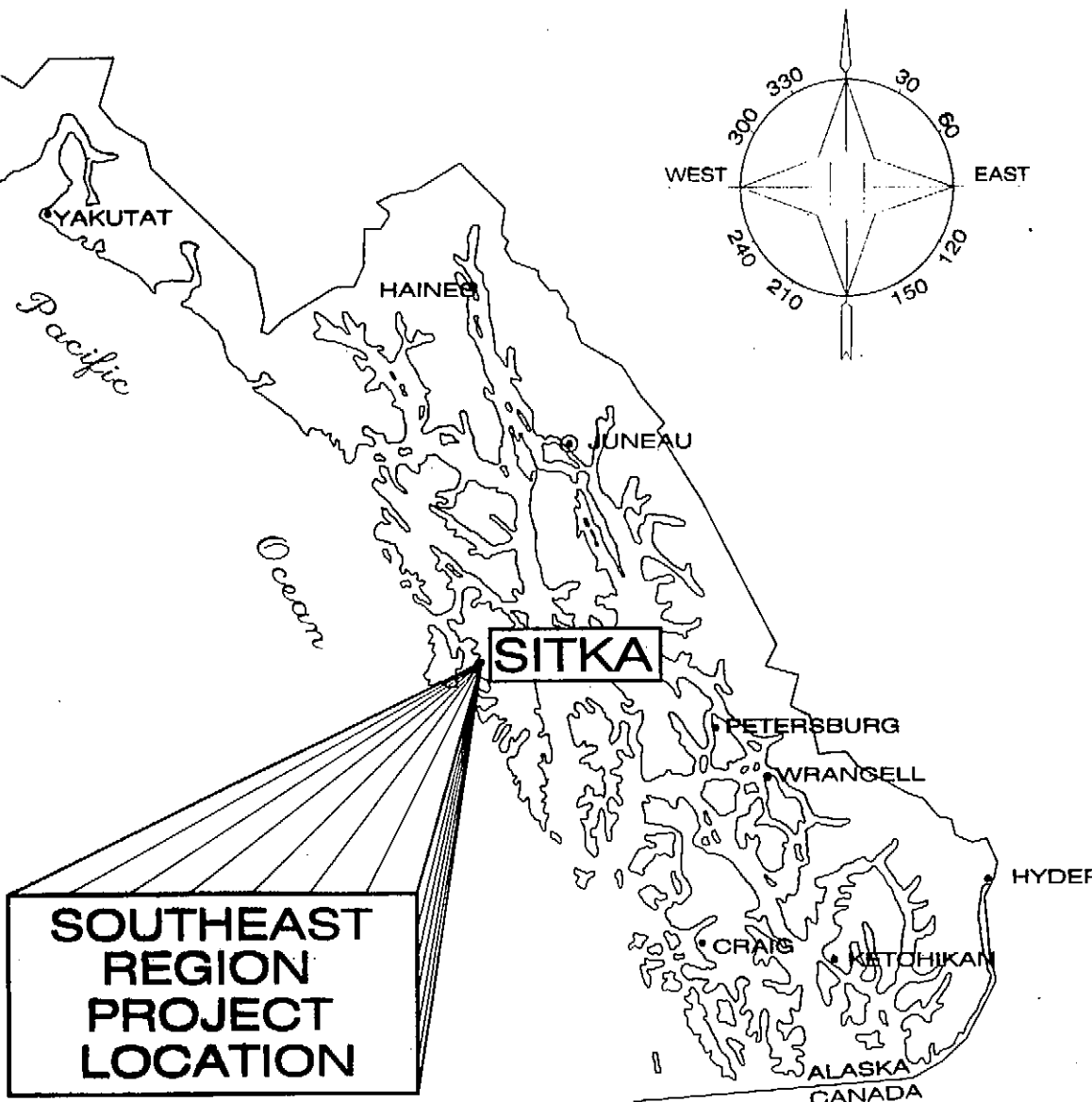


State of Alaska
Department of Transportation
and Public Facilities
Statewide Design and Engineering Services Division

SITKA, ALASKA

SIT-HARBOR DRIVE
LIGHTING, PEDESTRIAN &
BICYCLE IMPROVEMENTS

NH-99-3(7)~68350



TIDAL DATA

EHW 14.6'
EHT 12.7'
MHW 9.1'
ELW -4.0'

BASIS OF ESTIMATE

ITEM No.	ITEM	QUANTITY
301 (1)	CRUSHED AGGREGATE BASE COURSE	1.90 TON / CUBIC YARD
304 (1E)	SUBBASE, GRADING E	1.80 TON / CUBIC YARD
401 (1)	ASPHALT CONCRETE, TYPE II, CLASS "B"	120 LBS. / SQ. YARD / IN DEPTH
401 (2)	ASPHALT MATERIAL, PG 58-28	6% OF ITEM 401 (1)

DESIGN DESIGNATION

ITEM	2003	2023
A.D.T.	5,560	6,780
D.H.V.	560	680
V. (MPH)	35	35
P.H.F.	0.9	0.9
DIRECTIONAL DIST.	55/45	55/45
%TRUCKS	5.5	5.5
EAL	-	1,000,000
TURNING VEHICLE VEHICLE LOADING	WB50 HS25	

INDEX

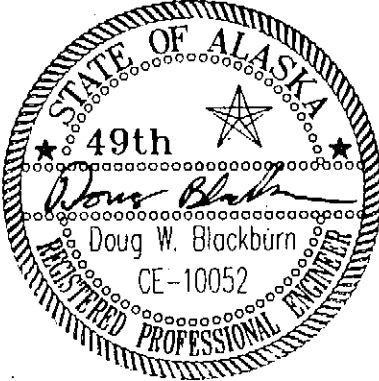
SHEET NO.	DESCRIPTION
A1	TITLE SHEET, BASIS OF ESTIMATE
A2	SURVEY CONTROL PLAN
B1-B4	TYPICAL SECTIONS
D1-D2	MISCELLANEOUS SUMMARIES
D3	SIGN SUMMARY
E1	MISCELLANEOUS DETAILS
E2	AS-BUILT APPROACH RAILING DETAILS
E3-E6	APPROACH RAIL
E7	BOX BEAM END TERMINAL DETAILS
E8	GUARDRAIL/BRIDGE RAIL ~ RT. CONNECTION
E9	BOX BEAM END TERMINAL CONNECTION
F1-F3	PLAN BOP STA. 0+00 TO STA. 24+00
F4-F7	PLAN & PROFILE STA. 24+00 TO EOP STA. 43+80
G1-G4	TRAFFIC CONTROL PLAN
H1-H5	ILLUMINATION PLANS
H6	LUMINAIRE DETAILS
H7	ELECTRICAL DETAILS
J1-J5	SIGNING & STRIPING PLAN
K1-K5	EROSION & SEDIMENT CONTROL PLAN & DETAILS

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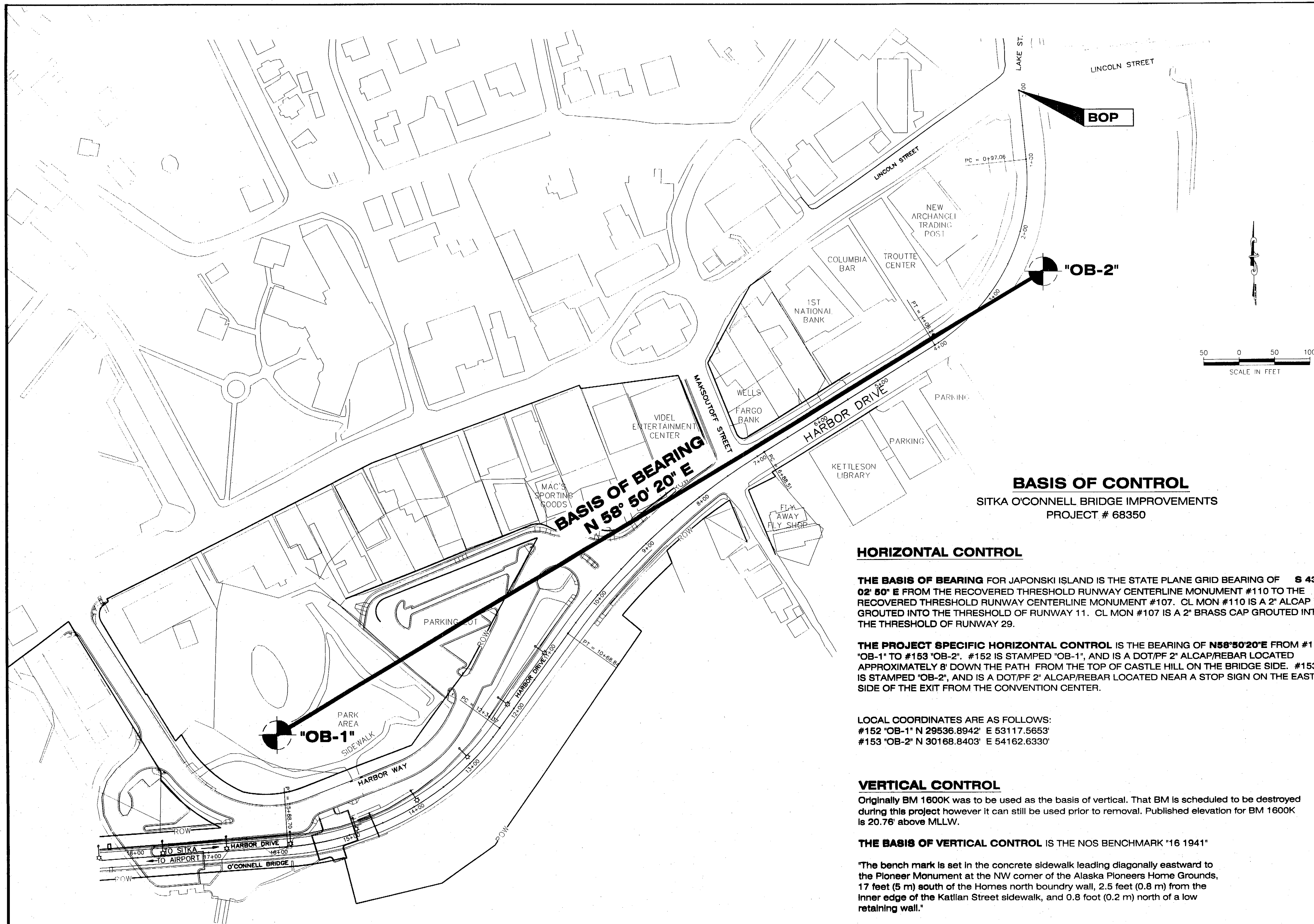
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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION

Project As-Built Drawings have been
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represent to the best of my knowledge, the
project as constructed.
Proj. Engr. _____ Date/2-6-06



STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	NH-99-3(7)~68350	2003	A1	46



BASIS OF CONTROL
SITKA O'CONNELL BRIDGE IMPROVEMENTS
PROJECT # 68350

HORIZONTAL CONTROL

THE BASIS OF BEARING FOR JAPONSKI ISLAND IS THE STATE PLANE GRID BEARING OF **S 43° 02' 50" E** FROM THE RECOVERED THRESHOLD RUNWAY CENTERLINE MONUMENT #110 TO THE RECOVERED THRESHOLD RUNWAY CENTERLINE MONUMENT #107. CL MON #110 IS A 2" ALCAP GROUTED INTO THE THRESHOLD OF RUNWAY 11. CL MON #107 IS A 2" BRASS CAP GROUTED INTO THE THRESHOLD OF RUNWAY 29.

THE PROJECT SPECIFIC HORIZONTAL CONTROL IS THE BEARING OF **N58°50'20"E** FROM #152 "OB-1" TO #153 "OB-2". #152 IS STAMPED "OB-1", AND IS A DOT/PF 2" ALCAP/REBAR LOCATED APPROXIMATELY 8' DOWN THE PATH FROM THE TOP OF CASTLE HILL ON THE BRIDGE SIDE. #153 IS STAMPED "OB-2", AND IS A DOT/PF 2" ALCAP/REBAR LOCATED NEAR A STOP SIGN ON THE EAST SIDE OF THE EXIT FROM THE CONVENTION CENTER.

LOCAL COORDINATES ARE AS FOLLOWS:
#152 "OB-1" N 29536.8942' E 53117.5653'
#153 "OB-2" N 30168.8403' E 54162.6330'

VERTICAL CONTROL

Originally BM 1600K was to be used as the basis of vertical. That BM is scheduled to be destroyed during this project however it can still be used prior to removal. Published elevation for BM 1600K is 20.76' above MLLW.

THE BASIS OF VERTICAL CONTROL IS THE NOS BENCHMARK "16 1941"

"The bench mark is set in the concrete sidewalk leading diagonally eastward to the Pioneer Monument at the NW corner of the Alaska Pioneers Home Grounds, 17 feet (5 m) south of the Homes north boundary wall, 2.5 feet (0.8 m) from the inner edge of the Katlian Street sidewalk, and 0.8 foot (0.2 m) north of a low retaining wall."

THE PUBLISHED ELEVATION FOR BENCHMARK "16 1941 IS 20.36' ABOVE MLLW BASED ON THE 1960-1978 TIDAL EPOCH.

ALTERNATE VERTICAL CONTROL CAN BE ANY TIDAL BENCHMARK PUBLISHED FOR SITKA TIDE STATION 9451600. http://www.co-ops.nos.noaa.gov/benchmarks/benchmarks_old/9451600.html

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ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

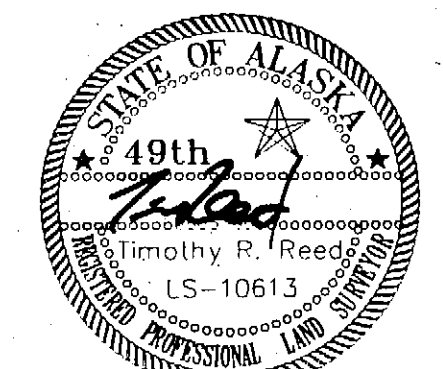
No.	DATE	DESCRIPTION

SIT-HARBOR DRIVE
LIGHTING, PEDESTRIAN & BICYCLE
IMPROVEMENTS
PROJECT NO. 68350

Survey Control Plan

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
Proj. Engr. *[Signature]* Date *2-6-04*

DESIGNED BY: T. REED



CHECKED BY: R. MURPHY

DRAWN/REVISED BY: K.K./R.S.

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

SIT-HARBOR DRIVE
LIGHTING, PEDESTRIAN &
BICYCLE IMPROVEMENTS

Survey Control Plan

PROJECT DESIGNATION NUMBER

MGS-NH-99-3(7)~68350

STATE	YEAR
ALASKA	2003
SHEET NUMBER	TOTAL SHEETS
A2	46

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

SIT-HARBOR DRIVE
LIGHTING, PEDESTRIAN & BICYCLE
IMPROVEMENTS
PROJECT NO. 68350

Asbuilt Typical Sections

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project as constructed.
Proj. Engr. *[Signature]* Date *2-6-06*

DESIGNED BY: D. BLACKBURN



CHECKED BY: J. HEUMANN

DRAWN/REVISED BY: K.K./R.S.

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

SIT-HARBOR DRIVE
LIGHTING, PEDESTRIAN &
BICYCLE IMPROVEMENTS

Asbuilt Typical
Sections

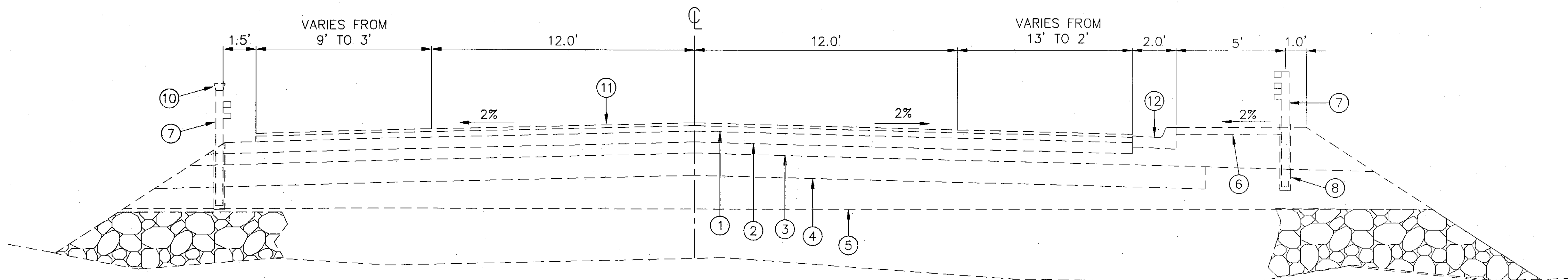
PROJECT DESIGNATION NUMBER

MGS-NH-99-3(7)~68350

STATE	YEAR
ALASKA	2003
SHEET NUMBER	TOTAL SHEETS
B1	46

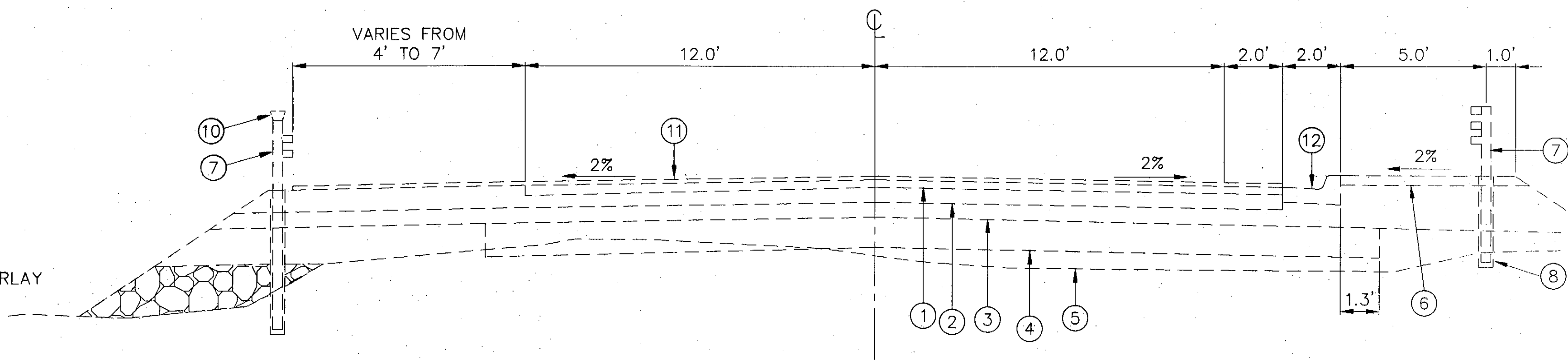
LEGEND

- ① 3" AC PAVEMENT
- ② 6" D-1
- ③ 6" SUBBASE
- ④ 12" SELECT MATERIAL
- ⑤ ROCK BORROW
- ⑥ 4" CONCRETE SIDEWALK
- ⑦ APPROACH RAIL
- ⑧ 1'Ø CONCRETE POST CASING
- ⑨
- ⑩ RAIL MOUNTED LUMINAIRE
- ⑪ 2" ASPHALT PAVEMENT OVERLAY
- ⑫ STD. CURB & GUTTER



TYPICAL SECTION

"O" STA. 10+22 TO 14+62
(TOWN APPROACH)



TYPICAL SECTION

"O" STA. 27+15 TO 34+46
(AIRPORT APPROACH)

NOTES

1.) BETWEEN STA "O" 27+15 & "O" 42+00 THE HIGHWAY C/L WILL SHIFT UP TO 2 FEET.

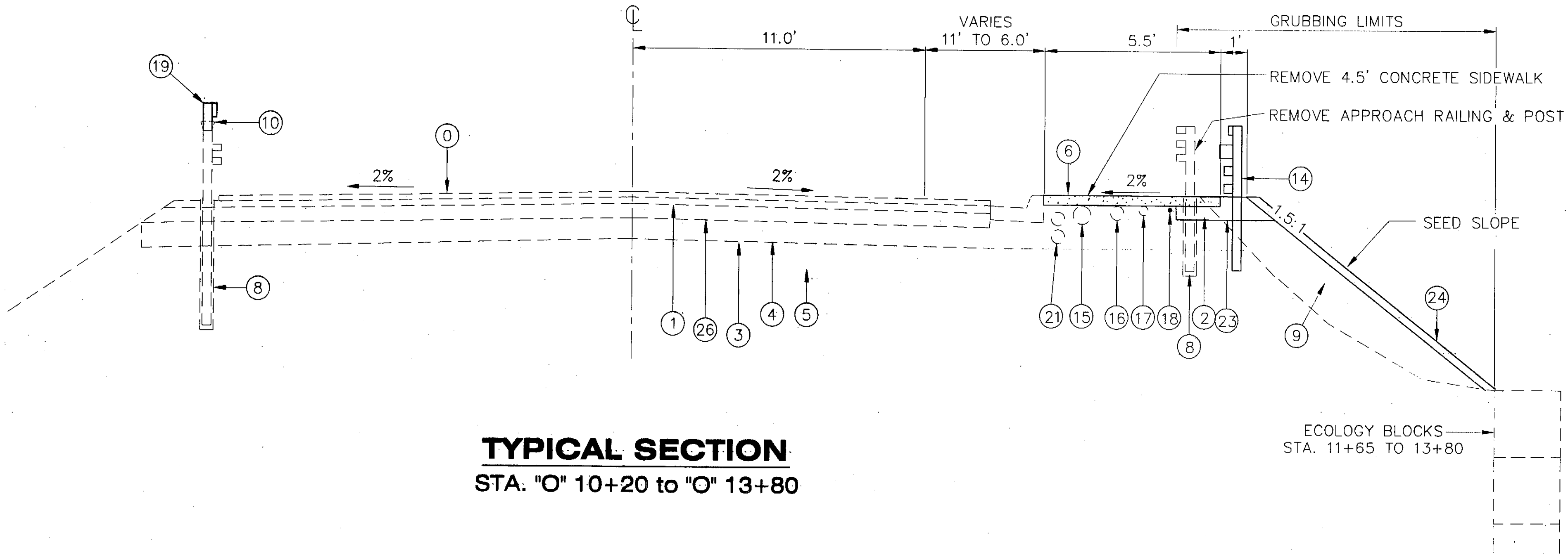
* SAW CUT ASPHALT, SEE DETAIL SHEET E1.

** GUTTER PAN TO BE PAVED TO FACE OF CURB. PROVIDE 6 FEET ASPHALT TAPER IN GUTTER PAN AT STATION 20+33.49 (SEE SHEET E1).

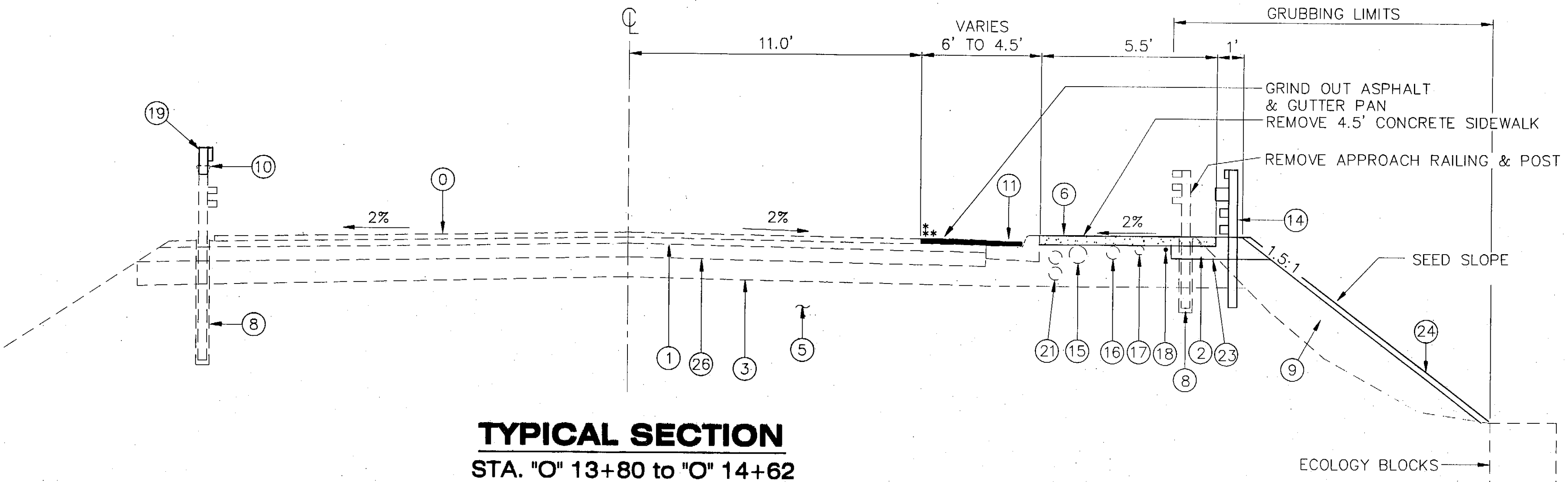
*** EXISTING CURB THAT EXTENDS 12' PAST BRIDGE ABUTMENT TO REMAIN.

LEGEND

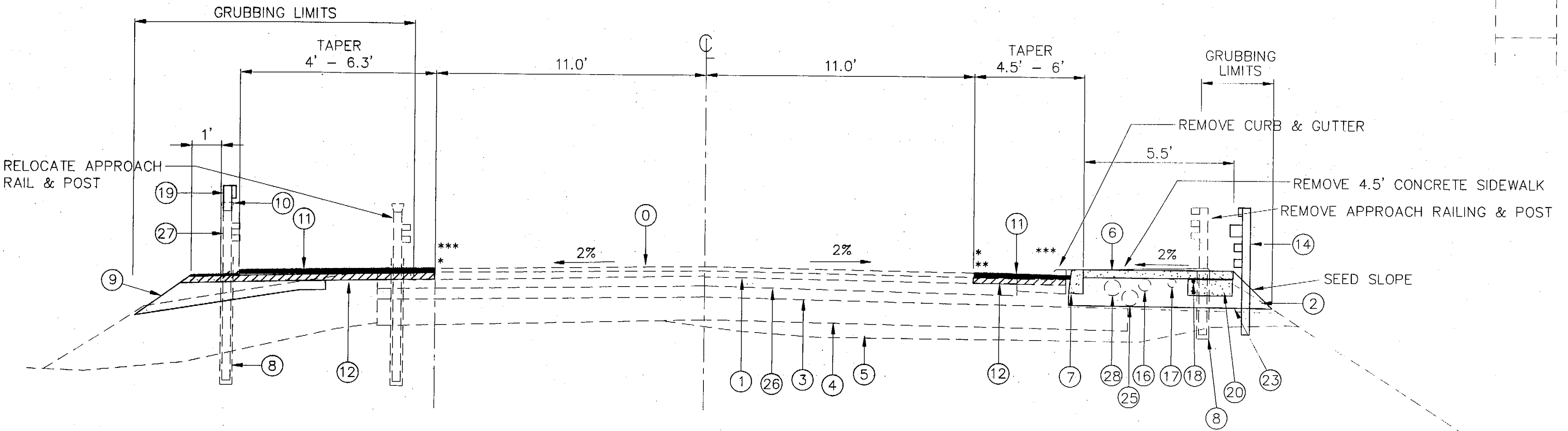
- ① 2" ASPHALT PAVEMENT OVERLAY
- ② 3" ASPHALT PAVEMENT
- ③ 4" CRUSHED AGGREGATE BASE COURSE
- ④ 6" SUBBASE
- ⑤ BORROW
- ⑥ NEW 4" CONCRETE SIDEWALK
- ⑦ 12" CURB
- ⑧ 1'Ø CONCRETE POST CASING
- ⑨ SUBBASE GRADING B
- ⑩ RAIL MOUNTED LUMINAIRE TO BE REMOVED
- ⑪ 2" ASPHALT PAVEMENT
- ⑫ 3" ATB
- ⑬ STANDARD CURB & GUTTER
- ⑭ NEW APPROACH RAILING SHEET D-2 FOR SUMMARY TABLE
- ⑮ 4" ABANDON ELECTRIC CONDUIT AND 3 EACH #000 CONDUCTORS
- ⑯ 3" PHONE CONDUIT W/300 PAIR
- ⑰ 2" PHONE CONDUIT W/ 48 FIBER CABLE
- ⑱ CABLE TV
- ⑲ APPROACH RAIL MODIFICATION
- ⑳ SIDEWALK RETAINING WALL SEE SHEET D1 FOR PLACEMENT DETAILS
- ㉑ 2 EA. 3" PVC CONDUIT
- ㉒ COMMON EXCAVATION
- ㉓ 4" TOPSOIL W/JUTE MESH INSTALLED ON TOP
- ㉔ 6" UTILITY CONDUIT
- ㉕ 6" CRUSHED AGGREGATE BASE COURSE
- ㉖ RELOCATED APPROACH RAIL
- ㉗ REMOVE 4" ABANDONED ELECTRIC CONDUIT & 3 EACH #000 CONDUCTORS



TYPICAL SECTION
STA. "O" 10+20 to "O" 13+80



TYPICAL SECTION
STA. "O" 13+80 to "O" 14+62



TYPICAL SECTION
STA. "O" 27+28 to "O" 28+33.49

PATH:
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Wed, 24/Dec/03 10:00AM vklemmelson
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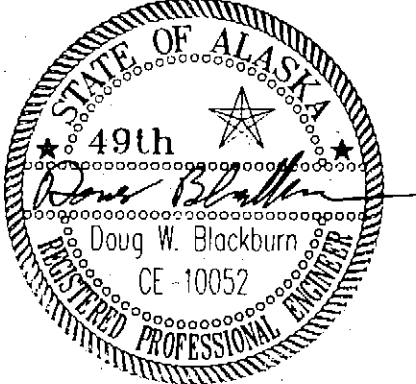
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ATTACHMENT NUMBER		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION

SIT-HARBOR DRIVE
LIGHTING, PEDESTRIAN & BICYCLE
IMPROVEMENTS
PROJECT NO. 68350

Typical Sections

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
Proj. Engr. *[Signature]* Date 2-6-04

DESIGNED BY: D. BLACKBURN



CHECKED BY: J. HEUMANN
DRAWN/REVISED BY: K.K./R.S.

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

SIT-HARBOR DRIVE
LIGHTING, PEDESTRIAN &
BICYCLE IMPROVEMENTS

Typical Sections

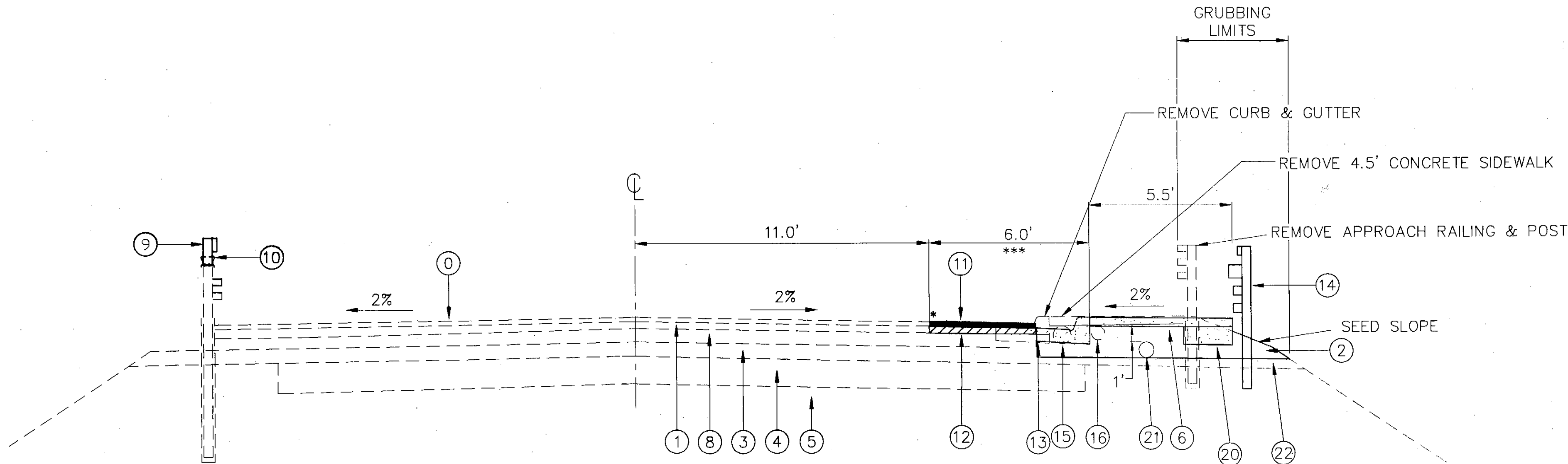
PROJECT DESIGNATION NUMBER

MGS-NH-99-3(7)-68350

STATE	YEAR
ALASKA	2003
SHEET NUMBER	TOTAL SHEETS
B2	46

NOTES

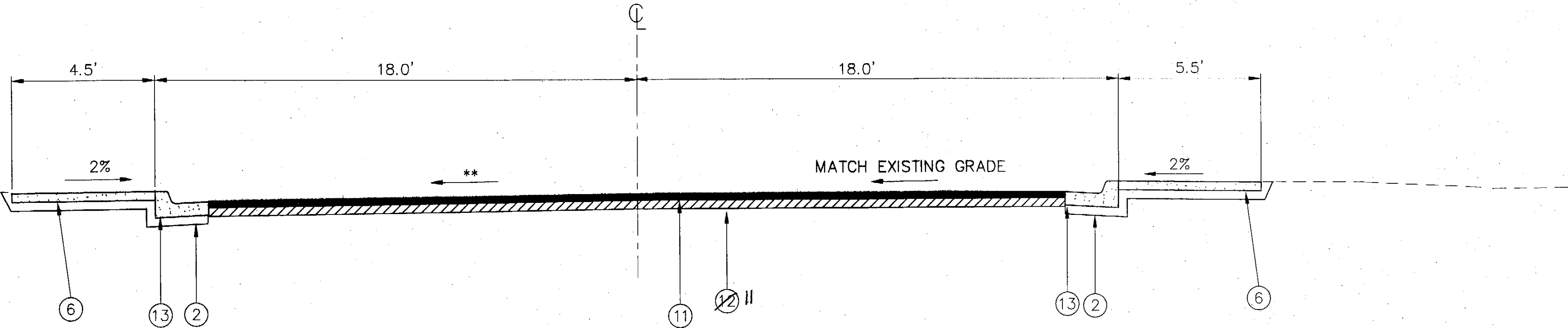
- * SAWCUT ASPHALT, SEE DETAIL SHEET E-1.
- ** MATCH EXISTING GRADE INTO INLET.
- *** TAPERS FROM STA 36+80 TO 38+00.
(6' TO 8')



TYPICAL SECTION
STA. "O" 28+33.49 to "O" 38+20

LEGEND

- ① 2" ASPHALT PAVEMENT OVERLAY
- ② 3" ASPHALT PAVEMENT
- ③ 4" CRUSHED AGGREGATE BASE COURSE
- ④ 6" SUBBASE
- ⑤ 12" SELECT MATERIAL
- ⑥ ROCK BORROW
- ⑦ 4" CONCRETE SIDEWALK
- ⑧ 12" STANDARD CURB
- ⑨ 6" CRUSHED AGGREGATE BASE COURSE
- ⑩ APPROACH RAIL MODIFICATION
- ⑪ RAIL MOUNTED LUMINAIRE
- ⑫ 2" ASPHALT PAVEMENT
- ⑬ 3" ATB
- ⑭ STANDARD CURB & GUTTER
- ⑮ NEW APPROACH RAILING
- ⑯ REMOVE ABANDONED 4" ELECTRIC CONDUIT AND 3 EACH #000 CONDUCTORS
- ⑰ 3" PHONE CONDUIT W/300 PAIR TO BE REMOVED
- ⑱ SIDEWALK RETAINING WALL BLOCK, SEE SHEET D1 FOR PLACEMENT.
- ⑲ 6" UTILITY CONDUIT
- ⑳ COMMON EXCAVATION



TYPICAL SECTION
STA. "S" 10+50

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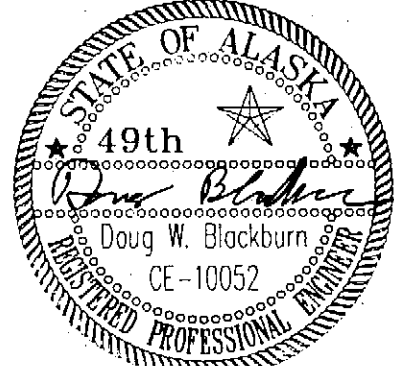
ADDENDUM NUMBER		
ATTACHMENT NUMBER		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION

SIT-HARBOR DRIVE
LIGHTING, PEDESTRIAN & BICYCLE
IMPROVEMENTS
PROJECT NO. 68350

Typical Sections

Project As-Built Drawings have been
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represent to the best of my knowledge, the
project as constructed.
Proj. Engr. *[Signature]* Date 12-6-04

DESIGNED BY: D. BLACKBURN



CHECKED BY: J. HEUMANN

DRAWN/REVISED BY: K.K./R.S.

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING
SERVICES DIVISION
SIT-HARBOR DRIVE
LIGHTING, PEDESTRIAN &
BICYCLE IMPROVEMENTS

Typical Sections

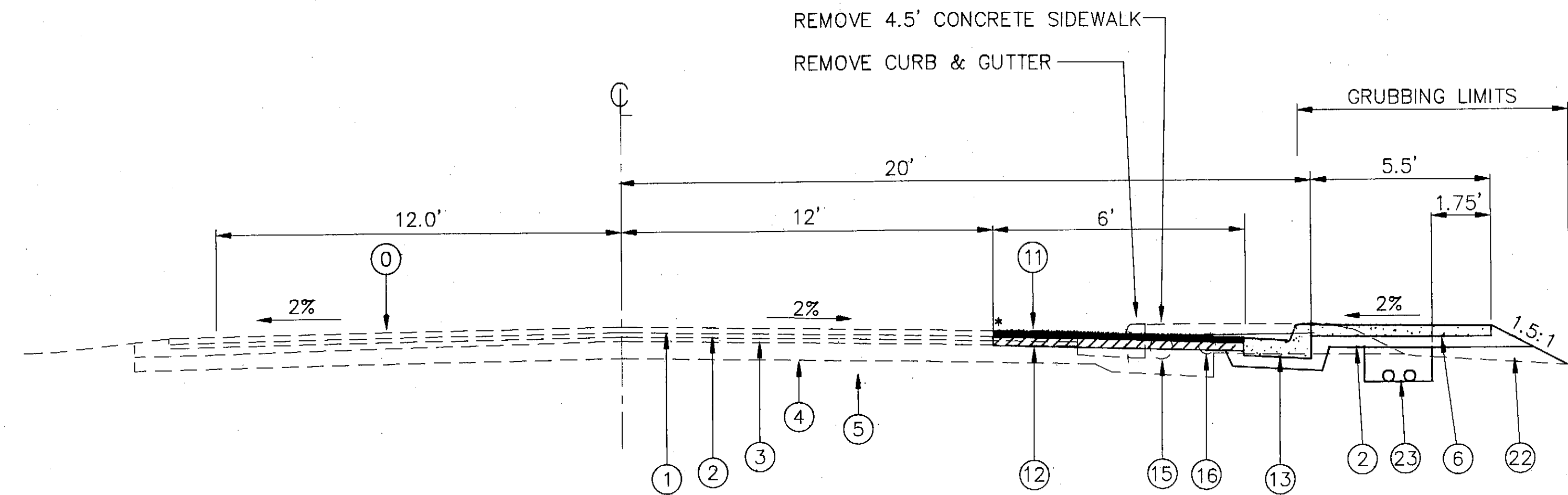
PROJECT DESIGNATION NUMBER

MGS-NH-99-3(7)-68350

STATE	YEAR
ALASKA	2003
SHEET NUMBER	TOTAL SHEETS
B3	46

NOTES

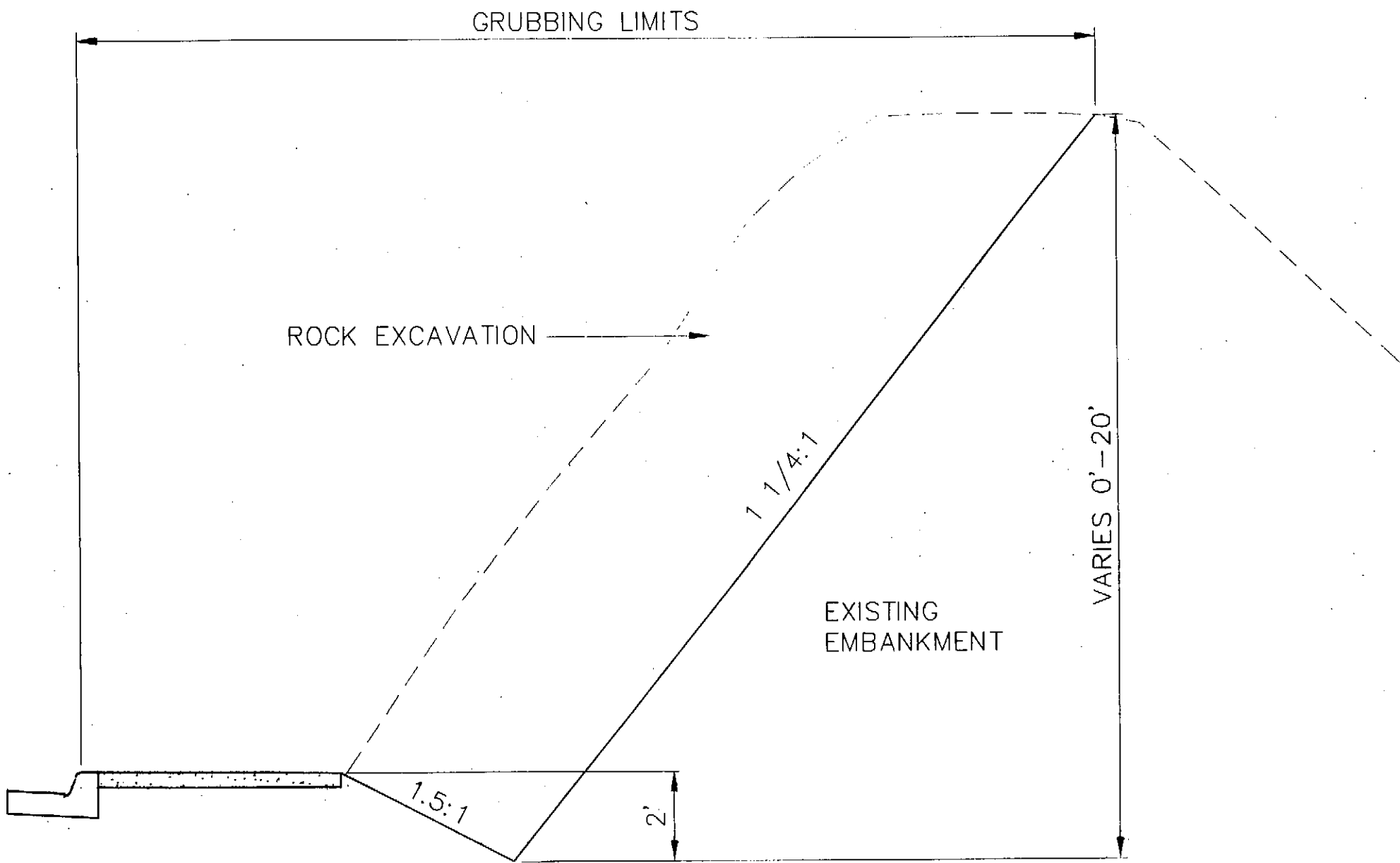
- * SAWCUT ASPHALT, SEE DETAIL SHEET E1.
- ** MATCH EXISTING GRADE INTO INLET.



TYPICAL SECTION
STA. "O" 38+99 to "O" 41+60

LEGEND

- ① 2" ASPHALT PAVEMENT OVERLAY
- ② 3" ASPHALT PAVEMENT
- ③ 4" CRUSHED AGGREGATE BASE COURSE
- ④ 6" SUBBASE
- ⑤ 12" SELECT MATERIAL
- ⑥ ROCK BORROW
- ⑦ 4" CONCRETE SIDEWALK
- ⑧ 12" STANDARD CURB
- ⑨ 1'Ø CONCRETE POST CASING
- ⑩ RAIL MOUNTED LUMINAIRE
- ⑪ 2" ASPHALT PAVEMENT
- ⑫ 3" ATB
- ⑬ STANDARD CURB & GUTTER
- ⑭ NEW APPROACH RAILING
- ⑮ 4" ABANDON ELECTRIC CONDUIT AND 3 EACH #000 CONDUCTERS TO BE REMOVED
- ⑯ 3" PHONE CONDUIT W/300 PAIR
- ⑰ 2" PHONE CONDUIT W/ 48 FIBER CABLE
- ⑱ CABLE TV
- ⑲ 4" ATB
- ⑳ 6" PVC CONDUIT
- ㉑ USEABLE FROM EXCAVATION
- ㉒ TRENCH EXCAVATION, 1' DEEP, 2' WIDE AND 2-4" CONDUITS INSTALLED BY OTHERS



ROCK EXCAVATION DETAIL
STA. "O" 39+60 to "O" 41+40

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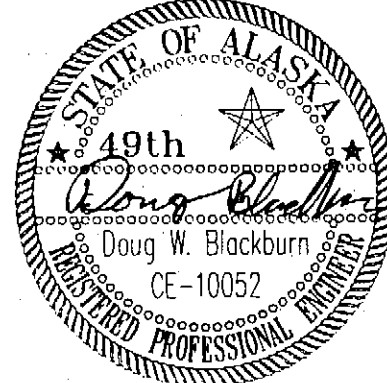
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ATTACHMENT NUMBER		
RECORD OF REVISIONS		
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SIT-HARBOR DRIVE
LIGHTING, PEDESTRIAN & BICYCLE
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PROJECT NO. 68350

Typical Sections

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Proj. Engr. *[Signature]* Date 2-6-06

DESIGNED BY: D. BLACKBURN



CHECKED BY: J. HEUMANN
DRAWN/REVISED BY: K.K./R.S.

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING
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SIT-HARBOR DRIVE
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Typical Sections

PROJECT DESIGNATION NUMBER
MGS-NH-99-3(7)-68350

STATE	YEAR
ALASKA	2003
SHEET NUMBER	TOTAL SHEETS
B4	46

APPROACH RAIL REMOVAL SUMMARY					
BEGIN STATION	END STATION	OFFSET		LENGTH (feet)	REMARKS
		LEFT	RIGHT		
"O" 10+15	"O" 14+44.76		X	430	
"O" 13+98.76	"O" 14+49.76	X		51	
"O" 27+27.76	"O" 27+78.76	X		51	
"O" 27+27.76	"O" 34+48		X	720	
"O" 35+40	"O" 35+76	X		36	SEE SHEET E9
TOTAL				1,288	

CURB & GUTTER REMOVAL SUMMARY					
BEGIN STATION	END STATION	OFFSET		LENGTH (feet)	REMARKS
		LEFT(ft.)	RIGHT(ft.)		
"O" 27+16	"O" 38+26		X	1,100	REMOVE & DISPOSE
"O" 38+90	"O" 41+60		X	270	REMOVE & DISPOSE
"S" 10+17	"S" 10+47	X		30	REMOVE & DISPOSE
"S" 10+17	"S" 10+39		X	22	REMOVE & DISPOSE
TOTAL				1,422	

SIDEWALK REMOVAL SUMMARY					
BEGIN STATION	END STATION	OFFSET		LENGTH (feet)	REMARKS
		LEFT	RIGHT		
"O" 10+20	"O" 14+60		X	440	REMOVE & DISPOSE
"O" 27+15.7	"O" 38+13		X	1,097	REMOVE & DISPOSE
"O" 38+99	"O" 41+60		X	301	REMOVE & DISPOSE
"S" 10+17	"S" 10+47	X		30	REMOVE & DISPOSE
"S" 10+17	"S" 10+39		X	22	REMOVE & DISPOSE
TOTAL				1,890	

REMOVAL OF STRUCTURES & OBSTRUCTIONS		
"O" STATION	OFFSET	REMARKS
30+60	18.3' RT.	ELECTRICAL, 2'x2'x2' HANDHOLE
31+25	18.3' RT.	TELEPHONE, 2'x2'x2' HANDHOLE
35+52	16.5' RT.	TELEPHONE, 6'x6'x6' VAULT
40+01	16.3' RT.	TELEPHONE, 6'x6'x6' VAULT
27+15 TO 40+10	RT.	TELEPHONE CONDUIT & 300 PAIR CONDUCTORS
29+99	RT.	TYPE "A" INLET & DRAIN PIPE
33+43	RT.	TYPE "A" INLET & DRAIN PIPE
38+65	RT.	TYPE "A" INLET & DRAIN PIPE
41+00	RT.	TYPE "A" INLET, PLUG PIPE WITH CONCRETE

REMOVAL OF PAVEMENT				
BEGIN STATION	END STATION	OFFSET		REMARKS
		LEFT(ft.)	RIGHT(ft.)	
13+61.27	14+62.77	X	X	REMOVE AND DISPOSE ASPHALT PAVEMENT & WATERPROOFING MEMBRANE
17+82.51	18+85.85	X	X	REMOVE AND DISPOSE ASPHALT PAVEMENT & WATERPROOFING MEMBRANE
25+41.67	26+45.01	X	X	REMOVE AND DISPOSE ASPHALT PAVEMENT & WATERPROOFING MEMBRANE
26+64.75	27+66.25	X	X	REMOVE AND DISPOSE ASPHALT PAVEMENT & WATERPROOFING MEMBRANE
27+15	41+60		X	SEE SHEET F4 TO F7

CURB & GUTTER SUMMARY					
BEGIN STATION	END STATION	OFFSET		LENGTH (feet)	REMARKS
		LEFT	RIGHT		
"S" 10+14	"S" 10+48	X		41.5	
"S" 10+21	"S" 10+52		X	42.5	MATCH EXISTING GRND 10+52 (17.68'), SPILL GUTTER PAN
"O" 27+15	"O" 38+13		X	1,098	
"O" 38+99	"O" 41+60		X	261	MATCH EXISTING INLET
TOTAL				1,443	

SIDEWALK RETAINING WALL SUMMARY						
BEGIN STATION	END STATION	OFFSET		LENGTH (feet)	NUMBER BLOCKS	REMARKS
		LEFT	RIGHT			
"0" 27+69	"0" 28+40		X	71	1 HIGH	1 BLOCK HIGH = 8"
"0" 32+30	"0" 32+80		X	50	1 HIGH	
"0" 32+80	"0" 33+40		X	60	2 HIGH	
"0" 33+40	"0" 34+50		X	110	1 HIGH	
TOTAL				291		

SIDEWALK SUMMARY							
BEGIN STATION	END STATION	OFFSET		LENGTH (feet)	WIDTH (feet)	AREA (sq ft)	REMARKS
		LEFT	RIGHT				
"S" 10+14	"S" 10+48	X		41.5	5.5	228	
"S" 10+21	"S" 10+52		X	42.5	5.5	233	
"O" 10+20	"O" 14+60		X	440	5.5	2,420	
"O" 27+15	"O" 38+13		X	1,097	5.5	6,033	
"O" 38+99	"O" 41+58		X	261	5.5	1,435.5	MATCH EXISTING SIDEWALK
TOTAL				1,440		10,350	

COLD PLANING SUMMARY					
BEGIN STATION	END STATION	OFFSET		LENGTH (feet)	REMARKS
		LEFT(ft.)	RIGHT(ft.)		
"O" 13+80	"O" 14+62		X	82	GRIND FROM 11' RT. TO FACE OF RT. CURB
TOTAL				82	

INLET SUMMARY							
STATION	OFFSET*		INLET TYPE	FG*	INVERT	GRATE TYPE	REMARKS
	LEFT(ft.)	RIGHT(ft.)					
"O" 29+99		15	A	36.30	32.97	G3R **	NEW INLET, DO NOT DEPRESS GRATE Δ
"O" 33+43		15	A	22.32	18.99	G3R **	NEW INLET, DO NOT DEPRESS GRATE Δ
"O" 38+65		13	A				NEW INLET, SOLID LID "STORM DRAIN" FIELD VERIFY PIPE SIZES & INVERTS
* : LIP OF GUTTER. ** : SEE STANDARD DRAWING D-23. Δ INSTALL 18" EXIT PIPE ON INLET							

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PSPACE 1=1(F) OR MSPACE 1=1(F)

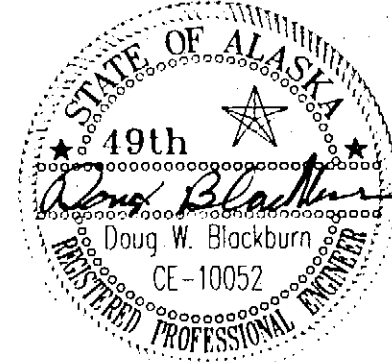
ADDENDUM NUMBER		
ATTACHMENT NUMBER		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION

SIT-HARBOR DRIVE
LIGHTING, PEDESTRIAN & BICYCLE
IMPROVEMENTS
PROJECT NO. 68350

Miscellaneous Summaries

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
Proj. Engr. *JR* Date: 2-6-06

DESIGNED BY: D. BLACKBURN



CHECKED BY: J. HEUMANN
DRAWN/REVISED BY: K.K./R.S.

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING
SERVICES DIVISION
SIT-HARBOR DRIVE
LIGHTING, PEDESTRIAN &
BICYCLE IMPROVEMENTS

Miscellaneous Summaries	
PROJECT DESIGNATION NUMBER	
MGS-NH-99-3(7)~68350	
STATE	YEAR
ALASKA	2003
SHEET NUMBER	TOTAL SHEETS
D1	46

GRUBBING SUMMARY			
BEGIN "O" STATION	END "O" STATION	LENGTH (feet)	REMARKS
10+20 RT	12+00 RT	180	GRUB SHOULDER
12+20 RT	14+60 RT	260	GRUB SLOPE
27+15 LT	29+20 LT	205	GRUB SHOULDER & HINGE POINT
27+15 RT	32+20 RT	505	GRUB SHOULDER & HINGE POINT
32+20 RT	33+50 RT	130	GRUB SLOPE
33+50 RT	38+20 RT	470	GRUB SHOULDER & HINGE POINT
38+99 RT	39+80 RT	81	GRUB SHOULDER
39+80 RT	41+30 RT	150	GRUB SLOPE
41+30 RT	41+60 RT	30	GRUB SHOULDER
"S" 10+20 LT	"S" 10+50 LT	30	GRUB SHOULDER
"S" 10+20 RT	"S" 10+50 RT	30	GRUB SHOULDER
TOTAL		2,071	

APPROACH RAIL MODIFICATION SUMMARY					
BEGIN "O" STATION	END "O" STATION	OFFSET (feet)		LENGTH (feet)	REMARKS
		LEFT	RIGHT		
10+07.76	13+98.76	X		391	SEE BRIDGE REHABILITATION SHEETS
27+78.76	35+62.76	X		784	SEE BRIDGE REHABILITATION SHEETS
TOTAL				1,175	

LANE STRIPING SUMMARY				
BEGIN STATION	END STATION	OFFSET		REMARKS
		LEFT(ft.)	RIGHT(ft.)	
"O" 8+50	"O" 42+80	—	—	DOUBLE YELLOW CENTERLINE
"O" 42+80	"O" 43+80	—	—	DOUBLE YELLOW CENTERLINE, MATCH EXISTING C/L
"O" 9+00	"O" 38+20	11'		FOGLINE, TAPER 9+00 TO 10+00, 12' LT. TO 11'LT.
"O" 36+80	"O" 39+00	X		FOGLINE, TAPER 11' LT. TO 12' LT.
"O" 39+00	"O" 43+80	12'		FOGLINE, MATCH EXISTING AT 43+80 WITH 100' TAPER
"O" 10+00	"O" 38+20		11'	FOGLINE, TAPER 9+00 TO 10+00, 12' RT. TO 11'RT.
"O" 39+00	"O" 43+80		12'	FOGLINE, MATCH EXISTING AT 43+80 WITH 100' TAPER

APPROACH RAIL SUMMARY				
BEGIN "O" STATION	END "O" STATION	OFFSET (feet)		REMARKS
		LEFT	RIGHT	
10+15	13+98.76		X	PROVIDE RAIL RETURN AT EACH END
27+27.76	34+47		X	PROVIDE RAIL RETURN AT 34+47
27+78	28+33.50	X		RELOCATE POSTS & RAILING
—	—			—
				—

APPROACH RAIL RETURN SUMMARY					
BEGIN "O" STATION	END "O" STATION	OFFSET (feet)		QTY	REMARKS
		LEFT	RIGHT		
10+15	13+98.76		X	2	PROVIDE RAIL RETURN AT EACH END
27+27.76	34+47		X	1	PROVIDE RAIL RETURN AT 34+47
TOTAL				3	

GUARDRAIL/BRIDGERAIL CONNECTION SUMMARY					
BEGIN "O" STATION	END "O" STATION	OFFSET (feet)		LENGTH (feet)	REMARKS
		LEFT	RIGHT		
13+98.76	14+49.76	X		51	SEE BRIDGE REHAB. SHEET L25–L26
27+27.76	27+78.76	X		51	SEE BRIDGE REHAB. SHEET L25–L26
27+27.76	27+78.76		X	51	SEE SHEET E8
TOTAL				153	

BOX BEAM END TERMINAL SUMMARY				
BEGIN "O" STATION	END "O" STATION	OFFSET (feet)		REMARKS
		LEFT	RIGHT	
35+40	35+88	X		APPROXIMATE STATIONING, SEE SHEET E9

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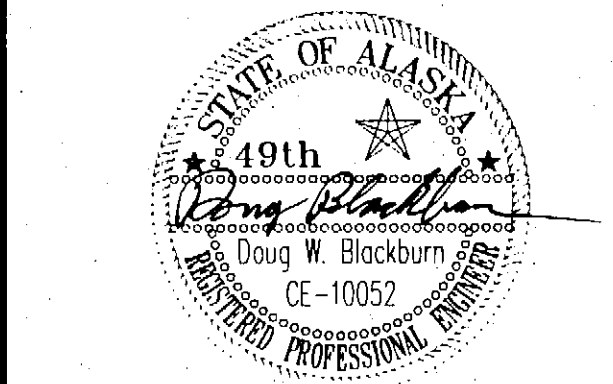
ADDENDUM NUMBER		
ATTACHMENT NUMBER		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION

SIT-HARBOR DRIVE
LIGHTING, PEDESTRIAN & BICYCLE
IMPROVEMENTS
PROJECT NO. 68350

Miscellaneous Summaries

Project As-Built Drawings have been
reviewed by the Project Engineer and
represent to the best of my knowledge,
the project as constructed.
Proj. Eng. *[Signature]* Date *12-6-06*

DESIGNED BY: D. BLACKBURN



CHECKED BY: J. HEUMANN
DRAWN/REVISED BY: K.K./R.S.

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING
SERVICES DIVISION
SIT-HARBOR DRIVE
LIGHTING, PEDESTRIAN &
BICYCLE IMPROVEMENTS

Miscellaneous
Summaries

PROJECT DESIGNATION NUMBER
MGS-NH-99-3(7)~68350

STATE	YEAR
ALASKA	2003
SHEET NUMBER	TOTAL SHEETS
D2	46

SIGN SUMMARY

SIGN NUMBER	STATION	OFFSET		TYPE	FACING TRAFFIC	SIGN LEGEND	SIZE (IN)		AREA (SQ.FT.)	POST SIZE	POST TYPE	REMARKS
		LT	RT				WD	HT				
1	0+03	X	-	R1-1	NB	STOP	30	30	6.25	2.5"	PST	-
2	-	X	-	R3-1	NB	4 WAY	12	6	0.50	-	-	MOUNT BELOW STOP SIGN
3	-	X	-	D3-1	NB/SB	LINCOLN ST	36	8	2.00	-	-	MOUNT ABOVE STOP SIGN
4	-	X	-	D3-1	EB/WB	HARBOR DR	36	8	2.00	-	-	MOUNT ABOVE STOP SIGN
5	0+85	-	X	R1-1	EB	STOP	30	30	6.25	2.5"	PST	-
6	-	-	X	R3-1	EB	4 WAY	12	6	0.50	-	-	MOUNT BELOW STOP SIGN
7	-	-	X	D3-1	NB/SB	LINCOLN ST	36	8	2.00	-	-	MOUNT ABOVE STOP SIGN
8	-	-	X	D3-1	EB/WB	HARBOR DR	36	8	2.00	-	-	MOUNT ABOVE STOP SIGN
9	0+85	X	-	R7P-101R	NB	NO PARKING ANYTIME	12	18	1.50	2.5"	PST	-
10	1+05	-	X	R7P-102	SB	NO PARKING 4AM TO 7AM	12	18	1.50	2.5"	PST	-
11	-	-	-	R7-108	SB	2 HR PARKING 8AM TO 5PM	12	18	1.50	-	-	MOUNT BELOW SIGN #10
12	2+00	X	-	W3-1A	NB	STOP AHEAD SYMBOL	36	36	9.00	2.5"	PST	-
13	2+30	-	X	R2-1	SB	SPEED LIMIT 25	30	36	7.50	2.5"	PST	-
14	2+45	X	-	R1-1	WB	STOP	30	30	6.25	2.5"	PST	-
15	2+85	X	-	R5-1	EB	DO NOT ENTER	30	30	6.25	2.5"	PST	-
16	-	X	-	R6-1R	SB	ONE WAY w/ ARROW	36	12	3.00	-	-	MOUNT BELOW SIGN #15
17	-	X	-	R6-1L	NB	ONE WAY w/ ARROW	36	12	3.00	-	-	MOUNT BELOW SIGN #15
18	3+60	X	-	R7P-102	NB	NO PARKING 4AM TO 7AM	12	18	1.50	2.5"	PST	-
19	-	X	-	R7-108	NB	2 HR PARKING 8AM TO 5PM	12	18	1.50	-	-	MOUNT BELOW SIGN #18
20	4+45	X	-	R6-1L	SB	ONE WAY w/ ARROW	36	12	3.00	2.5"	PST	-
21	-	X	-	R6-1R	NB	ONE WAY w/ ARROW	36	12	3.00	-	-	MOUNT BACK TO BACK WITH SIGH #20
22	5+00	-	X	R7P-102	SB	NO PARKING 4AM TO 7AM	12	18	1.50	2.5"	PST	-
23	-	-	X	R7-108	SB	2 HR. PARKING 8AM TO 5PM	12	18	1.50	-	-	MOUNT BELOW SIGN #22
24	6+25	-	X	W11-2	SB	PEDESTRIAN CROSSING (SYM)	36	36	9.00	2.5"	PST	-
25	-	-	X	W16-7P	SB	DIAGONAL ARROW SYMBOL	24	12	2.00	-	-	MOUNT BELOW SIGN #24
26	6+40	X	-	R7P-102	NB	NO PARKING 4AM TO 7AM	12	18	1.50	2.5"	PST	-
27	-	X	-	R7-108	NB	2 HR. PARKING 8AM TO 5PM	12	18	1.50	-	-	MOUNT BELOW SIGN #26
28	6+60	-	X	R7P-102	SB	NO PARKING 4AM TO 7AM	12	18	1.50	2.5"	PST	-
29	-	-	X	R7-108	SB	2 HR. PARKING 8AM TO 5PM	12	18	1.50	-	-	MOUNT BELOW SIGN #28
30	6+85	X	-	I-150	SB	ADOPT A HIGHWAY	30	24	5.00	2.5	PST	-
31	-	X	-	PLAQUE	SB	US COAST GUARD SITKA	30	12	2.50	-	-	MOUNT BELOW SIGN #30
32	7+50	-	X	R1-1	EB	STOP	30	30	6.25	2.5"	PST	-
33	-	-	X	D3-1	EB/WB	HARBOR DR	36	8	2.00	-	-	MOUNT ABOVE STOP SIGN
34	-	-	X	D3-1	NB/SB	MAKSOUTOFF ST	42	8	2.33	-	-	MOUNT ABOVE STOP SIGN
35	-	-	X	R7-108	EB	2 HR. PARKING 8AM TO 5PM	12	18	1.50	-	-	MOUNT BELOW STOP SIGN
36	8+20	-	X	R7P-106	SB	NO PARKING LOADING ZONE	12	18	1.50	2.5"	PST	-
37	8+30	X	-	R7P-102	NB	NO PARKING 4AM TO 7AM	12	18	1.50	2.5"	PST	-
38	-	X	-	R7-108	NB	2 HR. PARKING 8AM TO 5PM	12	18	1.50	-	-	MOUNT BELOW SIGN #37
39	8+50	-	X	R2-1	SB	SPEED LIMIT 25	30	36	7.50	2.5"	PST	-
40	8+70	X	-	W11-2	NB	PEDESTRIAN CROSSING (SYM)	36	36	9.00	2.5"	PST	-
41	-	X	-	W16-7P	NB	DIAGONAL ARROW SYMBOL	24	12	2.00	-	-	MOUNT BELOW SIGN #40
42	10+05	-	X	R1-1	EB	STOP	30	30	6.25	2.5"	PST	-
43	-	-	X	D3-1	EB/WB	HARBOR DR	36	8	2.00	-	-	MOUNT ABOVE STOP SIGN
44	-	-	X	D3-1	NB/SB	HARBOR WAY	42	8	2.33	-	-	MOUNT ABOVE STOP SIGN
45	10+25	X	-	R2-1	NB	SPEED LIMIT 25	30	36	7.50	2.5"	PST	-
46	10+65	-	X	R2-1	SB	SPEED LIMIT 35	30	36	7.50	2.5"	PST	-
47	13+05	X	-	R2-5A	NB	REDUCE SPEED AHEAD	24	30	5.00	2.5"	PST	-
48	28+00	X	-	R2-1	NB	SPEED LIMIT 35	30	36	7.50	2.5"	PST	-
49	28+00	-	X	R2-1	SB	SPEED LIMIT 35	30	36	7.50	2.5"	PST	-
50	10+05	-	X	R1-1	EB	STOP	30	30	6.25	2.5"	PST	-
51	-	-	X	D3-1	EB/WB	AIRPORT RD	36	8	2.00	-	-	MOUNT ABOVE STOP SIGN
52	-	-	X	D3-1	NB/SB	SEWARD AVE	36	8	2.00	-	-	MOUNT ABOVE STOP SIGN
53									192			
54												
55												
TOTAL							192					

SIGNING NOTES:

1. ALL SIGNS SHALL BE 0.125" THICKNESS.
2. FOR PURPOSE OF ORIENTATION, HARBOR DRIVE AND AIRPORT ROAD ARE CONSIDERED AS RUNNING NORTH/SOUTH, SIDE STREETS AS RUNNING EAST/WEST.

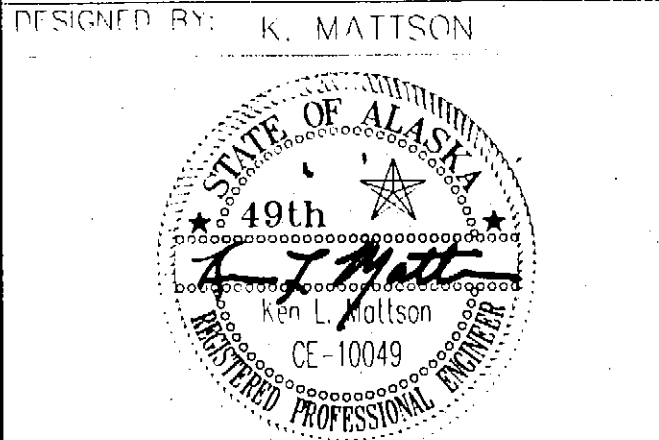
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ADDENDUM NUMBER		
ATTACHMENT NUMBER		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION

SIT- HARBOR DRIVE
LIGHTING, PEDESTRIAN & BICYCLE
IMPROVEMENTS
PROJECT NO. 68350

Sign Summary

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
Proj. Eng. *[Signature]* Date 12-6-06



CHECKED BY: K. MATTISON	
DRAWN/REVISED BY: K.K./R.S.	
STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION	
SIT-HARBOR DRIVE LIGHTING, PEDESTRIAN & BICYCLE IMPROVEMENTS	
Sign Summary	
PROJECT DESIGNATION NUMBER	
MGS-NH-99-3(7)~68350	
STATE	YEAR
ALASKA	2003
SHEET NUMBER	TOTAL SHEETS
D3	46

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

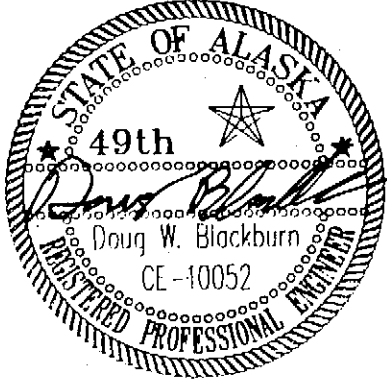
No.	DATE	DESCRIPTION

SIT- HARBOR DRIVE
LIGHTING, PEDESTRIAN & BICYCLE
IMPROVEMENTS
PROJECT NO. 68350

Miscellaneous Details

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reviewed by the Project Engineer and
represent to the best of my knowledge,
the project as constructed.
Proj. Eng. *[Signature]* Date 12-6-06

DESIGNED BY: J. HEUMANN



CHECKED BY: J. HEUMANN

DRAWN/REVISED BY: K.K./R.S.

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

SIT-HARBOR DRIVE
LIGHTING, PEDESTRIAN &
BICYCLE IMPROVEMENTS

Miscellaneous
Details

PROJECT DESIGNATION NUMBER

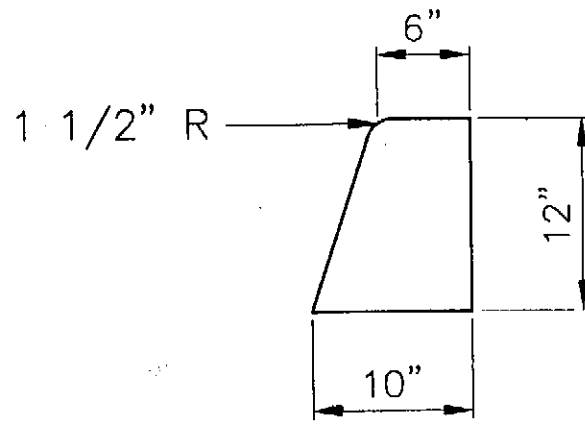
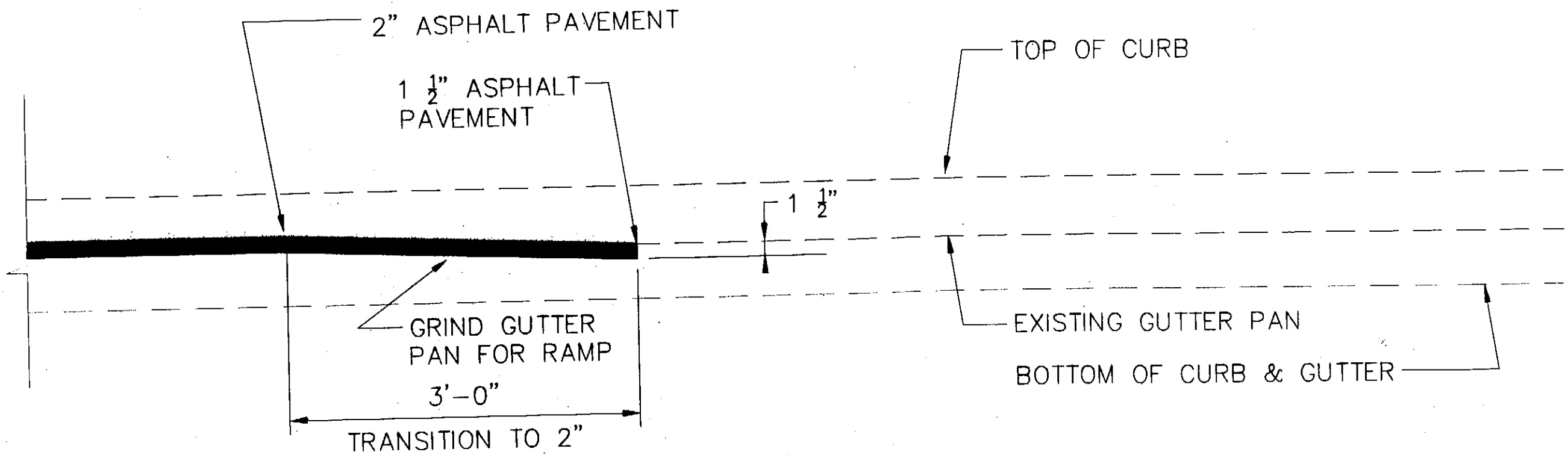
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STATE YEAR

ALASKA 2003

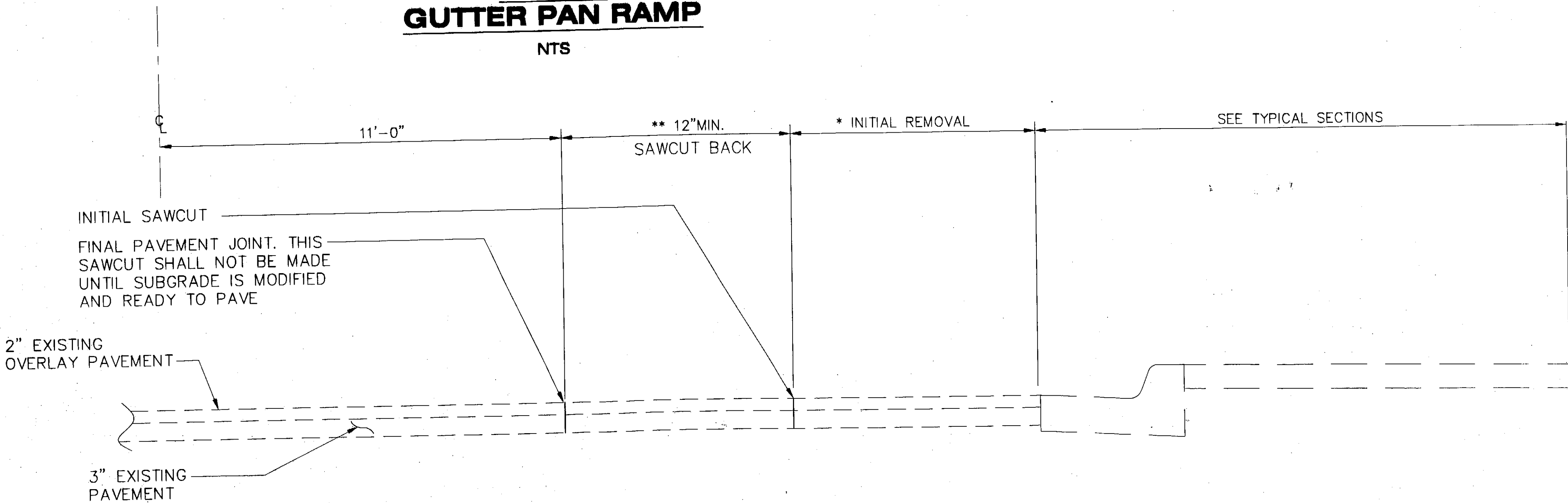
SHEET NUMBER TOTAL SHEETS

E1 46



12" CURB

NTS

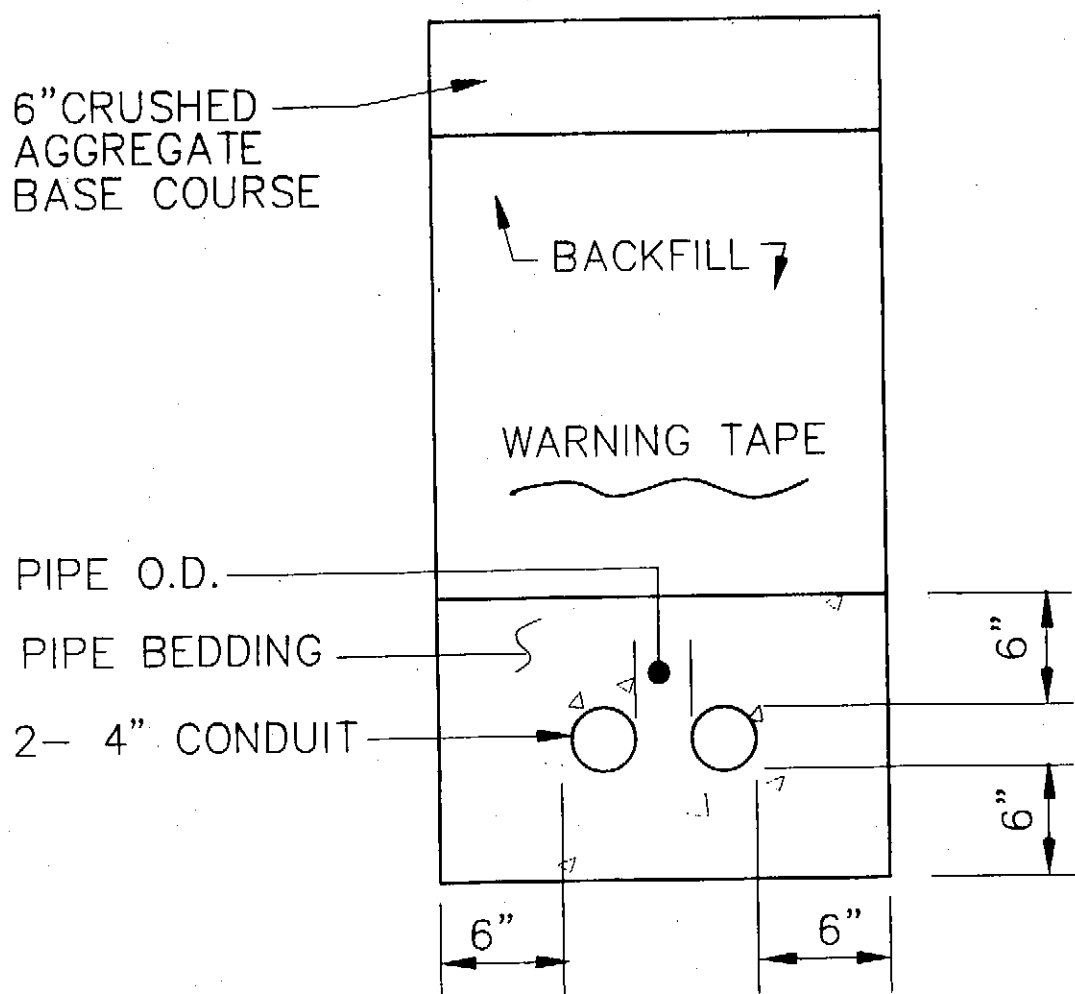


SECTION
PAVEMENT JOINT

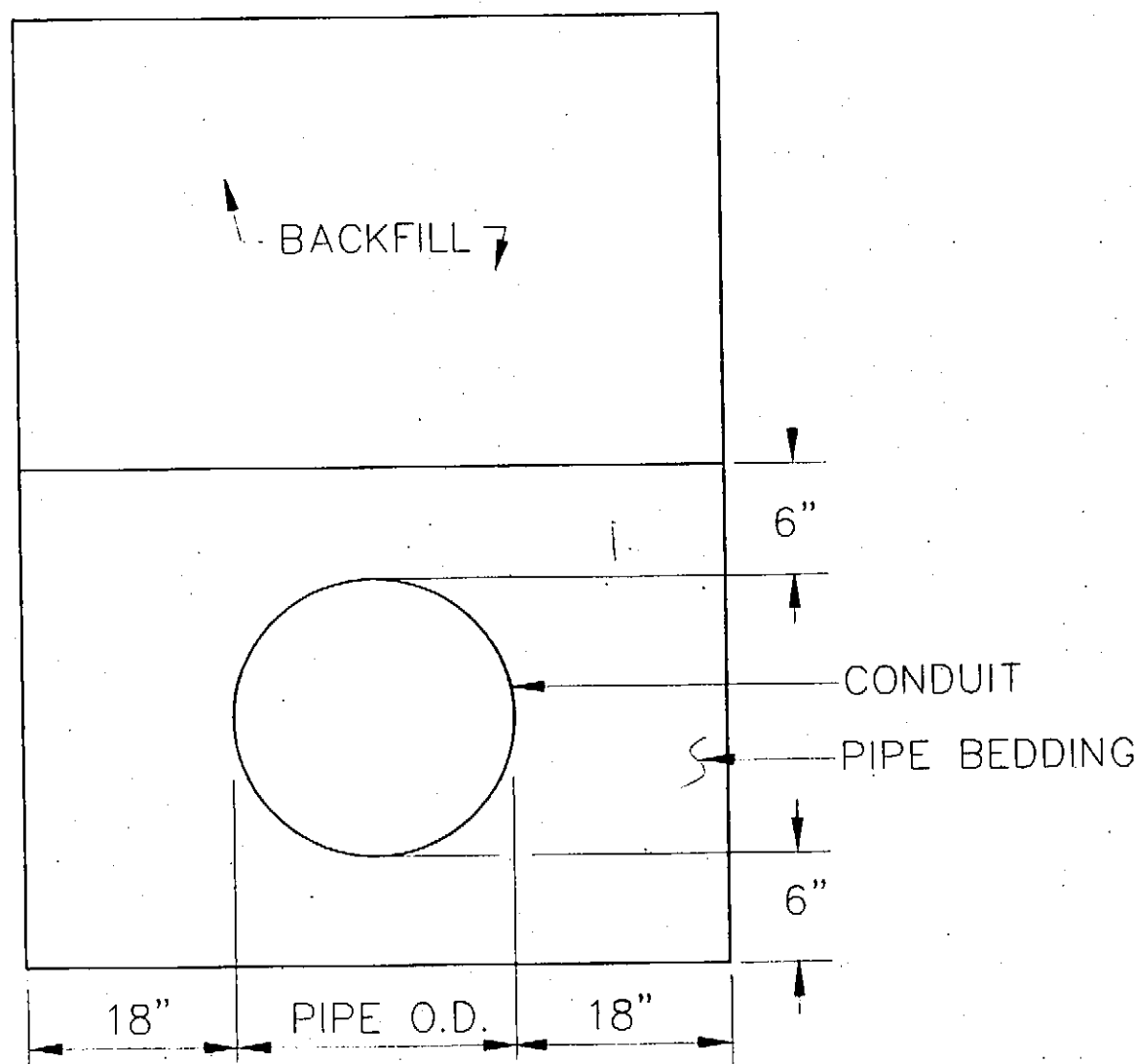
NTS

* INITIAL PAVEMENT REMOVAL, REMOVE ONLY AS
MUCH AS REQUIRED TO REMOVE EXISTING CURB,
GUTTER AND SIDEWALK, AND INSTALL NEW CURB,
GUTTER AND SIDEWALK.

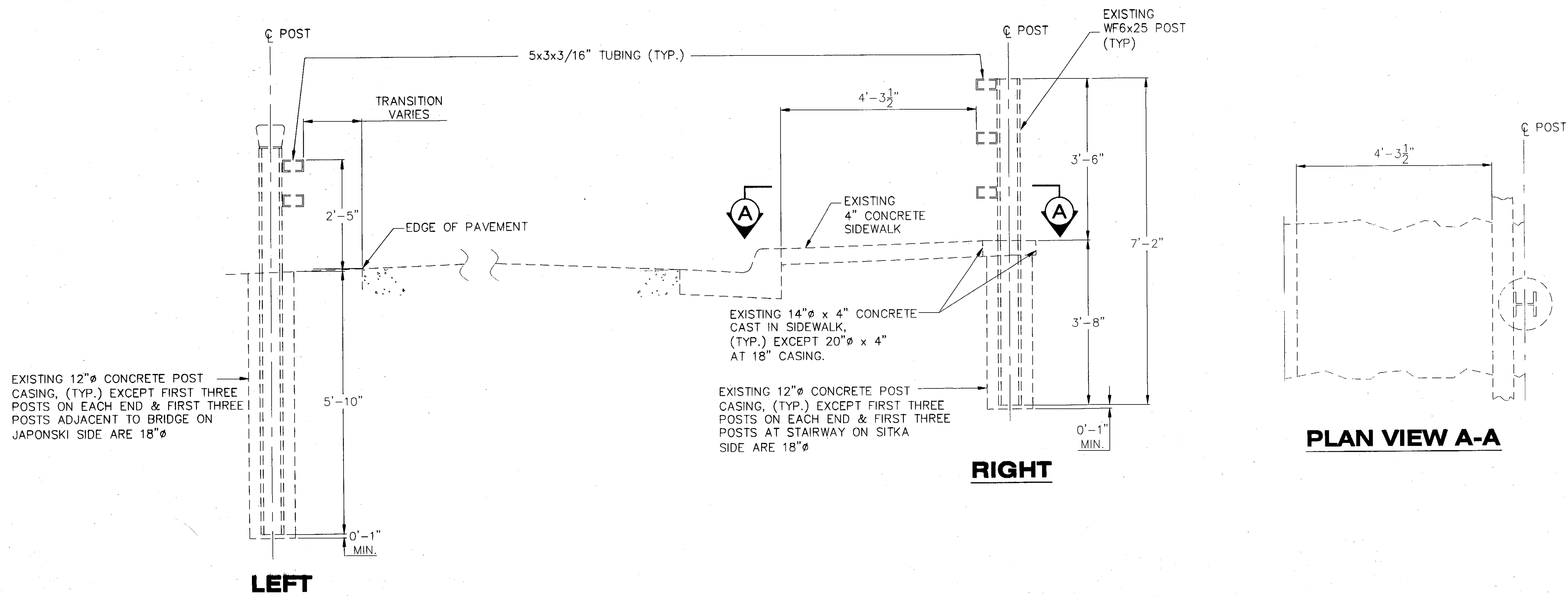
** FINAL SAWCUT AND PAVEMENT REMOVAL TO BE MADE
NO MORE THAN 48 HOURS PRIOR TO APPLYING ATB.



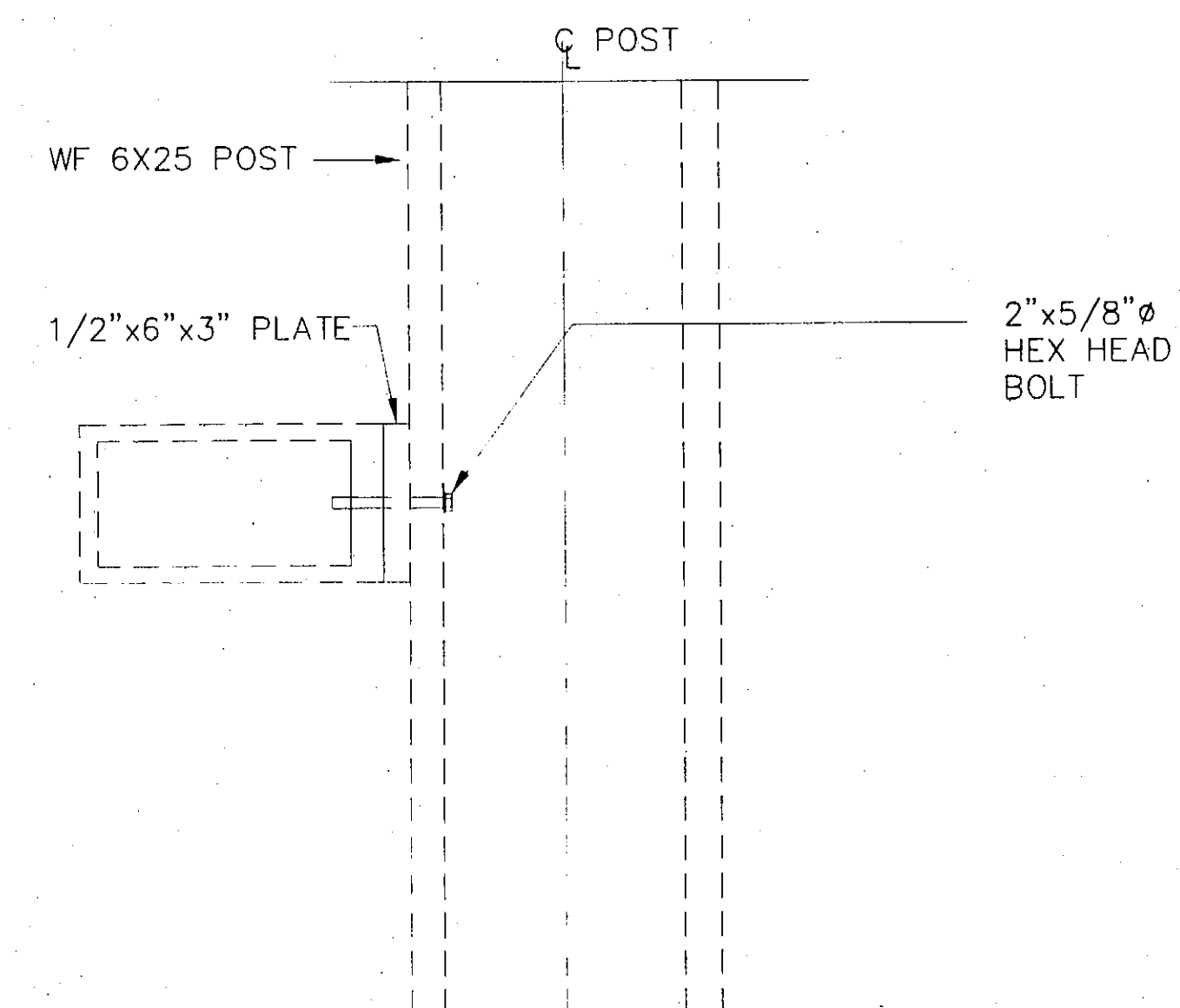
CONDUIT BEDDING DETAIL



CULVERT BEDDING DETAIL



EXISTING RAILING SECTIONS AT ROADWAY



RAIL ATTACH DETAIL

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ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

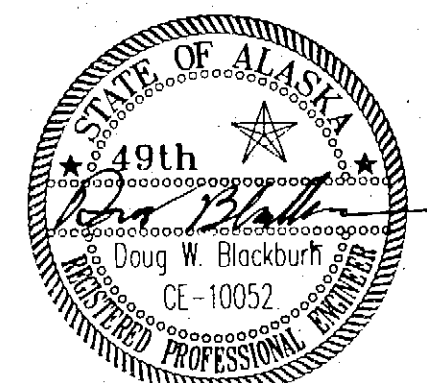
No.	DATE	DESCRIPTION

SIT-HARBOR DRIVE
LIGHTING, PEDESTRIAN & BICYCLE
IMPROVEMENTS
PROJECT NO. 68350

As-Built Approach Railing Details

Project As-Built Drawings have been
reviewed by the Project Engineer and
represent to the best of my knowledge,
the project as constructed.
Proj. Eng. *[Signature]* Date *2-6-06*

DESIGNED BY: D. BLACKBURN



CHECKED BY: J. HEUMANN

DRAWN/REVISED BY: K.K./R.S.

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

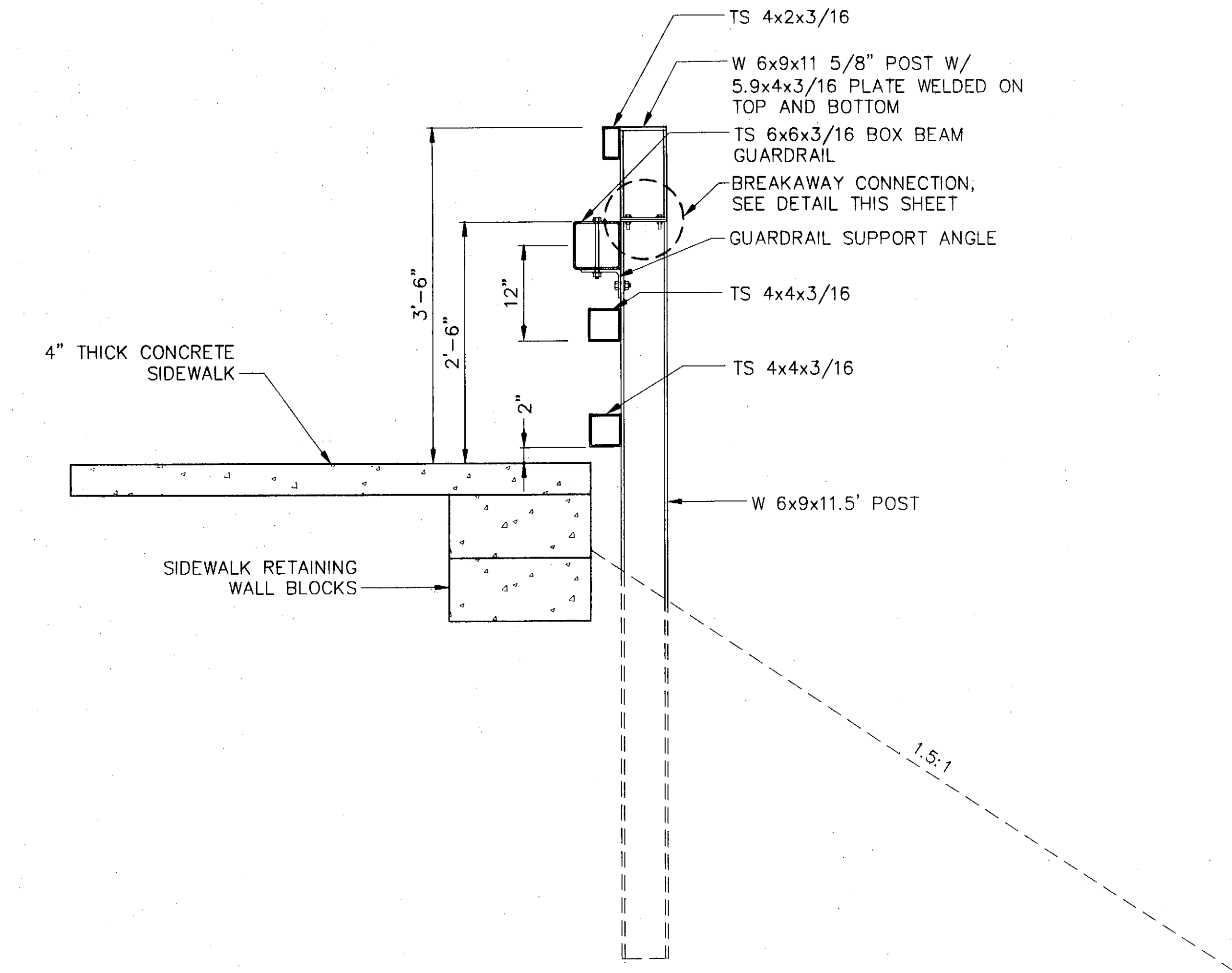
SIT-HARBOR DRIVE
LIGHTING, PEDESTRIAN &
BICYCLE IMPROVEMENTS

As-Built Approach Railing Details

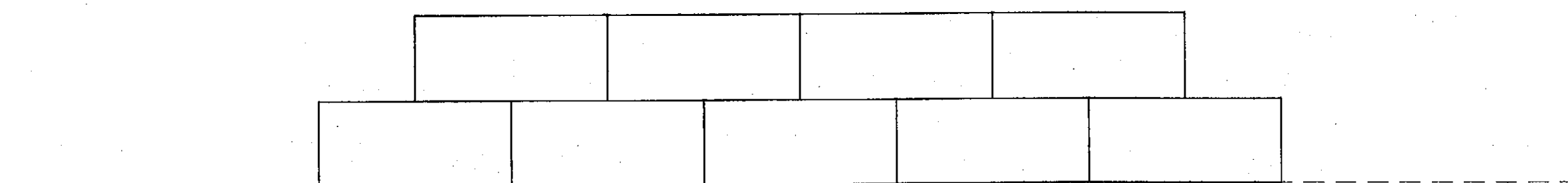
PROJECT DESIGNATION NUMBER

MGS-NH-99-3(7)-68350

STATE	YEAR
ALASKA	2003
SHEET NUMBER	TOTAL SHEETS
E2	46

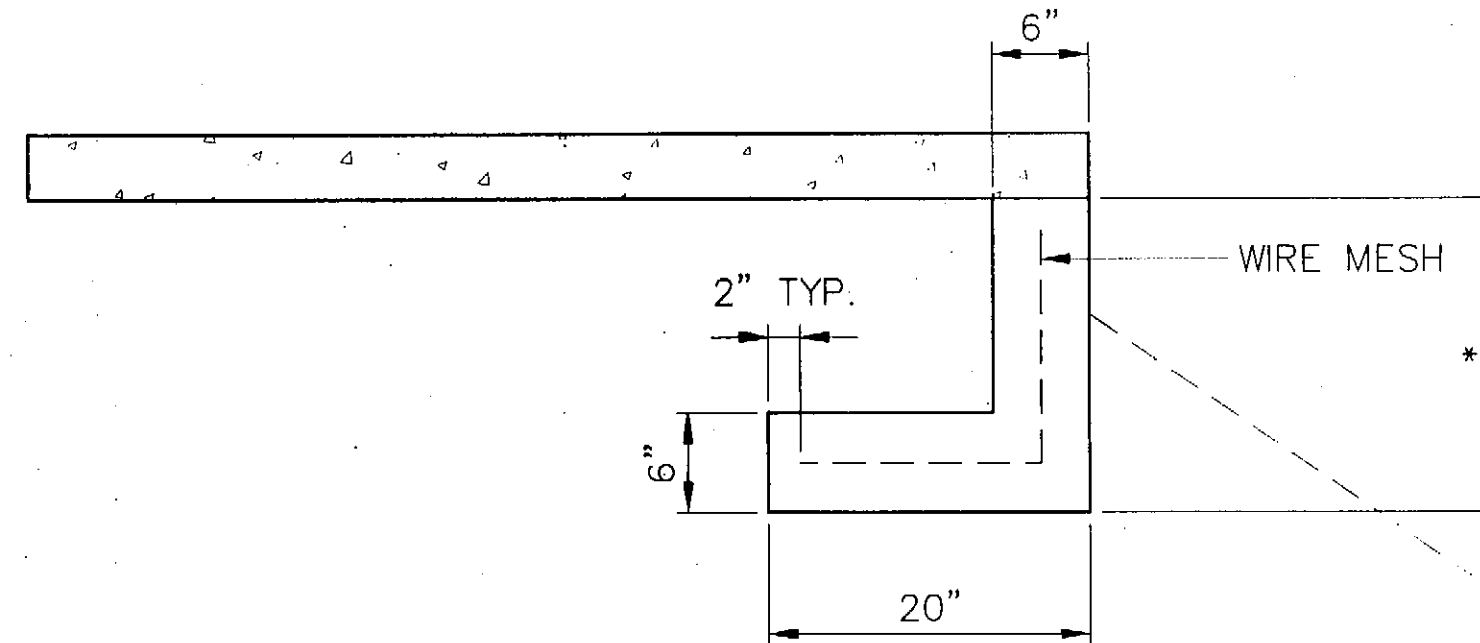


Approach Rail

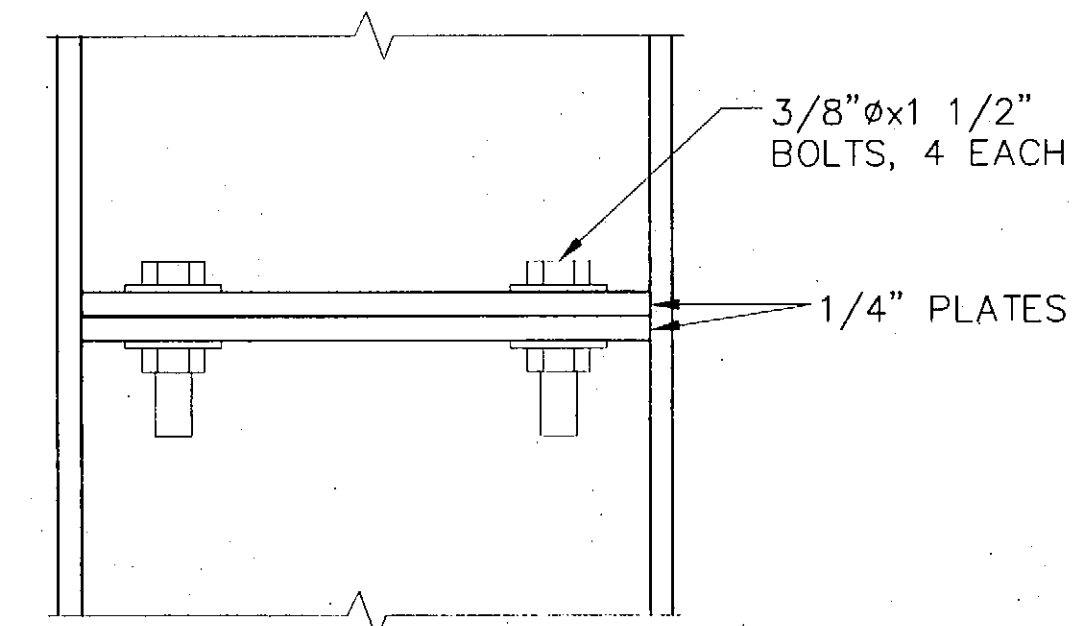


* TOP BLOCKS HAVE TO OVERLAP JOINT BELOW.

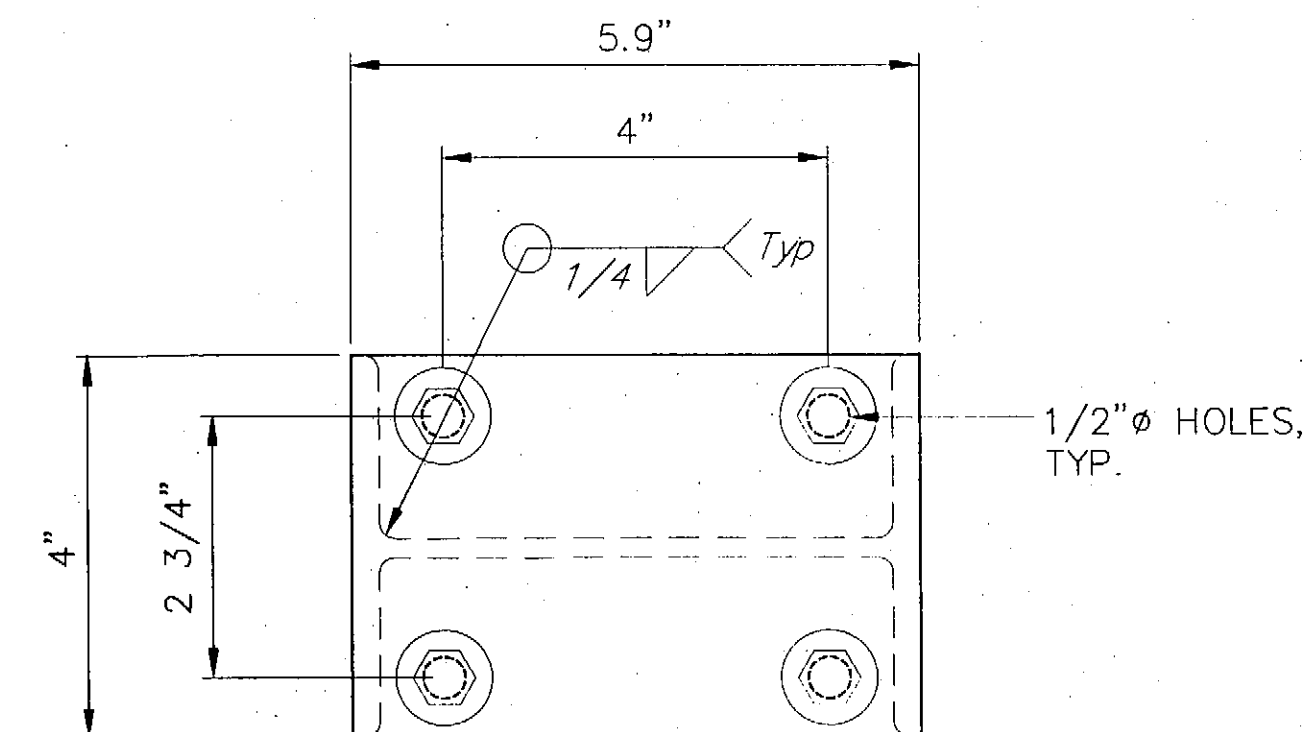
Sidewalk Retainer Wall
FACE VIEW



Alternate Sidewalk Retaining Wall



Elevation



Plan

Breakaway Connection

Notes:

- * SEE RETAINING WALL SUMMARY ON SHEET D1.

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Wed, 24/Dec/03 07:43AM klemmetson
PLOT:
PSPACE 1=1(F) OR MSPACE 1=3(F)
TAB: E3

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

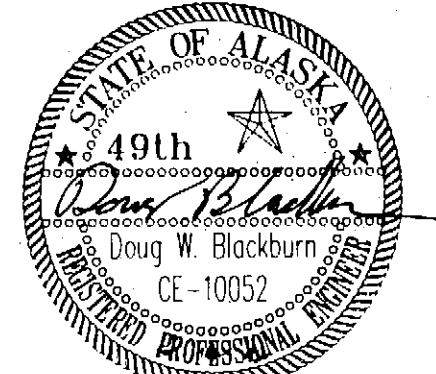
No.	DATE	DESCRIPTION

SIT-HARBOR DRIVE
LIGHTING, PEDESTRIAN & BICYCLE
IMPROVEMENTS
PROJECT NO. 68350

Approach Rail

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
Proj. Eng. *[Signature]* Date 12-6-06

DESIGNED BY: G LOCKWOOD



CHECKED BY: D BLACKBURN

DRAWN/REVISED BY: K.K./R.S.

