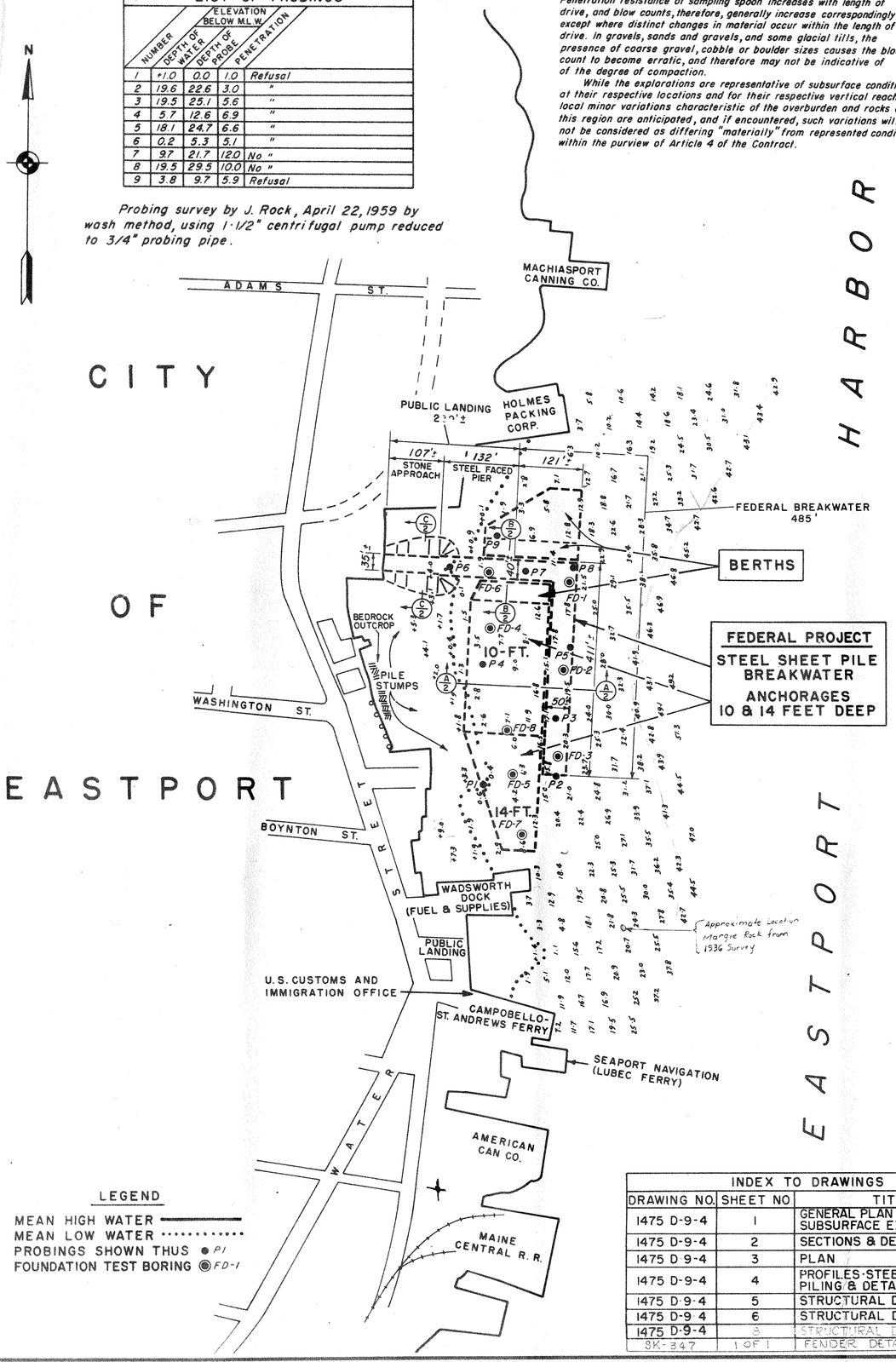
CORPS OF ENGINEERS

U. S. ARMY

LIST OF PROBINGS

NUMBER	DEPTH OF WATER	ELEVATION BELOW M.L.W. DEPTH OF PROBE	PENETRATION	
1	+1.0	0.0	1.0	Refusal
2	19.6	22.6	3.0	"
3	19.5	25.1	5.6	"
4	5.7	12.6	6.9	"
5	18.1	24.7	6.6	"
6	0.2	5.3	5.1	"
7	9.7	21.7	12.0	No "
8	19.5	29.5	10.0	No "
9	3.8	9.7	5.9	Refusal

Probing survey by J. Rock, April 22, 1959 by wash method, using 1-1/2" centrifugal pump reduced to 3/4" probing pipe.



LEGEND

MEAN HIGH WATER ——————

MEAN LOW WATER ·····

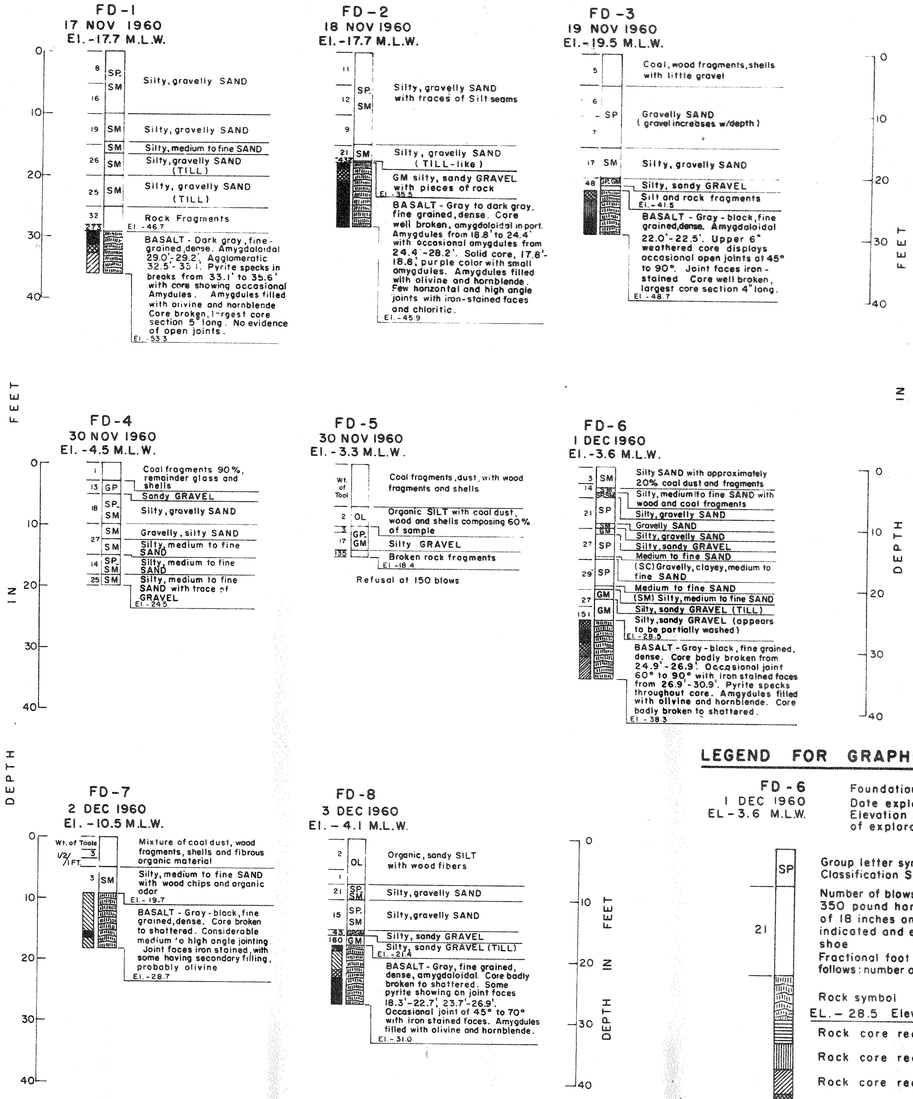
PROBINGS SHOWN THUS ● P1

FOUNDATION TEST BORING ◉ FD-1

BORING NOTES:

Normal length of continuous drive of sampling spoon is 5.0 feet. Penetration resistance of sampling spoon increases with length of drive, and blow counts, therefore, generally increase correspondingly except where distinct changes in material occur within the length of drive. In gravels, sands and gravels, and some glacial tills, the presence of coarse gravel, cobble or boulder sizes causes the blow count to become erratic, and therefore may not be indicative of the degree of compaction.

While the explorations are representative of subsurface conditions at their respective locations and for their respective vertical reaches, local minor variations characteristic of the overburden and rocks of this region are anticipated, and if encountered, such variations will not be considered as differing "materially" from represented conditions within the purview of Article 4 of the Contract.



GENERAL NOTES:

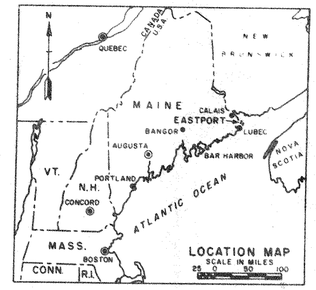
Soundings, probings and borings are in feet and tenths and are referred to the plane of Mean Low Water.

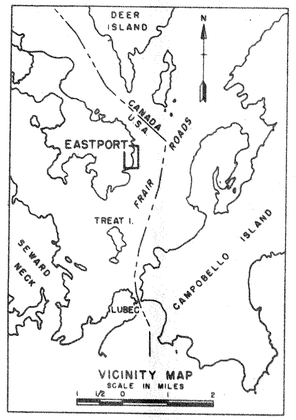
Bench Mark 3(1918) is a standard disk, stamped "No. 3 1918", set in top of south curbing of steps leading to Peavey Library, located on northwest corner of Key and Water Sts. Top of stone is 2' above walk. B.M. is 22.5' west from west line of Water St. and 51' north from north line of Key St. El. 46.54' above M.L.W. It was reported in Aug. 1948 that mark is somewhat mutilated in center of disk.

Bench Mark 4(1930) is a standard disk, stamped "No. 4 1930", set in solid rock ledge in lawn back of Peavey Library. The bench mark is 7.9' west of northwest corner of library building, and halfway between two northernmost maple trees that form west boundary line for library grounds. Ledge is flat and almost even with grass lawn. El. 49.51' above M.L.W.

Bench Mark 5(1948) is a standard disk, stamped "Tidal No. 5 1948", set in concrete foundation of south face of American Can Co. warehouse building, 10' northeast from southwest corner, 27' east of center line of Water St., 40 paces north of railroad tracks leading to Eastern Steamship Wharf and about 275' west of tide staff. El. 25.82' above M.L.W.

Soundings are from survey of Jan. & Feb. 1957.

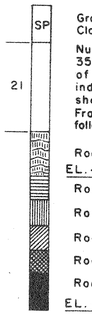




LEGEND FOR GRAPHIC LOGS

FD-6
1 DEC 1960
EL-3.6 M.L.W.

Foundation Test Boring
Date exploration completed
Elevation of ground surface during time of exploration



Group letter symbol according to Unified Soil Classification System

Number of blows per foot of penetration using a 350 pound hammer falling freely an average of 18 inches on the sample spoon of the size indicated and equipped with a beveled drive shoe

Fractional foot of penetration indicated as follows: number of blows / tenths of a foot 150/3

Rock symbol

EL.-28.5 Elevation of bedrock surface

Rock core recovery 0-25 %

Rock core recovery 25-50 %

Rock core recovery 50-75 %

Rock core recovery 75-90 %

Rock core recovery 90-100 %

EL.-38.3 Elevation bottom of exploration

INFORMATION DRAWING

DACW33-77-B-0029

INDEX TO DRAWINGS

DRAWING NO.	SHEET NO	TITLE
1475 D-9-4	1	GENERAL PLAN & SUBSURFACE EXPLORATIONS
1475 D-9-4	2	SECTIONS & DETAILS
1475 D-9-4	3	PLAN
1475 D-9-4	4	PROFILES-STEEL SHEET PILING & DETAILS
1475 D-9-4	5	STRUCTURAL DETAILS NO 1
1475 D-9-4	6	STRUCTURAL DETAILS NO 2
1475 D-9-4	7	STRUCTURAL DETAILS NO 3
SK-347	1 OF 1	FENDER DETAILS

REVISION	DATE	DESCRIPTION
1	9-27-61	Dwg. No. 1475 D-9-4 added

U.S. ARMY ENGINEER DIVISION, NEW ENGLAND
CORPS OF ENGINEERS
WALTHAM, MASS

DR. BY	TR. BY	CK. BY
A.L.D.	A.L.D.	J.J.F.

PROJECT ENGINEER

SUBMITTED BY: CHIEF, E & P/ SECTION

APPROVAL RECOMMENDED: CHIEF, PLANNG RPTS BRANCH

APPROVED: CHIEF ENGINEERING DIV.

DATE MAY 1961

EASTPORT HARBOR
EASTPORT, MAINE
BREAKWATER AND PUBLIC LANDING
GENERAL PLAN & SUBSURFACE EXPLORATIONS

SCALE IN FEET 100 0 100 200 300 400

SCALES AS SHOWN SPEC NO CIV ENG-19-016-61-58

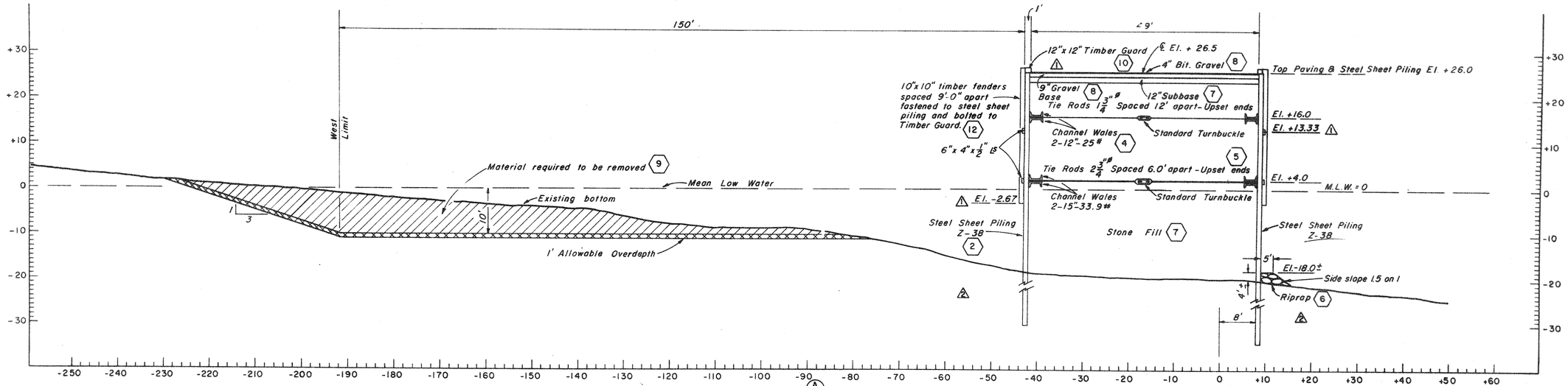
DRAWING NUMBER 1475 D-9-4

SHEET 1

As Built Drawing
77 0091

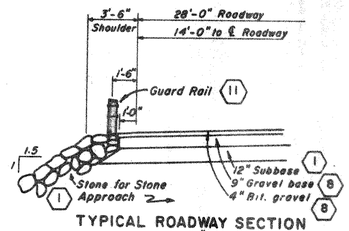
CORPS OF ENGINEERS

U. S. ARMY

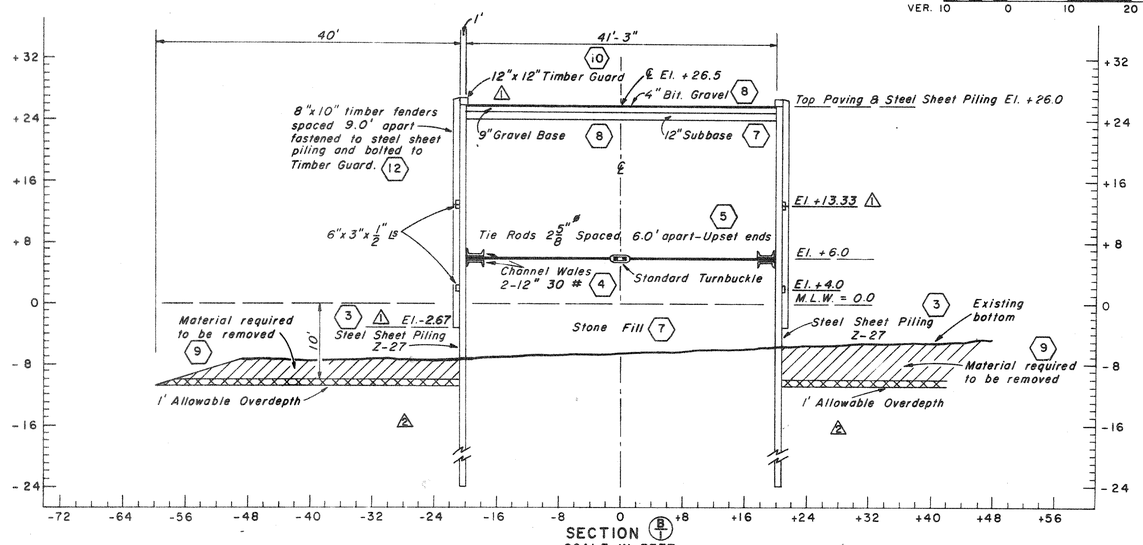


SECTION (A/1)
SCALE IN FEET
HOR. 10 0 10 20 30
VER. 10 0 10 20 30

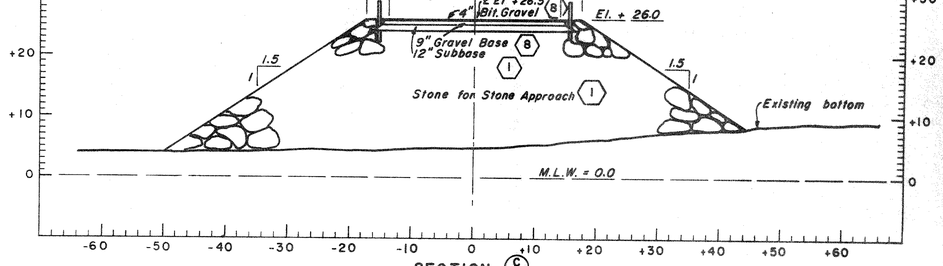
NOTE:
Steel sheet piling shall be driven to ledge rock except where the required penetration can be obtained before rock is encountered.



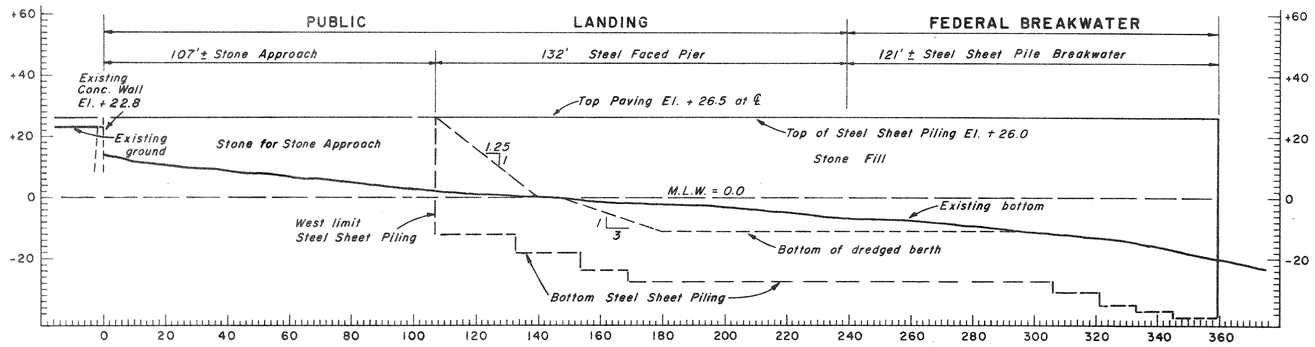
TYPICAL ROADWAY SECTION
SCALE: 1/4" = 1'-0"



SECTION (B/1)
SCALE IN FEET
HOR. 4 0 4 8 12 16 20
VER. 4 0 4 8 12 16 20



SECTION (℄/1)
SCALE IN FEET
HOR. 10 0 10 20 30
VER. 10 0 10 20 30



PROFILE ALONG ℄ PUBLIC LANDING
SCALE IN FEET
HOR. 20 0 20 40 60
VER. 20 0 20 40 60

INFORMATION DRAWING
DACW33-77-B-0029

NOTES

For general plan and general notes see Sheet No. 1.
For enlarged plan showing breakwater, steel faced pier, stone approach and areas to be dredged see Sheet No. 3.
For details of steel sheet piling, wales, tie rods and other connections see Sheets No. 4, 5 & 6.
Figures in hexagons indicate item numbers under which payment will be made.

As Built Drawing
Contract No. DACW33-77-C-0091

REVISION	DATE	DESCRIPTION	BY
⚠2	6-8-61	Penetration depths deleted (Add. #2)	JWJ
⚠1	6-6-61	Sections A & B revised (Add. #1)	JWJ

U.S. ARMY ENGINEER DIVISION, NEW ENGLAND
CORPS OF ENGINEERS
WALTHAM, MASS

DES. BY	TR BY	CK. BY
G.T.S. J.J.L.	A.D.C	G.J.L.

PROJECT ENGINEER
SUBMITTED BY
CHIEF, R. & H. SECTION
APPROVAL RECOMMENDED
CHIEF, PLANS & RPTS. BRANCH
APPROVED
CHIEF, ENGINEERING DIV.
DATE MAY 1961

EASTPORT HARBOR
EASTPORT, MAINE
BREAKWATER AND PUBLIC LANDING
SECTIONS & DETAILS

SCALES AS SHOWN
SPEC. NO. CIV ENG -15-016-61-55
DRAWING NUMBER
1475 D-9-4
SHEET 2

CORPS OF ENGINEERS

U. S. ARMY

NOTE
TIMBER FENDERS, LADDERS & MOORING CLEATS ON EAST SIDE & SOUTH END OF BREAKWATER ARE ADDITIVE ITEMS 1, 2 & 3.

N395,000 N394,900 N394,800 N394,700 N394,600 N394,500 N394,400 N394,300

E892,800 E892,700 E892,600 E892,500 E892,400

Timber fenders-45 spaces @ 9'-0" = 405'

RIPRAP

Sta. 3+35 FD-1 N394,838.51 E892,829.84

Sta. 4+00 Sta. 5+00 Sta. 6+00 P-3 Sta. 7+00

FD-2 FD-3 P-2

N394,474.23 E892,806.98

Timber fenders-40 spaces @ 9'-0" = 360'

Ladder (See sheet 6 for details)

14' Depth Contour

(N394,260.53 E892,765.87)

10' Depth Contour

DREDGE BERTH TO-10 FT. (ADDITIVE ITEM NO. 4)

DREDGE BERTH TO-10 FT.

DREDGE BERTH TO-10 FT.

DREDGE ANCHORAGE TO-10 FT.

DREDGE ANCHORAGE TO - 14 FT.

FD-4 FD-5 FD-6 FD-7 FD-8

P-4 P-5 P-6 P-7 P-8 P-9

REMAINS OF OLD PIER CRIB 2-2 (Approx. Location)

2 Spaces @ 12' = 24'

Timber fenders-20 spaces @ 9'0" = 180'

Sta. 3+00 Sta. 2+39 Sta. 2+00

Timber fenders-17 spaces @ 9'0" = 153'

5°-86°-24'-30" E — 335'

90°-00'

21'-7½" 21'-7½"

260' 210' 150'

M.L.W.

Slope varies from 1 on 1.5 to 1 on 1.25

Slope varies from 1 on 1.5 to 1 on 1.25

Sta. 1+07 Sta. 1+00

See note (2) This sheet

APPROX. LOCATION 10" SEWER

APPROX. LOCATION 8" SEWER

Slope 1 on 1.5

Toe of Stone Approach

Guard Rail

5.24°-50'-15" E

61°-34'-15"

Broken stub piles and sunken timbers from ruins of old wharves scattered throughout area

BROKEN STUB PILES

BIT. TREATED GRAVEL ROAD

LOG CRIB BULKHEAD

12" CMP CULVERT

12" CONC. WALL 2' CONC. WALL 10" CONC. WALL

Sta. 0+00 N394,859.5 E892,495.5

Sdg. Pt. B N394,854.94 E892,490.74

WALLS BADLY BROKEN

11" CONC. WALL 12" CONC. WALL 16" CONC. WALL 3" DRAIN

BEDROCK OUTCROP

GRAVEL ROAD

CHRISTIAN SCIENCE SOCIETY

LOG CRIB BULKHEAD

NOTE
(1) Measuring along the center line, the structure is divided as follows:
Sta. 0+00 to Sta. 1+07 Stone Approach
Sta. 1+07 to Sta. 2+39 Steel Faced Pier
Sta. 2+39 to Sta. 7+23.4 Federal Breakwater

(2) Hand place stone in vertical face above rock slope.

LEGEND
● P-1 = Probings
◉ FD-1 = Foundation Test Borings
Cl. = Mooring Cleat

INFORMATION DRAWING

DACW33-77-B-0029

NOTES
For general notes see Sheet No. 1.
Soundings and elevations are in feet and tenths and are referred to the plane of Mean Low Water.
Topography, contours and elevations in vicinity of proposed Public Landing are from plane table survey of Dec. 1960.
Soundings are from survey of Jan. & Feb. 1957.
Broken stub piles north of coordinate line N394,700 were actually located by plane table survey. Broken pile stubs south of this line have not been located by survey and are indicated to show their existence only.
Coordinates are on The Transverse Mercator System for the State of Maine (East Zone)
For graphic logs of borings and list of probings see Sh. No. 1
Figures in hexagons indicate item numbers under which payment will be made.

GRAPHIC SCALE
1" = 20' 20 0 20 40

As Built Drawing 77 0091

REVISION	DATE	DESCRIPTION	BY

U.S. ARMY ENGINEER DIVISION, NEW ENGLAND
CORPS OF ENGINEERS
WALTHAM, MASS.

DR. BY	TR. BY	CK. BY
A.L.D.	A.L.D.	J.J.L.

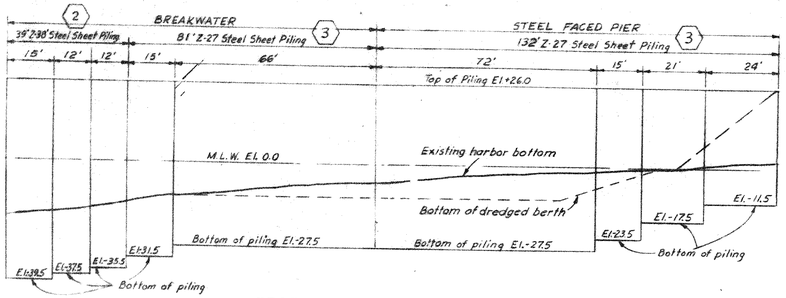
Jesse J. LaMarche
PROJECT ENGINEER
SUBMITTED BY
CHIEF, R. & H. SECTION
APPROVED / RECOMMENDED
(CHIEF, PLANS & APTS BRANCH)

EASTPORT HARBOR
EASTPORT, MAINE
BREAKWATER AND PUBLIC LANDING PLAN

APPROVED
CHIEF ENGINEERING DIV.
DATE MAY 1961

SCALE 1" = 20' SPEC. NO CIV ENG-19-016-61-59
DRAWING NUMBER 1475 D-9-4
SHEET 3

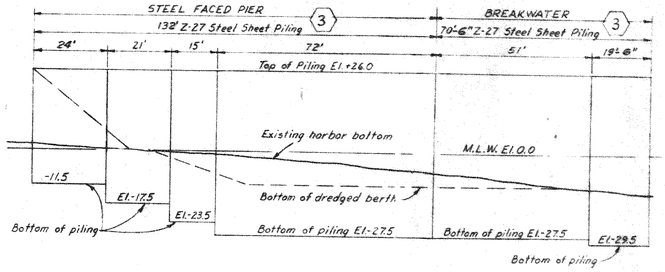
CORPS OF ENGINEERS — U. S. ARMY



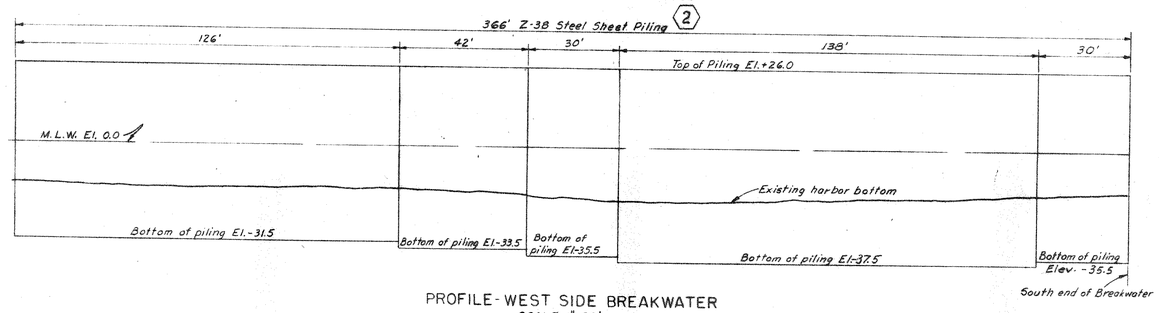
PROFILE - NORTH SIDE SHORE LEG BREAKWATER AND STEEL FACED PIER
SCALE 1"=20'

STONE APPROACH

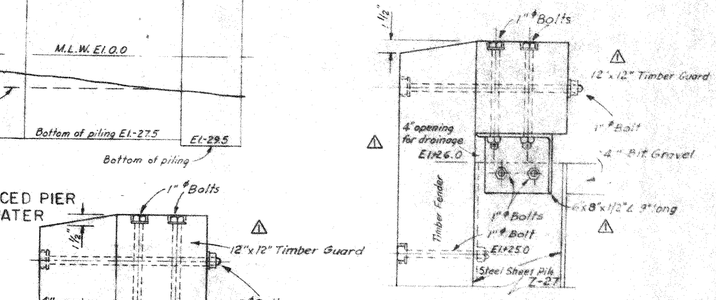
STONE APPROACH

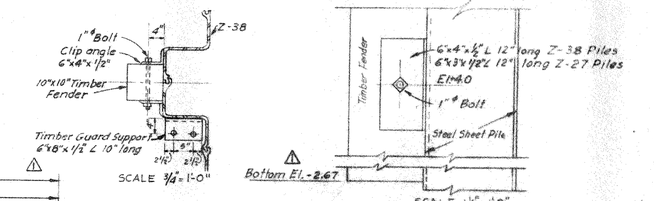


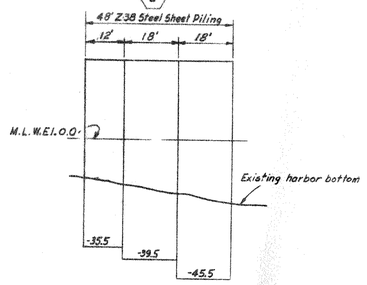
PROFILE - SOUTH SIDE STEEL FACED PIER AND SHORE LEG OF BREAKWATER
SCALE 1"=20'



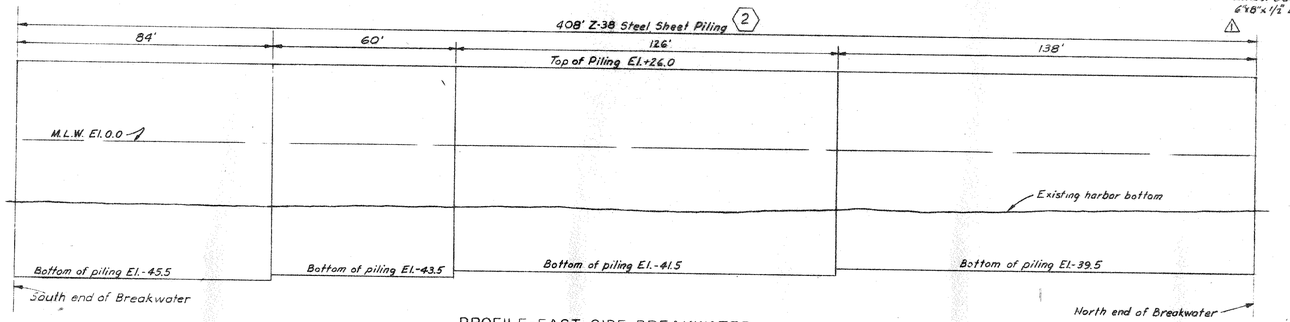
PROFILE - WEST SIDE BREAKWATER
SCALE 1"=20'







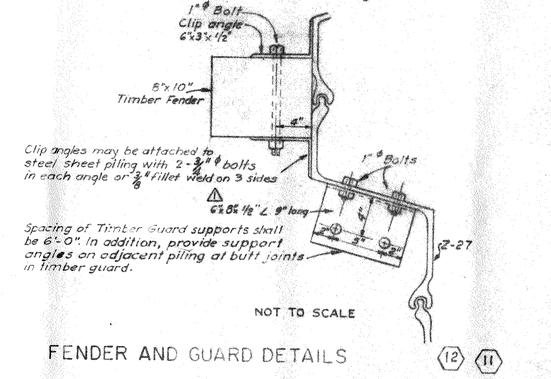
PROFILE - SOUTH END BREAKWATER
SCALE 1"=20'



PROFILE - EAST SIDE BREAKWATER
SCALE 1"=20'

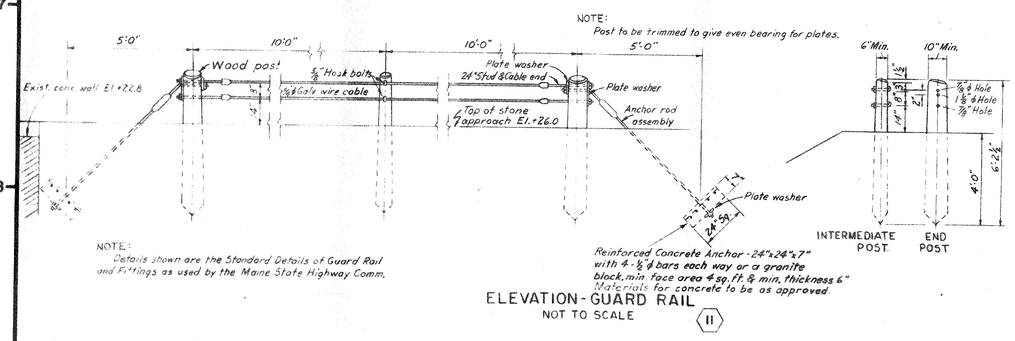
INFORMATION DRAWING

DACW33-77-B-0029



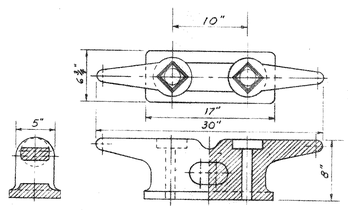
NOT TO SCALE

FENDER AND GUARD DETAILS (12) (11)



NOTE:
Details shown are the Standard Details of Guard Rail and Fittings as used by the Maine State Highway Comm.

