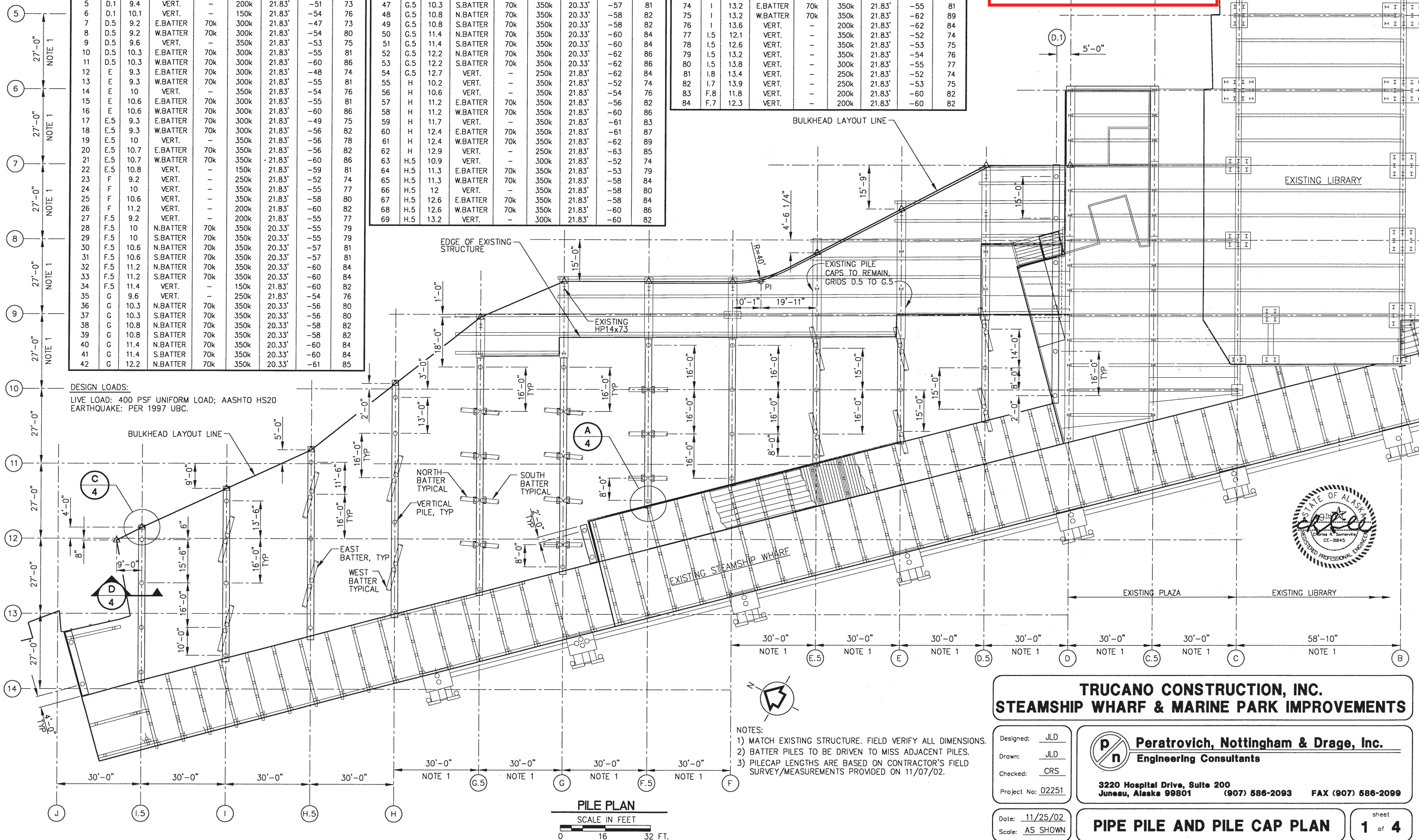


PILE #	GRID	GRID	PILE ORIENT.	DESIGN TENSION LOAD	DESIGN COMP. LOAD	CUT OFF ELEV.	EST'D PILE TIP ELEV.	EST'D PILE LENGTH
1	D.1	7.1	VERT.	-	250k	21.83'	-40	62
2	D.1	7.6	VERT.	-	200k	21.83'	-41	63
3	D.1	8.2	VERT.	-	200k	21.83'	-42	64
4	D.1	8.9	VERT.	-	200k	21.83'	-46	68
5	D.1	9.4	VERT.	-	200k	21.83'	-51	73
6	D.1	10.1	VERT.	-	150k	21.83'	-54	76
7	D.5	9.2	E.BATTER	70k	300k	21.83'	-47	73
8	D.5	9.2	W.BATTER	70k	300k	21.83'	-54	80
9	D.5	9.6	VERT.	-	350k	21.83'	-53	75
10	D.5	10.3	E.BATTER	70k	300k	21.83'	-55	81
11	D.5	10.3	W.BATTER	70k	300k	21.83'	-60	86
12	E	9.3	E.BATTER	70k	300k	21.83'	-48	74
13	E	9.3	W.BATTER	70k	300k	21.83'	-55	81
14	E	10	VERT.	-	350k	21.83'	-54	76
15	E	10.6	E.BATTER	70k	300k	21.83'	-55	81
16	E	10.6	W.BATTER	70k	300k	21.83'	-60	86
17	E.5	9.3	E.BATTER	70k	300k	21.83'	-49	75
18	E.5	9.3	W.BATTER	70k	300k	21.83'	-56	82
19	E.5	10	VERT.	-	350k	21.83'	-56	78
