POMERANZ CONSTRUCTION

BOX 509

NOME, ALASKA 99762

City Of Nome
Nome, Alaska 99762

June 9, 2024

Attn: Planning Commission

Ref: Conditional Use Permit

Commissioners,

The proposed land use of this project has been zoned Commercial. We are applying for this Conditional permit to place 14 single family dwellings and one duplex into this area. Per Chapter 18.10 Matrix of Permitted and conditional uses we will be in a conditional use area. Per that Matrix we clearly fall into those criteria. This area will be used as a residential neighborhood with the possibility of further expansion to the adjacent property owners.

Thank You

Randy Pomeranz
Acting Spokesman for Upper Niukluk LLC

PAID

RECEIVED
JUN 11 2024
CITY OF NOME
CLERKS DEPARTMENT

City of Nome, Alaska
Application for Conditional Use Permit

DATE: 6/10/2024

PERMIT NO. 2024-020

The undersigned hereby applies to the City of Nome for approval of the following conditional use permit to the land as follows as per NCO Title 18, Chapter 120.

Property Owner: Upper Niuklok LLC Phone #: 907-304-1329

Property Address: SunniShine Sub Block Lot 01 and Lot 04 Mailing Address: P.O. Box 509

Legal Description: Block#_____ Lot#_____ Tax ID/Lot # 192.1.040

Plat # _____ U.S. Survey _____ Parcel No. _____

CURRENT ZONE DESIGNATION: (Mark appropriate box)

Residential	Industrial	General Use
Commercial	Resource Development	Open Space/Rec

PROPOSED CONDITIONAL USE: Reference Nome Code of Ordinances – Title 18, Chapter 110 **(Description of Request)**

TO construct 14 single family DWELLings and 1 DUPLEX structure. PER NOME Zoning CODE MATRIX SEC. 18.110 and chapter 18.60.030

Zoning- 18.120.20 NCO – The following process shall apply to conditional permits. The City Clerk shall give notice of the public hearing in the following manner:

a. The City shall send notice of the public hearing to the applicant, all property owners of record within three hundred (300) feet of the property in question no less than fourteen (14) days before the hearing.

b. The referral information shall include the time and place of the public hearing, the nature of the hearing, the location of the subject property, and the applicant's name.

c. The City shall also publish notice in a newspaper of general circulation.

d. The City shall prepare a public hearing notification sign to be posted on the property by the applicant.

e. The hearing may be held no less than fourteen (14) days from the date of property posting and newspaper publication.

f. If the conditional use request is accompanying another application, which is scheduled

for public hearing before the Planning Commission, one public hearing may be held on both applications.

PLEASE NOTE:

Conditional Use Application Submittal.
The applicant shall submit one (1) copy of the complete conditional use application package to the City and shall request that the Planning Commission review the application. **Conditional use request shall include:**

1) Conditional Use Application Form.
2) Written statement and any graphics necessary to describe the precise nature of the proposed use and its operating characteristics and to illustrate how all conditional use review criteria have been satisfied.
3) A map showing the proposed development of the site, including building locations, parking, utilities, and drainage features.
4) Preliminary building plans and elevations sufficient to indicate the dimensions, general appearance, and scale of all buildings.
5) Such additional material as the City may prescribe or the applicant may submit pertinent to the application.

This request will be heard before the **Nome Planning Commission** on June 27, 2024, applicant attendance is required.

CERTIFICATION:

I hereby certify that (I Am) (I have been authorized to act for) the owner of the property described above and that I desire a conditional use permit for this property in conformance with the Title 18 NCO and hereby dispose and say that all of the above statements are true. I am familiar with the code requirements and certify that to the best of my knowledge, belief and professional ability, that this application meets them. I understand that payment of the conditional use fee is non-refundable and it is to cover Costs associated with the processing of this application and that it does not assure approval of the request.

Randy Pomeroy 6/10/24

Signature of Applicant Date

Planning Commission Additional Restriction or Conditions:

_____

_____

_____

_____

A conditional use hearing on this permit was held by the Planning Commission on _____ and this permit was / was not approved.

_____

Chairman, Planning Commission Date

_____

City Clerk's Office Date

Date/Fee Paid: 6/11/24

Receipt No: CR.4.018723

FEE SCHEDULE:

Regular Planning Commission Meeting: $200.00

Special Planning Commission Meeting : $300.00

City of Nome
102 Division St
PO Box 281
Nome AK 99762 (907) 443-6663

Receipt No: 4.018723 Jun 11, 2024

Pomeranz Construction

Misc	
Planning Commission	300.00
Conditional Use Permit	
11.3341.0002	
Variance, Plats, Zoning,Vacant	
Total:	300.00
CHECK-GEN FUND	
Check No: 11392	300.00
Payor:	
Pomeranz Construction	
Total Applied:	300.00
Change Tendered:	.00

Duplicate Copy
06/11/2024 10:30 AM

CONDITIONAL USE APPLICATION CHECKLIST

Conditional Use Permit # 2024-02C

✓ APPLICATION DATE: 06/11/24

✓ MEETING DATE SET: 06/27/24

✓ NEWSPAPER AD: 06/13/24

✓ NOTIFICATION OF APPLICANT 06/13/2024

✓ ADJACENT PROPERTY OWNERS
(Name, address, date cert. notice mailed)

Shane & Dani Smithhisler, Nome, AK, 06/13/24
Raymond Lang, Portland, OR, 06/13/24
James Jacobson, Kodiak, AK, 06/13/24
Alaska Gold Co., Nome, AK, 06/13/24

PC's contacted:	Yes	No	Other
Hughes	Y		
Odden			No Response
Smith	Y		
Piscoya	Y		
Ford	Y		
West	Y		
Lust	Y		

PUT IN PACKET

APPLICATION 06/11/24

DRAWINGS 06/11/24

ASBUILT N/A

ADJACENT PROPERTY LETTER COPIES 06/13/24

Review/Approved

Conditional Use # 2024-02C

18.120.030 Conditional use review criteria.

The city shall use the following criteria to evaluate the applicant’s request:

(a) The conditional use will satisfy all applicable provisions of this title and subdivision regulations unless a variance is being requested.

(b) The conditional use will conform with or further the goals, policies, and strategies set forth in the city comprehensive plan.

(c) The conditional use will be adequately served with public utilities, services, and facilities, if available (i.e., water, sewer, electric, fire protection, storm drainage, etc.), and not impose an undue burden on public utilities, services and facilities above and beyond those of the permitted uses of the district.

(d) The conditional use will not substantially alter the basic character of the district in which it is in or jeopardize the development or redevelopment potential of the district.

(e) The conditional use will result in efficient on- and off-site traffic circulation which will not have a significant adverse impact on the adjacent uses or result in hazardous conditions for pedestrians or vehicles in or adjacent to the site.

(f) Potential negative impacts of the conditional use on the rest of the neighborhood or of the neighborhood on the conditional use have been mitigated through setbacks, architecture, site arrangement, or other methods. The applicant shall satisfactorily address the following impacts:

(1) Traffic;

(2) Activity levels;

(3) Noise;

(4) Building type, style, and scale;

(5) Hours of operation;

(6) Dust;

(7) Erosion control; and

(8) The applicant has submitted evidence that all applicable local, state, and federal permits have been or will be obtained. (Ord. O-08-09-01 § 2 (part), 2008)

Cliff McHenry Date: 6/19/24
Building Inspector

Building Inspector Notes:
Building separations meet current code. Distance to existing property lines good. Distance to Right of Way good. Noted additional fill in progress. Top quality construction
Noted silt fencing at rear of property.

Date: 6/24/24
Nome Joint Utilities

NJU Notes:
The developer has worked closely with NJUS to install utilities as required for a major subdivision, and we have no objection/support the conditional use permit.

Cole Cushman Date: 6/19/24
Public Works

Public Works Notes:
No concerns. Concur with building inspector on high quality of construction.

Date: _____
Nome Volunteer Fire Department Chief

NVFD Notes:

Date: _____
City Clerk

City Clerk Notes:

FINDINGS FROM MEETING on _____ (see conditional use permit for PC findings)

Download 115_66_Lot 1 3 4 of Sunnishine Subdivision shade fill area please.png Previous Next

DEPARTMENT OF THE ARMY
ALASKA DISTRICT, U.S. ARMY CORPS OF ENGINEERS
REGULATORY DIVISION
1046 MARKS ROAD
FORT WAINWRIGHT, AK 99703

June 4, 2024

Regulatory Division
POA-2007-00394

Randy Pomeranz
Upper Niukluk LLC
PO Box 509
Nome, AK 99762

Dear Mr. Pomeranz:

This is in response to your April 9, 2024, request for a Department of the Army (DA) Regional General Permit verification to discharge 20,000 cubic yards of fill into 1.89 acres of palustrine wetlands to build housing across 10 residential lots. The project site is located within Section 25, T. 11 S., R. 34 W., Kateel Meridian; Latitude 64.5123º, Longitude -165.3940º; in Nome, Alaska.

DA authorization is necessary because your project will involve placement of fill material into waters of the U.S. under our regulatory jurisdiction. A Department of the Army General Permit 07, Rural Development, issued on November 28, 2023, authorizes the discharge of dredged and/or fill material into waters of the U.S. for the purpose of constructing and/or expanding building foundation pads, utilities, roads, driveways, and parking areas for residential and community developments. The RGP also authorizes mechanized land clearing and other activities that will result in a re-deposition of dredged material into waters of the U.S.

Based upon the information and plans you provided, we hereby verify that the work described above, which would be performed in accordance with the enclosed plan (sheets 1-3), dated April 17, 2024, is authorized by RGP No. 07, Rural Development, issued on November 28, 2023. RGP-07 and its associated Conditions can be accessed at our website at www.poa.usace.army.mil/Missions/Regulatory/Permits/Regional-General-Permits or, at your request, a paper copy can be provided to you. Please note that the time limit for work authorized under this RGP expires on November 28, 2028. If you will not complete the authorized work by the expiration date, please contact this office for information on a time extension. You must comply with all terms and conditions associated with RGP-07, as well as with the special conditions listed below:

Special Condition 1: The Permittee shall install erosion control measures along the perimeter of all work areas to prevent the displacement of fill material outside the

authorized work area. The erosion control measures shall remain in place and be maintained until all authorized work is completed and the work areas are stabilized. Immediately after completion of the final grading of the land surface, all slopes, land surfaces, and filled areas shall be stabilized using sod, degradable mats, barriers, or a combination of similar stabilizing materials to prevent erosion.

Special Condition 2: The Permittee shall use only clean fill material for this project. The fill material shall be free from items such as trash, debris, automotive parts, asphalt, construction materials, concrete blocks with exposed reinforcement bars, and soils contaminated with any toxic substance, in toxic amounts in accordance with Section 307 of the Clean Water Act.

Special Condition 3: The permittee shall comply with the Federal Endangered Species Act, you must implement all of the mitigating measures identified in the enclosed U.S. Fish and Wildlife Service letter of concurrence (Number FWS 2024-0093369, dated May 23, 2024), including those ascribed to the Corps therein. If you are unable to implement any of these measures, you must immediately notify the Corps, the U.S. Fish and Wildlife Office, and the National Marine Fisheries Service so we may consult as appropriate, prior to initiating the work, in accordance with Federal law.

If changes to the activity are planned, including a change in use of the site, a change in lease or ownership, or additional placement of dredged and/or fill material, please notify this office as soon as possible. We will then confirm that authorization would continue under the general permit, or notify you of any additional requirements and/or authorizations.

Nothing in this letter excuses you from compliance with other Federal, state, or local statutes, ordinances, or regulations.

Please contact me via email at Gwendolyn.A.Jacobson@usace.army.mil, by mail at the address above, or by phone at (907) 347-5802 if you have questions. For additional information about our Regulatory Program, visit our web site at www.poa.usace.army.mil/Missions/Regulatory.

Sincerely,

Gwen Jacobson
Regulatory Specialist

Enclosures

ENCLOSURE

US Army Corps of Engineers
Alaska District

Permit Number: POA-2007-00394

Name of Permittee: Randy Pomeranz, Upper Niukluk LLC

Date of Issuance: June 4, 2024

Upon completion of the activity authorized by this permit and any mitigation required by the permit, sign this certification and return it to Gwen Jacobson at regpagemaster@usace.army.mil, or the following address:

U.S. Army Corps of Engineers
Alaska District
Regulatory Division
1046 Marks Road
Fort Wainwright, AK 99703

Please note that your permitted activity is subject to a compliance inspection by a U.S. Army Corps of Engineers representative. If you fail to comply with this permit you are subject to permit suspension, modification, or revocation.

I hereby certify that the work authorized by the above-referenced permit has been completed in accordance with the terms and conditions of the said permit, and required mitigation was completed in accordance with the permit conditions.

_____ _____

Signature of Permittee Date

United States Department of the Interior

U.S. FISH AND WILDLIFE SERVICE
Northern Alaska Fish and Wildlife Field Office
101 12th Avenue, Room 110
Fairbanks, Alaska 99701

In Reply refer to:
FWS/R7/2024-0093369

May 23, 2024

Gwen Jacobson, Regulatory Specialist
U.S. Army Corp of Engineers
Alaska District Regulatory Division
1046 Marks Road
Fort Wainwright, Alaska 99703

Dear Ms. Jacobson:

Thank you for your email received on April 26, 2024, and the additional information received on May 8, 2024, regarding a Department of the Army permit application submitted by Upper Niukluk LLC (applicant), Bourbon Creek (file number POA-2007-00394), to discharge fill material into palustrine emergent wetlands for a housing development in Nome, Alaska. The U.S. Army Corps of Engineers (USACE) requested informal consultation with the with the U.S. Fish and Wildlife Service (Service) in accordance with section 7 of the Endangered Species Act of 1973, as amended (ESA; 16 U.S.C. 1531 et seq.). The USACE has determined the proposed action may affect, but is not likely to adversely affect polar bears (*Ursus maritimus*), spectacled eiders (*Somateria fischeri*), and the Alaska-breeding population of Steller's eiders (*Polysticta stelleri*).

The applicant proposes to discharge 20,000 cubic yards of fill material into 1.89 acres (0.008 km^2) of palustrine emergent wetlands for the housing development. Construction would occur between June 1 and October 1, 2024 to 2028. The project area is located within Section 25, T. 11 S., R. 34 W., Kateel Meridian; Latitude 64.5123º, Longitude -65.3940º; in Nome, Alaska (Figure 1).

We previously consulted on this project on August 21, 2018 (letter enclosed for reference) for the Department of the Army permit application from Mr. Shane Smithhisler. About 15,000 cubic yards of material was proposed to be used to fill approximately 3 acres (0.012 km^2) of tundra wetlands to construct residential housing units and associated structures. The project was expected to begin in August 2018 and be completed by the end of 2019. We understand that the housing development project was only partially completed (Figure 2), and the USACE is reauthorizing the Department of the Army permit to allow for completion. Your April 26, 2024, request includes more fill material than proposed in the original project description, but the wetland fill area is still within the area previously analyzed in our 2018 letter. Your current request considers effects to spectacled and Steller's eiders (collectively referred to as listed eiders) but those species were not previously considered in the 2018 consultation. Consequently,

this letter amends our August 21, 2018, letter to include the modification of the project dates, and to analyze project effects to listed eiders.

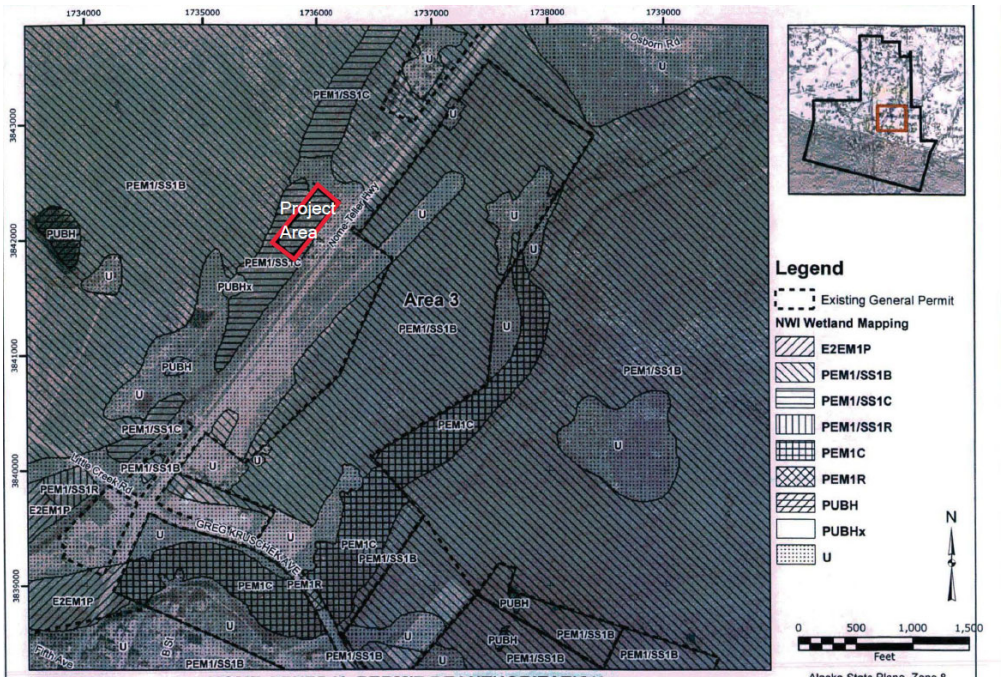


Figure 1. Project area near Nome Teller Highway in Nome, Alaska.

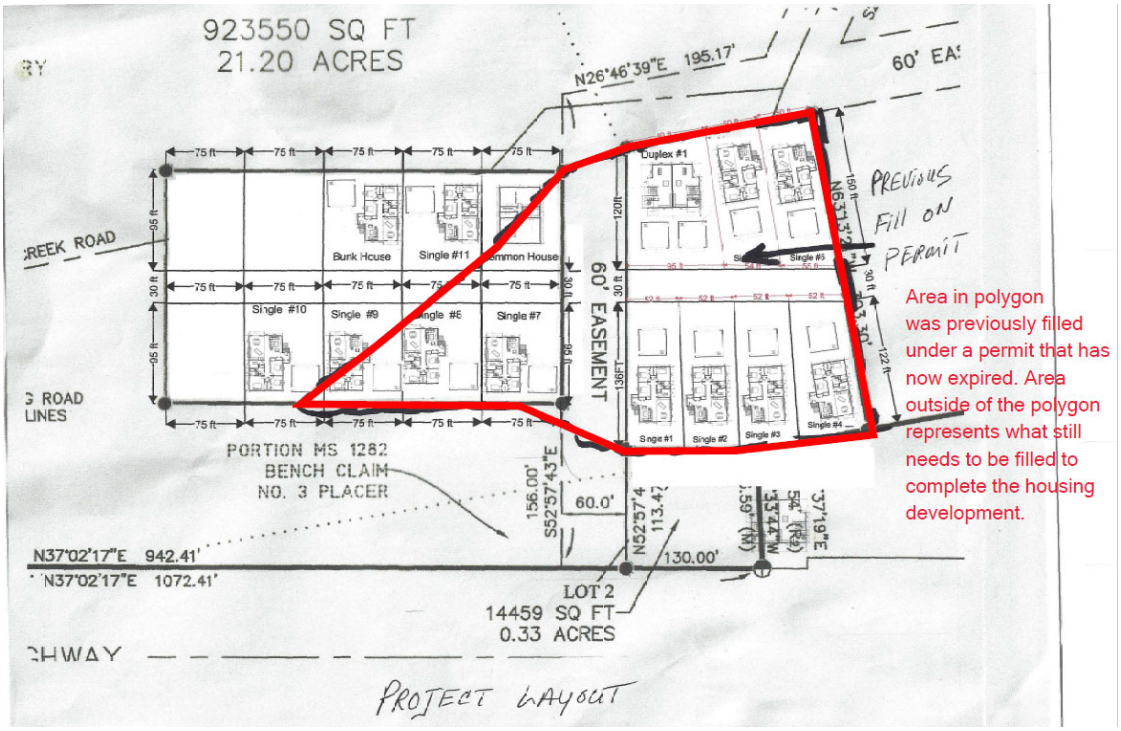


Figure 2. Detailed map of the housing development project indicating the area (within the red polygon) previously filled and the area that needs to be completed (outside of the red polygon).

Polar Bears

Our previous August 21, 2018, letter considered effects to polar bears from discharging fill material into 3 acres of wetlands. The development was not completed and the USACE is reauthorizing the permit to fill the wetland area necessary to complete the housing development project. Our 2018 letter analyzed impacts to polar bears for the entire 3-acre project area; therefore, we conclude that the effects from the proposed action to polar bears are consistent with our previous letter and no additional effects to polar bears are anticipated. We encourage the USACE and the applicant to use the enclosed *USFWS Polar Bear Best Management Practices* to reduce impacts to humans and bears in the unlikely event a polar bear is encountered during construction activities.

Listed Eiders

The nesting/breeding areas used by listed eiders are outside the action area; thus, effects to nesting listed eiders would not occur. Although 1.89 acres of wetlands would be filled, listed eiders are not known to nest in this area so no known nesting habitat would be destroyed. Listed eiders may migrate through the action area during pre-and post-breeding periods while construction is occurring between June and October. However, we expect most listed eiders would fly offshore (Johnson and Richardson 1982; Petersen et al. 1999; USGS unpublished data), thereby likely avoiding the land-based activities associated with the proposed action. On the rare occasion that listed eiders fly through the action area, we expect that disturbance would be minor (i.e., limited to changes in behavior that would not be biologically significant) and temporary (i.e., insignificant) because listed eiders can respond to human presence or disturbance by moving away to a safe distance. Since disturbance to migrating listed eiders would be so temporary and minor that injury or death is not expected, we conclude that effects to listed eiders would be insignificant.

Summary

We reviewed the proposed action and the project as described in our August 21, 2018, letter. This letter amends our August 21, 2018, letter, to include the modification of the project dates (2024 to 2028) and an analysis of effects to listed eiders. The Service concurs with the USACE's determination that the proposed activities are not likely to adversely affect polar bears, spectacled eiders, and the Alaska-breeding population of Steller's eiders. We have based this concurrence on the following: 1) effects to polar bears are consistent with those discussed in our August 21, 2018, letter (i.e., low density of transient (non-denning) polar bears, encounters with bears are expected to be infrequent, behavioral effects to transient bears would be minor and temporary); 2) disturbance to listed eiders would be minor and temporary; and 3) effects to nesting listed eiders would not occur.

This concludes informal consultation pursuant to the regulations implementing the ESA (50 CFR 402.13). Reinitiation of consultation is necessary (1) if new information reveals effects of the action that may affect listed species or critical habitat in a manner or to an extent not previously considered; (2) if the identified action is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered during informal consultation or in

written concurrence; or (3) if a new species is listed or critical habitat designated that may be affected by the identified action.

Thank you for your cooperation in meeting our joint responsibilities under the ESA. If you have any questions or comments regarding this letter, please contact Chiharu Mori at Chiharu_Mori@fws.gov and refer to consultation number 2024-0093369.

Sincerely,

Neesha Stellrecht
Field Office Supervisor

Literature Cited

Johnson, R., and W. Richardson. 1982. Waterbird migration near the Yukon and Alaska coast of the Beaufort Sea: II. Molt migration of seaducks in summer. Arctic 35:291–301.

Petersen, M. R., W. W. Larned, and D. C. Douglas. 1999. At-sea distribution of spectacled eiders: a 120-year-old mystery resolved. The Auk 116(4):1009–1020.

Best management practices to minimize impacts to polar bears

USFWS Marine Mammals Management

Polar bears are protected under the Marine Mammal Protection Act (MMPA) and were listed as a threatened species under the Endangered Species Act (ESA) in 2008. The MMPA and ESA both prohibit the "take" of polar bears with limited exceptions, such as for authorized incidental take and when necessary for human safety. Take includes disturbing, injuring, and killing polar bears.

Polar bears use sea ice, marine waters and terrestrial areas in northern and northwestern Alaska for resting, feeding, denning, and seasonal movements. They are most likely to be encountered within 25 miles of the coastline, especially along barrier islands during July-October. Polar bears may also be encountered farther inland, especially females during the denning period (November-April). Be aware that polar bears also occur within human settlements such as villages, camps, and work areas.

This document lists best management practices the Service recommends to minimize the risk of human activities causing adverse impacts to polar bears, as well as polar bear encounter guidelines and reporting procedures. Following as many relevant measures as possible through the development and implementation of a polar bear avoidance and encounter plan will help protect both human and bear safety. Adherence to measures does not, however, absolve personnel of responsibility if they take (harass, harm, capture, or kill) a polar bear in violation of the Marine Mammal Protection Act. If you have questions about any best management practices or how they might be implemented in specific scenarios, please contact USFWS Marine Mammals Management (MMM) at FW7_AK_Marine_Mammals@fws.gov or 907-786-3844.

Contents

Best practices for avoiding polar bear encounters and impacts to bears

Project siting and timing

- Avoid siting projects in polar bear high-use areas to the maximum extent practicable. High-use areas include all land within 2 km (1.2 miles) of the Chukchi and Beaufort Sea coasts. Polar bears are most likely to be encountered along coastal movement corridors along the Beaufort Sea coast between July and October. Polar bears may congregate near coastal communities in September and October when remains of subsistence-harvested whales are present. If coastal siting is unavoidable, maintain an open transit corridor for bears that is free of human presence and activity to help avoid conflict.
- Avoid establishing infrastructure in or near polar bear denning habitat (see USGS habitat maps: https://alaska.usgs.gov/data/polarBear/denHabitat/polarBear_denHabitat_allACP) and avoid undertaking activities in or near polar bear denning habitat between November and April.
- Be vigilant for sows with cubs during the den emergence period (March – May) in inland as well as coastal areas.
- Polar bears typically rest during day and become more active during dusk, night, or dawn. Plan activities with this in mind.

Den detection and avoidance

- Aerial infrared (AIR) surveys can locate polar bear dens that can then be avoided between November and April to prevent disturbance to denning bears. Anyone planning industrial operations or other activities involving large human presence or equipment between November and April and within 25 miles of the Bering, Chukchi, or Beaufort coasts (outside of communities) should contact Marine Mammals Management to determine if completing one or more AIR surveys is necessary to lower the risk of impacts to denning bears.
- Avoid any activities within one mile of known polar bears dens, including dens encountered in the course of activities. Locations of known polar bear dens can be obtained from MMM. Report any observed polar bear dens to the MMM Regulatory Program at FW7_MMM_Reports@fws.gov as soon as possible and within 24 hours of discovery. Should occupied dens be identified within one mile of activities, cease work in the immediate area and immediately contact MMM for guidance before proceeding with activities. The Service will evaluate these instances on a case-by-case basis and determine the appropriate action.
- During transit off of ice roads and established tundra travel routes, personnel in potential denning areas should constantly be on the lookout for signs of denning (e.g., piles of snow from den excavation, tracks) between November and April. Use vehicle-based forward looking infrared cameras to scan for dens when possible. Personnel should avoid crossing topographic features suitable for denning, such as riverbanks and along bluffs.

Avoiding impacts to sows and cubs after den emergence

- If a sow and cubs of the year are seen, cease operations within a 1.6 km (1 mi) exclusion zone and notify the Service at 1-800-362-5148 and FW7_MMM_Reports@fws.gov. Any operations in between the sow/cubs and the shoreline must be notified, and the bears must be provided a clear and unimpeded path to the sea ice through coordination with bear monitors.

