

# State of Alaska

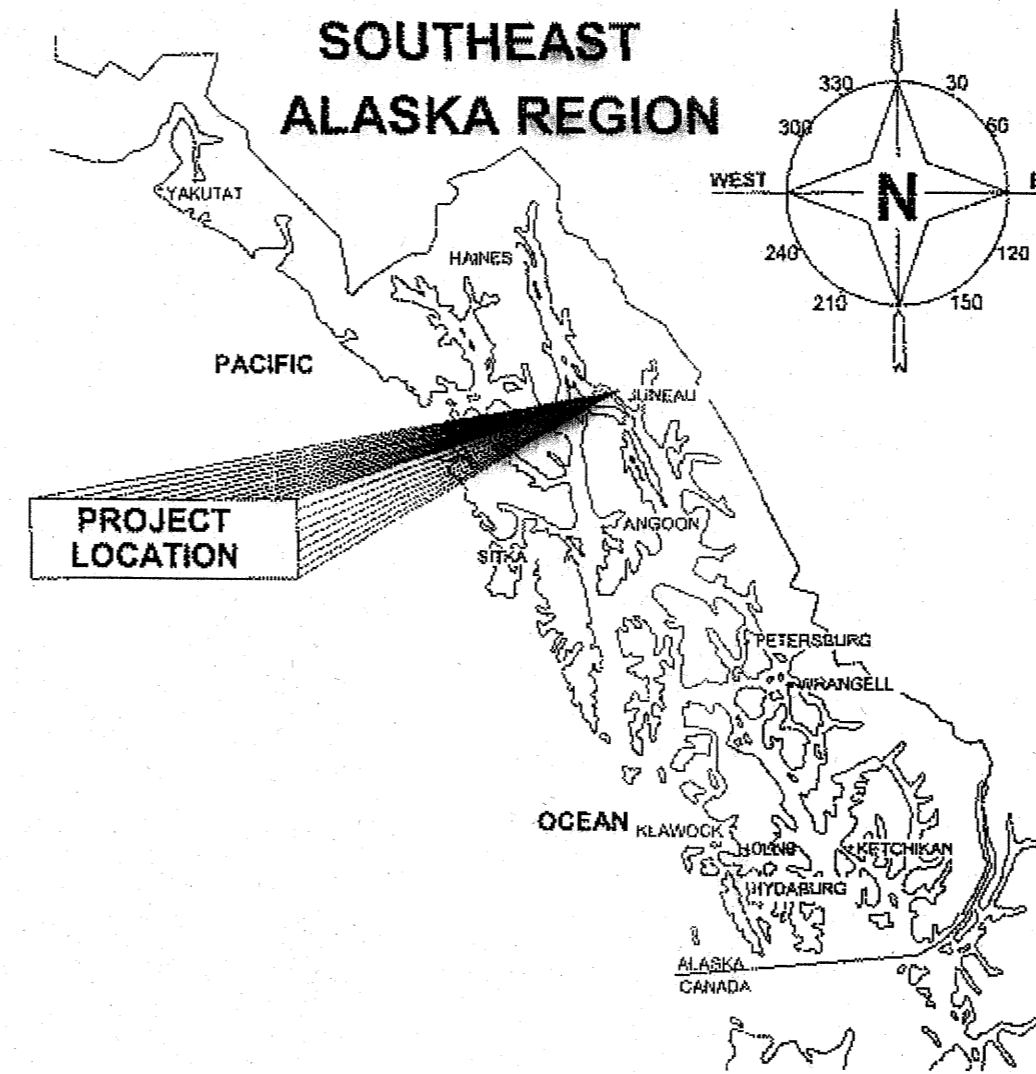
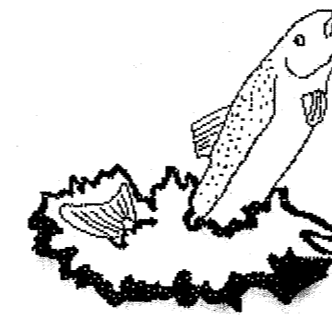
Department of Transportation  
and Public Facilities  
Southeast Region

## JUNEAU, ALASKA

DEC 31 2013

The undersigned hereby certifies that this duplicated document is an exact and true copy of the original.

*Handwritten Signature*



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### AMALGA HARBOR RD & BRIDGES RECONSTRUCTION & REPLACEMENT PROJECT No. BH-0950(1)~69684

### AS BUILT PLANS

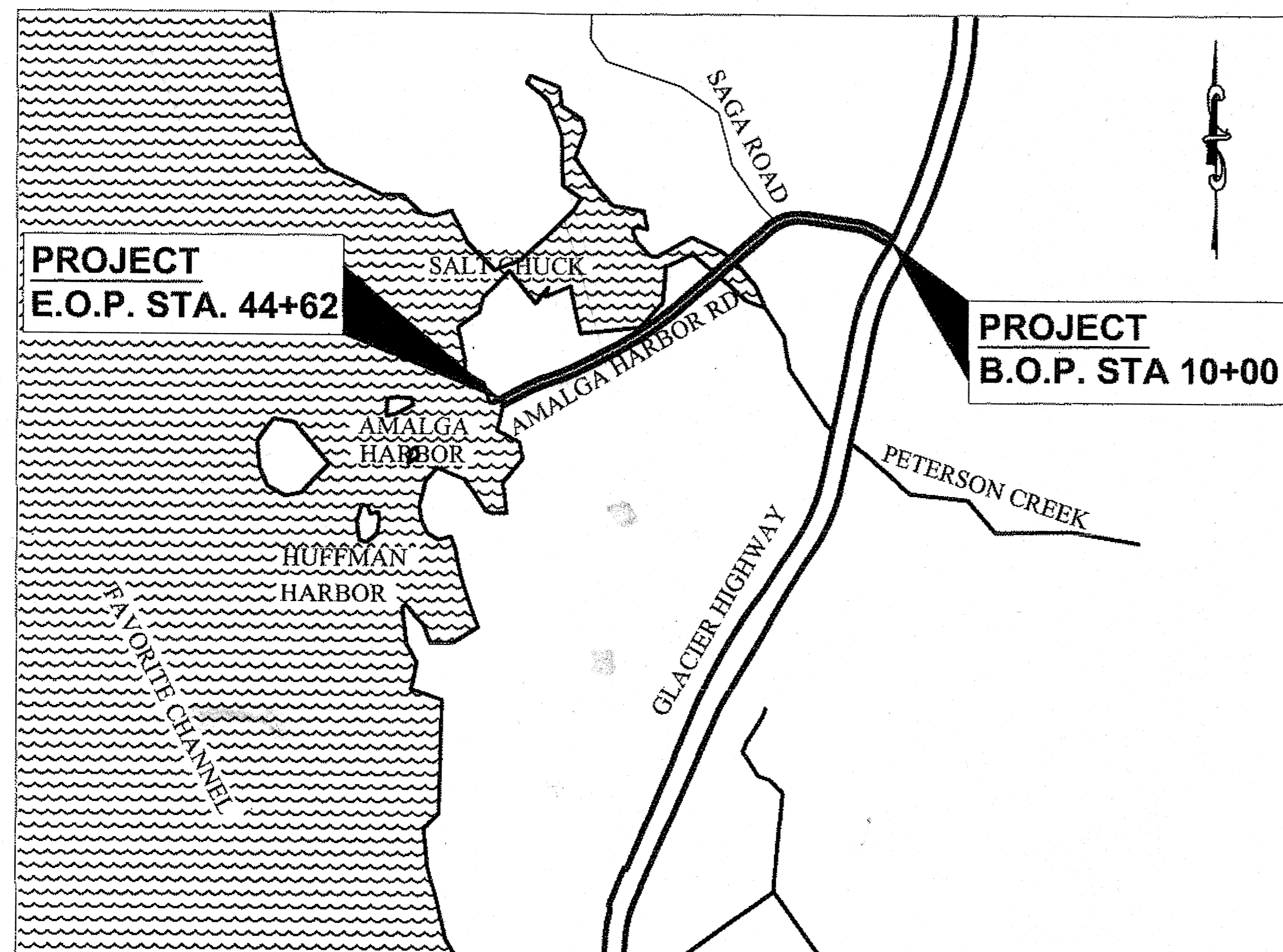
CONTRACTOR: TRUCANO CONSTRUCTION CO.

PROJECT ENG: MARK FIGLEY P.E.

GARRET GLADSO P.E.

BEGIN CONSTRUCTION: APRIL 14, 2014

END CONSTRUCTION: JUNE 25, 2015



VICINITY MAP

#### DESIGN DESIGNATION

A.D.T. 2014	=	240
A.D.T. 2034	=	270
D.H.V. (10.7%) 2014	=	40
D.H.V. (10.7%) 2034	=	40
% T	=	10.6
V	=	30
E.A.L.	=	50,000

Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.

PE: *[Signature]* Date: 07.08.2015

#### PROJECT SUMMARY

CDS ROUTE NO.	=	296670
CDS MILEPOINT	=	0.00 TO 0.678
LENGTH OF PROJECT	=	3462 FT
LENGTH OF PAVING	=	3150 FT
WIDTH OF PAVING	=	22 FT TO 28 FT

#### THE FOLLOWING STANDARD DRAWINGS APPLY TO THIS PROJECT:

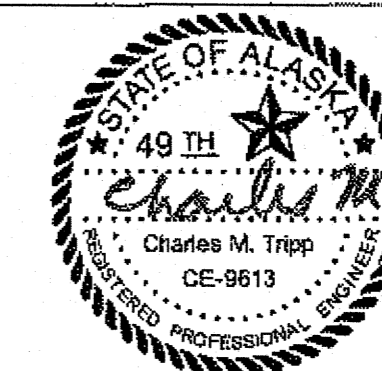
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C-03.10	D-22.01	D-36.00	M-13.01	S-20.10	T-21.02
C-04.12	D-24.00	E-13.00	M-16.01	S-21.02	T-22.03
C-05.10	D-25.00	I-20.13	S-21.02	S-23.00	U-03.00
D-01.02	D-26.02	I-81.00	S-00.10	S-30.03	

PATH: Q:\UNU69684\PLANSET\69684\_A1\_TITLE.DWG TAB:A1

Thursday, June 21, 2012 2:51:46 PM

PLOT: PSPACE OR MSPAGE: 1=1(F)

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
& PUBLIC FACILITIES  
SOUTHEAST REGION



APPROVED: *Chuck Correa* 10/14/13  
REGIONAL PRE-CONSTRUCTION ENGINEER DATE  
CHUCK CORREA, P.E.

APPROVED: *[Signature]* 10.14.2013  
DIRECTOR, SOUTHEAST REGION DATE  
ALBERT H. CLOUGH, CPG

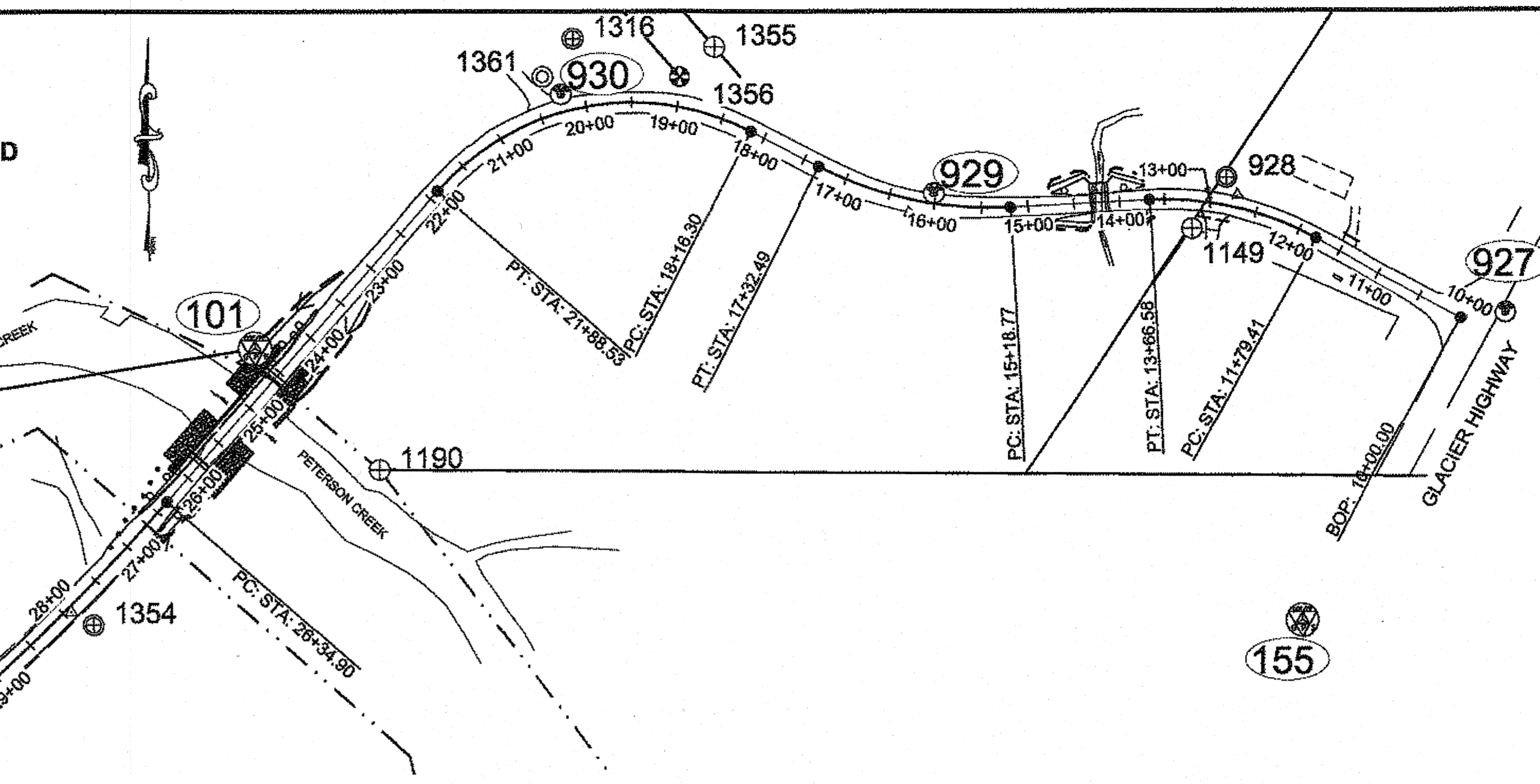
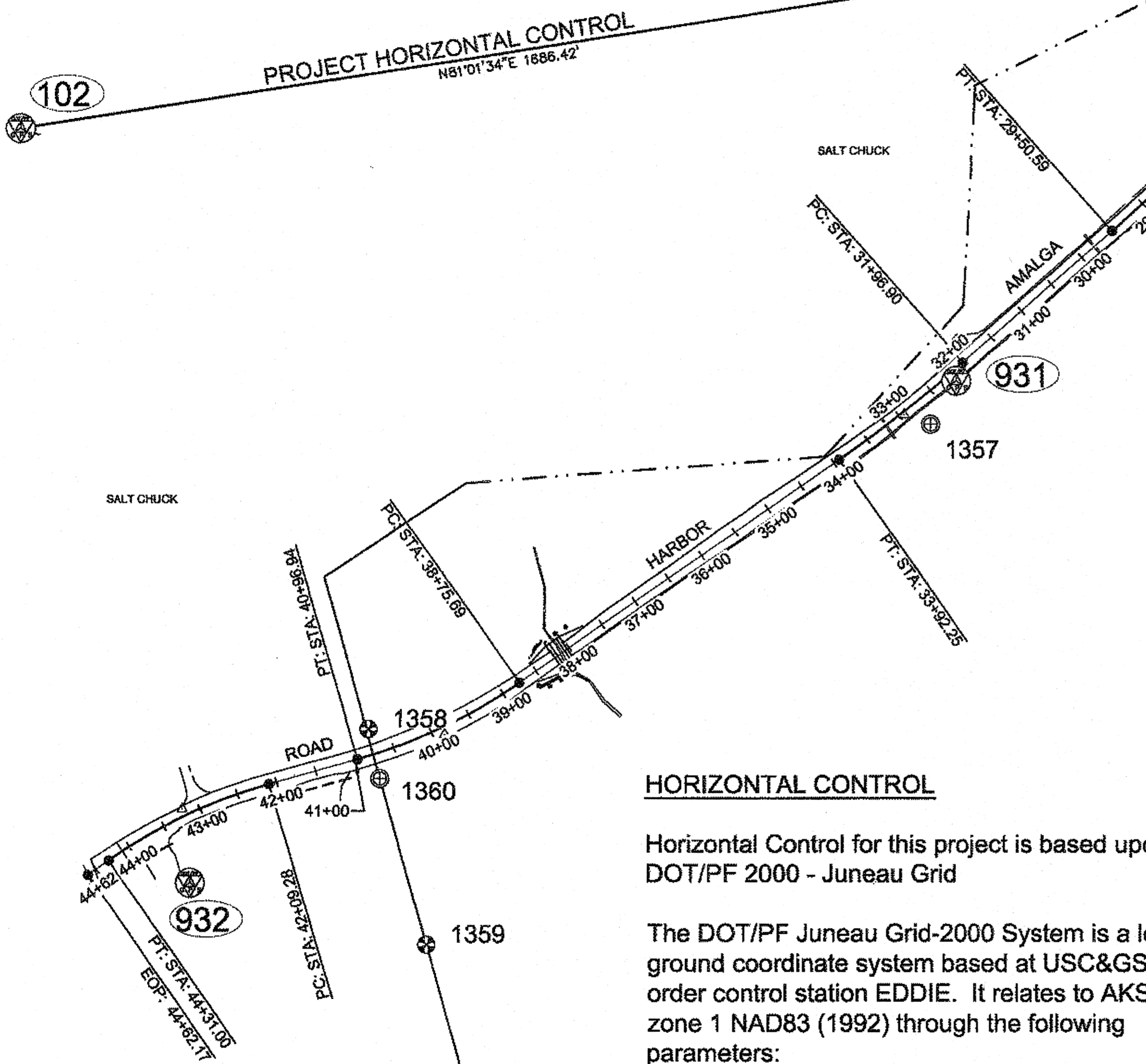
CERTIFIED TRUE & CORRECT AS-BUILT OF ACTUAL FIELD CONDITION:

*[Signature]* 7-13-15  
CONSTRUCTION PROJECT MANAGER DATE

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	69684/ BH-0950(1)	2013	A1	55

SURVEY CONTROL						
Point #	Elevation	Northing	Easting	Description	Station	Offset
929	30.50	550869.19	460813.24	ALCTRL2"	16+02.27	11.38R
930	26.64	551076.60	460407.72	ALCTRL2"	20+23.25	18.98R
155	29.63	550506.23	461210.42	GPS_SH-MON_ALCAP3.25"	N/A	N/A
931	25.52	550227.07	459564.98	GPS_ALCTRL2"	32+17.90	11.67L
932	35.21	549603.96	458618.48	GPS_ALCTRL2"	43+54.95	76.68L
101	25.71	550800.99	460075.67	GPS_ALCAP/DIGGER_AH-1	24+48.13	37.17R
102	22.15	550537.93	458408.89	GPS_BC2" AH-2	42+40.26	866.32R
158	30.93	551327.34	461653.08	GPS_SH-MON_ALCAP3.25"	10+04.94	563.58R
927	28.77	550838.31	461431.51	ALCTRL2"	N/A	N/A

ALL MONUMENTS IN THE SURVEY CONTROL TABLE ARE PROVIDED STRICTLY FOR SURVEY CONTROL. SHOULD ANY OF THEM BE DESTROYED DURING CONSTRUCTION THEY SHALL NOT BE REPLACED. HOWEVER, THE CONTRACTOR IS RESPONSIBLE FOR ESTABLISHING ADDITIONAL CONTROL AS NEEDED.



PROPERTY						
Point #	Northing	Easting	Elevation	Description	Station	Offset
928	550985.71	461130.51	27.29	BPR_BC3" S1375_OLD-PT-1148	12+87.91	30.00R
1360	549733.61	458851.96	29.62	BPR_BC3" ROW/S1286	40+78.06	30.69L
1381	551095.56	460387.93	27.16	BT_17"SPRUCE	20+35.57	42.74R
1354	550502.60	459900.90	24.73	BPR_BC3" RPP1_846+64.8_ELEV_27.4_2-J_199	27+85.91	32.30L
1355	551128.14	460574.80	32.25	BC2.5" WC-C1_3662S	18+77.73	71.84R
1316	551136.89	460420.59	26.70	BPR_BC3" P1839+10.2_2J	20+01.08	74.98R
1356	551095.64	460537.27	26.86	BLM_BC3.25" WP-L1/L3-S3764	19+02.92	32.12R
1149	550930.33	461092.00	25.68	BC3"BPR_S1375_2-J	13+18.45	30.21L
1357	550173.06	459532.90	26.76	BPR_BC3" ROW/S1276	32+76.33	32.74L
1190	550670.25	460210.90	25.29	BC2.25" USDA/USFS_S3764/C1L3_HES103_C1/M	24+57.64	150.69L
1358	549794.85	458838.23	29.95	GLO_BC2.5" C4-LB-TRA-S2387/C4-TRA-S3325	40+72.32	31.80R
1359	549528.18	458908.21	37.23	GLO_BC2.5" C4-S2179	40+84.42	243.55L

ALL MONUMENTS IN THE PROPERTY TABLE SHALL BE PRESERVED OR REFERENCED PRIOR TO DISTURBANCE AND REPLACED AT THEIR ORIGINAL HORIZONTAL POSITION.

**HORIZONTAL CONTROL**

Horizontal Control for this project is based upon DOT/PF 2000 - Juneau Grid

The DOT/PF Juneau Grid-2000 System is a local ground coordinate system based at USC&GS first order control station EDDIE. It relates to AKSPC zone 1 NAD83 (1992) through the following parameters:

Zone = NAD83 (1992) AKSPC ZONE 1  
 Grid Scale = 0.999928875  
 Convergence = -0°45'27.26"  
 Translation about USC&GS point EDDIE as follows:  
 AKSPC Northing = 2383469.17310 FT US  
 AKSPC Easting = 2512570.06318 FT US  
 Local Northing = 500000.0000 FT US  
 Local Easting = 500000.0000 FT US

**Project Specific Horizontal Control**

101: "AH-1" - 3.25" Alcap dig monument. AH-1 is on Amalga Harbor Road, approximately 28' south of the existing Peterson Creek Bridge, and is on the east bank of Peterson Creek.

JNU-Grid  
 N 550800.9901 FT US, E 460075.6715 FT US  
 AKSPC ZONE1  
 N 2434789.9414 FT US, E 2473323.6938 FT US

102: "AH-2" - 2" BRASS CAP epoxied into top of 2' X 3' X 1' exposed rock. Start at Ernest Gruening State Historical Site, go approximately 150' to unimproved trail on the right. Follow this trail to lagoon. AH-2 is approximately 25' to the left (west).

JNU-Grid  
 N 550537.9330 FT US, E 458409.8948 FT US  
 AKSPC ZONE1  
 N 2434548.9490 FT US, E 2471654.7034 FT US

**VERTICAL CONTROL**

The Vertical Datum for JNU Grid-2000 is MLLW Gastineau Channel tidal datum based on third order differential levels and supplemented with GEOID '99 modeled orthometric heights. The tidal epoch is 1960-1978, but this epoch has been updated with a 5 year observation period from Jan '94 to Dec '98 published Nov '99. The latest NOS publication (10-2011) on the 1983-2001 tidal epoch indicates the datum has risen 0.32'.

The Project Specific Basis of Vertical Control is point #99: a 3.5" BC set in a bedrock outcrop on shoreline of Amalga Harbor. TBM 99 bears approximately S30E 66.4' from the NE Corner of the concrete Amalga Harbor boat ramp and S75W 75.3' from a Brass Cap set in bedrock. TBM control point 99 has an observed elevation of 20.62 feet above MLLW.

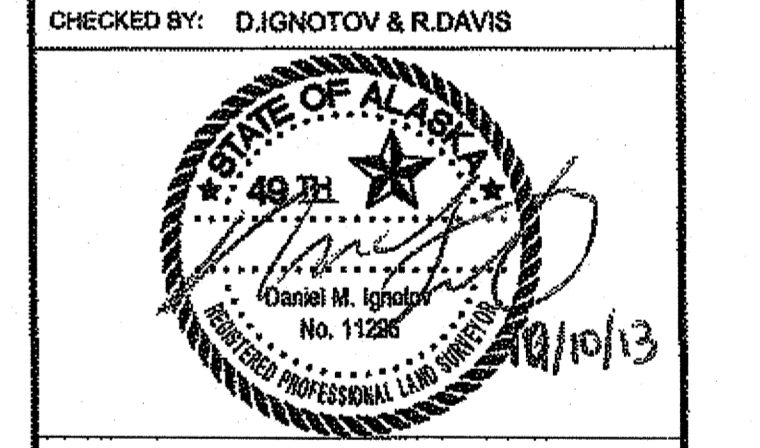
Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.  
 PE [Signature] Date 07.08.2015

DO NOT SCALE FROM THESE DRAWINGS - USE DIMENSIONS

PATH:Q:\INR\8098\SV\CD\SOURCE DWG\BASEMAP\A2-CONTROL_AMALGA		
PAPOL, JAMES M (DOT)		
TAB: A2 Wednesday, October 09, 2013 1:53:30 PM		
ADDENDUM NUMBER		
ATTACHMENT NUMBER		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION

**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, property markers, or accessories that 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 only be used as last resort for resetting monuments and corners.

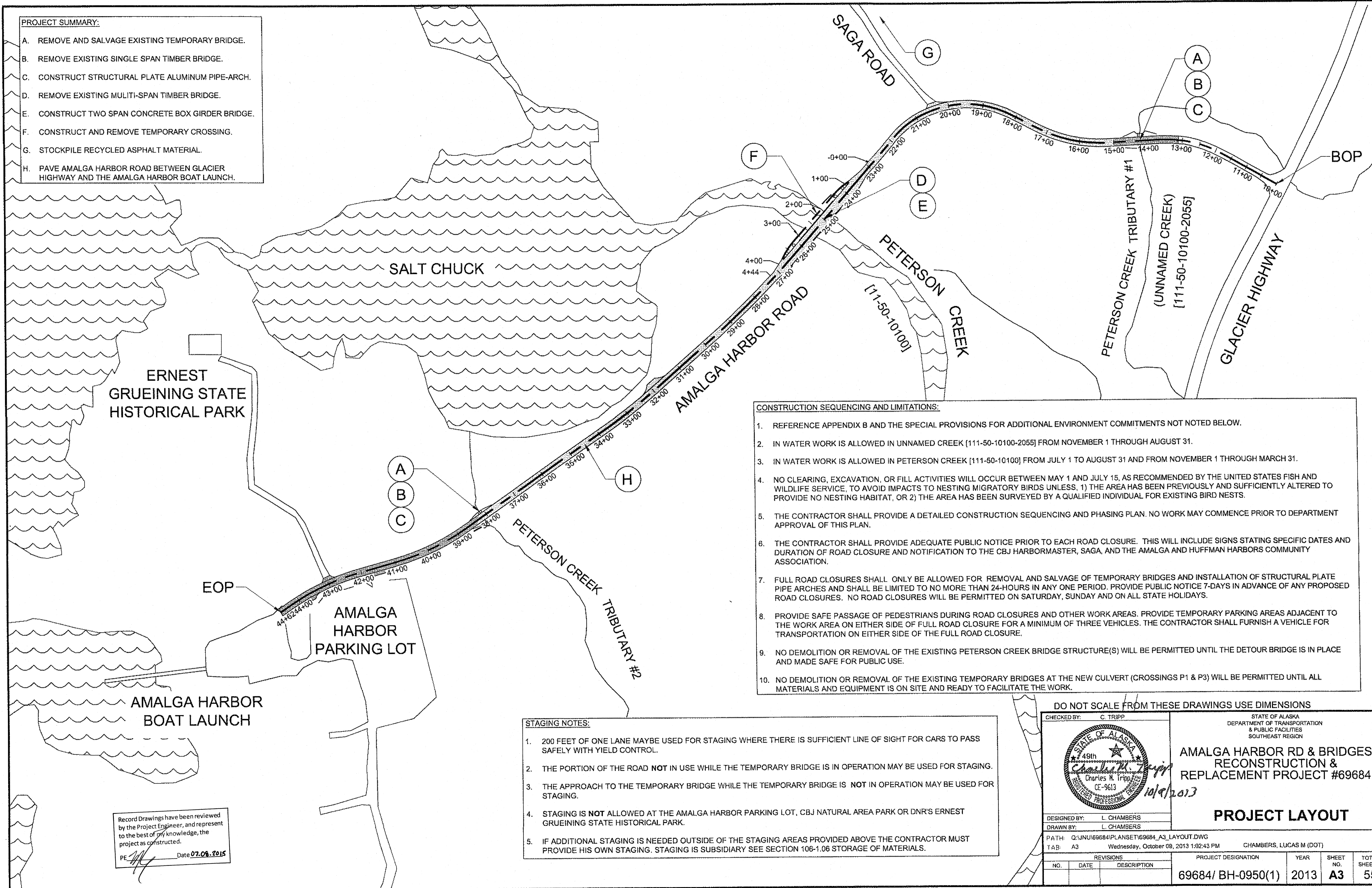


CHECKED BY: D.IGNOTOV & R.DAVIS  
 DESIGNED BY: J.PAPOI  
 DRAWN BY: J.PAPOI

STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES  
 SOUTHEAST REGION  
 AMALGA HARBOR ROAD  
 BRIDGE RECONSTRUCTION & REPLACEMENT  
 PROJECT #69684

SURVEY CONTROL	
PROJECT DESIGNATION	
69684/BH-0950(1)	
STATE	YEAR
ALASKA	2013
SHEET NUMBER	TOTAL SHEETS
A2	55

- PROJECT SUMMARY:**
- A. REMOVE AND SALVAGE EXISTING TEMPORARY BRIDGE.
  - B. REMOVE EXISTING SINGLE SPAN TIMBER BRIDGE.
  - C. CONSTRUCT STRUCTURAL PLATE ALUMINUM PIPE-ARCH.
  - D. REMOVE EXISTING MULTI-SPAN TIMBER BRIDGE.
  - E. CONSTRUCT TWO SPAN CONCRETE BOX GIRDER BRIDGE.
  - F. CONSTRUCT AND REMOVE TEMPORARY CROSSING.
  - G. STOCKPILE RECYCLED ASPHALT MATERIAL.
  - H. PAVE AMALGA HARBOR ROAD BETWEEN GLACIER HIGHWAY AND THE AMALGA HARBOR BOAT LAUNCH.



- CONSTRUCTION SEQUENCING AND LIMITATIONS:**
1. REFERENCE APPENDIX B AND THE SPECIAL PROVISIONS FOR ADDITIONAL ENVIRONMENT COMMITMENTS NOT NOTED BELOW.
  2. IN WATER WORK IS ALLOWED IN UNNAMED CREEK [111-50-10100-2055] FROM NOVEMBER 1 THROUGH AUGUST 31.
  3. IN WATER WORK IS ALLOWED IN PETERSON CREEK [111-50-10100] FROM JULY 1 TO AUGUST 31 AND FROM NOVEMBER 1 THROUGH MARCH 31.
  4. NO CLEARING, EXCAVATION, OR FILL ACTIVITIES WILL OCCUR BETWEEN MAY 1 AND JULY 15, AS RECOMMENDED BY THE UNITED STATES FISH AND WILDLIFE SERVICE, TO AVOID IMPACTS TO NESTING MIGRATORY BIRDS UNLESS, 1) THE AREA HAS BEEN PREVIOUSLY AND SUFFICIENTLY ALTERED TO PROVIDE NO NESTING HABITAT, OR 2) THE AREA HAS BEEN SURVEYED BY A QUALIFIED INDIVIDUAL FOR EXISTING BIRD NESTS.
  5. THE CONTRACTOR SHALL PROVIDE A DETAILED CONSTRUCTION SEQUENCING AND PHASING PLAN. NO WORK MAY COMMENCE PRIOR TO DEPARTMENT APPROVAL OF THIS PLAN.
  6. THE CONTRACTOR SHALL PROVIDE ADEQUATE PUBLIC NOTICE PRIOR TO EACH ROAD CLOSURE. THIS WILL INCLUDE SIGNS STATING SPECIFIC DATES AND DURATION OF ROAD CLOSURE AND NOTIFICATION TO THE CBJ HARBORMASTER, SAGA, AND THE AMALGA AND HUFFMAN HARBORS COMMUNITY ASSOCIATION.
  7. FULL ROAD CLOSURES SHALL ONLY BE ALLOWED FOR REMOVAL AND SALVAGE OF TEMPORARY BRIDGES AND INSTALLATION OF STRUCTURAL PLATE PIPE ARCHES AND SHALL BE LIMITED TO NO MORE THAN 24-HOURS IN ANY ONE PERIOD. PROVIDE PUBLIC NOTICE 7-DAYS IN ADVANCE OF ANY PROPOSED ROAD CLOSURES. NO ROAD CLOSURES WILL BE PERMITTED ON SATURDAY, SUNDAY AND ON ALL STATE HOLIDAYS.
  8. PROVIDE SAFE PASSAGE OF PEDESTRIANS DURING ROAD CLOSURES AND OTHER WORK AREAS. PROVIDE TEMPORARY PARKING AREAS ADJACENT TO THE WORK AREA ON EITHER SIDE OF FULL ROAD CLOSURE FOR A MINIMUM OF THREE VEHICLES. THE CONTRACTOR SHALL FURNISH A VEHICLE FOR TRANSPORTATION ON EITHER SIDE OF THE FULL ROAD CLOSURE.
  9. NO DEMOLITION OR REMOVAL OF THE EXISTING PETERSON CREEK BRIDGE STRUCTURE(S) WILL BE PERMITTED UNTIL THE DETOUR BRIDGE IS IN PLACE AND MADE SAFE FOR PUBLIC USE.
  10. NO DEMOLITION OR REMOVAL OF THE EXISTING TEMPORARY BRIDGES AT THE NEW CULVERT (CROSSINGS P1 & P3) WILL BE PERMITTED UNTIL ALL MATERIALS AND EQUIPMENT IS ON SITE AND READY TO FACILITATE THE WORK.

- STAGING NOTES:**
1. 200 FEET OF ONE LANE MAYBE USED FOR STAGING WHERE THERE IS SUFFICIENT LINE OF SIGHT FOR CARS TO PASS SAFELY WITH YIELD CONTROL.
  2. THE PORTION OF THE ROAD NOT IN USE WHILE THE TEMPORARY BRIDGE IS IN OPERATION MAY BE USED FOR STAGING.
  3. THE APPROACH TO THE TEMPORARY BRIDGE WHILE THE TEMPORARY BRIDGE IS NOT IN OPERATION MAY BE USED FOR STAGING.
  4. STAGING IS NOT ALLOWED AT THE AMALGA HARBOR PARKING LOT, CBJ NATURAL AREA PARK OR DNR'S ERNEST GRUEINING STATE HISTORICAL PARK.
  5. IF ADDITIONAL STAGING IS NEEDED OUTSIDE OF THE STAGING AREAS PROVIDED ABOVE THE CONTRACTOR MUST PROVIDE HIS OWN STAGING. STAGING IS SUBSIDIARY SEE SECTION 106-1.06 STORAGE OF MATERIALS.

Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.  
 PE *[Signature]* Date 07.06.2015

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: C. TRIPP

STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES  
 SOUTHEAST REGION

AMALGA HARBOR RD & BRIDGES RECONSTRUCTION & REPLACEMENT PROJECT #69684

PROJECT LAYOUT

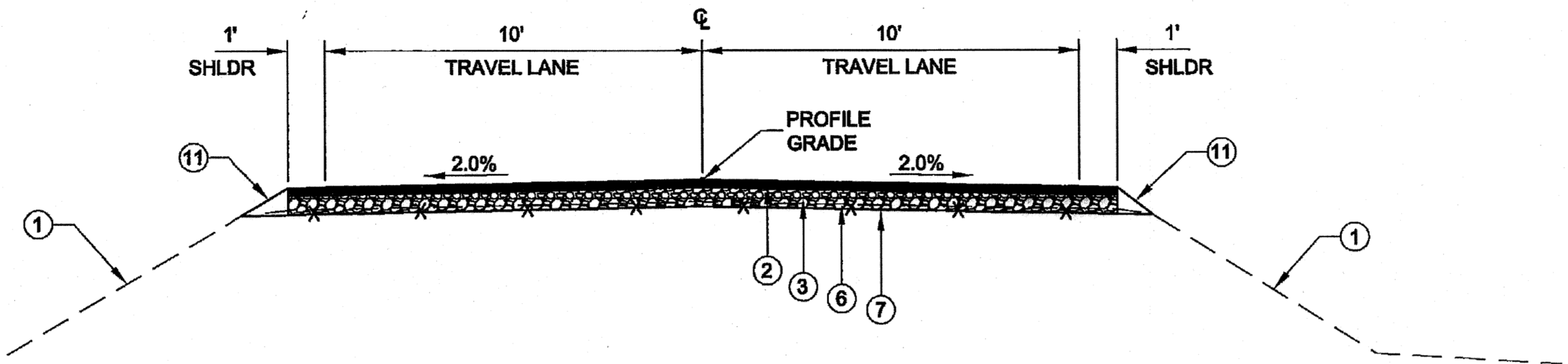
DESIGNED BY: L. CHAMBERS  
 DRAWN BY: L. CHAMBERS

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NO.	DATE	REVISIONS DESCRIPTION	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			69684/ BH-0950(1)	2013	A3	55

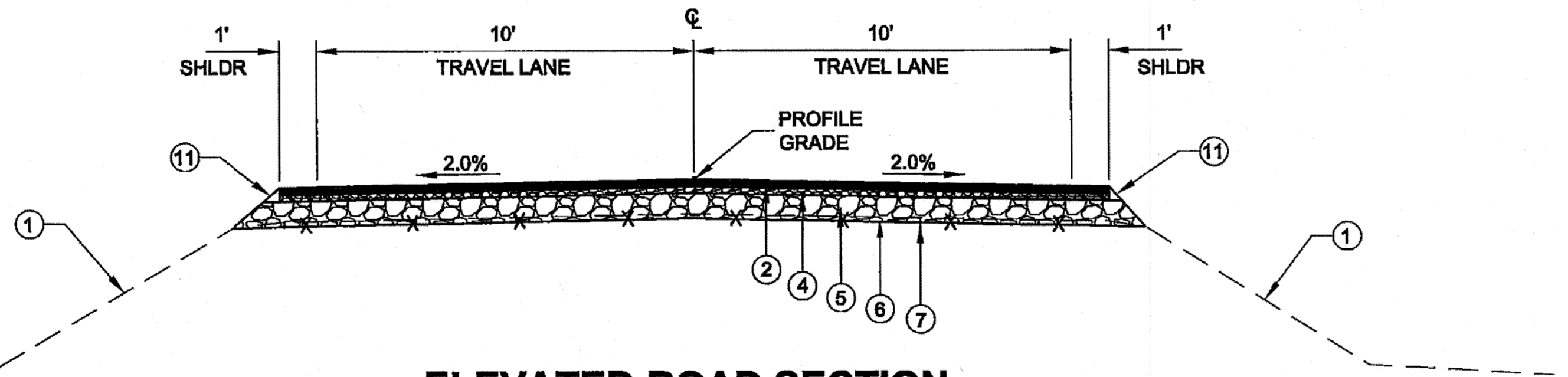
**MATERIAL LEGEND**

- ① EXISTING GROUND
- ② 2.5" ASPHALT CONCRETE, TYPE II, CLASS B
- ③ 6" AGGREGATE BASE COURSE, GRADING D-1
- ④ 2" AGGREGATE BASE COURSE, GRADING D-1
- ⑤ 8" SUBBASE, GRADING F
- ⑥ REMOVE EXISTING CHIP SEAL/ ASPHALT FULL DEPTH
- ⑦ GEOTEXTILE, SEPARATION
- ⑧ BORROW, SELECT MATERIAL, TYPE A
- ⑨ BONDED FIBER MATRIX (BFM)
- ⑩ SEEDING
- ⑪ LINEAR GRADING



**TYPICAL SECTION**

STA. 13+12.00 TO 13+73.00  
 STA. 14+73.00 TO 16+00.00  
 STA. 22+00.00 TO 23+24.00  
 STA. 27+12.00 TO 37+70.00  
 STA. 38+55.00 TO 44+62.00

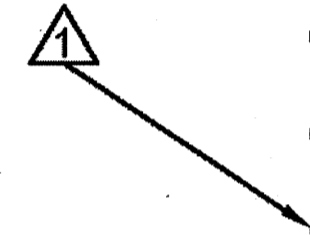


**ELEVATED ROAD SECTION**

STA. 16+00.00 TO 22+00.00  
 STA 18+00 TO 22+00 NOT CROWNED - SUPER ELEVATION RT SIDE HIGH 3%

**TYPICAL SECTION NOTES:**

1. SHOULDER TRANSITIONS FROM 1' TO 7'-4" BETWEEN STA. 23+24 AND 23+64. A 7'-4" SHOULDER IS APPLIED BETWEEN STA. 23+64 TO 23+74. SEE DETAIL ON SHEET E1 FOR PAVEMENT LAYOUT AT PARALLEL GUARDRAIL TERMINAL. A 7'-4" SHOULDER IS APPLIED BETWEEN STA. 26+62 TO 26+72. SEE DETAIL ON SHEET E1 FOR PAVEMENT LAYOUT AT PARALLEL GUARDRAIL TERMINAL. SHOULDER TRANSITIONS FROM 7'-4" TO 1' BETWEEN STA. 26+72 TO 27+12. SEE N1 FOR BRIDGE TYPICAL SECTION.
2. LINEAR GRADING SHALL CONSIST OF GRADING, SHAPING, AND COMPACTING THE AGGREGATE AS SHOWN ON THE TYPICAL SECTION. SEE DETAIL SHEET E2 & SECTION 303 OF THE SPECIAL PROVISIONS. CONTRACTOR SHALL KEEP ALL IMPORTED MATERIAL OUT OF DITCHES, ANY IMPORTED MATERIAL MIS-PLACED IN DITCHES SHALL BE REMOVED.
3. CONTRACTOR SHALL REMOVE EXISTING CHIP SEAL/ ASPHALT FULL DEPTH AND DISPOSE OF AT AN APPROVED WASTE SITE.
4. INSTALL GUARDRAIL TERMINAL AT 29" HEIGHT. ALL OTHER GUARDRAIL COMPONENTS AND INSTALLATION PER STANDARD DRAWINGS.
5. STABILIZE ALL NEW EMBANKMENT AND CUT SLOPES WITH SEEDING AND BONDED FIBER MATRIX PER SECTION 618 & SECTION 619.



Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.  
 PE *[Signature]* Date 07-08-2015

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: C. TRIPP  
 DESIGNED BY: L. CHAMBERS  
 DRAWN BY: L. CHAMBERS

STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES  
 SOUTHEAST REGION  
**AMALGA HARBOR RD & BRIDGES RECONSTRUCTION & REPLACEMENT PROJECT #69684**

**TYPICAL SECTIONS**

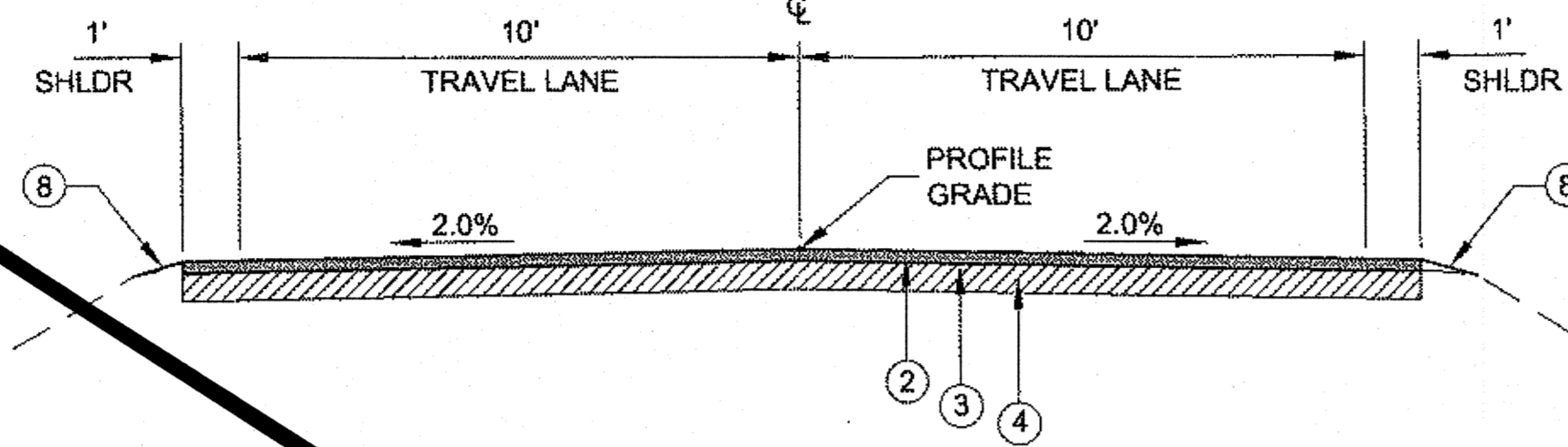
PATH: Q:\JUN169884\PLANSET\69684_B1-B2_TYPSECTIONS.DWG		PROJECT DESIGNATION		YEAR	SHEET NO.	TOTAL SHEETS
TAB: B1 Thursday, January 08, 2015 10:52:06 AM		69684/ BH-0950(1)		2013	B1	55
NO.	DATE	DESCRIPTION				
1	01 08 15	STRUCTURAL SECTION MOD.				

**MATERIAL LEGEND**

- ① EXISTING GROUND
- ② 2.5" ASPHALT CONCRETE, TYPE II, CLASS B
- ③ STE-1 ASPHALT FOR TACK COAT
- ④ 6" CRUSHED ASPHALT BASE COURSE (CABC)
- ⑤ SELECT MATERIAL TYPE A
- ⑥ BONDED FIBER MATRIX (BFM)
- ⑦ SEEDING
- ⑧ LINEAR GRADING

**TYPICAL SECTION NOTES:**

1. PULVERIZING DEPTH SHALL BE AS SHOWN TO CONSTRUCT 6" CABC. PULVERIZING TO CONSTRUCT CRUSHED ASPHALT BASE COURSE SHALL BE PAID FOR UNDER ITEM 308.
2. CONTRACTOR SHALL MAKE INITIAL PULVERIZING PASS THEN ADD AGGREGATE FOR CRUSHED ASPHALT BASE COURSE, IF REQUIRED, TO MEET A SMOOTH AND UNIFORM GRADE. THE ENGINEER SHALL APPROVE GRADE, PRIOR TO MIXING OIL AND CEMENT IN SECOND PASS.
3. SHOULDER TRANSITIONS FROM 1' TO 7'-4" BETWEEN STA. 23+24 AND 23+64. A 7'-4" SHOULDER IS APPLIED BETWEEN STA. 23+64 TO 26+74. SEE DETAIL ON SHEET E1 FOR PAVEMENT LAYOUT AT PARALLEL GUARDRAIL TERMINAL. A 7'-4" SHOULDER IS APPLIED BETWEEN STA. 26+62 TO 26+72. SEE DETAIL ON SHEET E1 FOR PAVEMENT LAYOUT AT PARALLEL GUARDRAIL TERMINAL. SHOULDER TRANSITIONS FROM 7'-4" TO 1' BETWEEN STA. 26+72 TO 27+12. SEE N1 FOR BRIDGE TYPICAL SECTION.
4. LINEAR GRADING SHALL CONSIST OF GRADING, SHAPING, AND COMPACTING THE AGGREGATE FOR CABC AS SHOWN ON THE TYPICAL SECTION. SEE SECTION 303 OF THE SPECIAL PROVISIONS.
5. INSTALL GUARDRAIL TERMINAL AT 29" HEIGHT. ALL OTHER GUARDRAIL COMPONENTS AND INSTALLATION PER STANDARD DRAWINGS.
6. STABILIZE ALL NEW EMBANKMENT AND CUT SLOPES WITH SEEDING AND BONDED FIBER MATRIX PER SECTION 618 & SECTION 619.

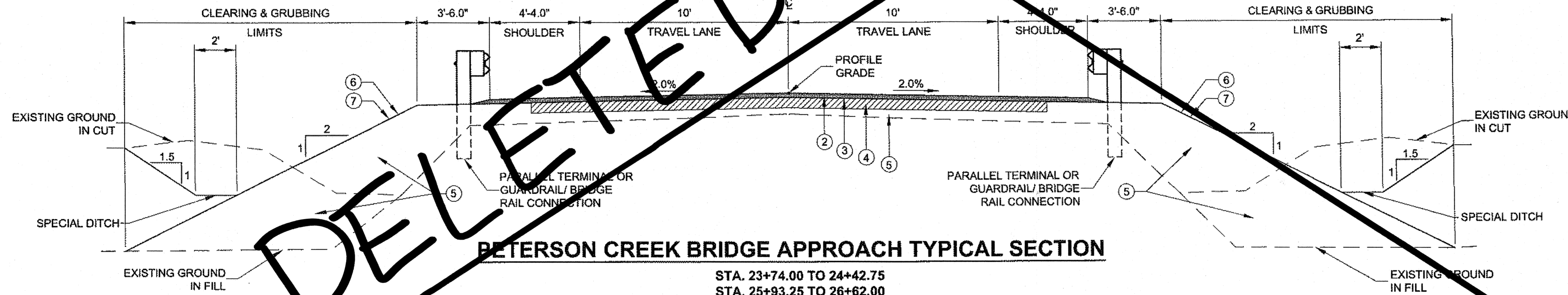


**TYPICAL SECTION**

STA. 13+12.00 TO 13+73.00  
 STA. 14+73.00 TO 23+24.00  
 STA. 27+42.00 TO 37+70.00  
 STA. 38+55.00 TO 44+62.00

PER CO2

DELETED



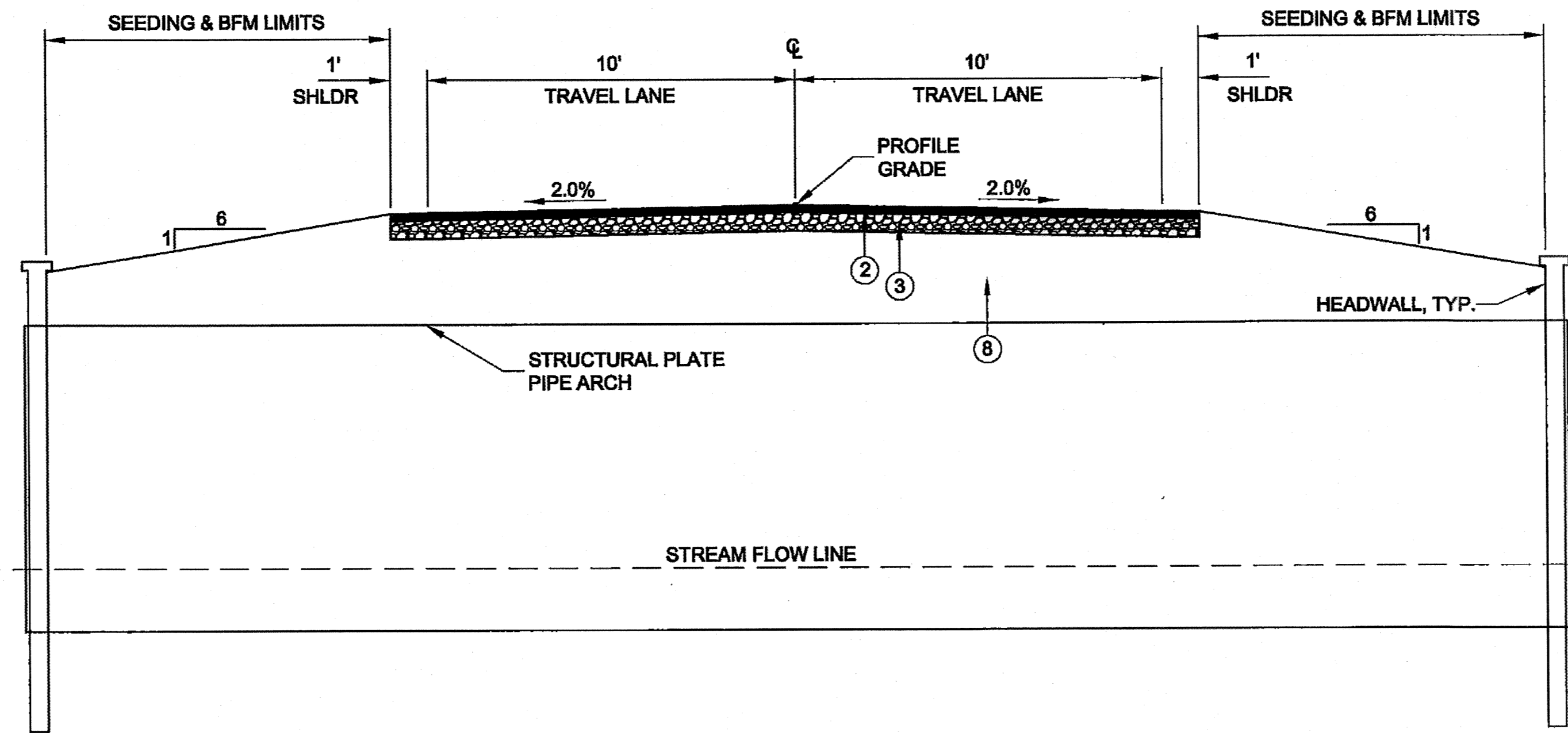
**PETERSON CREEK BRIDGE APPROACH TYPICAL SECTION**

STA. 23+74.00 TO 24+42.75  
 STA. 25+93.25 TO 26+62.00  
 \*SEE NOTE 3

Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.  
 PE *[Signature]* Date 07-08-2015

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

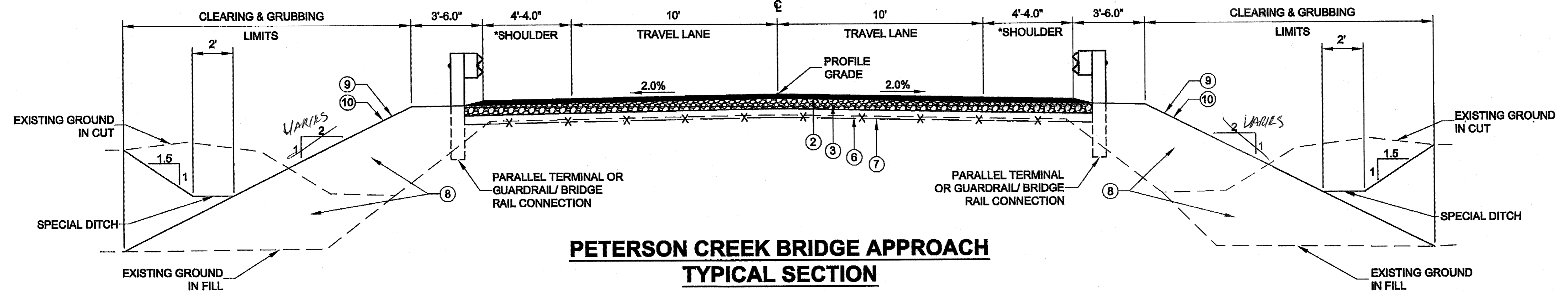
CHECKED BY: C. TRIP 		STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES SOUTHEAST REGION AMALGA HARBOR RD & BRIDGES RECONSTRUCTION & REPLACEMENT PROJECT #69684	
DESIGNED BY: L. CHAMBERS DRAWN BY: L. CHAMBERS		<b>TYPICAL SECTIONS</b>	
PATH: Q:\JUN169684\PLANSET\69684_B1-B2_TYPSECTIONS.DWG TAB: B1 Wednesday, October 09, 2013 1:05:07 PM CHAMBERS, LUCAS M (CONT)			
REVISIONS NO. DATE DESCRIPTION		PROJECT DESIGNATION 69684/ BH-0950(1)	YEAR 2013
		SHEET NO. B1	TOTAL SHEETS 55



- MATERIAL LEGEND**
- ① EXISTING GROUND
  - ② 2.5" ASPHALT CONCRETE, TYPE II, CLASS B
  - ③ 6" AGGREGATE BASE COURSE, GRADING D-1
  - ④ 2" AGGREGATE BASE COURSE, GRADING D-1
  - ⑤ 8" SUBBASE, GRADING F
  - ⑥ REMOVE EXISTING CHIP SEAL/ ASPHALT FULL DEPTH
  - ⑦ GEOTEXTILE, SEPARATION
  - ⑧ BORROW, SELECT MATERIAL, TYPE A
  - ⑨ BONDED FIBER MATRIX (BFM)
  - ⑩ SEEDING
  - ⑪ LINEAR GRADING

**TYPICAL SECTION AT PIPE ARCH**

STA. 13+73.00 TO 14+73.00  
 STA. 37+70.00 TO 38+55.00



**PETERSON CREEK BRIDGE APPROACH**

**TYPICAL SECTION**

STA. 23+74.00 TO 24+42.75  
 STA. 25+93.25 TO 26+62.00  
 \*SEE NOTE 1, SHEET B1

Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.  
 PE: [Signature] Date 01.08.15

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: C. TRIPP

DESIGNED BY: L. CHAMBERS  
 DRAWN BY: L. CHAMBERS

PATH: Q:\JNU69684\PLANSET\69684\_B1-B2\_TYPSECTIONS.DWG  
 TAB: B2 Thursday, January 08, 2015 10:51:25 AM CHAMBERS, LUCAS M (DOT)

NO.	DATE	DESCRIPTION
1	01 08 15	STRUCTURAL SECTION MOD.

STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES  
 SOUTHEAST REGION

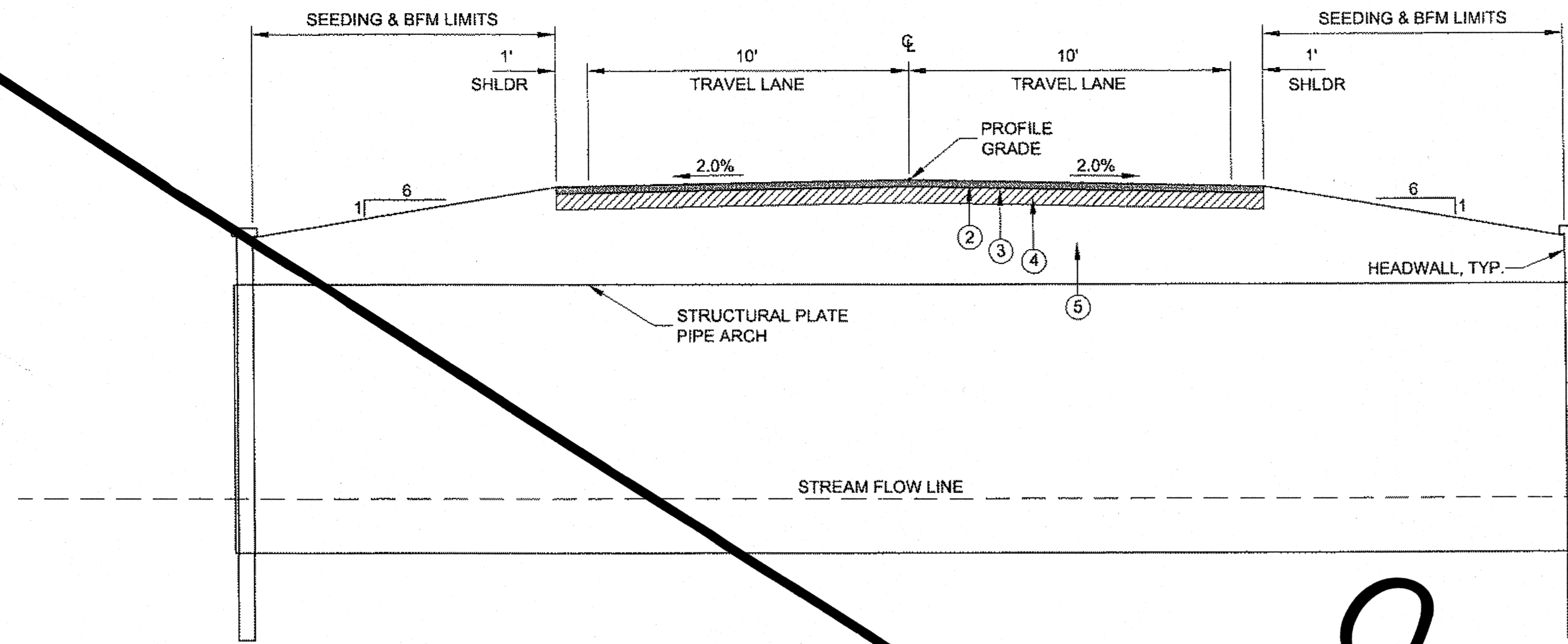
**AMALGA HARBOR RD & BRIDGES RECONSTRUCTION & REPLACEMENT PROJECT #69684**

**TYPICAL SECTIONS**

PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
69684/ BH-0950(1)	2013	B2	55

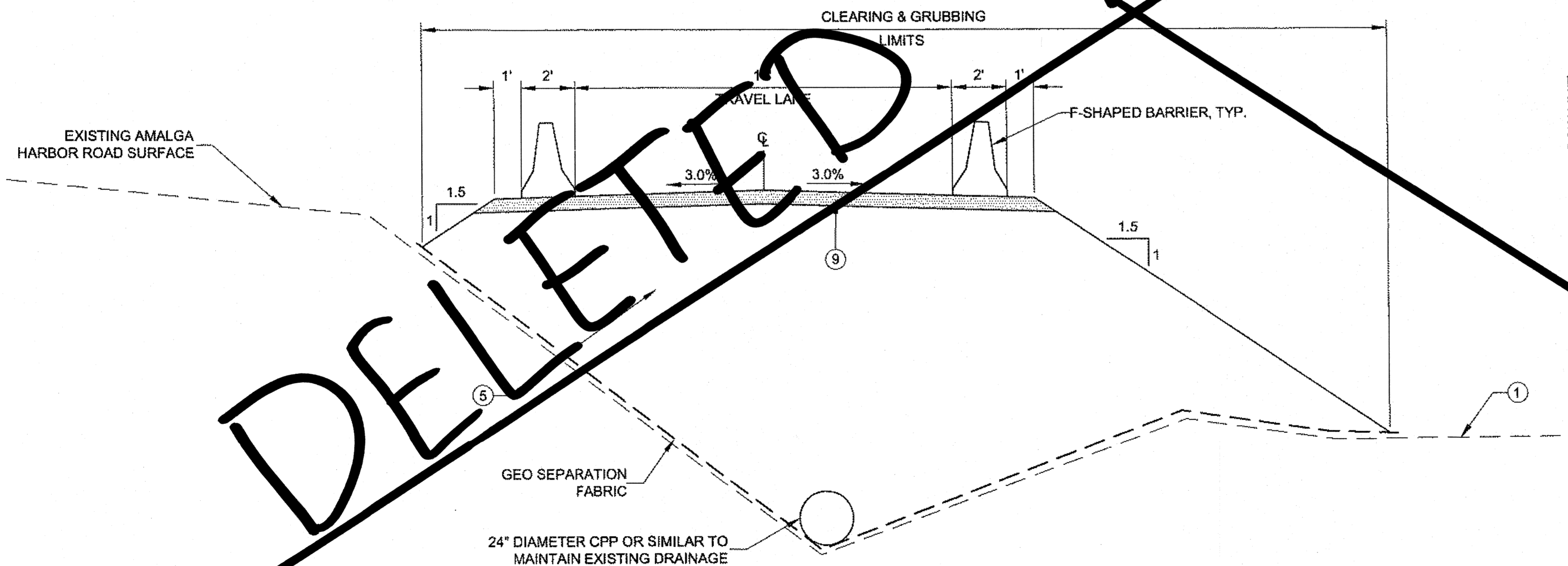
**MATERIAL LEGEND**

- ① EXISTING GROUND
- ② 2.5" ASPHALT CONCRETE, TYPE II, CLASS B
- ③ STE-1 ASPHALT FOR TACK COAT
- ④ 6" CRUSHED ASPHALT BASE COURSE (CABC)
- ⑤ SELECT MATERIAL, TYPE A
- ⑥ BONDED FIBER MATRIX (BFM)
- ⑦ SEEDING
- ⑧ LINEAR GRADING
- ⑨ 6" AGGREGATE SURFACE COURSE, GRADING E-1



**TYPICAL SECTION AT PIPE ARCH**

STA. 13+73.00 TO 14+73.00  
STA. 37+70.00 TO 38+55.00



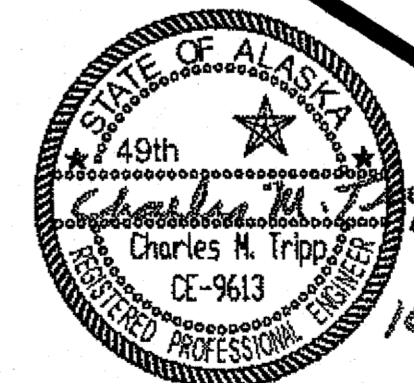
**TEMPORARY CROSSING APPROACH ROAD TYPICAL SECTION**

"M" LINE STA. 0+00.00 TO 1+80.50  
"M" LINE STA. 3+00.50 TO 4+54.50

DELETED PER C02

Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.  
PE *[Signature]* Date 07-08-2015

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: C. TRIPPI 		STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES SOUTHEAST REGION AMALGA HARBOR RD & BRIDGES RECONSTRUCTION & REPLACEMENT PROJECT #69684 10/9/2013	
DESIGNED BY: L. CHAMBERS DRAWN BY: L. CHAMBERS		<b>TYPICAL SECTIONS</b>	
PATH: Q:\UNU\69684\PLANSET\69684_B1-B2_TYPSECTIONS.DWG TAB: B2 Wednesday, October 09, 2013 1:05:10 PM CHAMBERS, LUCAS M (D)		PROJECT DESIGNATION: 69684/ BH-0950(1) YEAR: 2013 SHEET NO.: B2 TOTAL SHEETS: 55	
REVISIONS NO. DATE DESCRIPTION			

ESTIMATE OF QUANTITIES			
ITEM NO.	PAY ITEM	PAY UNIT	PLAN QUANTITY
201(3B)	CLEARING AND GRUBBING	LUMP SUM	ALL REQ'D
<del>202(4)</del>	<del>REMOVAL OF CULVERT PIPE</del>	<del>LINEAR FOOT</del>	<del>25</del>
202(13)	REMOVAL OF BRIDGE (BRIDGE NO. 383)	LUMP SUM	ALL REQ'D
202(14)	REMOVAL OF BRIDGE (BRIDGE NO. 7150)	LUMP SUM	ALL REQ'D
202(15)	REMOVAL OF BRIDGE (BRIDGE NO. 7151)	LUMP SUM	ALL REQ'D
202(16)	REMOVAL AND SALVAGE OF TEMPORARY BRIDGES	LUMP SUM	ALL REQ'D
203(3)	UNCLASSIFIED EXCAVATION	CUBIC YARD	-150- 183.72
203(5)	BORROW, SELECT MATERIAL, TYPE A	CUBIC YARD	-420- 105.94
206(1)	EXCAVATION FOR STRUCTURES	CUBIC YARD	-490- 245.93
205(3)	STRUCTURAL FILL	CUBIC YARD	-400- 179.66
205(4)	POROUS BACKFILL MATERIAL	CUBIC YARD	-20- 17.28
301(1)	AGGREGATE BASE COURSE, GRADING D-1	TON	-100- 191.59
<del>303(3)</del>	<del>LINEAR GRADING</del>	<del>STATION</del>	<del>51</del>
<del>308(1)</del>	<del>CRUSHED ASPHALT BASE COURSE (CABC)</del>	<del>SQUARE YARD</del>	<del>7,400</del>
<del>308(2)</del>	<del>CSS-1 ASPHALT FOR BASE COURSE</del>	<del>TON</del>	<del>160</del>
<del>308(3)</del>	<del>PORTLAND CEMENT</del>	<del>TON</del>	<del>26</del>
<del>308(4)</del>	<del>AGGREGATE FOR CABC</del>	<del>TON</del>	<del>885</del>
401(1)	ASPHALT CONCRETE, TYPE II, CLASS B	TON	-1,300- 1,372.86
401(2)	ASPHALT CEMENT, GRADE PG 58-28	TON	-70- 69.18
402(1)	STE-1 ASPHALT FOR TACK COAT	TON	-4- 0.27
501(1)	CLASS A CONCRETE	LUMP SUM	ALL REQ'D
501(3)	CLASS A CONCRETE	CUBIC YARD	-57- 66.50
501(5)	PRECAST CONCRETE MEMBER (62'-11 1/2" PRESTRESSED BOX GIRDER)	EACH	16
503(1)	REINFORCING STEEL	LUMP SUM	ALL REQ'D
503(2)	EPOXY-COATED REINFORCING STEEL	LUMP SUM	ALL REQ'D
503(3)	DRILL AND BOND DOWELS	EACH	64
505(5)	FURNISH STRUCTURAL STEEL PILES (2'-0" X 1/2" PIPE)	LINEAR FOOT	1,062
505(6)	DRIVE STRUCTURAL STEEL PILES (2'-0" X 1/2" PIPE)	EACH	9
507(2)	PEDESTRIAN RAILING	LINEAR FOOT	300
508(1)	WATERPROOFING MEMBRANE	LUMP SUM	ALL REQ'D
520(1)	TEMPORARY CROSSING	LUMP SUM	ALL REQ'D
602(2A)	STRUCTURAL PLATE ALUMINUM PIPE-ARCH 13'-1" SPAN, 8'-4" RISE, 0.125" THICKNESS	LINEAR FOOT	-42- 42.25
602(2B)	STRUCTURAL PLATE ALUMINUM PIPE-ARCH 10'-9" SPAN, 6'-10" RISE, 0.125" THICKNESS	LINEAR FOOT	-36- 36.13
603(21-24)	24 INCH CORRUGATED POLYETHYLENE PIPE	LINEAR FOOT	-75- 77.00
606(6)	REMOVING AND DISPOSING OF GUARDRAIL	LINEAR FOOT	-40- 317
606(13)	PARALLEL GUARDRAIL TERMINAL	EACH	4
606(16)	TRANSITION RAIL	EACH	4
611(1)	RIPRAP, CLASS I	CUBIC YARD	-640- 589.96
615(1)	STANDARD SIGN	SQUARE FOOT	33
615(2)	REMOVE AND RELOCATE EXISTING SIGN	EACH	4
616(6)	SALVAGE SIGN	EACH	-19- 15
618(1)	SEEDING	ACRE	-0.30- 0.27
619(3)	BONDED FIBER MATRIX (BFM)	POUND	-1,200- 850
631(2)	GEOTEXTILE, EROSION CONTROL, CLASS I	SQUARE YARD	-780- 572.20
633(2)	SEDIMENT BARRIER	LINEAR FOOT	-725- 465.00
639(3)	APPROACH	EACH	5
640(1)	MOBILIZATION AND DEMOBILIZATION	LUMP SUM	ALL REQ'D
641(1)	EROSION AND POLLUTION CONTROL ADMINISTRATION	LUMP SUM	ALL REQ'D
641(3)	TEMPORARY EROSION, SEDIMENT, AND POLLUTION CONTROL	CONTINGENT SUM	ALL REQ'D
641(5)	TEMPORARY EROSION, SEDIMENT, AND POLLUTION CONTROL BY DIRECTIVE	CONTINGENT SUM	ALL REQ'D
641(6)	WITHOLDING	CONTINGENT SUM	ALL REQ'D
642(1)	CONSTRUCTION SURVEYING	LUMP SUM	ALL REQ'D
642(3)	THREE PERSON SERVEY PARTY	HOUR	-32- 9.20
643(2)	TRAFFIC MAINTENANCE	LUMP SUM	ALL REQ'D
643(3)	PERMANENT CONSTRUCTION SIGNS	LUMP SUM	ALL REQ'D
643(15)	FLAGGING	CONTINGENT 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
<del>644(2)</del>	<del>FIELD LABORATORY</del>	<del>LUMP SUM</del>	<del>ALL REQ'D</del>
644(5)	VEHICLES	LUMP SUM	ALL REQ'D
<del>644(15)</del>	<del>NUCLEAR TESTING EQUIPMENT STORAGE SHED</del>	<del>LUMP SUM</del>	<del>ALL REQ'D</del>
646(1)	CPM SCHEDULING	LUMP SUM	ALL REQ'D
670(1)	PAINTED TRAFFIC MARKINGS	LUMP SUM	ALL REQ'D
680(2)	TEMPORARY ROCK CHECK DAM	EACH	-7- 14

CULVERT WAS LEFT IN PLACE

DELETED PER C02  
DELETED PER C02  
DELETED PER C02  
DELETED PER C02

2.0655

0.56

DELETED PER C0.1

DELETED PER C0.1

BASIS OF ESTIMATE		
ITEM NO.	DESCRIPTION	QUANTITY
201(3B)	CLEARING AND GRUBBING	6645 SF
202(13)	REMOVAL OF BRIDGE (BRIDGE NO. 383)	2545 SF
202(14)	REMOVAL OF BRIDGE (BRIDGE NO. 7150)	440 SF
202(15)	REMOVAL OF BRIDGE (BRIDGE NO. 7151)	440 SF
202(16)	REMOVAL AND SALVAGE OF TEMPORARY BRIDGES	1440 SF
202(16)	REMOVAL AND STOCKPILE OF RECYCLED ASPHALT MATERIAL	800 CY
301(1)	AGGREGATE BASE COURSE, GRADING D-1	1.95 TON/CY
308(2)	CSS-1 ASPHALT FOR BASE COURSE	12.5 GAL/SY FOR 6" DEPTH
308(2)	CSS-1 ASPHALT FOR BASE COURSE	243 GAL/TON
308(3)	PORTLAND CEMENT	6.8 LB/SY FOR 6" DEPTH
308(4)	AGGREGATE FOR CABC	20 TONS/ STATION
401(1)	ASPHALT CONCRETE	117 LBS/SY/IN
402(1)	STE-1 ASPHALT FOR ASPHALT TACK COAT	0.1 GAL/SY, 243 GAL/TON
619(3)	BONDED FIBER MATRIX (BFM)	4000 LB/ACRE

CHANGE ORDER ITEMS			
ITEM NO.	DESCRIPTION	PAY UNIT	PLAN QUANTITY
201(7)	ADDITIONAL CLEARING FOR OVERHEAD POWER (C-0.1)	LUMP SUM	1
202(17)	RELOCATE RAP STOCKPILE (C-0.1)	LUMP SUM	1
505(12)	PILE DRIVING ANALYSIS ASSISTANCE (C-0.1)	LUMP SUM	1
505(13)	ADDITIONAL STRUCTURAL STEEL PILE A2-3 (C-0.1)	LUMP SUM	1
505(14)	ADDITIONAL STRUCTURAL STEEL PILE A1-3 (C-0.1)	LUMP SUM	1
505(15)	ADDITIONAL STRUCTURAL STEEL PILE A1-2 (C-0.1)	LUMP SUM	1
505(16)	WET SHAFT CONCRETE PLACEMENT FOR ABT.1 (C-0.1)	LUMP SUM	1
507(6)	PEDESTRIAN RAILING MODIFICATIONS (C-0.1)	LUMP SUM	1
202(2)	PAVEMENT REMOVAL (C-0.2)	S.Y.	+7,350
203(3A)	ALTERNATIVE C-1 UNCLASSIFIED EXCAVATION (C-0.2)	C.Y.	+150
205(3A)	STRUCTURAL FILL PRICE REDUCTION (C-0.2)	LUMP SUM	(-1)
301(1A)	ALT. C-1 AGG BASE COURSE, GRADING D-1 (C-0.2)	TON	+27,445
303(3A)	ALTERNATIVE C-1 LINEAR GRADING (C-0.2)	STATION	+51
304(1)	SUBBASE, GRADING F (C-0.2)	TON	+670
615(7)	PETERSON CREEK NAME SIGNS (C-0.2)	LUMP SUM	1
630(1)	GEOTEXTILE, SEPERATION (C-0.2)	S.Y.	+7,700
640(1A)	ALT. C-1 MOBILIZATION & DEMOBILIZATION (C-0.2)	LUMP SUM	1
642(1A)	ALT. C-1 CONSTRUCTION SURVEYING (C-0.2)	LUMP SUM	1
643(2A)	ALT. C-1 TRAFFIC MAINTENANCE (C-0.2)	LUMP SUM	1

7,230.00  
136.54  
2,604.90  
60.00  
784.86  
6898.20

Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.  
Date 07.08.2015

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: C. TRIPP

DESIGNED BY: L. CHAMBERS  
DRAWN BY: L. CHAMBERS

PATH: Q:\JUN16684\PLANS\SET16684\_C1\_QUANTITIES.DWG  
TAB: C1 Monday, November 25, 2013 11:55:09 AM CHAMBERS, LUCAS M (DOT)

REVISIONS

NO.	DATE	DESCRIPTION

PROJECT DESIGNATION: 69684/ BH-0950(1) YEAR: 2013 SHEET NO.: C1 TOTAL SHEETS: 55

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES  
SOUTHEAST REGION

AMALGA HARBOR RD & BRIDGES  
RECONSTRUCTION &  
REPLACEMENT PROJECT #69684

ESTIMATE OF QUANTITIES

**202(4) REMOVAL OF CULVERT PIPE**

BEGIN STA.	END STA.	TYPE	DIAMETER (IN)	LENGTH (FT)	OFFSET (FT)	REPLACEMENT PIPE
24+40	24+60	CMP	18	25	24'	P-2

\* CULVERT WAS LEFT IN PLACE

**303(3) LINEAR GRADING** REPLACED C.O. 2

BEGIN STATION (LT & RT)	END STATION (LT & RT)	QUANTITY (STA)
13+12	13+73	1
14+73	23+27	17
27+10	37+70	21
38+55	44+62	12

**602 STRUCTURAL PLATE ALUMINUM PIPE-ARCH SUMMARY**

PIPE ID	STATION	SIZE	LENGTH (FT)	REMARKS
P-1	14+21.79	13'-1" x 8'-4"	42	INSTALL WITH HEADWALL & WINGWALLS
P-3	38+12.32	10'-9" x 6'-10"	36	INSTALL WITH HEADWALL & WINGWALLS

**603(21) CULVERT INSTALLATION SUMMARY**

PIPE ID	INLET			OUTLET			LENGTH (FT)	SIZE	APPROX. GRADE	REMARKS
	STATION	OFFSET	INVERT	STATION	OFFSET	INVERT				
P-2	24+32.00	31.25'	21.80'	24+68.89	34.04'	21.00'	37	24"	2.16	EXISTING CULVERT TO BE REMOVED PRIOR TO CONSTRUCTING TEMPORARY CROSSING.
P-4	38+67.76	19.57'	23.53'	38+20.08	24.09'	20.61'	36	24"	7.76	CULVERT TO BE PLACED IN EXISTING DITCH, SEE DETAIL SHEET Q9

**606(6) REMOVING AND DISPOSING OF GUARDRAIL**

BEGIN STA.	END STA.	LENGTH (FT)	OFFSET
13+80	13+90	10	RT
13+80	13+90	10	LT
14+50	14+60	10	RT
14+50	14+60	10	LT

\* ADDITIONAL GUARDRAIL REMOVAL DUE TO INSTALLATION FOR TEMP BRIDGE

**606(13) - PARALLEL GUARDRAIL TERMINAL**

STATION TO STATION	OFFSET	LENGTH	REMARKS
23+74	24+24	50'	PETERSON CREEK BRIDGE APPROACH
23+74	24+24	50'	PETERSON CREEK BRIDGE APPROACH
26+12	26+62	50'	PETERSON CREEK BRIDGE APPROACH
28+12	28+62	50'	PETERSON CREEK BRIDGE APPROACH

**606(16) TRANSITION RAIL**

STATION TO STATION	OFFSET	REMARKS
24+24.00	24+42.75	RT ATTACH TO PETERSON CREEK BRIDGE
24+24.00	24+42.75	LT ATTACH TO PETERSON CREEK BRIDGE
25+93.25	26+12.00	RT ATTACH TO PETERSON CREEK BRIDGE
25+93.25	26+12.00	LT ATTACH TO PETERSON CREEK BRIDGE

**615(1) - STANDARD SIGN SUMMARY**

SIGN #	LEGEND	STATION	OFFSET	ASDS CODE	WIDTH (IN)	HEIGHT (IN)	AREA (SF)	POST	EMBEDDED DEPTH	SIGN FACING	COMMENTS
1	SPEED LIMIT 30 MPH	11+35	RT	R2-1	30	36	7.50	2.5" PST	4'-6"	WB	
4	SHOULDER NARROWS	24+25	LT	W5-1A	36	36	9.00	2.5" PST	4'-6"	EB	
5	SHOULDER NARROWS	26+10	RT	W5-1A	36	36	9.00	2.5" PST	4'-6"	WB	
6	SPEED LIMIT 30 MPH	39+85	LT	R2-1	30	36	7.50	2.5" PST	4'-6"	EB	

**615(6) SALVAGE SIGN**

STA.	LEGEND	OFFSET	REMARKS
19+85	YIELD	RT	REMOVE & SALVAGE
19+85	YIELD	LT	REMOVE & SALVAGE
21+05	NARROW BRIDGE	RT	REMOVE & SALVAGE
22+70	YIELD AHEAD	RT	REMOVE & SALVAGE
23+60	ONE LANE BRIDGE	RT	REMOVE & SALVAGE
23+60	YIELD	RT	REMOVE & SALVAGE
24+65	WEIGHT LIMIT	RT	REMOVE & SALVAGE
24+65	WEIGHT LIMIT	RT	REMOVE & SALVAGE
24+80	OBJECT MARKER RIGHT	RT	REMOVE & SALVAGE
24+80	OBJECT MARKER LEFT	LT	REMOVE & SALVAGE
25+80	OBJECT MARKER RIGHT	LT	REMOVE & SALVAGE
25+80	OBJECT MARKER LEFT	RT	REMOVE & SALVAGE
25+85	WEIGHT LIMIT	LT	REMOVE & SALVAGE
25+85	WEIGHT LIMIT	LT	REMOVE & SALVAGE
26+35	ONE LANE BRIDGE	LT	REMOVE & SALVAGE
26+35	YIELD	LT	REMOVE & SALVAGE
27+95	NARROW BRIDGE	LT	REMOVE & SALVAGE
38+70	YIELD	RT	REMOVE & SALVAGE
39+25	YIELD	LT	REMOVE & SALVAGE

\* DNE - DOES NOT EXIST

**615(2) - REMOVE AND RELOCATE EXISTING SIGN**

SIGN #	LEGEND	STATION	OFFSET	SIGN FACING	COMMENTS
2	CBJ TRAIL "SALT CHUCK"	24+50	RT	SOUTH	REMOVE FOR INSTALLATION OF TEMPORARY BRIDGE & REPLACE AFTER REMOVAL OF TEMPORARY BRIDGE
3	NO SHOOTING	24+50	RT	SOUTH	REMOVE FOR INSTALLATION OF TEMPORARY BRIDGE & REPLACE AFTER REMOVAL OF TEMPORARY BRIDGE
7	STOP	41+25	LT	SOUTH	RELOCATE AS NECESSARY
8	STOP	43+50	LT	SOUTH	RELOCATE AS NECESSARY

**639(3) - APPROACH SUMMARY**

STATION	OFFSET	RADIUS		DRIVEWAY WIDTH (FT)	PAVING LIMITS (FT)	EXISTING SURFACE	REMARKS
		R1	R2				
20+43	RT	MTE	MTE	MTE	10.00	UNPAVED	CBJ SAGE EAGLE VALLEY CENTER
41+52	LT	MTE	MTE	MTE	18.50	UNPAVED	AMALGA HARBOR BOAT LAUNCH UPPER PARKING LOT
42+98	RT	MTE	MTE	MTE	10.00	UNPAVED	ERNEST GRUENING STATE HISTORIC SITE
43+77	LT	MTE	MTE	MTE	10.00	PAVED	AMALGA HARBOR BOAT LAUNCH LOOP INTERSECTION

**615(6) SALVAGE SIGN CONTIN.**

STA.	LEGEND	OFFSET	REMARKS
13+00	ONE LANE BRIDGE	RT	REMOVE & SALVAGE
15+50	ONE LANE BRIDGE	LT	REMOVE & SALVAGE
36+50	ONE LANE BRIDGE	RT	REMOVE & SALVAGE
23+60	20 MPH	RT	REMOVE & SALVAGE
26+35	20 MPH	LT	REMOVE & SALVAGE
13+00	20 MPH	RT	REMOVE & SALVAGE
15+50	20 MPH	LT	REMOVE & SALVAGE
13+00	NEW TRAFFIC PATTERN	RT	REMOVE & SALVAGE

Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.  
 PE: *[Signature]* Date: 07-08-2015

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: C. TRIPP

DESIGNED BY: L. CHAMBERS  
 DRAWN BY: L. CHAMBERS

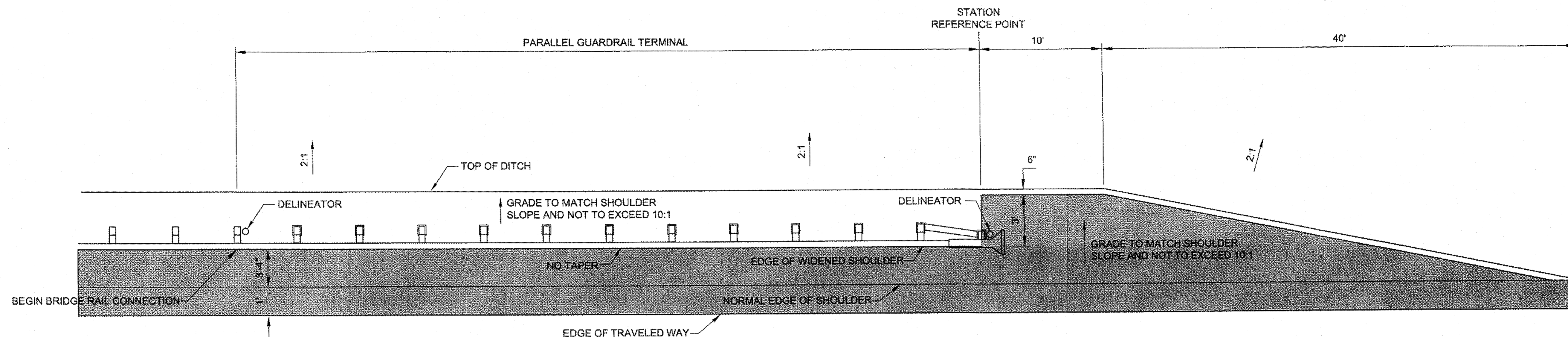
STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES  
 SOUTHEAST REGION

AMALGA HARBOR RD & BRIDGES RECONSTRUCTION & REPLACEMENT PROJECT #69684

MISCELLANEOUS SUMMARIES

PATH: Q:\UNIV69684\PLANS\SET1\59584\_D1\_MISC\SUMMARIES.DWG  
 TAB: D1 Monday, November 25, 2013 12:51:28 PM CHAMBERS, LUCAS M (DOT)

NO.	DATE	DESCRIPTION	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			69684/ BH-0950(1)	2013	D1	55

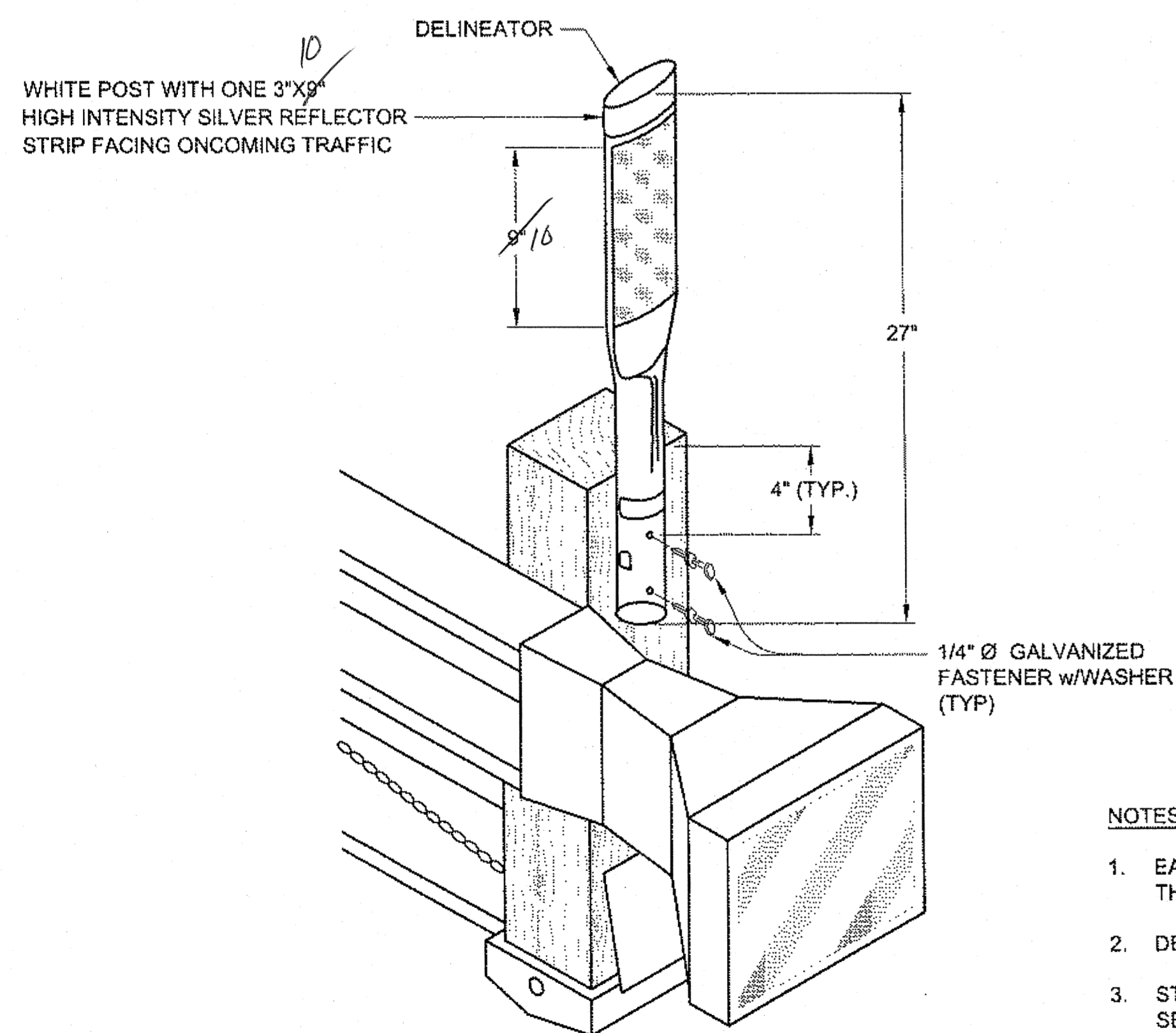


**NOTES:**

1. THE TERMINAL DETAILS SHOWN ARE FOR ILLUSTRATION ONLY. INSTALL TERMINAL SECTIONS ACCORDING TO MANUFACTURERS RECOMMENDATIONS.
2. SEE STD DWG, G-20.11 WIDENING FOR GUARDRAIL END TERMINAL.

**PARALLEL GUARDRAIL TERMINAL INSTALLATION WIDENING DETAIL**

NTS

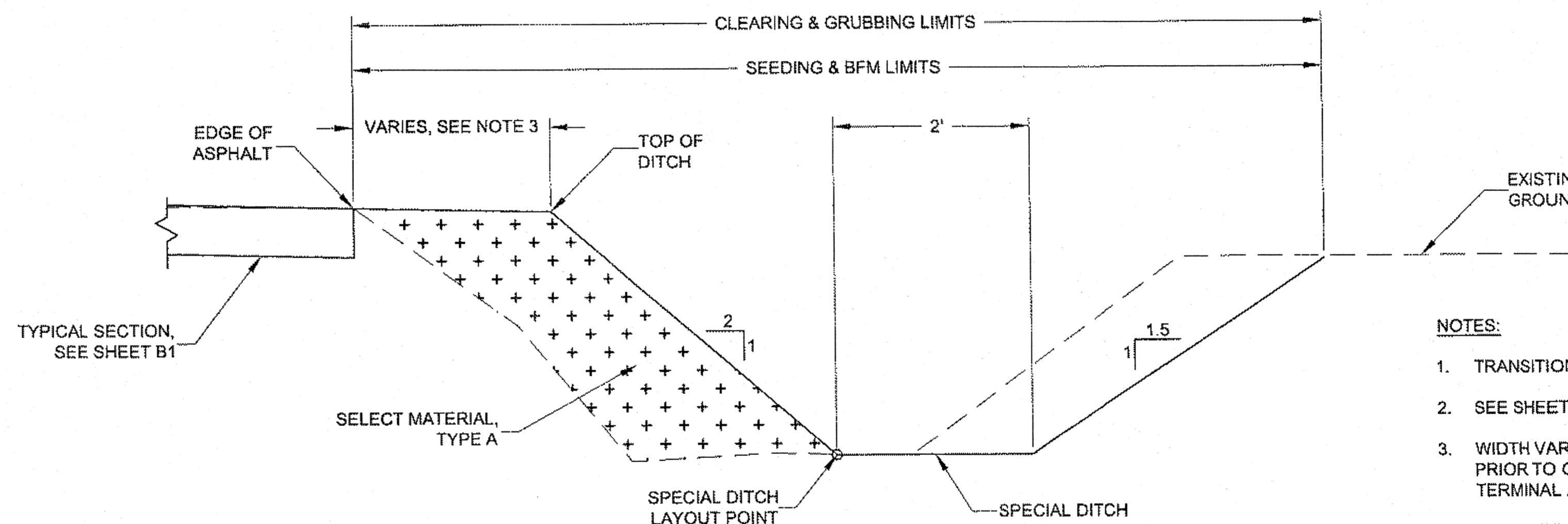


**FLEXIBLE GUARDRAIL DELINEATOR**

NTS

**NOTES:**

1. EACH PARALLEL GUARDRAIL END SHALL HAVE A DELINEATOR ON THE END AND BEGINNING POST OF EACH TERMINAL.
2. DELINEATORS SHALL HAVE WHITE REFLECTIVE SHEETING.
3. STEEL POST GUARDRAIL SHALL BE PRE-DRILLED PRIOR TO SECURING DELINEATOR WITH SELF-TAPPING SCREWS.



**BRIDGE APPROACH SPECIAL DITCH DETAIL**

NTS

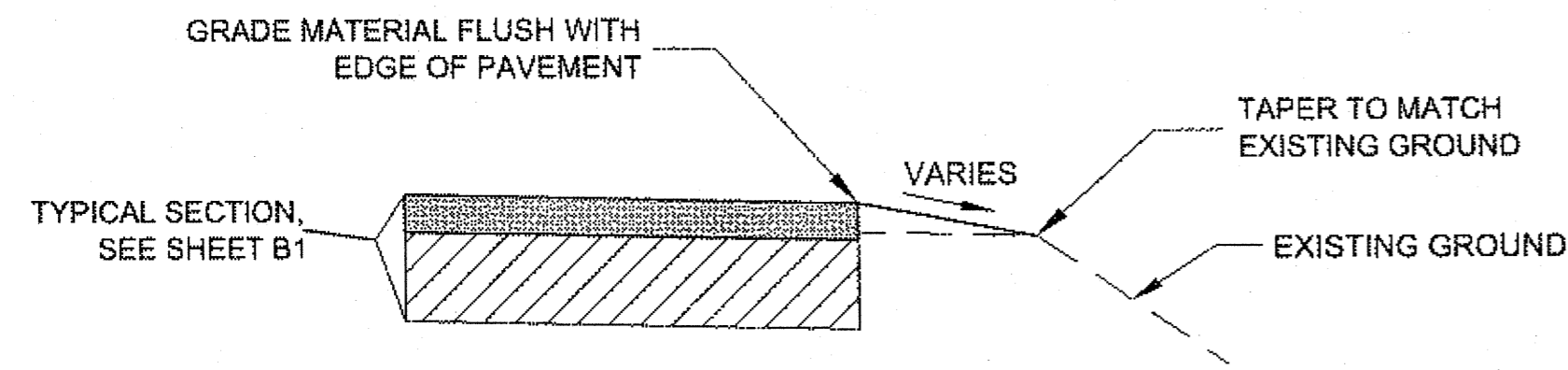
**NOTES:**

1. TRANSITION SPECIAL DITCH TO MATCH EXISTING DITCHES.
2. SEE SHEET F4 FOR SPECIAL DITCH LAYOUT TABLES.
3. WIDTH VARIES AROUND GUARDRAIL TERMINAL, 6" AT PAVED AREA PRIOR TO GUARDRAIL, 3'-6" BEHIND PARALLEL GUARDRAIL TERMINAL AND TRANSITION RAIL.
4. STABILIZE ALL NEW EMBANKMENT AND CUT SLOPES WITH SEEDING AND BONDED FIBER MATRIX PER SECTION 618 & SECTION 619.

Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.  
 PE: *[Signature]* Date 07.08.2015

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

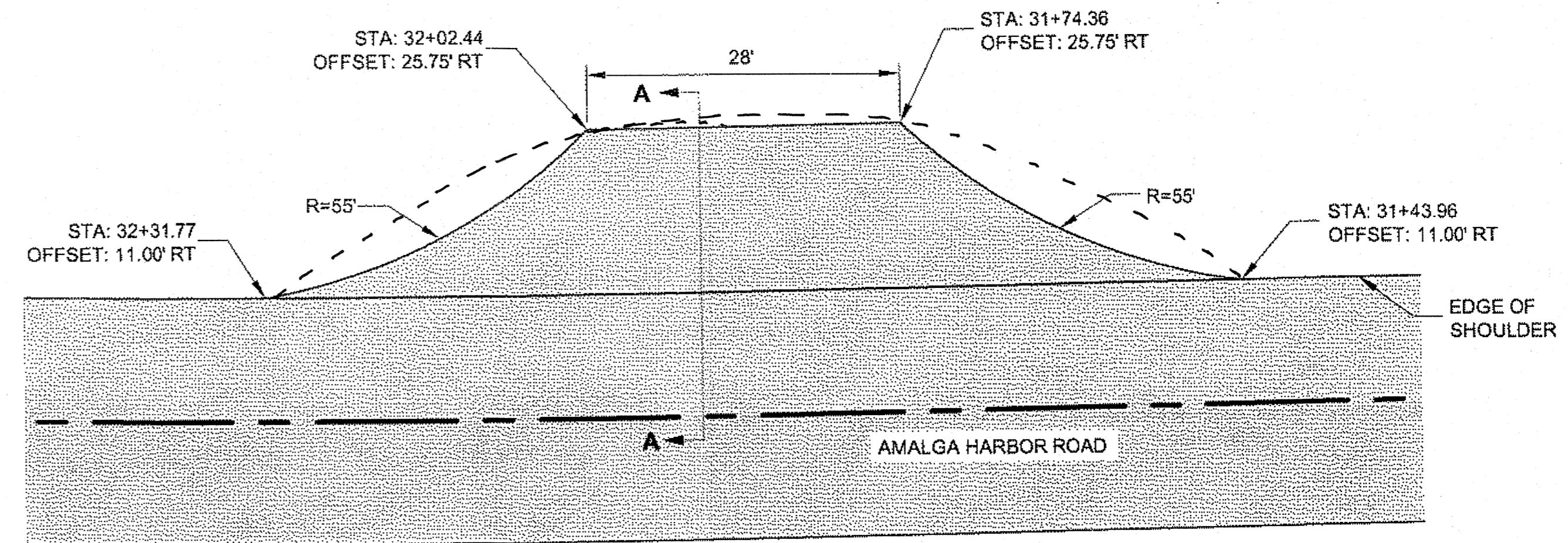
CHECKED BY: C. TRIPP		STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES SOUTHEAST REGION	
		AMALGA HARBOR RD & BRIDGES RECONSTRUCTION & REPLACEMENT PROJECT #69684	
		MISCELLANEOUS DETAILS	
DESIGNED BY: L. CHAMBERS		PROJECT DESIGNATION	
DRAWN BY: L. CHAMBERS		YEAR	
PATH: Q:\UNU\69684\PLANSET\69684_E1-E2_MISCDETAILS.DWG		SHEET NO.	
T.A.B: E1 Wednesday, October 09, 2013 1:06:09 PM		TOTAL SHEETS	
REVISIONS		69684/ BH-0950(1)	
NO.	DATE	DESCRIPTION	2013
			E1
			55



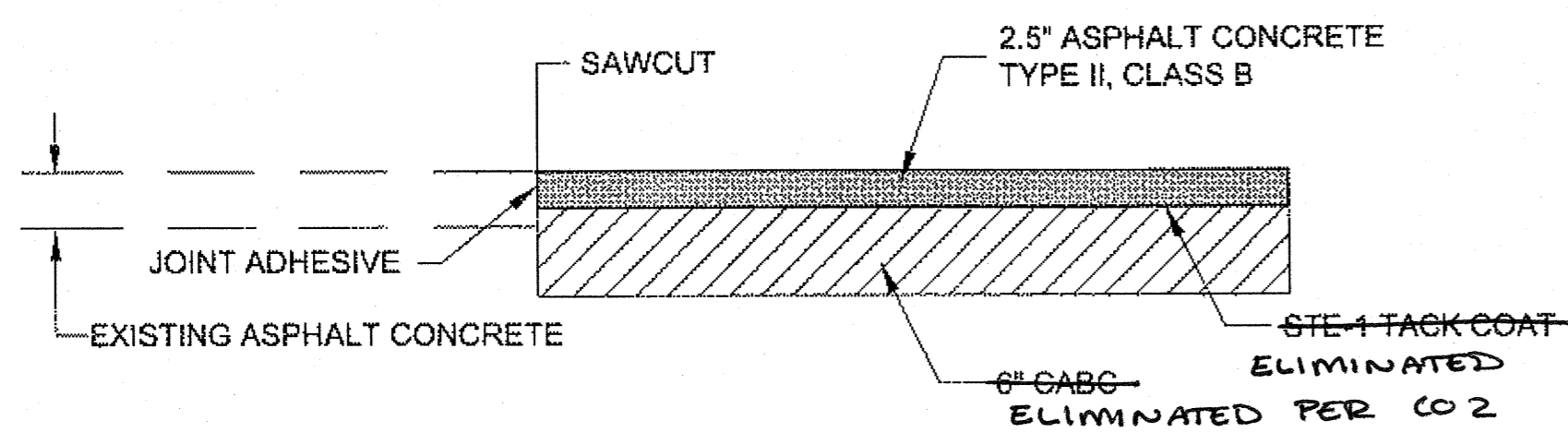
**LINEAR GRADING**  
NTS

**NOTES:**

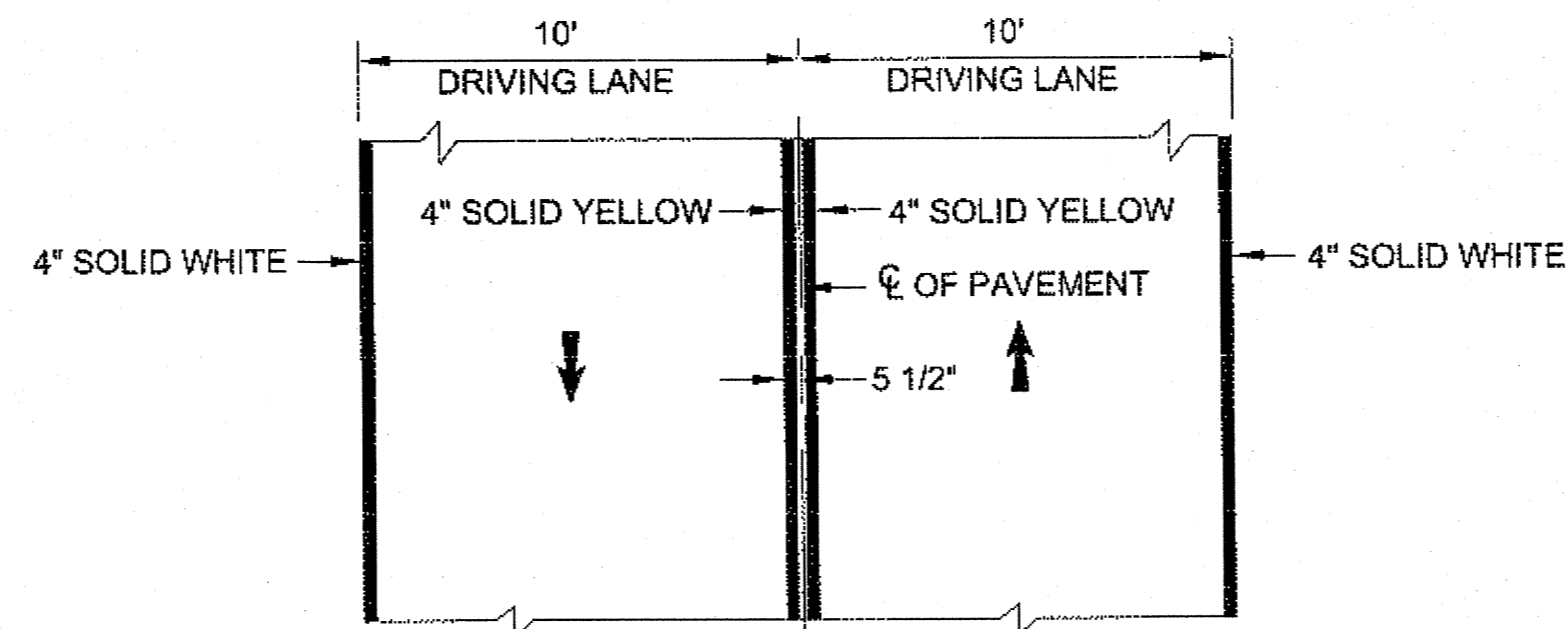
1. LINEAR GRADE TO TOP OF EXISTING DITCH OR 1' MINIMUM WHICHEVER IS LESS.
2. WHEN LINEAR GRADING IN CUT GRADE TO DAYLIGHT TO FACILITATE DRAINAGE.
3. MATERIAL FOR LINEAR GRADING SHALL MEET THE REQUIREMENTS AS SPECIFIED IN SECTION 303 OF THE SPECIAL PROVISIONS.
4. LINEAR GRADING SHALL BE PAID FOR UNDER ITEM 303(3).



