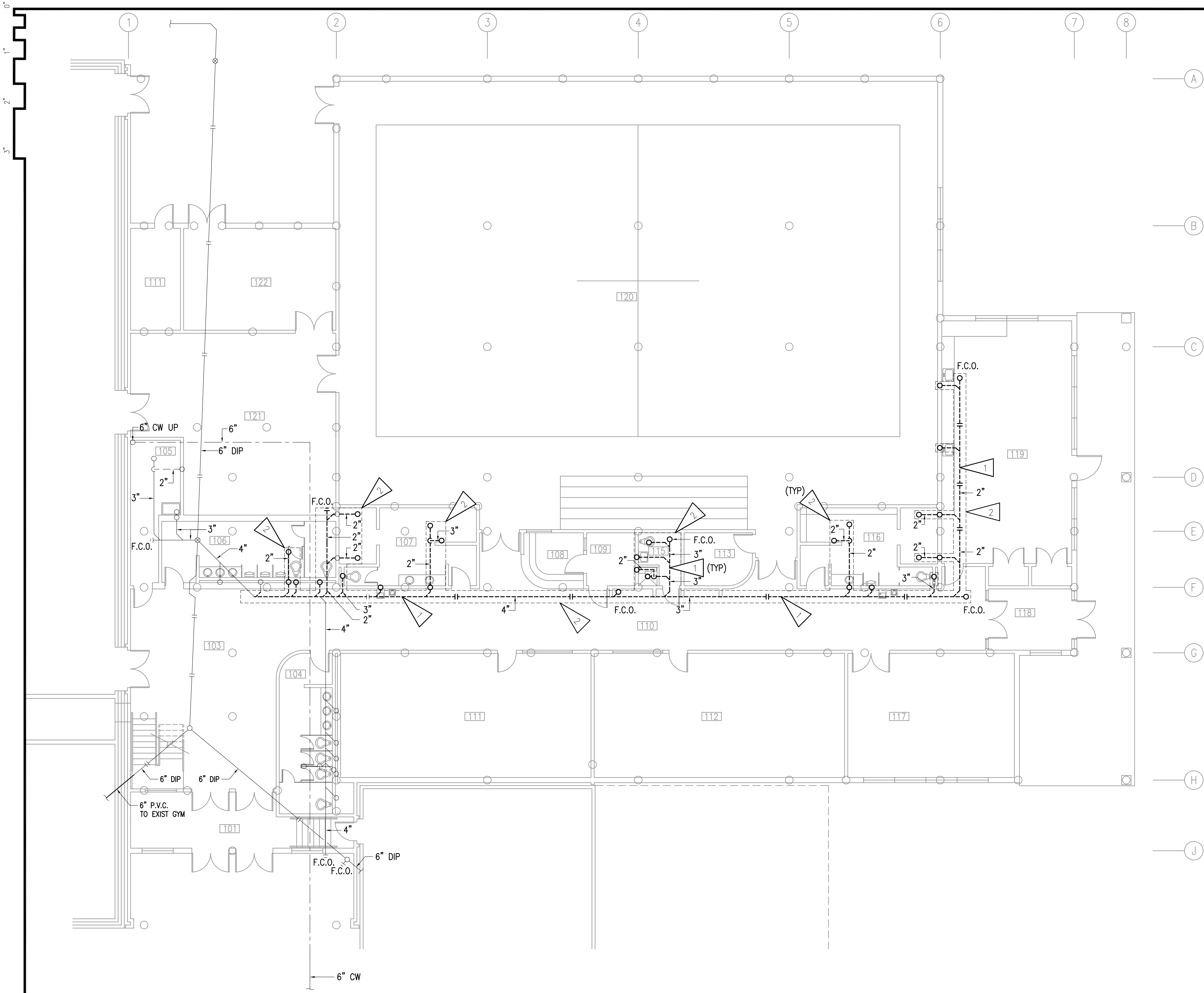
**2 WASTE PIPE DEMO DETAIL**  
NOT TO SCALE

**GENERAL NOTES:**

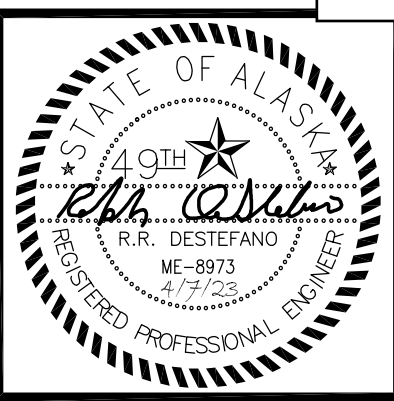
- A. THE INFORMATION SHOWN ON THIS DRAWING IS TAKEN FROM AS-BUILT DRAWINGS AND A NON-DESTRUCTIVE WALKTHROUGH OF THE FACILITY. THE CONTRACTOR SHALL FIELD VERIFY ALL ITEMS SCHEDULED FOR DEMOLITION PRIOR TO START OF WORK.

**SHEET NOTES:**

- 1. DEMOLISH EXISTING WASTE LINE. FOR TYPICAL DETAIL SEE - **2** (M101)
- 2. APPROXIMATE OUTLINE OF CONCRETE SLAB TO BE REMOVED.



**1 UNDERSLAB PLUMBING DEMOLITION PLAN**  
1/8" = 1'-0"



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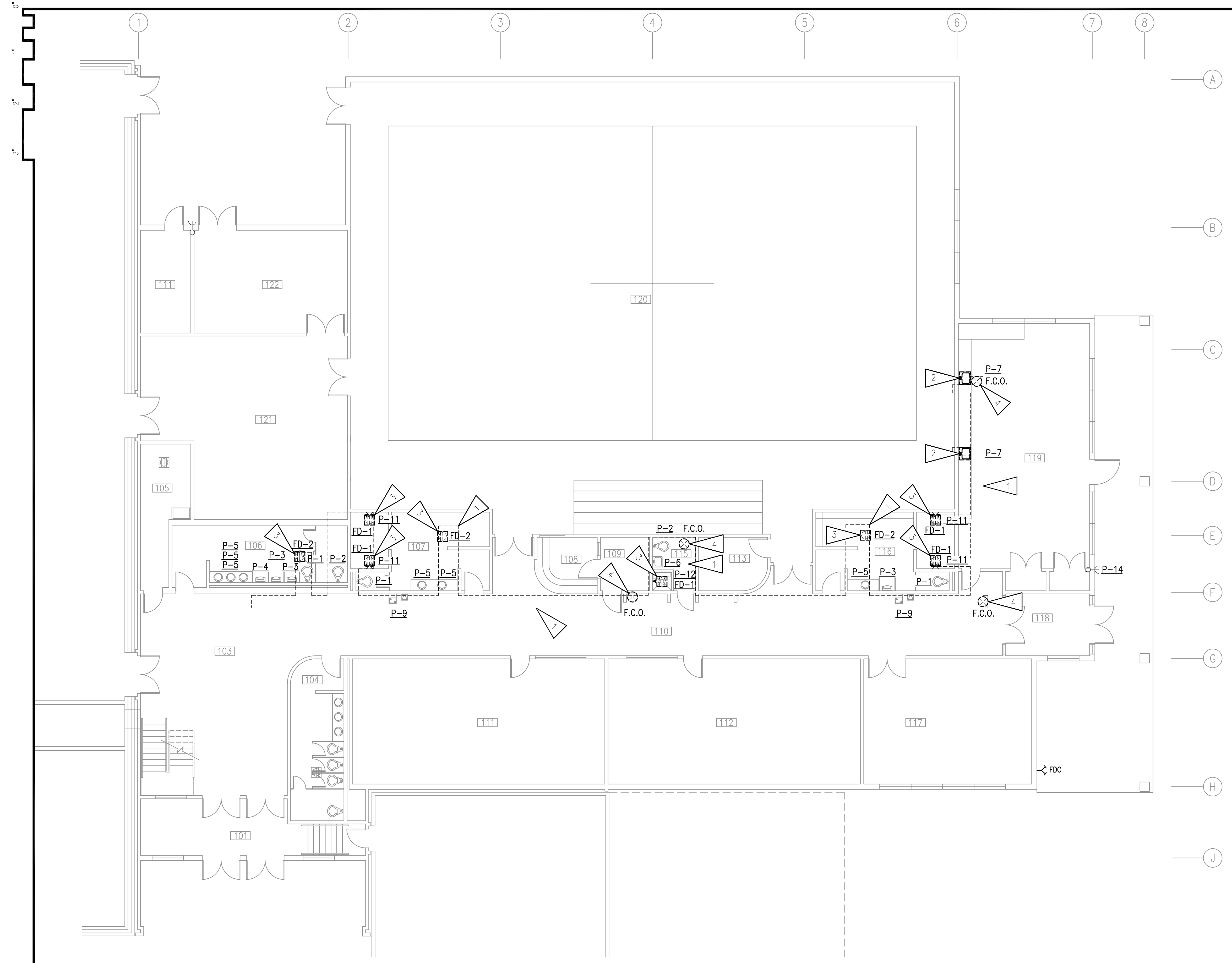
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**500 N. 3RD. ST.**  
**PETERSBURG ALASKA 99833**

REVISIONS:

DRAWN BY: ARN  
CHECKED BY: RRD  
DATE: 4/7/2023  
JOB NUMBER: M2219.00  
DWG FILE: MSERIES

DRAWING TITLE:  
ABOVE FLOOR PLUMBING  
DEMOLITION PLAN

SHEET:  
**M102**



**GENERAL NOTES:**

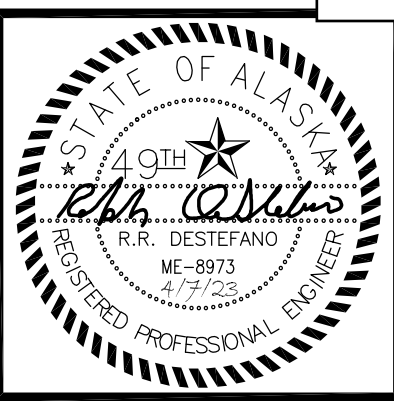
- A. THE INFORMATION SHOWN ON THIS DRAWING IS TAKEN FROM AS-BUILT DRAWINGS AND A NON-DESTRUCTIVE WALKTHROUGH OF THE FACILITY. THE CONTRACTOR SHALL FIELD VERIFY ALL ITEMS SCHEDULED FOR DEMOLITION PRIOR TO START OF WORK.

**SHEET NOTES:**

- 1. APPROXIMATE OUTLINE OF CONCRETE SLAB TO BE REMOVED.
- 2. DEMOLISH PLUMBING FIXTURE.
- 3. DEMOLISH FLOOR DRAIN.
- 4. DEMOLISH FLOOR CLEANOUT

**1** ABOVE FLOOR PLUMBING DEMOLITION PLAN  
1/8" = 1'-0"





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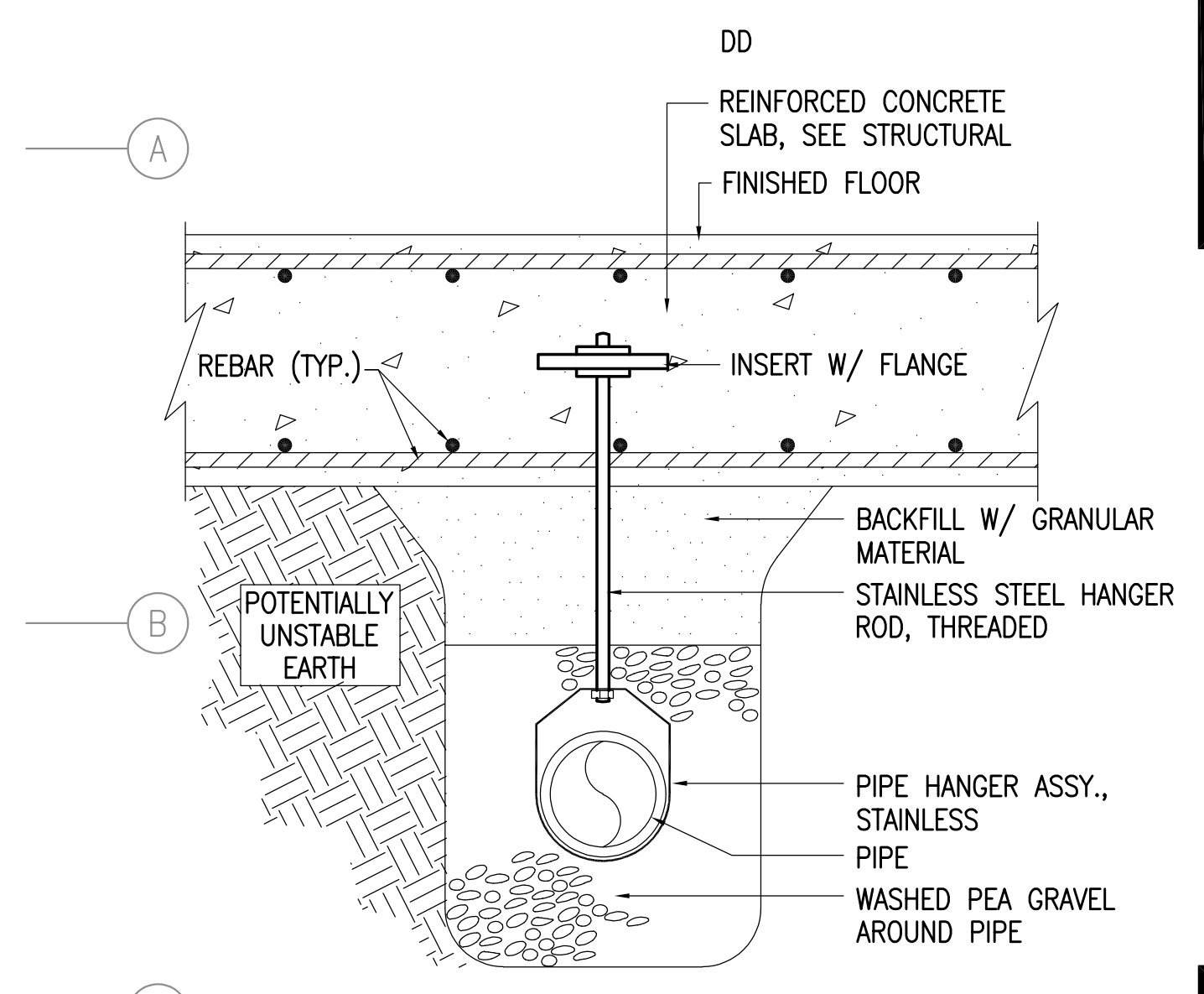
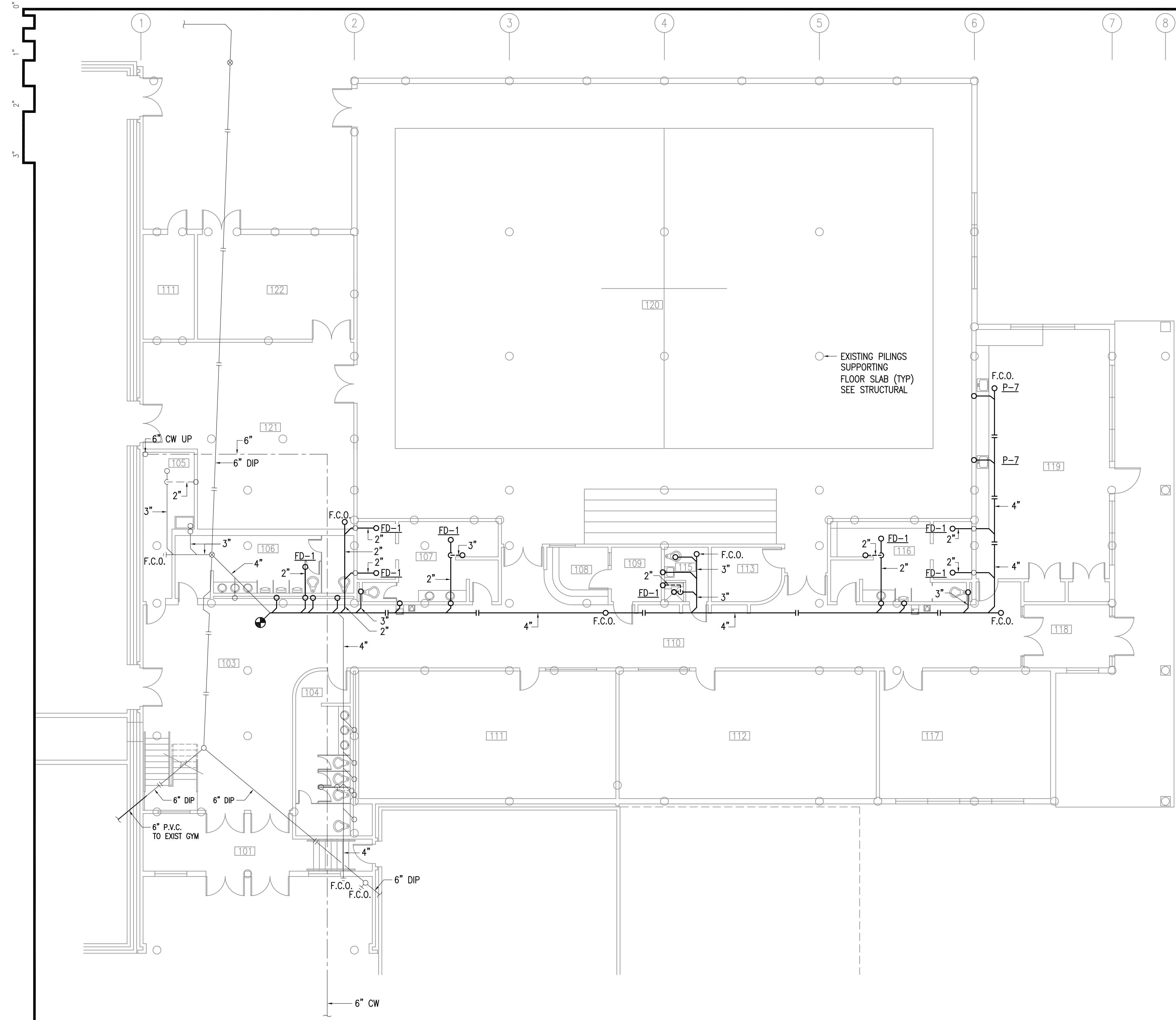
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REVISIONS:

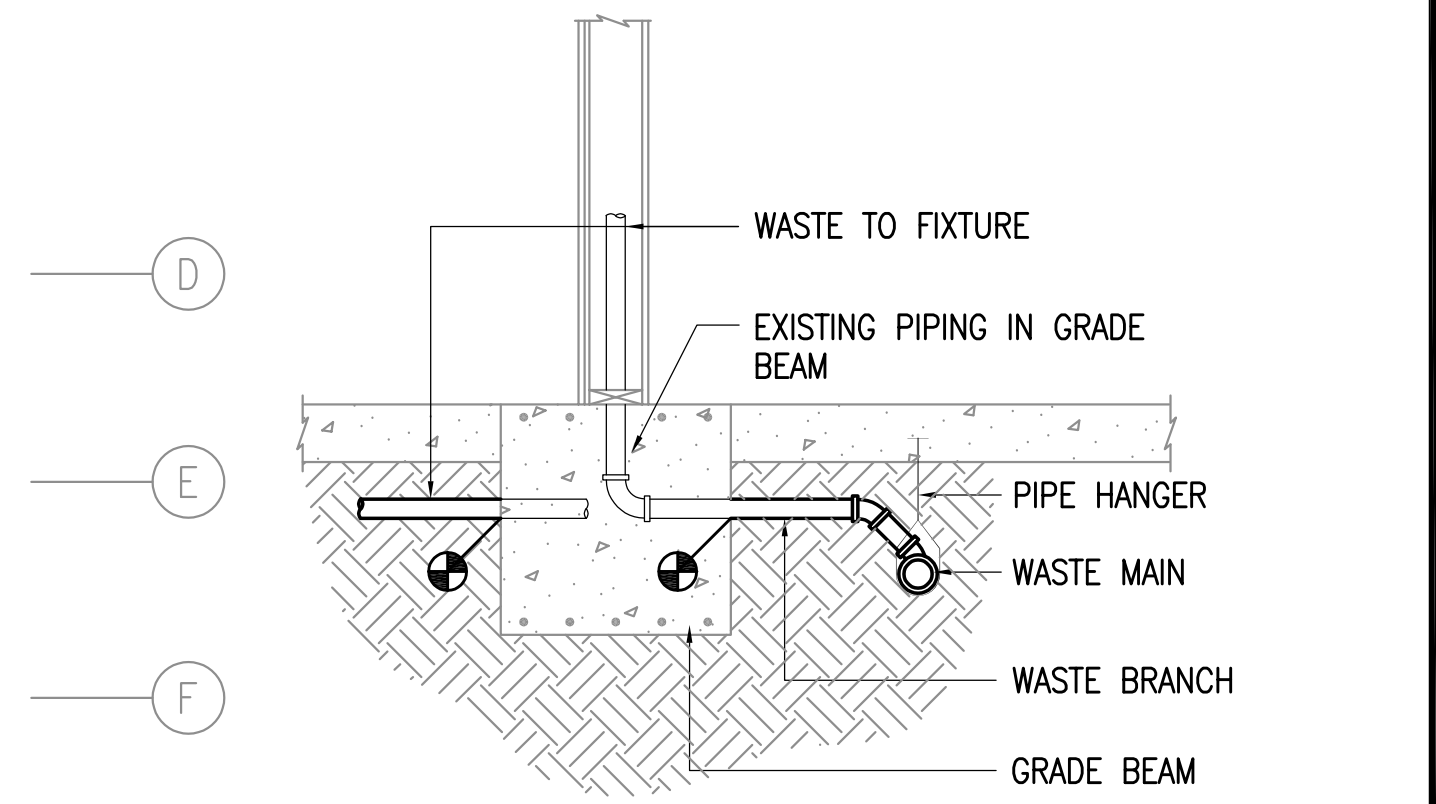
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CHECKED BY: RRD  
DATE: 4/7/2023  
JOB NUMBER: M2219.00  
DWG FILE: MSERIES

DRAWING TITLE:  
UNDERSLAB PLUMBING  
REMODEL PLAN

SHEET:  
**M201**



**2** BELOW GRADE PIPE HANGER  
NOT TO SCALE

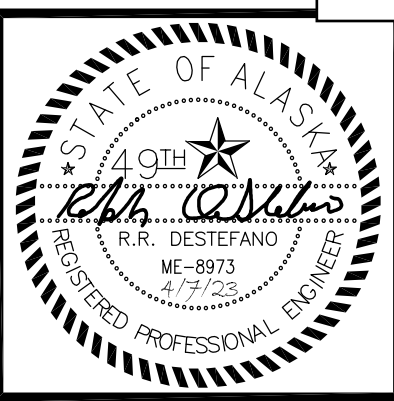


**3** WASTE PIPE REMODEL DETAIL  
NOT TO SCALE

**GENERAL NOTES:**

- A. WASTE PIPING IS TO BE SUPPORTED FROM THE SLAB ABOVE SEE DETAIL - **2** (M201)

**1** UNDERSLAB PLUMBING REMODEL PLAN  
1/8" = 1'-0"



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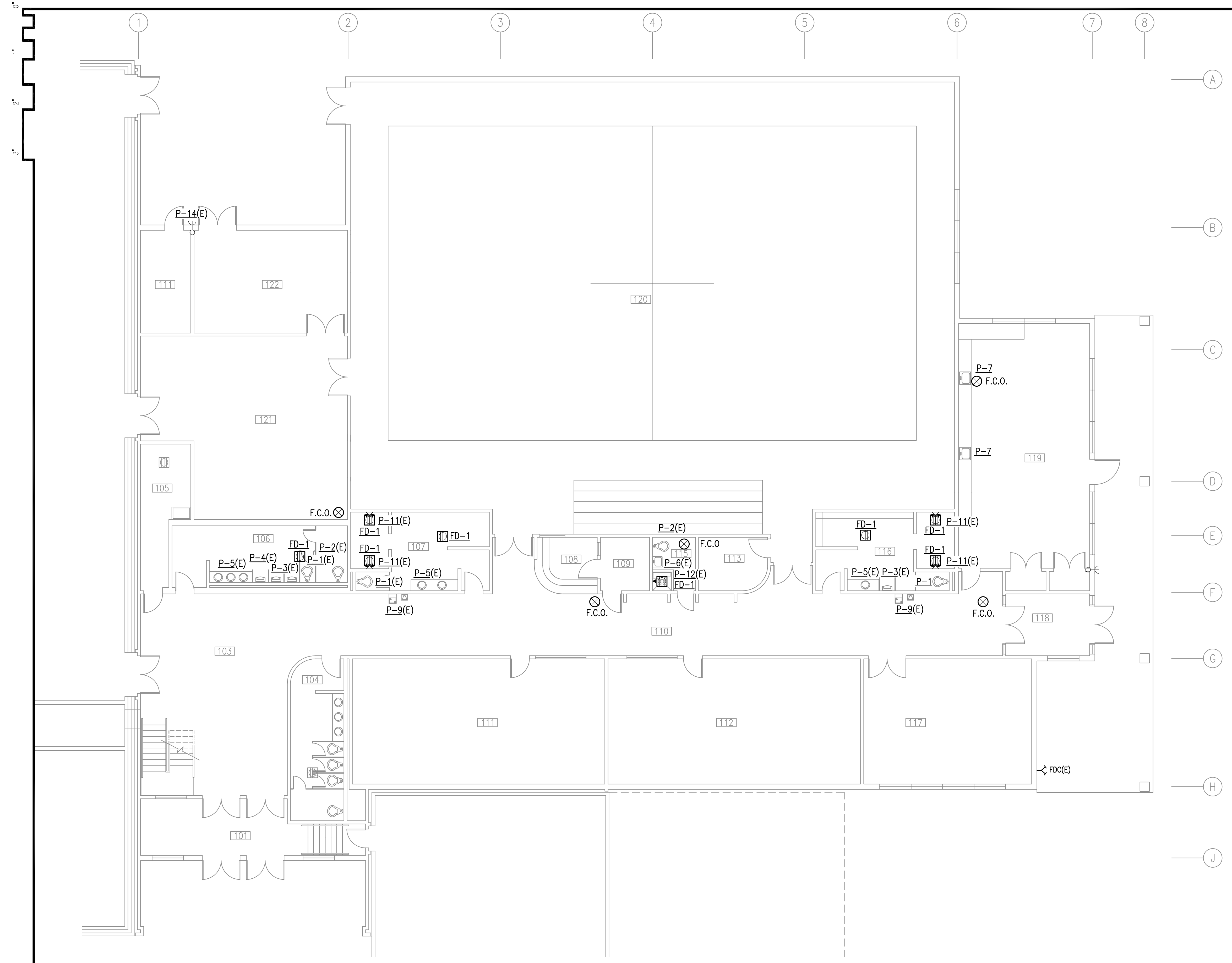
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**500 N. 3RD. ST.**  
**PETERSBURG ALASKA 99833**

REVISIONS:

DRAWN BY: ARN  
CHECKED BY: RRD  
DATE: 4/7/2023  
JOB NUMBER: M2219.00  
DWG FILE: MSERIES

DRAWING TITLE:  
ABOVE FLOOR PLUMBING  
REMODEL PLAN

SHEET:  
**M202**



**1** ABOVE FLOOR PLUMBING REMODEL PLAN  
1/8" = 1'-0"

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MEMORANDUM

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**TO:** STEVE GIESBRECHT, BOROUGH MANAGER  
**FROM:** KARL HAGERMAN, UTILITY DIRECTOR *KH*  
**SUBJECT:** PUMP STATION 4 UPDATE AND FINAL DESIGN AWARD RECOMMENDATION  
**DATE:** 4/25/23  
**CC:** DEBBIE THOMPSON, BOROUGH CLERK  
FILE

As you know, the project to replace the Pump Station 4 force main has been progressing after a pandemic related hiatus. As the Borough also had a need to improve/replace the pump station itself, and not just focus on the force main, the scope has grown substantially from the initial project. Most recently, PND Engineers completed a technical memorandum that identified various options for the layout of the new pump station, the extent of electrical upgrades and options for installation of the force main and gravity sewer. Wastewater department staff and I met with the Engineer and settled on a preferred alternative to move the project forward. Our goals were to undergo a project that would remedy any existing problems, but also provide the best long-term solution to the Borough for this particular station.

The preferred alternative, identified in the tech memo as Option A.2.3, will install a new wetwell and valve vault to the south of the current pump station. Procurement of property from the adjacent property owner will be part of this alternative, with a prospective no-cost land swap being the recommended solution. Due to the extreme depths required to site the new wet well, building in this location has fewer risks associated with undermining adjacent private structure foundations as well as the existing standby generator building.

Electrical code issues with the 1980's era service entrance and paneling will be resolved by expanding/rebuilding the electrical/generator building to accommodate new pump controls, which were previously located below grade in the pump drywell. The existing generator will be retained as well as the existing automatic transfer switch.

The engineers contemplated "floating" some of the gravity sewer as part of the project, as a cost savings, but the cost savings were not as significant as we had imagined and this would be a lesser construction standard to be sure. It is better for the long-term function of the gravity mains if they are not susceptible to settlement or movement, therefore all gravity sewer will be supported to hardpan, while the force main will be floated for its entire length. Further, the routing of the force main and gravity sewer could be considered as a first step in the development of a limited number of building lots in this area.

Lastly, some survey work and replatting will be necessary to establish a right of way through the subdivision for Ramona Street, which will connect with Augusta Street and on to Sandy Beach Road.

This project has grown since its inception but the issues with the pump station have also grown since the department started looking at this work. The force main is corroded and must be replaced. One pump, out of three at the station, is currently not in service due to

debris in pipes and non-functioning isolation valves. The electrical service does not meet current code and should be replaced to ensure safety at the site. All pump controls will be moved above ground and the new pumps will be submersible. As this is our second largest station, that accepts all wastewater flow south of Hungry Point, it is a vital piece of infrastructure that must be refurbished.

Current engineering estimates have option A.2.3 estimated to cost \$3,337,177. The department is presently seeking approval from ADEC for a loan increase to cover all design and construction costs associated with this design. The Borough has already received a loan for \$360,000 toward design and construction of the project, but as the scope of work has grown by combining the force main replacement with the pump station replacement, the cost has grown substantially as well.

In order to maintain momentum on this project, I recently requested PND Engineers to provide a proposal to complete construction documents, surveying for right of way and land acquisition, permitting, bid phase support and construction administration and inspection. The proposal came in at \$361,449.00. After some negotiation, a revision was offered that lowered the overall cost of the proposal and split out work up to the bid phase so that a partial award may be made at the present time with the project budget that is in hand. The revised proposal came to \$348,952 overall, with tasks 4 – 10 broken out for the next step of contract amendments to equal \$245,600.

**At this time, the wastewater department is recommending that PND Engineers be awarded a contract amendment in the amount of \$245,600 to complete project design, permitting, survey and platting for the Pump Station 4 Replacement project.**

Copies of the Pump Station 4 Alternatives Assessment Technical Memorandum, as well as the initial final design proposal and the revised proposal, are attached to this memo. I'll be happy to answer any questions that you or the Assembly may have.

Thank you.



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Item 151.

# TECHNICAL MEMORANDUM

**PND Project Number:** 192080  
**To:** Mr. Karl Hagerman, Utilities Director, Petersburg Borough  
**Date:** February 15, 2023  
**From:** Tyler Bradshaw, P.E., PND Engineers  
**Subject:** Pump Station 4 Alternatives Assessment Technical Memorandum  
**CC:** Mark Morris, Morris Engineering Group

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## 1 Background and Project Description

Petersburg Borough (PB) desires to replace Pump Station 4 (PS4) and associated force main discharge pipe. Located on Sandy Beach Road at the intersection of undeveloped Ramona Street right of way, Pump Station 4 is the second largest pump station in the PB sewer collection system. PS4 consists of a buried wet well with a buried drywell housing the pumps and controls. An adjacent brick maintenance building contains the backup generator system and primary power service. PS4 was originally constructed in 1975; the pumps were upgraded in 1989 to three Allis-Chalmers 50 HP vertical, non-clog pumps with design original design flow of approximately 1800 GPM each. The electrical and backup generator system is further described in the attached electrical technical memorandum, developed by Morris Engineering Group (MEG).

PS4 discharges into an approximately 1000-foot long, ten-inch cast iron force main which traverses Nordic Drive and Sandy Beach Road, to a discharge manhole at the intersection of Sandy Beach Road and undeveloped Augusta Street right of Way. Both the pump station and the force main are nearing their useful service life and are creating a heavy maintenance burden for PB.



Figure 1 - Pump Station 4 and Force Main

In 2020, PND performed an assessment of rehabilitation and replacement alternatives for the force main. The project and focus of the study at the time included only the force main, however, with an understanding that PB desired to replace Pump Station 4 in the near future, the study included a precursory evaluation of an alternate alignment utilizing undeveloped Borough rights of way within the Hungry Point Subdivision, assuming a full replacement of PS4. In light of recent PB discussion on the potential development of the Hungry Point Subdivision and the increasing need to update PS4, in addition to the force main, PB ultimately elected to proceed with an alternate force main alignment through Hungry Point Subdivision and full replacement of PS4.

The proposed project replaces existing PS4 with a new wet well including submersible Flygt pumps and a dry valve vault, similar to other newer PB pump stations. The proposed force main will be constructed of HDPE and traverses through undeveloped Ramona Street right of way to Augusta Street where a new gravity sewer main will carry wastewater to the discharge manhole in Sandy Beach Road. PB retained PND to evaluate alternatives for location and installation methods for the pump station and pipe systems. The intent of this report is to present alternatives and recommendations to PB regarding the cost and work required to replace PS4 and the force main. The assessment focuses on three areas of investigation:

1. Pump Station Location. Three alternative locations are evaluated. One utilizes adjacent privately owned property and two remain entirely within PB right of way.

- 2. Pipe installation. Two alternatives are evaluated. "Floating" pipe over unsuitable subgrade utilizing a reinforced trench, and over excavating trenches down to a suitable base.
- 3. Electrical Controls Housing. Three alternatives are evaluated. Exterior rated electrical panels, an electrical controls hut, and full replacement of the existing generator building with a new facility.

The recommendations contained herein are based on professional judgment and experience utilizing available data. Recommendations contained in this report should be considered as options; other alternatives may be feasible and may become more apparent and preferred as design progresses.

**2 Assessment Methods, Testing and Criteria**

PND and MEG began by meeting on site with Justin Haley, PB Wastewater Operations Supervisor to inspect the existing facility, and connected infrastructure. As built data was collected as available and measured as accessible.

Flow measurements were taken in order to confirm the existing flow rates for the influent at the time of testing and the average discharge flow from the existing pumps. At the time of testing, pump two was out of service, pumps one and three were operational. Results from draw down flow testing are reported in **Table 1**.

Operation	Average Flow Rate (GPM)
Pump 1 Discharge	1299
Pump 2 Discharge	1178
Inflow	401

Table 1 - Existing PS4 Average Flow Rates

Additional measurements were performed on electrical systems as reported in the MEG technical memorandum found in **Appendix A**.

