
Petroleum Piping

6407

Oak

Replacement Telegraph Avenue land, California

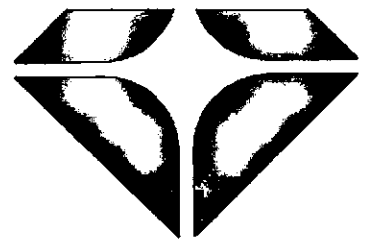
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Products Company

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Petroleum Piping Replacement Plan TL-1

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Ripuz only

ACCEPTED

DEPARTMENT OF ENVIRONMENTAL HEALTH

These plans have been reviewed and found to be acceptable and essentially meet the requirements of State and local health laws. Changes to your plans indicated by this Department are to assure compliance with State and local laws. The project prepared herein is now released for issuance of any required building permits for construction.

One copy of these accepted plans must be on the job and available to all contractors and craftsmen involved with the construction and installation.

Any change or alterations of these plans and specifications must be submitted to this Department and to the Fire and Building Inspection Department to determine if such changes meet the requirements of State and local laws. Notify this Department at least 48 hours prior to the following required inspections:

- Pressure Test *1st 2nd Piping*
- Pro-Covering of ~~Lead~~ Piping
- Final Inspection

Issuance of a permit to operate is dependent on compliance with accepted plans and all applicable laws and regulations.

THERE IS A FINANCIAL PENALTY FOR NOT OBTAINING THESE INSPECTIONS.

8/3/95
Bru P. [Signature]

RECEIVED
18 1995
[Signature]

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appr.

date

drawn by

DATE	REVISIONS

GENERAL CONDITIONS:

1. NO WORK SHALL COMMENCE BEFORE OR UNTIL G.C. HAS RETURNED A SIGNED CONSTRUCTION CONTRACT ISSUED BY ARCO AUTHORIZING SUCH WORK.
2. THE INSTRUCTIONS STATED WITHIN THIS SUPPLEMENTAL CONDITIONS SECTION SHALL SUPERSEDE ALL OTHER NOTES, DRAWINGS AND SPECIFICATIONS EXCEPT WHEN PROHIBITED BY LAW. IF THERE IS ANY DOUBT AS TO THE INTENT OF THESE INSTRUCTIONS OR IF THERE ARE ANY DISCREPANCIES IN THE PLANS AND/OR SPECIFICATIONS WHICH MAY AFFECT INITIAL BID CONSIDERATIONS, G.C. MUST CONTACT THE ARCO ENGINEER FOR CLARIFICATION.
3. THE GENERAL CONTRACTOR SHALL PROVIDE EACH SUBCONTRACTOR WITH A COMPLETE SET OF PLANS, THESE SUPPLEMENTAL CONDITIONS, THE "STANDARD SPECIFICATIONS FOR WOOD FRAME CONSTRUCTIONS", AND ANY ADDITIONAL DRAWINGS OR INFORMATION PROVIDED AS DOCUMENTATION FOR THIS PROJECT. INSTRUCTIONS FOR THE NECESSARY WORK ARE INCLUDED THROUGHOUT THE BID DRAWINGS. YOU, AS THE GENERAL CONTRACTOR, ARE RESPONSIBLE FOR INSURING A COMPLETE PROJECT. THE SPECIFICATIONS SENT WITH THIS BID PACKAGE SHALL BE THE ONLY SPECIFICATIONS USED. DO NOT SEND OUTDATED COPIES OF THE SPECIFICATIONS.
4. ALL INSTALLATIONS AND CONSTRUCTION ARE TO BE IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL REGULATIONS INCLUDING, BUT NOT LIMITED TO "OSHA FEDERAL REGULATIONS: LABOR 29: PART 1926".
5. THE GENERAL CONTRACTOR SHALL FURNISH ALL LABOR, MATERIALS AND EQUIPMENT NECESSARY TO COMPLETE THE WORK INDICATED BY THE DRAWINGS AND SPECIFICATIONS. ALL PHASES OF THE CONSTRUCTION NECESSARY FOR THE COMPLETION OF THIS PROJECT ARE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR, EXCEPT WHERE EXPLICITLY NOTED AS PROVIDED BY OWNER, OR OTHERS. AS A STRICT RULE, IF IT IS NOT NOTED AS "FURNISHED BY OWNER" OR "FURNISHED BY OTHERS", IT IS THE GENERAL CONTRACTOR'S RESPONSIBILITY TO FURNISH AND INSTALL THE MATERIALS AND/OR EQUIPMENT NECESSARY FOR A COMPLETE INSTALLATION.

THE GENERAL CONTRACTOR IS RESPONSIBLE FOR THE INSTALLATION OF ALL OWNER AND/OR DEALER FURNISHED EQUIPMENT AND ALL ITEMS NOTED AS "FURNISHED BY OTHERS" INSTALLED BY THE GENERAL CONTRACTOR.

6. G.C. WILL BE RESPONSIBLE FOR THE ITEMS NOTED IN THESE SUPPLEMENTAL CONDITIONS. THESE NOTATIONS ARE MADE HEREIN ONLY FOR THE PURPOSE OF CLARIFICATION AND ARE NOT INTENDED TO BE A COMPLETE SCOPE OF WORK, BUT IS TO BE USED WITH THE "GENERAL SCOPE OF WORK" OUTLINED IN THE PLANS AND ON THE SPECIFICATION DOCUMENTS REFERRED TO ABOVE.
7. G.C. IS EXPECTED TO INSPECT THE SITE FOR EXISTING CONDITIONS AND TO MAKE ALL NECESSARY PROVISIONS FOR ACCOMPLISHING THE WORK CALLED FOR. ALL DISCREPANCIES BETWEEN THE PLANS AND EXISTING CONDITIONS ARE TO BE ADDRESSED DURING THE BIDDING PHASE OR PRIOR TO THE START OF CONSTRUCTION. NO EXTRAS WILL BE CONSIDERED DUE TO FAILURE OF THE GENERAL CONTRACTOR TO INSPECT THE SITE PRIOR TO FURNISHING THEIR BID QUOTES OR PRIOR TO FINALIZING THE CONTRACT FOR CONSTRUCTION.
8. G.C. WILL BE EXPECTED TO SPECIFICALLY IDENTIFY ANY ITEMS SHOWN ON THE PLANS WHICH HE IS UNABLE TO INCLUDE IN HIS BID PRICE. OTHERWISE, IF IT IS ON THE BID SET OF PLANS, G.C. WILL BE HELD RESPONSIBLE FOR COMPLETING THE PROJECT WITHOUT ANY CHANGE ORDERS.

G.C. WILL UNDER NO CIRCUMSTANCES PERFORM "EXTRA"

FURNISHING
THE CONTRACT FOR CONSTRUCTION.

8. G.C. WILL BE EXPECTED TO SPECIFICALLY IDENTIFY ANY ITEMS SHOWN ON THE PLANS WHICH HE IS UNABLE TO INCLUDE IN HIS BID PRICE. OTHERWISE, IF IT IS ON THE BID SET OF PLANS, G.C. WILL BE HELD RESPONSIBLE FOR COMPLETING THE PROJECT WITHOUT ANY CHANGE ORDERS.
9. G.C. WILL UNDER NO CIRCUMSTANCES PERFORM "EXTRA" WORK WHICH WILL CONSTITUTE EXTRA CHARGES WITHOUT PRIOR APPROVAL FROM ARCO OR ARCO'S REPRESENTATIVE. G.C. WILL PROVIDE ARCO OR ARCO'S REPRESENTATIVE WITH SCOPE OF WORK AND COST ESTIMATE TO PROVIDE SUCH "EXTRA" WORK; ARCO OR ARCO'S REPRESENTATIVE WILL RESPOND EXPEDITIOUSLY SO AS NOT TO CAUSE UNDUE DELAYS IN THE PROJECT SCHEDULE. EXTRA CHARGES NOT APPROVED BEFOREHAND, IN WRITING, WILL NOT BE PAID.
10. GENERAL CONTRACTOR WILL BE RESPONSIBLE FOR COORDINATION OF ALL WORK ON THIS PROJECT. GENERAL CONTRACTOR WILL PROVIDE AN ON-SITE CONSTRUCTION SUPERVISOR RESPONSIBLE FOR OVERSEEING ALL OF THE WORK TO BE PERFORMED UNDER THIS CONTRACT FOR THE EXPRESS PURPOSE OF ENSURING THE TIMELY PERFORMANCE OF ALL SUBCONTRACTOR WORK AND UTILITY CONNECTIONS WITH THE ULTIMATE GOAL OF COMPLETING THE JOB IN THE MOST TIME AND COST EFFICIENT MANNER. ARCO'S CONTRACT WILL SPECIFY THE COMPLETION TIME OF THIS PROJECT AS 45 WORKING DAYS. THEREFORE, G.C. IS RESPONSIBLE FOR FURNISHING A CONSTRUCTION SCHEDULE (EITHER A BAR GRAPH OR CRITICAL PATH FLOW CHART) TO ARCO WITHIN 2 WEEKS OF THE BID AWARD WHICH ASSURES THAT THIS SCHEDULE CAN BE MET.
11. ARCO'S CONSTRUCTION SCHEDULE DEMANDS EXTREME ATTENTION TO DETAIL AND THE UTMOST COOPERATION FROM ALL CONTRACTORS. THEREFORE, G.C. MUST PROVIDE ABSOLUTE ASSURANCE OF HIS ABILITY TO SUCCESSFULLY COMPLETE THIS PROJECT WITHIN THE AGREED SCHEDULE REGARDLESS OF HOLIDAYS, INCLEMENT WEATHER, AND/OR UNCOOPERATIVE INSPECTORS.

GENERAL CONTRACTOR IS EXPECTED TO BE A KNOWLEDGEABLE, EXPERIENCED CONTRACTOR WITH PRIOR KNOWLEDGE OF SERVICE STATION/CONVENIENCE STORE CONSTRUCTION. ALL PHASES OF THIS CONSTRUCTION SHOULD BE INCLUDED IN YOUR BID, WHETHER LISTED IN THESE CONDITIONS OR NOT. THERE WILL BE NO EXTRAS PAID AT JOB'S COMPLETION UNLESS THERE IS A TOTALLY UNFORESEEN AND URGENT NEED WHICH MUST FIRST BE BROUGHT TO THE ATTENTION OF THE ARCO ENGINEER AND SUBMITTED FOR MANAGEMENT'S APPROVAL.

12. ARCO MAY REQUIRE THE G.C. TO FURNISH A PERFORMANCE BOND IN THE AMOUNT OF THE CONTRACT PER SECTION 0700, PARAGRAPH 6 OF THE STANDARD CONSTRUCTION CONTRACT CLAUSES. SUCH BOND WOULD BE AT ARCO'S EXPENSE AND SHOULD NOT BE INCLUDED IN G.C.'S BID.

CONTRACT

13. CONTRACTOR SHALL PROVIDE TEMPORARY FACILITIES FOR SEWERAGE AND TRASH CONTAINMENT AND SHALL ARRANGE AND PAY FOR TEMPORARY POWER, TELEPHONE, AND WATER DURING CONSTRUCTION. COSTS OF THE ABOVE SHALL BE INCORPORATED INTO THE CONTRACTOR'S BID. FAILURE TO PROVIDE THE NECESSARY FACILITIES AND UTILITIES WILL CAUSE A DELAY IN FINAL PAYMENT UNTIL ALL CHARGES ARE RECONCILED.
14. G.C. WILL SUBMIT A LIST TO THE ARCO ENGINEER AT THE BEGINNING OF THE JOB OF ALL SUBCONTRACTORS AND MAJOR SUPPLIERS (WHO SUPPLY AT LEAST \$2500 WORTH OF MATERIALS) TO BE USED ON THIS PROJECT. ANY CHANGES TO THIS LIST ONCE CONSTRUCTION HAS STARTED WILL ALSO BE SUBMITTED.
15. THE G.C. SHALL PROVIDE BOTH PHONE AND FAX MACHINES AT THE JOB SITE AND SHALL FAX ARCO ALL EQUIPMENT RECEIPTS AS SOON AS RECEIVED.
16. THE G.C. SHALL PROVIDE STORAGE UNIT FOR DEALER EQUIPMENT ON-SITE AND LABOR TO RELOCATE EQUIPMENT.
17. THE G.C. IS RESPONSIBLE FOR MAINTAINING A MINIMUM SIX-FOOT HIGH CHAIN LINK FENCE AROUND THE ENTIRE SITE TO PREVENT ACCESS BY ANY UNAUTHORIZED PERSONS.
18. G.C. IS TO STAFF THE JOB WITH A MINIMUM OF FOUR (4) PERSONS NOT INCLUDING SUBCONTRACTORS. WORK IS TO PROCEED ON A 6 DAY WEEK, 10 HOUR DAY SCHEDULE UNTIL THE JOB IS JUDGED COMPLETE BY THE ARCO ENGINEER. NO DEVIATIONS FROM THIS SCHEDULE WILL BE TOLERATED WITH THE EXCEPTION OF SEVERE WEATHER, NATIONAL HOLIDAYS, OR WHEN THIS SCHEDULE VIOLATES THE LAW. ANY DEVIATIONS WILL ONLY BE ACCEPTED WHEN THE ARCO ENGINEER IS NOTIFIED IN WRITING BY AND OF THE DAY OF THE CHANGE.

CONTRACTOR'S RESPONSIBILITY FOR RECORDING "AS-BUILT" CONSTRUCTION INFORMATION:

1. DRAWINGS ARE DIAGRAMMATIC IN NATURE AND ARE NOT INTENDED TO BE AN EXACT REPRESENTATION OF THE FINAL PRODUCT.
2. IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO RECORD ALL "AS-BUILT" INFORMATION INCLUDING, BUT NOT LIMITED TO, THE FOLLOWING:
 - A. ALL OFF-SITE STREET AND SIDEWALK IMPROVEMENTS INCLUDING UTILITIES PERFORMED AS A PART OF THIS CONTRACT.
 - B. ALL ON-SITE IMPROVEMENTS INCLUDING UTILITIES.
 - C. THE EXACT LOCATION OF TANKS.
 - D. THE EXACT LOCATIONS OF ALL PRODUCT VENT AND VAPOR LINES.

INSTALLATION OR RESETTING OF ON-SITE UTILITIES TO MATCH IN CASE CONFLICTS ARE ENCOUNTERED PRIOR TO REACHING THE PROPERTY.

4. G.C. IS RESPONSIBLE FOR PROVIDING TRAINING TO THE DEALER IN THE OPERATION OF ALL INSTALLED EQUIPMENT. ALL KEYS AND EQUIPMENT MANUAL WILL BE PRESENTED IN A NEAT, ORGANIZED MANNER TO FACILITY MANAGEMENT. ALL WARRANTY MATERIAL SHALL BE COMPLETED BY THE GENERAL CONTRACTOR WITH SPECIFIC ATTENTION TO THE BEGINNING AND ENDING PERIOD OF THAT WARRANTY AND THE NAME OF THE CONTRACTOR PROVIDING WARRANTY SERVICE FOR THAT PARTICULAR ITEM.

5. THE G.C. WILL COORDINATE AND/OR ARRANGE FOR ALL NECESSARY INSPECTIONS.

AT CONCLUSION OF ALL WORK, G.C. MUST PROVIDE A COPY OF ALL INSPECTION DOCUMENTS AS SIGNED OFF BY THE VARIOUS INSPECTORS SIGNIFYING APPROVAL OF ALL CONSTRUCTION. G.C. MUST FURTHER PROVIDE A COPY OF THE DOCUMENT GRANTING EITHER TEMPORARY OR PERMANENT OCCUPANCY. G.C. WILL ALSO PROVIDE A COPY OF THE TANK MANUFACTURER'S INSTALLATION CHECKLIST CERTIFYING BY SIGNATURE AND DATE THAT ALL INSTALLATION PROCEDURES WERE FOLLOWED AND CHECKED. REFER TO THE PROJECT COMPLETION SECTION FOR OTHER REQUIREMENTS.

6. AN ARCO REPRESENTATIVE MUST BE AT THE SITE FOR THE FOLLOWING ACTIVITIES:

- A. DELIVERY, TESTING, AND INSTALLATION OF THE UNDERGROUND STORAGE TANKS
- B. TESTING OF PIPING, BOTH PRIMARY AND SECONDARY.
- C. FINAL INSPECTIONS BY ALL AGENCIES HAVING JURISDICTION OVER THIS PROJECT.
- D. PROJECT COMPLETION/WALK-THROUGH.

THE G.C. MUST GIVE 48 HOUR ADVANCE NOTICE.

7. PERMITS

IT IS THE GENERAL CONTRACTOR'S RESPONSIBILITY TO COORDINATE WITH ARCO AND THEIR REPRESENTATIVES TO GUARANTEE THAT ALL PERMITS ARE OBTAINED PRIOR TO COMMENCING ANY CONSTRUCTION ON THIS PROJECT.

ARCO HAS ARRANGED FOR PERMITS WHICH REQUIRE PLAN CHECKING BY GOVERNMENT AGENCIES. A SEPARATE PERMIT COORDINATOR HAS BEEN HIRED TO ARRANGE FOR THESE PLAN-CHECKING ACTIVITIES AND NECESSARY APPROVALS. THE GENERAL CONTRACTOR SHALL PICK UP ANY PERMITS NOT PREVIOUSLY OBTAINED BY ARCO OR ITS PERMIT COORDINATOR. ANY OUTSTANDING FEES SHALL BE PAID BY THE GENERAL CONTRACTOR AND REIMBURSED BY ARCO (I.E., DO NOT INCLUDE A PERMIT ALLOWANCE IN YOUR BID).

- E. THE EXACT LOCATIONS OF ALL WATER, SEWER, IRRIGATION, STORM DRAIN, ELECTRICAL CONDUITS, TELEPHONE LINES, LOW VOLTAGE LINES, AND ANY OTHER PIPING, CONDUITS, OR UTILITIES THAT ARE INSTALLED, INCLUDE SIZE AND MATERIAL TYPE.
 - F. ALL BUILDING, CANOPY, SIGN, REFUSE ENCLOSURE AND LIGHTING INCLUDING MODIFICATIONS, IF ANY, INCLUDING SIZES, HEIGHTS, AND TYPES.
 - G. LANDSCAPE PLANTER CONFIGURATIONS.
3. THE "AS-BUILT" INFORMATION SHALL BE LEGIBLY WRITTEN AND ACCURATELY DRAWN ON THE "JOB" BLUELINE SET. AFTER ALL "AS-BUILT" INFORMATION IS RECORDED, BARGHAUSEN CONSULTING ENGINEERS WILL UPDATE THE ORIGINAL DRAWINGS TO "AS-BUILT" DRAWINGS. THE AS-BUILTS MUST INCLUDE ANY CHANGE ORDERS OR CLARIFICATIONS ISSUED THROUGHOUT THE CONSTRUCTION PHASE, AND SHALL BE COMPLETED WITHIN 30 DAYS FOLLOWING FINAL ACCEPTANCE WITHOUT EXCEPTION.
 4. FAILURE TO PROVIDE THE NECESSARY AS-BUILT INFORMATION WILL RESULT IN A DELAY OF THE FINAL PAYMENT TO THE CONTRACTOR.

CONTRACTOR'S RESPONSIBILITY FOR COORDINATION WITH JURISDICTIONAL AGENCIES, UTILITY COMPANIES, ARCO, AND ITS REPRESENTATIVES:

1. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR COORDINATING THE DELIVERY OF ALL EQUIPMENT. THIS INCLUDES BUT IS NOT LIMITED TO THE LIST OF ITEMS FURNISHED BY THE OWNER AND DEALER. THE PROJECT WILL NOT BE ACCEPTED UNTIL THESE ITEMS HAVE BEEN DELIVERED.
2. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR CONTACTING THE APPROPRIATE UTILITY TO DETERMINE EXACT CONSTRUCTION/INSTALLATION REQUIREMENTS AND SPECIFICATIONS FOR THE ELECTRICAL, SEWER, STORM WATER AND TELEPHONE LINES. A MINIMUM AMOUNT SHOULD BE INCLUDED IN THE BID TO COVER BASIC STANDARD INSTALLATION REQUIREMENTS. NO EXTRAS WILL BE PAID FOR THIS WORK. SOME KNOWN REQUIREMENTS HAVE BEEN INCORPORATED INTO THE PLANS. IT IS THE GENERAL CONTRACTOR'S RESPONSIBILITY FOR VERIFYING THE INFORMATION PROVIDED AS WELL AS DETERMINING ADDITIONAL REQUIREMENTS PRIOR TO INSTALLATION.
3. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR COORDINATING ANY CHANGES IN EXISTING UTILITIES REQUIRED BY THIS PROJECT. VERIFICATION OF ALL UNDERGROUND UTILITIES SHALL BE OBTAINED BY THE GENERAL CONTRACTOR PRIOR TO EXCAVATING. PLEASE NOTE THAT POT-HOLING FOR VERIFICATION OF UTILITY LINE DEPTH FOR OFF-SITE UTILITIES IS REQUIRED PRIOR TO INSTALLATION OF UTILITY CROSSINGS AND PLACEMENT OF DRAINAGE STRUCTURES ON-SITE. NO REQUEST FOR EXTRAS WILL BE CONSIDERED IF CONFLICTS BETWEEN UTILITIES CONSTRUCTED ON-SITE AND EXISTING OFF-SITE OCCUR. IT IS HIGHLY RECOMMENDED THAT THE OFF-SITE UTILITIES BE EXTENDED TO THE PROPERTY BEFORE THE ON-SITE SYSTEMS ARE INSTALLED TO AVOID RE-

BID).

OTHER PERMITS REQUIRED OF THE GENERAL CONTRACTOR OR HIS SUB-CONTRACTORS INCLUDING BUT NOT LIMITED TO:

- ENCROACHMENT PERMITS
- PLUMBING, MECHANICAL AND ELECTRICAL PERMITS (IF SEPARATE FROM BUILDING PERMIT)
- UTILITY CONNECTION PERMITS
- SIGN INSTALLATION PERMITS

ANY OTHER PERMITS WHICH REQUIRE A CONTRACTOR'S LICENSE, BUSINESS LICENSE, INSURANCE AND WORKMAN'S COMPENSATION CERTIFICATE AND CAN BE OBTAINED OVER THE COUNTER WITHOUT PLAN CHECKING ARE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR. LICENSING FEES SHALL BE PAID FOR BY THE CONTRACTOR.

8. THE GENERAL CONTRACTOR SHALL COORDINATE AND PERFORM ALL TESTS AND INSPECTIONS REQUIRED TO OBTAIN THE OPERATING PERMITS FROM BOTH THE ENVIRONMENTAL HEALTH DEPARTMENT AND THE AIR QUALITY MANAGEMENT DISTRICT WITH THE EXCEPTION OF THE PRECISION TEST WHICH SHALL BE PERFORMED BY ARCO OR ARCO'S OWN CONTRACTOR. THE OWNER OR OPERATOR OF THE FACILITY WILL PROVIDE THE NECESSARY HAZARDOUS MATERIALS MANAGEMENT PLAN TO THE ENVIRONMENTAL HEALTH DEPARTMENT. THE GENERAL CONTRACTOR SHALL GUARANTEE THAT ALL OPERATING PERMITS ARE IN-PLACE PRIOR TO COMPLETION OF THIS PROJECT.
9. SOIL TESTING TO GUARANTEE COMPLIANCE WITH PLANS AND SPECIFICATIONS SHALL BE PROVIDED BY ARCO FOR INITIAL COMPACTION TESTING. FAILING TEST AND RETESTING RESULTING THEREFROM SHALL BE PAID FOR BY THE GENERAL CONTRACTOR.

PROJECT COMPLETION:

1. AT THE COMPLETION WALK-THRU INSPECTION, THE GENERAL CONTRACTOR MUST PROVIDE THE FOLLOWING ITEMS TO CONSIDER THE PROJECT COMPLETE.
 - A. INSPECTION CARDS SHOWING SIGNATURES FOR ALL FINAL INSPECTIONS.
 - B. CERTIFICATE OF OCCUPANCY (TEMPORARY OF PERMANENT).
 - C. WRITTEN APPROVAL TO OPERATE THE STORE AND GASOLINE DISPENSING SYSTEMS FROM THE HEALTH DEPARTMENT.
 - D. PERMITS TO OPERATE FROM THE AIR POLLUTION CONTROL DISTRICT.
 - E. PROVIDE ALL OPERATING MANUALS, WARRANTY INFORMATION, KEYS AND OTHER PERTINENT INFORMATION IN A NEAT AND ORGANIZED FASHION.

IN ADDITION, THE PUNCH LIST MAY NOT CONTAIN MORE THAN FIVE (5) SUBSTANTIAL ITEMS. NONE OF WHICH MAY PREVENT THE FULL OPERATION OF THE STORE.

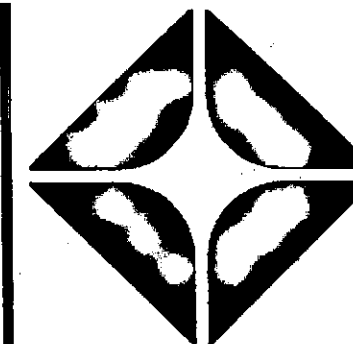
2. THE GENERAL CONTRACTOR SHALL CLEAN THE INTERIOR AND EXTERIOR OF THE STORE ACCORDING TO THE STANDARD

SPECIFICATIONS, UPON COMPLETION OF PROJECT.

3. THE GENERAL CONTRACTOR SHALL PROVIDE AS-BUILT DRAWINGS AND DOCUMENTS AS OUTLINED IN THE "CONTRACTOR'S RESPONSIBILITY FOR PROVIDING AS-BUILT INFORMATION" ABOVE.

BUILDING CONSTRUCTION, ON AND OFF-SITE IMPROVEMENTS:

1. THE GENERAL CONTRACTOR SHALL ESTABLISH THE CORRECT PROPERTY LINES BASED ON PROPERTY CORNER MONUMENTS TO BE SET PRIOR TO CONSTRUCTION, BENCHMARKS, ETC. ALL SITE STRUCTURES (INCLUDING THE BUILDING, CANOPY, TANKS, AND OTHER SITE IMPROVEMENTS) SHALL BE LOCATED USING THESE ESTABLISHED POINTS. THE GENERAL CONTRACTOR SHALL LAY OUT ALL STRUCTURES WHETHER OR NOT HE IS DOING THE INSTALLATION. ALL GRADING STAKES SHALL BE CHECKED AGAINST ESTABLISHED REFERENCE POINTS BEFORE ANY GRADING OR FORMING TAKES PLACE. ANY PROPERTY CORNER DISTURBED OR DESTROYED SHALL BE RESET BY A REGISTERED CIVIL ENGINEER OR LAND SURVEYOR UPON COMPLETION OF THE PROJECT AT THE GENERAL CONTRACTOR'S OWN COST AND EXPENSE.
2. THE GENERAL CONTRACTOR IS RESPONSIBLE AND SHALL PROVIDE ALL ELECTRICAL WORK. ALL WIRING SHALL BE IN CONTINUOUS RUNS WITH NO SPLICES. ALL ELECTRICAL CONDUIT FOR SITE, FUEL ISLANDS, AND CANOPIES SHALL BE AS SPECIFIED IN THE ELECTRICAL DRAWINGS AND SPECIFICATIONS. SPECIFICALLY, ALL UNDERGROUND CONDUIT FROM THE DISPENSERS AND THE TANK FIELD TO THE ELECTRICAL PANELS WILL BE 3/4" OR LARGER HEAVY RIGID METAL. THE G.C. MUST BALANCE ELECTRICAL PANEL LOADS AND LABEL BREAKERS AT THE COMPLETION OF THIS PROJECT.
3. ALL ELECTRICAL RECEPTACLES AND SWITCHES SHALL BE WHITE. ALL COVER PLATES SHALL BE UNBREAKABLE WHITE. IVORY COLORED RECEPTACLES, SWITCHES, AND COVER PLATES WILL NOT BE ACCEPTED.
4. TANK SLAB AND DRIVE SLAB AREAS SHALL BE CONSTRUCTED AS SPECIFIED ON THE PLANS. CONCRETE SURFACES INCLUDING ALL PUMP ISLANDS, DRIVE SLABS AT PUMP ISLANDS, FILL SLABS OVER TANKS, CURBS WITHIN THE YARD ARE TO BE COLORED AND SEALED PER ARCO SPECS IN SECTION 3350 OF THE AM/PM SPECIFICATIONS. FAILURE TO DO SO WILL RESULT IN G.C.'S HAVING TO REMOVE AND REPLACE IMPROPERLY COLORED CONCRETE.
5. ALL OFF-SITE WORK INDICATED ON THESE PLANS SHALL BE PROVIDED BY THE GENERAL CONTRACTOR. COORDINATE THE INSTALLATION OF METERS AND MISCELLANEOUS EQUIPMENT FURNISHED BY THE CITY. THE BID QUOTE PROVIDED FOR
6. FLASH REPORTS MAY BE ISSUED BY ARCO OCCASIONALLY. THESE REPORTS GENERALLY CLARIFY CONFLICTS OR ALTER THE PROJECT SPECIFICATION. THE GENERAL CONTRACTOR



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6. FLASH REPORTS MAY BE ISSUED BY ARCO OCCASIONALLY. THESE REPORTS GENERALLY CLARIFY CONFLICTS OR ALTER THE PROJECT SPECIFICATION. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR MAKING THESE CHANGES IF THE AFFECTED WORK HAS NOT BEEN COMPLETED. ADDITIONAL COSTS DUE TO THESE CHANGES MUST BE PRESENTED PRIOR TO DOING THE WORK.

7. SEAL COAT PAVEMENT SEALER - CONTRACTOR SHALL PROVIDE A SEAL COAT OF ASPHALT EMULSION AS SPECIFIED IN THE SPECIFICATIONS FOR "WOOD FRAME CONSTRUCTION", SECTION 2400, PARAGRAPH 8.

SEAL COAT SHALL BE APPLIED 30 DAYS AFTER PROJECT COMPLETION. PROVIDE TEMPORARY PAVEMENT STRIPING PRIOR TO FINAL INSPECTION TO INSURE THAT FINAL OCCUPANCY CAN BE OBTAINED. RESTRIPE THE LOT WITH PERMANENT PAINT, AS SPECIFIED IN SECTION 9903 OF THE SPECIFICATIONS FOR WOOD FRAME CONSTRUCTION, AFTER THE SEAL COAT HAS BEEN APPLIED.

TANK AND LINE INSTALLATION:

1. REFER TO SOILS REPORT FOR RECOMMENDATIONS WITH RESPECT TO THIS TANK INSTALLATION. THIS IS A DRY HOLE INSTALLATION.
2. THE G.C. SHALL INSTALL (4) 10,000 GALLON, DOUBLE WALL, FIBERGLASS (XERXES) TANKS.

