

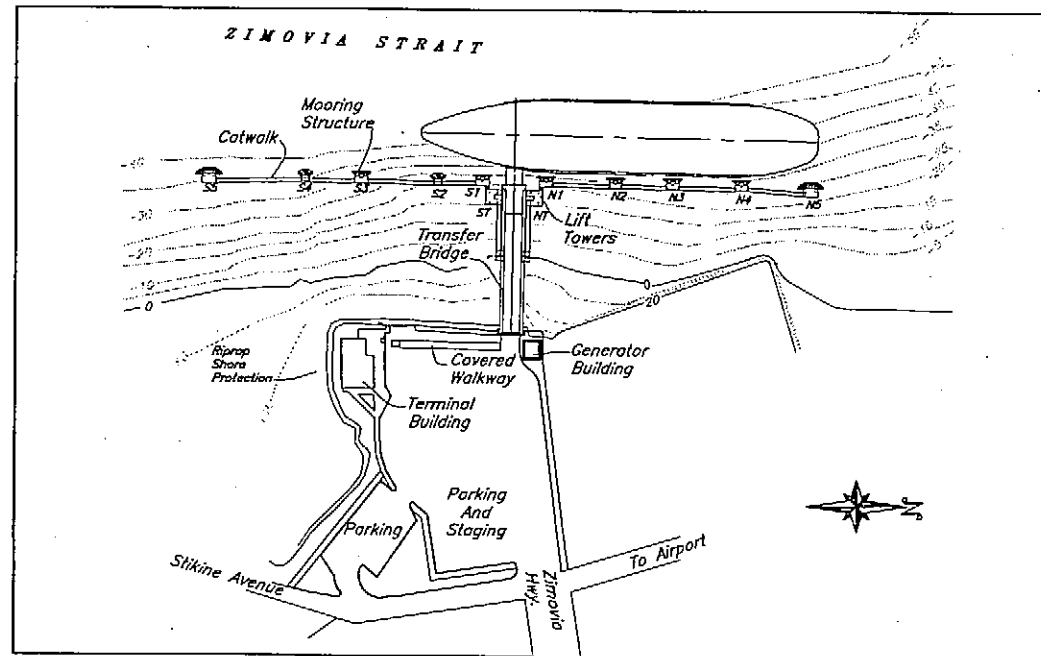
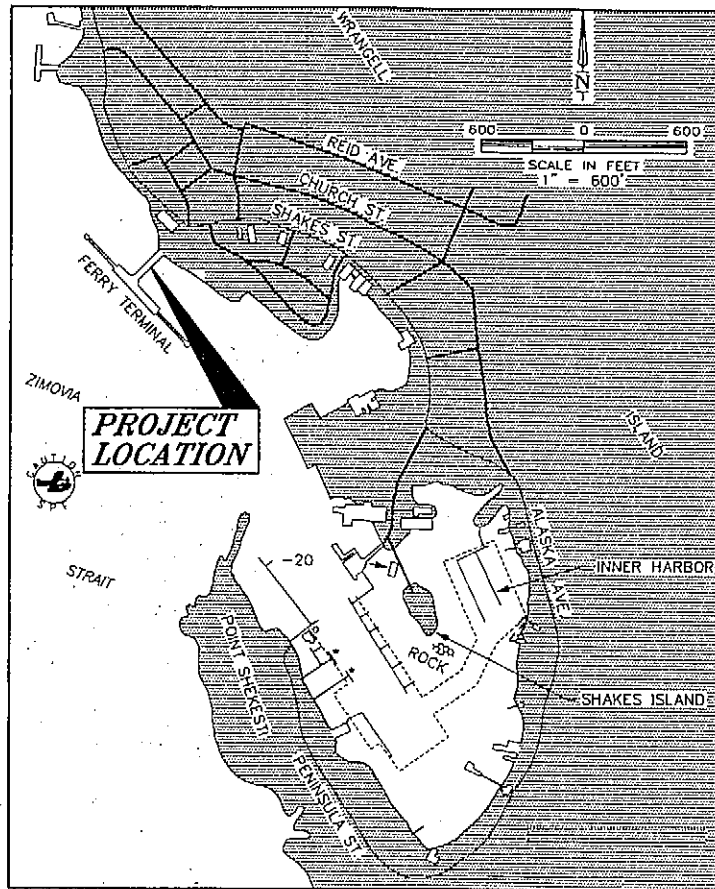
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND
PUBLIC FACILITIES
SOUTHEAST REGION

WRANGELL, ALASKA

WRANGELL - FERRY
TERMINAL MODIFICATIONS
PROJECT NO. CA-0003(69) ~ 67924

AS-BUILT DRAWINGS

INDEX OF SHEETS	
SHEET NO.	DESCRIPTION
1	Title Sheet
2	Estimate of Quantities & General Notes
3	Site Plan & Survey Control
4	Project Seaward Layout
5	Project Uplands Layout
6-11	Uplands Water & Sewer Details
12	Transfer Bridge Plan & Elevation
13-16	Bridge Water & Sewer Details
17-18	Fender Panel Extension, Dolphin S2
19-20	Fender Panel Extension, Dolphins S1 & S3
21	Hawser Mast & Misc. Details
22-29	As-Built Plans
E1	Electrical Site Plan
E2	Miscellaneous Electrical
E3	Heat Trace Control Schematic



Existing Terminal Site

Contractor - Southeast Roadbuilders

Project Engineer - Cliff Douglas

Date Began - March 27, 2006

Date Completed - May 3, 2006

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND
PUBLIC FACILITIES
SOUTHEAST REGION

APPROVED Date 12/15/05
Regional Preconstruction Engineer
Patrick J. Kemp

APPROVED Date 12/16/05
Director, S.E. Region
Malcolm A. Menzies

PROJECT NUMBER:

67924

DATE:

2005

SHEET 1 OF 32



ESTIMATE OF QUANTITIES			
ITEM NO.	ITEM	UNIT	QUANTITY
202(1)	REMOVAL OF STRUCTURES & OBSTRUCTIONS	L.S.	ALL REQ'D
504(1)	MOORING STRUCTURE MODIFICATIONS	L.S.	ALL REQ'D
504(2)	SYNCROLIIFT WINCH CABLE UPGRADE	L.S.	ALL REQ'D
626(1)	VESSEL WASTEWATER SYSTEM	L.S.	ALL REQ'D
627(1)	VESSEL POTABLE WATER SYSTEM	L.S.	ALL REQ'D
640(1)	MOBILIZATION & DEMOBILIZATION	L.S.	ALL REQ'D
640(4)	WORKER MEALS AND LODGING, OR PER DIEM	L.S.	ALL REQ'D
641(1)	EROSION AND POLLUTION CONTROL ADMINISTRATION	L.S.	ALL REQ'D
641(2)	TEMPORARY EROSION AND POLLUTION CONTROL	C.S.	ALL REQ'D
642(1)	CONSTRUCTION SURVEYING	L.S.	ALL REQ'D
644(1)	FIELD OFFICE	L.S.	ALL REQ'D
644(2)	VEHICLES	L.S.	ALL REQ'D

GENERAL NOTES FOR MARINE STRUCTURES AND COMPONENTS

Specifications: Per Contract Documents for Project No. CA-0003(69) ~ 67924

Construction: Per Contract Documents for Project No. CA-0003(69) ~ 67924

Design

Standards: AKDOT/PF & Southeast Region Marine Engineering Design Standards & AASHTO

Design Loads: Mooring and Fender Structures:

Vessel Berthing @ 30ft-k service

Mooring Load @ 50 kips line load

Bridge - LL Vehicle Lane: AASHTO HS20

- LL Pedestrian Walkway: 85 psf

Gangways - LL: 10 psf + 500 lb concentrated moving load

Materials

Concrete: Class A = 4000 psi. or Class A-A = 5000 psi

Reinforcement: Grade 60, Fy = 60 ksi

Steel Shapes

& Plates: Plates and shapes - ASTM A36 or ASTM 992 unless otherwise noted

Tube Sections - ASTM A500 Grade B

Pipe - ASTM A53, Grade B, Type E or S

Stainless Steel - ASTM Type T316

Steel Grating: Welded bar type, serrated top, thickness & bar spacings as noted on Plans.

UHMW: Ultra High Molecular Weight Plastic, ASTM D4020

Polyethylene

Pipe: High density polyethylene (HDPE) ASTM D3350. Diameter & wall thickness as noted on Plans.

Hardware: ASTM A325

Aluminum Plates & Shapes: ASTM 6061-T6

Protective Coatings: (where applicable)

All steel, and weldments: Galvanized after fabrication per Spec's, unless otherwise noted.

Platforms, Weldments, Gangways, Mooring Structures and Fenders: Galvanized after fabrication per Spec's.

Transfer Bridge: Painted, per Spec's System 5. Touch-up as req'd. per specifications.

Piling:

No piling on this project

LEGEND

Alphabetic reference for section view

Sheet where section view is located

Numeric reference for detail view

Sheet where detail view is located

Reference for section or detail view

Sheet where section or detail view was first referenced

NIC - Not In This Contract

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

DESIGNED BY: B. Savikko

CHECKED BY: T. Doggett
DRAWN BY: B. Nelson

12-14-05

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION

**Wrangell Terminal Modifications
Project 67924**

**Quantities and
General Notes**

PATH: O:\Wrg\67924\MF\Plans\002--Estimate of Quantities.dwg

Wed, 14/Dec/05 04:02PM

PLOT: PSPACE 1=1 TAB: Layout 1

REVISIONS		PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
NO.	DATE				

As-Built 11-14-06 cp

Basis of Horizontal Control

Back Face Of Abutment Backwall @ Centerline N-9960.537 E-10153.998
 BC-1, Brass cap in case in staging area N-9847.475 E-10259.448
~~BC-7, Brass cap in rock outcrop S.E. of building N-9760.189 E-10263.040~~

Basis of Vertical Control

~~BC-7, Brass cap in rock outcrop S.E. of building, Elevation +18.30 MLLW~~

Top Abutment 25.00

ZIMOVIA STRAIT

EXTENDED
AMHS Tidelands
Lease Boundary

Approx. ATS Boundary
(Directors line)

Prior AMHS Tidelands
Lease Boundary



BLOCK 12A
UNUSED TIDELANDS
(CITY OF WRANGELL)

Fender Panel Extensions

Bridge Lift Electric & Controls NIC

Bridge Water & Sewer Lines

Alaska Marine
Highway Tidelands

BLOCK 10A
(STATE OF ALASKA)
LOT 10

Terminal
Bldg.

Existing Buried Electric

Gen.
Bldg.

STAGING
AREA

BC-1

Proposed
Sewer Line

Proposed
Water Line

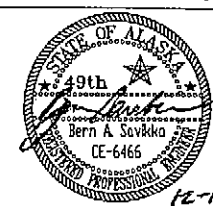
PARKING

As-Built 11-17-06

Connect to existing sanitary sewer manhole

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

DESIGNED BY: B. Savikko



STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION

Wrangell Terminal Modifications
Project 67924

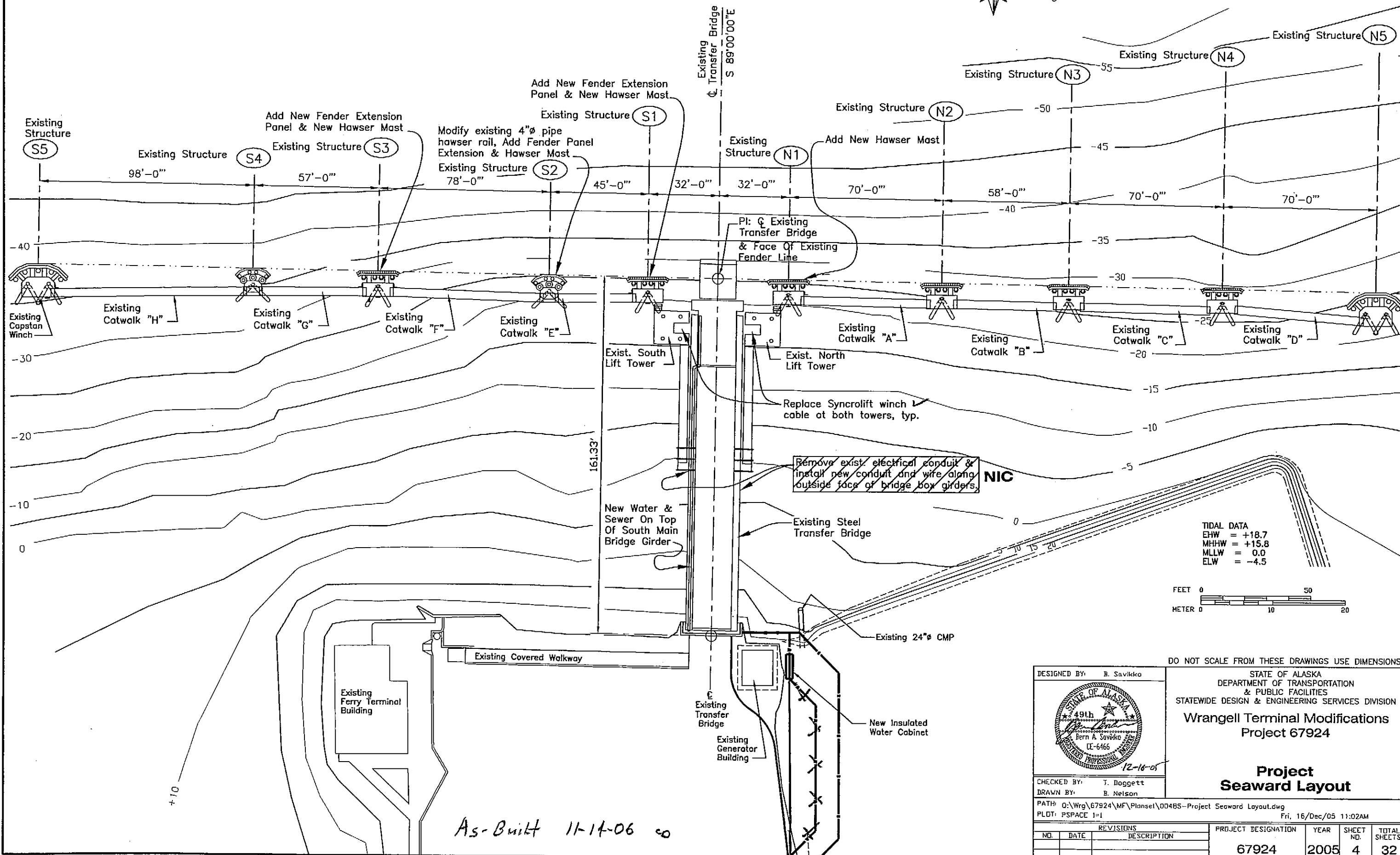
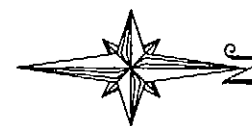
Project Site Plan &
Survey Control

CHECKED BY: T. Doggett
DRAWN BY: B. Nelson

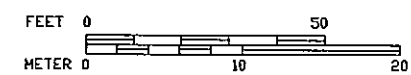
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REVISIONS			PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
NO.	DATE	DESCRIPTION				
			67924	2005	3	32

ZIMOVIA STRAIT



TIDAL DATA
 EHW = +18.7
 MHHW = +15.8
 MLLW = 0.0
 ELW = -4.5



DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

DESIGNED BY: B. Savikko

CHECKED BY: T. Doggett
 DRAWN BY: B. Nelson

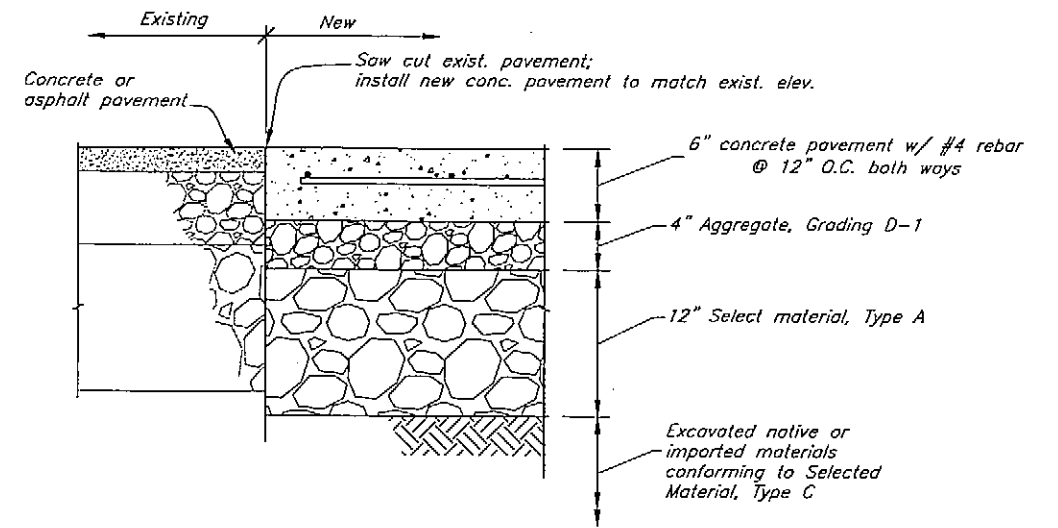
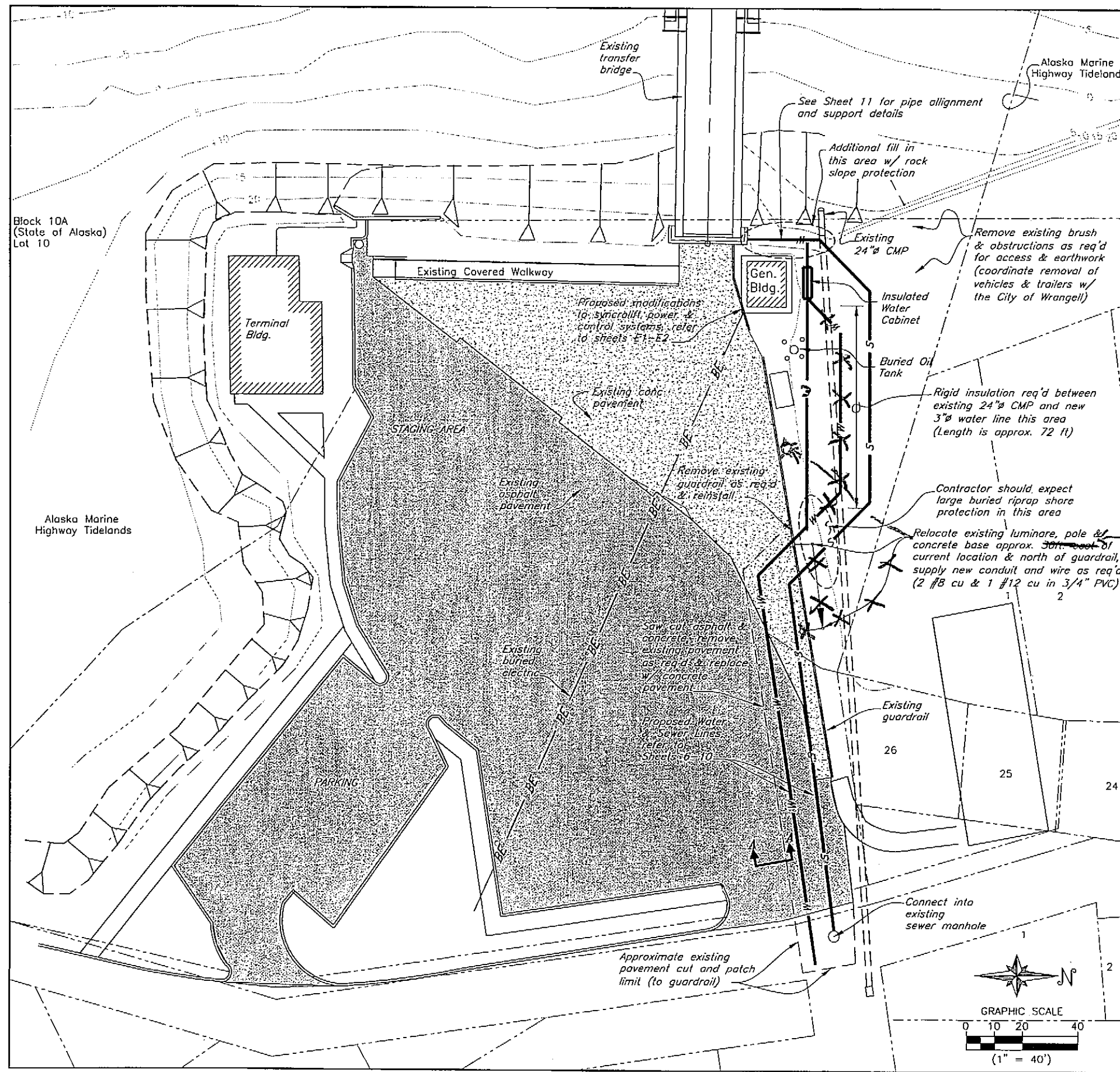
STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 & PUBLIC FACILITIES
 STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION
Wrangell Terminal Modifications
Project 67924

Project Seaward Layout

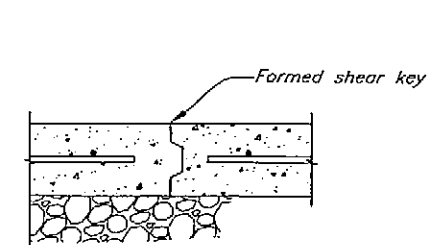
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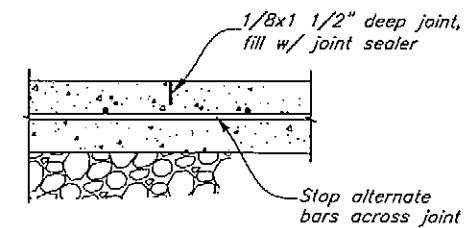
As-Built 11-14-06



Section A-A



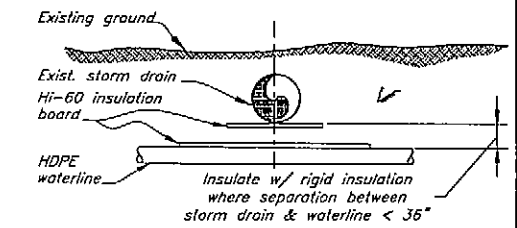
Construction Joint



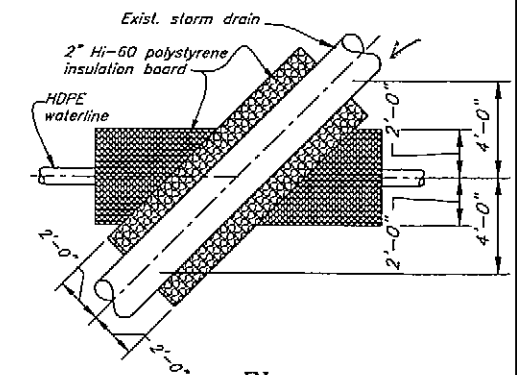
Control Joint

Typical Section
Concrete Pavement Jointing

Note: Install construction or control joints at spacing not to exceed 15 feet.



Section



Plan

Detail
Rigid Insulation

Layout
Uplands Project

As-Built 11-14-06

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

DESIGNED BY: B. Savikko

CHECKED BY: T. Doggett

DRAWN BY: B. Nelson

PATH: D:\Wrg\67924\MF\PlanSet\005B5-Project Shoreward Layout.dwg

PLT: PSPACE 1=1

12-16-05

STATE OF ALASKA
49th
Berna A. Savikko
CE-6466
REGISTERED PROFESSIONAL ENGINEER

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION

Wrangell Terminal Modifications
Project 67924

Project
Uplands Layout

Fri, 16/Dec/05 11:31AM

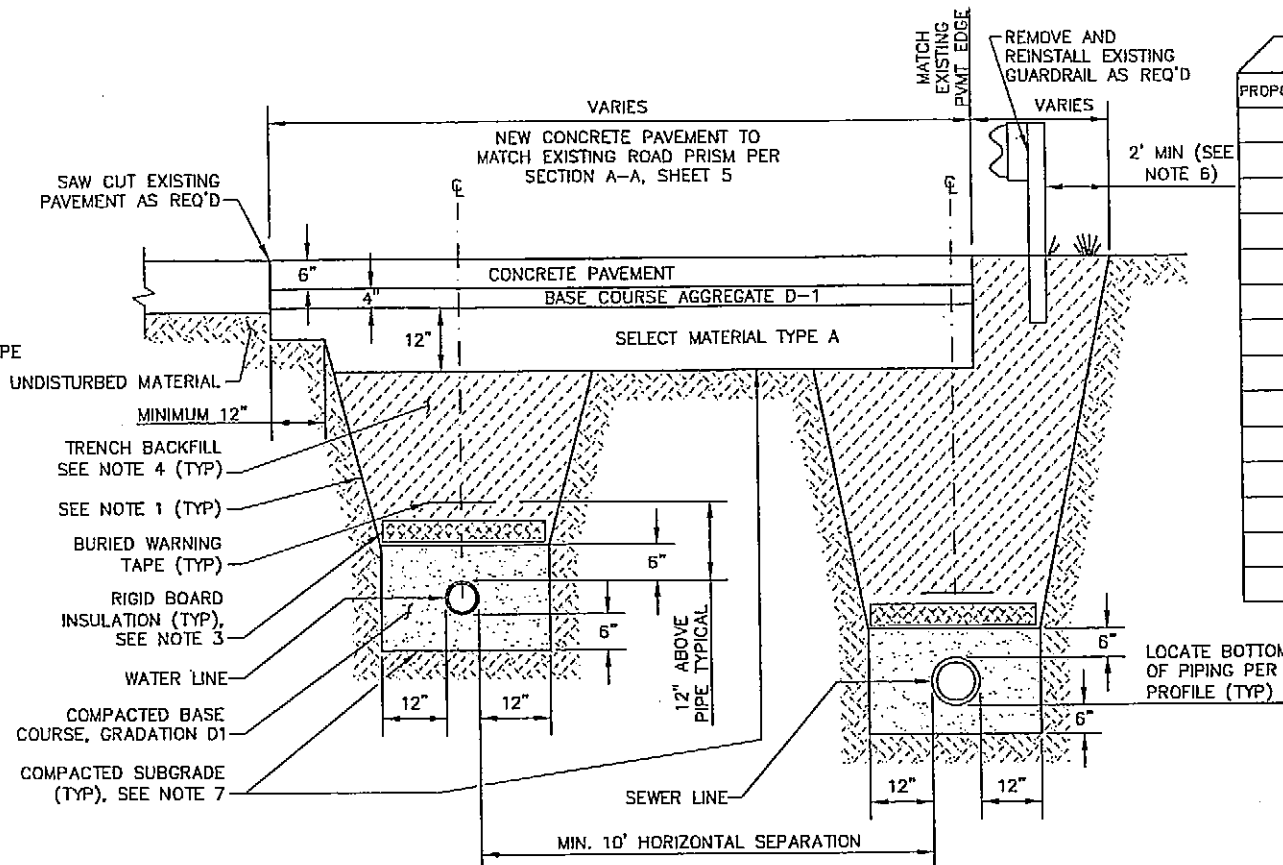
NO.	DATE	REVISIONS DESCRIPTION	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			67924	2005	5	32

GENERAL NOTES - WATER & SEWER

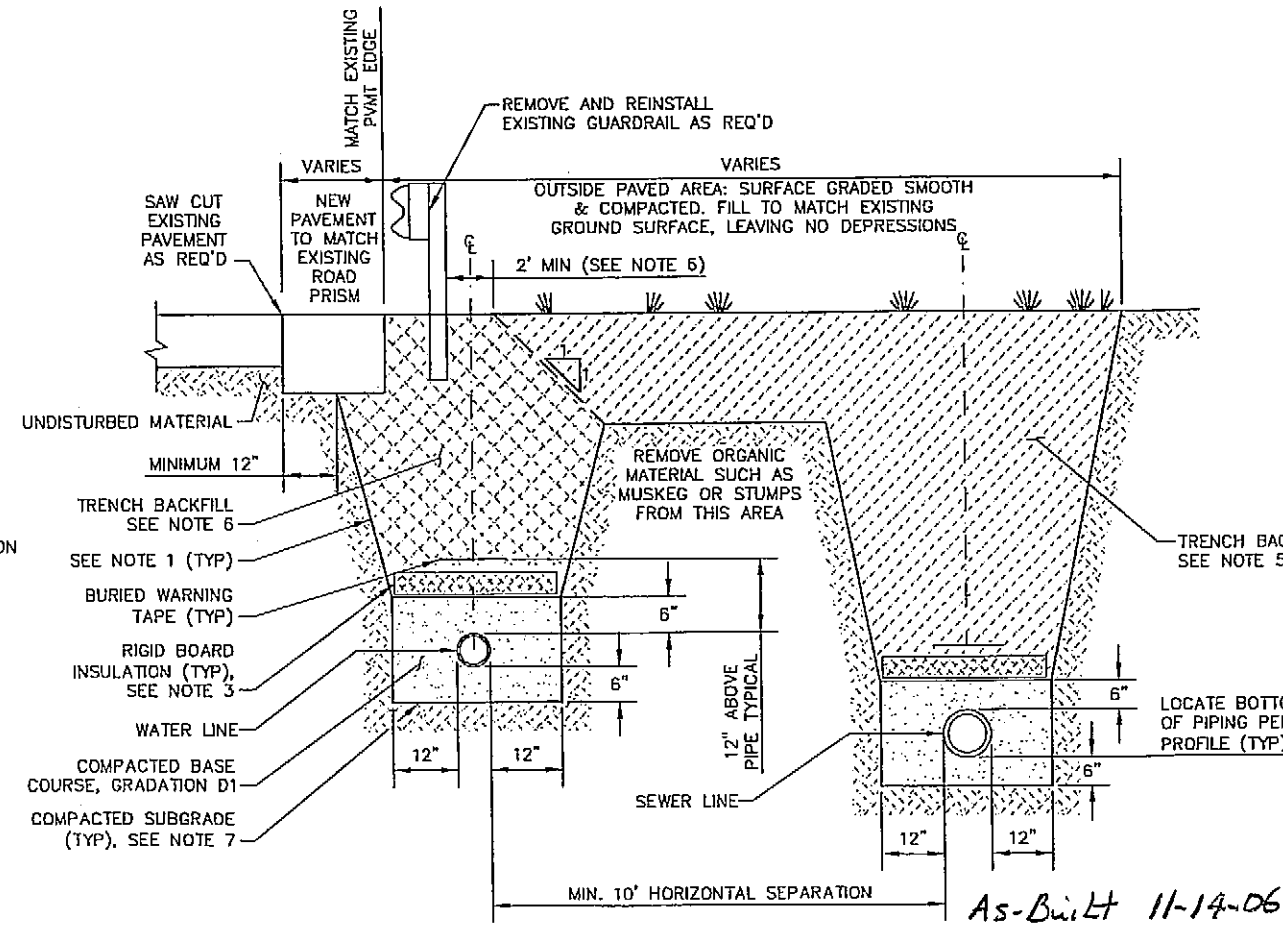
- LOCATIONS OF UTILITIES ARE SHOWN APPROXIMATELY. CONTRACTOR SHALL FIELD VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL ENCOUNTERED UTILITIES, AND RECORD ANY CHANGES ON THE CONTRACTOR RECORD DRAWINGS. CONTRACTOR SHALL VERIFY ALL EXISTING SERVICE LOCATIONS PRIOR TO CONSTRUCTION AND SHALL IMMEDIATELY NOTIFY THE ENGINEER OF ANY DISCREPANCIES OR CONFLICTS WITH THIS WORK.
- THE CONTRACTOR SHALL PROVIDE RECORD SURVEY NOTES FOR SUBMITTAL TOGETHER WITH RECORD DRAWING PLANS.
- ALL WORK AND MATERIALS PROVIDED FOR THIS PROJECT SHALL COMPLY WITH THE MOST CURRENT EDITIONS OF STATE AND LOCAL LAWS AND REGULATIONS AND THESE CONTRACT DOCUMENTS.
- CONTRACTOR SHALL RESTORE DISTURBED PROPERTY TO EXISTING CONDITION.
- A MINIMUM OF TEN (10) FEET OF HORIZONTAL SEPARATION AND 18 INCHES OF VERTICAL SEPARATION SHALL BE MAINTAINED BETWEEN ALL WATER AND SEWER MAINS AND SERVICES. WHERE THE VERTICAL SEPARATION BETWEEN THE WATER AND SEWER MAINS IS LESS THAN 18 INCHES, A WRITTEN WAIVER MUST BE OBTAINED FROM ADEC AND SUBMITTED TO ENGINEER PRIOR TO CONSTRUCTION. WHERE WATER AND SEWER MAINS CROSS, SEWER LINE JOINTS SHALL BE AT LEAST 9 FEET FROM THE WATER LINE JOINTS.
- WATER LINE SHALL HAVE A MINIMUM 5 FEET DEPTH OF BURY (TOP SURFACE OF FINISH GRADE TO TOP OF PIPE) UNLESS OTHERWISE SHOWN. CONFIRM FINISH GRADE BEFORE INSTALLING PIPE AND ADJUST DEPTH AS REQUIRED.
- GRAVITY SEWER LINES AND FORCE MAINS SHALL BE SDR 11 HIGH DENSITY POLYETHYLENE PIPE (HDPE).
- EXISTING PROFILE GRADES SHOWN ARE APPROXIMATE ELEVATIONS BASED ON A TOPOGRAPHIC SURFACE MODEL. CONTRACTOR SHALL FIELD VERIFY ACTUAL GRADES. NEW PROFILE ELEVATIONS ARE SHOWN IN UNITS OF FEET RELATIVE TO PROJECT VERTICAL CONTROL BASIS.
- CONTRACTOR SHALL NOTIFY CUSTOMERS 48 HOURS IN ADVANCE OF ANY WATER OR SEWER SERVICE INTERRUPTIONS. CONTRACTOR SHALL ALSO PROVIDE TEMPORARY SERVICE TO EXISTING CUSTOMERS IF DEEMED NECESSARY BY THE ENGINEER.
- "BOP" IS DEFINED AS THE OUTSIDE BOTTOM OF PIPE. "INVERT" IS DEFINED AS THE INSIDE BOTTOM OF PIPE.