PND and PB performed soil probes to measure the depth of the organic overburden, generally peat, to the hard pan beneath throughout the areas where pipe lines are proposed. The approximate surface profile of the hard pan strata is shown in the drawings found in **Appendix B**.

Central Southeast Surveyors (CSS) performed a topographic and utilities survey of the site. Survey drawings Can be Found in **Appendix B**.

Following the field visit and data collection, PND met with PB to discuss preliminary results and establish minimum design criteria for the assessment and future PS4 design. A summary of preliminary design criteria established in coordination with PB is as follows:

- Pump Station will consist of 3 Flygt submersible pumps.
- Design peak flow shall be 2000 GPM.
- Peak flow can be met with two pumps operating and one pump in reserve. 3 pumps shall never operate simultaneously.
- Minimum flow shall be approximately 300 GPM.
- Force main shall traverse through the undeveloped Ramona Street right of way to discharge into a manhole at the Augusta Street intersection, note this requires right of way acquisition through to PB owned lots.
- Gravity system shall traverse from the force main discharge manhole through the undeveloped Augusta Street right of way to an existing manhole on Sandy Beach Road.

- Provide for future development of the Hungry Point Subdivision by installing a stub to the wet well and finishing the pipe trenches with surface course to a minimum of 12-feet wide.
- VFDs are required.
- Reuse the existing backup generator system if possible.
- Additional electrical criteria are listed in the MEG technical memorandum found in **Appendix A**.

The above assumptions and criteria are common to all alternatives.

### 3 Alternatives Assessment

In order to develop alternatives and accurately estimate costs, PND and MEG began the assessment by performing preliminary design and calculations for hydraulic and electrical systems, then coordinated with suppliers to procure quotations for permanent and temporary pump systems, as well as electrical components. Quotations and product data for hydraulic systems can be found in **Appendix D**. Electrical systems information can be found in **Appendix A**.

The alternatives assessment focuses on three main areas of investigation as follows:

1. Pump Station Location, three alternatives are presented.
2. Pipe Trenching and Installation Methods, two alternatives are presented.
3. Electrical Controls and Housings, three alternatives are presented.

A description of each alternative follows. Preliminary Drawings can be found in **Appendix B**. Itemized cost estimates and a matrix of costs for each combination of alternatives is presented in **Appendix C**.

#### 3.1 Pump Station Location

PND reviewed layout, survey data, site constraints and environmental conditions. The wet well excavation will be approximately 20-feet to 25-feet deep, with a base elevation of approximately 1-foot above Mean Lower Low Water. Without shoring and damming, it is likely that tidal water will inundate excavations at applicable tide levels; for the wet well, due to its depth, water intrusion could occur for the entire duration of the work. Additionally, significant run-off was observed adjacent to the existing generator building, which appears to be a drainage from the adjacent hillside, southeast of the Pump Station. Considering the anticipated water infiltration from both sides, the limited space available, and the risk of destabilizing excavations and nearby structures, PND is recommending sheet pile shoring be utilized to install the new wet well under all alternatives and has assumed sheet pile shoring for all alternatives and cost estimates.

Three alternatives for PS4 location were reviewed.

##### 3.1.1 Alternative A

###### Description

Alternative A assumes a portion of privately owned Lot 10, adjacent to PS4 can be acquired by the PB and utilizes the space to construct the Pump Station in its entirety, outside of the limits of the existing PS4 in order to minimize down time. A site plan of Alternative A can be found on sheet C2 of the Drawings in **Appendix B**.

Alternative A allows for the entirety of the wet well and valve vault to be installed without impacting the existing pump station. It is assumed that the new pipelines will be fully installed prior to startup and testing. Bypass pumping is thereby minimized, only required for brief intervals during startup and testing and final connections.



### Estimated Cost

The estimated construction cost for Alternative A is \$952,845. This does not include piping or electrical work which are described in Sections 3.2 and 3.3. An itemized estimate is included in **Appendix C**.

Alternative A requires property acquisition from Lot 10, adjacent to the existing PS4. PB reports that this acquisition may occur as a “land swap” with the property owner for other Borough owned land. No costs have been included for the property acquisition in the estimates for Alternative A.

### Pros

- Minimizes system downtime and bypass pumping.
- Existing generator building remains.
- Least cost alternative.

### Cons

- Requires property acquisition

### 3.1.2 Alternative B

Alternative B installs the new wet well and valve vault north of the existing PS4, closer to the roadway. New infrastructure will be installed entirely within PB right of way and the existing generator building remains. A site plan of Alternative B can be found on sheet C3 of the Drawings in **Appendix B**.

Due to restricted footprint, Alternative B results in more impact to existing infrastructure when compared to Alternative A. The water main will be relocated to accommodate the wet well and work must occur within the roadway to install the wet well, resulting in additional traffic control requirements.

Alternative B results in more bypass pumping and temporary piping when compared to Alternative A, but less when compared to Alternative C.

Given the site constraints, impacts to nearby infrastructure and proximity to structures and property, PND considers Alternative B to be at the highest risk for unforeseen costs.

### Estimated Cost

The estimated construction cost for Alternative B is \$1,043,803. This does not include piping or electrical work which are described in Sections 3.2 and 3.3. An itemized estimate is included in **Appendix C**.

### Pros

- Existing generator building remains.
- Constructed entirely within PB right of way.

### Cons

- Highest risk of unforeseen costs.
- Considerable impacts to nearby infrastructure.
- Less clearance to roadway.

### 3.1.3 Alternative C

Alternative C completely replaces the existing PS4 in place, entirely within PB right of way. A site plan of Alternative C can be found on sheet C4 of the Drawings in **Appendix B**.

The existing wet well and dry vault will be removed in their entirety and the new wet well valve vault installed in the void. The depth of the existing wet well and the new wet well are similar, thereby minimizing excavation costs and the risk of encountering bedrock or hard pan within the excavation.

The generator will be salvaged, but the existing generator building will be removed in its entirety and new wood framed building will be installed to house the existing generator and all PS4 electrical equipment.

Alternative C requires extensive bypass pumping and temporary piping and electrical systems as the existing lift station must be completely removed before the new lift station can be installed. Temporary system would be designed to remain in place for an extended period, and would include float switches, an alarm system, and back up pump systems.

#### Estimated Cost

The estimated construction cost for Alternative C is \$1,109,830. This does not include piping or electrical work which are described in Sections 3.2 and 3.3. An itemized estimate is included in **Appendix C**.

#### Pros

- Constructed entirely within PB right of way.
- Less risk when compared to Alternative B.
- New building centralizes all electrical equipment.
- Increased service life with new building and equipment.

#### Cons

- Highest construction cost alternative.
- Bypass and temporary piping required for longer interval.
- More elaborate bypass and temporary piping system required.

### **3.2 Pipe Trenching and Installation Methods**

#### Description

The existing soils through the areas where the pipelines will be installed are primarily soft, organic overburden and peat ranging in depth from 8-feet -16-feet over hard pan glacial till, or bedrock. Two methods for the installation of pipe lines were explored:

1. Floating – Floating the pipes involves limiting the pipe trench such that it is entirely within the soft, otherwise unsuitable soils. The trench is reinforced with geofabric and a layer of imported backfill beneath the pipe bedding in order to stabilize the pipe within the surrounding unsuitable soils. The trench is backfilled with imported backfill. This method can result in minor differential settlement throughout the pipelines due to varying subgrade consistency and bearing pressures. This method is most effective with flexible pressure pipe systems with fused joints, such as HDPE, where the minor differential settlements throughout the pipeline has little impact on the efficacy of the system. With jointed pipes, sensitive to slope variations, such as PVC gravity sewer, the method can be employed effectively under certain conditions, but is generally less effective and can result in varying slopes and stress on joints, or in extreme cases, joint separation. PND has employed the method successfully for both pressure and gravity sewer systems.

- 2. Full trench excavation to stable subgrade – This method involves over-excavating the pipe trench such that all soft, unsuitable soils are removed from the trench to a suitable subbase and imported backfill is placed beneath the pipeline bedding to ensure a stable base. This method limits differential settlement to the extent possible, but results in additional excavation and imported fill costs.

Trench details can be found in the Drawings in **Appendix B**. For this assessment it is assumed that the force main pipe will be installed via the floating method for all alternatives. Cost estimates were developed using both methods for the gravity pipe and structures.

Estimated Costs

Estimated construction costs for pipe installations is presented in **Table 2**. Itemized estimates are included in **Appendix C**.

Pipe Installation Method	Estimated Construction Budget
Floating	\$686,576
Excavated to Hardpan	\$759,176

Table 2- Pipe Installation Costs

**3.3 Electrical Controls and Housing**

PB requested PND review alternatives for an electrical hut, similar to Pump Station 5, versus exterior electrical panels, similar to Scow Bay 1. During the course of the analysis PND determined it prudent to assess an alternative which places the new wet well in the same location as the existing wet well. Under this alternative, the existing generator building requires removal. As a result, a third electrical alternative, including full replacement of the generator building with a new timber framed structure sized to enclose the backup generator and all pump station electrical equipment was evaluated. Electrical impacts and work descriptions can be found in the MEG Technical Memo, **Appendix A**. Estimated costs are presented in **Table 3**, itemized cost estimates can be found in **Appendix C**.

Electrical Option	Estimated Construction Budget
Panels	\$558,500
Hut	\$537,500
Full Building Replacement	\$633,500

Table 3- Electrical and Housing Costs

**4 Total Project Costs**

Cost estimates presented in **Section 3**, are estimated construction budgets for the work required for the individual alternatives. Additional project costs include engineering to date, permitting, final design and construction contract administration and inspection. Further, PND has assumed the Pumps will be furnished by PB, outside of the construction contract. These additional project costs are summarized in the cost estimate matrix found in **Appendix C**. The least cost alternative for this project is estimated to be Alternative A with an electrical hut and floating gravity sewer pipe. Total recommended project budget for this Alternative, including a 10% construction contingency is **\$3,117,997**.

**5 Additional Considerations**

The excavation for and installation of the wet well is one of the most labor intensive and costly aspects of the project. As previously noted, the excavation will be deep. The consistency of the subgrade at depth and the level of water intrusion that can be anticipated is presently unknown. PND’s recommendation to utilize sheet pile shoring around this excavation will mitigate the potential risk and allows for the most accurate estimate of the work required and cost thereof, however, there remains

a degree of uncertainty, especially related to the difficulty that may be encountered in excavation of the hard material below the peat layer. A test pit exploration in the proposed wet well location for Alternative A would aid in better understanding subgrade conditions and mitigating construction risk associated with this uncertainty.

Floating gravity pipelines can be successful, especially when pipe slopes are such that minor variations resulting from some differential settlement over time will have minimal impact on the overall drainage capabilities. Portions of the gravity sewer pipe in this project have slopes PND would consider candidates for such an installation, however it may not be advisable over the entirety of the gravity system. The overall cost difference between the two options is less than \$80,000, however if budget constraints dictate, a design that incorporates both methods may result in savings without significantly increasing risk to the efficacy of the system.

**6 Summary and Recommendations**

This alternatives assessment required project design and development for the varying alternatives to a preliminary design level, providing a head start on final design for the selected alternative.

Of the Alternatives presented herein, Alternative A is the least cost and results in the least impact to existing infrastructure. It is considered the option with the least risk of unforeseen costs. Should the adjacent property be available, PND recommends Alternative A.

As discussed in Section 5, floating the gravity system is not advisable for the entirety of the system. PND recommends excavation to hardpan for the upper portion of the gravity system; floating the lower portion of the system could be considered should budget constraints dictate.

Any alternative for the electrical equipment installation will be equally effective, however indoor equipment will likely marginally increase service life. In consideration of increased service life and lower estimated cost, the PND recommends a hut installation of the electrical equipment. A full building replacement may also be considered.

The estimated project budget for Alternative A with pipes trenches to hard pan and an electrical hut is **\$3,212,377.**

**7 Appendices**

- Appendix A – MEG Electrical Technical Memorandum
- Appendix B – Drawings
- Appendix C – Cost Estimates
- Appendix D – Product and Vendor Data

# ***APPENDIX A – MEG TECHNICAL MEMORANDUM***



February 15, 2023

Tyler Bradshaw, P.E.  
Principal Engineer  
PND Engineers  
9360 Glacier Highway, Suite 100  
Juneau, AK 99801

RE: Petersburg Pump Station 4 – Electrical Options

Tyler,

The scope for all Options will consist of demolition of the Electrical in the existing Wet Well. Due to the NEC Code violations in the existing Generator Building, some work will be required to relocate electrical equipment inside the building to remedy the violations.

Morris Engineering performed a draw-down test of the Wet Well while running on the existing 150kW generator. Testing was performed with one 50 HP running and with both 50 HP pumps running. The generator was able to run both 50 HP at a load of 35 HP each. We are confident that the generator can run the two 30 HP design pumps.

To provide radio communications from Pump Station 4 to the Wastewater Treatment Plant would require installing a 50 ft. wooden pole 700 ft. uphill from the pump station, trenching in power and fiberoptic cables from the pump station, installing a repeater and radio gear at the pole, installing a 30 ft. wooden pole and radio at the WWTP, and connecting the radio to the WWTP communications equipment. This cost (~\$88K) is included in the Cost Estimate, though it is recommended that the Petersburg Borough set up internet service at the pump station for SCADA communications. According to AP&T, internet service is available at the site. Monthly rate varies \$75 to \$110 per month depending on speed. Using local internet service will reduce the cost by approximately \$88,000.

There is a need to provide temporary power to (2) 50 HP bypass pumps during construction of the new wet well and valve vault. The existing 150 kW backup generator at the pump station is too small to run (2) 50 HP pumps. It is recommended that the new Electrical infrastructure (either Option) be installed first. Then the temporary pumping package could be fed from the new Electrical Service. A trailer-mounted backup generator would need to be rented and plugged into the new generator receptacle during the bypass period to provide backup power for the temporary pumps.

#### Electrical Option 1, Civil Alternative A & B

A new Electrical Service will feed a 200A, Type 4X Meter Main and Type 4X electrical equipment mounted to racks under the eaves of the existing Generator Building. The Meter Main will feed a new 225A stainless steel Type 4X automatic transfer switch (ATS) which will provide power to a 74"x72"x24" stainless steel electrical enclosure mounted on a concrete pad and secured to a rack. The electrical enclosure will house fused disconnects and variable frequency drives (VFDs) which will drive the three 30 HP Wet Well pumps. The enclosure will also house the new Pump Control Panel, step-down transformer, and a load center.

The new Pump Control Panel will provide PLC control of the VFDs and communications with the Petersburg SCADA system. A submersible pressure transducer will communicate the Wet Well level to the PLC along with three backup float switches.

Backup power will be provided by the existing generator in the event of Utility power failure. The backup power feed will first go through a Type 4X manual double-throw switch before being routed to the ATS. The manual switch will be wired to a Type 4X circuit breaker and a portable generator receptacle. Should the existing generator fail, the power feed can be manually switched to the portable generator power.

Rack-mounted Type 4X stainless steel junction boxes will be mounted to provide splice points for the pump power cables, pressure transducer, and float switches. The conduits will have seal-off fittings from the junction boxes to the Classified Wet Well to prevent combustible gases from escaping.



### Electrical Option 2, Civil Alternative A & B

A new Electrical Service will feed a 200A, Type 4X Meter Main and a new 10'x10' fiberglass Electrical Shelter mounted on a concrete pad. The Electrical Shelter will house Type 1 electrical equipment in lieu of long-lead Type 4X stainless steel electrical equipment. The Meter Main will feed a new 225A ATS which will provide power to a 480V panelboard. The panelboard will distribute power to the VFDs which will drive the three 30 HP Wet Well pumps. The Electrical Shelter will also house the Pump Control Panel, step-down transformer, and a load center feeding 120/240V power for the Pump Control Panel, lighting, heater, receptacles, and SCADA communications equipment.

The new Pump Control Panel will provide PLC control of the VFDs and communications with the Petersburg SCADA system. A submersible pressure transducer will communicate the Wet Well level to the PLC along with three backup float switches.

Backup power will be provided by the existing generator in the event of Utility power failure. The backup power feed will first go through a Type 4X manual double-throw switch before being routed to the ATS. The manual switch will be wired to a Type 4X circuit breaker and a portable generator receptacle mounted external to the shelter. Should the existing generator fail, the power feed can be manually switched to portable generator power.

Rack-mounted Type 4X stainless steel junction boxes will be mounted to provide splice points for the pump power cables, pressure transducer, and float switches. The conduits will have seal-off fittings from the junction boxes to the Classified Wet Well to prevent combustible gases from escaping.

### Electrical Option 3, Civil Alternative C

The existing ATS and the Existing Generator will be salvaged. The existing Generator Building will be demolished. A new Generator Building will be constructed and the salvaged ATS and Generator will be reinstalled.

The existing Electrical Service will feed a new 200A Type 4X Meter Main. The Meter Main will feed the reinstalled 225A ATS which will provide power to a new 480V panelboard. The panelboard will provide power to the VFDs which will drive the three 30 HP Wet Well pumps. New electrical equipment will include: Pump Control Panel, step-down transformer, load center, lighting, heaters, receptacles, SCADA communications equipment, Generator cooling system, battery charger, and louvers.

The new Pump Control Panel will provide PLC control of the VFDs and communications with the Petersburg SCADA system. A submersible pressure transducer will communicate the Wet Well level to the PLC along with three backup float switches.

Backup power will be provided by the existing generator in the event of power failure. The backup power feed will first go through the ATS before being routed to a manual double-throw switch. The manual switch will be wired to a circuit breaker and a portable generator receptacle mounted external to the building. Should the existing generator fail, the power feed can be manually switched to portable generator power.

Rack-mounted Type 4X stainless steel junction boxes will be mounted to provide splice points for the pump power cables, pressure transducer, and float switches. The conduits will have seal-off fittings from the junction boxes to the Classified Wet Well to prevent combustible gases from escaping.

The cost of a New Generator Building is NOT included in the Electrical Cost Estimate.

Thank you,

*Mark Morris, P.E.*

Principal

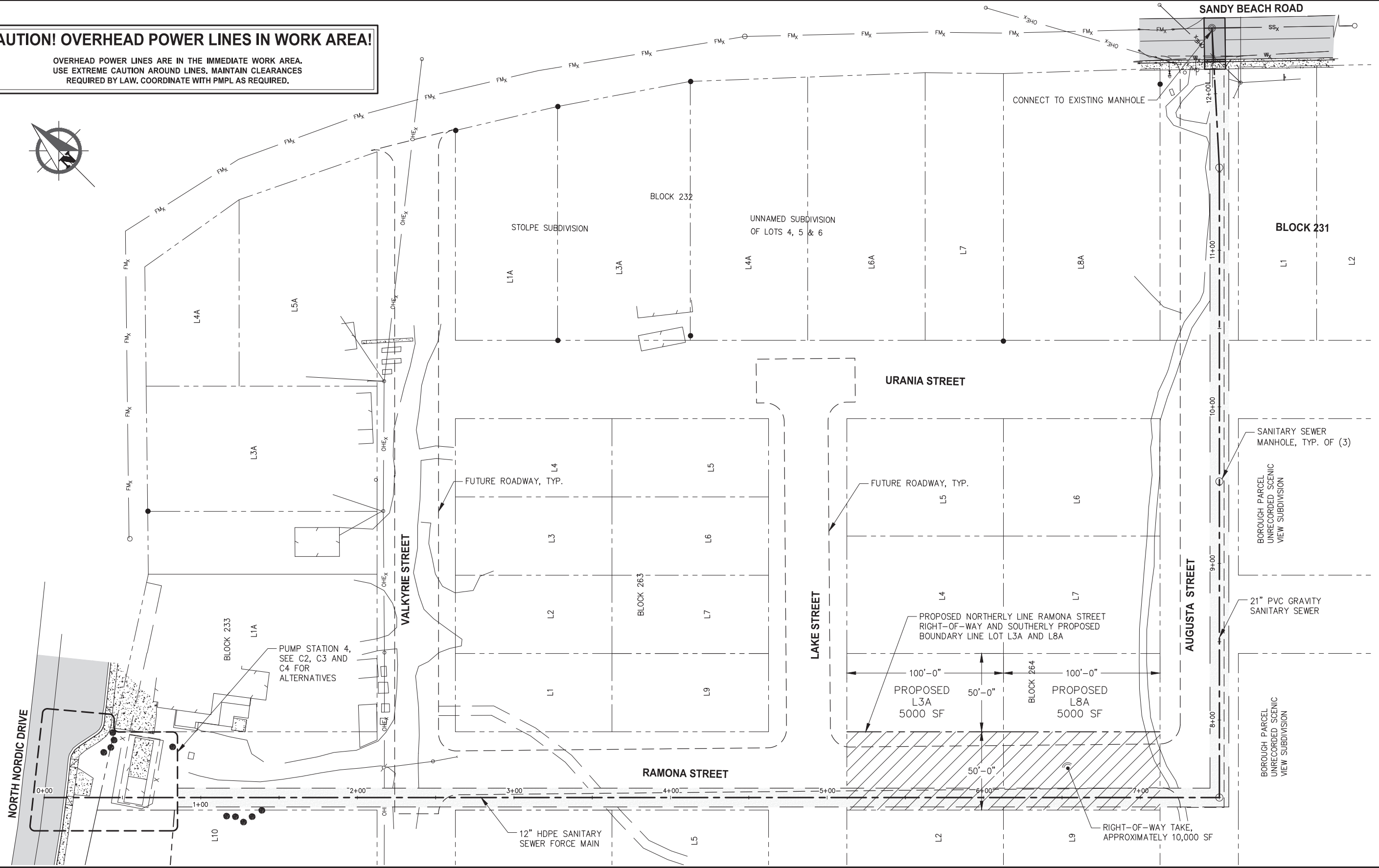
Morris Engineering Group, Inc.

## ***APPENDIX B - DRAWINGS***



**CAUTION! OVERHEAD POWER LINES IN WORK AREA!**

OVERHEAD POWER LINES ARE IN THE IMMEDIATE WORK AREA. USE EXTREME CAUTION AROUND LINES. MAINTAIN CLEARANCES REQUIRED BY LAW. COORDINATE WITH PMPL AS REQUIRED.



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Fax: 907-586-2099  
www.pndengineers.com

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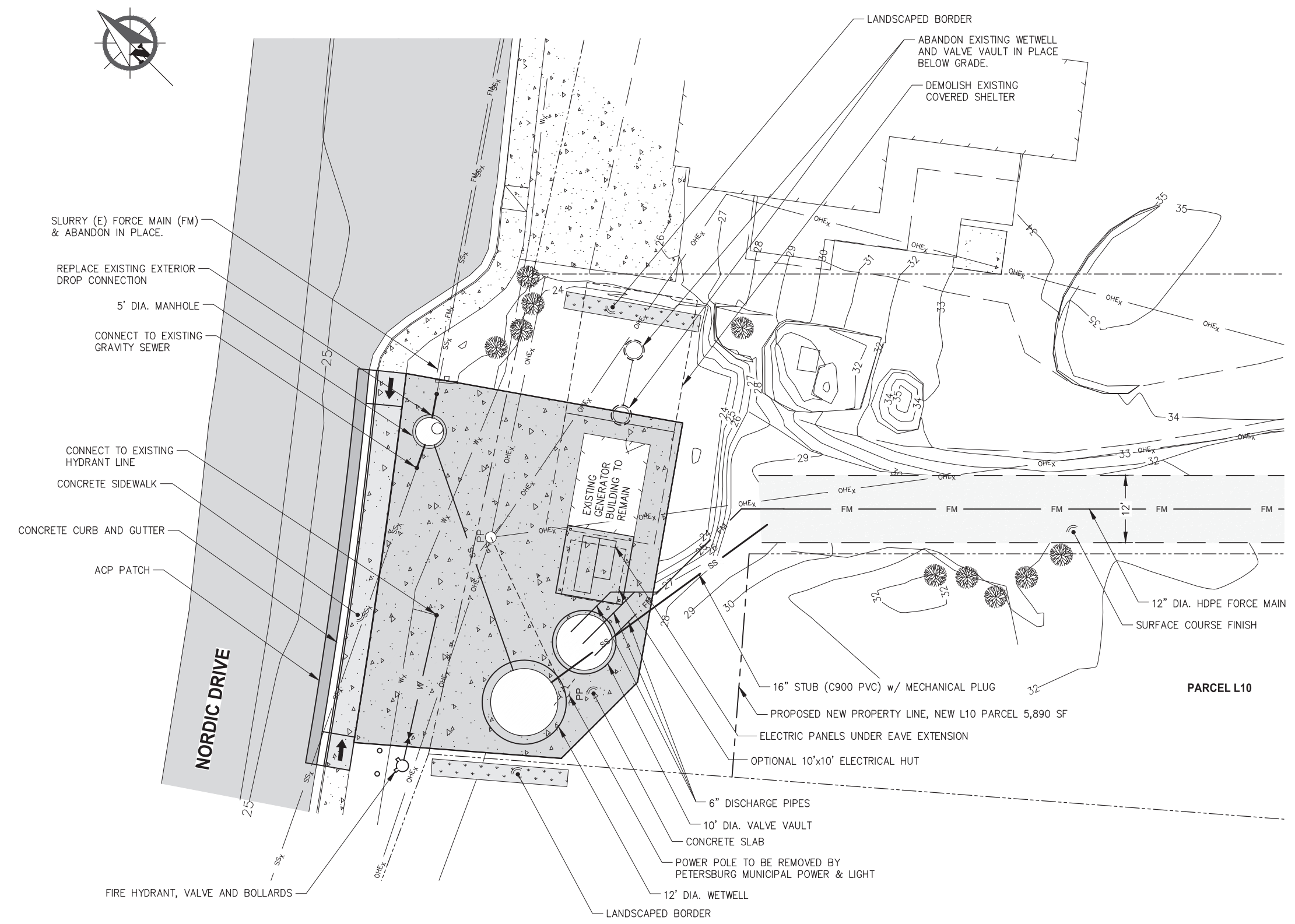
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DATE: 2/15/23

**PETERSBURG BOROUGH  
PUMP STATION 4  
FORCE MAIN REPLACEMENT**

SHEET TITLE:  
**OVERALL SITE PLAN**

PND PROJECT #: 192080 C.A.N. NO.: AECC250

**C1**



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 www.pndengineers.com

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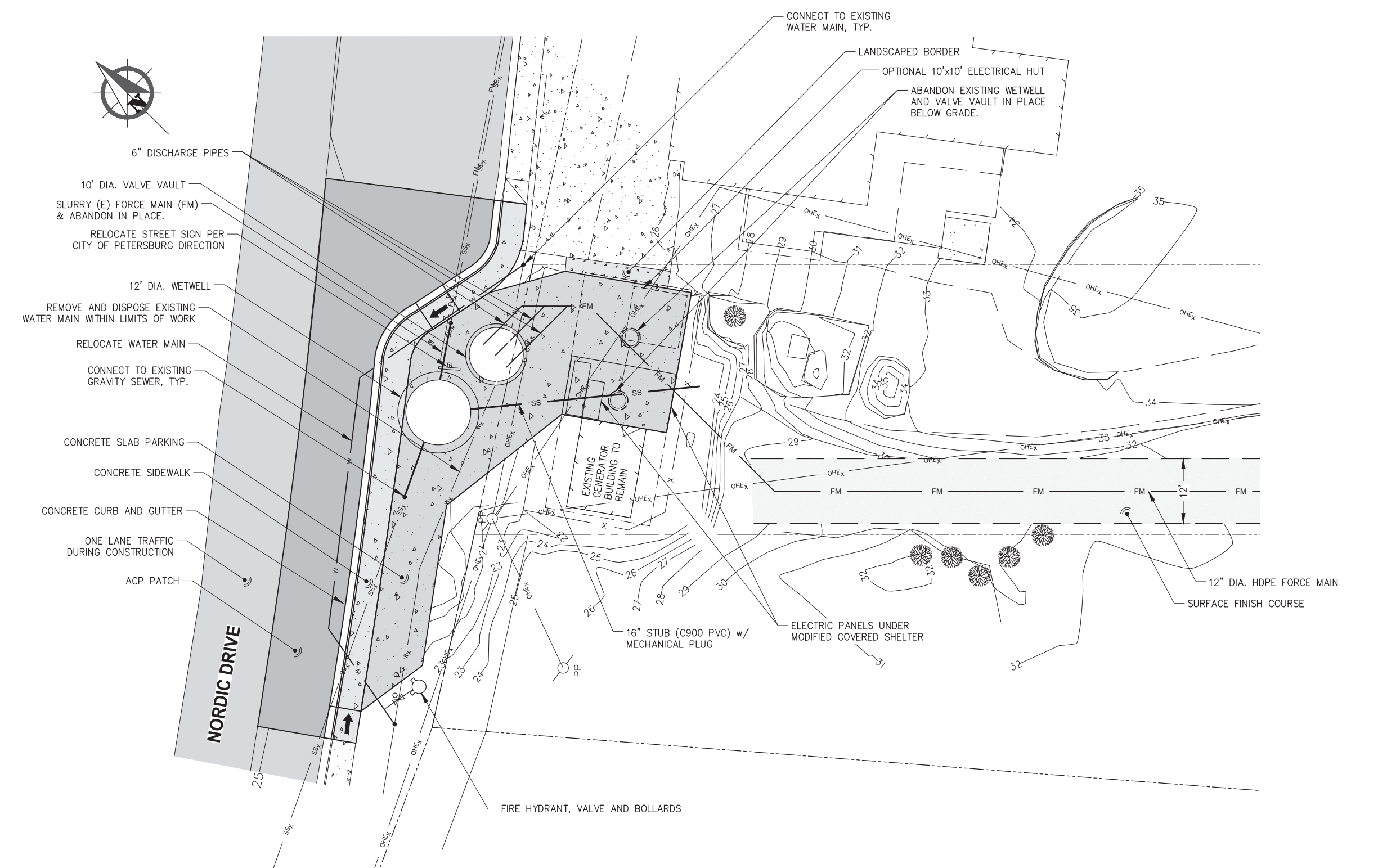
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**PETERSBURG BOROUGH  
 PUMP STATION 4  
 FORCE MAIN REPLACEMENT**

SHEET TITLE: **PUMP STATION 4  
 SITE PLAN - ALTERNATIVE A**

PND PROJECT #: 192080 C.A.N. NO.: AECC250

**C2**



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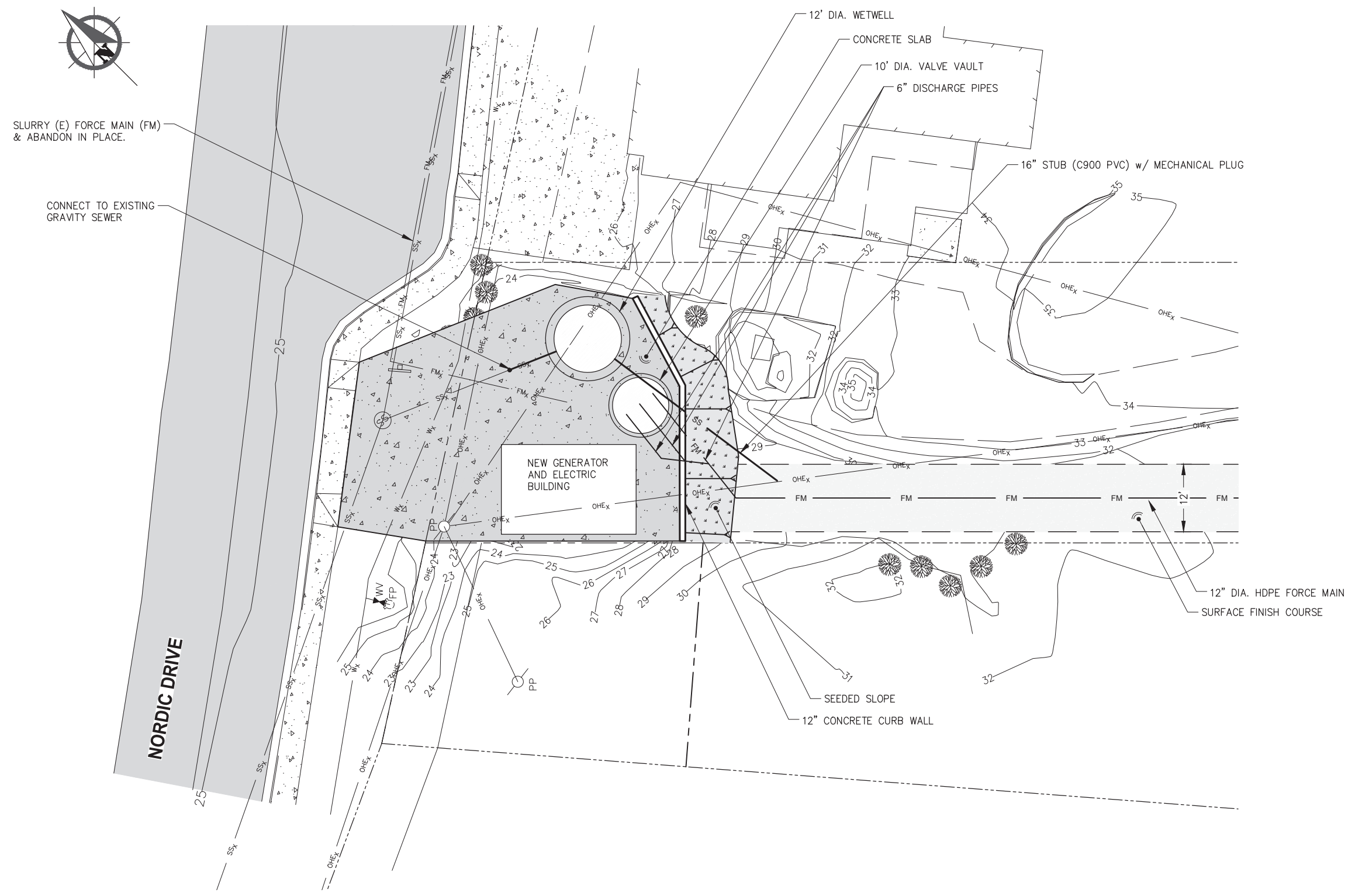
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**PETERSBURG BOROUGH  
PUMP STATION 4  
FORCE MAIN REPLACEMENT**