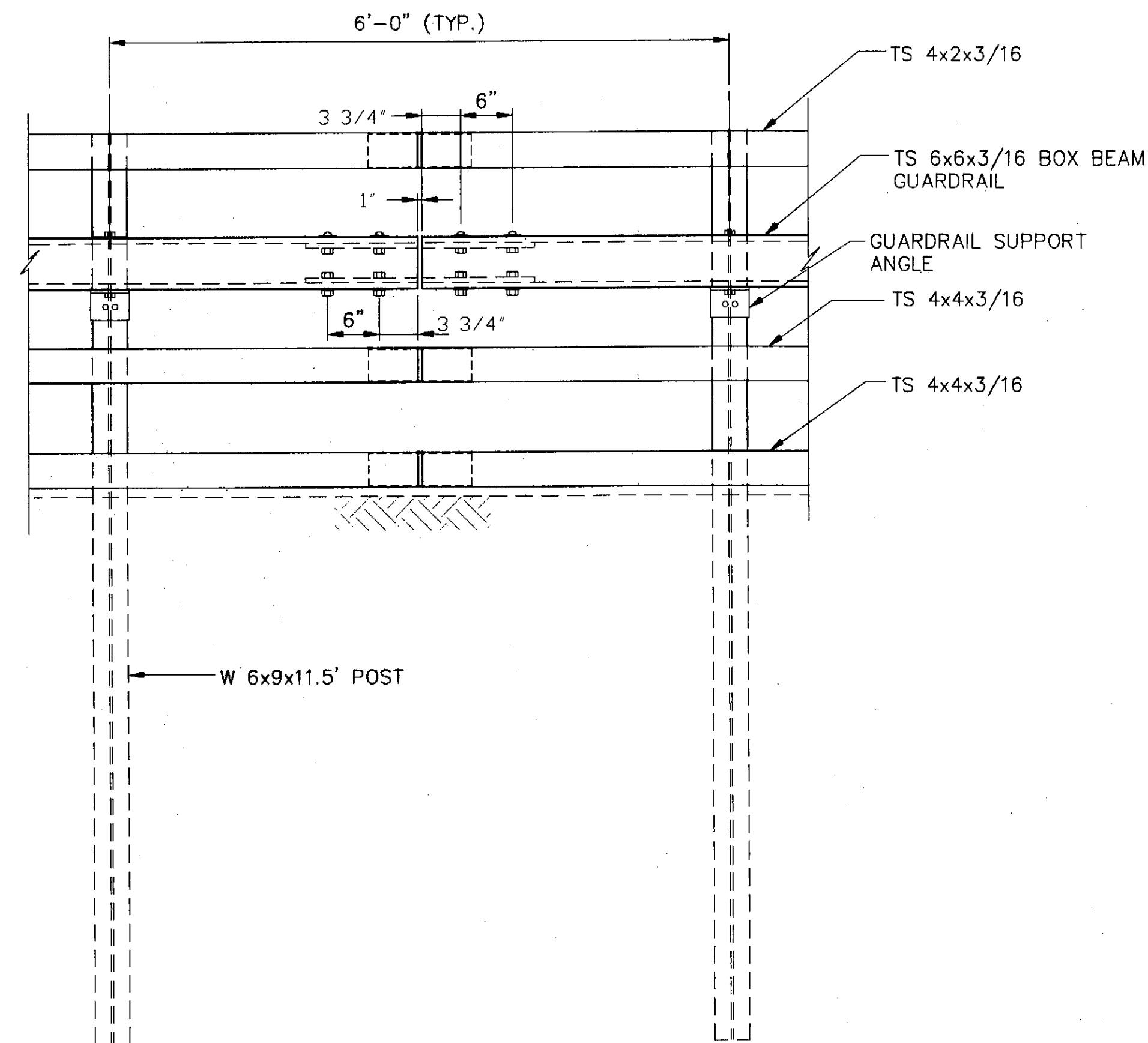
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING
SERVICES DIVISION
SIT-HARBOR DRIVE
LIGHTING, PEDESTRIAN &
BICYCLE IMPROVEMENTS

Approach Rail

PROJECT DESIGNATION NUMBER

MGS-NH-99-3(7)~68350

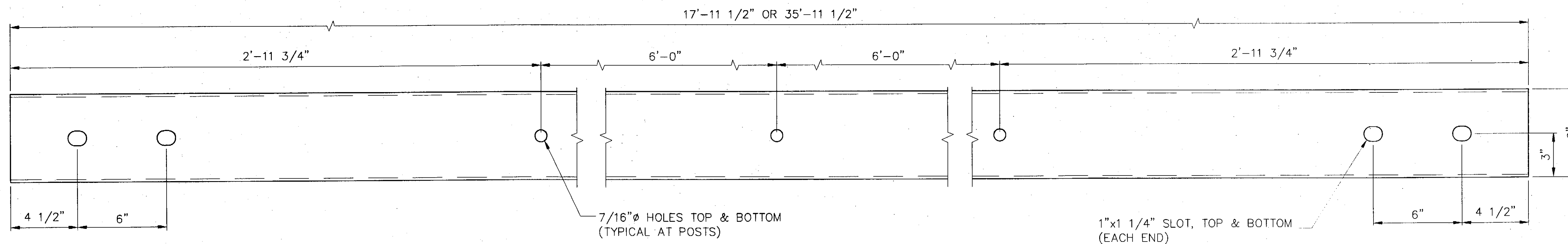
STATE	YEAR
ALASKA	2003
SHEET NUMBER	TOTAL SHEETS
E3	46



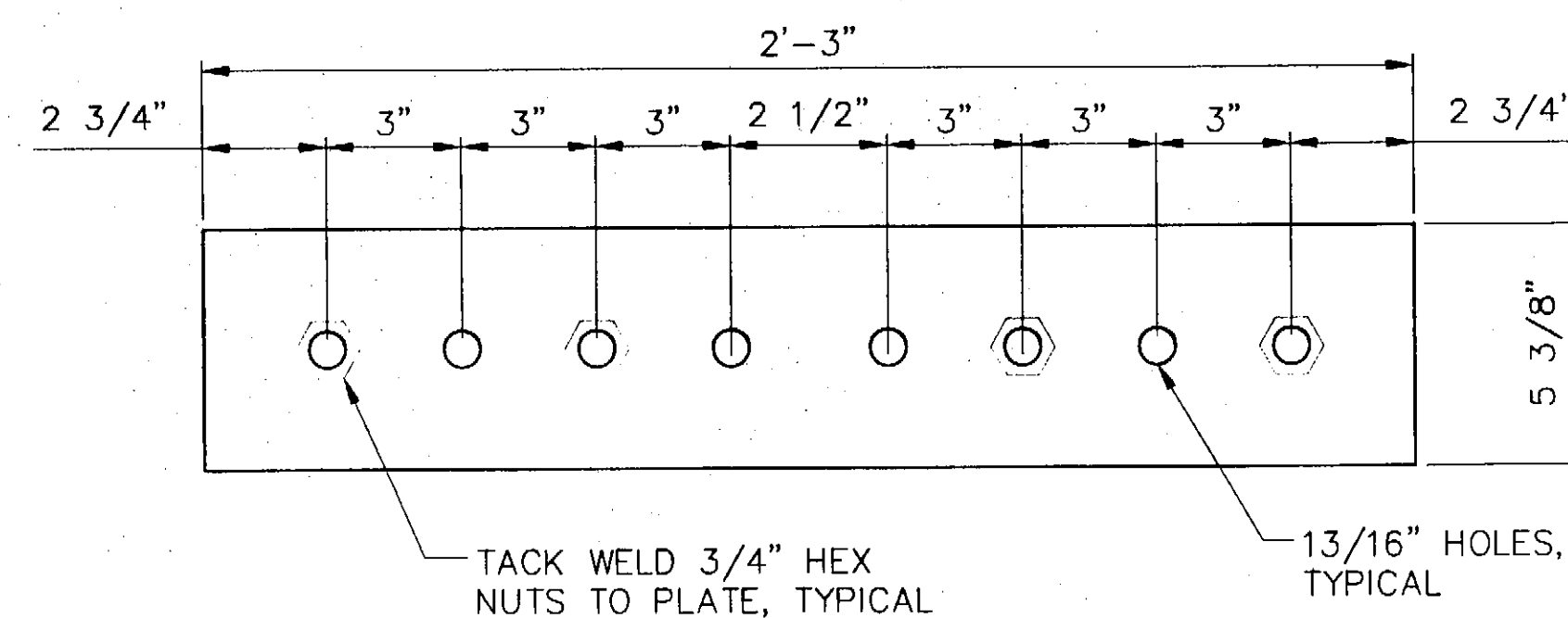
TS 6x6 RAIL JOINT DETAIL

NOTE:

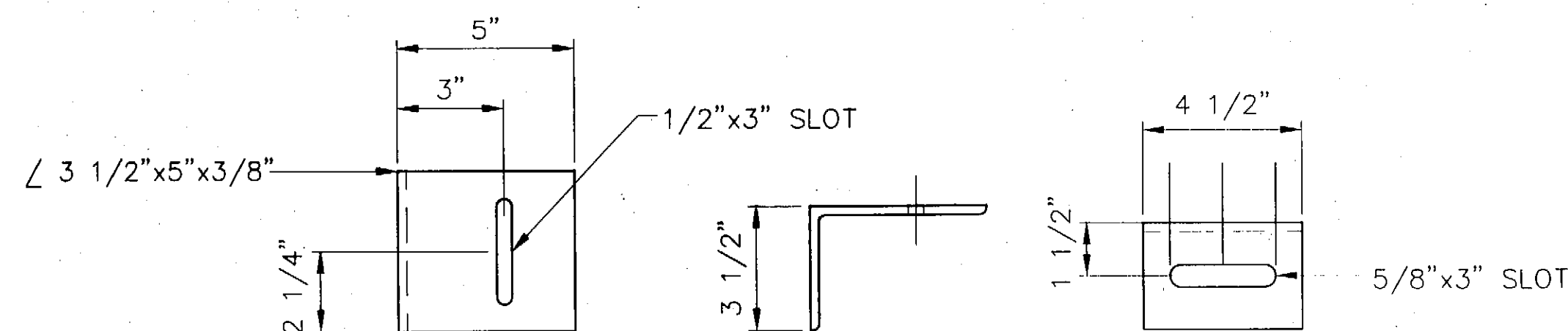
1. NO GALVANIZING IS PERMITTED BETWEEN SPLICE PLATE AND TS 6x6 RAIL ELEMENTS.
2. ALL RAIL ELEMENTS ARE SHOP BENT IF RADIUS IS LESS THAN 717'.
3. BOLTS AND NUTS FOR SPLICE PLATE'S ARE A325 & ASTM A563. RAIL SUPPORT FASTENERS ARE A307.



TS 6x6 RAIL DETAIL



SPLICE PLATE



SUPPORT ANGLE

PATH:
Q:\SIT\68350\PlanSet\E_RailDets.dwg
Wed, 24/Dec/03 07:44AM kklemmelson
PLOT:
PSPACE 1=1(F) OP MSPACE 1=3(F)
TAB: B4

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

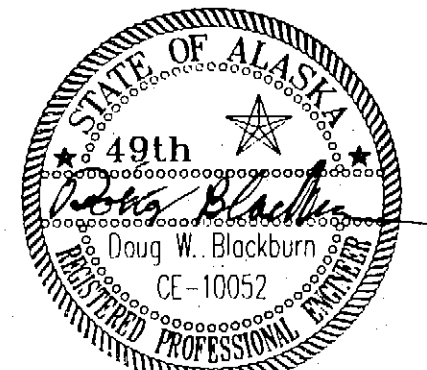
No.	DATE	DESCRIPTION

SIT-HARBOR DRIVE
LIGHTING, PEDESTRIAN & BICYCLE
IMPROVEMENTS
PROJECT NO. 68350

Approach Rail

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
Proj. Eng. *[Signature]* Date 12-6-06

DESIGNED BY: G. LOCKWOOD



CHECKED BY: D. BLACKBURN

DRAWN/REVISED BY: K.K./R.S.

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING
SERVICES DIVISION
**SIT-HARBOR DRIVE
LIGHTING, PEDESTRIAN &
BICYCLE IMPROVEMENTS**

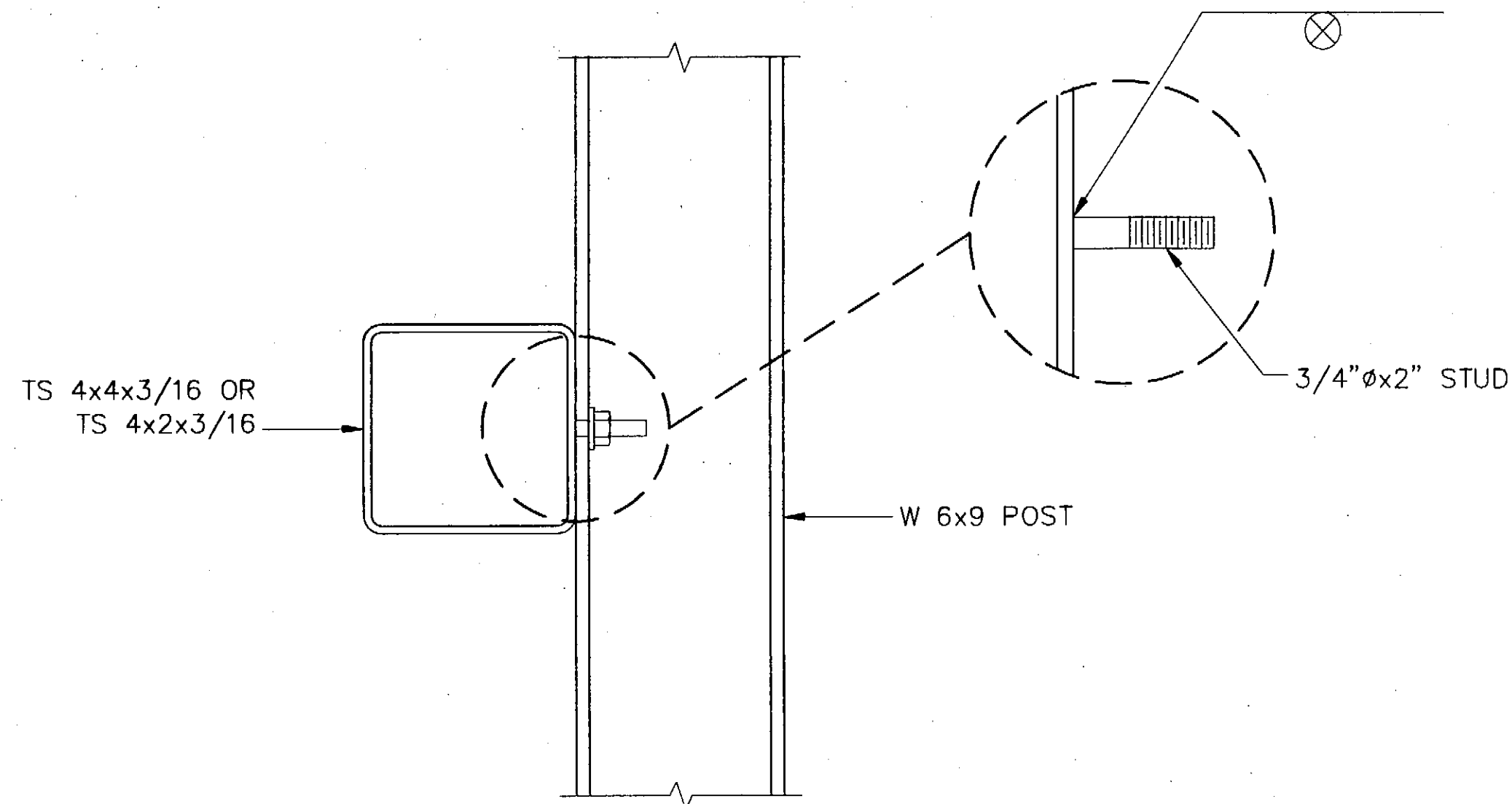
Approach Rail

PROJECT DESIGNATION NUMBER
MGS-NH-99-3(7)-68350

STATE	YEAR
ALASKA	2003
SHEET NUMBER	TOTAL SHEETS
E4	46

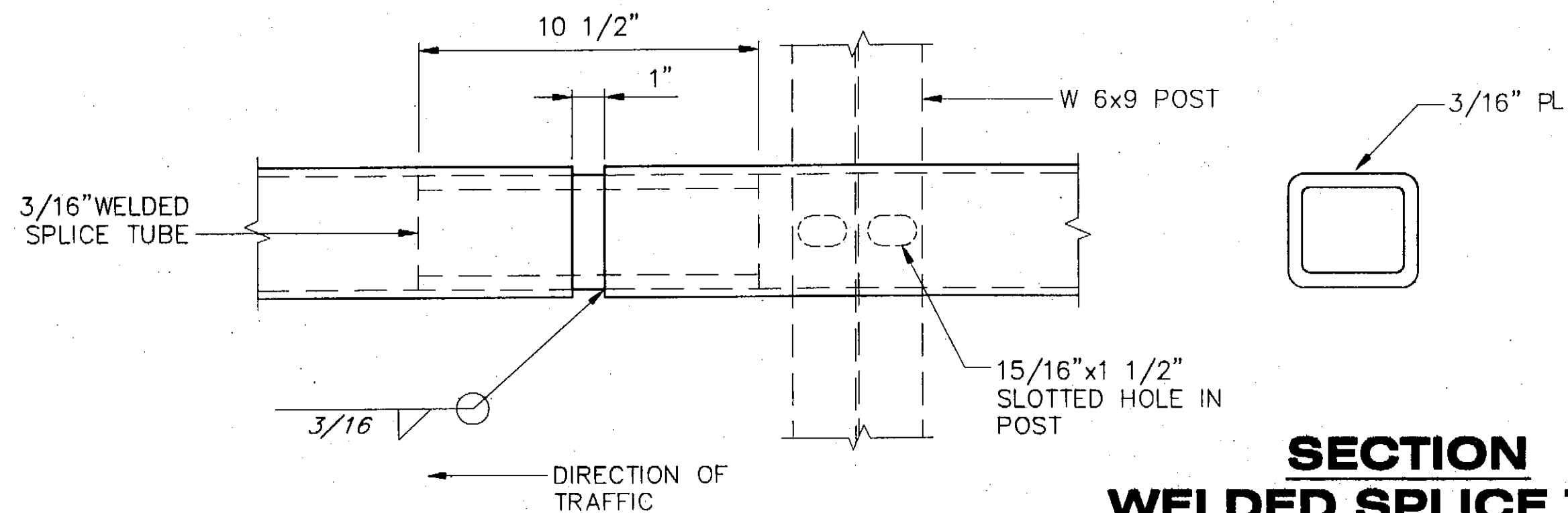
NOTE:

- 1) MINIMUM RAIL LENGTH 17'-11", MAXIMUM RAIL LENGTH 35'-11".
- 2) 2 EACH RAIL FASTENERS AT EACH RAIL POST.



SUPPORT DETAIL

FOR 4x4x3/16 RAIL
& 4x2x3/16 RAIL



**TS 4x4x3/16 & 4x2x3/16" RAIL
SPLICE DETAIL**

PATH:
Q:\SIT\68350\PlanSet\E_RailDets.dwg
Wed, 24 Dec '03 07:44AM klemmetson
PLOT:
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TAB: E5

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

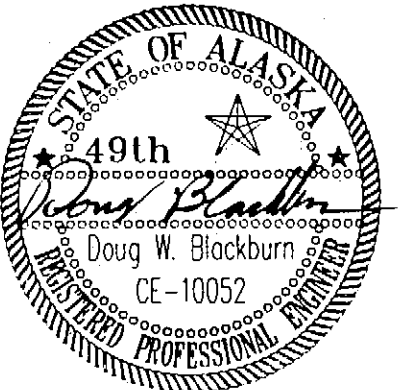
No.	DATE	DESCRIPTION

SIT-HARBOR DRIVE
LIGHTING, PEDESTRIAN & BICYCLE
IMPROVEMENTS
PROJECT NO. 68350

Approach Rail

Project As-Built Drawings have been
reviewed by the Project Engineer and
represent to the best of my knowledge,
the project as constructed.
Proj. Eng. *[Signature]* Date *2-6-06*

DESIGNED BY: J. LOCKWOOD



CHECKED BY: J. BLACKBURN

DRAWN/REVISED BY: K.K./R.S.

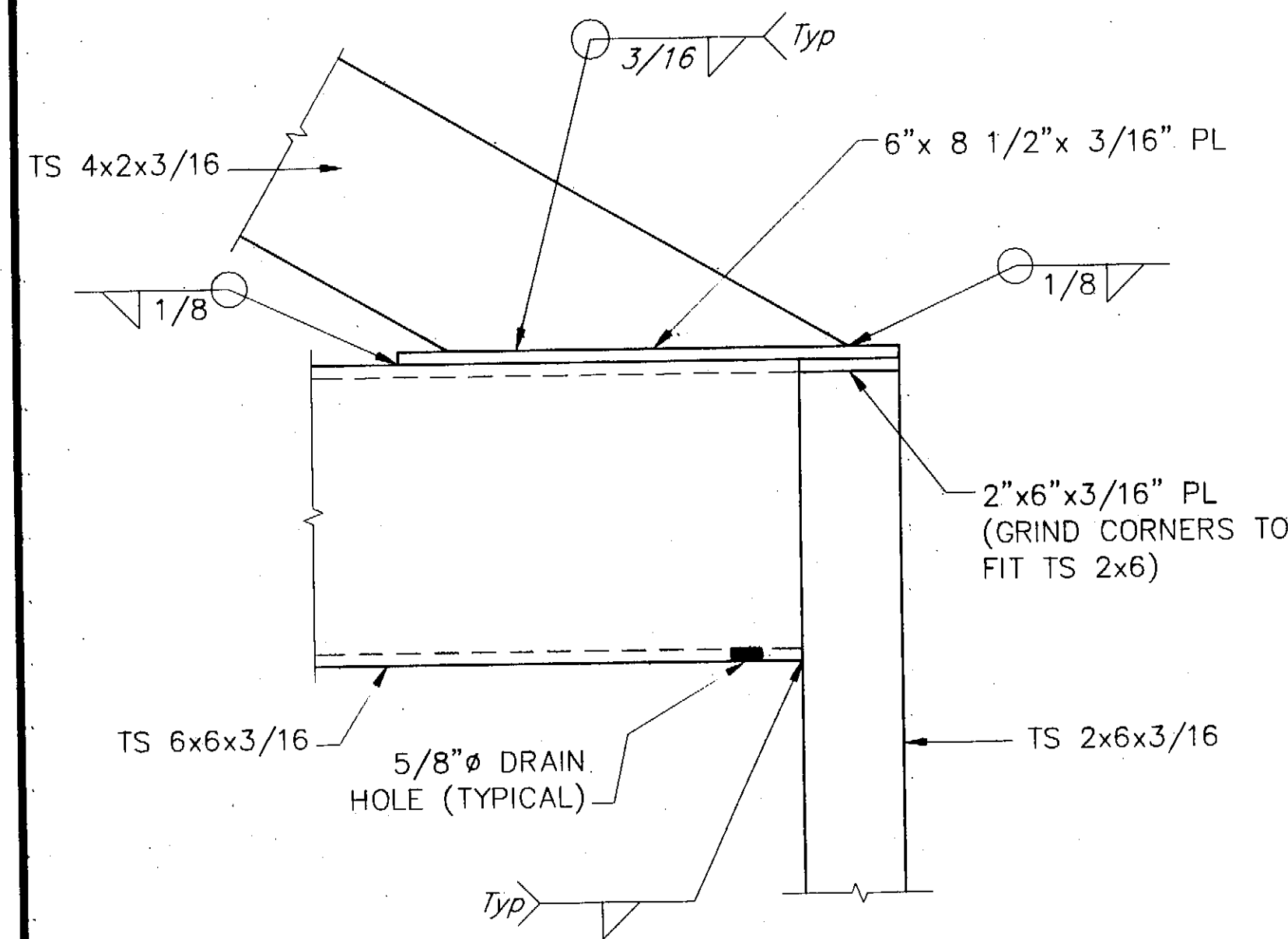
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING
SERVICES DIVISION
SIT-HARBOR DRIVE
LIGHTING, PEDESTRIAN &
BICYCLE IMPROVEMENTS

Approach Rail

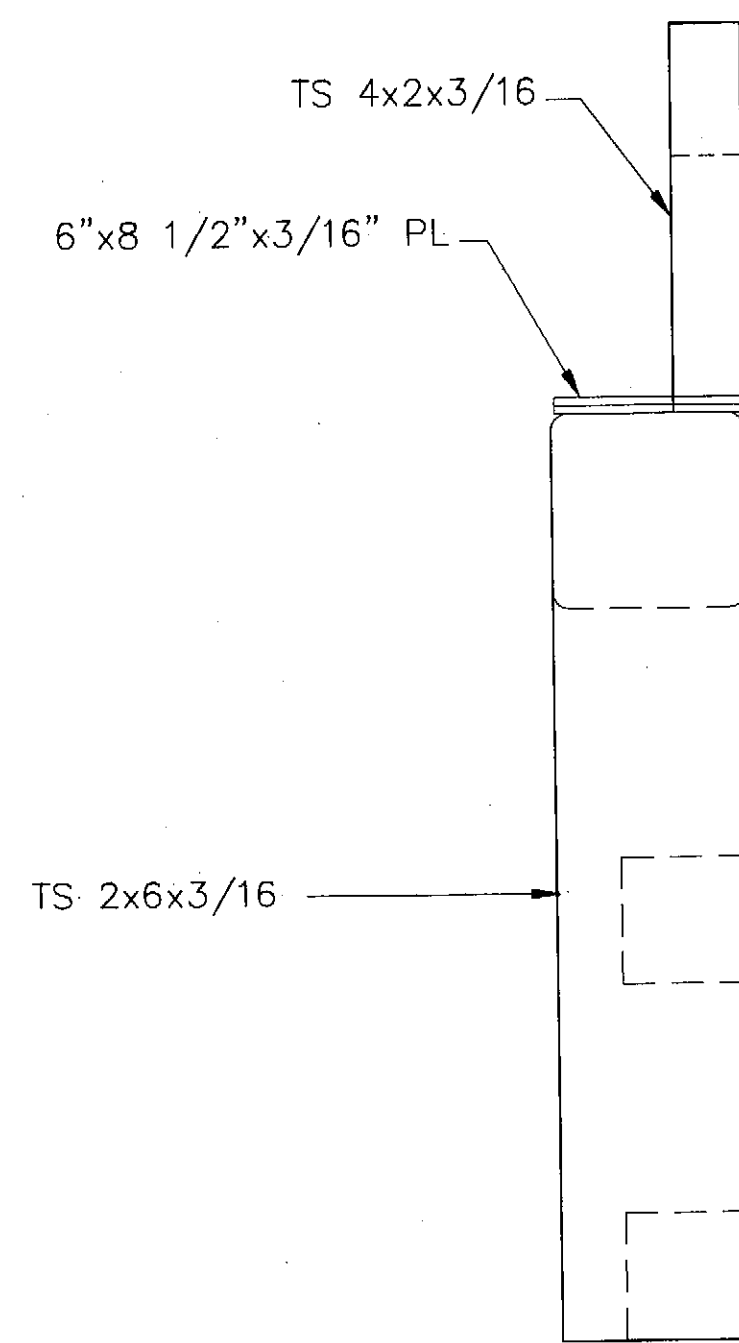
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MGS-NH-99-3(7)-68350

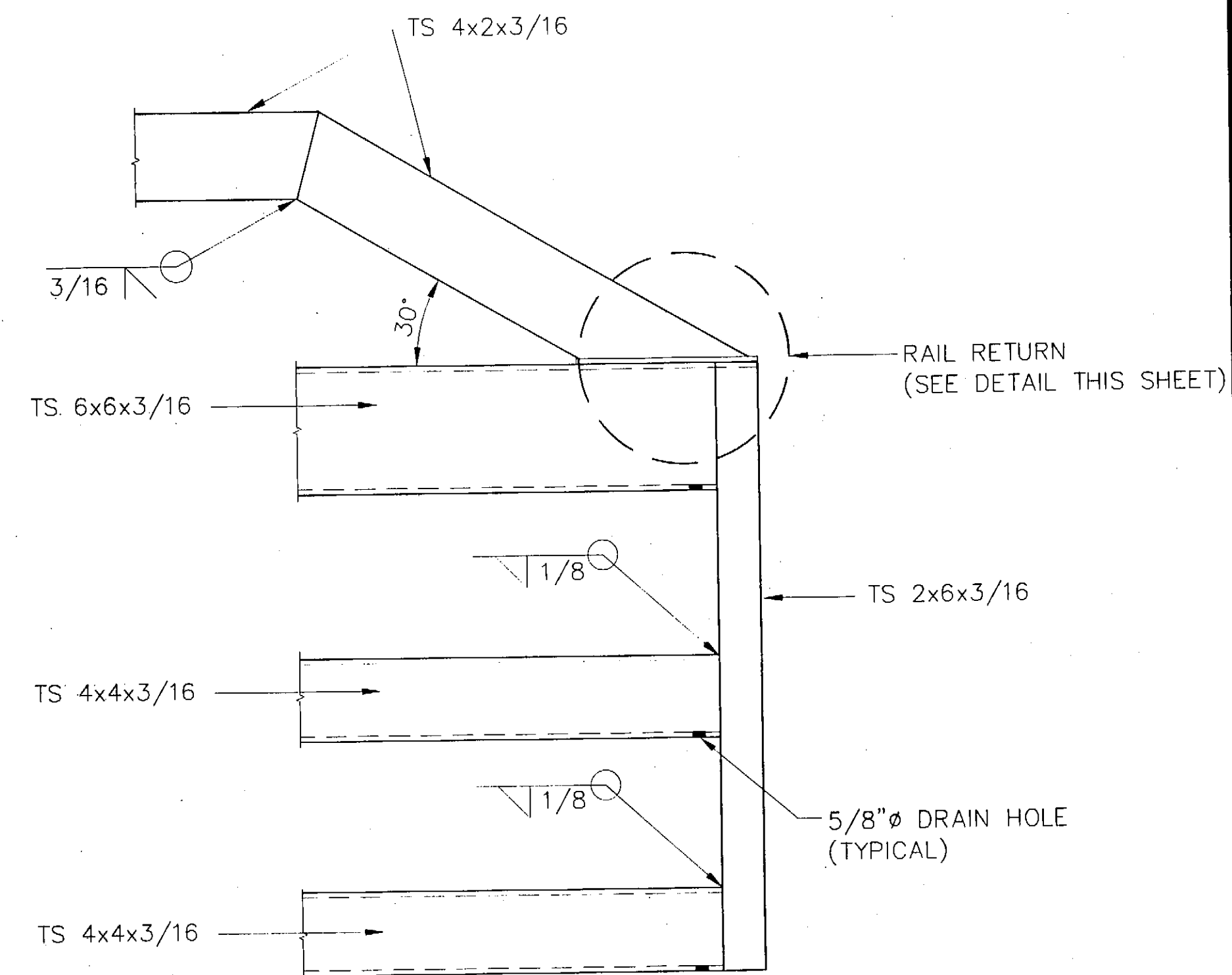
STATE	YEAR
ALASKA	2003
SHEET NUMBER	TOTAL SHEETS
E5	46



**RAIL RETURN DETAIL
BREAKAWAY
CONNECTION**



**RAIL RETURN
END VIEW**



**RAIL RETURN
SIDE VIEW**

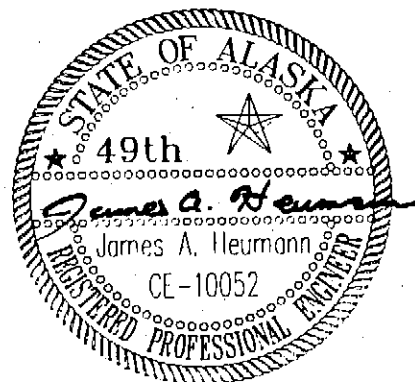
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 PLOT:
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 TAB: B6

ADDENDUM NUMBER		
ATTACHMENT NUMBER		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION

SIT- HARBOR DRIVE
 LIGHTING, PEDESTRIAN & BICYCLE
 IMPROVEMENTS
 PROJECT NO. 68350

Approach Rail

Project As-Built Drawings have been
 reviewed by the Project Engineer and
 represent to the best of my knowledge,
 the project as constructed.
 Proj. Eng. *[Signature]* Date *12-6-06*

DESIGNED BY: J. HEUMANN


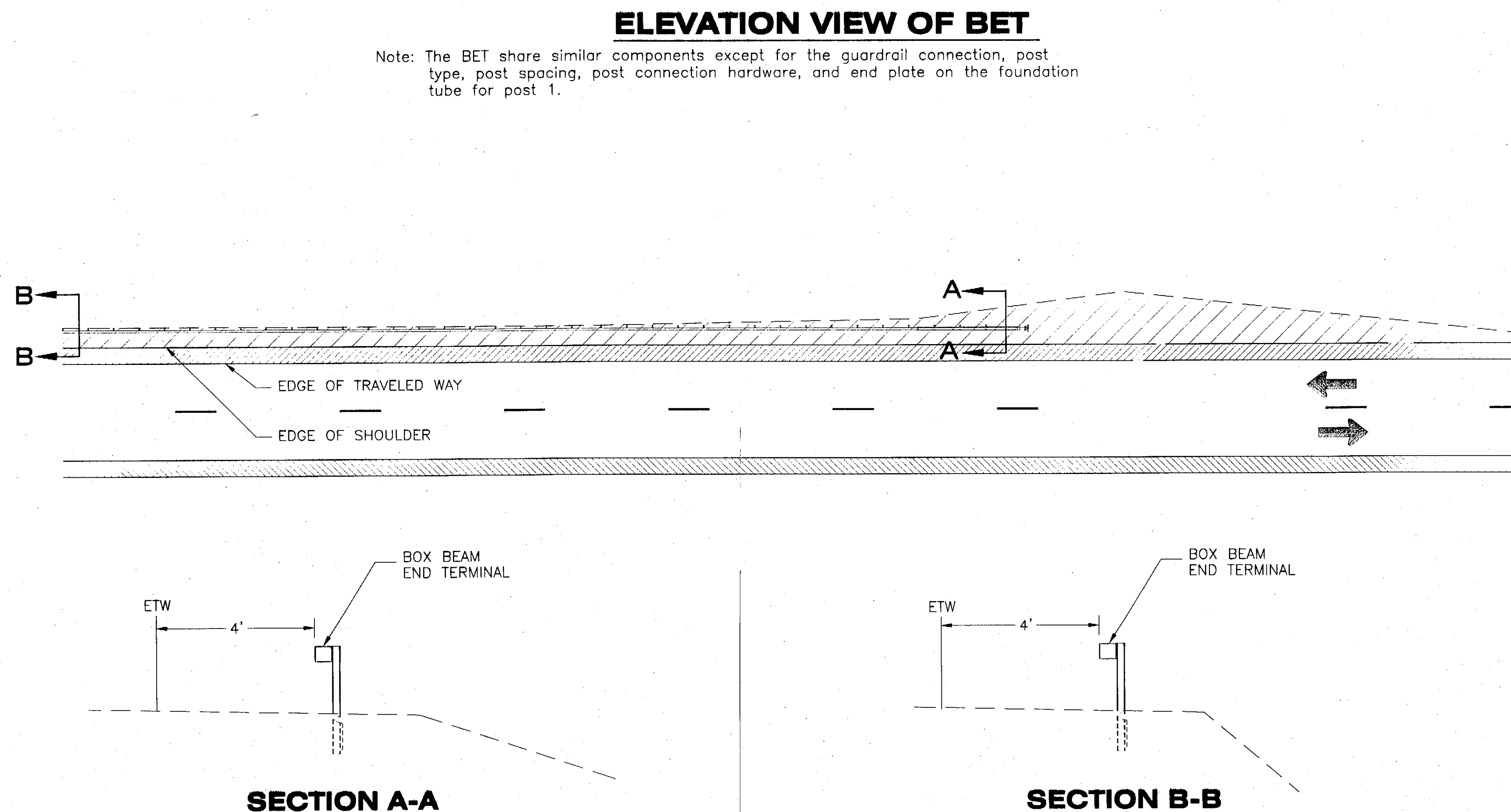
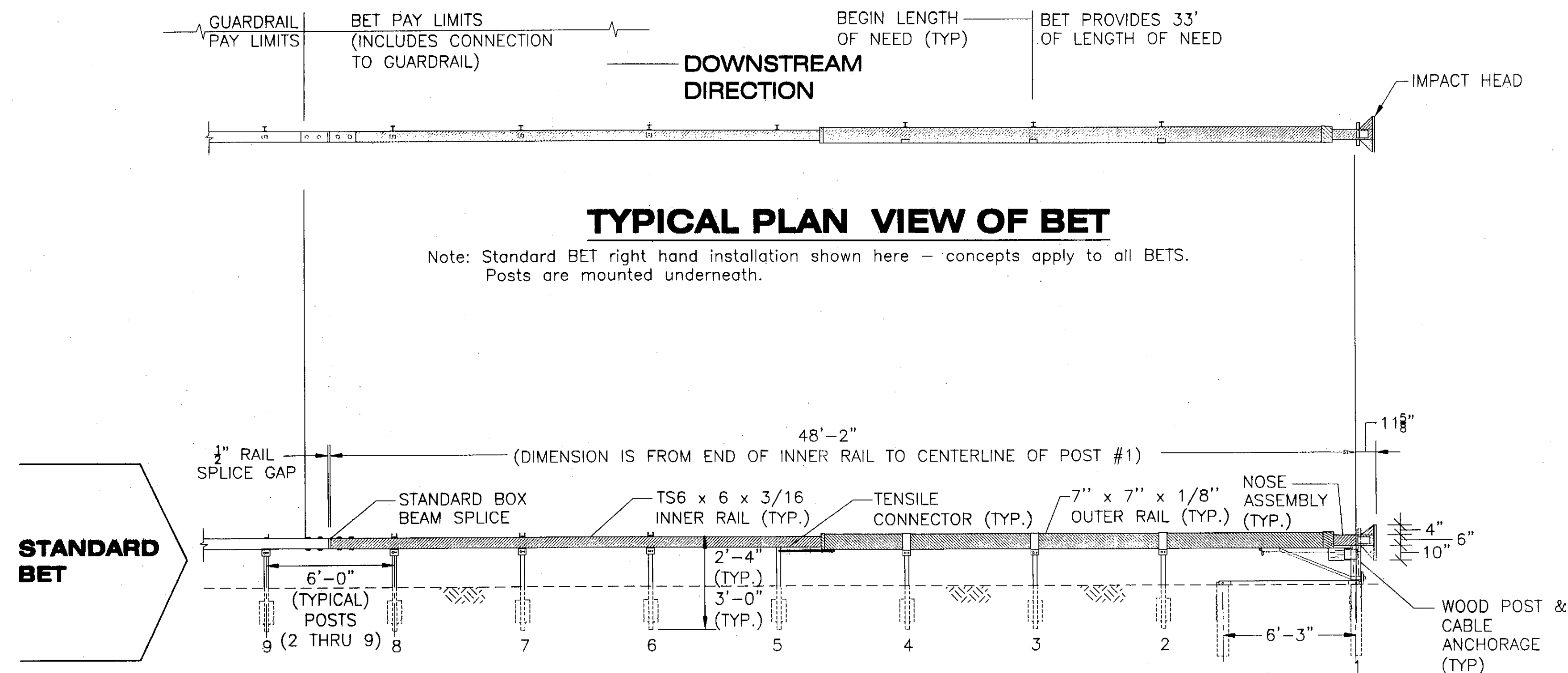
CHECKED BY: J. BLACKBURN
 DRAWN/REVISED BY: K.K./P.S.
 STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 & PUBLIC FACILITIES
 STATEWIDE DESIGN & ENGINEERING
 SERVICES DIVISION
 SIT-HARBOR DRIVE
 LIGHTING, PEDESTRIAN &
 BICYCLE IMPROVEMENTS

Approach Rail

PROJECT DESIGNATION NUMBER

MGS-NH-99-3(7)~68350

STATE	YEAR
ALASKA	2003
SHEET NUMBER	TOTAL SHEETS
E6	46



NOTES

1. SEE SHEET E9 ALSO

PATH:
O:\SIT\68350\PlanSet\E_GuardR1.dwg
Wed, 24 Dec '03 07:42AM kkiemmetson
PLOT:
PSPACE 1=1(F) OP MSPACE 1=1(F)
TAB: E7

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

SIT-HARBOR DRIVE
LIGHTING, PEDESTRIAN & BICYCLE
IMPROVEMENTS
PROJECT NO. 68350

Box Beam End Terminal

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
Proj. Eng. *[Signature]* Date 7-6-06

DESIGNED BY: M. LAVERING

CHECKED BY: J. HEUMATHI
DRAWN/REVISED BY: M. LIMBAUGH

STATE OF ALASKA
49th
DAUG W. BLACKBURN
CF-10052
REGISTERED PROFESSIONAL

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING
SERVICES DIVISION
SIT-HARBOR DRIVE
LIGHTING, PEDESTRIAN & BICYCLE IMPROVEMENTS
Box Beam End Terminal

PROJECT DESIGNATION NUMBER
MGS-NH-99-3(7)-68350

STATE	YEAR
ALASKA	2003

SHEET NUMBER	TOTAL SHEETS
E7	46

Notes

- 1) Grind all edges of welded box splices before galvanizing.
- 2) Splice bolts A325, washers F436, nuts A563
- 3) Transition rail post are the same as approach rail post.
- 4) Provide welded Box splice between this Approach Rail & Guardrail / Bridge rail Connection

PATH:
Q:\SIT\68350\PlanSet\E_RailDets2.dwg
Wed, 24/Dec/03 07:45AM kklemmetson
PLOT:
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ADDENDUM NUMBER

ATTACHMENT NUMBER

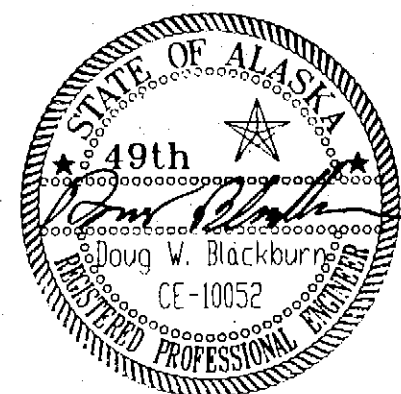
RECORD OF REVISIONS

No.	DATE	DESCRIPTION

SIT- HARBOR DRIVE
LIGHTING, PEDESTRIAN & BICYCLE
IMPROVEMENTS
PROJECT NO. 68350

Project As-Built Drawings have been
reviewed by the Project Engineer and
represent to the best of my knowledge,
the project as constructed.
Proj. Eng. *[Signature]* Date 12-6-06

DESIGNED BY: BLACKBURN



CHECKED BY: J. HEUMANN
DRAWN/REVISED BY: K. KLEMMETSON

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

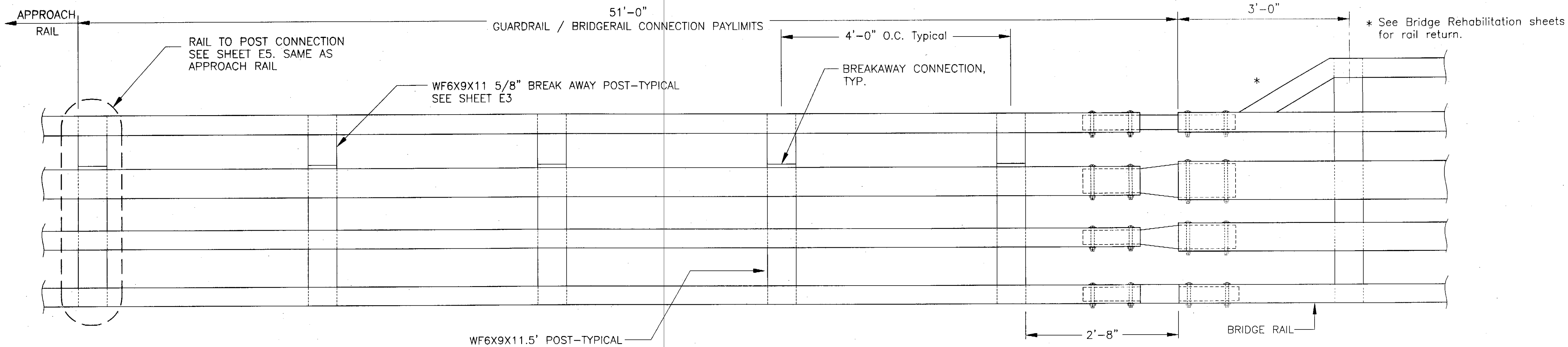
SIT-HARBOR DRIVE
LIGHTING, PEDESTRIAN &
BICYCLE IMPROVEMENTS
**Guardrail /
Bridgerail- Rt.
Connections**

PROJECT DESIGNATION NUMBER

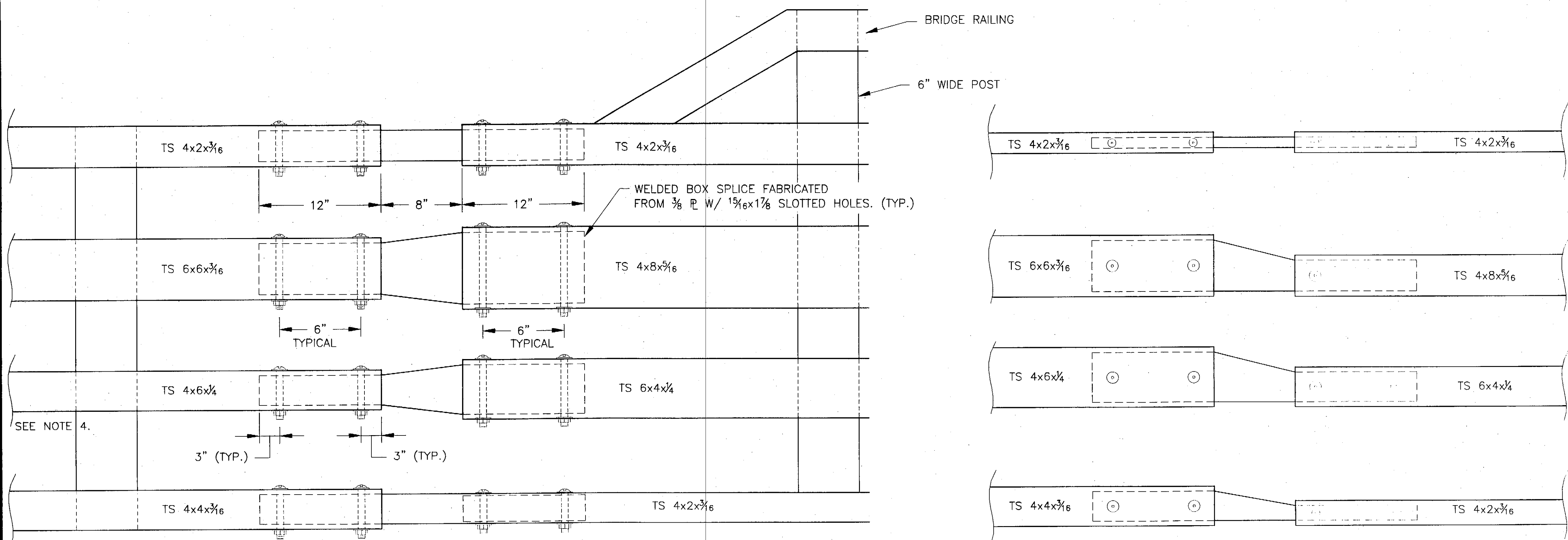
MGS-NH-99-3(7)-68350

STATE	YEAR
ALASKA	2003
SHEET NUMBER	TOTAL SHEETS
E8	46

Guardrail / Bridgerail- Rt. Connection



Guardrail / Bridgerail Connection - Profile - Rt.



Guardrail / Bridgerail Connections - Side View

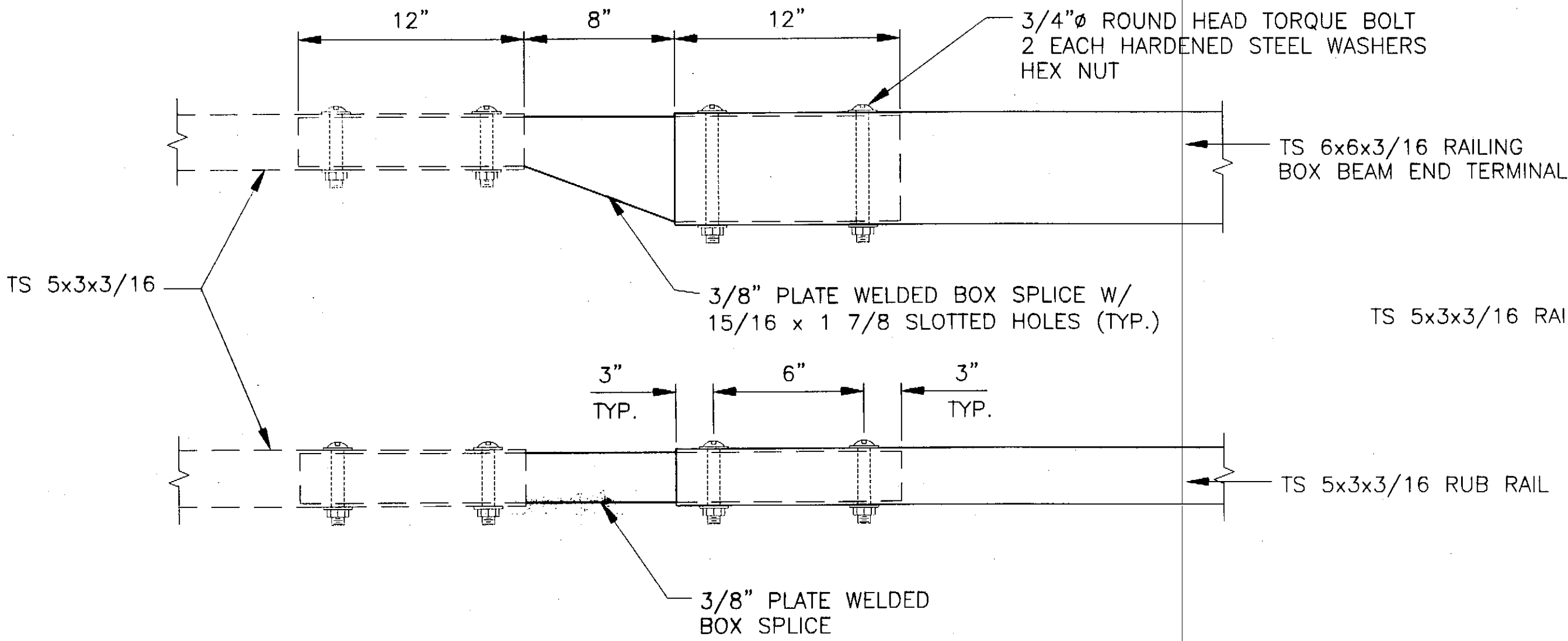
Transition Rail To Bridge Rail

Rail Connections - Top View

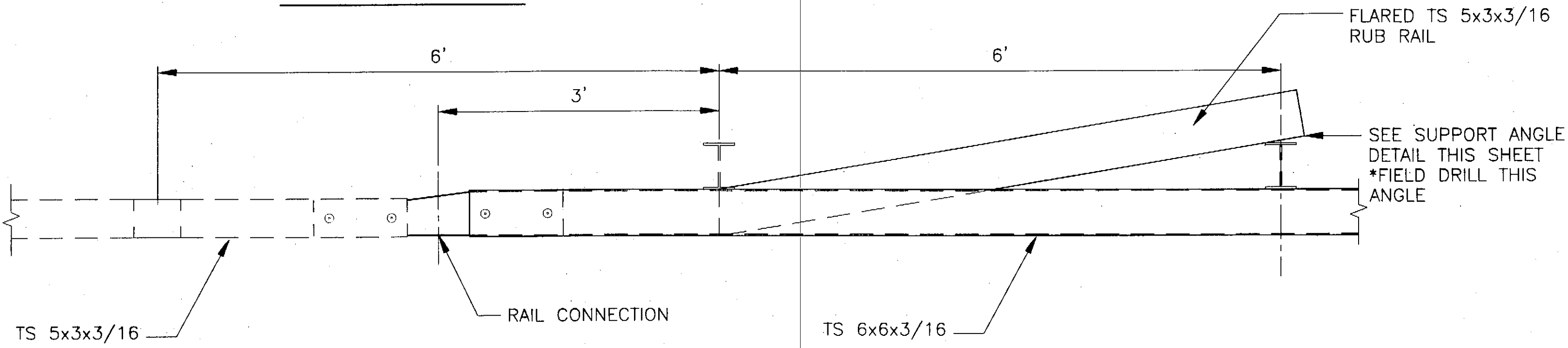
Rail Connectors

Notes:

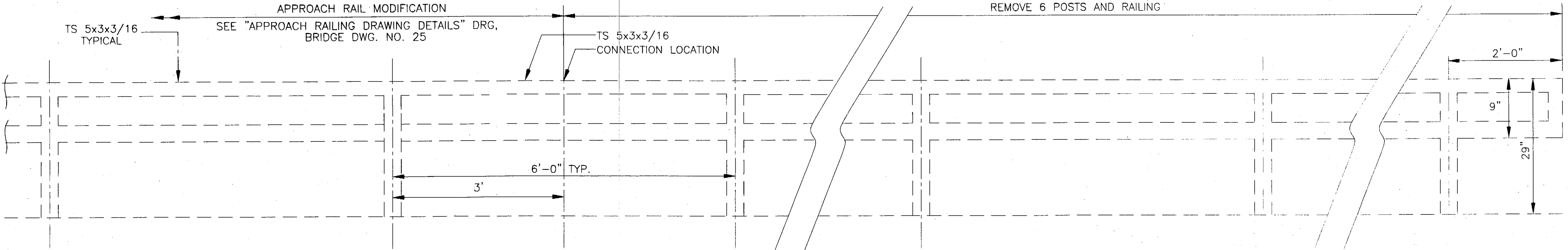
- 1.) WELDED BOX SPLICE IS A36 STEEL.
- 2.) GRIND WELDS SMOOTH
- 3.) BOLTS, NUTS AND WASHERS ARE A325, ASTM 563 AND F436 FOR CONNECTION FASTENERS.
- 4.) SUPPORT ANGLE FASTENERS ARE A307 BOLTS, F884 WASHERS AND A563 NUTS.



**Side View
Rail Connection**

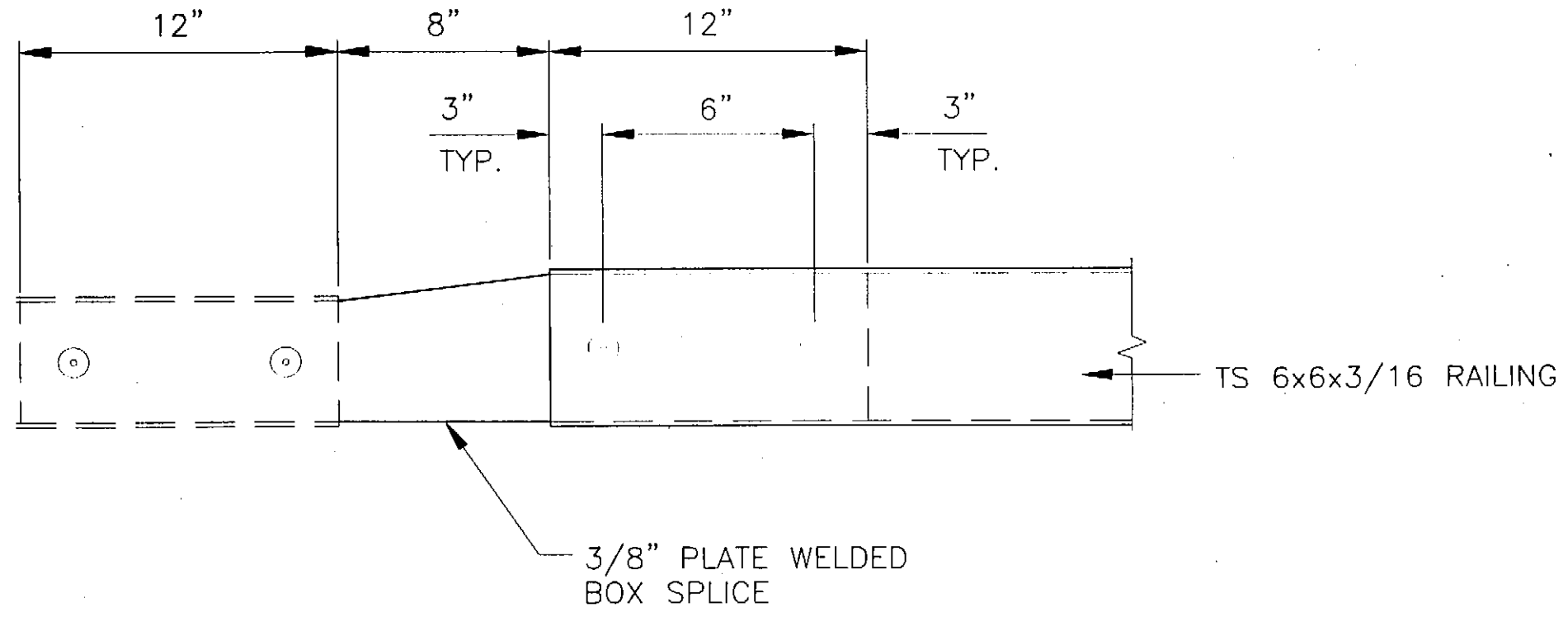


Top View

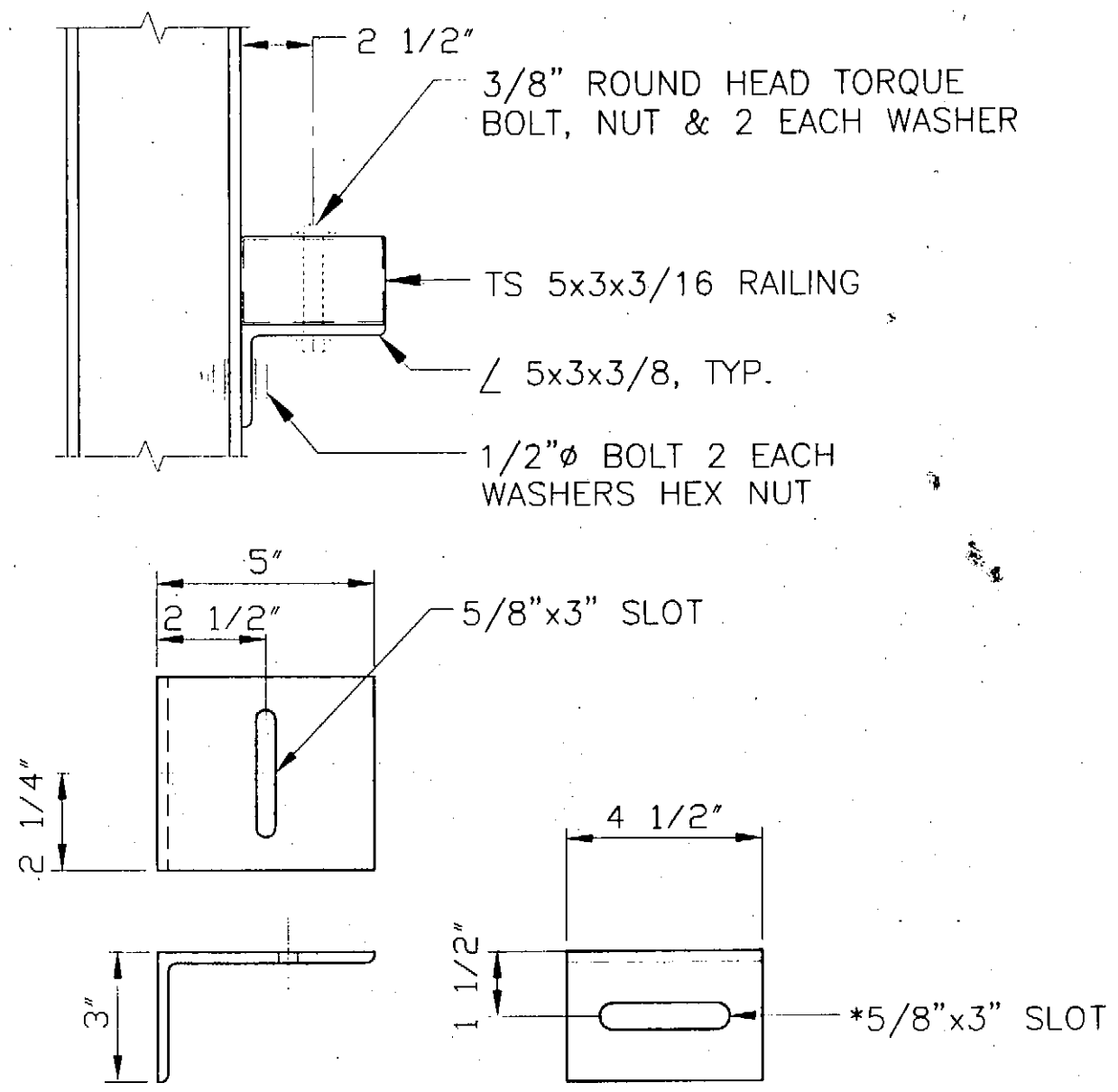


**Profile
Rail Removal**

**BET
Profile**



**Top View
Rail Connection**



**Support Angle
(5 x 3 rail)**

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Wed, 24/Dec/03 07:45AM klemmetson

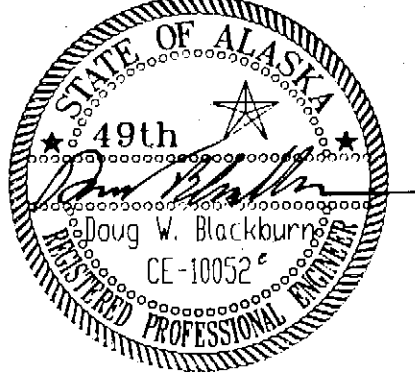
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ADDENDUM NUMBER		
ATTACHMENT NUMBER		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION

SIT-HARBOR DRIVE
LIGHTING, PEDESTRIAN & BICYCLE
IMPROVEMENTS
PROJECT NO. 68350

**Box Beam End
Terminal Connection**

Project As-Built Drawings have been
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represent to the best of my knowledge,
the project as constructed.
Proj. Eng. *[Signature]* Date 12-6-06

DESIGNED BY: BLACKBURN



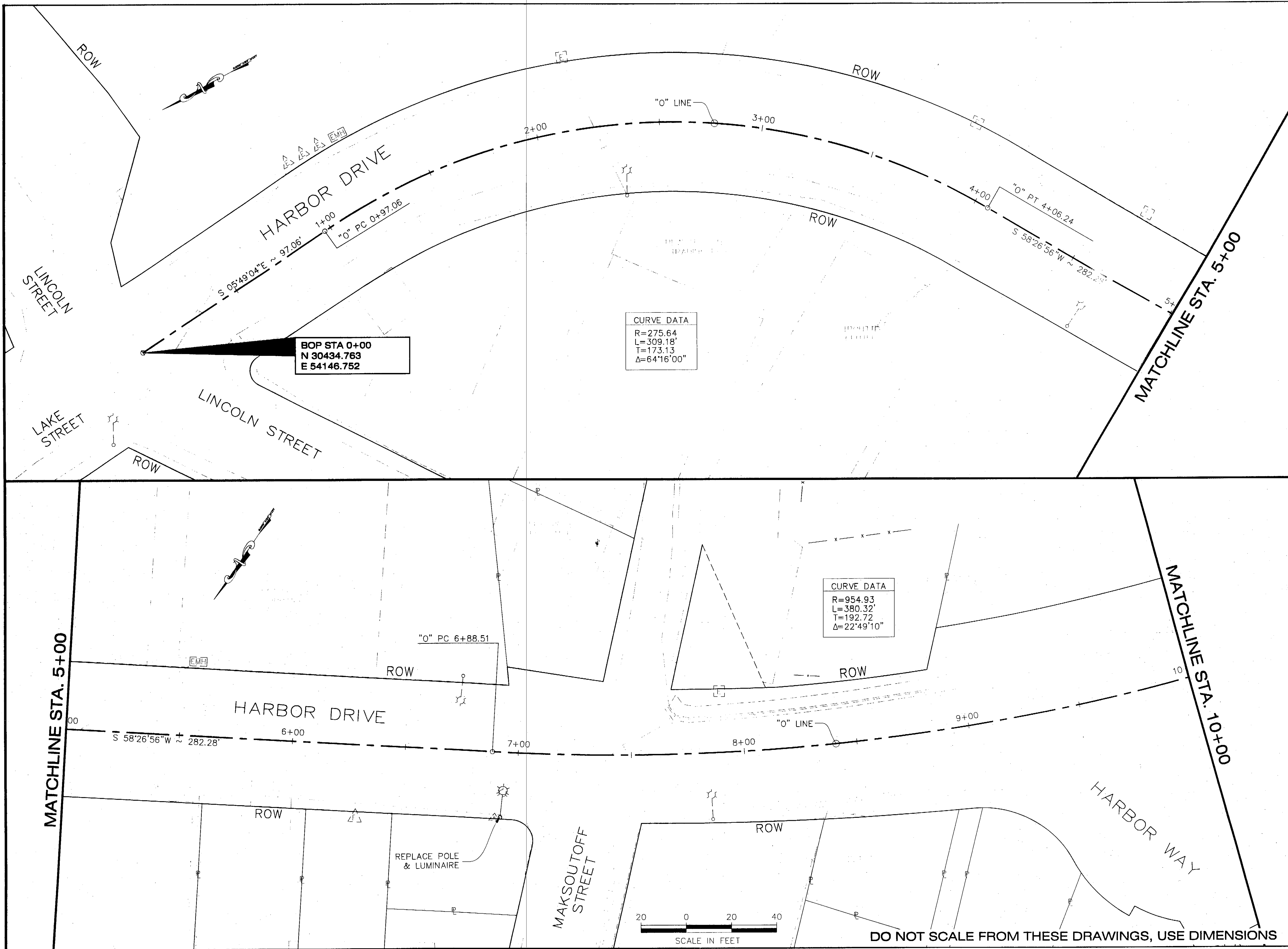
CHECKED BY: J. HEUMANN
DRAWN/REVISED BY: K. KLEMMETSON

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

**SIT-HARBOR DRIVE
LIGHTING, PEDESTRIAN &
BICYCLE IMPROVEMENTS
Box Beam End
Terminal
Connection**

PROJECT DESIGNATION NUMBER
MGS-NH-99-3(7)~68350

STATE	YEAR
ALASKA	2003
SHEET NUMBER	TOTAL SHEETS
E9	46



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PLOT: PSPACE 1-1(F) OR MSPACE 1-20(F)

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
Proj. Eng. *[Signature]* Date 2-6-06

Key Plan

DESIGNED BY: D. BLACKBURN

CHECKED BY: J. HEUMANN
DRAWN/REVISED BY: R.S./M.L./D.S.

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

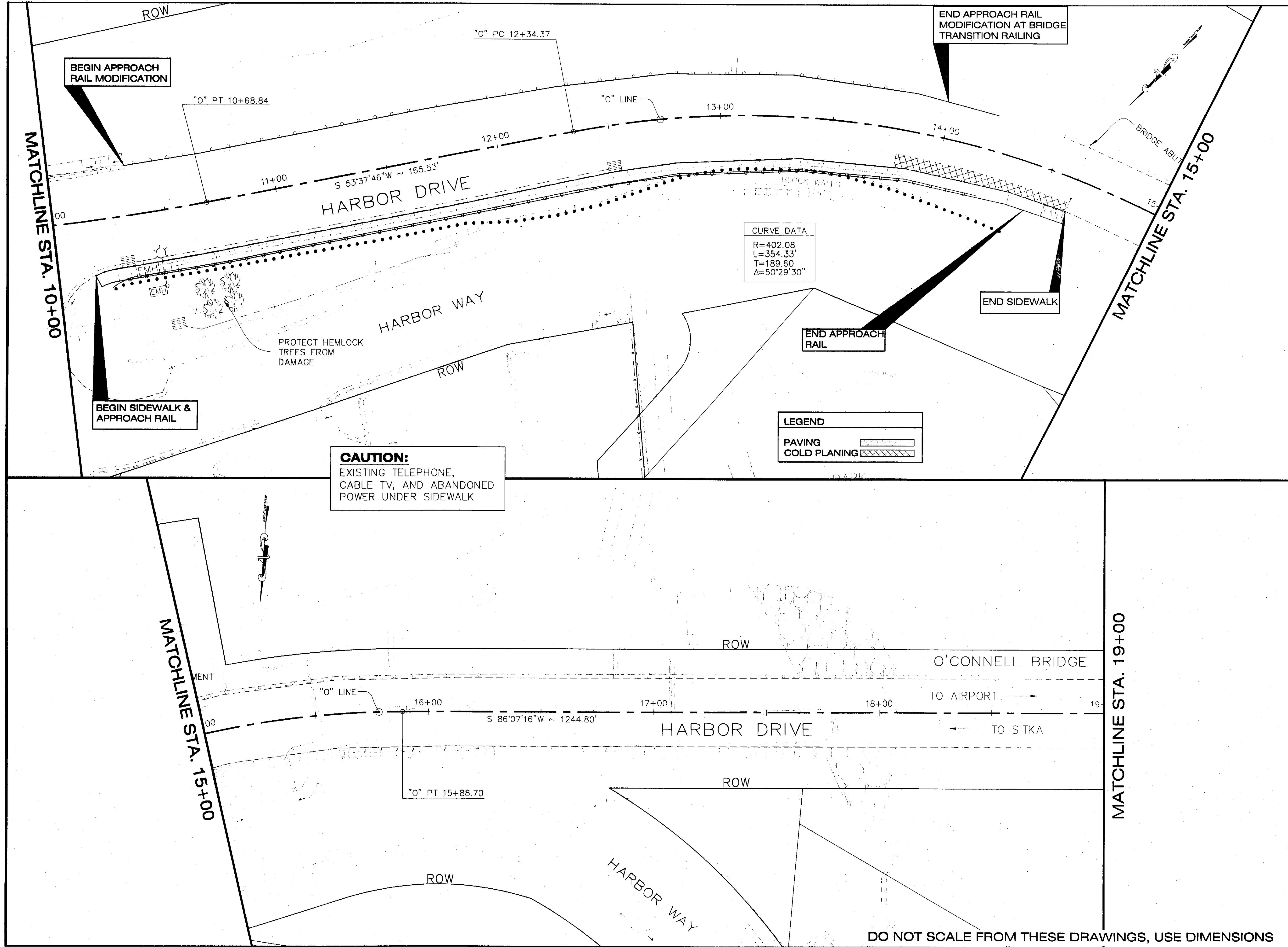
**SIT-HARBOR DRIVE
LIGHTING, PEDESTRIAN &
BICYCLE IMPROVEMENTS**

Plan

PROJECT DESIGNATION NUMBER
MGS-NH-99-3(7)~68350

STATE	YEAR
ALASKA	2003

SHEET NUMBER	TOTAL SHEETS
F1	46



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PLOT: PSPACE 1=1(F) OR MSPACE 1=20(F)

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

Key Plan

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
Proj. Eng. *[Signature]* Date 12-6-06

DESIGNED BY: D. BLACKBURN

CHECKED BY: J. HEUMANN
DRAWN/REVISED BY: R. SNYDER

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

**SIT-HARBOR DRIVE
LIGHTING, PEDESTRIAN &
BICYCLE IMPROVEMENTS**

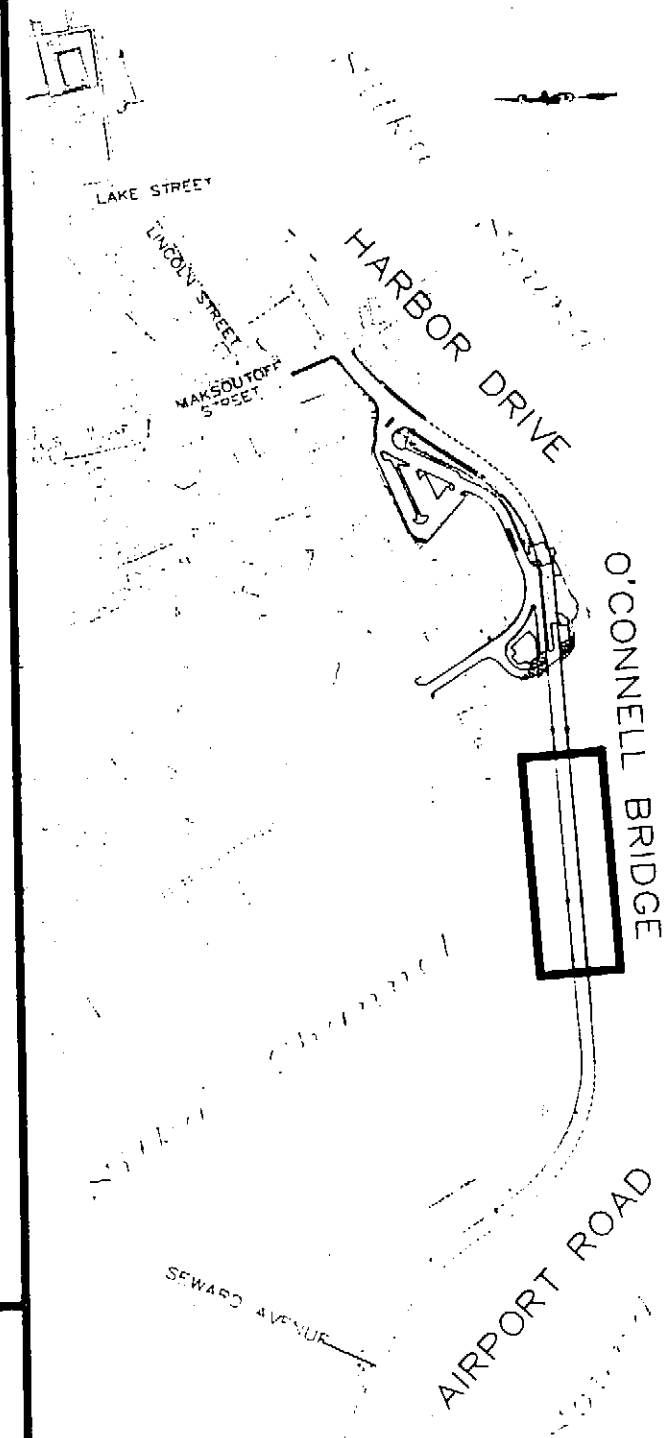
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PROJECT DESIGNATION NUMBER
MGS-NH-99-3(7)-68350

STATE	YEAR
ALASKA	2003
SHEET NUMBER	TOTAL SHEETS
F2	46

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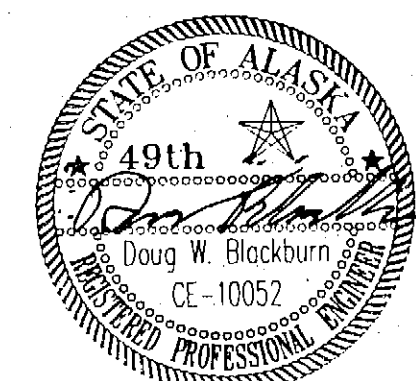
ADDENDUM NUMBER		
ATTACHMENT NUMBER		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION



Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
Proj. Eng. *[Signature]* Date 2-6-06

Key Plan

DESIGNED BY: D. BLACKBURN



CHECKED BY: J. HEUMANN

DRAWN/REVISED BY: R. SNYDER

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

**SIT-HARBOR DRIVE
LIGHTING, PEDESTRIAN &
BICYCLE IMPROVEMENTS**

Plan

PROJECT DESIGNATION NUMBER

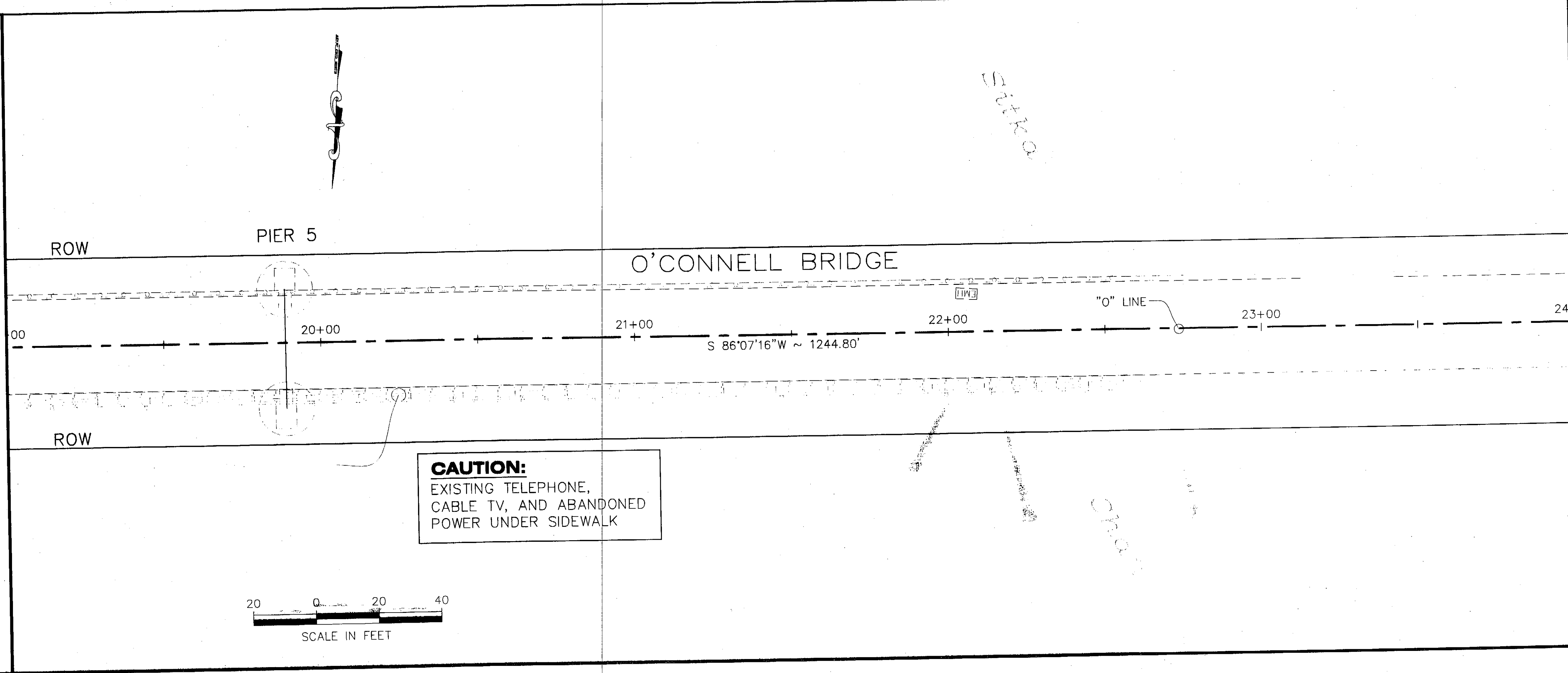
MGs-NH-99-3(7)-68350

STATE	YEAR
ALASKA	2003
SHEET NUMBER	TOTAL SHEETS
F3	46

DO NOT SCALE FROM THESE DRAWINGS, USE DIMENSIONS

MATCHLINE STA. 19+00

MATCHLINE STA. 24+00



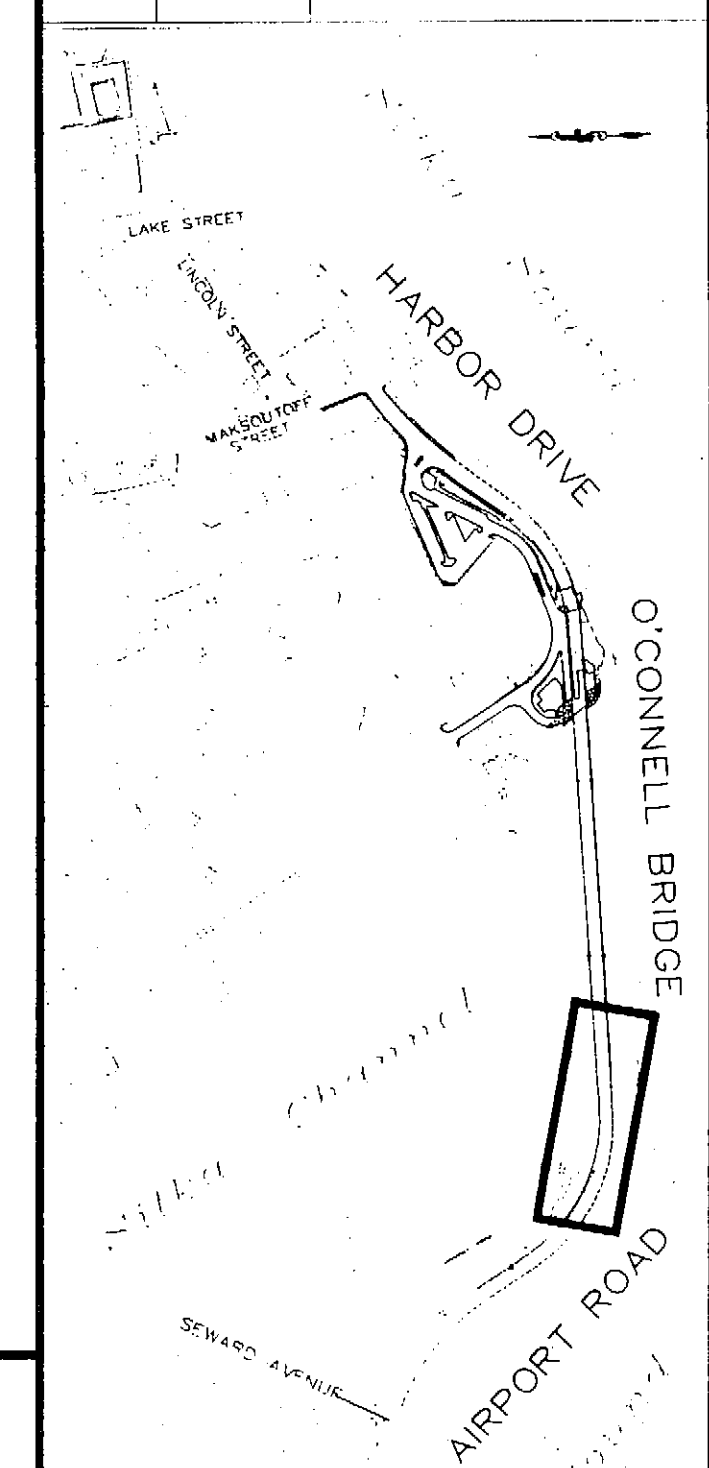
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ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

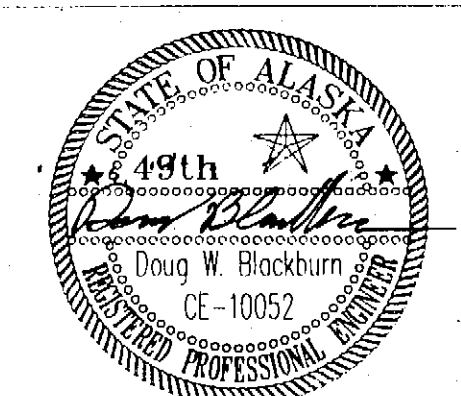
No.	DATE	DESCRIPTION



Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
Proj. Eng. *[Signature]* Date *2-6-06*

Key Plan

DESIGNED BY: D. BLACKBURN



CHECKED BY: J. HEUMANIH

DRAWN/REVISED BY: R. SNYDER

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING
SERVICES DIVISION
**SIT-HARBOR DRIVE
LIGHTING, PEDESTRIAN &
BICYCLE IMPROVEMENTS**

Plan & Profile

PROJECT DESIGNATION NUMBER

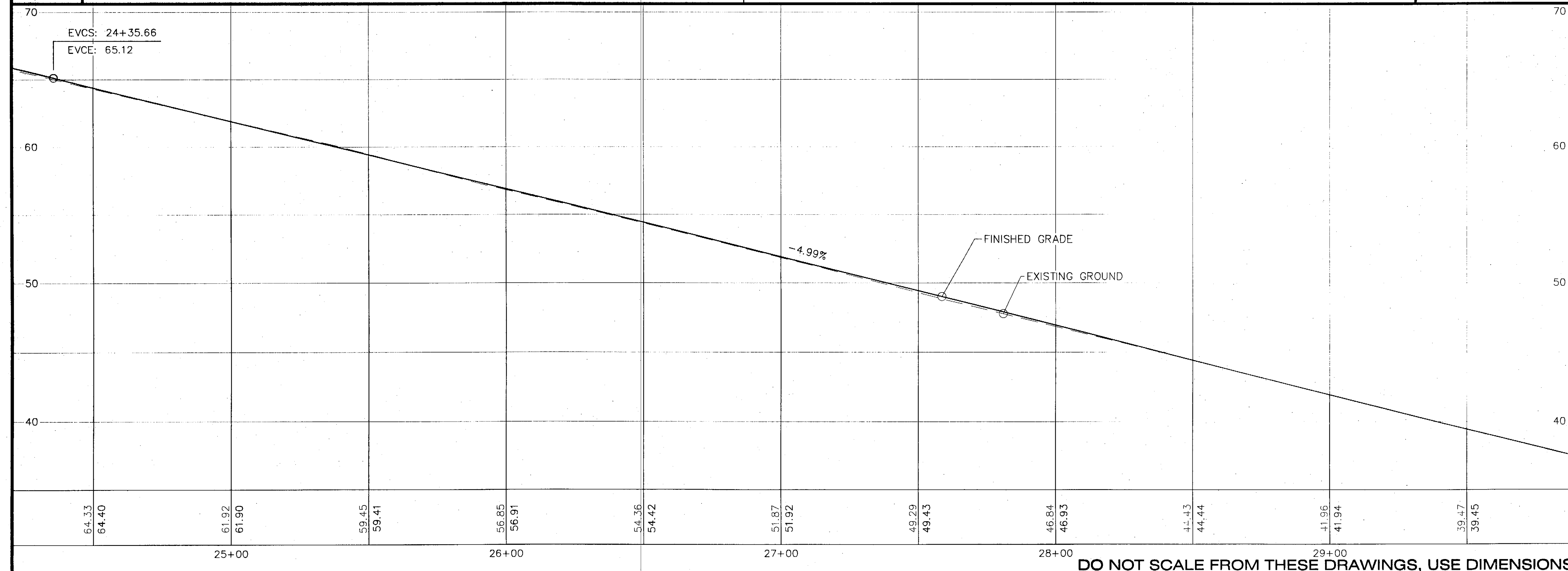
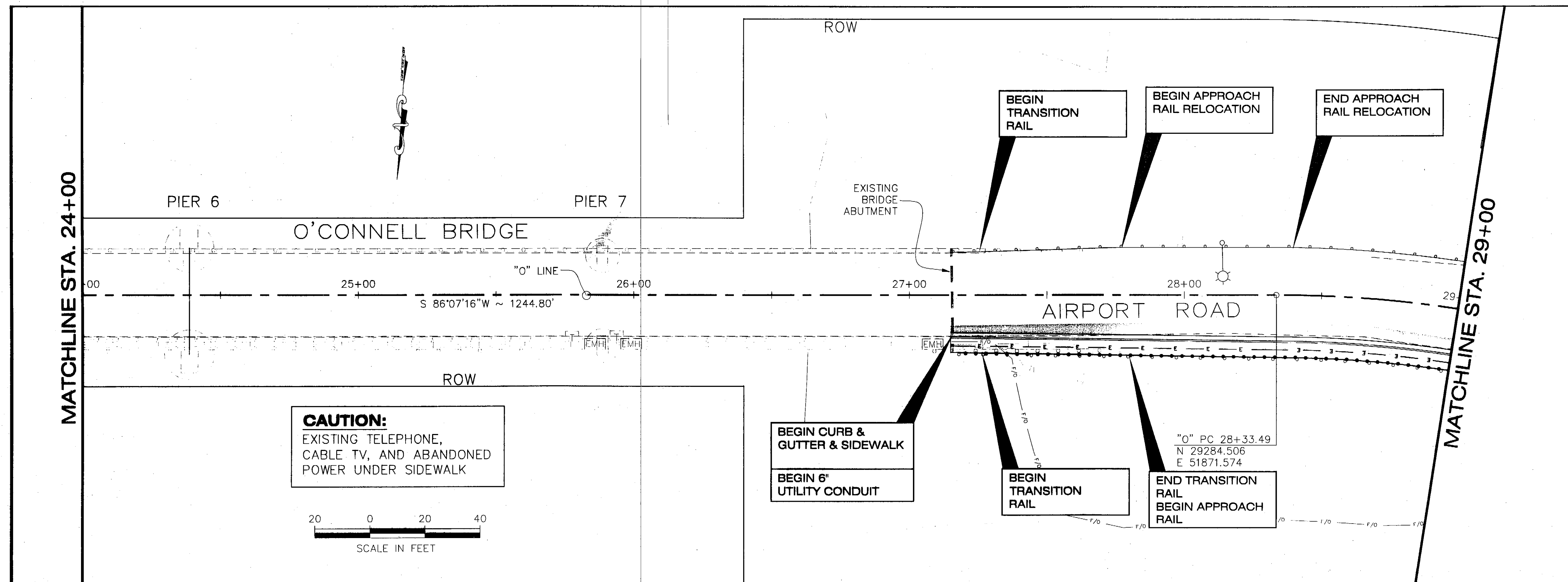
MGS-NH-99-3(7)-68350

STATE YEAR

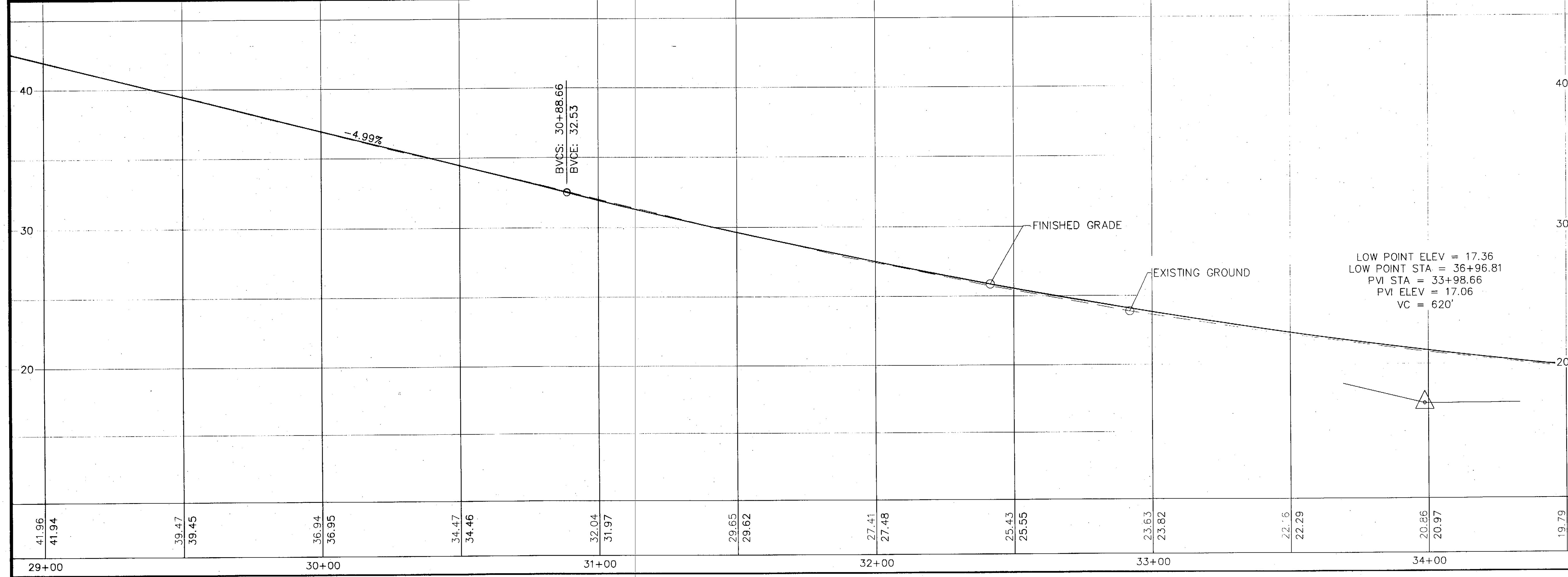
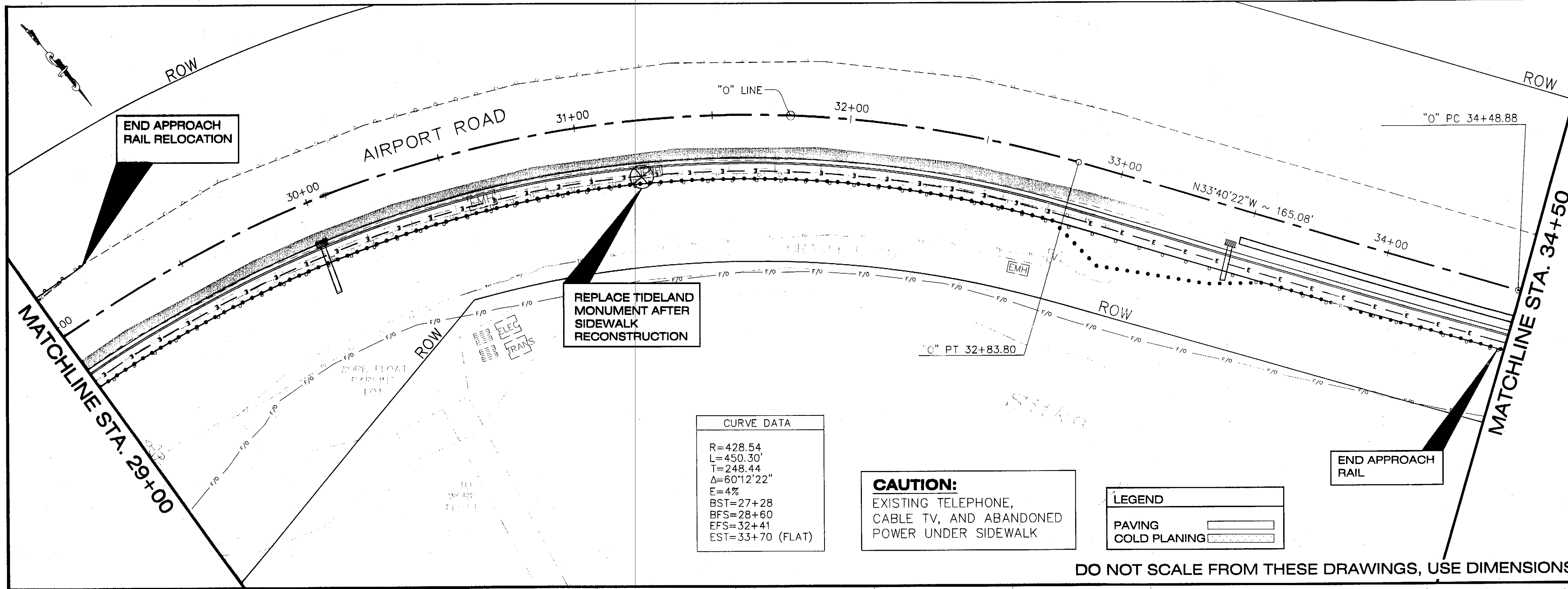
ALASKA 2003

SHEET NUMBER TOTAL SHEETS

F4 46



DO NOT SCALE FROM THESE DRAWINGS, USE DIMENSIONS



PATH: Q:\SH\68350\PlanSet\F_Plan.dwg
 Wed, 24 Dec 03 07:56AM kklemmetson
 PLOT:
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RECORD OF REVISIONS		
No.	DATE	DESCRIPTION

ADDENDUM NUMBER
 ATTACHMENT NUMBER

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
 Proj. Eng. *[Signature]* Date 12-6-06

Key Plan

DESIGNED BY: D. BLACKBURN

CHECKED BY: J. HEUMANN
DRAWN/REVISED BY: R. SHYDEP

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

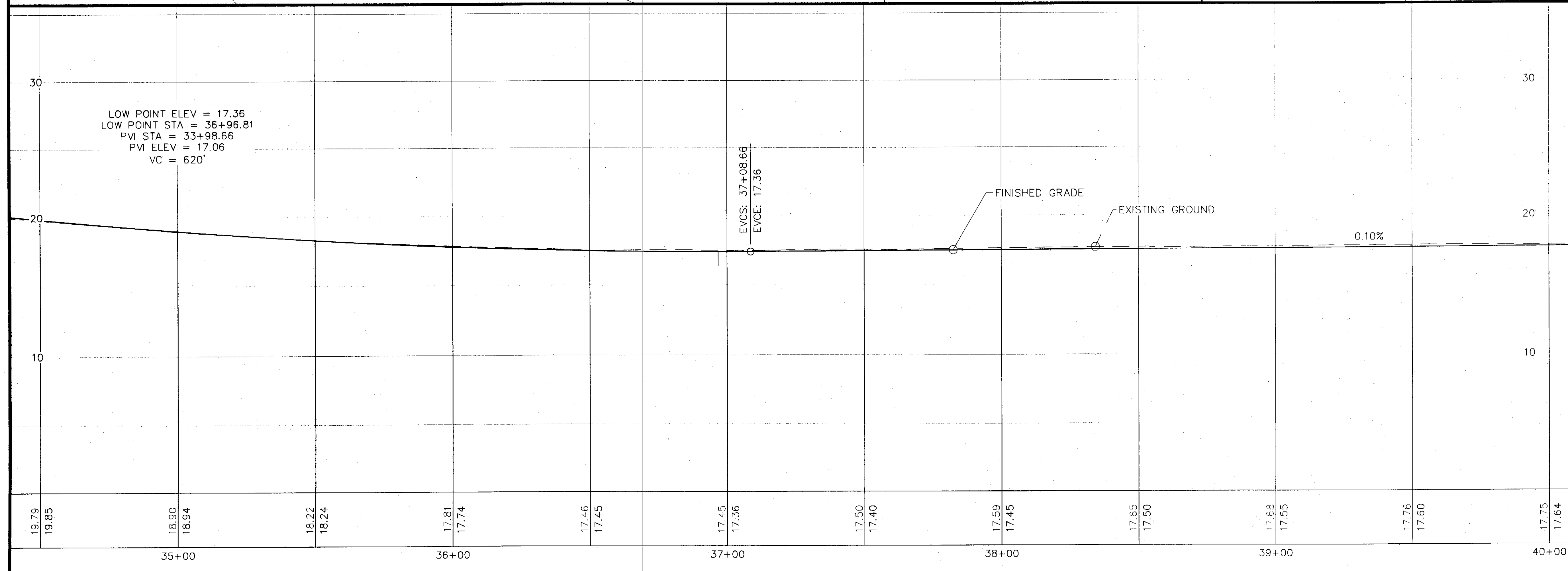
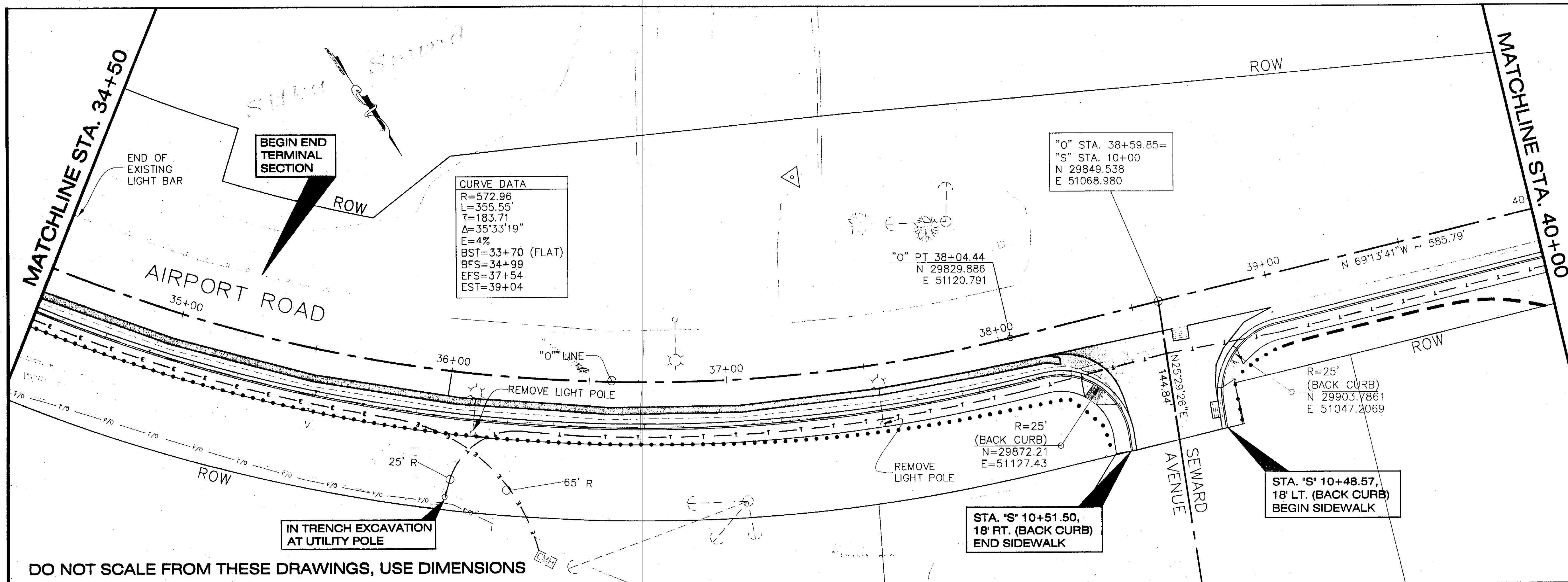
SIT-HARBOR DRIVE LIGHTING, PEDESTRIAN & BICYCLE IMPROVEMENTS

Plan & Profile

PROJECT DESIGNATION NUMBER
MGS-NH-99-3(7)-68350

STATE	YEAR
ALASKA	2003

SHEET NUMBER	TOTAL SHEETS
F5	46



PATH:
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Wed, 24/Dec/03 07:56AM klemmetsen
PLOT:
PSPACE 1=1(F) OR MSPACE 1=20(F)

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

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Proj. Eng. *[Signature]* Date 2-6-06

Key Plan

DESIGNED BY: D. BLACKBURN

STATE OF ALASKA
49th
Doug W. Blackburn
CE-10052
PROFESSIONAL ENGINEER

CHECKED BY: J. HEUMANN
DRAWN/REVISED BY: R. SNYDER

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

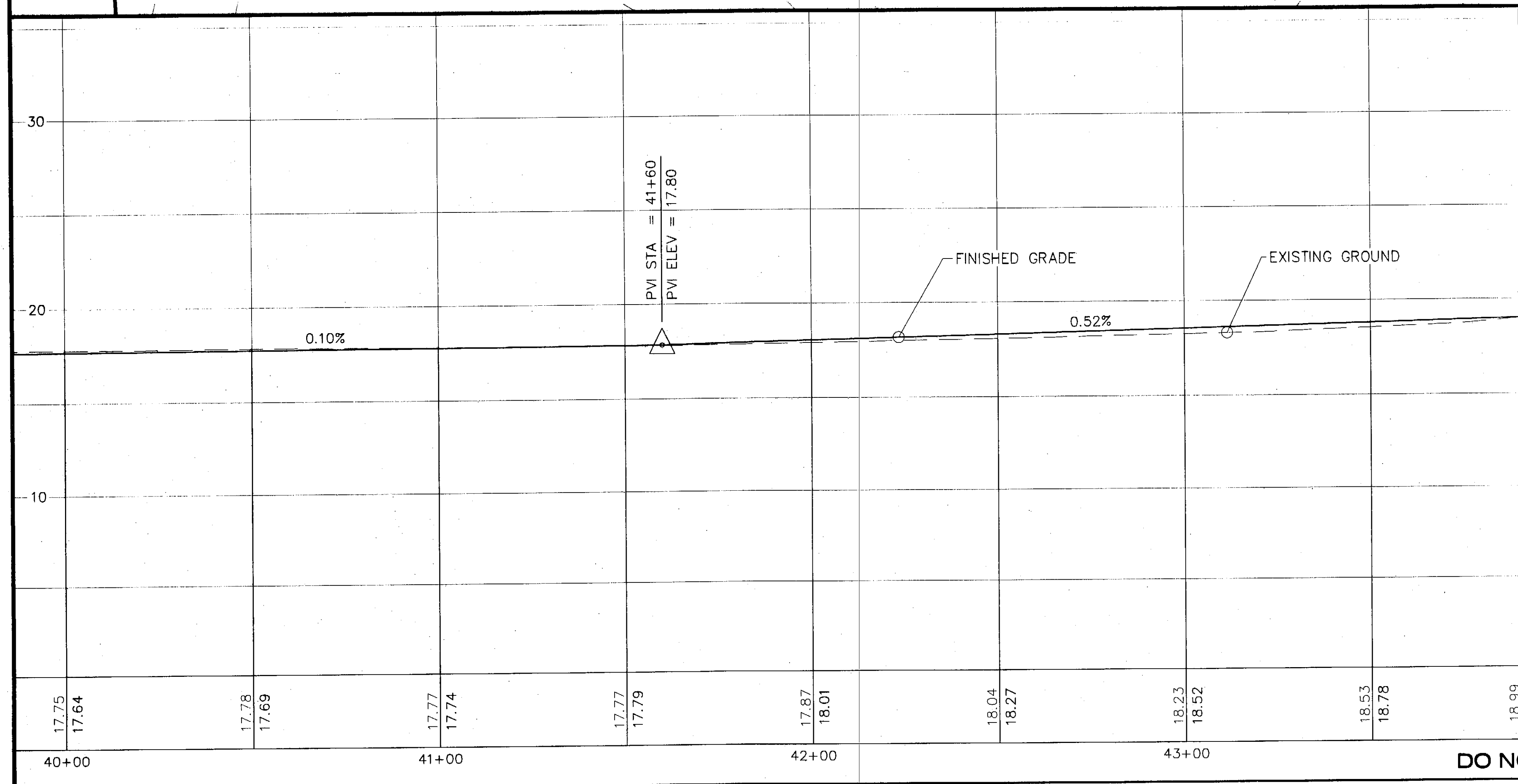
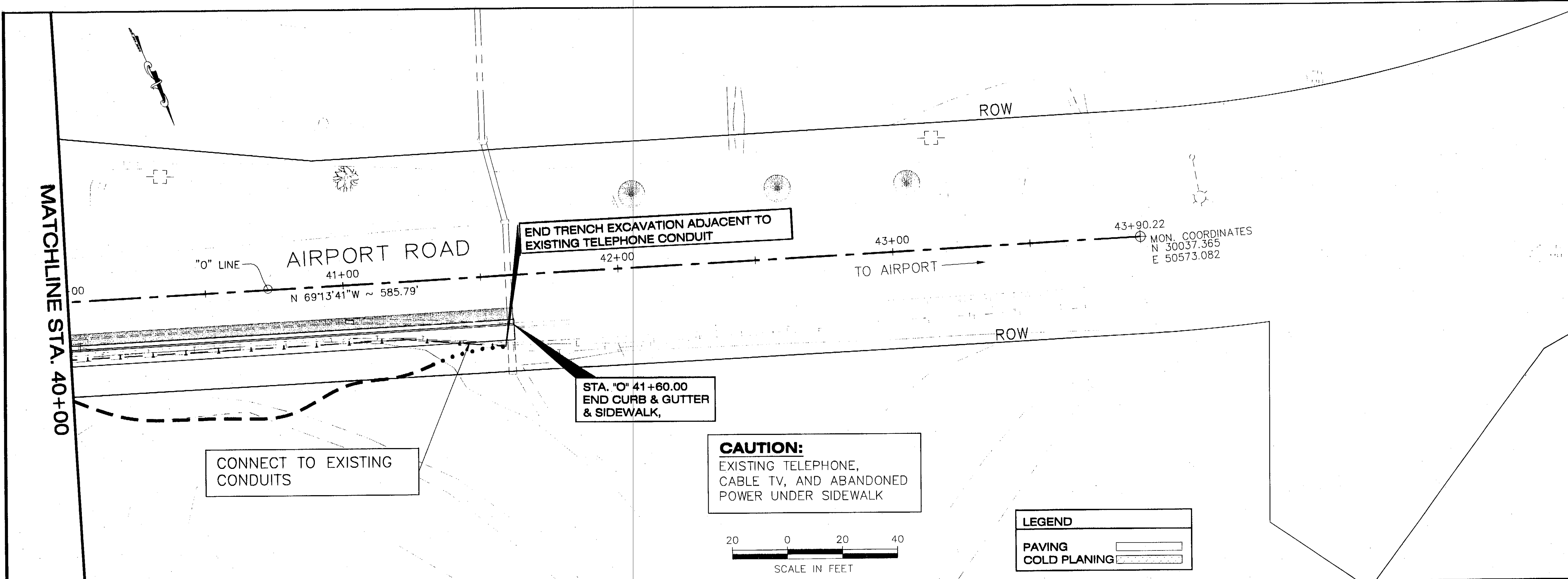
**SIT-HARBOR DRIVE
LIGHTING, PEDESTRIAN & BICYCLE IMPROVEMENTS**

Plan & Profile

PROJECT DESIGNATION NUMBER
MGS-NH-99-3(7)-68350

STATE	YEAR
ALASKA	2003

SHEET NUMBER	TOTAL SHEETS
F6	46



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PSPACE 1=1(F) OR MSPACE 1=20(F)

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
Proj. Eng. *[Signature]* Date 12-6-06

Key Plan

DESIGNED BY: D. BLACKBURN

STATE OF ALASKA
49th
Doug W. Blackburn
CE-10052
REGISTERED PROFESSIONAL ENGINEER

CHECKED BY: J. HEUMANN
DRAWN/REVISED BY: P. SIIYDEP

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

**SIT-HARBOR DRIVE
LIGHTING, PEDESTRIAN & BICYCLE IMPROVEMENTS**

Plan & Profile

PROJECT DESIGNATION NUMBER
MGS-NH-99-3(7)-68350

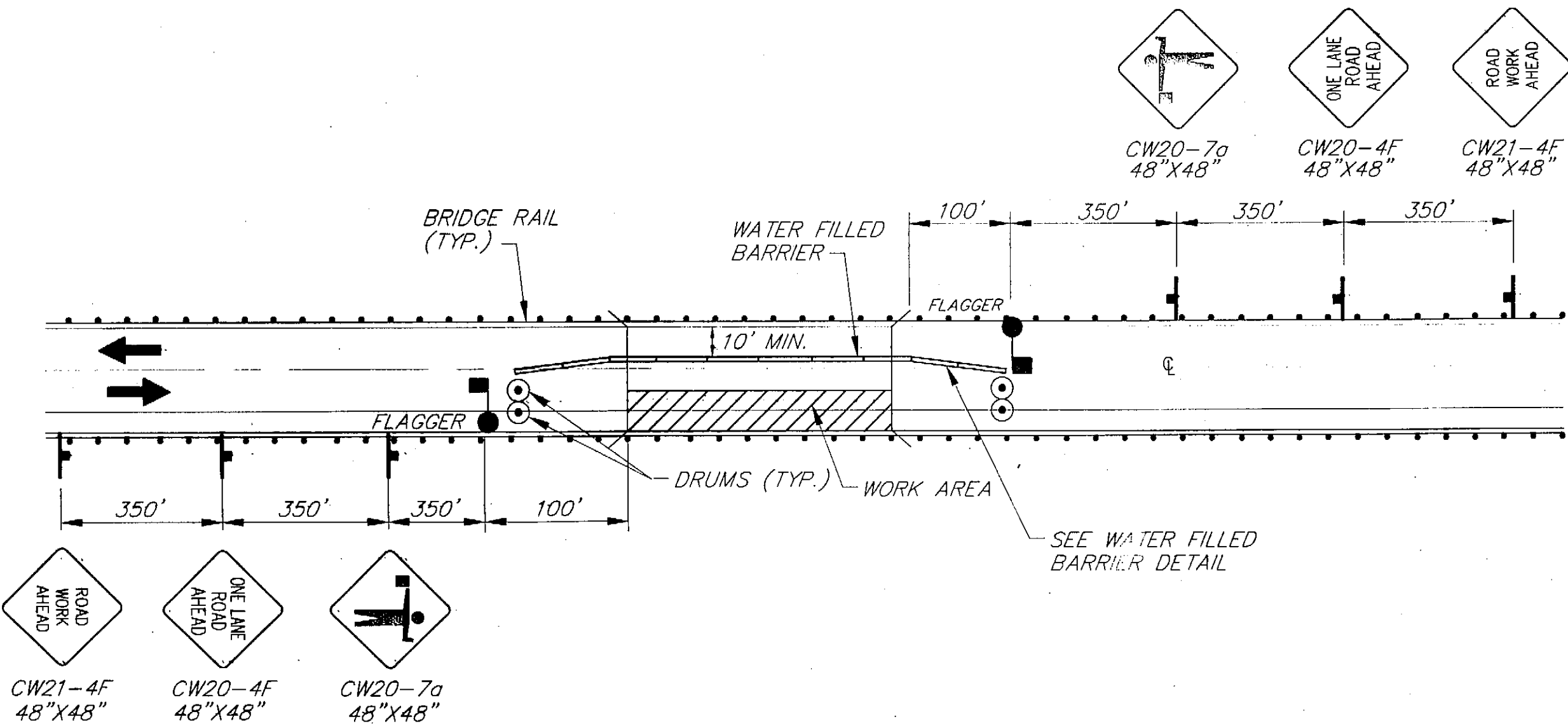
STATE	YEAR
ALASKA	2003

SHEET NUMBER	TOTAL SHEETS
F7	46

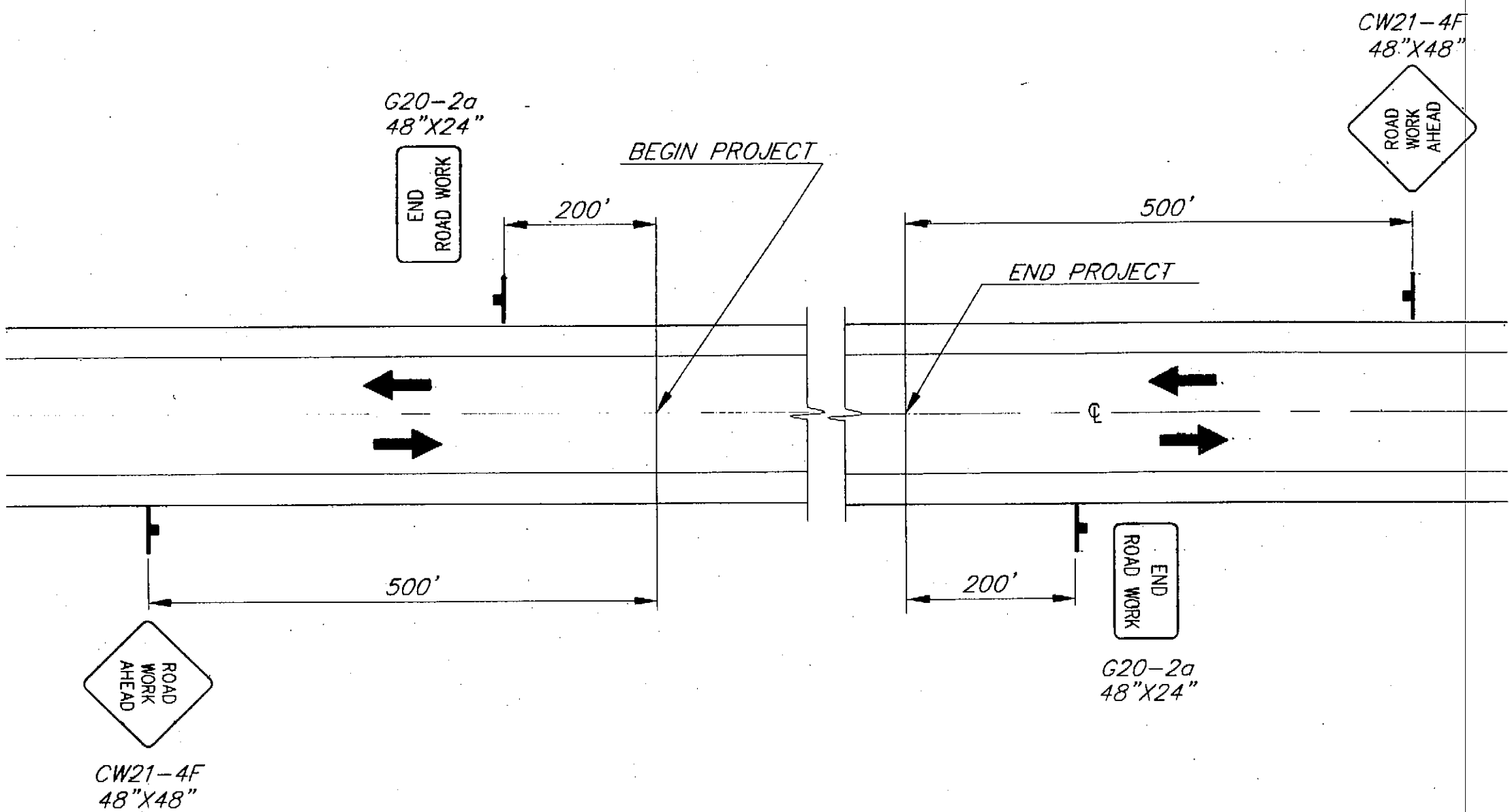
DO NOT SCALE FROM THESE DRAWINGS, USE DIMENSIONS

TRAFFIC CONTROL NOTES

- 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 PORTIONS OF DETAILS ON THESE SHEETS.
- A MINIMUM OF ONE LANE SHALL BE MAINTAINED AT ALL TIMES, THROUGH ALL WORK AREAS.
- TEMPORARY DRIVING LANES SHALL HAVE A MINIMUM WIDTH OF 10'.
- CONSTRUCTION SIGNING SHALL BE IN PLACE ONLY WHEN THE CONDITIONS EXIST FOR WHICH THE SIGNS ARE INTENDED.
- FLOOD LIGHTS SHALL BE PROVIDED FOR FLAGGER STATIONS DURING NIGHT OPERATIONS.
- A SINGLE FLAGGER MAY BE APPROVED BY THE ENGINEER IF THE ENTIRE WORK AREA IS LESS THAN 350' AND VISIBLE FROM THE FLAGGER STATION.
- CHANNELIZATION DEVICES IF USED AT NIGHT SHALL BE LIT IN ACCORDANCE WITH THE ALASKA TRAFFIC MANUAL.
- PERMANENT CONSTRUCTION SIGNING SHALL BE ERECTED AT THE BRIDGE IF WORK AT THE SITE LASTS LONGER THAN TWO WEEKS.
- THE CONTRACTOR SHALL PROTECT PEDESTRIANS FROM FUMES, DUST, DEBRIS, OR WATER THAT ARE THE RESULT OF THIS CONSTRUCTION ACTIVITY.
- BICYCLE AND PEDESTRIAN TRAFFIC SHALL BE ACCOMMODATED ON THE BRIDGE SUCH THAT THEY ARE SAFELY ROUTED ACROSS THE BRIDGE DURING CONSTRUCTION. IF REQUIRED, ADDITIONAL TRAFFIC CONTROL DEVICES FOR BICYCLE TRAFFIC AND ANY ADDITIONAL DEVICES, INCLUDING FLAGGING, NOT SHOWN IN THIS SETUP SHALL BE SUBSIDIARY TO ITEM 643(2), TRAFFIC MAINTENANCE.
- 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.



