

CONSTRUCTION DRAWINGS

Soil Vapor and Groundwater Extraction and Treatment System

PROPOSED EMERYVILLE POSTAL FACILITY, EMERYVILLE, CA

Prepared for

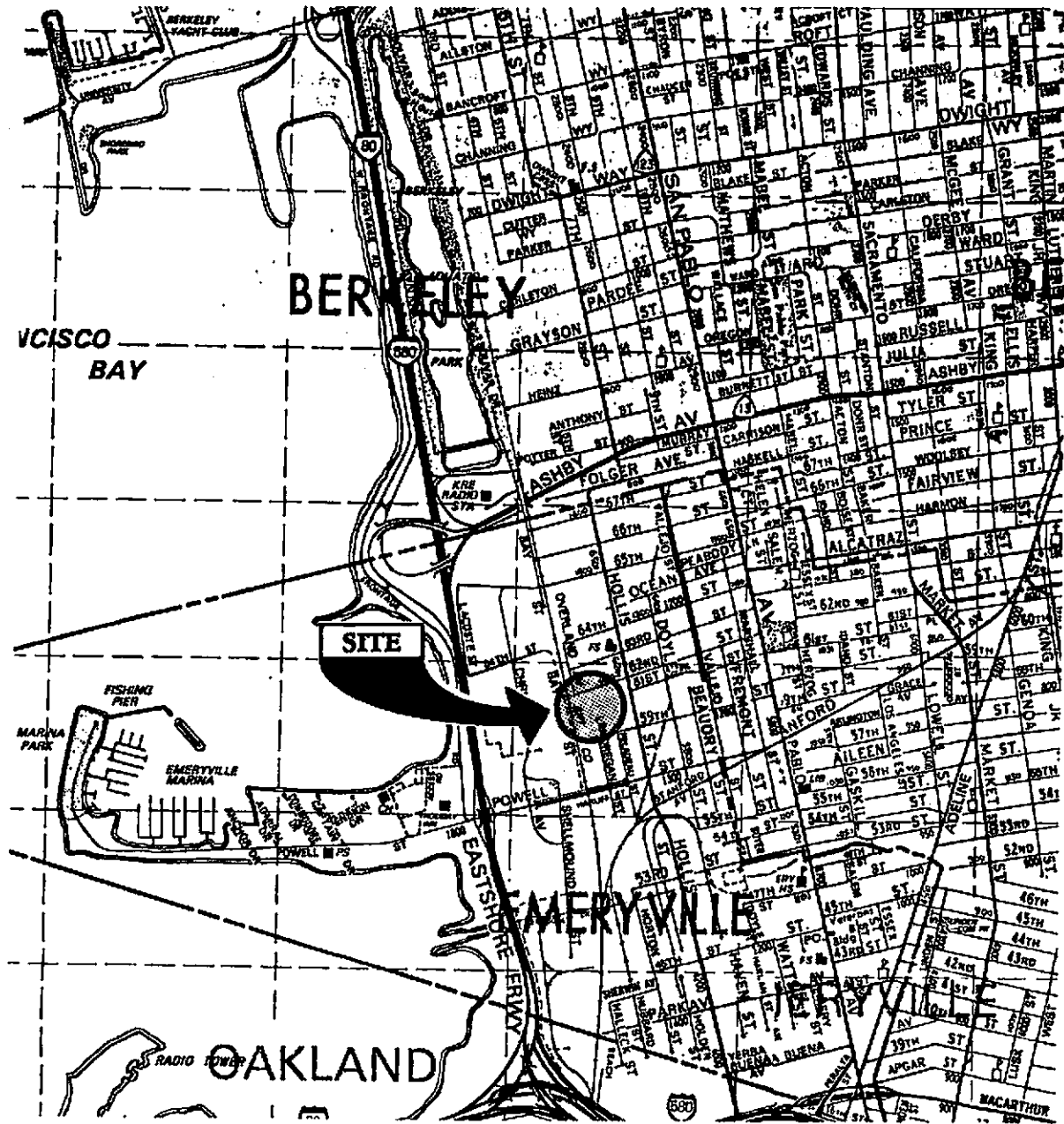
United States Postal Service
San Bruno Facilities Service Center

850 Cherry Avenue
San Bruno, CA 94099

By

LOWNEY ASSOCIATES

405 Clyde Avenue
Mountain View, CA 94043



SITE VICINITY MAP

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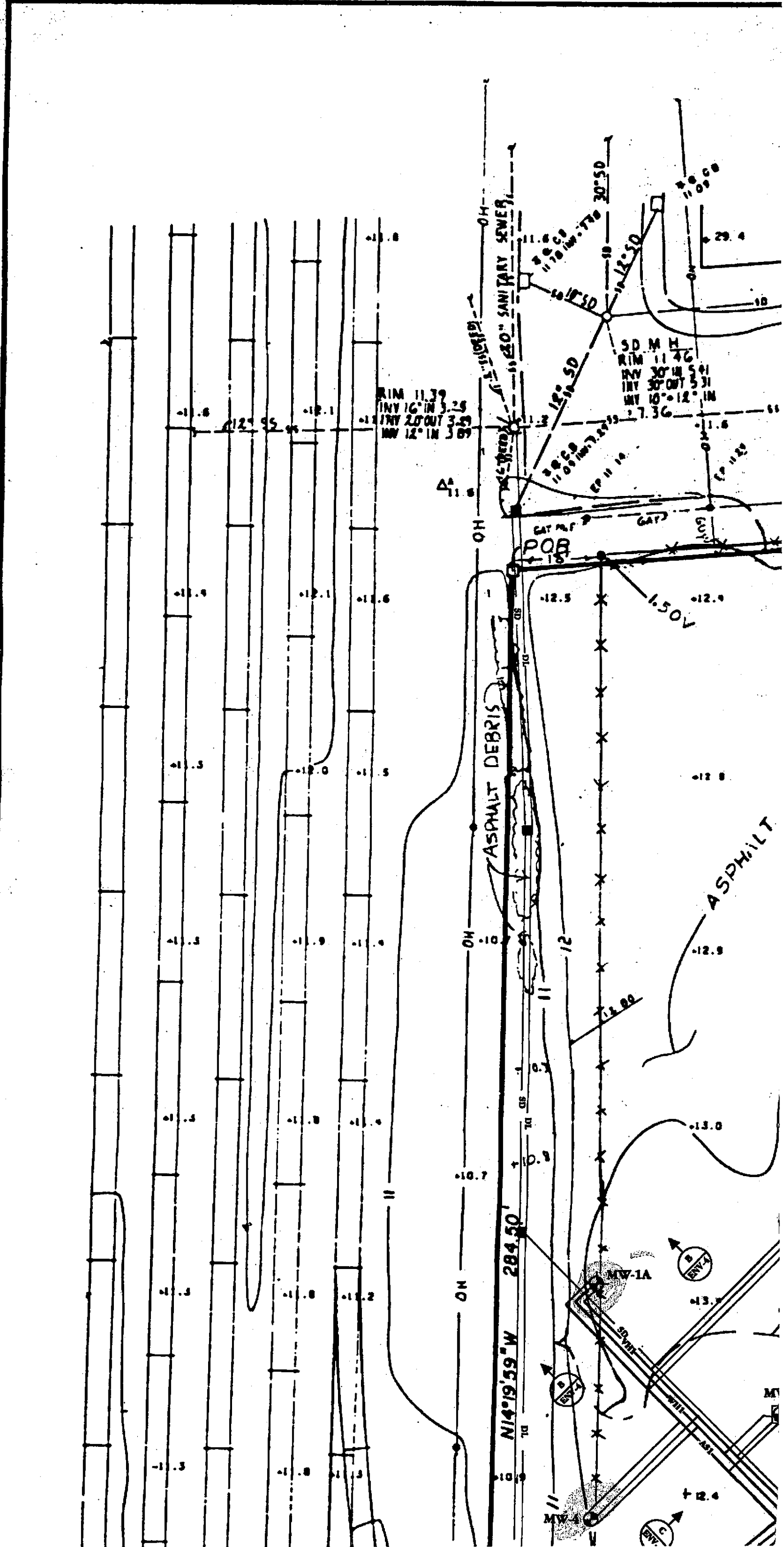
LOVNEY ASSOCIATES
Environmental/Geotechnical/Engineering Services

