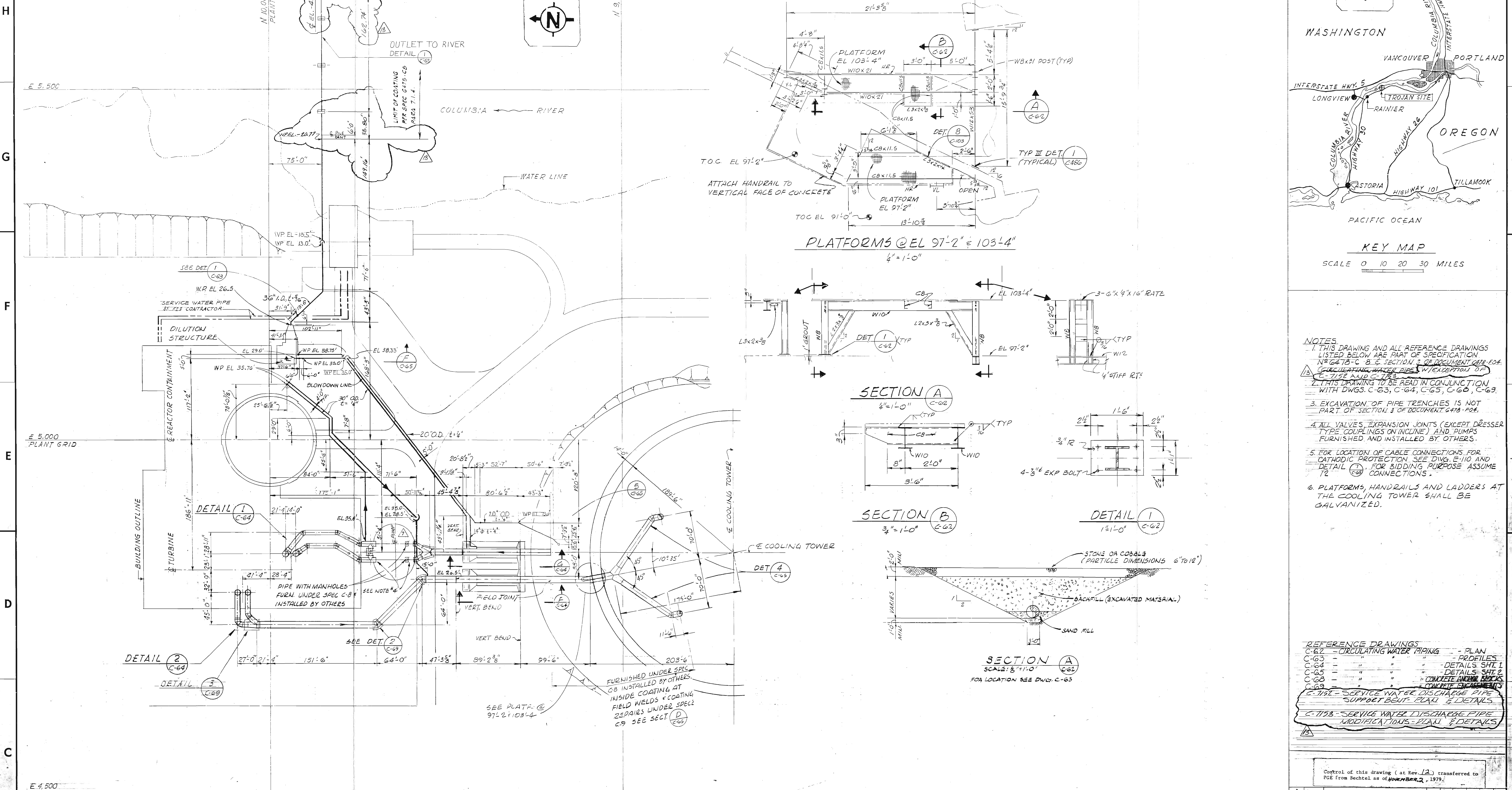
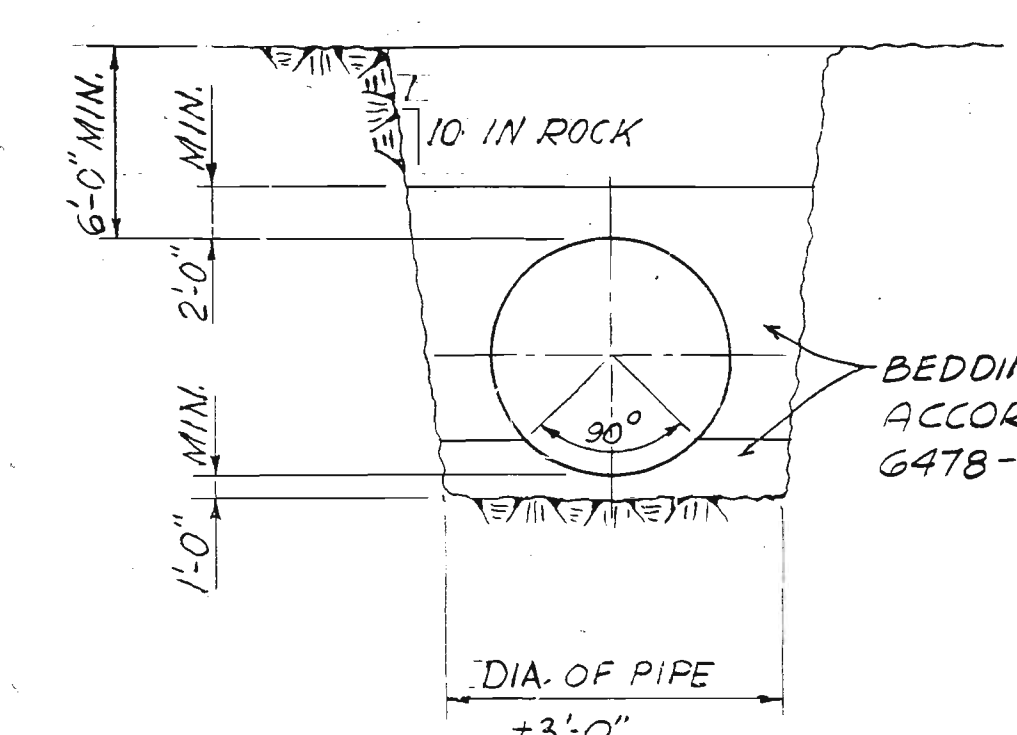