ABBREVIATIONS

- AC = ASPHALT CONCRETE
- ACP = AC PAVEMENT
- APPROX = APPROXIMATE
- BM = BENCH MARK
- B.O.C. = BACK OF CURB
- B.O.P. = BOTTOM OF PIPE
- BV = BUTTERFLY VALVE
- C&G = CURB AND GUTTER
- CI = CAST IRON
- CL = CENTERLINE
- CONT = CONTINUOUS
- CMP = CORRUGATED METAL PIPE
- C.O. = CLEAN-OUT
- CPEP = CORRUGATED POLYETHYLENE PIPE
- DI = DUCTILE IRON
- DIA = DIAMETER
- DIP = D.I. PIPE
- E = ELECTRICAL
- ELEV = ELEVATION
- E.O.P. = END OF PAVEMENT
- ESMT = EASEMENT
- EXC = EXCAVATION
- FG = FINISHED GRADE (ELEV.)
- F.L. = FLOW LINE (ELEV.)
- GALV = GALVANIZED
- GB = GRADE BREAK
- GV = GATE VALVE
- H = HORIZONTAL
- HDPE = HIGH DENSITY POLYETHYLENE
- HT = HEIGHT
- IE = INVERT ELEV.
- INV = INVERT
- L = LENGTH
- LF = LINEAR FEET
- LT = LEFT
- MAX = MAXIMUM
- ME = MATCH EXISTING (GRADE)
- MFR = MANUFACTURER
- MH = MANHOLE
- MIN = MINIMUM
- N = NORTHING
- NFS = NON-FROST SUSCEPTIBLE
- N.I.C. = NOT IN CONTRACT
- N.T.S. = NOT TO SCALE
- O.C. = ON CENTER
- OF = OUTFALL
- OG = ORIGINAL GROUND (ELEV.)
- OSHA = OCCUPATIONAL SAFETY & HEALTH ADMINISTRATION
- PCC = PORTLAND CEMENT CONCRETE
- PCMP = PRE-COATED CMP
- PL = PROPERTY LINE
- PP = POWER POLE
- PVMT = PAVEMENT
- R = RADIUS (LENGTH)
- RC = REINFORCED CONCRETE
- R.P. = RADIUS POINT
- RT = RIGHT
- R/W = RIGHT-OF-WAY
- S = SEWER
- S.I. = STREET INTERSECTION
- S.S. = STAINLESS STEEL
- SS = SANITARY SEWER
- STA = STATION
- STD = STANDARD
- TCB = TOP BACK OF CURB
- TBM = TEMPORARY BENCHMARK
- T.O.C. = TOP OF CONCRETE
- TYP = TYPICAL
- U/G = UNDER GROUND
- UON = UNLESS OTHERWISE NOTED
- V = VENT
- VB = VALVE BOX
- VPI = VERTICAL POINT OF INTERSECTION
- W = WATER
- WWF = WELDED WIRE FABRIC
- WT = WATER TABLE
- > = GREATER THAN
- < = LESS THAN
- >= = GREATER THAN OR EQUAL TO
- <= = LESS THAN OR EQUAL TO



(A) TYPICAL UTILITY TRENCH SECTION THRU PAVEMENT
NOT TO SCALE



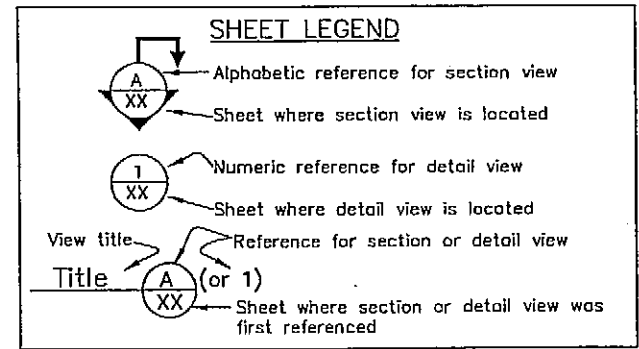
(B) TYPICAL UTILITY TRENCH SECTION NORTH OF GUARDRAIL
NOT TO SCALE

PROPOSED	EXISTING	DESCRIPTION
	⊕	BENCH MARK
	⊕ _{TM}	TEMPORARY BENCH MARK
	⊕	SURVEY MONUMENT
	⊕ _{LP}	IRON PIN RECOVERED
	---	PROPERTY LINE
	---	R-O-W
	---	EDGE OF GRAVEL ROAD
	+	STREET SIGN
	⊕	TREE OR SHRUB
		BUILDING
		INSULATION
	⊕	LIGHT POLE
	⊕	POWER POLE
)	GUY ANCHOR

PROPOSED	EXISTING	DESCRIPTION
	---	ELECTRIC LINES
	---	TELEPHONE LINES
	---	FILL LIMIT
	---	CUT LIMIT
	---	FENCE
	○	BOLLARD
	---	WATER LINE
	⊕	FIRE HYDRANT
	⊕	MAIN LINE VALVE
	---	CURB STOP
	---	GRAVITY SEWER LINE
	---	SEWER FORCE MAIN
	⊕	SEWER MANHOLE
	---	SEWER CLEANOUT
	---	REDUCER

TRENCH SECTION NOTES:

- TRENCH EXCAVATION AND SHORING SHALL COMPLY WITH ALL LOCAL, STATE, AND OSHA REGULATIONS AND REQUIREMENTS.
- ALL ORGANIC (MUSKIEG) AND UNSUITABLE MATERIAL SHALL BE REMOVED FROM THE TRENCH SECTION AND DISPOSED OF OFFSITE.
- INSTALL 2-INCH THICK BY TRENCH WIDTH (30" MINIMUM) RIGID BOARD INSULATION WHERE SHOWN ON THE PLAN & PROFILE DRAWINGS OR WHERE THE DEPTH OF BURY FOR WATER OR SEWER LINE IS LESS THAN 5- FEET.
- TRENCH BACKFILL SHALL BE EXCAVATED NATIVE OR IMPORTED MATERIALS CONFORMING TO 703-2.07 SELECTED MATERIAL, TYPE C. COMPACT TO 95% MAXIMUM DENSITY.
- COMPACT TO A MINIMUM OF 85% MAXIMUM DENSITY BEYOND INDICATED EXTENTS OF 95% COMPACTION.
- COMPACT TRENCH BACKFILL THAT SUPPORTS PERIPHERAL AREAS OF PAVEMENT AND STRUCTURES TO 95% MAXIMUM DENSITY.
- COMPACT SUBGRADE OF TRAFFIC WAY OR TRENCH EXCAVATIONS TO 95% MAXIMUM DENSITY PRIOR TO PLACEMENT OF FILL OR BACKFILL.



DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

DESIGNED BY: MIKE L	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES SE REGION DESIGN & ENGINEERING SERVICES DIVISION					
	Wrangell Terminal Modifications Project 67924					
	NOTES, LEGEND, ABBREVIATIONS & TRENCH SECTION					
CHECKED BY: JON H.	PATH: J:\Jobsdata\30101 Coffman Cove Ferry Terminal\00 CADD\Drawings\Wrangell\30101-62.dwg					
DRAWN BY: MIKE L	PLOT: XX					
REVISIONS		PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS	
NO.	DATE	DESCRIPTION	67924	2005	6	32

As-Built 11-14-06

AUGUST 2005

ADDENDUM NUMBER

ATTACHMENT NUMBER

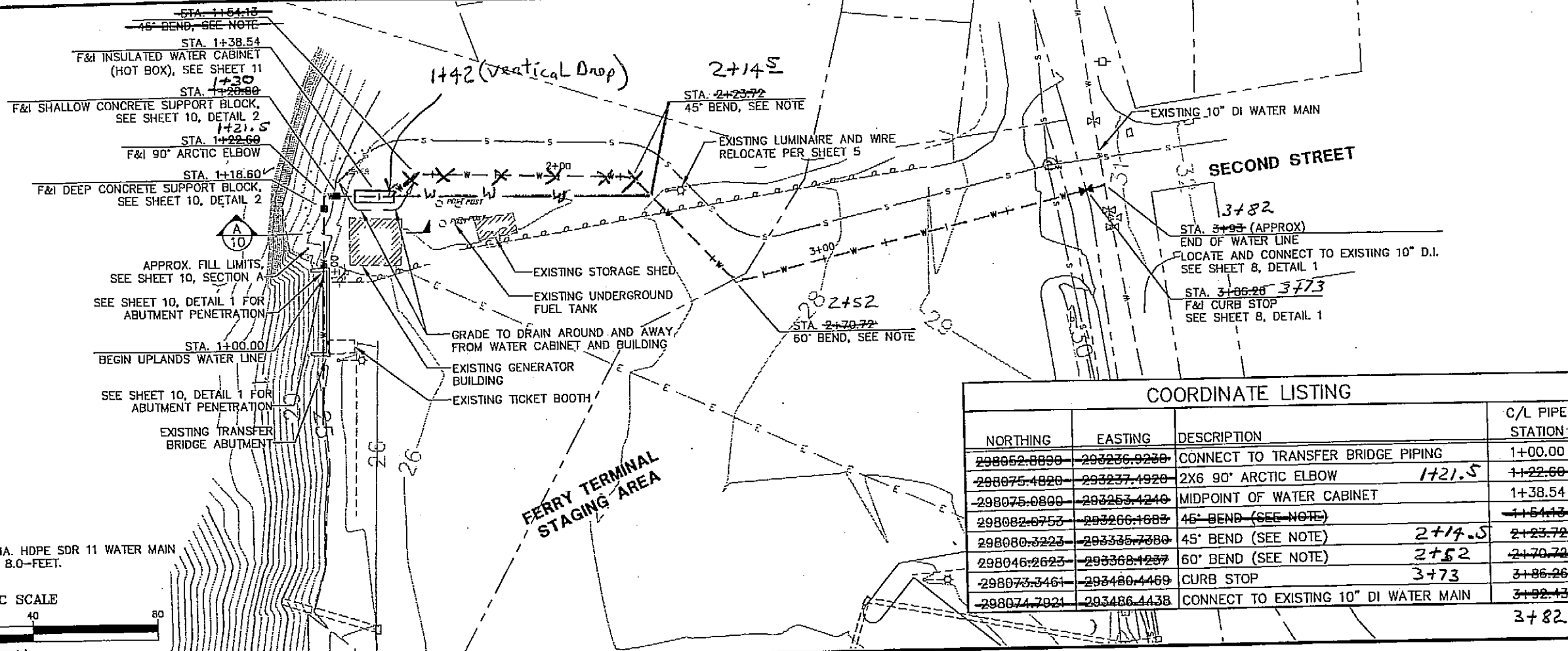
RECORD OF REVISIONS

No. DATE DESCRIPTION

No.	DATE	DESCRIPTION

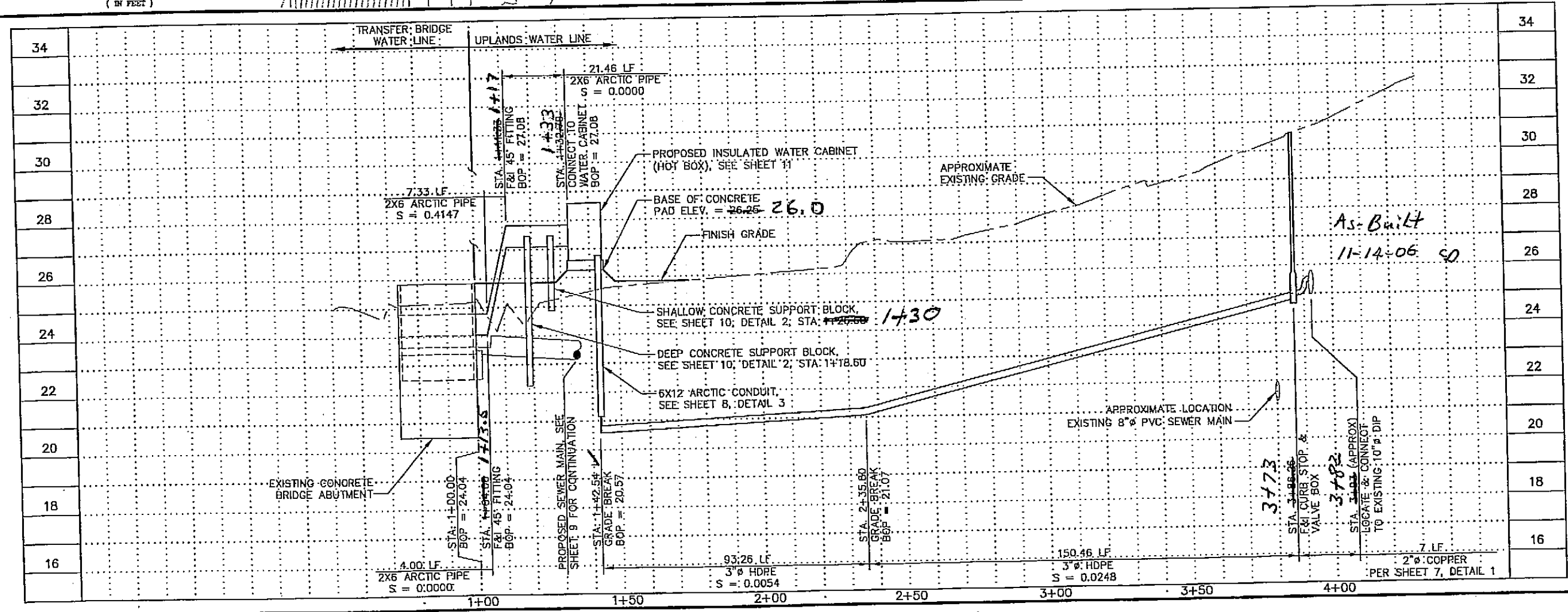
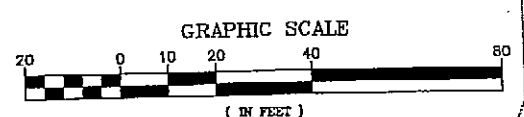
WRANGELL TERMINAL MODIFICATIONS
CA-0093(69)-67924

UPLAND WATER LINE
PLAN & PROFILE
STA 1+00.00 TO 3+92.56



NORTHING	EASTING	DESCRIPTION	C/L PIPE STATION
298052.8899	293236.9230	CONNECT TO TRANSFER BRIDGE PIPING	1+00.00
298075.4820	293237.4920	2X6 90° ARCTIC ELBOW	1+22.60
298075.0800	293253.4240	MIDPOINT OF WATER CABINET	1+38.54
298082.0753	293266.1683	45° BEND (SEE NOTE)	1+54.13
298080.3223	293335.7380	45° BEND (SEE NOTE)	2+14.5
298046.2623	293368.1257	60° BEND (SEE NOTE)	2+52
298073.3461	293480.4469	CURB STOP	3+73
298074.7921	293486.4438	CONNECT TO EXISTING 10" DI WATER MAIN	3+82

NOTE:
BENDING RADIUS FOR 3" DIA. HDPE SDR 11 WATER MAIN SHALL NOT BE LESS THAN 8.0-FEET.



DESIGNED BY: MIKE L

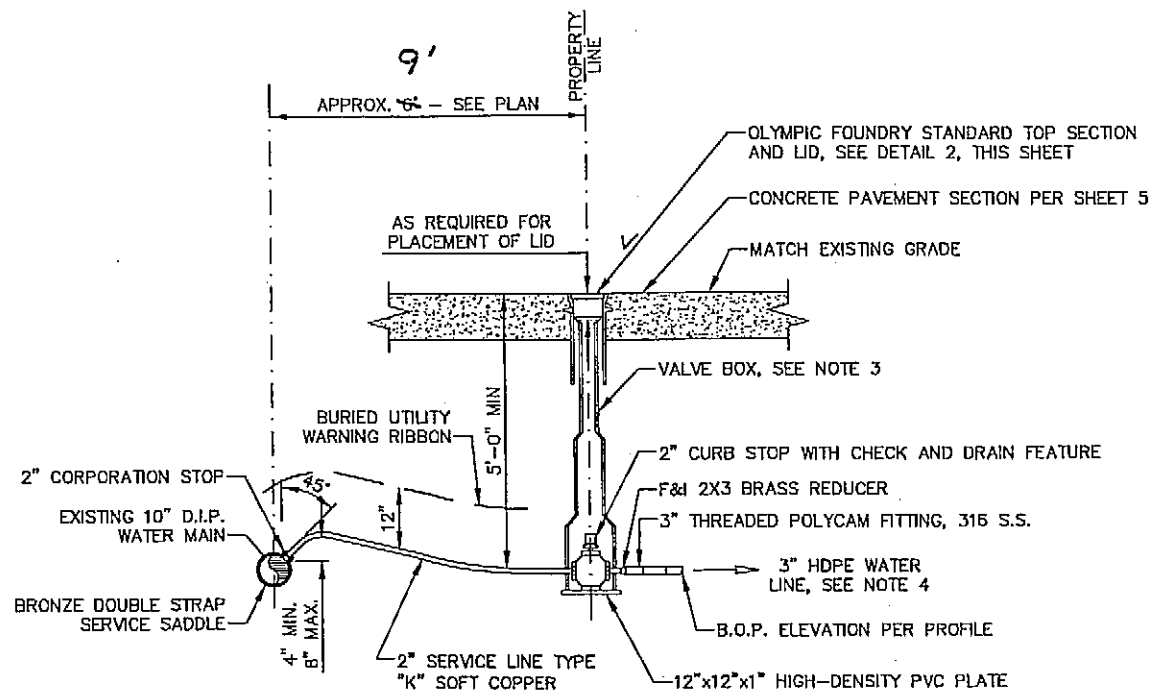


CHECKED BY: JON H.
DRAWN/REVISED BY: JOEY H.

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SE REGION DESIGN & ENGINEERING SERVICES DIVISION
WRANGELL TERMINAL MODIFICATIONS

UPLANDS WATER LINE
STA 1+00.00 TO 3+92.56
PROJECT DESIGNATION NUMBER
CA-0093(69)-67924

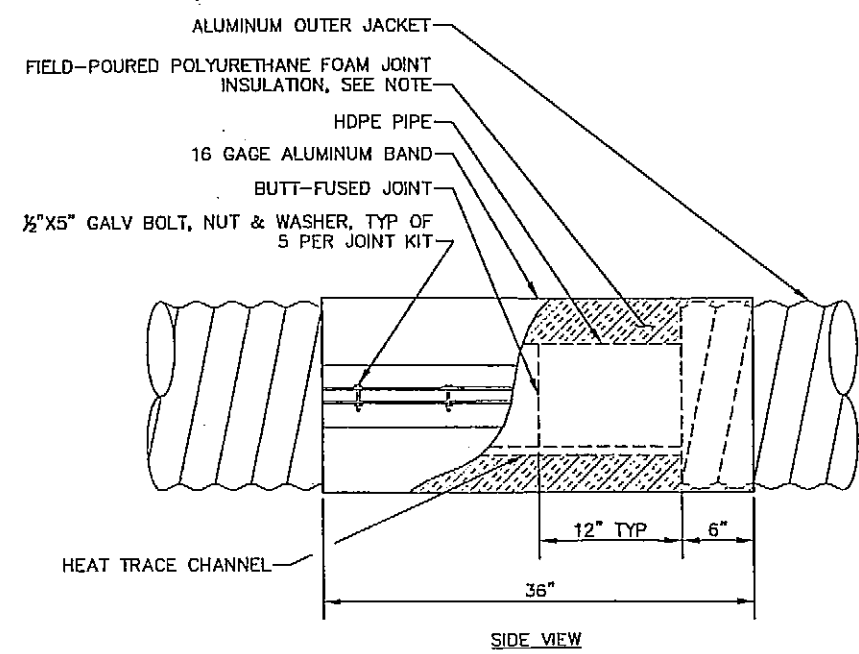
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ALASKA	2005
SHEET NUMBER	TOTAL SHEETS
7	32



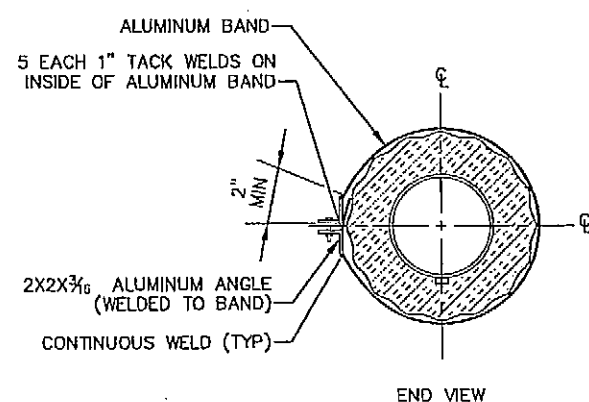
WATER SERVICE NOTES:

1. COPPER TUBE CONNECTIONS SHALL BE FLARED UNIONS.
2. 4"x24"xLENGTH TO FIT OF RIGID BOARD INSULATION SHALL BE REQUIRED OVER WATER LINE IF THERE IS LESS THAN 5 FEET OF COVER.
3. WRAP 6 MIL PVC SHEETING AROUND VALVE BOX BASE AFTER ASSEMBLY AND BEFORE BACKFILLING.
4. CONNECT 3" HDPE WATER LINE TO 2X3 REDUCER USING POLY-CAM FITTING

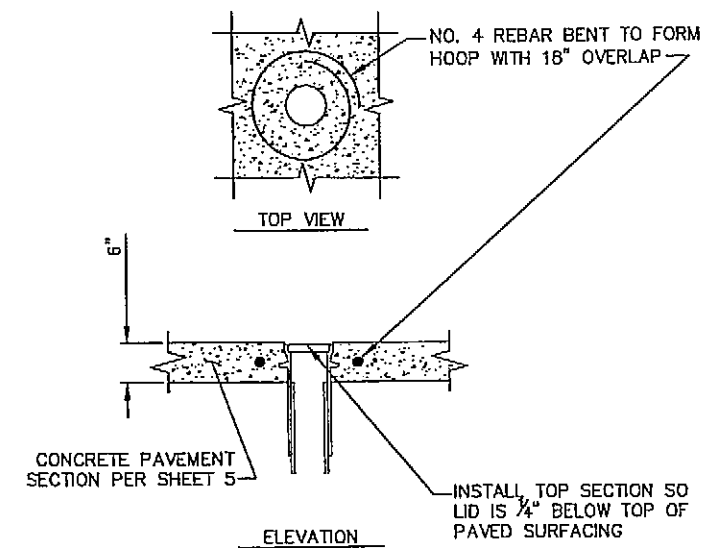
1 WATER LINE CONNECTION
7 NTS



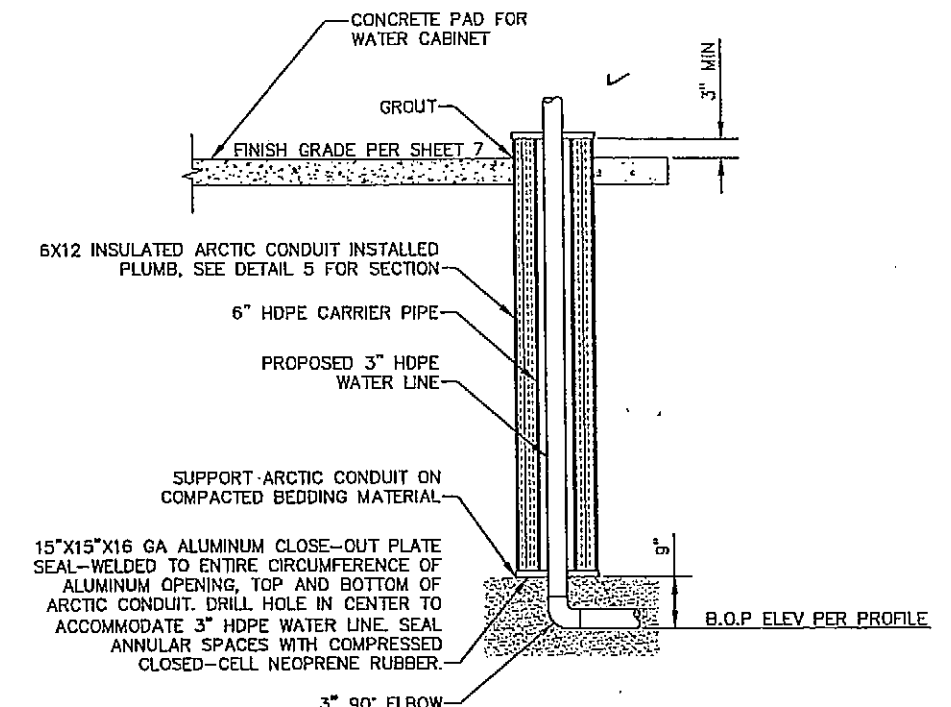
4 INSULATED JOINT KIT DETAIL
NTS



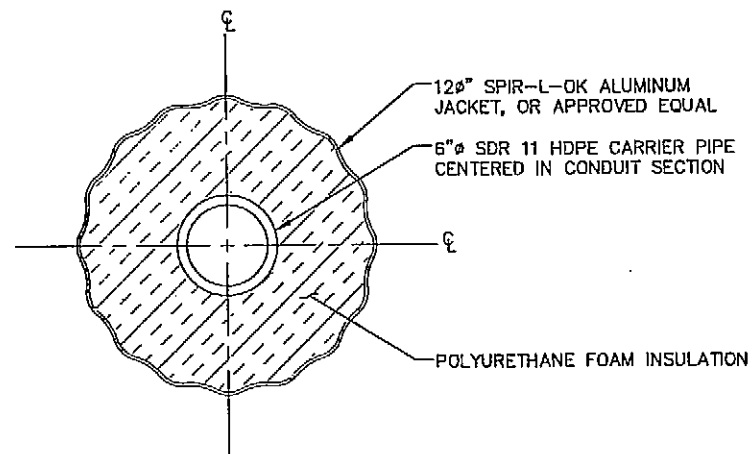
NOTE:
JOINT KIT INSULATION SHALL BE PROVIDED IN 2-PART LIQUID FORM SUCH THAT IT CAN BE POURED IN THE FIELD AFTER HDPE PIPE JOINT FUSION, USING ALUMINUM BAND AS A FORM. PROVIDE HEAT TRACE CHANNEL PRIOR TO POURING INSULATION, PLUG HOLES IN BAND WITH PLASTIC GROMMETS.



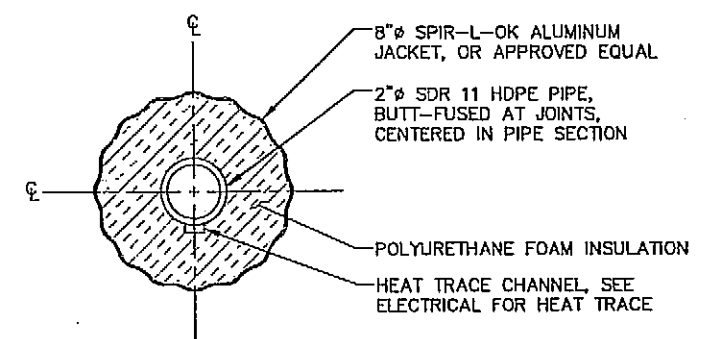
2 TOP SECTION INSTALLATION
8 NTS



3 WATER CABINET PENETRATION DETAIL
7 NTS



5 6X12 ARCTIC CONDUIT SECTION
8 NTS



6 2X6 ARCTIC PIPE SECTION
NTS

As-Built 11-14-06

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

DESIGNED BY: MIKE L.

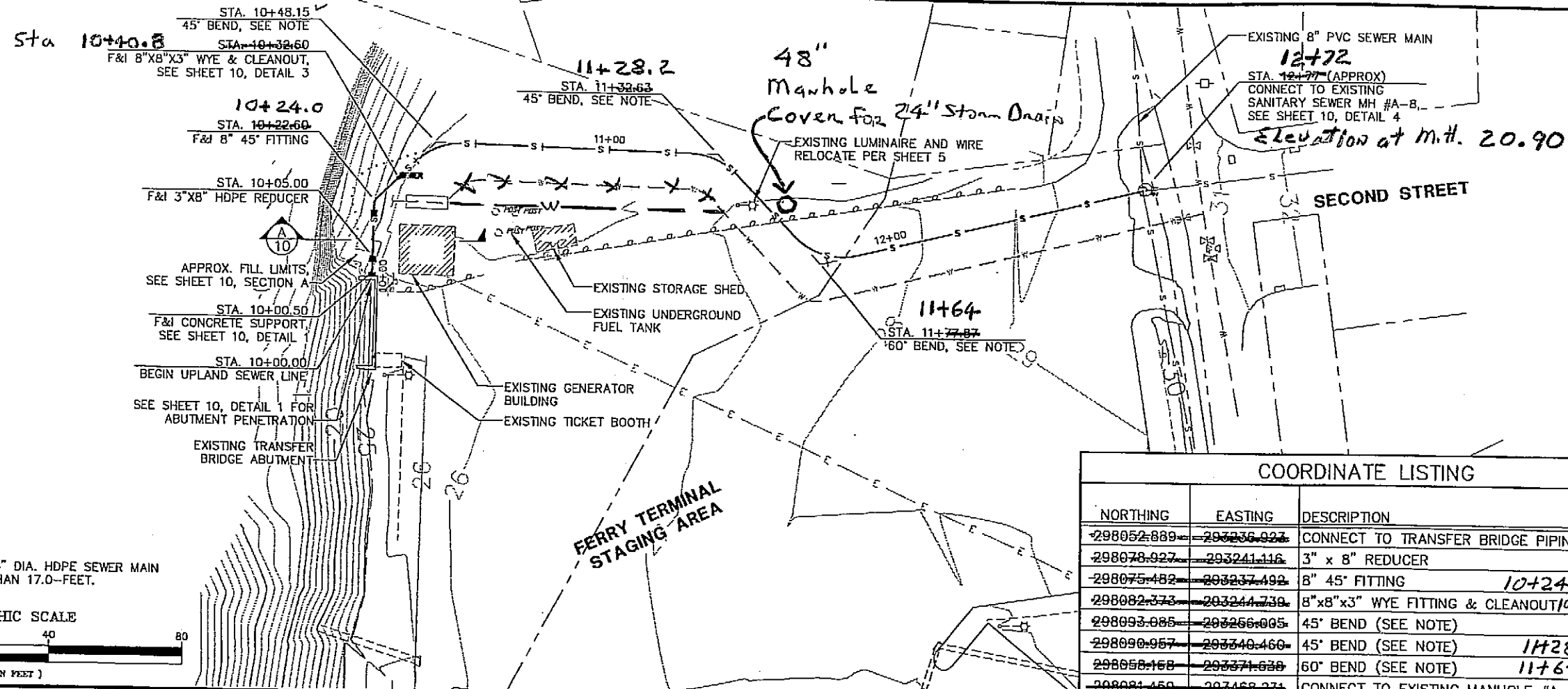
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SE REGION DESIGN & ENGINEERING SERVICES DIVISION

Wrangell Terminal Modifications
Project 62924
UPLANDS WATER DETAILS

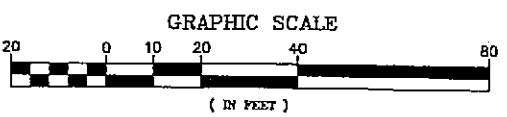
CHECKED BY: JON H.
DRAWN BY: JOEY H.

PATH: J:\Jobsdata\30101\CADD\Drawings\Wrangell W&S\30101.33 Details.dwg
PLOT:

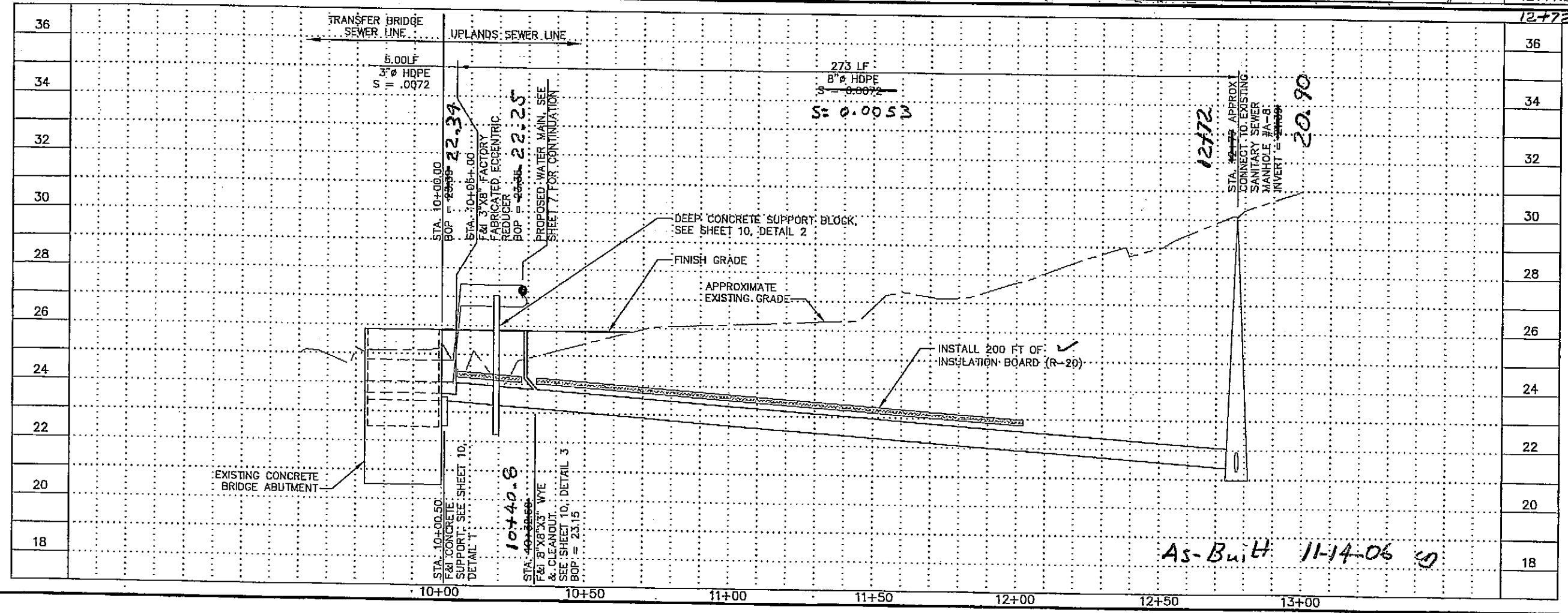
REVISIONS			PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
NO.	DATE	DESCRIPTION				
			62924	2005	8	32



NOTE:
BENDING RADIUS FOR 8" DIA. HDPE SEWER MAIN SHALL NOT BE LESS THAN 17.0- FEET.