Attractants management

- Be aware that garbage, food, deliberate feeding, animal carcasses, chemicals, petroleum products, sewage, and grey water can attract polar bears. Polar bears are curious and may also be attracted to novel or unfamiliar items (e.g., plastic objects, snowmachines)
- Incinerate garbage and food waste at work sites as frequently as possible. Locate incinerators outside of living areas. If incineration is not an option, store wastes as described below and remove them from site (e.g., fly them out) as frequently as possible.
- Store attractants in a manner that minimizes odors and prevents access by bears. Use bear-resistant storage containers and waste receptacles. Containers should be approved and certified by the Interagency Grizzly Bear Committee as "bear-resistant" (see information at http://www.igbconline.org/html/bear-resistant-products). Always store food away from living quarters.
- Maintain clean work areas and/or camps.
- Clean any fuel spills or spills/leaks of other chemicals or toxic materials properly and immediately, even if they are small.
- When travelling, avoid carrying strongly scented attractants or store them in air-tight containers to minimize odor transmission, and consume food in enclosed and secure areas whenever possible.

Bear avoidance, detection, and deterrence protocols

- Establish specific protocols to minimize the risk of encounters and maximize human and animal safety if an encounter does occur. These should include such measures as:
    - regular on-site safety discussions
    - using the buddy system for activities away from buildings or outside fences
    - being vigilant, traveling in groups, and making noise to avoid surprise encounters
    - using bear detection tools/methods including human monitors or "bear guards", physical barriers, trip wire systems, alarms, and/or motion detectors/cameras
    - establishing a notification system/communication plan (e.g., using radio, blow horns, or sirens) to alert workers of a polar bear in the area and contact outside help if needed (e.g., by satellite phone)
    - designating safe area(s) to gather if a bear approaches work areas

  Additional precautions should be taken on barrier islands, in river drainages, along bluff habitat or ice leads/polynyas, near whale or other marine mammal carcasses, or in the vicinity of fresh tracks. For example, prior to landing/docking on barrier islands or other coastal areas, survey the area to ensure polar bears are not present.
- Prepare bear deterrence plans to implement if a polar bear approaches and must be hazed

to protect workers and property. The Service has issued Polar Bear Deterrence Guidelines (link to notice: https://www.federalregister.gov/documents/2010/10/06/2010-25044/marine-mammal-protection-act-deterrence-guidelines) that describe passive and preventative deterrence measures that do not require advance training. These include tools such as loud acoustic devices, air horns, electric fencing, or using a vehicle or boat to block an approaching bear. Bear spray is another effective preventative deterrence tool for individuals informed in its proper use. Use of more advanced deterrence methods, such projectiles from a firearm (e.g., pepper balls, cracker shells, bean bags, rubber bullets) requires appropriate specialized training, and the Service may provide a Letter of Authorization for Intentional Harassment for projects intending to use advanced deterrence. Contact MMM for additional information on the Service's Bear Safety and Bear Deterrence Specialist training and intentional harassment authorization.
    - If deterrence plans include use of a firearm by a Service-approved bear deterrence specialist, make sure plans identify how rounds will be handled to prevent mixing of lethal and less-lethal rounds.
- If working near a North Slope Borough community, reach out to the North Slope Borough Department of Wildlife Management (phone: (907) 852-0350) for information on recent polar bear activity in the area to inform avoidance plans.

Information and measures in the Polar Bear Encounter Guidelines section of this document should be incorporated into encounter and deterrence protocols

Personnel training materials and procedures

- Ensure all personnel working in polar bear habitat receive appropriate safety training, including education on site-specific protocols. Depending on individual duties and activities, this may include Bear Safety Training from the Service or the Alaska Department of Fish and Game.
- Any personnel that may need to deter an approaching polar bear should receive training in use of deterrents, including hands-on practice. Training from the Service or Service-approved trainers is critical for individuals planning to use advanced hazing tools (e.g., projectiles from a firearm or approaches with vehicle).
- Share or publicly post materials on bear safety and encounter protocols at work sites.
- Complete on-site polar bear safety drills.

Industrial infrastructure: site design and snow and lighting management

- For industrial infrastructure, ensure good visibility in all work site locations though facility layout and lighting. All personnel areas, including entrances, should be illuminated during working hours. Waste-management areas and pedestrian traffic areas should be particularly well-lit.

- Exterior doors should open outward, and there should be windows in or near exterior doors so personnel can look for polar bears before exiting a building, and. To limit risk of bears entering buildings, use oval-shaped versus handle-type knobs on exterior doors. Prevent snow from piling up below windows if it could allow a bear to climb and enter the building.through the window. Grates on windows (in compliance with fire codes) are recommended to limit potential entry by bears.
- Take measures to prevent snow drifts from forming around elevated structures (including roads and pads), as they may obstruct visibility or attract bears as denning habitat. Prevailing wind directions and resulting drift should be considered when placing barriers or storing materials. Establish protocols to remove accumulated snow from infrastructure, as needed, and consider placement of snow berms to increase visibility.
- Minimize the potential for polar bear concealment. Arrange any objects outdoors in a way that reduces or eliminates spaces where a polar bear could be concealed. Where practicable, install skirting under elevated buildings, cap off stored pipes, block culverts in the winter, surround equipment storage areas with fencing, and place of gates or other barriers on stairwells.
- Avoid creating corners and areas where bears may feel trapped or workers may become trapped by a bear.
- Minimize outdoor storage and rearrangement of outdoor objects, which may attract curious polar bears.
- If work and camp activities are co-located (e.g., on a pad) ensure living quarters are centrally located.
- Use electric or other fences that exclude bears from work and living areas, but recognize that fences are not fail-safe and awareness within or outside fences is necessary.
- If full illumination of a work site is not possible, monitoring by a bear guard using infrared night-vision cameras or binoculars may be sufficient to detect approaching bears. Contact MMM if you are considering infrared night-vision monitoring.

<u>Remote field camp safety practices</u>

- Minimize and prevent access to attractants. Store food, garbage, and other attractants in a manner that minimizes odors and prevents access by bears. Do not allow any bears to receive a food reward in a camp. Use containers approved and certified by the Interagency Grizzly Bear Committee as "bear-resistant" to store food, garbage, and other attractants (see attractant section above).
- Use an electric fence or alarm system as additional campsite protection.
- Avoid camping or lingering in bear high-use areas such as river drainages, coastal bluffs and barrier islands, or along ice leads/polynyas. Do not camp within one mile of river drainages with steep banks and bluffs during denning season (November-April).
- Along the Beaufort and Chukchi coasts, locate overnight camps inland. Based on known patterns of land use by polar bears, camping just a mile or two inland will dramatically decrease the chance a camp will be in the path of a polar bear. Be aware, however, that camping inland or along the coast can result in an encounter with a brown bear, so take bear conflict-avoidance precautions regardless of camping location.

Watercraft operations

- Be especially vigilant for swimming bears when vessels are underway. If one or more swimming bears are encountered, allow it to continue unhindered. Never approach, herd, chase, or attempt to lure a swimming bear.
- Reduce speed and avoid sudden changes in travel direction when visibility is low.

Aircraft operations (including unmanned systems/drones):

- Pilots of all aircraft types (fixed wing, helicopters, and drones) should fly at the maximum distance possible from concentrations of polar bears. Aircraft should maintain an altitude of 1500 ft (457 m) above ground level when operationally possible. Under no circumstances, other than an emergency, should aircraft operate at an altitude lower than 1500 ft within 0.5 mi (805 m) of polar bears observed on ice or land.
- When weather conditions do not allow a 1500 ft flying altitude, such as during severe storms or when cloud cover is low, aircraft may be operated below this altitude. However, when lower flight is necessary, the operator should avoid areas of known concentrations of polar bears and should take precautions to avoid flying directly over or within 0.5 miles (805 m) of these areas. Operators should stay aware of bear congregation sites near their work areas through communication with the Service and regional and local bodies (e.g., the North Slope Borough Department of Wildlife Management, community councils). Note that Barter Island and Cross Island are consistent bear concentration areas.
- Aircraft should avoid performing any evasive and sudden maneuvers, especially when traveling at lower altitudes. Avoid circling, turning, or hovering aircraft within 0.5 mi (805 m) of polar bears or in known polar bear concentration areas.
- If a polar bear is spotted within a landing zone or work area while an aircraft is in flight, aircraft operators should travel away from the site, and if flying at a lower altitude, slowly increase altitude to 1500 ft (or a level that is safest and viable given current traveling conditions). Do not land aircraft within 0.5 mile of a polar bear.
- If a polar bear is observed while an aircraft is grounded, personnel should board the aircraft and leave the area. The pilot should also avoid flying over the polar bear.
- Do not operate aircraft in such a way as to separate individual members of a group of polar bears from each other.

Polar bear encounter guidelines

The general strategy for minimizing human-bear conflicts is to: 1) be prepared; 2) avoid encounters; and 3) know how to respond if an encounter occurs. Preparation and avoidance measures—which include avoiding high-use areas, minimizing attractants, developing a human-bear safety plan, preventing surprise encounters, carrying deterrents and practicing using them—are all described above. Guidelines for encounters are listed in this section. These encounter guidelines are based on up-to-date, expert assessment of polar bear incidents and practices that minimize negative outcomes.

Note that polar bears react differently to human presence depending on a variety of biological and environmental factors, as well as their previous experience with humans. Hungry (skinny) bears can be particularly dangerous.

If a polar bear is encountered:

- Prepare deterrent(s). Do not run from or approach polar bears. If the bear is unaware of human presence, allow it to continue what it was doing before it was encountered. Move to safe shelter (e.g. vehicle or building) if available, and wait until it is safe to proceed.

- Group up. If no safe shelter is available, group up with others and stand positioned to allow for safe deployment of deterrents (e.g. firearm, pistol launcher, bear spray) – until the bear leaves.

- Observe bear behavior. Polar bears that stop what they are doing to turn their head or sniff the air in your direction have likely become aware of your presence. These animals may exhibit various behaviors:

  - C*urious* polar bears typically move slowly, stopping frequently to sniff the air, moving their heads around to catch a scent, or holding their heads high with ears forward. They may also stand up.
  - *A threatened or agitated* polar bear may huff, snap its jaws together, stare at you (or the object of threat) and lower its head to below shoulder level, pressing its ears back and swaying from side to side.
  - A *predatory* bear may sneak up on an object it considers prey. It may also approach in a straight line at constant speed without exhibiting curious or threatened behavior.

If a polar bear approaches you or your camp:

- Defend your group/camp. Any bear that approaches within range of your deterrents should be deterred. Stand your ground; do not run. Defend your group or camp, increasing the intensity of your deterrence efforts as necessary. Start with the least aggressive options, such as using noisemakers, yelling or clapping, or deploying air horns. Recent work has found bear spray to be an effective deterrent against polar bears, even under high wind scenarios. With wise use of deterrents, your group may be able to de-escalate the incident by keeping bears from making contact with site items, and by eventually increasing distance between you and the bear. Be aware that lethal take of polar bears is permissible if such taking is imminently necessary in defense of human life. Defense of life kills must be reported to the Service within 48 hours.

- If bear makes physical contact, fight back. If deterrence/lethal efforts have failed and a polar bear attacks (makes physical contact), **do not "play dead"**. Fight back using any deterrents available, aiming fists or objects at the bear's nose and face.

If defense of life becomes necessary:

- Defense of life kills are only allowed in self-defense or to save the life of a person in immediate danger. All defense-of-life kills of polar bears must be reported to the Service within 48 hours. Report to USFWS Marine Mammals Management (email FW7_MMM_Reports@fws.gov and/or call 1-800-362-5148). Events in the Arctic National Wildlife Refuge may alternatively be reported by calling the Arctic National Wildlife Refuge Manager at 1-800-362-4546 or by calling (907) 883-9409 and speaking to a law enforcement officer. If you send an email or leave a message, provide your name, contact info, and location so you can be reached to provide additional information about the incident.
- You will be required to document the circumstances leading up to, and immediately surrounding, the death of the bear, including documentation of the preventative methods you used to de-escalate the conflict in advance of killing the bear.
- The shooter may be required to transfer the carcass (including hide and skull) to a law enforcement officer or designated local representative. The shooter is responsible for the carcass once the bear is killed (it cannot be abandoned).
- The shooter may not keep any parts of the animal unless authorized by the US Fish and Wildlife Service.

Reporting

The Service requests that any polar bears sighted during activities are reported to FW7_MMM_Reports@fws.gov. Reports are mandatory if polar bears are harassed or harmed in an incident, and all sighting reports are helpful. Any injury or death of a bear related to human activities must be reported as soon as possible and no later than 48 hours after occurrence, as described in the defense of life section above. Please include as much of the following information as possible in reports:

- Date, time, and location of the polar bear observation
- Number of individual polar bears by sex and age, if possible
- Observer name and contact information
- Weather, visibility, and ice conditions at the time of the polar bear observation
- Estimated closest point of approach for the polar bear from personnel and facilities/equipment
- Project activity at time of the polar bear observation and possible attractants if present
- Polar bear behavior
- Description of the encounter with the polar bear. A full written description, including the duration of encounter and all actions taken to minimize harassment or harm to the bear, is required when a human-bear interaction occurs.
- In cases involving aircraft or vessels:
    a. Aircraft or vessel heading
    b. Aircraft or vessel speed
    c. Aircraft altitude
    d. Initial behaviors of the polar bear before responding to the aircraft or vessel

e. A description of any apparent reactions from the polar bear to the aircraft or vessel

- If injured, distressed, or dead polar bears are observed that not associated with project activities (e.g., found outside the project area, previously wounded polar bears, or carcasses), please report this information to the Service as soon as possible at 1-800-362-5148 and FW7_MMM_Reports@fws.gov. The following website has instructions for reporting found polar bear remains: https://www.fws.gov/alaska/pages/marine-mammals/polar-bear/carcass-found. Photographs, video, location information, or any other available documentation is very helpful for all reports.

United States Department of the Interior

U.S. FISH AND WILDLIFE SERVICE
Fairbanks Fish and Wildlife Field Office
101 12th Avenue, Room 110
Fairbanks, Alaska 99701
August 21, 2018

Mary Romero
Project Manager
U.S. Army Corps of Engineers
Alaska District Regulatory Division
Elmendorf Air Force Base, AK 99506

Re: Informal consultation
POA-2007-003394
Shane Smithhisler – house construction

Dear Ms. Romero:

This letter is in response to your request for consultation on endangered and threatened species, and critical habitats pursuant to section 7 of the Endangered Species Act of 1973 (ESA), as amended. The U.S. Fish & Wildlife Service (Service) has reviewed the proposed action to determine if it would adversely affect listed species under our jurisdiction. One species listed as threatened under the ESA may occur in the project area: polar bears (*Ursus maritimus*).

THE PROPOSED ACTION

We understand the U.S. Army of Corps of Engineers Alaska District (USACE) has received a permit application for Mr. Shane Smithhisler to conduct wetland fill in the course of constructing residential housing units and associated structures adjacent to the Nome-Teller Highway north of Nome, Alaska (Figure 1). About 15,000 cubic yards of material would be used to fill approximately 3 acres (0.012 km^2) of tundra wetlands. The proposed work would begin as soon as possible, with project completion expected by the end of 2019.

THE ACTION AREA

The action area includes the location of the proposed construction project approximately 1.5 km north of Nome, Alaska adjacent to the Nome-Teller Highway (Figure 1).

EFFECTS OF THE ACTION ON LISTED SPECIES

Project effects on polar bears

The Service listed the polar bear as threatened under the ESA on May 15, 2008 (73 FR 28212). Polar bears may occasionally pass through or den in the action area, although their density is low and encounters are expected to be extremely rare. Transient (non-denning) bears entering the action area could be disturbed by the presence of humans or equipment noise. However, we expect disturbances would be minor and temporary because transient bears would be able to respond to human presence or disturbance by departing the area. Furthermore for reference, the Service is providing standard *Polar Bear Interaction Guidelines* (attached) for personnel to follow in the unlikely event polar bears are encountered during the proposed construction.

Due to a lack of preferred denning habitat, polar bears rarely den near the action area. Furthermore, given the inland location of the proposed operation, we would expect polar bears denning in or near the action area to be extremely unlikely.

Because 1) the density of polar bears in the action area is very low, 2) encounters with polar bears are expected to be infrequent, 3) behavioral effects to transient bears would be minor and temporary, 4) mitigation measures included in the attached interaction guidelines would minimize potential impacts in the event transient polar bears are encountered, and 5) the extremely low probability of polar bears denning in the action area; we expect effects of the proposed action on polar bears would be insignificant.

CONCLUSION

The proposed action could temporarily disturb polar bears in the project area; however, due to low densities of this species and minimization measures included in the attached interaction guidelines, we expect these disturbances would be discountable. Therefore, the Service concurs the proposed action is not likely to adversely affect polar bears. Preparation of a Biological Assessment or further consultation under section 7 of the ESA is not necessary at this time. Thank you for the opportunity to comment on this project. If you need further assistance, please contact Kaithryn Ott at (907) 456-0277.

Sincerely,

Ted Swem

Ted Swem
Consultation Branch Chief

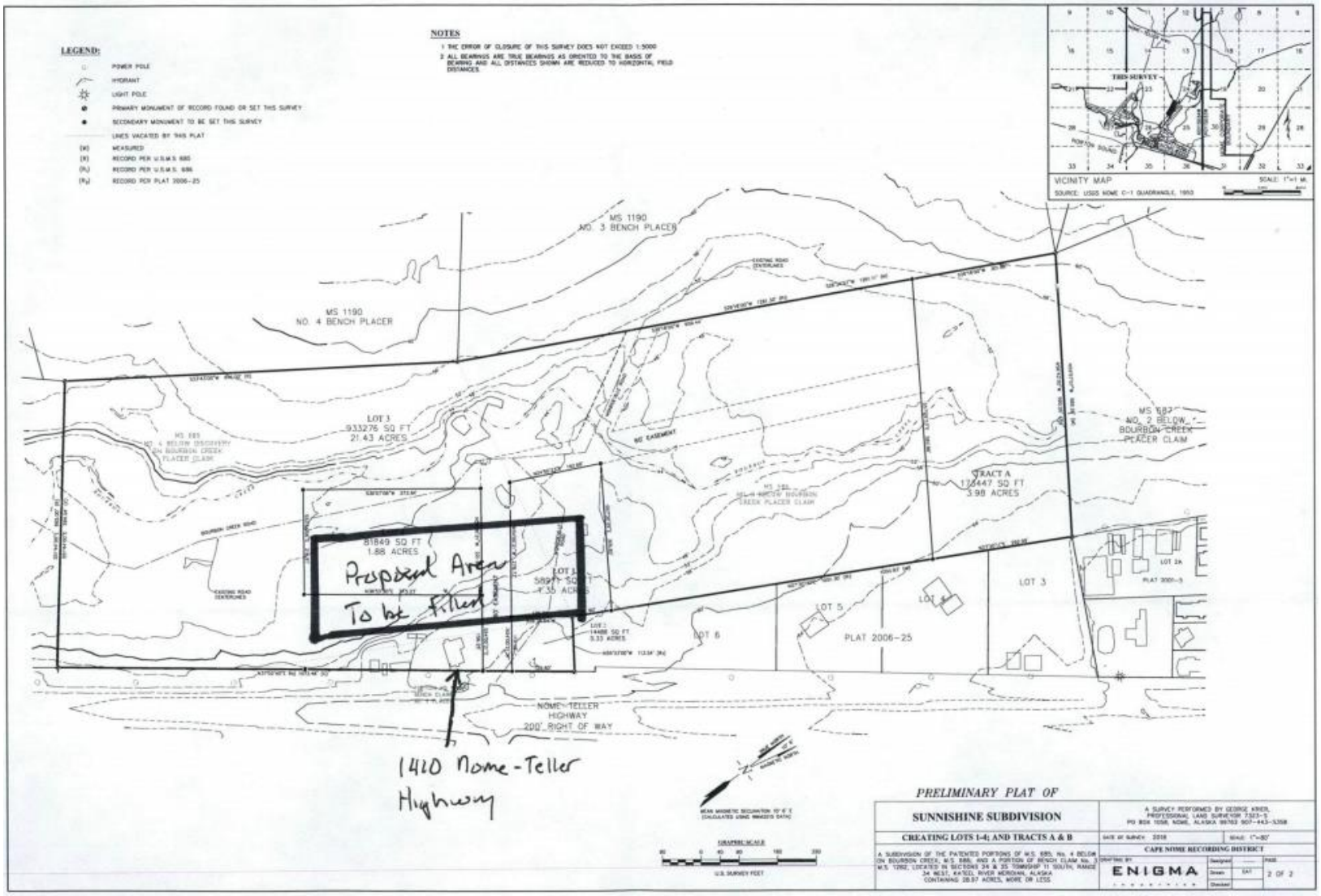


Figure 1. Location of the proposed construction at 1410 Nome-Teller Highway near Nome, Alaska.

POLAR BEAR INTERACTION GUIDELINES

These Polar Bear Interaction Guidelines (Guidelines) were developed to ensure activities are conducted in a manner that avoids conflicts between humans and polar bears. Polar bears are protected under the Marine Mammal Protection Act (MMPA), and were listed as a threatened species under the Endangered Species Act (ESA) in 2008. The MMPA and ESA both prohibit the "take" of polar bears without authorization. Take includes disturbance/harassment, as well as physical injury and killing of individuals.

In addition to sea ice, polar bears use marine waters and lands in northern Alaska for resting, feeding, denning, and seasonal movements. They are most likely to be encountered within 25 miles of the coastline, especially along barrier islands during July-October. Polar bears may also be encountered farther inland, especially females during the denning period (October-April). Polar bears may react differently to noise and human presence. The general methods for minimizing human-bear conflicts are to: 1) avoid detection and close encounters; 2) minimize attractants; and 3) recognize and respond appropriately to polar bear behaviors. These Guidelines provide information for avoiding conflicts with polar bears during air, land, or water-based activities.

Unusual sightings or questions/concerns can be referred to: Christopher Putnam, Marine Mammals Management Office (MMM Office), (907) 786-3844; or to Sarah Conn (907) 456-0499 of the Fairbanks Fish & Wildlife Field Office (FFWFO).

When operating aircraft:

- If a polar bear(s) is encountered, divert flight path to a minimum of 2,000 feet above ground level or ½ mile horizontal distance away from observed bear(s) whenever possible.

When traveling on land or water:

- Avoid surprising a bear. Be vigilant—especially on barrier islands, in river drainages, along bluff habitat, near whale or other marine mammal carcasses, or in the vicinity of fresh tracks.

- Between October and April special care is needed to avoid disturbance of denning bears. If activities are to take place in that time period the MMM Office should be contacted to determine if any additional mitigation is required. In general, activities are not permitted within one mile of known den sites.

- Avoid carrying bear attractants (such as strongly scented snacks, fish, meat, or dog food) while away from camp; if you must carry attractants away from camp, store foods in air-tight containers or bags to minimize odor transmission until you return them to "bear-resistant" containers.*

- If a polar bear(s) is encountered, remain calm and avoid making sudden movements. Stay downwind if possible to avoid allowing the bear to smell you. Do not approach polar bears. Allow bears to continue what they were doing before you encountered them. Slowly leave the vicinity if you see signs that you've been detected. Be aware that safe viewing distances will vary with each bear and individual situation. Remember that the closer you are to the animal, the more likely you are to disturb it.

- If a bear detects you, observe its behavior and react appropriately. Polar bears that stop what they are doing to turn their head or sniff the air in your direction have likely become aware of your presence. These animals may exhibit various behaviors:

    - *Curious* polar bears typically move slowly, stopping frequently to sniff the air, moving their heads around to catch a scent, or holding their heads high with ears forward. They may also stand up.

    - *A threatened or agitated* polar bear may huff, snap its jaws together, stare at you (or the object of threat) and lower its head to below shoulder level, pressing its ears back and swaying from side to side. These are signals for you to begin immediate withdrawal by backing away from the bear. If this behavior is ignored, the polar bear may charge. Threatened animals may also retreat.

    - In rare instances you may encounter a *predatory* bear. It may sneak or crawl up on an object it considers prey. It may also approach in a straight line at constant speed without exhibiting curious or threatened behavior. This behavior suggests the bear is about to attack. Standing your ground, grouping together, shouting, and waving your hands may halt the bear's approach.

- If a polar bear approaches and you are in the bear's path—or between a mother and her cubs—get out of the way (without running). If the animal continues to approach, stand your ground. Gather people together in a group and/or hold a jacket over your head to look bigger. Shout or make noise to discourage the approach.

- If a single polar bear attacks, defend yourself by using any deterrents available. If the attack is by a surprised female defending her cubs, remove yourself as a threat to the cubs.

When camping:

- Avoid camping or lingering in bear high-use areas such as river drainages, coastal bluffs and barrier islands.

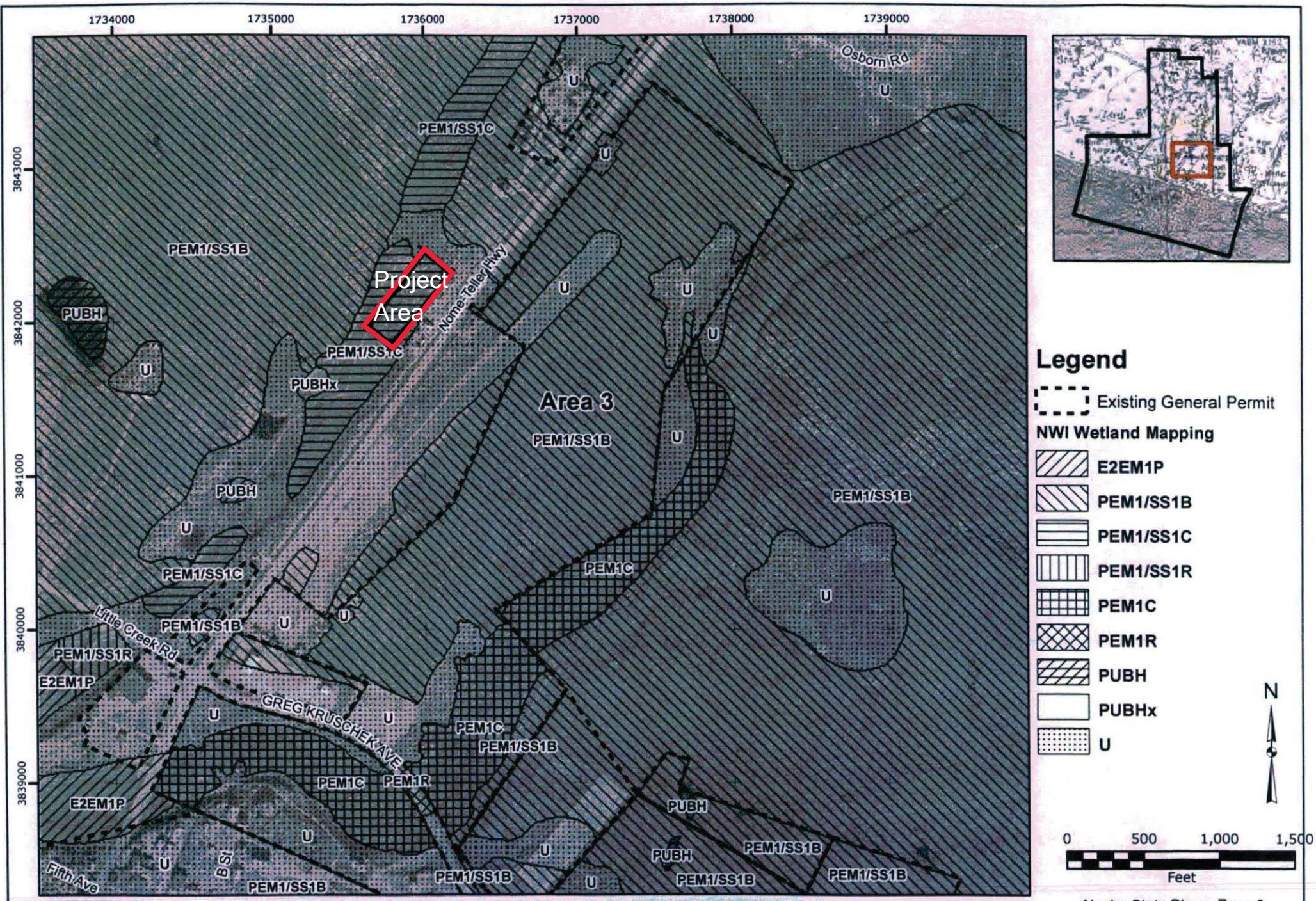
- Store food and other attractants in "bear-resistant" containers*. Consider the use of an electric fence as additional protection. Do not allow the bear to receive food as a reward in your camp. A food-rewarded bear is likely to become a problem bear for you or someone else in the future.