20	E.5	10.7	E.BATTER	70k	350k	21.83'	-56	82
21	E.5	10.7	W.BATTER	70k	350k	21.83'	-60	86
22	E.5	10.8	VERT.	-	150k	21.83'	-59	81
23	F	9.2	VERT.	-	250k	21.83'	-52	74
24	F	10	VERT.	-	350k	21.83'	-55	77
25	F	10.6	VERT.	-	350k	21.83'	-58	80
26	F	11.2	VERT.	-	200k	21.83'	-60	82
27	F.5	9.2	VERT.	-	200k	21.83'	-55	77
28	F.5	10	N.BATTER	70k	350k	20.33'	-55	79
29	F.5	10	S.BATTER	70k	350k	20.33'	-55	79
30	F.5	10.6	N.BATTER	70k	350k	20.33'	-57	81
31	F.5	10.6	S.BATTER	70k	350k	20.33'	-57	81
32	F.5	11.2	N.BATTER	70k	350k	20.33'	-60	84
33	F.5	11.2	S.BATTER	70k	350k	20.33'	-60	84
34	F.5	11.4	VERT.	-	150k	21.83'	-60	82
35	G	9.6	VERT.	-	250k	21.83'	-54	76
36	G	10.3	N.BATTER	70k	350k	20.33'	-56	80
37	G	10.3	S.BATTER	70k	350k	20.33'	-56	80
38	G	10.8	N.BATTER	70k	350k	20.33'	-58	82
39	G	10.8	S.BATTER	70k	350k	20.33'	-58	82
40	G	11.4	N.BATTER	70k	350k	20.33'	-60	84
41	G	11.4	S.BATTER	70k	350k	20.33'	-60	84
42	G	12.2	N.BATTER	70k	350k	20.33'	-61	85

