

State of Alaska

Department of Transportation
and Public Facilities
Southeast Region

HYDER

Causeway Reconstruction and Trestle Replacement MGS-0003(113) / AK 69070

AS-BUILTS

Project #: MGS-0003(113) / AK 69070

Project Name: Hyder Causeway Reconstruction and
Trestle Replacement

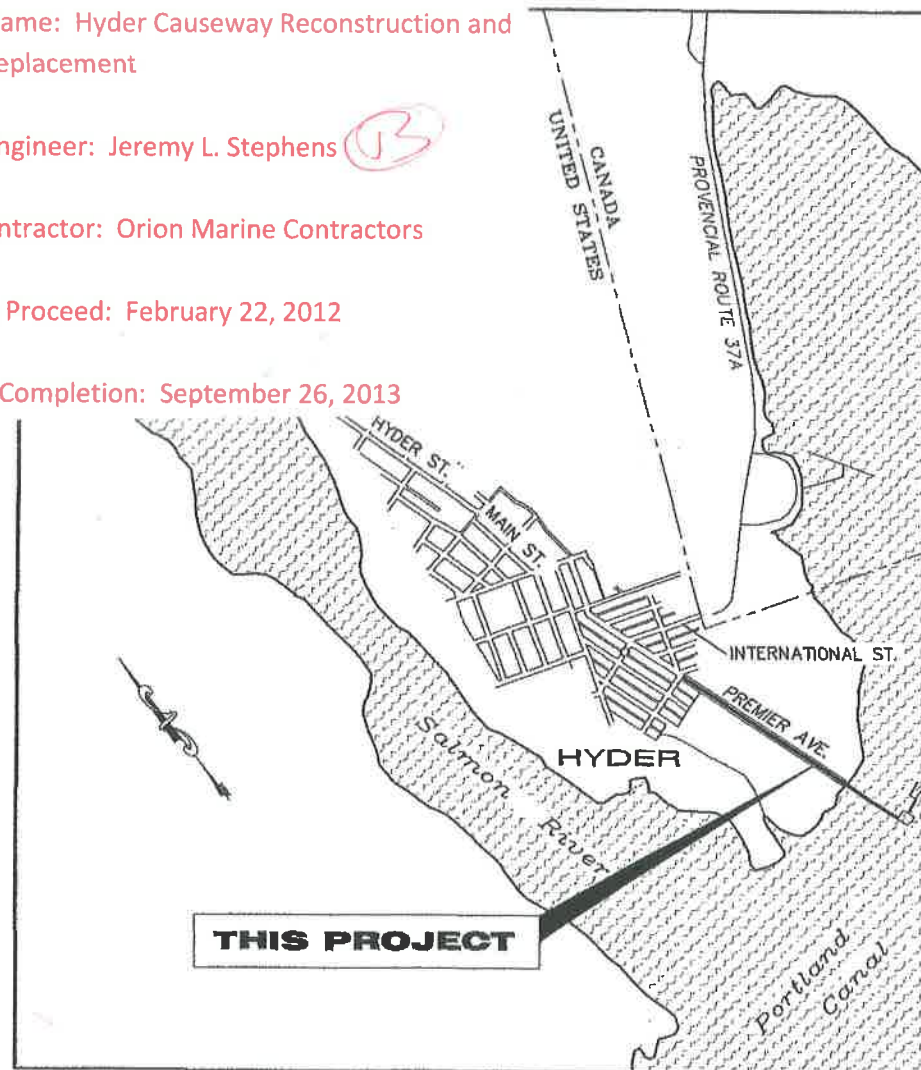
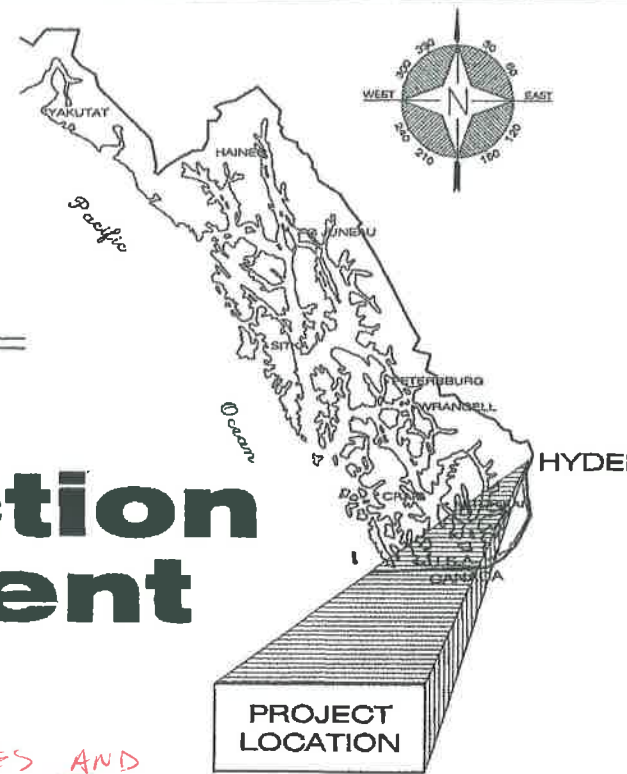
Project Engineer: Jeremy L. Stephens *(JS)*

Prime Contractor: Orion Marine Contractors

Notice to Proceed: February 22, 2012

Contract Completion: September 26, 2013

*EACH SHEET WAS REVIEWED FOR CHANGES AND
VERIFIED AS CORRECT. (JS)*



VICINITY MAP

International Street to Harbor Island			
	2012	2022	2032
A.D.T.	160	170	180
D.H.V.	20	20	30
Peak Hour Factor	0.9	0.9	0.9
Directional Distribution	55/45	55/45	55/45
% Commercial Trucks	10.3%	10.3%	10.3%
Compound Growth Rate	0.50%	0.50%	0.50%
Pedestrians (Number/Day)	n/a	n/a	n/a
Bicyclists (Number/Day)	n/a	n/a	n/a

STATE ROUTE NUMBER 290200

TURNING VEHICLE: WB-50
VEHICLE LOADING: HL93
EQUIVALENT AXLE LOADS: 30,000

TIDAL DATA	
EHW	21.0'
EHT	20.8'
MHHW	16.6'
MHW	15.7'
ELT	-4.0'

DESIGN SPEED
20 mph Sta 10+00 to 45+00

LENGTH PROJECT:.....0.68 miles
LENGTH PAVING:.....0.68 miles
WIDTH PAVING:.....22-32 feet

THE FOLLOWING STANDARD DRAWINGS APPLY TO THIS PROJECT:

A-1	D-20.03	E-00.00	G-09.04S	I-20.13	Q-20.03
C-04.02	D-22.01	E-13.00	G-10.01	I-81.00	T-21.02
D-01.02	D-24.00	G-00.01	G-13.00	M-13.01	S-05.01
D-04.21	D-26.02	G-04.06S	G-20.10	M-16.01	S-30.02
D-07.00	D-35.00	G-04.07W			

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A2	SURVEY CONTROL PLAN
A3	PROJECT OVERVIEW
B1-B2	TYPICAL SECTIONS
C1	ESTIMATE OF QUANTITIES
D1-D2	MISCELLANEOUS SUMMARIES
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G3	CAUSEWAY GRADING PLAN
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N1-N11	CONCRETE TRESTLE PLANS
O1-O14	STEEL TRESTLE PLANS
P1-P4	SIGNING & STRIPING PLANS
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T1-T7	EROSION & SEDIMENT CONTROL PLANS

PATH: Q:\Hyd\69070\Planset\A1_Tsht.dwg
Wed, 10/Aug/11 01:09PM bwbennett

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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHEAST REGION

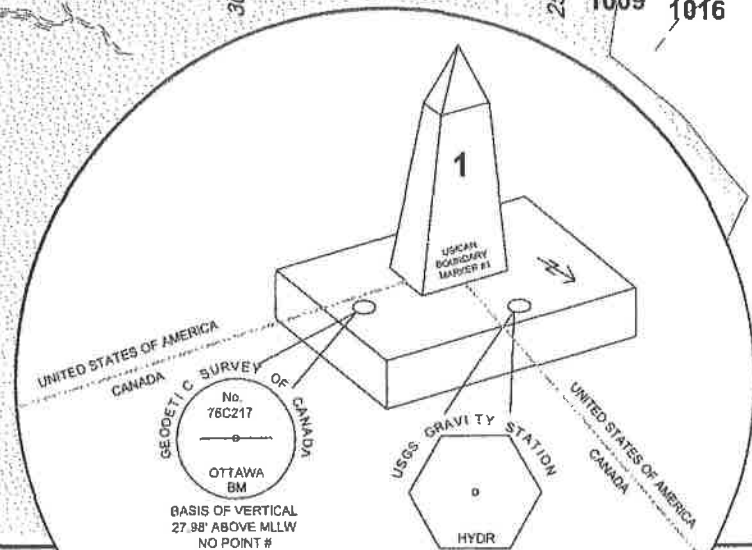
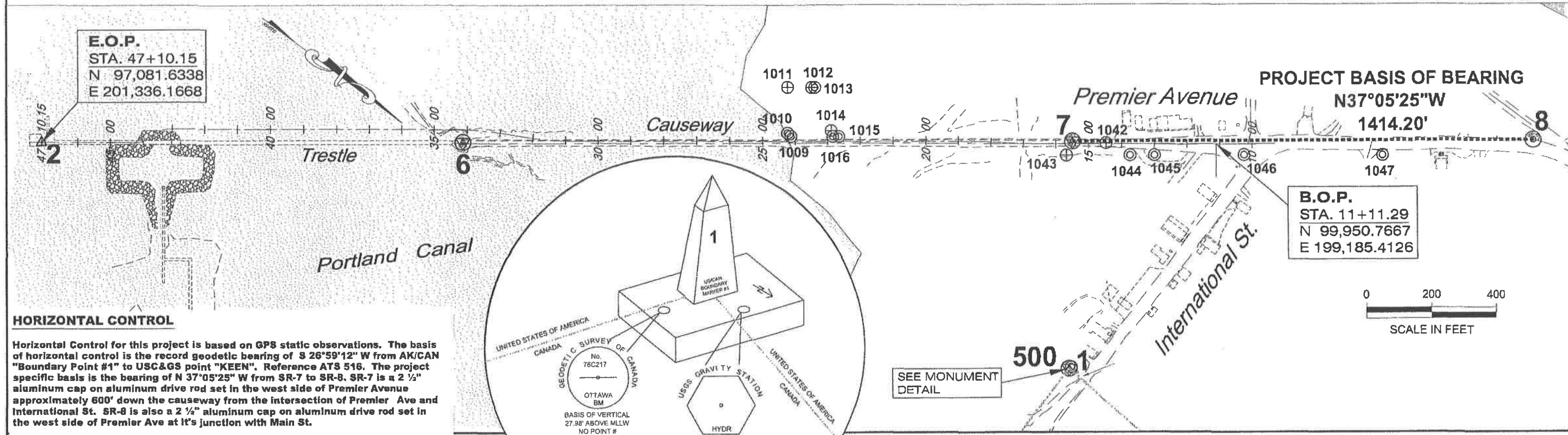
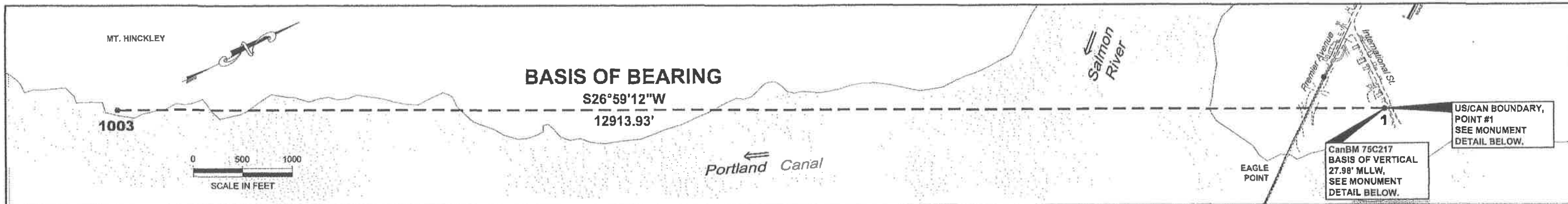
(Professional Seal)
49th
Doug W. Blackburn
CE-10052
01/15/11

RECOMMENDED FOR APPROVAL:
Chuck Correa 9/14/11
CHUCK CORREA, P.E. DATE
REGIONAL PRE-CONSTRUCTION ENGINEER

APPROVED: *Albert H. Clough* 9/20/11
ALBERT H. CLOUGH, CPG DATE
DIRECTOR, SOUTHEAST REGION
CERTIFIED TRUE & CORRECT AS-BUILT OF ACTUAL FIELD CONDITION:

CONSTRUCTION PROJECT MANAGER DATE

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	69070	2011	A1	58



HORIZONTAL CONTROL

Horizontal Control for this project is based on GPS static observations. The basis of horizontal control is the record geodetic bearing of S 26°59'12" W from AK/CAN "Boundary Point #1" to USC&GS point "KEEN". Reference AT5 516. The project specific basis is the bearing of N 37°05'25" W from SR-7 to SR-8. SR-7 is a 2 1/2" aluminum cap on aluminum drive rod set in the west side of Premier Avenue approximately 600' down the causeway from the intersection of Premier Ave and International St. SR-8 is also a 2 1/2" aluminum cap on aluminum drive rod set in the west side of Premier Ave at it's junction with Main St.

Geodetic parameters relating our local ground based coordinate system to AKSPC zone 1 NAD83 are as follows:

Zone = NAD83 AKSPC ZONE 1
 Grid Scale = 1.0000573
 Convergence = +3°01'37"
 Translation about AK/CAN Boundary Point #1
 AKSPC Northing = 1509139.6678 FT US
 AKSPC Easting = 3434238.3098 FT US
 Local Northing = 100000.0 FT US
 Local Easting = 200000.0 FT US
 Note: Grid Scale is greater than 1 due to Hyder being at the extreme edge of AKSPC zone 1.

Basis of Coordinate for this project (US Survey Feet)

CORPSCON converted NAD83 based on NGS NAD27 published values
 Boundary Point #1 N 55°54'42.79836"
 W 130°01'03.09358"
 Local : NORTH: 100000.0000 EAST: 200000.0000
 AKSPC : N 1509139.6678 E 3434238.3098

US&GS "KEEN" Local : NORTH: 88492.2288 EAST: 194139.8884
 AKSPC : N 1497337.8294 E 3428993.7481
 SR-7 Local : NORTH: 99595.6784 EAST: 199440.9008
 SR-8 Local : NORTH: 100723.7691 EAST: 198588.0323

VERTICAL CONTROL

The Vertical Datum is based upon US Mean Lower Low Water at 0.00'. Basis of vertical control is Canadian Benchmark 75C217 located in the concrete base of Boundary Point #1. Measure Up from CanBM 75C217 to tip of Obelisk is 4.65 feet. Accepted elevation for BM 75C217 is 27.98' above MLLW.

POINT	NORTH	EAST	ELEVATION	STATION	OFFSET	DESCRIPTION
1	100000.0000	200000.0000	32.63	N/A	N/A	GPS_OBELISK_BOUND-1
2	97082.4897	201335.9286	23.82	47+09.32	0.32 L	PK_FND_HYD-2
6	98108.9258	200561.8917	24.03	34+11.96	37.58 L	GPS_ALCTRL2.5" SR-6
7	99595.6784	199440.9008	23.46	15+48.65	B.60 R	GPS_ALCTRL_2.5" SR-7
8	100723.7691	198588.0323	27.07	N/A	N/A	ALCTRL_2.5" SR-8
500	99999.6829	200000.8207	28.08	N/A	N/A	USGS GRAVITY STATION
1003	88492.2288	194139.8884	27.79	N/A	N/A	US&GS_CONC-PILLAR "KEEN"

POINT	NORTH	EAST	STATION	OFFSET	DESCRIPTION
1009	98895.2967	199948.3581	24+13.59	18.17 R	ALPROP1.5" RM1_C5_ATS516
1010	98881.2926	199946.3391	24+23.58	26.18 R	REBAR_RM2_C5_ATS516
1011	98798.5667	199835.5909	24+23.35	164.42 R	ALCAP3.25" C4_ATS516
1012	98857.6719	199791.3155	23+49.50	164.39 R	ALCAP3.25" MC3_ATS516/ATS206/ATS
1013	98855.8717	199785.3605	23+39.36	164.24 R	ALPROP1.5" RM1_C3_ATS516
1014	98885.0420	199859.1652	22+88.28	33.71 R	ALCAP3.25" MC2_ATS516/5688
1015	98999.5323	199870.6521	22+83.57	15.82 R	ALPROP1.5" RM2_MC1_ATS516
1016	99015.5560	199858.8217	22+63.86	15.88 R	ALPROP1.5" RM1_MC1_ATS516
1042	99680.9270	199383.4519	14+45.98	3.43 R	BC3_POTD+00
1043	99606.4935	199486.3142	15+67.24	34.22 L	BC2_75" PREMIER
1044	99761.2769	198369.9875	13+73.62	34.00 L	IP2.5" NO-CAP
1045	99820.5209	199325.4392	12+99.49	33.90 L	REBAR
1046	100040.0309	199159.2884	10+24.19	32.85 L	REBAR
1047	100380.7255	198904.9204	N/A	N/A	IP_FND1.3'DOWN_BENT

CONTROL MONUMENT NOTES:
 1. If any pair of control points disagrees from published value by more than 1:10,000 horizontally or vertically then a third network point must be tied to ascertain which point is in error or has been disturbed.
 2. Whether listed or not, all monuments or property markers or accessories which will be disturbed or buried shall be referenced prior to being disturbed and re-established in their original position and a record of monument form in accordance with A.S.34.65.040 shall be submitted to the construction engineer for review prior to recording. Coordinate values listed are for informational purposes and should be used to reset monuments only as a last resort.

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: R. MURPHY 8-9-11

DESIGNED BY: T. REED
 DRAWN BY: T.R./R.S.

STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
 SOUTHEAST REGION

HYDER
 CAUSEWAY RECONSTRUCTION & TRESTLE REPLACEMENT
 PROJECT #69070

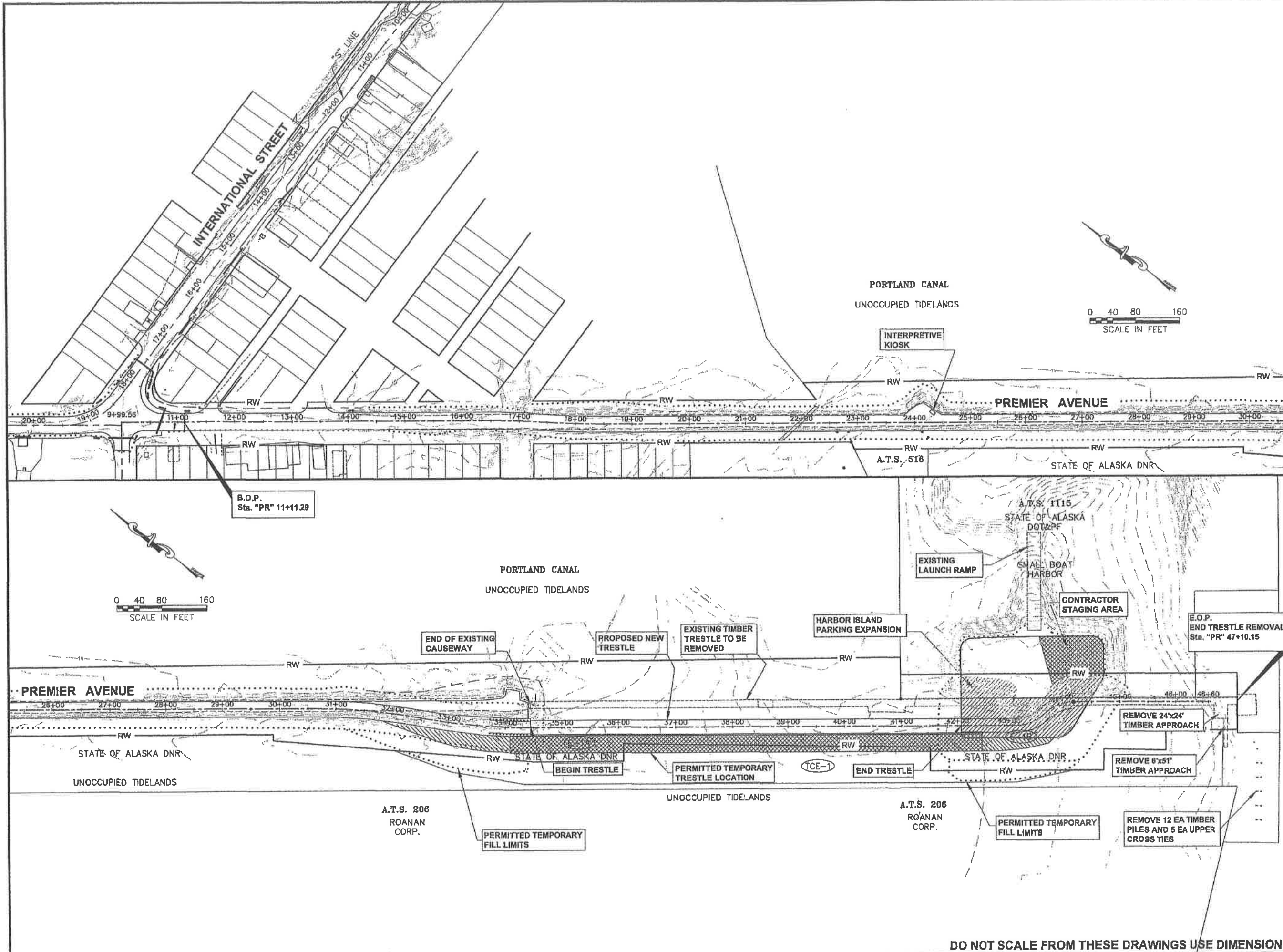
SURVEY CONTROL PLAN

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NO.	DATE	DESCRIPTION

PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
69070	2011	A2	58

RECORD OF REVISIONS		
No.	DATE	DESCRIPTION



CHECKED BY: M. Van Alstine



DESIGNED BY: D. Blackburn
 DRAWN BY: B. Bennett

STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 & PUBLIC FACILITIES - SOUTHEAST REGION
**CAUSEWAY RECONSTRUCTION
 & TRESTLE REPLACEMENT**
 Project No. 69070

**Project
 Overview**

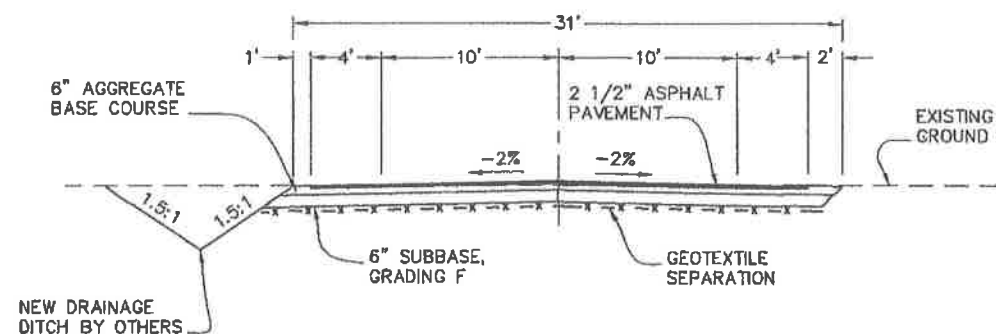
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69070	
STATE	YEAR
ALASKA	2011
SHEET NUMBER	TOTAL SHEETS
A3	58

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

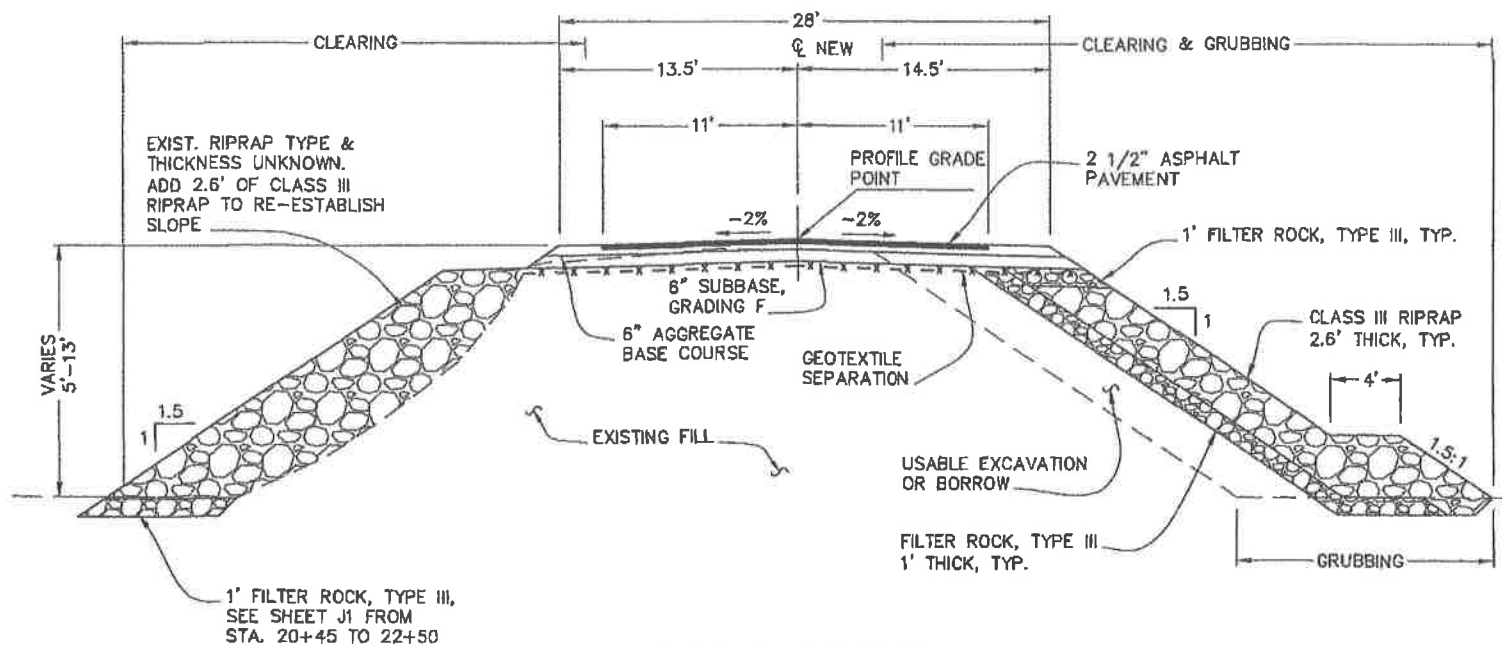
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HYDER CAUSEWAY RECONSTRUCTION
& TRESTLE REPLACEMENT
MGS-0003(113) ~ 69070

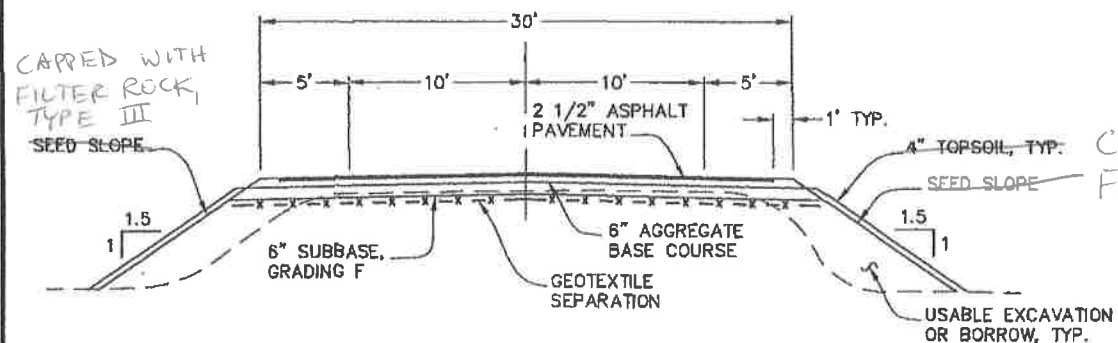
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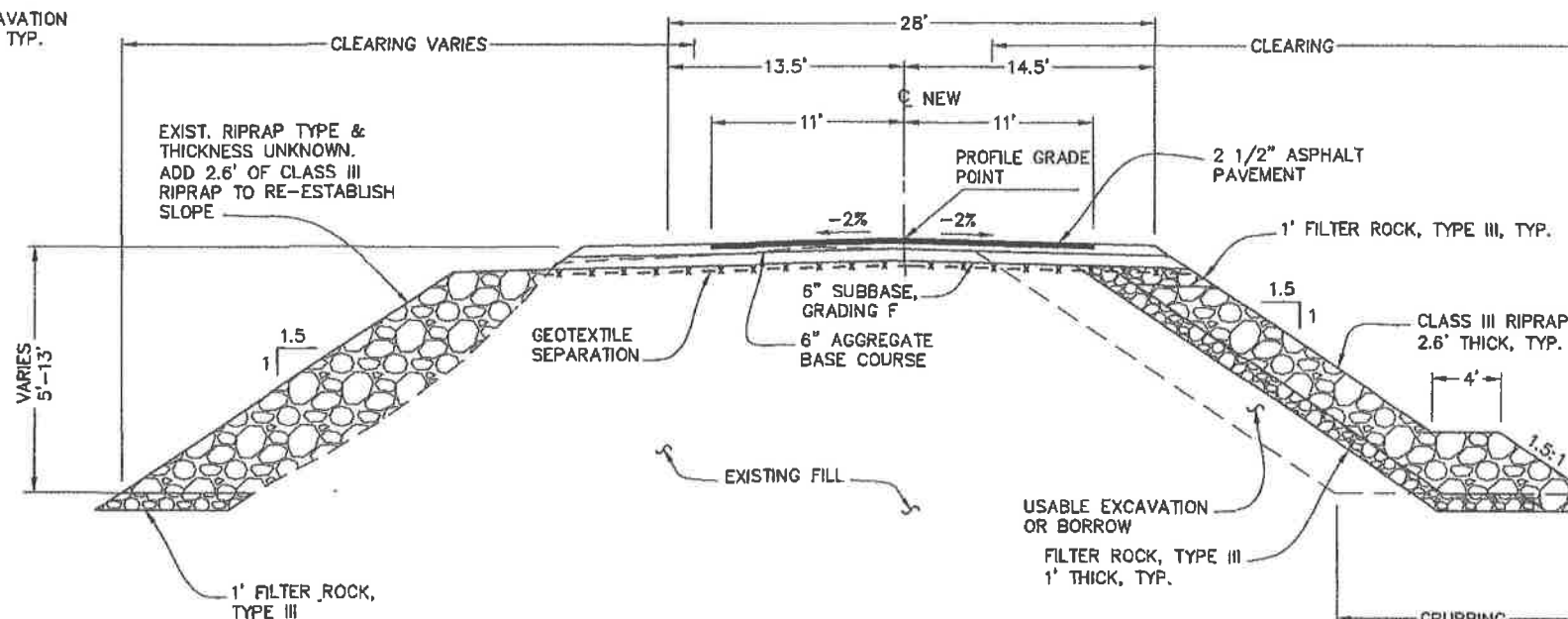
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TYPICAL SECTION
"PR" STA. 17+10 TO 30+66



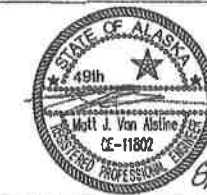
TYPICAL SECTION
"PR" STA. 14+20 TO 17+10



TYPICAL SECTION
"PR" STA. 30+66 TO 33+00

PLAN LEGEND

CHECKED BY: D. Blackburn



DESIGNED BY: M. Van Alstine

DRAWN BY: BB

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES - SOUTHEAST REGION
**CAUSEWAY RECONSTRUCTION
& TRESTLE REPLACEMENT**
Project No. 69070

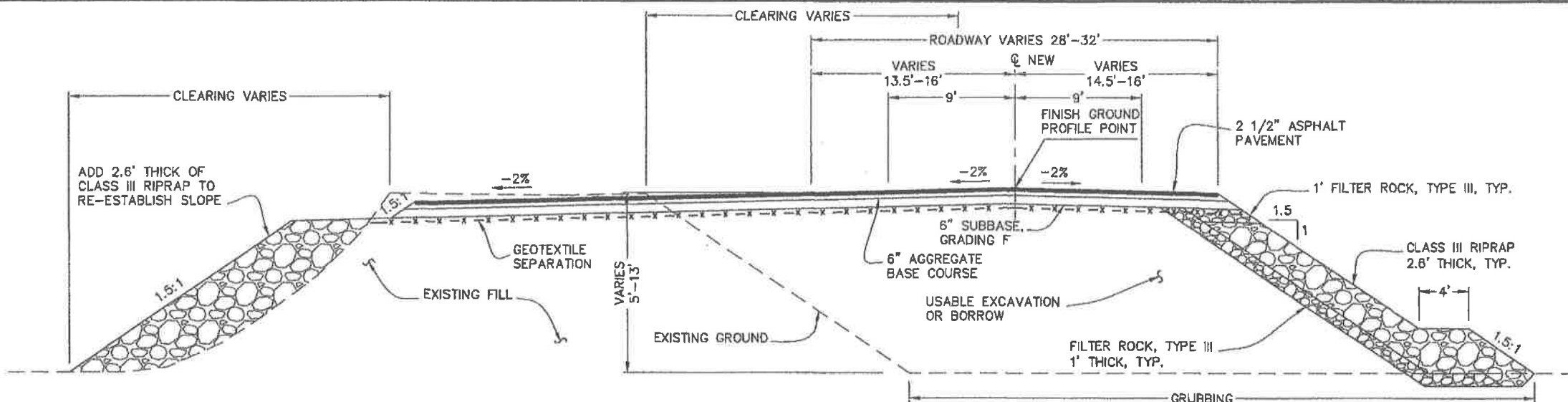
TYPICAL SECTIONS

PROJECT DESIGNATION

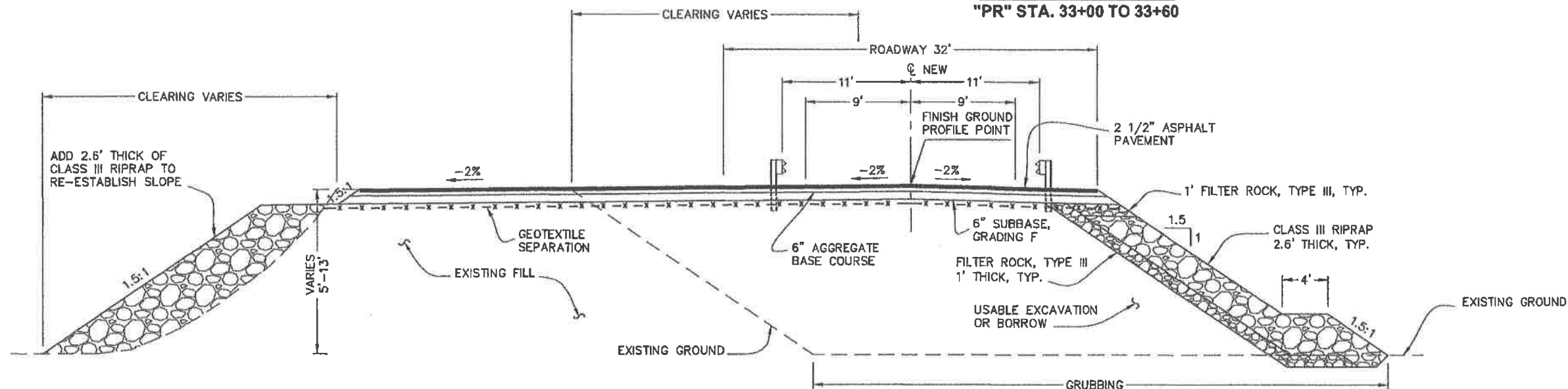
69070

STATE	YEAR
ALASKA	2011
SHEET NUMBER	TOTAL SHEETS
B1	58

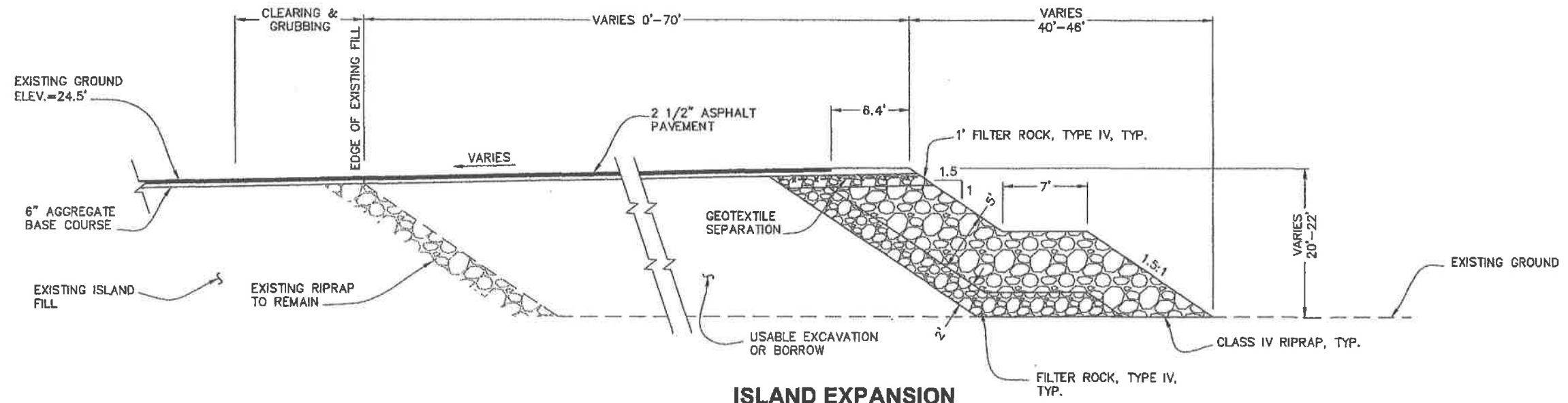
DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS



TYPICAL SECTION
"PR" STA. 33+00 TO 33+60



TYPICAL SECTION
"PR" STA. 30+60 TO 34+44.5



ISLAND EXPANSION
"PR" STA. 42+10.5 TO 44+45.5

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

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BENNETT, BERT W (DOT)
TAB: B2 Friday, July 29, 2005 11:27:44 AM

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

HYDER CAUSEWAY RECONSTRUCTION & TRESTLE REPLACEMENT
MGS-0003(113) ~ 69070

TYPICAL SECTIONS

PLAN LEGEND

CHECKED BY: D. Blackburn

DESIGNED BY: M. Von Alstine

DRAWN BY: BB

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES - SOUTHEAST REGION
CAUSEWAY RECONSTRUCTION & TRESTLE REPLACEMENT
Project No. 69070

TYPICAL SECTIONS

PROJECT DESIGNATION	
69070	
STATE	YEAR
ALASKA	2011
SHEET NUMBER	TOTAL SHEETS
B2	58

ESTIMATE OF QUANTITIES - CONCRETE TRESTLE

ITEM NO.	ITEM	UNIT	QUANTITY
201 (3A)	CLEARING & GRUBBING	ACRE	2.4
202 (1)	REMOVAL OF STRUCTURES & OBSTRUCTIONS	LUMP SUM	ALL REQ'D.
203 (3)	UNCLASSIFIED EXCAVATION	CUBIC YARD	4,300
203 (6)	BORROW	TON	30,350
205 (3)	STRUCTURAL FILL	CUBIC YARD	515
301 (1)	AGGREGATE BASE COURSE, GRADING D-1	TON	4,050
304 (1)	SUBBASE, GRADING F	TON	2,740
401 (1)	ASPHALT CONCRETE, TYPE II; CLASS B	TON	1,700
401 (2)	ASPHALT CEMENT, GRADE PG 58-28	TON	103
401 (6)	ASPHALT PRICE ADJUSTMENT	CONTINGENT SUM	ALL REQ'D.
501 (1)	CLASS A CONCRETE	LUMP SUM	ALL REQ'D.
501 (7)	PRECAST CONCRETE MEMBER (84'-6" BULB-TEE GIRDER)	EACH	36
503 (1)	REINFORCING STEEL	LUMP SUM	ALL REQ'D.
503 (2)	EPOXY-COATED REINFORCING STEEL	LUMP SUM	ALL REQ'D.
505 (5)	FURNISHED STRUCTURAL STEEL PILES (2'-0" DIA X 0.5" PIPE)	LINEAR FOOT	3,436.2
505 (6)	DRIVE STRUCTURAL STEEL PILES (2'-0" DIA X 0.5" PIPE)	EACH	30
505 (11)	PILE RESTRIKE	DAY	30
507 (2)	PEDESTRIAN RAILING	LINEAR FOOT	1,592
603 (9-60)	60 INCH CORRUGATED ALUMINUM PIPE	LINEAR FOOT	95
606 (12)	GUARDRAIL / BRIDGE RAIL CONNECTION	EACH	3
606 (13)	PARALLEL GUARDRAIL TERMINAL	EACH	2
610 (2)	DITCH LINING	TON	92
611 (1-3)	FILTER ROCK, TYPE III	CUBIC YARD	1,350
611 (1-4)	FILTER ROCK, TYPE IV	CUBIC YARD	1,990
611 (2-3)	RIPRAP, CLASS III	CUBIC YARD	5,660
611 (2-4)	RIPRAP, CLASS IV	CUBIC YARD	3,400
615 (1)	STANDARD SIGN	SQUARE FOOT	21.25
615 (5)	DELINEATOR, FLEXIBLE	EACH	4
618 (1)	SEEDING	ACRE	0.17
620 (1)	TOPSOIL	SQUARE YARD	800
630 (1)	GEOTEXTILE, SEPARATION	SQUARE YARD	9,100
639 (2)	COMMERCIAL DRIVEWAY	EACH	2
640 (1)	MOBILIZATION & DEMOBILIZATION	LUMP SUM	ALL REQ'D.
640 (4)	WORKER MEALS & LODGING, OR PER DIEM	LUMP SUM	ALL REQ'D.
641 (1)	EROSION & POLLUTION CONTROL ADMINISTRATION	LUMP SUM	ALL REQ'D.
641 (2)	TEMPORARY EROSION & POLLUTION CONTROL	CONTINGENT SUM	ALL REQ'D.
641 (6)	WITHHOLDING	CONTINGENT SUM	ALL REQ'D.
642 (1)	CONSTRUCTION SURVEYING	LUMP SUM	ALL REQ'D.
642 (3)	THREE PERSON SURVEY PARTY	LABOR HOUR	40
643 (2)	TRAFFIC MAINTENANCE	LUMP SUM	ALL REQ'D.
643 (3)	PERMANENT CONSTRUCTION SIGNS	LUMP SUM	ALL REQ'D.
643 (23)	TRAFFIC PRICE ADJUSTMENT	CONTINGENT SUM	ALL REQ'D.
643 (25)	TRAFFIC CONTROL	CONTINGENT SUM	ALL REQ'D.
644 (1)	FIELD OFFICE	LUMP SUM	ALL REQ'D.
644 (2)	FIELD LABORATORY	LUMP SUM	ALL REQ'D.
644 (6)	VEHICLES	LUMP SUM	ALL REQ'D.
645 (1)	TRAINING PROGRAM, 1 TRAINEE / APPRENTICE	LABOR HOUR	475
646 (1)	CPM SCHEDULING	LUMP SUM	ALL REQ'D.
650 (30A)	INTERPRETIVE KIOSK, TYPE A	EACH	1
670 (10)	METHYL METHACRYLATE PAVEMENT MARKINGS	LUMP SUM	ALL REQ'D.


ESTIMATE OF QUANTITIES - STEEL TRESTLE

ITEM NO.	ITEM	UNIT	QUANTITY
201 (3A)	CLEARING & GRUBBING	ACRE	2.4
202 (1)	REMOVAL OF STRUCTURES & OBSTRUCTIONS	LUMP SUM	ALL REQ'D.
203 (3)	UNCLASSIFIED EXCAVATION	CUBIC YARD	4,300
203 (6)	BORROW	TON	30,350
205 (3)	STRUCTURAL FILL	CUBIC YARD	565
301 (1)	AGGREGATE BASE COURSE, GRADING D-1	TON	4,050
304 (1)	SUBBASE, GRADING F	TON	2,740
401 (1)	ASPHALT CONCRETE, TYPE II; CLASS B	TON	1,700
401 (2)	ASPHALT CEMENT, GRADE PG 58-28	TON	103
401 (6)	ASPHALT PRICE ADJUSTMENT	CONTINGENT SUM	ALL REQ'D.
501 (1)	CLASS A CONCRETE	LUMP SUM	ALL REQ'D.
501 (8)	PRECAST CONCRETE MEMBER (DECK PLANK)	EACH	156
503 (1)	REINFORCING STEEL	LUMP SUM	ALL REQ'D.
503 (2)	EPOXY-COATED REINFORCING STEEL	LUMP SUM	ALL REQ'D.
504 (1)	STRUCTURAL STEEL	LUMP SUM	ALL REQ'D.
505 (5)	FURNISHED STRUCTURAL STEEL PILES (2'-0" DIA X 0.5" PIPE)	LINEAR FOOT	4,505
505 (6)	DRIVE STRUCTURAL STEEL PILES (2'-0" DIA X 0.5" PIPE)	EACH	42
505 (11)	PILE RESTRIKE	DAY	42
507 (2)	PEDESTRIAN RAILING	LINEAR FOOT	1,588
603 (9-60)	60 INCH CORRUGATED ALUMINUM PIPE	LINEAR FOOT	95
606 (12)	GUARDRAIL / BRIDGE RAIL CONNECTION	EACH	3
606 (13)	PARALLEL GUARDRAIL TERMINAL	EACH	2
610 (2)	DITCH LINING	TON	92
611 (1-3)	FILTER ROCK, TYPE III	CUBIC YARD	1,350
611 (1-4)	FILTER ROCK, TYPE IV	CUBIC YARD	1,990
611 (2-3)	RIPRAP, CLASS III	CUBIC YARD	5,660
611 (2-4)	RIPRAP, CLASS IV	CUBIC YARD	3,400
615 (1)	STANDARD SIGN	SQUARE FOOT	21.25
615 (5)	DELINEATOR, FLEXIBLE	EACH	4
618 (1)	SEEDING	ACRE	0.17
620 (1)	TOPSOIL	SQUARE YARD	800
630 (1)	GEOTEXTILE, SEPARATION	SQUARE YARD	9,100
639 (2)	COMMERCIAL DRIVEWAY	EACH	2
640 (1)	MOBILIZATION & DEMOBILIZATION	LUMP SUM	ALL REQ'D.
640 (4)	WORKER MEALS & LODGING, OR PER DIEM	LUMP SUM	ALL REQ'D.
641 (1)	EROSION & POLLUTION CONTROL ADMINISTRATION	LUMP SUM	ALL REQ'D.
641 (2)	TEMPORARY EROSION & POLLUTION CONTROL	CONTINGENT SUM	ALL REQ'D.
641 (6)	WITHHOLDING	CONTINGENT SUM	ALL REQ'D.
642 (1)	CONSTRUCTION SURVEYING	LUMP SUM	ALL REQ'D.
642 (3)	THREE PERSON SURVEY PARTY	LABOR HOUR	40
643 (2)	TRAFFIC MAINTENANCE	LUMP SUM	ALL REQ'D.
643 (3)	PERMANENT CONSTRUCTION SIGNS	LUMP SUM	ALL REQ'D.
643 (23)	TRAFFIC PRICE ADJUSTMENT	CONTINGENT SUM	ALL REQ'D.
643 (25)	TRAFFIC CONTROL	CONTINGENT SUM	ALL REQ'D.
644 (1)	FIELD OFFICE	LUMP SUM	ALL REQ'D.
644 (2)	FIELD LABORATORY	LUMP SUM	ALL REQ'D.
644 (6)	VEHICLES	LUMP SUM	ALL REQ'D.
645 (1)	TRAINING PROGRAM, 1 TRAINEE / APPRENTICE	LABOR HOUR	475
646 (1)	CPM SCHEDULING	LUMP SUM	ALL REQ'D.
650 (30A)	INTERPRETIVE KIOSK, TYPE A	EACH	1
670 (10)	METHYL METHACRYLATE PAVEMENT MARKINGS	LUMP SUM	ALL REQ'D.

BASIS OF ESTIMATE

ITEM NO.	ITEM	ESTIMATING FACTOR
203(6)	BORROW	1.85 TON/CUBIC YARD
301(1)	CRUSHED AGGREGATE BASE COURSE	1.9 TON/CUBIC YARD
401(1)	ASPHALT PAVEMENT	116 LBS/SQ YD-IN
402(2)	ASPHALT CEMENT	6% OF ITEM 401(1)
610 (2)	DITCH LINING	3,100 LBS/CY
611	RIPRAP	3,100 LBS/CY

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: M. VAN ALSTINE		STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES DESIGN & ENGINEERING SERVICES DIVISION-SOUTHEAST REGION	
		HYDER CAUSEWAY RECONSTRUCTION AND TRESTLE REPLACEMENT PROJECT 69070 ESTIMATE OF QUANTITIES & MISCELLANEOUS SUMMARIES	
		DESIGNED BY: D. BLACKBURN DRAWN BY: R. GRANTHAM PATH: Q:\Hyd\69070\Plans\setC1-C3 Estimates.dwg TAB: C1 rgrantham2Fri, 02/Sep/11 02:48PM	
REVISIONS NO. DATE DESCRIPTION		PROJECT DESIGNATION	YEAR
		69070	2011
		SHEET NO.	TOTAL SHEETS
		C1	58

REMOVAL OF STRUCTURES & OBSTRUCTIONS

NO.	ITEM	QUANTITY	REMARKS
1	TIMBER TRESTLE	1,256.5 FT	REMOVE AND DISPOSE OF, *PR* 34+44.5 TO STA. 47+10.15.
2	SECTION CONCRETE DECK	1 EA	14' WIDE x 27' LONG x 15" THICK, REMOVE & DISPOSE OF.
3	SECTION CONCRETE DECK	1 EA	14' WIDE x 27' LONG x 15" THICK, REMOVE & DISPOSE OF.
4	LOGS AND STUMPS	ALL	MOVE OUTSIDE TOE OF SLOPES AND KEEP WITHIN ROW FROM STA. 17+00 TO EOP LT. & RT.
5	6'x51' TIMBER APPROACH	ALL	REMOVE AND DISPOSE OF.
6	12 EACH TIMBER PILES & 6 EACH UPPER CROSS TIES	ALL	REMOVE AND DISPOSE OF.
7	24'x24' TIMBER APPROACH	ALL	REMOVE AND DISPOSE OF.
8	6'x50' GANGWAY	ALL	REMOVE AND DISPOSE OF.

MONUMENTS & CASES TO SET	
STATION	OFFSET
PT 44+18.57	0.00 RT

THESE MONUMENTS ARE TO BE SET AT APPROXIMATE STATIONS & OFFSETS DESCRIBED ENSURING THAT LINE OF SIGHT VISIBILITY BETWEEN PAIRS IS UNOBSTRUCTED.

MONUMENTS TO BE REPLACED	
NUMBER	NOTES
1042	EXISTING, NEEDS CASE

THESE MONUMENTS SHALL BE REFERENCED AND REPLACED AT THEIR ORIGINAL LOCATIONS.


GUARDRAIL SUMMARY

BEGIN		END		LENGTH (FT)	RAIL TYPE	REMARKS
STATION	OFFSET	STATION	OFFSET			
PR 33+71.5	11' LT.	*PR* 34+09.5	11' LT.	38	PARALLEL GUARDRAIL TERMINAL	OFFSET TO BACK OF RAIL
PR 34+09.5	11' LT.	*PR* 34+29.5	11' LT.	20	TRANSITION	OFFSEY TO BACK OF RAIL
PR 42+27.5	11.5' LT.	-	-	-	12" BOLLARD	
PR 33+71.5	11' RT.	*PR* 34+09.5	11' RT.	38	PARALLEL GUARDRAIL TERMINAL	OFFSET TO BACK OF RAIL
PR 34+09.5	11' RT.	*PR* 34+29.5	11' RT.	20	TRANSITION	OFFSET TO BACK OF RAIL
PR 42+25.5	11' RT.	*PR* 42+45.5	11' RT.	20	TRANSITION	OFFSET TO BACK OF RAIL, INSTALL STD. W-BEAM TERMINAL CONNECTOR - R=11"±
PR 24+06.31	28.12' LT.	-	-	-	6" BOLLARD	
PR 24+10.19	23.55' LT.	-	-	-	6" BOLLARD	

COMMERCIAL DRIVEWAY SUMMARY

STATION	WIDTH (FT)	LT RADIUS PNT STATION	LT RADIUS PNT OFFSET	LT RADIUS (FT)	RT RADIUS PNT STATION	RT RADIUS PNT OFFSET	RT RADIUS (FT)	REMARKS (SLOPES FROM EDGE ROAD)
PR 11+36.9	18	11+23.9	50	35	11+82.9	27	12	20' @50:1
PR 13+43.1	31	13+27.4	32	17	13+78.9	35	20	20' @50:1

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: M. VAN ALSTINE  DESIGNED BY: D. BLACKBURN DRAWN BY: R. GRANTHAM PATH: Q:\Hyd\69070\PlanSet\D1-D4 Summaries.dwg TAB: D1 bwbennett Wed, 21/Sep/11 10:21AM	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES DESIGN & ENGINEERING SERVICES DIVISION-SOUTHEAST REGION HYDER CAUSEWAY RECONSTRUCTION AND TRESTLE REPLACEMENT PROJECT 69070 MISCELLANEOUS SUMMARIES						
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: 69070 YEAR: 2011 SHEET NO.: D1 TOTAL SHEETS: 58
NO.	DATE	DESCRIPTION					

STORM DRAIN SUMMARY

PIPE No.	DIA. (IN.)	ENTRANCE			EXIT			LENGTH (FT.)	GRADE (%)	REMARKS
		INV. EL.	STATION	OFFSET	INV. EL.	STATION	OFFSET			
(P-3)	80	16.10	"PR" 19+78.7	30.2 RT	15.9	"PR" 20+45.3	30.4 LT	95.0	0.189	ALUMINUM CULVERT, 0.164" WALL.