ELEVATION - GUARD RAIL
NOT TO SCALE (11)



HEAVY CLEAT DETAIL (14)
SCALE 1½"=1'-0"

Mooring cleats shall be located as shown on sheet No. 3 and bolted to the Timber Guard with 2-1⅛" ϕ bolts

NOTES:

Figures in hexagons indicate item numbers under which payment will be made.

For details of Steel Sheet Piling and connections see sheet Nos. 5 and 6.

For location of guard rail see sheet No. 3

Timber fenders shall be located as shown on sheet No. 3.

GRAPHIC SCALES

1" = 20'-0" 20' 0 20' 40'

1½" = 1'-0" 12" 9" 6" 3" 0 6" 12"

3/4" = 1'-0" 1' 0 1' 2' 3'

As Built Drawing
Contract No. DACW 33-77-C-0091

REVISION	DATE	DESCRIPTION	BY
4	6-6-61	Details revised (Add. #1)	JHS

U.S. ARMY ENGINEER DIVISION, NEW ENGLAND
CORPS OF ENGINEERS
WALTHAM, MASS.

DES. BY	DR. BY	CK. BY
G.T.B. J.J.L.	A.L.D. A.D.C.	J.J.L.

PROJECT ENGINEER

SUBMITTED BY
CHIEF, R.B.H. SECTION

APPROVAL RECOMMENDED
CHIEF, PLANS & SPTS BRANCH

APPROVED
CHIEF, ENGINEERING DIVISION

DATE MAY 1961

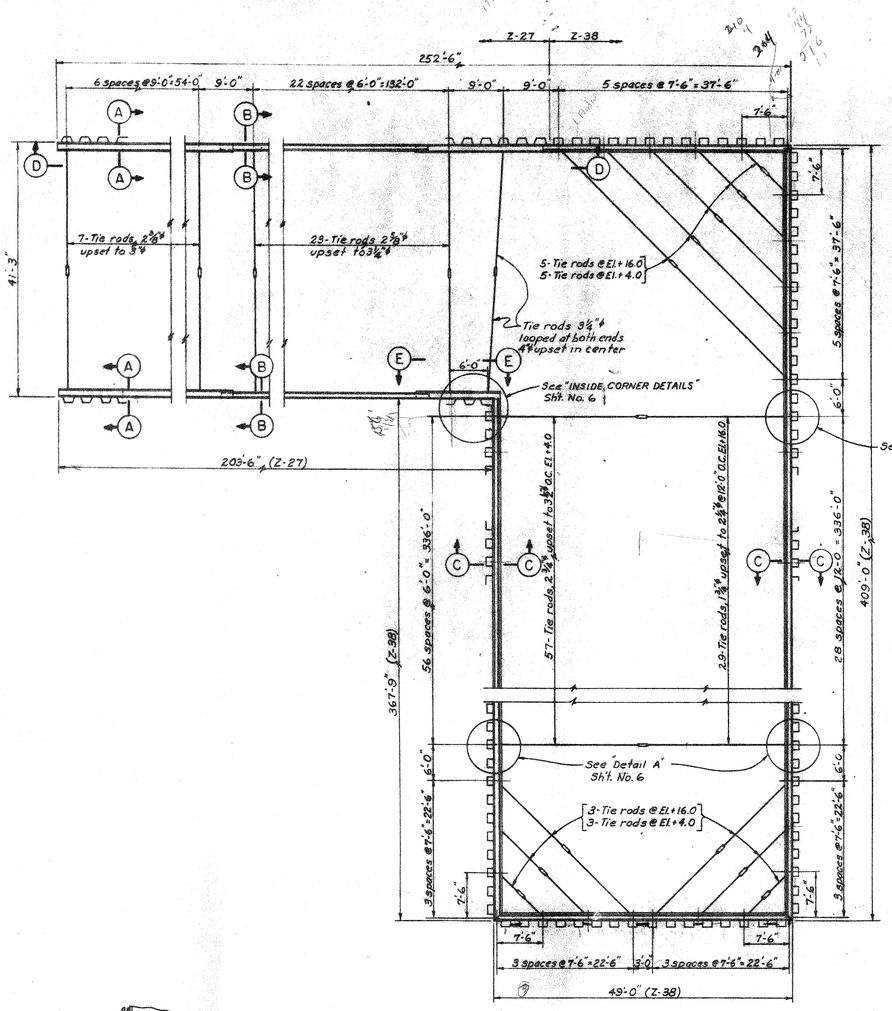
EASTPORT HARBOR
EASTPORT, MAINE
BREAKWATER AND PUBLIC LANDING
PROFILES - STEEL SHEET PILING & DETAILS

SCALE AS SHOWN SPEC NO. CIV. ENG.-19-016-61-58
DRAWING NUMBER
1475 D-9-4
SHEET 4

4 6

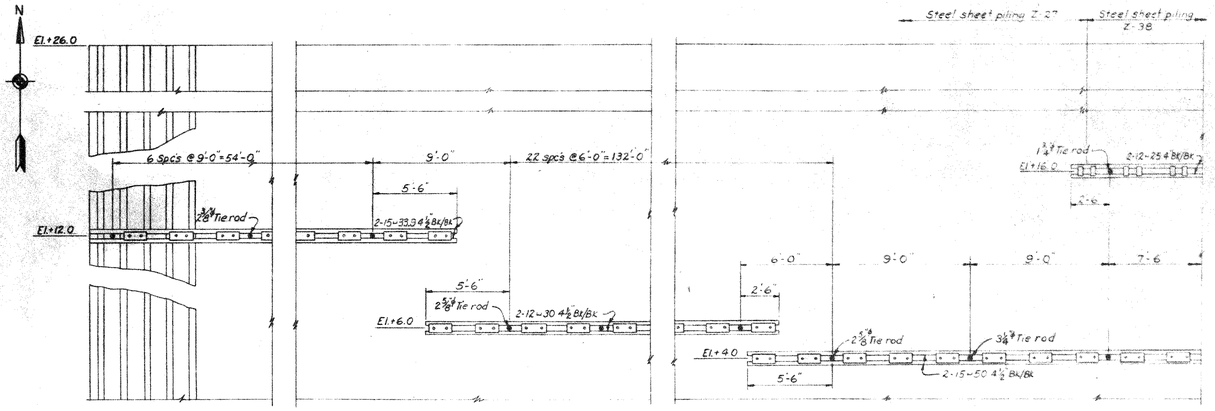
CORPS OF ENGINEERS

U. S. ARMY



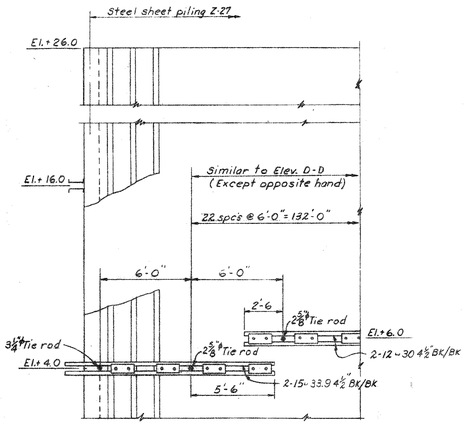
PLAN

SCALE: 1" = 10'-0"



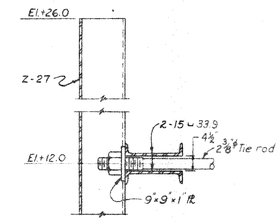
SECTIONAL ELEVATION D-D

SCALE ¼" = 1'-0"



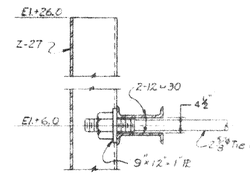
SECTIONAL ELEVATION E-E

SCALE: ¼" = 1'-0"



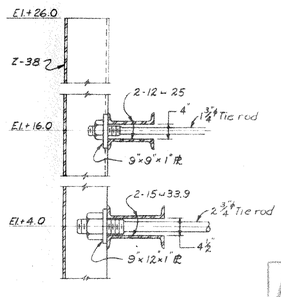
SECTION A-A

SCALE: ¾" = 1'-0"



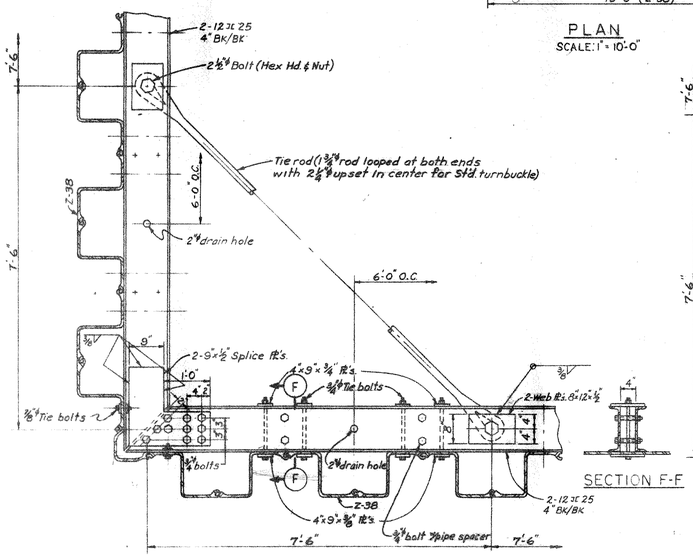
SECTION B-B

SCALE: ¾" = 1'-0"



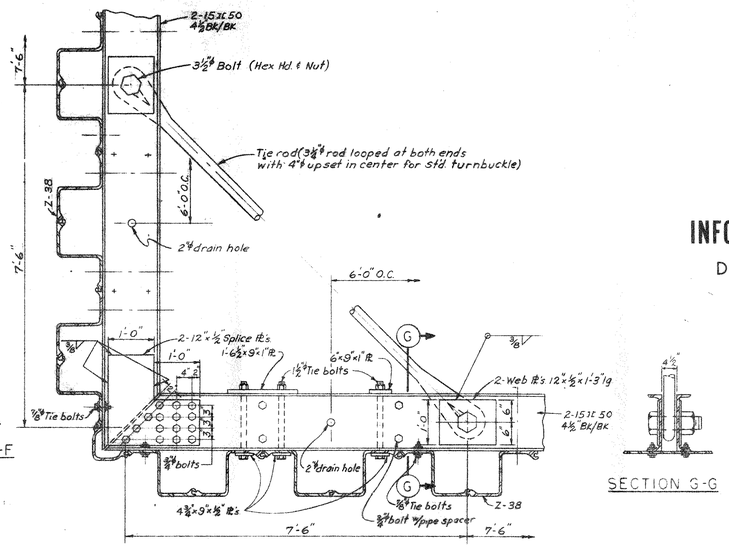
SECTION C-C

SCALE: ¾" = 1'-0"



TYPICAL OUTSIDE CORNER DETAIL AT EL.+16.0

SCALE: ⅜" = 1'-0"



TYPICAL OUTSIDE CORNER DETAIL AT EL.+4.0

SCALE: ¾" = 1'-0"

SECTION F-F

SECTION G-G

INFORMATION DRAWING

DACW33-77-B-0029

As Built Drawing
Contract No. DACW 33-77-C-0091

GRAPHIC SCALES

1/4" = 1'-0" 0 4' 8'

3/4" = 1'-0" 0 6' 9' 3'

1" = 10' 0 10' 20'

REVISION	DATE	DESCRIPTION

U.S. ARMY ENGINEER DIVISION, NEW ENGLAND
CORPS OF ENGINEERS
WALTHAM, MASS

DES. BY	DR. BY	CK. BY
G.T.S.	J.P.H.	G.T.S.

SUBMITTED: CHIEF, STRUCT. SECTION
PROJECT ENGINEER
APPROVAL RECOMMENDED: CHIEF, DESIGN BRANCH
APPROVAL RECOMMENDED: CHIEF, STR. & H. BRANCH

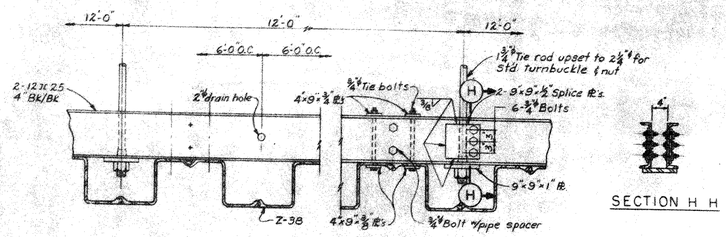
EASTPORT HARBOR
EASTPORT, MAINE
BREAKWATER AND PUBLIC LANDING
STRUCTURAL DETAILS NO. 1

APPROVED: CHIEF, ENGINEERING DIVISION
DATE: MAY 1961

SCALE AS SHOWN | SPEC NO. CIV ENG. 19-016-61-59
DRAWING NUMBER
1475 D-9-4
SHEET 5

CORPS OF ENGINEERS

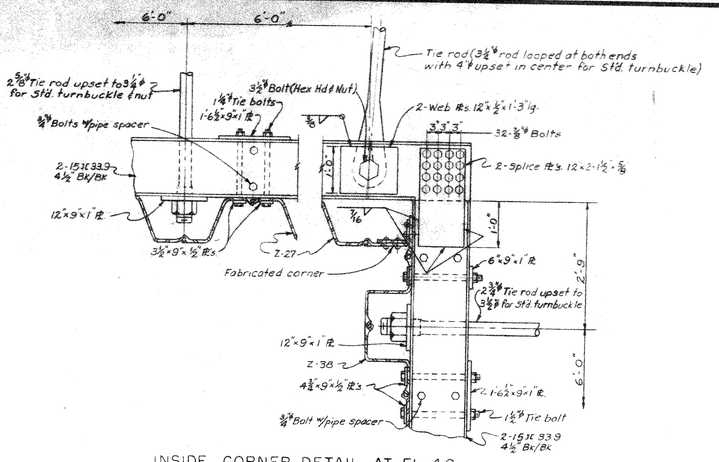
U.S. ARMY



TYPICAL WALE DETAIL AT EL.+16.0

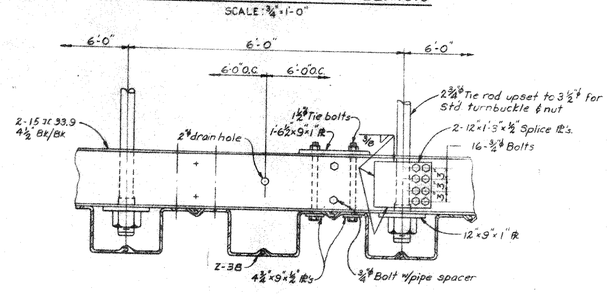
SCALE: ¾"=1'-0"

SECTION H H



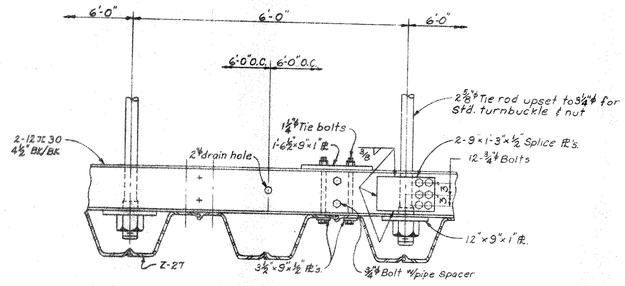
INSIDE CORNER DETAIL AT EL.+4.0

SCALE: ¾"=1'-0"



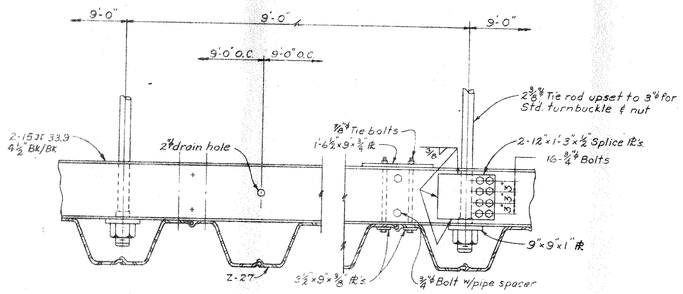
TYPICAL WALE DETAIL AT EL.+4.0

SCALE: ¾"=1'-0"



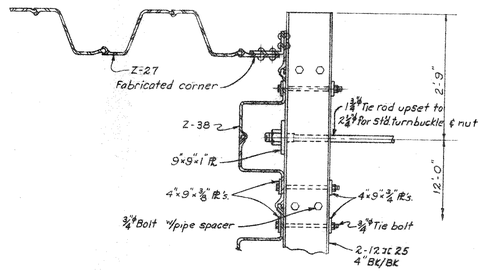
TYPICAL WALE DETAIL AT EL.+6.0

SCALE: ¾"=1'-0"



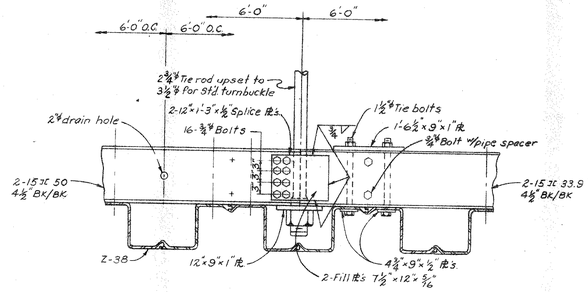
TYPICAL WALE DETAIL AT EL.+12.0

SCALE: ¾"=1'-0"



INSIDE CORNER DETAIL AT EL.+16.0

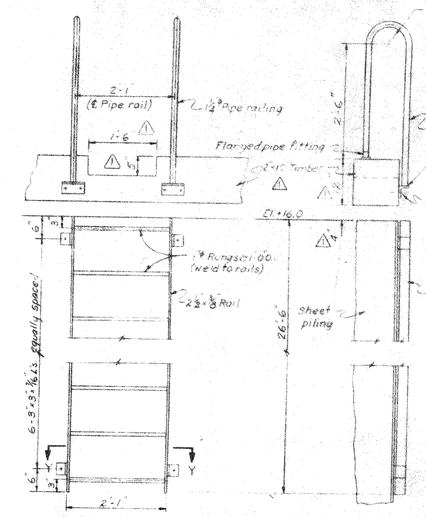
SCALE: ¾"=1'-0"



DETAIL A

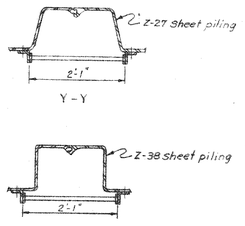
(AT ELEV.+4.0 ONLY)

SCALE: ¾"=1'-0"



LADDER DETAILS (13)

SCALE: ¾"=1'-0"



NOTES:

Ladder attachment angles may be attached to steel sheet piling with one ¾" bolt or 5/16" fillet weld all around. For ladder locations see sheet No. 3.

NOTES:

Provide 2" weep holes in steel sheet piling at El.+2.0 at 10'-0" intervals horizontally, commencing at approx. Sta. 1+50. All bolts shall conform to Federal Spec. QQ-S-633 Type 1 Cl. B or 2. All tie rods and turnbuckles shall conform to Federal Spec. QQ-S-633 F.S. 1035.

INFORMATION DRAWING

DACW33-77-B-0029

As Built Drawing

Contract No. DACW33-77-B-0029

GRAPHIC SCALE

3/4" = 1'-0"

REVISION	DATE	DESCRIPTION	
5	6-20-61	Details revised (Add "1")	GTS JPH GTS

U.S. ARMY ENGINEER DIVISION, NEW ENGLAND
CORPS OF ENGINEERS
WALTHAM, MASS

DES. BY	DR. BY	CK. BY
G.T.S.	J.P.H.	G.T.S.

SUBMITTED: CHIEF STRUCT. SECTION
PROJECT ENGINEER
APPROVAL RECOMMENDED: CHIEF DESIGN BRANCH
APPROVAL RECOMMENDED: CHIEF, E. & D. BRANCH

EASTPORT HARBOR
EASTPORT, MAINE
BREAKWATER AND PUBLIC LANDING
STRUCTURAL DETAILS NO. 2

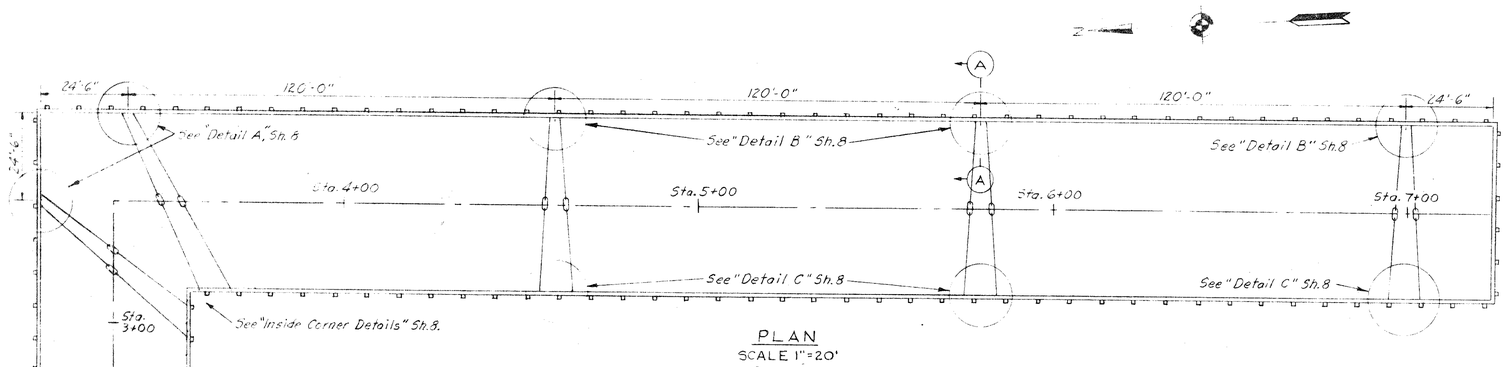
APPROVED: CHIEF, ENGINEERING DIVISION
DATE: MAY 1961

SCALE 3/4"=1'-0" | SPEC NO CIV ENG. 19-016-61-59
DRAWING NUMBER 1475 D-9-4
SHEET 6

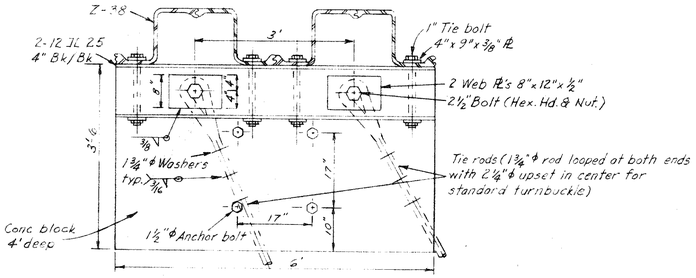
28-643

CORPS OF ENGINEERS

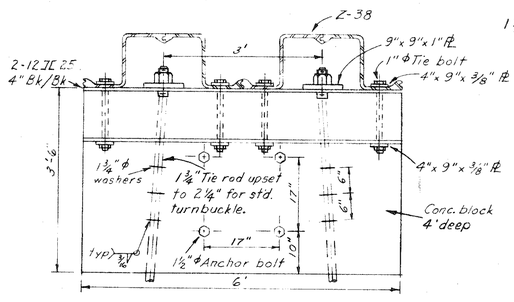
U. S. ARMY



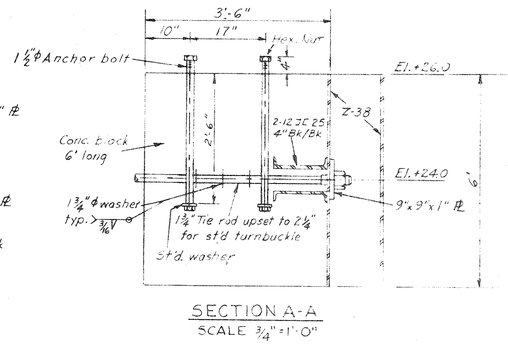
PLAN
SCALE 1"=20'



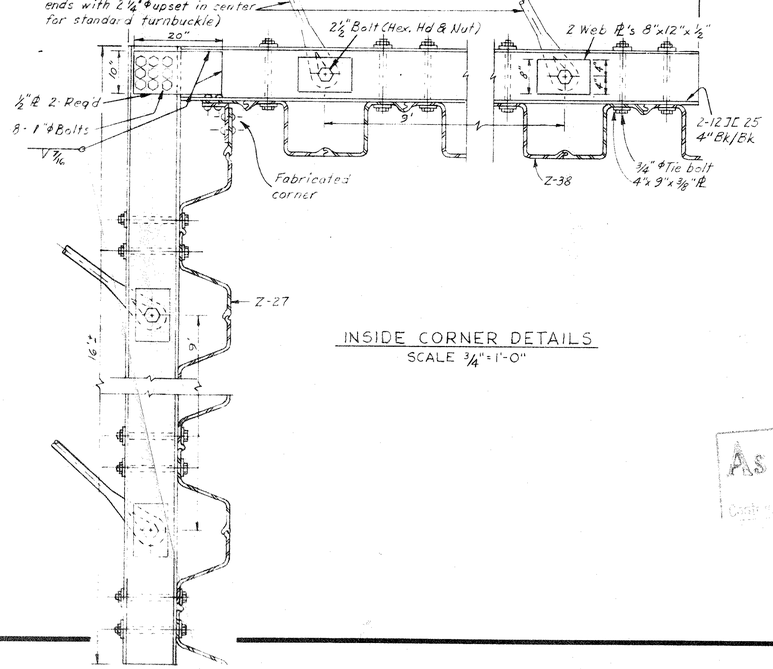
DETAIL A
SCALE 3/4"=1'-0"



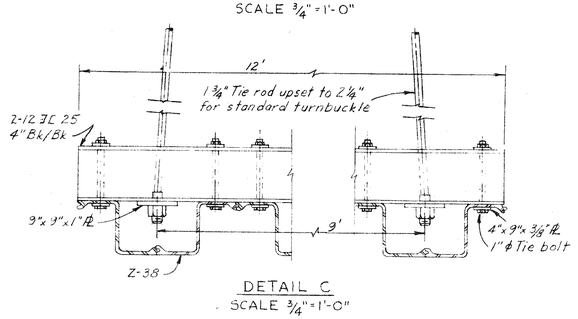
DETAIL B
SCALE 3/4"=1'-0"



SECTION A-A
SCALE 3/4"=1'-0"



INSIDE CORNER DETAILS
SCALE 3/4"=1'-0"



DETAIL C
SCALE 3/4"=1'-0"

INFORMATION DRAWING

DACW33-77-B-0029

As Built Drawing
Dated 28 DEC 77 0091

GRAPHIC SCALES

3/4" = 1'-0"

1" = 1'-0"

1" = 20'

REVISION	DATE	DESCRIPTION	BY

U.S. ARMY ENGINEER DIVISION, NEW ENGLAND
CORPS OF ENGINEERS
WALTHAM, MASS.

DES. BY	DR. BY	CK. BY
G.T.S.	A.L.D	

PROJECT ENGINEER

CHIEF, R. & H. SECTION

SUBMITTED BY

CHIEF, PLANN. & RPTS. BRANCH

APPROVED

CHIEF ENGINEERING DIV.