COVER SHEET
PROPOSED EMERYVILLE POSTAL FACILITY
Emeryville, California

Project No.
864-17A

Date
JULY 1993

Sheet No.
ENV-1



50 M H
RIM 12 31
INV 30 58 THRU
14 62
BY 8 58

55 M H
RIM 12 68
INV 12 48
16 04 83
BY 4 58

99 M H
RIM 12 46
INV (IN) 1791
INV (OUT) 1126

62nd STREET

16" SANITARY SEWER

6" SANITARY SEWER

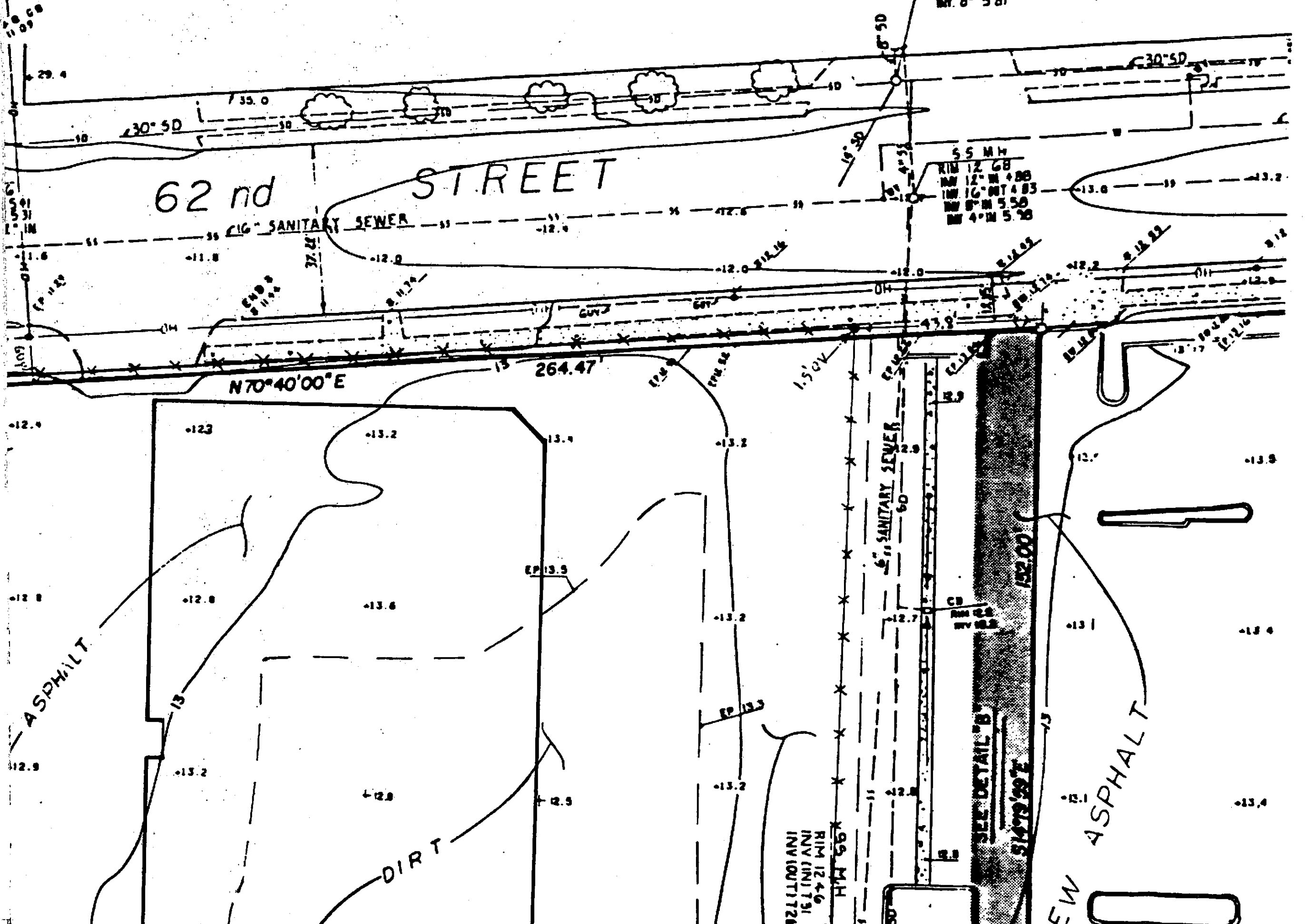
SEE DETAIL 'B'
51479'99"E

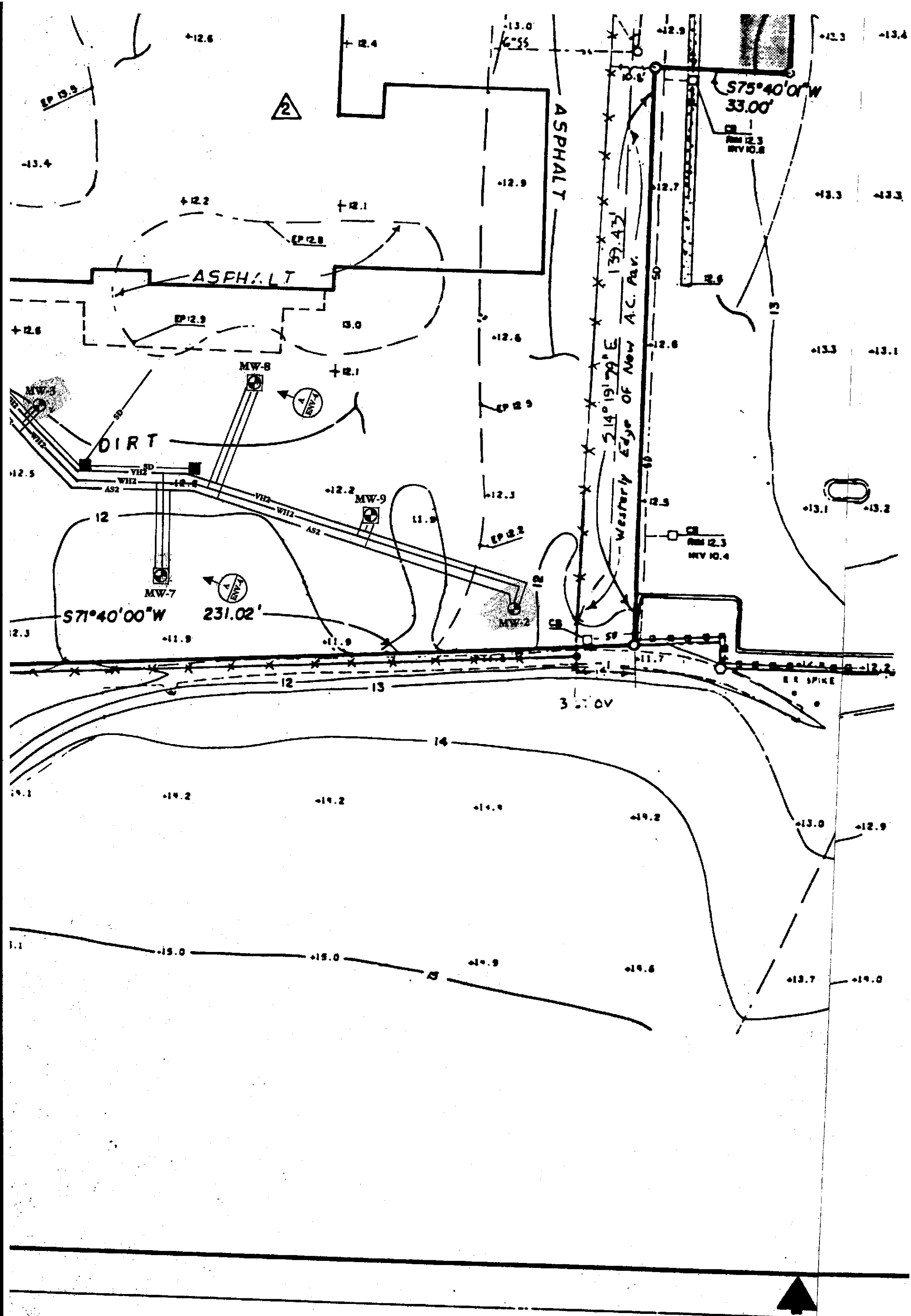
N70°40'00"E

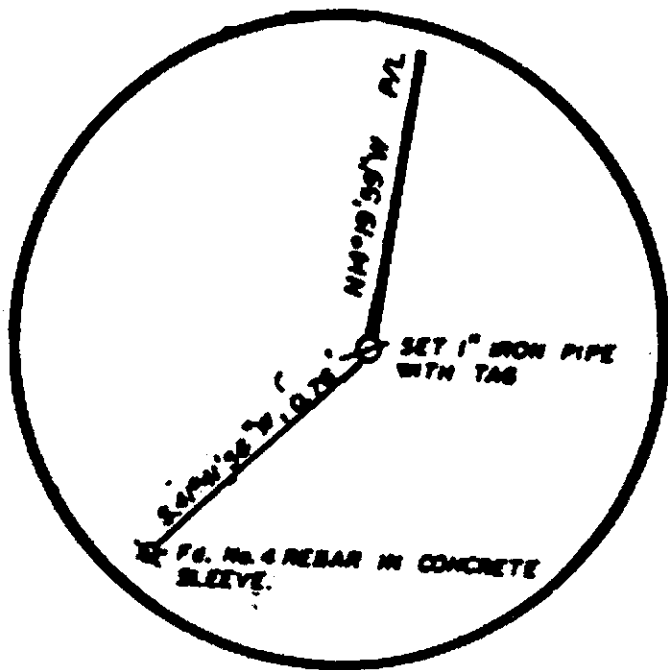
ASPHALT

EW ASPHALT

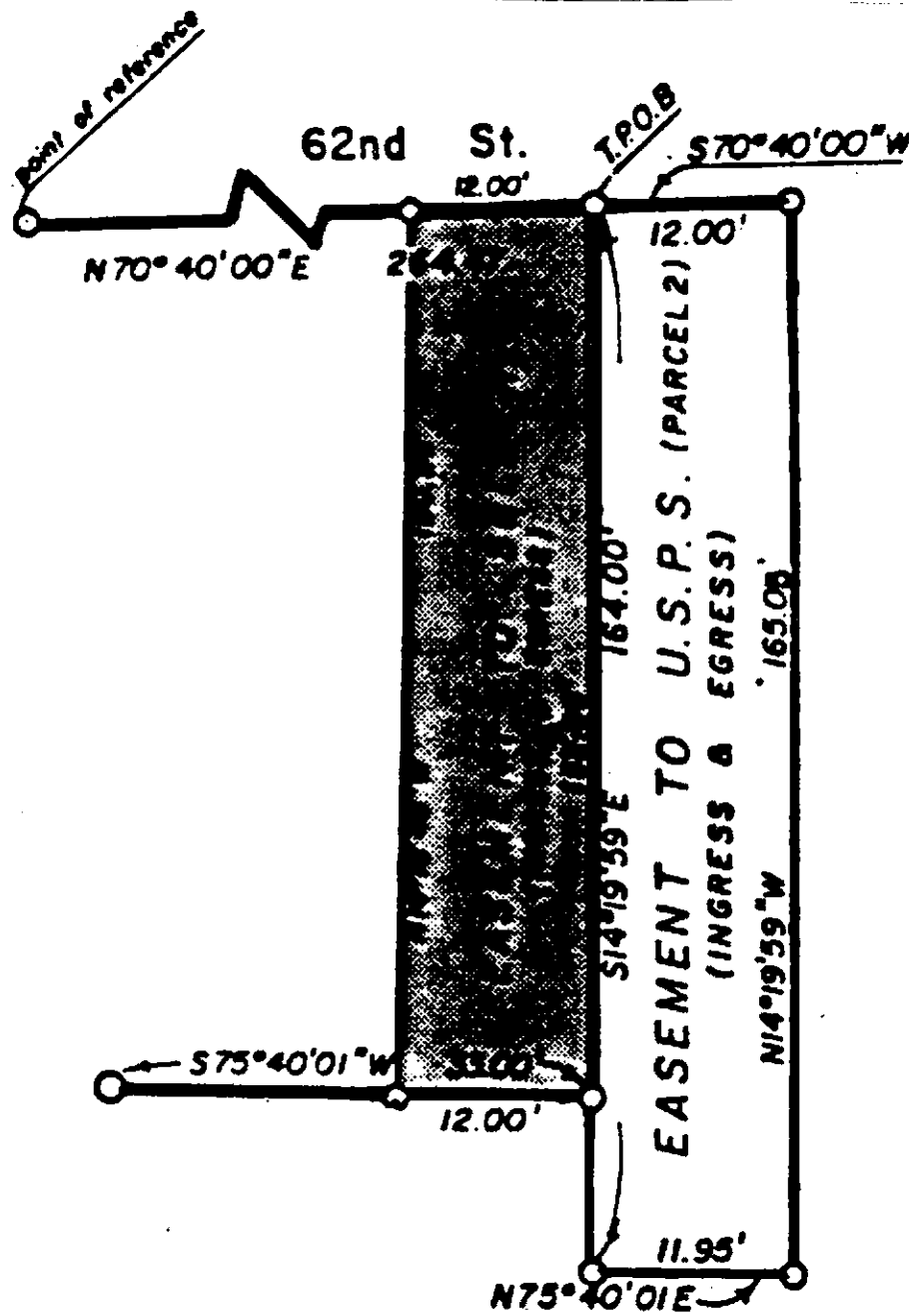
DIRT







DETAIL "A"
(NO SCALE)

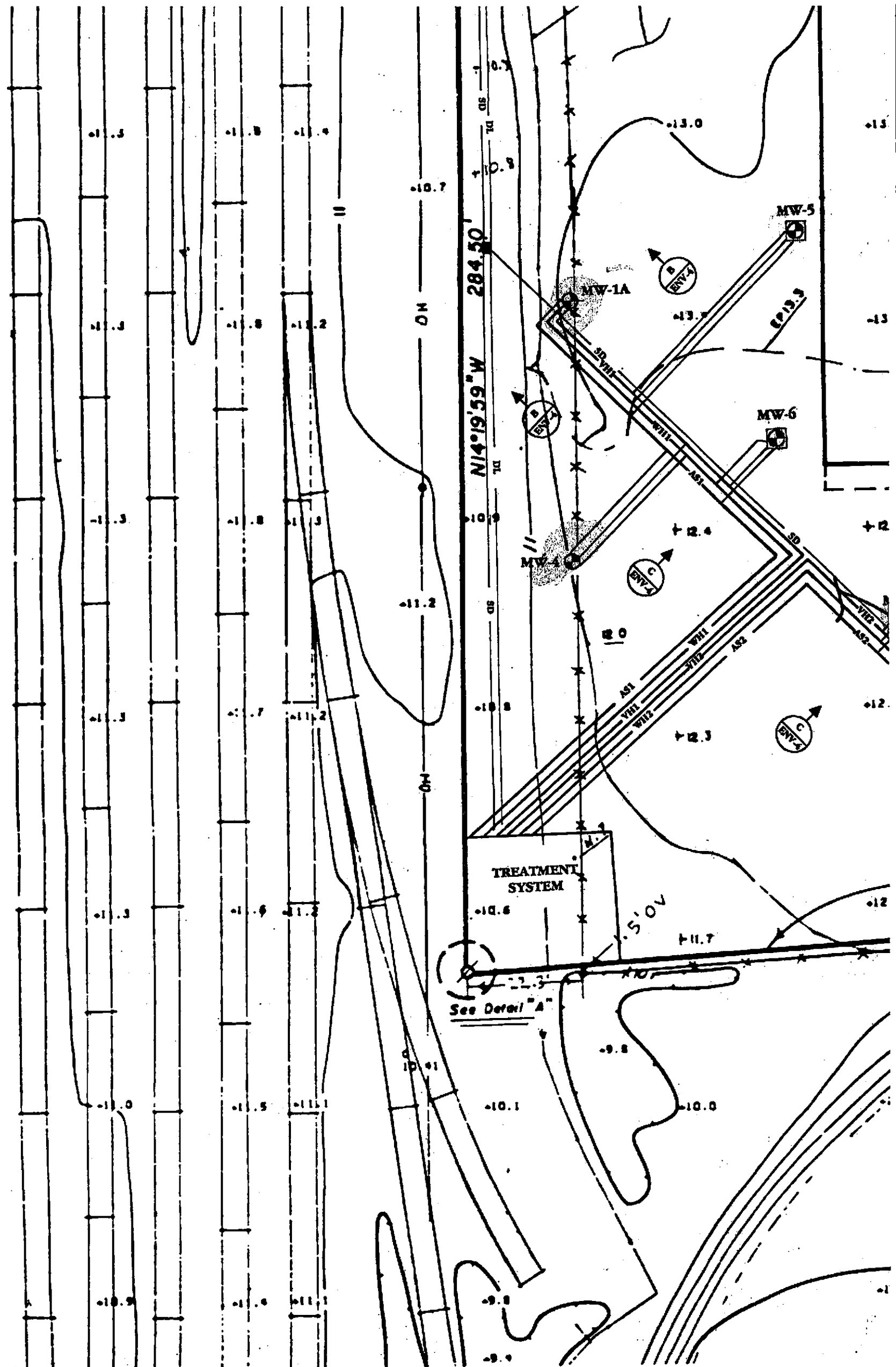


DETAIL "B"
(NO SCALE)

