

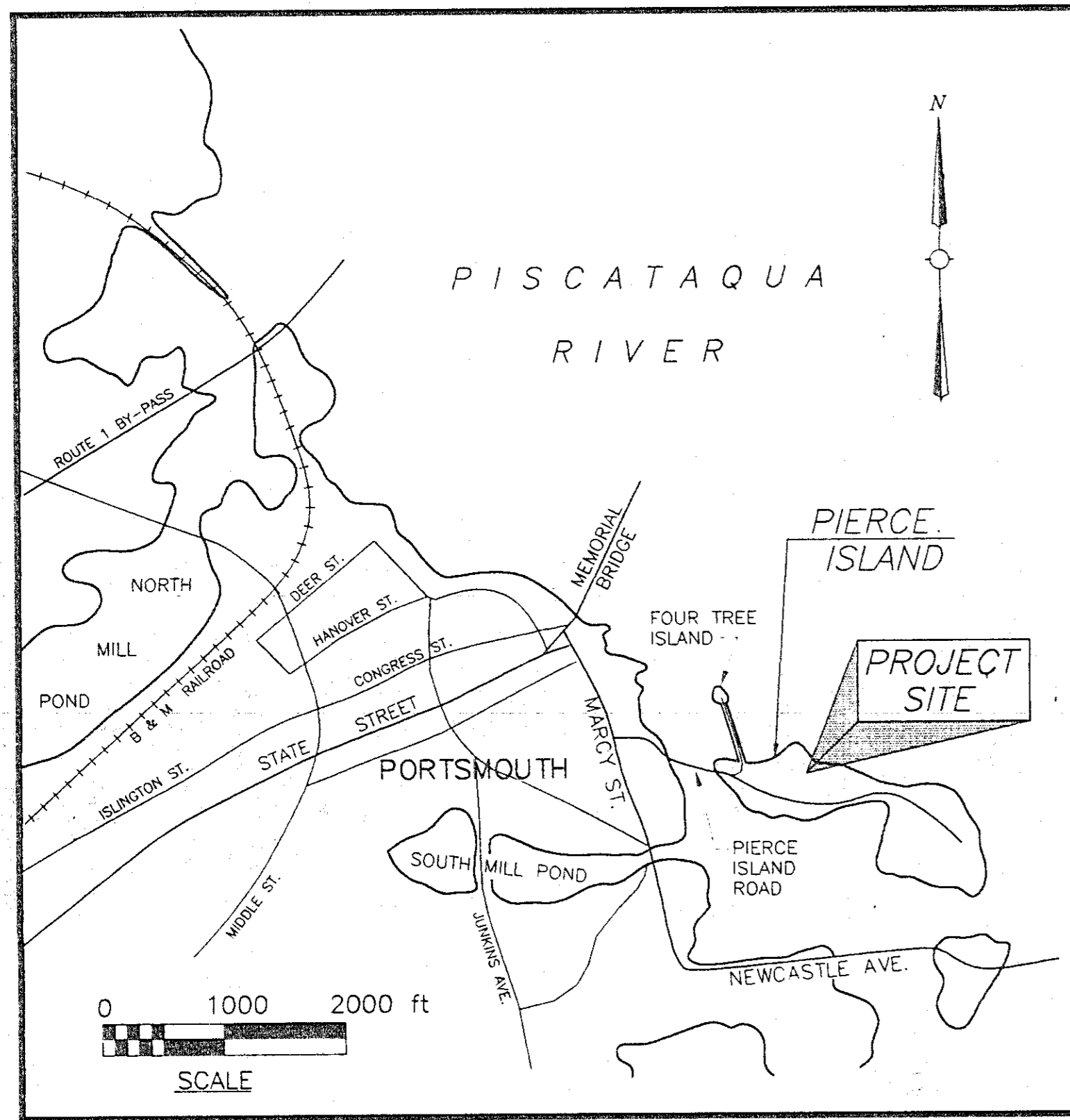
MUNICIPAL SWIMMING FACILITY REHABILITATION