G.C. WILL FOLLOW ARCO'S AND THE TANK MANUFACTURER'S INSTALLATION AND BACKFILLING INSTRUCTIONS INCLUDING, THE USE OF FILTER FABRIC TO LINE THE BOTTOM AND SIDES OF THE TANK HOLE. SHOULD ADVERSE, UNFORESEEN SOIL CONDITIONS BE ENCOUNTERED ONCE CONSTRUCTION HAS BEGUN, G.C. WILL IMMEDIATELY CONTACT ARCO'S FIELD ENGINEER FOR FURTHER DIRECTION BEFORE PROCEEDING.

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Underground Tank and Piping Replacement

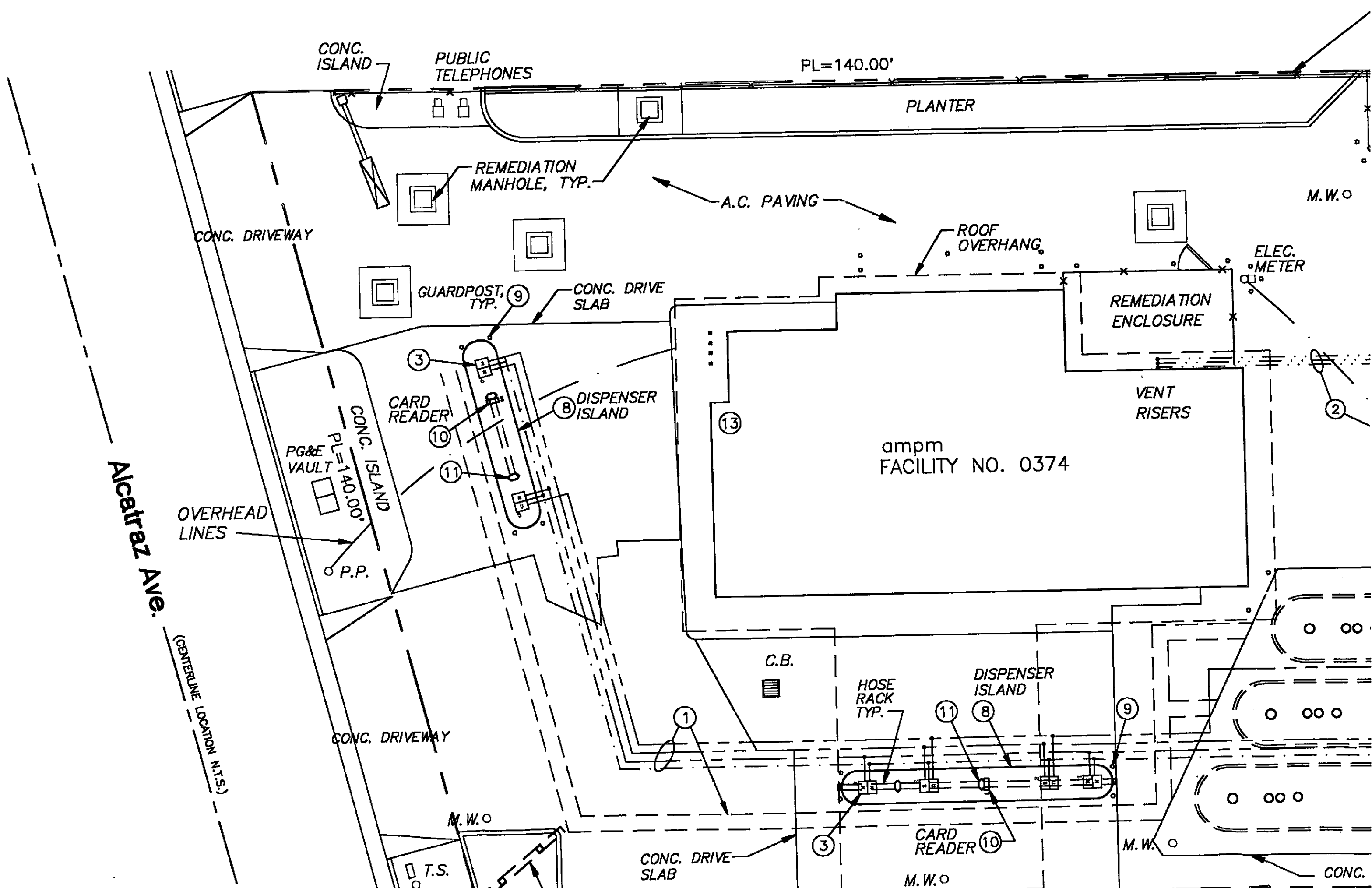
General Conditions

appr.

DATE	REVISIONS

date 05/19/95 drawn by 2D.F.

project / facility



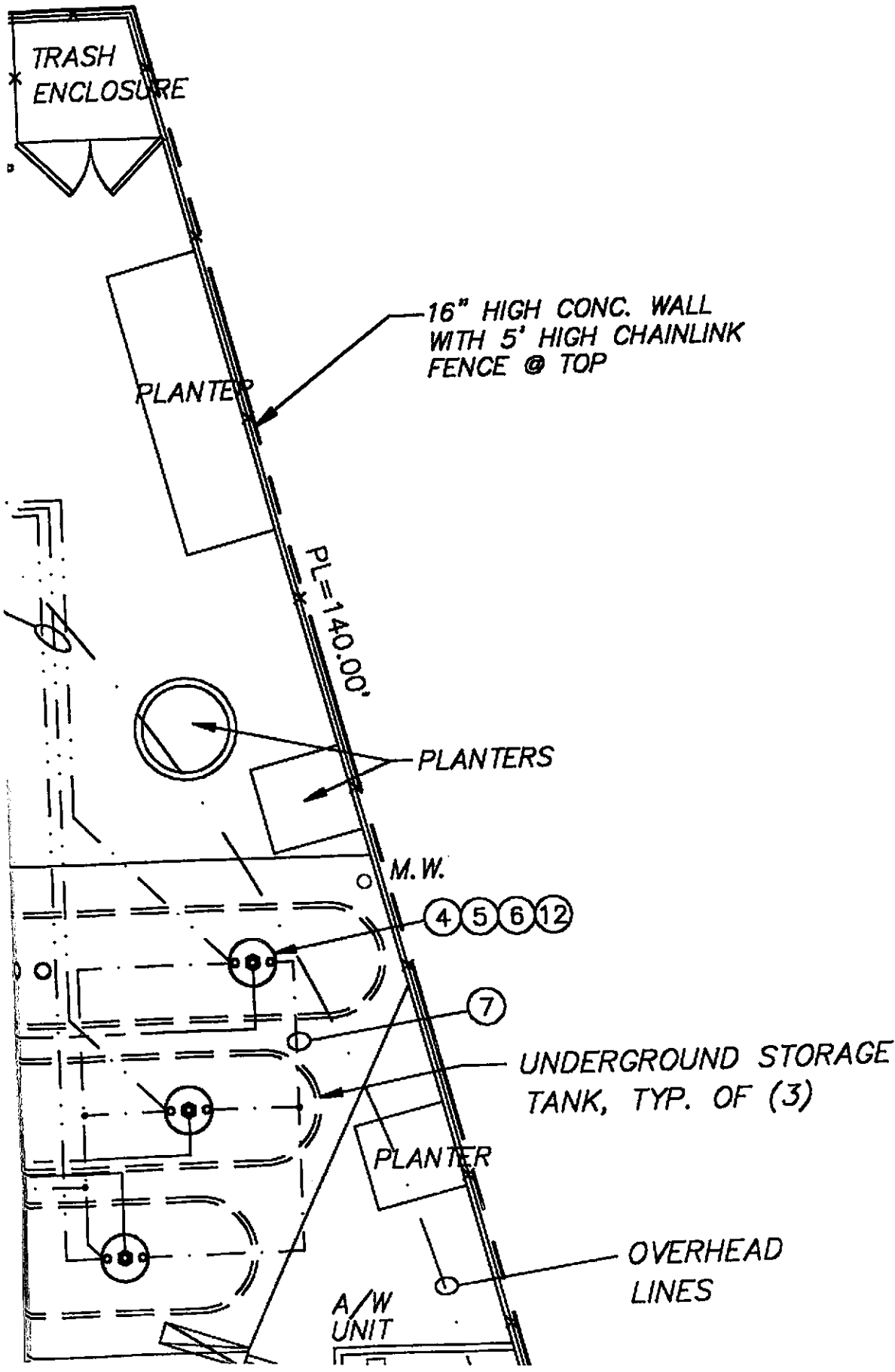
Piping Notes

- ✓ A. ALL IMPROVEMENTS ARE EXISTING AND TO REMAIN UNLESS OTHERWISE NOTED.
- ✓ B. (3) EXISTING DOUBLE WALL FIBERGLASS TANKS SHALL REMAIN. TANK BURIAL DEPTH IS TO BE FIELD-DETERMINED.
- C. UPGRADE TANK FIELD PIPING & EQUIPMENT PER ARCO TANK DRAWINGS DATED MAR. 1, 1994. (SECTIONS RELEVANT TO A LINE REPLACEMENT)
- D. ALL WORK SHALL BE DONE PER ARCO TANK DRAWINGS DATED MAR. 1, 1994 AND SECTIONS 13800 OF "CONSTRUCTION SPECIFICATIONS, WOOD FRAME CONSTRUCTION" DATED MAY 1991. (SECTIONS RELEVANT TO A LINE REPLACEMENT)
- ✓ E. CONTRACTOR IS TO PROVIDE A PUMP & FILTER SYSTEM TO DEWATER THE TANK EXCAVATION IF REQUIRED. DISCHARGE WILL BE DIRECTED BY ARCO ENVIRONMENTAL.
- F. TANK AND LINE TESTING AND AIR QUALITY TESTING WILL BE DONE BY ARCO. THE CONTRACTOR SHALL HAVE A REPRESENTATIVE PRESENT DURING TESTING.
- G. A.C. PAVEMENT SHALL BE SEAL COATED AND STRIPED. (TO MATCH EXISTING)
- H. ALL YARD STORM DRAINS & LINES SHALL BE CLEANED OUT.
- I. ALL METAL YARD COVERS (INCLUDING TANK FIELD) SHALL BE PAINTED BLACK (EXCEPT FILL COVERS).
- J. BUILDING, CANOPY AND SIGNAGE SHALL BE PRESSURE WASHED.
- K. SITE SHALL BE FENCED OFF WITH 6' HIGH CHAIN LINK FENCING DURING CONSTRUCTION.
- L. EXISTING ELECTRICAL CONDUITS ARE TO BE UTILIZED. REPLACE/ALTER ELECTRICAL AND RONAN CONDUIT AS NECESSARY.
- M. CAP ASPHALT AREA TRENCHES WITH 3" CONCRETE PRIOR TO LAYING ASPHALT.
- N. TOUCH-UP PAINTING IS TO BE COMPLETED BY CONTRACTOR AS REQ'D.
- O. CONTRACTOR IS TO REPLACE ALL DISPENSER FILTERS AFTER JOB COMPLETION.

Plan Notes

- ① REMOVE & DISPOSE OF ALL EXISTING SECONDARY CONTAINMENT, PRODUCT AND VAPOR RECOVERY PIPING EXISTING DISPENSERS TO EXISTING PRODUCT TANKS.

16" HIGH CONC. WALL
WITH 5' HIGH WOOD
FENCE @ TOP

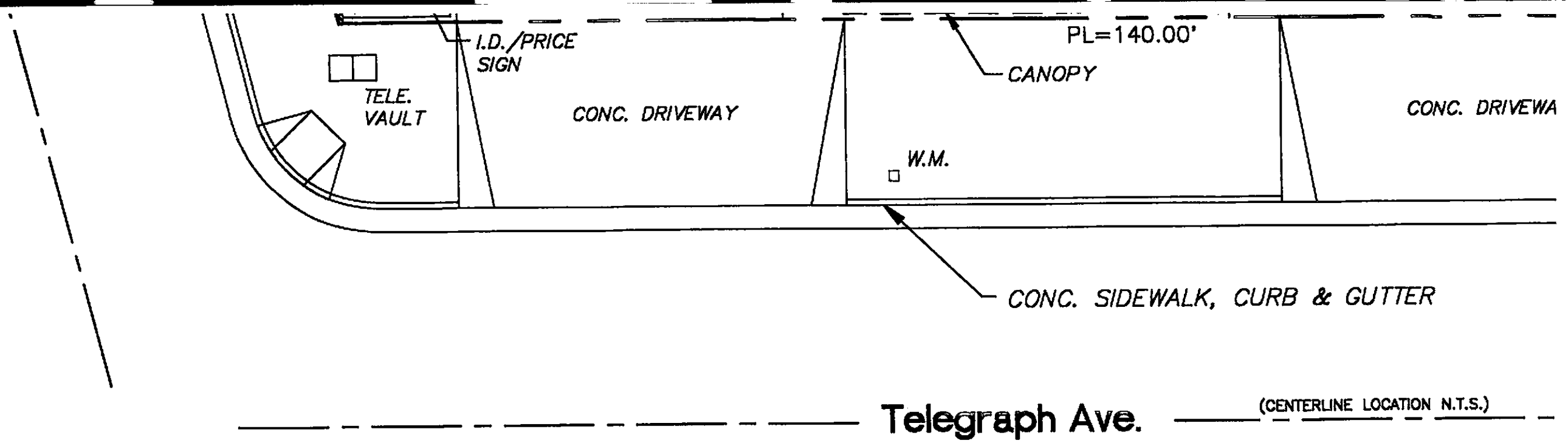


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Retail Marketing - Design & Engineering
1055 West Seventh St.

P.O. Box 2570, Los Angeles, CA 90051-0570



SITE PLAN

SCALE: 1" = 10'-0"

CONC. Δ
ISLAND

ST. LT.
& P.P.

FROM EXISTING DISPENSERS TO EXISTING PRODUCT TANKS.
INSTALL NEW PIPING.

- ② REMOVE AND REPLACE EXISTING SINGLE WALL VENT PIPING FROM EXISTING PRODUCT TANKS TO EXISTING VENT RISERS.
- ③ INSTALL NEW DISPENSER CONTAINMENT BOXES (TYP. OF 8). EXISTING DISPENSER CONFIGURATION IS TO BE MAINTAINED. DISPENSER CLEARANCES ARE TO BE 3'-5".
- ④ REMOVE AND REPLACE EXISTING CONTAINMENT SUMPS AND MANHOLES AT PRODUCT TANKS (TYP. OF 3 OR AS REQ'D.).
- ⑤ ALL SUMP PENETRATION FITTINGS SHALL BE INSTALLED FROM INSIDE THE SUMPS.
- ⑥ THE APPROPRIATE SUMP COLLAR WILL BE DETERMINED ONCE TANKS ARE UNCOVERED. ARCO WILL SUPPLY THE COLLARS AND ARRANGE FOR THEIR INSTALLATION. THE SUMPS WILL BE SUPPLIED BY ARCO AND INSTALLED BY THE CONTRACTOR.
- ⑦ INSTALL NEW INACTIVE SIPHON PIPING.
- ⑧ REMOVE AND REPLACE ALL EXISTING ISLANDS, DRIVE SLAB, TANK SLAB. MAINTAIN EXISTING WIDTH OF WALK - THRU BETWEEN COLUMNS ON ALL ISLANDS.
- ⑨ CONTRACTOR SHALL RESET GUARDPOSTS AT ALL ENDS OF ISLAND PER DETAIL 1 THIS SHEET. REPLACE BENT POSTS. BUMPER POST SIGNAGE IS TO BE RE-INSTALLED.
- ⑩ CONTRACTOR SHALL LOWER CARDREADERS TO 5' ABOVE DRIVE SLAB TO CENTERLINE OF VIEW SCREEN.
- ⑪ REPLACE DOWNSPOUTS AS REQ'D. THRU CURB FACE WHEN CONSTRUCTING NEW ISLANDS.
- ⑫ A RONAN X76S SYSTEM EXISTS AND IS TO BE UTILIZED, CONTRACTOR SHALL REPLACE ALL MONITORING PROBES WITH ARCO SUPPLIED PROBES.
- ⑬ INSTALL PANEL "D" SUBPANEL. RELOCATE ALL CIRCUITS SERVING ELECTRONIC AND RONAN EQUIPMENT TO THIS SUBPANEL.

Piping Legend

- PRODUCT PIPING
- VAPOR RECOVERY PIPING
- VENT PIPING

Ⓝ PLAN NOTES ITEM #



DATE	REVISIONS

PRELIMINARY

Petroleum Piping Replacement
 6407 Telegraph Avenue • Alcatraz Avenue
 Oakland, California

amprn
Site Plan

appr.

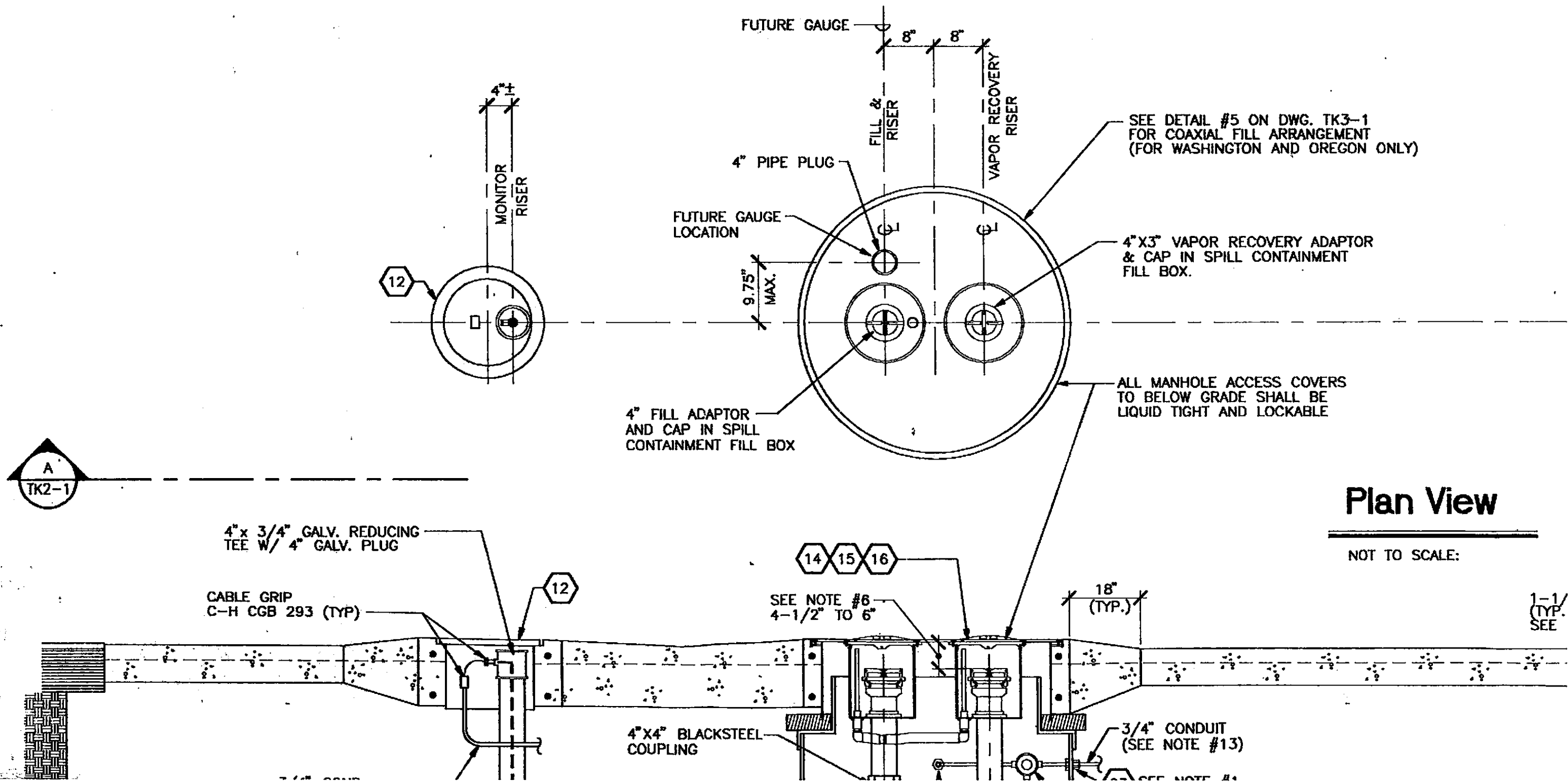
date 06/09/95 drawn by 2D.F.

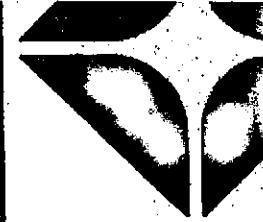
project / facility
0374

sheet / file

1. - SUMP PIPING PENETRATIONS SHALL BE MADE USING CAST FIBERGLASS BULK HEAD FITTINGS ("AMERON", "O.C.-FIBERGLASS"). ELECTRICAL PENETRATIONS SHALL BE MADE WITH APPROPRIATE AIR TIGHT COMPRESSION FITTINGS WITH SEAL-OFFS. (I.E. CNI, AMERICAN LINING).
2. - THE HEIGHT OF PENETRATIONS INTO SUMP FOR SIPHON PIPING VARY BETWEEN TANKS FOR ILLUSTRATIVE PURPOSES THE END TANK HAS BEEN SHOWN IN THIS VIEW. SEE DETAILS #8 & #9 ON DWG. TK3-2 FOR MIDDLE TANK SIPHON PIPING DETAILS.
3. - TANK(S) SHALL BE UNDERWRITERS LABORATORY APPROVED AS CALLED FOR ON THE SITE SPECIFIC DRAWING OR AS DESIGNATED ON THE SUPPLEMENTAL CONDITIONS AND SHALL BE DOUBLE WALL TANKS EITHER OF FIBERGLASS REINFORCED PLASTIC (FRP) AS MANUFACTURED BY OWENS-CORNING OR XERXES CORPORATION. INSTALLATION OF TANKS AND PIPING SHALL BE IN ACCORDANCE WITH SPECIFICATION 13800 LATEST EDITION AS PROVIDED BY ARCO PETROLEUM PRODUCTS COMPANY, AND MANUFACTURER'S INSTRUCTIONS.

4. - WHEN TESTING OF THE SECONDARY CONTAINMENT PIPING IS REQUIRED. THE SEALING BOOT IN THE SUMP IS TO BE INSTALLED WITH THE VALVE TURNED DOWN. AFTER TEST THE VALVE IS TO BE OPENED TO ALLOW DRAINAGE OF THE SECONDARY PIPING TO THE SUMP MONITOR.
5. - ALL PENETRATIONS OF THE SUMP TO BE ON A LINE TOWARD THE CENTER OF THE SUMP TO ENSURE THE PROPER INSTALLATION OF ALL BULKHEAD AND COMPRESSION FITTINGS AND RESULTANT WATER TIGHTNESS. ALL PIPING, CONDUIT AND GROUNDS THAT PENETRATE THE SUMP SIDE WALLS MUST BE SEALED IN SUMPS THAT MUST BE TESTED TO INSURE THAT SUMP IS WATER TIGHT.
6. - THIS DIMENSION IS CRITICAL AND MUST BE ADHERED TO.
7. - SEE SHEET TK4-2 FOR LIQUID PROBE COUPLING DETAIL.





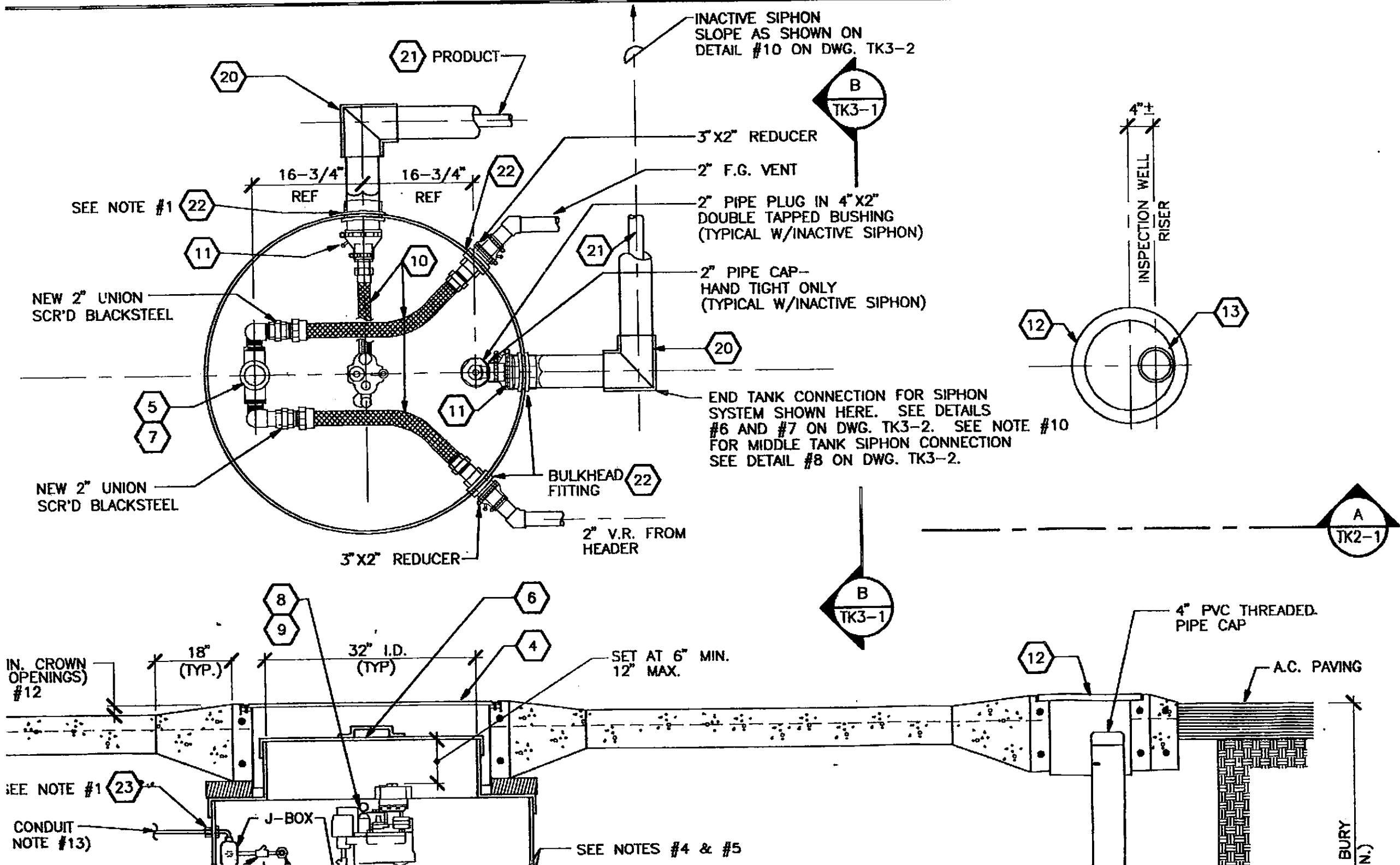
ARCO Products Company
 Division of AtlanticRichfieldCompany
Retail Marketing & Design & Engineering

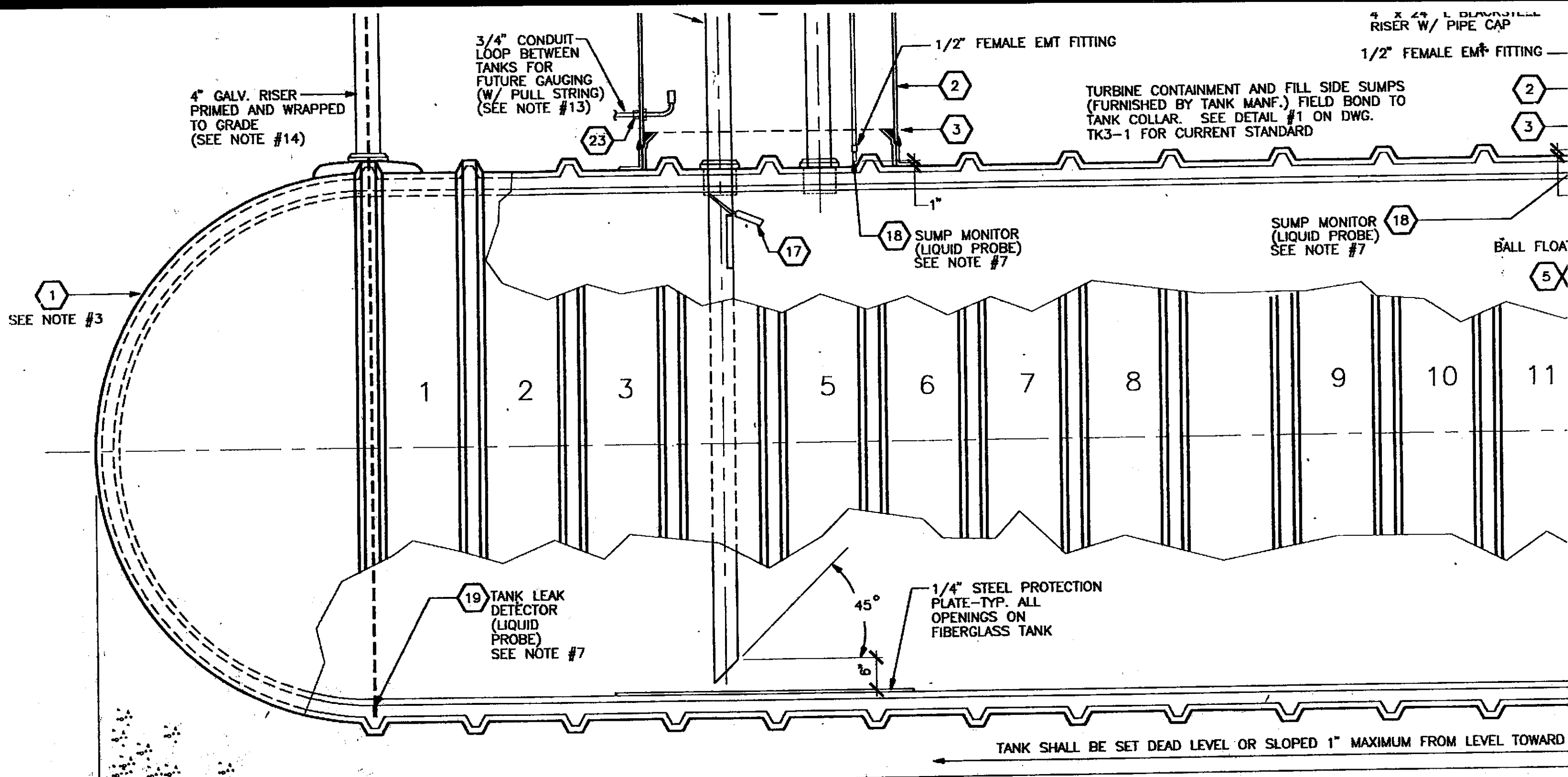
(714) 995-6204

CORP.