COORDINATE LISTING			
NORTHING	EASTING	DESCRIPTION	C/L PIPE STATION
298052.889	293236.924	CONNECT TO TRANSFER BRIDGE PIPING	10+00.00
298078.927	293241.116	3" x 8" REDUCER	10+05.00
298075.482	293237.492	8" 45° FITTING	10+22.60
298082.373	293244.739	8"x8"x3" WYE FITTING & CLEANOUT	10+32.60
298093.085	293266.005	45° BEND (SEE NOTE)	10+48.15
298090.957	293340.460	45° BEND (SEE NOTE)	11+28.2
298058.158	293371.628	60° BEND (SEE NOTE)	11+77.87
298081.450	293468.234	CONNECT TO EXISTING MANHOLE #A-8	12+77.23



As-Built 11-14-06

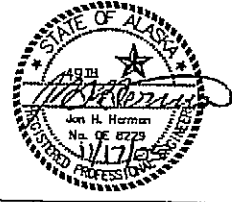
AUGUST 2005
ADDENDUM NUMBER
ATTACHMENT NUMBER

RECORD OF REVISIONS		
No.	DATE	DESCRIPTION

WRANGELL TERMINAL MODIFICATIONS
CA-0093(69)-67924

UPLAND SEWER LINE
PLAN & PROFILE
STA 10+00.00 TO 12+77.23

DESIGNED BY: MIKE L.



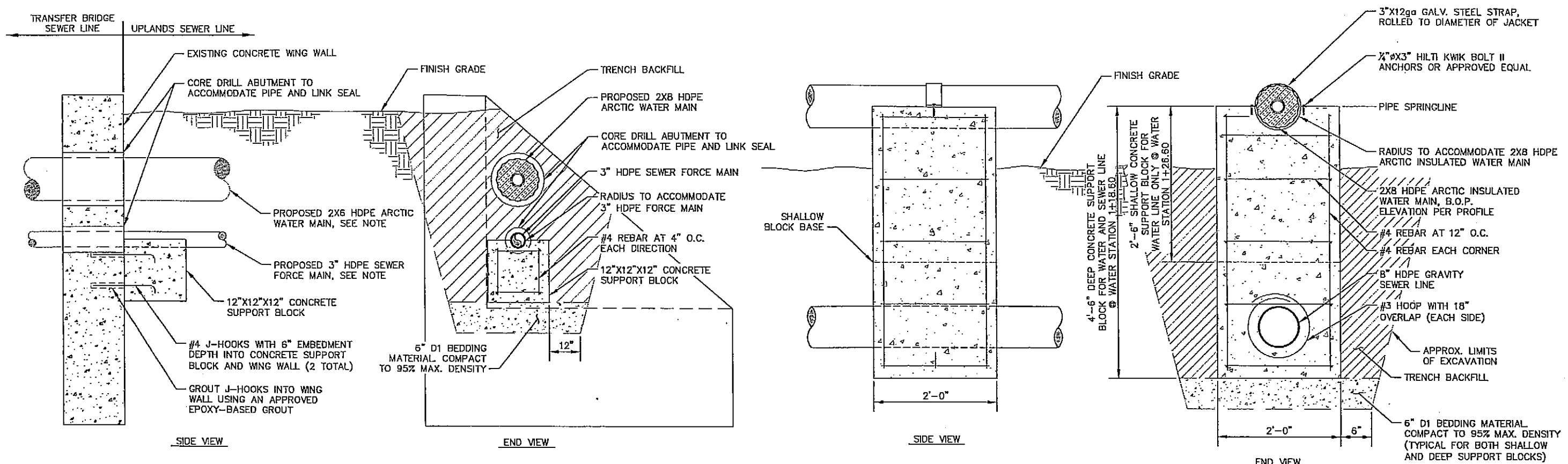
CHECKED BY: JON H.
DRAWN/REVISED BY: JOEY H.

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SE REGION DESIGN & ENGINEERING SERVICES DIVISION
WRANGELL TERMINAL MODIFICATIONS

UPLANDS SEWER LINE
STA 10+00.00 TO 12+77.23
PROJECT DESIGNATION NUMBER

CA-0093(69)-67924

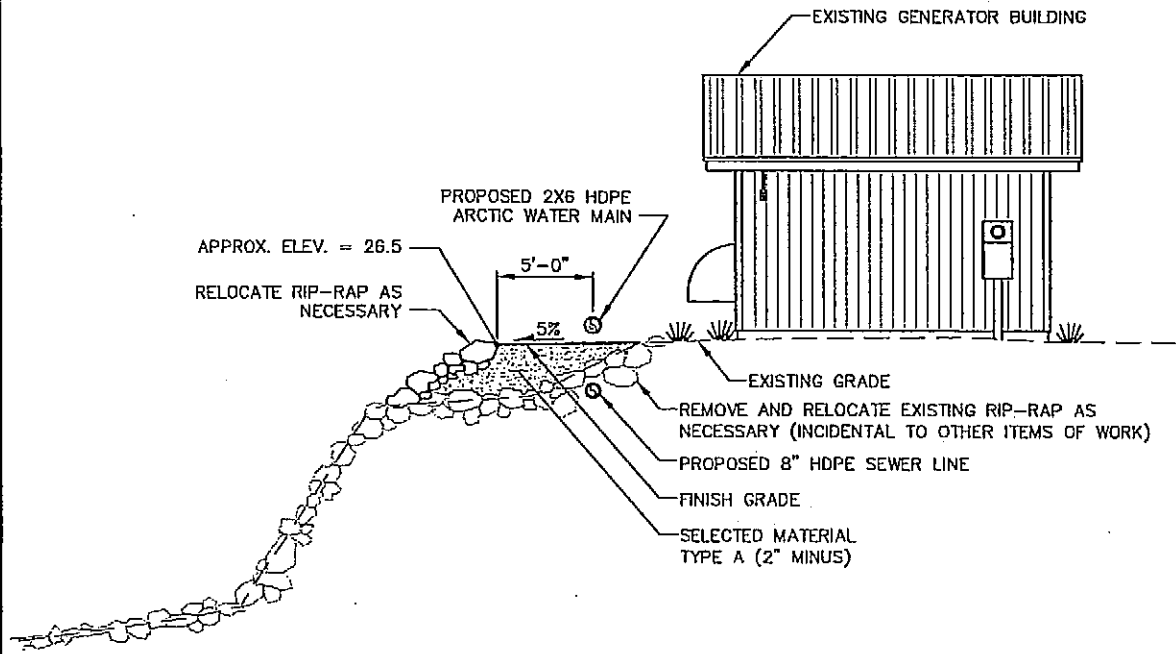
STATE	YEAR
ALASKA	2005
SHEET NUMBER	TOTAL SHEETS
9	32



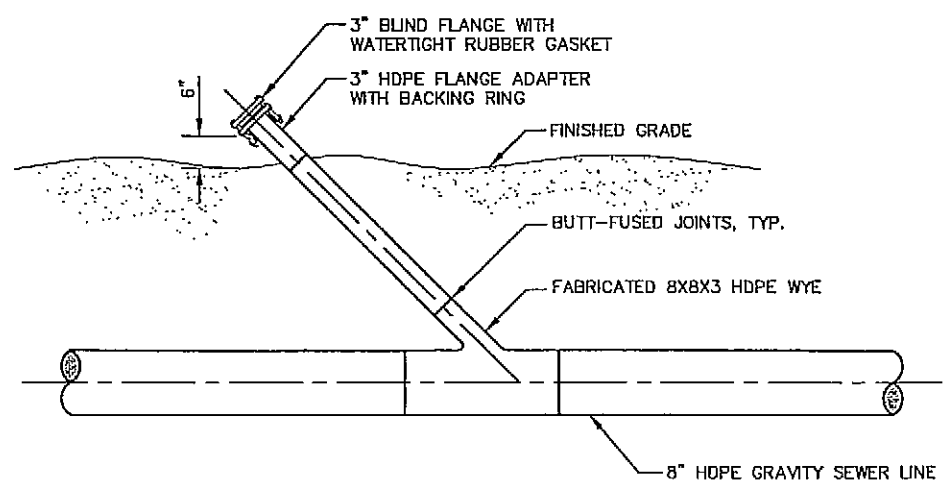
NOTE: SUPPORT PIPING IN WALL PENETRATIONS WITH FLEXIBLE ANNULAR SUPPORT, LINK-SEAL OR APPROVED EQUAL.

1
9 NTS
ABUTMENT PENETRATION AND CONCRETE SUPPORT DETAIL

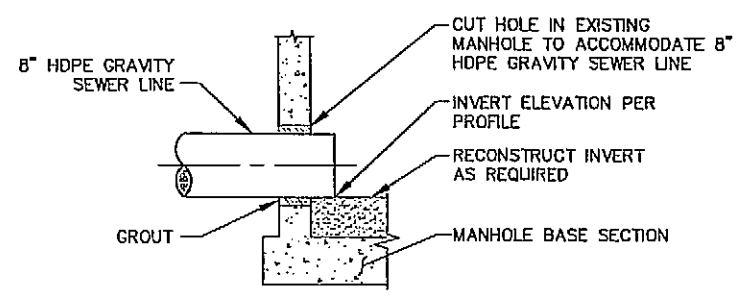
2
7 NTS
CONCRETE SUPPORT DETAIL



A
7 NTS
FILL PAD DETAIL



3
9 NTS
CLEAN-OUT DETAIL



4
9 NTS
EXISTING MANHOLE PIPE CONNECTION

As-Built 11-14-06

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

DESIGNED BY: MIKE L.

CHECKED BY: JON H.
DRAWN BY: JOEY H.

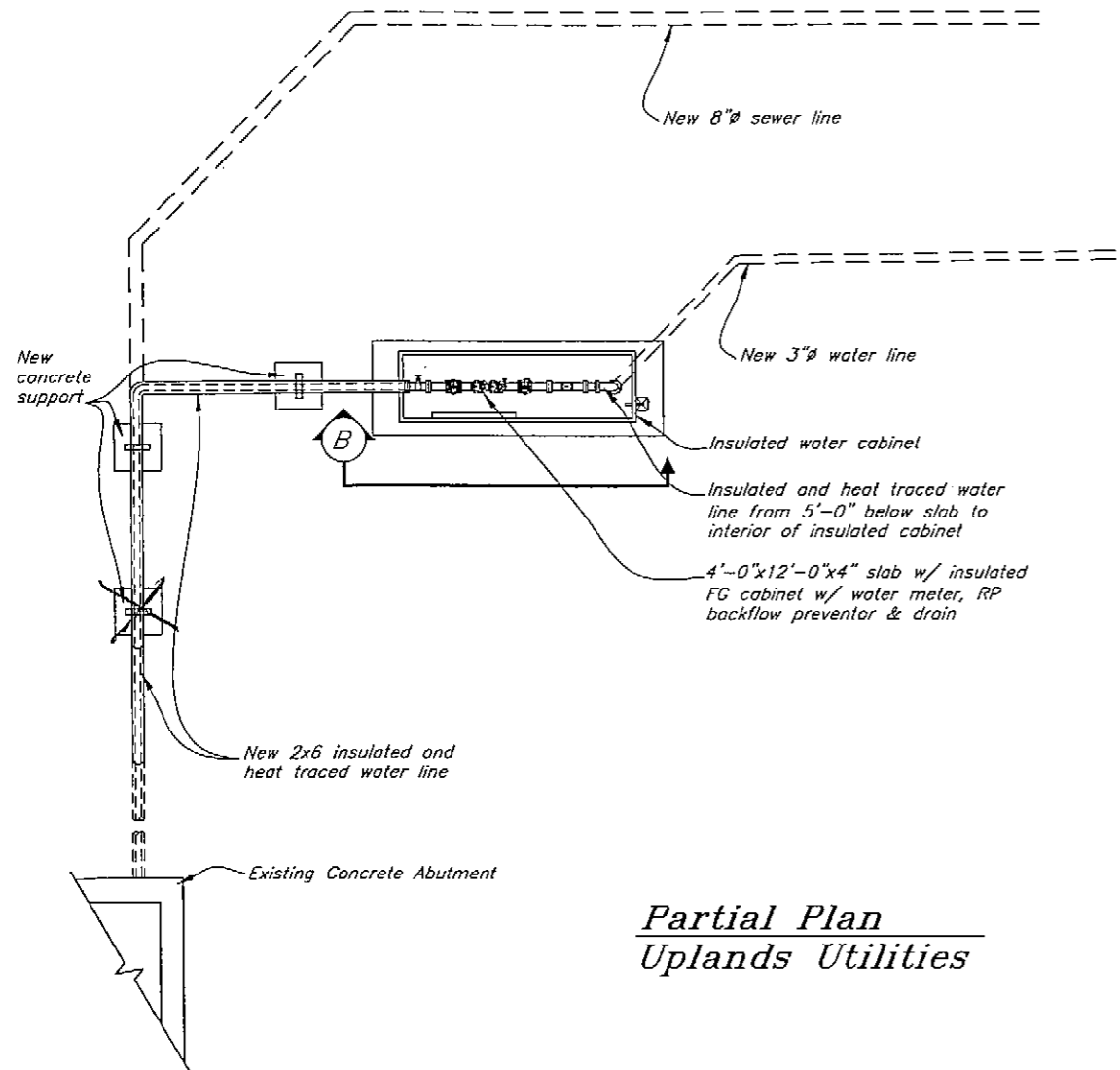
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PLOT:

STATE OF ALASKA
49th
Professional Engineer
Jon H. Harman
No. PE 0229

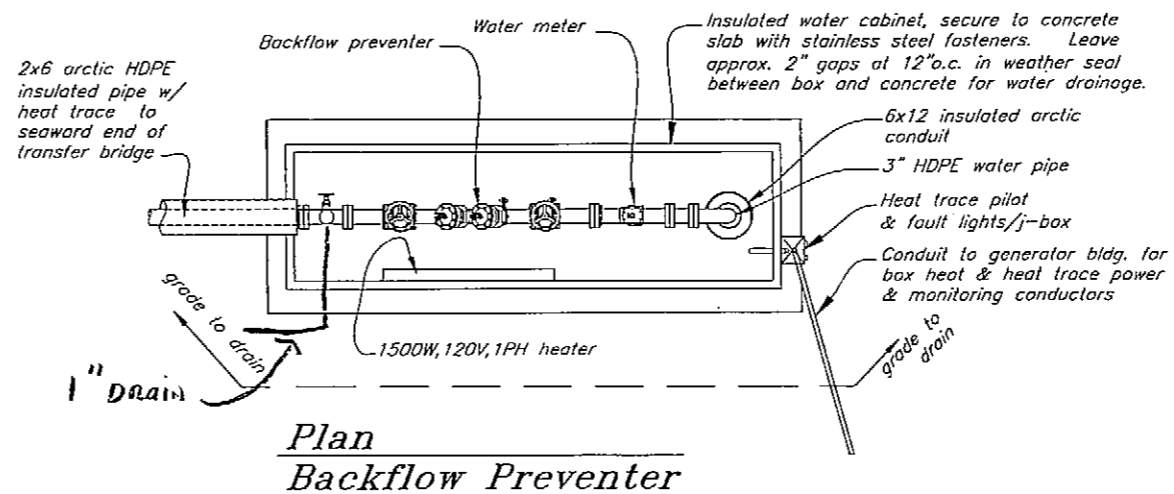
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SE REGION DESIGN & ENGINEERING SERVICES DIVISION

Wrangell Terminal Modifications
Project 62924
UPLANDS SEWER DETAILS

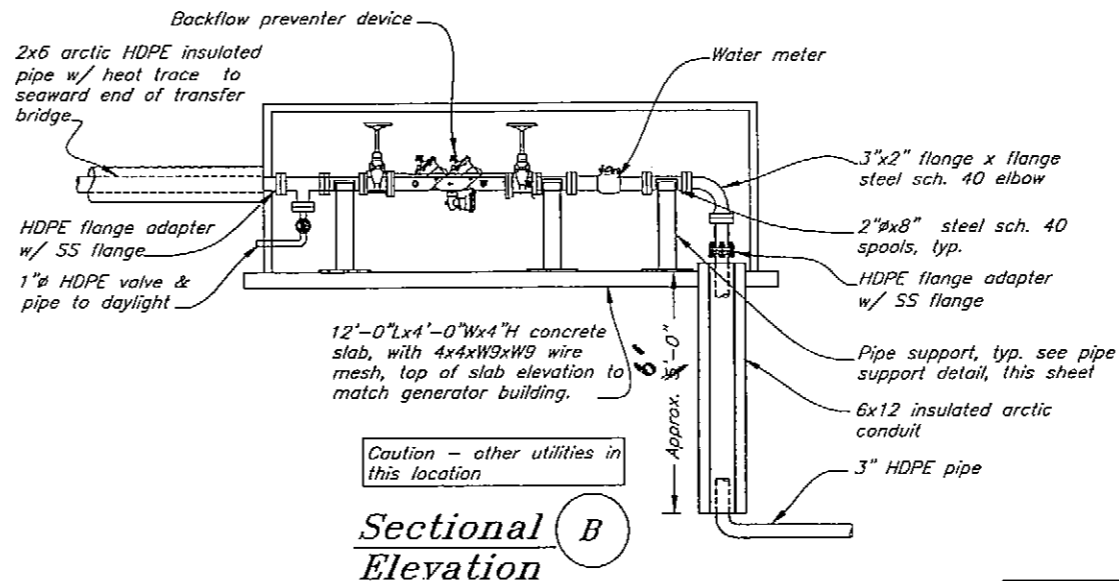
REVISIONS			PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
NO.	DATE	DESCRIPTION				
			62924	2005	10	32



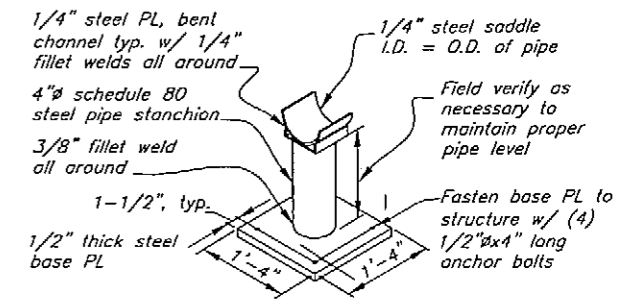
**Partial Plan
Uplands Utilities**



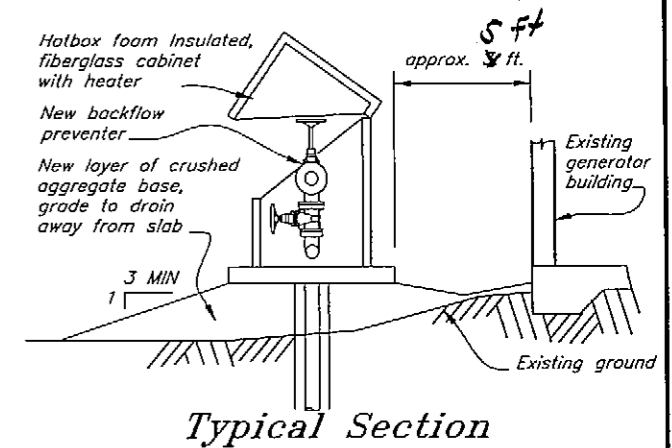
**Plan
Backflow Preventer**



**Sectional
Elevation B**



**Detail
Pipe Support**

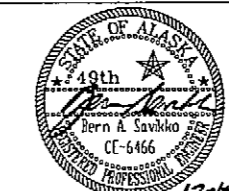


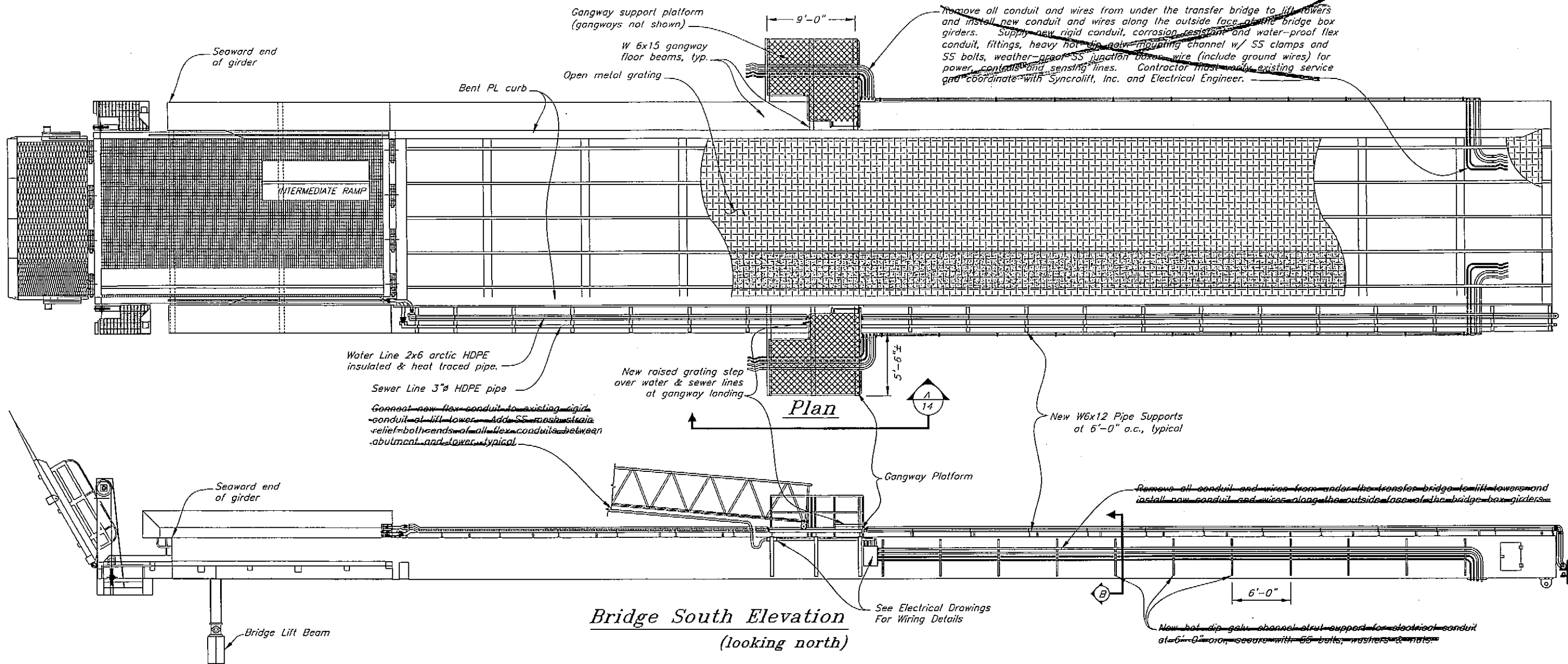
Typical Section

- NOTES: BACKFLOW PREVENTER/METER & ENCLOSURE**
- 1) Backflow preventer shall be 2 inch diameter and shall be Febco 860-NRS, Zurn/Wilkins Model 975, or equivalent.
 - 2) Water meter shall be Sensus Technologies, Inc. 2 inch, Model W-350 DRS Turbo-Meter with the Touch Read PiLid and be compatible with the Wrangell water system.
 - 3) The enclosure for the backflow preventer/meter/blow-off shall be a Hot Box modified #HB3NS fiberglass enclosure with flip-up lid and shall have a 1500 W, 120 V, 1 Ph heater, or equivalent.
 - 4) All fittings flange to flange inside enclosure, except as noted.

As-Built 11-14-06

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

DESIGNED BY: B. Savikko		STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION			
		Wrangell Terminal Modifications Project 67924			
CHECKED BY: T. Doggett		Water Backflow Preventer Details			
DRAWN BY: B. Nelson		PROJECT DESIGNATION: 67924			
PATH: Q:\Hrg\67924\MF\Plans\011-Water & Sewer - Misc Upland Details.dwg		YEAR: 2005	SHEET NO.: 11	TOTAL SHEETS: 32	
PLOT: PSPACE 1=1		TAB: DETAIL			
REVISIONS					
NO.	DATE	DESCRIPTION			

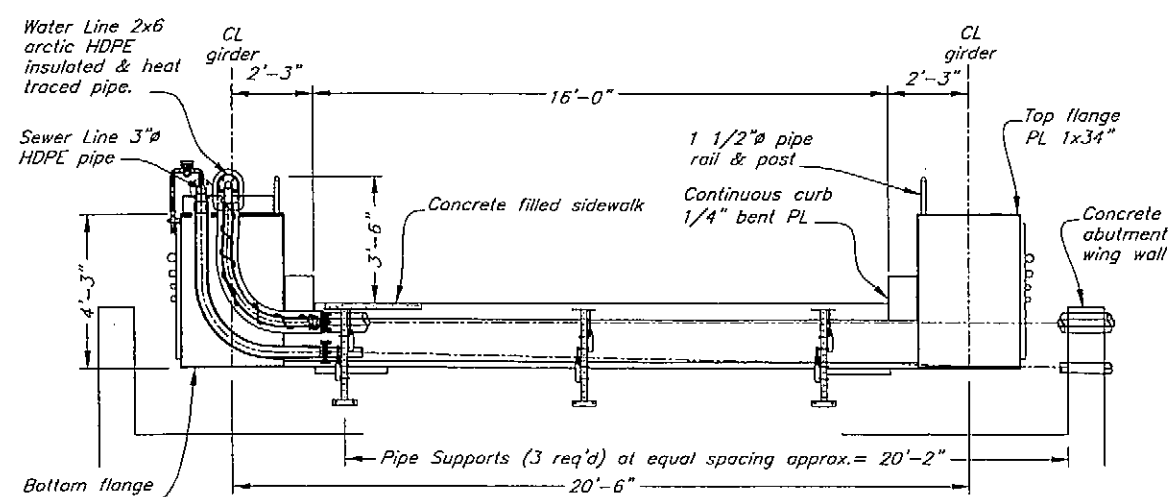


Remove all conduit and wires from under the transfer bridge to lift towers and install new conduit and wires along the outside face of the bridge box girders. Supply new rigid conduit, corrosion resistant and water-proof flex conduit, fittings, heavy hot-dip galv. mounting channel w/ SS clamps and SS bolts, weather-proof SS junction boxes, wire (include ground wires) for power, controls and sensing lines. Contractor must verify existing service and coordinate with Syncrolift, Inc. and Electrical Engineer.

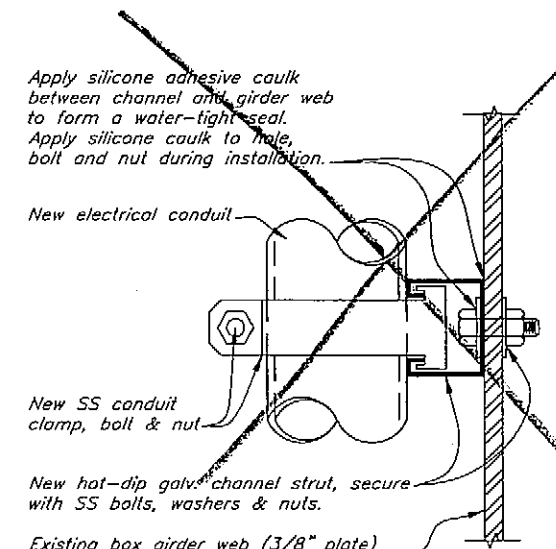
Remove all conduit and wires from under the transfer bridge to lift towers and install new conduit and wires along the outside face of the bridge box girders.

New hot-dip galv. channel strut support for electrical conduit at 6'-0" o.c., secure with SS bolts, washers & nuts.

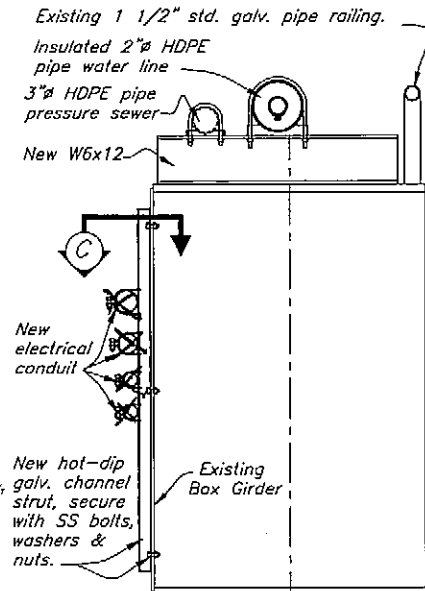
Bridge South Elevation
(looking north)



Section At Abutment Wall
(seaward view)



Section C
Conduit Support Channel



Section B
Conduit Support Channel

As-Built 11-14-06
6

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

DESIGNED BY: B. Savikko

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION

Wrangell Terminal Modifications
Project 67924

**Transfer Bridge
Plan & Elevation**

CHECKED BY: T. Daggell
DRAWN BY: B. Nelson

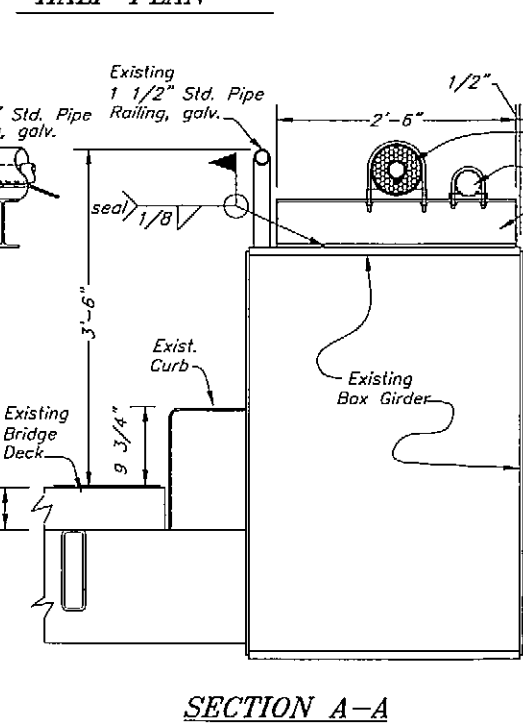
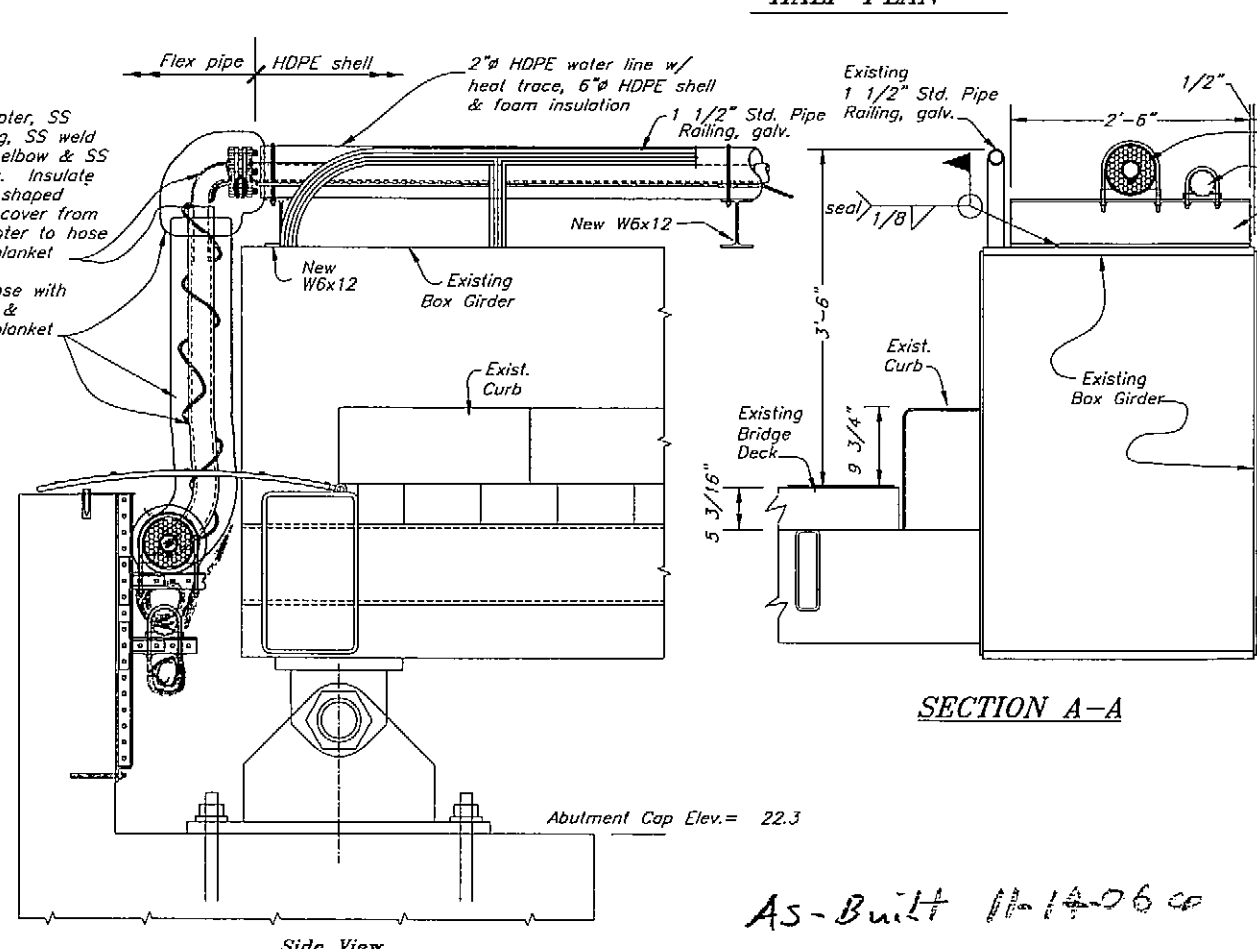
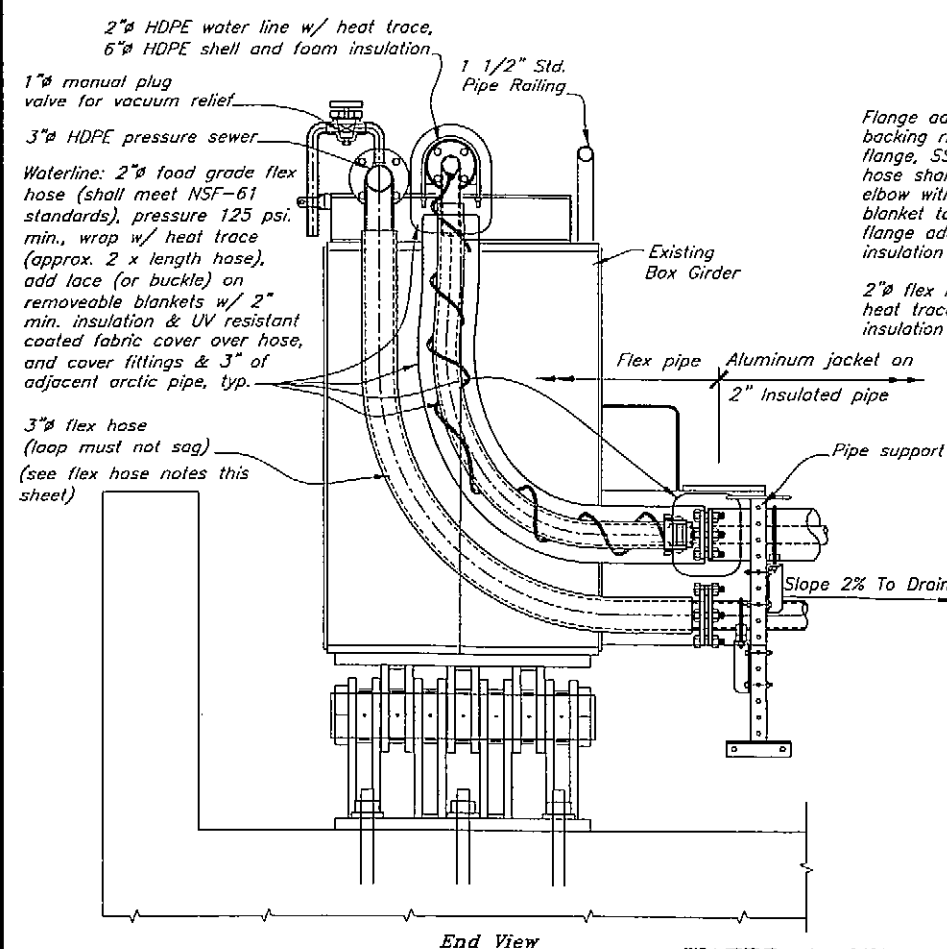
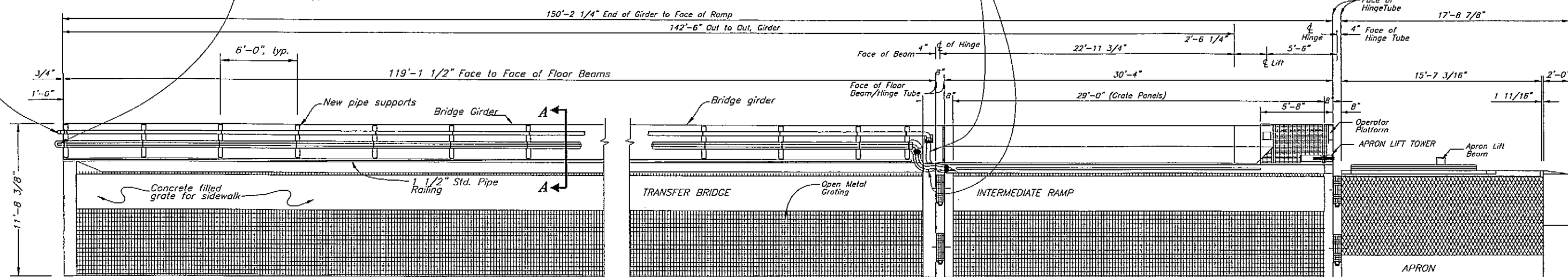
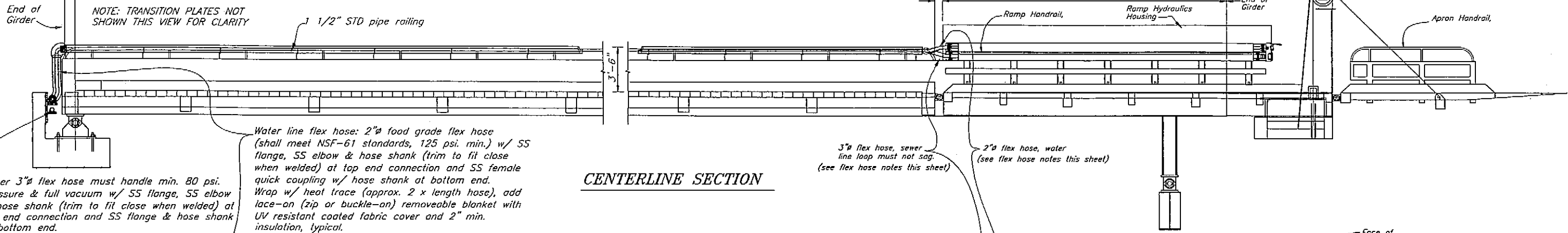
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PLOT: PSPACE 1=1 TAB: DETAIL