PHASE I

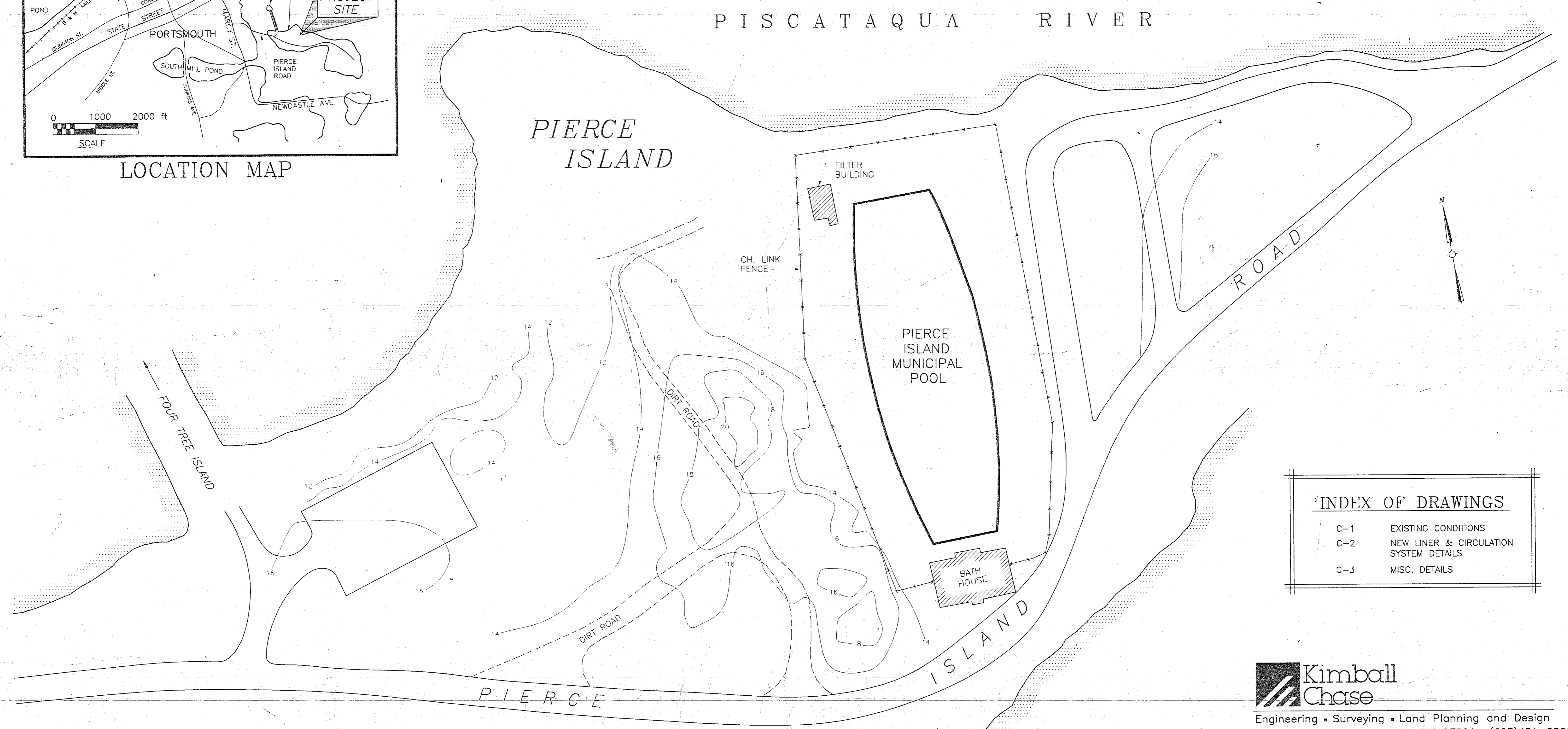
PIERCE ISLAND PORTSMOUTH, NH

MAY 2, 1994

PISCATAQUA RIVER



LOCATION MAP



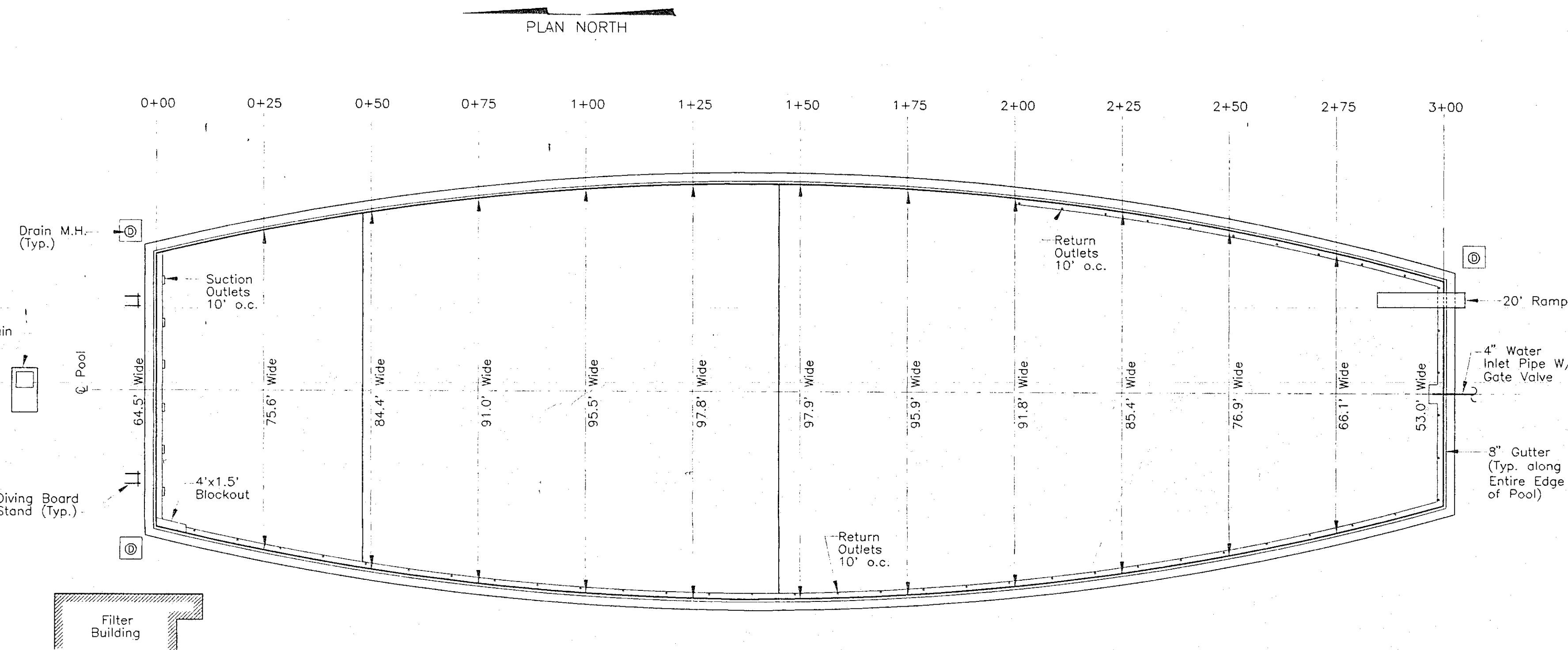
INDEX OF DRAWINGS

- C-1 EXISTING CONDITIONS
- C-2 NEW LINER & CIRCULATION SYSTEM DETAILS
- C-3 MISC. DETAILS

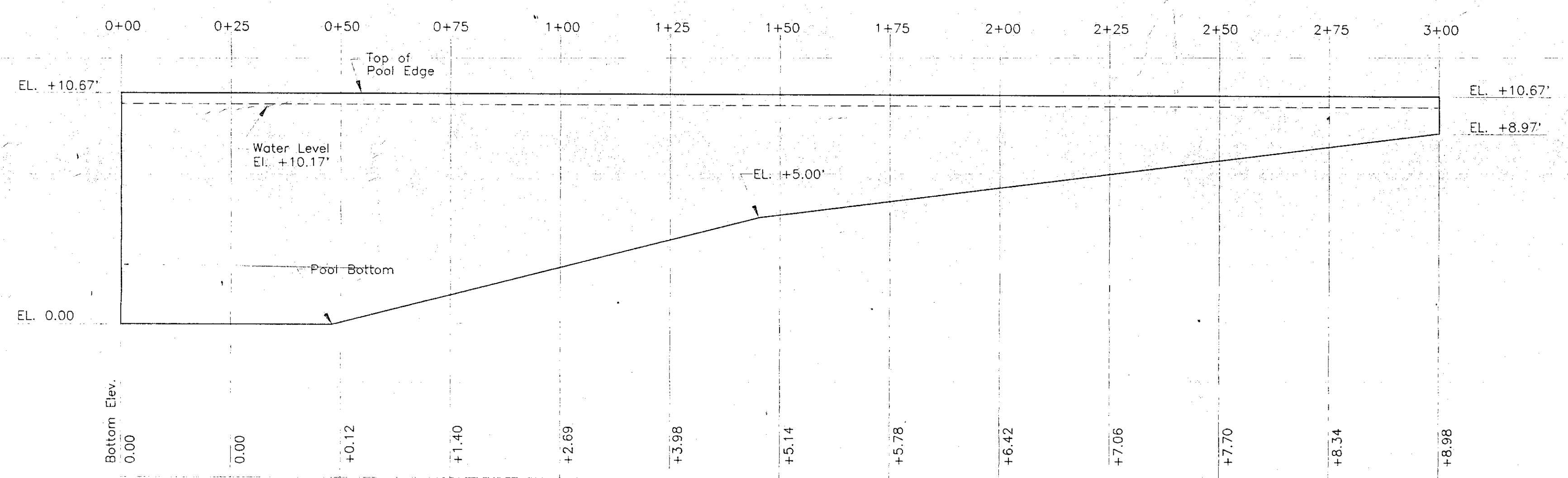


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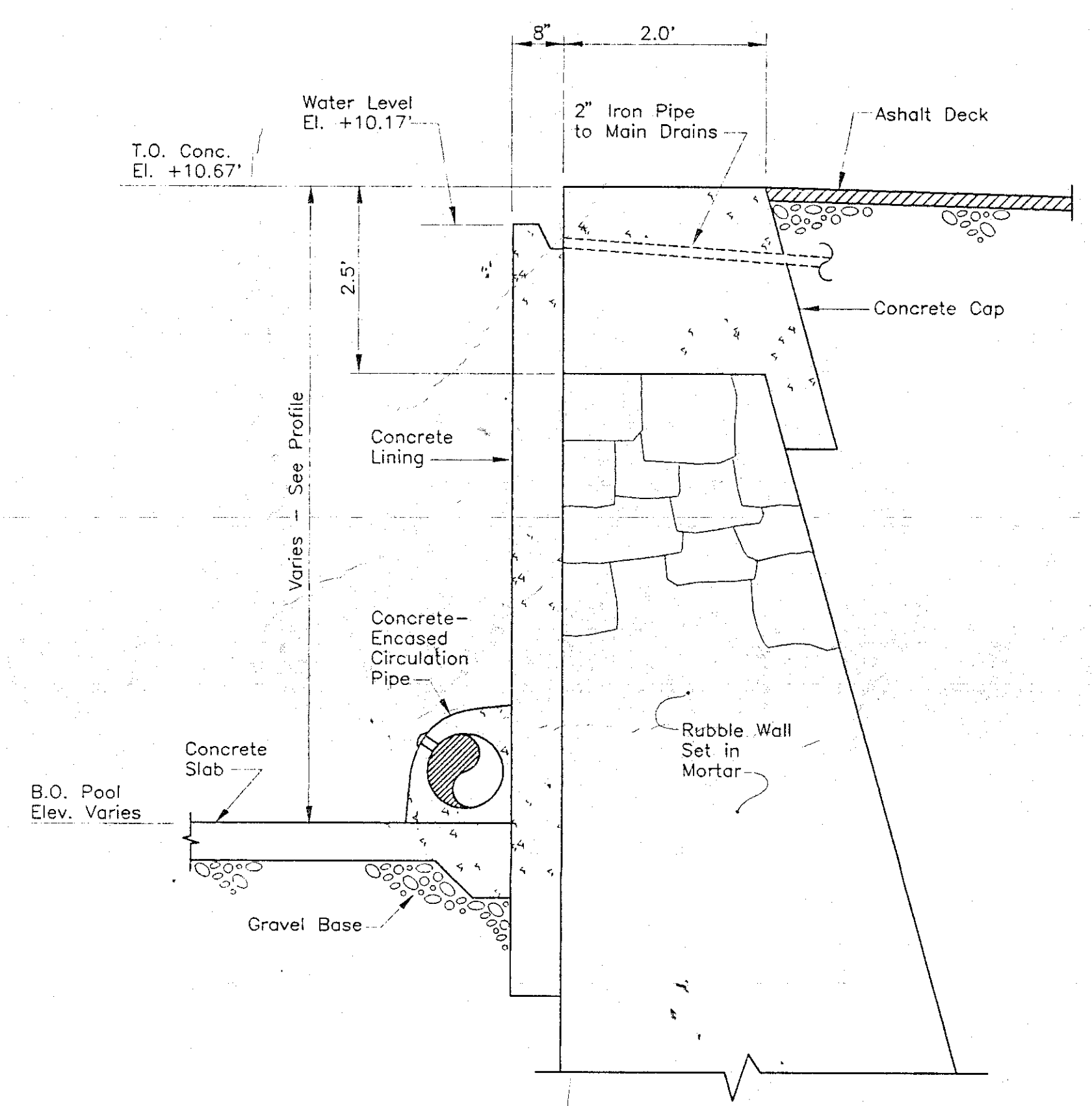
SCALE: 1"=40'



EXISTING PLAN
Scale: 1" = 20'

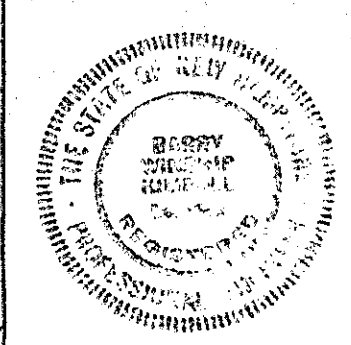


EXISTING PROFILE
Scales: 1" = 20' Horiz.
1" = 4" Vert.

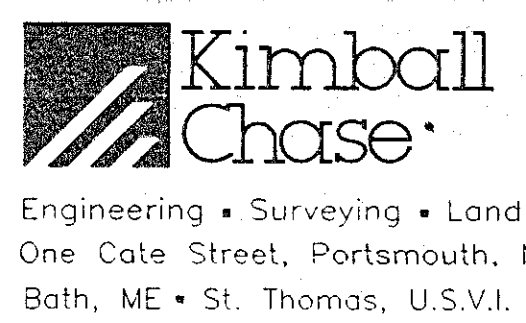


TYPICAL WALL SECTION
N.T.S.