DATE MAY 1962

EASTPORT HARBOR
EASTPORT, MAINE
BREAKWATER AND PUBLIC LANDING
STRUCTURAL DETAILS NO. 3

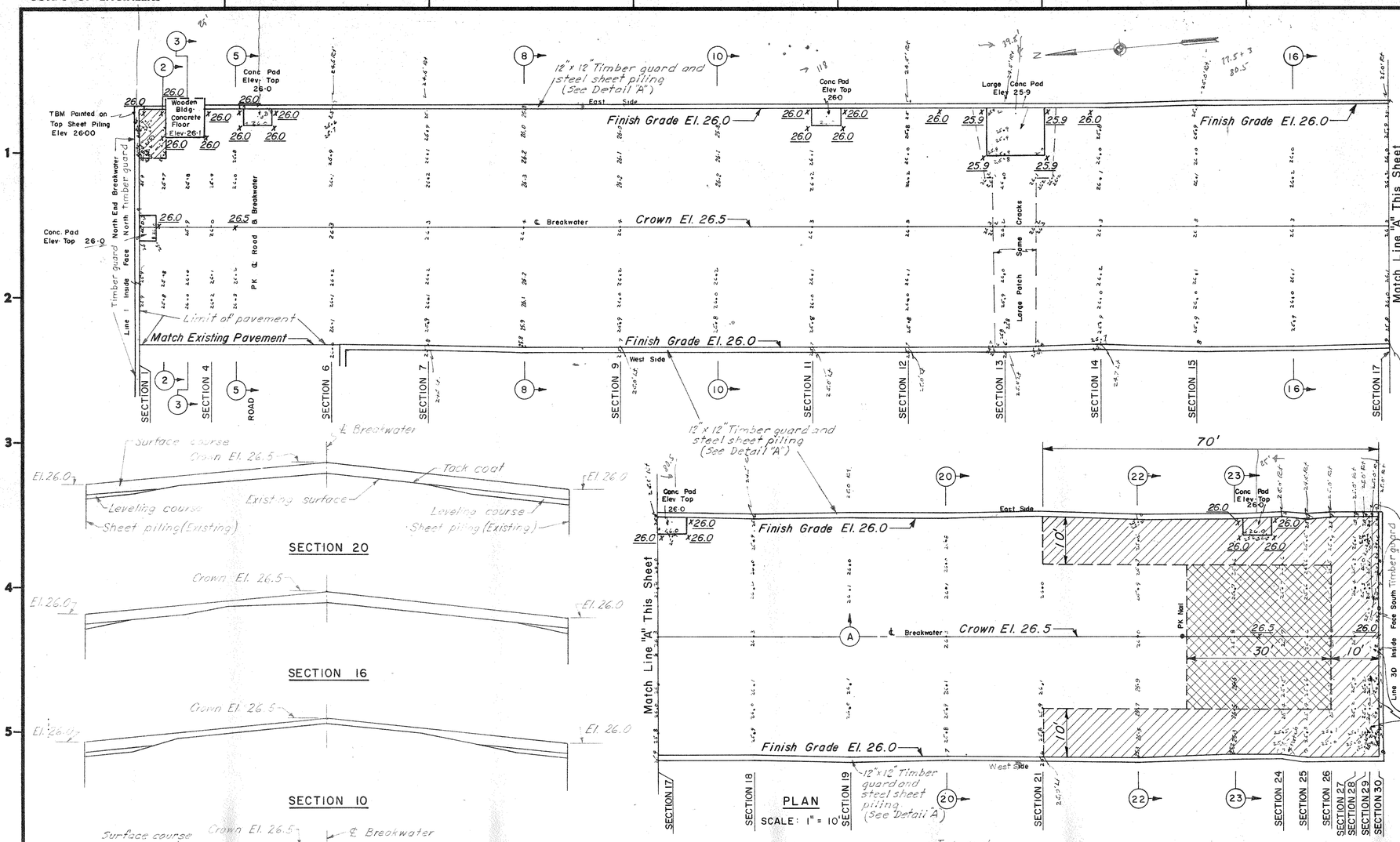
SCALE AS SHOWN

SPEC. NO CIV. ENG.-19-016-

DRAWING NUMBER
1475 D-9-4

SHEET 8

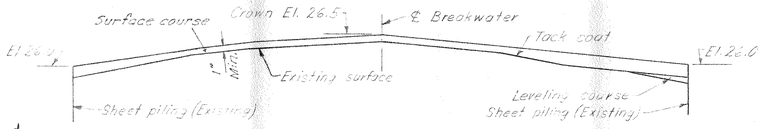
CORPS OF ENGINEERS — U. S ARMY



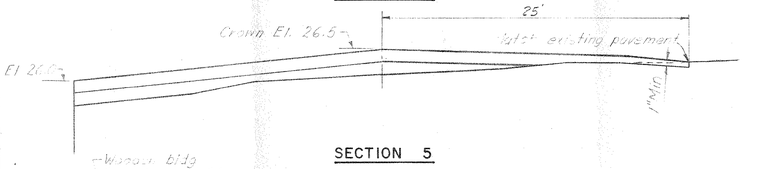
SECTION 20

SECTION 16

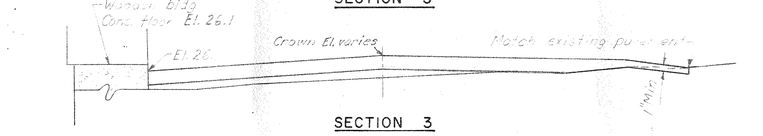
SECTION 10



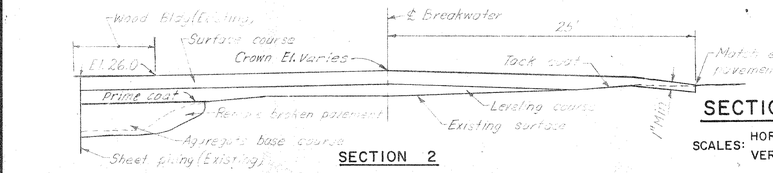
SECTION 8



SECTION 5



SECTION 3



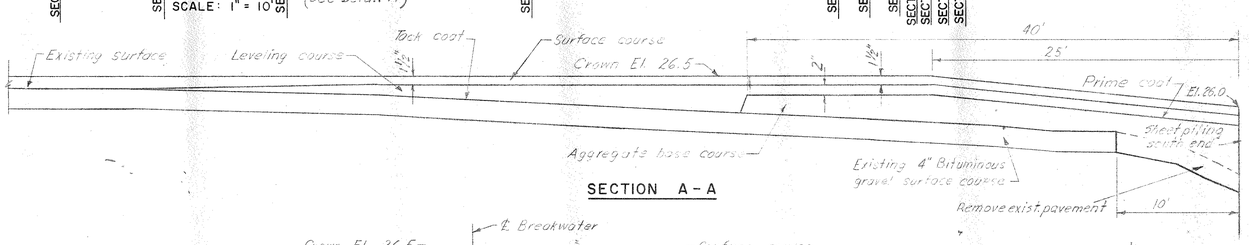
SECTION 2

SECTIONS

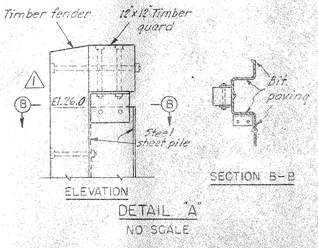
SCALES: HOR. 1"= 5'
VERT. 1"= 1'

PLAN

SCALE: 1" = 10'



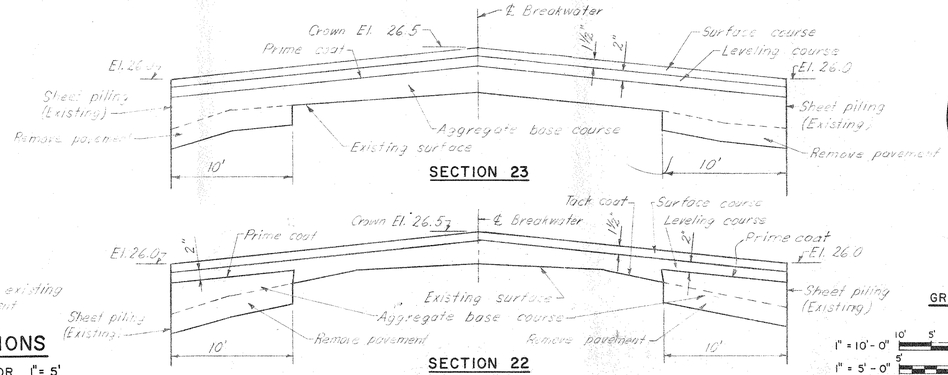
SECTION A - A



ELEVATION — SECTION B-B

DETAIL "A"

NO SCALE



SECTION 23

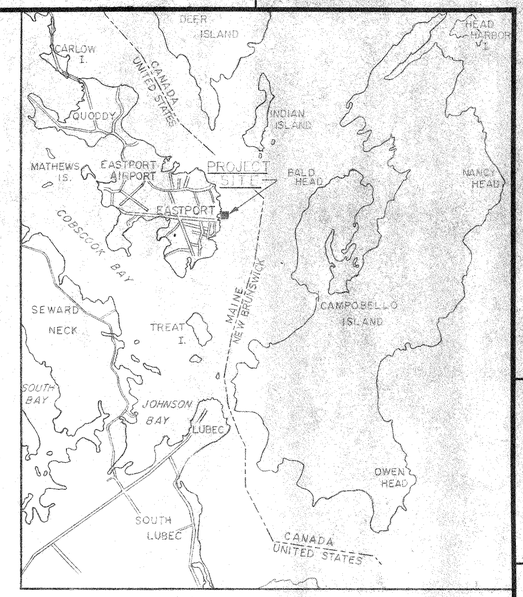
SECTION 22

GRAPHIC SCALES

1" = 10'- 0"

1" = 5'- 0"

1" = 1'- 0"



LOCATION MAP

SCALE 1" = 1 MILE

NOTES:

1. Elevations refer to Mean Sea Level Datum.
2. Surface course over existing pavement shall have a minimum thickness of 1 inch.
3. Surface course and leveling course may be placed in one layer where total thickness is not over 2½ inches.
4. Leveling course shall be placed in one or more layers not over 2½ inches thick.
5. Surface course shall be finished to the elevations shown on the Plan and Sections.
6. Surface course and leveling course shall consist of bituminous concrete pavement.

LEGEND:

Remove existing pavement. Place aggregate base course.

Place aggregate base course.

REVISION	DATE	DESCRIPTION	BY
3	4-16-73	Spec. No. changed	
2	1-24-73	Spec. No. changed	
1	9-25-72	Revised elevation & Spec. NO	

DEPARTMENT OF THE ARMY
NEW ENGLAND DIVISION
CORPS OF ENGINEERS
WALTHAM, MASS.

DES. BY	DR. BY	CK. BY
J.A	W. J. F.	K.E.

SUBMITTED: CHIEF, LAYOUT SECTION
APPROVAL RECOMMENDED: CHIEF, TECH. ENG. BRANCH
REVIEWED: PROJECT ENGINEER
APPROVAL RECOMMENDED: CHIEF BRANCH
APPROVED: for CHIEF, ENGINEERING DIVISION
DATE AUGUST 1972

EASTPORT HARBOR
EASTPORT, MAINE
REPAVING OF BREAKWATER
PLAN AND SECTIONS

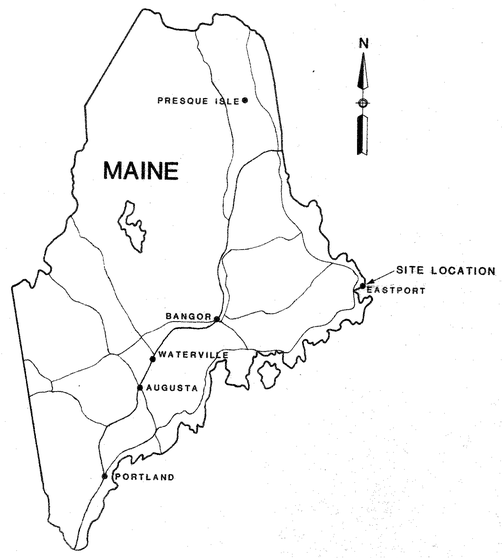
SCALE AS SHOWN SPEC. NO. DACW 33-73-B-0060
DRAWING NUMBER 1960 D-9-4
SHEET 1

CONTRACT DRAWINGS
EASTPORT PORT AUTHORITY
BREAKWATER REHABILITATION
EASTPORT, MAINE
CONTRACT NO. 83-1

INDEX TO DRAWINGS

TITLE	SHEET NO.
SITE PLAN	C-1
BREAKWATER REPAIRS AND CATHODIC PROTECTION	S-1
ELECTRICAL PLANS	E-1
ELECTRICAL DETAILS	E-2
ELECTRICAL DETAILS	E-3
ELECTRICAL DETAILS AND EQUIPMENT LIST	E-4
ELECTRICAL PANEL DIRECTORIES	E-5

LOCATION MAP



MORRISON GEOTECHNICAL ENGINEERING
RFD 3 BOX 7230 CHINA ROAD
WINSLOW, MAINE 04902
(207) 873-4283

WASHINGTON ST.

BOYTON STREET

WATER STREET

RETAINING WALL

RETAINING WALL

RETAINING WALL

BIT. RAMP

WHARF

TIMBER MAT

M.L.W. 0

TOE

TOE

14 FT. M.L.W. ZONE

EXISTING BOAT ANCHORAGE
(10 FT. M.L.W.)

COAST GUARD
AREA

M.L.W. 0

HOLMES
PACKING
CORP.

B.M., BRASS DISC #0140A
NATIONAL OCEAN SURVEY
DATED 1978, ELEV. 25.60 M.L.W.

EXISTING BOAT ANCHORAGE
(10 FT. M.L.W.)

STA. 10+00 ℄ STA. 11+00 STA. 12+00 STA. 13+00 STA. 14+00

EXISTING BREAKWATER

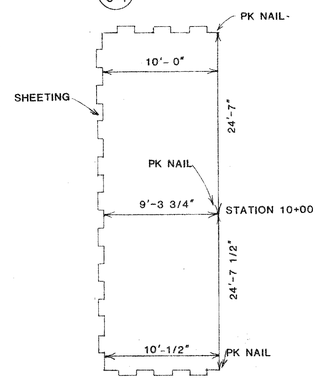
APPROX. 25'

1
C-1

EXISTING
FISH PIER

EASTPORT HARBOR

1
C-1 STATION LOCATION DETAIL



ALL DISTANCES MEASURED FROM
INSIDE EDGE OF SHEET.

1"=40' 40 0 40 80 scale feet

REV. NO.	DESCRIPTION	APP'D	DATE

MORRISON
GEOTECHNICAL
ENGINEERING
WINSLOW, MAINE 04902

EASTPORT PORT AUTHORITY

BREAKWATER REHABILITATION PROJECT
CONTRACT NO. 83-1

PORT OF EASTPORT

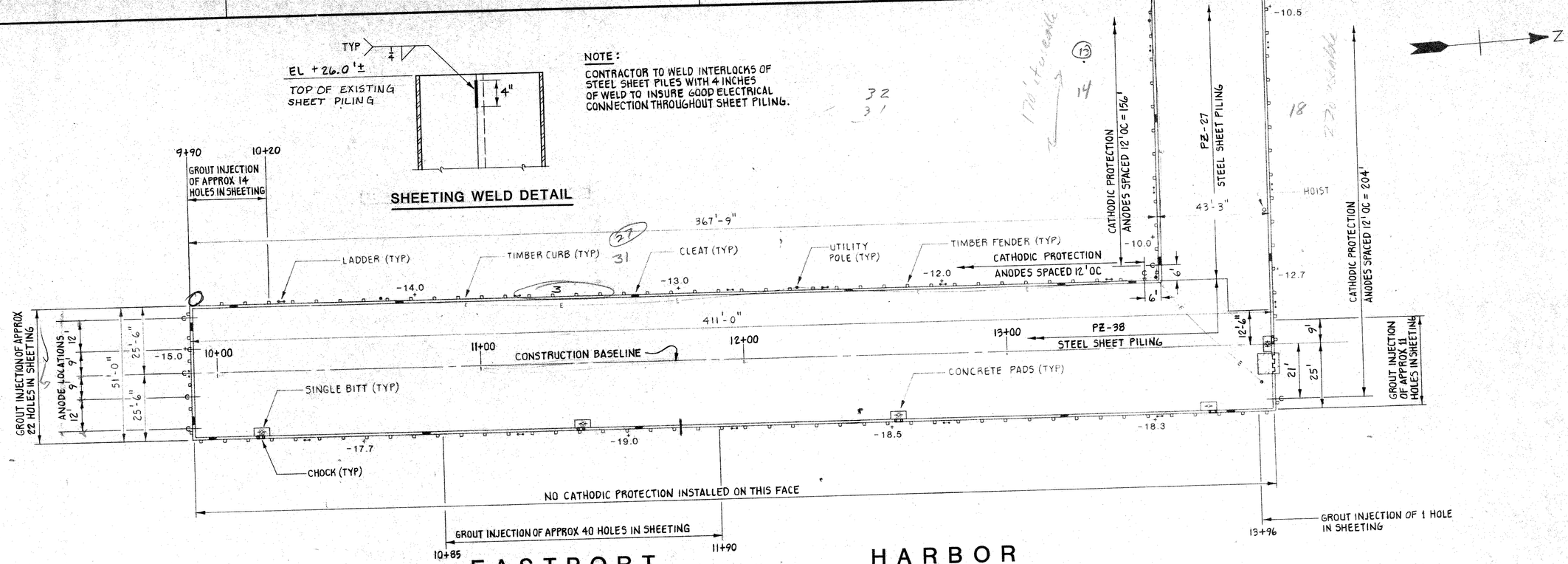
SITE PLAN

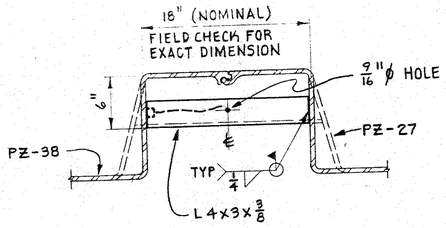
SCALE		JOB NO.
1"=40'		1638
DATE 6/24/83	REG. PROF. ENG. NO. 2464 DATE	SHEET C-1 OF 1

REVISION

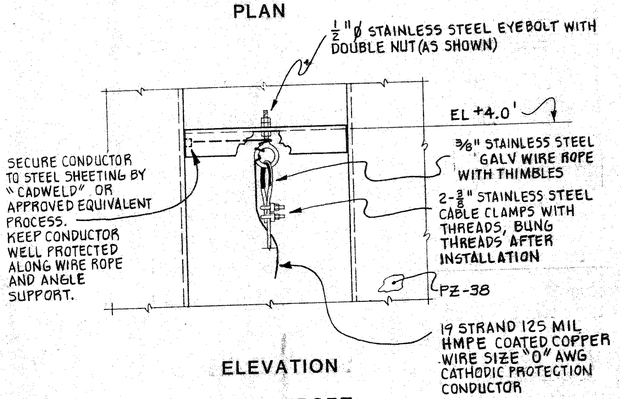
Childs Engineering Corporation
Box 333 Medfield, Mass. 02052 U.S.A.

Drawn
Checked
Approved



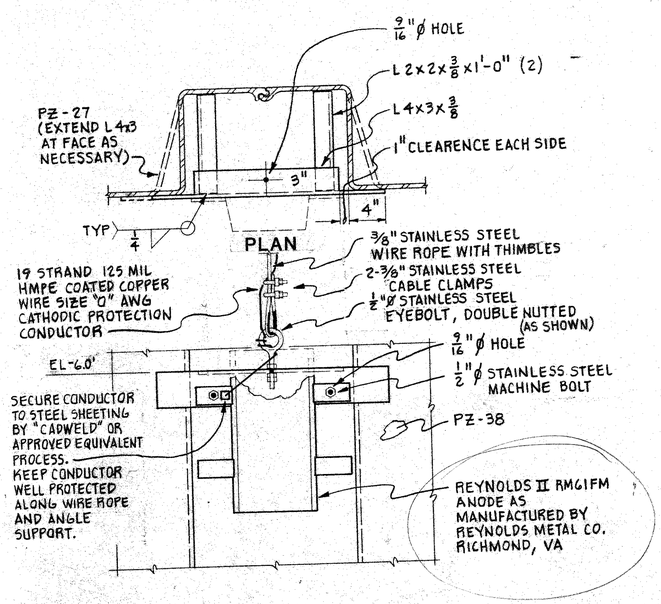


PLAN



ELEVATION

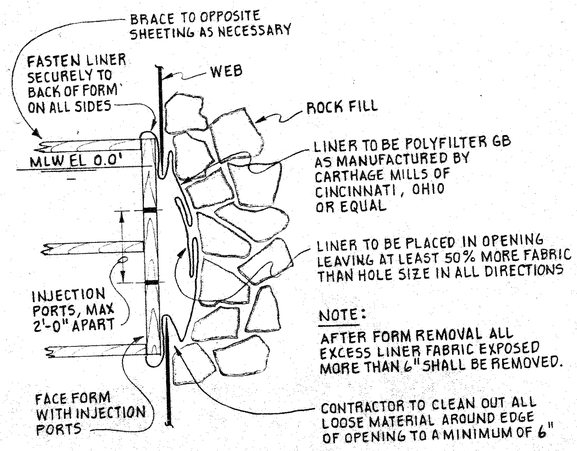
TOP SUPPORT
CATHODIC PROTECTION
SCALE: 1 1/2" = 1'-0"



PLAN

ELEVATION

BOTTOM CONNECTION
CATHODIC PROTECTION
SCALE: 1 1/2" = 1'-0"



SECTION

SHEETING REPAIR DETAIL
SCALE: 1/2" = 1'-0"

NOTE:
HOLES IN SHEETING VARY IN SIZE FROM < 6" DIAMETER TO APPROXIMATELY 6' LONG. MAXIMUM HOLE WIDTH 12" & MAJORITY OF HOLES 3'-4' LONG.

Scale: 1/2"; 1 1/2" = 1'-0"; 1" = 20'

REV. NO.	DESCRIPTION	APP'D	DATE

MORRISON GEOTECHNICAL ENGINEERING
WINSLOW, MAINE 04902

EASTPORT PORT AUTHORITY

BREAKWATER REHABILITATION PROJECT
CONTRACT NO. 83-1

PORT OF EASTPORT

BREAKWATER REPAIRS & CATHODIC PROTECTION

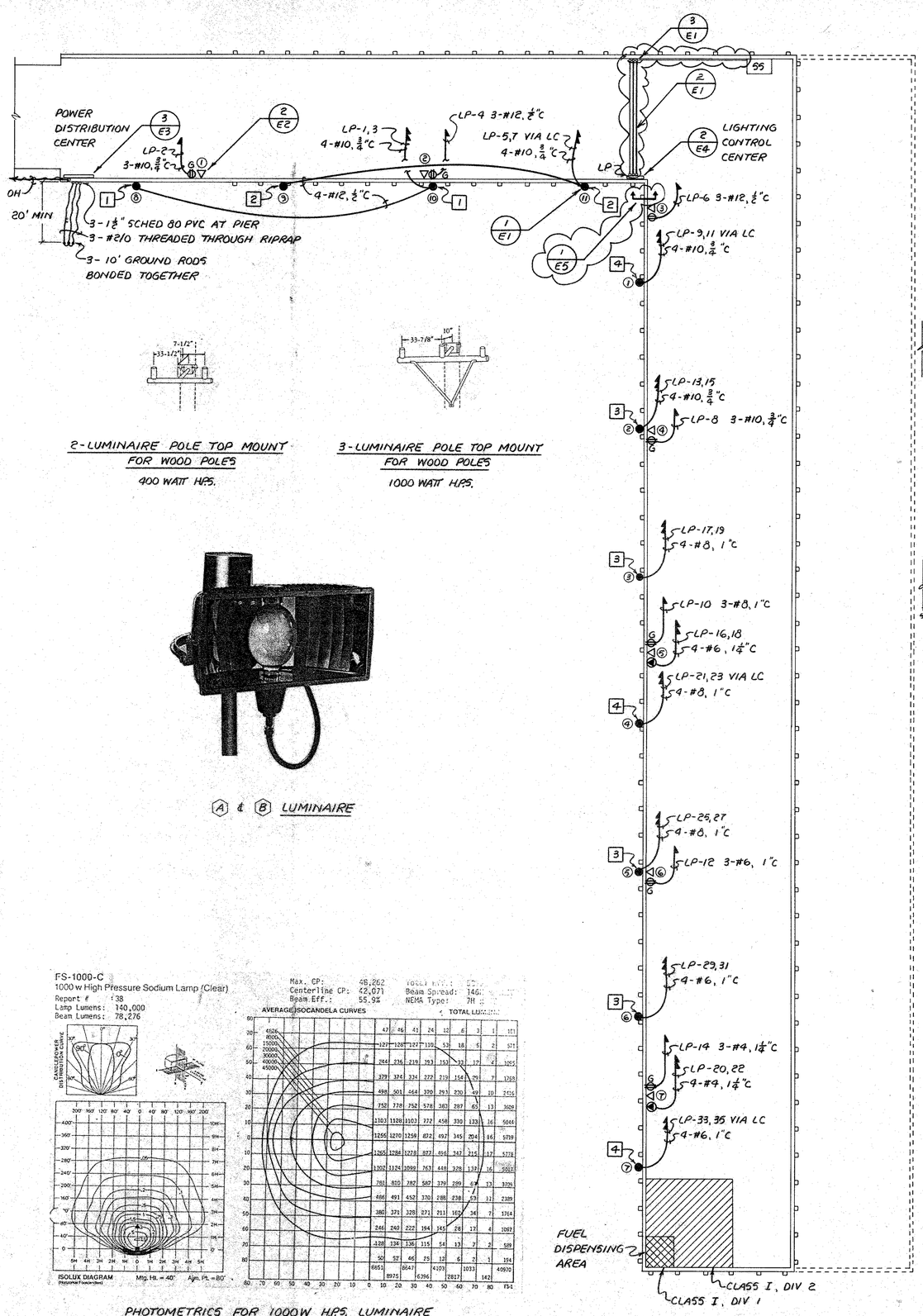
SCALE		JOB NO.
AS NOTED		1638
DATE 7/28/83	REG. PROF. ENG. NO. 2464 DATE	SHEET S-1 OF 1

REVISION

Childs Engineering Corporation
Box 333 Medfield, Mass. 02052 U.S.A.

Drawn MTF
Checked RTB
Approved CEC

CEC 543-83



2-LUMINAIRE POLE TOP MOUNT FOR WOOD POLES

400 WATT H.P.S.

3-LUMINAIRE POLE TOP MOUNT FOR WOOD POLES

1000 WATT H.P.S.

(A) & (B) LUMINAIRE

PHOTOMETRICS FOR 1000W H.P.S. LUMINAIRE

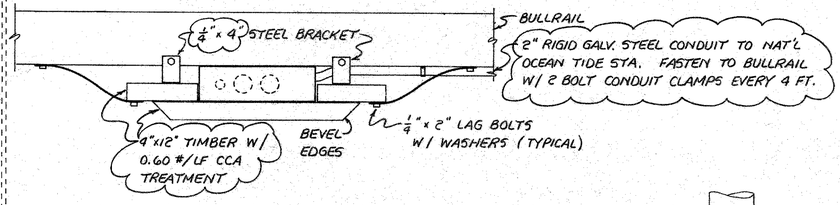
LIGHTING NOTES:

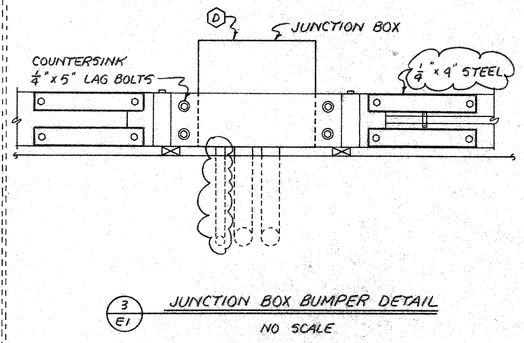
1. THE TWO (A)-TYPE 400 W H.P.S. LUMINAIRES ON THIS POLE ARE MANUALLY OPERATED BY A SWITCH MOUNTED ON THIS POLE.
2. ON THIS POLE, THE TWO 400 W H.P.S. LUMINAIRES ARE CONTROLLED BY THE LIGHTING CONTROL SYSTEM. ONE (A)-TYPE LUMINAIRE SHALL BE MANUALLY OPERATED BY A SWITCH MOUNTED ON THIS POLE. THE OTHER LUMINAIRE SHALL BE AN (AA)-TYPE LUMINAIRE WITH A QUARTZ RESTRIKE FEATURE.
3. THE THREE (B)-TYPE 1000 W H.P.S. LUMINAIRES ON THIS POLE ARE MANUALLY OPERATED BY A SWITCH MOUNTED ON THIS POLE.
4. ON THIS POLE, THE THREE 1000 W H.P.S. LUMINAIRES ARE CONTROLLED BY THE LIGHTING CONTROL SYSTEM. THE TWO OUTSIDE LUMINAIRES SHALL BE (BB)-TYPE LUMINAIRES WITH A QUARTZ RESTRIKE FEATURE. THE CENTER LUMINAIRE SHALL BE A (B)-TYPE LUMINAIRE MANUALLY OPERATED BY A SWITCH MOUNTED ON THIS POLE.

* REFER TO WIRING DETAIL 3 ON SHEET E2.

SYMBOLS:

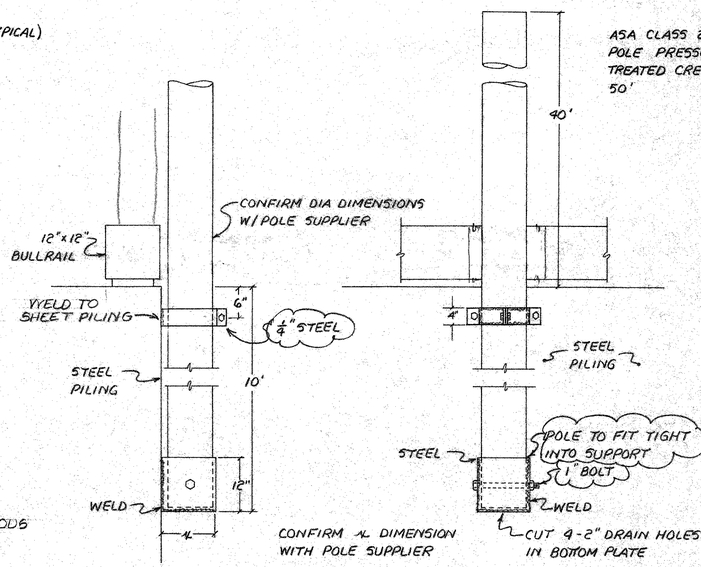
- GFCI RECEPTACLE
- 50' CREOSOTED CLASS 2 WOOD UTILITY POLE
- (A) REFERS TO ITEM ON EQUIPMENT SCHEDULE
- (#) UNIT REFERENCE NUMBER
- ▷ LOCATION OF SHORE POWER OUTLET ASSEMBLY
- WELDING RECEPTACLE
- [SS] NATIONAL OCEAN TIDE SURVEY STATION - U.S. DEPT OF COMMERCE
- LC LIGHTING CONTACTOR, 10 POLE, 20A/CONTACT, 240V RATED
- 120 VAC HOMERUN
- 240 VAC HOMERUN





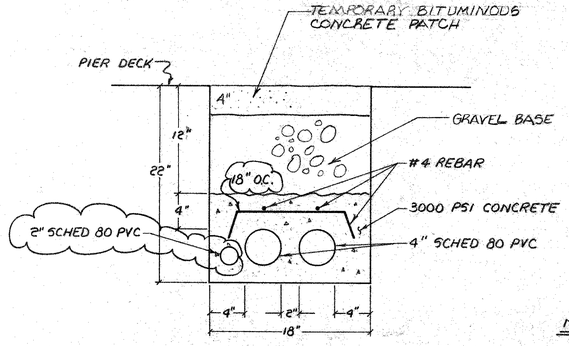
3/E1 JUNCTION BOX BUMPER DETAIL

NO SCALE



1/E1 DETAIL OF POLE SUPPORT

NO SCALE



2/E1 TRENCH DETAIL

NO SCALE

NOTE: ALL STEEL FABRICATIONS SHALL BE GALVANIZED.

REV. NO.	DESCRIPTION	APP'D	DATE

MORRISON GEOTECHNICAL ENGINEERING
WINSLOW, MAINE 04902

ELECTRICAL PLANS

SCALE 1" = 20'		JOB NO. 1638
DATE 7-25-83	REG. PROF. ENG. NO. 2464 DATE	SHEET 1 OF 5

STATE OF MAINE — RALPH F. SWEET — REGISTERED PROFESSIONAL ENGINEER

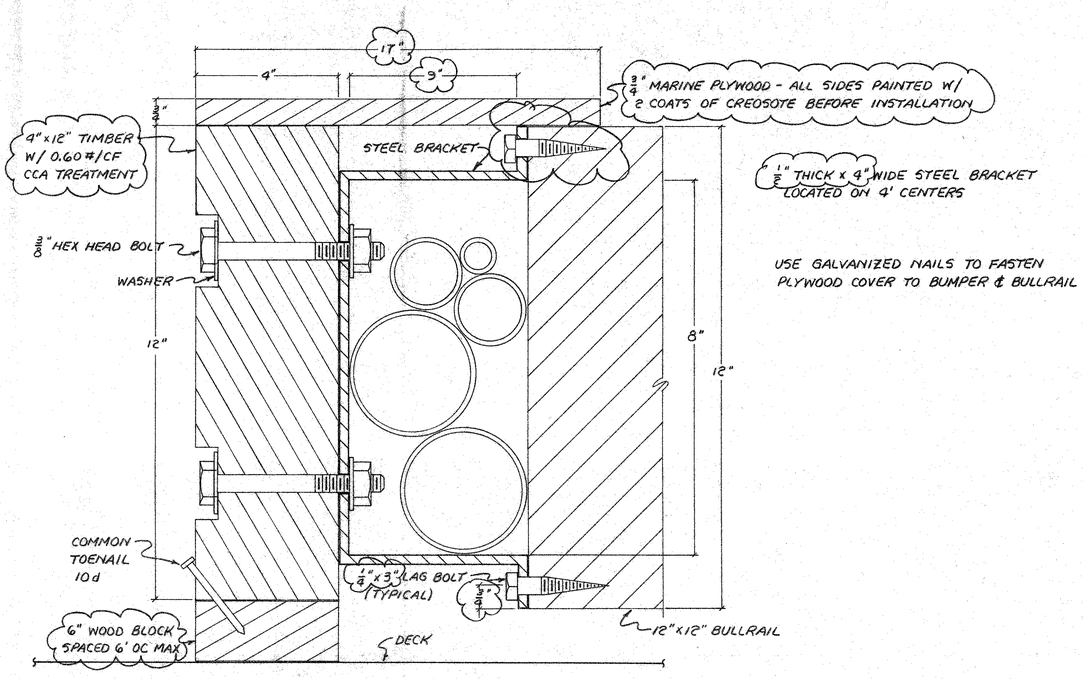
RALPH F. SWEET, P.E.
CONSULTING ENGINEER - ELECTRICAL
380 MAIN ST., SACO, MAINE 04072
207-283-0412

REVISION

Childs Engineering Corporation
Box 333 Medfield, Mass. 02052 U.S.A.

Drawn DLL
Checked
Approved

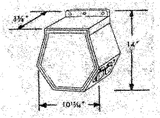
E1

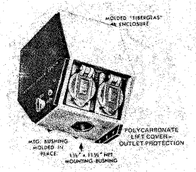


USE GALVANIZED NAILS TO FASTEN PLYWOOD COVER TO BUMPER & BULLRAIL

1/E2 WOOD BUMPER & STEEL STRAP DETAIL

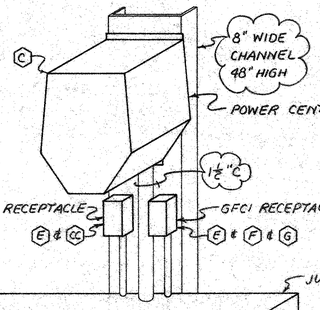
NO SCALE

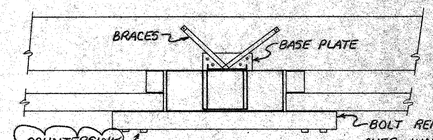




Ⓒ POWER CENTER

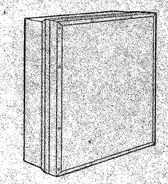
LOCATE WELDING RECEPTACLES AT SHORE PWR STATIONS 5 & 7 ONLY.