- Maintain a clean camp. Plan carefully to: minimize excess food; fly unnecessary attractants out on a regular basis (i.e. garbage, animal carcasses, excess anti-freeze or petroleum products); locate latrines at least ¼ mile from camp; and wash kitchen equipment after every use.

- If a polar bear approaches you in camp, defend your space by gathering people into a large group, making noise and waving jackets or tarps. Continue to discourage the bear until it moves off. Have people watch the surrounding area in case it returns later, keeping in mind that polar bears are known to be more active at night. Additional measures to protect your camp, such as electric fences or motion sensors can be used.

Harassment of polar bears is not permissible, unless such taking (as defined under the MMPA) is imminently necessary in defense of life, and such taking is reported to FWS within 48 hours.

*Containers must be approved and certified by the Interagency Grizzly Bear Committee as "bear-resistant." Information about certified containers can be found at http://www.igbconline.org/html/container.html.



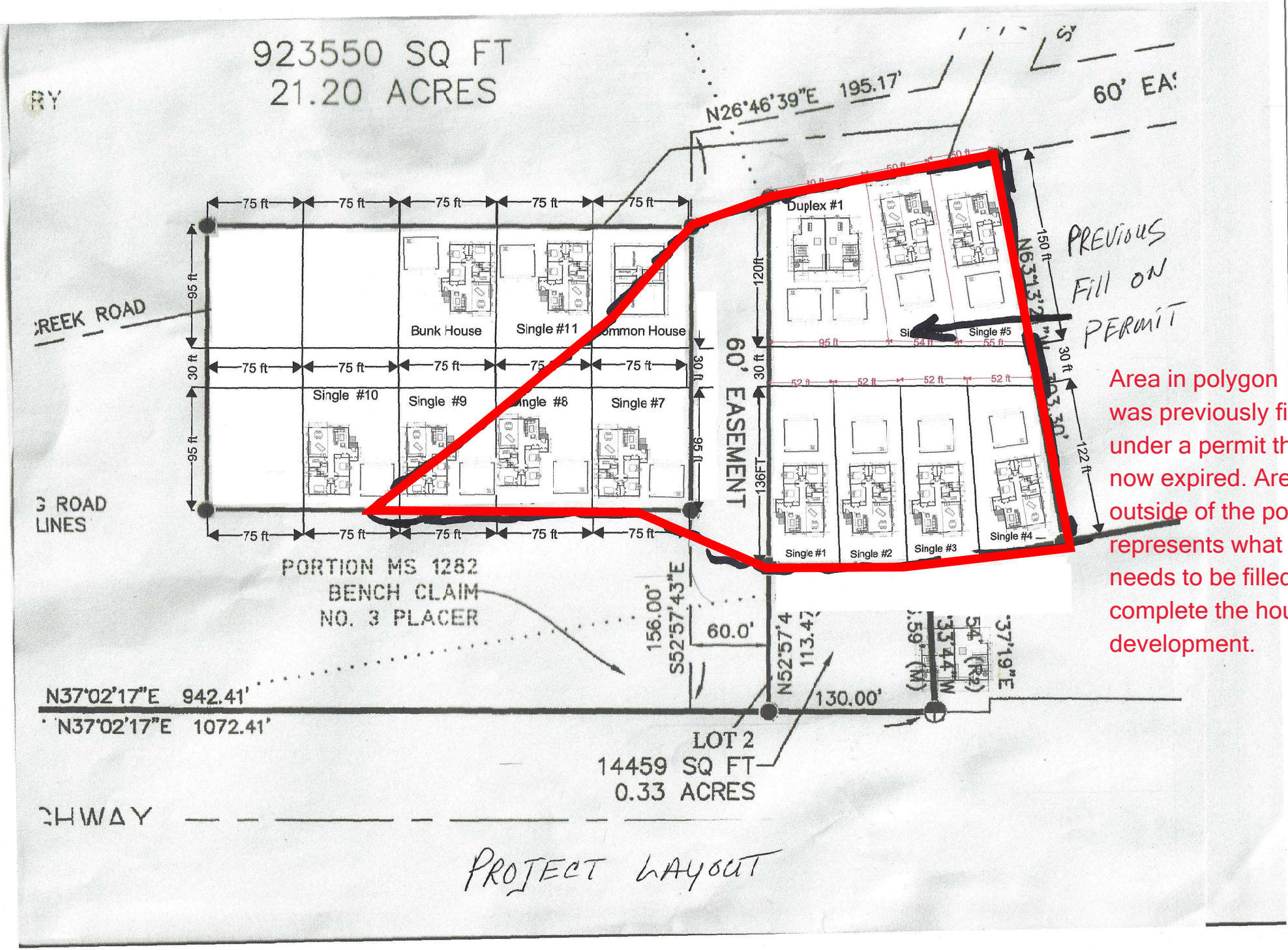
NOME GENERAL PERMIT REAUTHORIZATION
FIGURE 9 - NOME-TELLER HWY / GREG KRUSCHEK AVE (AKA: NOME BYPASS) AREA 3

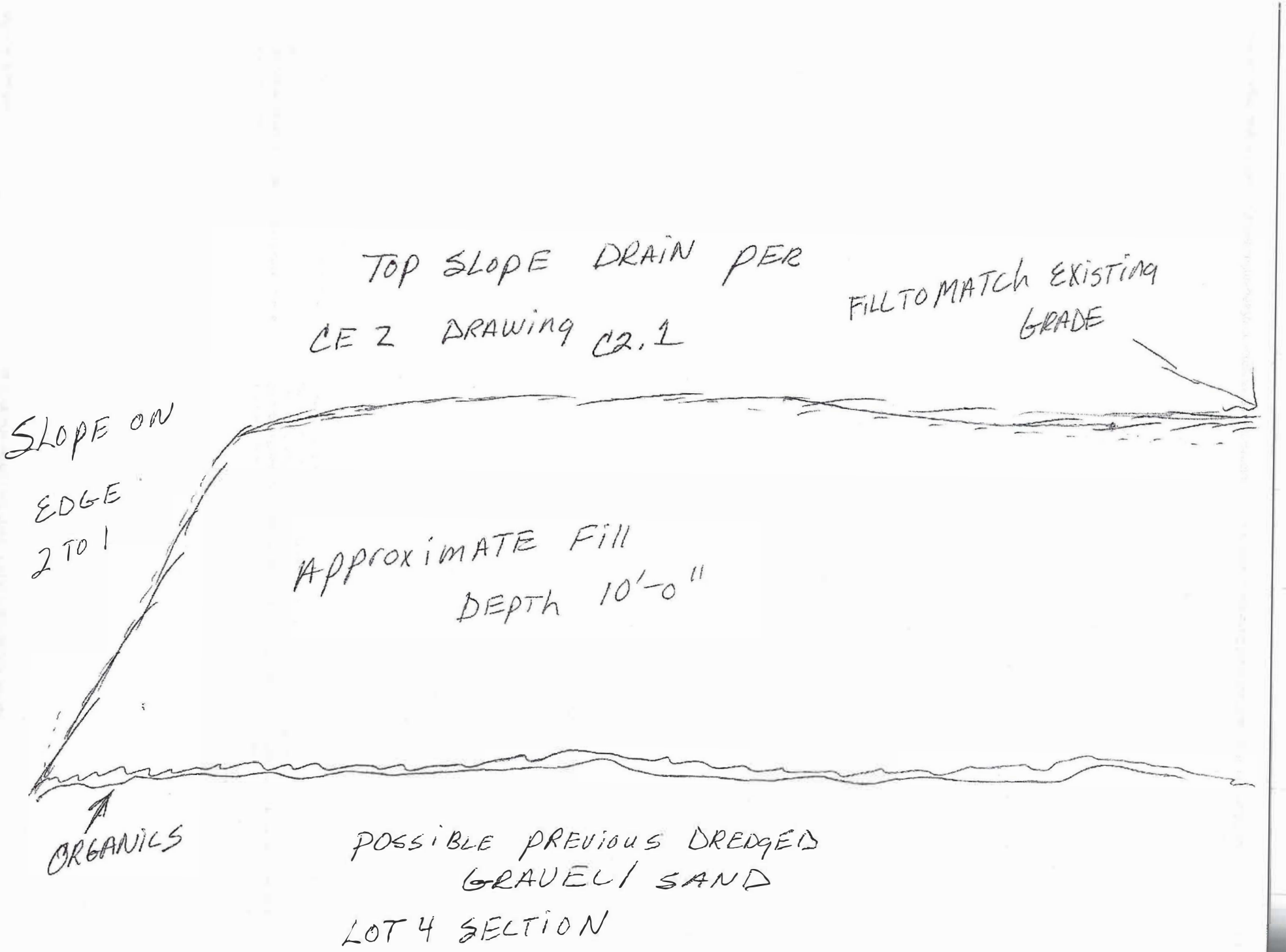
Bristol Engineering Services Corporation

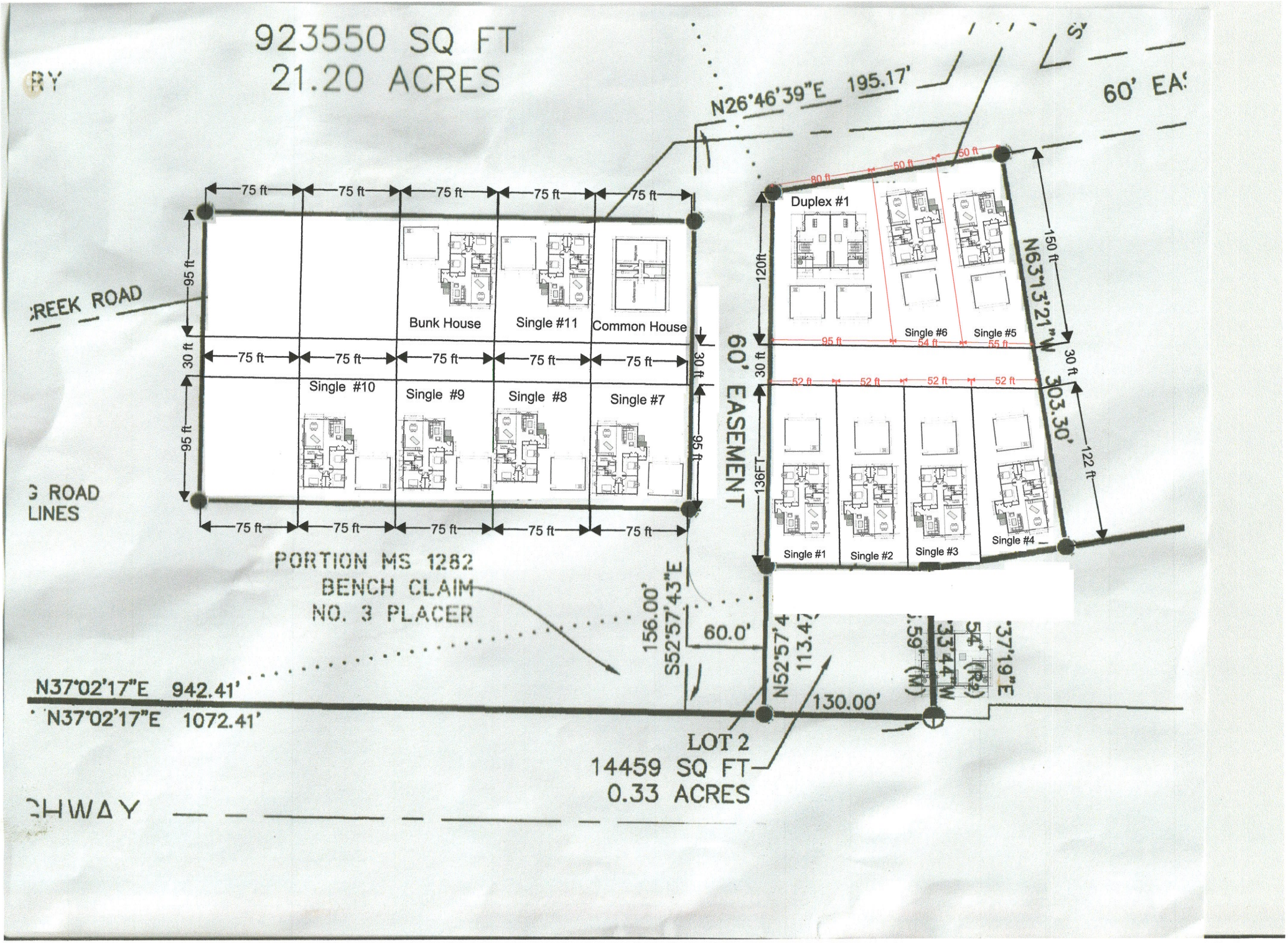
RGP-01, NOME (POA-2006-214-M2)

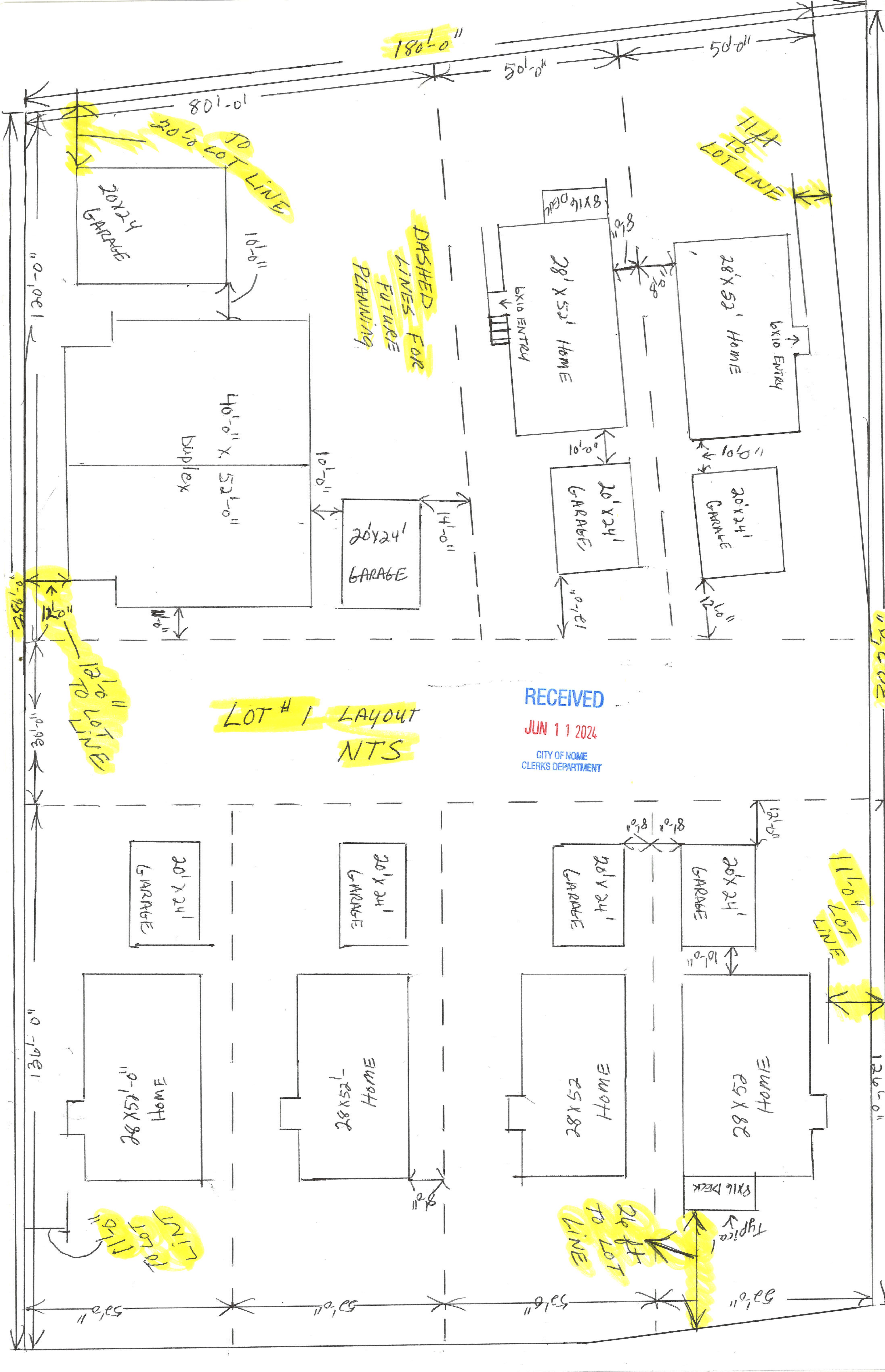
Alaska State Plane, Zone 8
North American Datum 1983

Wetland_GP_9_v3.mxd	Date: 3/3/2017
Version: 2	Author: BE-NP


923550 SQ FT
21.20 ACRES
N26°46'39"E 195.17'
60' EA
75 ft
95 ft
30 ft
Bunk House
Single #11
Single #10
Single #9
Single #8
Single #7
Duplex #1
Single #5
Single #1
Single #2
Single #3
Single #4
60' EASEMENT
120ft
136FT
150 ft
122 ft
PREVIOUS FILL ON PERMIT
Area in polygon was previously filled under a permit that has now expired. Area outside of the polygon represents what still needs to be filled to complete the housing development.
PORTION MS 1282
BENCH CLAIM
NO. 3 PLACER
156.00'
S52°57'43"E
60.0'
N52°57'4
113.47
130.00'
N37°02'17"E 942.41'
N37°02'17"E 1072.41'
LOT 2
14459 SQ FT
0.33 ACRES
PROJECT LAYOUT


TOP SLOPE DRAIN PER
CE 2 DRAWING C2.1
FILL TO MATCH EXISTING GRADE
SLOPE ON EDGE 2 TO 1
APPROXIMATE FILL DEPTH 10'-0"
ORGANICS
POSSIBLE PREVIOUS DREDGED GRAVEL/ SAND
LOT 4 SECTION


923550 SQ FT
21.20 ACRES
N26°46'39"E 195.17'
60' EA
75 ft
95 ft
30 ft
Bunk House
Single #11
Common House
Single #10
Single #9
Single #8
Single #7
Duplex #1
Single #6
Single #5
Single #1
Single #2
Single #3
Single #4
120ft
150 ft
N63°13'21"W
303.30'
122 ft
136FT
60' EASEMENT
52 ft
50 ft
80 ft
54 ft
55 ft
PORTION MS 1282
BENCH CLAIM
NO. 3 PLACER
156.00'
S52°57'43"E
60.0'
N52°57'4
113.47
130.00'
N37°02'17"E 942.41'
N37°02'17"E 1072.41'
LOT 2
14459 SQ FT
0.33 ACRES
CREEK ROAD
ROAD
LINES
CHWAY



LOT # 1 LAYOUT
NTS
RECEIVED
JUN 1 1 2024
CITY OF NOME
CLERKS DEPARTMENT
180'-0"
50'-0"
50'-0"
80'-0'
20'-0 TO LOT LINE
11 ft TO LOT LINE
20X24 GARAGE
10'-0"
DASHED LINES FOR FUTURE PLANNING
8X16 DECK
8'-0"
28' X 52' HOME
6X10 ENTRY
28'X 52' HOME
6X10 ENTRY
40'-0" X 52'-0" duplex
10'-0"
20'x24' GARAGE
14'-0"
10'-0"
20'x24' GARAGE
20'x24' GARAGE
12'-0"
12'-0"
12'-0" TO LOT LINE
36'-0"
120'-0"
136'-0"
8'-0"
8'-0"
12'-0"
20'x24' GARAGE
20'x 24' GARAGE
20'x24' GARAGE
20'x 24' GARAGE
11'-0" LOT LINE
10'-0"
28X52'-0" HOME
28X52' HOME
28X52 HOME
28X52 HOME
8X16 DECK
Typical
26 ft TO LOT LINE
11'-0" LOT LINE
8'-0"
53'-0"
53'-0"
53'-0"
53'-0"

12'-0" LOT LINE

20x24 GARAGE

20x24 GARAGE

375'-0" LOT

28'-0" x 52'-0" BUNK HOUSE

28'-0" x 52'-0" HOME

28'-0" x 52'-0" COMMON HOUSE

20'-0" LOT LINE

220'-0"

LOT 3 (4) NTS

DASHED LINES FOR FUTURE PLANNING

RECEIVED
JUN 11 2024
CITY OF NOME
CLERKS DEPARTMENT

28'-0" x 52'-0" HOUSE

20'x24' GARAGE

28'-0" x 52'-0" HOME

20'x24' GARAGE

28'-0" x 52'-0" HOUSE

26'x24' GARAGE

28'-0" x 52'-0" HOME

6x10

8'x16' DECK TYPICAL

12'-0" LOT LINE

20'x24' GARAGE

12'-0" LOT LINE

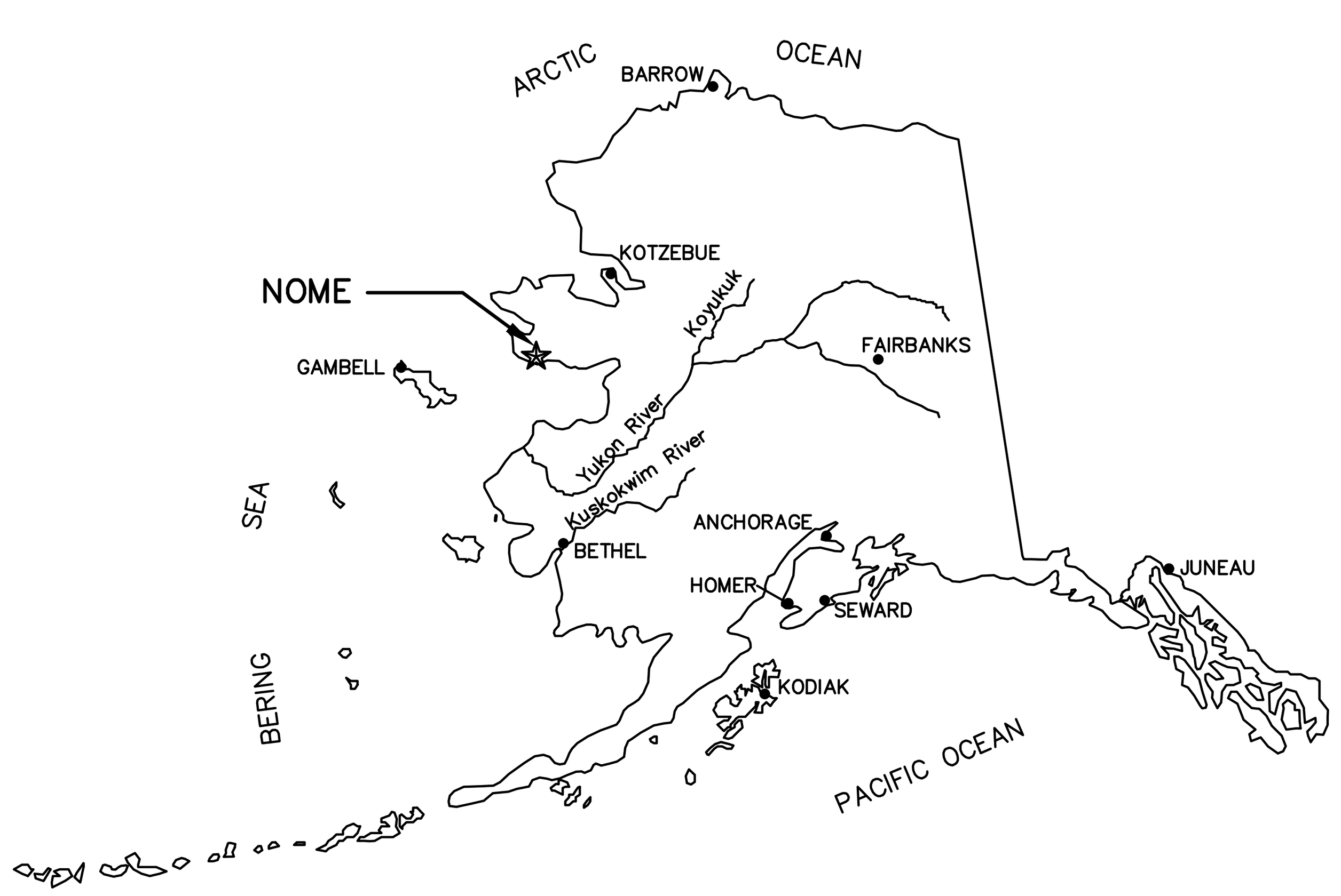
LittlePomerKamp

NOME, ALASKA

WATER AND SEWER

- (692 LF±) 8x15 HDPE SDR17 ARCTIC SEWER MAINS WITH (4 EA) 4' I.D. MANHOLES
- (1730 LF±) 8x15 HDPE SDR11 ARCTIC WATER MAINS WITH (6 EA) GATE VALVES
- (400 LF±) 4x12 HDPE SDR 11 ARCTIC FORCEMAIN WITH A 4' I.D. VALVE VAULT MANHOLE
- SEWAGE LIFT STATION (6' I.D.)

95% ISSUED FOR REVIEW



PROJECT LOCATION

Location Map

CE2 ENGINEERS, INC.
PO BOX 232946 ANCHORAGE, AK 99523 PH: 907-349-1010 FAX: 907-349-1015

STATE OF ALASKA 49TH
Michael R. Erdman
No.6252
REGISTERED PROFESSIONAL ENGINEER
10/31/23

Consultant

RECORD DRAWING CERTIFICATE

THESE DRAWINGS REFLECT RECORDED INFORMATION OBTAINED DURING CONSTRUCTION.
INFORMATION PROVIDED HEREIN IS ACCURATE TO THE BEST OF MY KNOWLEDGE.