TWO LANE ROAD - SINGLE LANE CLOSURE
DOUBLE FLAGGER



PERMANENT CONSTRUCTION SIGNING

LEGEND

- SIGN
- CONE
- DRUM
- TYPE III BARRICADE
- FLAGGING STATION
- HI-LEVEL WARNING DEVICE

NO PARKING WITHIN 200' OF CONES

$L = W \times T$

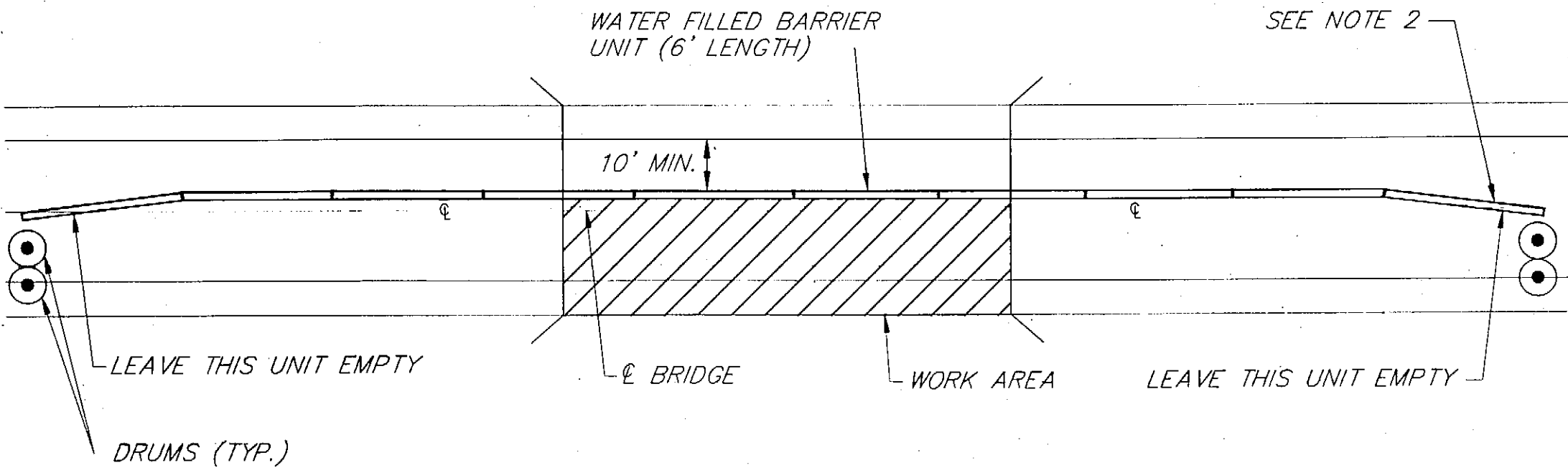
WHERE:
L = LENGTH OF TAPER
W = WIDTH OF OFFSET (10' min.)
T = TAPER FACTOR

TCP TABLE SETUP

SPEED (MILES PER HOUR)	BUFFER/ LENGTH (ft)	CONE/DRUM SPACING (ft)	TAPER FACTOR (T)
16	30	16	4:1
19	36	20	6:1
22	46	23	8:1
25	56	26	10:1
28	69	30	13:1
31	85	33	16:1
34	115	36	19:1
37	141	39	23:1
40	171	43	27:1
43	203	46	32:1
47	246	49	47:1
50	279	53	50:1
53	321	56	53:1
56	361	59	56:1

NOTES

- A MINIMUM OF 12 BARRIER UNITS (72') SHALL BE USED PER INSTALLATION.
- MAXIMUM FLARE RATE SHALL BE 8:1, THE MINIMUM RADIUS FOR A CURVED FLARE SHALL BE 12m.
- BARRIERS SHALL BE LIT WITH TYPE C LIGHTING DURING NIGHT TIME HOURS.



WATER FILLED BARRIER DETAIL

PATH:
Q:\S\168350\Draws\TCC\Draw
Rev. 24 Dec 03 MCEAM klemmetsen
PLOT:
PSPACE 1=1(F) OP MSPACE 1=1(F)
TAB: TYPICALS

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

SIT-HARBOR DRIVE
LIGHTING, PEDESTRIAN & BICYCLE
IMPROVEMENTS
PROJECT NO. 68350

Project As-Built Drawings have been
reviewed by the Project Engineer and
represent to the best of my knowledge,
the project as constructed.
Proj. Eng. *[Signature]* Date 12-6-06

DESIGNED BY: K. MATTSO



CHECKED BY: P. PURVES

DRAWN/REVISED BY: D. STEVENS

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

SIT-HARBOR DRIVE
LIGHTING, PEDESTRIAN &
BICYCLE IMPROVEMENTS

Traffic
Control Plan

PROJECT DESIGNATION NUMBER

NH-99-3(7) ~ 68350

STATE YEAR

ALASKA 2003

SHEET NUMBER TOTAL SHEETS

G1 46

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

SIT-HARBOR DRIVE
LIGHTING, PEDESTRIAN & BICYCLE
IMPROVEMENTS
PROJECT NO. 68350

Traffic Control Plan

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
Proj. Eng. *[Signature]* Date 12-6-06

DESIGNED BY: *[Signature]* MATTHEW



CHECKED BY: *[Signature]* PURVES

DRAWN/REVISED BY: *[Signature]* STEVENS

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

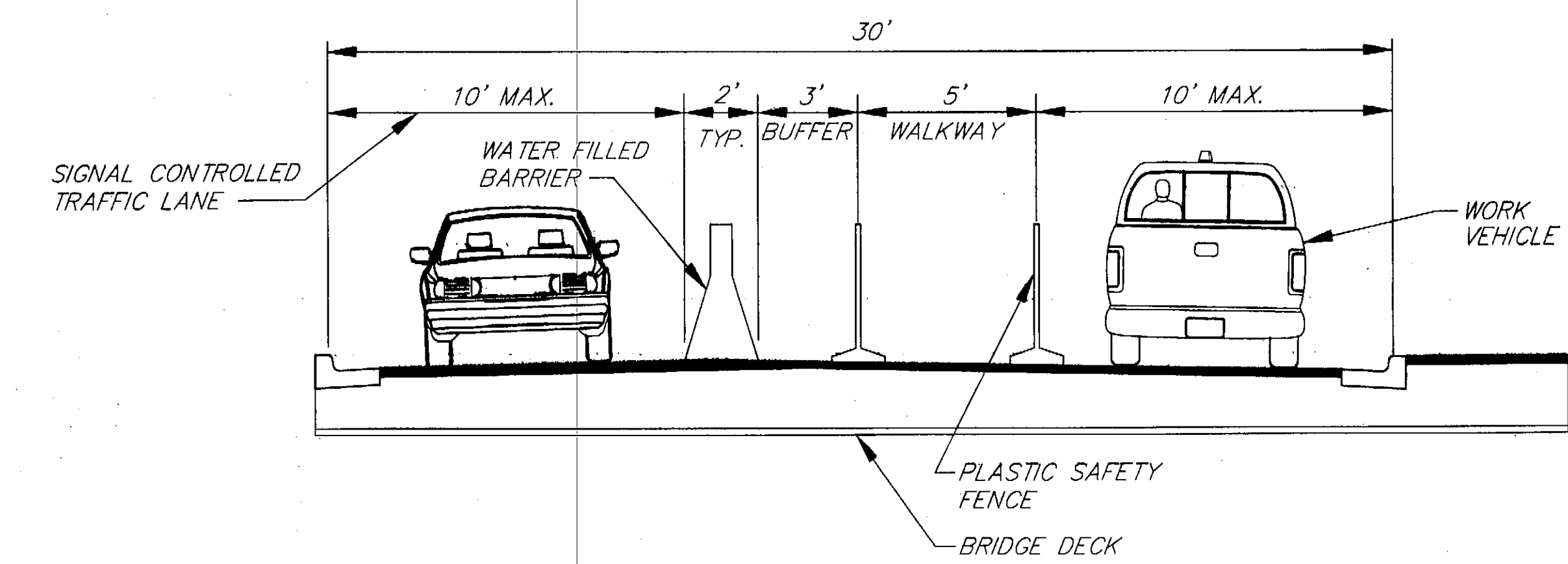
SIT-HARBOR DRIVE
LIGHTING, PEDESTRIAN & BICYCLE IMPROVEMENTS

Traffic Control Plan

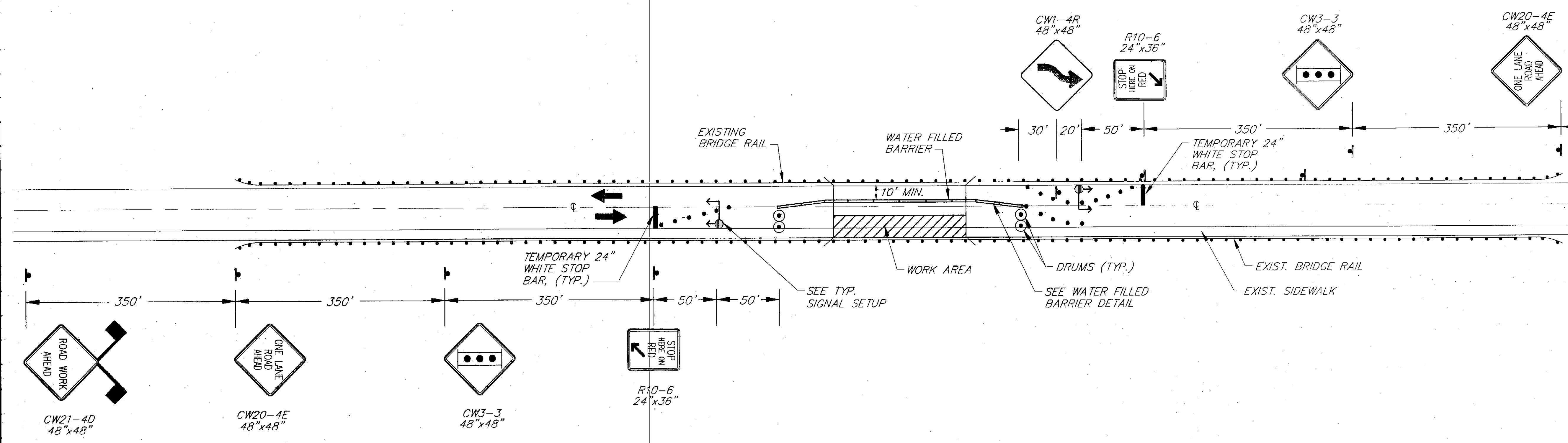
PROJECT DESIGNATION NUMBER

NH-99-3(7) ~ 68350

STATE	YEAR
ALASKA	2003
SHEET NUMBER	TOTAL SHEETS
G2	46



TYPICAL SECTION
RIGHT SIDE CONSTRUCTION



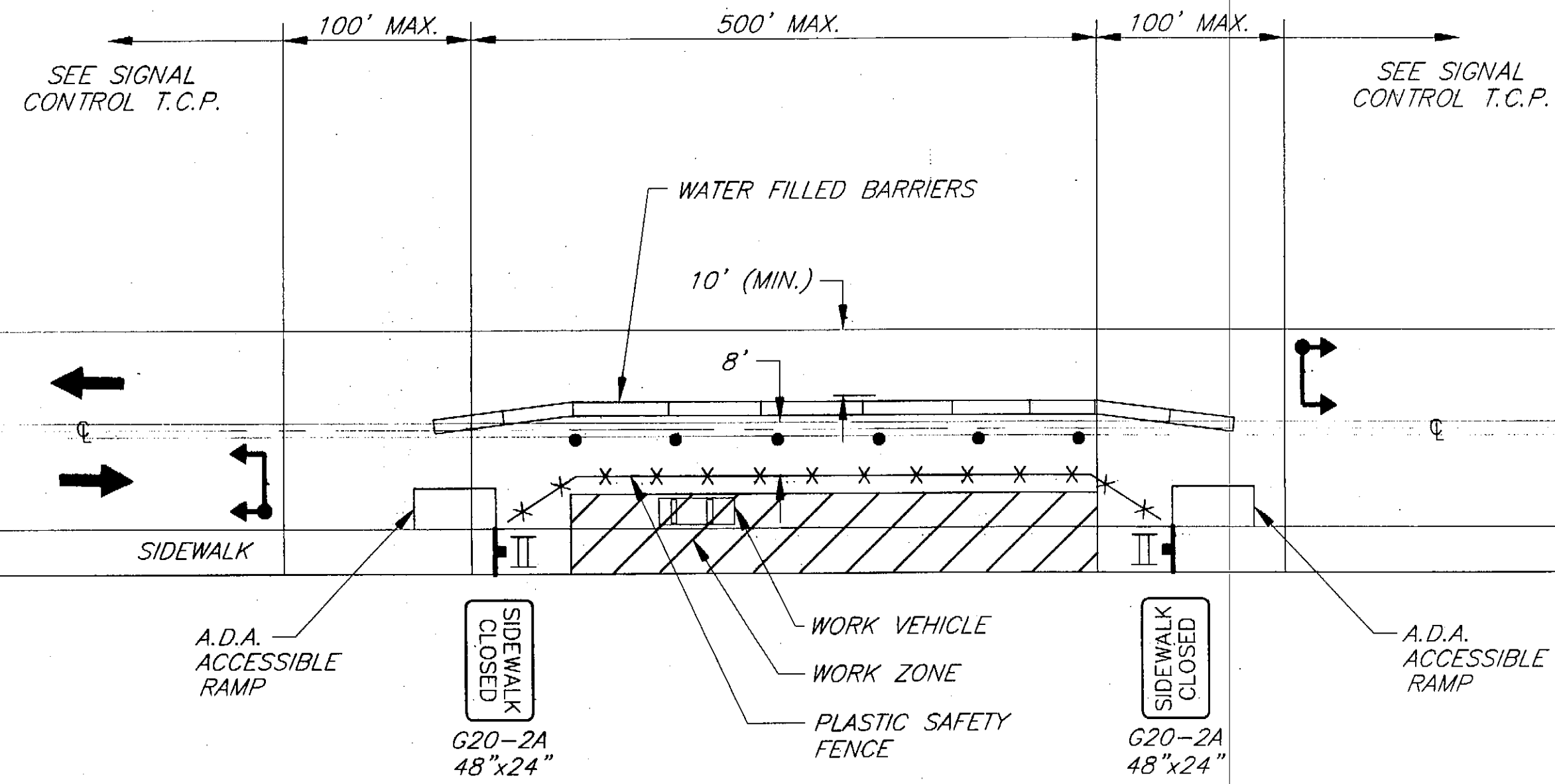
RIGHT SIDE OF BRIDGE SIGNAL CONTROL

LEGEND

- TEMPORARY SIGNAL
- CONSTRUCTION SIGN
- CONES
- PORTABLE WATER FILLED BARRIER
- HIGH LEVEL WARNING DEVICE
- WORK AREA

NOTES

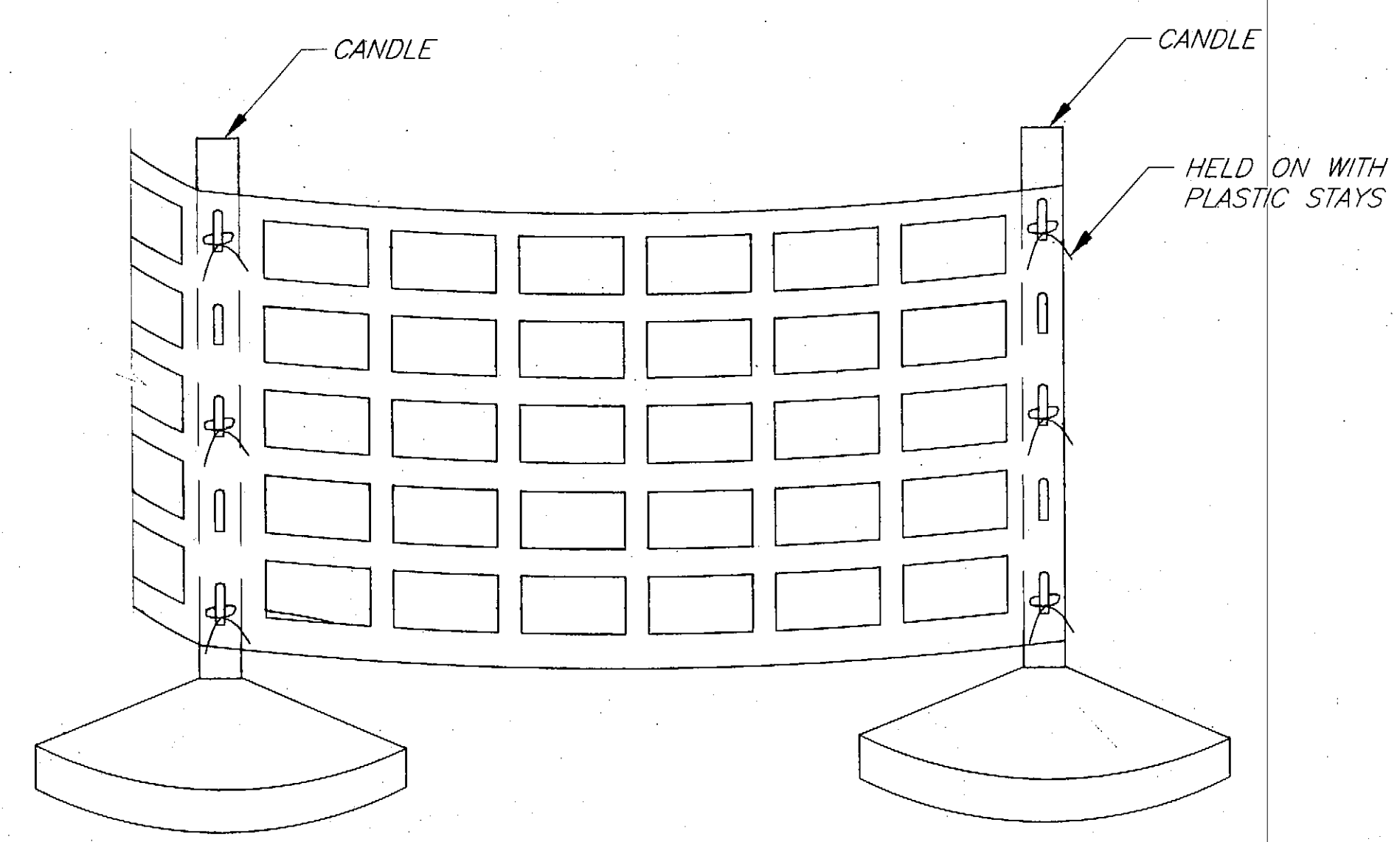
- IF FLAGMEN ARE USED INSTEAD OF A TRAFFIC SIGNAL, INSTALL CW20-7a (FLAGMAN) 48" x 48" SIGNS IN PLACE OF THE CW3-3 (SIGNAL AHEAD) SIGNS.
- FOR THE SITKA HARBOR BRIDGE, THE TEMPORARY SIGNAL SHALL BE PLACED ON EITHER END OF THE WORK ZONE, NOT AT EITHER END OF BRIDGE.
- THE CONTRACTOR SHALL PROVIDE EMERGENCY VEHICLES WITH ACCESS THROUGH THE PROJECT AT ALL TIMES.
- ALASKA DOT HAS WATER FILLED BARRIERS AVAILABLE FOR THIS PROJECT FOR USE BY THE CONTRACTOR.
- WORK ZONE LENGTH SHALL BE NO LONGER THAN THE LENGTH OF BRIDGE RAIL THE CONTRACTOR CAN REPLACE IN ONE WORK SHIFT.
- SEE PEDESTRIAN ACCESS DETAIL FOR RIGHT SIGNAL CONTROL.



PEDESTRIAN ACCESS DETAIL

NOTES

1. LANE WIDTH SHALL BE MEASURED FROM FACE OF CURB TO THE EDGE OF THE DRUMS OR BARRICADES (NOT THE CENTER OF DRUMS OR BARRICADES).
2. PEDESTRIAN ACCESS WIDTH SHALL BE MEASURED FROM THE FENCE TO THE EDGE OF THE DRUMS OR BARRICADES.
3. A.D.A. ACCESSIBILITY SHALL BE APPROVED BY THE ENGINEER PRIOR TO ANY TRAFFIC CONTROL ITEM BEING ACCEPTED FOR PAYMENT.
4. PEDESTRIAN SAFETY FENCE AND INSTALLATION DETAILS SHALL BE APPROVED BY THE ENGINEER PRIOR TO INSTALLATION. DETAILS SHOWN ON THIS DRAWING ARE FOR INFORMATION ONLY. THE CONTRACTOR MAY PROPOSE A SIMILAR SYSTEM FOR PEDESTRIAN SAFETY.



TYPICAL PLASTIC SAFETY FENCE
N.T.S.

LEGEND

- SIGN
- "CANDLE" (OR CONE)
- DRUM
- TYPE II BARRICADE
- FLAGGING STATION
- TRAFFIC SIGNAL

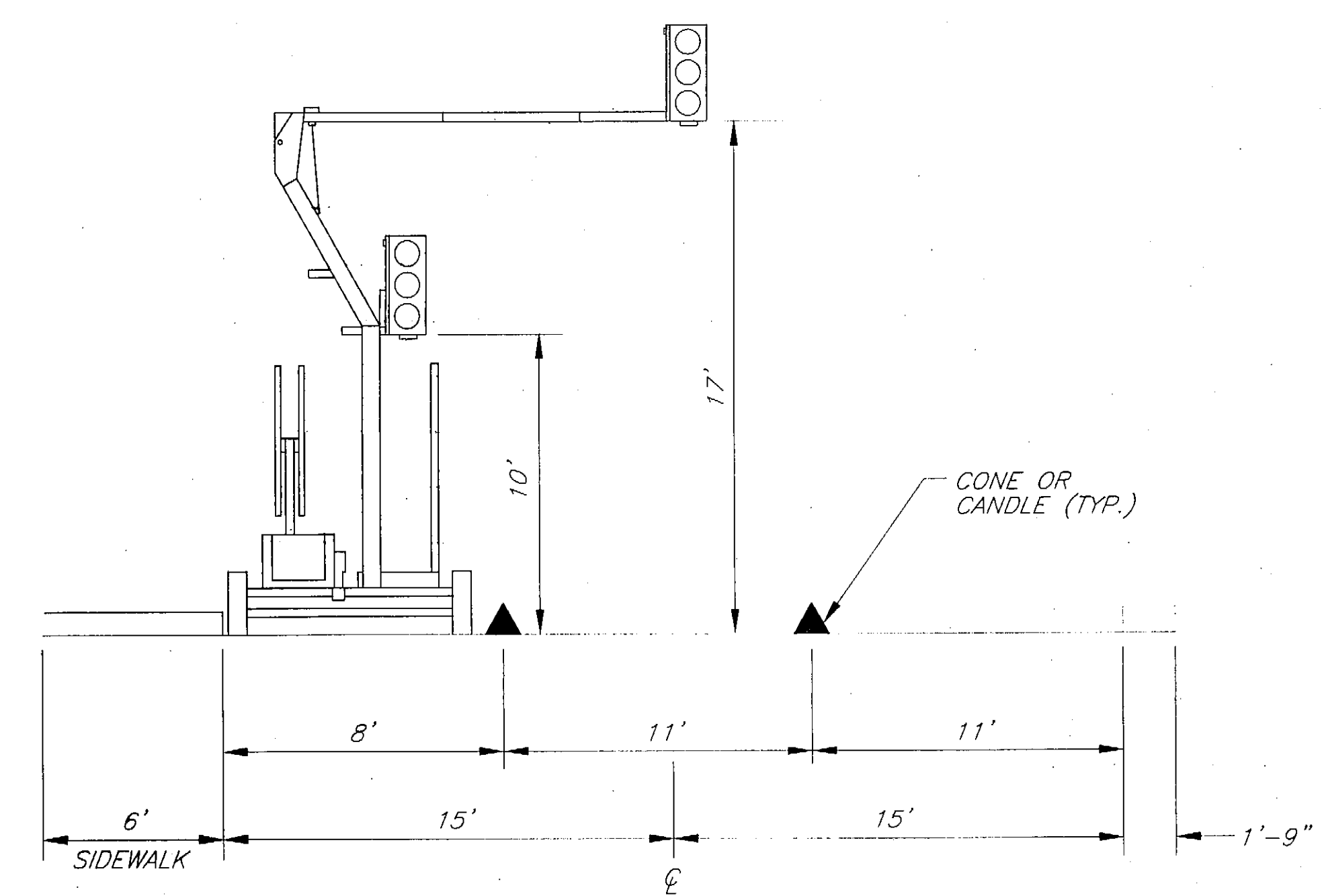
NO PARKING WITHIN 200' OF CONES

$$L = W \times T$$

WHERE:
L = LENGTH OF TAPER
W = WIDTH OF OFFSET (10' MIN.)
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TCP TABLE SETUP

SPEED (MILES PER HOUR)	BUFFER/ LENGTH (ft)	CONE/DRUM SPACING (ft)	TAPER FACTOR (T)
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28	69	30	13:1
31	85	33	16:1
34	115	36	19:1
37	141	39	23:1
40	171	43	27:1
43	203	46	32:1
47	246	49	47:1
50	279	53	50:1
53	321	56	53:1
56	361	59	56:1



TYPICAL TEMPORARY SIGNAL SETUP

PATH:
Q:\57\68350\Parset\TCP2.dwg
Wed, 24/Dec/03 11:06AM klemmetsor
PLOT:
PSPACE 1=1(F) OR MSPACE 1=1(F)
TAB: TYPICALS

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

SIT-HARBOR DRIVE
LIGHTING, PEDESTRIAN & BICYCLE
IMPROVEMENTS
PROJECT NO. 68350

Traffic Control Plan

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
Proj. Eng. *[Signature]* Date 7-6-06

DESIGNED BY: K. MATTSO



CHECKED BY: R. RIVES

DRAWN/REVISED BY: D. STEVENS

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

SIT-HARBOR DRIVE
LIGHTING, PEDESTRIAN &
BICYCLE IMPROVEMENTS

Traffic Control Plan

PROJECT DESIGNATION NUMBER

NH-99-3(7) ~ 68350

STATE	YEAR
ALASKA	2003

SHEET NUMBER	TOTAL SHEETS
G3	46

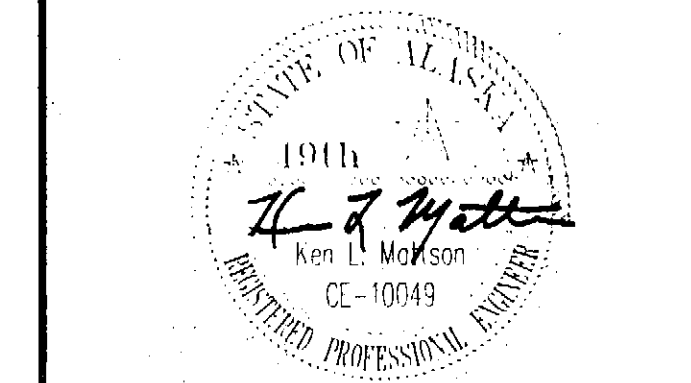
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION

SIT-HARBOR DRIVE
LIGHTING, PEDESTRIAN & BICYCLE
IMPROVEMENTS
PROJECT NO. 68350

Traffic Control Plan

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
Proj. Eng. *[Signature]* Date 12-6-06

DESIGNED BY: *[Signature]* MATTHEW



CHECKED BY: E. CURVES
DRAWN/REVISED BY: D. STEVENS

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

SIT-HARBOR DRIVE
LIGHTING, PEDESTRIAN &
BICYCLE IMPROVEMENTS

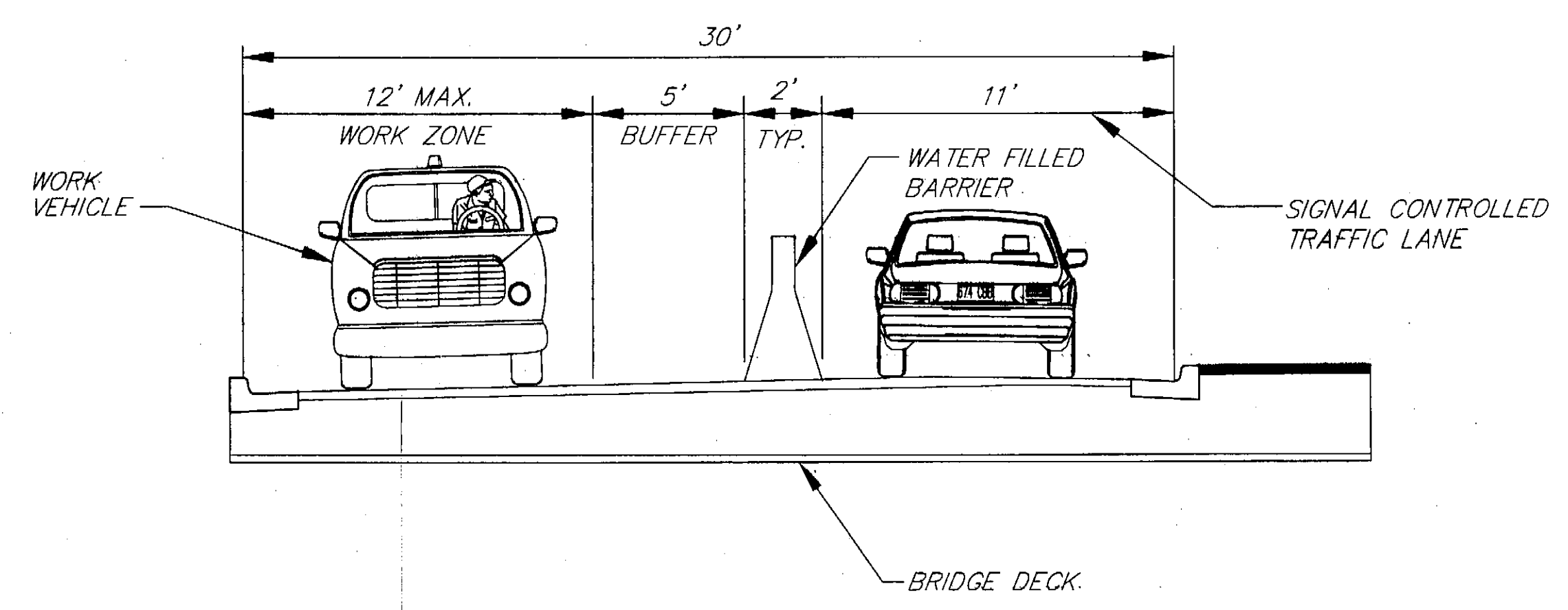
Traffic Control Plan

PROJECT DESIGNATION NUMBER

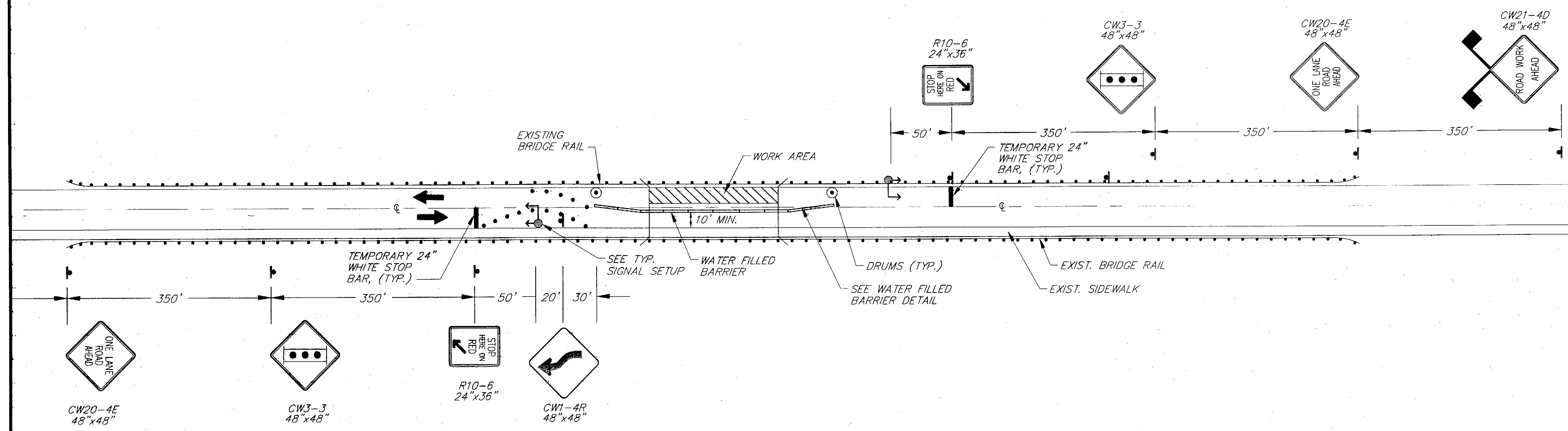
NH-99-3(7) ~ 68350

STATE	YEAR
ALASKA	2003

SHEET NUMBER	TOTAL SHEETS
G4	46



TYPICAL SECTION
LEFT SIDE CONSTRUCTION



LEFT SIDE OF BRIDGE SIGNAL CONTROL

LEGEND

- TEMPORARY SIGNAL CONSTRUCTION SIGN
- CONES
- PORTABLE WATER FILLED BARRIER
- HIGH LEVEL WARNING DEVICE
- WORK AREA

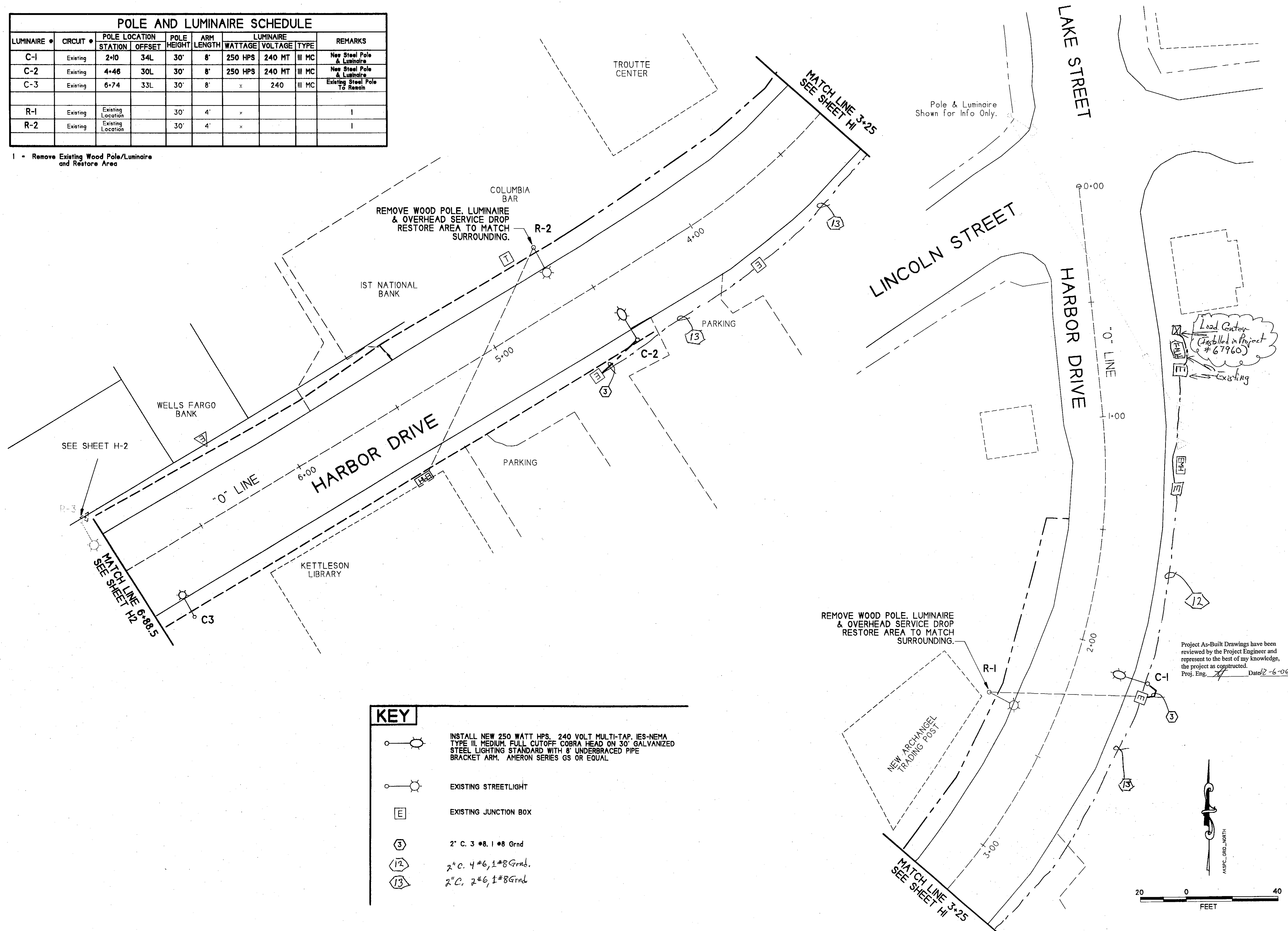
NOTES

- IF FLAGMEN ARE USED INSTEAD OF A TRAFFIC SIGNAL, INSTALL CW20-7a (FLAGMAN) 48" x 48" SIGNS IN PLACE OF THE CW3-3 (SIGNAL AHEAD) SIGNS.
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- SEE PEDESTRIAN ACCESS DETAIL FOR RIGHT SIGNAL CONTROL.

File 806-HI Plotted 12.03.2003

POLE AND LUMINAIRE SCHEDULE										
LUMINAIRE	CIRCUIT	POLE LOCATION		POLE HEIGHT	ARM LENGTH	LUMINAIRE			REMARKS	
STATION	OFFSET					WATTAGE	VOLTAGE	TYPE		
C-1	Existing	2+10	34L	30'	8'	250 HPS	240 MT	III MC	New Steel Pole & Luminaire	
C-2	Existing	4+46	30L	30'	8'	250 HPS	240 MT	III MC	New Steel Pole & Luminaire	
C-3	Existing	6+74	33L	30'	8'	x	240	III MC	Existing Steel Pole To Remain	
R-1	Existing	Existing Location		30'	4'	x			I	
R-2	Existing	Existing Location		30'	4'	x			I	

I - Remove Existing Wood Pole/Luminaire and Restore Area



ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
-----	------	-------------

KEY
LAYOUT PLAN

DESIGNED BY: J. DELVIN ARMSTRONG, P.E.

CHECKED BY:

DRAWN/REVISED BY: J.D.A. 11.07.2003

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION
SIT-HARBOR DRIVE IMPROVEMENTS

ILLUMINATION PLAN
STA 0+00 TO STA 6+88.5

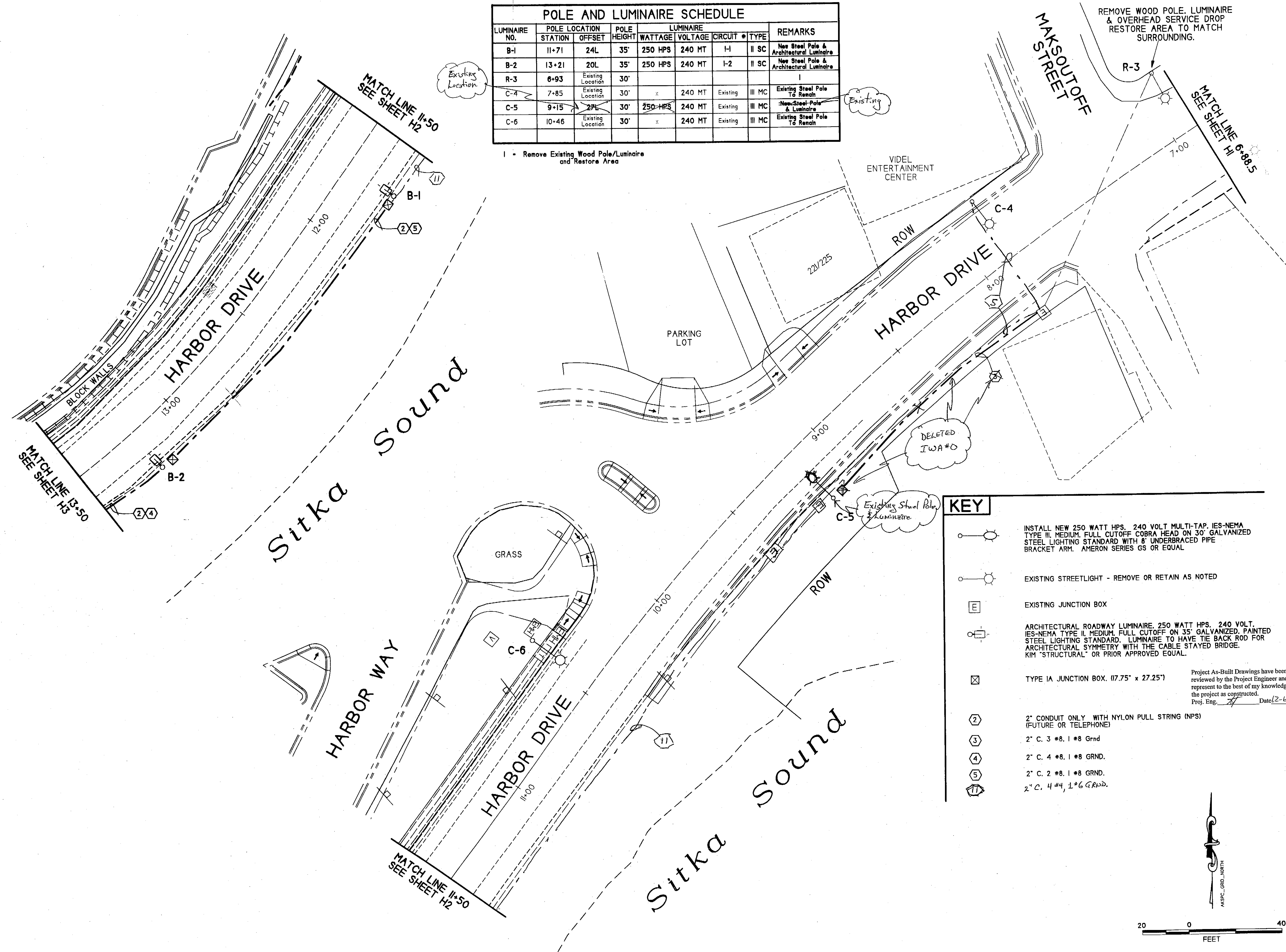
PROJECT DESIGNATION NUMBER
NH-99-3(7) ~ 68350

STATE	YEAR
ALASKA	2003
SHEET NUMBER	TOTAL SHEETS
HI	46

File Name: 806HI

POLE AND LUMINAIRE SCHEDULE									
LUMINAIRE NO.	POLE LOCATION		POLE HEIGHT	LUMINAIRE				REMARKS	
	STATION	OFFSET		WATTAGE	VOLTAGE	CIRCUIT	TYPE		
B-1	11+71	24L	35'	250 HPS	240 MT	I-1	II SC	New Steel Pole & Architectural Luminaire	
B-2	13+21	20L	35'	250 HPS	240 MT	I-2	II SC	New Steel Pole & Architectural Luminaire	
R-3	6+93	Existing Location	30'					I	
C-4	7+85	Existing Location	30'	x	240 MT	Existing	III MC	Existing Steel Pole To Remain	
C-5	9+15	27L	30'	250 HPS	240 MT	Existing	III MC	New Steel Pole & Architectural Luminaire	
C-6	10+46	Existing Location	30'	x	240 MT	Existing	III MC	Existing Steel Pole To Remain	

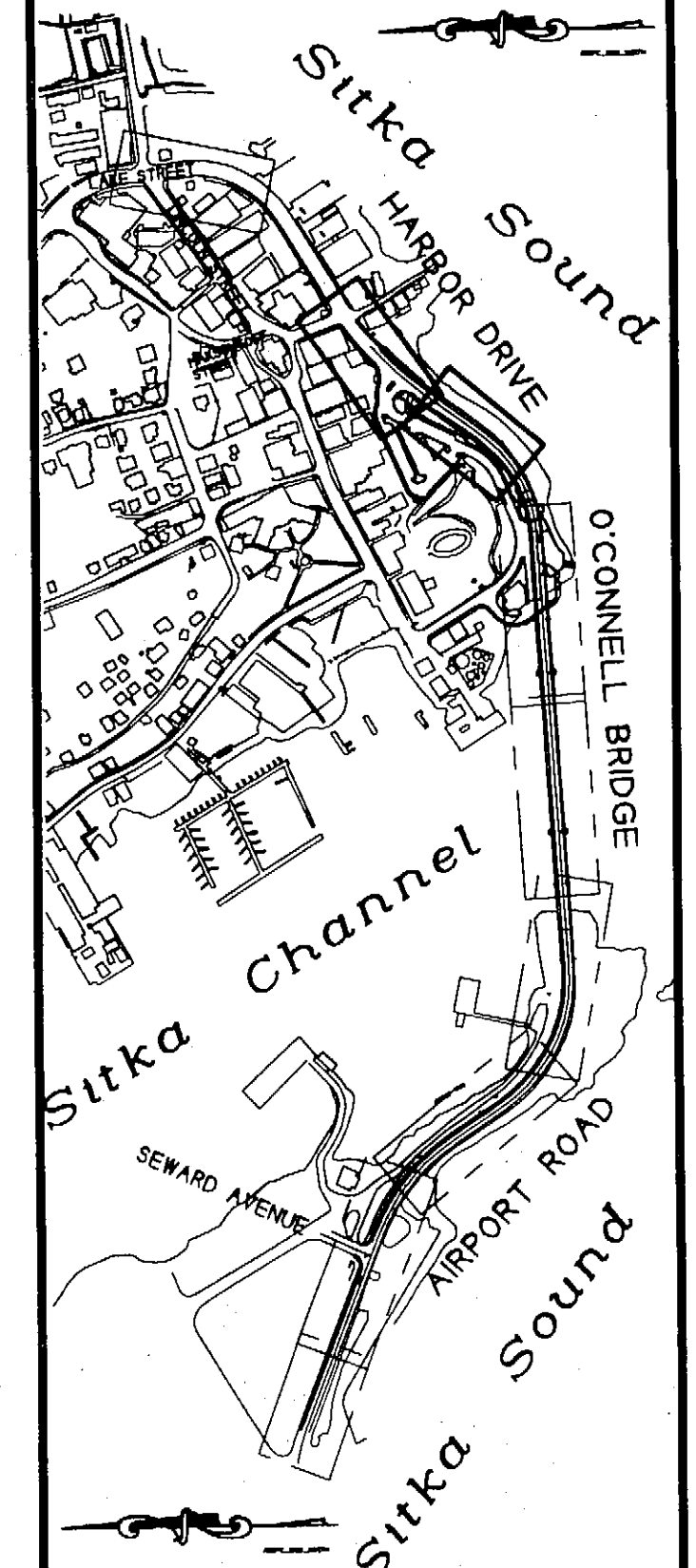
I - Remove Existing Wood Pole/Luminaire and Restore Area



KEY

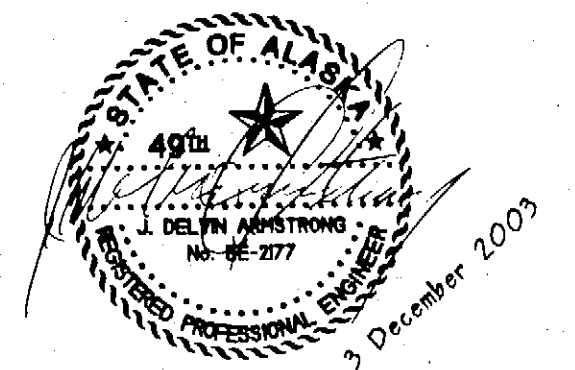
- INSTALL NEW 250 WATT HPS, 240 VOLT MULTI-TAP, IES-NEMA TYPE III, MEDIUM, FULL CUTOFF COBRA HEAD ON 30' GALVANIZED STEEL LIGHTING STANDARD WITH 8' UNDERBRACED PIPE BRACKET ARM, AMERON SERIES GS OR EQUAL
- EXISTING STREETLIGHT - REMOVE OR RETAIN AS NOTED
- EXISTING JUNCTION BOX
- ARCHITECTURAL ROADWAY LUMINAIRE, 250 WATT HPS, 240 VOLT, IES-NEMA TYPE II, MEDIUM, FULL CUTOFF ON 35' GALVANIZED, PAINTED STEEL LIGHTING STANDARD. LUMINAIRE TO HAVE TIE BACK ROD FOR ARCHITECTURAL SYMMETRY WITH THE CABLE STAYED BRIDGE. KIM 'STRUCTURAL' OR PRIOR APPROVED EQUAL.
- TYPE 1A JUNCTION BOX, (17.75' x 27.25')
- 2" CONDUIT ONLY, WITH NYLON PULL STRING (NPS) (FUTURE OR TELEPHONE)
- 2" C. 3 #8, 1 #8 GRND.
- 2" C. 4 #8, 1 #8 GRND.
- 2" C. 2 #8, 1 #8 GRND.
- 2" C. 4 #4, 1 #6 GRND.

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
Proj. Eng. Date 12-6-06



KEY LAYOUT PLAN

DESIGNED BY: J. DELVIN ARMSTRONG, P.E.



CHECKED BY:
DRAWN/REVISED BY: J.D.A. 11.07.2003

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING
SERVICES DIVISION
SIT-HARBOR DRIVE
IMPROVEMENTS

ILLUMINATION PLAN
STA 6+88.5 TO
STA 13+50

PROJECT DESIGNATION NUMBER
NH-99-3(7) ~ 68350

STATE ALASKA
YEAR 2003

SHEET NUMBER TOTAL SHEETS
H2 46

NOTES

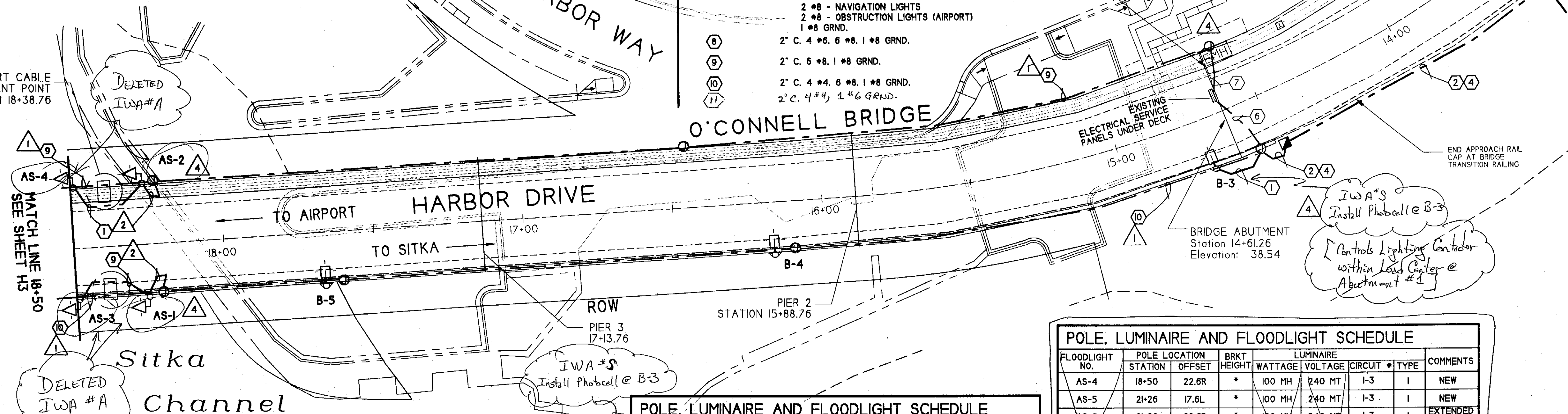
1. INSTALL CONDUIT UNDER DECK, 3" IN FROM EDGE. LB THROUGH DECK INTO JUNCTION BOX WHERE NOTED.
2. CONDUIT RUN SHOWN IN THIS LOCATION FOR CLARITY ONLY. INSTALL AS SHOWN ON THE DETAIL ON SHEET H-7.
3. JUNCTION BOX FOR NAVIGATION LIGHTING. THIS JUNCTION BOX IF SHALL BE A TYPE I MODIFIED EXCEPT THE DEPTH SHALL BE 8". SEE BRIDGE NO. 245, DRAWING #20 FOR FURTHER DETAILS.
4. PROVIDE CONDUIT EXPANSION COUPLER (BOTH SIDES) AT: BRIDGE ABUTMENT STATION 14+62.2 - 4" MOVEMENT MIN NEAR PIER 4 STATION 18+34.8 - 8" MOVEMENT MIN
5. PROVIDE SURFACE MOUNTED CONDUIT WITH CONDUCTORS FROM NEW JUNCTION BOX TO THE EXISTING NAVIGATION LUMINAIRE. SEE BRIDGE NO. 245, DRAWING #8, 9 & II FOR FURTHER DETAILS.

KEY

1. 1" C. 2 #10. TO LUMINAIRE 1 #10 GRND.
2. 2" CONDUIT ONLY WITH NYLON PULL STRING (NPS) (FUTURE OR TELEPHONE)
3. 2" C. 4 #6. 1 #8 GRND.
4. 2" C. 4 #8. 1 #10 GRND.
5. 2" C. 2 #8. 1 #10 GRND.
6. EXISTING 1.5" CONDUIT - NEW CONDUCTORS AS FOLLOWS:
4 #4 - EVEN & ODD NUMBER STREETLIGHTS
2 #8 - ARCHITECTURAL SPOTLIGHTS
2 #8 - NAVIGATION LIGHTS
2 #8 - OBSTRUCTION LIGHTS (AIRPORT)
1 #8 GRND.
7. EXISTING 1.5" CONDUIT - NEW CONDUCTORS AS FOLLOWS:
2 #8 - ARCHITECTURAL SPOTLIGHTS
2 #8 - NAVIGATION LIGHTS
2 #8 - OBSTRUCTION LIGHTS (AIRPORT)
1 #8 GRND.
8. 2" C. 4 #6. 6 #8. 1 #8 GRND.
9. 2" C. 6 #8. 1 #8 GRND.
10. 2" C. 4 #4. 6 #8. 1 #8 GRND.
11. 2" C. 4 #4. 1 #6 GRND.

NOTE: CHANGE ORDER #6 Provided for the Installation of an Electrical Distribution System for Architectural Lighting

PIER 4 And SUPPORT CABLE ATTACHMENT POINT STATION 18+38.76



KEY

- ARCHITECTURAL ROADWAY LUMINAIRE, 250 WATT HPS, 240 VOLT, IES-NEMA TYPE II, MEDIUM, FULL CUTOFF ON 35" GALVANIZED, PAINTED STEEL LIGHTING STANDARD. LUMINAIRE TO HAVE TIE BACK ROD FOR ARCHITECTURAL SYMMETRY WITH THE CABLE STAYED BRIDGE. KIM "STRUCTURAL" OR PRIOR APPROVED EQUAL.
- FLOODLIGHT, 100 WATT MH, 240 VOLT, IES-NEMA TYPE I, AIM AS DIRECTED.
- TYPE I MODIFIED JUNCTION BOX MOUNTED ON BRIDGE RAIL CURB SEE DETAIL ON H7
- TYPE II JUNCTION BOX (34" x 34")

JUNCTION BOX SCHEDULE NAVIGATION LIGHTS

BOX LOCATION		SERVES
STATION	OFFSET	
20+88.33	16.75L	RED LIGHT
21+10.12	21R	RED LIGHT
22+05.33	16.75L	GREEN LIGHT
22+27.12	21R	GREEN LIGHT
23+21.33	16.75L	RED LIGHT
23+43.12	21R	RED LIGHT
19+88.76	16.75L	RED LIGHT
19+88.76	21R	AVIATION OBSTRUCTION LIGHT PIER 5 And RED LIGHT

POLE, LUMINAIRE AND FLOODLIGHT SCHEDULE

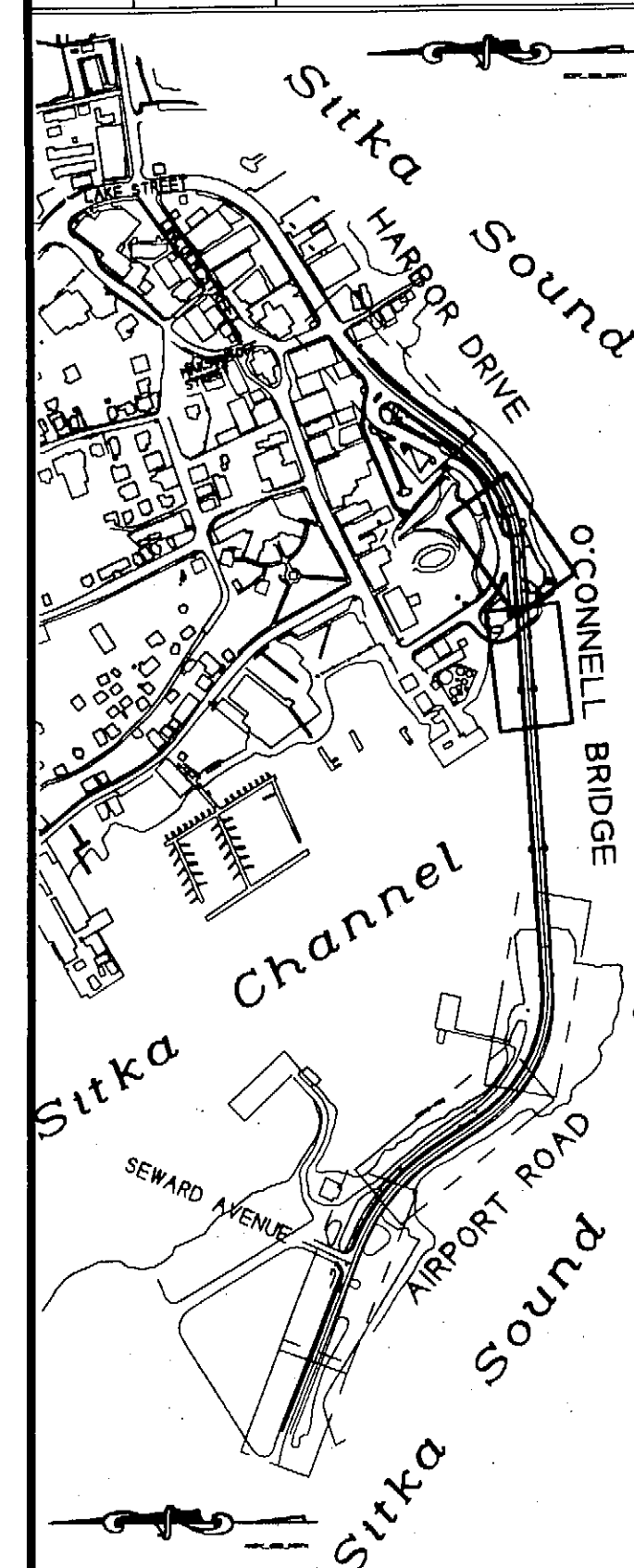
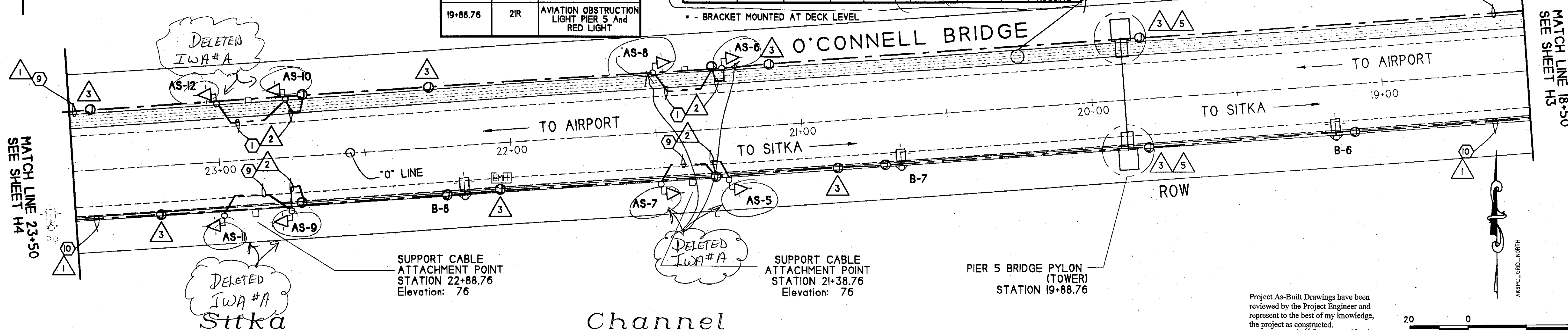
FLOODLIGHT NO.	POLE LOCATION STATION	POLE OFFSET	POLE HEIGHT	LUMINAIRE WATTAGE	LUMINAIRE VOLTAGE	LUMINAIRE CIRCUIT	TYPE	COMMENTS
B-3	14+71.33	17.6L	35'	250 HPS	240 MT	I-1	II SC	NEW
B-4	16+16.76	17.6L	35'	250 HPS	240 MT	I-2	II SC	NEW
B-5	17+66.76	17.6L	35'	250 HPS	240 MT	I-1	II SC	NEW
B-6	19+16.76	17.6L	35'	250 HPS	240 MT	I-2	II SC	NEW
B-7	20+66.76	17.6L	35'	250 HPS	240 MT	I-1	II SC	NEW
B-8	22+16.76	17.6L	35'	250 HPS	240 MT	I-2	II SC	NEW
AS-1	18+26	17.6L	*	100 MH	240 MT	I-3	I	EXTENDED HOUSING
AS-2	18+26	22.6R	*	100 MH	240 MT	I-3	I	NEW
AS-3	18+50	17.6L	*	100 MH	240 MT	I-3	I	EXTENDED HOUSING

POLE, LUMINAIRE AND FLOODLIGHT SCHEDULE

FLOODLIGHT NO.	POLE LOCATION STATION	POLE OFFSET	POLE HEIGHT	LUMINAIRE WATTAGE	LUMINAIRE VOLTAGE	LUMINAIRE CIRCUIT	TYPE	COMMENTS
AS-4	18+50	22.6R	*	100 MH	240 MT	I-3	I	NEW
AS-5	21+26	17.6L	*	100 MH	240 MT	I-3	I	NEW
AS-6	21+26	22.6R	*	100 MH	240 MT	I-3	I	EXTENDED HOUSING
AS-7	21+50	17.6L	*	100 MH	240 MT	I-3	I	NEW
AS-8	21+50	22.6R	*	100 MH	240 MT	I-3	I	EXTENDED HOUSING
AS-9	22+76	17.6L	*	100 MH	240 MT	I-3	I	EXTENDED HOUSING
AS-10	22+76	22.6R	*	100 MH	240 MT	I-3	I	NEW
AS-11	23+00	17.6L	*	100 MH	240 MT	I-3	I	EXTENDED HOUSING
AS-12	23+00	22.6R	*	100 MH	240 MT	I-3	I	NEW

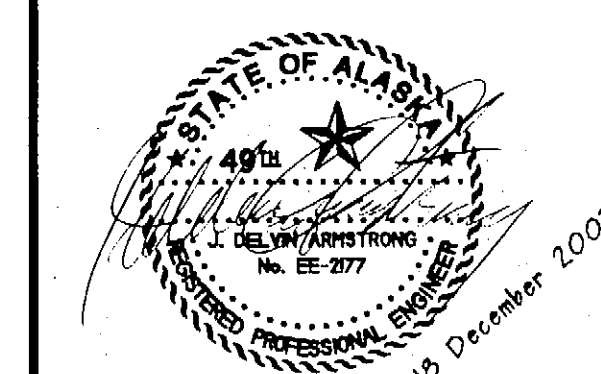
BRACKET MOUNTED AT DECK LEVEL
DELETED - IWA #A

CAUTION: EXISTING TELEPHONE CABLE TV, AND ABANDONED POWER UNDER SIDEWALK



KEY LAYOUT PLAN

DESIGNED BY: J. DELVIN ARMSTRONG, P.E.



CHECKED BY:
DRAWN/REVISED BY: J.D.A. 12/8/2003

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION
SIT-HARBOR DRIVE IMPROVEMENTS

ILLUMINATION PLAN
STA 13+50 TO STA 23+50

PROJECT DESIGNATION NUMBER

NH-99-3(7) ~ 68350

STATE YEAR

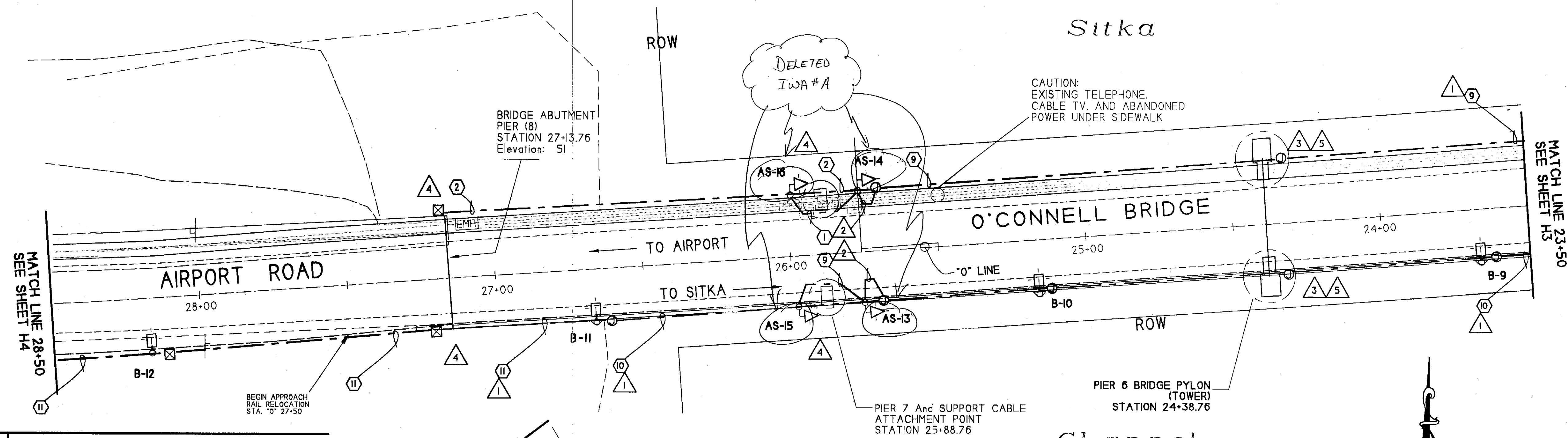
ALASKA 2003

SHEET NUMBER TOTAL SHEETS

H3 46

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
Proj. Eng. Date 2-6-06

20 0 40
FEET



NOTES

1. INSTALL CONDUIT UNDER DECK, 3" IN FROM EDGE. LB THROUGH DECK INTO JUNCTION BOX WHERE NOTED.
2. CONDUIT RUN SHOWN IN THIS LOCATION FOR CLARITY ONLY. INSTALL AS SHOWN ON THE DETAIL ON SHEET H-7.
3. JUNCTION BOX FOR NAVIGATION LIGHTING. THIS JUNCTION BOX SHALL BE A TYPE I MODIFIED EXCEPT THE DEPTH SHALL BE 8". SEE BRIDGE #245, DRAWING #20 FOR FURTHER DETAILS.
4. PROVIDE CONDUIT EXPANSION COUPLER (BOTH SIDES) AT: BRIDGE ABUTMENT STATION 27+15.32 - 4" MOVEMENT MIN NEAR PIER 7 STATION 25+93.34 - 8" MOVEMENT MIN
5. PROVIDE SURFACE MOUNTED CONDUIT WITH CONDUCTORS FROM NEW JUNCTION BOX TO THE EXISTING NAVIGATION LUMINAIRE. SEE BRIDGE NO. 245, DRAWING #8, 9 & 11 FOR FURTHER DETAILS.

JUNCTION BOX SCHEDULE
NAVIGATION LIGHTS

BOX LOCATION	STATION	OFFSET	SERVES
24+38.76	16.75L		RED LIGHT
24+38.76	21R		AVIATION OBSTRUCTION LIGHT PIER 6 And RED LIGHT

KEY

- ARCHITECTURAL ROADWAY LUMINAIRE, 250 WATT HPS, 240 VOLT, IES-NEMA TYPE II, MEDIUM, FULL CUTOFF ON 35' GALVANIZED, PAINTED STEEL LIGHTING STANDARD. LUMINAIRE TO HAVE THE BACK ROD FOR ARCHITECTURAL SYMMETRY WITH THE CABLE STAYED BRIDGE. KIM "STRUCTURAL" OR PRIOR APPROVED EQUAL.
- FLOODLIGHT, 100 WATT MH, 240 VOLT, IES-NEMA TYPE I, AIM AS DIRECTED
- TYPE I MODIFIED JUNCTION BOX MOUNTED ON BRIDGE RAIL CURB SEE DETAIL ON H7
- TYPE IA JUNCTION BOX, (17.75" x 27.25")
- 2" CONDUIT ONLY WITH NYLON PULL STRING (NPS) (FUTURE OR TELEPHONE)
- 2" C. 4 #6, 6 #8, 1 #8 GRND.
- 2" C. 6 #8, 1 #8 GRND.
- 2" C. 4 #4, 6 #8, 1 #8 GRND.
- 2" C. 4 #6, 1 #8 GRND.

POLE, LUMINAIRE AND FLOODLIGHT SCHEDULE

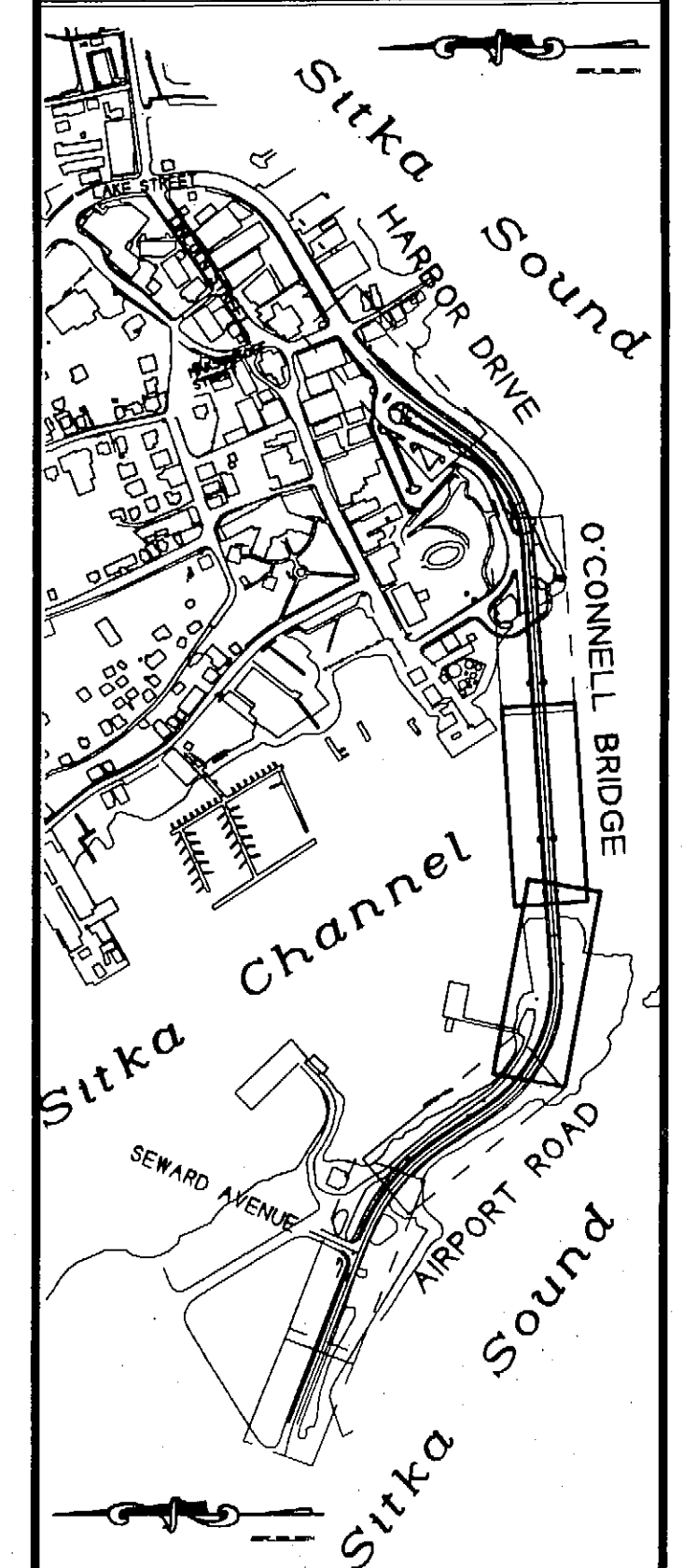
LUMINAIRE NO.	POLE LOCATION STATION	POLE LOCATION OFFSET	POLE HEIGHT	LUMINAIRE WATTAGE	LUMINAIRE VOLTAGE	CIRCUIT	TYPE	REMARKS
B-9	23+66.76	17.6L	35'	250 HPS	240 MT	I-1	II SC	New Steel Pole & Architectural Luminaire
B-10	25+16.76	17.6L	35'	250 HPS	240 MT	I-2	II SC	New Steel Pole & Architectural Luminaire
B-11	26+66.76	17.6L	35'	250 HPS	240 MT	I-1	II SC	New Steel Pole & Architectural Luminaire
B-12	28+17	19L	35'	250 HPS	240 MT	I-2	II SC	New Steel Pole & Architectural Luminaire
B-13	29+67	20L	35'	250 HPS	240 MT	I-1	II SC	New Steel Pole & Architectural Luminaire
B-14	31+17	20L	35'	250 HPS	240 MT	I-2	II SC	New Steel Pole & Architectural Luminaire
FLOODLIGHT NO.			BRKT HEIGHT					
AS-13	25+76	17.6L	*	100 MH	240 MT	I-3	I	NEW FLOODLIGHT
AS-14	25+76	22.8R	*	100 MH	240 MT	I-3	I	EXTENDED HOUSING
AS-15	26+00	17.6L	*	100 MH	240 MT	I-3	I	NEW FLOODLIGHT
AS-16	26+00	22.8R	*	100 MH	240 MT	I-3	I	EXTENDED HOUSING

BRACKET MOUNTED AT DECK LEVEL

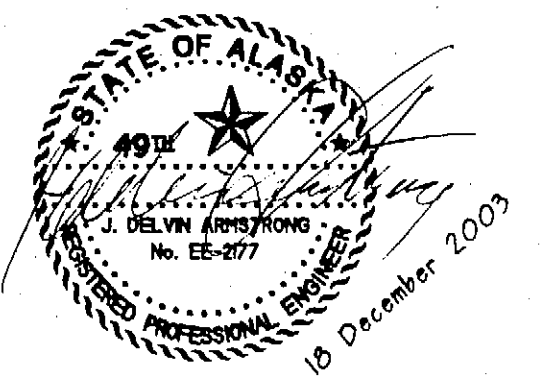
20 0 40
FEET

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

Proj. Eng. *[Signature]* Date 12-6-06

KEY
LAYOUT PLAN

DESIGNED BY: J. DELVIN ARMSTRONG, P.E.



CHECKED BY: *[Signature]*

DRAWN/REVISED BY: J.D.A. 12/8/2003

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING
SERVICES DIVISION
SIT-HARBOR DRIVE
IMPROVEMENTS

ILLUMINATION PLAN
STA 23+50 TO
STA 32+50

PROJECT DESIGNATION NUMBER	NH-99-3(7) ~ 68350
STATE	ALASKA
YEAR	2003
SHEET NUMBER	H4
TOTAL SHEETS	46

POLE, LUMINAIRE AND FLOODLIGHT SCHEDULE									
LUMINAIRE NO.	POLE LOCATION		POLE HEIGHT	LUMINAIRE				REMARKS	
	STATION	OFFSET		WATTAGE	VOLTAGE	CIRCUIT	TYPE		
B-15	32+67	21L	35'	250 HPS	240 MT	I-1	II SC	New Steel Pole & Architectural Luminaire	
B-16	34+17	22L	35'	250 HPS	240 MT	I-2	II SC	New Steel Pole & Architectural Luminaire	
B-17	35+67	22L	35'	250 HPS	240 MT	I-1	II SC	New Steel Pole & Architectural Luminaire	
B-18	37+17	18L	35'	250 HPS	240 MT	I-2	II SC	New Steel Pole & Architectural Luminaire	
C-7	38+15	24R	40'	400 HPS	240 MT	Existing	III MC	New Steel Pole & Luminaire	

KEY

ARCHITECTURAL ROADWAY LUMINAIRE, 250 WATT HPS, 240 VOLT, IES-NEMA TYPE II, MEDIUM, FULL CUTOFF ON 35' GALVANIZED, PAINTED STEEL LIGHTING STANDARD. LUMINAIRE TO HAVE TIE BACK ROD FOR ARCHITECTURAL SYMMETRY WITH THE CABLE STAYED BRIDGE. KIM "STRUCTURAL" OR PRIOR APPROVED EQUAL.

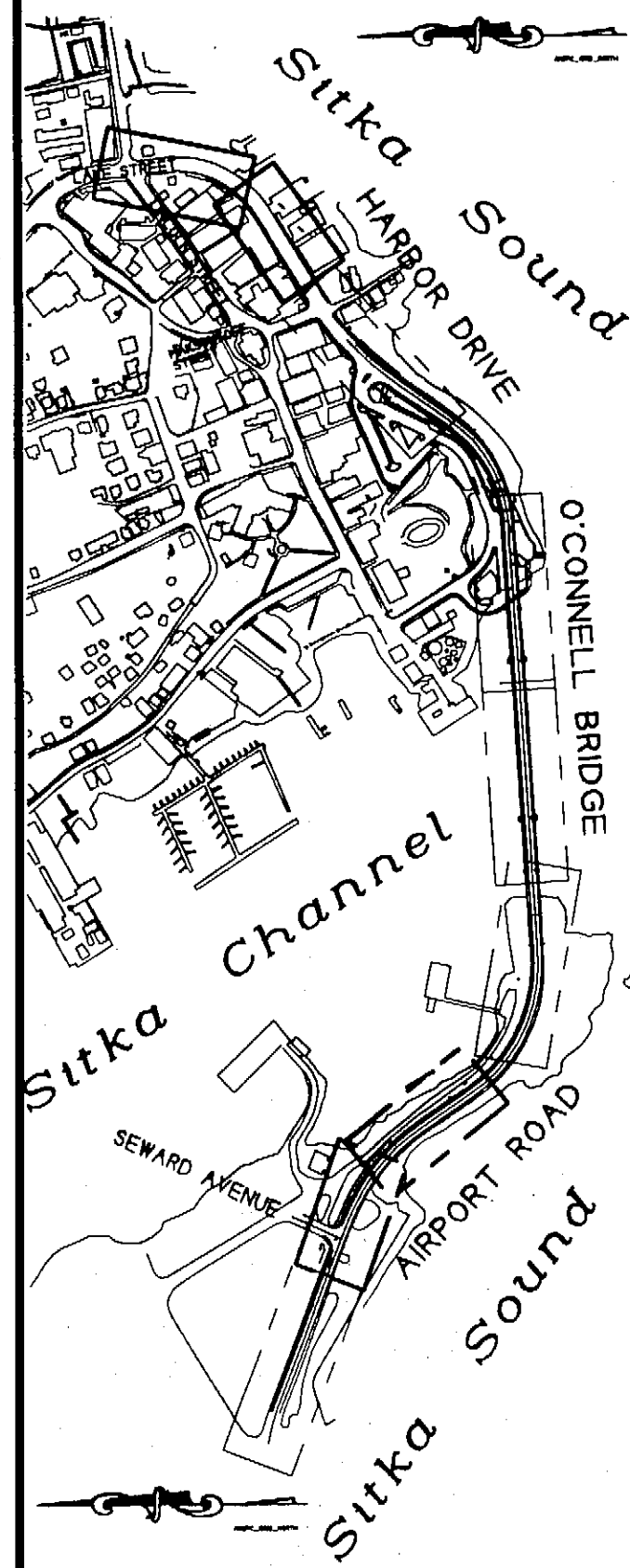
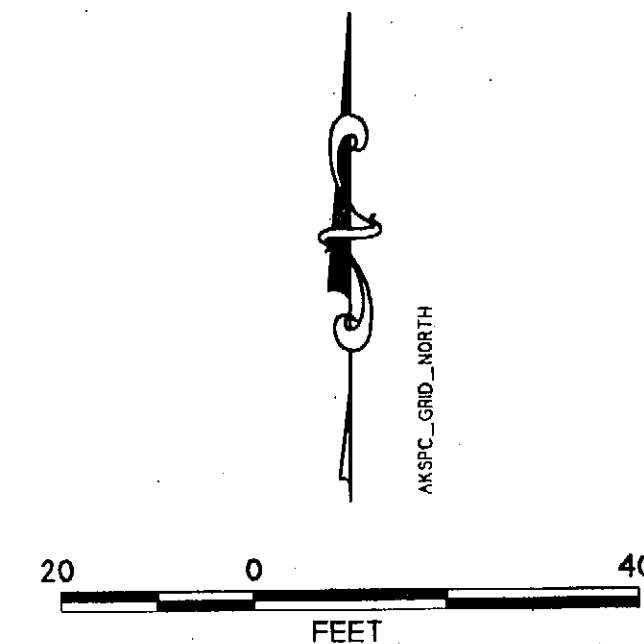
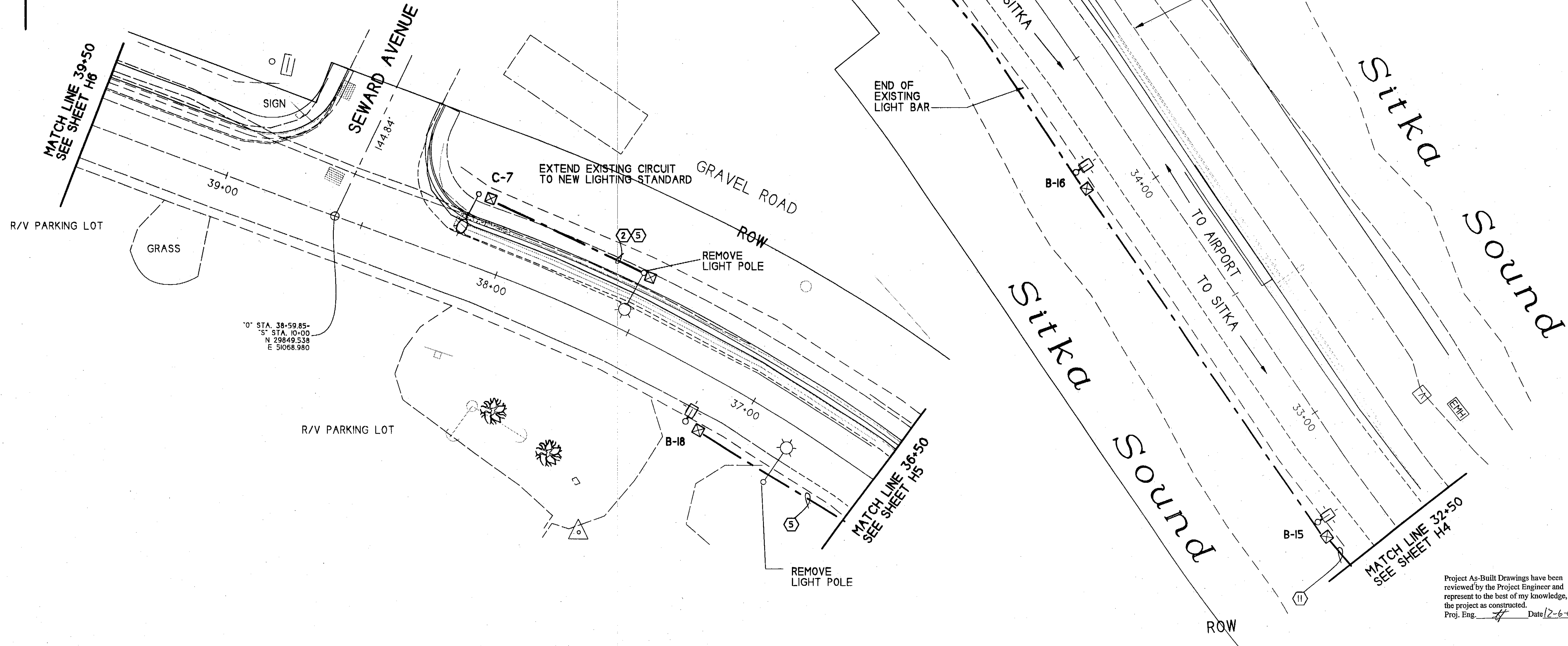
INSTALL NEW 400 WATT HPS, 240 VOLT MULTI-TAP, IES-NEMA TYPE III, MEDIUM, FULL CUTOFF COBRA HEAD ON 40' GALVANIZED STEEL LIGHTING STANDARD WITH 8' UNDERGRADED PIPE BRACKET ARM. AMERON SERIES GS OR EQUAL.

TYPE IA JUNCTION BOX, (17.75' x 27.25')

2" CONDUIT ONLY WITH NYLON PULL STRING (NPS) (FUTURE OR TELEPHONE)

2" C. 2 #8, 1 #8 GRND.

2" C. 4 #8, 1 #8 GRND.



KEY LAYOUT PLAN

DESIGNED BY: J. DELVIN ARMSTRONG, P.E.