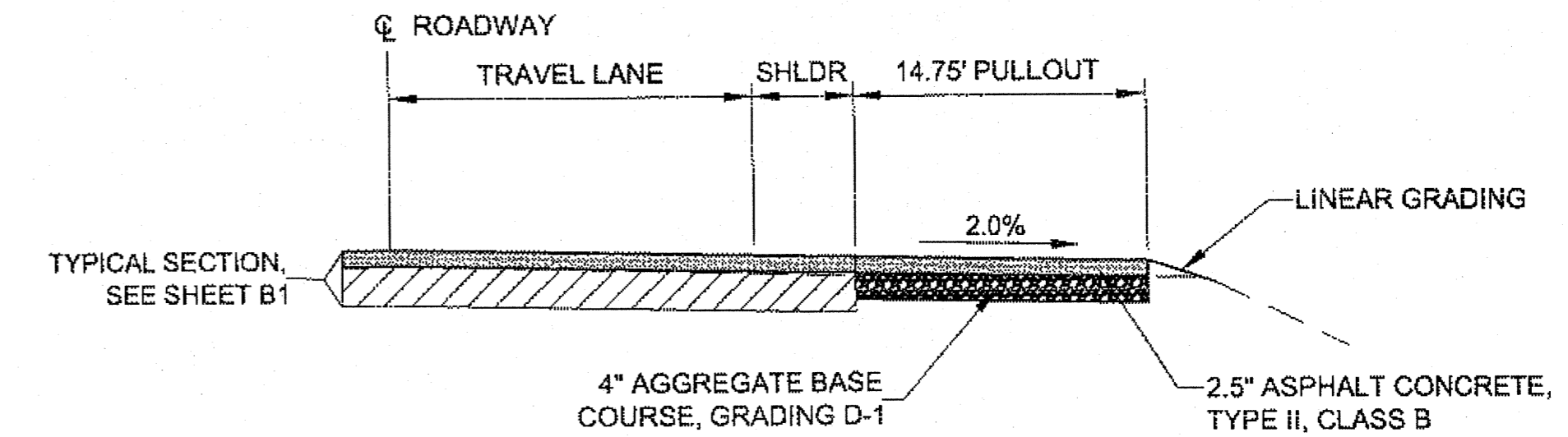
**LOOKOUT DIMENSION PLAN**  
NTS



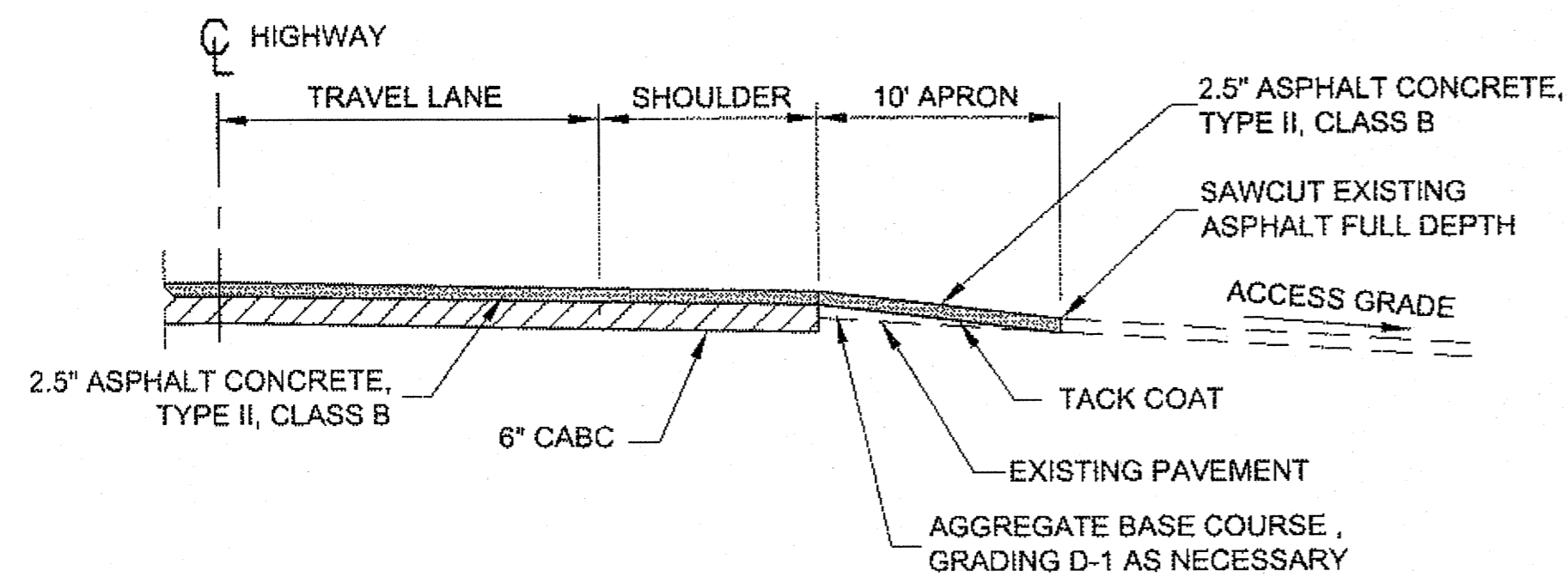
**PAVEMENT TRANSITION DETAIL**  
NTS



**STRIPING DETAIL**  
NTS



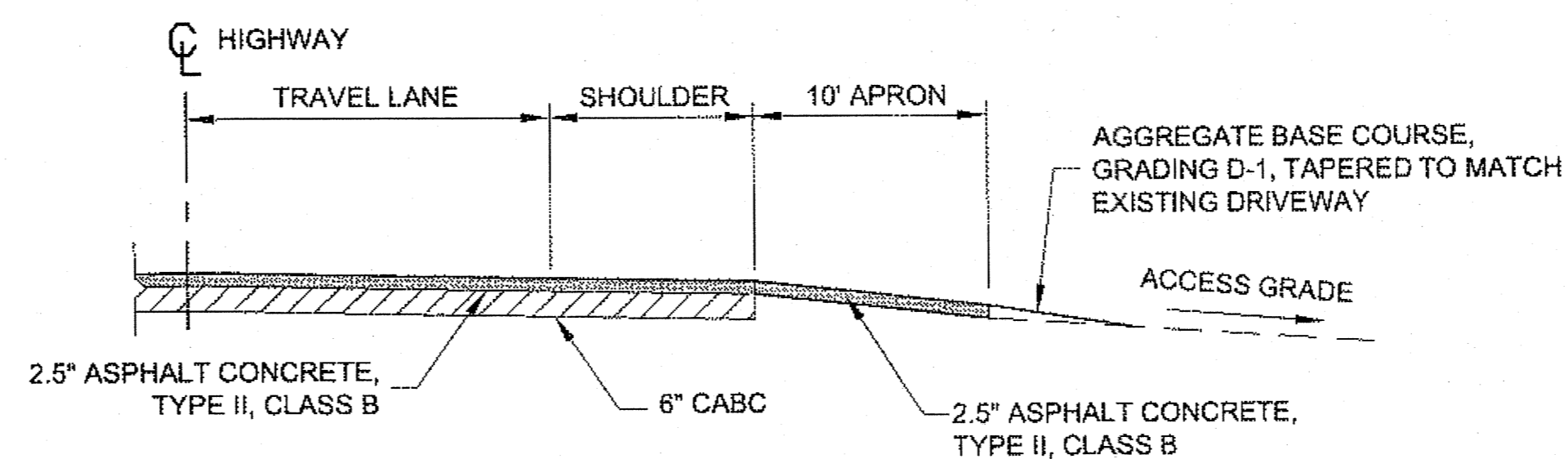
**LOOKOUT SECTION A-A**  
NTS



**PAVED DRIVEWAY APRON**  
NTS

**NOTES:**

1. MATCH EXISTING DRIVEWAY WIDTH.
2. MATCH EXISTING DRIVEWAY RETURN RADII.



**UNPAVED DRIVEWAY APRON**  
NTS

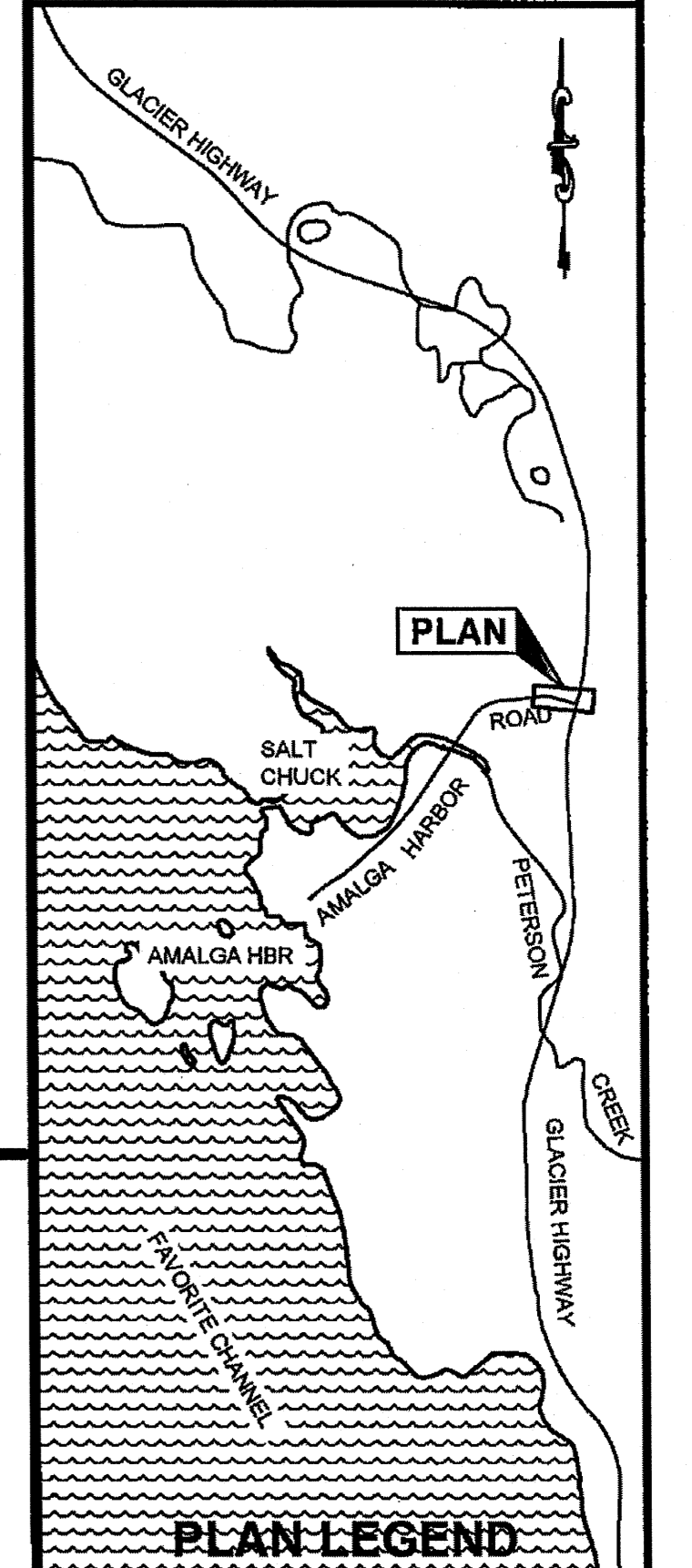
Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.

PE: *[Signature]* Date: 07.08.2015

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: C. TRIPP		STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES SOUTHEAST REGION	
DESIGNED BY: L. CHAMBERS			
DRAWN BY: L. CHAMBERS			
PATH: Q:\JNU\69684\PLANSET\69684_E1-E2_MISCDETAILS.DWG		AMALGA HARBOR RD & BRIDGES RECONSTRUCTION & REPLACEMENT PROJECT #69684	
TAB: E2 Wednesday, October 09, 2013 1:06:17 PM		MISCELLANEOUS DETAILS	
REVISIONS		PROJECT DESIGNATION	YEAR
NO.	DATE	DESCRIPTION	SHEET NO.
			69684/ BH-0950(1)
			2013
			E2
			TOTAL SHEETS
			55

ADDENDUM NUMBER		
ATTACHMENT NUMBER		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION
1	01 08 15	PROFILE MODIFICATION



CHECKED BY: C. TRIPP

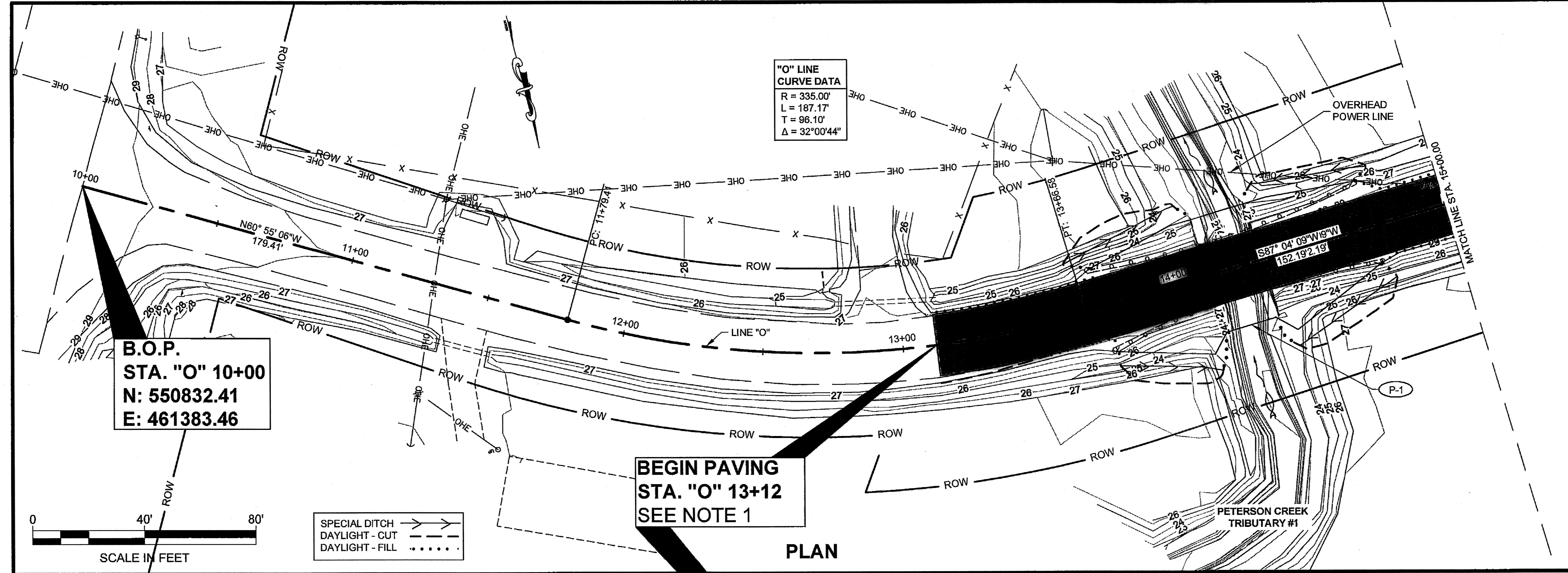


DESIGNED BY: L. CHAMBERS  
 DRAWN BY: L. CHAMBERS

STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION  
 & PUBLIC FACILITIES  
 SOUTHEAST REGION  
 AMALGA HARBOR RD &  
 BRIDGES RECONSTRUCTION &  
 REPLACEMENT  
 PROJECT #69684

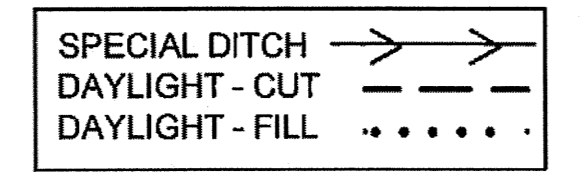
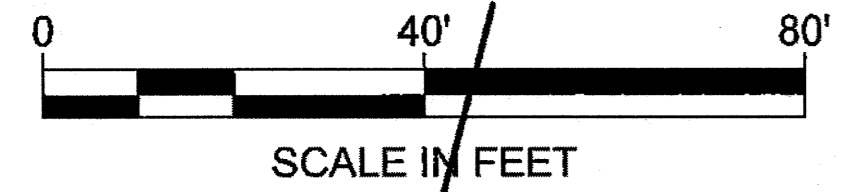
**PLAN & PROFILE**

PROJECT DESIGNATION	
<b>69684/ BH-0950(1)</b>	
STATE	YEAR
<b>ALASKA</b>	<b>2013</b>
SHEET NUMBER	TOTAL SHEETS
<b>F1</b>	<b>55</b>



**B.O.P.**  
**STA. "O" 10+00**  
**N: 550832.41**  
**E: 461383.46**

**BEGIN PAVING**  
**STA. "O" 13+12**  
**SEE NOTE 1**



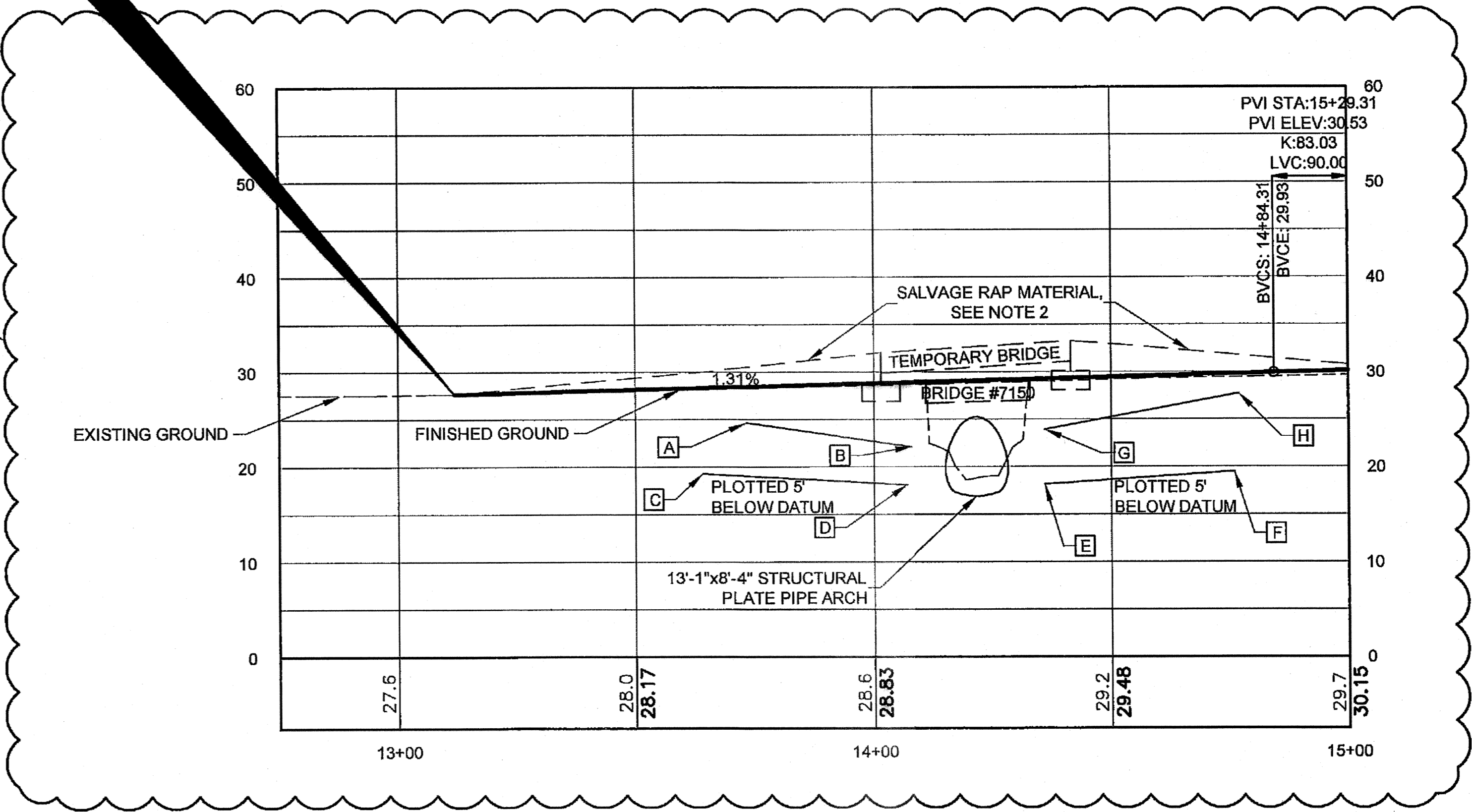
**NOTES:**

- BEGIN PAVING WHERE EXISTING TEMPORARY MODULAR BRIDGE APPROACH TIES INTO EXISTING ASPHALT APPROXIMATE STA. 13+12. SAWCUT FULL DEPTH & MATCH EXISTING ELEVATION.
- SALVAGE EXISTING RAP MATERIAL & STOCKPILE ON THE SAGA PARKING LOT. PROVIDE NOTICE TO CBJ ENGINEERING ONE WEEK PRIOR TO STOCKPILING, SEE SECTION 202.
- STATION & OFFSET GIVEN IN THE SPECIAL DITCH LAYOUT TABLE ARE APPROXIMATE. PROVIDE A SMOOTH TRANSITION BETWEEN THE EXISTING DITCH & THE SPECIAL DITCH. SEE SHEET Q10 FOR PIPE-ARCH SPECIAL DITCH DETAIL.

**SPECIAL DITCH LAYOUT**

"O" STA.	OFFSET (FT)	ELEV. (FT)	REMARKS
A	13+73 20.50 RT	24.87	
B	14+08 32.50 RT	22.13	
C	13+64 17.50 LT	24.33	PLOTTED 5' BELOW DATUM
D	14+07 26.50 LT	23.13	PLOTTED 5' BELOW DATUM
E	14+36 32.00 RT	23.18	PLOTTED 5' BELOW DATUM
F	14+76 18.50 RT	24.50	PLOTTED 5' BELOW DATUM
G	14+36 26.00 LT	23.95	
H	14+77 20.00 LT	27.75	

Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.  
 PE Date 07-08-2015



**PROFILE**

**DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS**

CHAMBERS, LUCAS M (D)

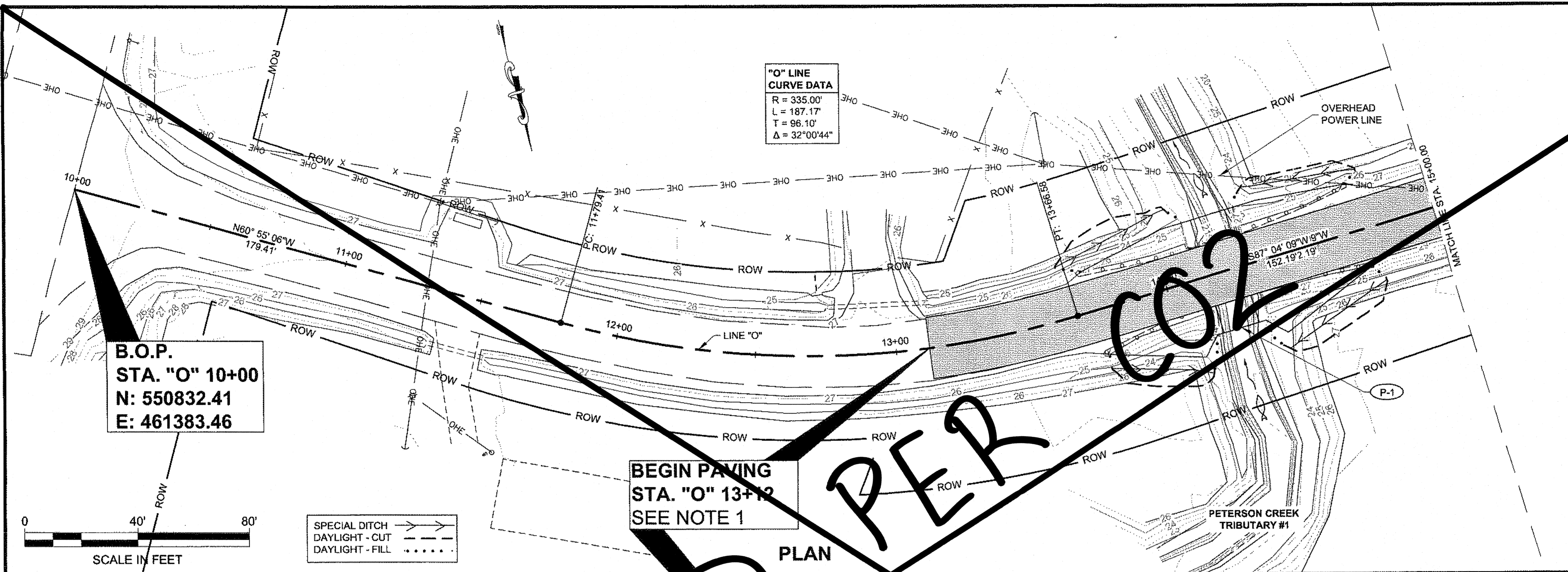
TAB: F1 Wednesday, October 09, 2013 1:09:16 P

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION



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**E: 461383.46**

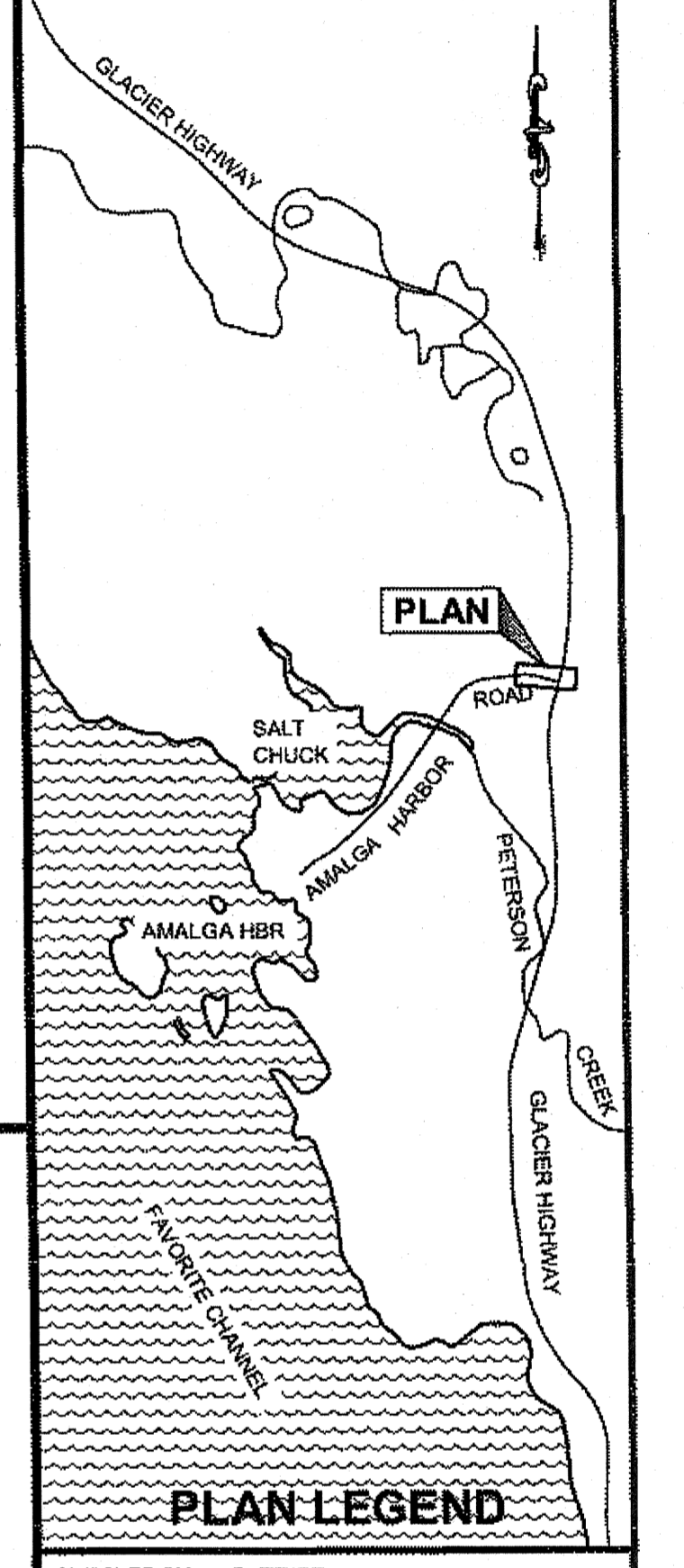
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 L = 187.17'  
 T = 96.10'  
 Δ = 32°00'44"

**BEGIN PAVING**  
**STA. "O" 13+12**  
**SEE NOTE 1**



**SPECIAL DITCH** →  
**DAYLIGHT - CUT** - - -  
**DAYLIGHT - FILL** ·····

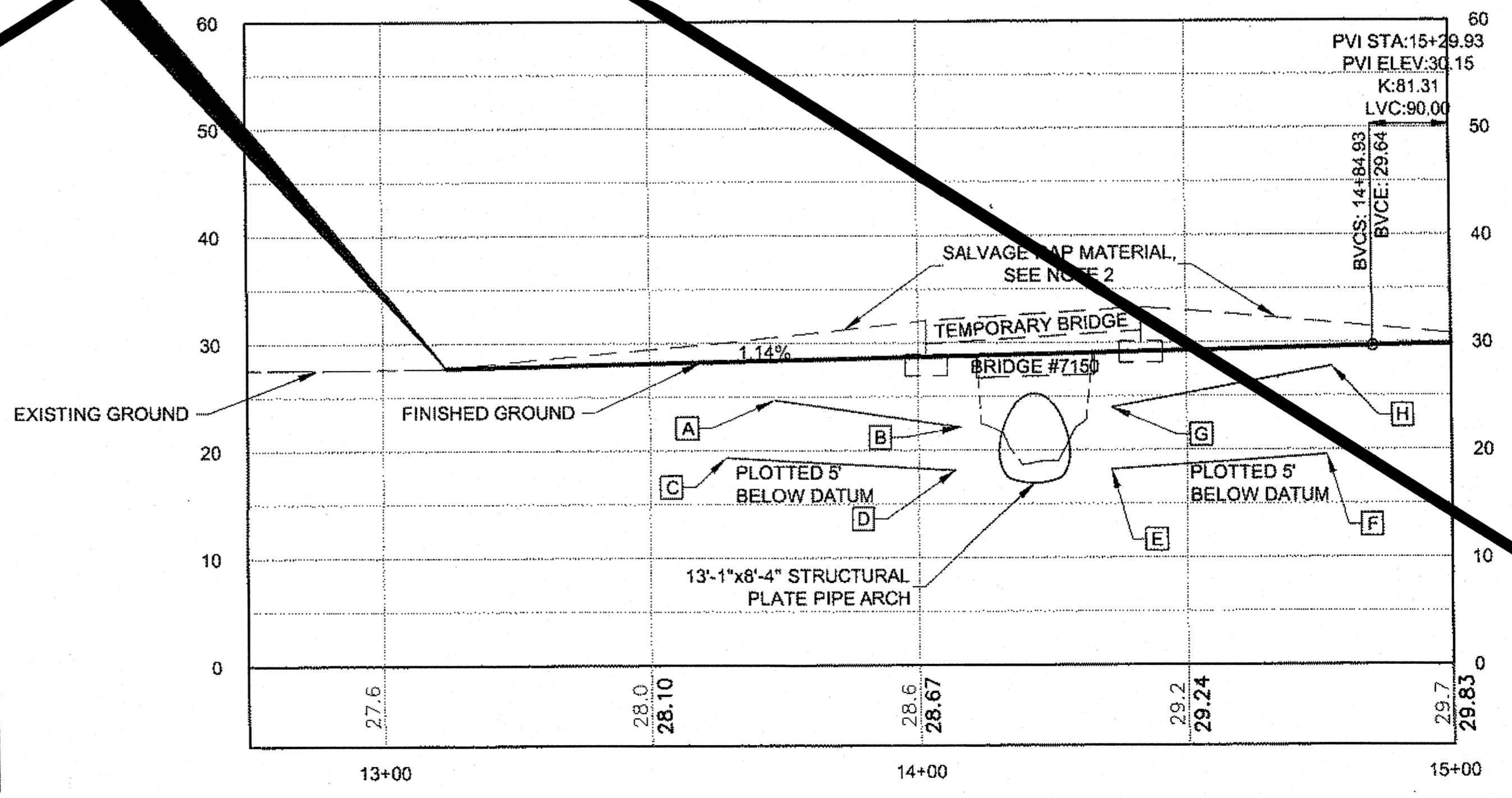
**PLAN**



- NOTES:**
- BEGIN PAVING WHERE EXISTING TEMPORARY MODULAR BRIDGE APPROACH TIES INTO EXISTING ASPHALT APPROXIMATE STA. 13+12. SAWCUT FULL DEPTH & MATCH EXISTING ELEVATION.
  - SALVAGE EXISTING RAP MATERIAL & STOCKPILE ON THE SAGA PARKING LOT. PROVIDE NOTICE TO CBJ ENGINEERING ONE WEEK PRIOR TO STOCKPILING. SEE SECTION 202.
  - STATION & OFFSET GIVEN IN THE SPECIAL DITCH LAYOUT TABLE ARE APPROXIMATE. PROVIDE A SMOOTH TRANSITION BETWEEN THE EXISTING DITCH & THE SPECIAL DITCH. SEE SHEET Q10 FOR PIPE-ARCH SPECIAL DITCH DETAIL.

**SPECIAL DITCH LAYOUT**

"O" STA.	OFFSET (FT)	ELEV. (FT)	REMARK
A 13+73	20.50 RT	24.67	
B 14+08	32.50 RT	22.13	
C 13+64	17.50 LT	24.33	PLOTTED 5' BELOW DATUM
D 14+07	26.50 LT	23.13	PLOTTED 5' BELOW DATUM
E 14+36	32.00 RT	23.18	PLOTTED 5' BELOW DATUM
F 14+76	18.50 RT	24.50	PLOTTED 5' BELOW DATUM
G 14+36	26.00 LT	23.95	
H 14+77	20.00 LT	27.75	



Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.  
 PE \_\_\_\_\_ Date 07.08.2015

**PROFILE**

**DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS**

CHECKED BY: C. TRIPP

DESIGNED BY: L. CHAMBERS  
 DRAWN BY: L. CHAMBERS

STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES  
 SOUTHEAST REGION

**AMALGA HARBOR RD & BRIDGES RECONSTRUCTION & REPLACEMENT PROJECT #69684**

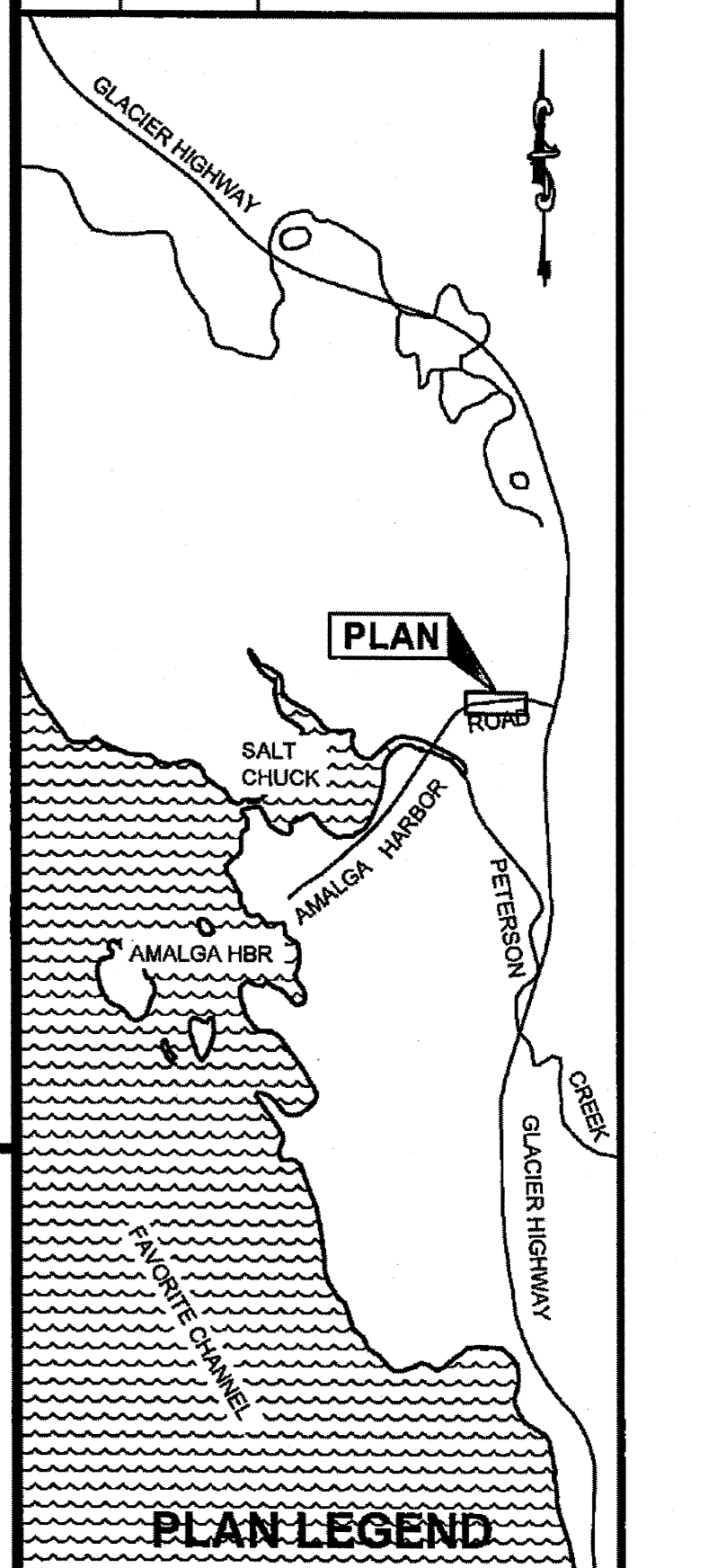
**PLAN & PROFILE**

PROJECT DESIGNATION  
**69684/ BH-0950(1)**

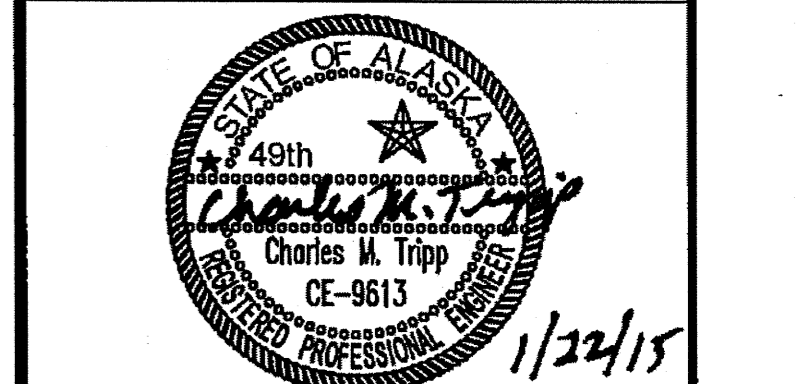
STATE	YEAR
<b>ALASKA</b>	<b>2013</b>

SHEET NUMBER	TOTAL SHEETS
<b>F1</b>	<b>55</b>

ADDENDUM NUMBER		
ATTACHMENT NUMBER		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION
△	01 08 14	PROFILE MODIFICATION



CHECKED BY: C. TRIPP



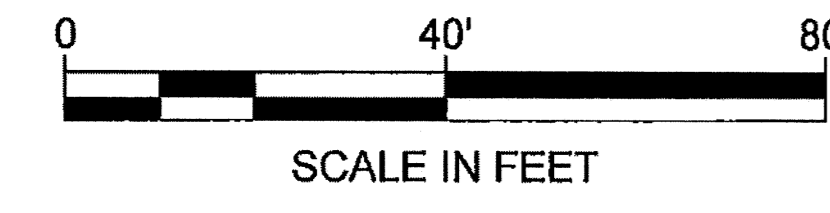
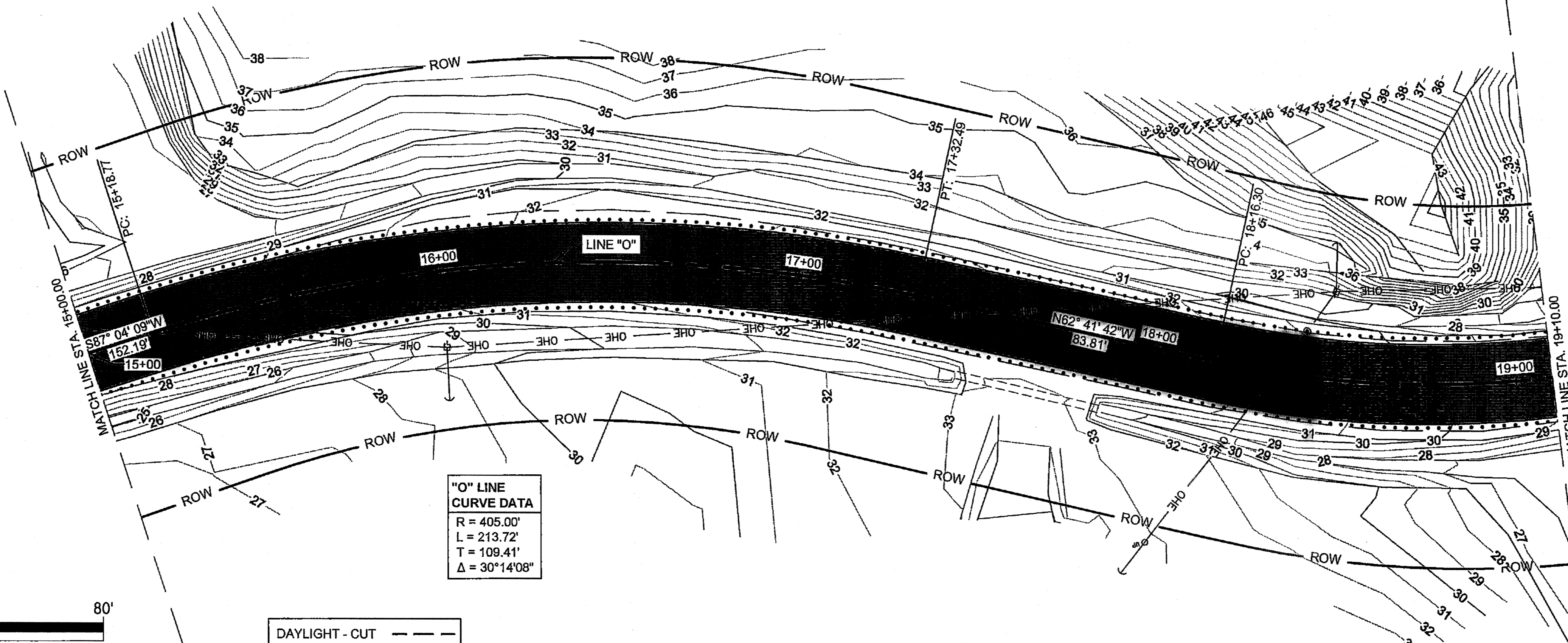
DESIGNED BY: L. CHAMBERS  
 DRAWN BY: L. CHAMBERS

STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION  
 & PUBLIC FACILITIES  
 SOUTHEAST REGION  
**AMALGA HARBOR RD &  
 BRIDGES RECONSTRUCTION &  
 REPLACEMENT  
 PROJECT #69684**

**PLAN & PROFILE**

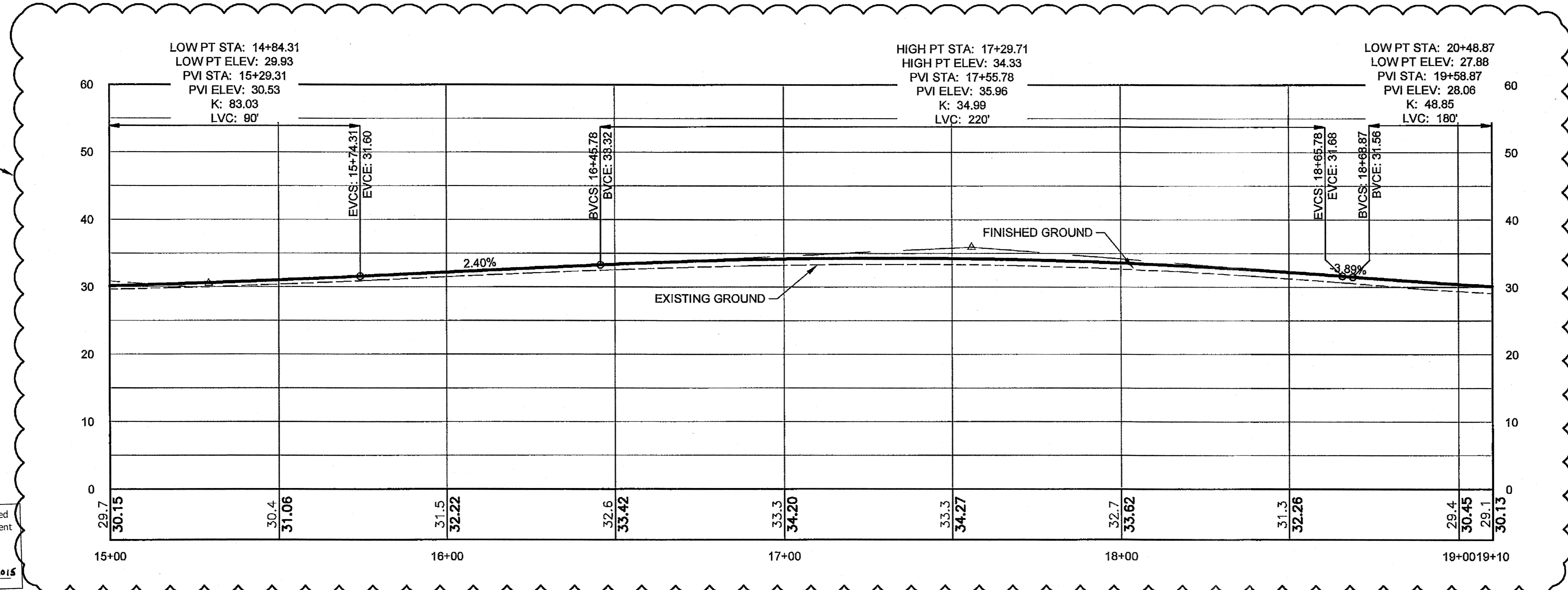
PROJECT DESIGNATION  
**69684/ BH-0950(1)**

STATE	YEAR
<b>ALASKA</b>	<b>2013</b>
SHEET NUMBER	TOTAL SHEETS
<b>F2</b>	<b>55</b>



DAYLIGHT - CUT ---  
 DAYLIGHT - FILL .....

**PLAN**



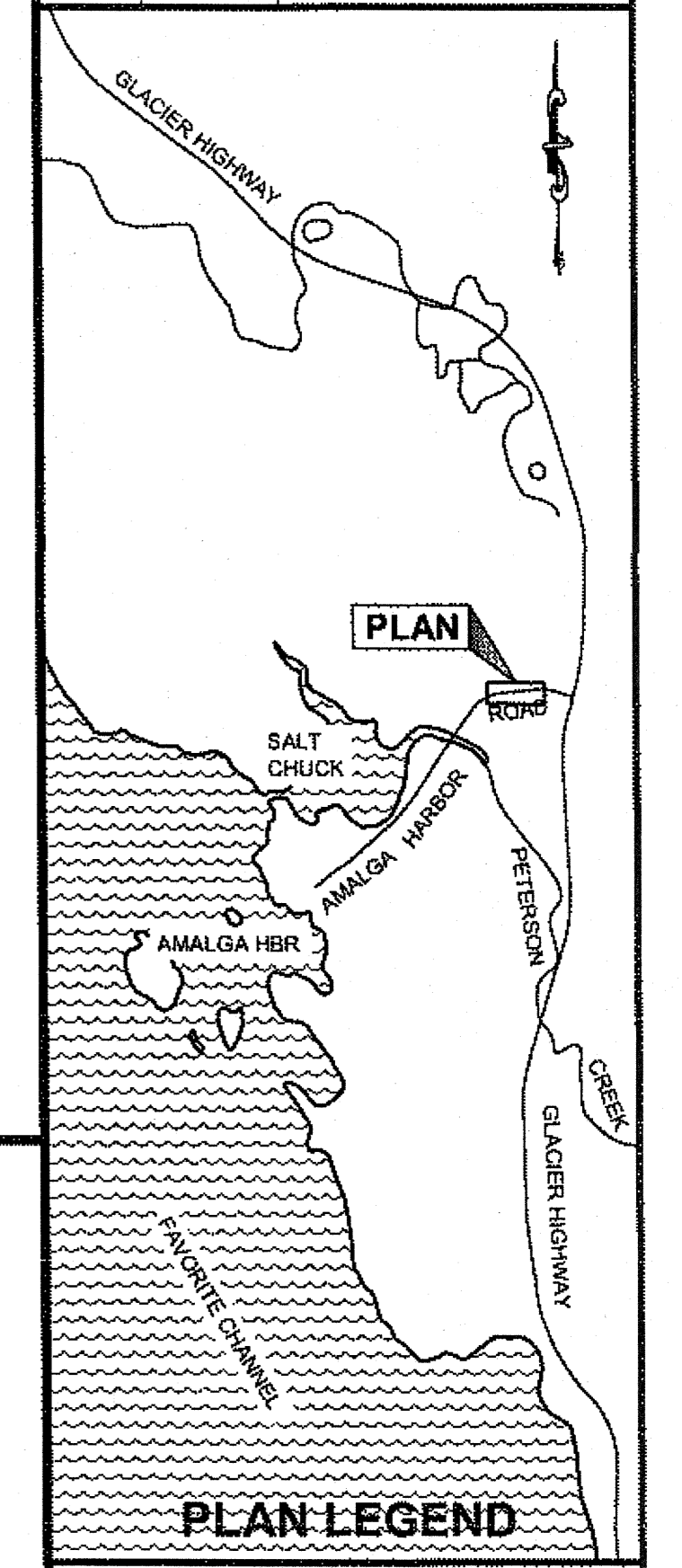
**PROFILE**

**DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS**

Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.  
 PE *[Signature]* Date 07.08.2015

CHAMBERS, LUCAS M (DOT)  
 TAB: F2 Wednesday, October 09, 2013 1:09:20 P

ADDENDUM NUMBER		
ATTACHMENT NUMBER		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION



CHECKED BY: C. TRIPP

DESIGNED BY: L. CHAMBERS  
 DRAWN BY: L. CHAMBERS

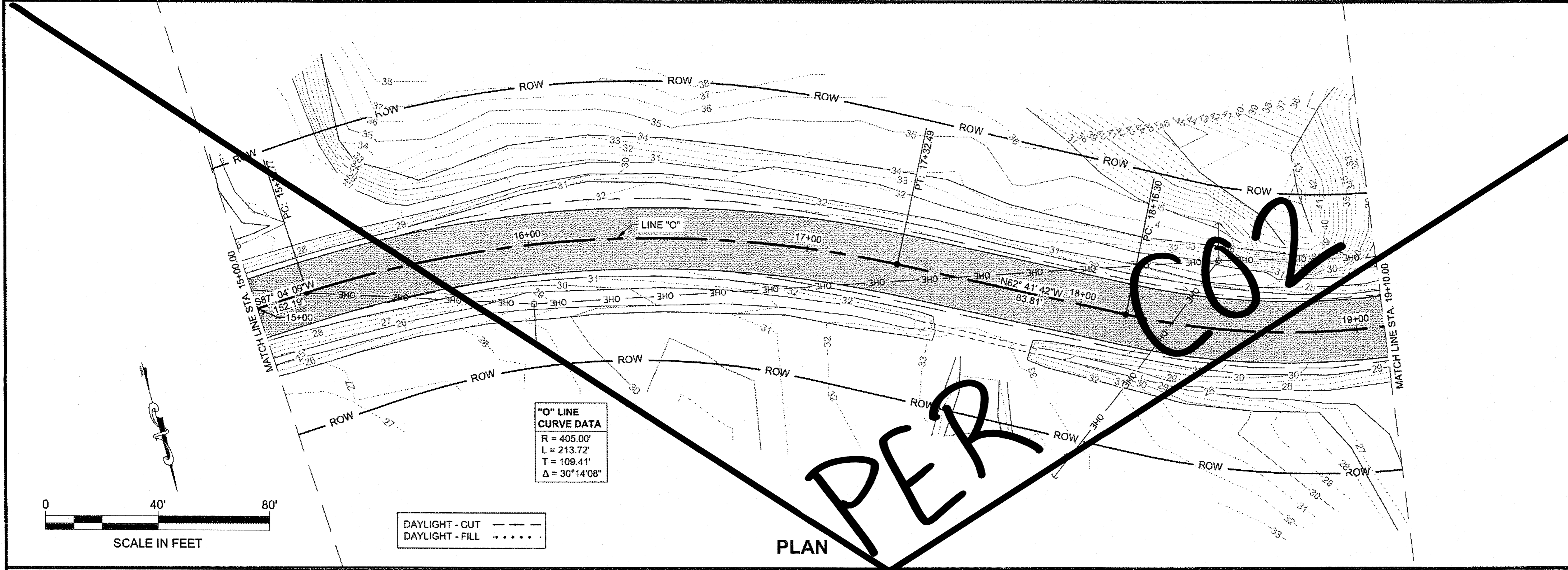
STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION  
 & PUBLIC FACILITIES  
 SOUTHEAST REGION

AMALGA HARBOR RD &  
 BRIDGES RECONSTRUCTION &  
 REPLACEMENT  
 PROJECT #69684

**PLAN & PROFILE**

PROJECT DESIGNATION  
**69684/ BH-0950(1)**

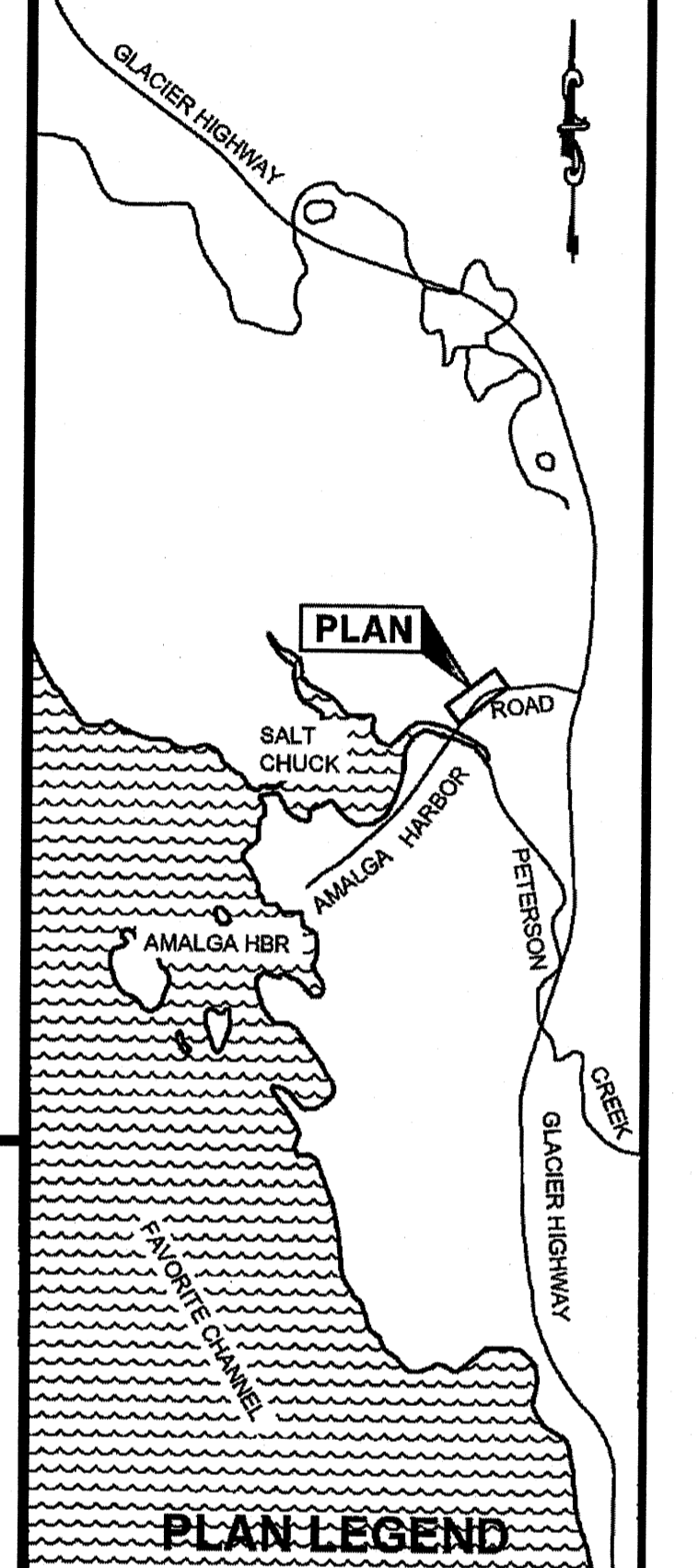
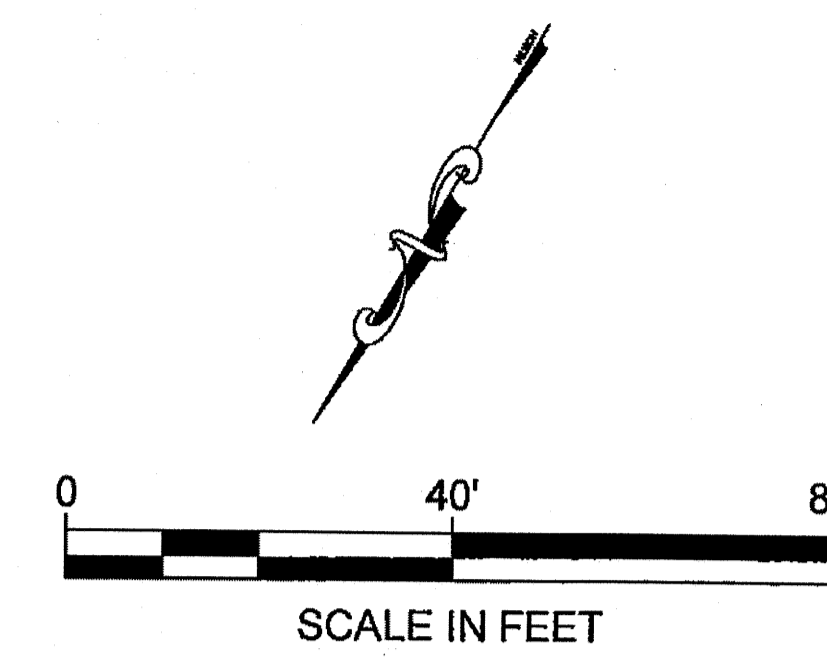
STATE	YEAR
ALASKA	2013
SHEET NUMBER	TOTAL SHEETS
F2	55



Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.  
 Date 07.08.2015

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

ADDENDUM NUMBER		
ATTACHMENT NUMBER		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION
1	01 08 15	PROFILE MODIFICATION



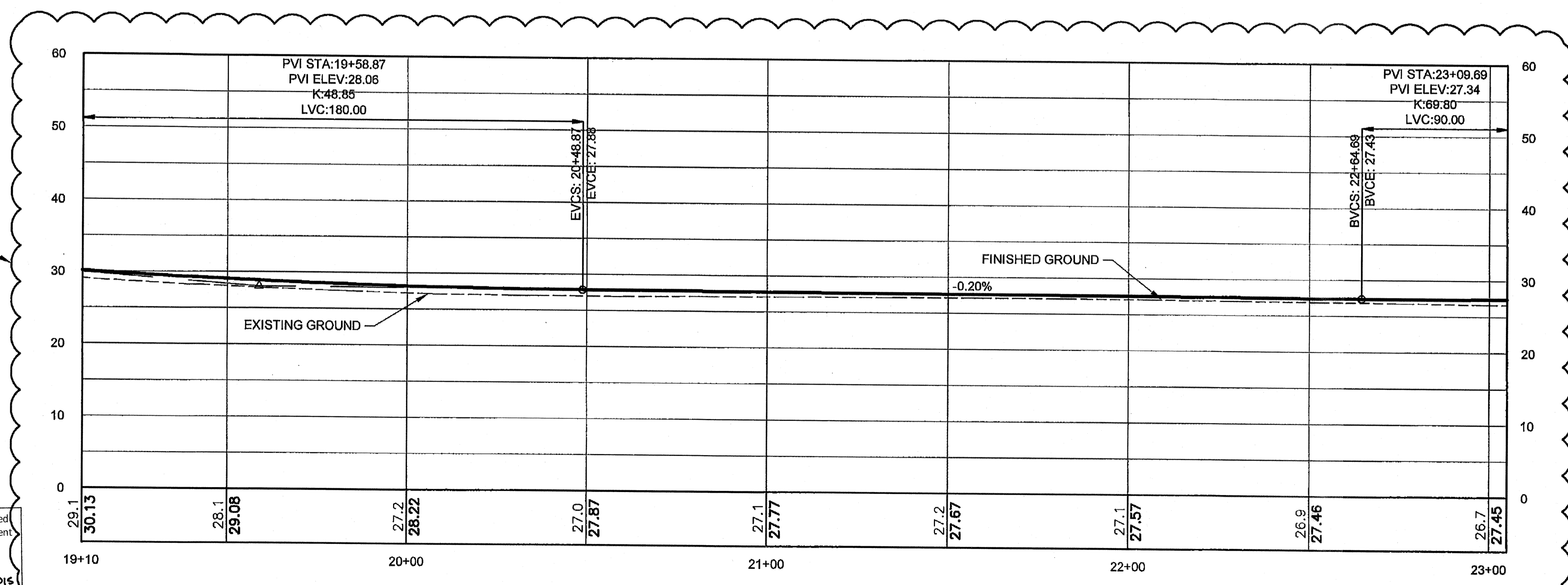
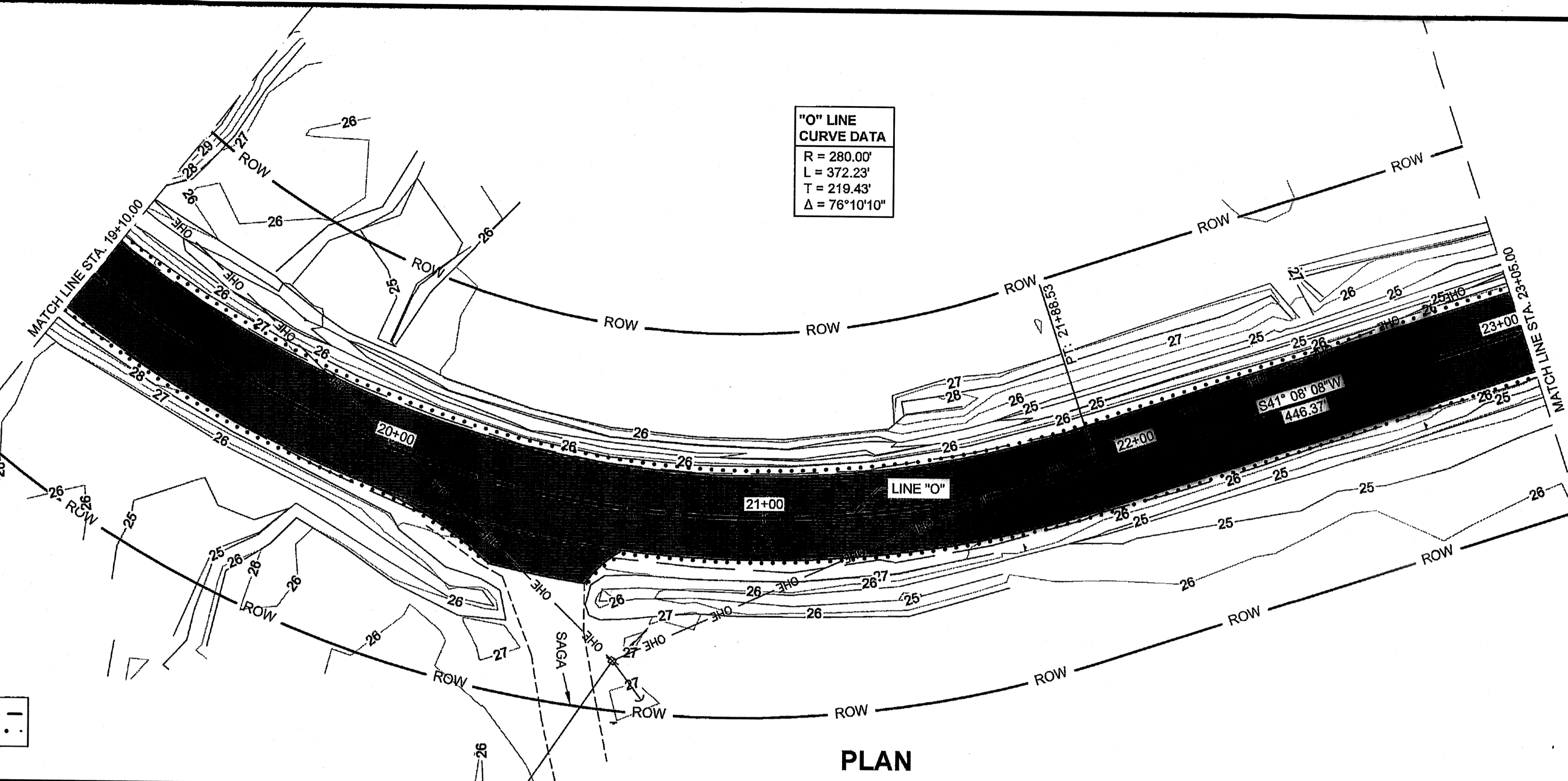
CHECKED BY: C. TRIPP

DESIGNED BY: L. CHAMBERS  
 DRAWN BY: L. CHAMBERS  
 STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES  
 SOUTHEAST REGION  
**AMALGA HARBOR RD & BRIDGES RECONSTRUCTION & REPLACEMENT**  
 PROJECT #69684

<b>PLAN &amp; PROFILE</b>	
PROJECT DESIGNATION	
<b>69684/ BH-0950(1)</b>	
STATE	YEAR
<b>ALASKA</b>	<b>2013</b>
SHEET NUMBER	TOTAL SHEETS
<b>F3</b>	<b>55</b>

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 T = 219.43'  
 Δ = 76°10'10"

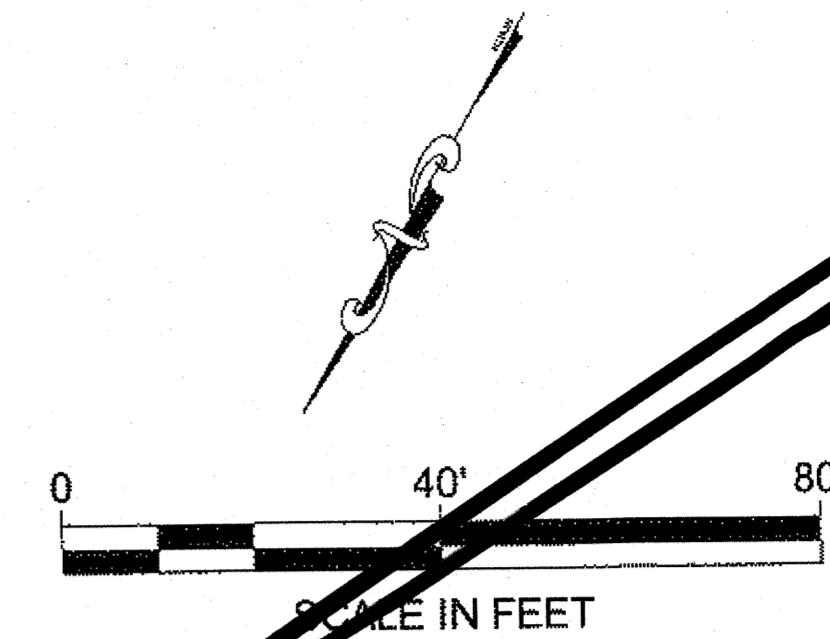
DAYLIGHT - CUT - - - - -  
 DAYLIGHT - FILL - . . . . .



Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.  
 PE [Signature] Date 07.08.2015

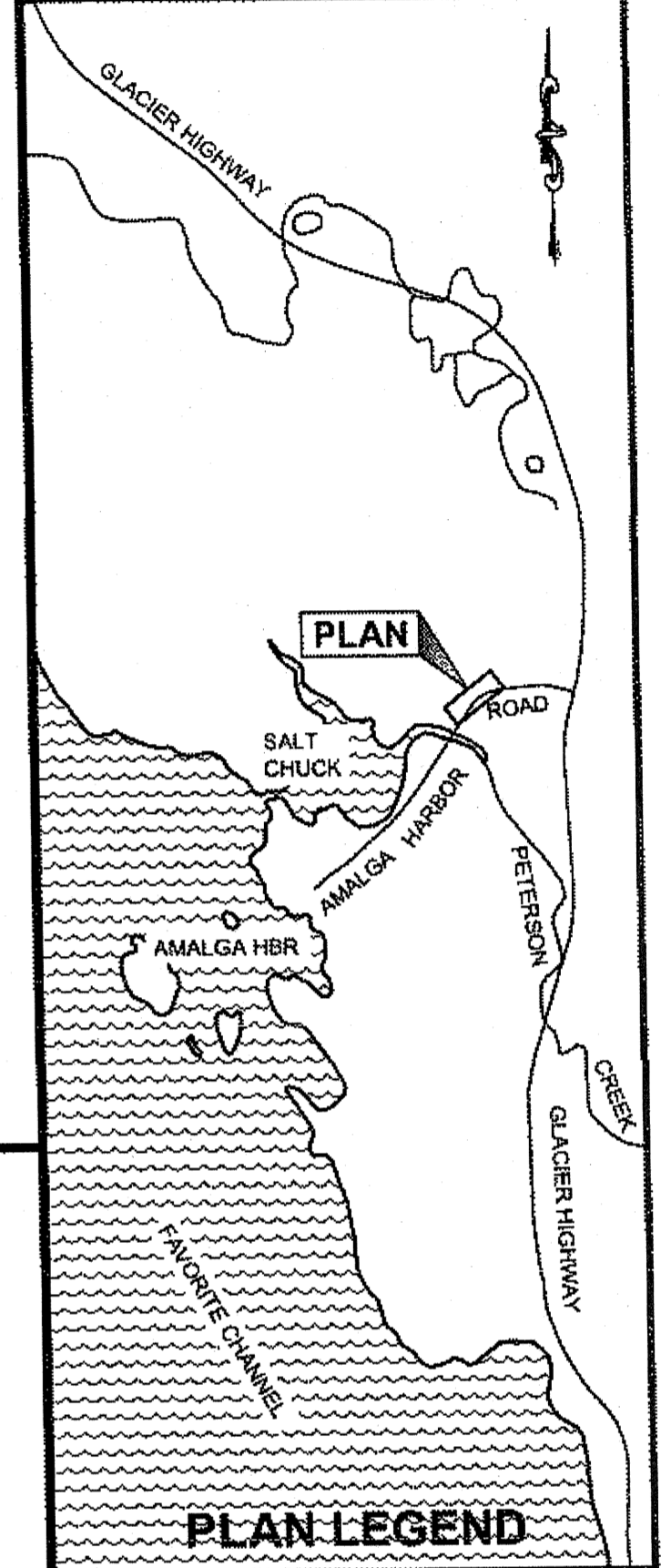
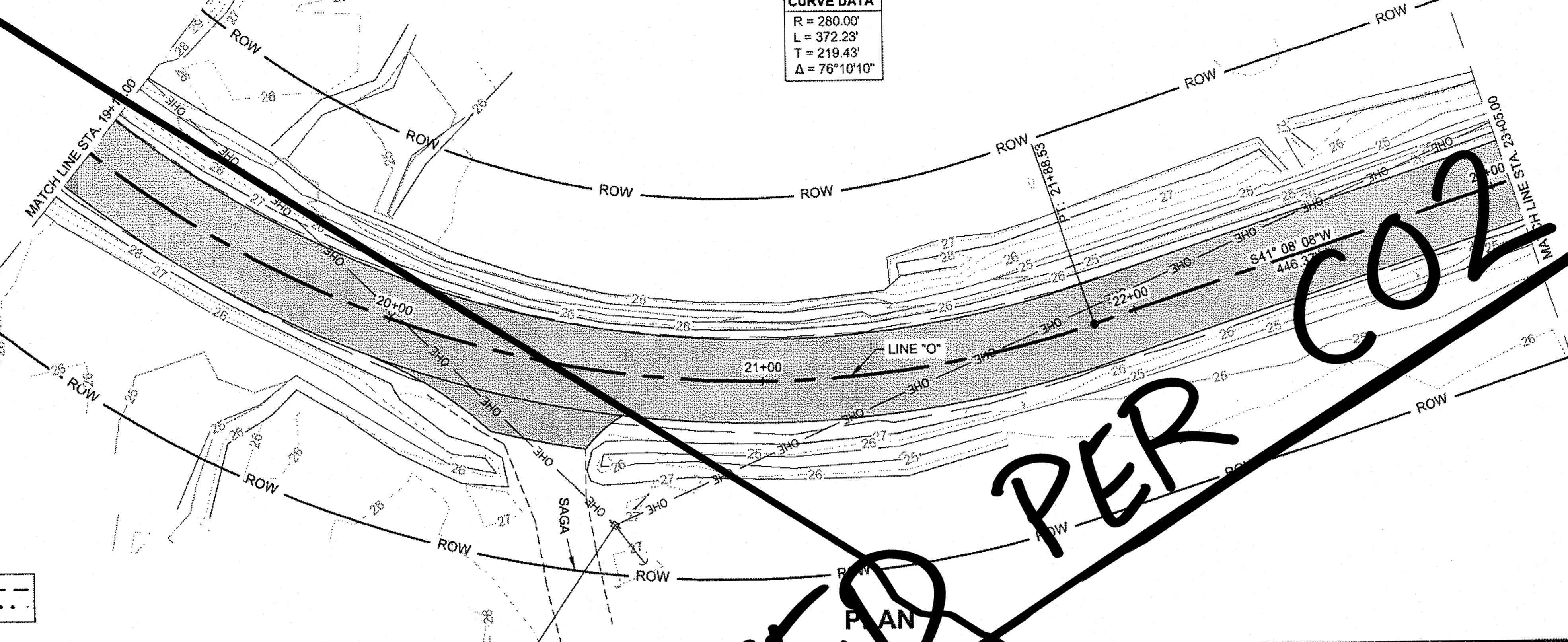
DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

ADDITION NUMBER		
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RECORD OF REVISIONS		
No.	DATE	DESCRIPTION

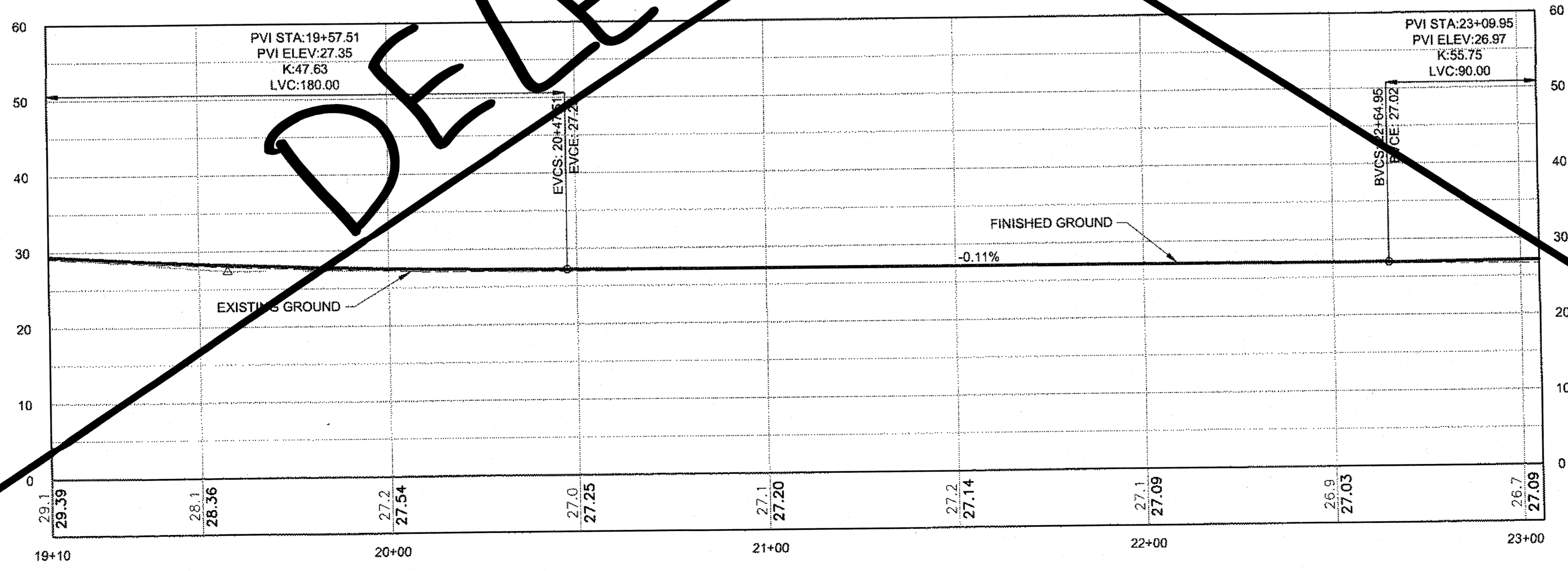


**"O" LINE CURVE DATA**  
 R = 280.00'  
 L = 372.23'  
 T = 219.43'  
 Δ = 76°10'10"

DAYLIGHT - CUT - - - -  
 DAYLIGHT - FILL - . . . .

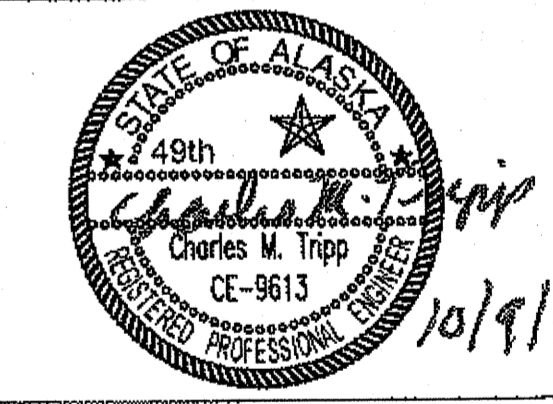


DELETED PER C02



Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.  
 PE: [Signature] Date 07.08.2015

CHECKED BY: C. TRIPP



DESIGNED BY: L. CHAMBERS  
 DRAWN BY: L. CHAMBERS

STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES  
 SOUTHEAST REGION  
 AMALGA HARBOR RD & BRIDGES RECONSTRUCTION & REPLACEMENT  
 PROJECT #69684

**PLAN & PROFILE**

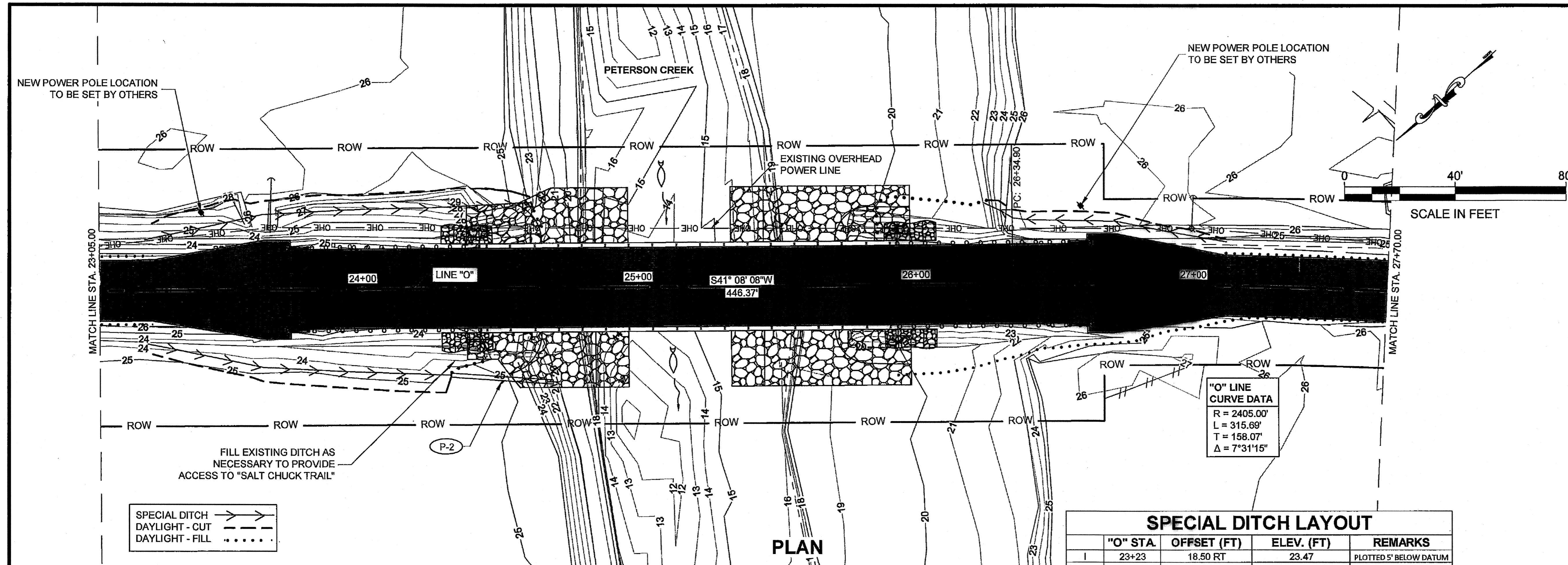
PROJECT DESIGNATION	
69684/ BH-0950(1)	
STATE	YEAR
ALASKA	2013
SHEET NUMBER	TOTAL SHEETS
F3	55

PROFILE

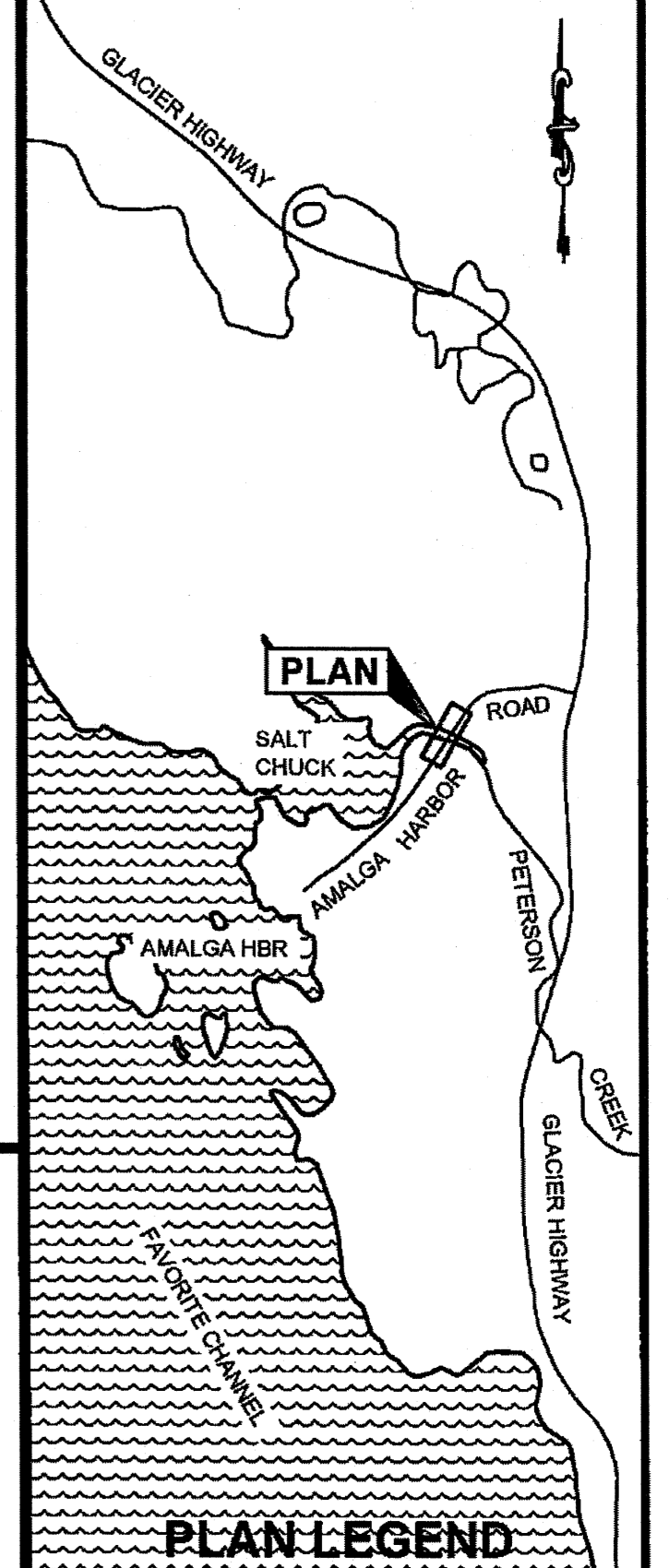
DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHAMBERS, LUCAS M (DOT)  
 TAB: F4 Thursday, January 08, 2015 10:55:21 AM

ADDENDUM NUMBER		
ATTACHMENT NUMBER		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION
1	04 24 14	BEGIN & END BRIDGE
2	01 08 15	PROFILE MODIFICATION



"O" STA.	OFFSET (FT)	ELEV. (FT)	REMARKS	
I	23+23	18.50 RT	23.47	PLOTTED 5' BELOW DATUM
J	24+32	30.00 RT	21.80	PLOTTED 5' BELOW DATUM
K	23+22	17.50 LT	23.95	
L	24+81	29.50 LT	21.90	
M	26+24	28.00 LT	21.75	
N	27+11	14.50 LT	24.60	



CHECKED BY: C. TRIPP

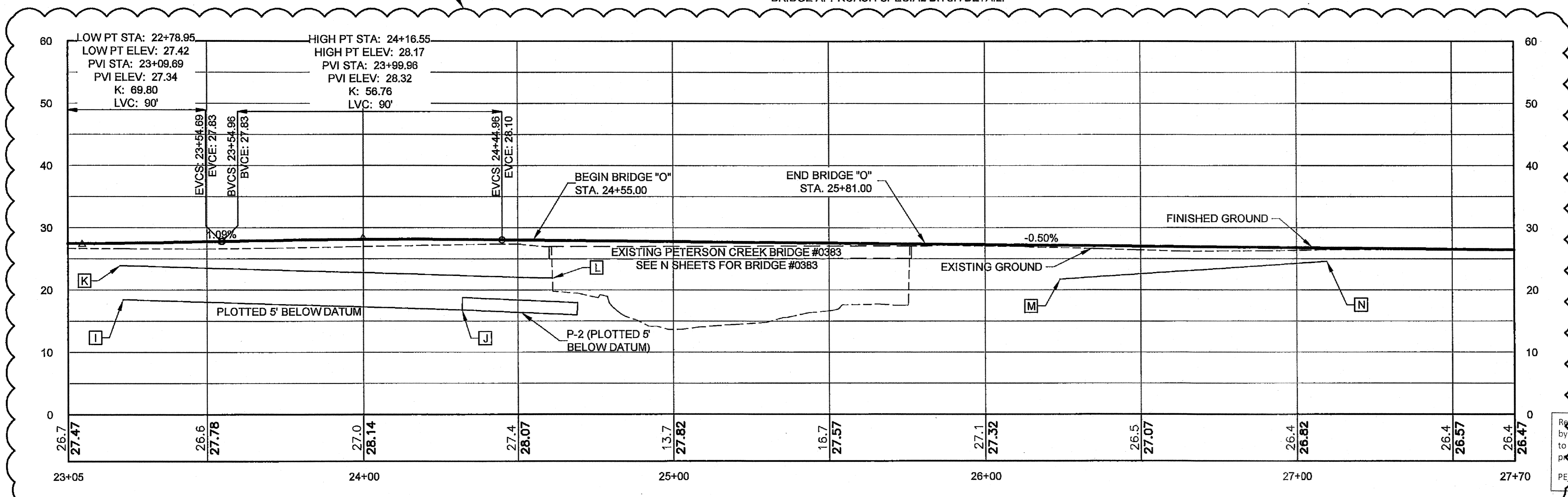
STATE OF ALASKA  
 49th  
 Charles M. Tripp  
 CE-9613  
 REGISTERED PROFESSIONAL ENGINEER  
 1/22/15

DESIGNED BY: L. CHAMBERS  
 DRAWN BY: L. CHAMBERS

STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION  
 & PUBLIC FACILITIES  
 SOUTHEAST REGION

AMALGA HARBOR RD &  
 BRIDGES RECONSTRUCTION &  
 REPLACEMENT  
 PROJECT #69684

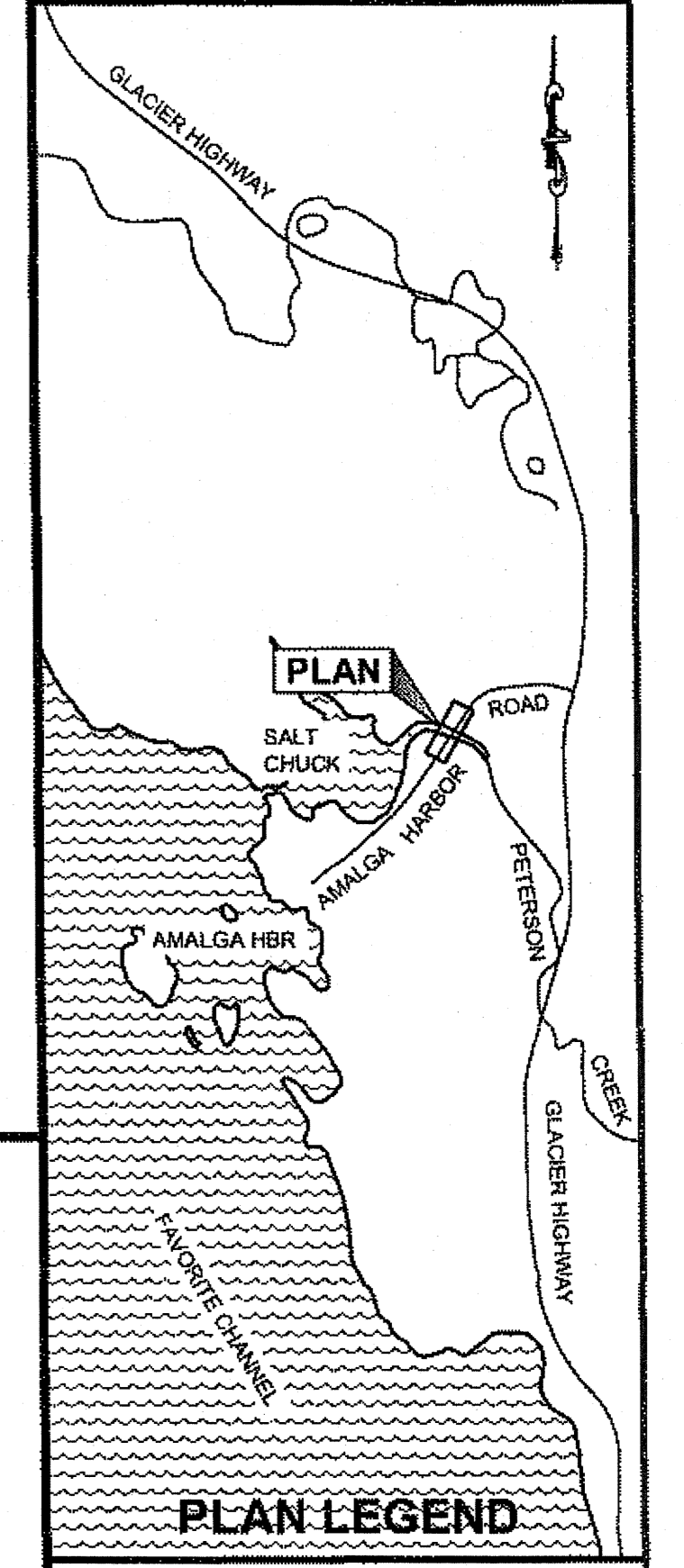
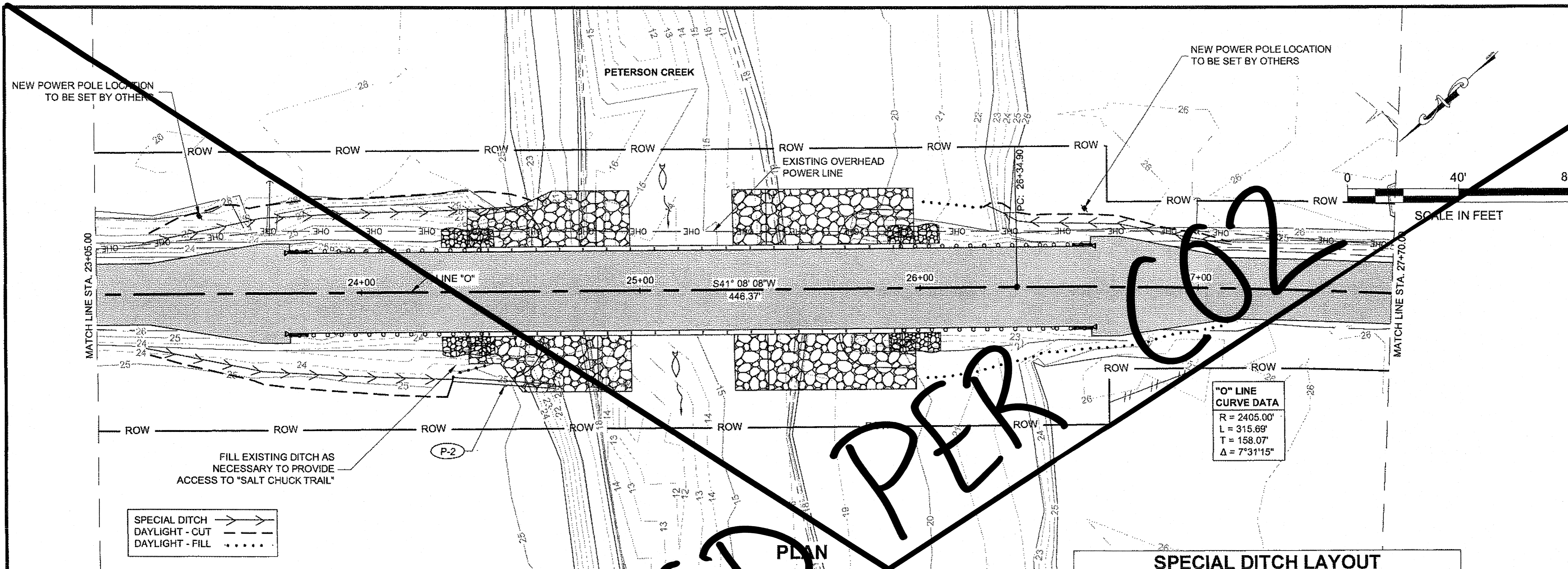
PLAN & PROFILE	
PROJECT DESIGNATION	
69684/ BH-0950(1)	
STATE	YEAR
ALASKA	2013
SHEET NUMBER	TOTAL SHEETS
F4	55



Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.  
 PE: [Signature] Date 01.08.2015

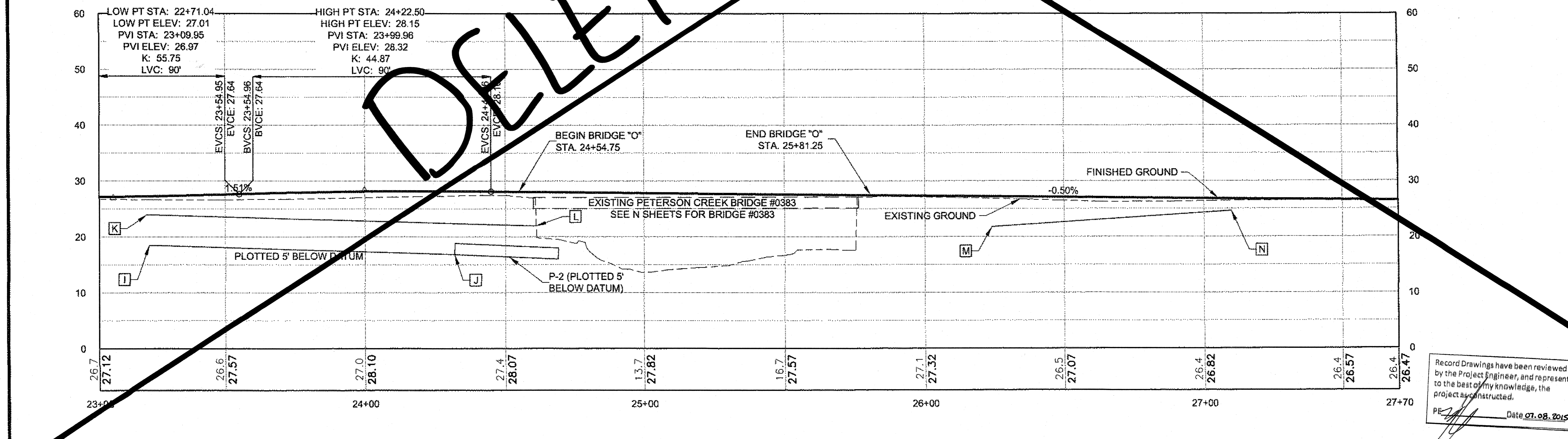
PROFILE

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS



NOTE:  
 1. STATION OFFSETS GIVEN IN THE SPECIAL DITCH LAYOUT TABLE ARE APPROXIMATE. PROVIDE A SMOOTH TRANSITION BETWEEN THE EXISTING DITCH & THE SPECIAL DITCH. SEE SHEET 51 FOR BRIDGE APPROACH SPECIAL DITCH DETAIL.