REV	DATE	STATUS	BY	CHKD	APPD



DESIGNED BY: RED
DRAWN BY: RWB
CHECKED BY: BWK
APPROVED BY: BWK
DATE: 5/02/94

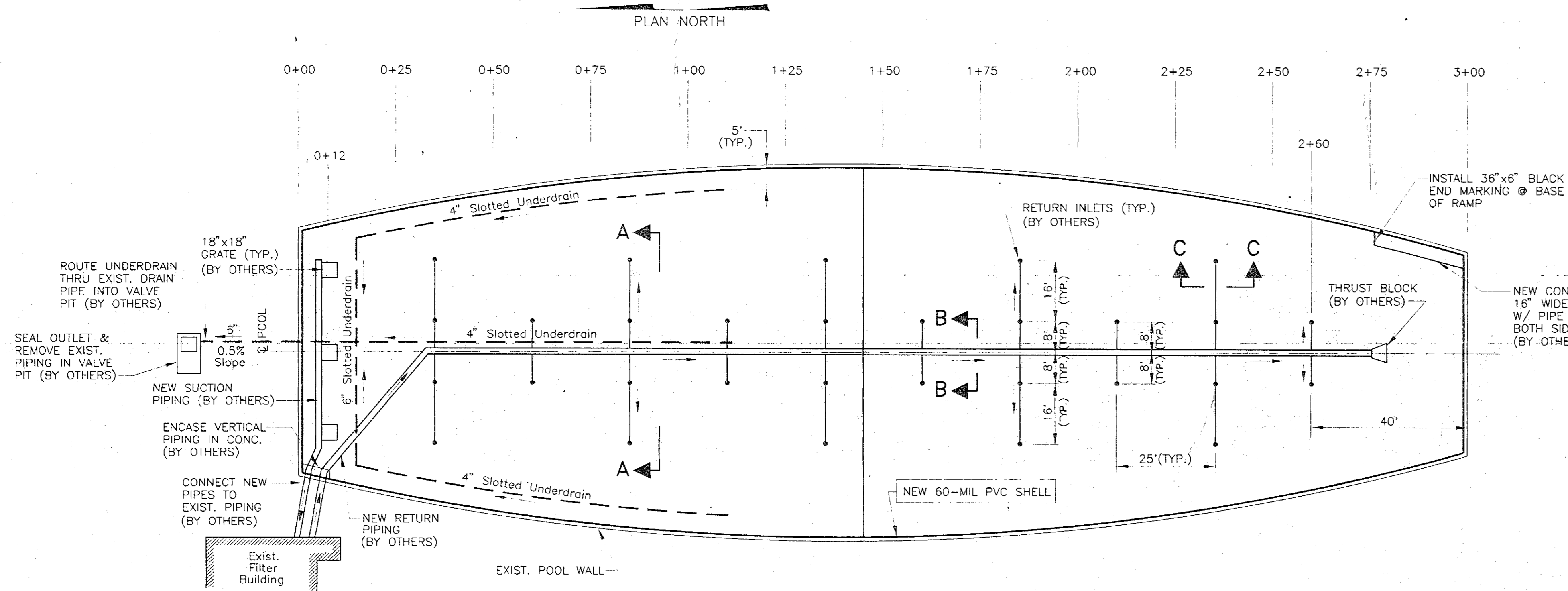


CLIENT
CITY OF PORTSMOUTH
PORTSMOUTH, NH

PROJECT
PIERCE ISLAND POOL
IMPROVEMENTS

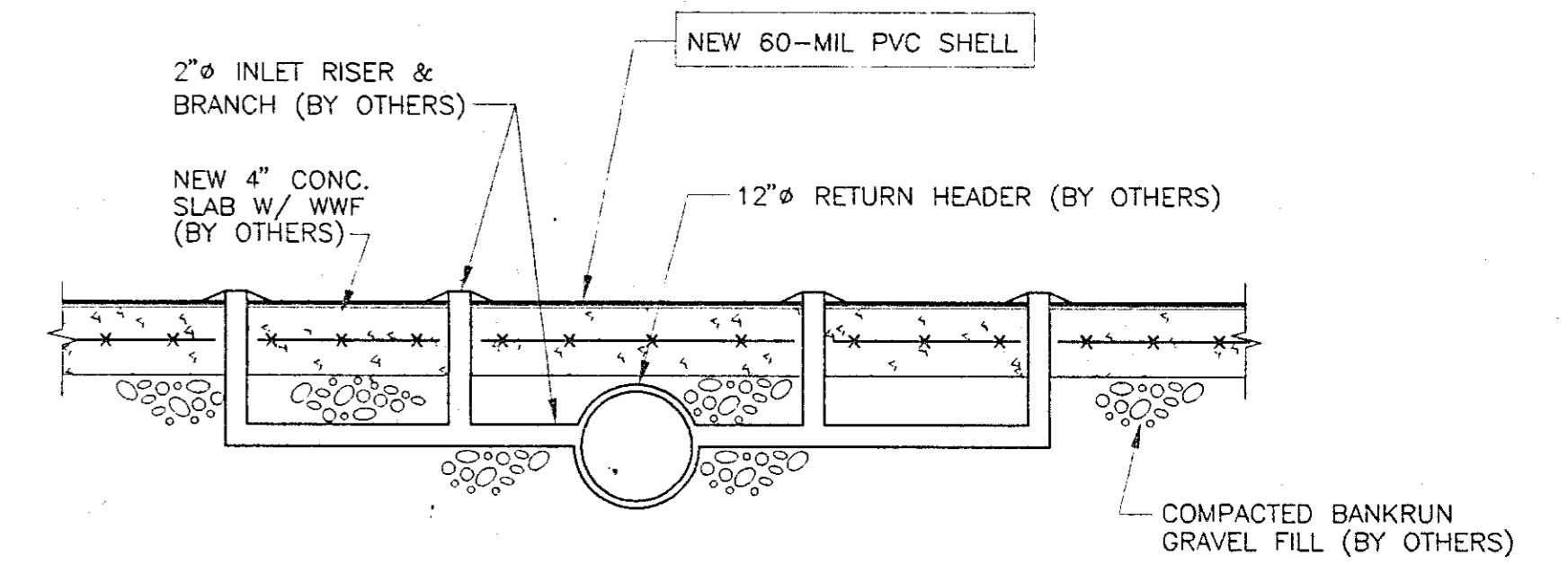
TITLE
EXISTING CONDITIONS

SCALE	AS NOTED
PROJECT NO.	94-5009.99
DRAWING NO.	C-1
SHT.	1 of 3
REV.	0

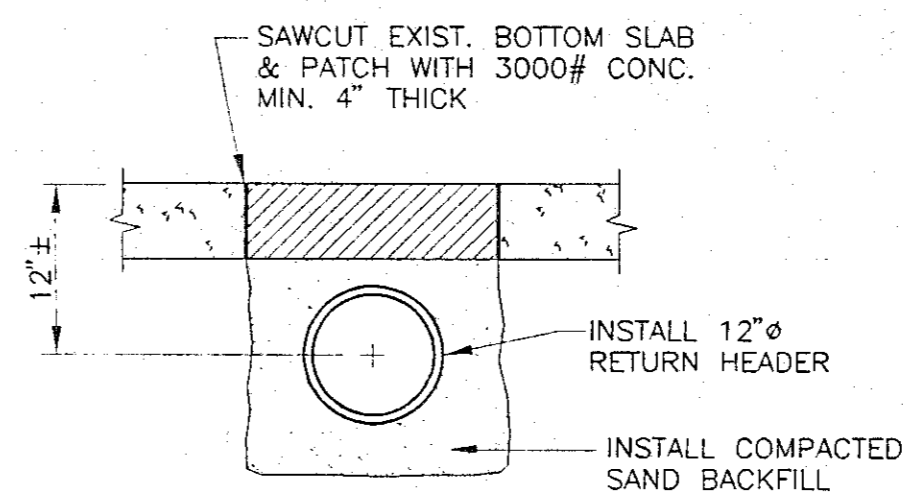


PLAN
Scale: 1"=20'

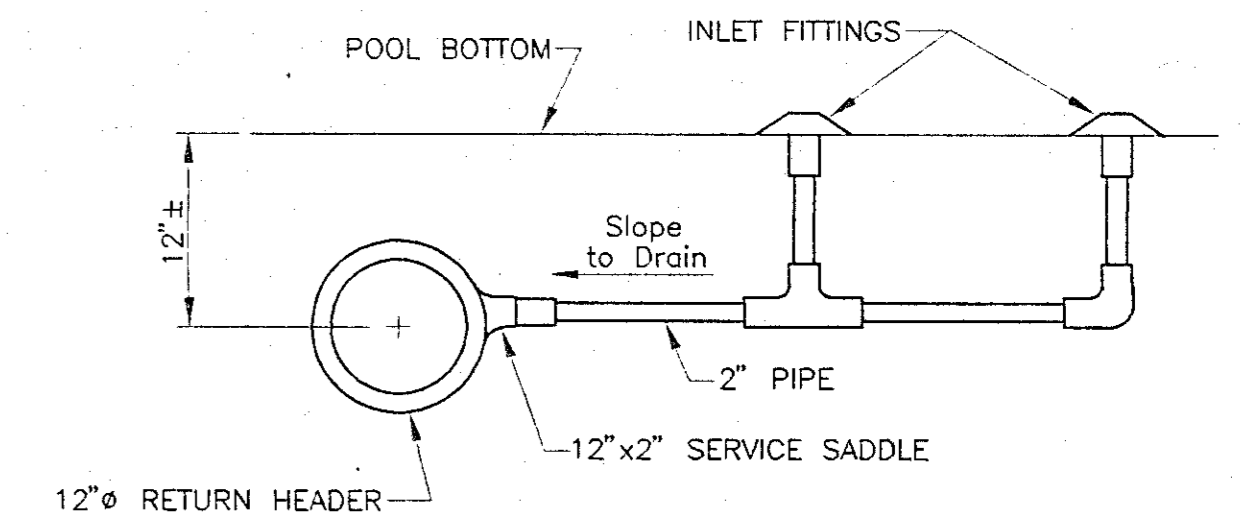
- CIRCULATION SYSTEM NOTES:**
1. POOL VOLUME = 900,000 GALLONS.
 2. MINIMUM CIRCULATION FLOW = 1875 GPM
 3. ALL METAL ITEMS IN CONTACT WITH CIRCULATION SYSTEM OR WITHIN 5 FEET OF THE POOL STRUCTURE SHALL BE BONDED TOGETHER WITH #8 AWG COPPER WIRE PER NEC ARTICLE 680.



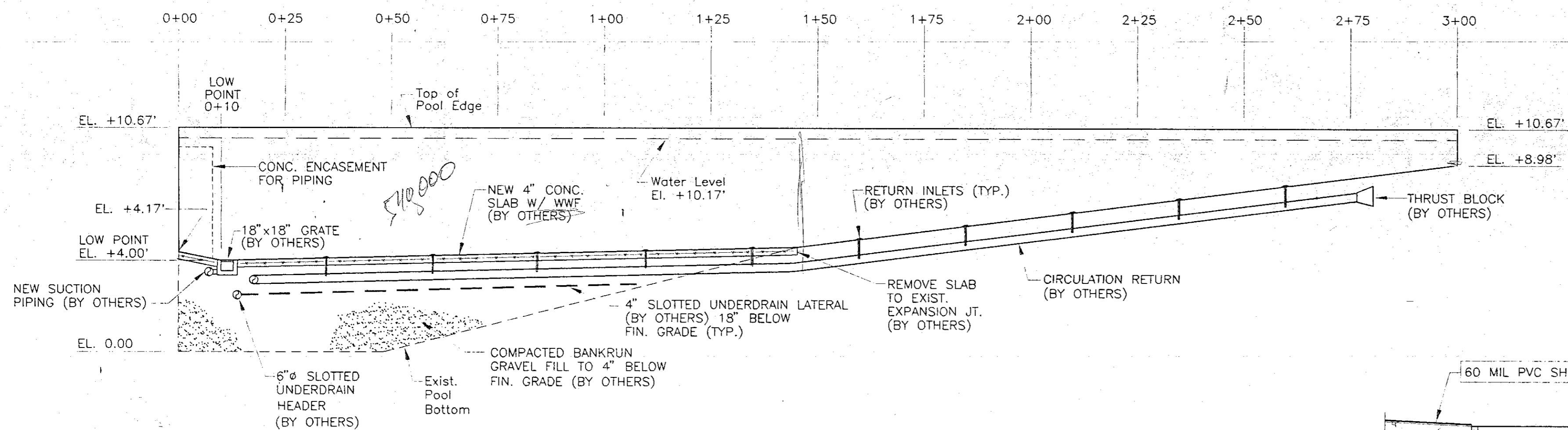
SECTION A-A
N.T.S.



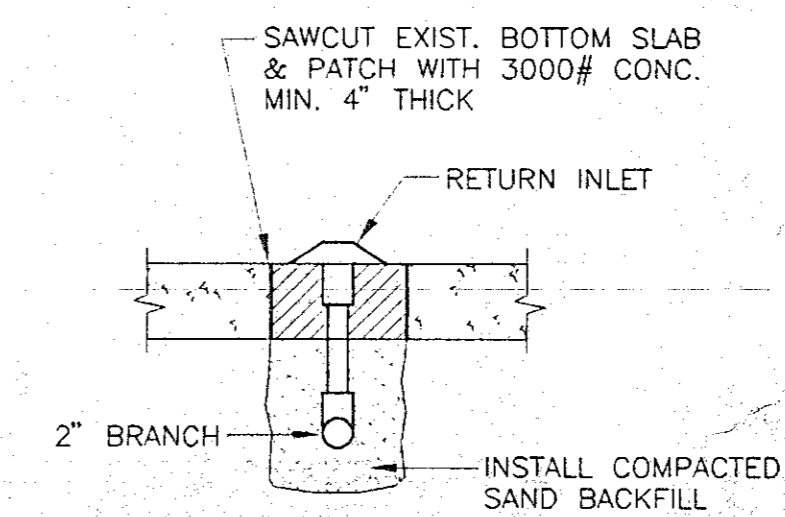
SECTION B-B
(BY OTHERS)
N.T.S.



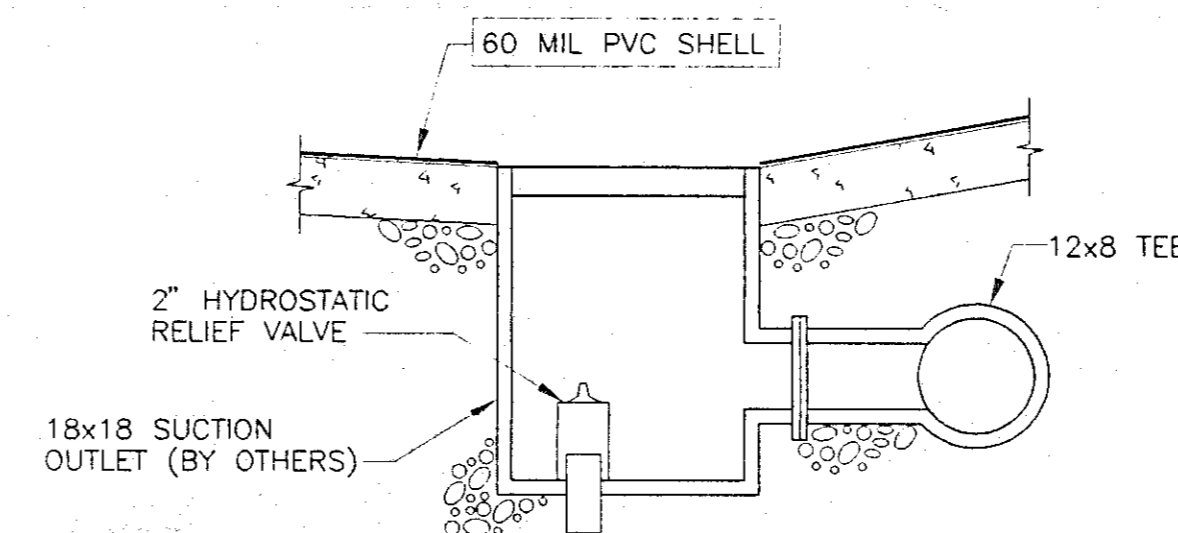
TYPICAL BRANCH CONNECTION
(BY OTHERS)
N.T.S.