DITCH ELEVATIONS

STATION	ELEVATION	REMARKS
"PR" LT	-	
11+00	21.16	V DITCH W/1.5:1 SLOPES
12+00	20.66	V DITCH W/1.5:1 SLOPES
12+50	20.41	V DITCH W/1.5:1 SLOPES
13+00	20.18	V DITCH W/1.5:1 SLOPES
14+00	19.68	V DITCH W/1.5:1 SLOPES

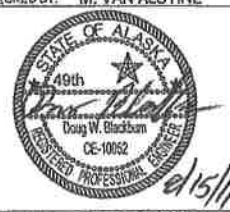
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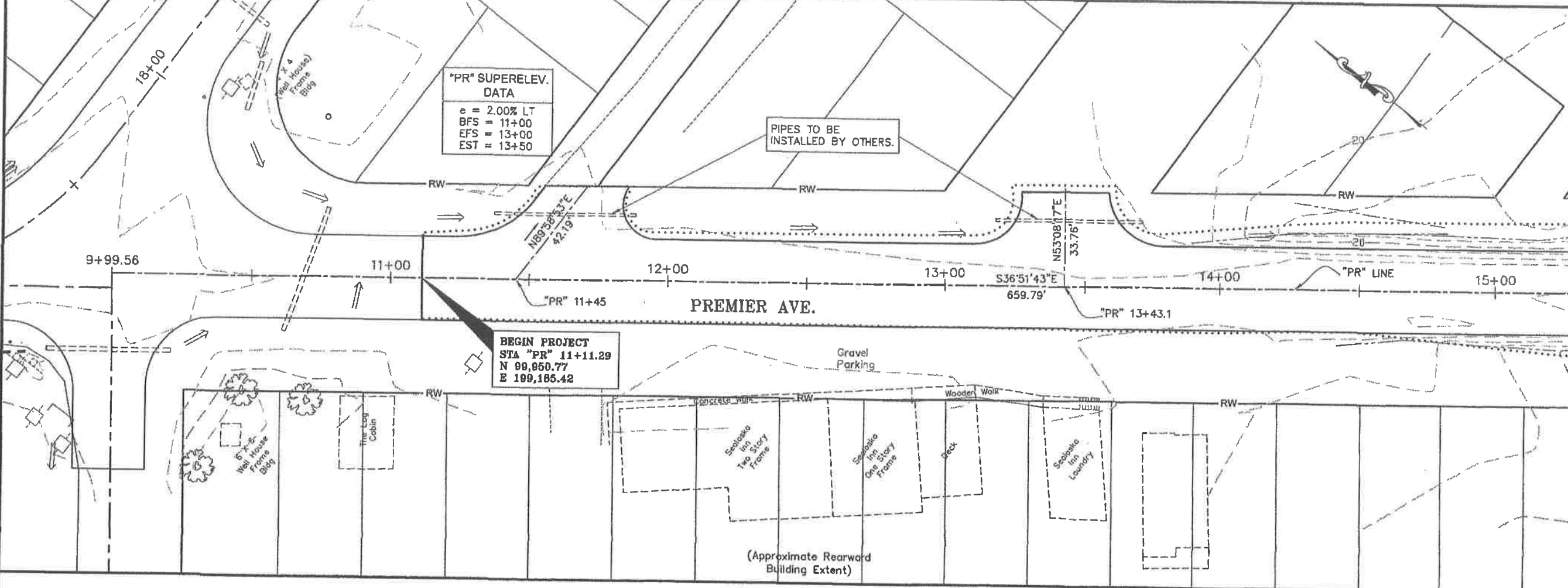
STATION	REMARKS
14+10 LT	

SIGN SUMMARY

SIGN No.	TYPE	FACING TRAFFIC	SIGN LEGEND	SIZE (IN.)		AREA (SQ. FT.)	# OF POSTS	POST SIZE	POST TYPE	REMARKS
				WD.	HT.					
1	W14-1	11+11 S	DEAD END	30	30	6.25	1	2.5	P.S.T.	
2	R2-1	12+11 S	SPEED LIMIT 20	30	36	7.50	1	2.5	P.S.T.	
6	R2-1	41+11 N	SPEED LIMIT 20	30	36	7.50	1	2.5	P.S.T.	
						21.25			TOTAL	

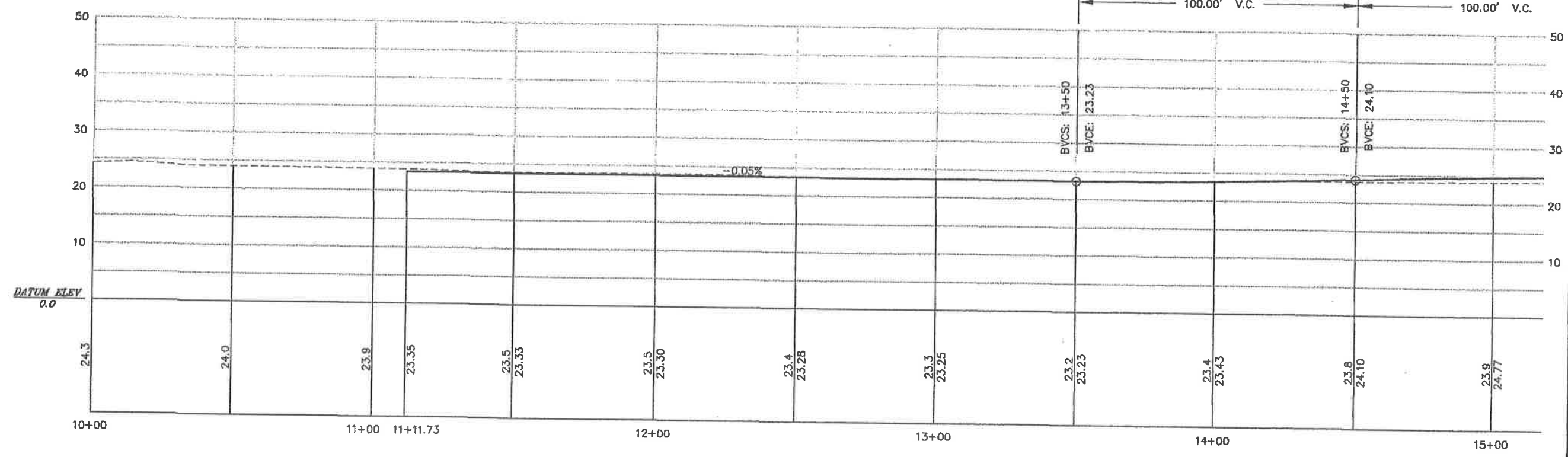
DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

<p>CHECKED BY: M. VAN ALSTINE</p>  <p>DESIGNED BY: D. BLACKBURN DRAWN BY: R. GRANTHAM</p> <p>PATH: Q:\Hyd\69070\Plans\6D1-04 Summaries.dwg TAB: D2 bvbennett Wed, 10/Aug'11 01:18PM</p>	<p>STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES DESIGN & ENGINEERING SERVICES DIVISION-SOUTHEAST REGION</p> <p>HYDER CAUSEWAY RECONSTRUCTION AND TRESTLE REPLACEMENT PROJECT 69070</p> <p>MISCELLANEOUS SUMMARIES</p>																												
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="3">REVISIONS</th> <th>PROJECT DESIGNATION</th> <th>YEAR</th> <th>SHEET NO.</th> <th>TOTAL SHEETS</th> </tr> <tr> <th>NO.</th> <th>DATE</th> <th>DESCRIPTION</th> <th>69070</th> <th>2011</th> <th>D2</th> <th>58</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table>	REVISIONS			PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS	NO.	DATE	DESCRIPTION	69070	2011	D2	58															
REVISIONS			PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS																							
NO.	DATE	DESCRIPTION	69070	2011	D2	58																							




LOW POINT ELEV = 23.23
 LOW POINT STA = 13+52.81
 PVI STA = 14+00
 PVI ELEV = 23.20
 A.D. = 1.85
 K = 53.99

HIGH POINT ELEV = 24.99
 HIGH POINT STA = 15+48.44
 PVI STA = 15+00
 PVI ELEV = 25.00
 A.D. = -1.83
 K = 54.69



PLAN LEGEND

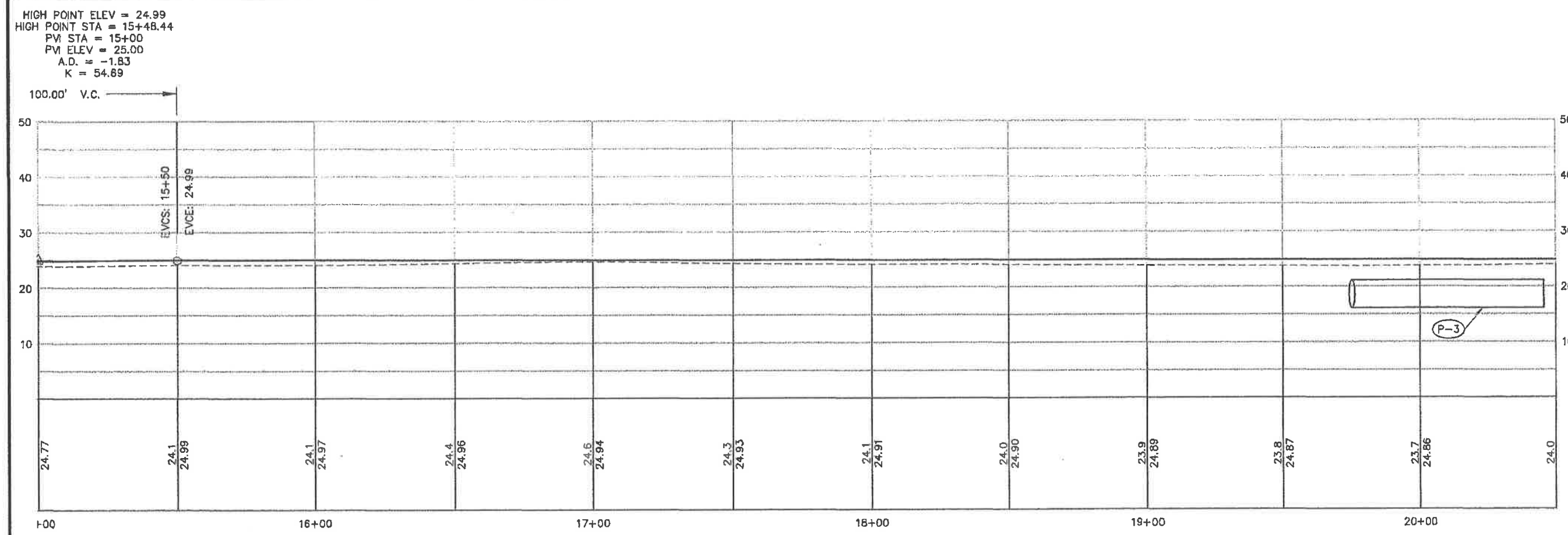
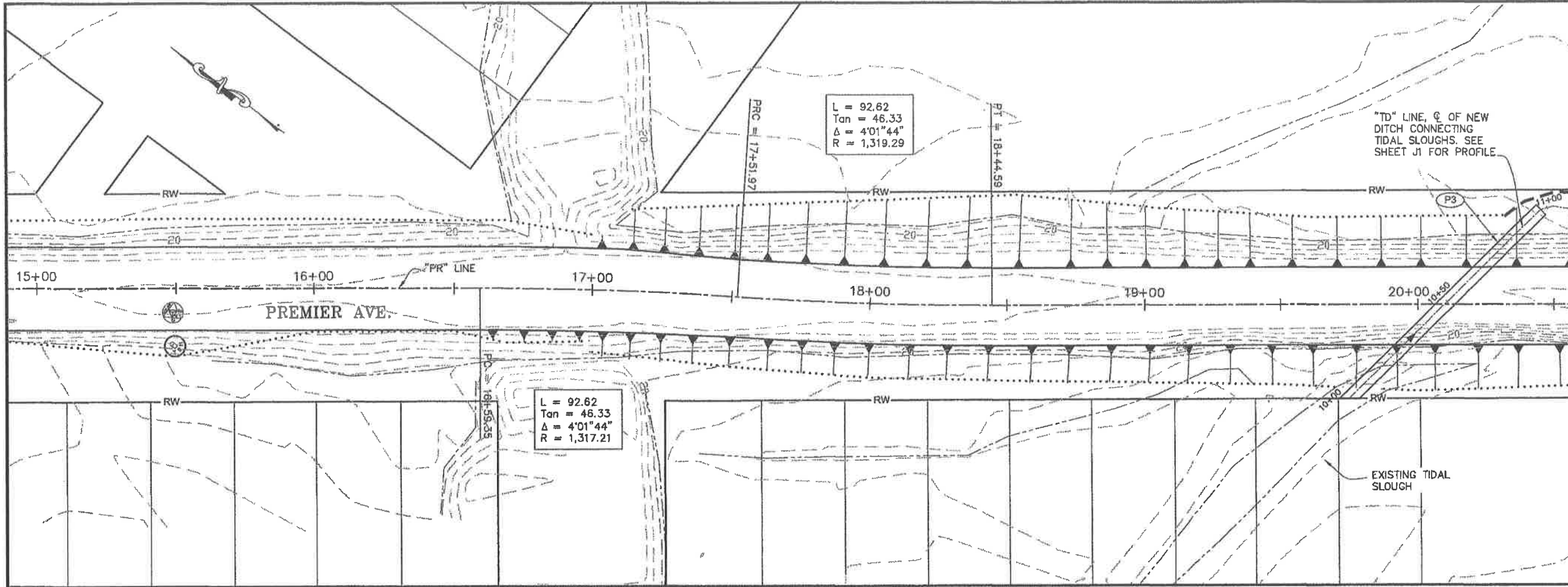
CHECKED BY: M. Van Alstine

 DESIGNED BY: D. Blackburn
 DRAWN BY: B. Bennett

STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 & PUBLIC FACILITIES - SOUTHEAST REGION
**CAUSEWAY RECONSTRUCTION
 & TRESTLE REPLACEMENT**
 Project No. 69070

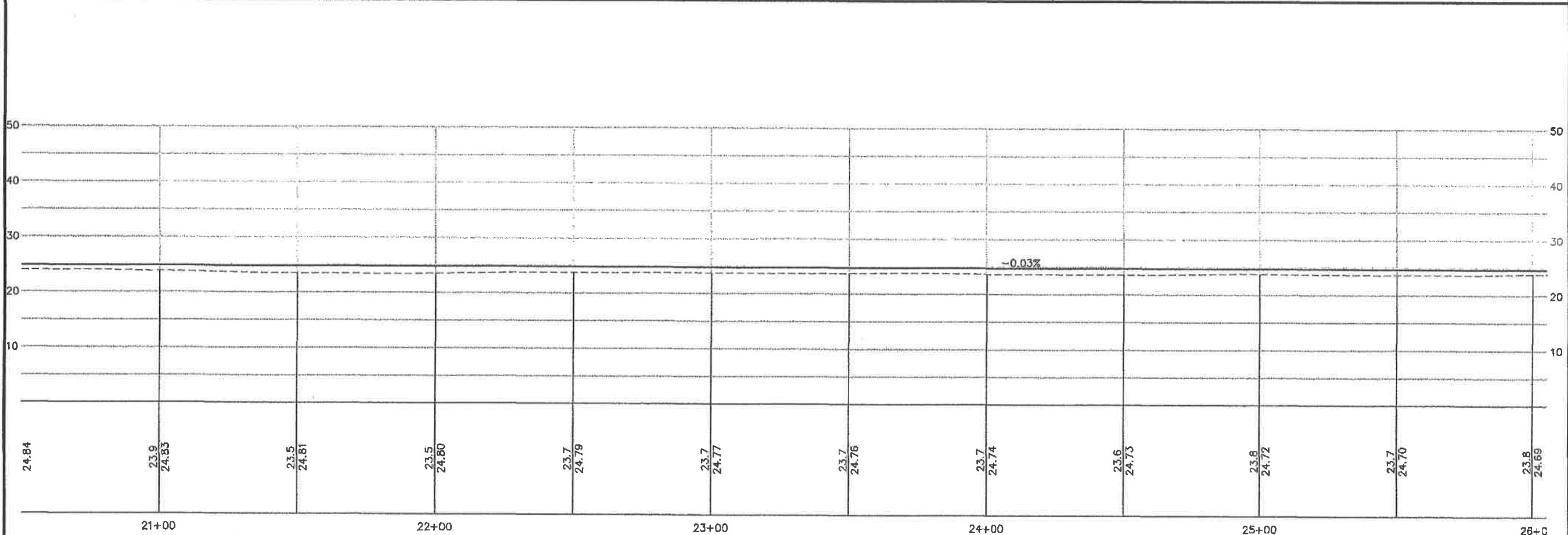
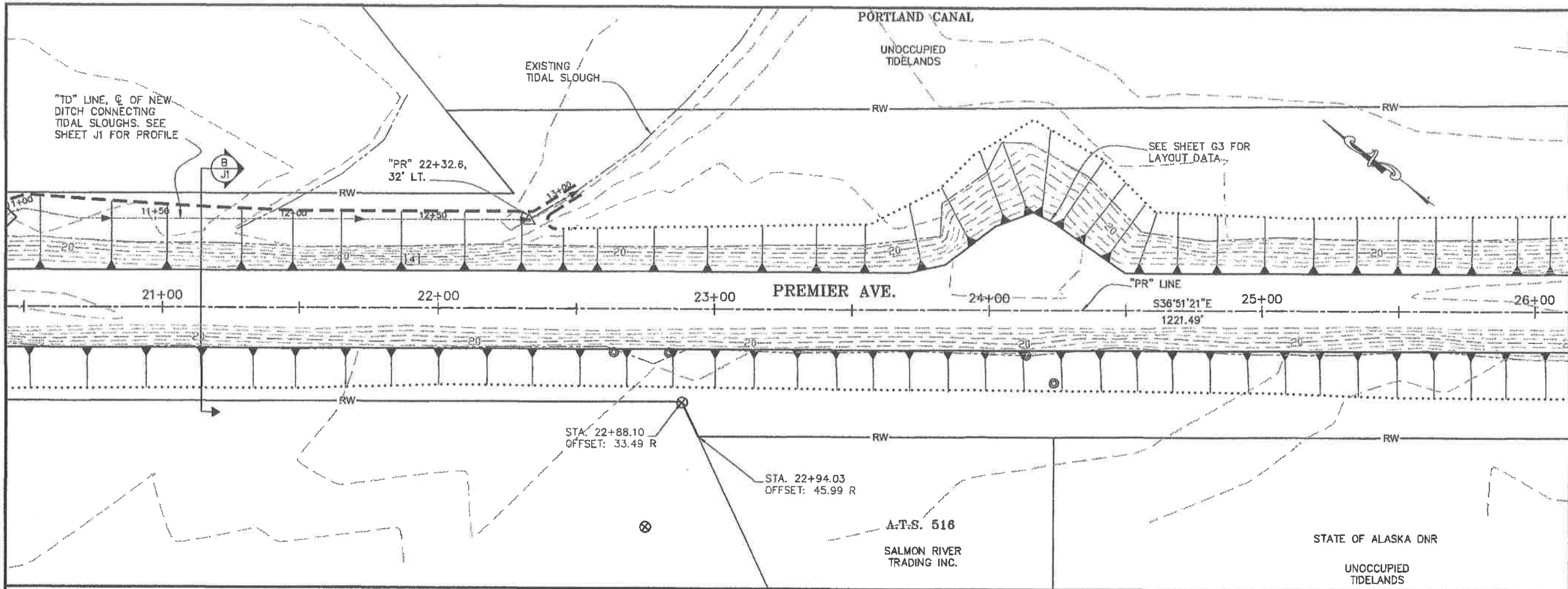
PLAN & PROFILE
 STA. 10+00 TO 15+00

PROJECT DESIGNATION	
69070	
STATE	YEAR
ALASKA	2011
SHEET NUMBER	TOTAL SHEETS
F1	58

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS



DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS



DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

PATH:Q:\HYD\6907\PLANSET\F1-F8 PLAN A PROF.DWG

BENNETT, BERT W (DOT)
 TAB: F3 Friday, July 29, 2005 11:27:44 AM

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES - SOUTHEAST REGION
CAUSEWAY RECONSTRUCTION & TRESTLE REPLACEMENT
 Project No. 69070

UNOCCUPIED TIDELANDS

PLAN LEGEND

CHECKED BY: M. Van Alstine

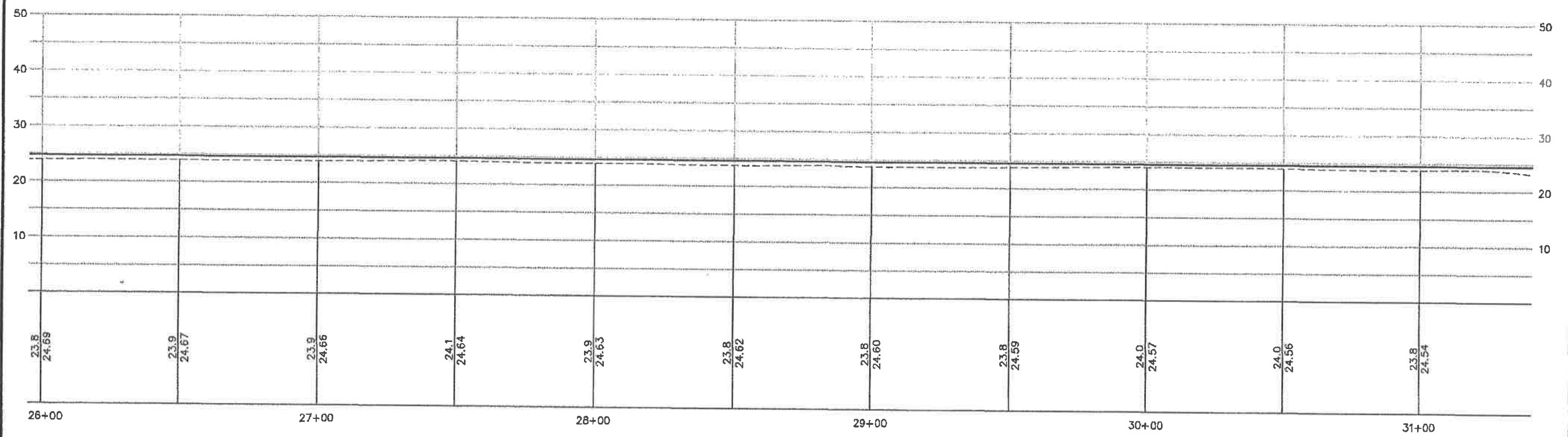
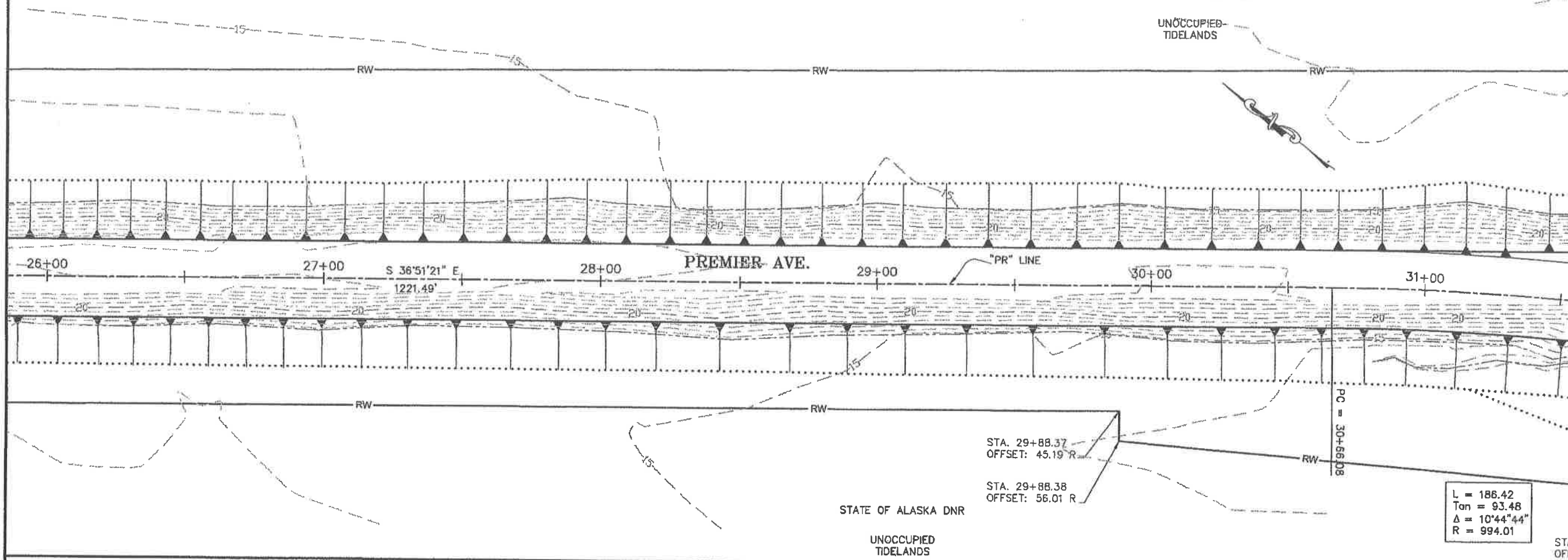
DESIGNED BY: D. Blackbum
 DRAWN BY: B. Bennett

STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES - SOUTHEAST REGION
CAUSEWAY RECONSTRUCTION & TRESTLE REPLACEMENT
 Project No. 69070

PLAN & PROFILE
 STA. 20+00 TO 26+00

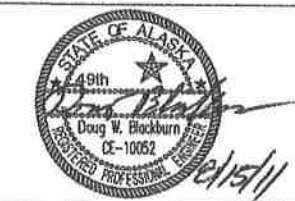
PROJECT DESIGNATION	
69070	
STATE	YEAR
ALASKA	2011
SHEET NUMBER	TOTAL SHEETS
F3	58

No.	DATE	DESCRIPTION



PLAN LEGEND

CHECKED BY: M. Van Aletine



DESIGNED BY: D. Blackburn

DRAWN BY: B. Bennett

STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 & PUBLIC FACILITIES - SOUTHEAST REGION
**CAUSEWAY RECONSTRUCTION
 & TRESTLE REPLACEMENT**
 Project No. 69070

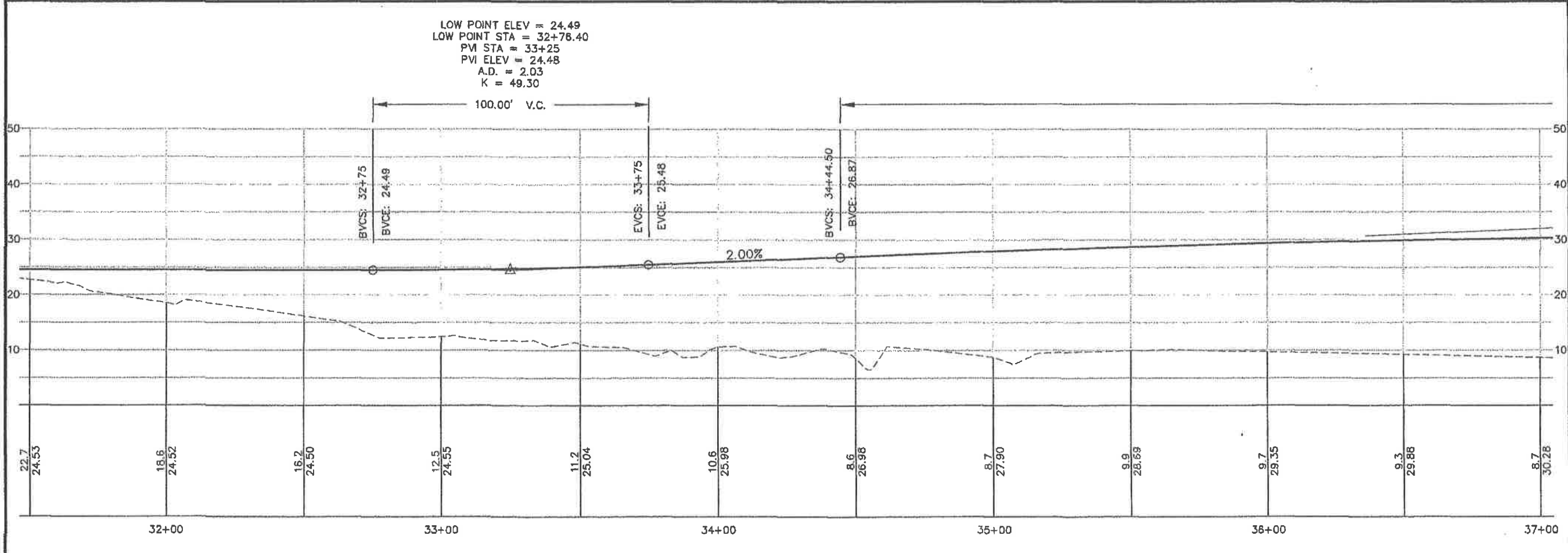
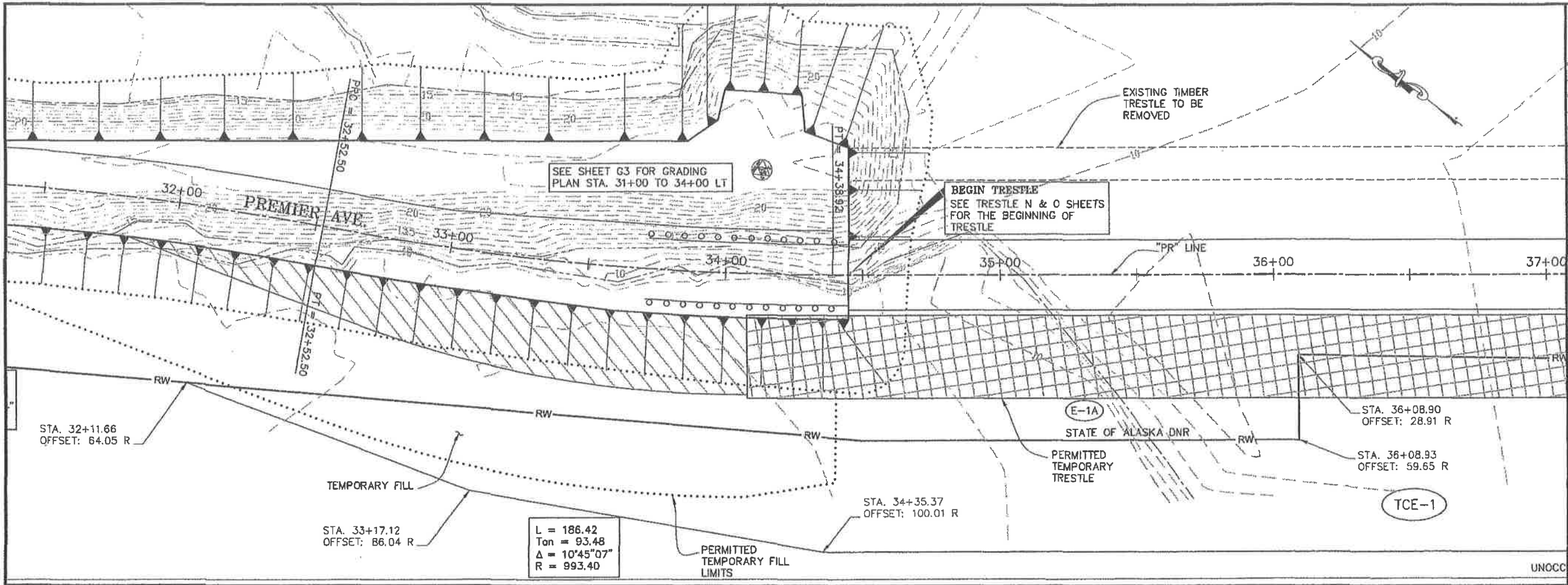
PLAN & PROFILE
 STA. 26+00 TO 30+50

PROJECT DESIGNATION	
69070	
STATE	YEAR
ALASKA	2011
SHEET NUMBER	TOTAL SHEETS
F4	58

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

RECORD OF REVISIONS

No.	DATE	DESCRIPTION



PLAN LEGEND

CHECKED BY: M. Van Alstine

DESIGNED BY: D. Blackburn
 DRAWN BY: B. Bennett

STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 & PUBLIC FACILITIES - SOUTHEAST REGION
**CAUSEWAY RECONSTRUCTION
 & TRESTLE REPLACEMENT**
 Project No. 69070

**PLAN & PROFILE
 STA. 31+50 TO 37+00**

PROJECT DESIGNATION

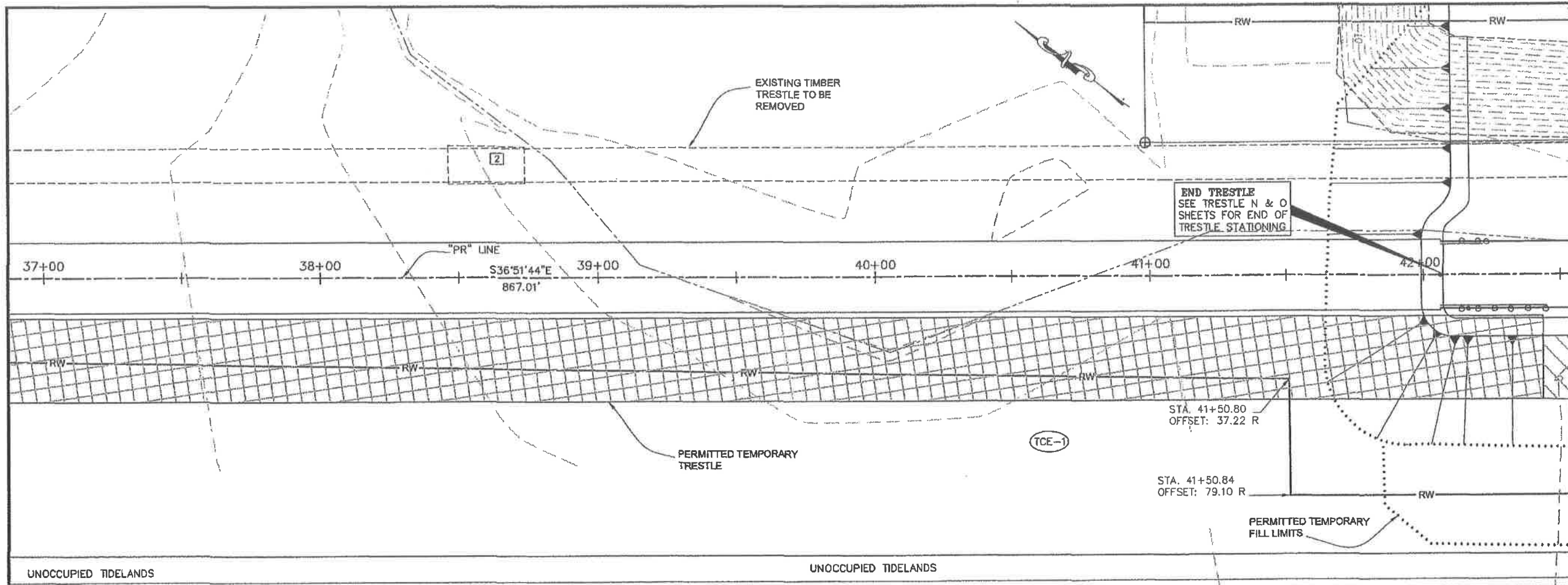
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STATE	YEAR
ALASKA	2011
SHEET NUMBER	TOTAL SHEETS
F5	58

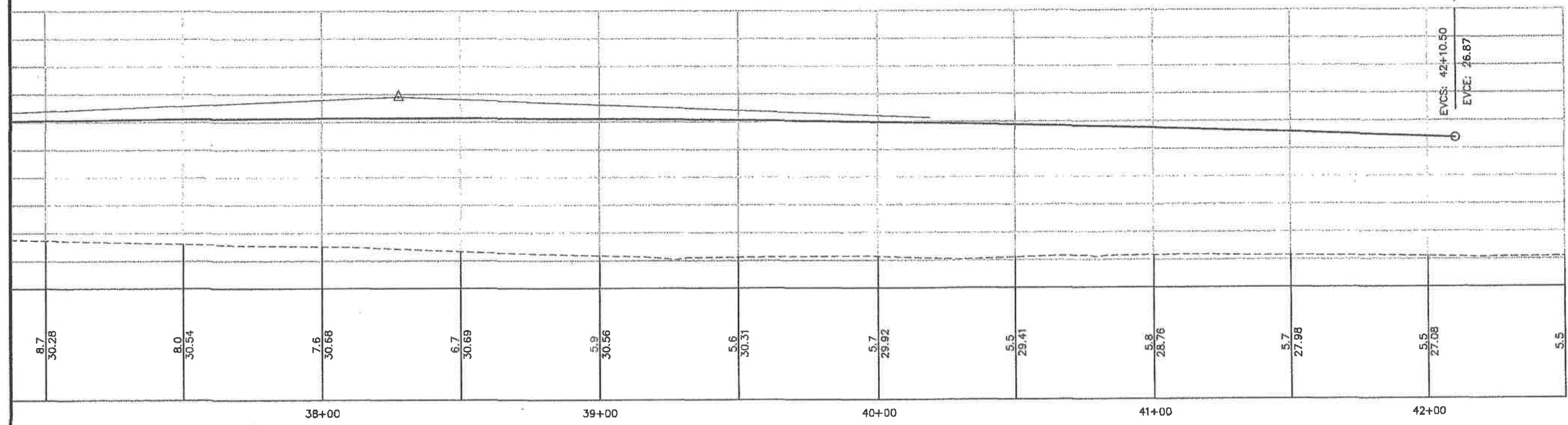
DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

PATH: Q:\HYD\69070\PLANSET\F1-F8 PLAN & PROF.DWG
 BENNETT, BERT W (DOT)
 TAB: F6 Friday, July 29, 2005 11:27:44 AM
 ADDENDUM NUMBER
 ATTACHMENT NUMBER
 RECORD OF REVISIONS


No.	DATE	DESCRIPTION



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 HIGH POINT STA = 38+27.50
 PM STA = 38+27.50
 PM ELEV = 34.53
 A.D. = -4.00
 K = 191.50
 766.00' V.C.



PLAN LEGEND

CHECKED BY: M. Van Alstine


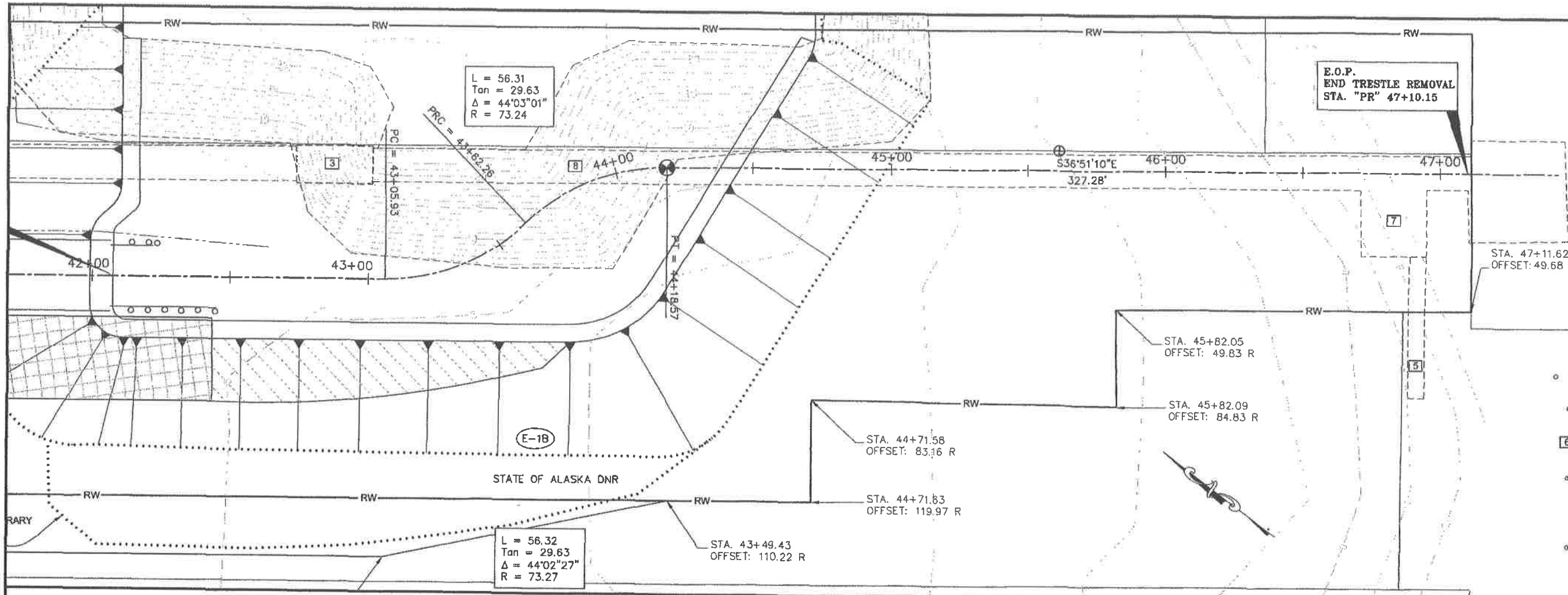
DESIGNED BY: D. Blackburn
 DRAWN BY: B. Bennett

STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 & PUBLIC FACILITIES - SOUTHEAST REGION
**CAUSEWAY RECONSTRUCTION
 & TRESTLE REPLACEMENT**
 Project No. 69070

PLAN & PROFILE
 STA. 37+00 TO 42+50

PROJECT DESIGNATION	
69070	
STATE	YEAR
ALASKA	2011
SHEET NUMBER	TOTAL SHEETS
F6	58

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS



PATH:Q:\HYD\69070\PLANSET\F1-F8 PLAN & PROF.DWG

BENNETT, BERT W (DOT)
TAB: F7 Friday, July 29, 2005 11:27:44 AM

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

STA. 47+11.62
OFFSET: 49.68 R

STA. 45+82.05
OFFSET: 49.83 R

STA. 45+82.09
OFFSET: 84.83 R

STA. 44+71.58
OFFSET: 83.16 R

STA. 44+71.83
OFFSET: 119.97 R

STA. 43+49.43
OFFSET: 110.22 R

E-1B

STATE OF ALASKA DNR

PLAN LEGEND

CHECKED BY: M. Van Aalstine

DESIGNED BY: D. Blackburn

DRAWN BY: B. Bennett

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES - SOUTHEAST REGION
**CAUSEWAY RECONSTRUCTION
& TRESTLE REPLACEMENT**
Project No. 69070

PLAN & PROFILE
STA. 41+00 TO 46+50

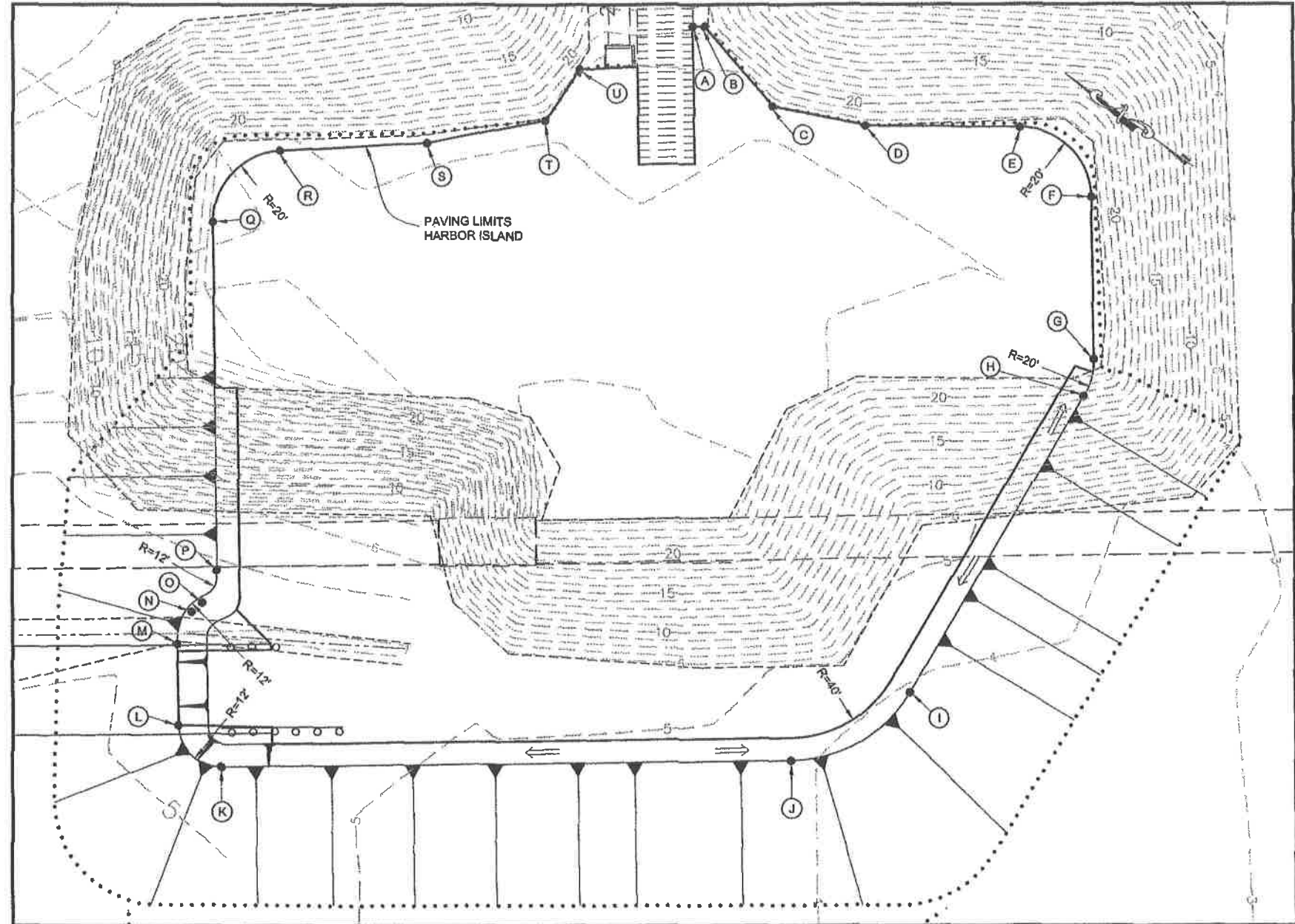
PROJECT DESIGNATION

69070

STATE	YEAR
ALASKA	2011
SHEET NUMBER	TOTAL SHEETS
F7	58

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

LAYOUT DATA		
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(D)	97,393.14	201,247.91
(E)	97,358.97	201,273.82
(F)	97,328.97	201,269.81
(G)	97,301.46	201,233.11
(H)	97,297.54	201,222.93
(I)	97,288.86	201,125.62
(J)	97,304.50	201,089.98
(K)	97,434.30	200,993.91
(L)	97,451.09	200,995.08
(M)	97,464.94	201,013.55
(N)	97,467.06	201,023.35
(O)	97,467.06	201,027.20
(P)	97,468.32	201,036.99
(Q)	97,527.39	201,115.78
(R)	97,524.03	201,143.27
(S)	97,491.28	201,160.99
(T)	97,467.94	201,194.93
(U)	97,468.55	201,212.43



PATH:Q:\HYD\09070\PLANSET\G1-03 GRADING PLAN.DWG		
BENNETT, BERT W (DOT)		
TAB: G1 Friday, July 29, 2006 11:27:44 AM		
ADDENDUM NUMBER		
ATTACHMENT NUMBER		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION

PLAN LEGEND

CHECKED BY: M. Van Aistine



DESIGNED BY: D. Blackburn

DRAWN BY: B. Bennett

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES - SOUTHEAST REGION
**CAUSEWAY RECONSTRUCTION
& TRESTLE REPLACEMENT**
Project No. 69070

**HARBOR ISLAND
LAYOUT PLAN**

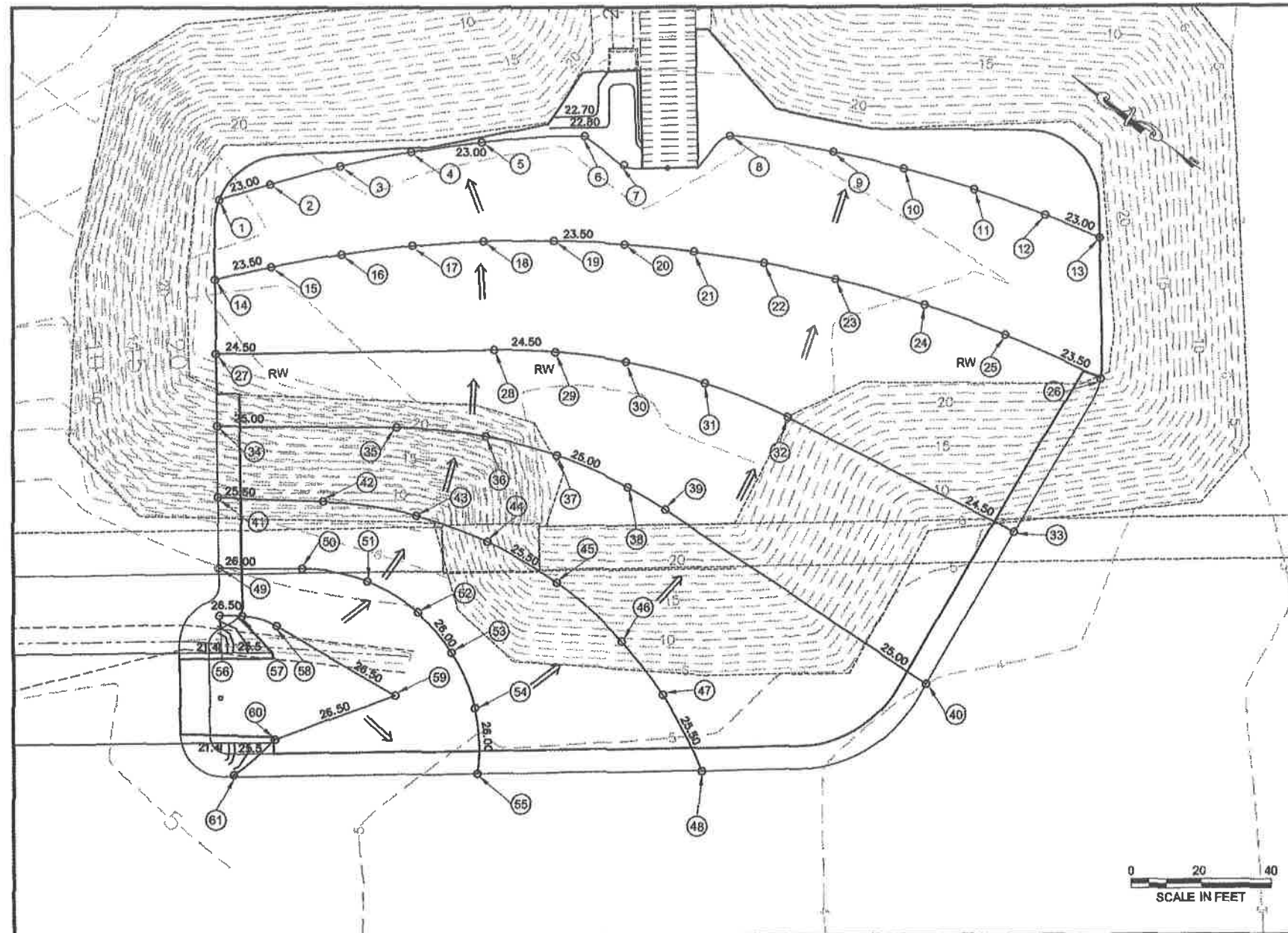
PROJECT DESIGNATION	
69070	
STATE	YEAR
ALASKA	2011
SHEET NUMBER	TOTAL SHEETS
G1	58

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

ADDENDUM NUMBER		
ATTACHMENT NUMBER		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION

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5	97480.34	201179.69
6	97457.67	201198.23
7	97443.86	201198.53
8	97424.15	201222.90
9	97397.96	201236.46
10	97378.96	201244.50
11	97359.29	201251.62
12	97338.74	201257.57
13	97322.80	201261.45
14	97518.52	201103.94
15	97507.79	201116.28
16	97493.78	201130.89
17	97479.03	201144.59
18	97463.63	201157.42
19	97447.54	201169.30
20	97430.80	201180.32
21	97413.35	201190.48
22	97395.29	201199.65
23	97376.44	201207.90
24	97351.86	201216.82
25	97328.28	201223.55
26	97299.31	201229.51
27	97506.02	201087.27
28	97443.15	201134.64
29	97428.78	201144.28
30	97410.99	201153.97
31	97389.31	201162.44
32	97364.58	201166.40
33	97293.65	201180.29
34	97493.85	201071.04
35	97452.70	201100.67
36	97430.79	201113.59
37	97411.38	201121.06
38	97389.91	201125.75
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PT. NO	N	E
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41	97481.82	201055.00
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43	97433.52	201083.91
44	97413.02	201089.90
45	97390.47	201092.06
46	97365.91	201089.69
47	97347.97	201084.41
48	97326.18	201073.74
49	97469.89	201039.12
50	97450.84	201052.92
51	97433.90	201060.88
52	97417.27	201062.27
53	97402.89	201058.80
54	97388.54	201050.03
55	97377.16	201035.52
56	97461.93	201028.46
57	97458.82	201032.12
58	97447.13	201035.76
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PLAN LEGEND

CHECKED BY: M. Van Alstine



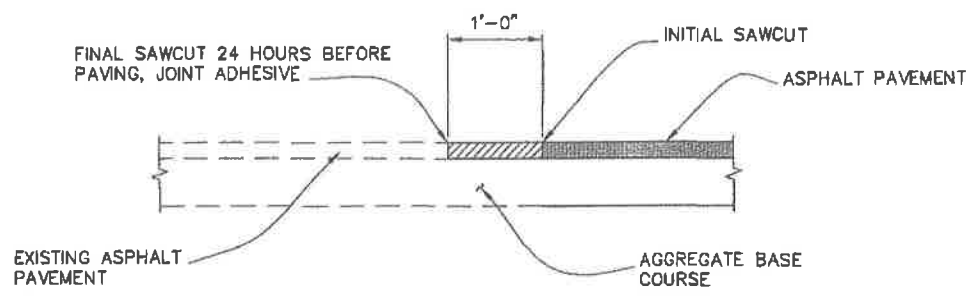
DESIGNED BY: D. Blackburn

DRAWN BY: B. Bennett

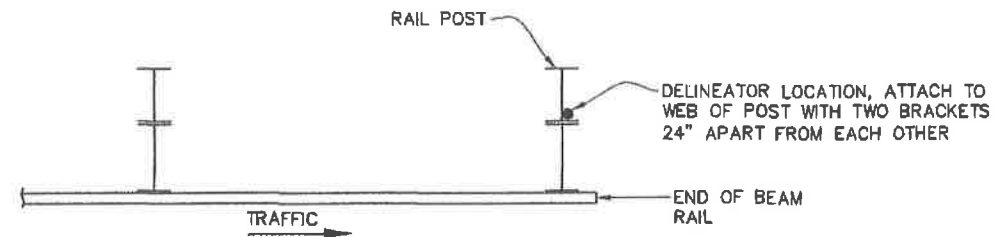
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES - SOUTHEAST REGION
**CAUSEWAY RECONSTRUCTION
& TRESTLE REPLACEMENT**
Project No. 69070
**HARBOR ISLAND
FINISH GROUND
CONTOURS PLAN**

PROJECT DESIGNATION	
69070	
STATE	YEAR
ALASKA	2011
SHEET NUMBER	TOTAL SHEETS
G2	58

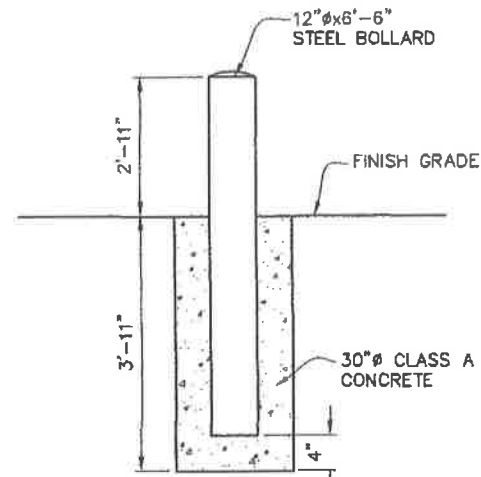
DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS



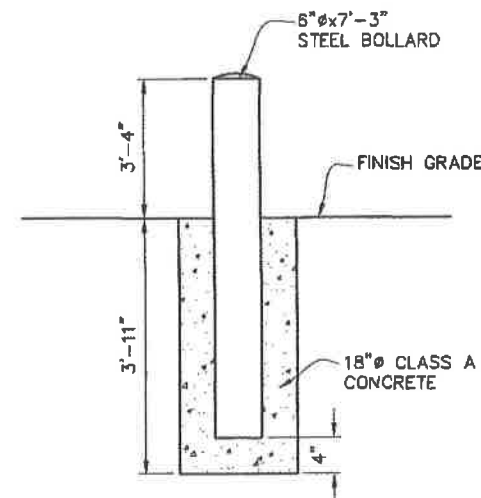
PAVEMENT MATCH DETAIL



DELINEATOR ATTACHMENT DETAIL



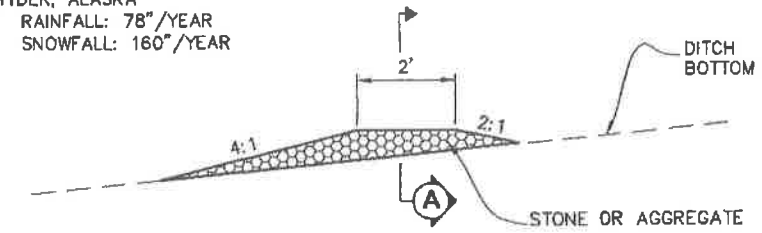
12 INCH BOLLARD DETAIL



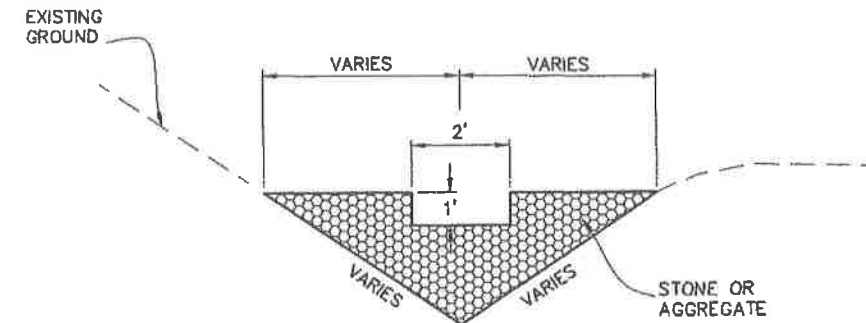
6 INCH BOLLARD DETAIL

EROSION & SEDIMENT CONTROL NOTES:

- HYDER, ALASKA
RAINFALL: 78"/YEAR
SNOWFALL: 160"/YEAR

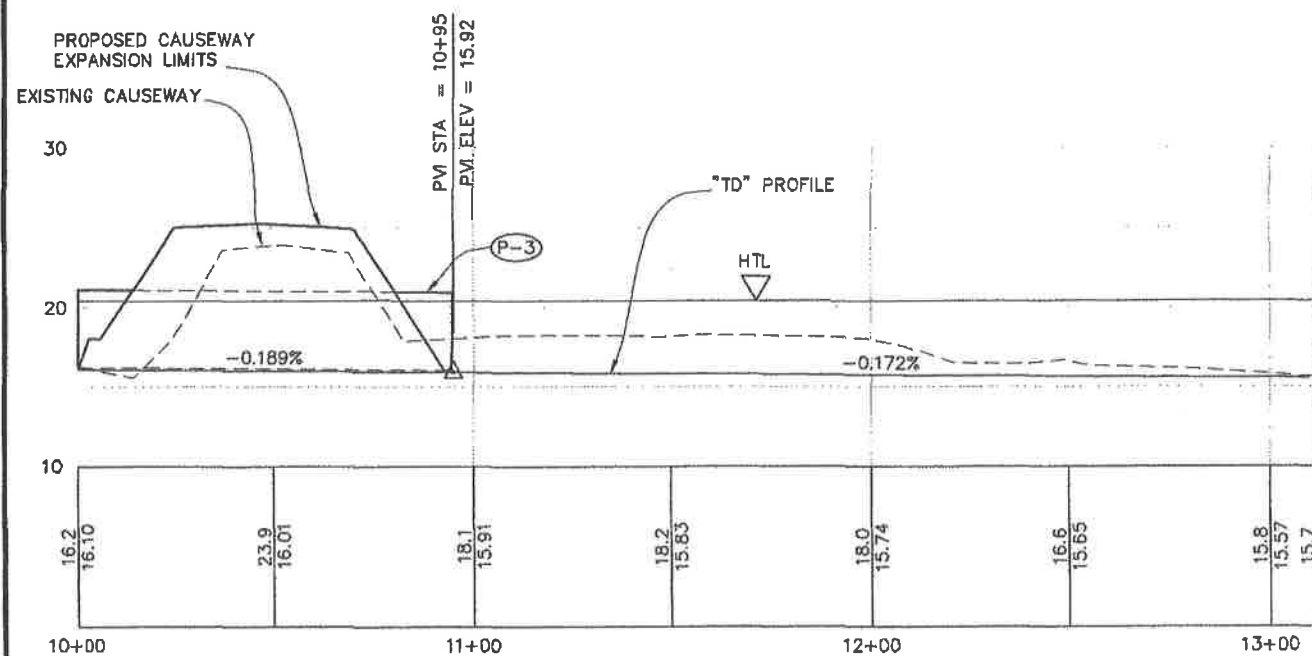


PROFILE SECTION

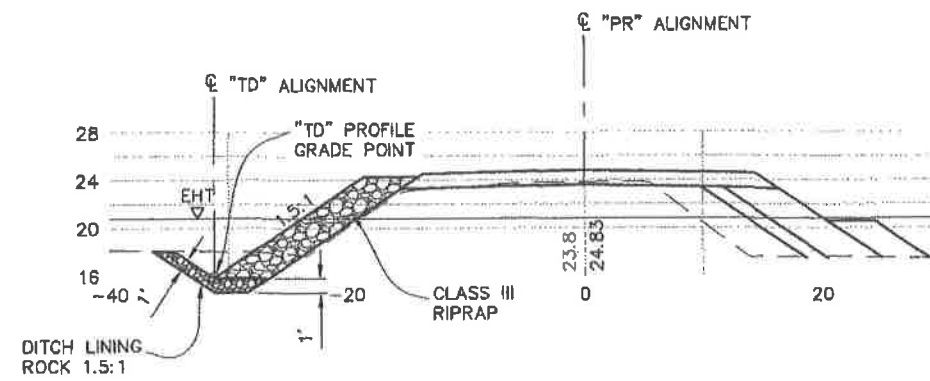


SECTION

CHECK DAM DETAIL



EFH MITIGATION PIPE



B

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

ADDENDUM NUMBER		
ATTACHMENT NUMBER		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION

PLAN LEGEND

CHECKED BY: M. Von Aistien



DESIGNED BY: D. Blackburn

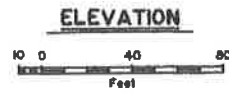
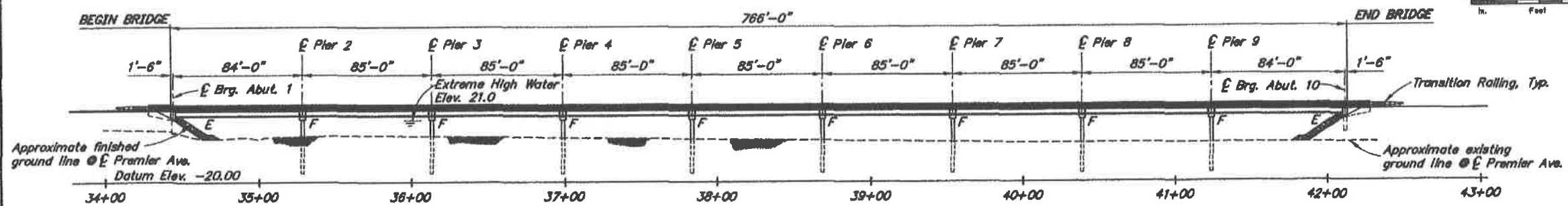
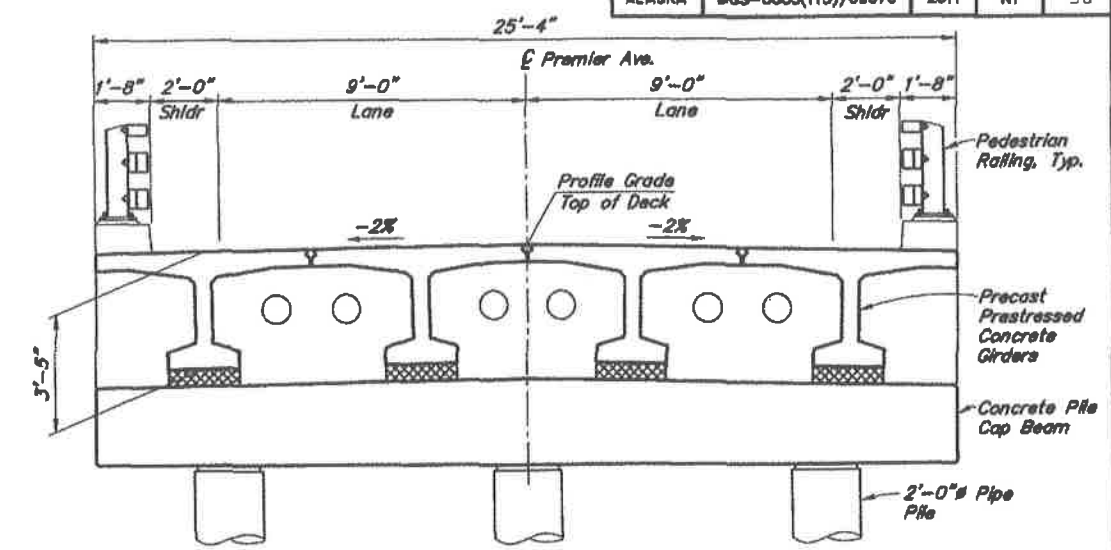
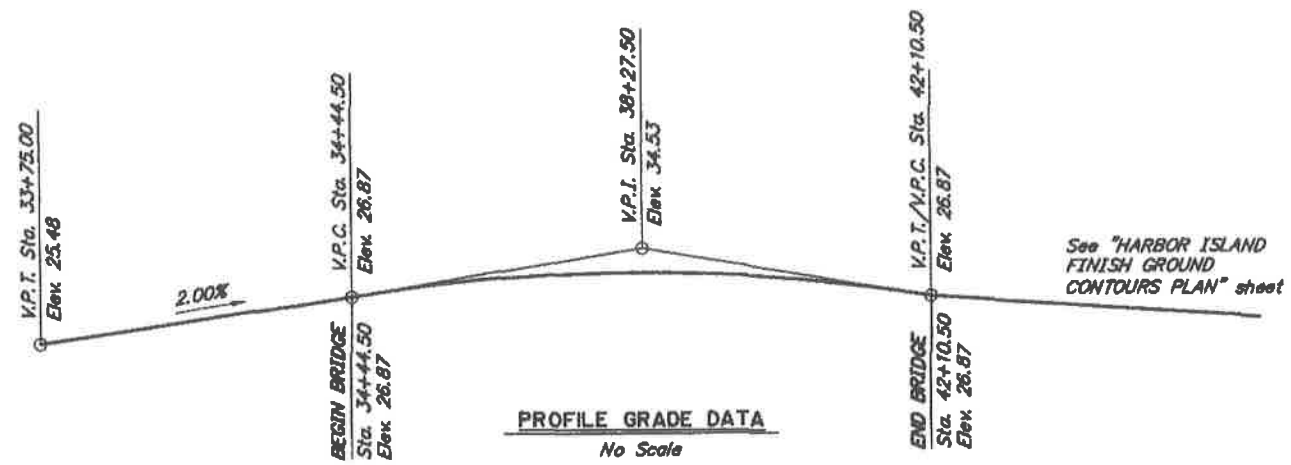
DRAWN BY: B. Bennett

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES - SOUTHEAST REGION
**CAUSEWAY RECONSTRUCTION
& TRESTLE REPLACEMENT**
Project No. 69070

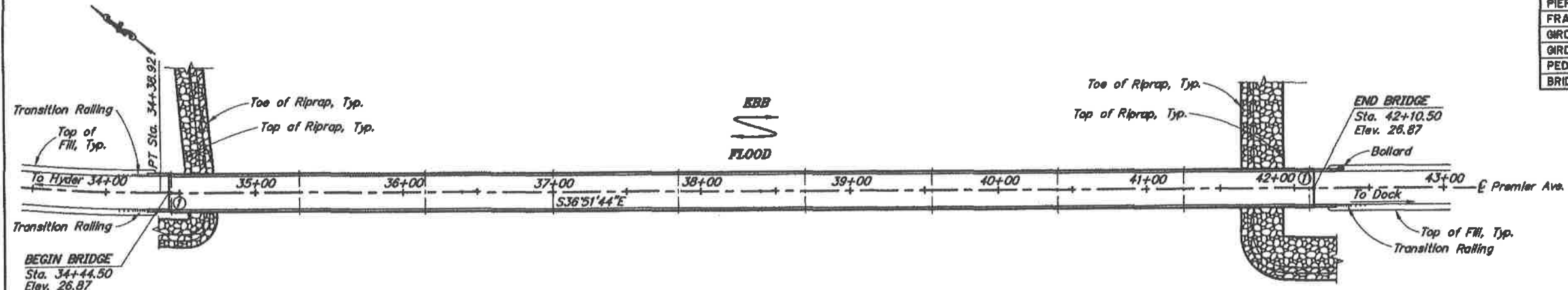
**MISCELLANEOUS
DETAILS**

PROJECT DESIGNATION	
69070	
STATE	YEAR
ALASKA	2011
SHEET NUMBER	TOTAL SHEETS
J1	58

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	MGS-0003(113)/89070	2011	N1	58



BRIDGE DRAWING INDEX	
TITLE	DWG. NO.
GENERAL LAYOUT	NI
SITE PLAN	N2
ABUTMENT I	N3
ABUTMENT IO	N4
WINGWALLS	N5
PIERS	N6
FRAMING PLAN AND TYPICAL SECTION	N7
GIRDERS - SPANS 1 & 9	N8
GIRDERS - SPANS 2 - 8	N9
PEDESTRIAN RAILING	N10
BRIDGE RAIL TRANSITION	N11



CURVE DATA
 $\Delta = 100^\circ 5' 34''$
 $L = 184.28'$
 $T = 92.38'$
 $R = 1046.15'$

ALTERNATE A - CONCRETE TRESTLE

NOTES:
 ① Denotes location of Bridge No. Plate.