NAME ______ DATE ______

Construction Foreman ______

Construction Period (From)______ (To)______

As-Builts (Date)______

SHEET INDEX

No.	Title
COVER SHEET	
G1.0	GENERAL NOTES
G2.0	SUBDIVISION PLAT AND VICINITY MAP
CIVIL DRAWINGS	
C1.1	PROJECT AND SHEET INDEX
C1.2	LIFT STATION SITE PLAN
C1.3	WATER AND SEWER INTERSECTION PLANS
C2.1	PHASE I - SEWER AND WATER - ACCESS ROAD P&P
C2.2	PHASE I - SEWER AND WATER - SUNNISHINE DRIVE P&P
C2.3	PHASE II - SEWER AND WATER - SUNNISHINE DRIVE P&P
C3.1	WATER AND SEWER PIPE DETIALS
C3.2	SEWER MANHOLE AND TRENCH SECTION
C3.3	LIFT STATION PLAN AND SECTION DETAILS
C3.4	LIFT STATION DETAILS

GENERAL NOTES

GENERAL

THE PROJECT SUPERINTENDENT SHALL MAINTAIN A CLEAN SET OF 'AS BUILT' RECORD DRAWINGS SHOWING THE LOCATIONS AND SWING TIES TO ALL MANHOLES, CLEANOUTS, SERVICE CONNECTIONS AND BENDS. ALL ELEVATIONS SHALL BE MARKED ASB (AS-BUILT) WITH THE CORRECT VALUE INSERTED. DRAWINGS SHALL BE KEPT CURRENT IN RED PENCIL ON A DAILY BASIS IN A NEAT, LEGIBLE FASHION. A COPY OF THE AS-BUILT DRAWINGS SHALL BE SUBMITTED TO THE AKIACHAK NATIVE COMMUNITY UPON COMPLETION OF CONSTRUCTION.

SEWER MANHOLE TOP OF CASTING (TOC) ELEVATIONS SHALL BE SET SIX (6) INCHES BELOW FINAL GRADE IN ALL ROADS AND TRAVELED WAYS. SEWER MANHOLE TOC ELEVATIONS SHALL BE SET 18 INCHES ABOVE FINISHED GRADE IN ALL NON-DEVELOPED, UNTRAVELED AREAS.

~~THE VERTICAL DATUM IS BASED UPON A SPIKE IN A UTILITY POLE AT THE INTERSECTION OF OLD PORTAGE STREET AND MAIN ST. ELEV = 999.26~~

THE BASIS OF BEARINGS FOR HORIZONTAL CONTROL IS SHOWN ON SHEET G-2.

Need a control sheet linking property corners to stationing - or going the northings / eastings route

EXISTING UTILITIES ARE SHOWN IN APPROXIMATE LOCATIONS TO THE BEST KNOWLEDGE OF THE ENGINEER AT THE TIME OF DESIGN. RECORDS MAY NOT BE COMPLETELY ACCURATE. THE PROJECT SUPERINTENDENT SHALL VERIFY HORIZONTAL AND VERTICAL LOCATIONS OF UTILITIES WITHIN EACH CONSTRUCTION REACH PRIOR TO BEGINNING WORK.

SEWER SERVICE LINE MINIMUM GRADE SHALL BE 2%, MINIMUM DEPTH OF BURY AT ARCTIC BOX SHALL BE 3 FEET TO CARRIER PIPE INVERT.

THE SUPERINTENDENT SHALL VERIFY ARCTIC BOX INSTALLATION POSITION WITH PROPERTY OWNER PRIOR TO CONSTRUCTION.

PIPING & MATERIALS (GENERAL)

ALL MATERIALS IN CONTACT WITH RAW OR POTABLE WATER SHALL BE ANSI/NSF-61 COMPLIANT, AND SHALL MEET NEW LEAD CONTENT REQUIREMENTS OF THE SAFE DRINKING WATER ACT.

CARRIER PIPE
THE GRAVITY SEWER MAIN SHALL BE: 8"Ø HDPE, SDR 17. THE SEWAGE FORCE MAINS SHALL BE: 4"Ø HDPE, SDR 11 (BUTT FUSED). THE DISTRIBUTION WATER MAIN SHALL BE: 8"Ø HDPE, SDR 11 (BUTT FUSED). ALL HDPE PIPING SHALL BE LISTED BY THE PPI WITH A DESIGNATION OF PE4710 AND A CELL CLASSIFICATION OF 445434C OR BETTER IN ACCORDANCE WITH ASTM D3350.

SEWER SERVICE & WATER SERVICE DUCT: 4 INCH HDPE, SDR 17 CARRIER PIPE WITH 2.5 INCHES MINIMUM THICKNESS OF 2.5 LBS/FT³ POLYURETHANE FOAM INSULATION, PUSH ON TYPE JOINTS AND 12" DIAMETER, 16 GAUGE ALUMINUM HELICAL JACKET.

WATER SERVICE - 1 INCH HDPE (~~BUTT FUSED~~ continuous), SDR 11 CARRIER PIPE.

ALL HDPE PIPE FUSION SHALL BE PERFORMED BY PERSONS TRAINED AND CERTIFIED PER STANDARDS OF THE PIPE AND FUSION EQUIPMENT MANUFACTURERS. PIPE FUSION, WELDABILITY TESTING, QA/QC, AND FUSION EQUIPMENT SHALL BE IN ACCORDANCE WITH PIPE MANUFACTURER RECOMMENDATIONS.

electronic data collector spec - similar to Bering St's specs

INSULATION
ARCTIC PIPE INSULATION SHALL BE CLOSED CELL (ASTM D2341 CELL CLASSIFICATION 550674970034) URETHANE FOAM WITH A MAXIMUM K FACTOR OF 0.155 BTU-IN/HR-SF-DEG F. THE INSULATION CORE DENSITY SHALL BE BETWEEN 3.0 AND 4.0 LBS/CF. VOIDS GREATER THAN 0.05 CUBIC INCHES BEYOND 24 INCHES OF EITHER END OF THE PIPE SECTION WILL BE CAUSE FOR REJECTION OF THE PIPE.

OUTER JACKET MATERIAL add 3/16" corrugation note - so not smoothwall Al jacket
THE OUTER JACKET MATERIAL FOR ALL ARCTIC PIPE AND FITTINGS SHALL BE 16 GAUGE HELICAL LOCK SEAM ALUMINUM PIPE (SPIR-L-OK OR EQUAL).

SEPARATION DISTANCES
THE FOLLOWING MINIMUM SEPARATION DISTANCES SHALL BE MAINTAINED, MEASURED FROM OUTSIDE EDGES OF CARRIER PIPES:

Add a note that service saddles will not be installed within 3' of a fused joint

10 FT HORIZ. BETWEEN WATER MAINS AND SANITARY OR STORM SEWER MAINS
10 FT HORIZ. BETWEEN WATER MAINS AND OUTSIDE OF SANITARY SEWER MANHOLES
10 FT HORIZ. BETWEEN WATER MAINS AND OUTSIDE OF STORM SEWER MAIN STRUCTURES

AT WATER-SEWER MAIN CROSSINGS:
9 FT HORIZ. BETWEEN PIPE JOINTS
18 INCHES VERT. BETWEEN WATER MAINS AND SANITARY OR STORM SEWER MAINS

DUCTILE IRON FITTINGS

1. DUCTILE IRON PIPE SHALL MEET ANSI/AWWA C151/A21.51-02 STANDARD, WITH MINIMUM THICKNESS CLASS 52.
2. DUCTILE IRON AND GRAY-IRON FITTINGS SHALL MEET ANSI/AWWA C110/A21.10-03 STANDARD.

TRENCHING AND BACKFILL

SIDE WALLS OF TRENCHES AND EXCAVATIONS SHALL BE SLOPED OR SUFFICIENTLY BRACED IN CONFORMANCE WITH SECTION 05.160 OF THE STATE OF ALASKA DEPARTMENT OF LABOR STANDARDS AND THE LATEST FEDERAL OSHA EXCAVATION AND TRENCHING STANDARDS. TRENCH BOXES SHALL BE USED WHEN TRENCH EXCAVATIONS THREATEN THE STRUCTURAL INTEGRITY OF ADJACENT STRUCTURES. ALL TRENCHES SHALL BE BACKFILLED BEFORE STOPPING WORK EACH DAY. IF IT IS NECESSARY TO LEAVE AN OPEN EXCAVATION UNATTENDED, THE OPEN EXCAVATION SHALL BE ADEQUATELY SIGNED AND BARRICADED TO WARN RESIDENTS OF THE HAZARD.

COMPACTION SHALL TYPICALLY BE ACCOMPLISHED USING A MECHANICAL DEVICE SUCH AS A VIBRATORY PLATE OR VIBRATORY DRUM COMPACTOR. TRENCH BACKFILL ABOVE THE PIPE ZONE AND WITHIN ROADS OR OTHER TRAVELED AREAS SHALL BE COMPACTED IN MAXIMUM 12" LIFTS TO 95% OF THE MAXIMUM MODIFIED PROCTOR DRY DENSITY. BACKFILL IN OTHER AREAS SHALL BE COMPACTED TO 90% OF THE MAXIMUM MODIFIED PROCTOR DRY DENSITY.

IF EXCAVATIONS ENCOUNTER GROUNDWATER, DEWATERING SHALL BE IMPLEMENTED AND TEMPORARY SHORING WILL BE REQUIRED TO STABILIZE THE WALLS WHILE EXCESS WATER IS PUMPED OUT OF THE EXCAVATION.

LIFT STATION STARTUP

AFTER INSTALLATION OF ALL NEW LIFT STATION EQUIPMENT, THE PROJECT SUPERINTENDENT SHALL START AND FIELD TEST EACH PUMP UNIT TO DEMONSTRATE ITS ABILITY TO PUMP WITHOUT EXCESSIVE VIBRATION, MOTOR OVERLOADING OR OVERHEATING. EACH PUMP SHALL BE OPERATED FOR A SUFFICIENT PERIOD OF TIME TO PERMIT THOROUGH OBSERVATION OF ALL PUMP COMPONENTS. THE PROJECT SUPERINTENDENT SHALL VERIFY THE PROPER SEQUENCING AND OPERATION OF ALL CONTROLS.

AFTER THE LIFT STATION INSTALLATION IS COMPLETE BUT PRIOR TO DRAWING WASTEWATER INTO THE WET WELL, THE SUPERINTENDENT SHALL DETERMINE THE DISCHARGE RATE OF EACH OF THE SUBMERSIBLE WASTEWATER PUMPS, INDEPENDENTLY AND IN TANDEM. THESE MEASUREMENTS SHALL BE RECORDED ON THE RECORD DRAWINGS FOR FUTURE REFERENCE.

THE DISCHARGE PUMPING RATE SHALL BE DETERMINED BY MEASURING DRAWDOWN OF POTABLE WATER PLACED IN THE WET WELL. ALL LIFT STATION TESTING SHALL BE PERFORMED WITH POTABLE WATER.

WATERMAIN DISINFECTION

1. DISINFECTION SHALL BE ACCOMPLISHED AFTER COMPLETION OF OPEN BORE FLUSHING AND HYDROSTATIC TESTING OPERATIONS, IN ACCORDANCE WITH THE LATEST EDITION AWWA C651
2. DURING THE CHLORINATION PROCESS, ALL INTERMEDIATE VALVES AND ACCESSORIES SHALL BE OPERATED. VALVES SHALL BE MANIPULATED SO THAT THE STRONG CHLORINE SOLUTION IN THE LINE BEING TREATED WILL NOT FLOW BACK INTO THE LINE SUPPLYING THE WATER. HYDROSTATIC TESTING OF A WATER LINE CONTAINING THE CHLORINE MIXTURE WILL NOT BE ALLOWED.
3. AFTER DISINFECTION, THE CHLORINATED WATER SHALL BE FLUSHED FROM THE LINE AT ITS EXTREMITIES UNTIL THE RESIDUAL CHLORINE LEVEL MATCHES THAT OF THE PERMANENT WATER SUPPLY. EACH INDIVIDUAL WATER SERVICE SHALL BE FLUSHED SEPARATELY TO REMOVE CHLORINE SOLUTION.
4. AFTER FLUSHING, WATER SAMPLES SHALL BE COLLECTED FOR COLIFORM BACTERIA ANALYSIS IN ACCORDANCE WITH AWWA C651 AND SPECIFIC CONDITIONS OF APPROVAL BY THE ALASKA DEPT. OF ENVIRONMENTAL CONSERVATION (ADEC). SAMPLES SHALL BE ANALYZED BY A STATE-CERTIFIED LABORATORY. NEWLY CONSTRUCTED MAINS SHALL NOT BE COMMISSIONED UNTIL ALL SAMPLES HAVE BEEN ANALYZED AND FOUND TO BE SATISFACTORY, AND "INTERIM APPROVAL TO OPERATE" HAS BEEN ISSUED BY ADEC.
5. HEAVILY CHLORINATED WATER SHALL BE NEUTRALIZED WITH A SOLUTION OF SODIUM BISULFITE OR SODIUM SULFITE. THE SUPERINTENDENT IN CHARGE OF THE DISINFECTION AND FLUSHING OF THE LINES SHALL HAVE A COPY OF THE LATEST EDITION OF AWWA C651 ON SITE FOR READY REFERENCE.

PIPELINE TESTING

1. GENERAL
   ALL TESTING SHALL BE IN CONFORMANCE WITH THE FOLLOWING REQUIREMENTS: ALL TESTS SHALL BE WITNESSED BY A REPRESENTATIVE DESIGNATED BY THE OWNER. UPON SUCCESSFUL COMPLETION OF A TEST, THE RESULTS OF THE TEST SHALL BE DOCUMENTED ON A TEST FORM AND ACKNOWLEDGED BY SIGNATURE OF THE COMMUNITY'S REPRESENTATIVE WITNESSING THE TEST AND BY THE PROJECT SUPERINTENDENT. THE SUPERINTENDENT'S RED LINED AS-BUILT DRAWINGS SHALL ALSO NOTE THE TIME AND DATE OF THE TEST, AS WELL AS THE NAME OF THE COMMUNITY'S WITNESS, FOR EACH PIPE SEGMENT TESTED.

2. WATER MAIN AND TESTING
   ALL PIPE JOINTS SHALL BE VISUALLY INSPECTED FOR INTEGRITY PRIOR TO INSTALLING THE INSULATION HALF-SHELLS AND COUPLING BANDS. ALL NEWLY INSTALLED WATERMAINS SHALL BE OPEN BORE FLUSHED TO REMOVE ANY FOREIGN MATTER. OPEN BORE FLUSHING SHALL BE ACCOMPLISHED AT EACH EXTREMITY OF THE MAIN, PRIOR TO SERVICE LINE INSTALLATION, HYDROSTATIC (PRESSURE) TESTING AND DISINFECTION. PERFORM HYDROSTATIC TESTING OF WATERMAINS AFTER OPEN BORE FLUSHING AND BEFORE DISINFECTION (SEE DISINFECTION BELOW). FILL THE LINE WITH WATER AND REMOVE AIR POCKETS PRIOR TO STARTING THE TEST. PRESSURIZE TO 1.5 TIMES THE OPERATING PRESSURE (MAX 80 PSI DURING FIRE EVENTS) = 120 PSI AND LEAVE FOR A MINIMUM OF 1 HOUR. AFTER THIS INITIAL PERIOD, ADD WATER TO BRING THE PRESSURE UP TO 120 PSI AND BEGIN A 1 HOUR TEST. FOR THE LINE TO BE ACCEPTED, THE MAKE-UP WATER REQUIRED TO RETURN THE PRESSURE TO 120 PSI AT THE END OF THE TEST PERIOD SHALL NOT BE GREATER THAN 0.6 GALLONS PER 100 FT OF 8" WATER MAIN.

3. SEWER MAIN AND SEWER SERVICE LINE TESTING
   THE CONSTRUCTION CREW SHALL CLEAN AND FLUSH ALL SANITARY SEWER MAINS PRIOR TO VISUAL INSPECTION (LAMPING) AND PRESSURE TESTING.

   EACH REACH OF SEWER MAIN SHALL BE LAMPED, MANHOLE TO MANHOLE, WITH A HIGH INTENSITY LIGHT AND LARGE MIRROR. SEGMENTS NOT LAMPING TO 7/8 OF A FULL MOON SHALL BE REALIGNED AND/OR REGRADED AS NECESSARY TO MEET THE 7/8 MOON REQUIREMENT.

   ALL SEGMENTS OF COMPLETED SEWER MAIN SHALL BE PRESSURE TESTED FROM MANHOLE TO MANHOLE OR MANHOLE TO CLEANOUT WITH AIR AT THE END OF CONSTRUCTION (PRIOR TO CONNECTING SEWER SERVICE LINES).

THE SEGMENT OF PIPE UNDER TEST SHALL BE ACCEPTED BASED ON THE FOLLOWING TABLE:

Table 1: Minimum Time Required for a 1.0 psig Pressure Drop

Nominal Pipe Diameter (in)	Minimum Allowable Time for Pipe Length (minutes:seconds)						
	<100ft	150ft	200ft	250 ft	300 ft	350 ft	400ft
4	3:46	3:46	3:46	3:46	3:46	3:46	3:46
6	5:40	5:40	5:40	5:40	5:40	5:40	5:42
8	7:34	7:34	7:34	7:34	7:36	8:52	10:08
10	9:26	9:26	9:26	9:53	11:52	13:51	15:49
12	11:20	11:20	11:24	14:15	17:05	19:56	22:47

1. Gauge shall be from 0 to at least 10 psig, minimum divisions of 0.1 psig, with ± 0.04 psig accuracy.
2. Regulate line pressure to maintain from 3.5 to 4.0 psig for at least 2 minutes before starting test.
3. Disconnect air supply, slowly drop pressure to 3.5 psig for test start, observe time to drop to 2.5 psig.
4. Increase start pressure by 0.43 psig per foot of groundwater above pipe crown (maximum 9.0 psig).
5. If laterals/service lines are included, and line does not meet Table 1, compute time per ASTM F-1417.
6. Test applicable if groundwater < 2 feet above upstream pipe end, otherwise use infiltration test.

SEWER SERVICE LINES SHALL BE VISUALLY INSPECTED FOR GRADE AND JOINT INTEGRITY PRIOR TO BACKFILLING TRENCH. PRESSURE TESTING OF SEWER SERVICE LINES IS NOT PERMITTED.

4. FORCEMAIN TESTING
   PERFORM HYDROSTATIC TESTING OF ALL FORCEMAIN PIPING. FILL THE LINES WITH POTABLE WATER AND REMOVE AIR POCKETS PRIOR TO STARTING THE TEST. PRESSURIZE TO 100 PSI AND LEAVE FOR A MINIMUM OF 1 HOUR. AFTER THIS INITIAL PERIOD, ADD WATER TO BRING THE PRESSURE UP TO 100 PSI AND BEGIN A ONE HOUR TEST. DURING THE TEST PERIOD THERE SHALL BE LESS THAN 0.3 GALLONS PER 100 LF OF FORCEMAIN OF MAKE-UP WATER REQUIRED TO RETURN TO THE INITIAL TEST PRESSURE.

RECORD DRAWING CERTIFICATE
THESE DRAWINGS REFLECT RECORDED INFORMATION OBTAINED DURING CONSTRUCTION. INFORMATION PROVIDED HEREIN IS ACCURATE TO THE BEST OF MY KNOWLEDGE.
NAME DATE

SCALE: AS SHOWN
BAR IS ONE INCH ON ORIGINAL DRAWING 0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

CONSTRUCTION RECORD
FIELD BOOK
STAKING
FOREMAN
AS-BUILT
INSPECTOR

10/31/23
STATE OF ALASKA 49 TH Michael R. Erdman No.6252 REGISTERED PROFESSIONAL ENGINEER

LittlePomerKamp WATER & SEWER
GENERAL NOTES
NOME, ALASKA

CE2 ENGINEERS, INC.
PO BOX 232946 ANCHORAGE, AK 99523 PH: 907-349-1010 FAX: 907-349-1015

REVISION	BY	DATE

Project No.
Date OCT 2023
Designed MRE
Drawn MRE
Approved MRE

Sheet No.
G1.0

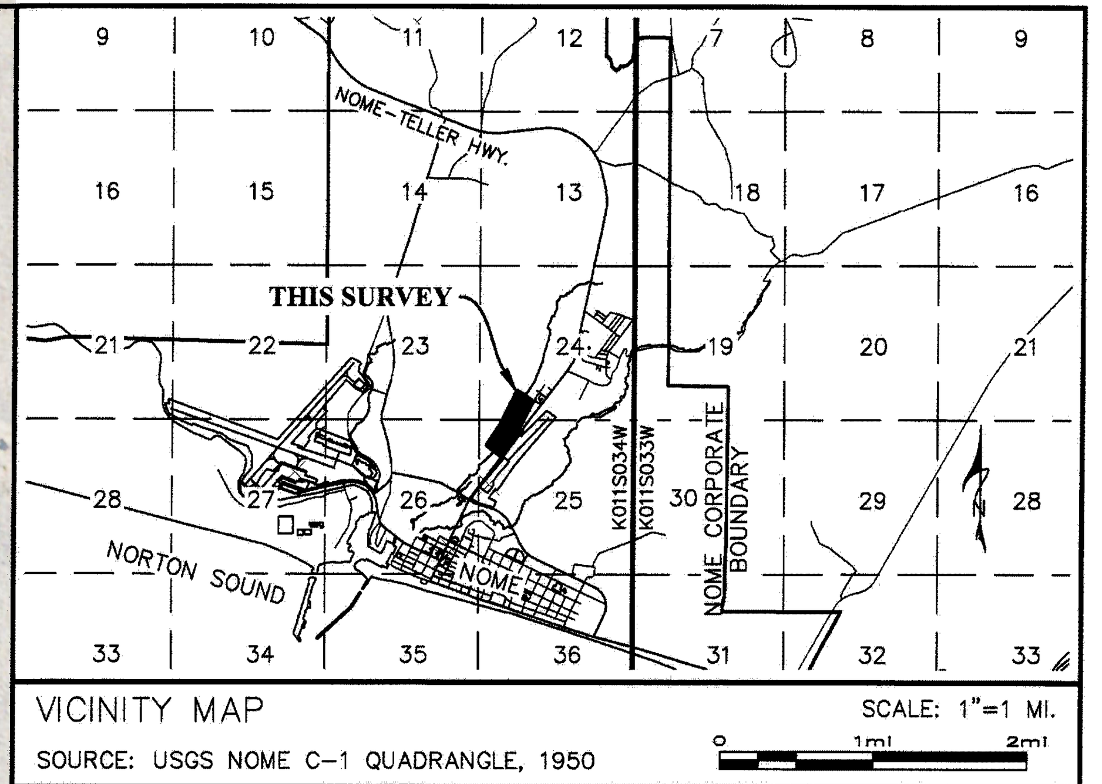
LEGEND:

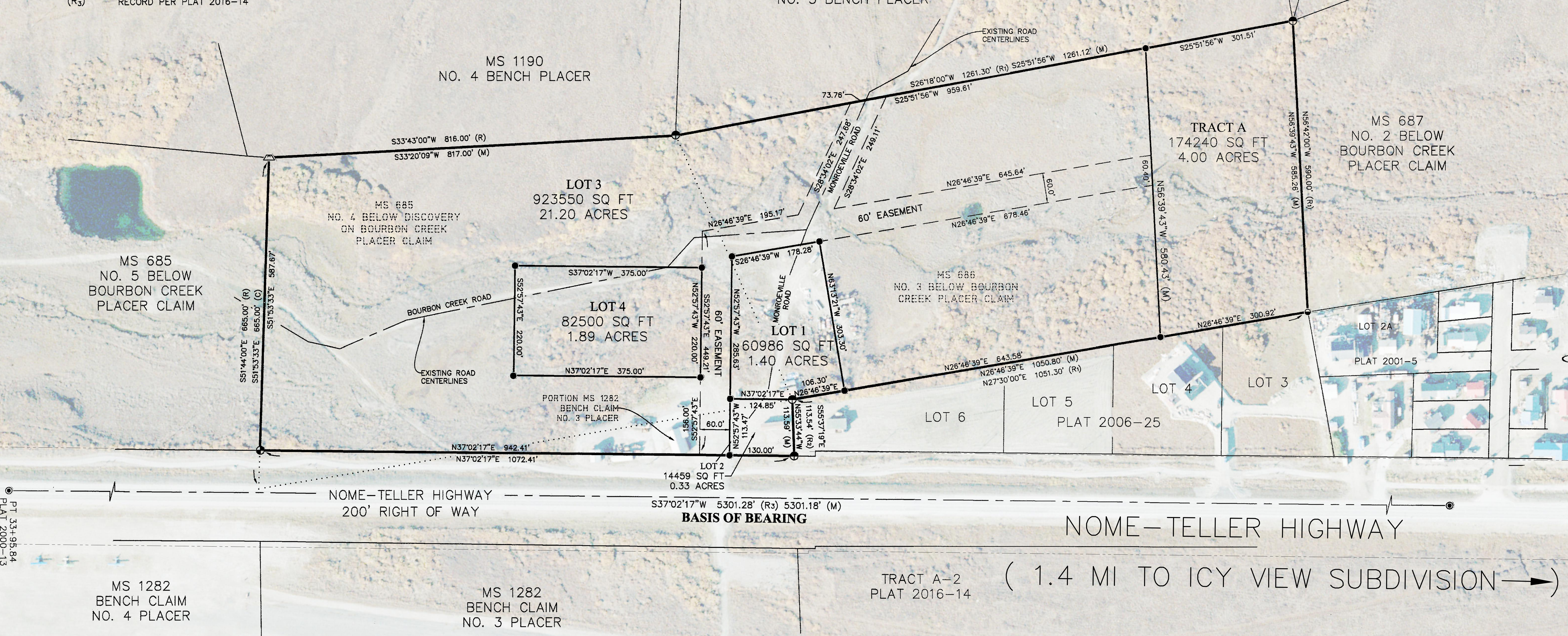
- FOUND 3-1/4" 7323-S ALUMINUM CAPPED PIPE MONUMENT
- FOUND 2-1/2" 7323-S ALUMINUM CAPPED 5/8" REBAR
- FOUND SCRIBED STONE MONUMENT
- FOUND DOT&PF 2" BRASS CAP CENTERLINE MONUMENT INSIDE 8" STEEL CASING
- SET 3-1/4" ALUMINUM CAPPED 30" X 2-3/8" PIPE MONUMENT WITH FRANGIBLE PLASTIC BASE CONTAINING CERAMIC MAGNET
- SET 2-1/2" ALUMINUM CAP ON 5/8"X30" REBAR
- Nº 4 BELOW DISCOVERY MS 685 LINES

(M)	MEASURED
(C)	COMPUTED
(R)	RECORD PER U.S.M.S 685
(R_1)	RECORD PER U.S.M.S. 686
(R_2)	RECORD PER PLAT 2006-25
(R_3)	RECORD PER PLAT 2016-14

NOTES

1 THE ERROR OF CLOSURE OF THIS SURVEY DOES NOT EXCEED 1:5000
2 ALL BEARINGS ARE TRUE BEARINGS AS ORIENTED TO THE BASIS OF BEARING AND ALL DISTANCES SHOWN ARE REDUCED TO HORIZONTAL FIELD DISTANCES.
3 ALL WASTEWATER DISPOSAL SYSTEMS ARE SUBJECT TO THE PROVISIONS OF TITLE 18 OF THE ALASKA ADMINISTRATIVE CODE CHAPTER 72 (18 AAC 72).