CHECKED BY:

DRAWN/REVISED BY: J.D.A. 11.07.2003

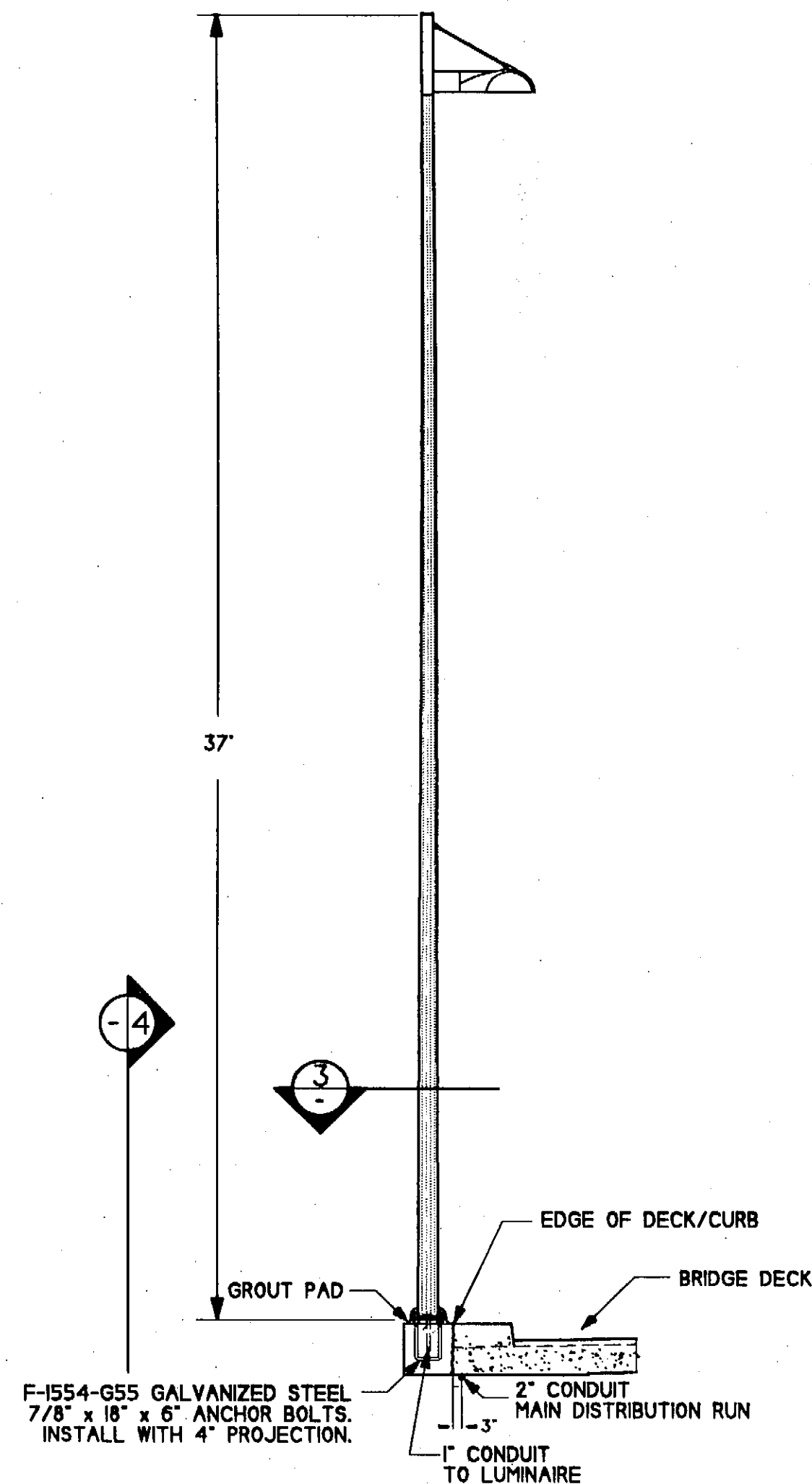
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION
SIT-HARBOR DRIVE IMPROVEMENTS

ILLUMINATION PLAN
STA 32+50 TO STA 39+50

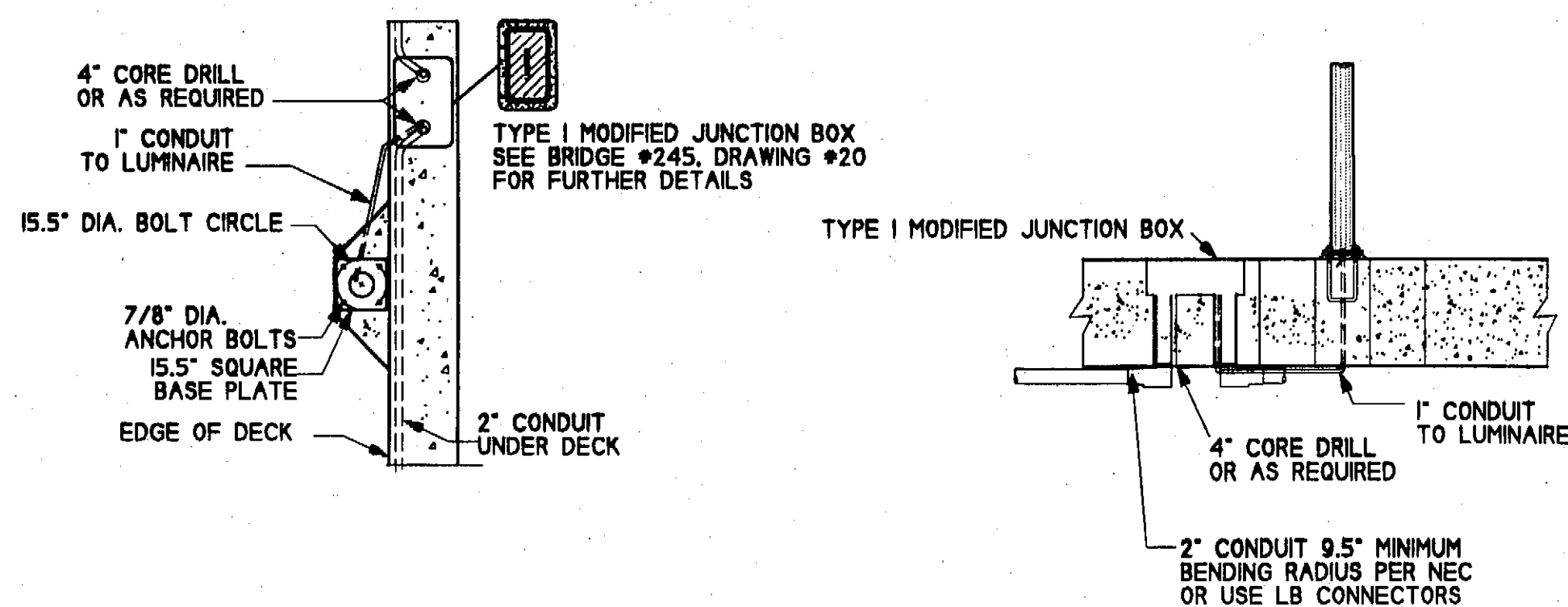
PROJECT DESIGNATION NUMBER
NH-99-3(7) ~ 68350

STATE	YEAR
ALASKA	2003
SHEET NUMBER	TOTAL SHEETS
H5	46

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
Proj. Eng. Date 12-6-06

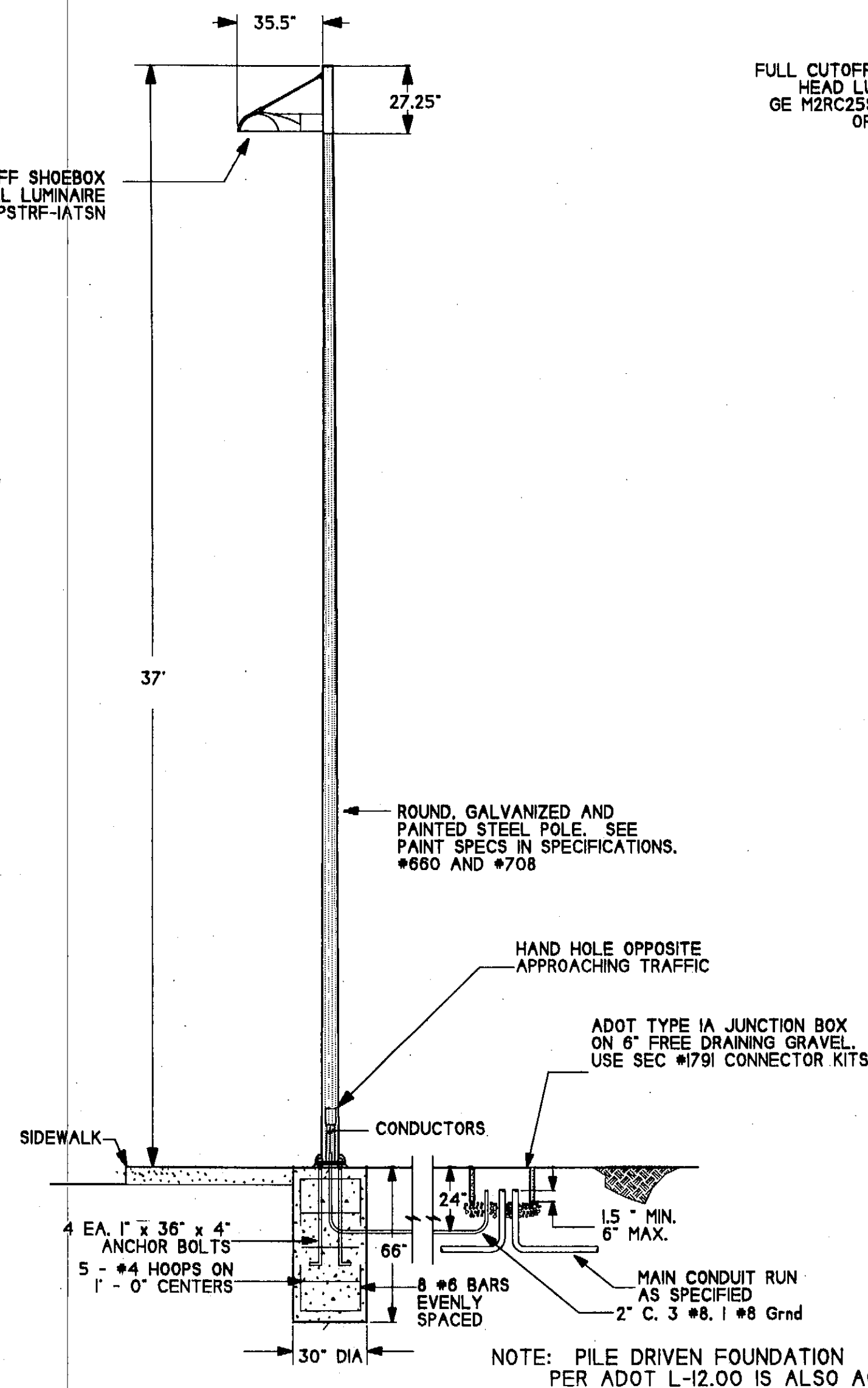


1
H3
BRIDGE INSTALLATION DETAIL

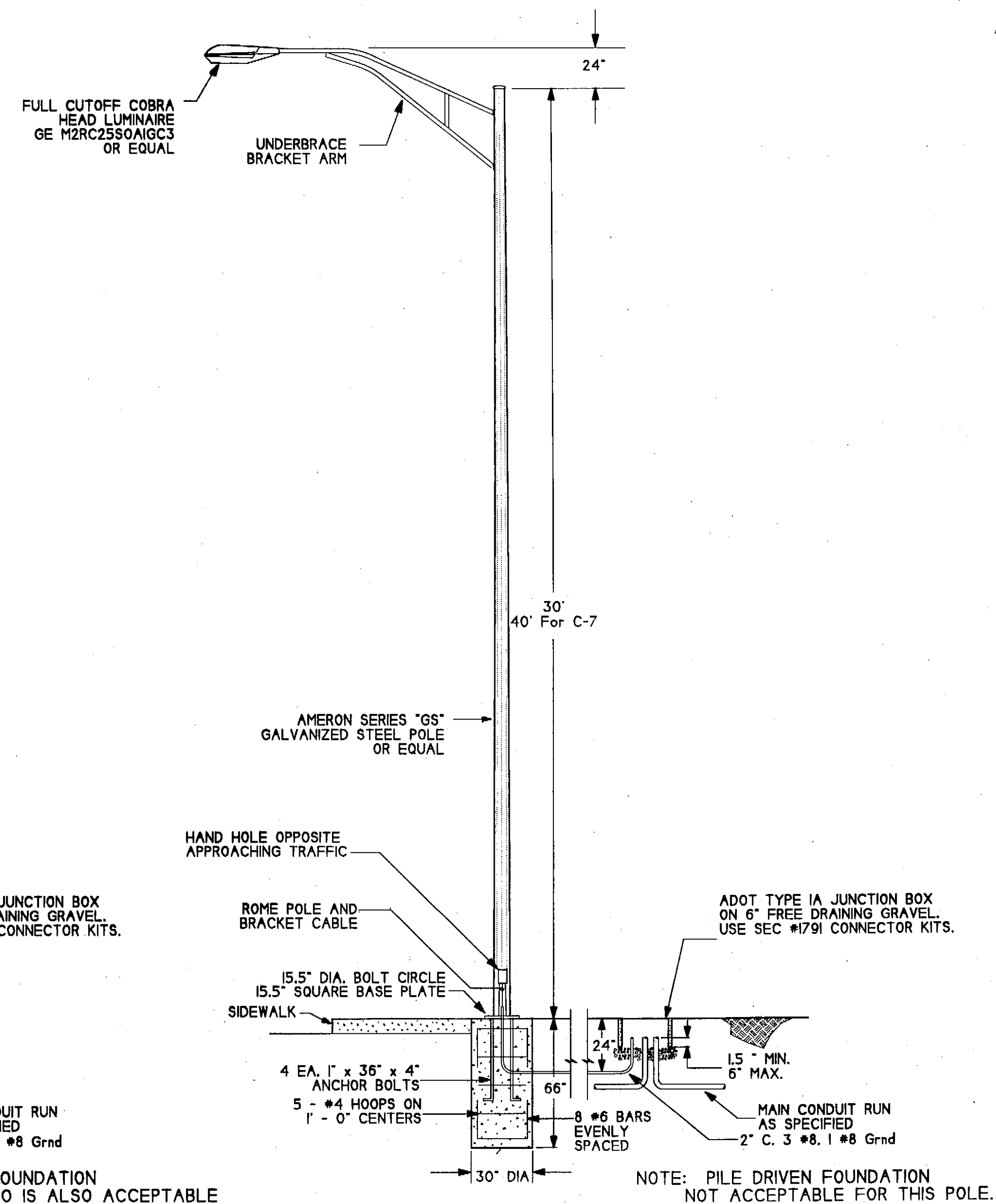


3
PLAN VIEW DETAIL
4
SIDE VIEW DETAIL

FULL CUTOFF SHOEBOX
STRUCTURAL LUMINAIRE
KIM IASTL2250HPS240LG-PSTRF-IATSN



2
H2
AT GRADE INSTALLATION DETAIL



5
H1
COBRA HEAD POLE DETAIL
NOT TO SCALE

ARCHITECTURAL ROADWAY LUMINAIRE & POLE DETAIL

NOT TO SCALE

ADDENDUM NUMBER

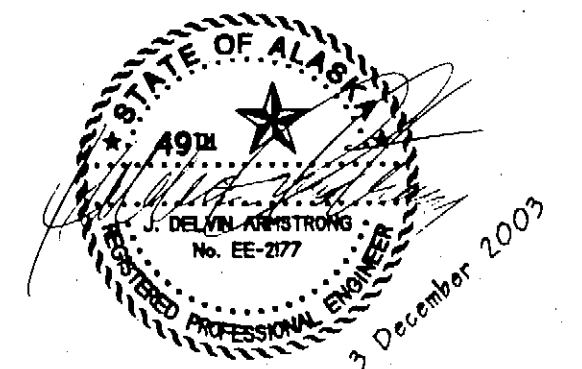
ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
Proj. Eng. *J. Delvin Armstrong* Date 12-6-06

DESIGNED BY: J. DELVIN ARMSTRONG, P.E.



CHECKED BY:

DRAWN/REVISED BY: J.D.A. 11.07.2003

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING
SERVICES DIVISION
SIT-HARBOR DRIVE
IMPROVEMENTS

LUMINAIRE DETAILS

PROJECT DESIGNATION NUMBER

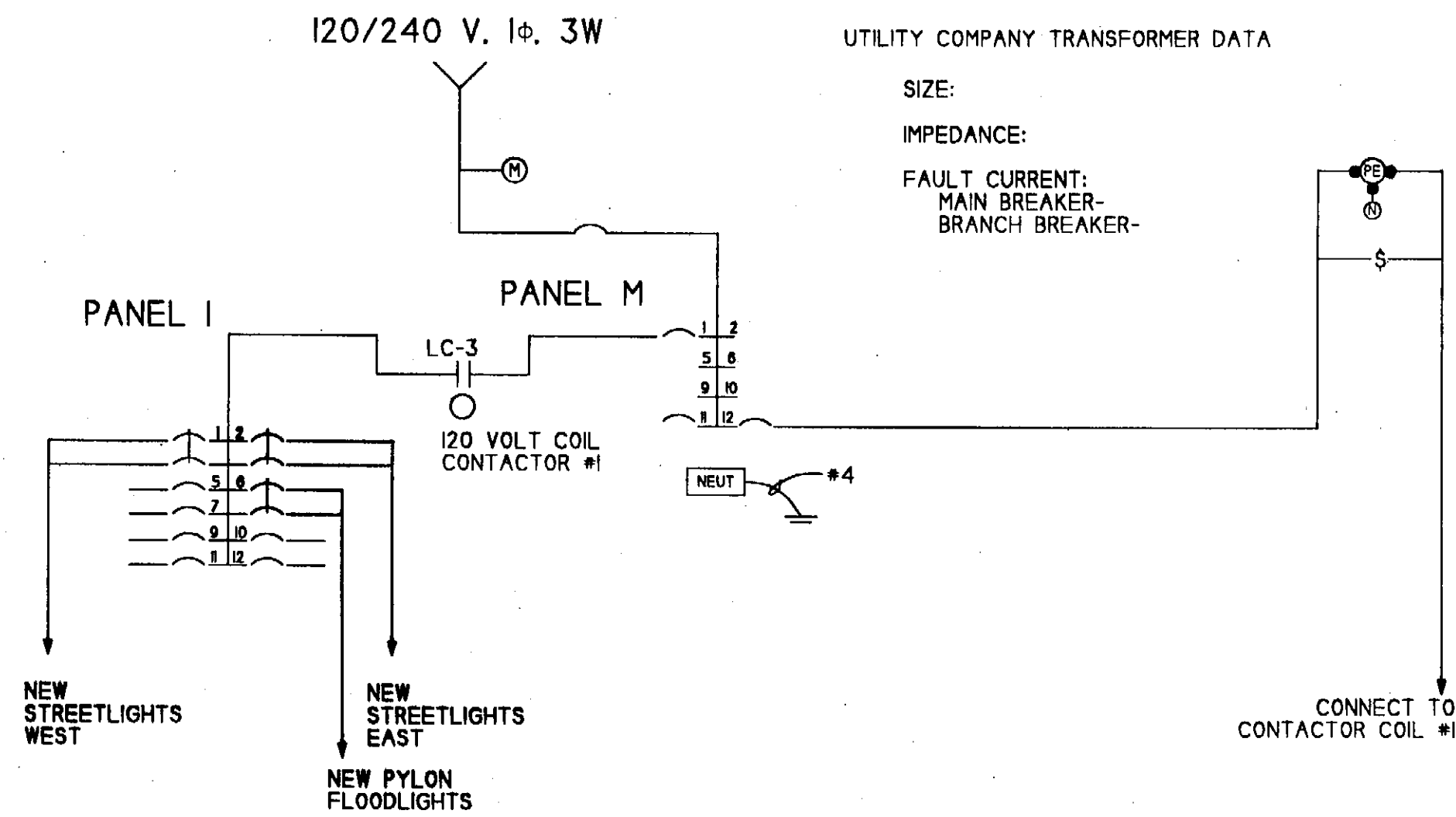
NH-99-3(7) ~ 68350

STATE YEAR

ALASKA 2003

SHEET NUMBER TOTAL SHEETS

H6 46

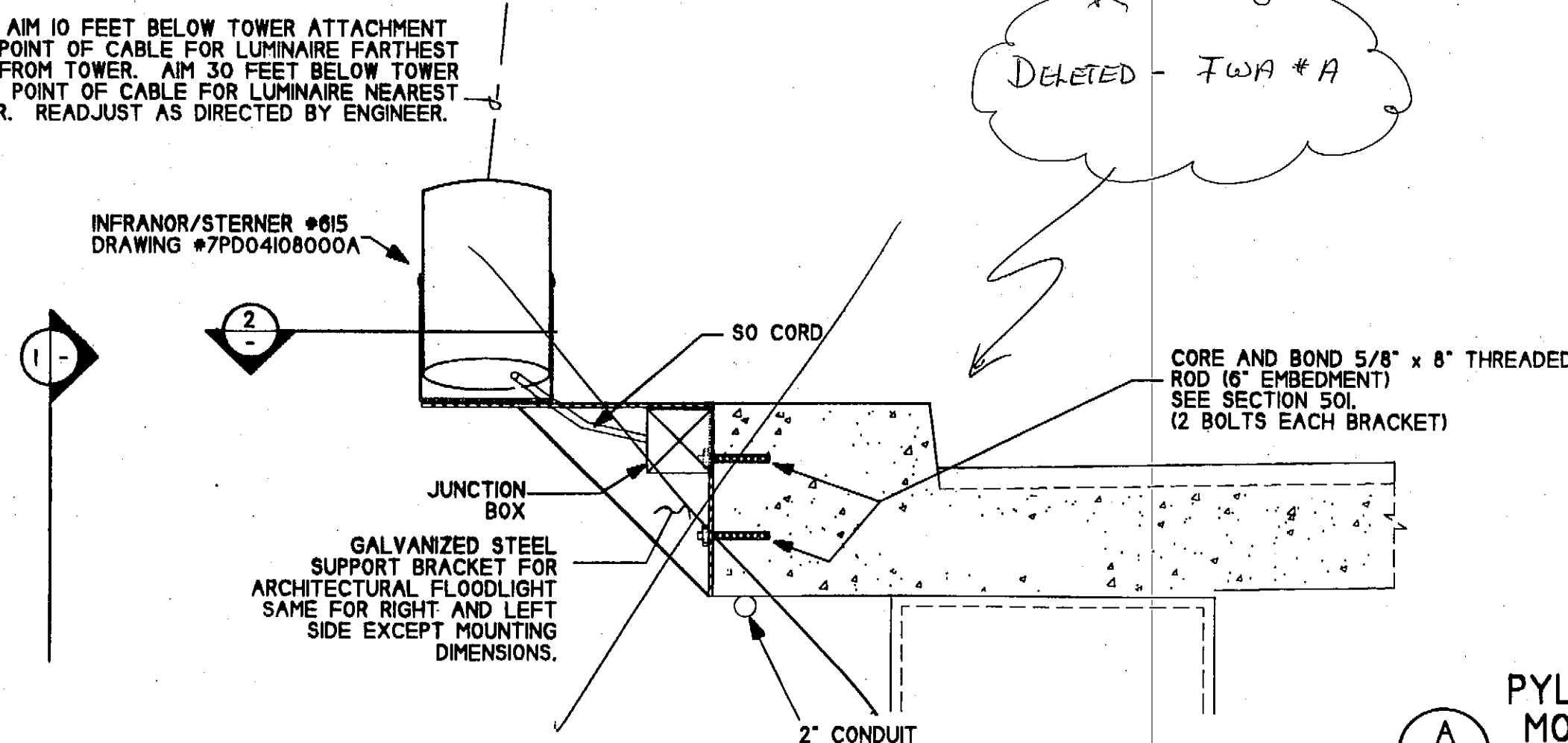


ONE LINE DIAGRAM

SKYLINE ELECTRIC CO., INC. SO #56265 DATED 4.27.2001									
PANEL SCHEDULE									
NO.	M	LOCATION: EAST BRIDGE ABUTMENT	120/240	VOLTS	1	PHASE	3	WIRE	
		SERVING: LIGHTING, ETC.	200	AMP WITH MAIN	BREAKER				
CKT NO.	LOAD DESCRIPTION	KVA	TRIP AMPS	TRIP AMPS	KVA	LOAD DESCRIPTION	CKT NO.		
1	PANEL I (SPLIT BUS)	11.3	100			SPACE ONLY	2		
5	SPACE ONLY					SPACE ONLY	6		
7	SPACE ONLY					SPACE ONLY	8		
9	SPACE ONLY					SPACE ONLY	10		
11	AVIATION LIGHTS	1.0	20		15	0.2 CONTROL	12		
REMARKS:		CONNECTED LOAD: 11.3 KVA 54 AMPS DEMAND LOAD 125% KVA AMPS							

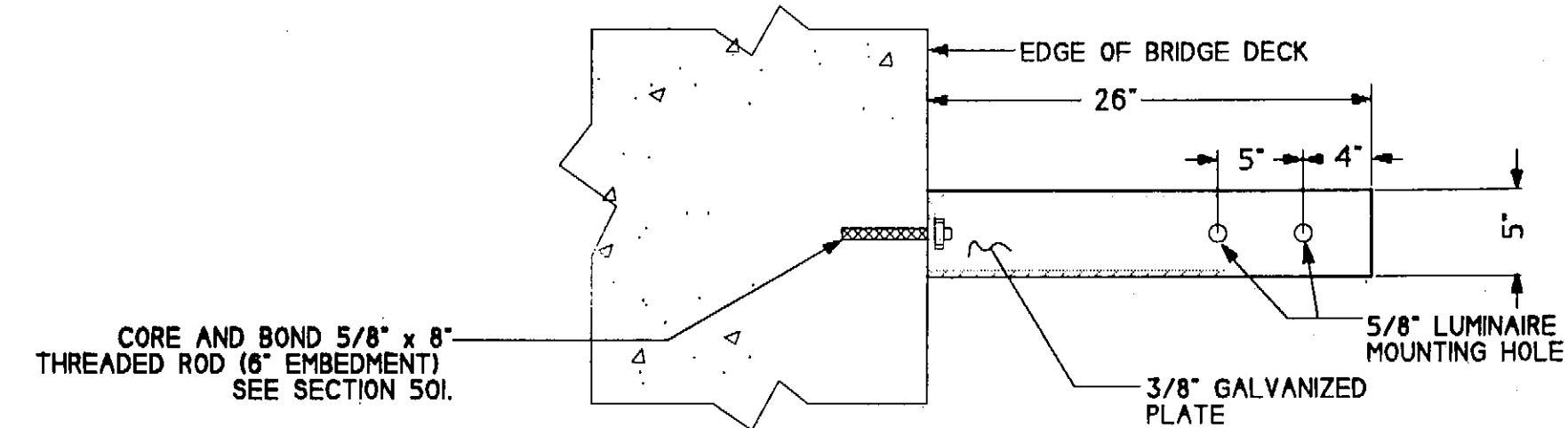
PANEL SCHEDULE									
NO.		LOCATION: EAST BRIDGE ABUTMENT	120/240	VOLTS	1	PHASE	3	WIRE	
		SERVING: LIGHTING, ETC.	200	AMP WITH MAIN	LUGS ONLY				
CKT NO.	LOAD DESCRIPTION	KVA	TRIP AMPS	TRIP AMPS	KVA	LOAD DESCRIPTION	CKT NO.		
1	NEW STREETLIGHTS - ODD	2.7	40		2.7	NEW STREETLIGHTS - EVEN	2		
5	LIGHTING #3	2.0	20		2.0	NEW PYLON FLOODLIGHTS	6		
7	SPARE		20						
9	SPARE		40		20	NAVIGATION LIGHTS	10		
11					20	NAVIGATION LIGHTS	12		
REMARKS:		CONNECTED LOAD: 11.3 KVA 49 AMPS DEMAND LOAD 125% KVA AMPS							

INITIALLY AIM 10 FEET BELOW TOWER ATTACHMENT POINT OF CABLE FOR LUMINAIRE FARTEST FROM TOWER. AIM 30 FEET BELOW TOWER ATTACHMENT POINT OF CABLE FOR LUMINAIRE NEAREST TO TOWER. READJUST AS DIRECTED BY ENGINEER.

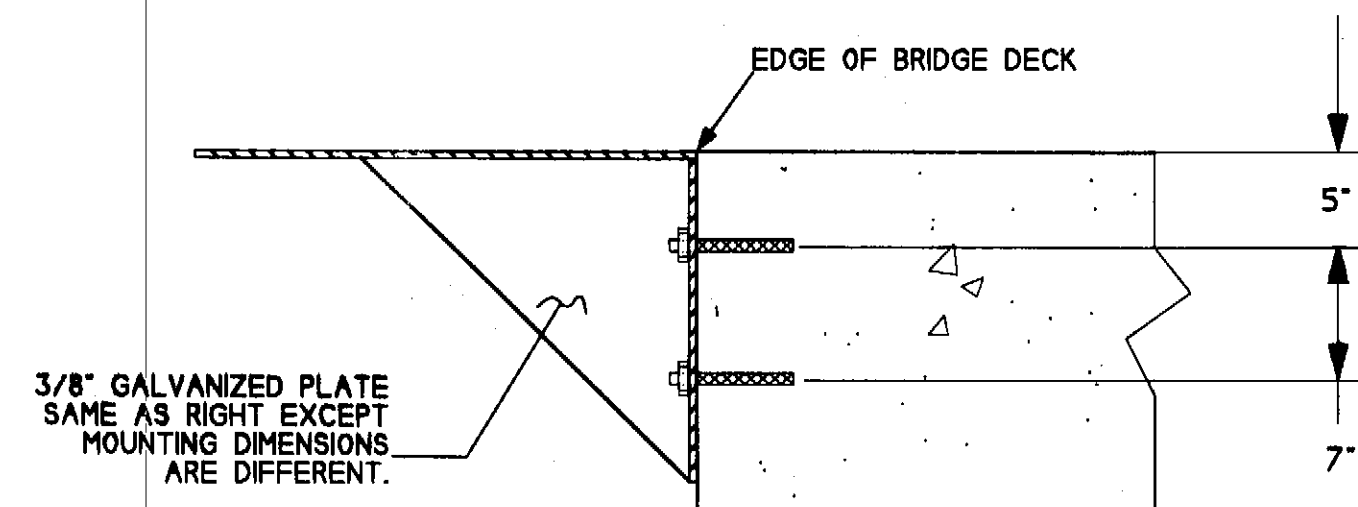


PYLON FLOODLIGHT MOUNTING DETAIL

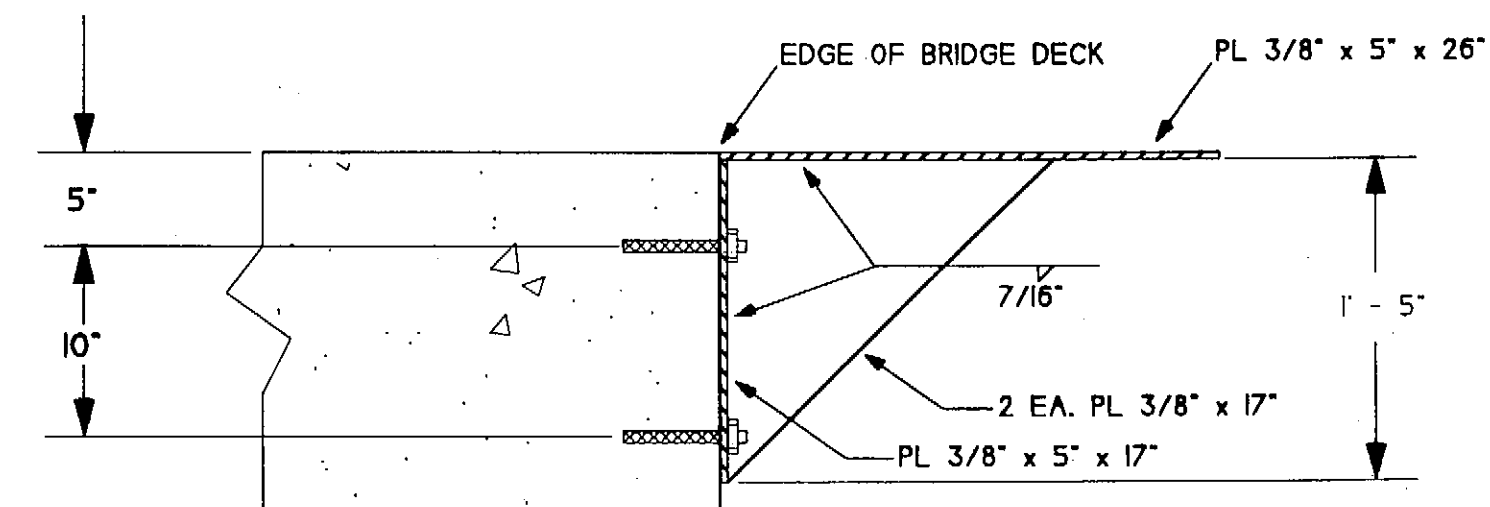
- KEY**
- ☉ PHOTOCELL 105-285 V. 1800 VA. EXISTING
 - ⚡ SWITCH 15A. 120V. - EXISTING
 - ⚡ DUPLEX RECEPTACLE SS COVER 20A 120V.
 - LC-3 2P100A ELECTRICALLY HELD LIGHTING CONTACTOR WITH 120 VOLT COIL - EXISTING



PLAN VIEW AND DETAILS



ELEVATION VIEW AND DETAILS - LEFT

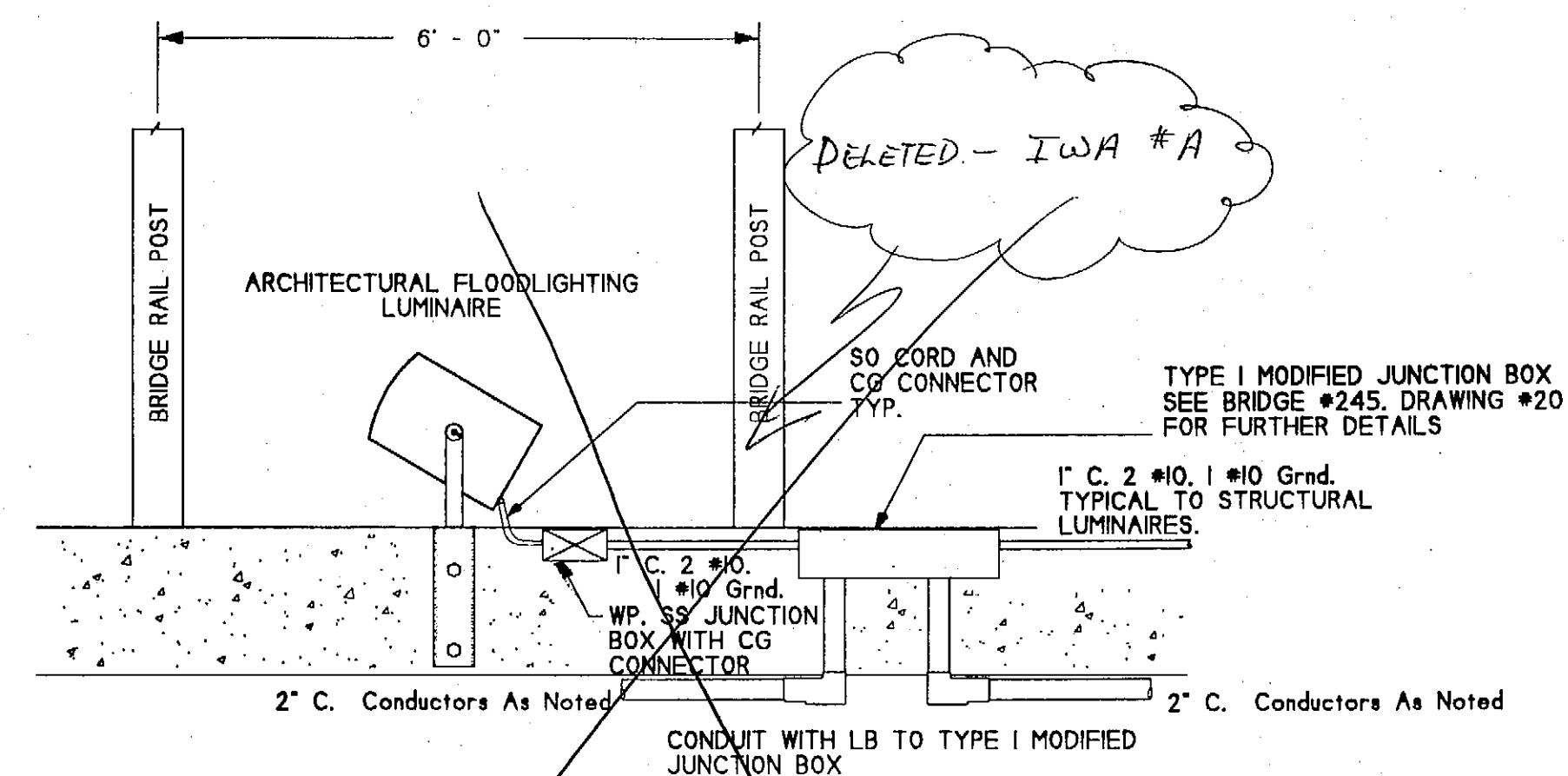


ELEVATION VIEW AND DETAILS - RIGHT

NOTE: CHANGE ORDER #6 Provided for the Installation of an Electrical Distribution System for Architectural Lighting

2 PYLON FLOODLIGHT BRACKET PLATE DETAIL

SCALE: - NONE



1 ELEVATION DETAIL

SCALE: - NONE

ADDENDUM NUMBER

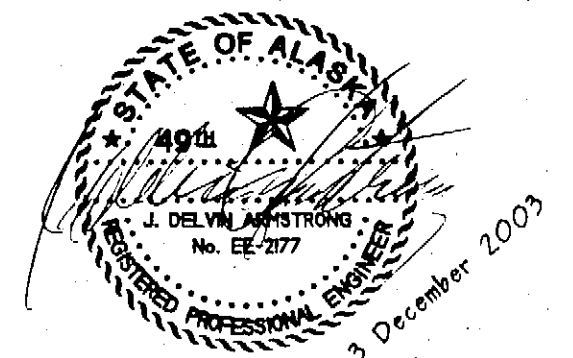
ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
Proj. Eng. J. Delvin Armstrong
Date 2-6-06

DESIGNED BY: J. DELVIN ARMSTRONG, P.E.



CHECKED BY:

DRAWN/REVISED BY: J.D.A. 12.03.2003

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

SIT-HARBOR DRIVE IMPROVEMENTS

ELECTRICAL DETAILS

PROJECT DESIGNATION NUMBER

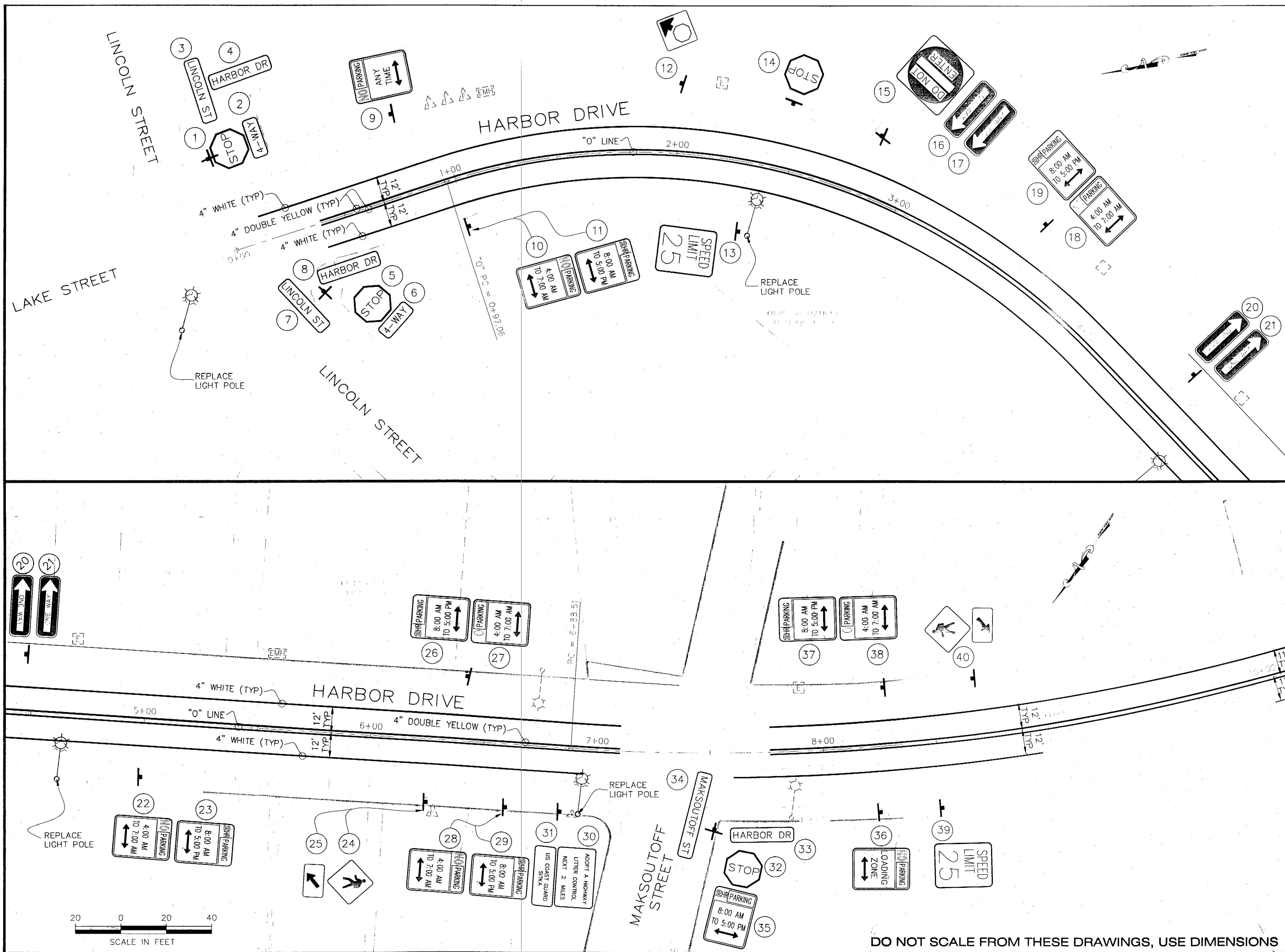
NH-99-3(7) ~ 68350

STATE YEAR
ALASKA 2003

SHEET NUMBER TOTAL SHEETS

H7

46



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ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
Proj. Eng. *[Signature]* Date 2-6-06

Key Layout Plan

DESIGNED BY: K. MATTISON

STATE OF ALASKA
49th
K. Mattison
Pen. L. Mattison
CE-10049
REGISTERED PROFESSIONAL ENGINEER

CHECKED BY: P. PUPVES
DRAWN/REVISED BY: R.S./K.K.

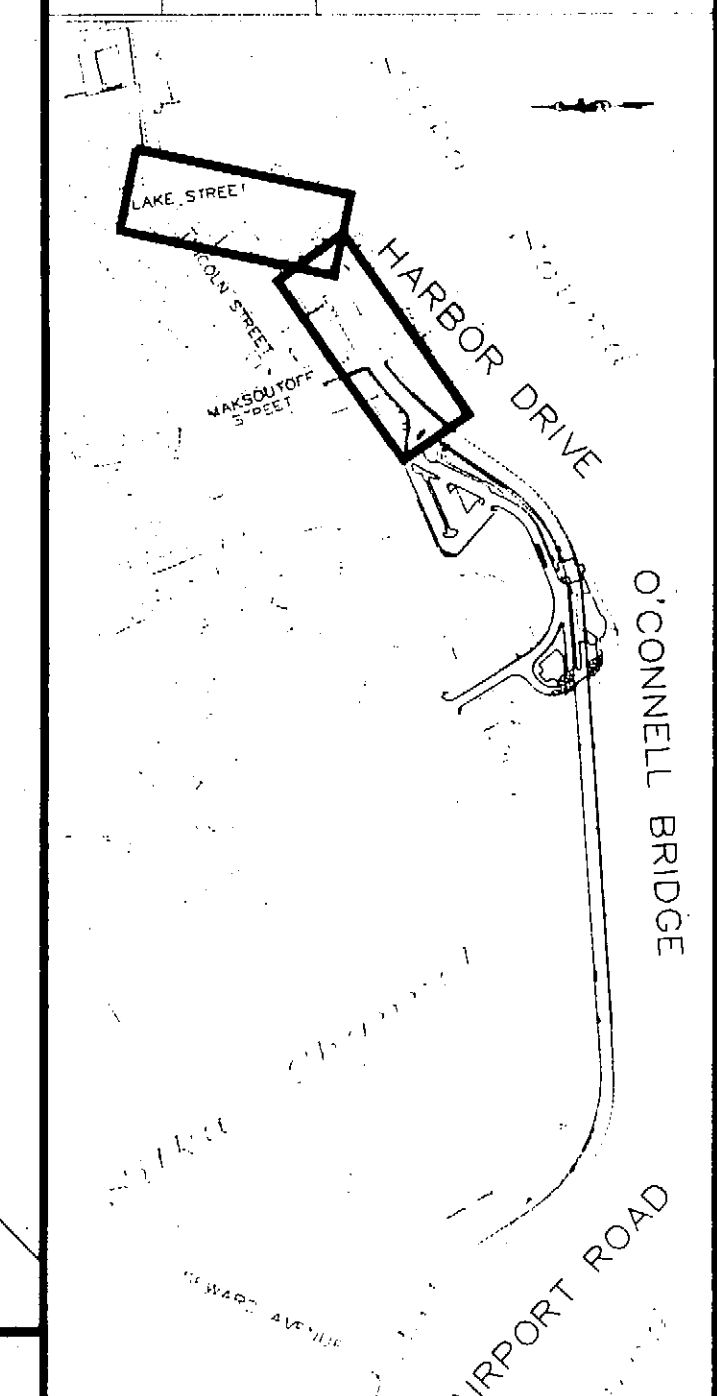
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION

**SIT-HARBOR DRIVE
LIGHTING, PEDESTRIAN &
BICYCLE IMPROVEMENTS**

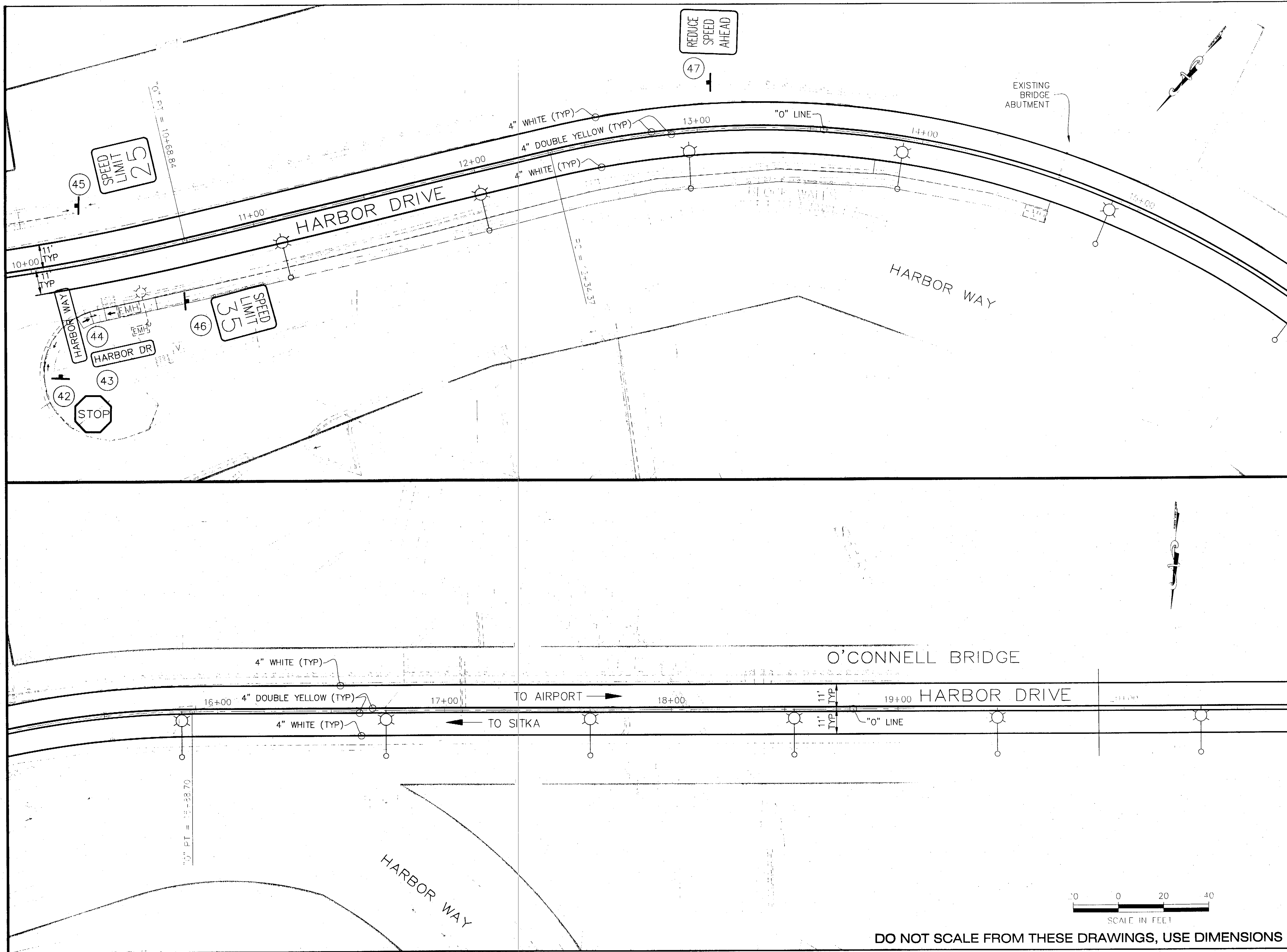
Signing & Striping Plan

PROJECT DESIGNATION NUMBER
MGs-NH-99-3(7)-68350

STATE	YEAR
ALASKA	2003
SHEET NUMBER	TOTAL SHEETS
J1	46



DO NOT SCALE FROM THESE DRAWINGS, USE DIMENSIONS



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ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
Proj. Eng. *[Signature]* Date 7-6-06

Key Layout Plan

DESIGNED BY: V. MATTSO



CHECKED BY: P. PURVES
DRAWN/REVISED BY: P.S./V.K.

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

**SIT-HARBOR DRIVE
LIGHTING, PEDESTRIAN &
BICYCLE IMPROVEMENTS**

Signing & Striping Plan

PROJECT DESIGNATION NUMBER
MGS-NH-99-3(7)-68350

STATE	YEAR
ALASKA	2003

SHEET NUMBER	TOTAL SHEETS
J2	46

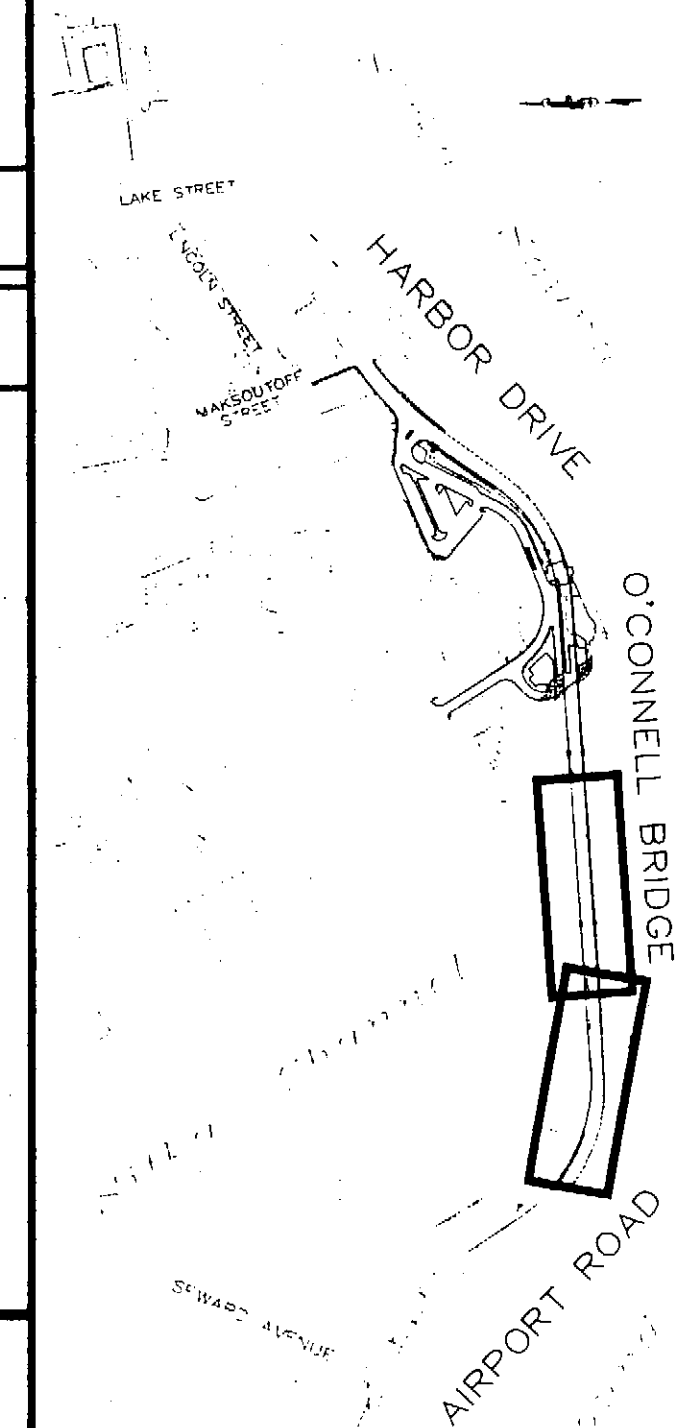
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ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

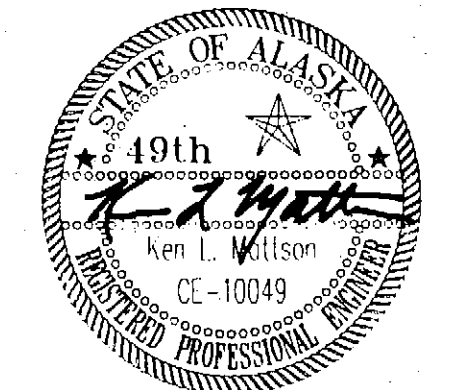
No.	DATE	DESCRIPTION



Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
Proj. Eng. *[Signature]* Date 12-6-06

Key Layout Plan

DESIGNED BY: K. MATTSOHN



CHECKED BY: R. PURVES

DRAWN/REVISED BY: P.S./K.K.

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

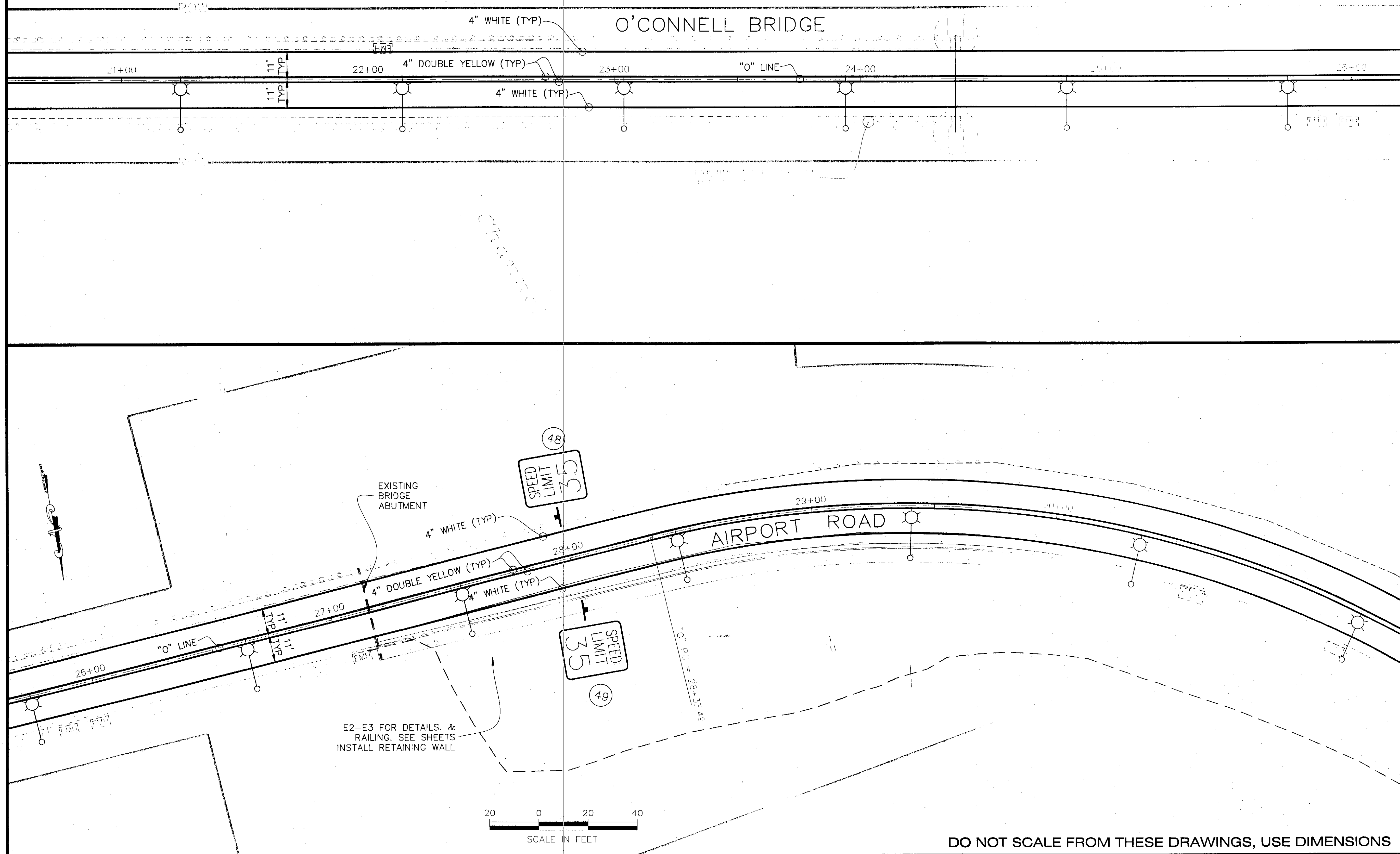
**SIT-HARBOR DRIVE
LIGHTING, PEDESTRIAN &
BICYCLE IMPROVEMENTS**

Signing & Striping Plan

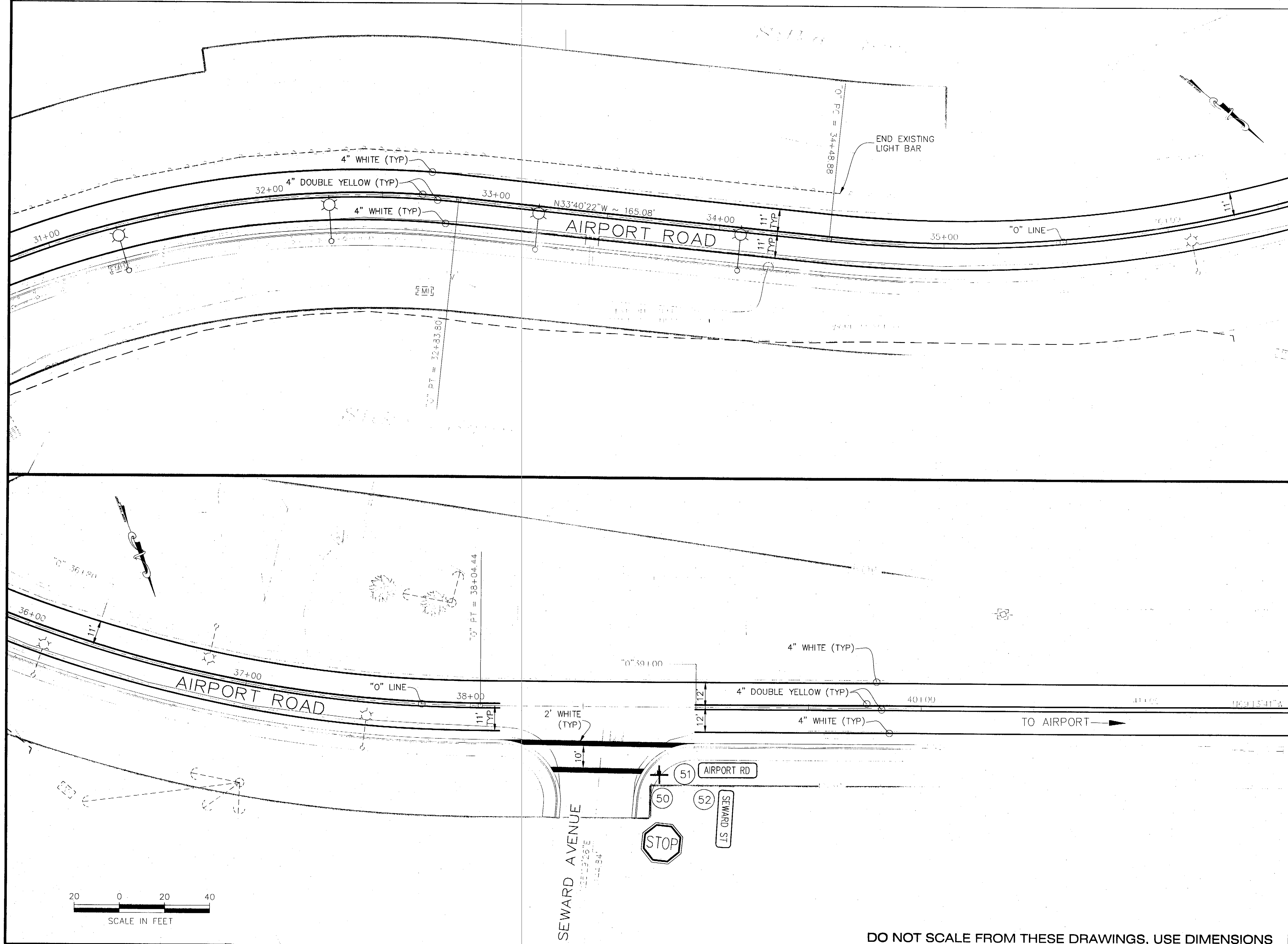
PROJECT DESIGNATION NUMBER

MGs-NH-99-3(7)-68350

STATE	YEAR
ALASKA	2003
SHEET NUMBER	TOTAL SHEETS
J3	46



DO NOT SCALE FROM THESE DRAWINGS, USE DIMENSIONS



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ADDENDUM NUMBER

ATTACHMENT NUMBER

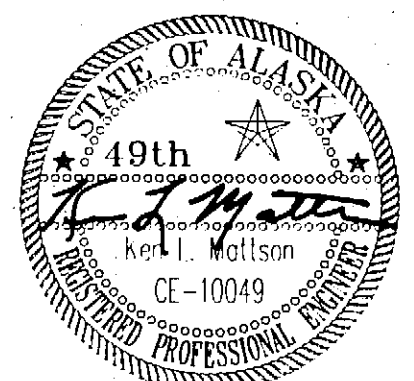
RECORD OF REVISIONS

No.	DATE	DESCRIPTION

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
Proj. Eng. *[Signature]* Date 7-6-06

Key Layout Plan

DESIGNED BY: K. MATTSOHN



STATE OF ALASKA
49th
K. L. Mattson
CE-10049
REGISTERED PROFESSIONAL ENGINEER

CHECKED BY: P. PUPVES
DRAWN/PEASED BY: P.S./Y.K.

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

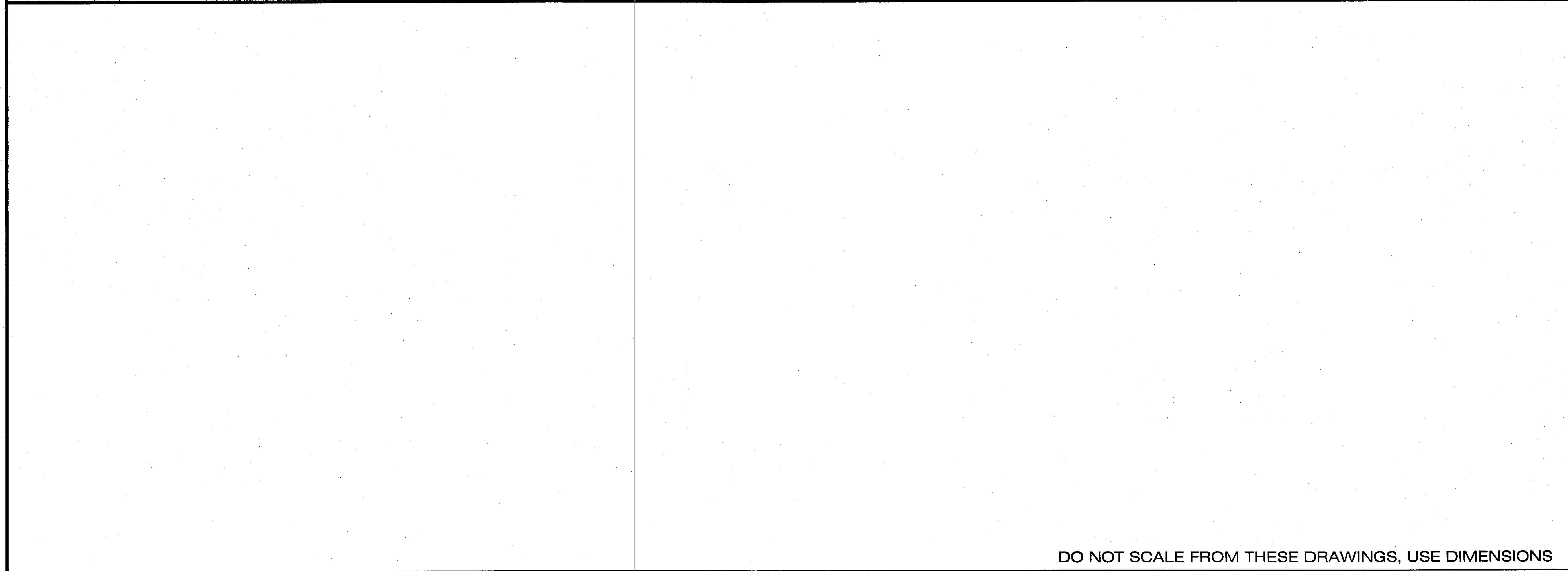
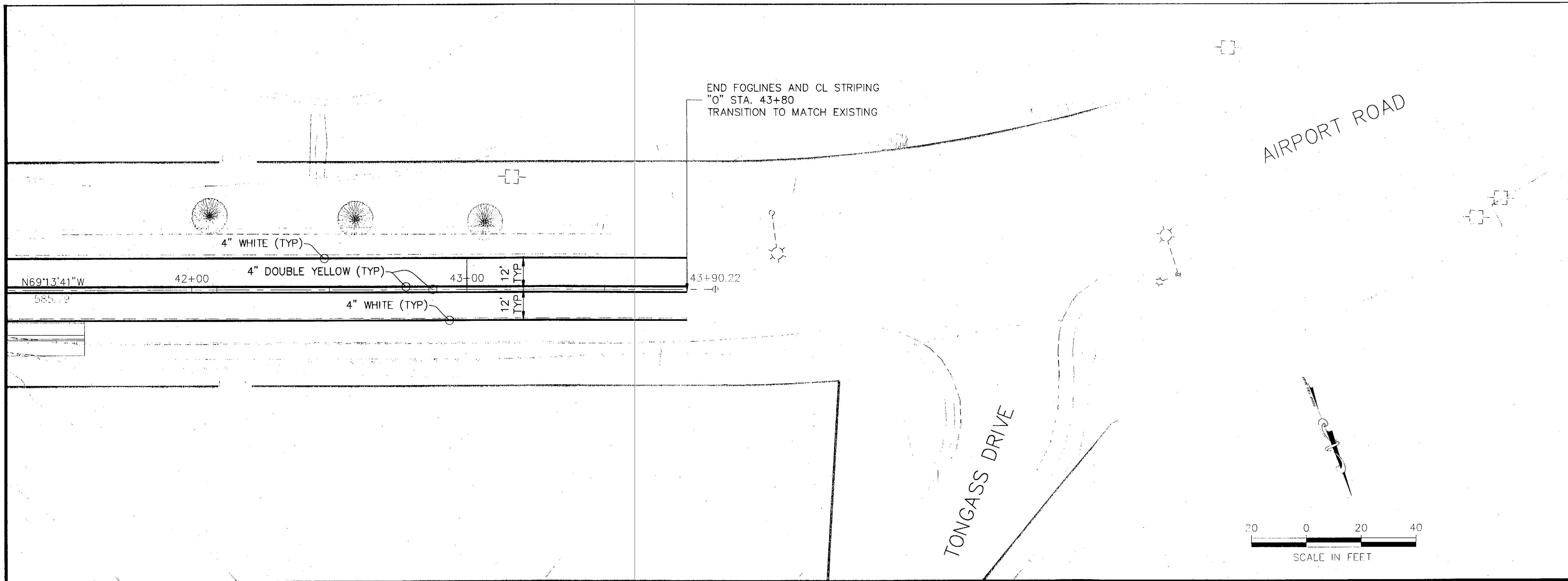
**SIT-HARBOR DRIVE
LIGHTING, PEDESTRIAN &
BICYCLE IMPROVEMENTS**

Signing & Striping Plan

PROJECT DESIGNATION NUMBER
MGS-NH-99-3(7)-68350

STATE	YEAR
ALASKA	2003
SHEET NUMBER	TOTAL SHEETS
J4	46

DO NOT SCALE FROM THESE DRAWINGS, USE DIMENSIONS



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TAB: J5

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS		
No.	DATE	DESCRIPTION

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
Proj. Eng. *[Signature]* Date 12-6-06

**Key
Layout Plan**

DESIGNED BY: K. MATTSOII

CHECKED BY: R. PURVES
DRAWN/REVISED BY: R.S./K.K.

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

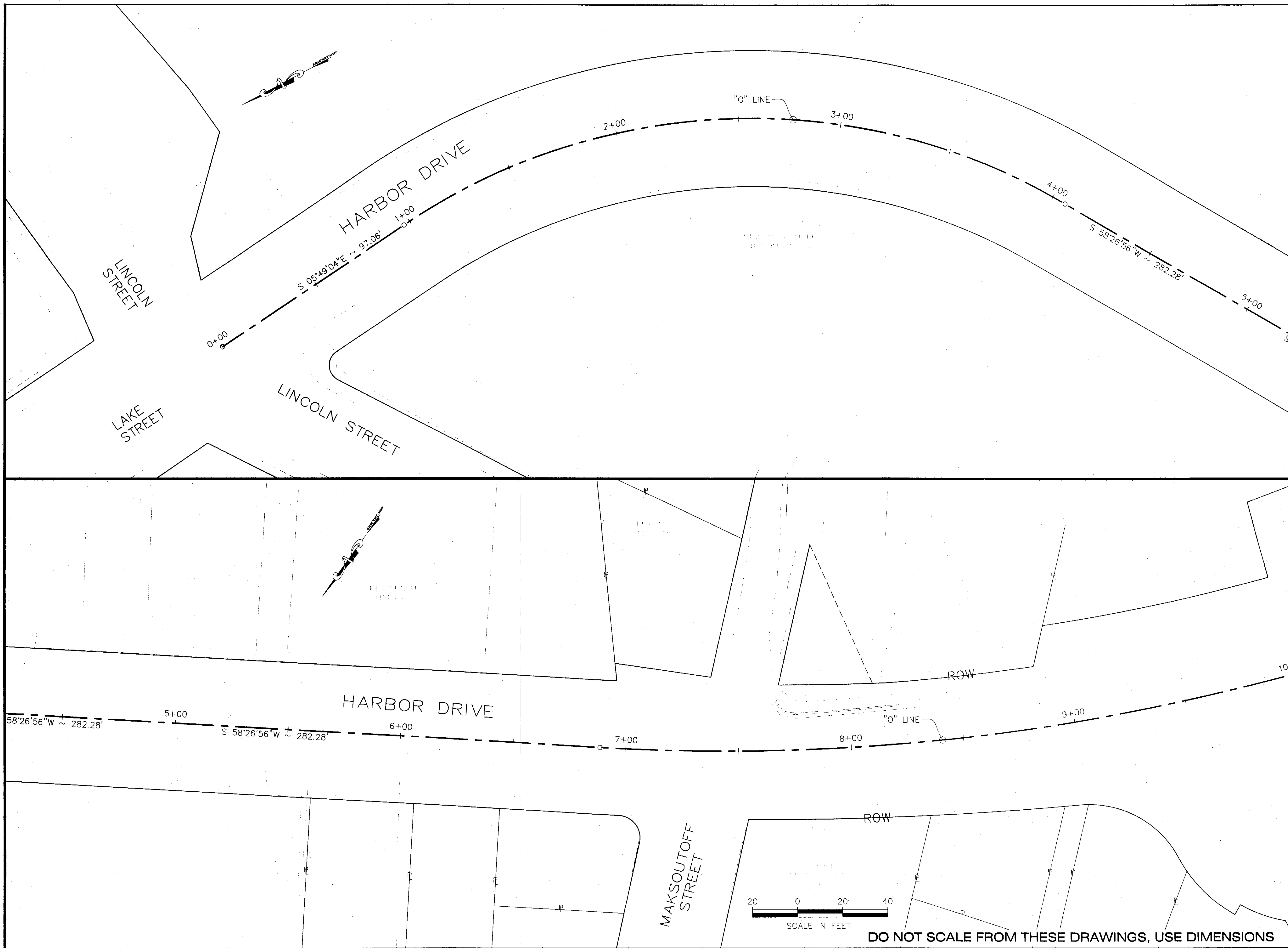
**SIT-HARBOR DRIVE
LIGHTING, PEDESTRIAN &
BICYCLE IMPROVEMENTS**

**Signing & Striping
Plan**

PROJECT DESIGNATION NUMBER
MGs-NH-99-3(7)-68350

STATE	YEAR
ALASKA	2003
SHEET NUMBER	TOTAL SHEETS
J5	46

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ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
Proj. Eng. Date 12-6-06

Key Layout Plan

DESIGNED BY: D. BLACKBURN

CHECKED BY: J. HEUMANN
DRAWN/REVISED BY: R. SNYDER

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

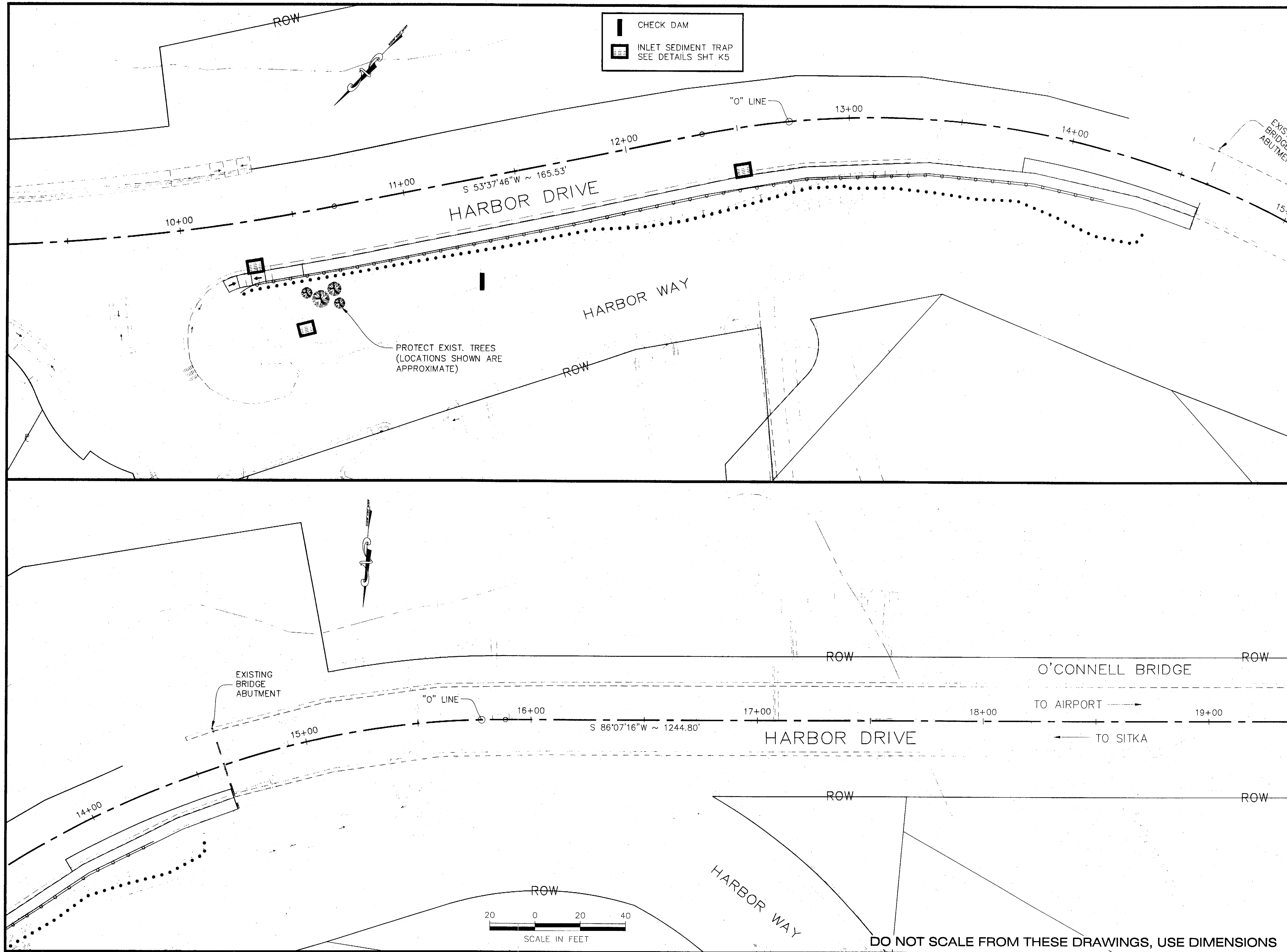
**SIT-HARBOR DRIVE
LIGHTING, PEDESTRIAN &
BICYCLE IMPROVEMENTS
Erosion &
Sediment Control Plan**

PROJECT DESIGNATION NUMBER
MGs-NH-99-3(7)-68350

STATE	YEAR
ALASKA	2003

SHEET NUMBER	TOTAL SHEETS
K1	46

DO NOT SCALE FROM THESE DRAWINGS, USE DIMENSIONS



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ADDENDUM NUMBER
ATTACHMENT NUMBER
RECORD OF REVISIONS
No. DATE DESCRIPTION

EXISTING BRIDGE ABUTMENT
HARBOR DRIVE
O'CONNELL BRIDGE
AIRPORT ROAD
SEWARD AVENUE
LAKE STREET
WASHINGTON STREET

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
Proj. Eng. *[Signature]* Date 7-6-06

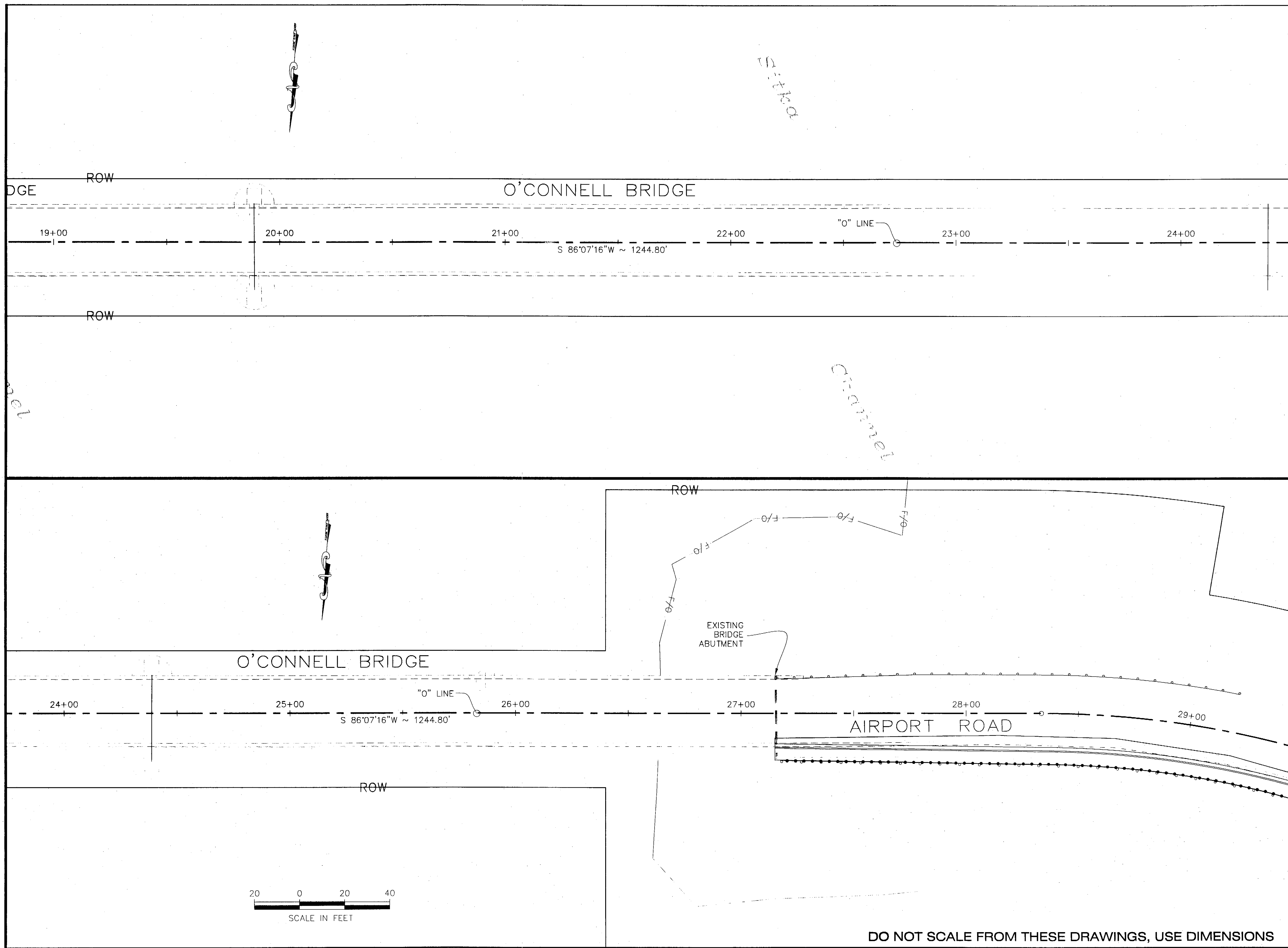
Key Layout Plan
DESIGNED BY: D. BLACKBURN

STATE OF ALASKA
19th
Doug W. Blackburn
CE-10052
REGISTERED PROFESSIONAL ENGINEER

CHECKED BY: J. HEUMANN
DRAWN/REVISED BY: R. SNYDER
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION
**SIT-HARBOR DRIVE
LIGHTING, PEDESTRIAN &
BICYCLE IMPROVEMENTS
Erosion &
Sediment Control Plan**
PROJECT DESIGNATION NUMBER
MGS-NH-99-3(7)~68350

STATE	YEAR
ALASKA	2003
SHEET NUMBER	TOTAL SHEETS
K2	46

DO NOT SCALE FROM THESE DRAWINGS, USE DIMENSIONS



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ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
Proj. Eng. *[Signature]* Date 12-6-06

Key Layout Plan

DESIGNED BY: D. BLACKBURN

CHECKED BY: J. HEUMANN
DRAWN/REVISED BY: P. SNYDER

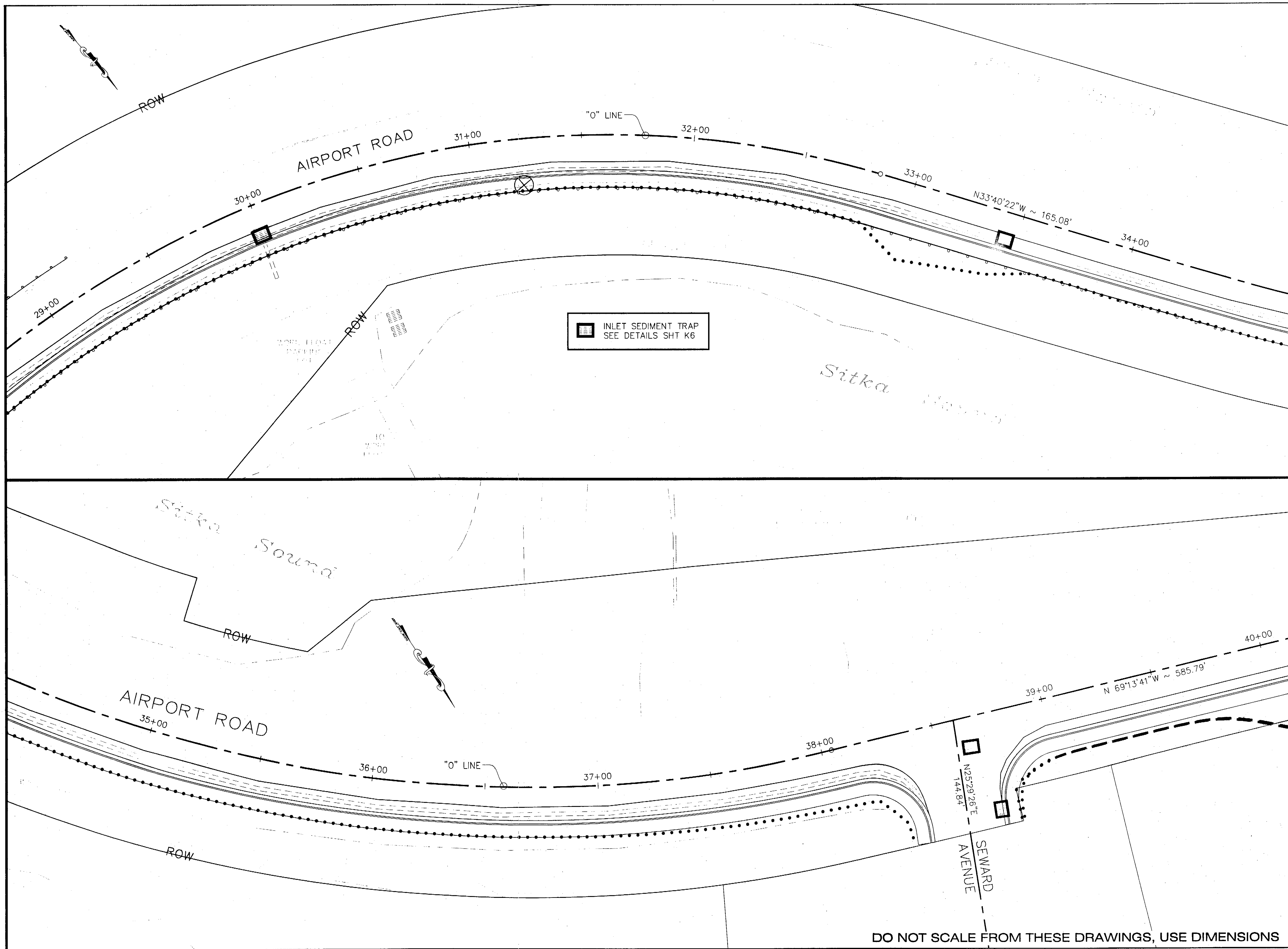
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION

**SIT-HARBOR DRIVE
LIGHTING, PEDESTRIAN &
BICYCLE IMPROVEMENTS
Erosion &
Sediment
Control Plan**

PROJECT DESIGNATION NUMBER
MGs-NH-99-3(7)-68350

STATE	YEAR
ALASKA	2003
SHEET NUMBER	TOTAL SHEETS
K3	46

DO NOT SCALE FROM THESE DRAWINGS, USE DIMENSIONS



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ADDITIONAL NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
Proj. Eng. *[Signature]* Date 12-1-06

Key Layout Plan

DESIGNED BY: D. BLACKBURN

CHECKED BY: J. HEUMANN
DRAWN/REVISED BY: P. SNYDER

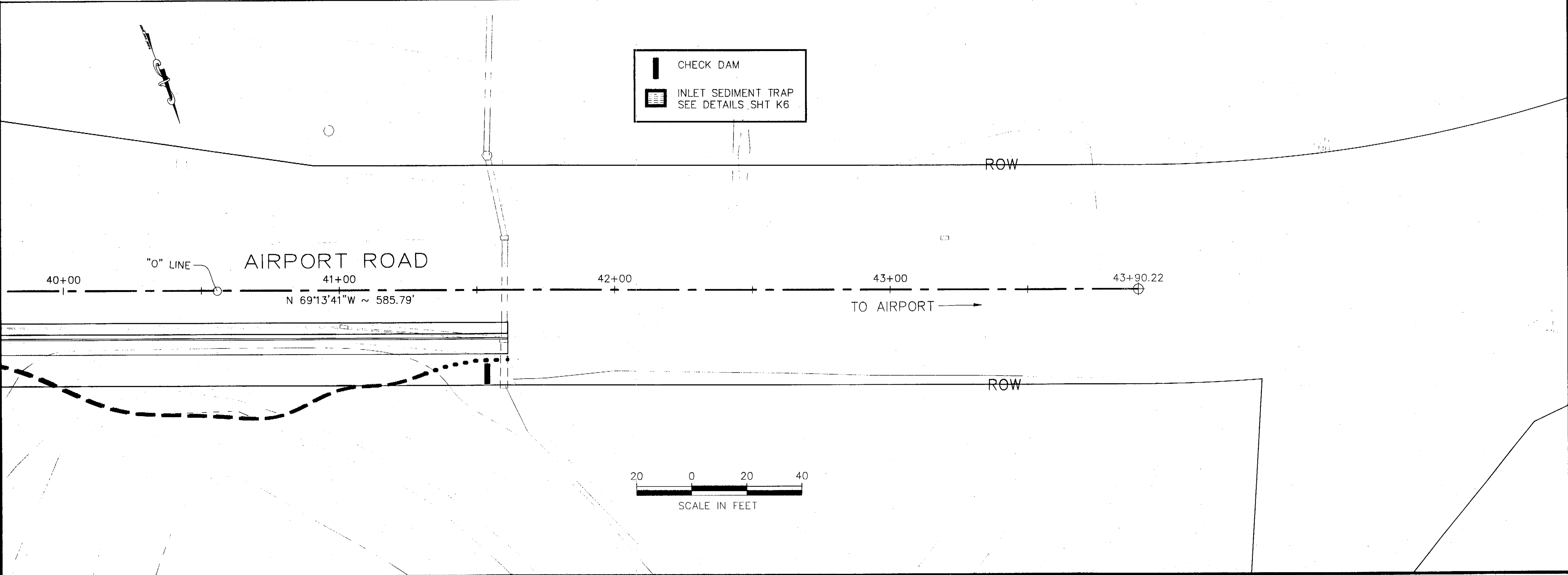
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION

**SIT-HARBOR DRIVE
LIGHTING, PEDESTRIAN &
BICYCLE IMPROVEMENTS
Erosion &
Sediment Control Plan**

PROJECT DESIGNATION NUMBER
MGS-NH-99-3(7)-68350

STATE	YEAR
ALASKA	2003

SHEET NUMBER	TOTAL SHEETS
K4	46



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ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
Proj. Eng. *[Signature]* Date 12-6-06

Key Layout Plan

DESIGNED BY: D. BLACKBURN

CHECKED BY: J. HEUMATIFI
DRAWN/REVISED BY: P. SHYDER

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

**SIT-HARBOR DRIVE
LIGHTING, PEDESTRIAN & BICYCLE IMPROVEMENTS
Erosion & Sediment Control Plan**

PROJECT DESIGNATION NUMBER
MGS-NH-99-3(7)~68350

STATE	YEAR
ALASKA	2003

SHEET NUMBER	TOTAL SHEETS
K5	46

DO NOT SCALE FROM THESE DRAWINGS, USE DIMENSIONS



State of Alaska
Department of Transportation
and Public Facilities
Southeast Region

Sitka - Harbor Drive & Bridge Improvements

Consists of:

Sitka Harbor Drive Lighting, Pedestrian & Bicycle Improvements

Project No. MGS-NH-99-3(7) ~ 68350

**Sitka Harbor Bridge Rehabilitation
(Statewide Bridge Repairs)**

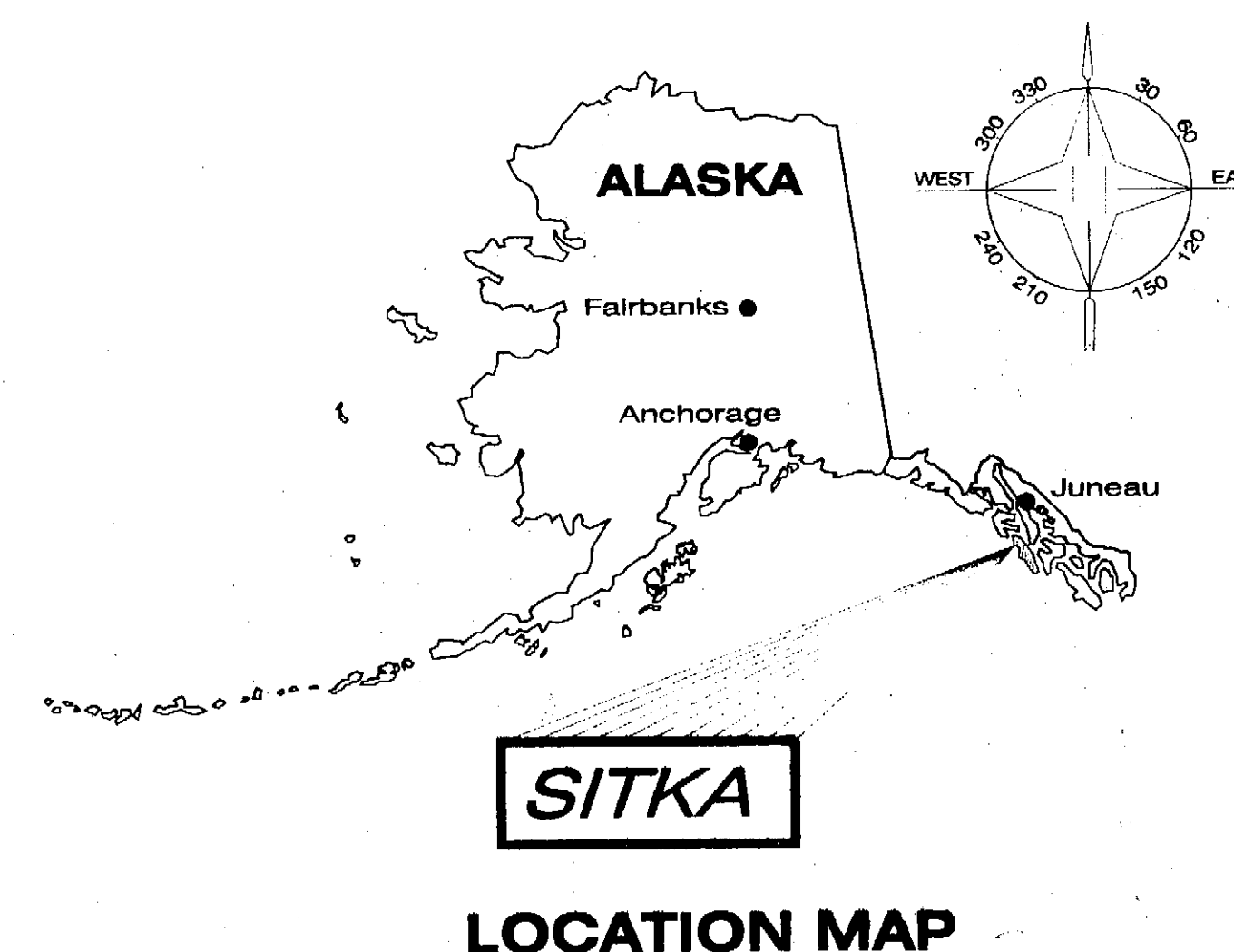
Project No. BH-099-3(16) ~ 67650

Sitka Harbor Bridge Seismic Retrofit

Project No. BH- 000S(427) ~ 75577

As - Built Drawings

Contractor: Swalling Construction
Company, Inc.
Project Engineer: Todd Fleming
Beginning Date: April 26, 2004
End Date: October 1, 2005

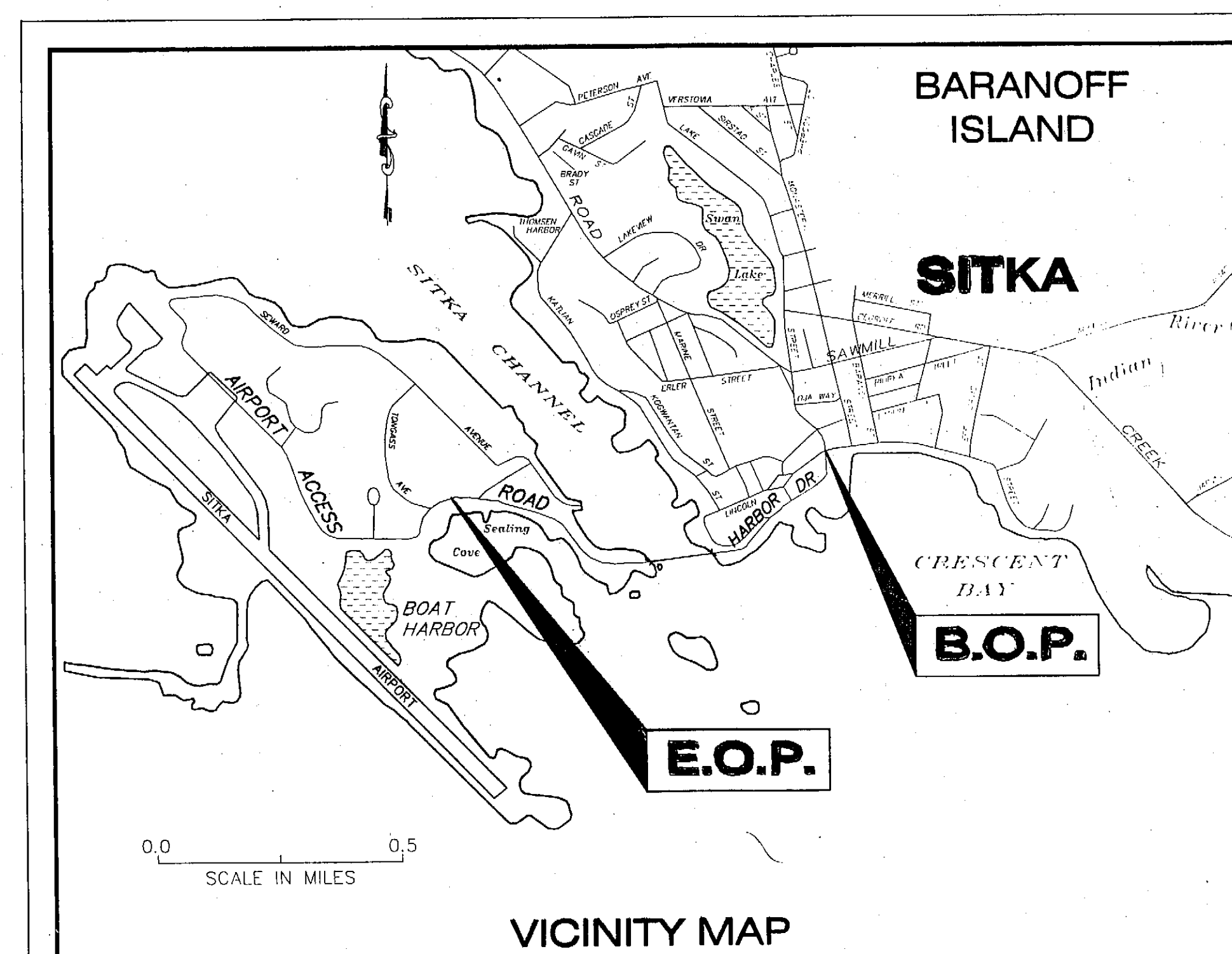


LOCATION MAP

Project As-Built Drawings have been
reviewed by the Project Engineer and
represent to the best of my knowledge, the
project as constructed.
Proj. Engr. *[Signature]* Date 12-4-06

THE FOLLOWING STANDARD DRAWINGS APPLY TO THESE PROJECTS:

A-1	E-13.00	M-13.01	T-21.02
D-04.20	I-20.13	S-00.10	T-23.00
D-20.03	I-21.01	S-05.01	U-03.00
D-23.00	L-03.10	S-20.10	
D-26.02	L-23.01	S-30.03	



VICINITY MAP

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PLOT: FULL 1:1 HALF 1:2 TAB: A1

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHEAST REGION

RECOMMENDED FOR APPROVAL:

[Signature] 12/24/03
PATRICK J. KEMP
SOUTHEAST REGIONAL PRE-CONSTRUCTION ENGINEER
DATE

APPROVED: *[Signature]* 12-24-03
for GARY L. PAXTON
SOUTHEAST REGIONAL DIRECTOR
DATE

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

CONSTRUCTION PROJECT MANAGER DATE

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	AS NOTED	2003	S1	1 OF 2

COMBINED ESTIMATE OF QUANTITIES

			Sitka Harbor Drive Lighting, Pedestrian & Bicycle Improvements	Sitka Harbor Bridge Rehabilitation (Statewide Bridge Repairs)	Sitka Harbor Bridge Seismic Retrofit	COMBINED TOTAL
ITEM No.	ITEM	UNIT	Project No. MGS-NH-99-3(7)~ 68350	Project No. BH-099-3(16)~ 67650	Project No. BH-000S(427)~ 75577	
203 (2a)	Rock Excavation, CO 12	Lump Sum	ALL REQUIRED			ALL REQUIRED
501 (9a)	Expansion Joint Modification, CO 9	Lump Sum		ALL REQUIRED		ALL REQUIRED
202 (1)	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	LUMP SUM	ALL REQUIRED✓	ALL REQUIRED✓	ALL REQUIRED✓	ALL REQUIRED✓
202 (2)	REMOVAL OF PAVEMENT	SQUARE YARD	500 466.80	1,334 133.3		1,834 600.1
202 (3)	REMOVAL OF SIDEWALK	SQUARE YARD	945 1,025.40			945 1,025.40
202 (9)	REMOVAL OF CURB AND GUTTER	LINEAR FOOT	1,400 1,425.50			1,400 1,425.50
202 (13)	REMOVAL OF APPROACH RAIL	LINEAR FOOT	1,288 1,272.60			1,288 1,272.60
202 (14)	PAVEMENT COLD PLANING	SQUARE YARD	34			34
501 (12a)	Pier Surface Preparation, CO 12	Lump Sum	ALL REQUIRED		ALL REQUIRED	ALL REQUIRED
203 (2)	ROCK EXCAVATION	CUBIC YARD	800 ALL REQUIRED			800 ALL REQUIRED
203 (10)	CONTROLLED BLASTING	LUMP SUM	ALL REQUIRED✓			ALL REQUIRED✓
203 (19)	COMMON EXCAVATION	LUMP SUM	ALL REQUIRED✓			ALL REQUIRED✓
204 (2)	TRENCH EXCAVATION	LINEAR FOOT	550 525.			550 525.
504 (1a)	Increase Anchor Plate Size, CO 8	Lump Sum			ALL REQUIRED	ALL REQUIRED
301 (1)	CRUSHED AGGREGATE BASE COURSE	TON	710 427.09			710 427.09
304 (1)	SUBBASE, GRADING B	TON	250 89.29			250 89.29
306 (1)	ASPHALT TREATED BASE	TON	170 0			170 0
504 (4a)	Preparation for Bearing Replacement, CO 2	Lump Sum			ALL REQUIRED	ALL REQUIRED
401 (1)	ASPHALT CONCRETE PAVEMENT, TYPE II, CLASS B	TON	115 266.61	150 26.12		265 292.73
401 (2)	ASPHALT CEMENT GRADE, PG-58-28	TON	14 17.20	9 1.68		23 18.88
504 (4b)	Permanent Jacking Posts, CO 2	Lump Sum			ALL REQUIRED	ALL REQUIRED
501 (1)	CLASS A CONCRETE	LUMP SUM		ALL REQUIRED✓	ALL REQUIRED✓	ALL REQUIRED✓
501 (9)	EXPANSION JOINT REPLACEMENT	LINEAR FOOT		78✓		78✓
501 (10)	EXPANSION JOINT MODIFICATION	LINEAR FOOT		78✓		78✓
501 (11)	DRILL & BOND DOWELS	LUMP SUM		ALL REQUIRED✓		ALL REQUIRED✓
501 (12)	CLASS J CONCRETE	LUMP SUM		ALL REQUIRED✓	ALL REQUIRED✓	ALL REQUIRED✓
501 (13)	DRILLING/CORING CONCRETE	LUMP SUM		ALL REQUIRED✓	ALL REQUIRED✓	ALL REQUIRED✓
502 (2)	PRESTRESSING CAST-IN PLACE CONCRETE	LUMP SUM		ALL REQUIRED✓	ALL REQUIRED✓	ALL REQUIRED✓
504 (4c)	Bearing Modifications, CO 2	Lump Sum			ALL REQUIRED	ALL REQUIRED
503 (1)	REINFORCING STEEL	LUMP SUM			ALL REQUIRED✓	ALL REQUIRED✓
503 (2)	EPOXY COATED REINFORCING STEEL	LUMP SUM		ALL REQUIRED✓		ALL REQUIRED✓
504 (4d)	Price Adjustment, CO 2, 3	Lump Sum			ALL REQUIRED	ALL REQUIRED
504 (1)	STRUCTURAL STEEL	LUMP SUM			ALL REQUIRED	ALL REQUIRED
504 (4)	BEARING REPLACEMENT OR REHABILITATION	LUMP SUM			ALL REQUIRED DELETED C.O. #2	ALL REQUIRED DELETED C.O. #2
507 (1)	STEEL BRIDGE RAILING	LINEAR FOOT		2,554 2,563.9		2,554 2,563.9
507 (2)	PEDESTRIAN RAILING	LINEAR FOOT		52 51.9		52 51.9
507 (1a)	Steel Bridge Railing, Tapered Washers, CO 4	Lump Sum		ALL REQUIRED		ALL REQUIRED
507 (7)	APPROACH RAIL	LINEAR FOOT	1,052 1,066.4			1,052 1,066.4
507 (8)	REMOVE AND RELOCATE APPROACH RAIL	LINEAR FOOT	55 60			55 60
507 (9)	REMOVE AND DISPOSE OF BRIDGE RAIL	LINEAR FOOT		2,554 2,564		2,554 2,564
507 (10)	APPROACH RAILING MODIFICATION	LINEAR FOOT		1,175 1,182.6		1,175 1,182.6
508 (1)	WATERPROOFING MEMBRANE	SQUARE YARD		1,334 0		1,334 0
510 (1)	REMOVAL OF CONCRETE BRIDGE DECK	SQUARE FOOT		31 14		31 14
511 (3)	SIDEWALK RETAINING WALL	SQUARE FOOT	231 0			231 0
513 (1)	FIELD PAINTING STEEL STRUCTURES	LUMP SUM		ALL REQUIRED✓	ALL REQUIRED✓	ALL REQUIRED✓
507 (9a)	Rail Lighting Hazardous Material Disposal, CO 7	Lump Sum		ALL REQUIRED		ALL REQUIRED
603 (17-18)	18 INCH PIPE	LINEAR FOOT	30✓			30✓
604 (5)	INLET, TYPE A	EACH	3✓			3✓
606 (12)	GUARDRAIL/BRIDGERAIL CONNECTION	EACH		3✓		3✓
606 (13)	BOX BEAM END TERMINAL	EACH	1✓			1✓
608 (1a)	CONCRETE SIDEWALK	SQUARE YARD	1,150 1,131.2			1,150 1,131.2
609 (2)	CURB AND GUTTER, TYPE I	LINEAR FOOT	1,443 1,433			1,443 1,433
615 (1)	STANDARD SIGNS	SQUARE FOOT	192 143.33			192 143.33
618 (4)	SEEDING	LUMP SUM	ALL REQUIRED✓			ALL REQUIRED✓
660 (3a)	Highway Lighting System Complete, CO 11	Lump Sum	ALL REQUIRED			ALL REQUIRED
620 (2)	TOPSOIL	LUMP SUM	ALL REQUIRED✓			ALL REQUIRED✓
660 (3b)	Highway Lighting System credit, CO 11	Lump Sum	ALL REQUIRED			ALL REQUIRED
640 (1)	MOBILIZATION & DEMOBILIZATION	LUMP SUM	ALL REQUIRED✓	ALL REQUIRED✓	ALL REQUIRED✓	ALL REQUIRED✓
641 (3)	EROSION & POLLUTION CONTROL	LUMP SUM	ALL REQUIRED✓	ALL REQUIRED✓	ALL REQUIRED✓	ALL REQUIRED✓
642 (1)	CONSTRUCTION SURVEYING	LUMP SUM	ALL REQUIRED✓			ALL REQUIRED✓
642 (3)	THREE PERSON SURVEY PARTY	HOURL	5 0			5
643 (2)	TRAFFIC MAINTENANCE	LUMP SUM	ALL REQUIRED✓	ALL REQUIRED✓		ALL REQUIRED✓
644 (6)	VEHICLES	LUMP SUM	ALL REQUIRED✓	ALL REQUIRED✓	ALL REQUIRED	ALL REQUIRED✓
660 (5a)	Temporary Bridge Lighting, CO 11	Lump Sum		ALL REQUIRED		ALL REQUIRED
660 (3)	HIGHWAY LIGHTING SYSTEM, COMPLETE	LUMP SUM	ALL REQUIRED✓			ALL REQUIRED✓
660 (5)	STRUCTURE ILLUMINATION SYSTEM COMPLETE	LUMP SUM		ALL REQUIRED✓		ALL REQUIRED
660 (14)	UTILITY CONDUIT	LINEAR FOOT	960 868			960 868
*660 (15)	BRIDGE ARCHITECTURAL FLOOD LIGHTING	LUMP SUM	ALL REQUIRED✓			ALL REQUIRED✓
662 (1)	CATHODIC PROTECTION SYSTEM	LUMP SUM		ALL REQUIRED✓		ALL REQUIRED✓
660 (15a)	Architectural Lighting Distribution System, CO 6	Lump Sum	ALL REQUIRED			ALL REQUIRED
670 (1)	PAINTED TRAFFIC MARKERS	LUMP SUM	ALL REQUIRED			ALL REQUIRED✓
662 (1a)	Cathodic Protection System Credit, CO 5	Lump Sum		ALL REQUIRED		ALL REQUIRED

*ADDITIVE ALTERNATE A

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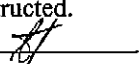
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RECORD OF REVISIONS

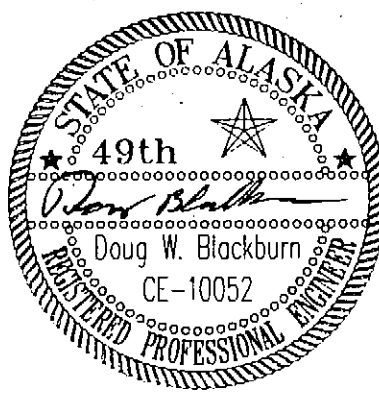
No.	DATE	DESCRIPTION

SITKA HARBOR DRIVE
& BRIDGE IMPROVEMENTS
PROJECT NOS. 68350, 67650 & 75577

Combined
Estimate of Quantities

Project As-Built Drawings have been
reviewed by the Project Engineer and
represent to the best of my knowledge, the
project as constructed.
Proj. Engr.  Date 2-6-04

DESIGNED BY: D. BLACKBURN



CHECKED BY: J. HEUMANN

DRAWN/REVISED BY: K.K./R.S.