- 8. - A CERTIFICATE OF APPROVAL SHALL BE FURNISHED WITH EACH PREFABRICATION ASSEMBLY CERTIFYING THAT THE ASSEMBLY OR STRUCTURE IN QUESTION HAS BEEN INSPECTED MEETING THE REQUIREMENT OF THE CODE.
- 9. - TANK STABILITY SHOULD BE CHECKED AGAINST FLOATATION.
- 10. - THIS PENETRATION SHALL BE AT A 45° DEGREE ANGLE. SHOWN HERE FOR CLARITY.
- 11. - FOR ALL METHANOL COMPATIBLE STORAGE SYSTEMS, ALL READILY ACCESSIBLE COMPONENTS WHICH ARE NOT METHANOL COMPATIBLE FOR THE IMMEDIATE INTENDED SERVICE SHALL BE RETROFITTED TO THE FUELS INTO THE STORAGE SYSTEM.
- 12. - ALL MANHOLES ON THE TANK SLAB SHALL BE INSTALLED WITH A 1-1/2" CROWN OF CONCRETE TO PREVENT WATER INTRUSION INTO THE MANHOLE. SEE SECTION A ON DWG. TK3-6.

- 13. - ALL U.G. CONDUIT (INCLUDING FITTINGS) TO TANKS SHALL BE RIGID GALVANIZED STEEL (RSG) WITH A BONDED .040" MIN. PVC JACKET. ALL RISERS SHALL BE GROUNDED AND BONDED PER DETAIL #4 ON DWG. TK4-2.
- 14. - FOR 10,000 GALLON 8' DIAMETER TANKS, THE ANNULAR SPACE RISER IS LOCATED ON THE FILL SIDE AS SHOWN. FOR 10,000 GALLON 10' DIAMETER TANKS, THE ANNULAR SPACE RISER IS LOCATED ON THE TURBINE SIDE.
- 15. - TO CALCULATE TOP OF TANK ELEVATION. START WITH 18" MINIMUM DEPTH OF VAPOR RECOVERY LINE AT THE FARTHEST DISPENSER AND SLOPE 1/4" PER FOOT MAXIMUM TO 1/16" PER FOOT MINIMUM. ADD 12" AT THE TANK. ADD 13" (FOR 3" PIPE) OR 8" (FOR 2") FOR A CHANGE IN PIPING DIRECTION OTHER THAN 90 OR 45. SET TANKS 6" DEEPER THAN CALCULATED AS PRECAUTION. IN NO EVENT SHALL THE TANK BE BURIED LESS THAN 4'-0" BELOW FINISHED GRADE OR DEEPER THAN 7'-0" BELOW FINISHED GRADE. SEE MANUFACTURERS INSTALLATION RECOMMENDATIONS. ANY VARIATIONS IN SLOPE FROM 1/4" PER FOOT SHALL BE REPORTED TO THE FIELD ENGINEER.





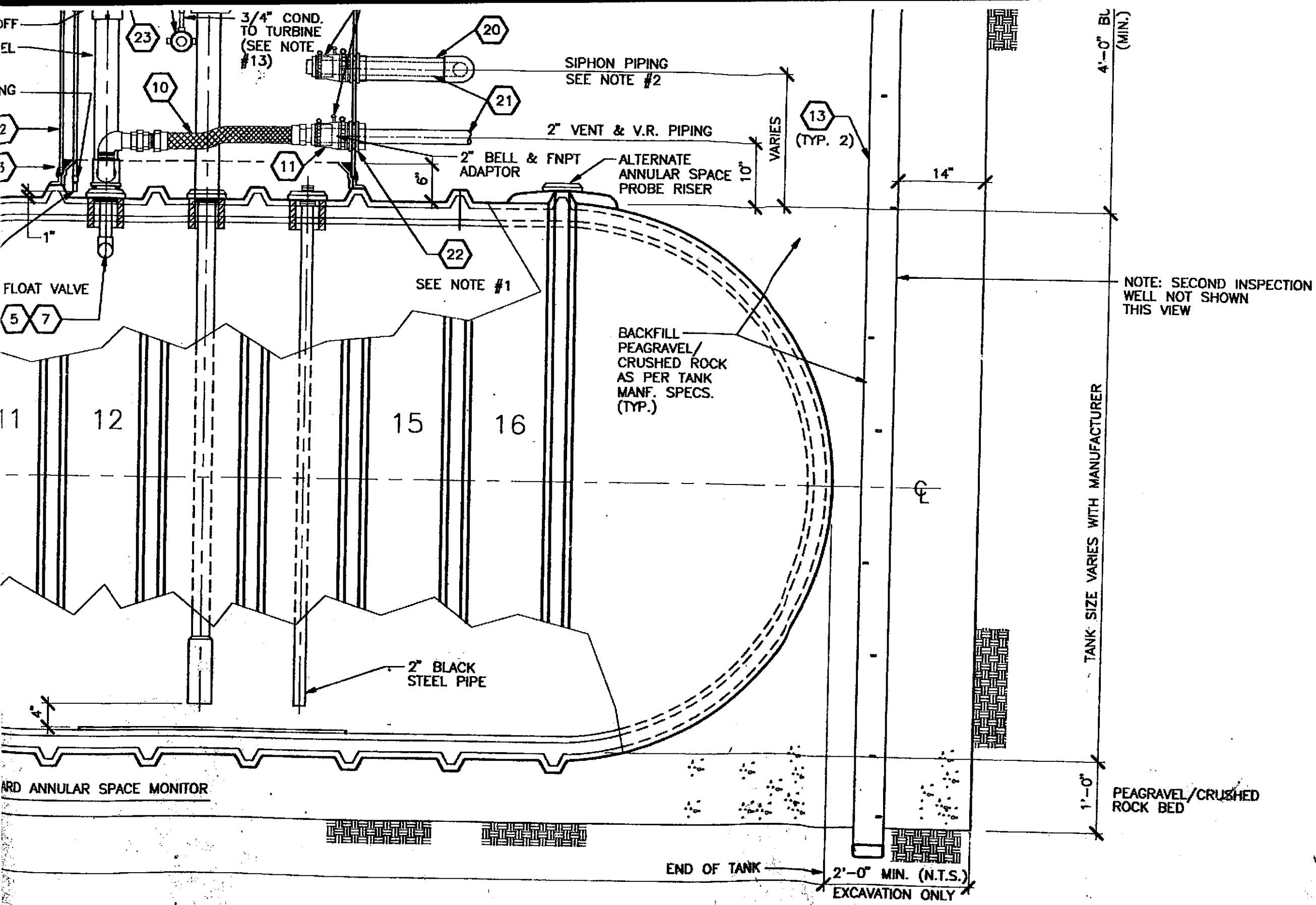
2'-0" MIN.
N.T.S.
EXCAVATION ONLY

TANK SIZE VARIES WITH MANUFACTURER AND MODEL NUMBER

THIS DESIGN ARRANGEMENT IS TYPICAL FOR DOUBLE WALL FIBERGLASS TANKS. SEE SITE PIPING PLAN AND TANK FITTING ORIENTATION ABOVE FOR ACTUAL MANUFACTURER'S CHOSEN FOR THIS PROJECT

A Underground Tank Section

NOT TO SCALE:
SEE NOTE #3



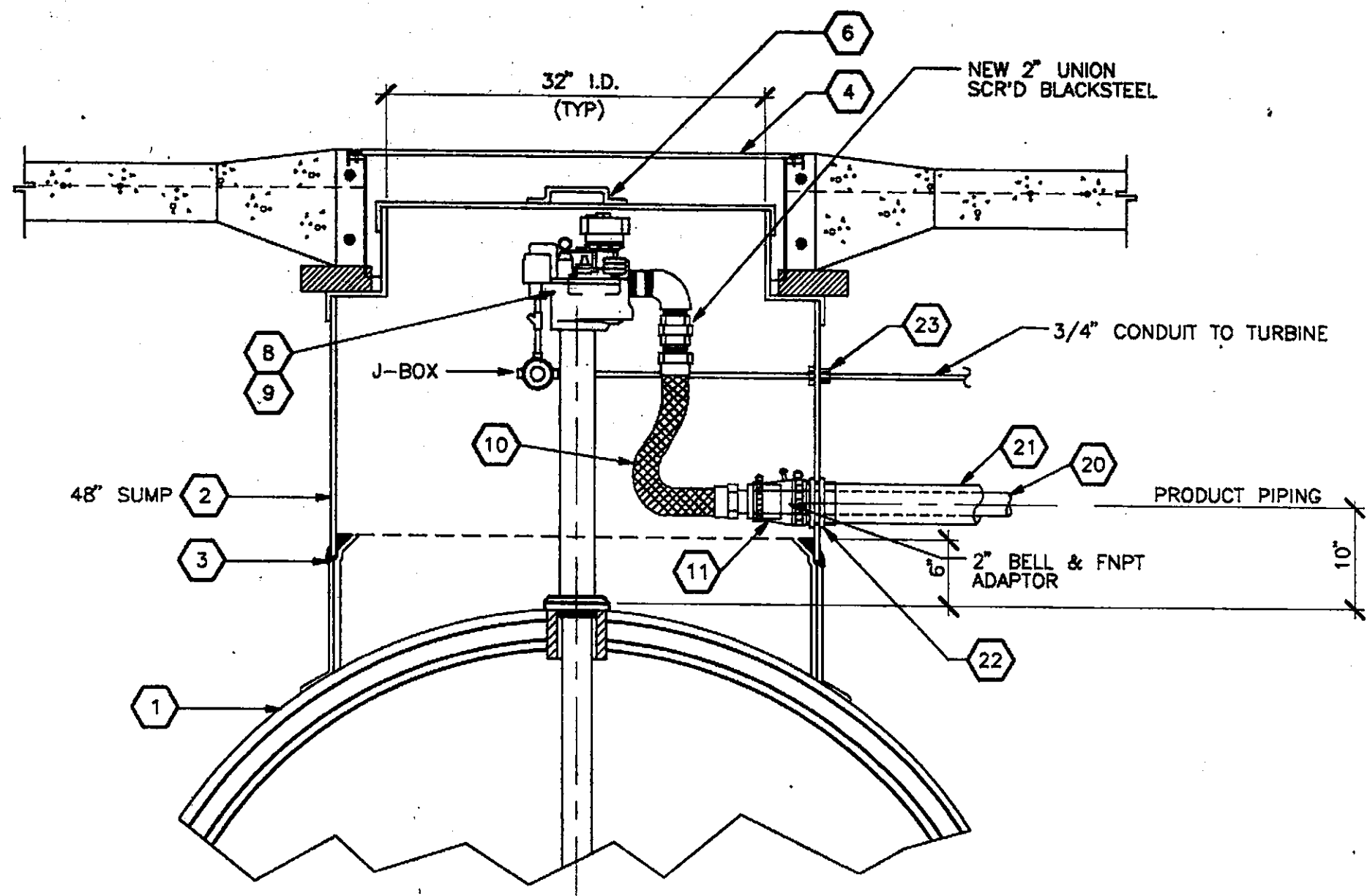
PH. (714) 995-1891 FAX (714) 995-1891
FRANCAIS ENGINEERING CO
 ARCHITECTURAL • CIVIL • MECHANICAL
 5951 LAKESHORE DRIVE, CYPRESS, CA

New ampm Facility
Double Wall Fiberglass Tank
Installation Details

appr. **3194**
 L.S. ANDREWS

DATE	REVISIONS
A	ISSUED FOR PLAN CHECK

date 3-1-94 drawn by SHK
 project / facility
 sheet / file

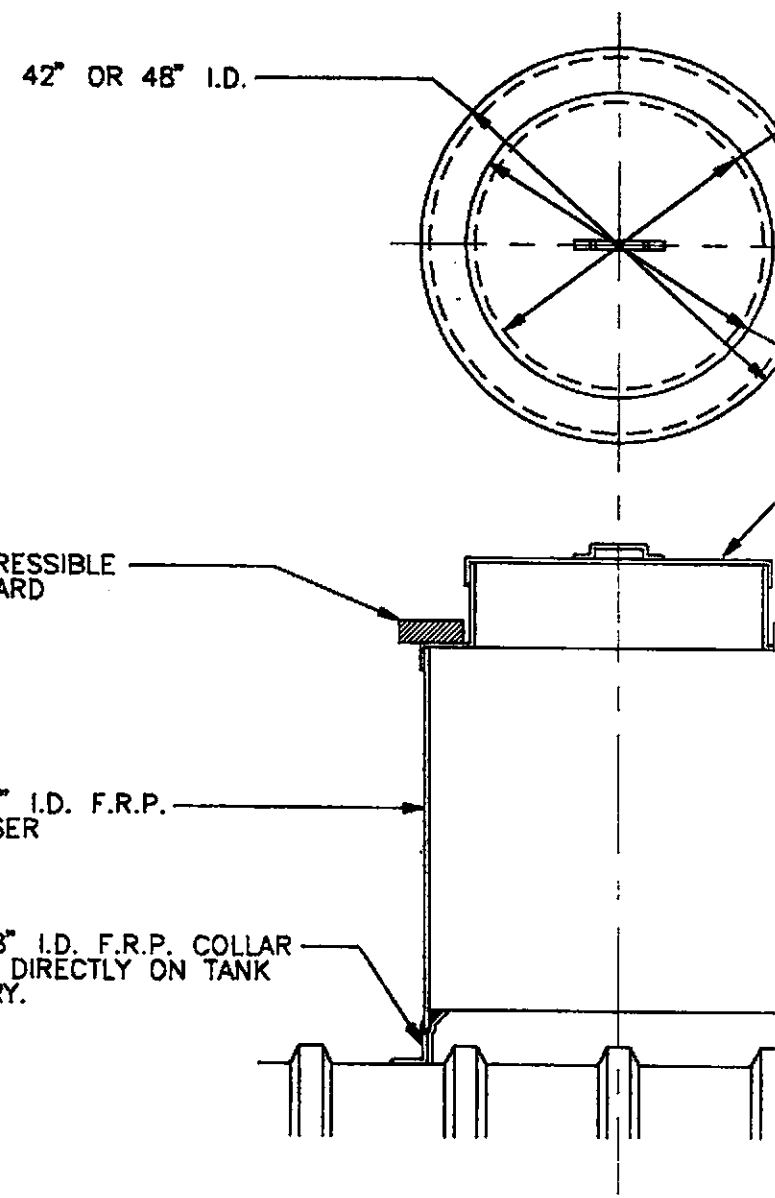


NOTE: ONLY PRODUCT PIPING IS SHOWN IN THIS VIEW FOR CLARITY

B

Sump Section

NOT TO SCALE:



SHOWN FOR FIBERGLASS STEEL

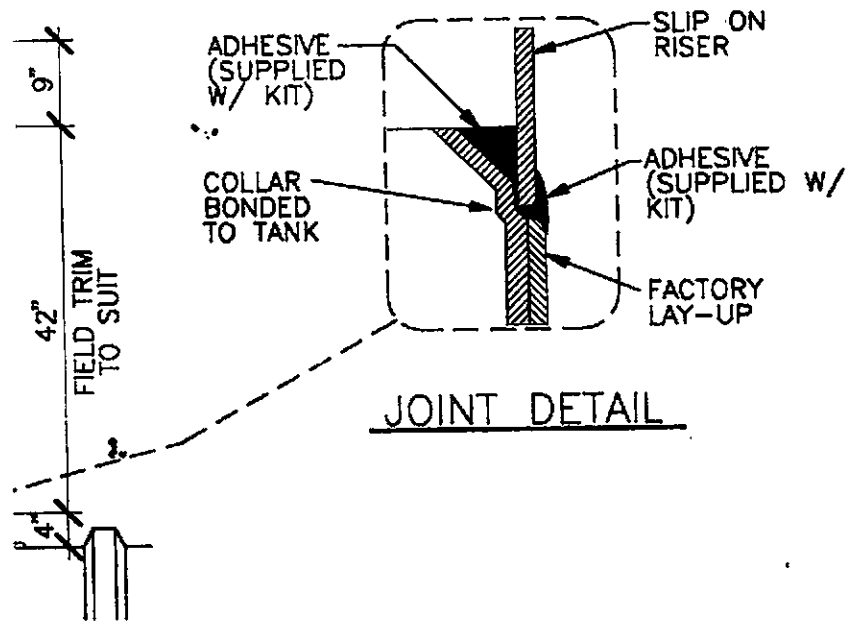
1

Sump Riser Section

NOT TO SCALE:

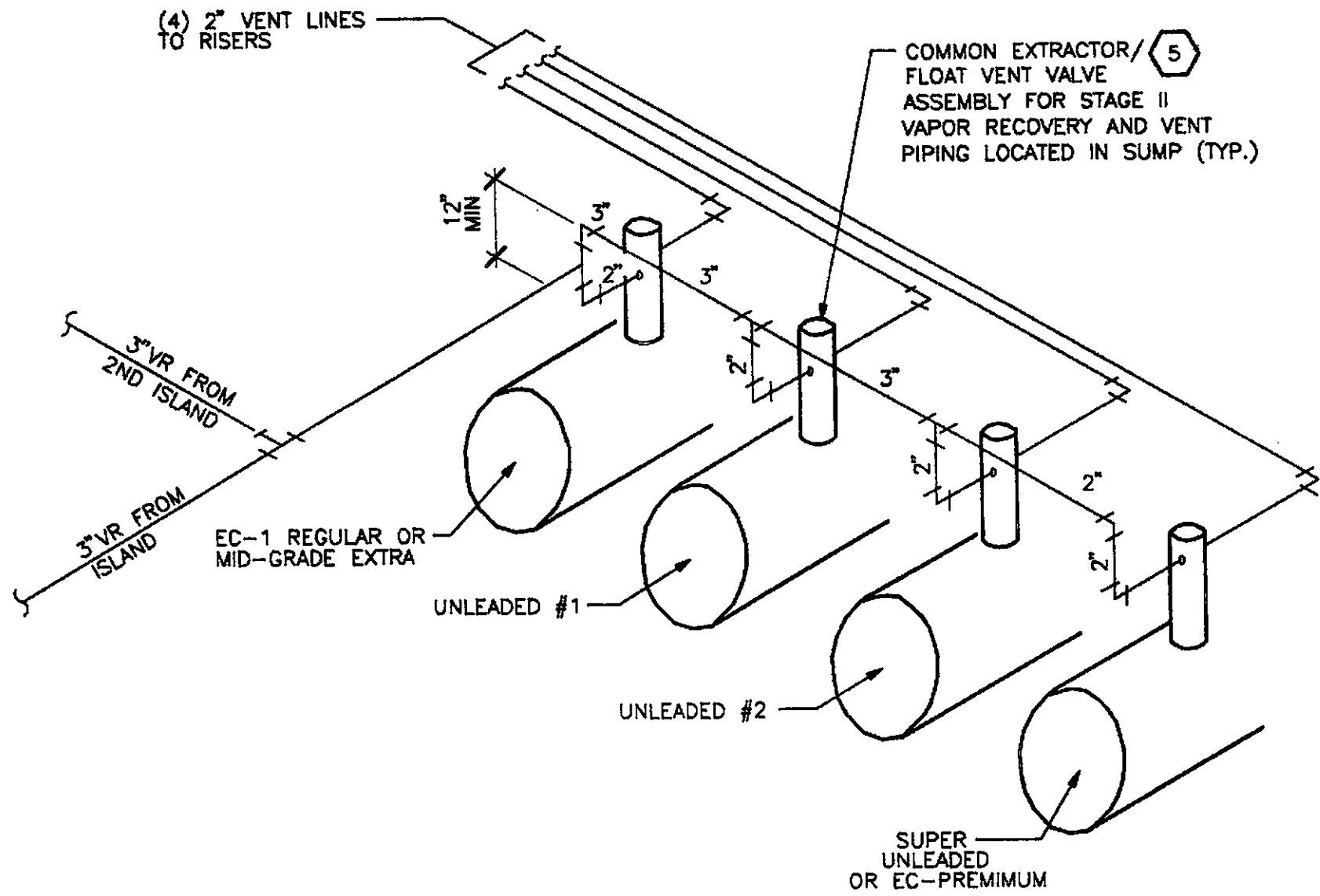
32" I.D.
ACCESS OPENING

33-1/2" O.D.
ACCESS COVER



SIMILAR

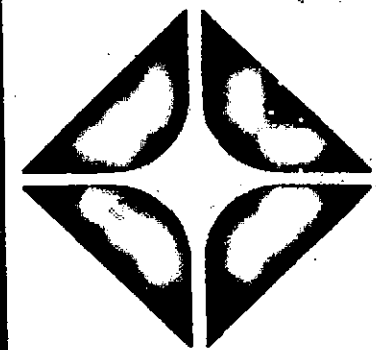
Standard



Vent and Vapor Recovery Schematic

2

NOT TO SCALE:



ARCO Products Company

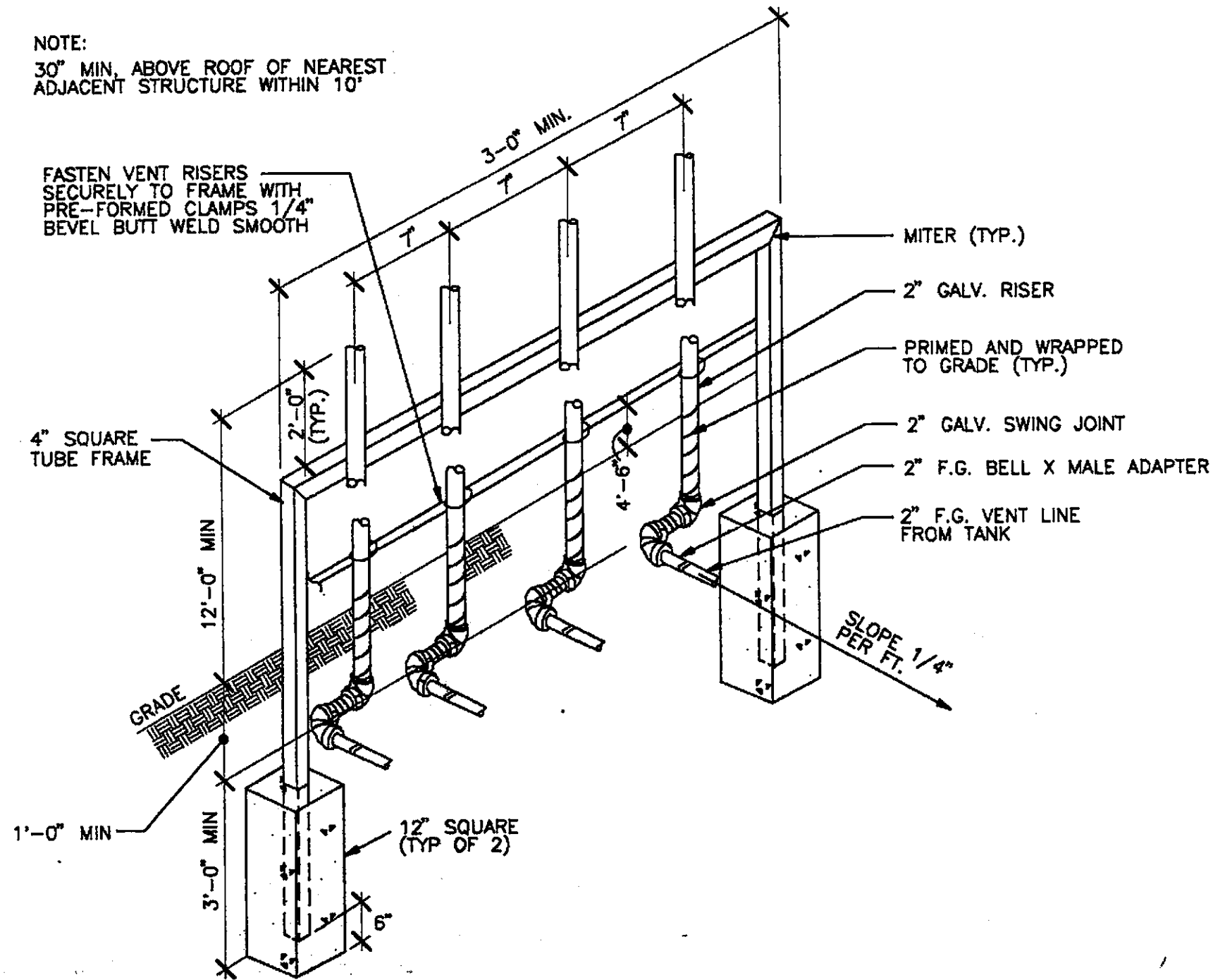
Division of AtlanticRichfieldCompany

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1055 West Seventh St.

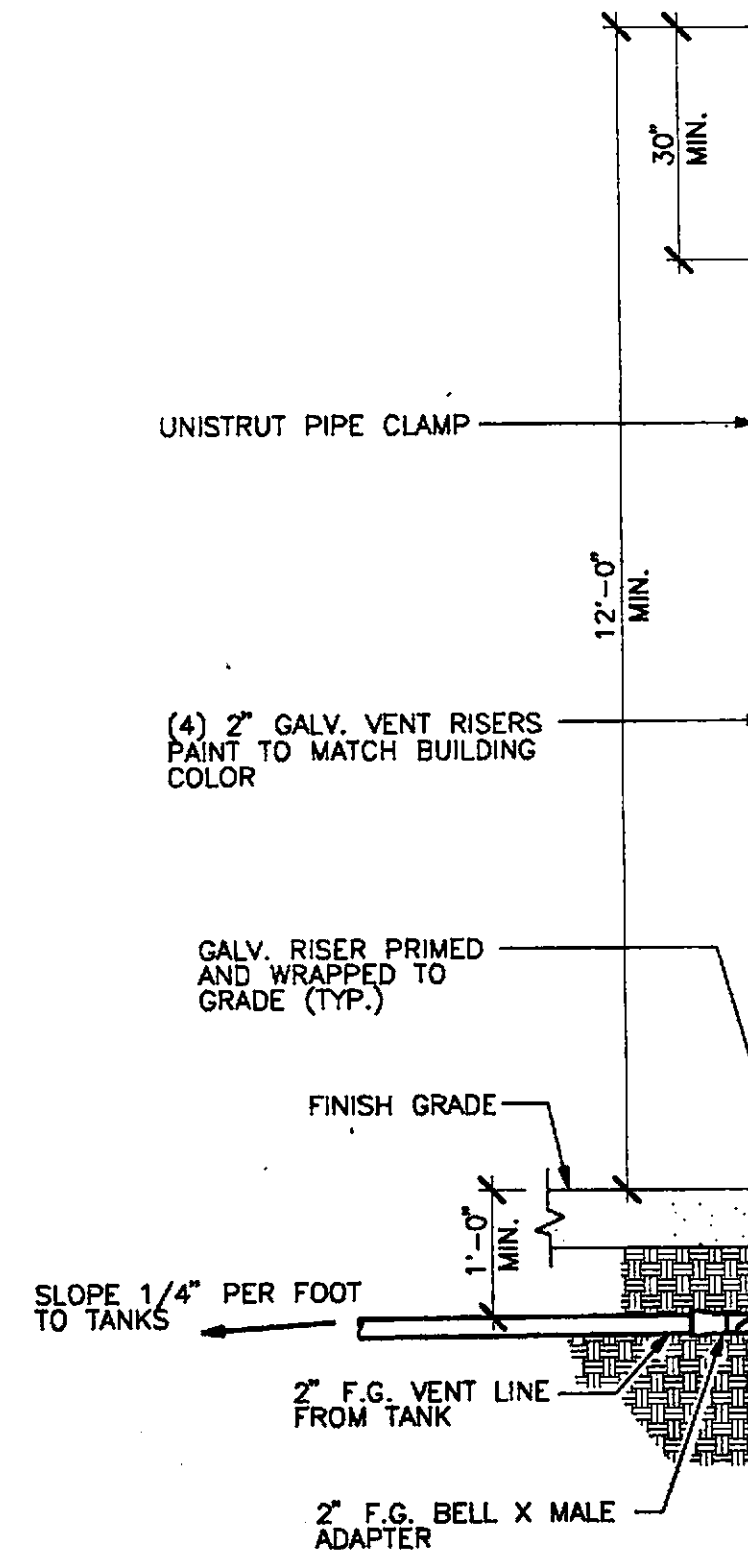
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NOTE:
30" MIN. ABOVE ROOF OF NEAREST
ADJACENT STRUCTURE WITHIN 10'



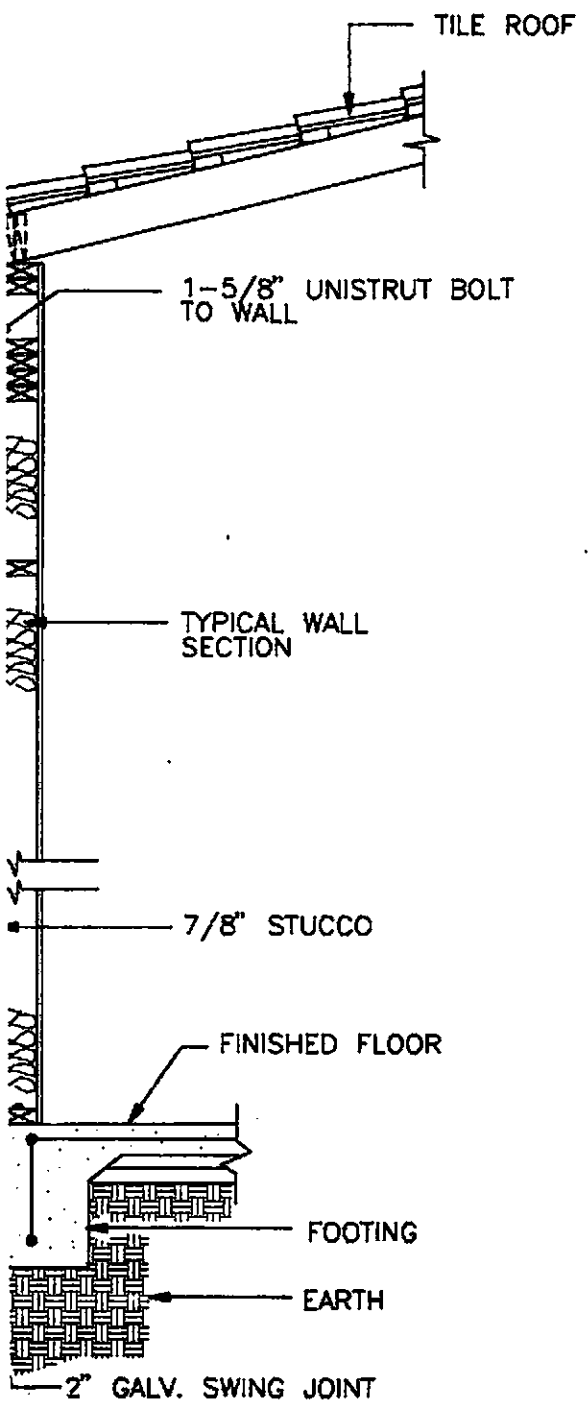
Vent Risers at Planter

NOTE:
THE LOCATION OF THE VENT DISCHARGE
SHALL NOT BE WITHIN 5 FEET OF ANY
BUILDING OPENING (I.E. DOOR, WINDOW ETC.).