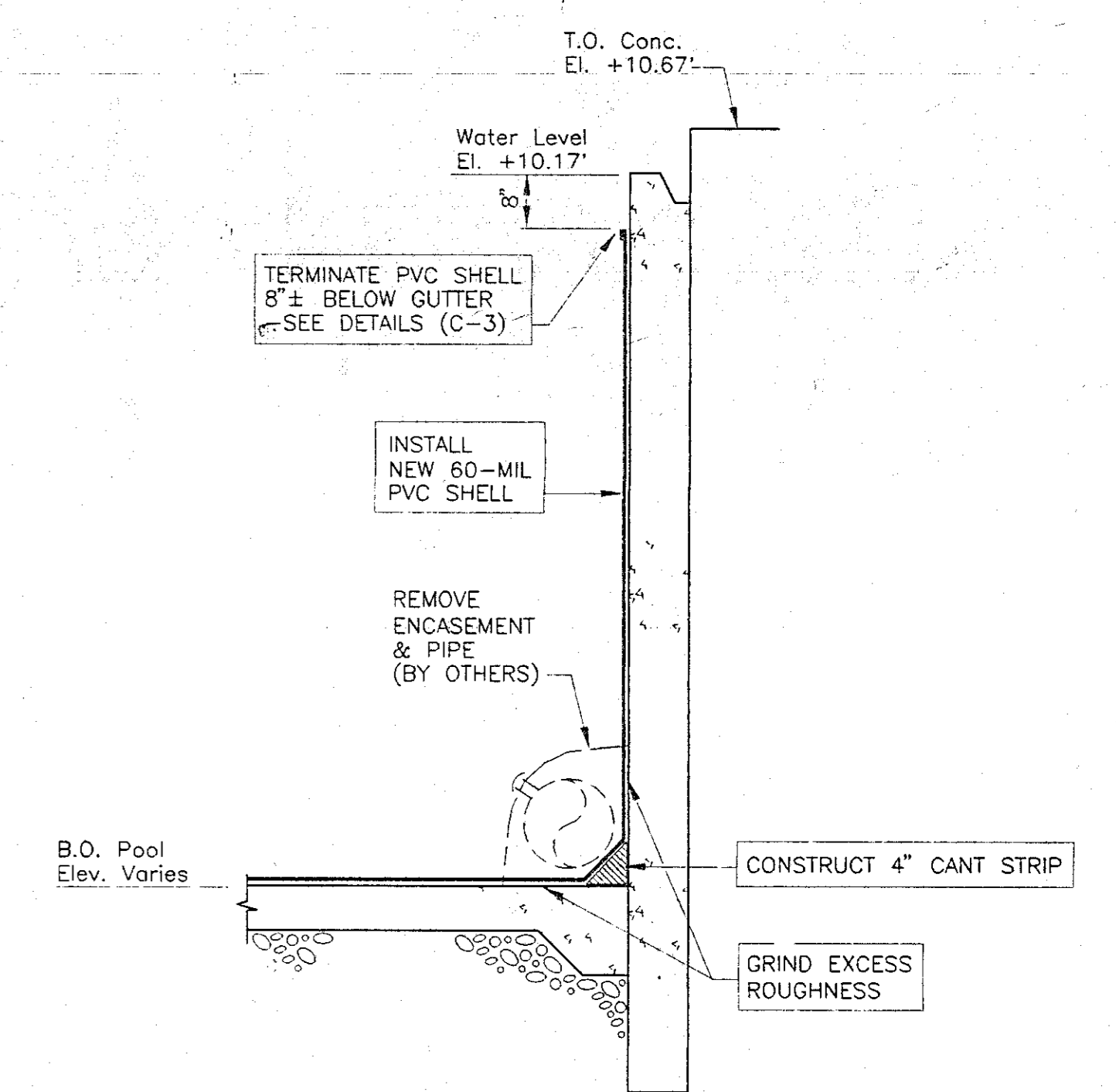
PROFILE
Scales: 1"=20' Horiz.
1"=4' Vert.



SECTION C-C
(BY OTHERS)
N.T.S.



TYPICAL MAIN DRAIN
(BY OTHERS)
N.T.S.



TYPICAL WALL SECTION
N.T.S.

REV	DATE	STATUS	BY	CHKD	APPD



DESIGNED BY: RED
DRAWN BY: RWB
CHECKED BY: BWK
APPROVED BY: BWK
DATE: 5/02/94



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CLIENT

CITY OF PORTSMOUTH
PORTSMOUTH, NH

PROJECT

PIERCE ISLAND POOL
IMPROVEMENTS

TITLE

NEW LINER & CIRCULATION
SYSTEM DETAILS

SCALE

AS NOTED

PROJECT NO.

94-5009.99

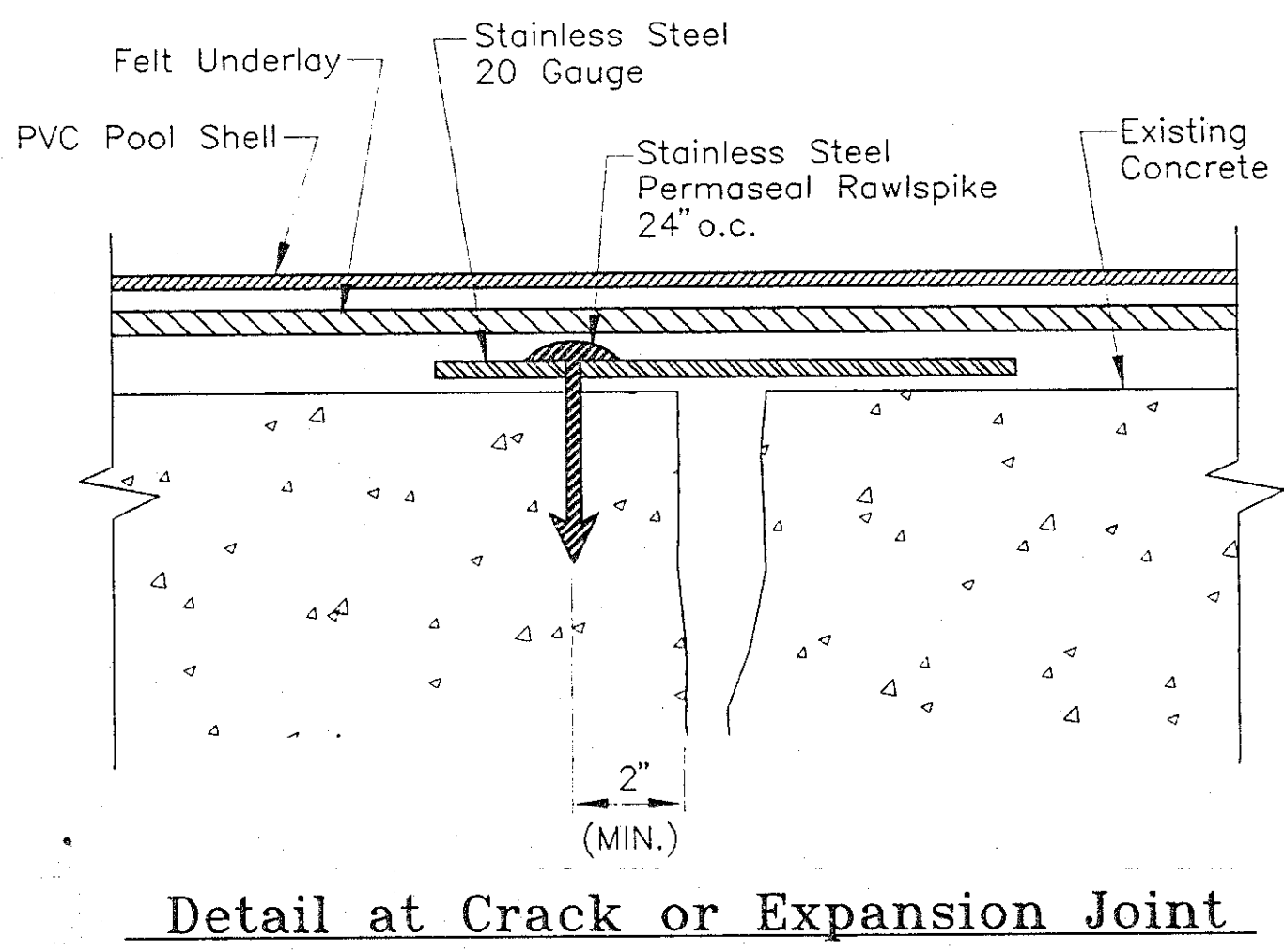
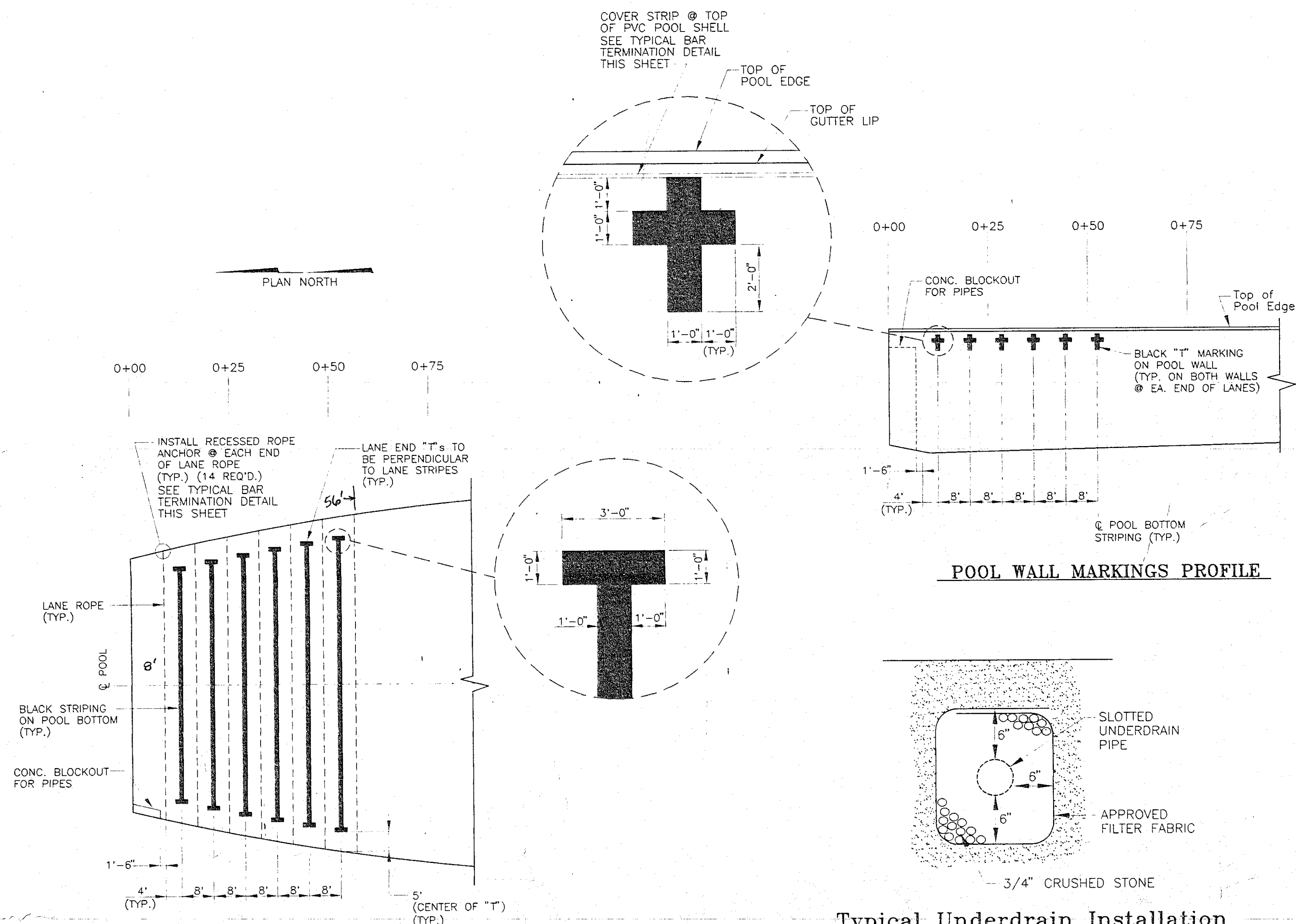
DRAWING NO.