TAX CERTIFICATE

I HEREBY CERTIFY THAT THE TAXES DUE AND PAYABLE ON THE PROPERTY PLATTED HEREON HAVE BEEN PAID THROUGH THE PERIOD ENDING

October 31, 2018

[signature] 9·26·2018

CITY OF NOME TAX COLLECTION OFFICIAL DATE

MINOR SUBDIVISION APPROVAL

THIS SUBDIVISION HAS BEEN REVIEWED IN ACCORDANCE WITH THE CITY OF NOME SUBDIVISION REGULATIONS AND IS HEREBY APPROVED.

[signature] 9·27·18

MANAGER, CITY OF NOME DATE

GRAPHIC SCALE

120 0 60 120 240 360

U.S. SURVEY FEET

CERTIFICATE OF OWNERSHIP AND DEDICATION

WE, THE UNDERSIGNED, CERTIFY THAT WE ARE THE OWNERS OF SUNNISHINE SUBDIVISION, AS SHOWN ON THIS PLAT. WE APPROVE THIS SURVEY AND PLAT AND DEDICATE FOR PUBLIC USE ALL EASEMENTS AS SHOWN AND DESCRIBED ON THIS PLAT.

[signature]	9/28/18	[signature]	9/28/18
SHANE D. SMITHHISLER PO BOX 745 NOME, AK 99762	DATE	DANI L. SMITHHISLER PO BOX 745 NOME, AK 99762	DATE

NOTARY'S ACKNOWLEDGEMENT

SUBSCRIBED AND SWORN TO BEFORE ME THIS 28th DAY OF September, 2018 BY SHANE D. SMITHHISLER PERSONALLY APPEARING BEFORE ME.

BRYANT HAMMOND
Notary Public
State of Alaska
My Commission Expires Nov 19, 2019

[signature]
NOTARY PUBLIC FOR ALASKA
MY COMMISSION EXPIRES: 11/19/19

NOTARY'S ACKNOWLEDGEMENT

SUBSCRIBED AND SWORN TO BEFORE ME THIS 28th DAY OF September, 2018 BY DANI L. SMITHHISLER PERSONALLY APPEARING BEFORE ME.

[signature]
NOTARY PUBLIC FOR ALASKA
MY COMMISSION EXPIRES: 10/19/21

SURVEYOR'S CERTIFICATE

I HEREBY CERTIFY THAT I AM PROPERLY REGISTERED AND LICENSED TO PRACTICE LAND SURVEYING IN THE STATE OF ALASKA, THAT THIS PLAT REPRESENTS A SURVEY MADE BY ME OR UNDER MY DIRECT SUPERVISION, THAT THE MONUMENTS SHOWN HEREON EXIST AS DESCRIBED, AND THAT ALL DIMENSIONS AND OTHER DETAILS ARE CORRECT.

GEORGE KRIER	7323	9/20/2018
REGISTERED LAND SURVEYOR,	PLS #	DATE

STATE OF ALASKA 49TH GEORGE KRIER No. 7323 REGISTERED PROFESSIONAL LAND SURVEYOR

2018-10
Plat # Nome
Rec Dist
10·11 20 18
Date
Time 1:53 PM

SUNNISHINE SUBDIVISION	A SURVEY PERFORMED BY GEORGE KRIER, PROFESSIONAL LAND SURVEYOR 7323-S PO BOX 1058, NOME, ALASKA 99762 907-443-5358
CREATING LOTS 1-4; AND TRACT A	DATE OF SURVEY: JULY 29, 2018 — SCALE: 1"=120'
A SUBDIVISION OF A PORTION OF Nº 4 BELOW DISCOVERY ON BOURBON CREEK PLACER CLAIM OF U.S.M.S. 685, U.S.M.S. 686, AND A PORTION OF BENCH CLAIM Nº 3 OF U.S.M.S. 1282, LOCATED IN SECTIONS 24 & 25 TOWNSHIP 11 SOUTH, RANGE 34 WEST, KATEEL RIVER MERIDIAN, ALASKA CONTAINING 28.97 ACRES, MORE OR LESS	**CAPE NOME RECORDING DISTRICT** DRAFTING BY: ENIGMA INDUSTRIES Designed: --- Drawn: EAT Checked: GK PAGE 1 OF 1

NORTH

0 150 300 Feet

RECORD DRAWING CERTIFICATE

THESE DRAWINGS REFLECT RECORDED INFORMATION OBTAINED DURING CONSTRUCTION. INFORMATION PROVIDED HEREIN IS ACCURATE TO THE BEST OF MY KNOWLEDGE.

NAME DATE

SCALE: AS SHOWN

CONSTRUCTION RECORD: FIELD BOOK, STAKING, FOREMAN, AS-BUILT, INSPECTOR

10/31/23

LittlePomerKamp WATER & SEWER

SUBDIVISION PLAT AND VICINITY MAP

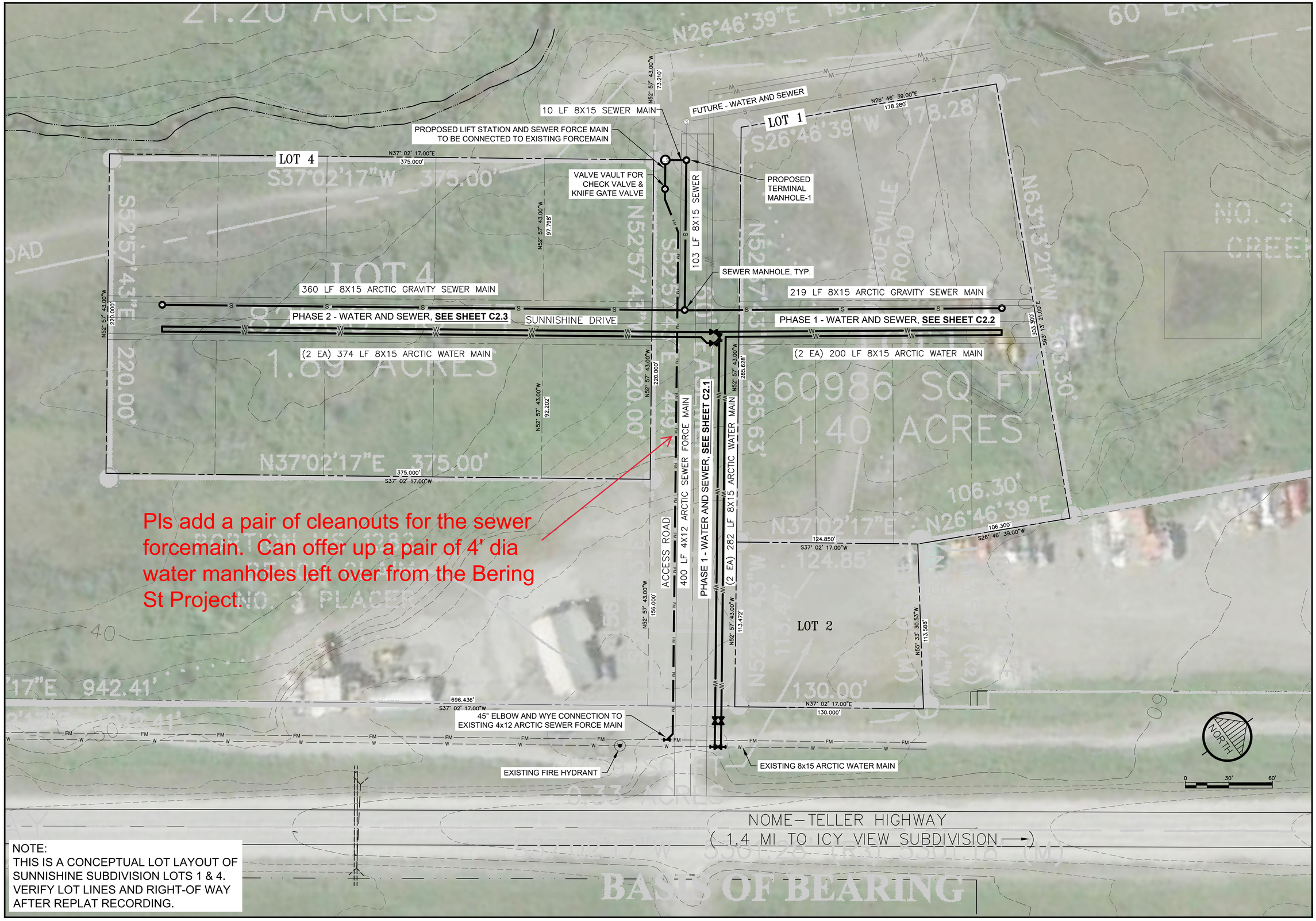
NOME, ALASKA

CE2 ENGINEERS, INC.
PO BOX 232946 ANCHORAGE, AK 99523 PH: 907-349-1010 FAX: 907-349-1015

REVISION BY DATE

Project No.	
Date	OCT 2023
Designed	MRE
Drawn	CM
Approved	MRE

Sheet No. G2.0



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FIELD BOOK

STAKING

FOREMAN

AS-BUILT

INSPECTOR

10/31/23

STATE OF ALASKA 49TH Michael R. Eastman No. 8226 REGISTERED PROFESSIONAL ENGINEER

LittlePomerKamp
WATER & SEWER

PROJECT AND SHEET INDEX

NOME, ALASKA

CE2 ENGINEERS, INC.
PO BOX 202346 ANCHORAGE, AK 99523 PH: 907-346-1010 FAX: 907-346-1015

REVISION	BY	DATE

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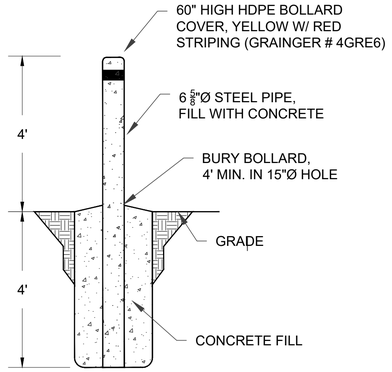
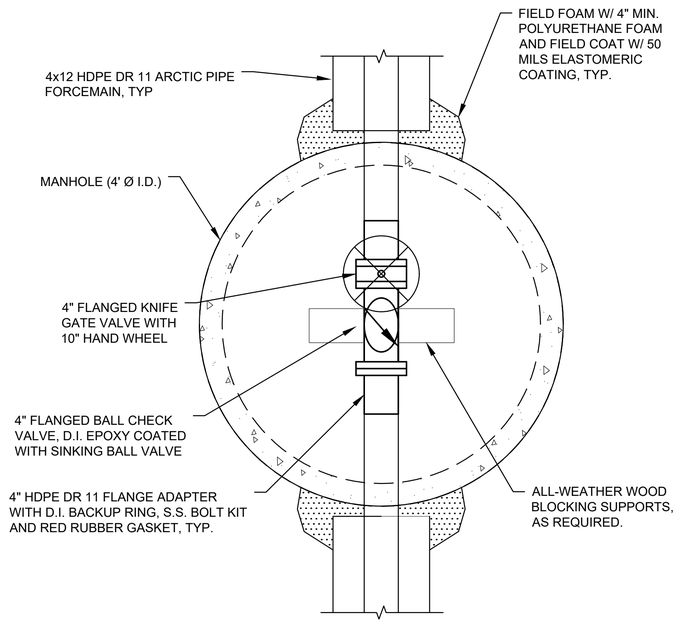
Drawn CM

Approved MRE

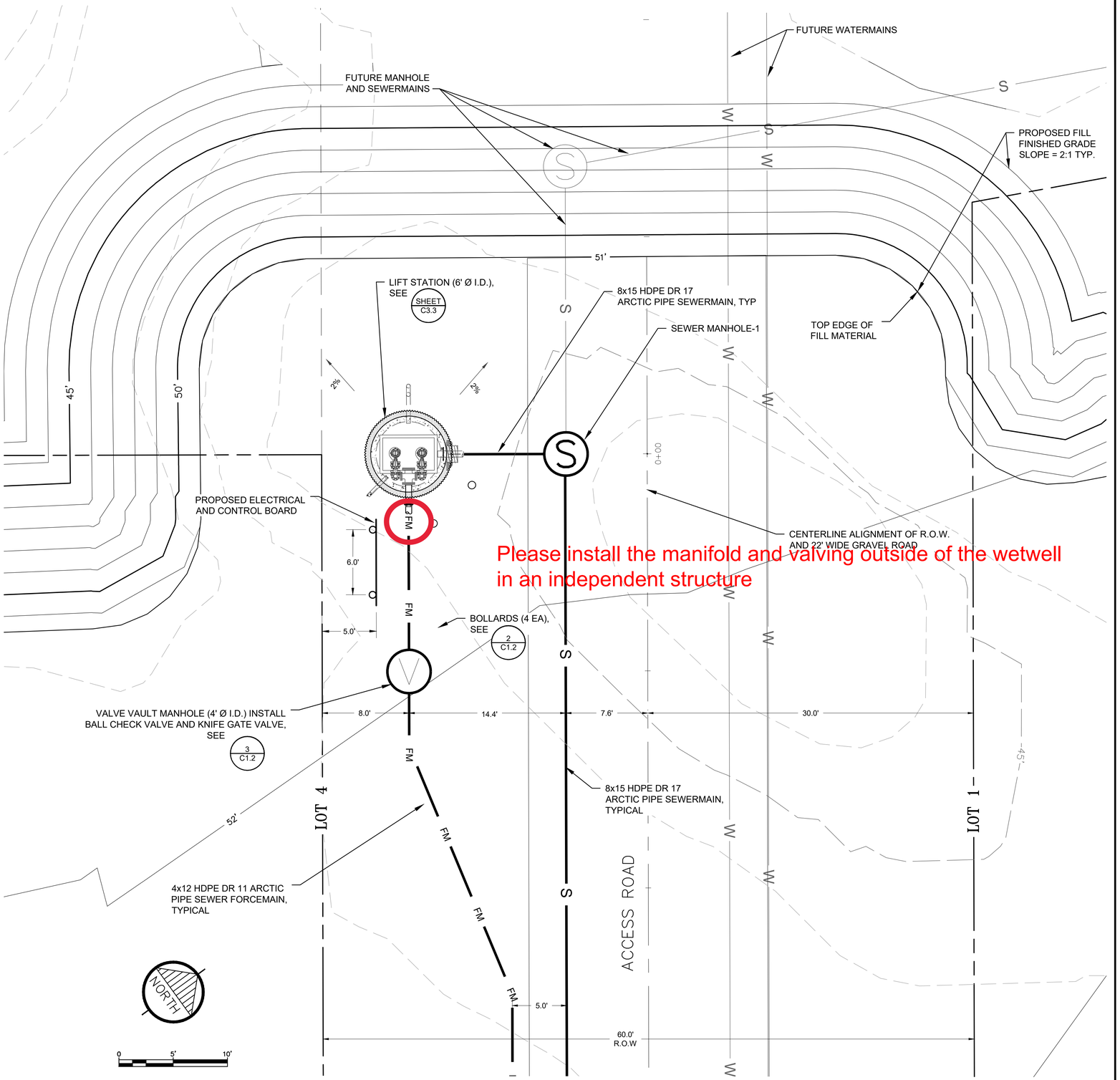
Sheet No. C1.1



2 BOLLARD DETAIL
Scale: N.T.S.



3 VALVE VAULT MANHOLE PLAN
Scale: 1" = 5'



1 LIFT STATION SITE PLAN
Scale: 1" = 10'

RECORD DRAWING CERTIFICATE
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AS-BUILT
INSPECTOR

10/31/23

STATE OF ALASKA
49TH
Michael R. Eichman
No. 8226
REGISTERED PROFESSIONAL ENGINEER

LittlePomerKamp
WATER & SEWER

LIFT STATION
SITE PLAN

NOME, ALASKA

CE2 ENGINEERS, INC.
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REVISION	BY	DATE

Project No. ___ Date OCT 2023
Designed MRE
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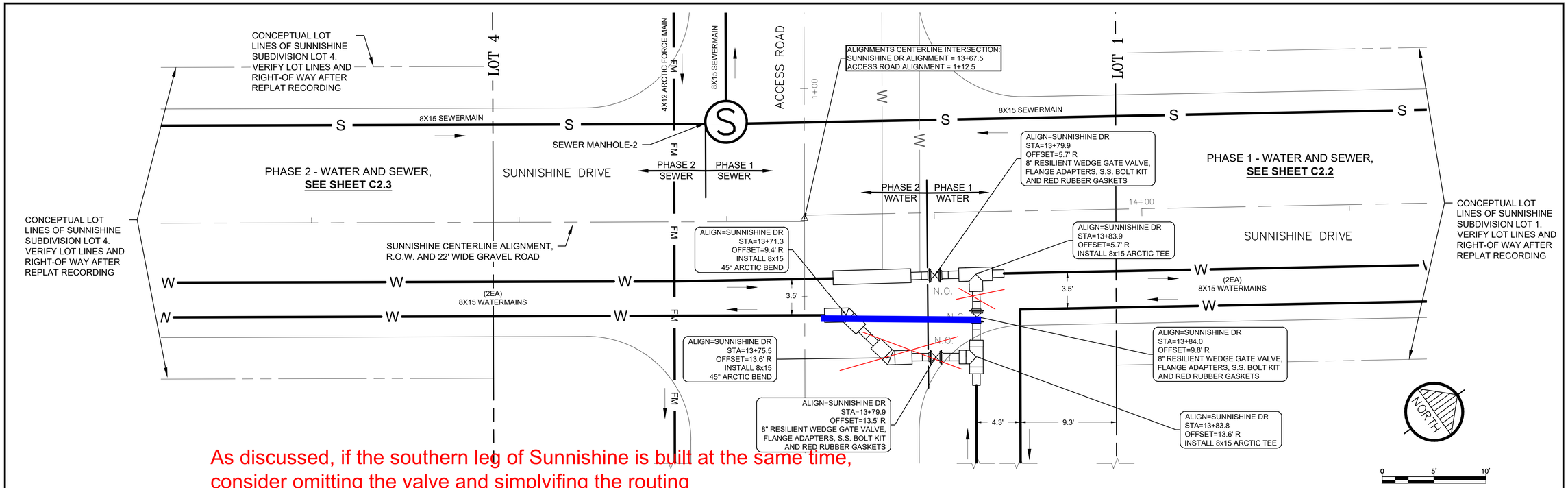
Approved MRE

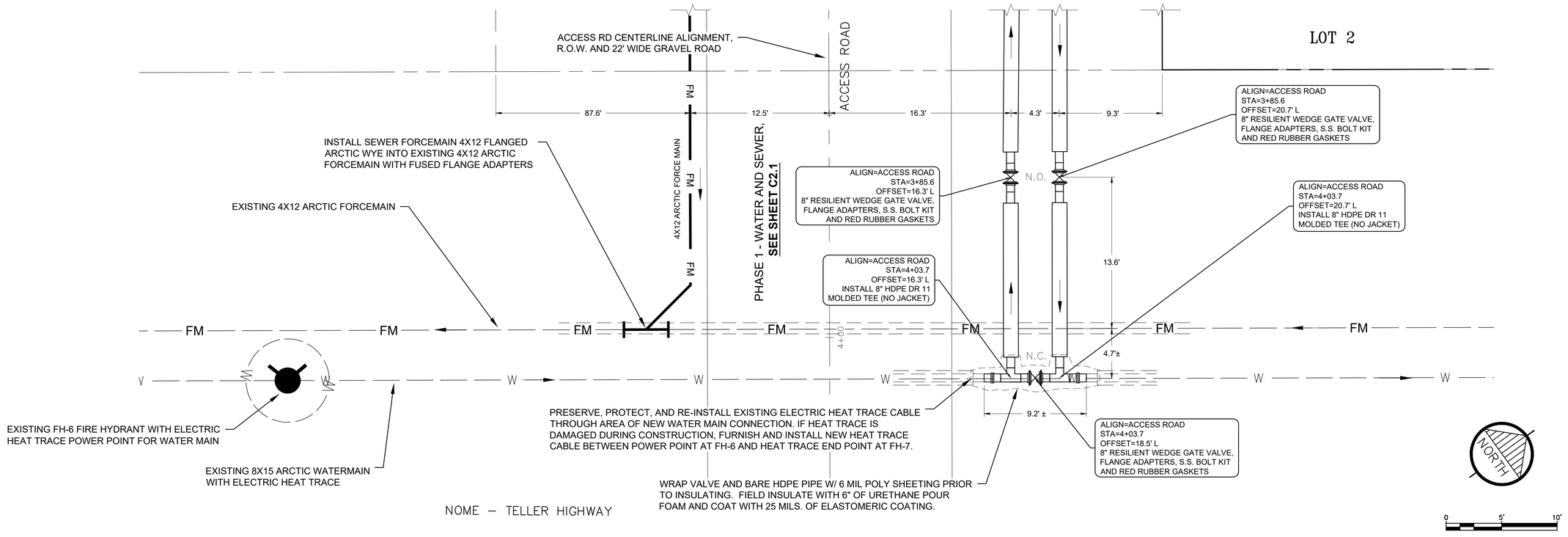
Sheet No.
C1.2



As discussed, if the southern leg of Sunnishine is built at the same time, consider omitting the valve and simplyifing the routing

1 SUNNSHINE DR / ACCESS RD - INTERSECTION W/S PLAN

Scale: 1" = 10'



2 NOME - TELLER HIGHWAY / ACCESS RD - INTERSECTION W/S PLAN

Scale: 1" = 10'

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INSPECTOR

10/31/23

STATE OF ALASKA
49TH
Michael R. Eichman
No. 8226
REGISTERED PROFESSIONAL ENGINEER

LittlePomerKamp
WATER & SEWER

WATER AND SEWER
INTERSECTION PLANS

NOME, ALASKA

CE2 ENGINEERS, INC.
PO BOX 232946 ANCHORAGE, AK 99523 PH: 907-345-1010 FAX: 907-345-1015

REVISION	BY	DATE

Project No. _____
Date OCT 2023
Designed MRE
Drawn CM
Approved MRE

Sheet No.
C1.3

FUTURE SEWERMAIN AND WATERMAINS

PROPOSED FILL FINISHED GRADE SLOPE = 2:1 TYP.

FUTURE WATERMAIN

FUTURE SEWER MANHOLE

ALIGN=ACCESS ROAD
STA=0+00.0
OFFSET=7.6' R
INSTALL MANHOLE-1

ALIGN=ACCESS ROAD
STA=1+17.9
OFFSET=16.6' L
INSTALL WATER
8x8x8 ARCTIC TEE

ALIGN=ACCESS ROAD
STA=1+21.3
OFFSET=20.9' L
INSTALL WATER 90°
8x15 ARCTIC BEND

ALIGN=ACCESS ROAD
STA=1+21.9
OFFSET=16.5' L
INSTALL WATER
VALVE ASSEMBLY

ALIGN=ACCESS ROAD
STA=3+85.7
OFFSET=20.7' L
INSTALL WATER
VALVE ASSEMBLY

ALIGN=ACCESS ROAD
STA=4+03.7
OFFSET=18.5' L
INSTALL WATER
VALVE ASSEMBLY,
ARCTIC TEES AND
FLANGE ADAPTERS
FOR CONNECTION TO
EXISTING 8x15 ARCTIC
WATER MAIN

ALIGN=ACCESS ROAD
STA=3+95.2
OFFSET=12.5' R
INSTALL SEWER FM 45°
4x12 ARCTIC BEND

ALIGN=ACCESS ROAD
STA=3+99.0
OFFSET=16.5' R
INSTALL SEWER FM 4X12
ARCTIC WYE IN EXISTING
4X12 ARCTIC FORCEMAIN

ALIGN=ACCESS ROAD
STA=0+00.0
OFFSET=22.0' R
INSTALL SEWER
6'∅ I.D. LIFT STATION

ALIGN=ACCESS ROAD
STA=0+20.0
OFFSET=22.0' R
INSTALL 4'∅ I.D. VALVE VAULT MANHOLE
WITH CHECK AND KNIFE GATE VALVE

ALIGN=ACCESS ROAD
STA=0+27.0
OFFSET=22.0' R
INSTALL SEWER FM 45°
4x12 ARCTIC BEND

ALIGN=ACCESS ROAD
STA=0+49.8
OFFSET=12.6' R
INSTALL SEWER FM 45°
4x12 ARCTIC BEND

ALIGN=ACCESS ROAD
STA=1+03.2
OFFSET=7.5' R
INSTALL MANHOLE-2

ALIGN=ACCESS ROAD
STA=1+25.9
OFFSET=16.5' L
INSTALL WATER
8x8x8 ARCTIC TEE

ALIGN=ACCESS ROAD
STA=3+85.7
OFFSET=16.3' L
INSTALL WATER
VALVE ASSEMBLY

W/S PHASE 1 - SEE SHEET C2.2

W/S PHASE 2 - SEE SHEET C2.3

SUNNISHINE DR

ACCESS ROAD

TELLER HIGHWAY

NOME

EXISTING 4X12 ARCTIC SEWER FORCEMAIN

EXISTING FH-6 FIRE HYDRANT

EXISTING 8X15 ARCTIC WATERMAIN

103.2 LF 8X15 ARCTIC SEWER MAIN

10 LF 8X15 ARCTIC SEWER MAIN

22.8 LF 4X12 ARCTIC FORCE MAIN

282.2 LF (2EA) 8X15 WATERMAINS

345.4 LF 4X12 ARCTIC FORCE MAIN

73.210' N52° 57' 43.00"W

285.628' N52° 57' 43.00"W

220.000' N52° 57' 43.00"W

113.472' N52° 57' 43.00"W

156.000' N52° 57' 43.00"W

124.855' S37° 02' 17.00"W

130.000' N37° 02' 17.00"E

NORTH

0 20' 40'

PHASE 1 WATER AND SEWER

STA. 1+21.9
INSTALL VALVE ASSEMBLY AND ARCTIC TEES

STA. 3+85.8
INSTALL VALVE ASSEMBLY AND (2EA) 45° BENDS

PROPOSED FILL FINISHED GRADE

4.0' MIN. COVER, TYP.