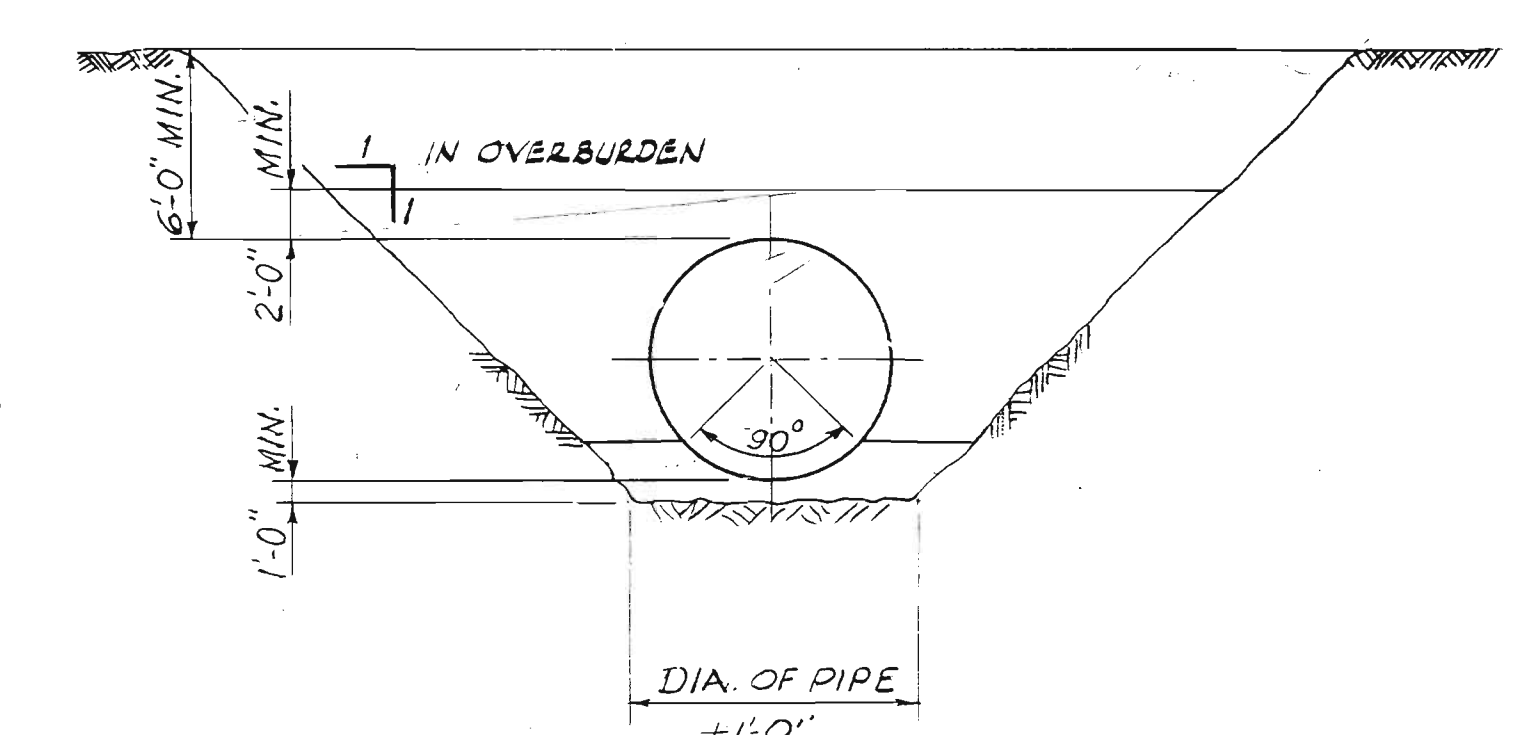
6478 / C-62



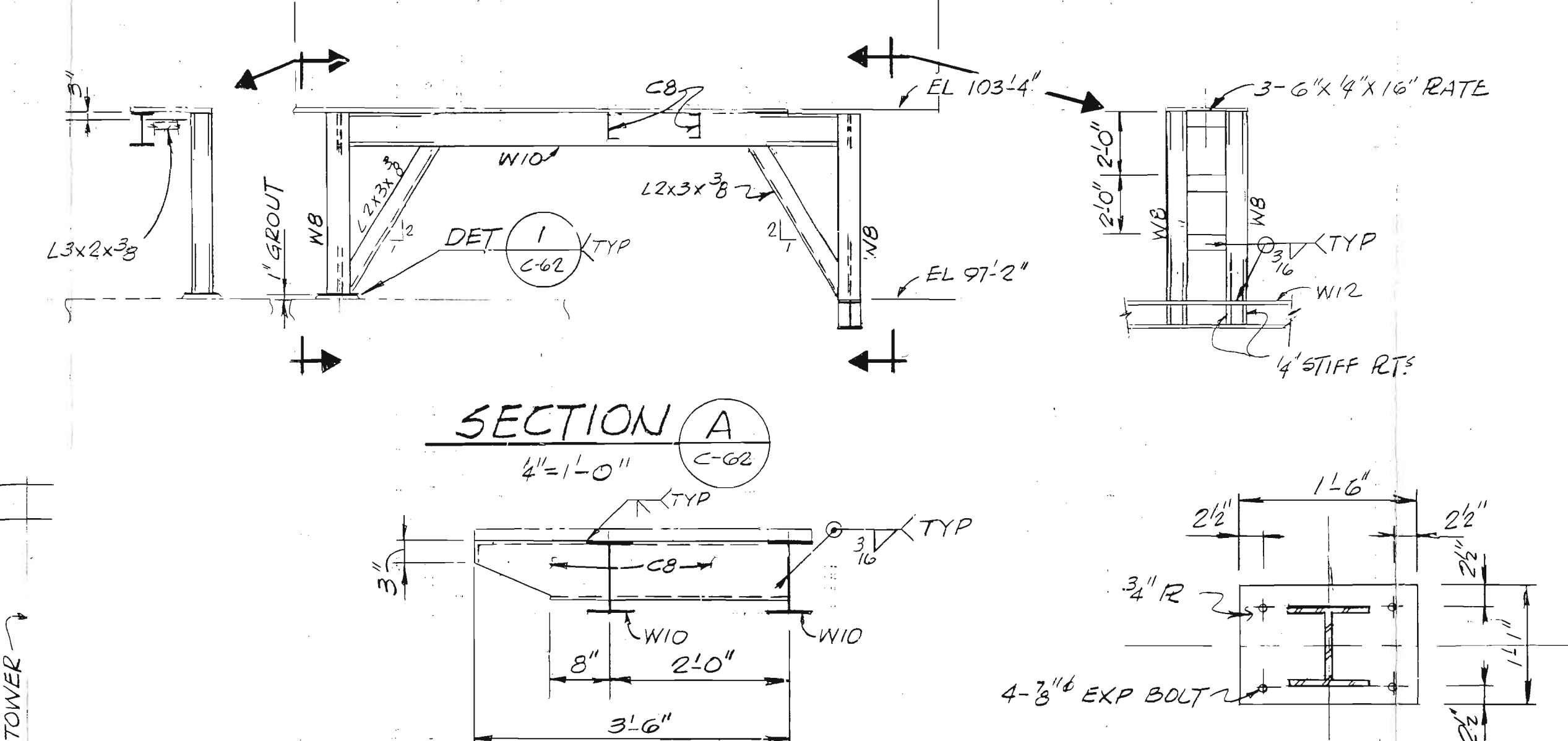