SHEET TITLE: **PUMP STATION 4  
SITE PLAN - ALTERNATIVE B**

PND PROJECT #: 192080 C.A.N. NO.: AECC250

**C3**



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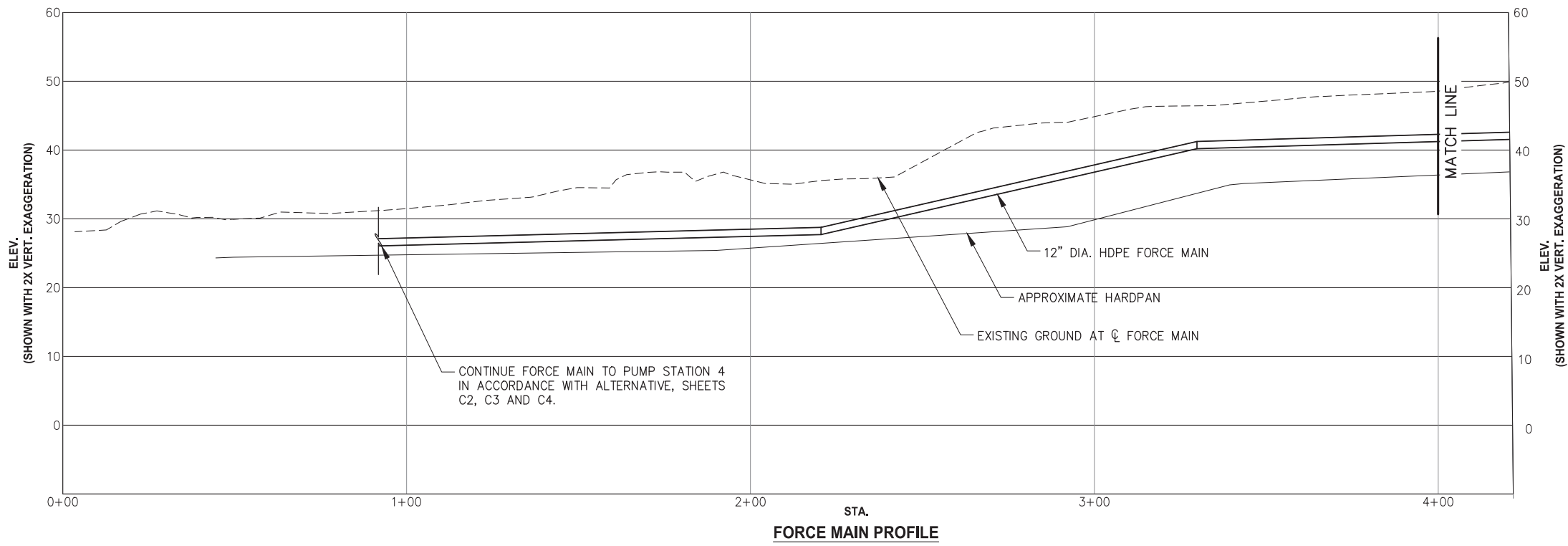
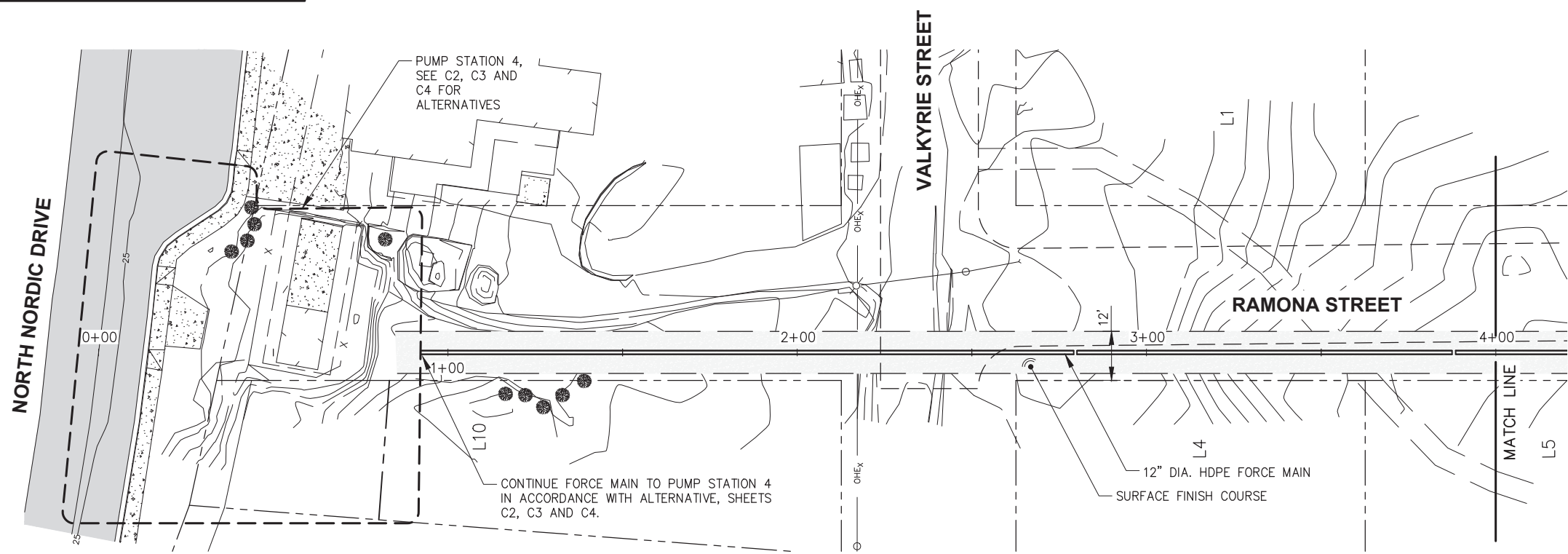
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 SITE PLAN - ALTERNATIVE C**

PND PROJECT #: 192080 C.A.N. NO.: AECC250

**C4**

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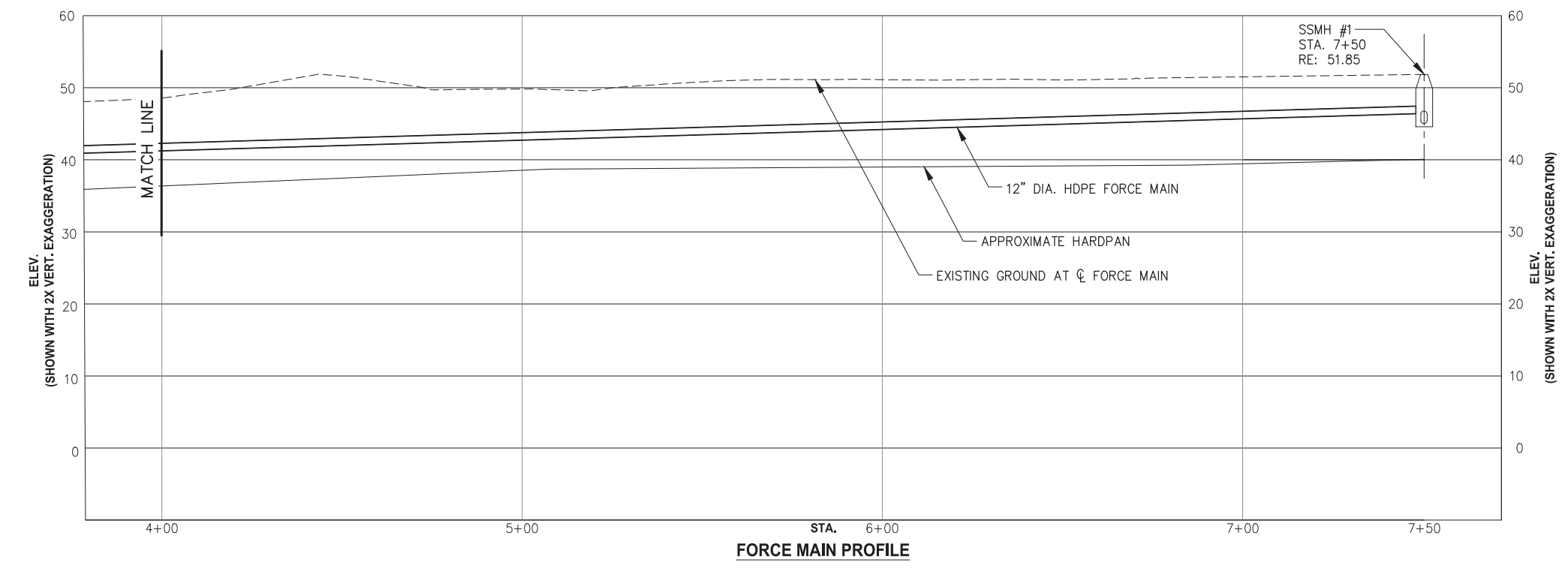
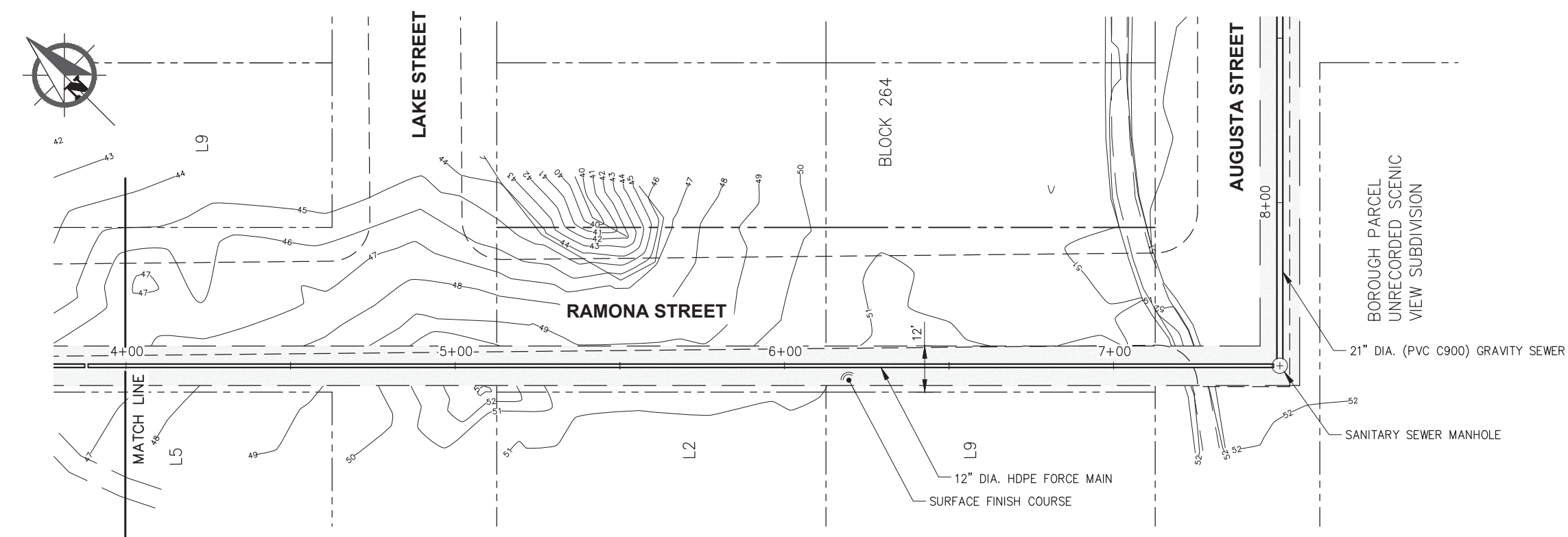
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**SANITARY SEWER FORCE MAIN  
 PLAN AND PROFILE**

PND PROJECT #: 192080 C.A.N. NO.: AECC250

**C5**



**FORCE MAIN PROFILE**



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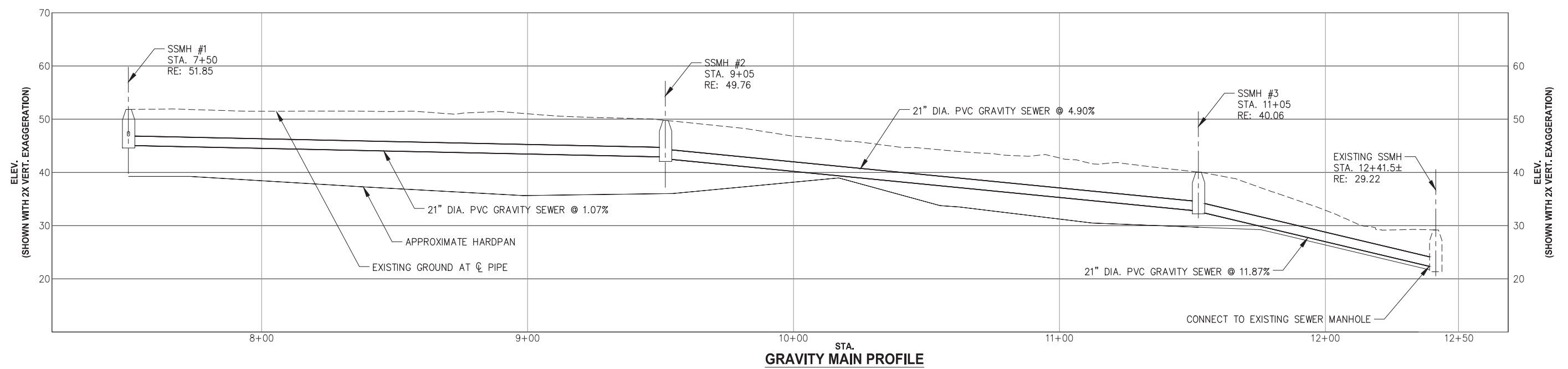
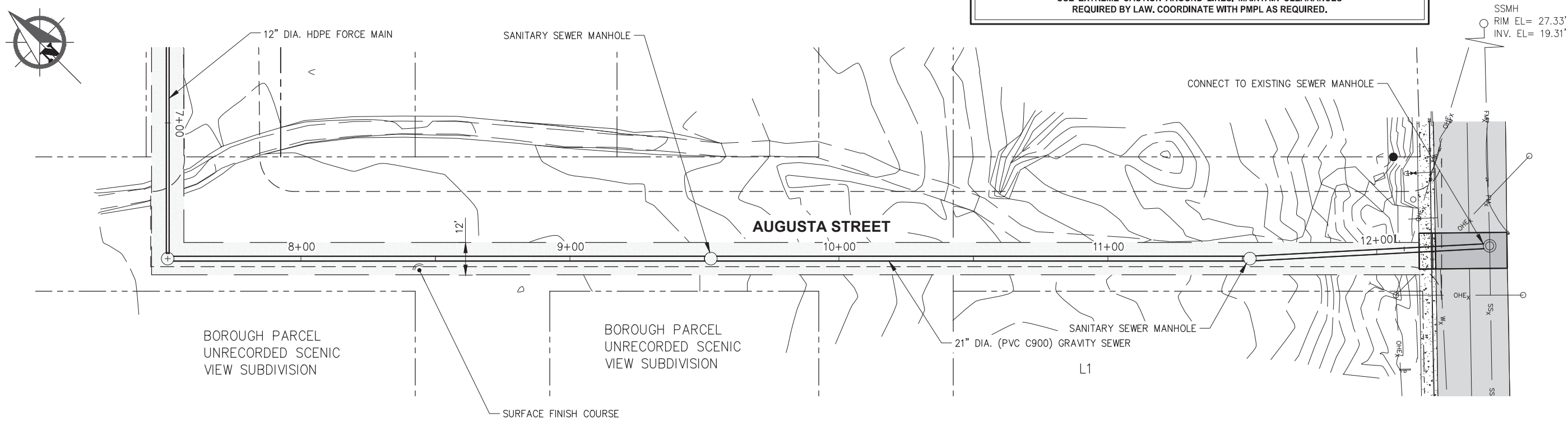
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**C6**

**CAUTION! OVERHEAD POWER LINES IN WORK AREA!**  
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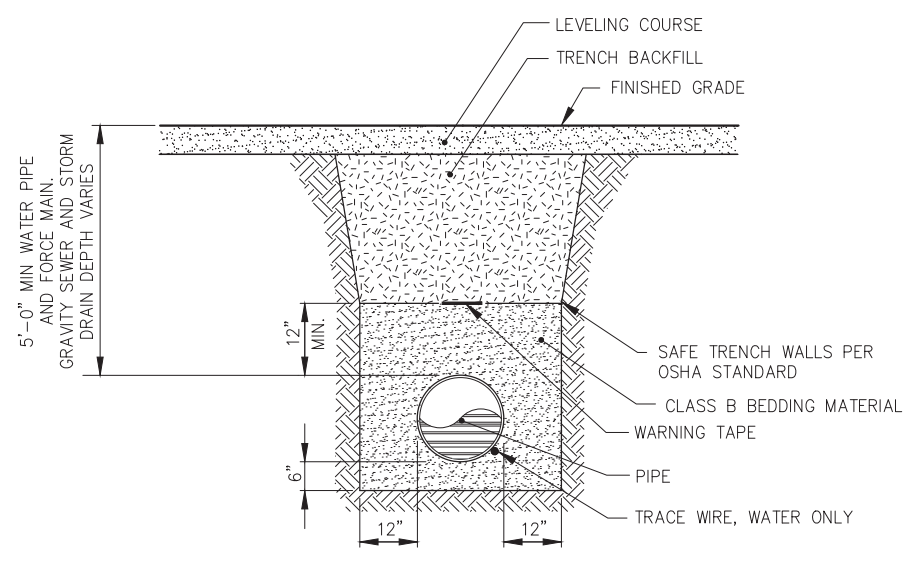
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**PETERSBURG BOROUGH  
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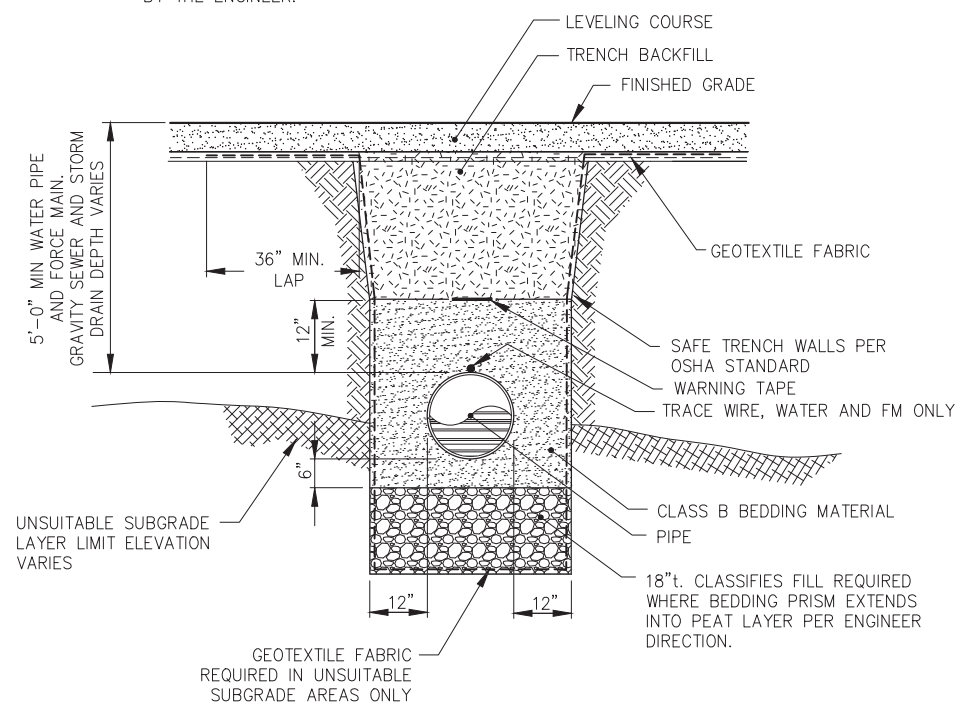
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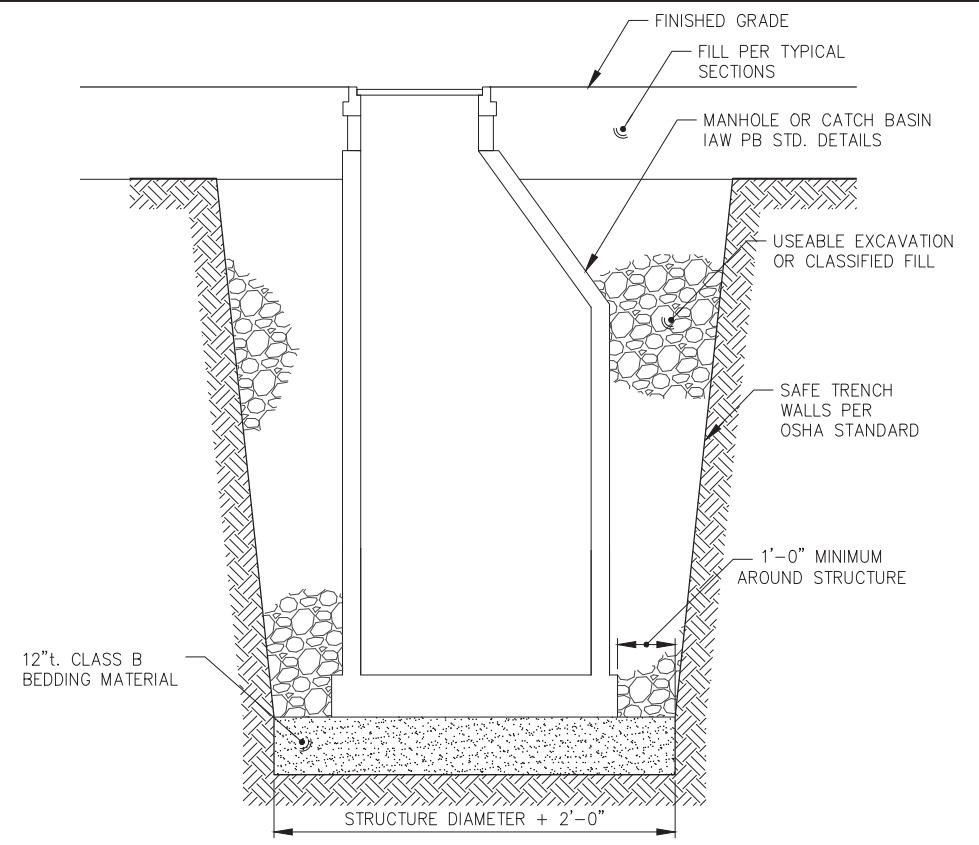
**PIPE TRENCH DETAIL WITHOUT SUBGRADE REINFORCEMENT**

- NOTES:**
1. DETAIL APPLIES TO ALL PIPE UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
  2. PIPE INSULATION SHALL BE PLACED OVER WATER PIPE AT ALL LOCATIONS WHERE DEPTH OF BURY MUST BE LESS THAN 5' AS DETERMINED AND DIRECTED BY THE ENGINEER.



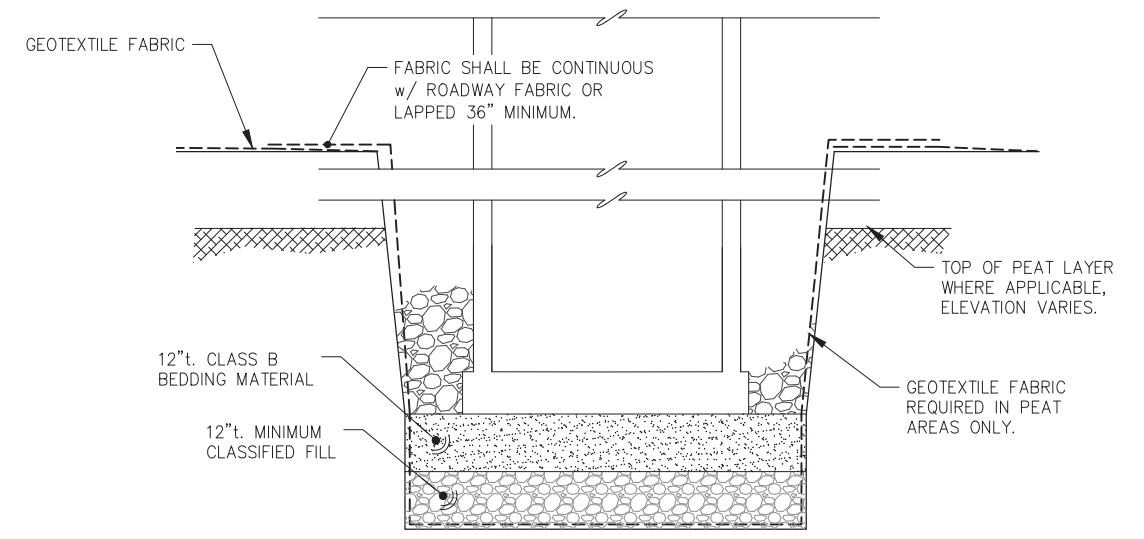
**PIPE TRENCH DETAIL WITH SUBGRADE REINFORCEMENT**

- NOTES:**
1. DETAIL SHALL BE UTILIZED IN AREAS WHERE BOTTOM OF TRENCH IS WITHIN UNSUITABLE MATERIAL AS DETERMINED BY THE ENGINEER.
  2. GEOTEXTILE FABRIC SHALL BE CONTINUOUS WITH ROADWAY FABRIC OR LAPPED A MINIMUM OF 36" AS SHOWN.
  3. PIPE INSULATION SHALL BE PLACED OVER WATER PIPE AT ALL LOCATIONS WHERE DEPTH OF BURY MUST BE LESS THAN 5' AS DETERMINED AND DIRECTED BY THE ENGINEER.



**STRUCTURE SUPPORT DETAIL WITHOUT SUBGRADE REINFORCEMENT**

- NOTES:**
1. DETAIL APPLIES TO ALL STORM STRUCTURES UNLESS OTHERWISE DIRECTED BY THE ENGINEER.



**STRUCTURE SUPPORT DETAIL WITH SUBGRADE REINFORCEMENT**

- NOTES:**
1. DETAIL SHALL BE UTILIZED IN AREAS WHERE BOTTOM OF TRENCH IS WITHIN UNSUITABLE MATERIAL AND ELSEWHERE AS DETERMINED BY THE ENGINEER.
  2. DETAILS AND CALLOUTS NOT SHOWN SIMILAR TO STRUCTURE SUPPORT DETAIL WITHOUT SUBGRADE REINFORCEMENT AND PB STD. DTLS.



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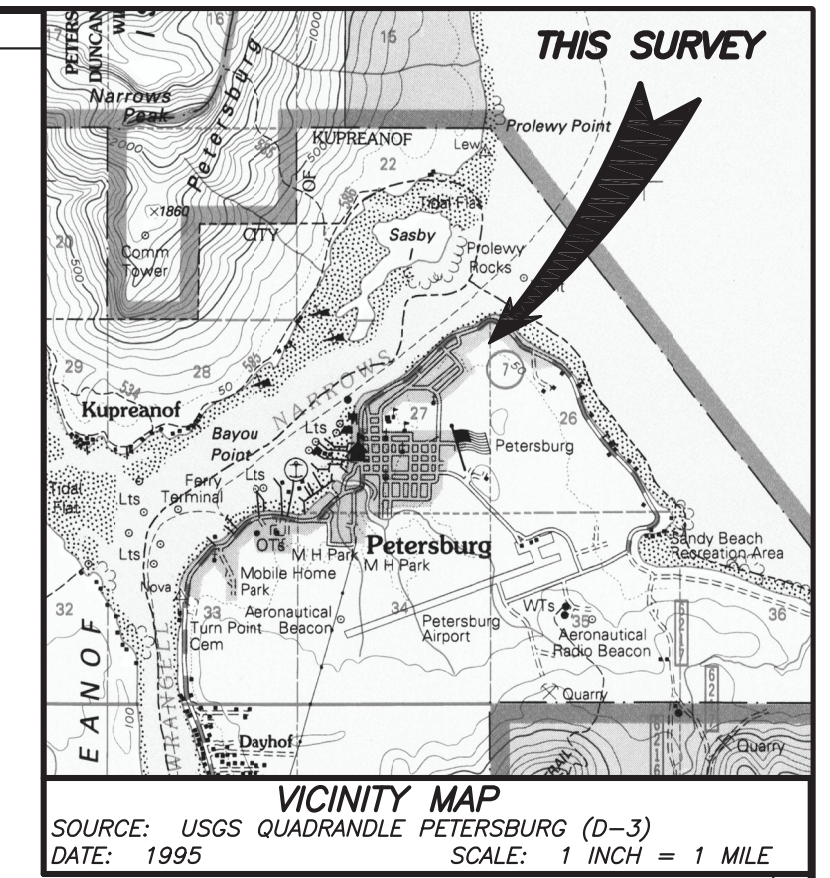
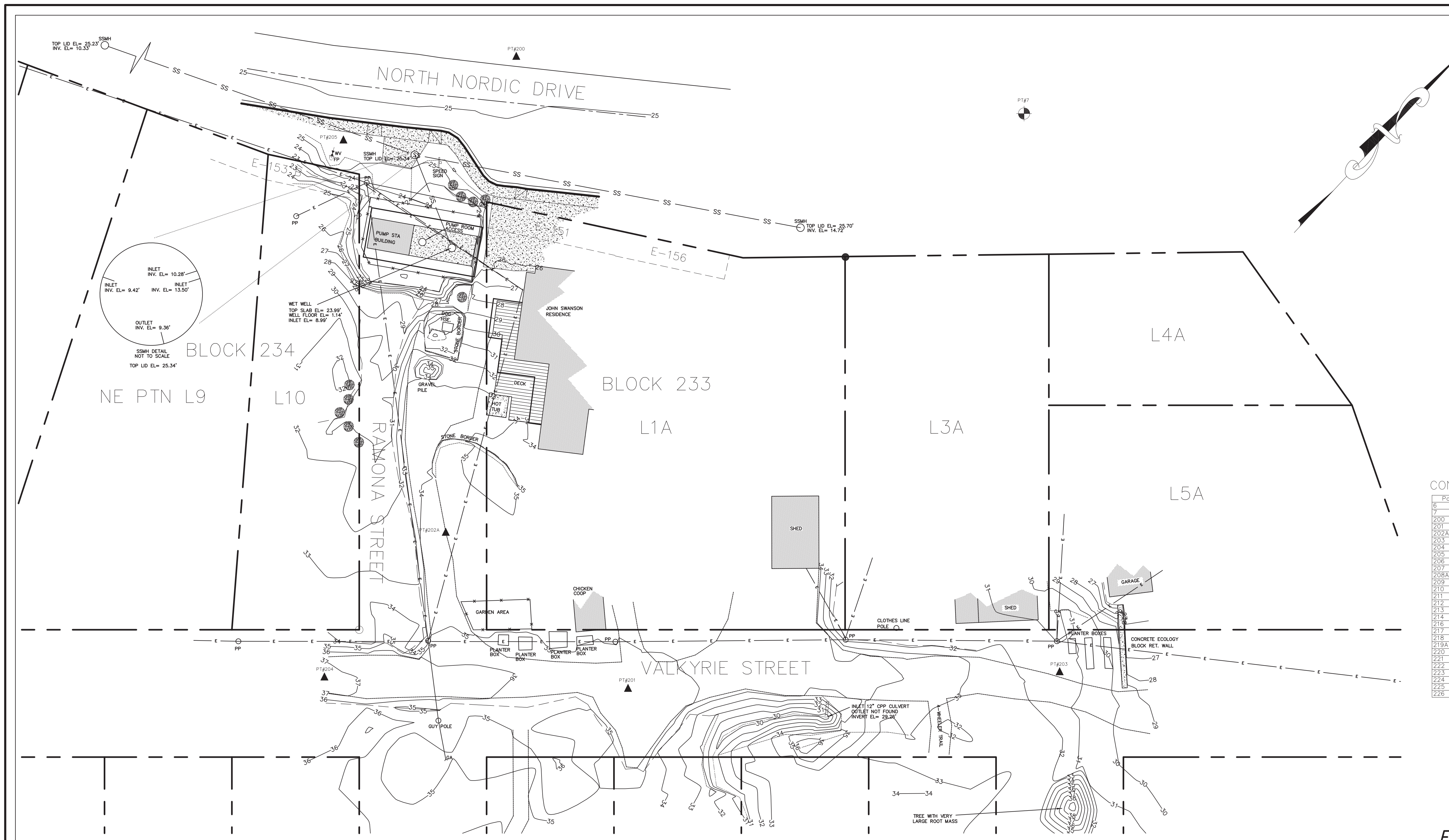
**PETERSBURG BOROUGH  
PUMP STATION 4  
FORCE MAIN REPLACEMENT**

SHEET TITLE:  
**UTILITY DETAILS**

PND PROJECT #: 192080 C.A.N. NO.: AECC250

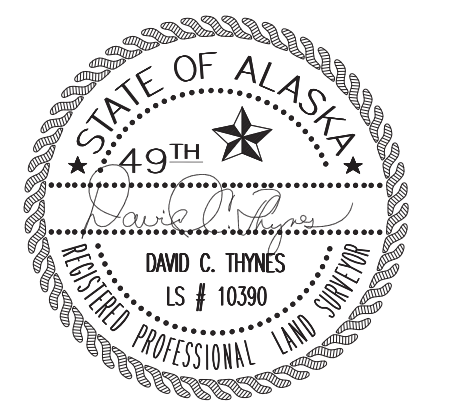
**C8**





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**CONTROL POINT TABLE**

Point	Northing	Easting	Elevation	Description
6	51385.960	17765.550	0.00	BCM SB-6
7	51696.710	18221.810	23.83	BCM SB-7
200	51577.015	18060.850	23.65	SET H&T
201	51425.539	18262.159	35.50	SET H&T
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226	51433.434	18531.641	35.03	SET PK

**PETERSBURG BOROUGH  
PUMP STATION 4  
FORCE MAIN REPLACEMENT  
TOPOGRAPHIC SURVEY**

CLIENT: PND ENGINEERS INC.  
9360 GLACIER HWY., STE. 100  
JUNEAU, ALASKA 99801



**SURVEYOR**  
**CENTRAL SOUTHEAST SURVEYORS**  
P.O. BOX 533, PETERSBURG AK 99833  
PH (907) 518-0075

**SURVEY COMPLETED 11/27/22**

**DRAWN BY D.C.T. DRAWING No. PNDPUMP4 2022**

**LEGEND**

- BREAK FEATURES**
- TOP SLOPE
  - TOE SLOPE
  - STREAM/DITCH CENTERLINE
  - CONTOUR LINE
  - LANDSCAPE TREE
- ROADS**
- CENTERLINE PAVED ROAD
  - EDGE PAVED ROAD
  - EDGE GRAVEL ROAD
  - DITCH CENTERLINE
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  - EDGE CONCRETE
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- UTILITIES**
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  - MUNICIPAL WATER
  - VALVE BOX
  - FIRE HYDRANT

**CONTROL & MONUMENTATION**

- WOOD HUB & TACK CONTROL POINT
- MASONRY NAIL (PK NAIL) CONTROL POINT
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- 1/2" G.I.P. MON. RECOVERED
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- SURVEY LIMITS