C-2

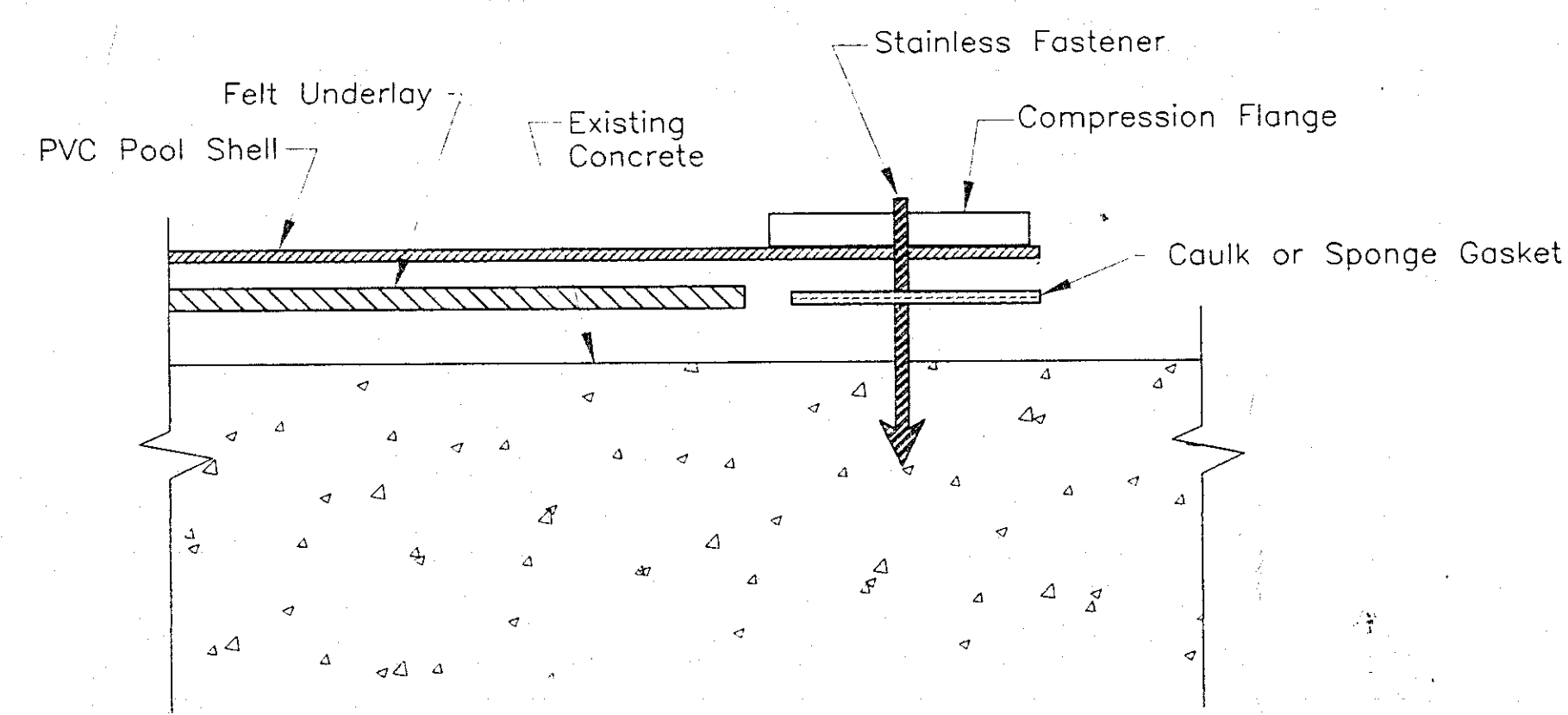
SHT.