	"O" STA	OFFSET (FT)	ELEV. (FT)	REMARKS
I	23+23	18.50 RT	23.47	PLOTTED 5' BELOW DATUM
J	24+32	30.00 RT	21.80	PLOTTED 5' BELOW DATUM
K	23+22	17.50 LT	23.95	
L	24+61	29.50 LT	21.90	
M	26+24	28.00 LT	21.75	
N	27+11	14.50 LT	24.60	



CHECKED BY: C. TRIPP

STATE OF ALASKA  
 49th  
 Charles M. Tripp  
 CE-9613  
 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: L. CHAMBERS  
 DRAWN BY: L. CHAMBERS

STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION  
 & PUBLIC FACILITIES  
 SOUTHEAST REGION

AMALGA HARBOR RD &  
 BRIDGES RECONSTRUCTION &  
 REPLACEMENT  
 PROJECT #69684

PLAN & PROFILE

PROJECT DESIGNATION  
 69684/BH-0950(1)

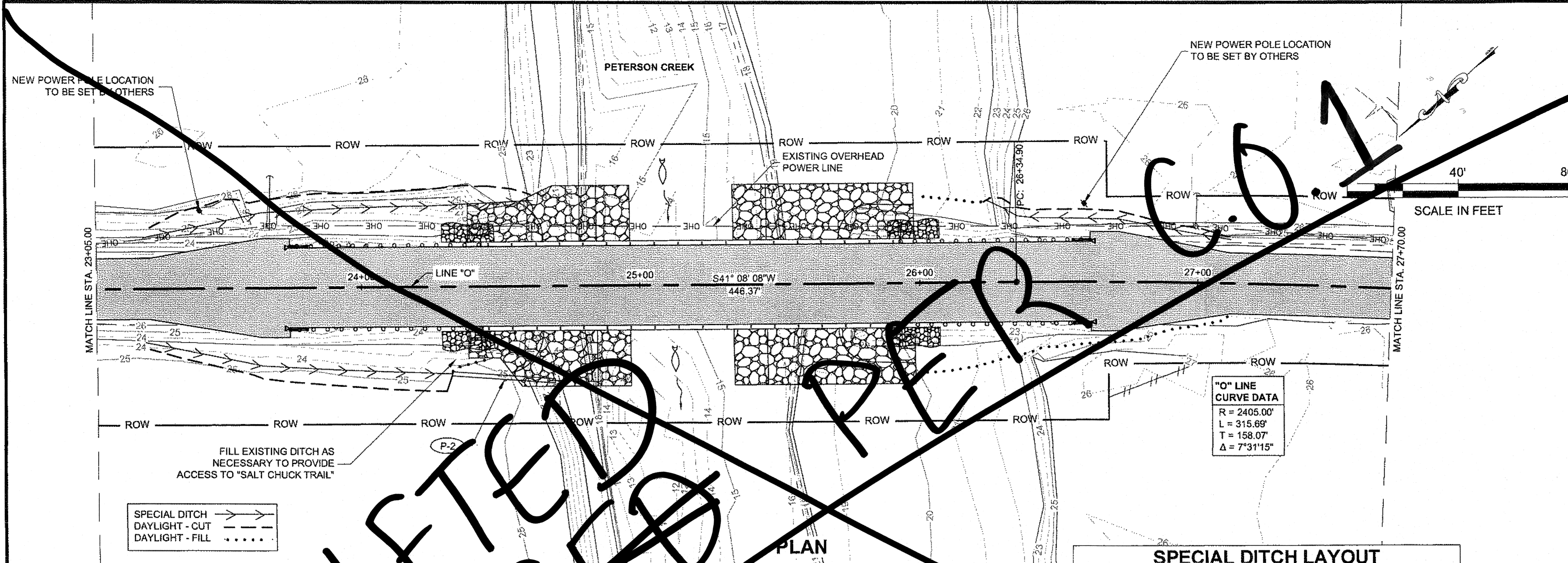
STATE ALASKA  
 YEAR 2013

SHEET NUMBER F4  
 TOTAL SHEETS 55

DELETED PER CON

PROFILE

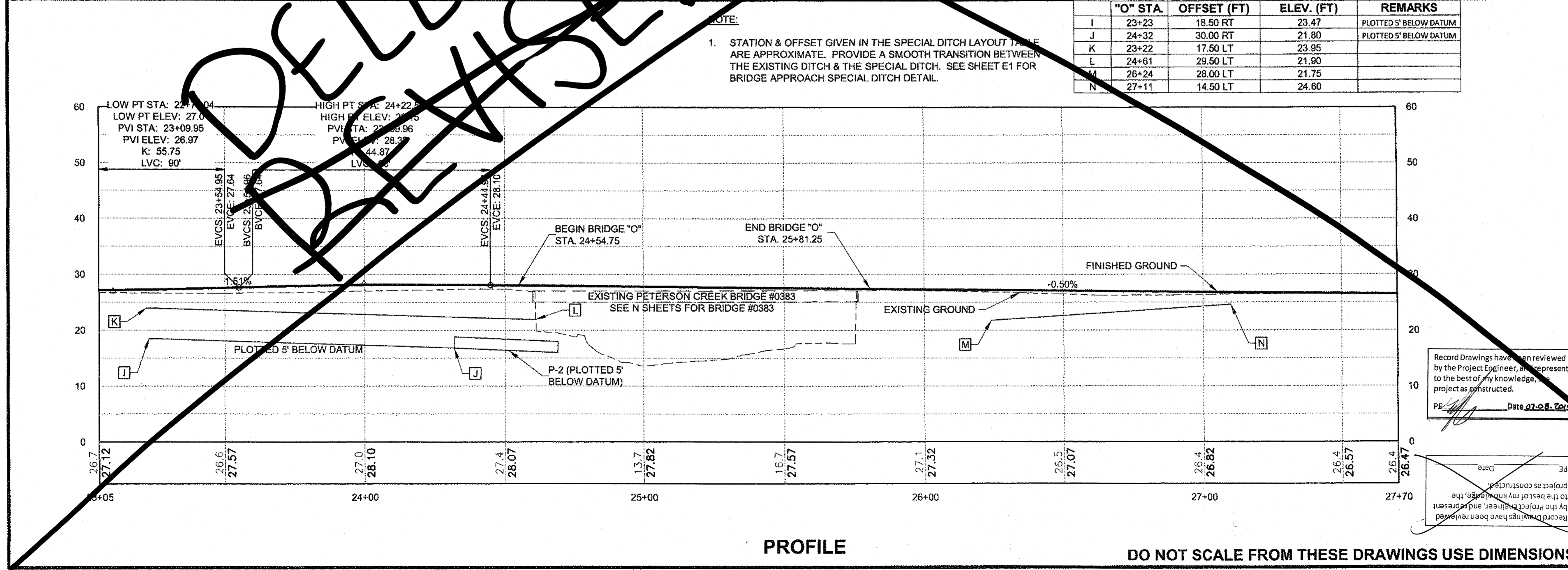
DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS



**SPECIAL DITCH LAYOUT**

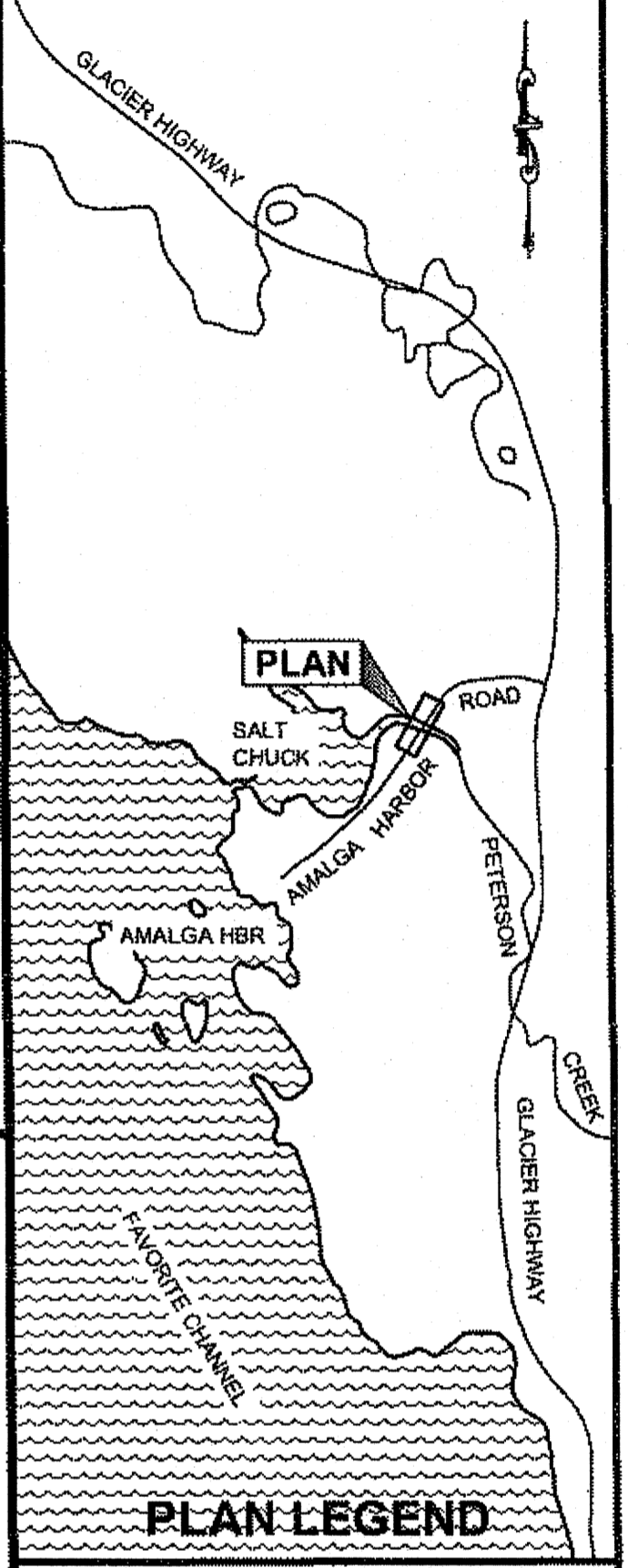
"O" STA.	OFFSET (FT)	ELEV. (FT)	REMARKS
I	23+23	18.50 RT	23.47 PLOTTED 5' BELOW DATUM
J	24+32	30.00 RT	21.80 PLOTTED 5' BELOW DATUM
K	23+22	17.50 LT	23.95
L	24+61	29.50 LT	21.90
M	26+24	28.00 LT	21.75
N	27+11	14.50 LT	24.60

NOTE:  
 1. STATION & OFFSET GIVEN IN THE SPECIAL DITCH LAYOUT TABLE ARE APPROXIMATE. PROVIDE A SMOOTH TRANSITION BETWEEN THE EXISTING DITCH & THE SPECIAL DITCH. SEE SHEET E1 FOR BRIDGE APPROACH SPECIAL DITCH DETAIL.



PROFILE

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS



CHECKED BY: C. TRIPP

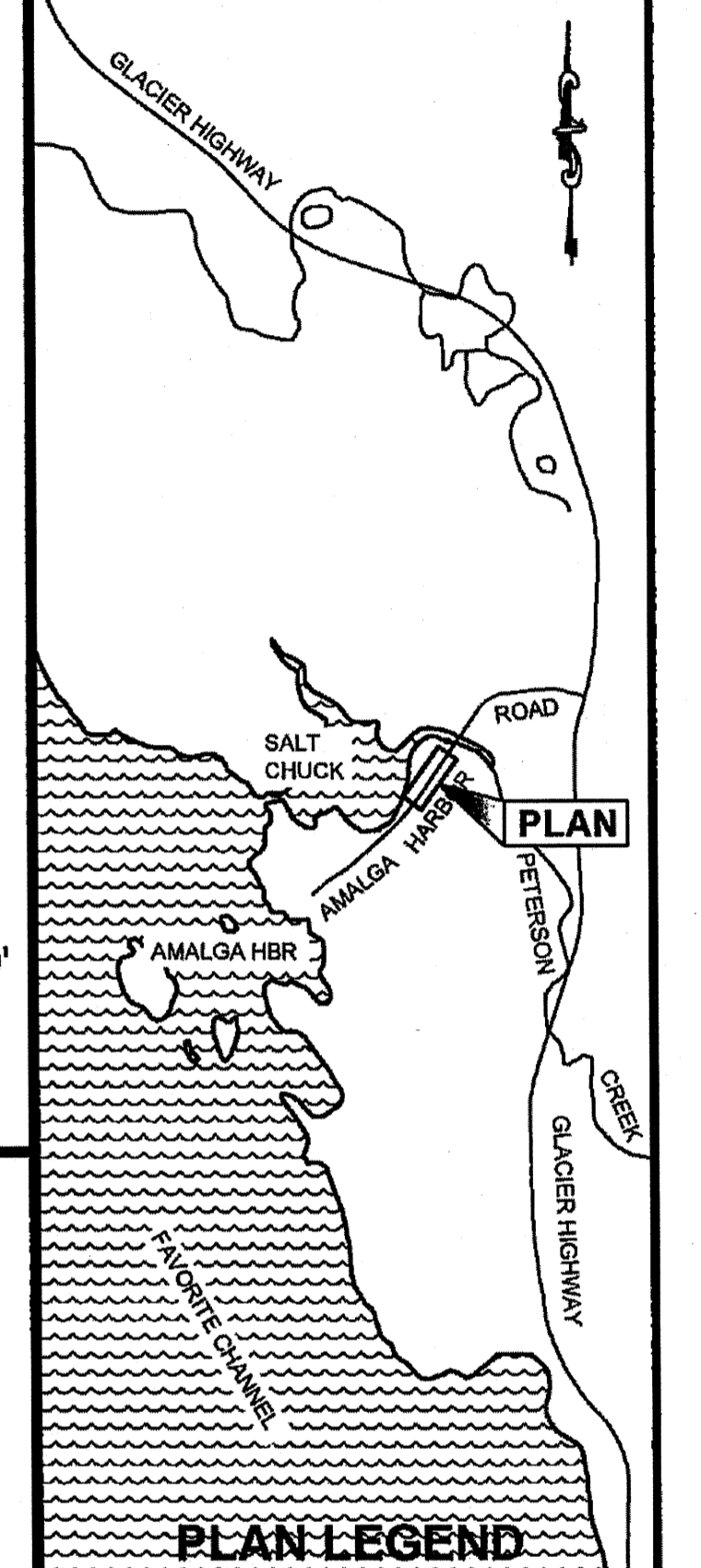
DESIGNED BY: L. CHAMBERS  
 DRAWN BY: L. CHAMBERS  
 STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION  
 & PUBLIC FACILITIES  
 SOUTHEAST REGION  
**AMALGA HARBOR RD & BRIDGES RECONSTRUCTION & REPLACEMENT PROJECT #69684**

**PLAN & PROFILE**  
 PROJECT DESIGNATION  
**69684 BH-0950(1)**  
 STATE: ALASKA YEAR: 2013  
 SHEET NUMBER: F4 TOTAL SHEETS: 55

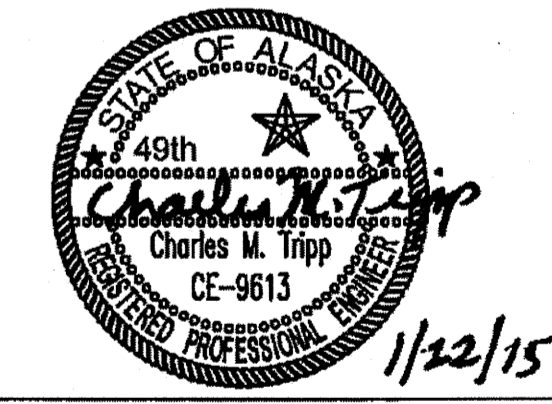
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CHAMBERS, LUCAS M (DOT)  
 TAB: F5 Thursday, January 08, 2015 10:55:41 AM

ADDENDUM NUMBER		
ATTACHMENT NUMBER		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION
1	01 08 15	PROFILE MODIFICATION



CHECKED BY: C. TRIPP

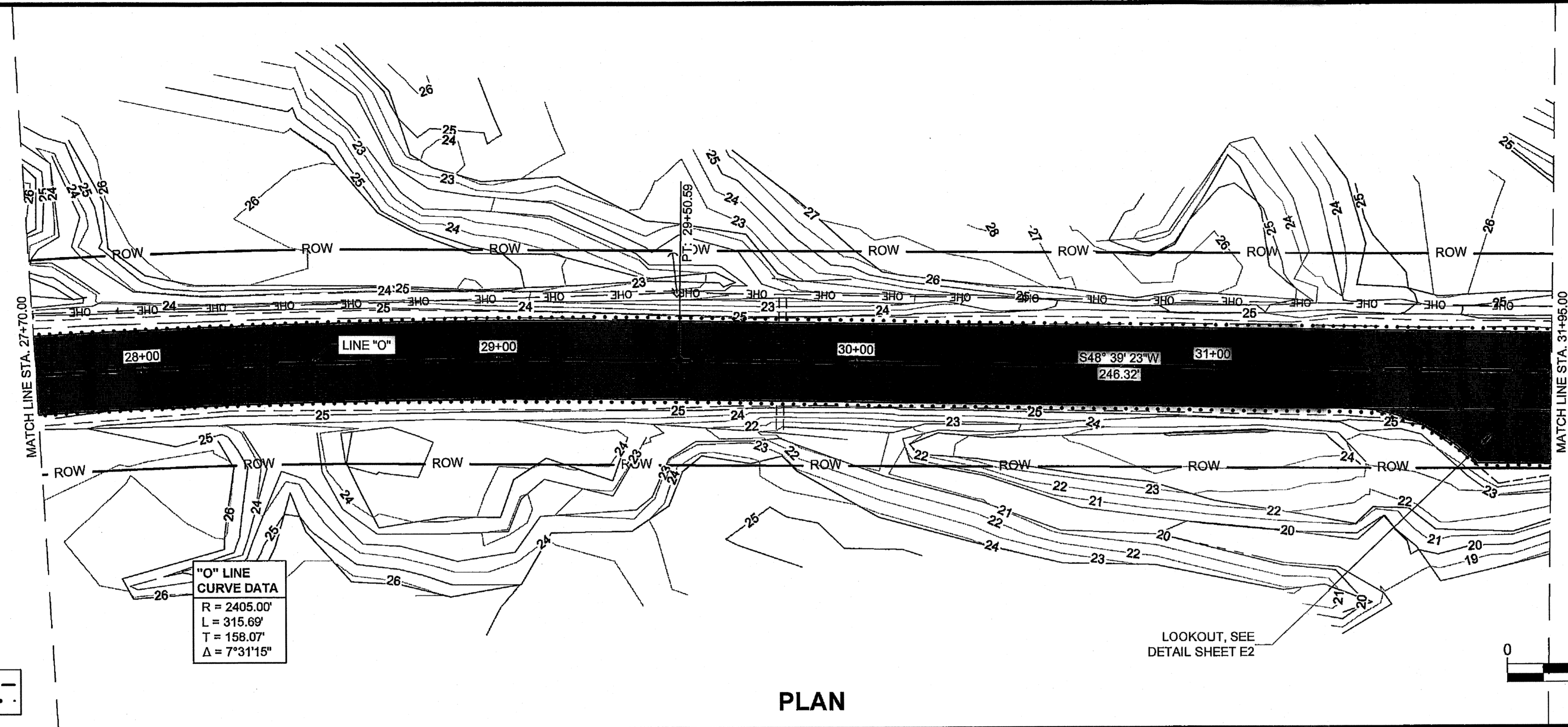


DESIGNED BY: L. CHAMBERS  
 DRAWN BY: L. CHAMBERS

STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION  
 & PUBLIC FACILITIES  
 SOUTHEAST REGION  
 AMALGA HARBOR RD &  
 BRIDGES RECONSTRUCTION &  
 REPLACEMENT  
 PROJECT #69684

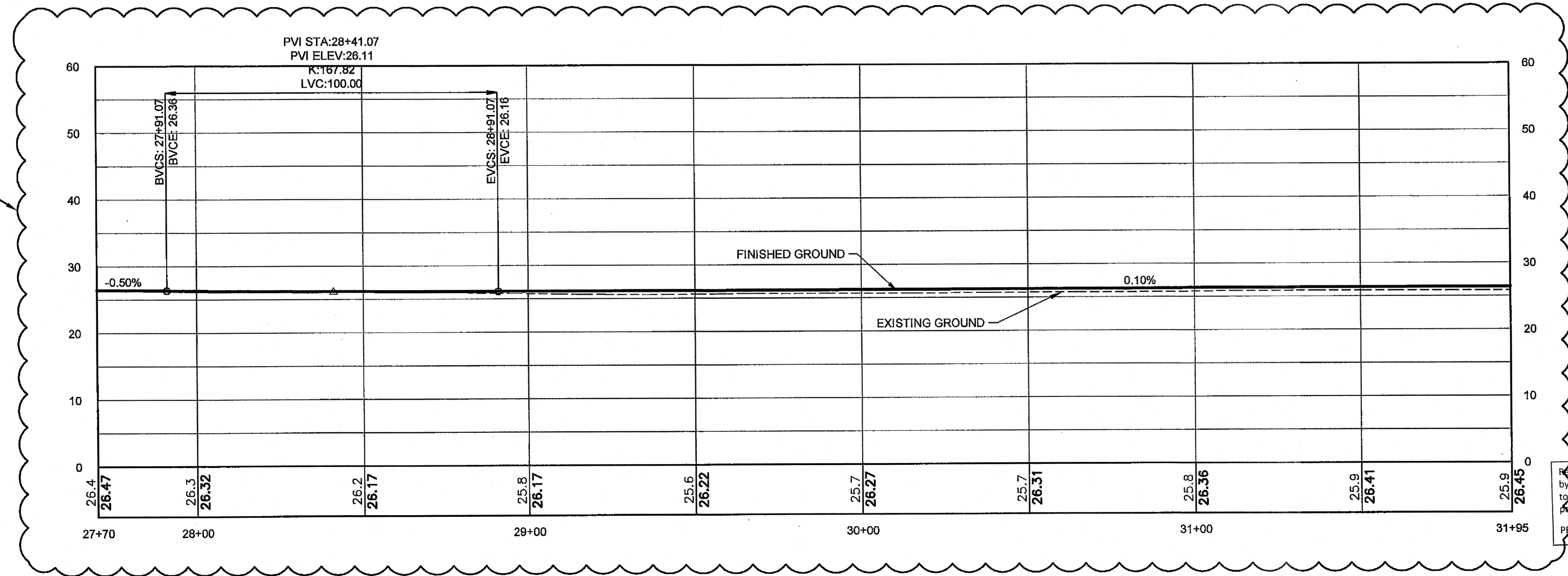
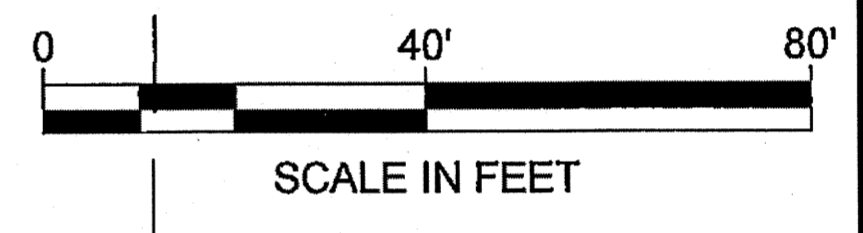
**PLAN & PROFILE**

PROJECT DESIGNATION	
<b>69684/ BH-0950(1)</b>	
STATE	YEAR
<b>ALASKA</b>	<b>2013</b>
SHEET NUMBER	TOTAL SHEETS
<b>F5</b>	<b>55</b>



DAYLIGHT - CUT - - - -  
 DAYLIGHT - FILL - . . . . .

**PLAN**

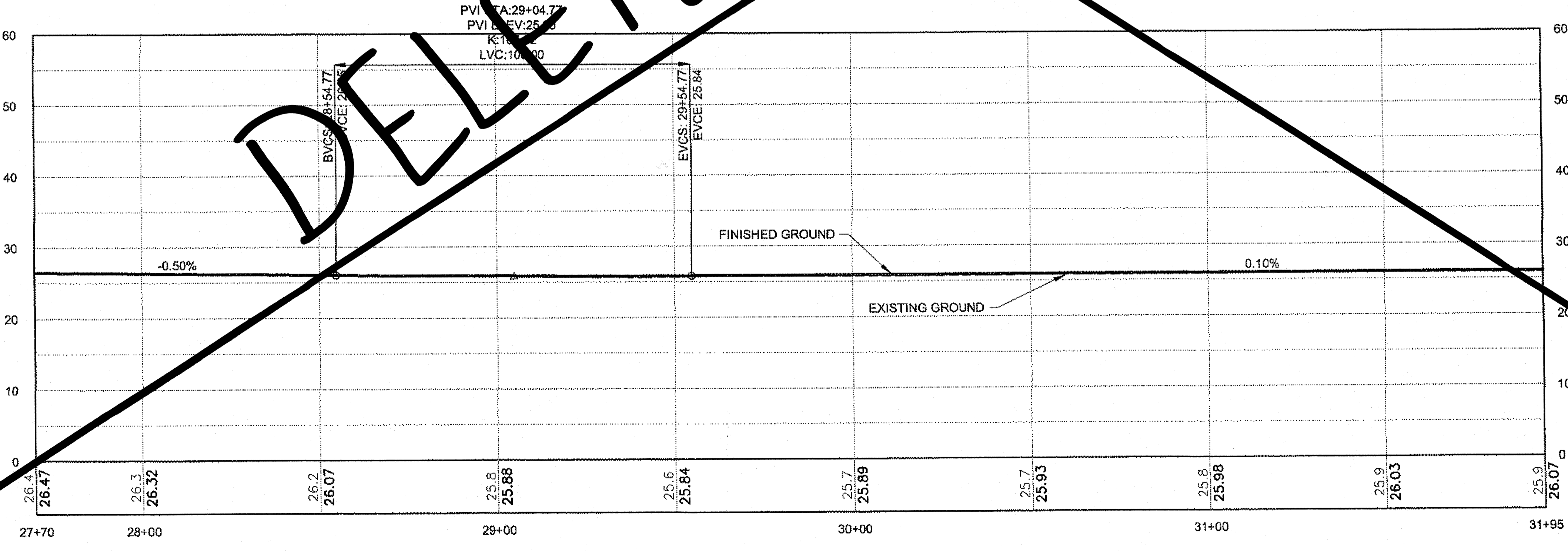
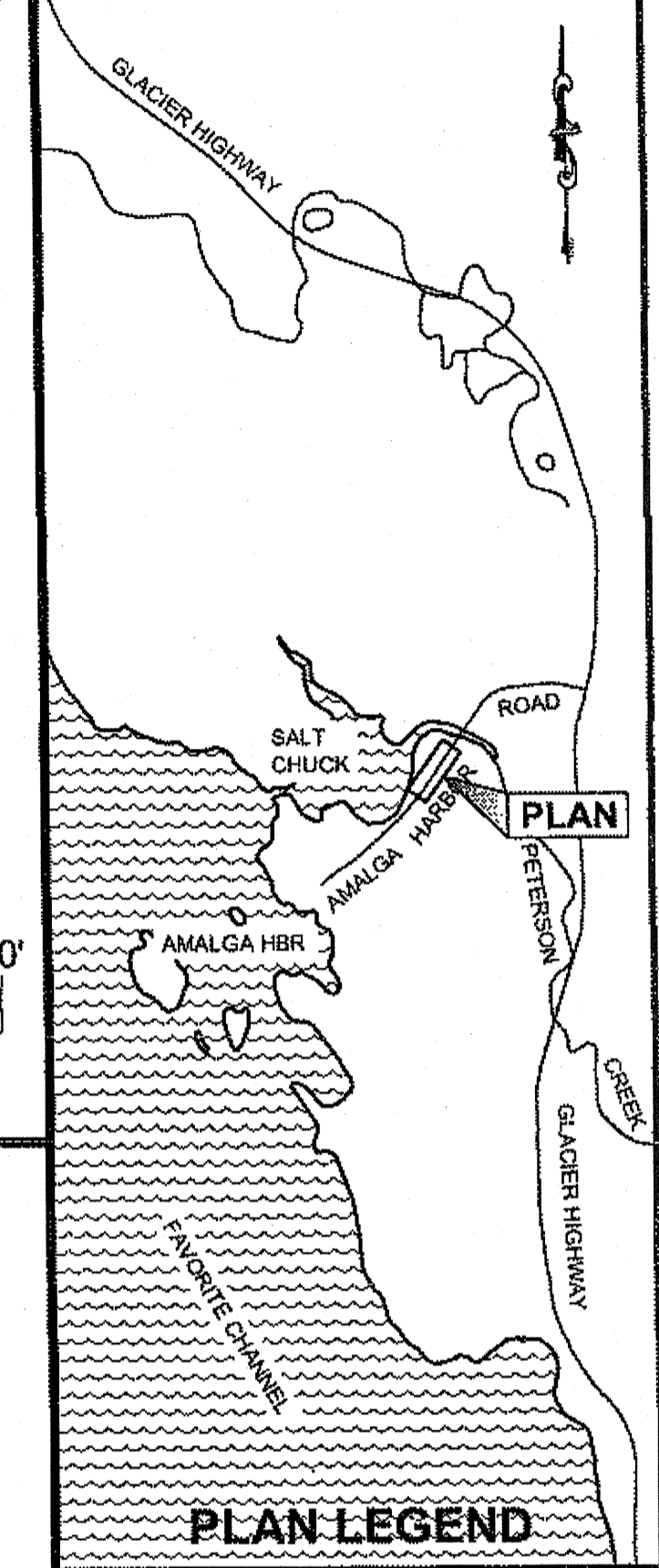
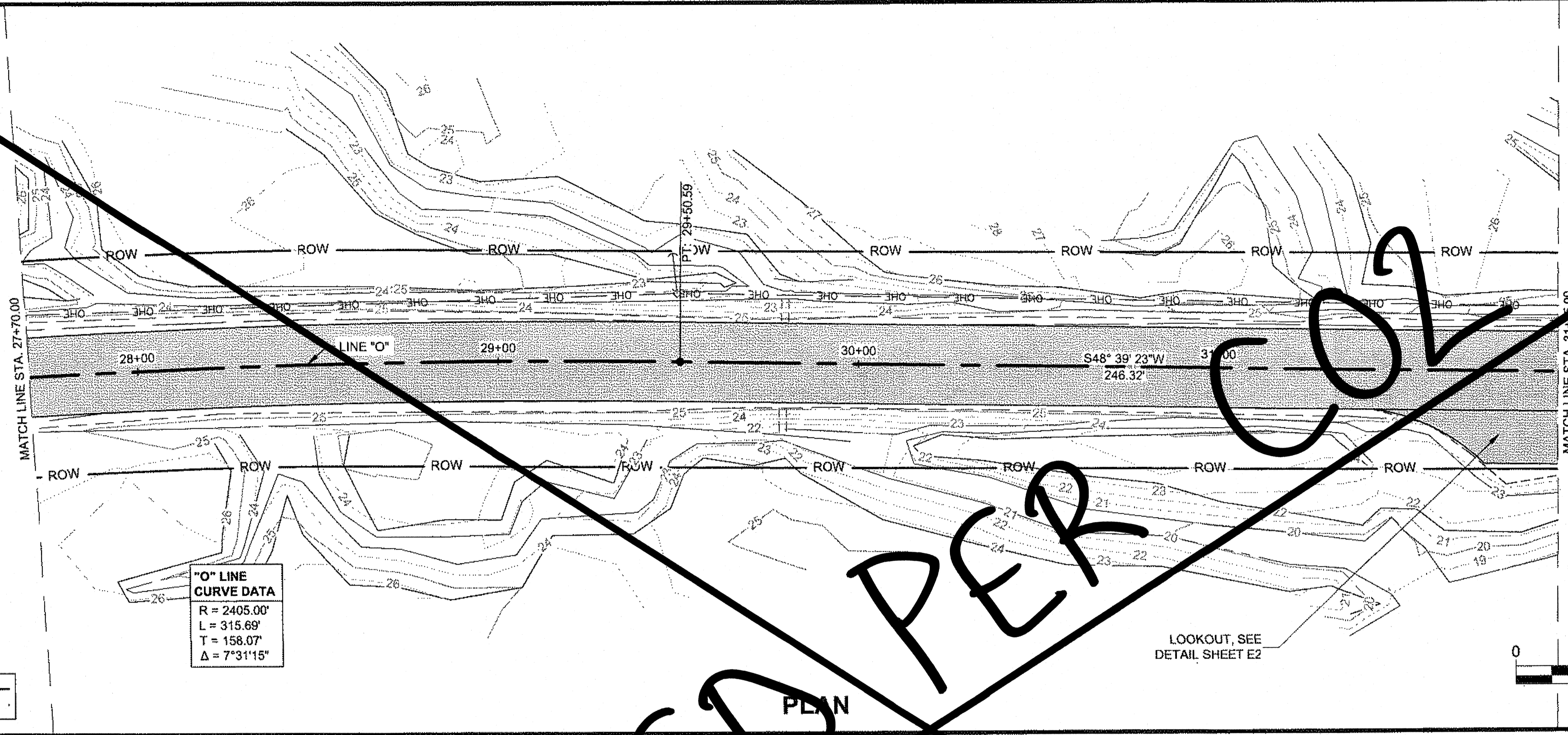


**PROFILE**

**DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS**

Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.  
 Date 01.08.2015

ADDITIONAL NUMBER		
ATTACHMENT NUMBER		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION



Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.  
 PE: *[Signature]* Date: 07.08.2015

CHECKED BY: C. TRIPP

**STATE OF ALASKA**  
 49th  
*[Signature]*  
 Charles M. Tripp  
 CE-9613  
 REGISTERED PROFESSIONAL ENGINEER  
 10/9/2013

DESIGNED BY: L. CHAMBERS  
 DRAWN BY: L. CHAMBERS

STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION  
 & PUBLIC FACILITIES  
 SOUTHEAST REGION

AMALGA HARBOR RD &  
 BRIDGES RECONSTRUCTION &  
 REPLACEMENT  
 PROJECT #69684

**PLAN & PROFILE**

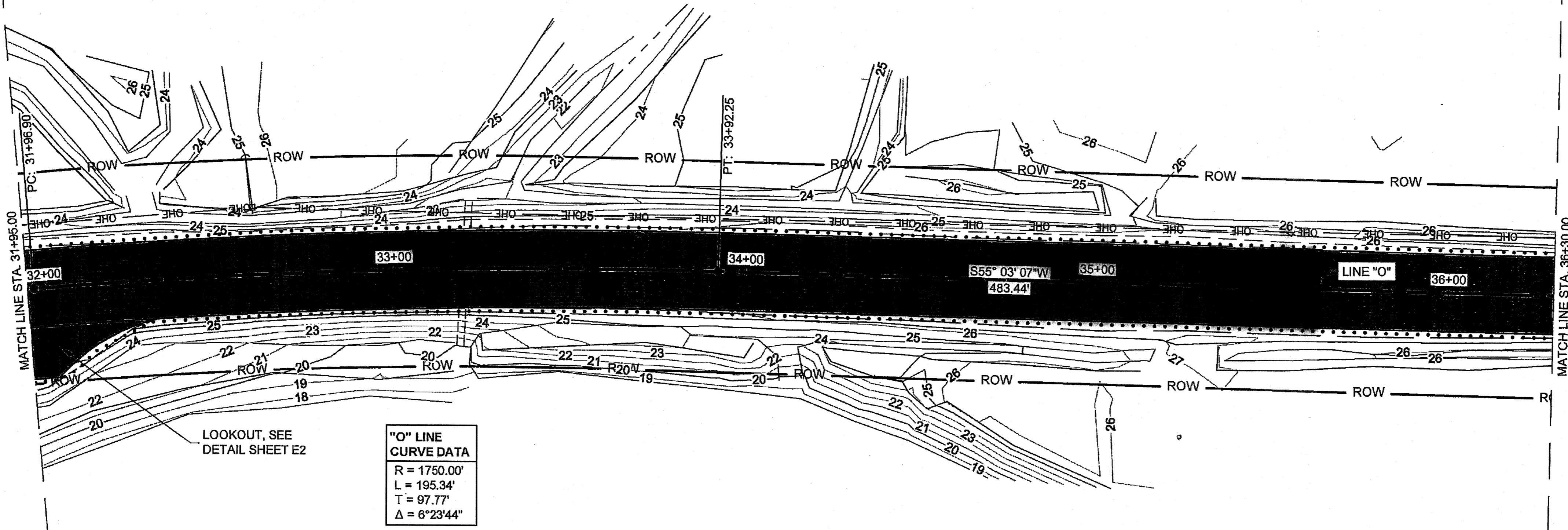
PROJECT DESIGNATION	
69684/ BH-0950(1)	
STATE	YEAR
ALASKA	2013
SHEET NUMBER	TOTAL SHEETS
F5	55

**PROFILE**

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHAMBERS, LUCAS M (DOT)  
 TAB: F6 Thursday, January 08, 2015 10:55:5 AM

ADDENDUM NUMBER		
ATTACHMENT NUMBER		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION
1	01 08 15	PROFILE MODIFICATION

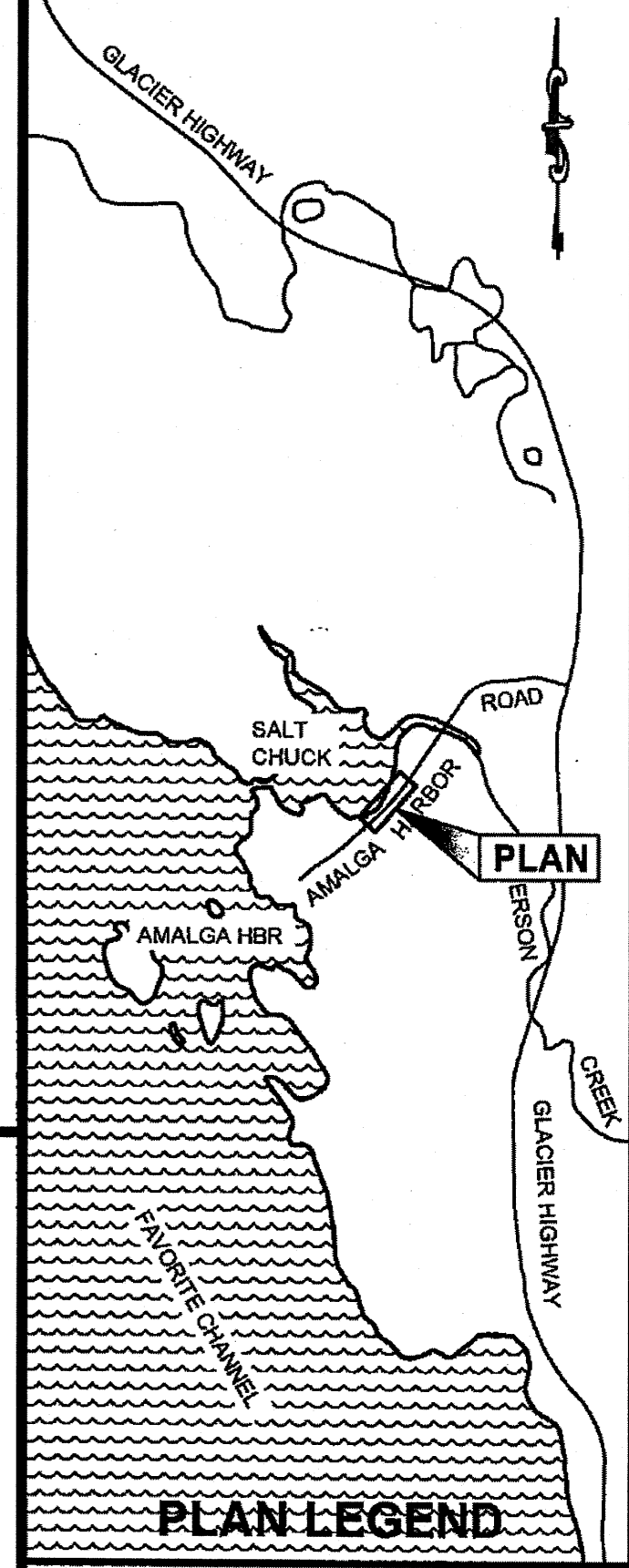
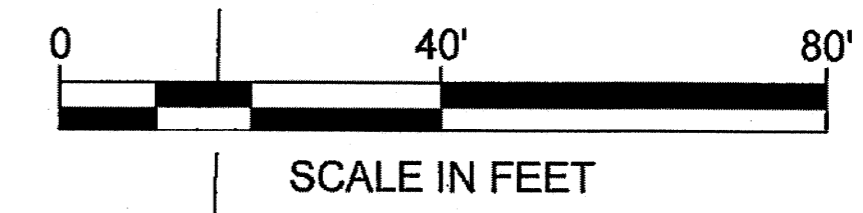


"O" LINE CURVE DATA

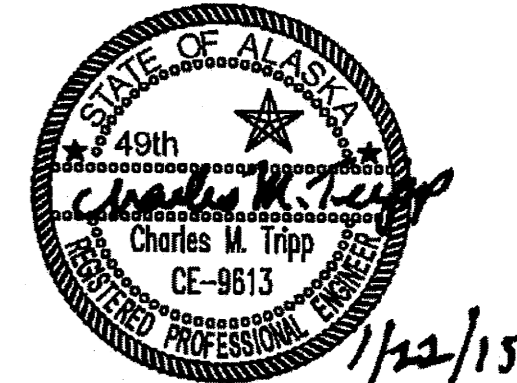
R = 1750.00'
L = 195.34'
T = 97.77'
Δ = 6°23'44"

DAYLIGHT - CUT - - - -  
 DAYLIGHT - FILL - . . . .

PLAN



CHECKED BY: C. TRIPP

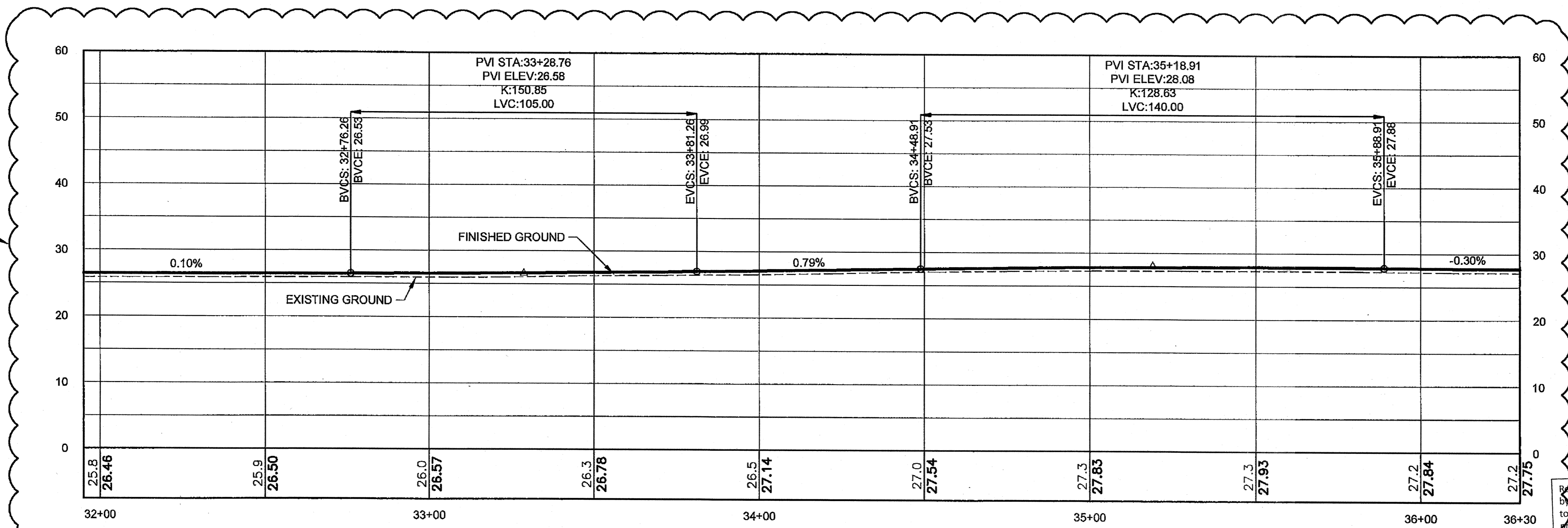


DESIGNED BY: L. CHAMBERS  
 DRAWN BY: L. CHAMBERS

STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION  
 & PUBLIC FACILITIES  
 SOUTHEAST REGION  
 AMALGA HARBOR RD &  
 BRIDGES RECONSTRUCTION &  
 REPLACEMENT  
 PROJECT #69684

PLAN & PROFILE

PROJECT DESIGNATION	
69684/ BH-0950(1)	
STATE	YEAR
ALASKA	2013
SHEET NUMBER	TOTAL SHEETS
F6	55

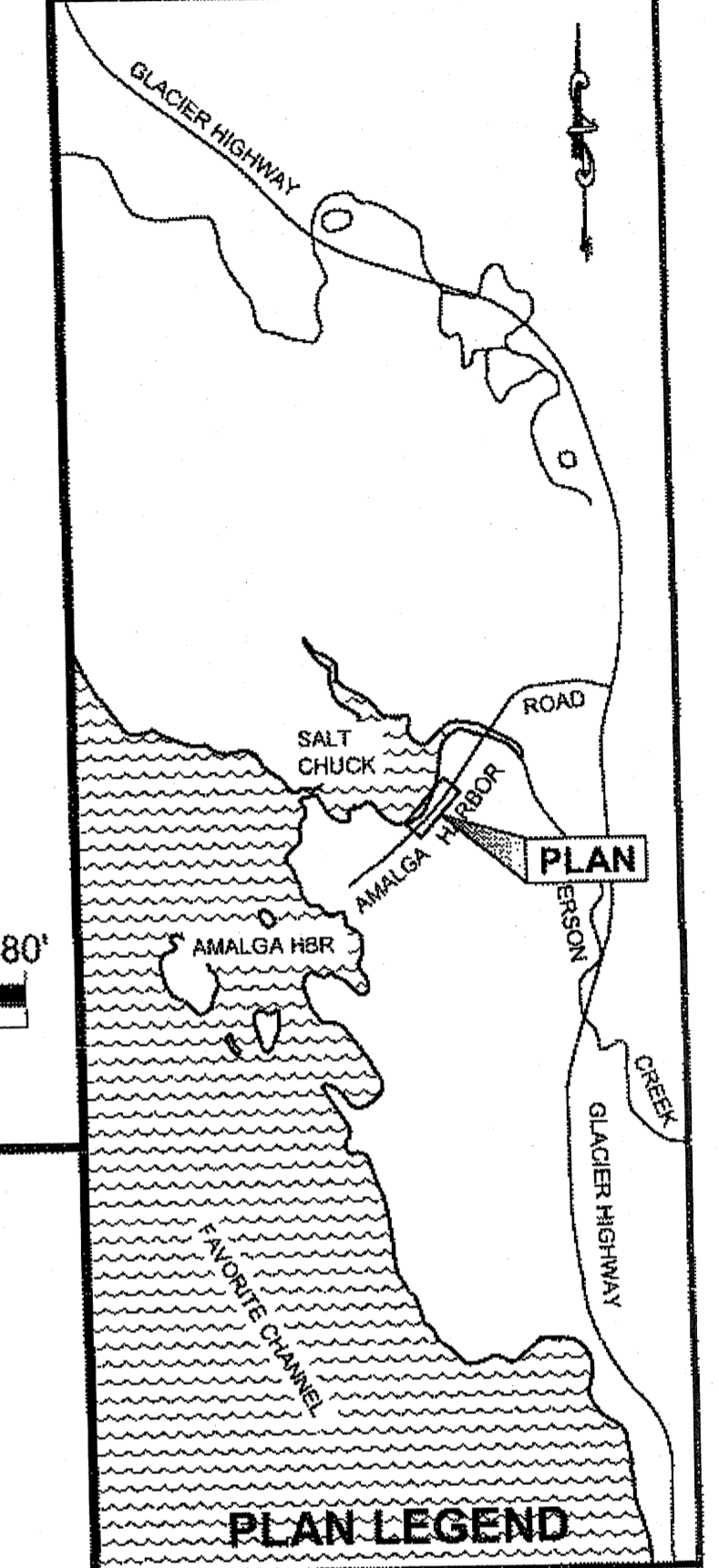


Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.  
 Date 01.08.2015

PROFILE

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

RECORD OF REVISIONS		
No.	DATE	DESCRIPTION



CHECKED BY: C. TRIPP

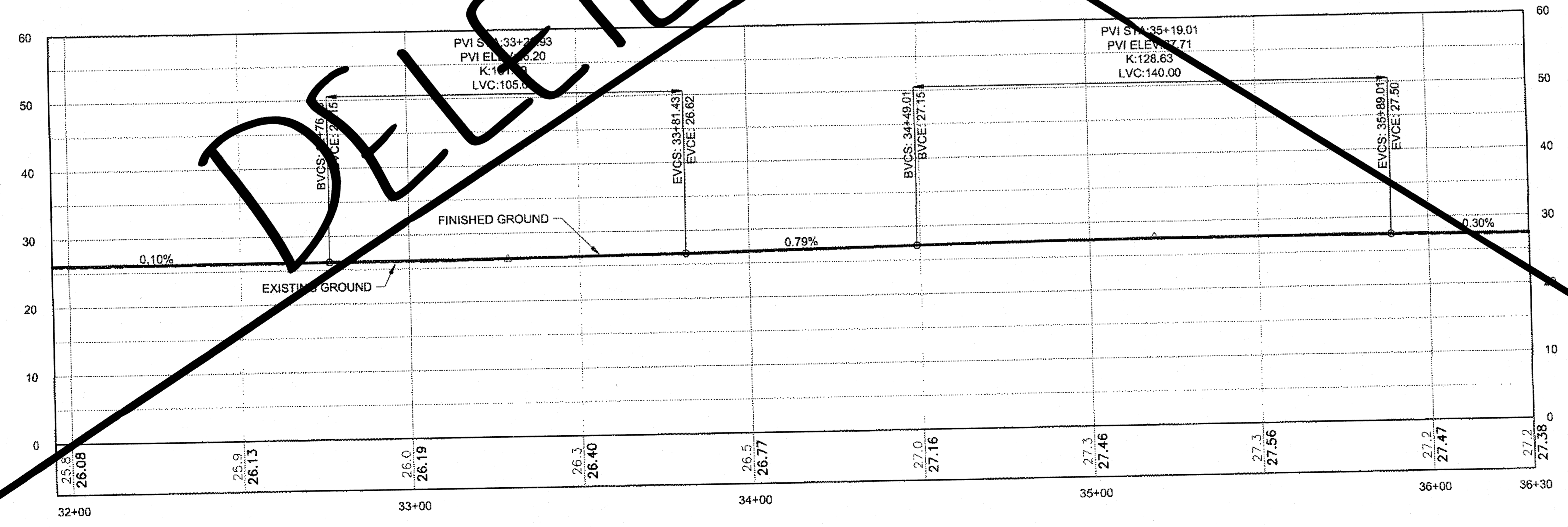
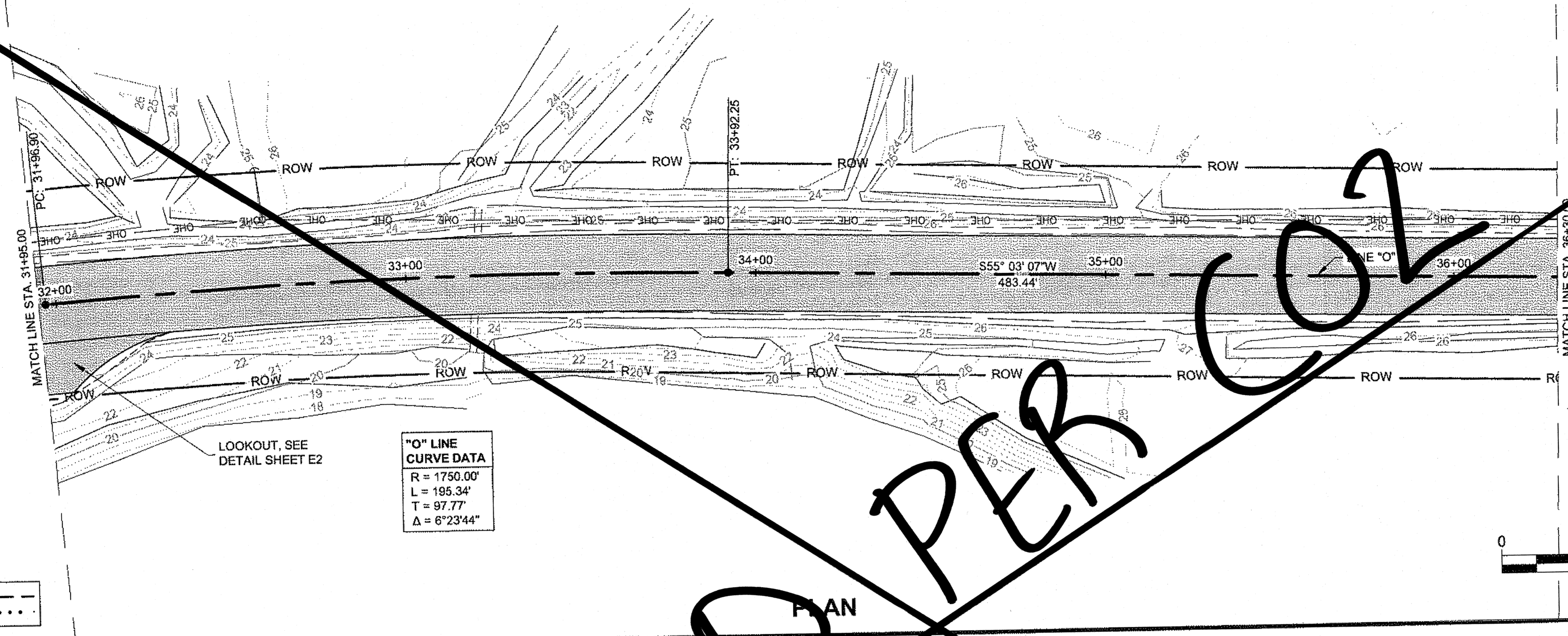
DESIGNED BY: L. CHAMBERS  
 DRAWN BY: L. CHAMBERS

STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION  
 & PUBLIC FACILITIES  
 SOUTHEAST REGION

AMALGA HARBOR RD &  
 BRIDGES RECONSTRUCTION &  
 REPLACEMENT  
 PROJECT #69684

**PLAN & PROFILE**

PROJECT DESIGNATION	
69684/ BH-0950(1)	
STATE	YEAR
ALASKA	2013
SHEET NUMBER	TOTAL SHEETS
F6	55

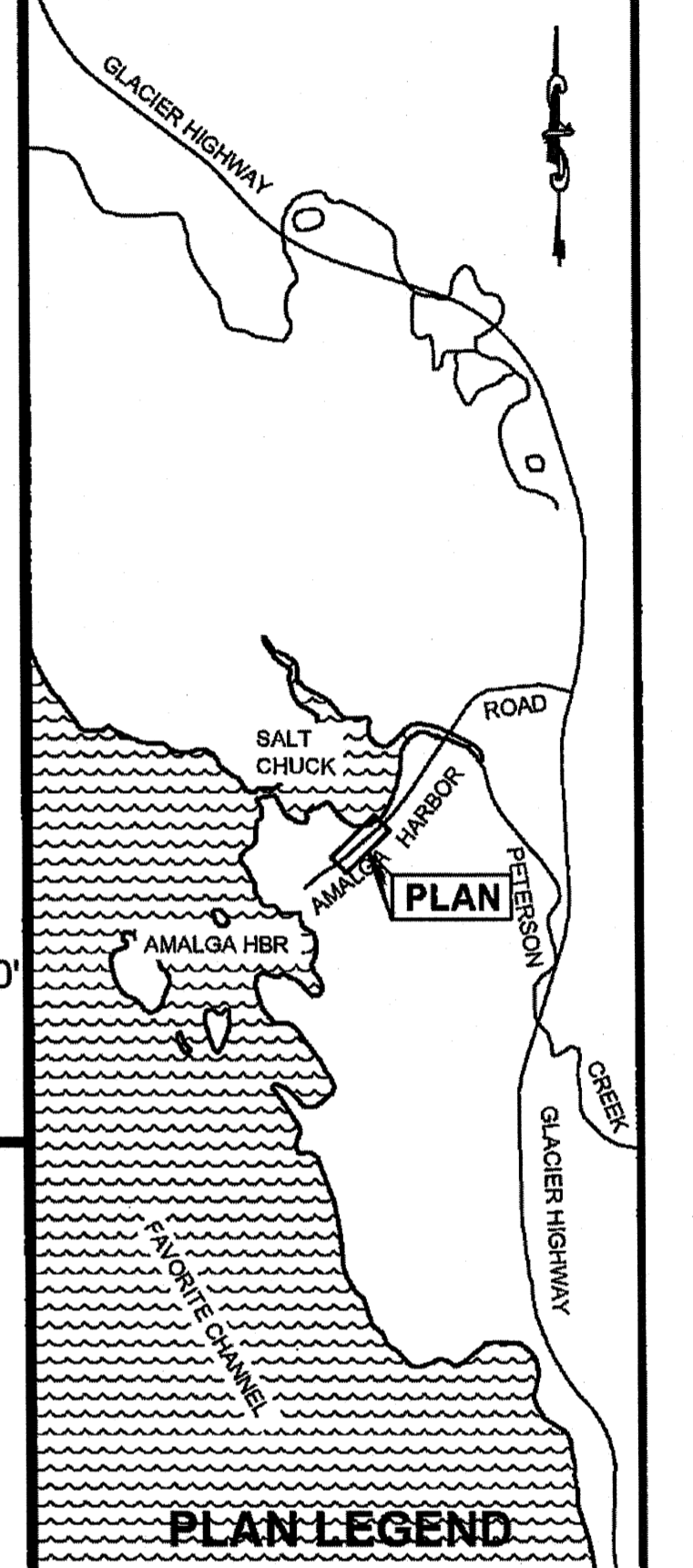
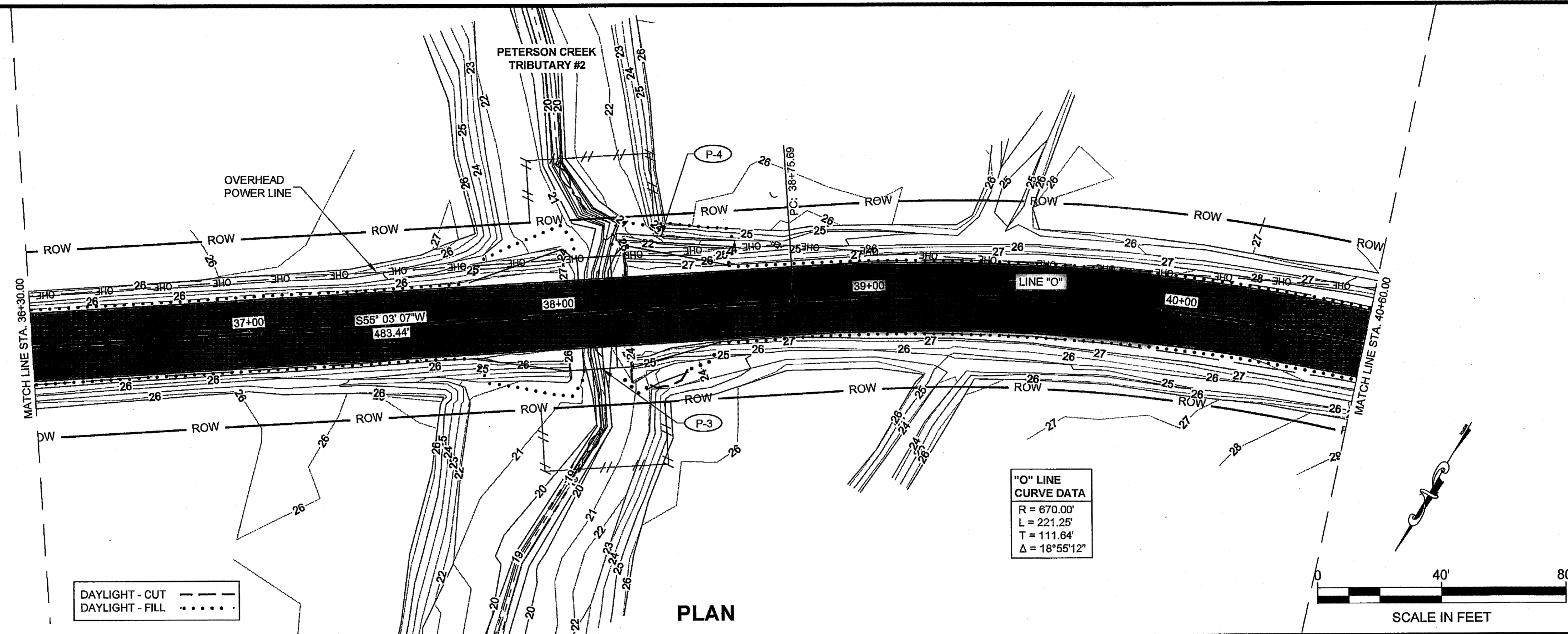


Record Drawings have been reviewed  
 by the Project Engineer, and represent  
 to the best of my knowledge, the  
 project as constructed.  
 PE: [Signature] Date 07.08.2015

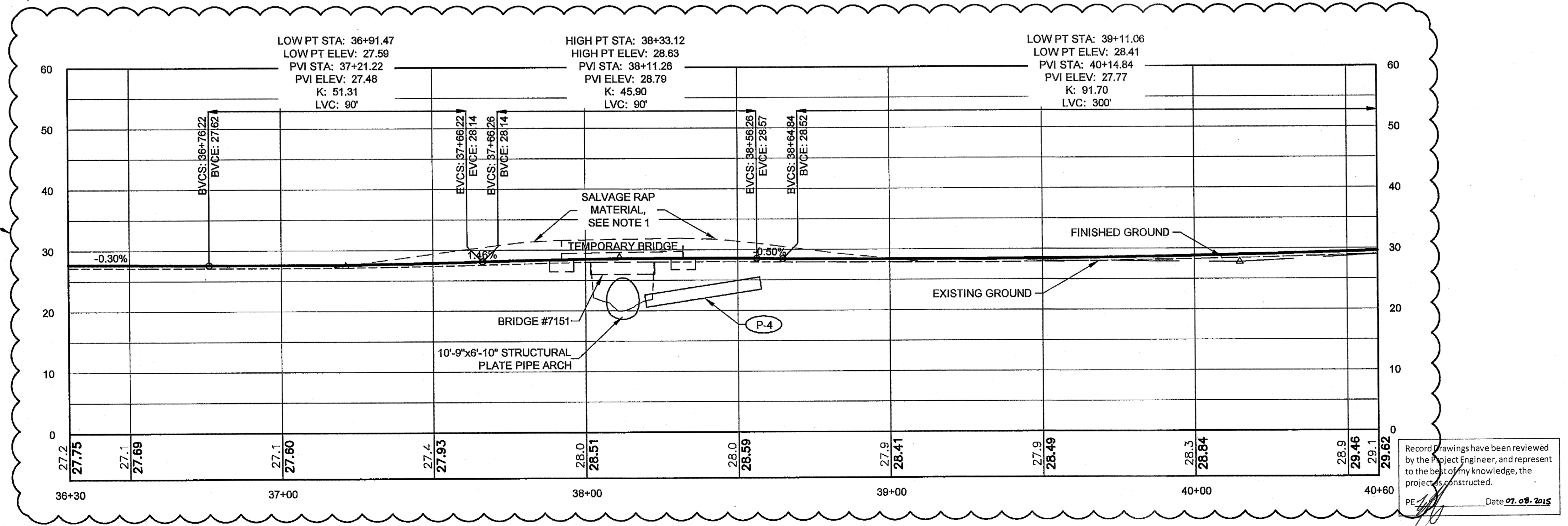
DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

DELETED PER CO2

ADDENDUM NUMBER		
ATTACHMENT NUMBER		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION
1	01 08 15	PROFILE MODIFICATION



- NOTES:
- SALVAGE EXISTING RAP MATERIAL & STOCKPILE ON THE SAGA PARKING LOT. PROVIDE NOTICE TO CBJ ENGINEERING ONE WEEK PRIOR TO STOCKPILING, SEE SECTION 202.



CHECKED BY: C. TRIPP

DESIGNED BY: L. CHAMBERS  
 DRAWN BY: L. CHAMBERS

STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION  
 & PUBLIC FACILITIES  
 SOUTHEAST REGION

AMALGA HARBOR RD &  
 BRIDGES RECONSTRUCTION &  
 REPLACEMENT  
 PROJECT #69684

**PLAN & PROFILE**

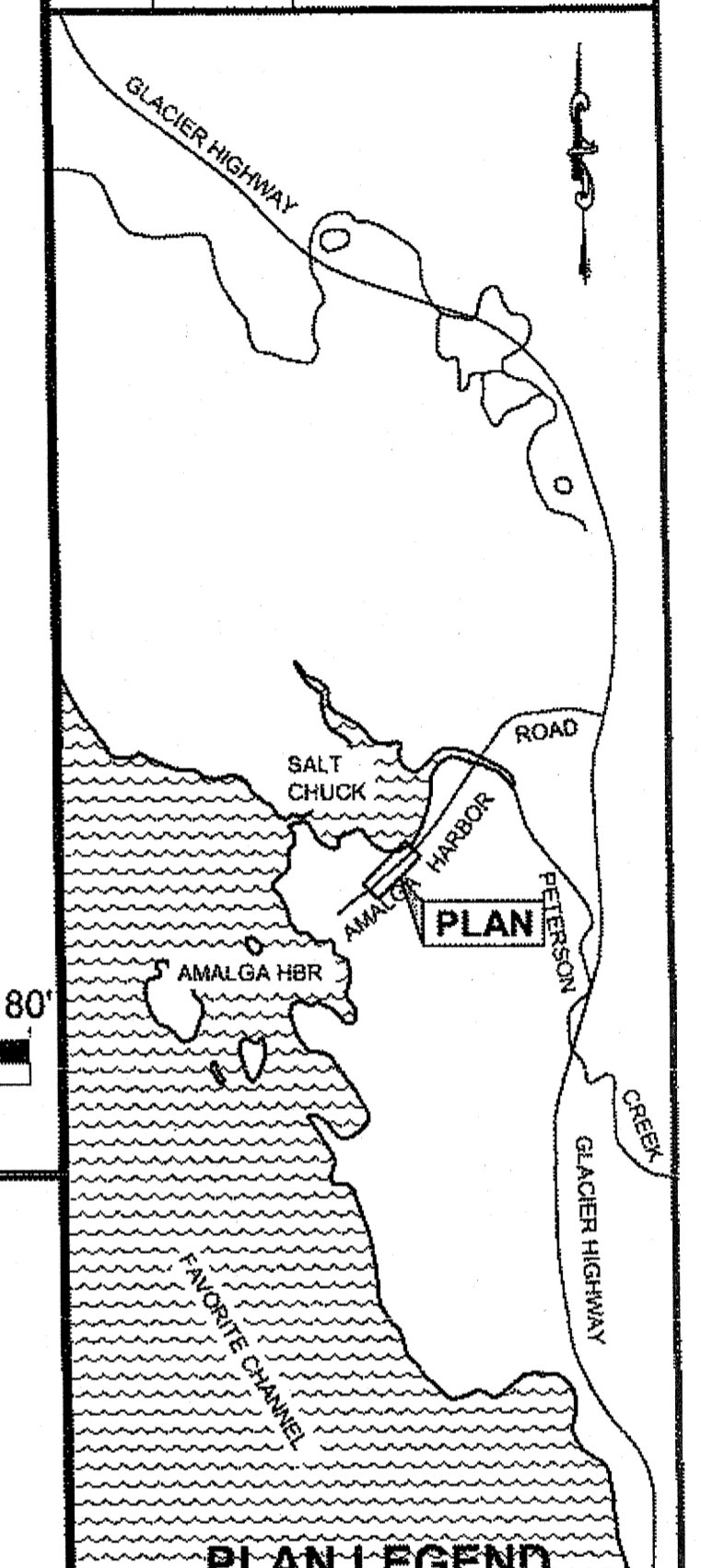
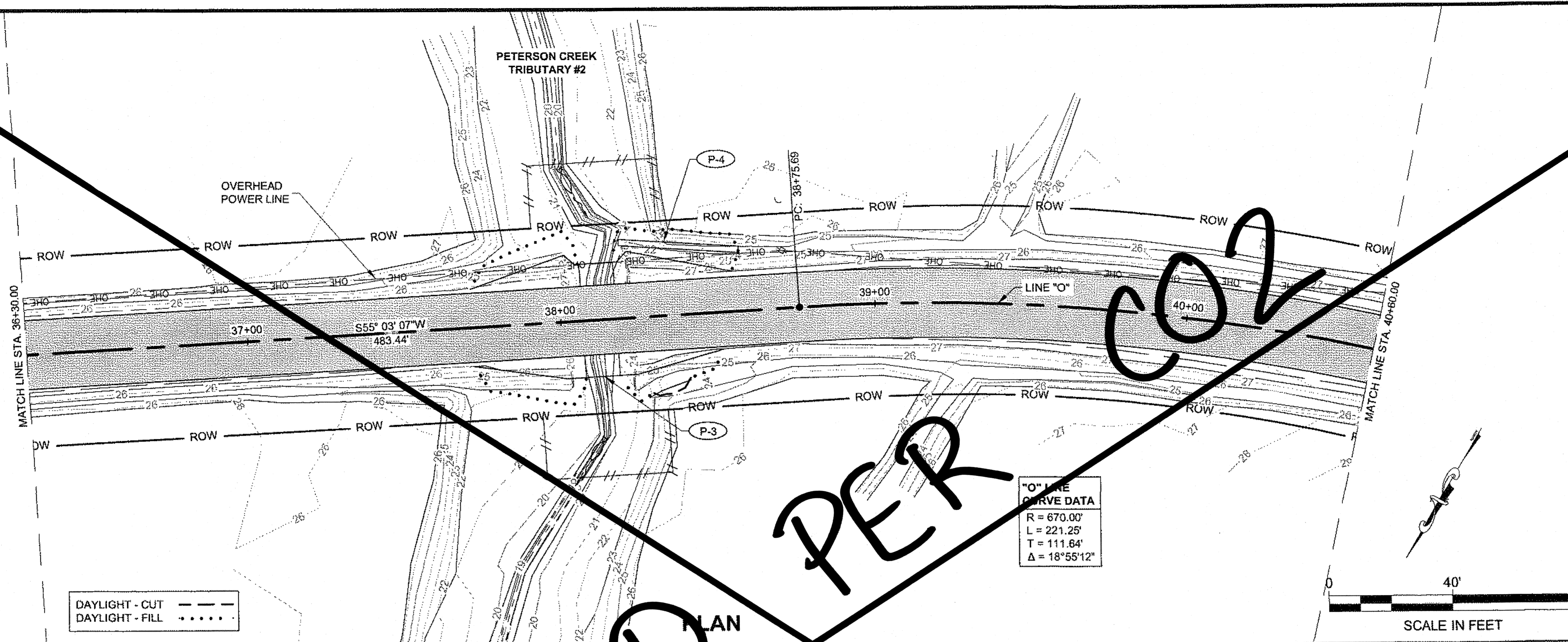
PROJECT DESIGNATION	
69684/ BH-0950(1)	
STATE	YEAR
ALASKA	2013
SHEET NUMBER	TOTAL SHEETS
F7	55

Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the projects constructed.  
 PE: [Signature] Date: 01.08.2015

**PROFILE** DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

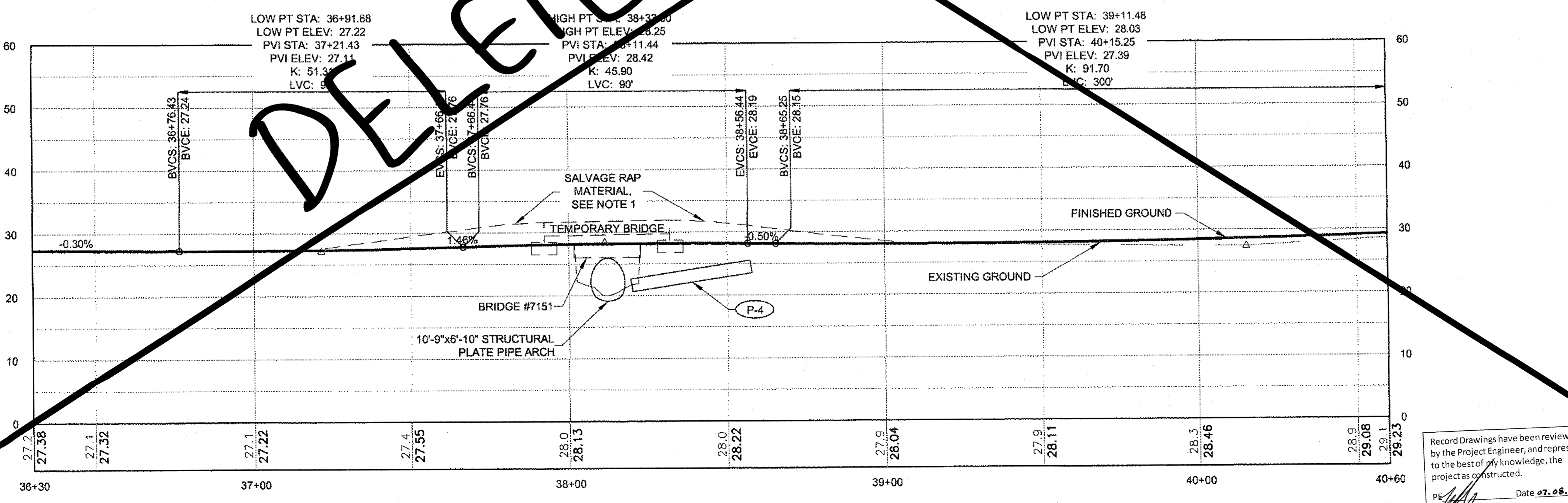
CHAMBERS, LUCAS M (DOT)  
 TAB: F7 Wednesday, October 09, 2013 1:09:44 P  
 ADDENDUM NUMBER  
 ATTACHMENT NUMBER  
 RECORD OF REVISIONS

No.	DATE	DESCRIPTION



NOTES:

1. SALVAGE EXISTING RAP MATERIAL & STOCKPILE ON THE SAGA PARKING LOT. PROVIDE NOTICE TO CBJ ENGINEERING ONE WEEK PRIOR TO STOCKPILING, SEE SECTION 202.



CHECKED BY: C. TRIPP

DESIGNED BY: L. CHAMBERS  
 DRAWN BY: L. CHAMBERS  
 STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION  
 & PUBLIC FACILITIES  
 SOUTHEAST REGION  
 AMALGA HARBOR RD &  
 BRIDGES RECONSTRUCTION &  
 REPLACEMENT  
 PROJECT #69684

**PLAN & PROFILE**

PROJECT DESIGNATION  
**69684/ BH-0950(1)**

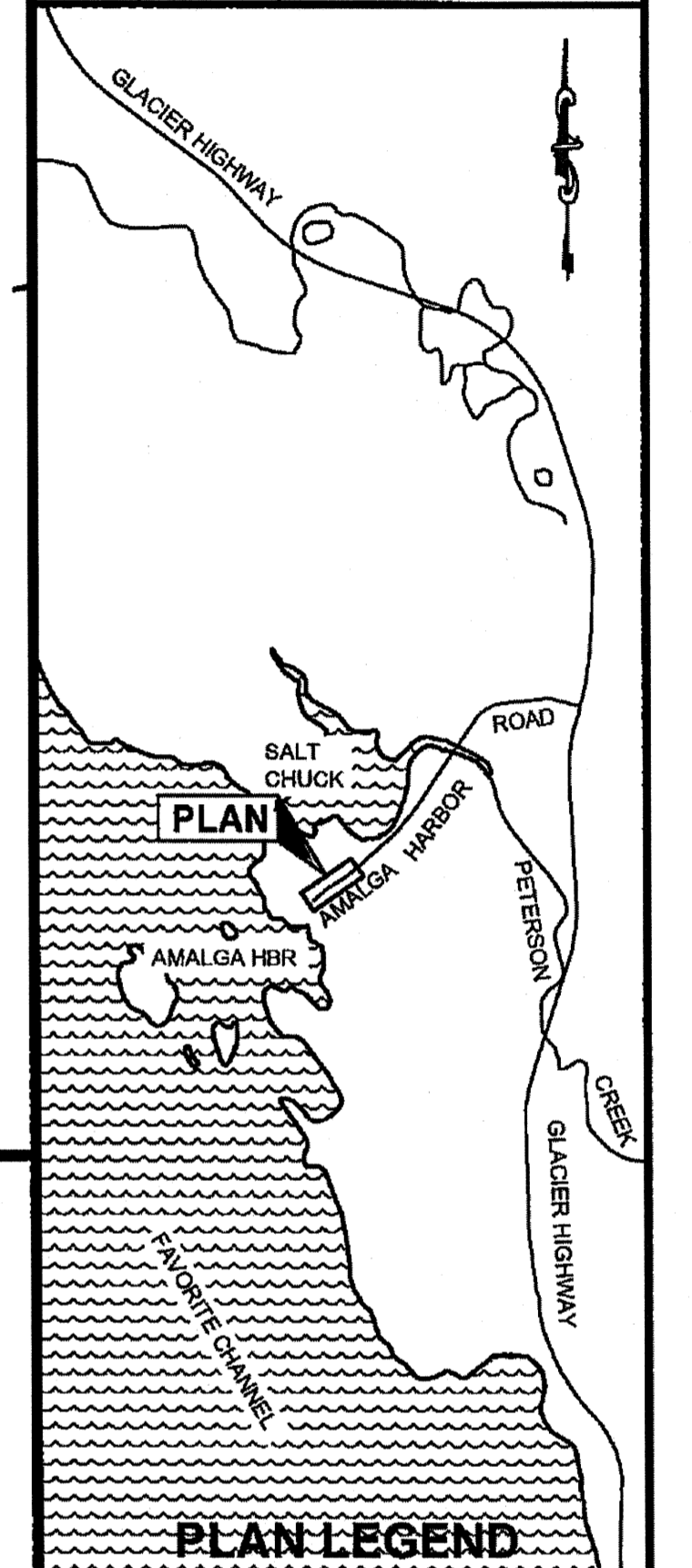
STATE	YEAR
<b>ALASKA</b>	<b>2013</b>
SHEET NUMBER	TOTAL SHEETS
<b>F7</b>	<b>55</b>

Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.  
 PE: [Signature] Date 07.06.2015

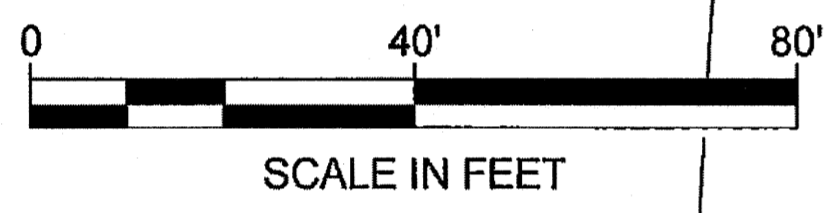
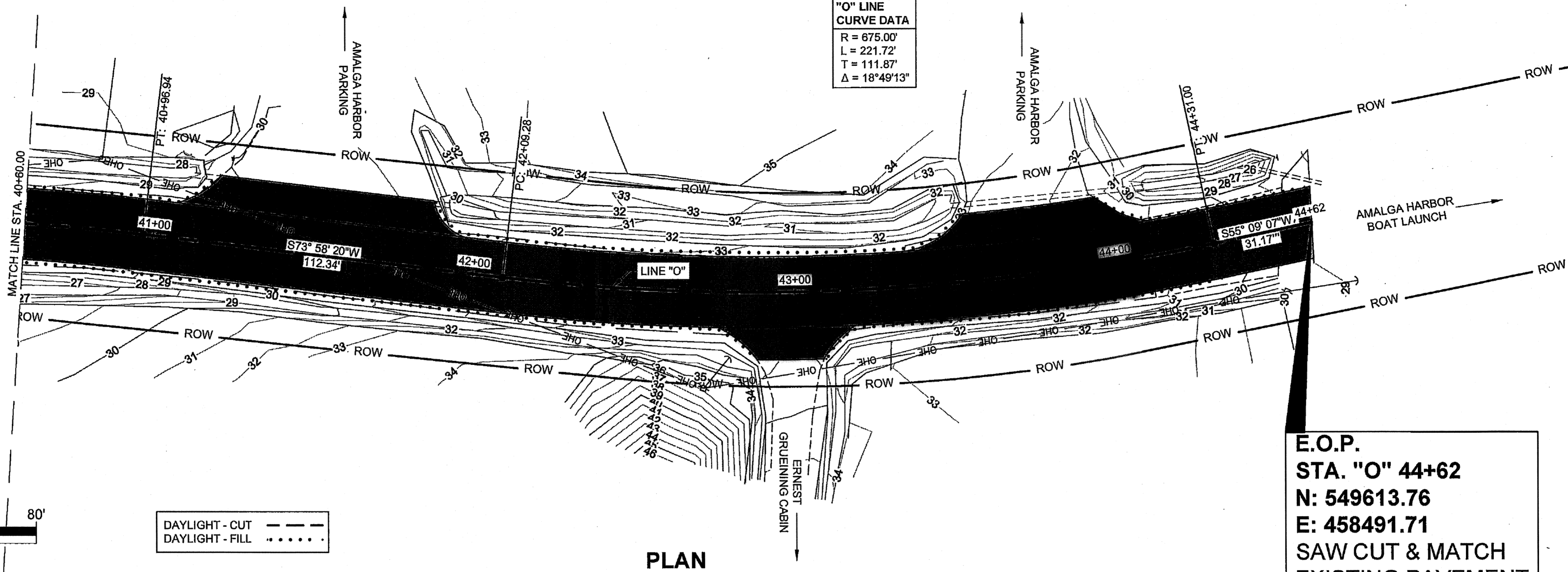
PROFILE

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

ADDENDUM NUMBER		
ATTACHMENT NUMBER		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION
1	01 08 15	PROFILE MODIFICATION

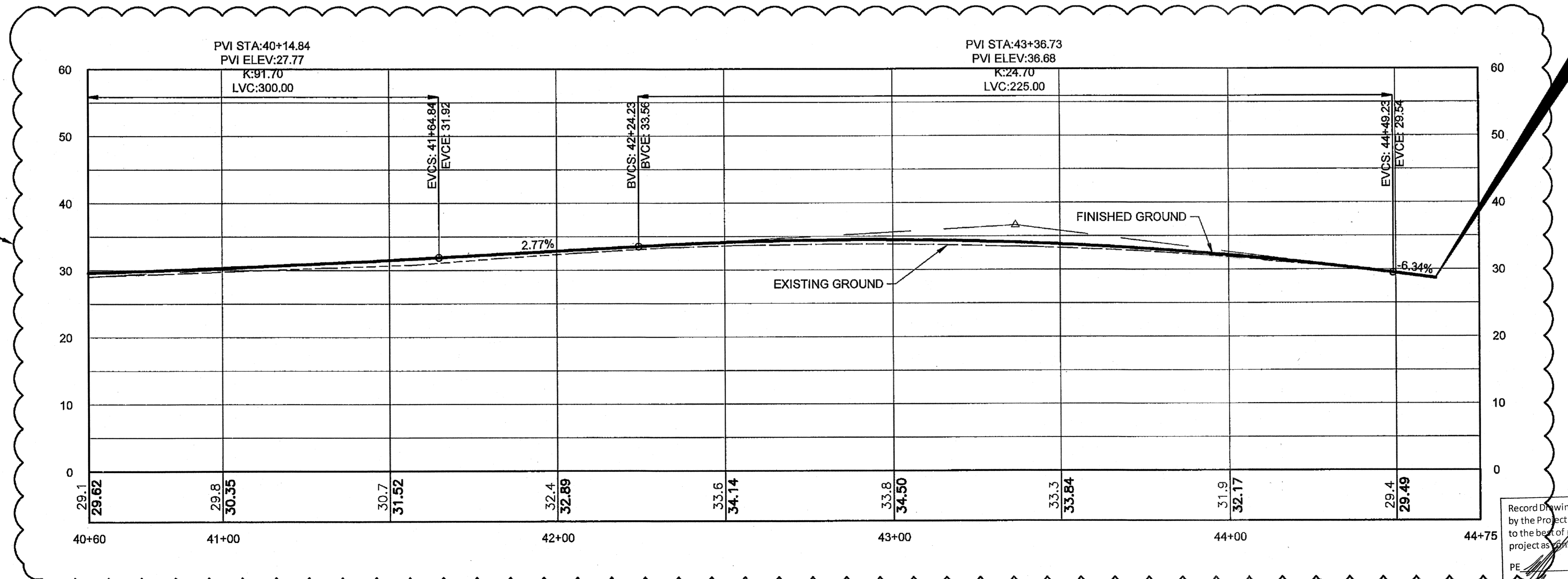


**"O" LINE CURVE DATA**  
 R = 675.00'  
 L = 221.72'  
 T = 111.87'  
 Δ = 18°49'13"



DAYLIGHT - CUT - - - -  
 DAYLIGHT - FILL - . . . . .

**E.O.P.**  
**STA. "O" 44+62**  
**N: 549613.76**  
**E: 458491.71**  
**SAW CUT & MATCH**  
**EXISTING PAVEMENT**



Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.  
 PE Date 07-08-2015

CHECKED BY: C. TRIPP

DESIGNED BY: L. CHAMBERS  
 DRAWN BY: L. CHAMBERS  
 STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES  
 SOUTHEAST REGION  
**AMALGA HARBOR RD & BRIDGES RECONSTRUCTION & REPLACEMENT PROJECT #69684**

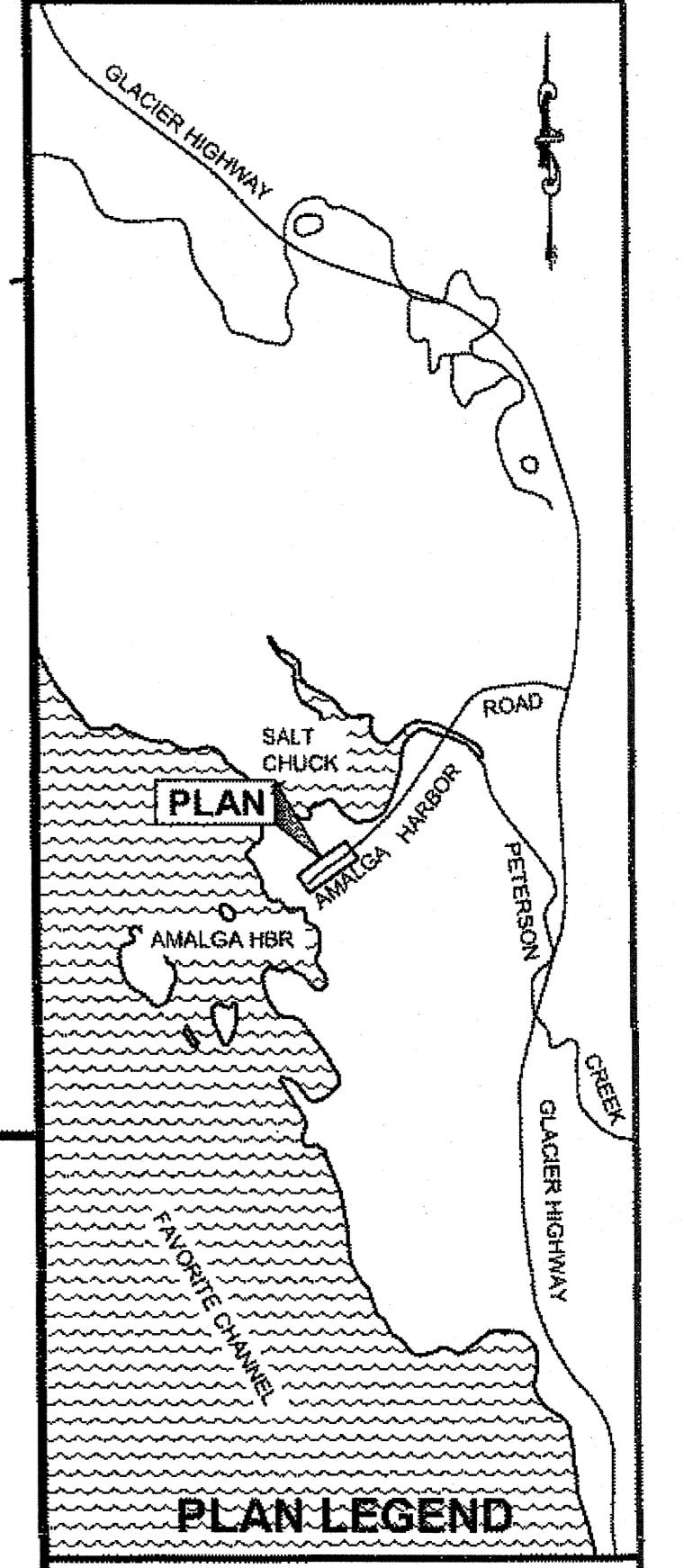
<b>PLAN &amp; PROFILE</b>	
PROJECT DESIGNATION	
<b>69684/ BH-0950(1)</b>	
STATE	YEAR
<b>ALASKA</b>	<b>2013</b>
SHEET NUMBER	TOTAL SHEETS
<b>F8</b>	<b>55</b>

**PROFILE**

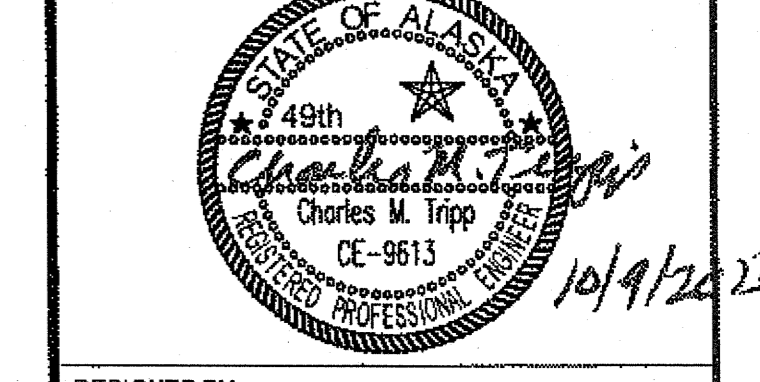
**DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS**

CHAMBERS, LUCAS M (DWG)  
TAB: F8 Wednesday, October 09, 2013 1:09:50 P  
ADDENDUM NUMBER  
ATTACHMENT NUMBER

RECORD OF REVISIONS		
No.	DATE	DESCRIPTION



CHECKED BY: C. TRIPP



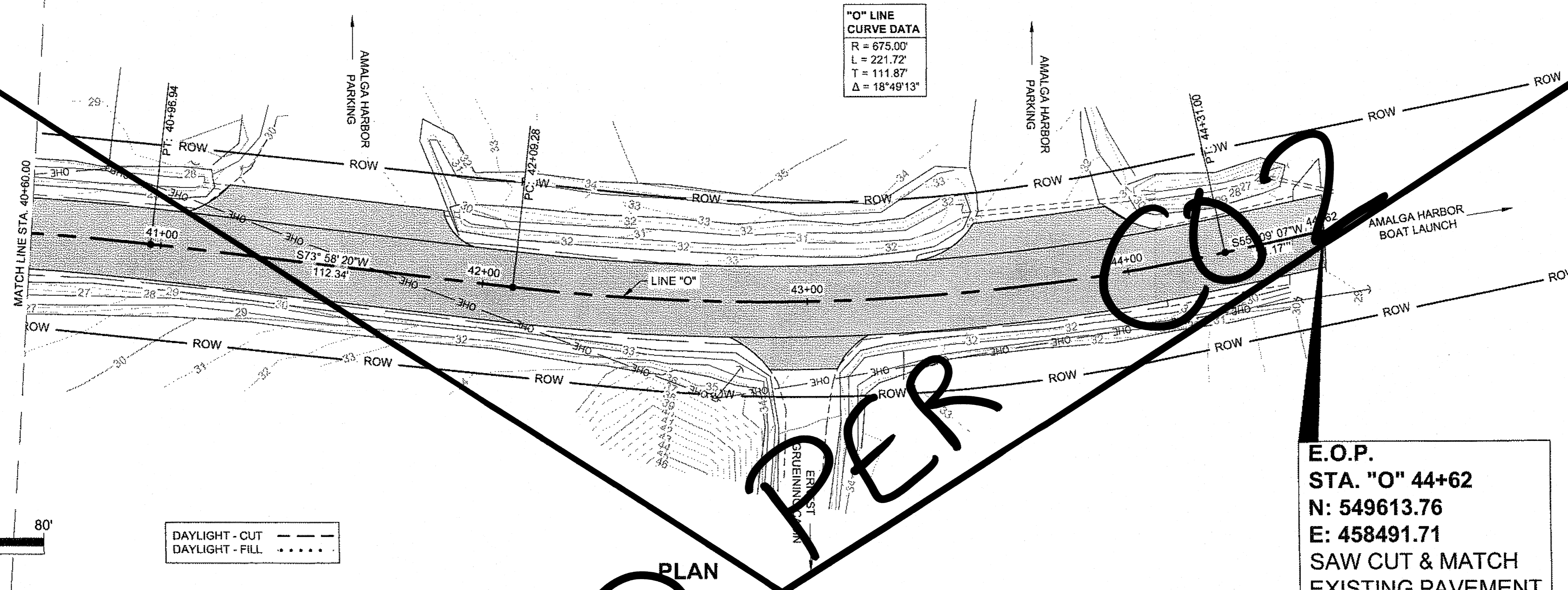
DESIGNED BY: L. CHAMBERS  
DRAWN BY: L. CHAMBERS

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
& PUBLIC FACILITIES  
SOUTHEAST REGION  
AMALGA HARBOR RD &  
BRIDGES RECONSTRUCTION &  
REPLACEMENT  
PROJECT #69684

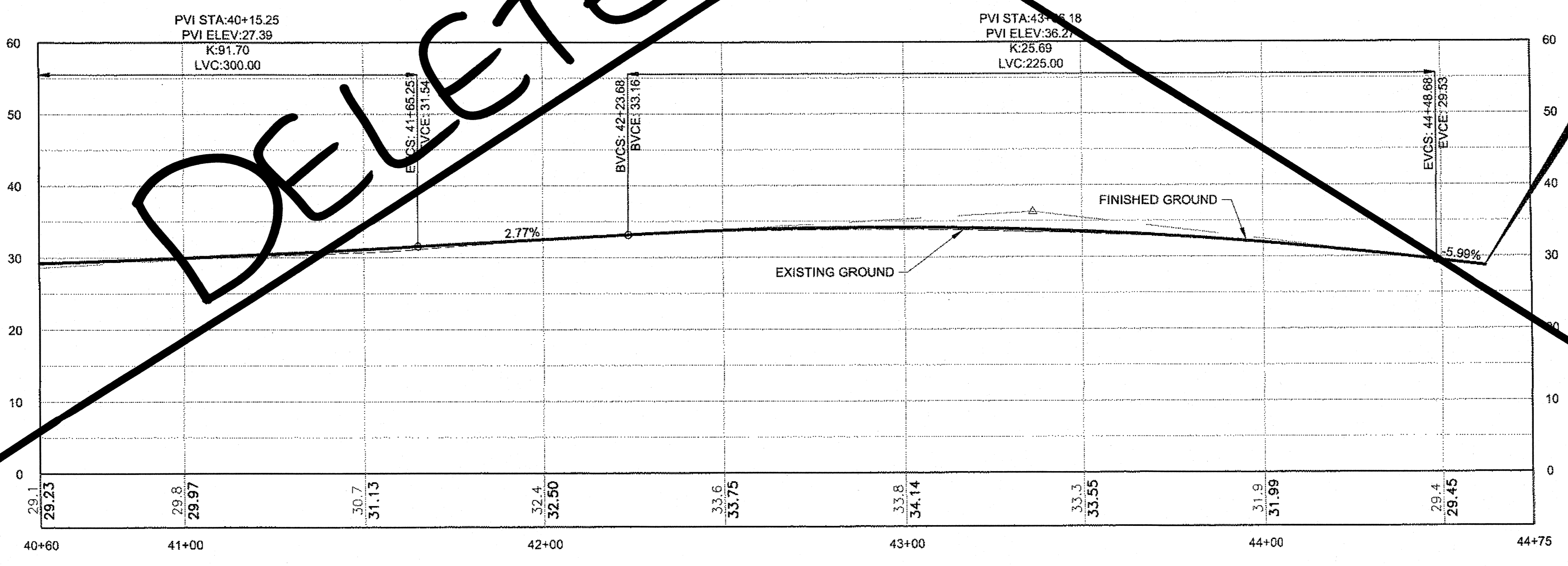
### PLAN & PROFILE

PROJECT DESIGNATION	
69684/ BH-0950(1)	
STATE	YEAR
ALASKA	2013
SHEET NUMBER	TOTAL SHEETS
F8	55

**"O" LINE CURVE DATA**  
 R = 675.00'  
 L = 221.72'  
 T = 111.87'  
 Δ = 18°49'13"



E.O.P.  
 STA. "O" 44+62  
 N: 549613.76  
 E: 458491.71  
 SAW CUT & MATCH  
 EXISTING PAVEMENT

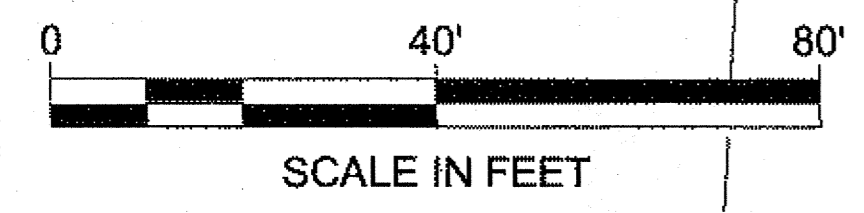


Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.  
 PE: [Signature] Date 07.08.2015

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

DELETED

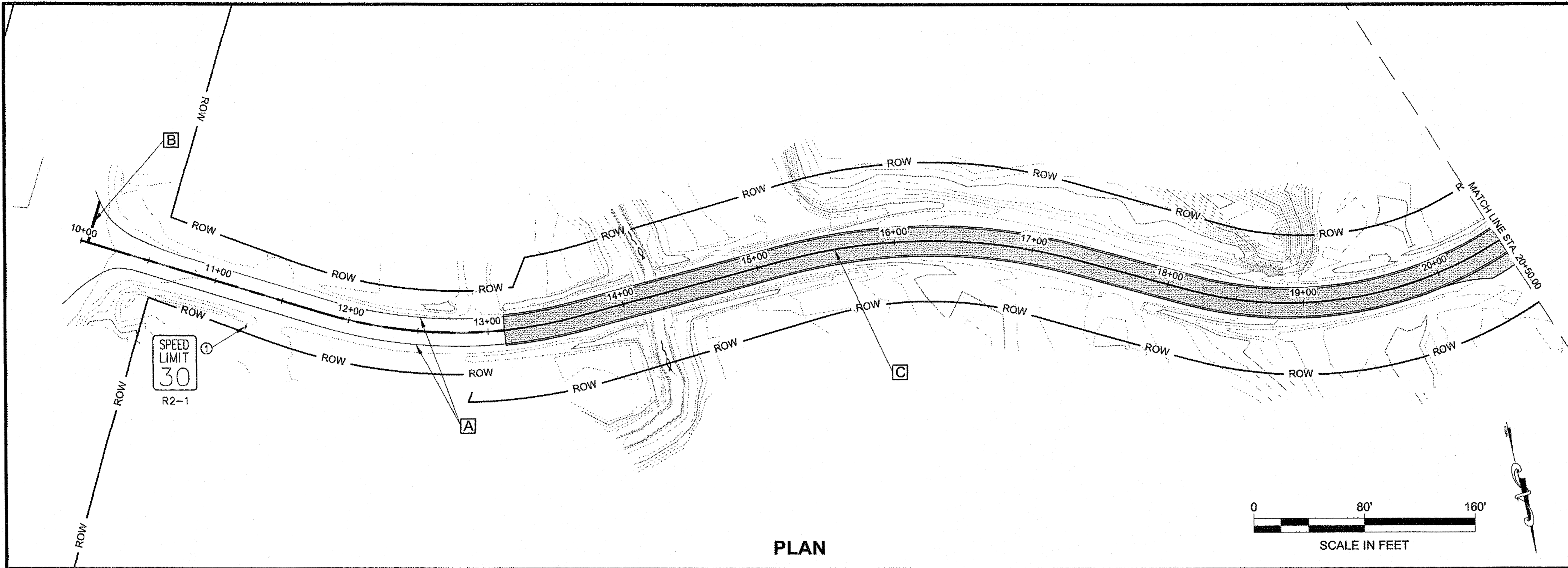
PER



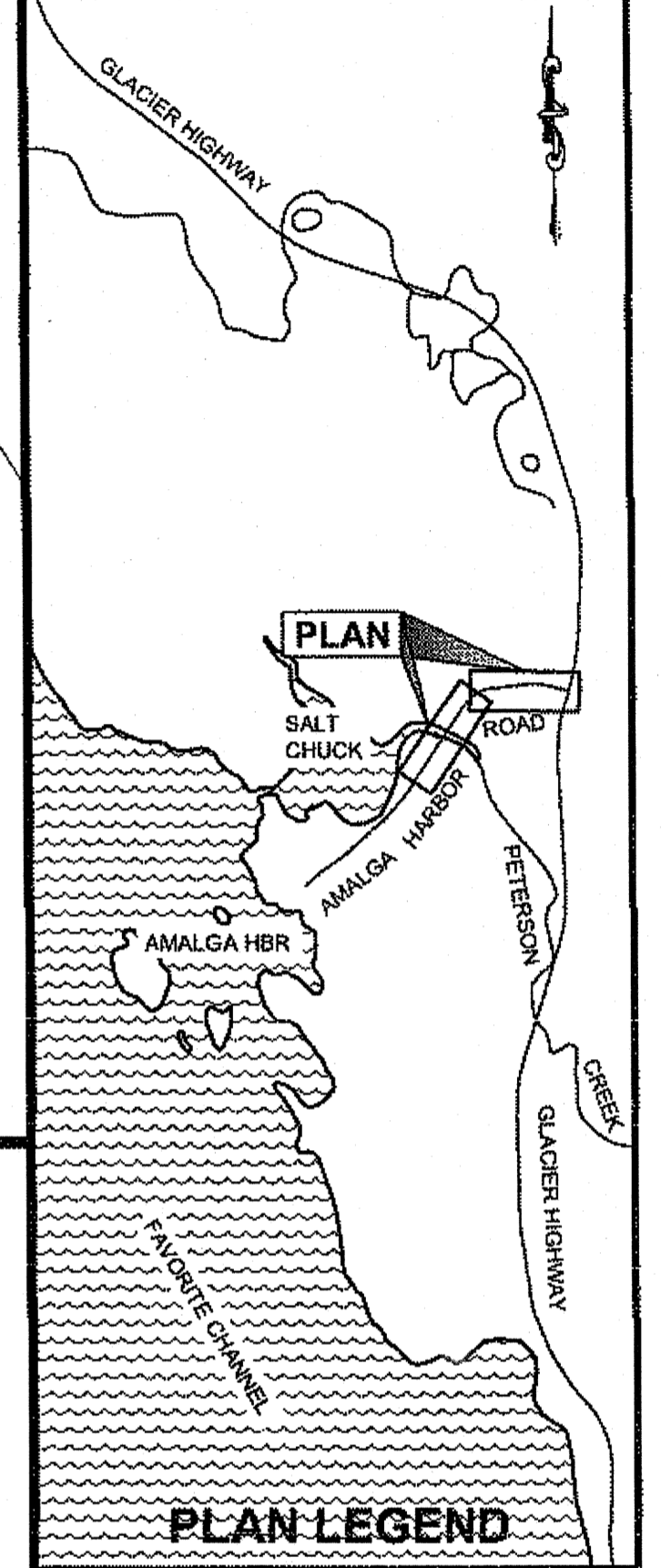
DAYLIGHT - CUT ---  
 DAYLIGHT - FILL - . . . . .