MH-1
STA: -0+00.0, 7.5' R
RIM: 51.00
LIFT STATION
STA: 0+00.0, 22.0' R
RIM: 53.00

VALVE VAULT
STA: 0+20.0, 22.0' R
RIM: 51.97

MH-2
STA: 1+03.2, 7.5' R
RIM: 53.05

STA 1+29.8
FORCEMAIN 3° VERTICAL PIPE JOINT DEFLECTION

STA 1+69.8
FORCEMAIN 3° VERTICAL PIPE JOINT DEFLECTION

STA 3+99.0
CONNECT TO EXISTING 4x12 ARCTIC FORCEMAIN

STA 4+04.0
8X15 ARCTIC WATERMAIN CONNECT TO EXISTING

400 LF 4X12 ARCTIC SEWER FORCEMAIN

286 LF (2EA) 8X15 ARCTIC WATERMAINS

103.2 LF 8X15 ARCTIC SEWER MAIN @ 0.50%

2%

FORCEMAIN AND WATERMAIN PIPE VERTICAL JOINT DEFLECTIONS AS REQ. TO MAINTAIN 4' MINIMUM COVER

SE INV: 43.08
SW INV: 42.98

NE INV: 42.91
FM INV. = 45.00

SE INV: 45.40
NW INV: 45.40

SW INV: 43.70
NE INV: 43.70
NW INV: 43.60

FM INV. = 46.66
VERTICAL DEFLECTION

FM INV. = 49.28
VERTICAL DEFLECTION

FM INV. = 52.23
FIELD VERIFY

WM INV. = 53.35
FIELD VERIFY

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CONSTRUCTION RECORD
FIELD BOOK
STAKING
FOREMAN
AS-BUILT
INSPECTOR

10/31/23

STATE OF ALASKA
49TH
Michael R. Eidman
No. 8226
REGISTERED PROFESSIONAL ENGINEER

LittlePomerKamp
WATER & SEWER

PHASE 1
SEWER AND WATER
PLAN AND PROFILE

NOME, ALASKA

CE2 ENGINEERS, INC.
PO BOX 223046 ANCHORAGE, AK 99523 PH: 907-349-1010 FAX: 907-349-1015

REVISION	BY	DATE

Project No. ____
Date ____ OCT 2023
Designed ____ MRE
Drawn ____ CM
Approved ____ MRE

Sheet No.
C2.1

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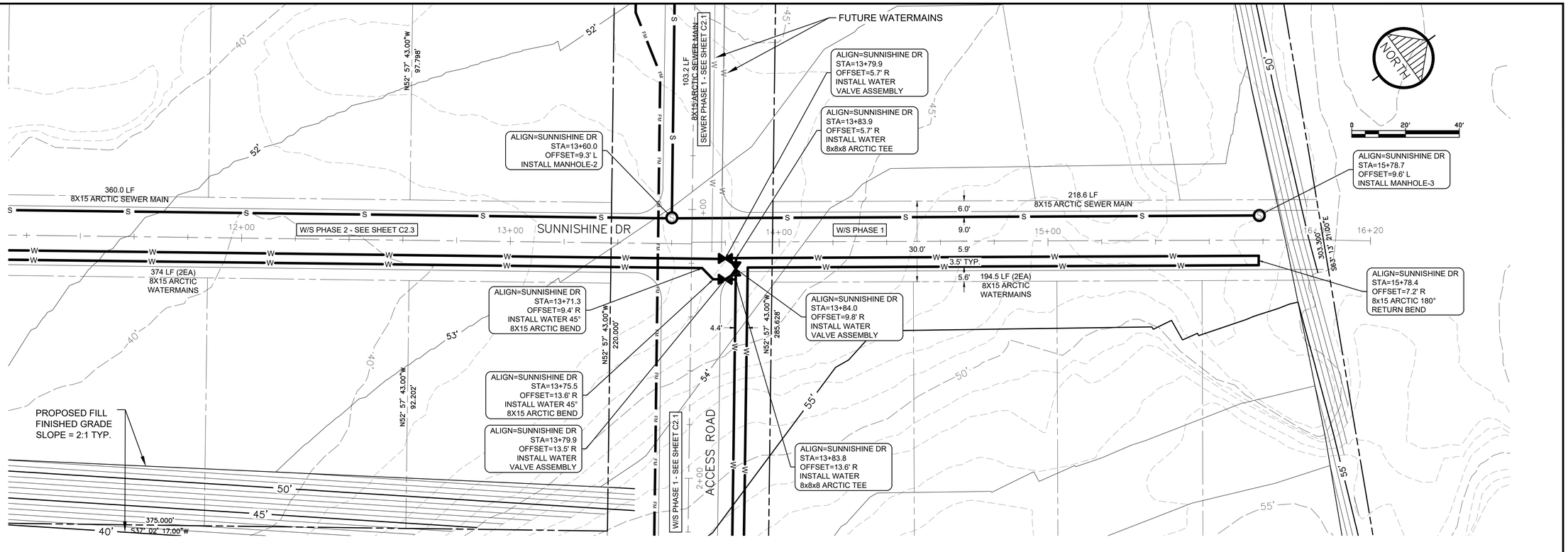

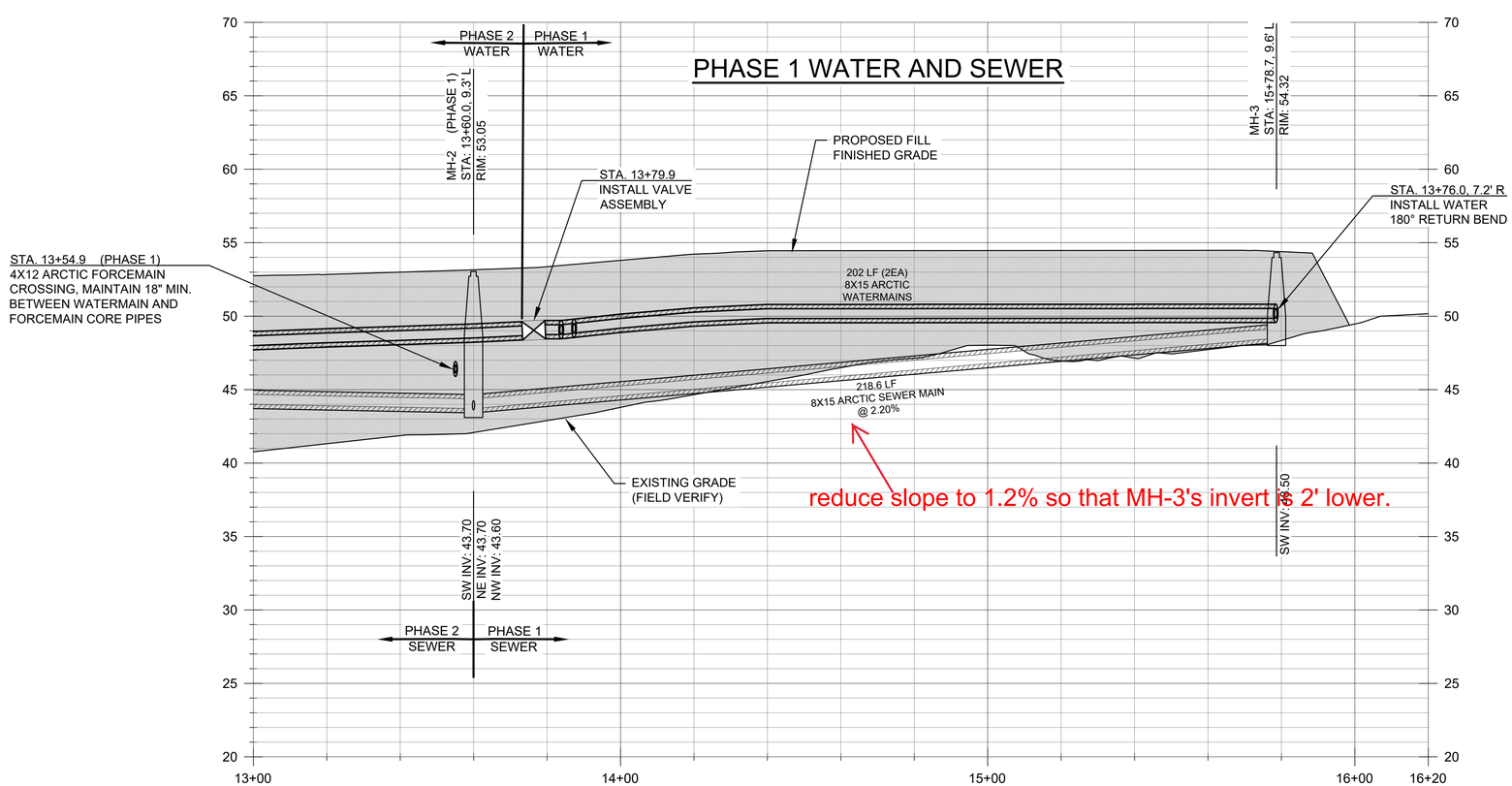

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10/31/23

STATE OF ALASKA
49TH
Michael R. Eshman
No. 8226
REGISTERED PROFESSIONAL ENGINEER

LittlePomerKamp
WATER & SEWER

PHASE 1
SEWER AND WATER
PLAN AND PROFILE

NOME, ALASKA

CE2 ENGINEERS, INC.
PO BOX 223046 ANCHORAGE, AK 99523 PH: 907-348-1010 FAX: 907-348-1015

REVISION	BY	DATE

Project No. _____
Date OCT 2023
Designed MRE
Drawn CM
Approved MRE

Sheet No.
C2.2

PROPOSED FILL
FINISHED GRADE
SLOPE = 2:1 TYP.

ALIGN=SUNNISHINE DR
STA=10+00.0
OFFSET=9.4' L
INSTALL MANHOLE-4

ALIGN=SUNNISHINE DR
STA=10+00.0
OFFSET=7.5' R
INSTALL WATER
8x15 ARCTIC 180°
RETURN BEND

N37° 02' 17.00"E
375.000'

40'
45'
50'
51'

N52° 57' 43.00"W
220.000'

360.0 LF
8X15 ARCTIC SEWER MAIN

374 LF (2EA)
8X15 ARCTIC
WATERMAINS

9+50
10+00
11+00
12+00
13+00
14+00

37.5'
30.0'
15.1'
5.7'
3.5' TYP

W/S PHASE 2

SUNNISHINE DR

W/S PHASE 1 - SEE SHEET C2.2

ALIGN=SUNNISHINE DR
STA=13+60.0
OFFSET=9.3' L
INSTALL MANHOLE-2

ALIGN=SUNNISHINE DR
STA=13+71.3
OFFSET=9.4' R
INSTALL WATER 45°
8X15 ARCTIC BEND

ALIGN=SUNNISHINE DR
STA=13+75.5
OFFSET=13.6' R
INSTALL WATER 45°
8X15 ARCTIC BEND

ALIGN=SUNNISHINE DR
STA=13+79.9
OFFSET=13.5' R
INSTALL WATER
VALVE ASSEMBLY

N52° 57' 43.00"W
97.798'

N52° 57' 43.00"W
92.202'

N52° 57' 43.00"W
285.628'

103.2 LF
8X15 ARCTIC SEWER MAIN
SEWER PHASE 1 - SEE SHEET C2.1

W/S PHASE 1 - SEE SHEET C2.1

ACCESS ROAD

FUTURE WATERMAINS

ALIGN=SUNNISHINE DR
STA=13+79.9
OFFSET=5.7' R
INSTALL WATER
VALVE ASSEMBLY

ALIGN=SUNNISHINE DR
STA=13+83.9
OFFSET=5.7' R
INSTALL WATER
8x8x8 ARCTIC TEE

ALIGN=SUNNISHINE DR
STA=13+84.0
OFFSET=9.8' R
INSTALL WATER
VALVE ASSEMBLY

ALIGN=SUNNISHINE DR
STA=13+83.8
OFFSET=13.6' R
INSTALL WATER
8x6x6 ARCTIC TEE

NORTH

PHASE 2 WATER AND SEWER

MH-4 (PHASE 2)
STA: 10+00.0, 9.4' L
RIM: 51.27

NE INV: 45.50

PROPOSED FILL
FINISHED GRADE

STA. 10+00.0, 7.5' R
INSTALL WATER
180° RETURN BEND

374 LF (2EA)
8X15 ARCTIC
WATERMAINS

360.0 LF
8X15 ARCTIC SEWER MAIN
@ 0.50%

EXISTING GRADE
(FIELD VERIFY)

STA. 13+54.9 (PHASE 1)
4X12 ARCTIC FORCEMAIN
CROSSING, MAINTAIN 18" MIN.
BETWEEN WATERMAIN AND
FORCEMAIN CORE PIPES

MH-2 (PHASE 1)
STA: 13+60.0, 9.3' L
RIM: 53.05

STA. 13+76.0
INSTALL VALVE
ASSEMBLY

SW INV: 43.70
NE INV: 43.70
NW INV: 43.60

PHASE 2 WATER | PHASE 1 WATER

PHASE 2 SEWER | PHASE 1 SEWER

70
65
60
55
50
45
40
35
30
25

9+50
10+00
11+00
12+00
13+00
14+00

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FOREMAN
AS-BUILT
INSPECTOR

10/31/23

STATE OF ALASKA
49TH
Michael R. Eortman
No. 8226
REGISTERED PROFESSIONAL ENGINEER

LittlePomerKamp
WATER & SEWER

PHASE 2
SEWER AND WATER
PLAN AND PROFILE

NOME, ALASKA

CE2 ENGINEERS, INC.
PO BOX 232046 ANCHORAGE, AK 99523 PH: 907-349-1010 FAX: 907-349-1015

REVISION	BY	DATE

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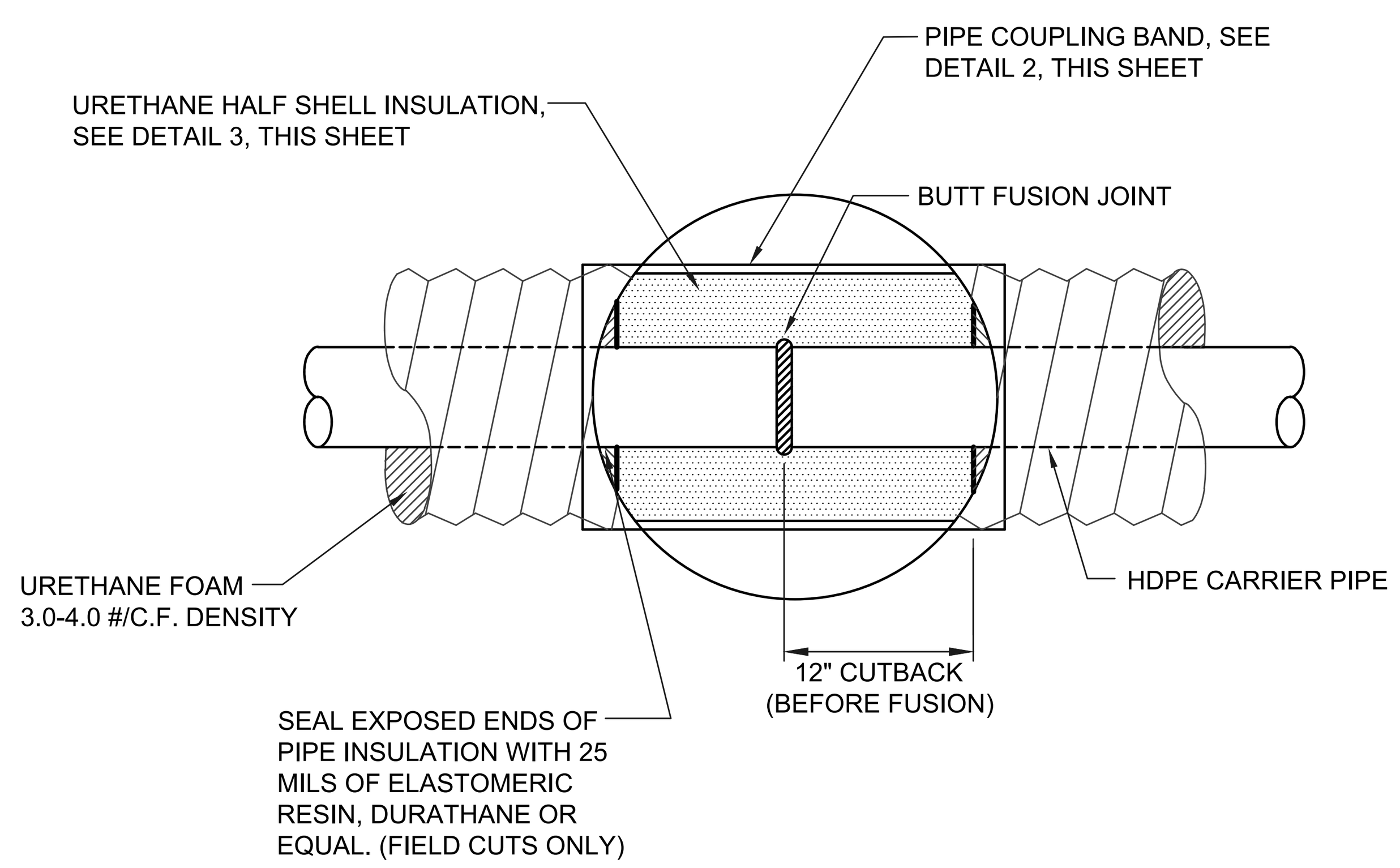
Designed ___ MRE
Drawn ___ CM
Approved ___ MRE

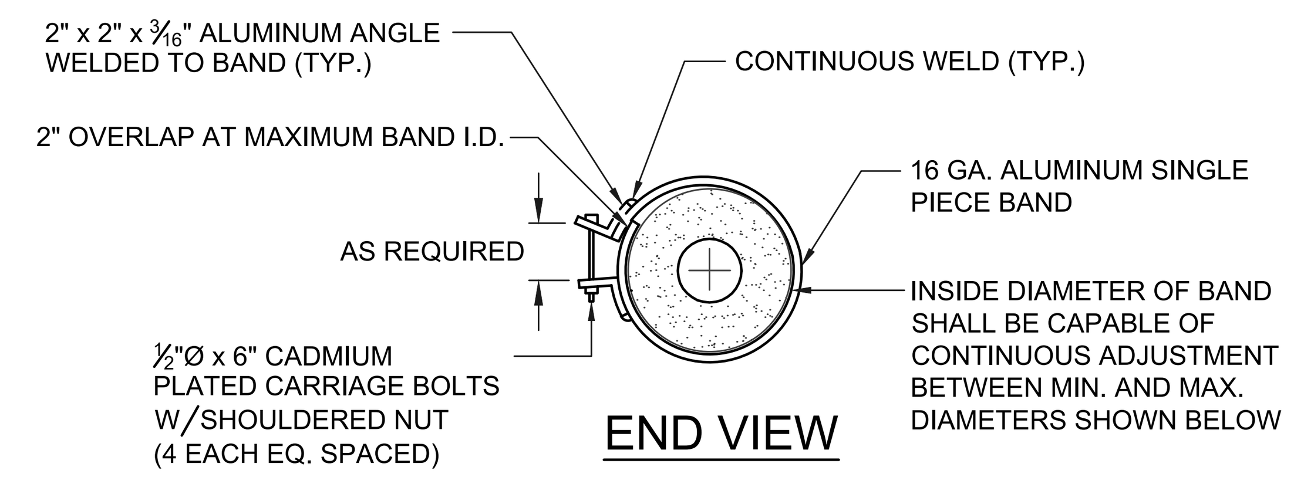
Sheet No.
C2.3

G:\ACAD\NOME\3023\Sunnishine Subd WS\C2.1 to C2.3 Plan Profile _ Sunnishine Subdivision.dwg, 11/2/2023 2:18:57 PM, cmerz, AutoCAD PDF (General Documentation).pc3

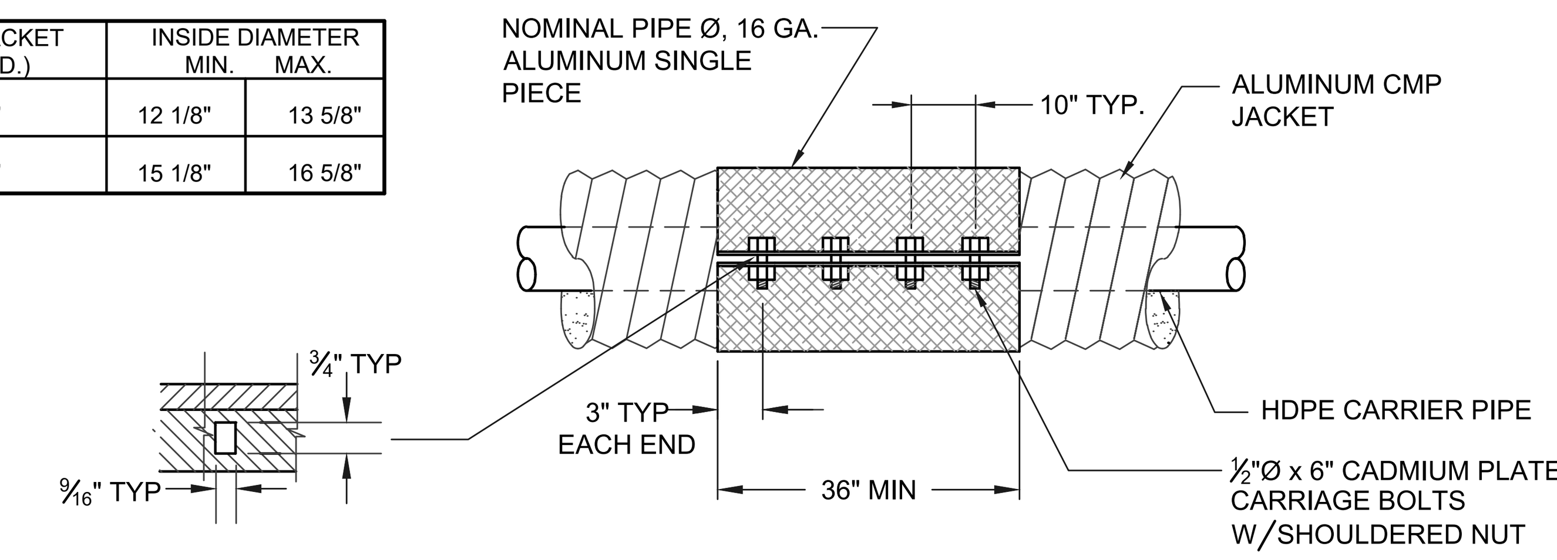


1 WATER MAIN & SEWER FORCE MAIN BUTT-FUSED PIPE JOINT DETAIL

Scale: N.T.S.

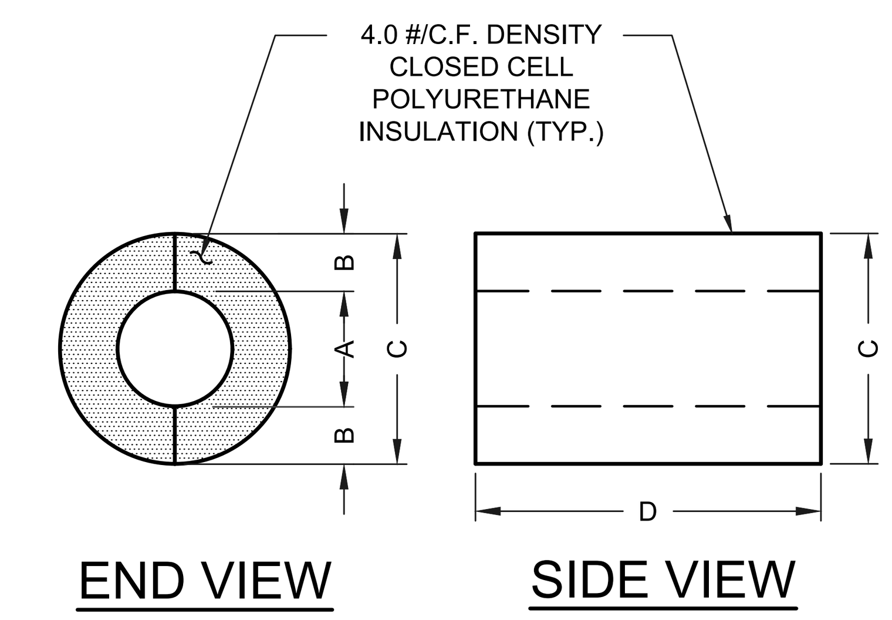


NOM. JACKET SIZE	ACTUAL JACKET SIZE (O.D.)	INSIDE DIAMETER MIN.	MAX.
12"	12 7/8"	12 1/8"	13 5/8"
15"	15 7/8"	15 1/8"	16 5/8"



2 WATER MAIN & SEWER FORCE MAIN PIPE JOINT COUPLING BAND DETAIL

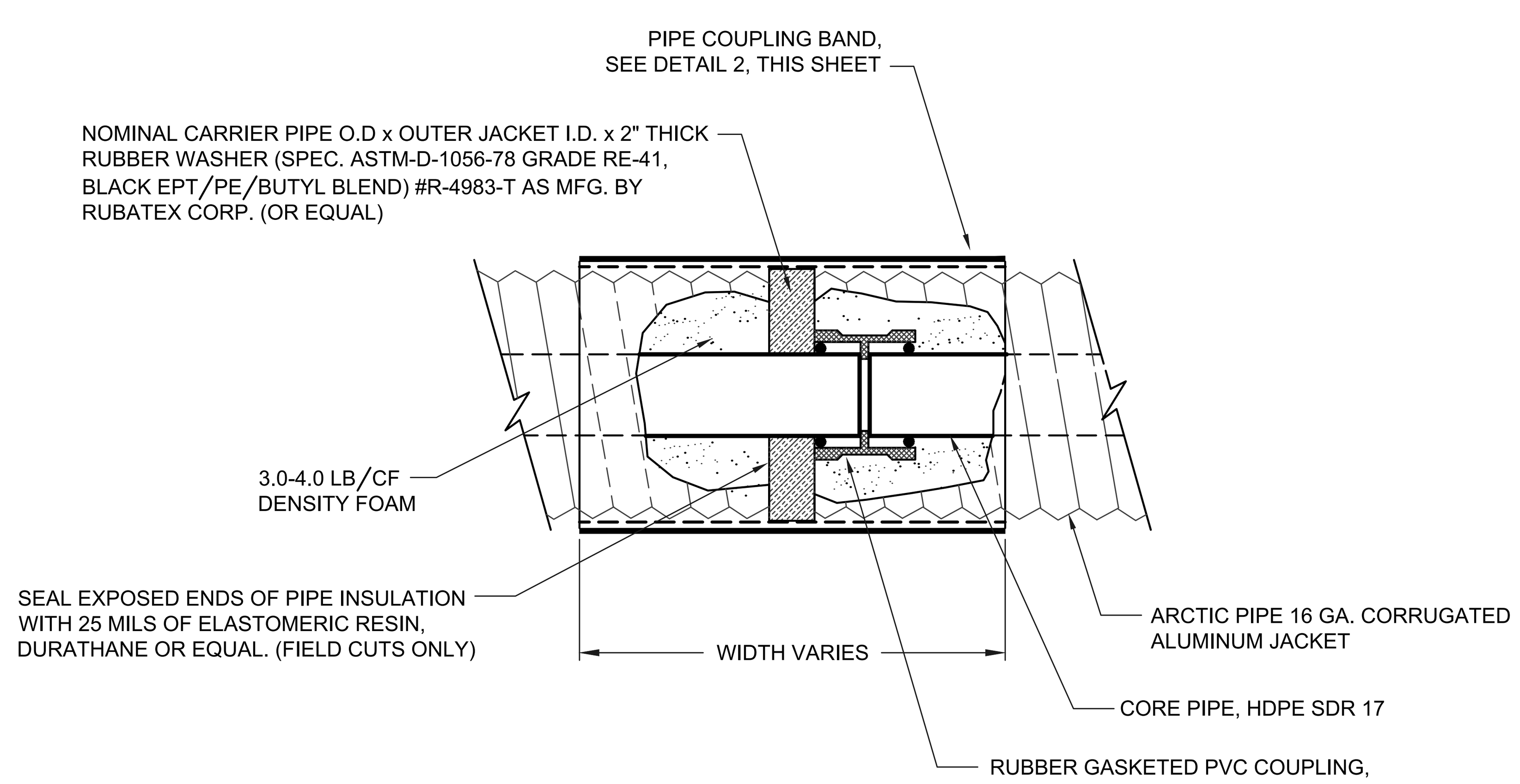
Scale: N.T.S.