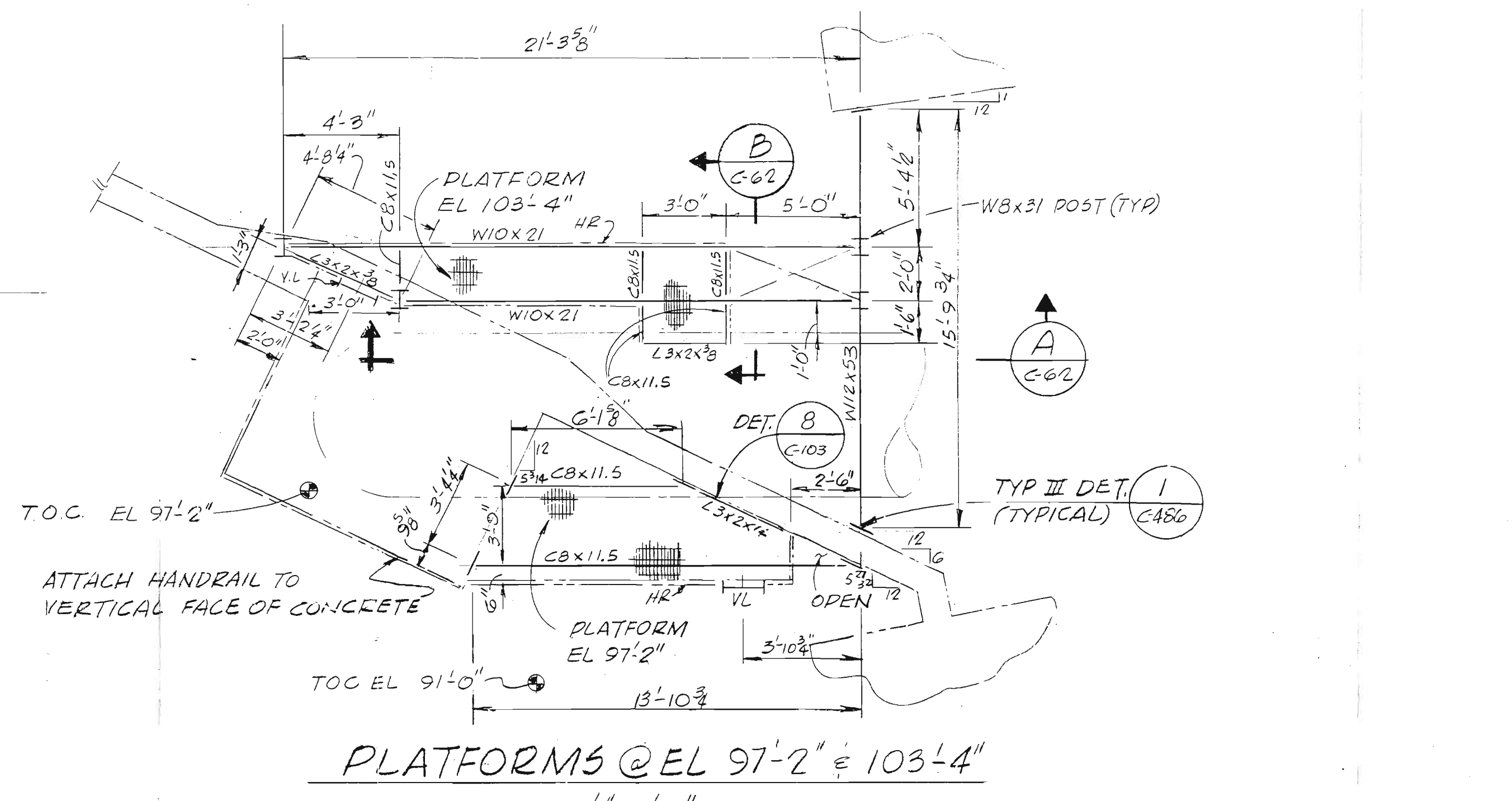
PLAN
SCALE: 1" = 50'