12-14-06

Wed, 09/Nov/05 03:48PM

REVISIONS			PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
NO.	DATE	DESCRIPTION				
			67924	2005	12	32

119'-4"



WATER & SEWER UTILITY LINES

As-Built 11-14-06 CD

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

DESIGNED BY: B. Savikko

CHECKED BY: T. Daggett

DRAWN BY: B. Nelson

PATH: O:\Wrg\67924\MF\Planset\013-Water & Sewer - Bridge & Abutment.dwg

PLT: PSPACE 1=1

Wed, 09/Nov/05 03:47PM

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION

Wrangell Terminal Modifications
Project 67924

Water & Sewer Utilities
Bridge & Abutment

12-14-05

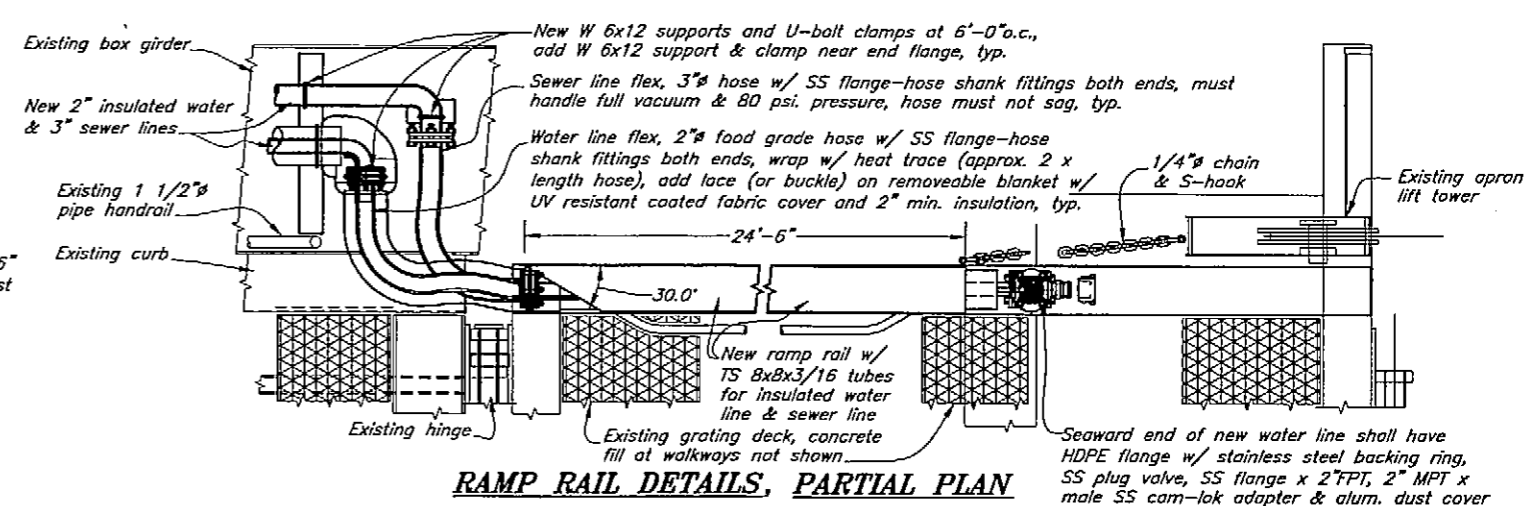
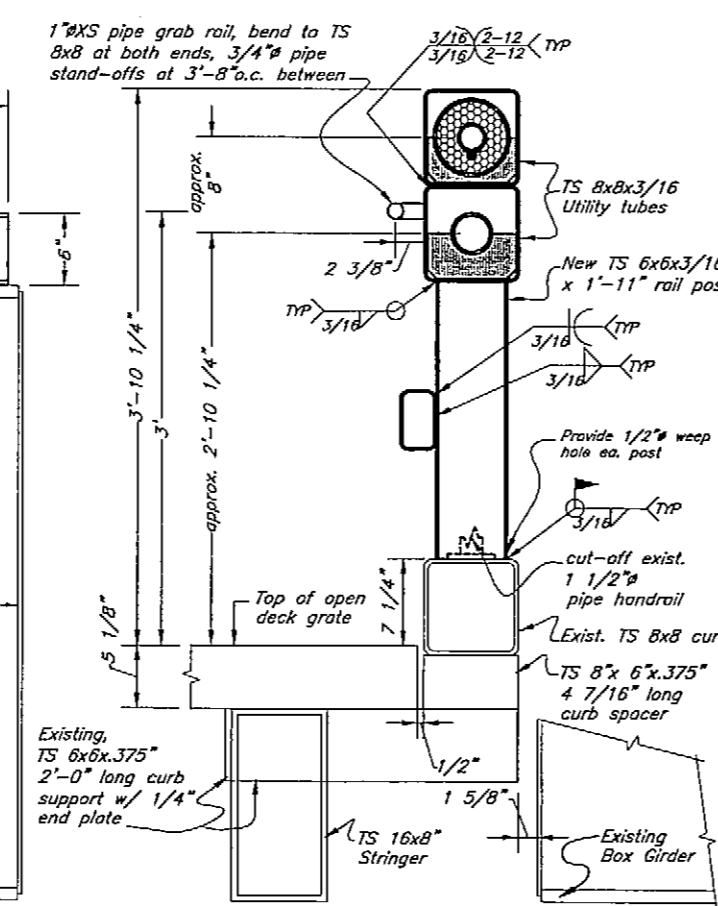
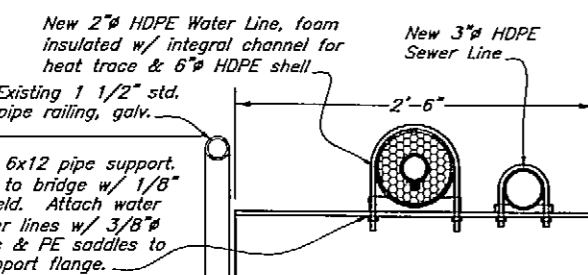
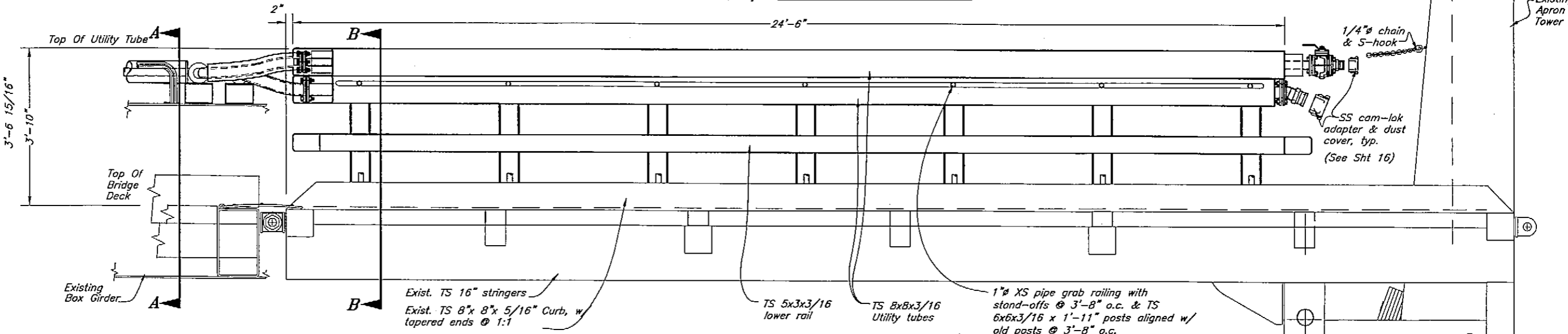
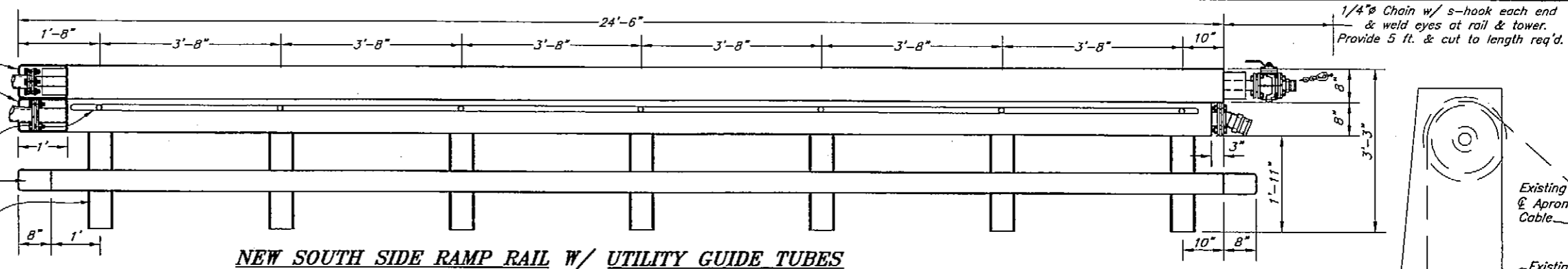
NO.	DATE	REVISIONS DESCRIPTION	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			67924	2005	13	32

TS 8"x8"x3/16" Utility tubes, for insulated water and sewer lines.

1"xs pipe grab rail, bend curve back at both ends & weld to TS8x8, add 3/4" pipe stand-offs at 3'-8" o.c.

TS 5x3x3/16 lower rail w/ 12" long return at 30 deg. both ends, typ.

TS 6x6x3/16"x1'-11" long rail post, match old post spacing to hide old welds inside spacer



SECTION A

WATER & SEWER UTILITY LINES

As-Built 11-14-06

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

DESIGNED BY: B. Savikko

CHECKED BY: T. Doggett

DRAWN BY: B. Nelson

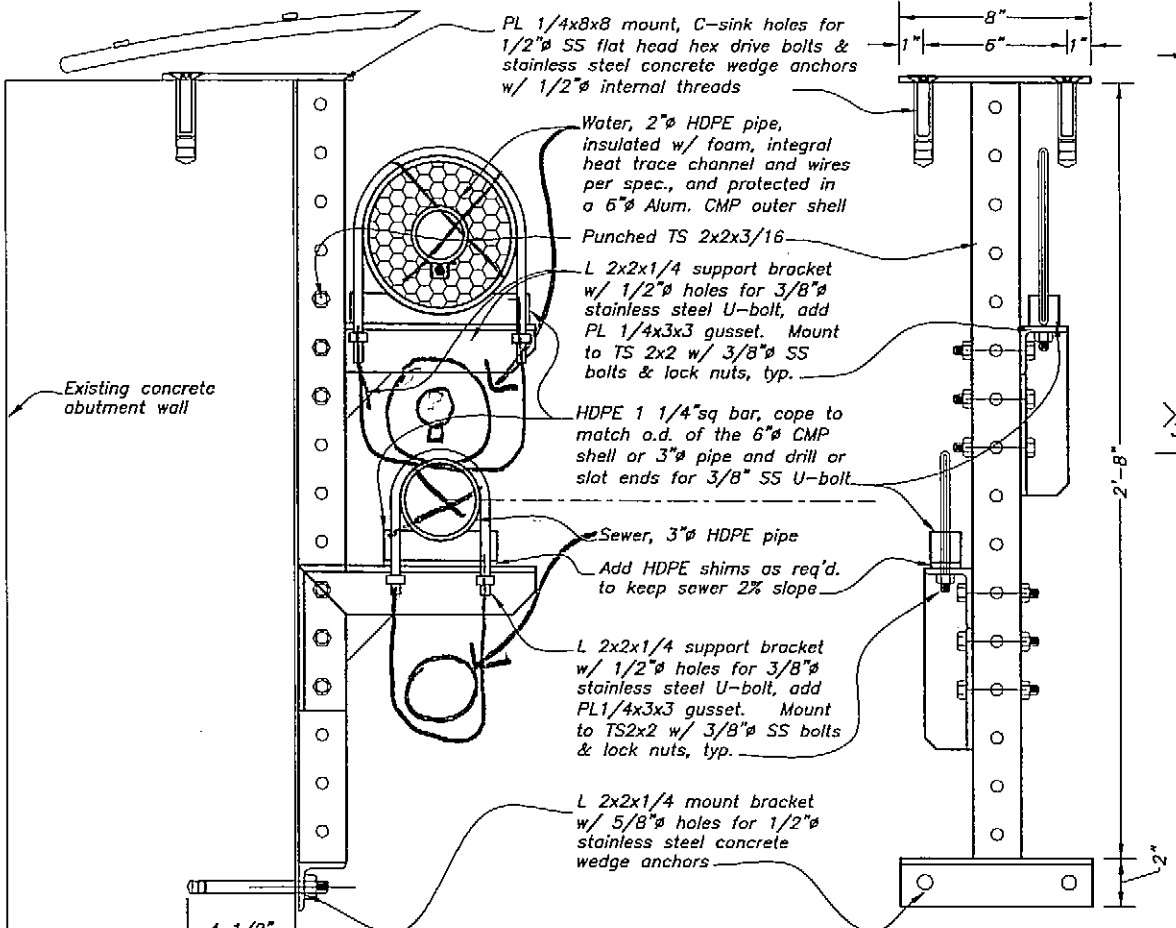
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION
Wrangell Terminal Modifications
Project 67924

NEW WATER & SEWER RAMP RAIL REPLACEMENT & PIPE SUPPORT DETAILS

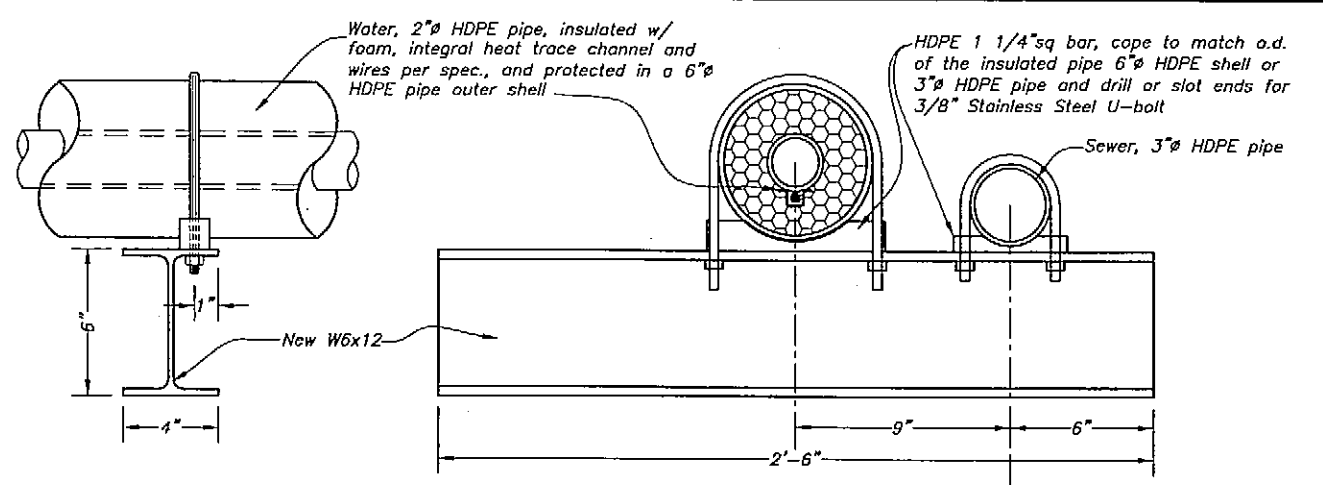
12-14-06

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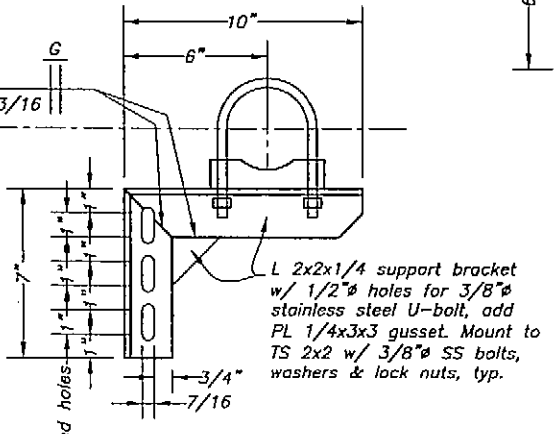
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NO.	DATE	DESCRIPTION				
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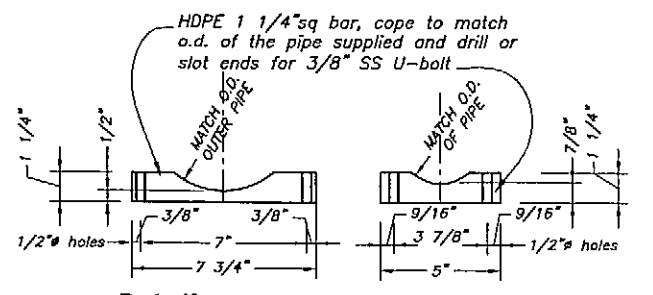
Abutment Wall Pipe Support Bracket
(3 assemblies req'd.)



Bridge Girder Pipe Support Bracket

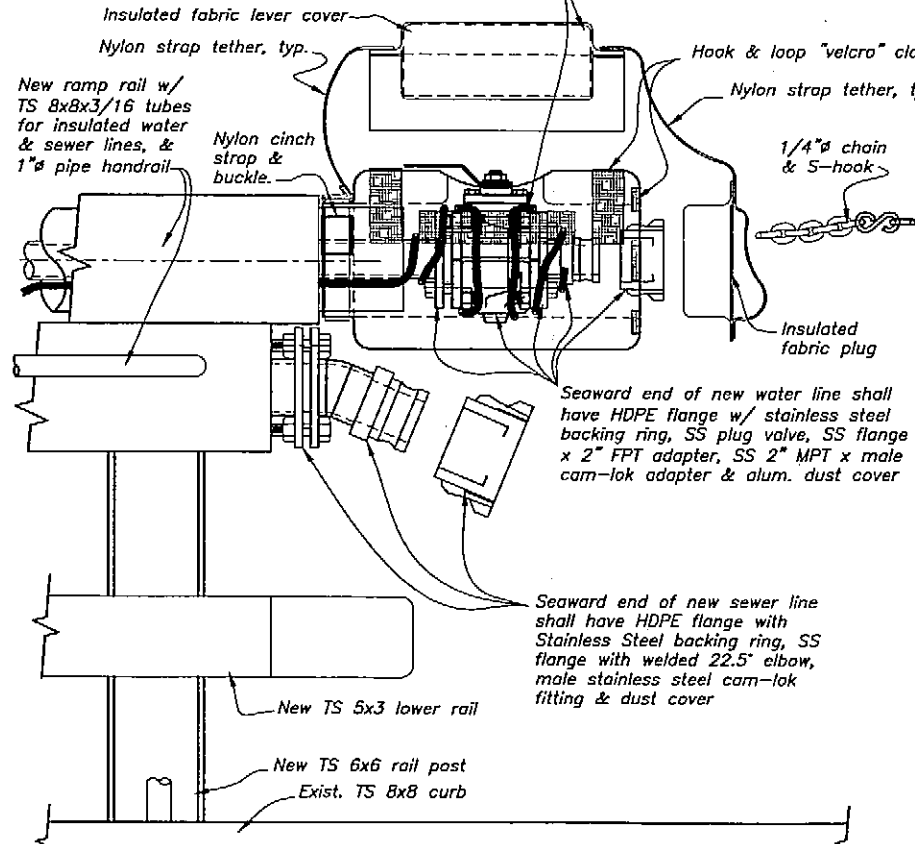


Detail
L 2x2 bracket
(6 req'd,
3 as shown & 3 op. hand)

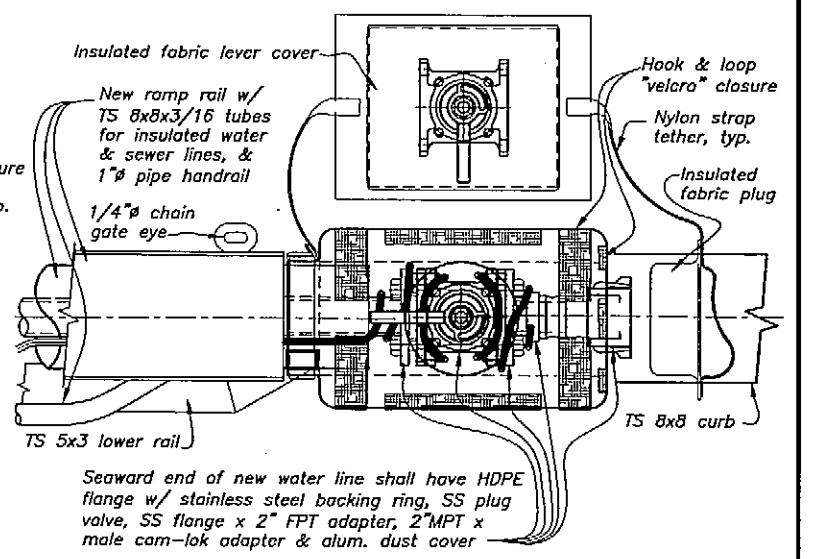


Detail
HDPE 1 1/4" Sq. Bar Saddles

NOTE: Heat trace at seaward end of new water line shall extend to protect flanges, plug valve, & cam-lok fitting. Supply insulated fabric cover for valve & cam-lok assembly with a side opening for the valve lever (modify lever shape or supply removable lever & tether if req'd). Supply insulated fabric cover for lever opening (secure w/ 2" wide velcro all around) and supply an insulated fabric plug at cam-lok opening (secure w/ velcro). Supply nylon strap tethers between valve cover, lever cover & plug to prevent loss.



Seaward End Water & Sewer Connection



Detail
Water & Sewer Line End

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

DESIGNED BY: B. Nelson

CHECKED BY: T. Doggett B. Savikko

DRAWN BY: B. Nelson

PATH: Q:\Wrg\67924\MF\Plans\016-Water & Sewer - Misc Details.dwg

PLDT: PSPACE 1=1

PROJECT DESIGNATION: 67924

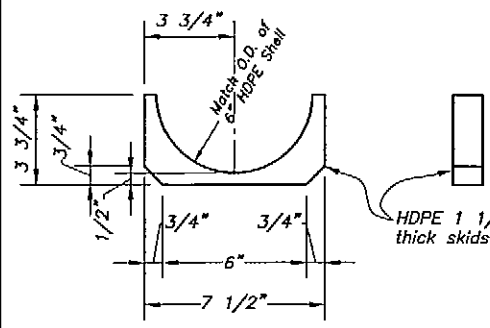
YEAR: 2005

SHEET NO.: 16

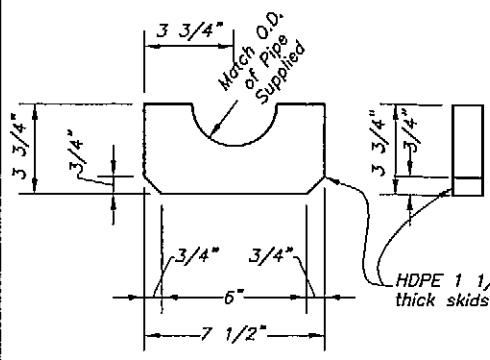
TOTAL SHEETS: 32

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION
Wrangell Terminal Modifications
Project 67924

Water & Sewer Utilities
Misc. Details

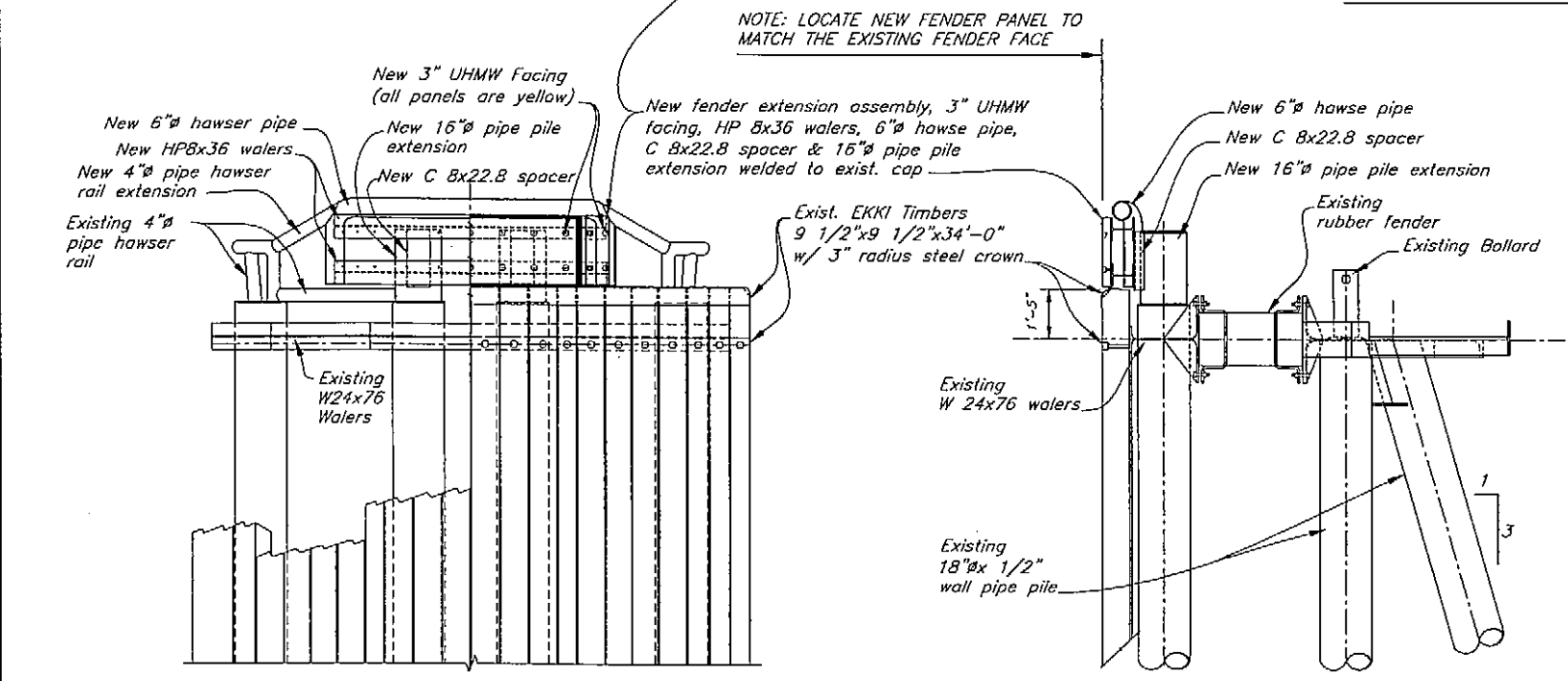
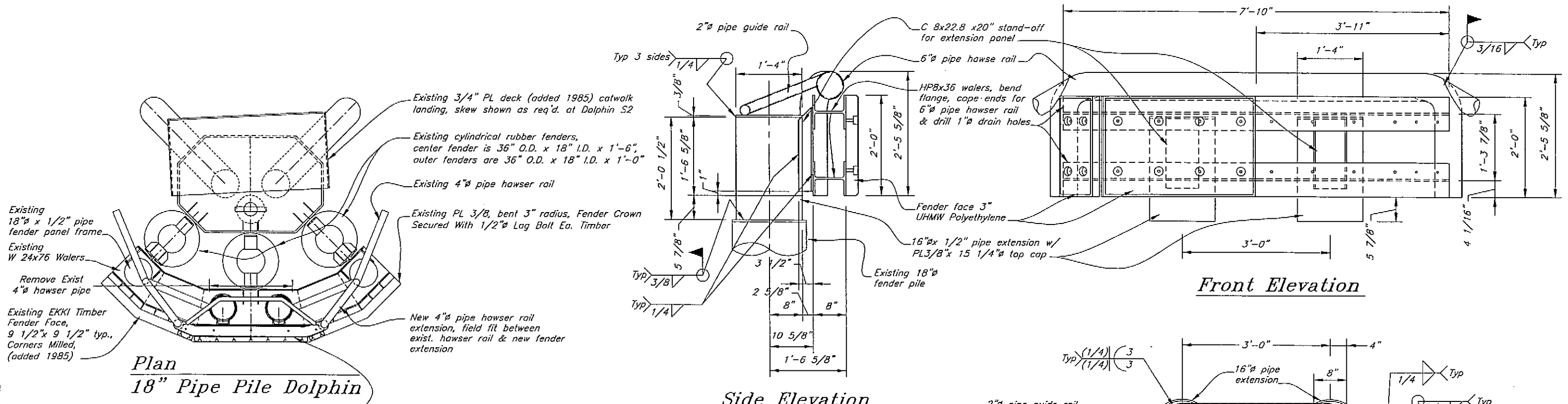


(Water Line Skid)



(Sewer Line Skid)

Details
Ramp Rail Pipe Support Skid As-Built 11-14-06



AS-Built 11-14-06

Plan
Fender Panel Extension

FENDER PANEL EXTENSION APPROXIMATE WEIGHT = 4130 lbs.