NOTE

- ① —RAILROAD SPUR TRACK (REMOVED)
- ② DEPICTS SURFACE CONDITIONS AS OF JAN. 20, 1987; VENDOR CONTINUES TO MAKE ADJUSTMENTS.
- ③ THIS MAP HAS BEEN REVISED TO SHOW EXISTING CONDITIONS AS OF OCT. 91





LEGEND

- ⊙ - Approximate location of existing 4-inch diameter PVC extraction well
- ⊕ - Approximate location of existing 2-inch diameter PVC extraction well
- ⊠ - Approximate location of proposed 4-inch diameter PVC extraction well
- - Approximate location of catch basin
- - Header pipe
- - Well delivery pipe
- SD - Storm drain
- DL - Discharge line
- VH - Vapor header
- WH - Water header
- AS - Air supply

NOTES:

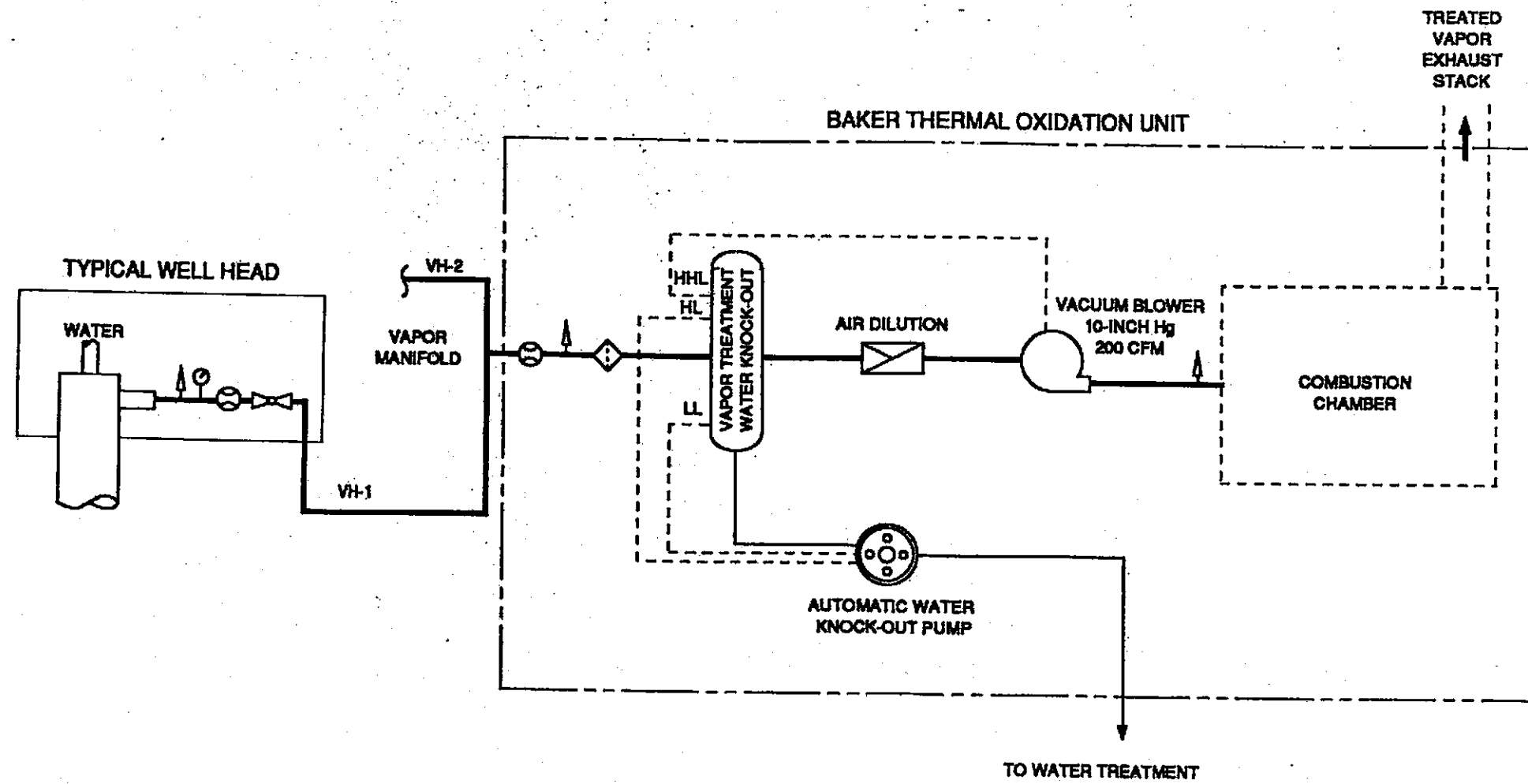
- 1) CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL FIELD DIMENSIONS BEFORE BEGINNING WORK.
- 2) WELL LOCATIONS SHOWN IN SYSTEM LAYOUT ARE APPROXIMATE.
- 3) ALL EXTRACTION WELLS SHALL HAVE AN AIR SUPPLY, GROUND WATER EXTRACTION AND VAPOR EXTRACTION LINE AS SPECIFIED IN THE PIPE SCHEDULE ON THIS SHEET.
- 4) ALL NEW GROUND WATER CONVEYANCE PIPING SHALL BE PRESSURE TESTED WITH WATER AT 150 PSI FOR TWO HOURS. ALL VACUUM EXTRACTION PIPING SHALL BE PRESSURE TESTED WITH AIR AT A GAUGE PRESSURE OF 8 PSI FOR TWO HOURS. ALL AIR SUPPLY LINES SHALL BE TESTED WITH WATER AT 185 PSI FOR TWO HOURS. THE CLIENT SHALL BE NOTIFIED 24 HOURS PRIOR TO PRESSURE TESTING.