HALF SHELL	A	B	C	D
4"	4 5/8"	3 11/16"	12 3/4"	23"
8"	8 3/4"	3 1/8"	15 7/8"	23"

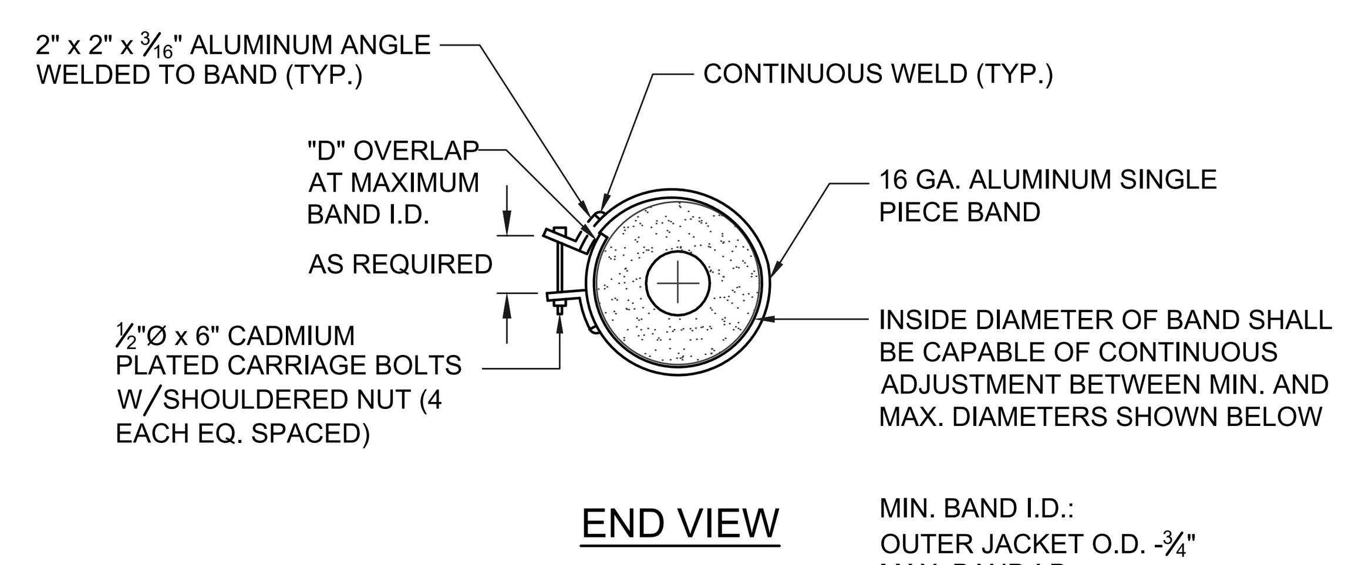
3 WATER MAIN & SEWER FORCE MAIN INSULATION JOINT HALF SHELL DETAIL

Scale: N.T.S.



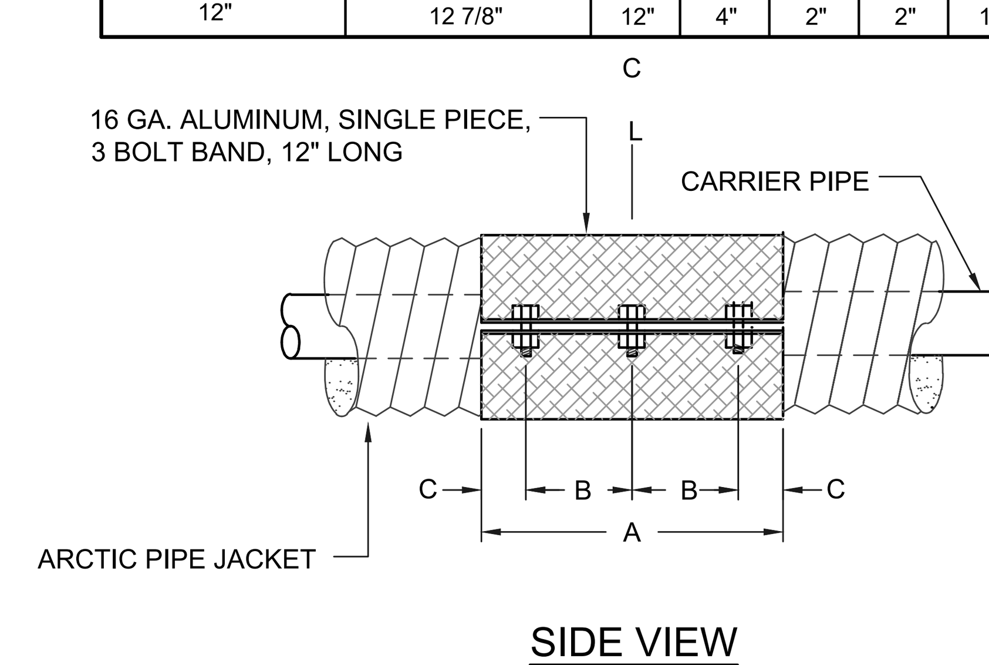
4 GRAVITY SEWER MAIN PIPE JOINT ENCASEMENT DETAIL

Scale: N.T.S.



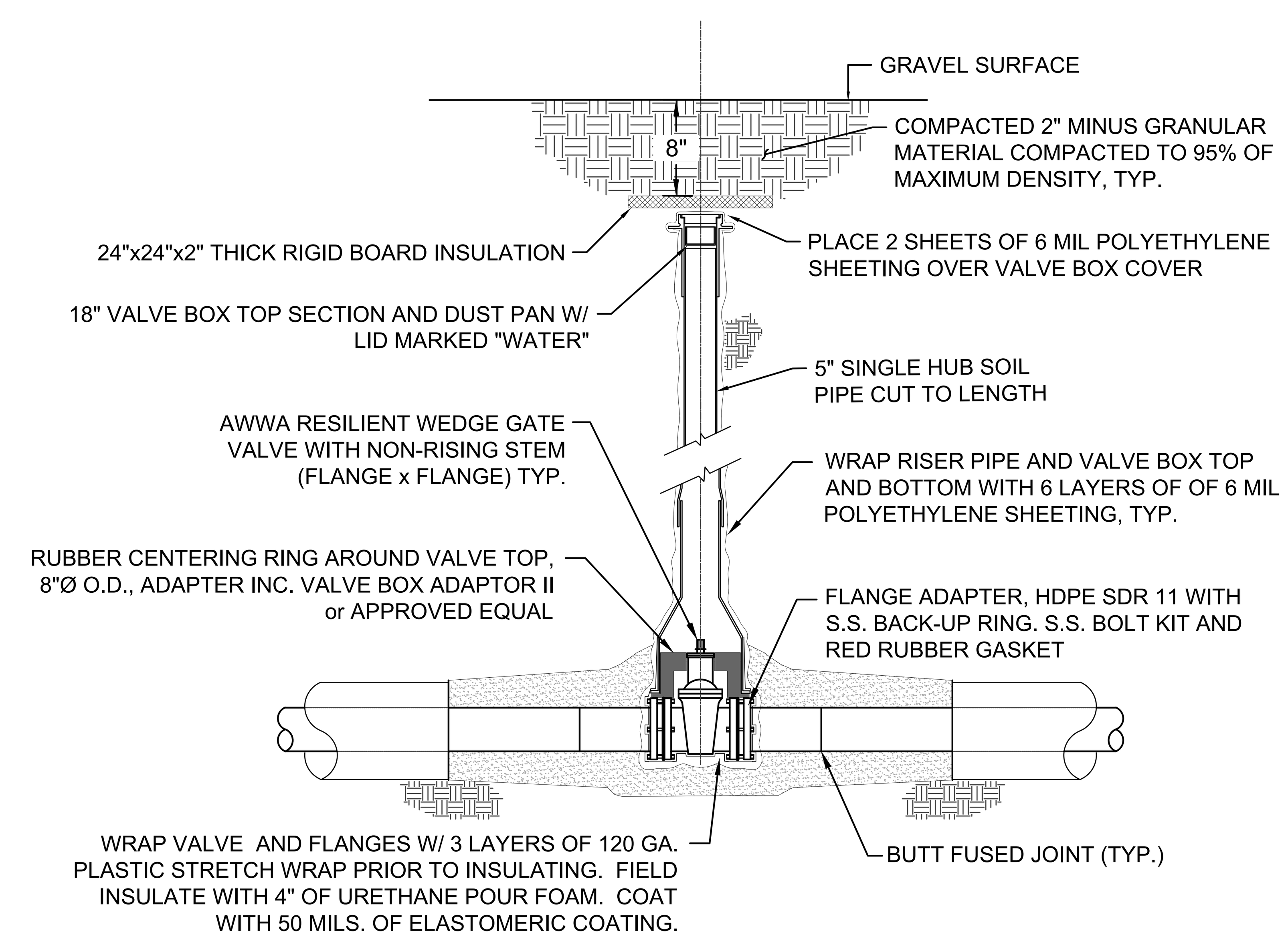
MIN. BAND I.D.:
OUTER JACKET O.D. -3/4"
MAX. BAND I.D.:
OUTER JACKET O.D. +3/4"

NOM. JACKET SIZE	ACTUAL JACKET SIZE (O.D.)	"A"	"B"	"C"	"D"	INSIDE DIAMETER MIN.	MAX.
12"	12 7/8"	12"	4"	2"	2"	12 1/8"	13 5/8"



5 GRAVITY SEWER MAIN PIPE JOINT COUPLING BAND DETAIL

Scale: N.T.S.



INSTALLATION IN GRAVEL SURFACED ROADWAYS

6 GATE VALVE INSTALLATION

Scale: N.T.S.

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CONSTRUCTION RECORD

FIELD BOOK | STAKING | FOREMAN | AS-BUILT | INSPECTOR

STATE OF ALASKA 49TH Michael R. Erdman No.6252 REGISTERED PROFESSIONAL ENGINEER

10/31/23

LittlePomerKamp WATER & SEWER

WATER AND SEWER PIPE DETAILS

NOME, ALASKA

CE2 ENGINEERS, INC.
PO BOX 232946 ANCHORAGE, AK 99523 PH: 907-349-1010 FAX: 907-349-1015

REVISION | BY | DATE

Project No.

Date OCT 2023

Designed MRE

Drawn CM

Approved MRE

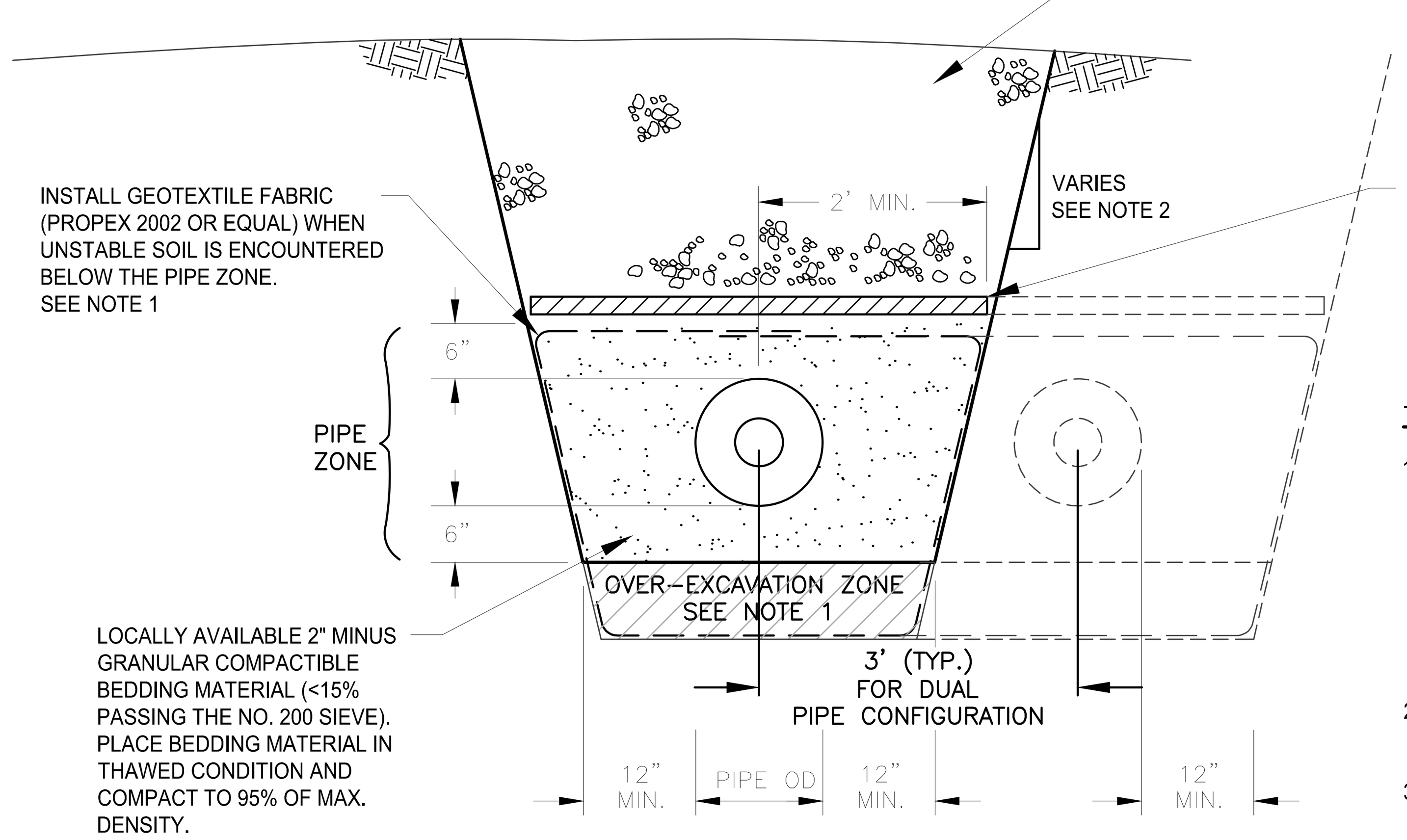
Sheet No. C3.1

BACKFILL THE TRENCH SECTION ABOVE THE PIPE ZONE WITH SELECTED MATERIAL FROM TRENCH EXCAVATION, IF SUITABLE TO SUPPORT MULTIPLE PASSES WITH A LOADED DUMPTRUCK. OTHERWISE, IMPORT GRANULAR COMPATIBLE BACKFILL MATERIAL FROM THE LOCAL BORROW SOURCE AND SPOIL THE EXCAVATED MATERIAL AS DIRECTED BY THE VILLAGE. COMPACT TO 90% OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY.

INSTALL GEOTEXTILE FABRIC (PROPEX 2002 OR EQUAL) WHEN UNSTABLE SOIL IS ENCOUNTERED BELOW THE PIPE ZONE. SEE NOTE 1

PLACE 4' WIDE SHEETS OF RIGID BOARD INSULATION (DOW HI-45 OR EQUAL) WHEN THE COVER OVER A PIPE IS LESS THAN 4'. (2" THICK INSULATION EQUAL TO 1' OF COVER DEFICIT) CENTER THE BOARD INSULATION OVER THE PIPE CENTERLINE AND PLACE 6"± ABOVE THE PIPE CROWN.

LOCALLY AVAILABLE 2" MINUS GRANULAR COMPACTIBLE BEDDING MATERIAL (<15% PASSING THE NO. 200 SIEVE). PLACE BEDDING MATERIAL IN THAWED CONDITION AND COMPACT TO 95% OF MAX. DENSITY.

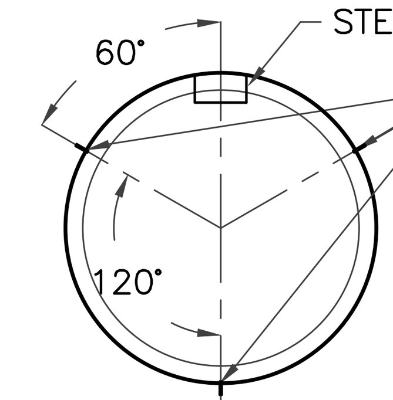


TRENCH NOTES

1. IF ORGANICS, SILTS AND/OR ICE RICH PERMAFROST ARE ENCOUNTERED BENEATH THE PIPE ZONE, OVER-EXCAVATE A MINIMUM OF 12" AND INSTALL GEO-TEXTILE FABRIC (AMOCO 2002 OR EQUAL) AS SHOWN. REPLACE THE DELETERIOUS MATERIAL WITH LOCALLY AVAILABLE 2" MINUS GRANULAR COMPACTIBLE FILL (WITH <15% PASSING THE NO. 200 SIEVE) OR ENGINEER APPROVED TRENCH EXCAVATION MATERIAL. PLACE FILL, IN THAWED CONDITION, WITH MAXIMUM 12" LIFTS AND COMPACT TO 95% OF MAXIMUM DENSITY.
2. ALL TRENCHES AND OTHER EXCAVATIONS SHALL BE SLOPED OR SHORED IN ACCORDANCE WITH OSHA STANDARDS.
3. AFTER BACKFILLING, REGRADE ALL DITCHLINES AND RESTORE ALL DRAINAGE STRUCTURES TO PRE- CONSTRUCTION CONDITIONS.

2 TYPICAL TRENCH SECTION

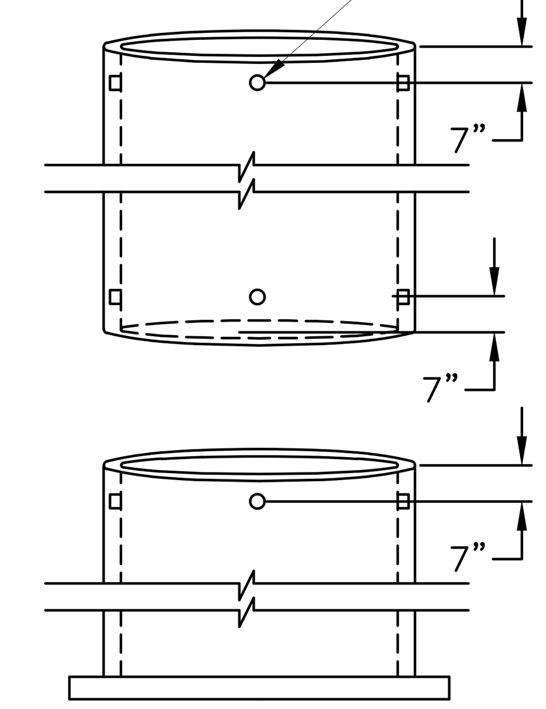
Scale: N.T.S.



INSERT LOCATION NOTE:
FOR 48"Ø BARREL SECTIONS, 3 INSERTS EACH END AT 120° INTERVALS AS SHOWN. FOR 72"Ø BARREL SECTION, USE 4 EA INSERTS AT 90° INTERVALS.

PLAN VIEW

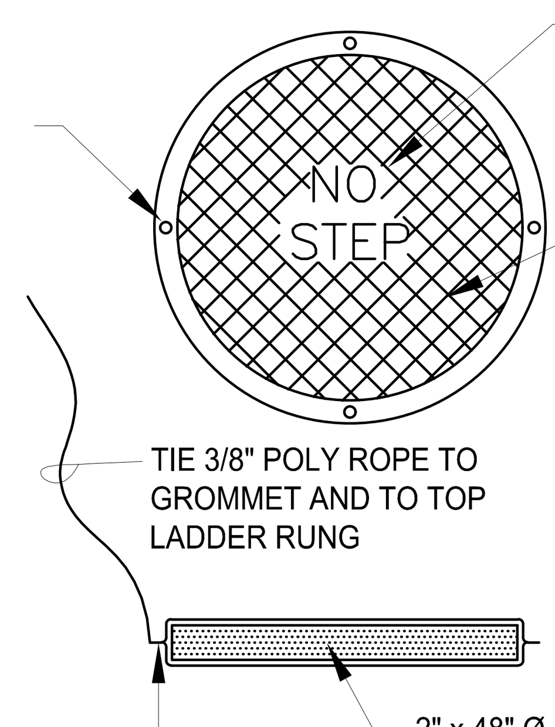
DAYTON SUPERIOR 3/4" F-42 LOOP FERRULE INSERT (TYP.) 6 REQ'D. PER JOINT



FERRULE INSERT LOCATIONS
ELEVATION VIEW

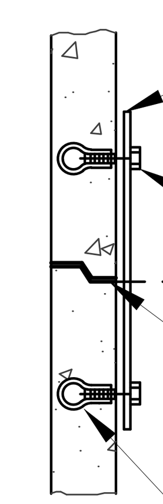
MANHOLE NOTES:

1. PRECAST MANHOLE SECTIONS SHALL BE REINFORCED CONCRETE CONFORMING TO ASTM C-478.
2. THE MANHOLE BASE SHALL BE INTEGRALLY CAST WITH THE BOTTOM BARREL SECTION.
3. RAM-NEK SEALANT OR ENGINEER APPROVED RUBBER GASKET AS SUPPLIED BY MANHOLE MANUFACTURER SHALL BE INSTALLED AT ALL PRECAST JOINTS.
4. LOOP FERRULE INSERTS AND JOINT STRAPS SHALL BE PROVIDED AS SHOWN ON THE DETAIL.
5. EDPM PIPE CONNECTORS (Z-LOCK OR EQUAL) SHALL BE INSTALLED AT ALL PIPE PENETRATIONS.
6. PIPES PENETRATING THE MANHOLE SHALL EXTEND 3 INCHES INTO THE MANHOLE.
7. FOR MANHOLE HEIGHTS LESS THAN 6 FEET, SUBSTITUTE A PRECAST REINFORCED CONCRETE FLAT SLAB TOP FOR THE ECCENTRIC CONE SECTION.
8. MANHOLE RING, CATCH PAN AND SOLID COVER MARKED "SEWER".
9. MANHOLE STEPS SHALL BE CAST IN PLACE, AND SHALL BE ½" GRADE 60 STEEL REINFORCEMENT DIPPED IN COPOLYMER POLYPROPYLENE PLASTIC.
10. MANHOLE BASE SHALL BE PLACED ON 4" OF RIGID BOARD INSULATION. THE BOTTOM 30" OF THE MANHOLE SHALL BE INSULATED PER THE DRAWING.
11. MANHOLE SHALL BE WRAPPED WITH 2 LAYERS OF 6 MIL VISQUEEN PRIOR TO BACKFILL.

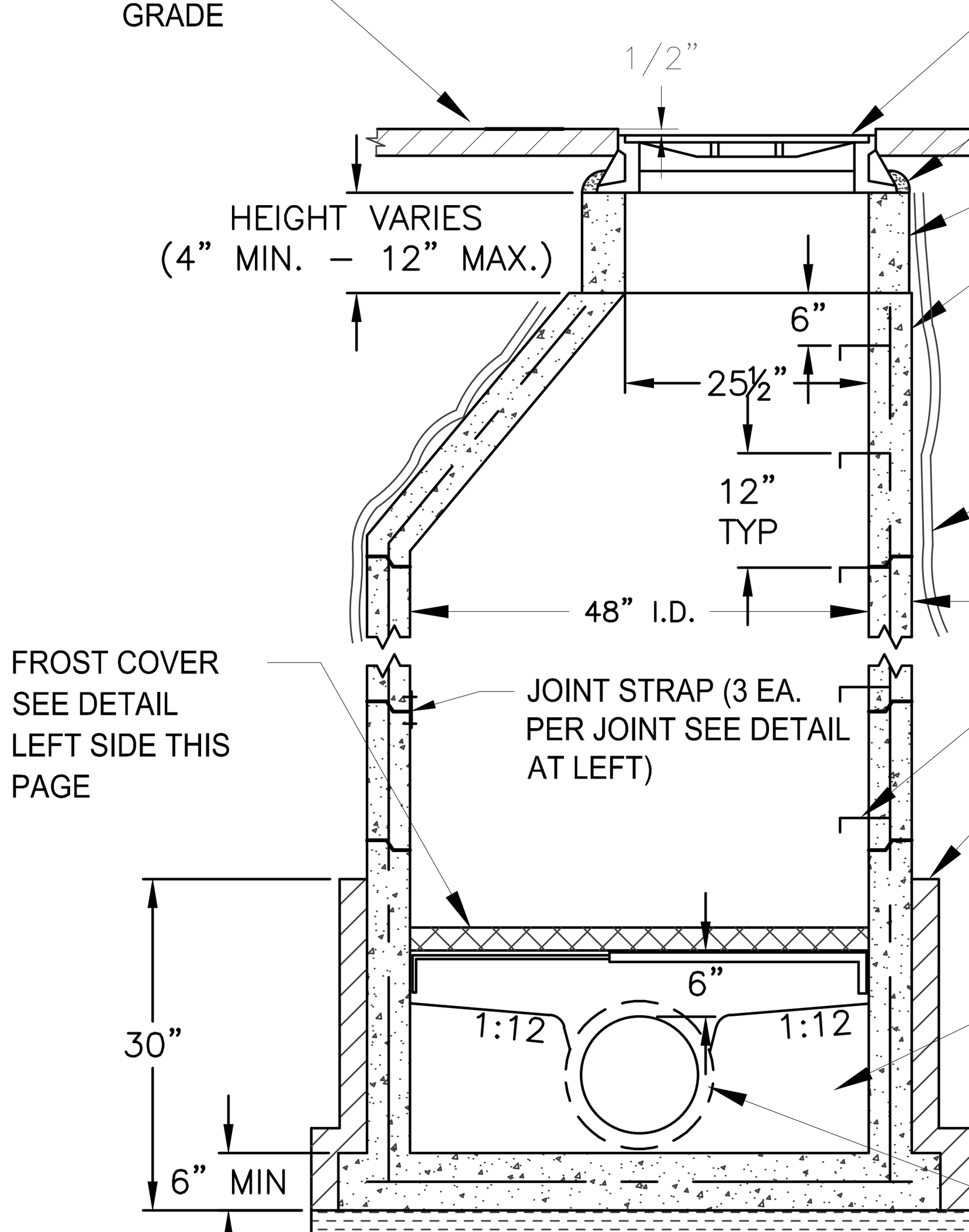


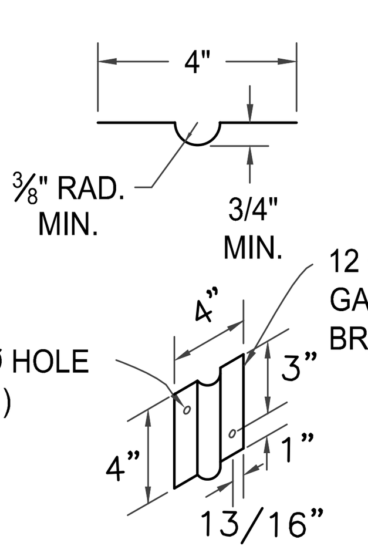
BRACKET / FROST COVER NOTES:

1. FASTEN BRACKETS TO INTERIOR MANHOLE WALL WITH ½" x 2½" S.S. WEDGE ANCHORS.
2. BOTTOM OF FROST COVER TO BE 6" ABOVE CROWN OF HIGHEST PIPE ENTERING THE MANHOLE

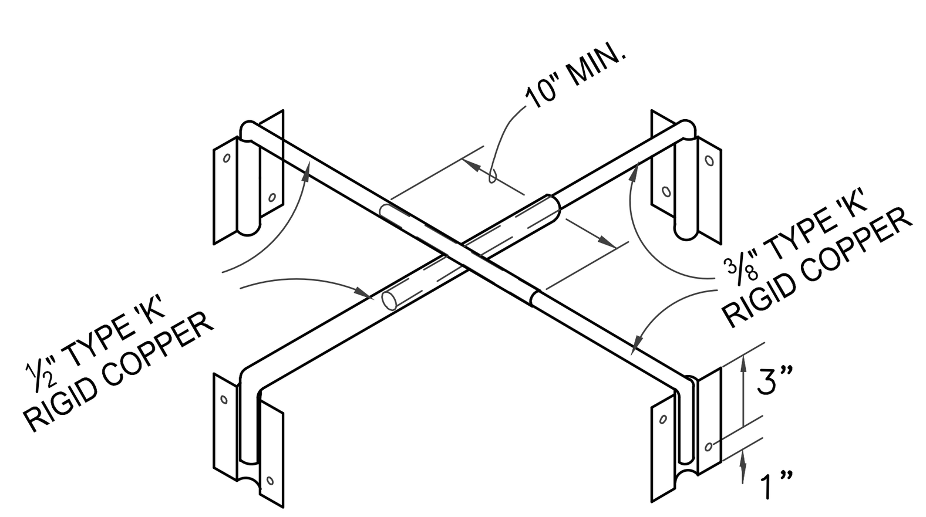


JOINT STRAPPING DETAIL





BRACKET DETAIL



TELESCOPING ROD SUPPORT SYSTEM

3 FROST COVER AND BRACKET DETAIL

Scale: N.T.S.