(THIS IS THE PREFER

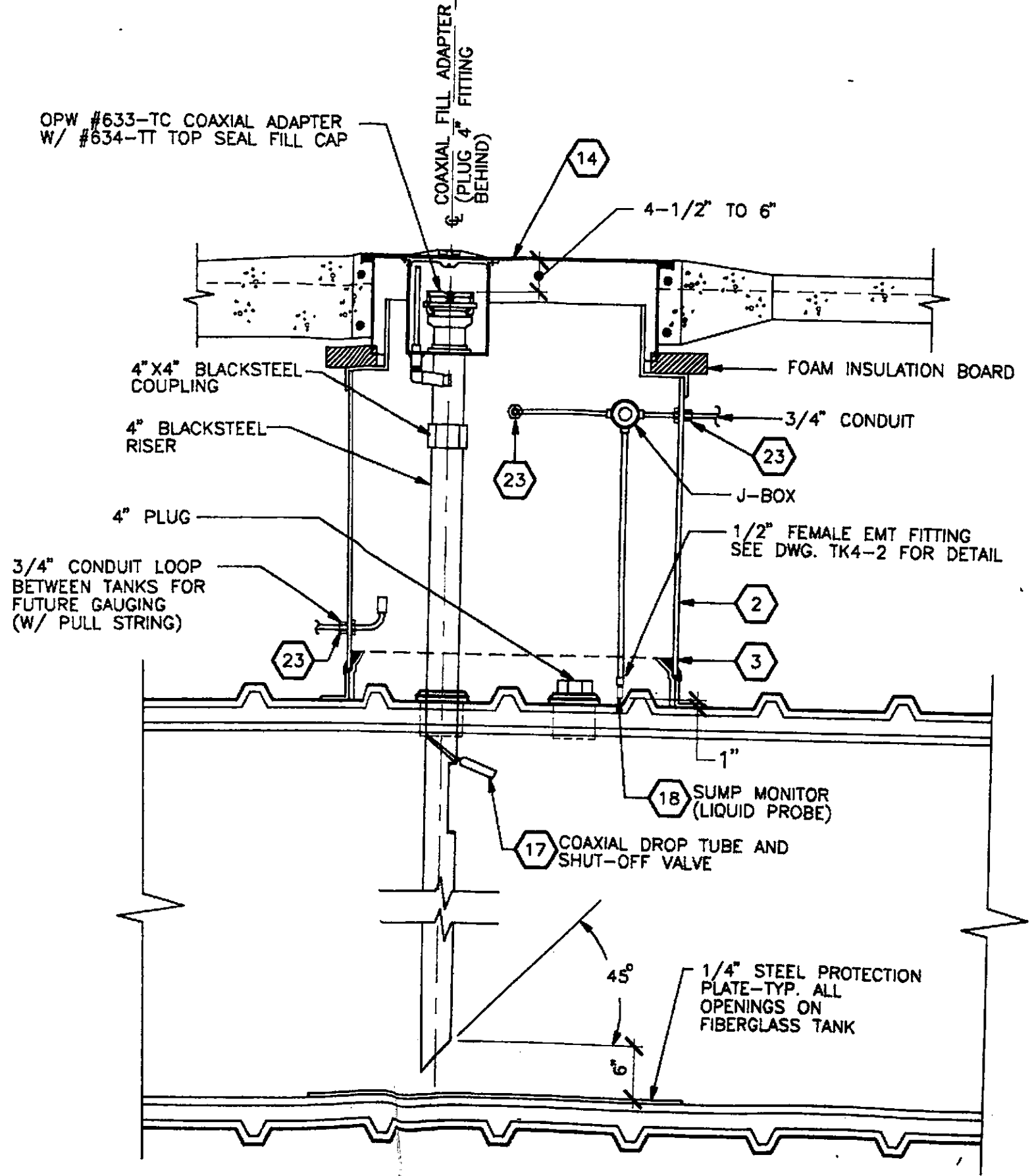
Vent Riser



ENT LOCATION OPTION)

t Building

OPW #633-TC COAXIAL ADAPTER
W/ #634-TT TOP SEAL FILL CAP



**Coaxial Fill Riser
Alternate Arrangement**

5

NOT TO SCALE

DATE	REVISIONS

New ampm Facility

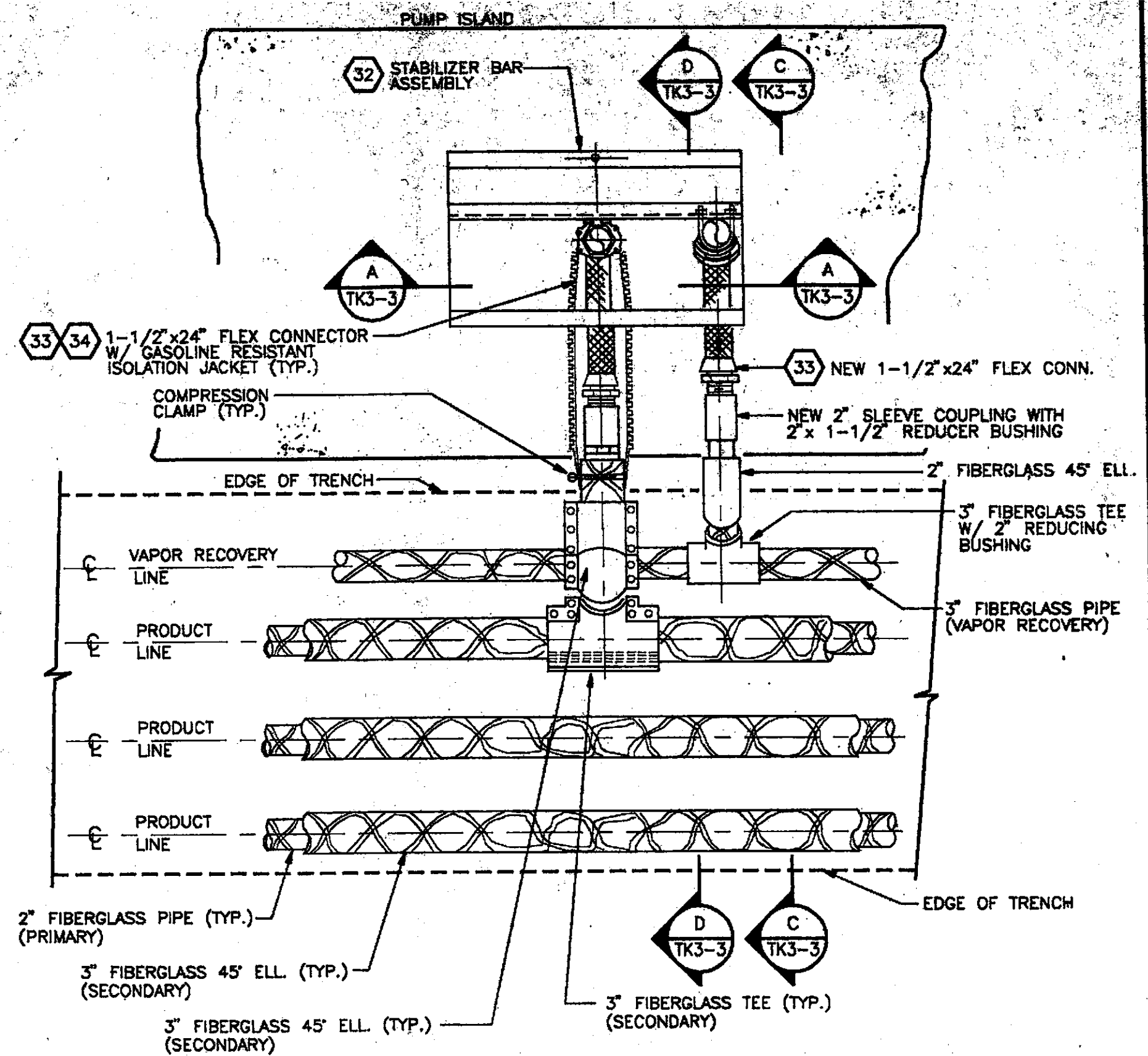
Sump and Vent Piping

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FRANCAIS ENGINEERING CORP.

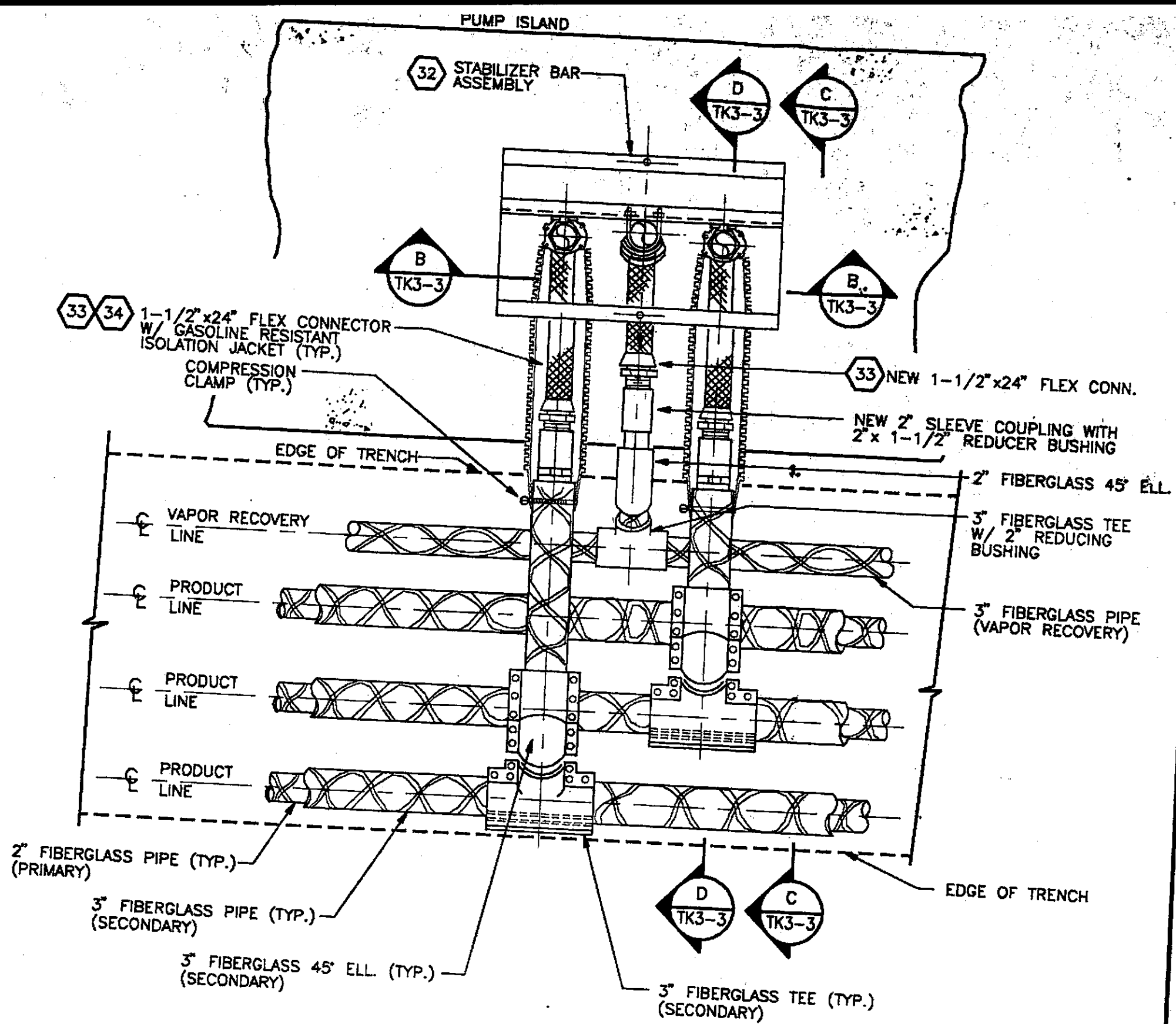
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5951 LAKESHORE DRIVE, CYPRESS, CA 90630

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L.S. ANDREWS



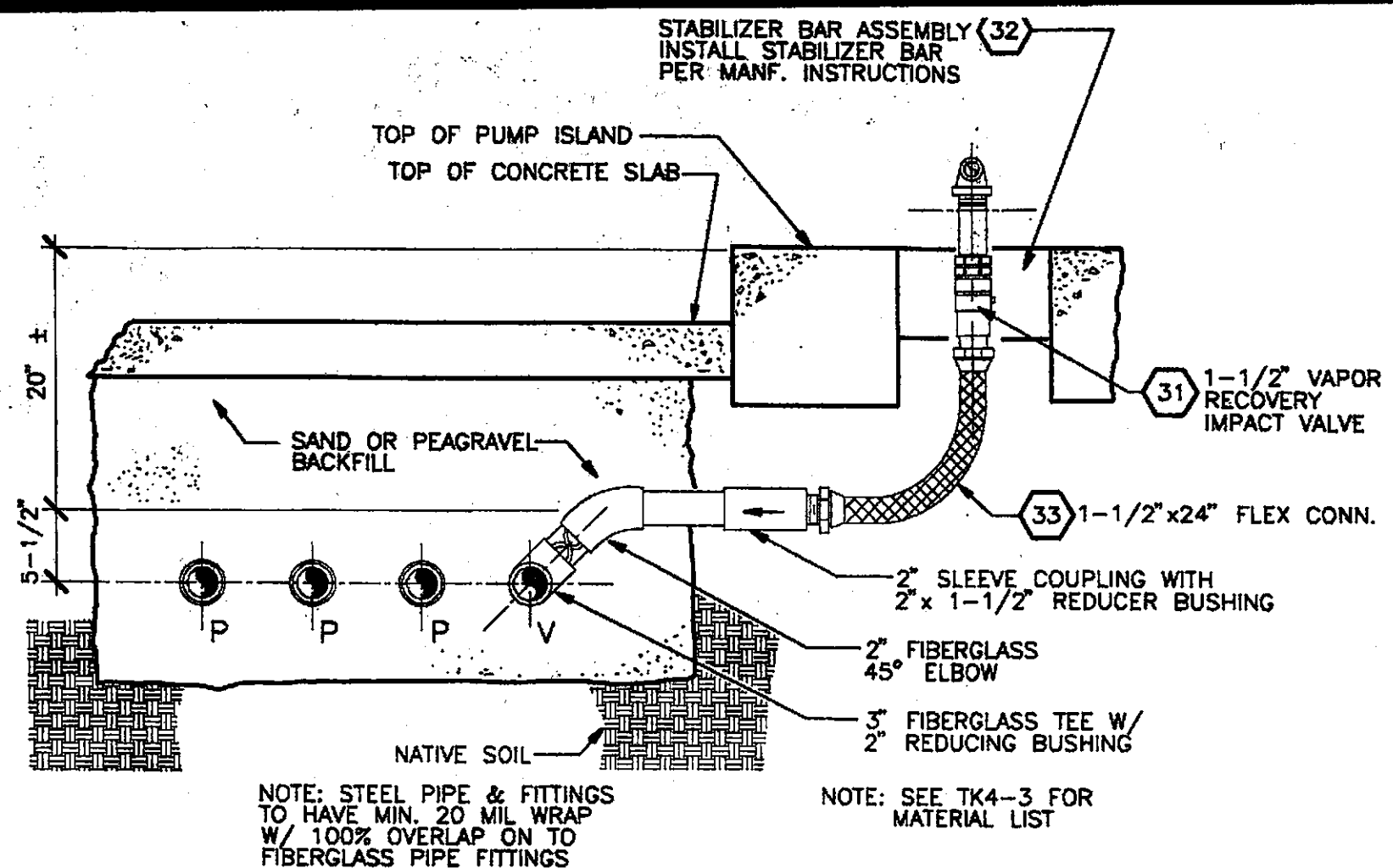
11 Plan View Single Product Dual

NOT TO SCALE:



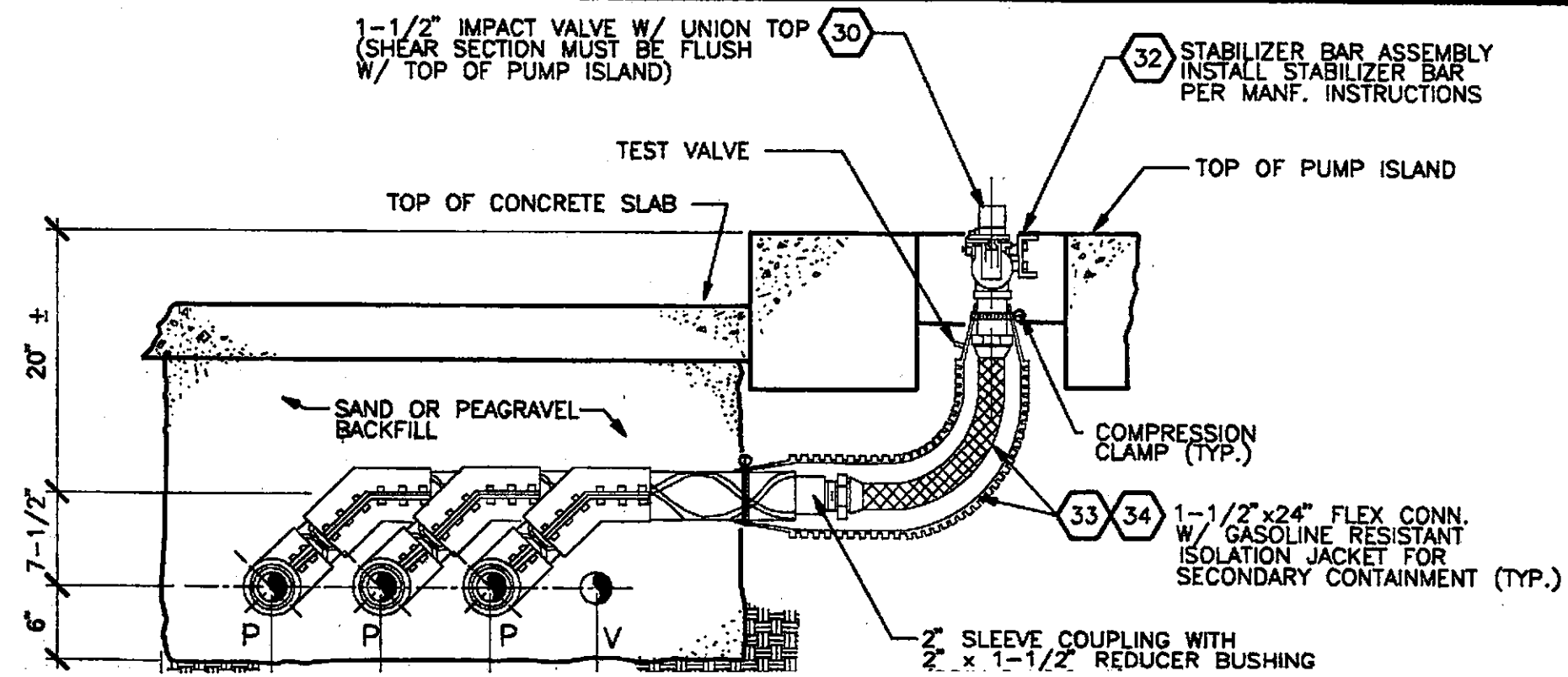
12 Plan View Two Product Dual

NOT TO SCALE:



(C) Vapor Recovery Piping at Dispenser

NOT TO SCALE:



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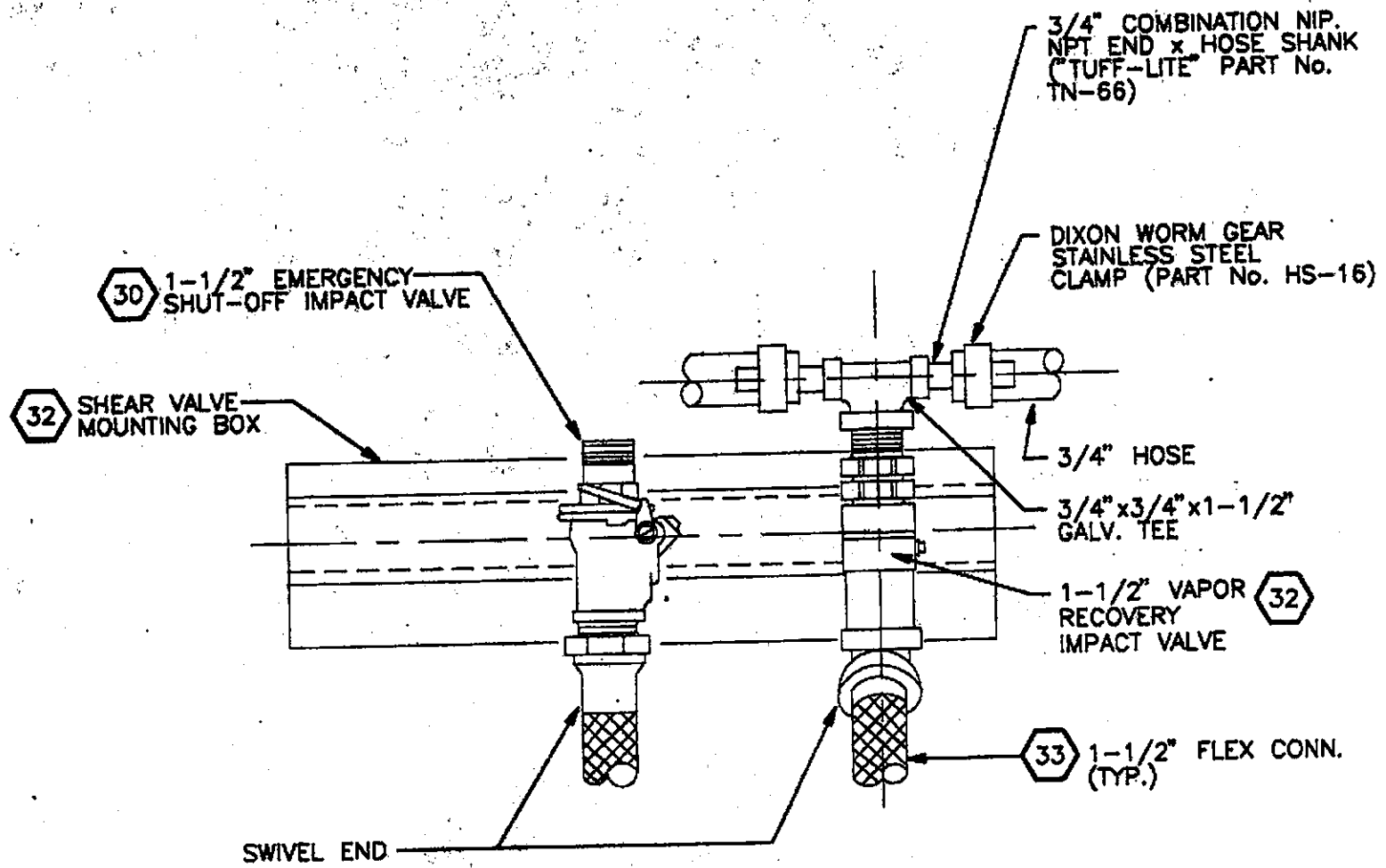
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CA 90630





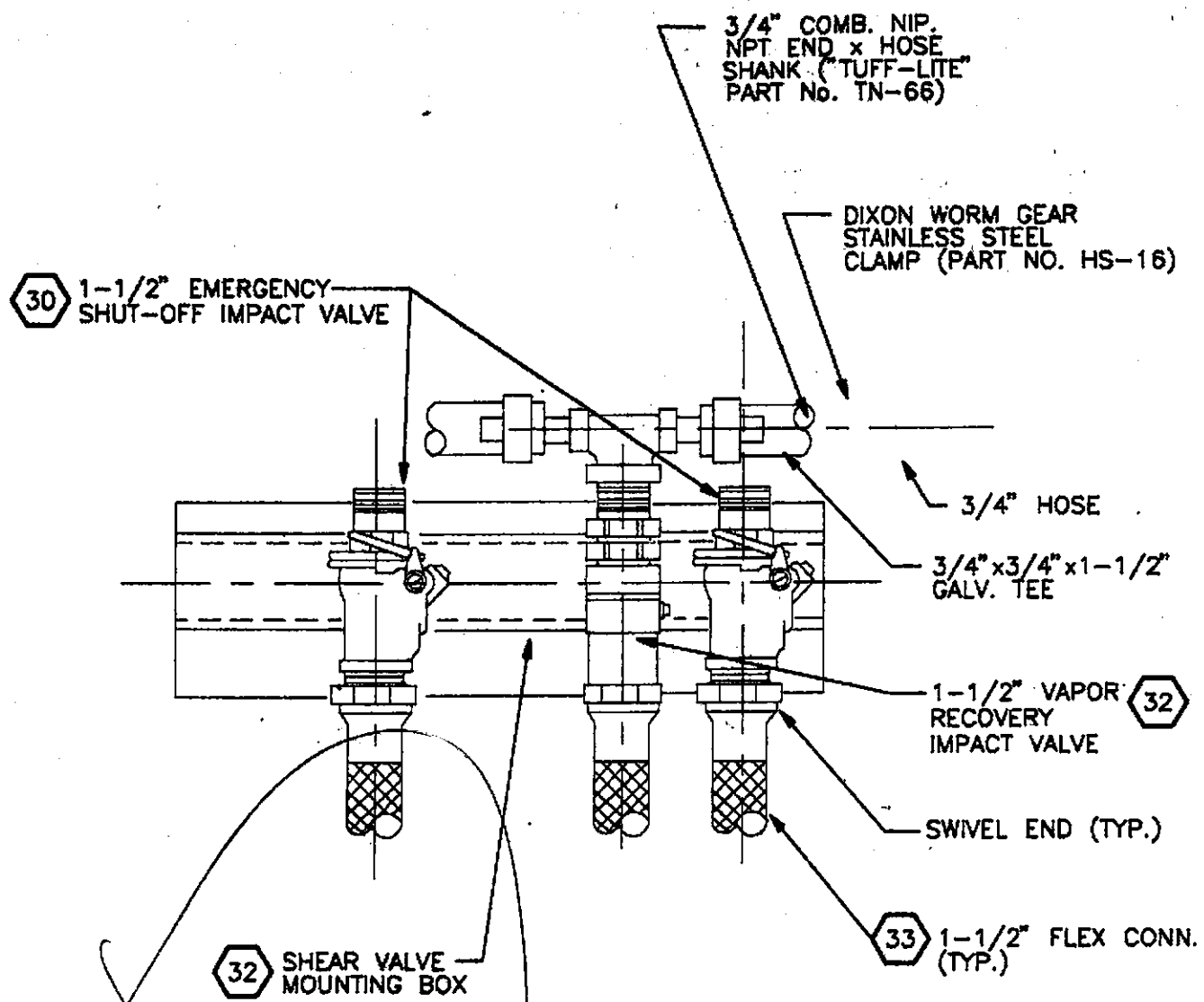
NOTES:

- VAPOR LINES TO SLOPE FROM DISPENSERS TO TANKS 1/4" PER FOOT MIN.

A

Section Single Product Dual

NOT TO SCALE:



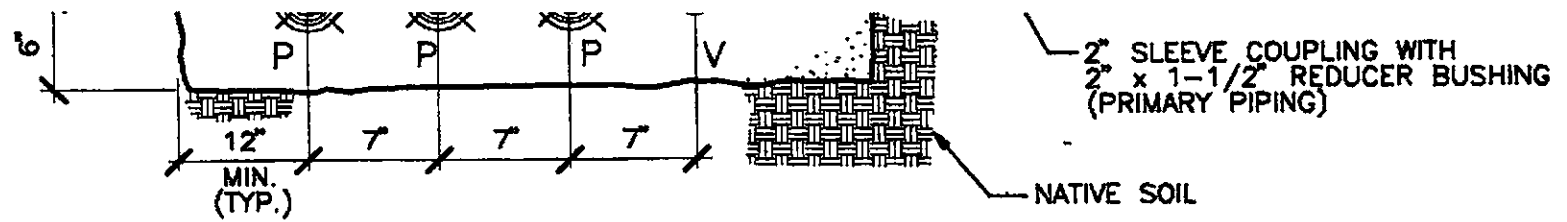
NOTES:

1. VAPOR LINES TO SLOPE FROM DISPENSERS TO TANKS 1/4" PER FOOT MIN.

B

Section Two Product Dual

NOT TO SCALE:



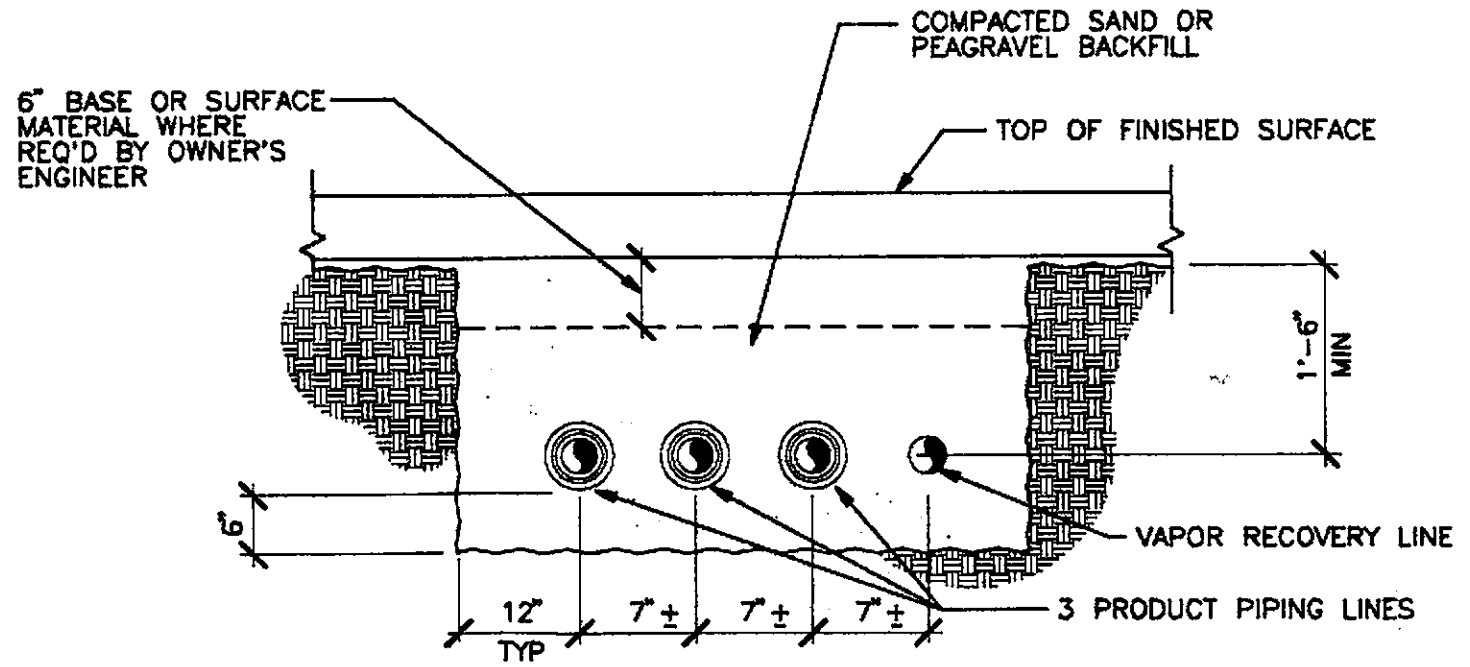
NOTE: STEEL PIPE & FITTINGS TO HAVE MIN. 20 MIL WRAP W/ 100% OVERLAP ON TO FIBERGLASS PIPE FITTINGS

NOTE: SEE TK4-3 FOR MATERIAL LIST

(CONTRACTOR SHALL FILL WITH SAND UP TO BASE OF IMPACT VALVE)

D Product Piping at Dispenser

NOT TO SCALE:



NOTE: CONTRACTOR SHALL TAKE PRECAUTIONS TO PROTECT HOLE AND TRENCHES FROM SURFACE WATER RUNOFF UNTIL PAVING IS REPLACED.