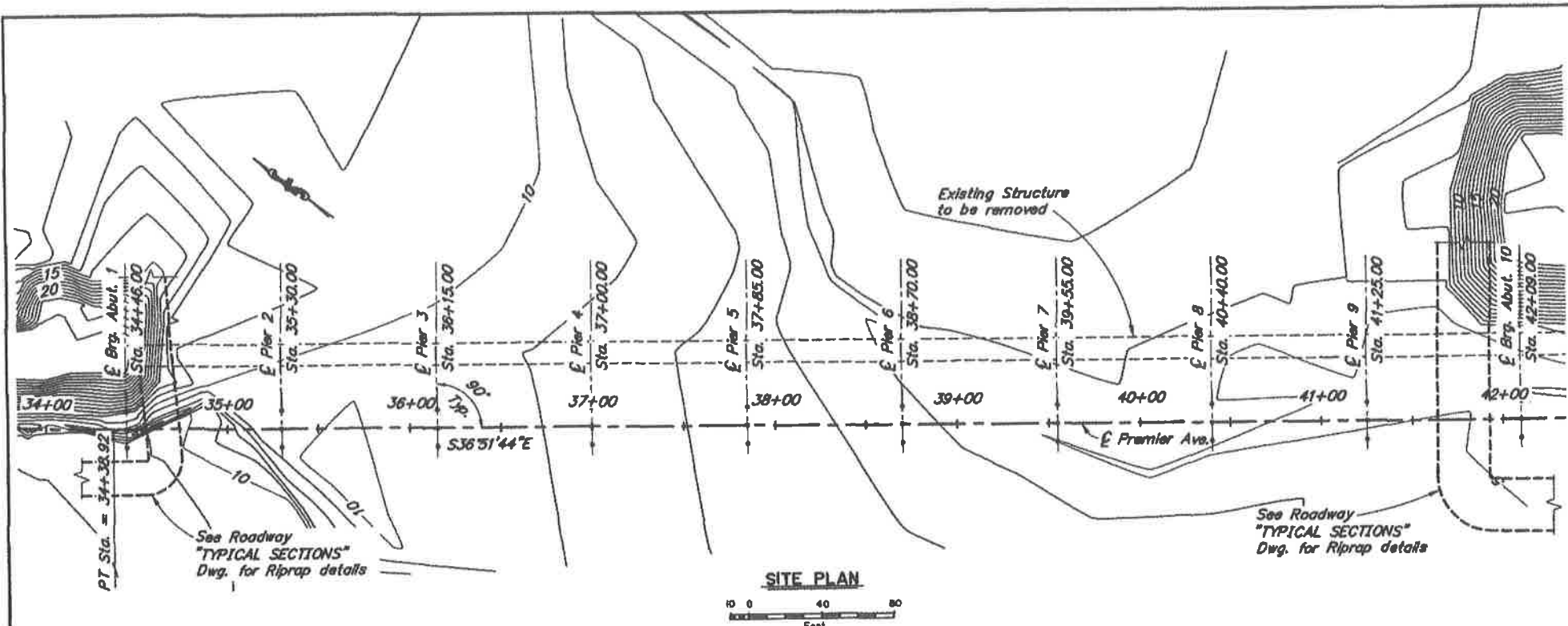
DESIGNED BY: Elmer Marx	CHECKED BY: Travis Arndt	LAYOUT BY: Elmer Marx	CHECKED BY: Travis Arndt
DRAWN BY: Sam Sallie Jr	CHECKED BY: Elmer Marx	SPECIFICATIONS BY: Elmer Marx	P S & E COMPARED: Travis Arndt
QUANTITIES BY: Elmer Marx	CHECKED BY: Travis Arndt	APPROVAL RECOMMENDED BY: George Imbison	FOR: Rich Pratt

STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 AND PUBLIC FACILITIES
 BRIDGE SECTION

HYDER HARBOR TRESTLE
 PREMIER AVENUE
 GENERAL LAYOUT

BRIDGE NO. 1238
 DWG. NO. NI

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	MOS-0003(113)/09070	2011	N2	58



GENERAL NOTES

DESIGN:..... AASHTO LRFD Bridge Design Specifications, 2010 edition, with latest interim specifications.
 Seismic design per AASHTO Guide Specifications for LRFD Seismic Bridge Design, 2009

LIVE LOAD:..... HL-93

DEAD LOAD:..... Includes 50 psf for all wearing surfaces.

SEISMIC PARAMETERS:..... PGA = 0.05
 SS = 0.11
 S1 = 0.09
 Site Class = E
 Liquefaction Potential = Low
 AASHTO 7% probability of exceedance in 75 years.

REINFORCEMENT:..... ASTM A706, Grade 60, Fy = 60,000 psi
 Space reinforcement evenly unless otherwise noted.
 ASTM A970, Class HA Headed bars.

CONCRETE:..... Class A Concrete unless otherwise noted, f_c = 4000 psi

PRESTRESSED CONCRETE:..... See "GIRDERS" Dwg.

STRUCTURAL STEEL:..... ASTM A709, GR.36T3, Fy = 36,000 psi, unless noted otherwise
 Galvanize all structural steel in accordance with AASTHO M111 unless shown otherwise.

STRUCTURAL STEEL PILING:..... API 5L X52 PSL2, Fy = 52,000 psi for Pipe Piles.
 Closed-End Conical Pile Tip reinforcing is required.

ITEM NO.	ITEM	PAY UNIT	EST UNIT	SUBST.	SUPERST.	TOTAL
202(1)	Removal of Structures and Obstructions	LS	LS	All Req'd	All Req'd	All Req'd
205(3)	Structural Fill	CY	CY	515	—	515
501(1)	Class A Concrete	LS	CY	256.2	1,33.0	389.2
501(7)	Precast Concrete Member (84'-6" Bulb-Teo Girder)	EA	EA	—	36	36
503(1)	Reinforcing Steel	LS	LBS	58,275	—	58,275
503(2)	Epoxy-Coated Reinforcing Steel	LS	LBS	14,570	18,650	33,220
505(5)	Furnish Structural Steel Piles (2'-0"x0.5" Pipe)	LF	LF	3,436.2	—	3,436.2
505(8)	Drive Structural Steel Piles (2'-0"x0.5" Pipe)	EA	EA	30	—	30
505(11)	Pile Restrike	DAY	DAY	30	—	30
507(2)	Pedestrian Rolling	LF	LF	—	1592.0	1592.0
606(12)	Guardrail / Bridge Rail Connection	EA	EA	—	3	3

Item numbers are for reference only. Quantities shown are not necessarily the pay quantities nor the total quantity of the particular item.

LOCATION	PILE TYPE	DRIVING CRITERIA			DESIGN DATA		
		MINIMUM PENETRATION (ft)	ESTIMATED PILE TIP ELEVATION	DRIVING RESISTANCE (k)	STRENGTH FACTORED LOAD (k)	NOMINAL RESISTANCE (k)	RESISTANCE FACTOR, φ
Abutment 1	2'-0"ØX1/2" Pipe	70.0	-78	500	325	500	0.65
Pier 2	2'-0"ØX1/2" Pipe	54.0	-93	700	455	700	0.65
Pier 3	2'-0"ØX1/2" Pipe	54.0	-93	700	455	700	0.65
Pier 4	2'-0"ØX1/2" Pipe	54.0	-94	700	455	700	0.65
Pier 5	2'-0"ØX1/2" Pipe	54.0	-95	700	455	700	0.65
Pier 6	2'-0"ØX1/2" Pipe	54.0	-96	700	455	700	0.65
Pier 7	2'-0"ØX1/2" Pipe	54.0	-97	700	455	700	0.65
Pier 8	2'-0"ØX1/2" Pipe	54.0	-97	700	455	700	0.65
Pier 9	2'-0"ØX1/2" Pipe	54.0	-97	700	455	700	0.65
Abutment 10	2'-0"ØX1/2" Pipe	70.0	-82	500	325	500	0.65

ABBREVIATIONS:

- C = Centerline
- P = Plate
- & = and
- @ = at
- Ø = diameter
- ± = approximate
- Approx. = approximate
- Abut. = Abutment
- Ave. = avenue
- bot. = bottom
- Br. = bridge
- btwn. = between
- Brg. = Bearings
- C.I.P. = cast in place
- Clr. = clear, clearance
- Col. = column
- CSL = crosshole sonic logging
- CY = cubic yard
- dia. = diameter
- D.H.W. = Design High Water
- Dwg. = drawing
- EA = each
- Elev. = elevation
- e.f. = each face
- e.w. = each way
- f.f. = far face
- LB = pound
- LF = linear foot
- LS = lump sum
- Lt. = left
- max. = maximum
- min. = minimum
- MSE = mechanically stabilized earth
- n.a. = not applicable
- n.c. = not calculated
- n.f. = near face
- No. = number
- PT = Post Tensioned
- PVC = point of vertical curve
- PVI = point of vertical intersection
- PVT = point of vertical tangent
- Rt. = right
- spc. = space, spaces
- Sta. = station
- SY = square yard
- Symm. = symmetric
- Typ. = typical

ALTERNATE A

DESIGNED BY: Emer Marx	CHECKED: Travis Arndt	FOUNDATIONS REVIEWED BY: Bruce Brunette
DRAWN BY: Sam Sallie Jr	CHECKED: Emer Marx	
QUANTITIES BY: Emer Marx	CHECKED: Travis Arndt	

STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 AND PUBLIC FACILITIES
 BRIDGE SECTION



HYDER HARBOR TRESTLE
 PREMIER AVENUE
 SITE PLAN

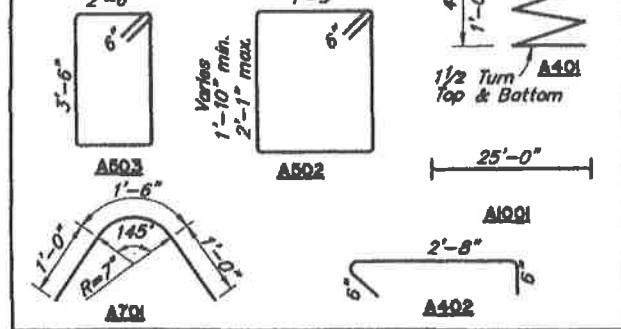
BRIDGE NO. 1238
 DWG. NO. N2

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	MOS-0003(113)/89070	2011	N3	58

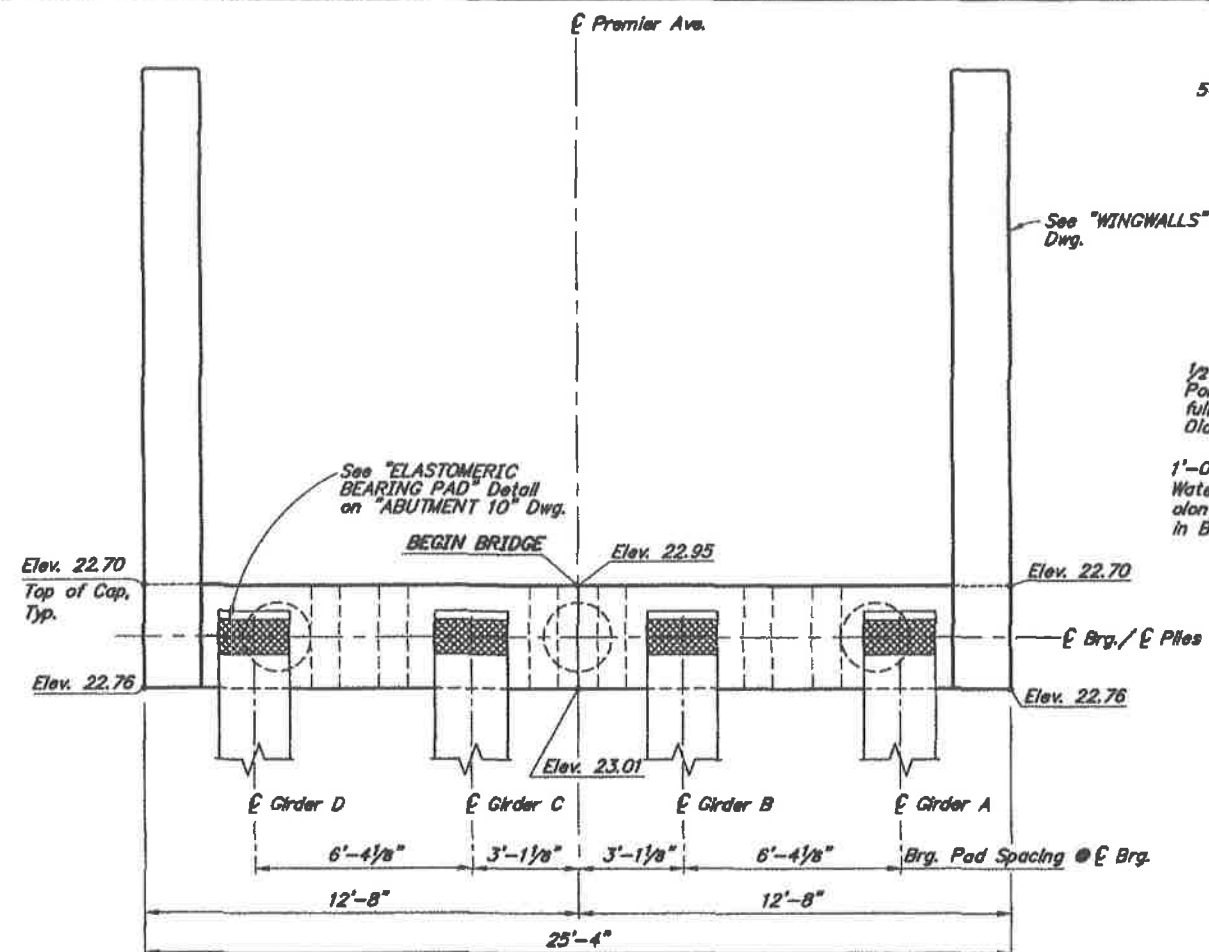
REINFORCING STEEL - ONE ABUTMENT

MARK	SIZE	NO.	LENGTH	TYPE
A401	4	3	35'-9"	SPIRAL
A402	4	12	3'-8"	BENT
A501	5	15	6'-0"	HOOP
A502	5	88	Varies	BENT
A503	5	26	13'-0"	BENT
A601	6	6	21'-7"	
A602	6	5	25'-0"	
A701	7	24	3'-8"	BENT
A801	8	24	51'-7"	
A1001	10	12	25'-0"	HEADED
A1002	10	4	25'-0"	

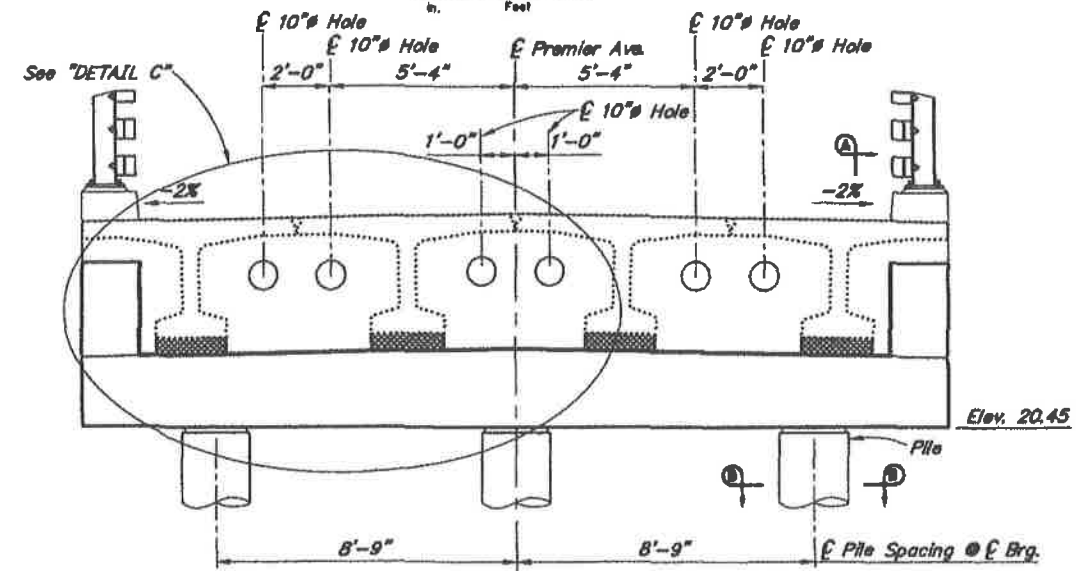
BENDING DIAGRAM



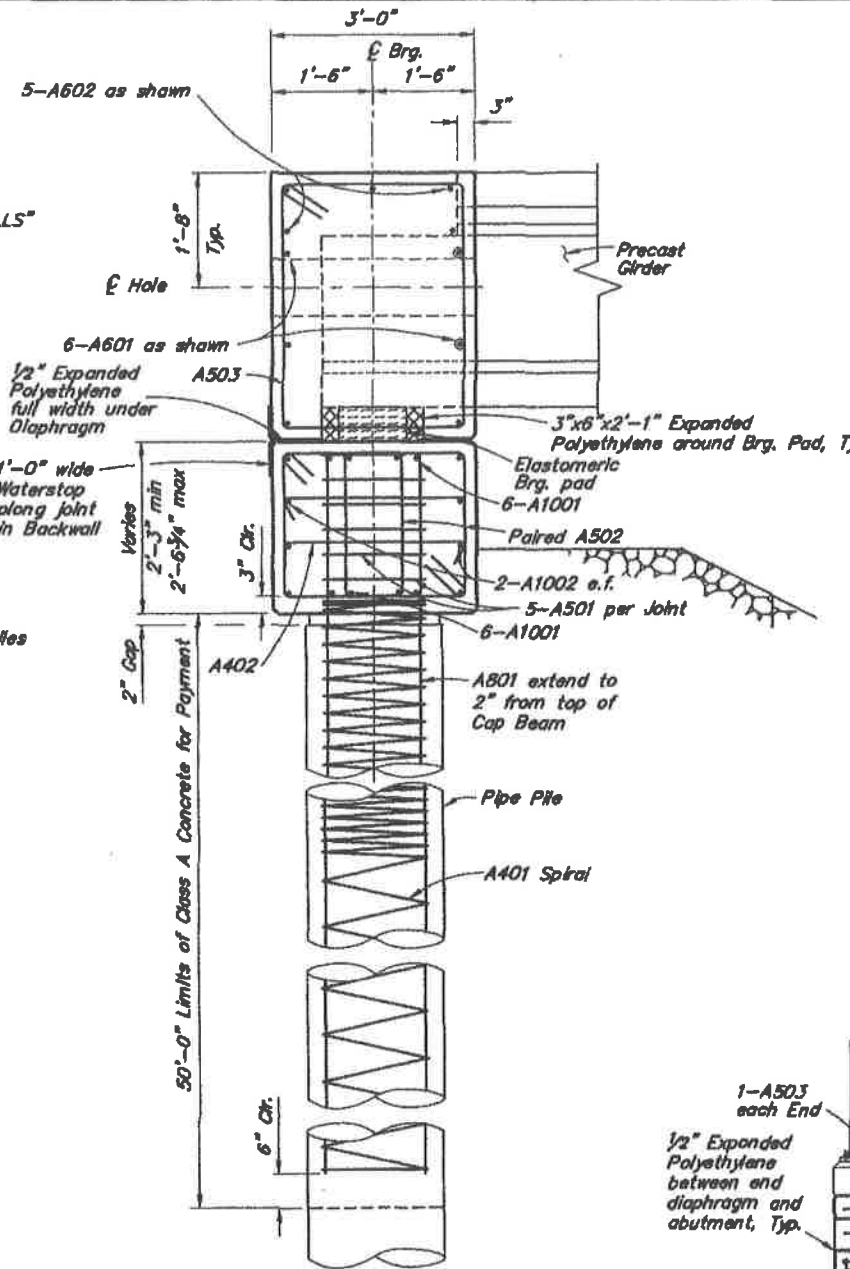
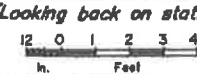
a - Epoxy-coated
b - Field adjust and match cross slope.



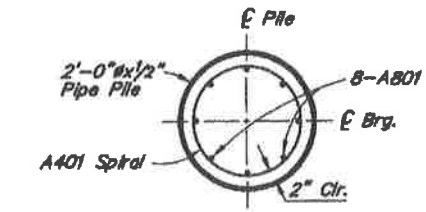
PLAN



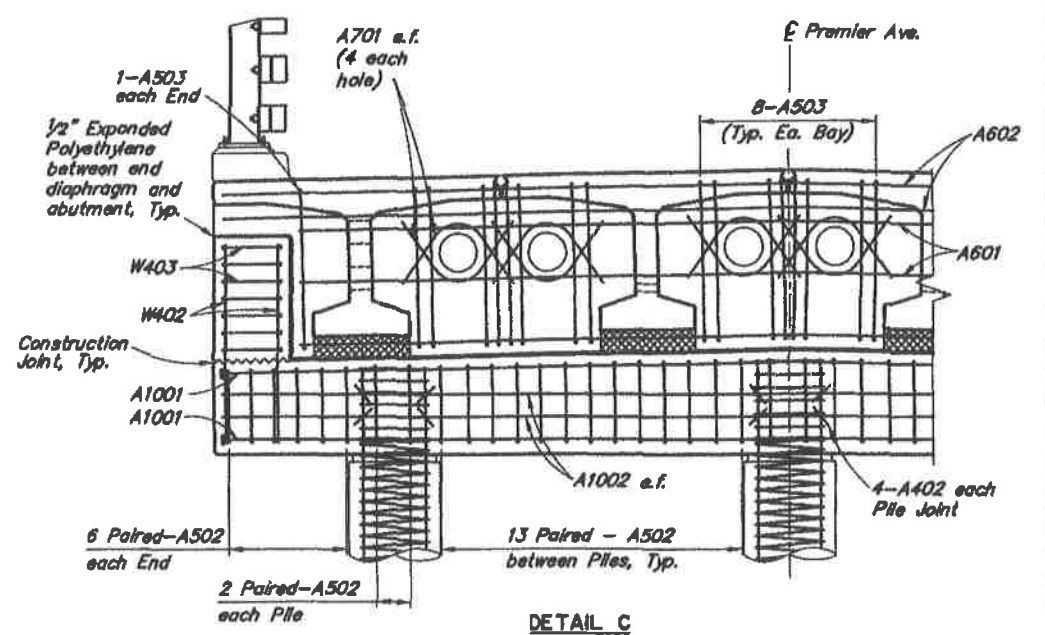
ELEVATION
(Looking back on station)



SECTION A-A



SECTION B-B



DETAIL C

(Abutment 1 shown Abutment 10 similar)



DESIGNED BY: ELMER E. MARX	CHECKED: <i>[Signature]</i>
DRAWN BY: Sam Sallie Jr	CHECKED: <i>[Signature]</i>
QUANTITIES BY: <i>[Signature]</i>	CHECKED: <i>[Signature]</i>

ALTERNATE A

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
BRIDGE SECTION



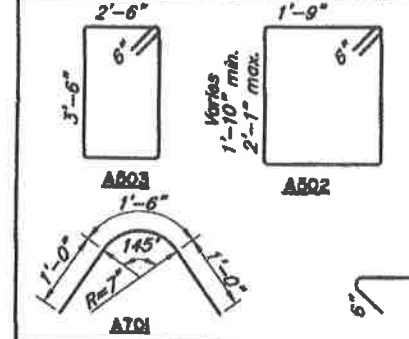
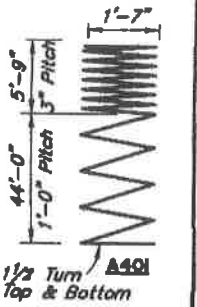
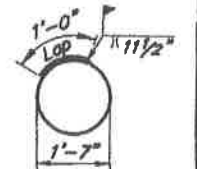
HYDER HARBOR TRESTLE
PREMIER AVENUE
ABUTMENT 1


BRIDGE NO. 1238
DWG. NO. N3

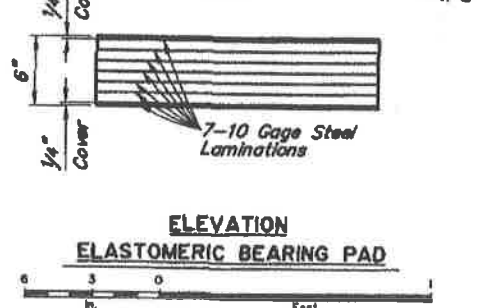
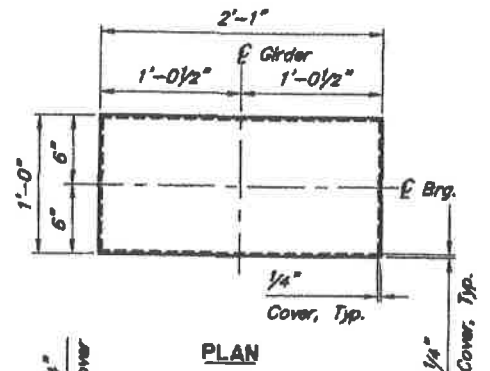
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	MGS-0003(113)/89070	2011	N4	58

REINFORCING STEEL - ONE ABUTMENT

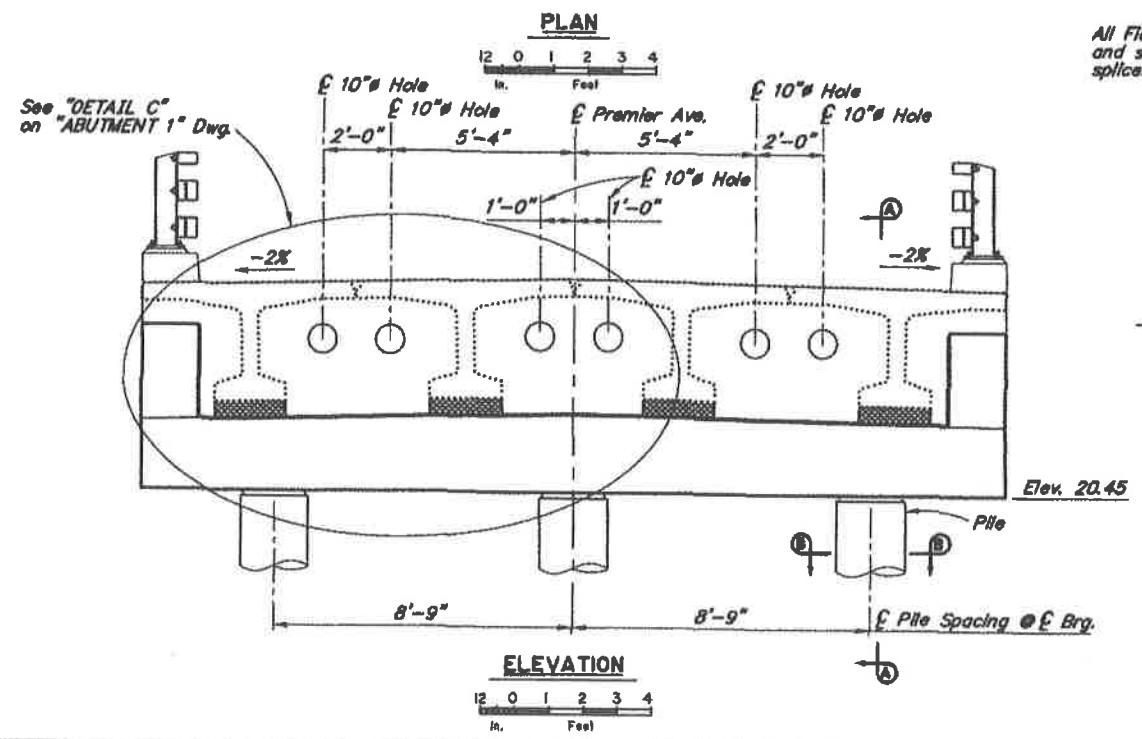
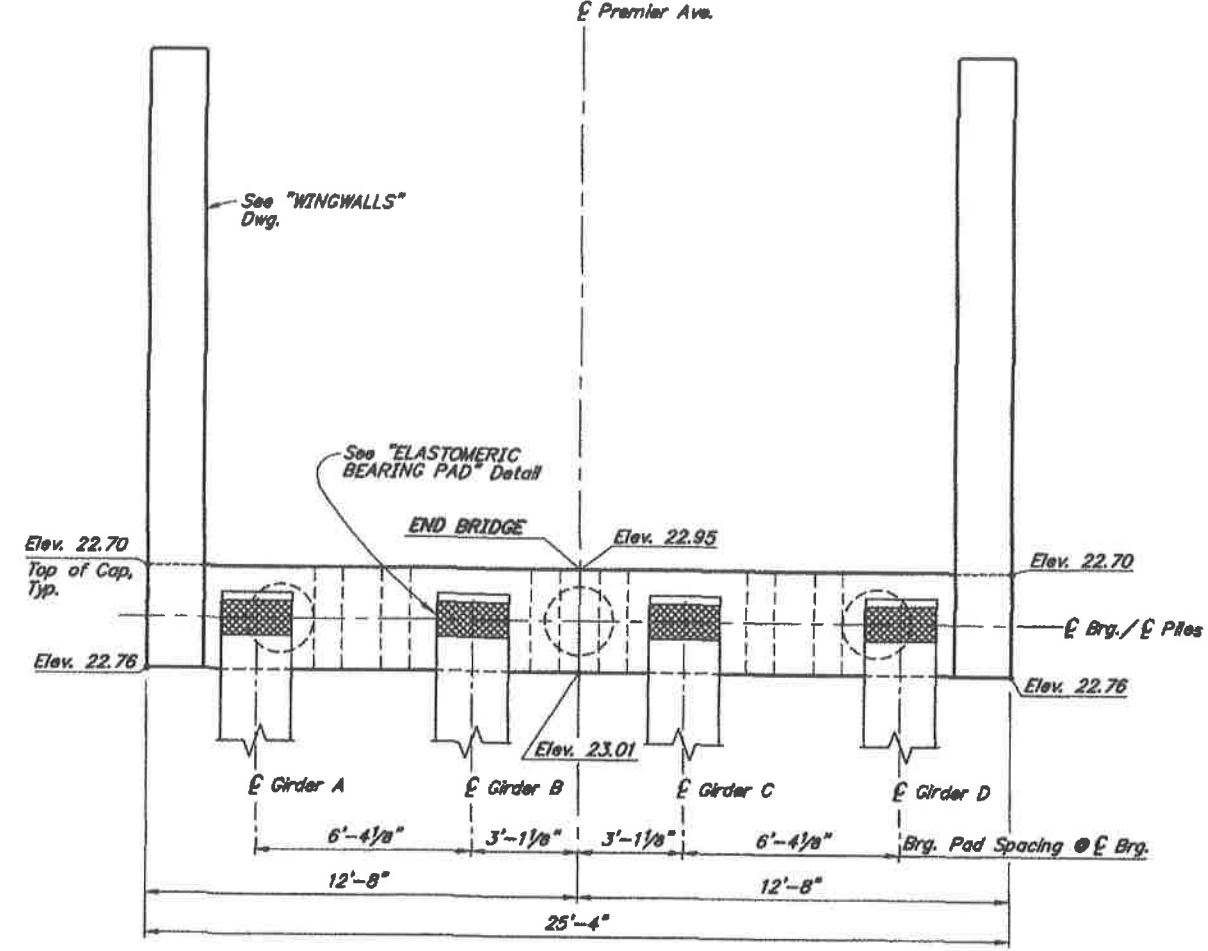
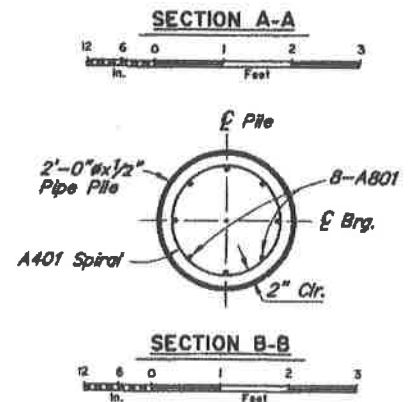
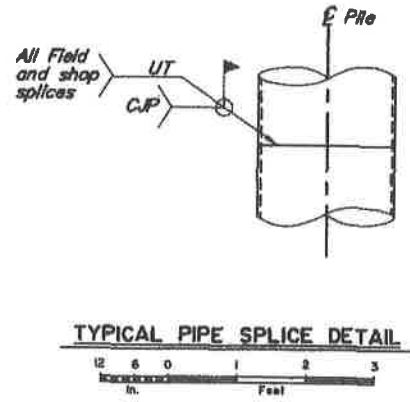
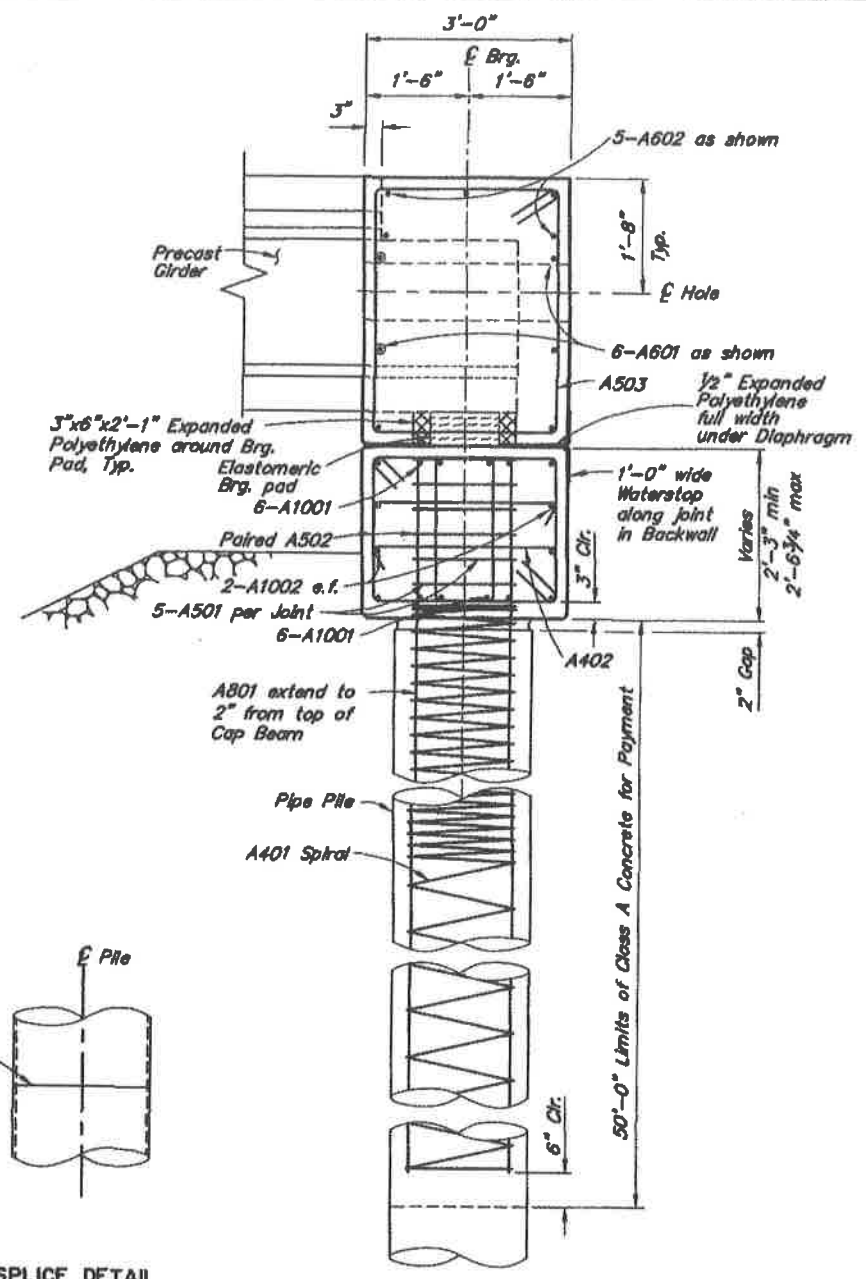
MARK	SIZE	NO.	LENGTH	TYPE
a A401	4	3	352'-9"	SPIRAL
a A402	4	12	3'-8"	BENT
A501	5	15	6'-0"	HOOP
a A502	5	88	Varies	BENT
a A503	5	26	13'-0"	BENT
a A601	6	6	21'-7"	
a,b A602	6	5	25'-0"	
a A701	7	24	3'-6"	BENT
AB01	8	24	51'-7"	
b A1001	10	12	25'-0"	HEADED
A1002	10	4	25'-0"	



a - Epoxy-coated
b - Field adjust and match cross slope.



Grade 5
Max. Dead Load = 68 k
Max. Live Load = 68 k
Shear Modulus = 115 psi



DESIGNED BY: Elmer Marx	CHECKED: Trade Arnett
DRAWN BY: Sam Sallis Jr	CHECKED: Elmer Marx
QUANTITIES BY: Elmer Marx	CHECKED: Trade Arnett

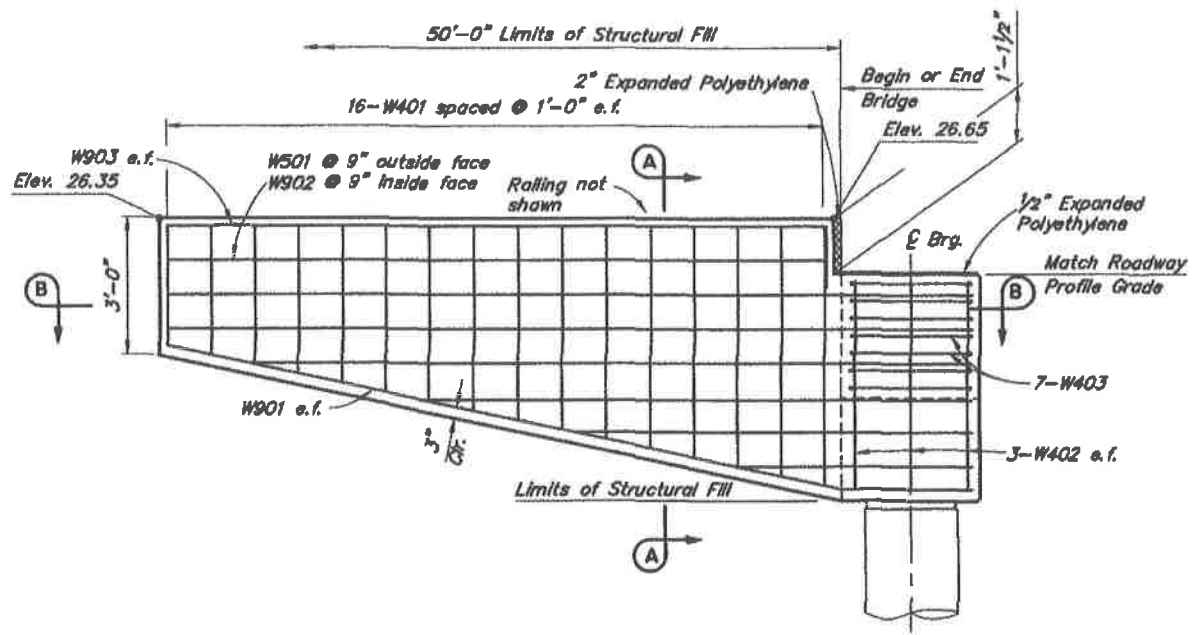
ALTERNATE A

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
BRIDGE SECTION

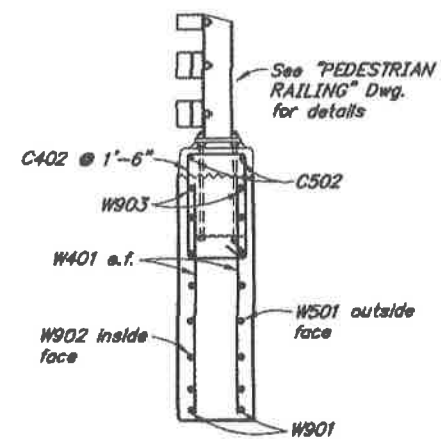


HYDER HARBOR TRESTLE
PREMIER AVENUE
ABUTMENT 10

BRIDGE NO. 1238
DWG. NO. N4



ELEVATION

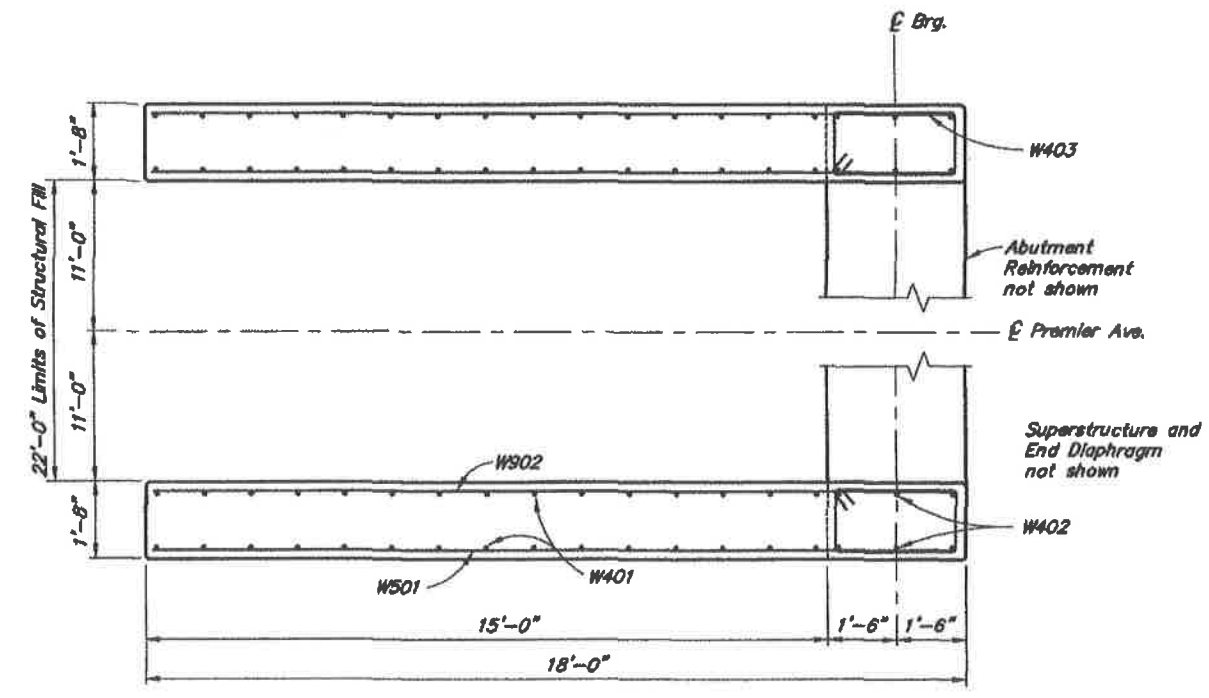


SECTION A-A

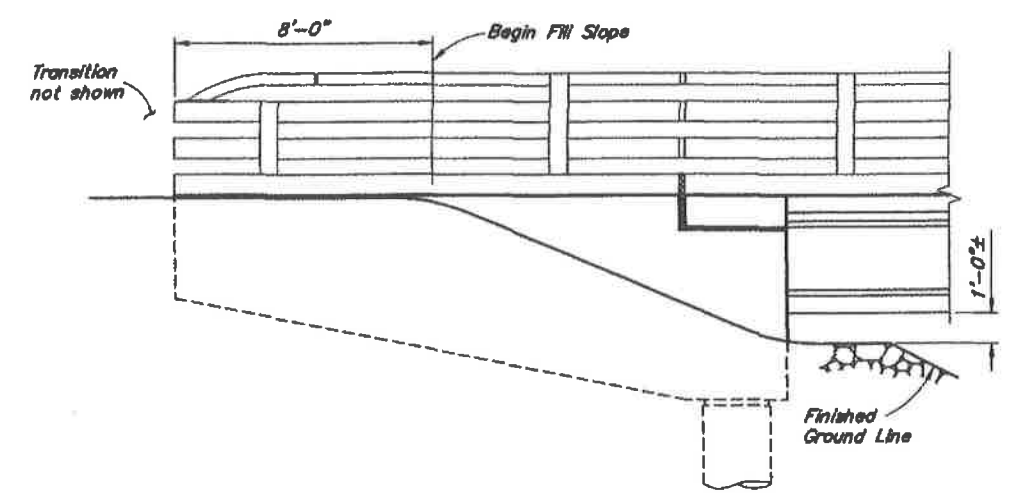
REINFORCING STEEL - ONE ABUTMENT				
MARK	SIZE	NO.	LENGTH	TYPE
a W401	4	64	Varies	—
a W402	4	12	4'-7"	—
a W403	4	14	9'-0"	Bent
a W501	5	14	Varies	—
a W901	9	4	17'-11"	Bent
a W902	9	14	Varies	—
a W903	9	4	16'-1"	Bent
a C402	4	22	8'-0"	Bent
a C502	5	4	14'-6"	—

BENDING DIAGRAM	
15'-2"	168°
2'-9"	5'-2" Min. 17'-8" Max. W501 W902
14'-6"	2'-8"
1'-7"	2'-7" Min. 5'-8" Max. W403
1'-3"	1'-4"
1'-3"	W401

a - Epoxy coated.



SECTION B-B



FINISHED ELEVATION


DESIGNED BY: Elmer Marx	CHECKED: Trade Arnold
DRAWN BY: Sam Sallis	CHECKED: Elmer Marx
QUANTITIES BY: Elmer Marx	CHECKED: Trade Arnold

ALTERNATE A

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
BRIDGE SECTION

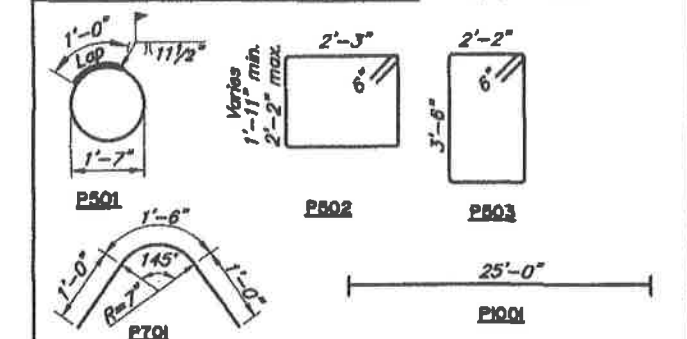


HYDER HARBOR TRESTLE
PREMIER AVENUE
WINGWALLS

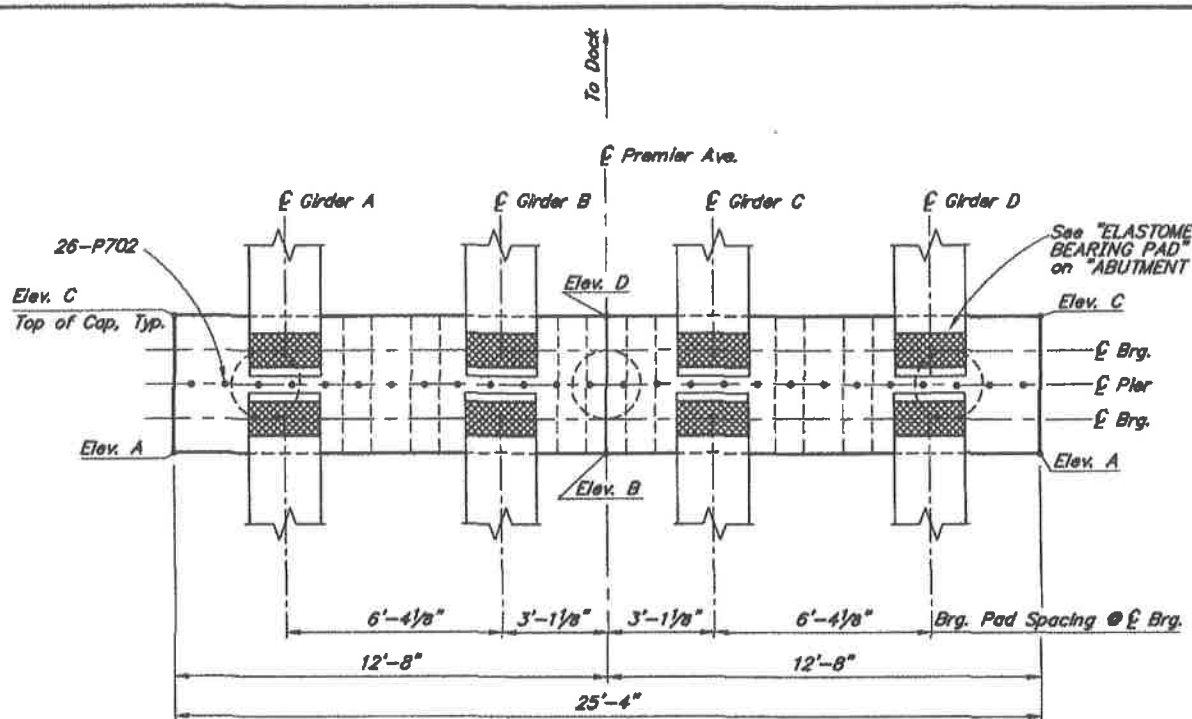

BRIDGE NO. 1238
DWG. NO. N5

REINFORCING STEEL-ONE PIER

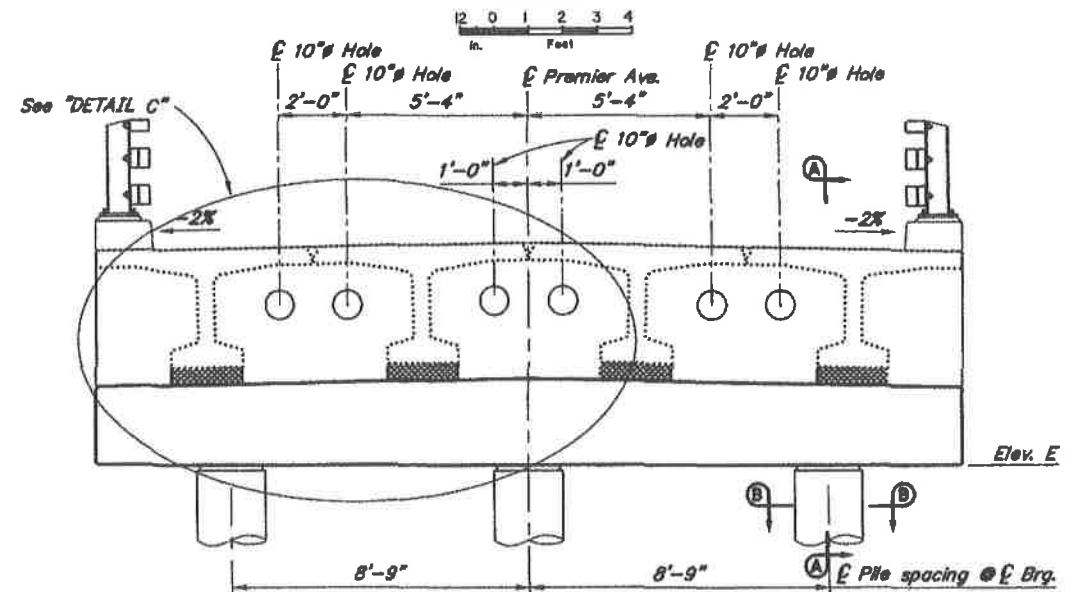
MARK	SIZE	NO.	LENGTH	TYPE
a P401	4	3	352'-9"	SPIRAL
a P402	4	12	4'-8"	BENT
P501	5	15	6'-0"	HOOP
a P502	5	88	Varies	BENT
a P503	5	64	12'-4"	BENT
a P601	6	17	25'-0"	
a P701	7	24	3'-6"	BENT
a P702	7	26	5'-10"	
P801	8	24	51'-7"	
b P1001	10	12	25'-0"	HEADED
b P1002	10	4	25'-0"	



a - Epoxy coated
b - Field adjust to match cross slope.