PILE #	GRID	GRID	PILE ORIENT.	DESIGN TENSION LOAD	DESIGN COMP. LOAD	CUT OFF ELEV.	EST'D PILE TIP ELEV.	EST'D PILE LENGTH
43	G	12.2	S.BATTER	70k	350k	20.33'	-61	85
44	G	12.4	VERT.	-	150k	21.83'	-60	82
45	G.5	9.6	VERT.	-	250k	21.83'	-53	75
46	G.5	10.3	N.BATTER	70k	350k	20.33'	-57	81
47	G.5	10.3	S.BATTER	70k	350k	20.33'	-57	81
48	G.5	10.8	N.BATTER	70k	350k	20.33'	-58	82
49	G.5	10.8	S.BATTER	70k	350k	20.33'	-58	82
50	G.5	11.4	N.BATTER	70k	350k	20.33'	-60	84
51	G.5	11.4	S.BATTER	70k	350k	20.33'	-60	84
52	G.5	12.2	N.BATTER	70k	350k	20.33'	-62	86
53	G.5	12.2	S.BATTER	70k	350k	20.33'	-62	86
54	G.5	12.7	VERT.	-	250k	21.83'	-62	84
55	H	10.2	VERT.	-	350k	21.83'	-52	74
56	H	10.6	VERT.	-	350k	21.83'	-54	76
57	H	11.2	E.BATTER	70k	350k	21.83'	-56	82
58	H	11.2	W.BATTER	70k	350k	21.83'	-60	86
59	H	11.7	VERT.	-	350k	21.83'	-61	83
60	H	12.4	E.BATTER	70k	350k	21.83'	-61	87
61	H	12.4	W.BATTER	70k	350k	21.83'	-62	89
62	H	12.9	VERT.	-	250k	21.83'	-63	85
63	H.5	10.9	VERT.	-	300k	21.83'	-52	74
64	H.5	11.3	E.BATTER	70k	350k	21.83'	-53	79
65	H.5	11.3	W.BATTER	70k	350k	21.83'	-58	84
66	H.5	12	VERT.	-	350k	21.83'	-58	80
67	H.5	12.6	E.BATTER	70k	350k	21.83'	-58	84
68	H.5	12.6	W.BATTER	70k	350k	21.83'	-60	86
69	H.5	13.2	VERT.	-	300k	21.83'	-60	82

PILE #	GRID	GRID	PILE ORIENT.	DESIGN TENSION LOAD	DESIGN COMP. LOAD	CUT OFF ELEV.	EST'D PILE TIP ELEV.	EST'D PILE LENGTH
70	I	11.5	VERT.	-	350k	21.83'	-52	74
71	I	12	E.BATTER	70k	350k	21.83'	-52	78
72	I	12	W.BATTER	70k	350k	21.83'	-55	81
73	I	12.6	VERT.	-	350k	21.83'	-55	77
74	I	13.2	E.BATTER	70k	350k	21.83'	-55	81
75	I	13.2	W.BATTER	70k	350k	21.83'	-62	89
76	I	13.6	VERT.	-	200k	21.83'	-62	84
77	I.5	12.1	VERT.	-	350k	21.83'	-52	74
78	I.5	12.6	VERT.	-	350k	21.83'	-53	75
79	I.5	13.2	VERT.	-	350k	21.83'	-54	76
80	I.5	13.8	VERT.	-	300k	21.83'	-55	77
81	I.8	13.4	VERT.	-	250k	21.83'	-52	74
82	I.7	13.9	VERT.	-	250k	21.83'	-53	75
83	F.8	11.8	VERT.	-	200k	21.83'	-60	82
84	F.7	12.3	VERT.	-	200k	21.83'	-60	82

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DESIGN LOADS:
 LIVE LOAD: 400 PSF UNIFORM LOAD; AASHTO HS20
 EARTHQUAKE: PER 1997 UBC.

- NOTES:**
- 1) MATCH EXISTING STRUCTURE. FIELD VERIFY ALL DIMENSIONS.
 - 2) BATTER PILES TO BE DRIVEN TO MISS ADJACENT PILES.
 - 3) PILECAP LENGTHS ARE BASED ON CONTRACTOR'S FIELD SURVEY/MEASUREMENTS PROVIDED ON 11/07/02.