CHAMBERS, LUCAS M (DOT)  
 TAB: H1 Wednesday, October 09, 2013 1:11:36 P

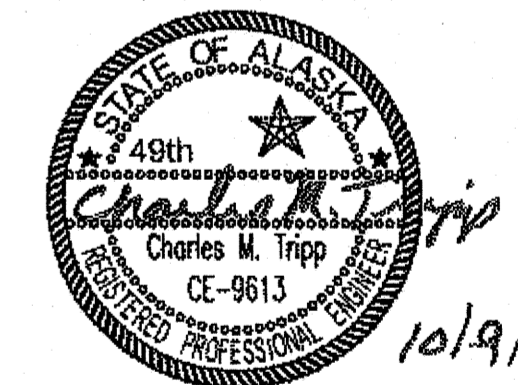
ADDENDUM NUMBER		
ATTACHMENT NUMBER		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION



PLAN



CHECKED BY: C. TRIPP

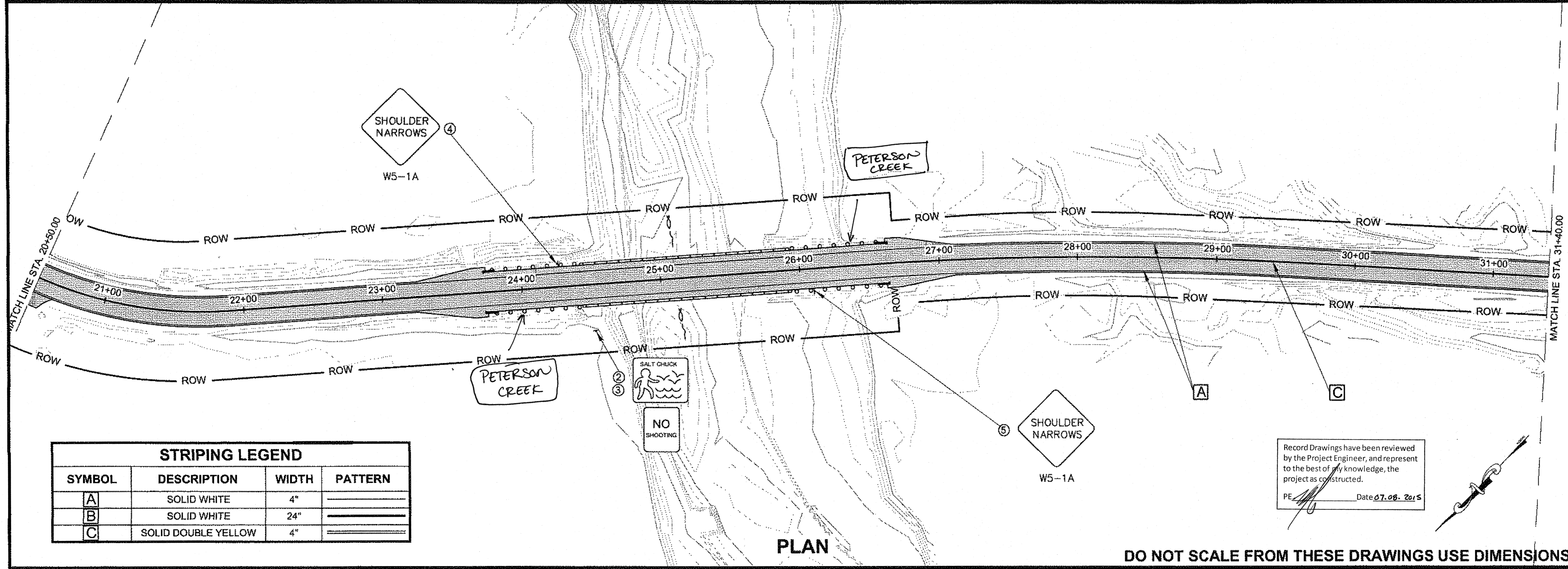


DESIGNED BY: L. CHAMBERS  
 DRAWN BY: L. CHAMBERS

STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES  
 SOUTHEAST REGION

**AMALGA HARBOR RD & BRIDGES RECONSTRUCTION & REPLACEMENT PROJECT #69684**

**SIGNING & STRIPING**



PLAN

STRIPING LEGEND			
SYMBOL	DESCRIPTION	WIDTH	PATTERN
A	SOLID WHITE	4"	=====
B	SOLID WHITE	24"	=====
C	SOLID DOUBLE YELLOW	4"	=====

Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.  
 PE [Signature] Date 07.06. 2015

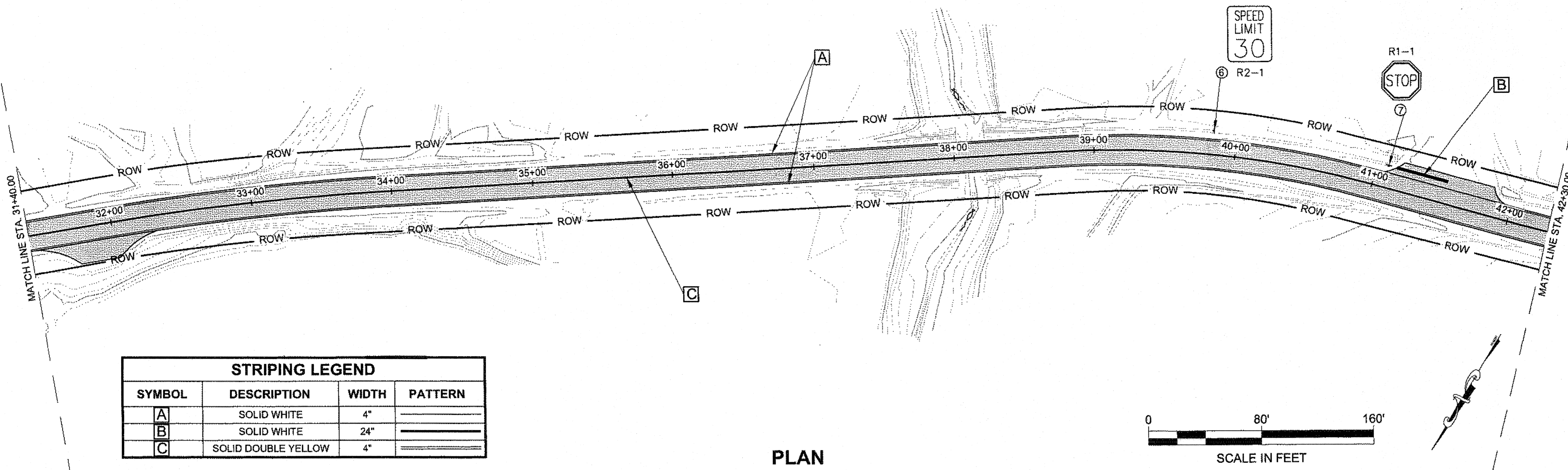
DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

PROJECT DESIGNATION  
**69684/ BH - 0950(1)**

STATE	YEAR
ALASKA	2013
SHEET NUMBER	TOTAL SHEETS
H1	55

CHAMBERS, LUCAS M (DOT)  
 TAB: H2 Wednesday, October 09, 2013 1:12:51 P  
 ADDENDUM NUMBER  
 ATTACHMENT NUMBER  
 RECORD OF REVISIONS

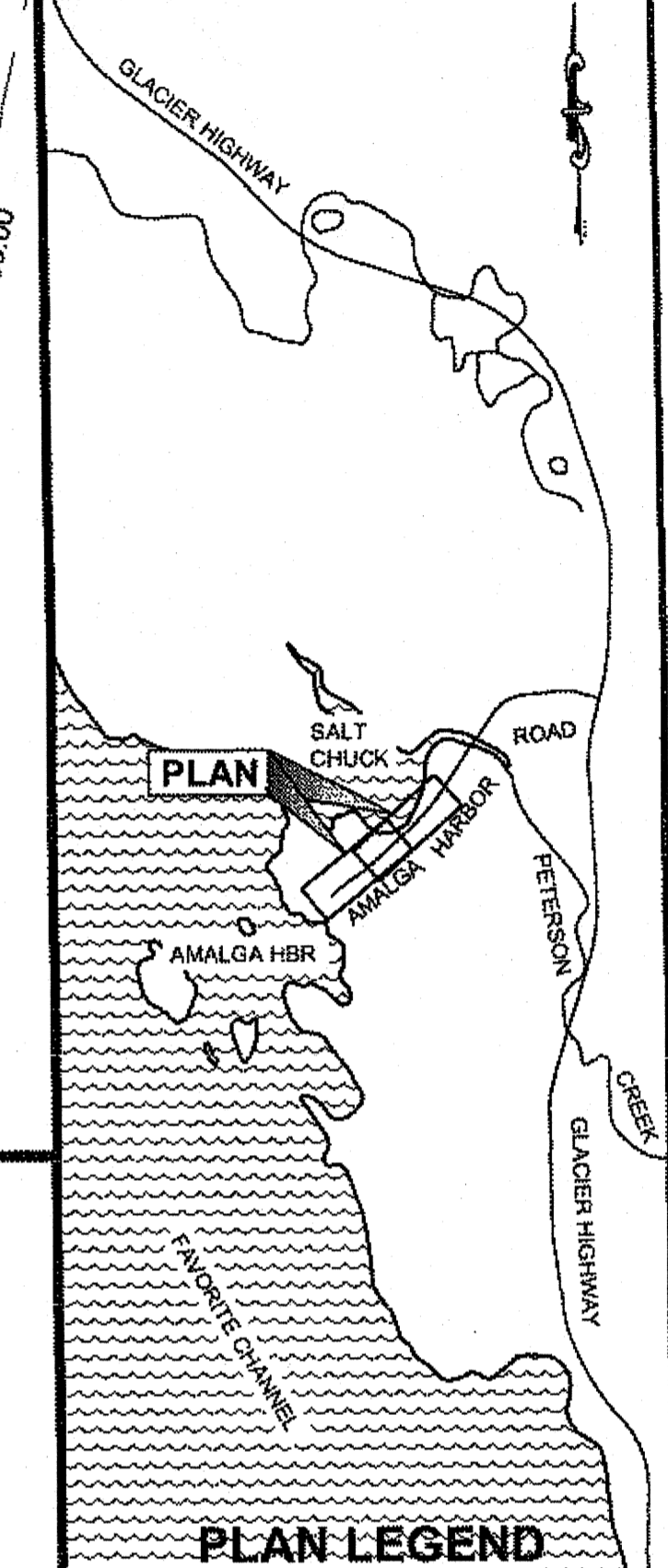
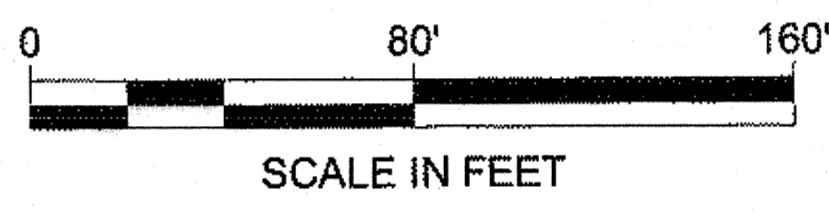
No.	DATE	DESCRIPTION



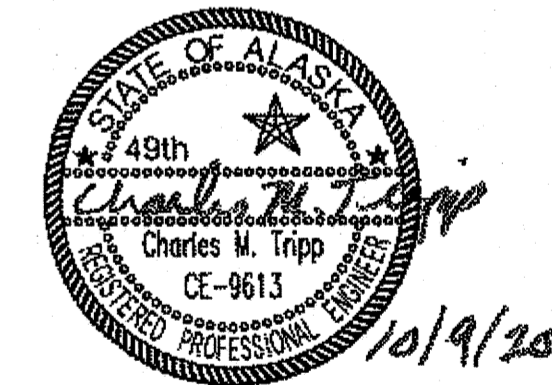
**STRIPING LEGEND**

SYMBOL	DESCRIPTION	WIDTH	PATTERN
A	SOLID WHITE	4"	—
B	SOLID WHITE	24"	—
C	SOLID DOUBLE YELLOW	4"	==

PLAN



CHECKED BY: C. TRIPP



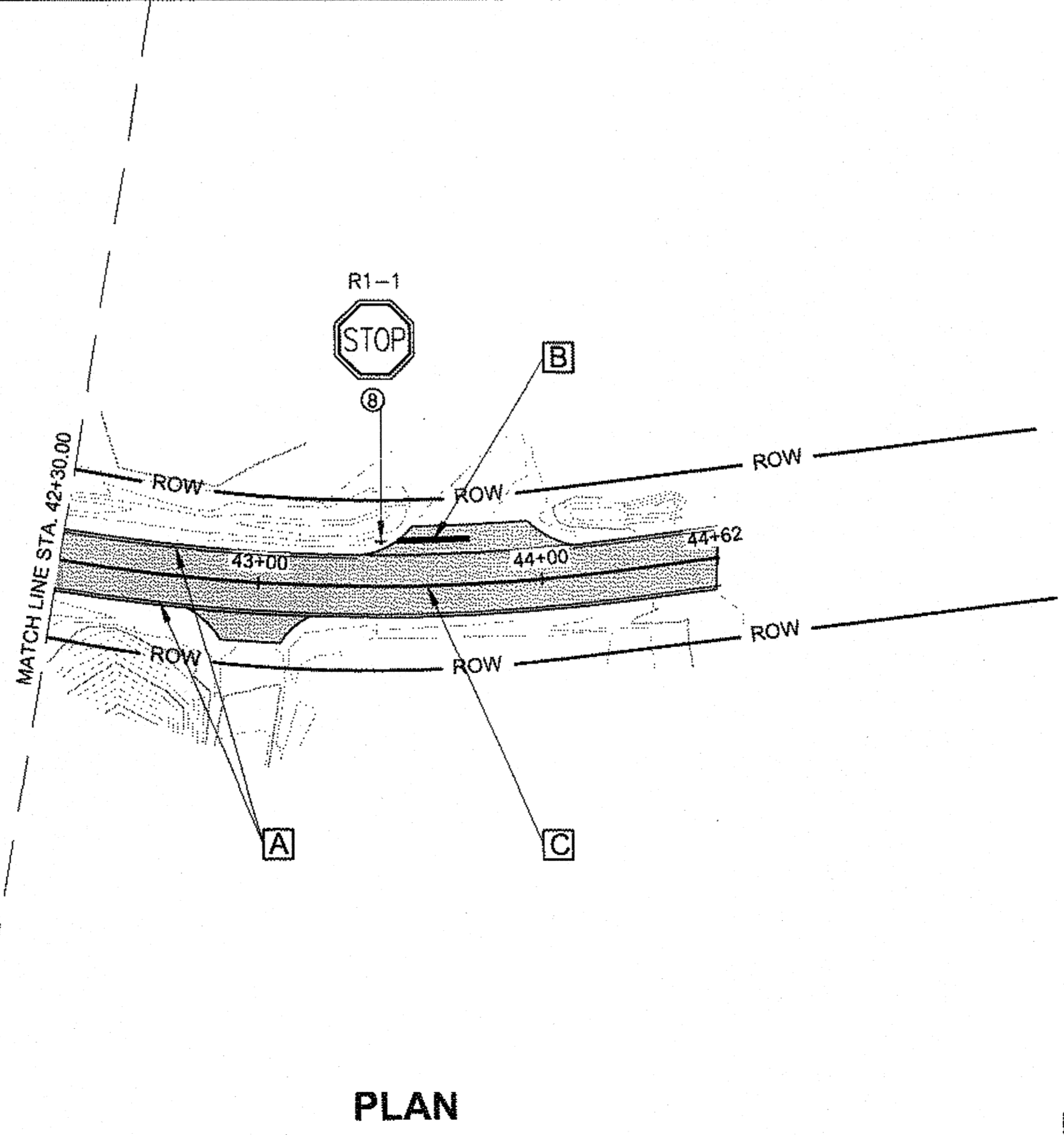
DESIGNED BY: L. CHAMBERS  
 DRAWN BY: L. CHAMBERS

STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION  
 & PUBLIC FACILITIES  
 SOUTHEAST REGION  
 AMALGA HARBOR RD &  
 BRIDGES RECONSTRUCTION &  
 REPLACEMENT  
 PROJECT #69684

**SIGNING &  
 STRIPING**

PROJECT DESIGNATION  
**69684/ BH - 0950(1)**

STATE	YEAR
ALASKA	2013
SHEET NUMBER	TOTAL SHEETS
H2	55



PLAN

Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.  
 PE: [Signature] Date 07-08-2015

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

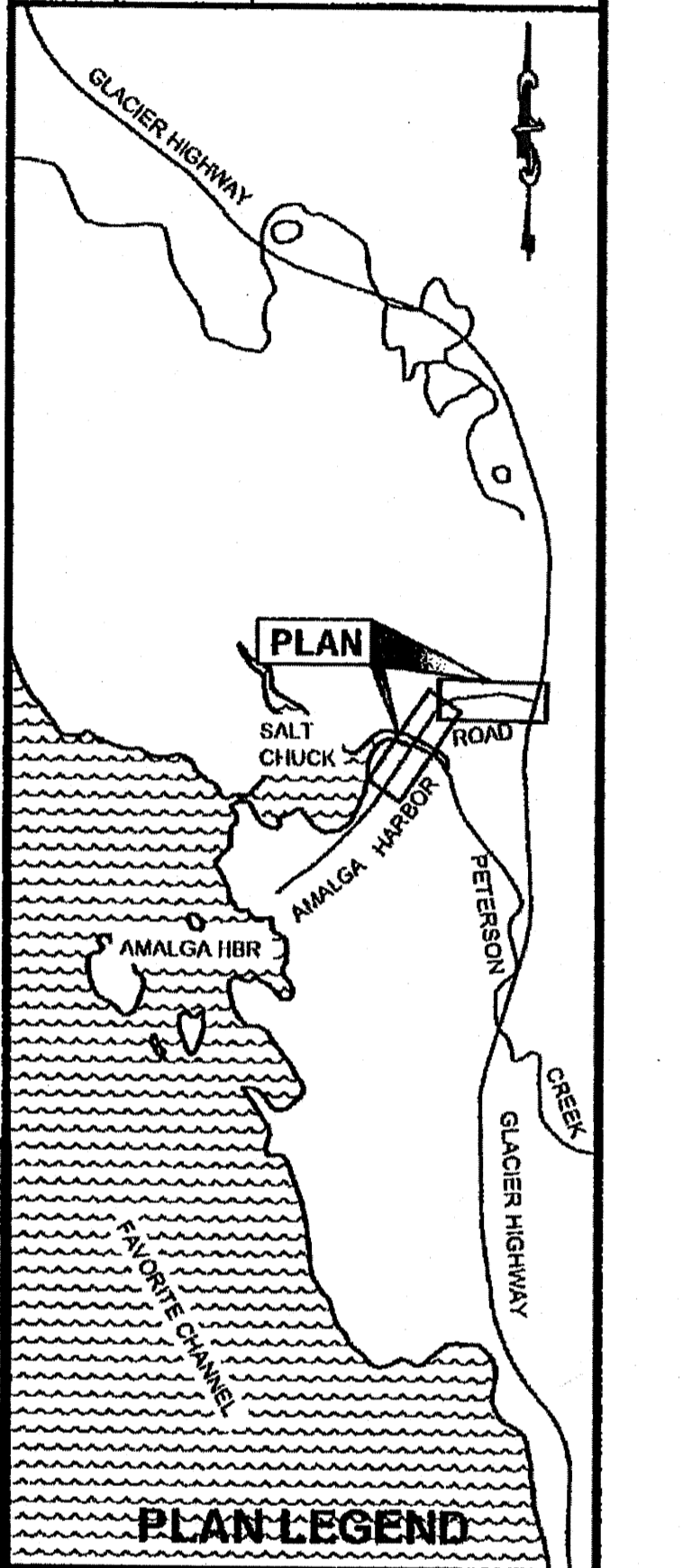
**RFP #6**

PATH: Q:\JNU\69684\PLANS\ET\CONTRACTOR\69684 BH1

CHAMBERS, LUCAS M (DOT)  
TAB: H1 Wednesday, January 21, 2015 4:18:22 P

ADDENDUM NUMBER		
ATTACHMENT NUMBER		
RECORD OF REVISIONS		
No	DATE	DESCRIPTION
1	01 08 15	ADD SIGNS

615(1) - STANDARD SIGN SUMMARY											
SIGN #	LEGEND	STATION	OFFSET	ASDS CODE	WIDTH (IN)	HEIGHT (IN)	AREA (SF)	POST	EMBEDDED DEPTH	SIGN FACING	COMMENTS
1	SPEED LIMIT 30 MPH	11+35	RT	R2-1	30	36	7.50	2.5" PST	4'-6"	WB	
4	SHOULDER NARROWS	24+25	LT	W5-1A	36	36	9.00	2.5" PST	4'-6"	EB	
5	SHOULDER NARROWS	26+10	RT	W5-1A	36	36	9.00	2.5" PST	4'-6"	WB	
6	SPEED LIMIT 30 MPH	39+85	LT	R2-1	30	36	7.50	2.5" PST	4'-6"	EB	
9	Peterson Creek	23+97	RT	I-3	30	24	5.00	2.5" PST	4'-6"	WB	USE 6" UPPERCASE LETTERS, 4.5" LOWER CASE LETTERS, FONT SERIES B
10	Peterson Creek	26+38	LT	I-4	30	24	5.00	2.5" PST	4'-6"	EB	USE 6" UPPERCASE LETTERS, 4.5" LOWER CASE LETTERS, FONT SERIES B



CHECKED BY: G. GLADISO

DESIGNED BY: L. CHAMBERS  
DRAWN BY: L. CHAMBERS

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
& PUBLIC FACILITIES  
SOUTHEAST REGION

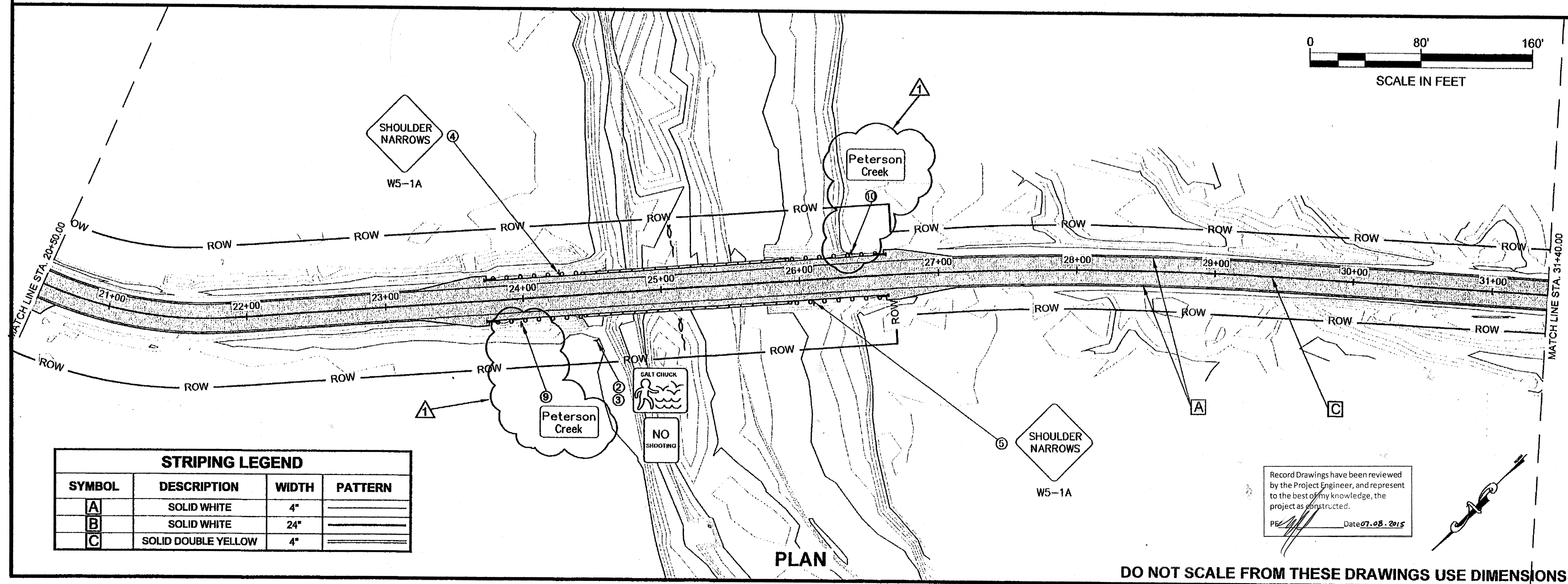
AMALGA HARBOR RD & BRIDGES RECONSTRUCTION & REPLACEMENT  
PROJECT #69684

**SIGNING & STRIPING**

PROJECT DESIGNATION  
**69684/ BH - 0950(1)**

STATE	YEAR
ALASKA	2013

SHEET NUMBER	TOTAL SHEETS
4 H3	4 SSA



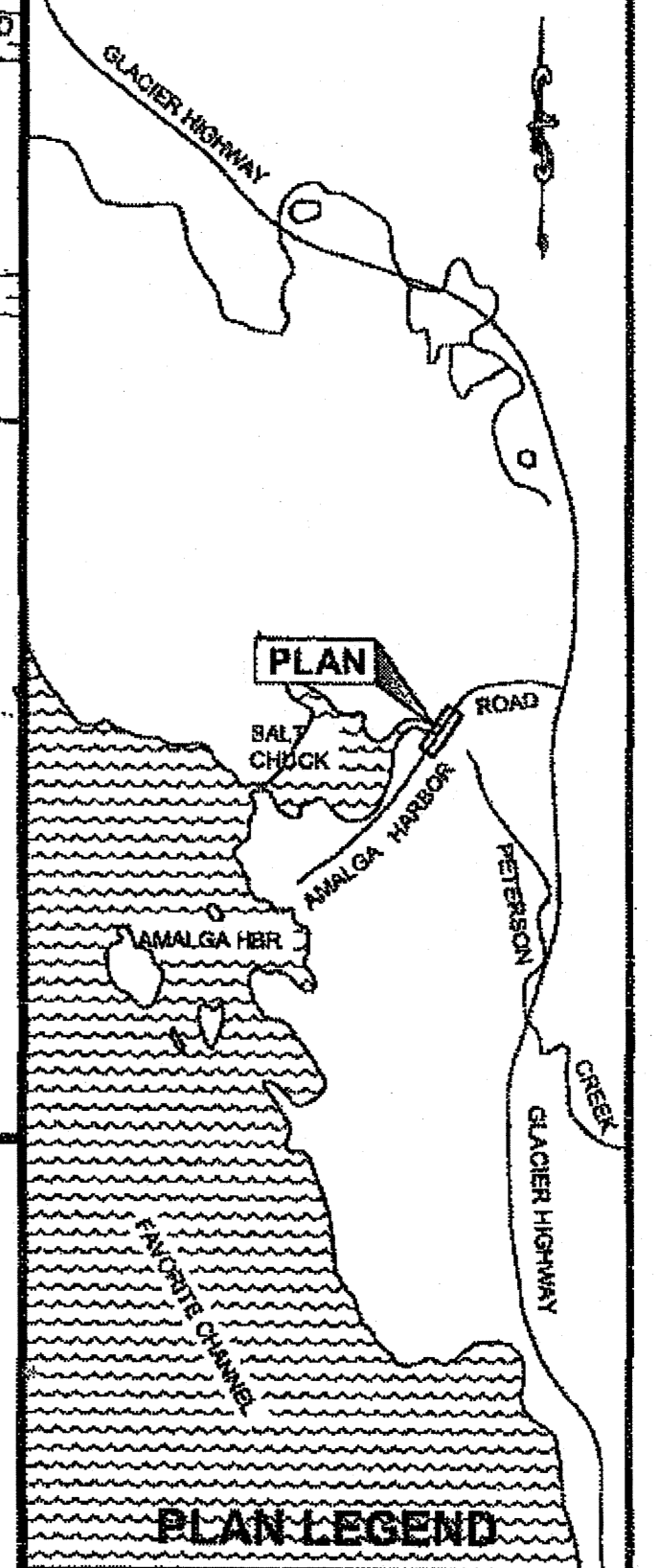
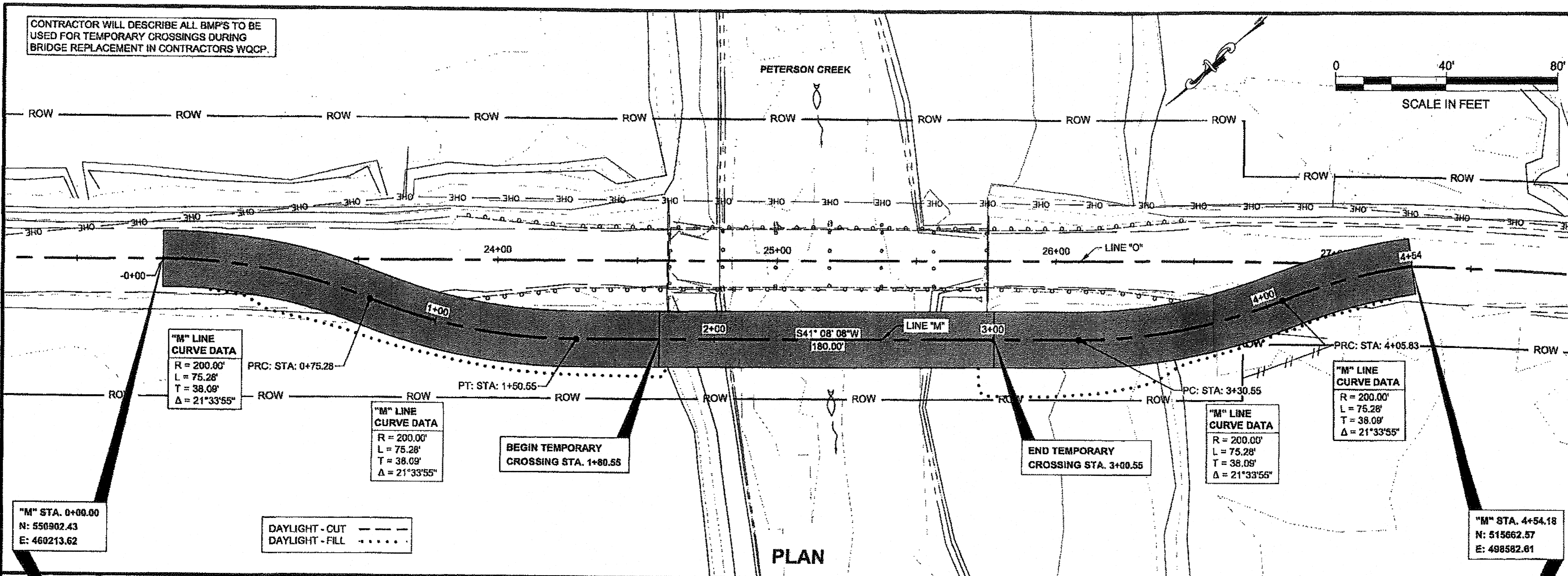
STRIPING LEGEND			
SYMBOL	DESCRIPTION	WIDTH	PATTERN
A	SOLID WHITE	4"	=====
B	SOLID WHITE	24"	=====
C	SOLID DOUBLE YELLOW	4"	=====

Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.  
PE: [Signature] Date: 07.08.2015

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

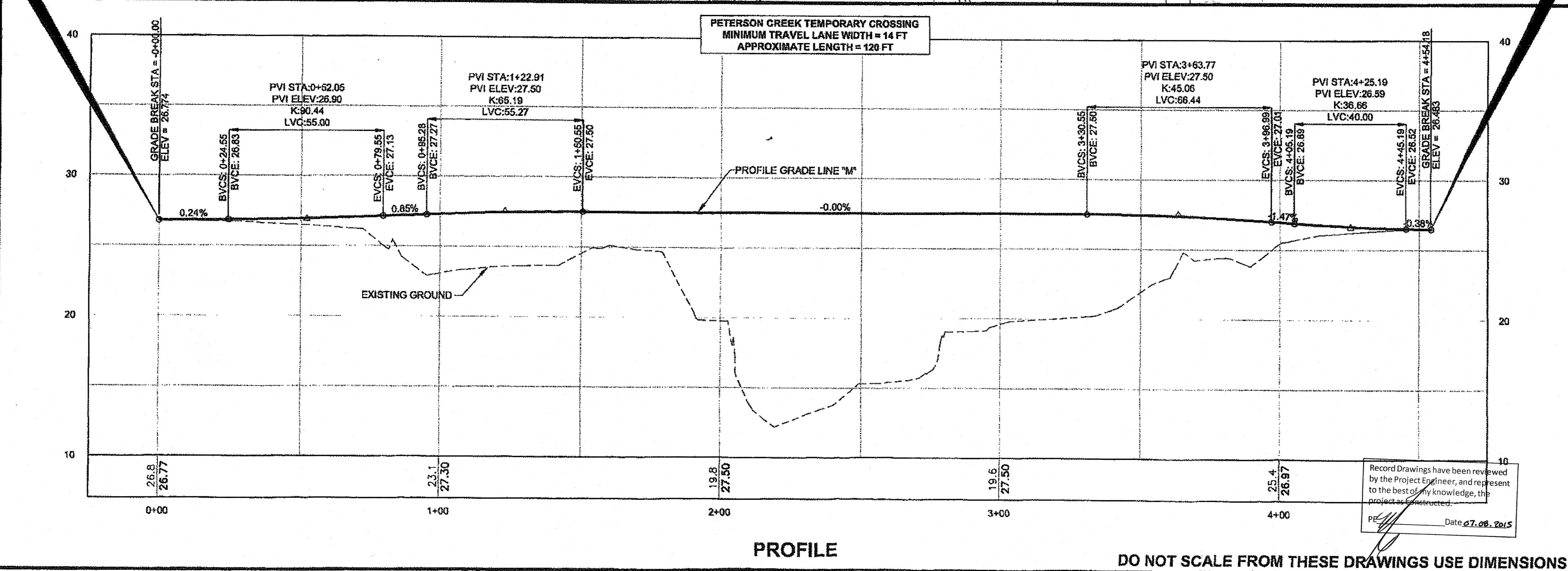
PATH: Q:\UNIB9684\PLANSET\B9684\_M1\_DETOUT.DWG

CHAMBERS, LUCAS M (DOT)		
TAB: M1	Tuesday, November 26, 2013 9:37:01 AM	
ADDENDUM NUMBER		
ATTACHMENT NUMBER		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION



CHECKED BY: C. TRIPP

Professional Engineer Seal for Charles M. Tripp, CE-9613, State of Alaska, dated 10/27/13.



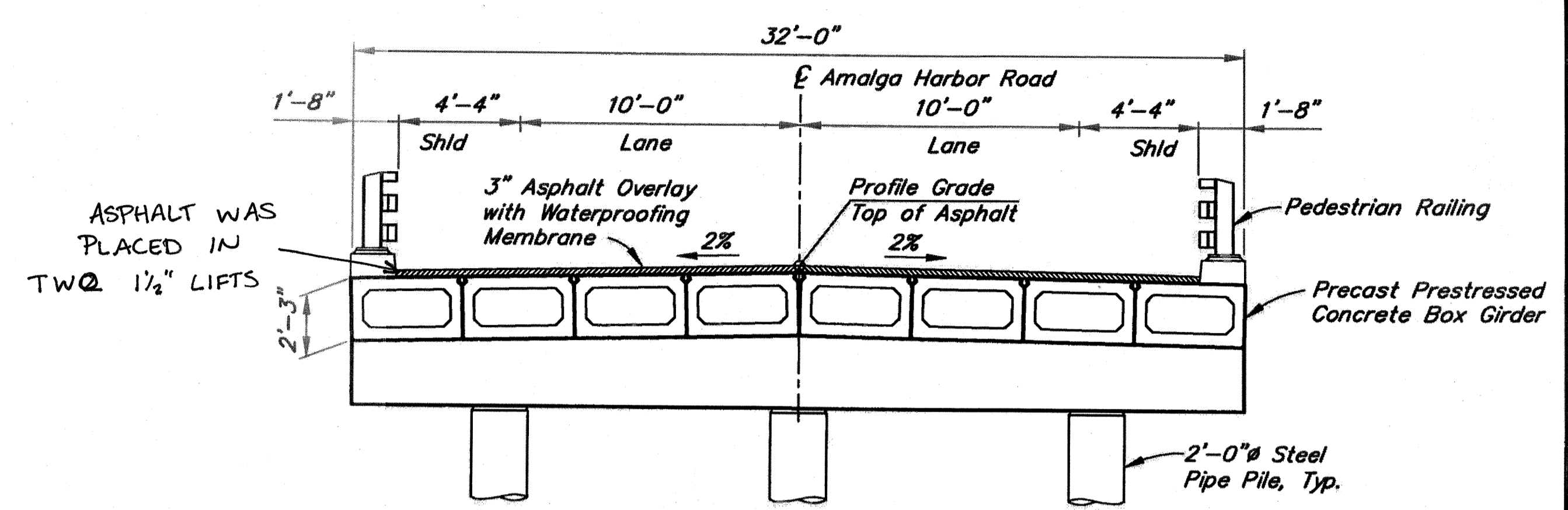
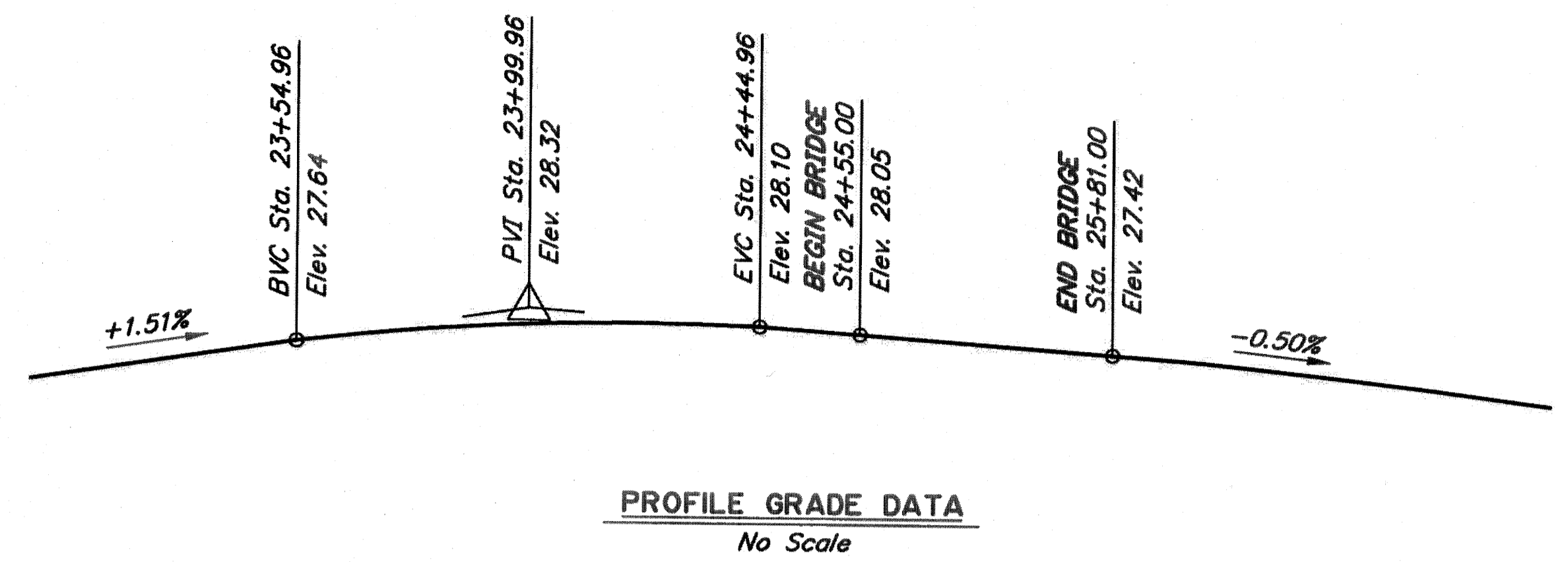
Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.

Date: 11/26/13

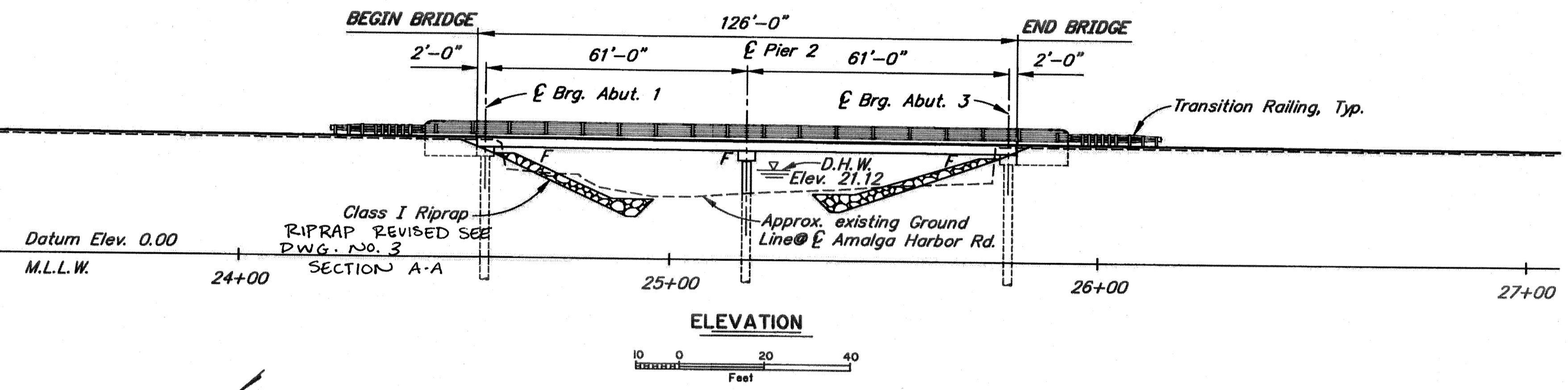
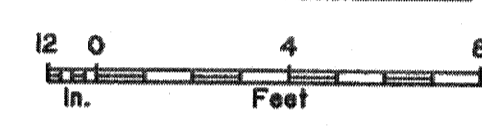
DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

DESIGNED BY: L. CHAMBERS	DRAWN BY: L. CHAMBERS	
STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES SOUTHEAST REGION		
AMALGA HARBOR RD & BRIDGES RECONSTRUCTION & REHABILITATION PROJECT #89684		
PETERSON CREEK TEMPORARY CROSSING PLAN & PROFILE		
PROJECT DESIGNATION 69684/ BH - 0950(1)		
STATE ALASKA	YEAR 2013	
SHEET NUMBER M1	TOTAL SHEETS 55	

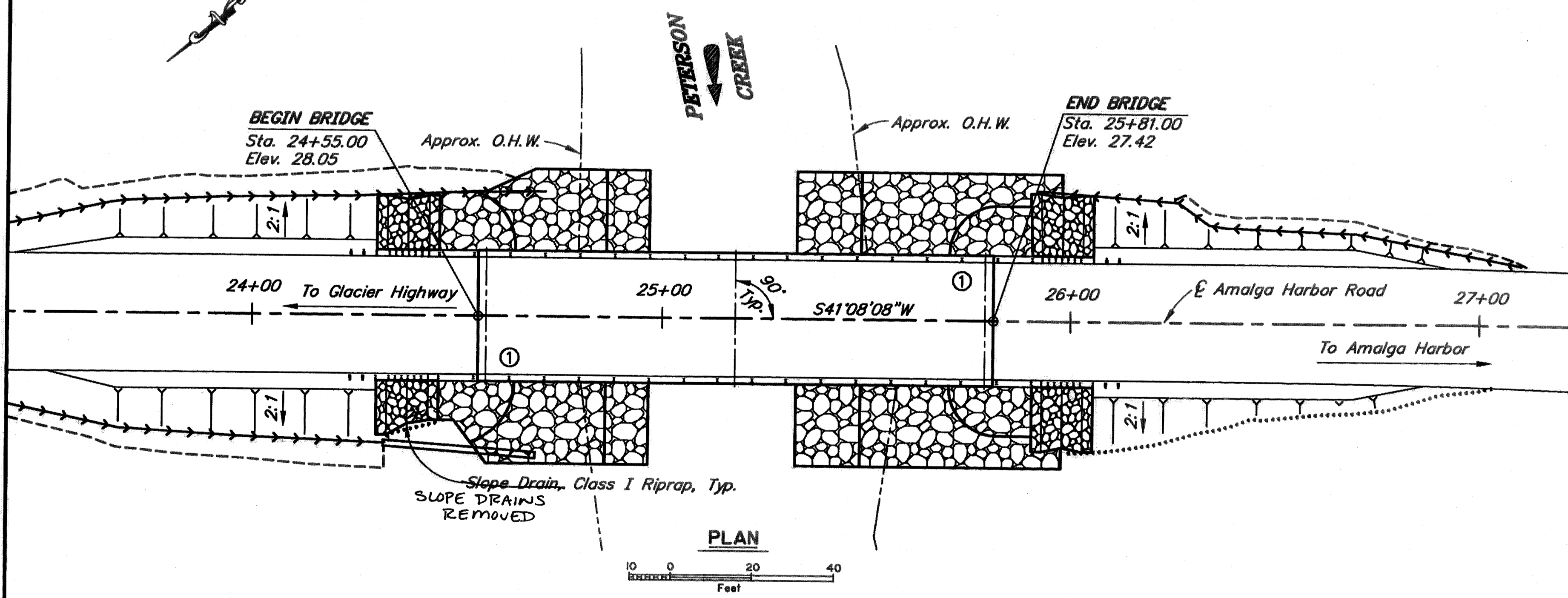
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BH-0950(1)/69684	2013	N1	55



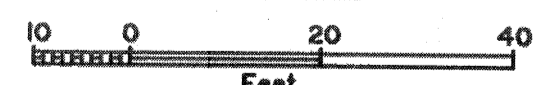
TYPICAL SECTION



ELEVATION



PLAN



BRIDGE DRAWING INDEX	
TITLE	DWG. NO.
GENERAL LAYOUT	1
SITE PLAN	2
RIPRAP LAYOUT	3
ABUTMENTS	4
WINGWALLS	5
PIER 2	6
FRAMING PLAN AND TYPICAL SECTION	7
GIRDERS	8
GIRDER DETAILS	9
PEDESTRIAN RAILING	10
BRIDGE RAIL TRANSITION	11
TEST HOLE LOGS AND LOCATIONS	12-17

Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.  
 PE: [Signature] Date: 07.08.2015

NOTES:

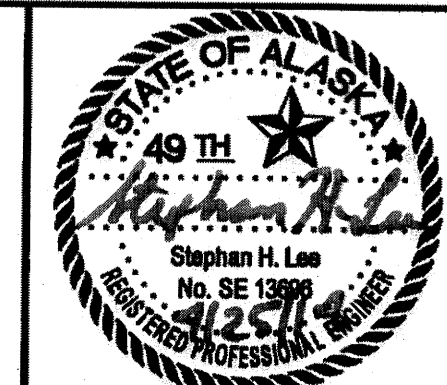
① Denotes location of Bridge No. Plate.

LEGEND

- ..... Daylight Fill
- Bottom of Ditch
- - - - - Daylight Cut

DESIGNED BY: Steve Lee	CHECKED: Loren Gehring	LAYOUT BY: Steve Lee	CHECKED BY: Loren Gehring
DRAWN BY: Sam Sollie Jr	CHECKED: Steve Lee	SPECIFICATIONS BY: Steve Lee	P S & E COMPARED: Loren Gehring
QUANTITIES BY: Steve Lee	CHECKED: Loren Gehring	APPROVAL RECOMMENDED BY: Michael W. Knapp	FOR: Rich Pratt

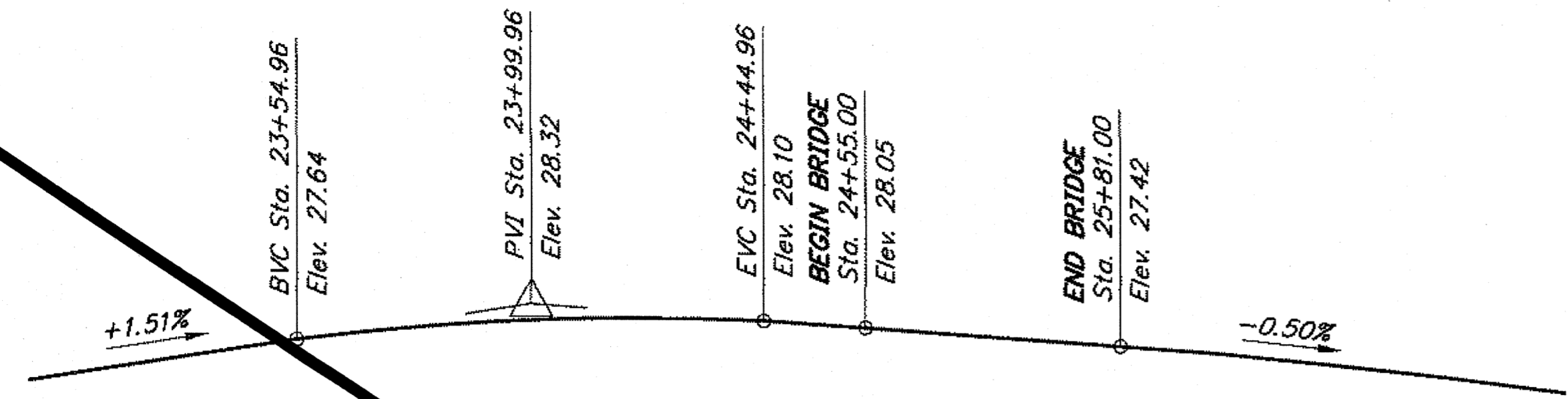
STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION  
 AND PUBLIC FACILITIES  
 BRIDGE SECTION



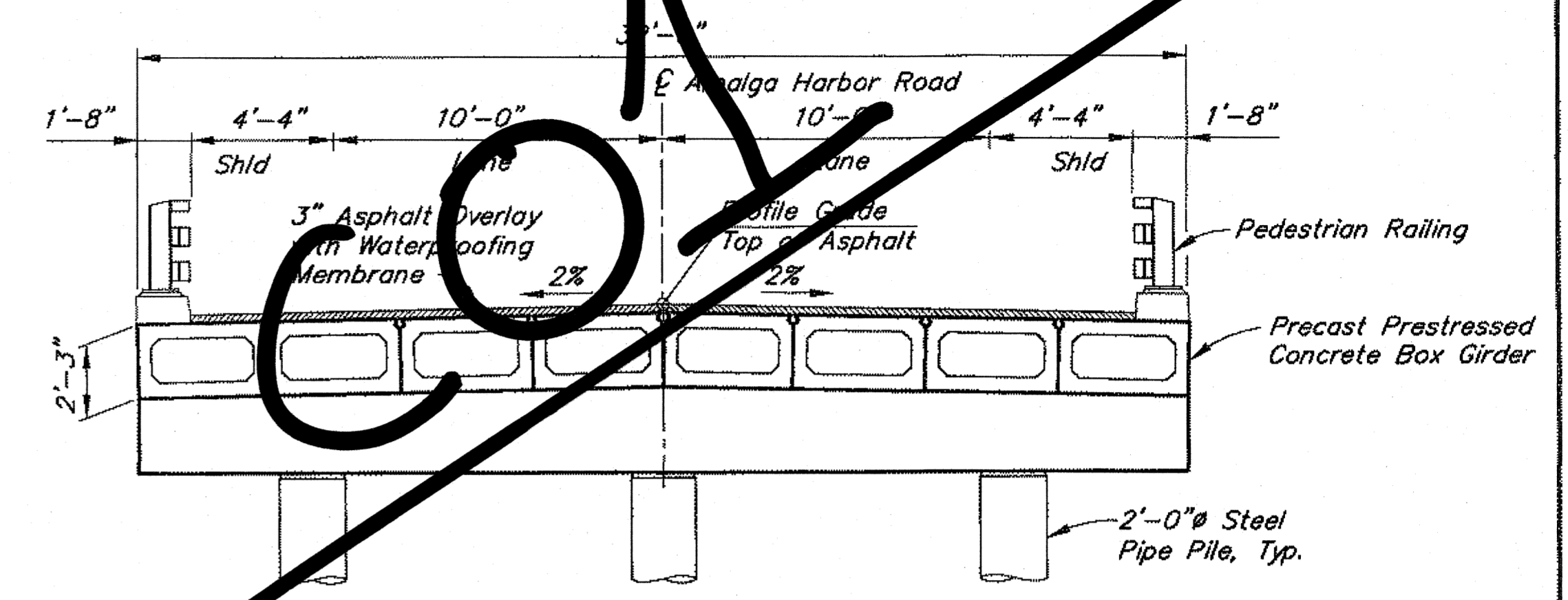
PETERSON CREEK BRIDGE  
 AMALGA HARBOR ROAD  
 GENERAL LAYOUT

BRIDGE NO. 383  
 DWG. NO. 1

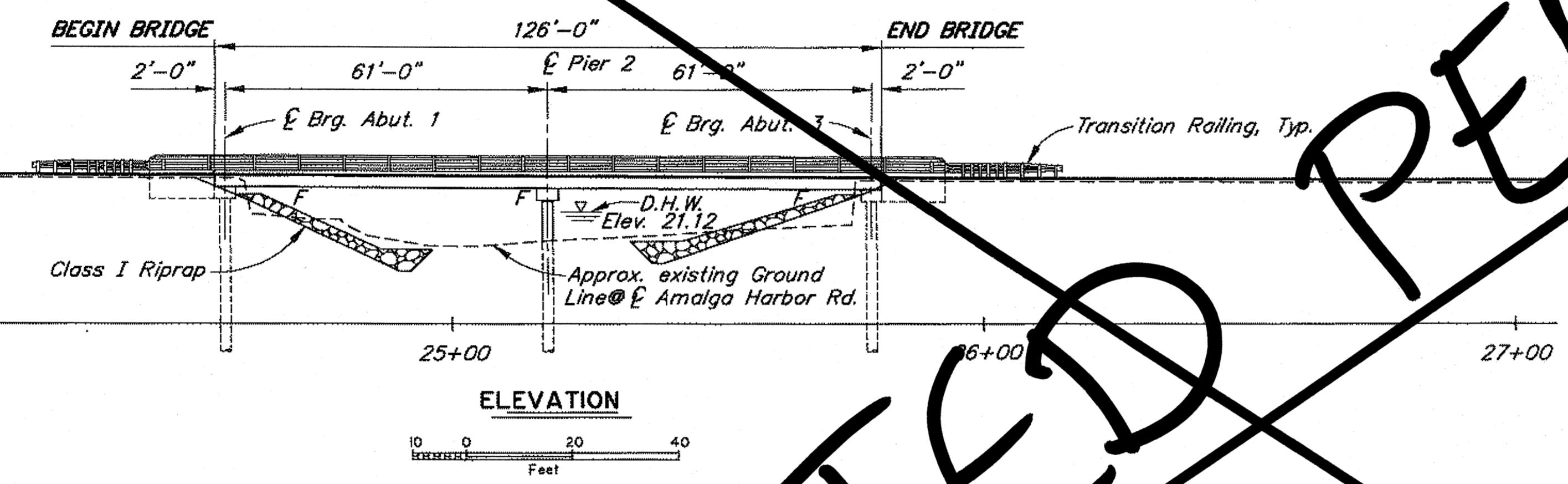
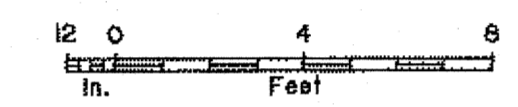
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BH-0950(1)/69684	2013	N1	55



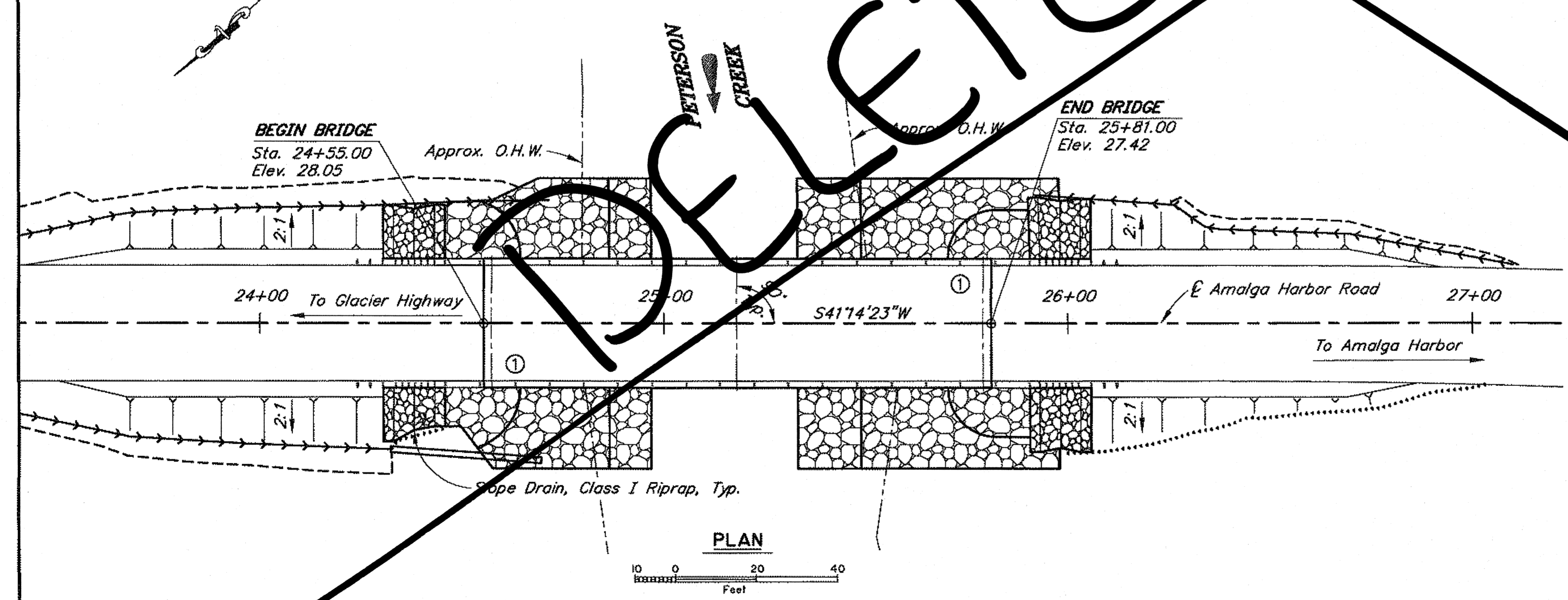
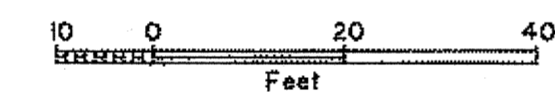
**PROFILE GRADE DATA**  
No Scale



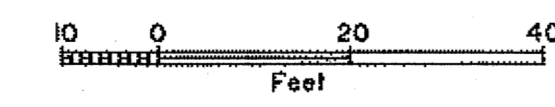
**TYPICAL SECTION**



**ELEVATION**



**PLAN**



TITLE	DWG. NO.
GENERAL LAYOUT	1
SITE PLAN	2
RIPRAP LAYOUT	3
ABUTMENTS	4
WINGWALLS	5
PIER 2	6
FRAMING PLAN AND TYPICAL SECTION	7
GIRDERS	8
GIRDER DETAILS	9
PEDESTRIAN RAILING	10
BRIDGE RAIL TRANSITION	11
TEST HOLE LOGS AND LOCATIONS	12-17

**NOTES:**

① Denotes location of Bridge No. Plate.

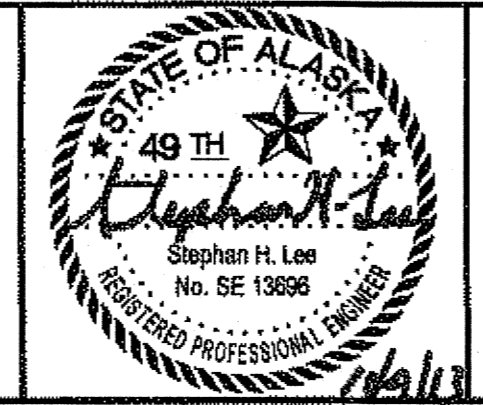
**LEGEND**

- ..... Daylight Fill
- Bottom of Ditch
- Daylight Cut

Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.  
PE *[Signature]* Date 07.08.2015

DESIGNED BY: Steve Lee	CHECKED: Loren Gehring	LAYOUT BY: Steve Lee	CHECKED BY: Loren Gehring
DRAWN BY: Sam Sallie Jr	CHECKED: Steve Lee	SPECIFICATIONS BY: Steve Lee	AS NOTED COMPARED: Loren Gehring
QUANTITIES BY: Steve Lee	CHECKED: Loren Gehring	APPROVAL RECOMMENDED BY: Rick Pratt	

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
BRIDGE SECTION

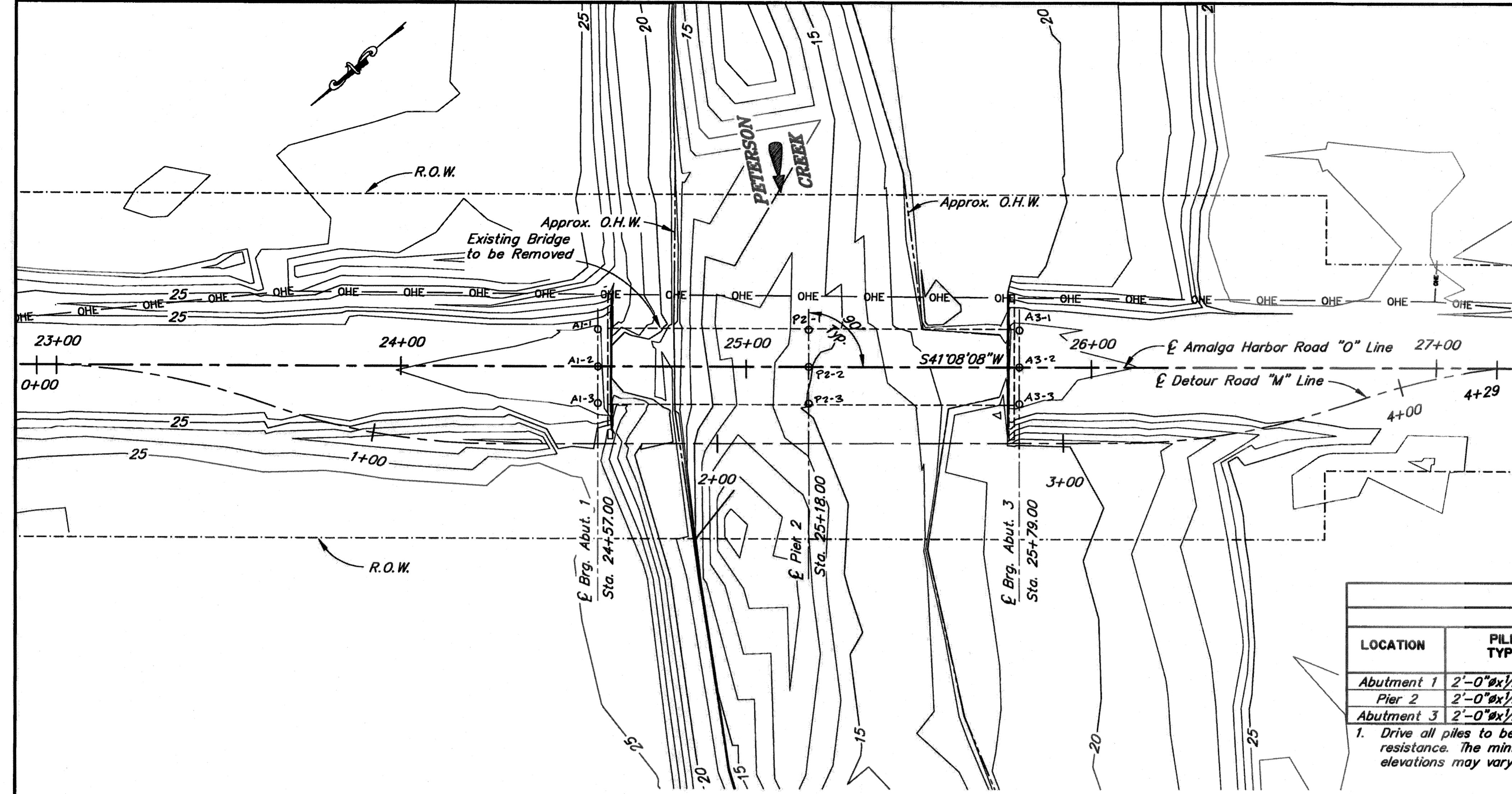


**PETERSON CREEK BRIDGE**  
AMALGA HARBOR ROAD  
GENERAL LAYOUT

BRIDGE NO. 383  
DWG. NO. 1

DELETED PER

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BH-0950(1)/69684	2013	N2	55



**GENERAL NOTES**

DESIGN:..... AASHTO LRFD Bridge Design Specifications, Sixth Edition 2012, with latest interim specifications.  
 Seismic design per AASHTO Guide Specifications for LRFD Seismic Bridge Design, Second Edition 2011 with latest interim specifications.

LIVE LOAD:..... HL-93

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

SEISMIC PARAMETERS:..... PGA = 0.21  
 SS = 0.48  
 S1 = 0.23  
 Site Class = E  
 Liquefaction Potential = High  
 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.

PRESTRESSED CONCRETE:..... See Girder Dwg.

CONCRETE:..... Class A Concrete unless otherwise noted, f'c = 4000 psi

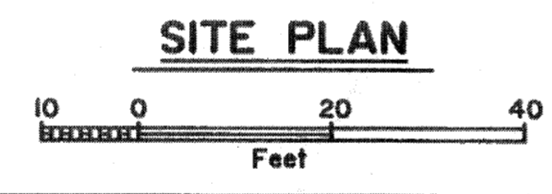
STRUCTURAL STEEL PILING:..... Pipe Piles - API 5L X52 PSL2, Fy = 52,000 psi  
 Pile Tip reinforcing is required.

PILE DATA TABLE							
LOCATION	PILE TYPE	DRIVING CRITERIA			DESIGN DATA		
		MINIMUM PENETRATION (ft)	ESTIMATED PILE TIP ELEVATION (ft)	DRIVING RESISTANCE (k)	STRENGTH FACTORED LOAD (k)	NOMINAL RESISTANCE (k)	RESISTANCE FACTOR, φ
Abutment 1	2'-0"x1/2" Pipe	66.0	-43.0	536	268	536	0.50
Pier 2	2'-0"x1/2" Pipe	119.5	-97.0	862	431	862	0.50
Abutment 3	2'-0"x1/2" Pipe	167.0	-145.0	558	279	558	0.50

1. Drive all piles to bedrock and to the required nominal resistance. The minimum penetration and estimated pile tip elevations may vary due to bedrock elevations.

**ABBREVIATIONS:**

- ℄ = Centerline
- ℄ = Plate
- & = and
- ⊙ = at
- ∅ = diameter
- A/C = asphalt concrete
- Approx. = approximate
- Abut. = Abutment
- bot. = bottom
- Br. = bridge
- btwn. = between
- Brg. = Bearings
- cfs = cubic feet per second
- CJP = complete joint penetration
- Clr. = clear, clearance
- cms = cubic meter per second
- Dia. = diameter
- D.H.W. = Design High Water
- Dwg. = drawing
- Elev. = elevation
- e.f. = each face
- E = expansion bearing
- (E) = existing
- F = fixed bearing
- f.f. = far face
- H.T.L. = high tide line
- Hwy. = highway
- Jt. = joint
- k = thousand pound
- ksi = thousand psi
- Lt. = left
- max. = maximum
- M.H.W. = mean high water
- min. = minimum
- M.L.L.W. = mean low low water
- n.a. = not applicable
- n.f. = near face
- No. = number
- N/C = not calculated
- O.H.W. = ordinary high water
- oe = overhead electrical
- psi = pounds per square inch
- R.O.W. = right of way
- Rt. = right
- spc. = space, spaces
- Sta. = station
- Symm. = symmetric
- Typ. = typical
- UT = ultrasonic testing
- Yr. = year



BRIDGE BASIS OF ESTIMATE						
ITEM NO.	ITEM	PAY UNIT	ESTIMATING UNIT	SUBST.	SUPERST.	TOTAL
202(13)	Removal of Bridge (Bridge No. 383)	LS	SF		2545	2545
205(1)	Excavation for Structures	CY	CY	190		190
205(3)	Structural Fill	CY	CY	100		100
205(4)	Porous Backfill Material	CY	CY	20		20
501(1)	Class A Concrete	LS	CY	48		48
501(3)	Class A Concrete	CY	CY	57		57
501(5)	Precast Concrete Member (62'-11 1/2" Prestressed Box Girder)	EA	EA		16	16
503(1)	Reinforcing Steel	LS	LBS	16,700		16,700
503(2)	Epoxy-Coated Reinforcing Steel	LS	LBS	830		830
503(3)	Drill and Bond Dowels	EA	EA	64		64
505(5)	Furnish Structural Steel Piles (2'-0"x1/2" Pipe)	LF	LF	1062		1062
505(6)	Drive Structural Steel Piles (2'-0"x1/2" Pipe)	EA	EA	9		9
507(2)	Pedestrian Railing	LF	LF		300	300
508(1)	Waterproofing Membrane	LS	SY		402	402
520(1)	Temporary Crossing	LS	LS			All Req'd
606(16)	Transition Rail	EA	EA		4	4
611(1)	Riprap, Class I	CY	CY	610		610
631(2)	Geotextile, Erosion Control, Class 1	SY	SY	780		780

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

ACTUAL INSTALLED PILE LENGTHS	
PILE ID	NET LENGTH (ft)
A1-1	61.50
A1-2	69.65
A1-3	75.10
P2-1	113.00
P2-2	117.00
P2-3	122.00
A3-1	160.23
A3-2	162.15
A3-3	163.76

Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.  
 PE: [Signature] Date: 07-08-2015

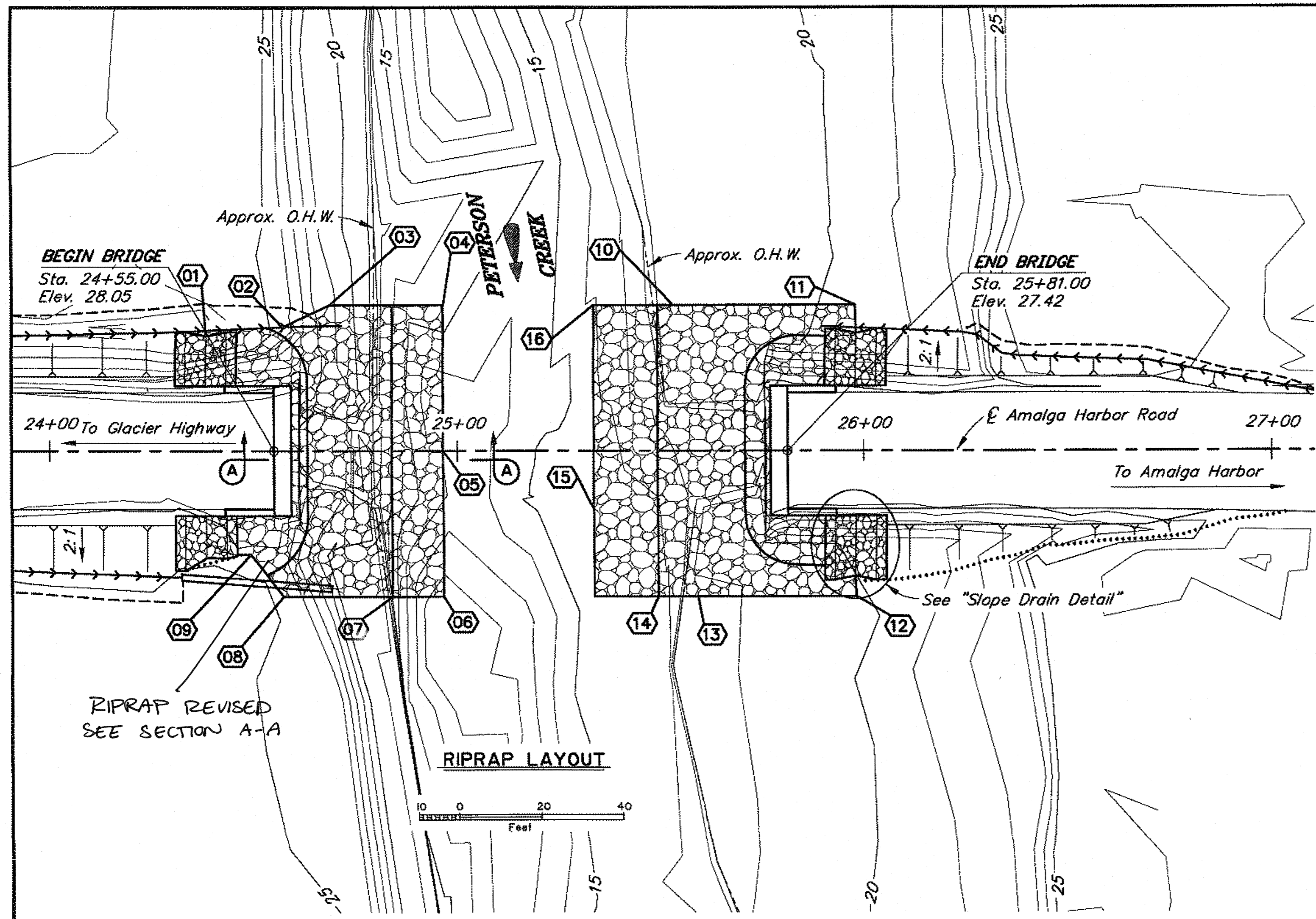
DESIGNED BY: Steve Lee	CHECKED: Loran Gehring	HYDRAULICS BY: Robert Troust	CHECKED BY:
DRAWN BY: Sam Sallie	CHECKED: Steve Lee	FOUNDATIONS REVIEWED BY: Dave Hemstreet / CH2MHill	
QUANTITIES BY: Steve Lee	CHECKED: Loran Gehring		

STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION  
 AND PUBLIC FACILITIES  
 BRIDGE SECTION

**PETERSON CREEK BRIDGE**  
 AMALGA HARBOR ROAD  
 SITE PLAN

BRIDGE NO. 383  
 DWG. NO. 2

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BH-0950(1)/69684	2013	N3	55

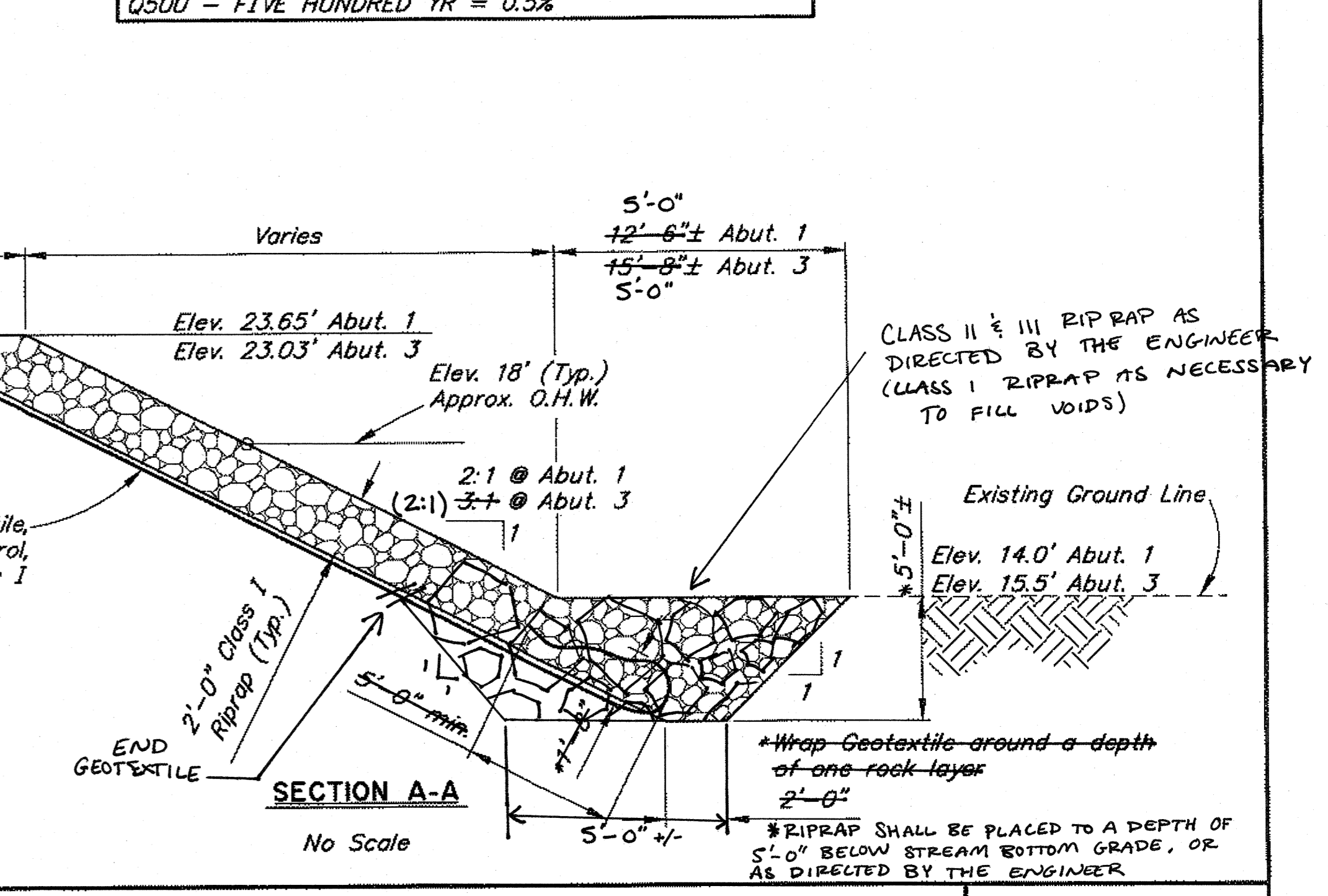
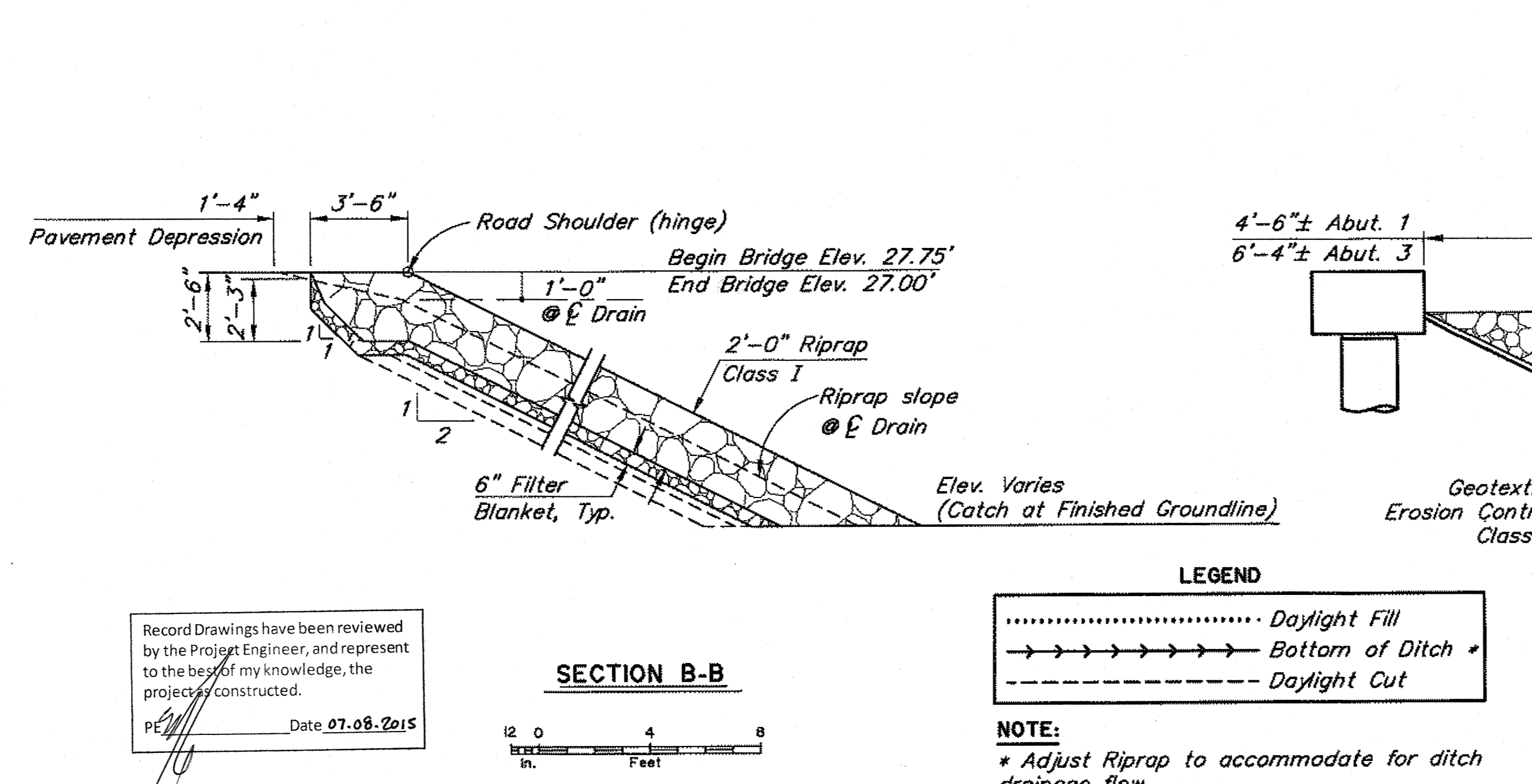
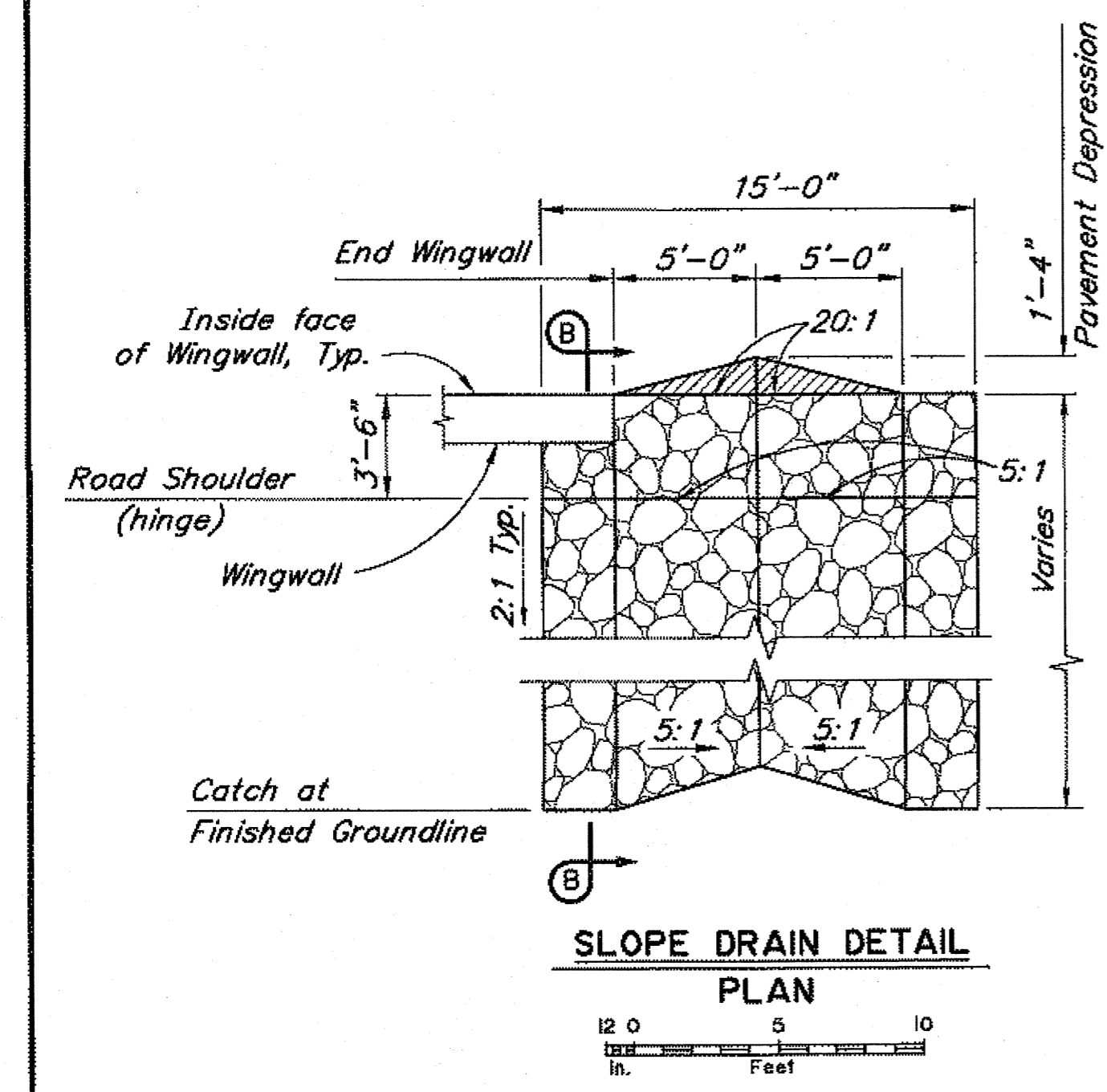


POINT	STATION	OFFSET	ELEVATION
01	24+38.00	29.7' LT	23.0
02	24+56.88	30.6' LT	23.0
03	24+68.47	36.0' LT	22.0
04	24+96.47	36.0' LT	14.0
05	24+96.46	00.0' RT	14.0
06	24+96.46	36.0' RT	14.0
07	24+83.96	36.0' RT	14.0
08	24+56.97	36.0' RT	20.0
09	24+49.00	25.6' RT	25.0
10	25+52.71	36.0' LT	17.0
11	25+98.00	36.0' LT	20.5
12	25+98.00	36.0' RT	20.5
13	25+58.71	36.0' RT	19.0
14	25+48.88	36.0' RT	15.5
15	25+33.21	14.3' RT	15.5
16	25+33.21	36.0' LT	15.5

AK DOT & PF BRIDGE NO.	383
DRAINAGE AREA, SQ MI	9.72
BRIDGE LENGTH, FT	126.50
BRIDGE WIDTH, FT	32
MINIMUM CHORD ELEV, FT	24.61
MINIMUM CAP BOTTOM ELEV, FT	21.28
OHW ELEV, FT	18.15
HW ELEV @ Q100, FT	21.12
PIER SCOUR	4.40
ABUTMENT / CONTRACTION SCOUR	2.00
ABUTMENT / END TREATMENT	CLASS I RIPRAP

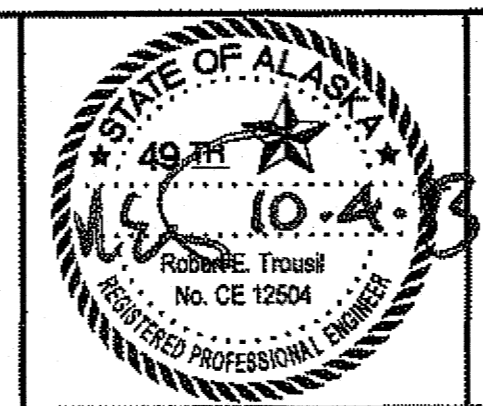
RETURN PERIOD	FLOW RATE, CFS	HEADWATER ELEV, (FT)	DISTANCE TO CHORD BOTTOM, (FT)
Q2	400	18.15	6.46
Q50	2310	20.97	3.64
Q100	2670	21.12	3.49
Q500	3220	22.31	2.30
Discharge Rqd. to overtop roadway, CFS	N/A		
Roadway overtopping recurrence probability	>Q500		

Q2 - TWO YR = 50% (OHW)
Q50 - FIFTY YR = 2%
Q100 - ONE HUNDRED YR = 1%
Q500 - FIVE HUNDRED YR = 0.5%



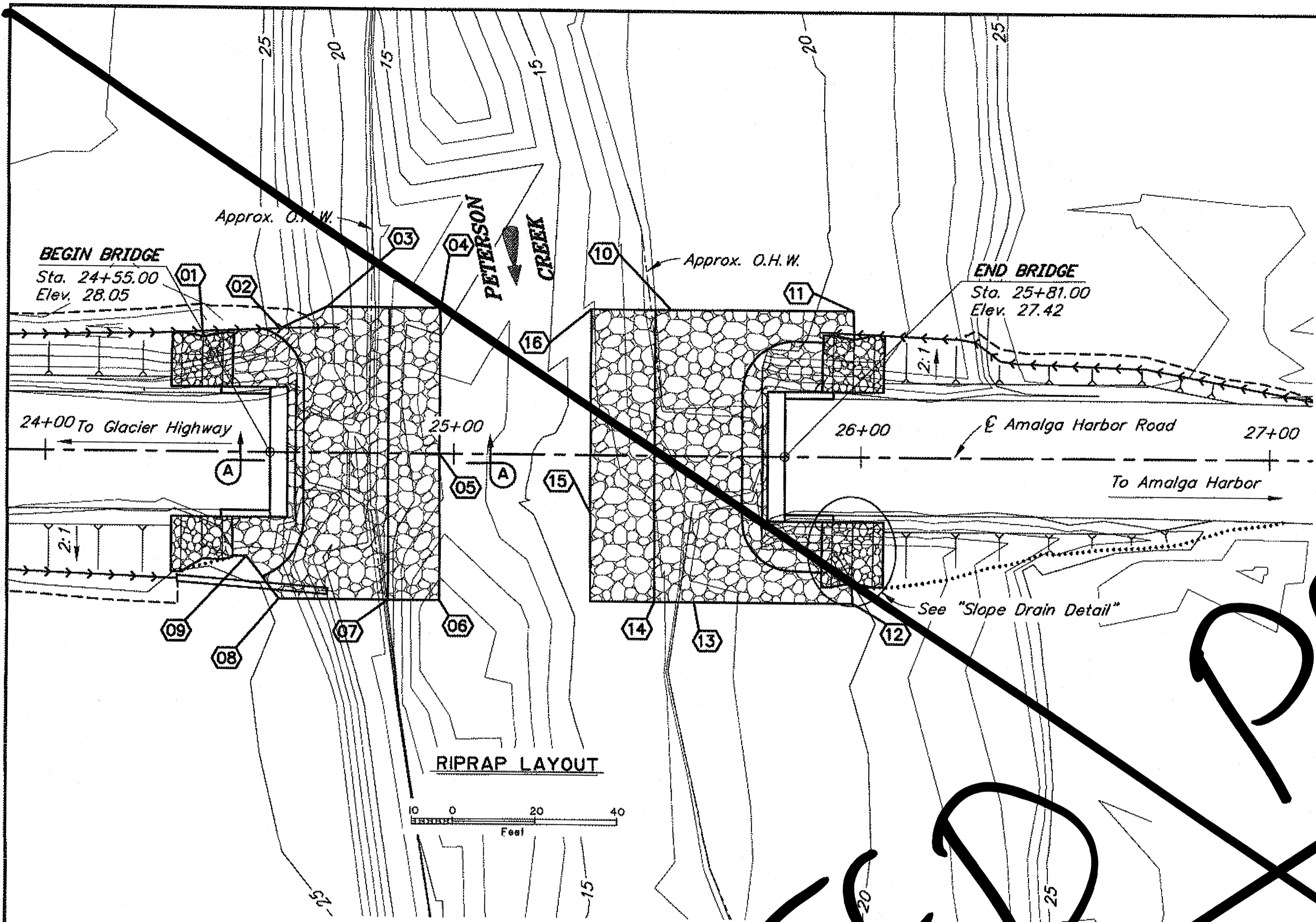
DESIGNED BY: Sara Manning	CHECKED: Robert Trautill
DRAWN BY: Sam Solie Jr.	CHECKED: Steve Lee
QUANTITIES BY: Steve Lee	CHECKED: Sara Manning

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
BRIDGE SECTION



PETERSON CREEK BRIDGE  
AMALGA HARBOR ROAD  
RIPRAP LAYOUT

BRIDGE NO. 383  
DWG. NO. 3

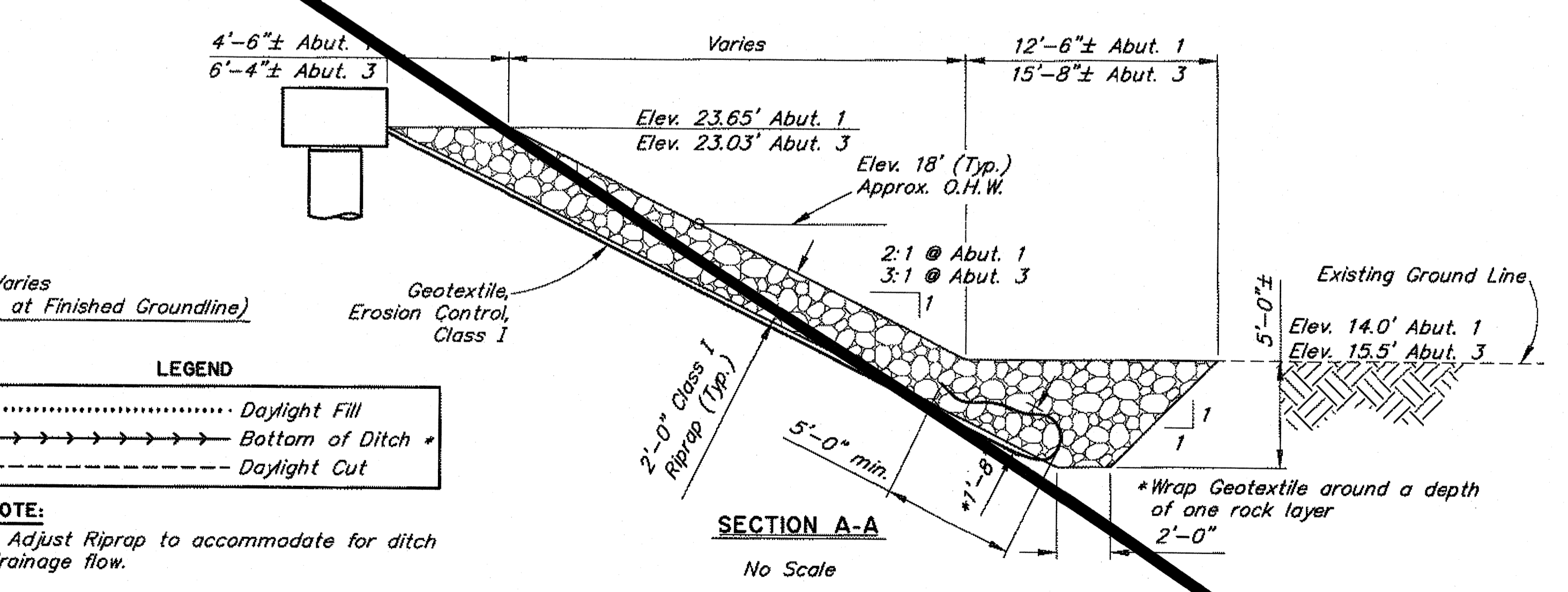
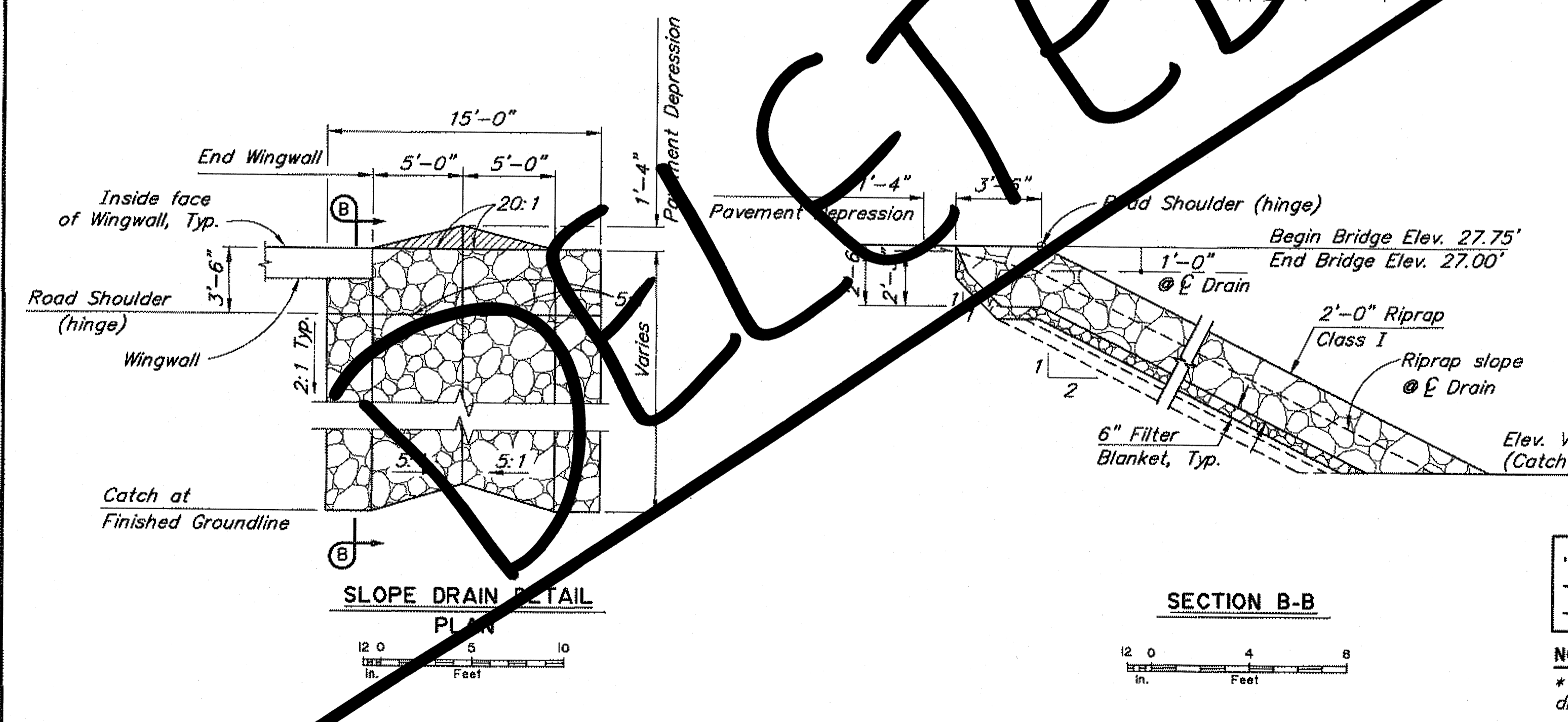


POINT	STATION	OFFSET	ELEVATION
1	24+38.00	29.7' LT	23.0
2	24+56.88	30.6' LT	23.0
3	24+68.47	36.0' LT	22.0
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5	24+96.46	00.0' RT	14.0
6	24+96.46	36.0' RT	14.0
7	24+83.96	36.0' RT	20.0
8	24+56.97	36.0' RT	14.0
9	24+49.00	25.6' RT	25.0
10	25+52.71	36.0' LT	17.0
11	25+98.00	36.0' LT	20.5
12	25+98.00	36.0' RT	20.5
13	25+52.71	36.0' RT	19.0
14	24+48.58	36.0' RT	15.5
15	25+52.71	17.3' RT	15.5
16	25+52.71	36.0' LT	15.5

AK DOT & PI BRIDGE NO.	383
DRAINAGE AREA, SQ MI	9.72
BRIDGE LENGTH, FT	126.50
BRIDGE WIDTH, FT	32
MINIMUM CHORD ELEV, FT	14.61
MINIMUM CAP BOTTOM ELEV, FT	21.28
OHW ELEV, FT	18.15
HW ELEV @ 100, FT	21.12
WATER SCOUR	4.40
ABUTMENT / CONTRACTION SCOUR	2.00
ABUTMENT / ROAD TREATMENT	CLASS I RIPRAP

RETURN PERIOD	FLOW RATE, CFS	HEADWATER ELEV, (FT)	DISTANCE TO CHORD BOTTOM, (FT)
Q2	400	18.15	6.46
Q50	2310	20.97	3.64
Q100	2670	21.12	3.49
Q500	3220	22.31	2.30
Discharge Req. to overtop roadway, CFS	N/A		
Roadway overtopping recurrence probability	>Q500		

Q2 - TWO YR = 50% (OHW)
Q50 - FIFTY YR = 2%
Q100 - ONE HUNDRED YR = 1%
Q500 - FIVE HUNDRED YR = 0.5%

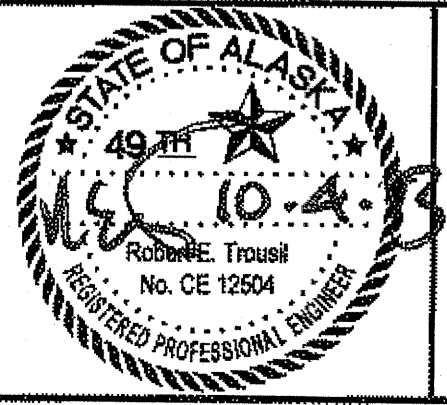


DESIGNED BY: Sara Manning  
 DRAWN BY: Sam Salik  
 QUANTITIES BY: Steve Lee

CHECKED: Robert Trauss  
 CHECKED: Steve Lee  
 CHECKED: Sara Manning

Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.  
 PE [Signature] Date 07-08-2015

STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION  
 AND PUBLIC FACILITIES  
 BRIDGE SECTION

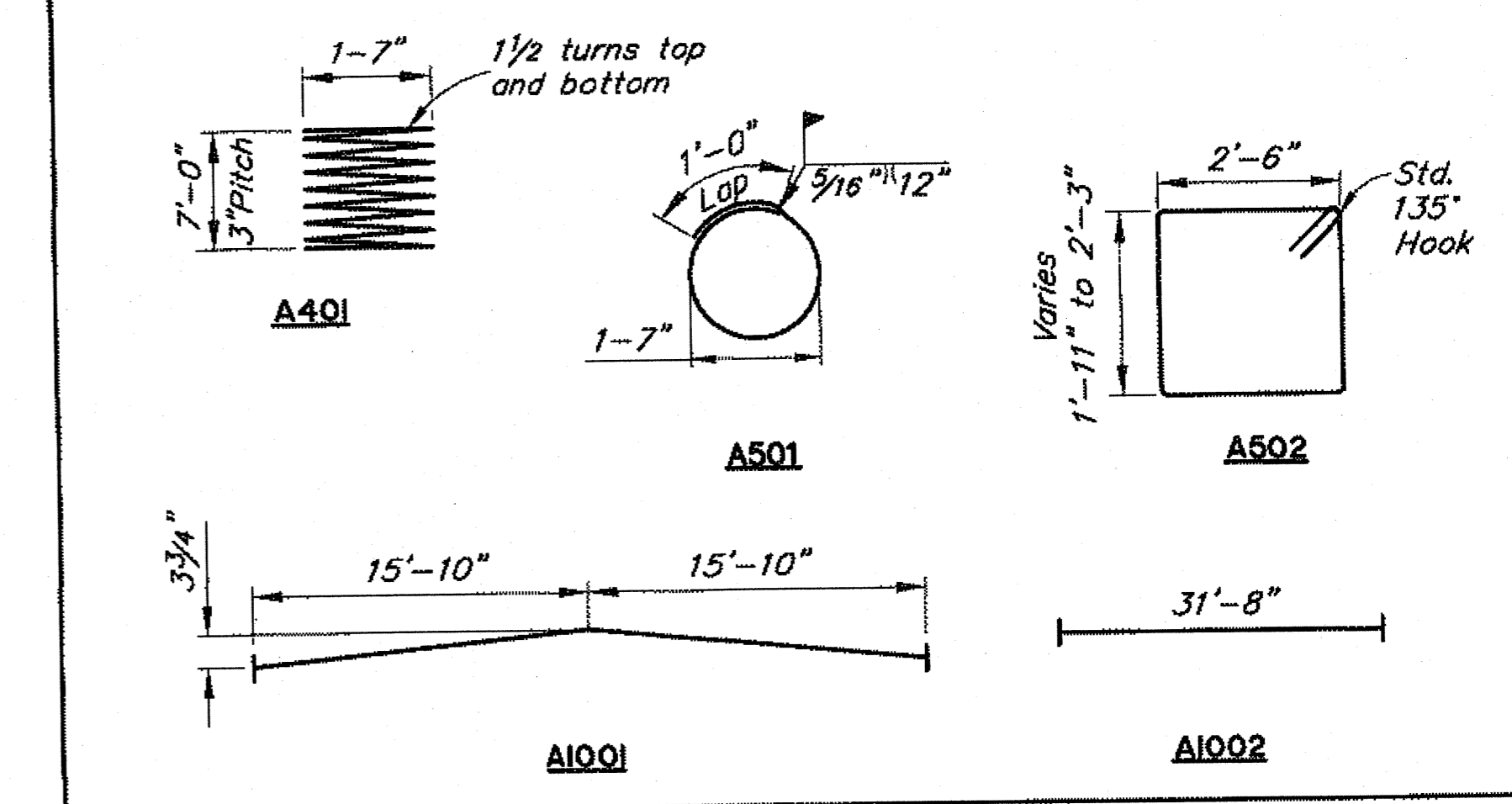


PETERSON CREEK BRIDGE  
 AMALGA HARBOR ROAD  
 RIPRAP LAYOUT

BRIDGE No. 383  
 DWG. NO. 3

**REINFORCING STEEL SCHEDULE - ONE ABUTMENT**

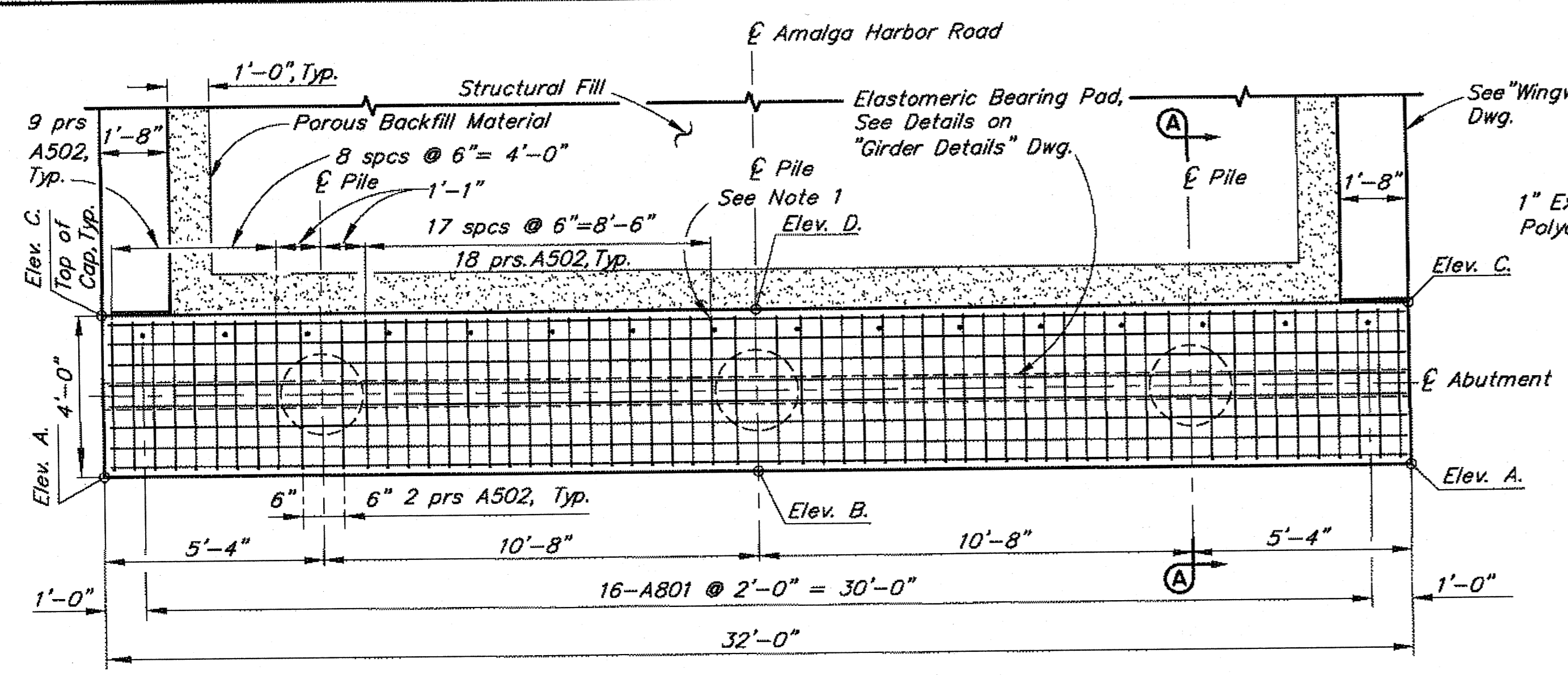
MARK	NOTE	SIZE	NO.	LENGTH	TYPE	BENDING DIAGRAM
A401	S	4	3	154'-6"	SPIRAL	
A402		4	12	4'-5"	STIRRUP	
A501		5	15	6'-0"	HOOP	
A502		5	120	Varies	STIRRUP	
A601		6	4	31'-8"		
A801	A,E	8	16	3'-6"		
A802		8	24	9'-4"		
A1001	H	10	8	31'-8"	HEADED	
A1002	H	10	8	31'-8"	HEADED	



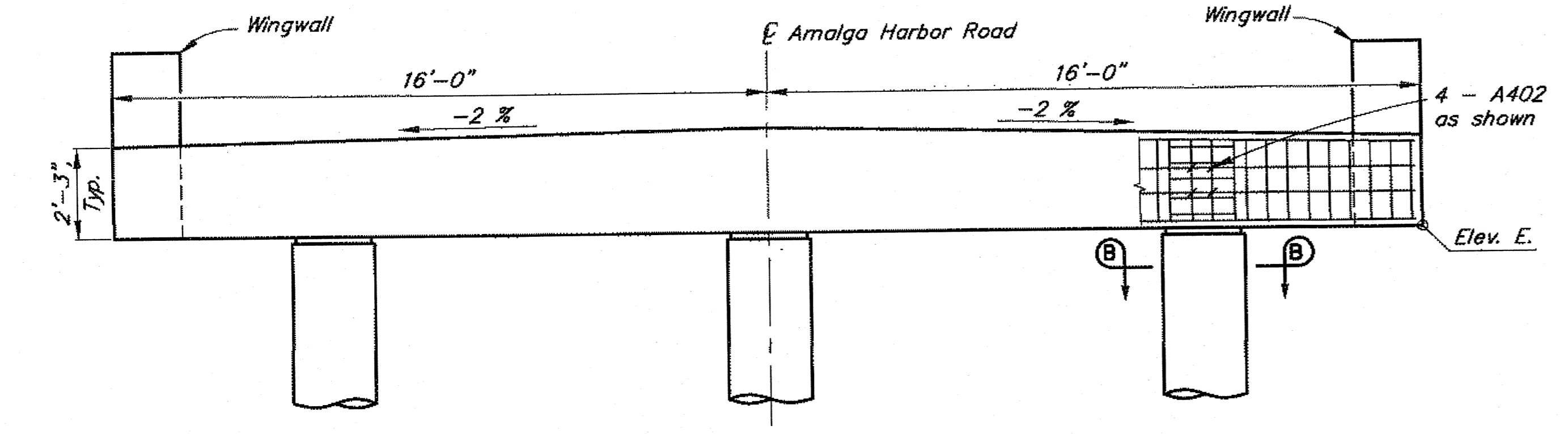
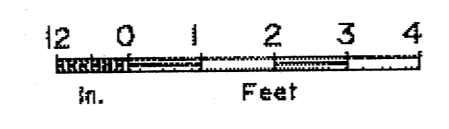
A - Drill and bond 1'-6" after girder erection  
 E - Epoxy coated reinforcing steel  
 H - Headed reinforcing steel  
 S - Splices permitted. Length does not include splices.