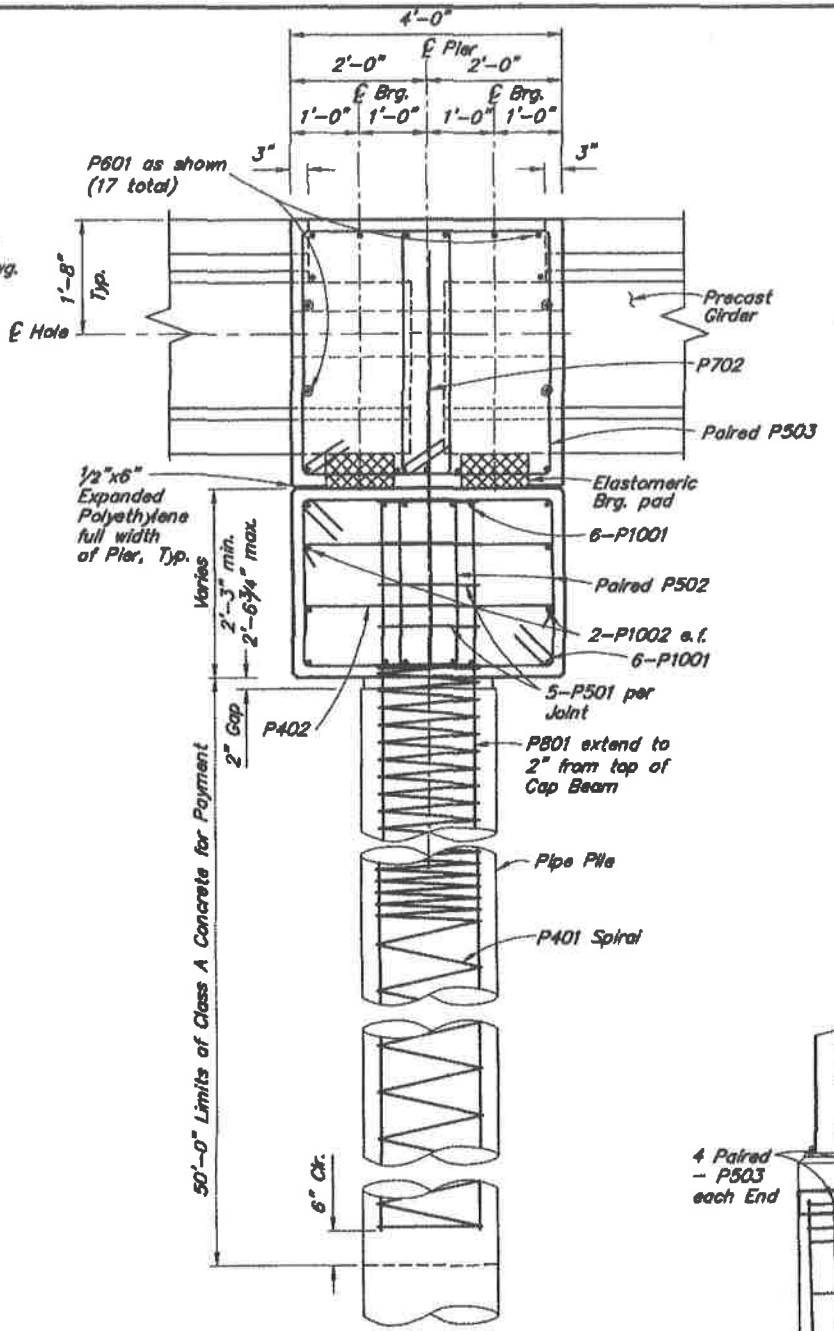


PLAN

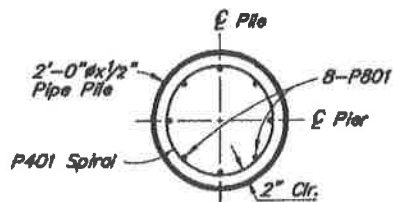


ELEVATION

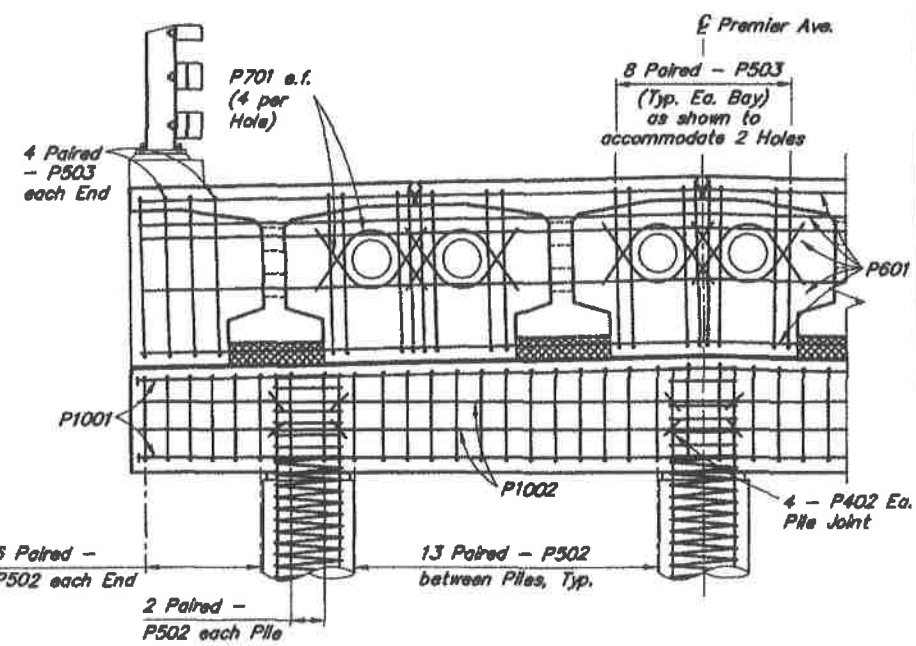
LOCATION	CAP ELEVATION TABLE				
	ELEVATION A	ELEVATION B	ELEVATION C	ELEVATION D	ELEVATION E
PIER 2	24.19	24.44	24.25	24.50	21.94
PIER 3	25.33	25.58	25.37	25.63	23.08
PIER 4	26.09	26.34	26.12	26.37	23.84
PIER 5	26.48	26.73	26.49	26.74	24.23
PIER 6	26.49	26.74	26.48	26.73	24.23
PIER 7	26.12	26.37	26.09	26.34	23.84
PIER 8	25.37	25.63	25.33	25.58	23.08
PIER 9	24.25	24.50	24.19	24.44	21.94



SECTION A-A



SECTION B-B



DETAIL C

DESIGNED BY: Elmer Marx
 CHECKED: Frank Arndt
 DRAWN BY: Sam Sallis
 CHECKED: Elmer Marx
 QUANTITIES BY: Elmer Marx
 CHECKED: Frank Arndt

ALTERNATE A

STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 AND PUBLIC FACILITIES
 BRIDGE SECTION

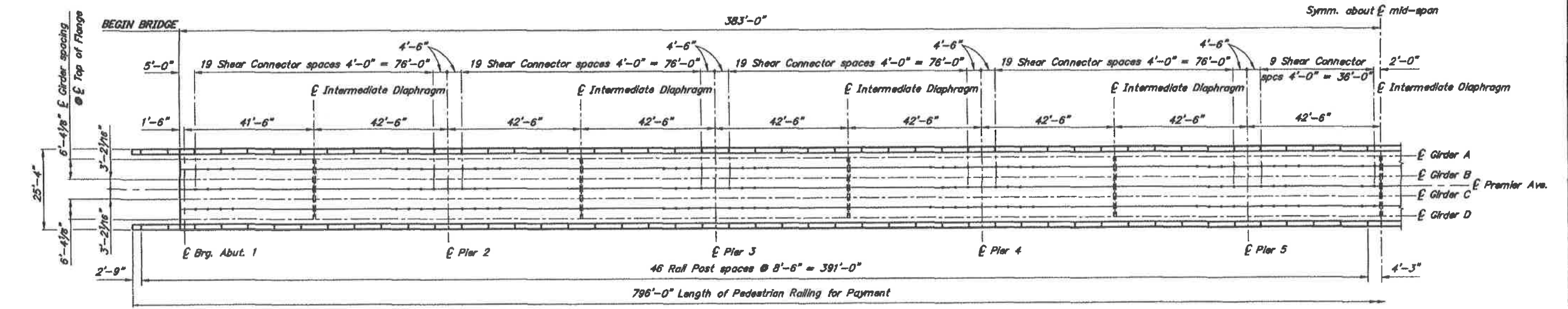
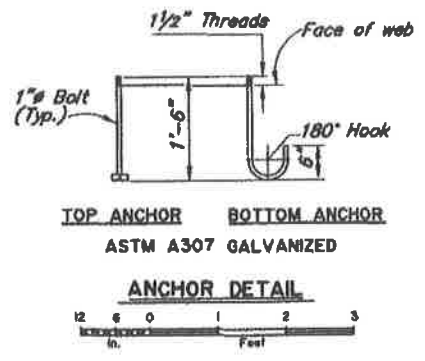
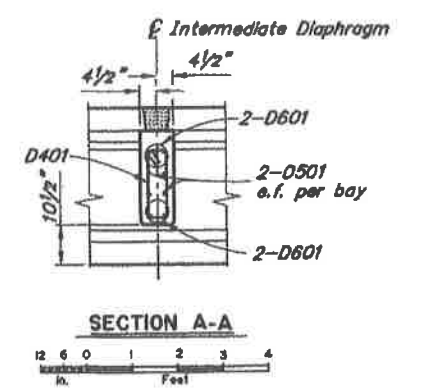
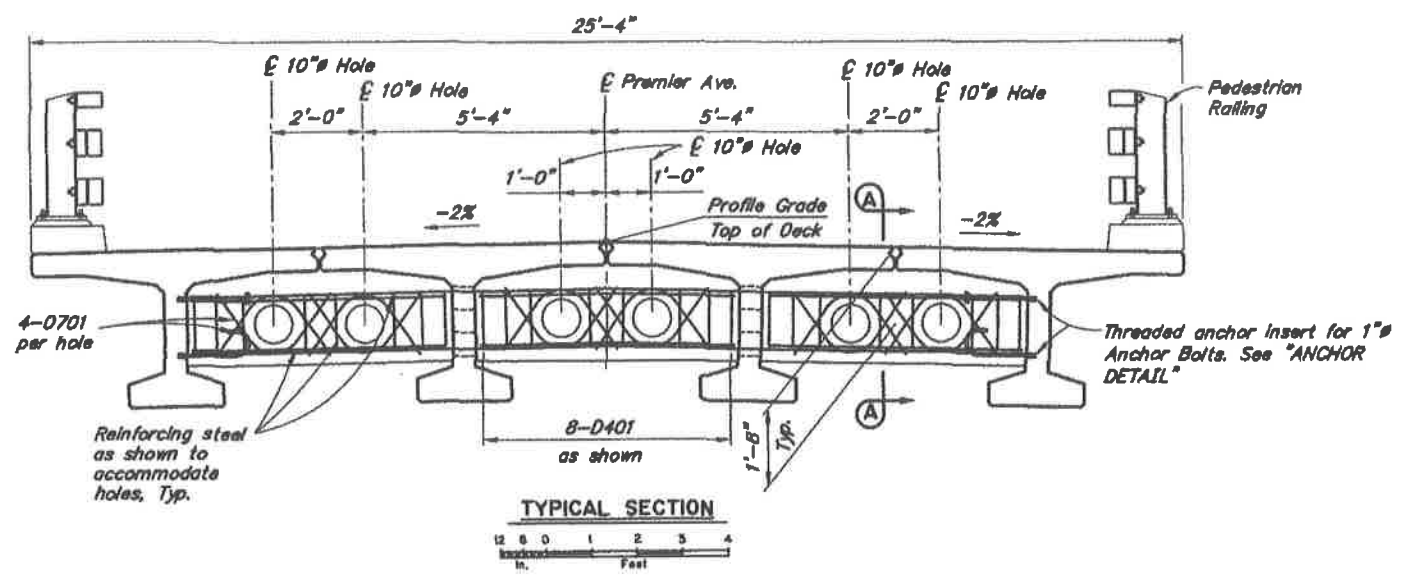


HYDER HARBOR TRESTLE
 PREMIER AVENUE
 PIERS

BRIDGE NO. 1238
 DWG. NO. N6

REINFORCING STEEL-ONE DIAPHRAGM				
MARK	SIZE	NO.	LENGTH	TYPE
a	D401	4	24	4'-4" Bent
a	D501	5	12	5'-6"
a,b	D601	6	4	18'-2"
a	D701	7	24	3'-6" Bent

a - Epoxy coat all reinforcing steel.
b - Field adjust to match cross slope.




DESIGNED BY: <i>Elmer Mark</i>	CHECKED: <i>L. Curt</i>
DRAWN BY: <i>Sam Sallie Jr.</i>	CHECKED: <i>Elmer Mark</i>
QUANTITIES BY: <i>Elmer Mark</i>	CHECKED: <i>L. Curt</i>

ALTERNATE A

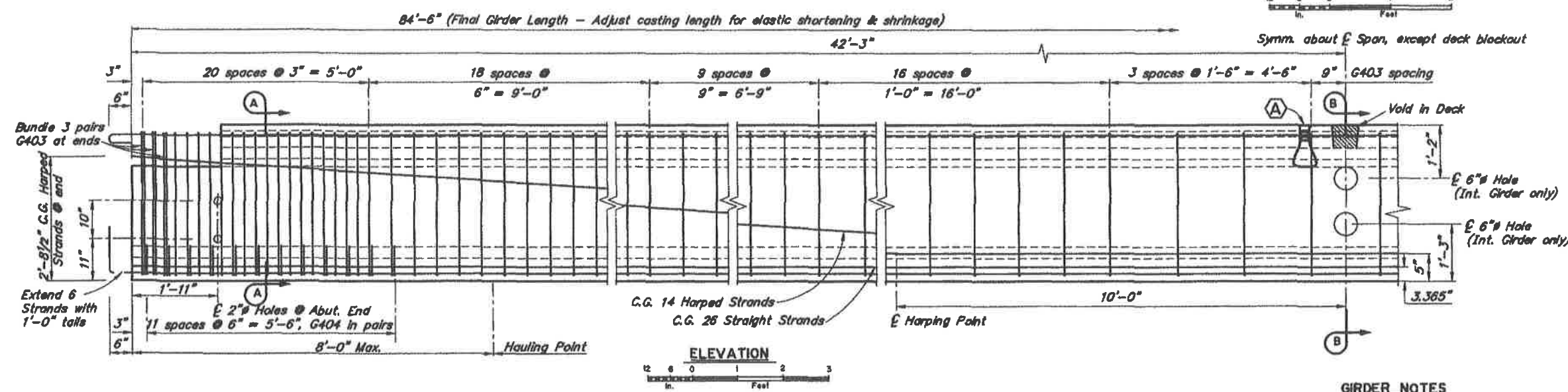
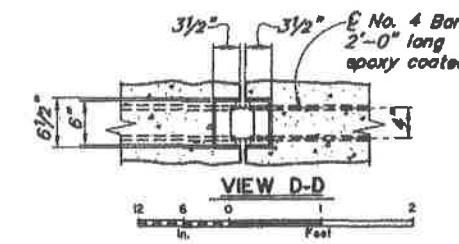
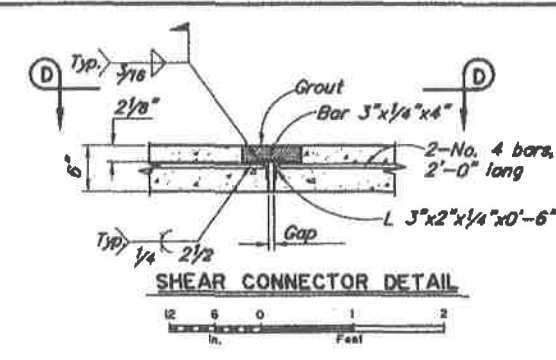
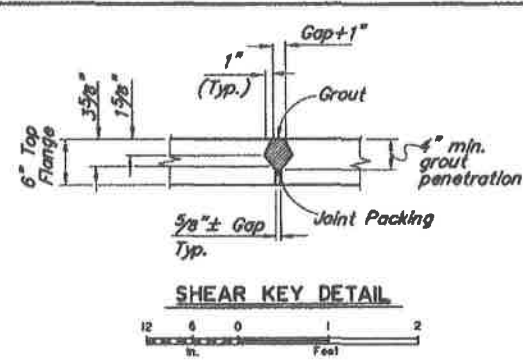
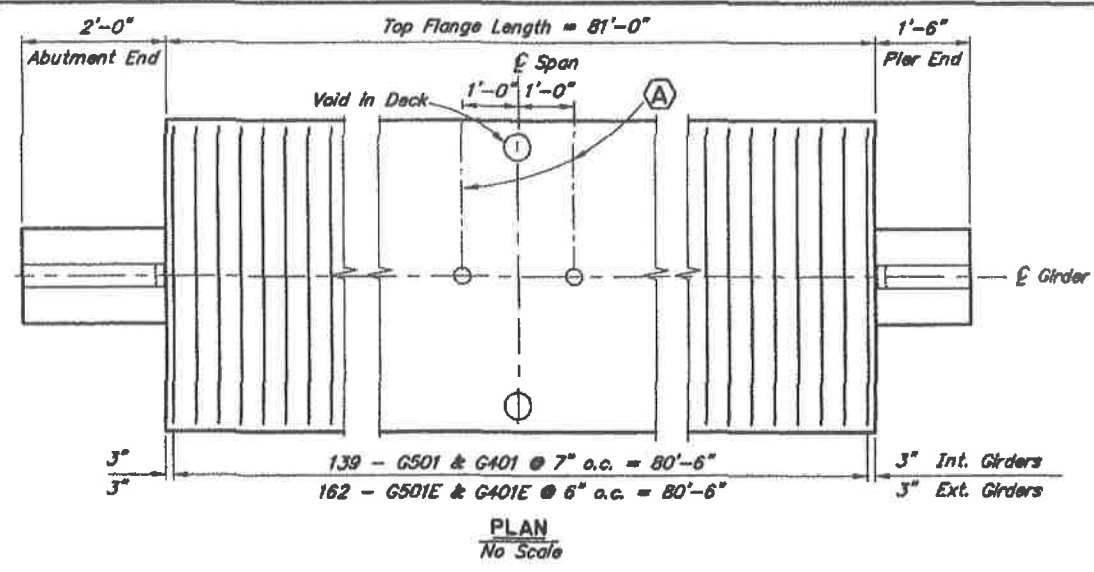
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
BRIDGE SECTION



HYDER HARBOR TRESTLE
PREMIER AVENUE
FRAMING PLAN AND TYPICAL SECTION

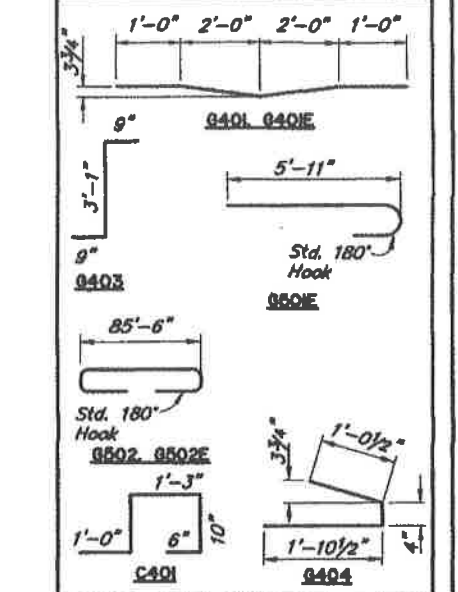

BRIDGE NO. 1238
DWG. NO. N7

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	MGS-0003(113)/89070	2011	N8	58



REINFORCING STEEL SCHEDULE-ONE GIRDER

MARK	SIZE	NO.	LENGTH	TYPE
a	G401	4	139	6'-0" Bent
a	G401E	4	162	6'-0" Bent
a,b	G402	4	10	80'-8" -
a,b	G402E	4	10	80'-8" -
a	G403	4	280	4'-7" Bent
a	G404	4	48	3'-3" Bent
a	G501	5	139	5'-10" -
a	G501E	5	162	6'-6" Bent
a,b	G502	5	10	85'-8" Bent
a,b	G502E	5	10	85'-8" Bent
a,d	C401	4	59	4'-5" Bent
a,b	C501	5	2	765'-8" -



GIRDER NOTES

a - Epoxy coat all girder reinforcing
b - Length does not include splices. Minimum lap splice length for splices shall be: 2'-0" for #4 bars, 2'-6" for #5 bars.
d - Ship 4 loose for diaphragms.

Use normal weight concrete having the following strengths:
At Stress Transfer $f_{ci} = 6250$ psi
At 28 days $f_c = 7000$ psi

Use 1/2" round low relaxation strands having an ultimate strength of 270 ksi and a cross section area of 0.153 in²

Design is based on the following steel stresses:
Pretensioning - Jacking Stress 189 ksi
After initial losses - 172 ksi
After all losses - 141 ksi

1" clear on all reinforcing except as noted.

Deflect forms to compensate for camber and roadway grade.

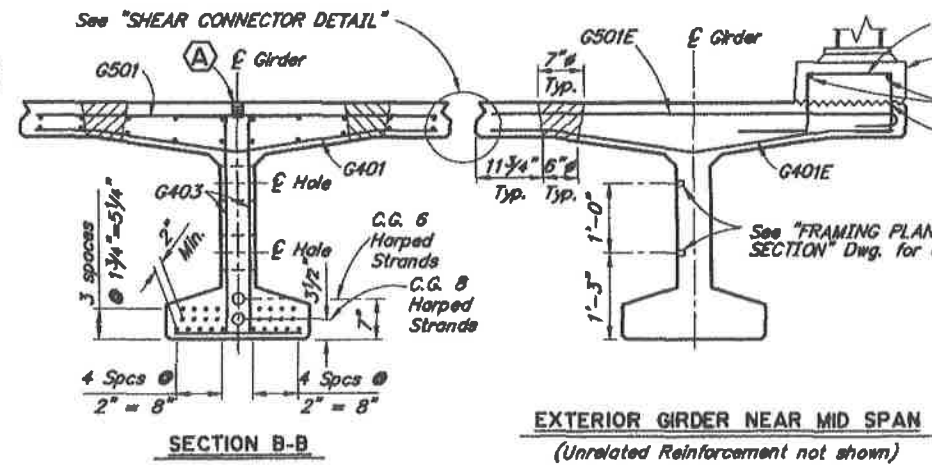
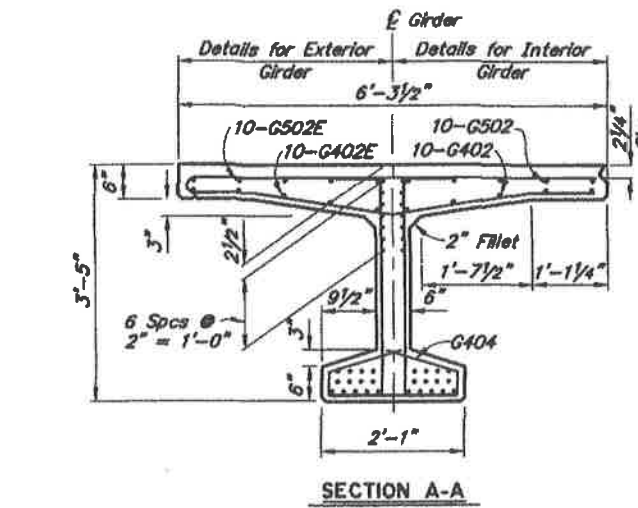
Provide a rough broom finish on the roadway surface of the precast member. Roughen the surface under the railing.

Omit Shear Key and Shear Connector on outside of exterior girders.

Cast Girder ends plumb with respect to roadway grade.

1"x1'-0" Coil Anchor Insert for vertical adjustment of girders. Recess 2". Prevent concrete from filling hole.

See "FRAMING PLAN AND TYPICAL SECTION" Dwg. for shear connectors spacing & rail post spacing.



EXTERIOR GIRDER NEAR MID SPAN
(Unrelated Reinforcement not shown)

DESIGNED BY: Eli S. Map	CHECKED: Trevi Arndt
DRAWN BY: Sam Sallie Jr.	CHECKED: Eli S. Map
QUANTITIES BY: Eli S. Map	CHECKED: Trevi Arndt

ALTERNATE A

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
BRIDGE SECTION



HYDER HARBOR TRESTLE
PREMIER AVENUE
GIRDERS - SPANS 1 & 9

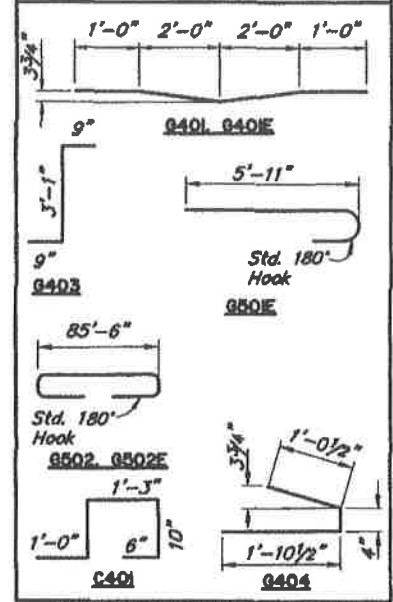
BRIDGE NO. 1238
DWG. NO. N8

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	MGS-0003(113)/89070	2011	NR	58

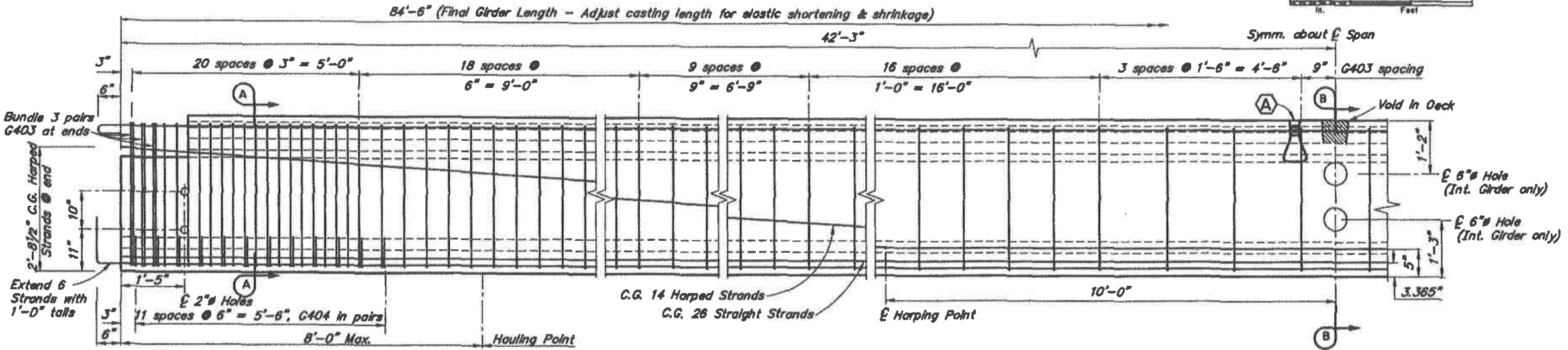
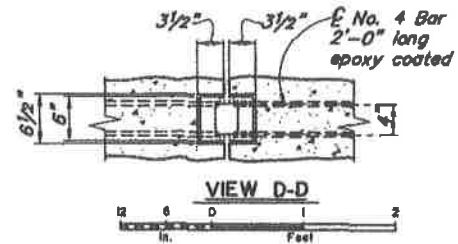
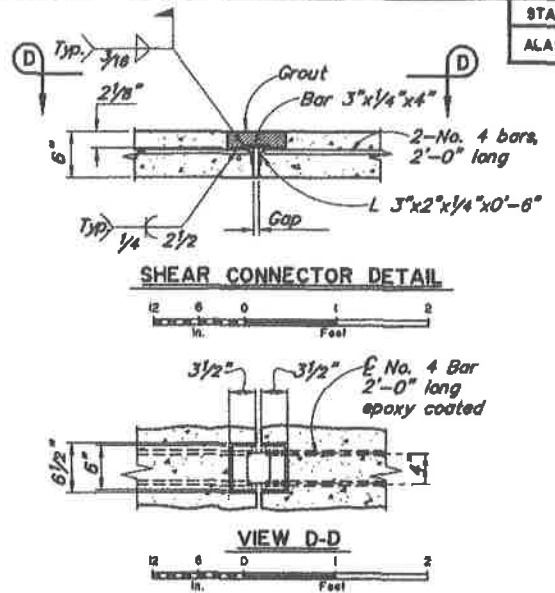
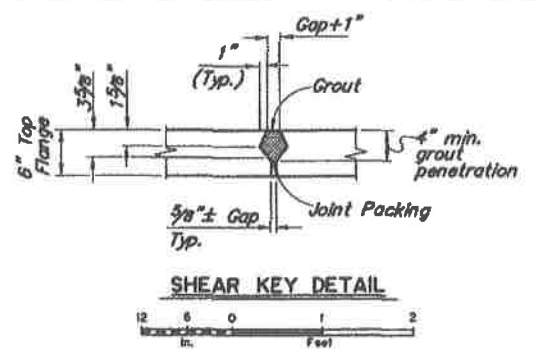
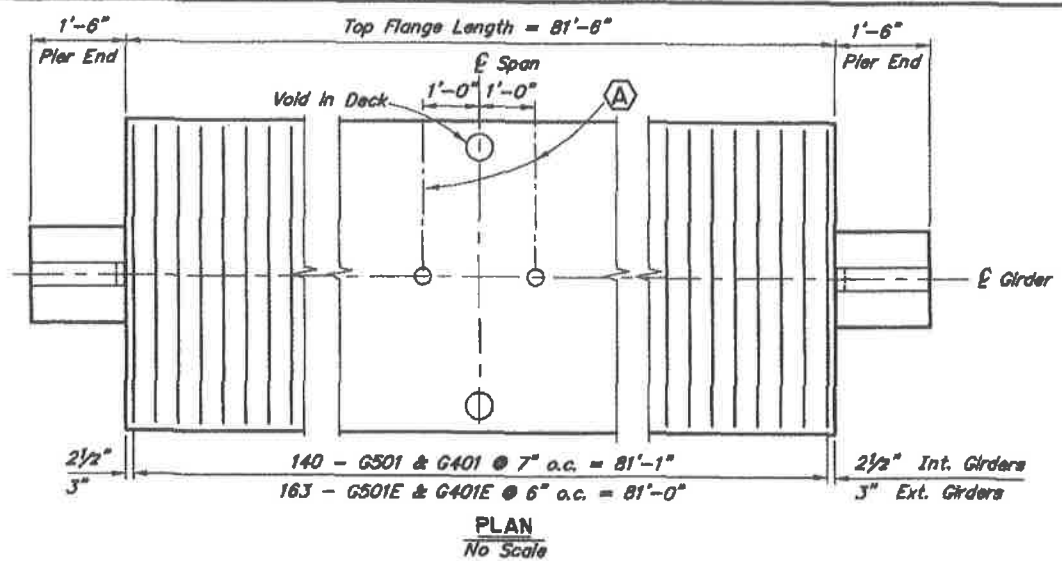
REINFORCING STEEL SCHEDULE-ONE GIRDER

MARK	SIZE	NO.	LENGTH	TYPE
a G401	4	140	6'-0"	Bent
a G401E	4	163	6'-0"	Bent
ab G402	4	10	81'-2"	-
ab G402E	4	10	81'-2"	-
a G403	4	280	4'-7"	Bent
a G404	4	48	3'-3"	Bent
a G501	5	140	5'-10"	-
a G501E	5	163	6'-6"	Bent
ab G502	5	10	86'-8"	Bent
ab G502E	5	10	86'-8"	Bent
a,d C401	4	59	4'-5"	Bent

BENDING DIAGRAM

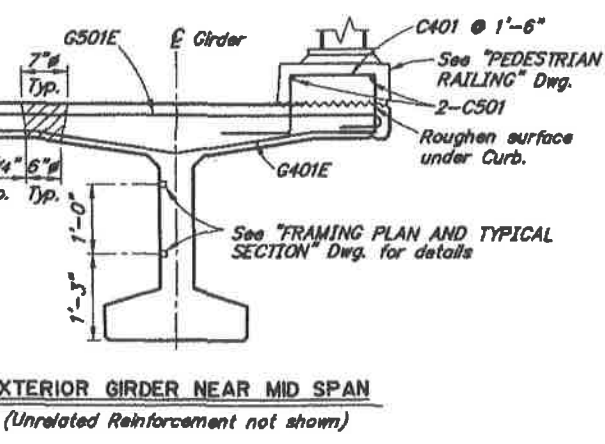
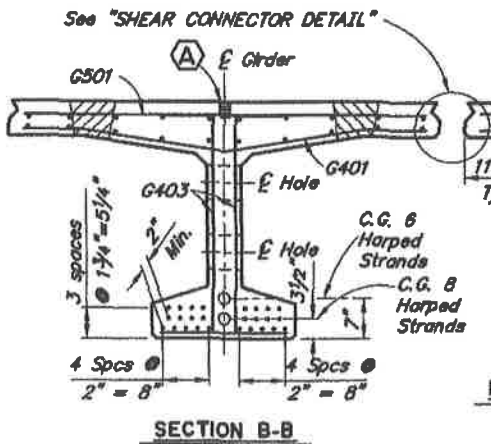
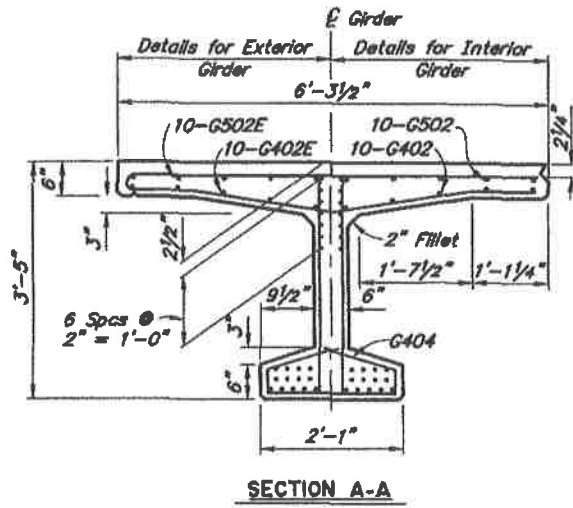


a - Epoxy coat all girder reinforcing
 b - Length does not include splices. Minimum lap splice length for splices shall be: 2'-0" for #4 bars, 2'-6" for #5 bars.
 d - Ship 4 loose for diaphragms.



GIRDER NOTES

Use normal weight concrete having the following strengths:
 At Stress Transfer $f_{ci} = 6250$ psi
 At 28 days $f_c = 7000$ psi
 Use 1/2" round low relaxation strands having an ultimate strength of 270 ksi and a cross section area of 0.153 in²
 Design is based on the following steel stresses:
 Prestressing - Jacking Stress 189 ksi
 After initial losses - 172 ksi
 After all losses - 141 ksi
 1" clear on all reinforcing except as noted.
 Deflect forms to compensate for camber and roadway grade.
 Provide a rough broom finish on the roadway surface of the precast member. Roughen the surface under the railing.
 Omit Shear Key and Shear Connector on outside of exterior girders.
 Cast Girder ends plumb with respect to roadway grade.
 1"x1'-0" Coll Anchor Insert for vertical adjustment of girders. Recess 2". Prevent concrete from filling hole.
 See "FRAMING PLAN AND TYPICAL SECTION" Dwg. for shear connectors spacing & rail post spacing.



DESIGNED BY: Elmer Marx	CHECKED: Travis Arnold
DRAWN BY: Sam Sallis Jr.	CHECKED: Elmer Marx
QUANTITIES BY: Elmer Marx	CHECKED: Travis Arnold

ALTERNATE A

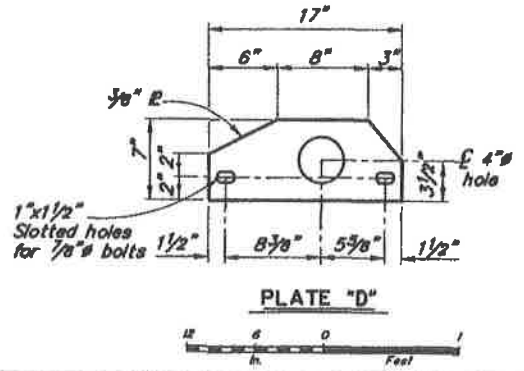
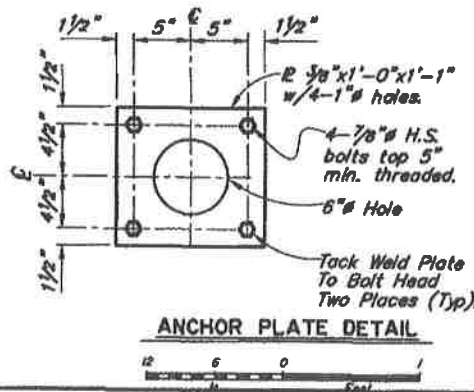
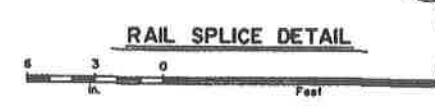
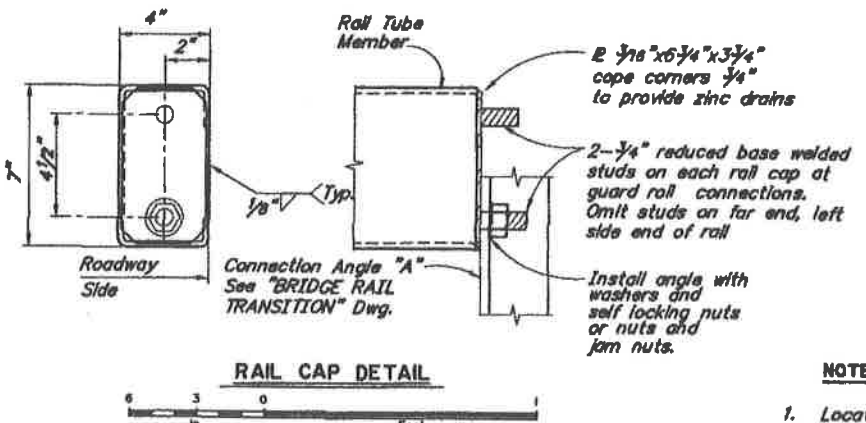
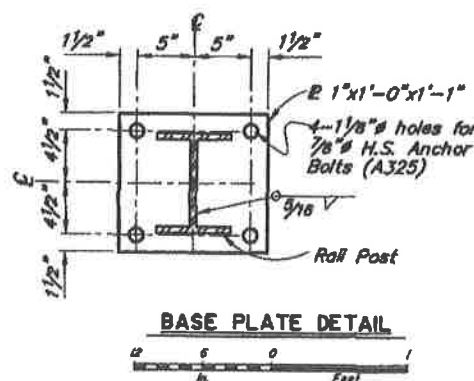
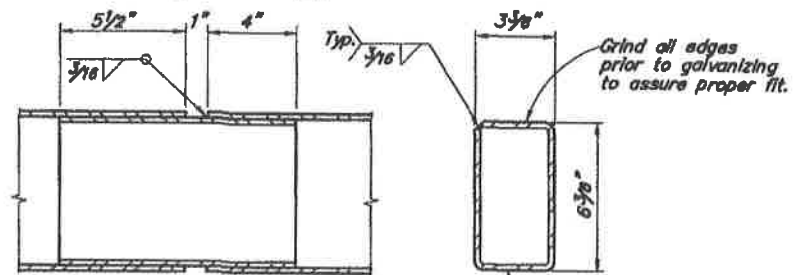
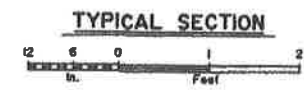
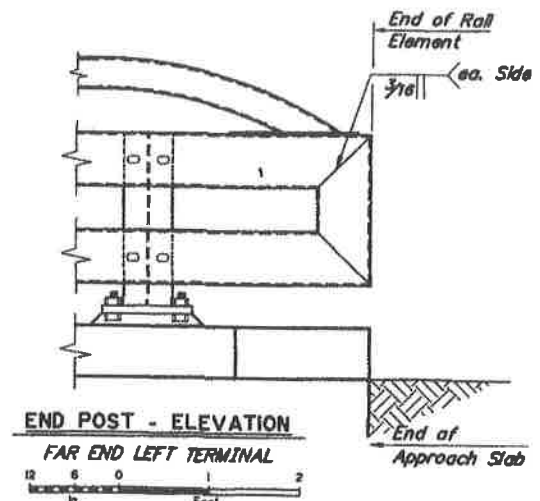
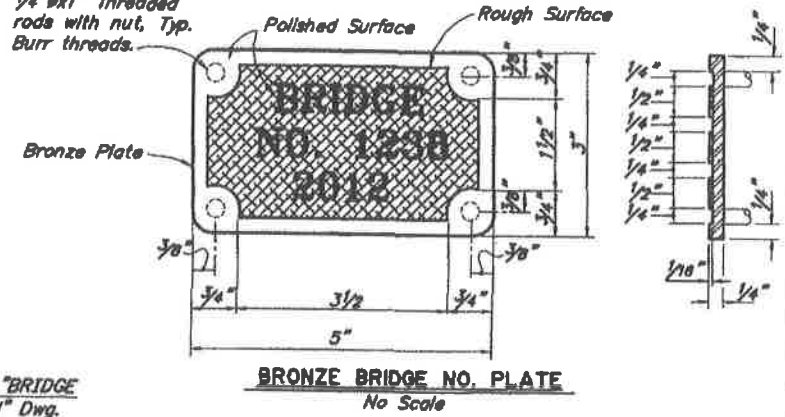
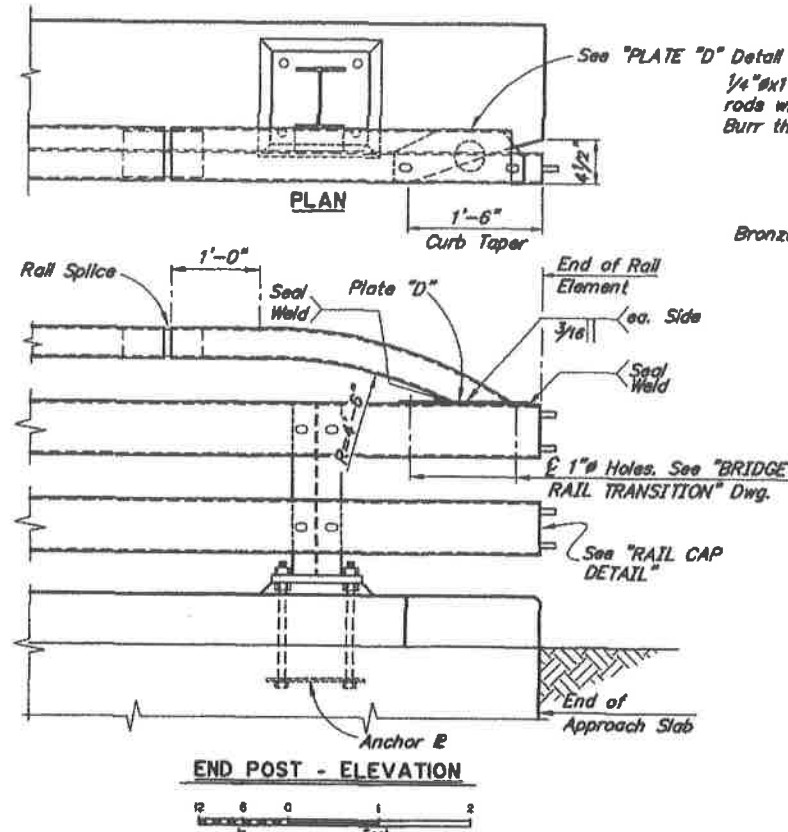
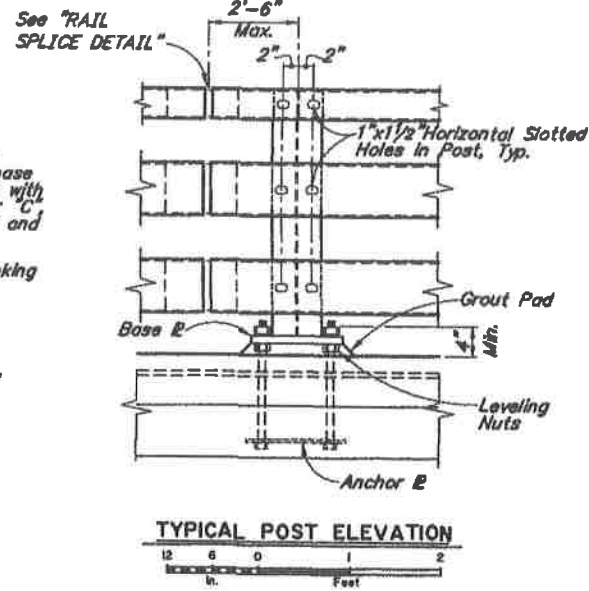
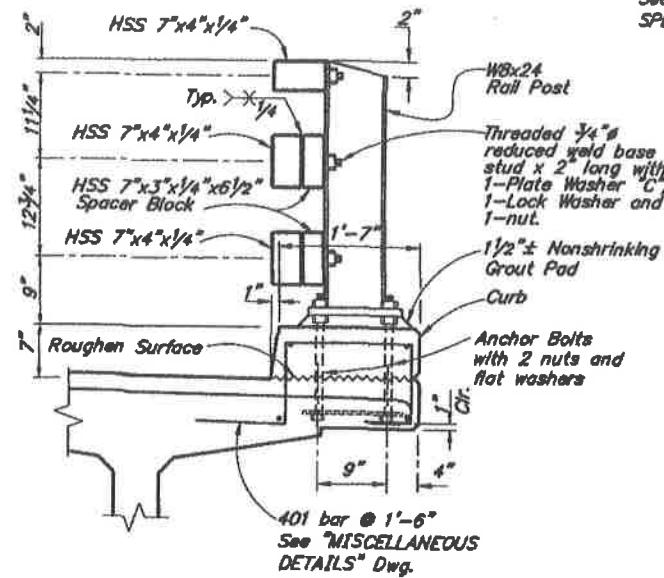
STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 AND PUBLIC FACILITIES
 BRIDGE SECTION



HYDER HARBOR TRESTLE
 PREMIER AVENUE
 GIRDERS - SPANS 2 - 8

BRIDGE NO. 1238
 DWG. NO. NR

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	MGS-0003(113)/89070	2011	N10	58



- NOTES:**
1. Locate bridge number plates on right hand side of approaching traffic near each end as shown (2 total).
 2. Furnish bridge number plates. Use bronze with "Century" type style lettering. Use studs and nuts that conform to UNS C65100 or C65500. Braze 1/4 inch threaded rod to back of plate with nut - 4 required. Use locking nuts or lock washers on all machine bolts.
 3. Provide railing expansion joints at 50'-0" max. intervals. Provide a minimum of 2 rail posts between railing expansion joints. Railing expansion joints are required in rail panels that span bridge expansion joints.
 4. Install posts plumb.
 5. Use grout with a minimum 24 hour f'c of 3 ksi
 6. See "FRAMING PLAN AND TYPICAL SECTION" Dwg. for rail post spacing.

DESIGNED BY: ELMER E. MARX	CHECKED: Doris Arnold
DRAWN BY: Sam Sallee Jr.	CHECKED: Elmer Marx
QUANTITIES BY: ELMER MARX	CHECKED: Doris Arnold

ALTERNATE A

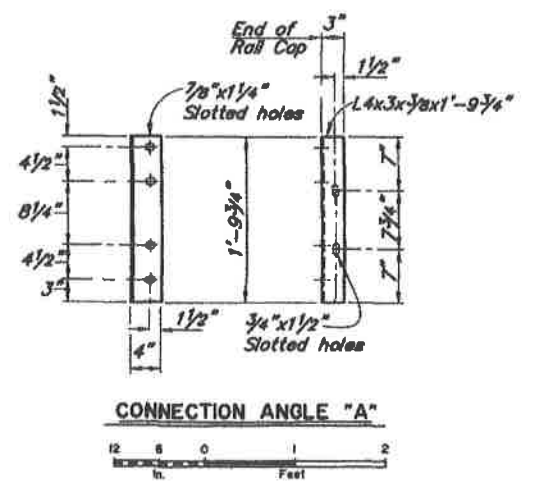
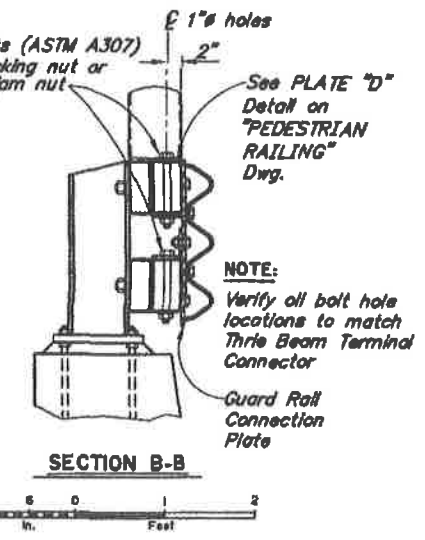
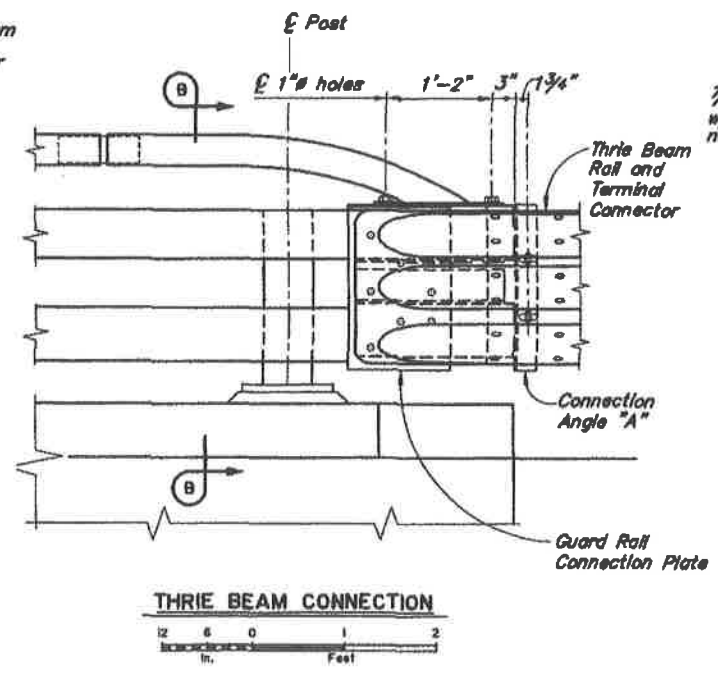
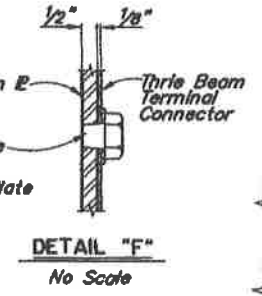
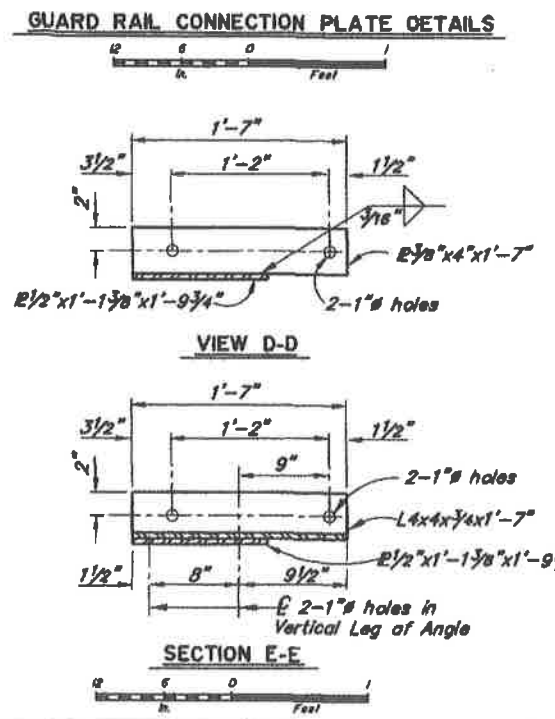
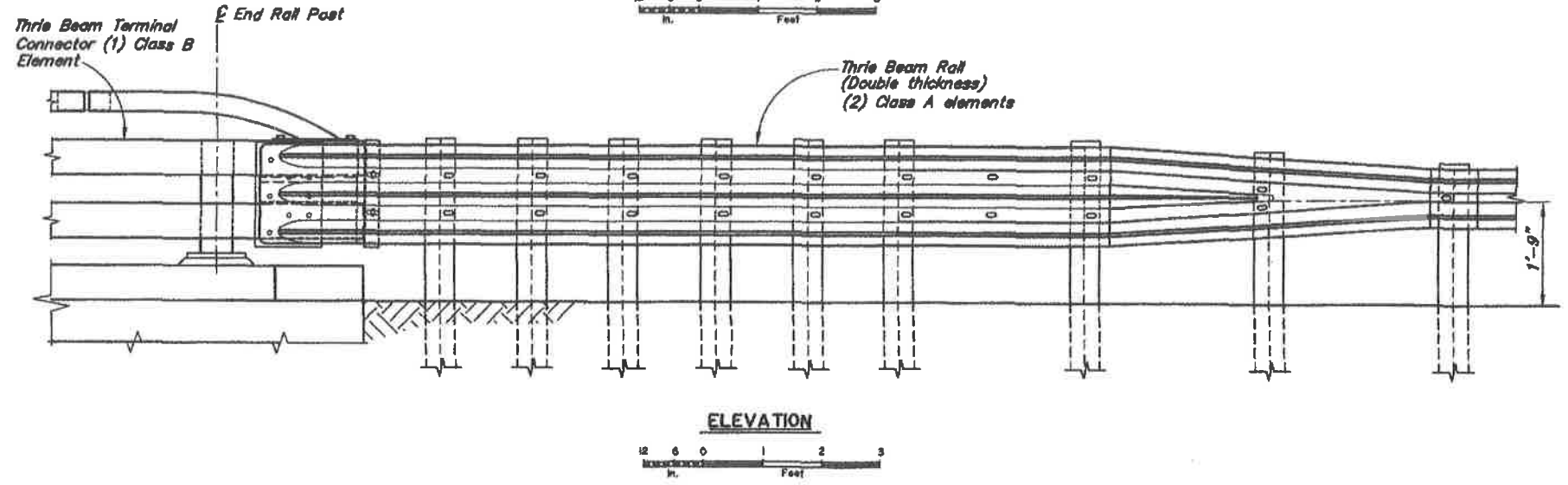
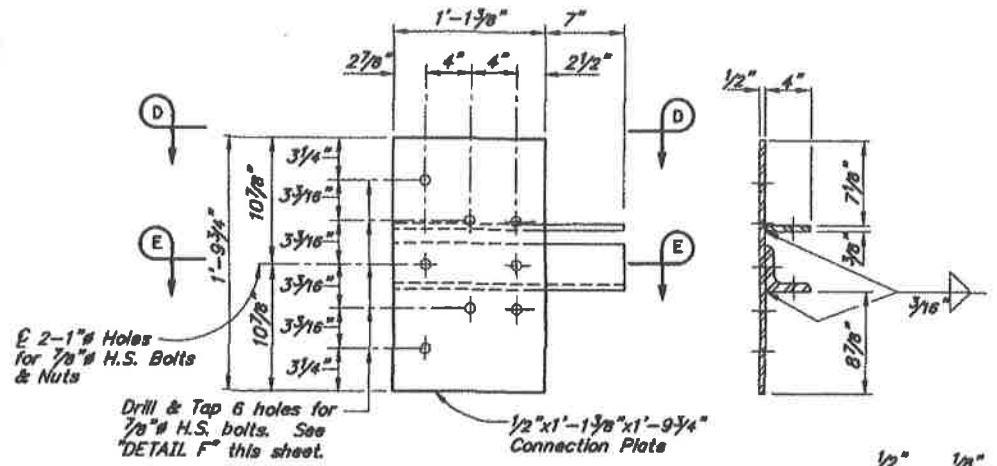
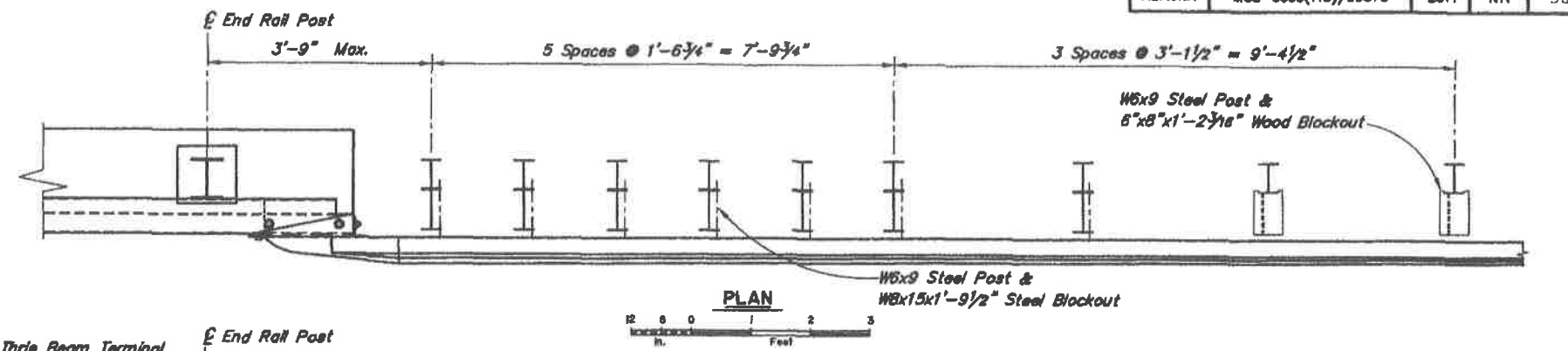
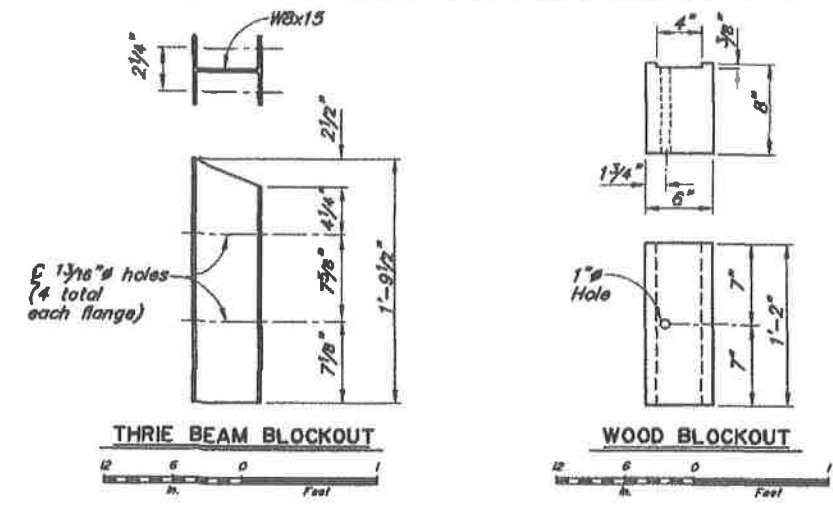
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
BRIDGE SECTION