TRUCANO CONSTRUCTION, INC.
STEAMSHIP WHARF & MARINE PARK IMPROVEMENTS

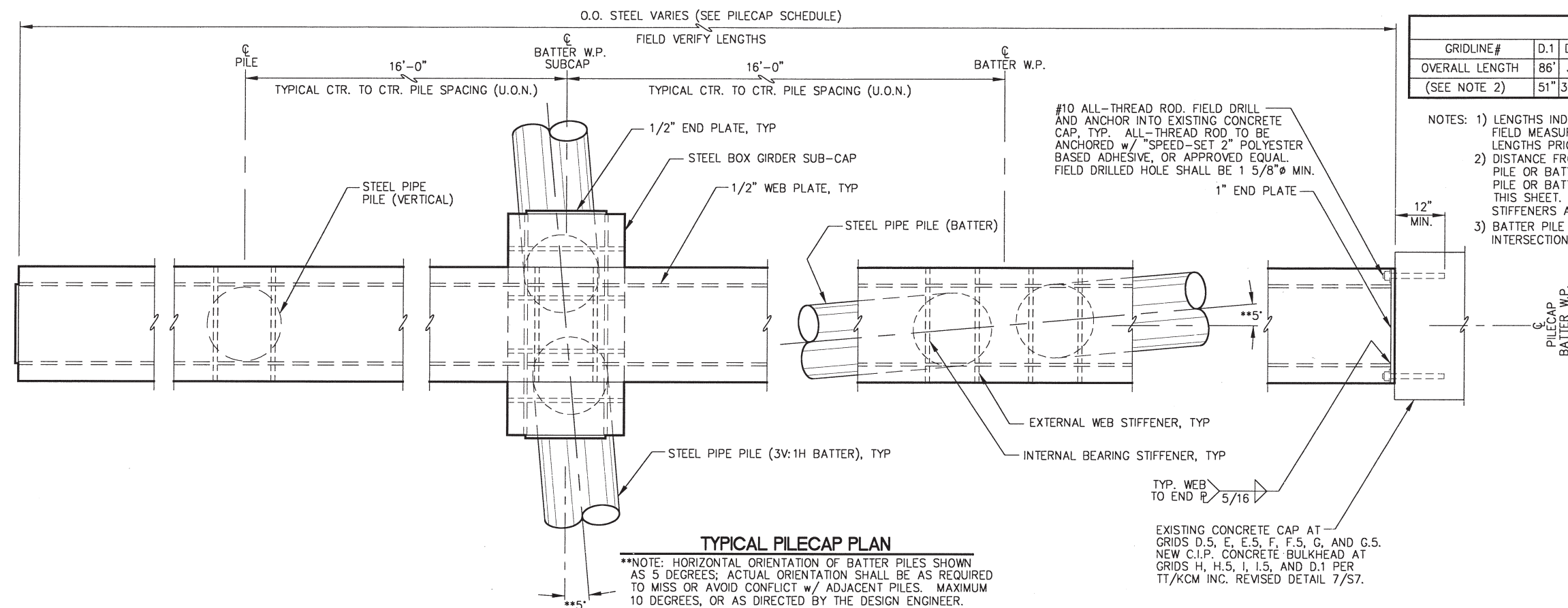
Designed: JLD
 Drawn: JLD
 Checked: CRS
 Project No: 02251