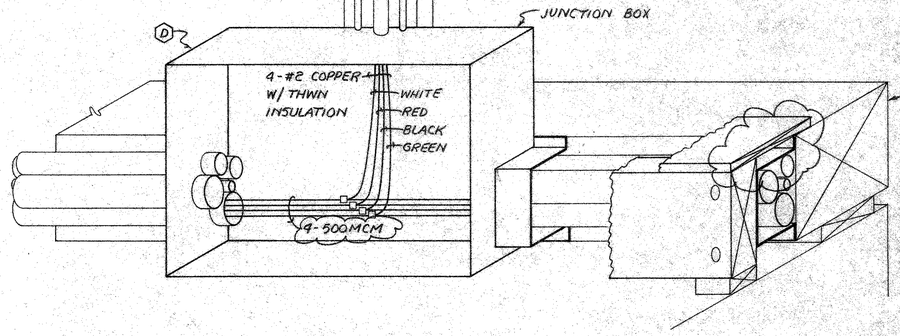


TOP VIEW

Ⓖ GFCI RECEPTACLE COVER (LOCKABLE)

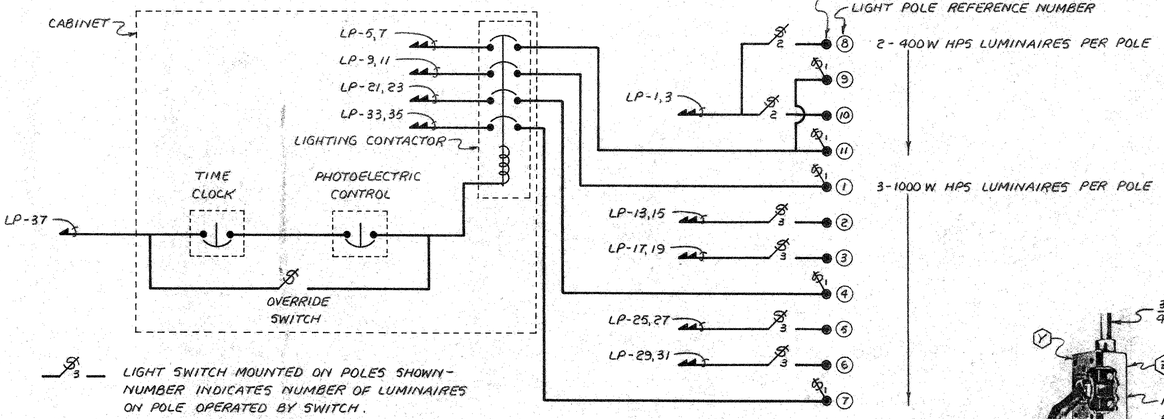


Ⓓ JUNCTION BOX



2/E2 SHORE POWER OUTLET ASSEMBLY

NO SCALE

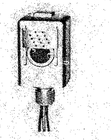


3/E2 LIGHTING POWER DISTRIBUTION & CONTROL ONE-LINE DIAGRAM

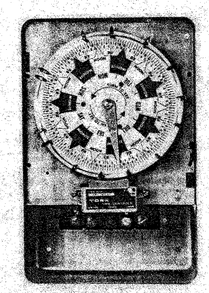
NO SCALE

3/4 LIGHT SWITCH MOUNTED ON POLES SHOWN - NUMBER INDICATES NUMBER OF LUMINAIRES ON POLE OPERATED BY SWITCH.

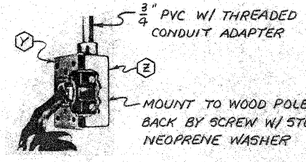
* REFER TO DETAIL 2 ON SHEET E4



Ⓙ PHOTOELECTRIC CONTROL



Ⓗ TIME CLOCK



POLE MOUNTED LIGHT SWITCH

REV. NO.	DESCRIPTION	APP'D	DATE

MORRISON GEOTECHNICAL ENGINEERING
WINSLOW, MAINE 04902

ELECTRICAL DETAILS

SCALE AS NOTED		JOB NO. 1638
DATE 7-25-83	REG. PROF. ENG. NO. 2409 DATE	SHEET 2 OF 5

STATE OF MAINE RALPH F. SWEET 2409 REGISTERED PROFESSIONAL ENGINEER

RALPH F. SWEET, P.E.
CONSULTING ENGINEER ELECTRICAL
380 MAIN ST., SACO, MAINE 04072
207-283-0412

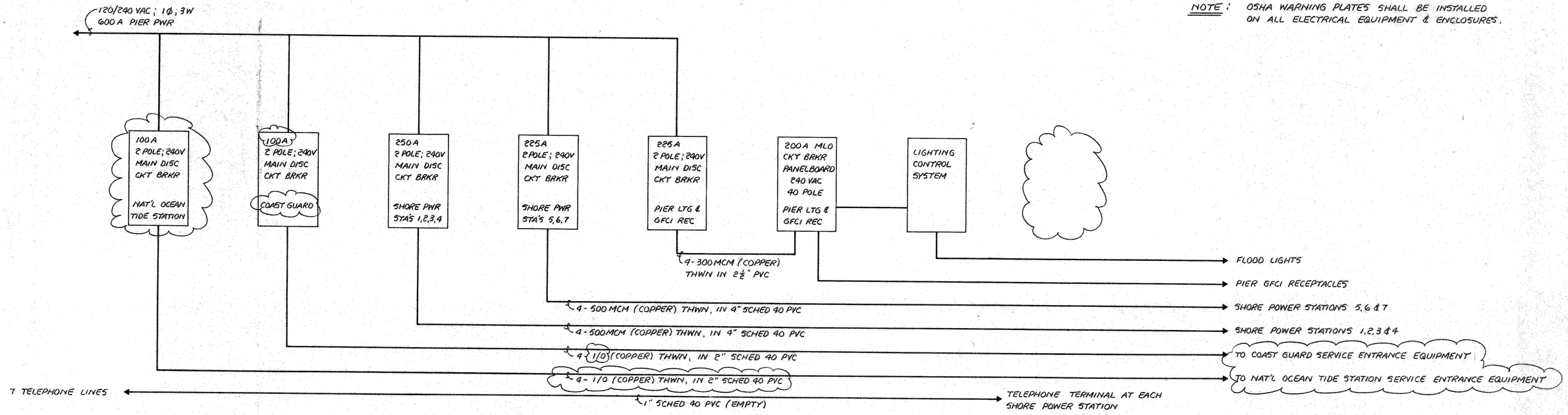
REVISION

Childs Engineering Corporation
Box 333 Medfield, Mass. 02052 U.S.A.

Drawn DLL
Checked
Approved

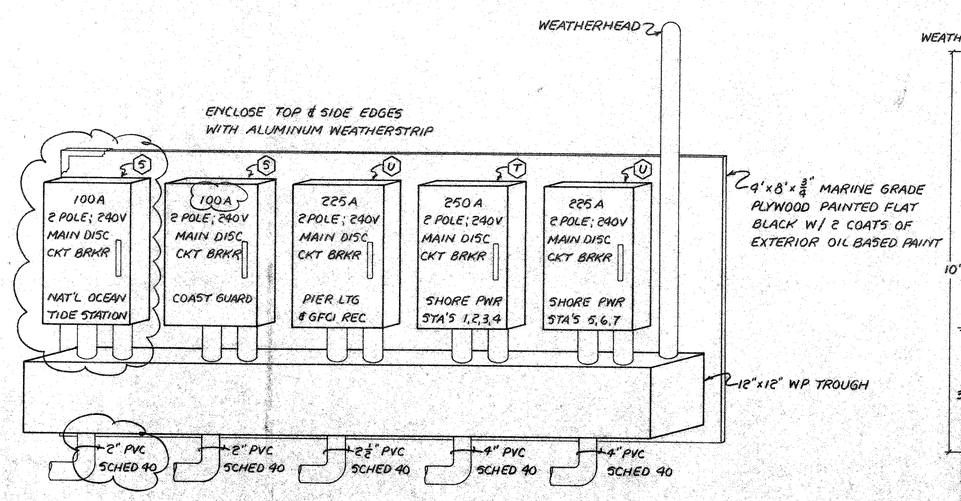
E2

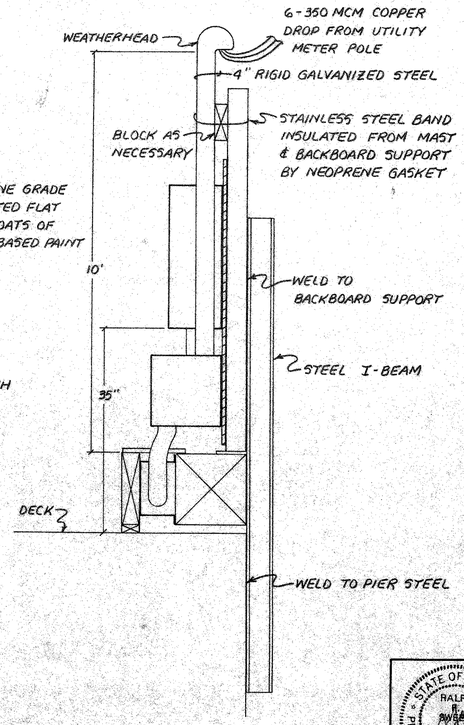
NOTE: OSHA WARNING PLATES SHALL BE INSTALLED ON ALL ELECTRICAL EQUIPMENT & ENCLOSURES.



(1/E3) ELECTRICAL POWER DISTRIBUTION - ONE LINE DIAGRAM

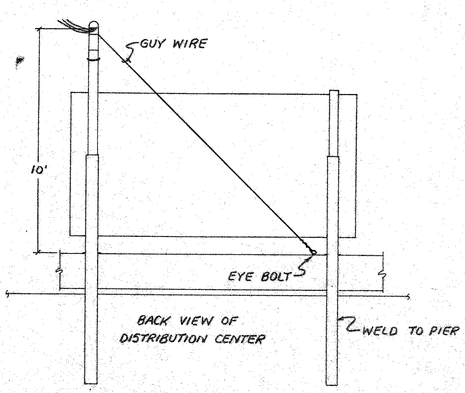
NO SCALE

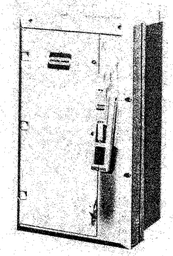




(3/E3) DISTRIBUTION CENTER DETAIL

NO SCALE





MAIN DISC CIRCUIT BREAKER

REV. NO.	DESCRIPTION	APP'D	DATE

MORRISON GEOTECHNICAL ENGINEERING
WINSLOW, MAINE 04902

ELECTRICAL DETAILS

SCALE AS NOTED		JOB NO. 1638
DATE 7-25-83	REG. PROF. ENG. NO. 2464 DATE	SHEET 5 OF 5

STATE OF MAINE RALPH F. SWEET 0809 REGISTERED PROFESSIONAL ENGINEER

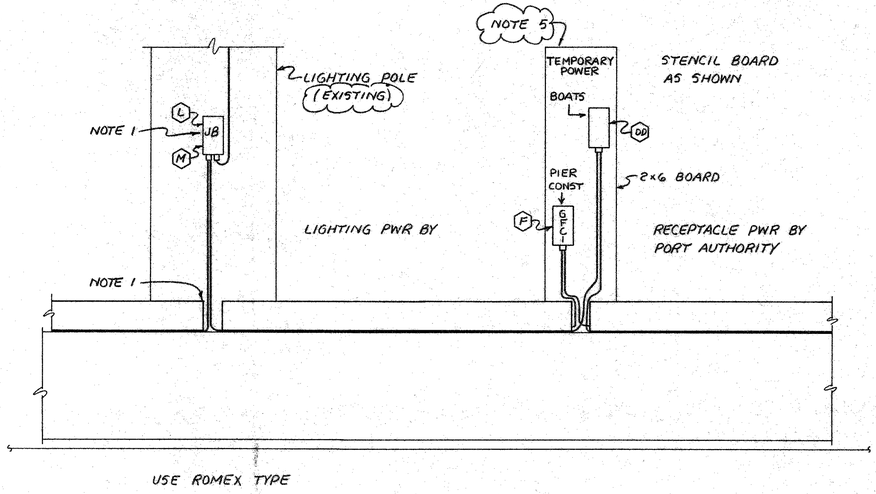
RALPH F. SWEET, P.E.
CONSULTING ENGINEER ELECTRICAL
380 MAIN ST., SACO, MAINE 04072
207-283-0412

REVISION

Childs Engineering Corporation
Box 333 Medfield, Mass. 02052 U.S.A.

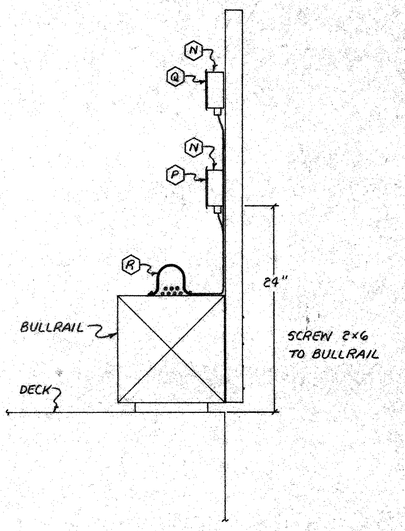
Drawn DLL
Checked
Approved

E3



1/E4 TEMPORARY POWER

NO SCALE



TEMPORARY POWER NOTES:

1. INSTALL TYPE NM CABLE FOR TEMPORARY POWER TO EXISTING DOCK LTG EQUIPMENT BEFORE REMOVAL OF OVERHEAD POWER BETWEEN POLES.
2. DO NOT REMOVE EXISTING PIER LTG EQUIP UNTIL NEW LTG EQUIP HAS BEEN INSTALLED & TESTED FOR PROPER OPERATION.
3. THE E.C. SHALL SCHEDULE WORK SO THAT PIER LTG EQUIP SHALL BE OPERATIONAL EVERY NIGHT.
4. THE E.C. SHALL PROVIDE A PORTABLE GENERATOR TO OPERATE PIER LTG IF UTILITY POWER IS NOT AVAILABLE DURING ANY NIGHT.
5. INSTALL 5 TEMPORARY POWER STATIONS: 1 ON CAUSEWAY & 4 ON PIER SPACED APPROX 100 FT APART.

(R) SCHED 80 "PV-MOLD"

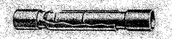
(L) FSS PVC BOX

(N) FSC PVC BOX

EQUIPMENT LIST (SEE NOTE BELOW)

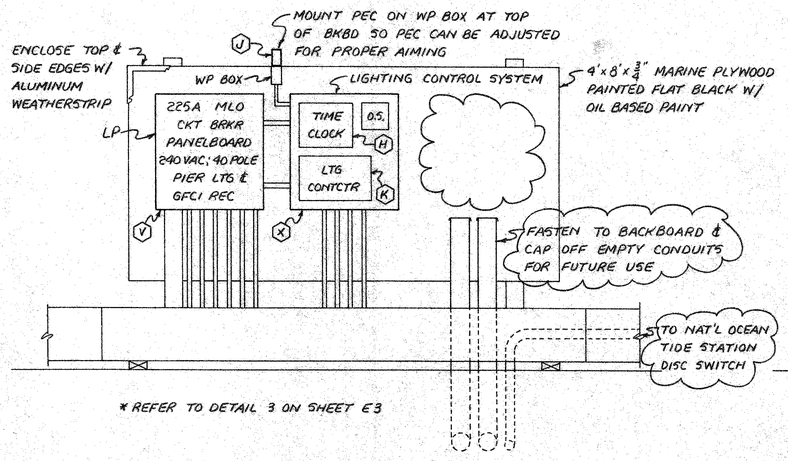
ITEM	MFR	PART NO.	DESCRIPTION
(A)	WIDELITE	MFS 400C-QV	400 W H.P.S. LUMINAIRE
(B)	WIDELITE	MFS 1000C-QV	1000 W H.P.S. LUMINAIRE
(C)	HUBBELL	C66GALF	POWER CENTER - ADD TO PART NO.: "TO BE WATER TIGHT W/ PLUG INSERTED"
(D)	CROUSE-HINDS	NJBE42608	24" x 26" x 8¾" JUNCTION BOX W/ SCREW COVER
(E)			WP BOX
(F)	LEVITON	6399	GFCI RECEPTACLE, 20A, W/O INDICATOR LIGHT W/ WP LOCKING COVER
(G)			WP COVER FOR GFCI REC (LOCKING TYPE)
(H)	TORK	W200L	TIME CLOCK, DPST, 40A PER POLE, 120V
(J)	TORK	2101	RAINTIGHT PHOTOELECTRIC CONTROL
(K)	SQUARE D	LG-60	ELECTRICALLY HELD LIGHTING CONTACTOR W/120 VAC COIL
(L)	CARLON	¾E982E	FSS SERIES PVC BOX FOR TEMPORARY POWER
(M)	CARLON	E980C	BLANK COVER W/ GASKET
(N)	CARLON	¾ E980E	FSC SERIES PVC BOX
(P)	CARLON	E98GFC	WP GFCI RECEPTACLE COVER
(Q)	CARLON	E985RC	WP SINGLE RECEPTACLE COVER
(R)	CARLON	59413	3" SCHED 80 PVC "PV-MOLD" (10' SECTIONS)
(S)	CROUSE-HINDS	NCB 1018F-100EB-22	100A 2 POLE, MAIN DISC CKT BRKR, 20,000 AIC - NON-THERMAL
(T)	CROUSE-HINDS	NCB 1426-250LB-26	250A, 2 POLE, MAIN DISC CKT BRKR, 20,000 AIC - NON-THERMAL
(U)	CROUSE-HINDS	NCB 1024F-225JB-36	225A, 2 POLE, MAIN DISC CKT BRKR, 20,000 AIC - NON-THERMAL
(V)	CROUSE-HINDS	NLP	225A MLO, 240 VAC RATED, NON-THERMAL BREAKERS, 40 POLE
(W)	NOT USED		
(X)	CROUSE-HINDS	NCE 242608	LIGHTING CONTROL EQUIPMENT CABINET
(Y)	HUBBELL	17CM81	COVER & SWITCH
(Z)	HUBBELL	60CM83	BOX
(AA)	WIDELITE	MFS400C-QV-LQ	SAME AS (A) WITH QUARTZ RESTR
(BB)	WIDELITE	MFS1000C-QV-LQ	SAME AS (B) WITH QUARTZ RESTRIKE
(CC)			WELDING RECEPTACLE, NEMA 14-30R, 250 VAC W/ WP COVER LOCKABLE
(DD)			20 AMP TWIST LOCK RECEPTACLE, 120 VAC W/ WP COVER
⬡			
⬡	CARLON	49005	1" SCHED 40 PVC CONDUIT #E945D EXPANSION COUPLING
⬡	CARLON	49007	¾" #E945E
⬡	CARLON	49008	1" #E945F
⬡	CARLON	49009	1¼" #E945G
⬡	CARLON	49011	2" #E945J
⬡	CARLON	49012	2½" #E945K
⬡	CARLON	49015	4" #E945N
⬡	CARLON		

NOTE: WHENEVER "PART NO." CONFLICTS WITH "DESCRIPTION" ABOVE "DESCRIPTION" TAKES PRECEDENCE.



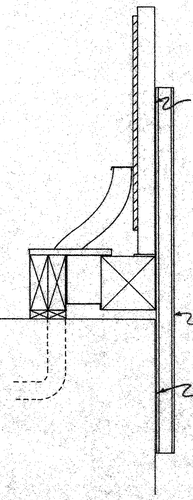
CONDUIT EXPANSION COUPLING

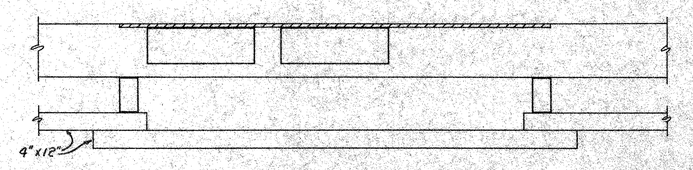
NOTE: INSTALL EXPANSION COUPLING IN EACH CONDUIT MID WAY BETWEEN JUNCTION BOXES & MID WAY ALONG ANY CONTINUOUS RUNS OF CONDUIT 100 FEET OR MORE IN LENGTH.



2/E4 PIER LTG & GFCI RECEPTACLE PANELBOARD DETAIL

NO SCALE





TOP VIEW

REV. NO.	DESCRIPTION	APP'D	DATE

MORRISON GEOTECHNICAL ENGINEERING
WINSLOW, MAINE 04902

ELECTRICAL DETAILS EQUIPMENT LIST

SCALE AS NOTED		JOB NO. 1638
DATE 7-28-85	REG. PROF. ENG. NO. 2464 DATE	SHEET 4 OF 5

STATE OF MAINE RALPH F. SWEET 4464 REGISTERED PROFESSIONAL ENGINEER

RALPH F. SWEET, P.E.
CONSULTING ENGINEER ELECTRICAL
380 MAIN ST., SACO, MAINE 04072
207-283-0412

REVISION

Childs Engineering Corporation
Box 333 Medfield, Mass. 02052 U.S.A.

Drawn DLL
Checked
Approved

E4

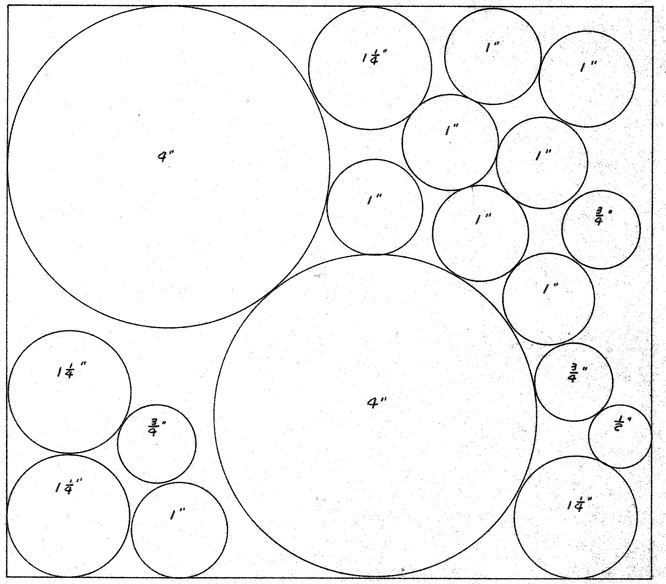
PANEL DIRECTORY LP

SYSTEM: 120/240V; 1Ø; 3W — MAIN: 200A MLO — LOC: LTG CONTROL CENTER
AMPERAGE: — POLES: 40 — MTG: SURFACE

CKT NO	Ø	BRKR C-B SIZE	CKT KVA LOAD LTG A	LTG B	REC A	REC B	PWR / HTG A	PWR / HTG B	MISC A	MISC B	REMARKS
1	A	20	1.1								POLES 8 & 10
3	B	↯		1.1							↯
5	A	20	1.1								POLES 9 & 11
7	B	↯		1.1							↯
9	A	20	1.8								POLE 1
11	B	↯		1.8							↯
13	A	20	1.8								POLE 2
15	B	↯		1.8							↯
17	A	20	1.8								POLE 3
19	B	↯		1.8							↯
21	A	20	1.8								POLE 4
23	B	↯		1.8							↯
25	A	20	1.8								POLE 5
27	B	↯		1.8							↯
29	A	20	1.8								POLE 6
31	B	↯		1.8							↯
33	A	20	1.8								POLE 7
35	B	↯		1.8							↯
37	A	15	.5								LIGHTING CONTROL SYSTEM PWR
39	B										
41											
SUBTOTAL			13.3	14.8							

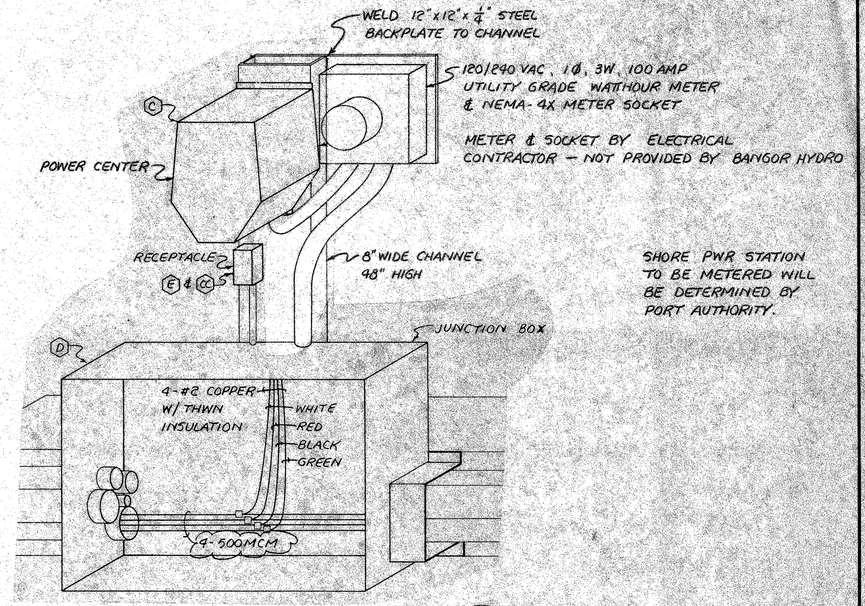
2	A	20			1.8						GFCI REC @ SHORE PWR 1
4	B	20				1.8					GFCI REC @ SHORE PWR 2
6	A	20			1.8						GFCI REC @ SHORE PWR 3
8	B	20				1.8					GFCI REC @ SHORE PWR 4
10	A	20			1.8						GFCI REC @ SHORE PWR 5
12	B	20				1.8					GFCI REC @ SHORE PWR 6
14	A	20			1.8						GFCI REC @ SHORE PWR 7
16	B	40				3.0					WELDING REC @ SHORE PWR 5
18	A	↯			3.0						↯
20	B	40				3.0					WELDING REC @ SHORE PWR 7
22	A	↯			3.0						↯
24	B										
26	A										
28	B										
30	A										
32	B										
34	A										
36	B										
38	A										
40	B										
42											
SUBTOTAL					13.2	11.4					
TOTAL DEMAND											
DMD TOT											

PHASE	A	B	
TOTAL LOAD			



2 - 4"
4 - 1¼"
6 - 1"
3 - ¾"
1 - ½"

(1/E5) CONDUIT ARRANGEMENT AT POINT SHOWN
SCALE: 1" = 1"



(2/E5) METER DETAIL FOR FEDERAL MARINE TERMINALS INC.
NO SCALE

REV. NO.	DESCRIPTION	APP'D	DATE

MORRISON GEOTECHNICAL ENGINEERING
WINSLOW, MAINE 04902

PANEL DIRECTORIES

SCALE — JOB NO. 1438
DATE 7/28/83 — REG. PROF. ENG. NO. 2441 — DATE — SHEET 5 OF 5

STATE OF MAINE — RALPH F. SWEET — REGISTERED PROFESSIONAL ENGINEER

RALPH F. SWEET, P.E.
CONSULTING ENGINEER - ELECTRICAL
380 MAIN ST., SACO, MAINE 04072
207-283-0412

REVISION

Childs Engineering Corporation
Box 333 Medfield, Mass. 02052 U.S.A.

Drawn ____
Checked ____
Approved ____

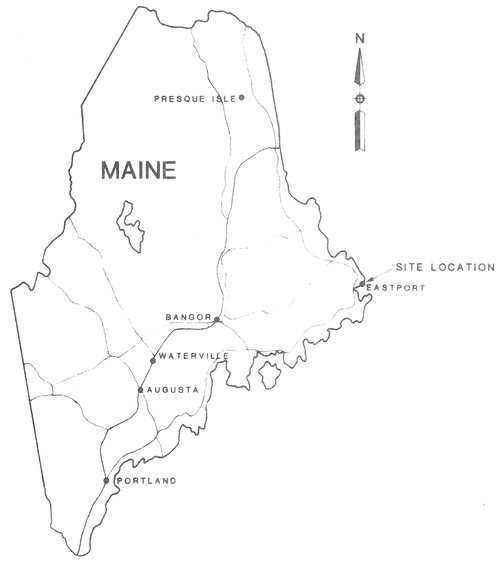
E5

CONTRACT DRAWINGS
EASTPORT PORT AUTHORITY
BREAKWATER REHABILITATION
EASTPORT, MAINE
CONTRACT NO. 83-2

INDEX TO DRAWINGS

TITLE	SHEET NO.
SITE PLAN	C-1
DREDGING PLAN	C-2
MARSHALLING YARD & DETAIL SHEET	C-3
DREDGE SECTIONS & DISPOSAL AREAS	C-4
FINAL DREDGING PLAN	C-5
DEMOLITION & EXCAVATION	S-1
PILE PLAN	S-2
DECKING/PILE CAP PLAN	S-3
PILE CAP - REINFORCING DETAILS	S-4
DECKING DETAILS	S-5
ANCHOR BEAM DETAILS	S-6
SHIP FENDER SYSTEM	S-7
SMALL VESSEL FENDER SYSTEM	S-8
MOORING DOLPHINS	S-9
CATHODIC PROTECTION	S-10
FENDER MODIFICATIONS	S-11

LOCATION MAP



RECORD DRAWINGS

THESE RECORD DRAWINGS HAVE BEEN PREPARED TO SHOW THOSE CHANGES MADE DURING THE CONSTUCTION PROCESS, BASED ON NOTES BY THE ENGINEER AND MARKED-UP PRINTS, DRAWINGS, AND OTHER DATA FURNISHED BY THE CONTRACTOR TO THE ENGINEER AND WHICH THE ENGINEER CONSIDERS SIGNIFICANT.

MORRISON GEOTECHNICAL ENGINEERING
RFD 3 BOX 7230 CHINA ROAD
WINSLOW, MAINE 04902
(207) 873-4283

EDA PROJECT NO. 01-01-02573

WASHINGTON ST.

EXISTING 8" C.I. MAIN

BOYNTON STREET

WATER STREET

RETAINING WALL

NEW 6" D.I. WATERMAIN

RETAINING WALL

EXISTING SEAWALL TOE

BIT. RAMP

NEW 6" VALVE AND BOX

WHARF

RETAINING WALL

TIMBER MAT

M.L.W. 0

NEW 2" D.I. WATERLINE

NEW 2" VALVE AND BOX

EXISTING SEAWALL TOE

NEW 8" D.I. WATERMAIN

EDGE OF EXISTING ROCK WALL

MARSHALLING YARD AREA SEE SHEET C-3

EDGE OF EXISTING TIMBER CRIB

SEE SHEET C-3 FOR PROPOSED DIKE DETAIL

38'-0"

M.L.W.

EL. -14 FT. M.L.W. ZONE

EXISTING BOAT ANCHORAGE EL. -10 FT. M.L.W.

2 / C-2

B.M., BRASS DISC #0140A NATIONAL OCEAN SURVEY DATED 1978, ELEV. 26.60 M.L.W.

COAST GUARD AREA

EXISTING BOAT ANCHORAGE EL. -10 FT. M.L.W.

PROPOSED DOLPHIN 2 SEE SHEET S-3 FOR DETAIL

PROPOSED MOORING DOLPHIN B SEE SHEET S-3 FOR DETAIL

HOLMES PACKING CORP.

STA. 7+00 — STA. 8+00 — STA. 9+00 — STA. 10+00 — STA. 11+00 — STA. 12+00 — STA. 13+00 — STA. 14+00 — STA. 15+00 — STA. 15+50 — STA. 16+00

EXISTING BREAKWATER

APPROX. 25'

1 / C-1

BREAKWATER EXTENSION

DREDGE TO -40 M.L.W.

NEW HYDRANT (SEE DETAIL)

NEW 6" CORPORATION AND CURB STOP THROUGH 4" PLASTIC DRAIN TO DAYLIGHT (SEE DETAIL)

EXISTING FISH PIER

2 FT² THRUST BLOCK

TAPPING SLEEVE

WITH VALVE

EASTPORT HARBOR

FRIAR ROADS

1. ALL ANGLES ARE TO BE 45° UNLESS OTHERWISE NOTED. A 90° ANGLE IS TO BE USED AT THE BASELINE STATION 14+00.

RECORD DRAWING

THIS RECORD DRAWING HAS BEEN PREPARED TO SHOW THOSE CHANGES MADE DURING THE CONSTRUCTION PROCESS, BASED ON THE NOTES BY THE ENGINEER AND MARKED - UP PRINTS, DRAWINGS, AND OTHER DATA FURNISHED BY THE CONTRACTOR TO THE ENGINEER AND WHICH THE ENGINEER CONSIDERS SIGNIFICANT.