HYDER HARBOR TRESTLE
PREMIER AVENUE
PEDESTRIAN RAILING

BRIDGE NO. 1238
DWG. NO. N10

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	MGS-0003(113)/89070	2011	N11	58



DESIGNED BY: ELMER MARX	CHECKED: <i>Zilbert</i>
DRAWN BY: Sam Sallie Jr.	CHECKED: ELMER MARX
QUANTITIES BY: <i>Elmer Marx</i>	CHECKED: <i>Zilbert</i>

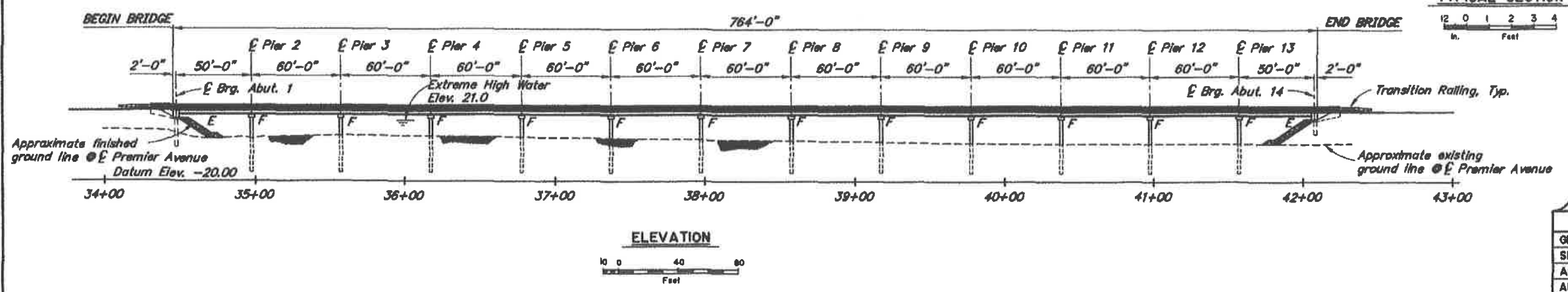
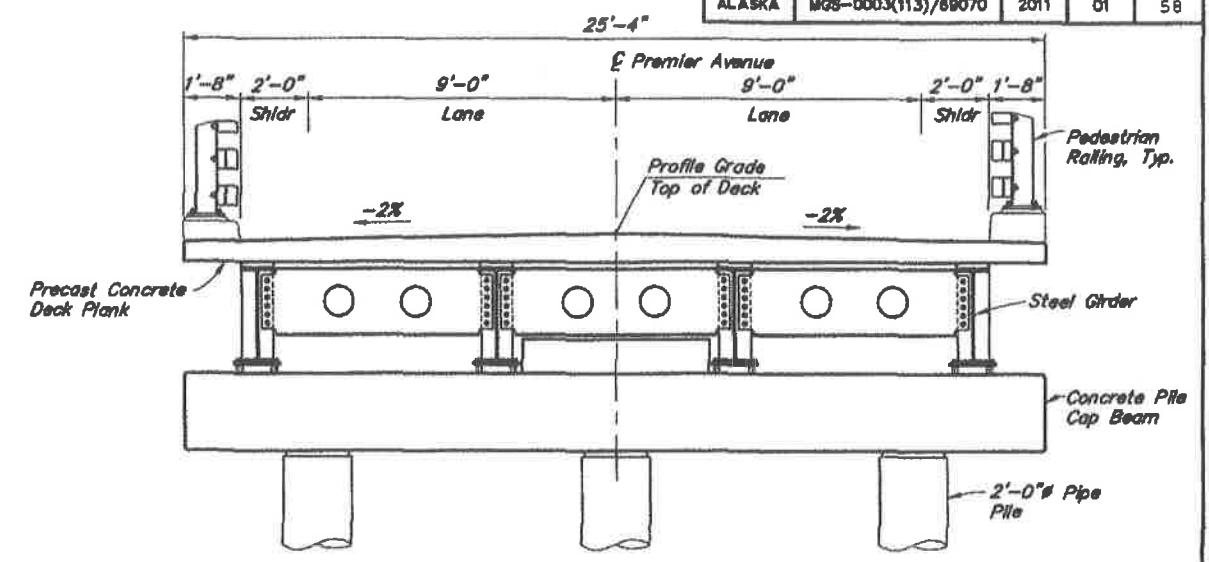
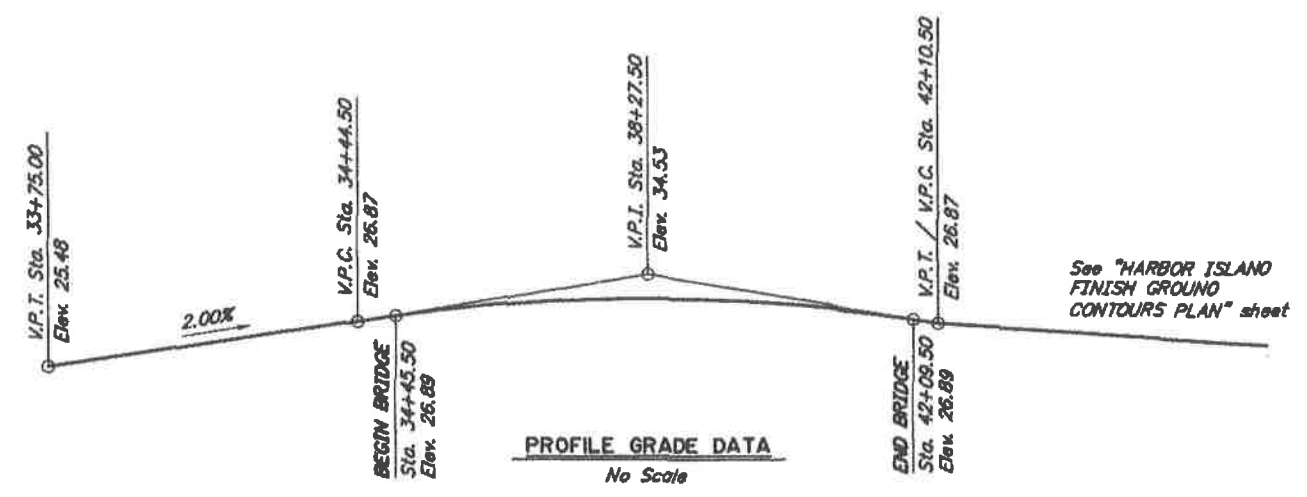
ALTERNATE A

STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 AND PUBLIC FACILITIES
 BRIDGE SECTION

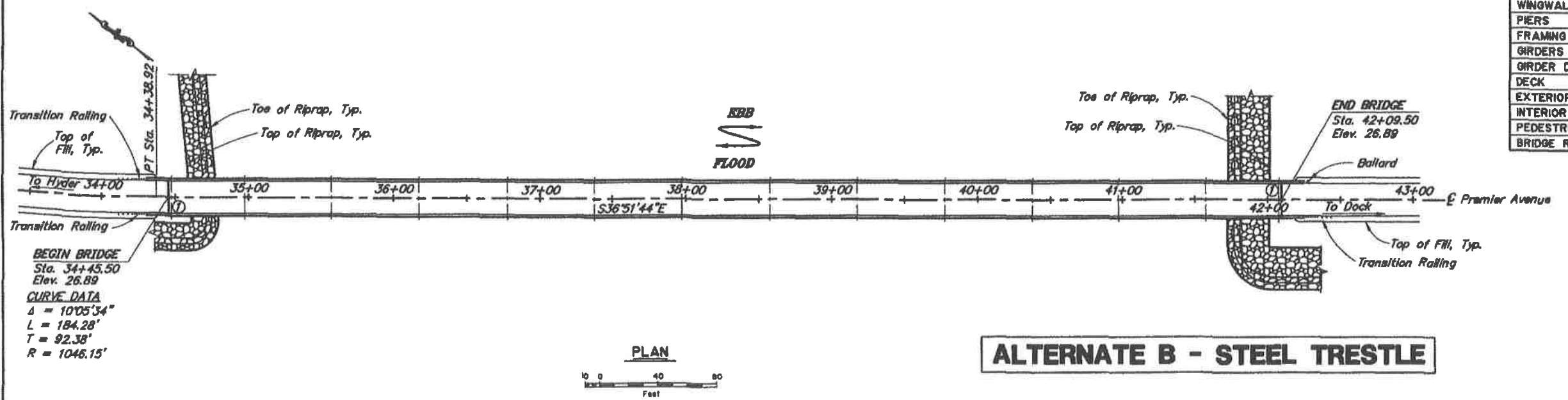


HYDER HARBOR TRESTLE
 PREMIER AVENUE
 BRIDGE RAIL TRANSITION

BRIDGE NO. 1238
 DWG. NO. N11



BRIDGE DRAWING INDEX	
TITLE	DWG. NO.
GENERAL LAYOUT	01
SITE PLAN	02
ABUTMENT 1	03
ABUTMENT 14	04
WINGWALLS	05
PIERS	06
FRAMING PLAN AND TYPICAL SECTION	07
GIRDERS	08
GIRDER DETAILS	09
DECK	010
EXTERIOR DECK PLANKS	011
INTERIOR DECK PLANKS	012
PEDESTRIAN RAILING	013
BRIDGE RAIL TRANSITION	014



ALTERNATE B - STEEL TRESTLE

NOTES:
 ① Denotes location of Bridge No. Plate.

DESIGNED BY: Elmer Marx	CHECKED: Travis Arndt	LAYOUT BY: Elmer Marx	CHECKED BY: Travis Arndt
DRAWN BY: Sam Sallie Jr	CHECKED: Elmer Marx	SPECIFICATIONS BY: Elmer Marx	P S & E COMPARED: Travis Arndt
QUANTITIES BY: Elmer Marx	CHECKED: Travis Arndt	APPROVAL RECOMMENDED BY: George Ambrose	FOR: Alth Pratt

STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 AND PUBLIC FACILITIES
 BRIDGE SECTION

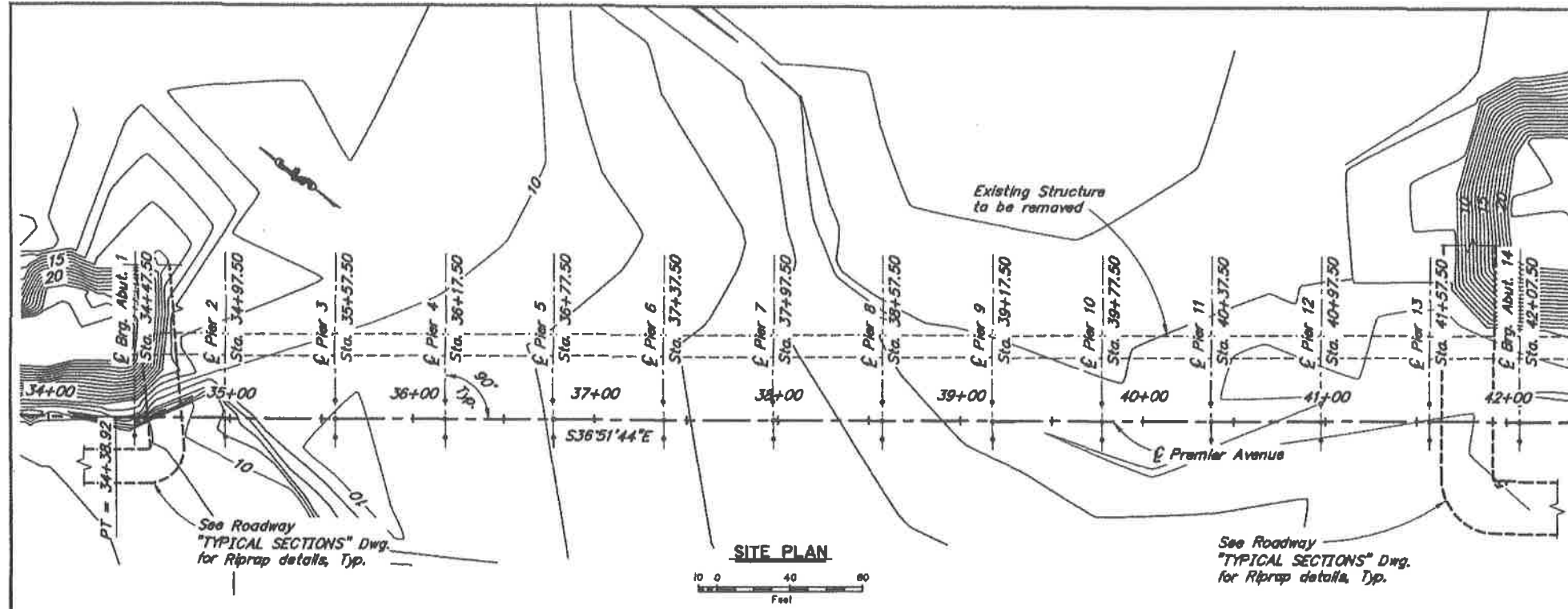


HYDER HARBOR TRESTLE
 PREMIER AVENUE
 GENERAL LAYOUT

BRIDGE NO. 1238
 DWG. NO. 01

GENERAL NOTES

- DESIGN:**..... AASHTO LRFD Bridge Design Specifications, 2010 edition, with latest interim specifications.
Seismic design per AASHTO Guide Specifications for LRFD Seismic Bridge Design, 2009
- LIVE LOAD:**..... HL-93
- DEAD LOAD:**..... Includes 50 psf for all wearing surfaces.
- SEISMIC PARAMETERS:**..... PGA = 0.05
SS = 0.11
S1 = 0.09
Site Class = E
Liquefaction Potential = Low
AASHTO 7% probability of exceedance in 75 years.
- REINFORCEMENT:**..... ASTM A706, Fy = 60,000 psi
Space reinforcement evenly unless otherwise noted.
ASTM A970, Class HA Headed bars.
- CONCRETE:**..... Class A Concrete unless otherwise noted, f'c = 4000 psi
Class A-A Concrete for Deck Planks, f'c = 5000 psi.
- STRUCTURAL STEEL:**..... ASTM A709, Grade 50T3, Fy = 50,000 psi, unless noted otherwise.
Galvanize all structural steel in accordance with AASHTO M111 or SSPC CS 23.00 unless shown otherwise.
- STRUCTURAL STEEL PILING:**..... Use API 5L X52 PSL2, Fy = 52,000 psi for Pipe Piles.
Conical Pile Tip reinforcing is required.
- HIGH STRENGTH BOLTS:**..... Galvanized ASTM A325 or ASTM F 1552, Fu = 120 ksi
Exclude threads from shear plane.
- SHEAR STUDS:**..... ASTM A108, Fu = 60,000 psi



LOCATION	PILE TYPE	DRIVING CRITERIA			DESIGN DATA		
		MINIMUM PENETRATION (ft)	ESTIMATED PILE TIP ELEVATION	DRIVING RESISTANCE (k)	STRENGTH FACTORED LOAD (k)	NOMINAL RESISTANCE (k)	RESISTANCE FACTOR, φ
Abutment 1	2'-0" x 1/2" Pipe	70.0	-68.0	595	270	415	0.65
Pier 2	2'-0" x 1/2" Pipe	54.0	-85.0	595	385	595	0.65
Pier 3	2'-0" x 1/2" Pipe	54.0	-84.0	595	385	595	0.65
Pier 4	2'-0" x 1/2" Pipe	54.0	-85.0	595	385	595	0.65
Pier 5	2'-0" x 1/2" Pipe	54.0	-85.0	595	385	595	0.65
Pier 6	2'-0" x 1/2" Pipe	54.0	-86.0	595	385	595	0.65
Pier 7	2'-0" x 1/2" Pipe	54.0	-87.0	595	385	595	0.65
Pier 8	2'-0" x 1/2" Pipe	54.0	-88.0	595	385	595	0.65
Pier 9	2'-0" x 1/2" Pipe	54.0	-89.0	595	385	595	0.65
Pier 10	2'-0" x 1/2" Pipe	54.0	-89.0	595	385	595	0.65
Pier 11	2'-0" x 1/2" Pipe	54.0	-89.0	595	385	595	0.65
Pier 12	2'-0" x 1/2" Pipe	54.0	-89.0	595	385	595	0.65
Pier 13	2'-0" x 1/2" Pipe	54.0	-89.0	595	385	595	0.65
Abutment 14	2'-0" x 1/2" Pipe	70.0	-74.0	595	270	415	0.65

ABBREVIATIONS:

- C = Centerline
- E = Plate
- & = and
- @ = at
- ∅ = diameter
- ± = approximate
- Approx. = approximate
- Abut. = Abutment
- Ave. = avenue
- bot. = bottom
- Br. = bridge
- btwn. = between
- Brg. = Bearings
- C.I.P. = cast in place
- Clr. = clear, clearance
- Col. = column
- CSL = crosshole sonic logging
- CY = cubic yard
- dia. = diameter
- D.H.W. = Design High Water
- Dwg. = drawing
- EA = each
- Elev. = elevation
- e.f. = each face
- e.w. = each way
- f.f. = far face
- LB = pound
- LF = linear foot
- LS = lump sum
- Lt. = left
- max. = maximum
- min. = minimum
- MSE = mechanically stabilized earth
- n.a. = not applicable
- n.c. = not calculated
- n.f. = near face
- No. = number
- PT = Post Tensioned
- PVC = point of vertical curve
- PVI = point of vertical intersection
- PVT = point of vertical tangent
- Rt. = right
- spc. = space, spaces
- Sta. = station
- SY = square yard
- Symm. = symmetric
- Typ. = typical

ITEM NO.	ITEM	PAY UNIT	EST UNIT	SUBST.	SUPERST.	TOTAL
202(1)	Removal of Structures and Obstructions	LS	SF	All Req'd	All Req'd	All Req'd
205(3)	Structural Fill	CY	CY	565	---	565
501(1)	Class A Concrete	LS	CY	373.9	---	373.9
501(7)	Precast Concrete Member (Deck Planks)	EA	EA	---	155	155
503(1)	Reinforcing Steel	LS	LBS	81,585	---	81,585
503(2)	Epoxy-Coated Reinforcing Steel	LS	LBS	16,820	---	16,820
504(1)	Structural Steel	LS	LBS	---	493,525	493,525
505(5)	Furnish Structural Steel Piles (2'-0"x0.5" Pipe)	LF	LF	4505.0	---	4505.0
505(6)	Drive Structural Steel Piles (2'-0"x0.5" Pipe)	EA	EA	42	---	42
505(11)	Pile Restrike	DAY	DAY	42	---	42
507(2)	Pedestrian Railing	LF	LF	---	1588.0	1588.0
606(12)	Guardrail / Bridge Rail Connection	EA	EA	---	3	3

Item numbers are for reference only. Quantities shown are not necessarily the pay quantities nor the total quantity of the particular item.

ALTERNATE B

DESIGNED BY: Elmer Marx	CHECKED: Trade Arndt	
DRAWN BY: Sam Sallie Jr	CHECKED: Elmer Marx	FOUNDATIONS REVIEWED BY: Bruce Burnett
QUANTITIES BY: Elmer Marx	CHECKED: Trade Arndt	

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
BRIDGE SECTION

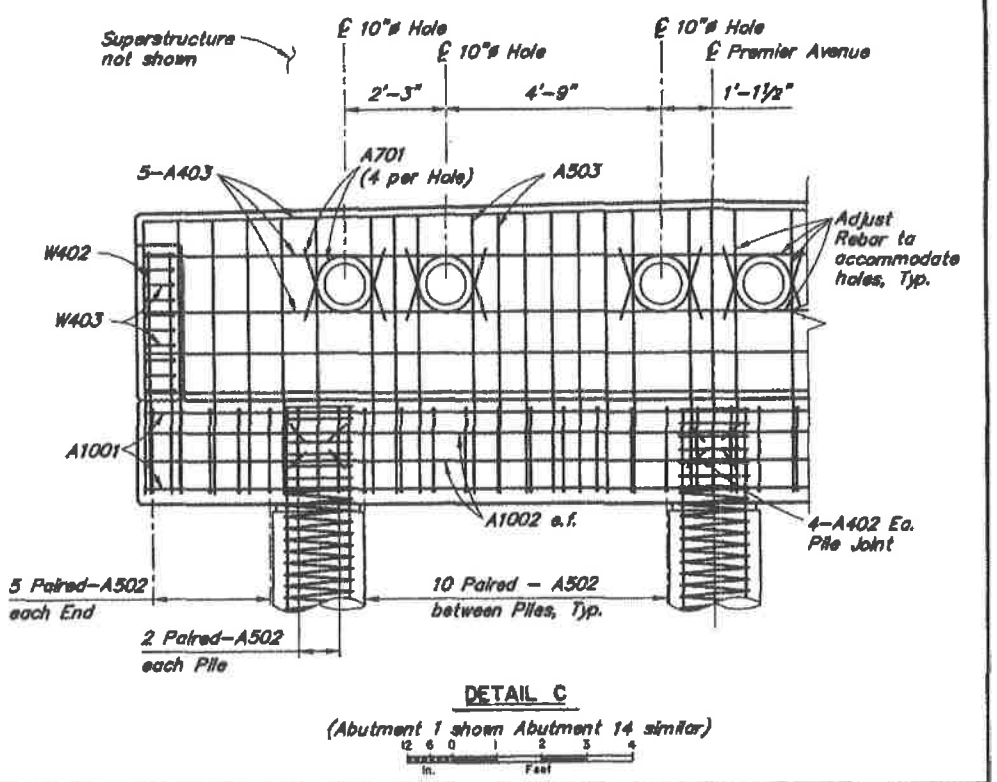
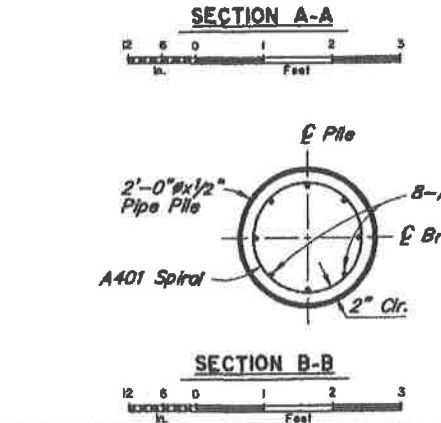
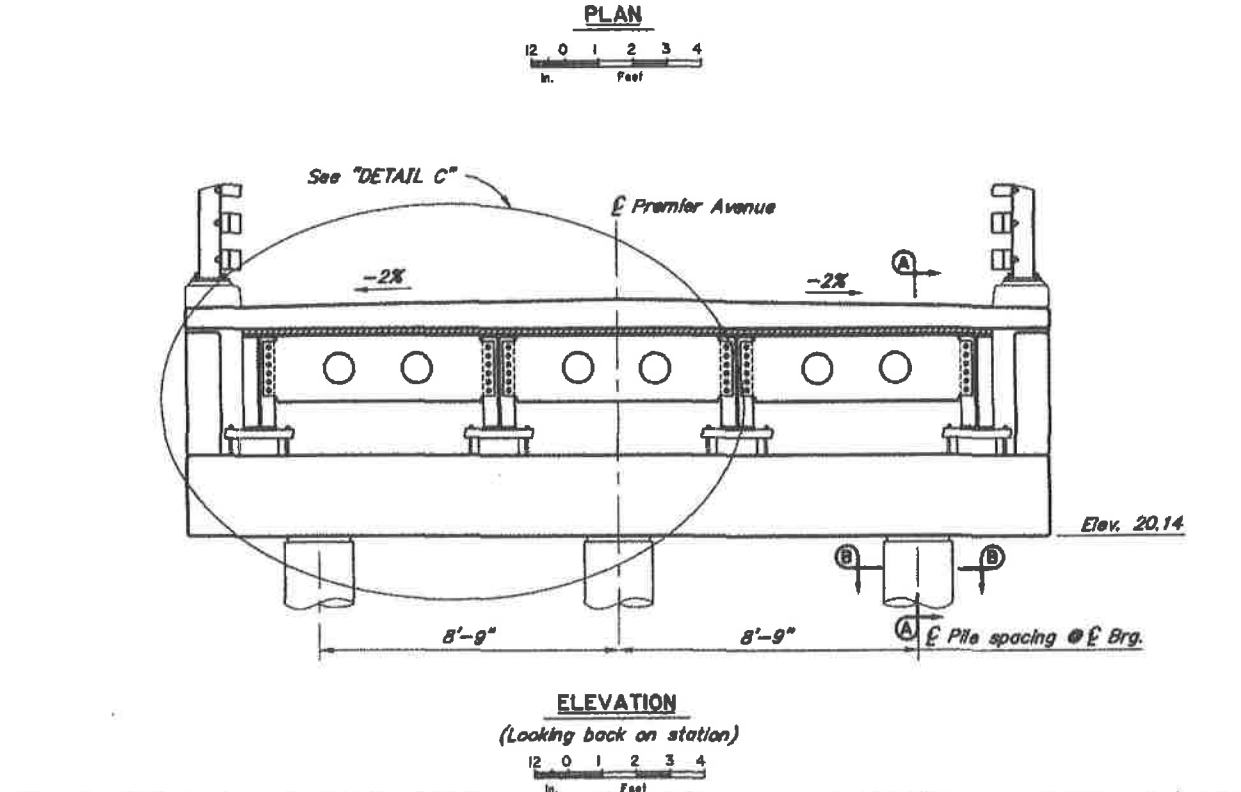
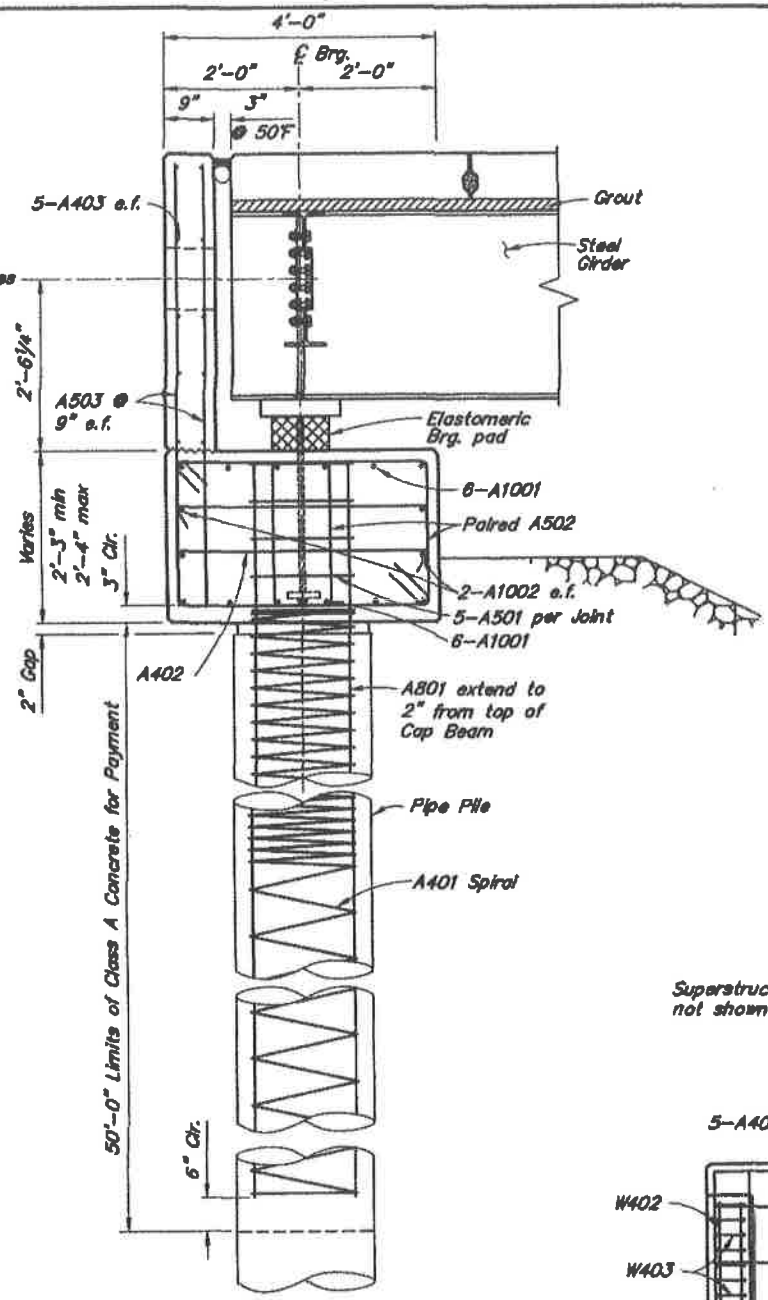
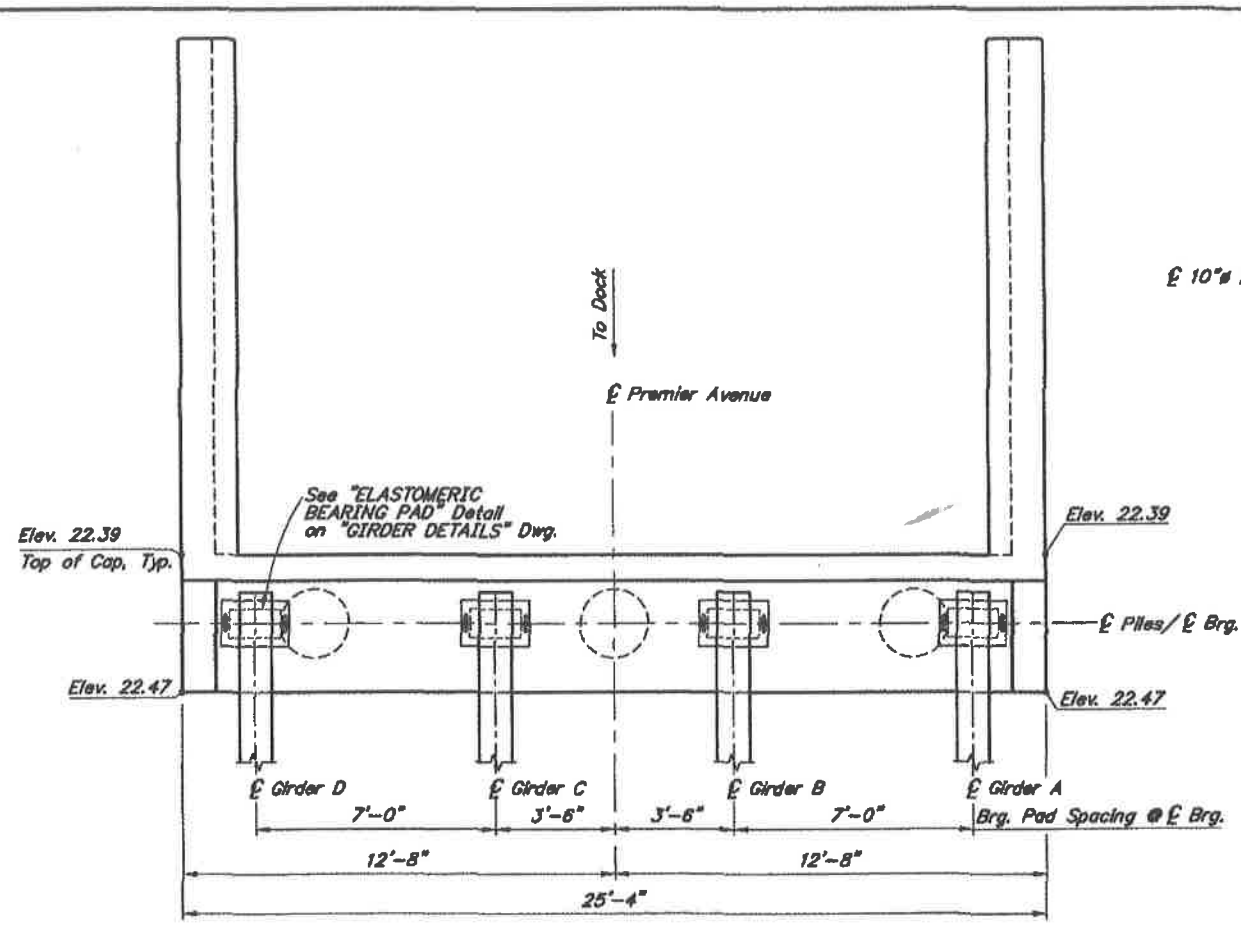
HYDER HARBOR TRESTLE
PREMIER AVENUE
SITE PLAN

BRIDGE NO. 1238
DWG. NO. 02

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	MGS-0003(113)/89070	2011	03	58

REINFORCING STEEL - ONE ABUTMENT				
MARK	SIZE	NO.	LENGTH	TYPE
A401	4	3	352'-9"	SPIRAL
A402	4	12	4'-8"	BENT
A403	4	10	30'-0"	BENT
A501	5	15	6'-0"	HOOP
A502	5	72	9'-2"	BENT
A503	5	64	6'-0"	
A701	7	24	3'-6"	BENT
A801	8	24	51'-7"	
A1001	10	12	25'-0"	HEADED
A1002	10	4	25'-0"	

BENDING DIAGRAM



DESIGNED BY: Elmer Marx III	CHECKED: Tina Arndt
DRAWN BY: Sam Sallie Jr	CHECKED: Elmer Marx
QUANTITIES BY: Elmer Marx III	CHECKED: Tina Arndt

ALTERNATE B

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
BRIDGE SECTION



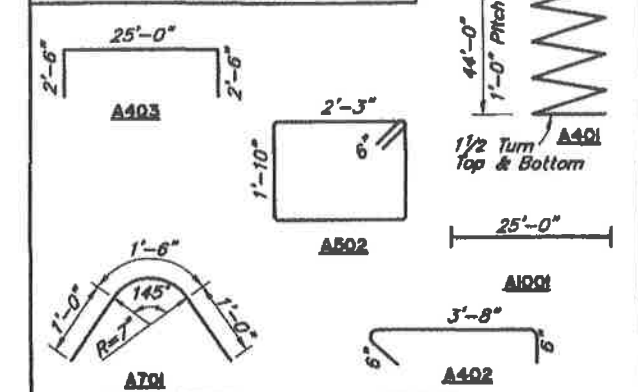
HYDER HARBOR TRESTLE
PREMIER AVENUE
ABUTMENT 1

BRIDGE NO. 1238
DWG. NO. 03

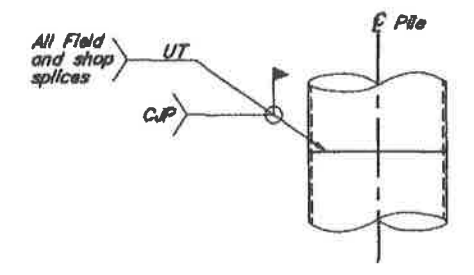
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	MGS-0003(113)/89070	2011	04	58

REINFORCING STEEL - ONE ABUTMENT

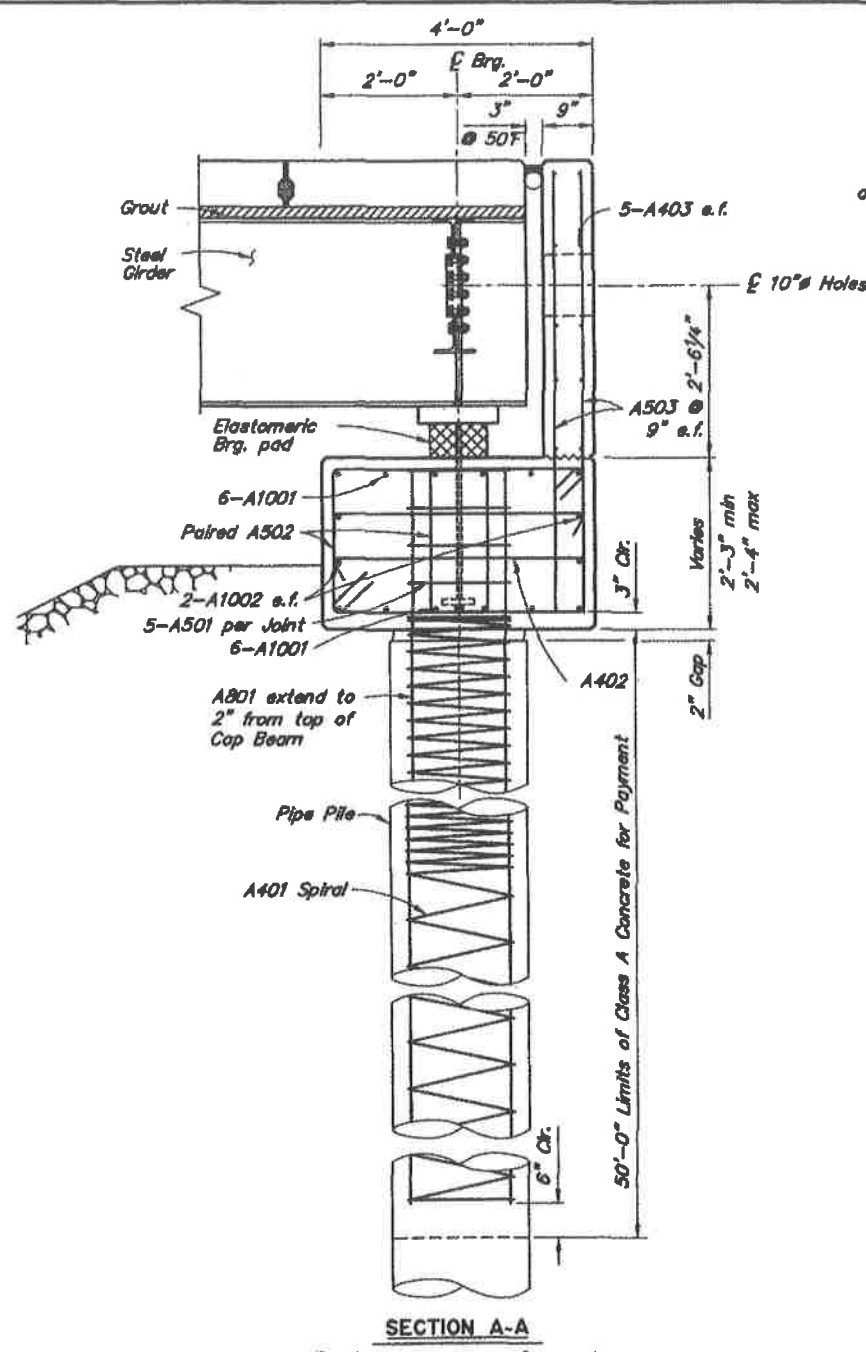
MARK	SIZE	NO.	LENGTH	TYPE
A401	4	3	332'-9"	SPIRAL
A402	4	12	4'-8"	BENT
A403	4	10	30'-0"	BENT
A501	5	15	6'-0"	HOOP
A502	5	72	9'-2"	BENT
A503	5	64	6'-0"	
A701	7	24	3'-6"	BENT
A801	8	24	51'-7"	
A1001	10	12	25'-0"	HEADED
A1002	10	4	25'-0"	



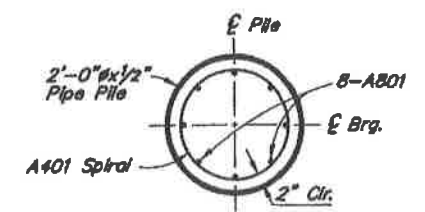
a - Epoxy-coated
c - Field adjust and match cross slope



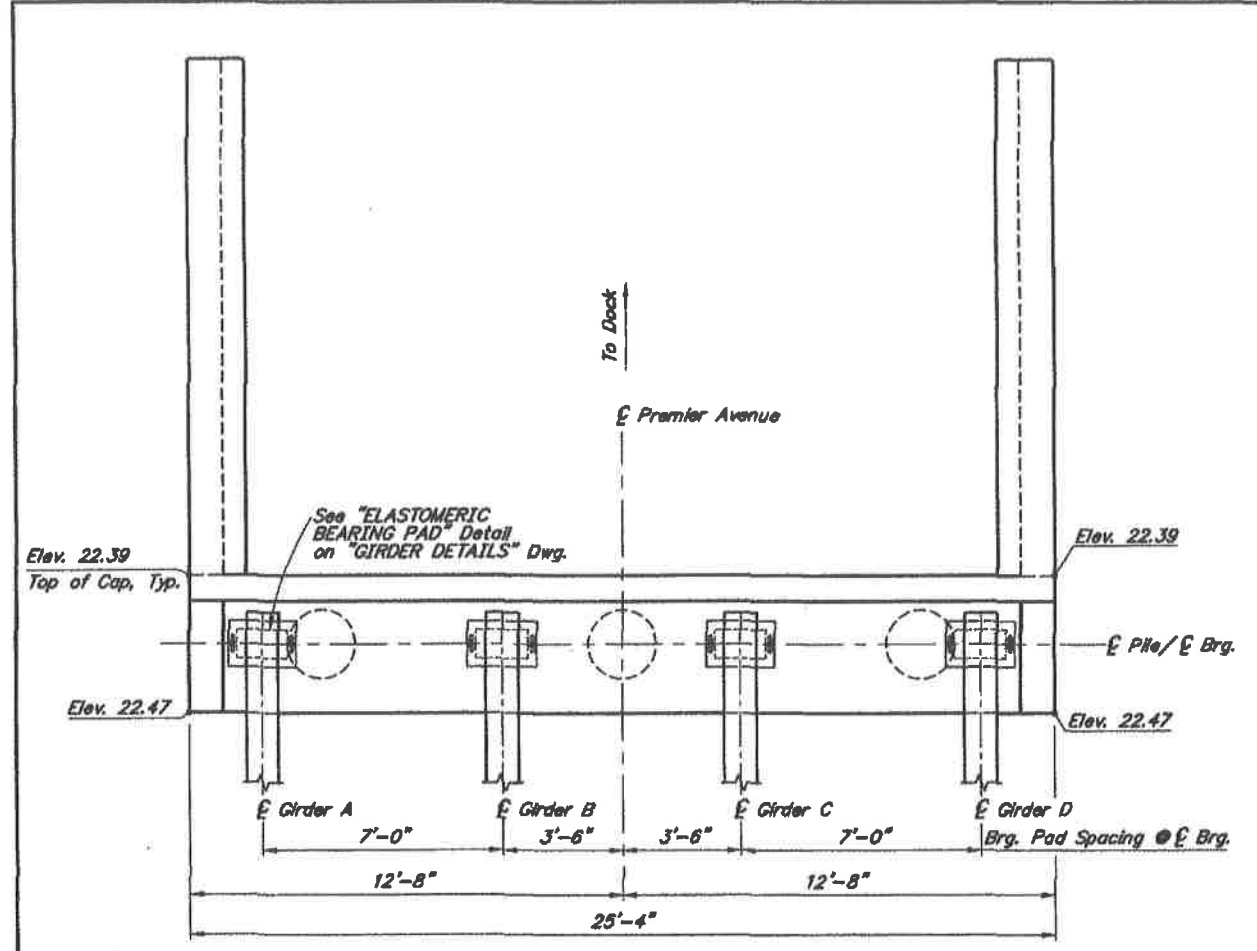
TYPICAL PIPE SPLICE DETAIL



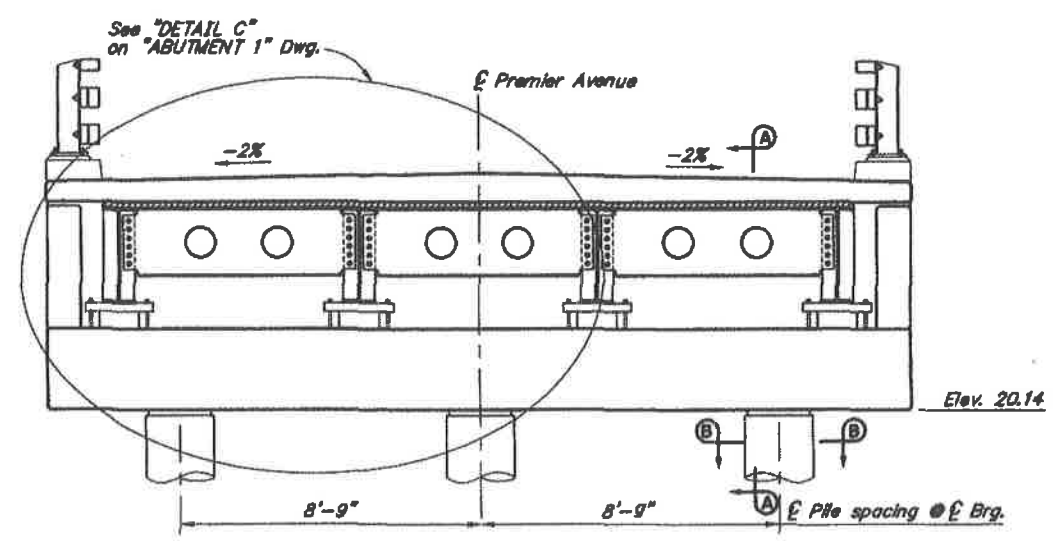
SECTION A-A



SECTION B-B



PLAN



ELEVATION


DESIGNED BY: <i>Elmer Marx</i>	CHECKED: <i>Travis Arnold</i>
DRAWN BY: <i>Sam Sallie Jr.</i>	CHECKED: <i>Elmer Marx</i>
QUANTITIES BY: <i>Elmer Marx</i>	CHECKED: <i>Travis Arnold</i>

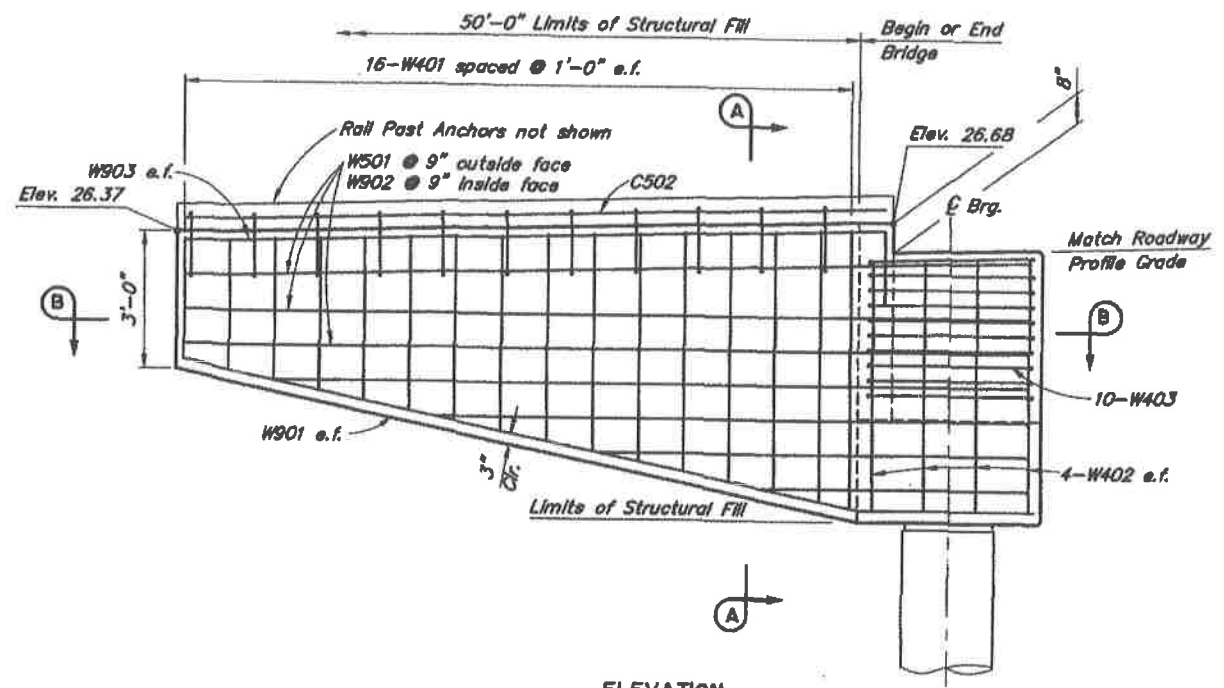
ALTERNATE B

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
BRIDGE SECTION

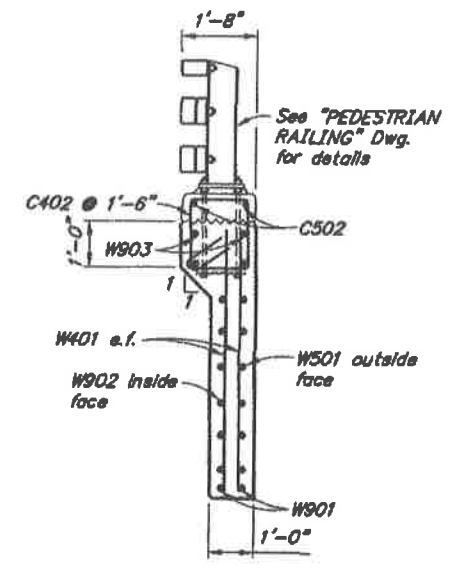


HYDER HARBOR TRESTLE
PREMIER AVENUE
ABUTMENT 14


BRIDGE NO. 1238
DWG. NO. 04



ELEVATION
 12 6 0 1 2 3 4
 In. Feet

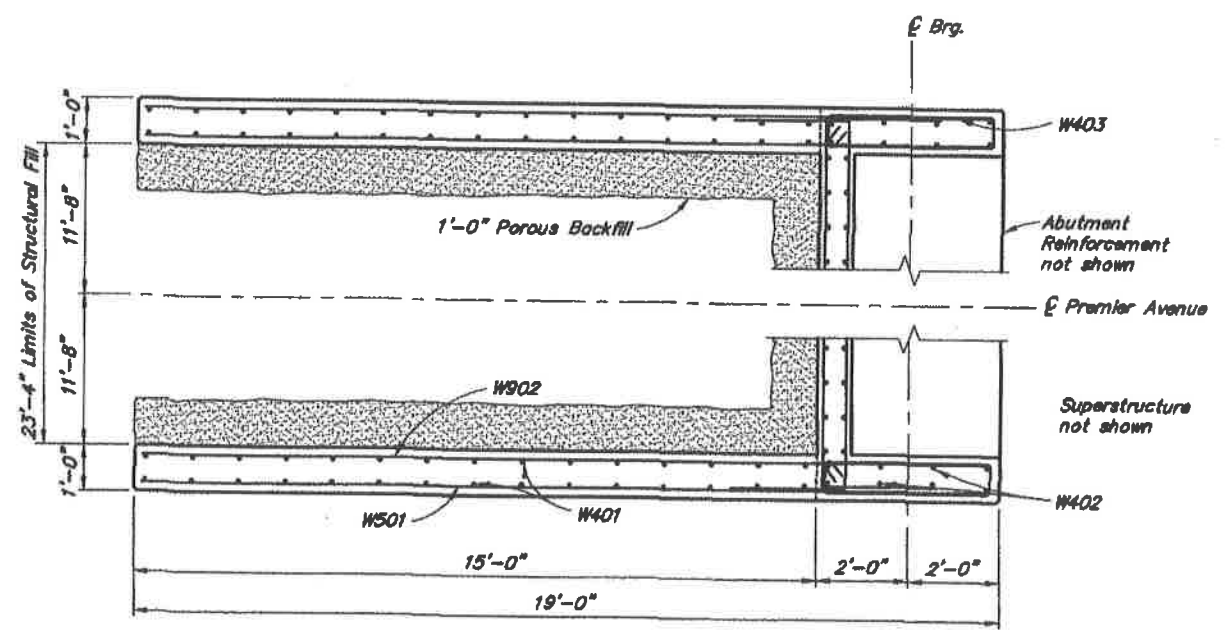


SECTION A-A
 12 6 0 1 2 3 4
 In. Feet

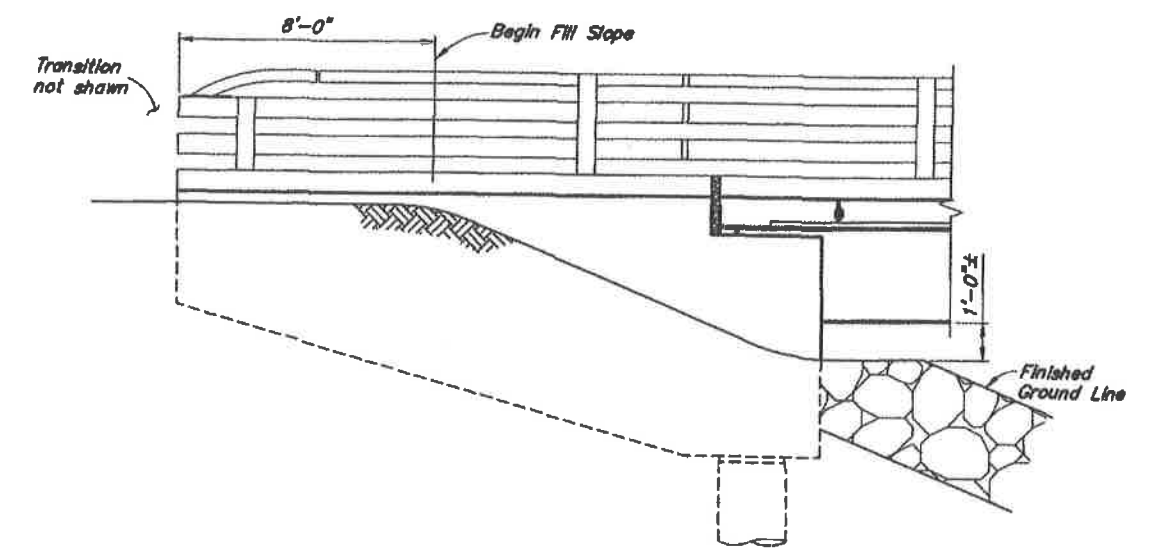
REINFORCING STEEL - ONE ABUTMENT				
MARK	SIZE	NO.	LENGTH	TYPE
W401	4	64	Varies	
W402	4	16	5'-5"	
W403	4	20	9'-8"	Bent
W501	5	14	Varies	
W901	9	4	18'-11"	Bent
W902	9	14	Varies	
W903	9	4	17'-0"	Bent
C402	4	22	6'-0"	Bent
C502	5	4	15'-5"	

BENDING DIAGRAM	
	7'-5" Min. 18'-8" Max. W501, W902
	3'-8" 6" W403
	2'-7" Min. 6'-0" Max. W401

σ - Epoxy-coated.