Peratovich, Nottingham & Drage, Inc.
Engineering Consultants

3220 Hospital Drive, Suite 200
 Juneau, Alaska 99801 (907) 586-2093 FAX (907) 586-2099

Date: 11/25/02
 Scale: AS SHOWN

PIPE PILE AND PILE CAP PLAN
 sheet 1 of 4

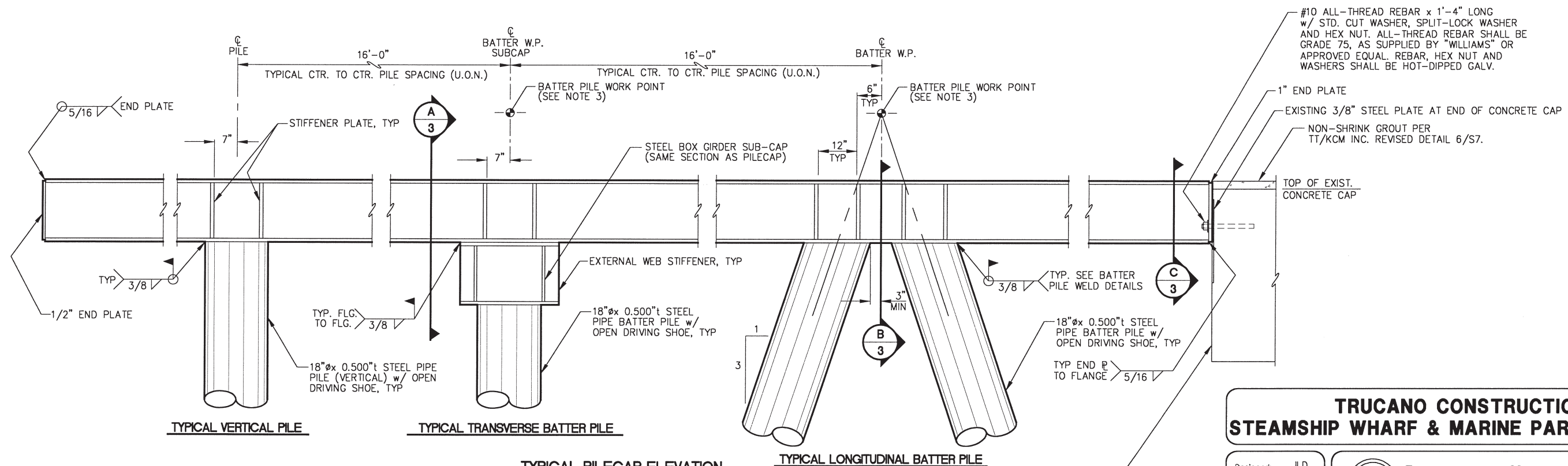


PILECAP SCHEDULE														
GRIDLINE#	D.1	D.5	E	E.5	F	F.5	G	G.5	H	H.5	I	I.5	I.8	F.8
OVERALL LENGTH	86'	37'	38'	46'	53'	61'	78'	85'-6"	85'-6"	69'-6"	63'	56'-6"	23'-6"	14'
(SEE NOTE 2)	51"	39.5"	41.5"	41.5"	28"	28"	40"	39.5"	74"	68.5"	63.5"	63.5"	48"	24"

NOTES: 1) LENGTHS INDICATED IN ABOVE SCHEDULE WERE DERIVED FROM CONTRACTOR'S SURVEYOR FIELD MEASUREMENTS (DATED 11/07/02). CONTRACTOR SHALL VERIFY ALL PILECAP LENGTHS PRIOR TO FABRICATION.

2) DISTANCE FROM END OF PILECAP (SHOREWARD END) TO CENTERLINE OF FIRST VERTICAL PILE OR BATTER PILE WORK POINT. LOCATE STIFFENERS RELATIVE TO CENTERLINE OF PILE OR BATTER PILE WORK