**CAP ELEVATION TABLE**

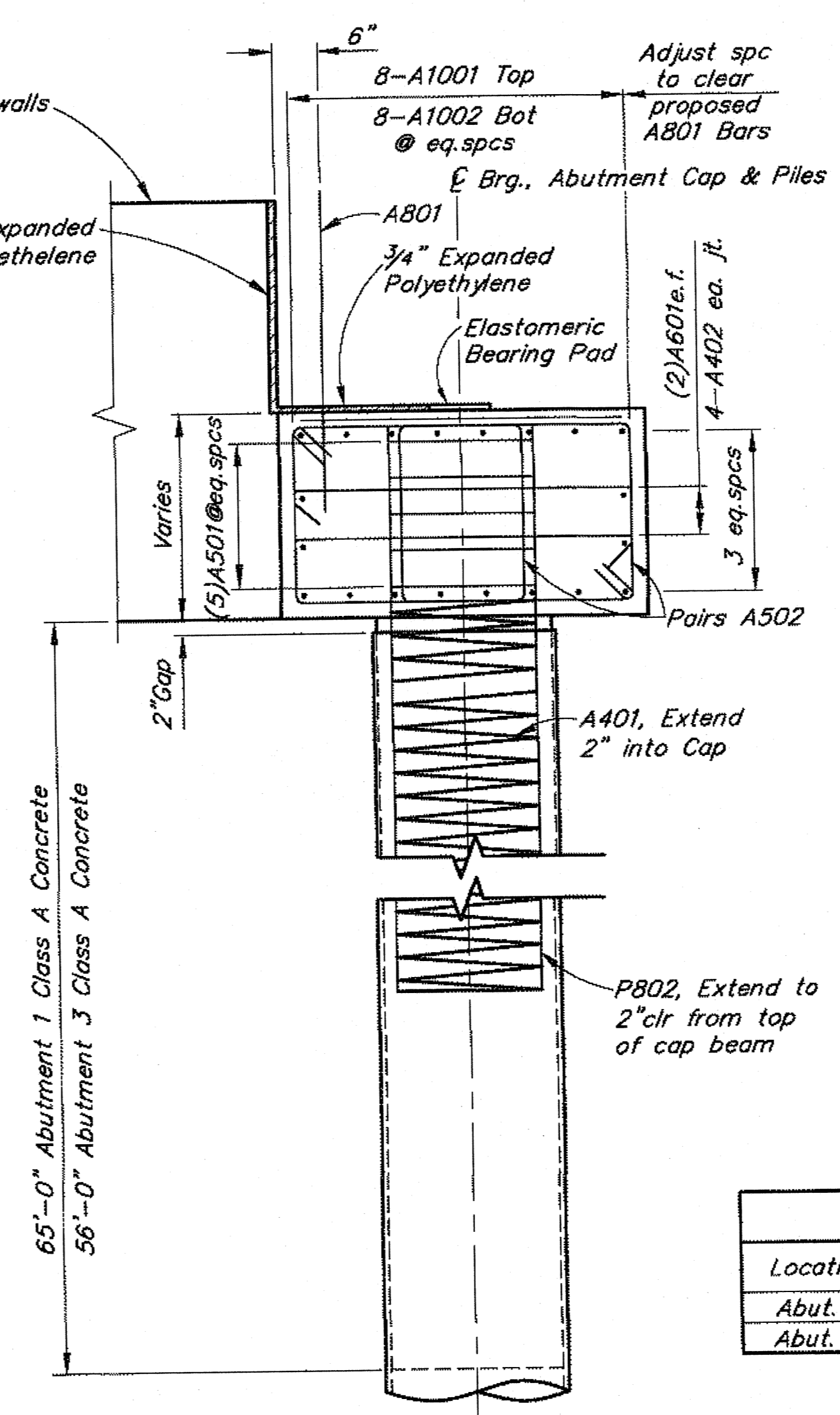
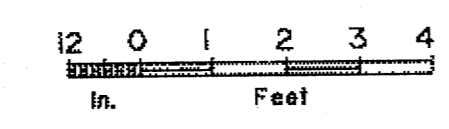
Location	Elevation A	Elevation B	Elevation C	Elevation D	Elevation E
Abut. 1	25.15	25.47	25.17	25.49	22.90
Abut. 3	24.56	24.88	24.54	24.86	22.28



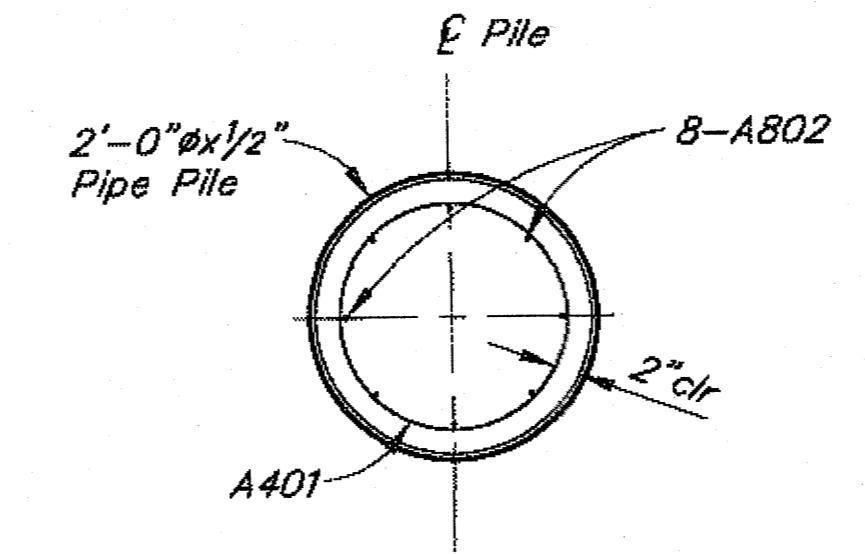
**PLAN**



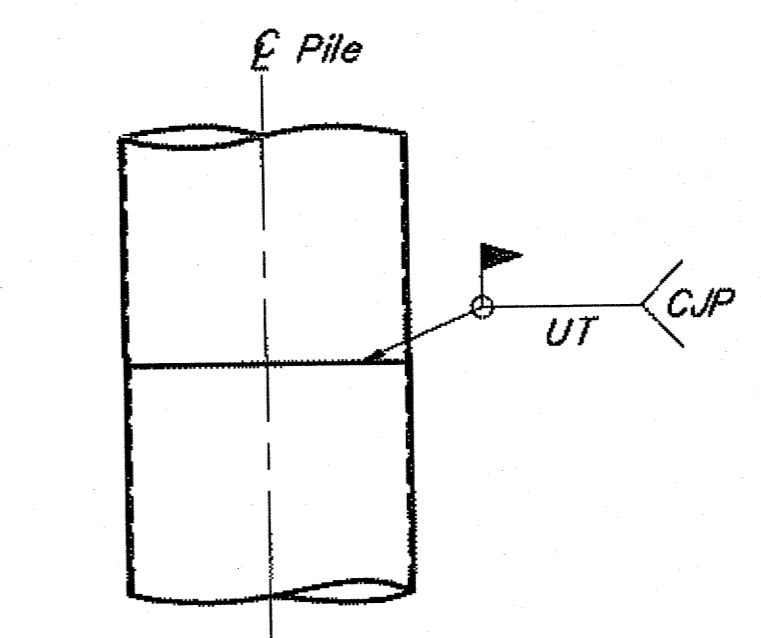
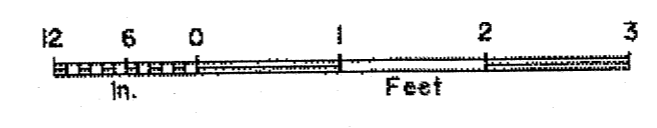
**ELEVATION**



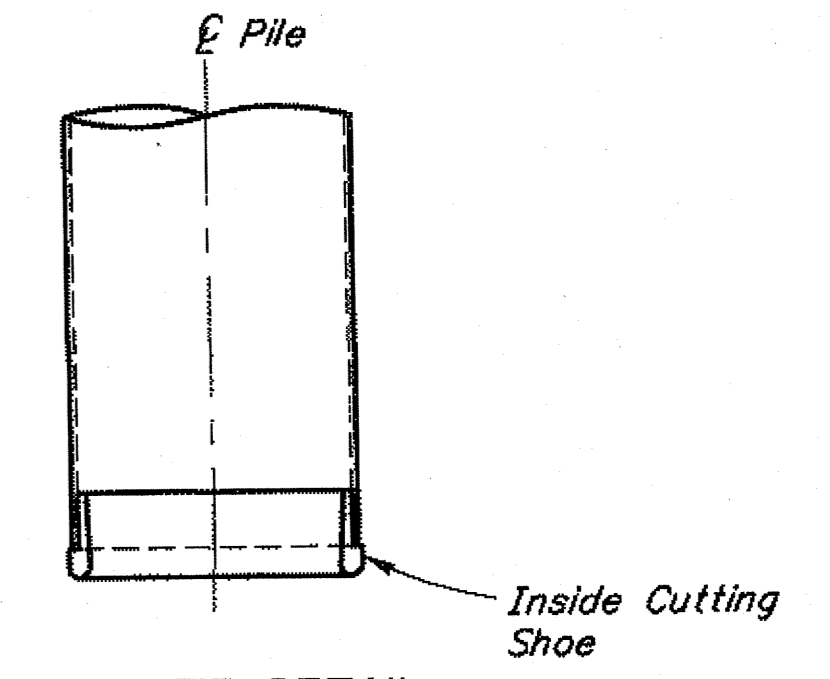
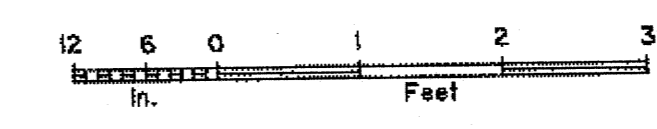
**SECTION A-A**



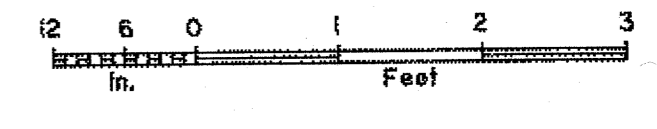
**SECTION B-B**



**PILE SPLICE DETAIL**



**PILE TIP DETAIL**

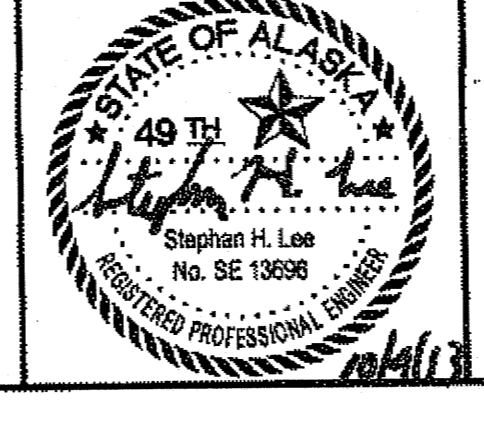


- NOTES:**
1. Adjust A502 to clear A801 bars.
  2. A801's, elastomeric pads and expanded polyethylene not shown in Elevation view.
  3. Bond elastomeric bearing pads and expanded polyethylene to concrete with epoxy resin adhesive meeting AASHTO M235, Type IV, Grade 3, Class B.

Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.  
 PE [Signature] Date 07-08-2015

DESIGNED BY: Steve Lee	CHECKED: Loren Gehring
DRAWN BY: Sam Sallie Jr	CHECKED: Steve Lee
QUANTITIES BY: Steve Lee	CHECKED: Loren Gehring

STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION  
 AND PUBLIC FACILITIES  
 BRIDGE SECTION



**PETERSON CREEK BRIDGE**  
 AMALGA HARBOR ROAD  
 ABUTMENTS

BRIDGE NO. 383  
 DWG. NO. 4

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BH-0950(1)/69684	2013	N5	55

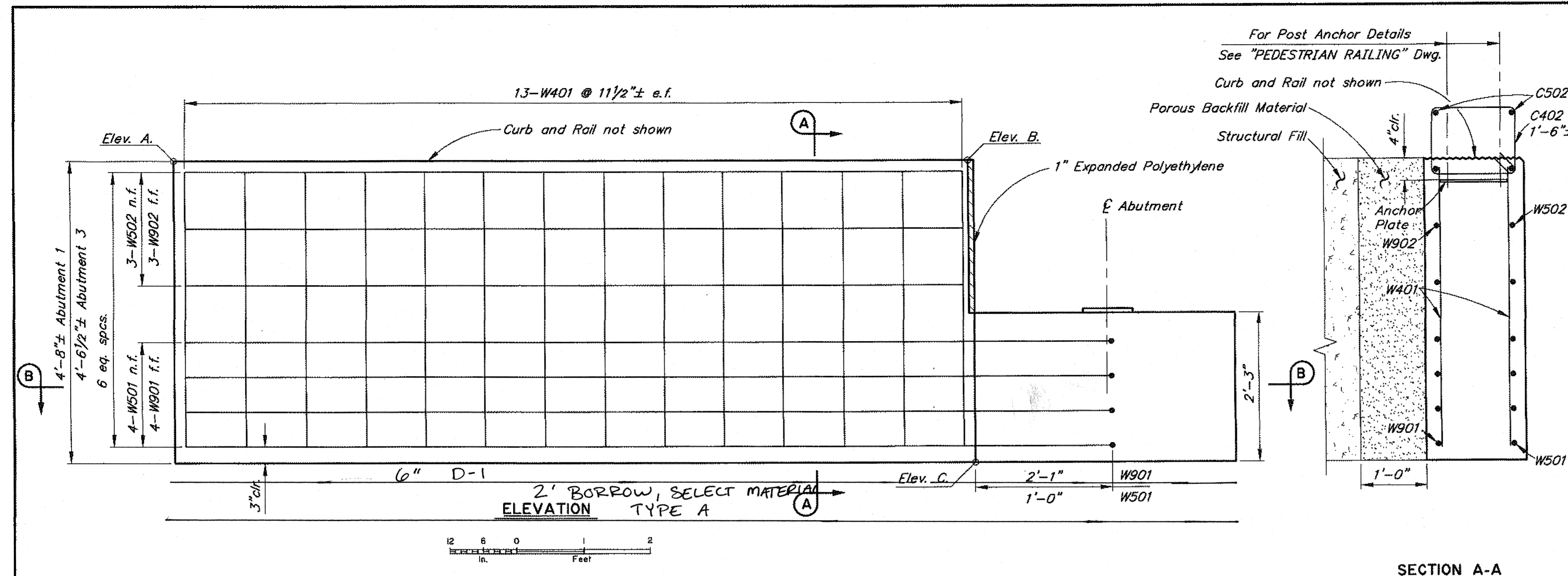
**REINFORCING STEEL SCHEDULE - ONE ABUTMENT**

MARK	NOTE	SIZE	NO.	LENGTH	TYPE	BENDING DIAGRAM
W401		4	52	4'-2"	---	10"
W501		5	8	13'-8"	BENT	
W502		5	6	11'-7"	---	12'-10"
W901		9	8	15'-2"	BENT	
W902		9	6	11'-7"	---	
C402	E	4	18	5'-3"	BENT	13'-11" Std. 180° Hook
C502	E	5	4	11'-7"	---	

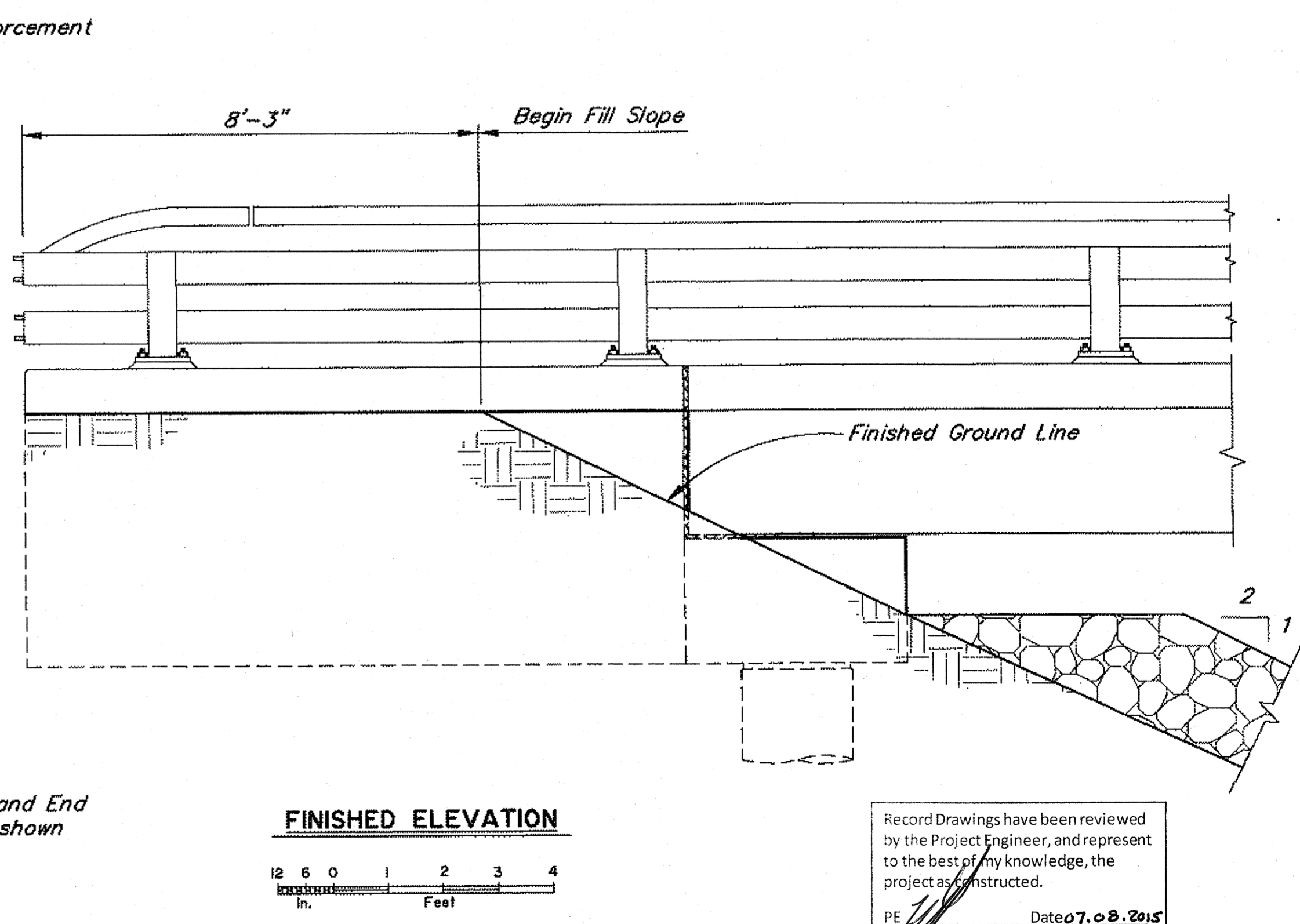
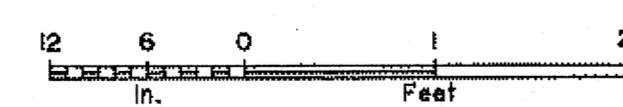
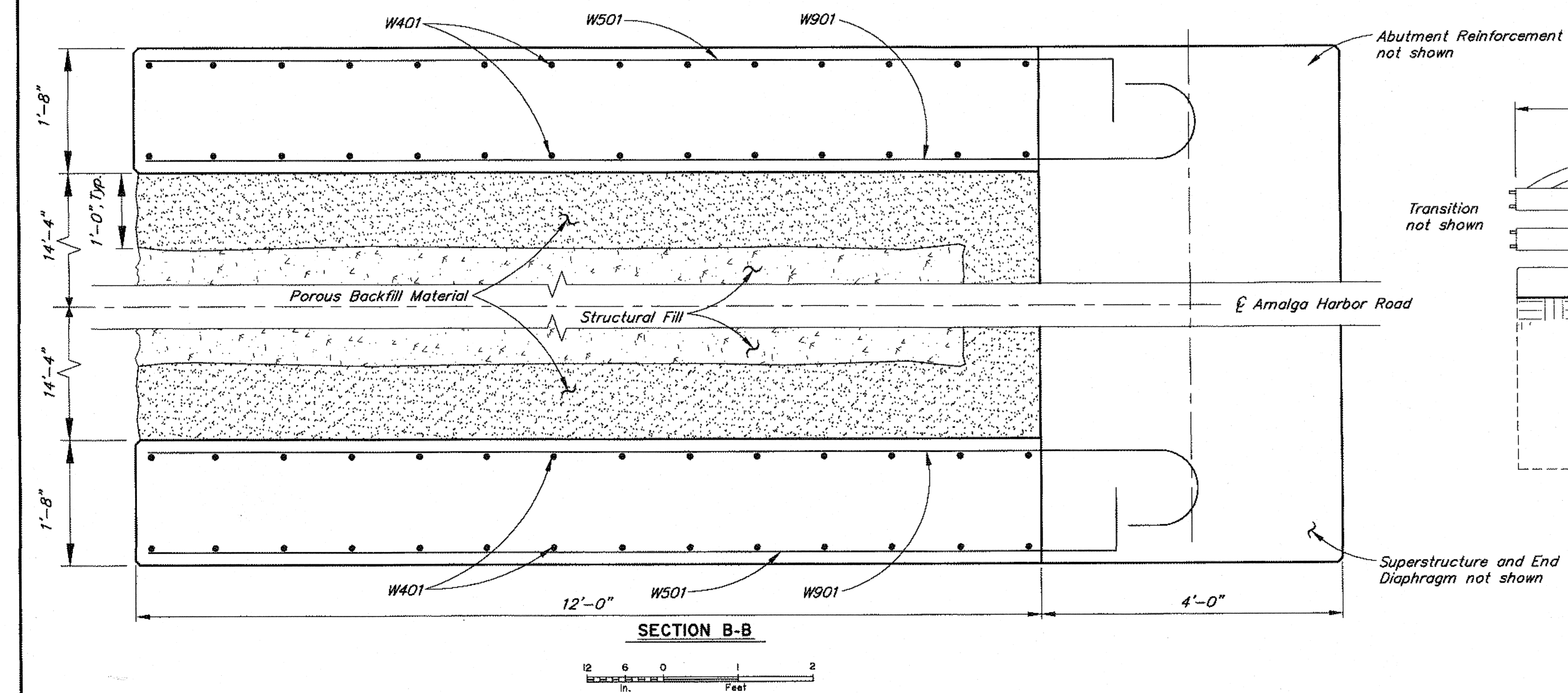
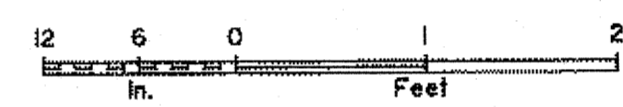
E - Epoxy coated reinforcing steel.

**WINGWALL ELEVATION TABLE**

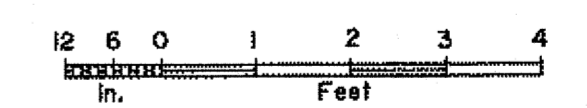
Location	Elevation A	Elevation B	Elevation C
Abut. 1	27.57	27.51	22.92
Abut. 3	26.82	26.88	22.29



SECTION A-A



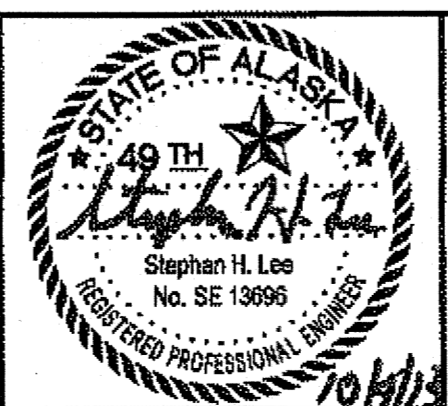
FINISHED ELEVATION



Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.  
PE [Signature] Date 7.08.2015

DESIGNED BY: Steve Lee	CHECKED: Loren Gehring
DRAWN BY: Sam Sallie Jr	CHECKED: Steve Lee
QUANTITIES BY: Steve Lee	CHECKED: Loren Gehring

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
BRIDGE SECTION

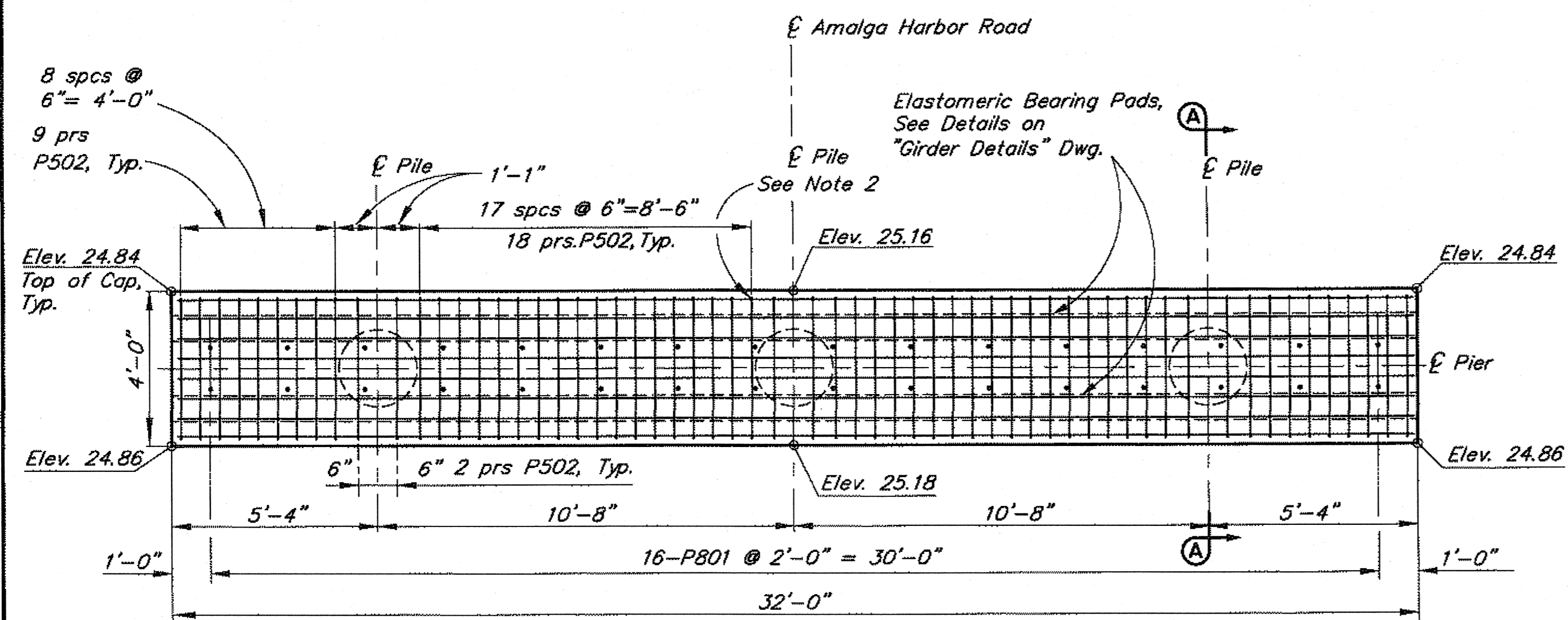


**PETERSON CREEK BRIDGE**  
AMALGA HARBOR ROAD  
**WINGWALLS**

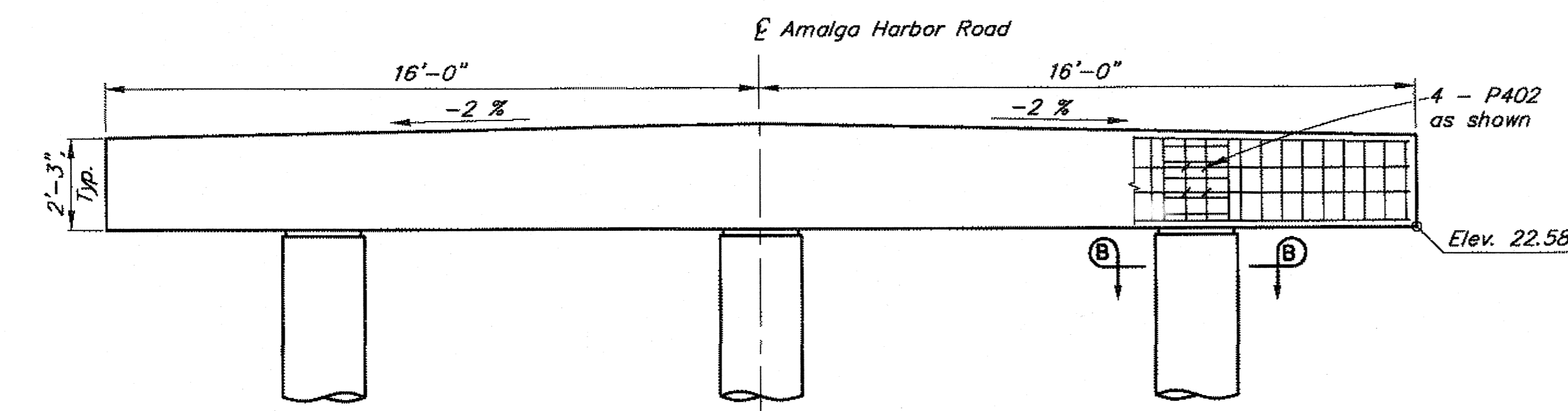
BRIDGE NO. 383  
DWG. NO. 5

**REINFORCING STEEL SCHEDULE - PIER 2**

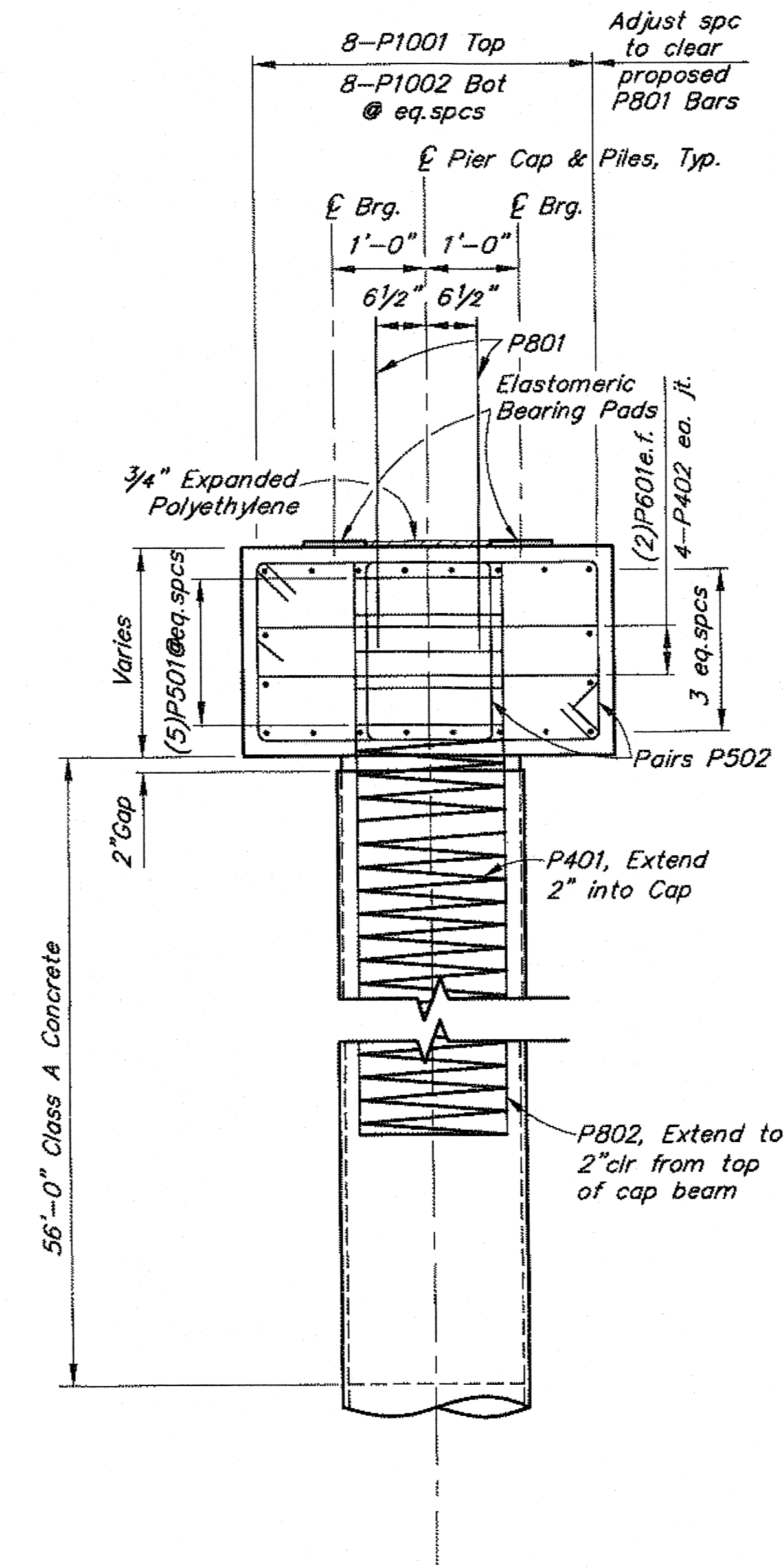
MARK	NOTE	SIZE	NO.	LENGTH	TYPE	BENDING DIAGRAM
P401	S	4	3	154'-6"	SPIRAL	
P402		4	12	4'-5"	STIRRUP	
P501		5	15	6'-0"	HOOP	
P502		5	120	Varies	STIRRUP	
P601		6	4	31'-8"		
P801	A,E	8	32	3'-6"		
P802		8	24	9'-4"		
P1001	H	10	8	31'-8"	HEADED	
P1002	H	10	8	31'-8"	HEADED	



**PLAN**  
 12 0 1 2 3 4  
 In. Feet

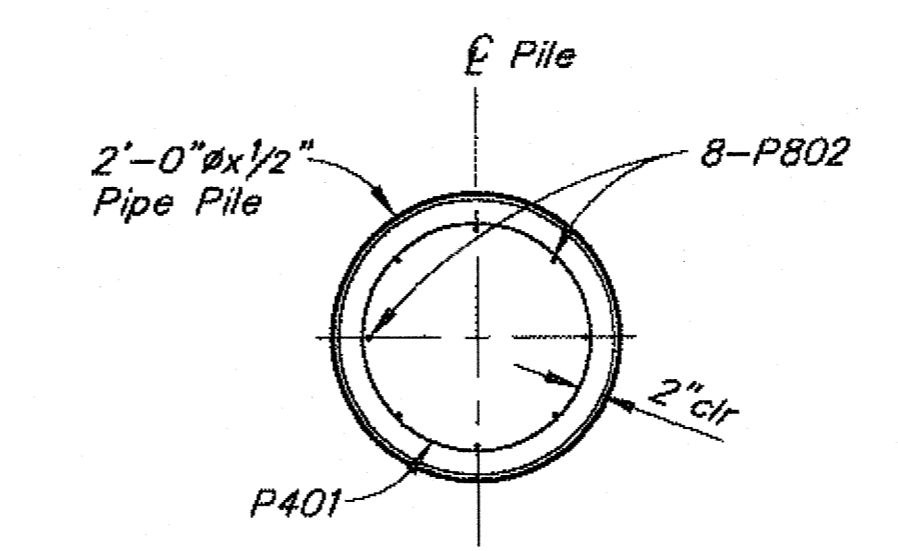


**ELEVATION**  
 12 0 1 2 3 4  
 In. Feet



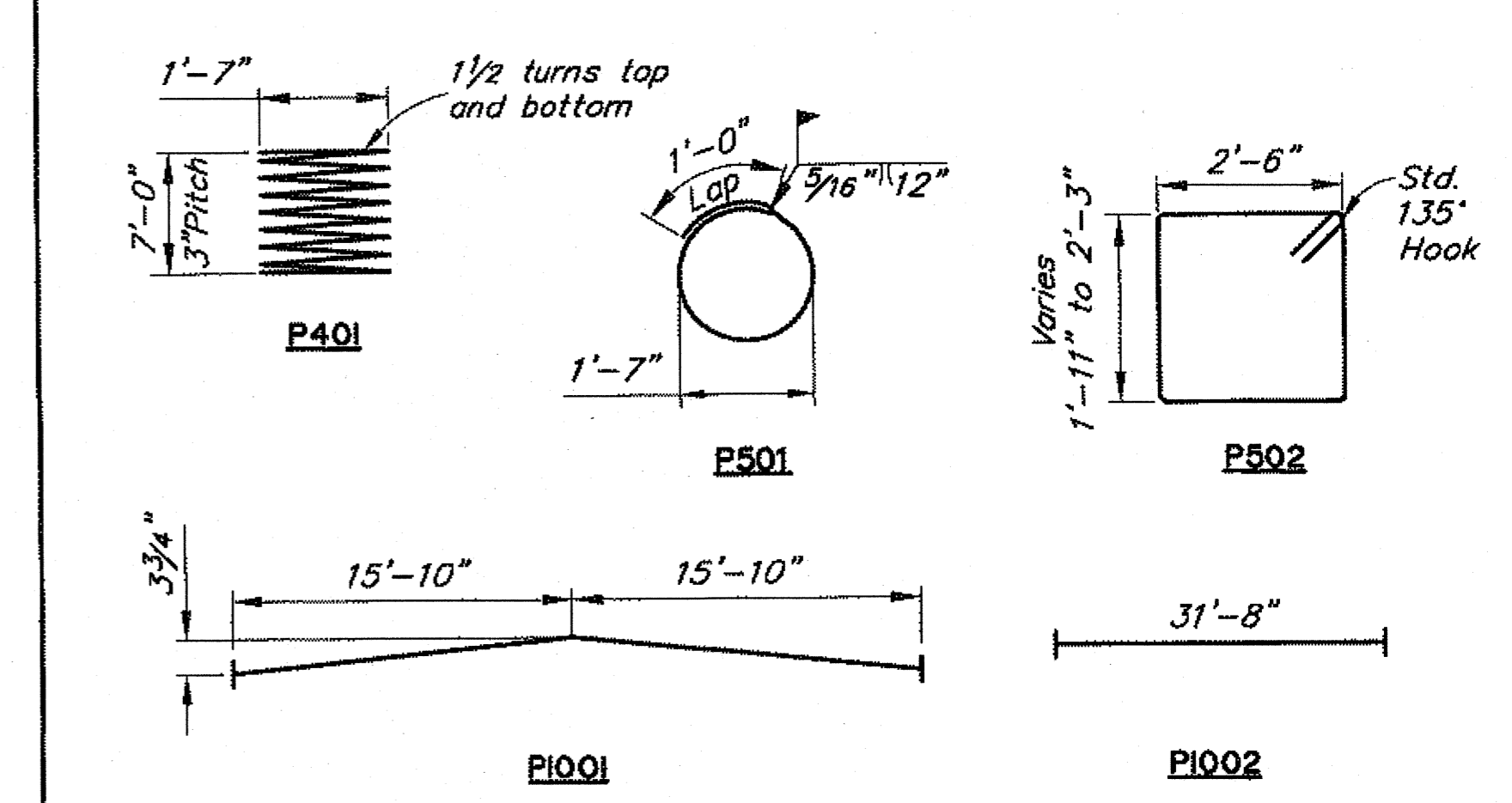
**SECTION A-A**

12 6 0 1 2 3  
 In. Feet



**SECTION B-B**

12 6 0 1 2 3  
 In. Feet



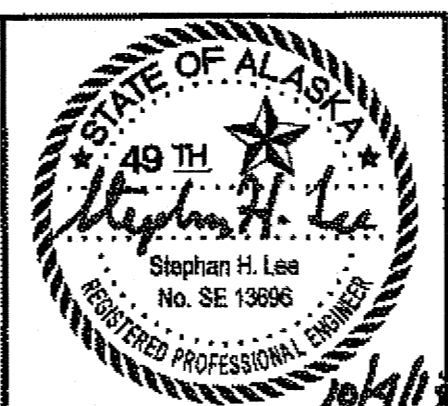
A - Drill and bond 1'-6" after girder erection  
 E - Epoxy coated reinforcing steel  
 H - Headed reinforcing steel  
 S - Splices permitted. Length does not include splices.

- NOTES:**
- See "ABUTMENTS" Dwg for "Pile Splice Detail" and "Pile Tip Detail".
  - Adjust P502 to clear P801 bars.
  - P801's, elastomeric pads and expanded polyethylene not shown in Elevation view.
  - Adjust P1001 to clear P801 bars.
  - Bond elastomeric bearing pads and expanded polyethylene to concrete with epoxy resin adhesive meeting AASHTO M235, Type IV, Grade 3, Class B.

DESIGNED BY: Steve Lee  
 CHECKED: Loren Gehring  
 DRAWN BY: Sam Sallie Jr.  
 CHECKED: Steve Lee  
 QUANTITIES BY: Steve Lee  
 CHECKED: Loren Gehring

Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.  
 PE: [Signature] Date: 07.06.2015

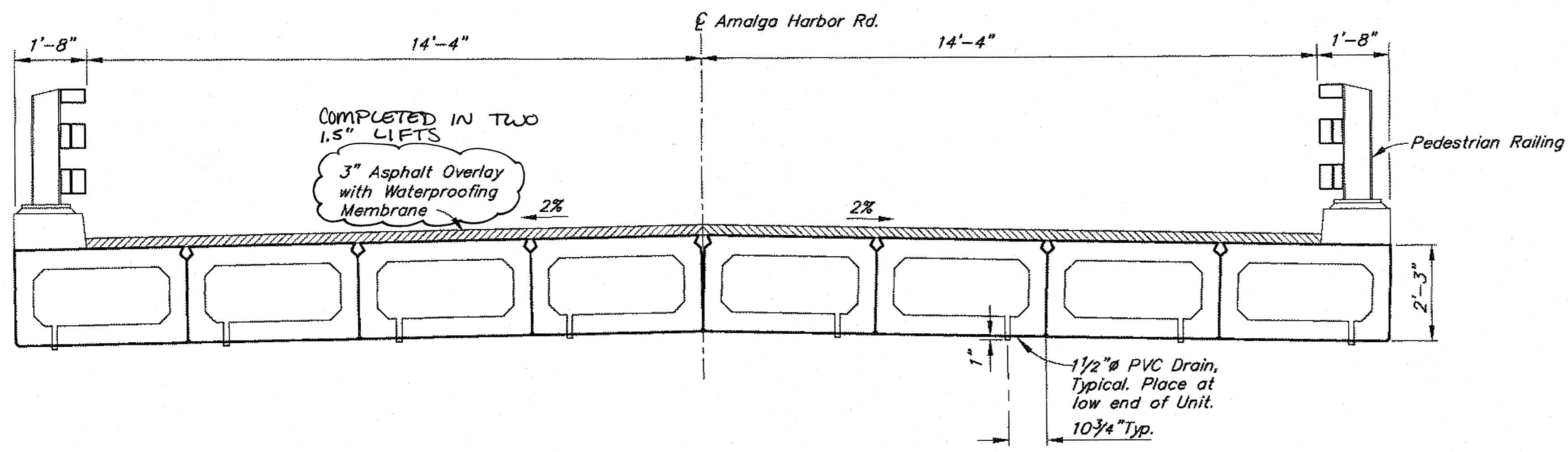
STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION  
 AND PUBLIC FACILITIES  
 BRIDGE SECTION



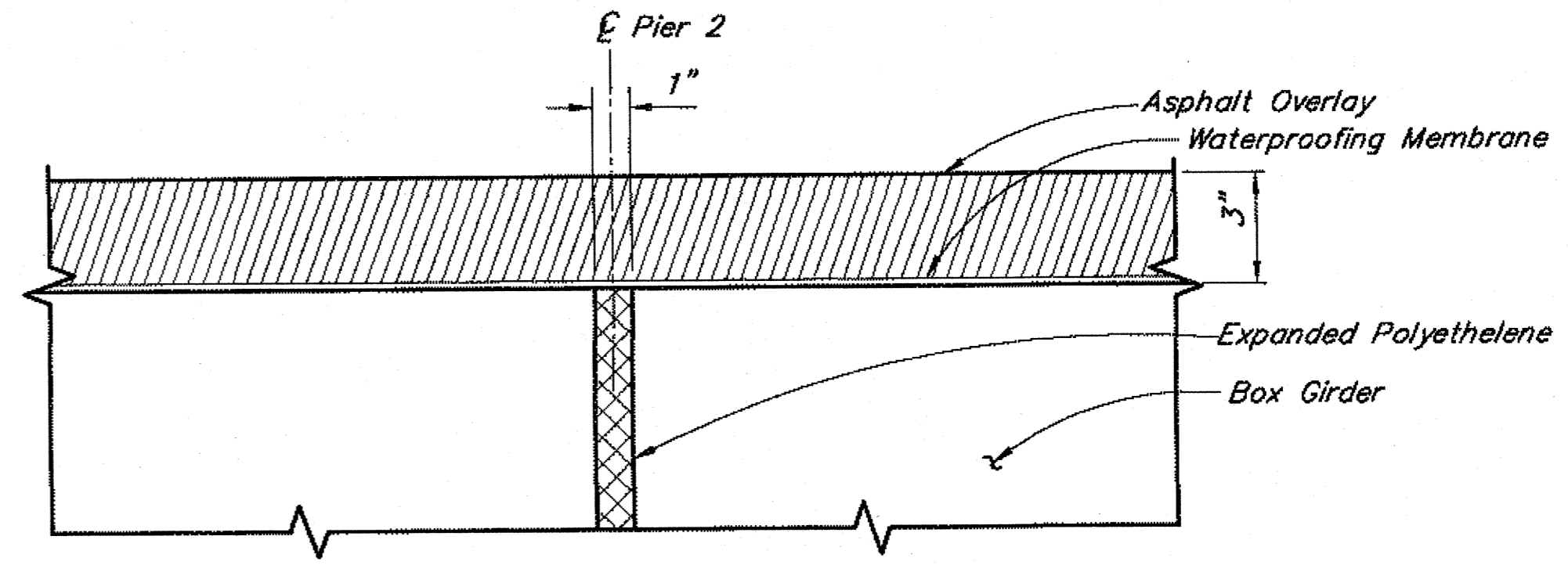
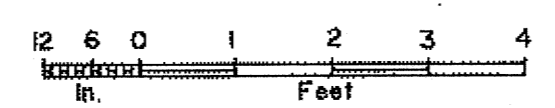
**PETERSON CREEK BRIDGE**  
 AMALGA HARBOR ROAD  
**PIER 2**

BRIDGE NO. 383  
 DWG. NO. 6

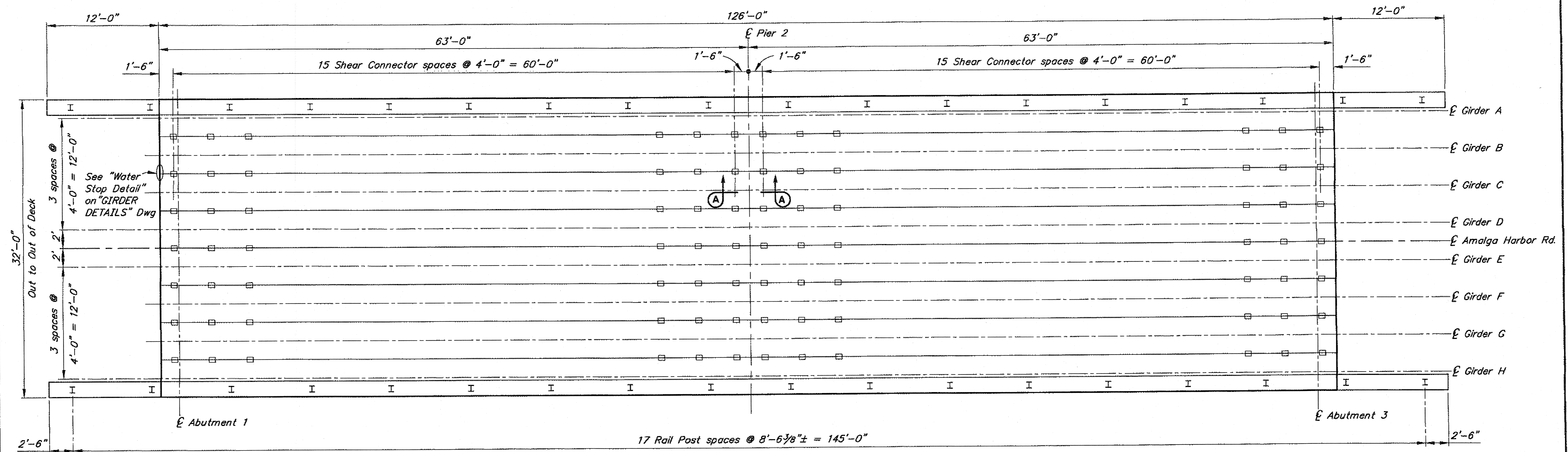
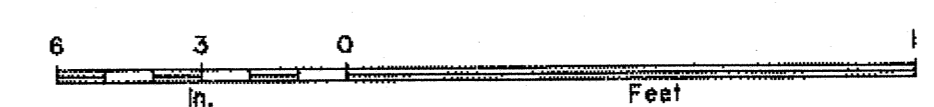
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BH-0950(1)/69684	2013	N7	55



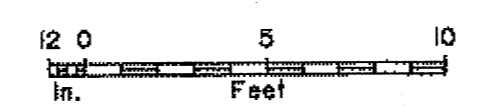
TYPICAL SECTION



SECTION A-A



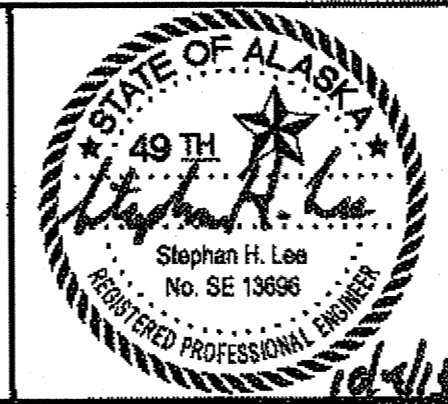
FRAMING PLAN



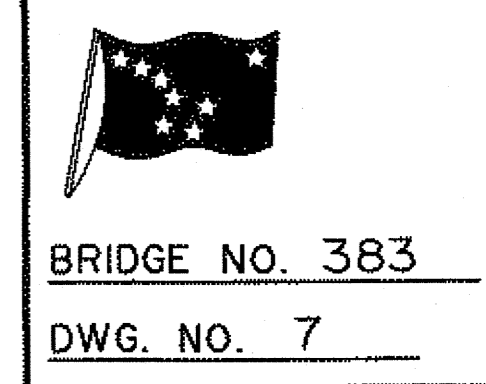
DESIGNED BY: Steve Lee	CHECKED: Loran Gahrng
DRAWN BY: Sam Sallie Jr	CHECKED: Steve Lee
QUANTITIES BY: Steve Lee	CHECKED: Loran Gahrng

Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.  
PE [Signature] Date 07-08-2015

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
BRIDGE SECTION



PETERSON CREEK BRIDGE  
AMALGA HARBOR ROAD  
FRAMING PLAN AND TYPICAL SECTION

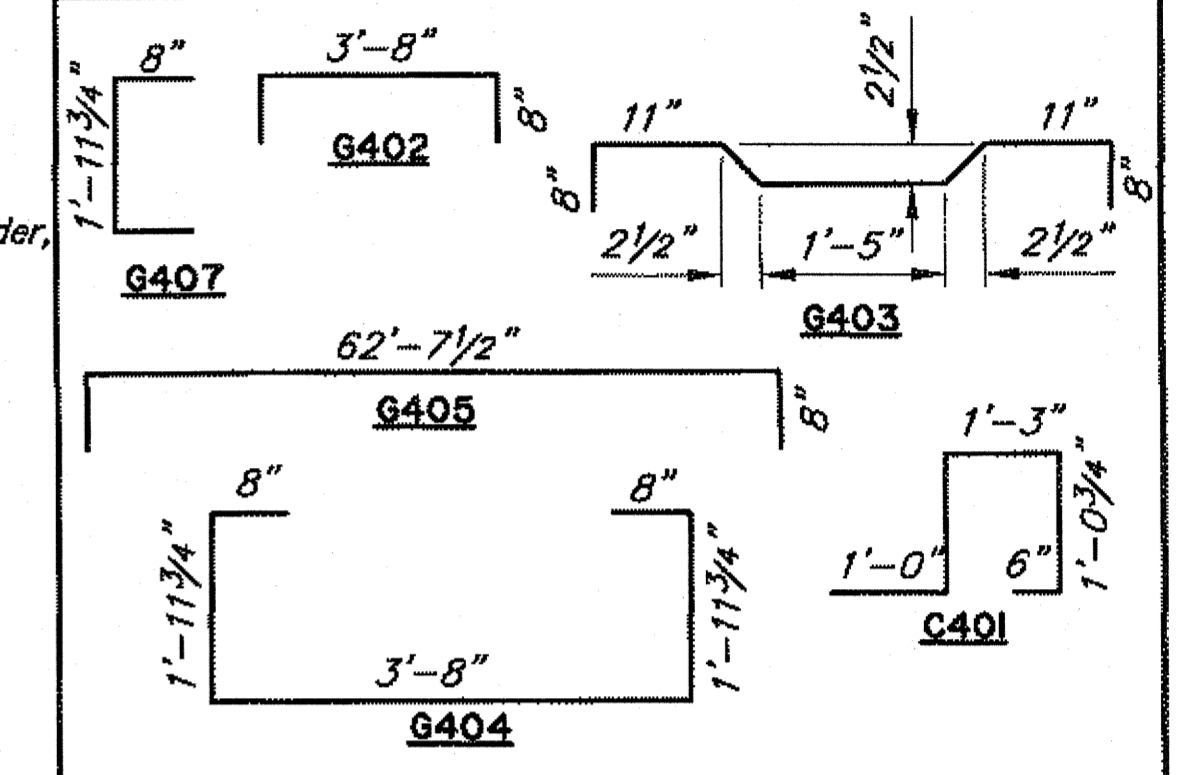


STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BH-0950(1)/69684	2013	N8	55

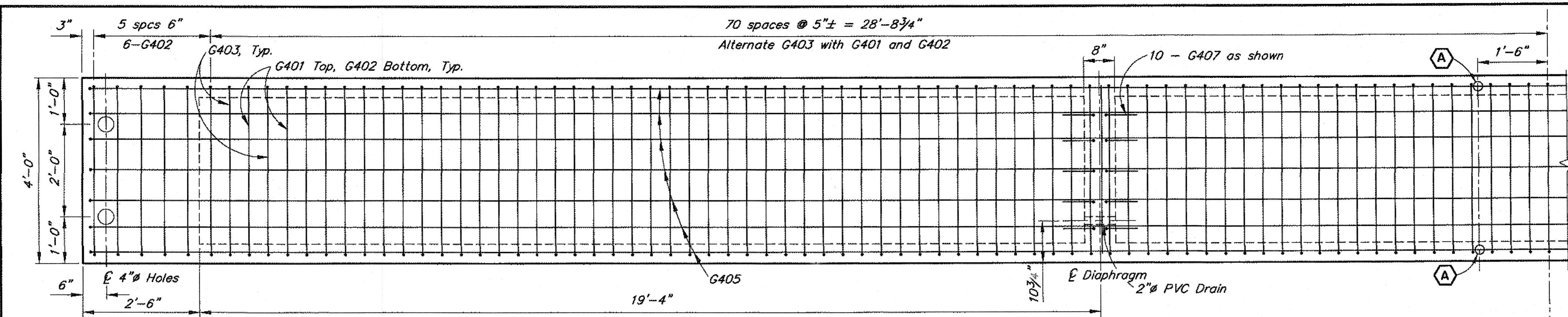
**REINFORCING STEEL - ONE GIRDER**

MARK	NOTE	SIZE	NO.	LENGTH	TYPE
G401	E	4	69	3'-8"	---
G402	E	4	97	5'-0"	BENT
G403	E	4	70	5'-2"	BENT
G404	E	4	83	8'-11 1/2"	BENT
G405	E,S	4	7	63'-11 1/2"	BENT
G406	E,N,Y	4	64	2'-0"	---
G407	E	4	20	3'-3 3/4"	BENT
G408	E,S	4	2	62'-7 1/2"	---
C401	E,X	4	43	4'-10 1/2"	BENT
C402	E,S,X	4	2	62'-7 1/2"	---

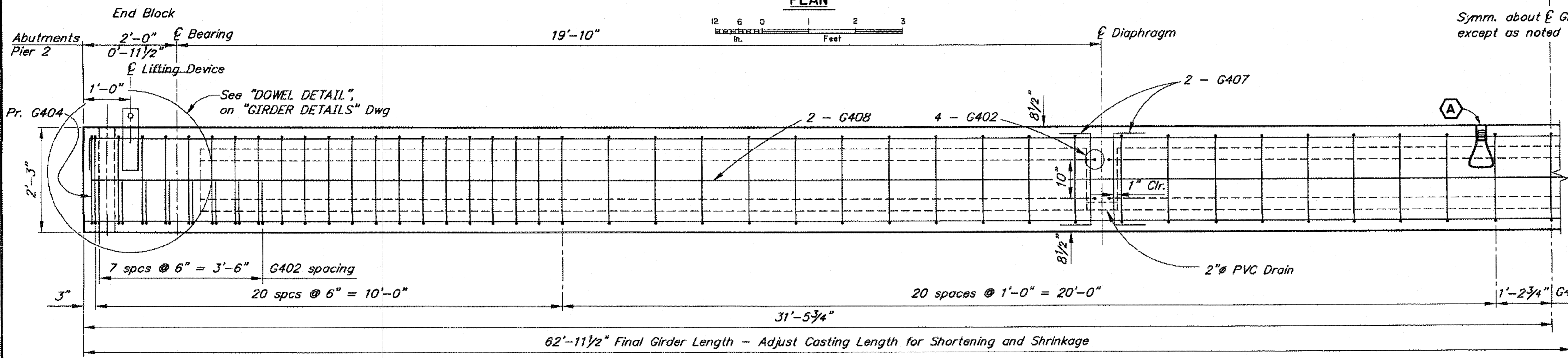
BENDING DIAGRAM



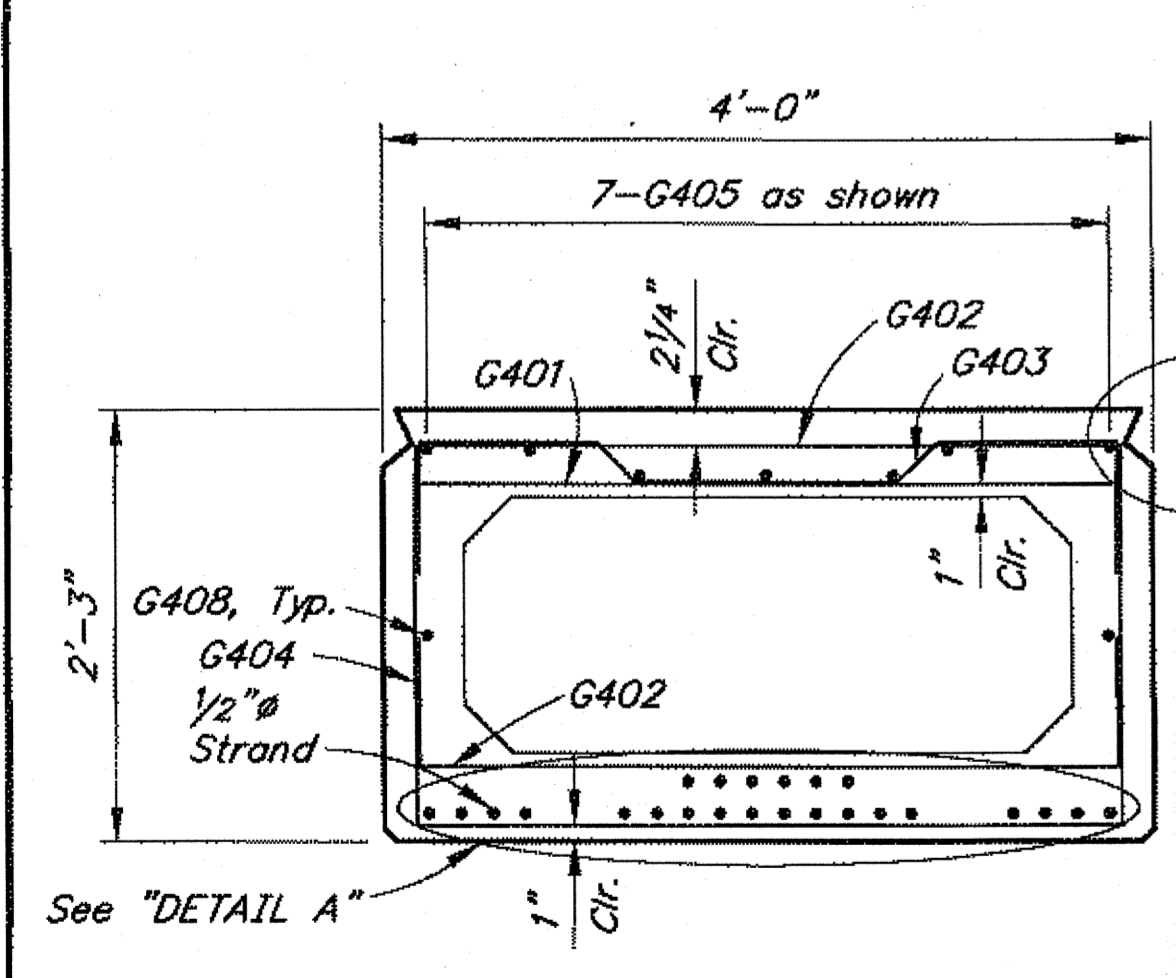
E - Epoxy-Coated reinforcing steel  
 N - See "Girder Details" Dwg.  
 S - Splices permitted. Length does not include splices.  
 X - Exterior girders only  
 Y - Provide 32 ea. at exterior girders



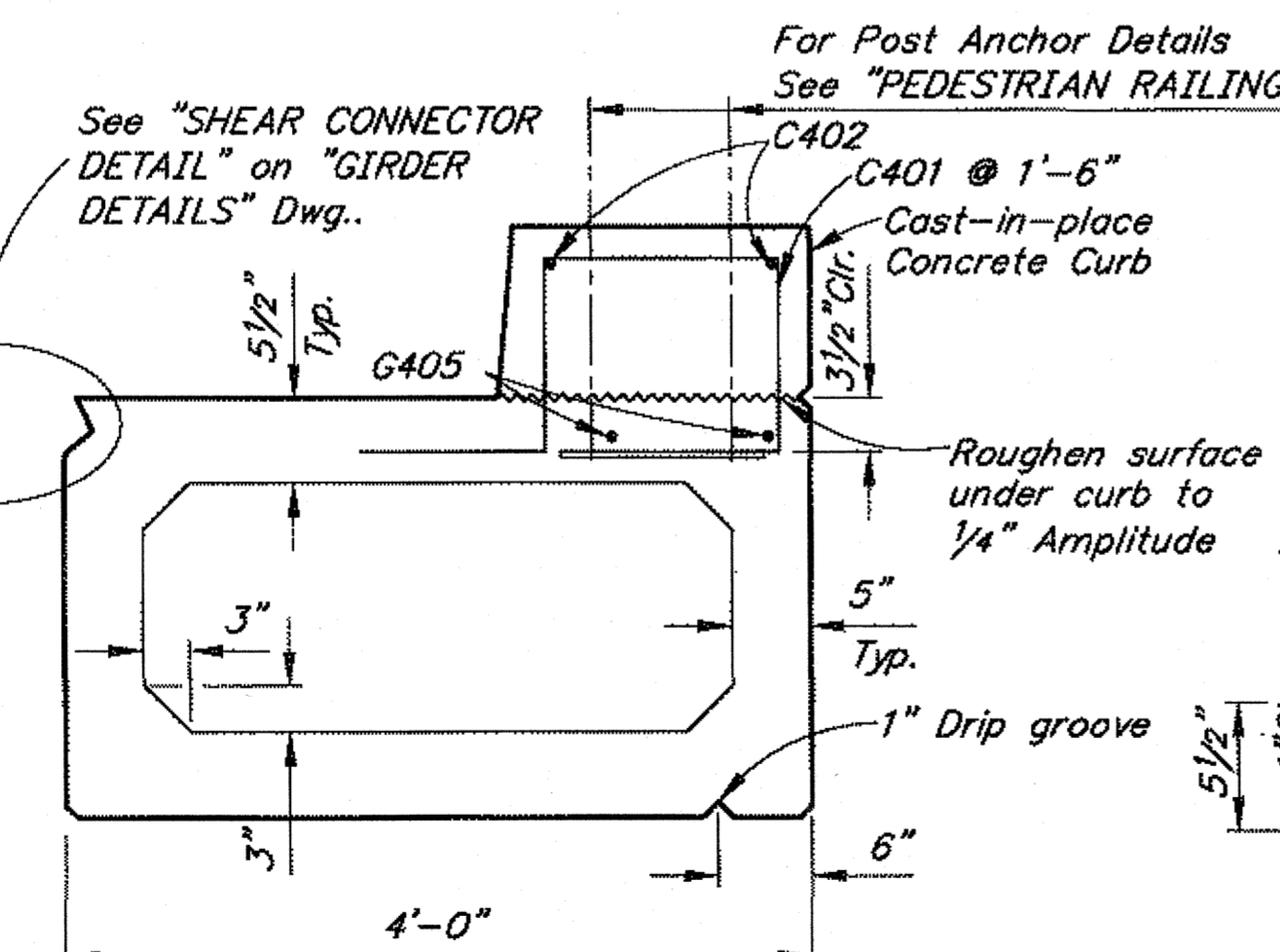
PLAN



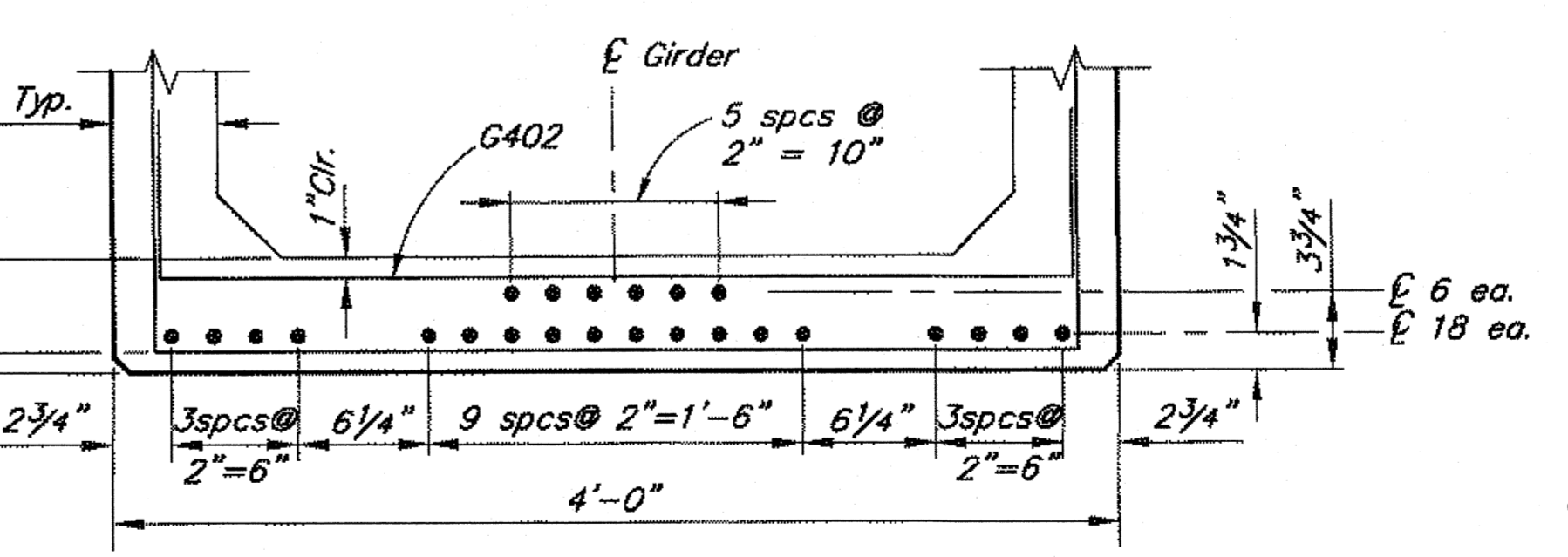
ELEVATION



INTERIOR GIRDER TYPICAL SECTION



EXTERIOR GIRDER TYPICAL SECTION



DETAIL A

**GIRDER NOTES:**

- Use Class P concrete with the following strengths:  
 at Stress Transfer..... $f_{ci}$  = 5000 psi  
 at 28 Days..... $f_c$  = 6000 psi
- Use 0.5"Ø prestressing strands conforming to AASHTO M203, Grade 270, low-relaxation strand.
- Design is based on the following steel stresses:  
 Pretensioning - Jacking Stress 189 ksi  
 after initial losses 178 ksi  
 after all losses 156 ksi
- Two inch clear cover on reinforcing steel unless noted otherwise.
- See "FRAMING PLAN AND TYPICAL SECTION" Dwg. for Shear Connector Spacing.
- Form girders so the roadway surface conforms to the indicated grade line with an allowance for 1/2" of positive camber at midspan.
- Galvanize all steel embedded in girders except for shear connectors.
- 1"X1'-0" Coil Anchor Insert for vertical adjustment of girders. Recess 2".
- Omit Shear Key and Shear Key Connector in the exterior face of exterior girders.
- Cast ends of girders plumb with respect to roadway grade.

DESIGNED BY: Steve Lee	CHECKED: Loren Gehring
DRAWN BY: Sam Sallie Jr.	CHECKED: Steve Lee
QUANTITIES BY: Steve Lee	CHECKED: Loren Gehring

Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.  
 PE: [Signature] Date: 07.08.2015

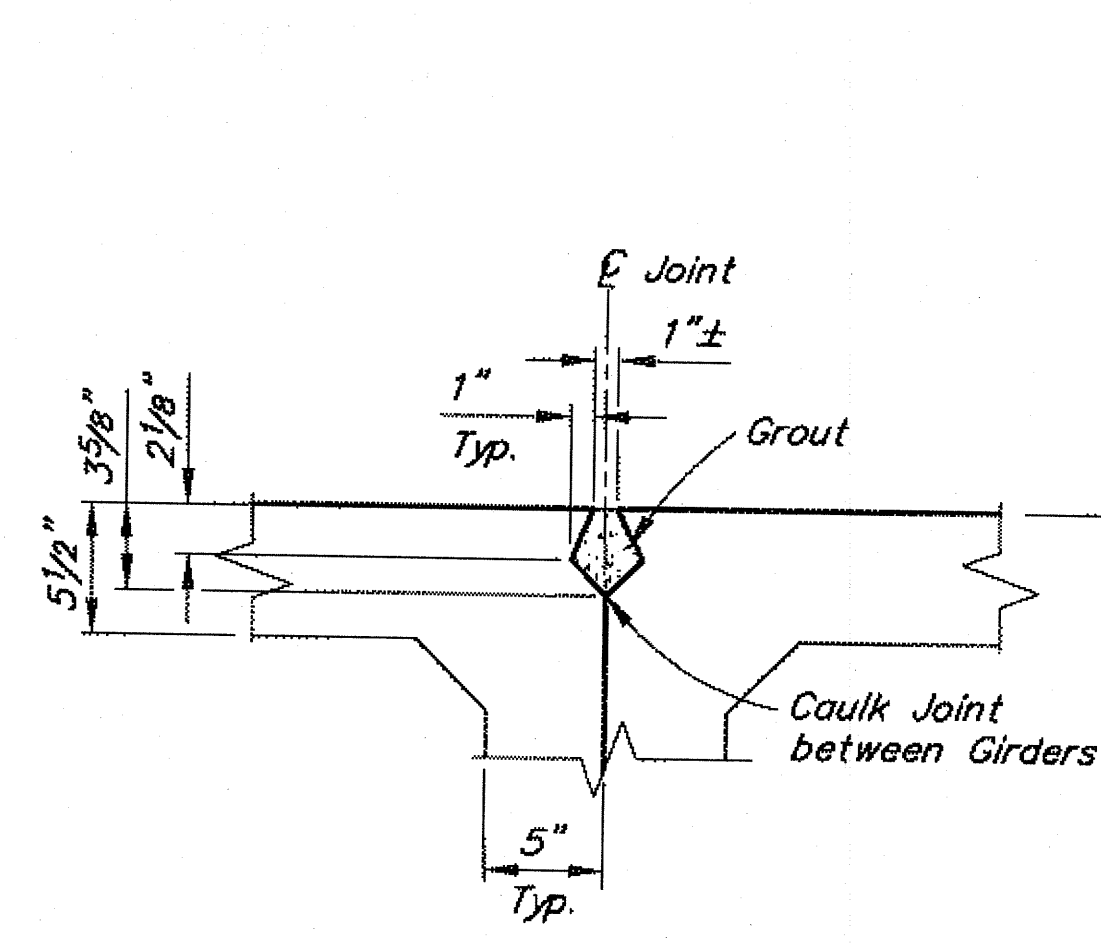
STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION  
 AND PUBLIC FACILITIES  
 BRIDGE SECTION



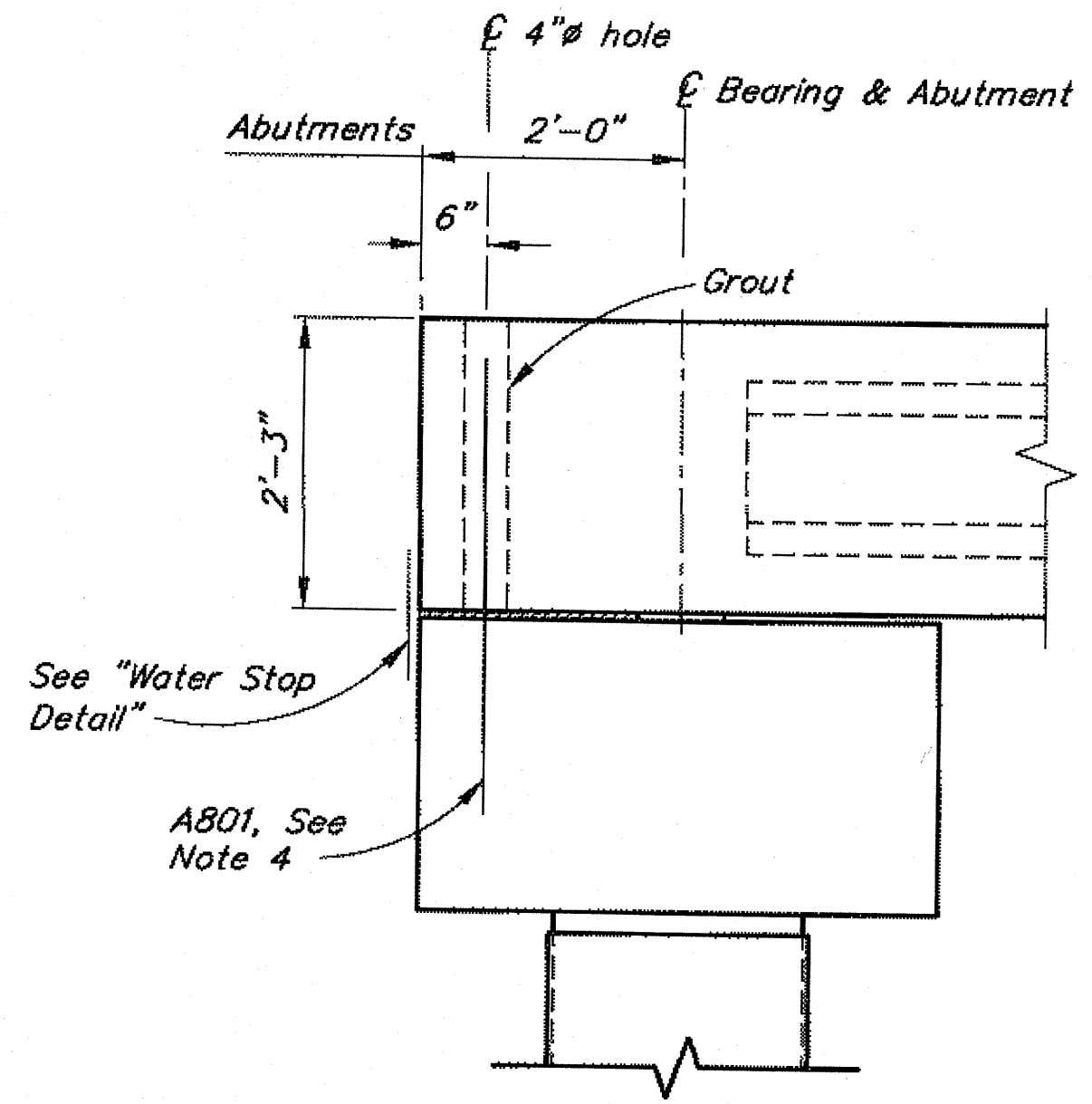
**PETERSON CREEK BRIDGE**  
 AMALGA HARBOR ROAD  
**GIRDERS**

BRIDGE NO. 383  
 DWG. NO. 8

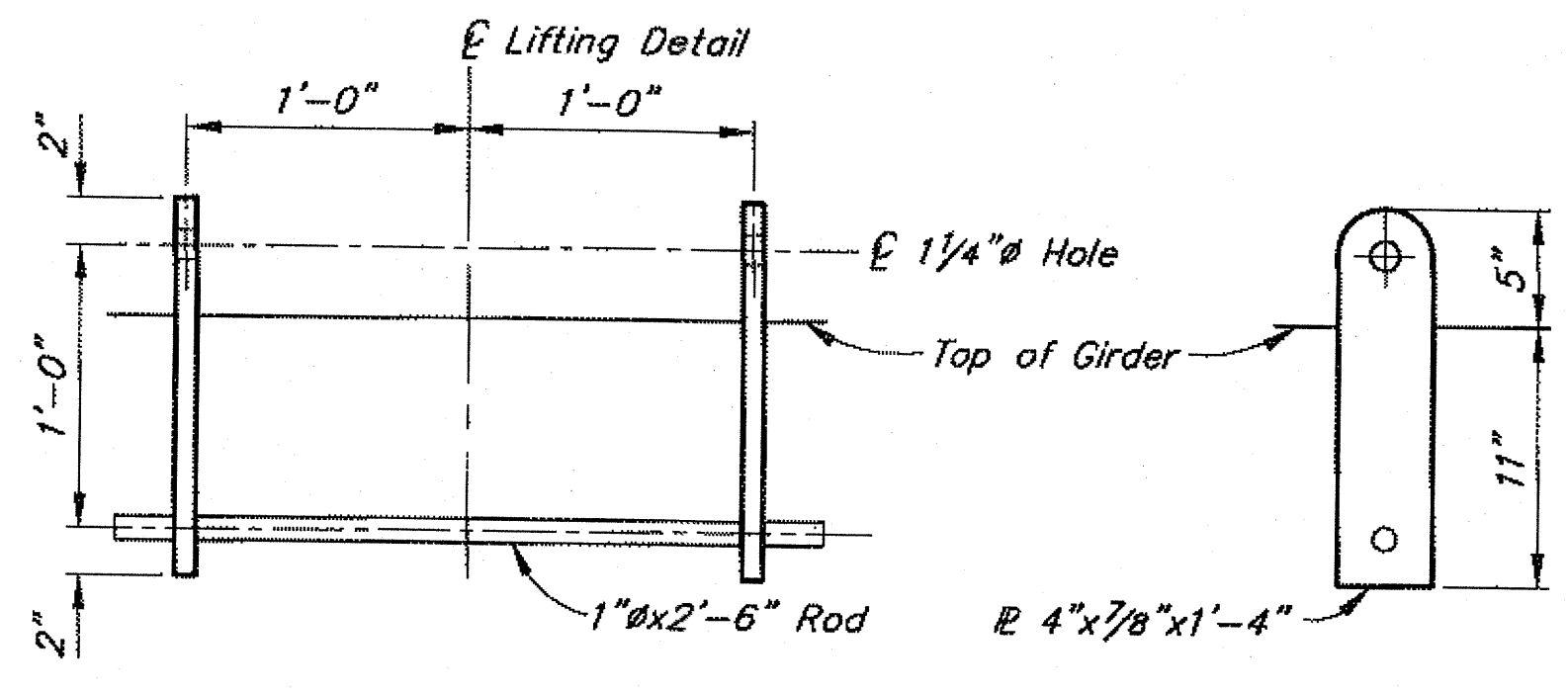
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BH-0950(1)/69684	2013	N9	55



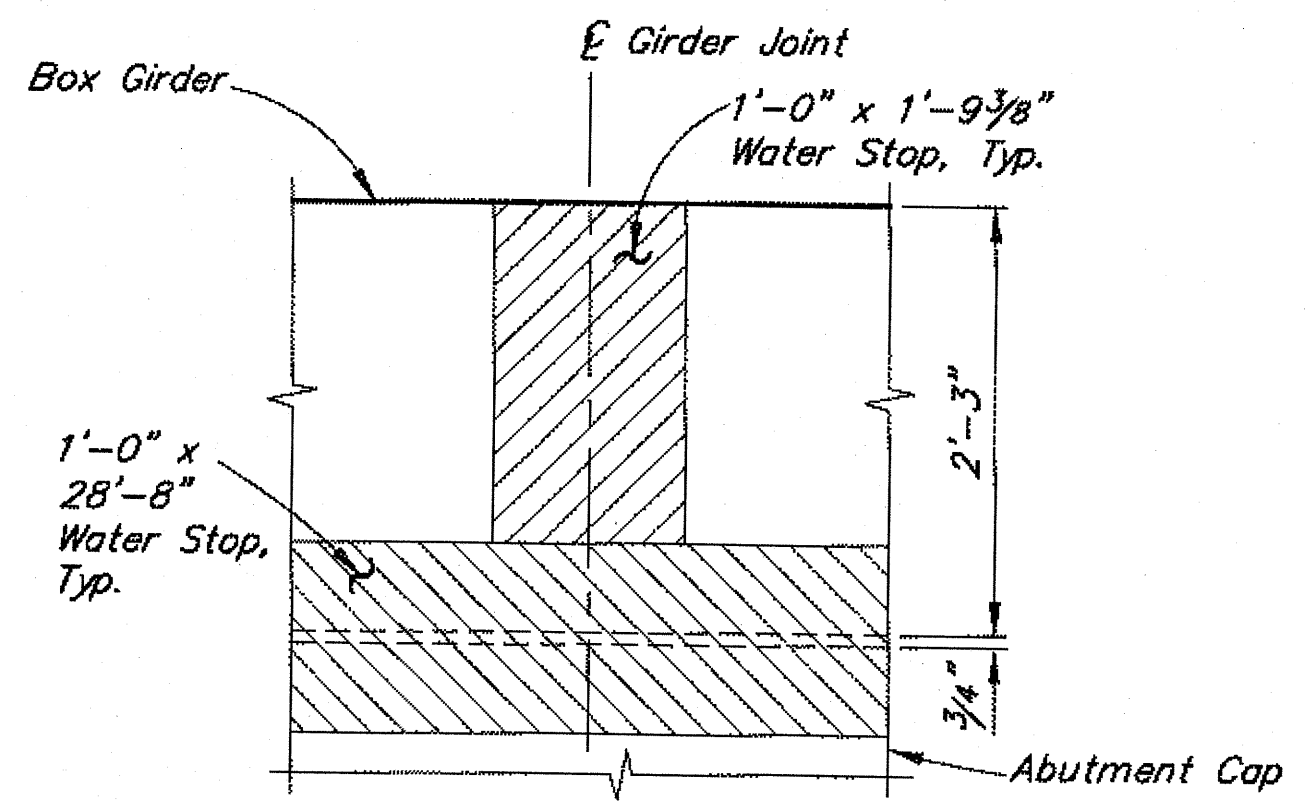
**SHEAR KEY DETAIL**  
12 6 0 1  
In. Feet



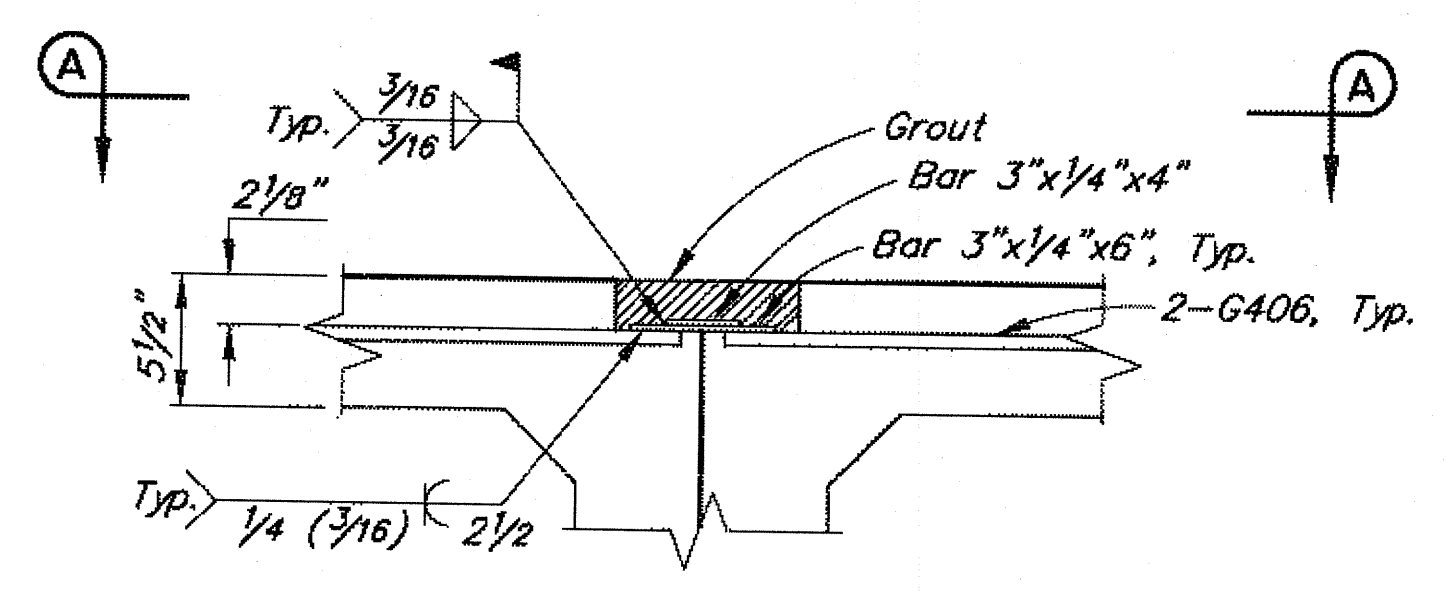
**DOWEL DETAIL ABUTMENTS**  
12 6 0 1 2 3  
In. Feet



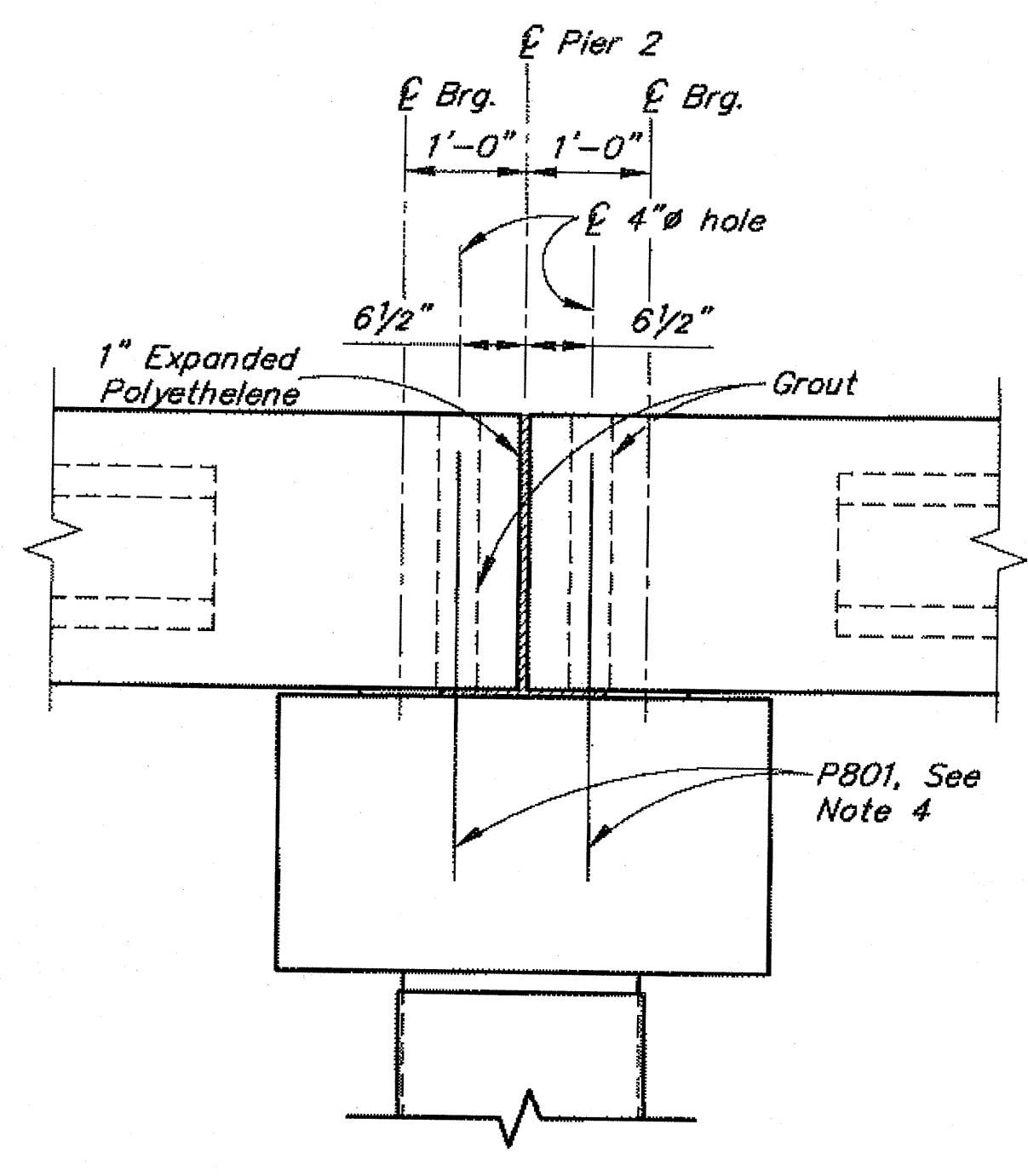
**LIFTING DEVICE DETAIL**  
12 6 0 1  
In. Feet



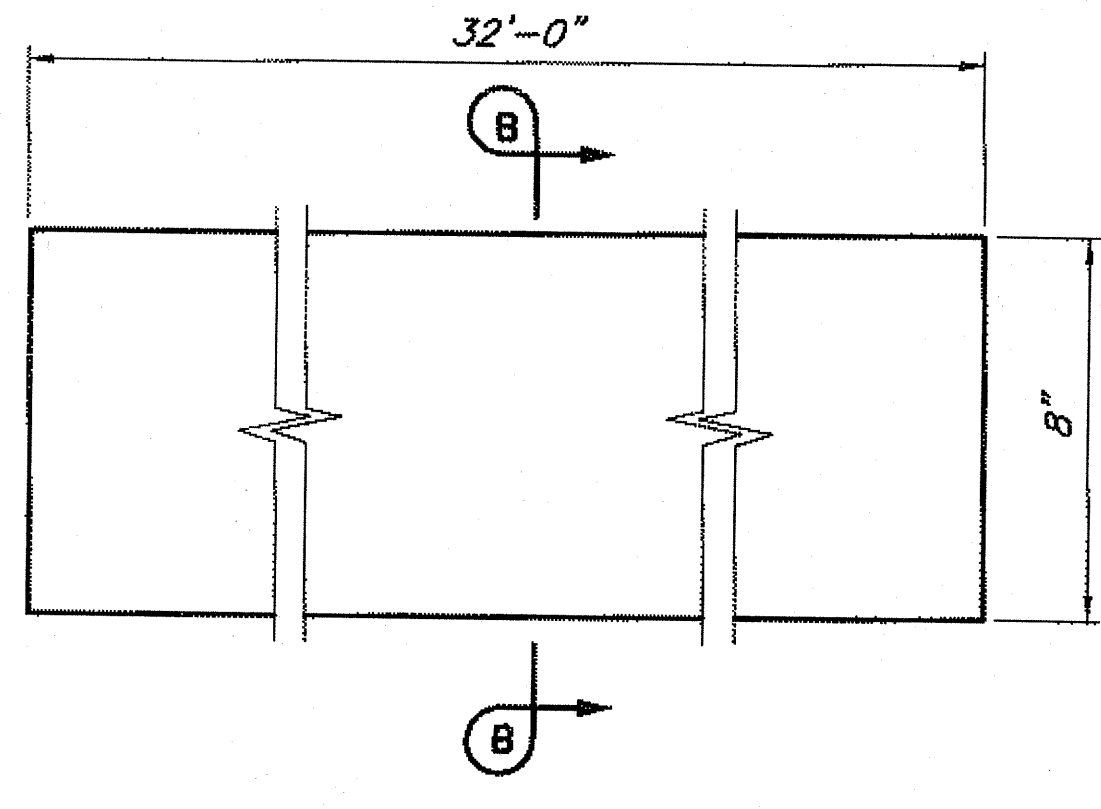
**WATER STOP DETAIL END ELEVATION**  
12 6 0 1 2  
In. Feet



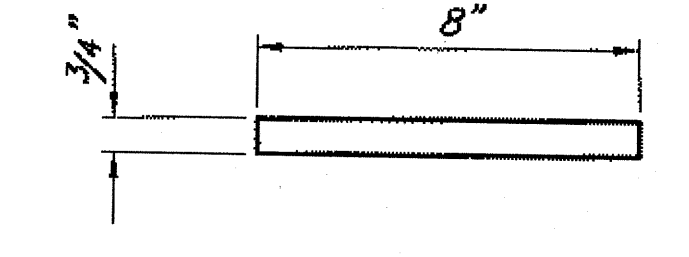
**SHEAR CONNECTOR DETAIL**  
12 6 0 1  
In. Feet



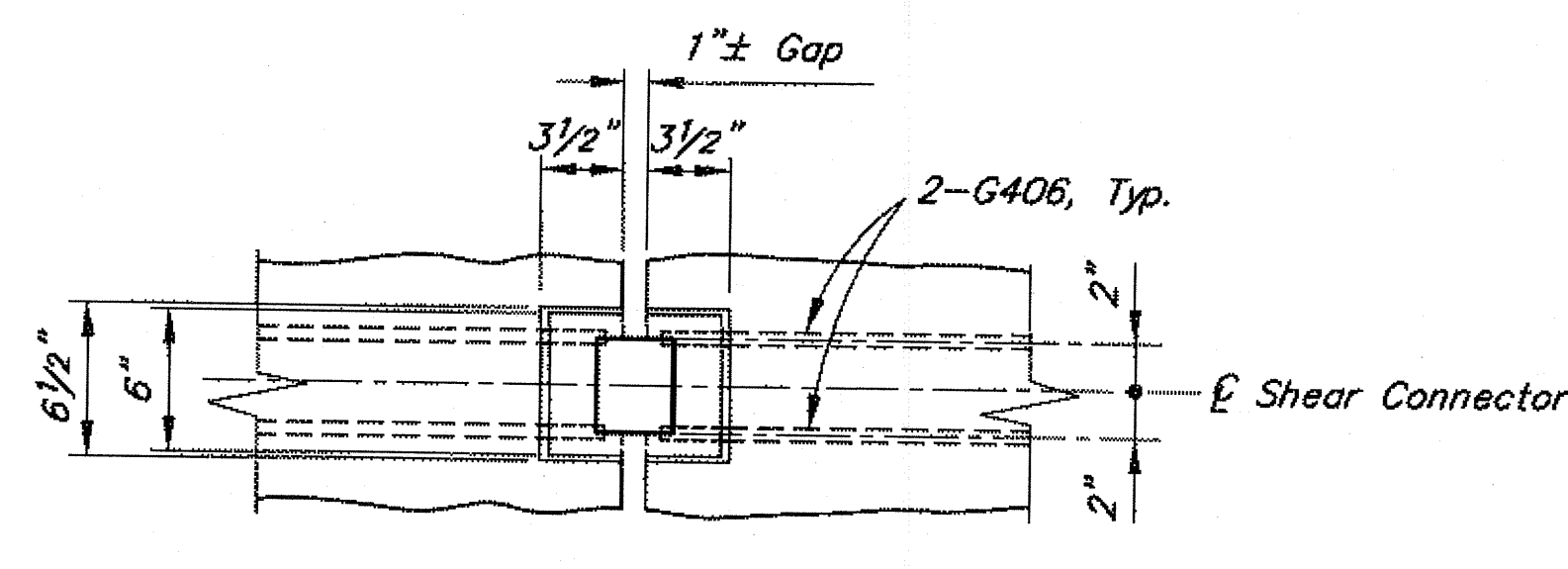
**DOWEL DETAIL PIER 2**  
12 6 0 1 2 3  
In. Feet



**ELASTOMERIC BEARING PAD DETAIL**  
6 3 0 1  
In. Feet  
Grade 5, Shear Modulus = 115 psi



**SECTION B-B**  
6 3 0 1  
In. Feet



**VIEW A-A**  
12 6 0 1  
In. Feet

BEARING PAD REACTION / GIRDER		
SERVICE LOAD		
LOCATION	DEAD LOAD, kips	*LIVE LOAD, kips
Abutments	36	37
Pier 2	36	37

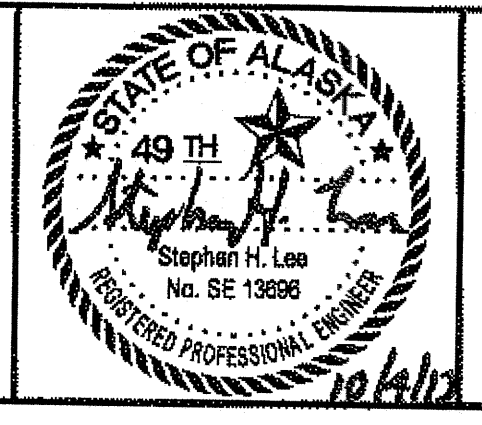
\* Does not include dynamic load allowance.

- NOTES:**
1. Remove epoxy coating from areas to be welded.
  2. Cut lifting device flush with top of girder after erection.
  3. Fill holes with grout at abutments and pier.
  4. Drill and bond A801's and P801's, 1'-6" after girder erection.