NEW 6" CORPORATION

NEW CURB STOP TO GRADE

2 FT 2 THRUST BLOCK

6" D.I. MAIN

4" COPPER TUBING TO DAYLIGHT

TYPICAL HYDRANT DETAIL

NOT TO SCALE

2 / C-1 WATERMAIN TRENCH DETAIL

EXISTING BREAKWATER SURFACE

6'-0"

1 / 3-1 SITE LOCATION DETAIL

SHEET PILING

TA 10+00

BASELINE LAYOUT

LEGEND

— — — EXISTING CONTOUR

25.5 EXISTING SPOT ELEVATIONS

℄ BASELINE LAYOUT

NO	DESCRIPTION	DATE	APPD
1.	NOTE ADDED	5/14/84	
2.	EDA PROJECT NUMBER ADDED	8/22/84	
3.	RECORD DRAWING C-0.8, C-0.9		

REVISIONS

SCALE: 1"=40'

DATE: 4/13/84

DRAWN BY: CL

CHECKED BY: DET

1 40 0 40 80 scale feet

STATE OF MAINE EDWARD A. LA MORE No 2464 REGISTERED PROFESSIONAL ENGINEER

MORRISON GEOTECHNICAL ENGINEERING
WINSLOW, MAINE 04902

REG. PROF. ENG. NO. 2464 DATE

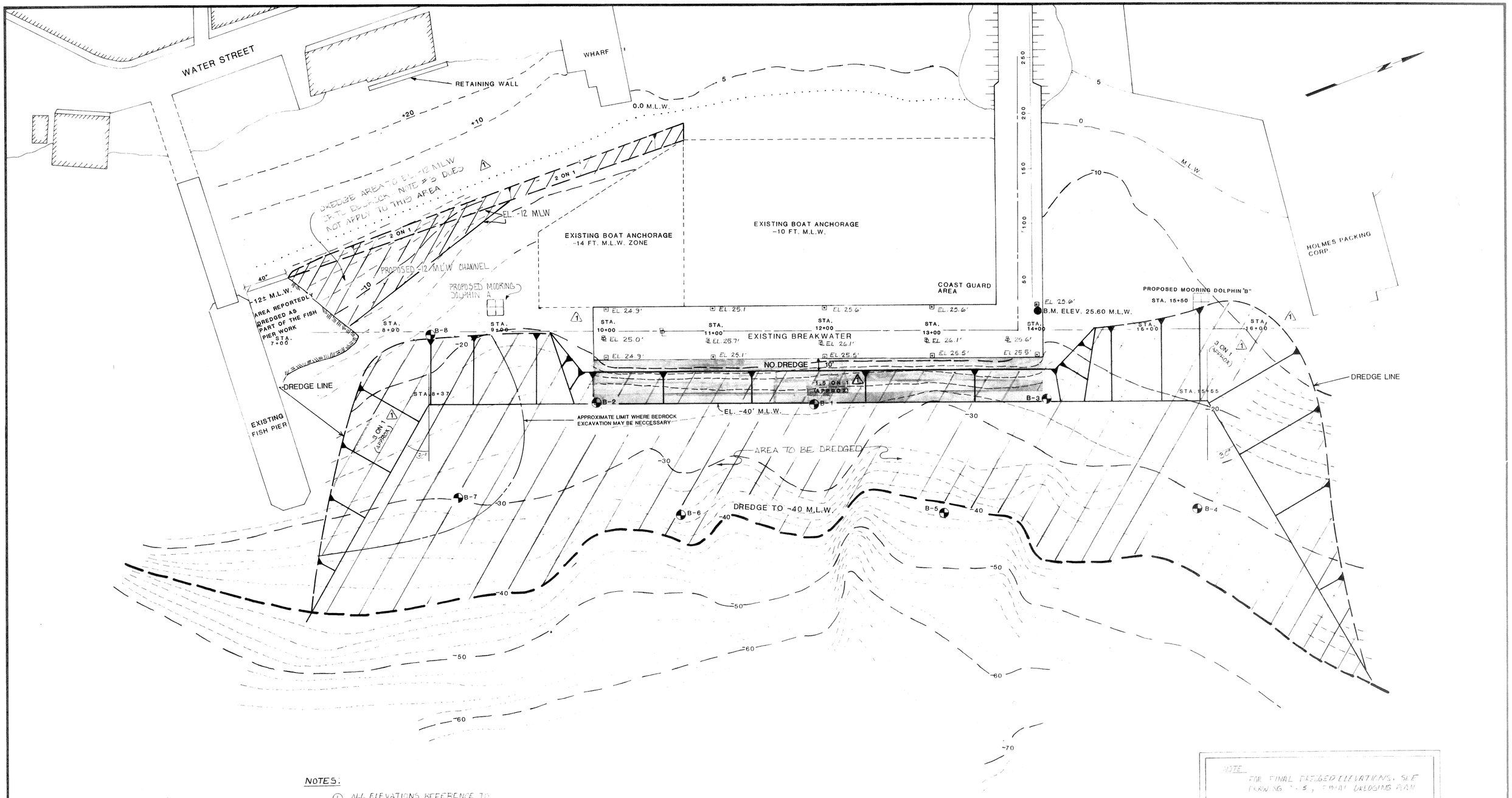
EASTPORT PORT AUTHORITY
EDA DO 01 01 02573
BREAKWATER REHABILITATION PROJECT
CONTRACT NO. 83-2
PORT OF EASTPORT

SITE PLAN

SHEET NO. C 1 OF 5

MORE JOB NO. 1808

DEC. JOB NO. 543 83



NOTE
FOR FINAL DREDGED ELEVATIONS, SEE DRAWING C-5, FINAL DREDGING PLAN

LEGEND

- B-X — BORING NUMBER
- BORING LOCATION
- PROPOSED NEW DECK ADDITION
- 40 — EXISTING CONTOURS
- BASELINE LAYOUT
- APPROXIMATE ELEVATION OF BITUMINOUS CONCRETE SURFACE AT INSIDE EDGE OF SHEETING

NOTES:

1. ALL ELEVATIONS REFERENCE TO MEAN LOW WATER (M.L.W. = 0.00)
2. CONTOUR INFORMATION FROM:
   FATHOMETER STUDY BY MORRISON GEOTECHNICAL ENGINEERING
   U.S. ARMY ENGINEER DIVISION, NEW ENGLAND, CORPS OF ENGINEERS, BREAKWATER AND HARBOR LINING PLAN DATED MAY 1961, DRAWING NO. 1457 D-9-4.
   PROK MARINE, INC., SOUNDINGS AND SWEEP DATA, DATED AUGUST 19, 1982.
3. NO MATERIAL SHALL REMAIN ABOVE ELEVATIONS INDICATED WITHIN THE AREAS TO BE DREDGED
4. NO PAYMENT WILL BE MADE FOR EXCAVATION OF SOIL OR ROCK BELOW THE ELEVATION INDICATED.

CONTOUR INTERVAL: 2 FEET

SCALE:	1"=40'
DATE:	4/13/84
DRAWN BY:	CL
CHECKED BY:	DET

RECORD DRAWING

THIS RECORD DRAWING HAS BEEN PREPARED TO SHOW THOSE CHANGES MADE DURING THE CONSTRUCTION PROCESS, BASED ON THE NOTES BY THE ENGINEER AND MARKED - UP PRINTS, DRAWINGS, AND OTHER DATA FURNISHED BY THE CONTRACTOR TO THE ENGINEER AND WHICH THE ENGINEER CONSIDERS SIGNIFICANT.

REVISIONS			
3	RECORD DRAWING		
2	EDA PROJECT NUMBER ADDED	8/22/84	
1	NOTE ADDED, ELEVATIONS ADDED,		
	CONTOURS NEAR BREAKWATER REVISED	5/14/84	
NO.	DESCRIPTION	DATE	APPD

STATE OF MAINE — EDWARD F. MORRISON NO. 2464 — REGISTERED PROFESSIONAL ENGINEER

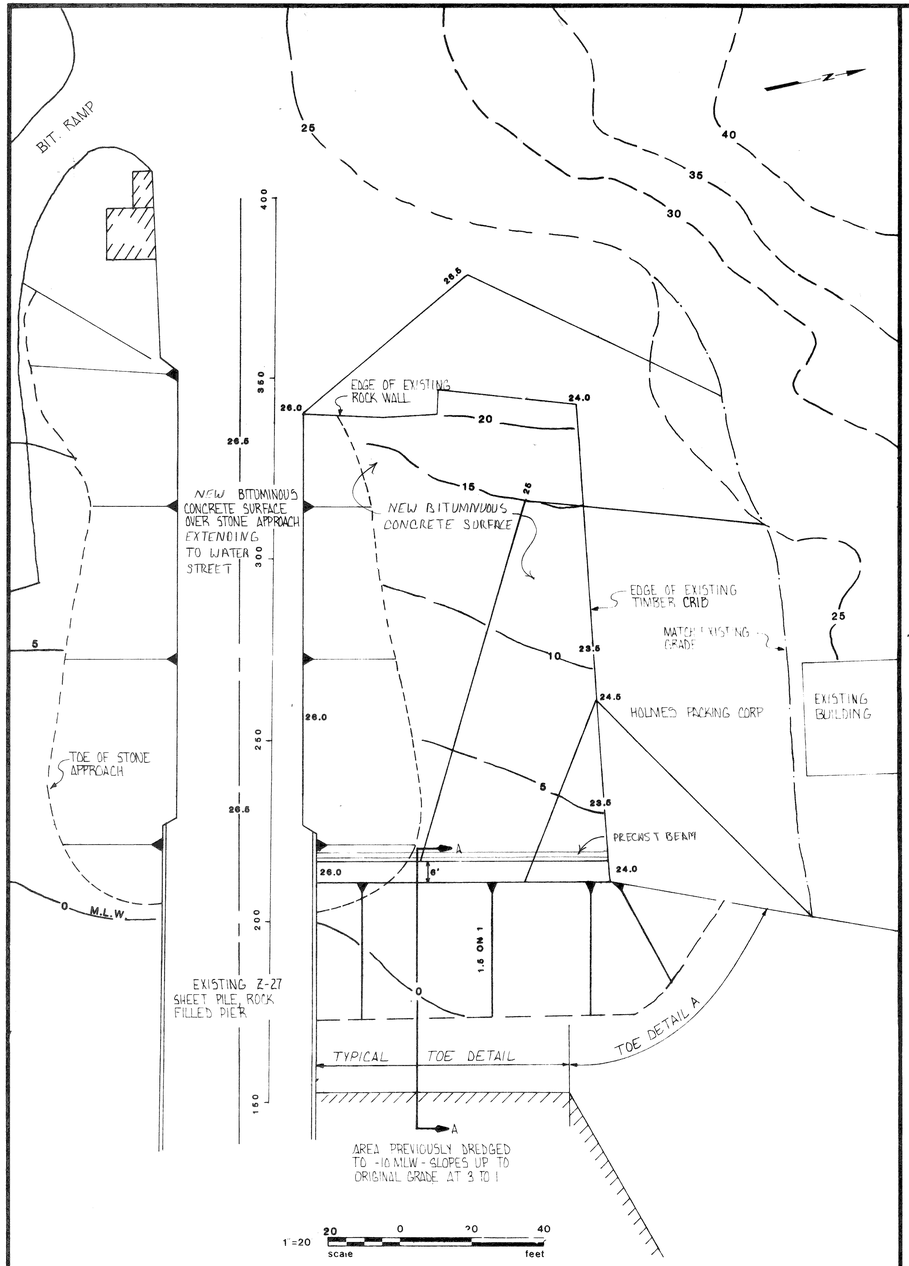
MORRISON GEOTECHNICAL ENGINEERING
WINSLOW, MAINE 04902

REG. PROF. ENG. NO. 2464 DATE

EASTPORT PORT AUTHORITY
EDA NO. 01 01 02573
BREAKWATER REHABILITATION PROJECT
CONTRACT NO. 83-2
PORT OF EASTPORT

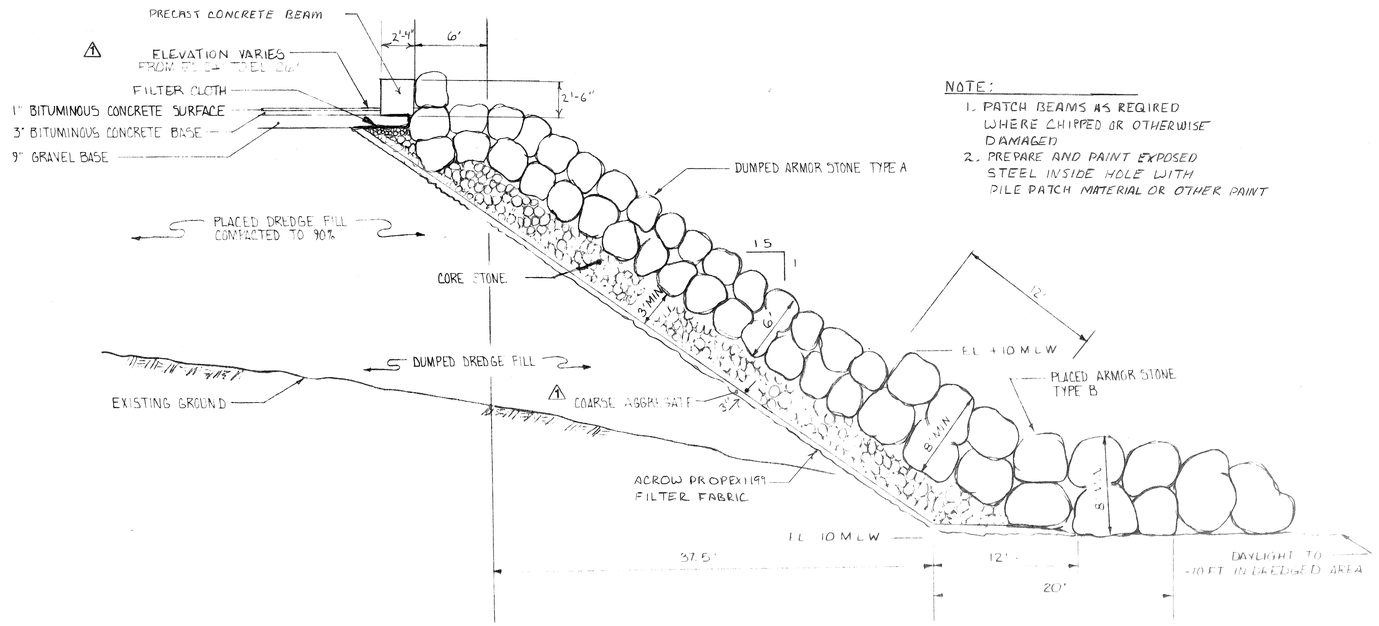
DREDGING PLAN

SHEET NO. C-2 OF 5
MGE JOB NO. 1805
GEC JOB NO. 543-83



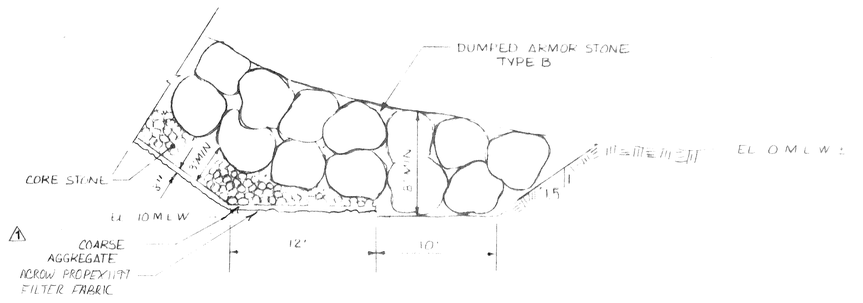
MARSHALLING YARD DETAIL

LEGEND
—5— EXISTING CONTOUR
—25— PROPOSED FINAL ELEVATION



NOTE:
1. PATCH BEAMS AS REQUIRED WHERE CHIPPED OR OTHERWISE DAMAGED
2. PREPARE AND PAINT EXPOSED STEEL INSIDE HOLE WITH PILE PATCH MATERIAL OR OTHER PAINT

SECTION AA
(TYPICAL SECTION)
-10 FT. M.L.W. BERTHING AREA
SCALE: 1"=6'



TOE DETAIL A
NON DREDGED AREA
SCALE: 1"=6'

	ARMOR STONE TYPE A	ARMOR STONE TYPE B	CORE STONE	⚠2 COARSE AGGREGATE SIZE	⚠2 COARSE AGGREGATE % PASSING
MAXIMUM SIZE	3.5 TONS	1 TONS	800 POUNDS	2"	100
85% SIZE	3 TONS	0 TONS	600 POUNDS	1½	95-100
50% SIZE	2.5 TONS	0.2 TONS	250 POUNDS	1	60-85
25% SIZE	2 TONS	4.5 TONS	6" INCHES	¾	30-70
2% SIZE	1.5 TONS	4 TONS	2 INCHES	¼"	10-45
MINIMUM SIZE	1 TON	3 TONS	1 INCH	⅜	10-30
				NO. 4	0-5
				NO. 200	1.5 MAX

DETAILED REQUIREMENTS FOR RIPRAP ARE PRESENTED IN SPECIFICATION SECTION 02250, RIPRAP IN THE PROJECT MANUAL.

RECORD DRAWING

THIS RECORD DRAWING HAS BEEN PREPARED TO SHOW THOSE CHANGES MADE DURING THE CONSTRUCTION PROCESS. BASED ON THE NOTES BY THE ENGINEER AND MARKED - UP PRINTS, DRAWINGS, AND OTHER DATA FURNISHED BY THE CONTRACTOR TO THE ENGINEER AND WHICH THE ENGINEER CONSIDERS SIGNIFICANT.

REVISIONS			
⚠3	RECORD DRAWING 1808-1010,087, CO.7,CO.10,CO.12		
⚠2	EDA PROJECT NUMBER ADDED	8/22/84	
⚠1	REVISIONS TO DETAIL NOTES	5/14/84	
NO.	DESCRIPTION	DATE	APPD

SCALE:	AS NOTED
DATE:	4/13/84
DRAWN BY:	CL
CHECKED BY:	DET

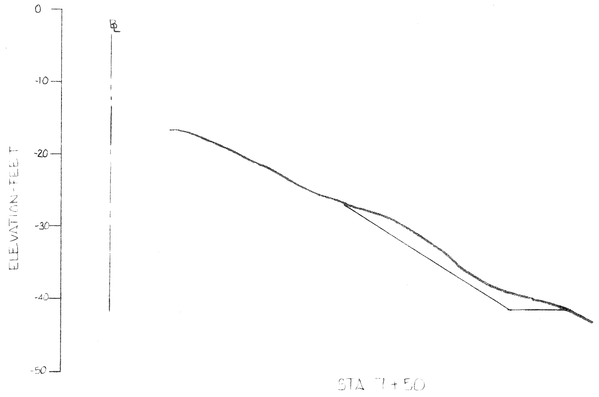
STATE OF MAINE EDWARD J. MORRISON No 2464 REGISTERED PROFESSIONAL ENGINEER

MORRISON GEOTECHNICAL ENGINEERING
WINSLOW, MAINE 04902

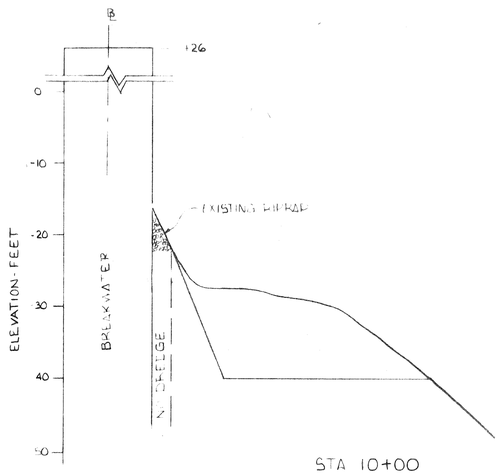
REG. PROF. ENG. NO. 2464 — DATE 5/14/84

EASTPORT PORT AUTHORITY
⚠2 EDA NO. 01-01-02573
BREAKWATER REHABILITATION PROJECT
CONTRACT NO. 83-2
PORT OF EASTPORT
MARSHALLING YARD & DETAIL SHEET

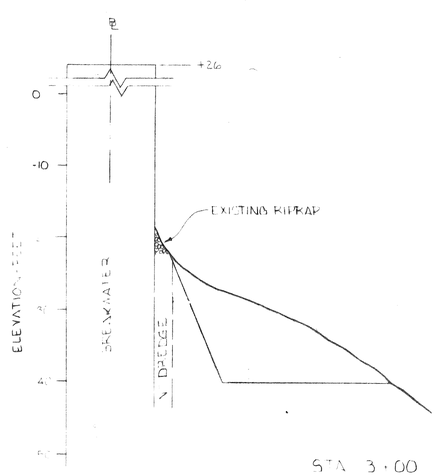
SHEET NO. C-3 OF 5
MGE JOB NO. 1808
GEO JOB NO. 543-83



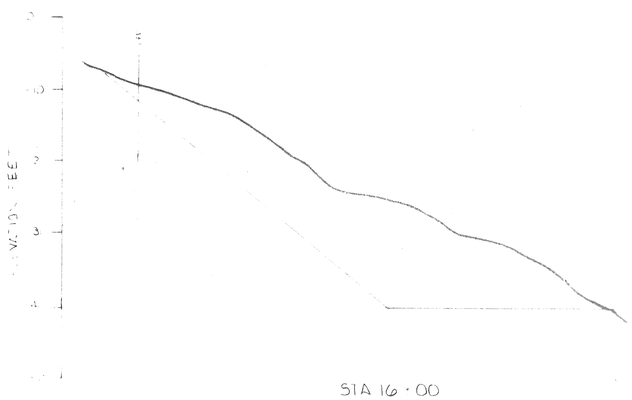
STA 7+50



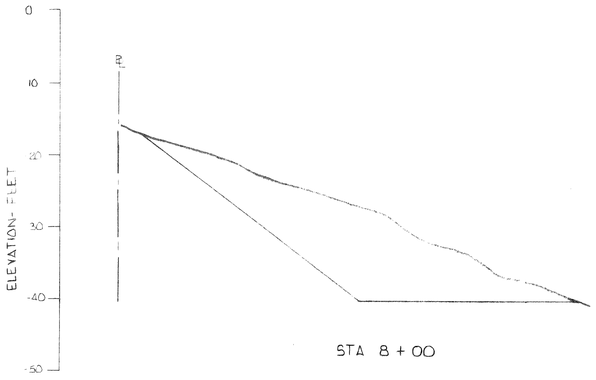
STA 10+00



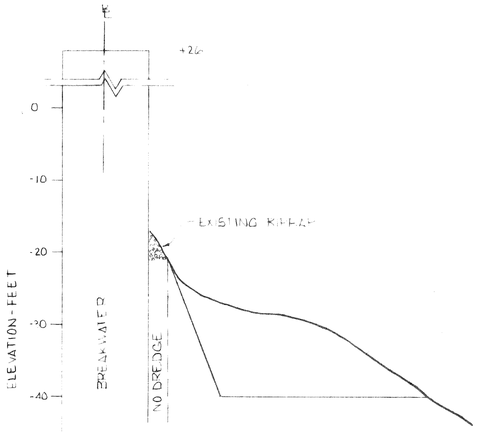
STA 3+00



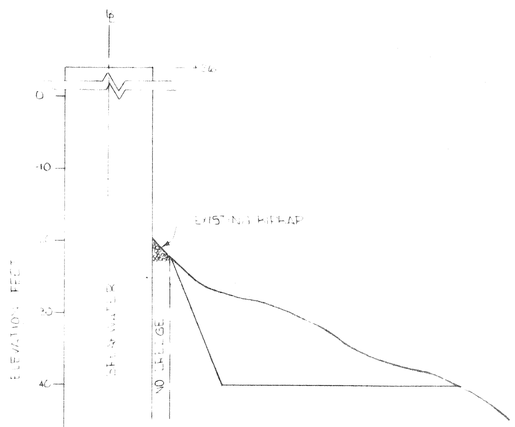
STA 16+00



STA 8+00

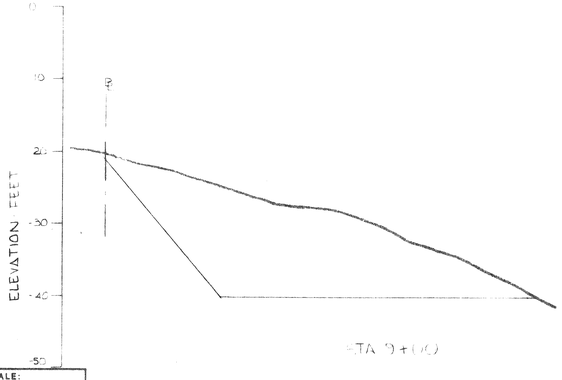


STA 11+00

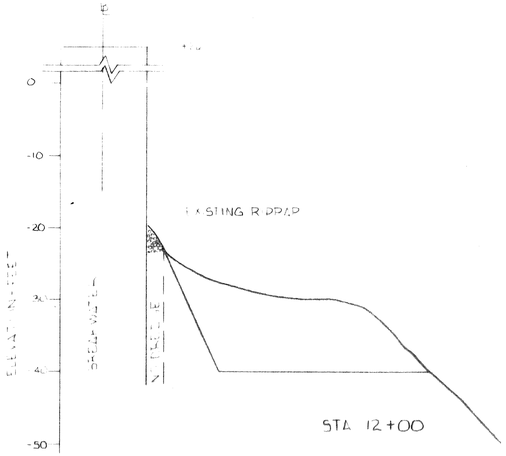


STA 14+00

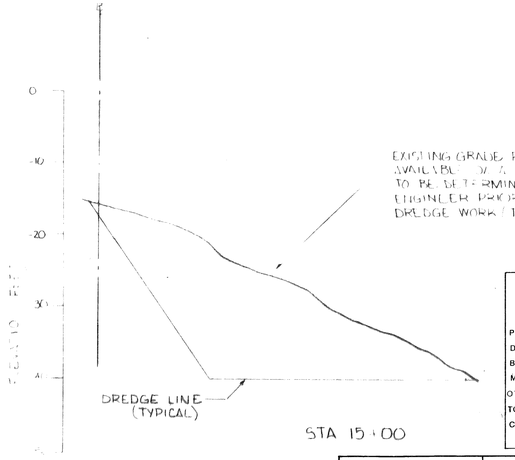
LOCATION MAP
SCALE 1"=2



STA 9+00



STA 12+00



STA 15+00

NOTE:
FOR FINAL DREGED ELEVATIONS, SEE DRAWING C-5, FINAL DREDGING PLAN

RECORD DRAWING

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REVISIONS			
3	RECORD DRAWING		
2	EDA PROJECT NUMBER ADDED	8/22/84	DBJ
1	SECTIONS REVISED, RIPRAP ADDED	5/14/84	DBJ
NO.	DESCRIPTION	DATE	APPD

SCALE: AS NOTED
DATE: 4/13/84
DRAWN BY: CL
CHECKED BY: DET

LEGEND
℄ BASELINE

SCALE
HORIZONTAL 1"=40'
VERTICAL 1"=10

STATE OF MAINE · EDWARD J. MORRISON No. 2464 · REGISTERED PROFESSIONAL ENGINEER

MORRISON GEOTECHNICAL ENGINEERING
WINSLOW, MAINE 04902

REG. PROF. ENG. NO. 2464 — DATE 5/10/84

EASTPORT PORT AUTHORITY
EDA NO. 01-01-02573
BREAKWATER REHABILITATION PROJECT
CONTRACT NO. 83-2
PORT OF EASTPORT
DREDGE SECTIONS & DISPOSAL AREAS

SHEET NO. C-4 OF 5
MGE JOB NO. 1808
CEC JOB NO. 543-83

AP 40084

WASHINGTON STREET

BOYNTON STREET

WATER STREET

RETAINING WALL

WHARF

SEAWALL TOE

SEAWALL TOE

MARSHALLING YARD AREA

EXISTING BOAT ANCHORAGE

MOORING DOLPHIN

EXISTING BOAT ANCHORAGE

MOORING DOLPHIN

EXISTING BREAKWATER

BREAKWATER EXTENSION

EXISTING FISH PIER

SEE NOTE 3

CONTRACT LIMIT OF AREA DREDGED TO -40FEET M.L.W.

CONTRACT LIMIT OF AREA DREDGED TO -40FEET M.L.W.

NOTES:

1. CONTOURS INTERPOLATED FROM SOUNDINGS COMPLETED BY PROCK MARINE COMPANY ON JULY 8, 1985
2. THE AREA INDICATED AS DREDGED TO -40 FEET M.L.W. EXCLUDES THE LEDGE AREA LEFT HIGH AS PER CHANGE ORDER NO. 2.
3. THE CROSS-HATCHED AREAS WERE DREDGED TO AT LEAST -40 FEET M.L.W. IN FEBRUARY 1986. THE DEPTH OF THE ENTIRE DREDGED AREA WAS VERIFIED TO BE AT LEAST -40 FEET M.L.W. BY A BAR AND CHAIN SURVEY BY PROCK MARINE COMPANY ON MARCH 4, 1986.

EASTPORT HARBOR
FRIAR ROADS

RECORD DRAWING

THIS RECORD DRAWING HAS BEEN PREPARED TO SHOW THOSE CHANGES MADE DURING THE CONSTRUCTION PROCESS, BASED ON THE NOTES BY THE ENGINEER AND MARKED - UP PRINTS, DRAWINGS, AND OTHER DATA FURNISHED BY THE CONTRACTOR TO THE ENGINEER AND WHICH THE ENGINEER CONSIDERS SIGNIFICANT.

REVISIONS			
NO.	DESCRIPTION	DATE	

SCALE:	1"=40'
DATE:	AUGUST 1985
DRAWN BY:	KJH
CHECKED BY:	DET

KJH 7/19/85
20.0 KMW 8/9/85
22.0 KMW 8/9/85

STATE OF MAINE EDWARD E. MORRISON 7711 REGISTERED PROFESSIONAL ENGINEER

MORRISON GEOTECHNICAL ENGINEERING
WINSLOW, MAINE

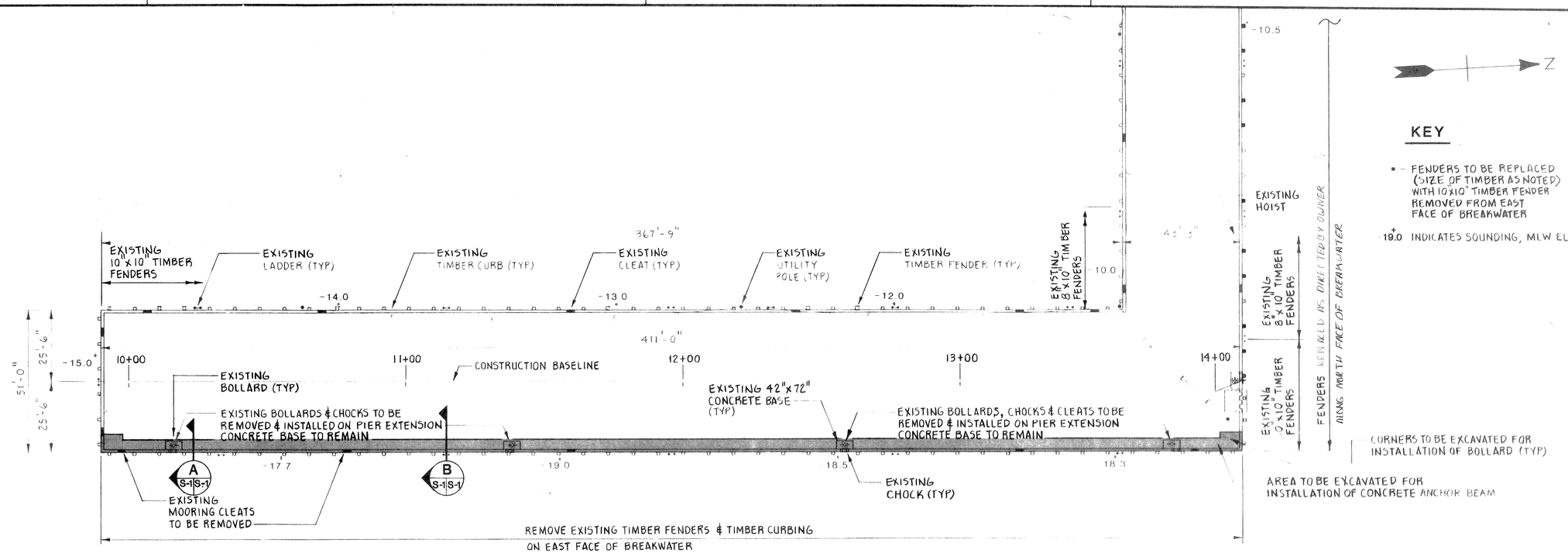
REG. PROF. ENG. NO. 2464 — DATE

EASTPORT PORT AUTHORITY
EDA NO. 01-01-02573
BREAKWATER REHABILITATION PROJECT
CONTRACT NO. 83-2
PORT OF EASTPORT

FINAL DREDGING PLAN

DRAWING NO. C-5 OF 5
MGE JOB NO. 1808
CE JOB NO. 543-83

HARLAN F. SPILLER CO. INC.