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

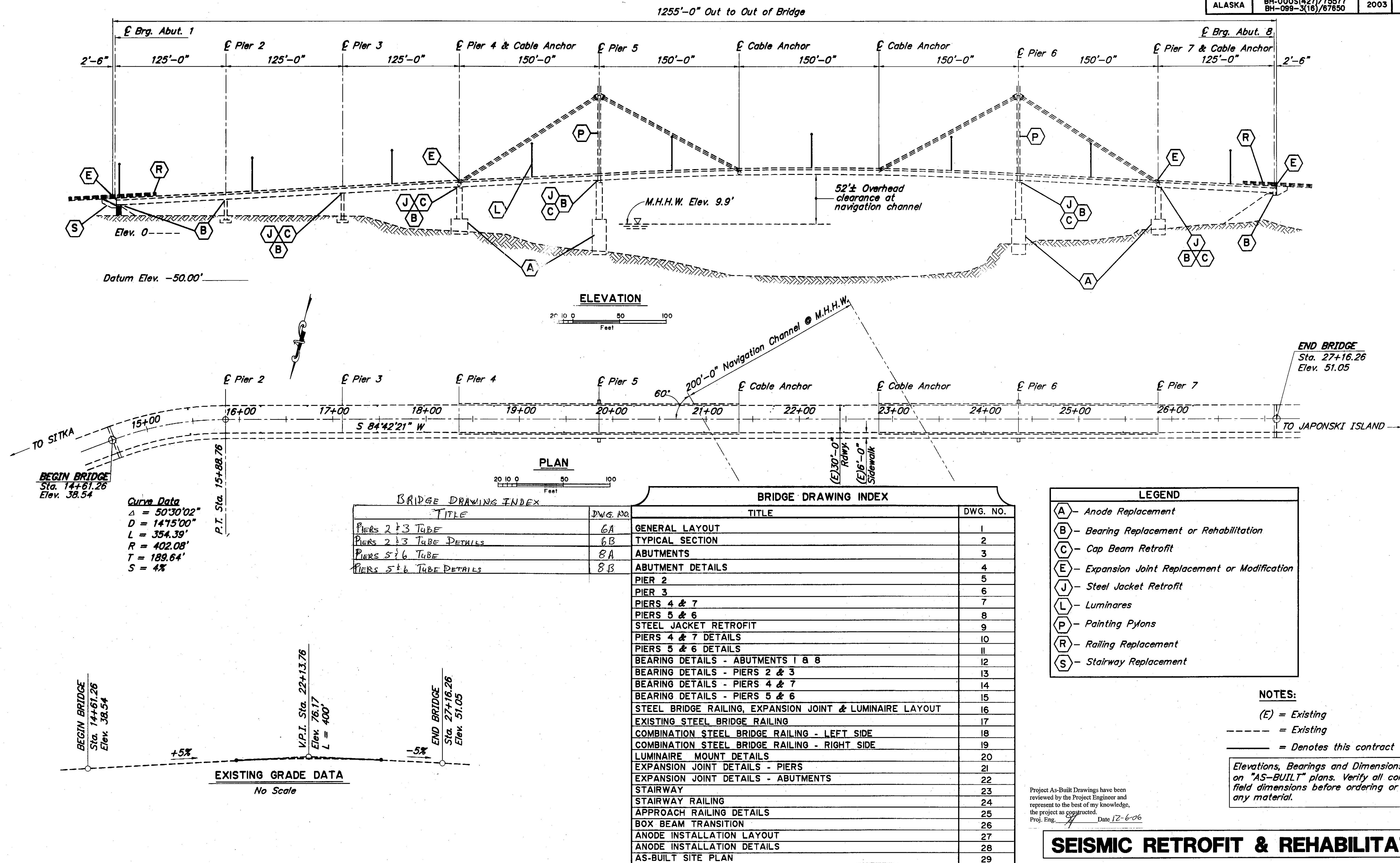
SITKA HARBOR DRIVE
& BRIDGE IMPROVEMENTS
PROJECT NOS.
68350, 67650 & 75577
Combined Estimate
of Quantities

PROJECT DESIGNATION NUMBER

AS NOTED

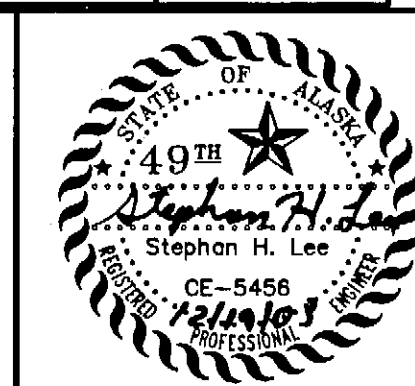
STATE	YEAR
ALASKA	2003
SHEET NUMBER	TOTAL SHEETS
S2	2 OF 2

ALL Lump Sum
ADDITIONAL ITEMS
ADDED BY CHANGE ORDERS:
504 (4a) PREPARATION FOR
BORING REPLACEMENT
504 (4b) PERMANENT JACKING POSTS
504 (1a) INCREASE ANCHOR PLATE SIZE
501 (12a) PIER SURFACE PREPARATION
501 (9a) EXPANSION JOINT
MODIFICATION
507 (9a) RAIL LIGHTING
HAZARDOUS MATERIAL
DISPOSAL
507 (1a) STEEL BRIDGE
RAILING, TAPERED WASHERS
660 (5a) TEMPORARY BRIDGE
LIGHTING
660 (15a) ARCHITECTURAL
LIGHTING DISTRIBUTION
SYSTEM
660 (3a) HIGHWAY LIGHTING
SYSTEM COMPLETE
203 (2a) ROCK EXCAVATION



DESIGNED BY: Rob Miller/Steve Lee	CHECKED: Larry Owen	LAYOUT BY: Rob Miller/Steve Lee	CHECKED BY: Larry Owen
DRAWN BY: Sam Sully/Leonard Robertson	CHECKED: Rob Miller/Steve Lee	SPECIFICATIONS BY: Rob Miller/Steve Lee	PLANS & SPEC. COMPARED: George Imboen
QUANTITIES BY: George Imboen	CHECKED: Rob Miller	APPROVAL RECOMMENDED BY: Rich Pratt	

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
BRIDGE SECTION



SITKA HARBOR BRIDGE
HARBOR DRIVE
GENERAL LAYOUT

BRIDGE NO. 245
DWG. NO. 1

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BH-000SI427/75577 BH-099-3(16)/67650	2003	L2	29

GENERAL NOTES

Design:..... AASTHO Standard Specifications for Highway Bridges, 17th Edition, 2002, with the latest Interim Specifications.

Seismic:..... Per USGS data
Acceleration Coefficient, A = 0.30g
Liquefaction Potential = Low
AASHTO 90% probability of not being exceeded in 50 years.

Concrete:..... Class "A" $f_c = 4000$ psi

Reinforcing Steel:..... A706, $F_y = 60,000$ psi
Grade 60

Structural Steel:..... ASTM A709,
Grade 50 $F_y = 50,000$ psi
Galvanize all steel jackets.
Galvanize all structural steel after shop fabrication unless otherwise noted.

LEGEND

- (A) - Anode Replacement
- (B) - Bearing Replacement or Rehabilitation
- (C) - Cap Beam Retrofit
- (E) - Expansion Joint Replacement or Modification
- (J) - Steel Jacket Retrofit
- (L) - Luminaries
- (P) - Painting Pylons
- (R) - Railing Replacement

NOTES:

- (E) = Existing
- = Existing
- _____ = Denotes this contract.

Elevations, Bearings and Dimensions are based on "AS-BUILT" plans. Verify all controlling field dimensions before ordering or fabricating any material.

BRIDGE BASIS OF ESTIMATE

	PAY ITEM	UNIT	SUBST.	SUPER.	TOTAL
202(1)	Removal of Structures & Obstructions	LS		All Req'd	All Req'd
202(2)	Removal of Pavement	SY		1334	1334
401(1)	Asphalt Concrete Pavement, Type II, Class B	TON		150	150
401(2)	Asphalt Cement, Grade PG 58-28	TON		9	9
501(1)	Class A Concrete	LS-CY	210	10	220
501(9)	Expansion Joint Replacement	LF		78	78
501(10)	Expansion Joint Modification	LF		78	78
501(11)	Drill and Bond Dowels	LS-EA	568	162	730
501(12)	Class J Concrete	LS-CY	405		405
501(13)	Drilling/Coring Concrete	LS-LF	1100		1100
502(2)	Prestressing Cast-In-Place Concrete	LS-EA	98		98
503(1)	Reinforcing Steel	LS-LBS	41,000		41,000
503(2)	Epoxy Coated Reinforcing Steel	LS-LBS		1100	1100
504(1)	Structural Steel	LS-LBS	370,000		370,000
504(4)	Bearing Replacement or Rehabilitation	LS-EA	16		16
507(1)	Steel Bridge Railing	LF		2554	2554
507(2)	Pedestrian Railing	LF		52	52
507(9)	Removing and Disposing of Bridge Rail	LF		2554	2554
507(10)	Approach Rail Modification	LF		1175	1175
508(1)	Waterproofing Membrane	SY		1334	1334
510(1)	Removal of Concrete Bridge Deck	SF		31	31
513(1)	Field Painting of Steel Structures	LS	All Req'd.	All Req'd.	All Req'd.
606(12)	Guardrail/Bridge Rail Connection	EA		3	3
660(5)	Structure Illumination System Complete	LS		All Req'd.	All Req'd.
662(1)	Cathodic Protection System	LS	All Req'd.		All Req'd.

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

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
Proj. Eng. *[Signature]* Date 12-6-06

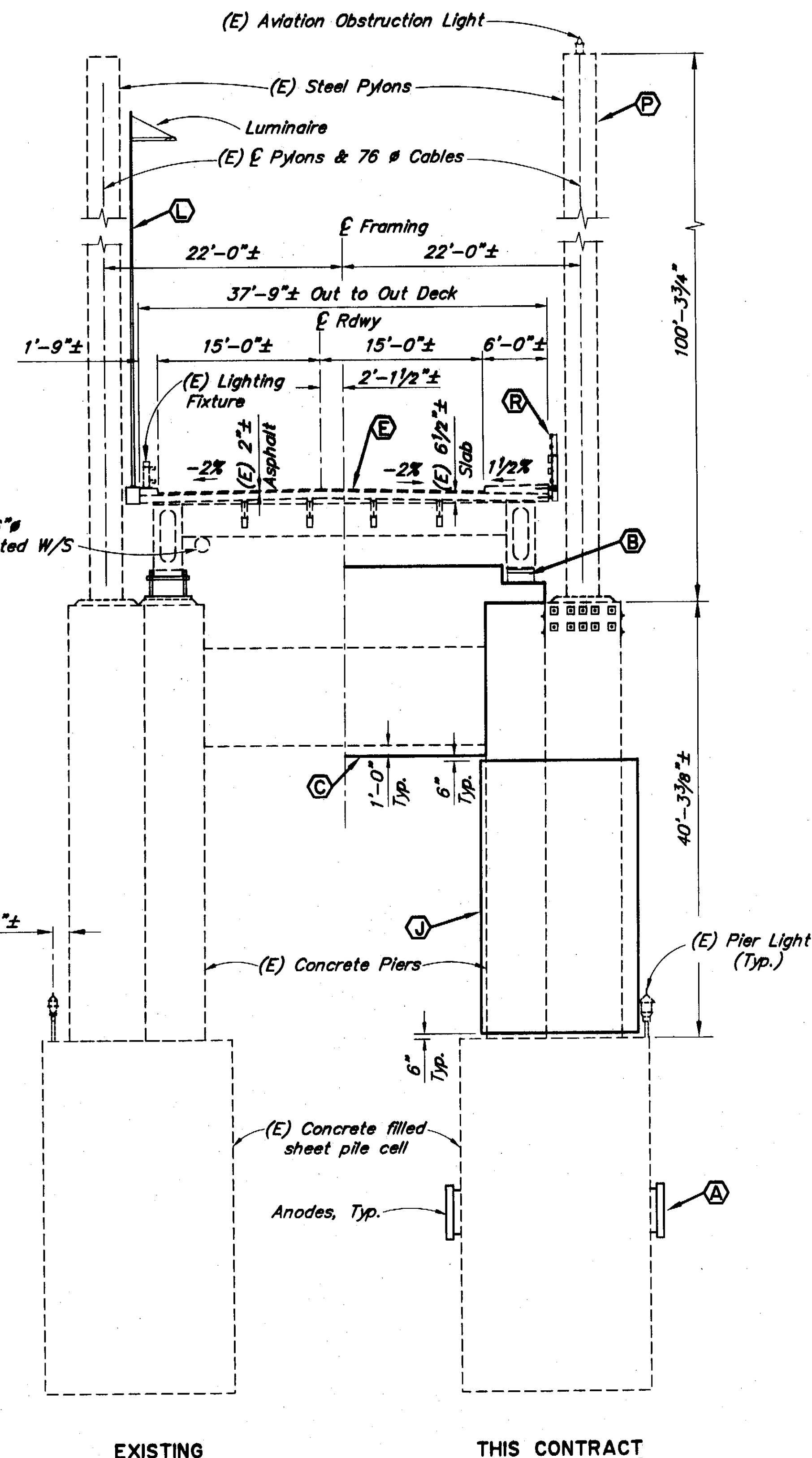
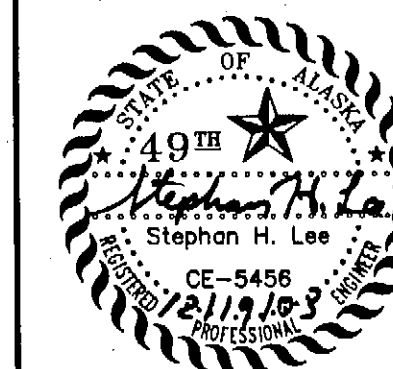
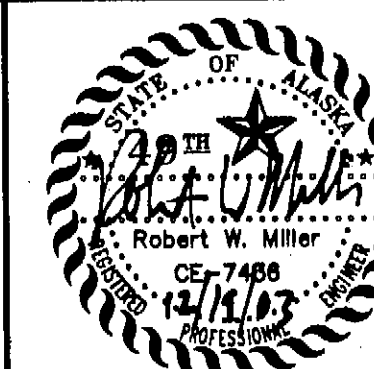
SEISMIC RETROFIT & REHABILITATION

SITKA HARBOR BRIDGE
HARBOR DRIVE
TYPICAL SECTION



BRIDGE NO. 245
DWG. NO. 2

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
BRIDGE SECTION



EXISTING

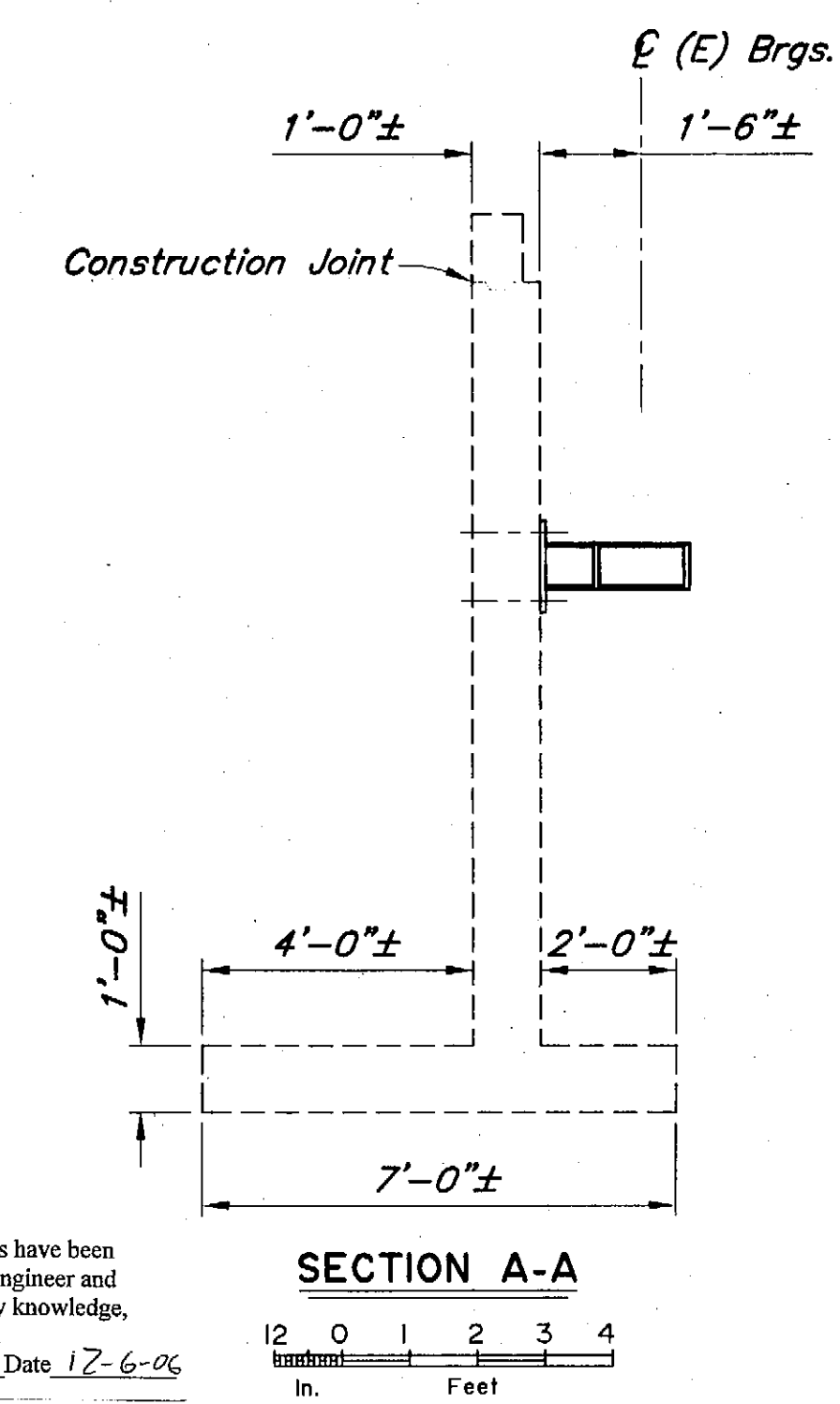
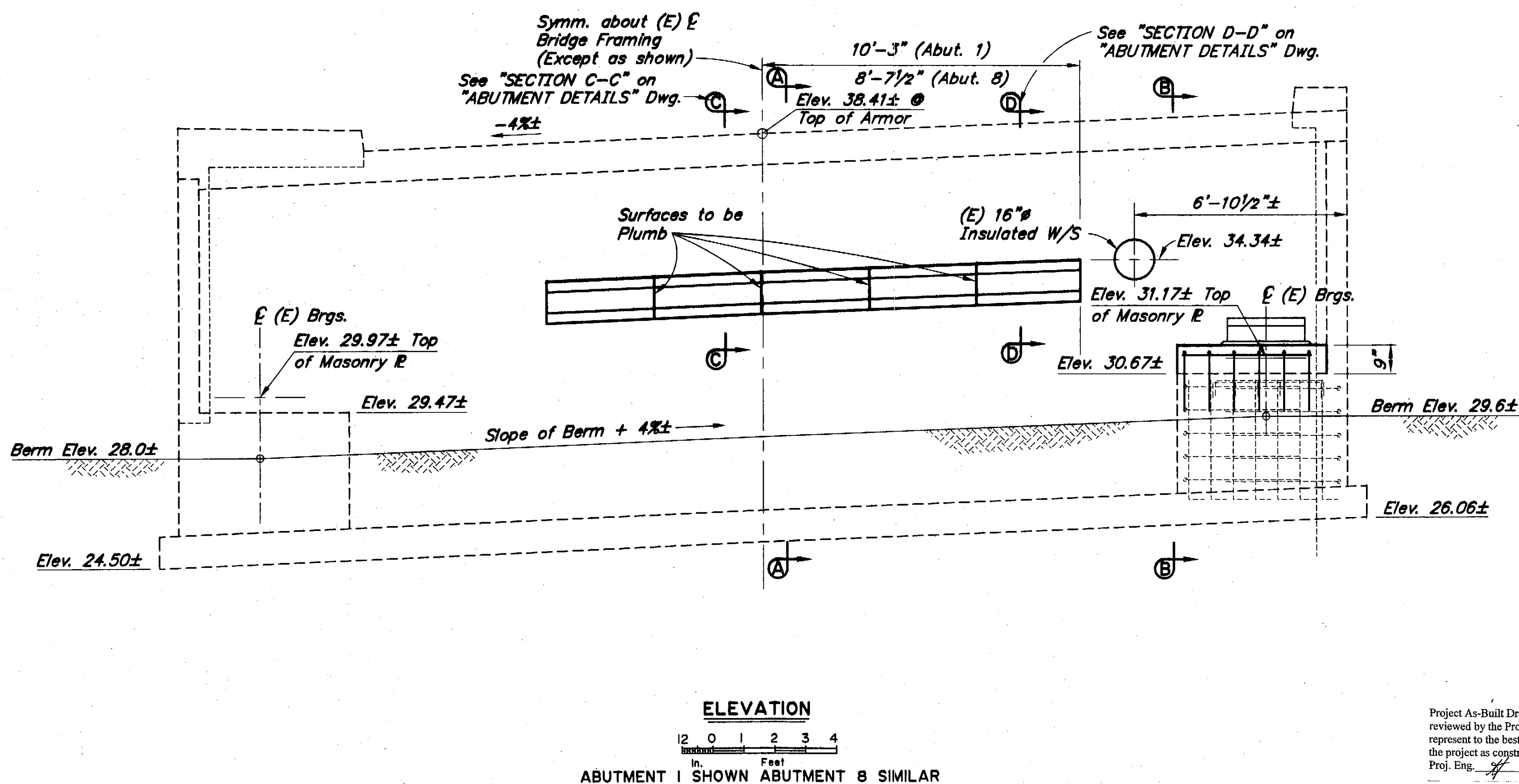
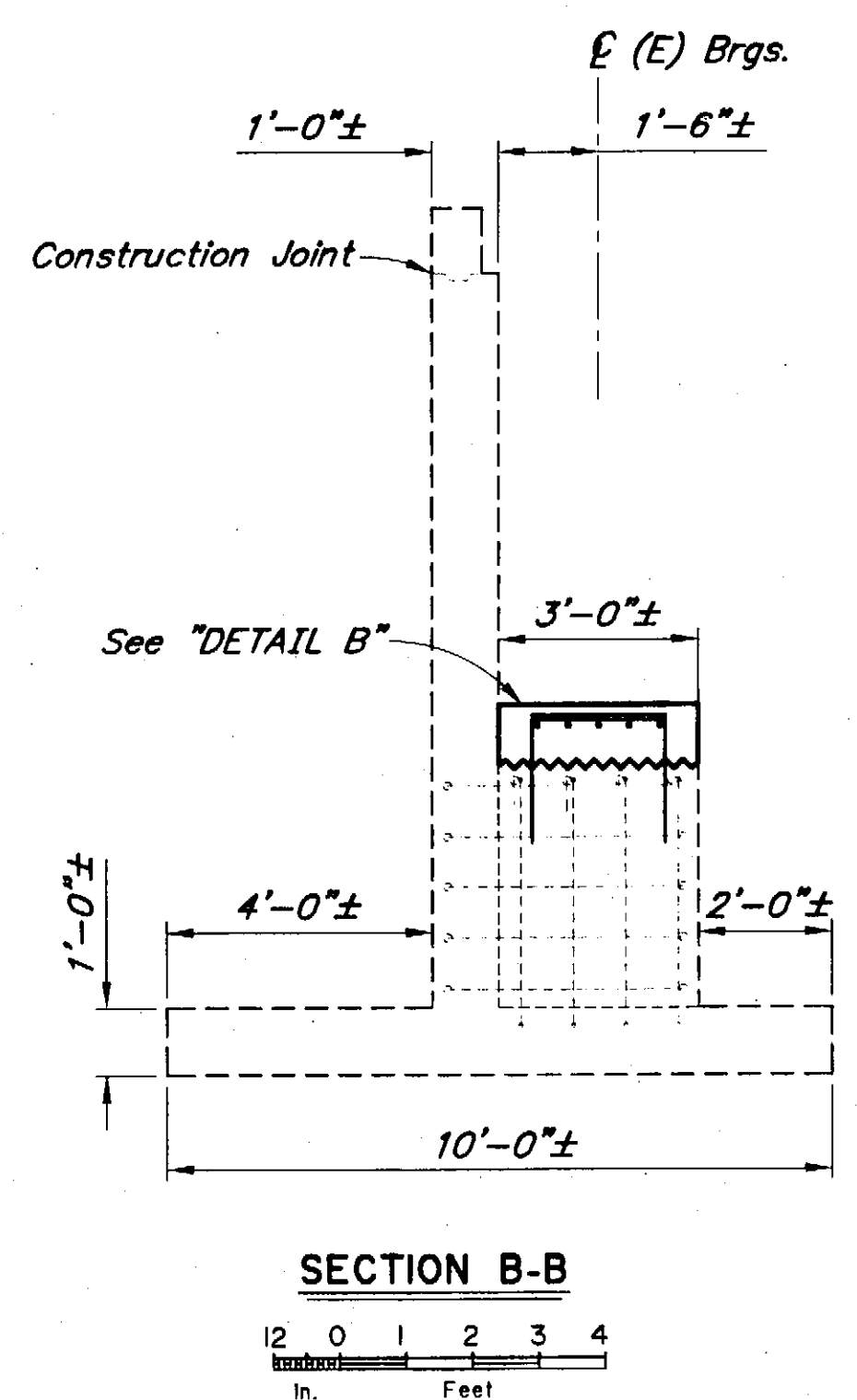
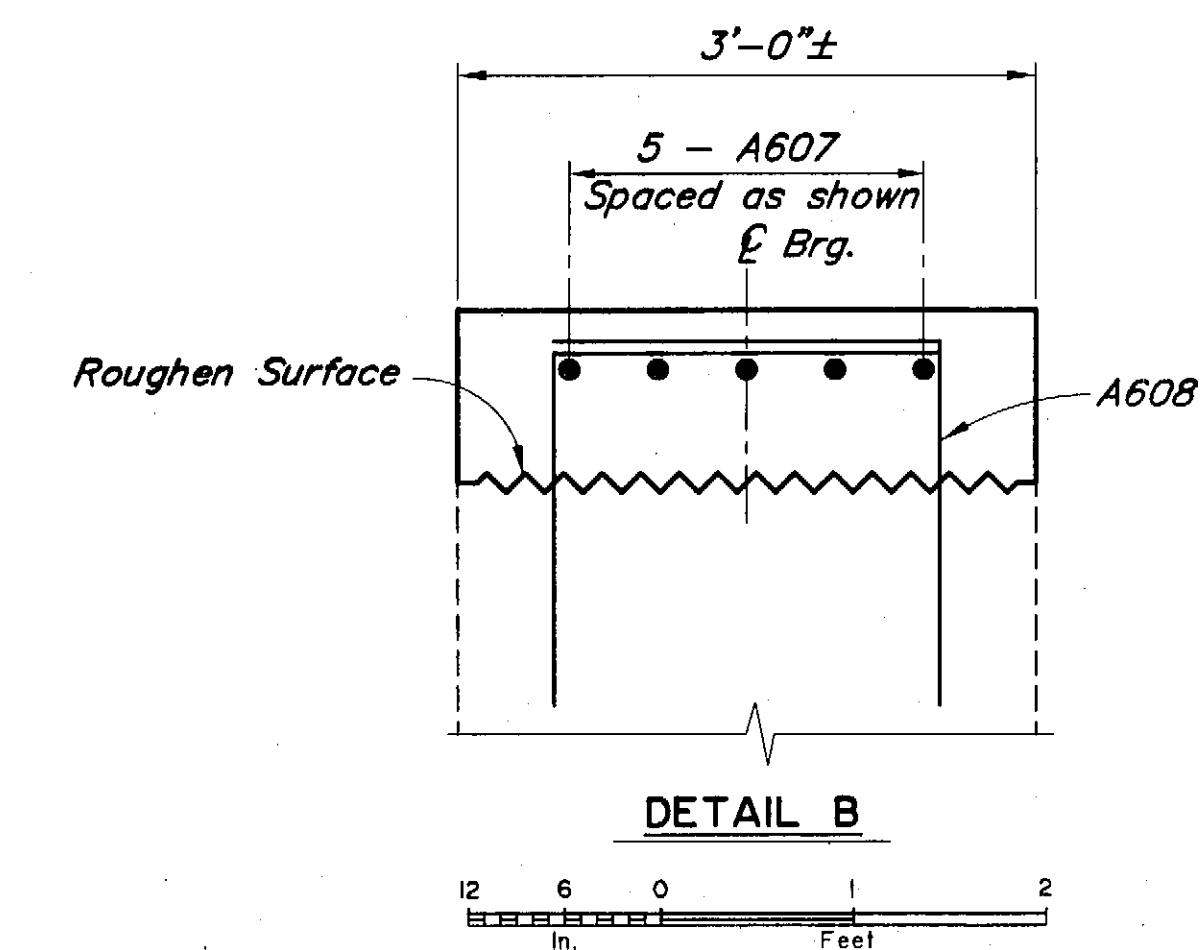
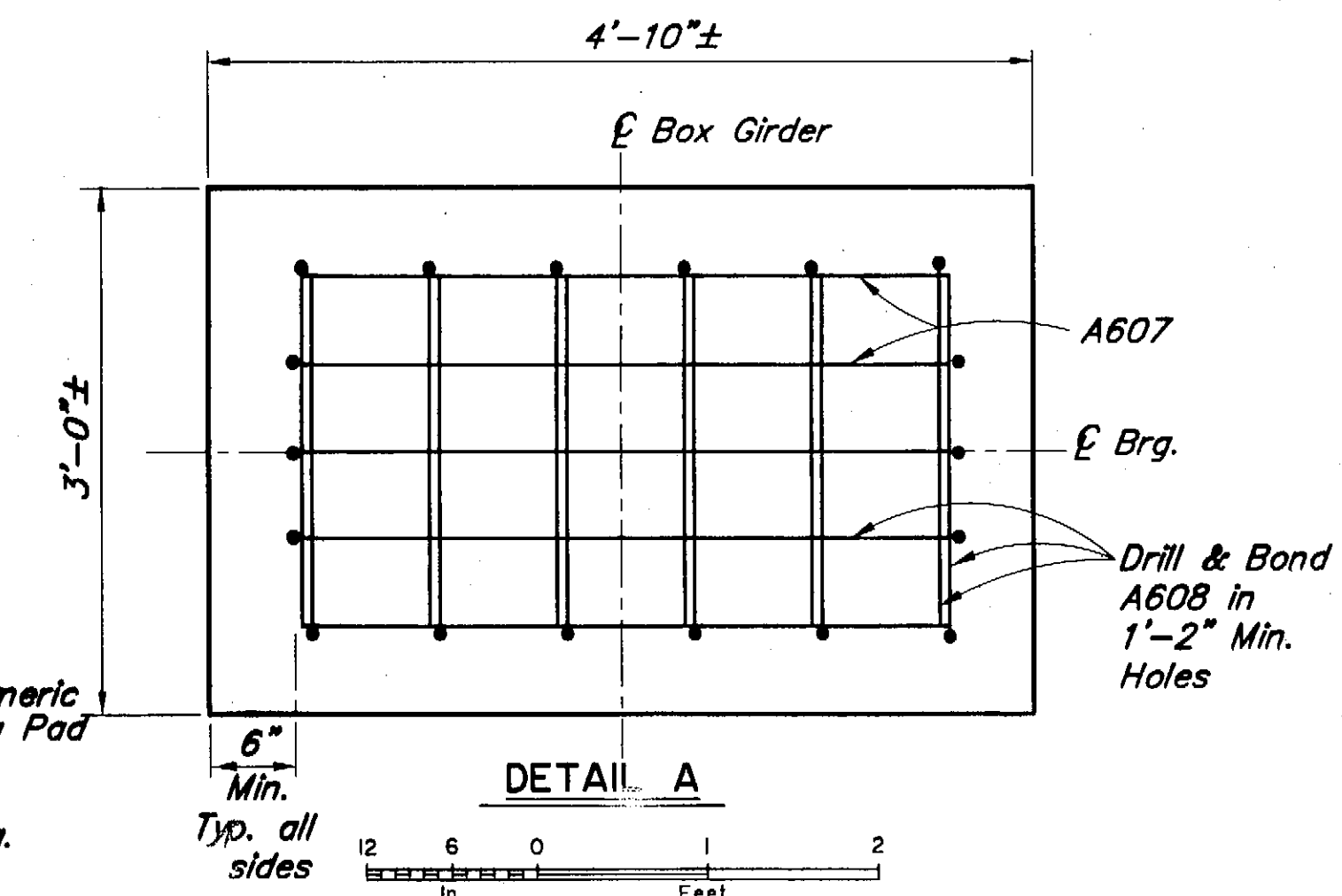
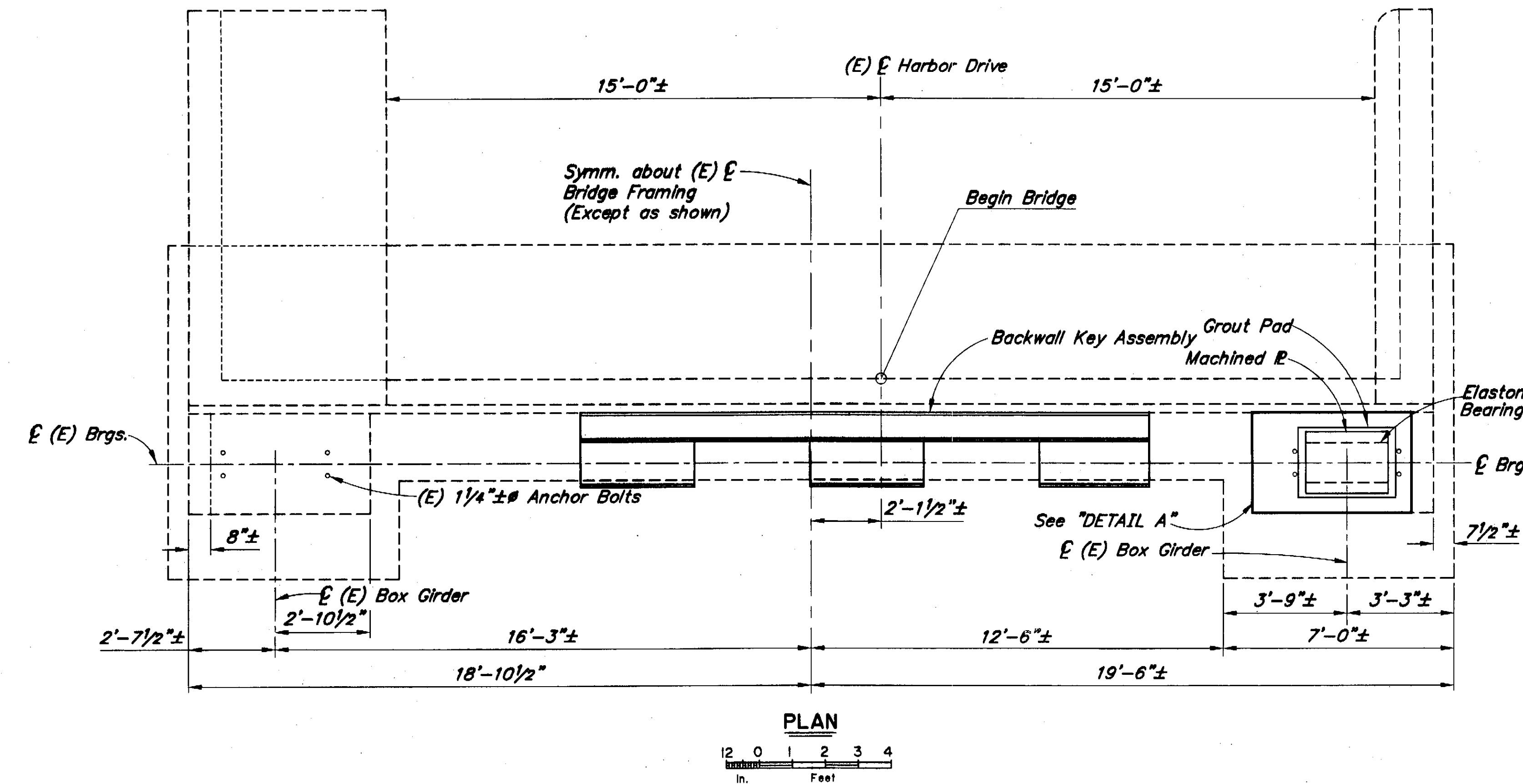
THIS CONTRACT

TYPICAL SECTION AT PIERS 5 & 6

DESIGNED BY: Rob Miller/Steve Lee	CHECKED: Larry Owen
DRAWN BY: Sam Sallie	CHECKED: Rob Miller/Steve Lee
QUANTITIES BY: George Imbisan	CHECKED: Rob Miller

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BH-000S(427)/75577	2003	L3	29

REINFORCING STEEL-ONE ABUTMENT				
MARK	SIZE	NO.	LENGTH	TYPE
A607	6	10	4'-6"	
A608	6	36	3'-9"	Bent
BENDING DIAGRAM				



NOTES:
 (E) = Existing
 --- = Existing
 — = Denotes this contract

Elevations, Bearings and Dimensions are based on "AS-BUILT" plans. Verify all controlling field dimensions before ordering or fabricating any material.

SEISMIC RETROFIT

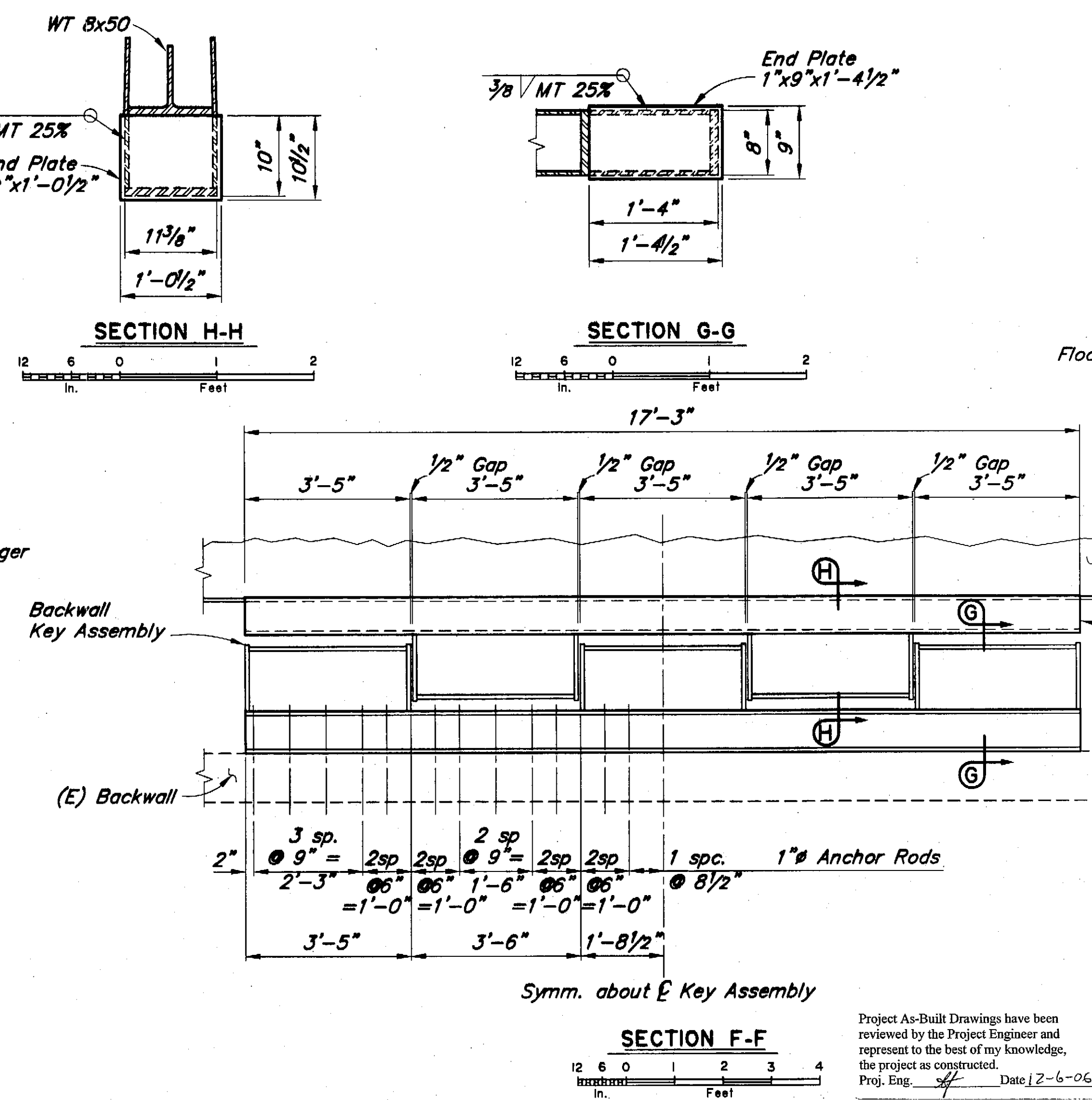
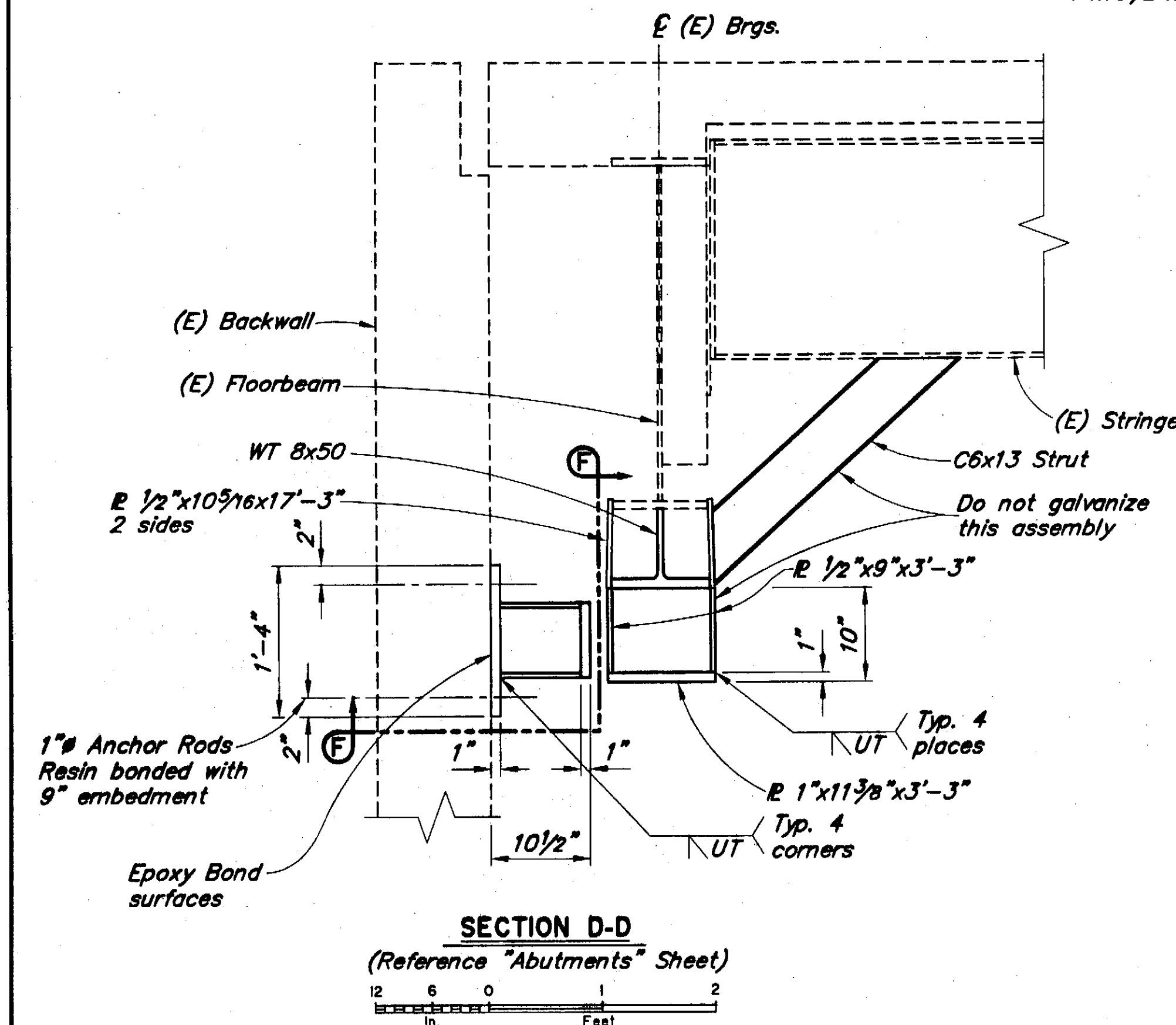
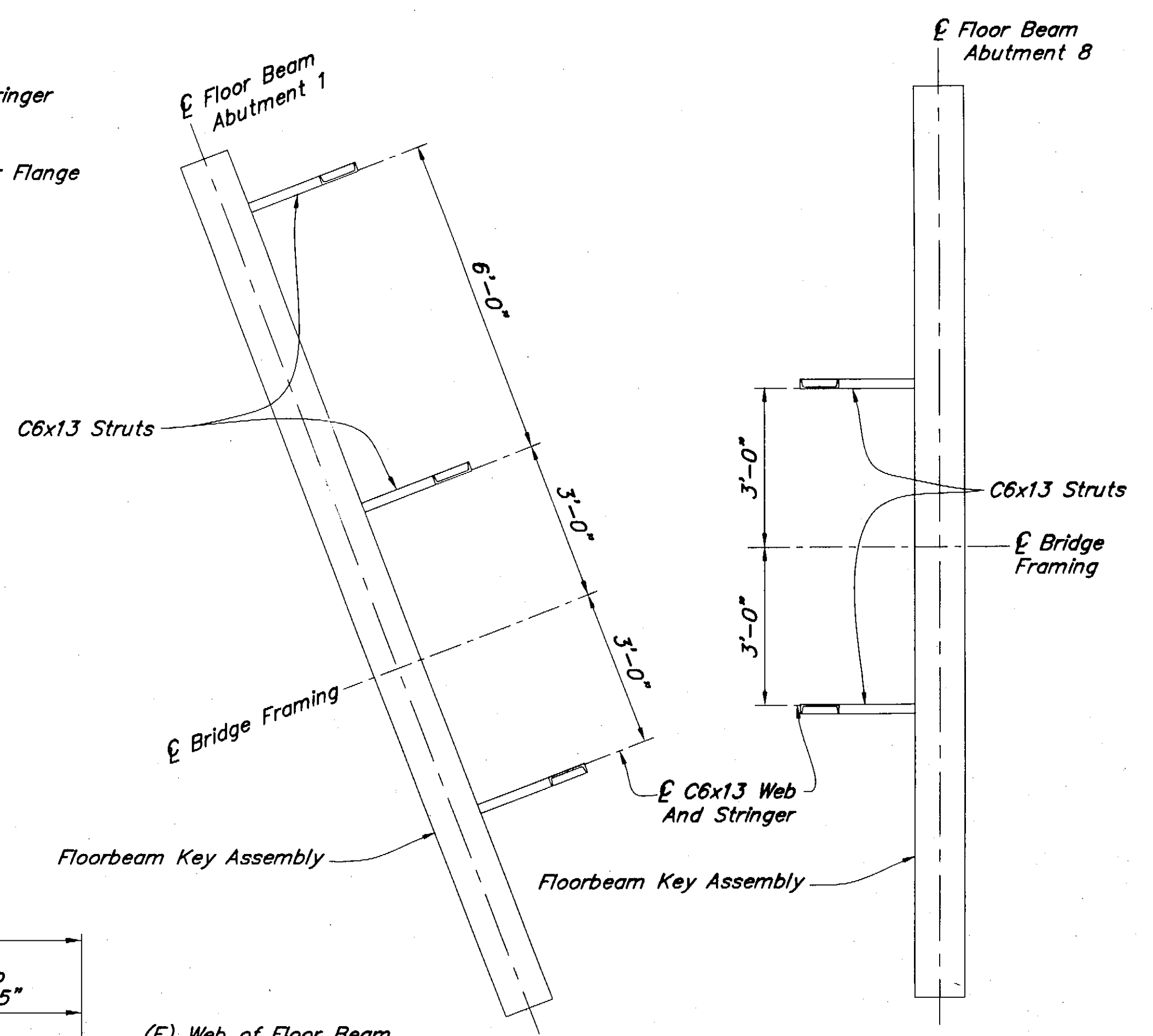
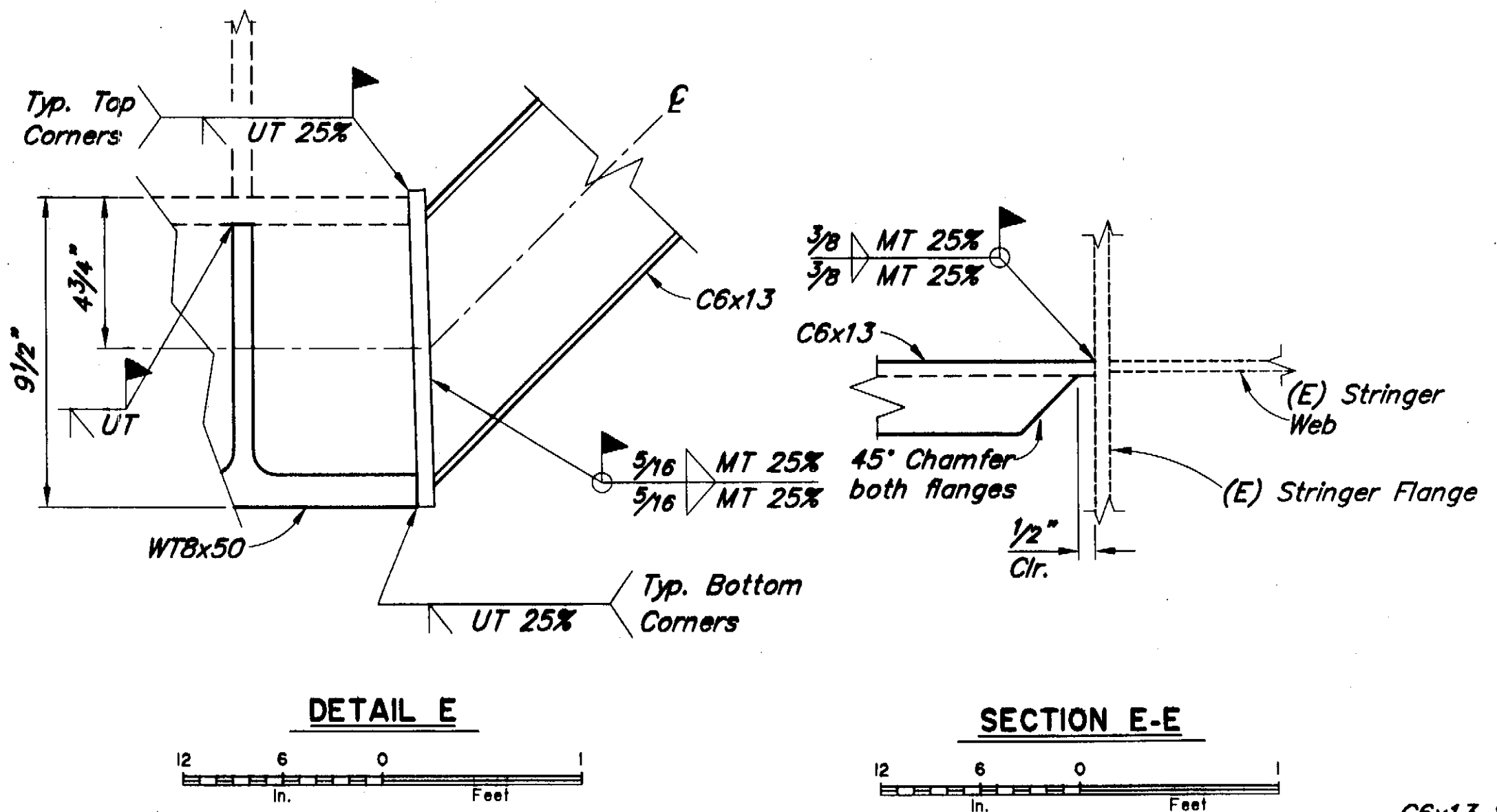
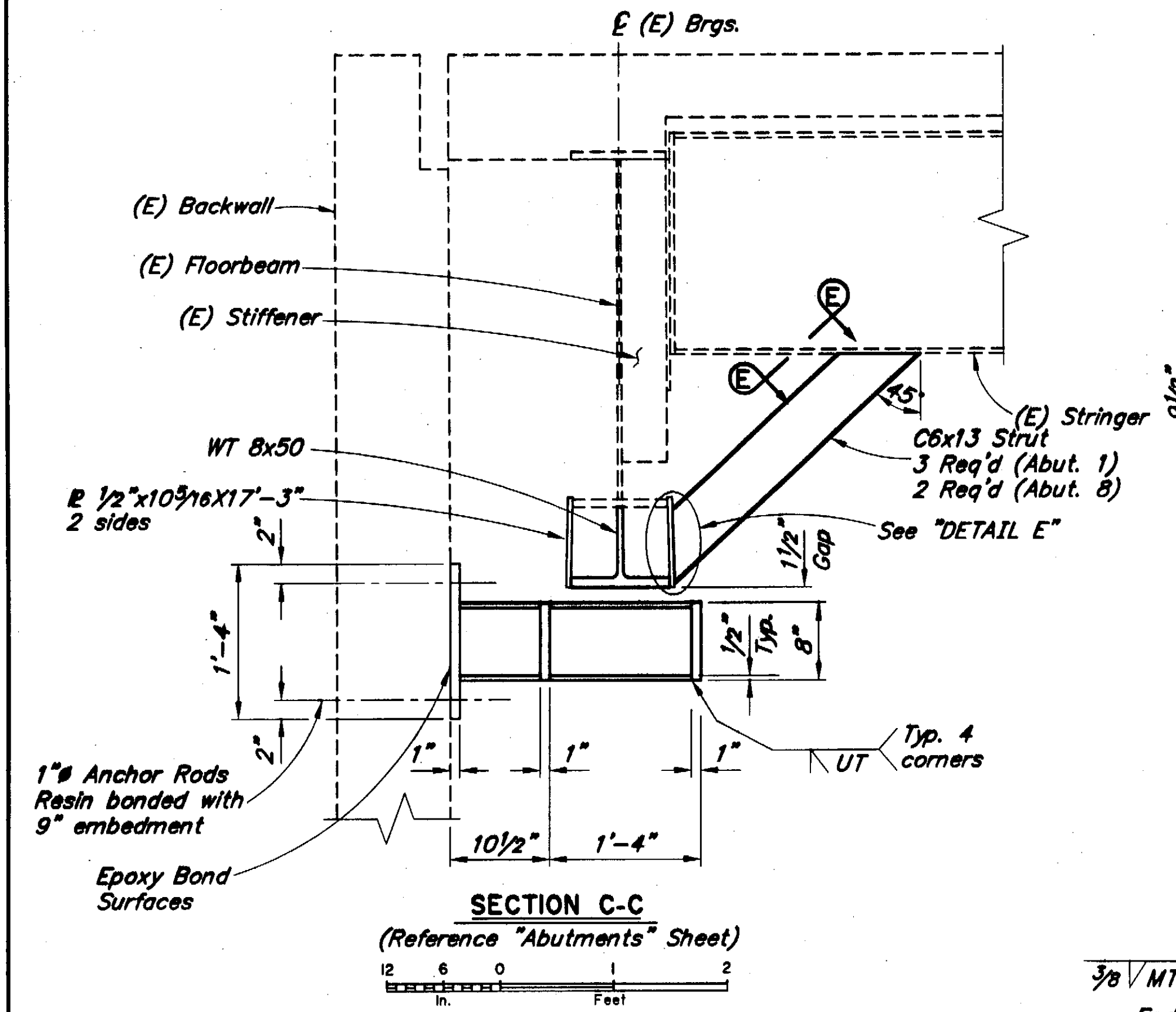
DESIGNED BY: <i>Rob Miller</i>	CHECKED: <i>Larry Owen</i>
DRAWN BY: <i>Sam Saffie</i>	CHECKED: <i>Rob Miller</i>
QUANTITIES BY: <i>George Imbse</i>	CHECKED: <i>Rob Miller</i>

STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 AND PUBLIC FACILITIES
 BRIDGE SECTION



SITKA HARBOR BRIDGE
 HARBOR DRIVE
 ABUTMENTS

BRIDGE NO. 245
 DWG. NO. 3

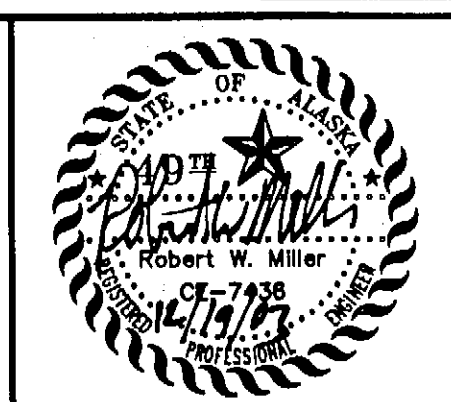


NOTES:
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 --- = Existing
 — = Denotes this contract
 Elevations, Bearings and Dimensions are based on "AS-BUILT" plans. Verify all controlling field dimensions before ordering or fabricating any material.

SEISMIC RETROFIT

DESIGNED BY: Rob Miller	CHECKED: George Imbsen
DRAWN BY: Sam Soffe	CHECKED: Rob Miller
QUANTITIES BY: George Imbsen	CHECKED: Rob Miller

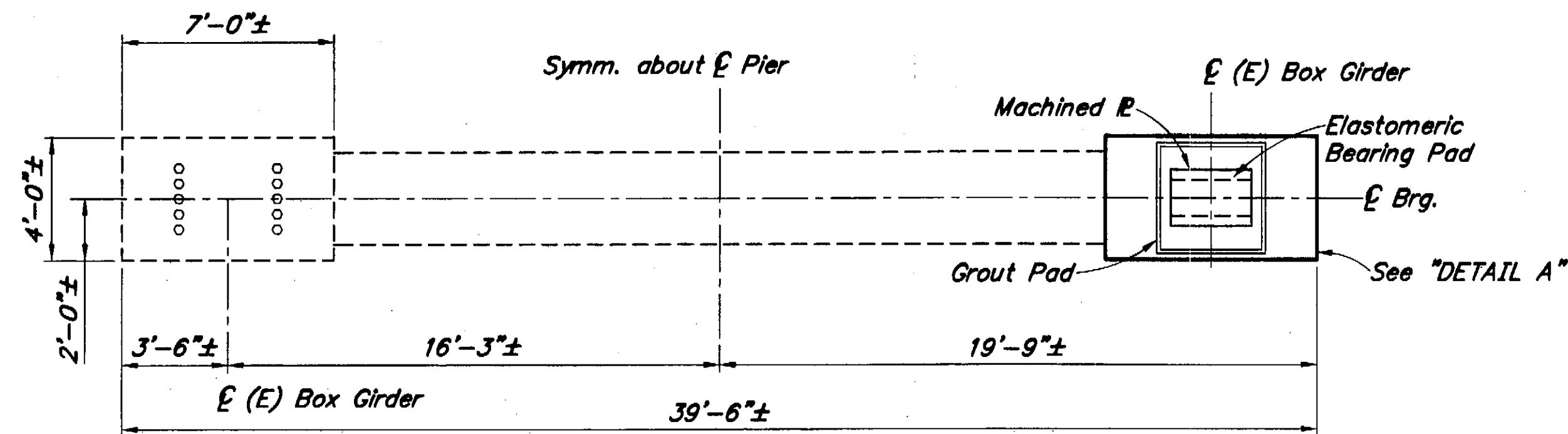
STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 AND PUBLIC FACILITIES
 BRIDGE SECTION



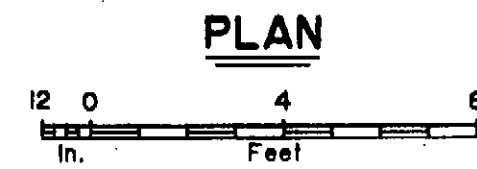
SITKA HARBOR BRIDGE
 HARBOR DRIVE
 ABUTMENT DETAILS

BRIDGE NO. 245
 DWG. NO. 4

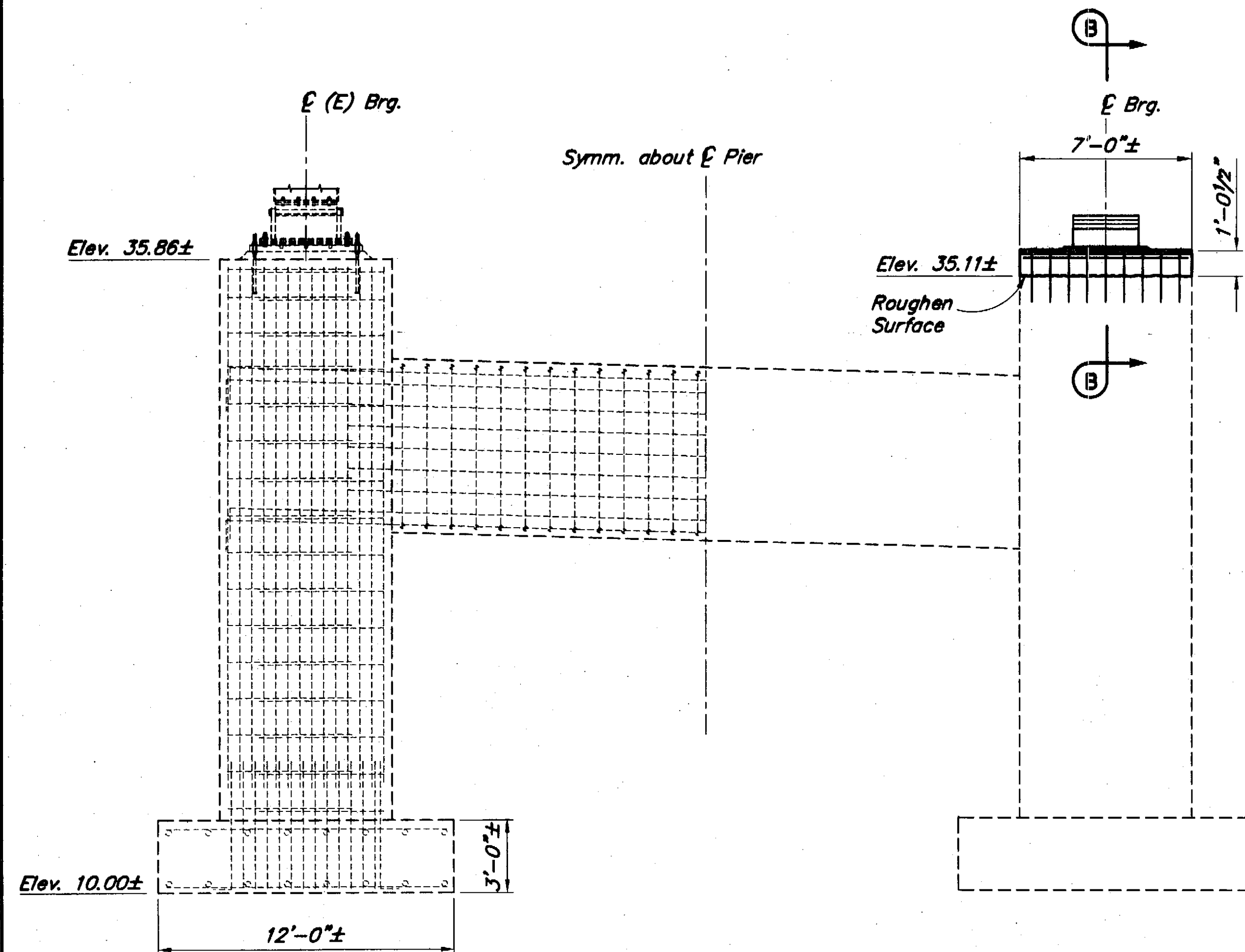
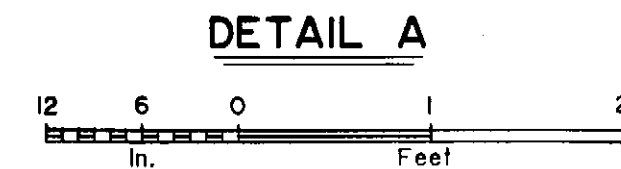
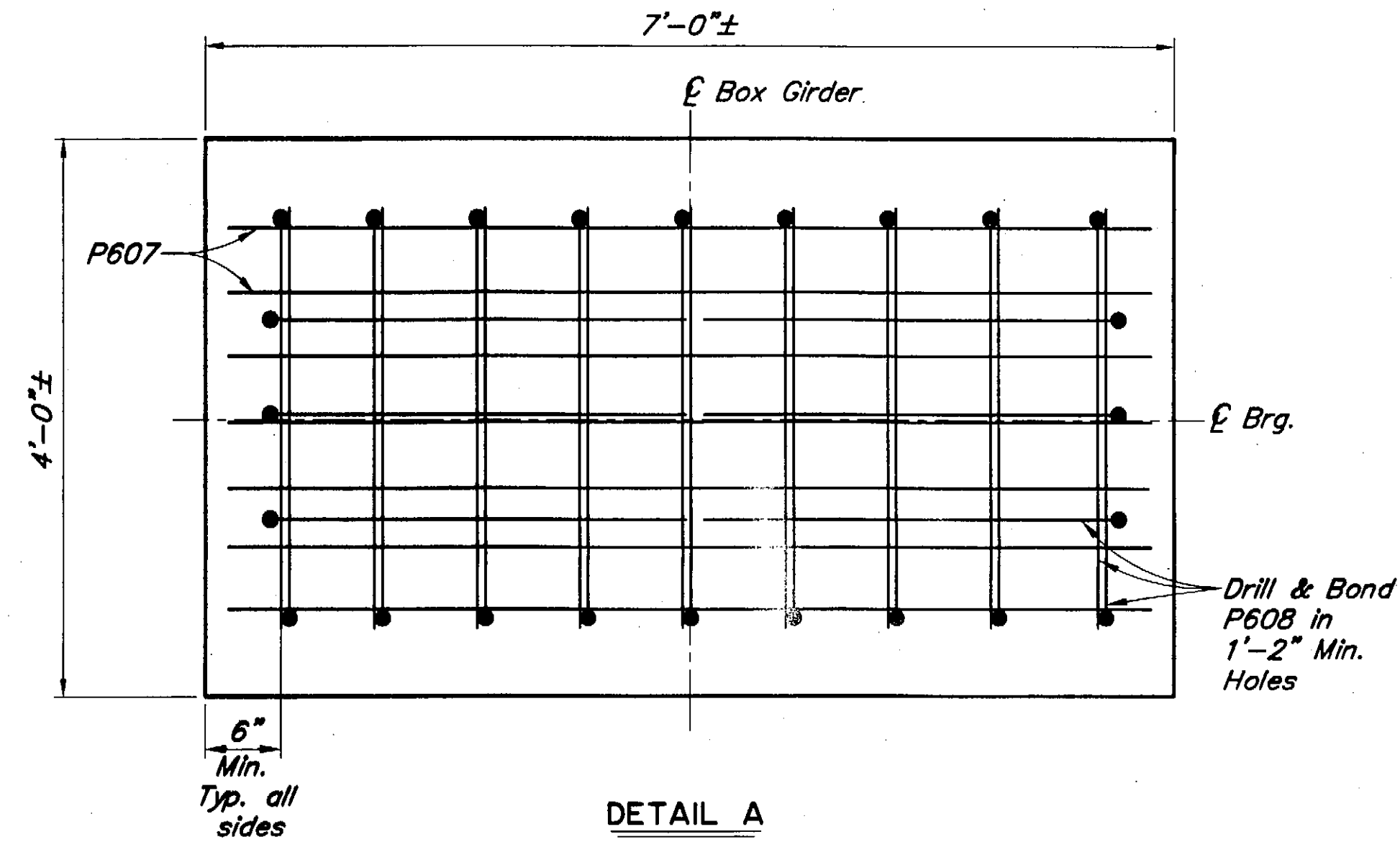
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BH-000S(427)/75577	2003	L5	29
REINFORCING STEEL - PIER 2				
MARK	SIZE	NO.	LENGTH	TYPE
P607	6	14	6'-8"	
P608	6	48	5'-0"	Bent
BENDING DIAGRAM				



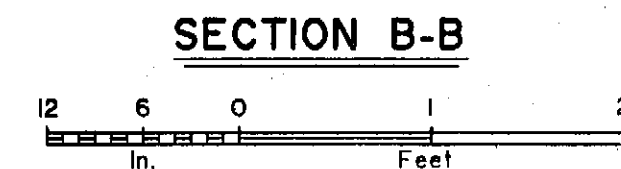
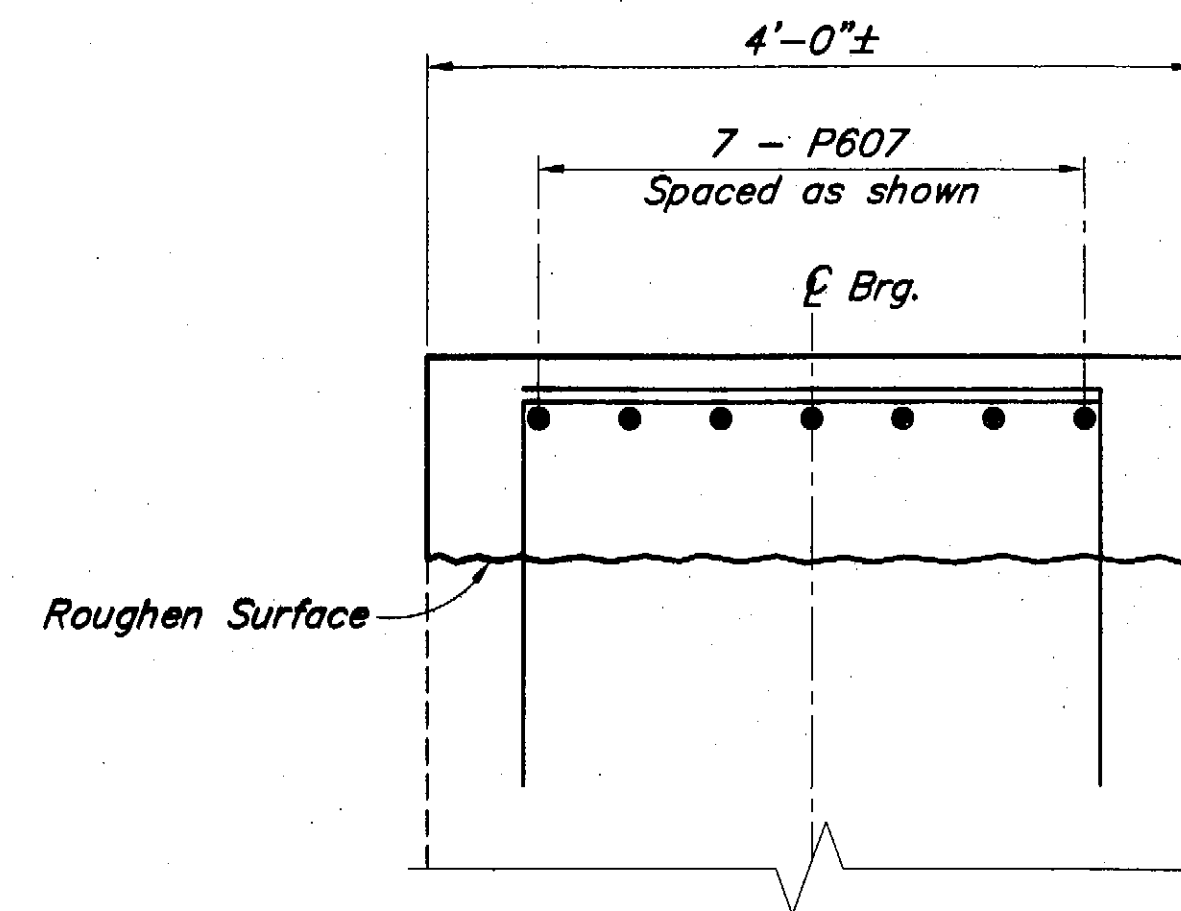
EXISTING



THIS CONTRACT



ELEVATION



NOTES:

(E) = Existing

--- = Existing

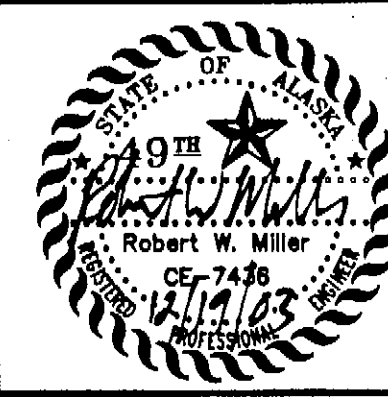
— = Denotes this contract

Elevations, Bearings and Dimensions are based on "AS-BUILT" plans. Verify all controlling field dimensions before ordering or fabricating any material.

SEISMIC RETROFIT

DESIGNED BY:	Rob Miller	CHECKED:	Larry Owen
DRAWN BY:	Sam Saffie	CHECKED:	Rob Miller
QUANTITIES BY:	George Imbsen	CHECKED:	Rob Miller

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
BRIDGE SECTION

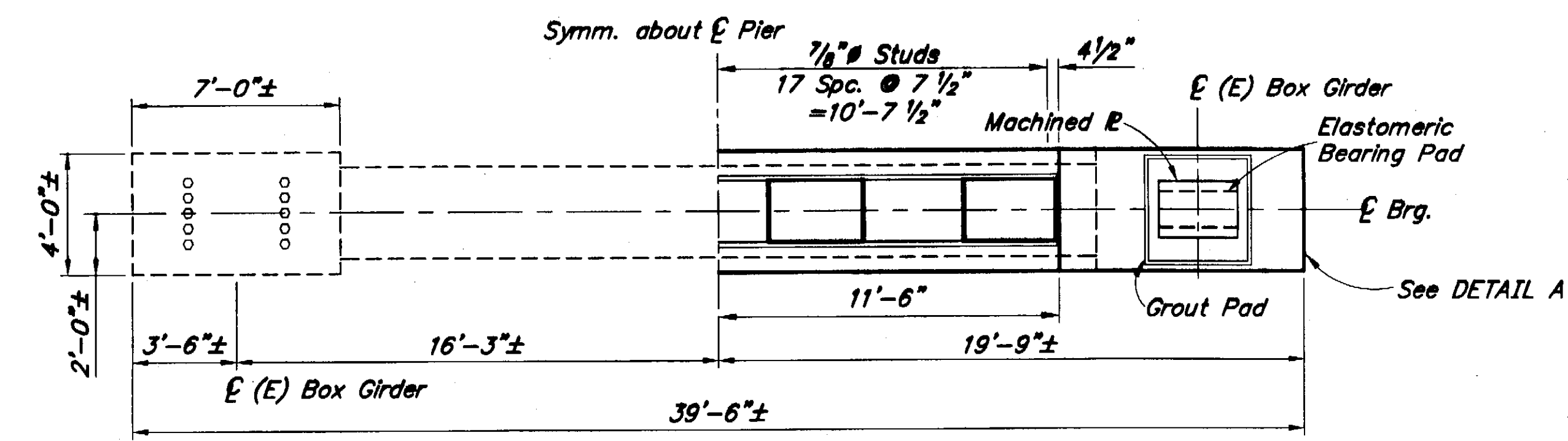


SITKA HARBOR BRIDGE
HARBOR DRIVE
PIER 2



BRIDGE NO. 245
DWG. NO. 5

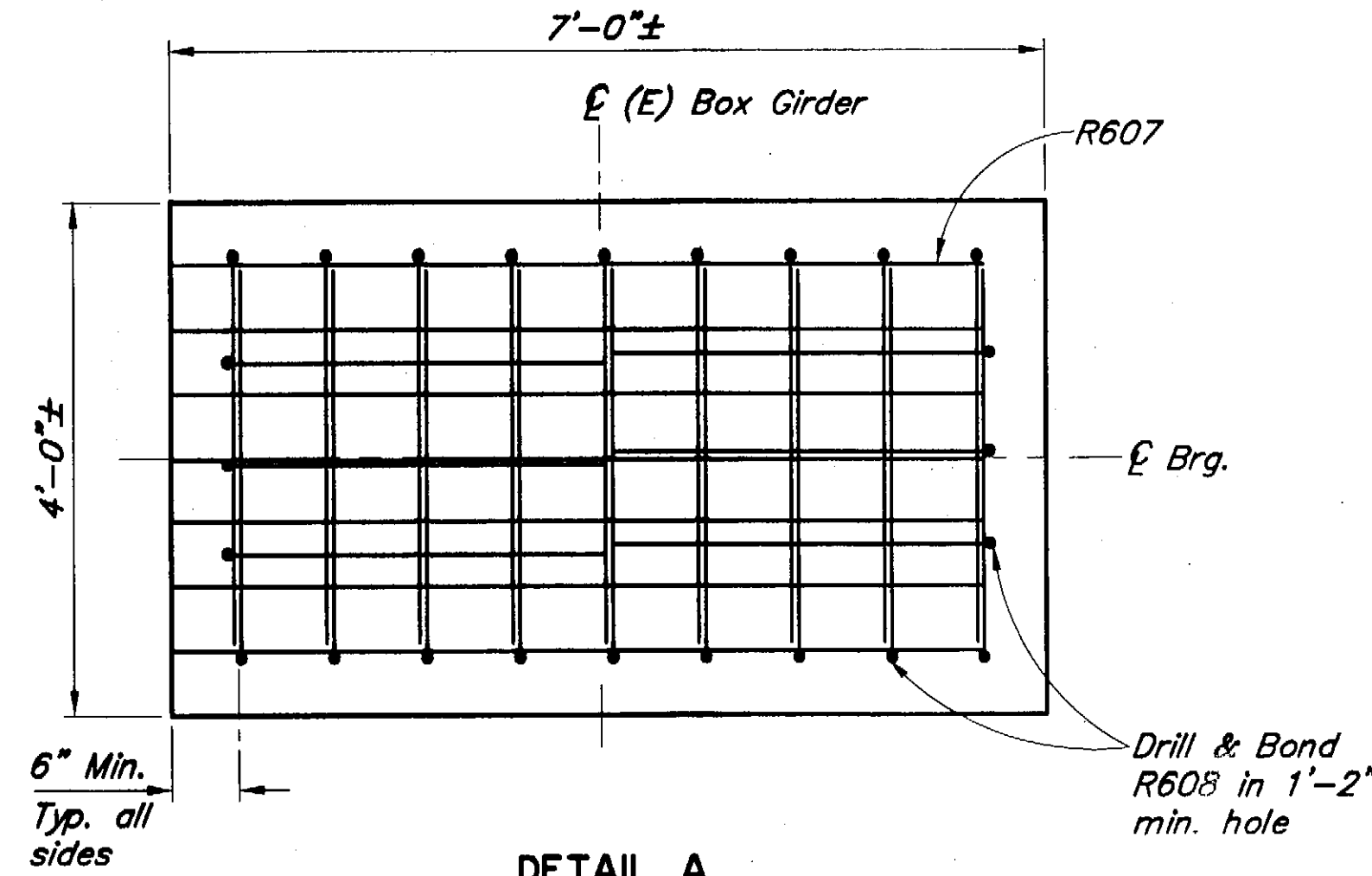
REINFORCING STEEL - PIER 3					
MARK	SIZE	NO.	LENGTH	TYPE	BENDING DIAGRAM
R401	4	294	4'-6"	Bent	
R601	6	28	4'-0"		
R602	6	28	6'-0"		
R603	6	28	25'-4"		
R604	6	104	18'-6"	Bent	
R605	6	46	22'-10"	Bent	
R606	6	11	22'-8"		
R607	6	7	39'-2"		
R608	6	48	5'-0"	Bent	
R609	6	6	17'-4"	Bent	



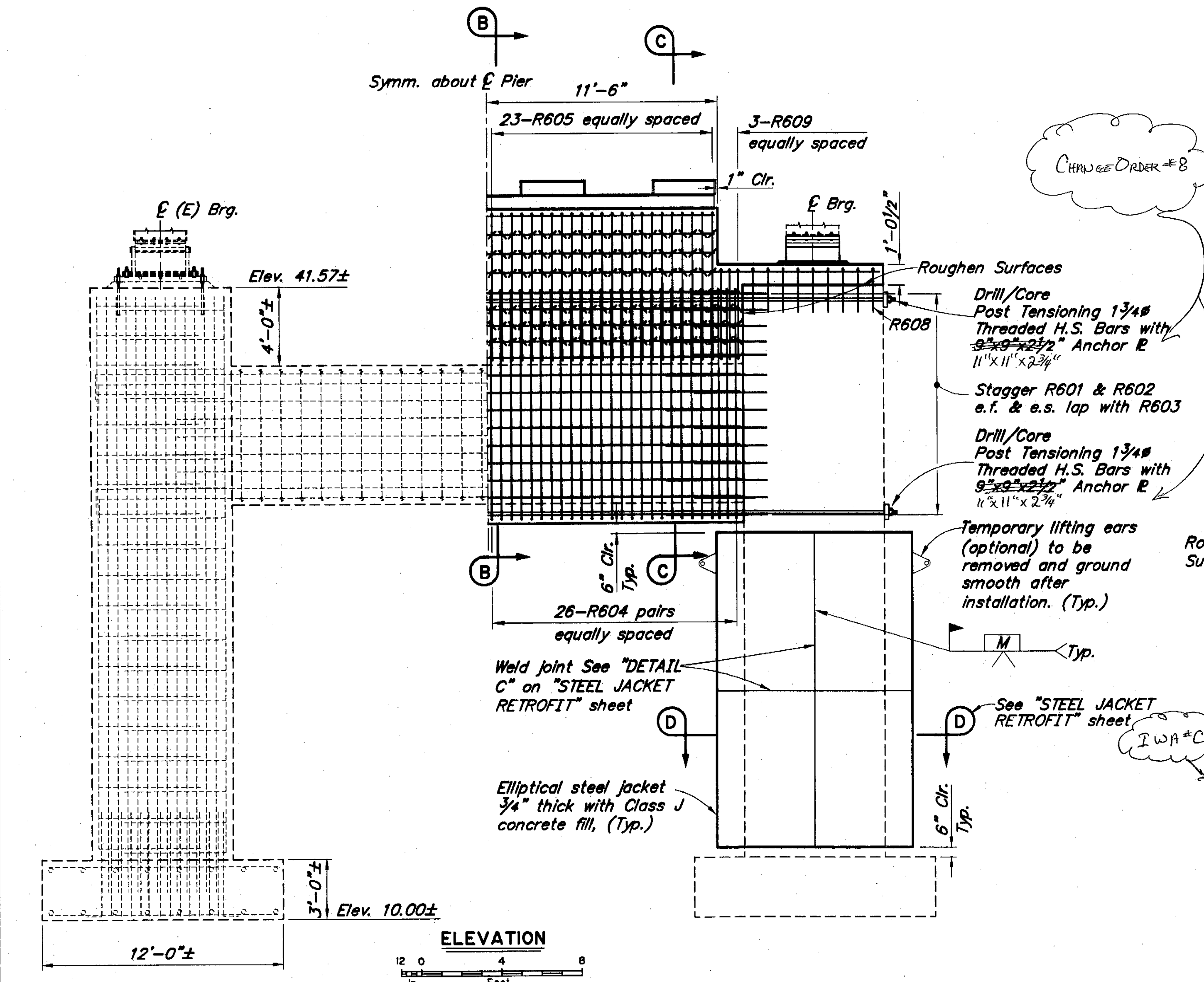
EXISTING

PLAN

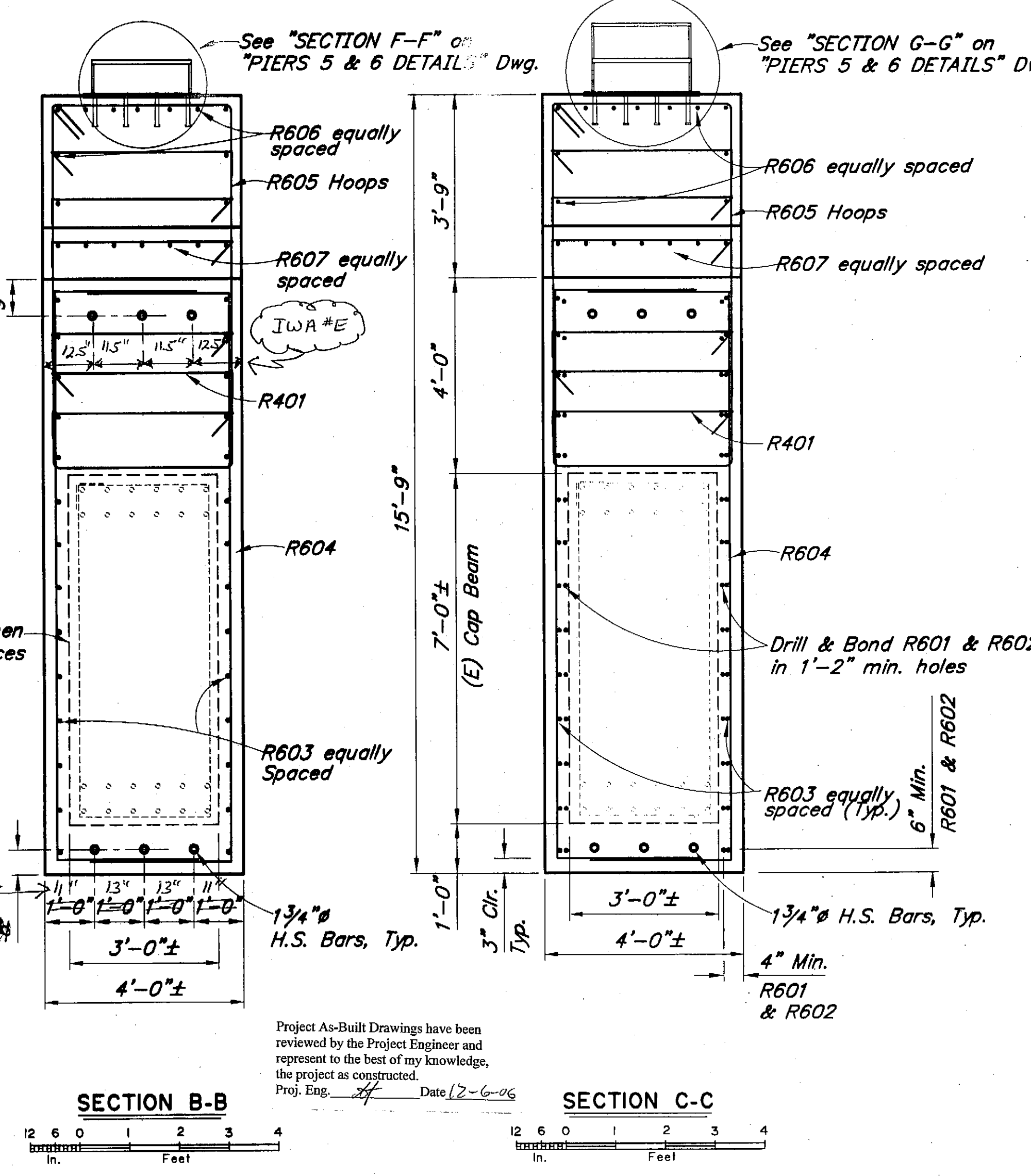
THIS CONTRACT



DETAIL A



ELEVATION



SECTION B-B

SECTION C-C

NOTES:

1 3/4" H.S. Rods shall be galvanized ASTM A722. Stress 1 3/4" H.S. Rods to 280k after concrete has obtained 75% f'c. Rods shall be bonded throughout entire length.

(E) = Existing

--- = Existing

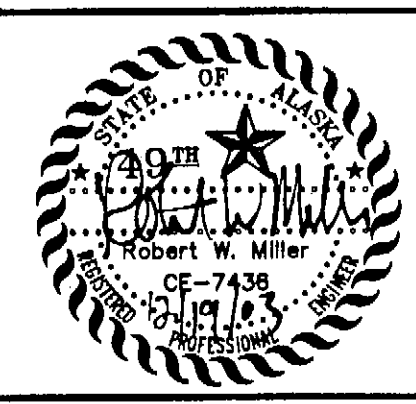
— = Denotes this contract

Elevations, Bearings and Dimensions are based on "AS-BUILT" plans. Verify all controlling field dimensions before ordering or fabricating any material.

SEISMIC RETROFIT

DESIGNED BY:	Rob Miller	CHECKED:	Larry Owen
DRAWN BY:	Sam Saffie	CHECKED:	Rob Miller
QUANTITIES BY:	George Imboden	CHECKED:	Rob Miller

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
BRIDGE SECTION

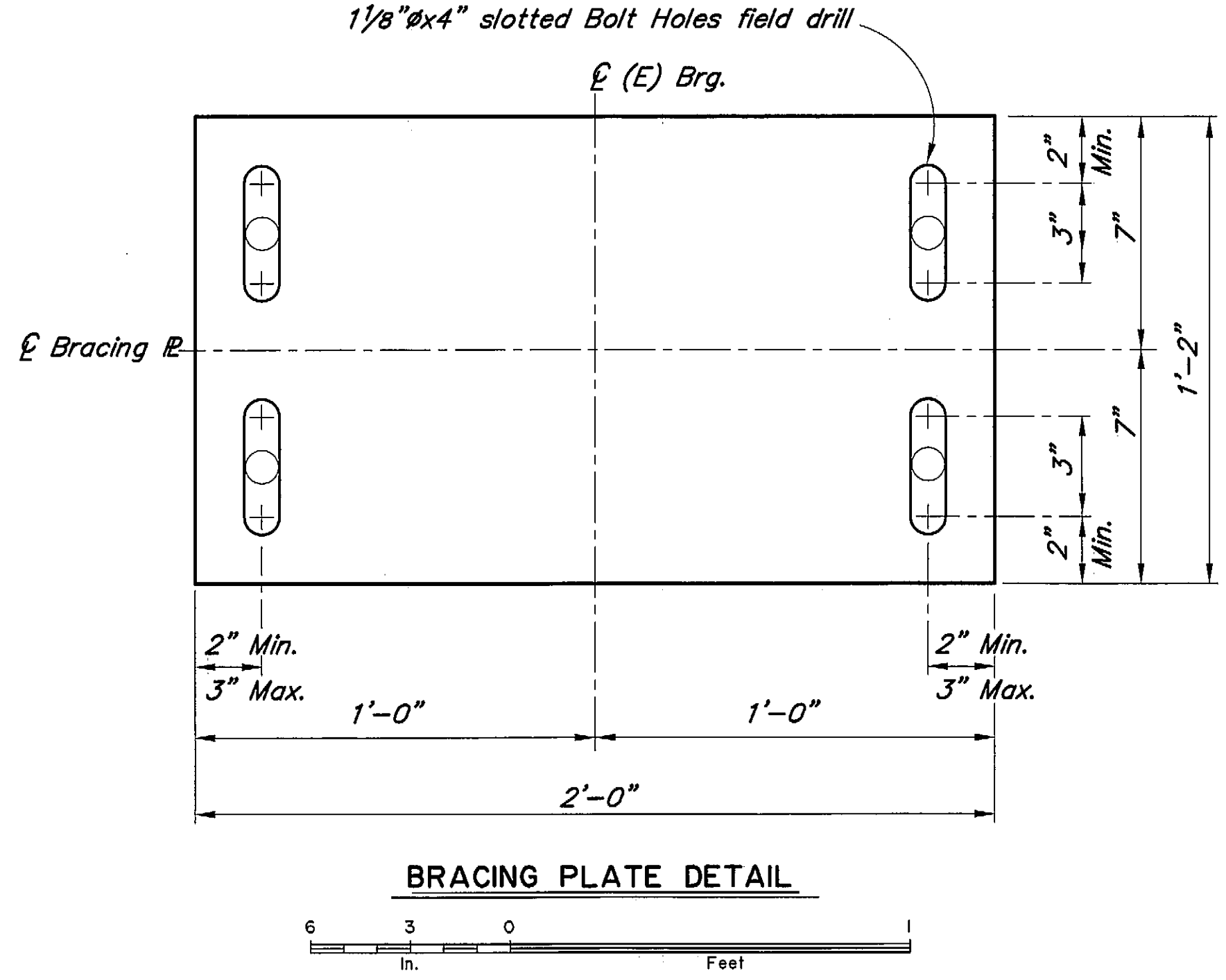
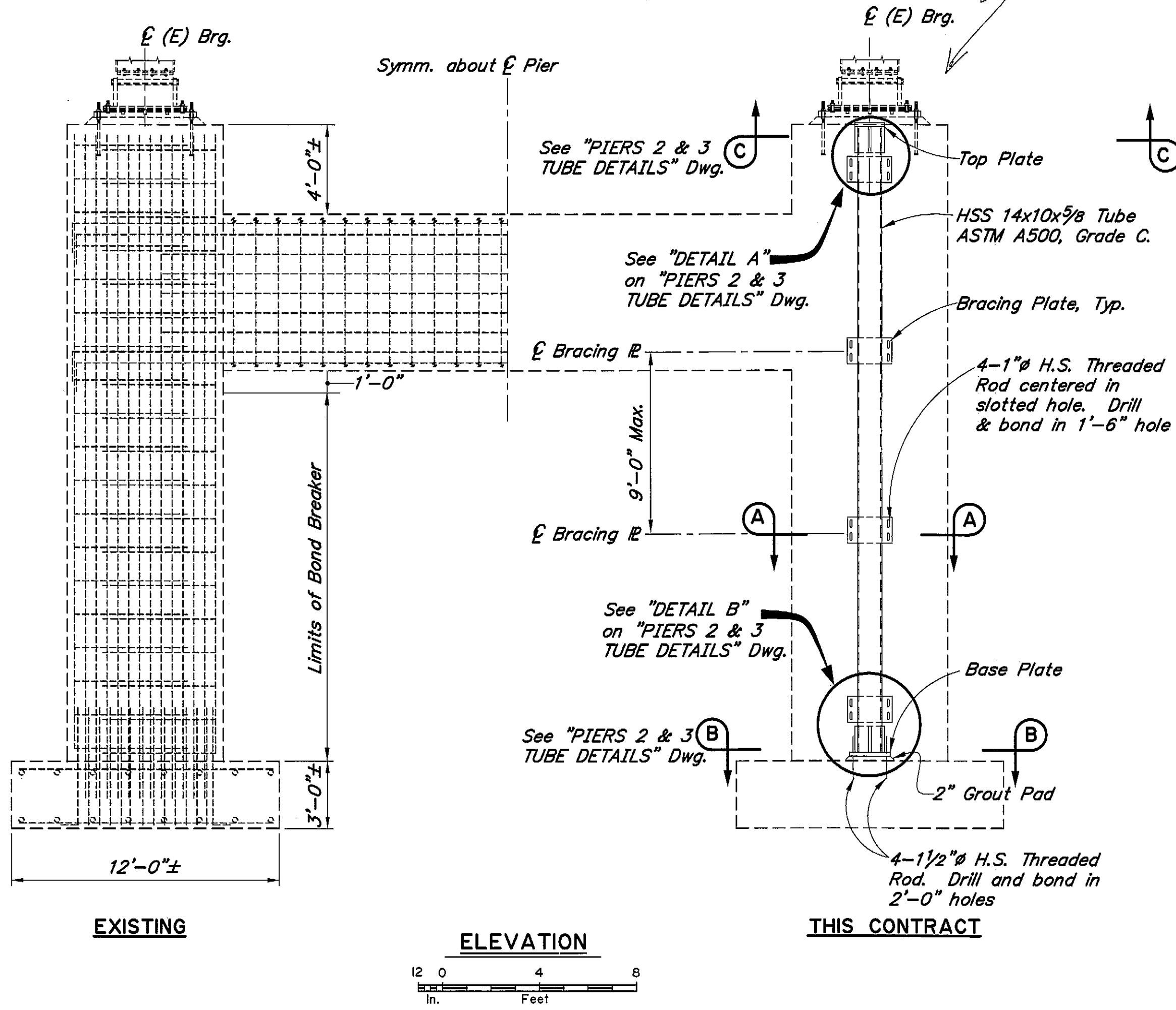
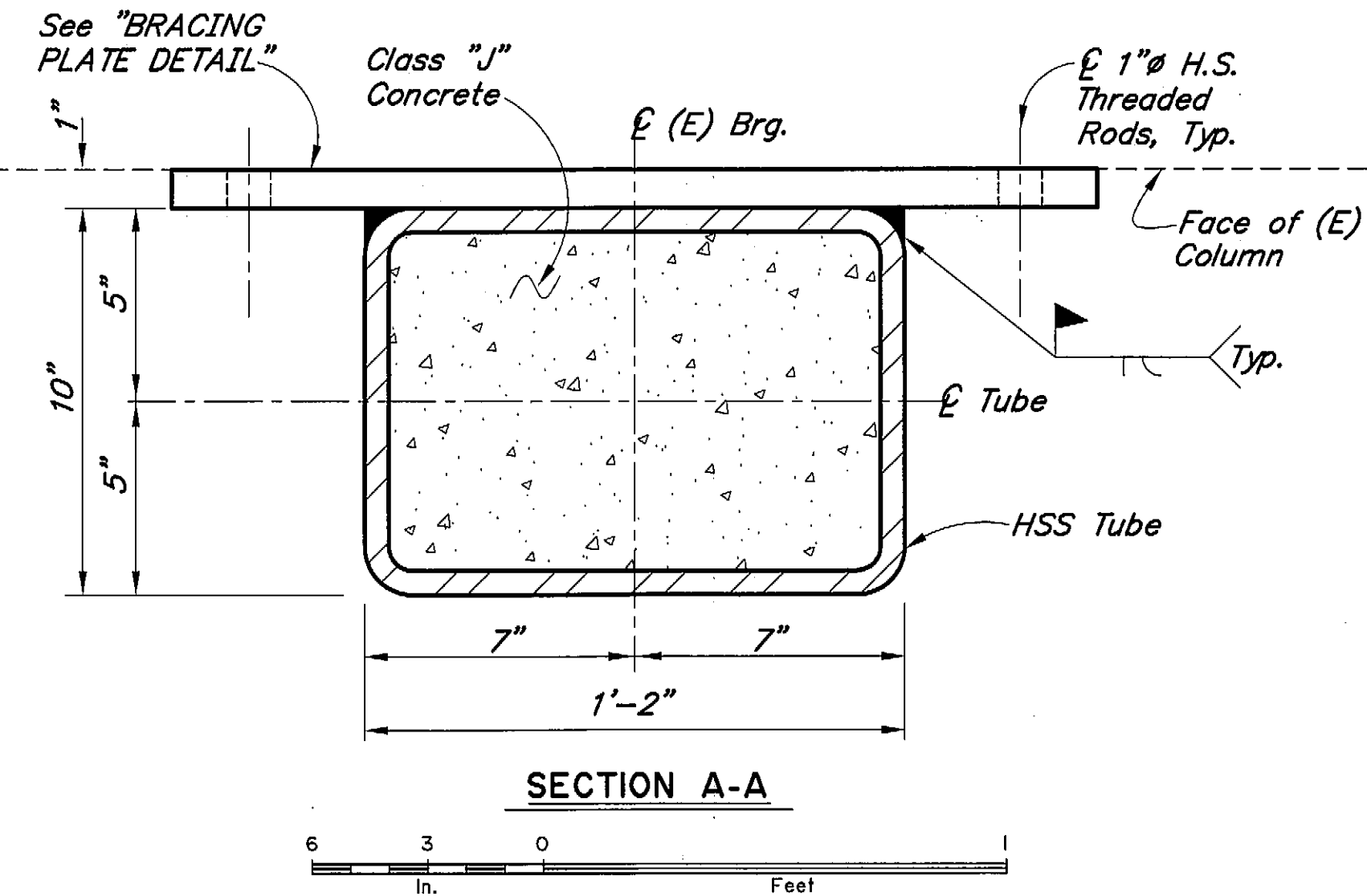
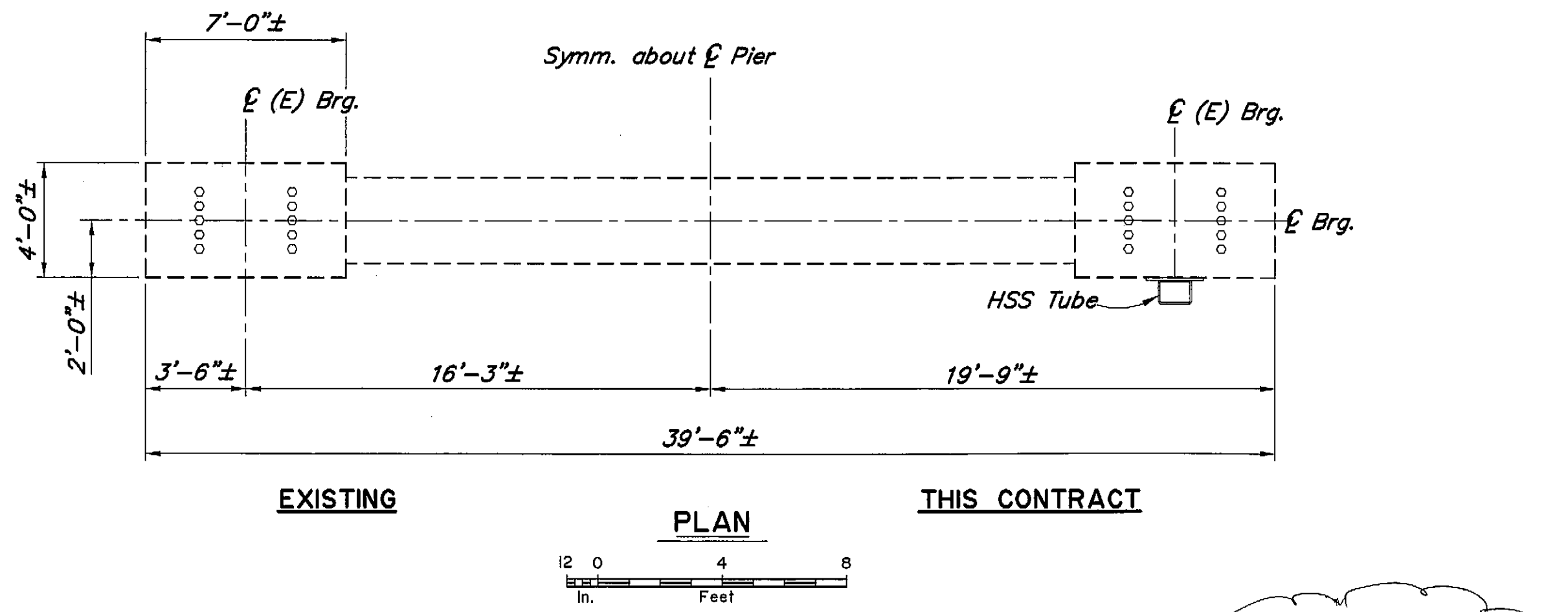


SITKA HARBOR BRIDGE
HARBOR DRIVE
PIER 3

BRIDGE NO. 245
DWG. NO. 6

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BH-000S(427)/75577	2004		

- NOTES:
- Seismic retrofit details not shown for clarity.
 - Before fabricating any material submit all mill certs. to the engineer for approval.
 - Install tube on channel side of column.
 - Provide 9000 psi. grout for grout pad.
 - Install Class "J" concrete in tube before jacking.
 - Use 6 mil polyethylene bond breaker on portions of tube encased in steel jacket retrofit.
 - Use a jack with a minimum safe working load of 680 kips.
 - Center jack on tube in both directions.
 - Block out seismic retrofit bearing seat adjustment up to 2" from face of (E) column to accommodate jacks larger than top plate, if required.
 - Do not allow jack to bear directly on top of (E) column at any time.

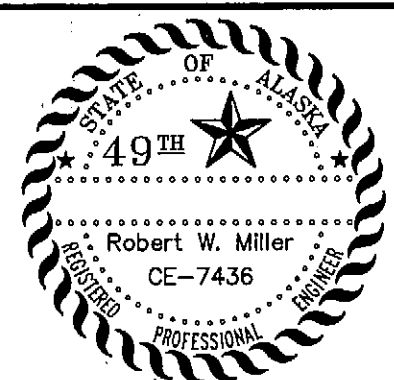


LEGEND:
(E) = Existing
--- = Existing
--- = Proposed

Elevations, bearings and dimensions are based on "AS-BUILT" plans. Verify all controlling field dimensions before ordering or fabricating any material.