SECTION B-B
 12 6 0 1 2 3 4
 In. Feet



FINISHED ELEVATION
 12 6 0 1 2 3 4
 In. Feet

DESIGNED BY: Elmer Marx	CHECKED: Travis Amott
DRAWN BY: Sam Sallis	CHECKED: Elmer Marx
QUANTITIES BY: Elmer Marx	CHECKED: Travis Amott

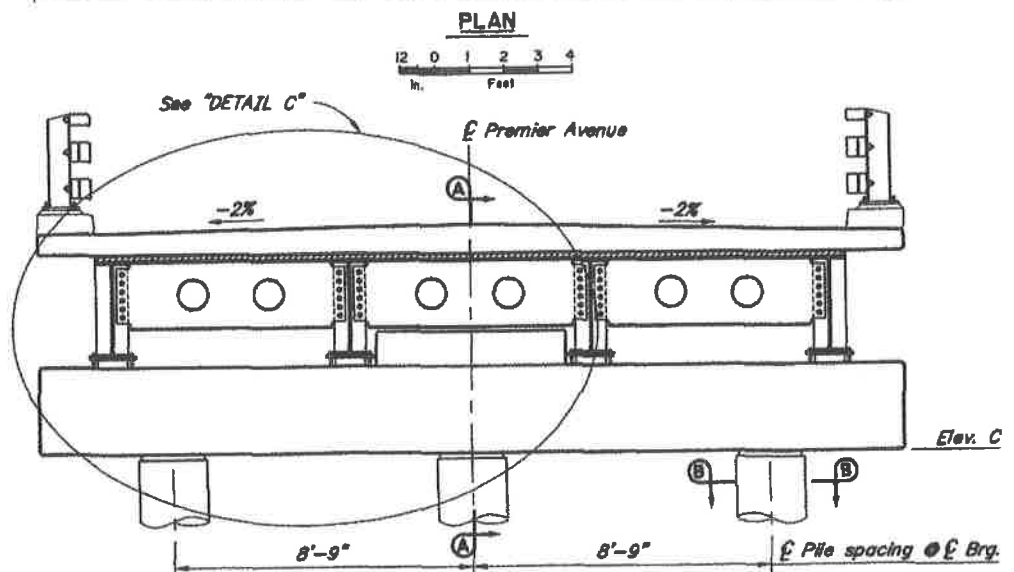
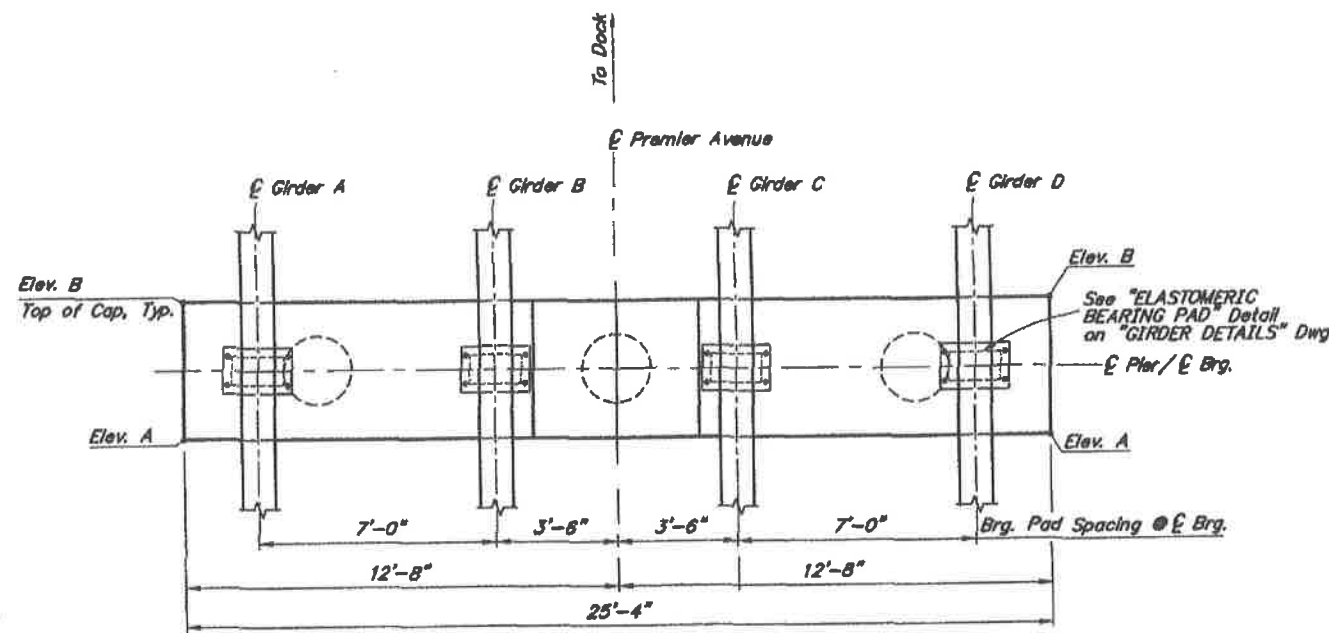
ALTERNATE B

STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 AND PUBLIC FACILITIES
 BRIDGE SECTION

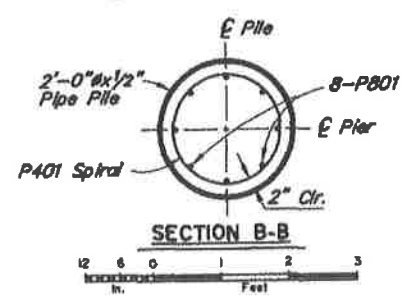
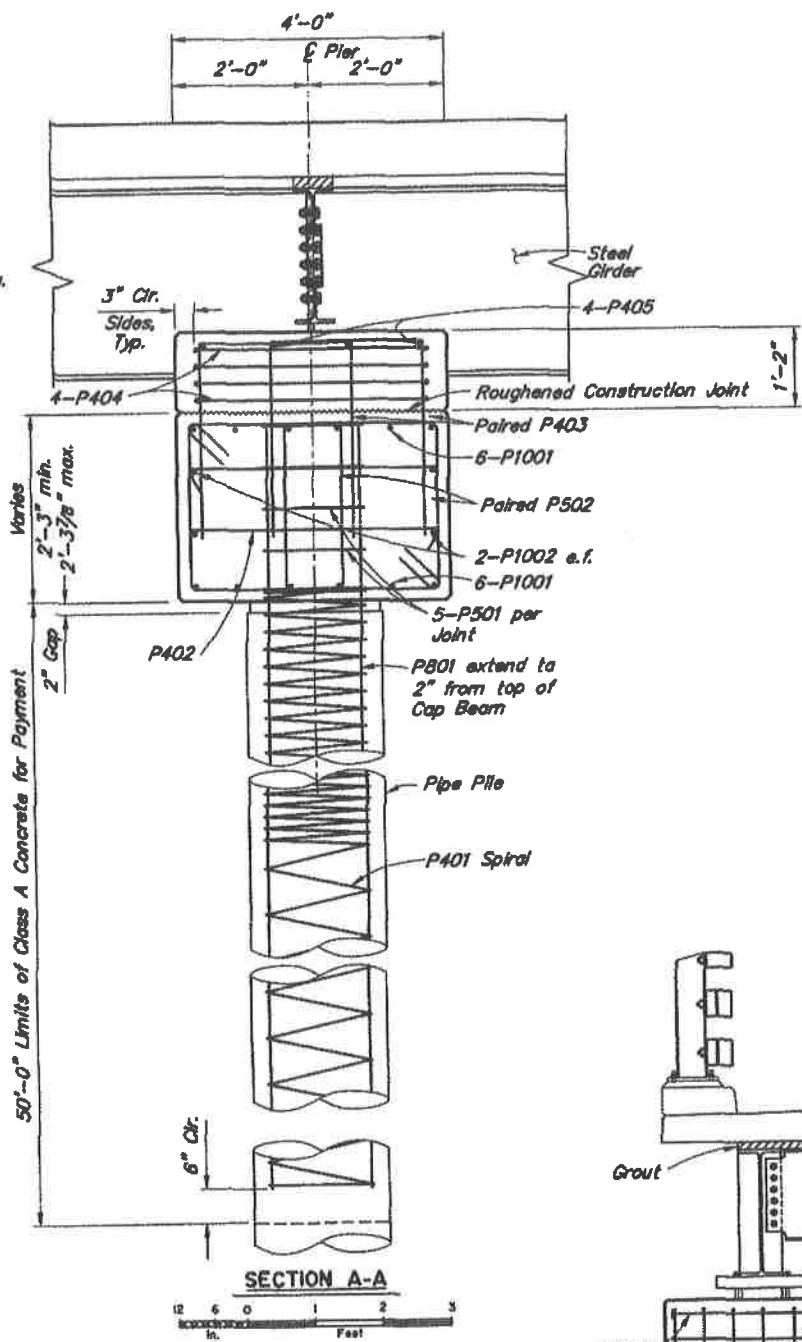


HYDER HARBOR TRESTLE
 PREMIER AVENUE
 WINGWALLS

BRIDGE NO. 1238
 DWG. NO. 05



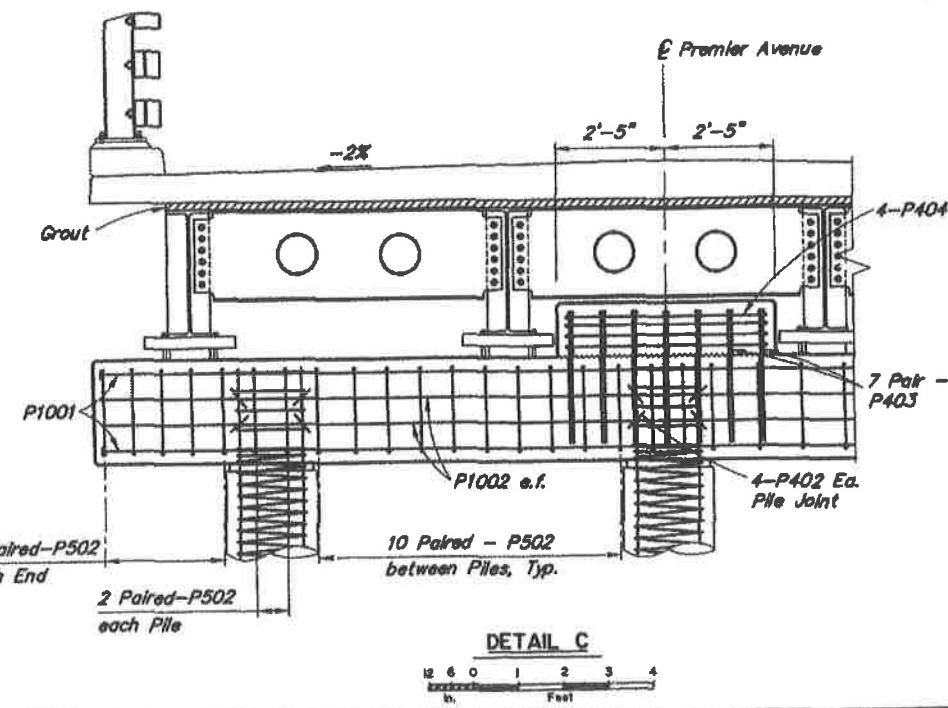
CAP ELEVATION TABLE			
LOCATION	ELEVATION A	ELEVATION B	ELEVATION C
Pier 2	23.57	23.64	21.32
Pier 3	24.52	24.57	22.27
Pier 4	25.28	25.32	23.03
Pier 5	25.85	25.88	23.60
Pier 6	26.23	26.25	23.98
Pier 7	26.42	26.43	24.17
Pier 8	26.43	26.42	24.17
Pier 9	26.25	26.23	23.98
Pier 10	25.88	25.85	23.60
Pier 11	25.32	25.28	23.03
Pier 12	24.57	24.52	22.27
Pier 13	23.64	23.57	21.32



REINFORCING STEEL-ONE PIER				
MARK	SIZE	NO.	LENGTH	TYPE
P401	4	3	352'-9"	SPIRAL
a P402	4	12	4'-8"	BENT
a P403	4	14	8'-0"	BENT
a P404	4	4	16'-8"	BENT
a P405	4	4	4'-4"	---
P501	5	15	6'-0"	HOOP
a P502	5	72	9'-4"	BENT
P801	8	24	51'-7"	---
P1001	10	12	25'-0"	HEADED
P1002	10	4	25'-0"	---

BENDING DIAGRAM

a - Epoxy-coated



DESIGNED BY: Elmer Marx
 DRAWN BY: Sam Sallie Jr.
 QUANTITIES BY: Elmer Marx

CHECKED: Travis Arnett
 CHECKED: Elmer Marx
 CHECKED: Travis Arnett

ALTERNATE B

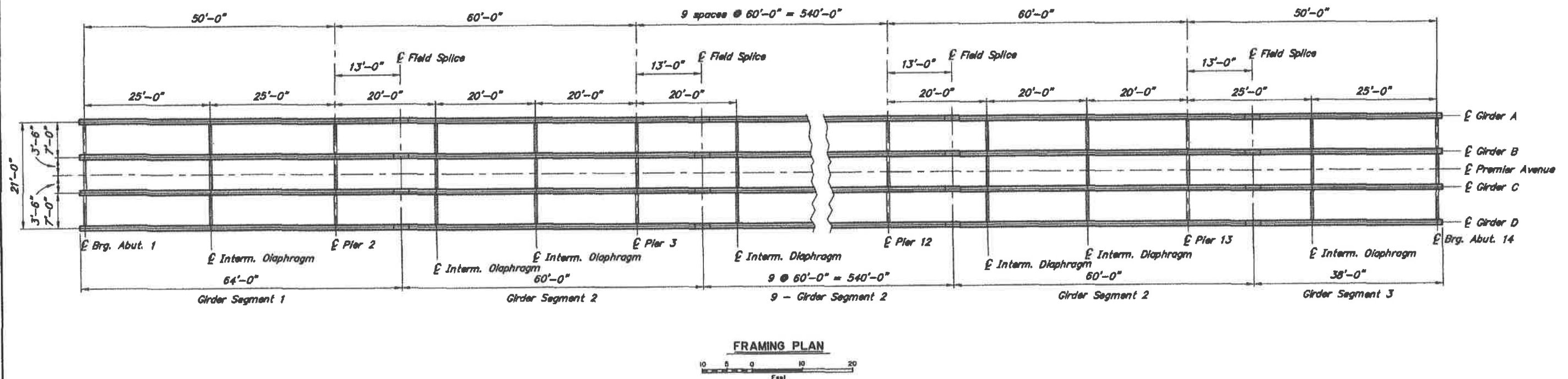
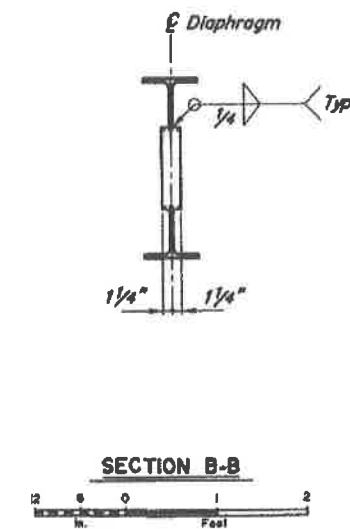
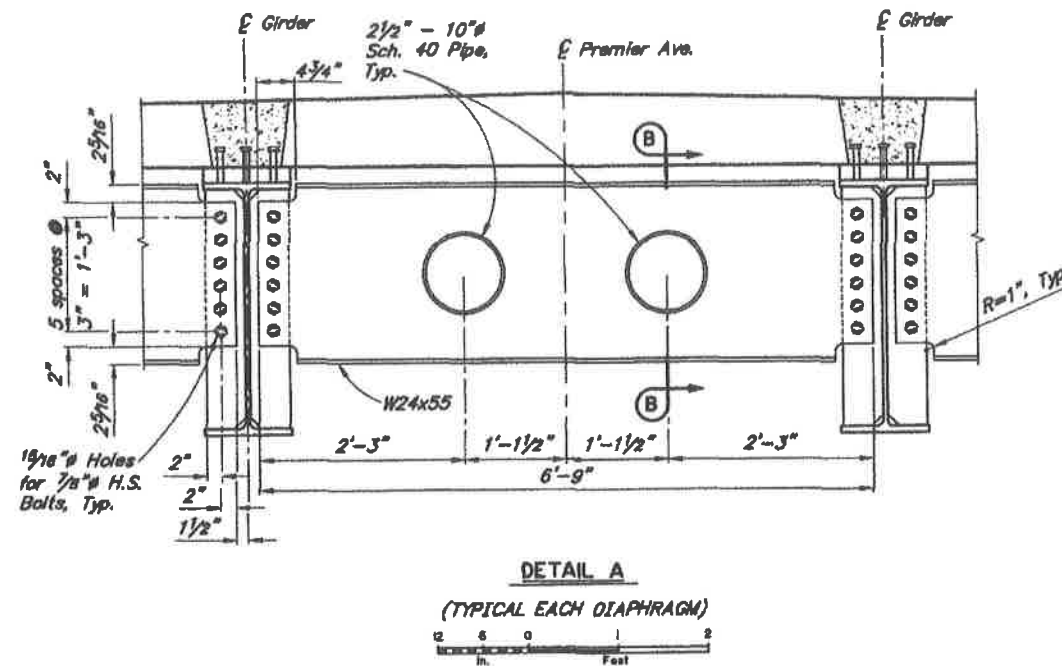
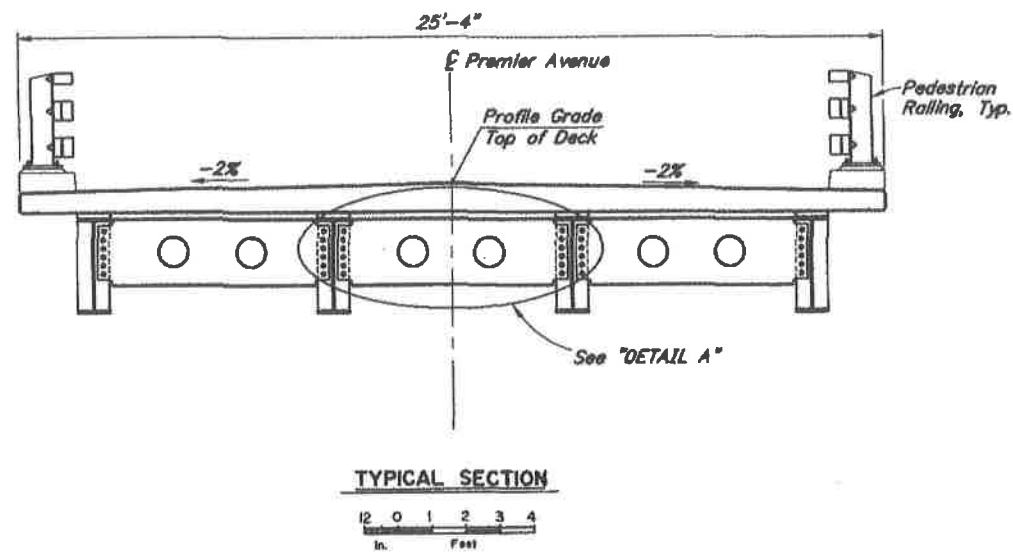
STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 AND PUBLIC FACILITIES
 BRIDGE SECTION



HYDER HARBOR TRESTLE
 PREMIER AVENUE
 PIERS

BRIDGE NO. 1238
 DWG. NO. 06

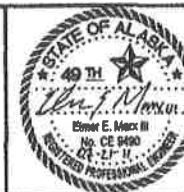
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	MGS-0003(113)/89070	2011	07	58



DESIGNED BY: <i>Elmer Marx</i>	CHECKED: <i>Li Cui</i>
DRAWN BY: <i>Sam Sallie Jr</i>	CHECKED: <i>Elmer Marx</i>
QUANTITIES BY: <i>Elmer Marx</i>	CHECKED: <i>Li Cui</i>

ALTERNATE B

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
BRIDGE SECTION

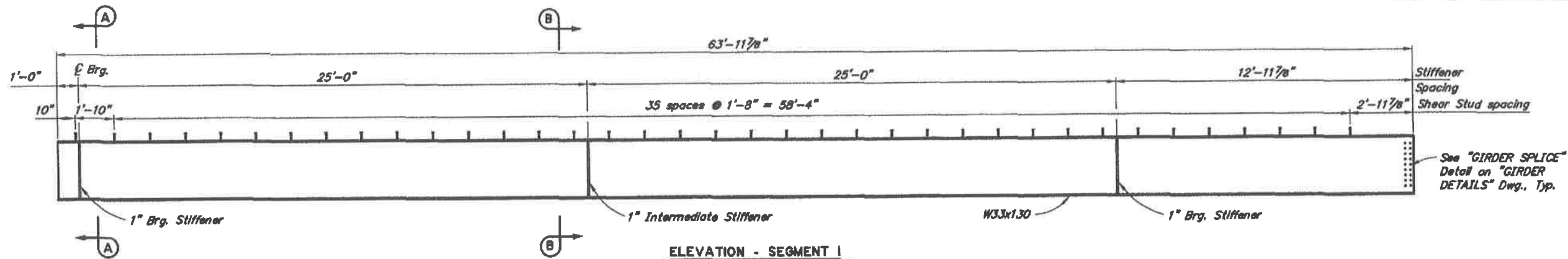


HYDER HARBOR TRESTLE
PREMIER AVENUE
FRAMING PLAN AND TYPICAL SECTION



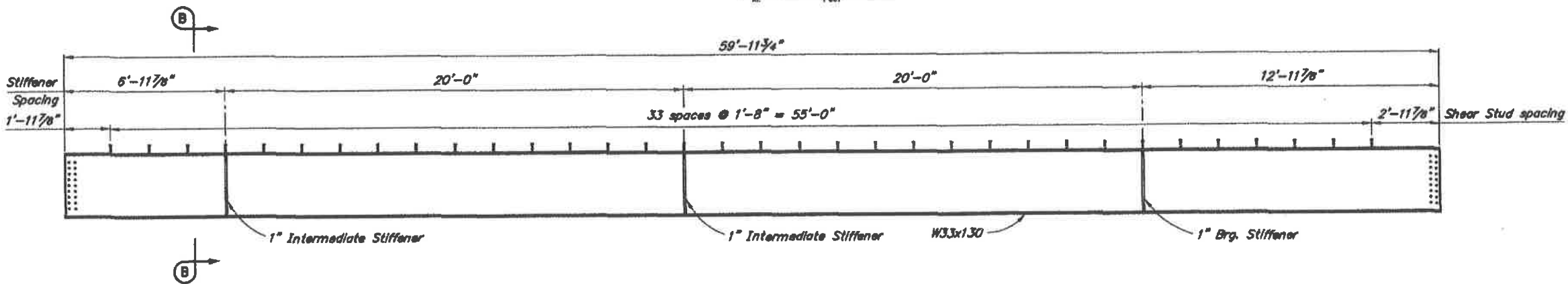
BRIDGE NO. 1238
DWG. NO. 07

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	MGS-0003(113)/89070	2011	08	58



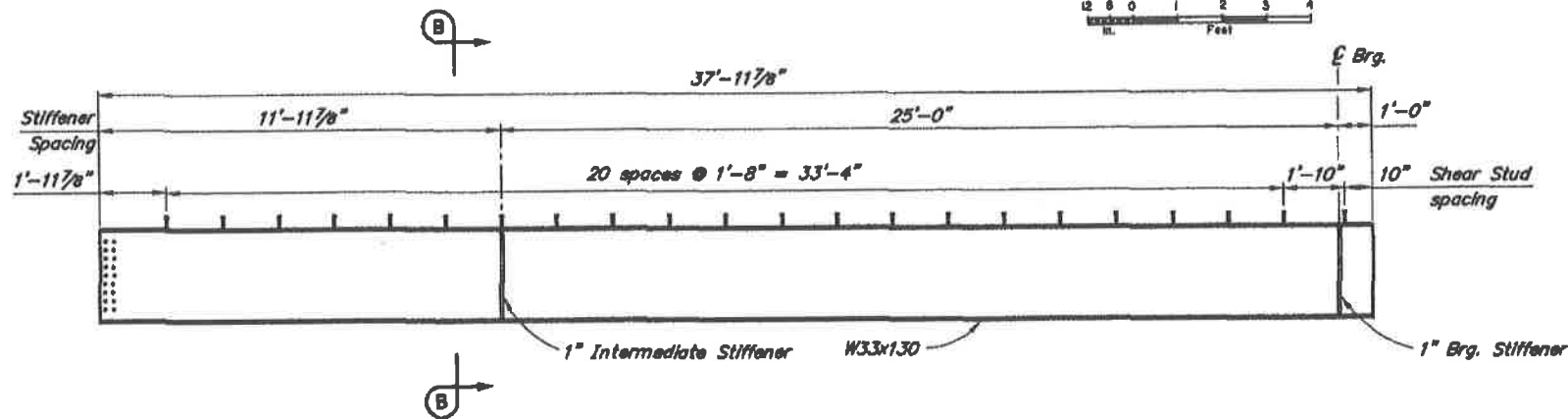
ELEVATION - SEGMENT 1

(1 Required per Girder Line)



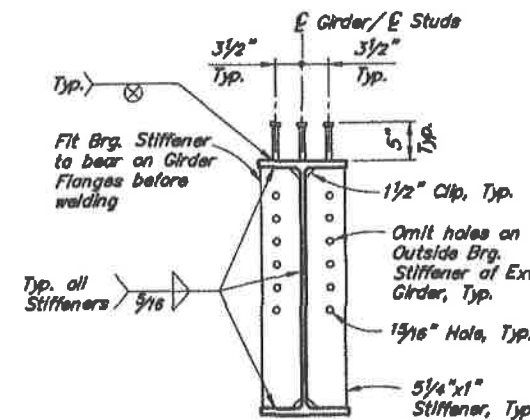
ELEVATION - SEGMENT 2

(11 Required per Girder Line)

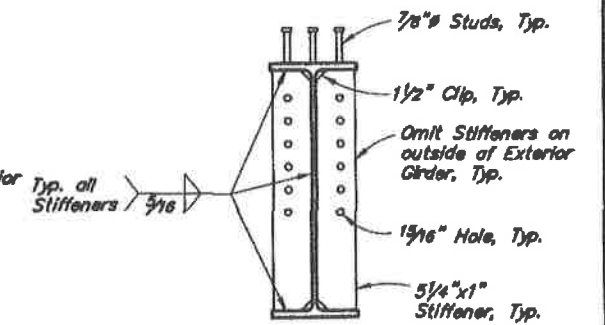


ELEVATION - SEGMENT 3

(1 Required per Girder Line)



SECTION A-A
BEARING STIFFENERS



SECTION B-B
INTERMEDIATE STIFFENERS




DESIGNED BY: ELMER E. MARX III	CHECKED: <i>[Signature]</i>
DRAWN BY: Sam Sallie Jr.	CHECKED: <i>[Signature]</i>
QUANTITIES BY: <i>[Signature]</i>	CHECKED: <i>[Signature]</i>

ALTERNATE B

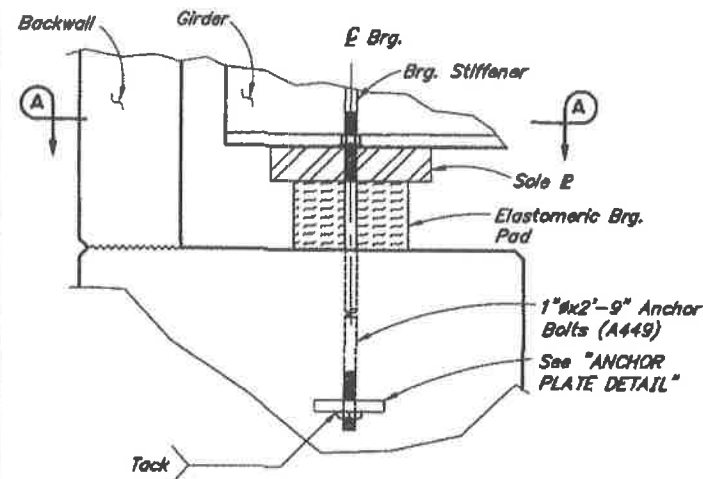
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
BRIDGE SECTION



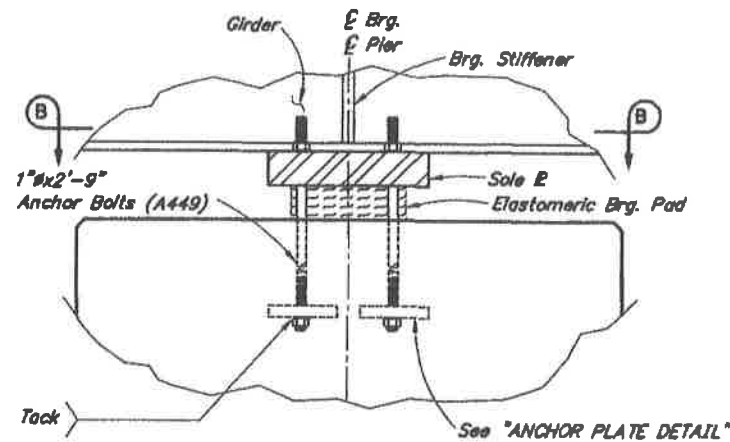
HYDER HARBOR TRESTLE
PREMIER AVENUE
GIRDERS


BRIDGE NO. 1238
DWG. NO. 08

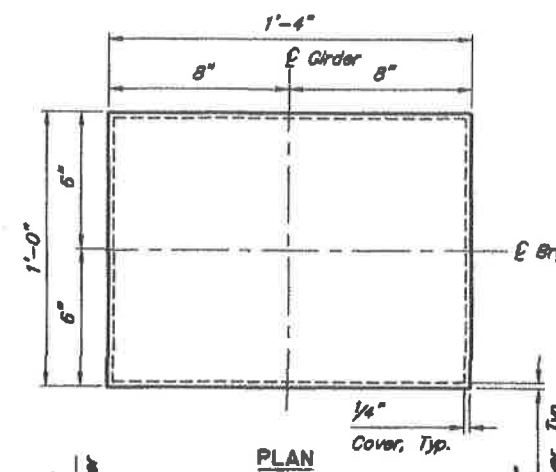
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	MGS-0003(113)/89070	2011	09	58



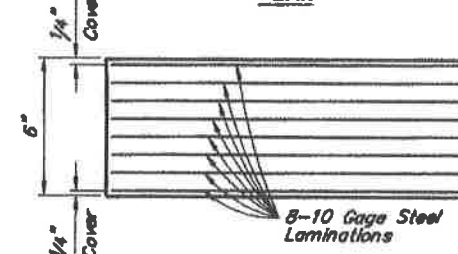
ABUTMENT BEARING DETAIL



PIER BEARING DETAIL



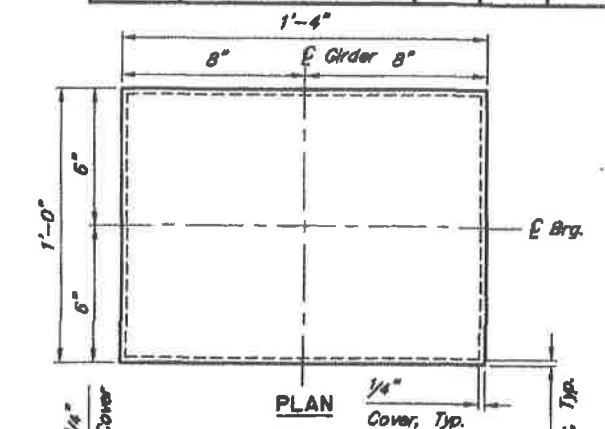
PLAN



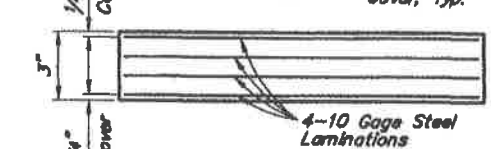
SECTION

ABUTMENT ELASTOMERIC BEARING PAD

Grade 5
Max. Dead Load = 26 k
Max. Live Load = 62 k
Shear Modulus = 115 psi



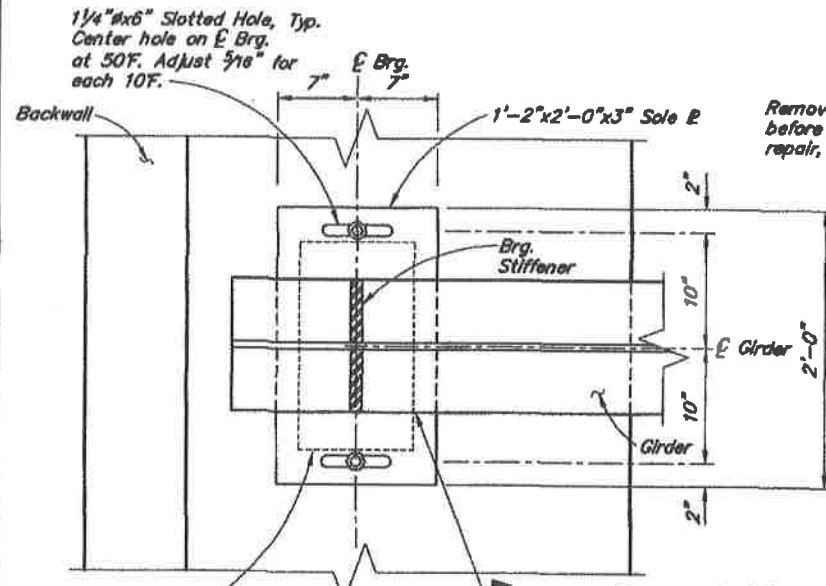
PLAN



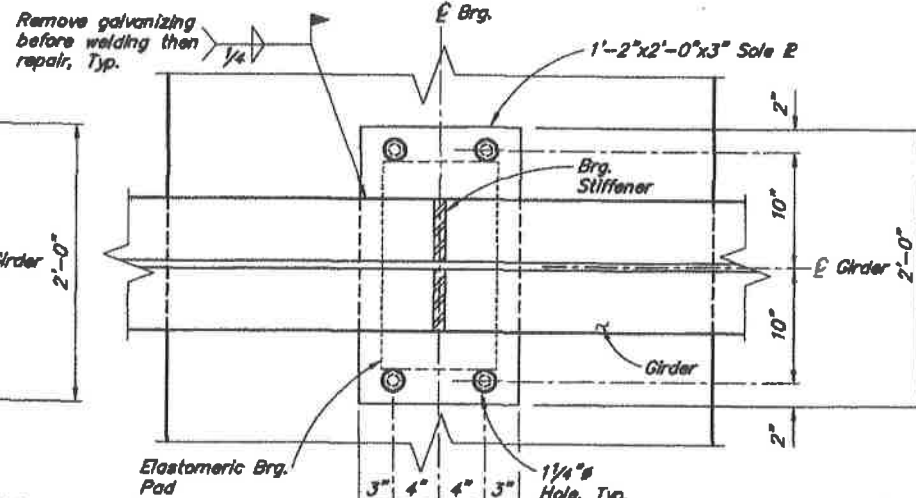
SECTION

PIER ELASTOMERIC BEARING PAD

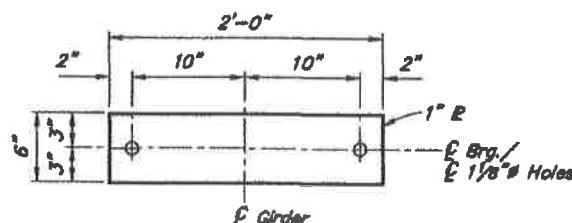
Grade 5
Max. Dead Load = 83 k
Max. Live Load = 110 k
Shear Modulus = 115 psi



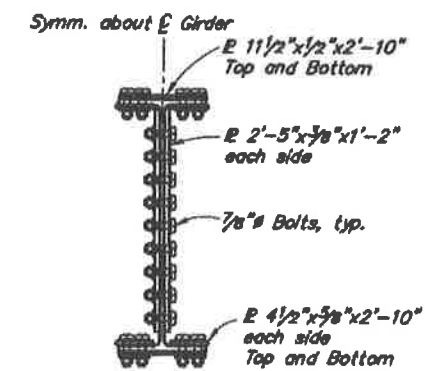
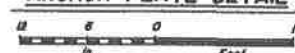
SECTION A-A



SECTION B-B



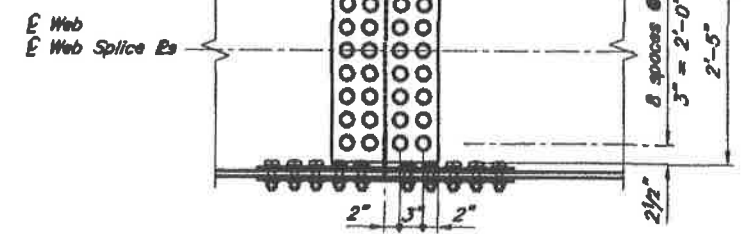
ANCHOR PLATE DETAIL



SECTION



GIRDER SPLICE



ELEVATION



DESIGNED BY: Elmer Marx	CHECKED: Travis Arndt
DRAWN BY: Sam Sallis Jr.	CHECKED: Elmer Marx
QUANTITIES BY: Elmer Marx	CHECKED: Travis Arndt

ALTERNATE B

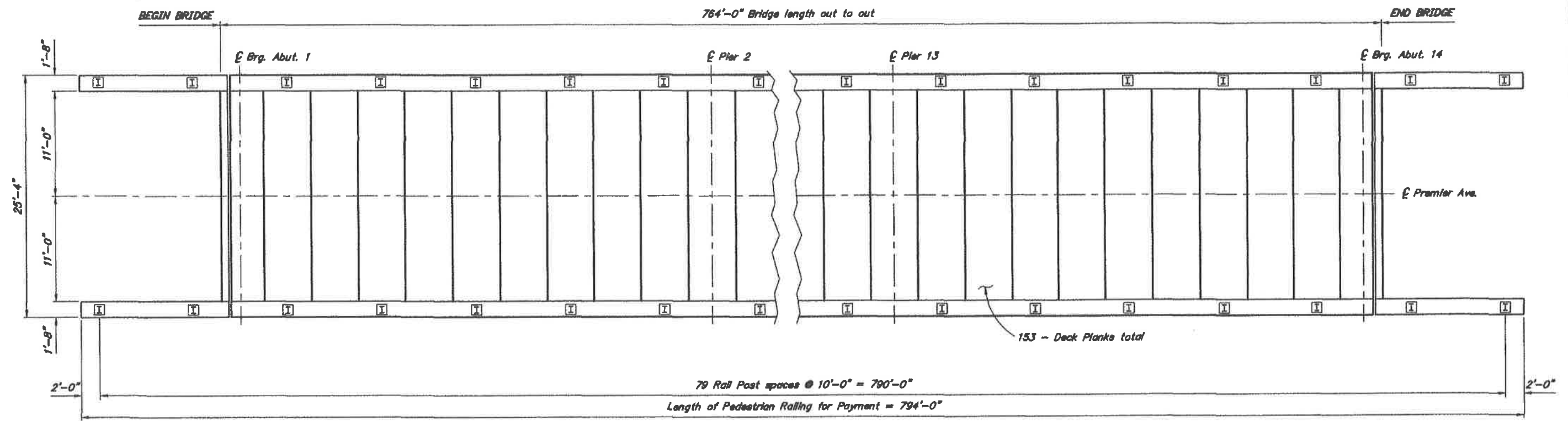
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
BRIDGE SECTION



HYDER HARBOR TRESTLE
PREMIER AVENUE
GIRDER DETAILS

BRIDGE NO. 1238
DWG. NO. 09

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	MGS-0003(113)/69070	2011	010	58



PARTIAL DECK PLAN



DESIGNED BY: ELMER MARK	CHECKED: <i>[Signature]</i>
DRAWN BY: Sam Sallie Jr.	CHECKED: Elmer Marx
QUANTITIES BY: Elmer Marx	CHECKED: <i>[Signature]</i>

ALTERNATE B

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
BRIDGE SECTION



HYDER HARBOR TRESTLE
PREMIER AVENUE
DECK

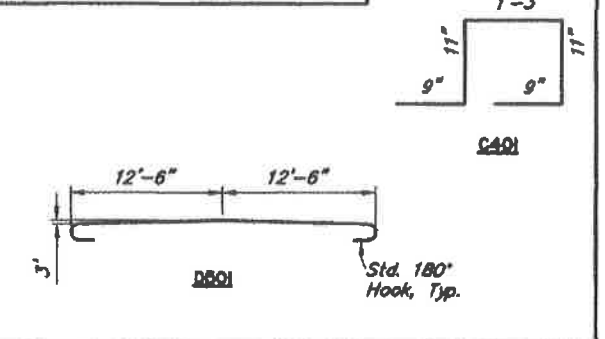
BRIDGE NO. 1238
DWG. NO. 010

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	MGS-0003(113)/89070	2011	011	58

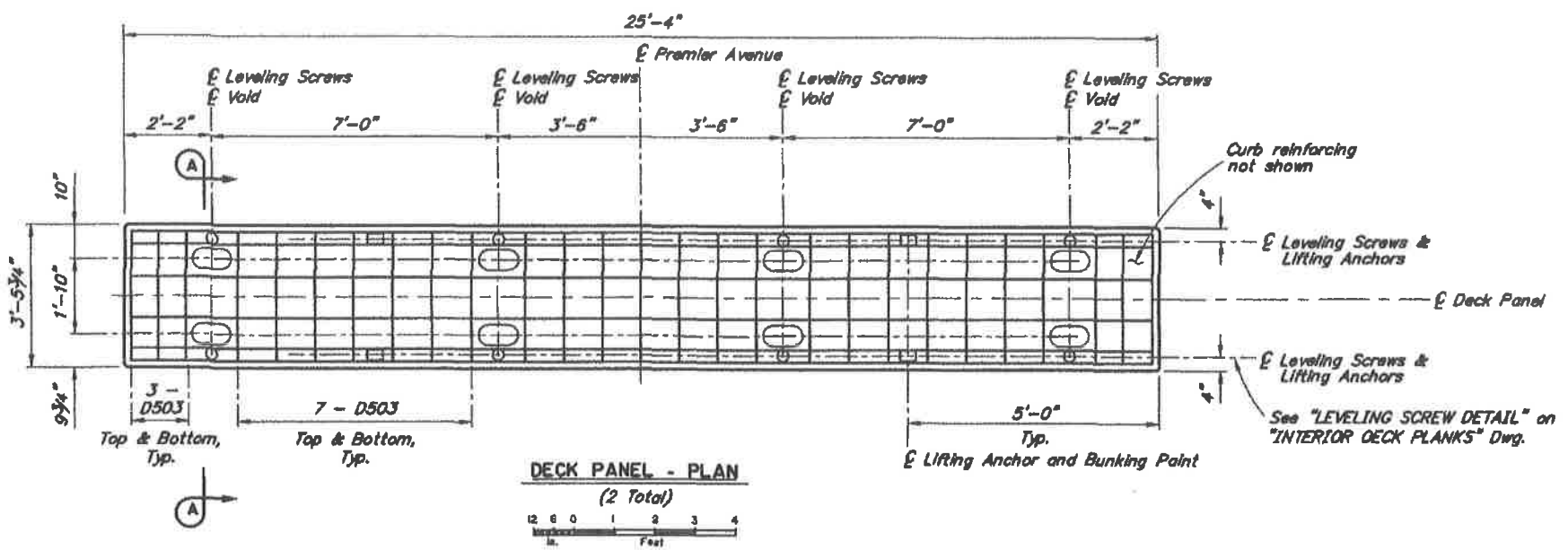
REINFORCING STEEL - ONE PLANK

MARK	SIZE	NO.	LENGTH	TYPE
a D501	5	6	26'-2"	BENT
a D502	5	6	25'-0"	
a D503	5	54	3'-0"	
a C401	4	6	4'-7"	BENT
a C501	5	4	76'-8"	

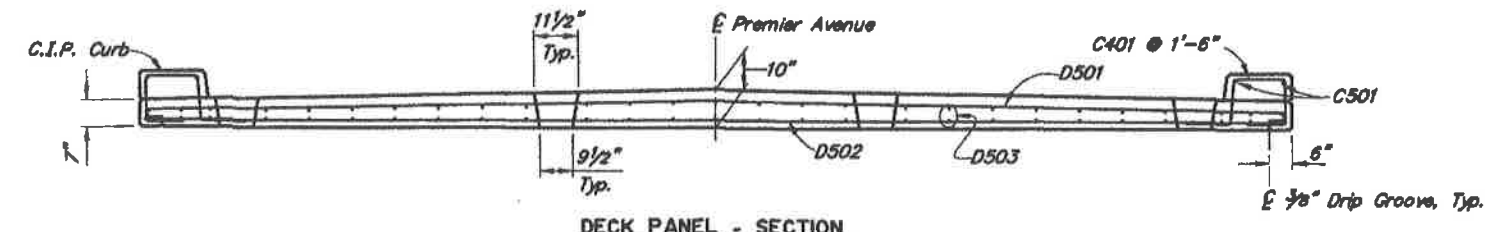
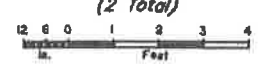
BENDING DIAGRAM



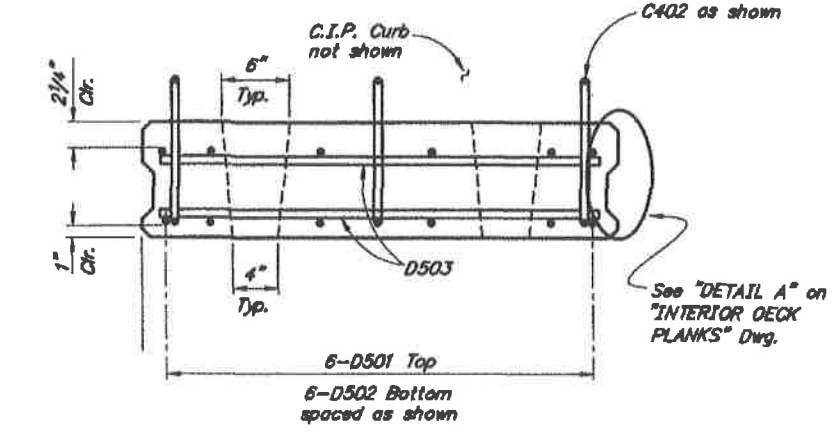
a - Epoxy-coated



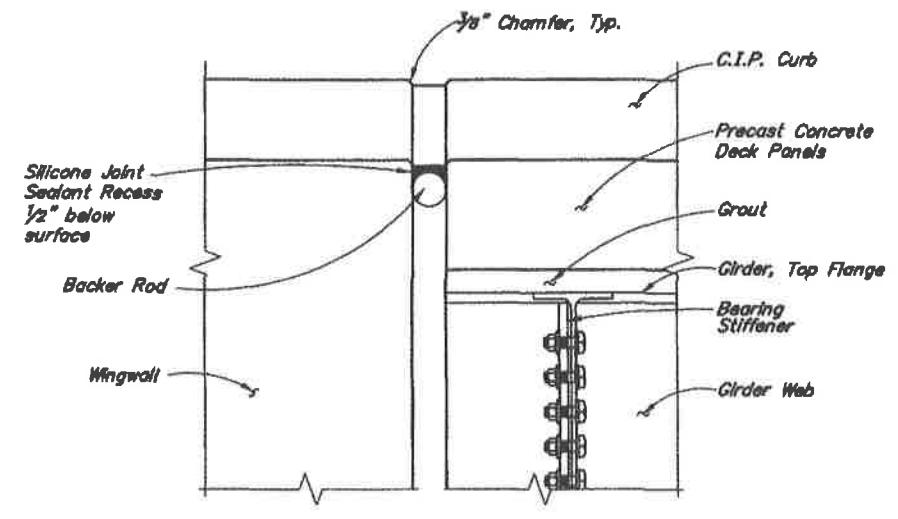
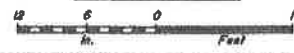
DECK PANEL - PLAN



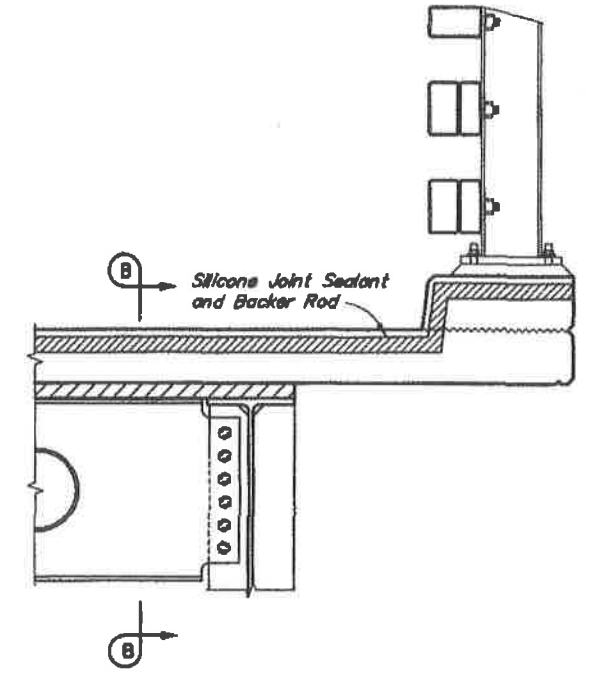
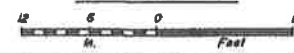
DECK PANEL - SECTION



SECTION A-A



SECTION B-B



EXPANSION JOINT



DESIGNED BY: Elmer Marx	CHECKED: Travis Arndt
DRAWN BY: Sam Sallie Jr.	CHECKED: Elmer Marx
QUANTITIES BY: Elmer Marx	CHECKED: Travis Arndt

ALTERNATE B

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
BRIDGE SECTION



HYDER HARBOR TRESTLE
PREMIER AVENUE
EXTERIOR DECK PLANKS

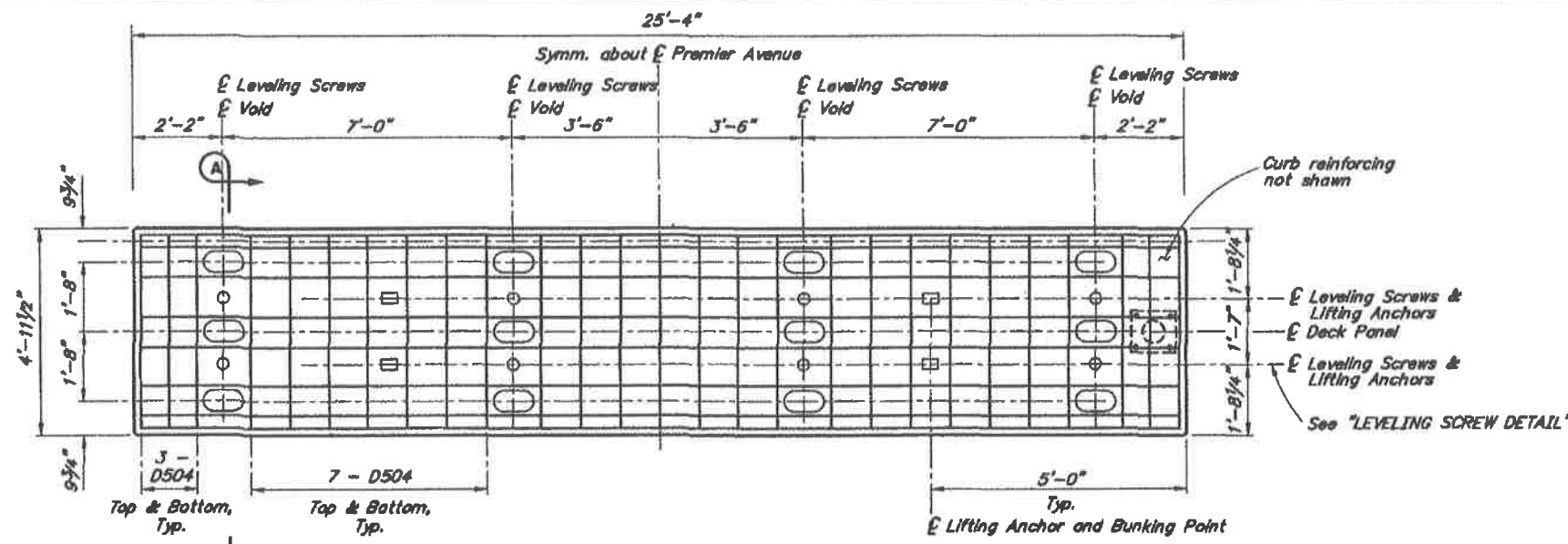
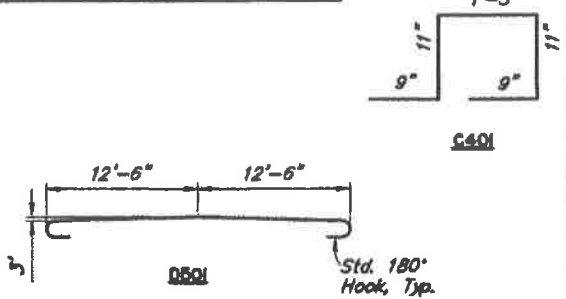
BRIDGE NO. 1238
DWG. NO. 011

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	MCS-0003(113)/89070	2011	012	58

REINFORCING STEEL - ONE PLANK

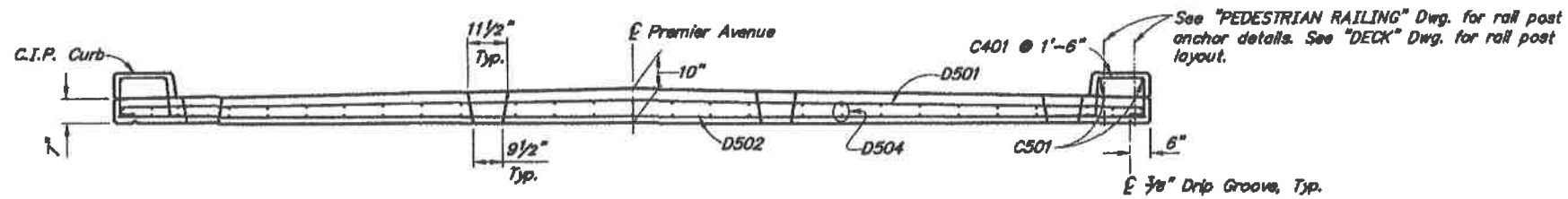
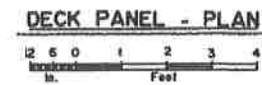
MARK	SIZE	NO.	LENGTH	TYPE
a D501	5	8	26'-2"	BENT
a D502	5	8	25'-0"	---
a D504	5	54	4'-6"	---
a C401	4	8	4'-7"	BENT

BENDING DIAGRAM

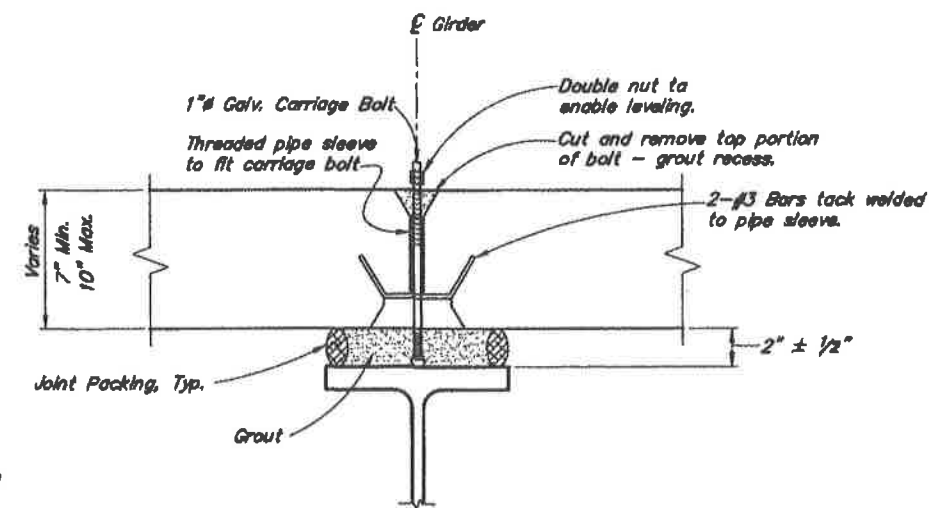
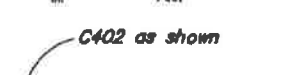


PLANK WITHOUT RAIL POST DETAIL
(75 Total)

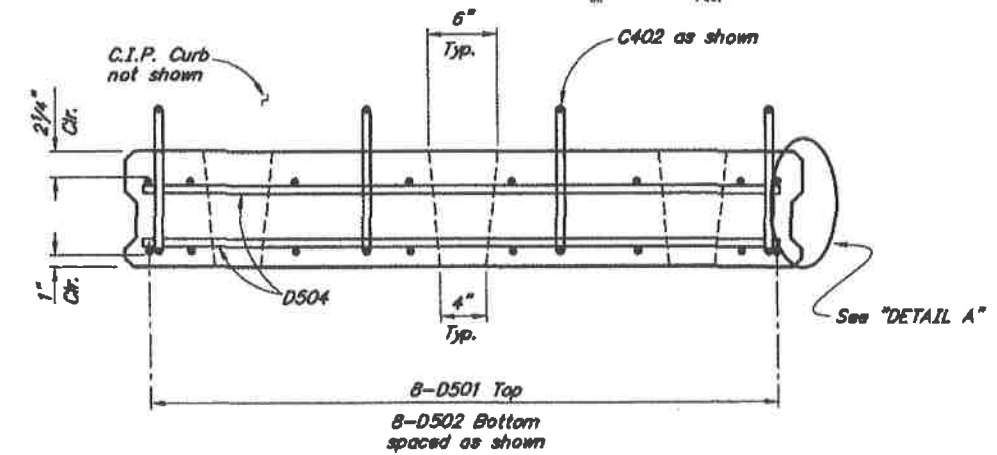
PLANK WITH RAIL POST DETAIL
(76 Total)



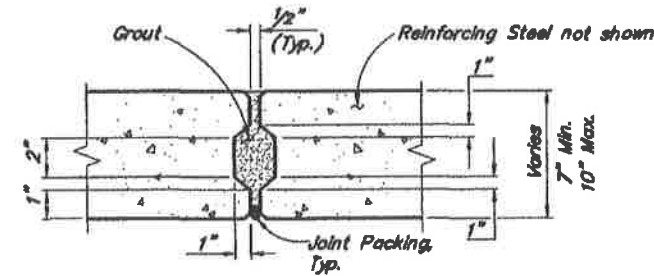
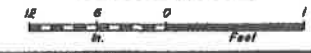
DECK PANEL - SECTION



LEVELING SCREW DETAIL
No Scale



SECTION A-A



DETAIL A
No Scale

- NOTES:**
1. Provide heavy broom finish on deck panels and all grouted surfaces.
 2. Match grout color to deck panels.