POINT AS DETAILED IN TYPICAL PILE CAP ELEVATION SHOWN THIS SHEET. CONTRACTOR SHALL VERIFY DISTANCES INDICATED AND LOCATE ALL PILECAP STIFFENERS ACCORDINGLY PRIOR TO FABRICATION.

3) BATTER PILE WORK POINT SHOWN THIS DRAWING DOES NOT CORRESPOND TO PILE INTERSECTION WORK POINT SHOWN ON ORIGINAL TT/KCM INC. DESIGN DRAWINGS.



EXISTING CONCRETE CAP AT
GRIDS D.5, E, E.5, F, F.5, G, AND G.5.
NEW C.I.P. CONCRETE BULKHEAD AT
GRIDS H, H.5, I, I.5, AND D.1 PER
TT/KCM INC. REVISED DETAIL 7/S7.

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TRUCANO CONSTRUCTION, INC.
STEAMSHIP WHARF & MARINE PARK IMPROVEMENTS

Designed: JLD
 Drawn: JLD
 Checked: CRS
 Project No: 02251

Drawn:

Checked: CRS

Project No: 02251

Date: 11/25/02

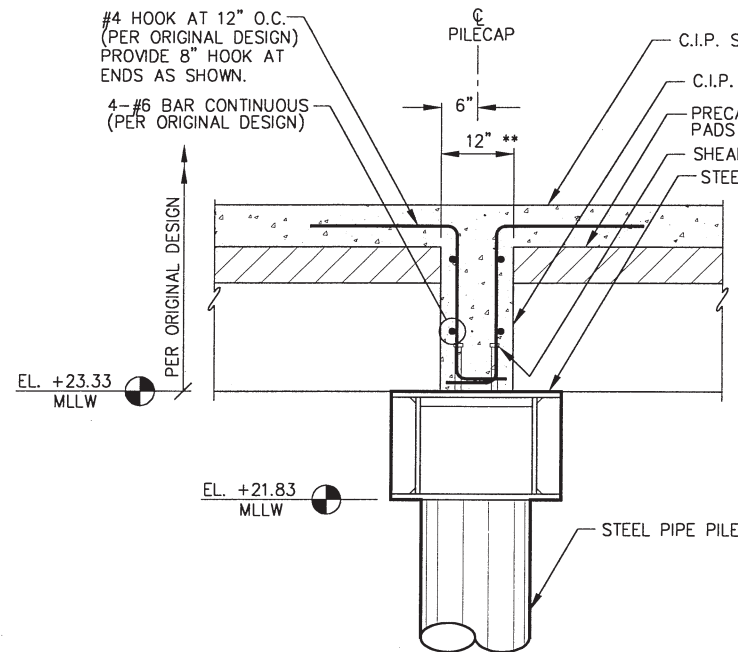
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 **Peratrovich, Nottingham & Drage, Inc.**
Engineering Consultants