DESIGNED BY: Steve Lee	CHECKED: Logan Gehring
DRAWN BY: Sam Sallie Jr.	CHECKED: Steve Lee
QUANTITIES BY: Steve Lee	CHECKED: Logan Gehring

Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.  
PE: [Signature] Date 07.08.2015

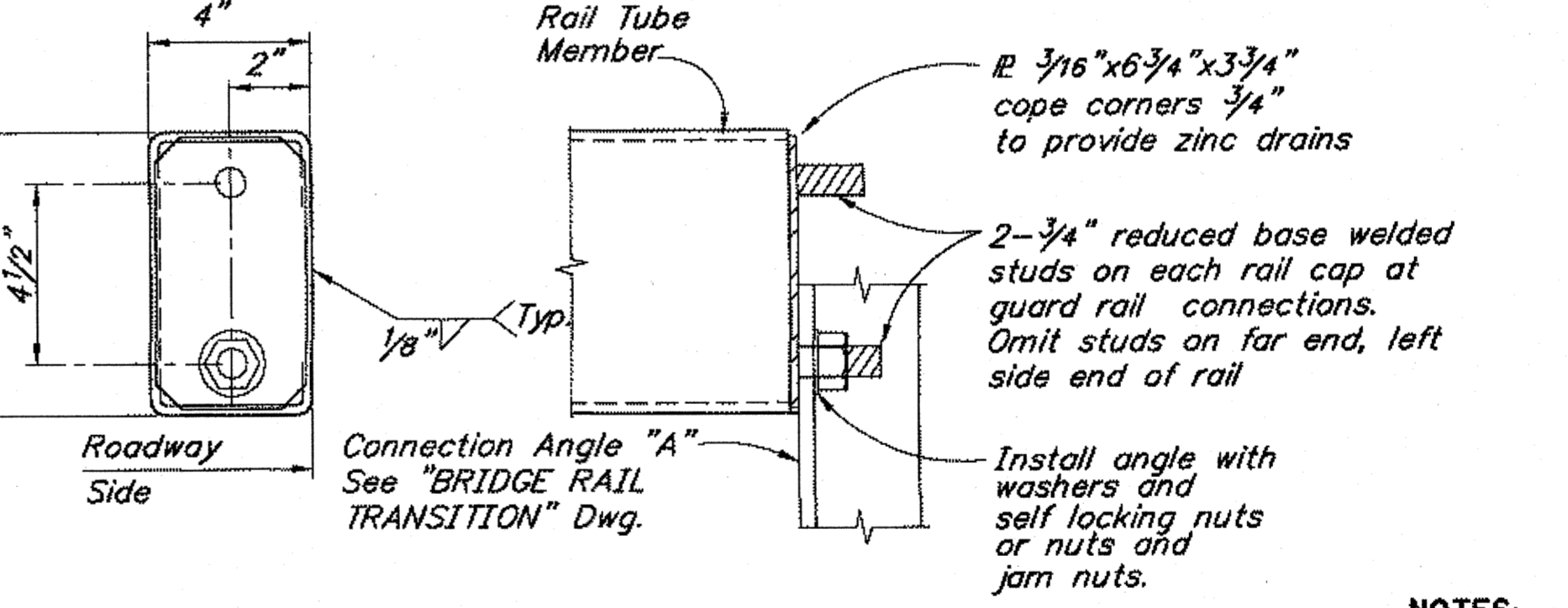
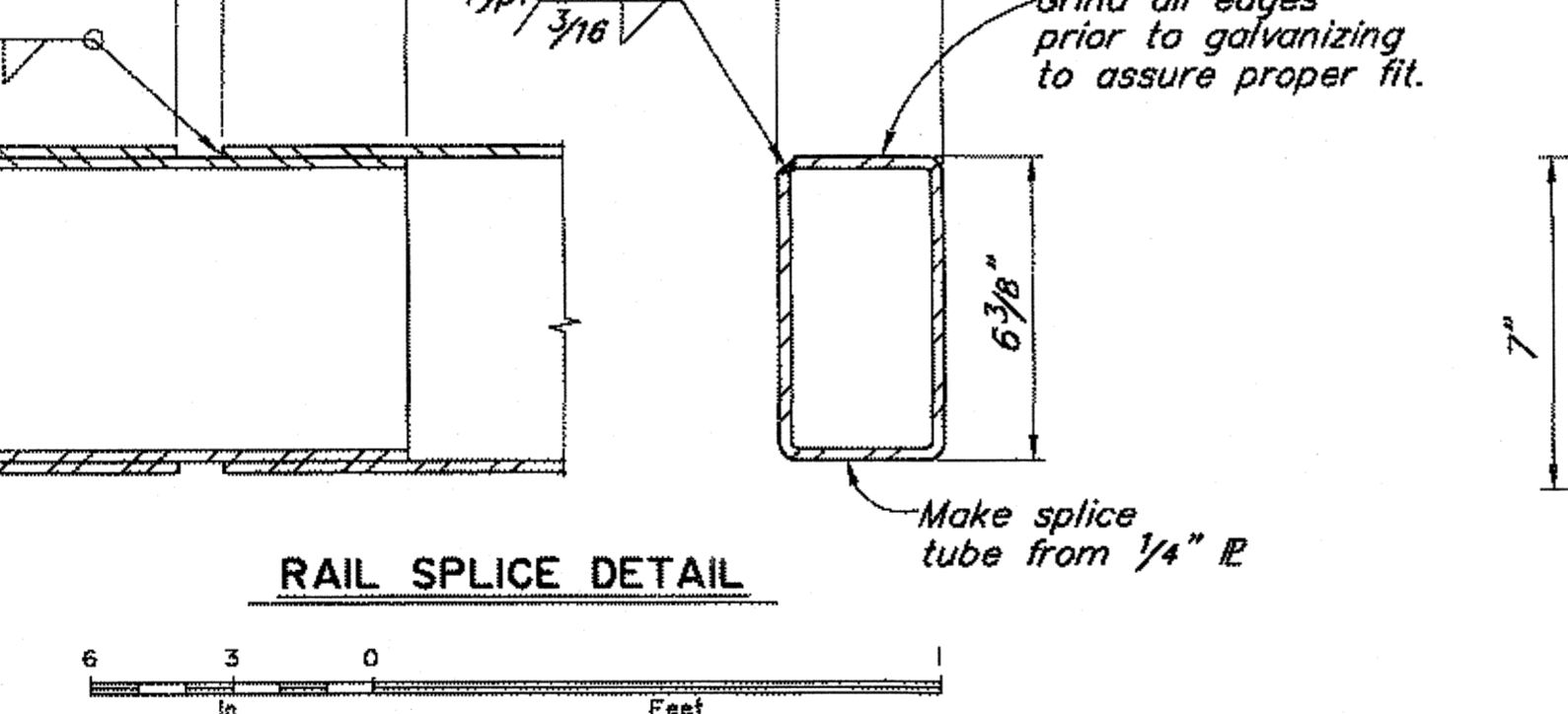
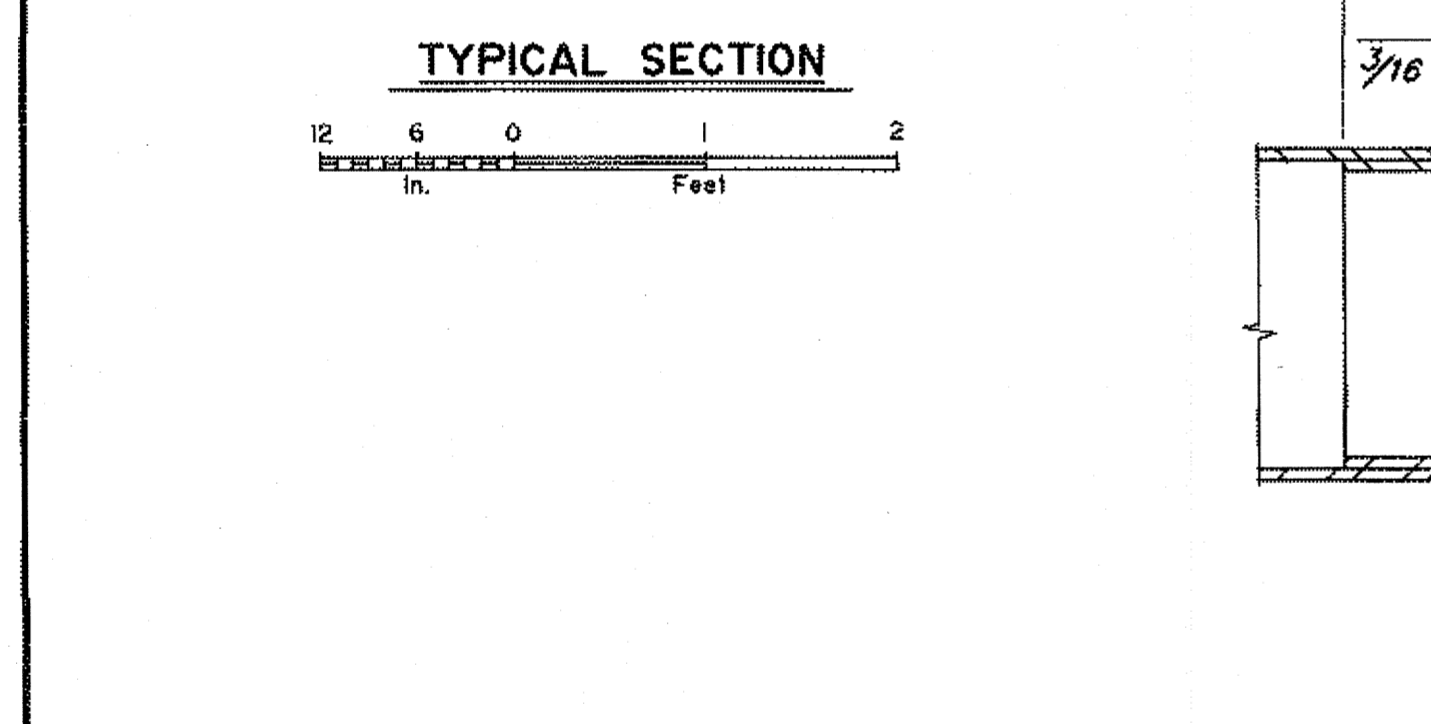
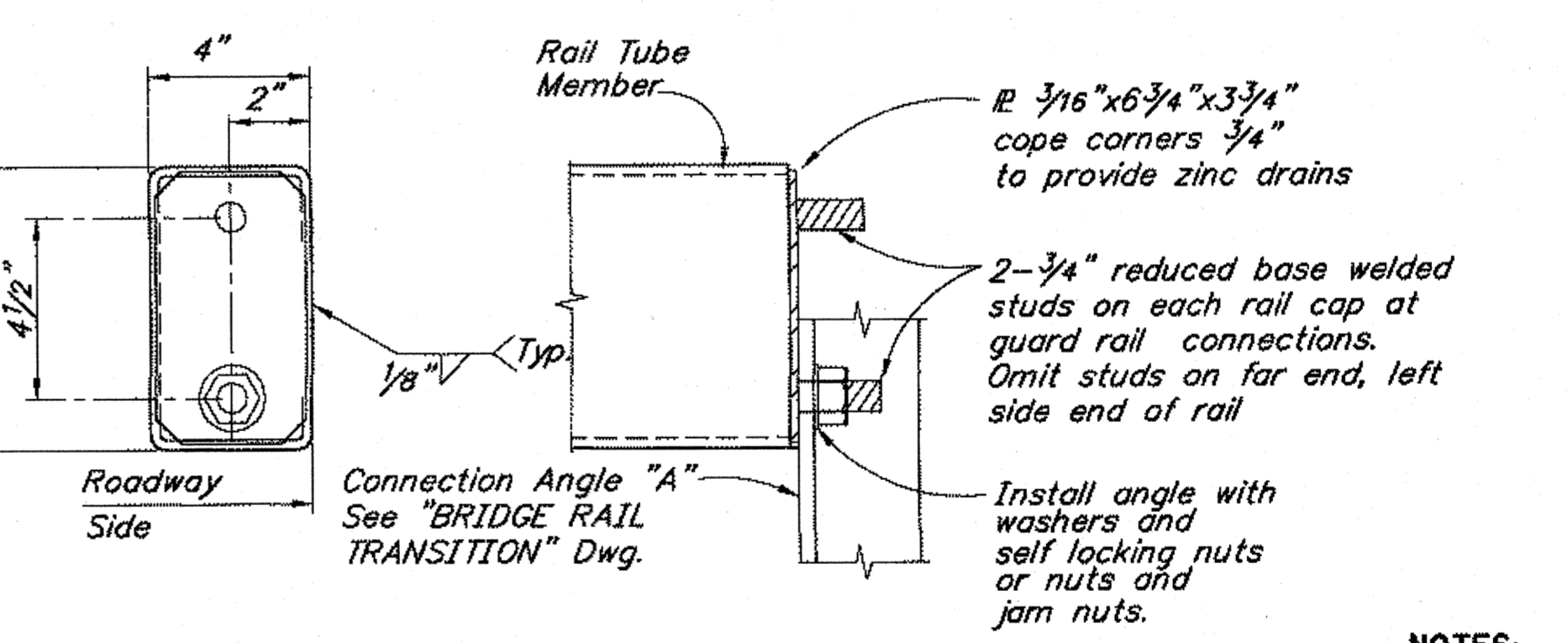
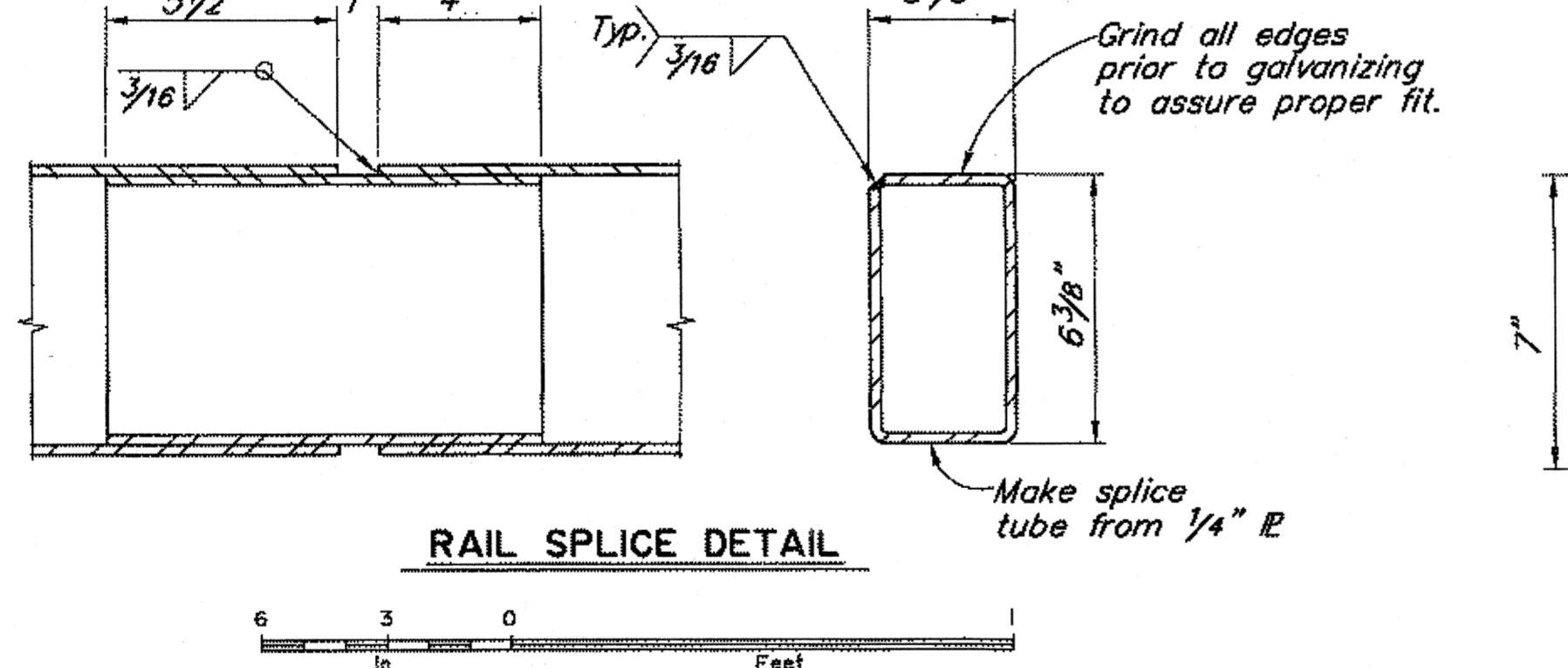
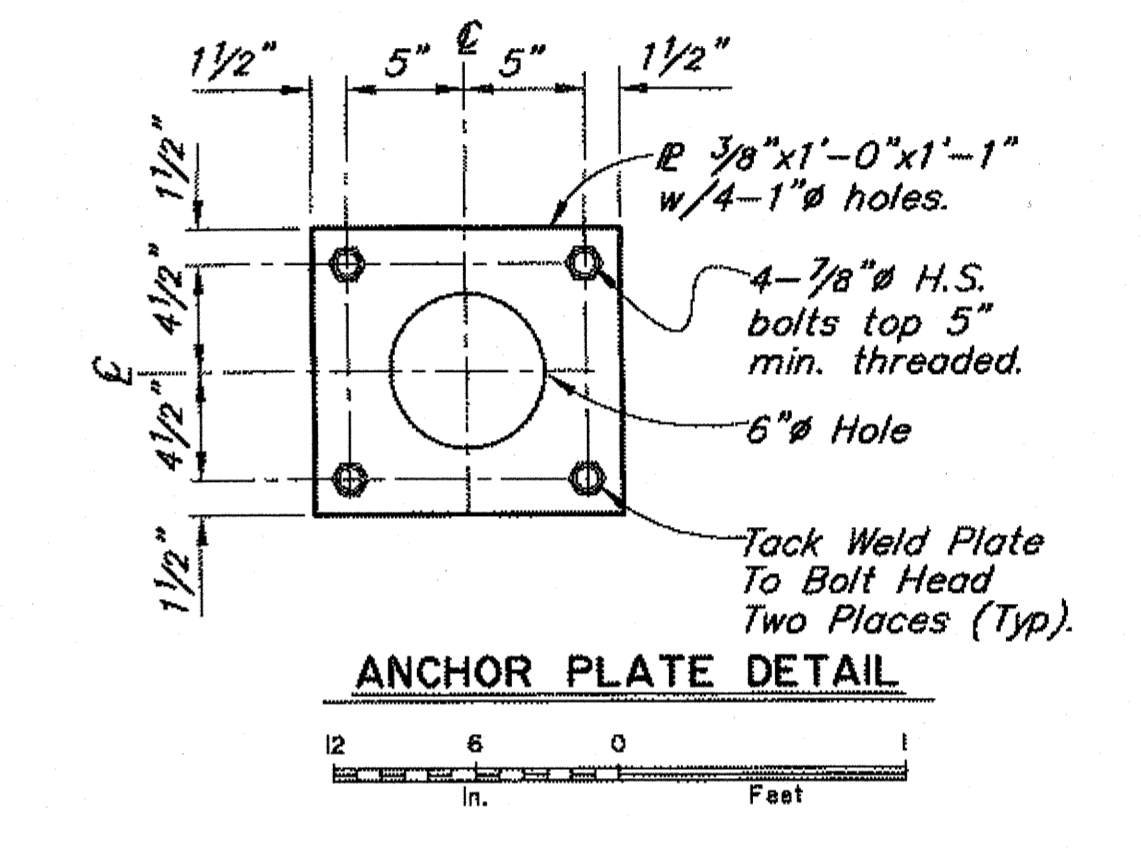
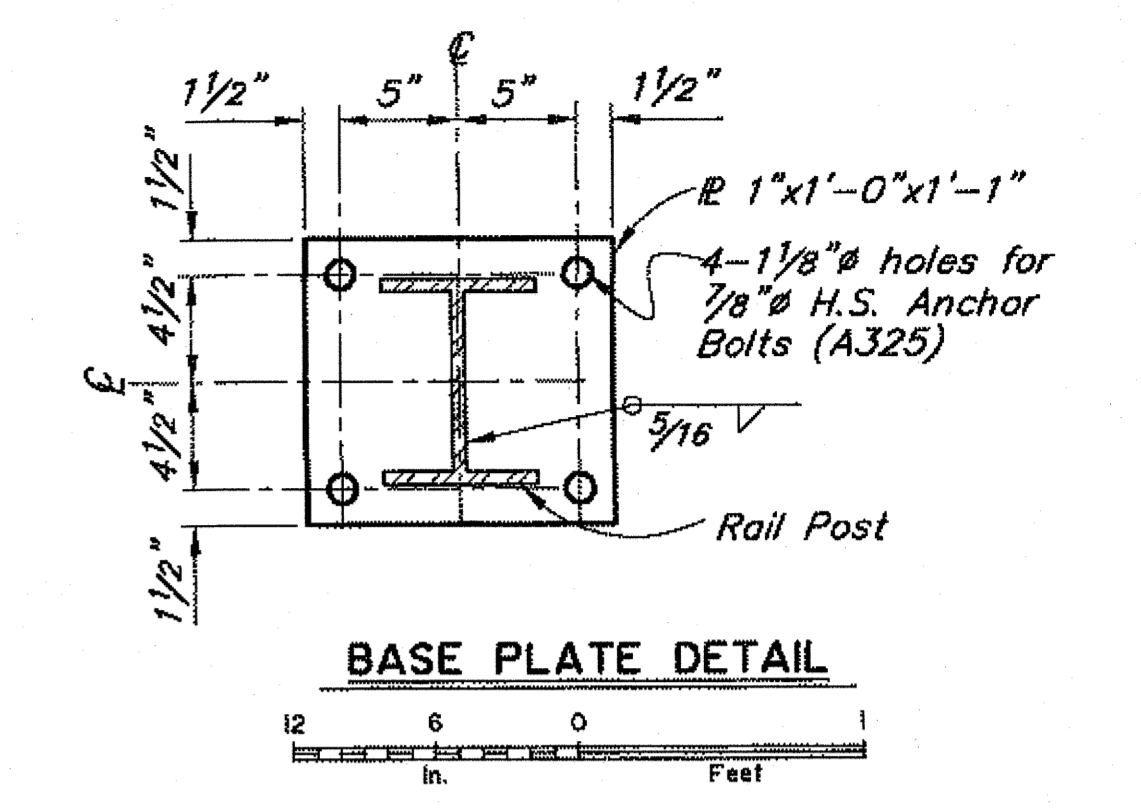
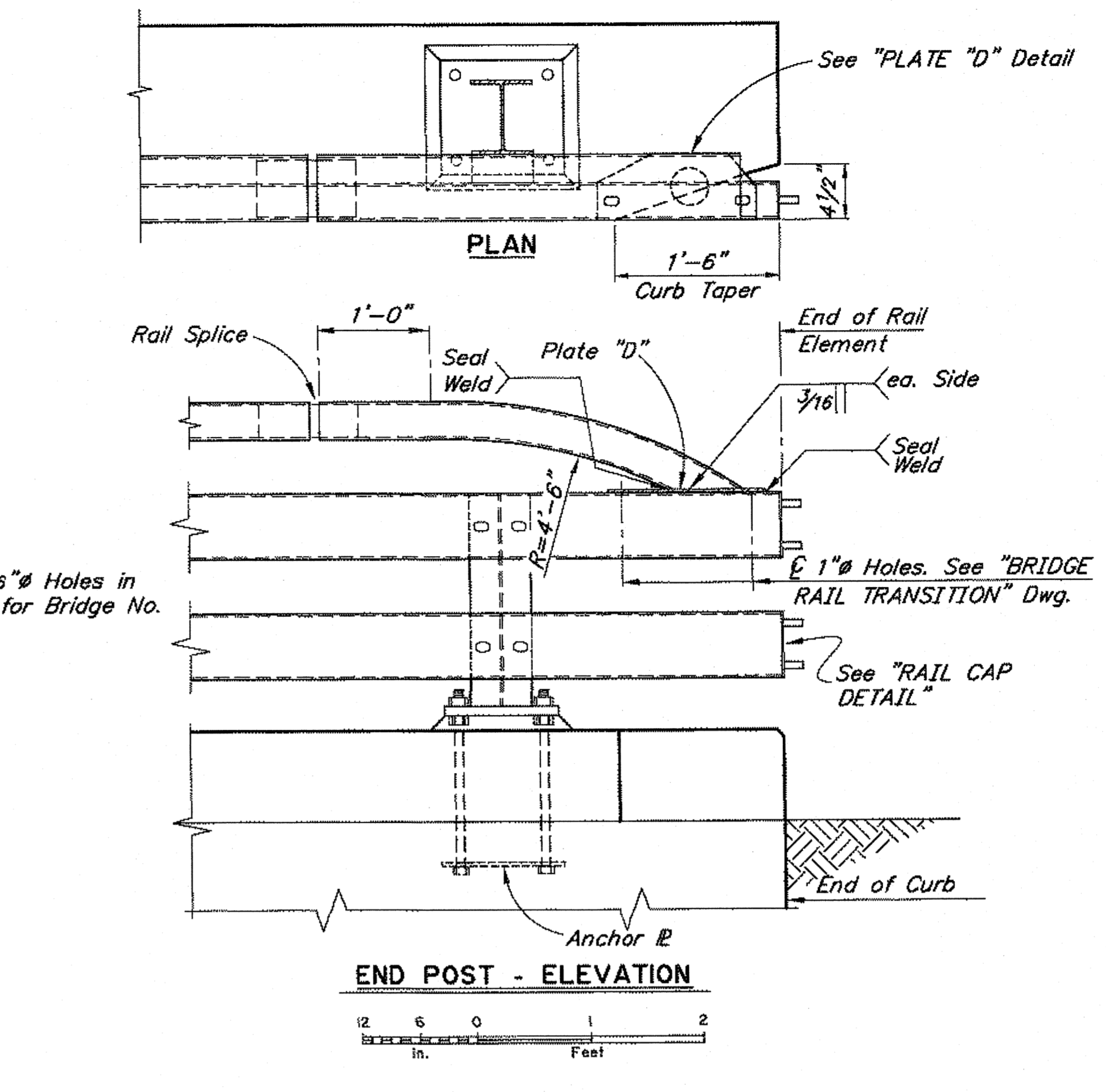
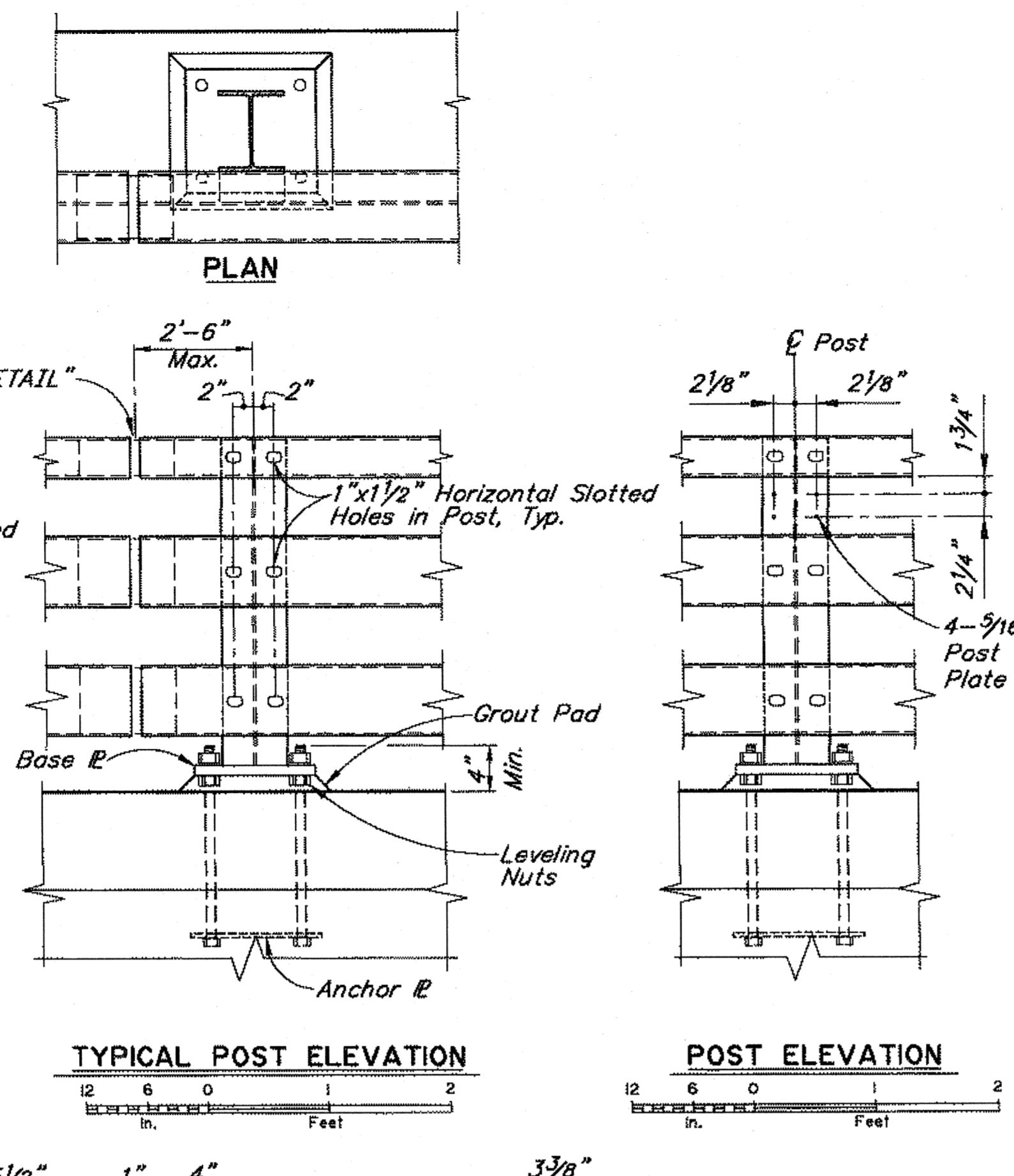
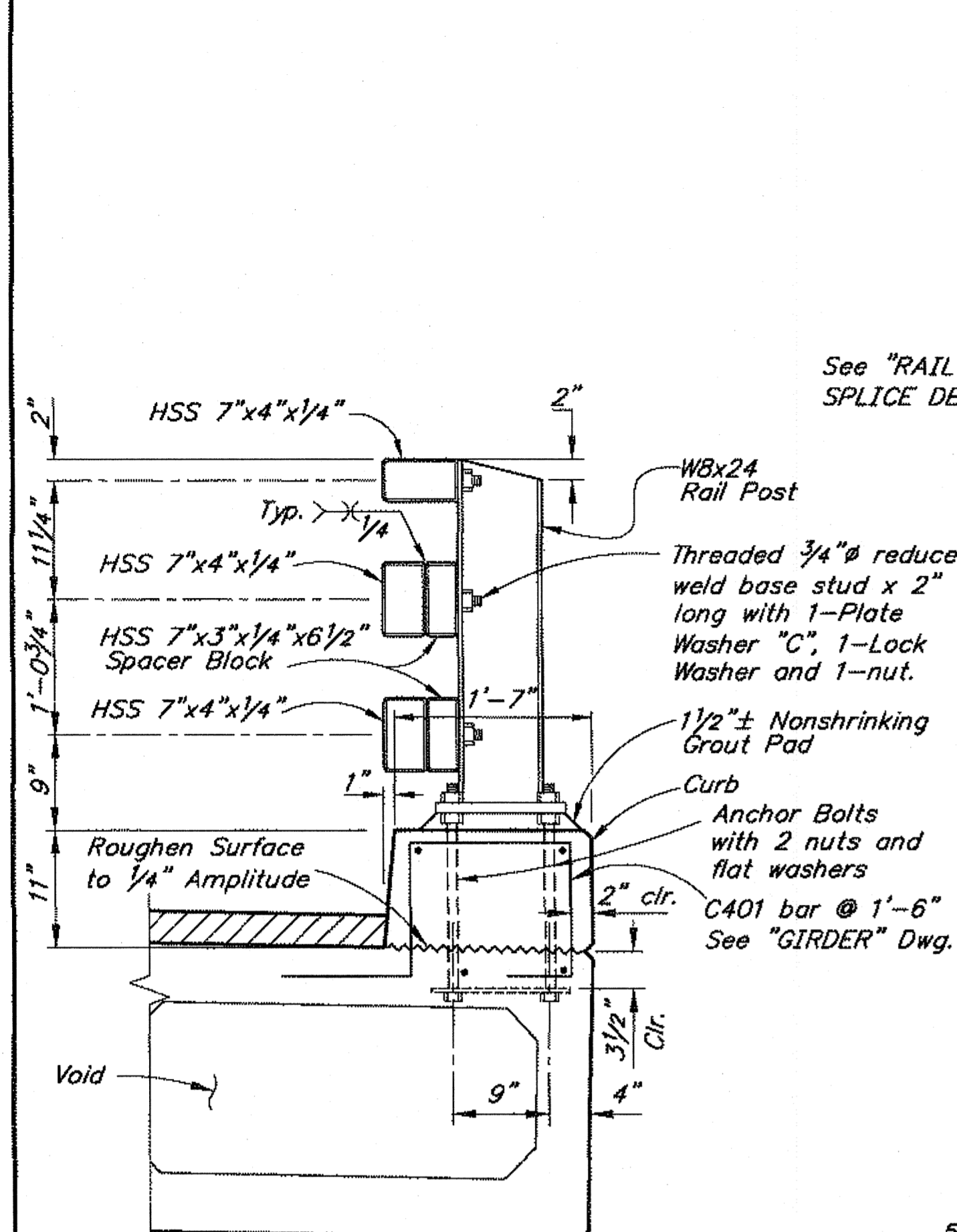
STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
BRIDGE SECTION



PETERSON CREEK BRIDGE  
AMALGA HARBOR ROAD  
GIRDER DETAILS

BRIDGE NO. 383  
DWG. NO. 9

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BH-0950(1)/69684	2013	NT0	55



- NOTES:**
1. Locate bridge number plates as shown (2 total) on "GENERAL LAYOUT" Dwg..
  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 that conforms to ASTM C1107, Grade C with a minimum 28 day f'c of 9000 psi and meets the requirements of ATM 520..
  6. See "FRAMING PLAN AND TYPICAL SECTION" Dwg. for rail post spacing and overhang length.

DESIGNED BY: Steve Lee	CHECKED: Loren Gehring
DRAWN BY: Sam Sallie	CHECKED: Steve Lee
QUANTITIES BY: Steve Lee	CHECKED: Loren Gehring

Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.

PE: [Signature] Date 07-08-2015

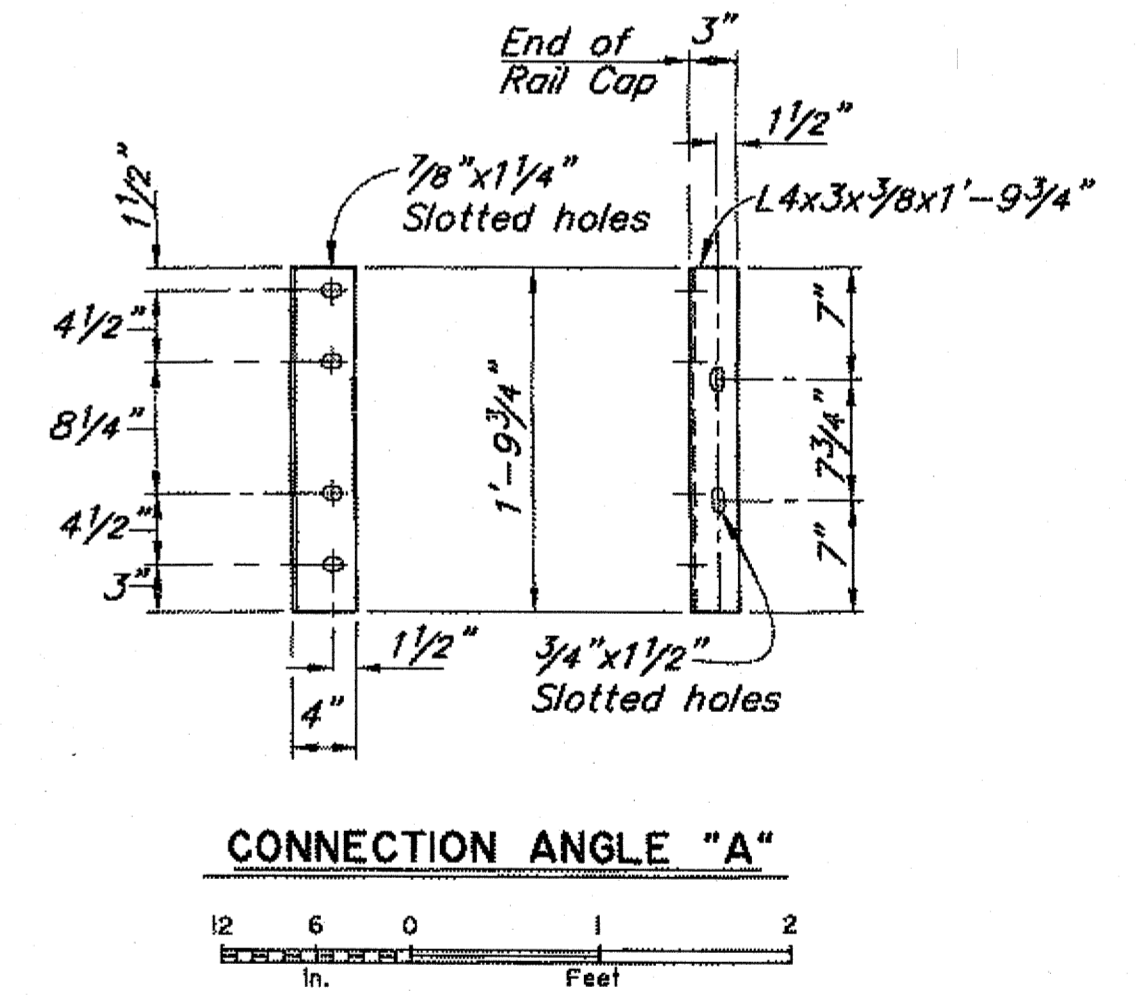
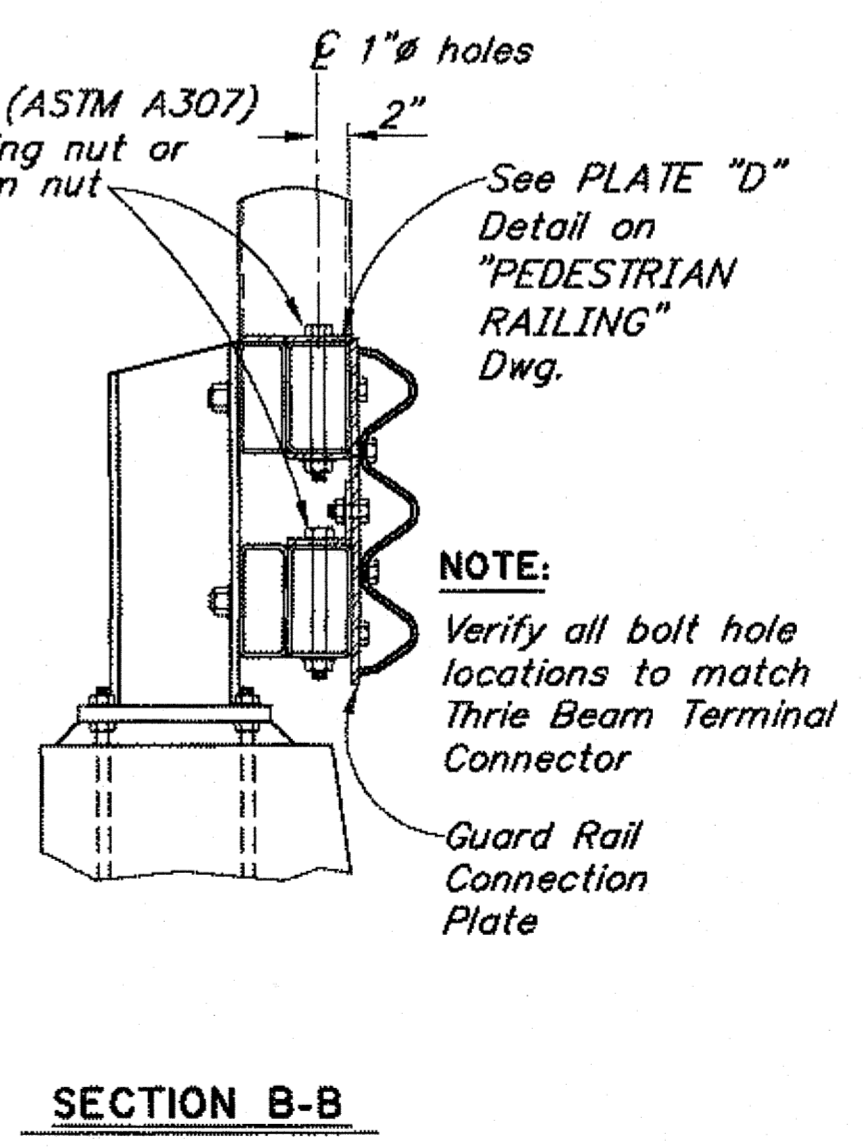
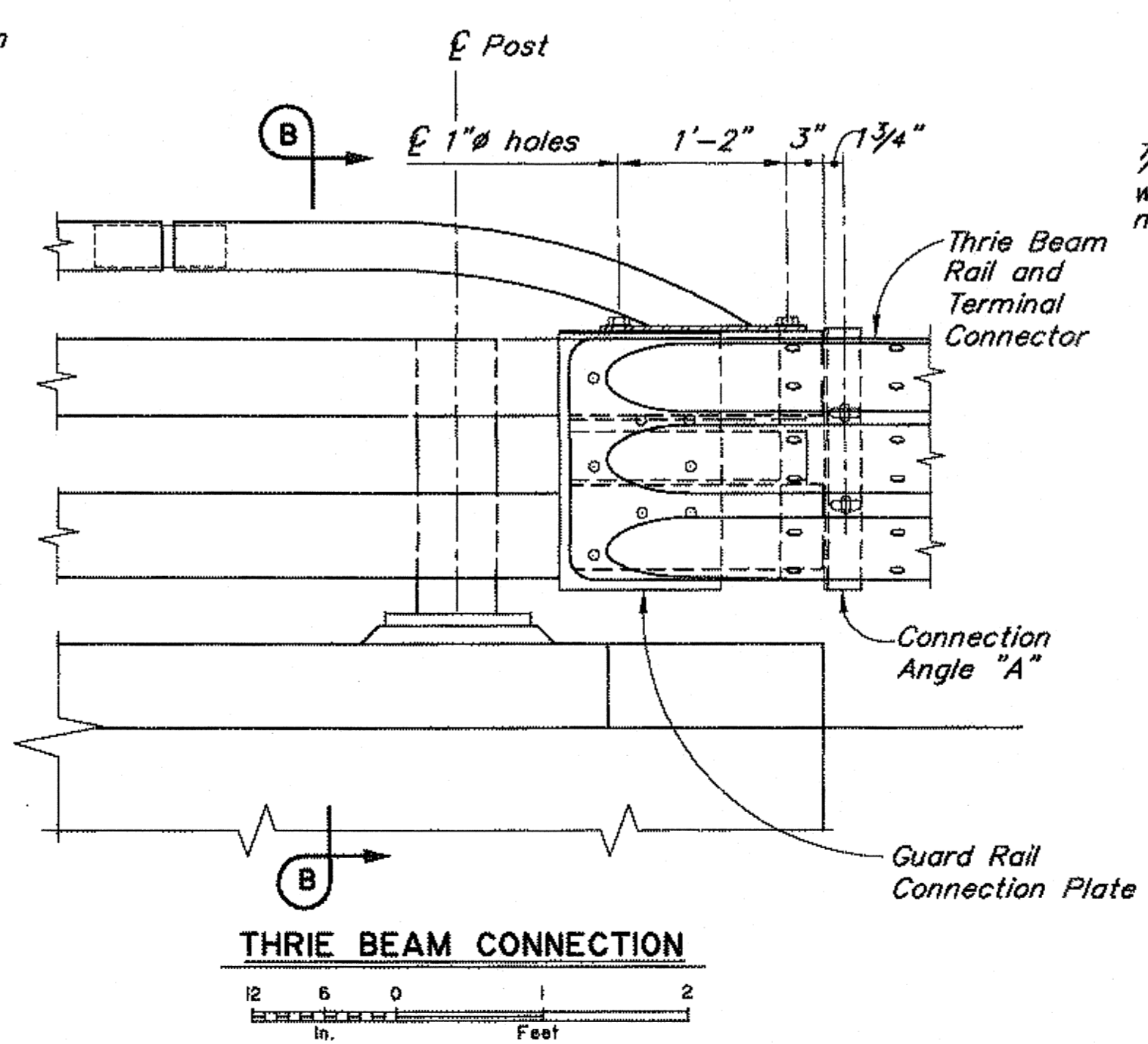
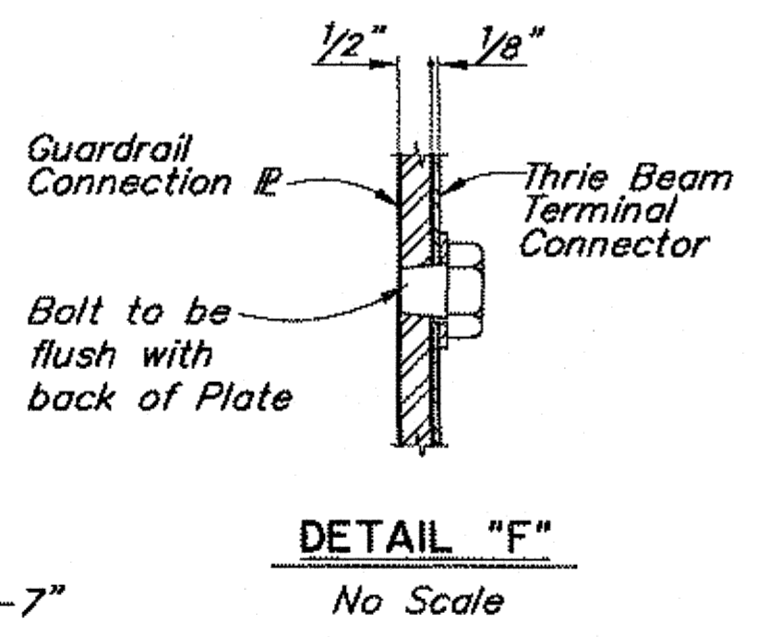
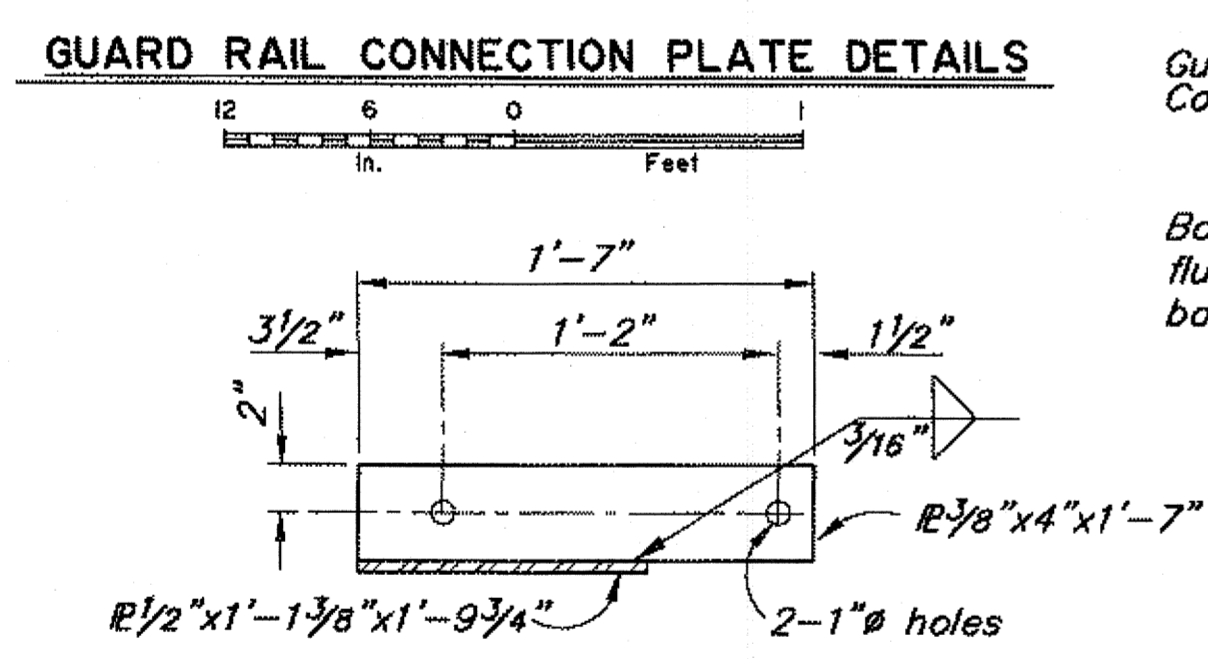
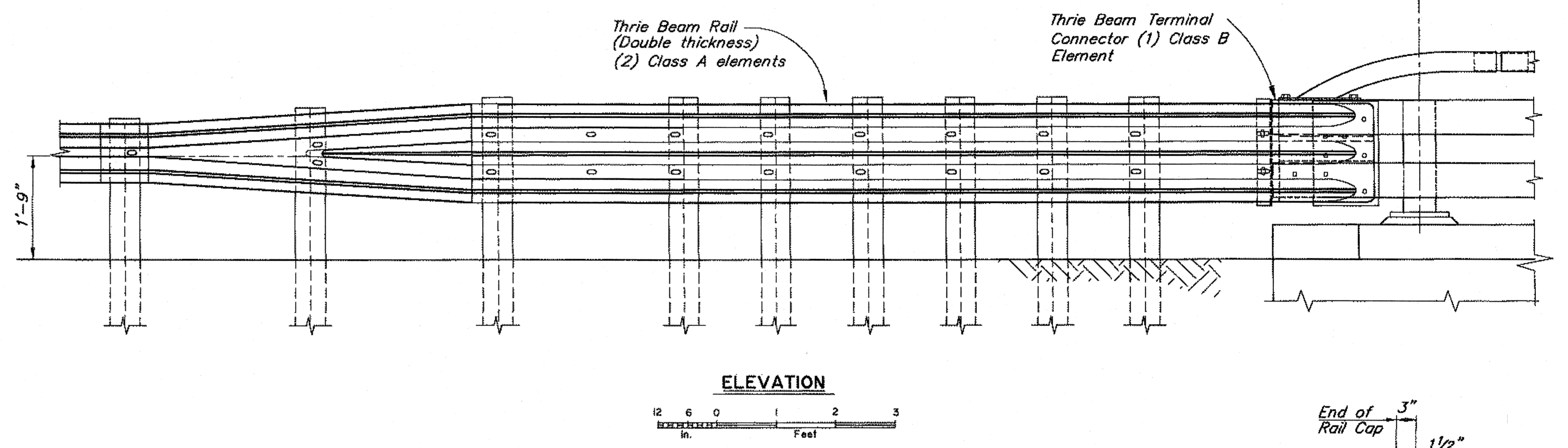
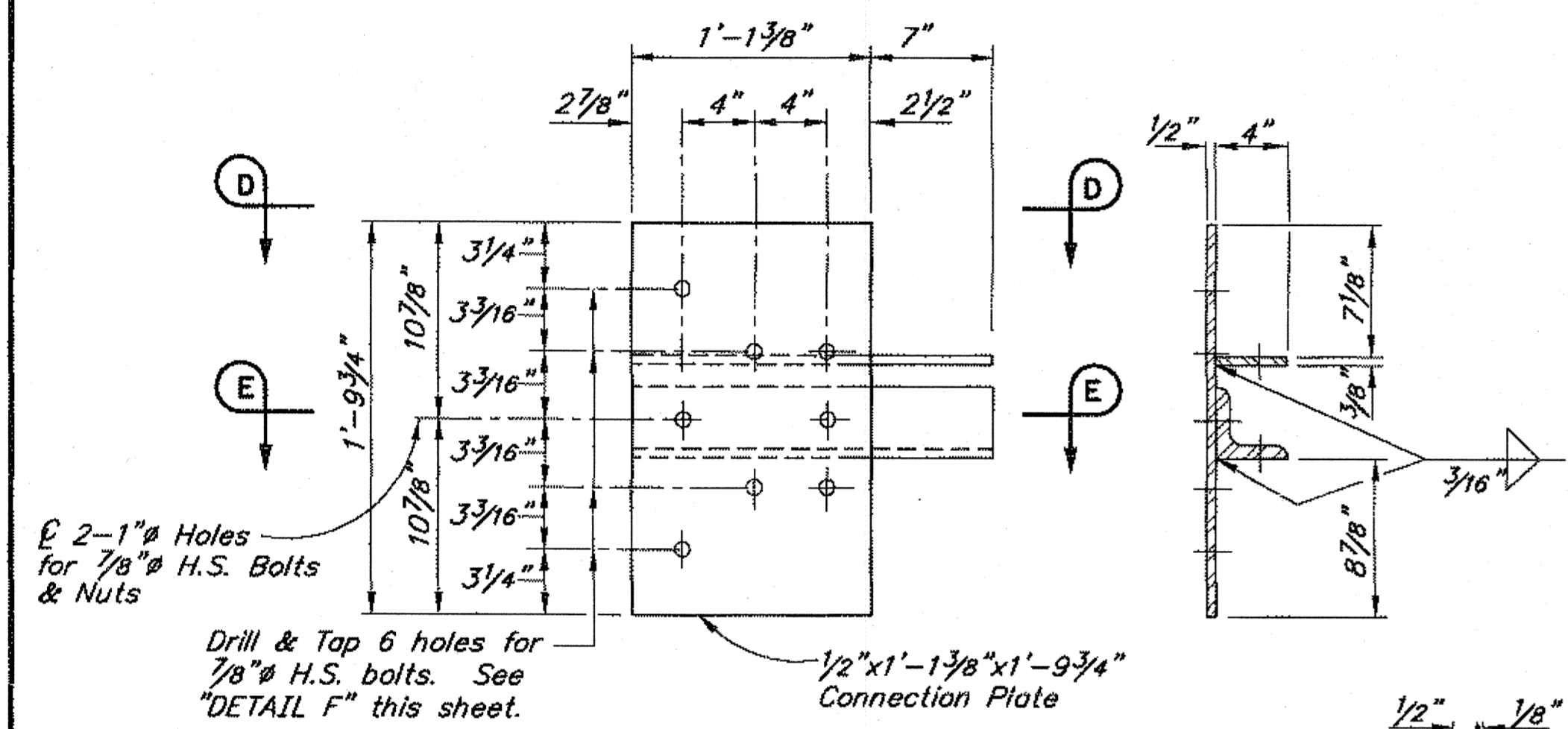
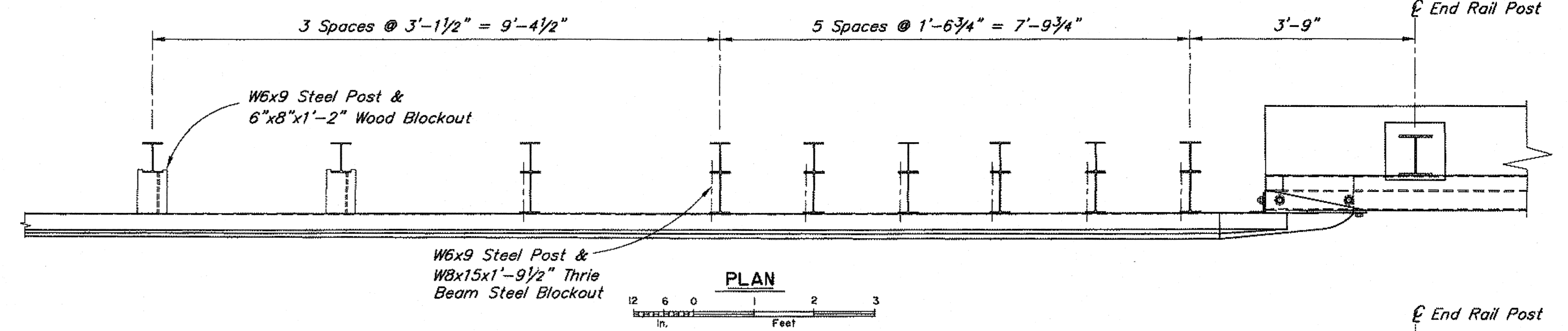
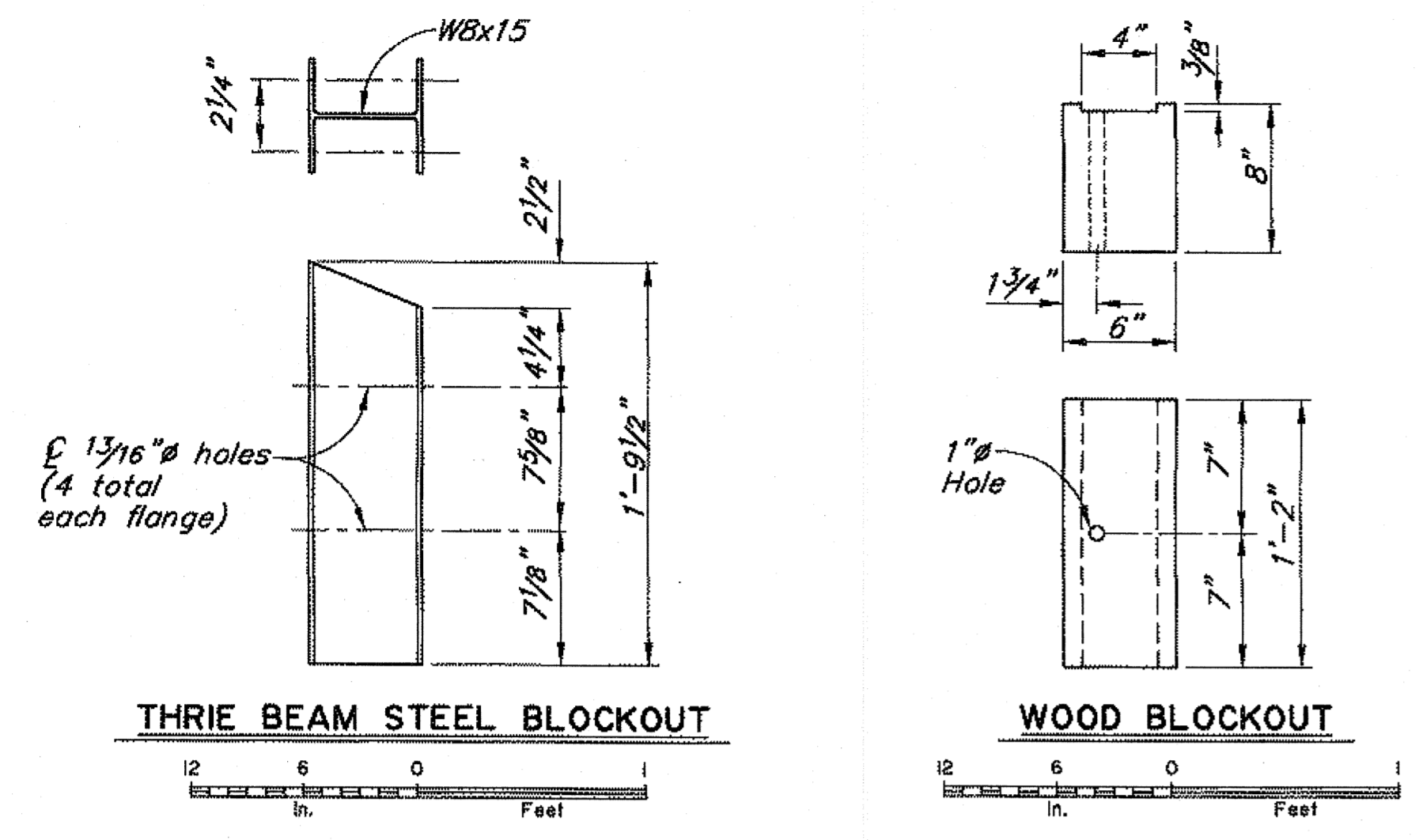
STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
BRIDGE SECTION



**PETERSON CREEK BRIDGE**  
AMALGA HARBOR ROAD  
PEDESTRIAN RAILING

BRIDGE NO. 383  
DWG. NO. 10

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BH-0950(1)/69684	2013	N11	55

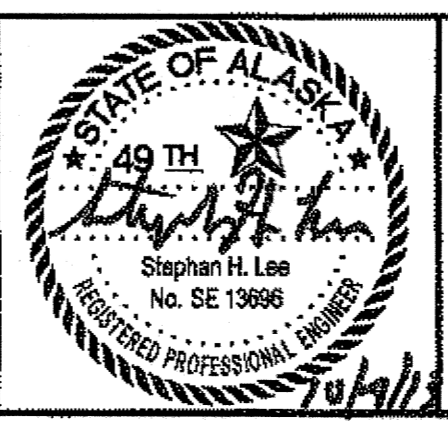


- NOTES:**
- All guardrail and guardrail connection hardware to conform to AASHTO M-180. Use H.S. Bolts conforming to ASTM A325. All other steel conforms to ASTM A709 Grade 36.
  - Conform to G-00 and G-04S for all guardrail details not shown.
  - Lap approach guardrail to prevent snags from oncoming traffic.
  - Provide 4 1/2 inch horizontal slots in approach guardrail. Adjust guardrail bolts for sliding fit.

DESIGNED BY: Steve Lee	CHECKED: Loren Gehring
DRAWN BY: Sam Sallie Jr	CHECKED: Steve Lee
QUANTITIES BY: Steve Lee	CHECKED: Loren Gehring

Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.  
 PE: [Signature] Date 07-09-2015

STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION  
 AND PUBLIC FACILITIES  
 BRIDGE SECTION


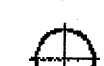


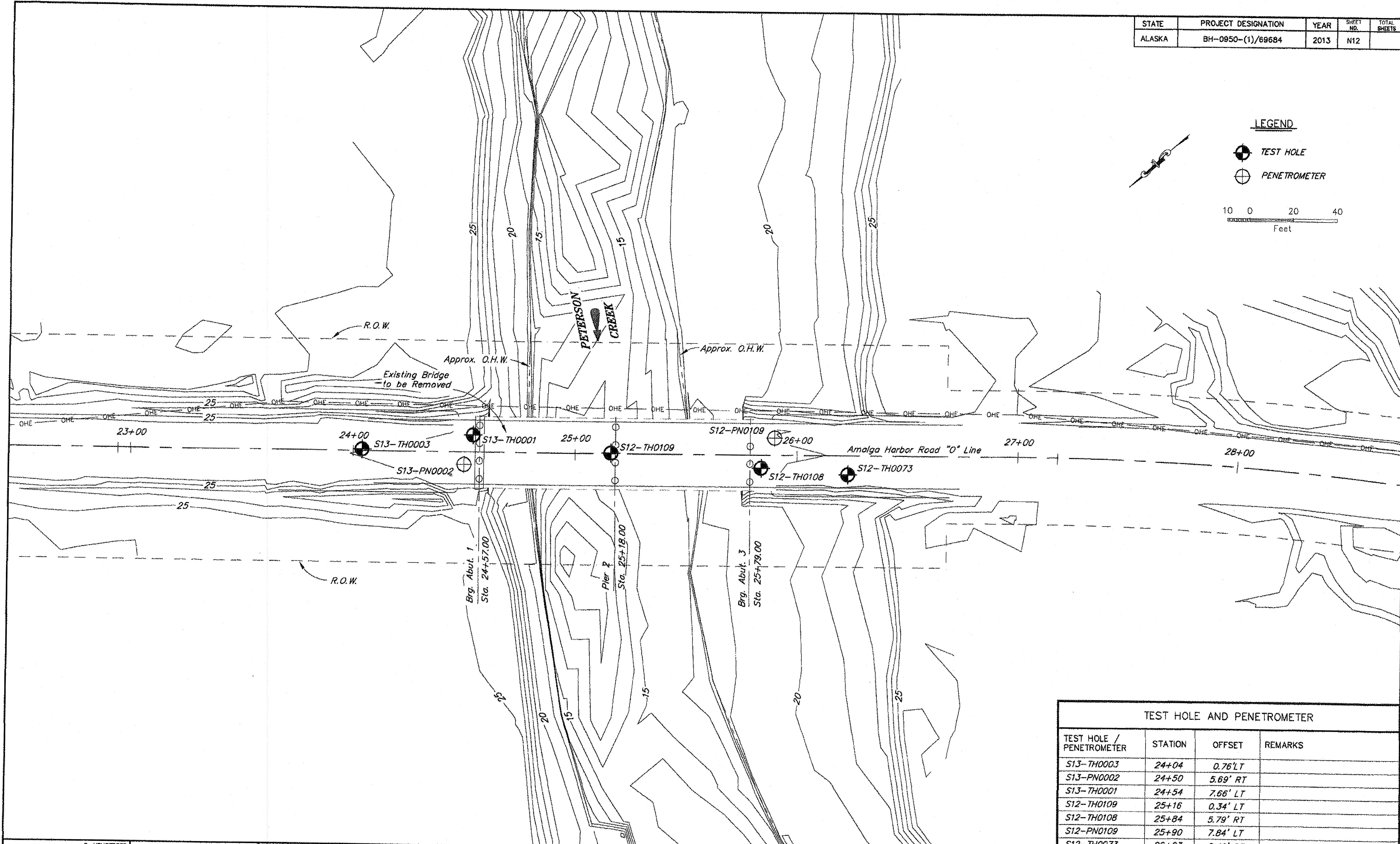
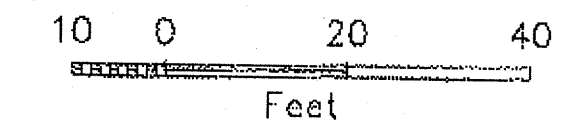
PETERSON CREEK BRIDGE  
 AMALGA HARBOR ROAD  
 BRIDGE RAIL TRANSITION

BRIDGE NO. 383  
 DWG. NO. 11

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BH-0950-(1)/69684	2013	N12	

**LEGEND**

-  TEST HOLE
-  PENETROMETER

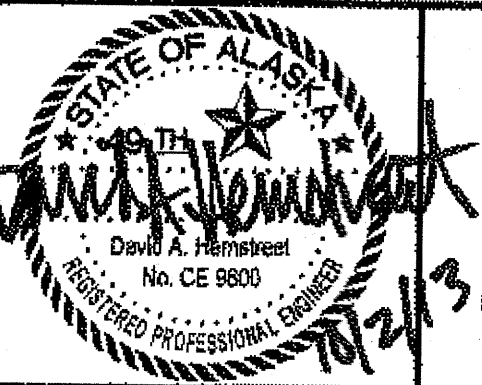


TEST HOLE AND PENETROMETER			
TEST HOLE / PENETROMETER	STATION	OFFSET	REMARKS
S13-TH0003	24+04	0.76' LT	
S13-PN0002	24+50	5.69' RT	
S13-TH0001	24+54	7.66' LT	
S12-TH0109	25+16	0.34' LT	
S12-TH0108	25+84	5.79' RT	
S12-PN0109	25+90	7.84' LT	
S12-TH0073	26+23	8.40' RT	

DESIGNED BY: D. HEMSTREET	CHECKED: GEOLOGIST
DRAWN BY: S. DONAHUE	CHECKED: Engineer
QUANTITIES BY: Engineer	CHECKED: Engineer

Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.  
 PE: [Signature] Date 01.08.2015

STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION  
 AND PUBLIC FACILITIES  
 STATEWIDE MATERIALS



PETERSON CREEK BRIDGE  
 AMALGA HARBOR ROAD

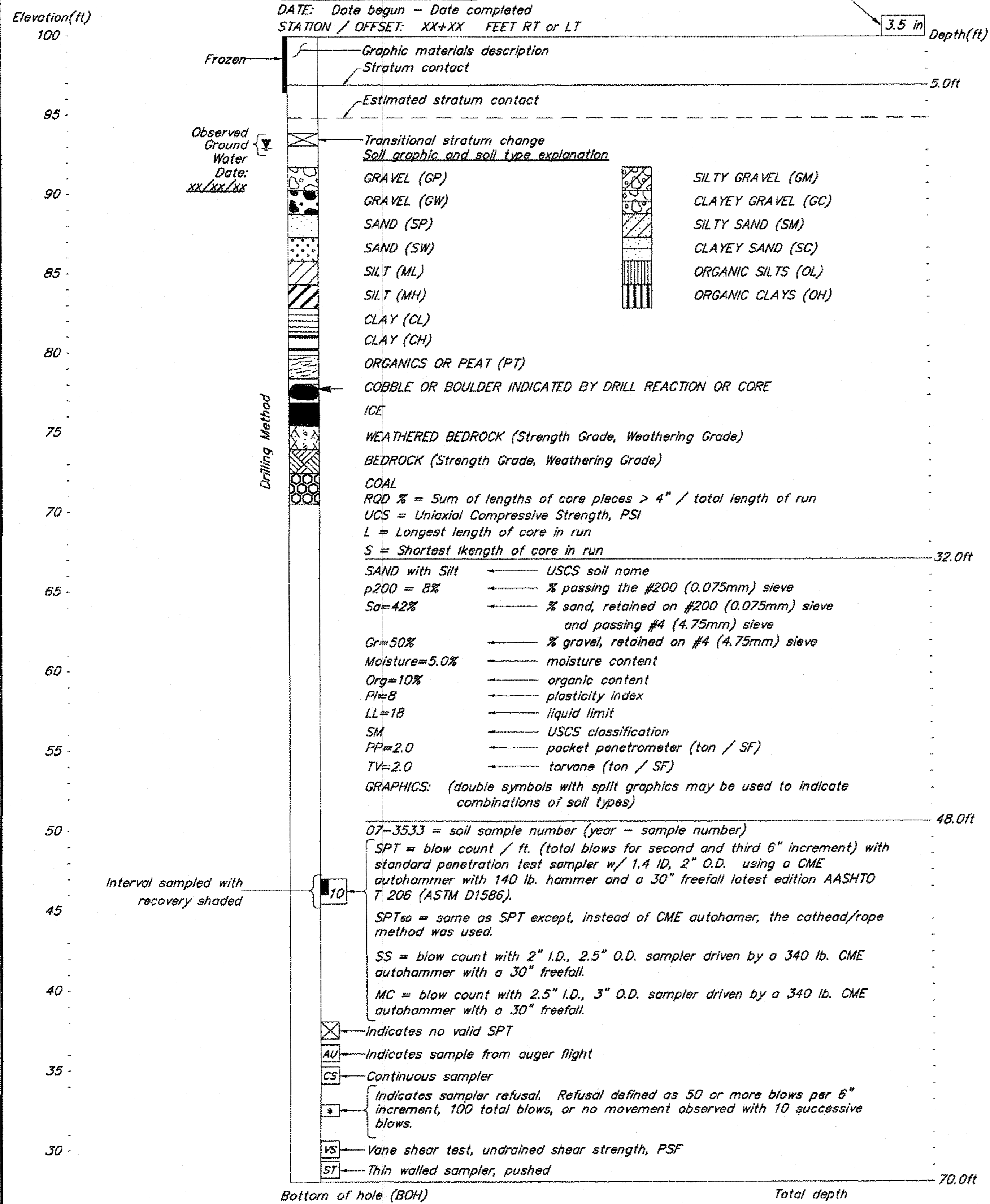
**TEST HOLE & PENETROMETER LOCATION**



BRIDGE NO. 0383  
 DWG. NO. 12

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BH-0950-(1)/69684	2013	N13	

**TYPICAL TEST HOLE LOG**

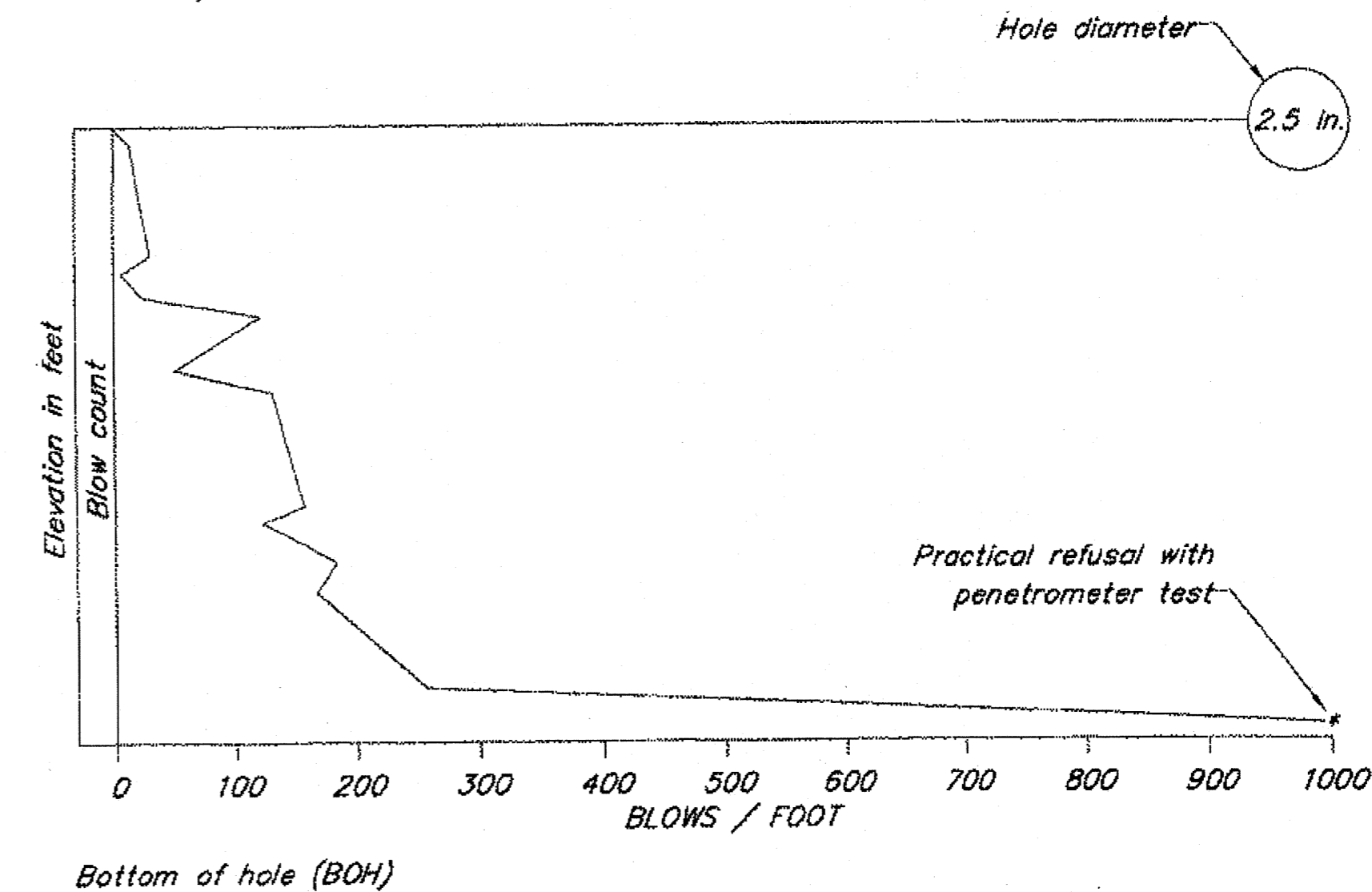


**NOTES:**

- 1) The test hole logs depicted graphically in these drawings are distillations of the original field logs, based on post-field investigation review and analysis. These drafted logs include changes made to field descriptions based upon laboratory test data, review and analysis. Detailed field observations of rock and soil sampled during the drilling program are not reproduced in the drafted logs.
- 2) Description of soils follows Alaska Geotechnical Procedures manual. Classification of soils follows Unified Soil Classification System (ASTM D2487).
- 3) The test hole logs from these sheets are an integral part of the Foundation Geology Report. See Construction Contract Bid Documents - invitation to bid/notice to bidders. Important information about the test hole logs and the foundation investigation is contained in the report. The test hole logs are not severable from and cannot be completely and correctly interpreted without reference to the Foundation Geology Report.

**TYPICAL PENETROMETER TEST LOG**

DATE: Date begun - Date completed  
 ELEVATION: Ground elevation at test hole  
 STATION / OFFSET: XX+XX FEET RT or LT



**NOTES:**

Penetrometer W/2.5" O.D., with a CME AUTOMATIC Hammer using a 340 lb. weight and a 30" freefall

DESIGNED BY: D. HEMSTREET	CHECKED: B. Benko
DRAWN BY: S. DONAHUE	CHECKED: Engineer
QUANTITIES BY: Engineer	CHECKED: Engineer

Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.  
 PE [Signature] Date 07-08-2015

STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION  
 AND PUBLIC FACILITIES  
 STATEWIDE MATERIALS



PETERSON CREEK BRIDGE

AMALGA HARBOR ROAD

TEST HOLE & PENETROMETER LEGEND

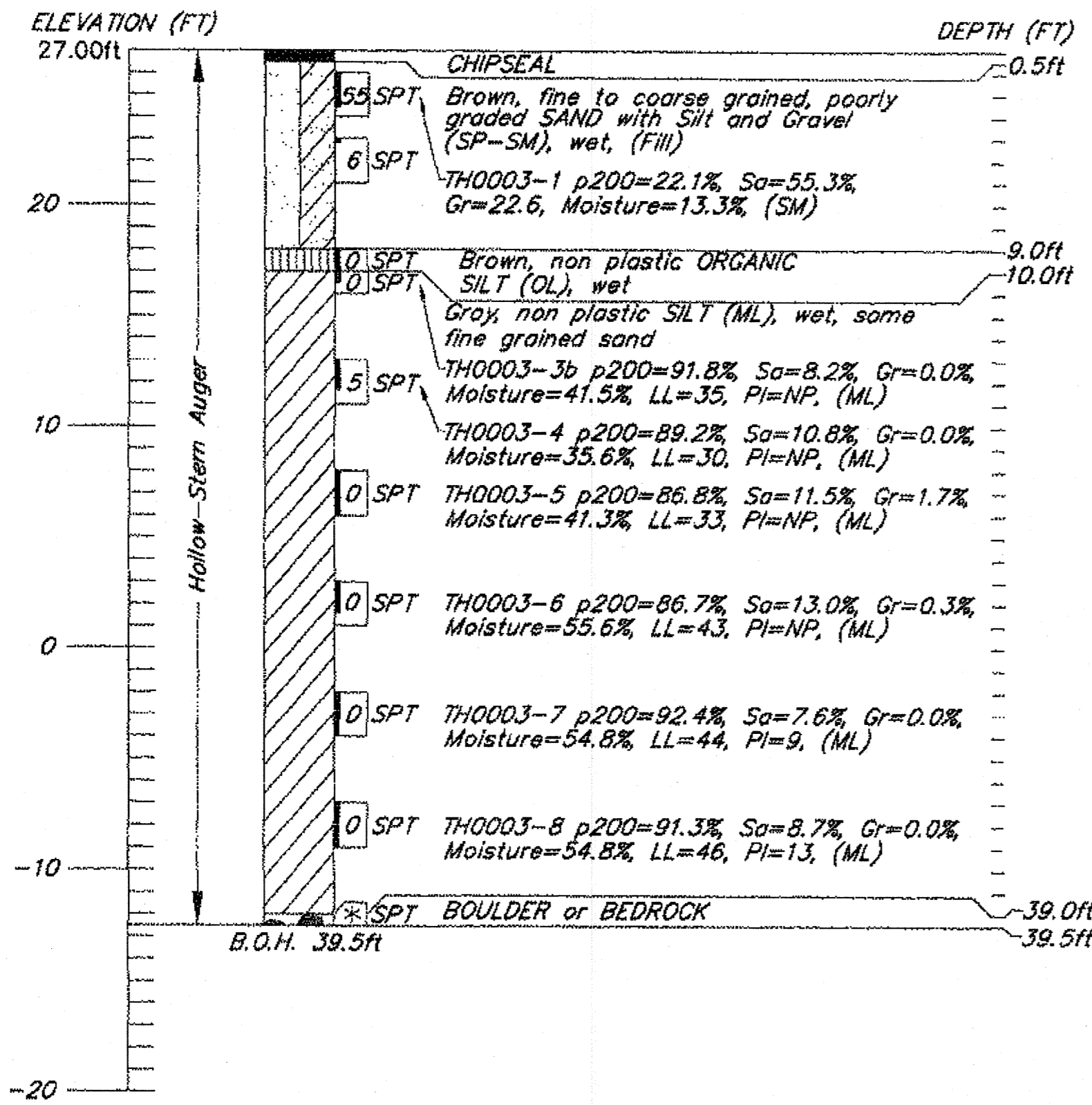


BRIDGE NO. 0383

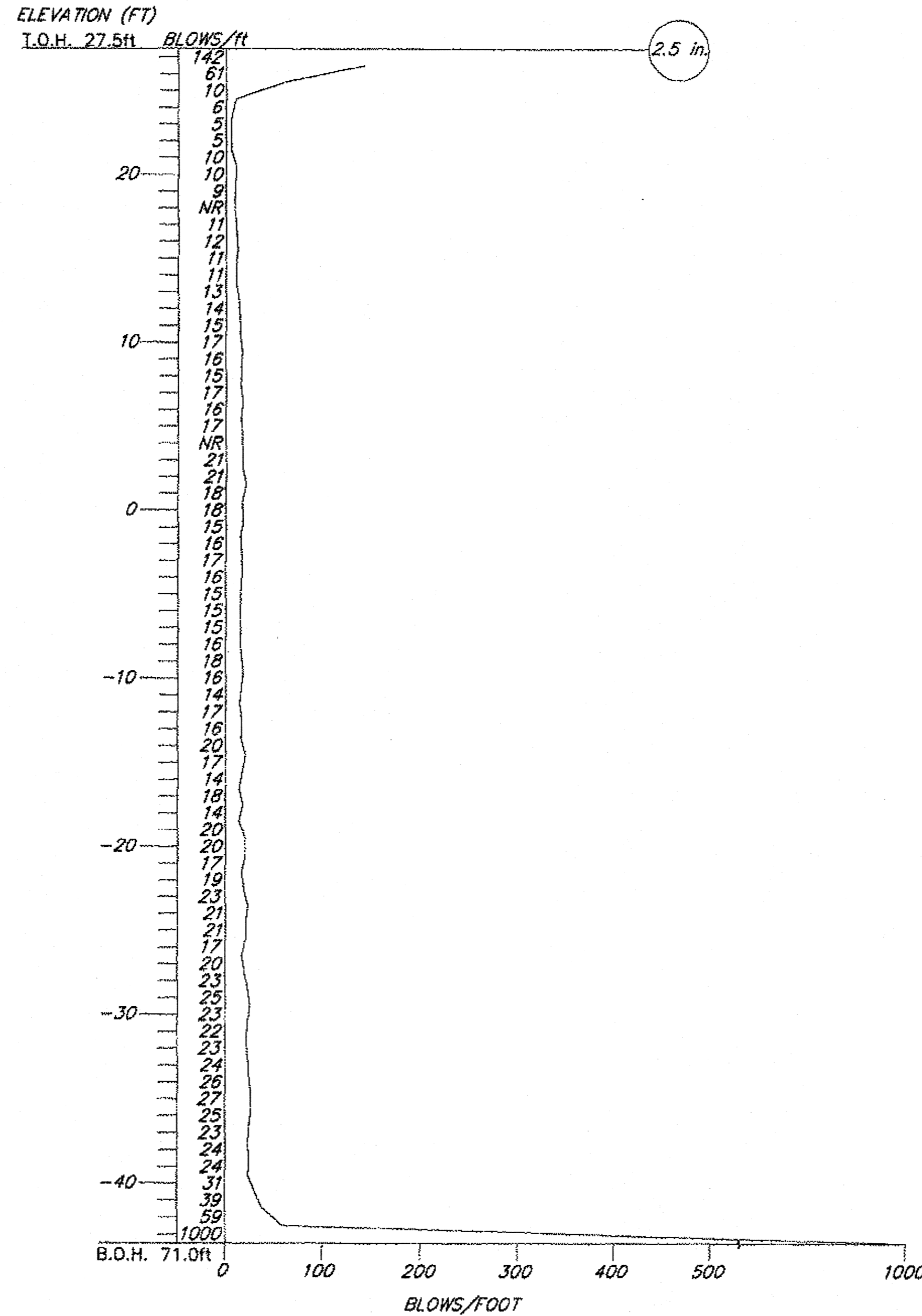
DWG. NO. 13

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
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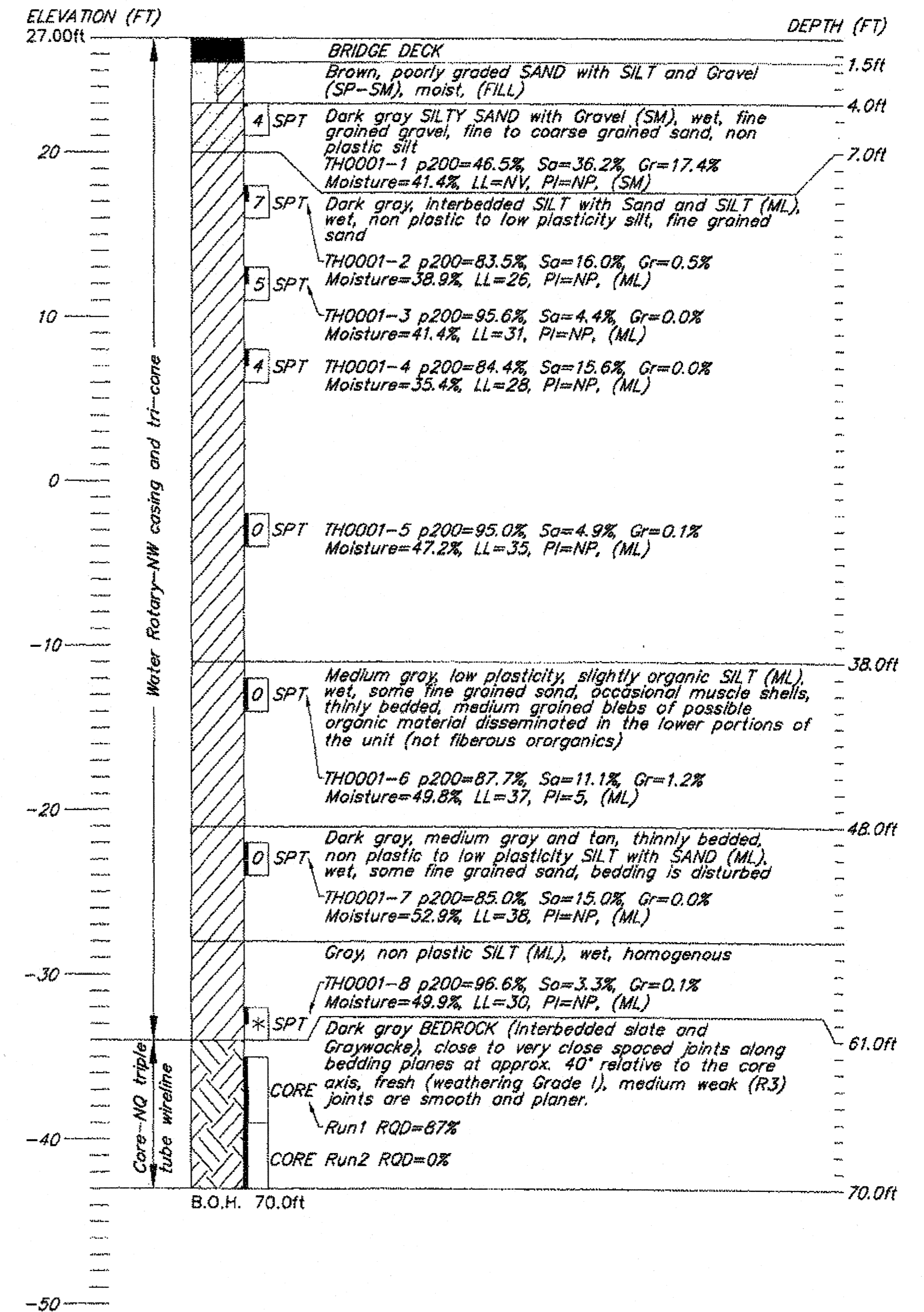
HOLE NO. S13-TH0003  
 DATE: 1/6/13 TO 1/6/13  
 ELEVATION: 27.00'  
 STATION/LOCATION: 24+04, 2' LT



HOLE NO. S12-PN0002  
 DATE: 1/5/13 TO 1/6/13  
 ELEVATION: 27.5'  
 STATION/LOCATION: 24+50, 5' RT



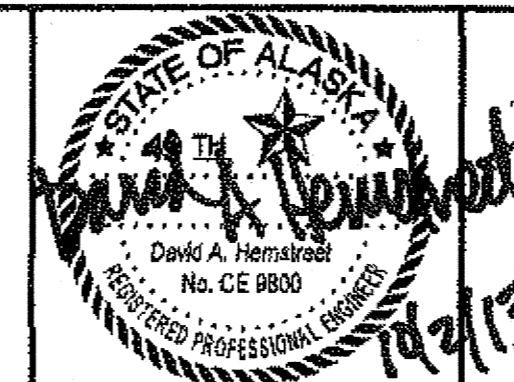
HOLE NO. S13-TH0001  
 DATE: 1/3/13 TO 1/4/13  
 ELEVATION: 27.00'  
 STATION/LOCATION: 24+54, 8' LT



DESIGNED BY: D. HEMSTREET	CHECKED: GEOLOGIST
DRAWN BY: S. DONAHUE	CHECKED: Engineer
QUANTITIES BY: Engineer	CHECKED: Engineer

Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.  
 PE: [Signature] Date 07-08-2015

STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES  
 STATEWIDE MATERIALS



PETERSON CREEK BRIDGE  
 AMALGA HARBOR ROAD  
 TEST HOLE & PENETROMETER LOGS

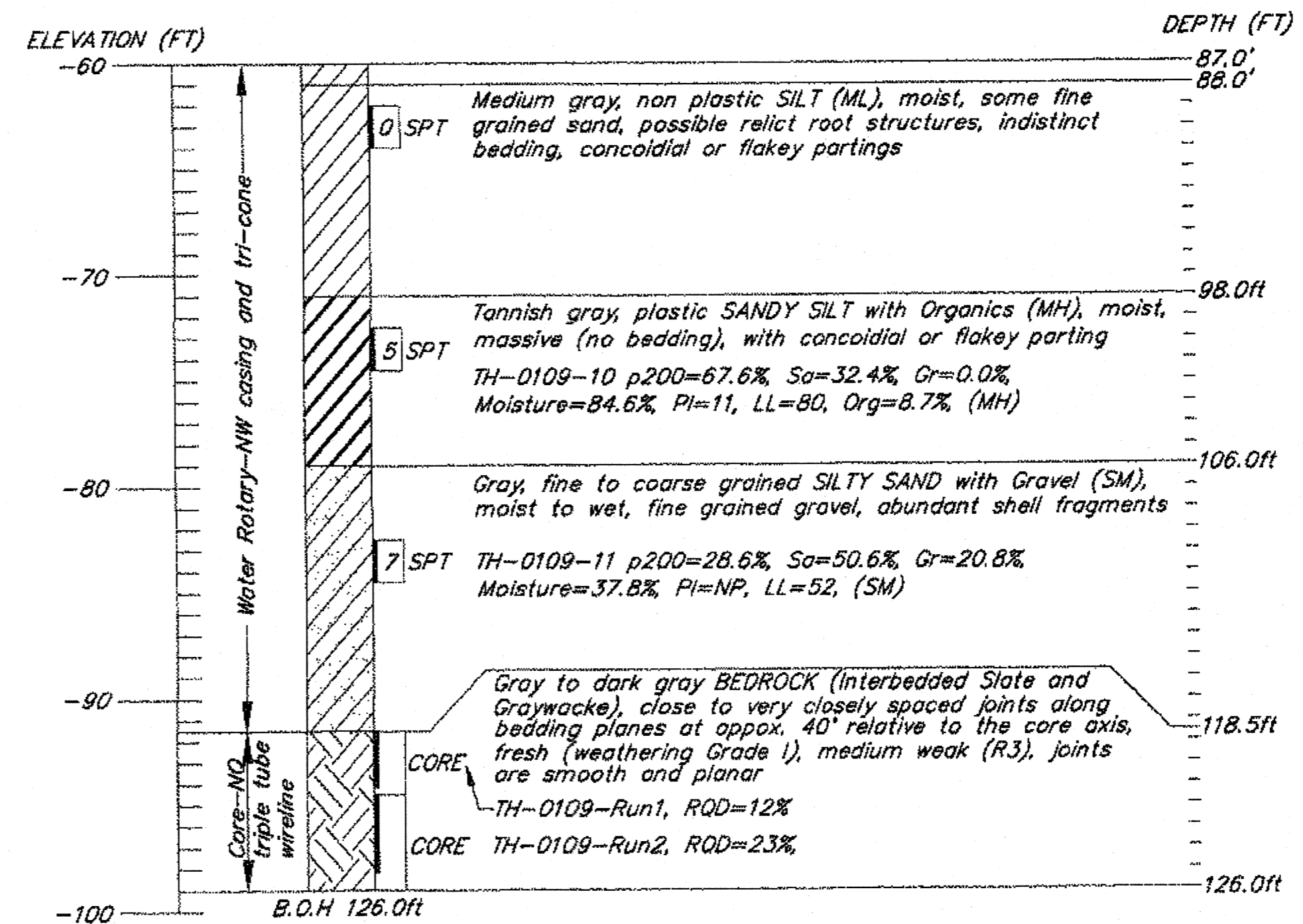
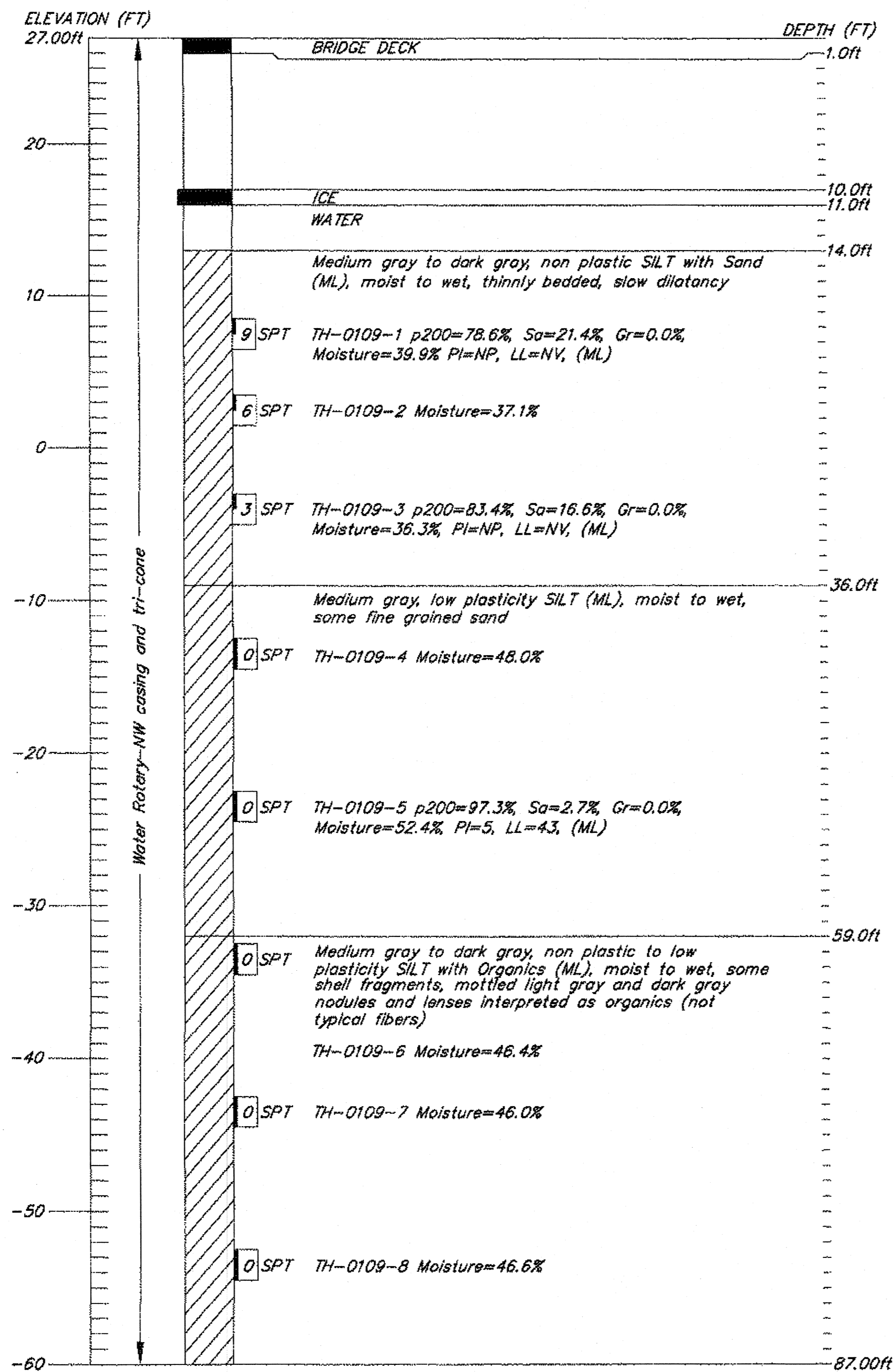


BRIDGE NO. 0383  
 DWG. NO. 14

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BH-0950-(1)/69684	2013	N15	

HOLE NO. S12-TH0109  
 DATE: 12/2/12 TO 12/2/12  
 ELEVATION: 27.00'  
 STATION/LOCATION: 25+16, 0.34' LT

HOLE NO. S12-TH0109 (CONTINUED)  
 DATE: 12/2/12 TO 12/2/12  
 ELEVATION: 27.00'  
 STATION/LOCATION: 25+16, 0.34' LT



DESIGNED BY: D. HEMSTREET	CHECKED: GEOLOGIST
DRAWN BY: S. DONAHUE	CHECKED: Engineer
QUANTITIES BY: Engineer	CHECKED: Engineer

Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.  
 PE [Signature] Date 07.08.2015

STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION  
 AND PUBLIC FACILITIES  
 STATEWIDE MATERIALS



PETERSON CREEK BRIDGE  
 AMALGA HARBOR ROAD  
 TEST HOLE & PENETROMETER LOGS

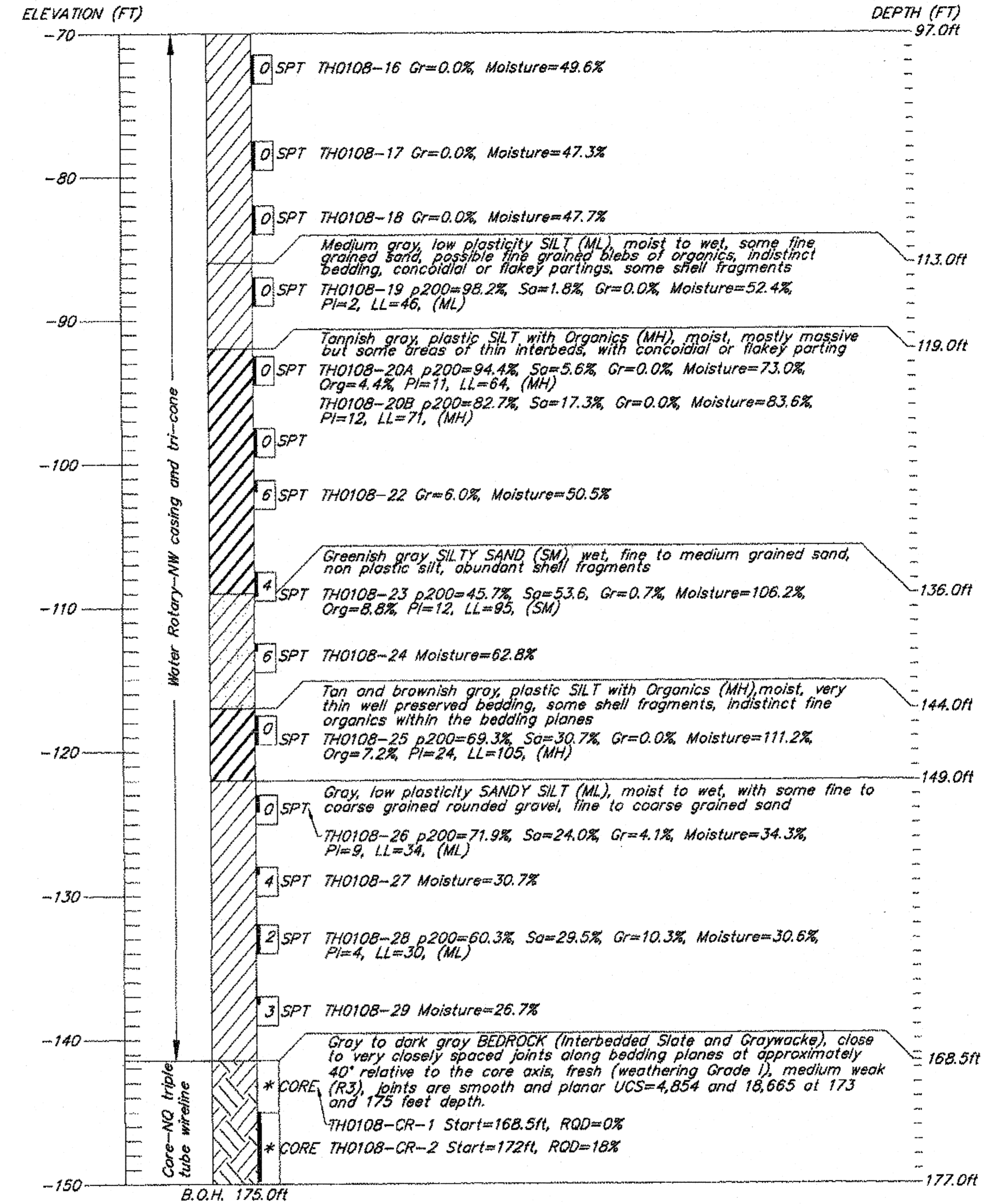
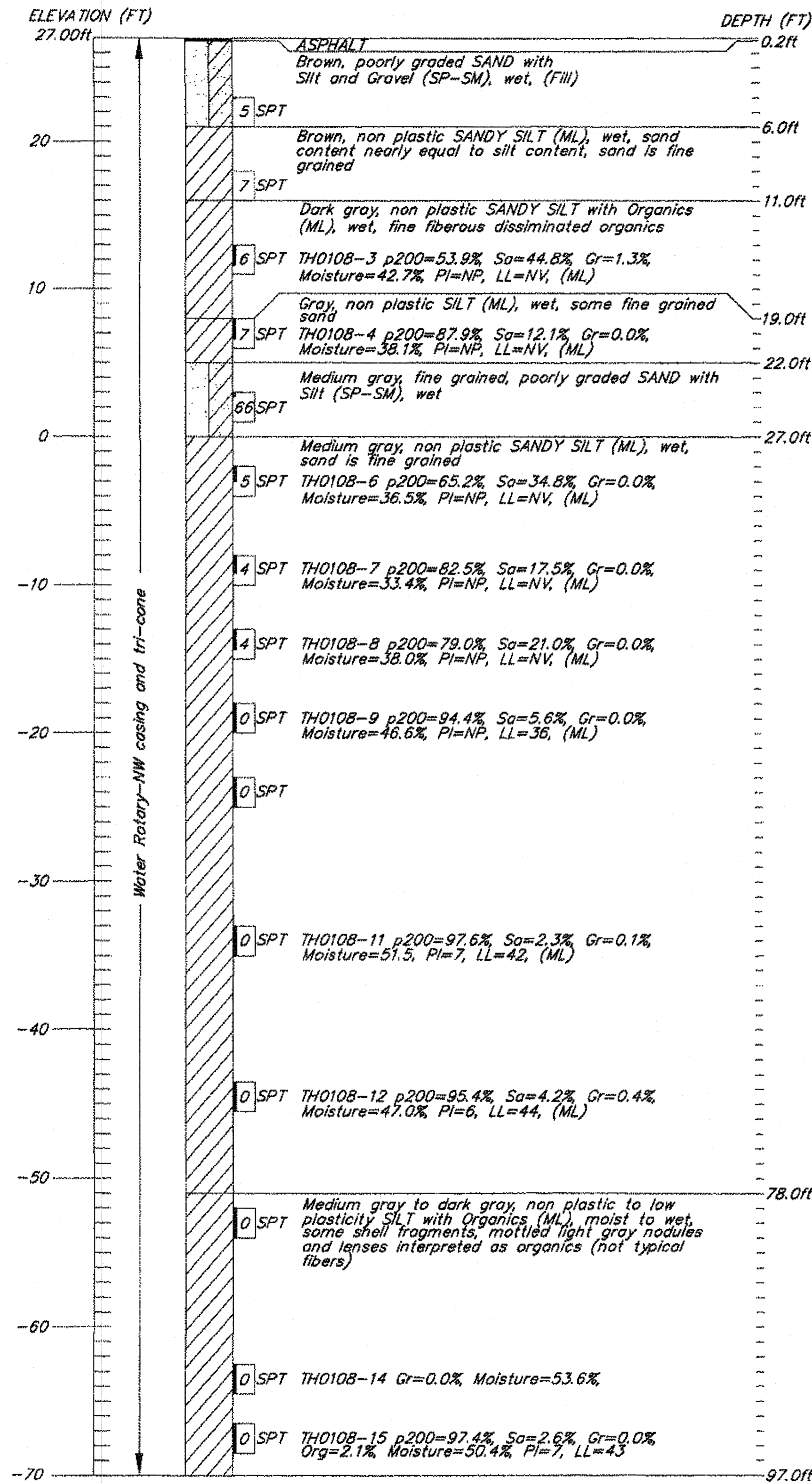