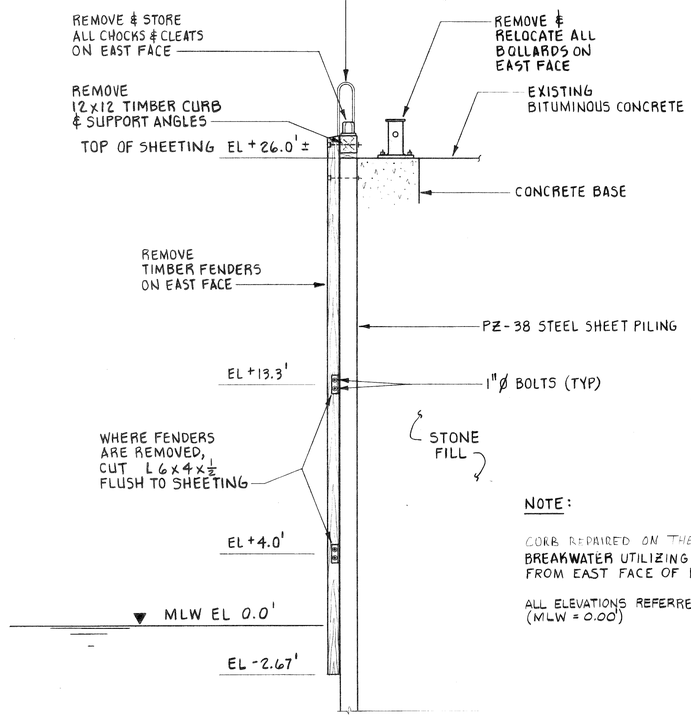


EASTPORT HARBOR

PLAN

SCALE: 1" = 20'

FRIAR ROADS



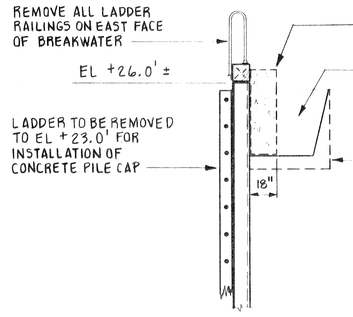
NOTE:

CORB REPAIRED ON THE NORTH FACE OF THE BREAKWATER UTILIZING SOUND TIMBER REMOVED FROM EAST FACE OF BREAKWATER.

ALL ELEVATIONS REFERRED TO MEAN LOW WATER (MLW = 0.00')

A S-1 S-1 EXISTING CROSS-SECTION

SCALE: 1/4" = 1'-0"



B S-1 S-1 SECTION

SCALE: 1/4" = 1'-0"

NOTE:
BOLLARDS ARE NOT TO BE REMOVED UNTIL INSTALLATION AT NEW LOCATION IS REQUIRED.

RECORD DRAWING

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REVISIONS			
3	RECORD DRAWING		
2	EDA PROJECT NUMBER ADDED	8/22/84	JPJ
NO.	DESCRIPTION	DATE	APPD

SCALE:	AS NOTED
DATE:	AUGUST 1985
DRAWN BY:	CEM
CHECKED BY:	JPM

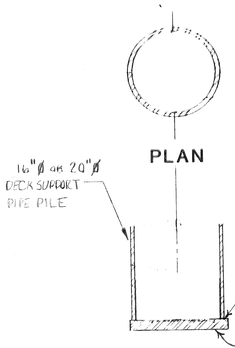
STATE OF MAINE — EDWARD — NO. 2 — REGISTERED PROFESSIONAL ENGINEER

MORRISON GEOTECHNICAL ENGINEERING
WINSLOW, MAINE 04902

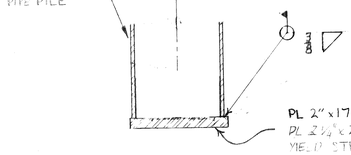
REG. PROF. ENG. NO 2464 DATE

EASTPORT PORT AUTHORITY
2 EDA NO. 01-01-02573
BREAKWATER REHABILITATION PROJECT
CONTRACT NO. 83-2
PORT OF EASTPORT
DEMOLITION & EXCAVATION

SHEET NO.	S-1 OF 11
MGE JOB NO.	1808
GEC JOB NO.	543-83



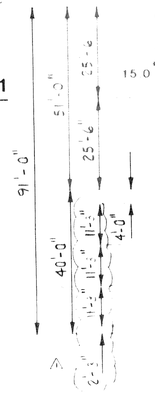
PLAN

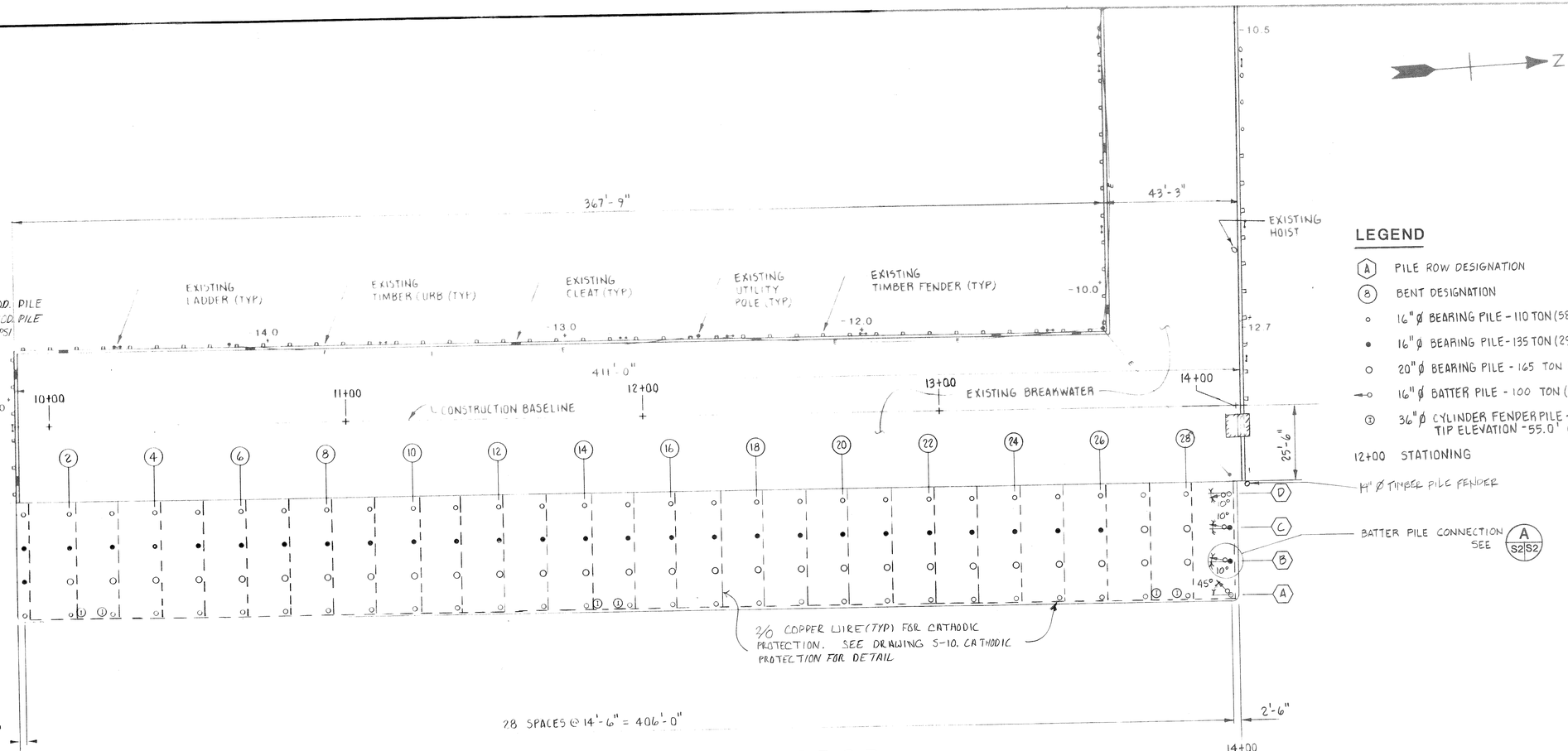


SECTION

PIPE PILE TIP – TYPE 1

SCALE: $\frac{3}{4}$"=1'-0"

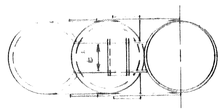




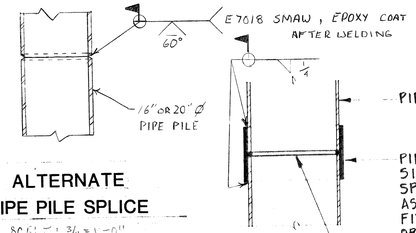
LEGEND

- (A) PILE ROW DESIGNATION
- (8) BENT DESIGNATION
- ○ 16"ø BEARING PILE – 110 TON (58 TOTAL)
- ● 16"ø BEARING PILE – 135 TON (29 TOTAL)
- ○ 20"ø BEARING PILE – 165 TON (29 TOTAL)
- ⊸○ 16"ø BATTER PILE – 100 TON (4 TOTAL)
- ① 36"ø CYLINDER FENDER PILE – TIP ELEVATION -55.0' (6 TOTAL)
- 12+00 STATIONING

EASTPORT FRIAR HARBOR ROADS

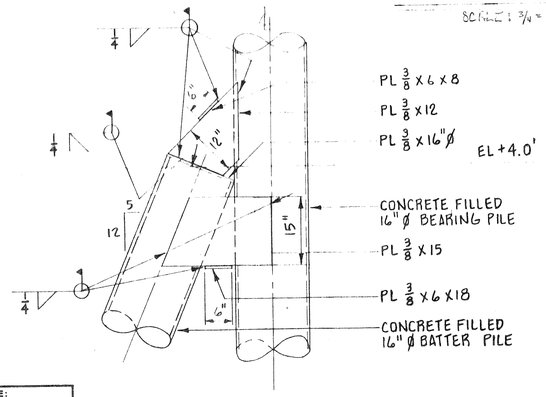


PLAN



ALTERNATE
PIPE PILE SPLICE
SCALE: 3/4"=1'-0"

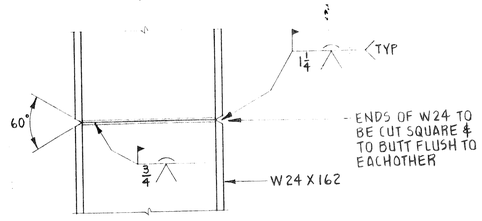
SECTION



ELEVATION

A S2|S2 BATTER PILE CONNECTION
SCALE: $\frac{3}{4}$"=1'-0"

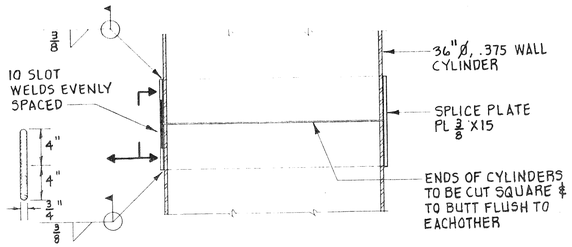
PIPE PILE SPLICE
SCALE: $\frac{3}{4}$"=1'-0"



ELEVATION

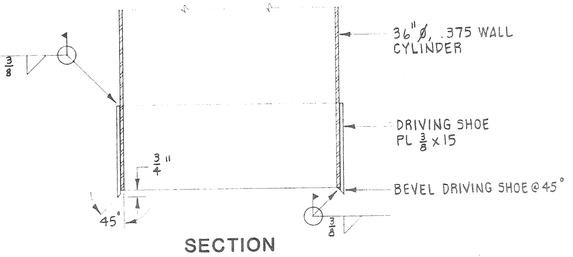
W 24 X 162 – SPLICE
SCALE: 1"=1'-0"

PLAN
SCALE: 1"=20'



SECTION

36"ø CYLINDER SPLICE
SCALE: 1"=1'-0"



SECTION

36"ø CYLINDER – DRIVING SHOE
SCALE: 1"=1'-0"

RECORD DRAWING

THIS RECORD DRAWING HAS BEEN PREPARED TO SHOW THOSE CHANGES MADE DURING THE CONSTRUCTION PROCESS, BASED ON THE NOTES BY THE ENGINEER AND MARKED - UP PRINTS, DRAWINGS, AND OTHER DATA FURNISHED BY THE CONTRACTOR TO THE ENGINEER AND WHICH THE ENGINEER CONSIDERS SIGNIFICANT.

REVISIONS			
3			
2	RECORD DRAWING C.O. 13, 1808-004, 008, 026, 049, 090		
1	REVISED PILE LAYOUT DIMENSIONS	8/23/84	BBJ
NO.	DESCRIPTION	DATE	APPD

SCALE:	AS NOTED
DATE:	AUGUST 1985
DRAWN BY:	CEM
CHECKED BY:	JPM

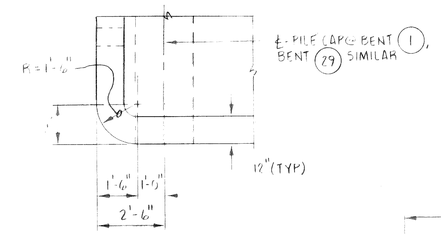
STATE OF MAINE — REGISTERED PROFESSIONAL ENGINEER

MORRISON GEOTECHNICAL ENGINEERING
WINSLOW, MAINE 04902

REG. PROF. ENG. NO. 2464 DATE

EASTPORT PORT AUTHORITY
EDA NO. 01-01-02573
BREAKWATER REHABILITATION PROJECT
CONTRACT NO. 83-2
PORT OF EASTPORT
PILE PLAN

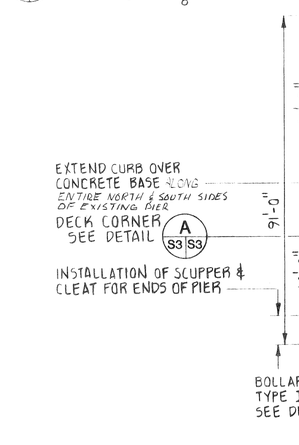
SHEET NO. S-2 OF 11
MGE JOB NO. 1808
CEC JOB NO. 543-83

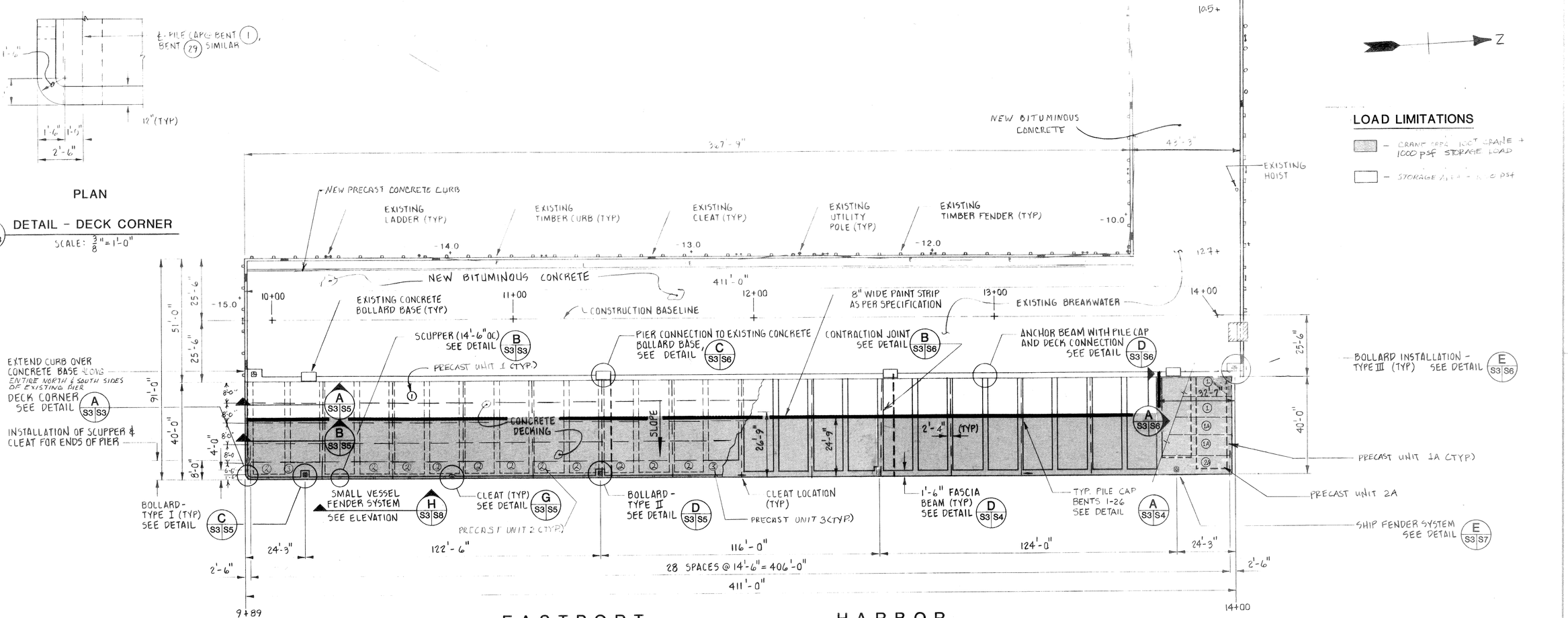


PLAN

(A S3|S3) DETAIL - DECK CORNER

SCALE: $\frac{3}{8}$"=1'-0"





LOAD LIMITATIONS

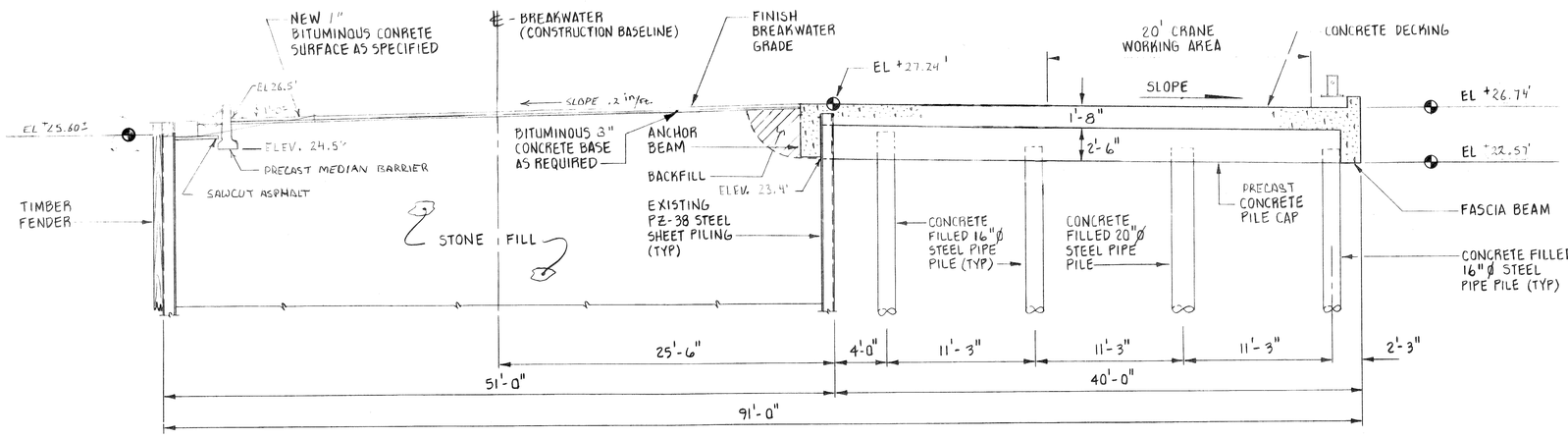
- ▒ – CRANE OPER. 100T CRANE + 1000 PSF STORAGE LOAD
- □ – STORAGE AREA = 1000 PSF

EASTPORT HARBOR

FRIAR ROADS

PLAN

SCALE: 1" = 20'

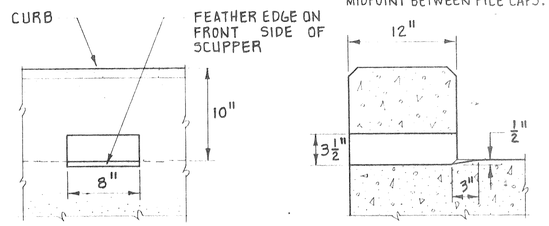


TYPICAL CROSS-SECTION

(BENTS (1) THRU (26))

SCALE: $\frac{3}{16}$"=1'-0"

NOTE:
SCUPPERS LOCATED AT MIDPOINT BETWEEN PILE CAPS.



ELEVATION SECTION

(B S3|S5) (B S3|S3) DETAIL - SCUPPER

SCALE: 1½"=1'-0"

RECORD DRAWING

THIS RECORD DRAWING HAS BEEN PREPARED TO SHOW THOSE CHANGES MADE DURING THE CONSTRUCTION PROCESS, BASED ON THE NOTES BY THE ENGINEER AND MARKED - UP PRINTS, DRAWINGS, AND OTHER DATA FURNISHED BY THE CONTRACTOR TO THE ENGINEER AND WHICH THE ENGINEER CONSIDERS SIGNIFICANT.

REVISIONS			
2	RECORD DRAWING 1808-013A,076A,CO.4,CO.6		
1	EDA PROJECT NUMBER ADDED	8/22/84	889
NO.	DESCRIPTION	DATE	APPD

SCALE:	AS NOTED
DATE:	AUGUST 1985
DRAWN BY:	CEM
CHECKED BY:	JPM

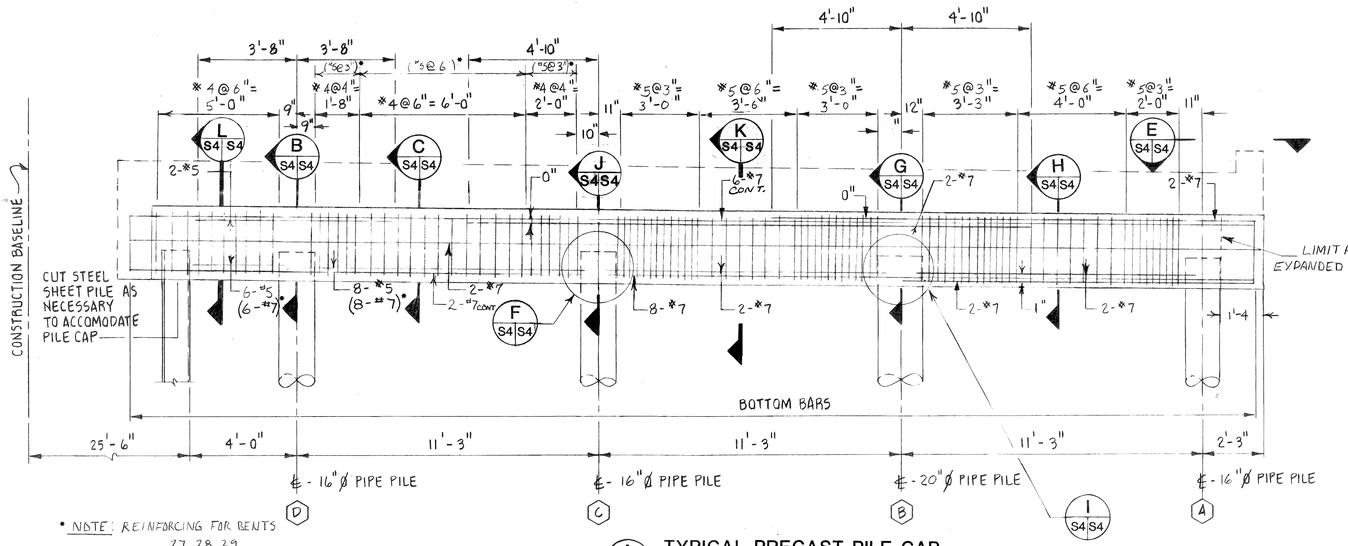
STRUCTURAL ENGINEER EDWARD P. MORRISON No 3604 REGISTERED PROFESSIONAL ENGINEER

MORRISON GEOTECHNICAL ENGINEERING
WINSLOW, MAINE 04902

REG. PROF. ENG. NO. 2464 DATE 8/13/84

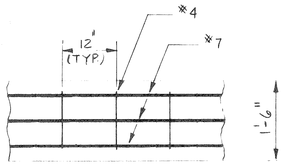
EASTPORT PORT AUTHORITY
EDA NO. 01-01-02573
BREAKWATER REHABILITATION PROJECT
CONTRACT NO. 83-2
PORT OF EASTPORT
DECKING / PILE CAP PLAN

SHEET NO. S-3 OF 11
MGE JOB NO. 1808
CEC JOB NO. 543-83

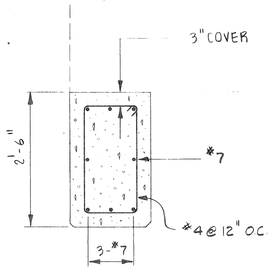


* NOTE: REINFORCING FOR BENTS 27, 28, 29

A S3|S4 **TYPICAL PRECAST PILE CAP**
SCALE: $\frac{3}{8}$" = 1'-0"

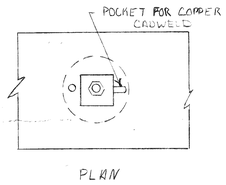


PLAN

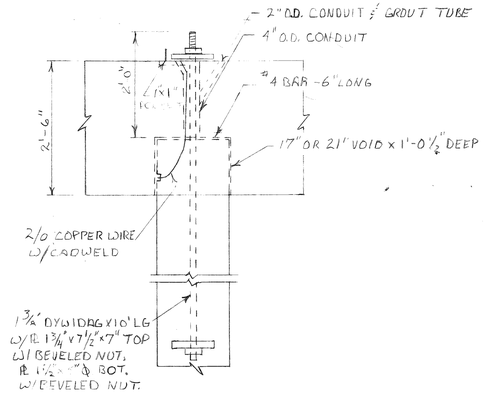


SECTION

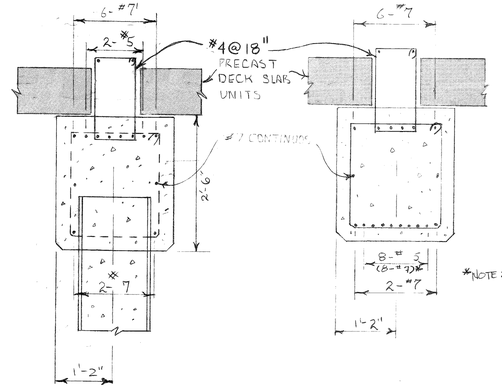
D S3|S4 **DETAIL – FASCIA BEAM**
SCALE: $\frac{3}{4}$" = 1'-0"



PLAN

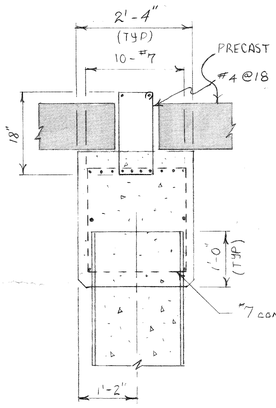


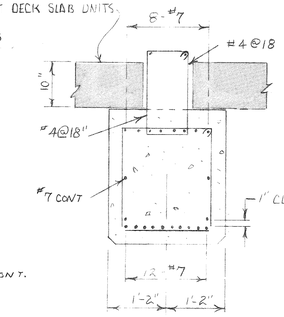
F S4|S4 **PILE – PILE CAP CONECTION DETAIL**
SCALE: $\frac{3}{4}$" = 1'-0"



B S4|S4 **SECTION**
SCALE: $\frac{3}{4}$" = 1'-0"

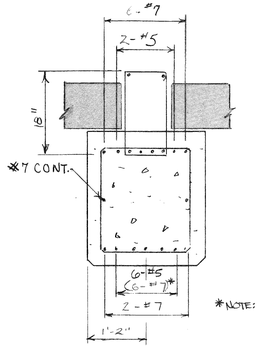
C S4|S4 **SECTION**
SCALE: $\frac{3}{4}$" = 1'-0"





G S4|S4 **SECTION**
SCALE: $\frac{3}{4}$" = 1'-0"

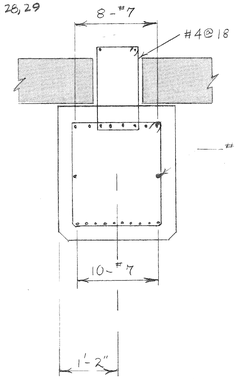
H S4|S4 **SECTION**
SCALE: $\frac{3}{4}$" = 1'-0"



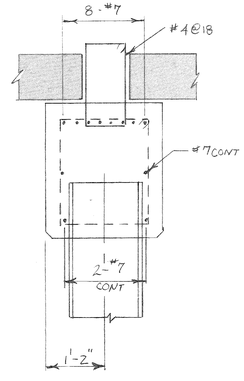
*NOTE: REINFORCING FOR BENTS 27, 28, 29

L S4|S4 **SECTION**
SCALE: $\frac{3}{4}$" = 1'-0"

*NOTE: REINFORCING FOR BENTS 27, 28, 29



K S4|S4 **SECTION**
SCALE: $\frac{3}{4}$" = 1'-0"



J S4|S4 **SECTION**
SCALE: $\frac{3}{4}$" = 1'-0"

GENERAL CONCRETE NOTES:

1. ALL CAST IN PLACE CONCRETE SHALL HAVE AN ULTIMATE STRENGTH OF 4000 PSI AT 28 DAYS
2. ALL PRECAST PILE CAP CONCRETE SHALL HAVE AN ULTIMATE STRENGTH OF 5000 PSI AT 28 DAYS
3. MINIMUM CONCRETE COVERAGE OVER REINFORCING SHALL BE 3".
4. REINFORCING SHALL CONFORM TO ASTM A-615 GRADE 60.
5. SPLICING OF REINFORCING:
   - #6 & SMALLER – 34 BAR DIAMETERS
   - #7 & LARGER – 40 BAR DIAMETERS
6. CHAMFER ALL EXPOSED EDGES $\frac{3}{4}$" @ 45°.

RECORD DRAWING

THIS RECORD DRAWING HAS BEEN PREPARED TO SHOW THOSE CHANGES MADE DURING THE CONSTRUCTION PROCESS, BASED ON THE NOTES BY THE ENGINEER AND MARKED – UP PRINTS, DRAWINGS, AND OTHER DATA FURNISHED BY THE CONTRACTOR TO THE ENGINEER AND WHICH THE ENGINEER CONSIDERS SIGNIFICANT.

REVISIONS			
2	RECORD DRAWING 1808-015A,016A		
1	EDA PROJECT NUMBER ADDED	8/22/84	
NO.	DESCRIPTION	DATE	APPD

SCALE:	AS NOTED
DATE:	AUGUST 1985
DRAWN BY:	CEM
CHECKED BY:	JPM

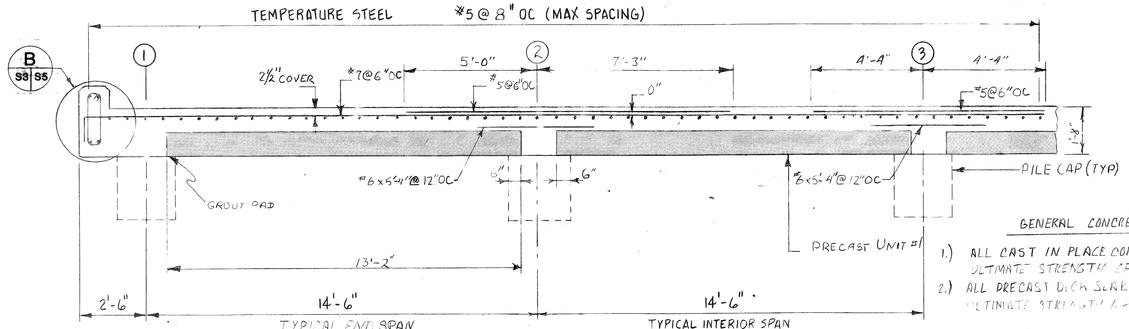
STATE OF MAINE — EDWARD B. MORRISON No 2464 — REGISTERED PROFESSIONAL ENGINEER

MORRISON GEOTECHNICAL ENGINEERING
WINSLOW, MAINE 04902

REG. PROF. ENG. NO. 2464 DATE 3/12/85

EASTPORT PORT AUTHORITY
EDA NO. 01-01-02573
BREAKWATER REHABILITATION PROJECT
CONTRACT NO. 83-2
PORT OF EASTPORT
PILE CAP – REINFORCING DETAILS

SHEET NO. S-4 OF 11
MGE JOB NO. 1808
CEC JOB NO. 543-83



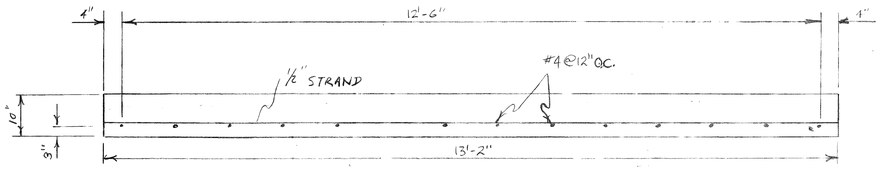
A S3 S5 **SECTION – DECK SLAB**

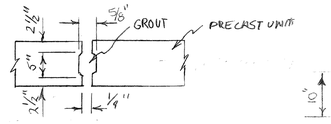
SCALE: $\frac{3}{8}$"=1'-0"

GENERAL CONCRETE NOTES

1.) ALL CAST IN PLACE CONCRETE SHALL HAVE AN ULTIMATE STRENGTH OF 4000 PSI @ 28 DAYS
2.) ALL PRECAST DECK SLAB CONCRETE SHALL HAVE AN ULTIMATE STRENGTH OF 5000 PSI @ 28 DAYS
3.) MINIMUM CONCRETE COVERAGE OVER REINFORCING SHALL BE 3".
4.) REINFORCING SHALL CONFORM TO ASTM A-615 GRADE 60.
5.) SPLICING OF REINFORCING:
- #6 & SMALLER – 34 BAR DIAMETERS
- #7 & LARGER – 40 BAR DIAMETERS

6.) CHAMFER ALL EXPOSED EDGES $\frac{3}{4}$" @ 45°.
7.) SLAB SHALL BE PLACED IN SECTIONS NOT EXCEEDING 2000 SQUARE FEET.