3220 Hospital Drive, Suite 200
Juneau, Alaska 99801 (907) 586-2093 FAX (907) 586-2099

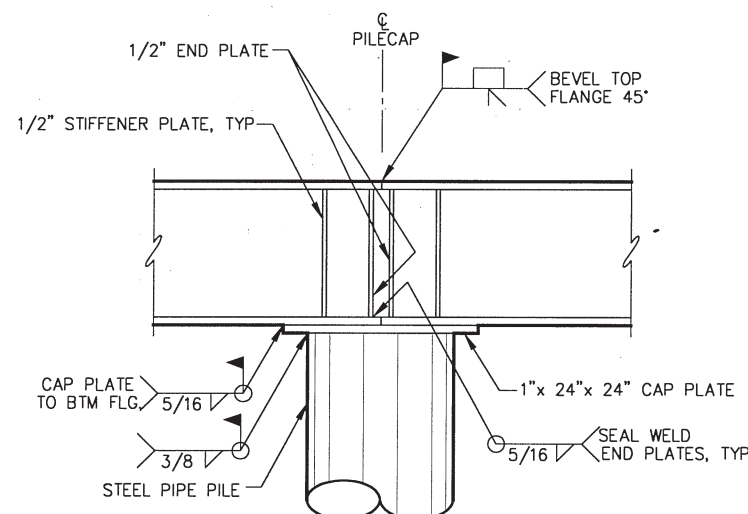
PILE CAP DETAILS

sheet
of **4**



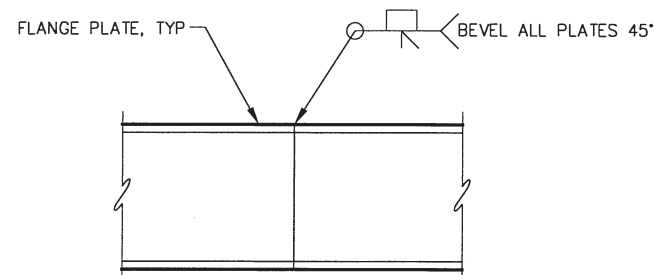
TYPICAL SECTION AT PILECAP

**NOTE: DIMENSION CHANGED FROM ORIGINAL DESIGN DRAWINGS.



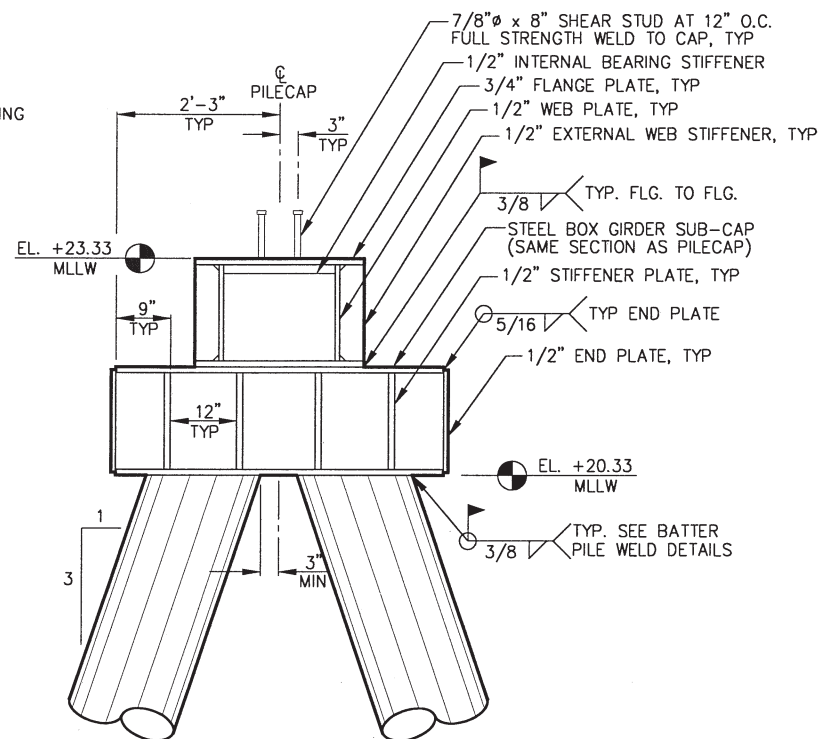
FIELD SPLICE DETAIL - ELEVATION

NOTE: FIELD SPLICE SHALL BE LOCATED OVER PILE AS SHOWN. ACTUAL LOCATIONS SHALL BE DETERMINED BY CONTRACTOR AND APPROVED BY ENGINEER PRIOR TO FABRICATION.



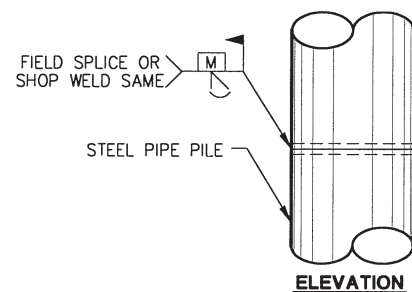
SHOP SPLICE DETAIL - ELEVATION

NOTE: ALL SHOP SPLICES SHALL BE CLEARLY IDENTIFIED ON FABRICATION DRAWINGS.

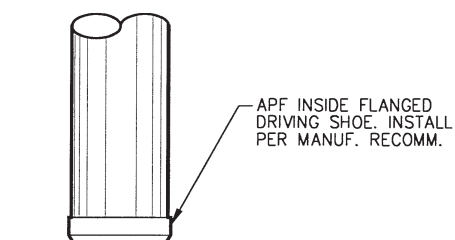


SECTION AT SUB-CAP

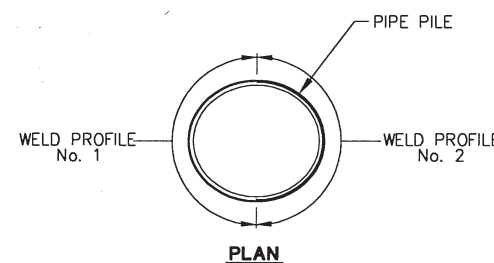
NOTE: DETAILS NOT SHOWN SIMILAR TO SECTION B.