2 of 3

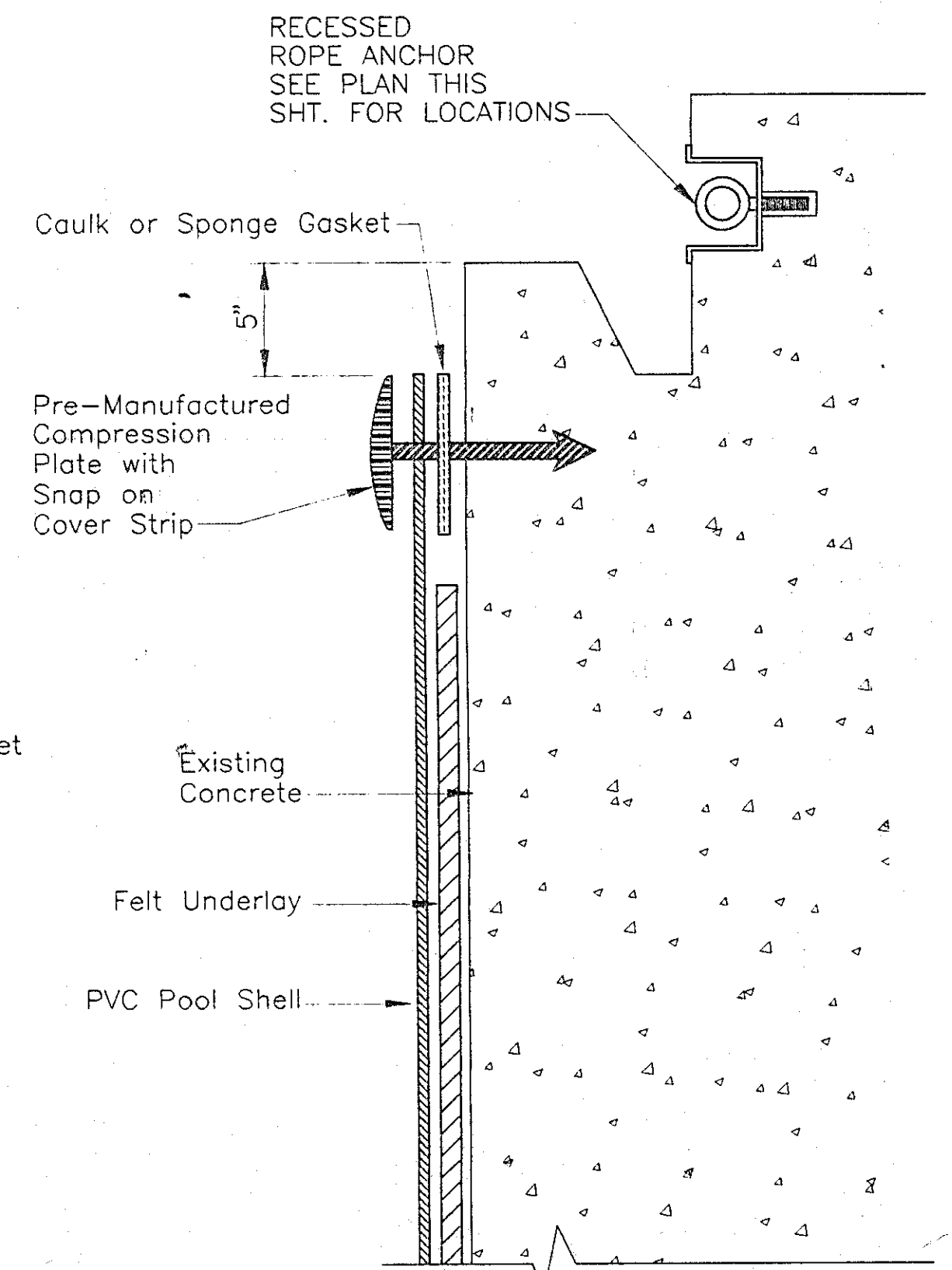
REV. 0



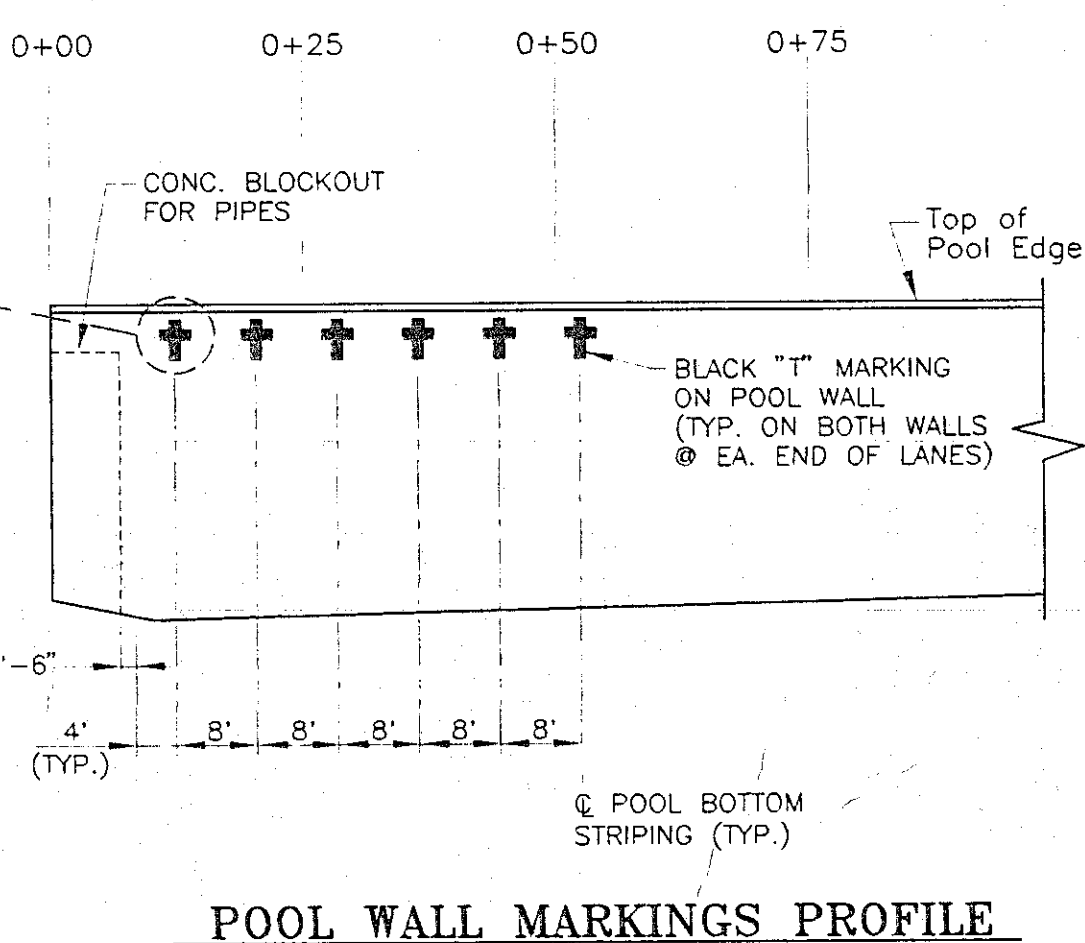
Detail at Crack or Expansion Joint



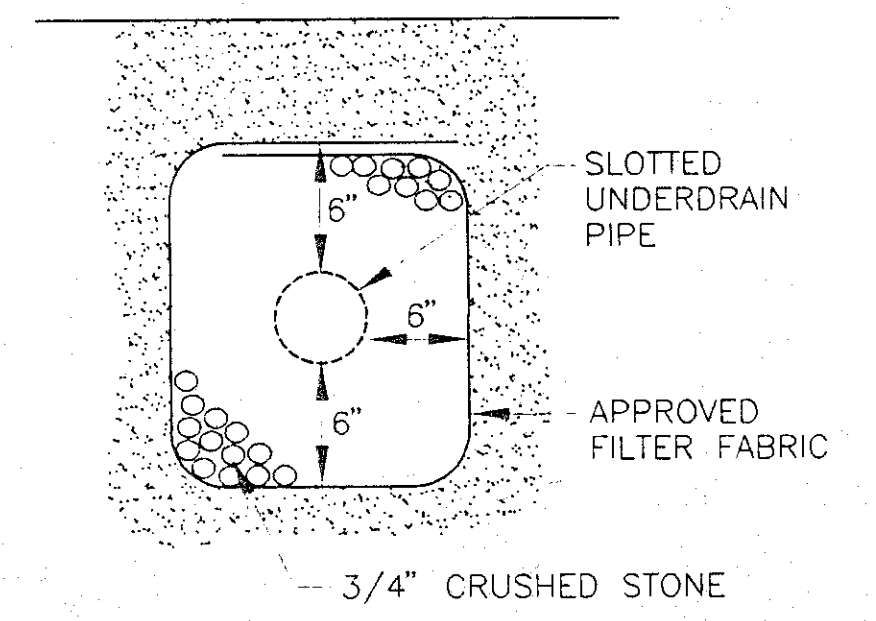
Typical Underwater Flange



Typical Bar Termination

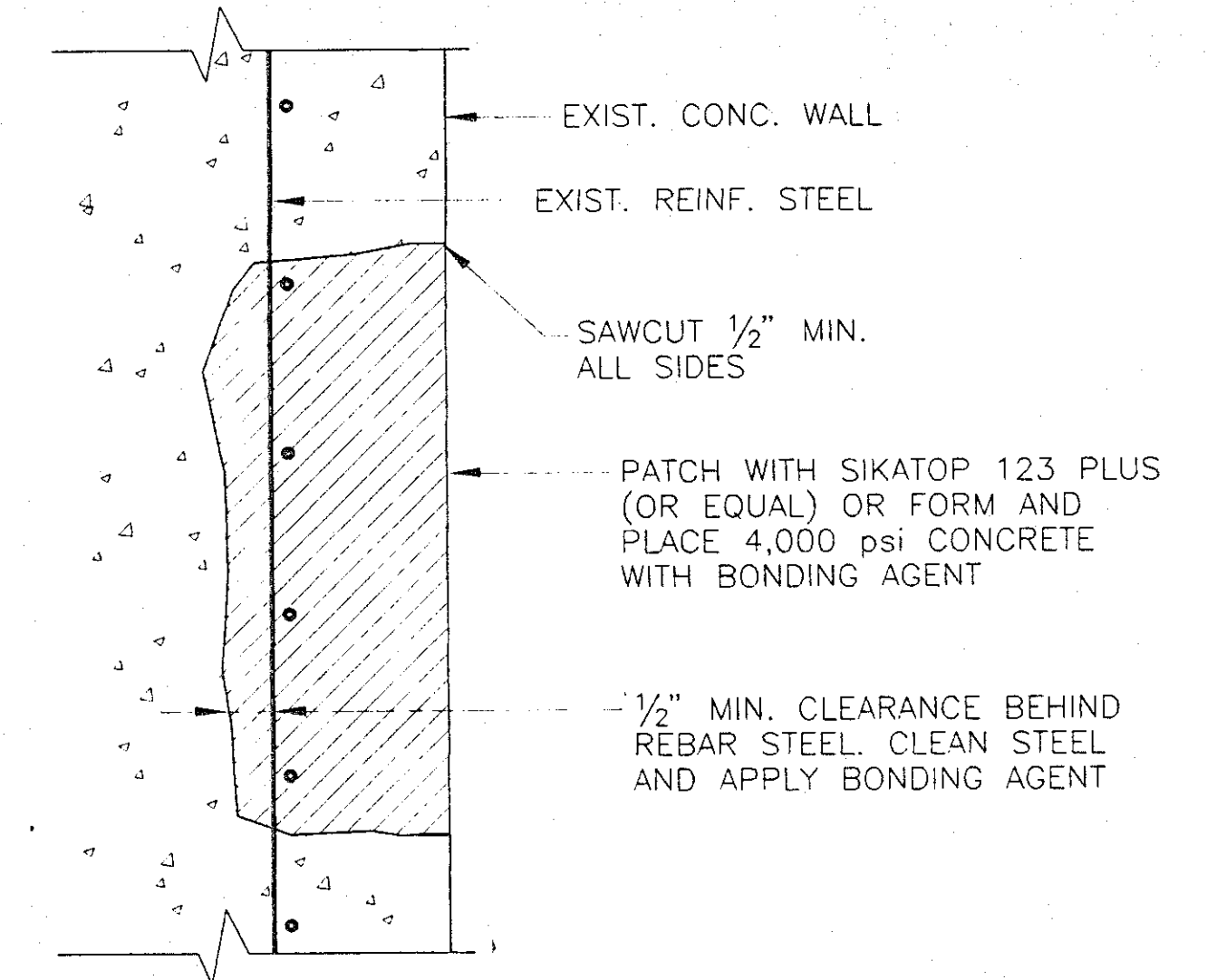


POOL WALL MARKINGS PROFILE

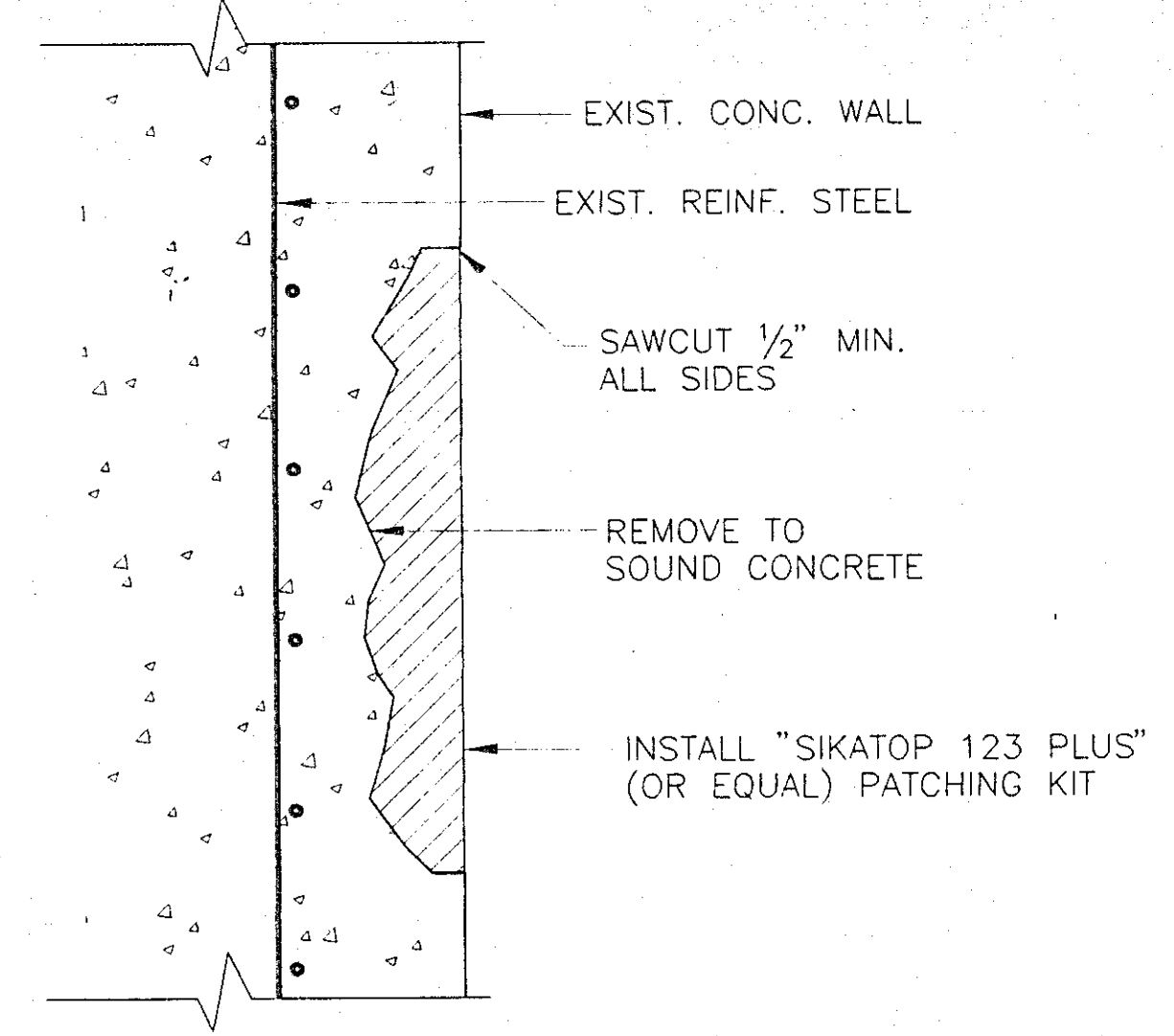


Typical Underdrain Installation (By Others)