BRIDGE NO. 0383  
 DWG. NO. 15

HOLE NO. S12-TH0108  
 DATE: 10/15/12 TO 10/15/12  
 ELEVATION: 27.00'  
 STATION/LOCATION: 25+84, 5.79' RT

HOLE NO. S12-TH0108 (CONTINUED)  
 DATE: 10/15/12 TO 10/15/12  
 ELEVATION: 27.00'  
 STATION/LOCATION: 25+84, 5.79' RT

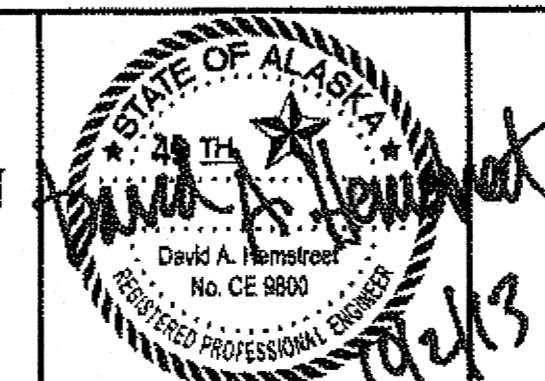
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BH-0950-(1)/69684	2013	N16	



DESIGNED BY: D. HEMSTREET	CHECKED: GEOLGIST
DRAWN BY: S. DONAHUE	CHECKED: Engineer
QUANTITIES BY: Engineer	CHECKED: Engineer

Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.  
 Date 07.08.2015

STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION  
 AND PUBLIC FACILITIES  
 STATEWIDE MATERIALS

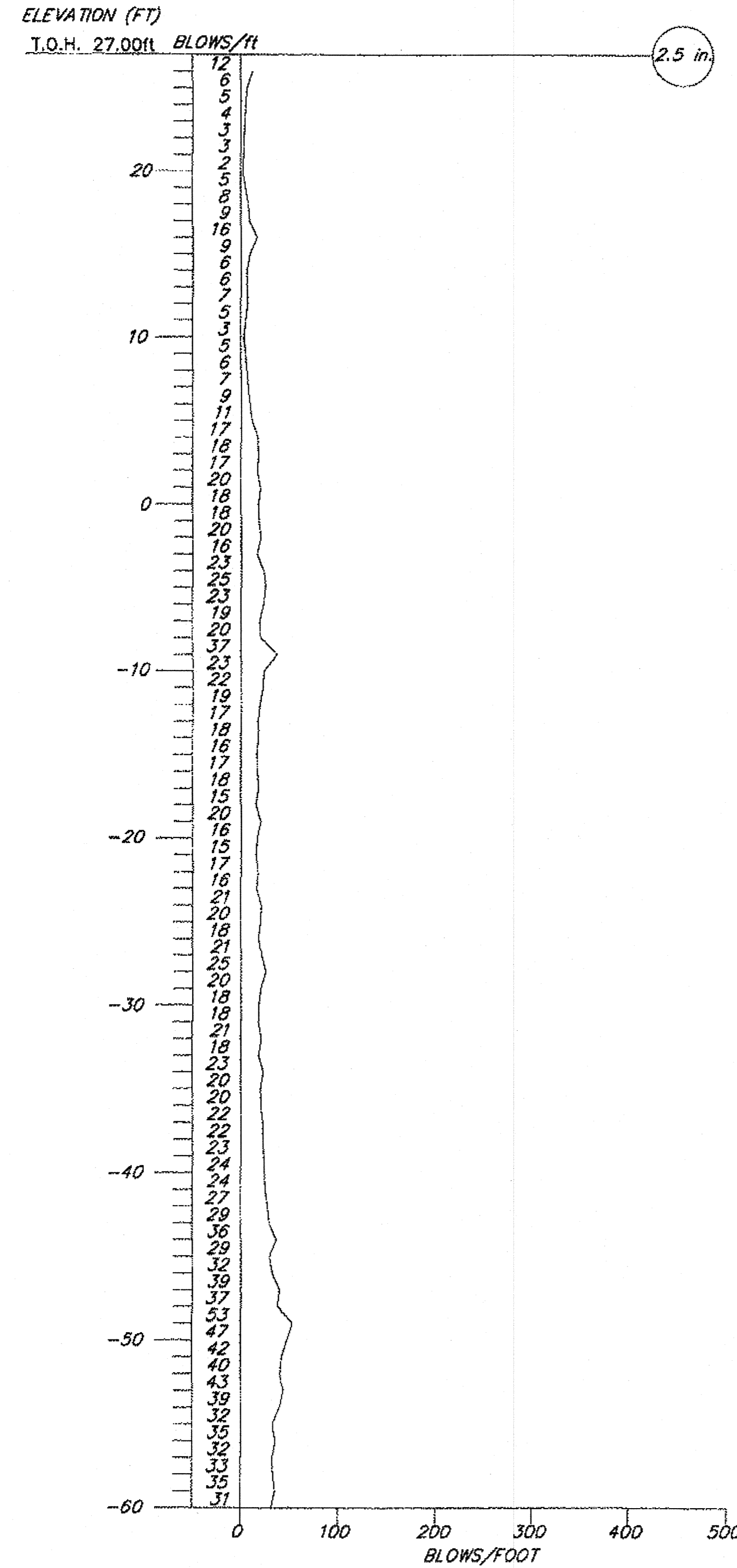


PETERSON CREEK BRIDGE  
 AMALGA HARBOR ROAD  
 TEST HOLE & PENETROMETER LOGS

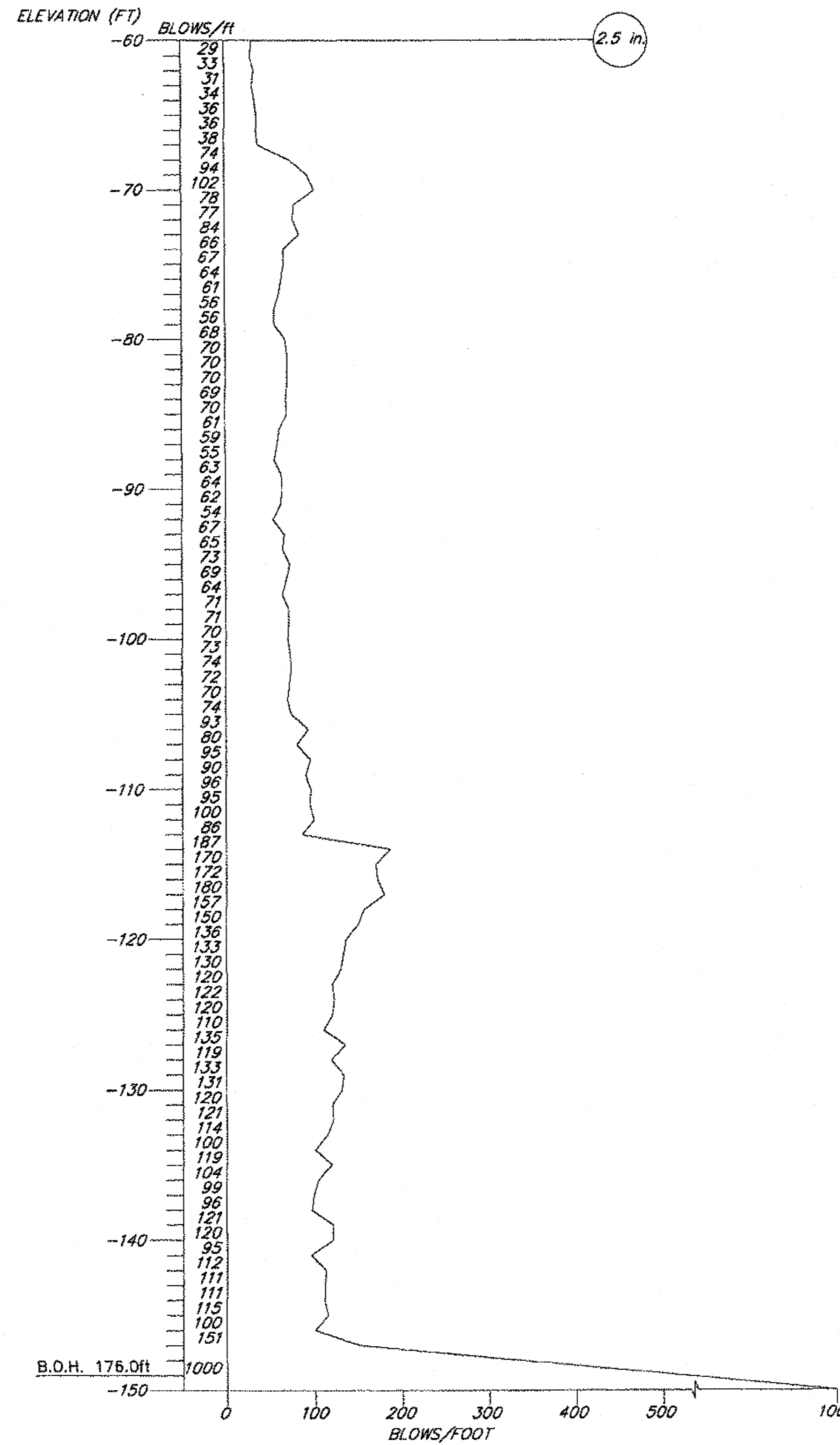
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 DWG. NO. 16

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BH-0950-(1)/69684	2013	N17	

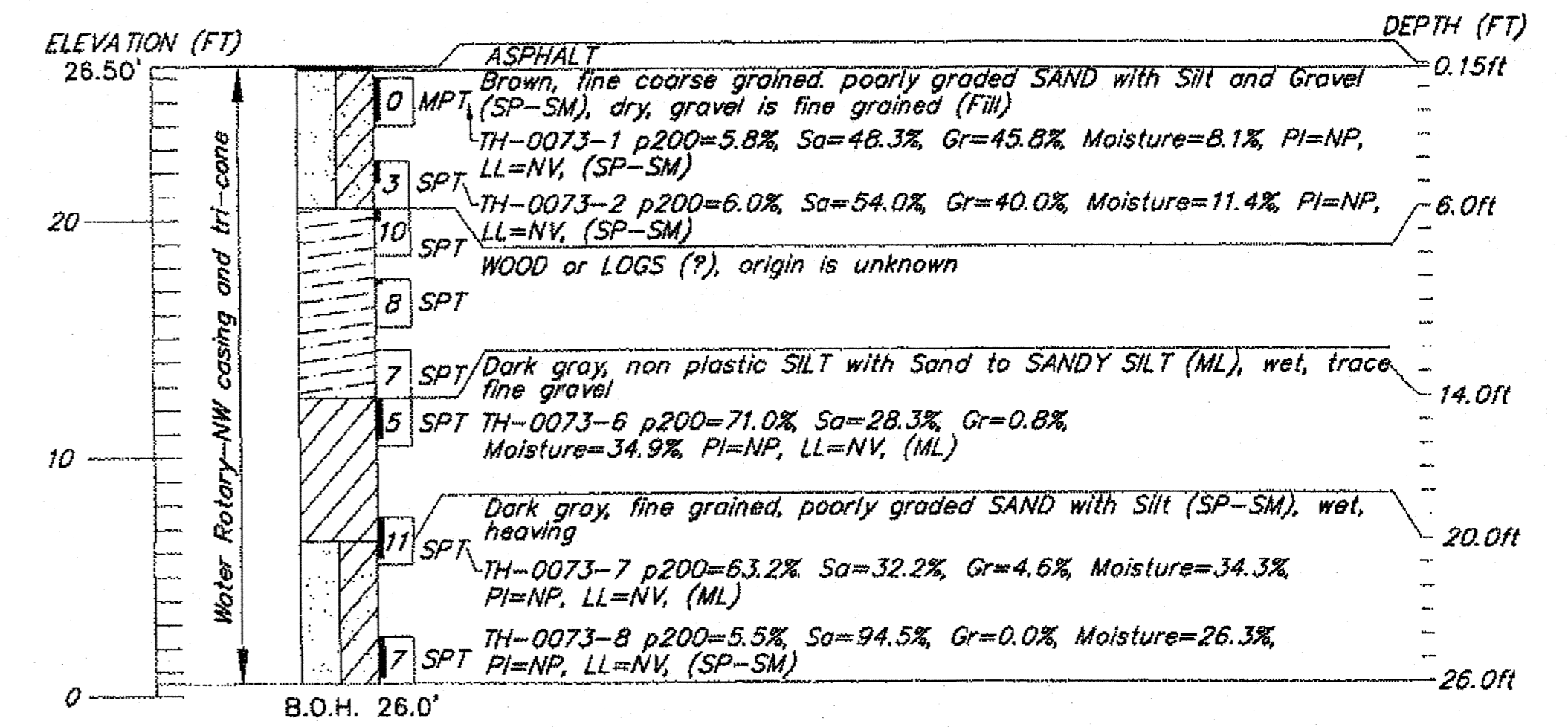
HOLE NO. S12-PN0109  
 DATE: 1/5/12 TO 1/5/12  
 ELEVATION: 27.00'  
 STATION/LOCATION: 25+90, 7.84' LT



HOLE NO. S12-PN0109 (CONTINUED)  
 DATE: 1/5/12 TO 1/5/12  
 ELEVATION: 27.00'  
 STATION/LOCATION: 25+90, 7.84' LT



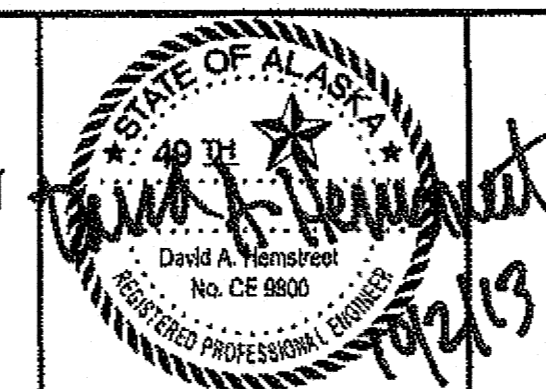
HOLE NO. S13-TH0073  
 DATE: 10/10/12 TO 10/10/12  
 ELEVATION: 26.50'  
 STATION/LOCATION: 26+23, 8.40' RT



DESIGNED BY: D. HEMSTREET	CHECKED: GEOLOGIST
DRAWN BY: S. DONAHUE	CHECKED: Engineer
QUANTITIES BY: Engineer	CHECKED: Engineer

Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.  
 PE [Signature] Date 07.08.2013

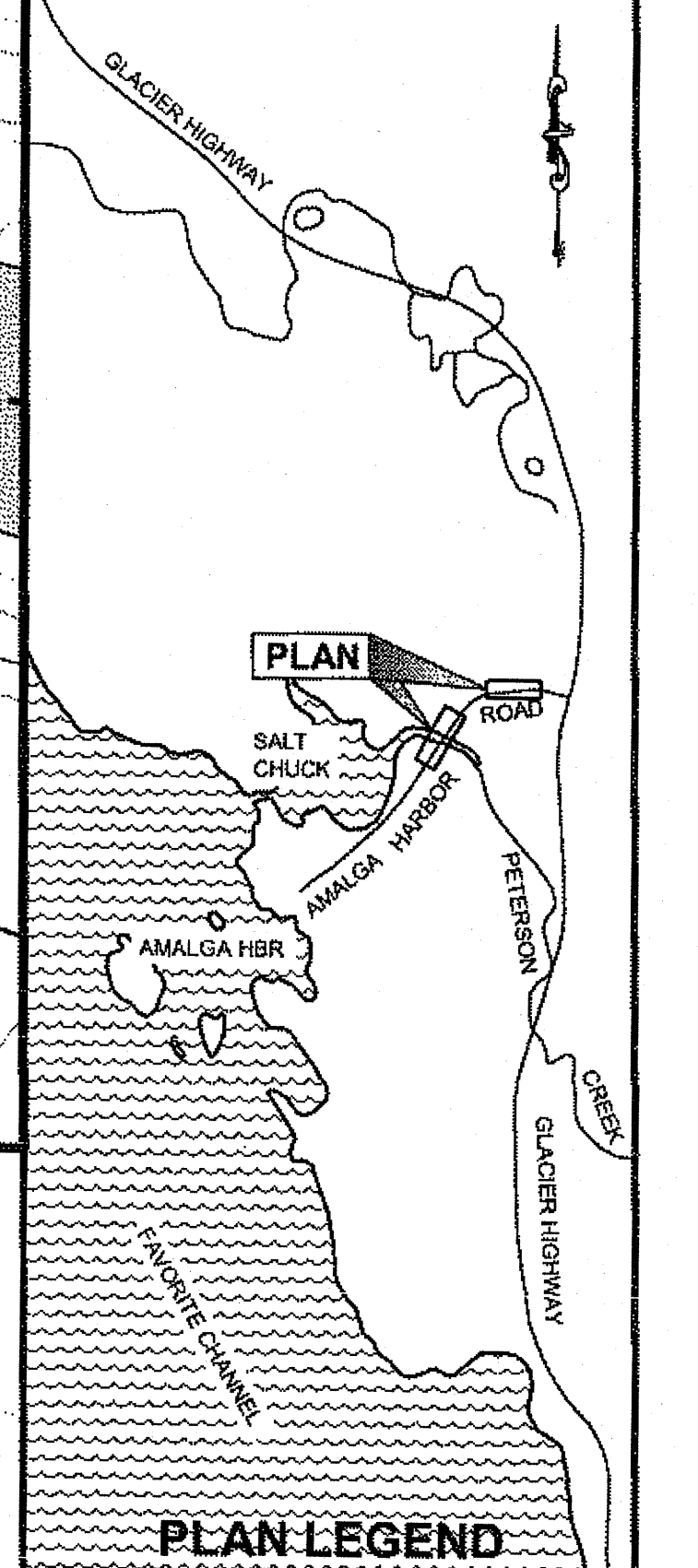
STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION  
 AND PUBLIC FACILITIES  
 STATEWIDE MATERIALS



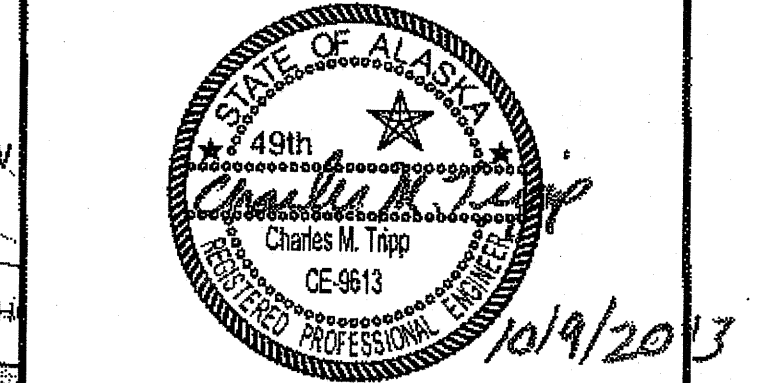
PETERSON CREEK BRIDGE  
 AMALGA HARBOR ROAD  
 TEST HOLE & PENETROMETER LOGS

BRIDGE NO. 0383  
 DWG. NO. 17

ADDENDUM NUMBER		
ATTACHMENT NUMBER		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION



CHECKED BY: C. TRIPP



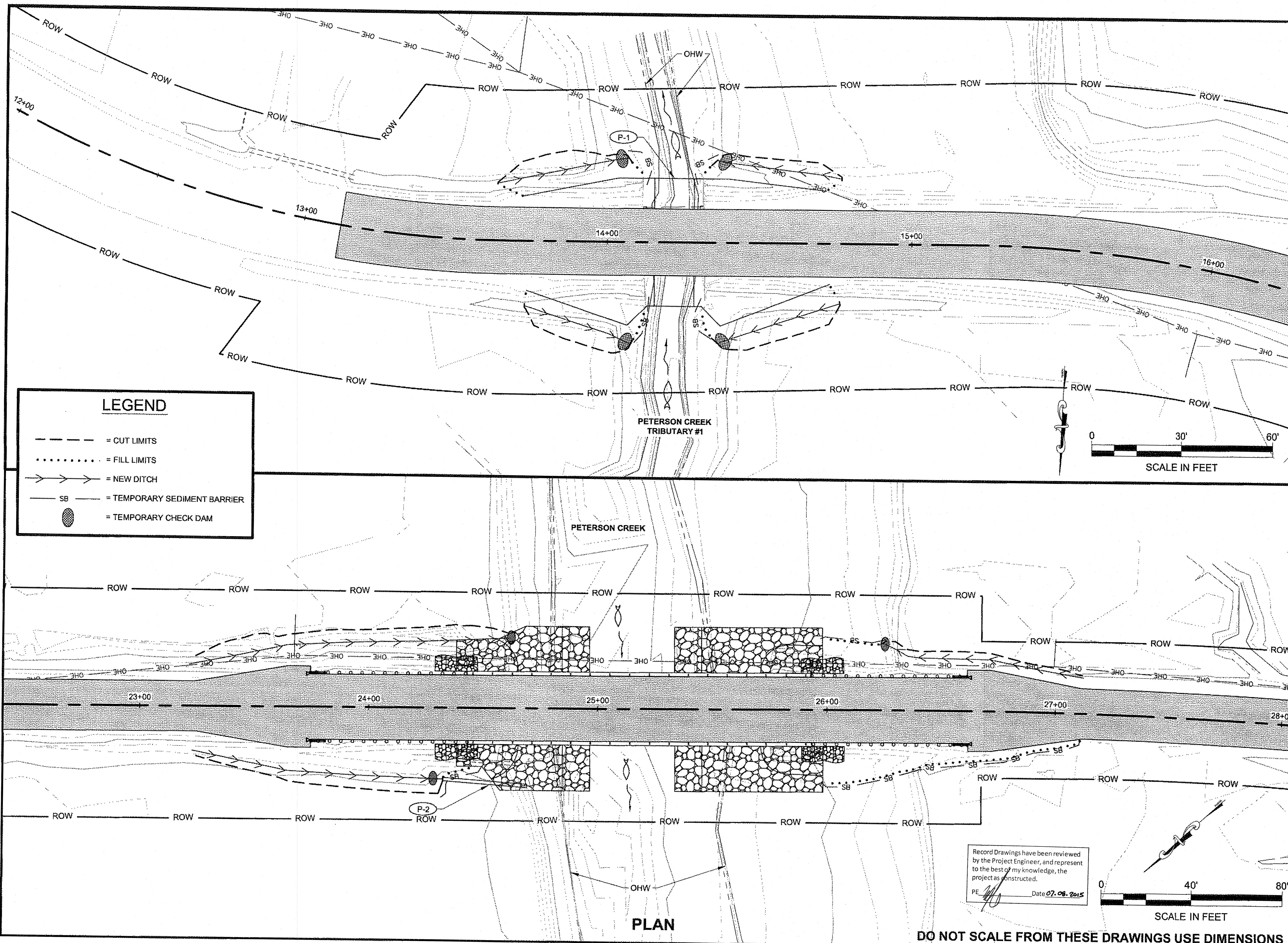
DESIGNED BY: L. CHAMBERS  
 DRAWN BY: L. CHAMBERS

STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION  
 & PUBLIC FACILITIES  
 SOUTHEAST REGION

**AMALGA HARBOR RD & BRIDGES RECONSTRUCTION & REPLACEMENT PROJECT #69684**

**EROSION SEDIMENT CONTROL PLANS**

PROJECT DESIGNATION	
69684/ BH - 0950(1)	
STATE	YEAR
ALASKA	2013
SHEET NUMBER	TOTAL SHEETS
P1	55

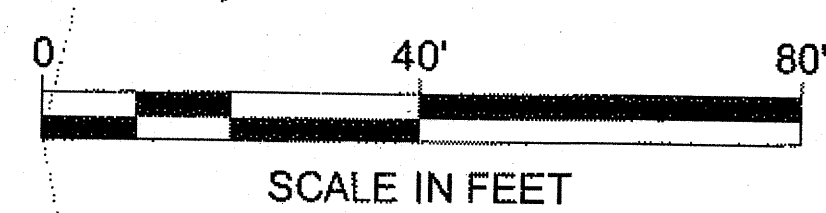


**LEGEND**

- - - - - = CUT LIMITS
- ..... = FILL LIMITS
- → → = NEW DITCH
- SB — = TEMPORARY SEDIMENT BARRIER
- = TEMPORARY CHECK DAM

Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.

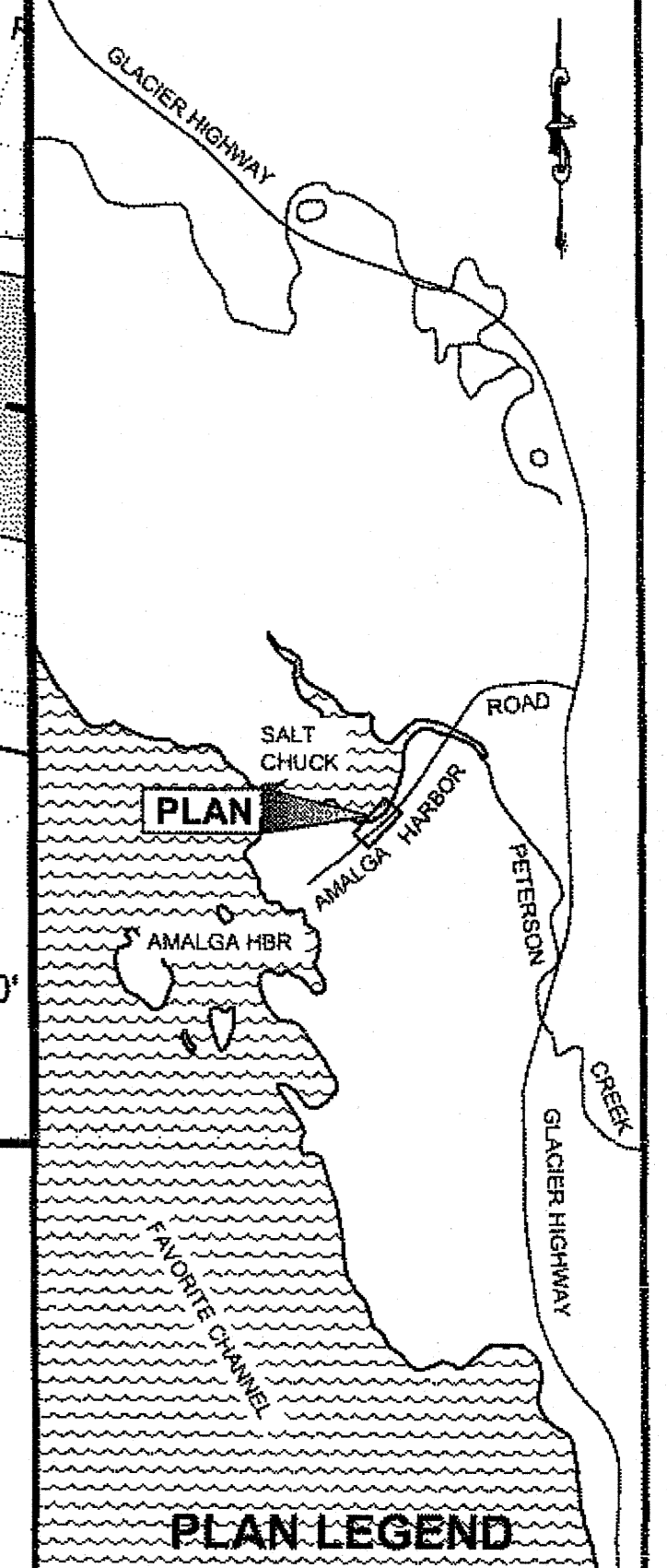
PE *[Signature]* Date 07.08.2015



**DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS**

CHAMBERS, LUCAS M (DOT)  
 TAB: P2 Wednesday, October 09, 2013 1:16:22 P  
 ADDENDUM NUMBER  
 ATTACHMENT NUMBER  
 RECORD OF REVISIONS

No.	DATE	DESCRIPTION



CHECKED BY: C. TRIPP

DESIGNED BY: L. CHAMBERS  
 DRAWN BY: L. CHAMBERS

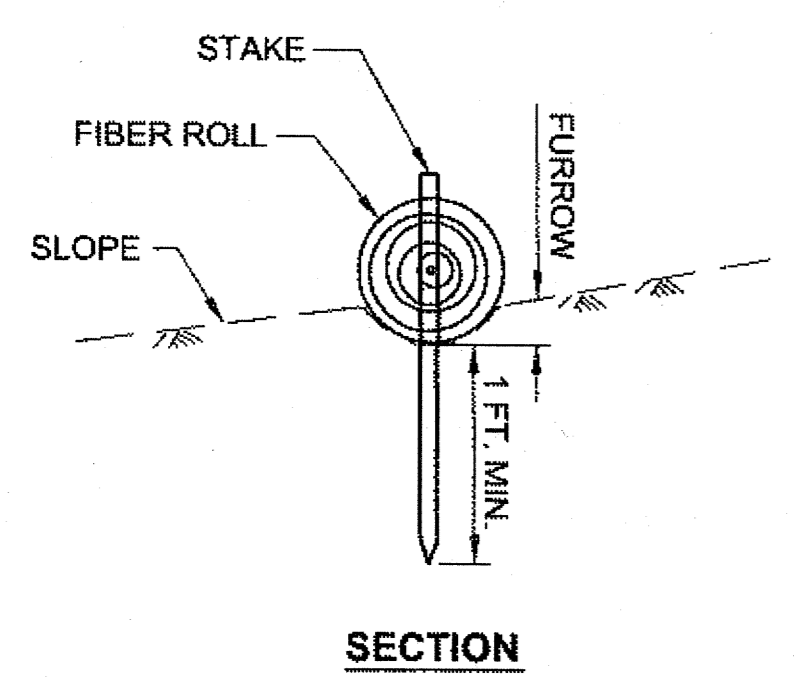
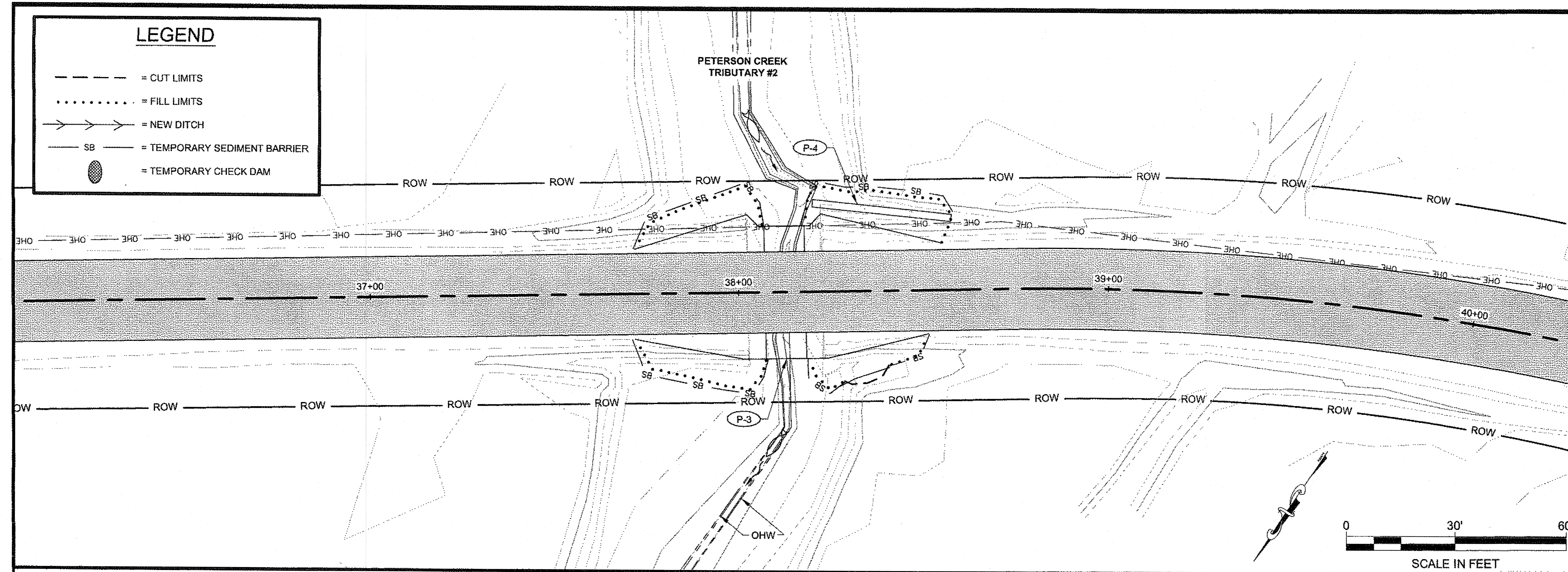
STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION  
 & PUBLIC FACILITIES  
 SOUTHEAST REGION

**AMALGA HARBOR RD & BRIDGES RECONSTRUCTION & REPLACEMENT PROJECT #69684**  
**EROSION SEDIMENT CONTROL PLANS**

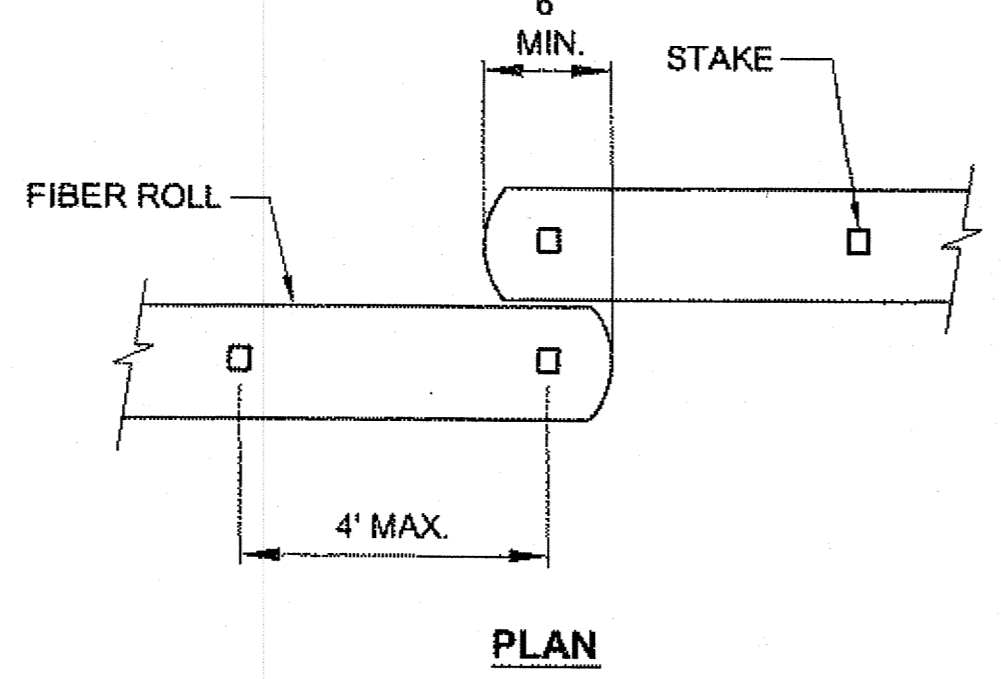
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69684/ BH - 0950(1)	
STATE	YEAR
ALASKA	2013
SHEET NUMBER	TOTAL SHEETS
P2	55

**LEGEND**

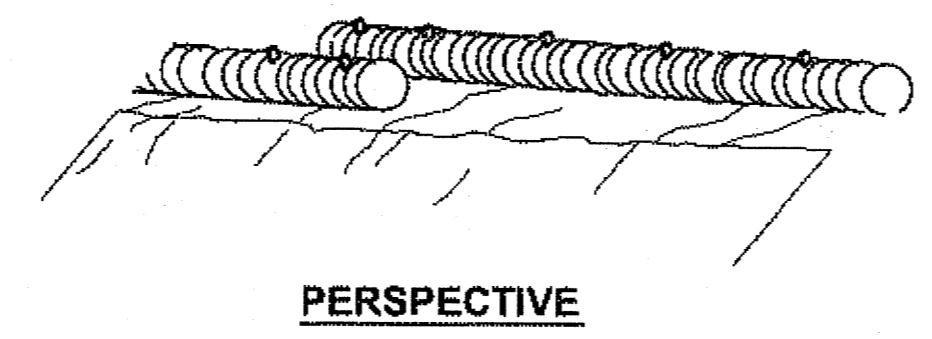
- - - - - = CUT LIMITS
- ..... = FILL LIMITS
- → → = NEW DITCH
- SB — = TEMPORARY SEDIMENT BARRIER
- = TEMPORARY CHECK DAM



SECTION



PLAN



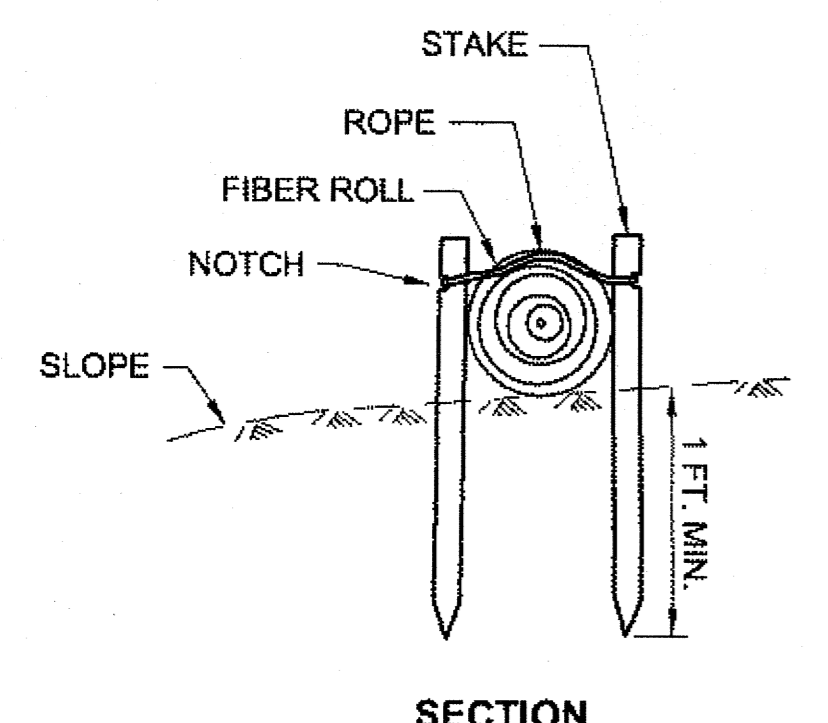
PERSPECTIVE

**FIBER ROLL (TYPE 1)**

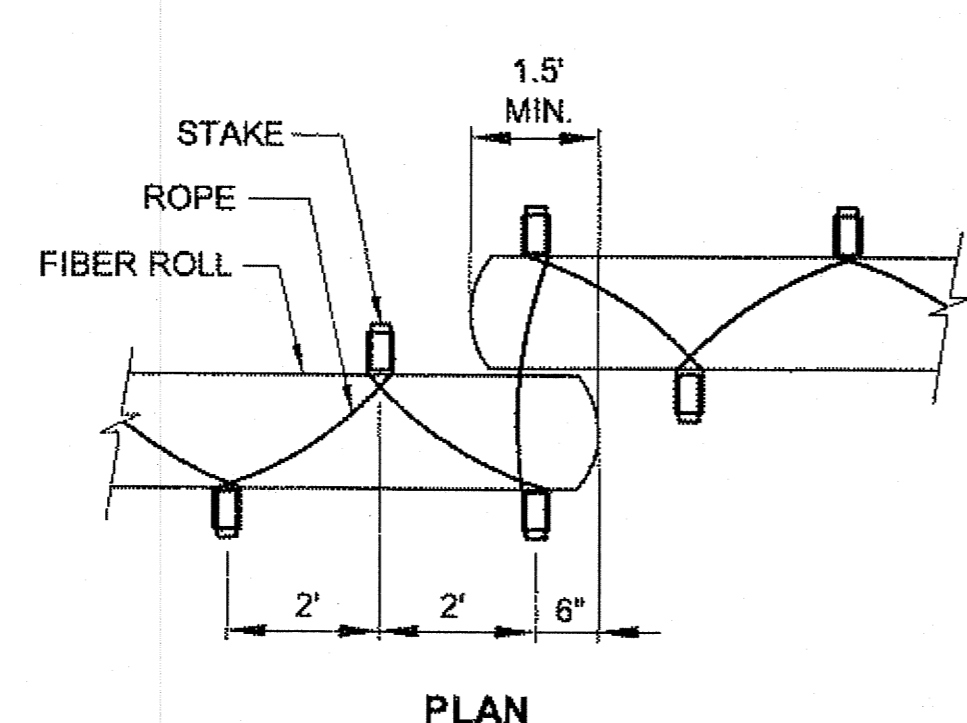
**FIBER ROLL (TYPE 1)**

**GENERAL NOTES:**

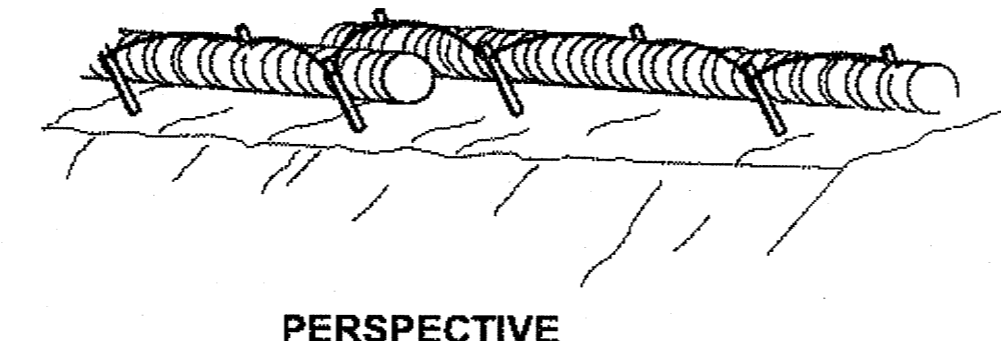
- REFER TO APPENDIX B OF THE SPECIAL PROVISIONS FOR THE ENVIRONMENTAL COMMITMENTS.
- EROSION CONTROL MEASURES WILL BE EVALUATED BY THE ENGINEER BASED ON EFFECTIVENESS. THOSE FOUND INEFFECTIVE MUST BE REPLACED OR REPAIRED WITHIN 24 HOURS FOLLOWING NOTIFICATION.
- THE LOCATIONS OF TEMPORARY EROSION & SEDIMENT POLLUTION CONTROLS ARE RECOMMENDATIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PREPARE AND IMPLEMENT A WQCP ACCORDING TO SECTION 641 OF THE SPECS.
- INSTALL EROSION AND SEDIMENT CONTROL DEVICES BEFORE BEGINNING EARTH DISTURBING ACTIVITIES OR AS SPECIFIED ELSEWHERE.
- THE LOCATION AND LENGTH OF SEDIMENT BARRIER IS DEPENDENT ON THE CONDITIONS OF THE SITE.
- ANCHOR AS NECESSARY TO FIRMLY SECURE FIBER ROLLS AND PROVIDE CONTINUOUS CONTACT WITH THE SURFACE ON WHICH IT IS INSTALLED.
- LAP ADJACENT FIBER ROLLS TO PREVENT SEDIMENT BYPASS.



SECTION



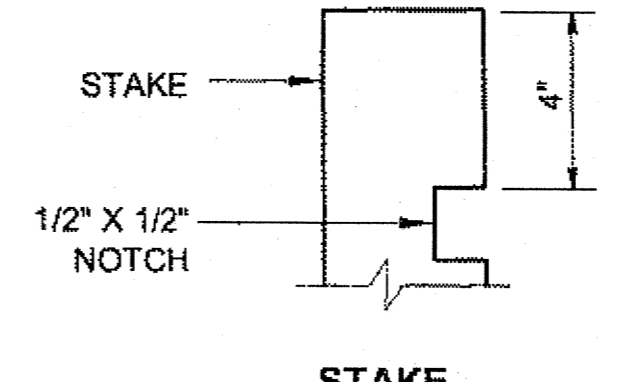
PLAN



PERSPECTIVE

**FIBER ROLL (TYPE 2)**

**FIBER ROLL (TYPE 2)**



STAKE

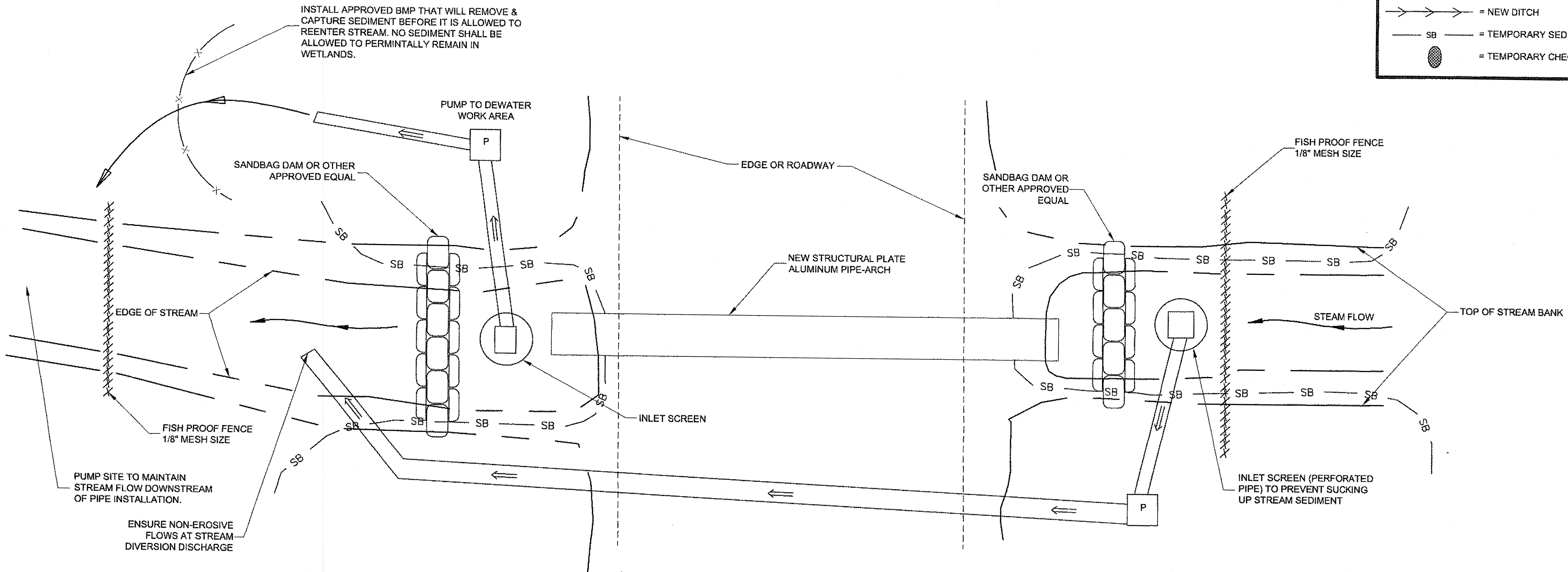
**TYPICAL FIBER ROLL DETAIL**

Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.  
 PE [Signature] Date 07.08.2015

**DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS**

**LEGEND**

- - - - - = CUT LIMITS
- ..... = FILL LIMITS
- → → = NEW DITCH
- SB — = TEMPORARY SEDIMENT BARRIER
- ⊙ = TEMPORARY CHECK DAM



**DAM & DEWATERING PLAN**  
NTS

**NOTES:**

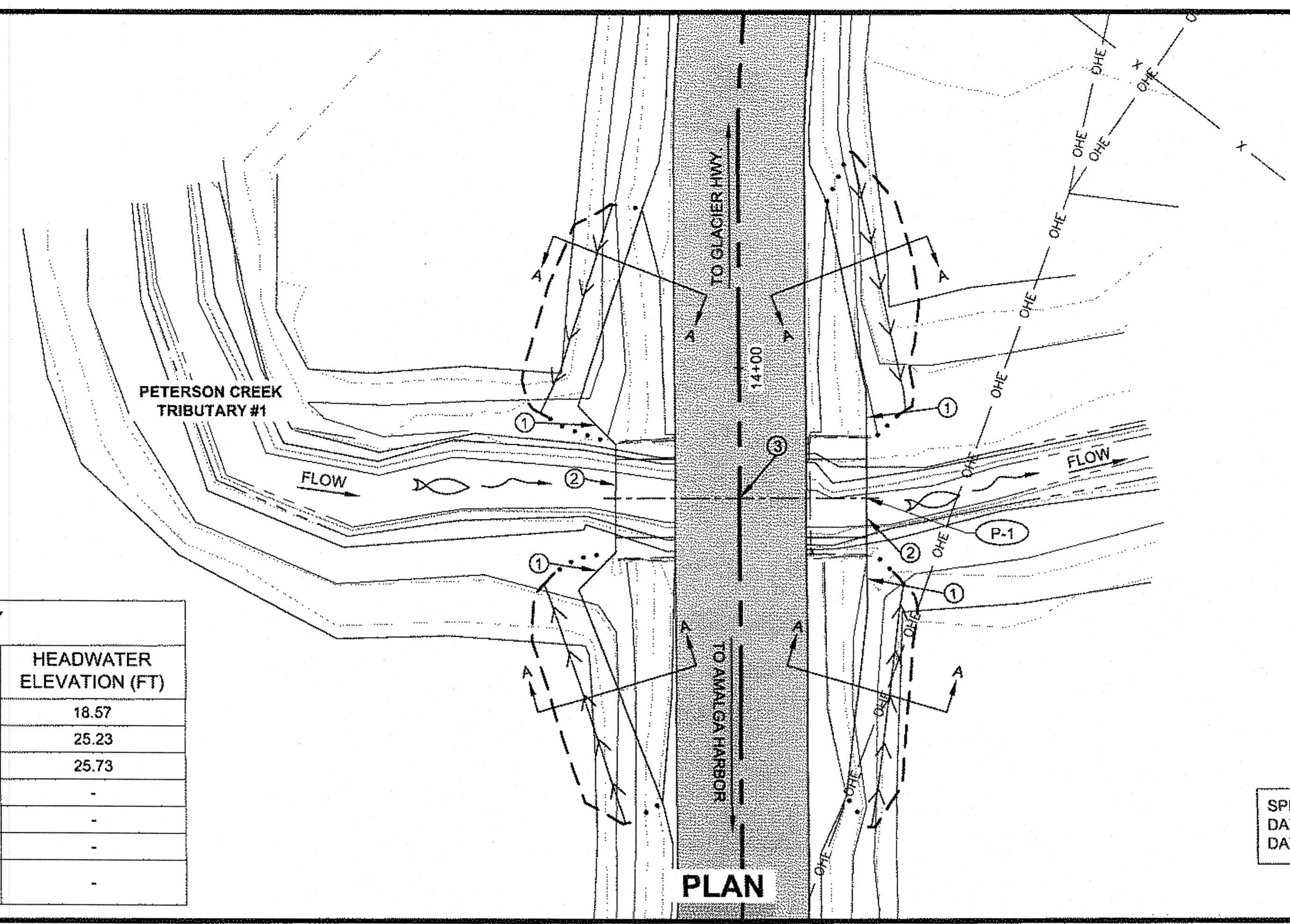
1. FISH SHALL BE EXCLUDED FROM WORK AREAS PRIOR TO BEGINNING WORK OPERATIONS IN A DESIGNATED FISH STREAM. THE ENVIRONMENTAL MONITOR (SEE SECTION 680 OF THE SPECIFICATIONS) WILL ACCOMPLISH FISH TRAPPING AND FISH PROOF FENCING INSTALLATION. THE CONTRACTOR SHALL PROVIDE A SCHEDULE OF CULVERT INSTALLATION IN FISH STREAMS TO THE ENGINEER EIGHT DAYS PRIOR TO BEGINNING WORK AT EACH PIPE SO THAT 1) THE ENVIRONMENTAL MONITOR HAS ADVANCE NOTICE IN ORDER TO RELOCATE THE FISH AND, 2) THE ENGINEER CAN COMPLY WITH AGENCY NOTIFICATION REQUIREMENTS. THE CONTRACTOR SHALL PROVIDE THE 1/8" MESH SIZE FISH PROOF FENCING.
2. WHEN INSTREAM WORK AREAS REQUIRE DEWATERING, THE PUMP DISCHARGE SHALL BE PLACED SO THAT THERE IS A MINIMUM OF 50 FEET OF VEGETATED AREAS BETWEEN THE DISCHARGE POINT AND THE STREAM BANK SUCH THAT NO SILT-LADEN WATER ENTERS THE STREAM. THIS MAY REQUIRE FREQUENT REPOSITIONING OF THE DISCHARGE LOCATION AND/OR ADDITIONAL DISCHARGE TREATMENT METHODS.
3. MULTIPLE PUMPS MAY BE NECESSARY TO DEWATER WORK AREAS AND/OR MAINTAIN STREAM BYPASS FLOW. THE CONTRACTOR SHALL PROVIDE ADEQUATE QUANTITIES AND SIZES OF PUMPS.
4. AFTER INSTALLATION OF PIPE INSTALL SEDIMENT BARRIER AS NECESSARY. STABILIZE ALL NEW EMBANKMENT & CUT SLOPES WITH SEEDING AND BONDED FIBER MATRIX PER SECTION 618 & SECTION 619.

Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.  
PE: \_\_\_\_\_ Date: 07.06.2015

**DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS**

CHECKED BY: C. TRIPP 		STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES SOUTHEAST REGION	
DESIGNED BY: L. CHAMBERS DRAWN BY: L. CHAMBERS		<b>AMALGA HARBOR RD &amp; BRIDGES RECONSTRUCTION &amp; REPLACEMENT PROJECT #69684</b>	
PATH: Q:\JUN169684\PLANSET\69684_P1-P3_ESCP.DWG TAB: P3 Wednesday, October 09, 2013 1:16:27 PM CHAMBERS, LUCAS M (DOT)		<b>EROSION SEDIMENT CONTROL DETAILS</b>	
REVISIONS NO. DATE DESCRIPTION		PROJECT DESIGNATION 69684/ BH-0950(1)	YEAR 2013
		SHEET NO. P3	TOTAL SHEETS 55

CHAMBERS, LUCAS M (DOT)  
 TAB: Q1 Wednesday, October 09, 2013 1:19:47 P  
 ADDENDUM NUMBER  
 ATTACHMENT NUMBER  
 RECORD OF REVISIONS  
 No. DATE DESCRIPTION

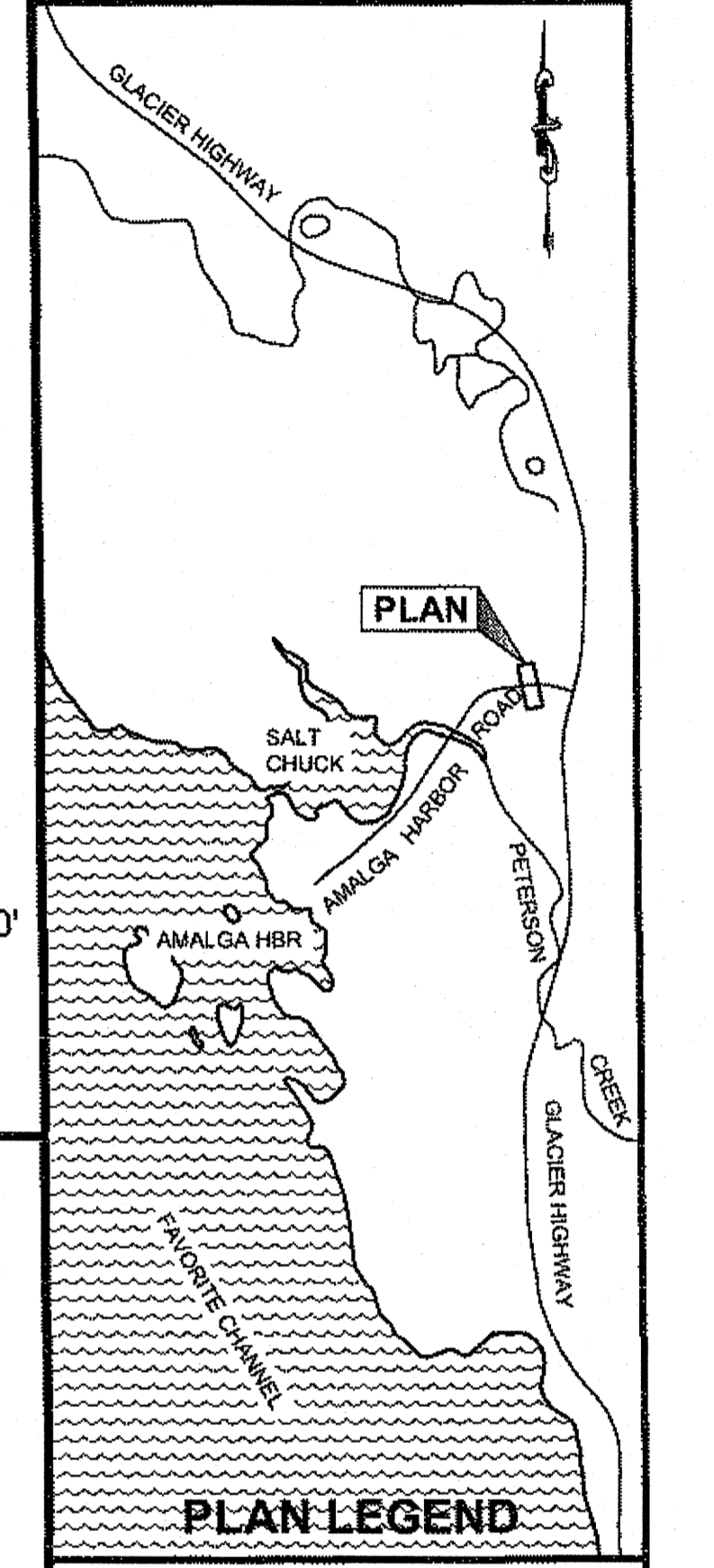
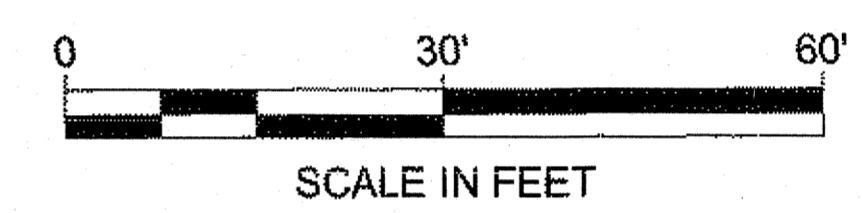
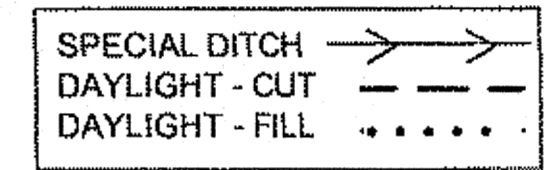


**LEGEND**

- ① WINGWALL - INTAKE END: INSTALL 45° FROM HEADWALL FACE  
 - DISCHARGE END: INSTALL PARALLEL TO HEADWALL FACE
- ② HEADWALL
- ③ CENTER CULVERT ON HIGHWAY CENTERLINE AT 90°

**HYDRAULIC SUMMARY**

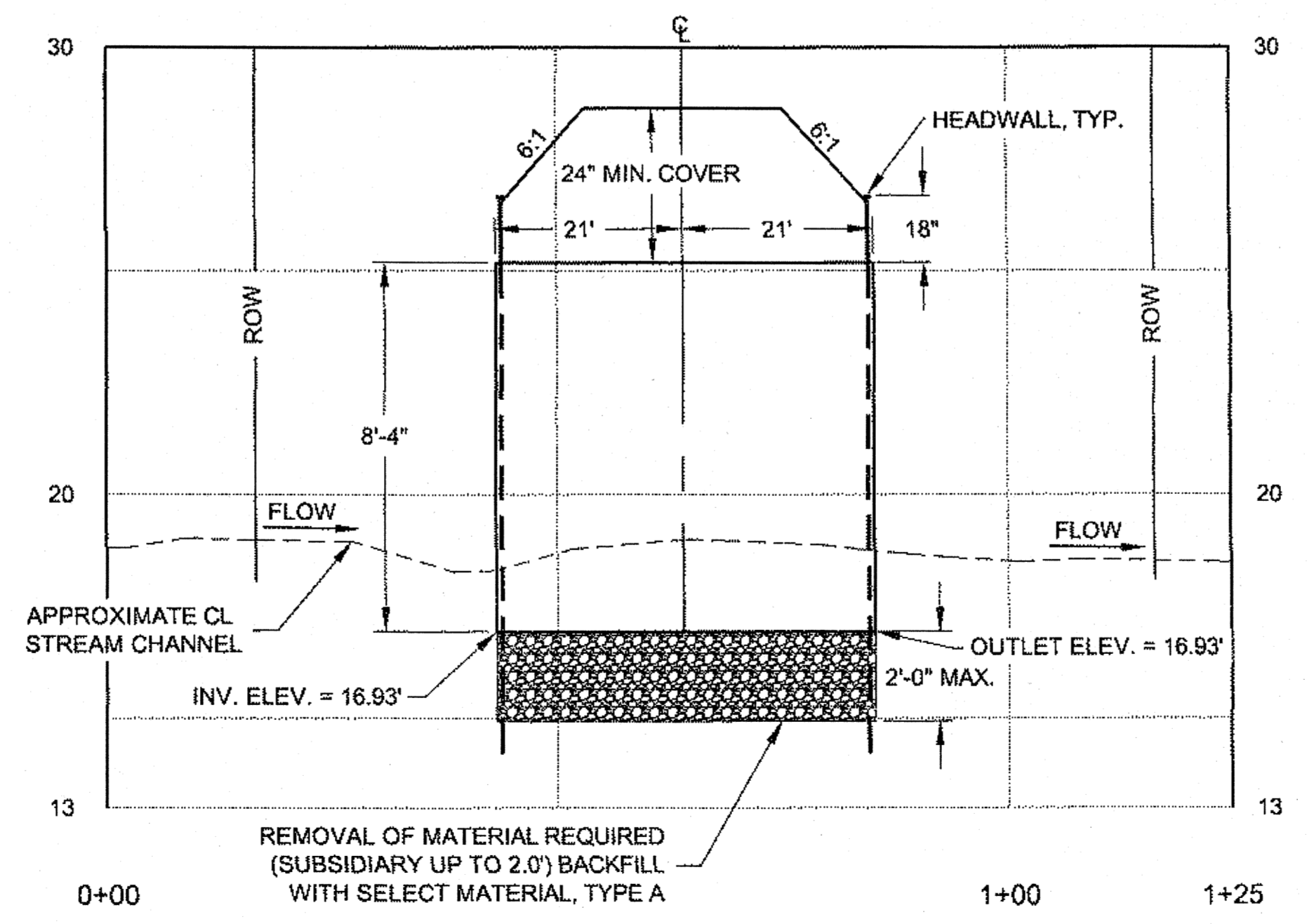
RETURN PERIOD	FLOWRATE (CFS)	HEADWATER ELEVATION (FT)
Q2	152.00	18.57
Q50	375.00	25.23
Q100	420.00	25.73
Q500	531.00	-
DISCHARGE WHEN Hw/D=1	380	-
DISCHARGE RQD TO OVERTOP ROADWAY	460	-
ROADWAY OVERTOPPING RECURRENCE PROBABILITY	<1%	-



**CULVERT DATA**

CULVERT ID	P1
CULVERT STA	14+21.79
CULVERT SPAN X RISE, FT	13'-1"x8'-4"
DRAINAGE AREA, AC	640
LENGTH, FT	42
HWY CL ELEV, FT	28.79
INLET INVERT ELEV, FT	16.93
OUTLET INVERT ELEV, FT	16.93
Hw ELEV @ Q50, FT	25.23
Hw/D RATIO, Q50	0.99
END TREATMENT	HEADWALL

- NOTES:**
- ENGINEER SHALL VERIFY FINAL INVERT ELEVATIONS BASED ON ACTUAL SITE CONFIGURATIONS.
  - SEE SHEET P3 FOR DEWATERING PLAN.
  - SEE SHEET Q10 FOR SECTION A-A STRUCTURAL PLATE ALUMINUM PIPE-ARCH SPECIAL DITCH DETAIL. SEE SHEET F1 FOR SPECIAL DITCH PROFILE LAYOUT.



**PROFILE**

Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.  
 PE [Signature] Date 07.08.2015

CHECKED BY: C. TRIPP

DESIGNED BY: L. CHAMBERS  
 DRAWN BY: L. CHAMBERS

STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES  
 SOUTHEAST REGION

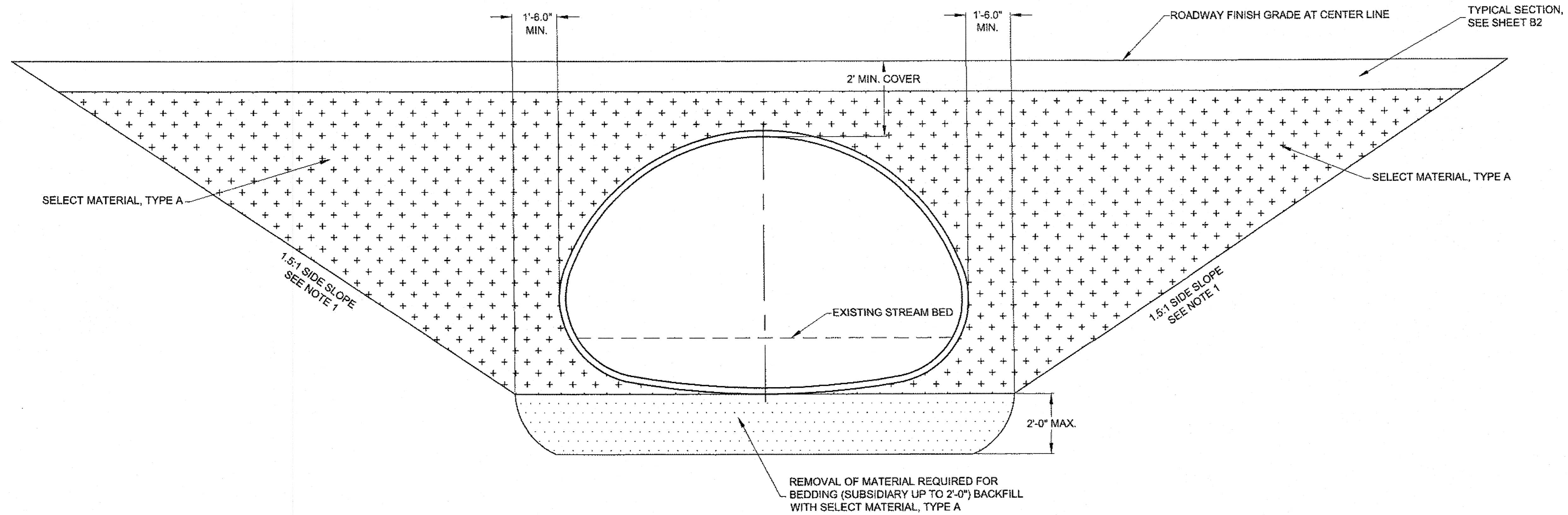
AMALGA HARBOR RD & BRIDGES RECONSTRUCTION & REPLACEMENT  
 PROJECT #69684

**P-1 STRUCTURAL PLATE ALUMINUM PIPE-ARCH**

PROJECT DESIGNATION  
**69684/ BH-0950(1)**

STATE	YEAR
ALASKA	2013
SHEET NUMBER	TOTAL SHEETS
Q1	55

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS



**NOTES:**

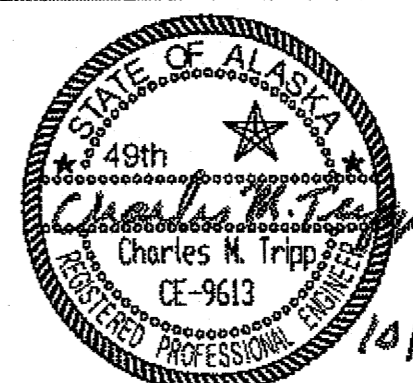
1. SLOPE MAY VARY DUE TO BANK STABILITY.
2. ENGINEER SHALL VERIFY FINAL INVERT ELEVATIONS BASED ON ACTUAL SITE CONFIGURATIONS. EMBEDMENT SHALL BE 20% OF PIPE RISE.

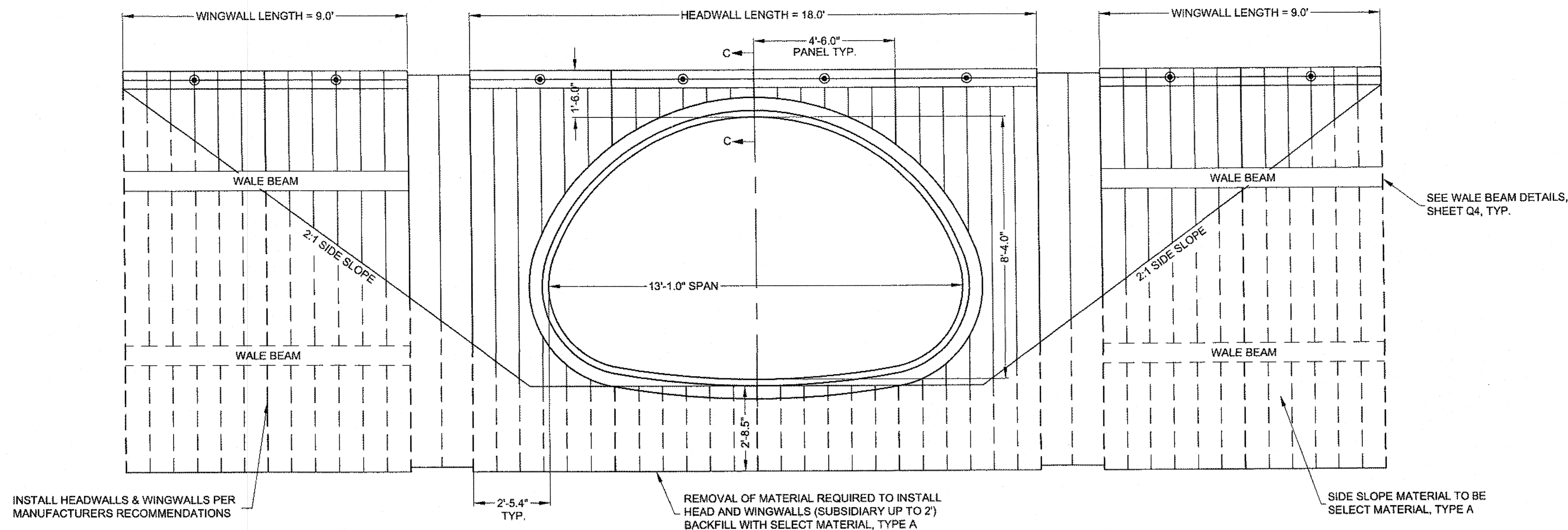
**P-1 TYPICAL 13'-1" x 8'-4" STRUCTURAL PLATE ALUMINUM  
PIPE-ARCH BEDDING DETAIL, ELEVATION VIEW**

NTS

Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.  
PE *[Signature]* Date **07-08-2015**

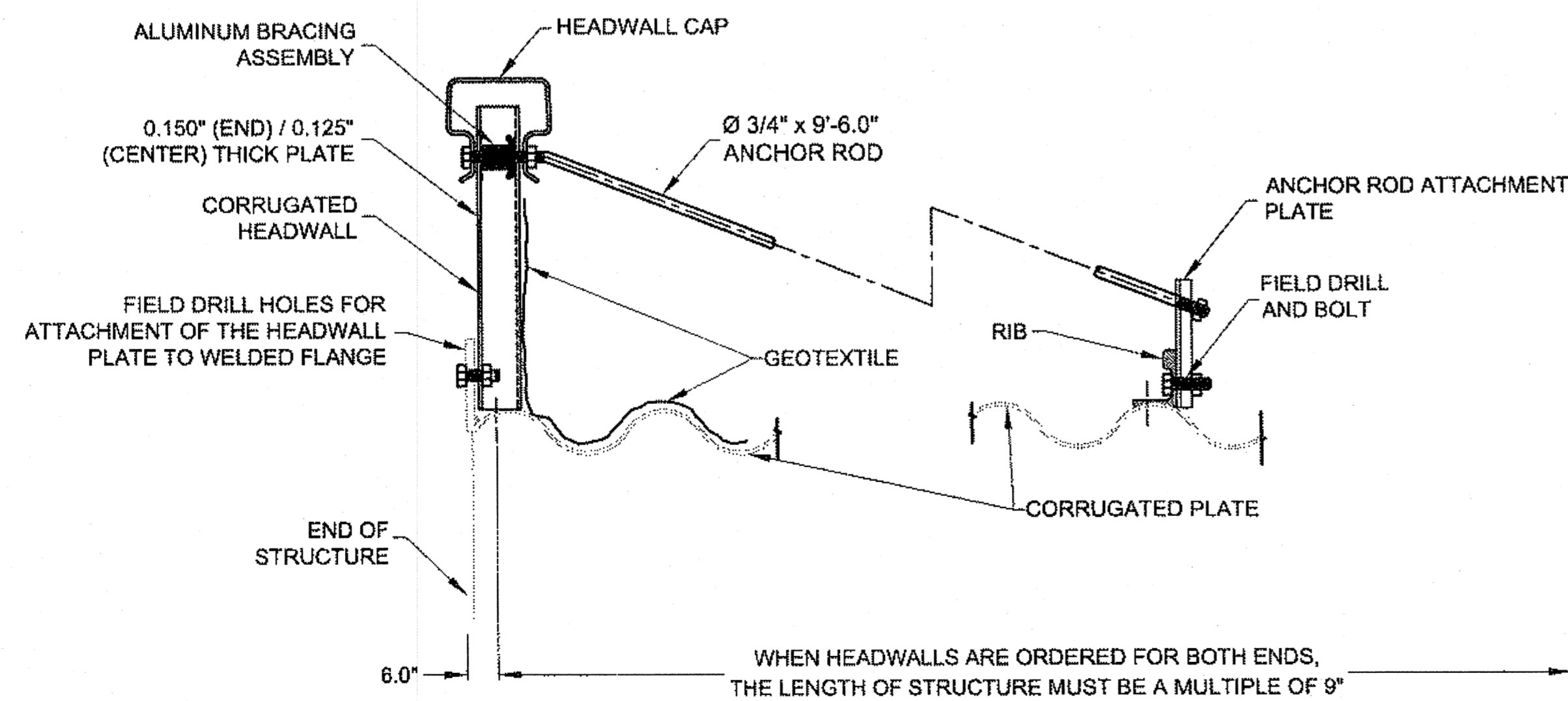
DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: C. TRIPP 		STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES SOUTHEAST REGION												
DESIGNED BY: L. CHAMBERS DRAWN BY: L. CHAMBERS		<b>AMALGA HARBOR RD &amp; BRIDGES          RECONSTRUCTION &amp;          REPLACEMENT PROJECT #69684          P-1 STRUCTURAL          PLATE ALUMINUM          PIPE-ARCH</b>												
PATH: Q:\JUN169684\PLANS\T169684_Q1-Q10_CULVERT.DWG TAB: Q2 Wednesday, October 09, 2013 1:19:52 PM		CHAMBERS, LUCAS M (DOT)												
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REVISIONS														
NO.	DATE	DESCRIPTION												



**P-1 TYPICAL 13'-1" x 8'-4" STRUCTURAL PLATE ALUMINUM PIPE-ARCH HEADWALL & WINGWALL DETAILS, ELEVATION VIEW**

NTS

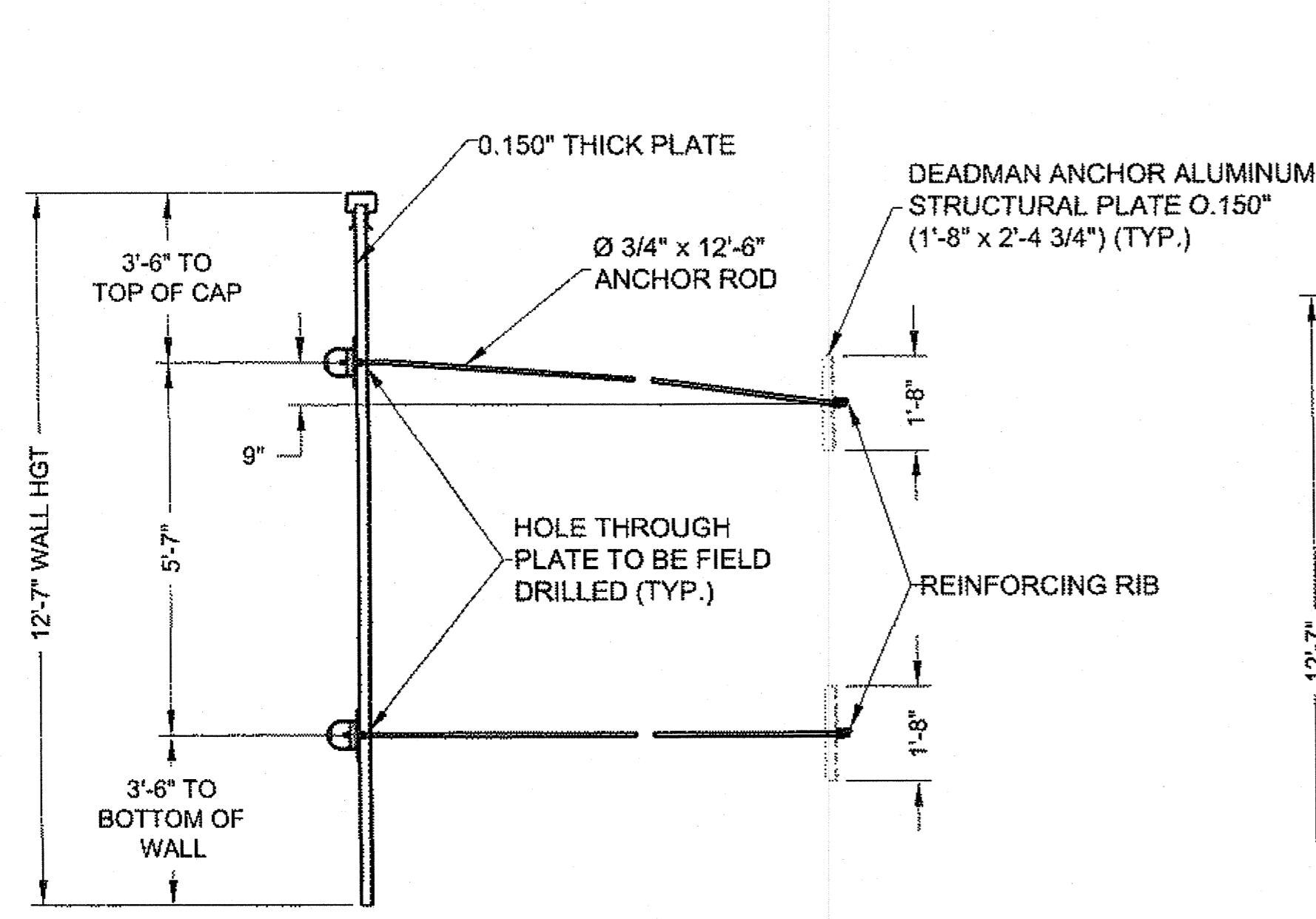


**SECTION C-C**  
HEADWALL ATTACHMENT TO CROWN OF STRUCTURE

Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.  
PE *[Signature]* Date 07-08-2015

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

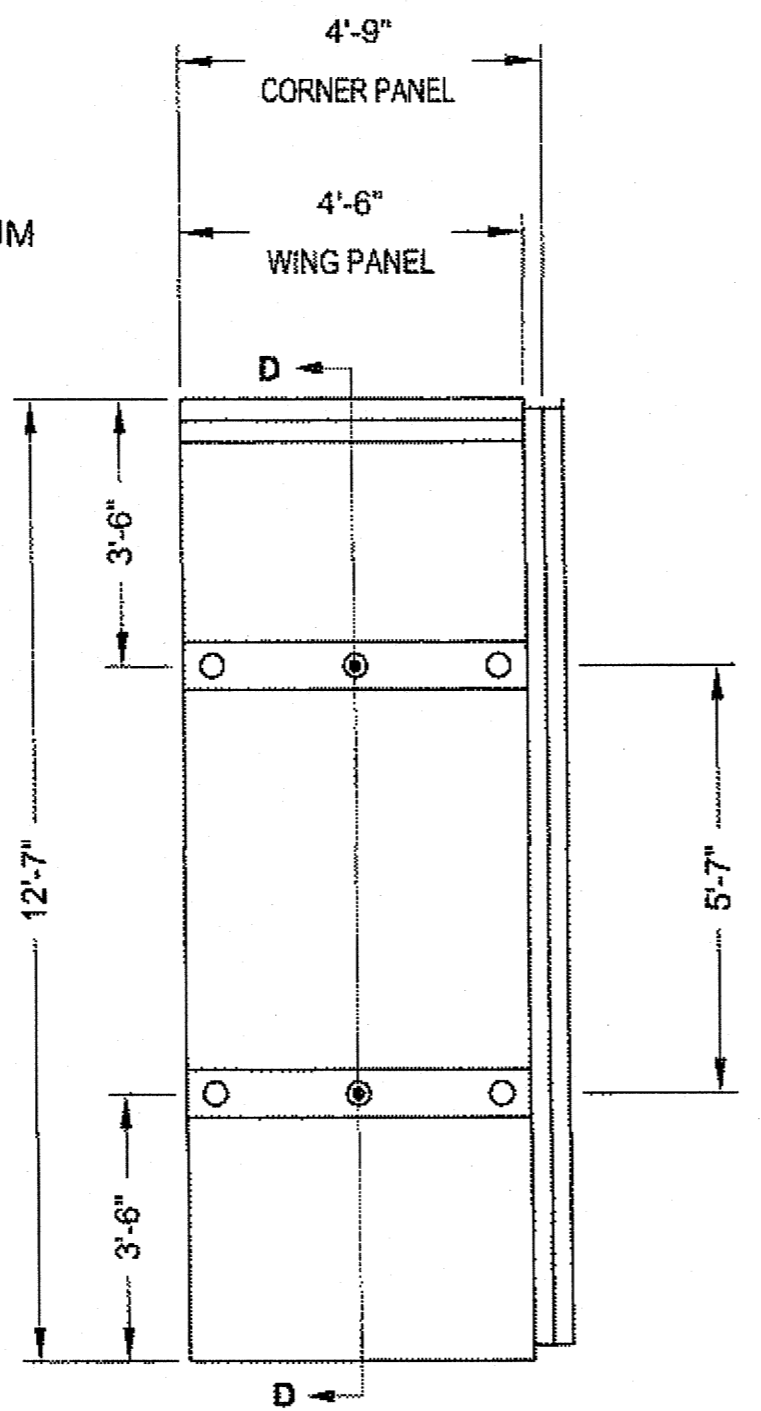
CHECKED BY: C. TRIPP 		STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES SOUTHEAST REGION <b>AMALGA HARBOR RD &amp; BRIDGES RECONSTRUCTION &amp; REPLACEMENT PROJECT #69684</b> <b>P-1 STRUCTURAL PLATE ALUMINUM PIPE-ARCH</b>												
DESIGNED BY: L. CHAMBERS DRAWN BY: L. CHAMBERS		PATH: Q:\UNU\69684\PLANS\T169684_Q1-Q10_CULVERT.DWG TAB: Q3 Wednesday, October 09, 2013 1:19:57 PM CHAMBERS, LUCAS M (DOT)												
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REVISIONS														
NO.	DATE	DESCRIPTION												



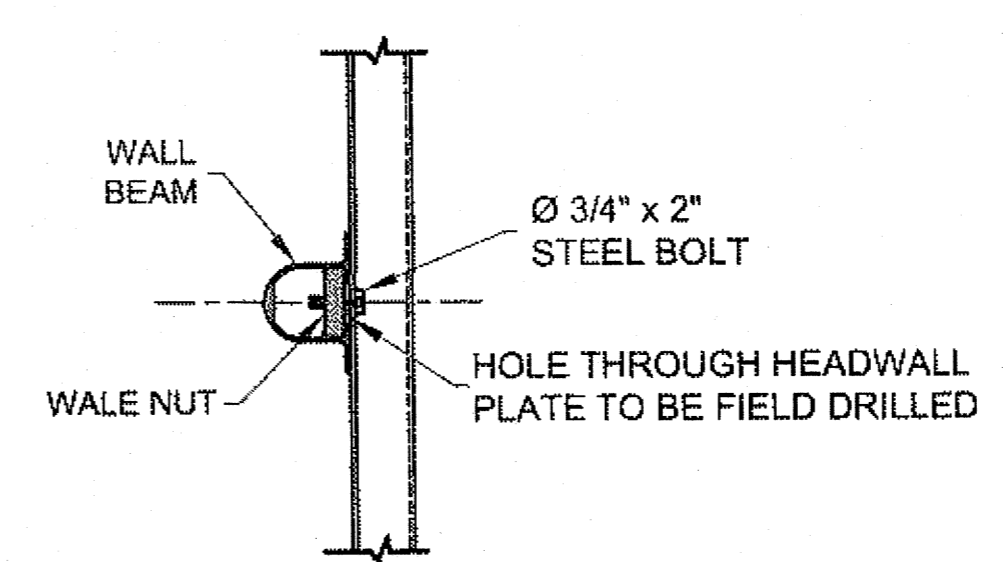
**SECTION D-D**  
DEADMAN ANCHOR ATTACHMENT

**NOTES:**

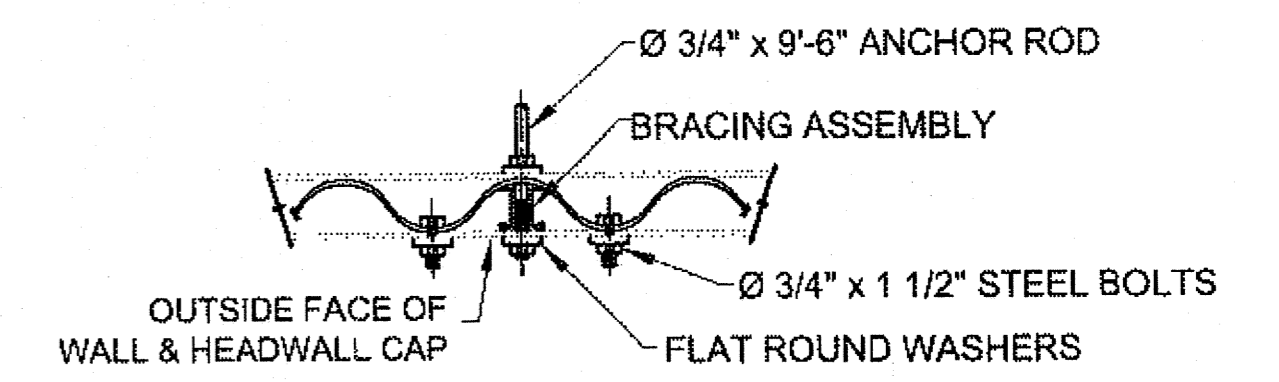
1. DIMENSIONS SHOWN ARE NOMINAL. FINISHED DIMENSIONS ARE SUBJECT TO MANUFACTURING AND INSTALLATION TOLERANCES.



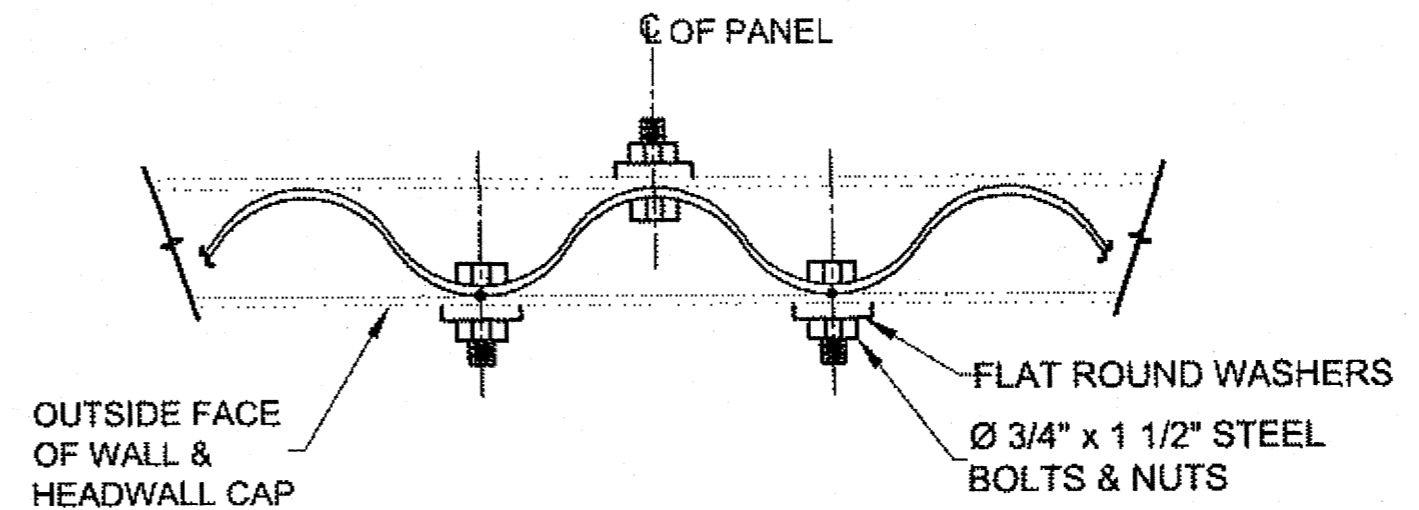
**P-1 DOUBLE WALE**  
NTS



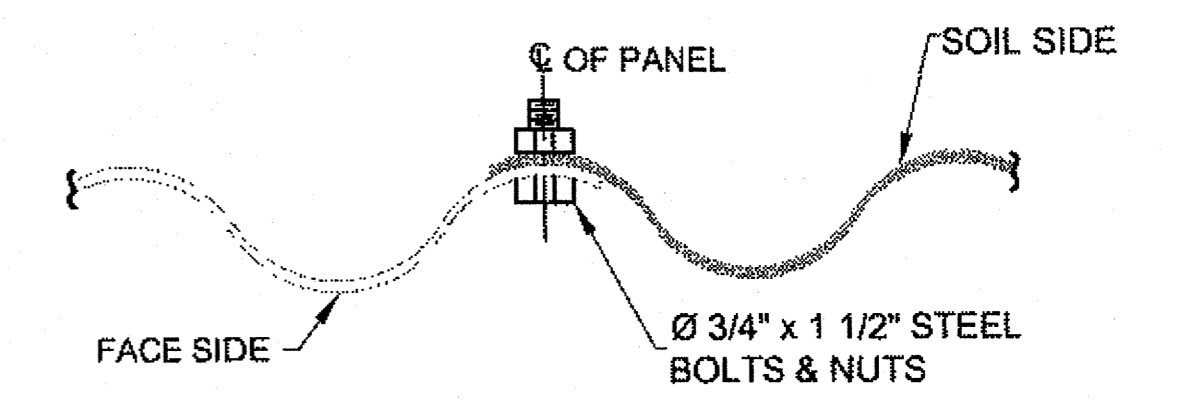
**P-1 WALE BEAM ATTACHMENT DETAIL**  
NTS



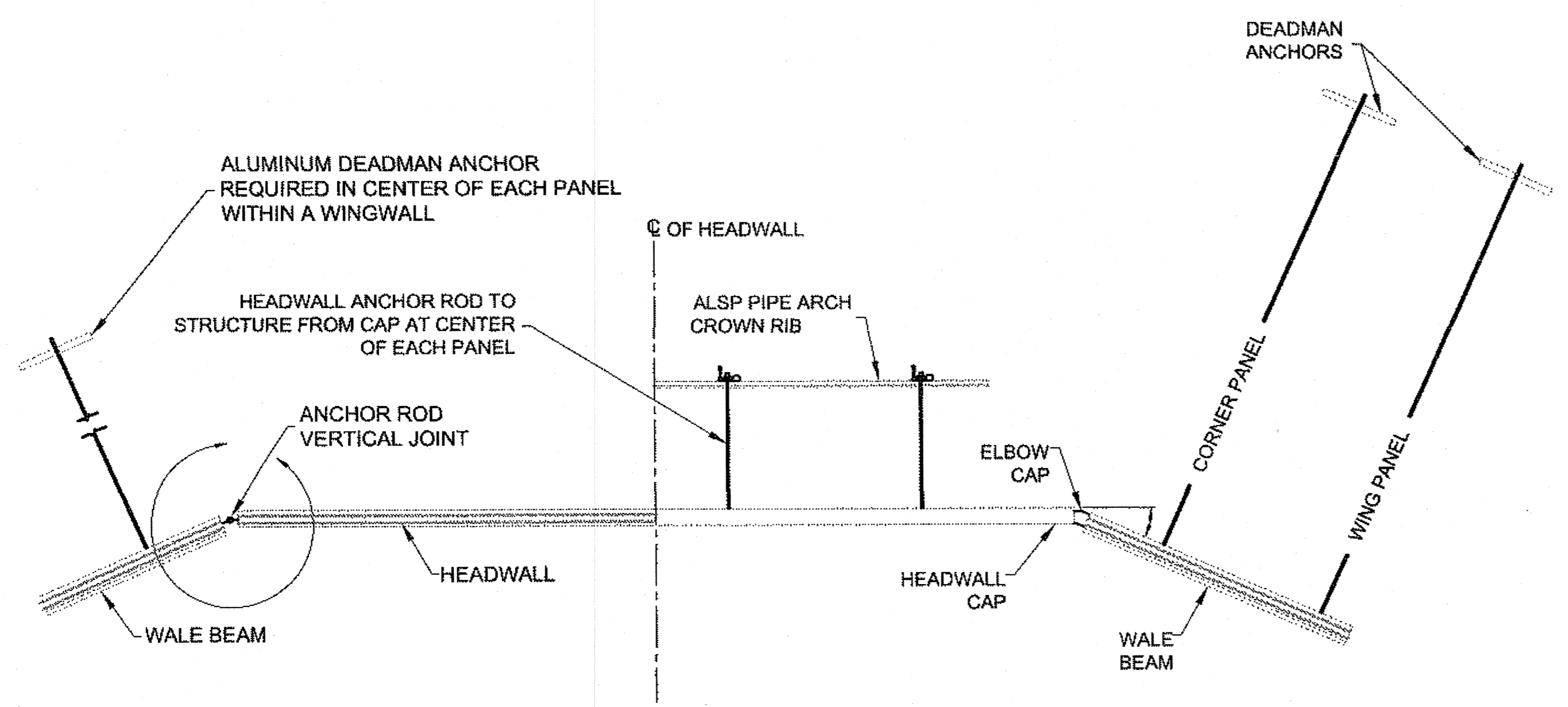
**P-1 TYPICAL ANCHOR ROD ATTACHMENT DETAIL**  
NTS



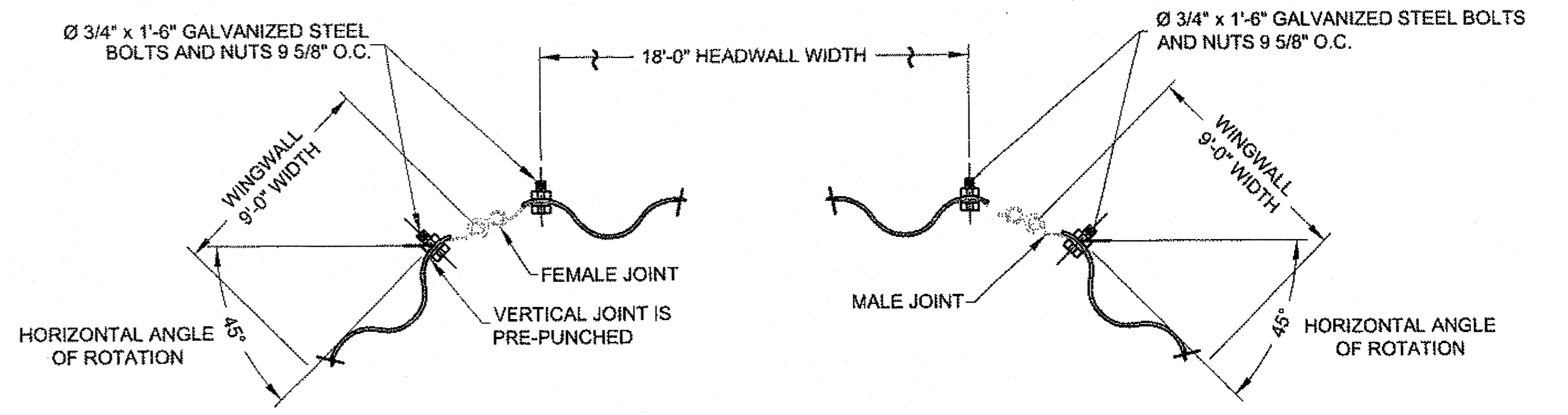
**P-1 HEADWALL CAP AT ATTACHMENT TO PANEL DETAIL**  
NTS



**P-1 TYPICAL PANEL LAP DETAIL**  
NTS



**P-1 PLAN VIEW**  
NTS



**P-1 TYPICAL HEADWAL PANEL TO ANGLED WING PANEL JOINTS DETAIL**  
(UPSTREAM END)

**NOTES:**

1. FOR THE DOWNSTREAM HEADWALL PANEL TO WING PANEL CONNECTION HORIZONTAL ANGLE OF ROTATION SHALL BE 0°.

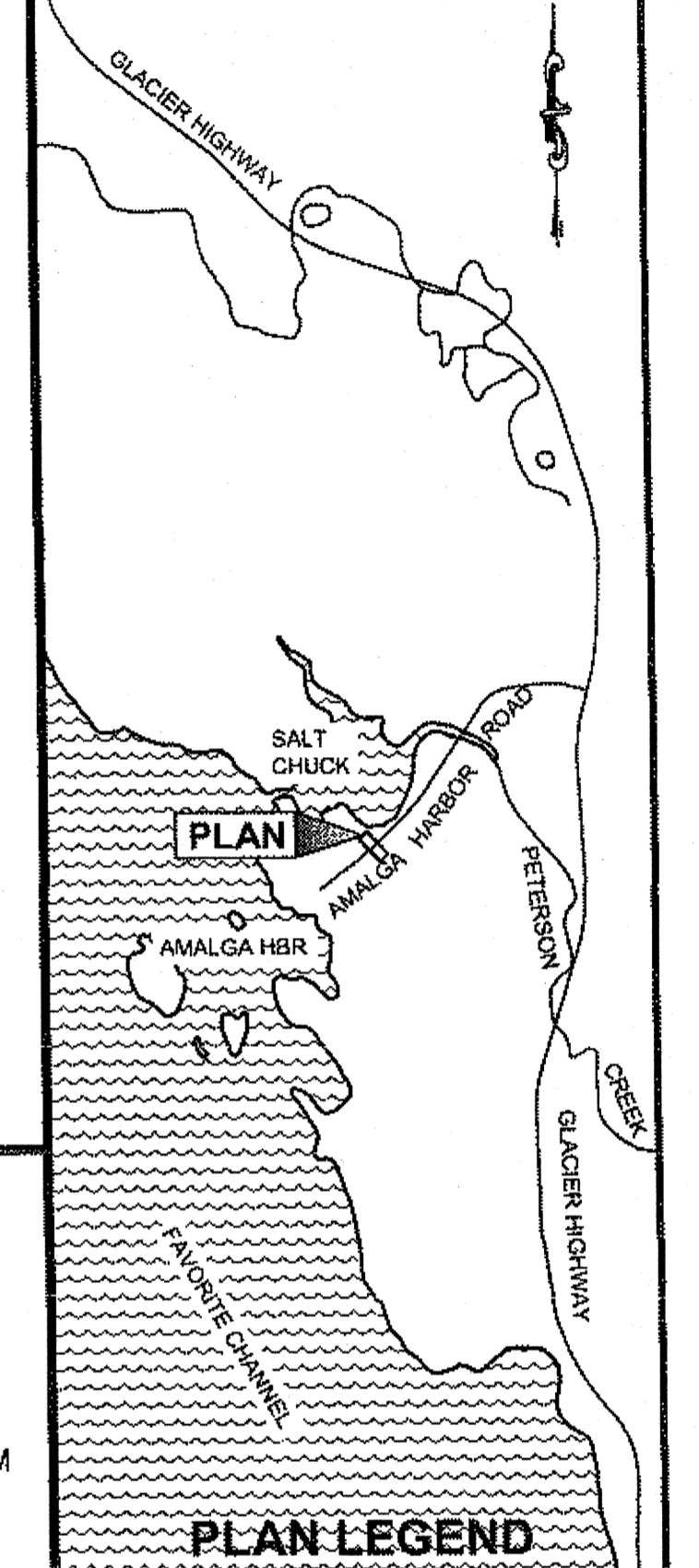
Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.  
PE *[Signature]* Date 07.08.2015

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: C. TRIPP 		STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES SOUTHEAST REGION <b>AMALGA HARBOR RD &amp; BRIDGES RECONSTRUCTION &amp; REPLACEMENT PROJECT #69684</b> <b>P-1 STRUCTURAL PLATE ALUMINUM PIPE-ARCH</b>		
DESIGNED BY: L. CHAMBERS DRAWN BY: L. CHAMBERS		PATH: Q:\JNU\69684\PLANSET\69684_Q1-Q10_CULVERT.DWG TAB: Q4 Wednesday, October 09, 2013 1:20:02 PM CHAMBERS, LUCAS M (DOT)		
REVISIONS NO. DATE DESCRIPTION		PROJECT DESIGNATION 69684/ BH-0950(1)	YEAR 2013	SHEET NO. Q4
		TOTAL SHEETS 55		

CHAMBERS, LUCAS M (DOT)  
 TAB: Q5 Wednesday, October 09, 2013 1:20:46 P

ADDENDUM NUMBER		
ATTACHMENT NUMBER		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION



CHECKED BY: C. TRIPP

DESIGNED BY: L. CHAMBERS  
 DRAWN BY: L. CHAMBERS

STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION  
 & PUBLIC FACILITIES  
 SOUTHEAST REGION

**AMALGA HARBOR RD & BRIDGES RECONSTRUCTION & REPLACEMENT  
 PROJECT #69684**

**P-3 STRUCTURAL PLATE ALUMINUM PIPE-ARCH**

PROJECT DESIGNATION  
**69684/ BH-0950(1)**

STATE	YEAR
<b>ALASKA</b>	<b>2013</b>
SHEET NUMBER	TOTAL SHEETS
<b>Q5</b>	<b>55</b>

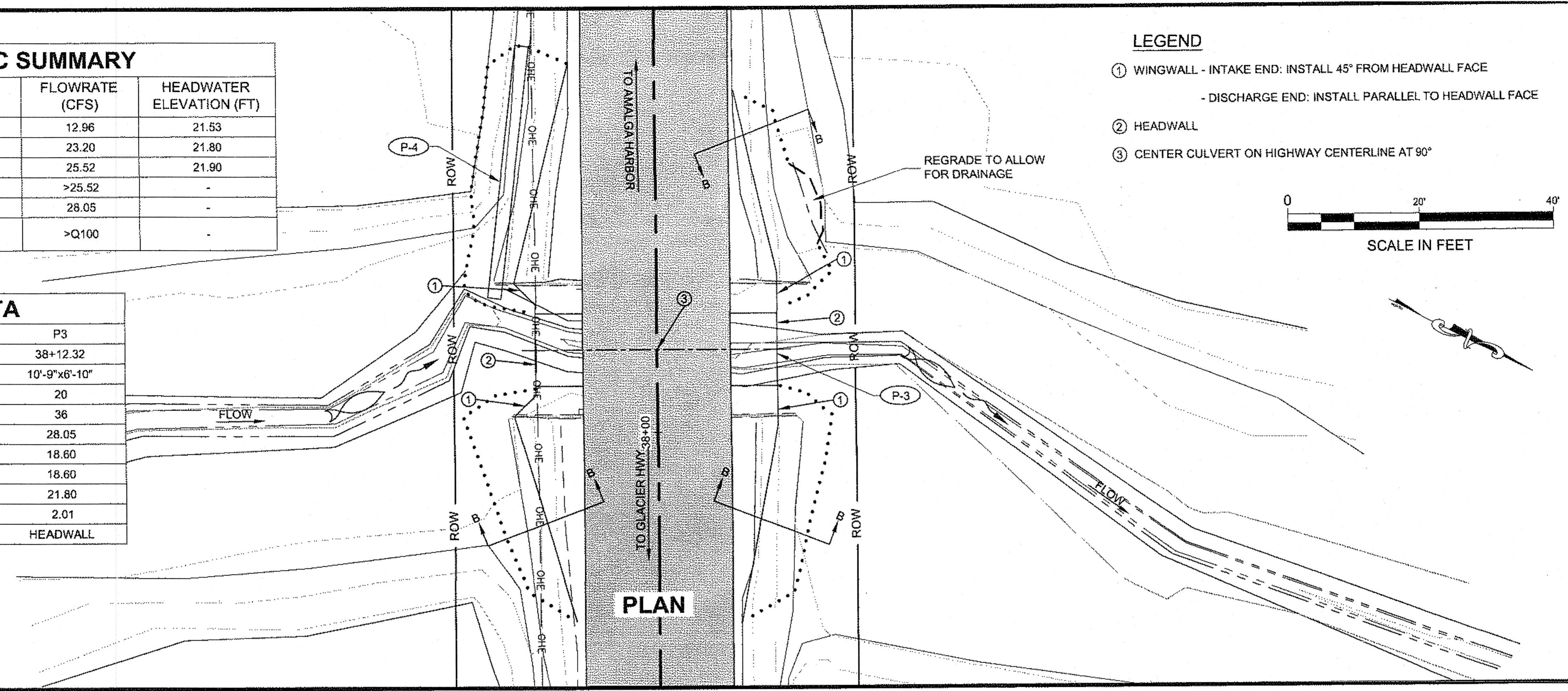
### HYDRAULIC SUMMARY

RETURN PERIOD	FLOWRATE (CFS)	HEADWATER ELEVATION (FT)
Q2	12.96	21.53
Q50	23.20	21.80
Q100	25.52	21.90
DISCHARGE WHEN Hw/D=1	>25.52	-
DISCHARGE RQD TO OVERTOP ROADWAY	28.05	-
ROADWAY OVERTOPPING RECURRENCE PROBABILITY	>Q100	-

### CULVERT DATA

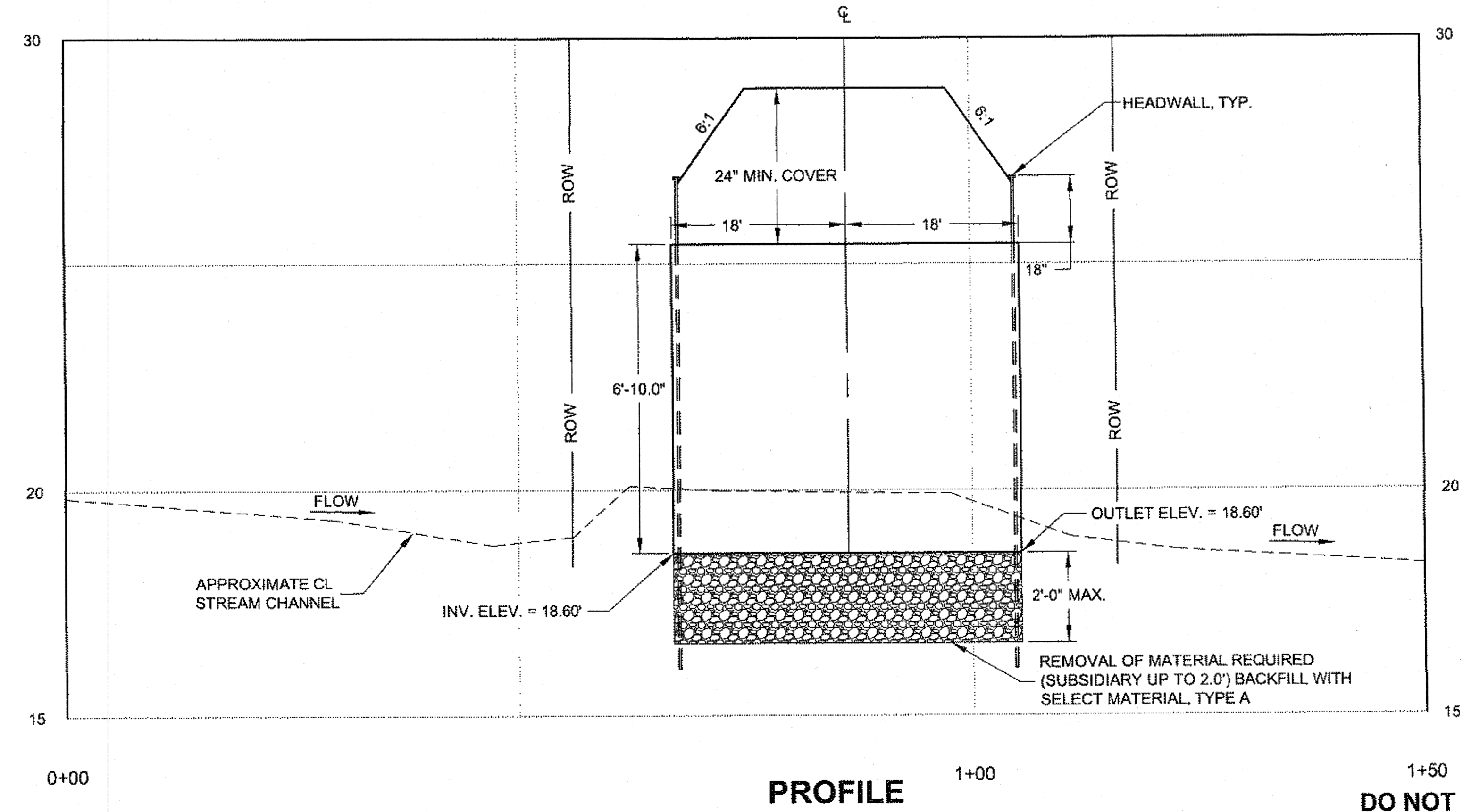
CULVERT ID	P3
CULVERT STA.	38+12.32
CULVERT SPAN X RISE, FT	10'-9"x6'-10"
DRAINAGE AREA, AC	20
LENGTH, FT	36
HWY CL ELEV, FT	28.05
INLET INVERT ELEV, FT	18.60
OUTLET INVERT ELEV, FT	18.60
Hw ELEV @ Q50, FT	21.80
Hw/D RATIO, Q50	2.01
END TREATMENT	HEADWALL

DAYLIGHT - CUT - - - - -  
 DAYLIGHT - FILL - . . . . .