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

DESIGNED BY: B. Nelson

CHECKED BY: T. Doggett/BAS
 DRAWN BY: B. Nelson

STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 & PUBLIC FACILITIES
 STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION

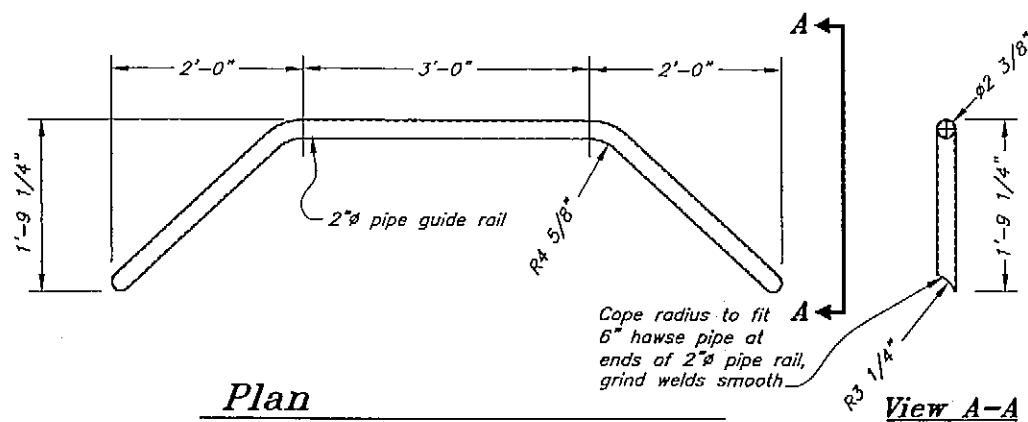
Wrangell Terminal Modifications
 Project 67924

**Fender Panel Extension
 Dolphin S2 Assembly**

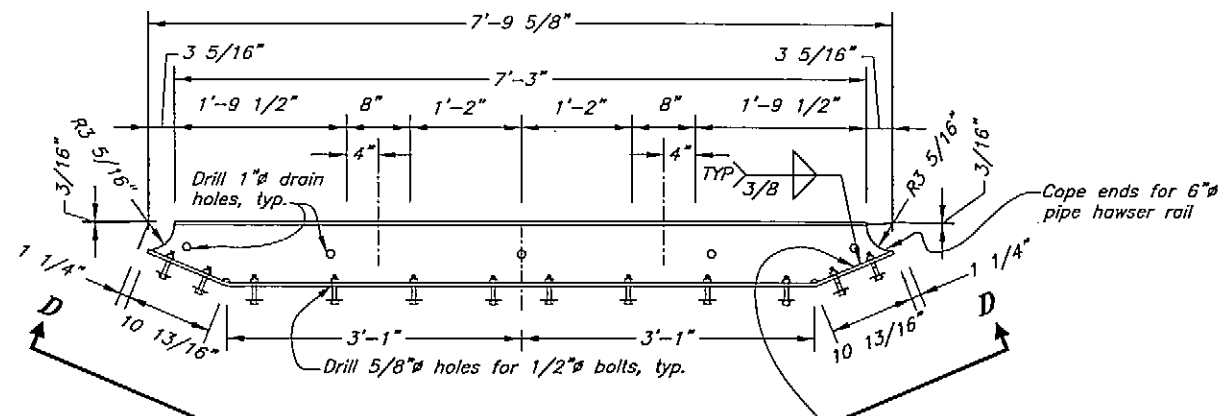
1274-0

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 PLOT: PSPACE 1=1 Wed, 09/Nov/05 03:52PM

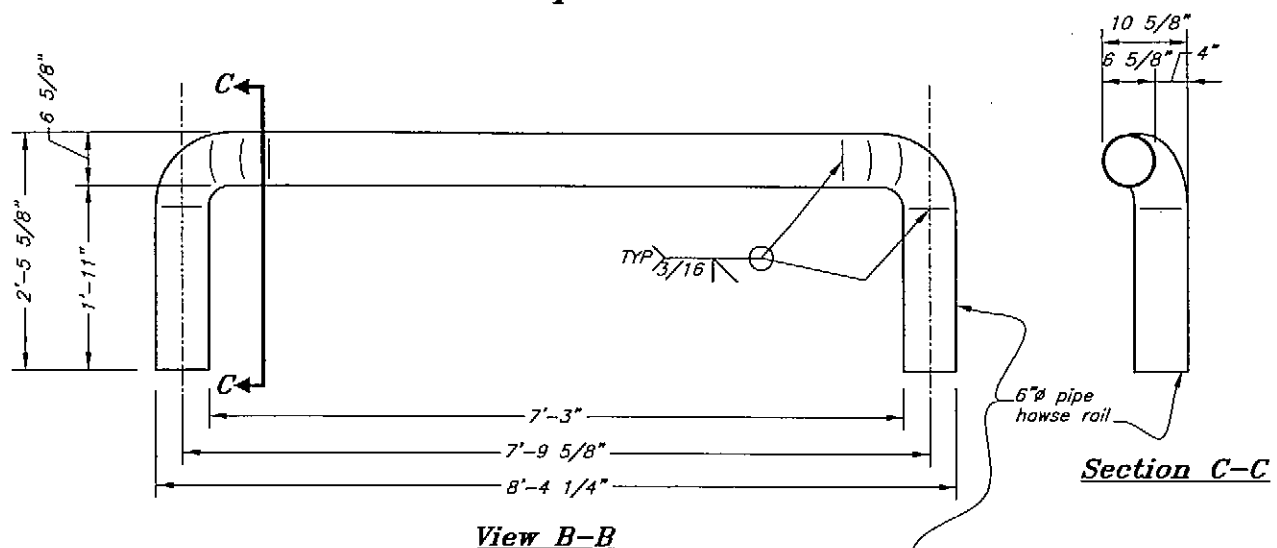
NO.	DATE	REVISIONS DESCRIPTION	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			67924	2005	17	32



Plan
2" Std. Pipe Guide Rail

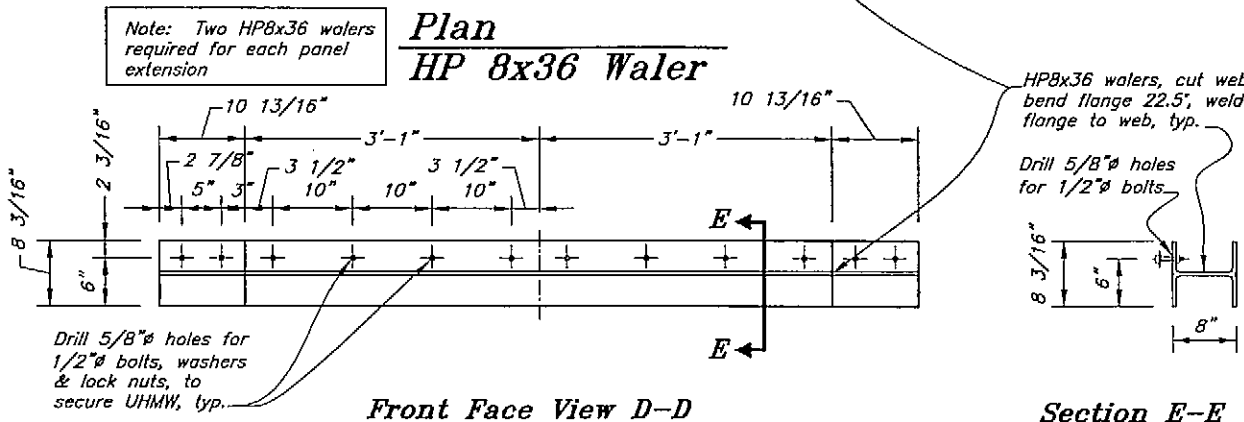


Plan
HP 8x36 Waler



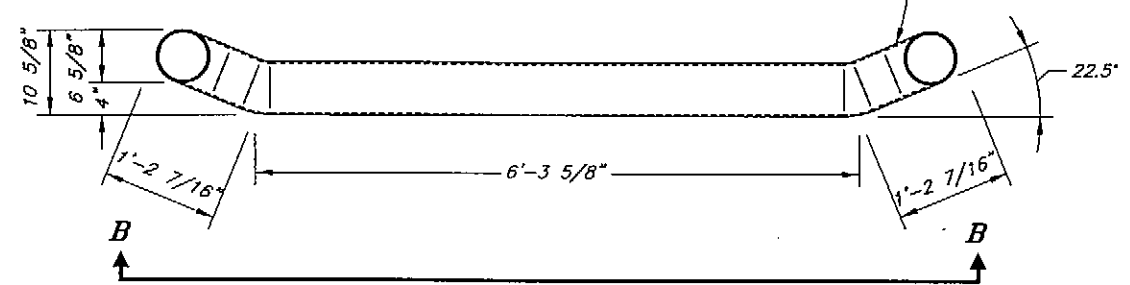
View B-B

Section C-C

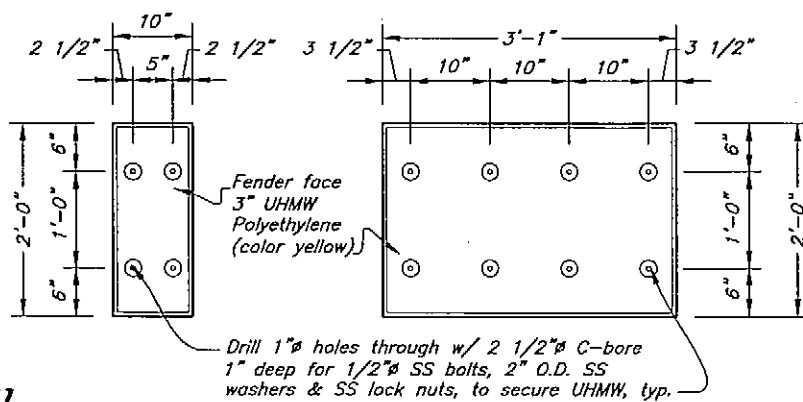


Front Face View D-D

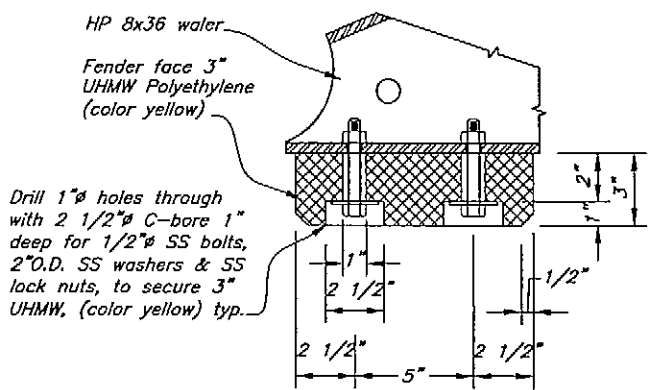
Section E-E



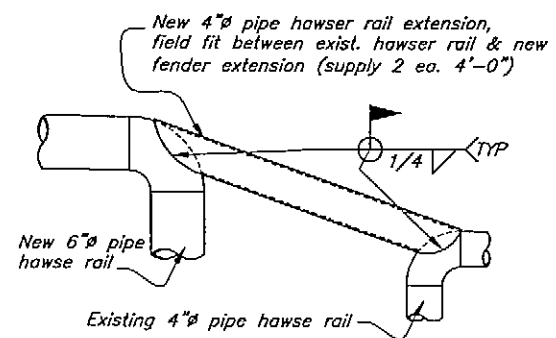
Plan
6" Std. Pipe Hawser Rail



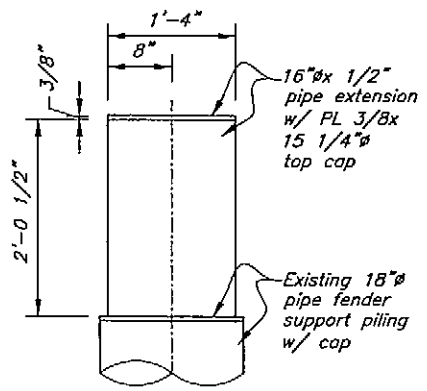
Detail
3" Thick UHMW Fender Panels (2 ea. req'd.)



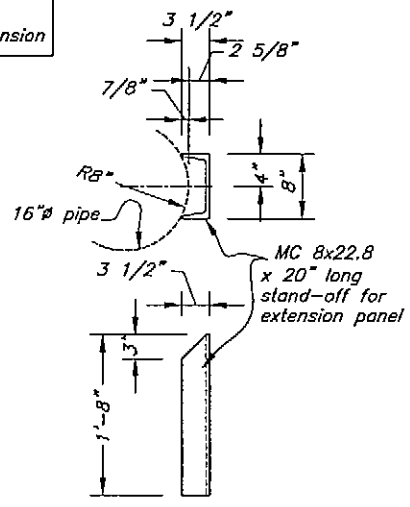
Typical Section
UHMW



Elevation
4" Std. Pipe Hawser Rail Extension



Detail
Fender Support Pile Extension



Detail
MC 8x22.8 Stand-Off Spacer

As-Built 11-14-06



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DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION

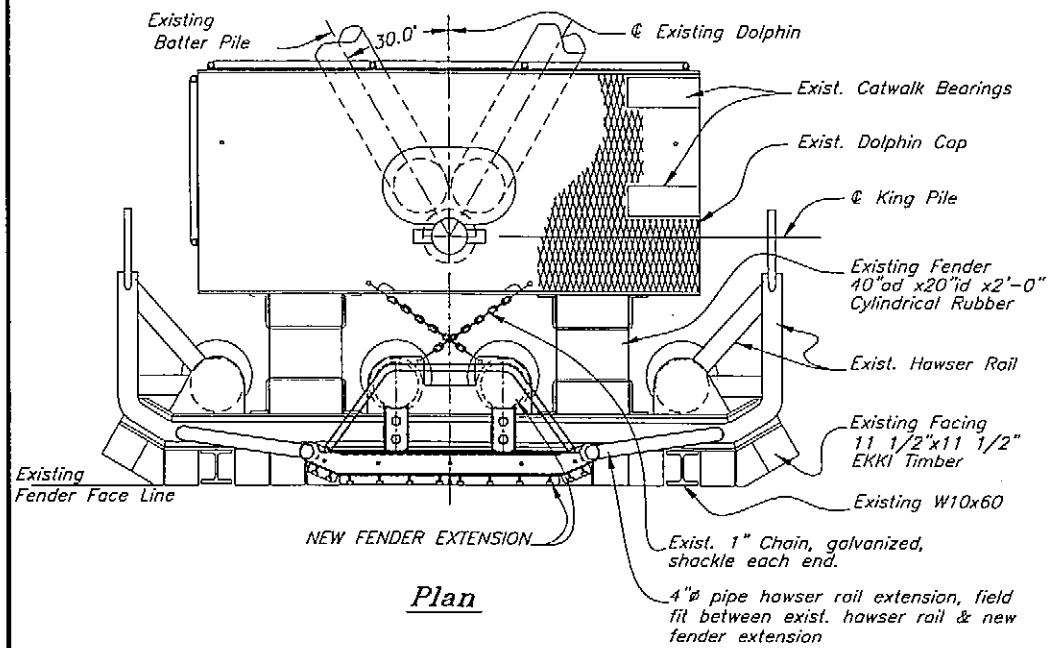
Wrangell Terminal Modifications
Project 67924

DESIGNED BY: B. Savikko
CHECKED BY: T. Doggett
DRAWN BY: B. Nelson

Fender Panel Extensions
Dolphin S2 Details

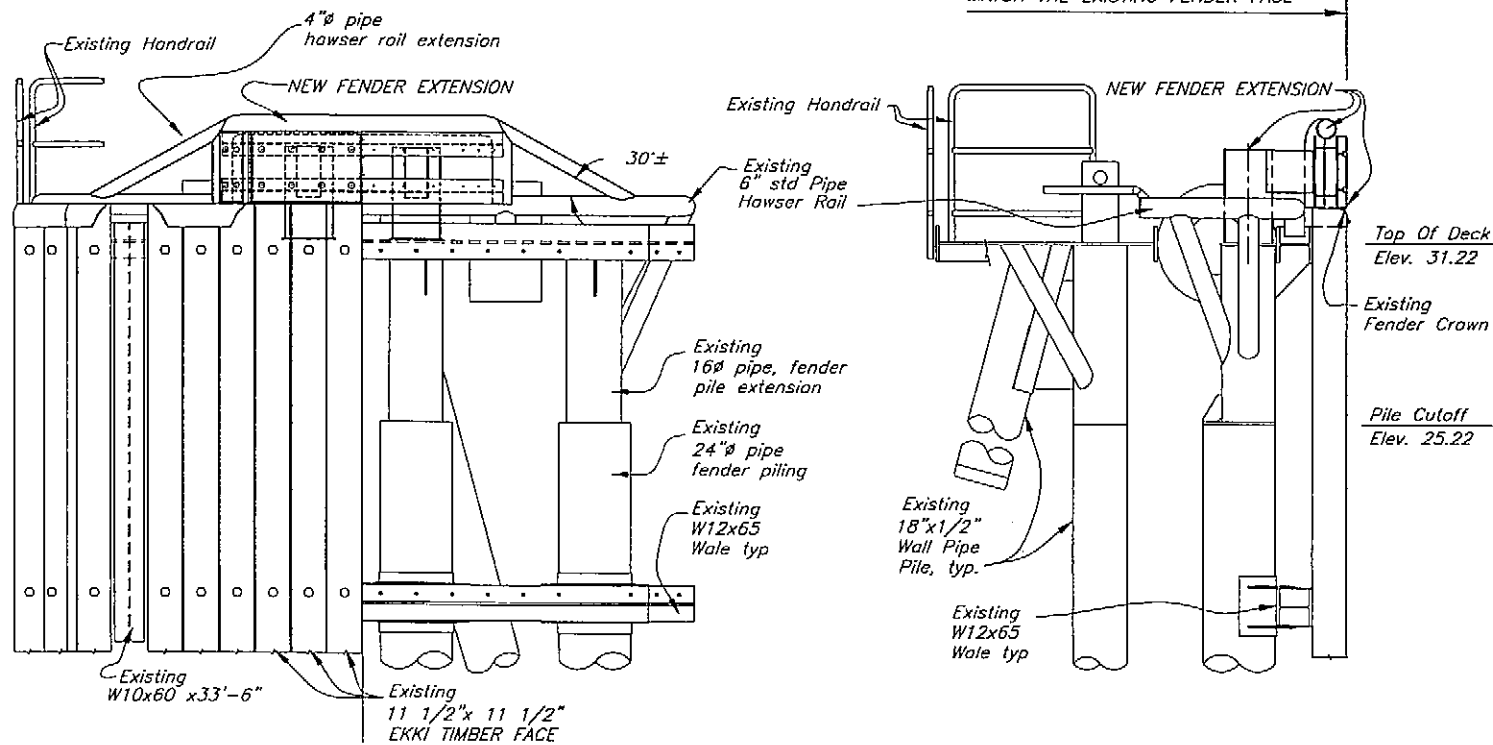
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Wed, 09/Nov/05 05:38PM

NO.	DATE	REVISIONS DESCRIPTION	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			67924	2005	18	32



Plan

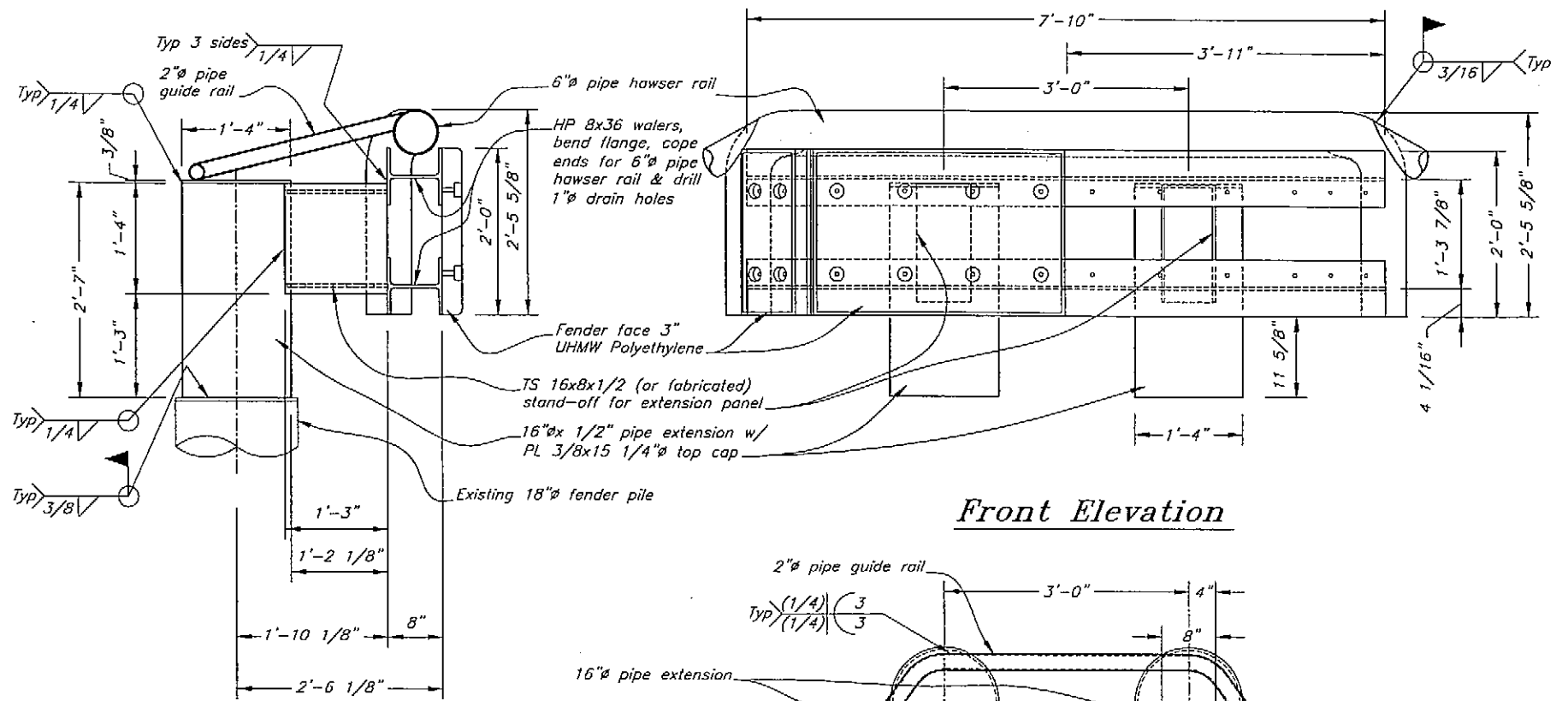
NOTE: LOCATE NEW FENDER PANEL TO MATCH THE EXISTING FENDER FACE



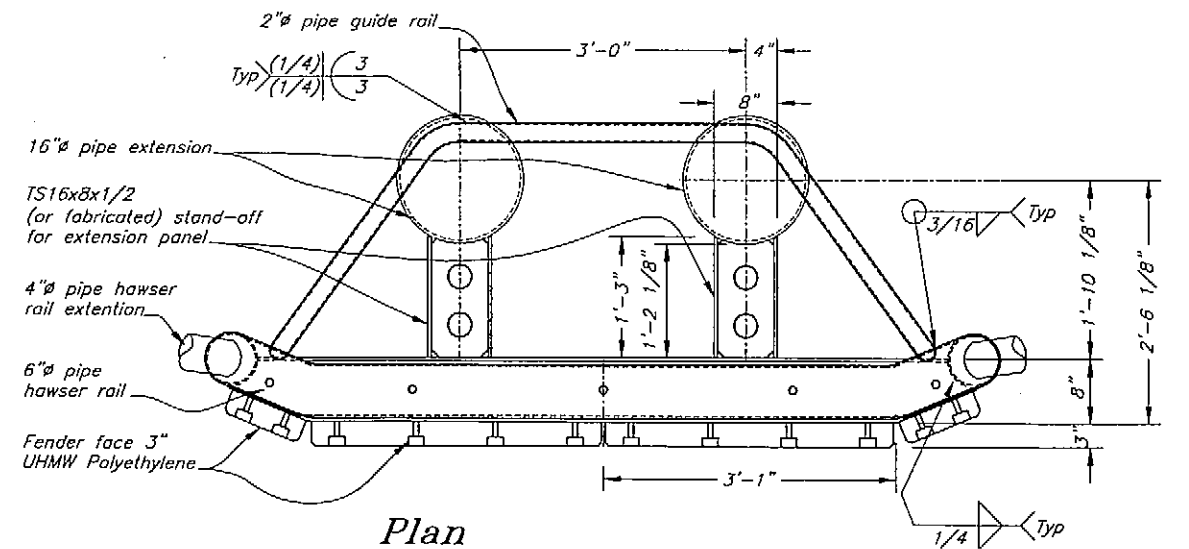
Front Elevation

Side Elevation

Placement-S1 & S3 Dolphin New Fender Panel Extension As-Built 11-14-06 cd



Front Elevation



Plan Fender Panel Extension



Existing Dolphin Fender

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

DESIGNED BY: B. Savikko

CHECKED BY: T. Daggett
DRAWN BY: B. Nelson

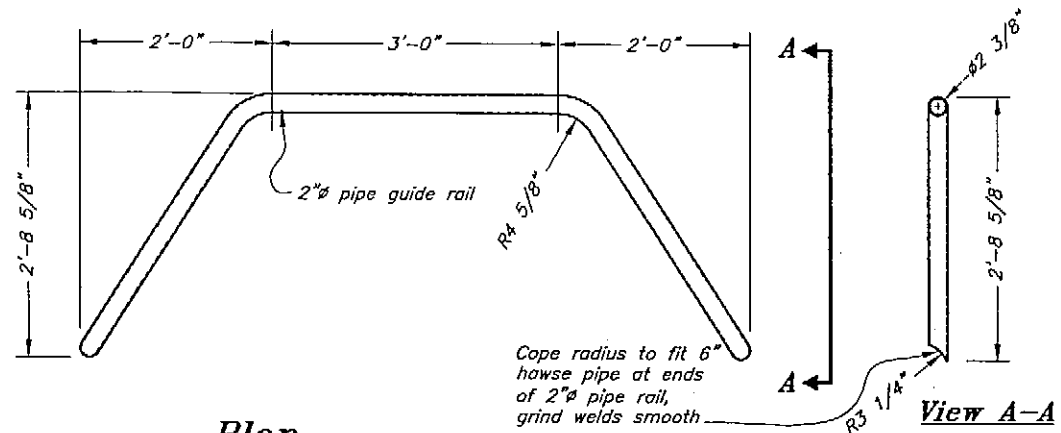
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION
Wrangell Terminal Modifications
Project 67924

Fender Panel Extension Dolphins S1 & S3, Assembly

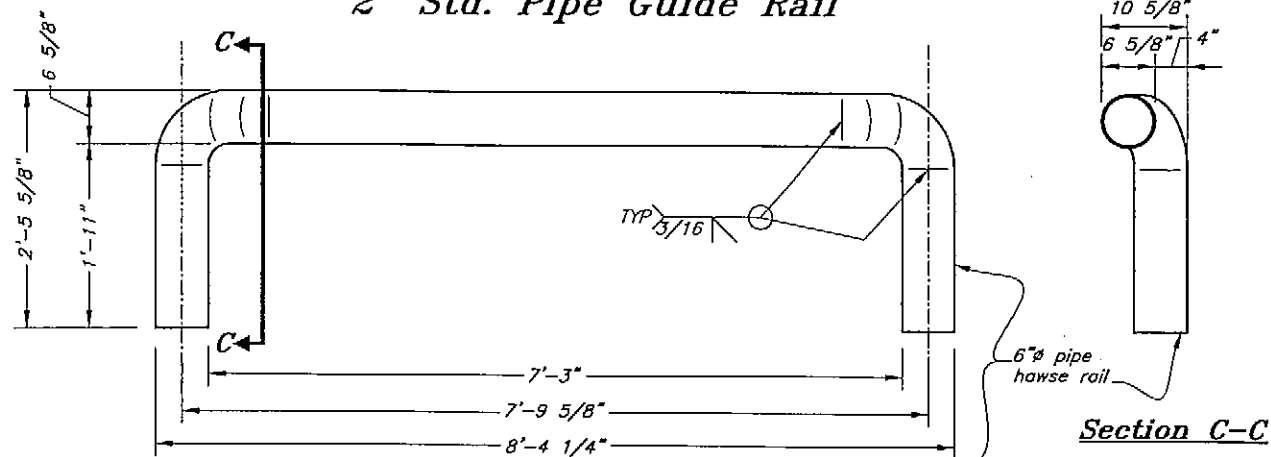
12-14-05

PATH: Q:\Wrg\67924\MF\Planset\019 dolphin mods - S1 & S3 assembly.dwg
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NO.	DATE	REVISIONS DESCRIPTION	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			67924	2005	19	32

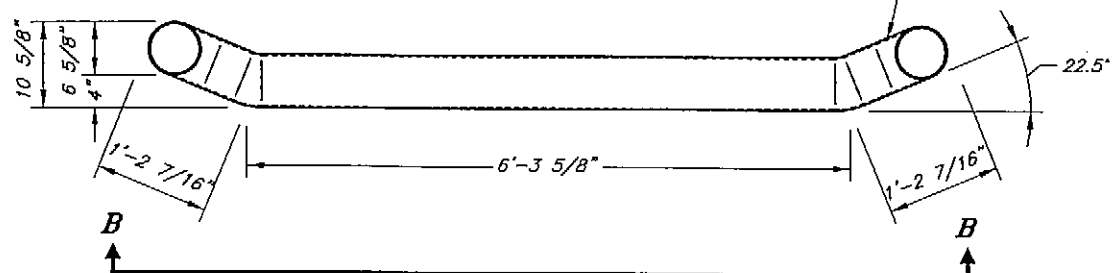


Plan
2" Std. Pipe Guide Rail

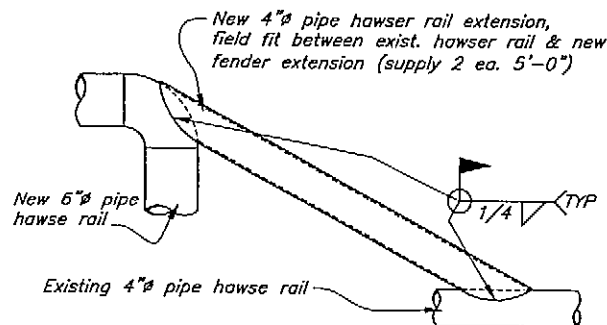


View B-B

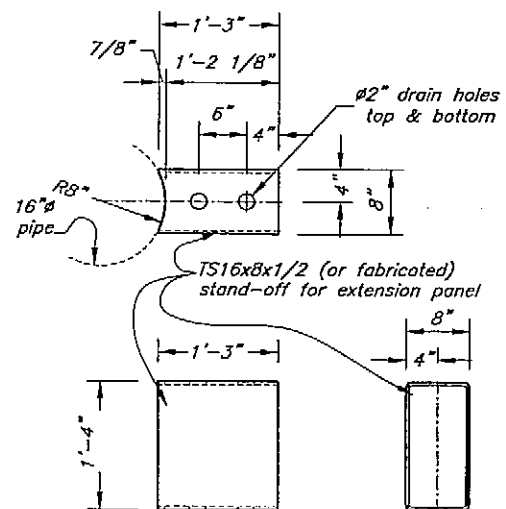
Section C-C



Plan
6" Std. Pipe Hawse Rail

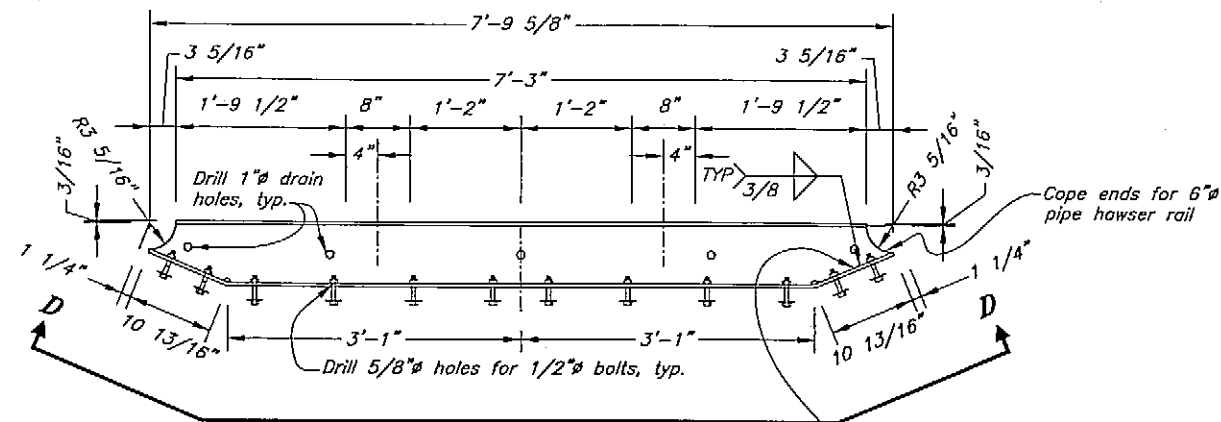


Elevation
4" Std. Pipe Hawse Rail Extension



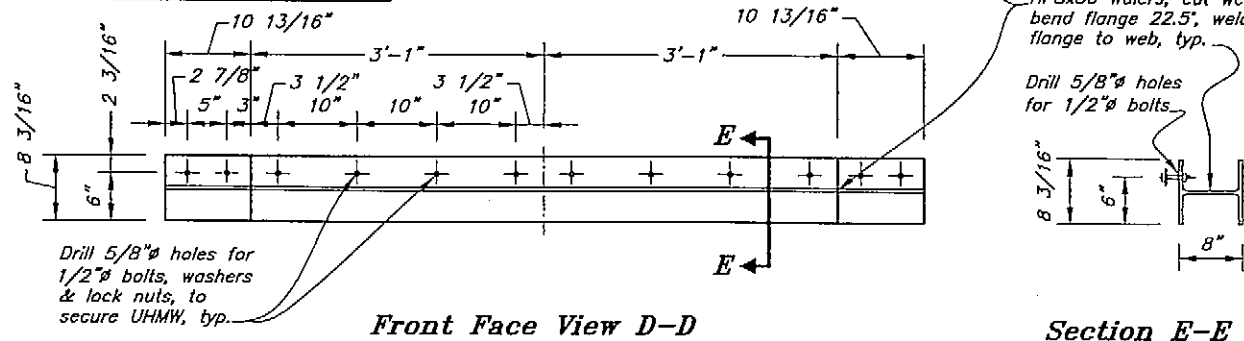
Note: Two TS 16x8 stand-offs required for each panel extension

TS 16x8x3/8 Stand-Off Spacer



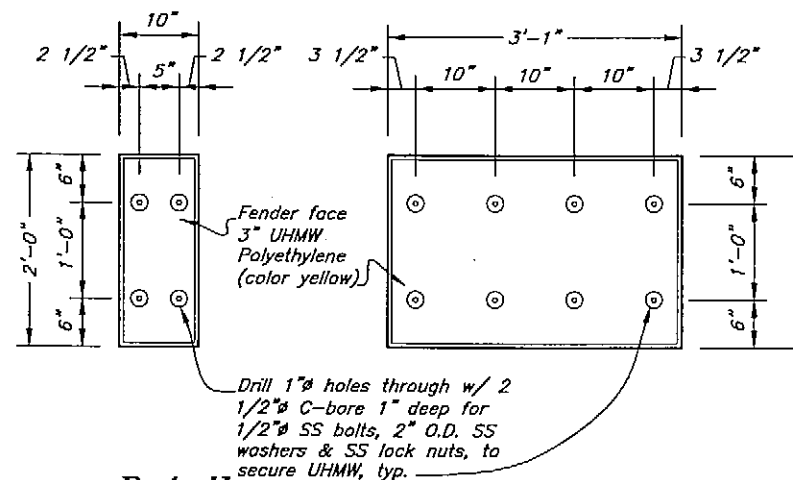
Note: Two HP8x36 walers required for each panel extension