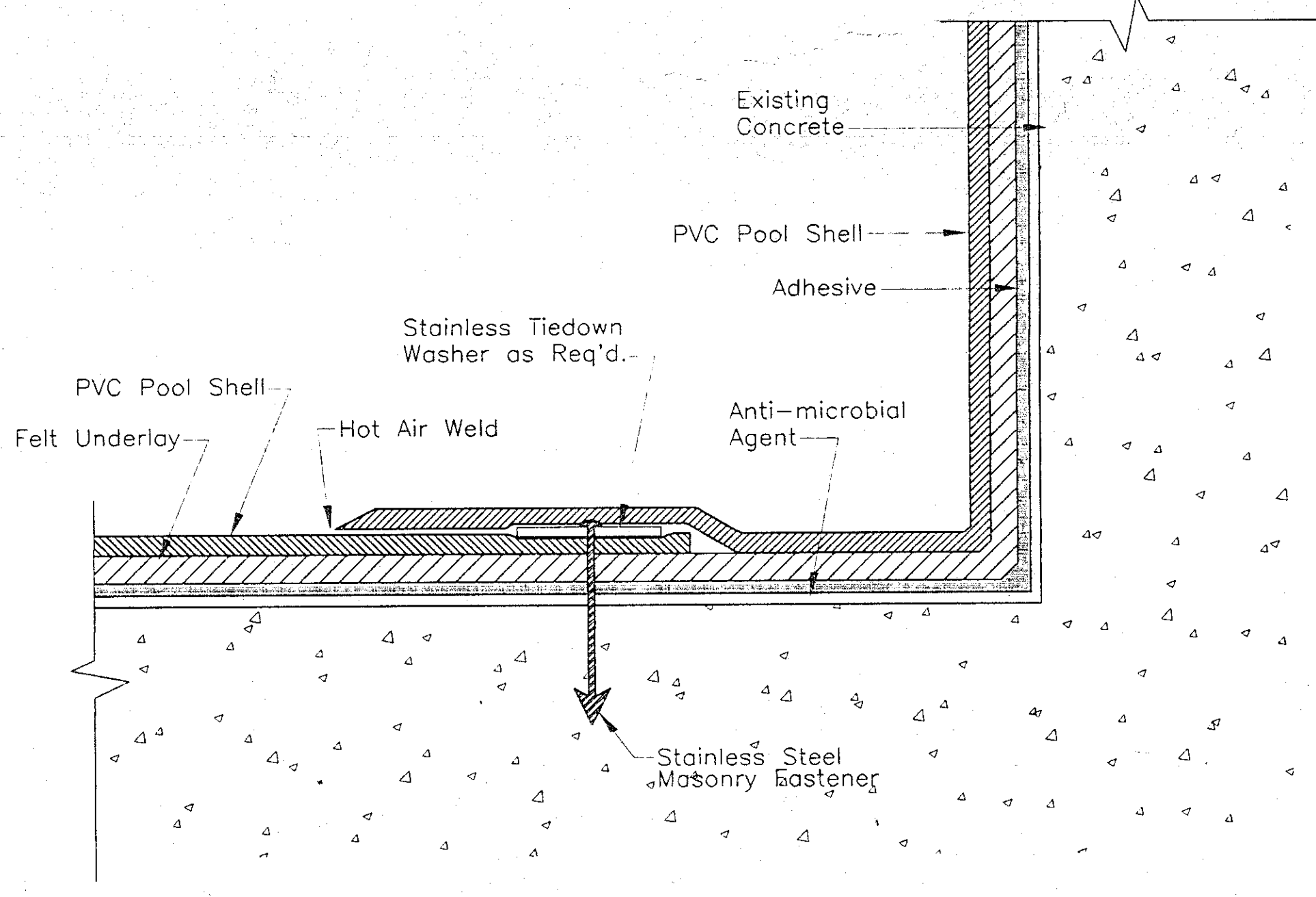
POOL BOTTOM MARKINGS PLAN



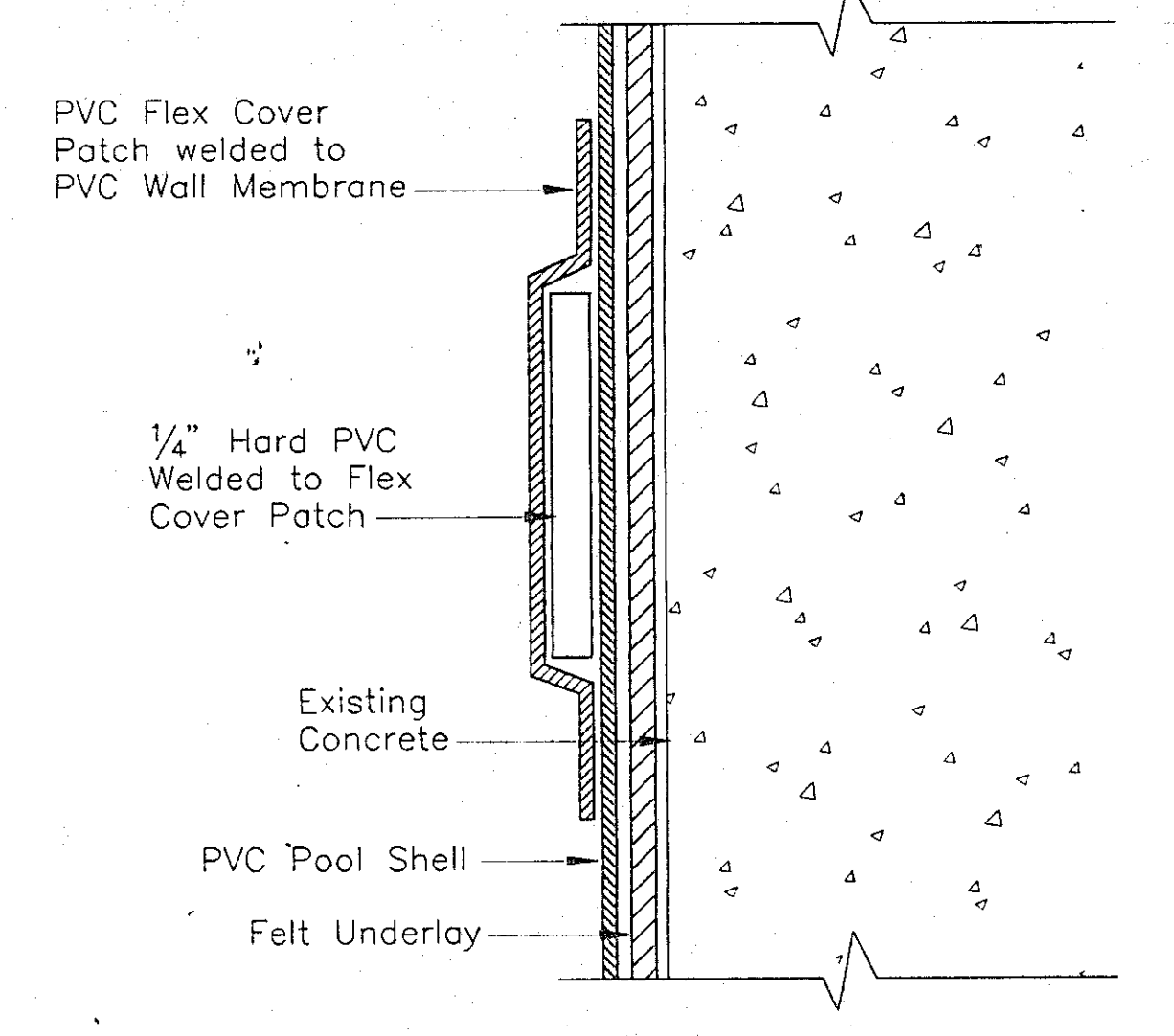
Deep Patching Detail



Surface Patching Detail



Typical Floor Wall Detail



Typical Ladder Bumper Guard

- PVC NOTES:**
1. MINIMUM OVERLAP OF SEAMS IS 2".
 2. NON-SKID TEXTURE REQUIRED ON FLOOR.
 3. ALL SEAMS TO BE HOT-AIR WELDED AND TESTED FOR APPROVAL.

	DESIGNED BY: RED	<p>Engineering • Surveying • Land Planning and Design One Cate Street, Portsmouth, NH 03801 • (603)431-2520 Bath, ME • St. Thomas, U.S.V.I.</p>	CLIENT: CITY OF PORTSMOUTH, PORTSMOUTH, NH	PROJECT: PIERCE ISLAND POOL IMPROVEMENTS	SCALE: Not to Scale	
	DRAWN BY: RWB		TITLE: MISC. DETAILS	PROJECT NO.: 94-5009.99	DRAWING NO.: C-3	
	CHECKED BY: BWK				SHT. 3 of 3	REV. 0
	APPROVED BY: BWK					
DATE: 5/02/94						
REV	DATE	STATUS	BY	CHKD	APPD	

NOTE: PIPE IN CHLORINE INTO EFFLUENT AS PER SAND FILTER'S MANUFACTURER'S RECOMMENDATIONS.

RUN VENT ABOVE ROOF LINE

2-250 GALLON POLYETHYLENE TANKS FOR CHLORINE STORAGE. CLOSED HEAD

USE GALVANIZED STEEL BRACKETS TO HOLD VENT LINE

CHLORINE FILL & VENT PIPES SHALL BE 1/2" SCHEDULE 80 PVC WITH PVC VALVES & FILL CAP.

OUTSIDE FILL & VENT

FILL LINE VENT LINE

FILTER ROOM FLOOR

CONSTRUCT 3" CONCRETE PAD FOR TANKS. ROUGHEN EXISTING CONCRETE & USE #10-6x6 WIRE MESH.

CHLORINE STORAGE DETAIL

NO SCALE

RESTORE TO EXISTING

SUITABLE MATERIAL

SAND BLANKET

3/4" CRUSH STONE

TRENCH DETAIL

NO SCALE

INSTALL NEW BACKWASH OUTFALL LINE 30" x 8" PVC - SDR-25 TO THE EXISTING OUTFALL - SEE TRENCH DETAILS

MAINTAIN NEGATIVE PITCH. CONNECT EXISTING GUTTER DRAIN INTO NEW BACKWASH LINE

CONSTRUCTION NOTES:

ELECTRICAL:
THIS WORK SHALL CONSIST OF ALL NEW WIRING, PANELS, MAIN SWITCHES, BREAKERS, SWITCHES, OUTLETS, MOTOR CONTROLS, LIGHTING, SUBPANELS & ASSOCIATED ITEMS WITH THE NEW FILTER SYSTEM.
CONTRACTOR SHALL SUPPLY SHOP DRAWINGS & CATALOG CUT SHEET. THE PROPOSED WORK, FOR APPROVAL.
CONTRACTOR SHALL PROVIDE SUFFICIENT LIGHTING & OUTLETS. EXISTING SHALL BE REMOVED BY THE CONTRACTOR.
ALL WORK SHALL BE IN CONFORMANCE WITH ARTICLE 680 OF THE NATIONAL ELECTRICAL CODE.

CONCRETE:
ALL WORK SHALL BE IN CONFORMANCE WITH THE STANDARD SPECIFICATIONS FOR ROAD & BRIDGE CONSTRUCTION BY THE STATE OF NEW HAMPSHIRE DEPARTMENT OF PUBLIC WORKS & HIGHWAYS 1983.
THIS SHALL CONSIST OF ENLARGING THE PUMP FLOOR AS SHOWN & DIRECTED.
ALL CAST IN PLACE CONCRETE SHALL HAVE A MINIMUM 28-DAY COMP. STRENGTH OF 4000 PSI.
REINFORCING STEEL SHALL COMPLY WITH A.S.T.M. DESIGNATION GRADE 40.

BACKWASH OUTFALL:
ALL WORK SHALL CONFORM TO THE STANDARD SPECIFICATIONS FOR BRIDGE CONSTRUCTION BY THE STATE OF NEW HAMPSHIRE DEPT. OF PUBLIC WORKS & HIGHWAYS 1983.
PLACE 6" TRAP ROCK AS NEEDED AT THE OUTFALL TO PREVENT

EXISTING FILTERING SYSTEM:
THE EXISTING DIATOMACEOUS FILTER SYSTEM SHALL BE REMOVED FROM THE SITE AND BECOME THE PROPERTY OF THE CONTRACTOR.

INSTALLATION OF SAND FILTER TANKS:
THE CONTRACTOR HAS TWO OPTIONS IN PLACING THE SAND FILTER TANKS INSIDE THE FILTER BUILDING: 1) REMOVE & RESET THE WOODEN FLOOR LOWER TANKS IN BY CRANE; OR 2) CONSTRUCT DOUBLE STEEL DOORS ENOUGH TO MOVE TANKS THRU - SHOP DRAWINGS REQUIRED FOR DOOR.

SAND FILTER TANK AIR-RELIEF SYSTEM:
INSTALL AIR-RELIEF SYSTEM PER MANUFACTURER'S RECOMMENDATIONS. DISCHARGE SHALL BE IN PUMP FLOOR SUMP.

PUMP FLOOR SUMP PUMP:
EXISTING SUMP PUMP SHALL BE REUSED - NEW ELECTRICAL OUTLET REQUIRED. INSTALL NEW PVC DISCHARGE WITH CHECK VALVE INTO NEW BACKWASH

CHAIN HOIST:
INSTALL CHAIN HOIST PER PLANS IN THE SPECIFICATIONS PACKAGE.

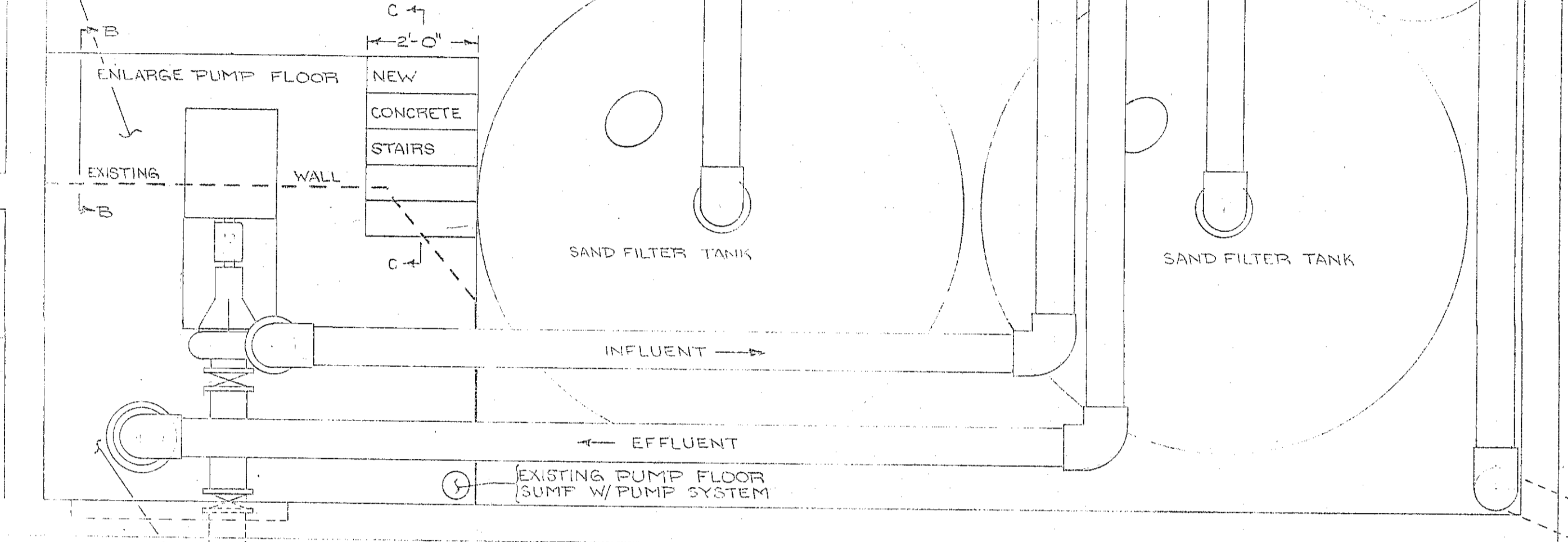
SIGNS:
PLACE SIGNS PER REQUIREMENTS OF THE STATE OF N.H. WATER SUPPLY POLLUTION CONTROL COMMISSION.
PLACE OPERATIONS & MAINTANCE SIGNS PER MANUFACTURER'S RECOMMENDATION. ALL SIGNS SHALL BE PLASTIC AND EASY TO READ.

PAINTING (NEW WORK):
PER MANUFACTURER'S RECOMMENDATIONS OR AS DIRECTED.

PIPE SUPPORT:
OVERHEAD PIPE SUPPORT SHALL BE PER MANUFACTURER'S RECOMMENDATION. IN NO CASE SHALL SAGGING BE ALLOWED. THE CONTRACTOR SHALL AND INSTALL THE SYSTEM WITH APPROVAL OF THE OWNER. THE SYSTEM ALLOW FOR MOVEMENT. THE CONTRACTOR SHALL MAKE STRUCTURAL AS NEEDED TO THE EXISTING ROOF JOISTS.

REMOVE EXISTING CONCRETE WALLS, EXCAVATE AND ENLARGE PUMP FLOOR WITH WALLS & STAIRS AS SHOWN IN DETAILS.