DESIGNED BY: Elmer Marx	CHECKED: Trade Arndt
DRAWN BY: Sam Sallie Jr.	CHECKED: Elmer Marx
QUANTITIES BY: Elmer Marx	CHECKED: Trade Arndt

ALTERNATE B

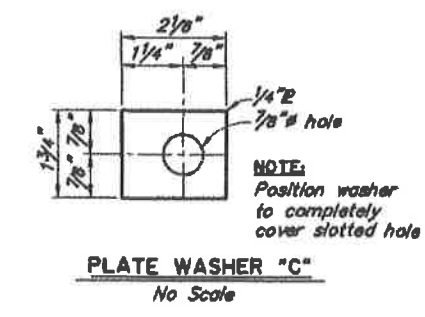
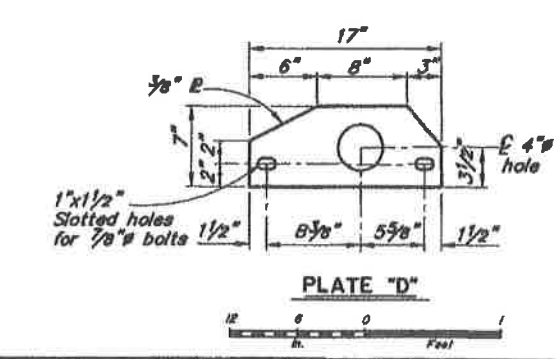
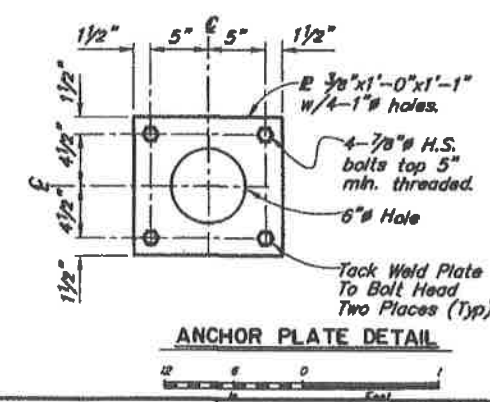
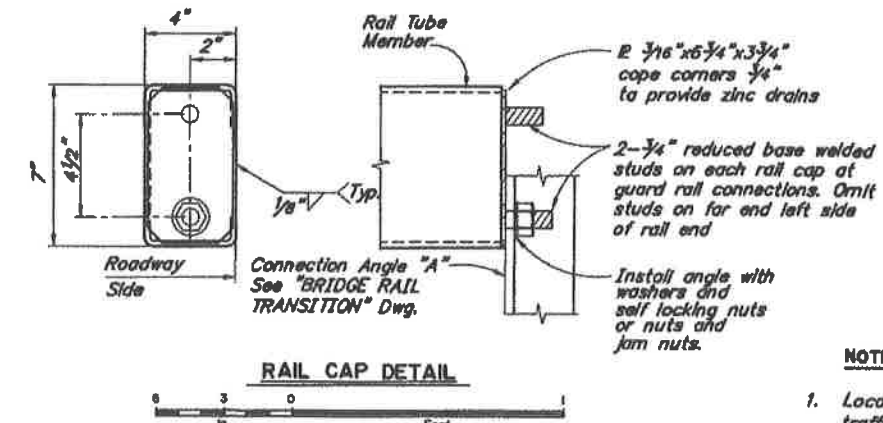
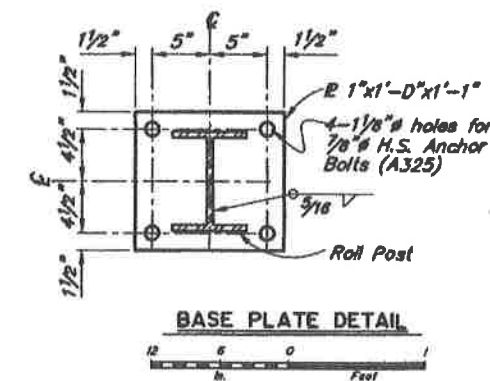
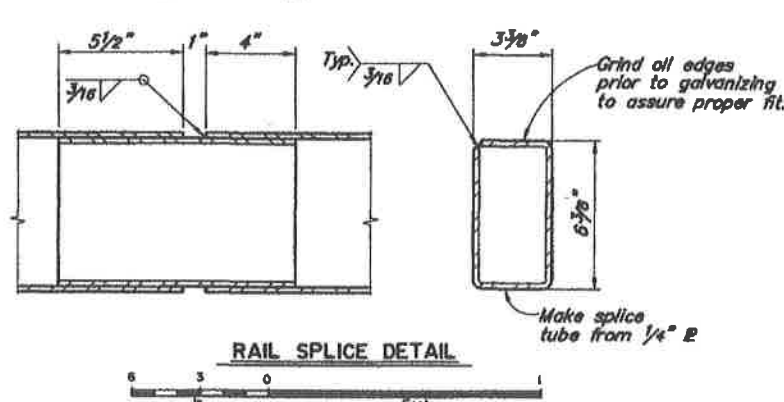
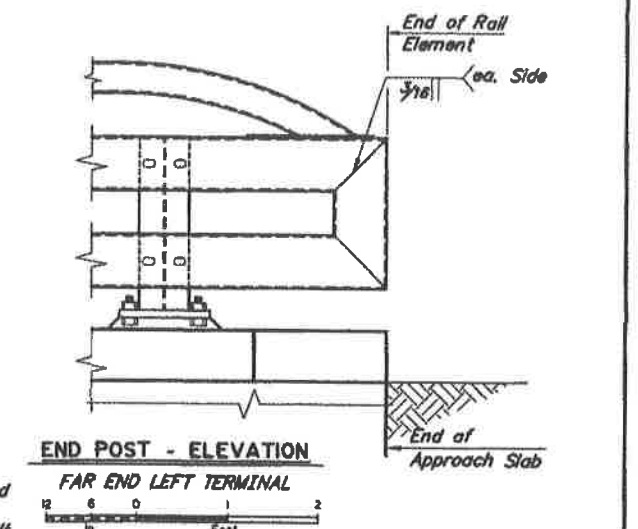
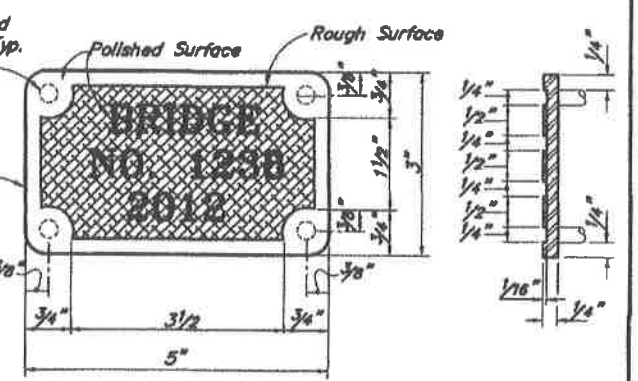
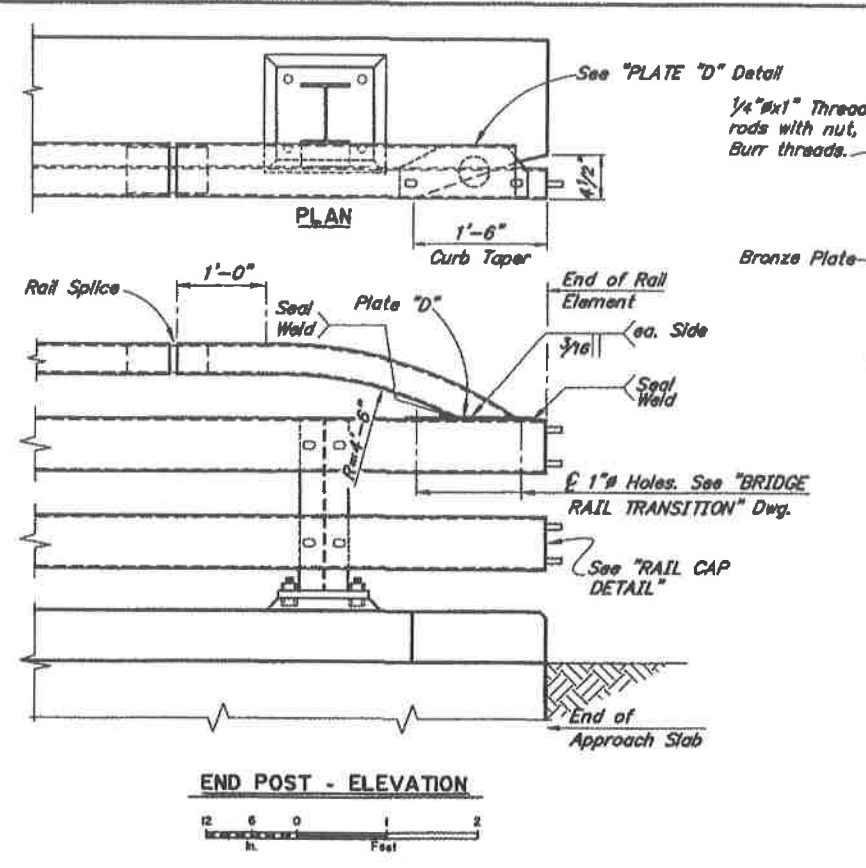
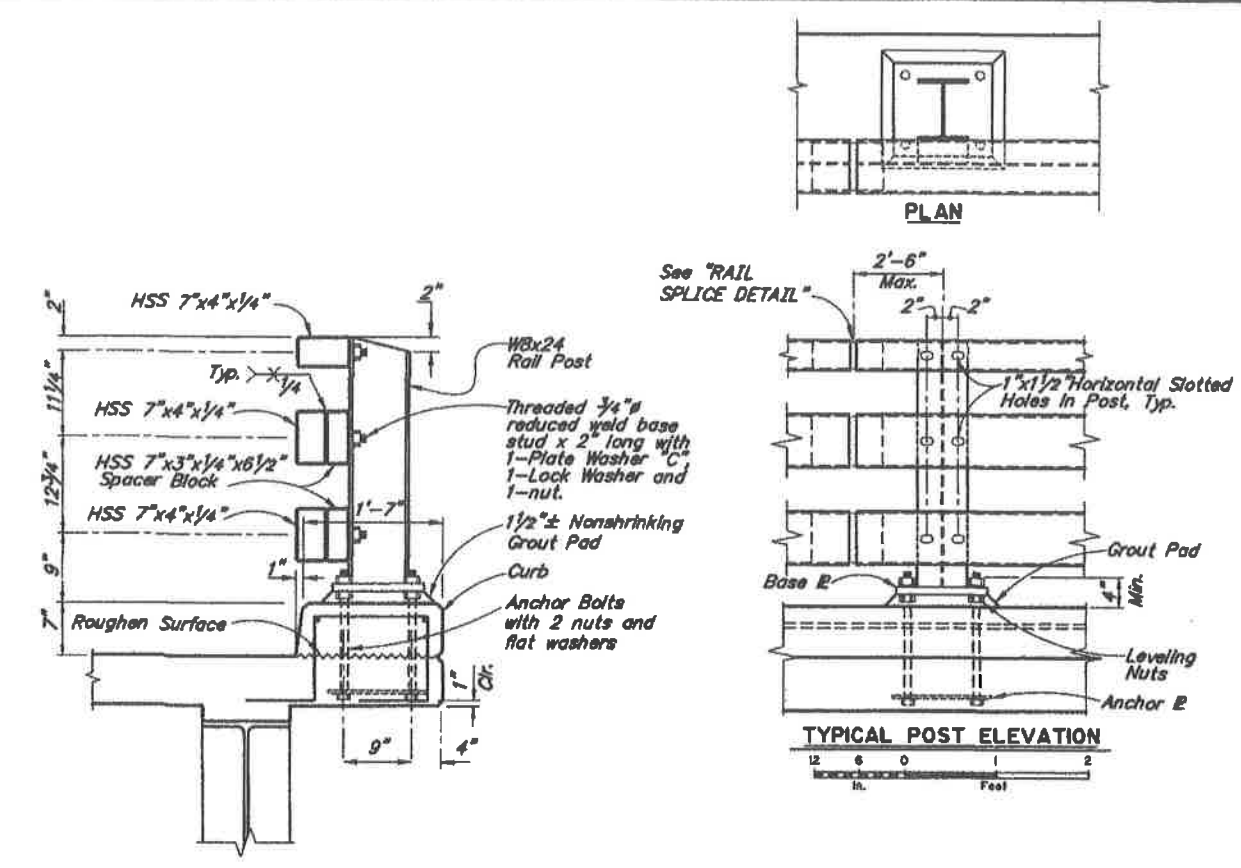
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
BRIDGE SECTION



HYDER HARBOR TRESTLE
PREMIER AVENUE
INTERIOR DECK PLANKS


BRIDGE NO. 1238
DWG. NO. 012

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	MGS-0003(113)/89070	2011	013	58



- NOTES:**
1. Locate bridge number plates on right hand side of approaching traffic near each end as shown (2 total).
 2. Furnish bridge number plates. Use bronze with "Century" type style lettering. Use studs and nuts that conform to UNS C65100 or C65500. Braze 1/4" threaded rod to back of plate with nut - 4 required. Use locking nuts or lock washers on all machine bolts.
 3. Provide railing expansion joints at 50'-0" max. intervals. Provide a minimum of 2 rail posts between railing expansion joints. Railing expansion joints are required in rail panels that span bridge expansion joints.
 4. Install posts plumb.
 5. Use grout with a minimum 24 hour f'c of 3 ksi.
 6. See "FRAMING PLAN AND TYPICAL SECTION" Dwg. for rail post spacing.


DESIGNED BY: ELMER MARK	CHECKED: <i>[Signature]</i>
DRAWN BY: Sam Sallis Jr.	CHECKED: Elmer Mark
QUANTITIES BY: <i>[Signature]</i>	CHECKED: <i>[Signature]</i>

ALTERNATE B

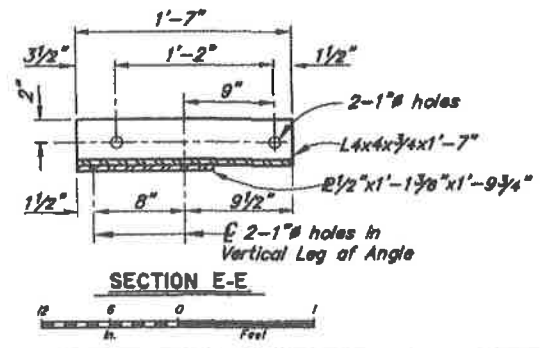
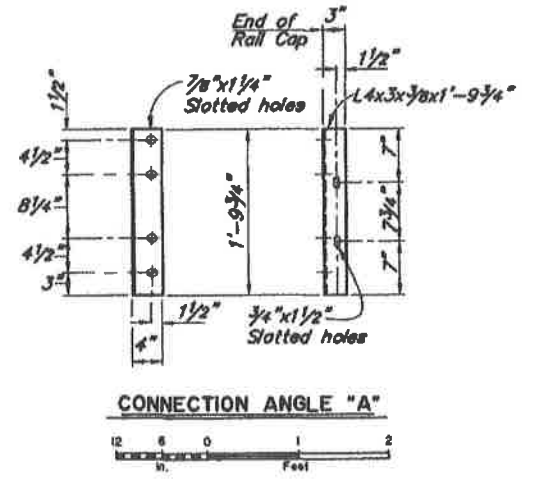
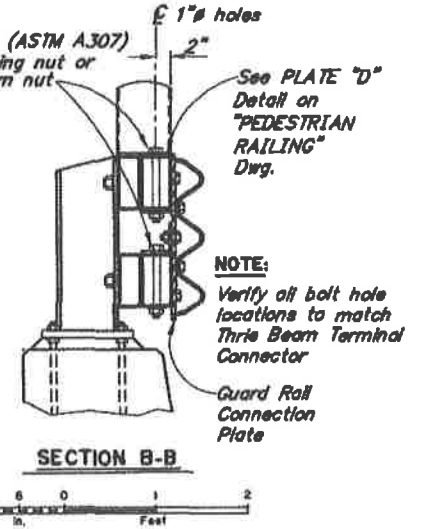
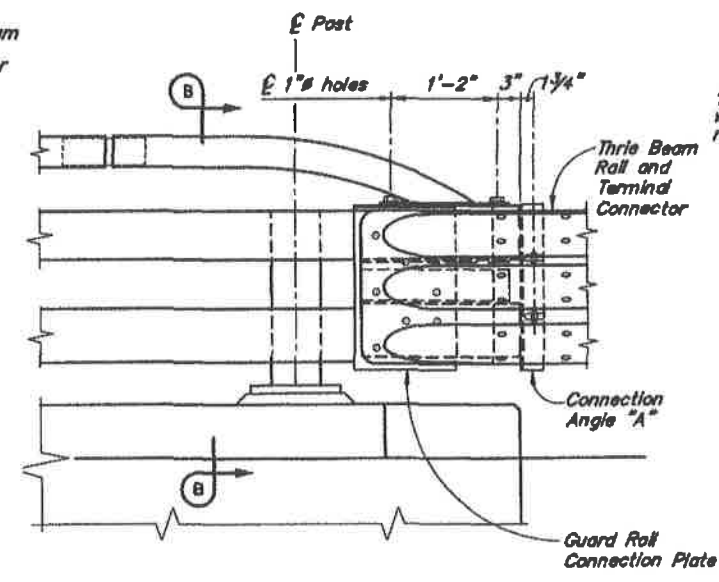
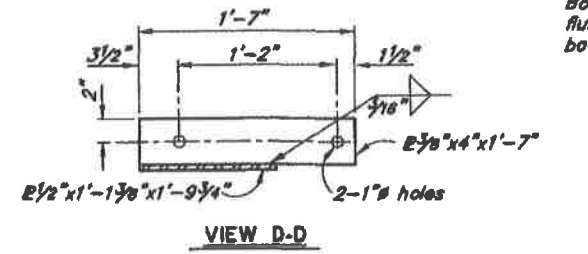
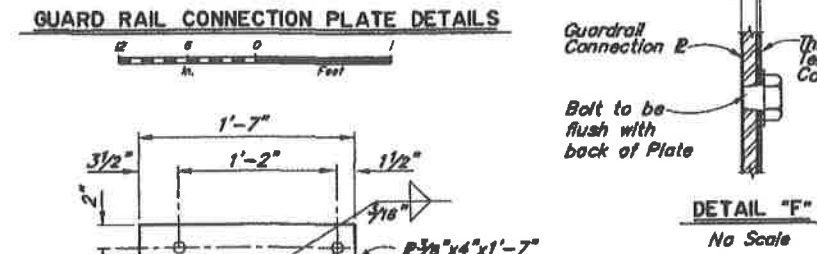
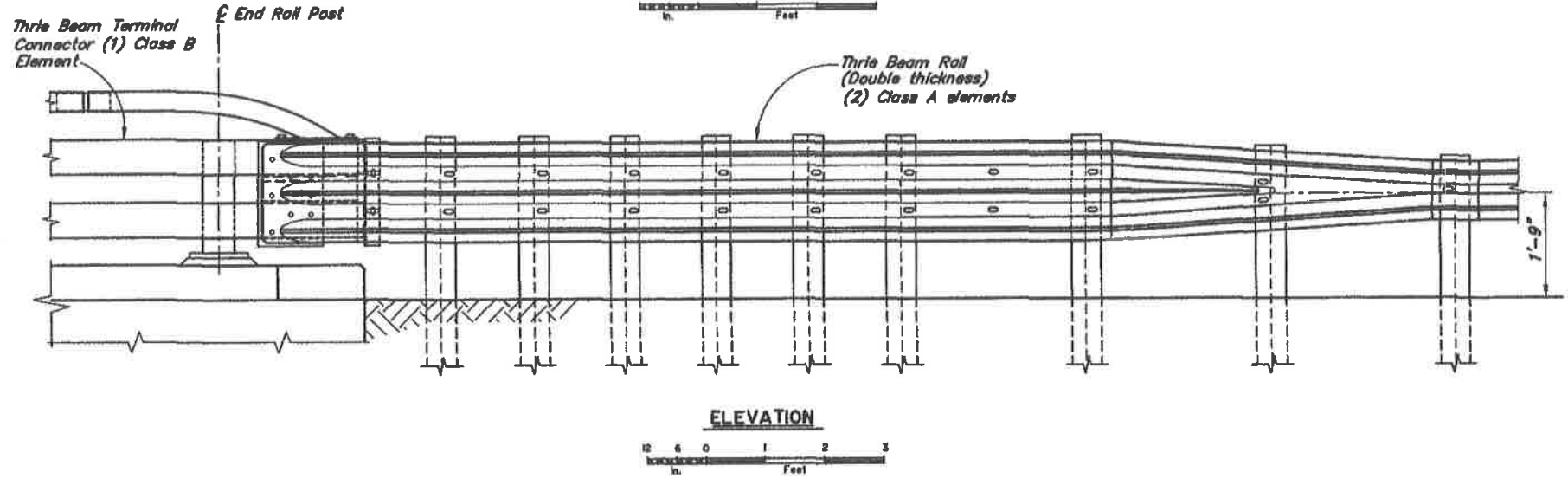
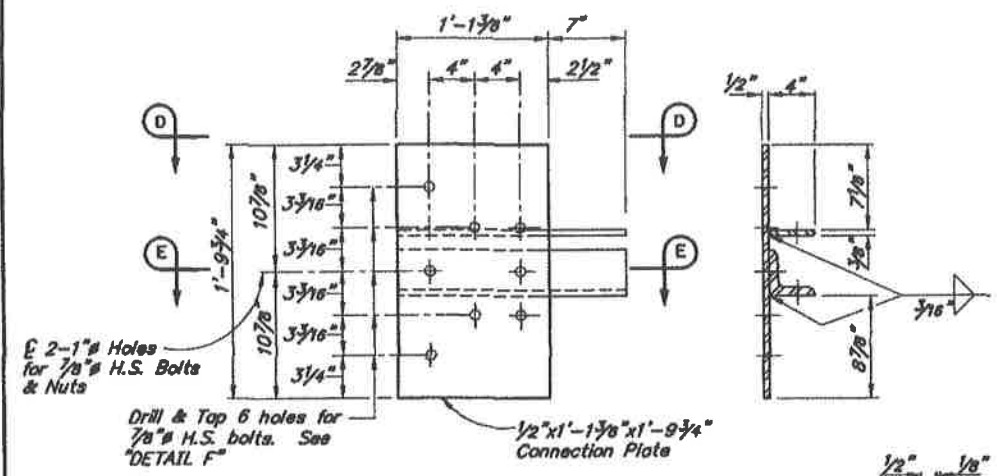
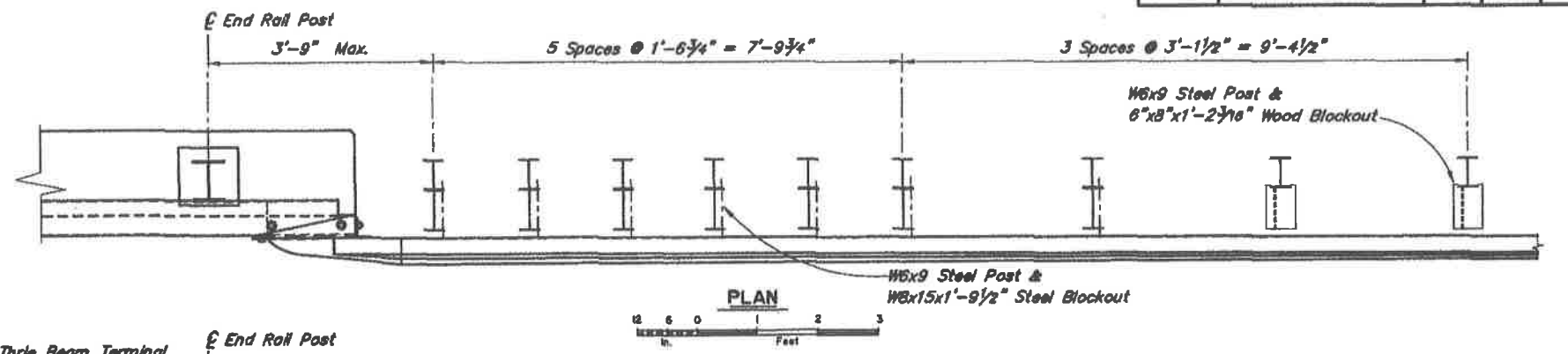
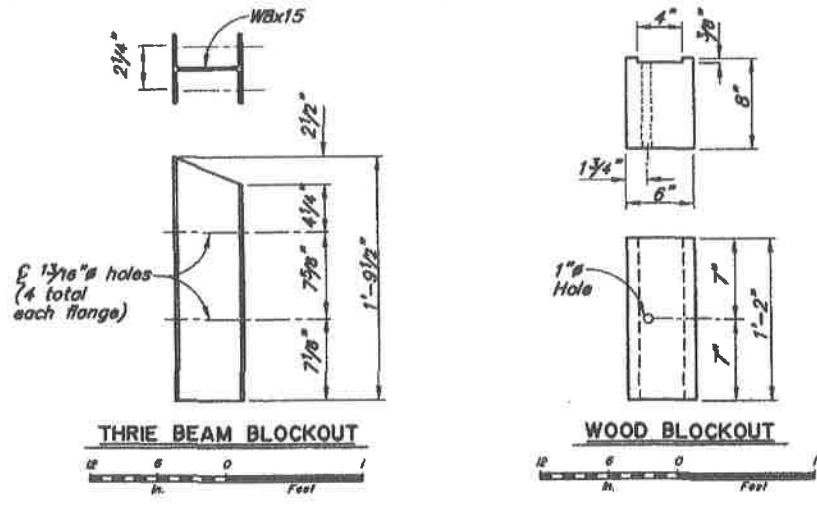
STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 AND PUBLIC FACILITIES
 BRIDGE SECTION



HYDER HARBOR TRESTLE
 PREMIER AVENUE
 PEDESTRIAN RAILING


 BRIDGE NO. 1238
 DWG. NO. 013

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	MGS-0003(113)/89070	2011	014	58




DESIGNED BY: Elmer Marx <i>Elmer Marx</i>	CHECKED: Trevi Arndt <i>Trevi Arndt</i>
DRAWN BY: Sam Sallie Jr. <i>Sam Sallie Jr.</i>	CHECKED: Elmer Marx <i>Elmer Marx</i>
QUANTITIES BY: Elmer Marx <i>Elmer Marx</i>	CHECKED: Trevi Arndt <i>Trevi Arndt</i>

ALTERNATE B

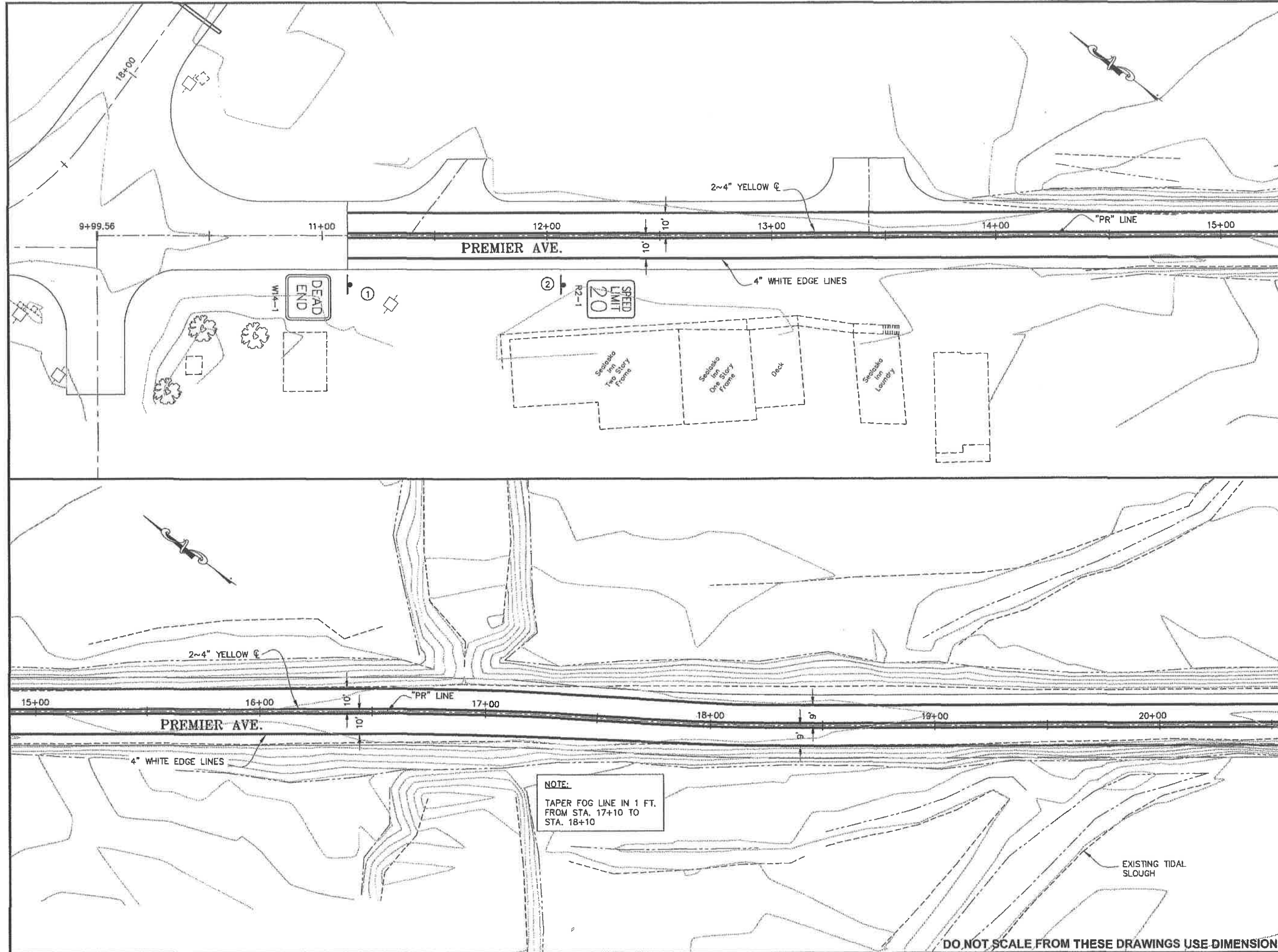
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
BRIDGE SECTION



HYDER HARBOR TRESTLE
PREMIER AVENUE
BRIDGE RAIL TRANSITION


BRIDGE NO. 1238
DWG. NO. 014

ADDENDUM NUMBER		
ATTACHMENT NUMBER		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION



PLAN LEGEND

CHECKED BY: M. Van Alsteln



DESIGNED BY: D. Epstein
 DRAWN BY: B. Bennett

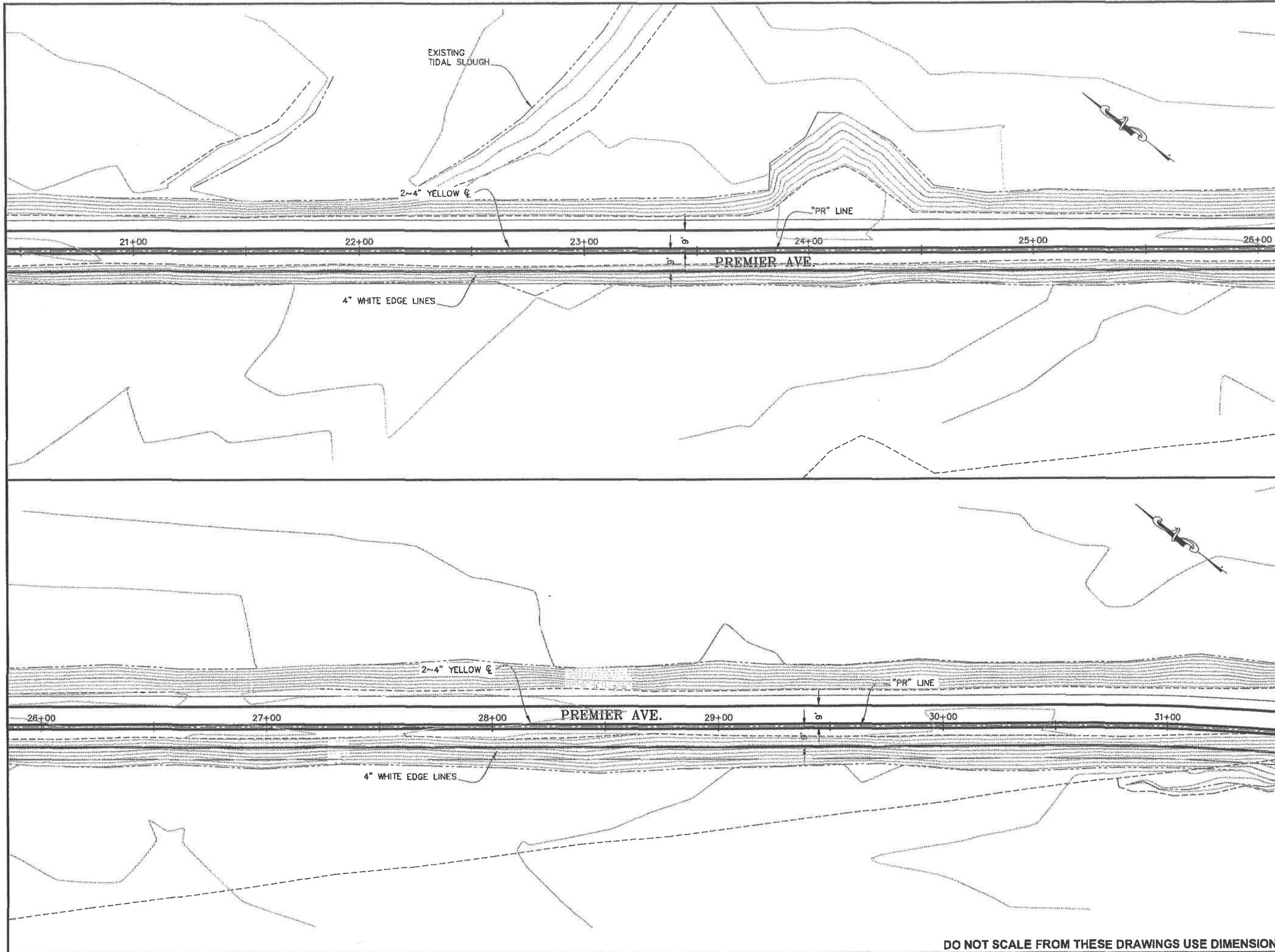
STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 & PUBLIC FACILITIES - SOUTHEAST REGION
**CAUSEWAY RECONSTRUCTION
 & TRESTLE REPLACEMENT**
 Project No. 69070

**SIGNING &
 STRIPING PLAN**

PROJECT DESIGNATION	
69070	
STATE	YEAR
ALASKA	2011
SHEET NUMBER	TOTAL SHEETS
P1	58

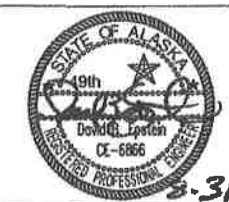
DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

No.	DATE	DESCRIPTION



PLAN LEGEND

CHECKED BY: M. Von Alstein



DESIGNED BY: D. Epstein
 DRAWN BY: B. Bennett

STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 & PUBLIC FACILITIES - SOUTHEAST REGION
**CAUSEWAY RECONSTRUCTION
 & TRESTLE REPLACEMENT**
 Project No. 69070

**SIGNING &
 STRIPING PLAN**

PROJECT DESIGNATION	
69070	
STATE	YEAR
ALASKA	2011
SHEET NUMBER	TOTAL SHEETS
P2	58

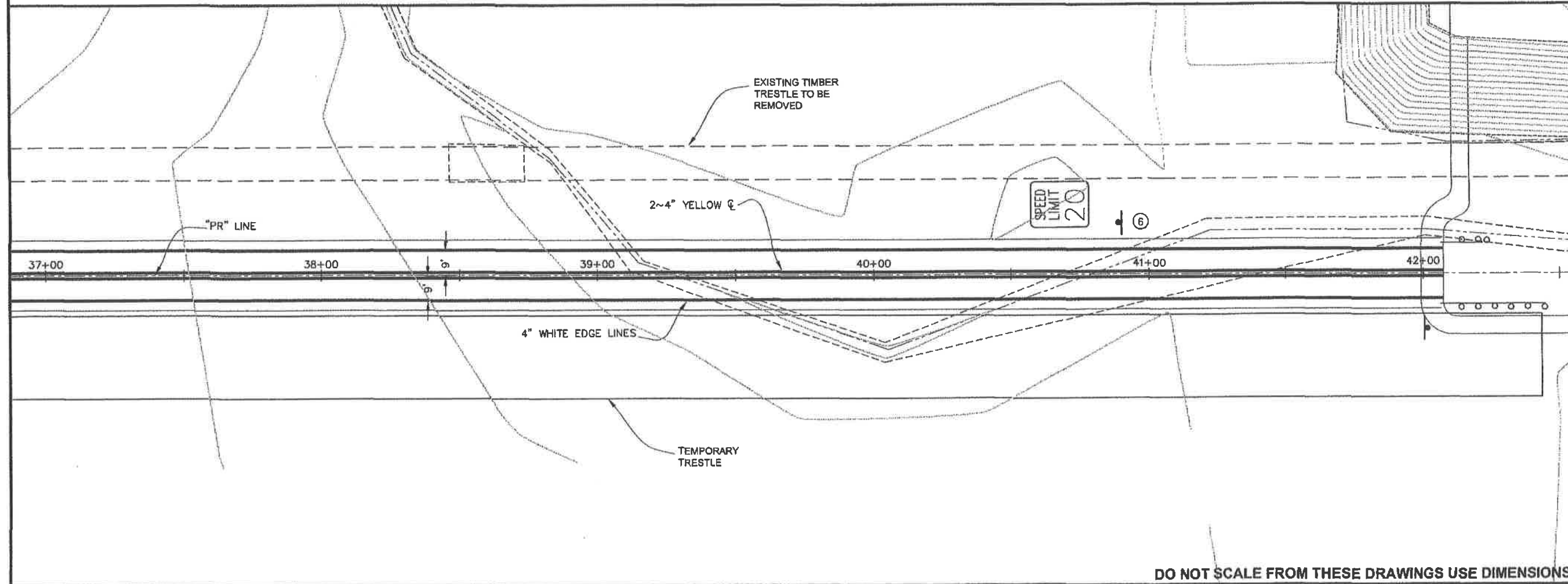
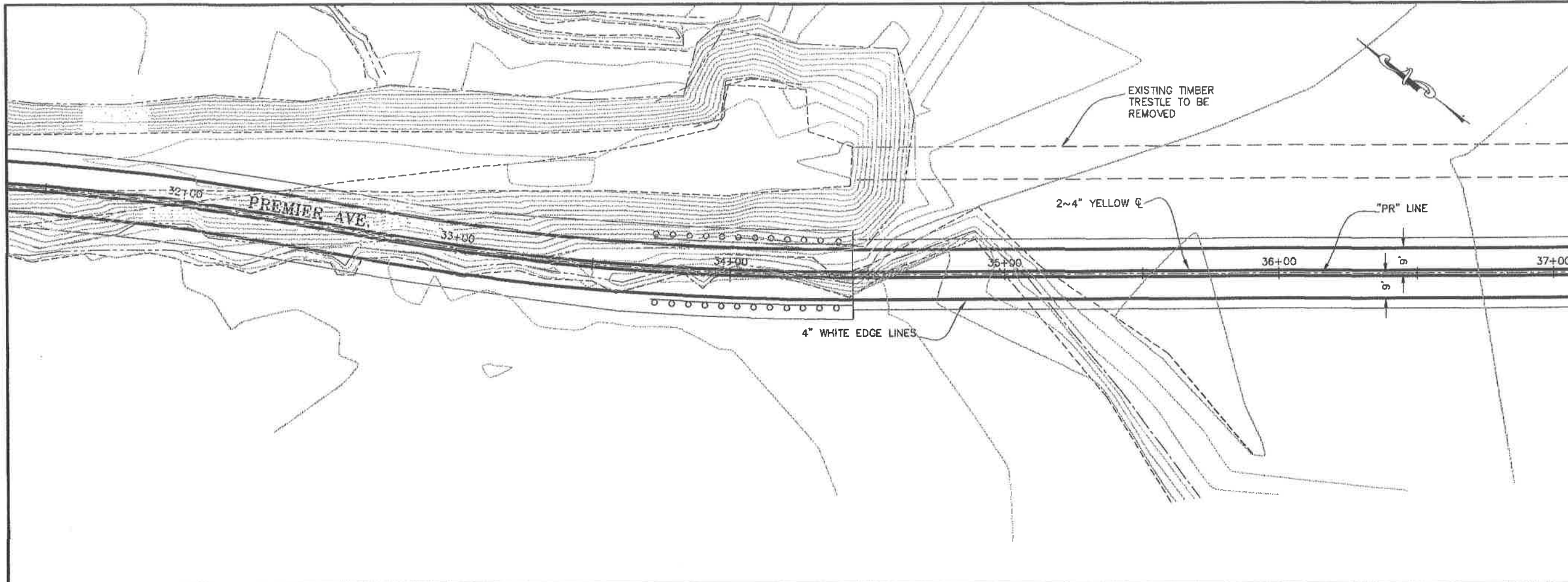
DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION



PLAN LEGEND

CHECKED BY: M. Van Alstein



DESIGNED BY: D. Epstein

DRAWN BY: B. Bennett

STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 & PUBLIC FACILITIES - SOUTHEAST REGION
**CAUSEWAY RECONSTRUCTION
 & TRESTLE REPLACEMENT**
 Project No. 69070

**SIGNING &
 STRIPING PLAN**

PROJECT DESIGNATION

69070

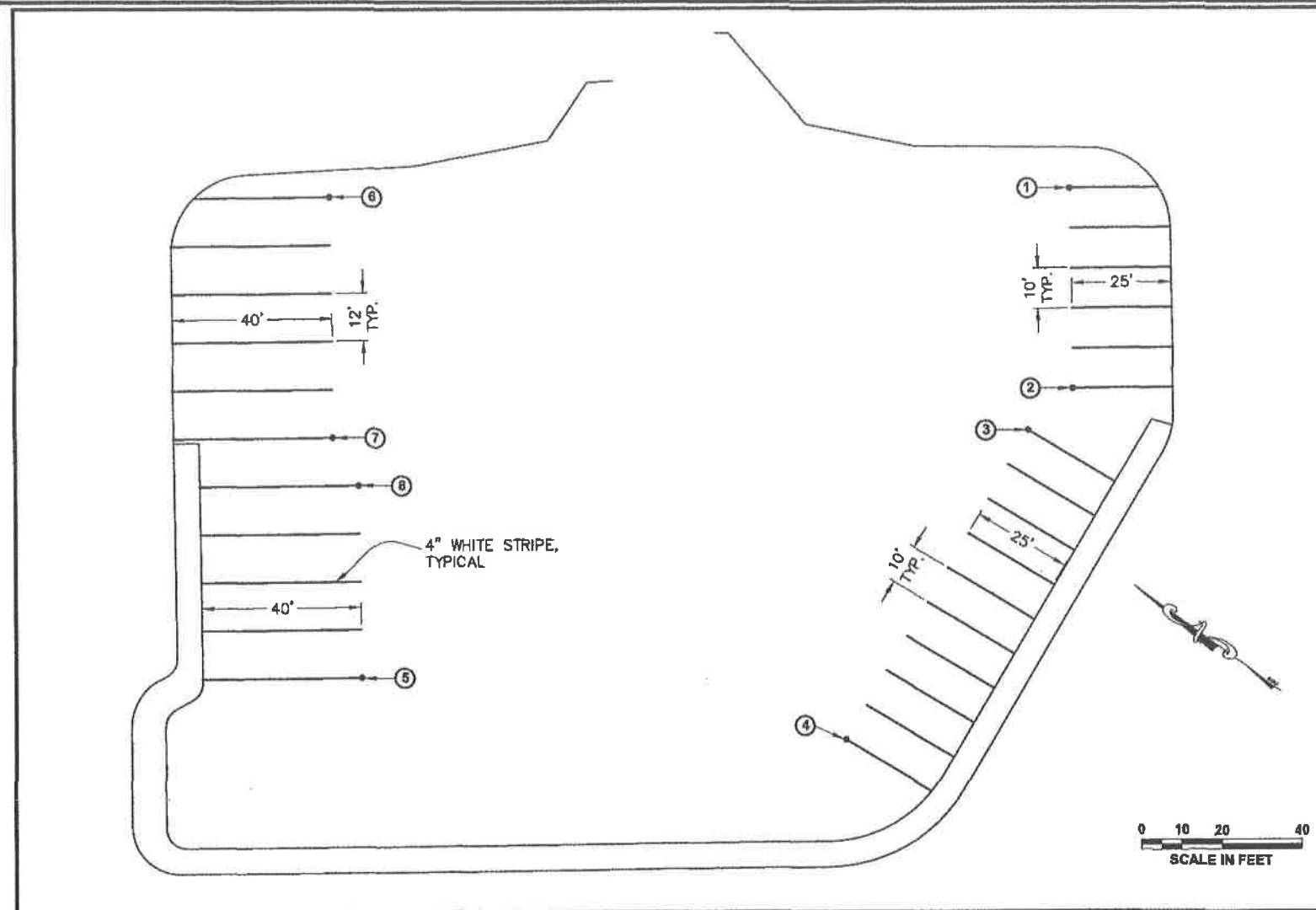
STATE	YEAR
ALASKA	2011

SHEET NUMBER TOTAL SHEETS

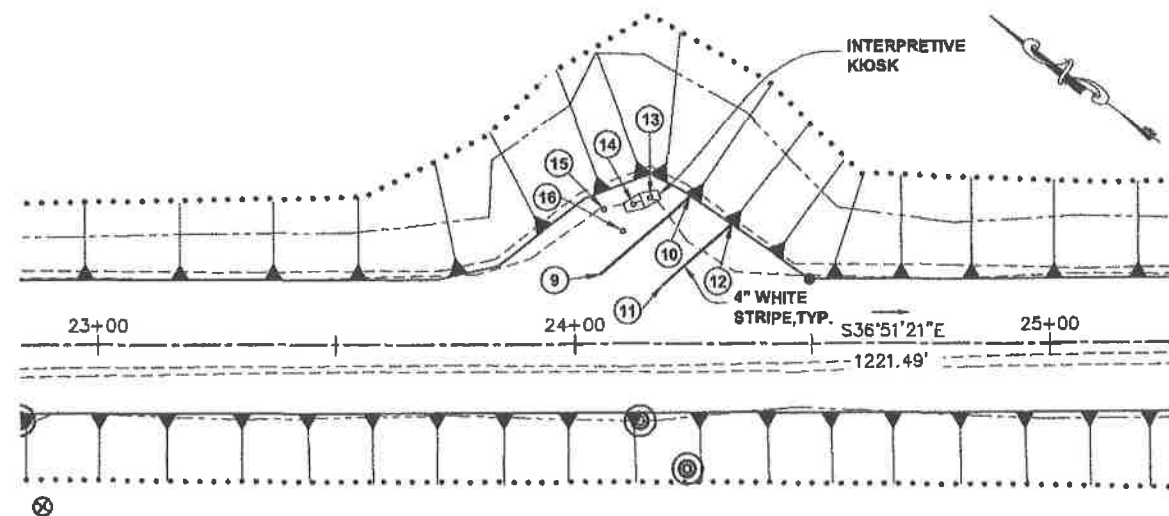
P3	58
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DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

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②	97,324.99	201,222.81	
③	97,321.94	201,215.15	
④	97,315.58	201,145.44	
⑤	97,435.15	201,052.75	
⑥	97,504.76	201,151.91	
⑦	97,467.92	201,103.14	
⑧	97,455.62	201,097.39	
⑨	98,920.23	199,967.97	
⑩	98,914.63	199,992.68	
⑪	98,908.41	199,974.04	
⑫	98,904.10	199,993.06	
⑬	98,921.35	199,987.17	CENTER OF KIOSK POST
⑭	98,923.31	199,983.97	CENTER OF KIOSK POST
⑮	98,927.68	199,979.42	CENTER OF BOLLARD
⑯	98,921.63	199,978.10	CENTER OF BOLLARD



**HARBOR ISLAND
STRIPING PLAN**



KIOSK STRIPING PLAN
STA. 23+71 LT. TO STA. 24+50 LT.



DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

No.	DATE	DESCRIPTION

PLAN LEGEND

CHECKED BY: M. Von Aistine



DESIGNED BY: D. Blackburn

DRAWN BY: B. Bennett

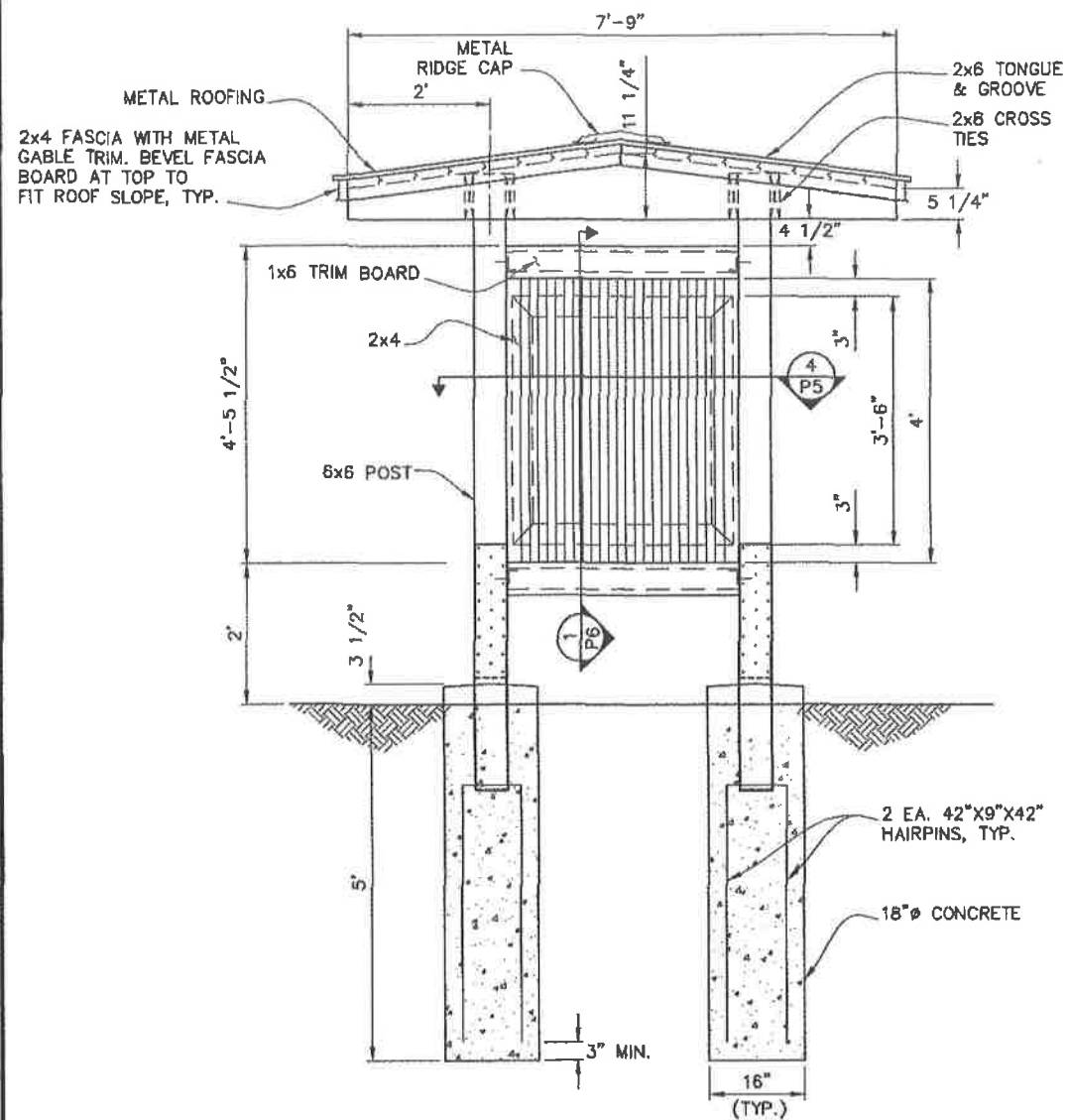
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES - SOUTHEAST REGION
**CAUSEWAY RECONSTRUCTION
& TRESTLE REPLACEMENT**
Project No. 69070

**HARBOR ISLAND
STRIPING PLAN**

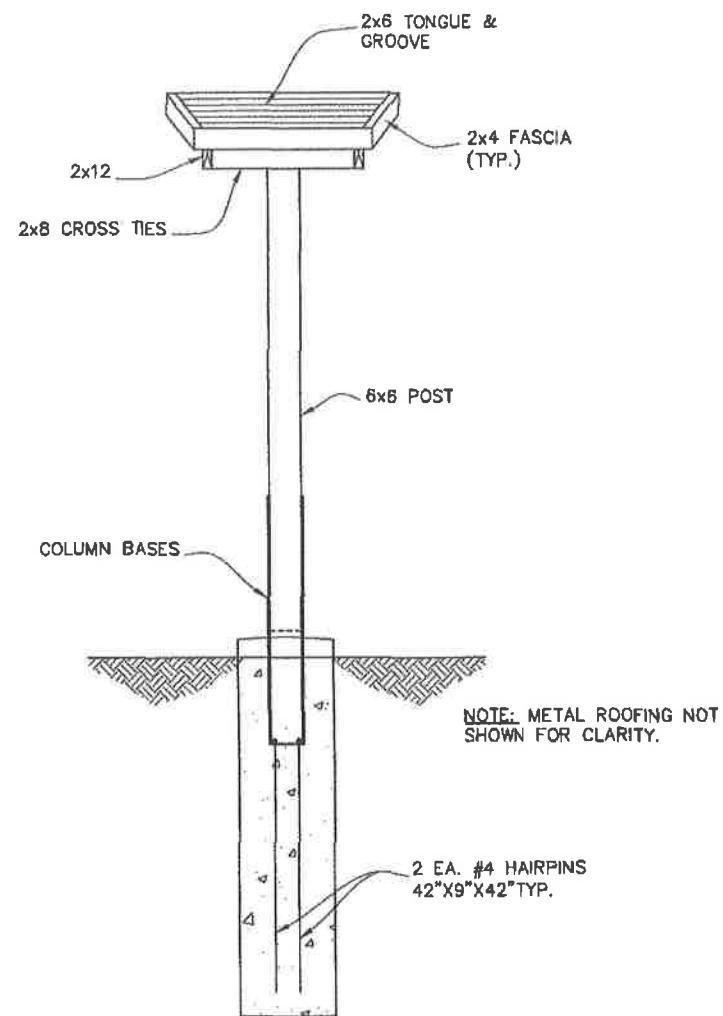
PROJECT DESIGNATION

69070

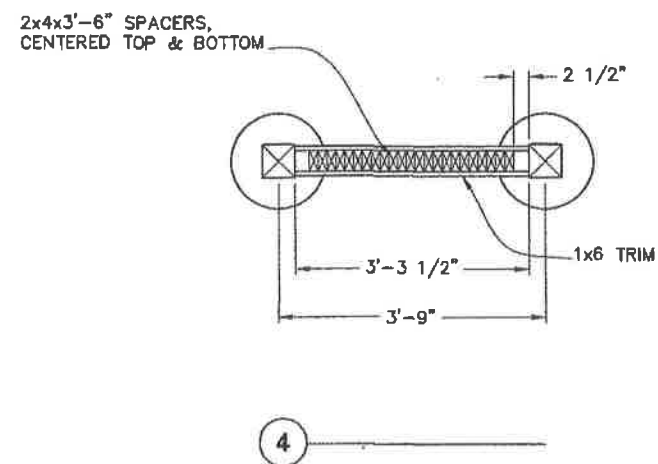
STATE	YEAR
ALASKA	2011
SHEET NUMBER	TOTAL SHEETS
P4	58



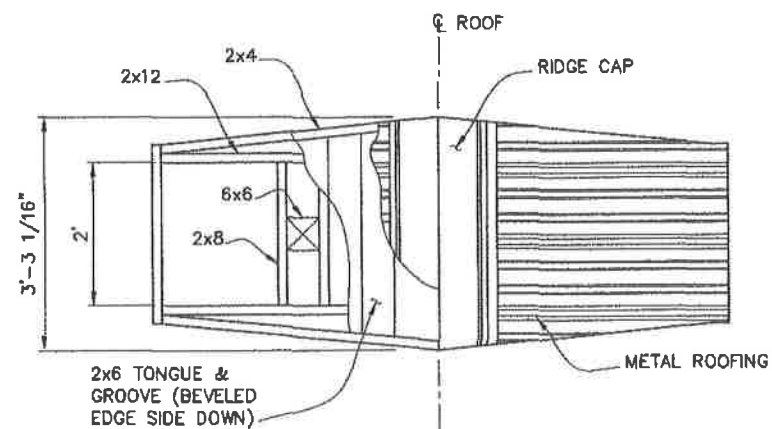
SIDE ELEVATION



END ELEVATION




4

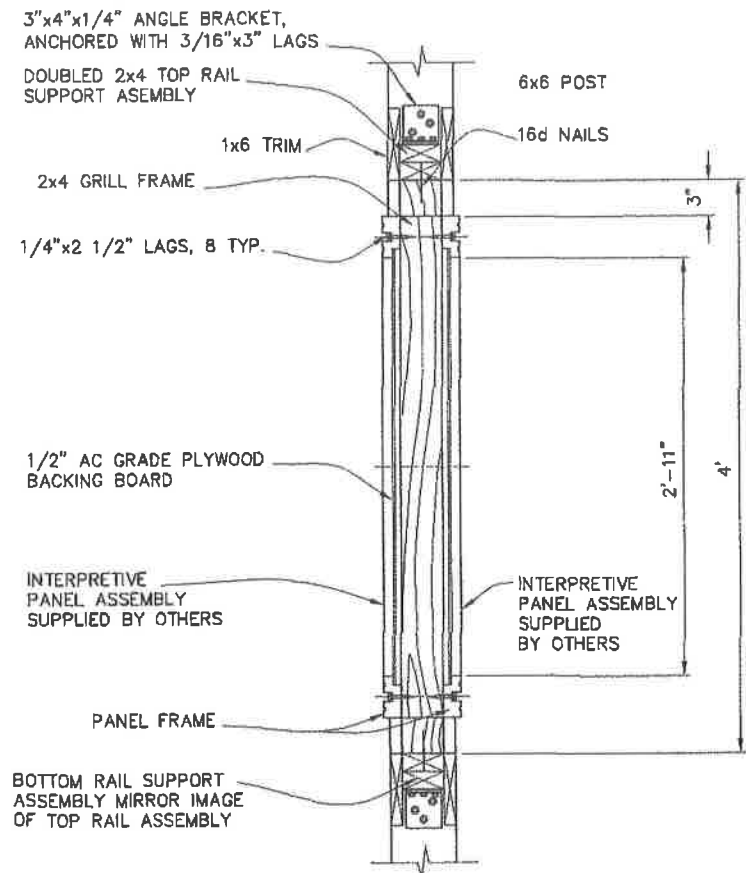


ROOF PLAN VIEW

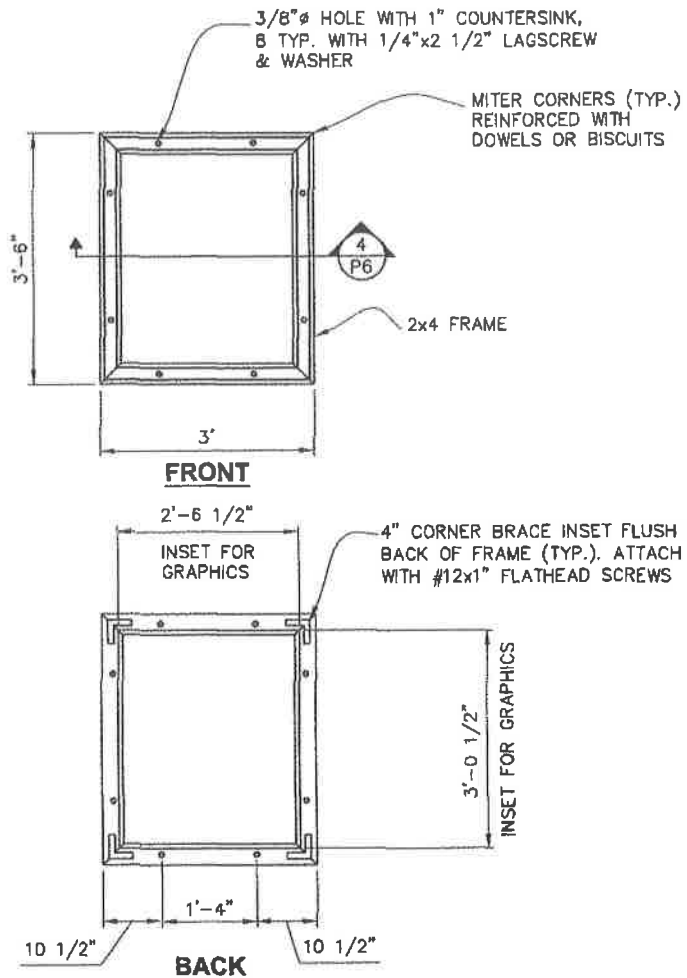
NOTES:
1. KIOSK LOCATION, SEE SHEET P4.