Plan
HP 8x36 Waler



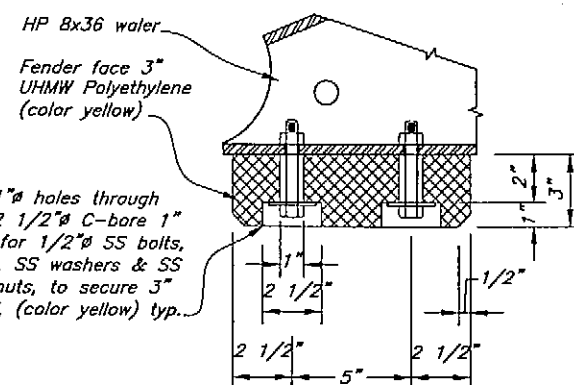
Front Face View D-D

Section E-E



Detail
3" Thick UHMW Fender Panels

Note: Two wing panels & two face panels required at each fender extension

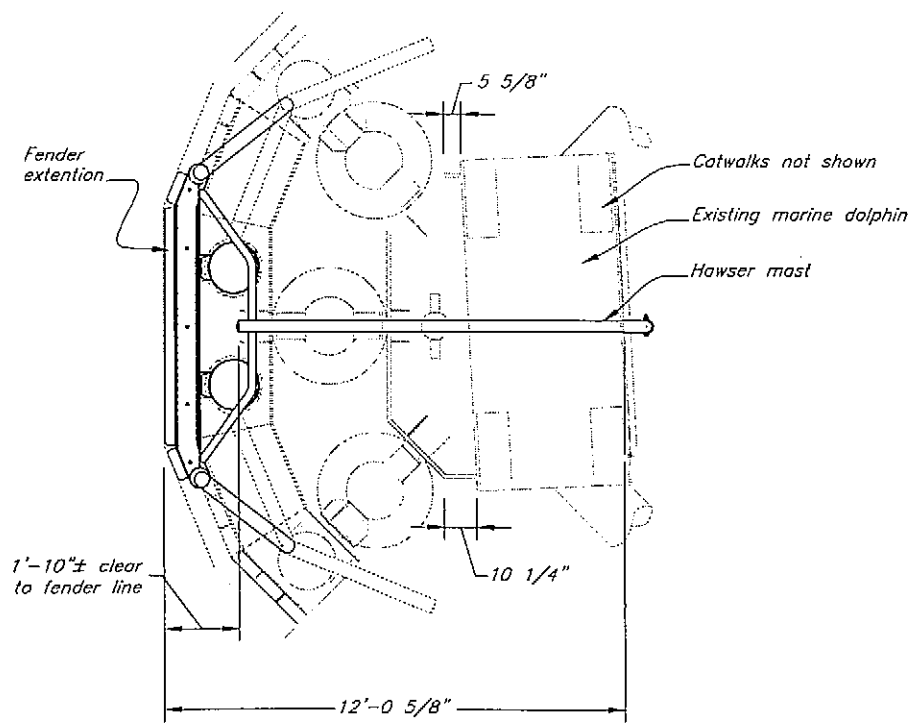


Typical Section
UHMW

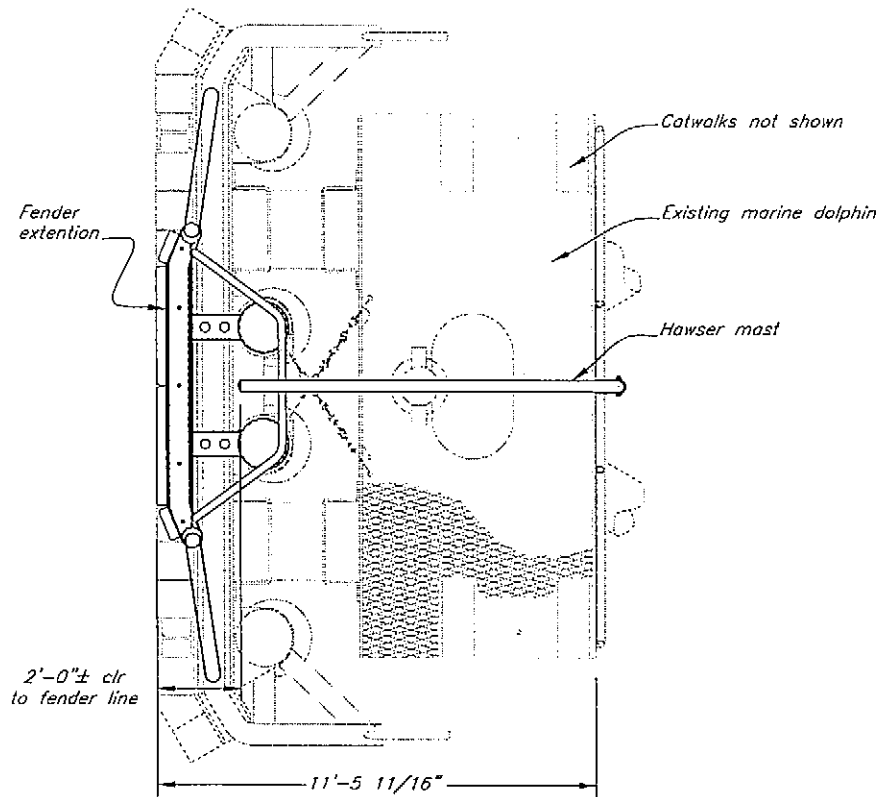
DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

DESIGNED BY: B. Savitko		STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION			
		Wrangell Terminal Modifications Project 67924			
		Fender Panel Extensions Dolphin S1 & S3 Details			
CHECKED BY: T. Doggett		PROJECT DESIGNATION: 67924			
DRAWN BY: B. Nelson		YEAR: 2005			
PATH: Q:\Wrg\67924\MF\Panel\020 dolphin mods - S1 & S3 details.dwg		SHEET NO.: 20			
PLDT: PSPACE 1=1		TOTAL SHEETS: 32			
		Thu, 10/Nov/05 10:54AM			

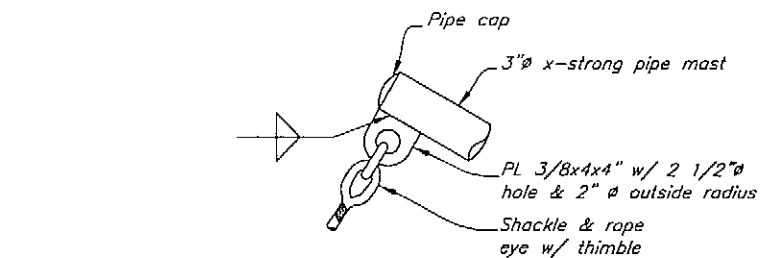
As-Built 11-14-06



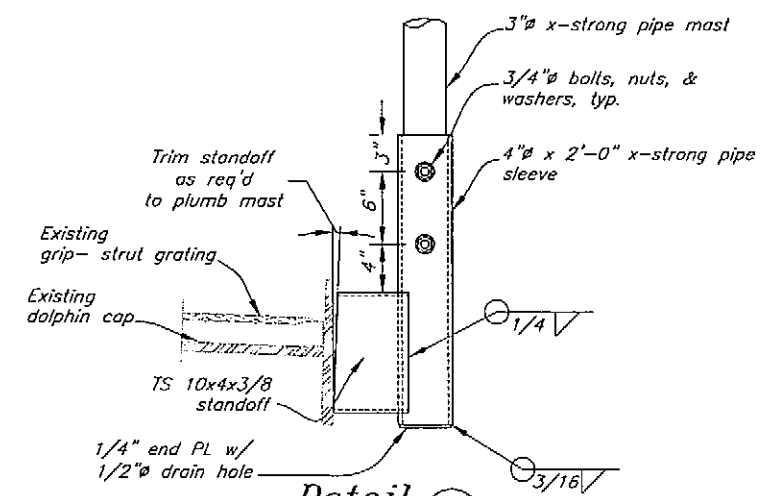
Plan



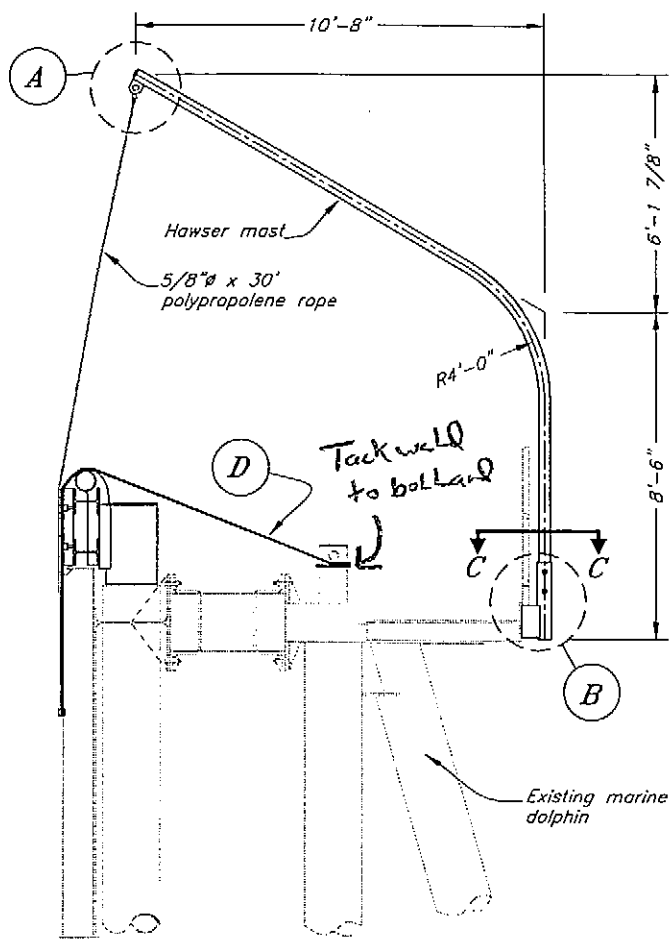
Plan



Detail A

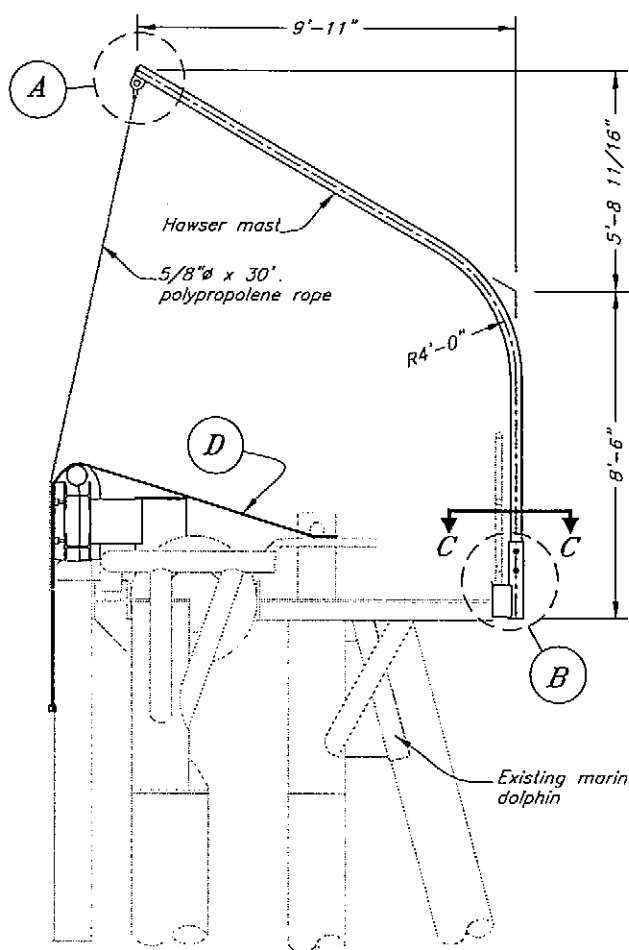


Detail B



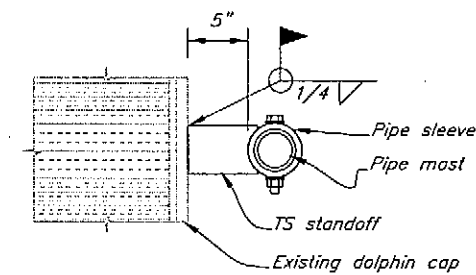
Elevation

Dolphin S2

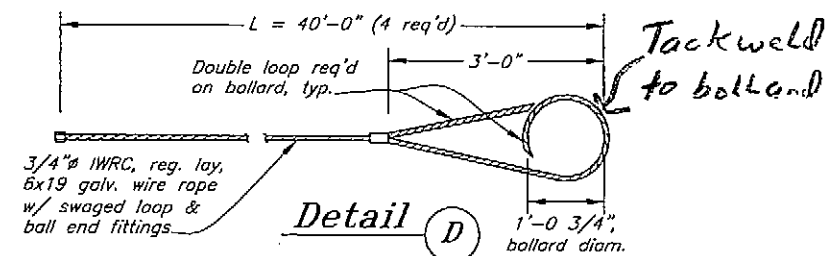


Elevation

Dolphin N1, S1, & S3

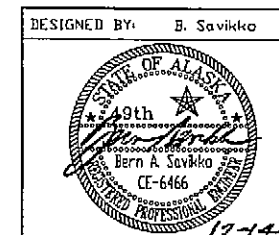


Section C-C



Detail D

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS



STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION

Wrangell Terminal Modifications
Project 67924

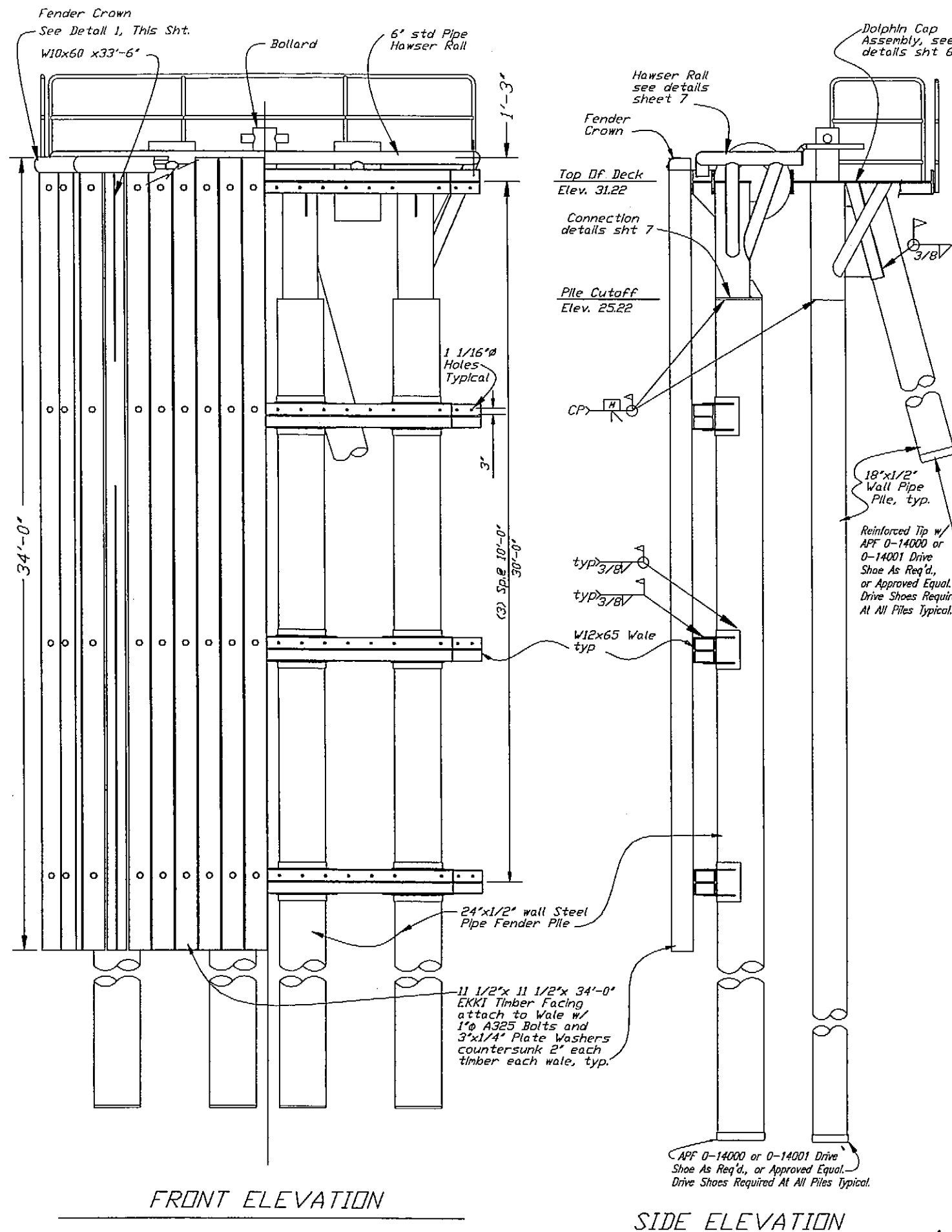
Hawser Mast &
Misc. Details

DESIGNED BY: B. Savikko
CHECKED BY: T. Doggett
DRAWN BY: T. Doggett

PATH: Q:\Wrg\67924\MF\Planse\021 dolphin mods - misc details.dwg
PLDT: PSPACE I=1
Thu, 10/Nov/05 11:09AM

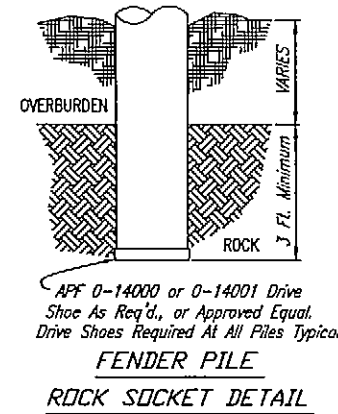
REVISIONS			PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
NO.	DATE	DESCRIPTION				
			67924	2005	21	32

As-Built 11-14-06
CD



FRONT ELEVATION

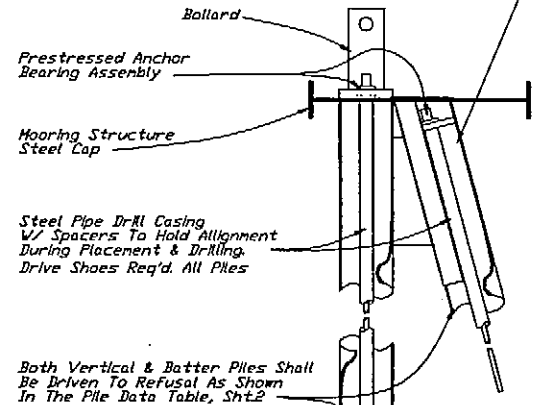
SIDE ELEVATION



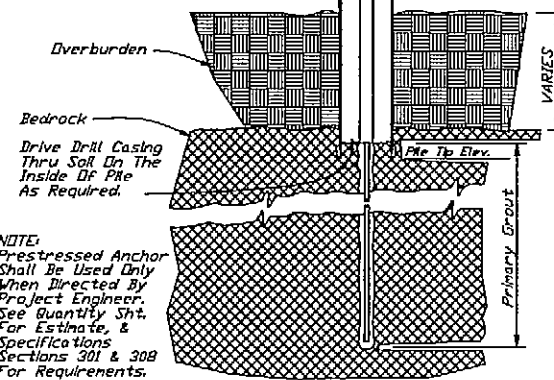
APF 0-14000 or 0-14001 Drive Shoe As Req'd., or Approved Equal. Drive Shoes Required At All Piles Typical.

FENDER PILE
ROCK SOCKET DETAIL

NOTE:
Piles To Receive Retrofit Prestressed Pile Anchors Are The Batter Piles At Structures N1, S1 & S3. These Piles Are Concrete Filled & Will Require Drilling Prior To Installation Of Anchors. See Section 308 Of The Specifications For Contractor Options. Submit Procedure & Drawings For Approval.

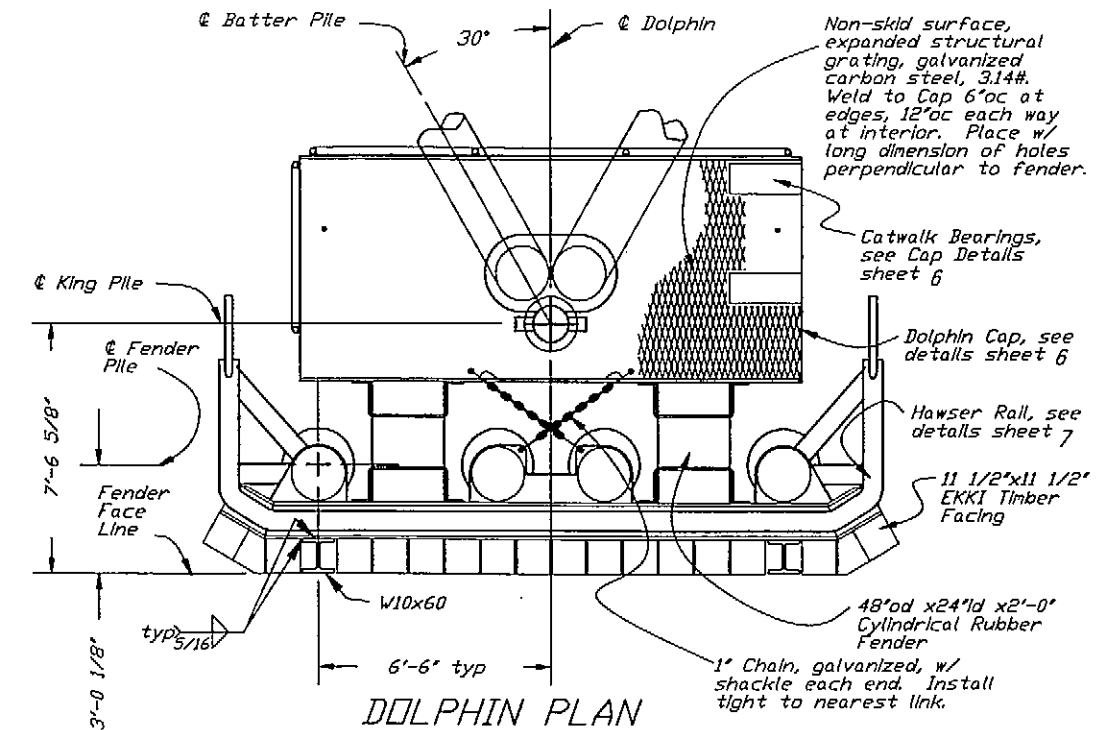


Both Vertical & Batter Piles Shall Be Driven To Refusal As Shown In The Pile Data Table, Sht.2

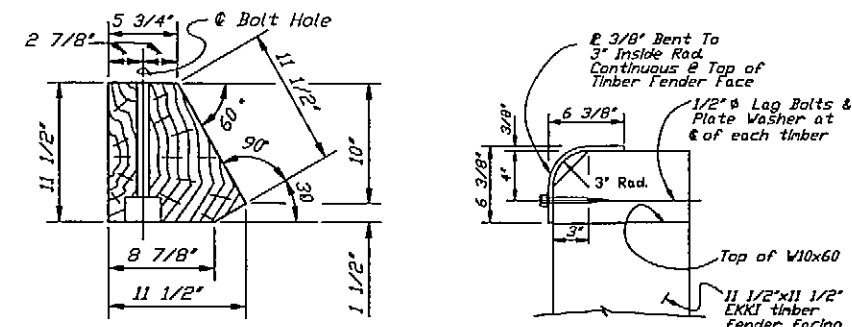


NOTE:
Prestressed Anchor Shall Be Used Only When Directed By Project Engineer. See Quantity, Sht. For Estimate, & Specifications Sections 301 & 308 For Requirements.

PRESTRESSED PILE ANCHOR
CONTRACTOR TO SUBMIT DETAILS

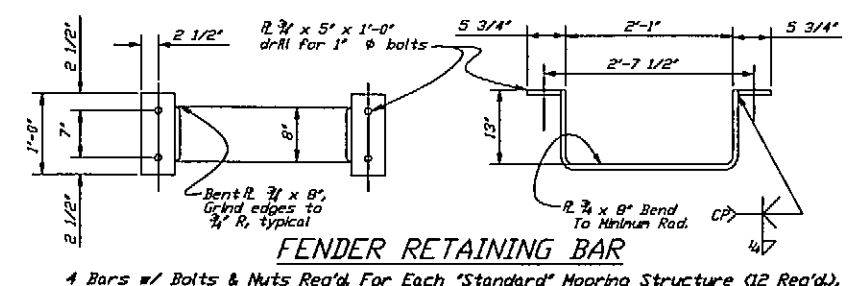


DOLPHIN PLAN



CORNER TIMBER DETAIL

DETAIL 1

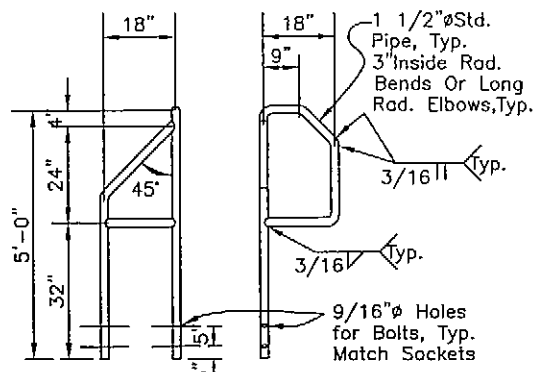


FENDER RETAINING BAR
4 Bars w/ Bolts & Nuts Req'd For Each "Standard" Mooring Structure (12 Req'd).

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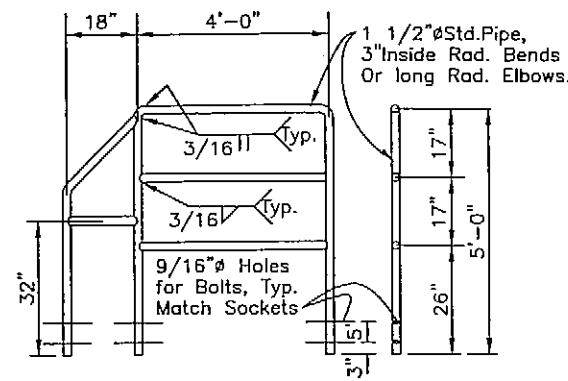
DESIGNED BY:	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION			
CHECKED BY:	Wrangell Terminal Modifications Project 67924			
DRAWN BY:	AS-BUILT INFORMATION ONLY (S1 & S3) DOLPHIN PLAN & ELEV.			
PATH: Q:\Wrg\67924\MF\Planse\022-AB01-Dolphin S1 & S3 Plan & Elev.DWG		PROJECT DESIGNATION		YEAR
PLOT: PSPACE 1=1		67924		2005
		SHEET NO.		TOTAL SHEETS
		22		32
		THU, 10/NOV/05 11:11AM		

As-Built 11-14-06 CD

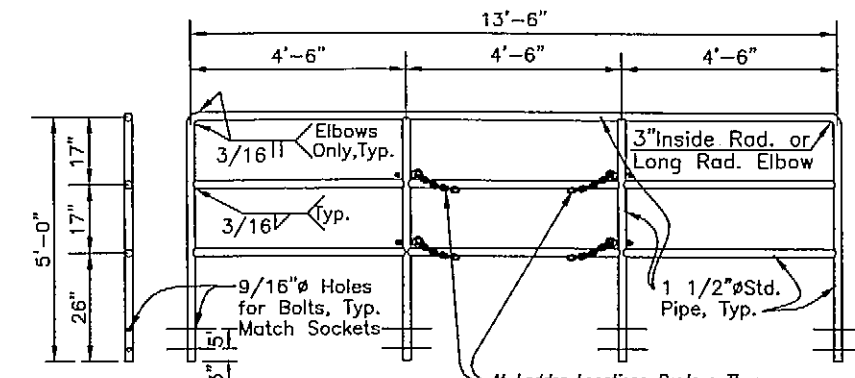


SIDE HANDRAIL AT CATWALK

Right Hand Rail Shown, Supply 6 R.H. (3 New, 3 Retrofit)
Supply 6 L.H. (4 New, 2 Retrofit)

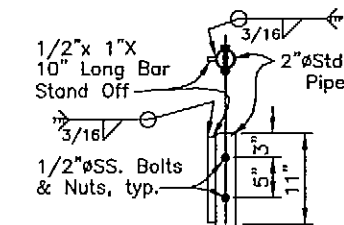


CLOSED SIDE HANDRAIL

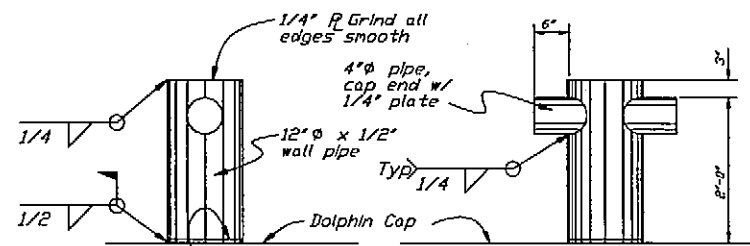


BACK HANDRAIL

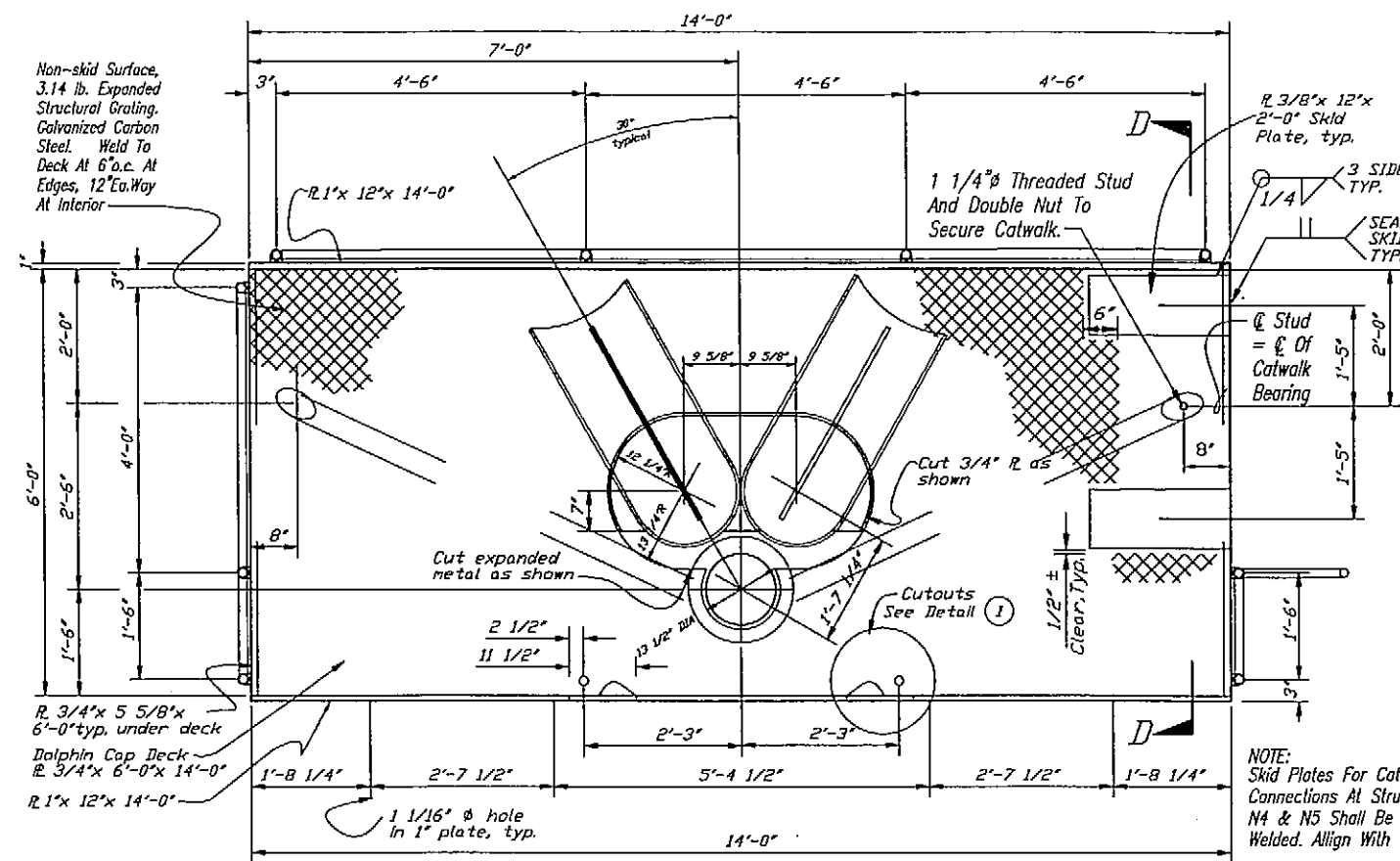
At Ladder Locations Replace These Two Rail Sections w/ 5/16" Galv. Chain, Two 3/8" Shoulder Eye Bolts, One Snap Hook & Req'd Connectors.



HANDRAIL SOCKET

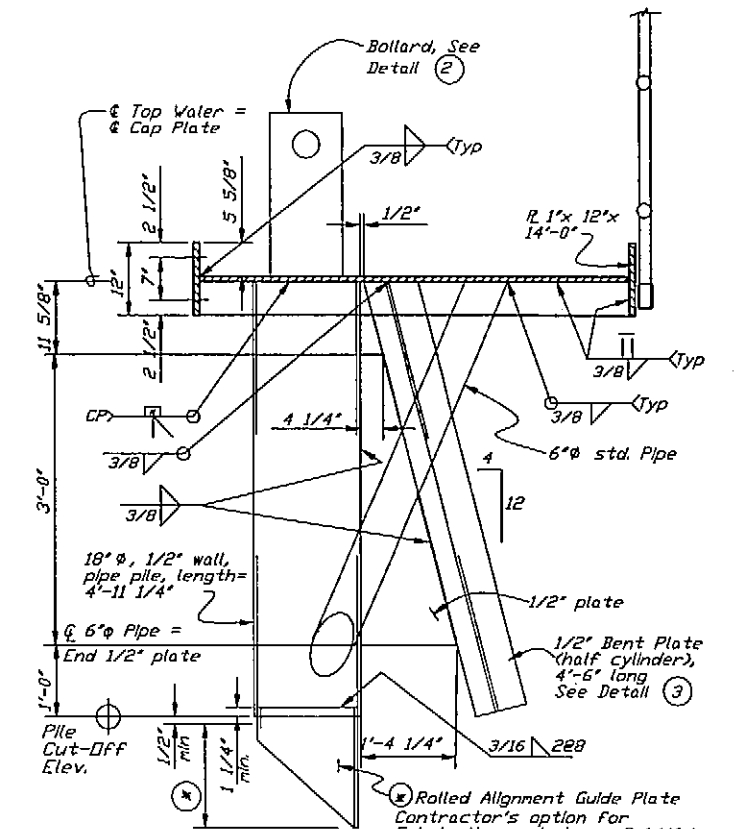


BOLLARD DETAIL 2

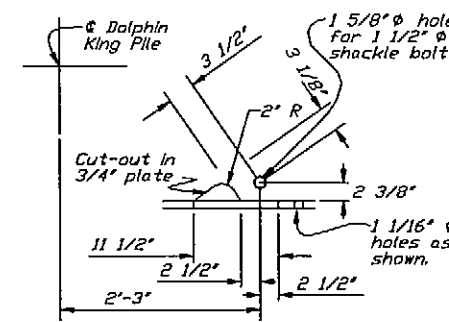


DOLPHIN CAP PLAN

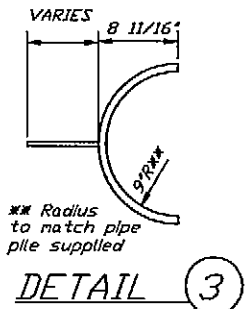
NOTE: Skid Plates For Catwalk "D" Connections At Structures N4 & N5 Shall Be Field Welded. Align With Catwalk.