DESIGNED BY:	Larry Owen	CHECKED:	Rob Miller
DRAWN BY:	C. Anderson	CHECKED:	Larry Owen
QUANTITIES BY:	Larry Owen	CHECKED:	Rob Miller

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
BRIDGE SECTION

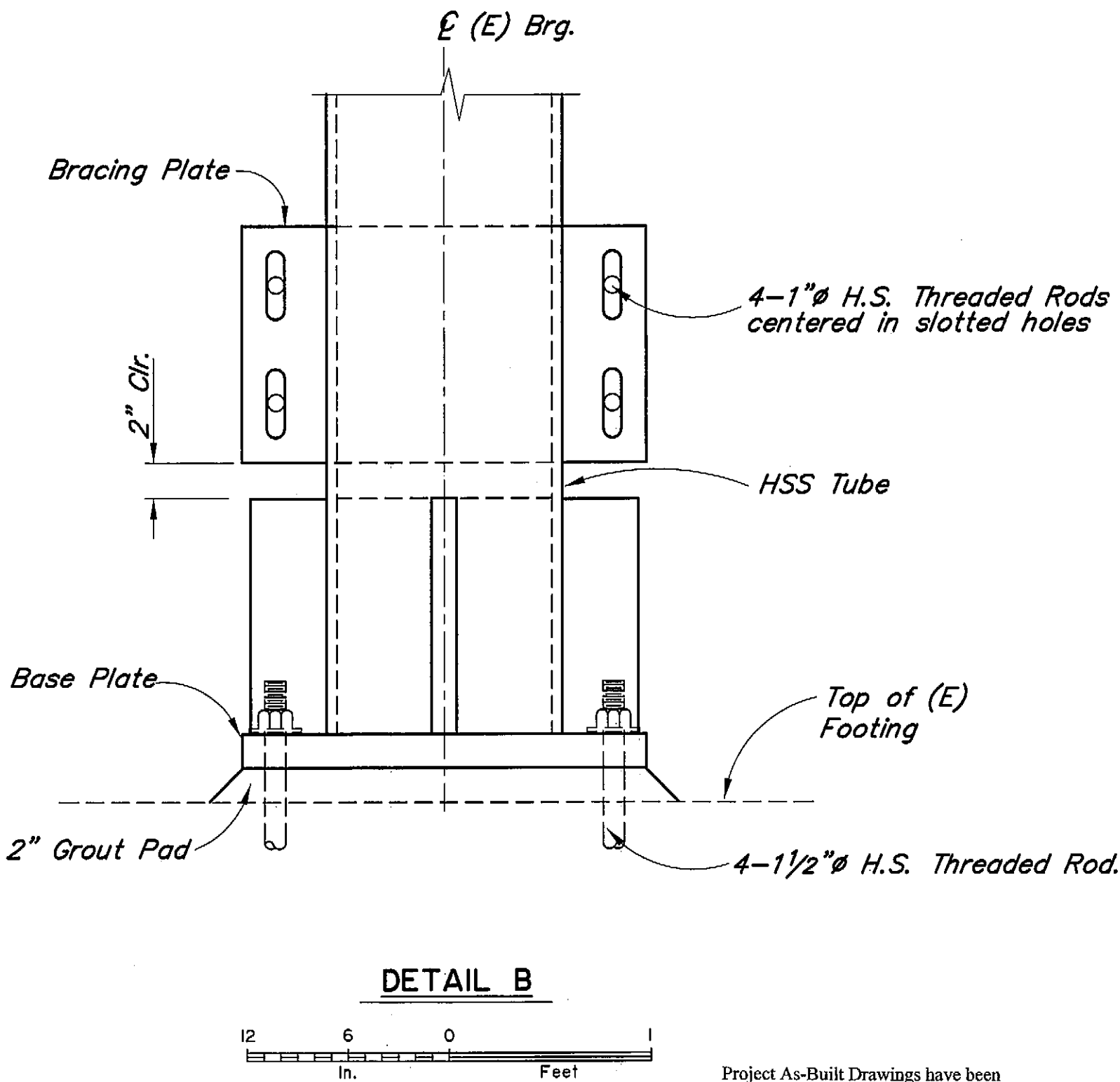
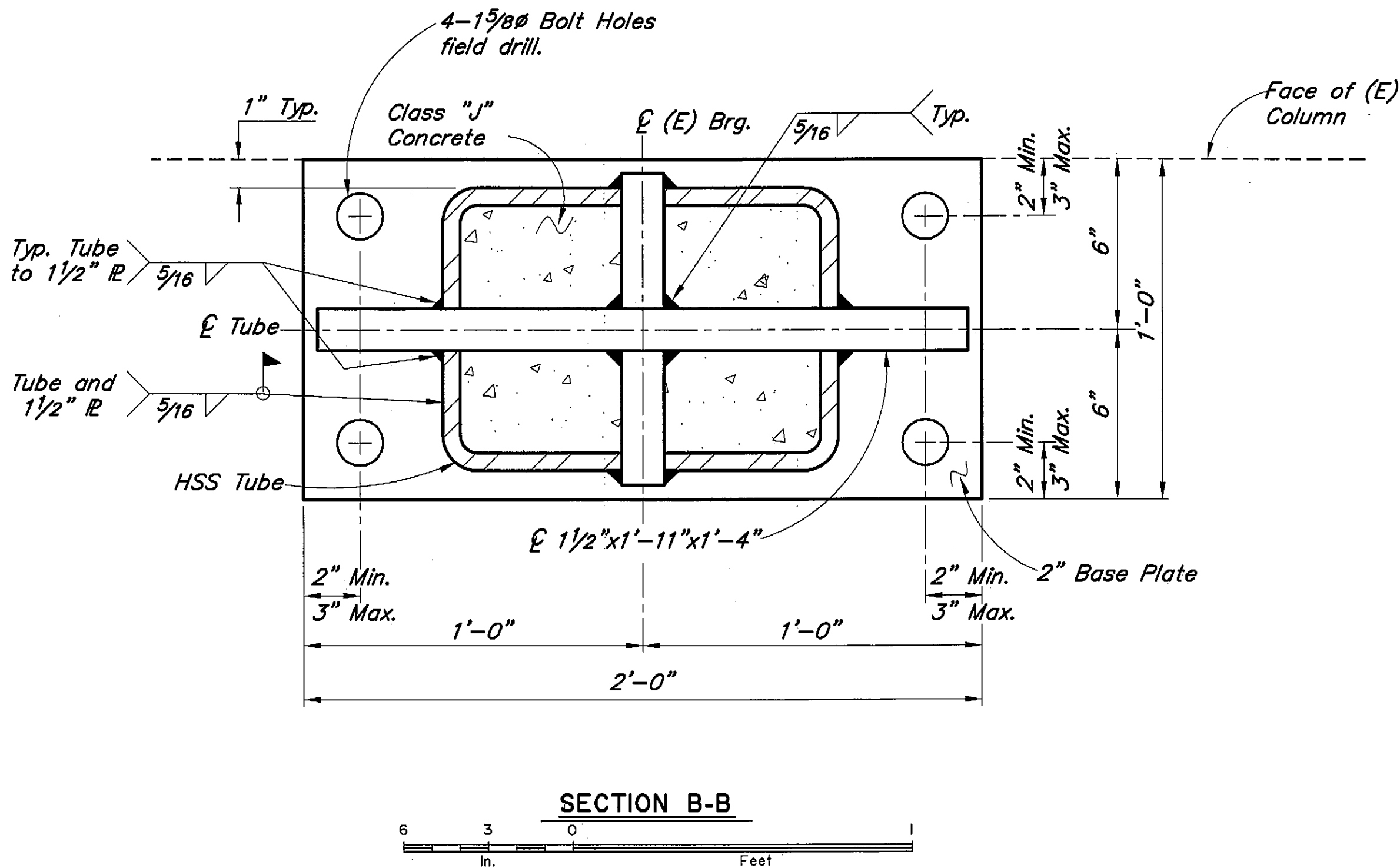
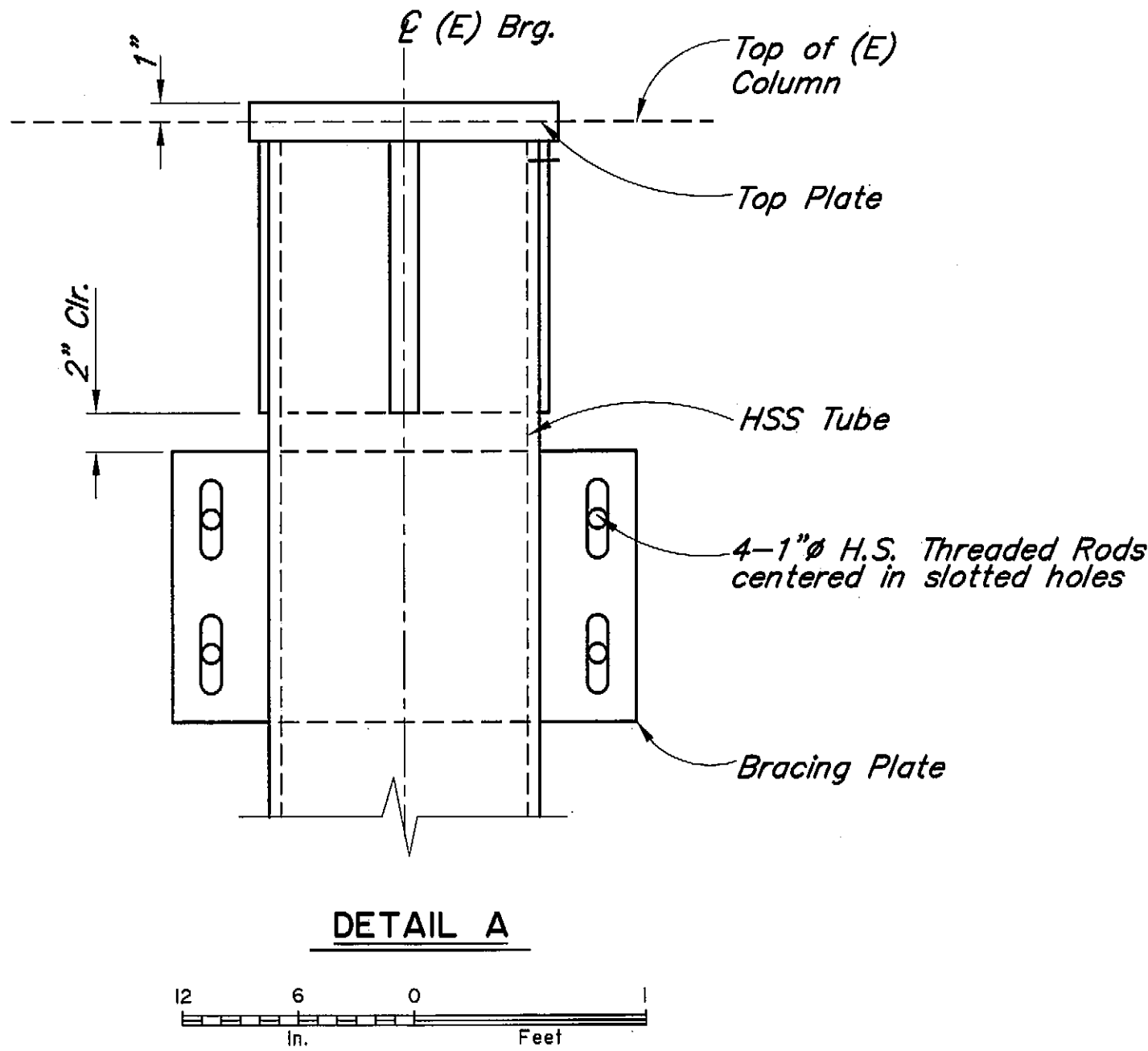
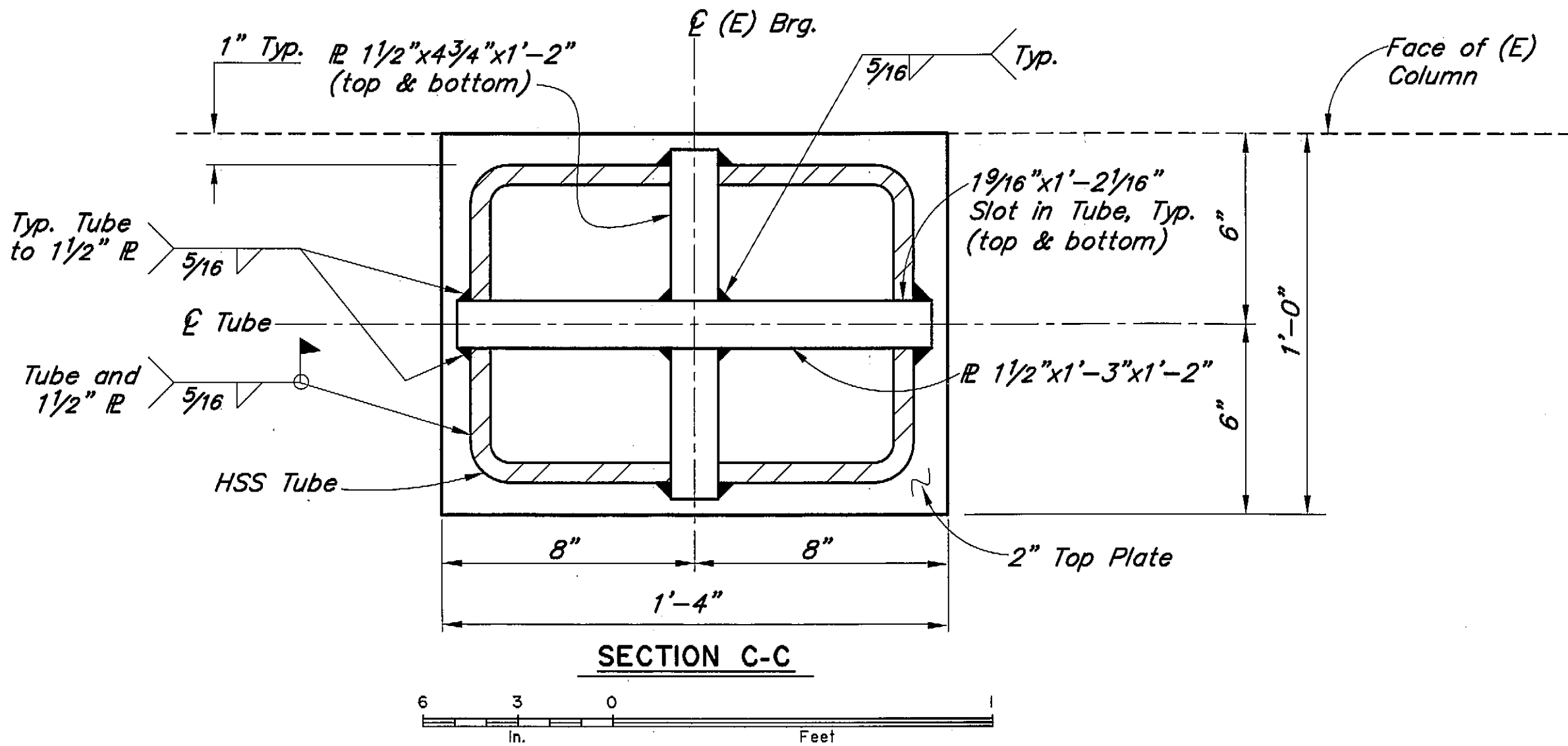


SITKA HARBOR BRIDGE
SITKA, ALASKA
PIERS 2 & 3 TUBE

BRIDGE NO. 245
DWG. NO. 6A

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STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BH-000S(427)/75577	2004		



LEGEND:

(E) = Existing

----- = Existing

———— = Proposed

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

Proj. Eng. *[Signature]* Date 12-6-06

Elevations, bearings and dimensions are based on "AS-BUILT" plans. Verify all controlling field dimensions before ordering or fabricating any material.

DESIGNED BY:	Larry Owen	CHECKED:	Rob Miller
DRAWN BY:	C. Anderson	CHECKED:	Larry Owen
QUANTITIES BY:	Larry Owen	CHECKED:	Rob Miller

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
BRIDGE SECTION



SITKA HARBOR BRIDGE

SITKA, ALASKA

PIER 2 & 3 TUBE DETAILS



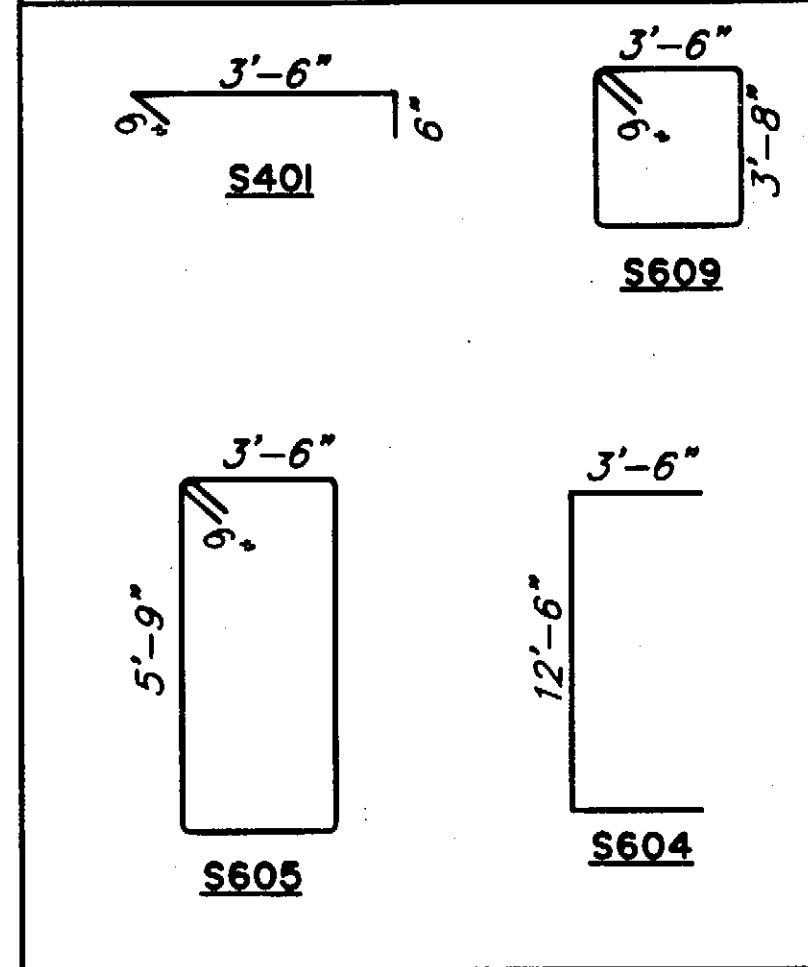
BRIDGE NO. 245

DWG. NO. 6B

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BH-0005(427)/75577	2003	L7	29

REINFORCING STEEL - ONE PIER				
MARK	SIZE	NO.	LENGTH	TYPE
S401	4	248	4'-6"	Bent
S601	6	30	4'-0"	
S602	6	30	6'-0"	
S603	6	30	25'-4"	
S604	6	104	19'-6"	Bent
S605	6	46	19'-6"	Bent
S606	6	11	22'-8"	
S609	6	6	15'-4"	Bent

BENDING DIAGRAM



NOTES:

1 3/4" H.S. Rods shall be galvanized ASTM A722. Stress 1 3/4" H.S. Rods to 280k after concrete has obtained 75% f'c. Rods shall be bonded throughout entire length.

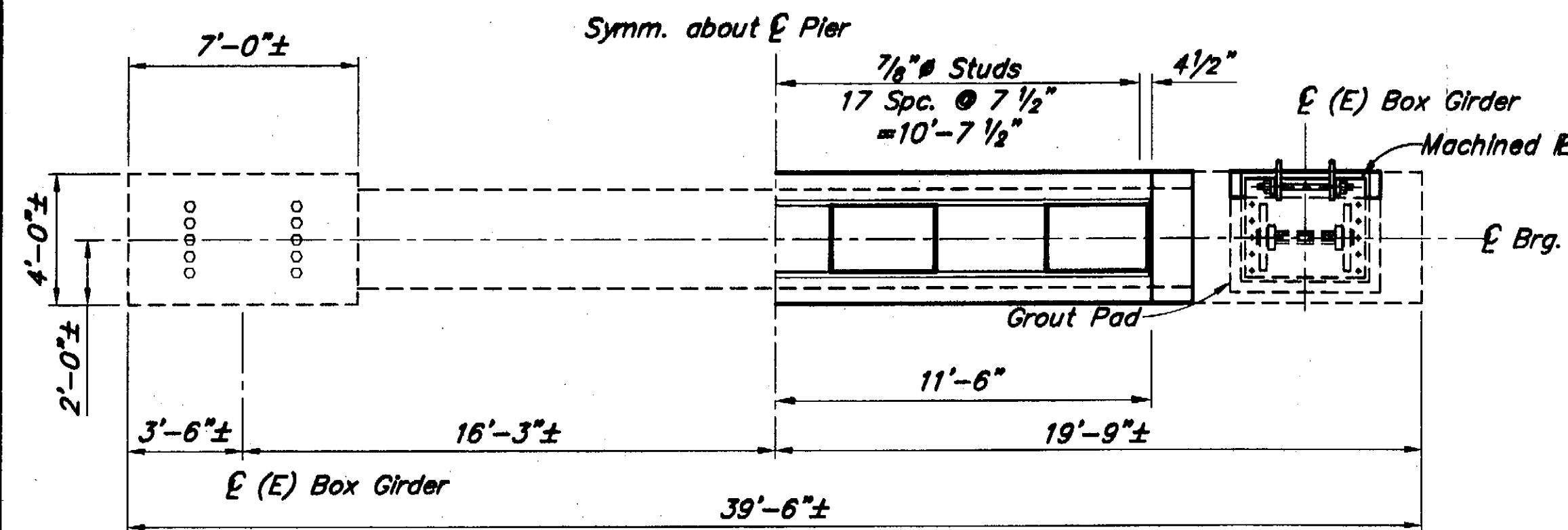
(E) = Existing

--- = Existing

— = Denotes this contract

Elevations, Bearings and Dimensions are based on "AS-BUILT" plans. Verify all controlling field dimensions before ordering or fabricating any material.

SEISMIC RETROFIT



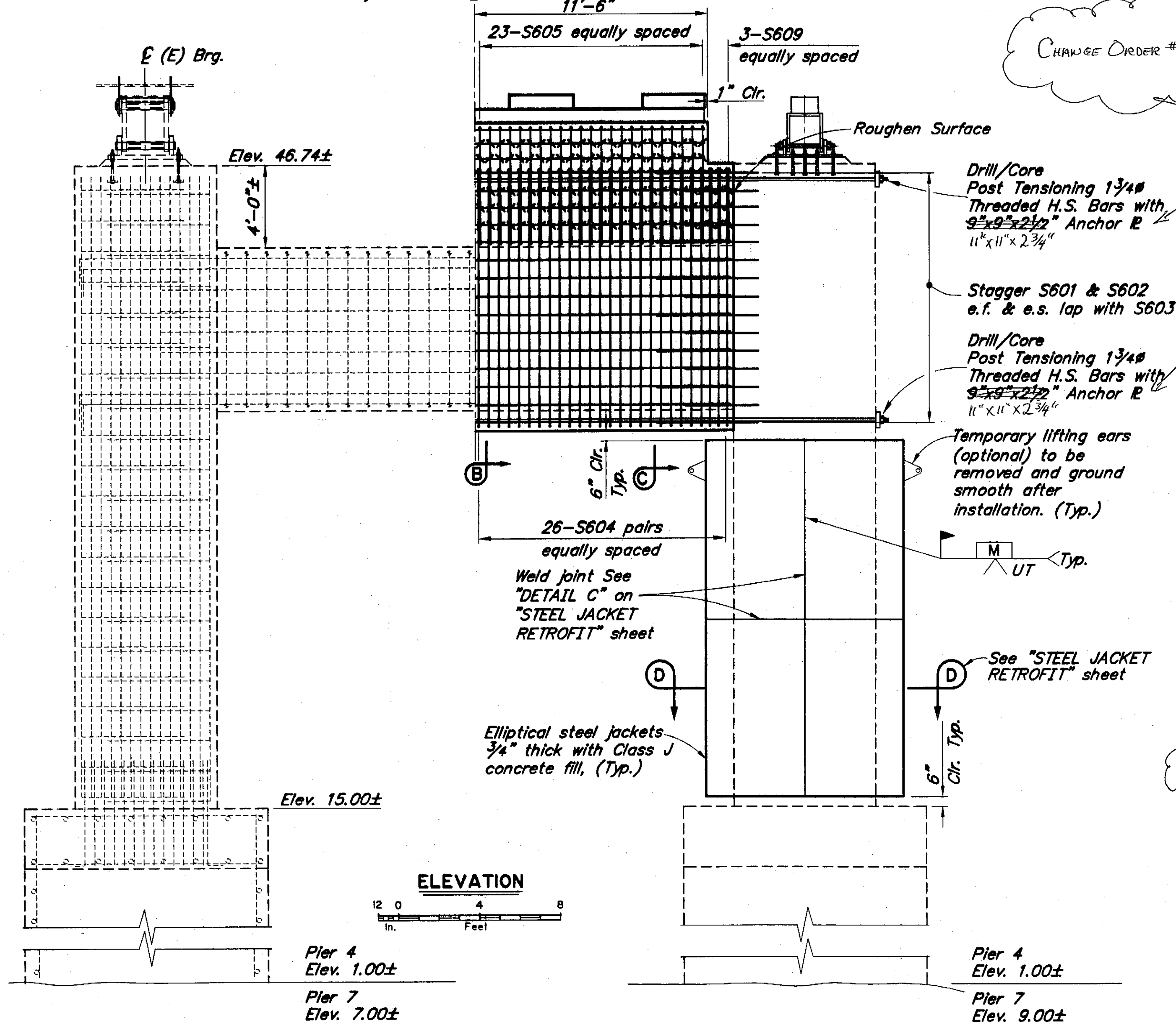
EXISTING

PLAN

THIS CONTRACT

Symm. about E Pier

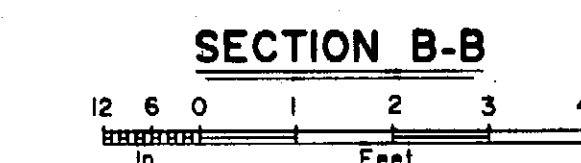
Symm. about E Pier



ELEVATION

Pier 4
Elev. 1.00±
Pier 7
Elev. 7.00±

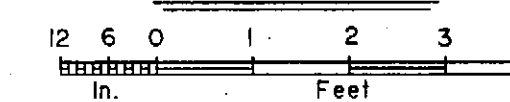
Pier 4
Elev. 1.00±
Pier 7
Elev. 9.00±



SECTION B-B

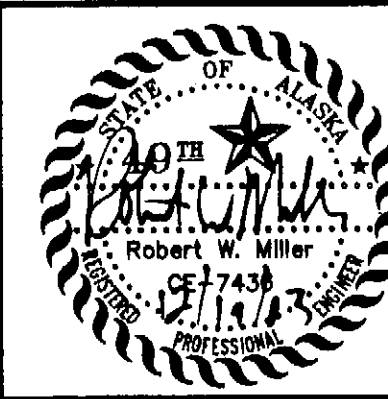
Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
Proj. Eng. [Signature] Date 12-6-06

SECTION C-C



DESIGNED BY: Rob Miller	CHECKED: Larry Owen
DRAWN BY: Sam Saffie	CHECKED: Rob Miller
QUANTITIES BY: George Imbison	CHECKED: Rob Miller

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
BRIDGE SECTION



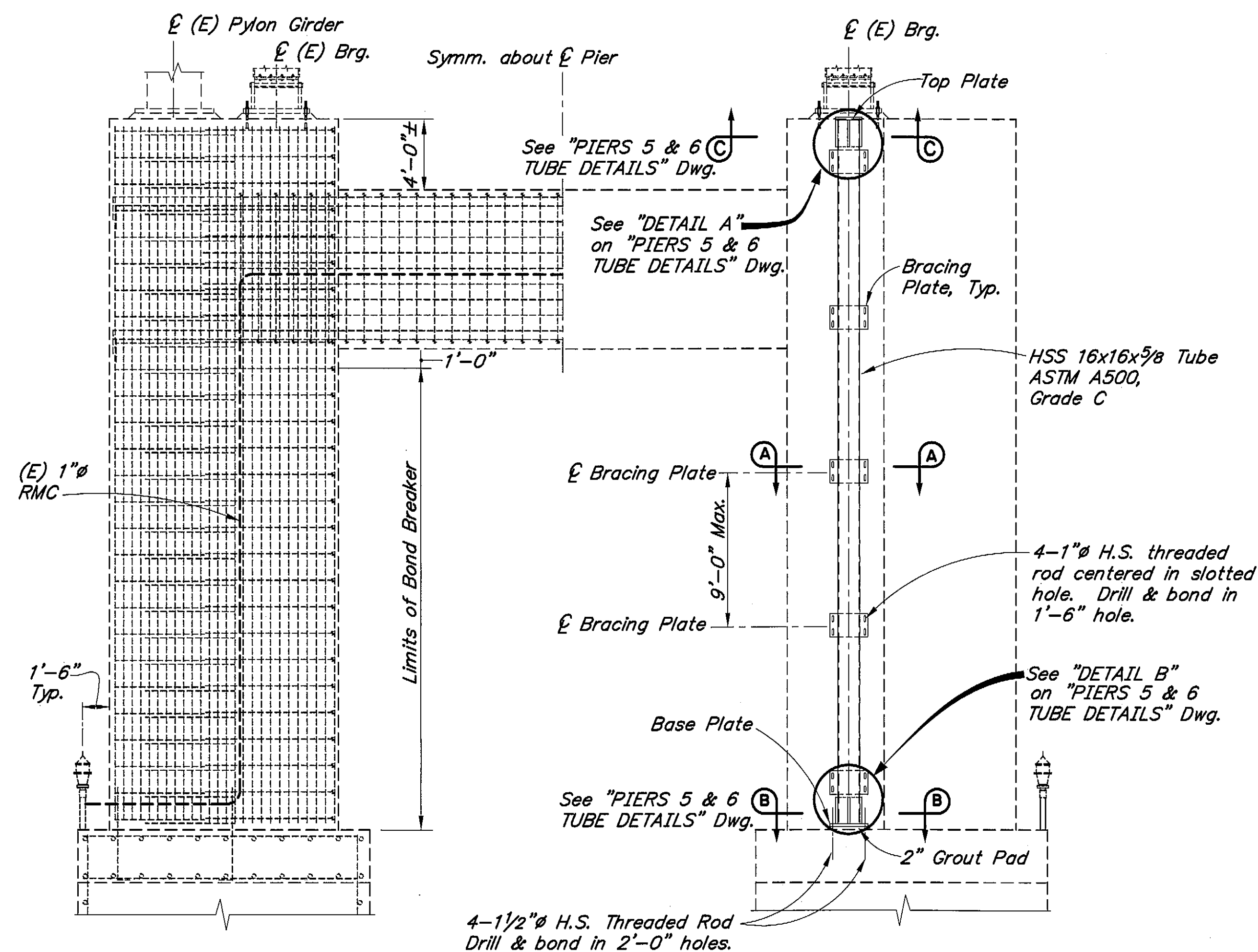
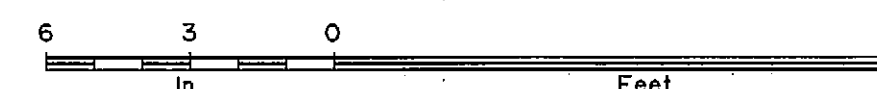
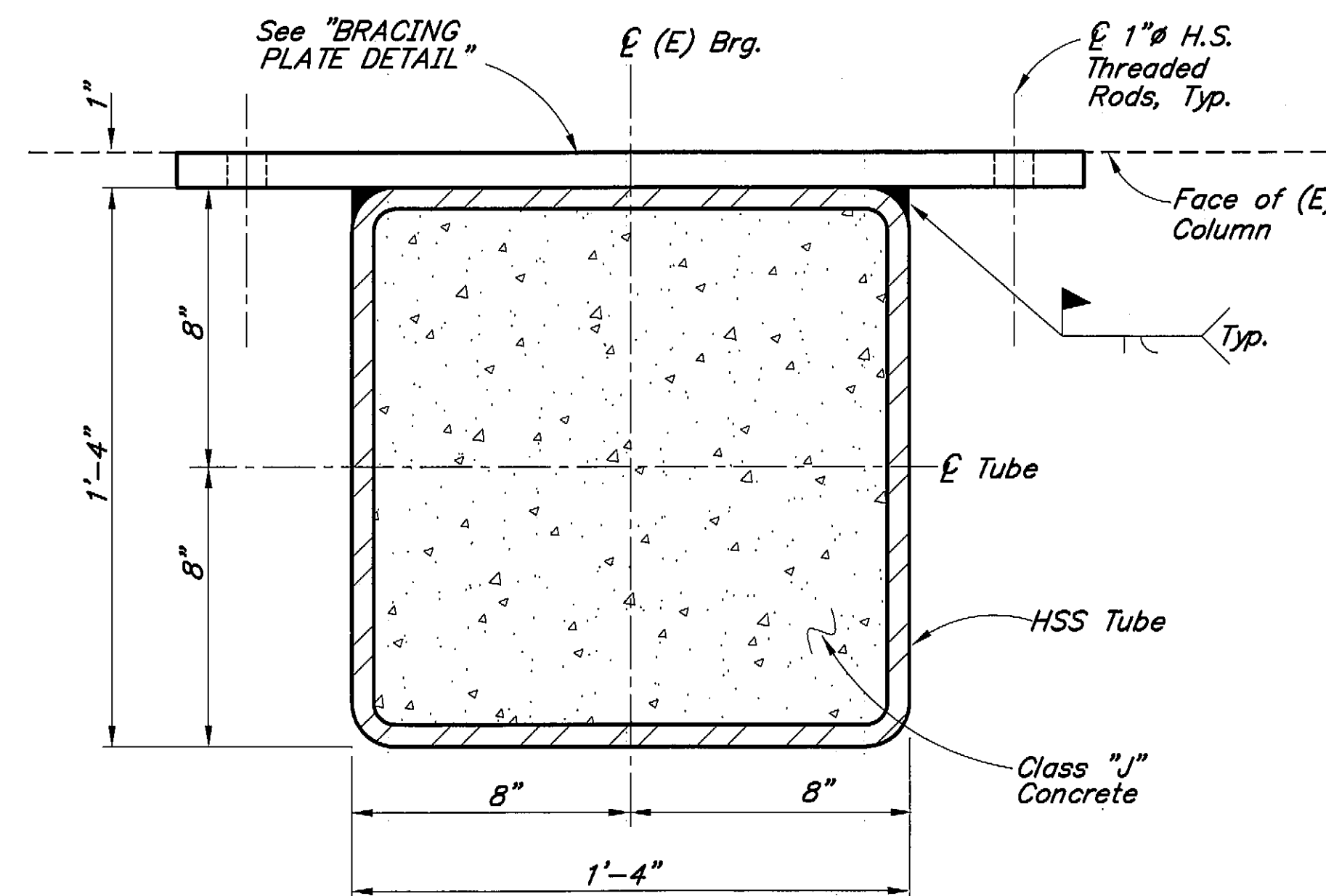
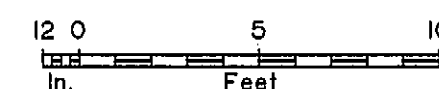
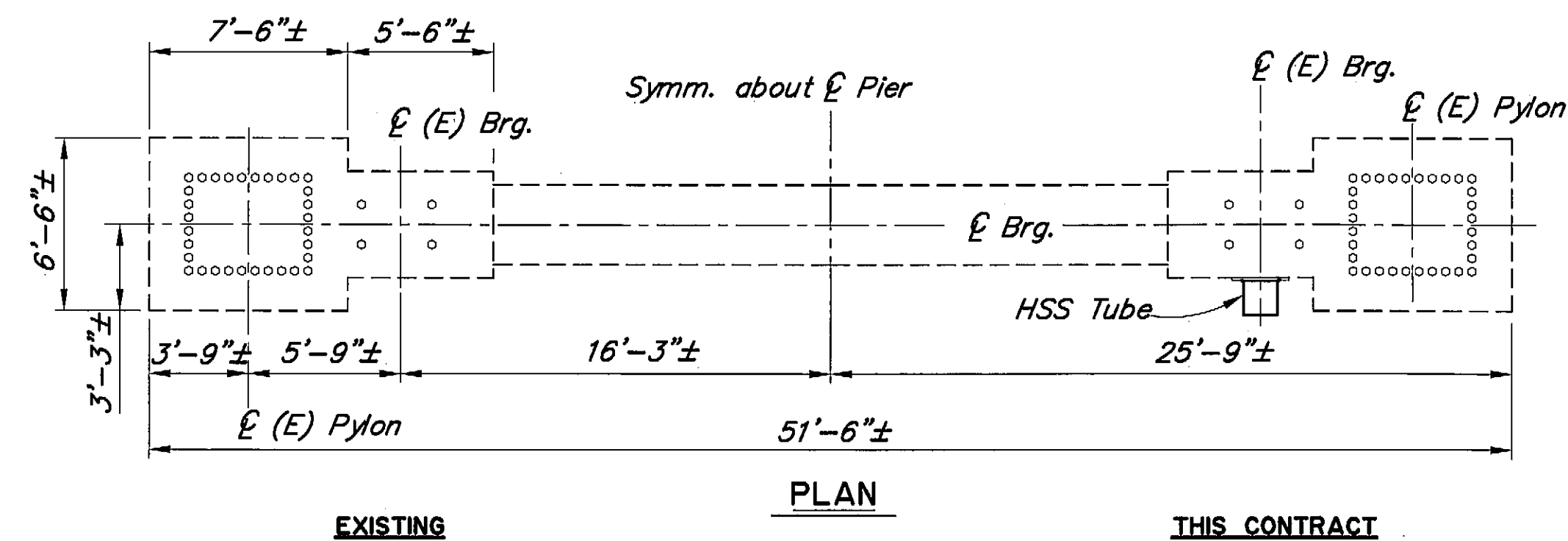
SITKA HARBOR BRIDGE
HARBOR DRIVE
PIERS 4 & 7

BRIDGE NO. 245
DWG. NO. 7

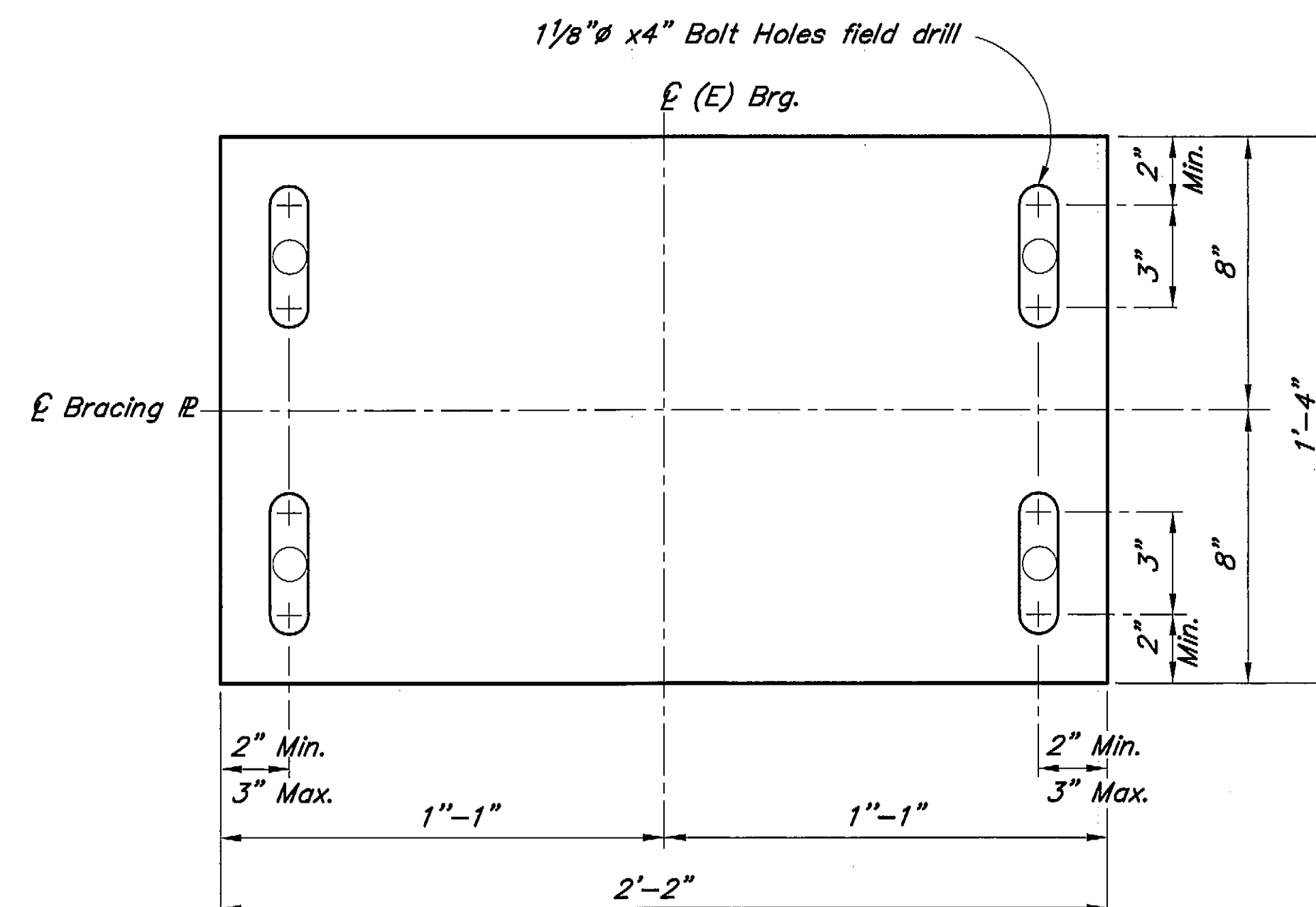
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BH-000S(427)/75577	2004		

NOTES:

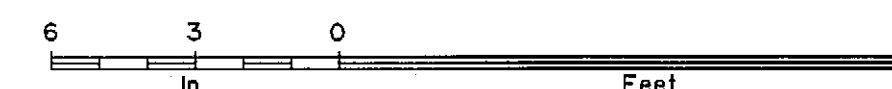
1. Seismic retrofit details not shown for clarity.
2. Before fabricating any material submit all mill certs. to the engineer for approval.
3. Install tube on channel side of column.
4. Provide 9000 psi. grout for grout pad.
5. Install Class "J" concrete in tube before jacking.
6. Use 6 mil polyethylene bond breaker on portions of tube encased in steel jacket retrofit.
7. Use a jack with a minimum safe working load of 920 kips.
8. Center jack on tube in both directions.
9. Block out seismic retrofit bearing seat adjustment up to 2" from face of (E) column to accommodate jacks larger than top plate, if required.
10. Do not allow jack to bear directly on top of (E) column at any time.



ELEVATION



BRACING PLATE DETAIL



Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
Proj. Eng. *[Signature]* Date 12-6-06

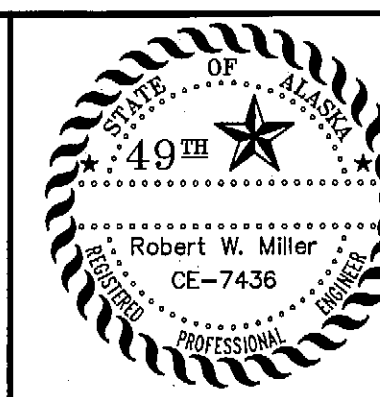
LEGEND:

- (E) = Existing
--- = Existing
— = Proposed

Elevations, bearings and dimensions are based on "AS-BUILT" plans. Verify all controlling field dimensions before ordering or fabricating any material.

DESIGNED BY:	Larry Owen	CHECKED:	Rob Miller
DRAWN BY:	C. Anderson	CHECKED:	Larry Owen
QUANTITIES BY:	Larry Owen	CHECKED:	Rob Miller

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
BRIDGE SECTION



SITKA HARBOR BRIDGE

SITKA, ALASKA

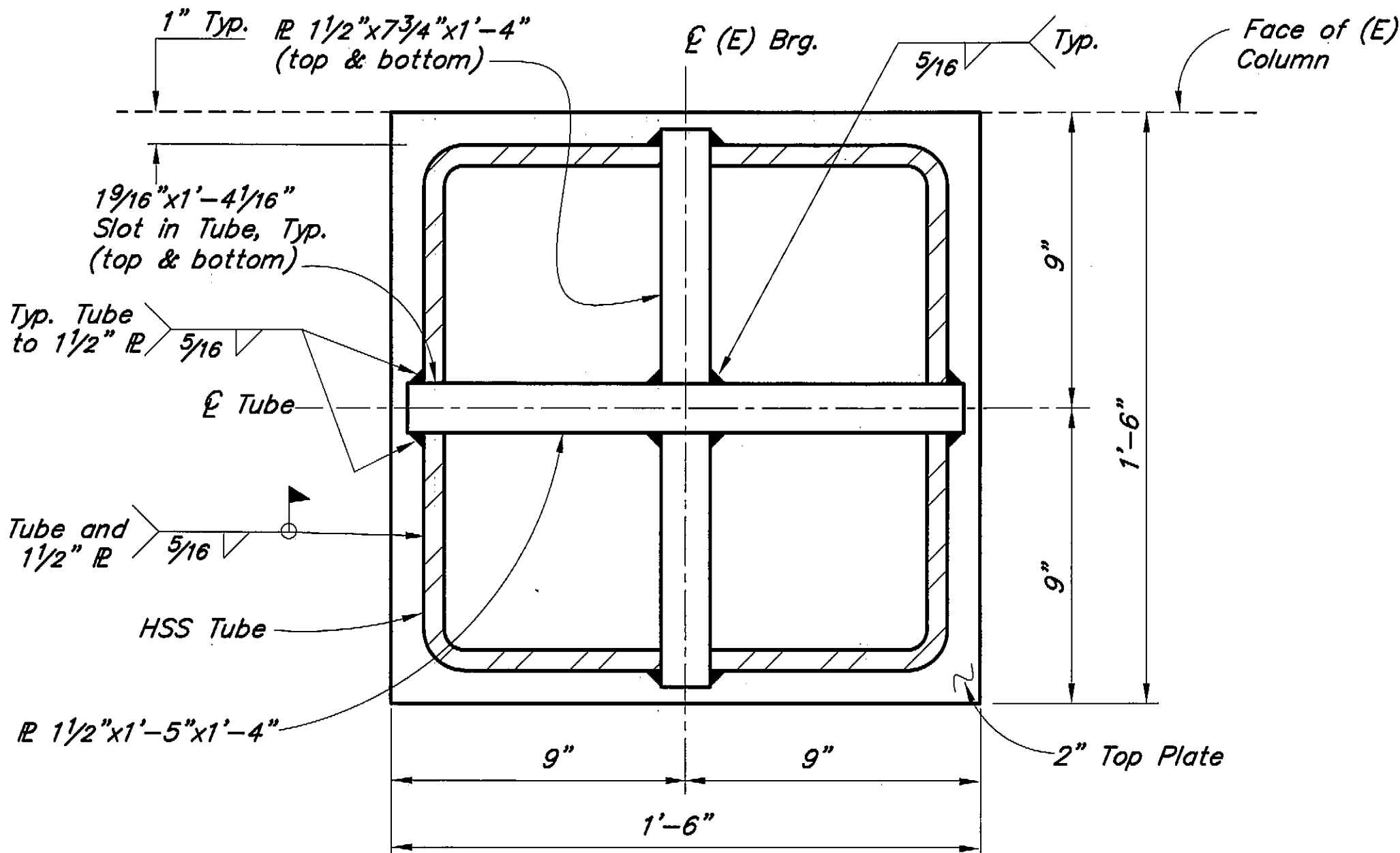
PIERS 5 & 6 TUBE



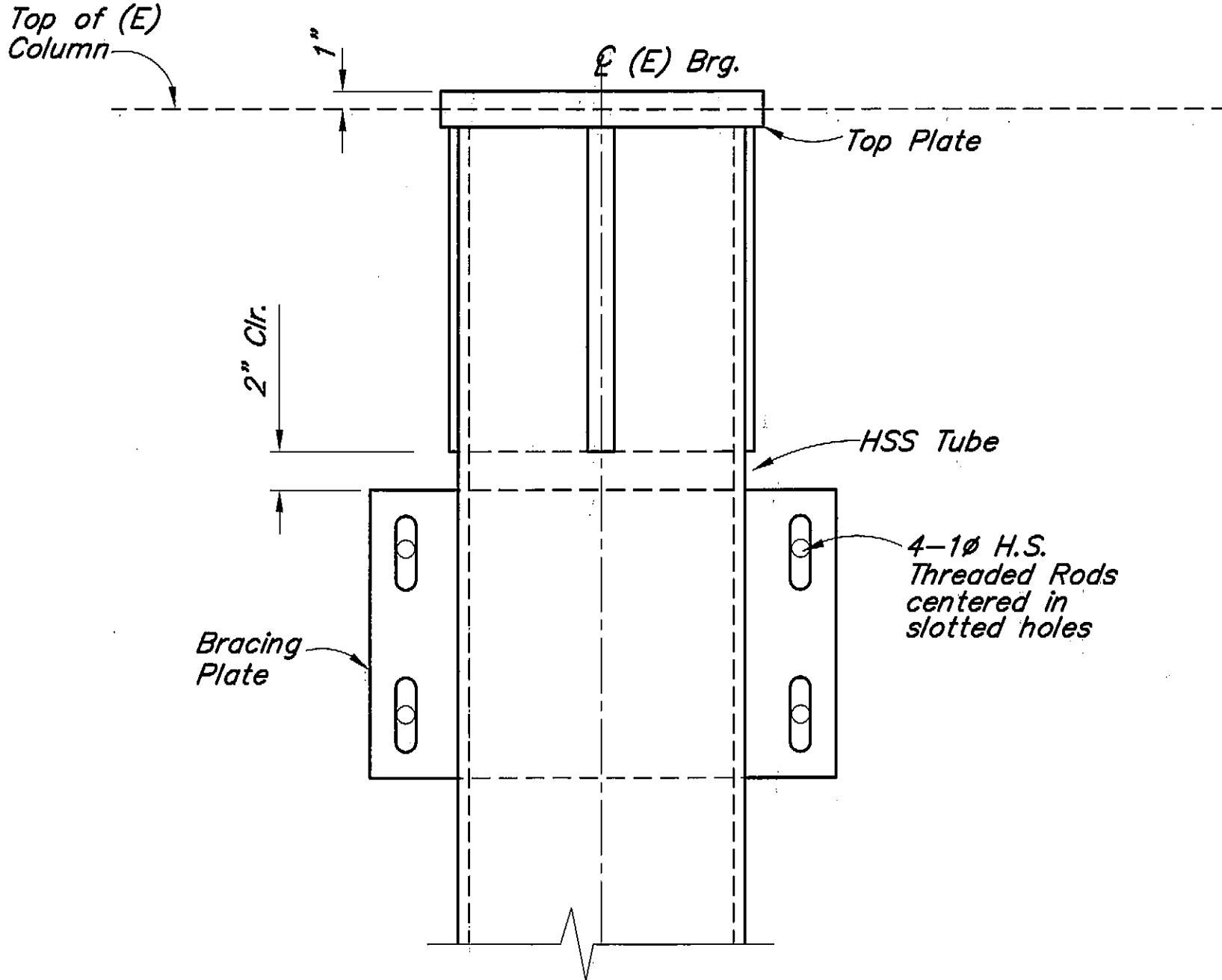
BRIDGE NO. 245

DWG. NO. 8A

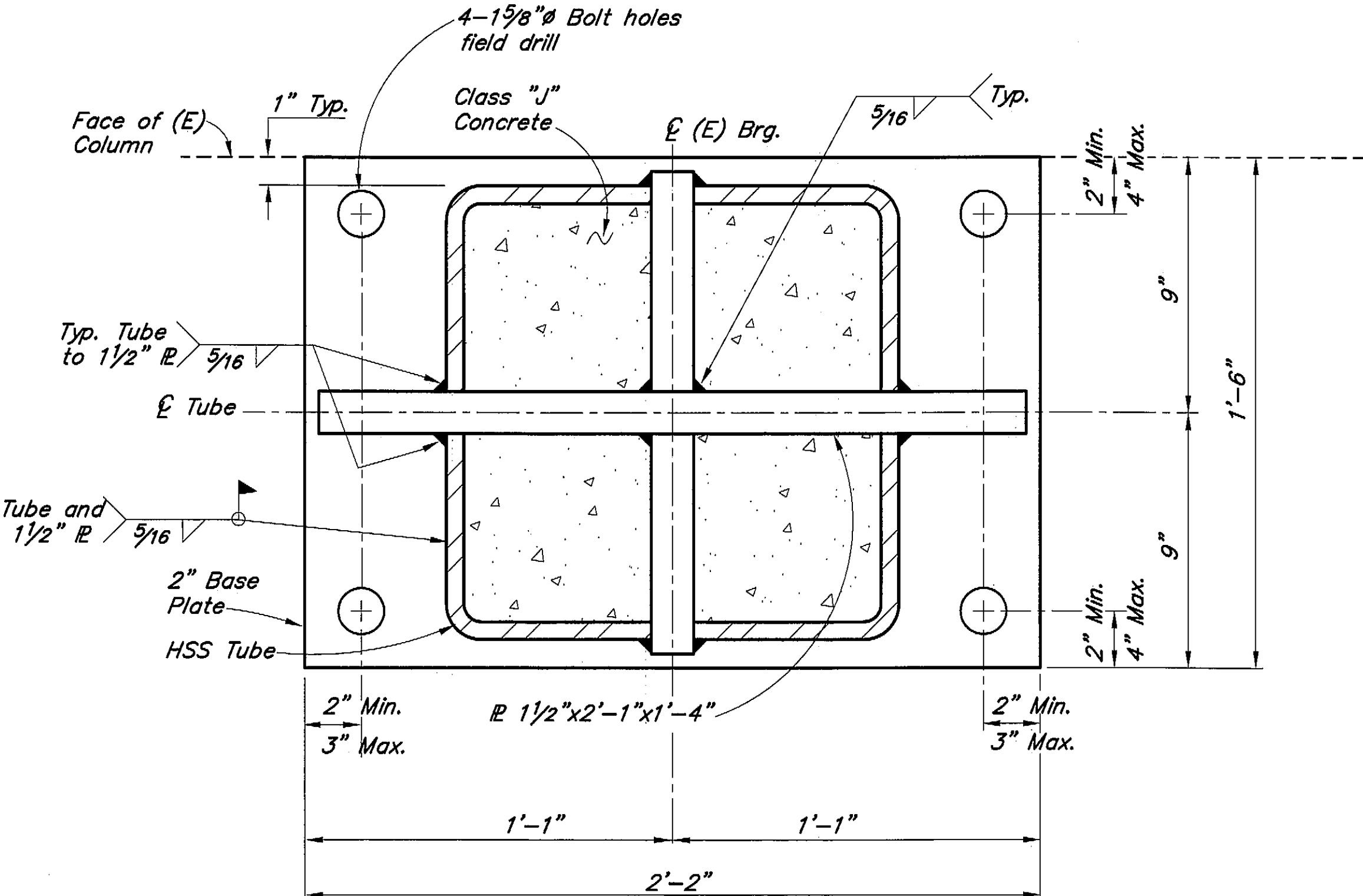
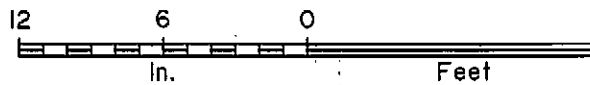
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BH-000S(427)/75577	2004		



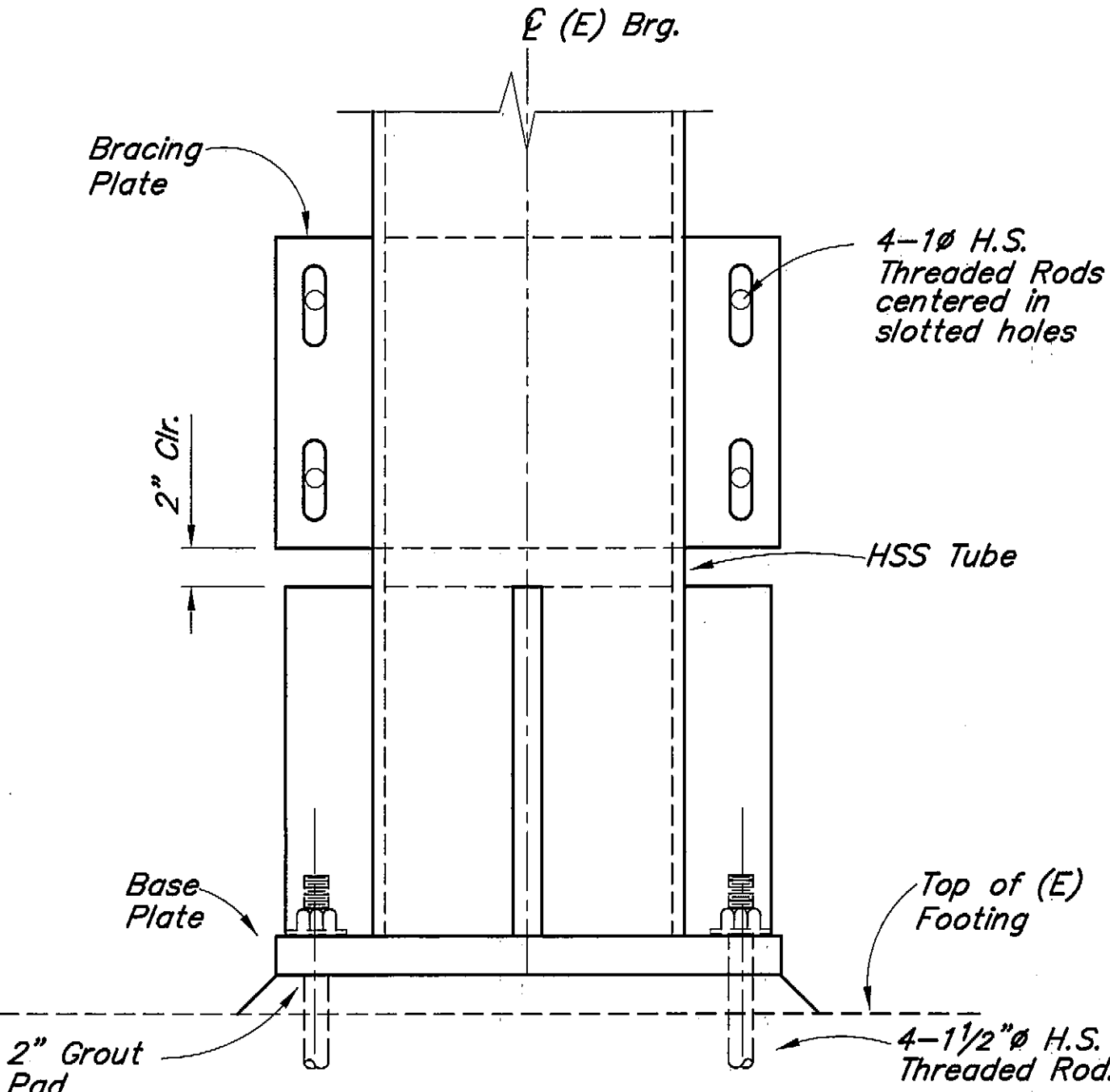
SECTION C-C



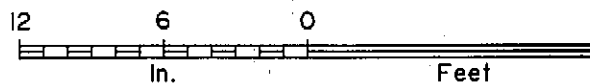
DETAIL A



SECTION B-B



DETAIL B



Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
 Proj. Eng. *[Signature]* Date *2-6-06*

LEGEND:
 (E) = Existing
 --- = Existing
 — = Proposed

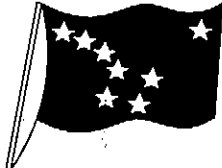
Elevations, bearings and dimensions are based on "AS-BUILT" plans. Verify all controlling field dimensions before ordering or fabricating any material.

DESIGNED BY:	Larry Owen	CHECKED:	Rob Miller
DRAWN BY:	C. Anderson <i>Csa</i>	CHECKED:	Larry Owen
QUANTITIES BY:	Larry Owen	CHECKED:	Rob Miller

STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 AND PUBLIC FACILITIES
 BRIDGE SECTION



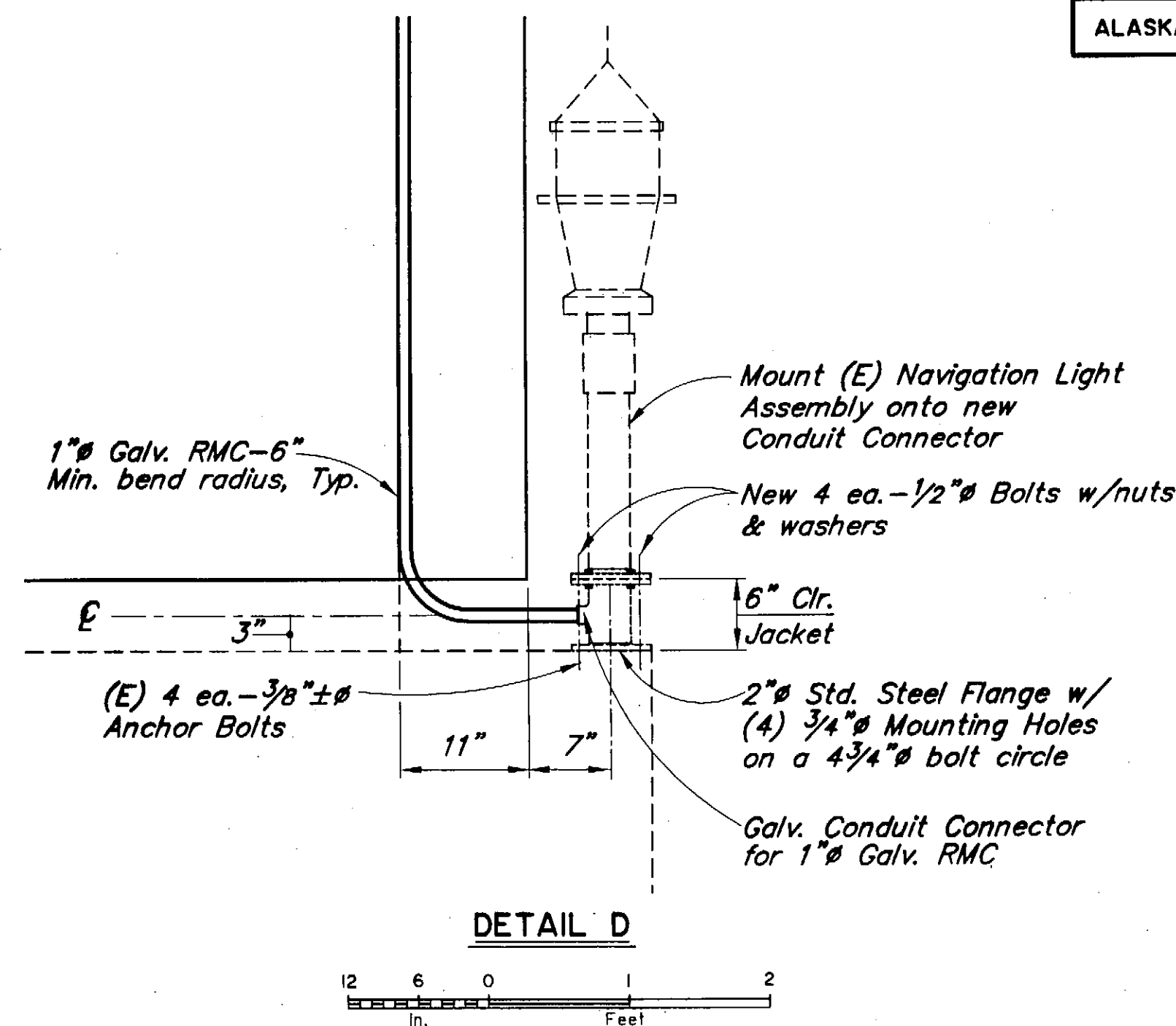
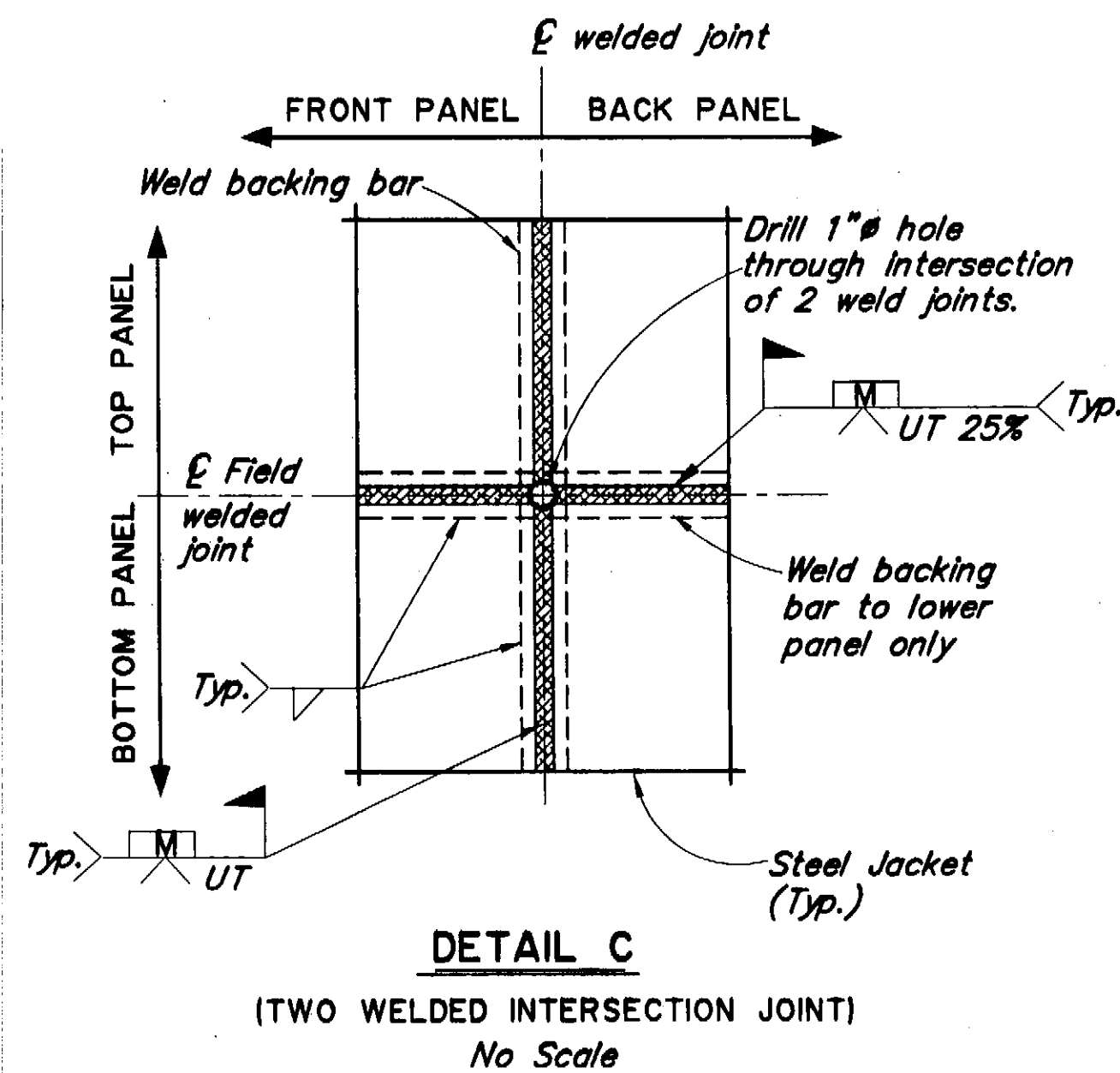
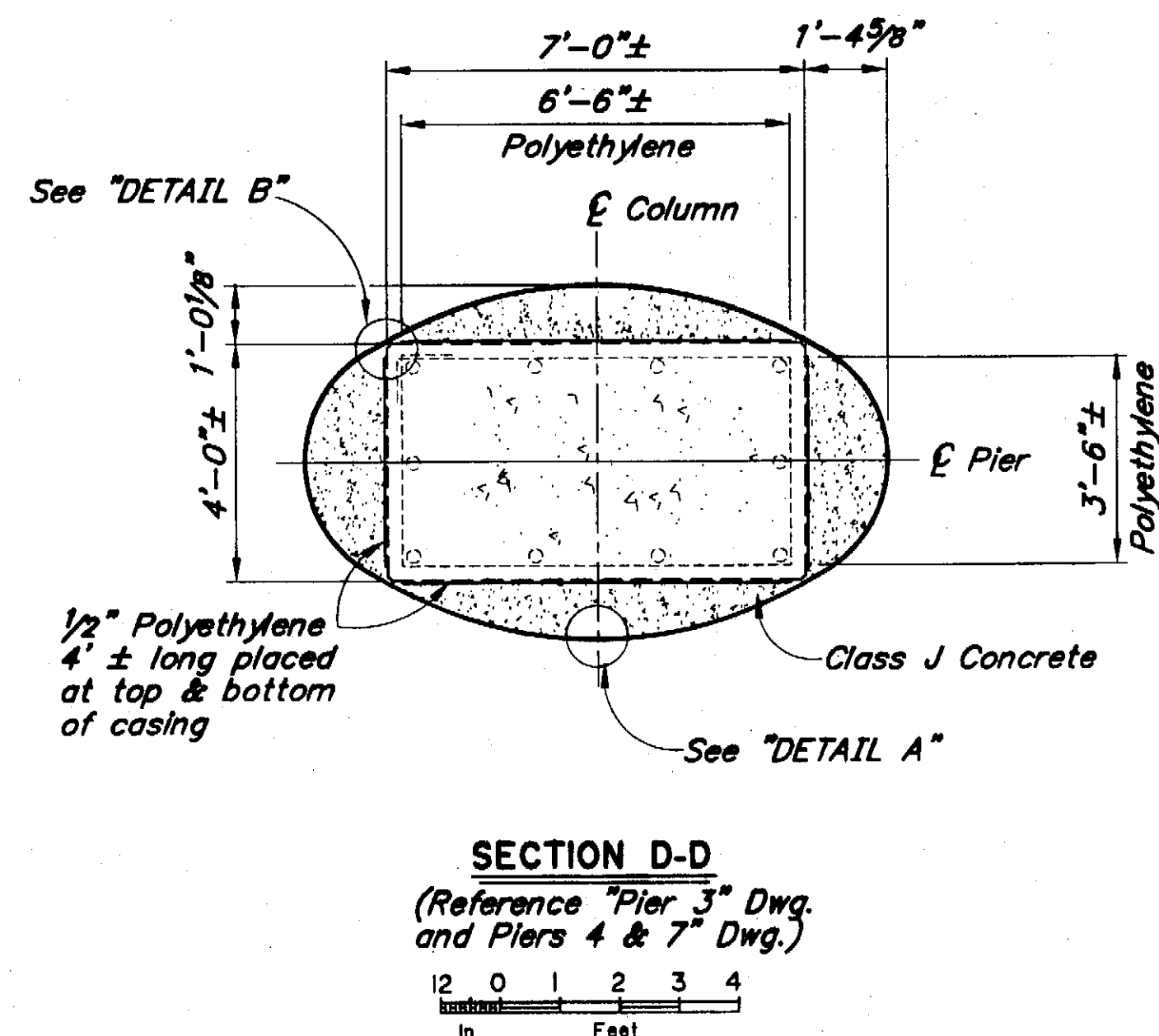
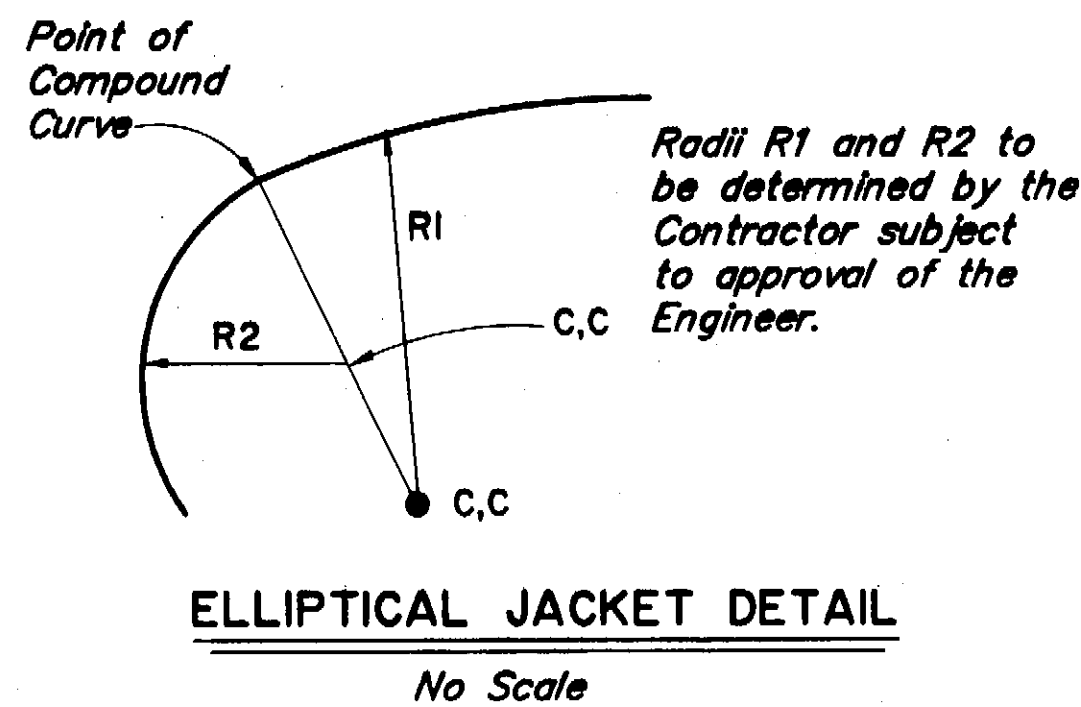
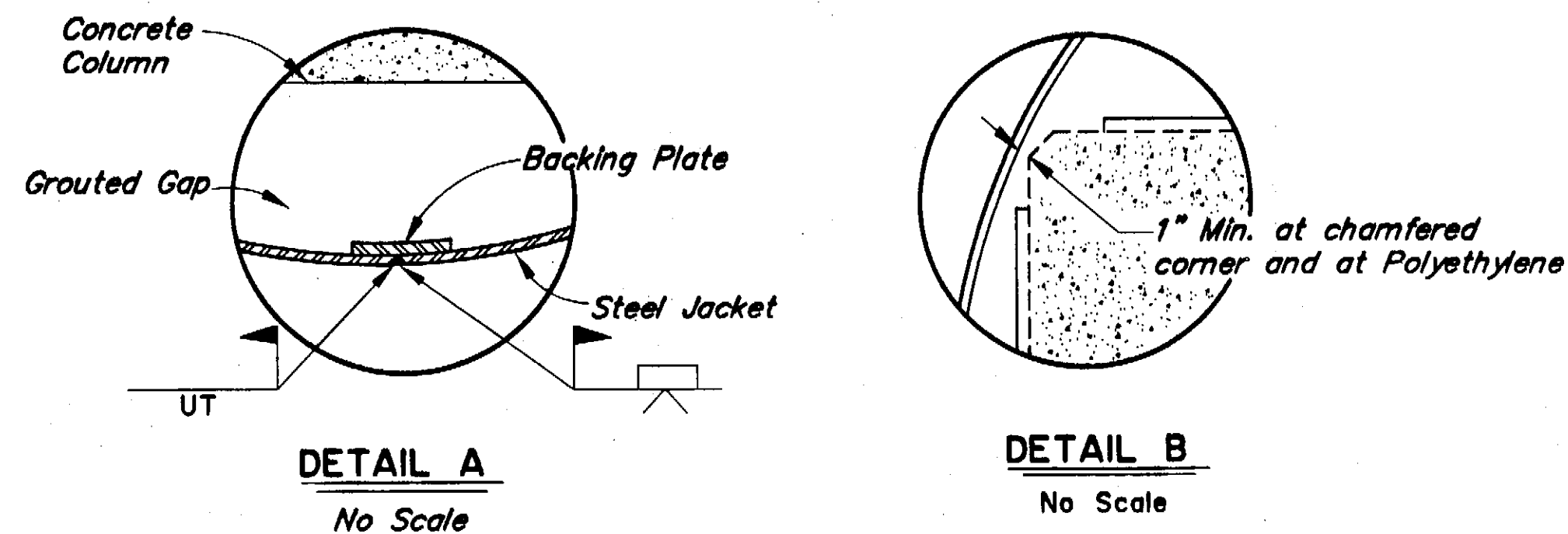
SITKA HARBOR BRIDGE
 SITKA, ALASKA
 PIERS 5 & 6 - TUBE DETAILS



BRIDGE NO. 245
 DWG. NO. 8B

R:\cad\245\SAD\dwgs\245-plb\p1.dwg, 11/24/2006 08:10:31 AM

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BH-000S(427)/75577	2003	L9	29



NOTES:

- Perform all welding in accordance with the provisions of AWS D1.1-02.
- Jacket groove welds are a cyclically loaded non-tubular connection per AWS D1.1-02.
- Acceptance criteria shall be per AWS 6.13.2(1). All the groove welds are subject to tensile stress.
- All voids between steel jacket and polyethylene and also steel jacket and concrete column to be filled with Class J concrete, as described in Section 501 of the Specifications.
- Location and number of vertical and horizontal welds to be determined by the Contractor, and subject to the approval of the Engineer.
- Backing plates shall be the same thickness as the jacket.
- The location of jacket welds are for illustration. The fabricator may choose alternate locations and identify them on the shop plans.
- No skip welds allowed.
- Remove all galvanizing and other coatings to a distance of 1" beyond the weld joint. Repair all galvanizing and painting after welding, on the outside face per the specifications.

(E) = Existing

----- = Existing

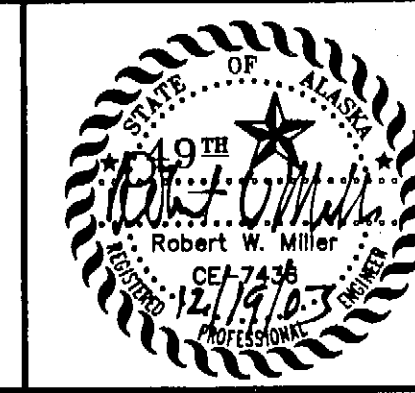
_____ = Denotes this contract

Elevations, Bearings and Dimensions are based on "AS-BUILT" plans. Verify all controlling field dimensions before ordering or fabricating any material.

SEISMIC RETROFIT

DESIGNED BY: Rob Miller	CHECKED: Larry Owen
DRAWN BY: Sam Sallie	CHECKED: Rob Miller
QUANTITIES BY: George Imboden	CHECKED: Rob Miller

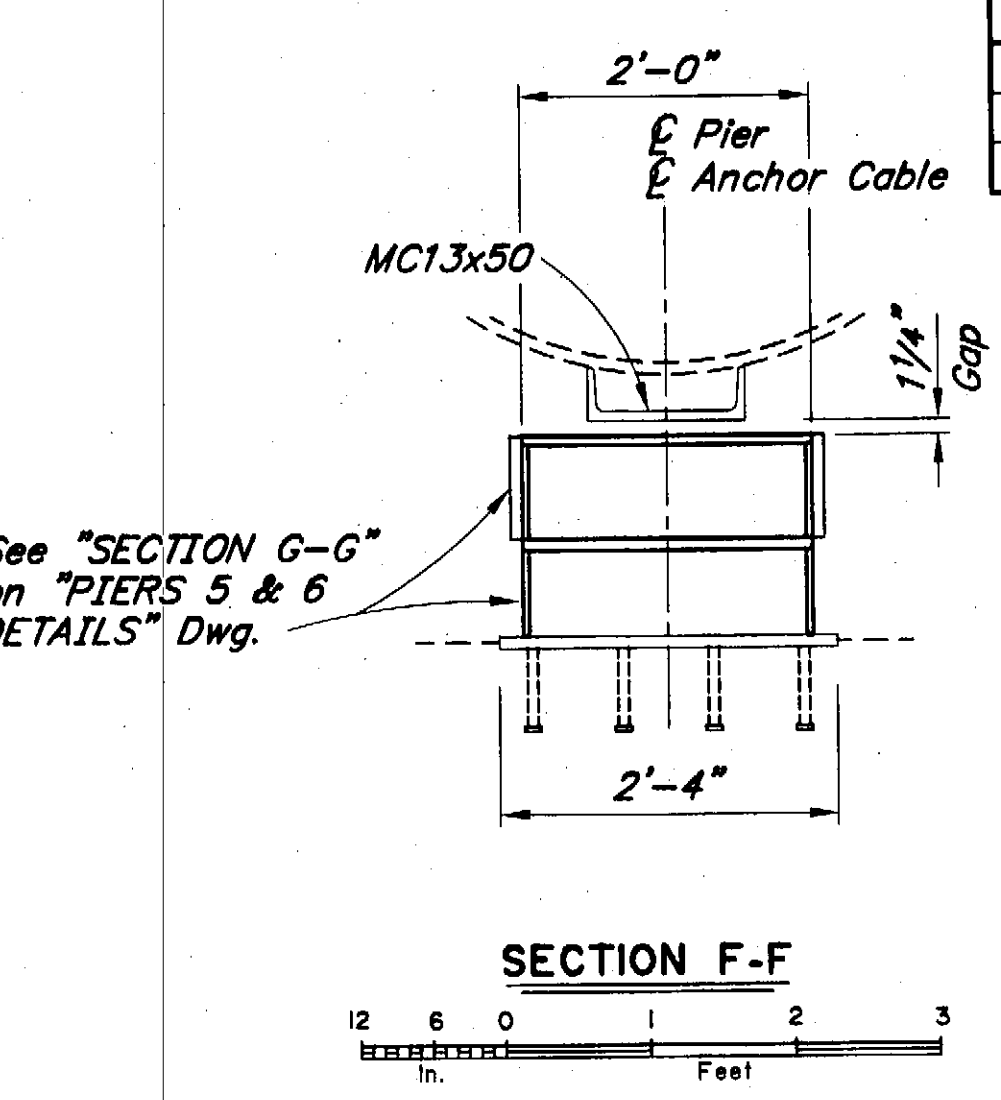
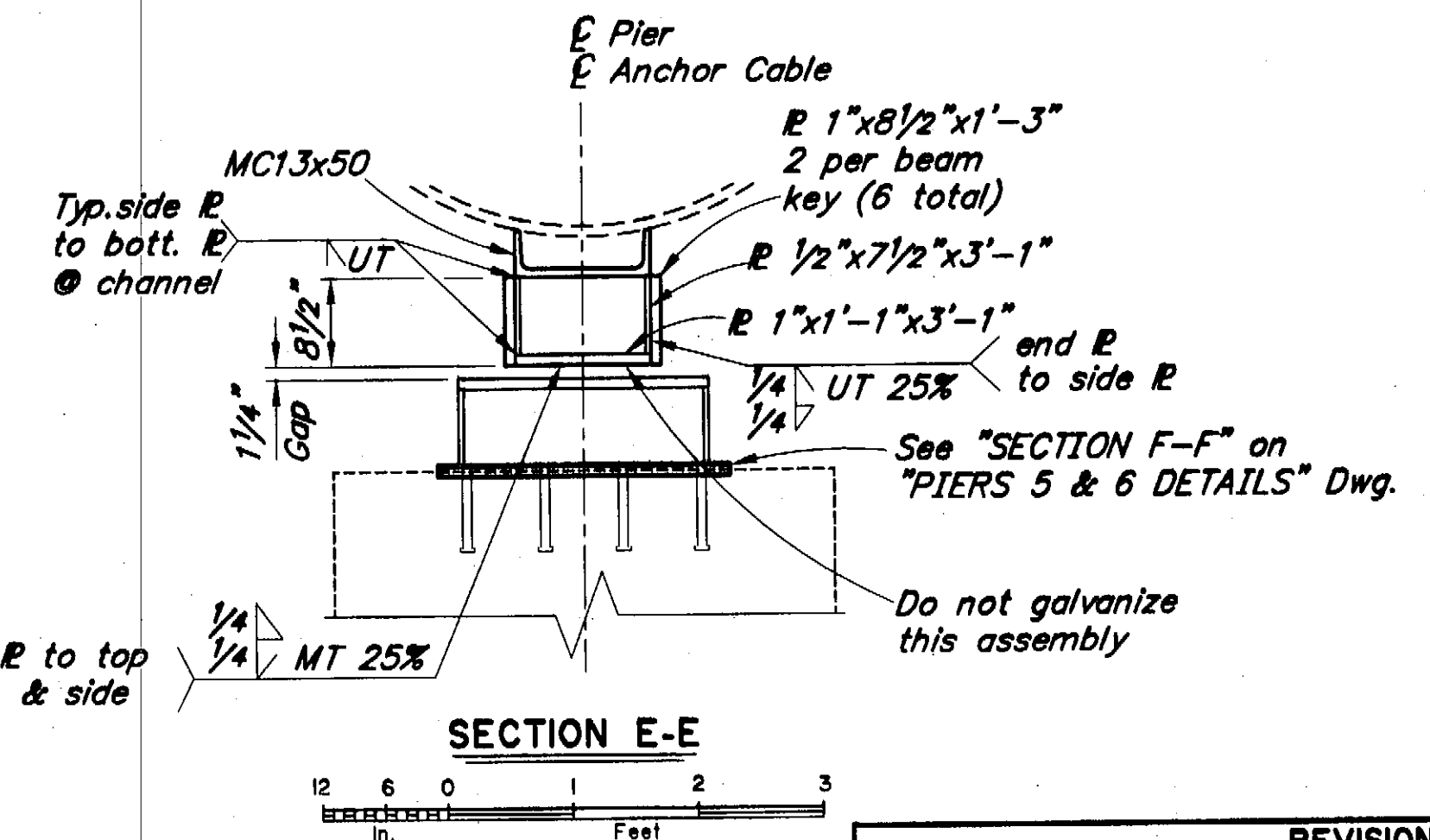
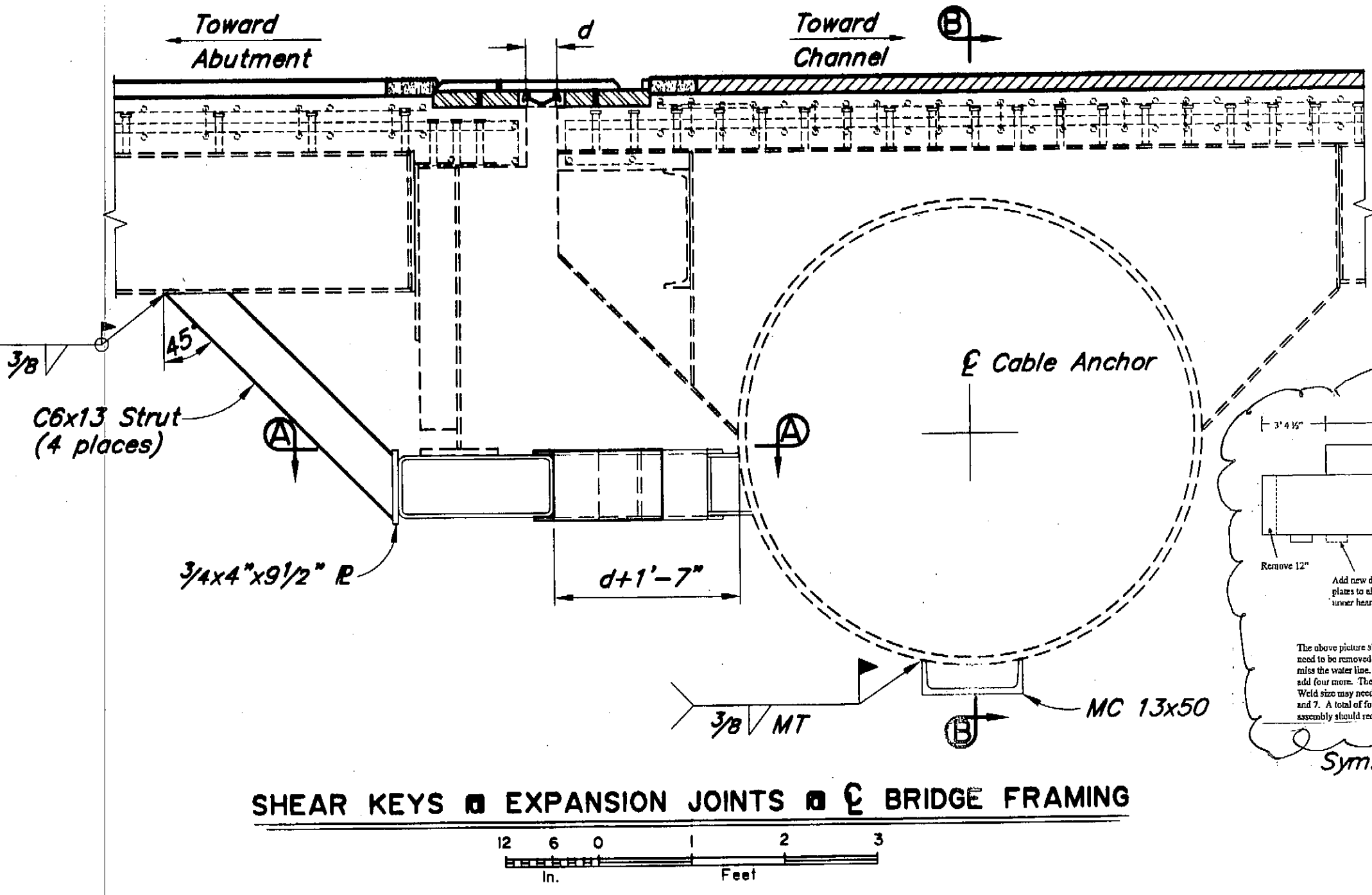
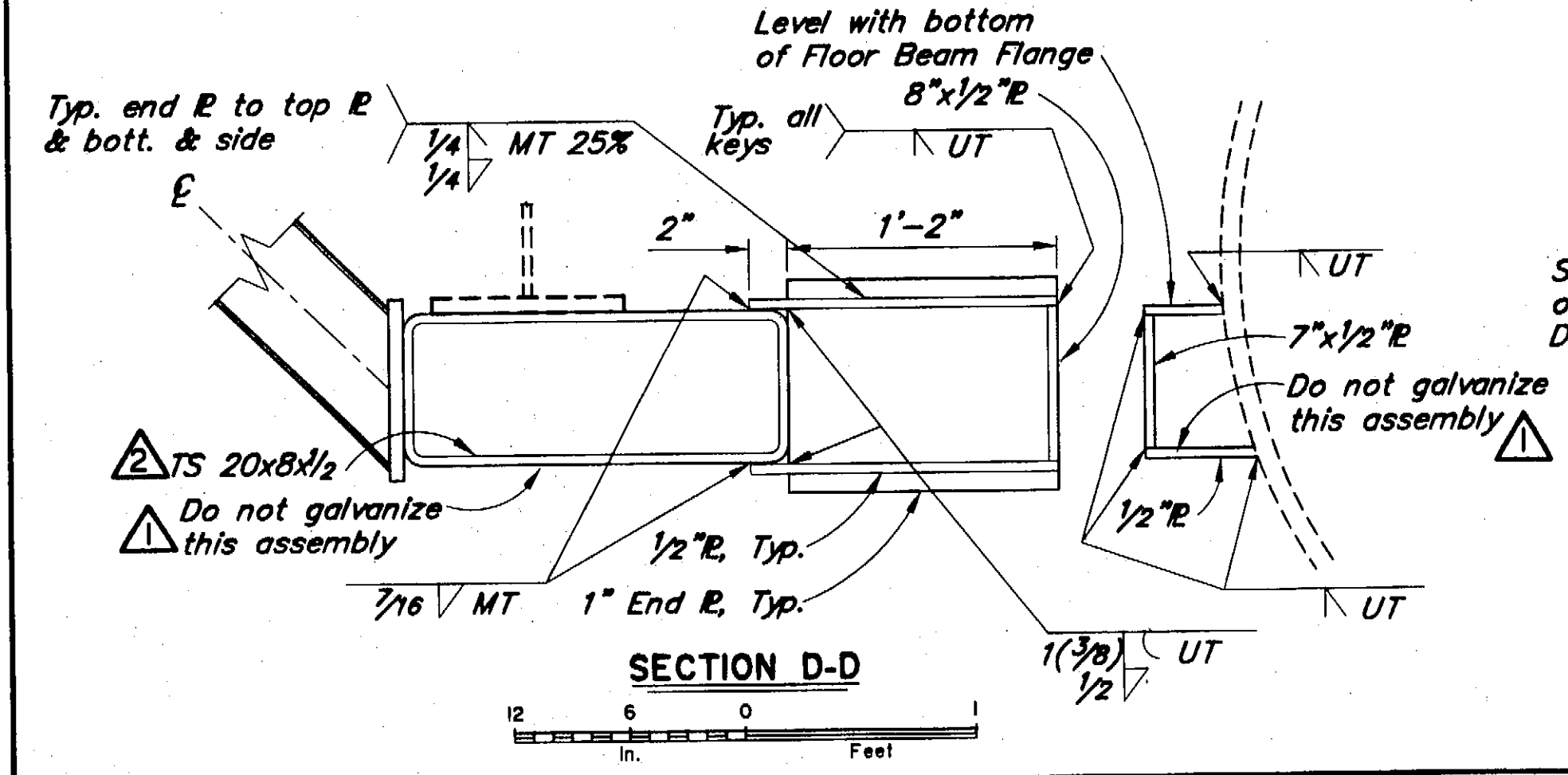
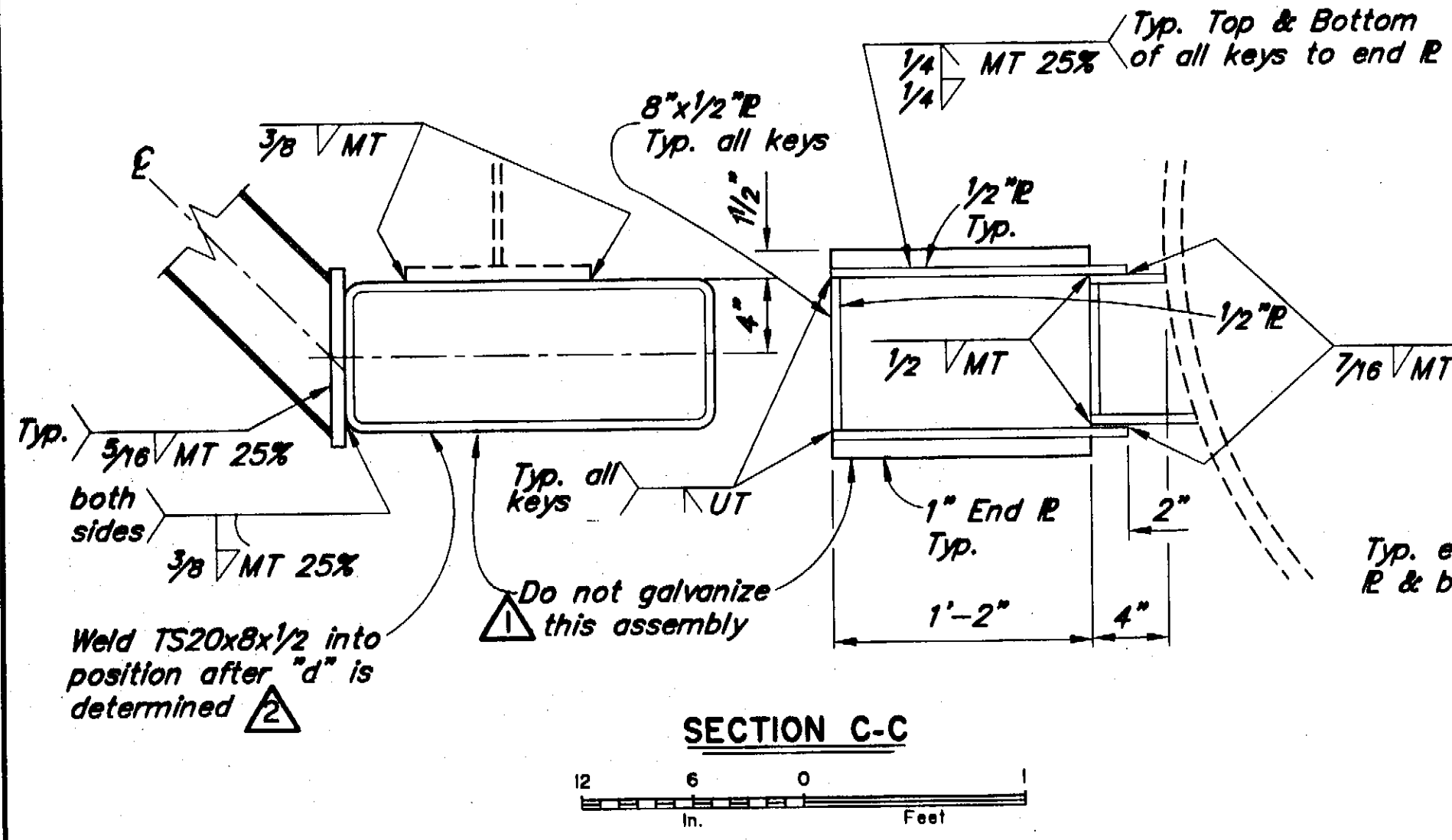
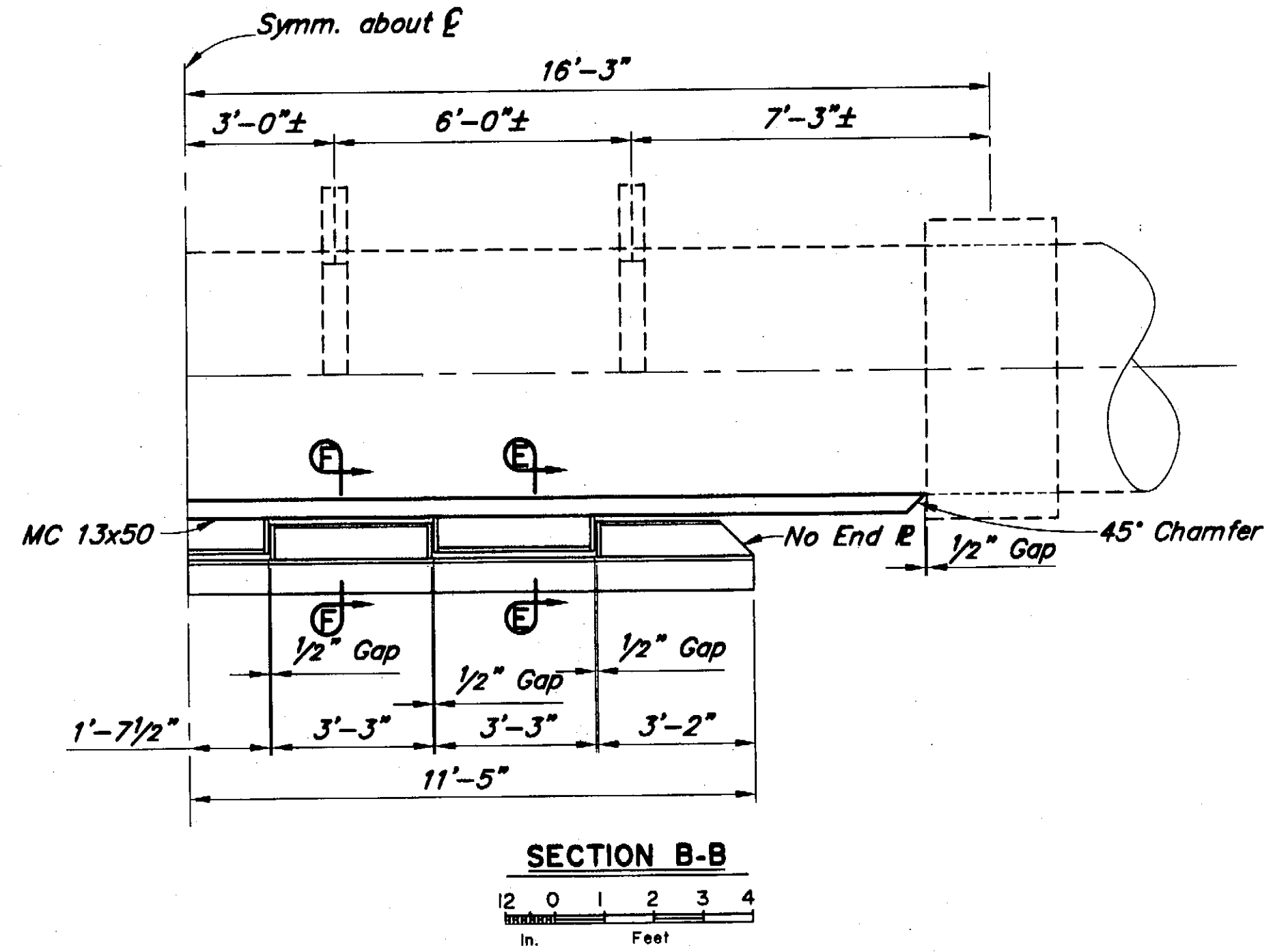
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
BRIDGE SECTION



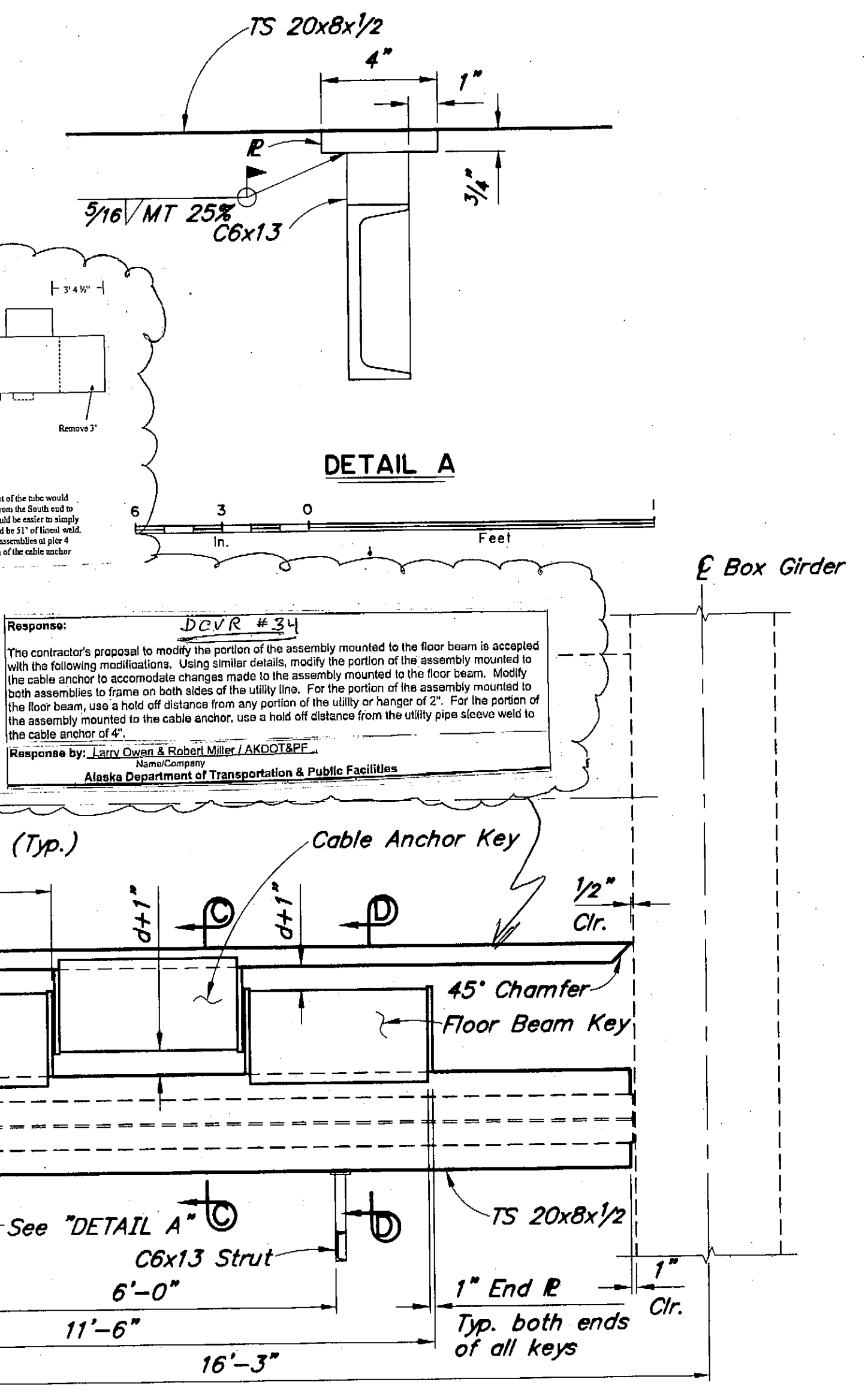
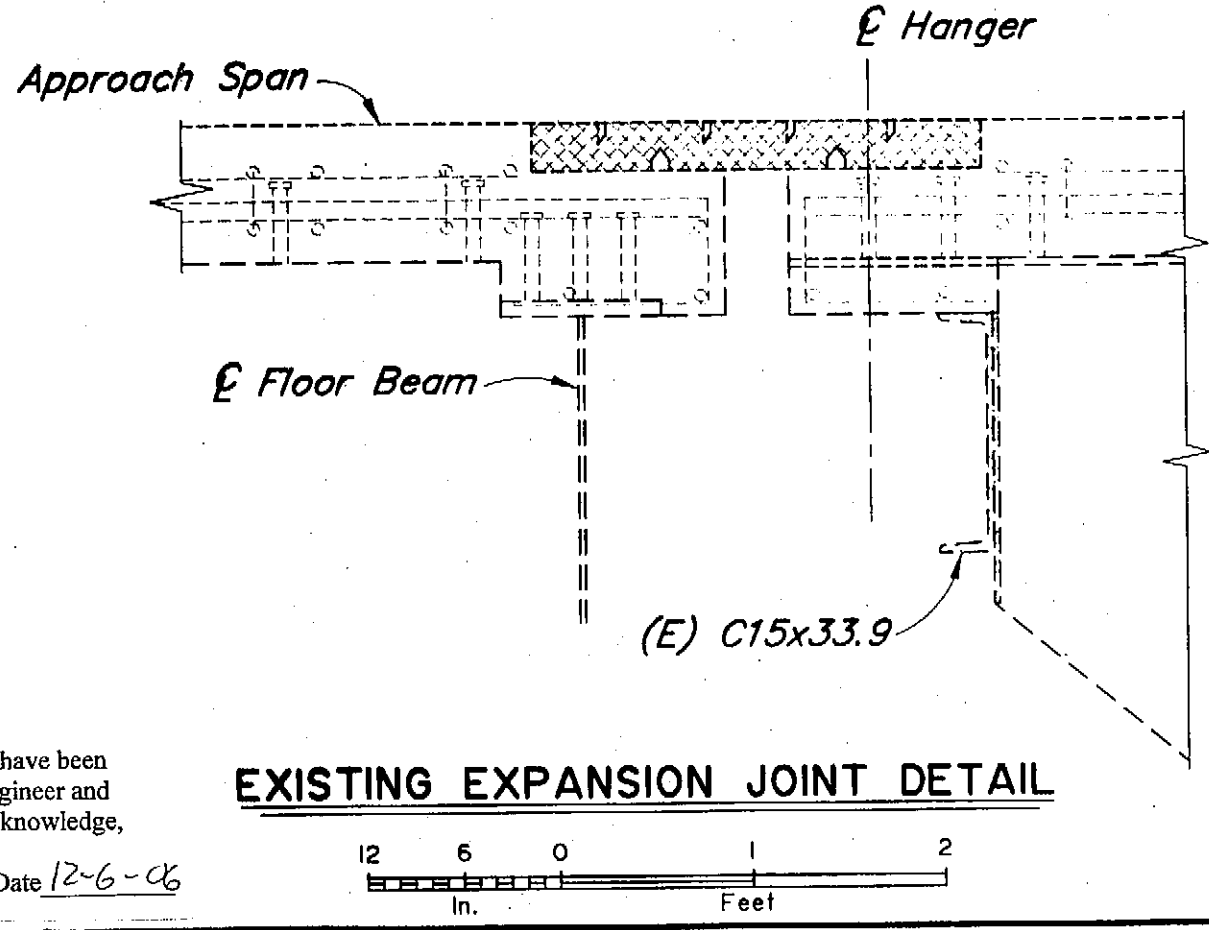
SITKA HARBOR BRIDGE
HARBOR DRIVE
STEEL JACKET RETROFIT



BRIDGE NO. 245
DWG. NO. 9



REVISIONS				
No.	Date	By	Description	
1	1-23-04	RWM	Added Note	
2	1-23-04	RWM	Moved Note	



NOTES:

(E) = Existing

--- = Existing

--- = Denotes this contract

Elevations, Bearings and Dimensions are based on "AS-BUILT" plans. Verify all controlling field dimensions before ordering or fabricating any material.