E Typical Piping in Trench

NOT TO SCALE:

DATE		REVISIONS
A		ISSUED FOR PLAN CHECK

New ampm Facility

**Piping Installation Details
At Dispenser Island**

app. **3194**
L.S. ANDREWS

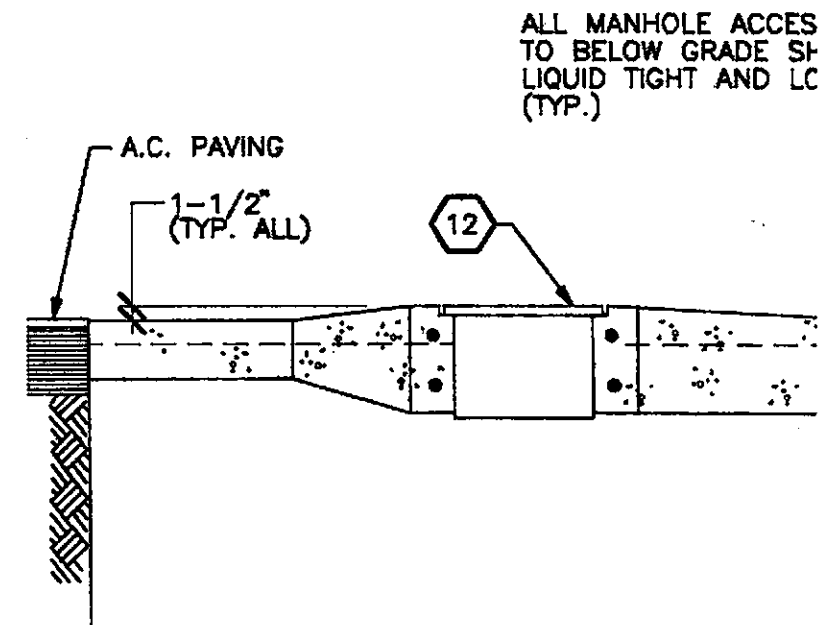
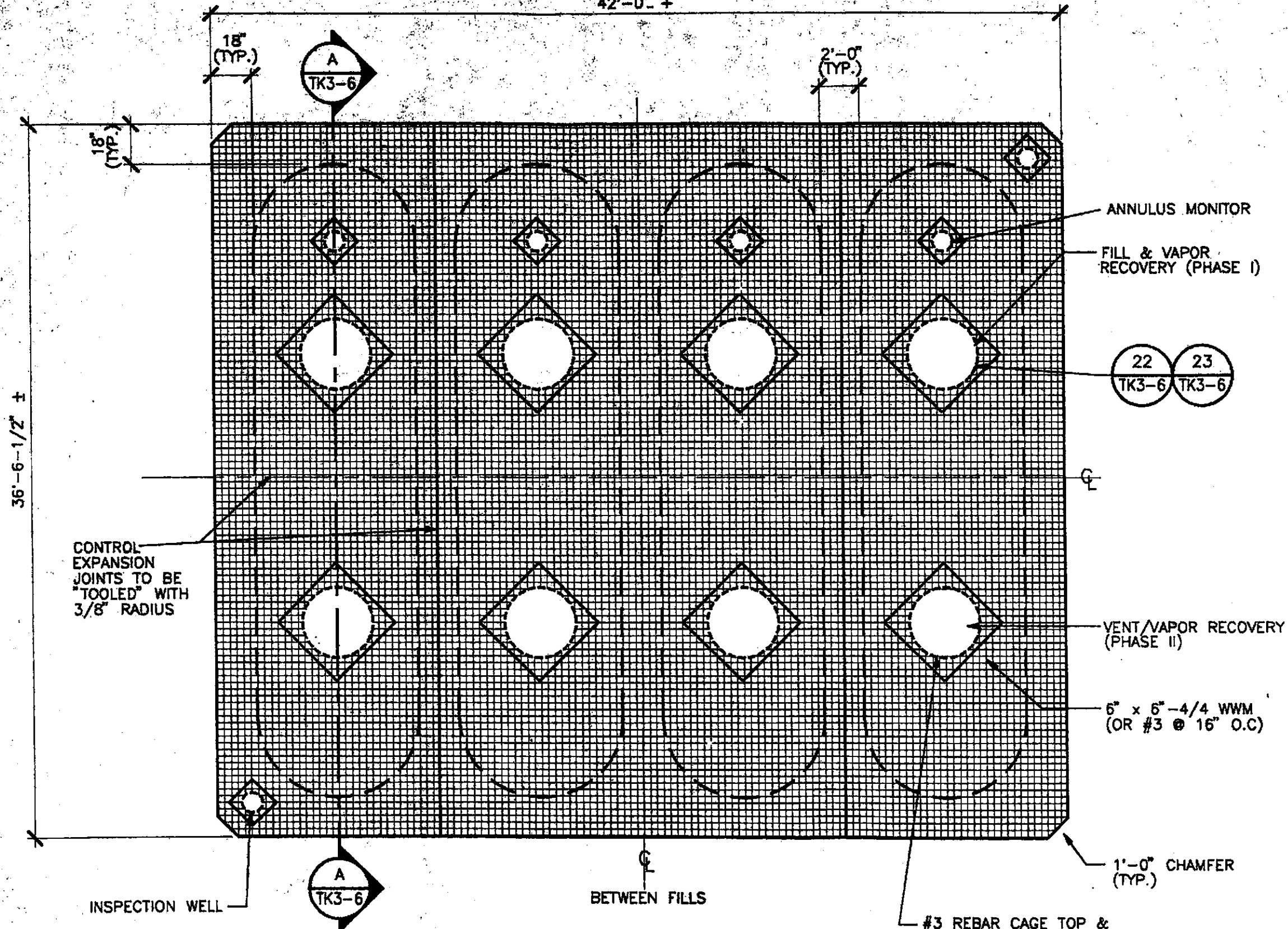
date 3-1-94 drawn by SHK

project / facility

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 5951 LAKESHORE DRIVE, CYPRESS, CA

(OPENINGS IN SLAB TO HAVE 1-1/2" CROWN)

42'-0" ±

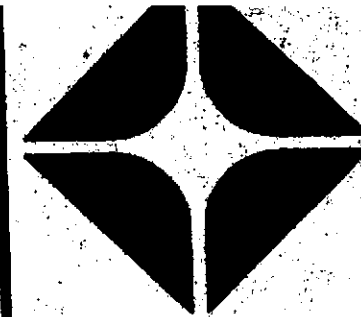


NOTE: SEE TK1-1 FOR SITE SPECIFIC TANK ARRANGEMENT

#3 REBAR CAGE TOP & BOTTOM 2" COVER TYP. ALL AROUND PENETRATIONS

20 Typical Tank Slab Reinforcing

NOT TO SCALE:



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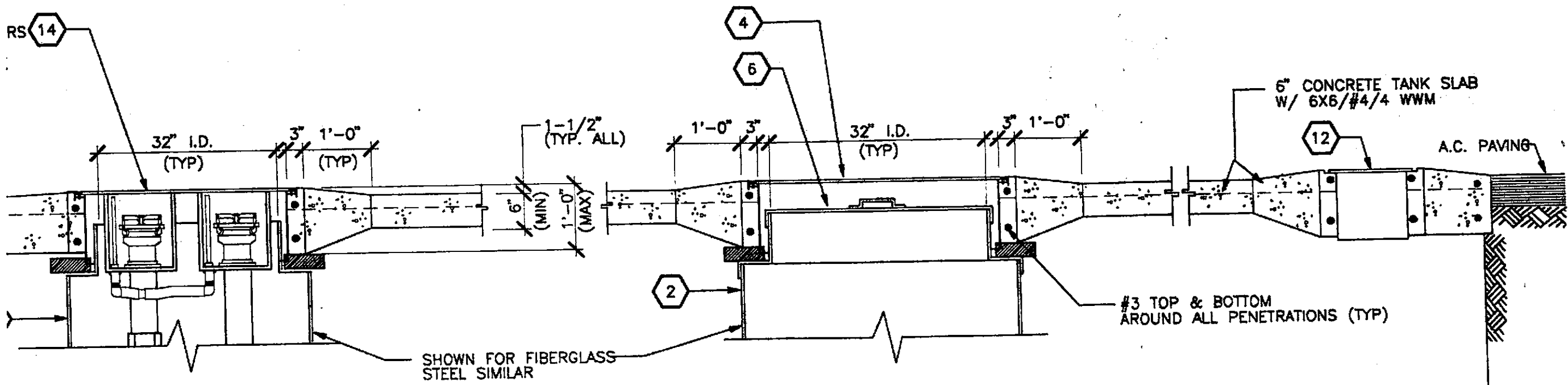
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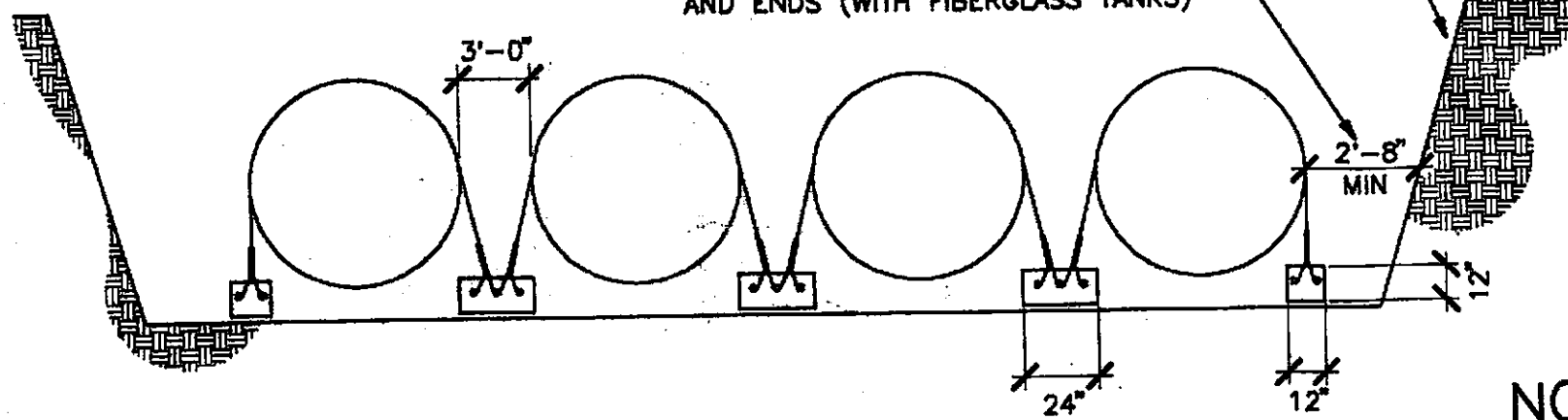
A

Typical Slab at Tanks

NOT TO SCALE:

FILTER FABRIC
SEE NOTE NO. 1

IN UNSTABLE SOIL THE DIMENSION
MUST BE 4 FT. FROM BOTH SIDES
AND ENDS (WITH FIBERGLASS TANKS)



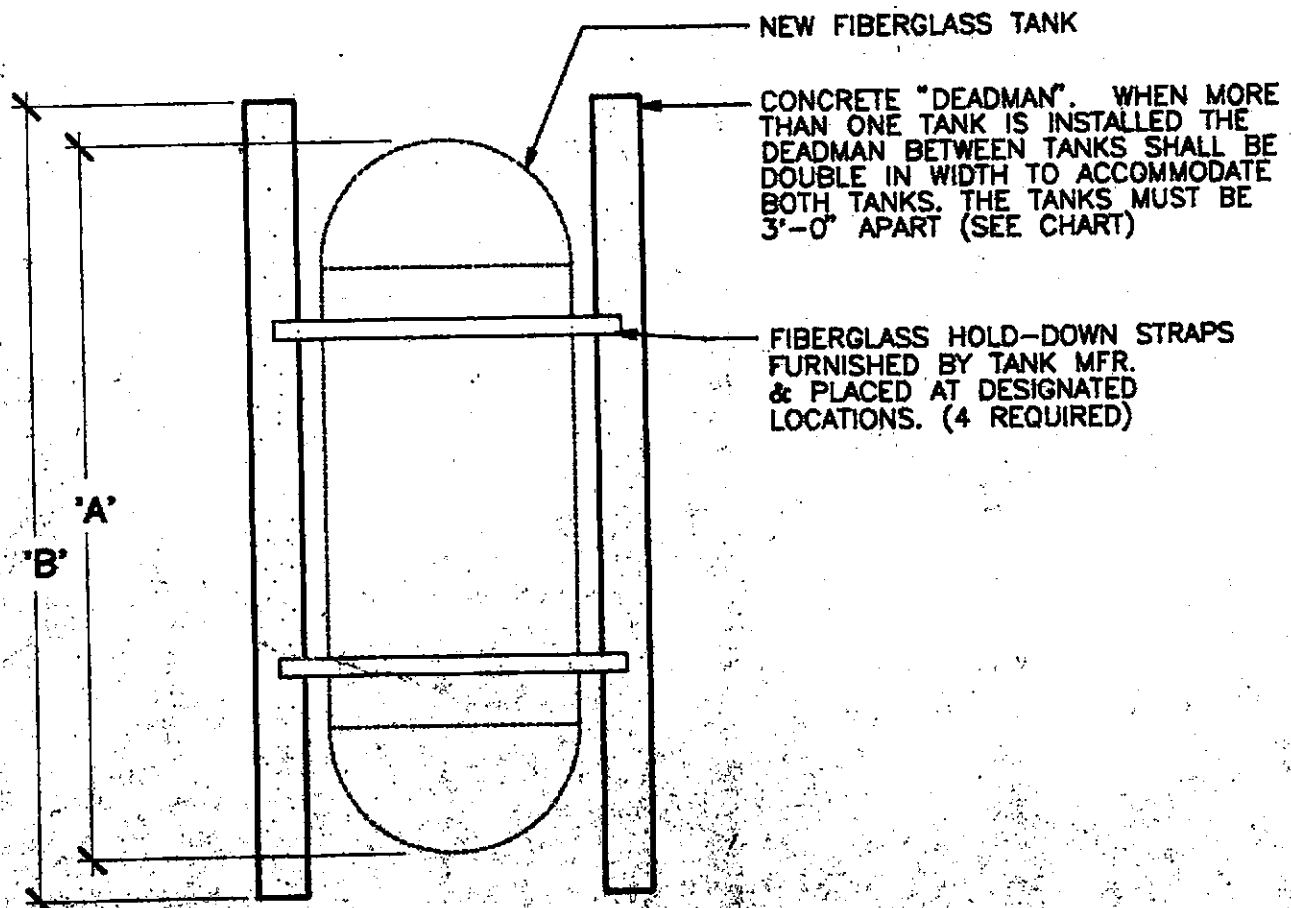
REQUIRED DEADMAN DIMENSIONS

TANK SIZE	TANK LENGTH 'A'	DEADMAN LENGTH 'B'	DEADMAN HEIGHT 'C'	DEADMAN WIDTH 'D'
4 FT. DIA. 550 GAL	6'-9"	7'-9"	6"	6"
8 FT. DIA. 10,000 GAL	31'-6"	32'-6"	12"	12"
10 FT. DIA. 10,000 GAL	21'-5"	22'-5"	24"	18"

Typical Anchoring for (4) 8'-0" Diameter Tanks

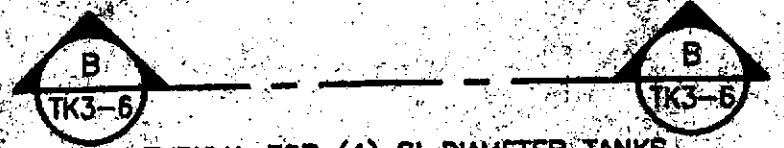
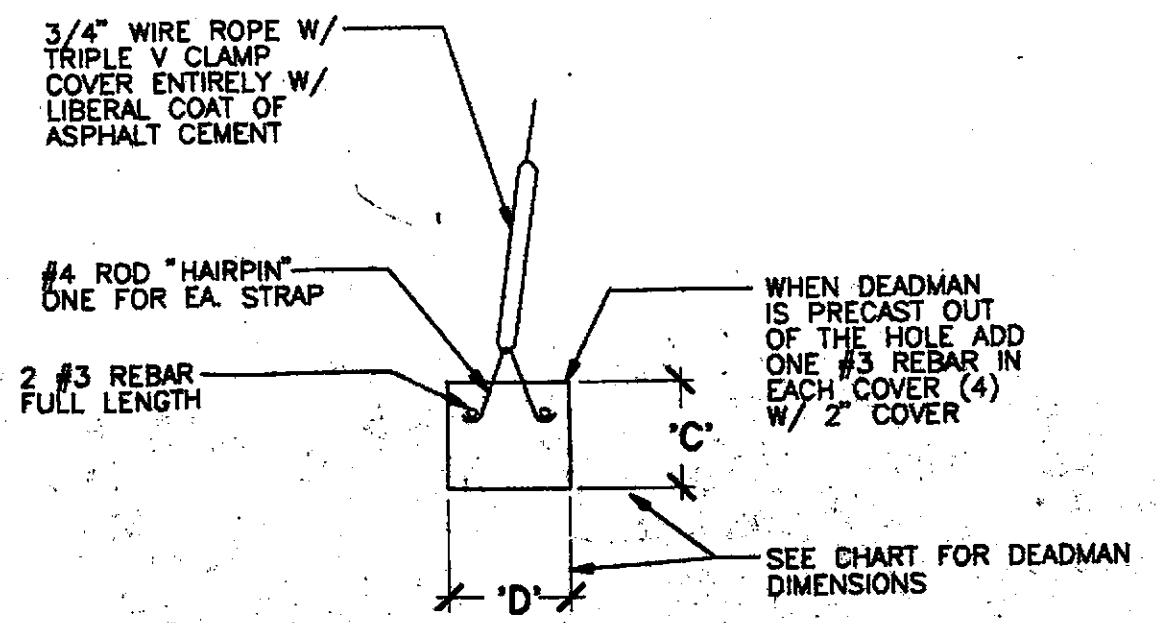
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NOT TO SCALE:



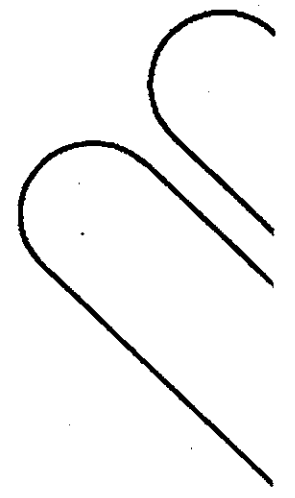
NOTES:

- (1) FILTER FABRIC (DUPONT TYPAR OR MIRAFI 500X) IS REQUIRED. FABRIC MUST EXTEND 1' ABOVE MAXIMUM HIGH WATER TABLE AND MAY BE PINNED TO SIDE OF HOLE WITH WIRE, ETC., SEAMS MUST BE LAPPED 1' MINIMUM.
- (2) TANK MUST BE BALLASTED BY FILLING WITH LIQUID UNTIL BACKFILL IS COMPLETE. **CAUTION** DO NOT FILL FIBERGLASS TANK WITH LIQUID UNTIL BACKFILL IS EVEN WITH TOP. SEE SPECIFICATIONS.
- (3) DEADMEN TO BE INSTALLED IN A WET HOLE OR WHEN REQUIRED BY OWNER'S ENGINEER OR AUTHORITY HAVING JURISDICTION. WHEN REQUIRED, THE ANCHORING SYSTEM SHALL BE IN COMPLIANCE WITH AUTHORITY HAVING JURISDICTION.
- (4) WHEN GROUNDWATER LEVEL IS ANTICIPATED TO BE WITHIN 5 FEET OF GRADE CONTRACTOR SHALL NOTIFY ARCO FIELD ENGINEER FOR DIRECTION ON ANCHORING METHOD TO BE USED. (DEADMAN OR ANCHORING SLAB)



TYPICAL FOR (4) 8' DIAMETER TANKS

Typical Tank Anchoring

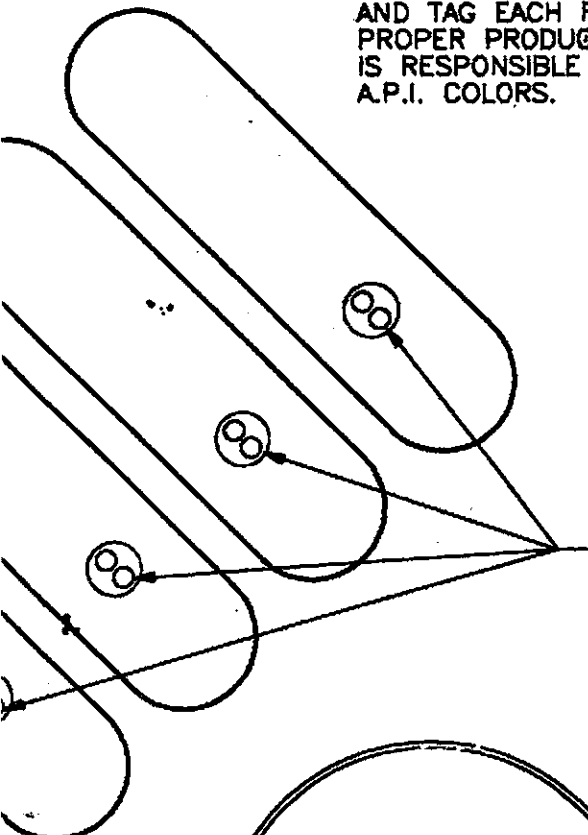


STAGE I VA
TO BE PAID

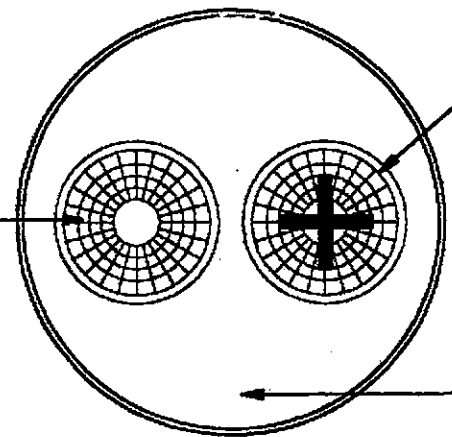
22

NOTE:

ARCO CONSTRUCTION WILL PAINT COVER BLACK AND TAG EACH FILL RISER WITH THE PROPER PRODUCT I.D. TAG. DISTRIBUTION IS RESPONSIBLE FOR PAINTING THE CORRECT A.P.I. COLORS.



STANDARD DETAIL FOR 10" 12" OR 14" ACCESS COVERS. NO OTHER MARKINGS ARE PERMITTED.



FILL SIDE TO BE PAINTED WITH STANDARD "API COLORS PER PRODUCT IDENTIFICATION CHART BELOW. CROSS TO BE PAINTED WHITE OR BLACK TO IDENTIFY FILL. NO OTHER MARKINGS ARE PERMITTED.

THIS AREA TO REMAIN BLACK

Access Cover Identification Standard Two Point Fill

SCALE:

API STANDARD COLORS

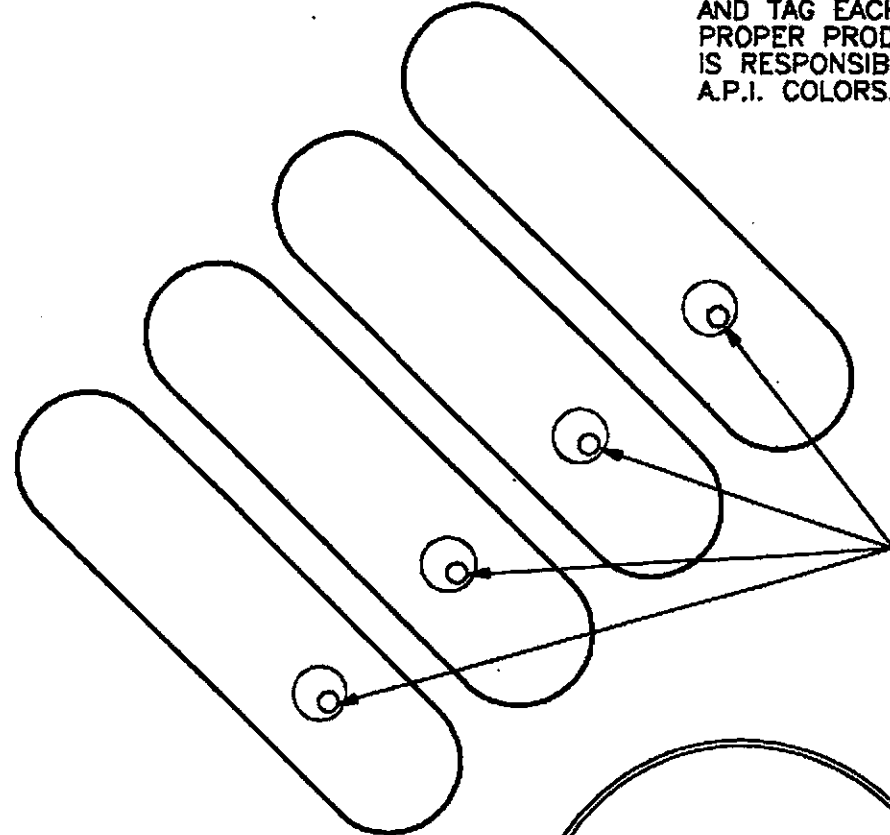
- EC-PREMIUM/SUPER UNLEADED - RED
- UNLEADED - WHITE
- EC-1 REGULAR/LEADED REGULAR - BLUE
- METHANOL - GREEN

OTHER

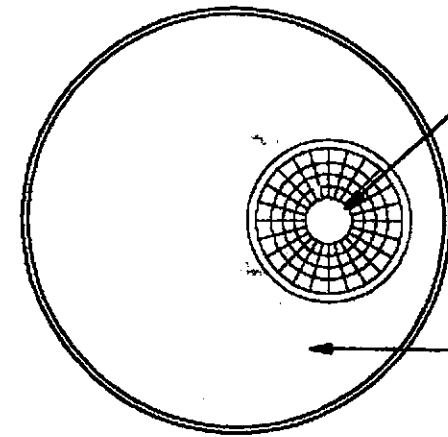
- MID GRADE EXTRA - HALF CIRCLE WHITE

NOTE:

ARCO CONSTRUCTION WILL PAINT COVER BLACK AND TAG EACH FILL RISER WITH THE PROPER PRODUCT I.D. TAG. DISTRIBUTION IS RESPONSIBLE FOR PAINTING THE CORRECT A.P.I. COLORS.



STANDARD DETAIL FOR 10" 12" OR 14" ACCESS COVERS. NO OTHER MARKINGS ARE PERMITTED.



FILL SIDE TO BE PAINTED WITH STANDARD "API COLORS PER PRODUCT IDENTIFICATION CHART BELOW. NO OTHER MARKINGS ARE PERMITTED.