PIPE SCHEDULE

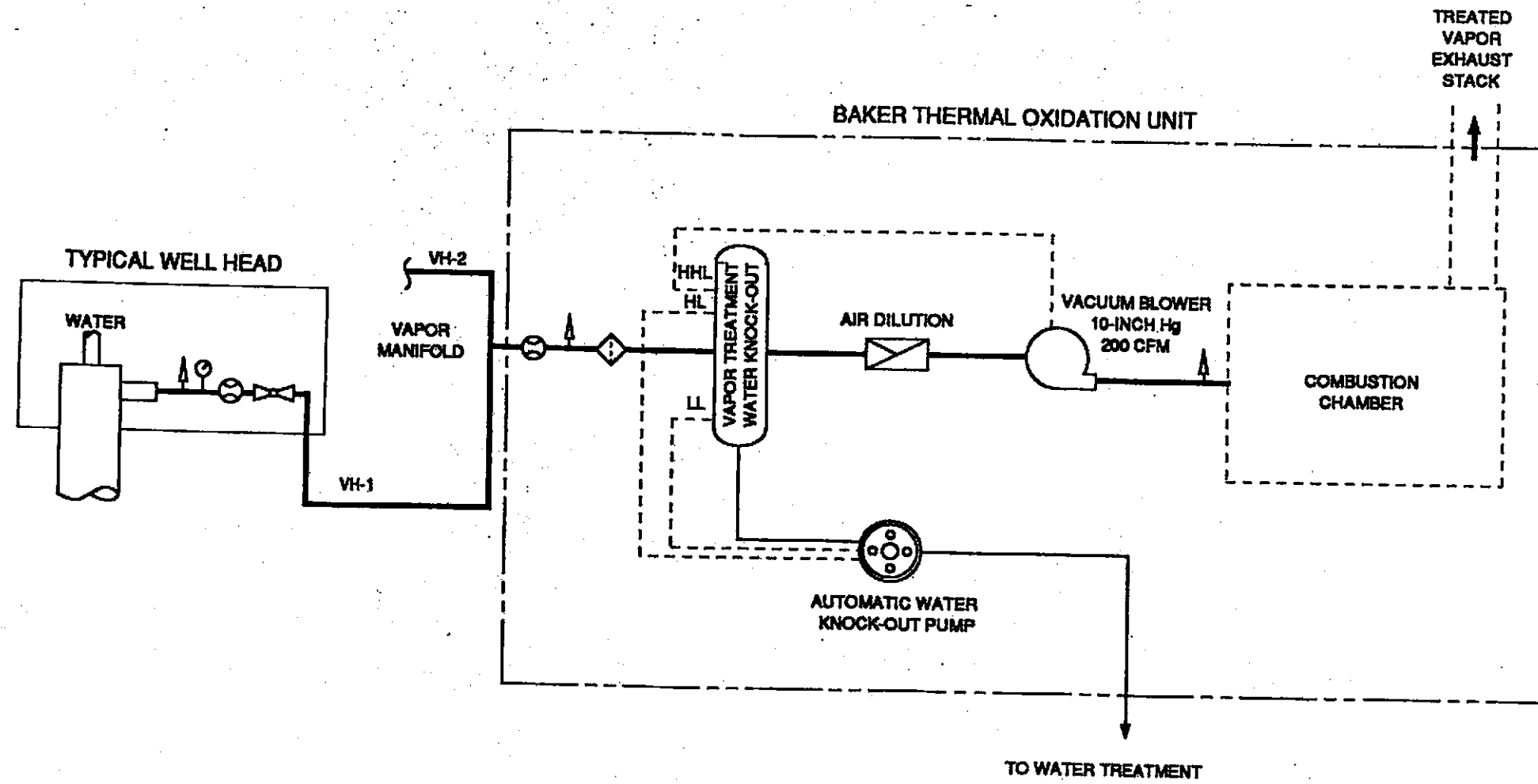
	VAPOR	WATER	AIR
HEADER	3" PVC PIPE SCHEDULE 80	1" PVC PIPE SCHEDULE 80	1/2" COPPER PIPE TYPE "L"
WELL DELIVERY	2" PVC PIPE SCHEDULE 80	3/4" PVC PIPE SCHEDULE 80	1/2" COPPER PIPE TYPE "L"
DISCHARGE	NA	1-1/4" PVC PIPE SCHEDULE 80	NA

SCALE 1"=20'

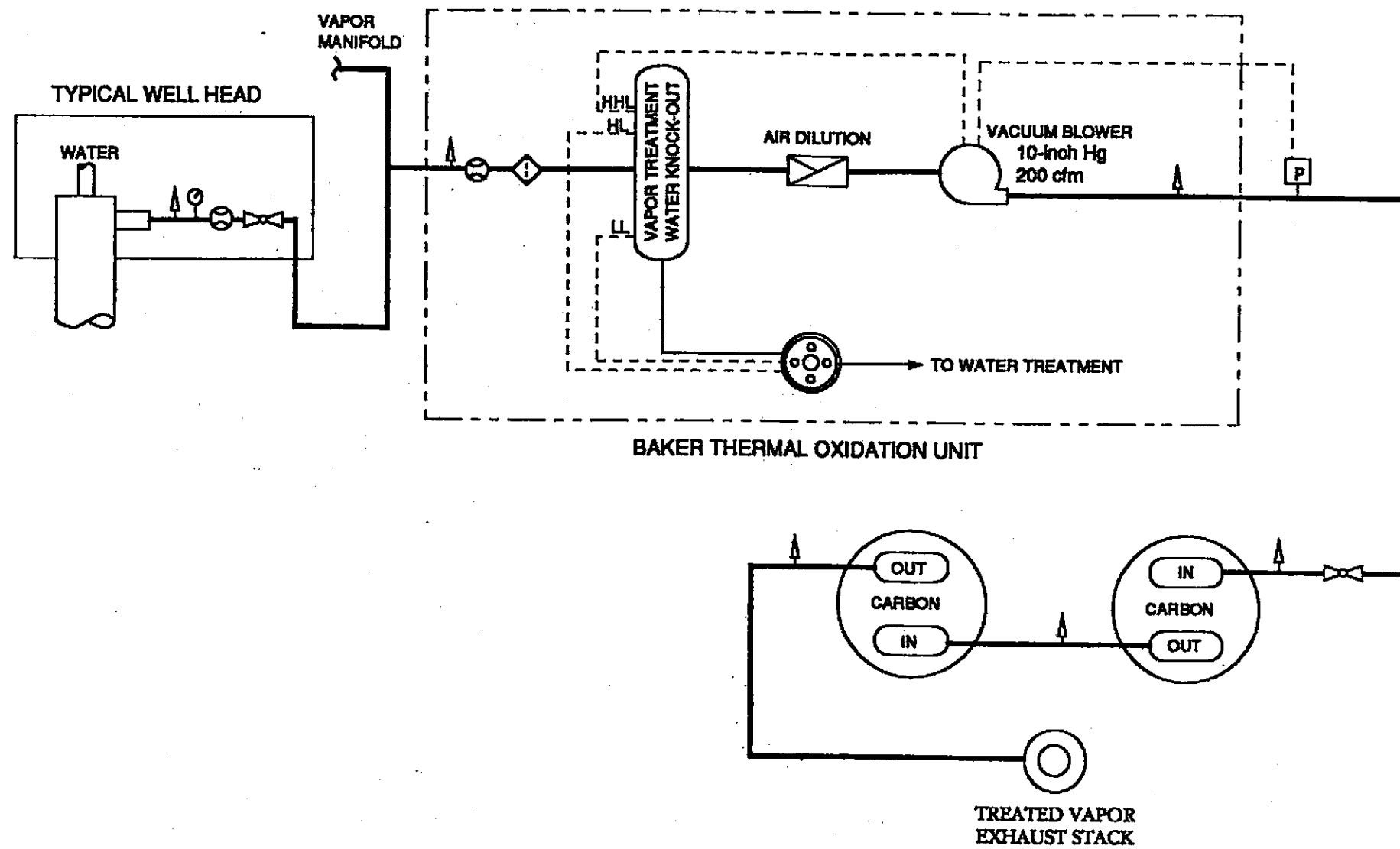
<p>LOVNEY ASSOCIATES Environmental/Geotechnical/Engineering Services</p>	<p>SYSTEM LAYOUT PROPOSED EMERYVILLE POSTAL FACILITY Emeryville, California</p>	Project No. 864-17A
		Date JULY 1993
		Sheet No. ENV-2



PROCESS INSTRUMENTATION DIAGRAM - VAPOR WITH THERMAL OXIDATION



PROCESS INSTRUMENTATION DIAGRAM - VAPOR WITH THERMAL OXIDATION



PROCESS INSTRUMENTATION DIAGRAM - VAPOR WITH CARBON ADSORPTION

NOTES:









VAPOR

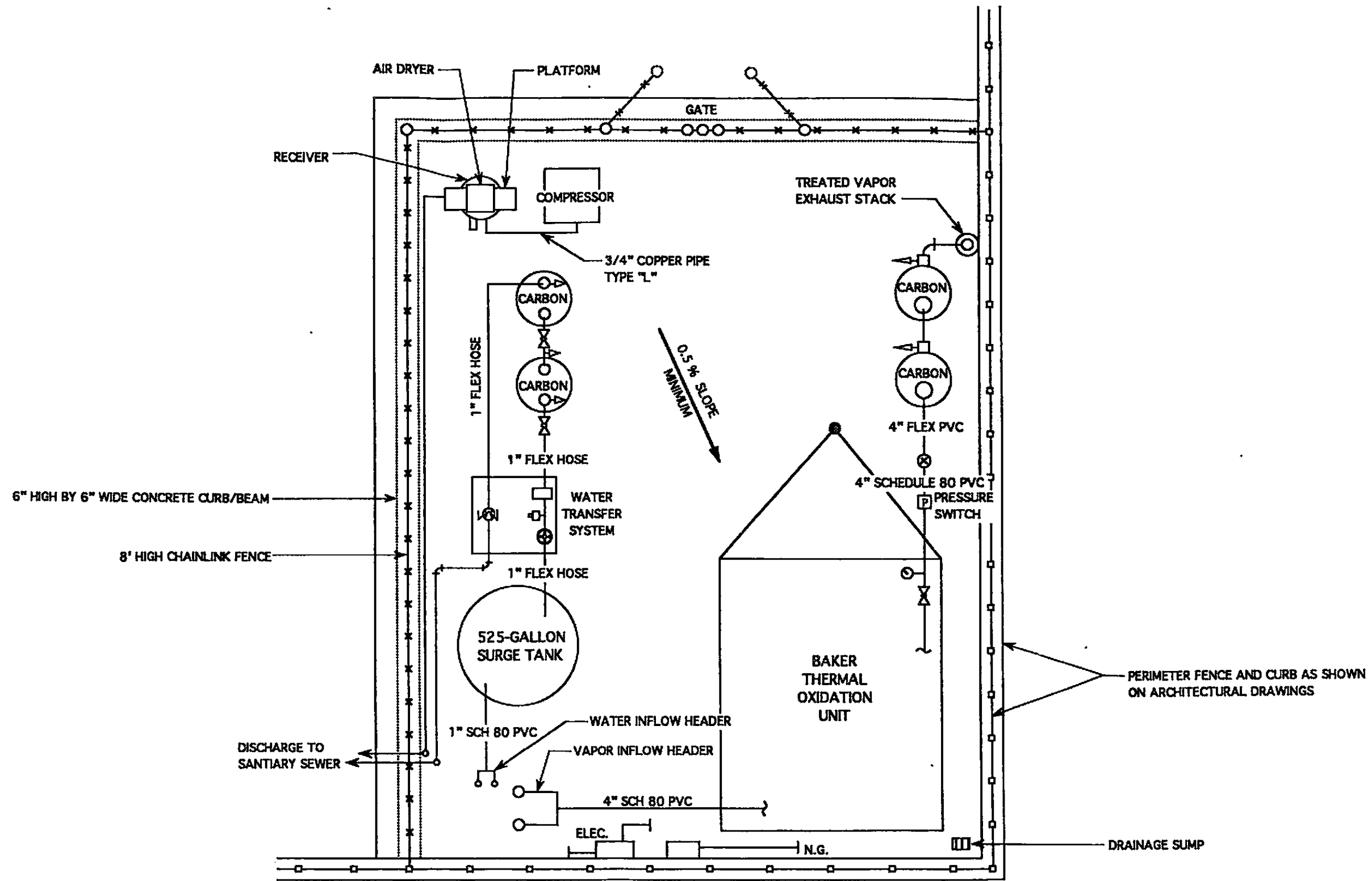
- 1. BACK PRESSURE SWITCH SHALL DEACTIVATE BLOWER AT SET POINT OF 4 PSI WHEN CARBON TRAIN IS ON LINE.
- 2. HHL SHALL DEACTIVATE BLOWER (ALARM CONDITION).
- 3. HL SHALL ACTIVATE WATER KNOCK-OUT PUMP.
- 4. LL SHALL DEACTIVATE WATER KNOCK-OUT PUMP.

WATER

- 1. HHL SHALL DEACTIVATE WATER KNOCK-OUT PUMP AND CLOSE/PURGE WELL DELIVERY AIR SUPPLY LINES (ALARM CONDITION).
- 2. HL SHALL ACTIVATE WATER TRANSFER SYSTEM.
- 3. LL TO DEACTIVATE WATER TRANSFER SYSTEM.

LEGEND

- | | | |
|---|---|------------------------------|
|  - CHECK VALVE |  - BACK PRESSURE GAUGE | LL - LOW LEVEL SENSOR |
|  - SAMPLE PORT |  - FLOW TOTALIZER | HL - HIGH LEVEL SENSOR |
|  - PRESSURE INDICATOR |  - FILTER | HHL - HIGH/HIGH LEVEL SENSOR |
|  - TRUE UNION BALL VALVE |  - FLOW METER | |



TREATMENT STAGING AREA - PLAN VIEW

LOVNEY ASSOCIATES
Environmental/Geotechnical/Engineering Services

**PROCESS INSTRUMENTATION DIAGRAMS
TREATMENT STAGING AREA-PLAN
PROPOSED EMERYVILLE POSTAL FACILITY
Emeryville, California**

Project No.