1 MANHOLE DETAILS (TYPICAL)

Scale: N.T.S.

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0 1"
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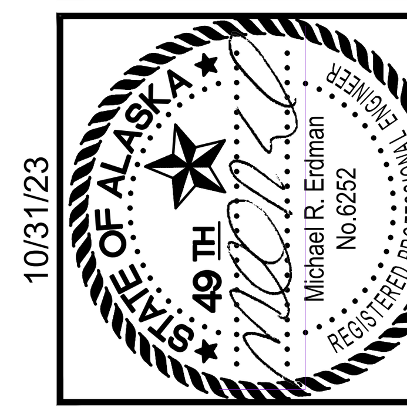
AS-BUILT
INSPECTOR



10/31/23

LittlePomerKamp
WATER & SEWER

SEWER MAHOLE AND TRENCH SECTION

NOME, ALASKA

CE2 ENGINEERS, INC.
PO BOX 232946 ANCHORAGE, AK 99523 PH: 907-349-1010 FAX: 907-349-1015

REVISION	BY	DATE

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Date OCT 2023
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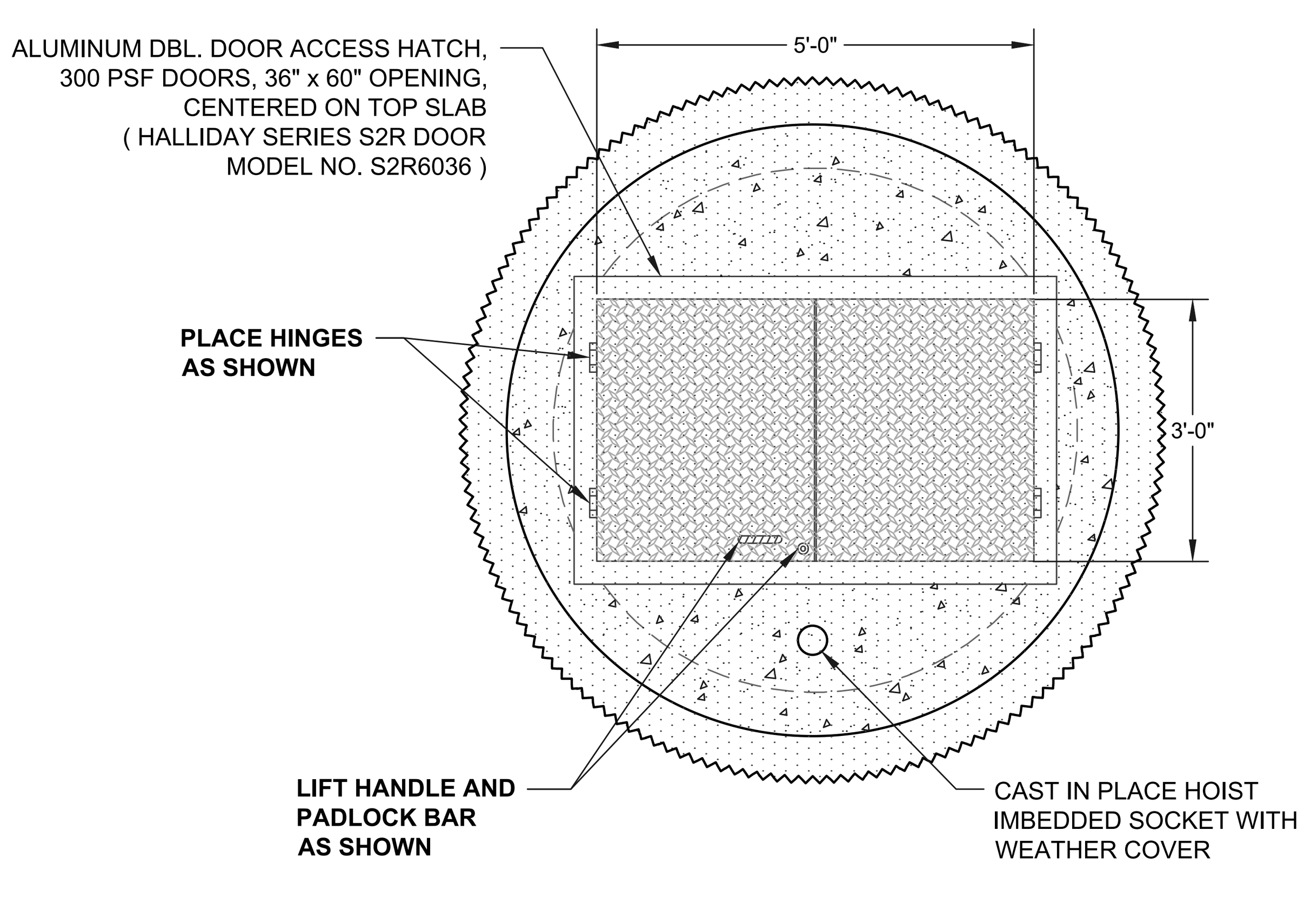
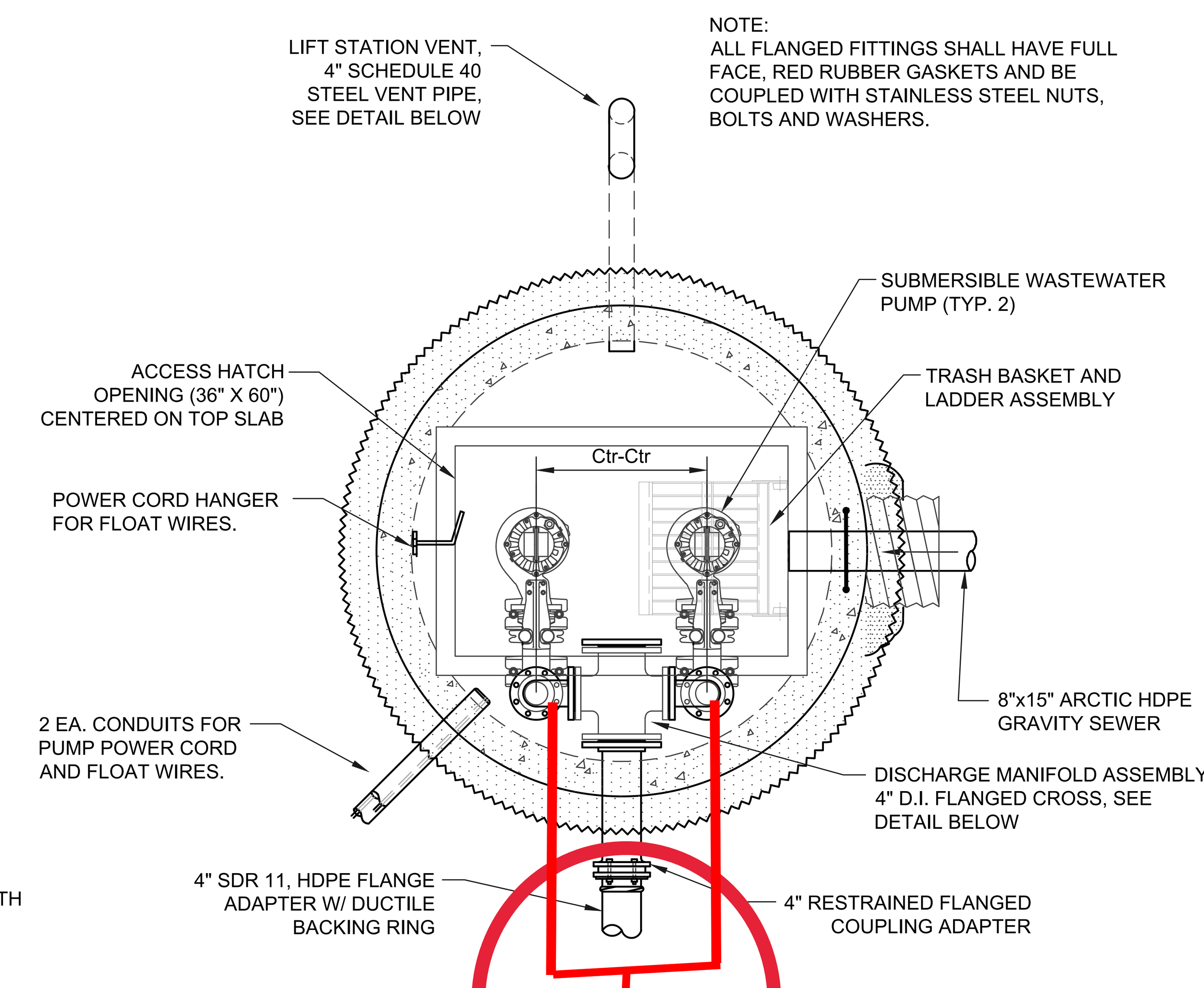
Drawn CM
Approved MRE

Sheet No.
C3.2

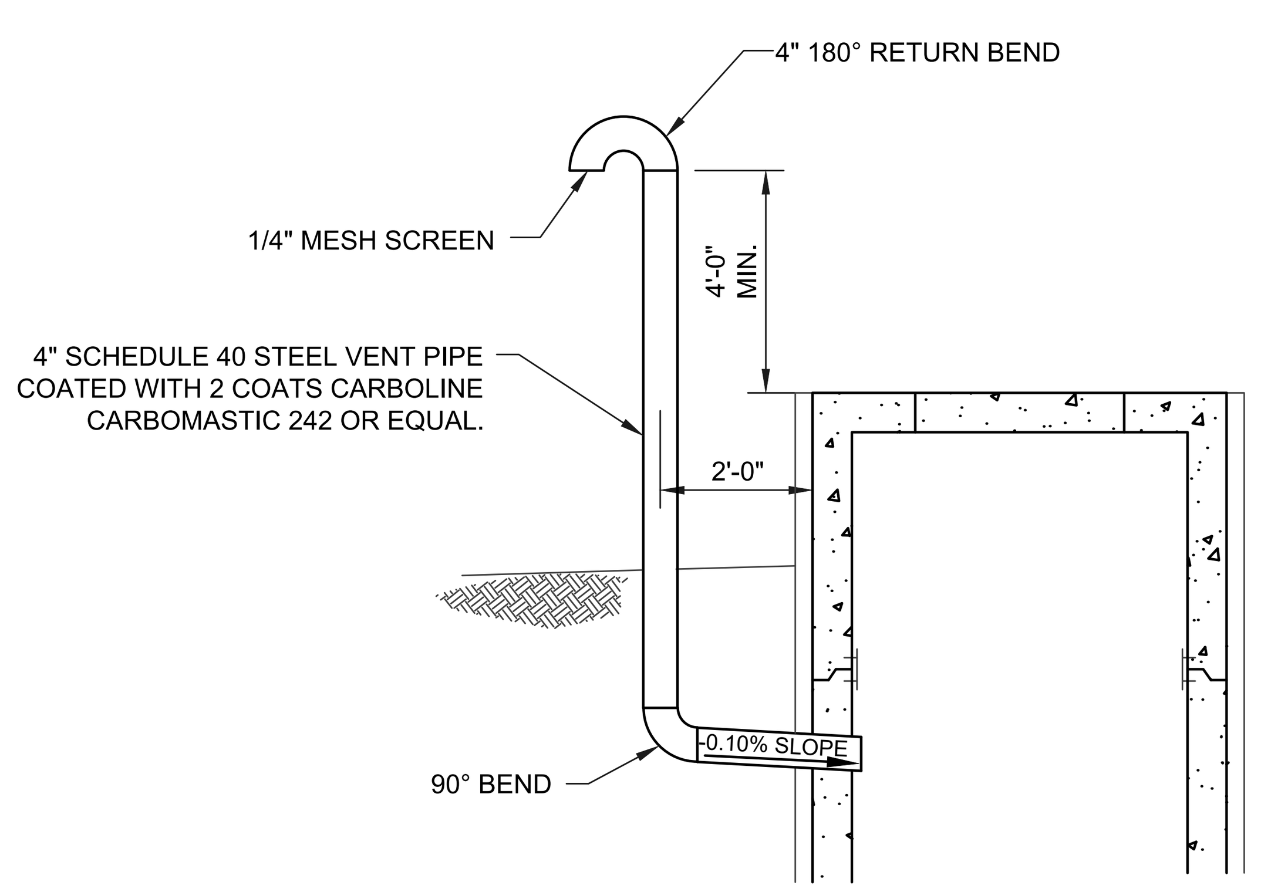


2 LIFT STATION TOP SLAB DETAIL
Scale: N.T.S

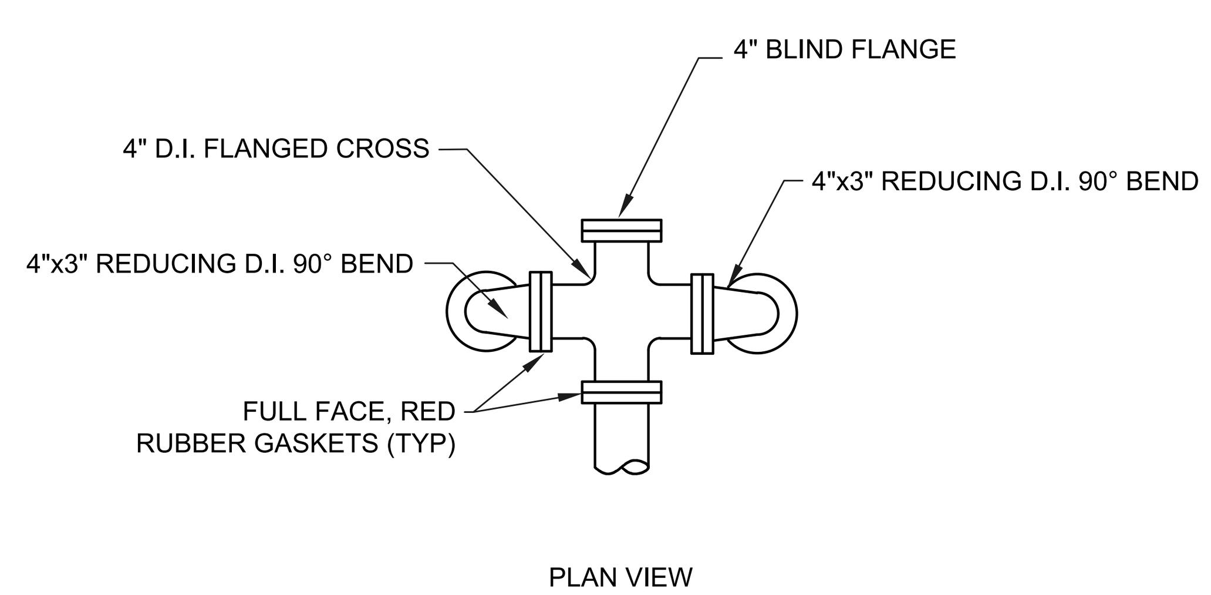


3 LIFT STATION LAYOUT PLAN
Scale: N.T.S

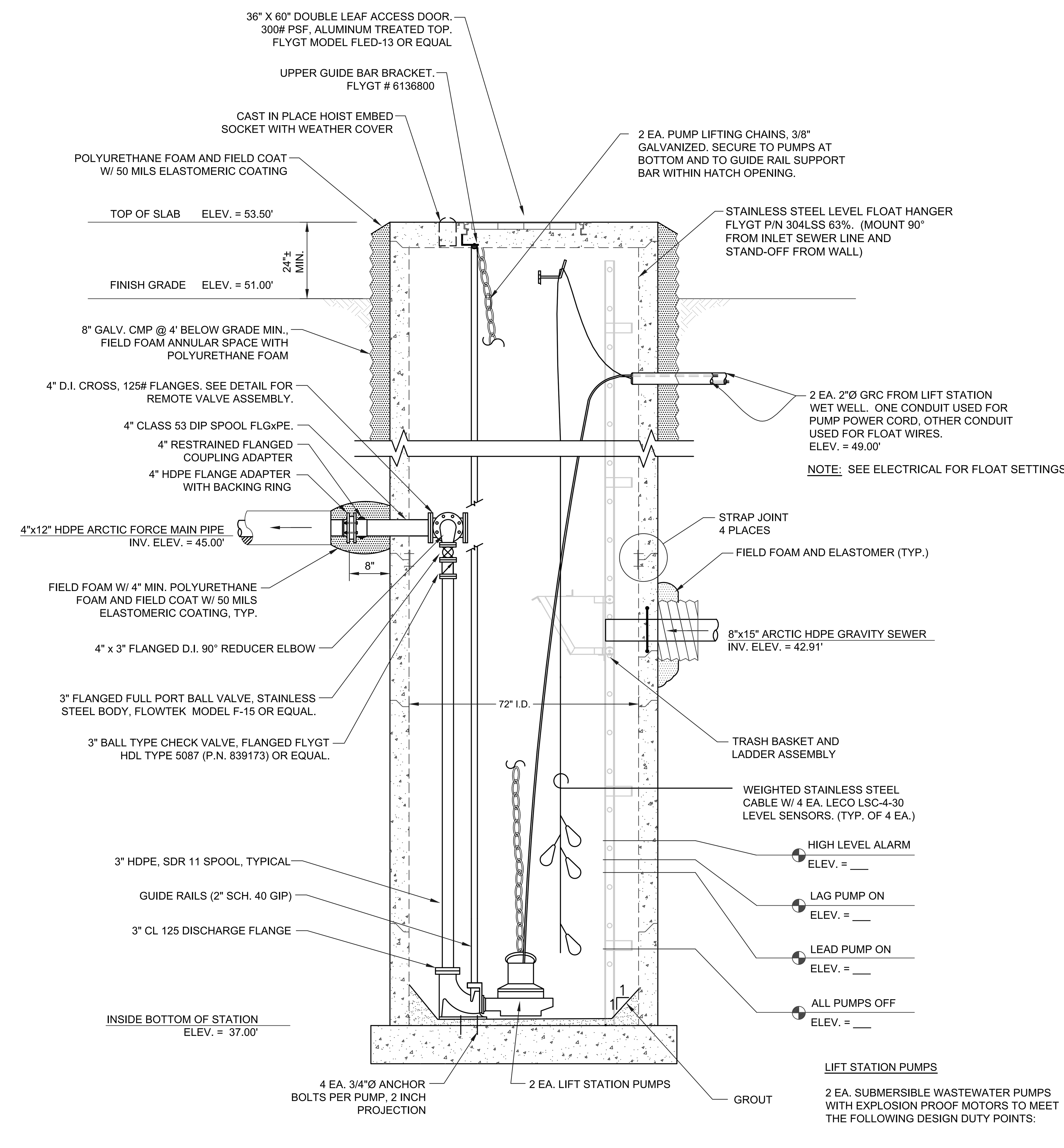
Please move the manifold / check valves out of the sewer wetw



4 LIFT STATION VENT DETAIL
Scale: N.T.S



5 DISCHARGE MANIFOLD ASSEMBLY
Scale: N.T.S



1 LIFT STATION SECTION DETAILS
Scale: N.T.S

NOTE:
THIS LIFT STATION SECTION, PIPING AND EQUIPMENT ARE SHOWN FOR CLARITY. **SEE LIFT STATION PLAN VIEW** FOR ACTUAL PIPING CONNECTION, ORIENTATION AND EQUIPMENT LOCATIONS.

RECORD DRAWING CERTIFICATE
THESE DRAWINGS REFLECT RECORDED INFORMATION OBTAINED DURING CONSTRUCTION. INFORMATION PROVIDED HEREIN IS ACCURATE TO THE BEST OF MY KNOWLEDGE.
NAME DATE

SCALE: AS SHOWN

CONSTRUCTION RECORD
FIELD BOOK
STAKING
FOREMAN
AS-BUILT
INSPECTOR

10/31/23
STATE OF ALASKA 49TH Michael R. Erdman No.6252 REGISTERED PROFESSIONAL ENGINEER

LittlePomerKamp WATER & SEWER
LIFT STATION PLAN AND SECTION DETAILS
NOME, ALASKA

CE2 ENGINEERS, INC.
PO BOX 232946 ANCHORAGE, AK 99523 PH: 907-349-1010 FAX: 907-349-1015

REVISION	BY	DATE

Project No.
Date OCT 2023
Designed MRE
Drawn CM
Approved MRE

Sheet No. C3.3

SERIES B1B TRASH BASKET

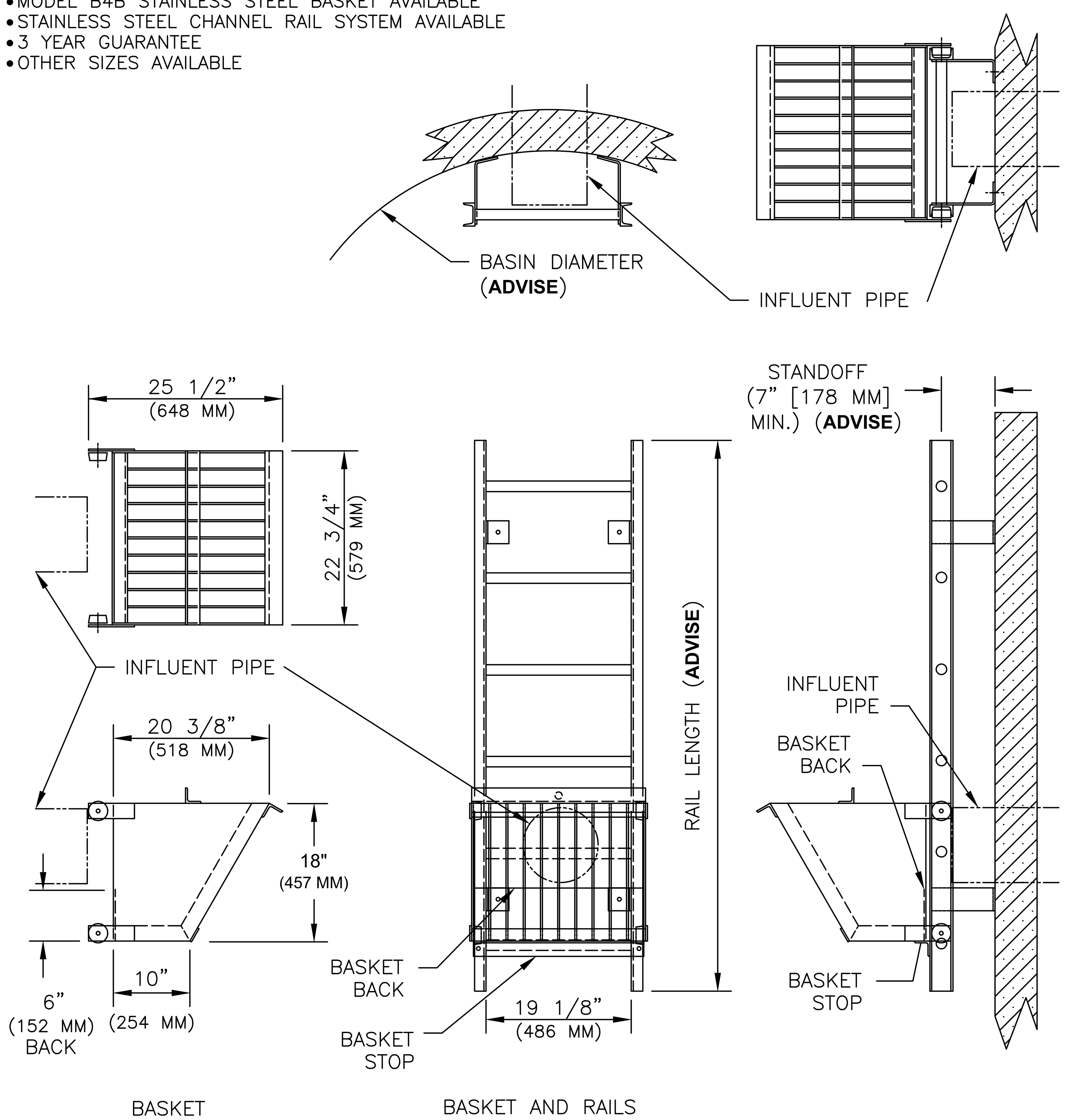
www.HallidayProducts.com
Phone 800-298-1027
Fax 407-298-4534
Sales@HallidayProducts.com

STANDARD FEATURES:

- ALL ALUMINUM BASKET AND RAILS
- SOLID ALUMINUM WHEELS AND STAINLESS STEEL AXLES
- HEAVY DUTY LADDER/GUIDERAIL COMBINATION
- 1 3/8" TYPE "D" RUNG WITH FLAT SLIP RESISTANT SURFACE
- BAR SCREEN STYLE BASKET
- AVAILABLE W/O LADDER RUNGS (GUIDE RAILS ONLY)
- MODEL B4B STAINLESS STEEL BASKET AVAILABLE
- STAINLESS STEEL CHANNEL RAIL SYSTEM AVAILABLE
- 3 YEAR GUARANTEE
- OTHER SIZES AVAILABLE

REQUIRED INFORMATION:

- BASIN DIAMETER
- RAIL LENGTH
- STANDOFF LENGTH (7" [178 MM] MIN. FOR LADDER COMBO)



1 LIFT STATION LADDER AND TRASH BASKET DETAIL

Scale: N.T.S

RECORD DRAWING CERTIFICATE

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NAME DATE

SCALE: AS SHOWN

CONSTRUCTION RECORD: FIELD BOOK, STAKING, FOREMAN, AS-BUILT, INSPECTOR

10/31/23

STATE OF ALASKA 49TH Michael R. Erdman No.6252 REGISTERED PROFESSIONAL ENGINEER

LittlePomerKamp WATER & SEWER

LIFT STATION DETAILS

NOME, ALASKA

CE2 ENGINEERS, INC.

REVISION	BY	DATE

Project No.

Date OCT 2023

Designed MRE

Drawn CM

Approved MRE

Sheet No. C3.4