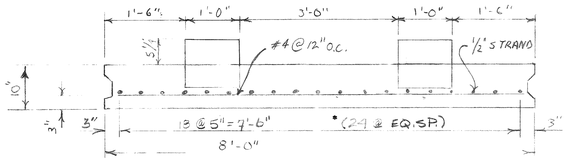




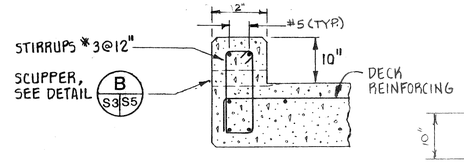
SECTION

JOINT BETWEEN PRECAST UNITS

SCALE: $\frac{3}{4}$"=1'-0"

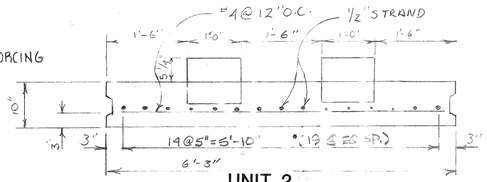


UNIT 1
UNIT 1A

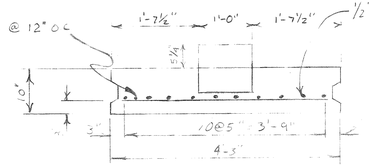


E S5 S5 **CURB DETAIL**

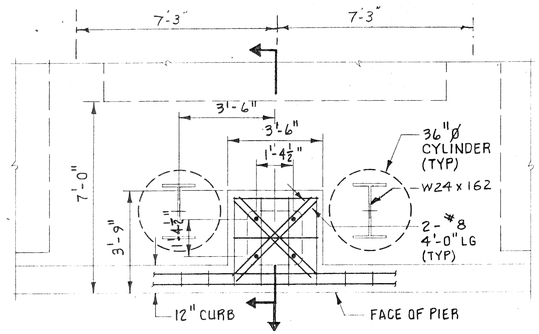
SCALE: $\frac{3}{4}$"=1'-0"



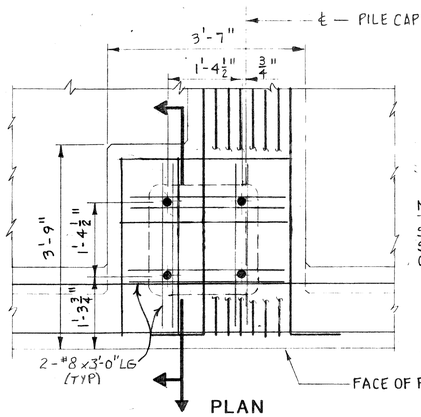
UNIT 2
UNIT 2A



UNIT 3

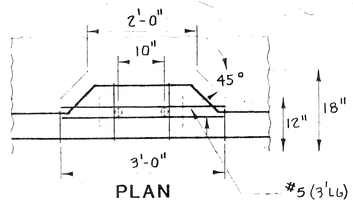


PLAN

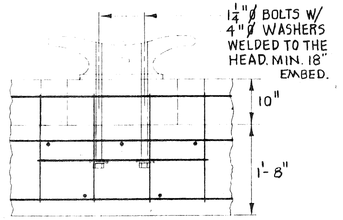


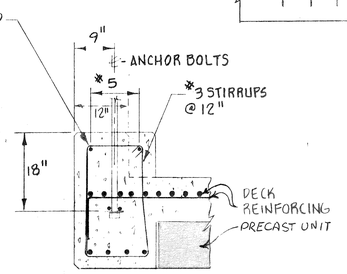
PLAN

NOTE:
STIRRUPS NOT SHOWN FOR CLARITY.



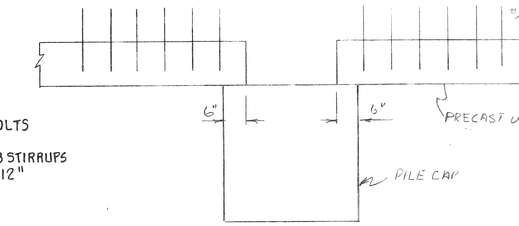
PLAN





G S3 S5 **DETAIL – CLEAT ANCHOR**

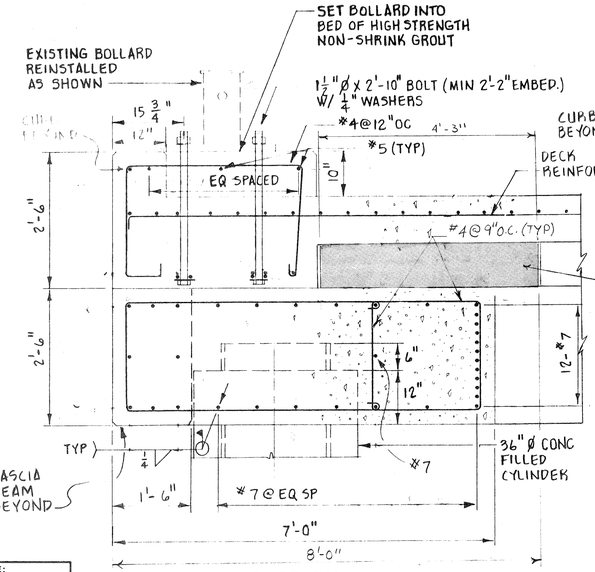
SCALE: $\frac{3}{4}$"=1'-0"



SECTION

PRECAST DECK SLAB

SCALE: $\frac{3}{4}$"=1'-0"

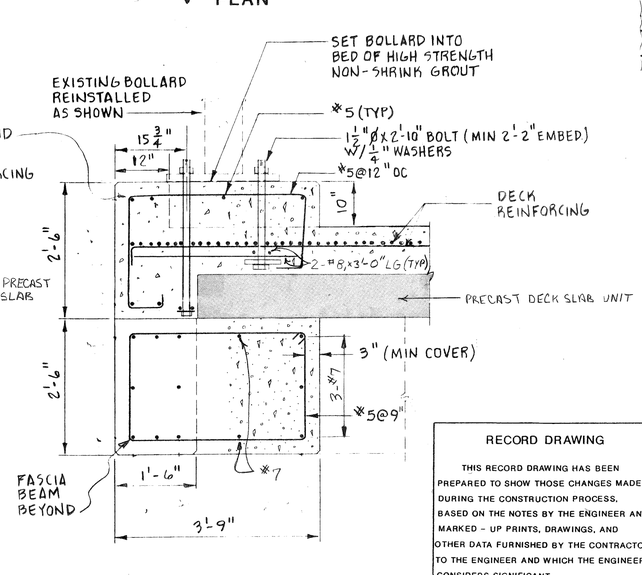


SECTION

C S3 S5 **BOLLARD INSTALLATION – TYPE I**

SCALE: $\frac{3}{4}$"=1'-0"

FENDER BEAM INSTALLATION



SECTION

D S3 S5 **BOLLARD INSTALLATION – TYPE II**

SCALE: $\frac{3}{4}$"=1'-0"

RECORD DRAWING

THIS RECORD DRAWING HAS BEEN PREPARED TO SHOW THOSE CHANGES MADE DURING THE CONSTRUCTION PROCESS, BASED ON THE NOTES BY THE ENGINEER AND MARKED – UP PRINTS, DRAWINGS, AND OTHER DATA FURNISHED BY THE CONTRACTOR TO THE ENGINEER AND WHICH THE ENGINEER CONSIDERS SIGNIFICANT.

REVISIONS			
2	RECORD DRAWING 1808-013A,014A,016A, 017A 039,040,041,012,078		
1	EDA PROJECT NUMBER ADDED	8/22/84	
NO.	DESCRIPTION	DATE	APPD

SCALE:	AS NOTED
DATE:	AUGUST 1985
DRAWN BY:	CEM
CHECKED BY:	JPM

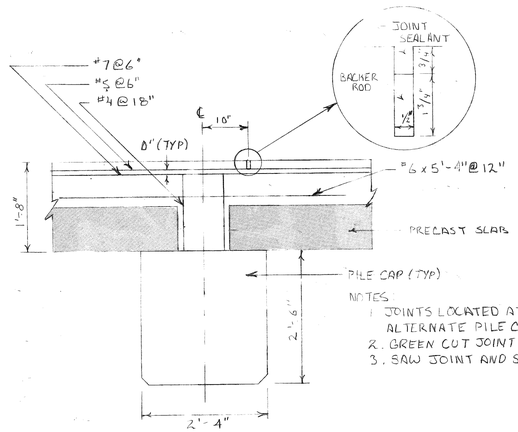
STATE OF MAINE EDWARD B MORRISON NO 2464 REGISTERED PROFESSIONAL ENGINEER

MORRISON GEOTECHNICAL ENGINEERING
WINSLOW, MAINE 04902

REG. PROF. ENG. NO. 2464 DATE 8/31/84

EASTPORT PORT AUTHORITY
EDA NO. 01-01-02573
BREAKWATER REHABILITATION PROJECT
CONTRACT NO. 83-2
PORT OF EASTPORT
DECKING DETAILS

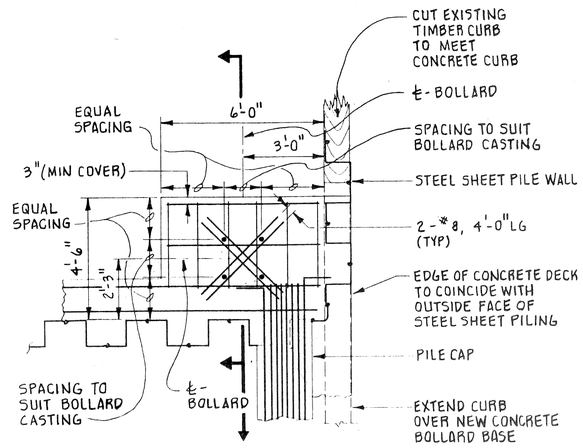
SHEET NO. S-5 OF 11
MGE JOB NO. 1808
CEC JOB NO. 543-83



NOTES:
1. JOINTS LOCATED AT ALTERNATE PILE CAPS (29'-0" OC)
2. GREEN CUT JOINT
3. SAW JOINT AND SEAL

B S3 S6 **CONTRACTION JOINT**

SCALE: 3/4" = 1'-0"



PLAN

SCALE: 3/8" = 1'-0"

GENERAL CONCRETE NOTES

1.) ALL CAST IN PLACE CONCRETE SHALL HAVE AN ULTIMATE STRENGTH OF 4000 PSI @ 28 DAYS.

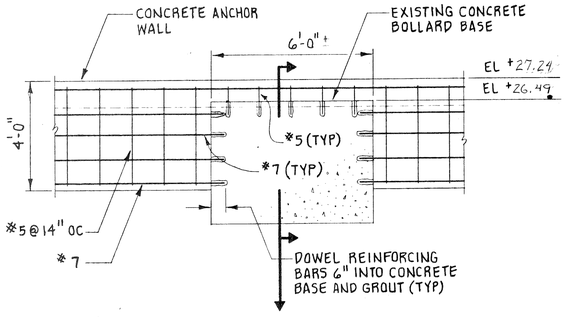
2.) MINIMUM CONCRETE COVERAGE OVER REINFORCING SHALL BE 3".

3.) REINFORCING SHALL CONFORM TO ASTM A-615 GRADE 60.

4.) SPLICING OF REINFORCING:
- #6 & SMALLER - 34 BAR DIAMETERS
- #7 & LARGER - 40 BAR DIAMETERS

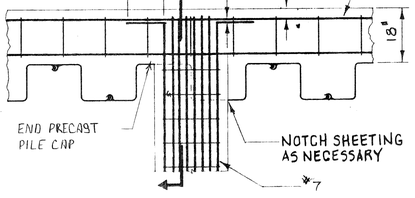
5.) CHAMFER ALL EXPOSED EDGES 3/4" @ 45°.

6.) SLAB SHALL BE PLACED IN SECTIONS NOT EXCEEDING 2000 SQUARE FEET.



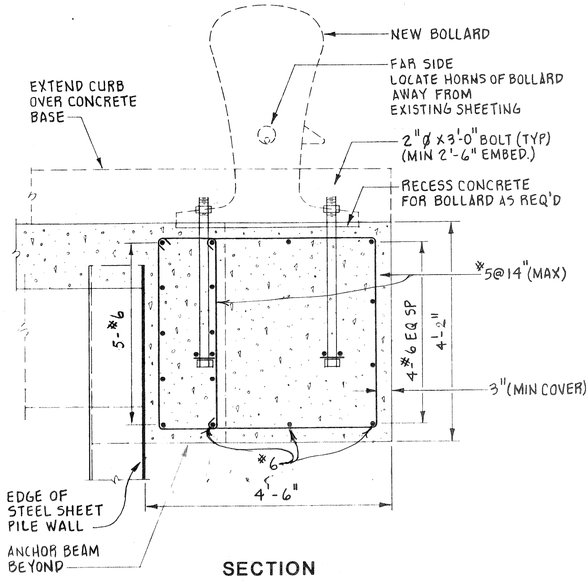
ELEVATION

SCALE: 3/8" = 1'-0"



PLAN

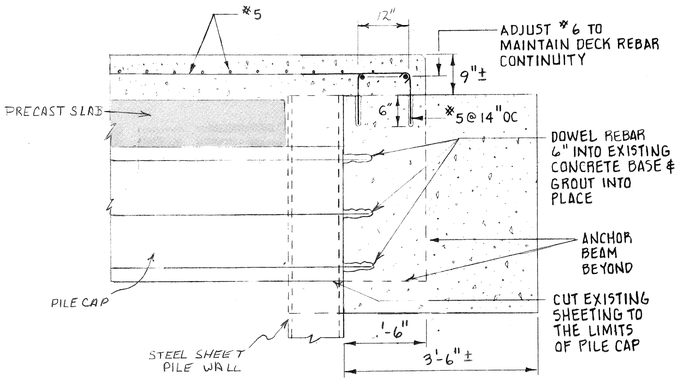
SCALE: 1/2" = 1'-0"



SECTION

E S3 S6 **DETAIL - BOLLARD INSTALLATION TYPE III**

SCALE: 3/4" = 1'-0"

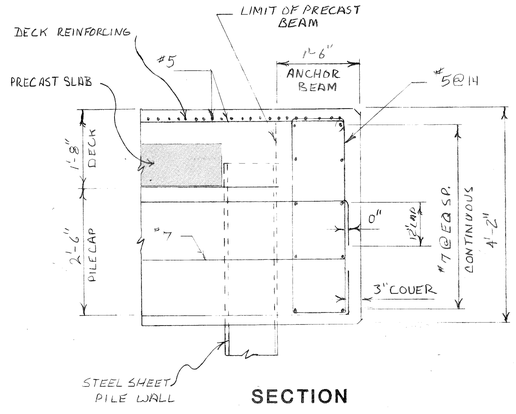


SECTION

PIER CONNECTION TO

C S3 S6 **DETAIL - EXISTING CONCRETE BOLLARD BASE**

SCALE: 3/4" = 1'-0"



SECTION

D S3 S6 **DETAIL - ANCHOR BEAM WITH PILE CAP & DECK CONNECTION**

SCALE: 3/4" = 1'-0"

RECORD DRAWING

THIS RECORD DRAWING HAS BEEN PREPARED TO SHOW THOSE CHANGES MADE DURING THE CONSTRUCTION PROCESS, BASED ON THE NOTES BY THE ENGINEER AND MARKED - UP PRINTS, DRAWINGS, AND OTHER DATA FURNISHED BY THE CONTRACTOR TO THE ENGINEER AND WHICH THE ENGINEER CONSIDERS SIGNIFICANT.

REVISIONS			
3	RECORD DRAWING 1808-016A,018A,066		
2	EDA PROJECT NUMBER ADDED	8122184	DRJ
NO.	DESCRIPTION	DATE	APPD

SCALE:	AS NOTED
DATE:	AUGUST 1985
DRAWN BY:	CEM
CHECKED BY:	JPM

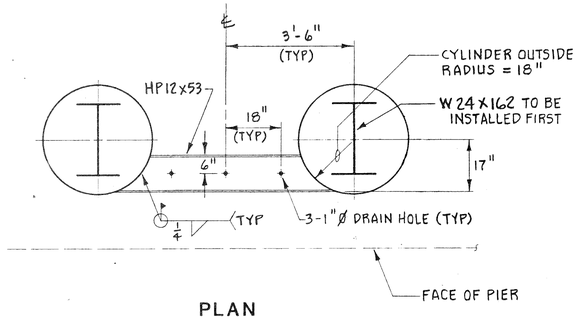
STATE OF MAINE EDWARD B. MORRISON No. 2464 REGISTERED PROFESSIONAL ENGINEER

MORRISON GEOTECHNICAL ENGINEERING
WINSLOW, MAINE 04902

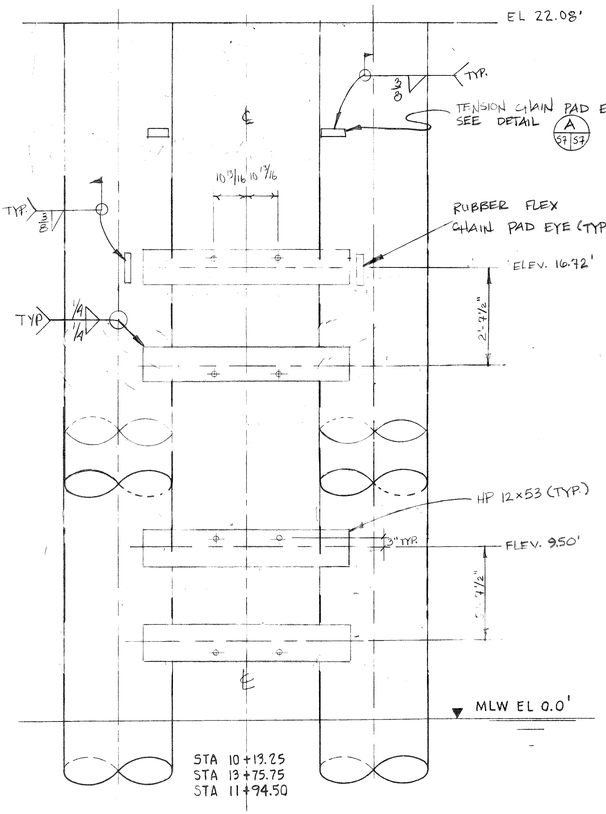
REG. PROF. ENG. NO. 2464 DATE

EASTPORT PORT AUTHORITY
EDA NO. 01-01-02573
BREAKWATER REHABILITATION PROJECT
CONTRACT NO. 83-2
PORT OF EASTPORT
CONCRETE DETAILS

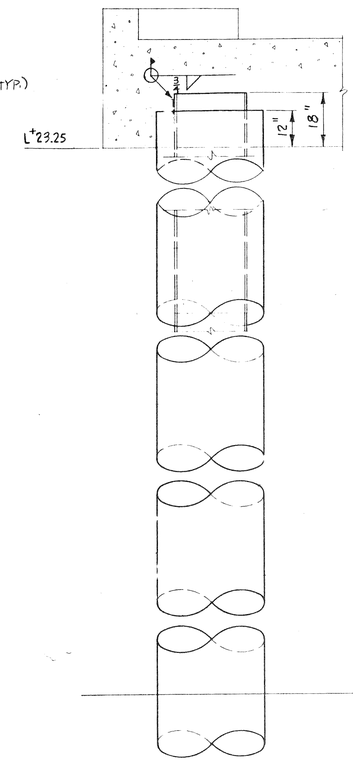
SHEET NO. S-6 OF 11
MGE JOB NO. 1808
CEC JOB NO. 543-83



PLAN

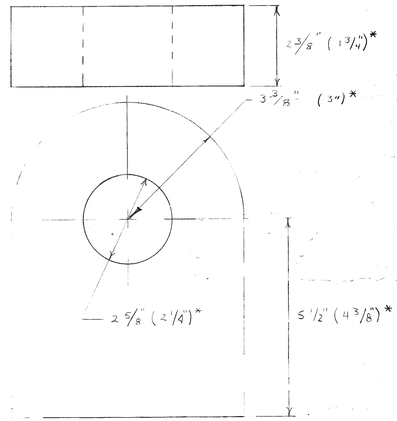


ELEVATION



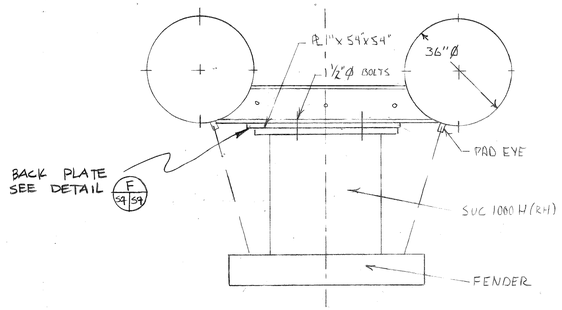
SECTION

D S7|S7 SHIP FENDER SYSTEM
(STA 10+13.25) (STA 11+94.50) (STA 13+75.75)
SCALE: 1/2"=1'-0"



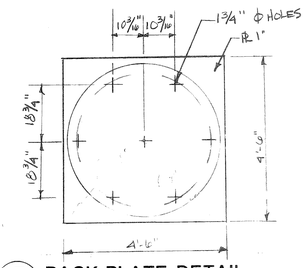
DETAIL – TENSION CHAIN PAD EYE
*(RUBBER FLEX CHAIN PAD EYE)

A S7|S7

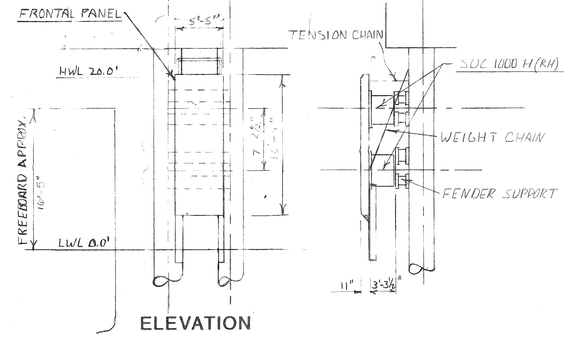


PLAN
FENDER CHAIN INSTALLATION
SCALE: 3/8"=1'-0"

C S7|S7



F S7|S7 BACK PLATE DETAIL
SCALE: 1/2"=1'-0"



ELEVATION

E S3|S7 SHIP FENDER ASSEMBLY
SCALE: 1/8"=1'-0"

RECORD DRAWING

THIS RECORD DRAWING HAS BEEN PREPARED TO SHOW THOSE CHANGES MADE DURING THE CONSTRUCTION PROCESS. BASED ON THE NOTES BY THE ENGINEER AND MARKED - UP PRINTS, DRAWINGS, AND OTHER DATA FURNISHED BY THE CONTRACTOR TO THE ENGINEER AND WHICH THE ENGINEER CONSIDERS SIGNIFICANT.

NO.	DESCRIPTION	DATE	APPD
		3/4/86	
2	RECORD DRAWING 1808-029.058 C.O.13, C.O.14		
1	EDA PROJECT NUMBER ADDED	11/27/85	

REVISIONS

SCALE:	AS NOTED
DATE:	AUGUST 1985
DRAWN BY:	CEM
CHECKED BY:	JPM

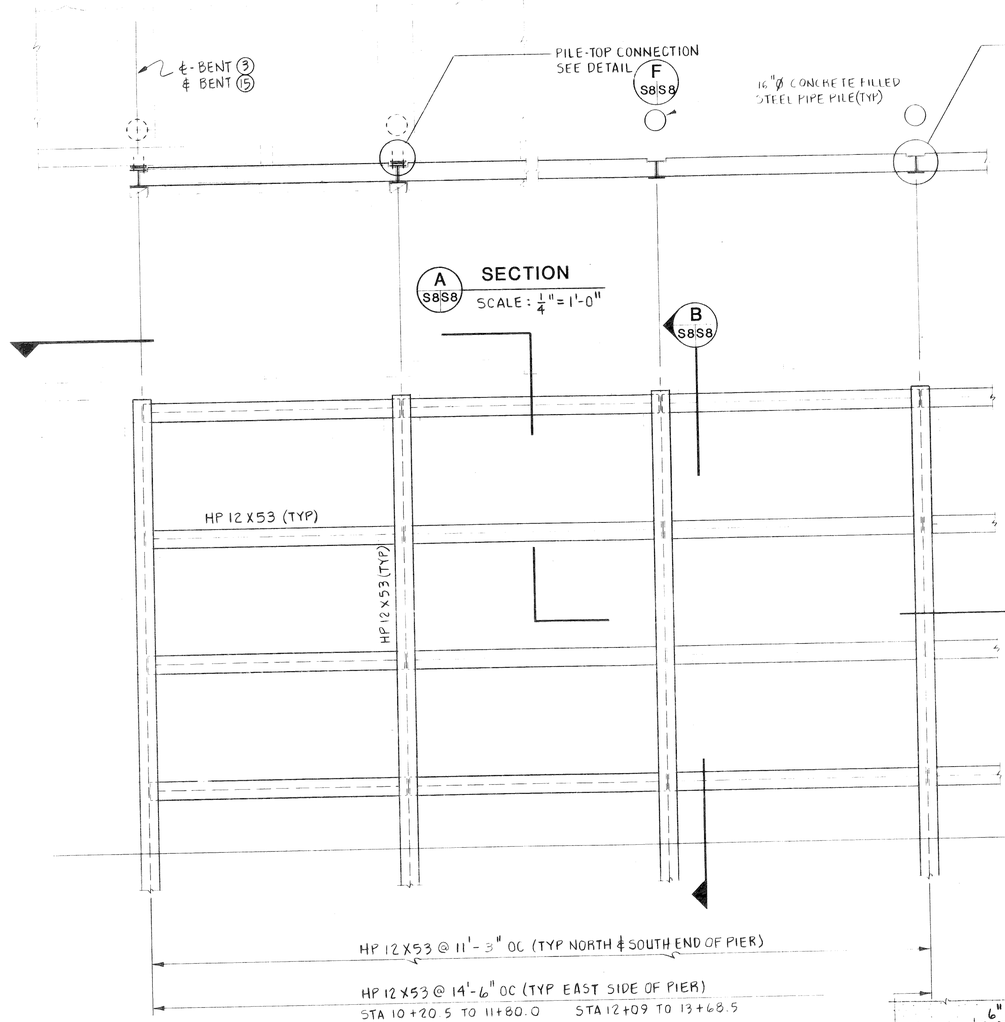
STATE OF MAINE EDWARD B. MORRISON NO 2464 REGISTERED PROFESSIONAL ENGINEER

MORRISON GEOTECHNICAL ENGINEERING
WINSLOW, MAINE 04902

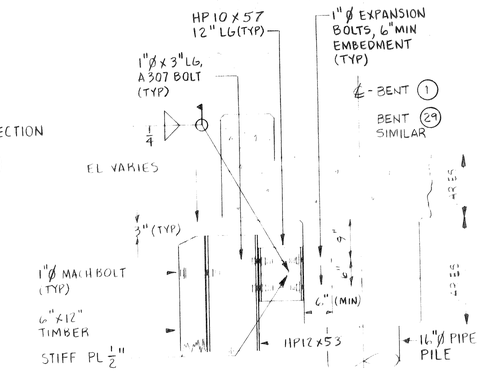
REG. PROF. ENG. NO. 2464 DATE 3/10/86

EASTPORT PORT AUTHORITY
EDA NO. 01-01-02573
BREAKWATER REHABILITATION PROJECT
CONTRACT NO. 83-2
PORT OF EASTPORT
SHIP FENDER SYSTEM

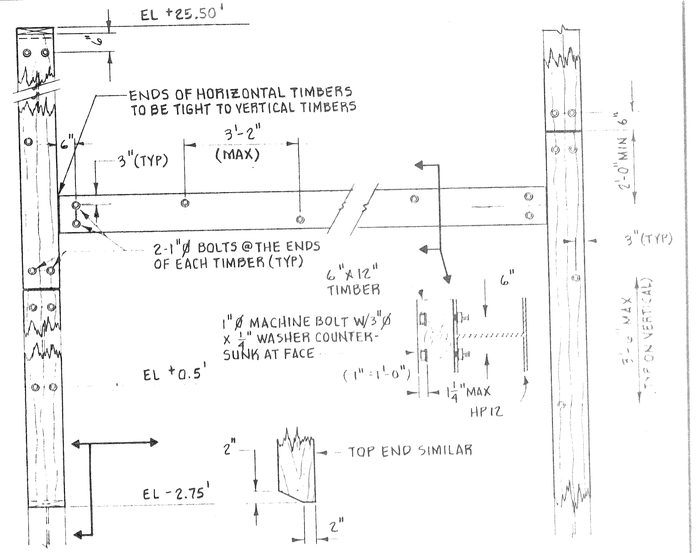
SHEET NO. S-7 OF 11
MGE JOB NO. 1808
GEC JOB NO. 543-83



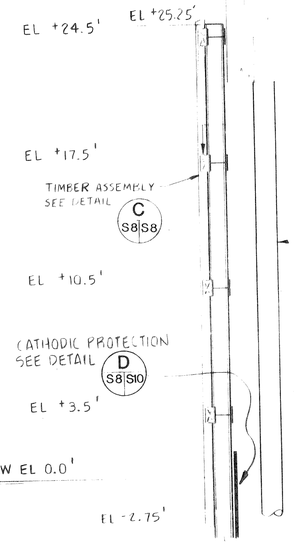
A S8S8 **SECTION**
SCALE: $\frac{1}{4}$"=1'-0"



NORTH / SOUTH FENDER SYSTEM
TOP CONNECTION 3/4"=1'-0"

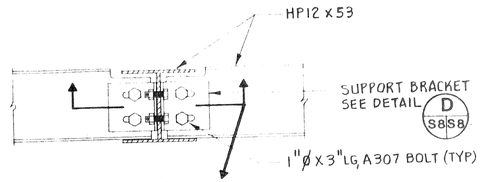


C S8S8 **DETAIL - TIMBER ASSEMBLY**
SCALE: $\frac{1}{2}$"=1'-0"

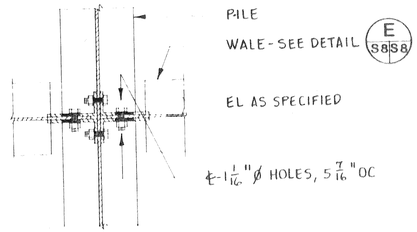


ELEVATION

F S8S8 **DETAIL - PILE TOP CONNECTION AT PIER FACE**
SCALE: 1"=1'-0"

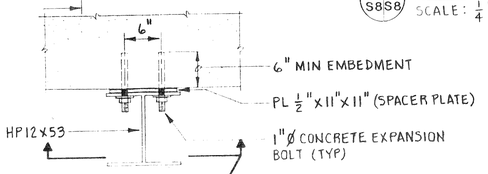


PLAN

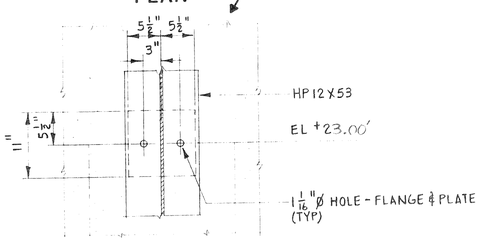


SECTION

G S8S8 **DETAIL - WALE / PILE CONNECTION**
SCALE: 1"=1'-0"

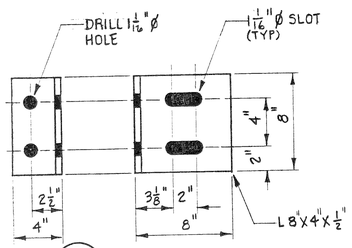


PLAN

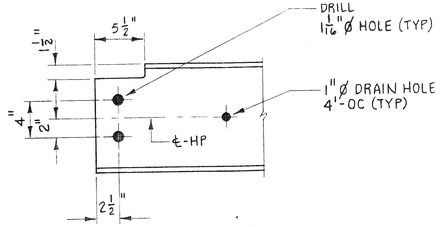


ELEVATION

H S3S8 **ELEVATION**
SCALE: $\frac{1}{4}$"=1'-0"



D S8S8 **DETAIL - SUPPORT BRACKET**
SCALE: 2"=1'-0"



E S8S8 **DETAIL - WALE**
SCALE: $\frac{1}{2}$"=1'-0"

B S8S8 **SECTION**
SCALE: $\frac{1}{4}$"=1'-0"

SCALE:	AS NOTED
DATE:	AUGUST 1985
DRAWN BY:	CEM
CHECKED BY:	JPM

RECORD DRAWING

THIS RECORD DRAWING HAS BEEN PREPARED TO SHOW THOSE CHANGES MADE DURING THE CONSTRUCTION PROCESS, BASED ON THE NOTES BY THE ENGINEER AND MARKED - UP PRINTS, DRAWINGS, AND OTHER DATA FURNISHED BY THE CONTRACTOR TO THE ENGINEER AND WHICH THE ENGINEER CONSIDERS SIGNIFICANT.