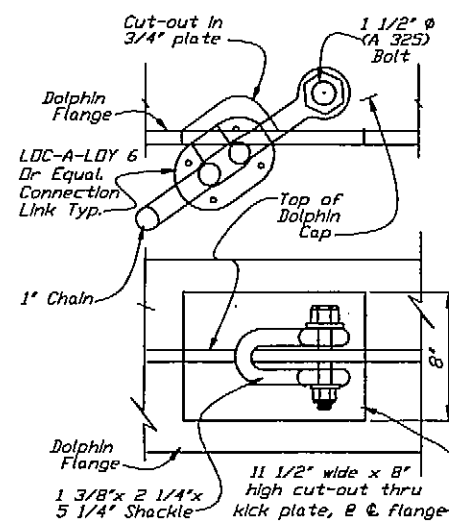
SECTION D-D



COVER PLATE DETAIL



DETAIL 3



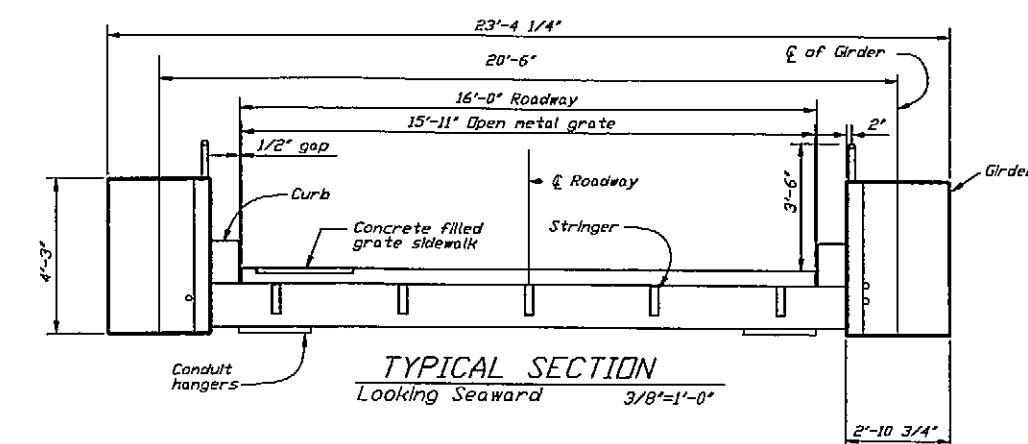
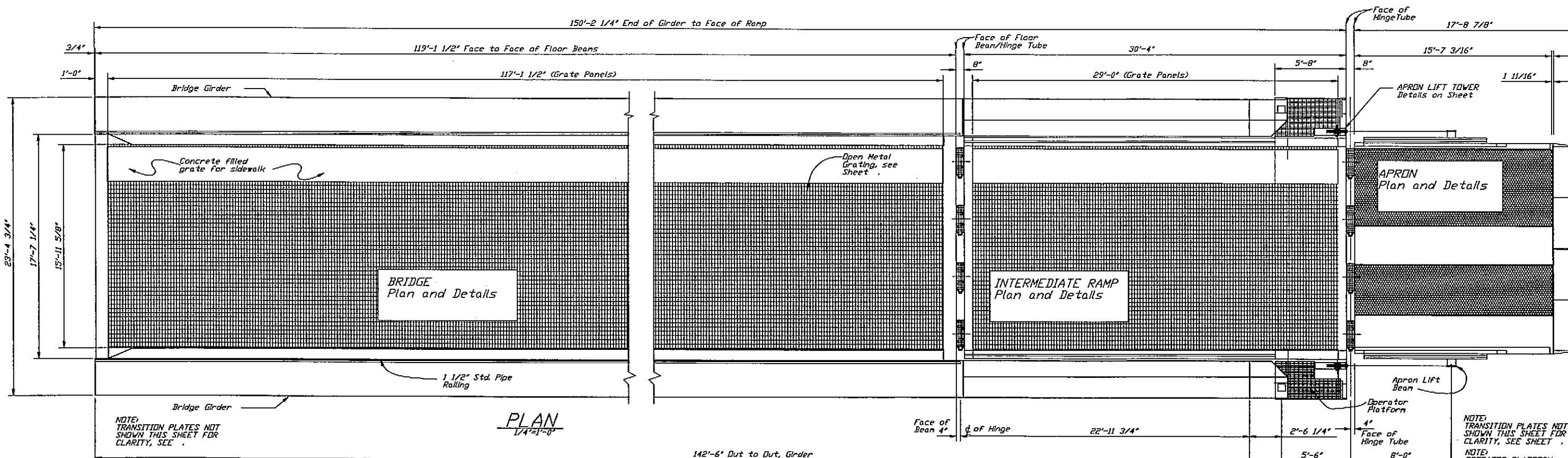
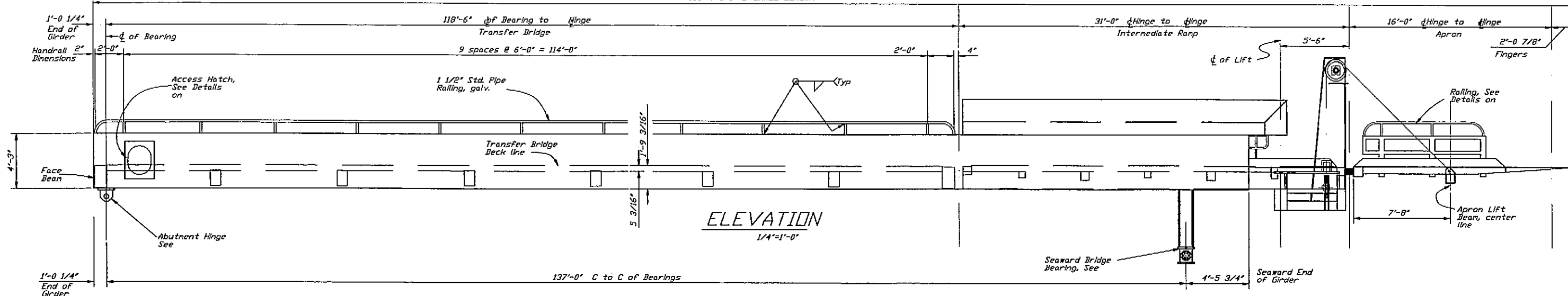
DETAIL 1

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

DESIGNED BY:		STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION			
CHECKED BY:		Wrangell Terminal Modifications Project 67924			
DRAWN BY:		AS-BUILT INFORMATION ONLY DOLPHIN CAP (S1 & S3)			
PATH: Q:\wrg\67924\MF\Planset\023-AB02-Dolphin S1 & S3 Cap Dils.DWG		PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
PLOT: PSPACE 1=1		67924	2005	23	32
Thu, 10/Nov/05 11:12AM					

As-Built 11-14-06

168'-7 1/8" OVERALL LENGTH



- NOTES:**
1. Approx. Total Wt. of Transfer Bridge w/ deck and rolls = 253,000 lbs. (778,000 lbs. A572; 55,000 lbs. A500; 120,000 lbs A36)
 2. Transfer Bridge to be painted (See General Notes) except grating, rails and apron which shall be galvanized after fabrication.
 3. For Utility and Bridge Illumination system details, See Sheet .

As-Built 11-14-06

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

DESIGNED BY:

CHECKED BY:

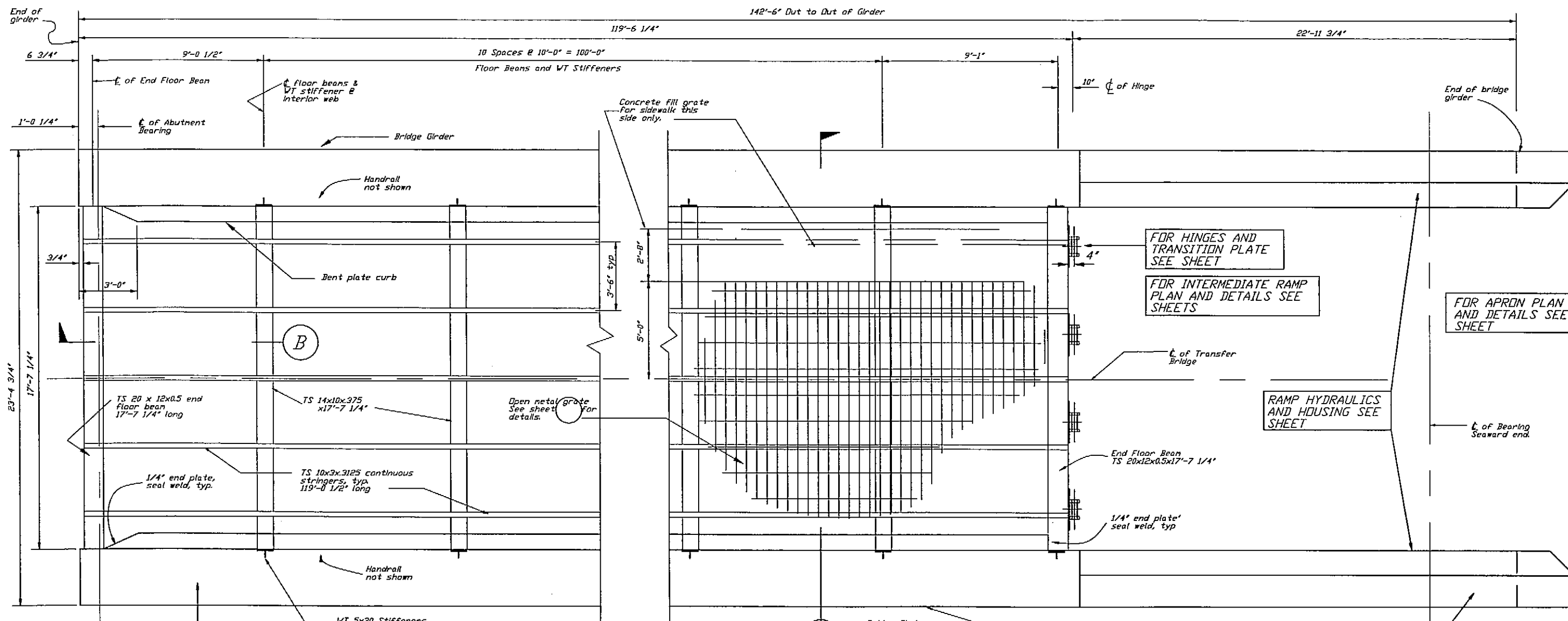
DRAWN BY:

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION
Wrangell Terminal Modifications
Project 67924

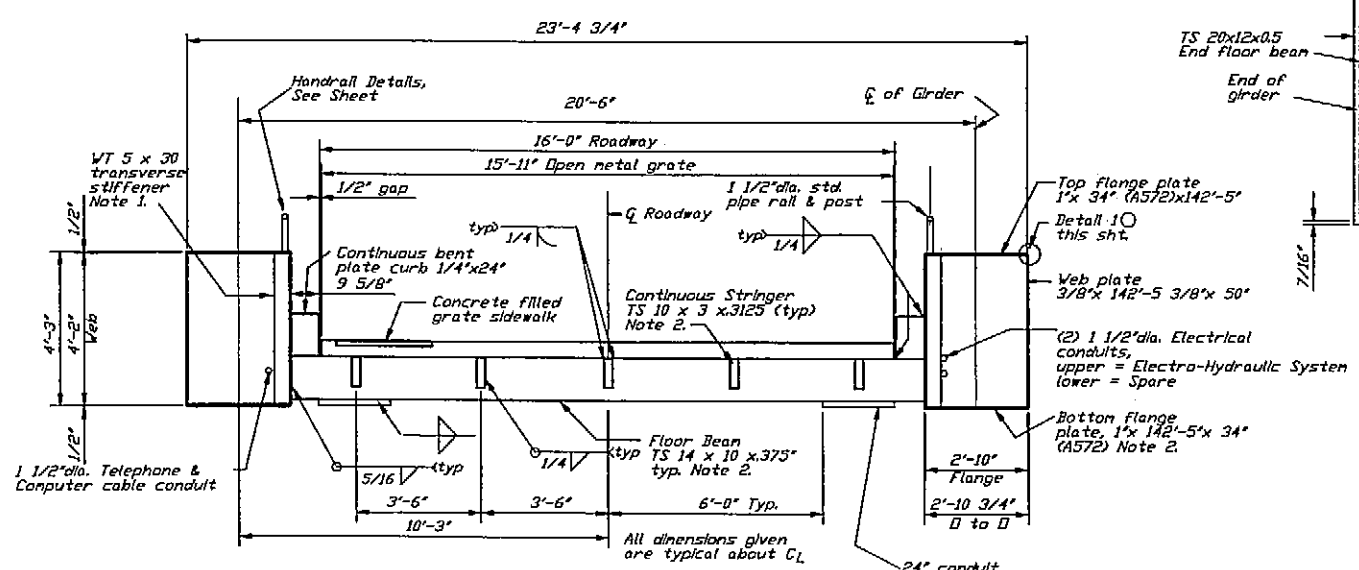
**EXISTING STRUCTURE
INFORMATION ONLY
Bridge Plan & Elevation**

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PLDT: PSPAGE 1=1
Thu, 10/Nov/05 11:13AM

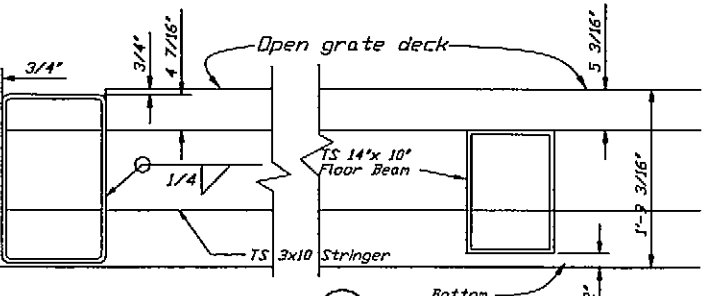
NO.	DATE	REVISIONS DESCRIPTION	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			67924	2005	25	32



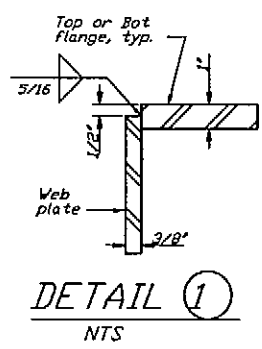
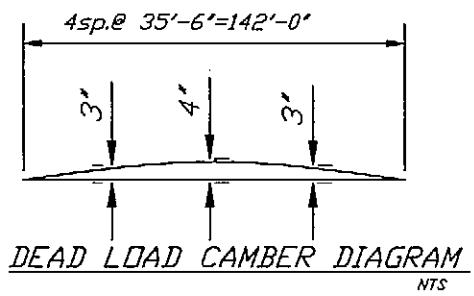
PLAN
3/8"=1'-0"



TYPICAL SECTION (A)
Looking Seaward 3/8"=1'-0"



SECTION (B)

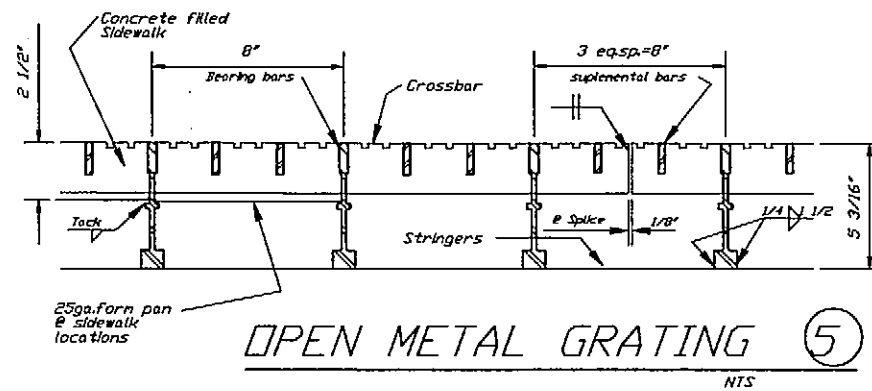
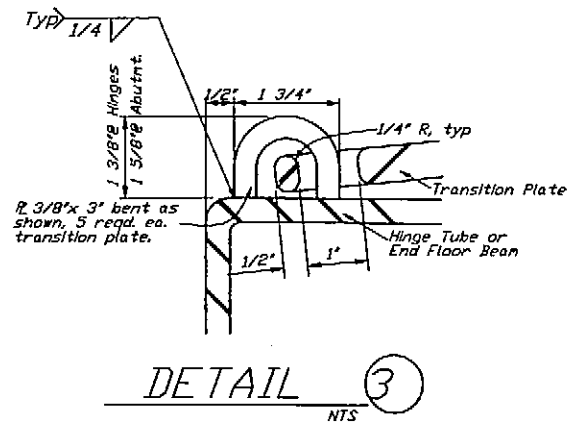
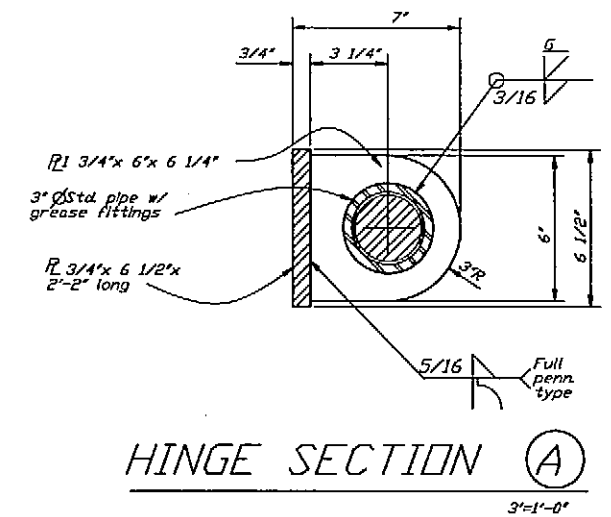
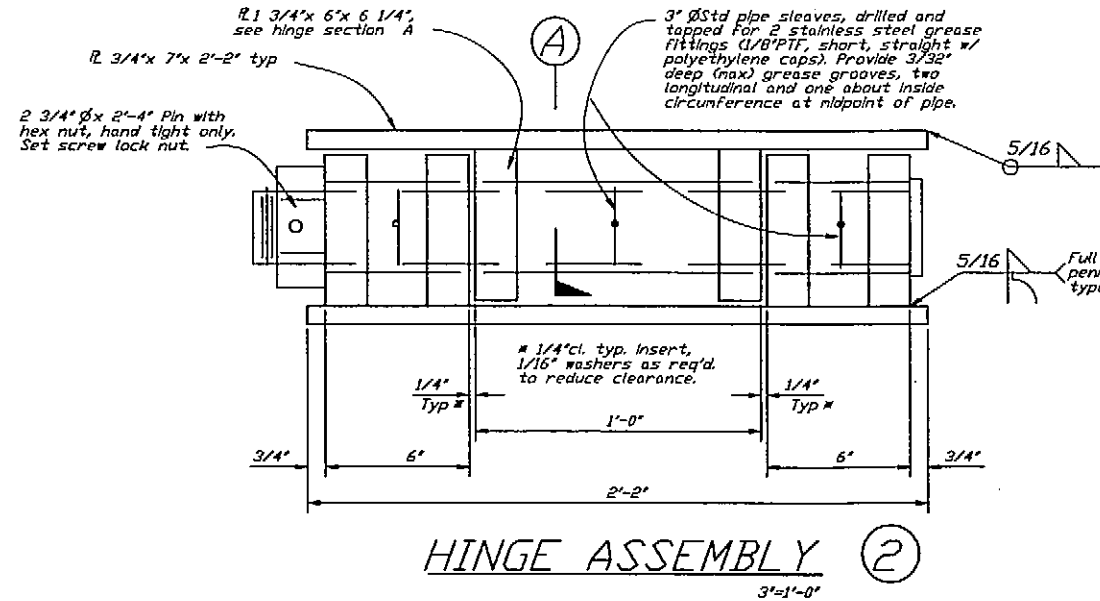
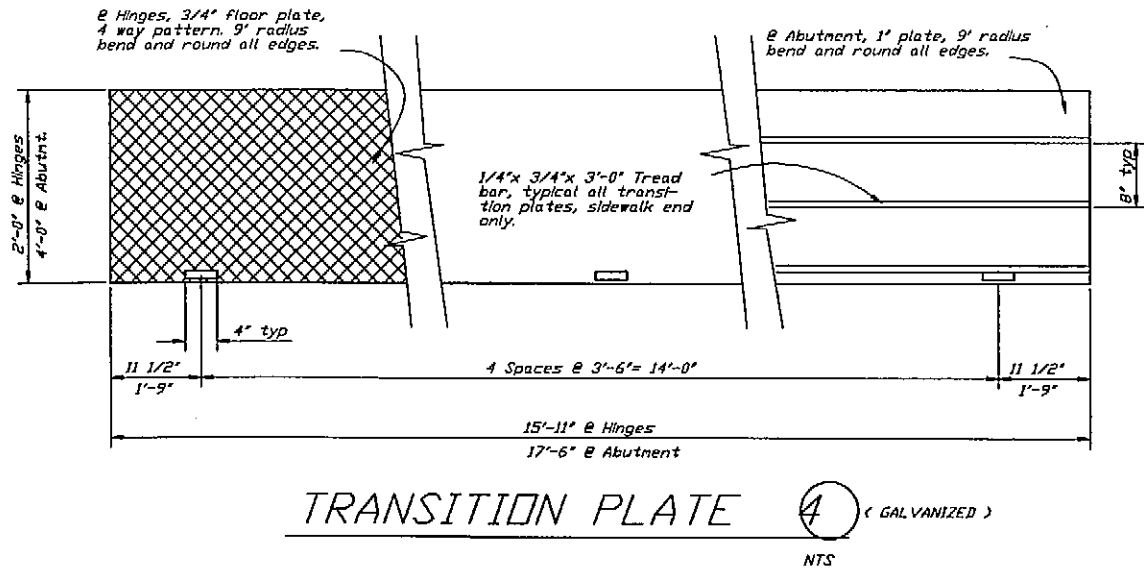
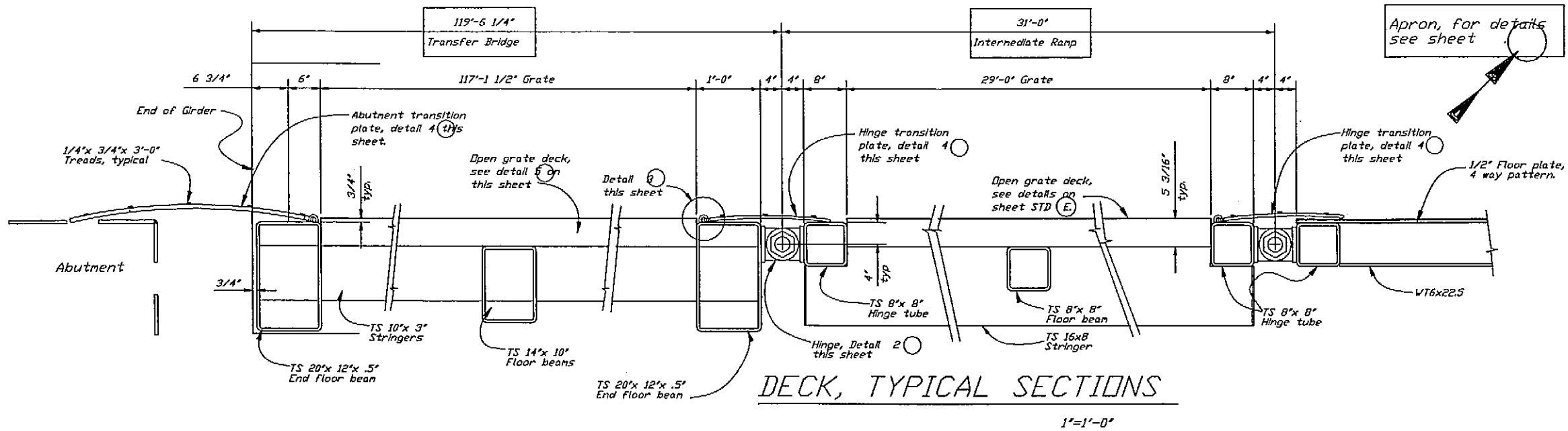


- NOTES:
1. Fillet weld (5/16") each side of Transverse stiffener and all contact surfaces except bottom flange, tight fit only. Start weld 1 1/2" from bot. of stiffener.
 2. Main members subjected to tensile stress.

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

DESIGNED BY:		STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION			
CHECKED BY:		Wrangell Terminal Modifications Project 67924			
DRAWN BY:		EXISTING STRUCTURE INFORMATION ONLY Bridge Ends & Typ. Section			
PATH: O:\Wrg\67924\MF\PlanSet\026-AB06--Bridge Ends & Typ. Section.dwg					
PLOT: PSPAGE 1=1 Thu, 10/Nov/05 11:14AM					
REVISIONS		PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
NO.	DATE	DESCRIPTION	67924	2005 26	32

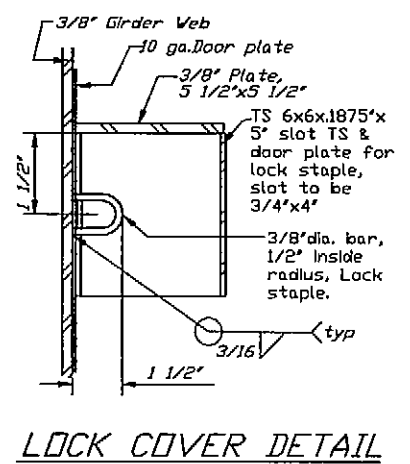
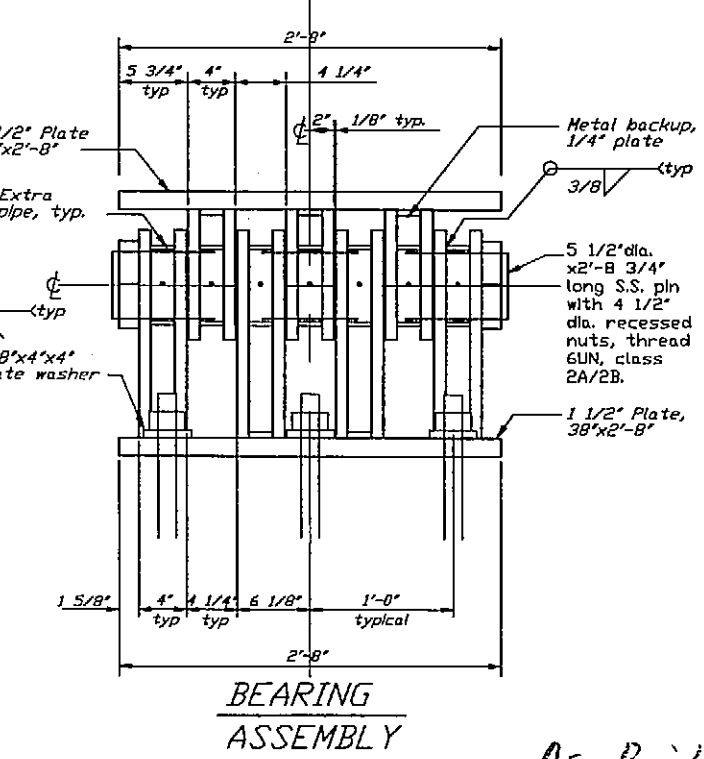
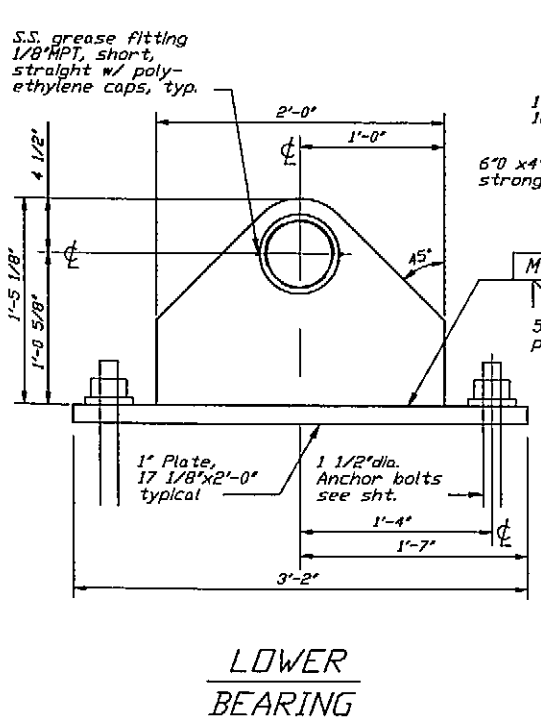
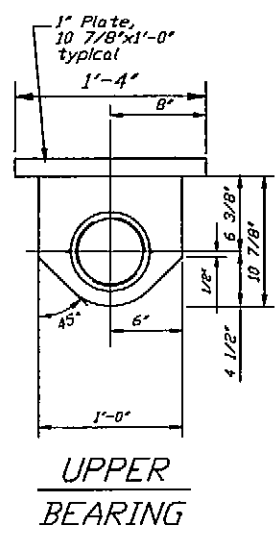
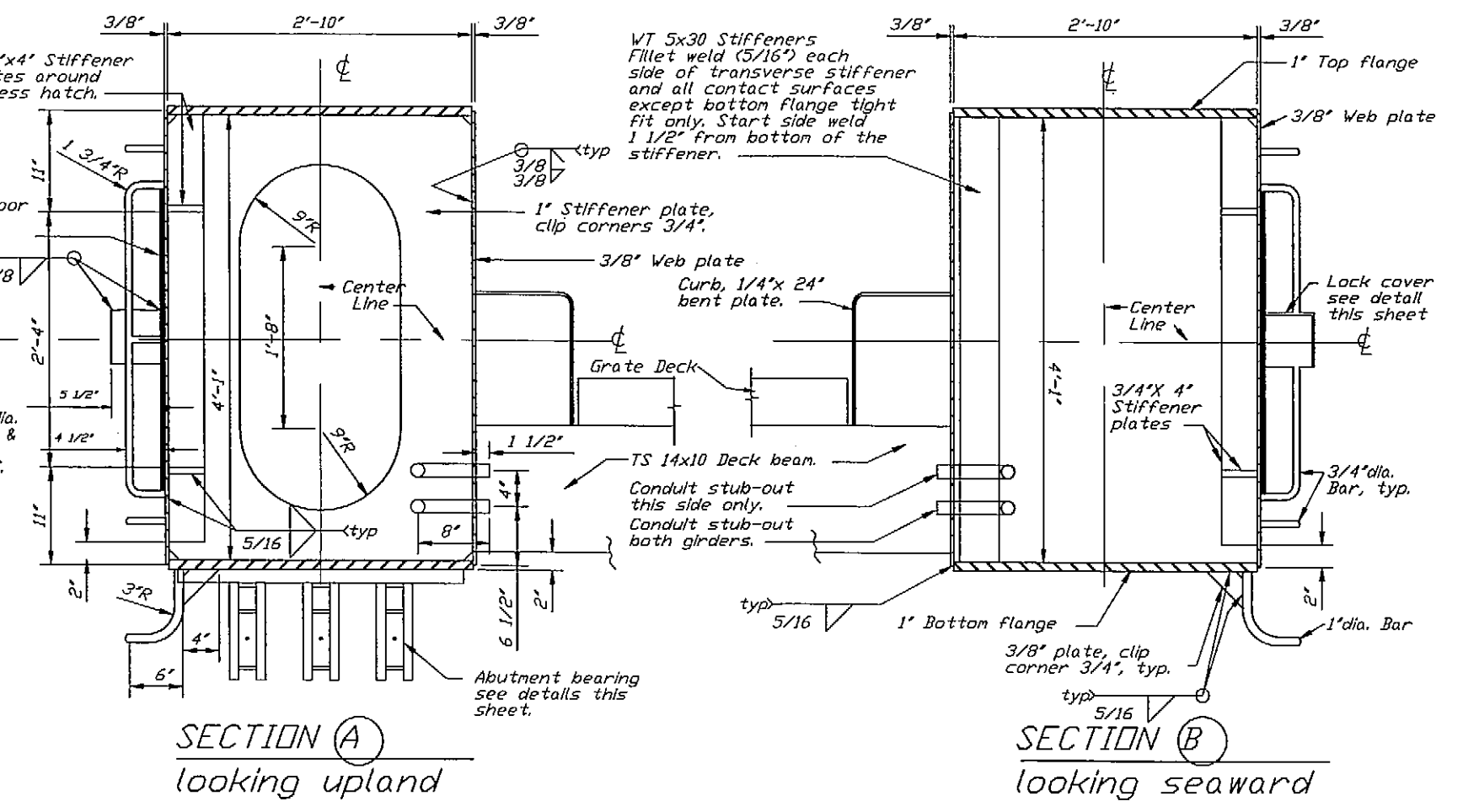
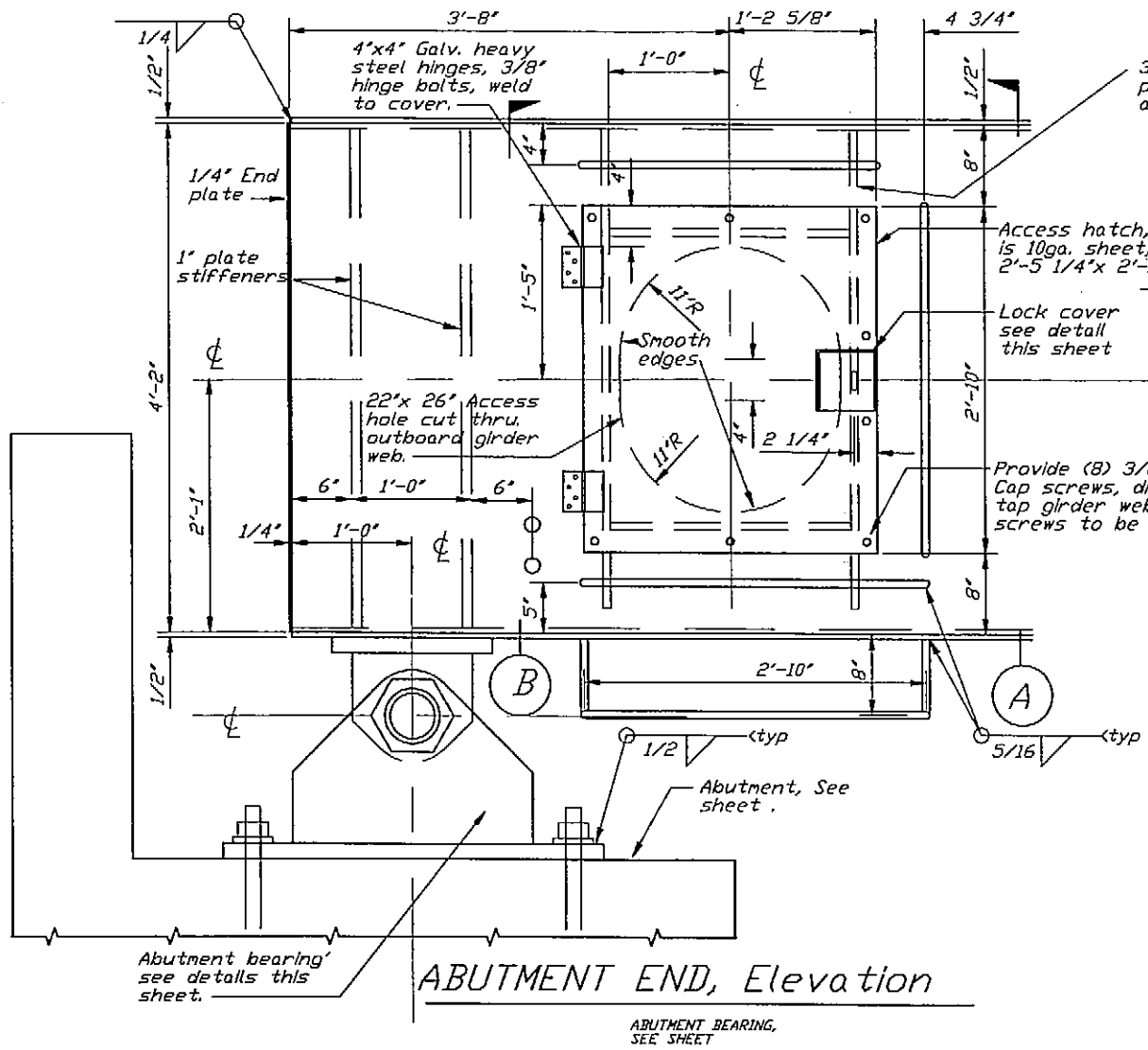
As-Built 11-14-06 cp