SEISMIC RETROFIT

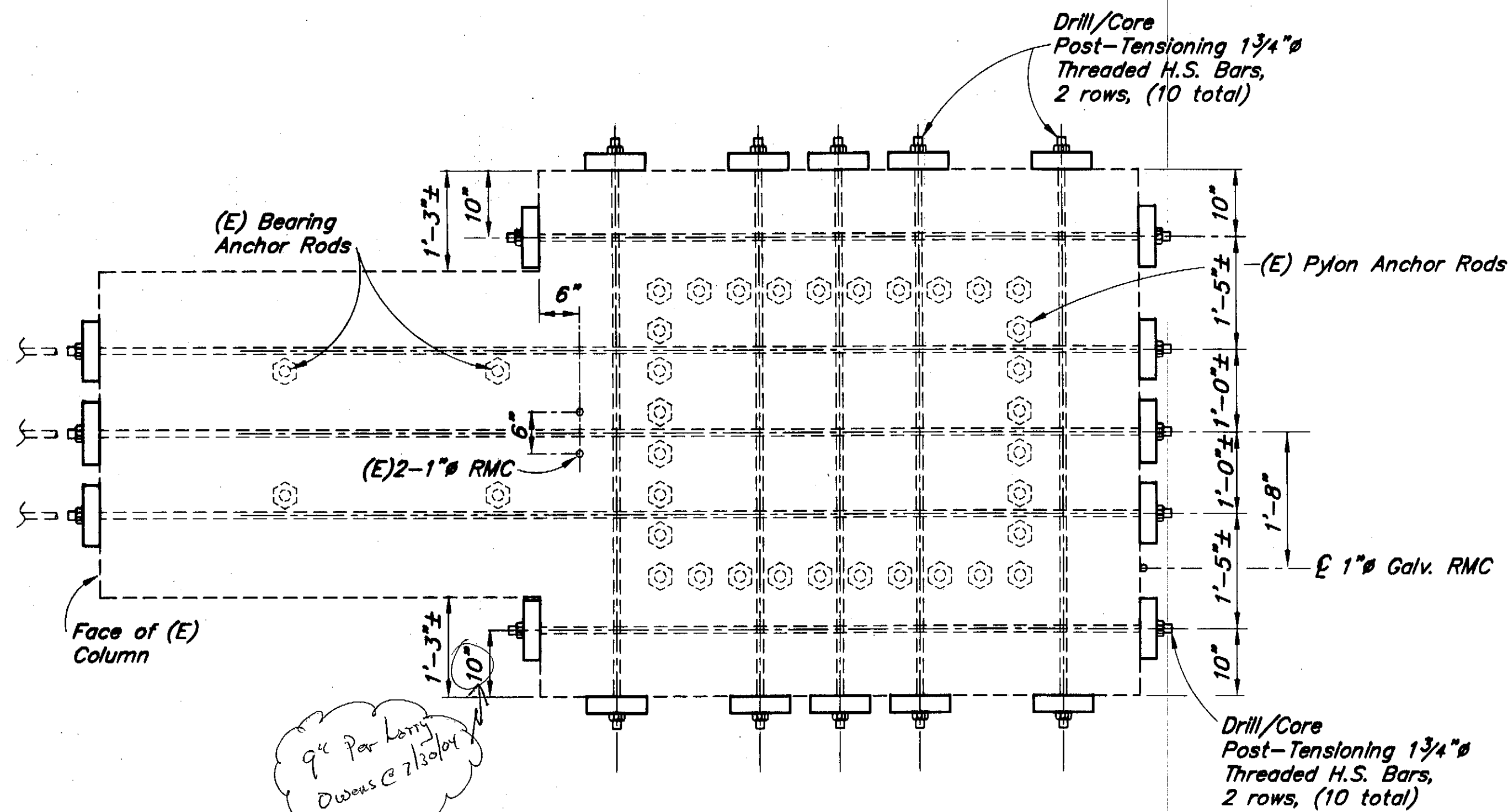
DESIGNED BY: Rob Miller	CHECKED: George Imbsen
DRAWN BY: Sam Soffe	CHECKED: Rob Miller
QUANTITIES BY: George Imbsen	CHECKED: Rob Miller

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
BRIDGE SECTION

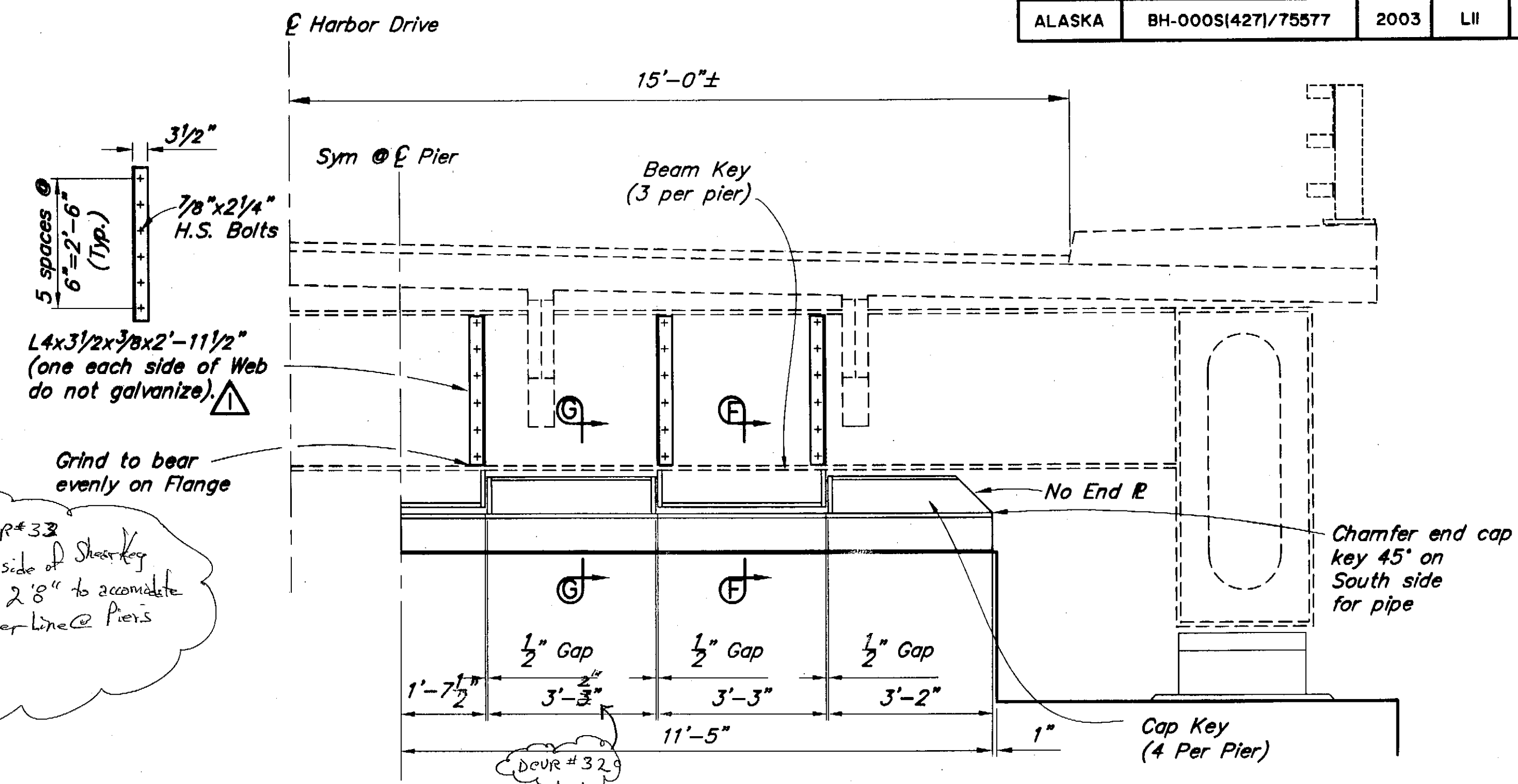


SITKA HARBOR BRIDGE
HARBOR DRIVE
PIERS 4 & 7 DETAILS

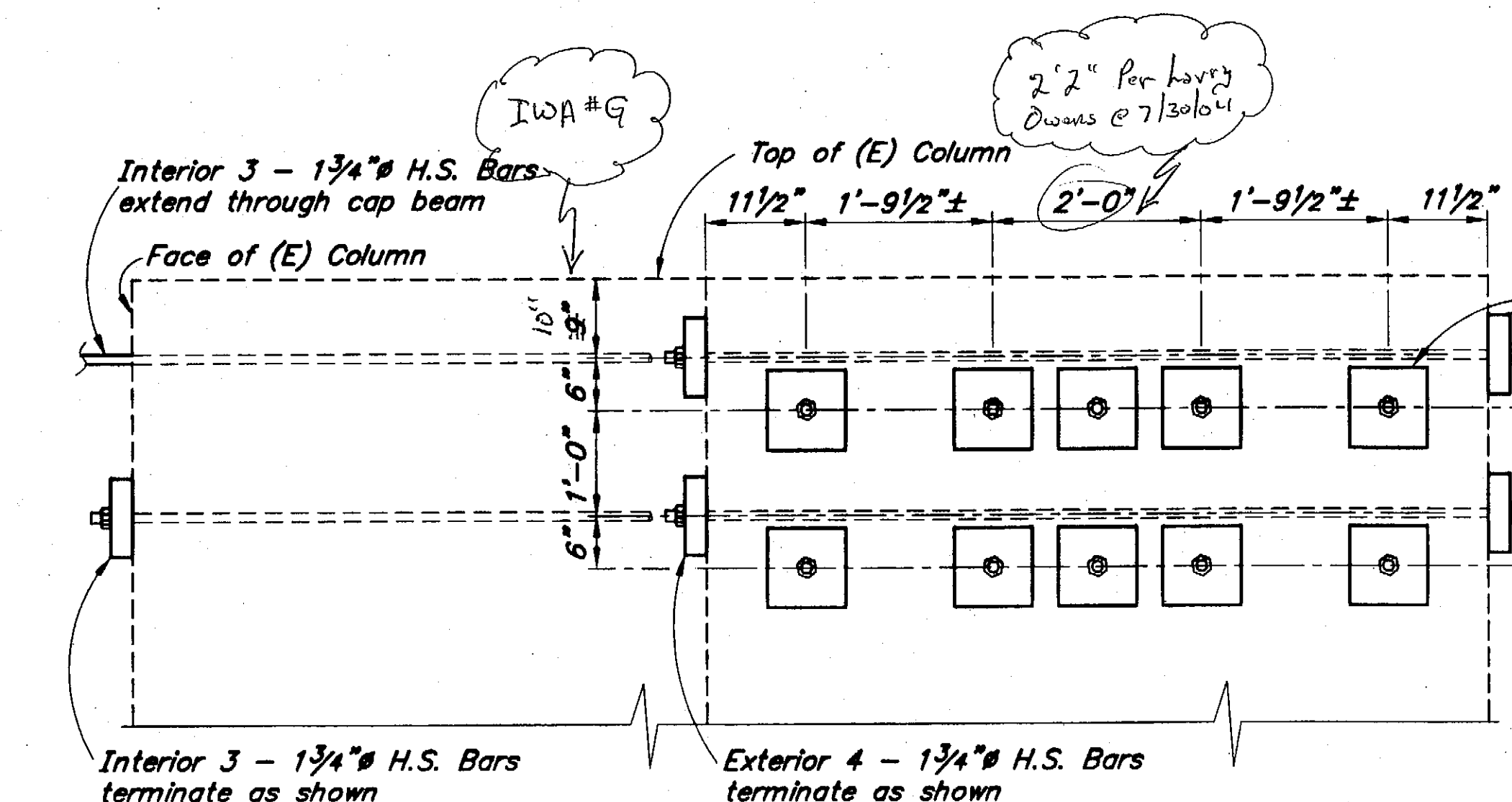
BRIDGE NO. 245
DWG. NO. 10



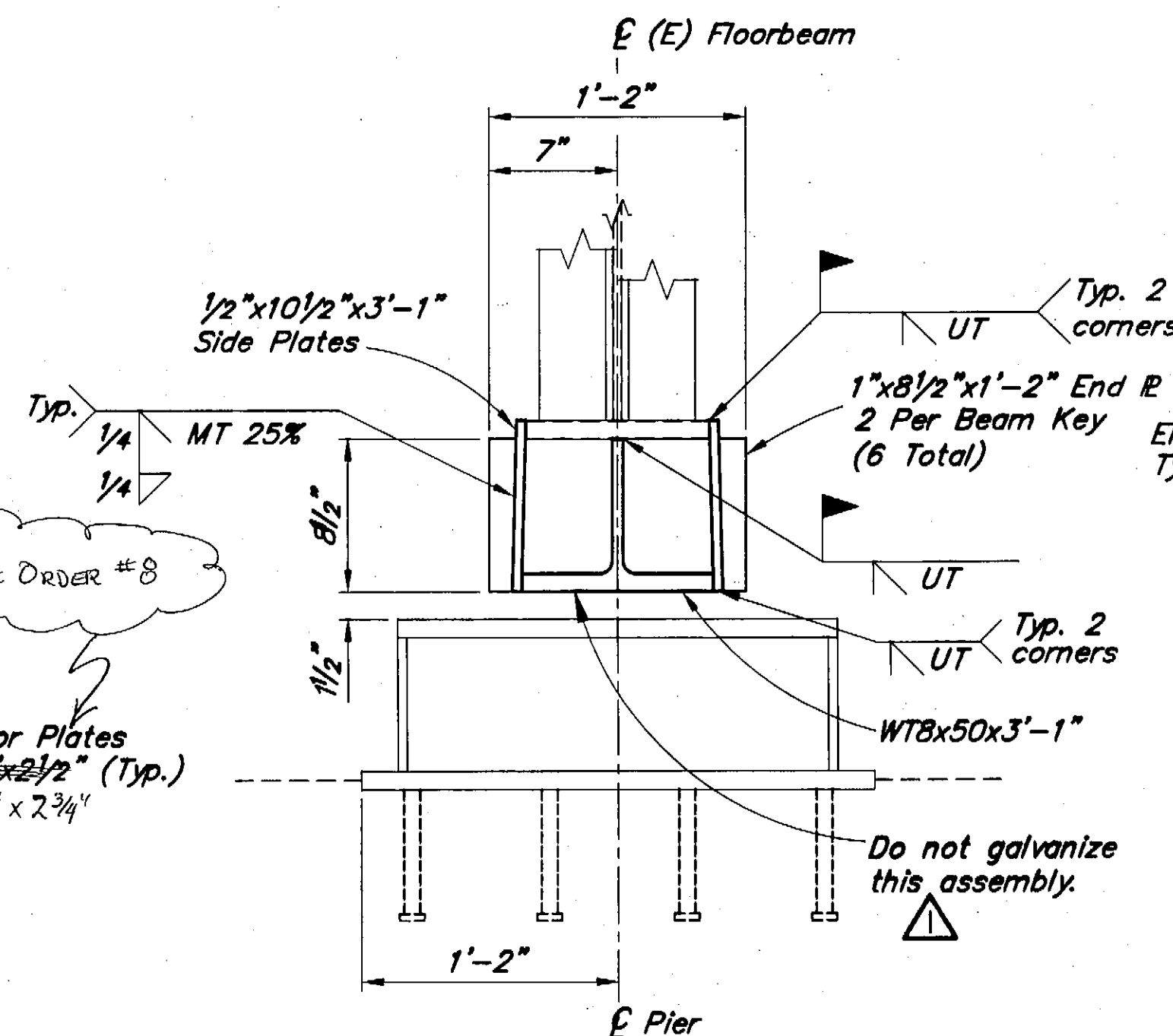
SECTION D-D
(Reference Piers 5 & 6 Sheet)



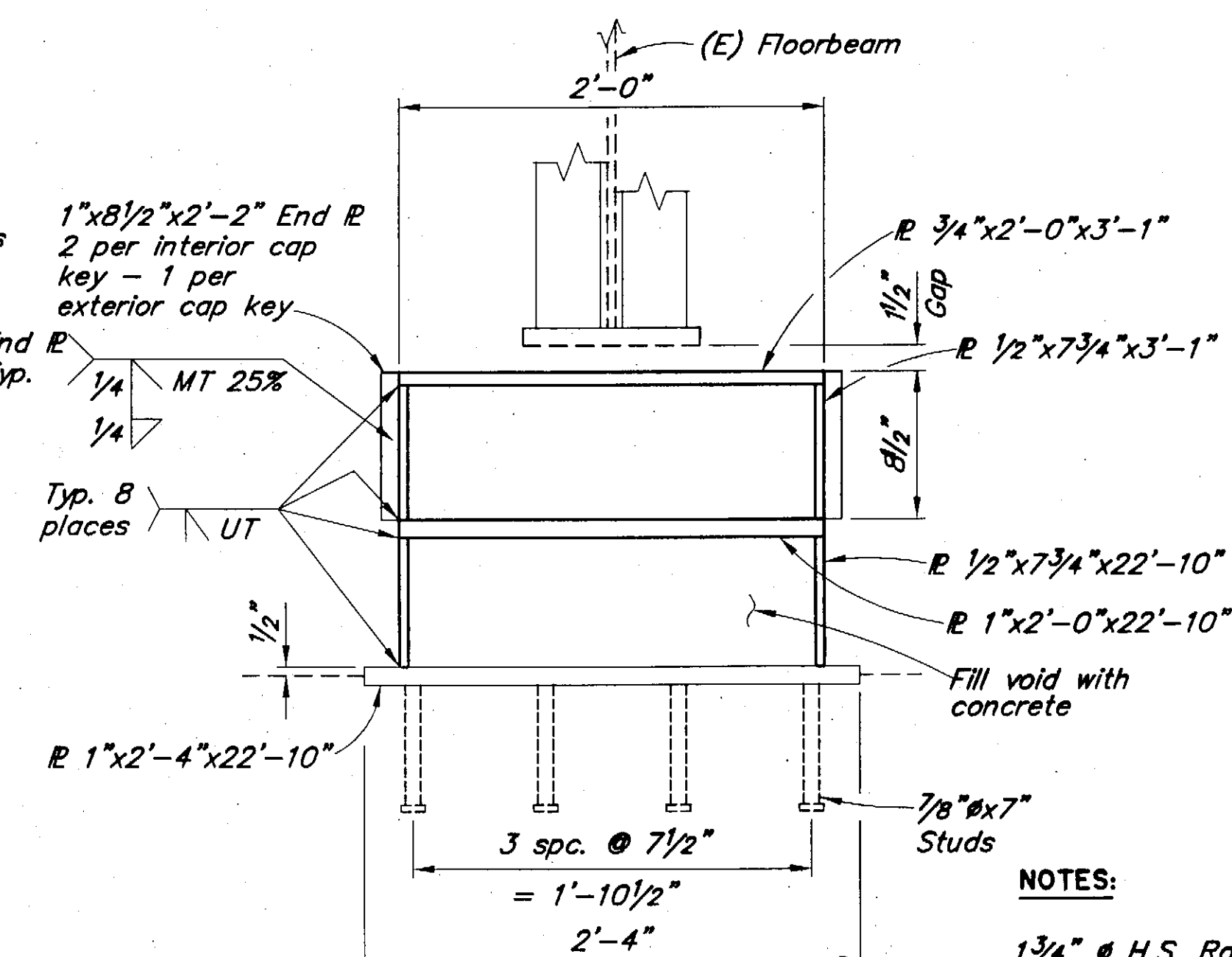
ELEVATION VIEW OF SHEAR KEYS



ELEVATION



SECTION F-F



SECTION G-G

(Galvanize all steel in this assembly)

NOTES:

1 3/4" # H.S. Rods shall be galvanized ASTM A722. Stress 1 3/4" # H.S. Rods to 280k after concrete has obtained 75% f'c. Rods shall be bonded throughout entire length.

(E) = Existing

--- = Existing

— = Denotes this contract

SEISMIC RETROFIT

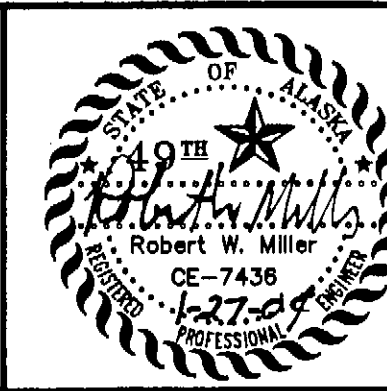
REVISIONS				
No.	Date	By	Description	
1	1-23-04	RWM	Added Note	

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
Proj. Eng. *[Signature]* Date 12-6-06

Elevations, Bearings and Dimensions are based on "AS-BUILT" plans. Verify all controlling field dimensions before ordering or fabricating any material.

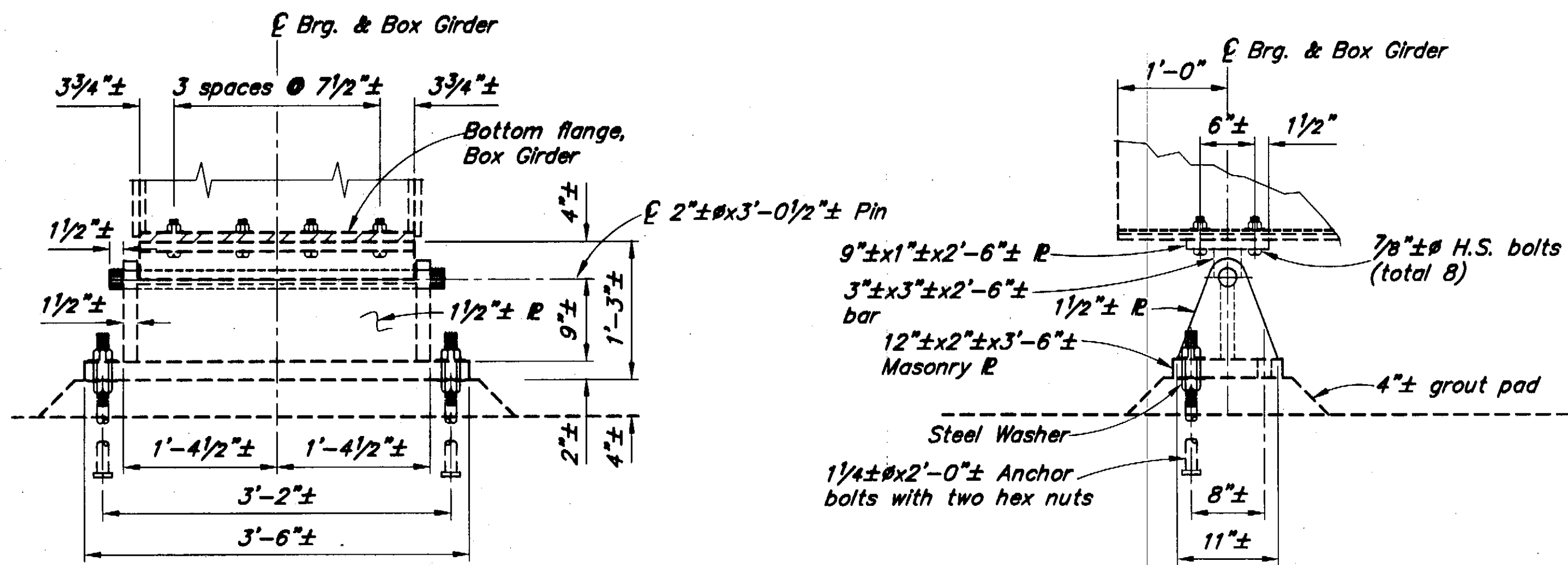
DESIGNED BY: <i>Rob Miller</i>	CHECKED: <i>George Imbsen</i>
DRAWN BY: <i>Sam Saffie</i>	CHECKED: <i>Rob Miller</i>
QUANTITIES BY: <i>George Imbsen</i>	CHECKED: <i>Rob Miller</i>

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
BRIDGE SECTION

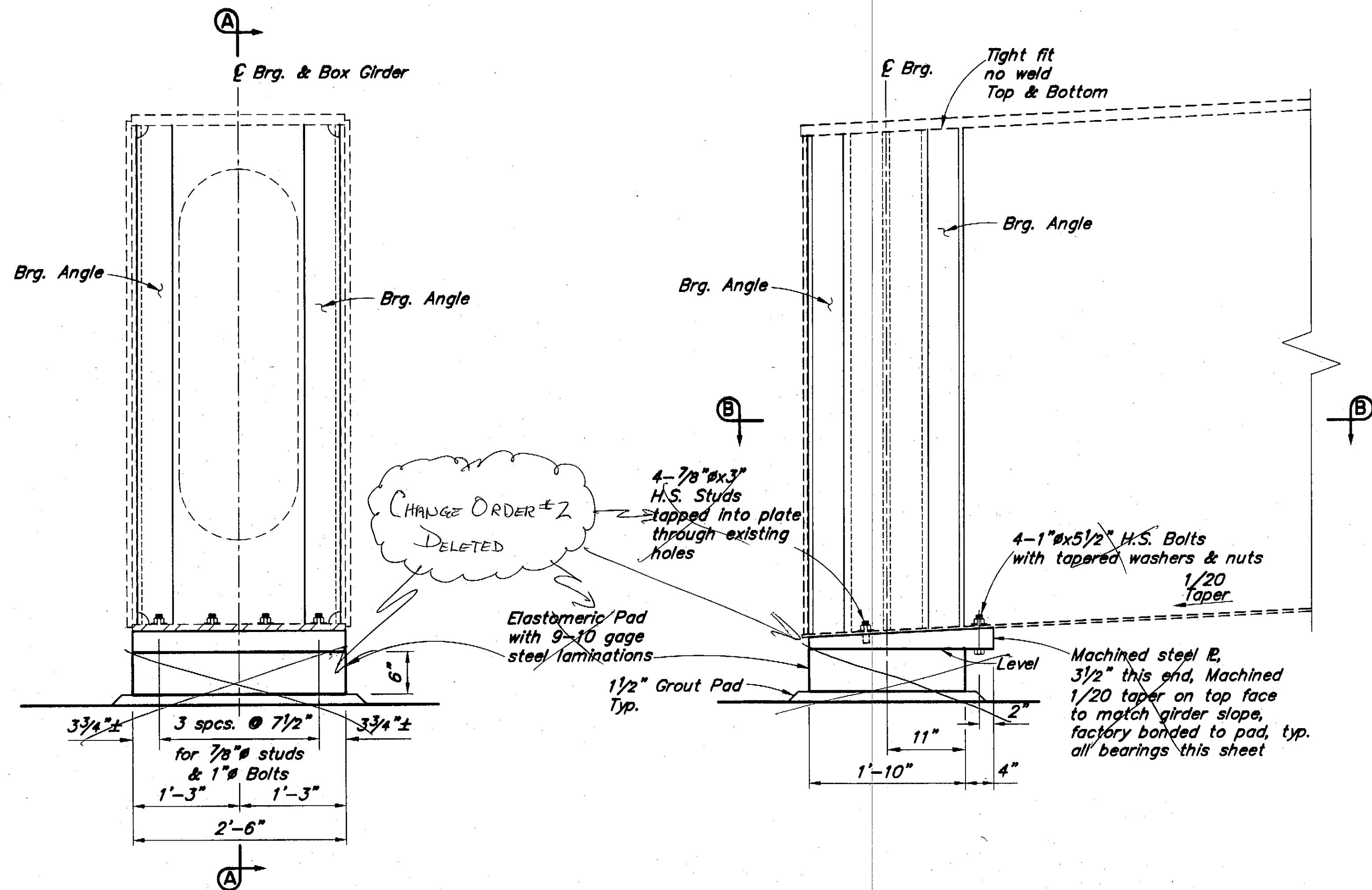
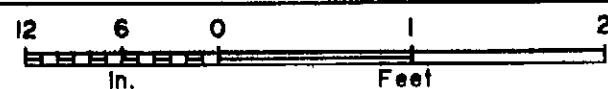


SITKA HARBOR BRIDGE
HARBOR DRIVE
PIERS 5 & 6 DETAILS

BRIDGE NO. 245
DWG. NO. II



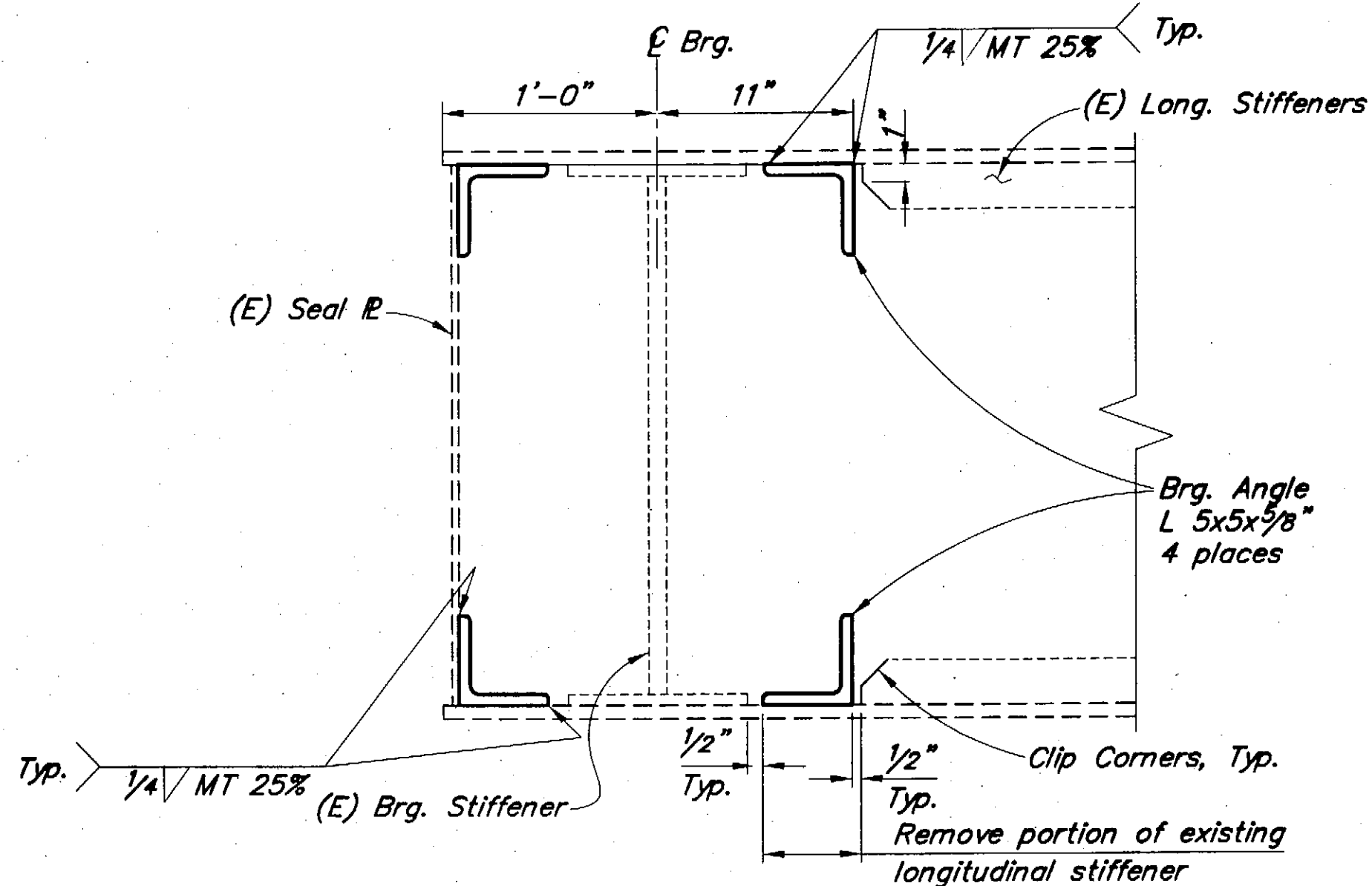
EXISTING
FIXED BEARINGS AT ABUTMENT 1 & 8



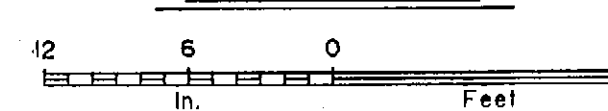
THIS CONTRACT
ABUTMENTS 1 SHOWN, ABUTMENT 8 SIMILAR



SECTION A-A



SECTION B-B



NOTES:

- (E) = Existing
- = Existing
- = Denotes this contract

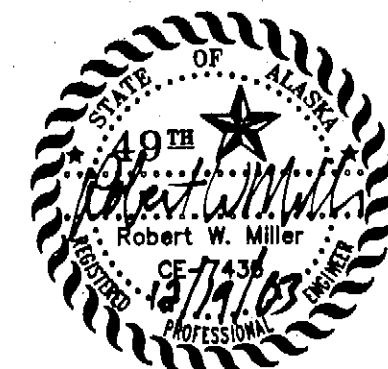
Elevations, Bearings and Dimensions are based on "AS-BUILT" plans. Verify all controlling field dimensions before ordering or fabricating any material.

SEISMIC RETROFIT

BEARING MOVEMENT TABLE		
Location	Movement for each 10° change in Temperature for existing Bearings	Movement for each 10° change in Temperature for Bearings this contract
Abutment 1	0	5/32"
Pier 2	3/32"	1/32"
Pier 3	3/16"	1/16"
Pier 4	1/8"	9/32" (*5/32")
Pier 5	0	3/16"
Pier 6	3/8"	3/16"
Pier 7	1/2"	9/32" (*1/32")
Abutment 8	0	1/16"

* At end of hanging span

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
Proj. Eng. *[Signature]* Date 12-6-06



STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
BRIDGE SECTION

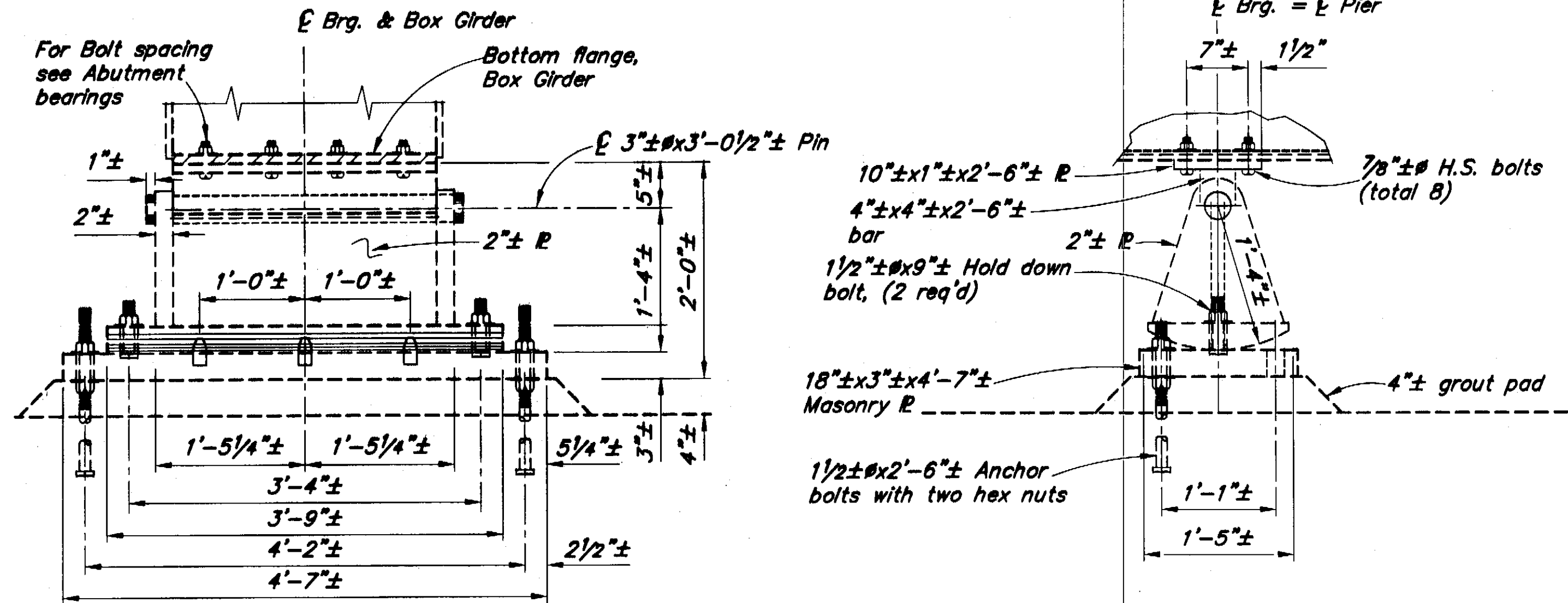
SITKA HARBOR BRIDGE
HARBOR DRIVE
BEARING DETAILS - ABUTMENTS 1 & 8



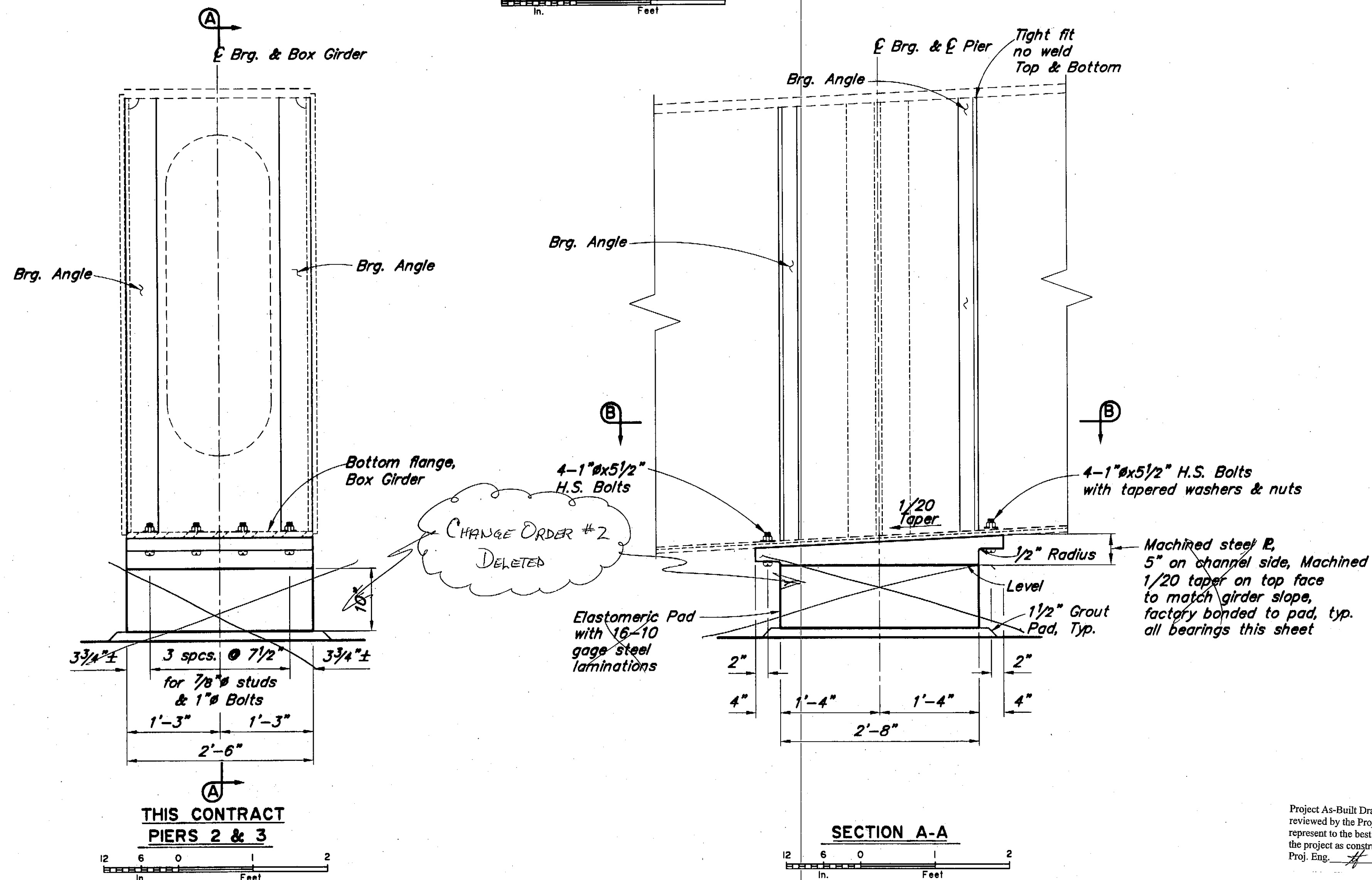
BRIDGE NO. 245
DWG. NO. 12

DESIGNED BY: *Rob Miller*
CHECKED: *George Imbsen*
DRAWN BY: *Sam Solis*
CHECKED: *Rob Miller*
QUANTITIES BY: *George Imbsen*
CHECKED: *Rob Miller*

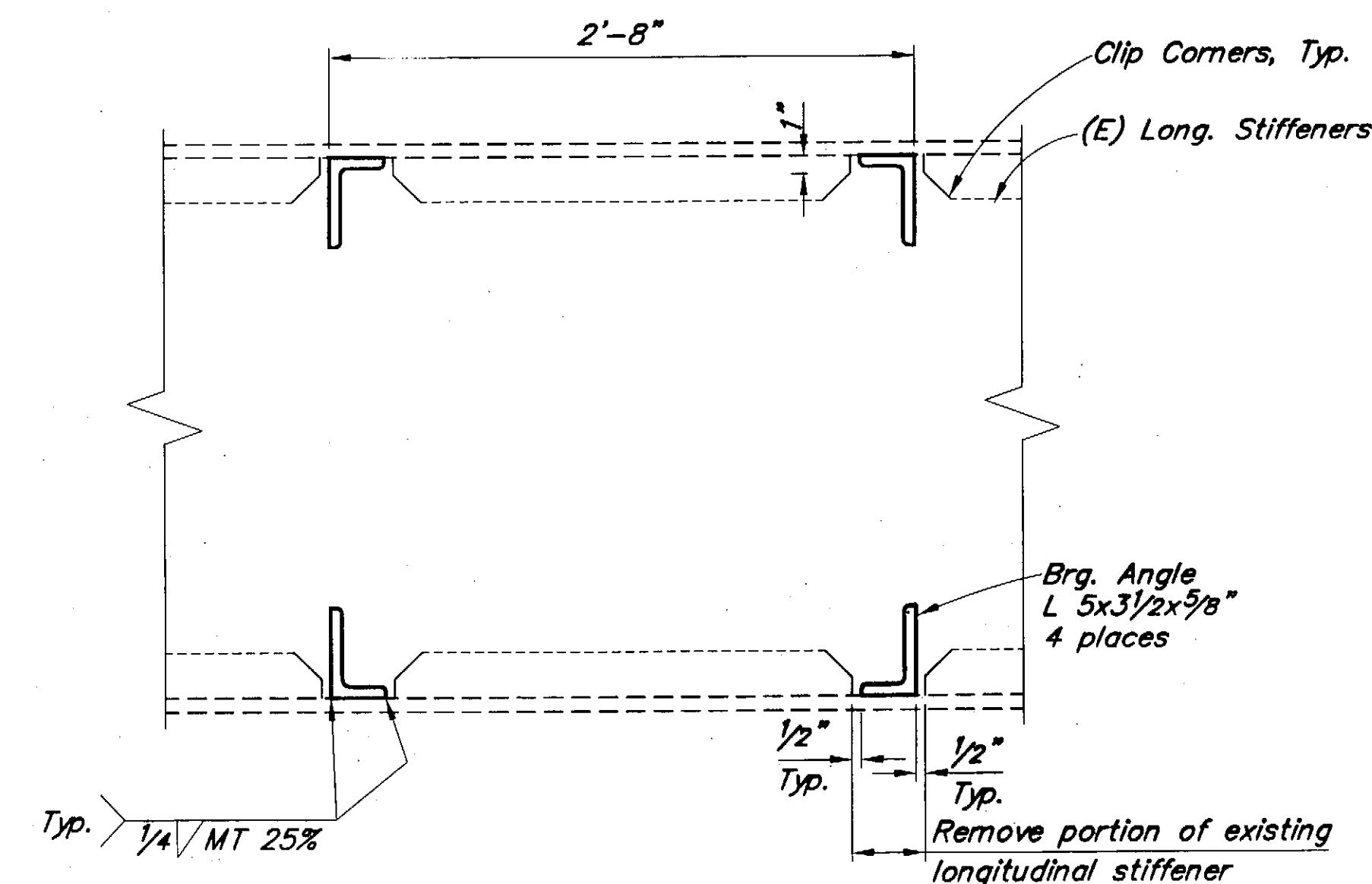
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BH-0005(427)/75577	2003	L13	29



EXISTING
EXPANSION BEARINGS AT PIERS 2 & 3



THIS CONTRACT
PIERS 2 & 3



SECTION B-B

NOTES:

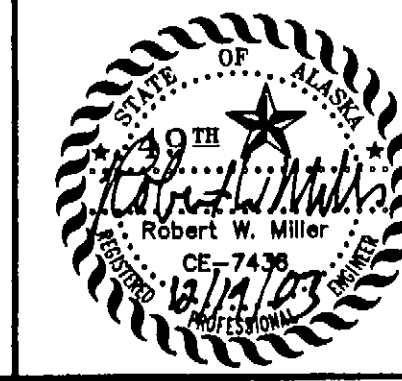
- (E) = Existing
- = Existing
- = Denotes this contract

Elevations, Bearings and Dimensions are based on "AS-BUILT" plans. Verify all controlling field dimensions before ordering or fabricating any material.

SEISMIC RETROFIT

DESIGNED BY: Rob Miller	CHECKED: George Imbsen
DRAWN BY: Sam Sallie	CHECKED: Rob Miller
QUANTITIES BY: George Imbsen	CHECKED: Rob Miller

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
BRIDGE SECTION

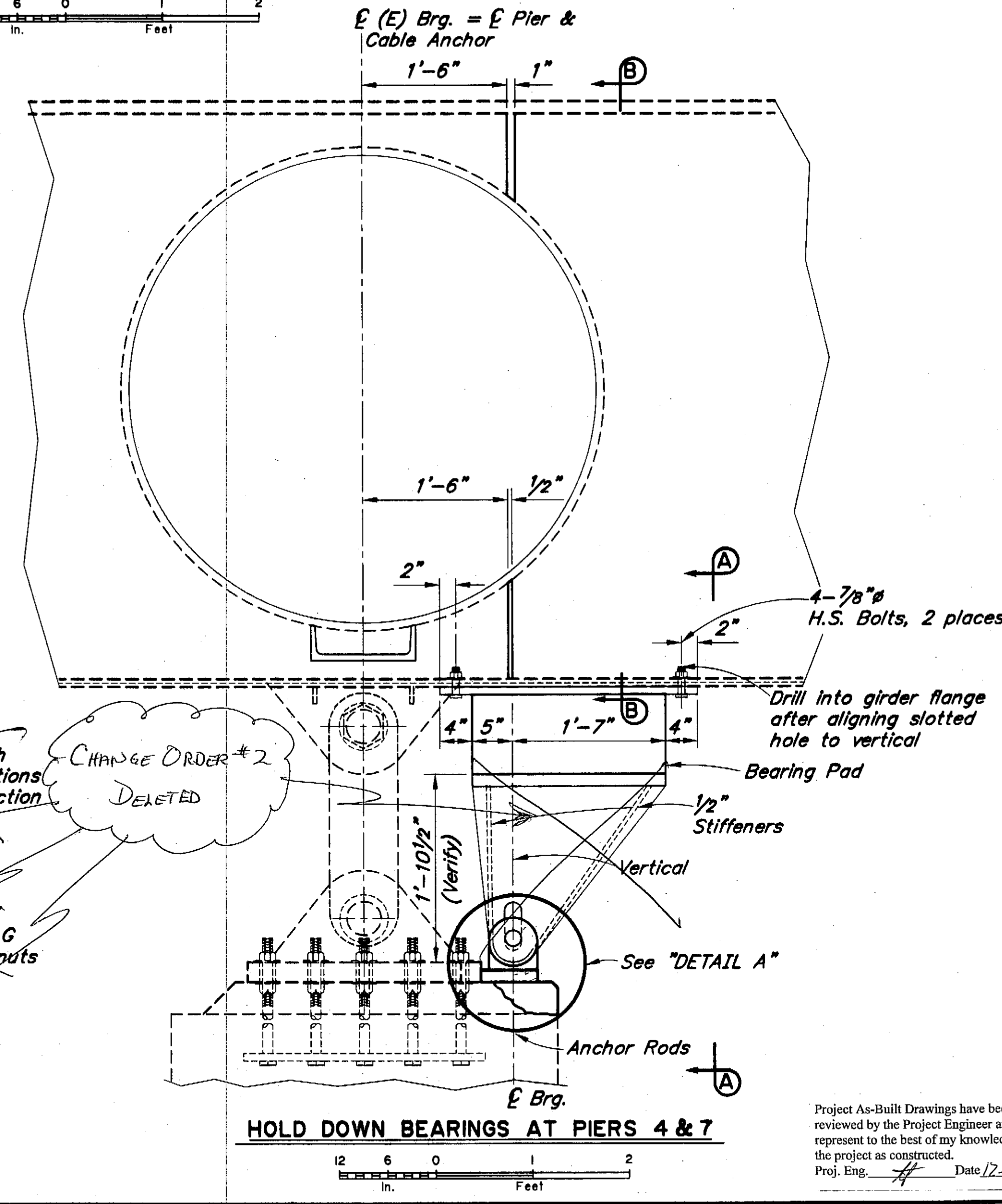
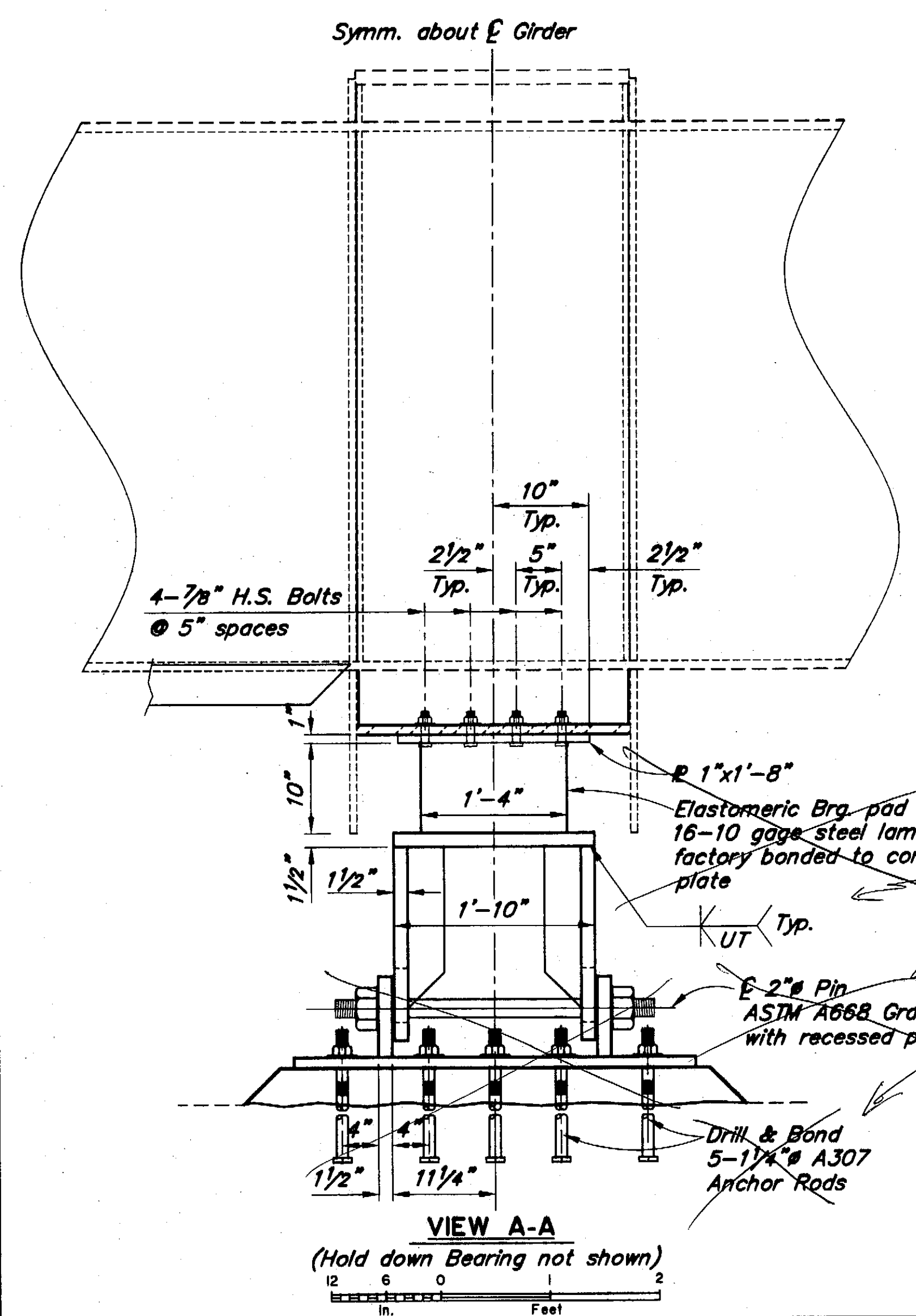
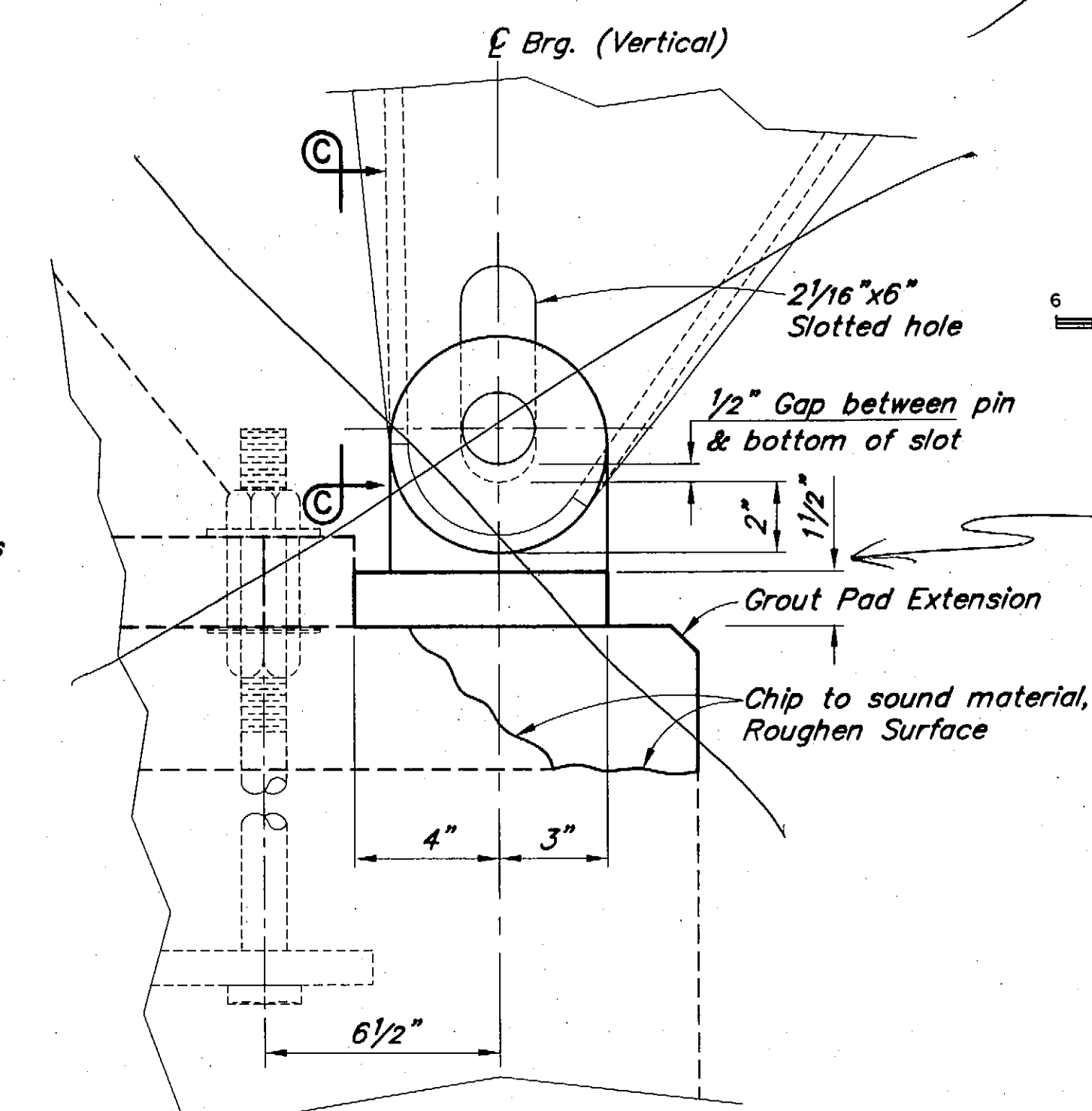
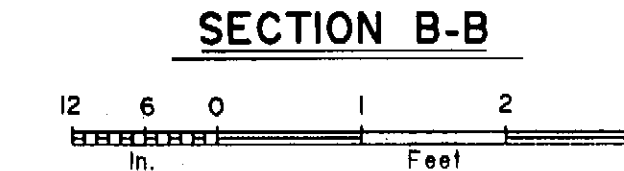
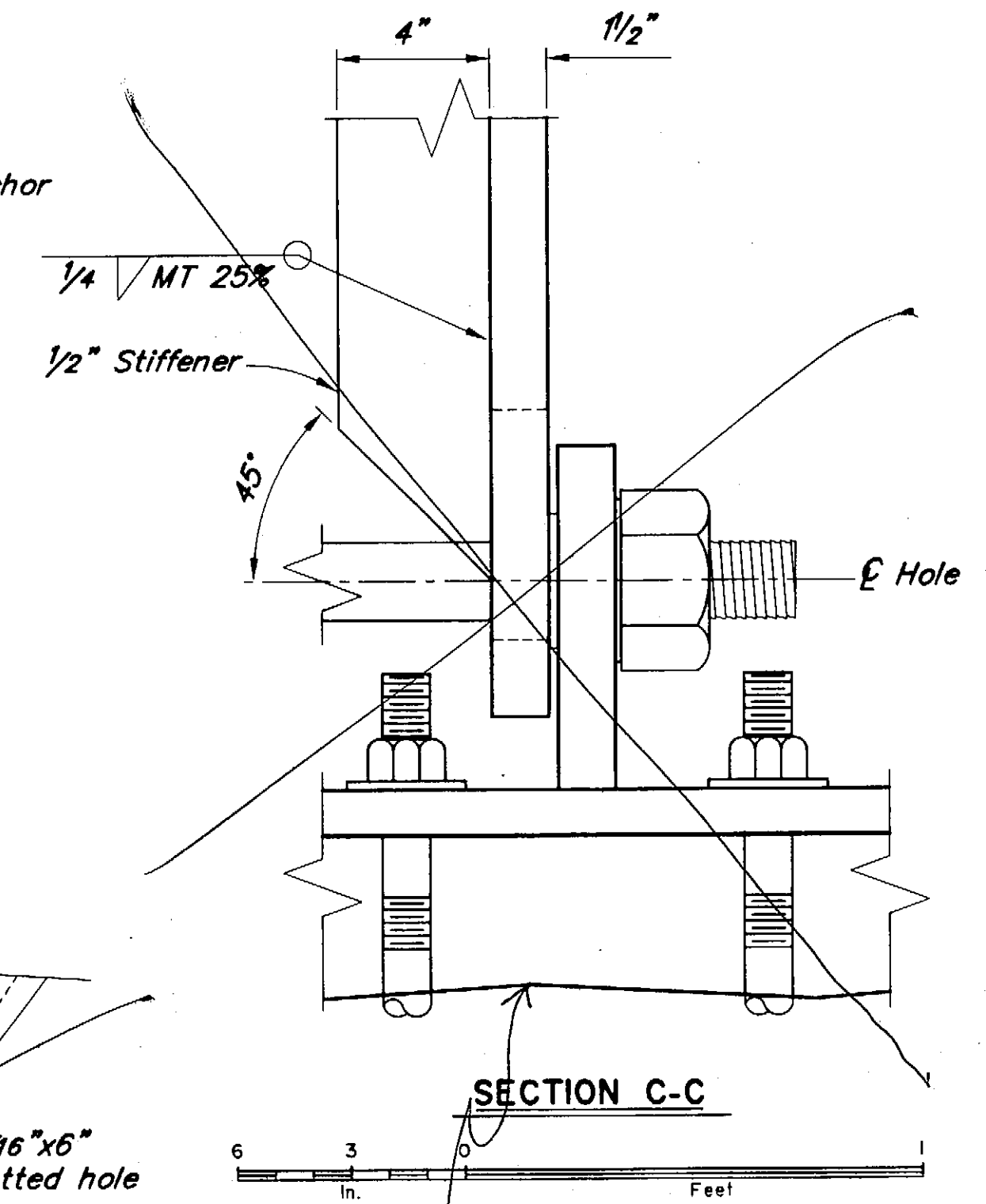
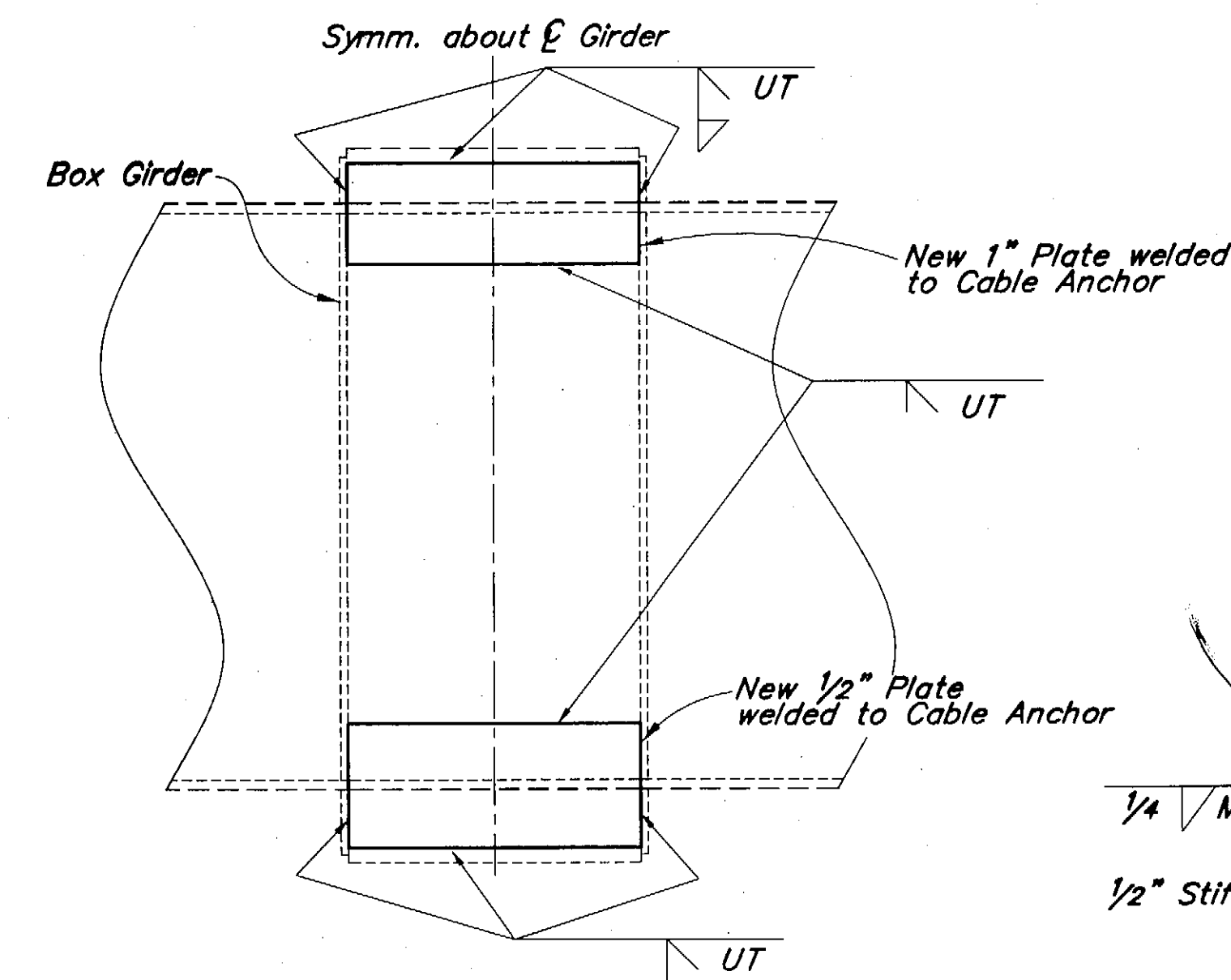
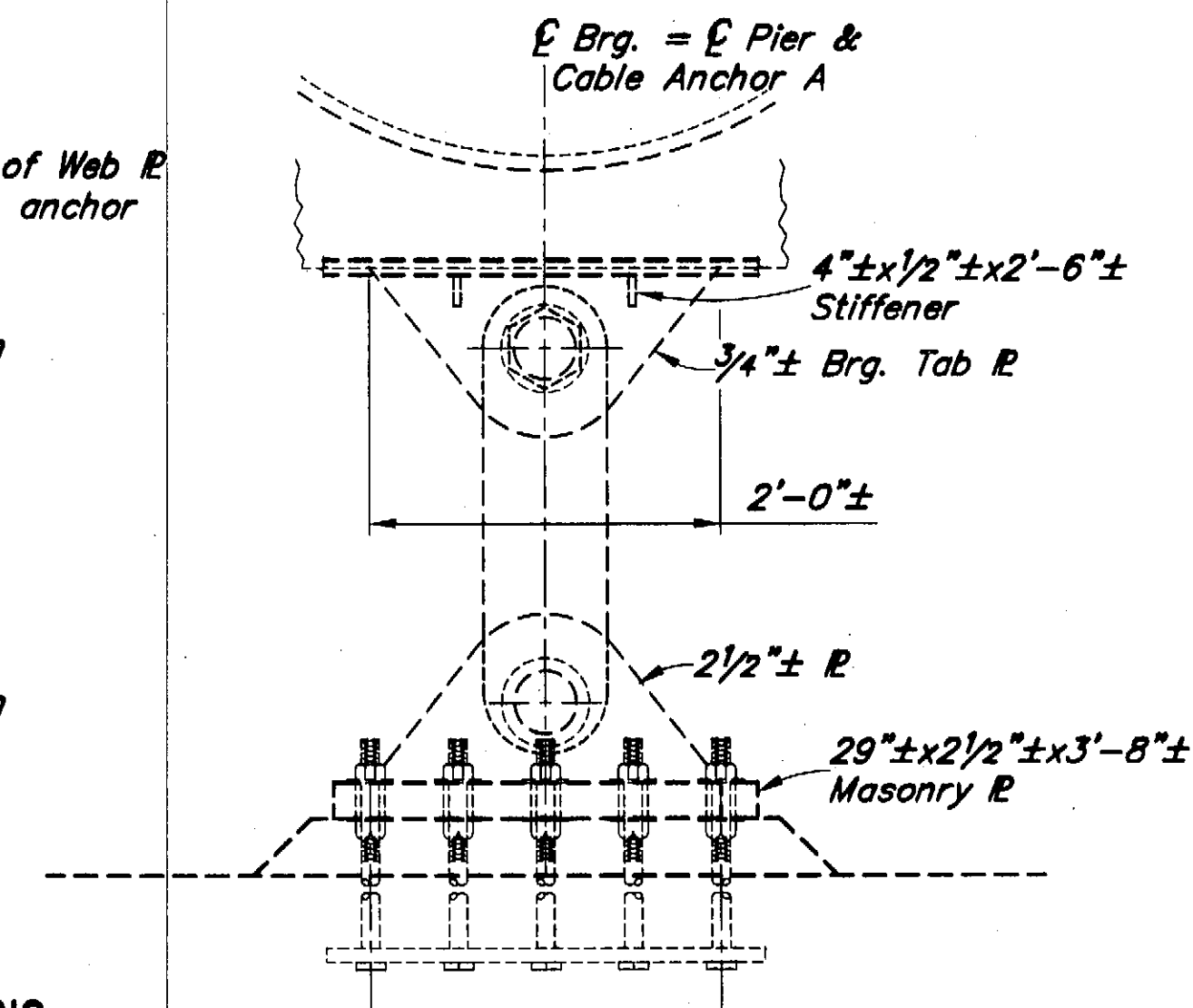
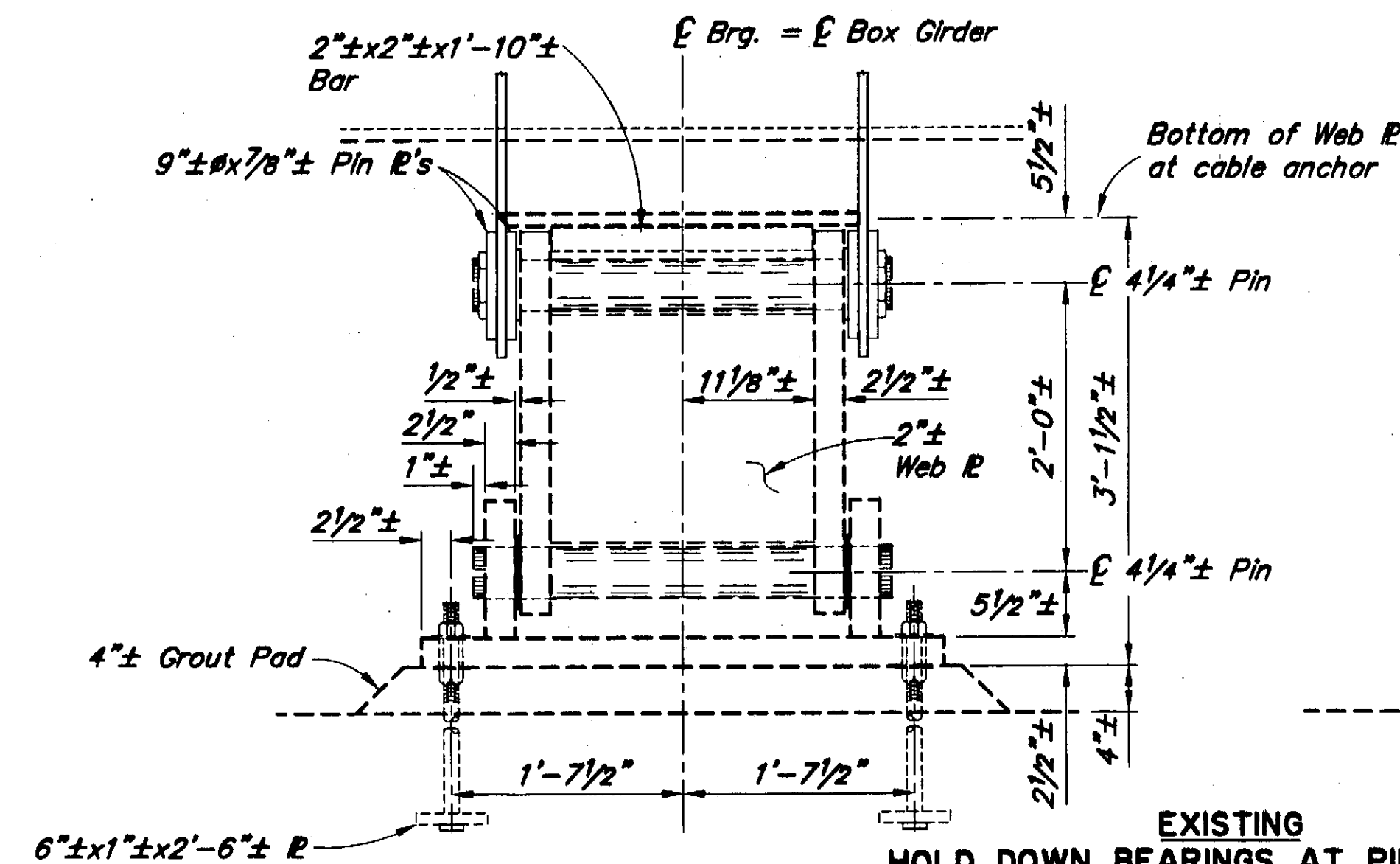


SITKA HARBOR BRIDGE
HARBOR DRIVE
BEARING DETAILS - PIERS 2 & 3



BRIDGE NO. 245
DWG. NO. 13

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BH-000S(427)/75577	2003	L14	29



NOTES:
(E) = Existing
--- = Existing
— = Denotes this contract

Elevations, Bearings and Dimensions are based on "AS-BUILT" plans. Verify all controlling field dimensions before ordering or fabricating any material.

SEISMIC RETROFIT

DESIGNED BY: <i>Rob Miller</i>	CHECKED: <i>George Imbse</i>
DRAWN BY: <i>Sarn Solite</i>	CHECKED: <i>Rob Miller</i>
QUANTITIES BY: <i>George Imbse</i>	CHECKED: <i>Rob Miller</i>

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
BRIDGE SECTION



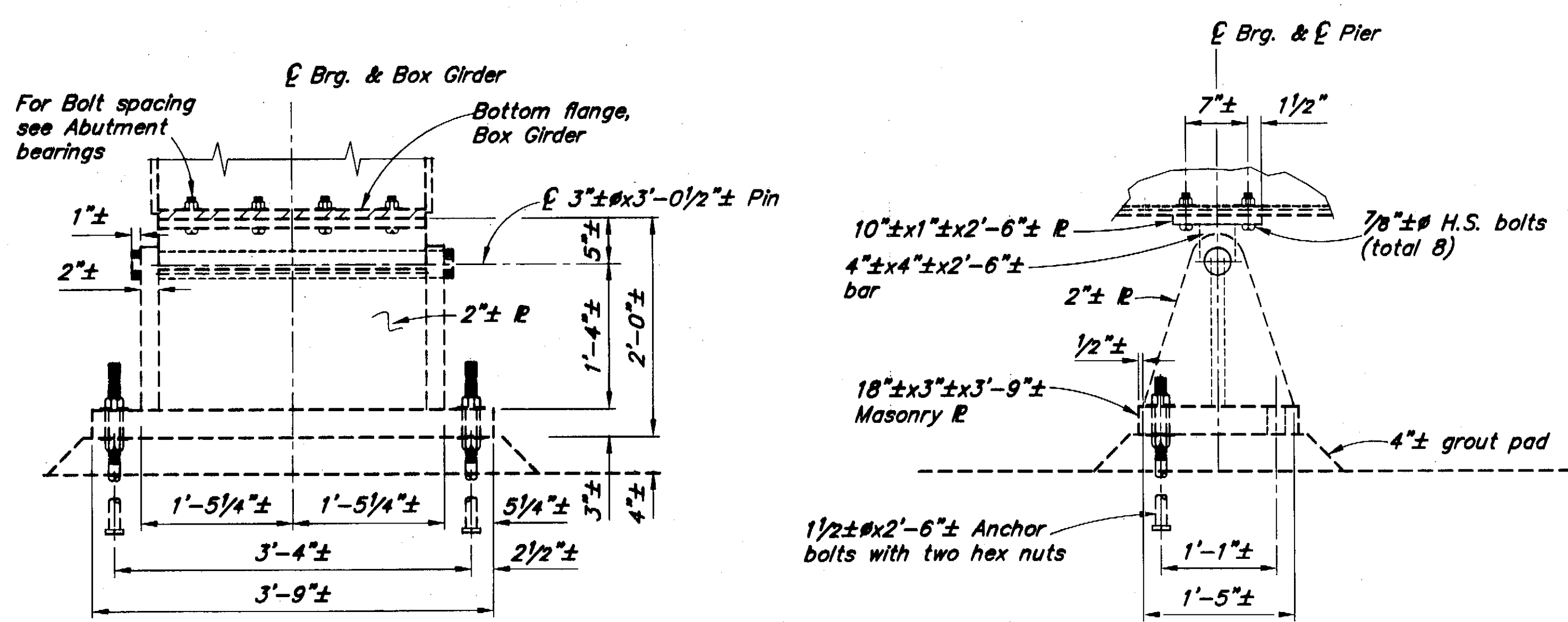
SITKA HARBOR BRIDGE
HARBOR DRIVE
BEARING DETAILS - PIERS 4 & 7



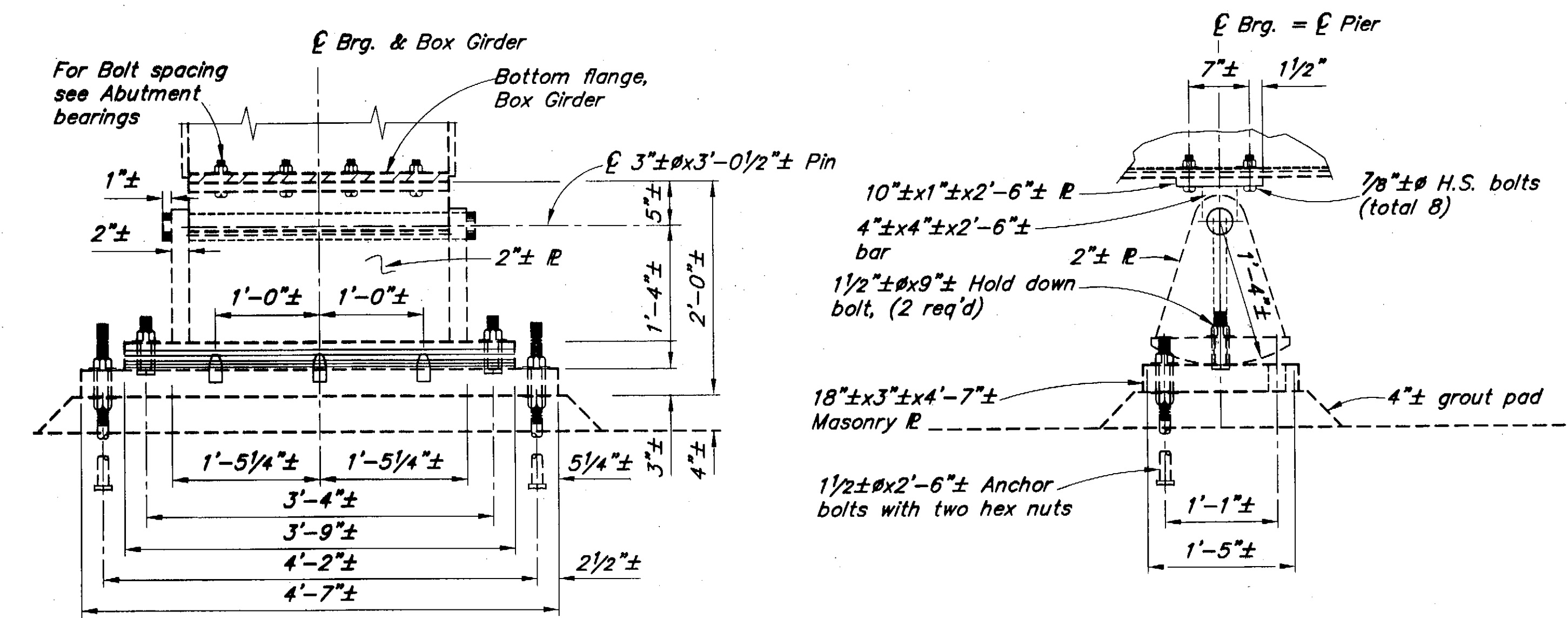
BRIDGE NO. 245

DWG. NO. 14

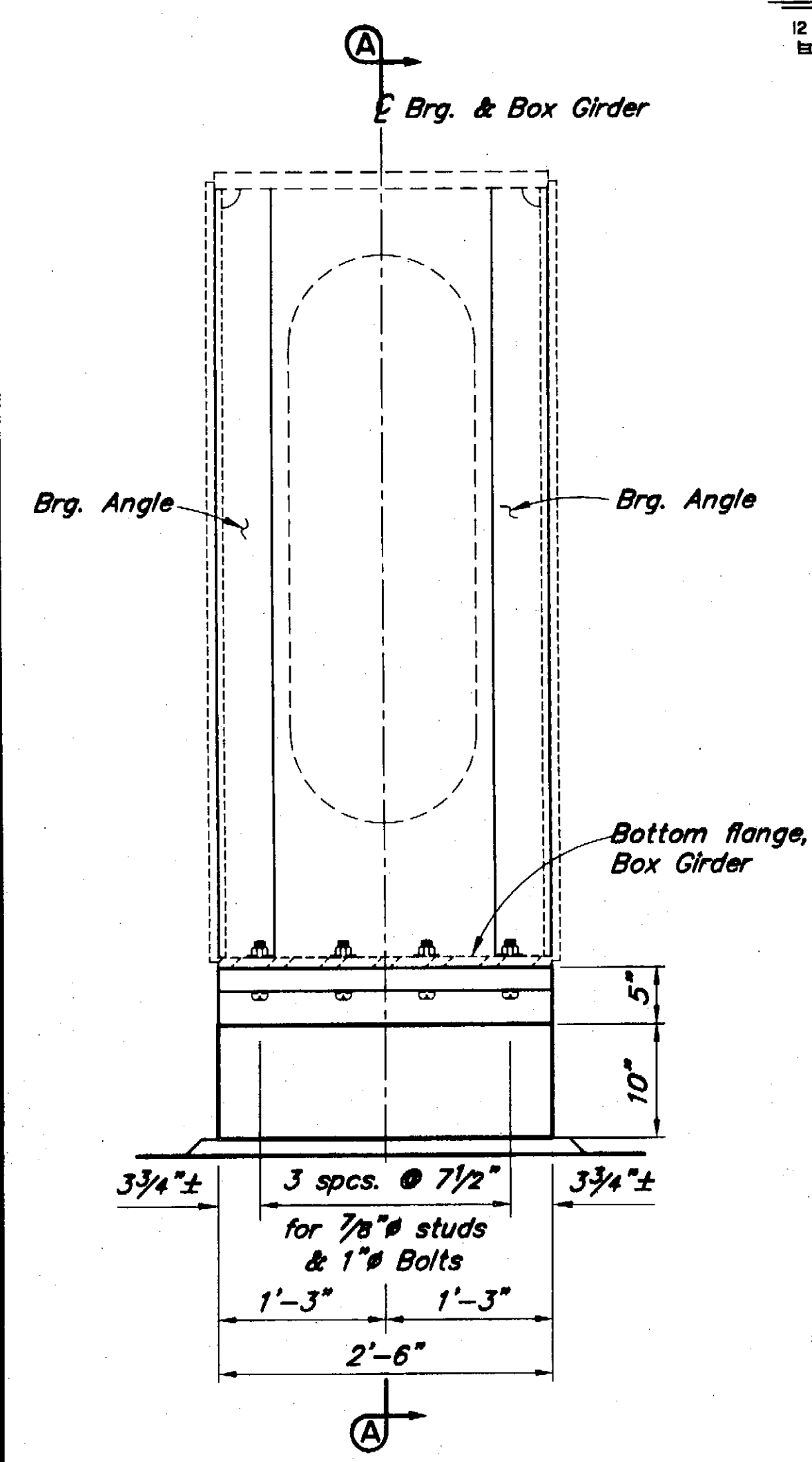
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BH-000S(427)/75577	2003	L15	29



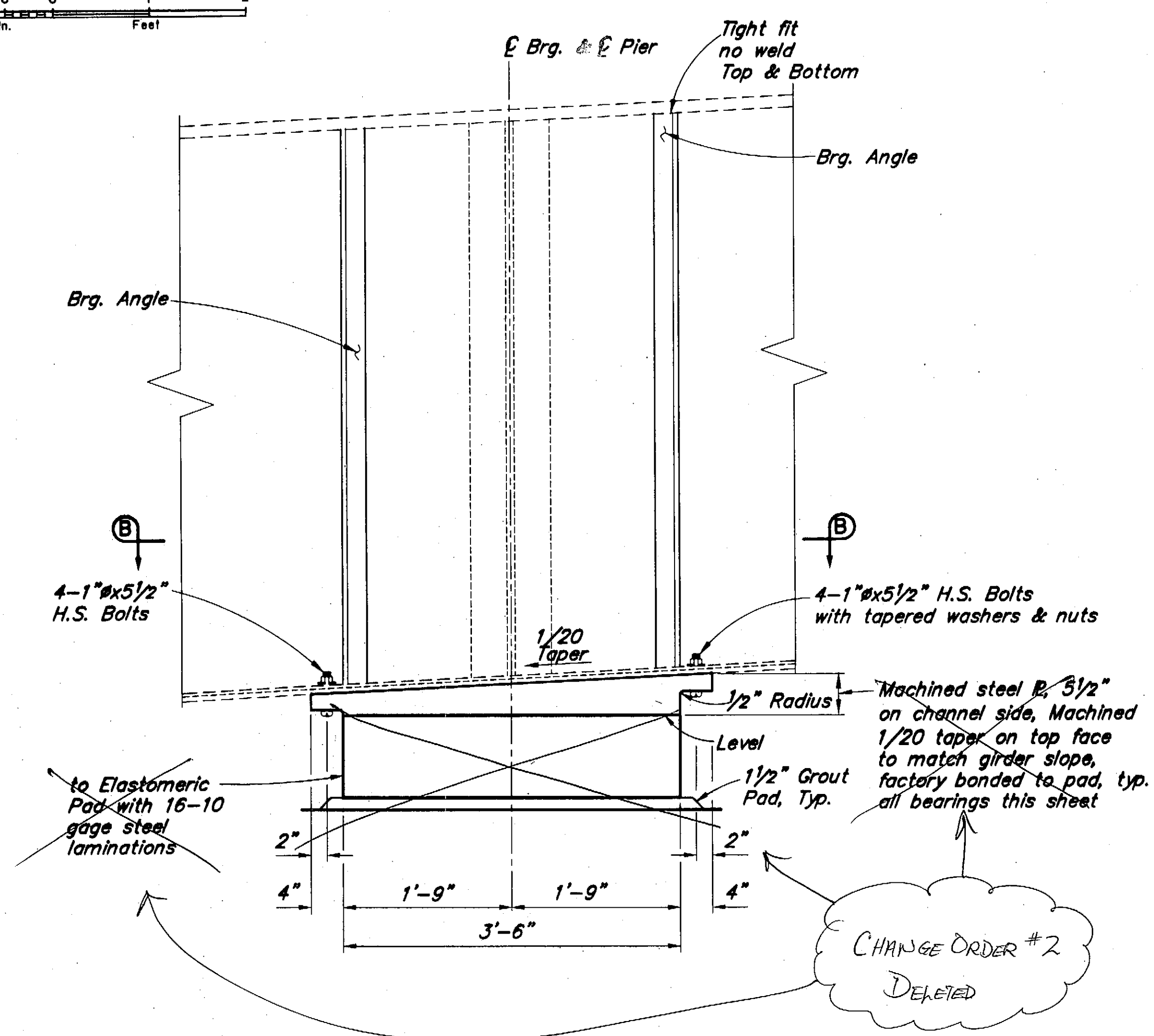
EXISTING
FIXED BEARINGS AT PIER 5



EXISTING
EXPANSION BEARINGS AT PIER 6



THIS CONTRACT
PIERS 5 & 6



SECTION B-B

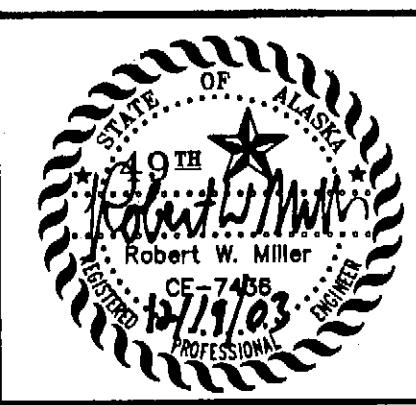
NOTES:
(E) = Existing
--- = Existing
— = Denotes this contract

Elevations, Bearings and Dimensions are based on "AS-BUILT" plans. Verify all controlling field dimensions before ordering or fabricating any material.

SEISMIC RETROFIT

DESIGNED BY: Rob Miller	CHECKED: George Imbse
DRAWN BY: Sam Sallie	CHECKED: Rob Miller
QUANTITIES BY: George Imbse	CHECKED: Rob Miller

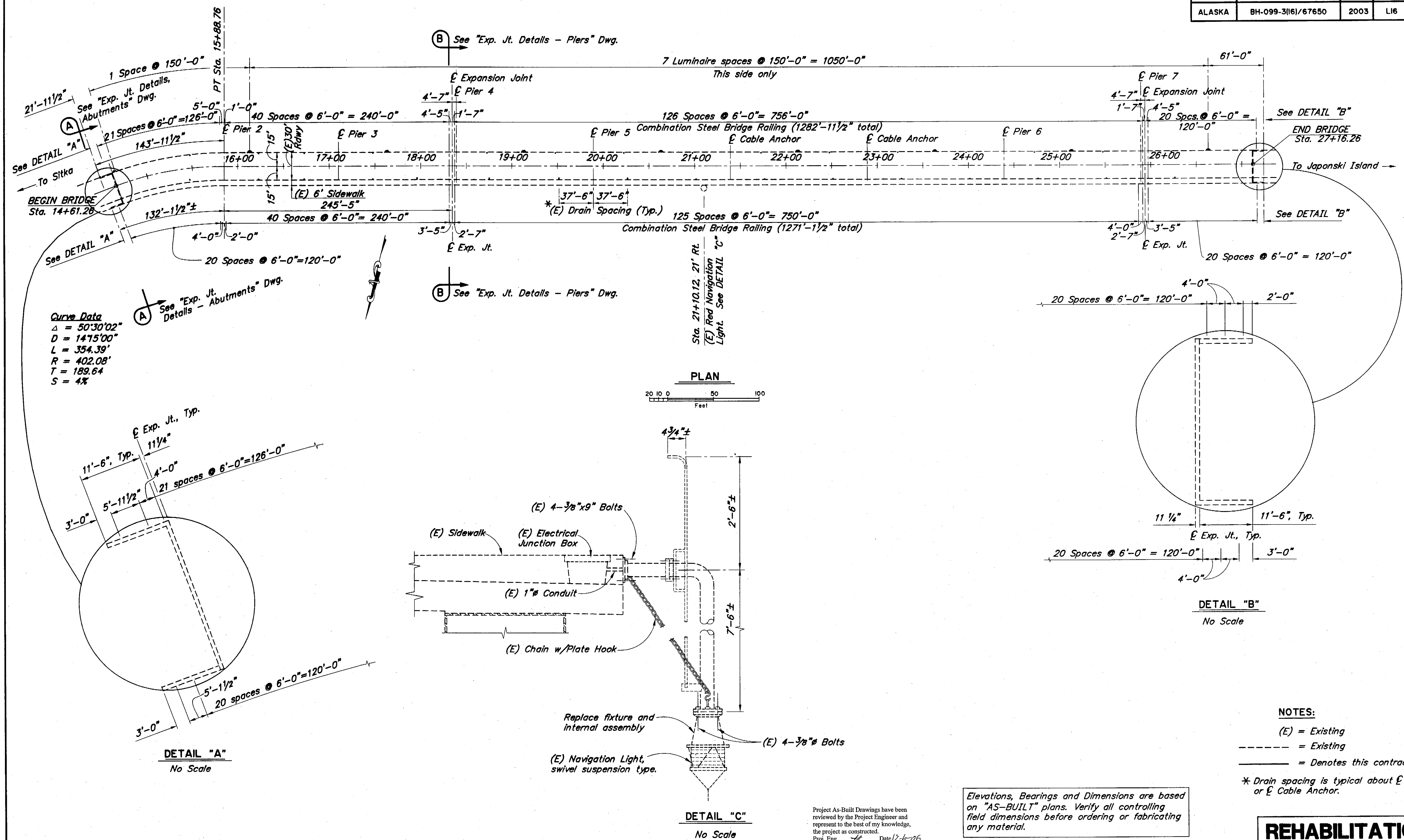
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
BRIDGE SECTION



SITKA HARBOR BRIDGE
HARBOR DRIVE
BEARING DETAILS - PIERS 5 & 6

BRIDGE NO. 245
DWG. NO. 15

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BH-099-3(16)/67650	2003	L16	29



Elevations, Bearings and Dimensions are based on "AS-BUILT" plans. Verify all controlling field dimensions before ordering or fabricating any material.

NOTES:

(E) = Existing

----- = Existing

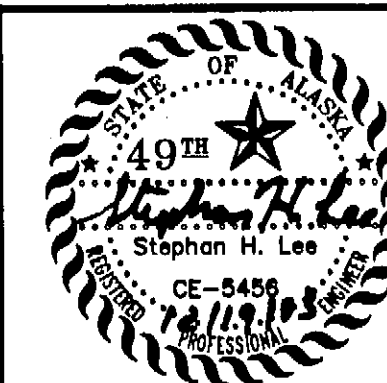
————— = Denotes this contract

* Drain spacing is typical about £ Pier
or £ Cable Anchor.

REHABILITATION

DESIGNED BY: Steve Lee	CHECKED: George Imboden
DRAWN BY: Leonard Robertson	CHECKED: Steve Lee
QUANTITIES BY: Steve Lee	CHECKED: George Imboden

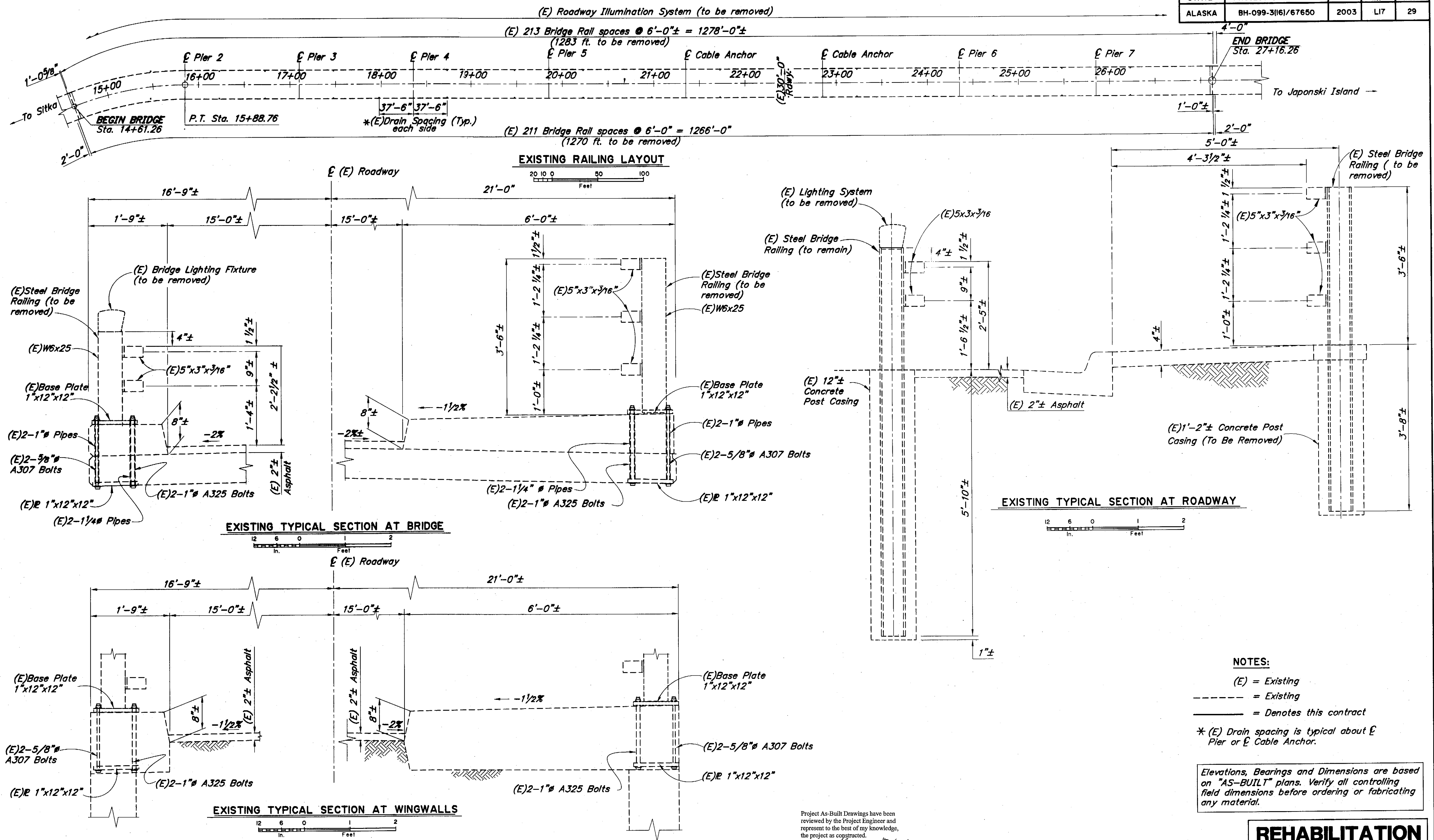
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
BRIDGE SECTION



SITKA HARBOR BRIDGE
HARBOR DRIVE
STEEL BRIDGE RAILING,
EXPANSION JOINT & LUMINAIRE LAYOUT

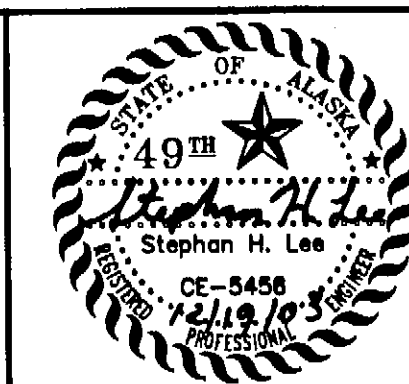


BRIDGE NO. 245
DWG. NO. 16



DESIGNED BY:	Steve Lee	CHECKED:	George Imboen
DRAWN BY:	Leonard Robertson	CHECKED:	Steve Lee
QUANTITIES BY:	Steve Lee	CHECKED:	George Imboen

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
BRIDGE SECTION



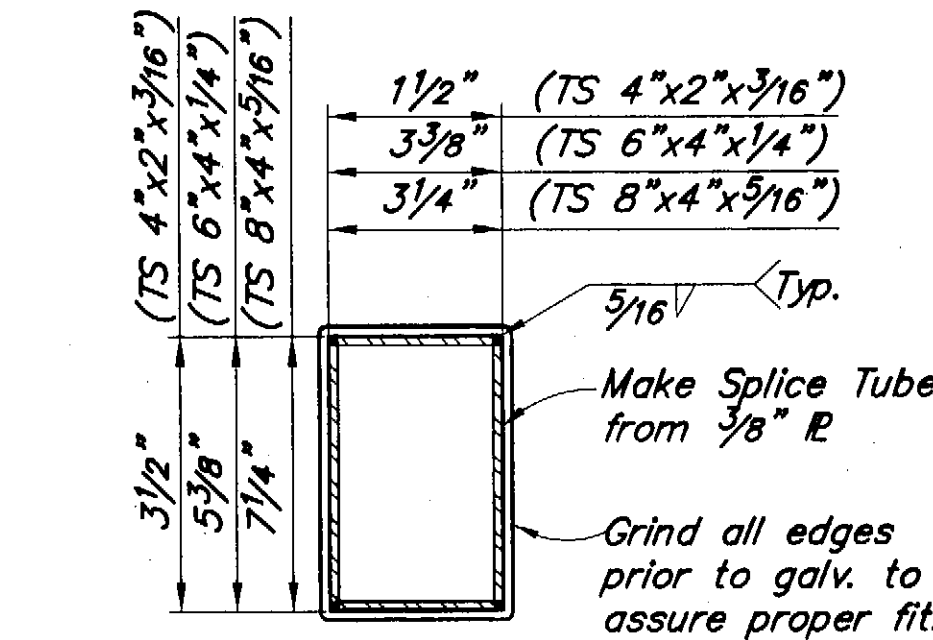
SITKA HARBOR BRIDGE
HARBOR DRIVE
EXISTING STEEL BRIDGE RAILING

BRIDGE NO. 245
DWG. NO. 17

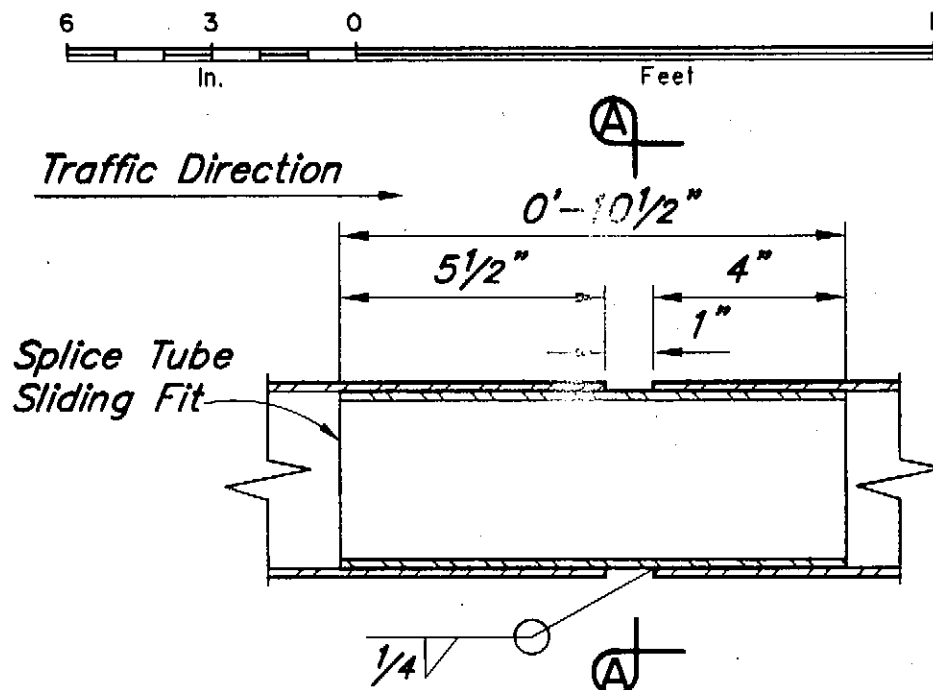
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BH-099-3(16)/67650	2003	L18	29

NOTES

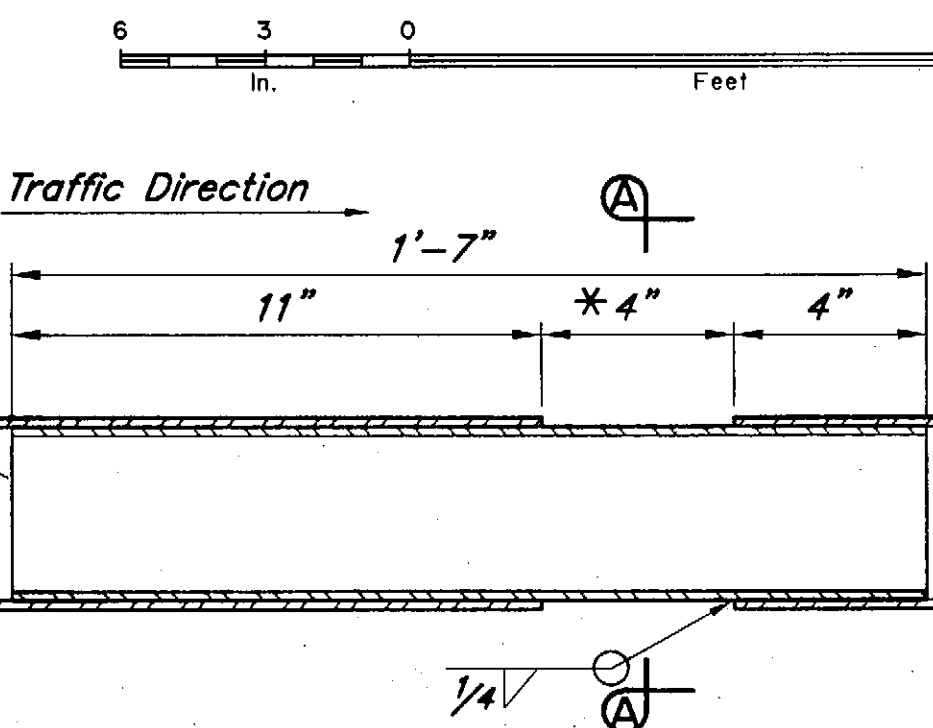
1. Locate bridge number plate on right hand side of approaching traffic at second post from end (1 total).
2. Remove existing bridge no. plate from first existing railpost at airport end. Attach to new railing with 4-1/4"x1" ribbed neck carriage bolts with steel tamper proof nuts (McMaster-Carr 90084A029 or equal), galvanized or cadmium plated.
3. All machine bolts shall have locking nuts or lock washers.
4. Railing expansion joints must be provided at 50 ft. maximum intervals throughout the railing. Railing shall be continuous over 2 posts minimum. Provide an additional rail splice at abutment and pier expansion joints.
5. Post shall be adjusted to a plumb position.
6. Steel tube rail elements shall conform to the requirements of ASTM designation A 500. Grade B.
7. All other steel shapes and plates shall conform to the requirements of AASHTO M 270, Grade 36 except posts shall conform to AASHTO M 270, Grade 50.
8. Core and bond 1"Ø H.S. Anchor Bolts in 1 1/4"Ø holes through existing curb and deck.
9. Grout for railposts shall conform to ASTM C1107, Grade C and shall have a minimum 28 day f'c of 9000 psi.
10. See "Box Beam Transition" drawing for Guardrail/Bridge Rail Connection."
11. See "Approach Railing Details" Dwg. DCUR #30
12. Cut (E) bolts flush with bottom of (E) embedded anchor plate and top of (E) curb. Apply prime coat to top of exposed bolt surface.
13. Remove spalled concrete. Sandblast clean rusty rebar. Furnish and place Class A concrete.
14. Anchor Bolts shall conform to ASTM A325, Grade 120 and shall be galvanized.