TYPICAL EXCAVATION AND BACKFILL IN ROCK
FOR PIPES OVER 36" DTA

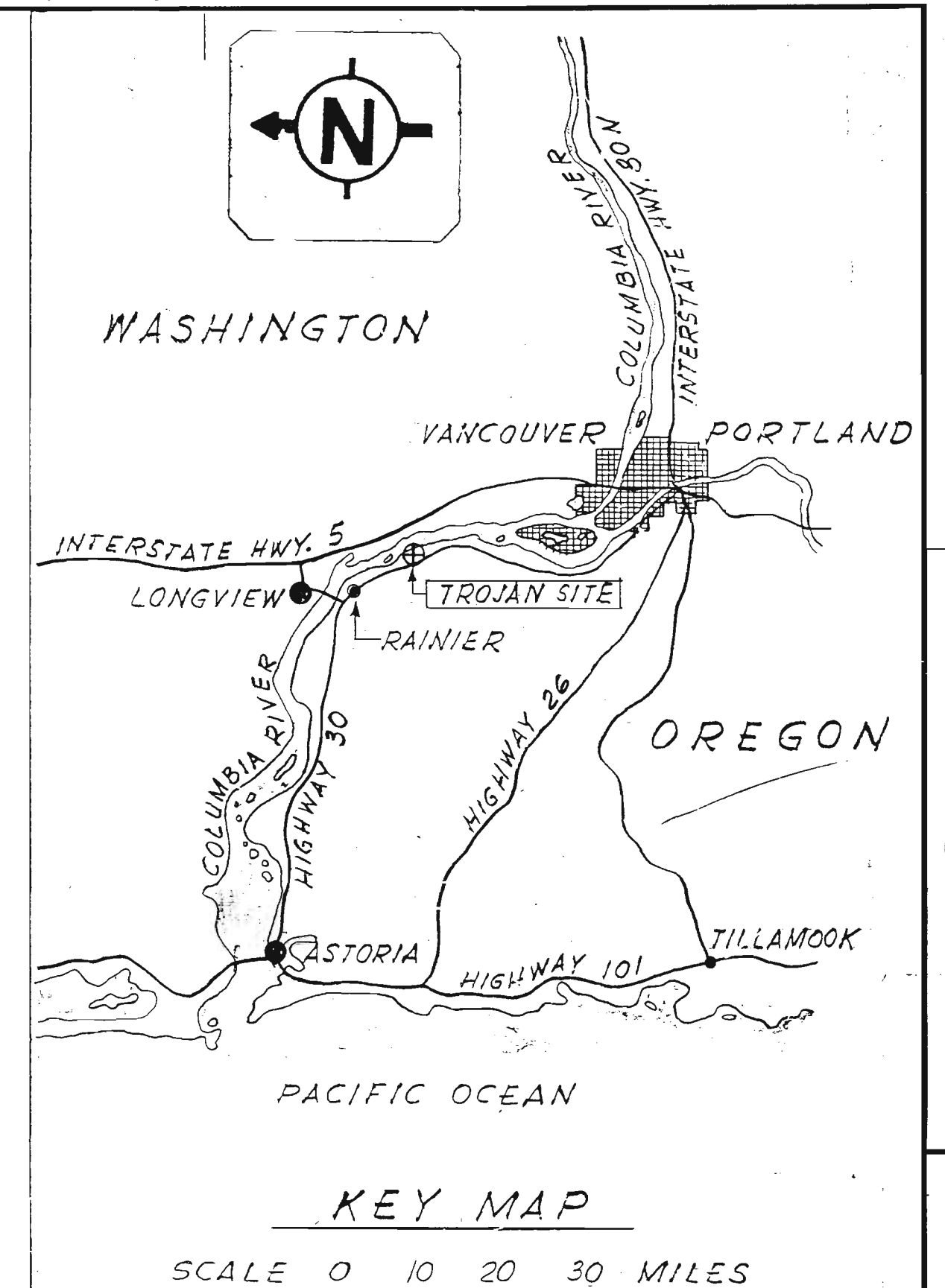
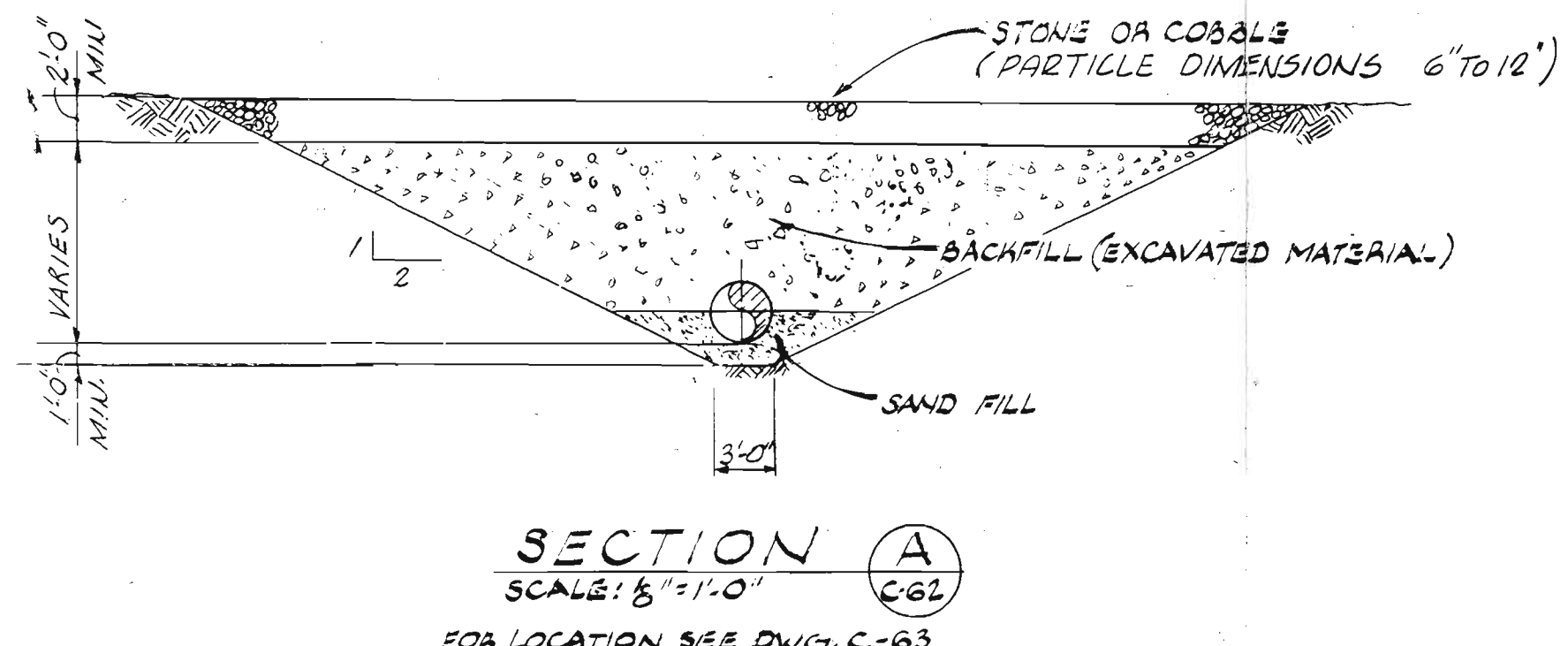