NO.	DESCRIPTION	DATE	APPD
3		3/4/86	
2	RECORD DRAWING	8/19/85	
1	EDA PROJECT NUMBER ADDED	8/27/84	

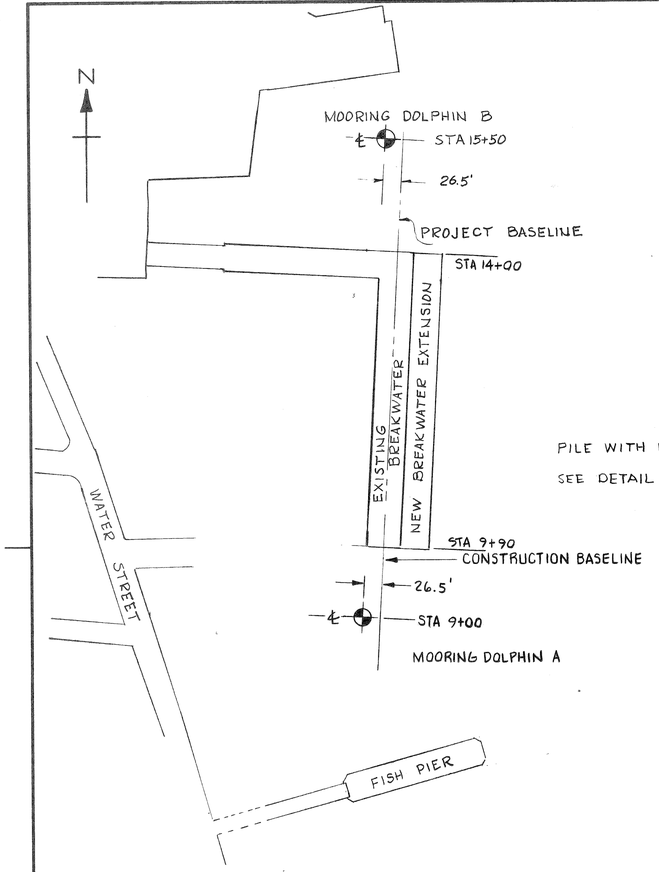
STATE OF MAINE — EDWARD J. MORRISON No. 2464 — REGISTERED PROFESSIONAL ENGINEER

MORRISON GEOTECHNICAL ENGINEERING
WINSLOW, MAINE 04902

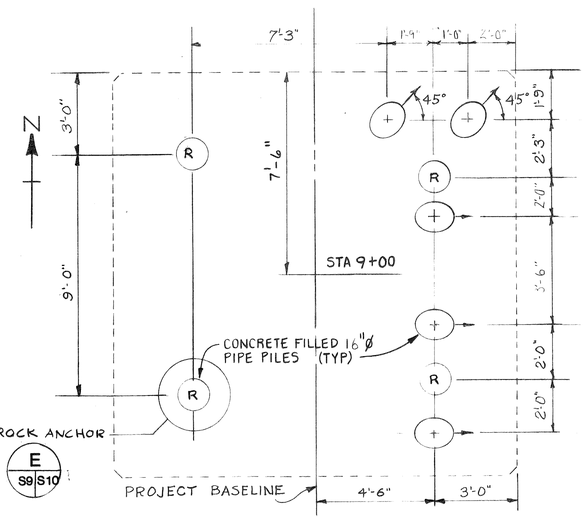
REG. PROF. ENG. NO. 2464 DATE 8/13/86

EASTPORT PORT AUTHORITY
EDA NO 01-01-02573
BREAKWATER REHABILITATION PROJECT
CONTRACT NO. 83-2
PORT OF EASTPORT
SMALL VESSEL FENDER SYSTEM

SHEET NO. S-8 OF 11
MGE JOB NO. 1808
DEC JOB NO. 543.83

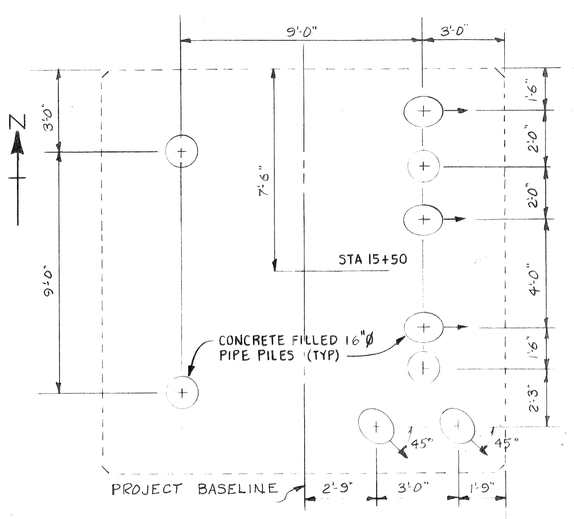


LOCUS
Scale: 1" = 100'



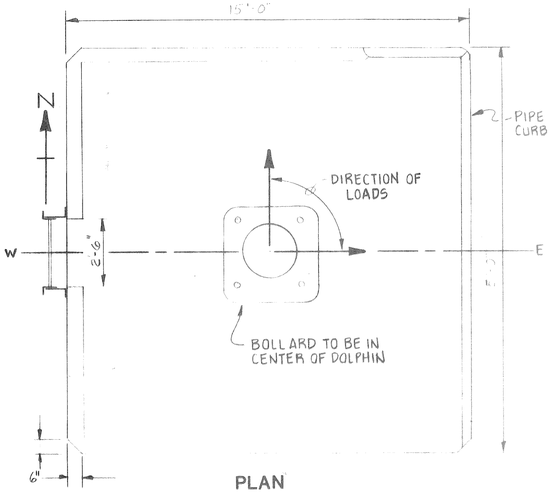
PILE LOCATIONS–DOLPHIN A

PILE LOCATIONS SHOWN AT ELEVATION +15.0



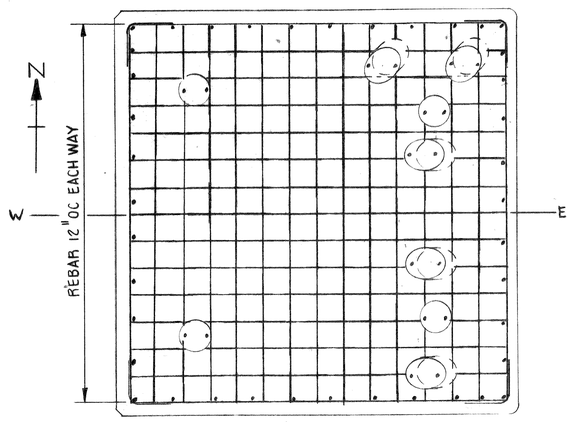
PILE LOCATIONS–DOLPHIN B

PILE LOCATIONS SHOWN AT ELEVATION +15.0



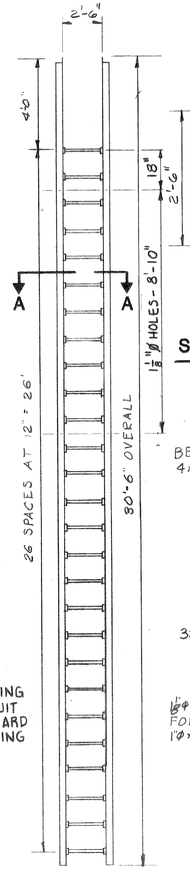
PLAN

DOLPHIN A SHOWN, DOLPHIN B OPPOSITE HAND ABOUT E-W CENTER LINE

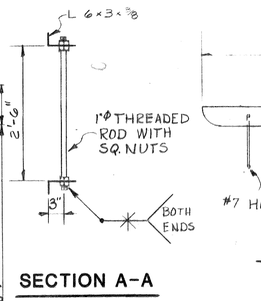


BOTTOM REINFORCING

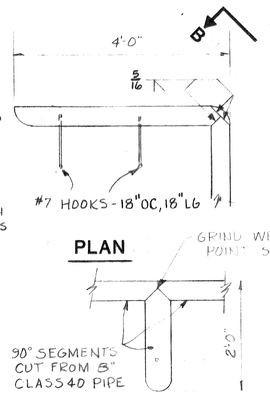
DOLPHIN A SHOWN, DOLPHIN B OPPOSITE HAND ABOUT E-W CENTER LINE



LADDER



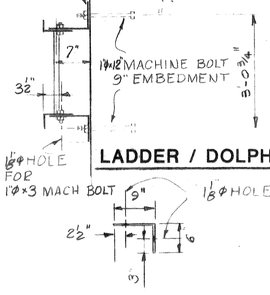
SECTION A-A



PLAN

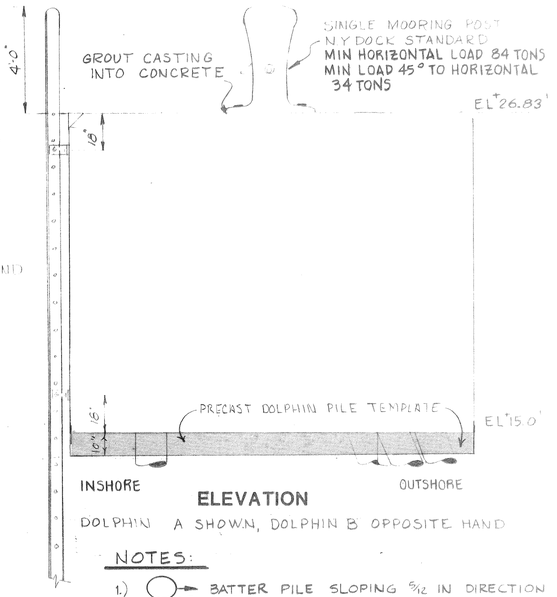
SECTION B-B

PIPE CURB DETAILS



LADDER / DOLPHIN ATTACHMENT DETAIL

BENT BAR DETAIL

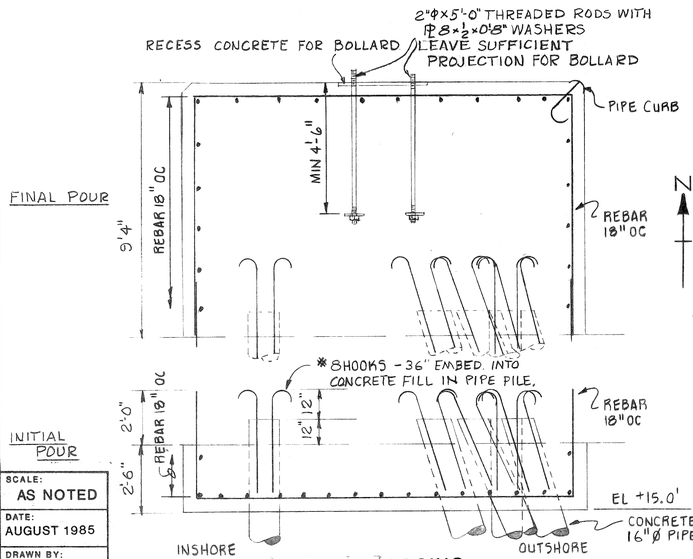


ELEVATION

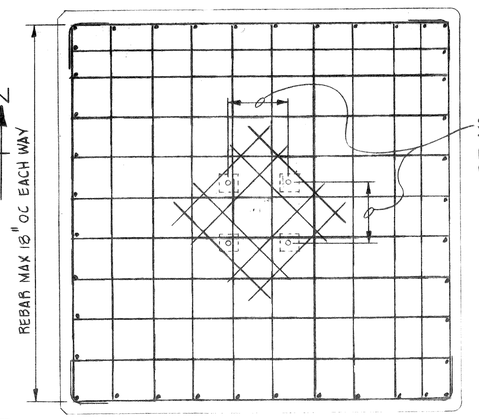
DOLPHIN A SHOWN, DOLPHIN B OPPOSITE HAND

NOTES:

1.) ○→ BATTER PILE SLOPING 5/12 IN DIRECTION OF ARROW.
2.) ALL REBAR SHOWN TO BE #7.
3.) WHERE PILES INTERFERE WITH REBAR, WELD REBAR TO PILE.
4.) SEE GENERAL CONCRETE NOTES SHEET S-4
5.) ALL PILES EXCEPT THOSE WITH ROCK ANCHORS SHALL HAVE PILE POINTS. SEE PIPE PILE TIP - TYPE 2 DETAIL C S9|S10



SIDE REINFORCING



TOP REINFORCING

RECORD DRAWING

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REVISIONS			
2	RECORD DRAWING 1808-006,056,057,062		
1	EDA PROJECT NUMBER ADDED	8/22/84	JPM
NO.	DESCRIPTION	DATE	APPD

STATE OF MAINE — EDWARD B. FOWARD — No. 2464 — REGISTERED PROFESSIONAL ENGINEER

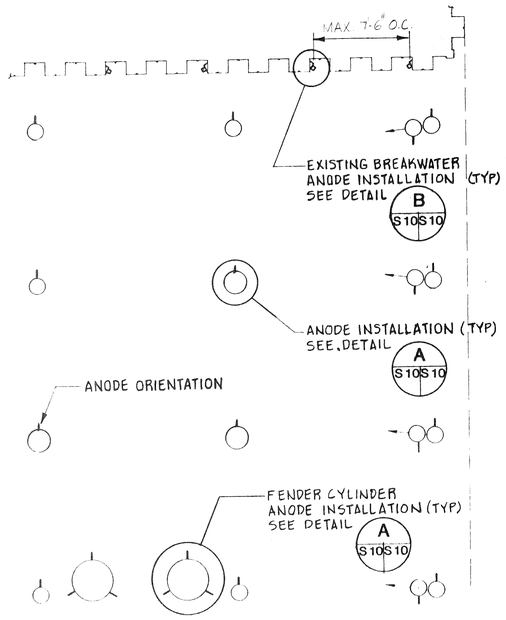
MORRISON GEOTECHNICAL ENGINEERING
WINSLOW, MAINE 04902

Edward B. Foward 7/12/96
REG. PROF. ENG. NO. 2464 DATE

EASTPORT PORT AUTHORITY
2 EDA NO. 01-01-02573
BREAKWATER REHABILITATION PROJECT
CONTRACT NO. 83-2
PORT OF EASTPORT
MOORING DOLPHINS

SHEET NO. S-9 OF 11
MGE JOB NO. 1808
GEC JOB NO. 543-83

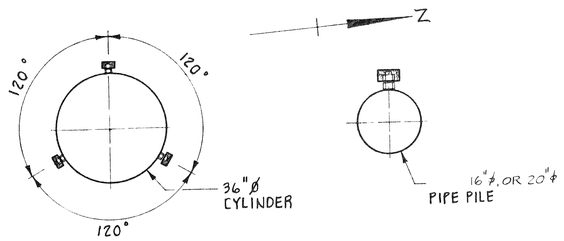
SCALE: AS NOTED
DATE: AUGUST 1985
DRAWN BY: CEM
CHECKED BY: JPM



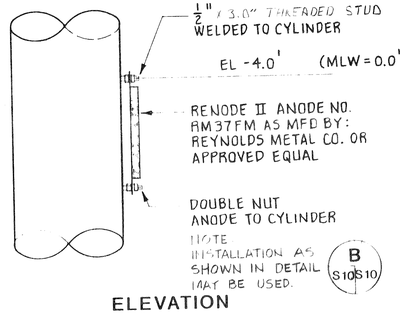
PLAN

CATHODIC PROTECTION - TYPICAL ARRANGEMENT

SCALE: 3/16" = 1'-0"



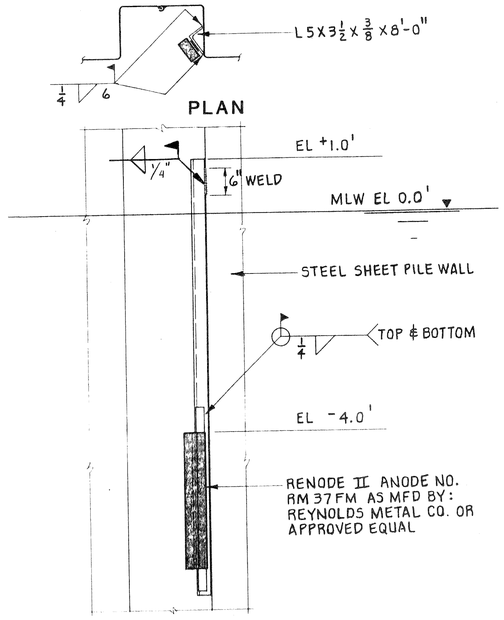
PLAN



ELEVATION

A S10 S10 CATHODIC PROTECTION CYLINDERS & PIPE PILES

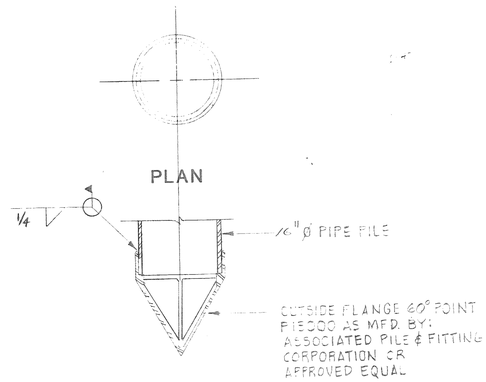
SCALE: 1/2" = 1'-0"



ELEVATION

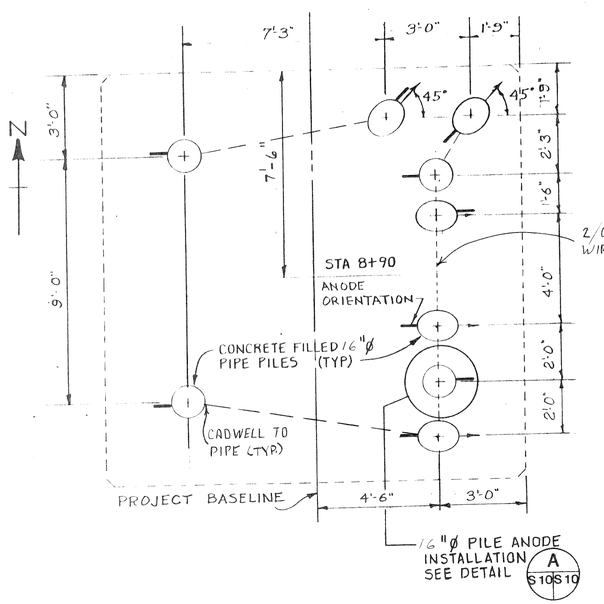
B S10 S10 CATHODIC PROTECTION - SHEET PILE WALL

SCALE: 1" = 1'-0"



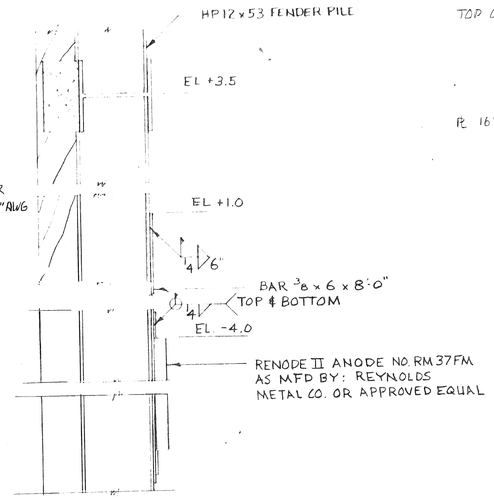
C S9 S10 PIPE PILE TIP - TYPE 2

SCALE: 1" = 1'-0"



CATHODIC PROTECTION - TYPICAL ARRANGEMENT DOLPHIN A (DOLPHIN B SIMILAR)

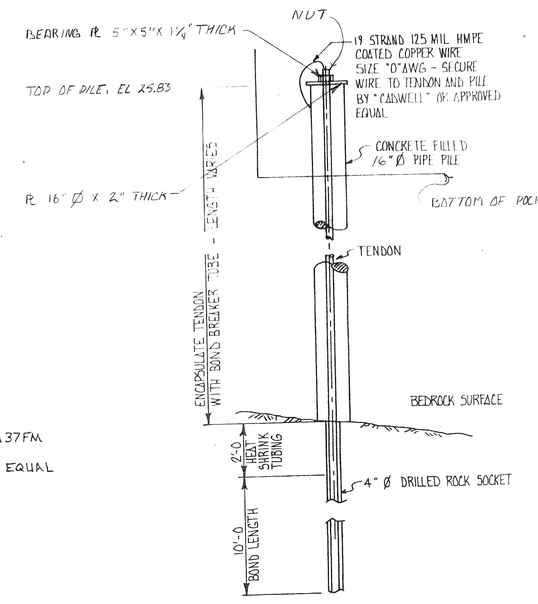
SCALE: 3/8" = 1'-0"



ELEVATION

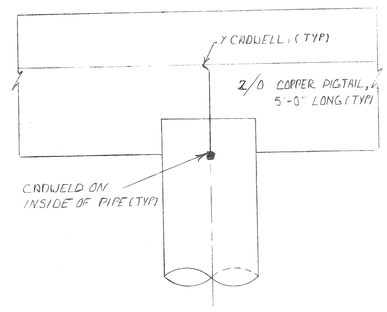
D S8 S10 CATHODIC PROTECTION - H - PILES

SCALE: 1" = 1'-0"



E S9 S10 ROCK ANCHOR DETAIL

NOT TO SCALE



TYPICAL BENT - SECTION

NOTE:

ALL WELD LENGTHS WHERE WELDING IS PERFORMED UNDERWATER ARE INCREASED BY 50%

RECORD DRAWING

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REVISIONS			
2	RECORD DRAWING 1808-006,026,027,062		
1	EDA PROJECT NUMBER ADDED	8/22/84	CEM
NO.	DESCRIPTION	DATE	APPD

SCALE: AS NOTED
DATE: AUGUST 1985
DRAWN BY: CEM
CHECKED BY: JPM

STATE OF MAINE EDWARD A. MORRISON NO. 2464 REGISTERED PROFESSIONAL ENGINEER

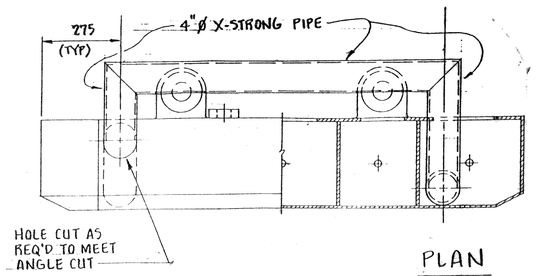
MORRISON GEOTECHNICAL ENGINEERING
WINSLOW, MAINE 04902

REG. PROF. ENG. NO. 2464 DATE

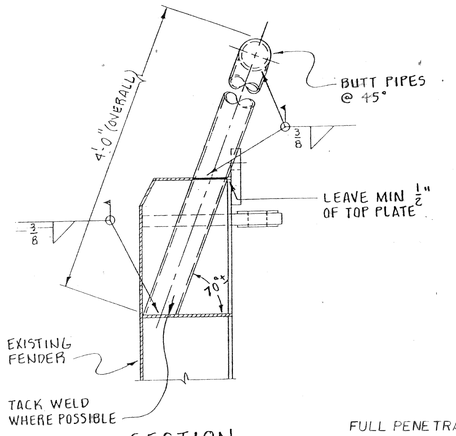
EASTPORT PORT AUTHORITY
EDA NO. 01-01-02573
BREAKWATER REHABILITATION PROJECT
CONTRACT NO. 83-2
PORT OF EASTPORT
CATHODIC PROTECTION

SHEET NO. S-10 OF 11
MGE JOB NO. 1808
CEC JOB NO. 543-83

AF 40084



PLAN

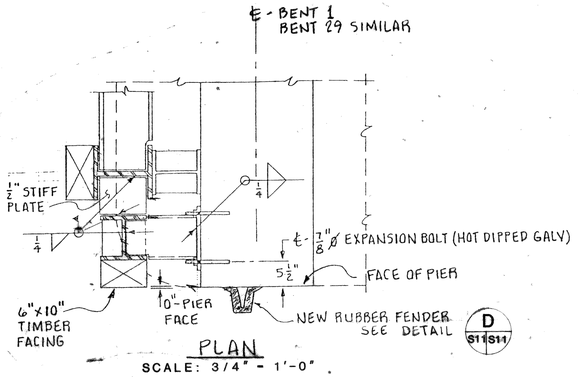


SECTION

SHIP FENDER UPPER EXTENSION

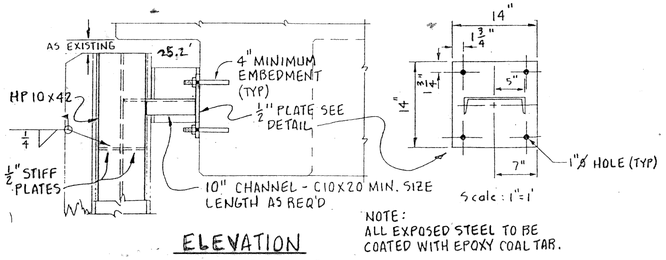
A S7|S11

NOT TO SCALE



PLAN

SCALE: 3/4" = 1'-0"



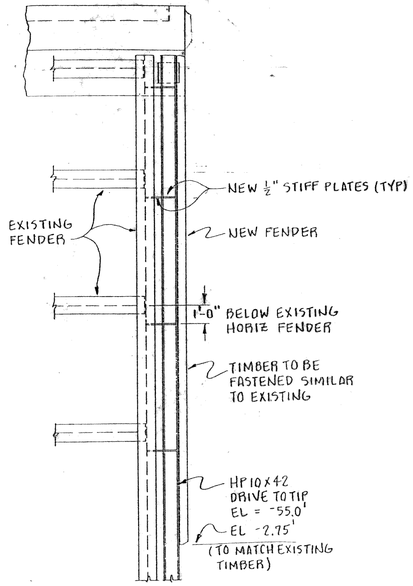
ELEVATION

SCALE: 3/4" = 1'-0"

NOTE:
ALL EXPOSED STEEL TO BE COATED WITH EPOXY COAL TAR.

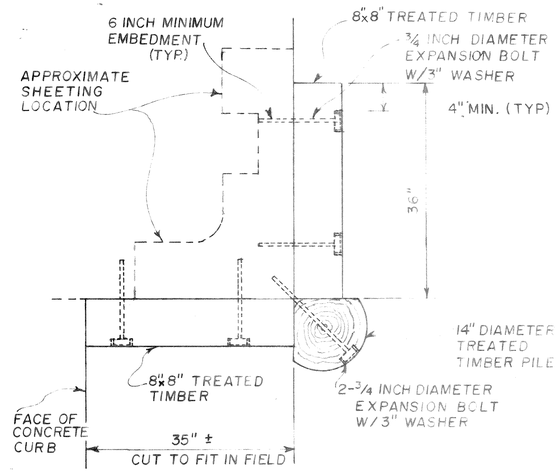
CORNER FENDER

B S8|S11

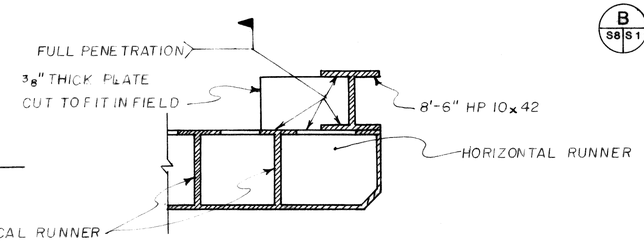


SIDE ELEVATION

SCALE: 1/4" = 1'-0"

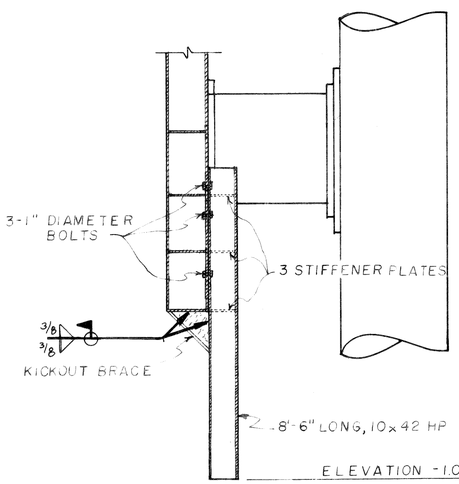


UPPER ATTACHMENT PLAN

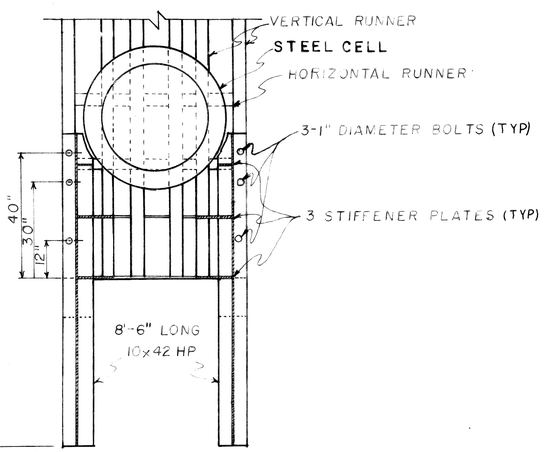


STIFFENER DETAIL

SCALE: 1" = 1'-0"



SECTION

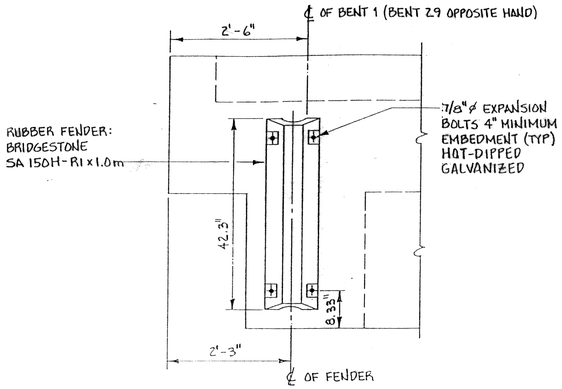


REAR ELEVATION

SHIP FENDER LOWER EXTENSION

E S7|S11

NOT TO SCALE



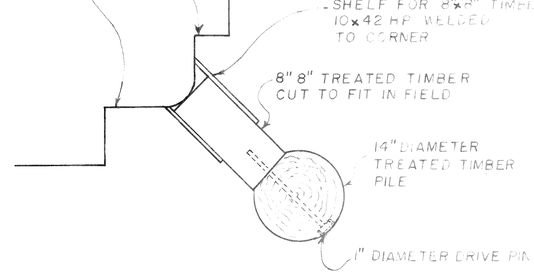
ELEVATION

SCALE: 3/4"=1'-0"

RUBBER FENDER

D S11|S11

SCALE: 3/4" = 1'-0"



LOWER ATTACHMENT PLAN

TIMBER FENDER

C S2|S11

SCALE: 1" = 1'-0"

RECORD DRAWING

THIS RECORD DRAWING HAS BEEN PREPARED TO SHOW THOSE CHANGES MADE DURING THE CONSTRUCTION PROCESS, BASED ON THE NOTES BY THE ENGINEER AND MARKED - UP PRINTS, DRAWINGS, AND OTHER DATA FURNISHED BY THE CONTRACTOR TO THE ENGINEER AND WHICH THE ENGINEER CONSIDERS SIGNIFICANT.

REVISIONS			
NO.	DESCRIPTION	DATE	APPD

SCALE	AS NOTED
DATE	5/15/86
DRAWN BY	KES
CHECKED BY	DET

1808 S5 13/8

STATE OF MAINE EDWARD B. MORRISON No 2454 REGISTERED PROFESSIONAL ENGINEER

MORRISON GEOTECHNICAL ENGINEERING
WINSLOW, MAINE

REG. PROF. ENG. NO. — DATE 6/13/86

EASTPORT PORT AUTHORITY
EDA NO. 01-01-02573
BREAKWATER REHABILITATION PROJECT
CONTRACT NO. 83-2
PORT OF EASTPORT
FENDER MODIFICATION

DRAWING NO. S-11 OF 11
MGE JOB NO. 1808
543-83

HARLAN E. SPELLER CO. INC