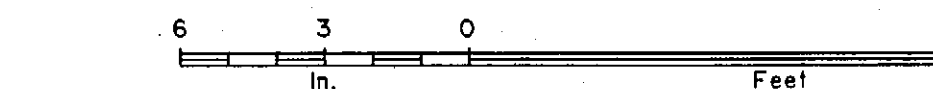
SECTION A-A



RAIL SPLICE DETAIL



RAIL SPLICE DETAIL AT PIERS 4 & 7



REVISIONS			
No.	Date	By	Description
△	1-27-04	SHL	Revised dimension

NOTES:

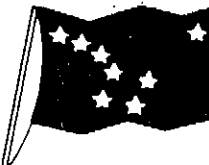
(E) = Existing

--- = Existing

— = Denotes this contract

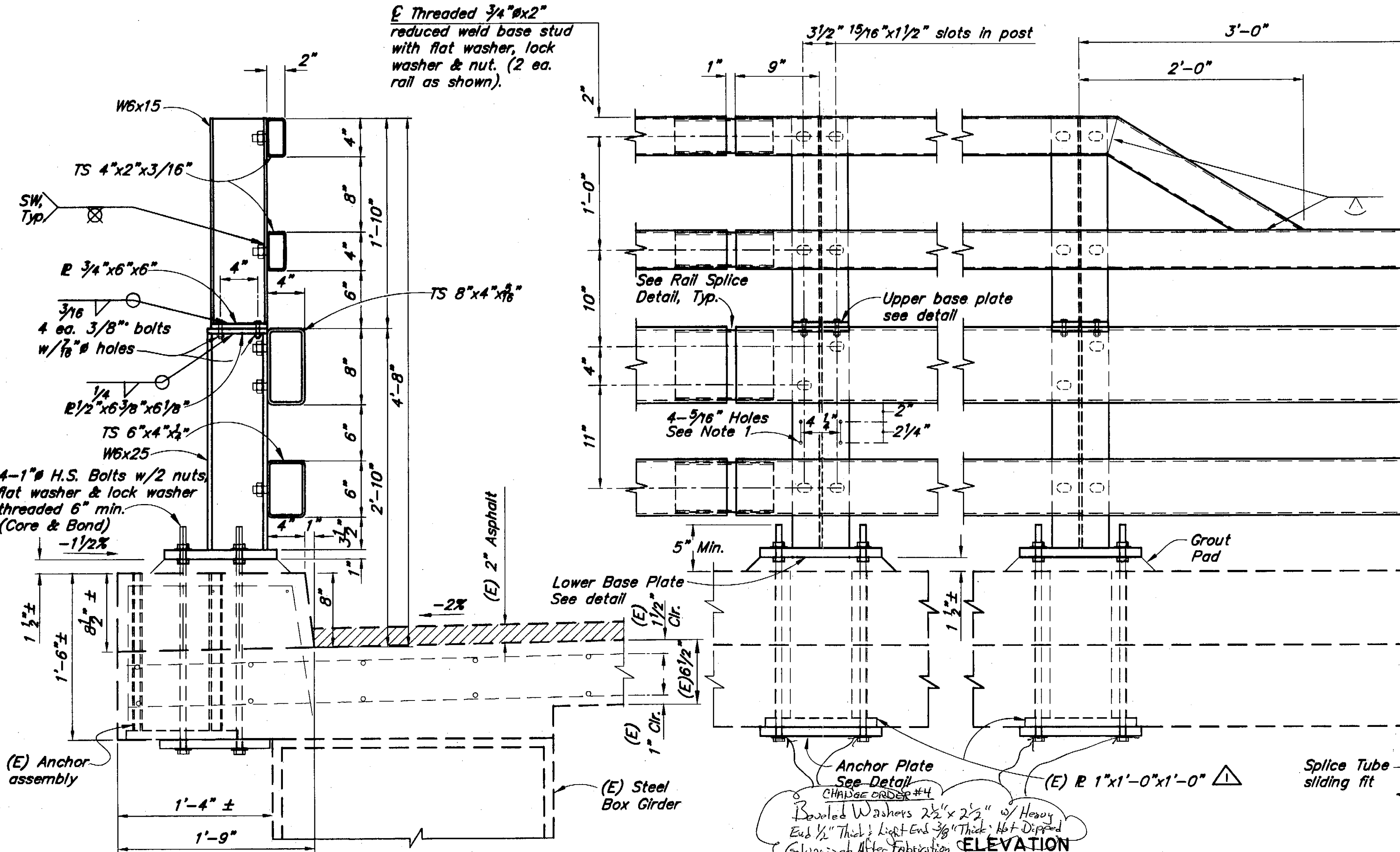
Elevations, Bearings and Dimensions are based on "AS-BUILT" plans. Verify all controlling field dimensions before ordering or fabricating any material.

REHABILITATION

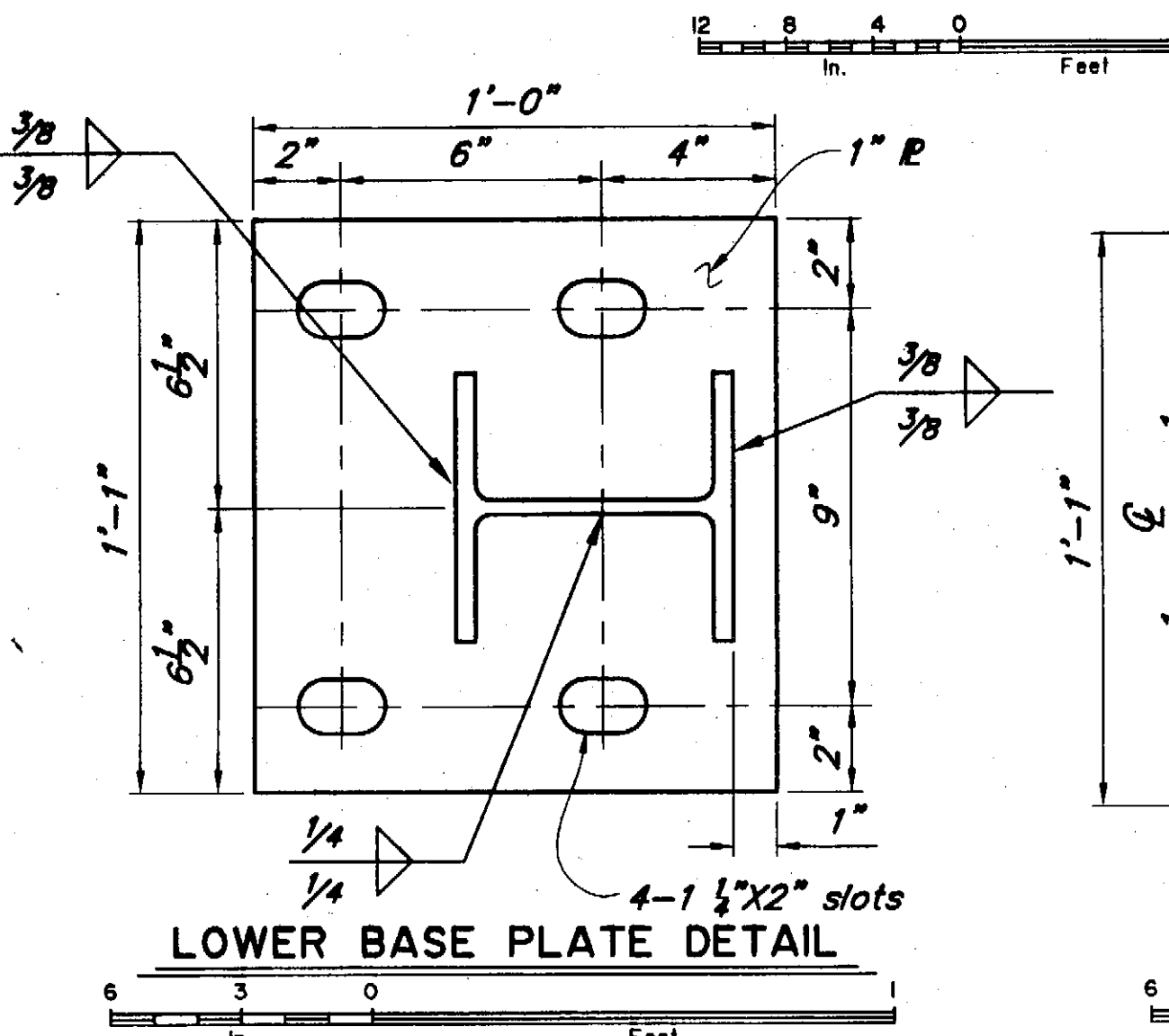


BRIDGE NO. 245

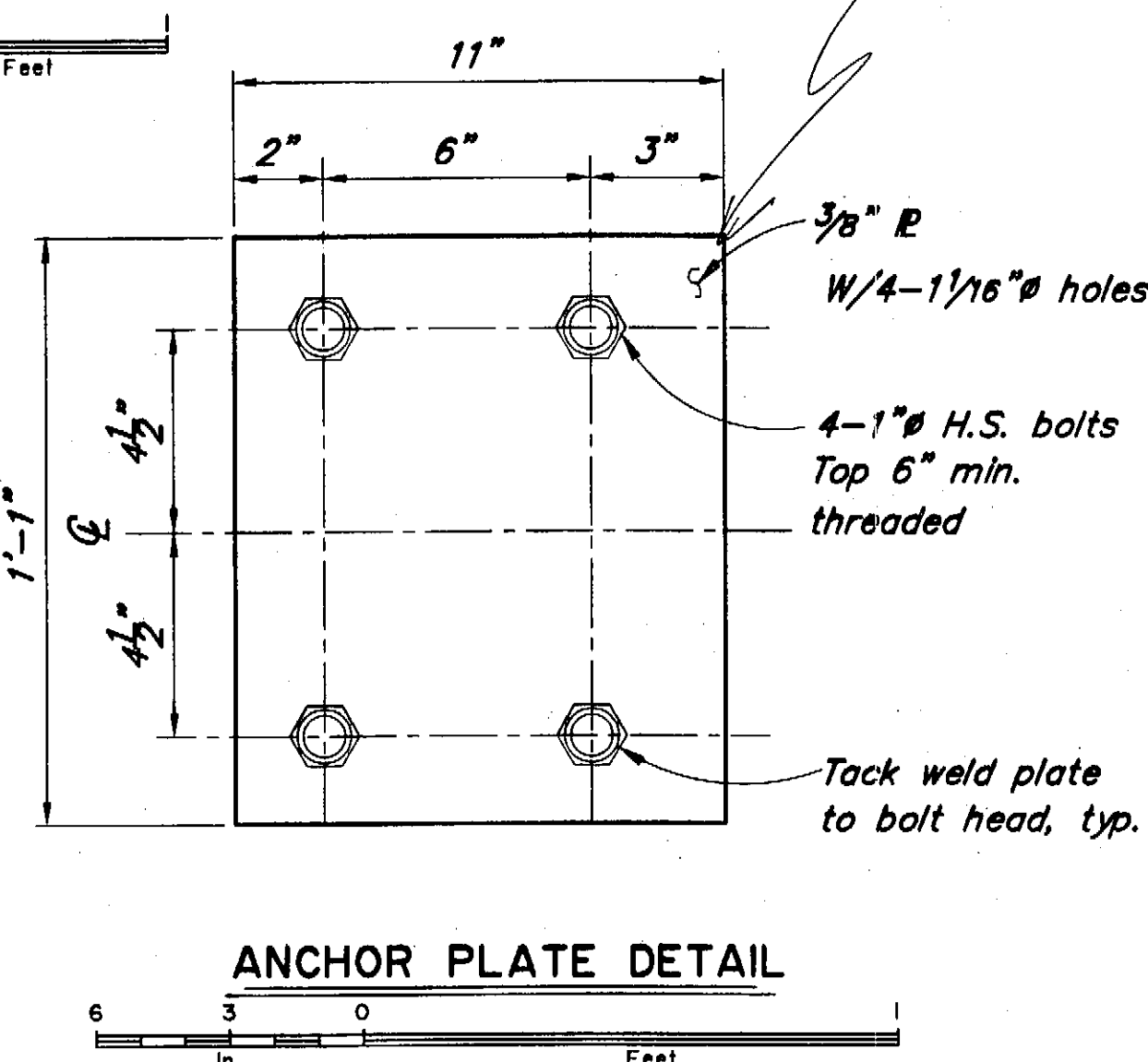
DWG. NO. 18



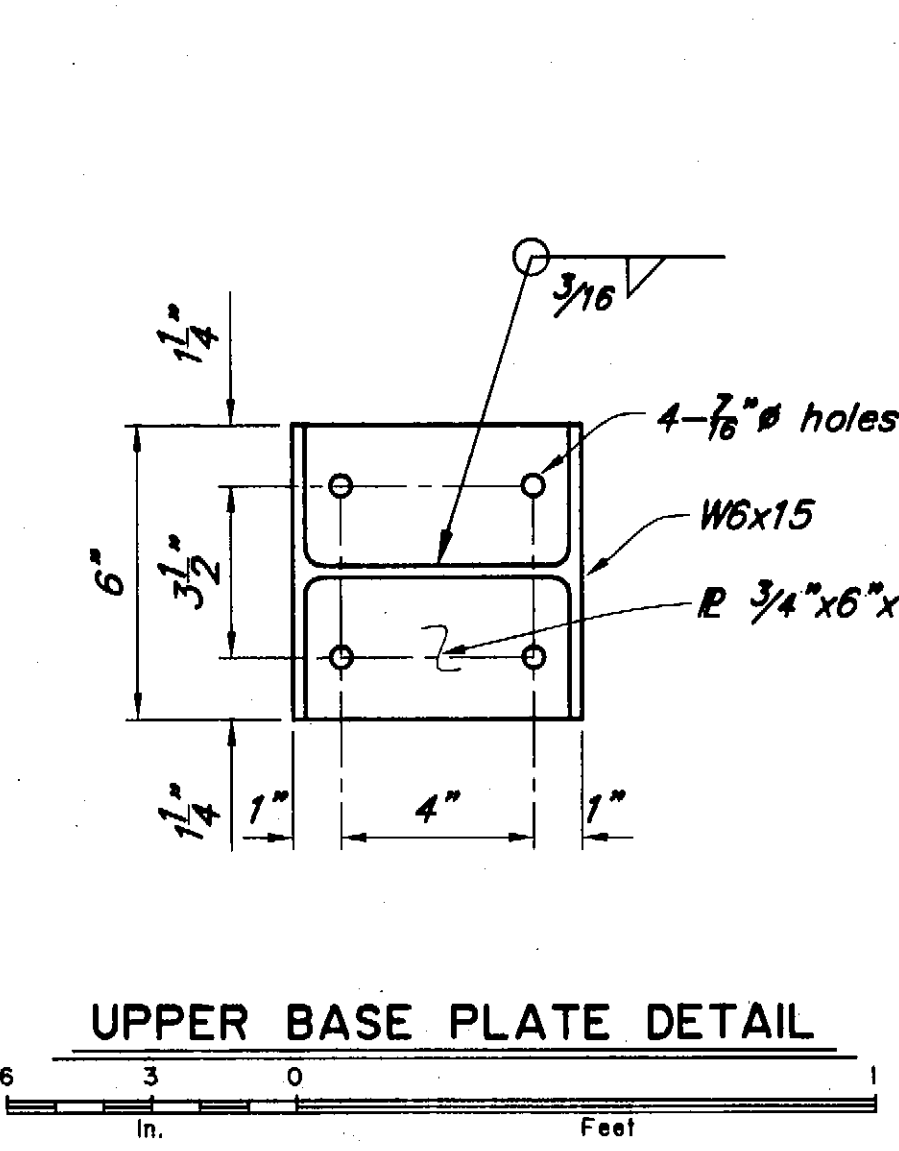
TYPICAL SECTION



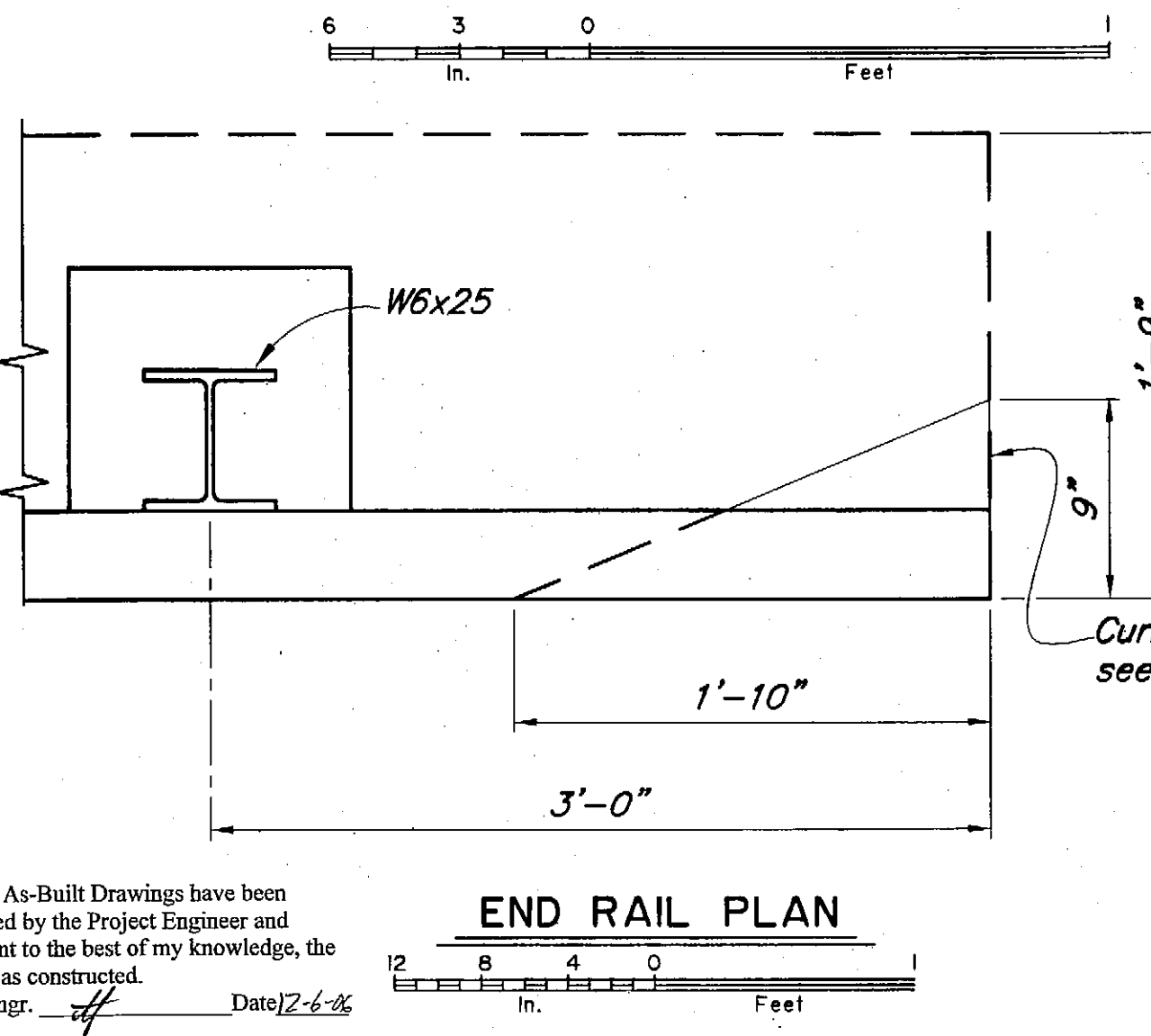
LOWER BASE PLATE DETAIL



ANCHOR PLATE DETAIL



UPPER BASE PLATE DETAIL



END RAIL PLAN

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

Proj. Engr. H Date 2-6

DESIGNED BY: Steve Lee	CHECKED: George Imbison
<i>Steve Lee</i>	<i>George Imbison</i>
DRAWN BY: Leonard Robertson	CHECKED: Steve Lee
<i>Leon</i>	<i>Steve Lee</i>
QUANTITIES BY: Steve Lee	CHECKED: George Imbison
<i>Steve Lee</i>	<i>George Imbison</i>

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
BRIDGE SECTION



**SITKA HARBOR BRIDGE
HARBOR DRIVE
COMBINATION STEEL BRIDGE RAILING
- LEFT SIDE**

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BH-099-3(16)/67650	2003	L19	29

NOTES

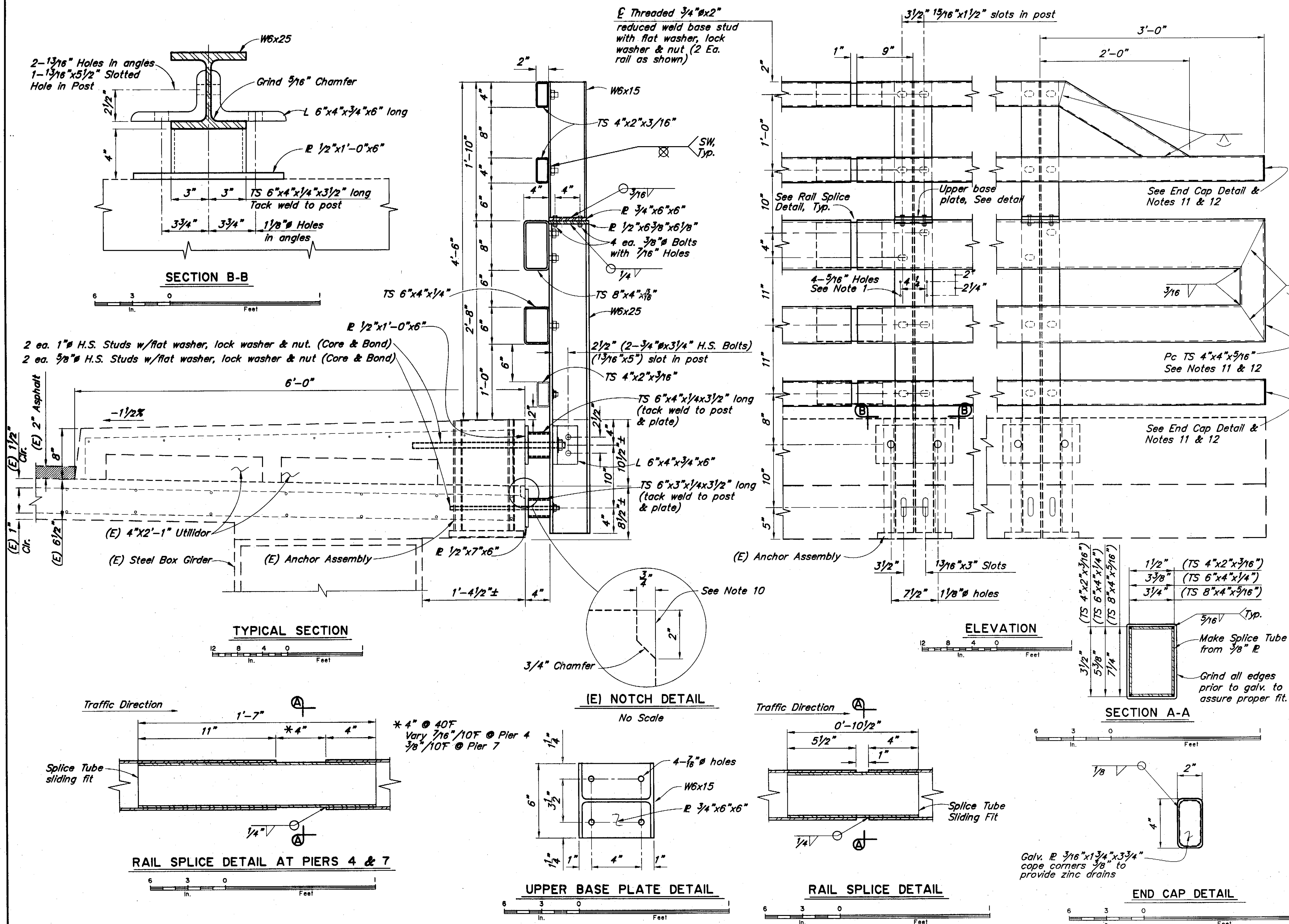
- Locate bridge number plate on right hand side of approaching traffic at second post from end (1 total).
- Remove existing bridge no. plate from first existing railpost at Sitka end and attach to new railing with 4-1/2" x 1" ribbed neck carriage bolts with steel tamper proof nuts (McMaster-Corr 90084A029 or equal), galvanized or cadmium plated.
- All machine bolts shall have locking nuts or lock washers.
- Railing expansion joints must be provided at 50 ft. maximum intervals throughout the railing. Railing shall be continuous over 2 posts minimum. Provide an additional rail splice at abutment and pier expansion joints.
- Post shall be adjusted to a plumb position.
- Steel tube rail elements shall conform to the requirements of ASTM designation A 500, Grade B.
- All other steel shapes and plates shall conform to the requirements of AASHTO M 270, Grade 36 except post and angles shall conform to AASHTO M 270, Grade 50.
- Core and bond 1" H.S. Studs in 1/4" x 1'-6" min. deep holes. Core and bond 3/8" H.S. Studs in 7/8" x 1'-0" min. deep holes. *DEVR #30*
- Cut (E) anchor bolts flush with top of sidewalk. Apply prime coat to exposed bolt surfaces.
- Fill (E) notch at edge of deck at each post w/ epoxy resin mortar conforming to AASHTO M-235, Type IV, Grade 3, Class B.
- Omit vertical piece and end cap detail at abutment B. Fabricate lower two rails to be flush with end.
- See "Guardrail/Bridge Rail-Rt Connections" Dwg., Road Plans, for additional details at Abutment B.
- Anchor Studs shall conform to ASTM A449, Grade 120 and shall be threaded full length and galvanized.

NOTES:

- (E) = Existing
 --- = Existing
 — = Denotes this contract

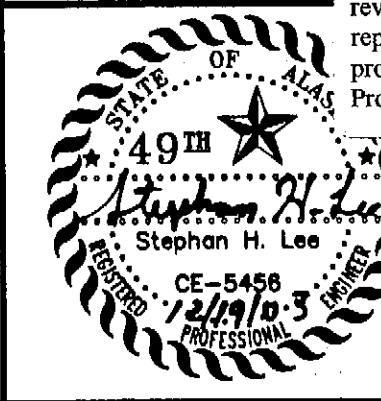
Elevations, Bearings and Dimensions are based on "AS-BUILT" plans. Verify all controlling field dimensions before ordering or fabricating any material.

REHABILITATION



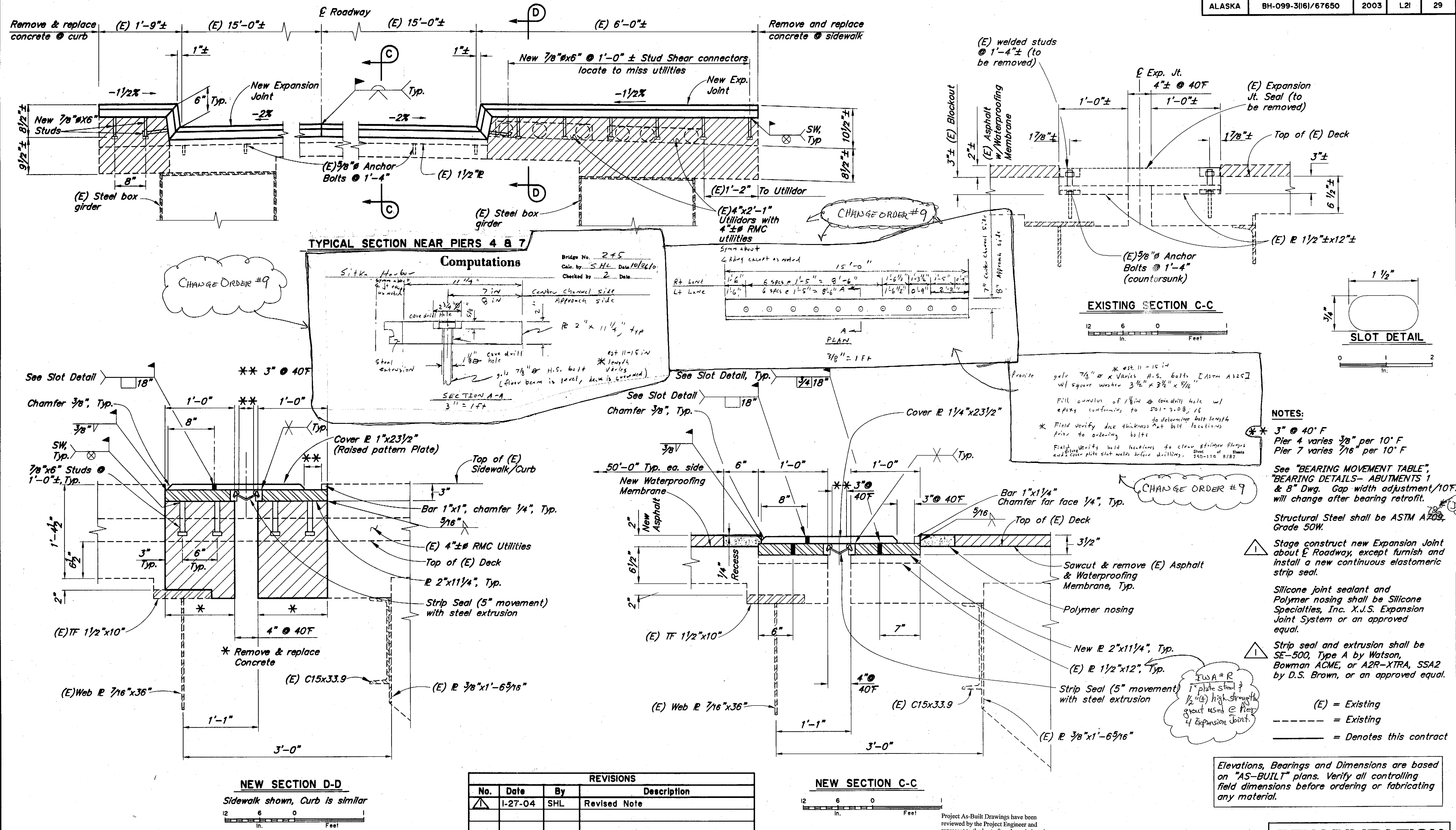
DESIGNED BY:	Steve Lee	CHECKED:	George Imbsen
DRAWN BY:	Leonard Robertson	CHECKED:	Steve Lee
QUANTITIES BY:	Steve Lee	CHECKED:	George Imbsen

STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 AND PUBLIC FACILITIES
 BRIDGE SECTION



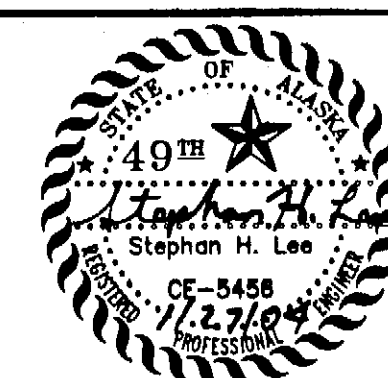
SITKA HARBOR BRIDGE
 HARBOR DRIVE
 COMBINATION STEEL BRIDGE RAILING
 - RIGHT SIDE

BRIDGE NO. 245
DWG. NO. 19



DESIGNED BY: Steve Lee
 CHECKED: George Imbison
 DRAWN BY: Leonard Robertson
 CHECKED: Steve Lee
 QUANTITIES BY: Steve Lee
 CHECKED: George Imbison

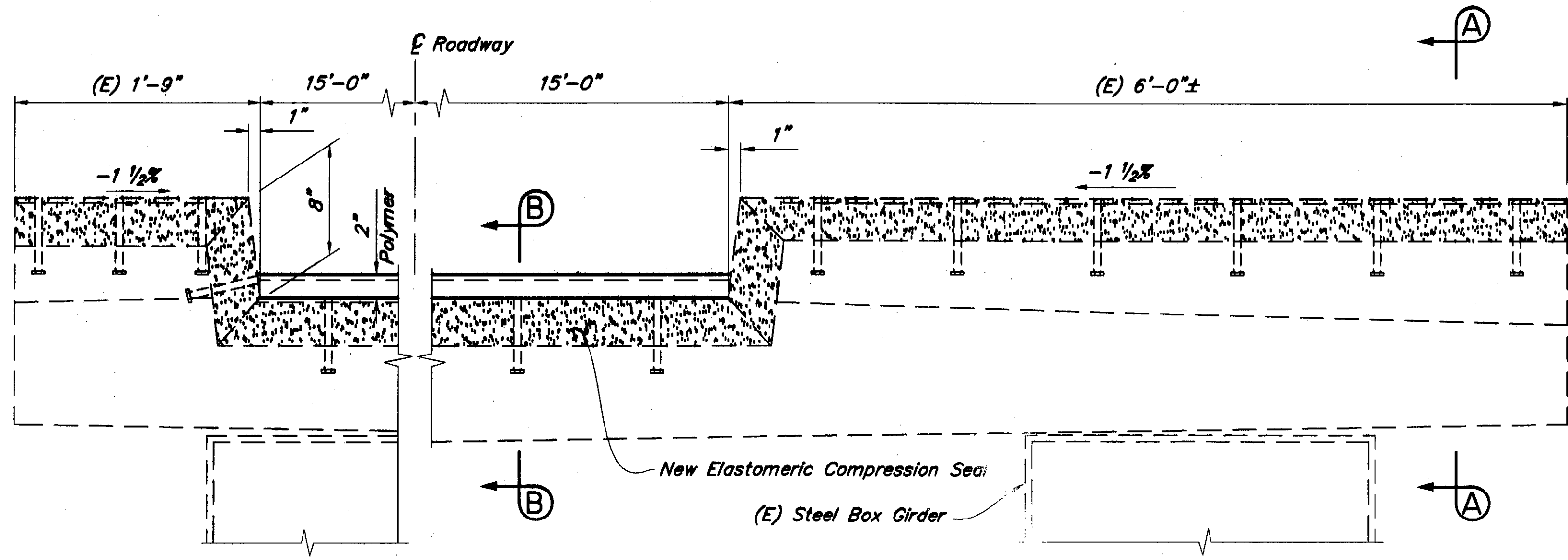
STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 AND PUBLIC FACILITIES
 BRIDGE SECTION



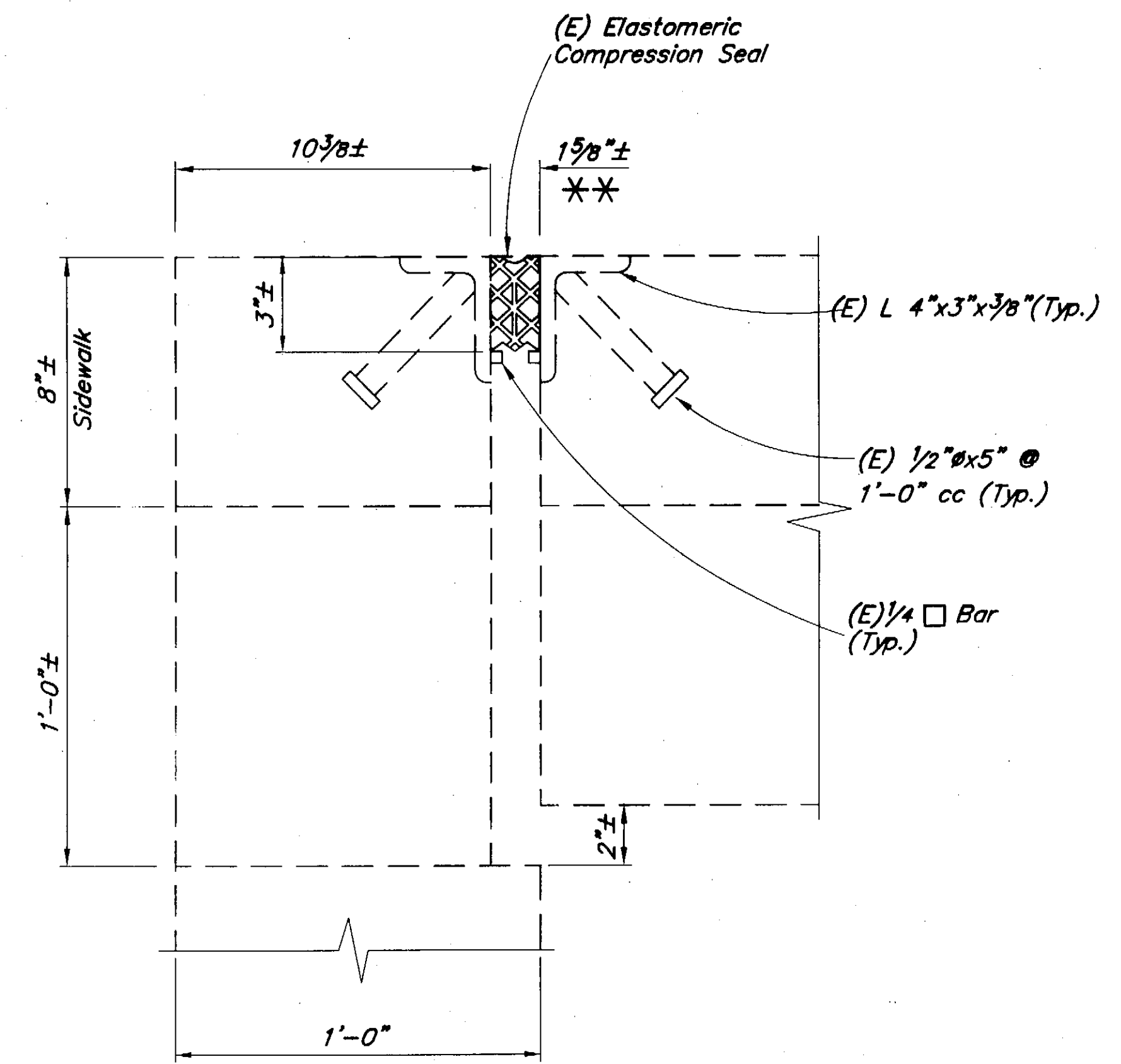
SITKA HARBOR BRIDGE
 HARBOR DRIVE
 EXPANSION JOINT DETAILS - PIERS

BRIDGE NO. 245
 DWG. NO. 21

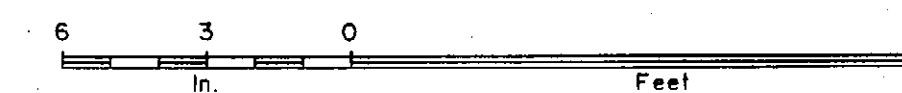
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BH-099-31(6)/67650	2003	L22	29



TYPICAL SECTION AT ABUTMENTS



EXISTING SECTION A-A



NOTES:
 * 15/8" @ 40' F
 Abut. 1 varies 1/8" per 10' F
 Abut. 8 varies 1/16" per 10' F
 See "BEARING MOVEMENT TABLE",
 "BEARING DETAILS-ABUTMENTS 1
 & 8" Dwg. Gap width adjustment/10F
 will change after bearing retrofit.

Structural Steel shall be ASTM A709,
 Grade 50W.

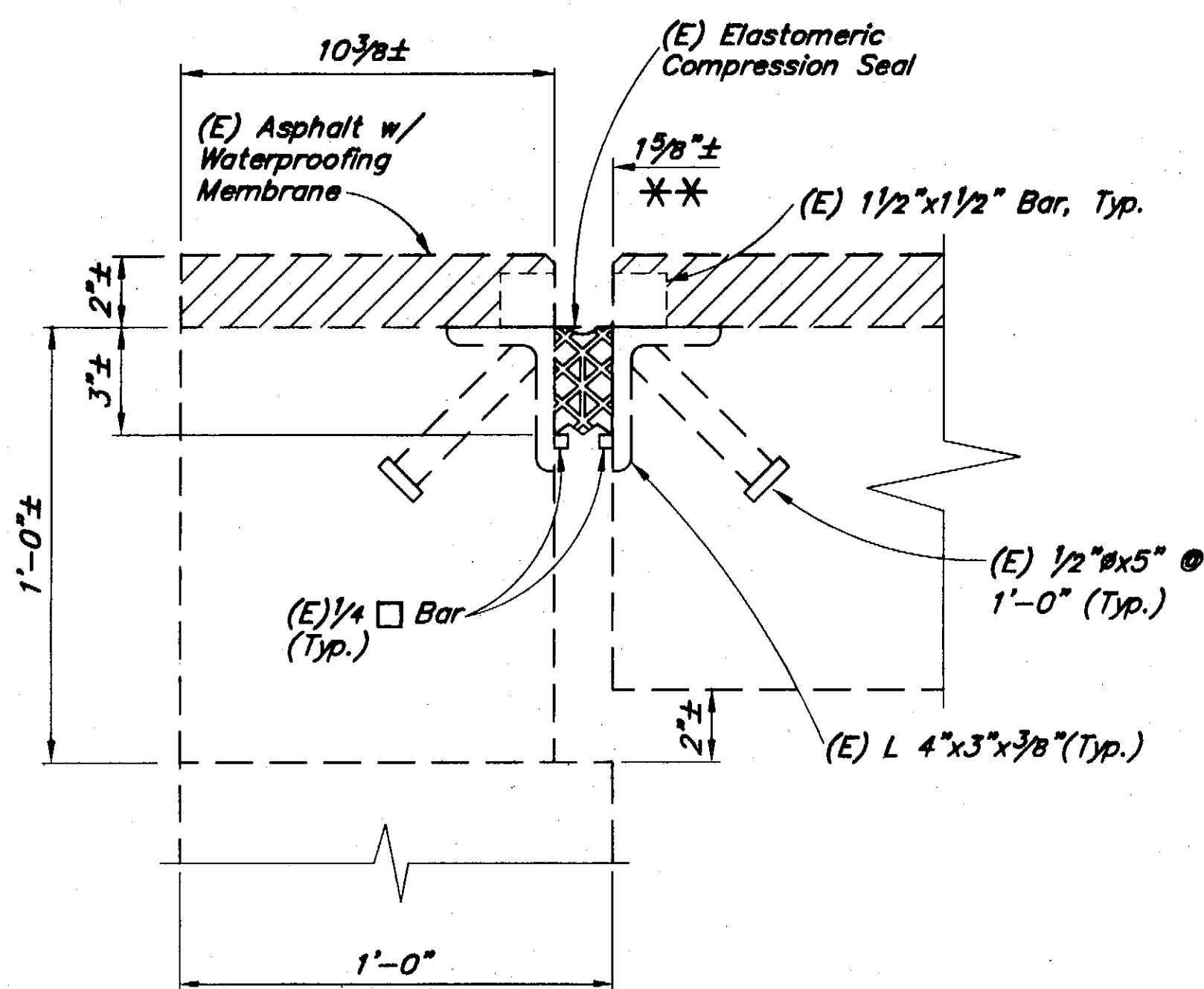
Stage construct new Expansion Joint
 about E Roadway, except furnish and
 install a new continuous elastomeric
 compression seal.

Silicone joint sealant and
 Polymer nosing shall be Silicone
 Specialties, Inc. X.J.S. Expansion
 Joint System or an approved
 equal.

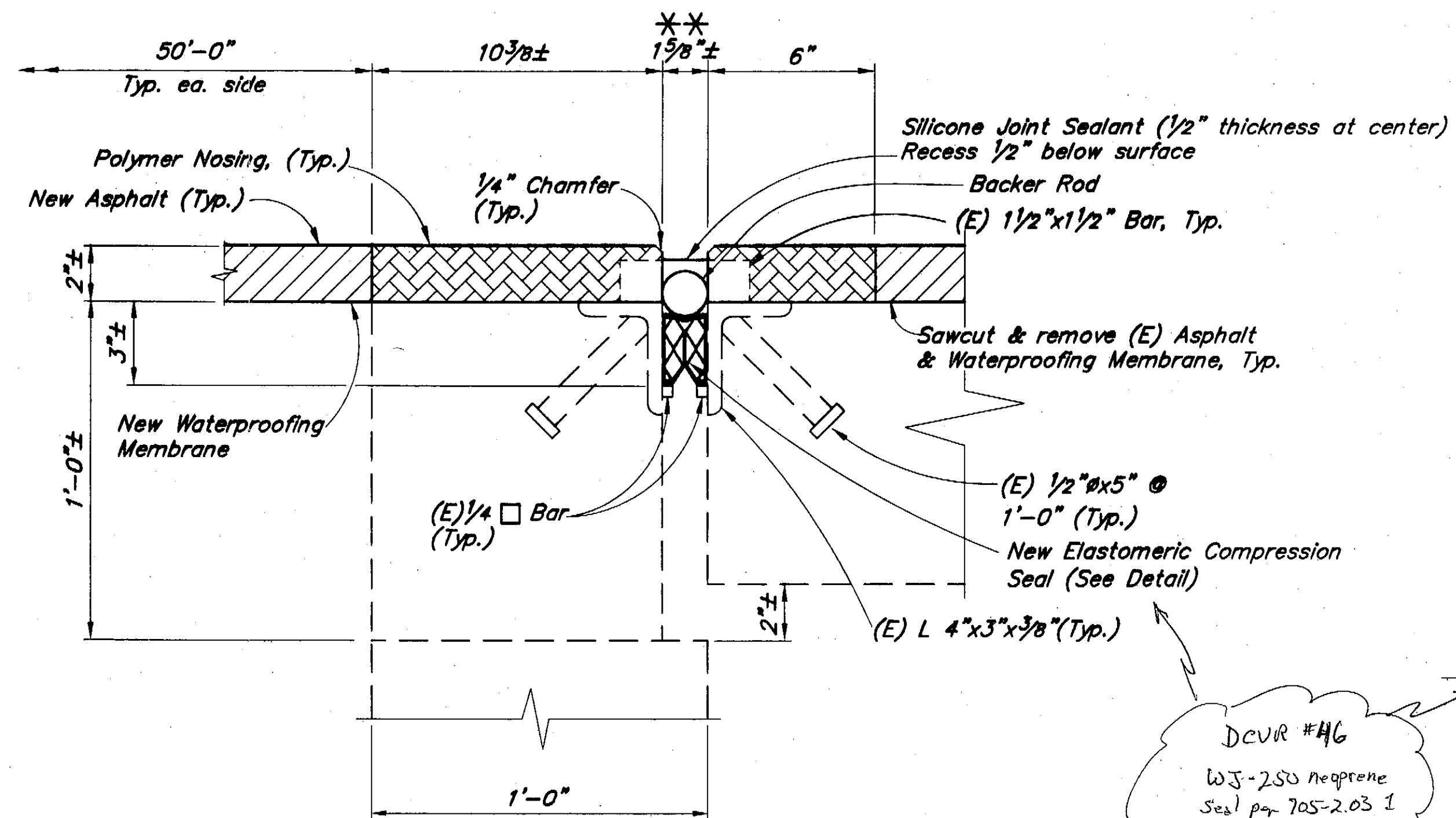
(E) = Existing
 --- = Existing
 ——— = Denotes this contract

Elevations, Bearings and Dimensions are based
 on "AS-BUILT" plans. Verify all controlling
 field dimensions before ordering or fabricating
 any material.

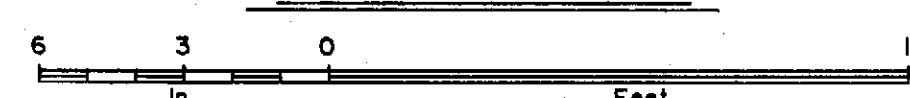
REHABILITATION



EXISTING SECTION B-B



NEW SECTION B-B

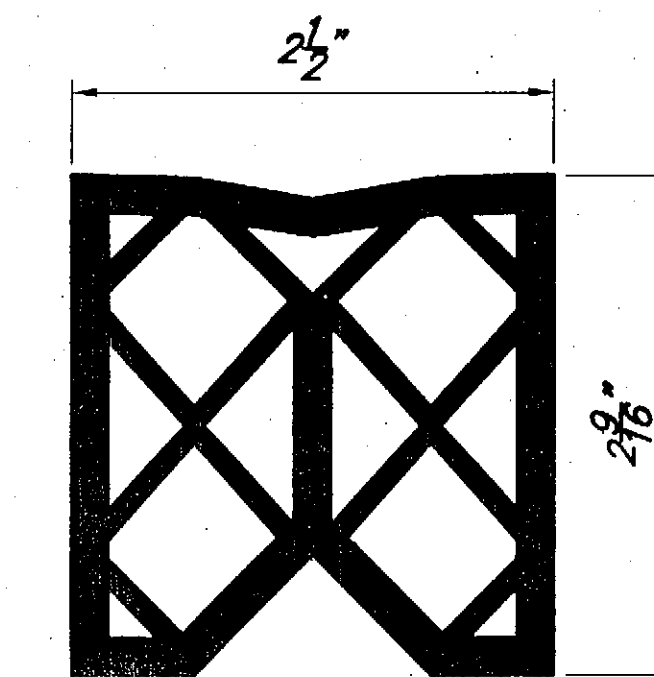


Project As-Built Drawings have been
 reviewed by the Project Engineer and
 represent to the best of my knowledge, the
 project as constructed.
 Proj. Engr. *[Signature]* Date 12-6-04

DEVIR #46
 WJ-250 neoprene
 Seal per 705-2.03.1
 (Addendum No. 2) is
 approved

ELASTOMERIC COMPRESSION SEAL

NO SCALE



DESIGNED BY:	Steve Lee	CHECKED:	George Imbrian
DRAWN BY:	Leonard Robertson	CHECKED:	Steve Lee
QUANTITIES BY:	Steve Lee	CHECKED:	George Imbrian

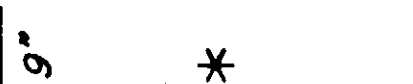
STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 AND PUBLIC FACILITIES
 BRIDGE SECTION



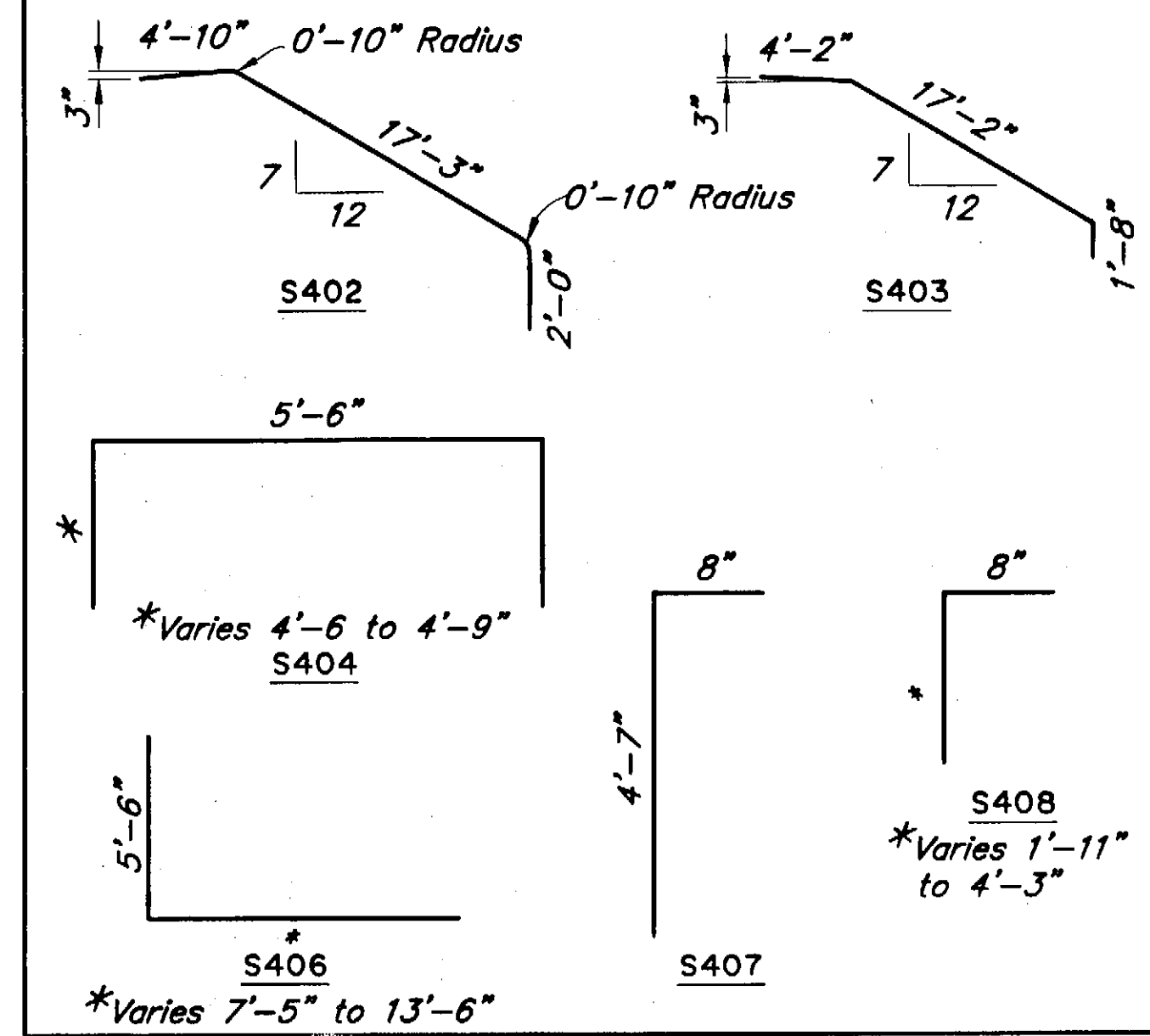
SITKA HARBOR BRIDGE
 HARBOR DRIVE
 EXPANSION JOINT DETAILS - ABUTMENTS

BRIDGE NO. 245
 DWG. NO. 22

REINFORCING SCHEDULE - STAIRWAY

MARK	SIZE	NO.	LENGTH	TYPE	BENDING DIAGRAM
S401	4	17	Varies	Bent	
S402	4	2	24'-1"	Bent	
S403	4	14	23'-0"	Bent	
S404	4	5	Varies	Bent	
S405	4	6	4'-8"	—	
S406	4	5	Varies	Bent	
S407	4	5	5'-3"	Bent	
S408	4	5	Varies	Bent	

* Varies 4'-8" to 5'-6"



Epoxy coat all reinforcing steel.

NOTES:

(E) = Existing

--- = Existing

_____ = Denotes this contract

1. Remove existing railing panel at upper stairway landing. See "Stairway Railing" Dwg. for Details.
2. Remove and replace railing panels each side of upper stairway. See "Stairway Railing" Dwg. for Details.
3. Core drill 4" dia. hole to remove (E) pipe sockets at middle landing and to install new pipe sockets. Install outer pipe socket at new location. Fill annulus of void with epoxy resin mortar conforming to AASHTO M-235, Type IV, Grade 2, Class B.
4. Broom finish stairway surfaces.
5. Provide approx. 10 cy borrow and grade slope to lower concrete block retaining wall.

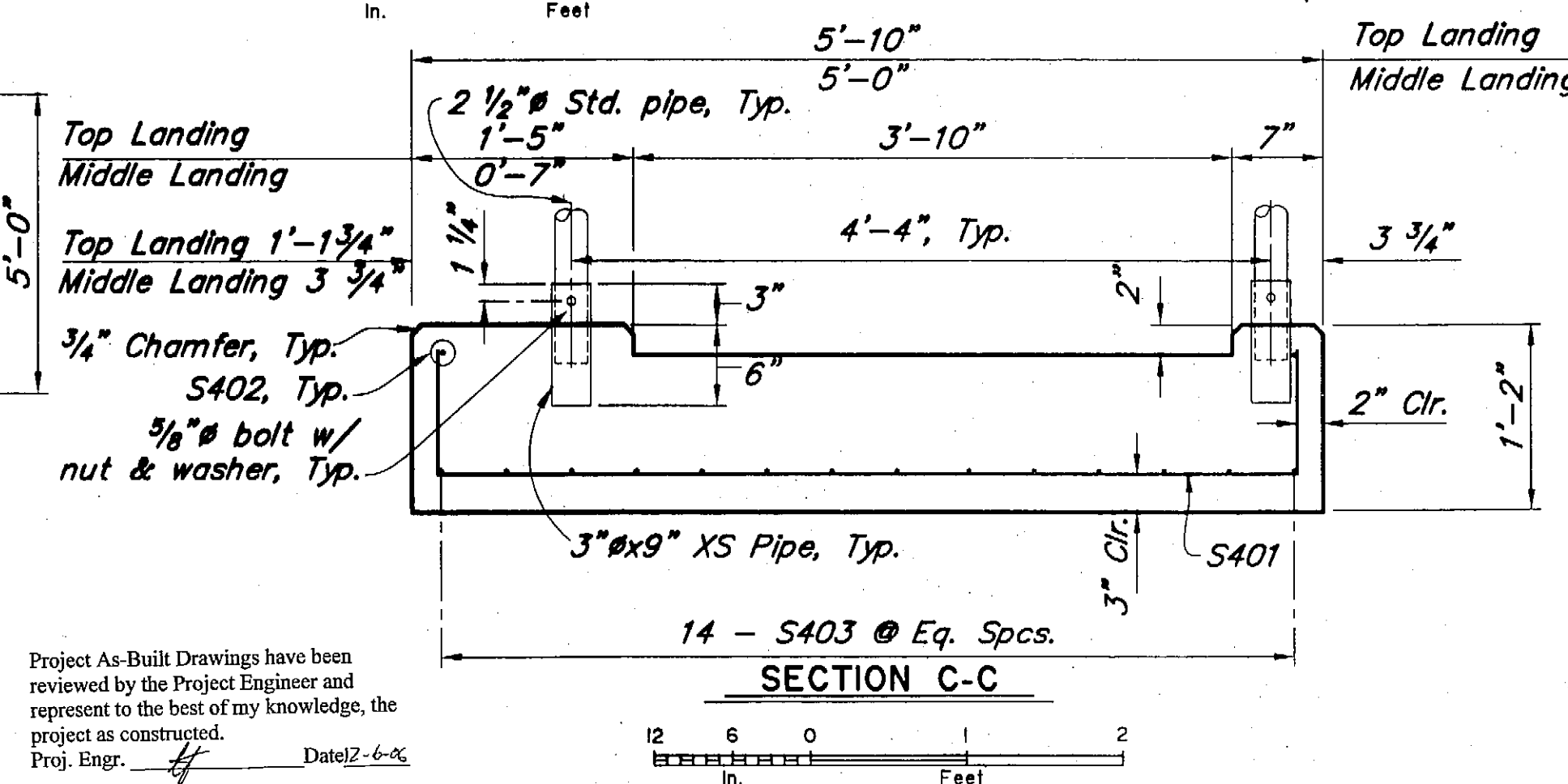
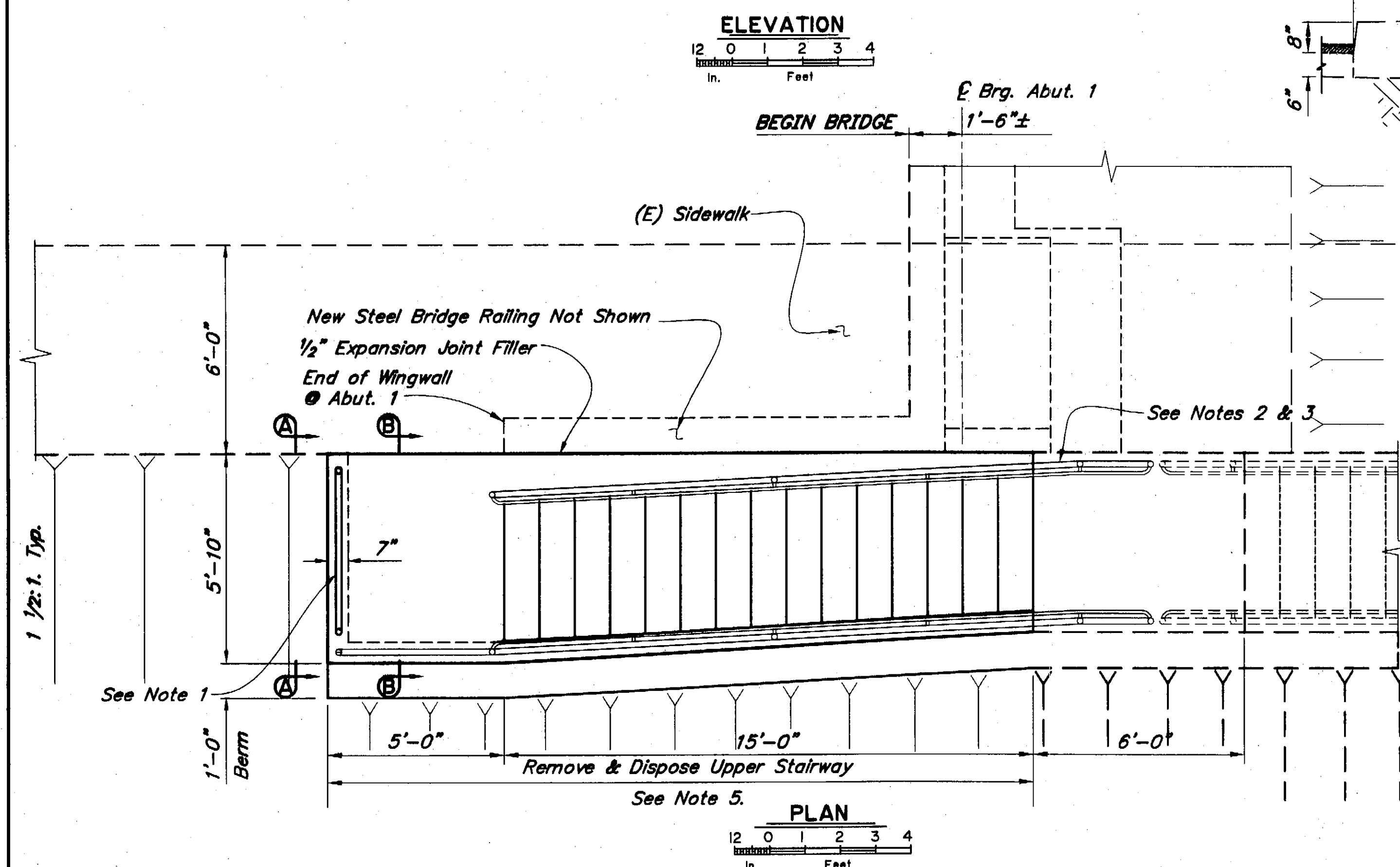
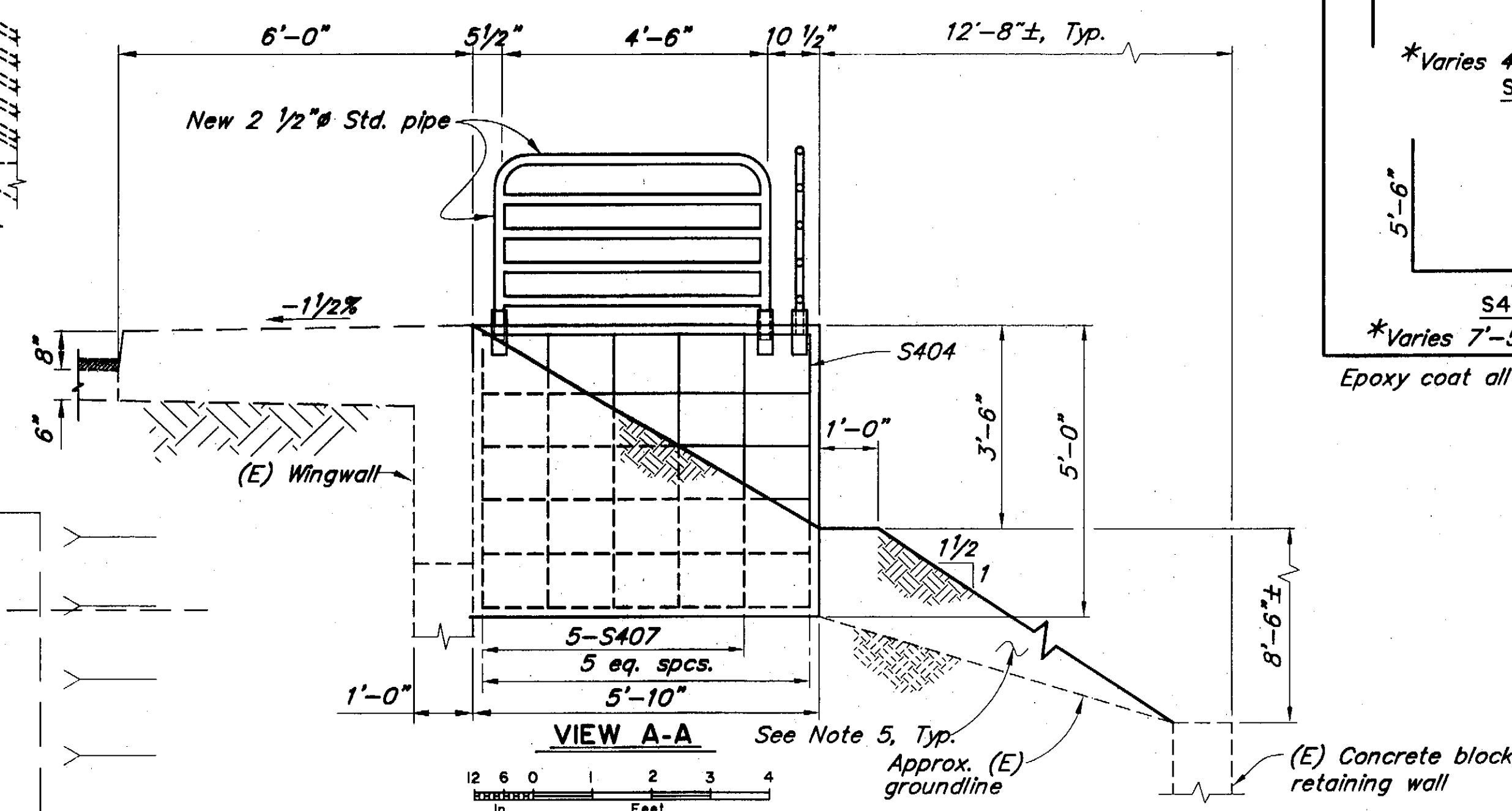
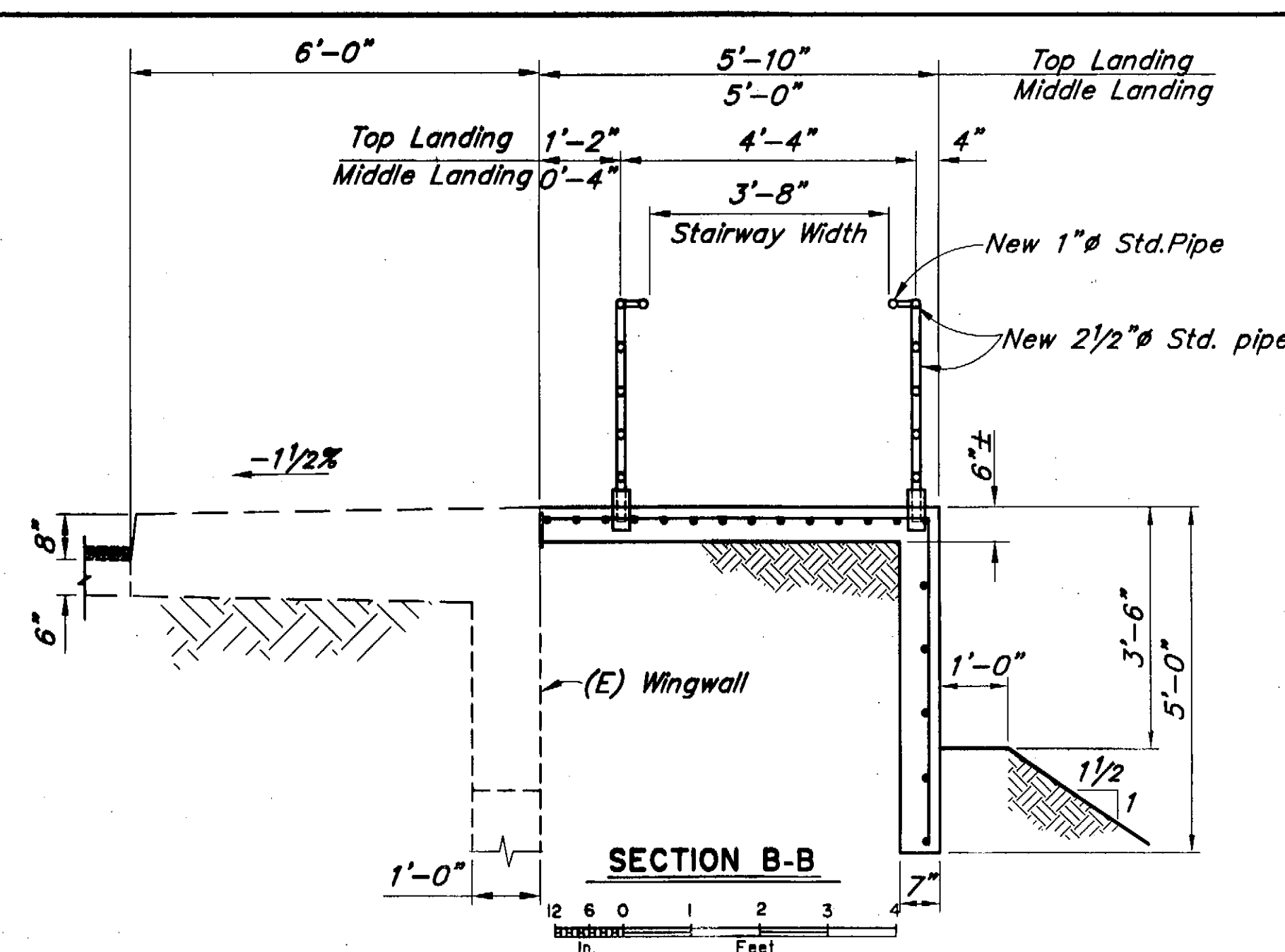
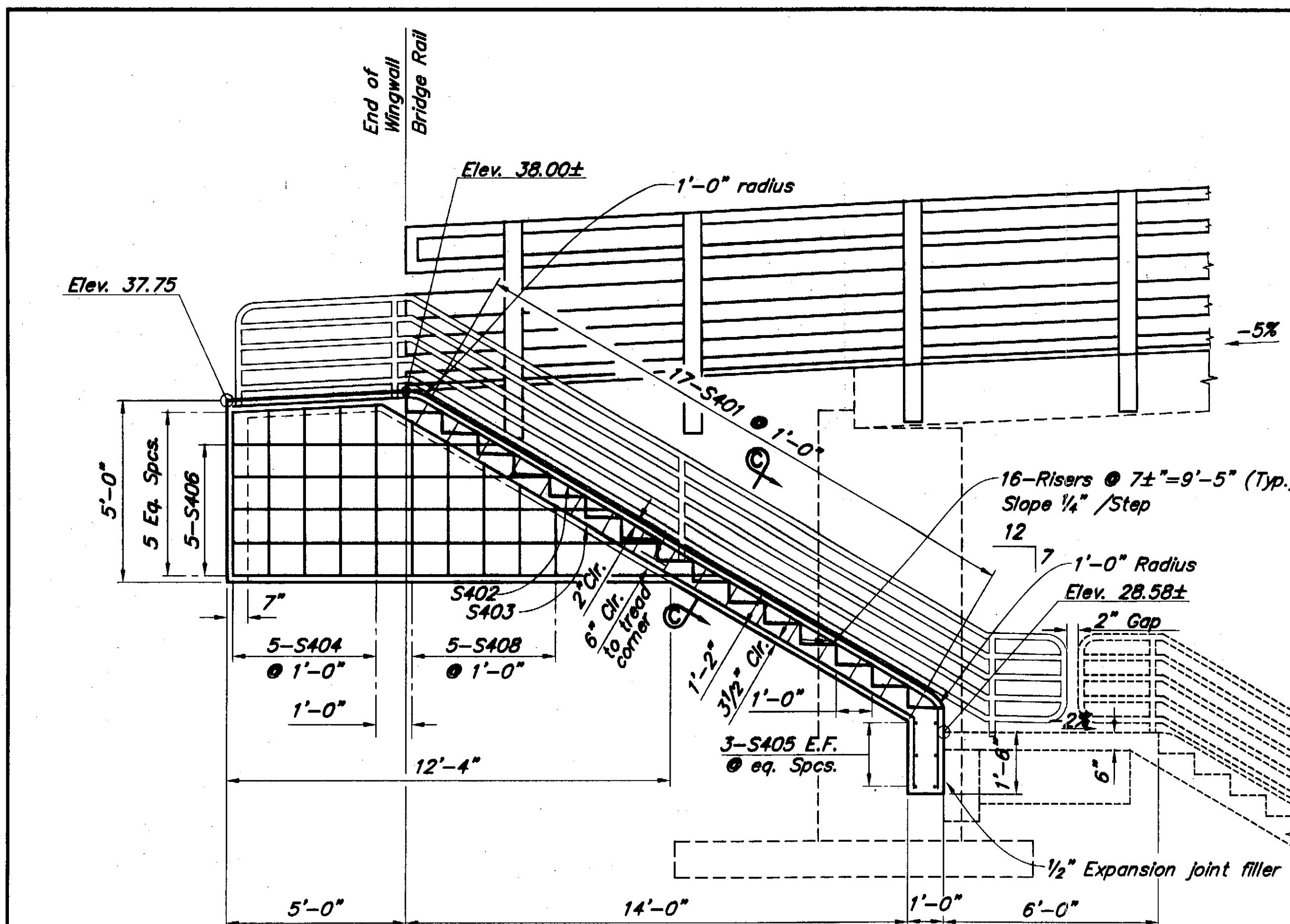
Elevations, Bearings and Dimensions are based on "AS-BUILT" plans. Verify all controlling field dimensions before ordering or fabricating any material.

REHABILITATION



BRIDGE NO. 245

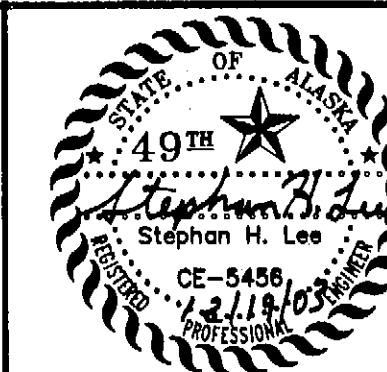
DWG. NO. 23



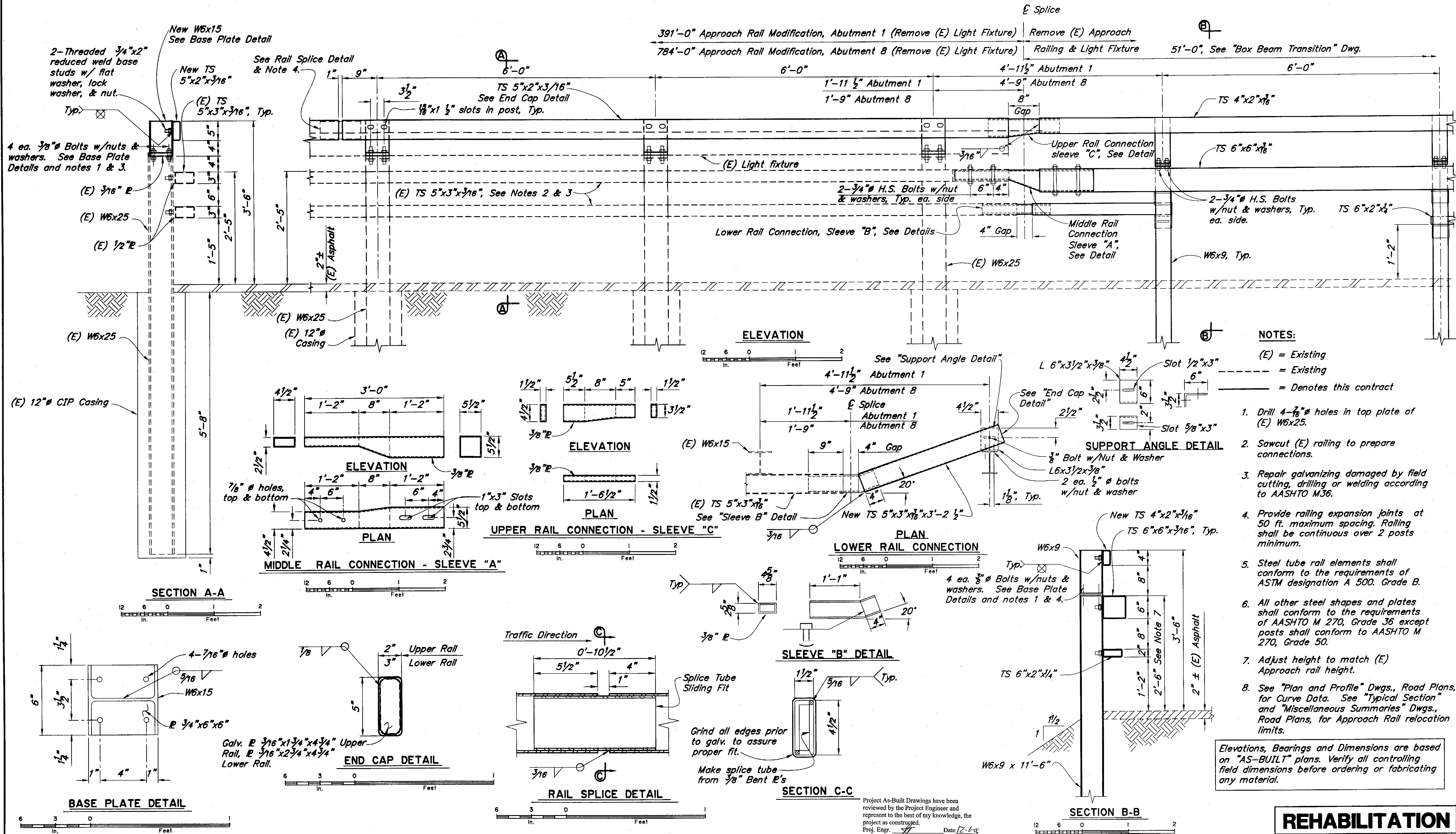
Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.

DESIGNED BY: <i>Steve Lee</i>	CHECKED: <i>George Imbriani</i>
DRAWN BY: <i>Leonard Robertson</i>	CHECKED: <i>Steve Lee</i>
QUANTITIES BY: <i>Steve Lee</i>	CHECKED: <i>George Imbriani</i>

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
BRIDGE SECTION



SITKA HARBOR BRIDGE
HARBOR DRIVE
STAIRWAY



DESIGNED BY:	Steve Lee	CHECKED:	George Imbar
DRAWN BY:	Leonard Robertson	CHECKED:	Steve Lee
QUANTITIES BY:	Steve Lee	CHECKED:	George Imbar

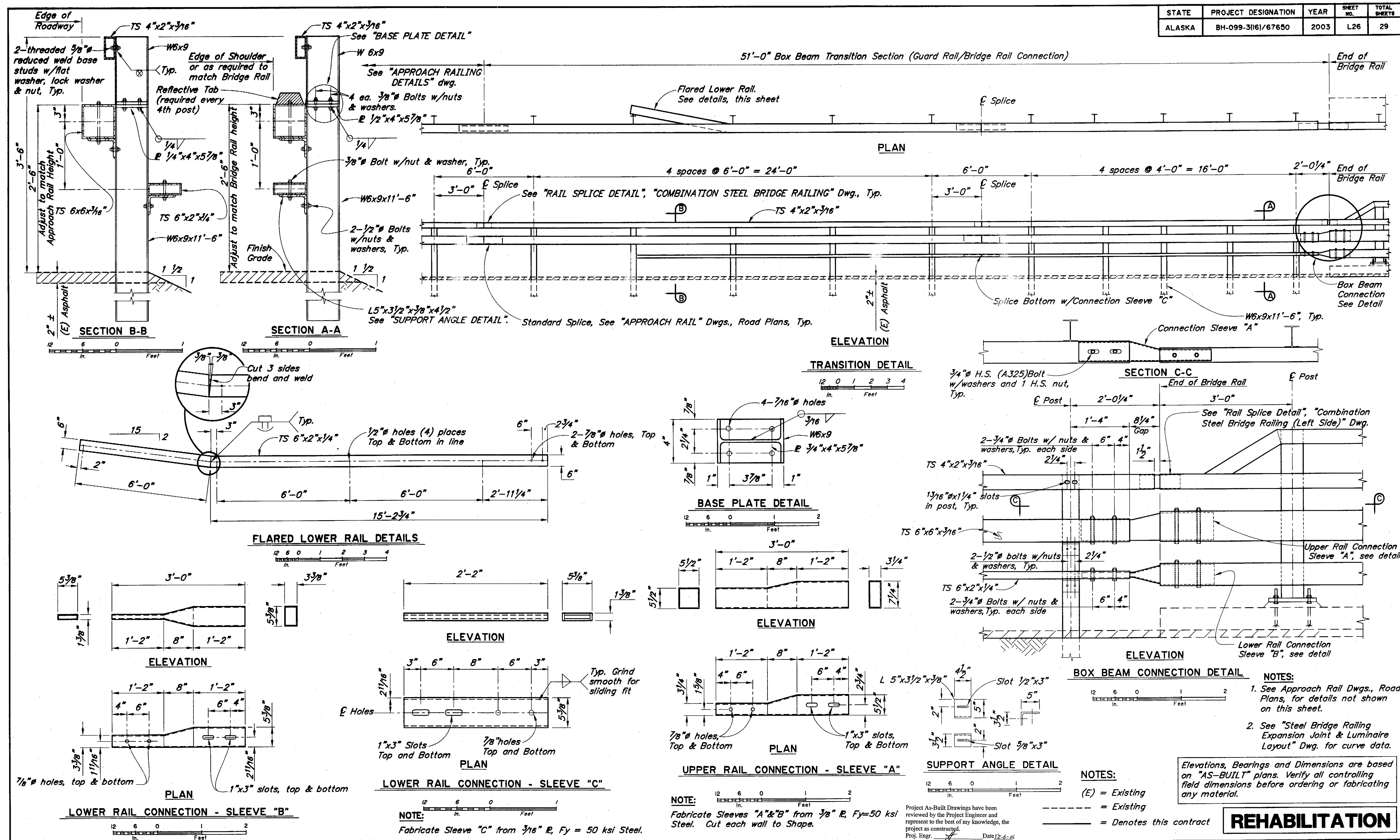
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
BRIDGE SECTION



SITKA HARBOR BRIDGE
HARBOR DRIVE
APPROACH RAILING DETAILS

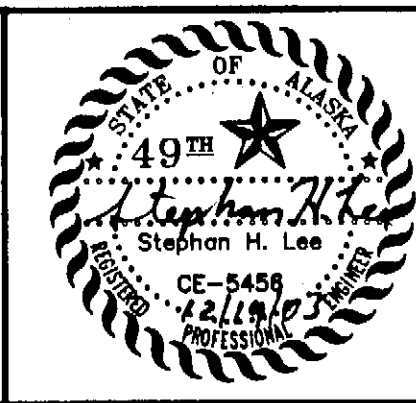
BRIDGE NO. 245
DWG. NO. 25

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BH-099-31(6)/67650	2003	L26	29



DESIGNED BY:	Steve Lee	CHECKED:	George Imboden
DRAWN BY:	Leonard Robertson	CHECKED:	Steve Lee
QUANTITIES BY:	Steve Lee	CHECKED:	George Imboden

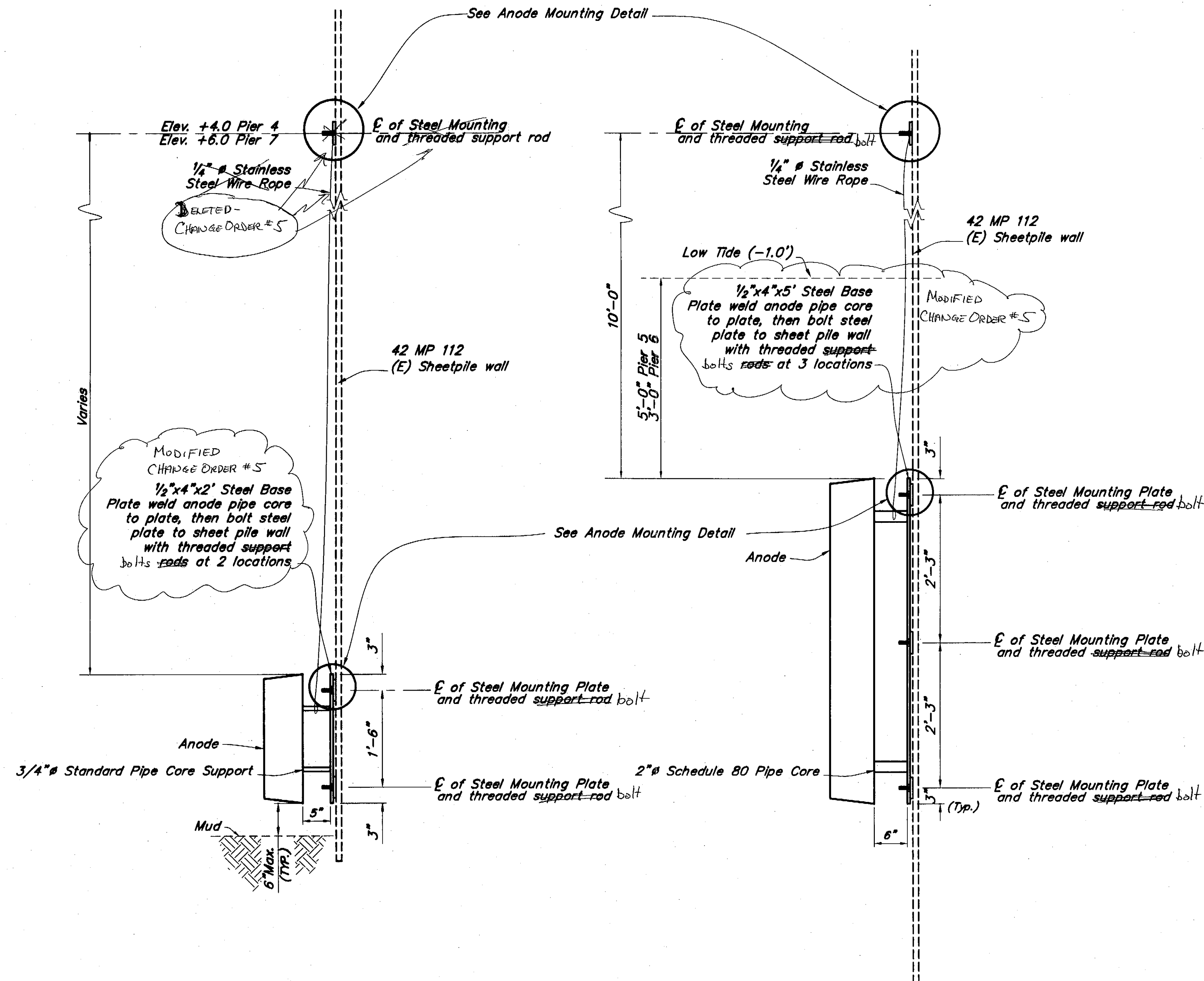
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
BRIDGE SECTION



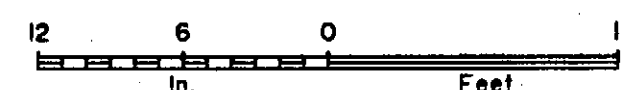
SITKA HARBOR BRIDGE
HARBOR DRIVE
BOX BEAM TRANSITION

BRIDGE NO. 245
DWG. NO. 26

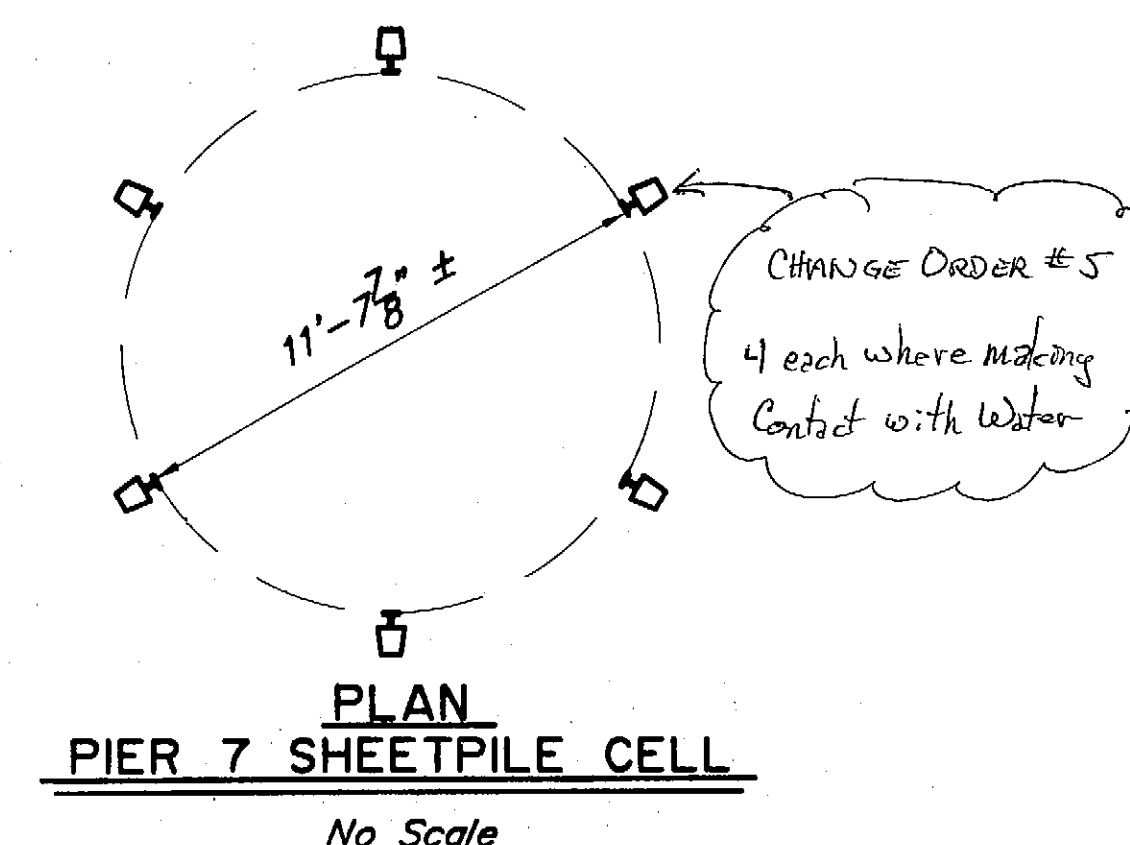
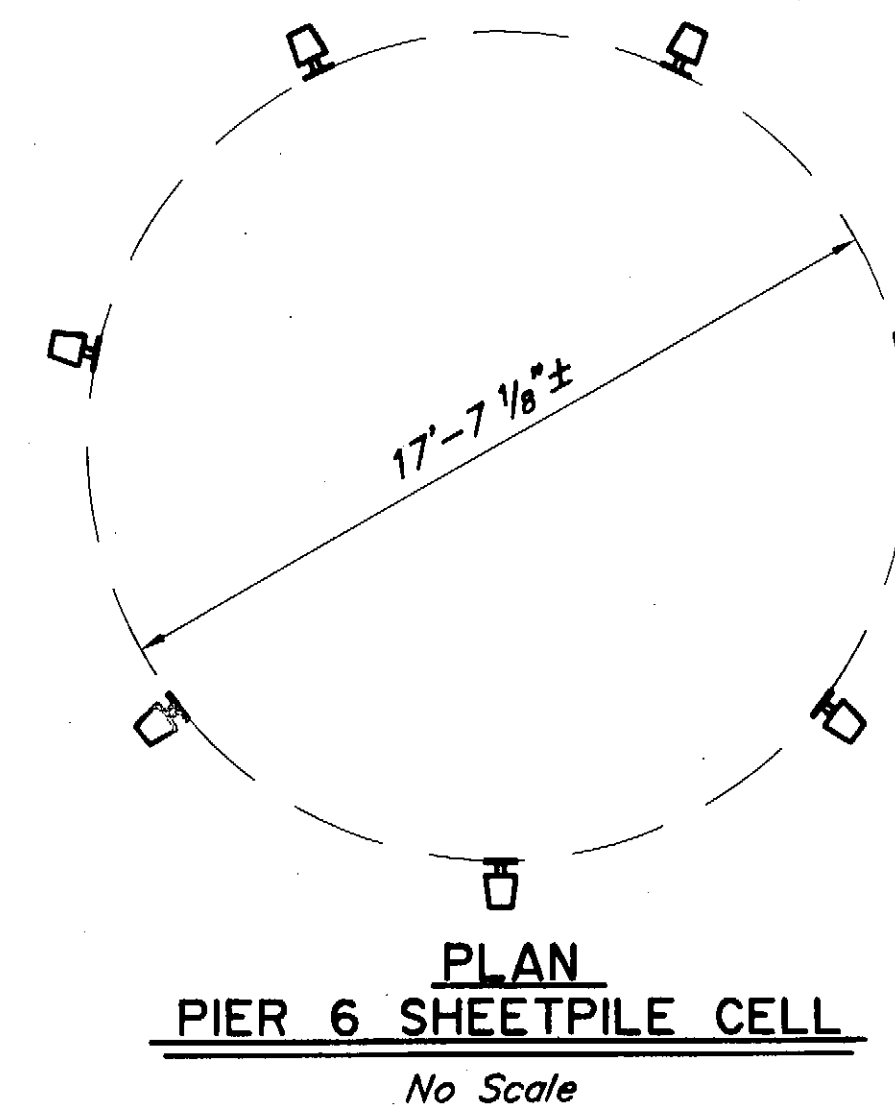
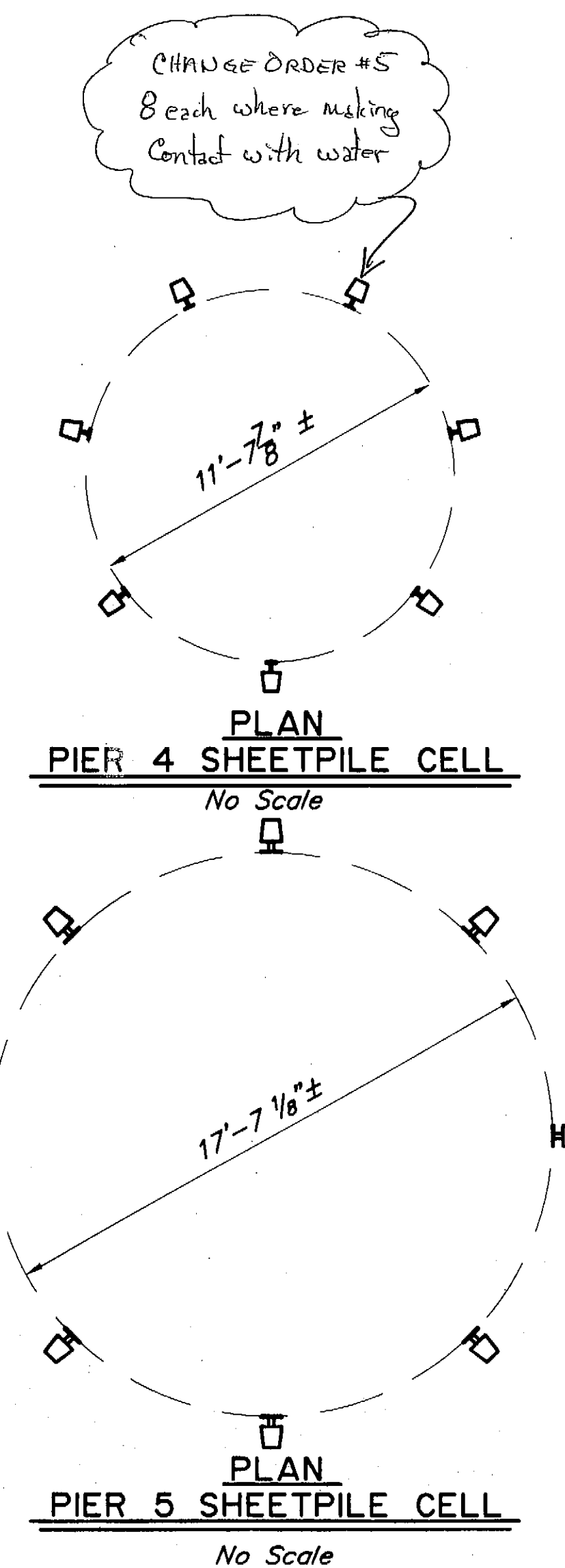
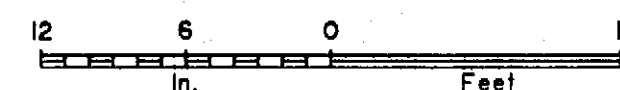
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BH-099-3(16)/67650	2003	L27	29



TYPICAL SECTION
PIER 4 & 7 INSTALLATION



TYPICAL SECTION
PIER 5 & 6 INSTALLATION



NOTES:

(E) = Existing

--- = Existing

— = Denotes this contract

DETAIL NOTES:

1. Install anodes vertically at equal spacing around each pier support.
2. Anode size: (20 Year life)
Piers 4 and 7: 120lbs; 7"x7"x24"
Piers 5 and 6: 384lbs; 8"x8"x60"
3. Provide 1 inch of slack in 1/4" Stainless Steel Wire Rope when installed.
4. Each pier has two sheetpile cells.
Total of 8 required anode installations.

Elevations, Bearings and Dimensions are based on "AS-BUILT" plans. Verify all controlling field dimensions before ordering or fabricating any material.

REHABILITATION

DESIGNED BY: Mike Higgo	CHECKED: Drew Stelbach
DRAWN BY: Leonard Robertson	CHECKED: Mike Higgo
QUANTITIES BY: Mike Higgo	CHECKED: Drew Stelbach

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
BRIDGE SECTION

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
Proj. Engr. Date 2-6-06

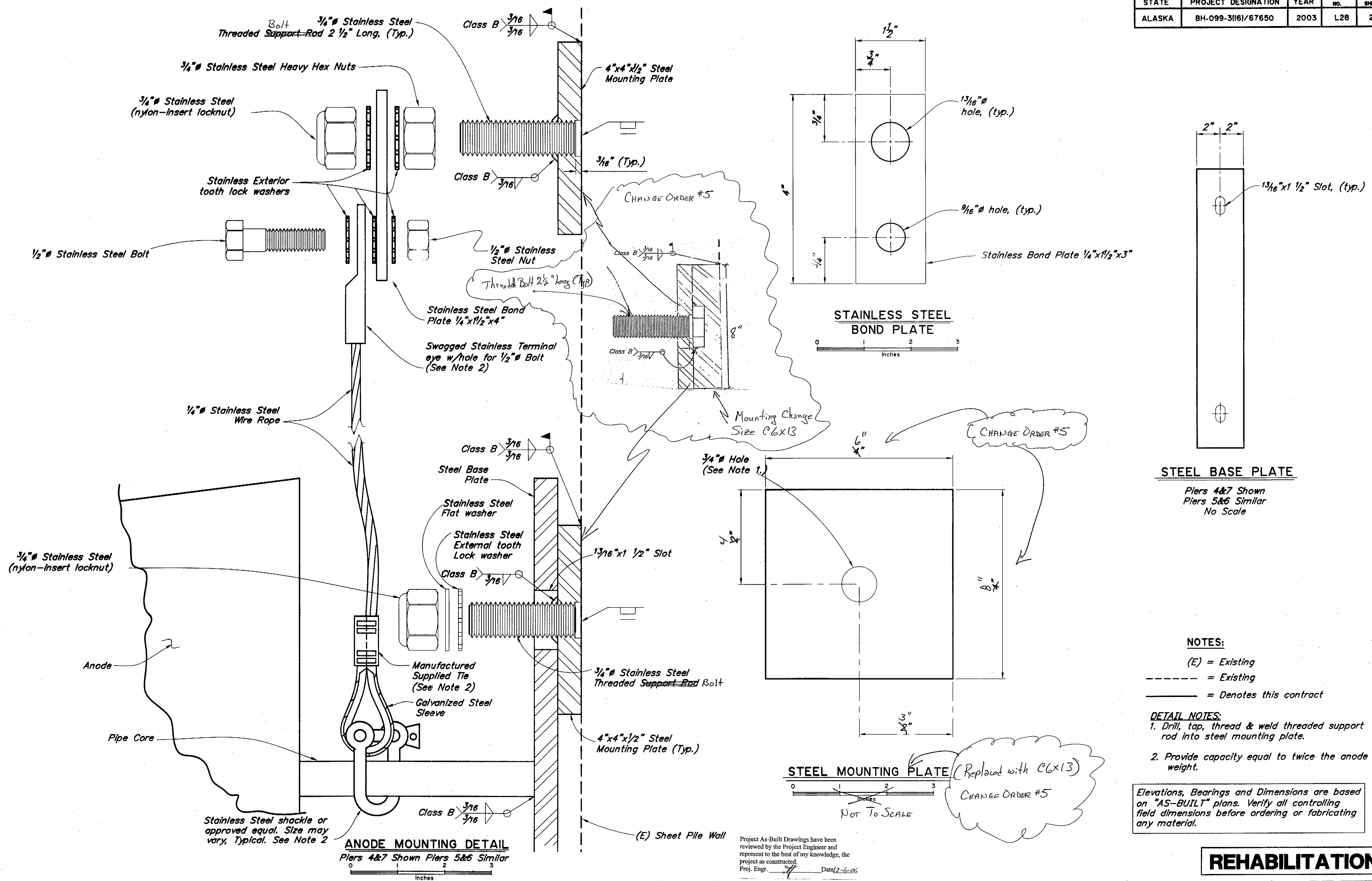


SITKA HARBOR BRIDGE
HARBOR DRIVE
ANODE INSTALLATION LAYOUT



BRIDGE NO. 245
DWG. NO. 27

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BH-099-3(16)/67650	2003	L28	29



STEEL BASE PLATE
 Piers 4&7 Shown
 Piers 5&6 Similar
 No Scale

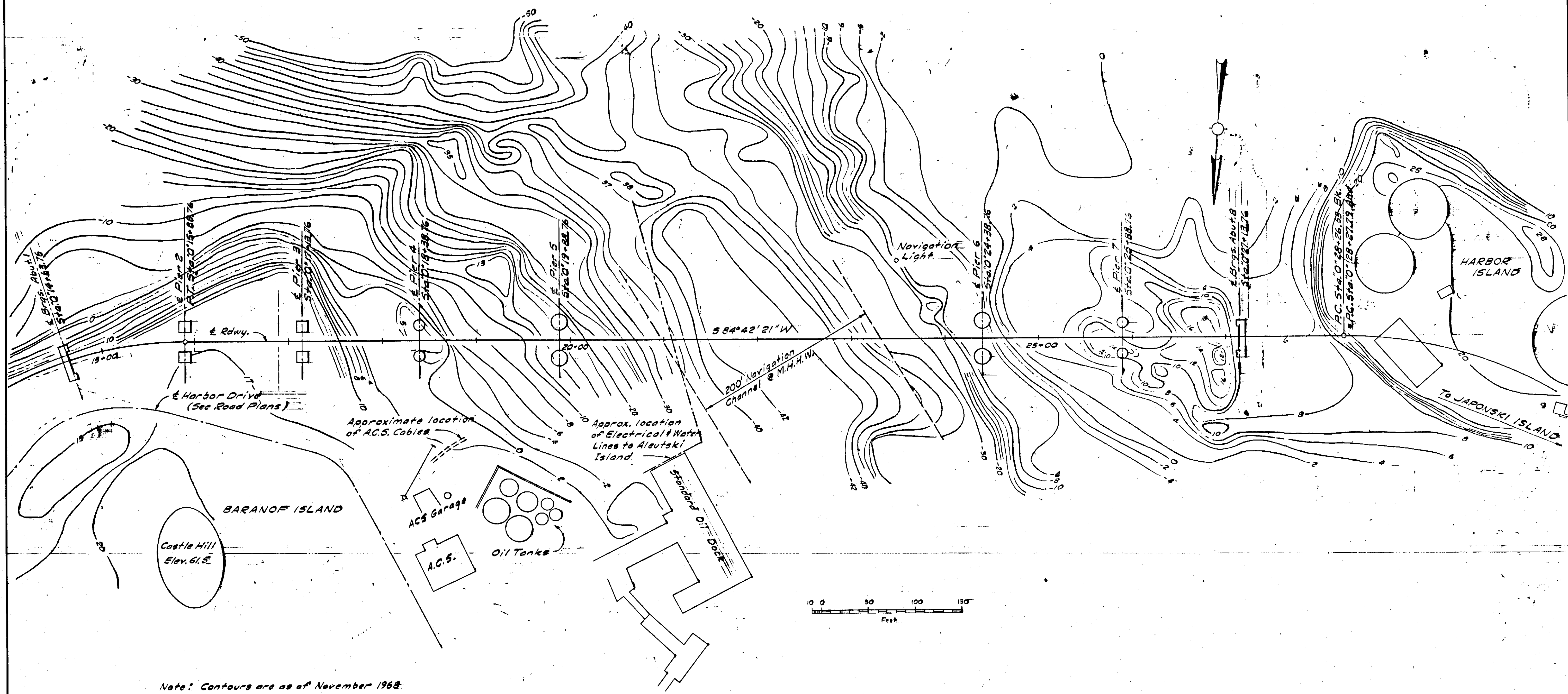
- NOTES:**
- (E) = Existing
 - = Existing
 - = Denotes this contract
- DETAIL NOTES:**
1. Drill, tap, thread & weld threaded support rod into steel mounting plate.
 2. Provide capacity equal to twice the anode weight.

Elevations, Bearings and Dimensions are based on "AS-BUILT" plans. Verify all controlling field dimensions before ordering or fabricating any material.

REHABILITATION

DESIGNED BY: <i>Mike Higgs</i> DRAWN BY: <i>Leonard Robertson</i> QUANTITIES BY: <i>Mike Higgs</i>	CHECKED: <i>Drew Stelbach</i> CHECKED: <i>Mike Higgs</i> CHECKED: <i>Drew Stelbach</i>	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES BRIDGE SECTION		SITKA HARBOR BRIDGE HARBOR DRIVE ANODE INSTALLATION DETAILS	
				BRIDGE NO. 245 DWG. NO. 28	

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BH-099-3(16)/67650	2003	L29	29



Note: Contours are as of November 1968.
 Datum, Mean Lower Low Water

Note dates of Site Plan and Contours.
 Verify all controlling field dimensions
 before ordering or fabricating any material.

Note: Additional fill in some areas

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
 Proj. Engr. *[Signature]* Date 12-6-06

AS BUILT PLANS	
Project Engineer	Date
CORRECTIONS TRANSFERRED	
Tracings <i>R.L. Winn</i>	Date <i>11/2/78</i>
Checked <i>[Signature]</i>	Date <i>11/6/78</i>

SITKA HARBOR BRIDGE
ROUTE NO. F-99

SITE PLAN

State of Alaska
DEPARTMENT OF HIGHWAYS
Juneau, Alaska

BRIDGE NO. 245
DWG. NO. 2229

408300 elev 122.20
 200' Harbor of Refuge mho.