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- BUILDING/SHED
- CONCRETE SLAB/WALL/SIDEWALK
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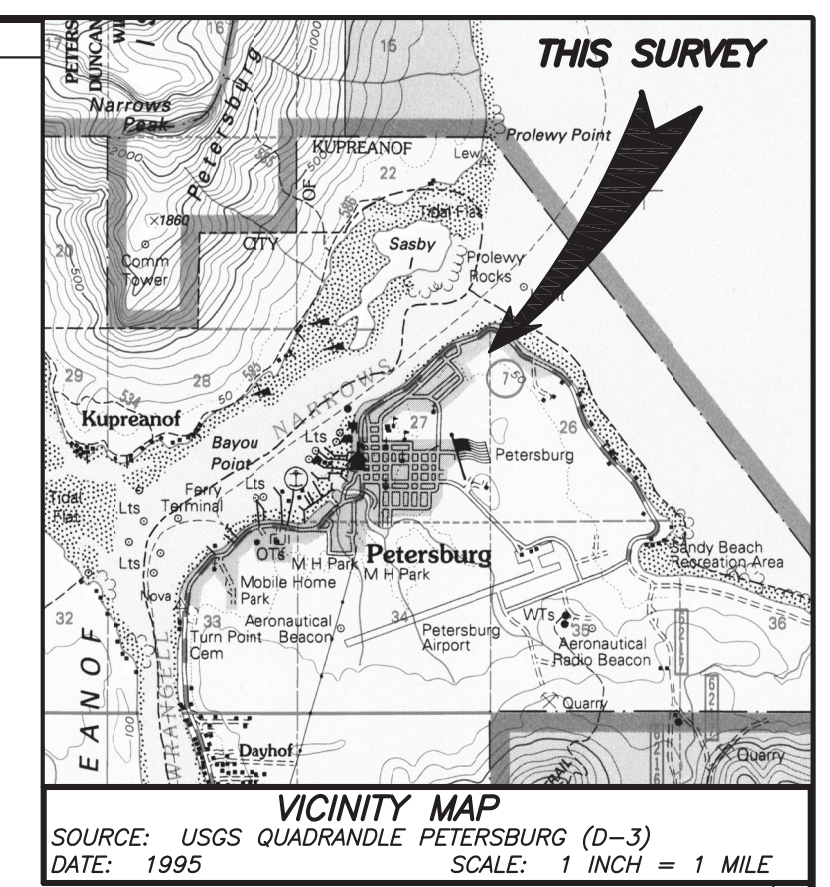
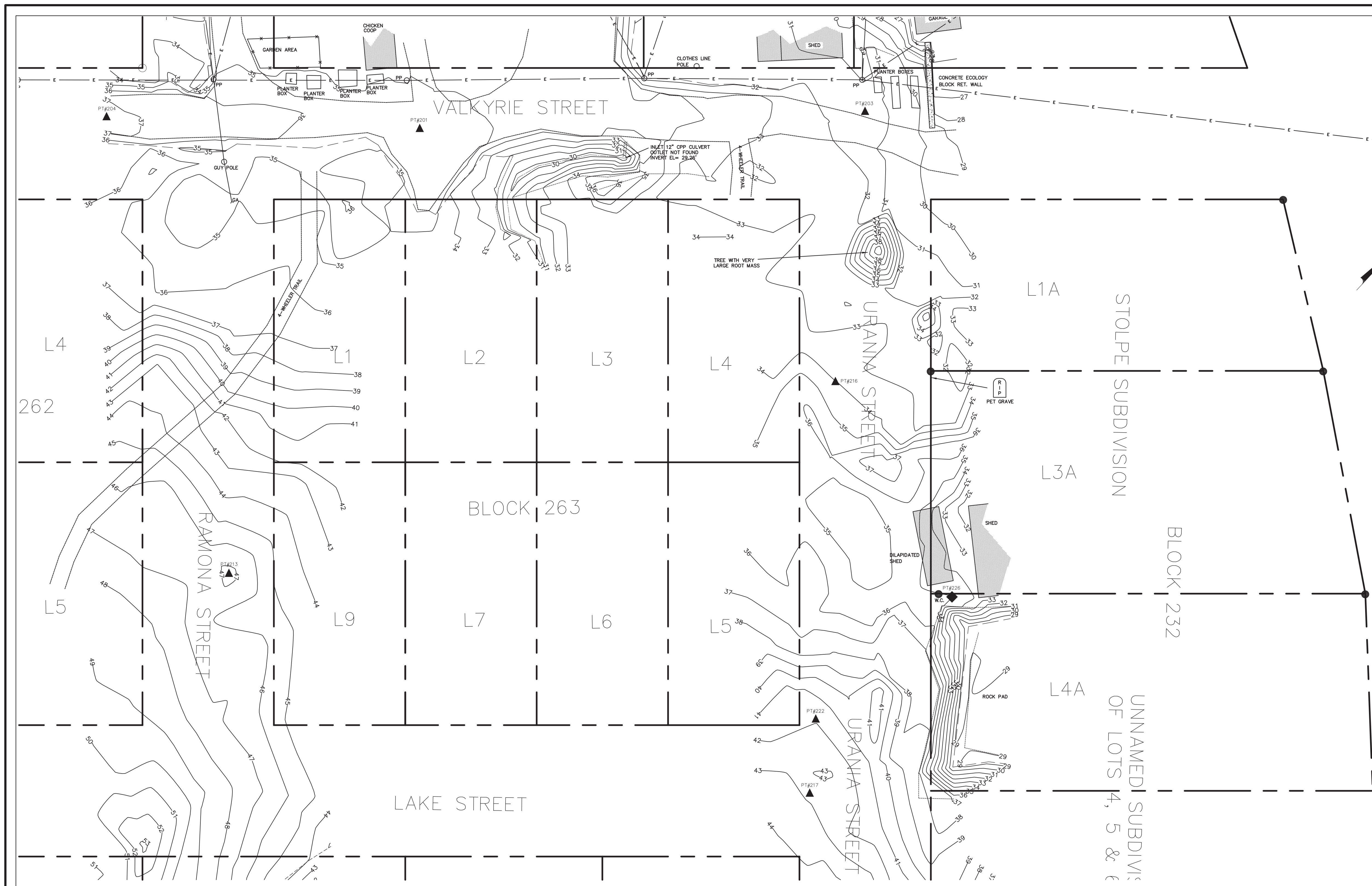
REVISIONS:

12/6/22		
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**NOTES:**

- PROJECT CONTROL FOR THIS TOPOGRAPHIC SURVEY ARE POINTS 6, 7, 200, 201, 202A, 203-207, 208A, 209-218, 219A & 220-226 AS SHOWN ON THIS MAP.
- VERTICAL CONTROL FOR THIS SURVEY IS BASED UPON THE PUBLISHED ELEVATION FOR U.S.A.C.E. B.C.M. NH-3 LOCATED IN A CONCRETE SIDEWALK BORDERING THE PETERSBURG NORTH HARBOR PARKING AREA, THE PUBLISHED ELEVATION = 25.58' M.L.L.W. DATUM. ELEVATIONS WERE TRANSFERRED TO THE PUMP STATION 4 CONTROL NETWORK USING A PRECISE SURVEY GRADE GEOMAX ZENITH35 PRO RTK GPS SYSTEM WITH THE BASE OCCUPYING NH-3 AND THE ROVER OCCUPYING POINT 200 WITH ADDITIONAL OBSERVATIONS ON POINTS 202A, 206, & 211. U.S.A.C.E. VERTICAL CONTROL IS BASED ON THE 1983-2001 TIDAL EPOCH AS REFERENCED BY TIDE STATION, 9451434 AND WAS PART OF A U.S.A.C.E. PROJECT UNDERTAKEN IN 2008.
- HORIZONTAL CONTROL IS BASED ON A.D.O.T. CONTROL MONUMENTS INSTALLED ALONG SANDY BEACH ROAD. COORDINATES ARE BASED ON THE LOCAL GROUND COORDINATE SYSTEM "SANDY BEACH ROAD-GRID" USED IN A.D.O.T. PROJECT #68076 AND IN THE RECORD OF SURVEY PERFORMED BY RICK G. BRAUN IN 2006 (PLAT No. 2008-2 PETERSBURG RECORDING DISTRICT), SHEETS 6 AND 7 CONTAINING RECORD INFORMATION RELEVANT TO THIS PROJECT.
- THE ACCURACY OF THIS SURVEY IS GREATER THAN 1:10,000.
- BURIED UTILITIES EXIST IN THE PUMPSTATION 4 AREA AS WELL AS IN THE AREA OF THE AUGUSTA STREET - SANDY BEACH ROAD INTERSECTION. MUNICIPAL WATER, SANITARY SEWER AND STORM SEWER INFORMATION WAS TRANSFERRED FROM THE PETERSBURG BOROUGH "2014LARGEWATERANDSEWERGISMAP" DRAWING FOR THE AUGUSTA/SANDY BEACH ROAD INT; HOWEVER, SIGNIFICANT DIFFERENCES BETWEEN FIELD LOCATES AND THE BOROUGH DRAWING DETAILS NEAR THE PUMP STATION PREVENTED THE BOROUGH'S MUNICIPAL WATER LINENWORK FROM BEING INCORPORATED WITH THIS TOPOGRAPHIC MAP. FIELD LOCATES PERFORMED BY PETERSBURG BOROUGH MUNICIPAL WATER STAFF IS RECOMMENDED PRIOR TO EXCAVATION.
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- RECORD PLATS USED FOR THIS SURVEY INCLUDE THE FOLLOWING:  
U.S. SURVEY 1252 A, A.D.O.T. R.O.S. SANDY BEACH ROAD CONTROL PLAT #2008-2  
A.D.O.T. R.O.W. MAP PROJECT No. S-0937 PLAT 85-35, UNNAMED RESUBDIVISION PLAT #81-26,  
STOLPE SUBDIVISION PLAT #2008-18, AND UNNAMED SUBDIVISION PLAT #79-9.
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WET WELL INLET INVERT EL= 8.99'  
PUMP ROOM FLOOR BELOW ACCESS SHAFT EL= 1.18'; TOP OF DISCHARGE PIPE FLANGE AT PUMP CONNECTION EL= 3.30'; TOP OF DISCHARGE PIPE MANIFOLD AT 90' ELBOW EL= 3.04'; TOP OF INLET PIPE FROM WET WELL AT WALL PENETRATION EL= 1.82'.



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  - CHAINLINK FENCE
- REVISIONS:**
- |         |  |  |
|---------|--|--|
| 12/6/22 |  |  |
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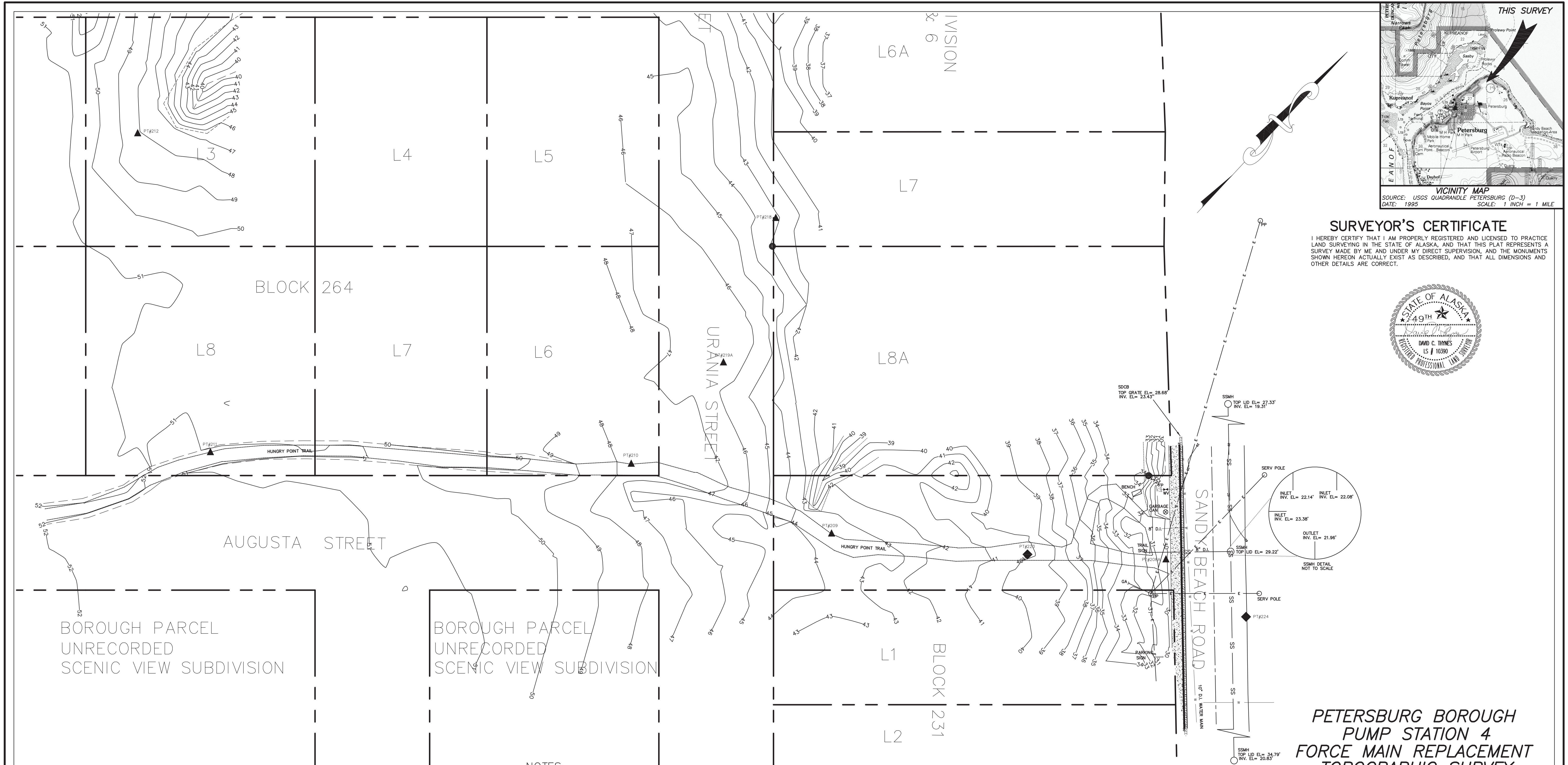
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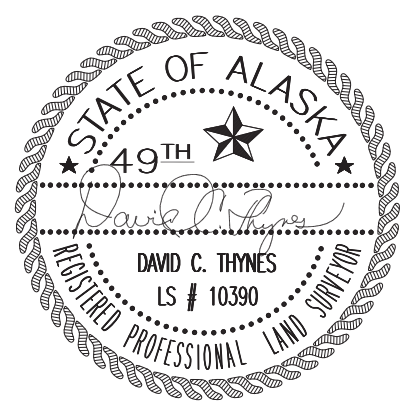
**SURVEY COMPLETED 11/27/22**

**DRAWN BY D.C.T. DRAWING No. PNDPUMP4 2022**



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**PETERSBURG BOROUGH  
PUMP STATION 4  
FORCE MAIN REPLACEMENT  
TOPOGRAPHIC SURVEY**

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**SURVEY COMPLETED 11/27/22**

**DRAWN BY D.C.T. DRAWING No. PNDPUMP4 2022**

## ***APPENDIX C - ESTIMATES***



PETERSBURG BOROUGH  
PUMP STATION 4



ROM Cost Estimate Matrix  
Prepared By PND Engineers on February 15, 2023

Alternative A with Options							
	Cost	A.1.1	A.1.2	A.1.3	A.2.1	A.2.2	A.2.3
A	PUMP STATION ALT. A	\$952,845	\$952,845	\$952,845	\$952,845	\$952,845	\$952,845
1	PIPE INSTALLATION, FLOATING	\$686,576	\$686,576	\$686,576			
2	PIPE INSTALLATION, HARDPAN	\$759,176			\$759,176	\$759,176	\$759,176
1	ELECTRICAL, PANELS (Includes Covered Shelter/ Eave Mods)	\$558,500			\$558,500		
2	ELECTRICAL HUT (Includes Hut)	\$537,500	\$537,500			\$537,500	
3	ELECTRICAL BUILDING RECONSTRUCT (Includes Building)	\$633,500		\$633,500			\$633,500
ESTIMATED CONSTRUCTION BID PRICE		\$2,197,921	\$2,176,921	\$2,272,921	\$2,270,521	\$2,249,521	\$2,345,521
CONSTRUCTION CONTINGENCY (10%)		\$219,792	\$217,692	\$227,292	\$227,052	\$224,952	\$234,552
PRELIMINARY DESIGN AND SURVEY (Includes to date engineering expenses)		\$113,000	\$113,000	\$113,000	\$113,000	\$113,000	\$113,000
OWNER FURNISHED PUMPS		\$160,000	\$160,000	\$160,000	\$160,000	\$160,000	\$160,000
PERMITTING		\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000
FINAL DESIGN (Estimated at 10% of Construction Costs)		\$219,792	\$217,692	\$227,292	\$227,052	\$224,952	\$234,552
CA/CI (Estimated at 10% of Construction Costs)		\$219,792	\$217,692	\$227,292	\$227,052	\$224,952	\$234,552
<b>TOTAL RECOMMENDED PROJECT BUDGET</b>		<b>\$3,145,297</b>	<b>\$3,117,997</b>	<b>\$3,242,797</b>	<b>\$3,239,677</b>	<b>\$3,212,377</b>	<b>\$3,337,177</b>

Alternative B with Options							
	Cost	B.1.1	B.1.2	B.1.3	B.2.1	B.2.2	B.2.3
B	PUMP STATION ALT. B	\$1,043,803	\$1,043,803	\$1,043,803	\$1,043,803	\$1,043,803	\$1,043,803
1	PIPE INSTALLATION, FLOATING	\$686,576	\$686,576	\$686,576			
2	PIPE INSTALLATION, HARDPAN	\$759,176			\$759,176	\$759,176	\$759,176
1	ELECTRICAL, PANELS (Includes Covered Shelter/ Eave Mods)	\$558,500			\$558,500		
2	ELECTRICAL HUT (Includes Hut)	\$537,500	\$537,500			\$537,500	
3	ELECTRICAL BUILDING RECONSTRUCT (Includes Building)	\$633,500		\$633,500			\$633,500
ESTIMATED CONSTRUCTION BID PRICE		\$2,288,879	\$2,267,879	\$2,363,879	\$2,361,479	\$2,340,479	\$2,436,479
CONSTRUCTION CONTINGENCY (10%)		\$228,888	\$226,788	\$236,388	\$236,148	\$234,048	\$243,648
PRELIMINARY DESIGN AND SURVEY (Includes to date engineering expenses)		\$113,000	\$113,000	\$113,000	\$113,000	\$113,000	\$113,000
OWNER FURNISHED PUMPS		\$160,000	\$160,000	\$160,000	\$160,000	\$160,000	\$160,000
PERMITTING		\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000
FINAL DESIGN (Estimated at 10% of Construction Costs)		\$228,888	\$226,788	\$236,388	\$236,148	\$234,048	\$243,648
CA/CI (Estimated at 10% of Construction Costs)		\$228,888	\$226,788	\$236,388	\$236,148	\$234,048	\$243,648
<b>TOTAL RECOMMENDED PROJECT BUDGET</b>		<b>\$3,263,542</b>	<b>\$3,236,242</b>	<b>\$3,361,042</b>	<b>\$3,357,922</b>	<b>\$3,330,622</b>	<b>\$3,455,422</b>

Alternative C with Options							
	Cost	C.1.1	C.1.2	C.1.3	C.2.1	C.2.2	C.2.3
C	PUMP STATION ALT. C	\$1,109,830	\$1,109,830	\$1,109,830	\$1,109,830	\$1,109,830	\$1,109,830
1	PIPE INSTALLATION, FLOATING	\$686,576	\$686,576	\$686,576			
2	PIPE INSTALLATION, HARDPAN	\$759,176			\$759,176	\$759,176	\$759,176
1	ELECTRICAL, PANELS (Includes Covered Shelter/ Eave Mods)	\$558,500			\$558,500		
2	ELECTRICAL HUT (Includes Hut)	\$537,500	\$537,500			\$537,500	
3	ELECTRICAL BUILDING RECONSTRUCT (Includes Building)	\$633,500		\$633,500			\$633,500
ESTIMATED CONSTRUCTION BID PRICE		\$2,354,906	\$2,333,906	\$2,429,906	\$2,427,506	\$2,406,506	\$2,502,506
CONSTRUCTION CONTINGENCY (10%)		\$235,491	\$233,391	\$242,991	\$242,751	\$240,651	\$250,251
PRELIMINARY DESIGN AND SURVEY (Includes to date engineering expenses)		\$113,000	\$113,000	\$113,000	\$113,000	\$113,000	\$113,000
OWNER FURNISHED PUMPS		\$160,000	\$160,000	\$160,000	\$160,000	\$160,000	\$160,000
PERMITTING		\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000
FINAL DESIGN (Estimated at 10% of Construction Costs)		\$235,491	\$233,391	\$242,991	\$242,751	\$240,651	\$250,251
CA/CI (Estimated at 10% of Construction Costs)		\$235,491	\$233,391	\$242,991	\$242,751	\$240,651	\$250,251
<b>TOTAL RECOMMENDED PROJECT BUDGET</b>		<b>\$3,349,378</b>	<b>\$3,322,078</b>	<b>\$3,446,878</b>	<b>\$3,443,758</b>	<b>\$3,416,458</b>	<b>\$3,541,258</b>

Denotes Unlikely Combination of Alternatives, Estimate May Be Invalid.  
 Denotes Least Cost Option  
 Denotes Recommended Option



**PETERSBURG BOROUGH**  
**PUMP STATION 4**



**ROM Cost Estimate**  
**Prepared By PND Engineers on November 29, 2022**

**Pump Station 4 Alternative A (Excludes Forcemain and Gravity Pipe)**

<b>Item</b>	<b>Item Description</b>	<b>Units</b>	<b>Quantity</b>	<b>Unit Cost</b>	<b>Amount</b>
15.01	Mobilization/Demobilization	LS	All Req'd	\$85,895	\$85,895
20.04(a)	Clearing and Grubbing	LS	All Req'd	\$8,000	\$8,000
20.07	Remove Sidewalk	SY	40	\$30	\$1,200
20.08	Remove Curb and Gutter	LF	70	\$25	\$1,750
20.09	Remove Pavement	SY	15	\$30	\$450
20.10(a)	Unusable Excavation	CY	900	\$25	\$22,500
20.12	Dewatering	LS	All Req'd	\$30,000	\$30,000
20.15	Furnish Trench Backfill	CY	700	\$42	\$29,400
20.22	Leveling Course	CY	100	\$70	\$7,000
20.30	Sheetpile Shoring, 40-foot long	PC.	60	\$4,500	\$270,000
30.02	Curb and Gutter	LF	70	\$75	\$5,250
30.03	Sidewalk	SY	40	\$165	\$6,600
30.07(a)	Lift Station Concrete Slab on Grade	SY	350	\$180	\$63,000
30.07(b)	Roadway Patch	SY	15	\$180	\$2,700
50.02(a)	Furnish & Install Pipe, PVC Gravity Sewer	LF	90	\$170	\$15,300
50.02(b)	Furnish & Install Pipe, 12" HDPE SDR 17 Force Main Pipe	LF	30	\$170	\$5,100
50.02(c)	Connect to Existing Sewer Pipe	EA	2	\$2,500	\$5,000
50.03(a)	Construct Sanitary Sewer Manhole Type A	EA	1	\$10,000	\$10,000
50.03(b)	Connect to Existing Manhole	EA	0	\$5,000	\$0
50.20	Decommission Existing Lift Station	LS	All Req'd	\$12,000	\$12,000
50.20(b)	Demolish Existing Covered Shelter	LS	All Req'd	\$5,000	\$5,000
60.04	Fire Hydrant	LS	All Req'd	\$8,000	\$8,000
60.06	Yard Hydrant	LS	All Req'd	\$5,000	\$5,000
65.02(a)	Construction Survey Measurement	LS	All Req'd	\$30,000	\$30,000
70.07(a)	Remove Pipe	LF	60	\$20	\$1,200
70.07(b)	Slurry or Foam to Abandon Existing Force Main	LF	1100	\$55	\$60,500
70.12	Traffic Maintenance	LS	All Req'd	\$3,000	\$3,000
70.13	Bollard	EA	4	\$2,000	\$8,000
75.04	Landscaping	LS	All Req'd	\$5,000	\$5,000
09900	Concrete Coatings	LS	All Req'd	\$35,000	\$35,000
11176(a)	Furnish and Install 12' dia. Wet Well with Pipe and Equipment	LS	All Req'd	\$100,000	\$100,000
11176(b)	Furnish and Install 10' dia. Valve Vault with Pipe and Equipment	LS	All Req'd	\$90,000	\$90,000
11176(d)	Install and Remove Temporary Pipes and Equipment	LS	All Req'd	\$5,000	\$5,000
11176(e)	Bypass Pumping	LS	All Req'd	\$5,000	\$5,000
11176(f)	Approved Work Plan	LS	All Req'd	\$3,000	\$3,000
<b>ESTIMATED CONSTRUCTION BID PRICE</b>					<b>\$944,845</b>
<b>PMPL POLE RELOCATION</b>					<b>\$1,000</b>
<b>ADDITIONAL SURVEY and PLATTING</b>					<b>\$7,000</b>
<b>CONSTRUCTION BUDGET ALTERNATIVE A</b>					<b>\$952,845</b>



**PETERSBURG BOROUGH**  
**PUMP STATION 4**



**ROM Cost Estimate**

Prepared By PND Engineers on November 29, 2022

**Pump Station 4 Alternative B (Excludes Forcemain and Gravity Pipe)**

<b>Item</b>	<b>Item Description</b>	<b>Units</b>	<b>Quantity</b>	<b>Unit Cost</b>	<b>Amount</b>
15.01	Mobilization/Demobilization	LS	All Req'd	\$94,528	\$94,528
20.04(a)	Clearing and Grubbing	LS	All Req'd	\$3,000	\$3,000
20.07	Remove Sidewalk	SY	65	\$30	\$1,950
20.08	Remove Curb and Gutter	LF	110	\$25	\$2,750
20.09	Remove Pavement	SY	185	\$30	\$5,550
20.10(a)	Unusable Excavation	CY	900	\$25	\$22,500
20.12	Dewatering	LS	All Req'd	\$30,000	\$30,000
20.15	Furnish Trench Backfill	CY	700	\$42	\$29,400
20.22	Leveling Course	CY	200	\$70	\$14,000
20.30	Sheetpile Shoring, 2-Foot x 40-foot long	PC.	60	\$4,500	\$270,000
30.02	Curb and Gutter	LF	110	\$75	\$8,250
30.03	Sidewalk	SY	65	\$165	\$10,725
30.07(a)	Lift Station Concrete Slab on Grade	SY	210	\$180	\$37,800
30.07(b)	Roadway Patch	SY	185	\$180	\$33,300
50.02	Furnish & Install Pipe, PVC Gravity Sewer	LF	55	\$170	\$9,350
51.02	Furnish & Install Pipe, 12" HDPE SDR 17 Force Main Pipe	LF	60	\$170	\$10,200
50.02(c)	Connect to Existing Sewer Pipe	EA	2	\$2,500	\$5,000
50.03(a)	Construct Sanitary Sewer Manhole Type A	EA	0	\$10,000	\$0
50.03(b)	Connect to Existing Manhole	EA	0	\$5,000	\$0
50.20	Decommission Existing Lift Station	LS	All Req'd	\$12,000	\$12,000
50.20(b)	Modify Existing Shelter	LS	All Req'd	\$10,000	\$10,000
50.20(c)	Remove Existing Sewer Manhole	LS	All Req'd	\$5,000	\$5,000
60.01	12" HDPE Water Main	LF	105	\$160	\$16,800
60.01(b)	Connect to Existing Water Main	EA	2	\$2,500	\$5,000
60.04	Fire Hydrant	LS	All Req'd	\$8,000	\$8,000
60.06	Yard Hydrant	LS	All Req'd	\$5,000	\$5,000
65.02(a)	Construction Survey Measurement	LS	All Req'd	\$30,000	\$30,000
70.10	Striping and Signage	LS	All Req'd	\$5,000	\$5,000
70.07(a)	Remove Pipe	LF	60	\$20	\$1,200
70.07(b)	Slurry or Foam to Abandon Existing Force Main	LF	1100	\$55	\$60,500
70.12	Traffic Maintenance	LS	All Req'd	\$3,000	\$3,000
70.13	Bollard	EA	2	\$2,000	\$4,000
75.04	Landscaping	LS	All Req'd	\$3,000	\$3,000
09900	Concrete Coatings	LS	All Req'd	\$35,000	\$35,000
11176(a)	Furnish and Install 12' dia. Wet Well with Pipe and Equipment	LS	All Req'd	\$100,000	\$100,000
11176(b)	Furnish and Install 10' dia. Valve Vault with Pipe and Equipment	LS	All Req'd	\$90,000	\$90,000
11176(d)	Install and Remove Temporary Pipes and Equipment	LS	All Req'd	\$25,000	\$25,000
11176(c)	Bypass Pumping	LS	All Req'd	\$30,000	\$30,000
11176(f)	Approved Work Plan	LS	All Req'd	\$3,000	\$3,000
<b>ESTIMATED CONSTRUCTION BID PRICE</b>					<b>\$1,039,803</b>
<b>ADDITIONAL SURVEY and PLATTING</b>					<b>\$4,000</b>
<b>CONSTRUCTION BUDGET ALTERNATIVE B</b>					<b>\$1,043,803</b>



**PETERSBURG BOROUGH  
PUMP STATION 4**



**ROM Cost Estimate**

Prepared By PND Engineers on November 29, 2022

**Pump Station 4 Alternative C (Excludes Forcemain and Gravity Pipe)**

<b>Item</b>	<b>Item Description</b>	<b>Units</b>	<b>Quantity</b>	<b>Unit Cost</b>	<b>Amount</b>
15.01	Mobilization/Demobilization	LS	All Req'd	\$100,530	\$100,530
20.04(a)	Clearing and Grubbing	LS	All Req'd	\$3,000	\$3,000
20.07	Remove Slab	SY	20	\$30	\$600
20.08	Remove Curb and Gutter	LF	0	\$25	\$0
20.09	Remove Pavement	SY	0	\$30	\$0
20.10(a)	Unusable Excavation	CY	900	\$25	\$22,500
20.12	Dewatering	LS	All Req'd	\$30,000	\$30,000
20.15	Furnish Trench Backfill	CY	750	\$42	\$31,500
20.22	Leveling Course	CY	100	\$70	\$7,000
20.30	Sheetpile Shoring, 40-foot long	PC.	76	\$4,500	\$342,000
30.02	Curb and Gutter	LF	0	\$75	\$0
30.03	Sidewalk	SY	0	\$165	\$0
30.07(a)	Lift Station Concrete Slab on Grade	SY	300	\$180	\$54,000
30.07(b)	Roadway Patch	SY	0	\$165	\$0
50.02	Furnish & Install Pipe, PVC Gravity Sewer	LF	40	\$170	\$6,800
51.02	Furnish & Install Pipe, 12" HDPE SDR 17 Force Main Pipe	LF	10	\$170	\$1,700
50.02(c)	Connect to Existing Sewer Pipe	EA	1	\$2,500	\$2,500
50.03(a)	Construct Sanitary Sewer Manhole Type A	EA	0	\$10,000	\$0
50.03(b)	Connect to Existing Manhole	EA	0	\$5,000	\$0
50.20	Decommission Existing Lift Station	LS	All Req'd	\$30,000	\$30,000
50.20(b)	Demolish Existing Building	LS	All Req'd	\$30,000	\$30,000
60.04	Fire Hydrant	LS	All Req'd	\$8,000	\$8,000
60.06	Yard Hydrant	LS	All Req'd	\$5,000	\$5,000
65.02(a)	Construction Survey Measurement	LS	All Req'd	\$30,000	\$30,000
70.07(a)	Remove Pipe	LF	60	\$20	\$1,200
70.07(b)	Slurry or Foam to Abandon Existing Force Main	LF	1100	\$55	\$60,500
70.12	Traffic Maintenance	LS	All Req'd	\$3,000	\$3,000
70.13	Bollard	EA	2	\$2,000	\$4,000
70.04	Landscaping	LS	All Req'd	\$4,000	\$4,000
09900	Concrete Coatings	LS	All Req'd	\$35,000	\$35,000
11176(a)	Furnish and Install 12' dia. Wet Well with Pipe and Equipment	LS	All Req'd	\$100,000	\$100,000
11176(b)	Furnish and Install 10' dia. Valve Vault with Pipe and Equipment	LS	All Req'd	\$90,000	\$90,000
11176(d)	Install and Remove Temporary Pipes and Equipment	LS	All Req'd	\$25,000	\$25,000
11176(e)	Bypass Pumping and Temp. Piping	LS	All Req'd	\$75,000	\$75,000
11176(f)	Approved Work Plan	LS	All Req'd	\$3,000	\$3,000
<b>ESTIMATED CONSTRUCTION BID PRICE</b>					<b>\$1,105,830</b>
<b>ADDITIONAL SURVEY and PLATTING</b>					<b>\$4,000</b>
<b>CONSTRUCTION BUDGET ALTERNATIVE C</b>					<b>\$1,109,830</b>





**PETERSBURG BOROUGH**  
**PUMP STATION 4**



**ROM Cost Estimate**

Prepared By PND Engineers on February 15th 2023

**Floating Pipes**

Item	Item Description	Units	Quantity	Unit Cost	Amount
15.01	Mobilization/Demobilization	LS	All Req'd	\$62,416	\$62,416
20.04(a)	Clearing and Grubbing	AC	0.5	\$80,000	\$40,000
20.07	Remove Sidewalk	SY	12	\$30	\$360
20.08	Remove Curb and Gutter	LF	20	\$25	\$500
20.09	Remove Pavement	SY	65	\$30	\$1,950
20.10(a)	Unusable Excavation	CY	4900	\$20	\$98,000
20.12	Dewatering	LS	All Req'd	\$8,000	\$8,000
20.15	Furnish Trench Backfill	CY	4000	\$42	\$168,000
20.22	Leveling Course	CY	500	\$70	\$35,000
20.25	Geotextile Fabric	SY	1100	\$10	\$11,000
20.30	Shoring - Trenches	LS	All Req'd	\$5,000	\$5,000
30.02	Curb and Gutter	LF	30	\$75	\$2,250
30.03	Sidewalk	SY	20	\$165	\$3,300
30.07(b)	Roadway Patch	SY	60	\$180	\$10,800
50.02	Furnish & Install Pipe, 21" PVC SDR18 Gravity Sewer	LF	500	\$150	\$75,000
51.02	Furnish & Install Pipe, 12" HDPE SDR 17 Force Main Pipe	LF	700	\$150	\$105,000
50.03(a)	Construct Sanitary Sewer Manhole Type A	EA	3	\$10,000	\$30,000
50.03(b)	Connect to Existing Manhole	EA	1	\$5,000	\$5,000
65.02(a)	Construction Survey Measurement	LS	All Req'd	\$20,000	\$20,000
70.12	Traffic Maintenance	LS	All Req'd	\$5,000	\$5,000
<b>ESTIMATED CONSTRUCTION BID PRICE</b>					<b>\$686,576</b>

**Excavated to Hardpan**

Item	Item Description	Units	Quantity	Unit Cost	Amount
15.01	Mobilization/Demobilization	LS	All Req'd	\$69,016	\$69,016
20.04(a)	Clearing and Grubbing	AC	0.5	\$80,000	\$40,000
20.07	Remove Sidewalk	SY	12	\$30	\$360
20.08	Remove Curb and Gutter	LF	20	\$25	\$500
20.09	Remove Pavement	SY	65	\$30	\$1,950
20.10(a)	Unusable Excavation	CY	6000	\$20	\$120,000
20.12	Dewatering	LS	All Req'd	\$8,000	\$8,000
20.15	Furnish Trench Backfill	CY	5100	\$42	\$214,200
20.22	Leveling Course	CY	500	\$70	\$35,000
20.25	Geotextile Fabric	SY	1100	\$8	\$8,800
20.30	Shoring - Trenches	LS	All Req'd	\$5,000	\$5,000
30.02	Curb and Gutter	LF	30	\$75	\$2,250
30.03	Sidewalk	SY	20	\$165	\$3,300
30.07(b)	Roadway Patch	SY	60	\$180	\$10,800
50.02	Furnish & Install Pipe, 21" PVC SDR18 Gravity Sewer	LF	500	\$150	\$75,000
51.02	Furnish & Install Pipe, 12" HDPE SDR 17 Force Main Pipe	LF	700	\$150	\$105,000
50.03(a)	Construct Sanitary Sewer Manhole Type A	EA	3	\$10,000	\$30,000
50.03(b)	Connect to Existing Manhole	EA	1	\$5,000	\$5,000
65.02(a)	Construction Survey Measurement	LS	All Req'd	\$20,000	\$20,000
70.12	Traffic Maintenance	LS	All Req'd	\$5,000	\$5,000
<b>ESTIMATED CONSTRUCTION BID PRICE</b>					<b>\$759,176</b>



**PETERSBURG BOROUGH  
PUMP STATION 4**



**ROM Cost Estimate**

Prepared By PND Engineers on February 15th 2023

**Electrical Panels**

Item	Item Description	Units	Quantity	Unit Cost	Amount
260500	Electrical and Panels, All	LS	All Req'd	\$531,000	\$531,000
260500(b)	Eve Extension and Structural Mods	LS	All Req'd	\$20,000	\$20,000
<b>ESTIMATED CONSTRUCTION BID PRICE</b>					<b>\$551,000</b>
<b>PMPL WORK</b>					<b>\$7,500</b>
<b>CONSTRUCTION BUDGET PANELS</b>					<b>\$558,500</b>

**Electrical Hut**

Item	Item Description	Units	Quantity	Unit Cost	Amount
260500	Electrical and Huts, All	LS	All Req'd	\$520,000	\$520,000
260500(b)	Structural Mods	LS	All Req'd	\$10,000	\$10,000
<b>ESTIMATED CONSTRUCTION BID PRICE</b>					<b>\$530,000</b>
<b>PMPL WORK</b>					<b>\$7,500</b>
<b>CONSTRUCTION BUDGET HUT</b>					<b>\$537,500</b>

**Electrical, New Building**

Item	Item Description	Units	Quantity	Unit Cost	Amount
260500	Electrical in New Building, All	LS	All Req'd	\$530,000	\$530,000
260500(b)	New Timber Framed Building	SF	384	\$250	\$96,000
<b>ESTIMATED CONSTRUCTION BID PRICE</b>					<b>\$626,000</b>
<b>PMPL WORK</b>					<b>\$7,500</b>
<b>CONSTRUCTION BUDGET BUILDING</b>					<b>\$633,500</b>



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15-Feb-23

**Cost Estimate**

Project: Petersburg Pump Station 4 Renovation

Description: Electrical Option 1, Civil Alternative A & B  
 Assumes adding a new 200A Electrical Service feeding Electrical equipment rack-mounted on the outside of the Existing Generator Building. Demo of existing wet well Electrical.