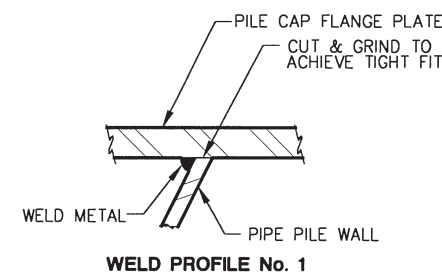
TYPICAL PILE SPLICE WELD
TYPICAL FOR ALL PIPE PILE SPLICES



TYPICAL PILE TIP

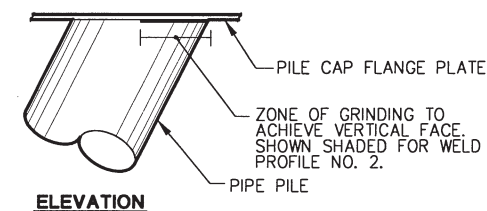


PLAN

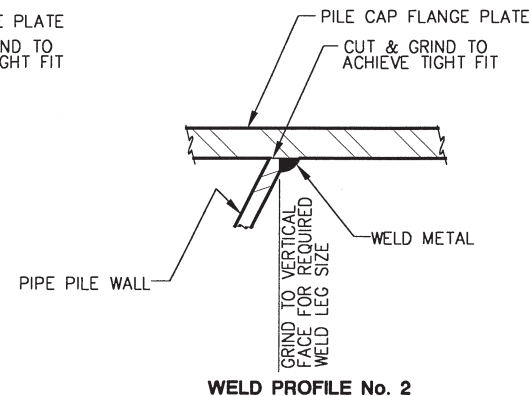


WELD PROFILE No. 1

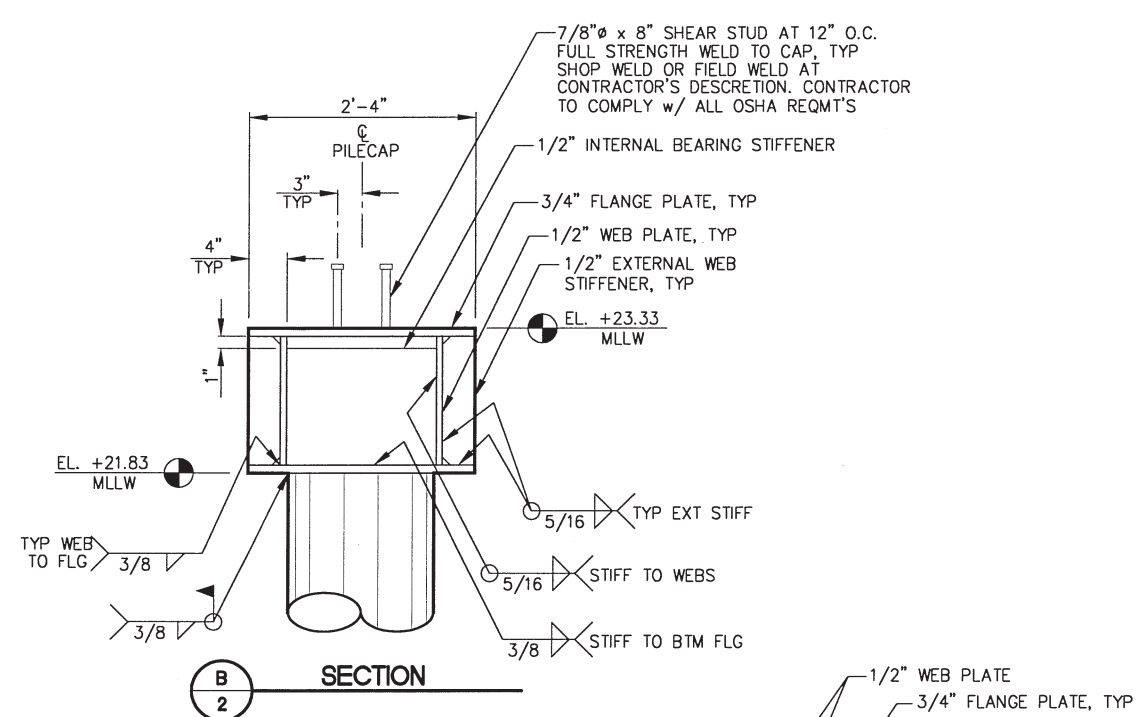
BATTER PILE WELD DETAILS



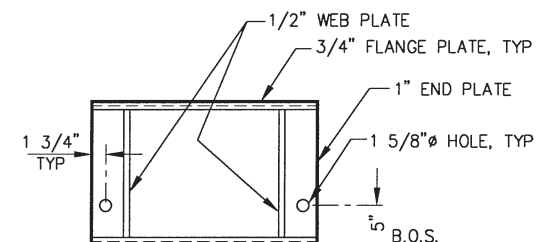
ELEVATION



WELD PROFILE No. 2



SECTION B



SECTION C

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TRUCANO CONSTRUCTION, INC.
STEAMSHIP WHARF & MARINE PARK IMPROVEMENTS

Designed: JLD
Drawn: JLD
Checked: CRS
Project No: 02251

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Engineering Consultants

3220 Hospital Drive, Suite 200
Juneau, Alaska 99801 (907) 586-2093 FAX (907) 586-2099

Date: 11/25/02
Scale: NTS

PILE AND PILE CAP DETAILS

sheet
3 of 4



NOTE: CONTRACTOR SHALL VERIFY VERTICAL LOCATION OF BOLT HOLES SHOWN THROUGH STEEL WELDMENTS BY COORDINATING WITH CONCRETE FABRICATOR REGARDING REINFORCEMENT REQUIREMENTS AND BY VERIFYING FIBER BEARING PAD THICKNESS REQUIRED BY TT/KCM DESIGN DRAWINGS.



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sheet
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