THIS AREA TO REMAIN BLACK

Access Cover Identification Coaxial Single Point Fill

23

NOT TO SCALE:

DATE	REVISIONS
A	ISSUED FOR PLAN CHECK

New ampm Facility

Tank Slab, Anchoring and Identification Marking Details

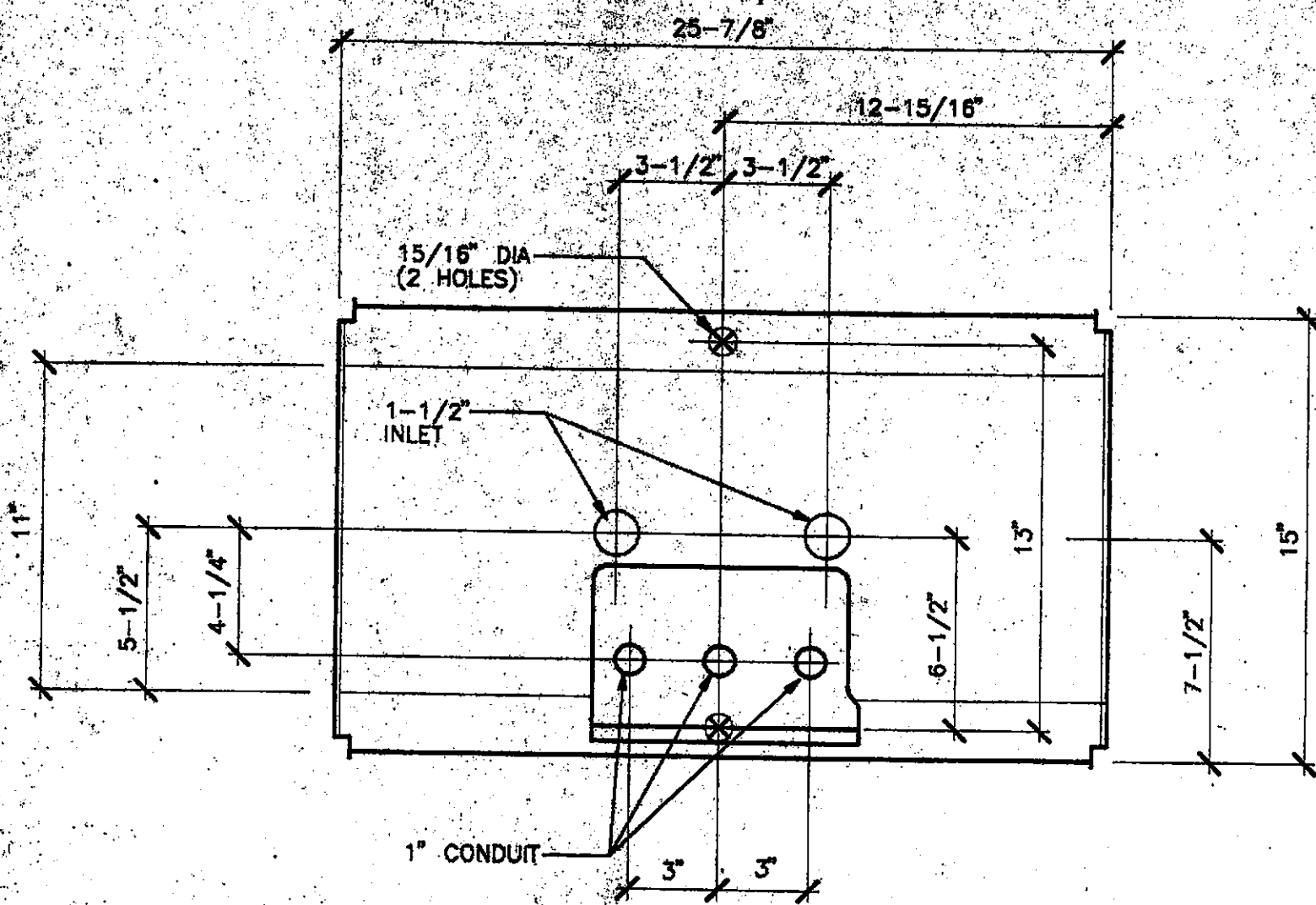
app. 3194
L.S. ANDREWS

date 3-1-94 drawn by SHK

project / facility

sheet / file

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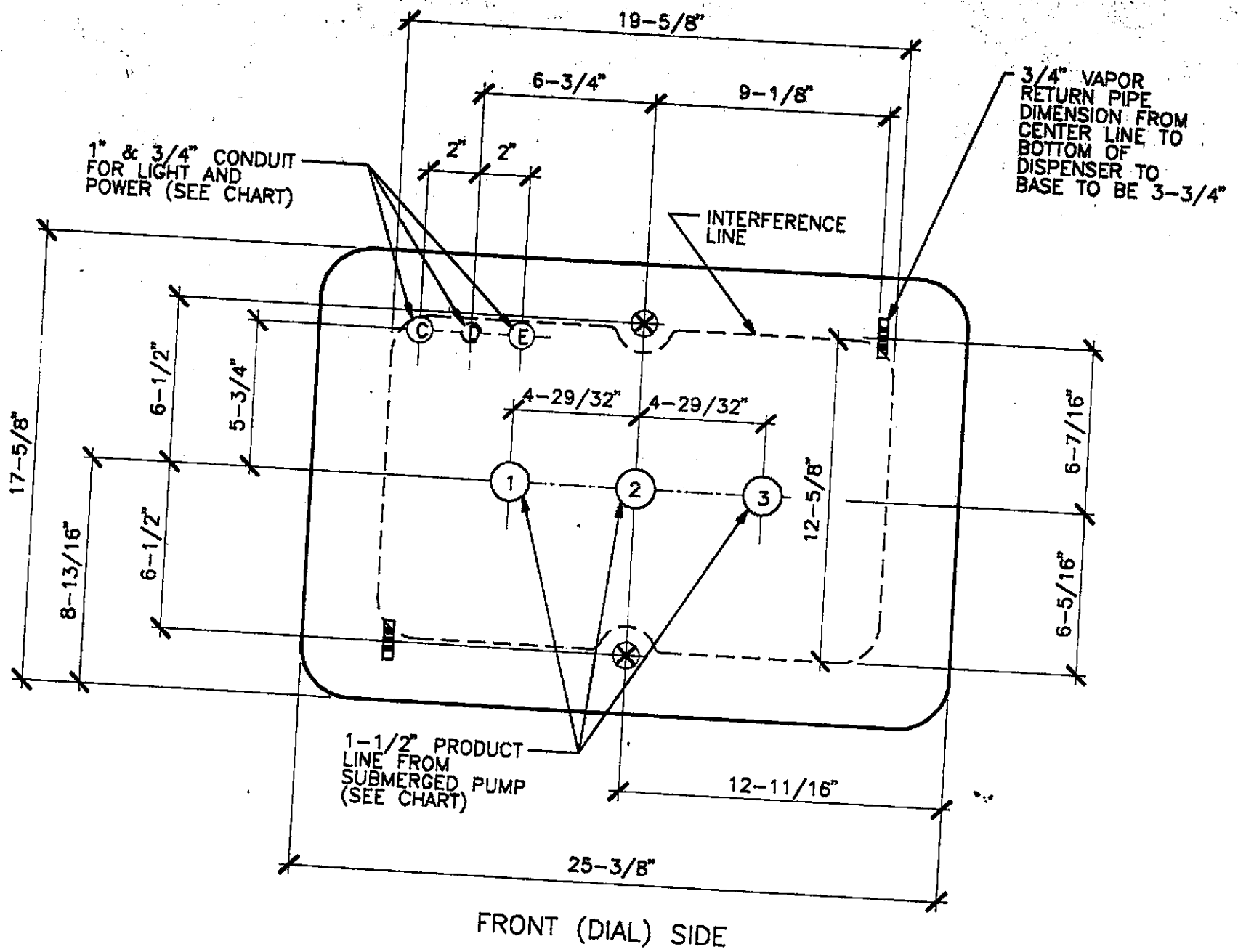
FRONT (DIAL) SIDE

SEE DETAIL #17 THIS SHEET

Wayne 360 Series Dispenser Base Dimensions

B

NOT TO SCALE:

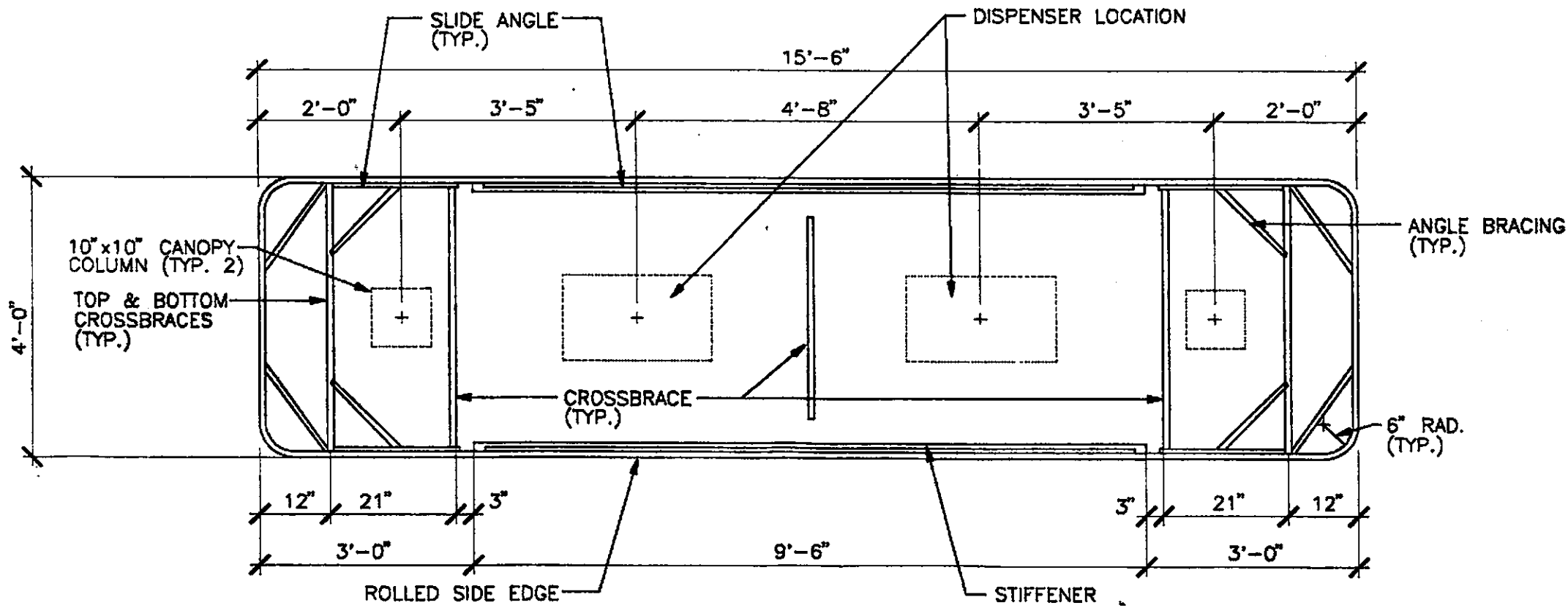
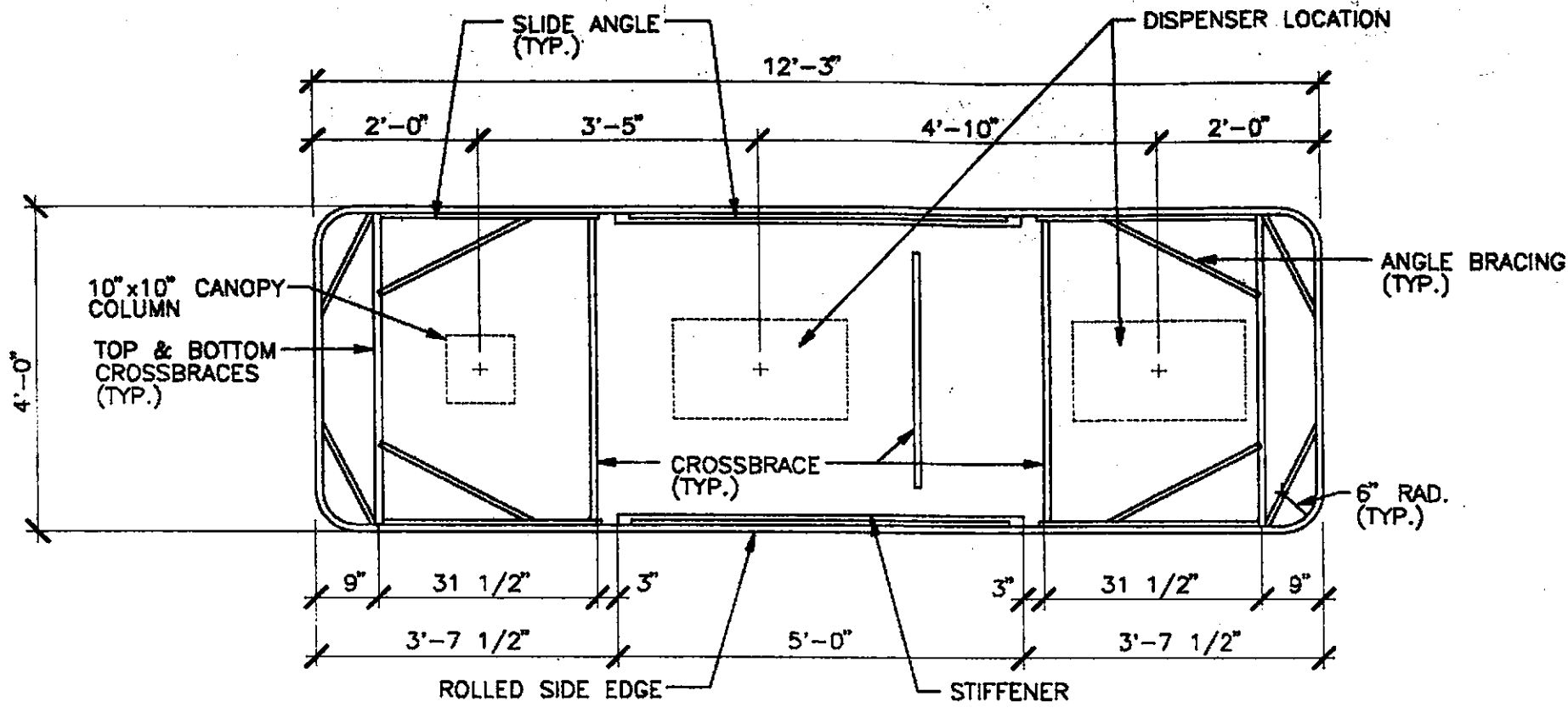


SEE DETAIL #17 THIS SHEET

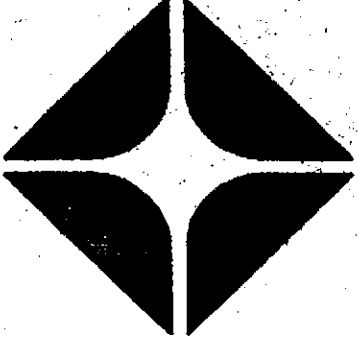
Tohkeim 262A Series Dispenser Base Dimensions



NOT TO SCALE:

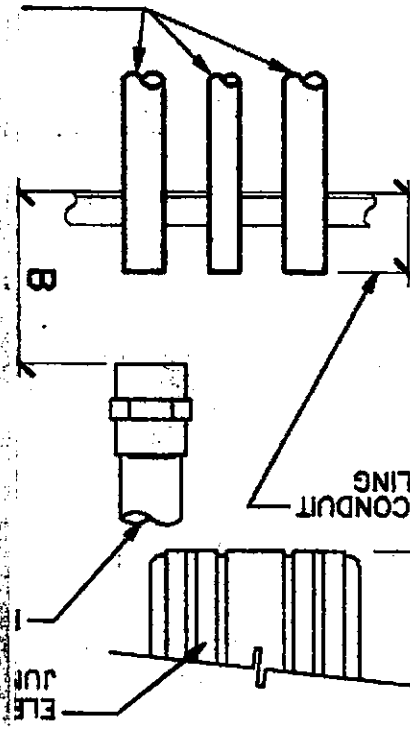


17 **Stainless Steel Island Forms**
 NOT TO SCALE: 36


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 Division of AtlanticRichfieldCompany
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995-6204

ELECTRICAL
 A 90630



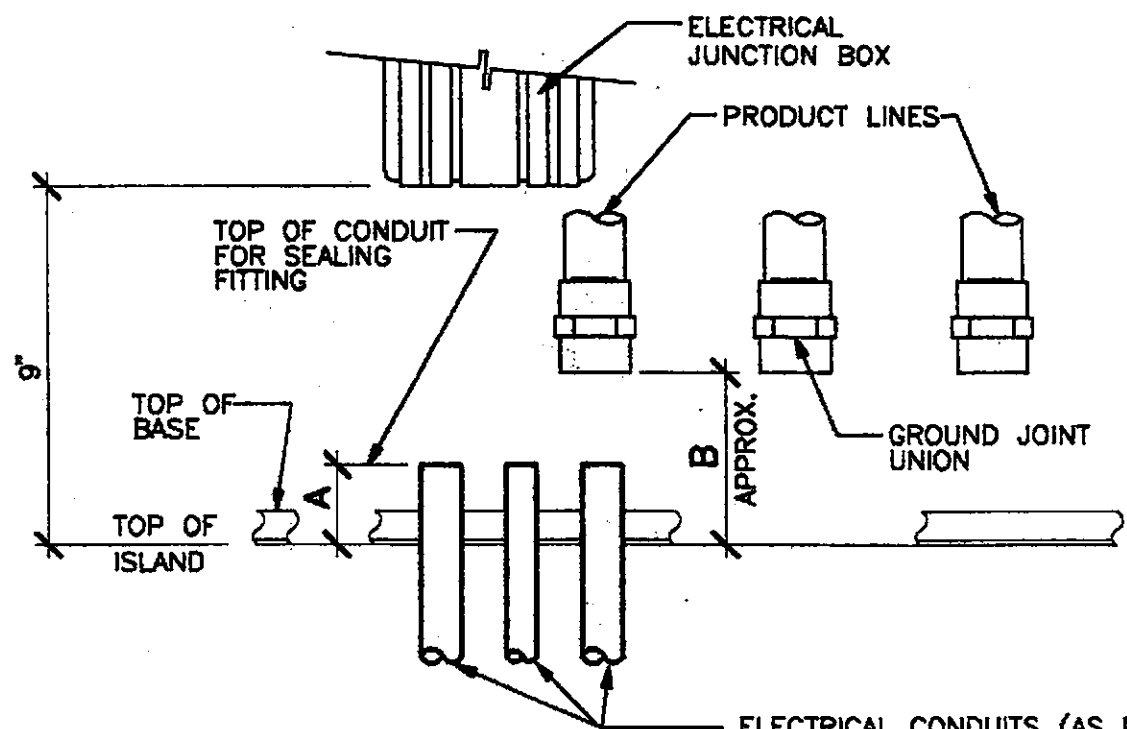
DIM. NO. HEIM

2	NML-RC-TWIN
2	NML-RC-TWIN

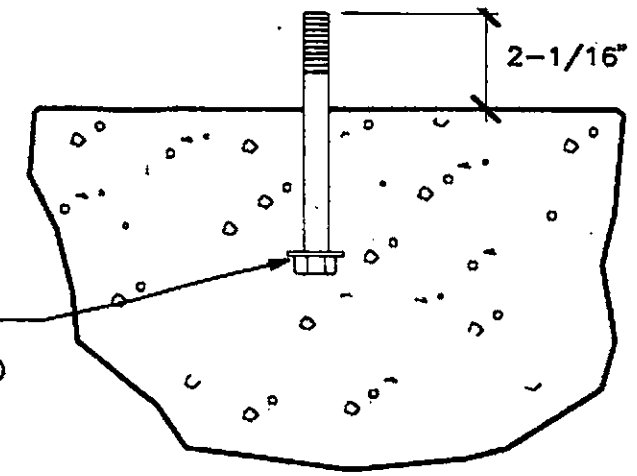
LOCATIONS ARE DICTATED BY
 S. CONSIDERATION MUST BE

DIM. NO. HEIM

18



5/8" WASHER WHEN MACHINE BOLTS ARE USED



TO MEET MINIMUM UL AND API REQUIREMENTS FOR UNIVERSAL INTERCHANGEABILITY OF PUMPS, ANCHOR PUMP TO ISLAND WITH TWO 1/2" x 5" LONG SQUARE HEAD MACHINE BOLTS OR USE TWO 1/2" x 3-1/2" LONG LAG SCREWS WITH 2" LONG EXPANSION SHIELDS AT POINTS MARKED ⊗ (13" APART.)

ELECTRICAL CONDUITS (AS REQUIRED SEE ELECTRICAL DRAWINGS)
ALL U.G. CONDUITS TO INCLUDING FITTINGS SHALL BE RIGID GALVANIZED STEEL (RGS) WITH BONDED .040" MIN. PVC JACKET

3" SINGLE WALL FIBERGLASS VAPOR RECOVERY HEADER (TYP.)

2" DOUBLE WALLED FIBERGLASS PRODUCT PIPING HEADERS (TYP.)

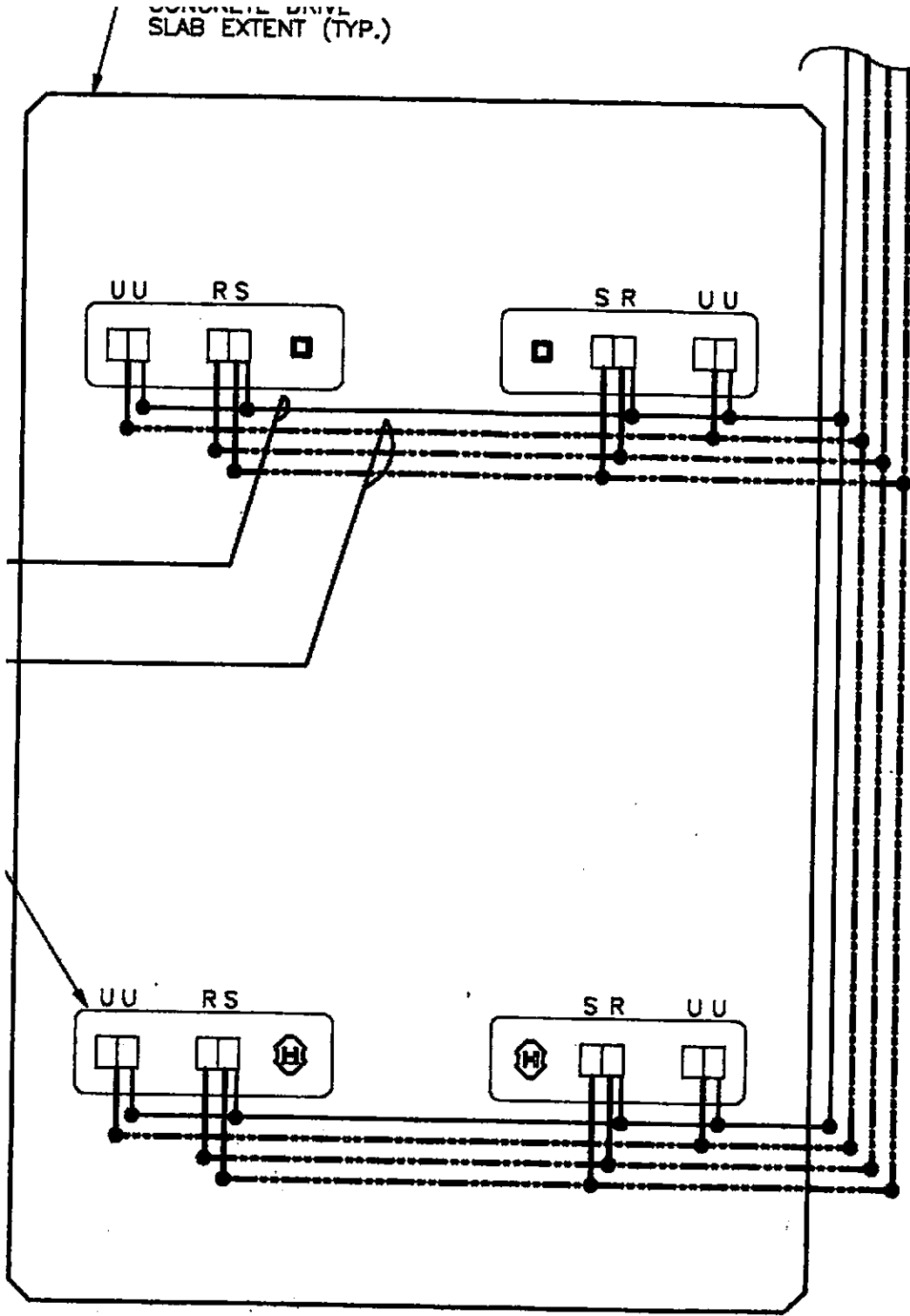
36 12'-3" x 4'-0" x 6" HIGH RAISED ISLAND EXTENT WITH CONCRETE WITH STAINLESS STEEL ISLAND FORMS. (TYP. 4 PLCS.) SEE DETAIL #17 THIS SHEET.

TOKHEIM MODEL NO.	"A" DIM	"B" DIM	CONNECTION BOX CONDUIT OPENINGS			PRODUCT LINE REQUIRED		
			C	D	E	#1	#2	#3
262A-VC-1-RC-TWIN	2"	4-5/8"	X		X		X	
262A-VC-2-RC-TWIN	2"	4-5/8"	X		X	X		X

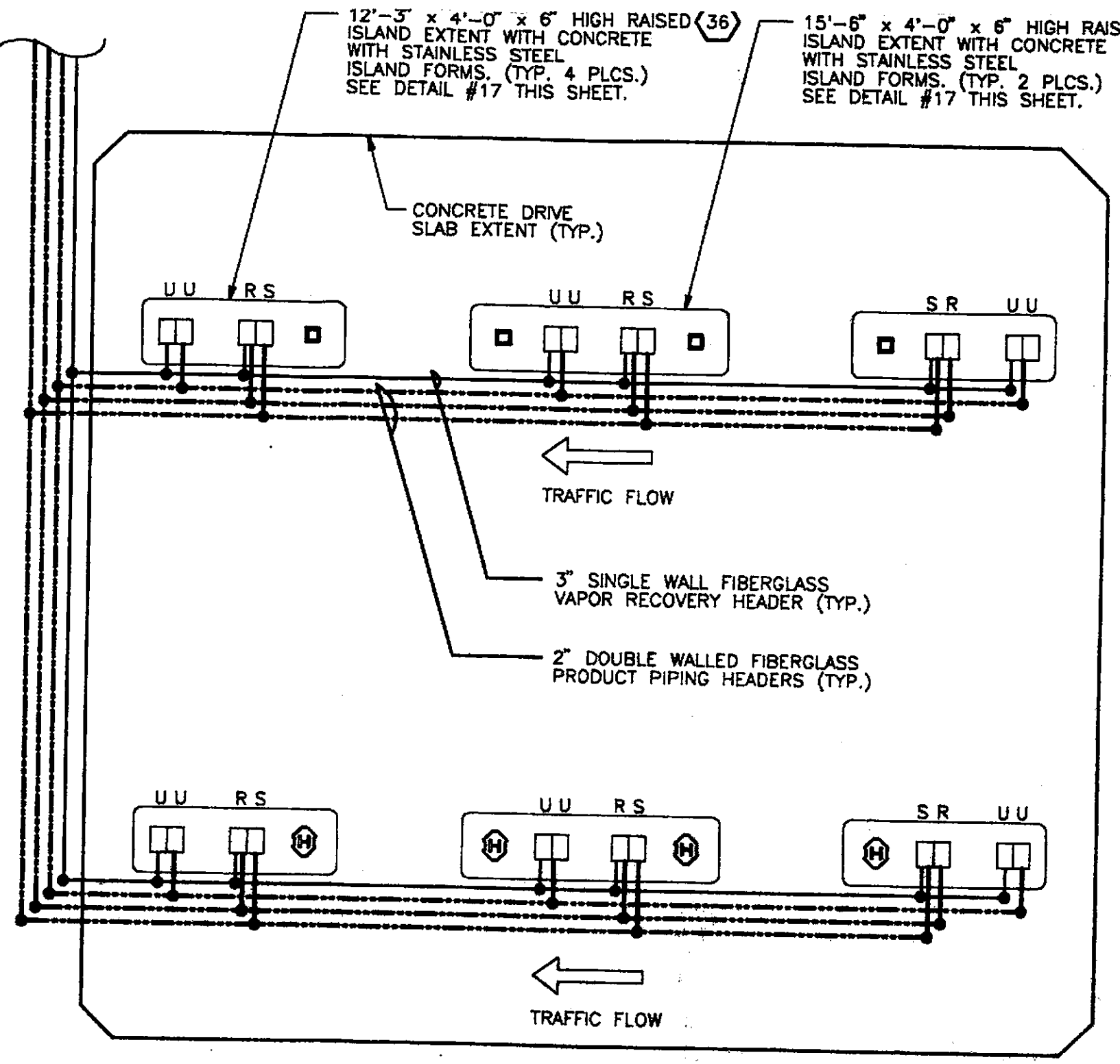
IMPORTANT:

PRODUCT LINE LOCATIONS ARE DICTATED FROM POSITION OF HOSE SIDE ON UNITS. CONSIDERATION MUST BE MADE WHEN LOCATING LINES.

Electric Conduit Penetrations and Universal Dispenser Mounting



16 Hose Product Layout



24 Hose Product Layout

Product Legend

- U - 87 OCTANE UNLEADED
- R - 89 OCTANE EC-1, MID-GRADE EXTRA OR LEADED REGULAR
- S - 92 OCTANE SUPER UNLEADED OR EC-PREMIUM

Typical Dispenser Product Configurations at Fueling Island

NOTE: ISLAND LAYOUT TO BE VERIFIED BY ARCO FIELD ENGINEER. DISPENSER CONFIGURATION FOR MIDDLE ISLANDS TO BE BASED ON SINGLE DIRECTION OF TRAFFIC FLOW IN PEAK OPERATIONAL HOURS

DATE	REVISIONS
A	ISSUED FOR PLAN CHECK

12'-3" x 4'-0" x 6" HIGH RAISED (36) ISLAND EXTENT WITH CONCRETE WITH STAINLESS STEEL ISLAND FORMS. (TYP. 4 PLCS.) SEE DETAIL #17 THIS SHEET.

15'-6" x 4'-0" x 6" HIGH RAISED (36) ISLAND EXTENT WITH CONCRETE WITH STAINLESS STEEL ISLAND FORMS. (TYP. 2 PLCS.) SEE DETAIL #17 THIS SHEET.

CONCRETE DRIVE SLAB EXTENT (TYP.)

TRAFFIC FLOW

3" SINGLE WALL FIBERGLASS VAPOR RECOVERY HEADER (TYP.)

2" DOUBLE WALLED FIBERGLASS PRODUCT PIPING HEADERS (TYP.)