TYPICAL EXCAVATION FOR PIPES 36" AND UNDER
NOT TO SCALE



SECTION B
3'-1-0" C-62

DETAIL 1
1'-1-0" C-62



- NOTES**
- THIS DRAWING AND ALL REFERENCE DRAWINGS LISTED BELOW ARE PART OF SPECIFICATION N6478-C, B, E SECTION 3 OF DOCUMENT 6478-F04.
 - THIS DRAWING TO BE READ IN CONJUNCTION WITH DWGS. C-63, C-64, C-65, C-66, C-69.
 - EXCAVATION OF PIPE TRENCHES IS NOT PART OF SECTION 3 OF DOCUMENT 6478-F04.
 - ALL VALVES, EXPANSION JOINTS (EXCEPT DRESSER TYPE COUPLINGS ON INCLINE) AND PUMPS FURNISHED AND INSTALLED BY OTHERS.
 - FOR LOCATION OF CABLE CONNECTIONS FOR CATHODIC PROTECTION SEE DWG. E-110 AND DETAIL C-68 FOR BIDDING PURPOSE ASSUME CONNECTIONS.
 - PLATFORMS, HANDRAILS AND LADDERS AT THE COOLING TOWER SHALL BE GALVANIZED.

REFERENCE DRAWINGS

C-62	CIRCULATING WATER PIPING	PLAN
C-63	"	PROFILES
C-64	"	DETAILS SHEET 1
C-65	"	DETAILS SHEET 2
C-66	"	CONCRETE ANCHOR BOLTS
C-69	"	CONCRETE ENCASUREMENTS
C-7152	SERVICE WATER DISCHARGE PIPE SUPPORT BEUP. PLAN & DETAILS	
C-7153	SERVICE WATER DISCHARGE PIPE MODIFICATIONS - PLAN & DETAILS	

Control of this drawing (at Rev. 12) transferred to PG&E from Bechtel as of November 2, 1979.

NO.	DATE	REVISIONS	BY	CHKD	ENGR	PROJ. CHIEF
1	2/28/74	INC. DCN #3	HP	HP	HP	HP
2	11/7/77	ADDED PLATE @ EL 97'-2 1/2" @ 103'-4" ISSUED FOR CONSTRUCTION (FOB)	HP	MK	HP	HP
3	11-17-77	REFERENCE TO DET 11C-63 & ISSUED FOR CONSTRUCTION (FOB)	R	A	R	A
4	7-28-77	INC. DCN # 2 ISSUED FOR PROPOSAL (FOB)	R	KCS	A	HP
5	7-26-77	RELEASED HOLDINGS INCORPORATED DCN #1	HI	A	R	HP
6	3-5-77	ISSUED FOR CONSTRUCTION (FOB)	SH	HP	A	HP

The structure shown on this drawing is Class II.