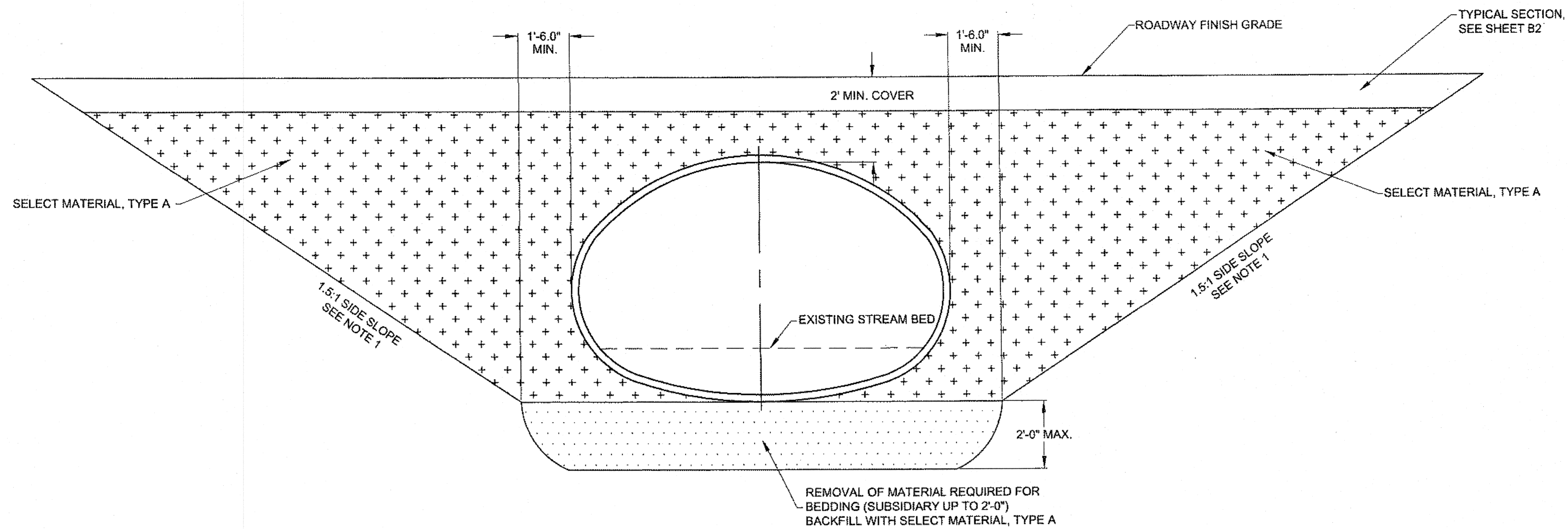
- ### LEGEND
- ① WINGWALL - INTAKE END: INSTALL 45° FROM HEADWALL FACE  
 - DISCHARGE END: INSTALL PARALLEL TO HEADWALL FACE
  - ② HEADWALL
  - ③ CENTER CULVERT ON HIGHWAY CENTERLINE AT 90°

- ### NOTES:
- ENGINEER SHALL VERIFY FINAL INVERT ELEVATIONS BASED ON ACTUAL SITE CONFIGURATIONS.
  - SEE SHEET P3 FOR DEWATERING PLAN.
  - SEE SHEET Q10 FOR SECTION B-B STRUCTURAL PLATE ALUMINUM PIPE-ARCH DITCH FILL DETAIL.
  - P-4 DETAIL, SEE SHEET Q9



Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.  
 PE [Signature] Date 07-06-2015

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS



**P-3 TYPICAL 10'-9" x 6'-10" STRUCTURAL PLATE ALUMINUM  
PIPE-ARCH BEDDING DETAIL, ELEVATION VIEW**

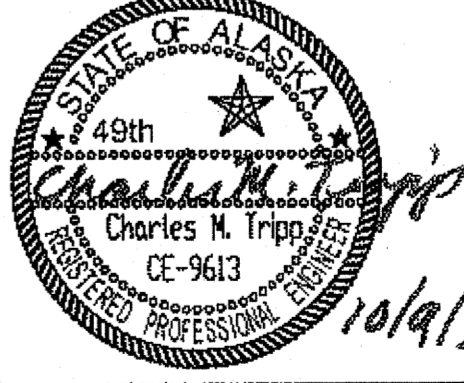
NTS

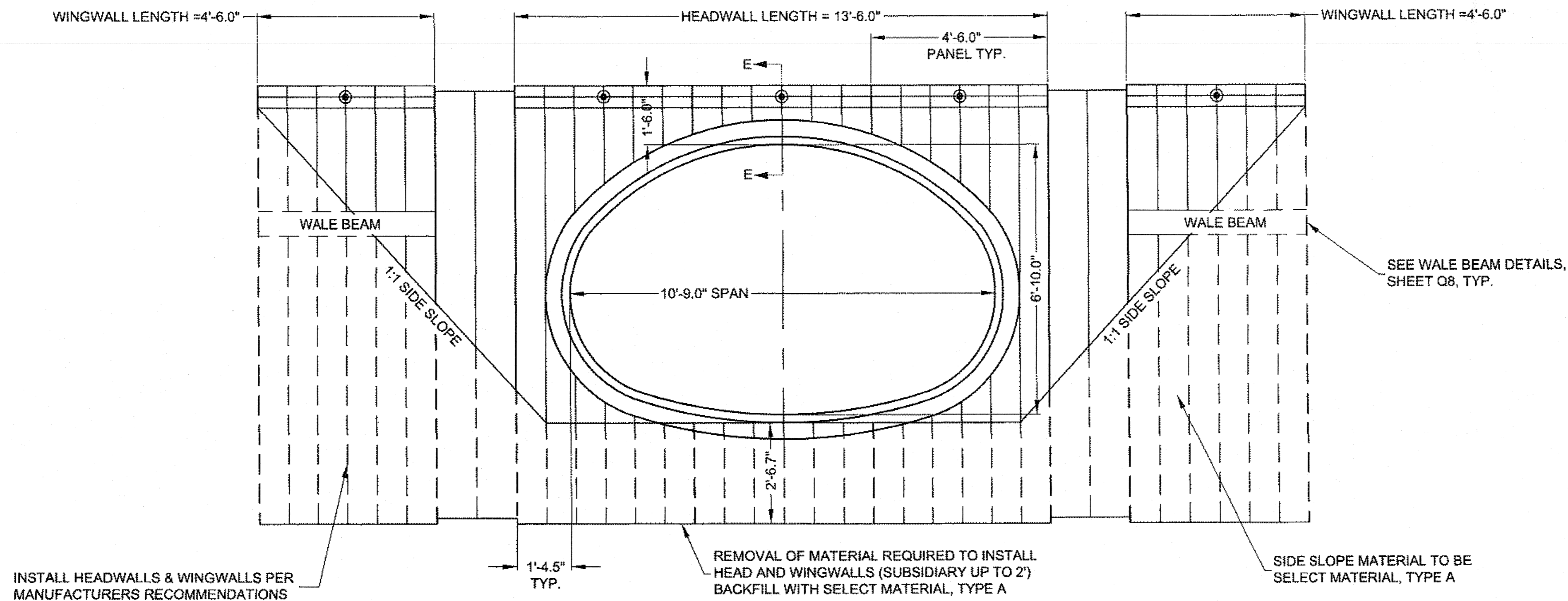
**NOTES:**

1. SLOPE MAY VARY DUE TO BANK STABILITY.
2. ENGINEER SHALL VERIFY FINAL INVERT ELEVATIONS BASED ON ACTUAL SITE CONFIGURATIONS. EMBEDMENT SHALL BE 20% OF PIPE RISE.

Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.  
PE *[Signature]* Date **07.06.2015**

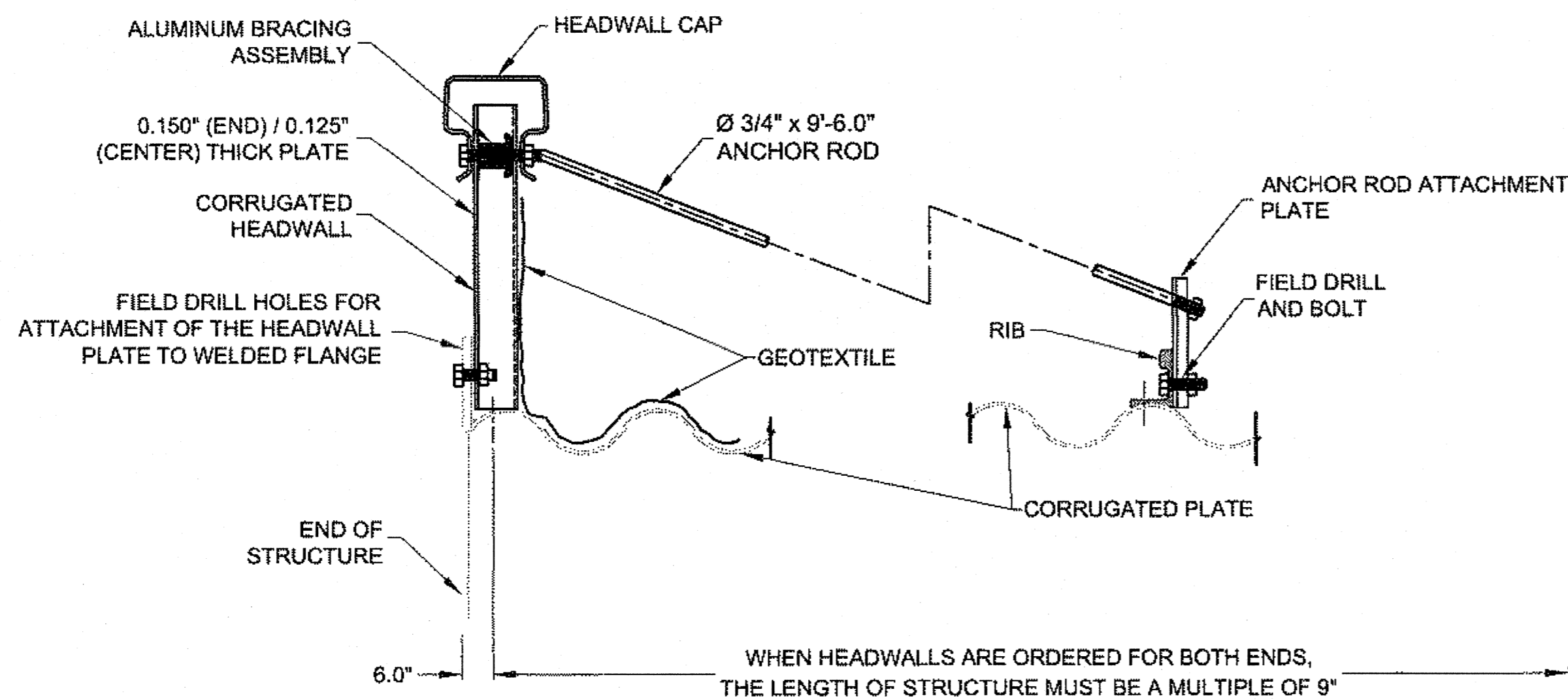
DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: C. TRIPP 		STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES SOUTHEAST REGION  <b>AMALGA HARBOR RD &amp; BRIDGES          RECONSTRUCTION &amp;          REPLACEMENT PROJECT #69684</b> <b>P-3 STRUCTURAL          PLATE ALUMINUM          PIPE-ARCH</b>												
DESIGNED BY: L. CHAMBERS DRAWN BY: L. CHAMBERS		PATH: Q:\UNU\69684\PLANS\T\69684_Q1-Q10_CULVERT.DWG TAB: Q6 Wednesday, October 09, 2013 1:20:12 PM CHAMBERS, LUCAS M (DOT)												
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REVISIONS														
NO.	DATE	DESCRIPTION												



**P-3 TYPICAL 10'-9" x 6'-10" STRUCTURAL PLATE ALUMINUM  
PIPE-ARCH HEADWALL & WINGWALL DETAILS, ELEVATION VIEW**

NTS

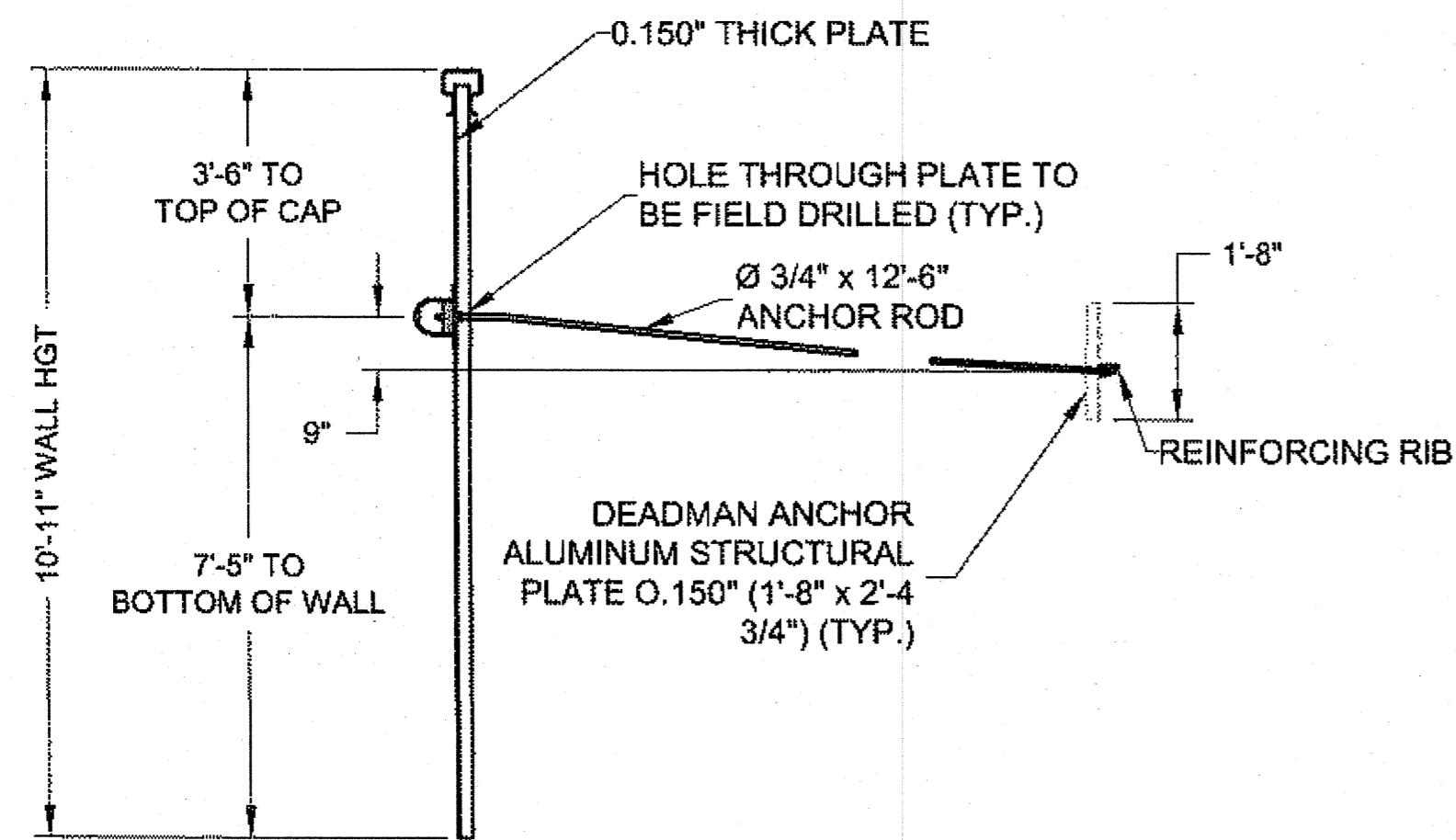


**SECTION E-E  
HEADWALL ATTACHMENT TO CROWN OF STRUCTURE**

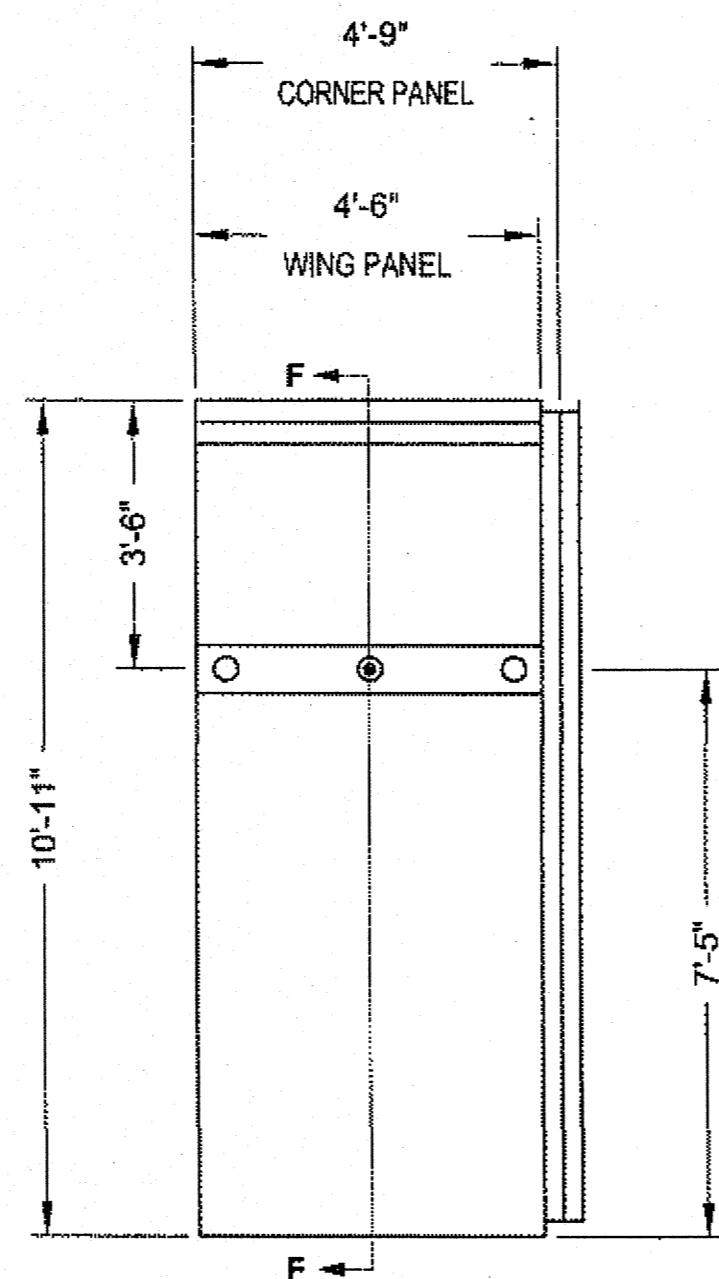
Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.  
PE *[Signature]* Date **07.08.2015**

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: C. TRIPP 		STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES SOUTHEAST REGION <b>AMALGA HARBOR RD &amp; BRIDGES          RECONSTRUCTION &amp;          REPLACEMENT PROJECT #69684</b> <b>P-3 STRUCTURAL          PLATE ALUMINUM          PIPE-ARCH</b>												
DESIGNED BY: L. CHAMBERS DRAWN BY: L. CHAMBERS		PATH: Q:\JNL\69684\PLANSET\69684_Q1-Q10_CULVERT.DWG T.A.B: Q7 Wednesday, October 09, 2013 1:20:17 PM CHAMBERS, LUCAS M (DOT)												
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REVISIONS														
NO.	DATE	DESCRIPTION												



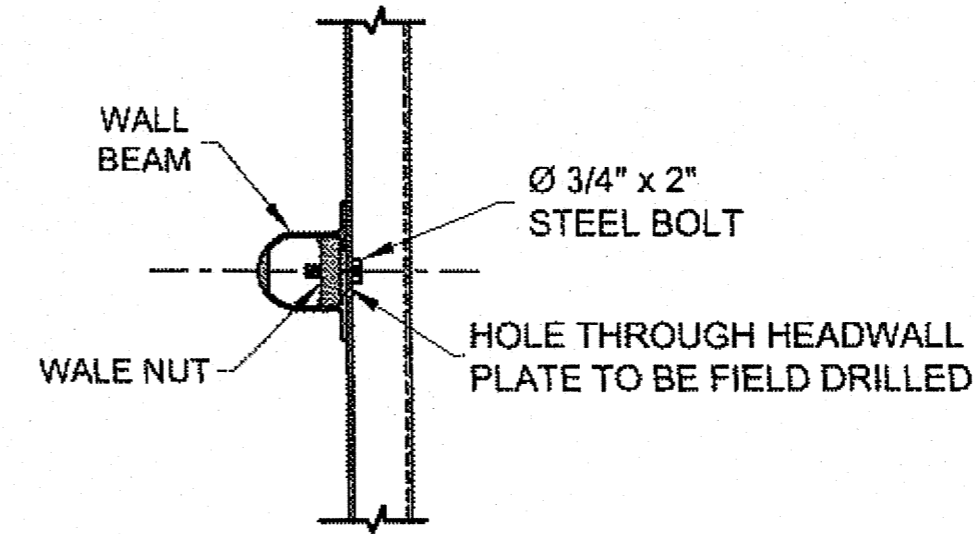
**SECTION F-F**  
DEADMAN ANCHOR ATTACHMENT



**P-3 SINGLE WALE**  
NTS

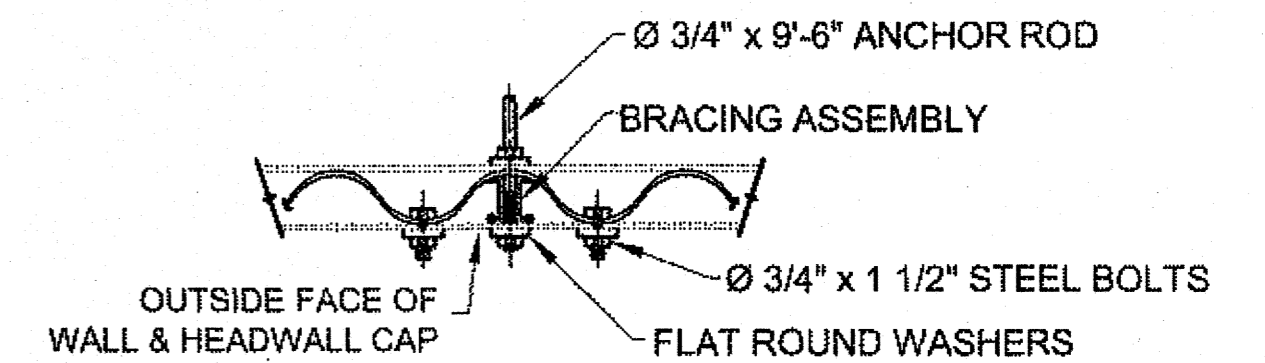
**NOTES:**

1. DIMENSIONS SHOWN ARE NOMINAL. FINISHED DIMENSIONS ARE SUBJECT TO MANUFACTURING AND INSTALLATION TOLERANCES.



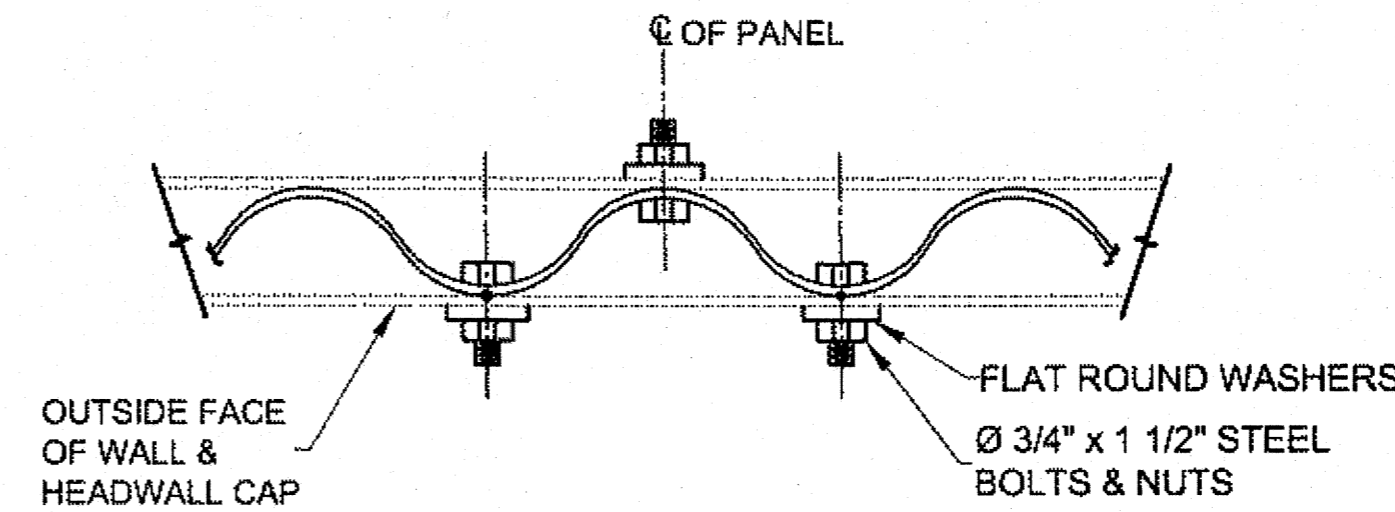
**P-3 WALE BEAM ATTACHMENT DETAIL**

NTS



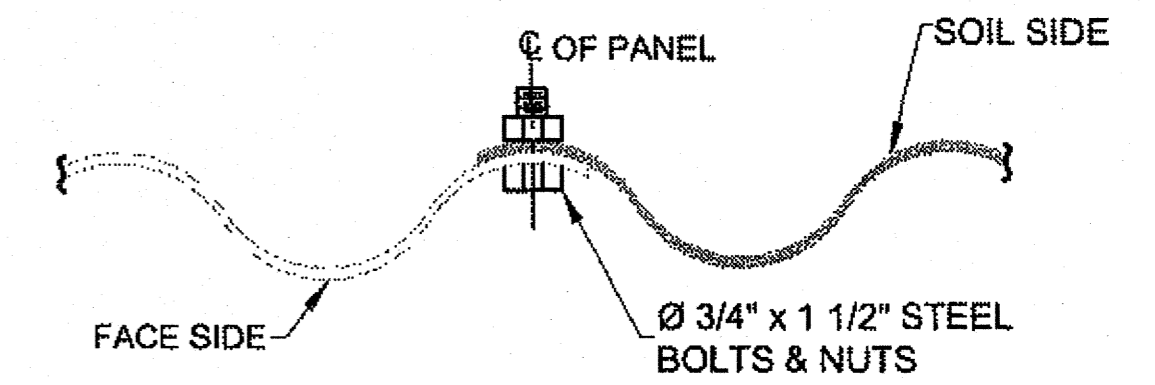
**P-3 TYPICAL ANCHOR ROD ATTACHMENT DETAIL**

NTS



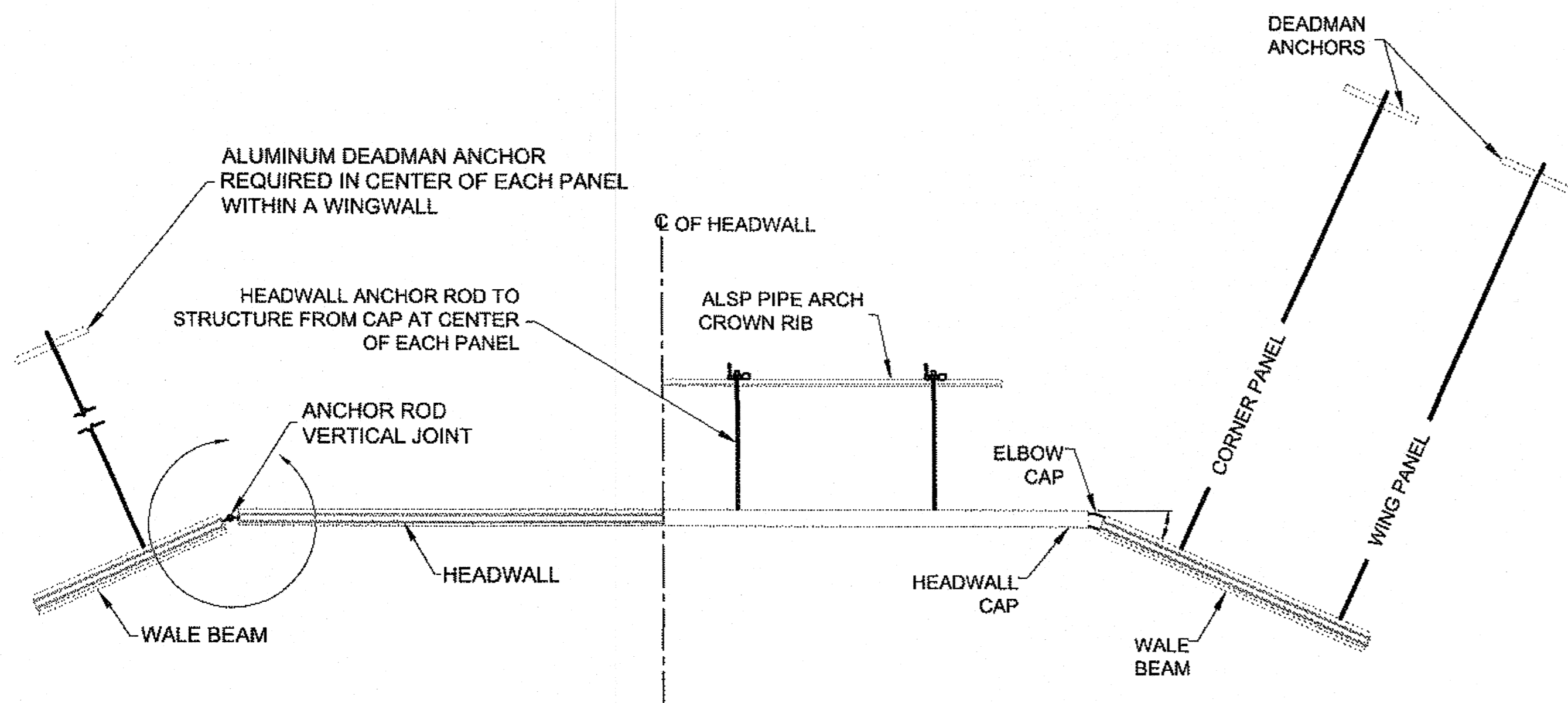
**P-3 HEADWALL CAP AT ATTACHMENT TO PANEL DETAIL**

NTS

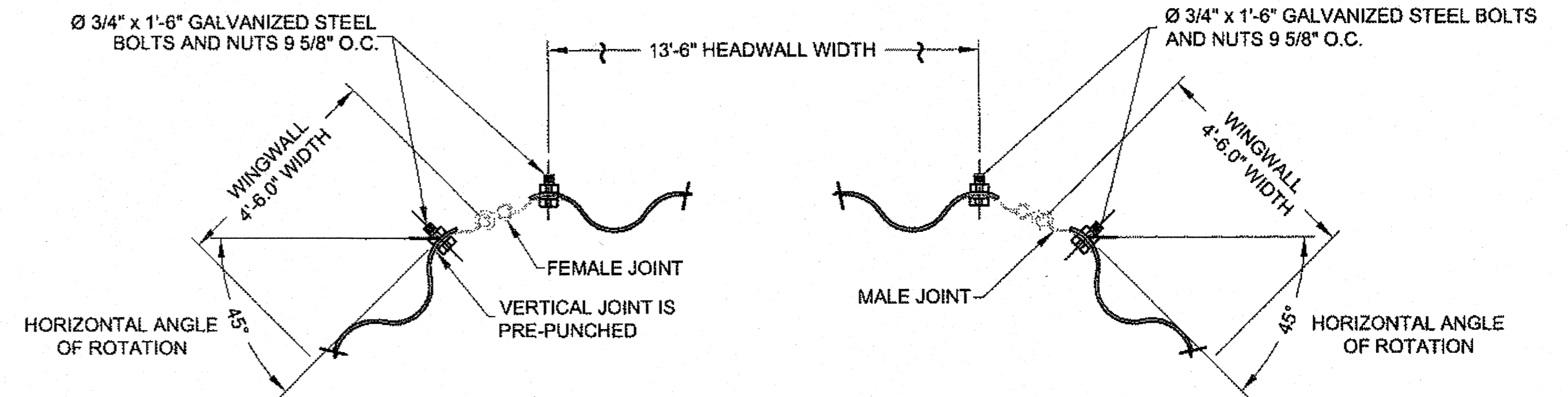


**P-3 TYPICAL PANEL LAP DETAIL**

NTS



**P-3 PLAN VIEW**  
NTS



**P-3 TYPICAL HEADWALL PANEL TO ANGLED WING PANEL JOINTS DETAIL**

(UPSTREAM END)

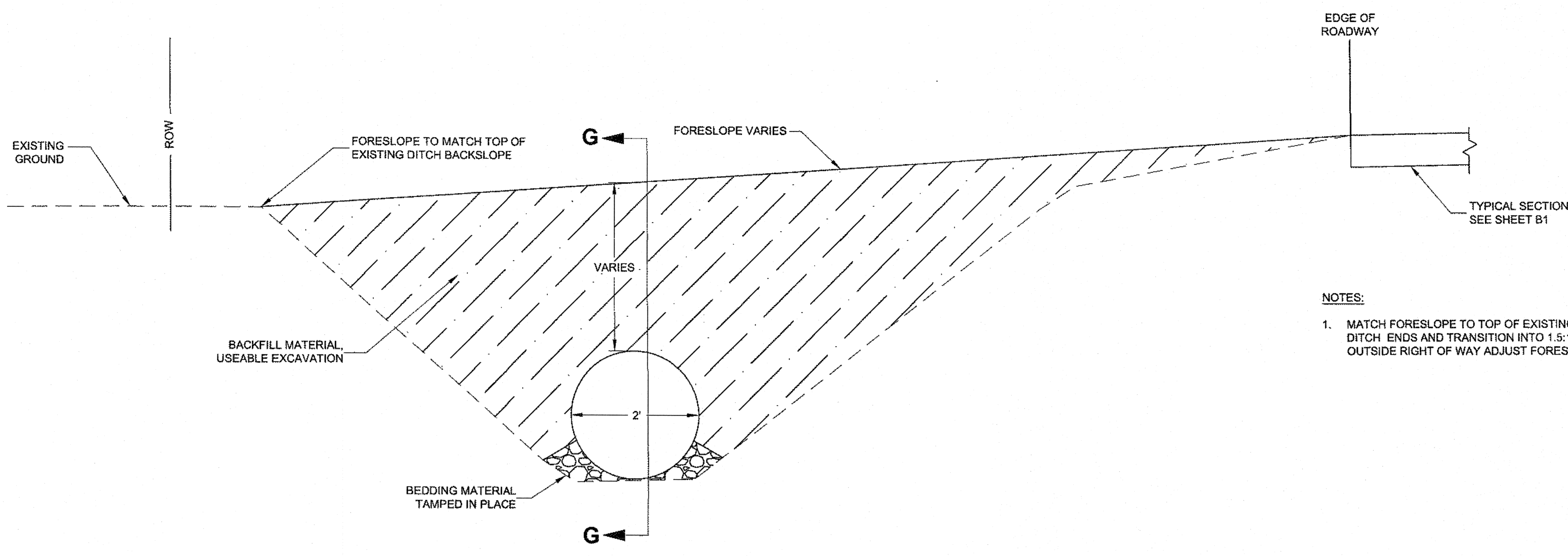
**NOTES:**

1. FOR THE DOWNSTREAM HEADWALL PANEL TO WING PANEL CONNECTION HORIZONTAL ANGLE OF ROTATION SHALL BE 0°.

Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.  
PE: [Signature] Date: 07-08-2015

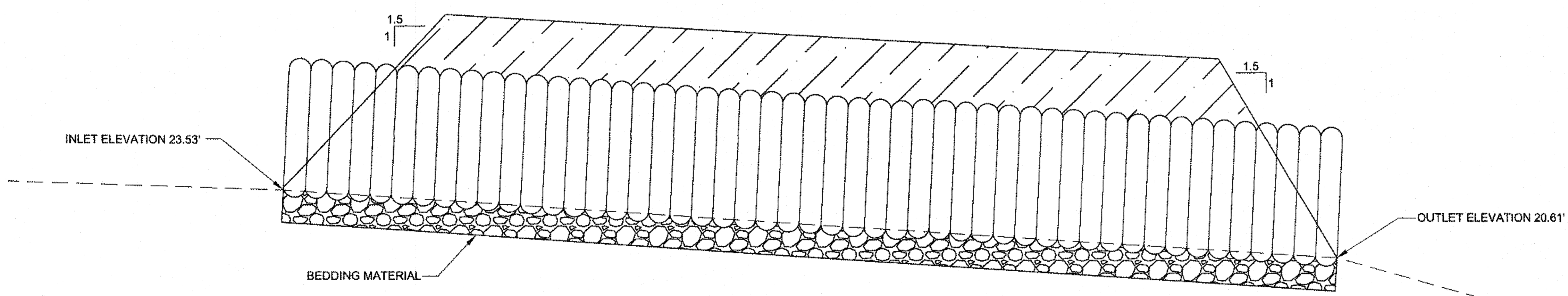
DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: C. TRIPP 		STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES SOUTHEAST REGION		
DESIGNED BY: L. CHAMBERS DRAWN BY: L. CHAMBERS		<b>AMALGA HARBOR RD &amp; BRIDGES RECONSTRUCTION &amp; REPLACEMENT PROJECT #69684</b> <b>P-3 STRUCTURAL PLATE ALUMINUM PIPE-ARCH</b>		
PATH: Q:\JUN09684\PLANSET\169684_Q1-Q10_CULVERT.DWG TAB: Q8 Wednesday, October 09, 2013 1:20:22 PM CHAMBERS, LUCAS M (DOT)		PROJECT DESIGNATION 69684/ BH-0950(1)	YEAR 2013	
NO.	DATE	DESCRIPTION	SHEET NO. Q8	TOTAL SHEETS 55



- NOTES:**
1. MATCH FORESLOPE TO TOP OF EXISTING DITCH BACK SLOPE UNTIL DITCH ENDS AND TRANSITION INTO 1.5:1 FORESLOPE. DO NOT GO OUTSIDE RIGHT OF WAY ADJUST FORESLOPE AS NECESSARY.

**P-4 CULVERT DITCH DETAIL**  
NTS

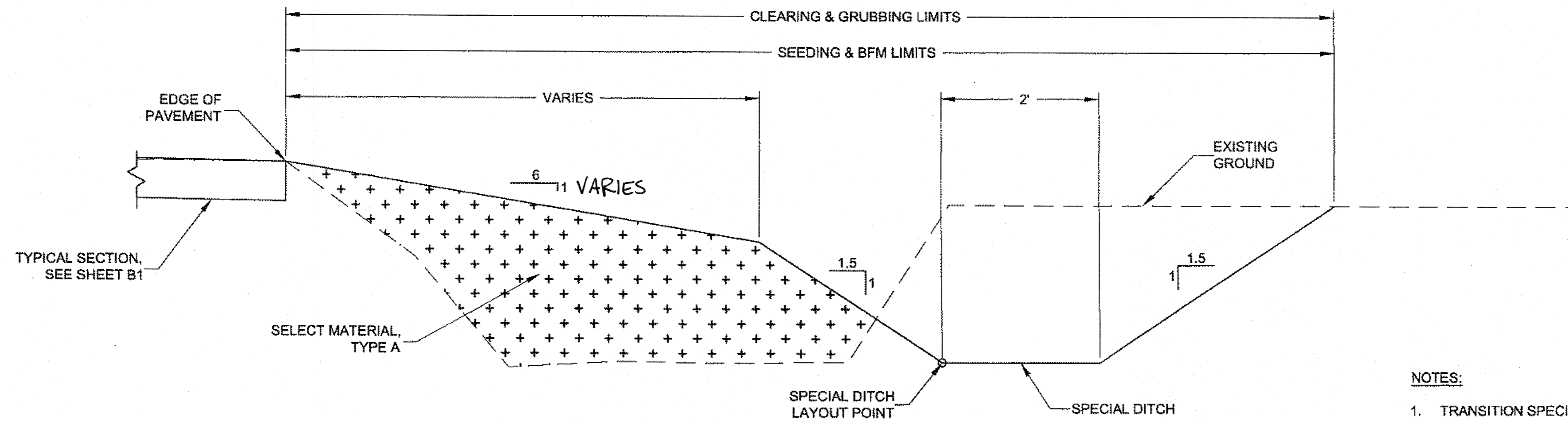


**SECTION G-G**  
NTS

Record Drawings have been reviewed by the Project engineer, and represent to the best of my knowledge, the project as constructed.  
Date **07.08.2015**

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: C. TRIPP		STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES SOUTHEAST REGION	
		<b>AMALGA HARBOR RD &amp; BRIDGES RECONSTRUCTION &amp; REPLACEMENT PROJECT #69684</b>	
DESIGNED BY: L. CHAMBERS		<b>P-4 CULVERT DITCH DETAILS</b>	
DRAWN BY: L. CHAMBERS		CHAMBERS, LUCAS M (DOT)	
PATH: Q:\JUN169684\PLANSET\69684_Q1-Q10_CULVERT.DWG		PROJECT DESIGNATION	
TAB: Q8 Wednesday, October 09, 2013 1:20:27 PM		YEAR	SHEET NO.
REVISIONS		69684/ BH-0950(1)	2013
NO.	DATE	DESCRIPTION	TOTAL SHEETS
			<b>Q9</b>
			<b>55</b>

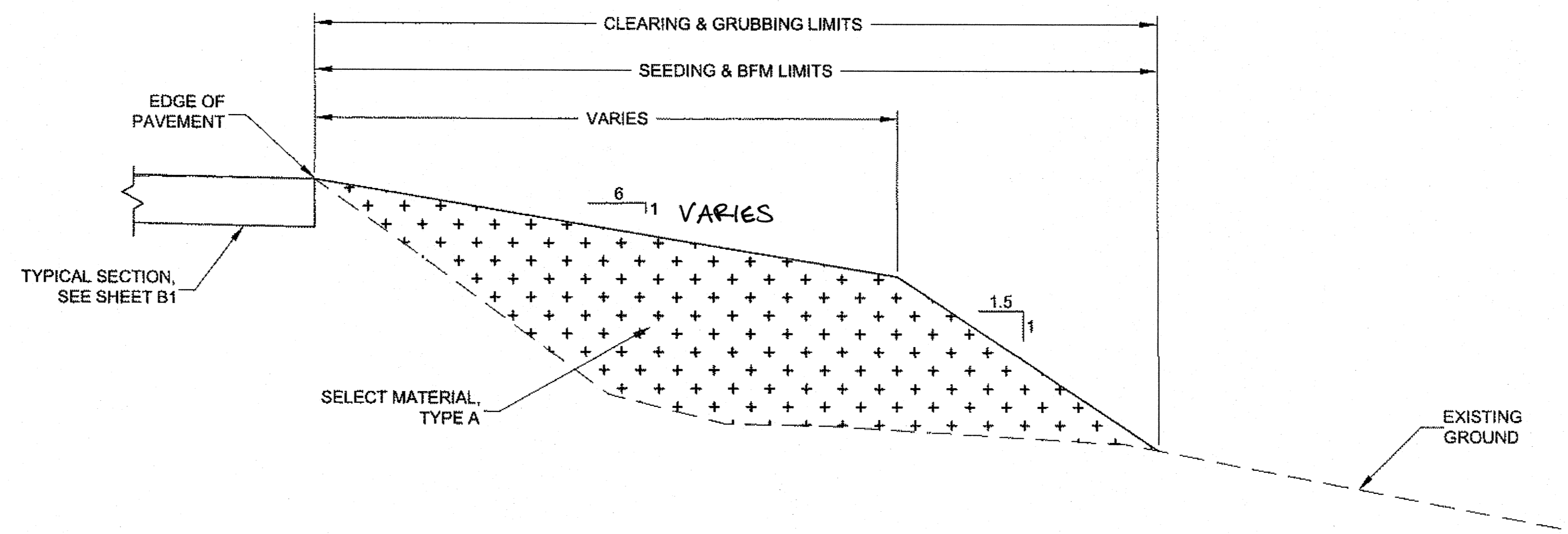


**SECTION A-A STRUCTURAL PLATE ALUMINUM  
PIPE-ARCH SPECIAL DITCH DETAIL**

NTS

**NOTES:**

1. TRANSITION SPECIAL DITCH TO MATCH EXISTING DITCHES.
2. SEE SHEET F1 FOR SPECIAL DITCH LAYOUT TABLES.
3. STABILIZE ALL NEW EMBANKMENT AND CUT SLOPES WITH SEEDING AND BONDED FIBER MATRIX PER SECTION 618 & SECTION 619.



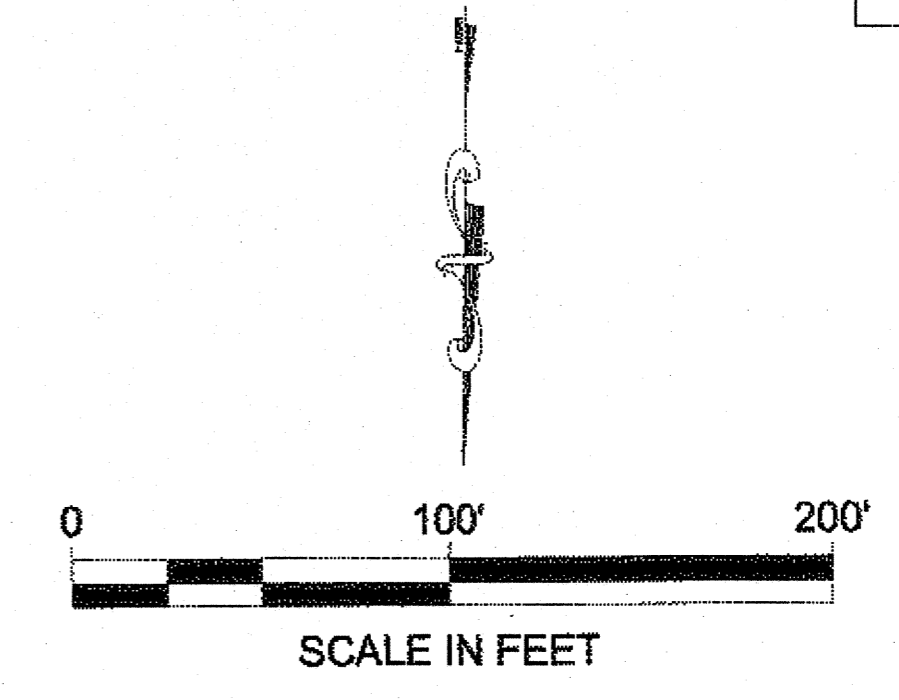
**SECTION B-B STRUCTURAL PLATE  
ALUMINUM PIPE-ARCH DITCH FILL DETAIL**

NTS

Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.  
PE *[Signature]* Date **07-08-2015**

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: C. TRIPP 		STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES SOUTHEAST REGION												
DESIGNED BY: L. CHAMBERS DRAWN BY: L. CHAMBERS		<b>AMALGA HARBOR RD &amp; BRIDGES RECONSTRUCTION &amp; REPLACEMENT PROJECT #69684</b> <b>P-3 STRUCTURAL PLATE ALUMINUM PIPE-ARCH DETAILS</b>												
PATH: Q:\UN\69684\PLANSET\69684_Q1-Q10_CULVERT.DWG TAB: Q10 Wednesday, October 08, 2013 1:20:32 PM		CHAMBERS, LUCAS M (DOT)												
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REVISIONS														
NO.	DATE	DESCRIPTION												



USS 1196  
TRACT 5  
STATE OF ALASKA,  
DEPT. OF FISH & GAME

USS 1375  
CHAFFIN TRACT  
RECORD BY/DEED  
TOM MILLER

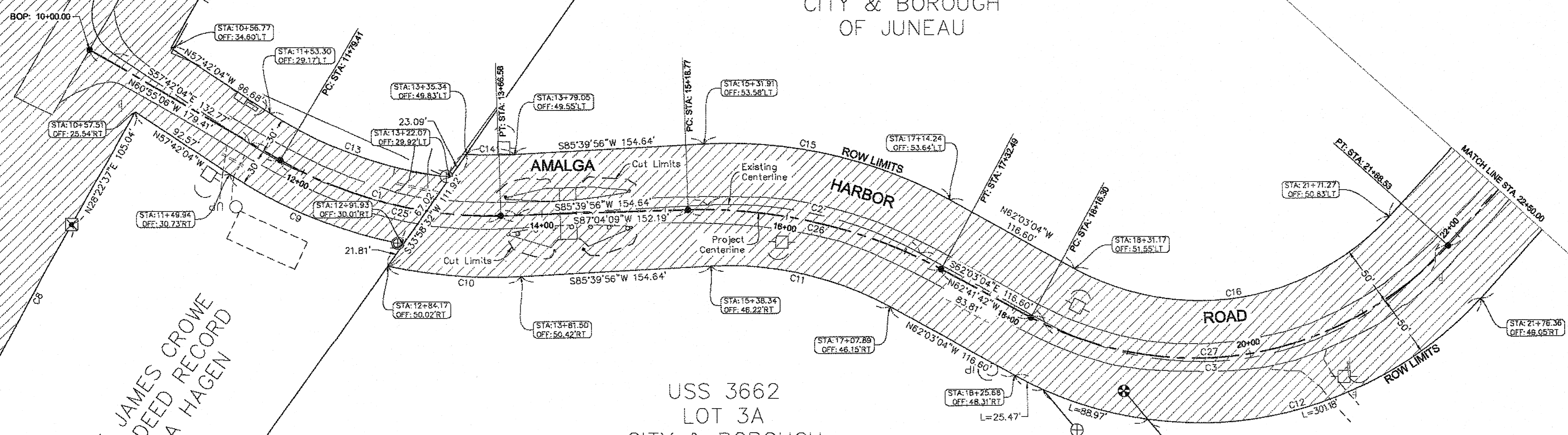
USS 3662  
LOT 3B  
CITY & BOROUGH  
OF JUNEAU

USS 1375 JAMES CROME  
TRACT BY DEED RECORD  
PETE & SARA HAGEN

USS 3662  
LOT 3A  
CITY & BOROUGH  
OF JUNEAU

USS 3662  
LOT 1  
CITY & BOROUGH  
OF JUNEAU

USS 3662  
LOT 3B  
CITY & BOROUGH  
OF JUNEAU



Existing Centerline Curve Table

Curve	Radius	Length	Delta	Chord Length	Chord Direction	Tangent
C1	357.96'	228.87'	36°36'00"	224.99'	N76°01'04"W	118.50'
C2	318.19'	179.28'	32°17'00"	176.92'	S78°11'34"E	92.09'
C3	260.44'	348.68'	76°42'32"	323.21'	S79°35'40"W	206.08'

Project Centerline Curve Table

Curve	Radius	Length	Delta	Chord Length	Chord Direction	Tangent
C25	335.00'	187.17'	32°00'44"	184.75'	N76°55'28"W	96.10'
C26	405.00'	213.72'	30°14'08"	211.25'	N77°48'46"W	109.41'
C27	280.00'	372.23'	76°10'10"	345.42'	S79°13'13"W	219.43'

Right of Way Curve Table

Curve	Radius	Length	Delta	Chord Length	Chord Direction	Tangent
C9	387.96'	152.24'	22°29'01"	151.27'	N68°56'35"W	77.11'
C10	407.96'	109.68'	15°24'13"	109.35'	N86°37'58"W	55.17'
C11	268.19'	151.11'	32°17'00"	149.12'	S78°11'34"E	77.62'
C12	310.44'	415.62'	76°42'32"	385.27'	S79°35'40"W	245.65'
C13	327.96'	156.16'	27°16'54"	154.69'	N71°20'31"W	79.59'
C14	307.96'	39.08'	7°16'17"	39.06'	S88°18'04"W	19.57'
C15	368.19'	207.45'	32°17'00"	204.72'	S78°11'34"E	106.56'
C16	210.44'	281.74'	76°42'32"	261.16'	S79°35'40"W	166.52'

Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.  
PE: [Signature] Date: 07.06.2015

DATE	REVISIONS	BY

**STATE OF ALASKA**  
DEPARTMENT OF TRANSPORTATION  
&  
PUBLIC FACILITIES  
RIGHT OF WAY MAP  
ALASKA PROJECT  
BH-0950(1) / AKSAS NO. 69684  
JUNEAU  
AMALGA HARBOR ROAD & BRIDGES  
RECONSTRUCTION & REPLACEMENT

DRAWN	EAA	DATE	07/25/2013	SCALE	1" = 50'
CHECKED		DATE		SHEET	R1 OF 3

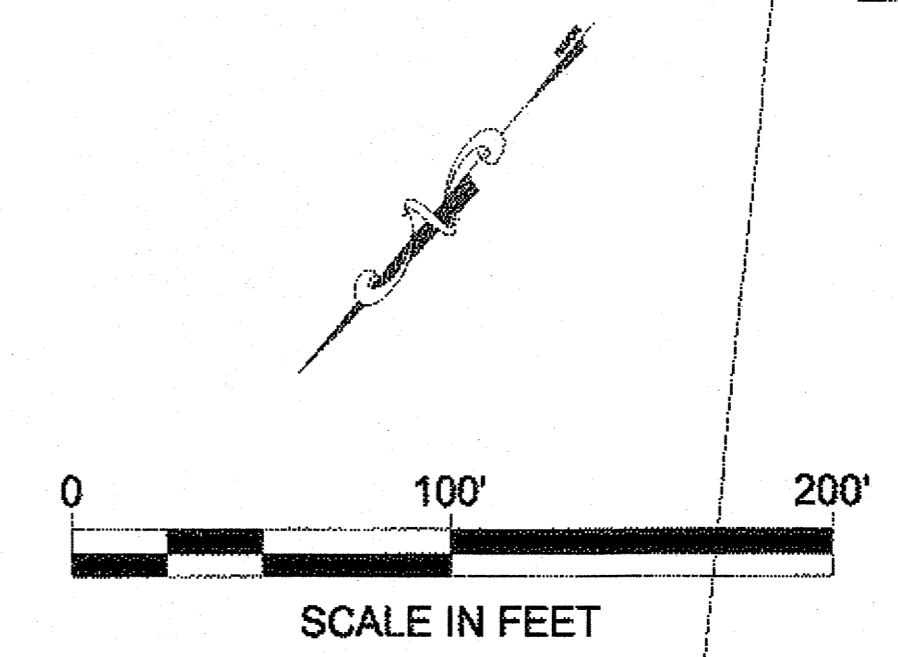
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Existing Centerline Curve Table						
Curve	Radius	Length	Delta	Chord Length	Chord Direction	Tangent
C4	1,432.39'	172.52'	6°54'03"	172.41'	N44°41'25"E	86.36'
C5	1,432.39'	176.38'	7°03'19"	176.27'	N51°40'05"E	88.30'

Right of Way Line Table		
Line #	Length	Direction
L1	20.00'	N48°23'49"W
L2	31.94'	S41°14'23"W
L3	32.32'	S41°14'23"W
L4	20.00'	N48°23'49"W

Right of Way Curve Table						
Curve	Radius	Length	Delta	Chord Length	Chord Direction	Tangent
C17	1,462.39'	176.13'	6°54'03"	176.03'	N44°41'25"E	88.17'
C18	1,402.39'	168.91'	6°54'03"	168.80'	N44°41'25"E	84.55'
C19	1,402.39'	172.69'	7°03'19"	172.58'	N51°40'05"E	86.45'
C20	1,462.39'	180.07'	7°03'19"	179.96'	N51°40'05"E	90.15'

Project Centerline Curve Table						
Curve	Radius	Length	Delta	Chord Length	Chord Direction	Tangent
C28	2405.00'	315.69'	7°31'15"	315.47'	S44°53'45"W	158.07'
C29	1750.00'	195.34'	6°23'44"	195.24'	S51°51'15"W	97.77'

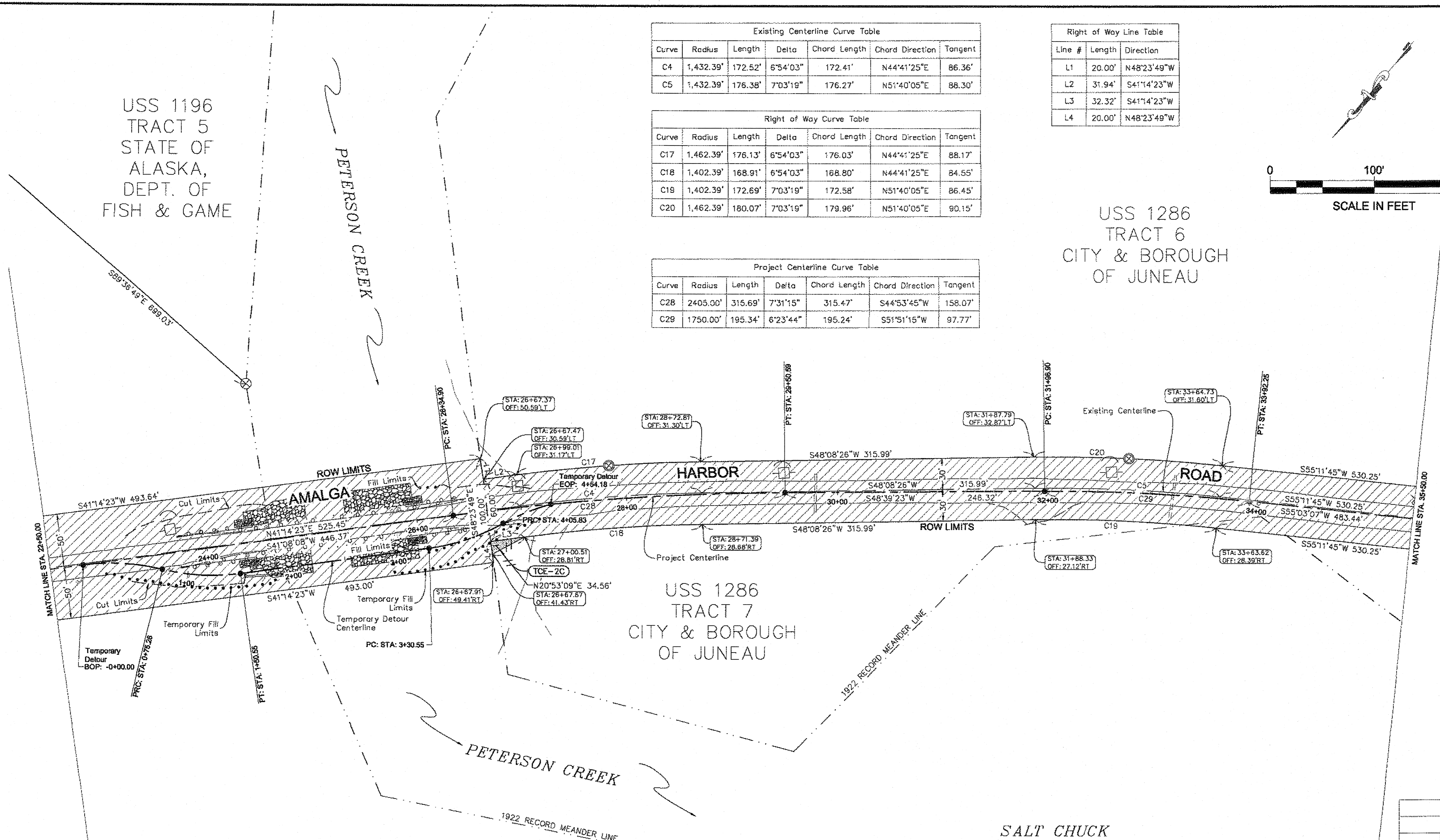


USS 1196  
TRACT 5  
STATE OF  
ALASKA,  
DEPT. OF  
FISH & GAME

USS 1286  
TRACT 6  
CITY & BOROUGH  
OF JUNEAU

USS 1286  
TRACT 7  
CITY & BOROUGH  
OF JUNEAU

USS 3662  
LOT 1  
CITY & BOROUGH  
OF JUNEAU



Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.  
Date **07.08.2015**

TEMPORARY CONSTRUCTION EASEMENT			
TCE NO.	OWNER	AREA	PURPOSE
TCE-2C	City & Borough of Juneau	194 S.F.	Temporary Fill Limits

DATE	REVISIONS	BY
5/20/13	Adjusted ROW & deleted TCE-1	CAA

**STATE OF ALASKA**  
DEPARTMENT OF TRANSPORTATION  
&  
PUBLIC FACILITIES  
RIGHT OF WAY MAP  
ALASKA PROJECT  
**BH-0950(1) / AKSAS NO. 69684**  
JUNEAU  
AMALGA HARBOR ROAD & BRIDGES  
RECONSTRUCTION & REPLACEMENT

DRAWN	EAA	DATE	07/25/2013	SCALE	1" = 50'
CHECKED		DATE		SHEET	R2 OF 3

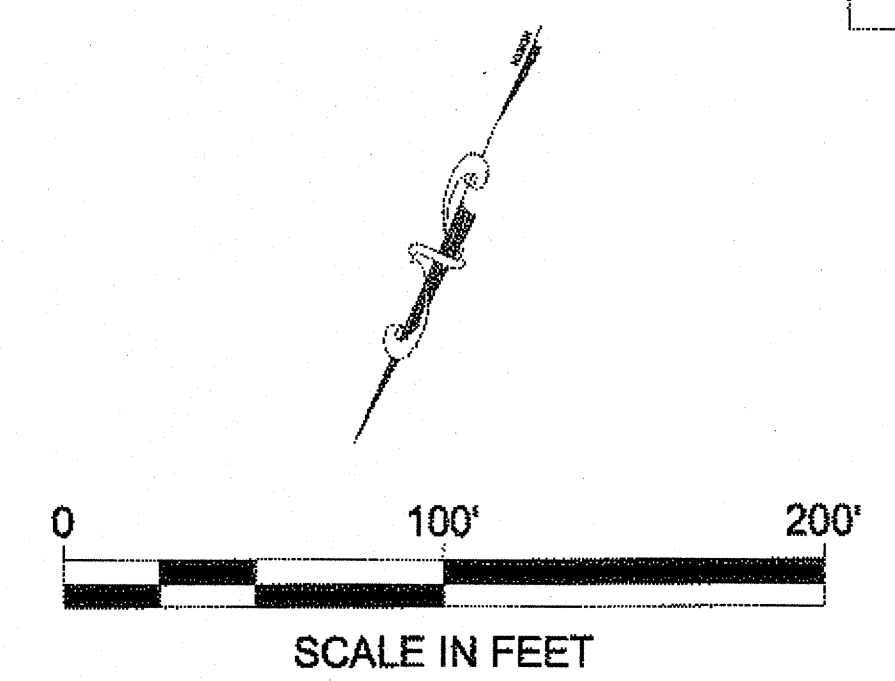
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Line #	Length	Direction
L5	20.00'	S34°48'16"E
L6	40.00'	S55°11'45"W
L7	20.00'	N34°48'15"W
L8	40.00'	N55°11'45"E
L9	20.00'	N34°48'15"W
L10	40.00'	N55°11'45"E
L11	20.00'	S34°48'15"E
L12	40.00'	S55°11'45"W

Curve	Radius	Length	Delta	Chord Length	Chord Direction	Tangent
C30	670.00'	221.25'	18°55'12"	220.24'	S64°30'44"W	111.64'
C31	675.00'	221.72'	18°49'13"	220.73'	S64°33'43"W	111.87'

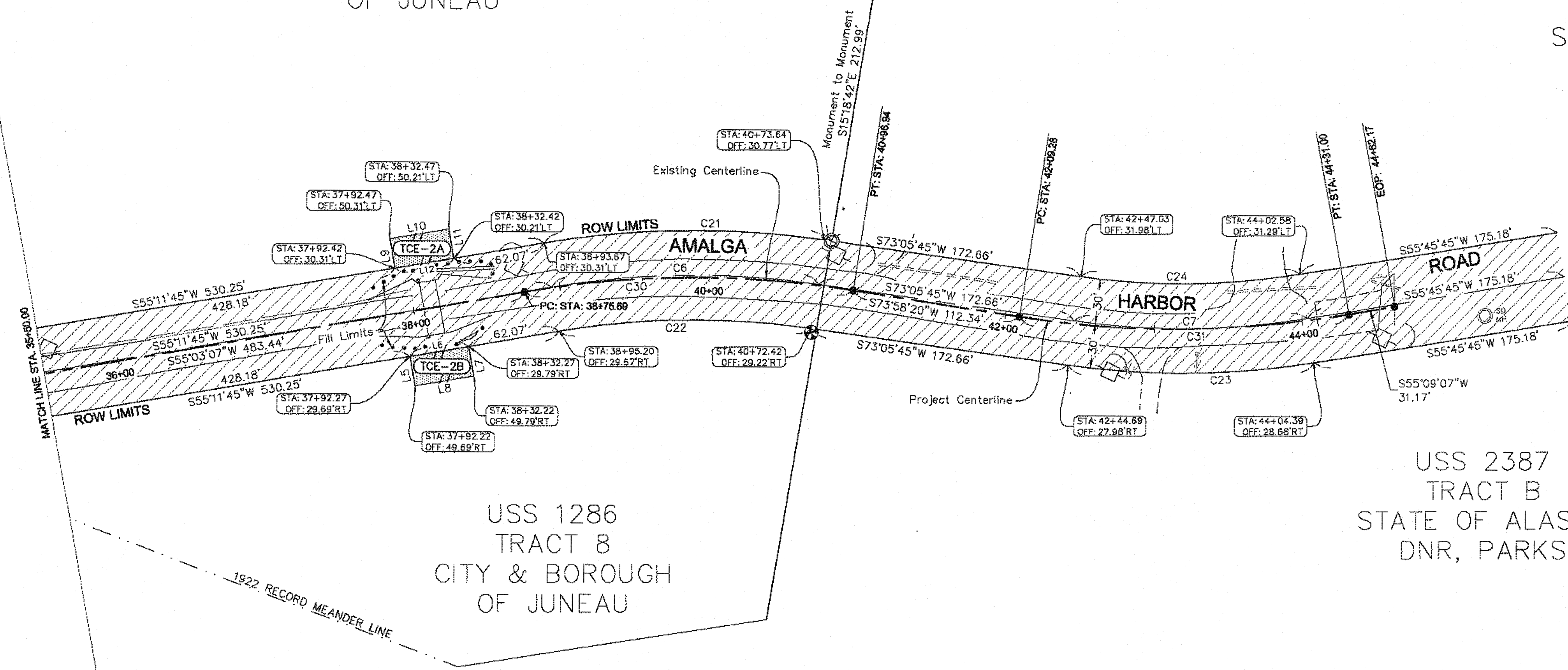
Curve	Radius	Length	Delta	Chord Length	Chord Direction	Tangent
C6	572.96'	179.00'	17°54'00"	178.27'	N64°08'45"E	90.24'
C7	520.87'	157.58'	17°20'00"	156.98'	S64°25'45"W	79.39'

Curve	Radius	Length	Delta	Chord Length	Chord Direction	Tangent
C21	602.96'	188.37'	17°54'00"	187.61'	N64°08'45"E	94.96'
C22	542.96'	169.63'	17°54'00"	168.94'	N64°08'45"E	85.51'
C23	550.87'	166.65'	17°20'00"	166.02'	S64°25'45"W	83.97'
C24	490.87'	148.50'	17°20'00"	147.93'	S64°25'45"W	74.82'



USS 1286  
TRACT 6  
CITY & BOROUGH  
OF JUNEAU

USS 2387  
TRACT B  
STATE OF ALASKA  
DNR, PARKS



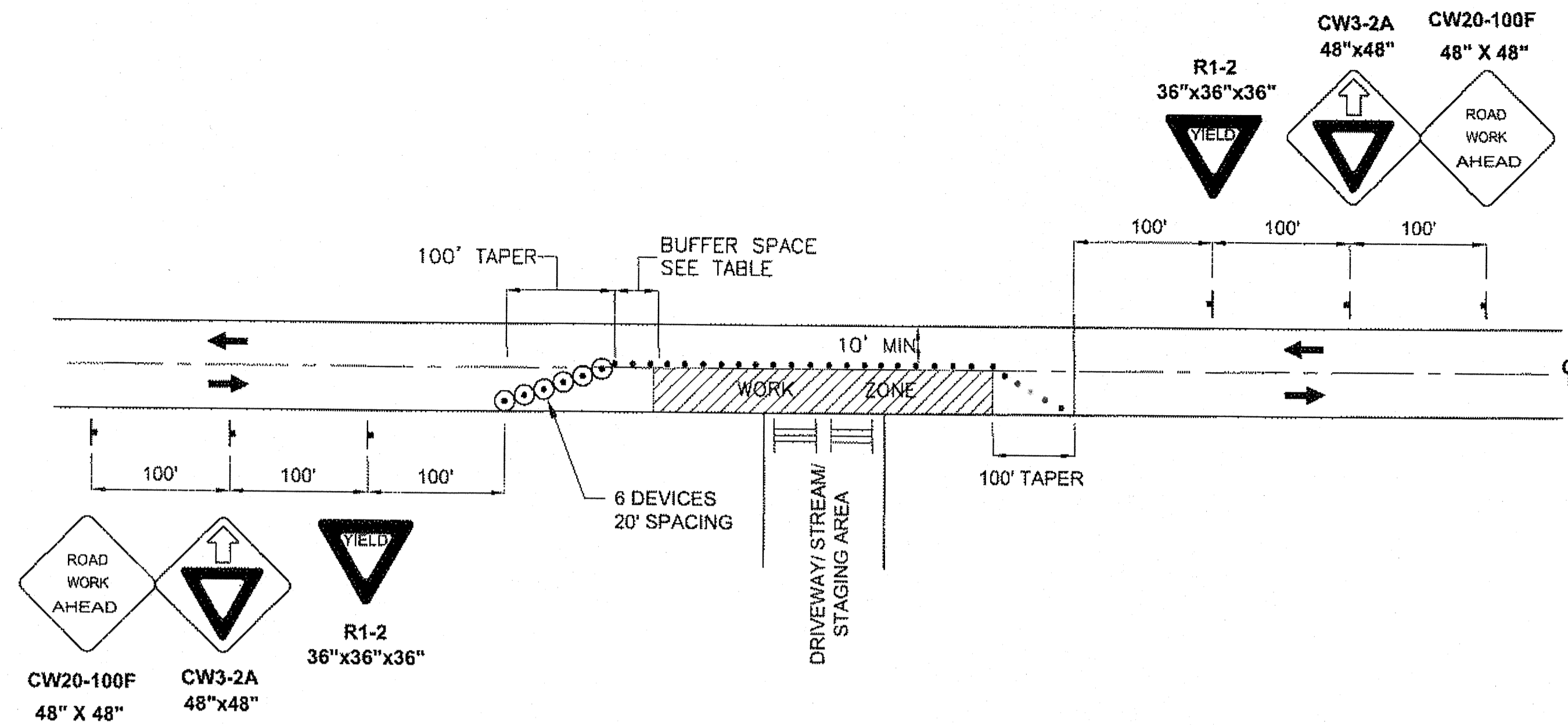
TCE NO.	OWNER	AREA	PURPOSE
TCE-2A	City & Borough of Juneau	800 S.F.	Installation of Culvert
TCE-2B	City & Borough of Juneau	800 S.F.	Installation of Culvert

SALT  
CHUCK

Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.  
PE: [Signature] Date: 07.08.2015

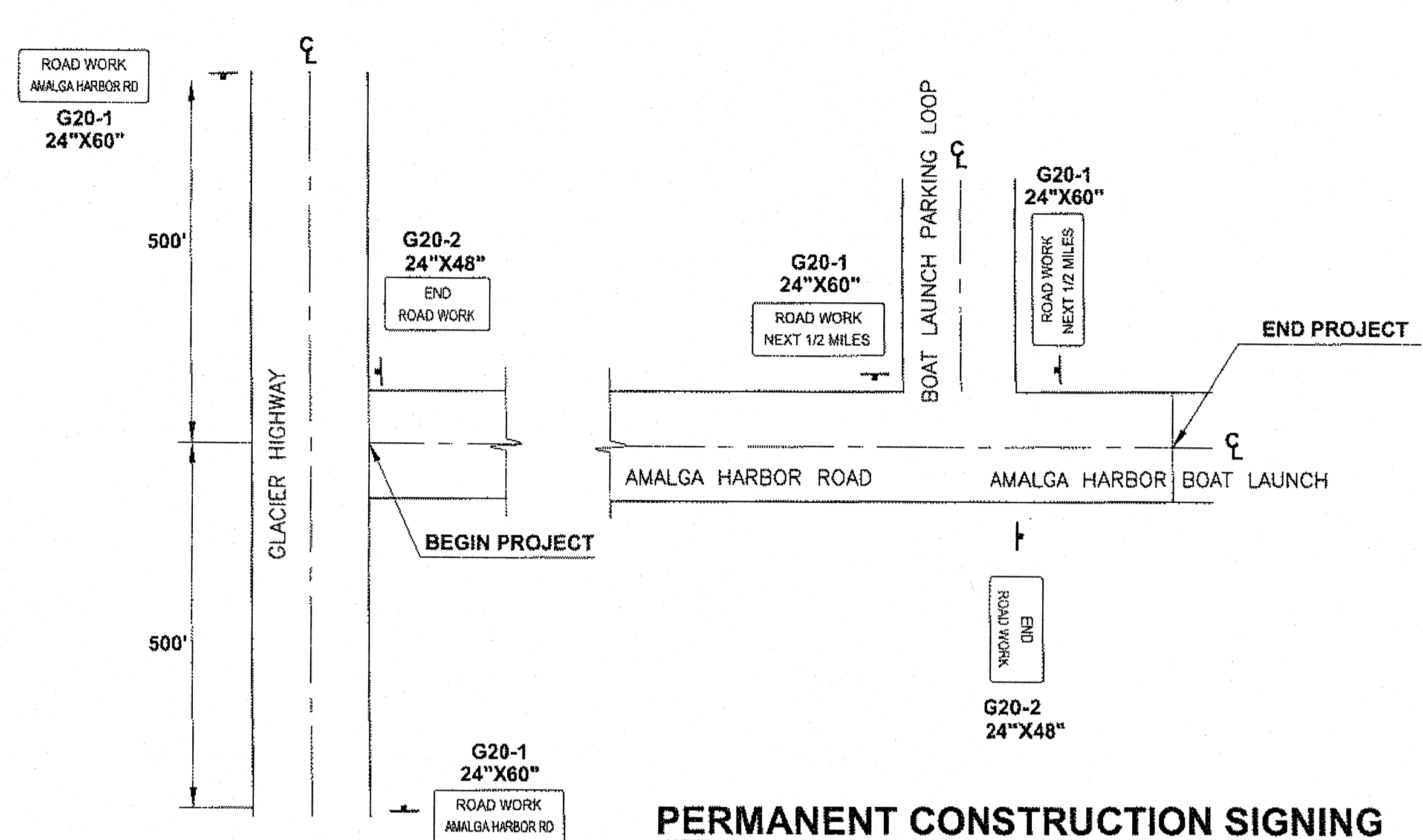
DATE	REVISIONS	BY
<b>STATE OF ALASKA</b> DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES RIGHT OF WAY MAP ALASKA PROJECT BH-0950(1) / AKSAS NO. 69684 JUNEAU AMALGA HARBOR ROAD & BRIDGES RECONSTRUCTION & REPLACEMENT		
DRAWN	EAA	DATE 07/25/2013
CHECKED		DATE
SCALE 1" = 50'		SHEET R3 OF 3

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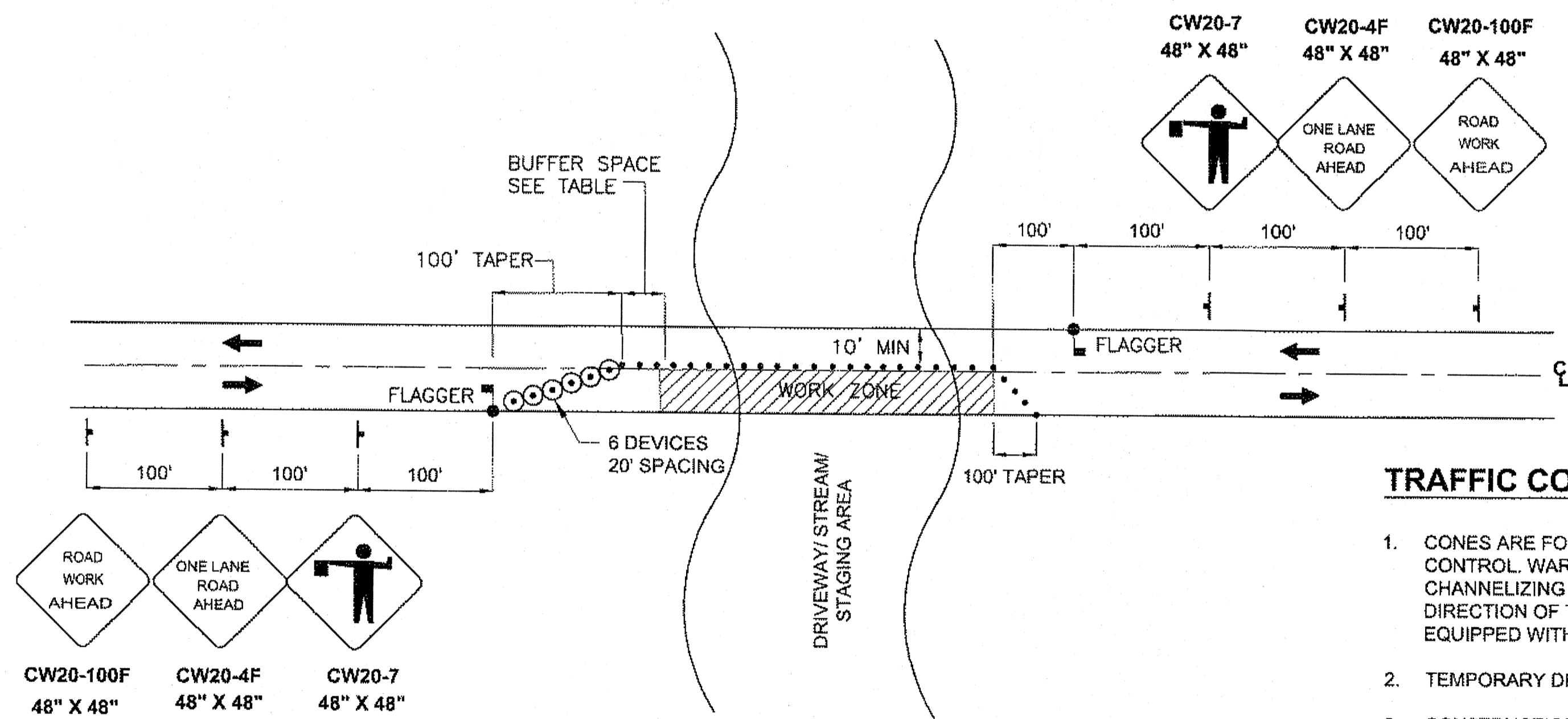


**TWO LANE ROADWAY-SINGLE LANE YIELD CONTROL CLOSURE**

NOTE: USE WHERE ADEQUATE SITE DISTANCE ALLOWS FOR YIELD CONTROL.



**PERMANENT CONSTRUCTION SIGNING**



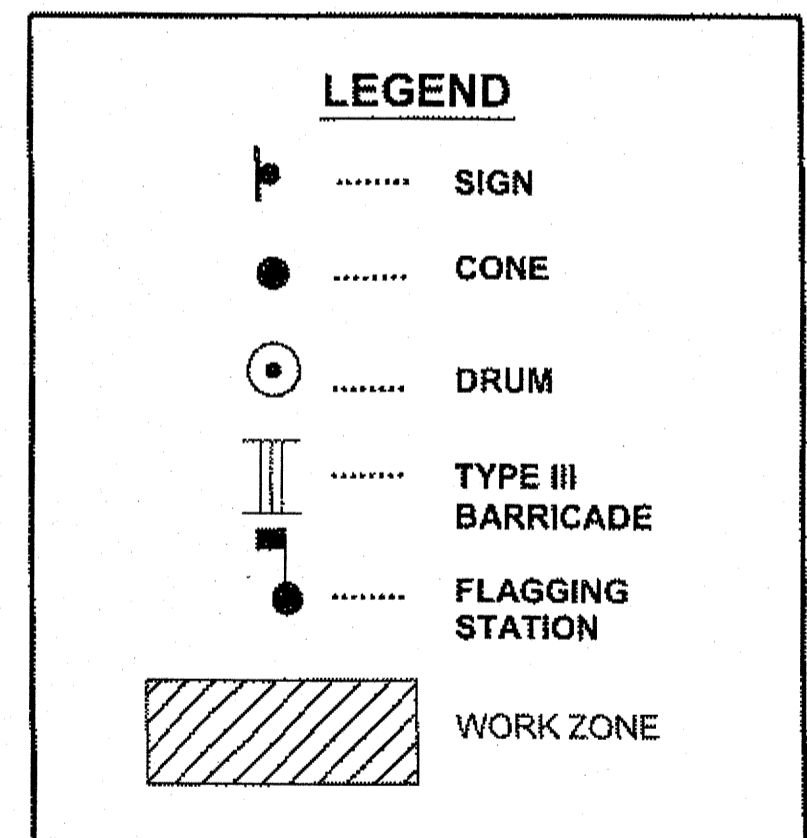
**TWO LANE ROADWAY-SINGLE LANE FLAGGER CONTROL CLOSURE**

NOTE: USE WHERE ADEQUATE SITE DISTANCE IS NOT AVAILABLE FOR YIELD CONTROL.

SPEED (MPH)	MIN MERGING TAPER LENGTH (L) IN FEET WIDTH OF OFFSET (W) IN			MIN NUMBER OF DEVICES WIDTH OF OFFSET (W) IN FEET			MAX DEVICE SPACING IN FEET		BUFFER SPACE (FT)	BUFFER SPACE PER THE ATSSA GUIDE (FT)
	10'	11'	12'	10'	11'	12'	ALONG TAPER	ALONG TANGENT		
25 OR BELOW	105	115	125	6	6	6	25	50	155	55
30	150	165	180	6	7	7	30	60	200	85

**TRAFFIC CONTROL NOTES:**

- CONES ARE FOR DAYTIME USE WHILE WORKERS ARE PRESENT. USE DRUMS FOR OVERNIGHT TRAFFIC CONTROL. WARNING LIGHTS SHALL BE USED TO MARK BARRICADES, PORTABLE BARRIERS OR ANY OTHER CHANNELIZING DEVICE AT NIGHT AS DIRECTED BY THE ENGINEER. THE FIRST DEVICE FACING THE DIRECTION OF TRAFFIC SHALL BE EQUIPPED WITH A FLASHING WARNING LIGHT, ALL OTHERS SHALL BE EQUIPPED WITH STEADY-BURN WARNING LIGHTS.
- TEMPORARY DRIVING LANES SHALL HAVE A MINIMUM WIDTH OF 10'-0".
- CONSTRUCTION SIGNING SHALL BE IN PLACE ONLY WHEN THE CONDITIONS EXIST FOR WHICH THE SIGNS ARE INTENDED.
- DRIVEWAYS MAY BE CLOSED DURING ACTUAL WORK ON A GIVEN DRIVEWAY, PROVIDED THAT THE CLOSURE DOES NOT EXCEED 4 HOURS AND THE AFFECTED RESIDENTS HAVE BEEN GIVEN 24 HOURS NOTICE OF THE CLOSURE.
- IT IS THE INTENT OF THIS TRAFFIC CONTROL PLAN (TCP) TO ILLUSTRATE SOME, NOT ALL, OF THE TRAFFIC CONTROL SETUPS WHICH WILL BE REQUIRED ON THIS PROJECT. PLANS FOR CONFIGURATIONS NOT COVERED BY THE TCP SHALL BE CREATED BY THE CONTRACTOR AND SUBMITTED TO THE ENGINEER FOR APPROVAL. WHERE APPROPRIATE, THEY SHALL INCORPORATE APPLICABLE DETAILS FROM THESE SHEETS.



DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: D. ESPSTEIN		STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES SOUTHEAST REGION	
TCP NOT SEALED IN ACCORDANCE WITH ALASKA HIGHWAY PRECONSTRUCTION MANUAL SECTION 400.3.5 DATED JANUARY 30, 2012		AMALGA HARBOR RD & BRIDGES RECONSTRUCTION & REPLACEMENT PROJECT #69684	
DESIGNED BY: L. CHAMBERS		<b>TRAFFIC CONTROL PLAN</b>	
DRAWN BY: L. CHAMBERS		PROJECT DESIGNATION	
PATH: Q:\UNU69684\PLANSET\69684_T1-T2_TCP.DWG		YEAR	SHEET NO.
TAB: T1 Wednesday, October 09, 2013 1:21:03 PM		69684/ BH-0950(1)	T1
REVISIONS		YEAR	TOTAL SHEETS
NO.	DATE	DESCRIPTION	55

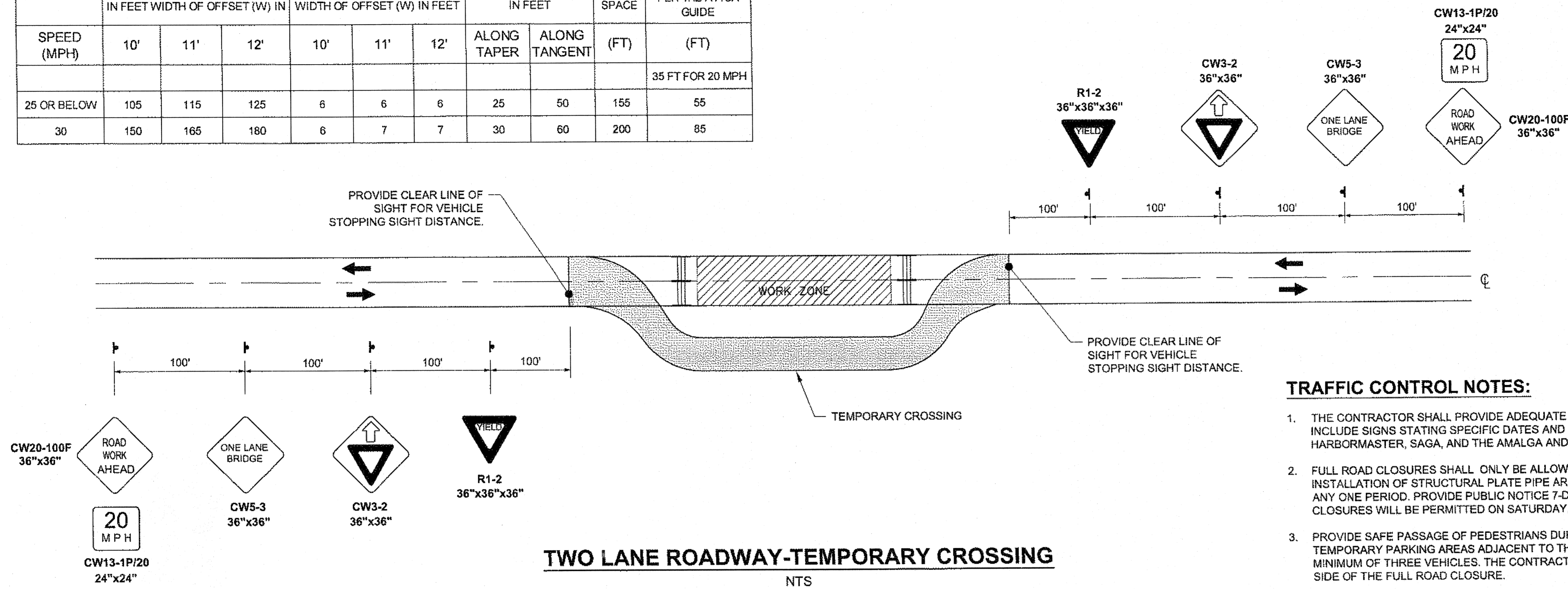
Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.  
PE: [Signature] Date 07.08.2015

**TCP SETUP TABLE**

SPEED (MPH)	MIN MERGING TAPER LENGTH (L) IN FEET WIDTH OF OFFSET (W) IN			MIN NUMBER OF DEVICES WIDTH OF OFFSET (W) IN FEET			MAX DEVICE SPACING IN FEET		BUFFER SPACE	BUFFER SPACE PER THE ATSSA GUIDE
	10'	11'	12'	10'	11'	12'	ALONG TAPER	ALONG TANGENT	(FT)	(FT)
25 OR BELOW	105	115	125	6	6	6	25	50	155	35 FT FOR 20 MPH
30	150	165	180	6	7	7	30	60	200	85

**LEGEND**

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



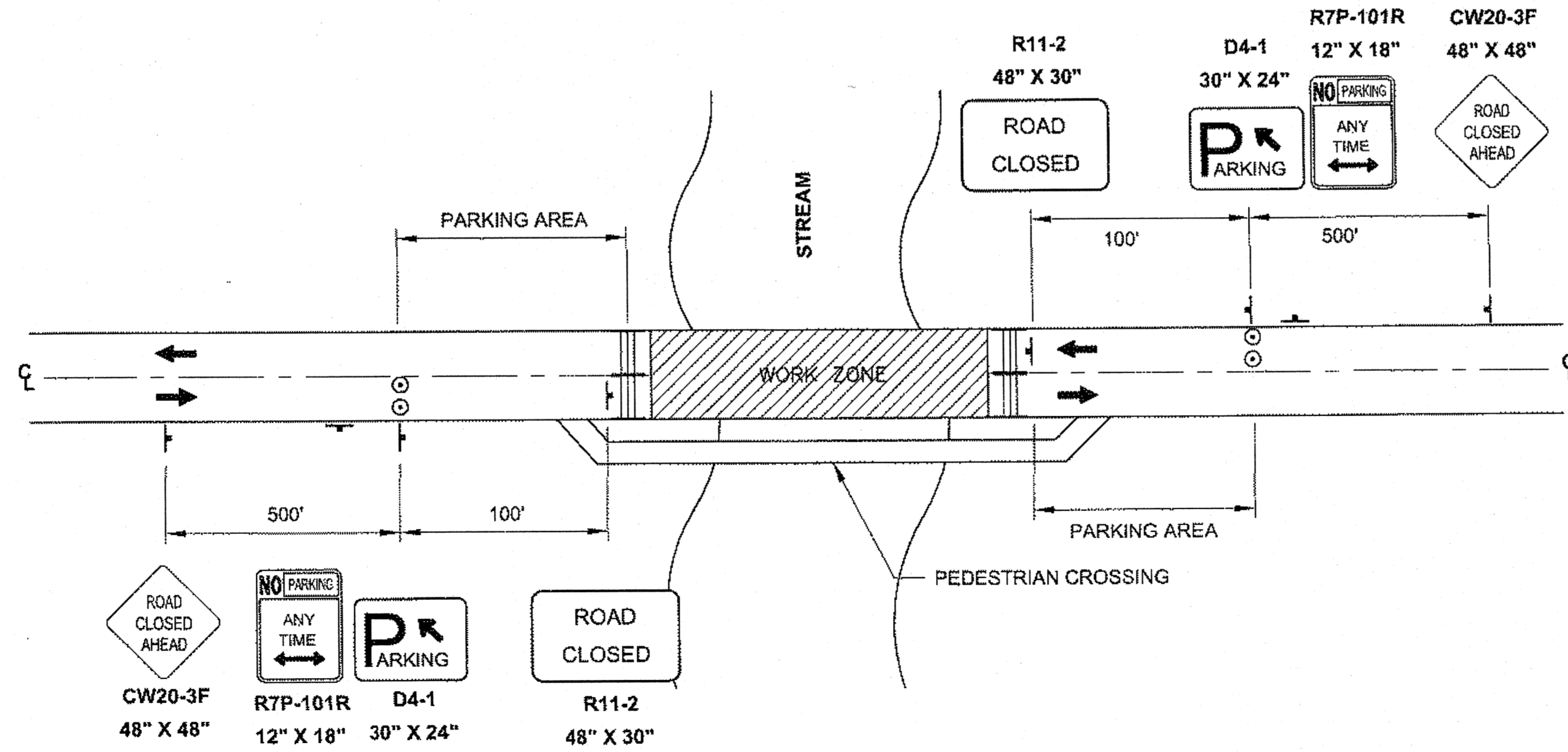
**TWO LANE ROADWAY-TEMPORARY CROSSING**

NTS

NOTE: SEE SHEET M1 FOR TEMPORARY BRIDGE PLAN & PROFILE.

**TRAFFIC CONTROL NOTES:**

1. THE CONTRACTOR SHALL PROVIDE ADEQUATE PUBLIC NOTICE PRIOR TO EACH ROAD CLOSURE. THIS WILL INCLUDE SIGNS STATING SPECIFIC DATES AND DURATION OF ROAD CLOSURE AND NOTIFICATION TO THE CBJ HARBORMASTER, SAGA, AND THE AMALGA AND HUFFMAN HARBORS COMMUNITY ASSOCIATION.
2. FULL ROAD CLOSURES SHALL ONLY BE ALLOWED FOR REMOVAL AND SALVAGE OF TEMPORARY BRIDGES AND INSTALLATION OF STRUCTURAL PLATE PIPE ARCHES AND SHALL BE LIMITED TO NO MORE THAN 24-HOURS IN ANY ONE PERIOD. PROVIDE PUBLIC NOTICE 7-DAYS IN ADVANCE OF ANY PROPOSED ROAD CLOSURES. NO ROAD CLOSURES WILL BE PERMITTED ON SATURDAY, SUNDAY AND ON ALL STATE HOLIDAYS.
3. PROVIDE SAFE PASSAGE OF PEDESTRIANS DURING ROAD CLOSURES AND OTHER WORK AREAS. PROVIDE TEMPORARY PARKING AREAS ADJACENT TO THE WORK AREA ON EITHER SIDE OF FULL ROAD CLOSURE FOR A MINIMUM OF THREE VEHICLES. THE CONTRACTOR SHALL FURNISH A VEHICLE FOR TRANSPORTATION ON EITHER SIDE OF THE FULL ROAD CLOSURE.
4. CONSTRUCTION SIGNING SHALL BE IN PLACE ONLY WHEN THE CONDITIONS EXIST FOR WHICH THE SIGNS ARE INTENDED.
5. WARNING LIGHTS SHALL BE USED TO MARK BARRICADES, PORTABLE BARRIERS OR ANY OTHER CHANNELIZING DEVICE AT NIGHT AS DIRECTED BY THE ENGINEER. THE FIRST DEVICE FACING THE DIRECTION OF TRAFFIC SHALL BE EQUIPPED WITH A FLASHING WARNING LIGHT, ALL OTHERS SHALL BE EQUIPPED WITH STEADY-BURN WARNING LIGHTS.
6. IT IS THE INTENT OF THIS TRAFFIC CONTROL PLAN (TCP) TO ILLUSTRATE SOME, NOT ALL, OF THE TRAFFIC CONTROL SETUPS WHICH WILL BE REQUIRED ON THIS PROJECT. PLANS FOR CONFIGURATIONS NOT COVERED BY THE TCP SHALL BE CREATED BY THE CONTRACTOR AND SUBMITTED TO THE ENGINEER FOR APPROVAL. WHERE APPROPRIATE, THEY SHALL INCORPORATE APPLICABLE DETAILS FROM THESE SHEETS.



**CULVERT INSTALLATION FULL ROAD CLOSURE**

Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.  
 PE: [Signature] Date: 07.08.2015

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: D. ESPEIN

STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES  
 SOUTHEAST REGION

AMALGA HARBOR RD & BRIDGES  
 RECONSTRUCTION & REPLACEMENT PROJECT #69684

**TRAFFIC CONTROL PLAN**

TCP NOT SEALED IN ACCORDANCE WITH ALASKA HIGHWAY PRECONSTRUCTION MANUAL SECTION 1400.3.5 DATED JANUARY 30, 2012

DESIGNED BY: L. CHAMBERS  
 DRAWN BY: L. CHAMBERS

PATH: Q:\UNU\69684\PLANSET\69684\_T1-T2\_TCP.DWG  
 TAB: T2 Wednesday, October 09, 2013 1:21:13 PM CHAMBERS, LUCAS M (DOT)

NO.	DATE	REVISIONS DESCRIPTION	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			69684/ BH-0950(1)	2013	T2	55