TRAFFIC FLOW

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FAX (714)

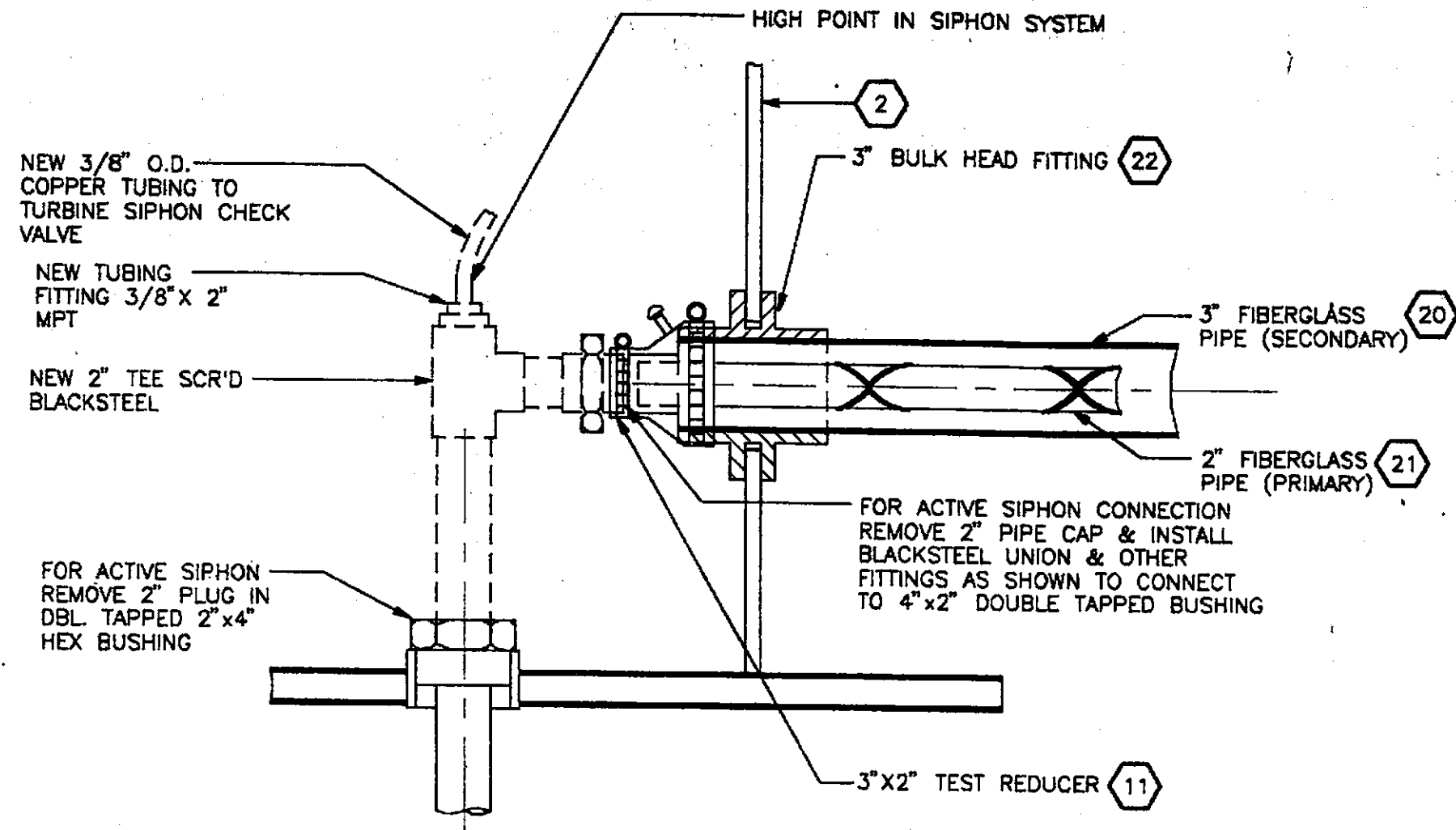
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appr. **3194**
 L.S. ANDREWS

Dispenser Vase Orientation Details & Dispenser Product Island Configurations

date	drawn by
3-1-94	SHK
project / facility	

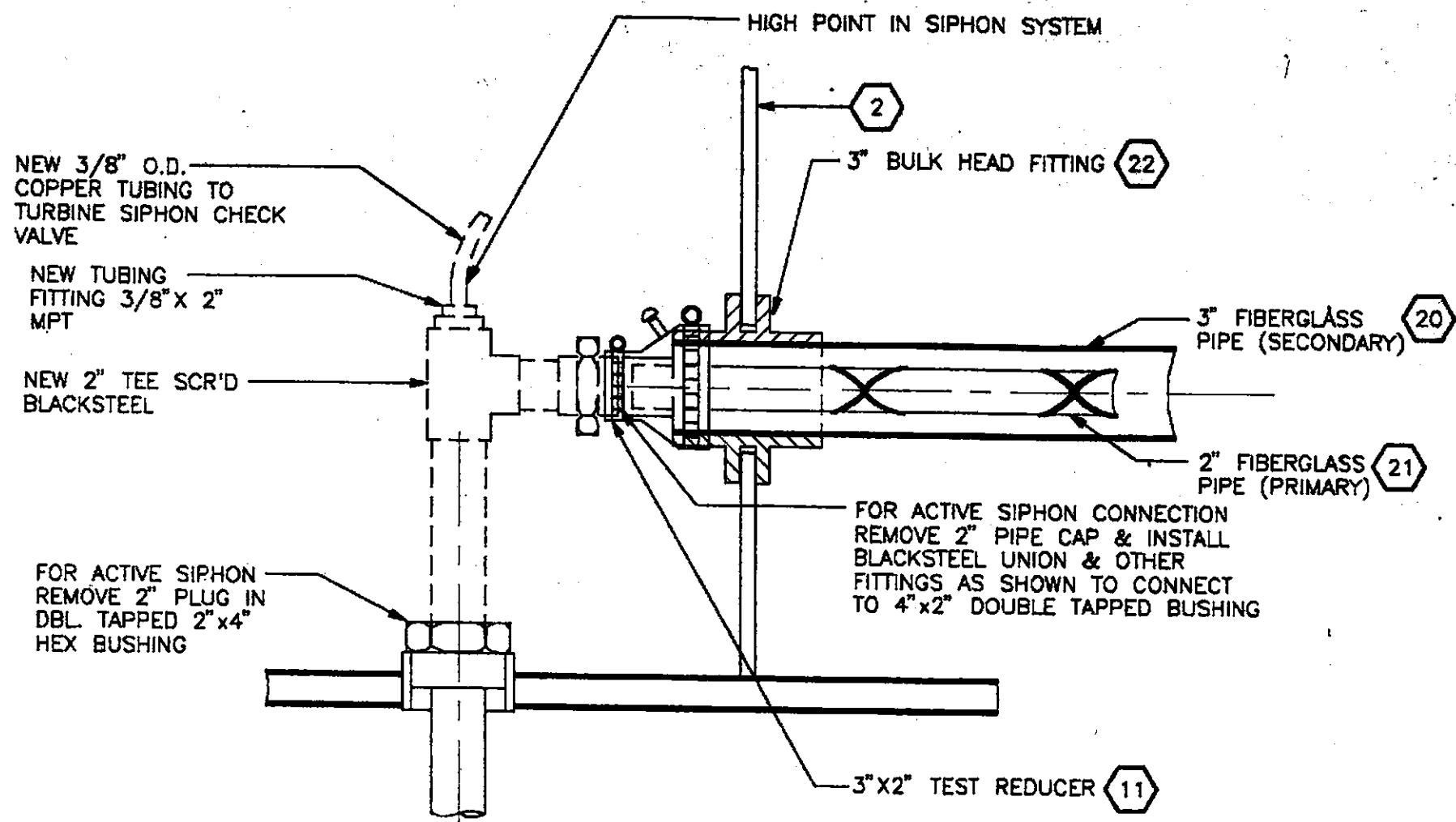


NOTE: ACTIVE CONNECTION SHOWN BY DASHED LINES

End Tank Connection For Turbine Side of Siphon System

6

NOT TO SCALE:



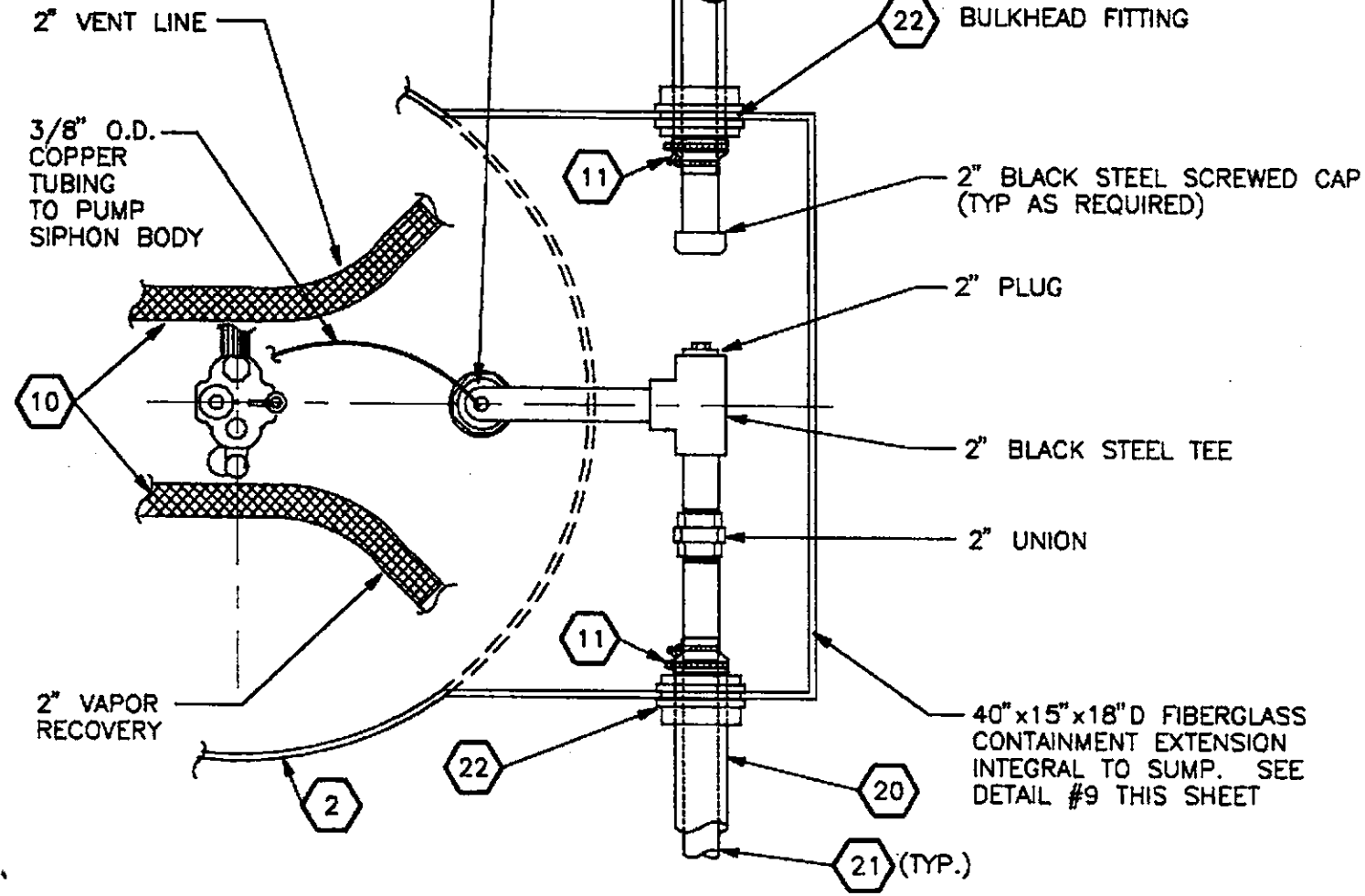
NOTE: ACTIVE CONNECTION SHOWN BY DASHED LINES

6

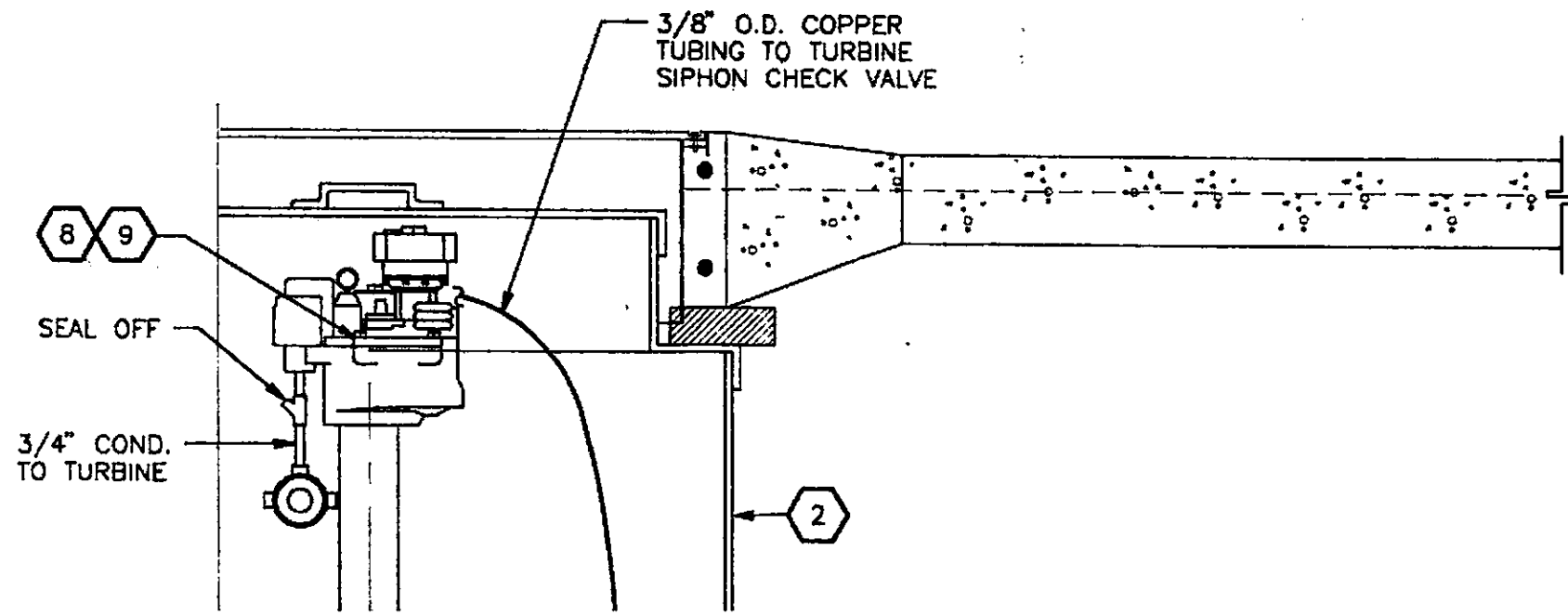
End Tank Connection For Turbine Side of Siphon System

NOT TO SCALE:

2" TEE OR ELBOW (ACTIVE CONN.)
SEE DETAILS #6 & #7 THIS
SHEET FOR TURBINE & PASSIVE
END CONNECTIONS



Plan View



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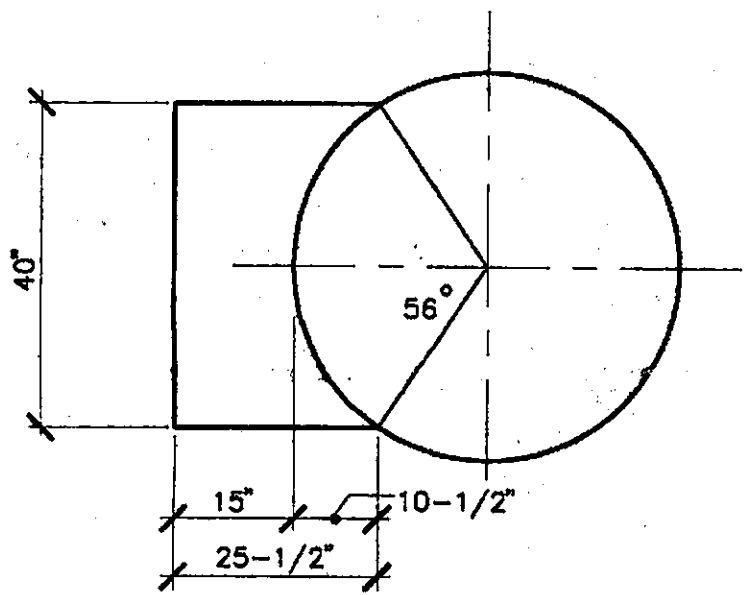
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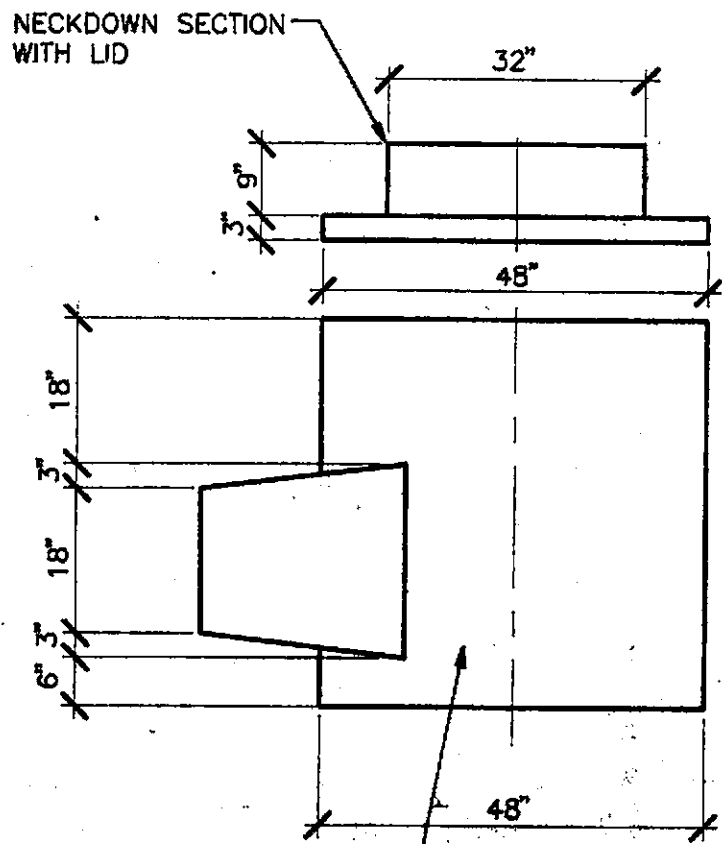
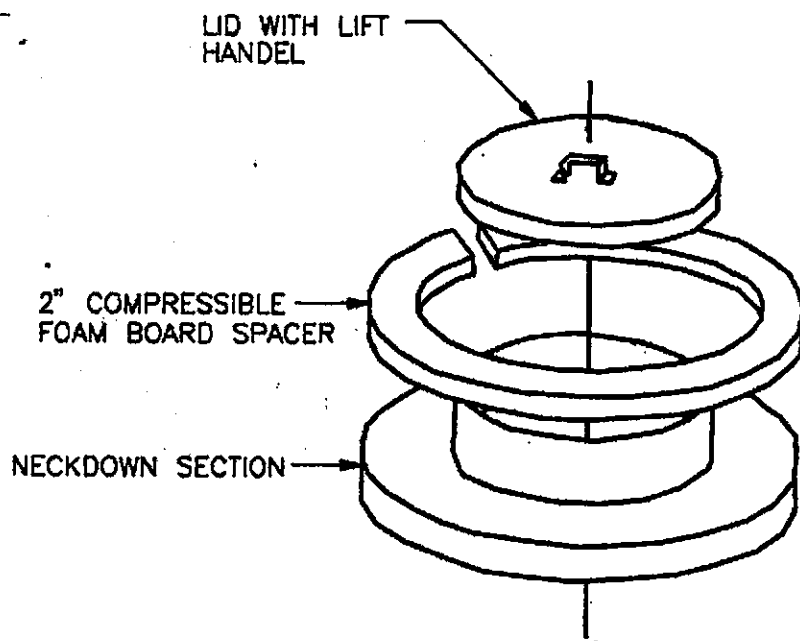
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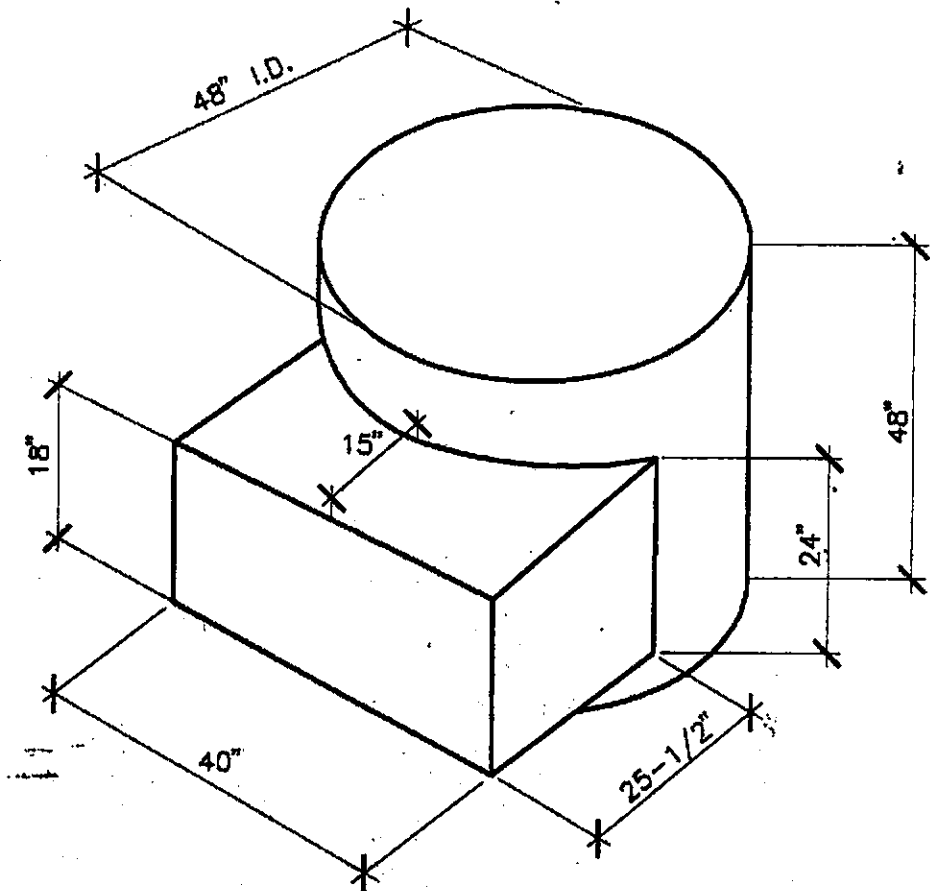


Plan View



48" DIA. FIBERGLASS SUMP FOR ACCOMODATING SIPHON PIPING AT MIDDLE TANKS

Side View



Isometric View

Sump Riser For Middle Tanks at Turbine Side (Siphon Piping)

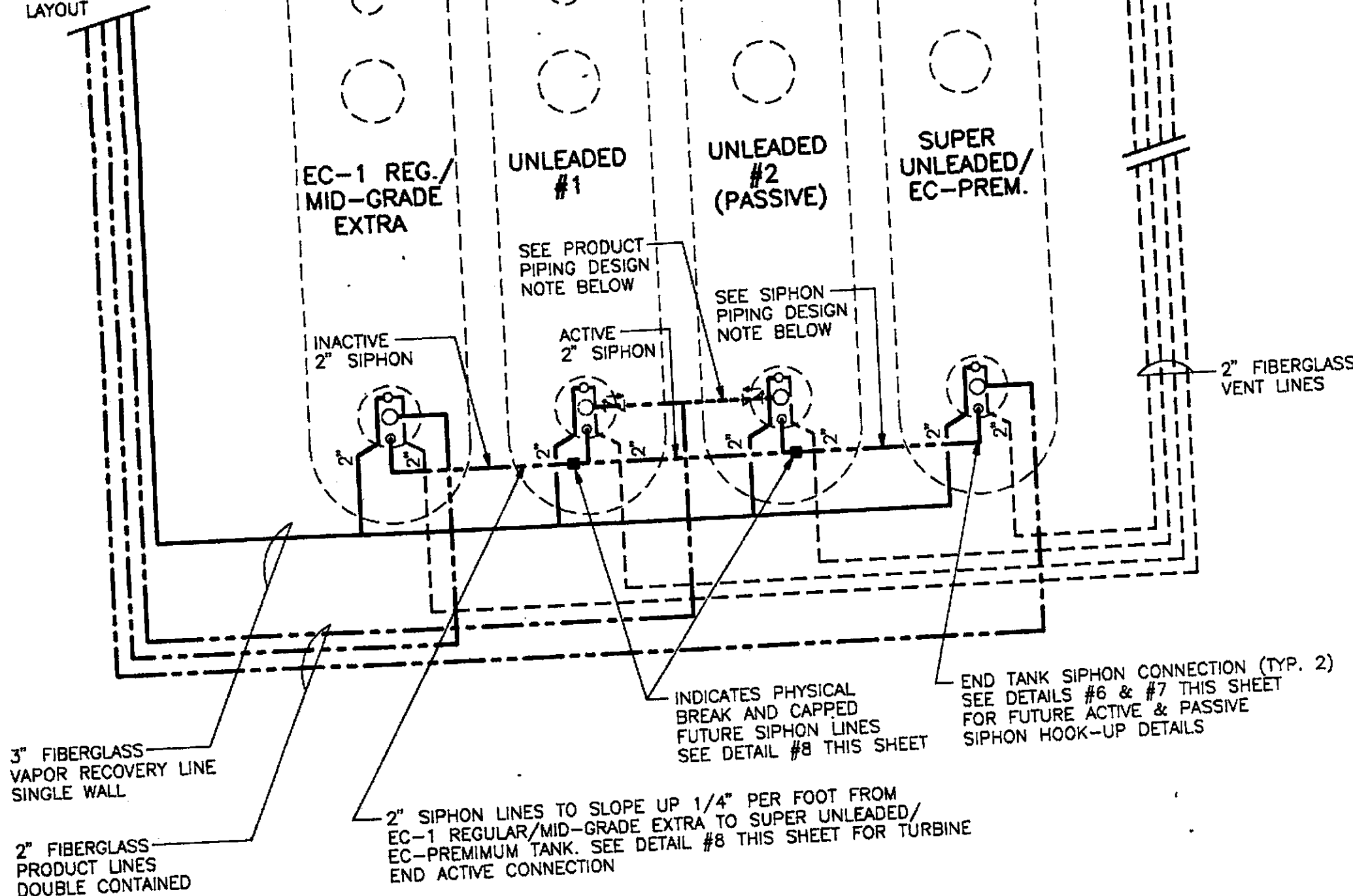
9

NOT TO SCALE

(4) 10,000 GALLON DOUBLE WALL GASOLINE STORAGE TANKS

TO DISPENSERS
SEE DWG. TK1-1
FOR SITE SPECIFIC
DISPENSER ISLAND
LAYOUT

2" VENT RISERS SEE
DWG. TK1-1 FOR
SITE SPECIFIC LOCATION



SIPHON PIPING DESIGN NOTE:

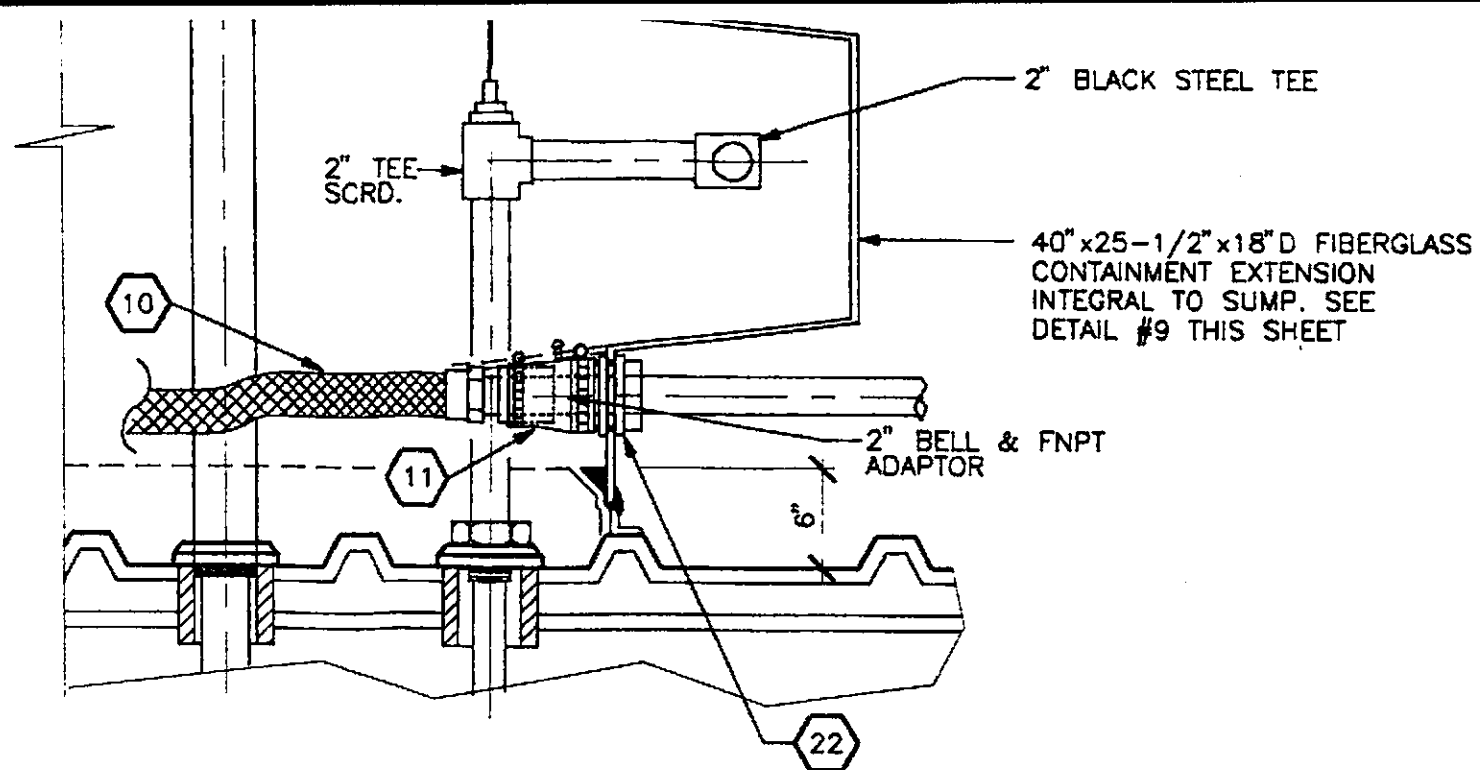
IT IS THE INTENT OF THE SIPHON SYSTEM DESIGN TO PROVIDE FUTURE VERSATILITY OF VARIOUS SIPHON CONFIGURATIONS.

3 PRODUCT FACILITIES SHALL HAVE: (2) UNLEADED TANKS, (1) SUPER UNLEADED/EC-PREMIUM TANK & (1) EC-1 REGULAR/MID-GRADE EXTRA TANK. THE (2) UNLEADED TANKS SHALL BE SIPHONED TOGETHER & THERE SHALL BE INACTIVE SIPHONS INSTALLED BETWEEN THE UNLEADED #1 & EC-1 REGULAR/MID-GRADE EXTRA TANK AS WELL AS BETWEEN THE UNLEADED #2 AND SUPER UNLEADED/EC-PREMIUM TANKS FOR POSSIBLE FUTURE RECONFIGURATION OF PRODUCTS STORED.

PRODUCT PIPING DESIGN NOTE:

FOR FACILITIES THAT HAVE (8) "UNLEADED" HOSES, THE "PASSIVE" UNLEADED TANK SHALL NOT HAVE A TURBINE INSTALLED. FOR FACILITIES THAT HAVE MORE THAN (8) "UNLEADED" HOSES, A TURBINE SHALL BE INSTALLED AT THE "PASSIVE" UNLEADED TANK. THE TWO TURBINES SHALL BE MANIFOLDED TOGETHER AS SHOWN. 2" CHECK VALVES SHALL BE INSTALLED IN THE PRODUCT LINES INSIDE THE SUMPS FOR BACKFLOW PREVENTION.