Labor wage w/ Benefits: 95  
 Labor Multiplier: 1.5  
 Material Multiplier: 1.25

Item	Quantity	Cost per unit	Total Material	Labor per unit	Total Labor	
Demolition Electrical Existing Wetwell	1	\$1,500.00	\$1,875.00	80	\$11,400.00	
2" Schedule 80 PVC	500	\$1.10	\$687.50	0.03	\$2,137.50	
No. 2/0 XHHW	1500	\$2.50	\$4,687.50	0.2	\$42,750.00	
No. 6 XHHW	500	\$0.60	\$375.00	0.2	\$14,250.00	
Building wiring	1	\$4,500.00	\$5,625.00	24	\$3,420.00	
Re work in Generator Building	1	\$4,500.00	\$5,625.00	124	\$17,670.00	
Relocate ATS	1	\$1,500.00	\$1,875.00	18	\$2,565.00	
PLC Panel	1	\$35,000.00	\$43,750.00	60	\$8,550.00	
Variable Frequency Drives	3	\$9,000.00	\$33,750.00	16	\$6,840.00	\$207,832.50
<b>Service Equip</b>						
METER MAIN	1	\$12,000.00	\$15,000.00	24	\$3,420.00	
Fuse Disconnects	3	\$2,500.00	\$9,375.00	8	\$3,420.00	
Building panel	1	\$3,500.00	\$4,375.00	8	\$1,140.00	
GROUNDING	1	\$400.00	\$500.00	16	\$2,280.00	
Transformer	1	\$1,500.00	\$1,875.00	16	\$2,280.00	
Racks	2	\$5,000.00	\$12,500.00	60	\$17,100.00	
74"x72"x24" SS Enclosure, Double Door, Type 4X	1	\$20,000	\$25,000.00	12	\$1,710.00	
225A Automatic Transfer Switch, Type 4X	1	\$10,000	\$12,500.00	12	\$1,710.00	
200A Manual Transfer Switch, Type 4X	1	\$12,000	\$15,000.00	8	\$1,140.00	
200/3 MCCB w/ Type 4X enclosure	1	\$8,000	\$10,000.00	6	\$855.00	
Portable Generator Receptacle	1	\$2,000	\$2,500.00	4	\$570.00	\$144,250.00
<b>Wetwell Electrical</b>						
Stainless Steel Junction Boxes	3	\$3,500.00	\$13,125.00	8	\$3,420.00	
Wetwell Electrical Installation	1	\$1,500.00	\$1,875.00	18	\$2,565.00	
Sealoffs	8	\$250.00	\$2,500.00	3	\$3,420.00	
Wiring to J-boxes	1	\$1,500.00	\$1,875.00	8	\$1,140.00	
Pressure Transducer	1	\$1,500	\$1,875.00	6	\$855.00	
Float Switches	3	\$200	\$750.00	4	\$1,710.00	\$35,110.00
<b>Lighting</b>						
CONTACTOR-BUILDING LTG	1	\$751.22	\$939.03	16	\$2,280.00	
Indoor luminaires	4	\$175.00	\$875.00	3	\$1,710.00	
Exterior Luminaires	3	\$175.00	\$656.25	3	\$1,282.50	\$7,742.78
<b>Radio Communications</b>						
Radio Pair	1	\$5,000.00	\$6,250.00	16	\$2,280.00	
Radio Enclosure	1	\$5,000.00	\$6,250.00	6	\$855.00	
Fiber Cable	800	\$2.00	\$2,000.00	0.01	\$1,140.00	
Power Cable	800	\$1.50	\$1,500.00	0.03	\$3,420.00	
Trenching	700	\$5	\$4,375.00	0.12	\$11,970.00	
2"C	700	\$2	\$1,750.00	0.15	\$14,962.50	
Pull Box	2	\$800.00	\$2,000.00	12	\$3,420.00	
Wood Pole	2	\$4,000.00	\$10,000.00	30	\$8,550.00	
Riser on Pole with Weatherhead	2	\$1,000.00	\$2,500.00	16	\$4,560.00	\$87,782.50
Subtotals			\$267,970.28		\$214,747.50	\$482,717.78

Total Mat. & Labor	\$482,717.78
Profit (10%)	\$48,271.78

<b>Grand Total Electrical</b>	<b>\$530,989.55</b>
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**Power and Telephone Service**

PMPL Service	\$ 3,500.00
Tele Service	\$ 2,500.00
Conduit & Trenching	\$ 1,500.00
<b>New Electrical Utility Services</b>	<b>\$ 7,500.00</b>



PO Box 210049, Auke Bay, AK 99821, 907-789-3350, 907-789-3360 (fax)  
 email: mark@morrisingengineeringgroup.com

15-Feb-23

**Cost Estimate**

Project: Petersburg Pump Station 4 Renovation  
 Description: Electrical Option 2, Civil Alternative A & B  
 Assumes adding a new 200A Electrical Service feeding a fiberglass Electrical building with equipment mounted inside and outside. Demo of existing wet well Electrical.

Labor wage w/ Benefits: 95  
 Labor Multiplier: 1.5  
 Material Multiplier: 1.25

Item	Quantity	Cost per unit	Total Material	Labor per unit	Total Labor	
Demolition Electrical Existing Wetwell	1	\$1,500.00	\$1,875.00	80	\$11,400.00	
2" Schedule 80 PVC	500	\$1.10	\$687.50	0.03	\$2,137.50	
No. 2/0 XHHW	1500	\$2.50	\$4,687.50	0.2	\$42,750.00	
No. 6 XHHW	500	\$0.60	\$375.00	0.2	\$14,250.00	
Building wiring	1	\$4,500.00	\$5,625.00	24	\$3,420.00	
Re work in Generator Building	1	\$4,500.00	\$5,625.00	124	\$17,670.00	
Relocate ATS	1	\$1,500.00	\$1,875.00	18	\$2,565.00	
PLC Panel	1	\$35,000.00	\$43,750.00	60	\$8,550.00	
TVSS	1	\$1,500.00	\$1,875.00	8	\$1,140.00	
Variable Frequency Drives	3	\$9,000.00	\$33,750.00	16	\$6,840.00	
Unit Heater	1	\$750.00	\$937.50	8	\$1,140.00	
Receptacles	4	\$70.00	\$350.00	2	\$1,140.00	
Electrical Shelter	1	\$35,000	\$43,750.00	48	\$6,840.00	
Shelter Foundation	1	\$7,000	\$8,750.00	24	\$3,420.00	
Wireway	1	\$1,000	\$1,250.00	4	\$570.00	
225A Automatic Transfer Switch, Type 1	1	\$5,000	\$6,250.00	24	\$3,420.00	
480V 3-PH Panelboard	1	\$3,000	\$3,750.00	16	\$2,280.00	
50/3 Feeder	3	\$700	\$2,625.00	2	\$855.00	
40/3 Feeder	1	\$700	\$875.00	2	\$285.00	
15kVA Transformer	1	\$2,500	\$3,125.00	16	\$2,280.00	
100A, 120/240V Load Center	1	\$600	\$750.00	12	\$1,710.00	
200A Manual Transfer Switch, Type 1	1	\$3,000	\$3,750.00	12	\$1,710.00	
200/3 MCCB w/ Type 1 enclosure	1	\$3,400	\$4,250.00	8	\$1,140.00	
Portable Generator Receptacle	1	\$2,000	\$2,500.00	2.5	\$356.25	\$320,906.25
<b>Service Equip</b>						
METER MAIN	1	\$12,000.00	\$15,000.00	24	\$3,420.00	
GROUNDING	1	\$400.00	\$500.00	16	\$2,280.00	\$21,200.00
<b>Wetwell Electrical</b>						
Stainless Steel Junction Boxes	3	\$3,500.00	\$13,125.00	8	\$3,420.00	
Wetwell Electrical Installation	1	\$1,500.00	\$1,875.00	18	\$2,565.00	
Sealoffs	8	\$250.00	\$2,500.00	3	\$3,420.00	
Wiring to J-boxes	1	\$1,500.00	\$1,875.00	8	\$1,140.00	
Pressure Transducer	1	\$1,500	\$1,875.00	6	\$855.00	
Float Switches	3	\$200	\$750.00	4	\$1,710.00	\$35,110.00
<b>Lighting</b>						
CONTACTOR-BUILDING LTG	1	\$751.22	\$939.03	16	\$2,280.00	
Indoor luminaires	4	\$175.00	\$875.00	3	\$1,710.00	
Exterior Luminaires	3	\$175.00	\$656.25	3	\$1,282.50	\$7,742.78
<b>Radio Communications</b>						
Radio Pair	1	\$5,000.00	\$6,250.00	16	\$2,280.00	
Radio Enclosure	1	\$5,000.00	\$6,250.00	6	\$855.00	
Fiber Cable	800	\$2.00	\$2,000.00	0.01	\$1,140.00	
Power Cable	800	\$1.50	\$1,500.00	0.03	\$3,420.00	
Trenching	700	\$5	\$4,375.00	0.12	\$11,970.00	

2"C	700	\$2	\$1,750.00	0.15	\$14,962.50	
Pull Box	2	\$800.00	\$2,000.00	12	\$3,420.00	
Wood Pole	2	\$4,000.00	\$10,000.00	30	\$8,550.00	
Riser on Pole with Weatherhead	2	\$1,000.00	\$2,500.00	16	\$4,560.00	\$87,782.50
Subtotals			\$259,632.78		\$213,108.75	\$472,741.53
Total Mat. & Labor			\$472,741.53			
Profit (10%)			\$47,274.15			

**Grand Total Electrical** **\$520,015.68**

**Power and Telephone Service**

PMPL Service	\$	3,500.00
Tele Service	\$	2,500.00
Conduit & Trenching	\$	1,500.00
<b>New Electrical Utilty Services</b>	<b>\$</b>	<b>7,500.00</b>



PO Box 210049, Auke Bay, AK 99821, 907-789-3350, 907-789-3360 (fax)  
 email: mark@morrisengineeringgroup.com

15-Feb-23

**Cost Estimate**

Project: Petersburg Pump Station 4 Renovation

Description: Electrical Option 3, Civil Alternative C  
 Assumes demolition of the existing building, construction of a new generator building, procuring a new generator, and installation of all new electrical equipment. Demo of existing wet well Electrical.

Labor wage w/ Benefits: 95  
 Labor Multiplier 1.5  
 Material Multiplier: 1.25

<i>Item</i>	<i>Quantity</i>	<i>Cost per unit</i>	<i>Total Material</i>	<i>Labor per unit</i>	<i>Total Labor</i>	
Demolition Electrical Existing Wetwell	1	\$1,500.00	\$1,875.00	80	\$11,400.00	
2" Schedule 80 PVC	500	\$1.10	\$687.50	0.03	\$2,137.50	
No. 2/0 XHHW	1500	\$2.50	\$4,687.50	0.2	\$42,750.00	
No. 6 XHHW	500	\$0.60	\$375.00	0.2	\$14,250.00	
Building wiring	1	\$4,500.00	\$5,625.00	24	\$3,420.00	
Relocate ATS	1	\$1,500.00	\$1,875.00	18	\$2,565.00	
PLC Panel	1	\$35,000.00	\$43,750.00	60	\$8,550.00	
TVSS	1	\$1,500.00	\$1,875.00	8	\$1,140.00	
Variable Frequency Drives	3	\$9,000.00	\$33,750.00	16	\$6,840.00	
Unit Heater	1	\$750.00	\$937.50	8	\$1,140.00	
Receptacles	4	\$70.00	\$350.00	2	\$1,140.00	
Existing Generator Relocation	1	\$1,500.00	\$1,875.00	120	\$17,100.00	
200A Manual Transfer Switch, Type 1	1	\$3,000	\$3,750.00	12	\$1,710.00	
200/3 Mccb w/ Type 1 enclosure	1	\$3,400	\$4,250.00	8	\$1,140.00	
Portable Generator Receptacle	1	\$2,000	\$2,500.00	2.5	\$356.25	
Cooling System	1	\$1,500	\$1,875.00	65	\$9,262.50	
Battery Charger	1	\$750	\$937.50	3	\$427.50	
Louvers	3	\$2,500	\$9,375.00	16	\$6,840.00	\$252,518.75
<b>Service Equip</b>						
METER MAIN	1	\$12,000.00	\$15,000.00	24	\$3,420.00	
PANEL MDP	1	\$25,000.00	\$31,250.00	20	\$2,850.00	
Building panel	1	\$3,500.00	\$4,375.00	8	\$1,140.00	
GROUNDING	1	\$400.00	\$500.00	16	\$2,280.00	
Transformer	1	\$1,500.00	\$1,875.00	16	\$2,280.00	
Panel G	1	\$4,500.00	\$5,625.00	24	\$3,420.00	\$74,015.00
<b>Wetwell Electrical</b>						
Stainless Steel Junction Boxes	3	\$3,500.00	\$13,125.00	8	\$3,420.00	
Wetwell Electrical Installation	1	\$1,500.00	\$1,875.00	18	\$2,565.00	
Sealoffs	8	\$250.00	\$2,500.00	3	\$3,420.00	
Wiring to J-boxes	1	\$1,500.00	\$1,875.00	8	\$1,140.00	
Pressure Transducer	1	\$1,500	\$1,875.00	6	\$855.00	
Float Switches	3	\$200	\$750.00	4	\$1,710.00	\$35,110.00
<b>Lighting</b>						
CONTACTOR-BUILDING LTG	1	\$751.22	\$939.03	16	\$2,280.00	
Indoor luminaires	4	\$175.00	\$875.00	3	\$1,710.00	
Exterior Luminaires	3	\$175.00	\$656.25	3	\$1,282.50	\$7,742.78
<b>Radio Communications</b>						
Radio Pair	1	\$5,000.00	\$6,250.00	16	\$2,280.00	
Radio Enclosure	1	\$5,000.00	\$6,250.00	6	\$855.00	
Fiber Cable	800	\$2.00	\$2,000.00	0.01	\$1,140.00	
Power Cable	800	\$1.50	\$1,500.00	0.03	\$3,420.00	
Trenching	700	\$5	\$4,375.00	0.12	\$11,970.00	
2"C	700	\$2	\$1,750.00	0.15	\$14,962.50	
Pull Box	2	\$800.00	\$2,000.00	12	\$3,420.00	

Wood Pole	2	\$4,000.00	\$10,000.00	30	\$8,550.00	
Riser on Pole with Weatherhead	2	\$1,000.00	\$2,500.00	16	\$4,560.00	\$87,782.50
<b>Temp Bypass</b>						
Control Panel Installation	2	\$2,500.00	\$6,250.00	16	\$4,560.00	
Floats	2	\$1,500.00	\$3,750.00	12	\$3,420.00	
Pumps	2	\$800.00	\$2,000.00	12	\$3,420.00	\$23,400.00
Subtotals			\$252,070.28		\$228,498.75	\$480,569.03
Total Mat. & Labor			\$480,569.03			
Profit (10%)			\$48,056.90			

<b>Grand Total Electrical</b>	<b>\$528,625.93</b>
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<b>Power and Telephone Service</b>	
PMPL Service	\$ 3,500.00
Tele Service	\$ 2,500.00
Conduit & Trenching	\$ 1,500.00
<b>New Electrical Utility Services</b>	<b>\$ 7,500.00</b>





March 24, 2023

192080.04

Mr. Karl Hagerman  
 Utility Director  
 Petersburg Borough  
 P.O. Box 329  
 Petersburg, Alaska 99833

**SUBJECT:** Pump Station No. 4 and Force Main Replacement, Final Design Fee Proposal

Dear Mr. Hagerman,

PND Engineers, Inc. (PND) is pleased to provide this proposal for additional engineering services for the Pump Station No. 4 and Force Main Replacement project. You requested PND provide a fee proposal to perform final design, permitting, survey and platting, and bid and construction phase engineering services based on the selected alternative identified as Alternative A.2.3 in the alternatives analysis memo dated February 15, 2023. The selected alternative includes a new electrical equipment building with a new or remodeled generator addition. The selected alternative has an estimated total project cost of approximately \$3.4M. PND will perform the following additional tasks on the project.

4. **Preliminary Site Visit.** PND and sub consultants will meet on site to confirm scope and preferences and review layout for the selected alternative.
5. **Test Pit Investigation.** A PND geologist will be on site to direct and log a test pit excavation in the proposed location of the wet well.
6. **65% Design Development.** Submittal will include Plans and Construction Cost Estimate. Assume controls and programming design by RMC Engineering, directly for PB, under separate contract.
7. **95% Final Design.** Submittal will include Plans, Specifications and Construction Cost Estimate.
8. **Bid Ready Documents.** Bid Ready Documents including Plans, Specifications and Construction Cost Estimate in reproduction ready PDF. Assume PB will advertise the bid as appropriate.
9. **Permitting.** PND will secure required permits for the project. We have assumed a USACE nationwide permit with no mitigation.
10. **Survey and Platting.** CSS will survey and provide plat documents and recording services to establish Ramona St. ROW right of way between Lake and Augusta, subdivision and plat (as required) of the lot adjacent to the existing lift station, and additional surveying/platting as required to transfer PB land to a private Owner per PB direction.
11. **Bid Support.** PND will provide bid phase assistance including conducting the prebid conference and developing addenda as needed.
12. **Construction Support.** PND will provide construction phase engineering services. PND has assumed 2 civil site visits, 2 building special inspection site visits, 1 electrical site visit, 1 mechanical site visit and additional inspections for substantial and final completion.

Scope details and individual subtasks are identified on the enclosed fee spreadsheets.

**Fee Proposal.**

We have estimated the fees for this work as summarized in the following table.

Cost Summary			
Task	Description	Cost	Fee Method
4	Task 4 Preliminary Site Visit	\$30,654.90	T&E
5	Task 5 Test Pit Investigation	\$7,584.20	T&E
6	Task 6 65% Design Development	\$87,825.00	T&E
7	Task 7 95% Final Design	\$80,507.00	T&E
8	Task 8 Bid Ready Documents	\$25,720.00	T&E
9	Task 9 Permitting	\$16,510.00	T&E
10	Task 10 Survey and Platting	\$9,295.00	T&E
11	Task 11 Bid Support	\$12,842.50	T&E
12	Task 12 Construction Phase	\$90,510.40	T&E
<b>Total Fee Estimate</b>		<b>\$361,449.00</b>	

PND proposes to perform this work for on a time and expenses (T&E) basis. PND will not exceed this fee without written authorization. Enclosed please find a breakdown of the estimated time and fees for the described services.

**Schedule.**

PND and our subconsultants are ready to commence immediately upon receiving written Notice to Proceed. The following schedule is proposed.

Task	Begin	Complete
<b>NTP</b>		April 7, 2023
<b>Preliminary Site Visit</b>		April 14, 2023
<b>Test Pit Investigation</b>		April 30, 2023
<b>65% Design Development</b>	April 7, 2023	June 2, 2023
<b>PB Review and Meeting</b>		June 15, 2023
<b>Permitting</b>	June 15, 2023	September 15, 2023
<b>95% Final Design</b>	June 15, 2023	August 25, 2023
<b>PB Review and Meeting</b>		Sept. 1, 2023
<b>Survey and Platting</b>	July 15, 2023	September 15, 2023
<b>Bid Ready Documents</b>	September 1, 2023	September 29, 2023
<b>Bid</b>	October 3, 2023	October 31, 2023
<b>Procurement/Construction</b>	Nov. 15, 2023	October 31, 2024

**Closing.**

PND appreciates the opportunity to continue assisting the Petersburg Borough on this important infrastructure project. We look forward to advancing this project with you.

Sincerely,

PND Engineers, Inc. | Juneau Office



Dick Somerville, P.E.  
Vice President



Tyler Bradshaw, P.E.  
Project Manager

- Enclosures:
- PND Fee Proposal (Civil and Structural)
  - MEG Fee Proposal (Electrical)
  - MM Fee Proposal (Mechanical)
  - MA Fee Proposal (Architectural)
  - CSS Fee Proposal (Survey)



**PND Engineers, Inc.**  
**Petersburg Borough**  
**Pump Station 4 Final Design, Bid and CA**  
**Engineering Services Fee Proposal**  
**March 24, 2023**

<b>Cost Summary</b>			
<b>Task</b>	<b>Description</b>	<b>Cost</b>	<b>Fee Method</b>
4	Task 4 Preliminary Site Visit	\$30,654.90	T&E
5	Task 5 Test Pit Investigation	\$7,584.20	T&E
6	Task 6 65% Design Development	\$87,825.00	T&E
7	Task 7 95% Final Design	\$80,507.00	T&E
8	Task 8 Bid Ready Documents	\$25,720.00	T&E
9	Task 9 Permitting	\$16,510.00	T&E
10	Task 10 Survey and Platting	\$9,295.00	T&E
11	Task 11 Bid Support	\$12,842.50	T&E
12	Task 12 Construction Phase	\$90,510.40	T&E
	<b>Total Fee Estimate</b>	<b>\$361,449.00</b>	



**PND Engineers, Inc.**  
**Petersburg Borough**  
**Pump Station 4 Final Design, Bid and CA**  
**Engineering Services Fee Proposal**  
**March 24, 2023**

Subtask	Description of Services	Senior Engineer VII	Senior Engineer VI	Senior Engineer V	Staff Engineer III	Staff Engineer II	Env. Scientist V	Technician VI	Technician V	CAD Designer VI	CAD Designer V	Line Total	Task Subtotal Costs													
		\$235.00	\$220.00	\$200.00	\$130.00	\$120.00	\$180.00	\$157.50	\$137.50	\$137.50	\$125.00															
<b>Task 4 Preliminary Site Visit</b>																										
4.1	Project Management: Team Management, correspondence, scheduling, budget controls, invoicing, reports, contract management, clerical.	1	4						2			\$1,390	\$13,980.00													
4.2	Final design preliminary coordination, scoping, meetings and fee development	1	16									\$3,755		\$13,980.00												
4.3	On site coordination and scope site visit preparation and meeting		18	18	4	4				2		\$8,835			\$13,980.00											
4.4												\$0				\$13,980.00										
4.5												\$0					\$13,980.00									
4.6												\$0						\$13,980.00								
4.7												\$0							\$13,980.00							
4.8												\$0								\$13,980.00						
4.9												\$0									\$13,980.00					
4.10												\$0										\$13,980.00				
4.11												\$0											\$13,980.00			
4.12												\$0												\$13,980.00		
4.13												\$0													\$13,980.00	
4.14												\$0														\$13,980.00
4.15												\$0														
<b>Total Estimated Man-hours</b>		2	38	18	4	4	0	0	2	2	0															
<b>Estimated Third Party Expenses</b>		<b>Description</b>									<b>Quantity</b>	<b>Unit Cost</b>	<b>Line Total</b>													
<b>Expenses</b>																										
Misc.	Reproduction and Misc. Consumables									1	\$50	\$50														
PND Travel	Air fare, round trip, PM and Structural Engineer JNU - PSG									2	\$400	\$800														
PND Travel	Lodging, per night									2	\$200	\$400														
PND Travel	Vehicle Rental									1	\$125	\$125														
PND Travel	Per Diem, Days									4	\$86	\$344														
												\$0														
Administrative Fee	Expenses Markup									1	10%	\$172	\$1,890.90													
<b>Subcontractor Fees</b>																										
Morris Engineering Group	Electrical Engineering Services									1	\$6,660	\$6,660														
Millard and Assoc.	Architectural Design Services									1	\$480	\$480														
Modern Mechanical	Mechanical Engineering Services									1	\$6,300	\$6,300														
										0	\$0	\$0														
Administrative Fee	Subcontractor Markup									1	10%	\$1,344	\$14,784.00													
<b>Task 4 Preliminary Site Visit Total</b>												<b>\$30,654.90</b>														



**PND Engineers, Inc.**  
**Petersburg Borough**  
**Pump Station 4 Final Design, Bid and CA**  
**Engineering Services Fee Proposal**  
**March 24, 2023**

Subtask	Description of Services	Senior Engineer VII	Senior Engineer VI	Senior Engineer V	Staff Engineer III	Staff Engineer II	Env. Scientist V	Technician VI	Technician V	CAD Designer VI	CAD Designer V	Line Total	Task Subtotal Costs													
		\$235.00	\$220.00	\$200.00	\$130.00	\$120.00	\$180.00	\$157.50	\$137.50	\$137.50	\$125.00															
<b>Task 5 Test Pit Investigation</b>																										
5.1	Project Management: Team Management, correspondence, scheduling, budget controls, invoicing, reports, contract management, clerical.	1	2						1			\$813	\$6,542.50													
5.2	Investigation research and preparation		2					4	1			\$1,070		\$6,542.50												
5.3	On site test pit investigation - PB performs digging							18				\$2,835			\$6,542.50											
5.4	Findings Memo		2			4		4		2		\$1,825				\$6,542.50										
5.5												\$0					\$6,542.50									
5.6												\$0						\$6,542.50								
5.7												\$0							\$6,542.50							
5.8												\$0								\$6,542.50						
5.9												\$0									\$6,542.50					
5.10												\$0										\$6,542.50				
5.11												\$0											\$6,542.50			
5.12												\$0												\$6,542.50		
5.13												\$0													\$6,542.50	
5.14												\$0														\$6,542.50
5.15												\$0														
<b>Total Estimated Man-hours</b>		1	6	0	0	4	0	26	1	2	0															
<b>Estimated Third Party Expenses</b>		<b>Description</b>									<b>Quantity</b>	<b>Unit Cost</b>	<b>Line Total</b>													
<b>Expenses</b>																										
Misc.	Reproduction and Misc. Consumables											1	\$50	\$50												
PND Travel	Air fare, round trip, Geotech Technician JNU - PSG											1	\$400	\$400												
PND Travel	Lodging, per night											1	\$200	\$200												
PND Travel	Vehicle Rental											1	\$125	\$125												
PND Travel	Per Diem, Days											2	\$86	\$172												
														\$0												
Administrative Fee	Expenses Markup											1	10%	\$95												
<b>Subcontractor Fees</b>																										
Morris Engineering Group	Electrical Engineering Services											0	\$0	\$0												
Millard and Assoc.	Architectural Design Services											0	\$0	\$0												
Modern Mechanical	Mechanical Engineering Services											0	\$0	\$0												
												0	\$0	\$0												
Administrative Fee	Subcontractor Markup											1	10%	\$0												
<b>Task 5 Test Pit Investigation Total</b>													<b>\$7,584.20</b>													



**PND Engineers, Inc.**  
**Petersburg Borough**  
**Pump Station 4 Final Design, Bid and CA**  
**Engineering Services Fee Proposal**  
**March 24, 2023**

Subtask	Description of Services	Senior Engineer VII	Senior Engineer VI	Senior Engineer V	Staff Engineer III	Staff Engineer II	Env. Scientist V	Technician VI	Technician V	CAD Designer VI	CAD Designer V	Line Total	Task Subtotal Costs	
<b>Task 6 65% Design Development</b>														
6.1	Project Management: Team Management, correspondence, scheduling, budget controls, invoicing, reports, contract management, clerical.	4	14						6			\$4,845	\$54,990.00	
6.2	Team and Client Meetings	1	12	4	8							\$4,715		
6.3	Demolition, disposal and materials salvage plan	1	4	10	10	4				8	6	\$6,745		
6.4	Construction sequencing plan	1	6	2	12					2		\$3,790		
6.5	Pump design, calculations and and mfr. coordination	1	4		12							\$2,675		
6.6	Pump station operations and sequencing	1	2		6					2		\$1,730		
6.7	Lift station layout and site plan		2	2	8	8				8		\$3,940		
6.8	Lift Station and wells design details	1	2		12					8		\$3,335		
6.9	Building structural design		4	16		18					20	\$8,740		
6.10	Shoring structural design	1	4	6		6					8	\$4,035		
6.11	Distribution pipes design, plans and profiles		4		16					8		\$4,060		
6.12	Material quantities computations, bid schedule and cost estimate	1	4	2	8	4				6		\$3,860		
6.13	Design Review Submittal Meeting (Teams)		2	2								\$840		
6.14	Respond to review comments		2	2								\$840		
6.15												\$840		
<b>Total Estimated Man-hours</b>		12	66	46	92	40	0	0	6	42	34			
<b>Estimated Third Party Expenses</b>		<b>Description</b>									<b>Quantity</b>	<b>Unit Cost</b>	<b>Line Total</b>	
<b>Expenses</b>														
Misc.	Reproduction and Misc. Consumables									1	\$200	\$200		
PND Travel	Air fare									0	\$400	\$0		
PND Travel	Lodging, per night									0	\$200	\$0		
PND Travel	Vehicle Rental									0	\$125	\$0		
PND Travel	Per Diem, Days									0	\$86	\$0		
												\$0		
Administrative Fee	Expenses Markup									1	10%	\$20	\$220.00	
<b>Subcontractor Fees</b>														
Morris Engineering Group	Electrical Engineering Services									1	\$19,310	\$19,310		
Millard and Assoc.	Architectural Design Services									1	\$2,320	\$2,320		
Modern Mechanical	Mechanical Engineering Services									1	\$8,020	\$8,020		
										0	\$0	\$0		
Administrative Fee	Subcontractor Markup									1	10%	\$2,965	\$32,615.00	
<b>Task 6 65% Design Development Total</b>												<b>\$87,825.00</b>		



**PND Engineers, Inc.**  
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**Engineering Services Fee Proposal**  
**March 24, 2023**

Subtask	Description of Services	Senior Engineer VII	Senior Engineer VI	Senior Engineer V	Staff Engineer III	Staff Engineer II	Env. Scientist V	Technician VI	Technician V	CAD Designer VI	CAD Designer V	Line Total	Task Subtotal Costs	
		\$235.00	\$220.00	\$200.00	\$130.00	\$120.00	\$180.00	\$157.50	\$137.50	\$137.50	\$125.00			
<b>Task 7 95% Final Design</b>														
7.1	Project Management: Team Management, correspondence, scheduling, budget controls, invoicing, reports, contract management, clerical.	4	14						6				\$4,845	
7.2	Team and Client Meetings	1	12	4	10	2							\$5,215	
7.3	Demolition, disposal and materials salvage plan		2	4	6	6				2	2		\$3,265	
7.4	Construction sequencing plan	1	6	2	6					4			\$3,285	
7.5	Pump design, calculations and and mfr. coordination		2		4								\$960	
7.6	Pump station operations and sequencing	1	2		4					2			\$1,470	
7.7	Lift station layout and site plan		2		8					6			\$2,305	
7.8	Lift Station and wells design details		2		8					6			\$2,305	
7.9	Building structural design		2	10		12					16		\$5,880	
7.10	Shoring structural design	1	2	4		4					6		\$2,705	
7.11	Distribution pipes design, plans and profiles		2		10					8			\$2,840	
7.12	Material quantities computations, bid schedule and cost estimate		2	2	6	4				6	2		\$3,175	
7.13	Special provisions and technical specifications	2	8	6	10	8							\$5,690	
7.14	On site design review submittal meeting		18	18									\$7,560	
7.15	Respond to review comments		2	2						2			\$1,115	
<b>Total Estimated Man-hours</b>		10	78	52	72	36	0	0	6	36	26		\$52,615.00	
<b>Estimated Third Party Expenses</b>		<b>Description</b>									<b>Quantity</b>	<b>Unit Cost</b>	<b>Line Total</b>	
<b>Expenses</b>														
Misc.	Reproduction and Misc. Consumables									1	\$200		\$200	
PND Travel	Air fare									1	\$400		\$400	
PND Travel	Lodging, per night									1	\$200		\$200	
PND Travel	Vehicle Rental									1	\$125		\$125	
PND Travel	Per Diem, Days									2	\$86		\$172	
													\$0	
Administrative Fee	Expenses Markup									1	10%		\$93	
<b>Subcontractor Fees</b>														
Morris Engineering Group	Electrical Engineering Services									1	\$14,145		\$14,145	
Millard and Assoc.	Architectural Design Services									1	\$1,740		\$1,740	
Modern Mechanical	Mechanical Engineering Services									1	\$8,390		\$8,390	
										0	\$0		\$0	
Administrative Fee	Subcontractor Markup									1	10%		\$2,428	
<b>Task 7 95% Final Design Total</b>													<b>\$80,507.00</b>	