TROJAN NUCLEAR PLANT
PORTLAND GENERAL ELECTRIC CO. PORTLAND, OREGON

COOLING WATER SYSTEM CIRCULATING WATER PIPING PLAN

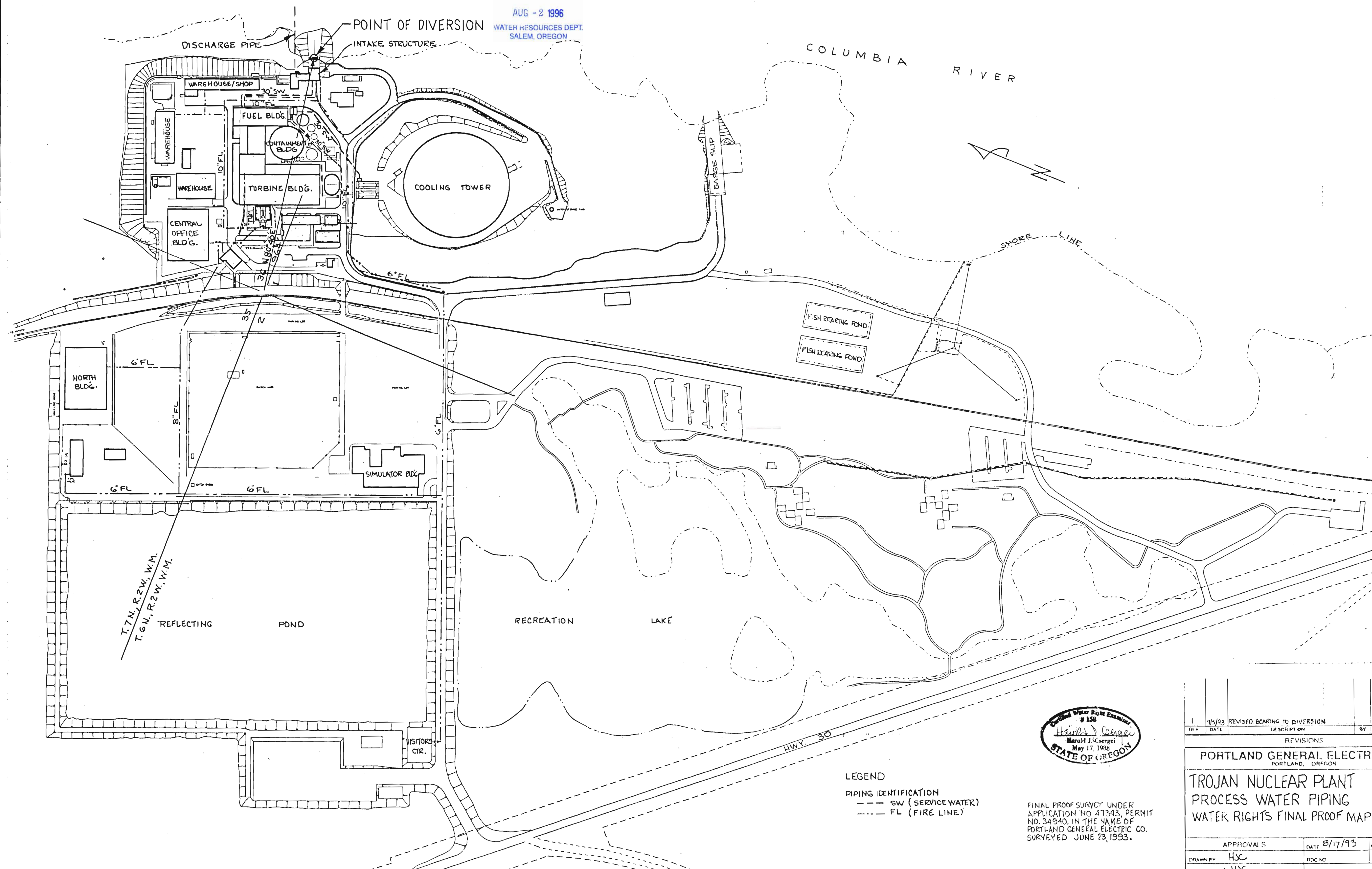
BECHTEL

JOB No.	DRAWING No.	REV.
6478	C-62	13

RECEIVED

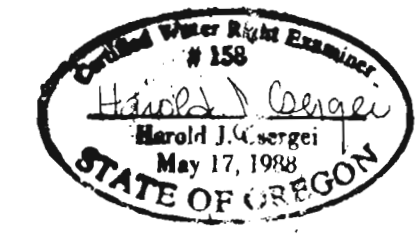
AUG - 2 1996

WATER RESOURCES DEPT.
SALEM, OREGON



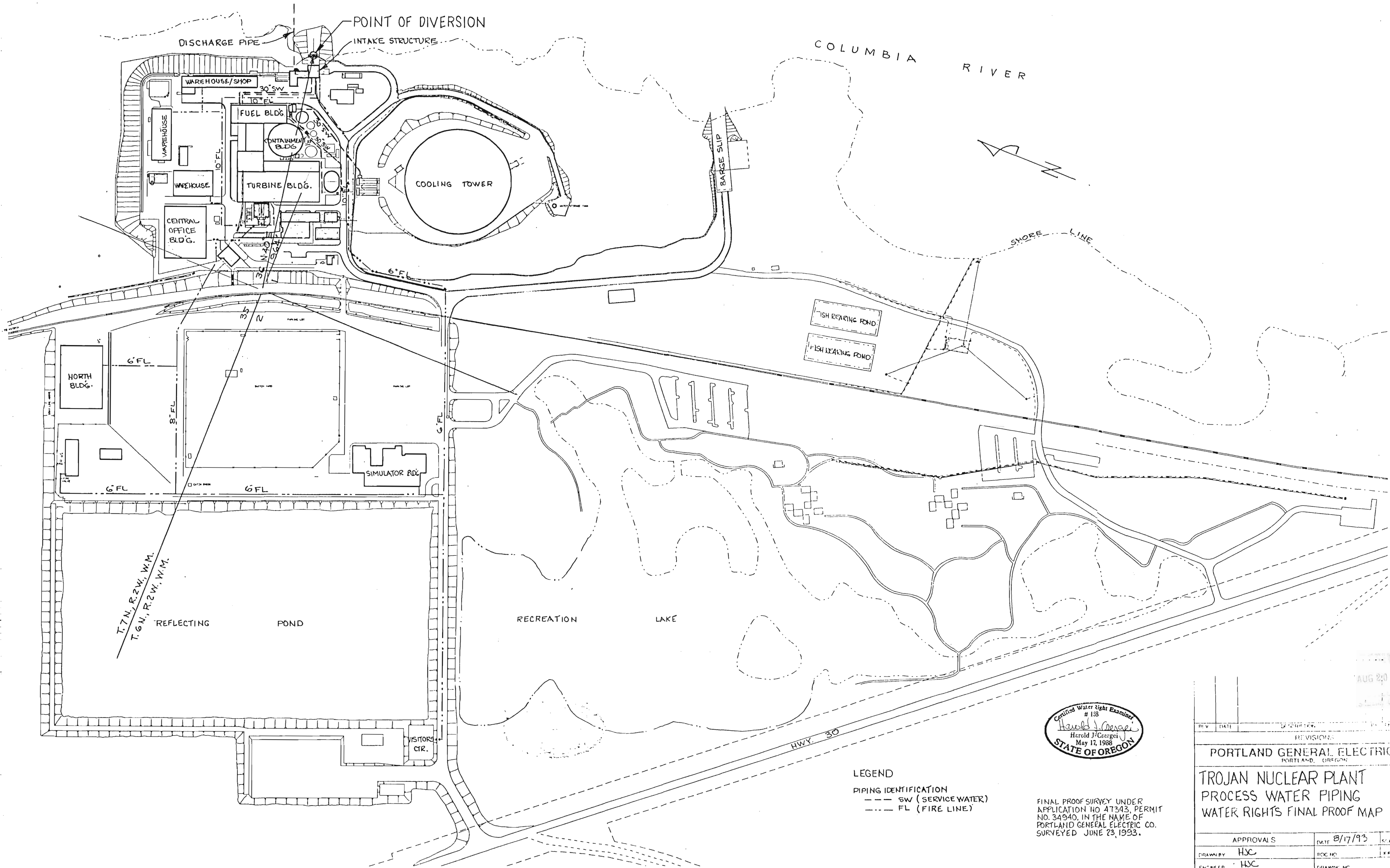
LEGEND

PIPING IDENTIFICATION
 --- SW (SERVICE WATER)
 --- FL (FIRE LINE)

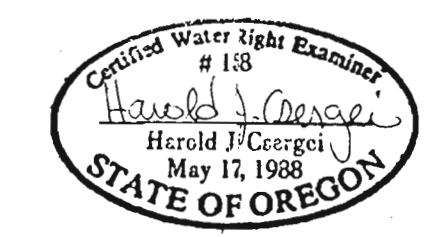


FINAL PROOF SURVEY UNDER
 APPLICATION NO. 47343, PERMIT
 NO. 34940, IN THE NAME OF
 PORTLAND GENERAL ELECTRIC CO.
 SURVEYED JUNE 23, 1993.

1	9/5/93	REVISED BEARING TO DIVERSION	HSC	GMH
REV	DATE	DESCRIPTION	BY	APPD
REVISIONS				
PORTLAND GENERAL ELECTRIC CO. PORTLAND, OREGON				
TROJAN NUCLEAR PLANT PROCESS WATER PIPING WATER RIGHTS FINAL PROOF MAP				
APPROVALS		DATE 8/17/93	SCALE 1"=200'	
DRAWN BY HSC	DESIGNER HSC	DATE	REV	
APPROVED		DRAWING NO. D-10578	REV	1



LEGEND
 PIPING IDENTIFICATION
 --- SW (SERVICE WATER)
 - - - FL (FIRE LINE)



FINAL PROOF SURVEY UNDER
 APPLICATION NO. 47343, PERMIT
 NO. 34940, IN THE NAME OF
 PORTLAND GENERAL ELECTRIC CO.
 SURVEYED JUNE 23, 1993.

AUG 20 1993 PORTLAND, OREGON		
REVISIONS		
PORTLAND GENERAL ELECTRIC CO. PORTLAND, OREGON		
TROJAN NUCLEAR PLANT PROCESS WATER PIPING WATER RIGHTS FINAL PROOF MAP		
APPROVALS	DATE 8/17/93	SCALE 1"=200'
DRAWN BY HSC	DWG. NO.	REV. NO.
ENGINEER HSC	DRAWING NO.	REV.
SUPV. ADM. George Hutchinson	D-10578	0