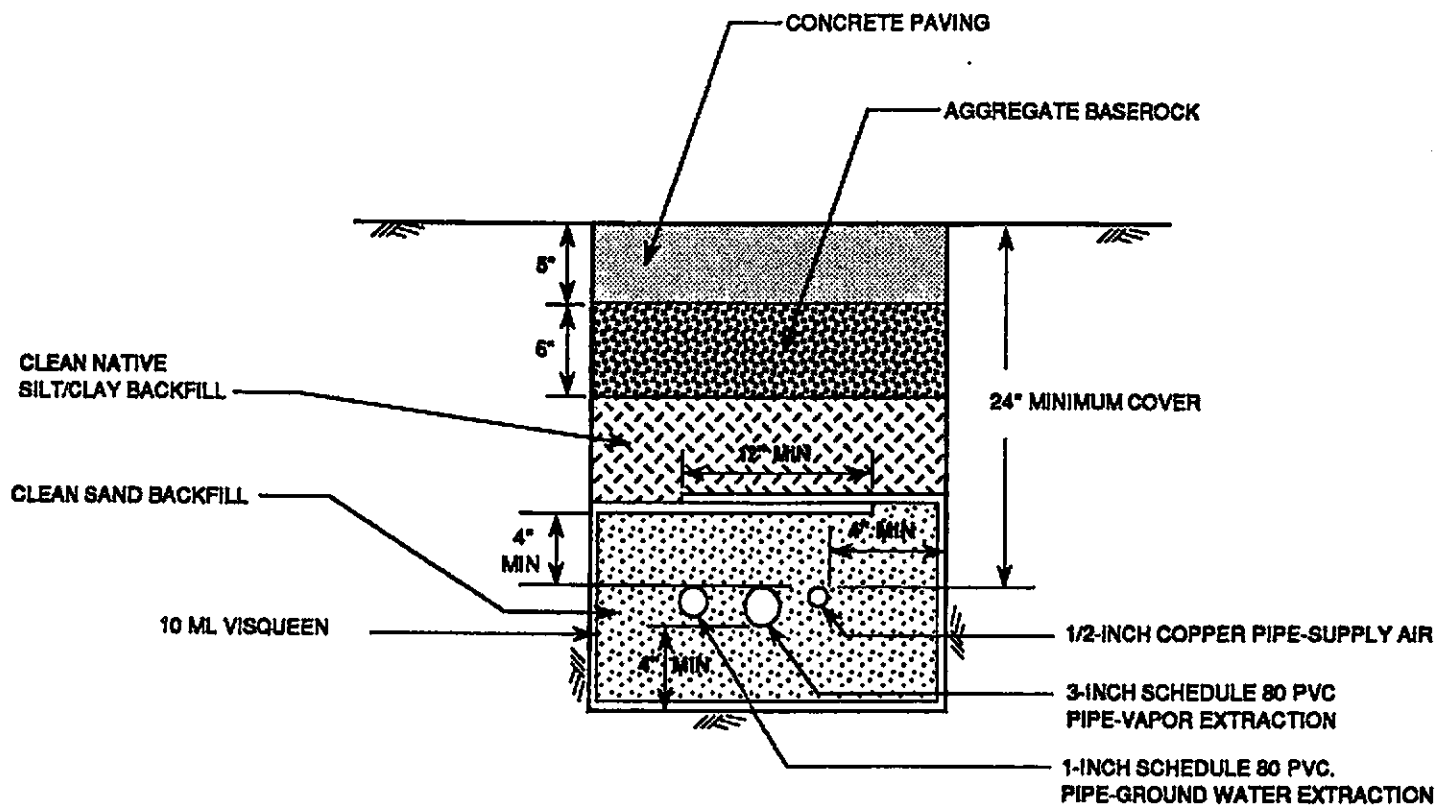
864-17A

Date

JULY 1993

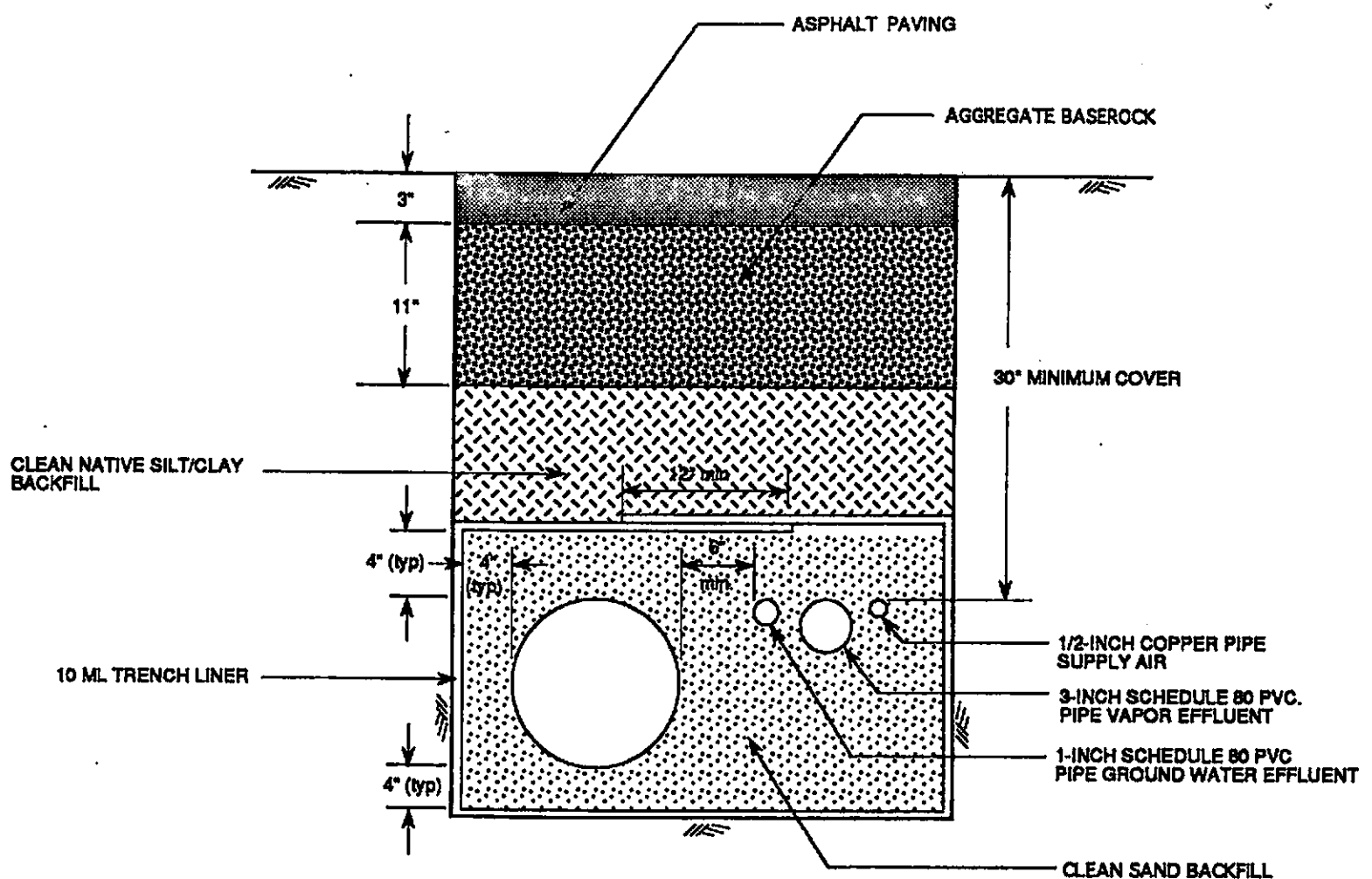
Sheet No.