**PND Engineers, Inc.**  
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**March 24, 2023**

Subtask	Description of Services	Senior Engineer VII	Senior Engineer VI	Senior Engineer V	Staff Engineer III	Staff Engineer II	Env. Scientist V	Technician VI	Technician V	CAD Designer VI	CAD Designer V	Line Total	Task Subtotal Costs
		\$235.00	\$220.00	\$200.00	\$130.00	\$120.00	\$180.00	\$157.50	\$137.50	\$137.50	\$125.00		
<b>Task 8 Bid Ready Documents</b>													
8.1	Project Management: Team Management, correspondence, scheduling, budget controls, invoicing, reports, contract management, clerical.	2	2						2				\$1,185
8.2	Address all final review comments.		6	4	12	6				12	4		\$6,550
8.3	Conduct Internal QA Design Audit - plans, specs, calculations, cost estimate, schedule, bid documents, independent final reviews	10	10	2	2	2				2			\$5,725
8.4	Prepare final stamped bid ready documents		2	2	2	2				4	2		\$2,140
8.5													\$0
8.6													\$0
8.7													\$0
8.8													\$0
8.9													\$0
8.10													\$0
8.11													\$0
8.12													\$0
8.13													\$0
8.14													\$0
8.15													\$0
<b>Total Estimated Man-hours</b>		12	20	8	16	10	0	0	2	18	6		\$15,600.00
<b>Estimated Third Party Expenses</b>		<b>Description</b>									<b>Quantity</b>	<b>Unit Cost</b>	<b>Line Total</b>
<b>Expenses</b>													
Misc.	Reproduction and Misc. Consumables									1	\$200		\$200
PND Travel	Air fare									0	\$400		\$0
PND Travel	Lodging, per night									0	\$200		\$0
PND Travel	Vehicle Rental									0	\$125		\$0
PND Travel	Per Diem, Days									0	\$86		\$0
													\$0
Administrative Fee	Expenses Markup									1	10%		\$20
<b>Subcontractor Fees</b>													
Morris Engineering Group	Electrical Engineering Services									1	\$5,570		\$5,570
Millard and Assoc.	Architectural Design Services									1	\$750		\$750
Modern Mechanical	Mechanical Engineering Services									1	\$2,680		\$2,680
										0	\$0		\$0
Administrative Fee	Subcontractor Markup									1	10%		\$900
<b>Task 8 Bid Ready Documents Total</b>													<b>\$25,720.00</b>



**PND Engineers, Inc.**  
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**March 24, 2023**

Subtask	Description of Services	Senior Engineer VII	Senior Engineer VI	Senior Engineer V	Staff Engineer III	Staff Engineer II	Env. Scientist V	Technician VI	Technician V	CAD Designer VI	CAD Designer V	Line Total	Task Subtotal Costs	
<b>Task 9 Permitting</b>														
9.1	Project Management: Team Management, correspondence, scheduling, budget controls, invoicing, reports, contract management, clerical.	1	4						2			\$1,390		
9.2	USACE Nationwide Permit with PCN, assume no mitigation required	1	8				12			4		\$4,705		
9.3	ADEC Wastewater Authorization to Construct		8		20	4	4			8		\$6,660		
9.4	ADEC Wastewater Authorization to Operate		4		4		2					\$1,760		
9.5	Support ADEC Loan EA upon request		4		2		2			2		\$1,775		
9.6												\$0		
9.7												\$0		
9.8												\$0		
9.9												\$0		
9.10												\$0		
9.11												\$0		
9.12												\$0		
9.13												\$0		
9.14												\$0		
9.15												\$0	\$16,290.00	
<b>Total Estimated Man-hours</b>		2	28	0	26	4	20	0	2	14	0			
<b>Estimated Third Party Expenses</b>		<b>Description</b>									<b>Quantity</b>	<b>Unit Cost</b>	<b>Line Total</b>	
<b>Expenses</b>														
Misc.	Reproduction and Misc. Consumables									1	\$200	\$200		
PND Travel	Air fare									0	\$400	\$0		
PND Travel	Lodging, per night									0	\$200	\$0		
PND Travel	Vehicle Rental									0	\$125	\$0		
PND Travel	Per Diem, Days									0	\$86	\$0		
												\$0		
Administrative Fee	Expenses Markup									1	10%	\$20	\$220.00	
<b>Subcontractor Fees</b>														
Morris Engineering Group	Electrical Engineering Services									1	\$0	\$0		
Millard and Assoc.	Architectural Design Services									1	\$0	\$0		
Modern Mechanical	Mechanical Engineering Services									1	\$0	\$0		
										0	\$0	\$0		
Administrative Fee	Subcontractor Markup									1	10%	\$0	\$0.00	
<b>Task 9 Permitting Total</b>												<b>\$16,510.00</b>		



**PND Engineers, Inc.**  
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**March 24, 2023**

Subtask	Description of Services	Senior Engineer VII	Senior Engineer VI	Senior Engineer V	Staff Engineer III	Staff Engineer II	Env. Scientist V	Technician VI	Technician V	CAD Designer VI	CAD Designer V	Line Total	Task Subtotal Costs
		\$235.00	\$220.00	\$200.00	\$130.00	\$120.00	\$180.00	\$157.50	\$137.50	\$137.50	\$125.00		
<b>Task 10 Survey and Platting</b>													
10.1	Project Management: Team Management, correspondence, scheduling, budget controls, invoicing, reports, contract management, clerical.		4						2			\$1,155	\$2,585.00
10.2	Coordinate Survey and Platting		4							4		\$1,430	
10.3												\$0	
10.4												\$0	
10.5												\$0	
10.6												\$0	
10.7												\$0	
10.8												\$0	
10.9												\$0	
10.10												\$0	
10.11												\$0	
10.12												\$0	
10.13												\$0	
10.14												\$0	
10.15												\$0	
<b>Total Estimated Man-hours</b>		0	8	0	0	0	0	0	2	4	0		
<b>Estimated Third Party Expenses</b>		<b>Description</b>									<b>Quantity</b>	<b>Unit Cost</b>	<b>Line Total</b>
<b>Expenses</b>													
Misc.	Reproduction and Misc. Consumables									1	\$100	\$100	\$110.00
PND Travel	Air fare									0	\$400	\$0	
PND Travel	Lodging, per night									0	\$200	\$0	
PND Travel	Vehicle Rental									0	\$125	\$0	
PND Travel	Per Diem, Days									0	\$86	\$0	
												\$0	
Administrative Fee	Expenses Markup									1	10%	\$10	
<b>Subcontractor Fees</b>													
Morris Engineering Group	Electrical Engineering Services									1	\$0	\$0	\$6,600.00
Millard and Assoc.	Architectural Design Services									1	\$0	\$0	
Modern Mechanical	Mechanical Engineering Services									1	\$0	\$0	
Central Southeast Surveyors	Survey and Platting									1	\$6,000	\$6,000	
Administrative Fee	Subcontractor Markup									1	10%	\$600	
<b>Task 10 Survey and Platting Total</b>												<b>\$9,295.00</b>	



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Subtask	Description of Services	Senior Engineer VII	Senior Engineer VI	Senior Engineer V	Staff Engineer III	Staff Engineer II	Env. Scientist V	Technician VI	Technician V	CAD Designer VI	CAD Designer V	Line Total	Task Subtotal Costs	
		\$235.00	\$220.00	\$200.00	\$130.00	\$120.00	\$180.00	\$157.50	\$137.50	\$137.50	\$125.00			
<b>Task 11 Bid Support</b>														
11.1	Project Management: Team Management, correspondence, scheduling, budget controls, invoicing, reports, contract management, clerical.	1	1									\$455	\$7,865.00	
11.2	Conduct prebid video conference - prepare agenda and minutes		3		4							\$1,180		
11.3	Address bidder questions and prepare addenda responses		4	1	4	1				2	1	\$2,120		
11.4	Prepare stamped, conformed documents.		2	1	2					4	1	\$1,575		
11.5	Final Submittals Preparation: Bind CAD Files, organize specification docs, prepare organize and deliver files.		2	1	2	1				2	1	\$1,420		
11.6	Prepare bid recommendation and bid tabs	1	4									\$1,115		
11.7												\$0		
11.8												\$0		
11.9												\$0		
11.10												\$0		
11.11												\$0		
11.12												\$0		
11.13												\$0		
11.14												\$0		
11.15												\$0		
<b>Total Estimated Man-hours</b>		2	16	3	12	2	0	0	0	8	3			
<b>Estimated Third Party Expenses</b>		<b>Description</b>									<b>Quantity</b>	<b>Unit Cost</b>	<b>Line Total</b>	
<b>Expenses</b>														
Misc.	Reproduction and Misc. Consumables									1	\$200	\$200		
PND Travel	Air fare									0	\$400	\$0		
PND Travel	Lodging, per night									0	\$200	\$0		
PND Travel	Vehicle Rental									0	\$125	\$0		
PND Travel	Per Diem, Days									0	\$86	\$0		
												\$0		
Administrative Fee	Expenses Markup									1	10%	\$20	\$220.00	
<b>Subcontractor Fees</b>														
Morris Engineering Group	Electrical Engineering Services									1	\$1,720	\$1,720		
Millard and Assoc.	Architectural Design Services									1	\$325	\$325		
Modern Mechanical	Mechanical Engineering Services									1	\$2,280	\$2,280		
										0	\$0	\$0		
Administrative Fee	Subcontractor Markup									1	10%	\$433	\$4,757.50	
<b>Task 11 Bid Support Total</b>												<b>\$12,842.50</b>		



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Subtask	Description of Services	Senior Engineer VII	Senior Engineer VI	Senior Engineer V	Staff Engineer III	Staff Engineer II	Env. Scientist V	Technician VI	Technician V	CAD Designer VI	CAD Designer V	Line Total	Task Subtotal Costs													
		\$235.00	\$220.00	\$200.00	\$130.00	\$120.00	\$180.00	\$157.50	\$137.50	\$137.50	\$125.00															
<b>Task 12 Construction Phase</b>																										
12.1	Project Management: Team Management, correspondence, scheduling, budget controls, invoicing, reports, contract management, clerical.	4	12						2			\$3,855	\$56,285.00													
12.2	Attend Preconstruction Meeting (Teams) Prepare, Agenda and Minutes		4	2	2							\$1,540		\$56,285.00												
12.3	Progress Meetings, Agendas, Minutes		12	6	22							\$6,700			\$56,285.00											
12.4	Review Submittals		8	4	20	8						\$6,120				\$56,285.00										
12.5	Respond to RFIs and DC/VRs	1	8	2	6	4				2	2	\$4,180					\$56,285.00									
12.6	Field design assistance/modifications and COs		8	1	4	1				4	2	\$3,400						\$56,285.00								
12.7	Construction Observations and Reporting - Assume 4 site visits 2 civil and 2 building special inspections		18	18	18			18				\$12,735							\$56,285.00							
12.8	Onsite Substantial and Final Inspections		36	18								\$11,520								\$56,285.00						
12.9	Punch lists and project close out.		6	2	10	2						\$3,260									\$56,285.00					
12.10	Record Drawings		4		4					6	6	\$2,975										\$56,285.00				
12.11												\$0											\$56,285.00			
12.12												\$0												\$56,285.00		
12.13												\$0													\$56,285.00	
12.14												\$0														\$56,285.00
12.15												\$0														
<b>Total Estimated Man-hours</b>		5	116	53	86	15	0	18	2	12	10															
<b>Estimated Third Party Expenses</b>		<b>Description</b>									<b>Quantity</b>	<b>Unit Cost</b>	<b>Line Total</b>													
<b>Expenses</b>																										
Misc.	Reproduction and Misc. Consumables									1	\$200	\$200	\$6,989.40													
PND Travel	Air fare									7	\$400	\$2,800		\$6,989.40												
PND Travel	Lodging, per night									7	\$200	\$1,400			\$6,989.40											
PND Travel	Vehicle Rental									6	\$125	\$750				\$6,989.40										
PND Travel	Per Diem, Days									14	\$86	\$1,204					\$6,989.40									
												\$0						\$6,989.40								
Administrative Fee	Expenses Markup									1	10%	\$635							\$6,989.40							
<b>Subcontractor Fees</b>																										
Morris Engineering Group	Electrical Engineering Services									1	\$17,975	\$17,975	\$27,236.00													
Millard and Assoc.	Architectural Design Services									1	\$905	\$905		\$27,236.00												
Modern Mechanical	Mechanical Engineering Services									1	\$5,880	\$5,880			\$27,236.00											
										0	\$0	\$0				\$27,236.00										
Administrative Fee	Subcontractor Markup									1	10%	\$2,476					\$27,236.00									
<b>Task 12 Construction Phase Total</b>												<b>\$90,510.40</b>														



PO Box 210049, Auke Bay, Alaska 99821, 907-789-3350,  
email: mark@morrisengineeringgroup.com

# Fee Estimate

3/24/2023

## Petersburg Lift Station 4 - Professional Services

Scope of Services: 65%, 95%, and Final Design Drawings and Specs for Lift Station.  
Consists of site visits, meeting with City of Petersburg Wastewater, construction cost estimate, bid phase support, contract administration, submittal reviews, inspection services, and closeout services including as-builts.

<u>Task</u>	<u>Engineer (hrs)</u>	<u>Tech/CAD (hrs)</u>	<u>Expenses</u>
<b>Preliminary Site Visit - 2 Engineers</b>	24		\$1,500
Hourly Rate	\$215	\$135	
Fees	\$5,160	\$0	\$1,500
<b>Subtotal - Preliminary Site Visit</b>	<b>\$6,660</b>		
<b>65% Design for Lift Station</b>			
<b>Services</b>			
Coordination with Utility	1		
Site Plan	4	2	
Rack Elevation with service, genset receptacle	4	2	
Fault Current Calculations	2		
<b>Building Addition</b>			
Wall Elevations	4	2	
Floor Plan	4	2	
<b>Power</b>			
Size pump VFDs	2		
Single Line Diagrams	4	2	
Elevation View of Lift Station	4	2	
<b>Underground Power to Wet Well</b>			
Wet Well Elevation View	4	2	
Conduit & Cable selection & routing	4	2	
Trench Detail	1	1	
<b>Riser Diagrams</b>	4	2	
<b>Project Meetings</b>	4		
<b>Coordination w/ Control Panel Designer</b>	8		
<b>Specifications</b>	8		
<b>Estimate</b>	8		
<b>65% Submittal</b>	4	2	
<b>65% Review Meeting &amp; Changes</b>	2	1	
<b>Hour Totals</b>	<b>76</b>	<b>22</b>	
Hourly Rate	\$215	\$135	
Fees	\$16,340	\$2,970	\$0
<b>Subtotal Fee - 65% Design</b>	<b>\$19,310</b>		



Petersburg LS4 Design

<u>Task</u>	<u>Engineer (hrs)</u>	<u>Tech/CAD (hrs)</u>	<u>Expenses</u>
<b>Bid Phase Assistance</b>	8		
Hourly Rate	<u>\$215</u>	<u>\$135</u>	
Fees	\$1,720	\$0	\$0
<b>Subtotal Fee - Bid Phase Assistance</b>	<b>\$1,720</b>		
<b>Construction Services</b>			
<b>Submittal Reviews</b>	16		
<b>Answering Contractor RFIs</b>	8		
<b>Milestone Inspections Onsite</b>			
Construction	8		\$750
Report	4		
Substantial Completion	8		\$750
Report	4		
Final Completion	8		\$750
Report	4		
<b>As-Built Drawings</b>	10	5	
Hour Totals	70	5	
Hourly Rate	<u>\$215</u>	<u>\$135</u>	
Fees	\$15,050	\$675	\$2,250
<b>Subtotal Fee - Construction Services</b>	<b>\$17,975</b>		
<b>Grand Total Fee - Design &amp; Construction Services</b>	<b>\$65,380</b>		



<b>Morris Engineering Group</b>	<b>MODERN MECHANICAL</b>
P.O. Box 210049	11001 Black Bear Road
Auke Bay, Alaska 99821	Juneau, AK 99801
907 789-3350	cell: 723-9320

MECHANICAL ENGINEERING FEE ESTIMATE for the: **Petersburg Lift Station 4**

Scope Services: 65%, 95%, and Final Design Drawings and specs for lift station. March 24,2022

Cosists of site visit, meetings, construction cost estimate, bid phase support, C/A, submittal reviews and as-builts.

Hourly rates are: Principal \$200/hr, Mechanical Engineer \$135/hr, Clerical Drafter \$100/hr

Preliminary Site Visit/As-Builts	PRINCIPAL	MECHANICAL/ ENGINEER	CLERICAL/ DRAFTING	EXPENSE	TOTAL (\$)
Initial Meeting to Review Requirements	24.0	0.0		\$1,500	6,300
	<b>24.0</b>	<b>0.0</b>	<b>0.0</b>	<b>\$1,500</b>	<b>\$6,300</b>

### 65% Construction Documents

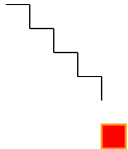
65% Construction Documents	PRINCIPAL	MECHANICAL/ ENGINEER	CLERICAL/ DRAFTING	EXPENSE	TOTAL (\$)
Coordination with Utility - Petersburg	1.0	1.0			335
Coordination with Morris	1.0	2.0			470
Integrate necessary codes into design	1.0	2.0			470
On-site as-builts (Basic not in depth)	2.0	4.0	2.0		1,140
Equipment design layout	2.0	4.0	1.0		1,040
Mechanical equipment	1.0	4.0	1.0		840
Relocate or replace louvers	2.0	4.0	1.0		1,040
Remove and reinstall generator with cooling	4.0	4.0	1.0		1,440
Preliminary Cost Estimate	1.0	4.0			740
Coordination	1.0	1.0			335
Print/PDF65% documents			1.0	70	170
	<b>16.0</b>	<b>30.0</b>	<b>7.0</b>	<b>\$70</b>	<b>\$8,020</b>

### 95% Construction Documents

CONSTRUCTION DOCUMENTS	PRINCIPAL	MECHANICAL/ ENGINEER	CLERICAL/ DRAFTING	EXPENSE	TOTAL (\$)
Incorporate 65% review comments	1.0	4.0	2.0		940
Coordination with Disciplines	1.0	2.0			470
Update Drawing format changes	1.0	2.0	1.0		570
Modify design layout	2.0	4.0	1.0		1,040
Sections or diagrams	1.0	4.0	1.0		840
Louver replacement or duct mods	1.0	2.0	1.0		570
Heat Pumps (alternate or base bid?)	1.0	2.0			470
Equipment Schedule	1.0	2.0	1.0		570
Interface/controls/electrical	1.0	2.0			470
Estimate or cost review	2.0	2.0			670
Basic specifications (on drawing)	2.0	4.0	2.0		1,140
Coordination	1.0	2.0			470
Print/PDF95% documents			1.0	70	170
	<b>15.0</b>	<b>32.0</b>	<b>10.0</b>	<b>70.0</b>	<b>\$8,390</b>

<b>100% Construction Documents</b>					
<b>100% Construction Documents</b>	<b>PRINCIPAL</b>	<b>MECHANICAL/ ENGINEER</b>	<b>CLERICAL/ DRAFTING</b>	<b>EXPENSE</b>	<b>TOTAL (\$)</b>
Changes from 95% Incorporated	2.0	4.0	2.0		1,140
Coordination with disciplines and Owner	1.0	2.0			470
Final Specifications Revisions	1.0	1.0	1.0		435
Prepare final documents	2.0	1.0	1.0		635
	<b>6.0</b>	<b>8.0</b>	<b>4.0</b>	<b>\$0</b>	<b>\$2,680</b>
<b>Total CD Project Hours and Fee</b>	<b>61.0</b>	<b>70.0</b>	<b>21.0</b>	<b>1640.0</b>	<b>\$25,390.0</b>
<b>Bidding Phase (estimate)</b>					
<b>BIDDING</b>	<b>PRINCIPAL</b>	<b>ENGINEER</b>	<b>CLERICAL/ DRAFTING</b>	<b>EXPENSE</b>	<b>TOTAL (\$)</b>
Bidding assistance	2.0	4.0			940
Bidding evaluation	4.0	4.0			1,340
	<b>6.0</b>	<b>8.0</b>	<b>0.0</b>	<b>\$0</b>	<b>\$2,280</b>
<b>Phase 4: Construction Administration</b>					
<b>CONSTRUCTION SERVICES</b>	<b>PRINCIPAL</b>	<b>ENGINEER</b>	<b>CLERICAL/ DRAFTING</b>	<b>EXPENSE</b>	<b>TOTAL (\$)</b>
Submittal review	1.0	4.0	1.0		840
Construction coordination	1.0	4.0			740
Meetings with Client and Disciplines	2.0	2.0			670
Final Inspection and report	8.0	2.0	1.0	750	2,720
As-built drawings	1.0	4.0	1.0	70	910
	<b>13.0</b>	<b>16.0</b>	<b>3.0</b>	<b>\$820</b>	<b>\$5,880</b>
<b>Total CA Project Hours and Fee</b>	<b>19.0</b>	<b>24.0</b>	<b>3.0</b>	<b>\$820</b>	<b>\$8,160</b>

**MILLARD +  
ASSOCIATES  
ARCHITECTS LLC**



March 20, 2023

Tyler Bradshaw  
PND Engineers, Inc.  
9360 Glacier Highway, Suite 100  
Juneau, AK 99801

RE: Petersburg Lift Station – Architectural Design Services

Dear Tyler,

Thank you for the opportunity to provide you with a fee proposal for architectural design services for a new addition and the renovation or replacement of the existing 200 sf lift station building and shelter on Nordic Drive in Petersburg, Alaska. The goal of the project is to design a functional, easily maintained building that’s appearance is in character with the residential neighborhood where it is located. The project will be constructed in two phases with the addition completed first, followed by the renovation or replacement of the existing building that houses the generator. The design will be carefully coordinated with you to meet the project requirements and will meet the 2021 International Building Code as adopted by the State of Alaska and other associated applicable codes. The architectural scope of work includes the following:

- Preliminary site visit and review of existing documents and project requirements.
- 65% design development drawing submittal.
- 95% construction drawing and specification submittal.
- 100% construction documents and permitting assistance if requested.
- Bid assistance if requested.
- Construction services (submittal review, answering contractor questions, and substantial completion inspection)

For design through construction services we propose working on an hourly basis for up to \$6,520 for the architectural tasks noted above. A detailed spreadsheet of estimated hours is attached. You will be billed each month only for time expended on the project. If the proposed services are more or less than are required for the project, please let me know and we can modify the scope of work to meet your budget. Feel free to contact me with any questions you may have regarding this proposal.

Sincerely,

Linda Millard, AIA,  
Principal, Millard + Associates Architects LLC

309 Stedman Street  
Ketchikan, Alaska 99901  
Tel: 907.225.7133  
staff@millardarchitects.com

**Petersburg Pump Station No. 4  
Building Addition & Renovation**

Millard + Associates Architects LLC, Ketchikan  
Architectural Services Fee Proposal 3.20.2023

**Architectural Services- Design & Construction**

1. Preliminary Site Visit, Code Analysis, Project Requirements

Architect	\$ 120.00	4	\$	480.00
Tech/Cad	\$ 85.00	0	\$	-
Clerical/Res	\$ 60.00	0	\$	-

2. Design Development Drawings 65% CD & Coordination

Architect	\$ 120.00	8	\$	960.00
Tech/Cad	\$ 85.00	16	\$	1,360.00
Clerical/Res	\$ 60.00	0	\$	-

3. 95% CD Construction Drawings & Specifications

Architect	\$ 120.00	6	\$	720.00
Tech/Cad	\$ 85.00	12	\$	1,020.00
Clerical/Res	\$ 60.00	0	\$	-

4. 100% CD Construction Documents & Permitting

Architect	\$ 120.00	2	\$	240.00
Tech/Cad	\$ 85.00	6	\$	510.00
Clerical/Res	\$ 60.00	0	\$	-

5. Bidding & Construction Services

Architect	\$ 120.00	6	\$	720.00
Tech/Cad	\$ 85.00	6	\$	510.00
Clerical/Res	\$ 60.00	0	\$	-

**\$ 6,520.00 Total**

**Total Architectural Services : \$ 6,520.00**

**Central Southeast Surveyors**  
 David C. Thynes, Alaska R.P.L.S. 10390, Owner  
 P.O. Box 533  
 Petersburg, Alaska  
 99833-0533



February 13, 2023

Tyler Bradshaw, P.E. P.N.D. Senior Engineer

Re: Pump station 4 project - lot 10 block, 234 and lots 3 & 8, block 264 minor subdivision costs proposal.

Tyler,

In regard to our email conversation last week, I have put together this cost proposal.

The following represents lump sum costs for creating the minor subdivisions of lots 10, block 234 of U.S. Survey 1252-A and lots 3 & 8, block 264 of the Northeast Subdivision Plat #69-179, Psg Rec. Dist. as shown on the attachment to the PND email sent 2/9/23.

**Lot 10 Minor Subdivision-**

**Field Work:**

- C.S.S. agrees to install four - 2" aluminum cap monuments on 36"x5/8" diam. rebar at each of the exterior corners of existing lot 10 as required by local code and two additional similar monuments marking the line separating proposed lot 10A from the remainder of the existing lot 10.
- C.S.S. anticipates 6 hours of field work for PLS in charge with one survey tech. Much of the control work is in place, this field work constitutes monument preparation and installation with some additional traversing to verify bearing base alignment.

Total Lump Sum Field Component: \$1,320.00

**Office/Admin. Work:**

C.S.S. anticipates 10 hours of office time for PLS in charge for drafting and deliverables submission, possible P&Z minor subdivision review meeting, borough and state filing. (All borough & state filing/recording/public notice fees. included.)

Total Lump Sum Office Component: \$1,697.00

**Lot 10 Minor Subdivision Lump Sum Total:** **\$3,017.00**

**Lots 3 & 8 Minor Subdivision-****Field Work:**

- C.S.S. agrees to install six 2" aluminum cap monuments on 36"x5/8" diam. rebar at each of the exterior corners of existing lots 3 & 8 as required by local code and three additional monuments marking the lines of subdivision of the respective lots as required by local code.
- C.S.S. anticipates 10 hours of field work for PLS in charge with one survey tech. Much of the control work is in place, this field work constitutes chainsaw brush clearing, monument preparation and installation with some additional traversing to verify bearing base alignment and stake-out control in the forested sections of the lots.

**Total Lump Sum Field Component:** **\$2,200.00**

**Office/Admin. Work:**

C.S.S. anticipates 10 hours of office time for PLS in charge for drafting and deliverables submission, possible P&Z minor subdivision review meeting, borough and state filing. (All borough & state filing/recording/public notice fees. included.)

**Total Lump Sum Office Component:** **\$1,697.00**

**Lots 3 & 8 Minor Subdivision Lump Sum Total:** **\$3,897.00**

*Note: If the Petersburg Borough opts to take care of the local filing fees and/or the District Recorder's filing fees, C.S.S. agrees to subtract the total of those fees from this cost proposal.*

Best Regards,

Dave Thynes R.P.L.S. #10390  
Central Southeast Surveyors



April 14, 2023

192080.04

Mr. Karl Hagerman  
 Utility Director  
 Petersburg Borough  
 P.O. Box 329  
 Petersburg, Alaska 99833

**SUBJECT:** Pump Station No. 4 and Force Main Replacement, Final Design Fee Proposal

Dear Mr. Hagerman,

PND Engineers, Inc. (PND) is pleased to provide this proposal for additional engineering services for the Pump Station No. 4 and Force Main Replacement project. You requested PND provide a fee proposal to perform final design, permitting, survey and platting, and bid and construction phase engineering services based on the selected alternative identified as Alternative A.2.3 in the alternatives analysis memo dated February 15, 2023. The selected alternative includes a new electrical equipment building with a new or remodeled generator addition. The selected alternative has an estimated total project cost of approximately \$3.4M. PND will perform the following additional tasks on the project.

4. **Preliminary Site Visit.** PND and sub consultants will meet on site to confirm scope and preferences and review layout for the selected alternative. We have assumed a single day trip.
5. **Test Pit Investigation.** PB will conduct a test pit investigation and log findings. PND will provide direction on location, depth and log format. PND will provide a summary of findings memo.
6. **65% Design Development.** Submittal will include Plans and Construction Cost Estimate. Assume controls and programming design by RMC Engineering, directly for PB, under separate contract.
7. **95% Final Design.** Submittal will include Plans, Specifications and Construction Cost Estimate.
8. **Bid Ready Documents.** Bid Ready Documents including Plans, Specifications and Construction Cost Estimate in reproduction ready PDF. Assume PB will advertise the bid as appropriate.
9. **Permitting.** PND will secure required permits for the project. We have assumed a USACE nationwide permit with no mitigation.
10. **Survey and Platting.** CSS will survey and provide plat documents and recording services to establish Ramona St. ROW right of way between Lake and Augusta, subdivision and plat (as required) of the lot adjacent to the existing lift station, and additional surveying/platting as required to transfer PB land to a private Owner per PB direction.
11. **Bid Support.** PND will provide bid phase assistance including conducting the prebid conference and developing addenda as needed.
12. **Construction Support.** PND will provide construction phase engineering services. PND has assumed 2 civil site visits, 2 building special inspection site visits, 1 electrical site visit, 1 mechanical site visit and additional inspections for substantial and final completion.

Scope details and individual subtasks are identified on the enclosed fee spreadsheets.

**Fee Proposal.**

We have estimated the fees for this work as summarized in the following table. PND understands that you only intend to proceed with Tasks 1 through 10 at this time. The estimated fees have been subtotaled accordingly.

Cost Summary			
Task	Description	Cost	Fee Method
4	Task 4 Preliminary Site Visit	\$22,415.00	T&E
5	Task 5 Test Pit Investigation	\$3,327.50	T&E
6	Task 6 65% Design Development	\$87,825.00	T&E
7	Task 7 95% Final Design	\$80,507.00	T&E
8	Task 8 Bid Ready Documents	\$25,720.00	T&E
9	Task 9 Permitting	\$16,510.00	T&E
10	Task 10 Survey and Platting	\$9,295.00	T&E
<b>Subtotal Tasks 1-10</b>		<b>\$245,599.50</b>	
11	Task 11 Bid Support	\$12,842.50	T&E
12	Task 12 Construction Phase	\$90,510.40	T&E
<b>Subtotal Tasks 11 and 12</b>		<b>\$103,352.90</b>	
<b>Total Fee Estimate</b>		<b>\$348,952.40</b>	

PND proposes to perform this work for on a time and expenses (T&E) basis. PND will not exceed this fee without written authorization. Enclosed please find a breakdown of the estimated time and fees for the described services.

**Schedule.**

PND and our subconsultants are ready to commence immediately upon receiving written Notice to Proceed. The following schedule is proposed.

Task	Begin	Complete
<b>NTP</b>		May 9, 2023
<b>Preliminary Site Visit</b>		May 11, 2023
<b>Test Pit Investigation</b>		May, 2023
<b>65% Design Development</b>	May 9, 2023	July 14, 2023
<b>PB Review and Meeting</b>		July 21, 2023
<b>Permitting</b>	July 14, 2023	September 15, 2023
<b>95% Final Design</b>	July 21, 2023	September 29, 2023
<b>PB Review and Meeting</b>		October 6, 2023
<b>Survey and Platting</b>	September 15, 2023	October 15, 2023
<b>Bid Ready Documents</b>	October 6, 2023	October 23, 2023
<b>Bid</b>	October 24, 2023	November 21, 2023
<b>Procurement/Construction</b>	Dec. 1, 2023	October 31, 2024



**Closing.**

PND appreciates the opportunity to continue assisting the Petersburg Borough on this important infrastructure project. We look forward to advancing this project with you.