As-Built 11-14-06 CP

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

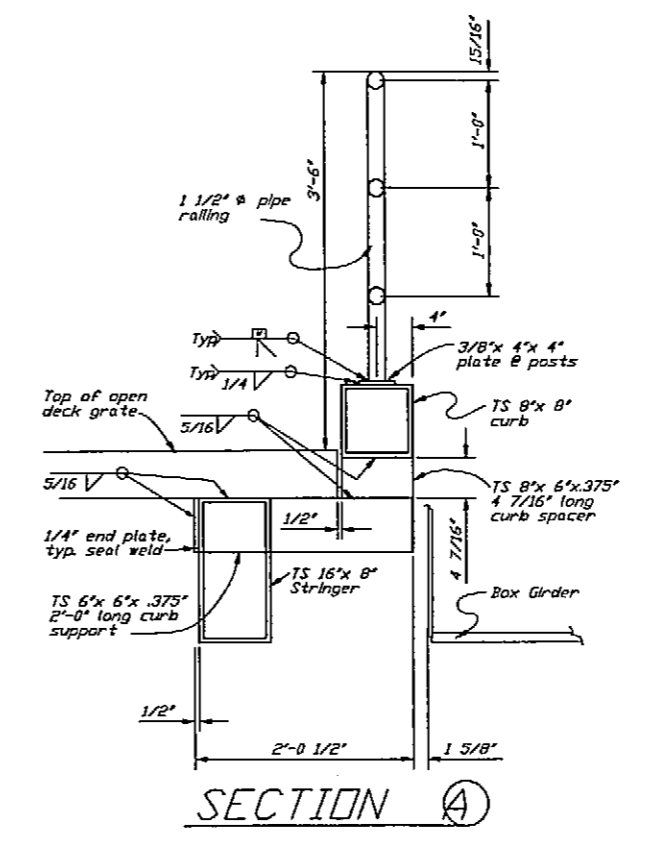
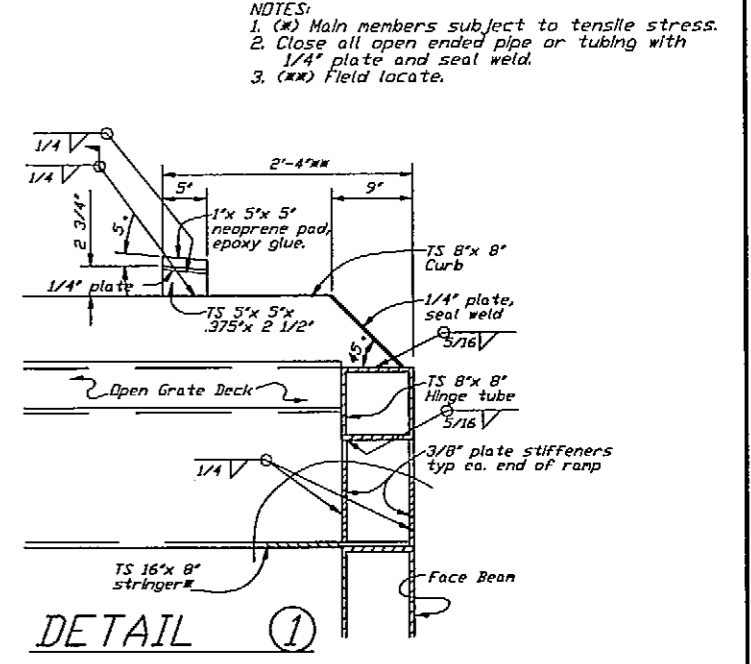
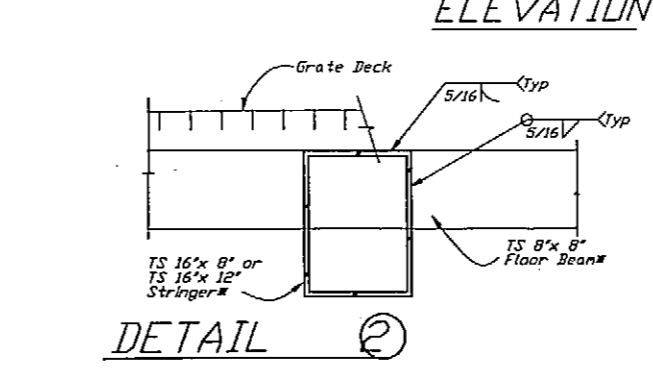
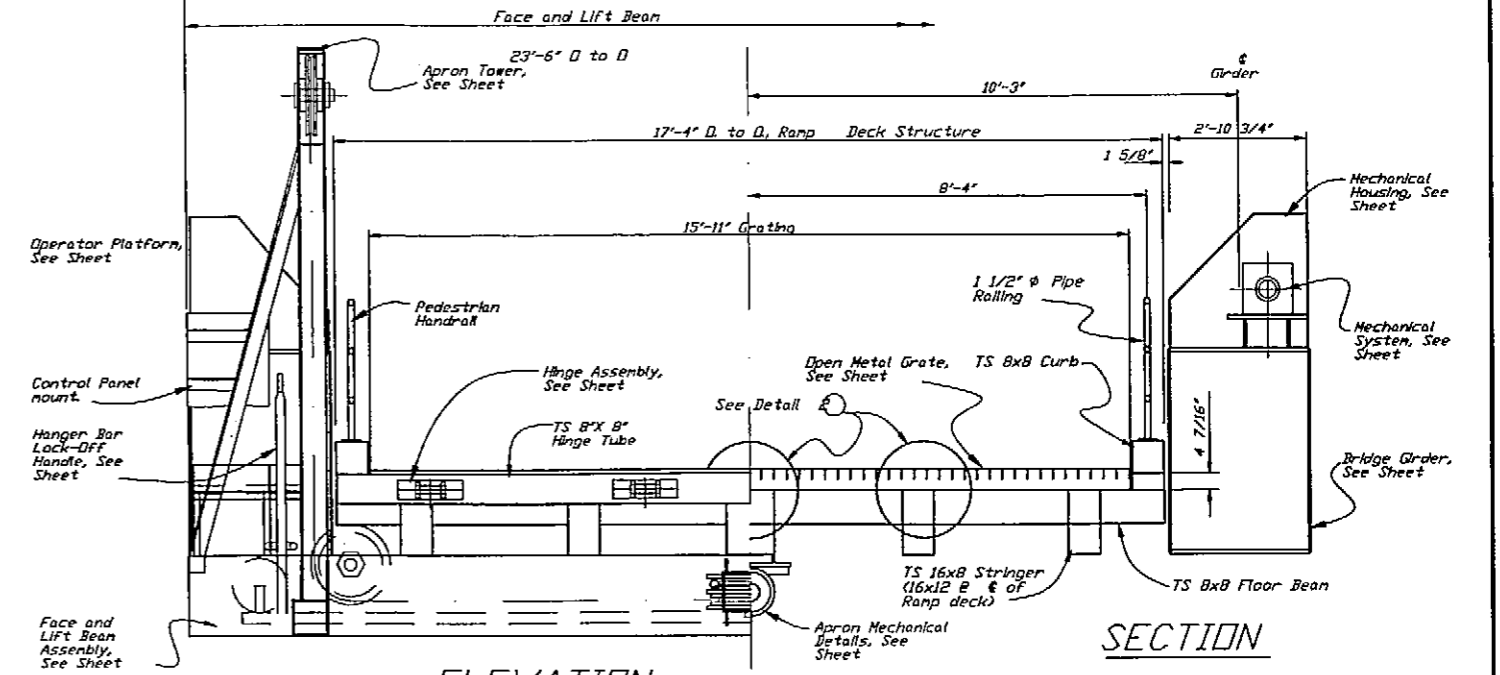
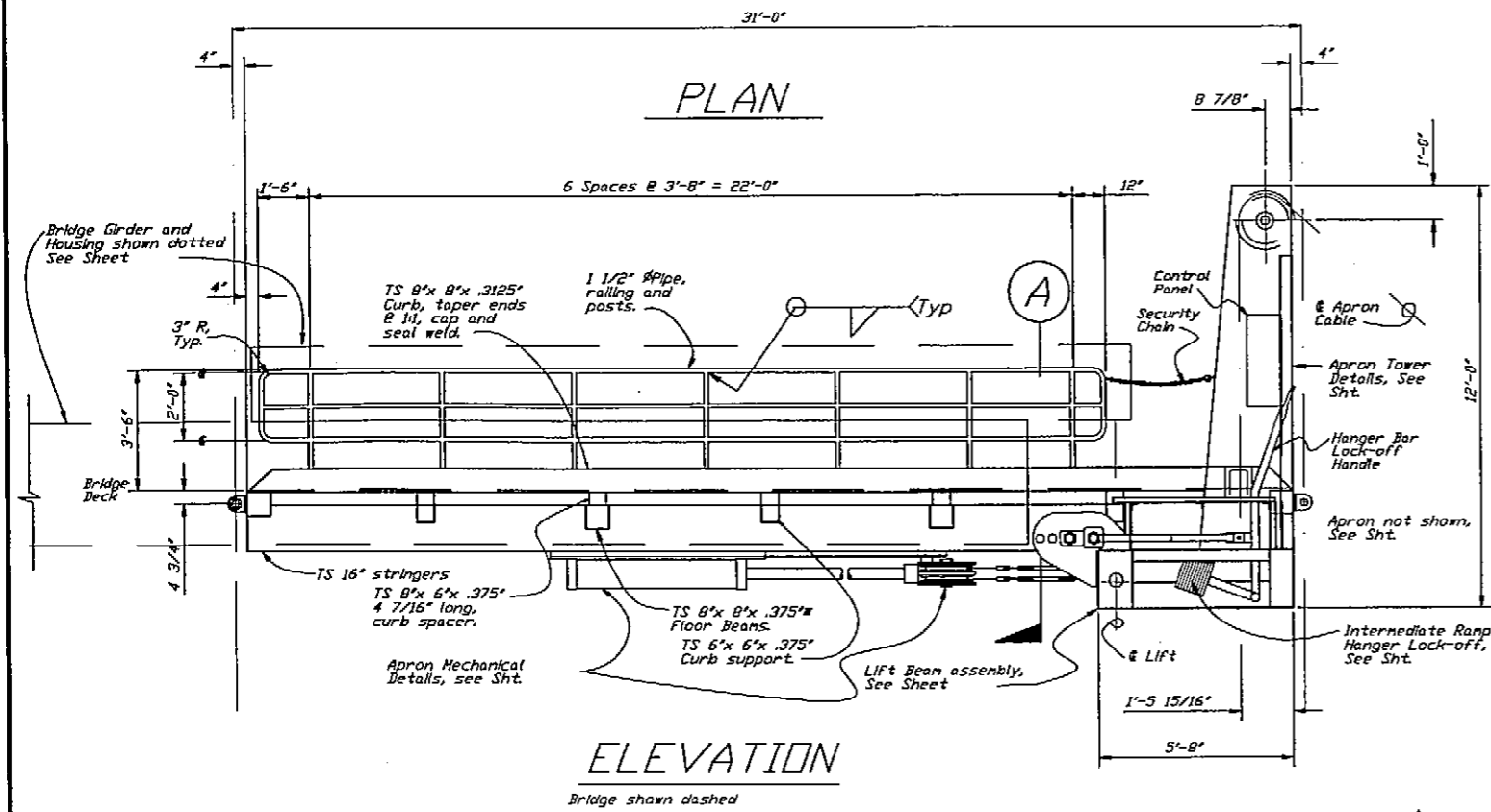
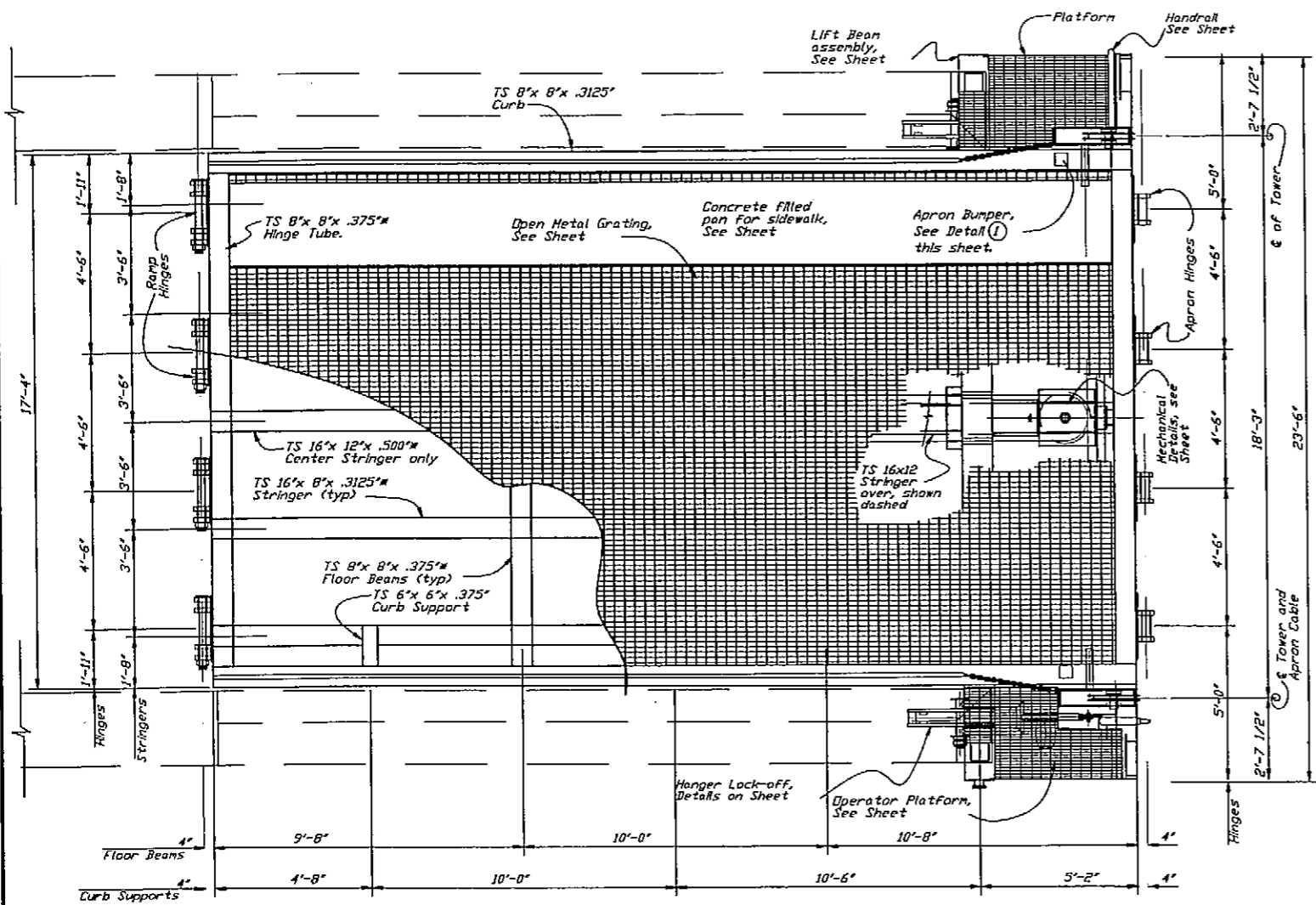
DESIGNED BY:	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION						
CHECKED BY:	Wrangell Terminal Modifications Project 67924						
DRAWN BY:	EXISTING STRUCTURE INFORMATION ONLY Deck Hinge & Misc. Dtls.						
PATH: O:\Wrg\67924\MF\Plonset\027-AB07-Deck Hinge & Misc Dtls.dwg PLDT: PSPACE 1=1 Thu, 10/Nov/05 11:14AM							
NO.		REVISIONS		PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
		DESCRIPTION		67924	2005	27	32



DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

DESIGNED BY:	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION				
CHECKED BY:	Wrangell Terminal Modifications Project 67924				
DRAWN BY:	AS BUILT INFORMATION ONLY Bridge Girder, Seaward End				
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REVISIONS		PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
NO.	DATE	DESCRIPTION	67924	28	32

As-Built 11-14-06 CD



NOTES:
 1. (*) Main members subject to tensile stress.
 2. Close all open ended pipe or tubing with 1/4" plate and seal weld.
 3. (**) Field locate.

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

DESIGNED BY: STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION

PROJECT DESIGNATION: Wrangell Terminal Modifications Project 67924

EXISTING STRUCTURE INFORMATION ONLY RAMP FRAMING DETAILS

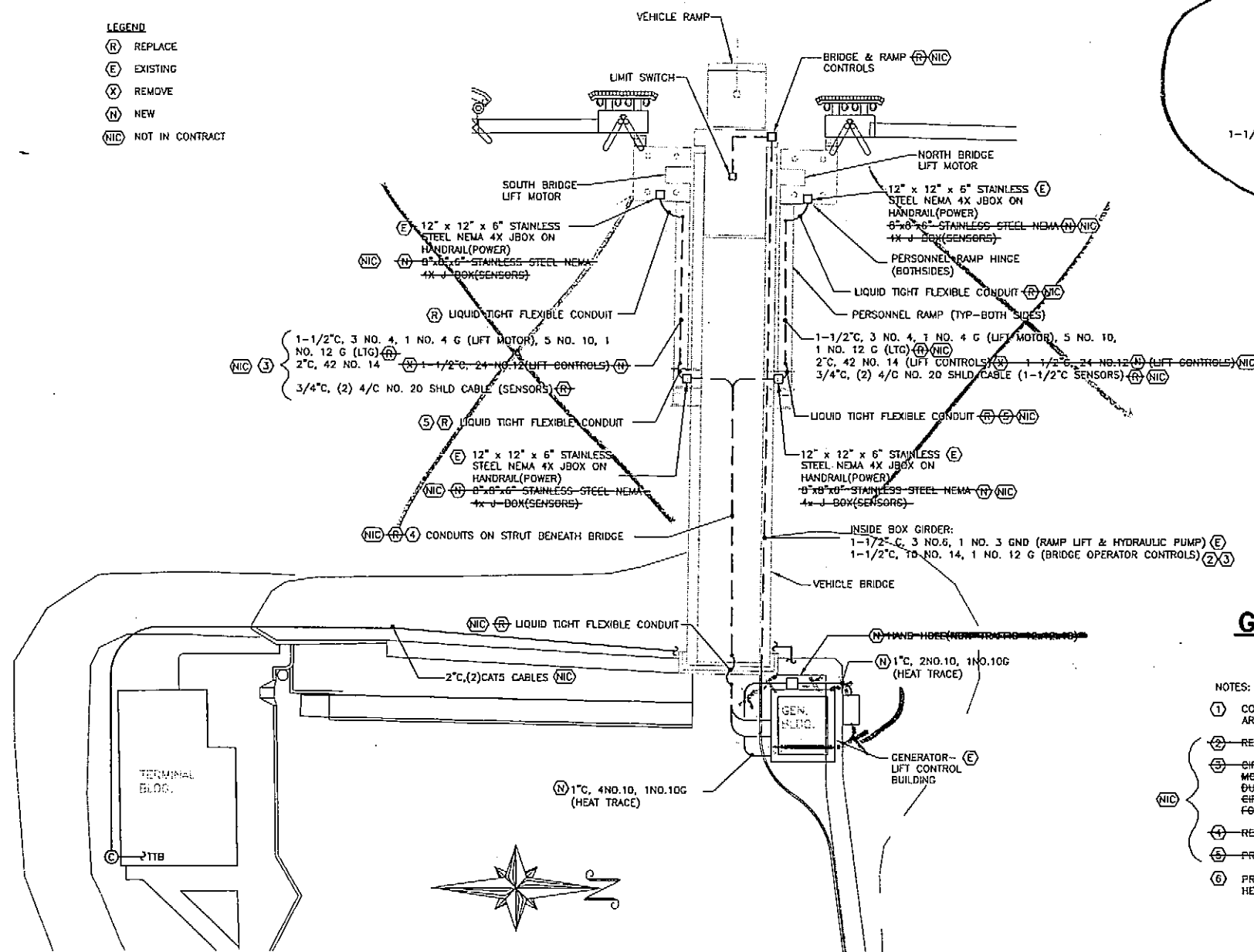
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NO.	DATE	REVISIONS DESCRIPTION	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			67924	2005	29	32

As-Built 11-04-06 CD

- LEGEND**
- (R) REPLACE
 - (E) EXISTING
 - (X) REMOVE
 - (N) NEW
 - (NIC) NOT IN CONTRACT



GENERATOR-LIFT CONTROL-BUILDING

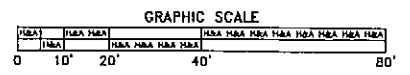
SCALE: 1/2" = 1'-0"

GRAPHIC SCALE

- NOTES:**
- ① COMPONENTS SHOWN ARE EXISTING, EXCEPT WHERE MODIFICATIONS ARE REQUIRED.
 - ② REPLACE CONDUCTORS WITH 20 NO. 12, 1 NO. 12B.
 - ③ CIRCUITING FROM THE BRIDGE LIFT MOTOR CONTROL CENTER TO THE LIFT MOTORS & CONTROLS MAY VARY FROM ILLUSTRATED SIZES AND QUANTITIES DUE TO PROPRIETARY REQUIREMENTS BY MANUFACTURER. PROVIDE CIRCUITING AS RECOMMENDED BY MANUFACTURER. ADVISE THE ENGINEER FOR ACCEPTANCE AND RACEWAY MODIFICATIONS.
 - ④ REPLACE ALL SUPPORT HARDWARE.
 - ⑤ PROVIDE ADEQUATE LENGTH FOR FULL RANGE OF GANGWAY TRAVEL.
 - ⑥ PROVIDE (1) 20/2 GF(30MA)CB FOR HEAT TRACE & (1) 20/1 CB FOR HEAT TRACE CONTROLS.

SITE PLAN

SCALE: 1" = 20'-0"



As-Built 11-14-06

CONSULTING ELECTRICAL ENGINEERS

HAIGHT & ASSOCIATES

256 MAIN STREET
Juneau, Alaska 99801
(907) 586-9788
Fax (907) 586-5774

DESIGNED BY: B. Haight

CHECKED BY: BCH
DRAWN BY: P-JF

PATH: Dec 13, 2005 - 9:38am
PLOT: F:\projects\134 State of Alaska DOTPF\109 Wrangell Ferry Terminal Electrical\Drawings\109el.dwg (Layout1 tab)

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION

Wrangell Ferry Terminal
Ramp Controls

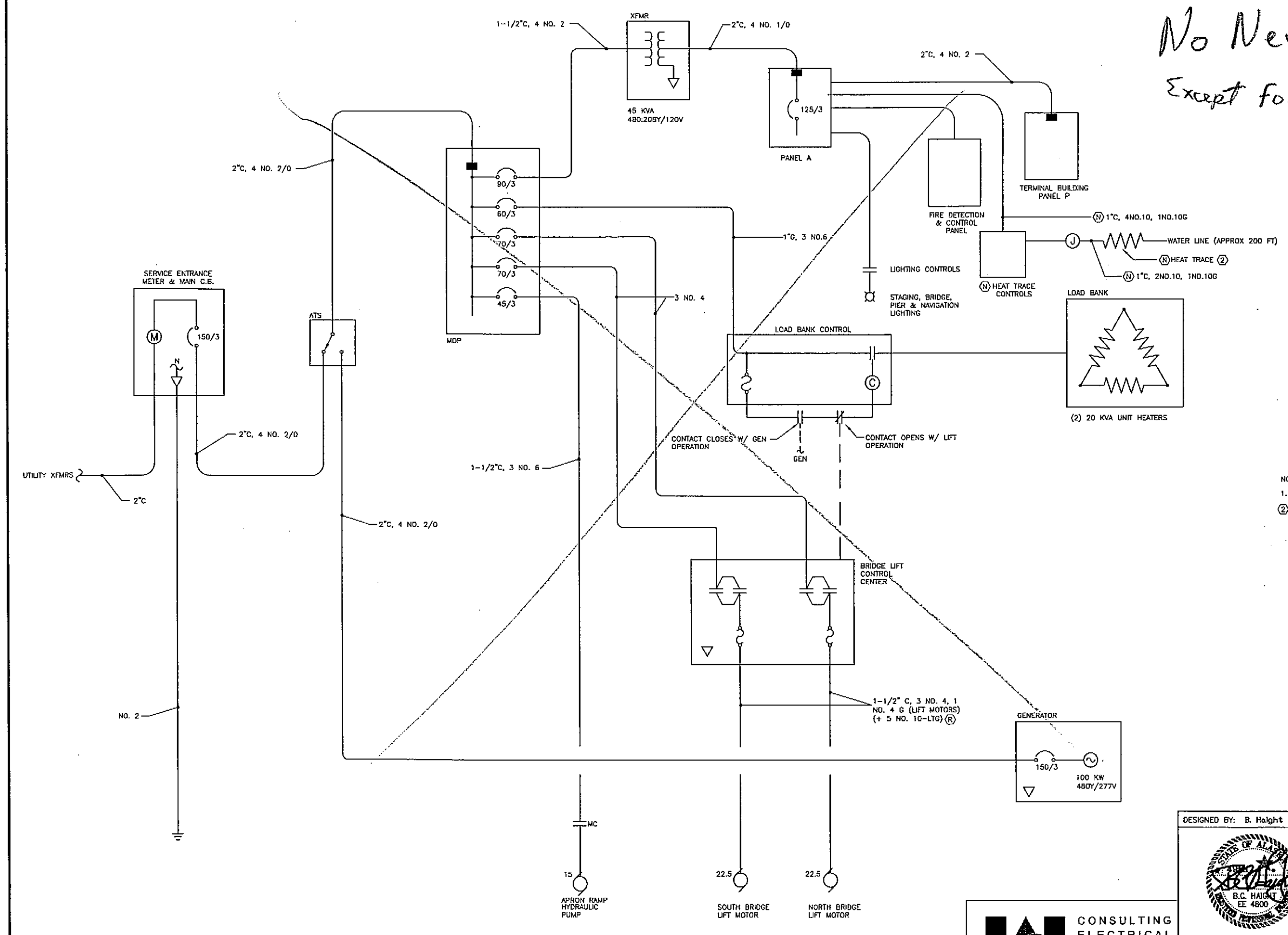
Site Plan & Generator - Lift Control Building

REVISIONS		PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
NO.	DATE DESCRIPTION				
		67924	2005	E1	--

No New Electrical
Except for Heat Trace Controls



CD

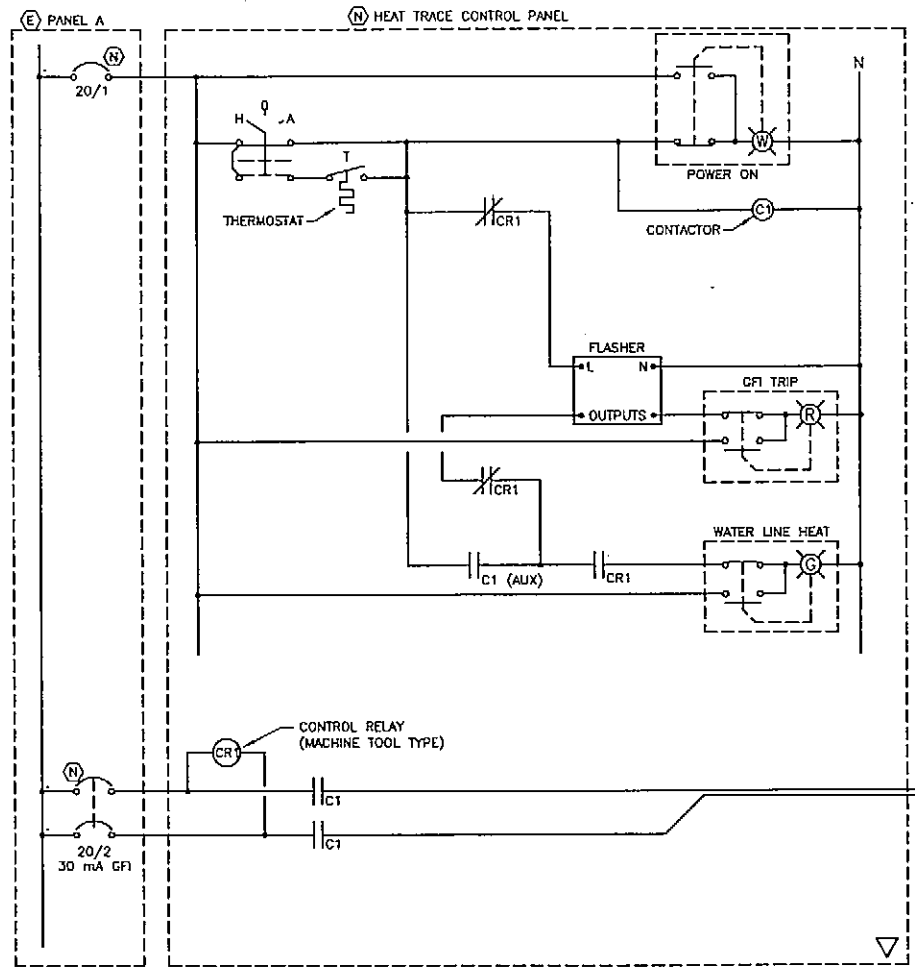
As-Built 11-14-06
CD



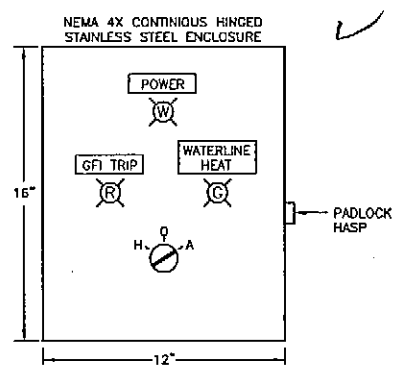
NOTES:
1. ALL EXISTING EXCEPT WHERE SHOWN OTHERWISE.
② PROVIDE LOW TEMPERATURE 208 VOLT, 5 WATT (MAX) HEAT TRACE.

SINGLE LINE DIAGRAM—POWER DISTRIBUTION
NO SCALE

DESIGNED BY: B. Haight		STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION Wrangell Ferry Terminal Ramp Controls Single-Line Diagram									
											
CHECKED BY: BCH DRAWN BY: PJF		PATH: Dec 13, 2005 - 9:41am PLOT: F:\projects\134 State of Alaska DOTPF\109 Wrangell Ferry Terminal Electrical\Drawings\109e2.dwg (Layout1 tab)									
 CONSULTING ELECTRICAL ENGINEERS 526 MAIN STREET Juneau, Alaska 99801 (907) 586-9788 Fax (907) 586-5774		REVISIONS <table border="1"> <thead> <tr> <th>NO.</th> <th>DATE</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>		NO.	DATE	DESCRIPTION				PROJECT DESIGNATION 67924	
NO.	DATE	DESCRIPTION									
		YEAR 2005		SHEET NO. E2							
				TOTAL SHEETS --							



CONTROL PANEL SCHEMATIC



NOTE: ALL CONTROL DEVICES SHALL BE NEMA 4X RATED, 30mm, NON-METALLIC. LAMPS SHALL BE LED.

CONTROL PANEL
NO SCALE

HEAT TRACE CONTROLS
NO SCALE

As-Built 11-14-06

HAIGHT & ASSOCIATES
CONSULTING ELECTRICAL ENGINEERS
526 MAIN STREET
Juneau, Alaska 99801
(907) 586-9788
Fax (907) 586-5774

DESIGNED BY: B. Haight

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION
Wrangell Ferry Terminal Ramp Controls
Schematic Diagram

CHECKED BY: BCH
DRAWN BY: P.J.F.

PATH: Dec 13, 2005 - 9:45am
PLOT: F:\projects\134 State of Alaska DOT\109 Wrangell Ferry Terminal Electrical\Drawings\109a3.dwg (Layout1.tob)

REVISIONS			PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
NO.	DATE	DESCRIPTION				
			67924	2005	E3	--