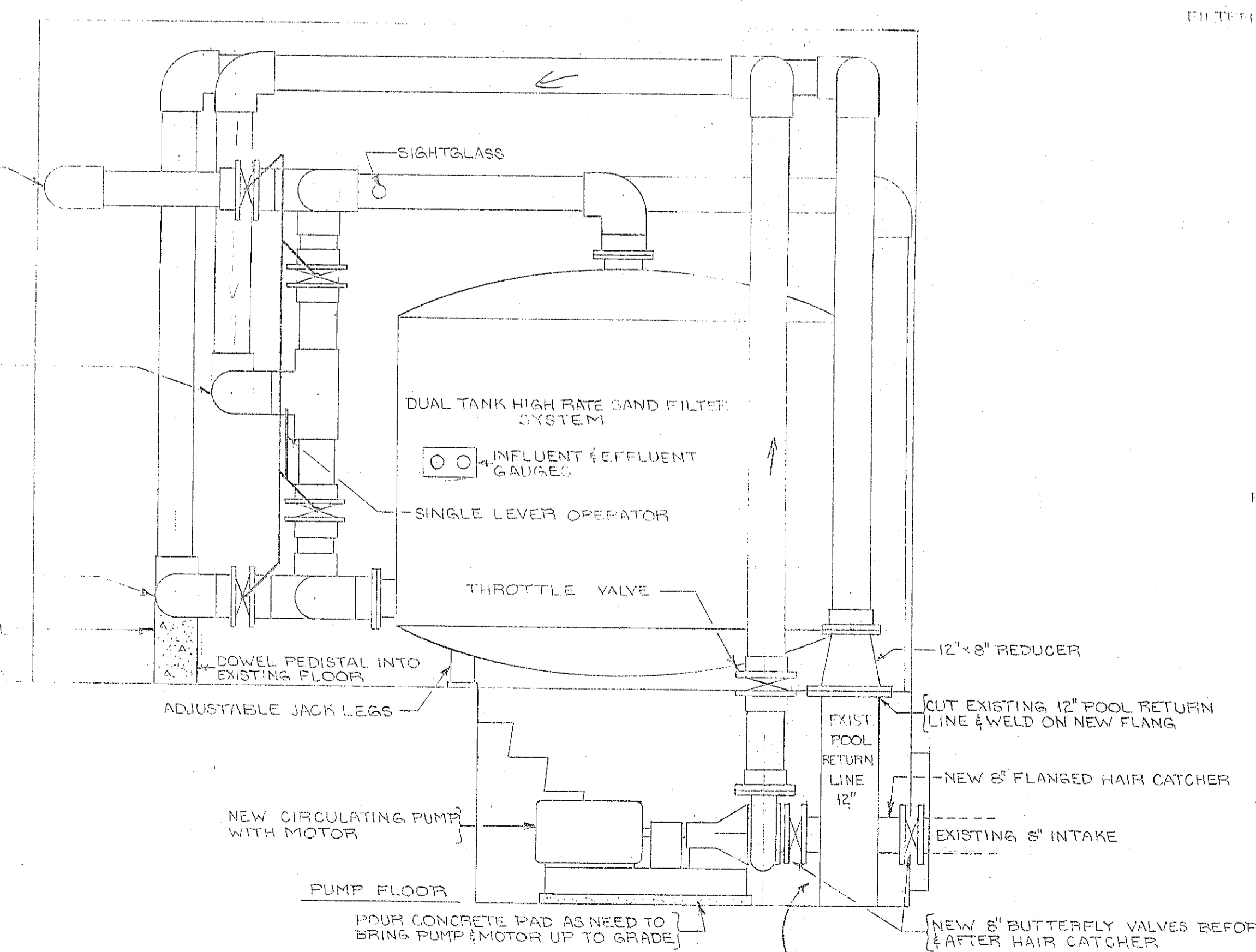
RELOCATE EXISTING ELECTRICAL BOARD



PLAN VIEW

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

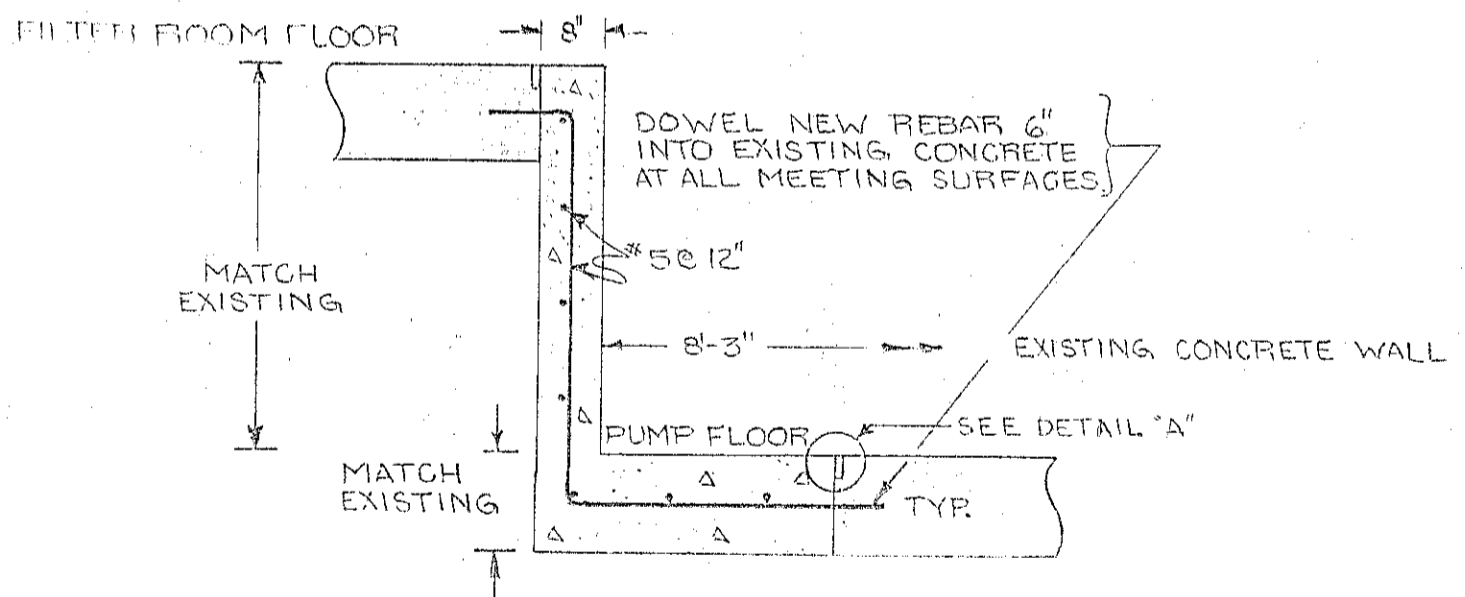
NOTE: INSTALL CHECK VALVE ON THE EXISTING OUTGOING GUTTER DRAIN INSIDE THE EXISTING DRAIN MANHOLE



SECTION A-A

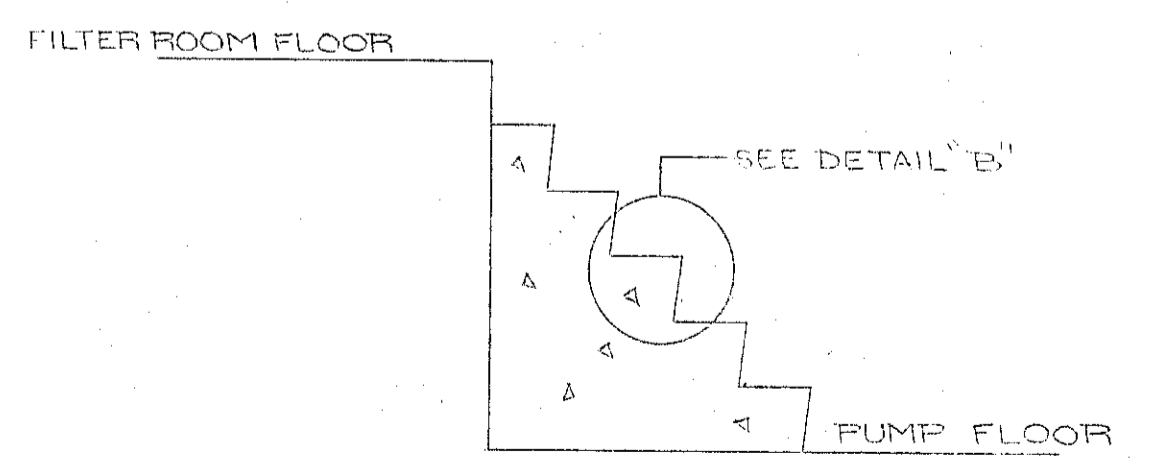
SCALE: 1/2" = 1'-0"

CONTRACTOR SHALL CHIP AWAY CONCRETE FLOOR TO A SMOOTH SURFACE SO THAT THE DRAIN PLUG CAN BE OPERATED ON THE HAIR CATCHER.



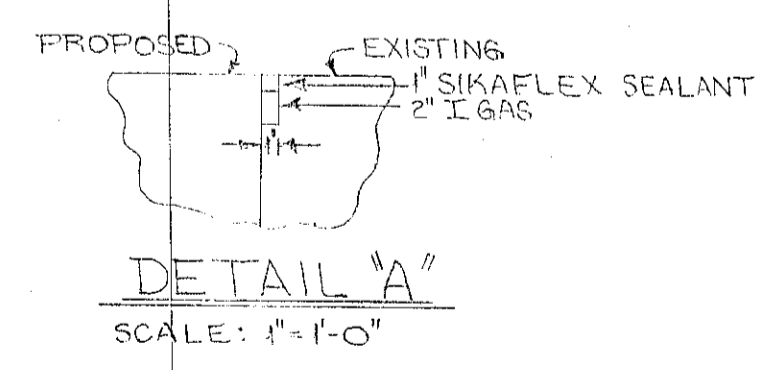
SECTION B-B

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



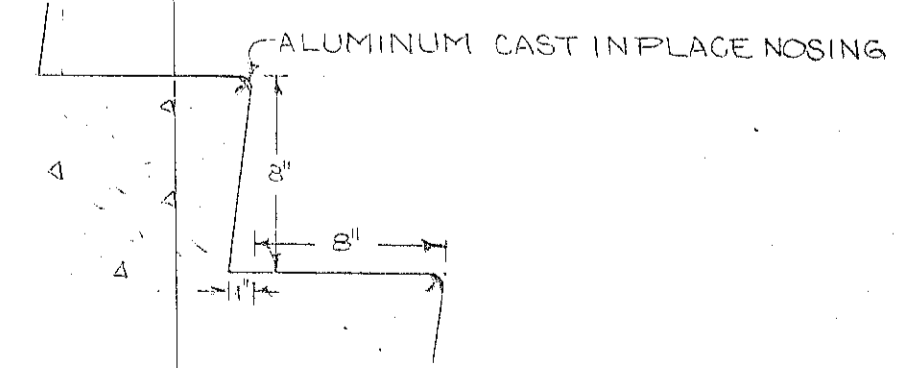
SECTION C-C

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



DETAIL 'A'

SCALE: 1" = 1'-0"



DETAIL 'B'

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

FLOW DATA	
POOL DATA	
CAPACITY	900,000 GALLONS
TURNOVER	8 HOURS
PUMPING RATE	1875 GPM
FILTER DATA	
EFFECTIVE AREA	127.2 SF.
FILTER RATE	14.74 GPM/SF
BACKWASH RATE	14.74 GPM/SF
PUMP DATA	
CAPACITY	1875 G.P.M. @ 60' T.D.H.
MOTOR SIZE	50 H.P. - 1750 RPM - 230V
	3 PHASE 60 CYCLE
PUMP SIZE	8" SUCTION & DISCHARGE

SAND FILTERING SYSTEM
PIERCE ISLAND SWIMMING POOL

ENGINEERING DIVISION
PUBLIC WORKS DEPARTMENT

SCALE AS SHOWN APPROVED BY: STEVE PARKINSON DRAWN BY: R. W. I.
DATE: NOV. 1984 CITY ENGINEER REVISED

CITY of PORTSMOUTH, N.H.

DRAWING NUMBER