Sincerely,

PND Engineers, Inc. | Juneau Office



Dick Somerville, P.E.  
Vice President



Tyler Bradshaw, P.E.  
Project Manager

Enclosures: PND Fee Proposal (Civil and Structural)  
MEG Fee Proposal (Electrical)  
MM Fee Proposal (Mechanical)  
MA Fee Proposal (Architectural)  
CSS Fee Proposal (Survey)



**PND Engineers, Inc.**  
**Petersburg Borough**  
**Pump Station 4 Final Design, Bid and CA**  
**Engineering Services Fee Proposal**  
**April 14, 2023**

<b>Cost Summary</b>			
<b>Task</b>	<b>Description</b>	<b>Cost</b>	<b>Fee Method</b>
4	Task 4 Preliminary Site Visit	\$22,415.00	T&E
5	Task 5 Test Pit Investigation	\$3,327.50	T&E
6	Task 6 65% Design Development	\$87,825.00	T&E
7	Task 7 95% Final Design	\$80,507.00	T&E
8	Task 8 Bid Ready Documents	\$25,720.00	T&E
9	Task 9 Permitting	\$16,510.00	T&E
10	Task 10 Survey and Platting	\$9,295.00	T&E
	<b>Subtotal Tasks 1-10</b>	<b>\$245,599.50</b>	
11	Task 11 Bid Support	\$12,842.50	T&E
12	Task 12 Construction Phase	\$90,510.40	T&E
	<b>Subtotal Tasks 11 and 12</b>	<b>\$103,352.90</b>	
	<b>Total Fee Estimate</b>	<b>\$348,952.40</b>	



**PND Engineers, Inc.**  
**Petersburg Borough**  
**Pump Station 4 Final Design, Bid and CA**  
**Engineering Services Fee Proposal**  
**April 14, 2023**

Subtask	Description of Services	Senior Engineer VII	Senior Engineer VI	Senior Engineer V	Staff Engineer III	Staff Engineer II	Env. Scientist V	Technician VI	Technician V	CAD Designer VI	CAD Designer V	Line Total	Task Subtotal Costs
		\$235.00	\$220.00	\$200.00	\$130.00	\$120.00	\$180.00	\$157.50	\$137.50	\$137.50	\$125.00		
<b>Task 4 Preliminary Site Visit</b>													
4.1	Project Management: Team Management, correspondence, scheduling, budget controls, invoicing, reports, contract management, clerical.	1	4						2			\$1,390	\$11,800.00
4.2	Final design preliminary coordination, scoping, meetings and fee development	1	16									\$3,755	
4.3	On site coordination and scope site visit preparation and meeting		14	14	2	2				2		\$6,655	
4.4												\$0	
4.5												\$0	
4.6												\$0	
4.7												\$0	
4.8												\$0	
4.9												\$0	
4.10												\$0	
4.11												\$0	
4.12												\$0	
4.13												\$0	
4.14												\$0	
4.15												\$0	
<b>Total Estimated Man-hours</b>		2	34	14	2	2	0	0	2	2	0		
<b>Estimated Third Party Expenses</b>													
		Description									Quantity	Unit Cost	Line Total
<b>Expenses</b>													
Misc.	Reproduction and Misc. Consumables									1	\$50	\$50	
PND Travel	Air fare, round trip, PM and Structural Engineer JNU - PSG									2	\$550	\$1,100	
PND Travel	Lodging, per night									0	\$200	\$0	
PND Travel	Vehicle Rental									0	\$125	\$0	
PND Travel	Per Diem, Days									0	\$86	\$0	
												\$0	
Administrative Fee	Expenses Markup									1	10%	\$115	\$1,265.00
<b>Subcontractor Fees</b>													
Morris Engineering Group	Electrical Engineering Services									1	\$4,870	\$4,870	
Millard and Assoc.	Architectural Design Services									1	\$480	\$480	
Modern Mechanical	Mechanical Engineering Services									1	\$3,150	\$3,150	
										0	\$0	\$0	
Administrative Fee	Subcontractor Markup									1	10%	\$850	\$9,350.00
<b>Task 4 Preliminary Site Visit Total</b>												<b>\$22,415.00</b>	



**PND Engineers, Inc.**  
**Petersburg Borough**  
**Pump Station 4 Final Design, Bid and CA**  
**Engineering Services Fee Proposal**  
**April 14, 2023**

Subtask	Description of Services	Senior Engineer VII	Senior Engineer VI	Senior Engineer V	Staff Engineer III	Staff Engineer II	Env. Scientist V	Technician VI	Technician V	CAD Designer VI	CAD Designer V	Line Total	Task Subtotal Costs	
		\$235.00	\$220.00	\$200.00	\$130.00	\$120.00	\$180.00	\$157.50	\$137.50	\$137.50	\$125.00			
<b>Task 5 Test Pit Investigation</b>														
5.1	Project Management: Team Management, correspondence, scheduling, budget controls, invoicing, reports, contract management, clerical.	1	1						1			\$593	\$3,272.50	
5.2	Investigation preparation and Coordination with PB		6									\$1,320		
5.3	On site test pit investigation - PB performs digging											\$0		
5.4	Findings Memo		4			4						\$1,360		
5.5												\$0		
5.6												\$0		
5.7												\$0		
5.8												\$0		
5.9												\$0		
5.10												\$0		
5.11												\$0		
5.12												\$0		
5.13												\$0		
5.14												\$0		
5.15												\$0		
<b>Total Estimated Man-hours</b>		1	11	0	0	4	0	0	1	0	0			
<b>Estimated Third Party Expenses</b>		<b>Description</b>									<b>Quantity</b>	<b>Unit Cost</b>	<b>Line Total</b>	
<b>Expenses</b>														
Misc.	Reproduction and Misc. Consumables									1	\$50	\$50		
PND Travel	Air fare, round trip, Geotech Technician JNU - PSG									0	\$400	\$0		
PND Travel	Lodging, per night									0	\$200	\$0		
PND Travel	Vehicle Rental									0	\$125	\$0		
PND Travel	Per Diem, Days									0	\$86	\$0		
												\$0		
Administrative Fee	Expenses Markup									1	10%	\$5	\$55.00	
<b>Subcontractor Fees</b>														
Morris Engineering Group	Electrical Engineering Services									0	\$0	\$0		
Millard and Assoc.	Architectural Design Services									0	\$0	\$0		
Modern Mechanical	Mechanical Engineering Services									0	\$0	\$0		
										0	\$0	\$0		
Administrative Fee	Subcontractor Markup									1	10%	\$0	\$0.00	
<b>Task 5 Test Pit Investigation Total</b>													<b>\$3,327.50</b>	



**PND Engineers, Inc.**  
**Petersburg Borough**  
**Pump Station 4 Final Design, Bid and CA**  
**Engineering Services Fee Proposal**  
**April 14, 2023**

Subtask	Description of Services	Senior Engineer VII	Senior Engineer VI	Senior Engineer V	Staff Engineer III	Staff Engineer II	Env. Scientist V	Technician VI	Technician V	CAD Designer VI	CAD Designer V	Line Total	Task Subtotal Costs	
<b>Task 6 65% Design Development</b>														
6.1	Project Management: Team Management, correspondence, scheduling, budget controls, invoicing, reports, contract management, clerical.	4	14						6			\$4,845		
6.2	Team and Client Meetings	1	12	4	8							\$4,715		
6.3	Demolition, disposal and materials salvage plan	1	4	10	10	4				8	6	\$6,745		
6.4	Construction sequencing plan	1	6	2	12					2		\$3,790		
6.5	Pump design, calculations and and mfr. coordination	1	4		12							\$2,675		
6.6	Pump station operations and sequencing	1	2		6					2		\$1,730		
6.7	Lift station layout and site plan		2	2	8	8				8		\$3,940		
6.8	Lift Station and wells design details	1	2		12					8		\$3,335		
6.9	Building structural design		4	16		18					20	\$8,740		
6.10	Shoring structural design	1	4	6		6					8	\$4,035		
6.11	Distribution pipes design, plans and profiles		4		16					8		\$4,060		
6.12	Material quantities computations, bid schedule and cost estimate	1	4	2	8	4				6		\$3,860		
6.13	Design Review Submittal Meeting (Teams)		2	2								\$840		
6.14	Respond to review comments		2	2								\$840		
6.15												\$840	\$54,990.00	
<b>Total Estimated Man-hours</b>		12	66	46	92	40	0	0	6	42	34			
<b>Estimated Third Party Expenses</b>		<b>Description</b>									<b>Quantity</b>	<b>Unit Cost</b>	<b>Line Total</b>	
<b>Expenses</b>														
Misc.	Reproduction and Misc. Consumables									1	\$200	\$200		
PND Travel	Air fare									0	\$400	\$0		
PND Travel	Lodging, per night									0	\$200	\$0		
PND Travel	Vehicle Rental									0	\$125	\$0		
PND Travel	Per Diem, Days									0	\$86	\$0		
												\$0		
Administrative Fee	Expenses Markup									1	10%	\$20	\$220.00	
<b>Subcontractor Fees</b>														
Morris Engineering Group	Electrical Engineering Services									1	\$19,310	\$19,310		
Millard and Assoc.	Architectural Design Services									1	\$2,320	\$2,320		
Modern Mechanical	Mechanical Engineering Services									1	\$8,020	\$8,020		
										0	\$0	\$0		
Administrative Fee	Subcontractor Markup									1	10%	\$2,965	\$32,615.00	
<b>Task 6 65% Design Development Total</b>												<b>\$87,825.00</b>		



**PND Engineers, Inc.**  
**Petersburg Borough**  
**Pump Station 4 Final Design, Bid and CA**  
**Engineering Services Fee Proposal**  
**April 14, 2023**

Subtask	Description of Services	Senior Engineer VII	Senior Engineer VI	Senior Engineer V	Staff Engineer III	Staff Engineer II	Env. Scientist V	Technician VI	Technician V	CAD Designer VI	CAD Designer V	Line Total	Task Subtotal Costs	
		\$235.00	\$220.00	\$200.00	\$130.00	\$120.00	\$180.00	\$157.50	\$137.50	\$137.50	\$125.00			
<b>Task 7 95% Final Design</b>														
7.1	Project Management: Team Management, correspondence, scheduling, budget controls, invoicing, reports, contract management, clerical.	4	14						6				\$4,845	
7.2	Team and Client Meetings	1	12	4	10	2							\$5,215	
7.3	Demolition, disposal and materials salvage plan		2	4	6	6				2	2		\$3,265	
7.4	Construction sequencing plan	1	6	2	6					4			\$3,285	
7.5	Pump design, calculations and and mfr. coordination		2		4								\$960	
7.6	Pump station operations and sequencing	1	2		4					2			\$1,470	
7.7	Lift station layout and site plan		2		8					6			\$2,305	
7.8	Lift Station and wells design details		2		8					6			\$2,305	
7.9	Building structural design		2	10		12					16		\$5,880	
7.10	Shoring structural design	1	2	4		4					6		\$2,705	
7.11	Distribution pipes design, plans and profiles		2		10					8			\$2,840	
7.12	Material quantities computations, bid schedule and cost estimate		2	2	6	4				6	2		\$3,175	
7.13	Special provisions and technical specifications	2	8	6	10	8							\$5,690	
7.14	On site design review submittal meeting		18	18									\$7,560	
7.15	Respond to review comments		2	2						2			\$1,115	
<b>Total Estimated Man-hours</b>		10	78	52	72	36	0	0	6	36	26		\$52,615.00	
<b>Estimated Third Party Expenses</b>		<b>Description</b>									<b>Quantity</b>	<b>Unit Cost</b>	<b>Line Total</b>	
<b>Expenses</b>														
Misc.	Reproduction and Misc. Consumables									1	\$200		\$200	
PND Travel	Air fare									1	\$400		\$400	
PND Travel	Lodging, per night									1	\$200		\$200	
PND Travel	Vehicle Rental									1	\$125		\$125	
PND Travel	Per Diem, Days									2	\$86		\$172	
													\$0	
Administrative Fee	Expenses Markup									1	10%		\$93	
<b>Subcontractor Fees</b>														
Morris Engineering Group	Electrical Engineering Services									1	\$14,145		\$14,145	
Millard and Assoc.	Architectural Design Services									1	\$1,740		\$1,740	
Modern Mechanical	Mechanical Engineering Services									1	\$8,390		\$8,390	
										0	\$0		\$0	
Administrative Fee	Subcontractor Markup									1	10%		\$2,428	
<b>Task 7 95% Final Design Total</b>													<b>\$80,507.00</b>	



**PND Engineers, Inc.**  
**Petersburg Borough**  
**Pump Station 4 Final Design, Bid and CA**  
**Engineering Services Fee Proposal**  
**April 14, 2023**

Subtask	Description of Services	Senior Engineer VII	Senior Engineer VI	Senior Engineer V	Staff Engineer III	Staff Engineer II	Env. Scientist V	Technician VI	Technician V	CAD Designer VI	CAD Designer V	Line Total	Task Subtotal Costs	
		\$235.00	\$220.00	\$200.00	\$130.00	\$120.00	\$180.00	\$157.50	\$137.50	\$137.50	\$125.00			
<b>Task 8 Bid Ready Documents</b>														
8.1	Project Management: Team Management, correspondence, scheduling, budget controls, invoicing, reports, contract management, clerical.	2	2						2				\$1,185	
8.2	Address all final review comments.		6	4	12	6				12	4		\$6,550	
8.3	Conduct Internal QA Design Audit - plans, specs, calculations, cost estimate, schedule, bid documents, independent final reviews	10	10	2	2	2				2			\$5,725	
8.4	Prepare final stamped bid ready documents		2	2	2	2				4	2		\$2,140	
8.5													\$0	
8.6													\$0	
8.7													\$0	
8.8													\$0	
8.9													\$0	
8.10													\$0	
8.11													\$0	
8.12													\$0	
8.13													\$0	
8.14													\$0	
8.15													\$0	
<b>Total Estimated Man-hours</b>		12	20	8	16	10	0	0	2	18	6		\$15,600.00	
<b>Estimated Third Party Expenses</b>		<b>Description</b>									<b>Quantity</b>	<b>Unit Cost</b>	<b>Line Total</b>	
<b>Expenses</b>														
Misc.	Reproduction and Misc. Consumables									1	\$200		\$200	
PND Travel	Air fare									0	\$400		\$0	
PND Travel	Lodging, per night									0	\$200		\$0	
PND Travel	Vehicle Rental									0	\$125		\$0	
PND Travel	Per Diem, Days									0	\$86		\$0	
													\$0	
Administrative Fee	Expenses Markup									1	10%		\$20	
<b>Subcontractor Fees</b>														
Morris Engineering Group	Electrical Engineering Services									1	\$5,570		\$5,570	
Millard and Assoc.	Architectural Design Services									1	\$750		\$750	
Modern Mechanical	Mechanical Engineering Services									1	\$2,680		\$2,680	
										0	\$0		\$0	
Administrative Fee	Subcontractor Markup									1	10%		\$900	
<b>Task 8 Bid Ready Documents Total</b>													<b>\$25,720.00</b>	



**PND Engineers, Inc.**  
**Petersburg Borough**  
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**Engineering Services Fee Proposal**  
**April 14, 2023**

Subtask	Description of Services	Senior Engineer VII	Senior Engineer VI	Senior Engineer V	Staff Engineer III	Staff Engineer II	Env. Scientist V	Technician VI	Technician V	CAD Designer VI	CAD Designer V	Line Total	Task Subtotal Costs	
<b>Task 9 Permitting</b>														
9.1	Project Management: Team Management, correspondence, scheduling, budget controls, invoicing, reports, contract management, clerical.	1	4						2			\$1,390		
9.2	USACE Nationwide Permit with PCN, assume no mitigation required	1	8				12			4		\$4,705		
9.3	ADEC Wastewater Authorization to Construct		8		20	4	4			8		\$6,660		
9.4	ADEC Wastewater Authorization to Operate		4		4		2					\$1,760		
9.5	Support ADEC Loan EA upon request		4		2		2			2		\$1,775		
9.6												\$0		
9.7												\$0		
9.8												\$0		
9.9												\$0		
9.10												\$0		
9.11												\$0		
9.12												\$0		
9.13												\$0		
9.14												\$0		
9.15												\$0	\$16,290.00	
<b>Total Estimated Man-hours</b>		2	28	0	26	4	20	0	2	14	0			
<b>Estimated Third Party Expenses</b>		<b>Description</b>									<b>Quantity</b>	<b>Unit Cost</b>	<b>Line Total</b>	
<b>Expenses</b>														
Misc.	Reproduction and Misc. Consumables									1	\$200	\$200		
PND Travel	Air fare									0	\$400	\$0		
PND Travel	Lodging, per night									0	\$200	\$0		
PND Travel	Vehicle Rental									0	\$125	\$0		
PND Travel	Per Diem, Days									0	\$86	\$0		
												\$0		
Administrative Fee	Expenses Markup									1	10%	\$20	\$220.00	
<b>Subcontractor Fees</b>														
Morris Engineering Group	Electrical Engineering Services									1	\$0	\$0		
Millard and Assoc.	Architectural Design Services									1	\$0	\$0		
Modern Mechanical	Mechanical Engineering Services									1	\$0	\$0		
										0	\$0	\$0		
Administrative Fee	Subcontractor Markup									1	10%	\$0	\$0.00	
<b>Task 9 Permitting Total</b>												<b>\$16,510.00</b>		





**PND Engineers, Inc.**  
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**Engineering Services Fee Proposal**  
**April 14, 2023**

Subtask	Description of Services	Senior Engineer VII	Senior Engineer VI	Senior Engineer V	Staff Engineer III	Staff Engineer II	Env. Scientist V	Technician VI	Technician V	CAD Designer VI	CAD Designer V	Line Total	Task Subtotal Costs	
		\$235.00	\$220.00	\$200.00	\$130.00	\$120.00	\$180.00	\$157.50	\$137.50	\$137.50	\$125.00			
<b>Task 10 Survey and Platting</b>														
10.1	Project Management: Team Management, correspondence, scheduling, budget controls, invoicing, reports, contract management, clerical.		4						2			\$1,155	\$2,585.00	
10.2	Coordinate Survey and Platting		4							4		\$1,430		
10.3												\$0		
10.4												\$0		
10.5												\$0		
10.6												\$0		
10.7												\$0		
10.8												\$0		
10.9												\$0		
10.10												\$0		
10.11												\$0		
10.12												\$0		
10.13												\$0		
10.14												\$0		
10.15												\$0		
<b>Total Estimated Man-hours</b>		0	8	0	0	0	0	0	2	4	0			
<b>Estimated Third Party Expenses</b>		<b>Description</b>									<b>Quantity</b>	<b>Unit Cost</b>	<b>Line Total</b>	
<b>Expenses</b>														
Misc.	Reproduction and Misc. Consumables									1	\$100	\$100		
PND Travel	Air fare									0	\$400	\$0		
PND Travel	Lodging, per night									0	\$200	\$0		
PND Travel	Vehicle Rental									0	\$125	\$0		
PND Travel	Per Diem, Days									0	\$86	\$0		
												\$0		
Administrative Fee	Expenses Markup									1	10%	\$10	\$110.00	
<b>Subcontractor Fees</b>														
Morris Engineering Group	Electrical Engineering Services									1	\$0	\$0		
Millard and Assoc.	Architectural Design Services									1	\$0	\$0		
Modern Mechanical	Mechanical Engineering Services									1	\$0	\$0		
Central Southeast Surveyors	Survey and Platting									1	\$6,000	\$6,000		
Administrative Fee	Subcontractor Markup									1	10%	\$600	\$6,600.00	
<b>Task 10 Survey and Platting Total</b>												<b>\$9,295.00</b>		



**PND Engineers, Inc.**  
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**Engineering Services Fee Proposal**  
**April 14, 2023**

Subtask	Description of Services	Senior Engineer VII	Senior Engineer VI	Senior Engineer V	Staff Engineer III	Staff Engineer II	Env. Scientist V	Technician VI	Technician V	CAD Designer VI	CAD Designer V	Line Total	Task Subtotal Costs
		\$235.00	\$220.00	\$200.00	\$130.00	\$120.00	\$180.00	\$157.50	\$137.50	\$137.50	\$125.00		
<b>Task 11 Bid Support</b>													
11.1	Project Management: Team Management, correspondence, scheduling, budget controls, invoicing, reports, contract management, clerical.	1	1									\$455	\$7,865.00
11.2	Conduct prebid video conference - prepare agenda and minutes		3		4							\$1,180	
11.3	Address bidder questions and prepare addenda responses		4	1	4	1				2	1	\$2,120	
11.4	Prepare stamped, conformed documents.		2	1	2					4	1	\$1,575	
11.5	Final Submittals Preparation: Bind CAD Files, organize specification docs, prepare organize and deliver files.		2	1	2	1				2	1	\$1,420	
11.6	Prepare bid recommendation and bid tabs	1	4									\$1,115	
11.7												\$0	
11.8												\$0	
11.9												\$0	
11.10												\$0	
11.11												\$0	
11.12												\$0	
11.13												\$0	
11.14												\$0	
11.15												\$0	
<b>Total Estimated Man-hours</b>		2	16	3	12	2	0	0	0	8	3		
<b>Estimated Third Party Expenses</b>		<b>Description</b>									<b>Quantity</b>	<b>Unit Cost</b>	<b>Line Total</b>
<b>Expenses</b>													
Misc.	Reproduction and Misc. Consumables									1	\$200	\$200	
PND Travel	Air fare									0	\$400	\$0	
PND Travel	Lodging, per night									0	\$200	\$0	
PND Travel	Vehicle Rental									0	\$125	\$0	
PND Travel	Per Diem, Days									0	\$86	\$0	
												\$0	
Administrative Fee	Expenses Markup									1	10%	\$20	\$220.00
<b>Subcontractor Fees</b>													
Morris Engineering Group	Electrical Engineering Services									1	\$1,720	\$1,720	
Millard and Assoc.	Architectural Design Services									1	\$325	\$325	
Modern Mechanical	Mechanical Engineering Services									1	\$2,280	\$2,280	
										0	\$0	\$0	
Administrative Fee	Subcontractor Markup									1	10%	\$433	\$4,757.50
<b>Task 11 Bid Support Total</b>												<b>\$12,842.50</b>	



**PND Engineers, Inc.**  
**Petersburg Borough**  
**Pump Station 4 Final Design, Bid and CA**  
**Engineering Services Fee Proposal**  
**April 14, 2023**

Subtask	Description of Services	Senior Engineer VII	Senior Engineer VI	Senior Engineer V	Staff Engineer III	Staff Engineer II	Env. Scientist V	Technician VI	Technician V	CAD Designer VI	CAD Designer V	Line Total	Task Subtotal Costs
		\$235.00	\$220.00	\$200.00	\$130.00	\$120.00	\$180.00	\$157.50	\$137.50	\$137.50	\$125.00		
<b>Task 12 Construction Phase</b>													
12.1	Project Management: Team Management, correspondence, scheduling, budget controls, invoicing, reports, contract management, clerical.	4	12						2			\$3,855	\$56,285.00
12.2	Attend Preconstruction Meeting (Teams) Prepare, Agenda and Minutes		4	2	2							\$1,540	
12.3	Progress Meetings, Agendas, Minutes		12	6	22							\$6,700	
12.4	Review Submittals		8	4	20	8						\$6,120	
12.5	Respond to RFIs and DC/VRs	1	8	2	6	4				2	2	\$4,180	
12.6	Field design assistance/modifications and COs		8	1	4	1				4	2	\$3,400	
12.7	Construction Observations and Reporting - Assume 4 site visits 2 civil and 2 building special inspections		18	18	18			18				\$12,735	
12.8	Onsite Substantial and Final Inspections		36	18								\$11,520	
12.9	Punch lists and project close out.		6	2	10	2						\$3,260	
12.10	Record Drawings		4		4					6	6	\$2,975	
12.11												\$0	
12.12												\$0	
12.13												\$0	
12.14												\$0	
12.15												\$0	
<b>Total Estimated Man-hours</b>		5	116	53	86	15	0	18	2	12	10		
<b>Estimated Third Party Expenses</b>		<b>Description</b>									<b>Quantity</b>	<b>Unit Cost</b>	<b>Line Total</b>
<b>Expenses</b>													
Misc.	Reproduction and Misc. Consumables									1	\$200	\$200	
PND Travel	Air fare									7	\$400	\$2,800	
PND Travel	Lodging, per night									7	\$200	\$1,400	
PND Travel	Vehicle Rental									6	\$125	\$750	
PND Travel	Per Diem, Days									14	\$86	\$1,204	
												\$0	
Administrative Fee	Expenses Markup									1	10%	\$635	\$6,989.40
<b>Subcontractor Fees</b>													
Morris Engineering Group	Electrical Engineering Services									1	\$17,975	\$17,975	
Millard and Assoc.	Architectural Design Services									1	\$905	\$905	
Modern Mechanical	Mechanical Engineering Services									1	\$5,880	\$5,880	
										0	\$0	\$0	
Administrative Fee	Subcontractor Markup									1	10%	\$2,476	\$27,236.00
<b>Task 12 Construction Phase Total</b>												<b>\$90,510.40</b>	



PO Box 210049, Auke Bay, Alaska 99821, 907-789-3350, email: mark@morrisingengineeringgroup.com

# Fee Estimate

4/14/2023

## Petersburg Lift Station 4 - Professional Services

Scope of Services: 65%, 95%, and Final Design Drawings and Specs for Lift Station. Consists of site visits, meeting with City of Petersburg Wastewater, construction cost estimate, bid phase support, contract administration, submittal reviews, inspection services, and closeout services including as-builts.

<u>Task</u>	<u>Engineer (hrs)</u>	<u>Tech/CAD (hrs)</u>	<u>Expenses</u>
<b>Preliminary Site Visit - 2 Engineers</b>	18		\$1,000
Hourly Rate	\$215	\$135	
Fees	\$3,870	\$0	\$1,000
<b>Subtotal - Preliminary Site Visit</b>	<b>\$4,870</b>		
<b>65% Design for Lift Station</b>			
<b>Services</b>			
Coordination with Utility	1		
Site Plan	4	2	
Rack Elevation with service, genset receptacle	4	2	
Fault Current Calculations	2		
<b>Building Addition</b>			
Wall Elevations	4	2	
Floor Plan	4	2	
<b>Power</b>			
Size pump VFDs	2		
Single Line Diagrams	4	2	
Elevation View of Lift Station	4	2	
<b>Underground Power to Wet Well</b>			
Wet Well Elevation View	4	2	
Conduit & Cable selection & routing	4	2	
Trench Detail	1	1	
<b>Riser Diagrams</b>	4	2	
<b>Project Meetings</b>	4		
<b>Coordination w/ Control Panel Designer</b>	8		
<b>Specifications</b>	8		
<b>Estimate</b>	8		
<b>65% Submittal</b>	4	2	
<b>65% Review Meeting &amp; Changes</b>	2	1	
<b>Hour Totals</b>	<b>76</b>	<b>22</b>	
Hourly Rate	\$215	\$135	
Fees	\$16,340	\$2,970	\$0
<b>Subtotal Fee - 65% Design</b>	<b>\$19,310</b>		



Petersburg LS4 Design

<u>Task</u>	<u>Engineer (hrs)</u>	<u>Tech/CAD (hrs)</u>	<u>Expenses</u>
<b>Bid Phase Assistance</b>	8		
Hourly Rate	<u>\$215</u>	<u>\$135</u>	
Fees	\$1,720	\$0	\$0
<b>Subtotal Fee - Bid Phase Assistance</b>	<b>\$1,720</b>		
<b>Construction Services</b>			
<b>Submittal Reviews</b>	16		
<b>Answering Contractor RFIs</b>	8		
<b>Milestone Inspections Onsite</b>			
Construction	8		\$750
Report	4		
Substantial Completion	8		\$750
Report	4		
Final Completion	8		\$750
Report	4		
<b>As-Built Drawings</b>	10	5	
Hour Totals	70	5	
Hourly Rate	<u>\$215</u>	<u>\$135</u>	
Fees	\$15,050	\$675	\$2,250
<b>Subtotal Fee - Construction Services</b>	<b>\$17,975</b>		
<b>Grand Total Fee - Design &amp; Construction Services</b>	<b>\$63,590</b>		

<b>Morris Engineering Group</b>	<b>MODERN MECHANICAL</b>
P.O. Box 210049	11001 Black Bear Road
Auke Bay, Alaska 99821	Juneau, AK 99801
907 789-3350	cell: 723-9320

MECHANICAL ENGINEERING FEE ESTIMATE for the: **Petersburg Lift Station 4**

Scope Services: 65%, 95%, and Final Design Drawings and specs for lift station. March 24,2022

Cosists of site visit, meetings, construction cost estimate, bid phase support, C/A, submittal reviews and as-builts.

Hourly rates are: Principal \$200/hr, Mechanical Engineer \$135/hr, Clerical Drafter \$100/hr

Preliminary Site Visit/As-Builts	PRINCIPAL	MECHANICAL/ ENGINEER	CLERICAL/ DRAFTING	EXPENSE	TOTAL (\$)
Initial Meeting to Review Requirements	12.0	0.0		\$750	3,150
	<b>12.0</b>	<b>0.0</b>	<b>0.0</b>	<b>\$750</b>	<b>\$3,150</b>

### 65% Construction Documents

65% Construction Documents	PRINCIPAL	MECHANICAL/ ENGINEER	CLERICAL/ DRAFTING	EXPENSE	TOTAL (\$)
Coordination with Utility - Petersburg	1.0	1.0			335
Coordination with Morris	1.0	2.0			470
Integrate necessary codes into design	1.0	2.0			470
On-site as-builts (Basic not in depth)	2.0	4.0	2.0		1,140
Equipment design layout	2.0	4.0	1.0		1,040
Mechanical equipment	1.0	4.0	1.0		840
Relocate or replace louvers	2.0	4.0	1.0		1,040
Remove and reinstall generator with cooling	4.0	4.0	1.0		1,440
Preliminary Cost Estimate	1.0	4.0			740
Coordination	1.0	1.0			335
Print/PDF65% documents			1.0	70	170
	<b>16.0</b>	<b>30.0</b>	<b>7.0</b>	<b>\$70</b>	<b>\$8,020</b>

### 95% Construction Documents

CONSTRUCTION DOCUMENTS	PRINCIPAL	MECHANICAL/ ENGINEER	CLERICAL/ DRAFTING	EXPENSE	TOTAL (\$)
Incorporate 65% review comments	1.0	4.0	2.0		940
Coordination with Disciplines	1.0	2.0			470
Update Drawing format changes	1.0	2.0	1.0		570
Modify design layout	2.0	4.0	1.0		1,040
Sections or diagrams	1.0	4.0	1.0		840
Louver replacement or duct mods	1.0	2.0	1.0		570
Heat Pumps (alternate or base bid?)	1.0	2.0			470
Equipment Schedule	1.0	2.0	1.0		570
Interface/controls/electrical	1.0	2.0			470
Estimate or cost review	2.0	2.0			670
Basic specifications (on drawing)	2.0	4.0	2.0		1,140
Coordination	1.0	2.0			470
Print/PDF95% documents			1.0	70	170
	<b>15.0</b>	<b>32.0</b>	<b>10.0</b>	<b>70.0</b>	<b>\$8,390</b>

### 100% Construction Documents

<b>100% Construction Documents</b>	<b>MECHANICAL/ PRINCIPAL</b>	<b>ENGINEER</b>	<b>CLERICAL/ DRAFTING</b>	<b>EXPENSE</b>	<b>TOTAL (\$)</b>
Changes from 95% Incorporated	2.0	4.0	2.0		1,140
Coordination with disciplines and Owner	1.0	2.0			470
Final Specifications Revisions	1.0	1.0	1.0		435
Prepare final documents	2.0	1.0	1.0		635
	<b>6.0</b>	<b>8.0</b>	<b>4.0</b>	<b>\$0</b>	<b>\$2,680</b>
<b>Total CD Project Hours and Fee</b>	<b>49.0</b>	<b>70.0</b>	<b>21.0</b>	<b>890.0</b>	<b>\$22,240.0</b>

### Bidding Phase (estimate)

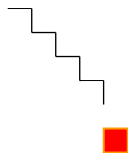
<b>BIDDING</b>	<b>PRINCIPAL</b>	<b>ENGINEER</b>	<b>CLERICAL/ DRAFTING</b>	<b>EXPENSE</b>	<b>TOTAL (\$)</b>
Bidding assistance	2.0	4.0			940
Bidding evaluation	4.0	4.0			1,340
	<b>6.0</b>	<b>8.0</b>	<b>0.0</b>	<b>\$0</b>	<b>\$2,280</b>

### Phase 4: Construction Administration

<b>CONSTRUCTION SERVICES</b>	<b>PRINCIPAL</b>	<b>ENGINEER</b>	<b>CLERICAL/ DRAFTING</b>	<b>EXPENSE</b>	<b>TOTAL (\$)</b>
Submittal review	1.0	4.0	1.0		840
Construction coordination	1.0	4.0			740
Meetings with Client and Disciplines	2.0	2.0			670
Final Inspection and report	8.0	2.0	1.0	750	2,720
As-built drawings	1.0	4.0	1.0	70	910
	<b>13.0</b>	<b>16.0</b>	<b>3.0</b>	<b>\$820</b>	<b>\$5,880</b>
<b>Total CA Project Hours and Fee</b>	<b>19.0</b>	<b>24.0</b>	<b>3.0</b>	<b>\$820</b>	<b>\$8,160</b>



**MILLARD +  
ASSOCIATES  
ARCHITECTS LLC**



March 20, 2023

Tyler Bradshaw  
PND Engineers, Inc.  
9360 Glacier Highway, Suite 100  
Juneau, AK 99801

RE: Petersburg Lift Station – Architectural Design Services

Dear Tyler,

Thank you for the opportunity to provide you with a fee proposal for architectural design services for a new addition and the renovation or replacement of the existing 200 sf lift station building and shelter on Nordic Drive in Petersburg, Alaska. The goal of the project is to design a functional, easily maintained building that's appearance is in character with the residential neighborhood where it is located. The project will be constructed in two phases with the addition completed first, followed by the renovation or replacement of the existing building that houses the generator. The design will be carefully coordinated with you to meet the project requirements and will meet the 2021 International Building Code as adopted by the State of Alaska and other associated applicable codes. The architectural scope of work includes the following:

- Preliminary site visit and review of existing documents and project requirements.
- 65% design development drawing submittal.
- 95% construction drawing and specification submittal.
- 100% construction documents and permitting assistance if requested.
- Bid assistance if requested.
- Construction services (submittal review, answering contractor questions, and substantial completion inspection)

For design through construction services we propose working on an hourly basis for up to \$6,520 for the architectural tasks noted above. A detailed spreadsheet of estimated hours is attached. You will be billed each month only for time expended on the project. If the proposed services are more or less than are required for the project, please let me know and we can modify the scope of work to meet your budget. Feel free to contact me with any questions you may have regarding this proposal.

Sincerely,

Linda Millard, AIA,  
Principal, Millard + Associates Architects LLC

309 Stedman Street  
Ketchikan, Alaska 99901  
Tel: 907.225.7133  
staff@millardarchitects.com

**Petersburg Pump Station No. 4  
Building Addition & Renovation**

Millard + Associates Architects LLC, Ketchikan  
Architectural Services Fee Proposal 3.20.2023

**Architectural Services- Design & Construction**

1. Preliminary Site Visit, Code Analysis, Project Requirements

Architect	\$ 120.00	4	\$	480.00
Tech/Cad	\$ 85.00	0	\$	-
Clerical/Res	\$ 60.00	0	\$	-

2. Design Development Drawings 65% CD & Coordination

Architect	\$ 120.00	8	\$	960.00
Tech/Cad	\$ 85.00	16	\$	1,360.00
Clerical/Res	\$ 60.00	0	\$	-

3. 95% CD Construction Drawings & Specifications

Architect	\$ 120.00	6	\$	720.00
Tech/Cad	\$ 85.00	12	\$	1,020.00
Clerical/Res	\$ 60.00	0	\$	-

4. 100% CD Construction Documents & Permitting

Architect	\$ 120.00	2	\$	240.00
Tech/Cad	\$ 85.00	6	\$	510.00
Clerical/Res	\$ 60.00	0	\$	-

5. Bidding & Construction Services

Architect	\$ 120.00	6	\$	720.00
Tech/Cad	\$ 85.00	6	\$	510.00
Clerical/Res	\$ 60.00	0	\$	-

**\$ 6,520.00 Total**

**Total Architectural Services : \$ 6,520.00**

**Central Southeast Surveyors**  
 David C. Thynes, Alaska R.P.L.S. 10390, Owner  
 P.O. Box 533  
 Petersburg, Alaska  
 99833-0533



February 13, 2023

Tyler Bradshaw, P.E. P.N.D. Senior Engineer

Re: Pump station 4 project - lot 10 block, 234 and lots 3 & 8, block 264 minor subdivision costs proposal.

Tyler,

In regard to our email conversation last week, I have put together this cost proposal.

The following represents lump sum costs for creating the minor subdivisions of lots 10, block 234 of U.S. Survey 1252-A and lots 3 & 8, block 264 of the Northeast Subdivision Plat #69-179, Psg Rec. Dist. as shown on the attachment to the PND email sent 2/9/23.

**Lot 10 Minor Subdivision-**

**Field Work:**

- C.S.S. agrees to install four - 2" aluminum cap monuments on 36"x5/8" diam. rebar at each of the exterior corners of existing lot 10 as required by local code and two additional similar monuments marking the line separating proposed lot 10A from the remainder of the existing lot 10.
- C.S.S. anticipates 6 hours of field work for PLS in charge with one survey tech. Much of the control work is in place, this field work constitutes monument preparation and installation with some additional traversing to verify bearing base alignment.

Total Lump Sum Field Component: \$1,320.00

**Office/Admin. Work:**

C.S.S. anticipates 10 hours of office time for PLS in charge for drafting and deliverables submission, possible P&Z minor subdivision review meeting, borough and state filing. (All borough & state filing/recording/public notice fees. included.)

Total Lump Sum Office Component: \$1,697.00

**Lot 10 Minor Subdivision Lump Sum Total:** **\$3,017.00**

**Lots 3 & 8 Minor Subdivision-****Field Work:**

- C.S.S. agrees to install six 2" aluminum cap monuments on 36"x5/8" diam. rebar at each of the exterior corners of existing lots 3 & 8 as required by local code and three additional monuments marking the lines of subdivision of the respective lots as required by local code.
- C.S.S. anticipates 10 hours of field work for PLS in charge with one survey tech. Much of the control work is in place, this field work constitutes chainsaw brush clearing, monument preparation and installation with some additional traversing to verify bearing base alignment and stake-out control in the forested sections of the lots.

**Total Lump Sum Field Component:** **\$2,200.00**

**Office/Admin. Work:**

C.S.S. anticipates 10 hours of office time for PLS in charge for drafting and deliverables submission, possible P&Z minor subdivision review meeting, borough and state filing. (All borough & state filing/recording/public notice fees. included.)