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

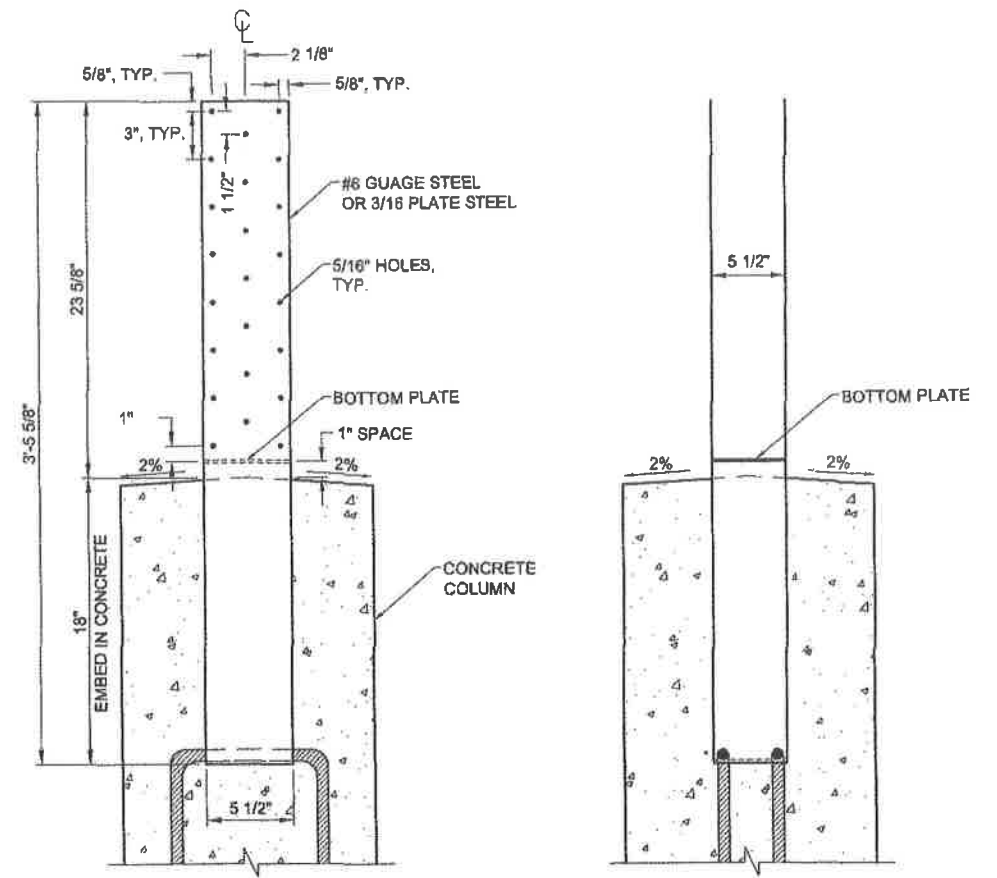
CHECKED BY: M. Van Alstine 		STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES - SOUTHEAST REGION CAUSEWAY RECONSTRUCTION & TRESTLE REPLACEMENT Project No. 69070 INTERPRETIVE KIOSK, TYPE A DETAILS																							
DESIGNED BY: D. Blackburn DRAWN BY: B. Bennett		PATH: Q:\HYD\69070\PLANSET\PS-P10 SIGNS.DWG TAB: P5 Thursday, September 01, 2011 10:44:40 AM GRANTHAM, RICK L (DOT)																							
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REVISIONS			PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS																			
NO.	DATE	DESCRIPTION	69070	2011	P5	58																			



1

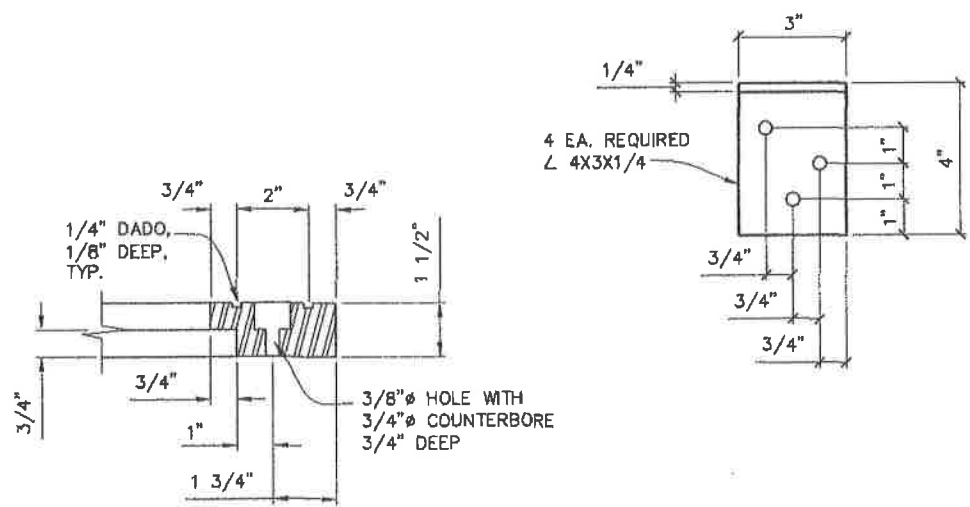


INTERPRETIVE PANEL FRAME
(2 REQUIRED)



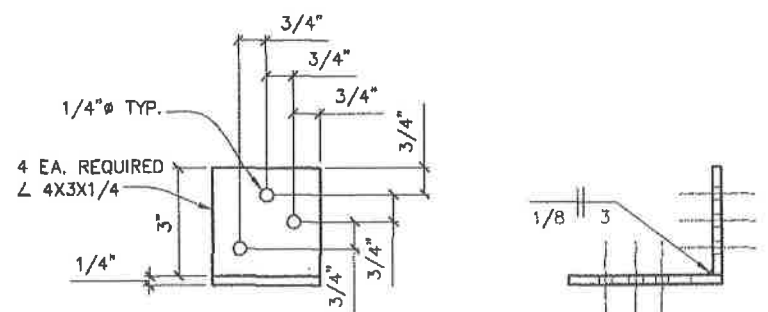
POST BASE
FACE VIEW

POST BASE
SIDE VIEW



4

ANGLE BRACKET



DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: M. Von Aislone

STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 & PUBLIC FACILITIES - SOUTHEAST REGION
**CAUSEWAY RECONSTRUCTION
 & TRESTLE REPLACEMENT**
 Project No. 69070
**INTERPRETIVE
 KIOSK, TYPE A
 DETAILS**

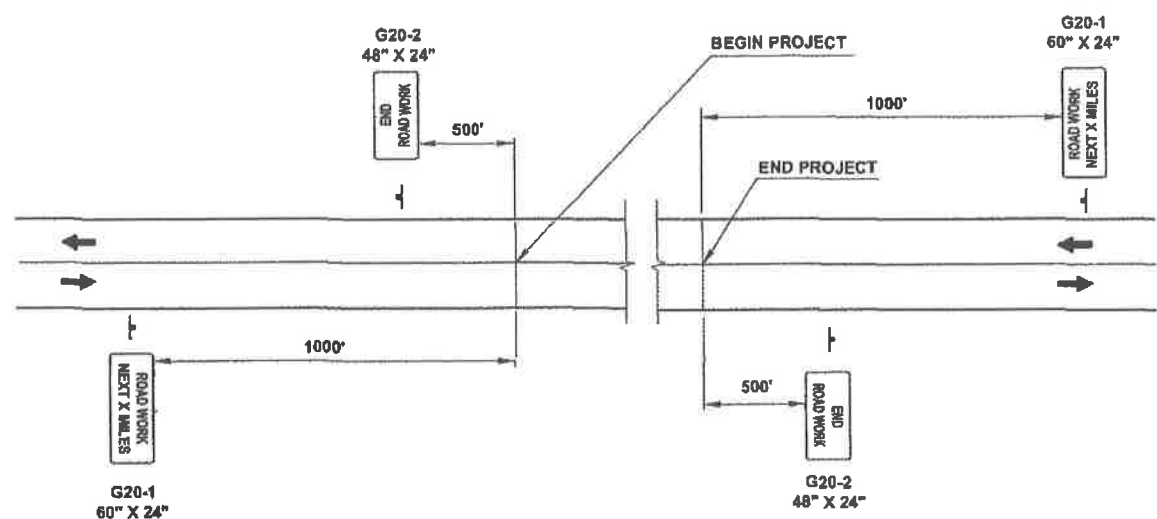
DESIGNED BY: D. Blackburn
 DRAWN BY: B. Bennett

PATH: Q:\HYD\69070\PLANS\TYP-P10 SIGNS.DWG
 TAB: P6 Wednesday, August 10, 2011 1:42:58 PM BENNETT, BERT W (DOT)

REVISIONS		PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
NO.	DATE				
		69070	2011	P6	58

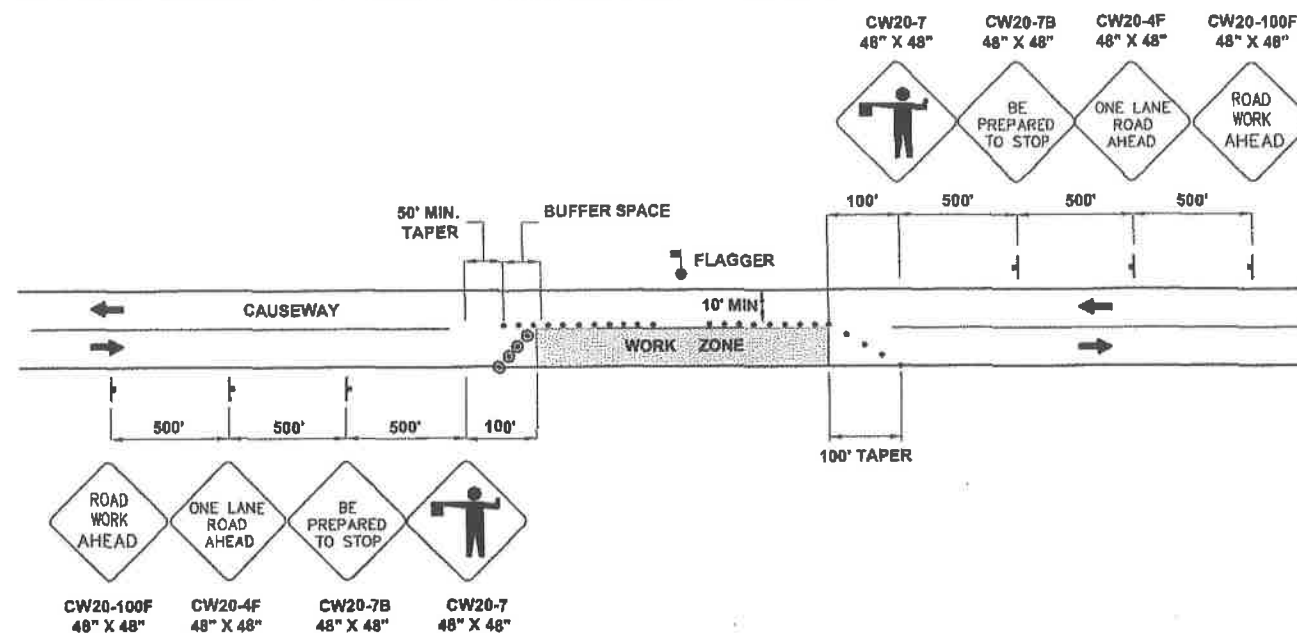
BENNETT, BERT W (DOT)
 TAB: 51 Friday, July 29, 2005 11:27:44 AM

ADDENDUM NUMBER		
ATTACHMENT NUMBER		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION



PERMANENT CONSTRUCTION SIGNING

(SEE STD. DWG C-04.12 FOR DOUBLE FINE SIGNS)



TWO LANE ROADWAY-SINGLE LANE CLOSURE

N.T.S.

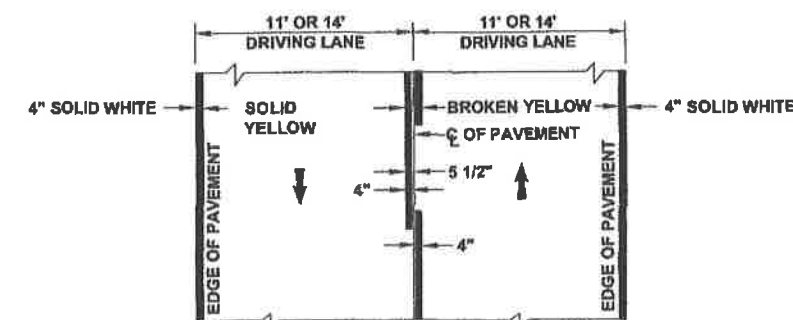
FORMULAS FOR L (TAPER LENGTH)

40 MPH OR LESS	$L = \frac{W \times S^2}{60}$
40 MPH OR GREATER	$L = W \times S$

WHERE W = WIDTH OF OFFSET
 S = POSTED SPEED LIMIT

TCP TABLE SETUP

SPEED (MILES PER HOUR)	BUFFER/LENGTH (FT)	CONE/DRUM SPACING (FT.)	TAPER FACTOR (T)
20	115	20	7:1
25	155	25	10:1
30	200	30	15:1
35	250	35	20:1



STRIPING DETAIL

N.T.S.

TRAFFIC CONTROL NOTES:

- IT IS THE INTENT OF THIS TRAFFIC CONTROL PLAN (TCP) TO ILLUSTRATE SOME BUT NOT ALL OF THE TRAFFIC CONTROL CONFIGURATIONS THAT WILL BE REQUIRED BY THIS PROJECT. TRAFFIC CONTROL PLANS FOR CONFIGURATIONS NOT COVERED BY THIS TCP SHALL BE DEVELOPED BY THE CONTRACTOR AND SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO USE.
- A MINIMUM OF ONE LANE SHALL BE MAINTAINED AT ALL TIMES IN WORK AREAS
- TWO LANES SHALL BE MAINTAINED AT ALL TIMES WITHIN THE PROJECT LIMITS IN NON-WORK AREAS AND DURING NON-WORKING HOURS.
- DRIVING LANES SHALL BE A MINIMUM WIDTH OF 10'. WORK ZONE SHALL BE NO LONGER THAN 300 FEET.
- TRAFFIC DELAYS SHALL NOT EXCEED 5 MINUTES.
- THE UNEVEN LANES (CW8-11) SIGN SHOULD BE USED DURING OPERATIONS THAT CREATE A DIFFERENCE IN ELEVATION BETWEEN ADJACENT LANES OF 2 INCHES OR GREATER.
- FLAGGER STATION NEEDS TO BE ILLUMINATED AT NIGHT.
- THE CONTRACTOR SHALL KEEP THE PUBLIC INFORMED OF HIS/HER CONSTRUCTION ACTIVITIES THROUGH THE USE OF THE LOCAL NEWS MEDIA. NEWS RELEASES SHALL BE APPROVED BY THE PROJECT ENGINEER PRIOR TO THEIR RELEASE. NEWS RELEASES WILL BE REQUIRED BUT NOT LIMITED TO, THE ONSET OF WORK, GRINDING, PAVING AND CHANGES IN THE LANE CONFIGURATIONS.
- DRUM OR CONE SPACING NEEDS TO BE MAXIMUM 45' ALONG THE TAPER SECTION AND 90' ALONG THE TANGENT, USING A MINIMUM OF 11 DEVICES.
- FOR LOCATION OF DOUBLE TRAFFIC FINE SIGNS SEE ALASKA STANDARD DRAWING C-04.12.

LEGEND

- SIGN
- CONE
- DRUM
- TYPE III BARRICADE
- FLAGGING STATION

STRIPING NOTE:

- CONTRACTOR STRIPING SHALL BE LIMITED TO AREAS RECEIVING PAVEMENT REHABILITATION. THE CONTRACTOR IS RESPONSIBLE TO RE-STRIPES THAT IS OBLITERATED DUE TO CONSTRUCTION ACTIVITIES.

PLAN LEGEND

CHECKED BY: M. Von Alstine



DESIGNED BY: D. Epstein
 DRAWN BY: B. Bennett

STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES - SOUTHEAST REGION
CAUSEWAY RECONSTRUCTION & TRESTLE REPLACEMENT
 Project No. 69070

TRAFFIC CONTROL PLAN

PROJECT DESIGNATION

69070

STATE	YEAR
ALASKA	2011
SHEET NUMBER	TOTAL SHEETS
S1	58

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

PATH: Q:\HYDRO\07\PLANS\T1-T7
ESCP&P.DWG

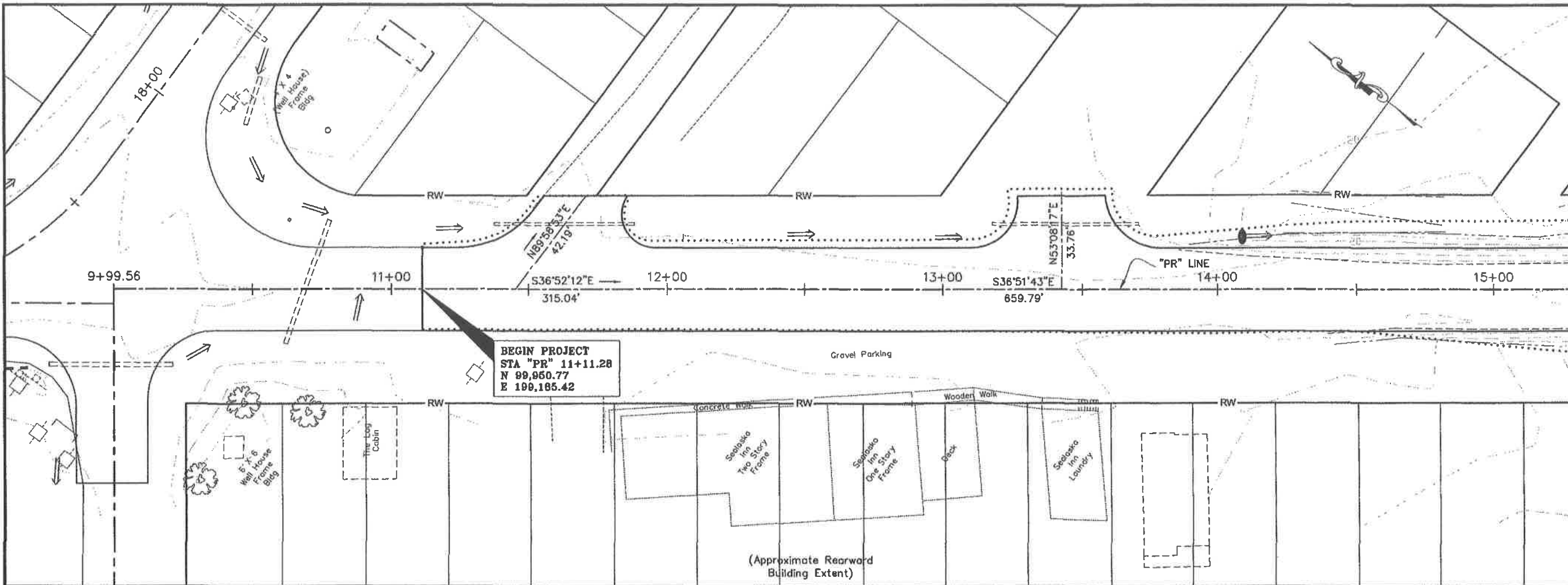
GRANTHAM, RICK L (DOT)
TAB: T1 Thursday, September 01, 2011 11:4

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

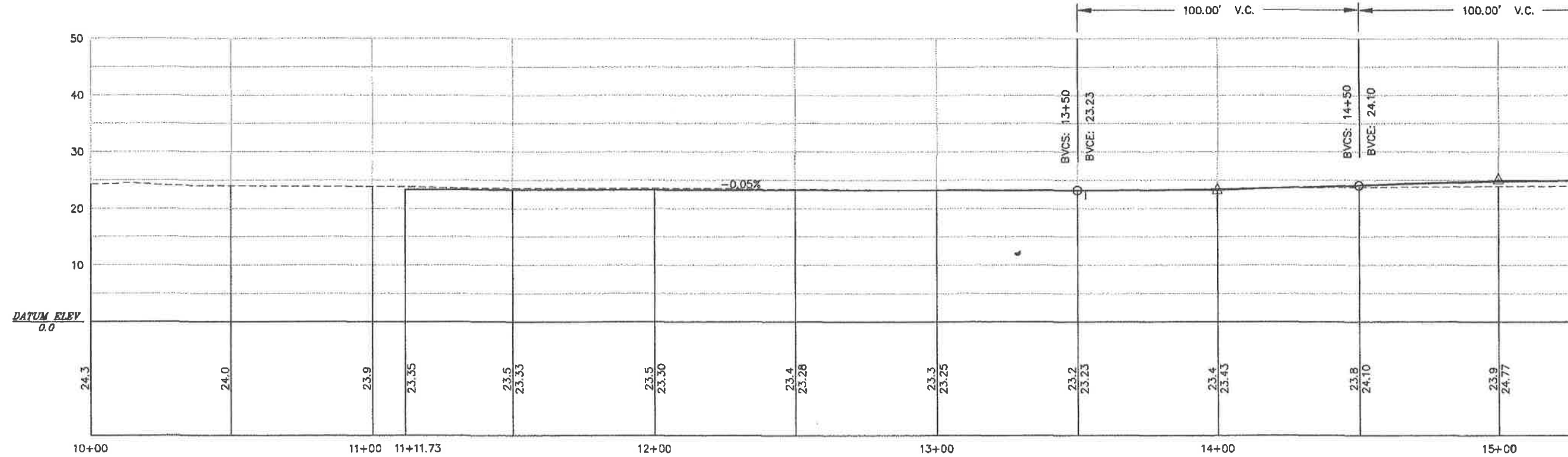
No.	DATE	DESCRIPTION



PLAN & PROFILE
STA. 10+00 TO 15+00

LOW POINT ELEV = 23.23
LOW POINT STA = 13+52.81
PVI STA = 14+00
PVI ELEV = 23.20
A.D. = 1.85
K = 53.99

HIGH POINT ELEV = 24.99
HIGH POINT STA = 15+48.44
PVI STA = 15+00
PVI ELEV = 25.00
A.D. = -1.83
K = 54.69



CHECKED BY: M. VAN ALSTINE

DESIGNED BY: D. Blackburn
DRAWN BY: S. Bennett

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

**HYDER CAUSEWAY
RECONSTRUCTION &
TRESTLE REPLACEMENT**

**EROSION & SEDIMENT
CONTROL PLAN**

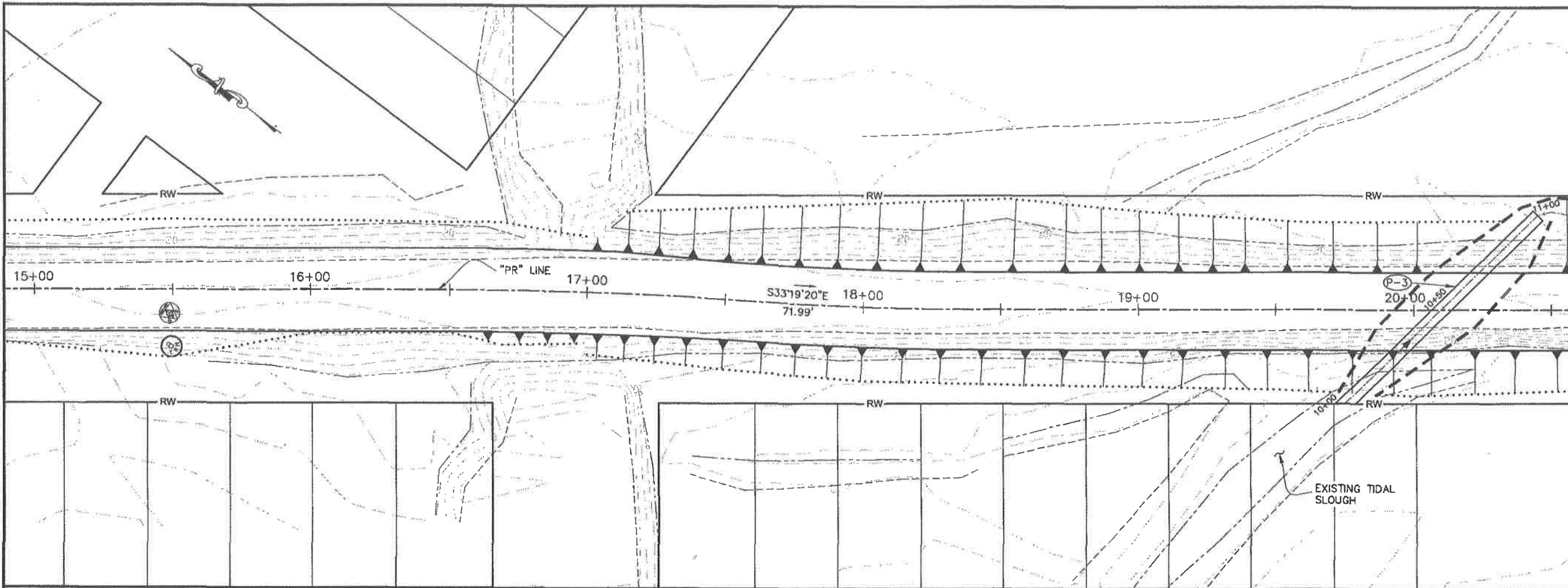
PROJECT DESIGNATION

69070

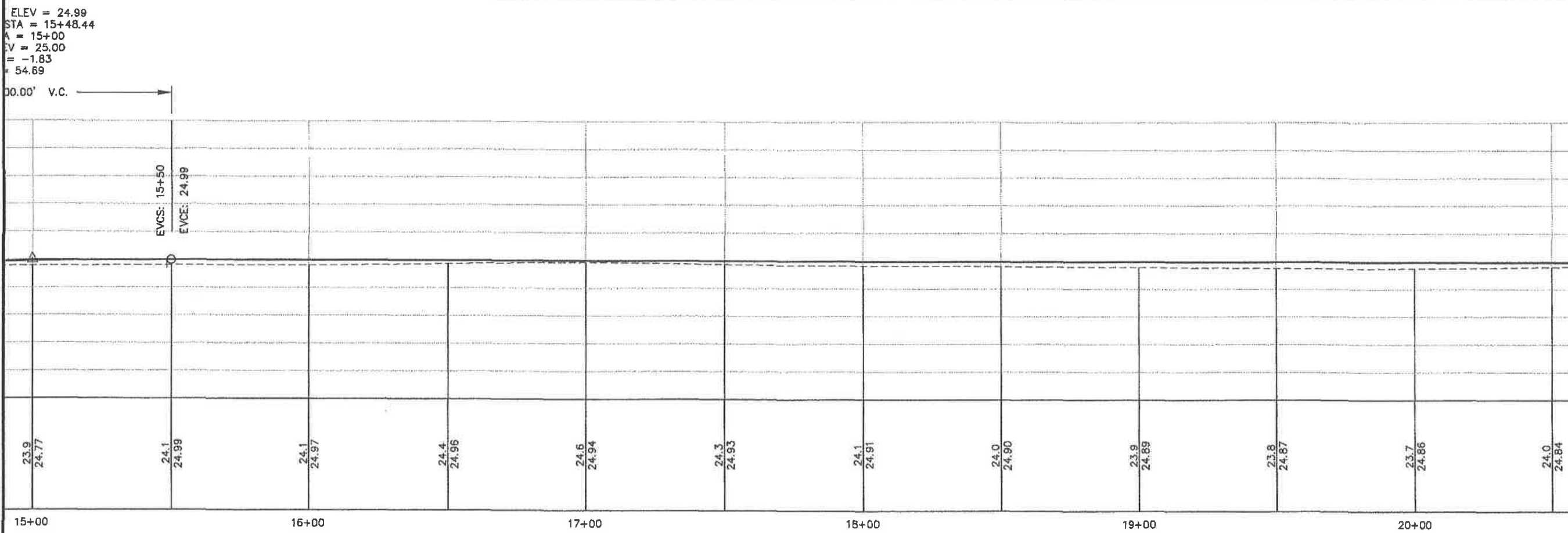
STATE	YEAR
ALASKA	2011
SHEET NUMBER	TOTAL SHEETS
T1	58

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

RECORD OF REVISIONS		
No.	DATE	DESCRIPTION



**PLAN & PROFILE
STA. 15+00 TO 20+50**



ELEV = 24.99
STA = 15+48.44
A = 15+00
V = 25.00
= -1.83
+ 54.69

00.00' V.C.

EVCS: 15+50
EVCE: 24.99

23.9 24.77	24.1 24.99	24.1 24.97	24.4 24.96	24.6 24.94	24.3 24.93	24.1 24.91	24.0 24.90	23.9 24.89	23.8 24.87	23.7 24.86	24.0 24.84
15+00	16+00	17+00	18+00	19+00	20+00						

CHECKED BY: M. VAN ALSTINE



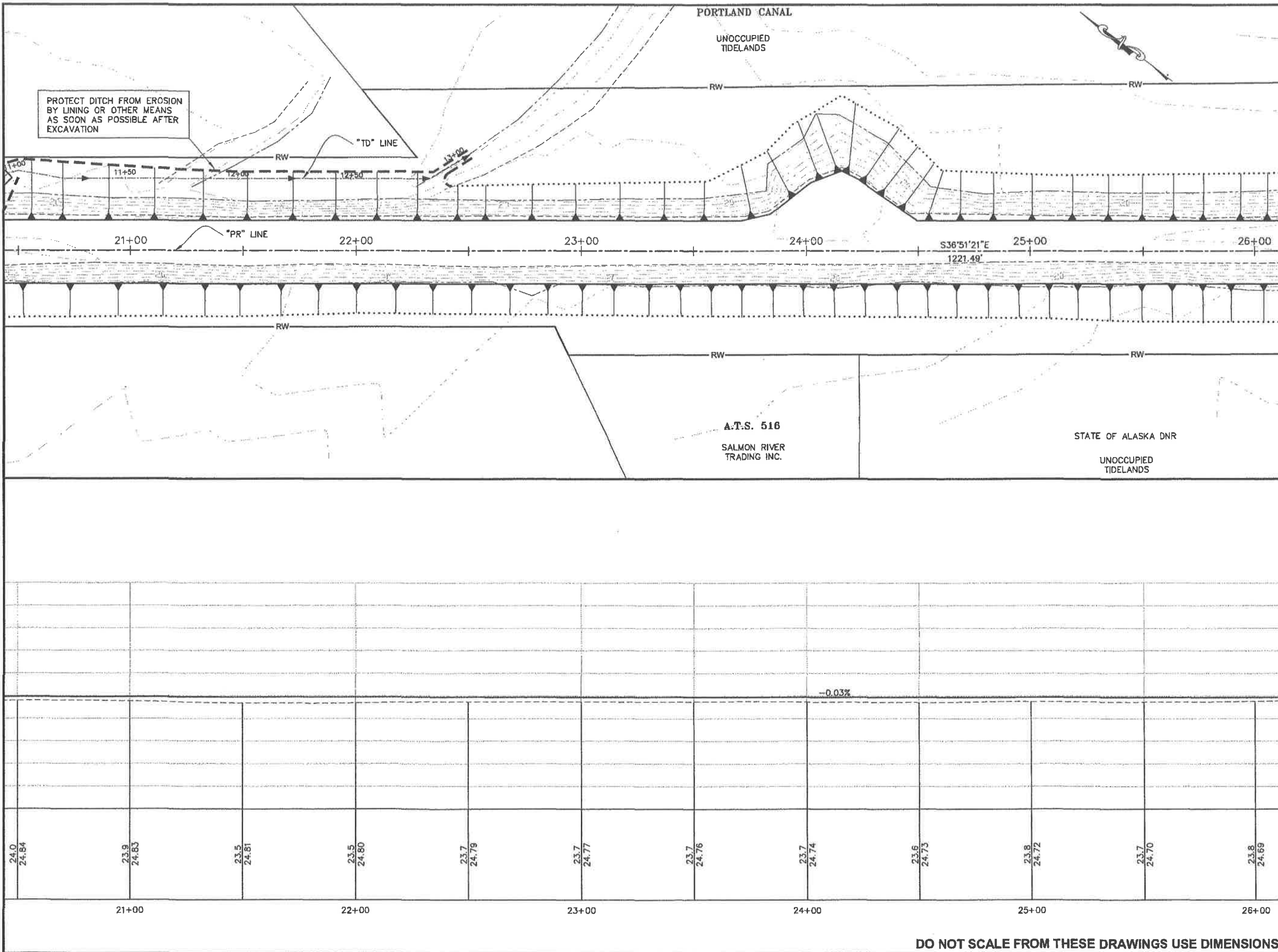
DESIGNED BY: D. Blackburn

DRAWN BY: B. Bennett

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
DESIGN & ENGINEERING SERVICES
DIVISION-SOUTHEAST REGION
**HYDER CAUSEWAY
RECONSTRUCTION &
TRESTLE REPLACEMENT
EROSION & SEDIMENT
CONTROL PLAN**

PROJECT DESIGNATION	
69070	
STATE	YEAR
ALASKA	2011
SHEET NUMBER	TOTAL SHEETS
T2	58

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS



PATH:Q:\HYD\69070\PLANSET\1-17 ESCP&P.DWG

GRANTHAM, RICK L (DDT)
 TAB: T3 Thursday, September 01, 2011 11:4

ADDENDUM NUMBER		
ATTACHMENT NUMBER		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION

PLAN & PROFILE
STA. 20+50 TO 26+00

CHECKED BY: M. VAN ALSTINE

DESIGNED BY: D. Blackburn
 DRAWN BY: B. Bennett

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

**HYDER CAUSEWAY
 RECONSTRUCTION &
 TRESTLE REPLACEMENT**

**EROSION & SEDIMENT
 CONTROL PLAN**

PROJECT DESIGNATION
69070

STATE	YEAR
ALASKA	2011
SHEET NUMBER	TOTAL SHEETS
T3	58

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

UNOCCUPIED
TIDELANDS

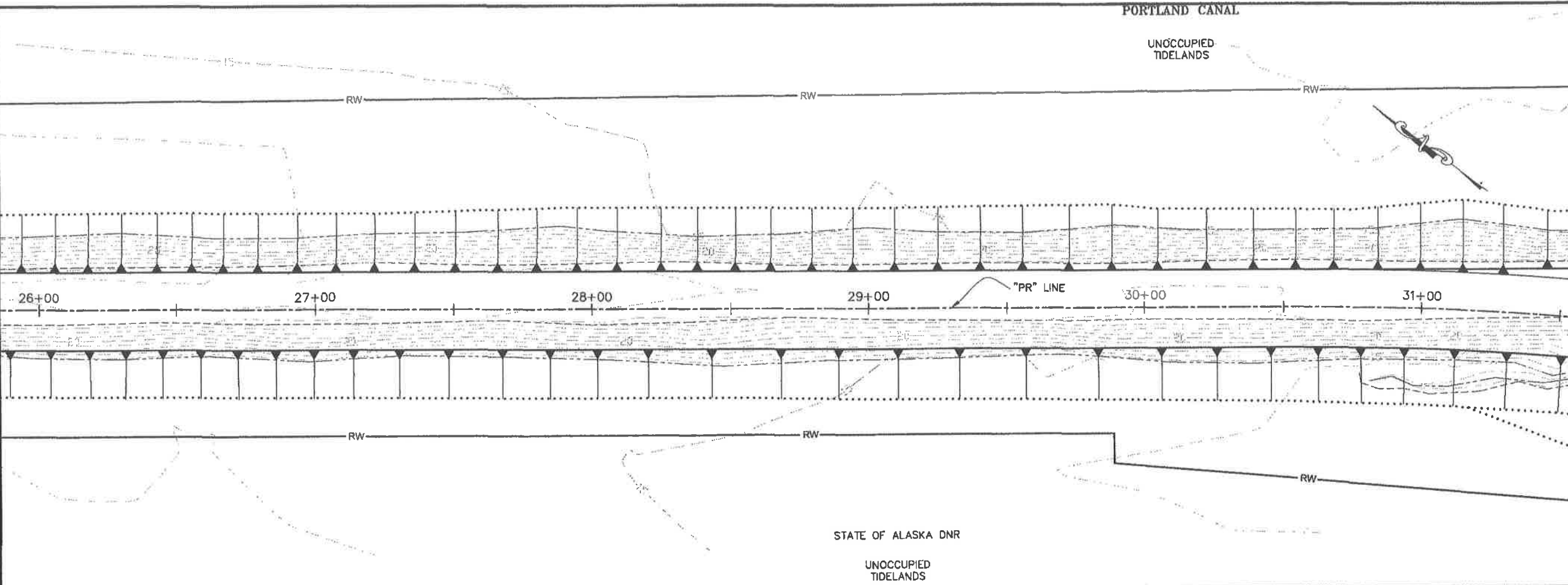
ADDENDUM NUMBER

ATTACHMENT NUMBER

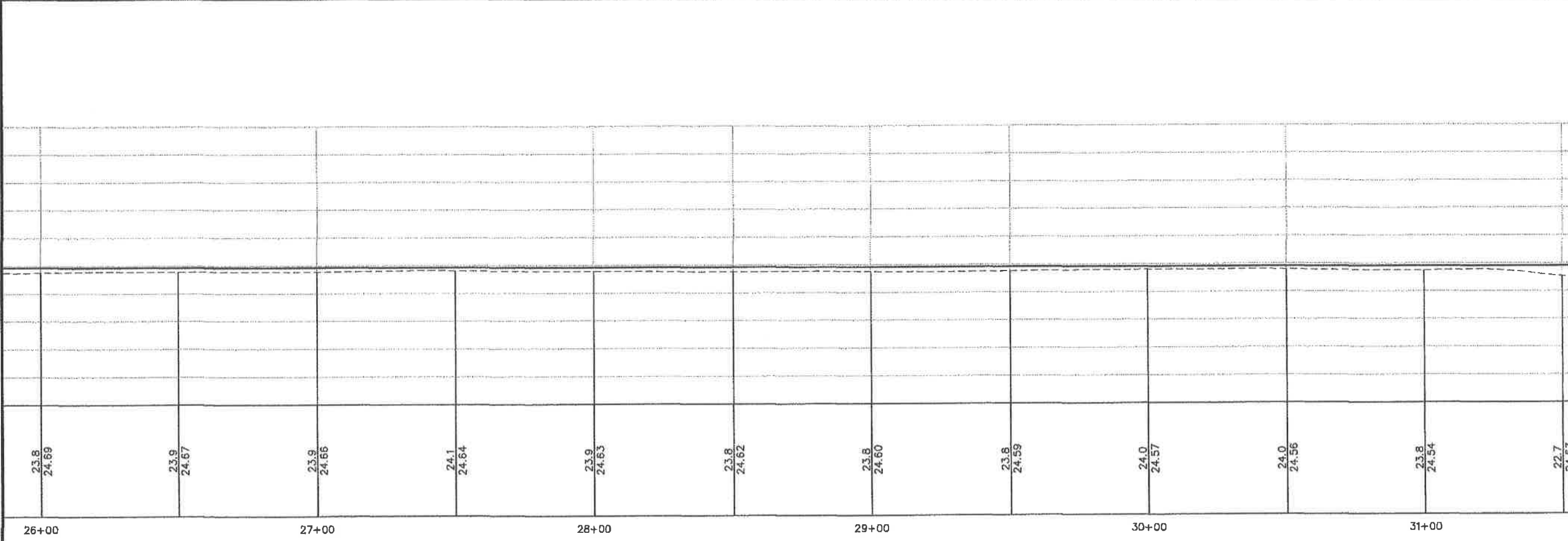
RECORD OF REVISIONS

No.	DATE	DESCRIPTION

PLAN & PROFILE
STA. 26+00 TO 31+50



STATE OF ALASKA DNR
UNOCCUPIED
TIDELANDS



CHECKED BY: M. VAN ALSTINE



DESIGNED BY: D. Blackburn

DRAWN BY: B. Bennett

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

**HYDER CAUSEWAY
RECONSTRUCTION &
TRESTLE REPLACEMENT**

**EROSION & SEDIMENT
CONTROL PLAN**

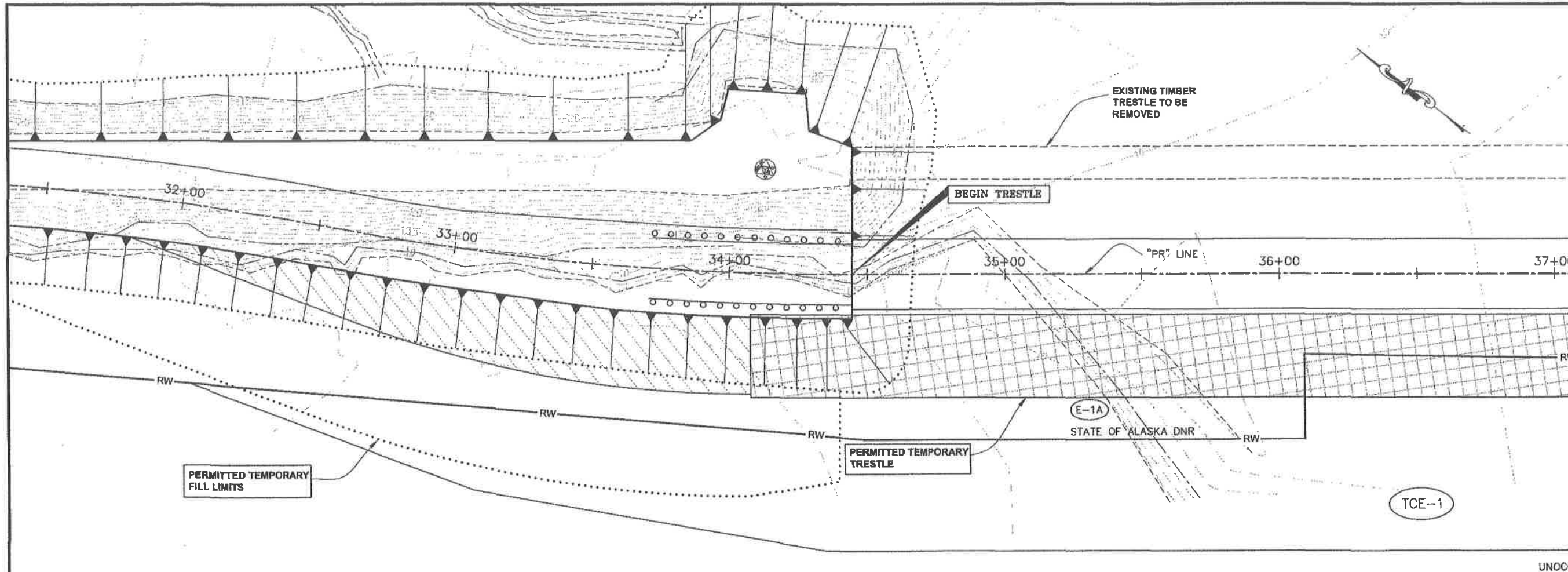
PROJECT DESIGNATION

69070

STATE	YEAR
ALASKA	2011

SHEET NUMBER	TOTAL SHEETS
T4	58

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS



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ESCP&P.DWG

GRANTHAM, RICK L (DOT)
TAB: T5 Thursday, September 01, 2011 1:54

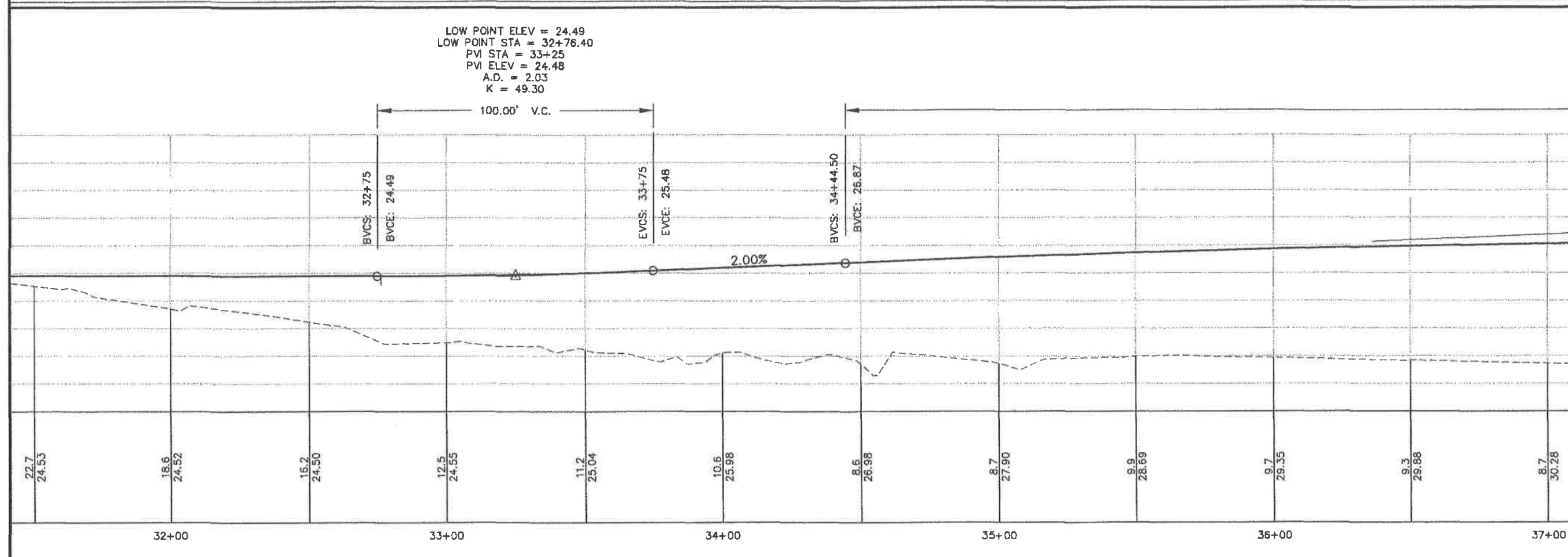
ADDENDUM NUMBER

ATTACHMENT NUMBER

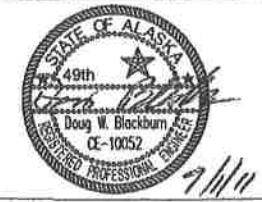
RECORD OF REVISIONS

No.	DATE	DESCRIPTION

PLAN & PROFILE
STA. 31+50 TO 37+00



CHECKED BY: M. VAN ALSTINE



DESIGNED BY: D. Blackburn
DRAWN BY: B. Barnett

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

**HYDER CAUSEWAY
RECONSTRUCTION &
TRESTLE REPLACEMENT**

**EROSION & SEDIMENT
CONTROL PLAN**

PROJECT DESIGNATION

69070

STATE	YEAR
ALASKA	2011
SHEET NUMBER	TOTAL SHEETS
T5	58

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

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 ESCP&P.DWG

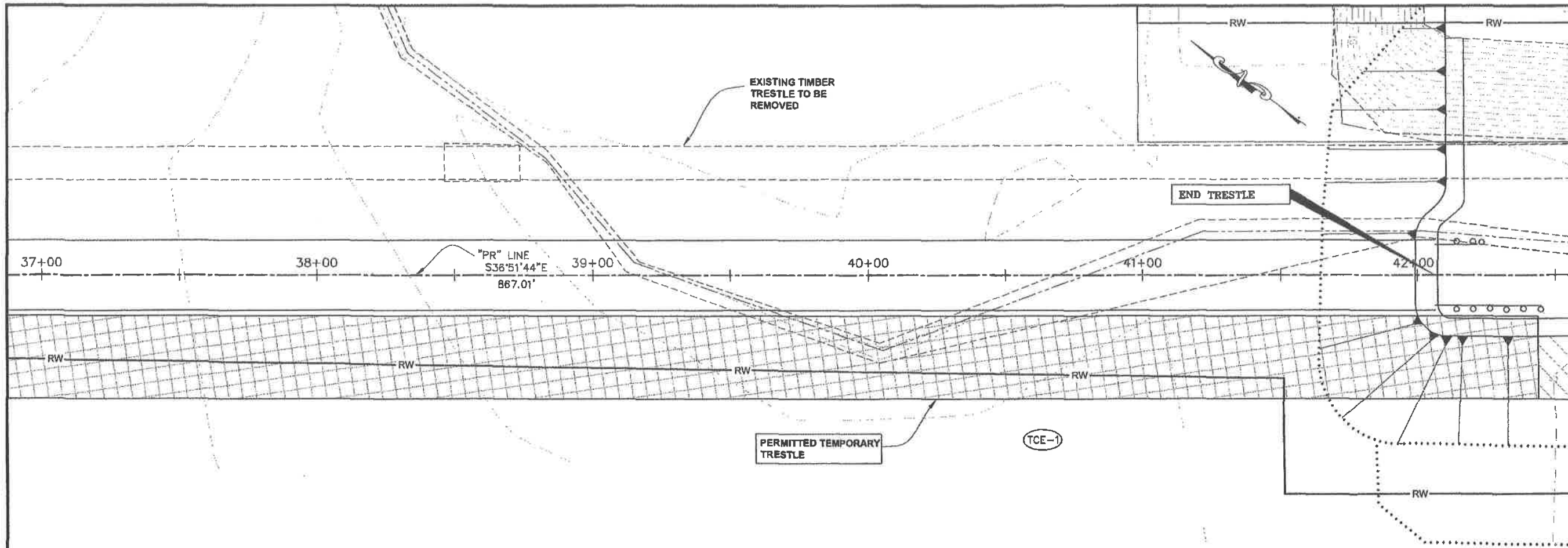
GRANTHAM, RICK L (DDT)
 TAB: T6 Thursday, September 01, 2011 11:4

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

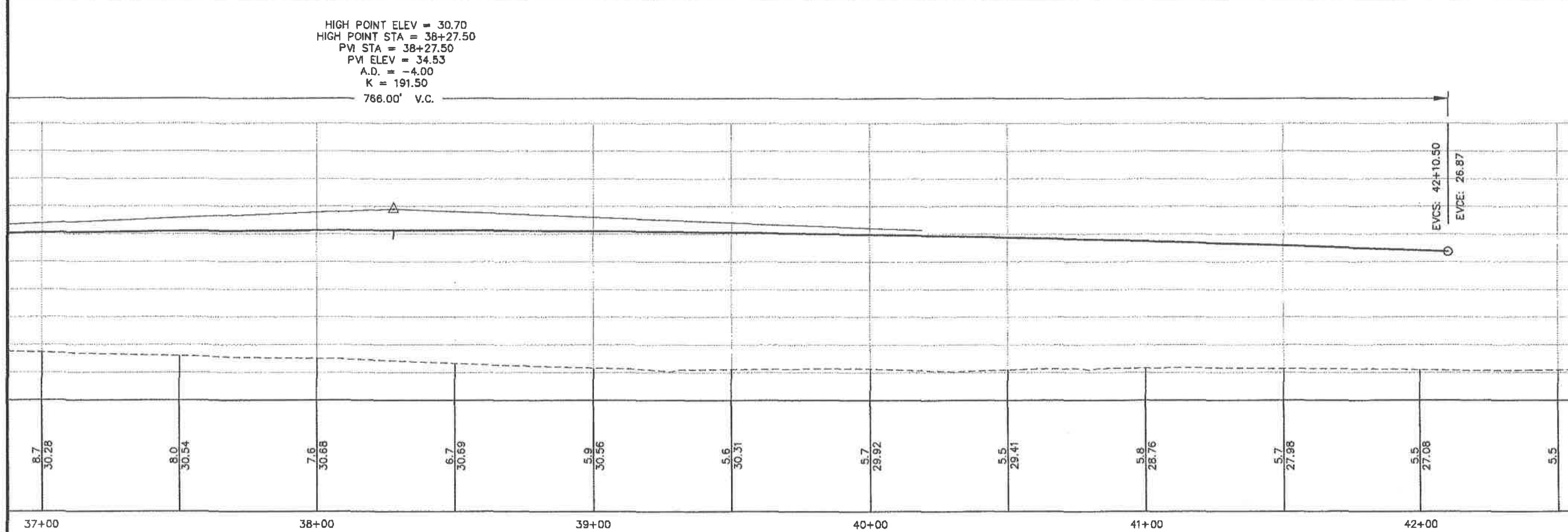
No.	DATE	DESCRIPTION



PLAN & PROFILE
STA. 37+00 TO 42+50

UNOCCUPIED TIDELANDS

HIGH POINT ELEV = 30.70
 HIGH POINT STA = 38+27.50
 PVI STA = 38+27.50
 PVI ELEV = 34.53
 A.D. = -4.00
 K = 191.50
 786.00' V.C.



CHECKED BY: N. VAN ALSTINE

DESIGNED BY: D. Blackburn
 DRAWN BY: B. Bennett

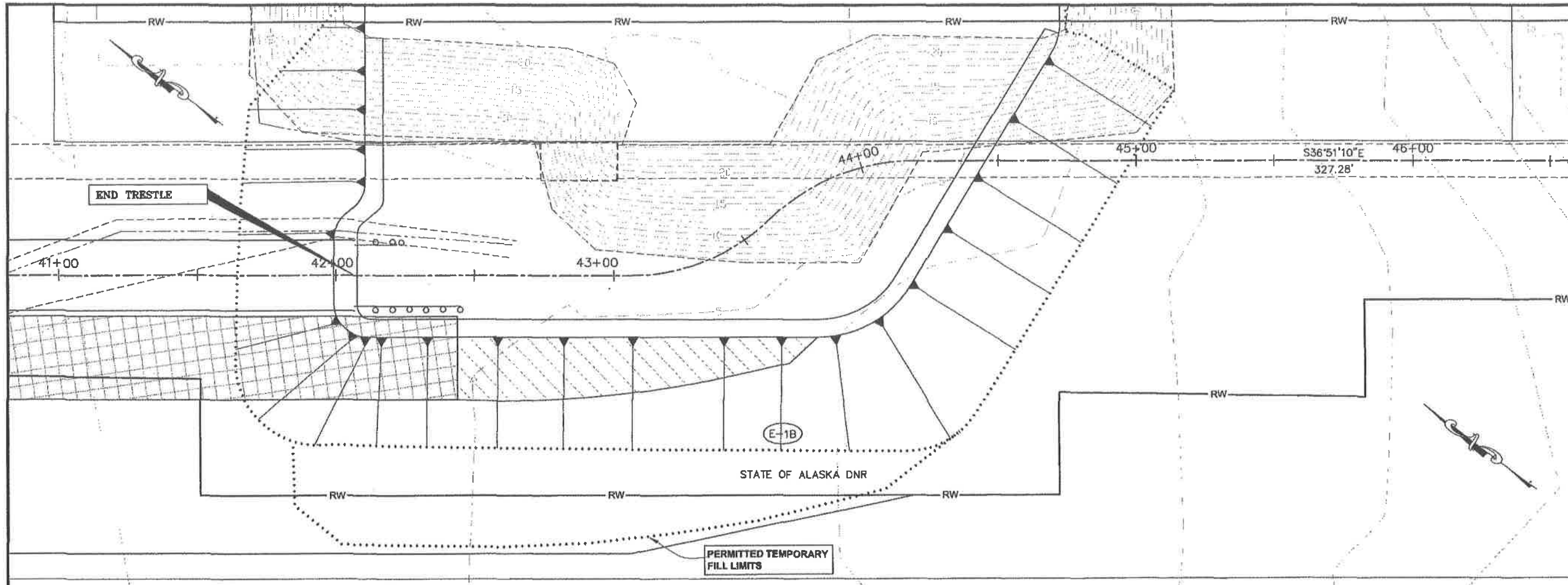
STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 & PUBLIC FACILITIES
 DESIGN & ENGINEERING SERVICES
 DIVISION-SOUTHEAST REGION

**HYDER CAUSEWAY
 RECONSTRUCTION &
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**EROSION & SEDIMENT
 CONTROL PLAN**

PROJECT DESIGNATION	
69070	
STATE	YEAR
ALASKA	2011
SHEET NUMBER	TOTAL SHEETS
T6	58

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS



PATH: Q:\HYD\6907\PLAN\BET11-T7
ESCP&P.DWG

GRANTHAM, RICK L (DOT)
TAB: T7 Thursday, September 01, 2011 11:4

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

PLAN
STA. 41+00 TO 46+50

CHECKED BY: M. VAN ALSTINE

DESIGNED BY: D. Blackburn
DRAWN BY: S. Bennett

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

**HYDER CAUSEWAY
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**EROSION & SEDIMENT
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PROJECT DESIGNATION

69070

STATE	YEAR
ALASKA	2011
SHEET NUMBER	TOTAL SHEETS
T7	58

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