ENV-3



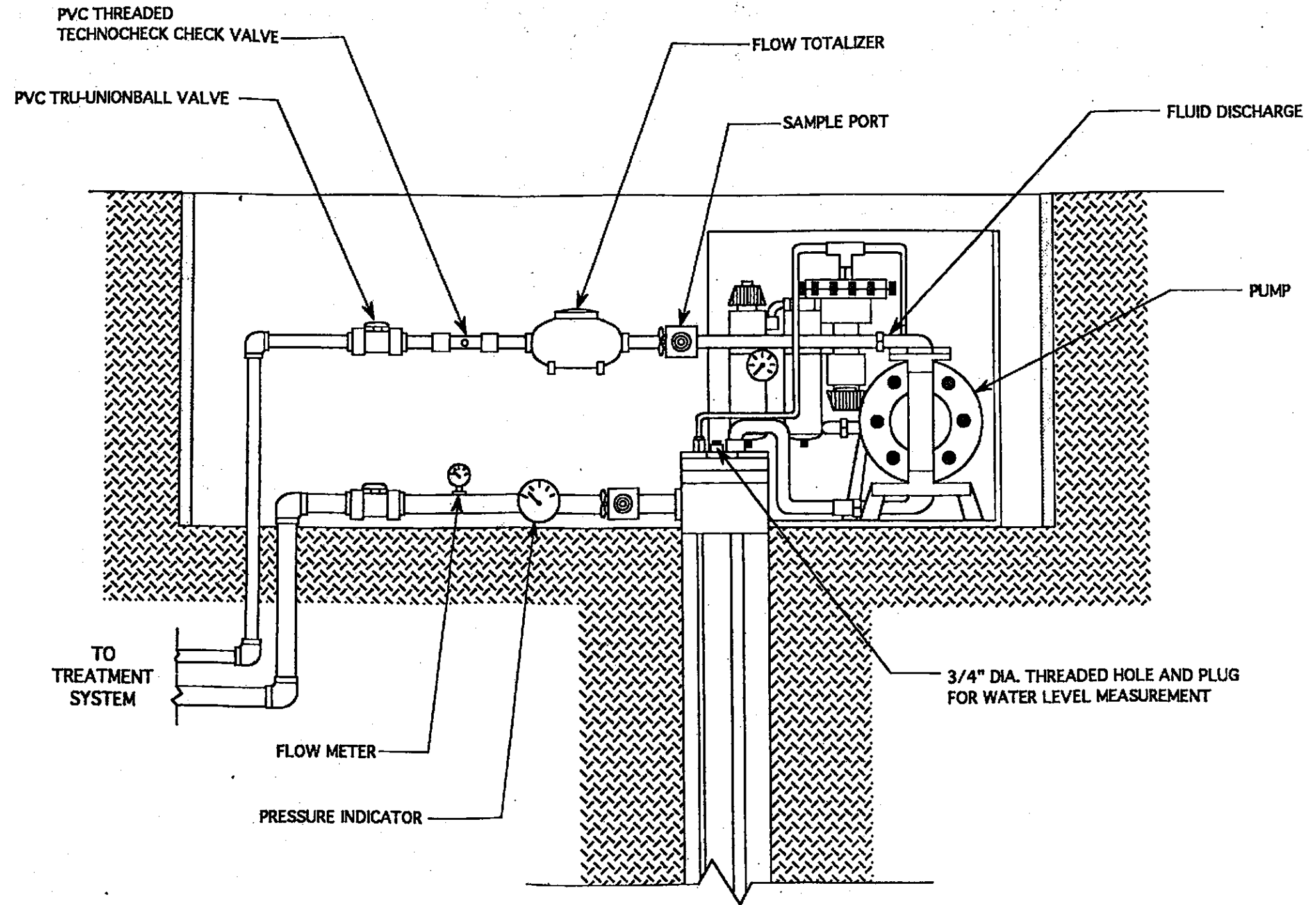
SECTION A - TYPICAL TRENCH DETAIL BELOW CONCRETE PAVING

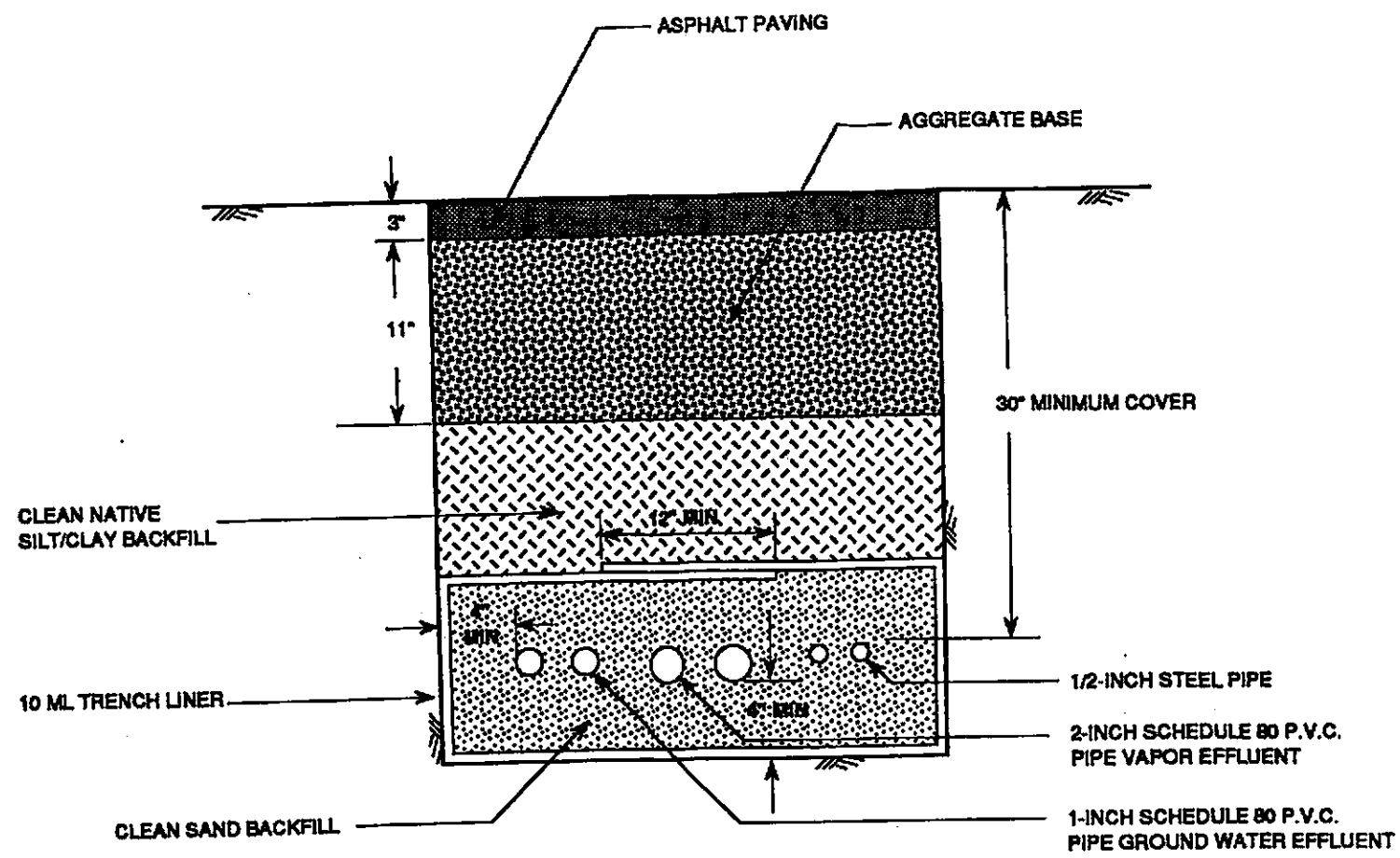
NOT TO SCALE



SECTION B - TRENCH DETAIL WITH STORM DRAIN

NOT TO SCALE



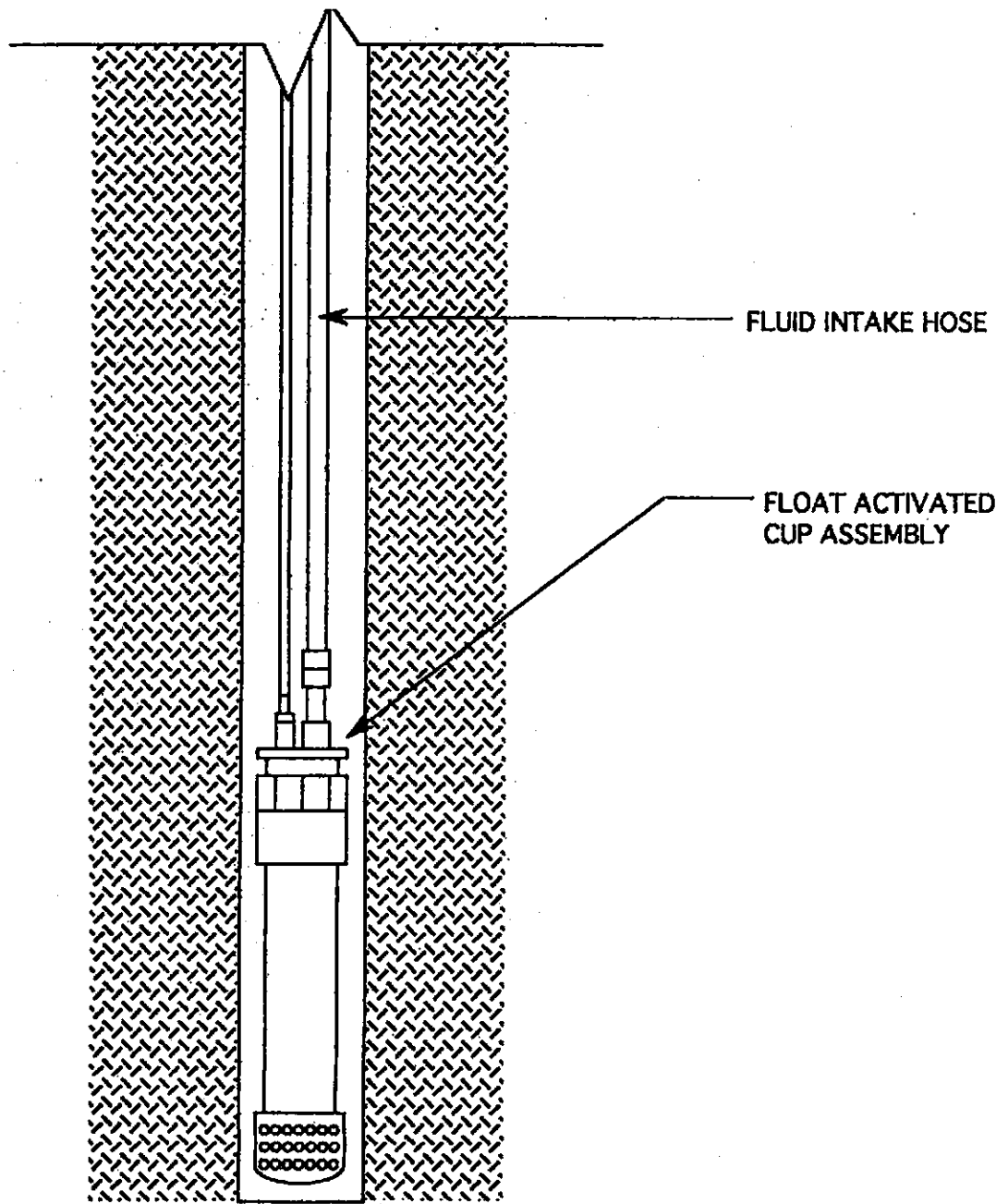


SECTION C - TRENCH DETAIL MAIN HEADER TRENCH

NOT TO SCALE

NOTES: ALL TRENCH BACKFILL MATERIALS SHALL BE COMPACTED TO AT LEAST 95 PERCENT RELATIVE COMPACTION

PAVEMENT SECTION DIMENSIONS SHOWN ARE APPROXIMATE AND NOT TO BE USED FOR CONSTRUCTION PURPOSES. SEE CIVIL DRAWINGS FOR PAVEMENT DETAILS



DETAIL - TYPICAL WELL HEAD

NOT TO SCALE

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**TRENCH CROSS-SECTIONS
TYPICAL WELL HEAD DETAIL**
PROPOSED EMERYVILLE POSTAL FACILITY
Emeryville, California

Project No.
864-17A

Date
JULY 1993

Sheet No.
ENV-4