**Total Lump Sum Office Component:** **\$1,697.00**

**Lots 3 & 8 Minor Subdivision Lump Sum Total:** **\$3,897.00**

*Note: If the Petersburg Borough opts to take care of the local filing fees and/or the District Recorder's filing fees, C.S.S. agrees to subtract the total of those fees from this cost proposal.*

Best Regards,

Dave Thynes R.P.L.S. #10390  
Central Southeast Surveyors

# Senator Click Bishop

*Alaska State Legislature, District R*

*Session:*

State Capitol, Room 504  
Juneau, Alaska 99801  
Phone (907) 465-2327  
Toll Free: (800) 336-7383



*Interim:*

1292 Sadler Way  
Fairbanks, Alaska 99701  
Phone: (907) 456-8161  
Toll Free: (800) 336-7383

## SB 132 - Sponsor Statement

### Alaska Education Facilities, Maintenance, and Construction Tax

From 1919-1980, Alaska had an annual employment head tax for the purpose of collecting revenues to fund schools. The tax went through numerous transformations, but it always charged an equal amount to each employed individual. When it was repealed in 1980, the tax was \$10 per person which has the equivalent value of \$38.80 today. This bill proposes a \$30 tax.

Senate Bill 132 proposes to revive the repealed head tax on employed individuals, both resident and nonresident, with income from a source in Alaska. The Alaska Education Facilities, Maintenance, and Construction Tax would collect \$30 from each person employed in the state. The tax would be withheld from an employee's first paycheck each year while self-employed individuals would be required to remit payment to the Alaska Department of Revenue. The tax would be deductible on an individual's federal income tax return.

According to the most recent statistics from the Alaska Department of Labor and Workforce Development and the U.S. Census Bureau, there were approximately 390,465 employed individuals in Alaska in 2021. Roughly 20% of those workers who earn their living in Alaska do not reside here resulting in \$2.7 billion in nonresident income that leaves Alaska's economy each year and, in most cases, gets taxed by a nonresident's home state.

It is estimated that this tax would generate north of \$10 million each year. The revenue collected would be deposited into the state's general fund and accounted for separately and intended to pay for the growing maintenance and construction needs of Alaska's schools.

Please join me in supporting this bill.

WORK DRAFT

WORK DRAFT

WORK DRAFT

33-LS0764A  
Nauman  
4/19/23

**SENATE BILL NO.**

IN THE LEGISLATURE OF THE STATE OF ALASKA

THIRTY-THIRD LEGISLATURE - FIRST SESSION

**BY**

**Introduced:**  
**Referred:**

**A BILL**

**FOR AN ACT ENTITLED**

1 **"An Act imposing an annual educational facilities maintenance and construction tax on**  
2 **net earnings from self-employment and wages; relating to the administration and**  
3 **enforcement of the educational facilities maintenance and construction tax; and**  
4 **providing for an effective date."**

5 **BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF ALASKA:**

6 **\* Section 1.** AS 23.05.060 is amended to read:

7 **Sec. 23.05.060. Powers of the department.** The department may

8 (1) enforce all state labor laws;

9 (2) act as mediator and appoint deputy commissioners of conciliation  
10 in labor disputes whenever it considers the interest of industrial peace requires it;

11 (3) make investigations and collect and compile statistical information  
12 concerning the conditions of labor generally and on [UPON] all matters relating to the  
13 enforcement of this chapter;

14 (4) institute court proceedings against an employer of labor without

1 cost to the employee when it is satisfied that the employer has failed to pay an  
2 employee an amount due by contract;

3 (5) issue cease and desist orders and other orders and regulations  
4 necessary for the enforcement of state labor laws;

5 (6) in accordance with AS 37.07 (the Executive Budget Act), receive  
6 and spend money derived from agreements with local governments, nongovernmental  
7 organizations, or other persons;

8 (7) if requested under AS 43.45.021(e), collect or coordinate  
9 collection and reporting of the educational facilities maintenance and  
10 construction tax.

11 \* **Sec. 2.** AS 43 is amended by adding a new chapter to read:

12 **Chapter 45. Educational Facilities Maintenance and Construction Tax.**

13 **Sec. 43.45.011. Tax imposed.** (a) A tax of \$30 is imposed on wages and on net  
14 earnings from self-employment of every

15 (1) resident individual; and

16 (2) nonresident and part-year resident individual with income from a  
17 source in the state.

18 (b) For purposes of (a) of this section, the wages and the net earnings from  
19 self-employment of a

20 (1) resident are the total annual wages and the net earnings from self-  
21 employment of the resident;

22 (2) nonresident or part-year resident are the annual wages and the net  
23 earnings from self-employment of the nonresident or part-year resident that are  
24 attributable to a source in the state.

25 **Sec. 43.45.021. Collection of tax by employer.** (a) An employer shall deduct  
26 and withhold the tax due under AS 43.45.011 from an employee's wages subject to  
27 withholding under 26 U.S.C. 3401 - 3406 from the first regular payroll of the calendar  
28 year. If the employee's first payroll is insufficient to cover the tax due, the employer  
29 shall continue to deduct and withhold from subsequent payrolls until the tax due under  
30 this chapter is fully withheld. The employer shall withhold any outstanding amount of  
31 tax due under AS 43.45.011 from the final regular payroll of the calendar year.

1 (b) An employer is liable for the tax required to be withheld from an employee  
 2 unless the employer can demonstrate that the employer relied on proof provided by the  
 3 employee that the total tax for the calendar year imposed under AS 43.45.011 had  
 4 already been withheld under this section or paid under AS 43.45.031. A deduction of  
 5 the tax may not be made from the wages of an individual who provides proof to the  
 6 employer that the entire tax imposed under AS 43.45.011 on that individual for the  
 7 calendar year has already been withheld or paid under AS 43.45.031. The department  
 8 may impose a civil penalty on an employer in an amount up to five times the amount  
 9 of tax due from employees but not remitted to the department. The penalty shall be  
 10 imposed in the manner provided by AS 43.05.245.

11 (c) Tax withheld by an employer becomes due and shall be paid by an  
 12 employer to the department in accordance with regulations adopted by the department.

13 (d) An employer shall maintain a record of the amount deducted from the  
 14 wages of each employee and shall furnish an annual statement of the deductions to  
 15 each employee and to the department in accordance with regulations adopted by the  
 16 department.

17 (e) The department shall, if it will result in cost savings for the state in the  
 18 administration of the tax, for employers in the administration of the tax, or for both,  
 19 coordinate collection and reporting of the tax imposed in this chapter with the  
 20 collection and reporting of employment security contributions by the Department of  
 21 Labor and Workforce Development, including requesting that the Department of  
 22 Labor and Workforce Development collect the tax payments and remit them to the  
 23 department.

24 **Sec. 43.45.031. Payment of tax by self-employed individual.** A self-  
 25 employed individual shall remit to the department the tax due under AS 43.45.011 in  
 26 accordance with regulations adopted by the department.

27 **Sec. 43.45.041. Refund of overpayments.** (a) If an individual pays to the  
 28 department, directly or through withholding by an employer, an amount exceeding the  
 29 total tax imposed under this chapter during a calendar year and the individual applies  
 30 for a refund in accordance with regulations adopted by the department, the department  
 31 shall refund the overpayment to the individual.



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(b) Interest on an overpayment may not be allowed under AS 43.05.280 if the department refunds the overpayment within 90 days after the date the individual correctly files the refund claim.

(c) The department may adopt regulations to coordinate refunds of overpayments under this section with refunds of employment security contributions under AS 23.20.165.

(d) An individual may apply for a refund under this section only during the calendar year immediately following the calendar year in which the excess was paid.

**Sec. 43.45.051. Report of payments to self-employed individuals.** A person required to report a payment to a self-employed individual to the federal government under 26 U.S.C. shall also report that payment to the department in accordance with regulations adopted by the department.

**Sec. 43.45.061. Disposition of tax proceeds.** (a) The tax and penalties collected by the department under this chapter shall be deposited into the general fund and accounted for separately.

(b) The legislature may appropriate the estimated amounts to be collected and separately accounted for under (a) of this section into the educational facilities maintenance and construction fund established under AS 37.05.560. Nothing in this section creates a dedicated fund.

**Sec. 43.45.099. Definitions.** In this chapter,  
(1) "employee" has the meaning given in 26 U.S.C. 3401, as that section read on January 1, 2023;  
(2) "employer" has the meaning given in 26 U.S.C. 3401, as that section read on January 1, 2023;  
(3) "net earnings from self-employment" has the meaning given in 26 U.S.C. 1402, as that section read on January 1, 2023;  
(4) "wages" has the meaning given in 26 U.S.C. 3401, as that section read on January 1, 2023.

\* **Sec. 3.** The uncodified law of the State of Alaska is amended by adding a new section to read:

REGULATIONS. The Department of Revenue may adopt regulations to implement

1 sec. 2 of this Act. The regulations take effect under AS 44.62 (Administrative Procedure Act),  
2 but not before the effective date of sec. 2 of this Act.

3 \* **Sec. 4.** Section 3 of this Act takes effect immediately under AS 01.10.070(c).

4 \* **Sec. 5.** Except as provided in sec. 4 of this Act, this Act takes effect January 1, 2024.



US Army Corps  
of Engineers  
Alaska District

Regulatory Division (1145)  
CEPOA-RD  
Post Office Box 6898  
JBER, Alaska 99506-0898

# Public Notice of Application for Permit

<b>PUBLIC NOTICE DATE:</b>	<b>April 13, 2023</b>
<b>EXPIRATION DATE:</b>	<b>May 15, 2023</b>
<b>REFERENCE NUMBER:</b>	<b>POA-2023-00127</b>
<b>WATERWAY:</b>	<b>Unnamed Stream</b>

Interested parties are hereby notified that a Department of the Army permit application has been received for work in waters of the United States as described below and shown on the enclosed project drawings.

All comments regarding this public notice should be sent to the address noted above. If you desire to submit your comments by email, you should send it to the project manager's email as listed below or to [regpagemaster@usace.army.mil](mailto:regpagemaster@usace.army.mil). All comments should include the public notice reference number listed above.

All comments should reach this office no later than the expiration date of this public notice to become part of the record and be considered in the decision. Please contact Roberta Budnik at (907) 753-2785, toll free from within Alaska at (800) 478-2712, or by email at [roberta.k.budnik@usace.army.mil](mailto:roberta.k.budnik@usace.army.mil) if further information is desired concerning this public notice.

**APPLICANT:** Mr. Christian Buschmann, P.O. Box 898, Petersburg, Alaska 99833

**AGENT:** Mr. Rick Braun, P.O. Box 211, Petersburg, Alaska 99833

**LOCATION:** The project site is located at Latitude 56.7888° N., Longitude 132.9574° W.; 1141 feet east of 300 Airport Bypass Road, in Petersburg, Alaska.

**PURPOSE:** The applicant's stated purpose is to construct roadway access and utilities for a residential and fishing storage development, as well as construct pads for vacation rental cabins, a private residence, and a fishing gear storage warehouse and shed.

**PROPOSED WORK:** Discharge up to 25,800 cubic yards of shot rock fill material into a total of 3.14 acres of wetlands in order to construct a road and two building pads. The road would be 1,250 feet long with a top width of 17 feet and a bottom width varying from 30 to 40 feet wide. Within the road, a 6-inch diameter HDPE waterline would be placed. Power poles would be placed along the road for above ground power utilities. Up to a total of 2.7 cubic yards of crushed rock would be placed with nine poles for stabilization. An approximately 194 foot long by 87 foot wide fill pad would be constructed on the south side of the road for the construction of four vacation rental cabins. At the end of the road, an approximately 400 foot long by 100 foot wide fill pad would be constructed for the applicant's residence, warehouse, and shed. At the north end of this pad, the northwest corner would be extended for the house (see project drawings for dimensions). To construct the proposed road and fill pads which will house the water line, four to eight feet of muskeg overlaying hard pan clay would be removed and replaced with shot rock. For those filled areas which do not house the water line, soil stabilizing fabric would be placed over the muskeg and up to three feet of shot rock would be placed on top of the fabric. The road would cross four streams and culverts would be installed for each crossing. Each culvert would be approximately 46 foot long and width would vary depending on the width of the stream. The inlets and outlets of the culverts would have riprap stream channel liners installed within the footprint of the road dimensions. All work would be performed in accordance with the enclosed plan (sheets 1-5), dated March 2023.

**ADDITIONAL INFORMATION:** The proposed project would require building permits from the Petersburg Borough.

**APPLICANT PROPOSED MITIGATION:** The applicant proposes the following mitigation measures to avoid, minimize, and compensate for impacts to waters of the United States from activities involving discharges of dredged or fill material.

- a. Avoidance: The entire parcel owned by the applicant is wetlands, making impacts to wetlands unavoidable.
- b. Minimization: The roadway location was chosen in order to access the desired area for vacation rental cabins and the residential site as well as to minimize the roadway grade. The roadway has been designed to be a single lane in order to minimize the project footprint. Silt fences and straw bales would be used to minimize impacts to wetland areas adjacent to the project footprint. No refueling of equipment would be done on-site to minimize potential contamination of surrounding wetlands.
- c. Compensatory Mitigation: The applicant states the following in their permit application, "Compensatory mitigation has not been required for residential development in Petersburg in the past. Public projects such as Petersburg's Fire Hall, have been required to provide compensatory mitigation. Since governmental agencies often own large amounts of land and have greater monetary resources, it is not a great burden for them. These agencies can compensate for the impacted wetlands with other wetlands they own or purchase conservation easements with their money. It is a much greater burden for private residential developers to set aside land for compensation. For this reason, compensatory mitigation should not be required for this project."

WATER QUALITY CERTIFICATION: A permit for the described work will not be issued until a certification or waiver of certification, as required under Section 401 of the Clean Water Act (Public Law 95-217), has been received from the Alaska Department of Environmental Conservation.

CULTURAL RESOURCES: The latest published version of the Alaska Heritage Resources Survey (AHRS), including the document repository, has been consulted for the presence or absence of historic properties, including those listed in or eligible for inclusion in the National Register of Historic Places. There are no known cultural resources in the permit area or within the vicinity of the permit area. The permit area has been determined to be the proposed project footprint within waters of the U.S., including wetlands, and those areas immediately adjacent to the project footprint. Consultation of the AHRS constitutes the extent of cultural resource investigations by the U.S. Army Corps of Engineers (Corps) at this time, and we are otherwise unaware of the presence of such resources. The Corps has made a No Historic Properties Affected (No Effect) determination for the proposed project. This application is being coordinated with the State Historic Preservation Office (SHPO), Federally recognized Tribes, and other consulting parties. Any comments SHPO, Federally recognized Tribes, and other consulting parties may have concerning presently unknown archeological or historic data that may be lost or destroyed by work under the requested permit will be considered in our final assessment of the described work. The Corps is requesting the SHPO's concurrence with this determination.

ENDANGERED SPECIES: No threatened or endangered species are known to use the project area. As such, we have determined the described activity would have no effect on any listed or proposed threatened or endangered species and would have no effect on any designated or proposed critical habitat, under the Endangered Species Act of 1973 (87 Stat. 844). Therefore, no consultation with the U.S. Fish and Wildlife Service or the National Marine Fisheries Service (NMFS) is required. However, any comments they may have concerning endangered or threatened wildlife or plants or their critical habitat will be considered in our final assessment of the described work.

ESSENTIAL FISH HABITAT: The Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act), as amended by the Sustainable Fisheries Act of 1996, requires all Federal agencies to consult with the NMFS on all actions, or proposed actions, permitted, funded, or undertaken by the agency, that may adversely affect Essential Fish Habitat (EFH). The project area is not within mapped EFH. As such, we have determined the described activity would not adversely affect EFH in the project area and consultation with NMFS is not required. However, any comments or recommendations they may have concerning EFH will be considered in our final assessment of the described work.

TRIBAL CONSULTATION: The Corps fully supports tribal self-governance and government-to-government relations between Federally recognized Tribes and the Federal Government. Tribes with protected rights or resources that could be significantly affected by a proposed Federal action (e.g., a permit decision) have the right to consult with the Corps, Alaska District, on a government-to-government basis. Views of each Tribe regarding protected rights and resources will be accorded due consideration in this process. This public notice serves as

notification to the Tribes within the area potentially affected by the proposed work and invites their participation in the Federal decision-making process regarding the protected Tribal rights or resources. Consultation may be initiated by the affected Tribe upon written request to the District Commander during the public comment period.

PUBLIC HEARING: Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider this application. Requests for public hearings shall state, with particularity, reasons for holding a public hearing.

EVALUATION: The decision whether to issue a permit will be based on an evaluation of the probable impacts, including cumulative impacts of the proposed activity and its intended use on the public interest. Evaluation of the probable impacts, which the proposed activity may have on the public interest, requires a careful weighing of all the factors that become relevant in each particular case. The benefits, which reasonably may be expected to accrue from the proposal, must be balanced against its reasonably foreseeable detriments. The outcome of the general balancing process would determine whether to authorize a proposal, and if so, the conditions under which it will be allowed to occur. The decision should reflect the national concern for both protection and utilization of important resources. All factors, which may be relevant to the proposal, must be considered including the cumulative effects thereof. Among those are conservation, economics, aesthetics, general environmental concerns, wetlands, cultural values, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shore erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership, and, in general, the needs and welfare of the people. For activities involving 404 discharges, a permit will be denied if the discharge that would be authorized by such permit would not comply with the Environmental Protection Agency's 404(b)(1) guidelines. Subject to the preceding sentence and any other applicable guidelines or criteria (see Sections 320.2 and 320.3), a permit will be granted unless the District Commander determines that it would be contrary to the public interest.

The Corps is soliciting comments from the public; Federal, state, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

AUTHORITY: This permit will be issued or denied under the following authority:

(X) Discharge dredged or fill material into waters of the United States – Section 404 Clean Water Act (33 U.S.C. 1344). Therefore, our public interest review will consider the guidelines set forth under Section 404(b) of the Clean Water Act (40 CFR 230).

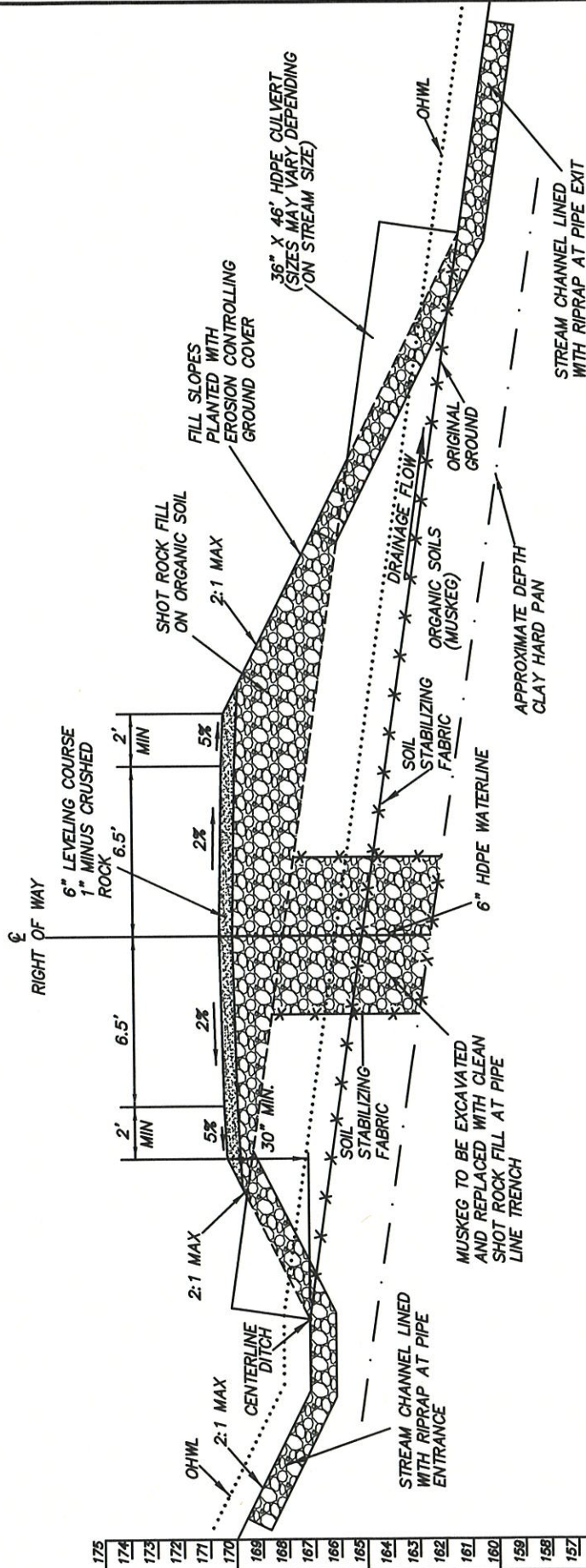
Project drawings are enclosed with this public notice.

District Commander  
U.S. Army, Corps

Enclosure







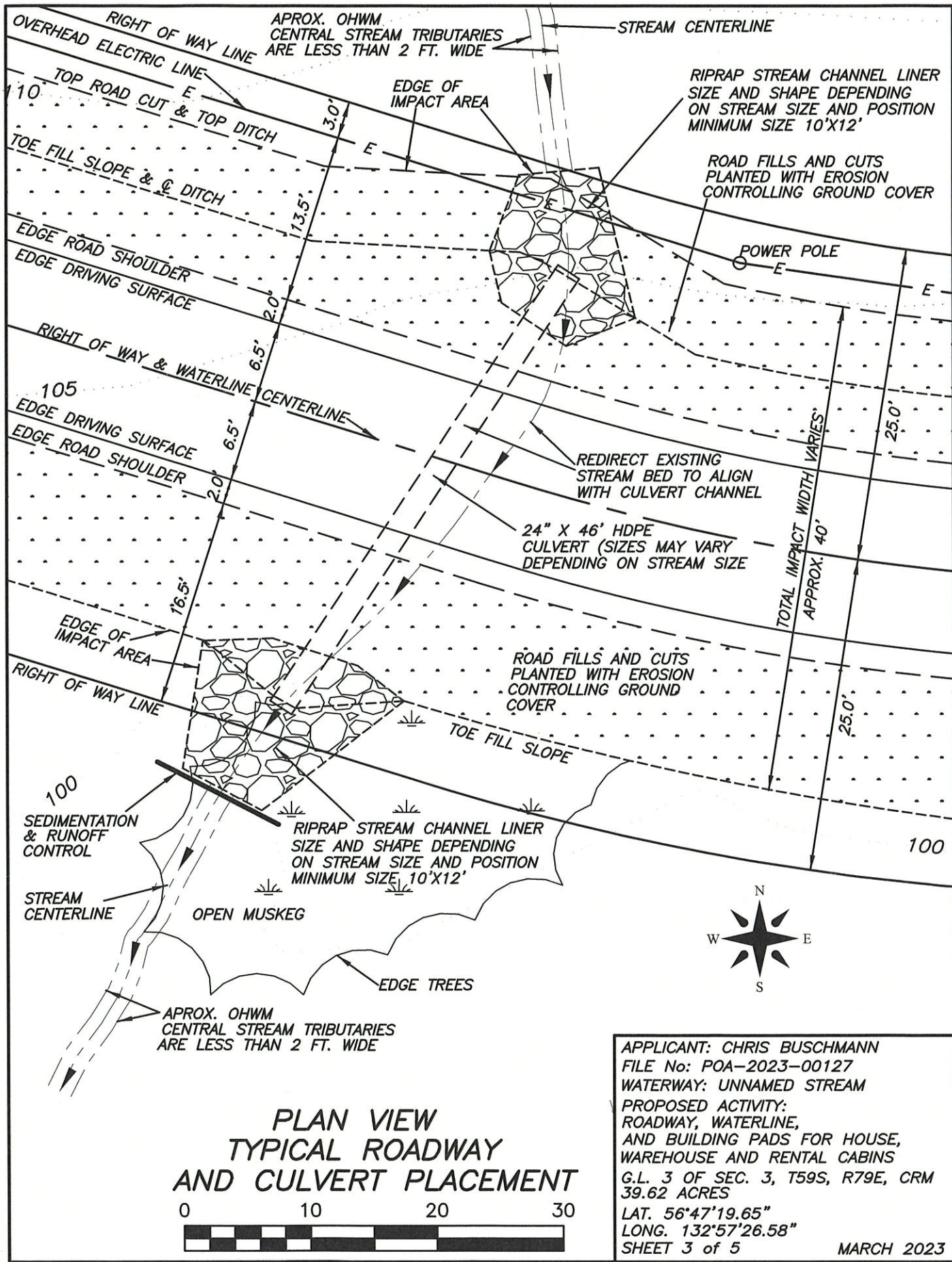
**SECTION A-A  
TYPICAL ROAD AND CULVERT SECTION**

STATE OF ALASKA  
 PETERSBURG BOROUGH  
 300 AIRPORT BYPASS ROAD

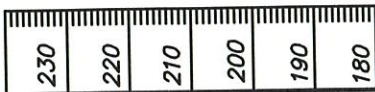
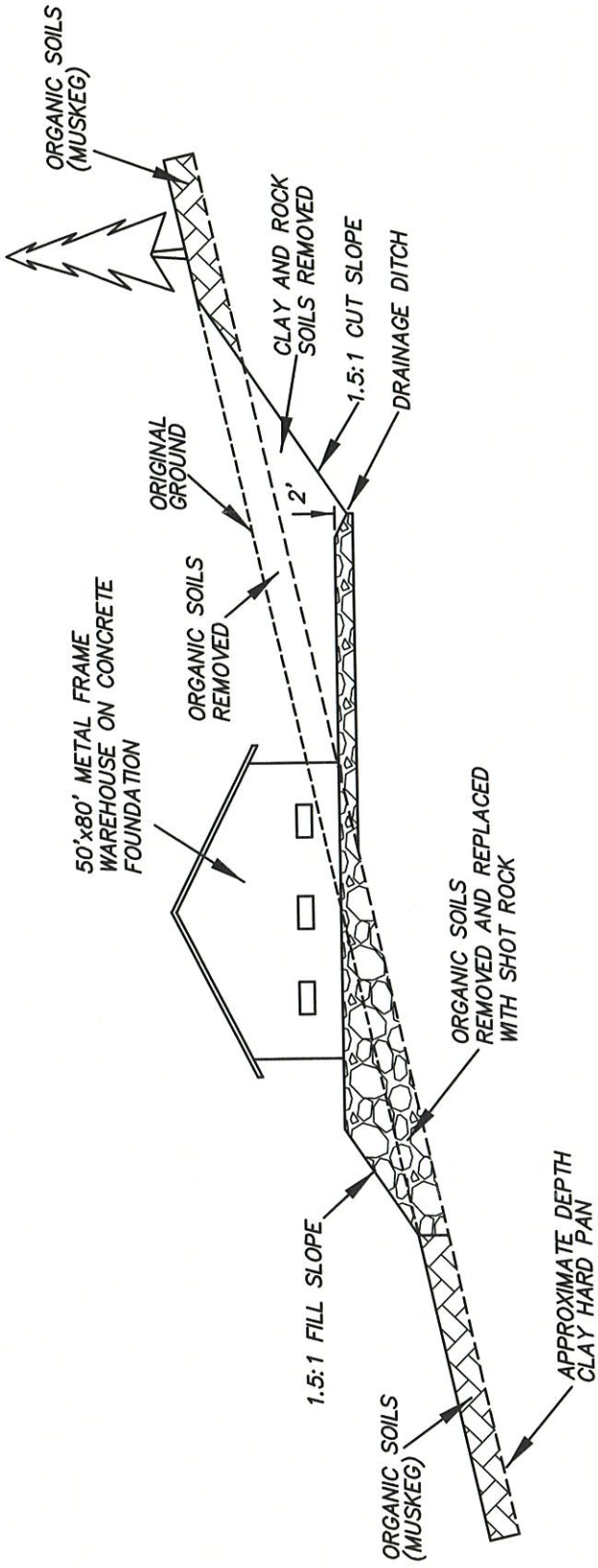
DIRECTIONS TO SITE: AT MILE 2.5 MITKOF HIGHWAY, TURN EAST ONTO HUNGERFORD HILL ROAD. DRIVE EAST FOR 0.15 MILES AND THEN NORTH FOR 0.12 MILES TO THE INTERSECTION OF HUNGERFORD HILL ROAD AND THE AIRPORT BYPASS ROAD. DRIVE 0.40 MILES ALONG THE BYPASS ROAD. THE PROJECT IS ON THE EAST SIDE OF THE ROAD AND 1141 FEET EAST.

APPLICANT: CHRIS BUSCHMANN  
 FILE No: POA-2023-00127  
 WATERWAY: UNNAMED STREAM  
 PROPOSED ACTIVITY:  
 ROADWAY, WATERLINE,  
 AND BUILDING PADS FOR HOUSE,  
 WAREHOUSE AND RENTAL CABINS  
 G.L. 3 OF SEC. 3, T59S, R79E, CRM  
 39.62 ACRES  
 LAT. 56°47'19.65"  
 LONG. 132°57'26.58"  
 SHEET 2 of 5





**PLAN VIEW  
 TYPICAL ROADWAY  
 AND CULVERT PLACEMENT**

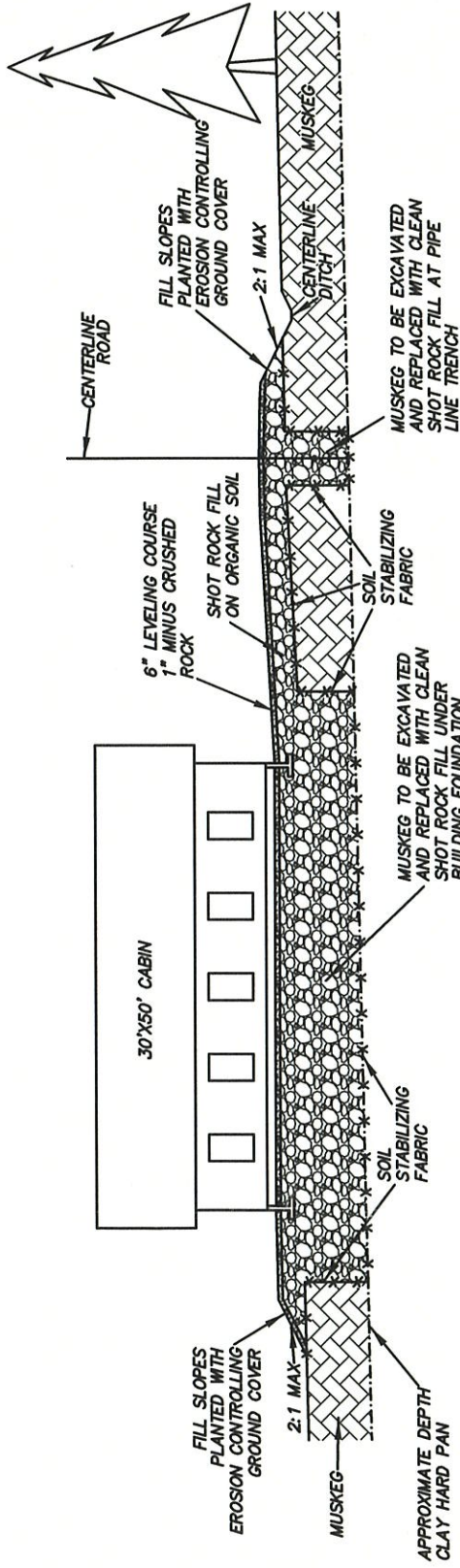
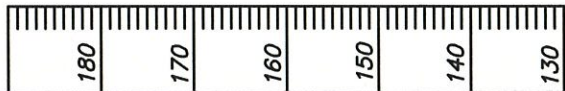


### SECTION B-B



APPLICANT: CHRIS BUSCHMANN  
 FILE No: POA-2023-00127  
 WATERWAY: UNNAMED STREAM  
 PROPOSED ACTIVITY:  
 ROADWAY, WATERLINE,  
 AND BUILDING PADS FOR HOUSE,  
 WAREHOUSE AND RENTAL CABINS  
 G.L. 3 OF SEC. 3, T59S, R79E, CRM  
 39.62 ACRES  
 LAT. 56°47'19.65"  
 LONG. 132°57'26.58"  
 SHEET 4 of 5

MARCH 2023



# SECTION C-C



APPLICANT: CHRIS BUSCHMANN  
 FILE No: POA-2023-00127  
 WATERWAY: UNNAMED STREAM  
 PROPOSED ACTIVITY:  
 ROADWAY, WATERLINE,  
 AND BUILDING PADS FOR HOUSE,  
 WAREHOUSE AND RENTAL CABINS  
 G.L. 3 OF SEC. 3, T59S, R79E, CRM  
 39.62 ACRES  
 LAT. 56°47'19.65"  
 LONG. 132°57'26.58"  
 SHEET 5 of 5

MARCH 2023

**Debra Thompson**

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**From:** Christine Slaght <christine\_slaght@icloud.com>  
**Sent:** Tuesday, April 18, 2023 12:23 PM  
**To:** Assembly  
**Subject:** Molly parks Marie Giesbrecht death investigation

Dear Petersburg Assembly Members,

Please enact a third party independent investigation into the deaths of Ms. Molly Parks and Marie Giesbrecht, and the Petersburg City Borough's direct involvement. There are key details missing from the Petersburg Pilot and KFSK news articles that are necessary for the general public and The State of Alaska to fully understand and address. There seems to be a snowball effect of careless daily decisions made by the Petersburg Parks and Recreation director of the time that ultimately caused the deaths of these two young women. More upsettingly, the borough refused discussion with the parents of these girls further on, suggesting cover-up. Please, give the families of these girls the closure that they deserve, and bring the responsible party, (the borough) to the justice that is long overdue.

Sincerely,

-Christine Slaght

Sent from my iPhone

**Debra Thompson**

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**From:** Patricia Moulton <bmoulton@gci.net>  
**Sent:** Wednesday, April 19, 2023 7:05 AM  
**To:** Assembly  
**Subject:** Unleashed Dogs

It has become an ongoing problem with unleashed dogs out by themselves or with there owners. When responsible dog owners walk their dogs on a leash and run into the dogs that aren't leashed sometimes it results in a horrific confrontation and attack! Responsible dog owners that pick up the poop do not want to pick up the poop from dogs they don't own! Taking walks around town it is really disgusting all the dog poop on sidewalks and the streets-There is a leash law in Petersburg and it needs to be enforced for safety. I'm assured that the Assembly Members will take action on this ongoing problem- Thank you,  
Patricia Moulton

Sent from my iPhone

**Debra Thompson**

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**From:** Mark Tuccillo <drt@rescue-doc.net>  
**Sent:** Saturday, April 22, 2023 3:12 PM  
**To:** Assembly  
**Subject:** July 4th 2016

To the Assembly;

This email is written in support of RD and Madonna Parks. As you are surely aware they suffered a tragic loss as a result of a single vehicle event which resulted in to fatalities. I was directly involved in the initial events. The circumstances that lead to this event were unexplainable at the time and, to best of my knowledge have yet to be fully resolved.

RD and Madonna are asking that the assembly revisit this situation. And to that end, I send this letter of support for the same.

Thank you for your rapid attention to this matter and concern for these long term residents of our community.

Mark Tuccillo DO