Typical Piping Arrangement at Tanks



NOTE: ALL PIPING SHOWN IN SOLID FOR CLARITY

NOTE: ACTIVE TURBINE END OF SIPHON SHOWN. SEE DETAIL #7 THIS SHEET FOR PASSIVE CONNECTION (LESS DOUBLE WALL PIPE)

(SHOWN FOR FIBERGLASS, STEEL SIMILAR)

8

Siphon Piping at Center Tanks

SCALE: 1" = 1'-0"

DATE	REVISIONS
A	ISSUED FOR PLAN CHECK

date
3-1-94

project / facility

sheet / file

TK3-2

New amp Facility

**Siphon Piping
Installation Details**

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A
TK3-4

29 HOSE RETRACTOR BOX

15
TK3-4

RETRACTOR BAR

26 NEW WAYNE DISPENSER

24" ±
REF.

28 COAXIAL FUEL HOSE (TYP.)

7'-3" ±
REF.

27 COAXIAL DISPENSER NOZZLE (TYP.)



CONCRETE ISLAND

B
TK3-4

B
TK3-4

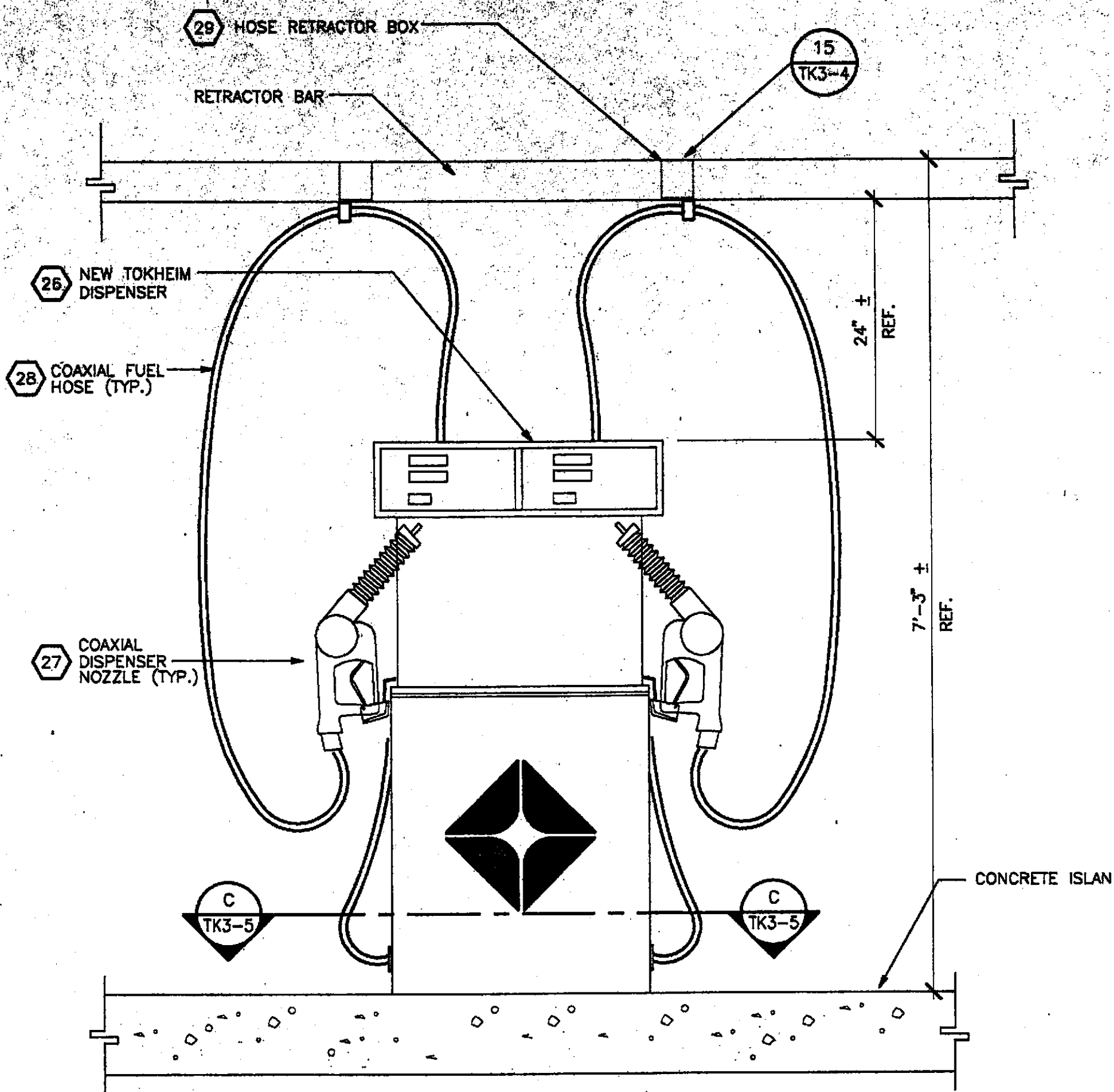
NOTE: UNDERGROUND PIPING NOT SHOWN ON THIS DRAWING. SEE DWG. TK3-3

A
TK3-4

Wayne 360 Series Electronic Dispenser

13

NOT TO SCALE.



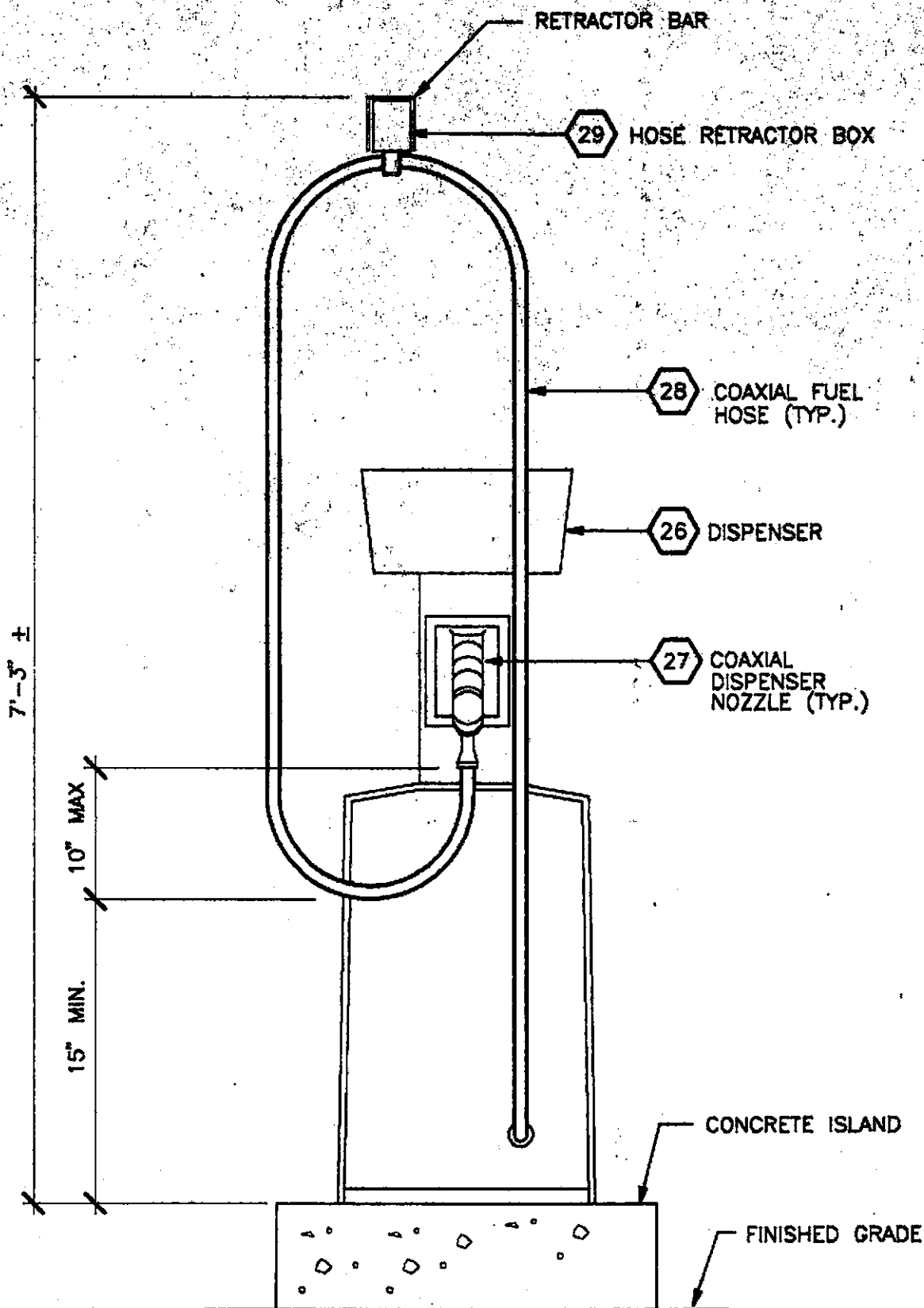
NOTE: UNDERGROUND PIPING NOT SHOWN ON THIS DRAWING. SEE DWG. TK3-3

W/ INTERNAL CHECK/SPLITER VALVE

Tokheim 262A Series Electronic Dispenser

14

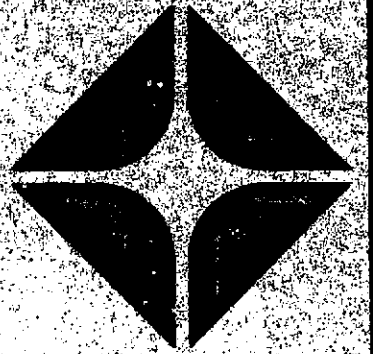
NOT TO SCALE:



A

**Typical Dispenser
Hose Dimensions**

NOT TO SCALE.



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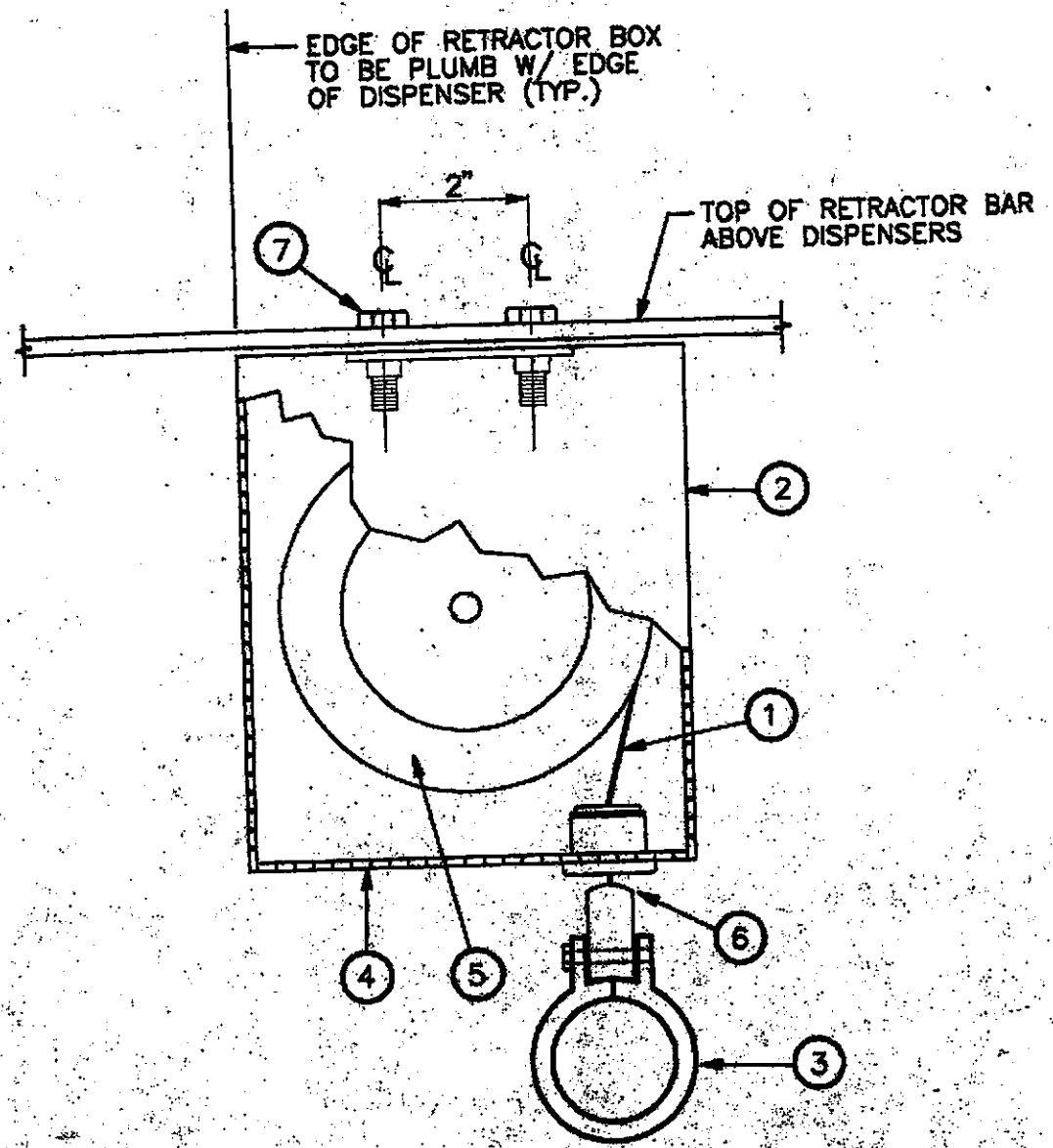
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CNI HOSE RETRACTOR PARTS LIST

ITEM	PART NO.	QTY.	DESCRIPTION
1	9984	1	CABLE, 1/8" NYLON BRAIDED
2	9967	1	COVER, .090 ALUM., BLACK EPOXY COATING
3	----	1	HOSE CLAMP, SINGLE HOSE, SPEC BY MANF.
4	9966	1	BODY, .090 ALUM., BLACK EPOXY COATING
5	9971	1	REEL, HEAVY DUTY
6	9979	1	EYE, CABLE ASSEMBLY
7	9980	2	SCREW, 3/8"-16 x 1" SOCKET HEAD

CNI HOSE RETRACTOR ASSEMBLIES

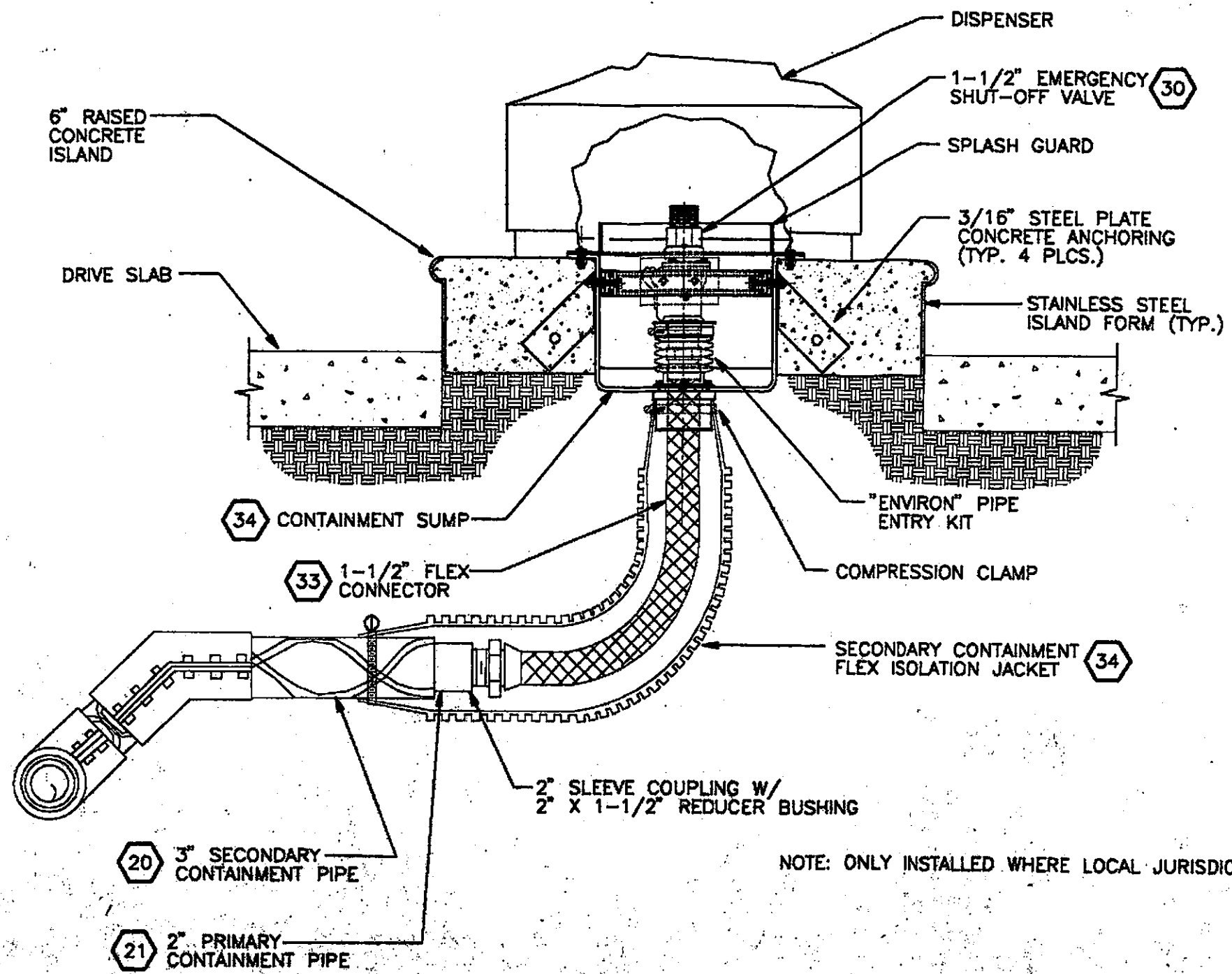
PART NO.	QTY.	DESCRIPTION
9930-GYAK	1	OVERHEAD RETRACTOR, GOODYEAR HOSE, ANTI KINK
9930-DAK	1	OVERHEAD RETRACTOR, DAYCO HOSE, ANTI KINK
9930-TAK	1	OVERHEAD RETRACTOR, THERMOID HOSE, ANTI KINK

CNI Hose Retractor

15

NOT TO SCALE

29



NOTE: ONLY INSTALLED WHERE LOCAL JURISDICTION REQUIRES.

VAPOR RECOVERY NOT SHOWN THIS VIEW

Typical Under Dispenser Containment Basin

16

NOT TO SCALE

35

DATE	REVISIONS
A	ISSUED FOR PLAN CHECK

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FRANCIS ENGINEER
 ARCHITECTURAL
 5951 LAKESHORE

New amp Facility

Typical Dispenser and Retractor Bar Installation Details

appr. **3194**
 L.S. ANDREWS

date 3-1-94 drawn by SHK

project / facility

sheet / file
TK3-4
 of

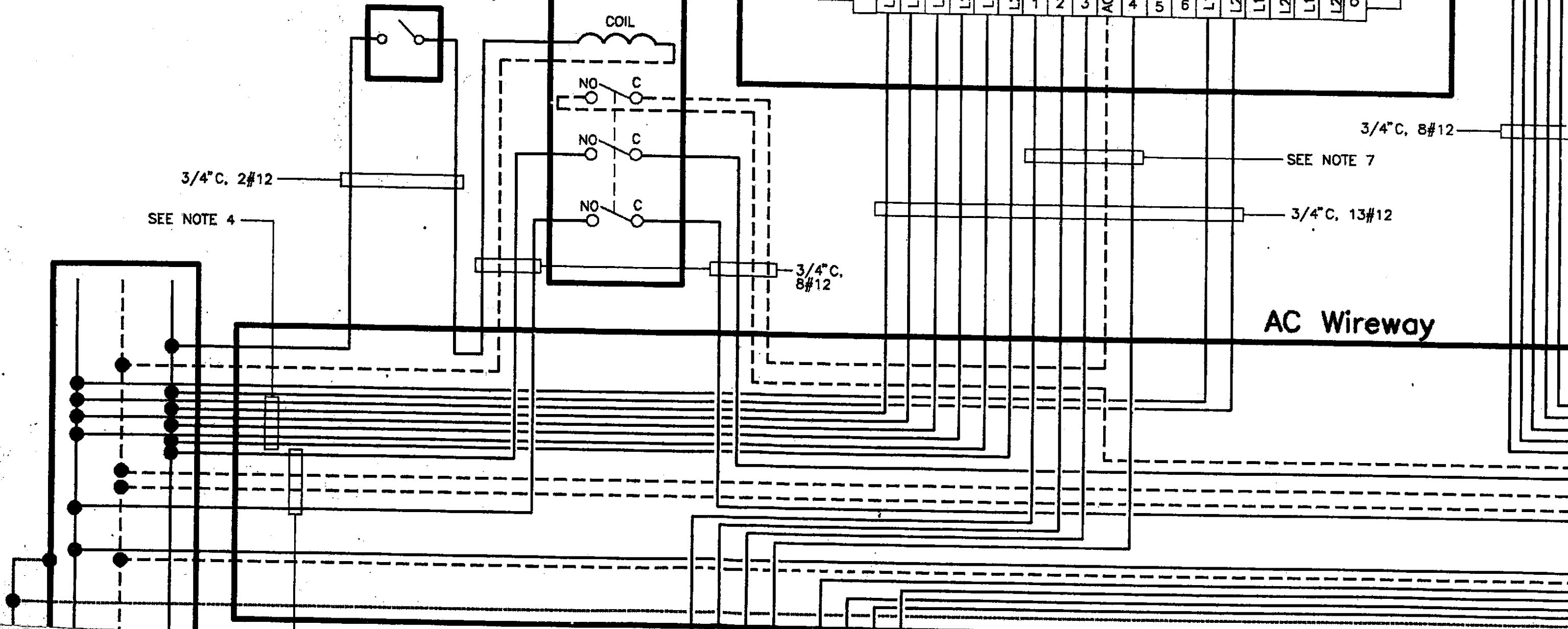
Wiring Legend

HOT ———
 NEUTRAL - - - -
 GROUND ·····

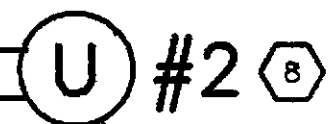
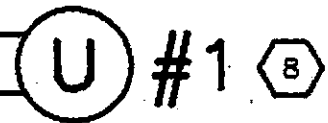
41 Tokheim Model 168/268 Relay Control Box

SEE NOTE 6

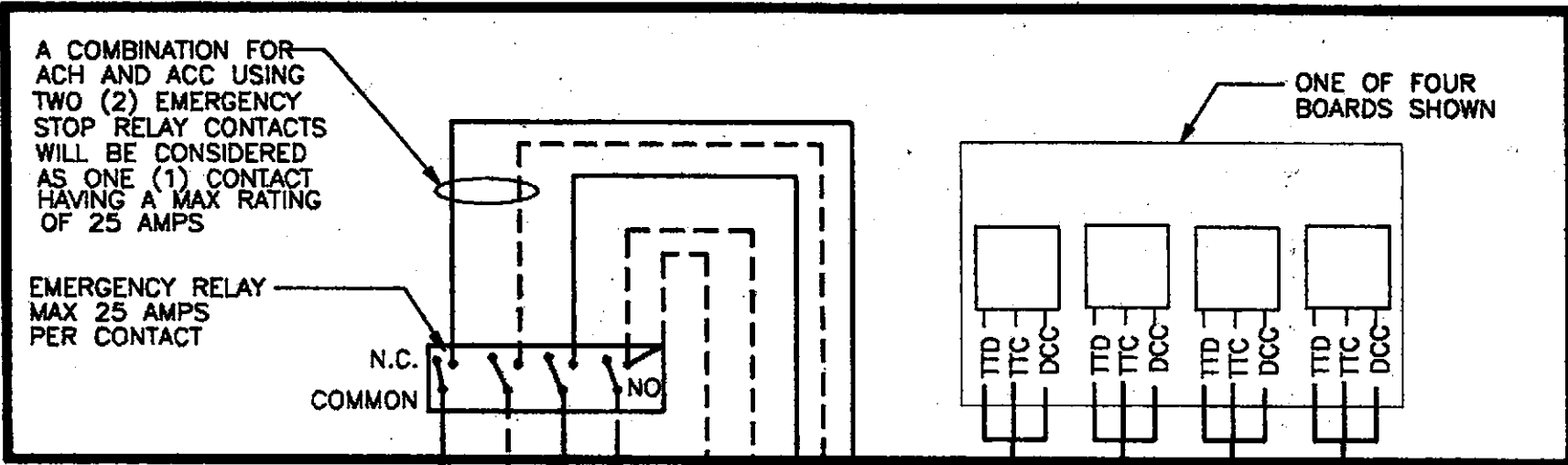
40 Emergency Cut-Off Switch (NC)
 43 Emergency Cut-Off Relay



Pumps



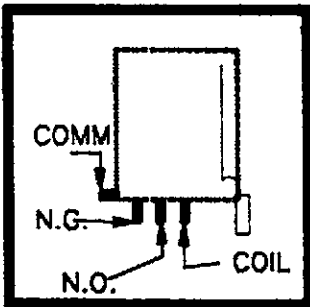
39
Tokheim Model 67/67A Interface Box



A COMBINATION FOR ACH AND ACC USING TWO (2) EMERGENCY STOP RELAY CONTACTS WILL BE CONSIDERED AS ONE (1) CONTACT HAVING A MAX RATING OF 25 AMPS

EMERGENCY RELAY
MAX 25 AMPS
PER CONTACT

ONE OF FOUR
BOARDS SHOWN



SIDE VIEW OF EMERGENCY STOP RELAY ILLUSTRATING CONTACT LOCATIONS TYP 4 PLACES

WHEN REQUIRED ONLY SEE SPECIAL NOTE #1 FOR DUAL SINGLE PRODUCT DISPENSERS

SEE NOTE 5

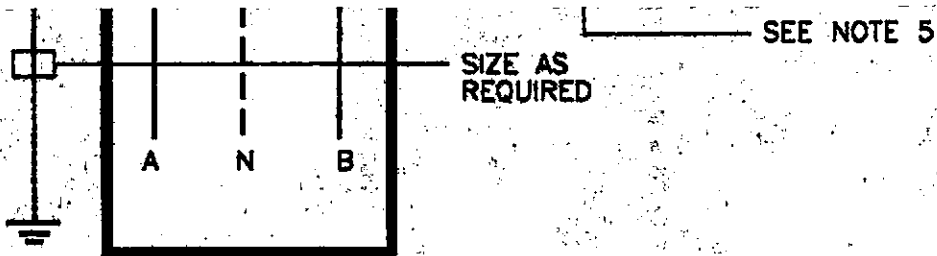
DC Wireway



ARCO Products Company

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Panel 'A'

3/4" C, 2#12
 3/4" C, 2#12
 3/4" C, 2#12
 3/4" C, 2#12

Sheet Notes

TOKHEIM

1. STAND ALONE INSTALLATIONS DO NOT REQUIRE. MODELS 67/67A AND 68. SEE NOTE 6 FOR REMOTE CONTROL INSTALLATION.
2. A SEPARATE CONDUIT IS RECOMMENDED FOR DC AND AC WIRING FOR EACH DISPENSER TO PREVENT INDUCTIVE INTERFERENCE FOR DISPENSERS. A SINGLE CONDUIT MAY BE USED, BUT IT MUST BE CONNECTED TO BOTH CONNECTION BOXES IN DISPENSER.
3. CAUTION:
120VAC WIRING MUST NOT BE CONNECTED TO LOW VOLTAGE CONNECTIONS. DAMAGE FROM MISWIRING IS NOT COVERED BY WARRANTY.
4. MAXIMUM 20 AMP 2-POLE, CIRCUIT BREAKER FOR 240 VAC, 1-1/2 HP MOTOR IN PANEL 'A'.
5. DISTRIBUTION PANEL MASTER DISPENSER CIRCUIT BREAKER TO BE MAXIMUM 50 AMP. ALSO, IT IS RECOMMENDED THAT A SEPARATE CIRCUIT BREAKER BE INSTALLED IN EACH CIRCUIT BETWEEN MODEL 67/67A (WHEN USED) AND EACH DISPENSER. FOR CALCULATING TOTAL LOAD, AND DISPENSER LOAD, SEE MAXIMUM AMP RATING ON INSIDE OF DISPENSER DOOR BY AC CONNECTION
6. REMOTE CONTROL ONLY
RELAYS USED IN MODEL 68 RELAY CONTROL BOX HAVE A CONTACT RATING OF 1-1/2 HP. @ 240 VAC. IF A MODEL 68 RELAY CONTROL BOX IS NOT USED, A MOTOR RELAY MUST BE USED HAVING A COIL RATING OF 1/2 AMP MAXIMUM @ 120 VAC. AND A CONTACT RATING OF 1-1/2 HP. @ 240 VAC.
7. REMOTE CONTROL ONLY
MAXIMUM OF (3) DISPENSER MOTOR CONTROL CONDUCTORS RECOMMENDED FOR EACH PRODUCT TERMINAL BLOCK LOCATION.
8. ALL U.G. CONDUIT INCLUDING FITTINGS SHALL BE RIGID GALVANIZED STEEL (RGS) WITH A BONDED .040" MIN. PVC JACKET.

RONAN

9. **WARNING** - THIS IS INTRINSICALLY SAFE WIRING AND MUST BE SEPARATED FROM ALL OTHER WIRING AND INSTALL IN CONDUIT. MAXIMUM CABLE LENGTH BETWEEN MONITOR AND SENSORS IS 1,165 FEET.
10. THIS WIRING MUST BE SEPARATED FROM ALL OTHER WIRING AND INSTALLED IN CONDUIT.
11. **WARNING** - TO MAINTAIN INTRINSIC SAFETY, THIS WIRING MUST BE SEPARATED FROM ALL OTHER WIRING AND INSTALL IN CONDUIT.
12. **WARNING** - TO MAINTAIN INTRINSIC SAFETY, THE JUNCTION BOX MUST CONTAIN ONLY WIRE SPLICES.
13. **SPECIAL NOTE** - IT IS THE INTENT OF THIS DESIGN THAT ANY FAILURE OF THE LEAK DETECTION SYSTEM, THAT ALL POWER TO THE PRODUCT PUMPS WILL BE INTERRUPTED.

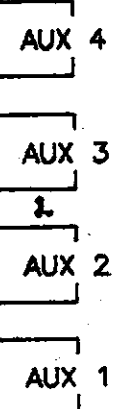
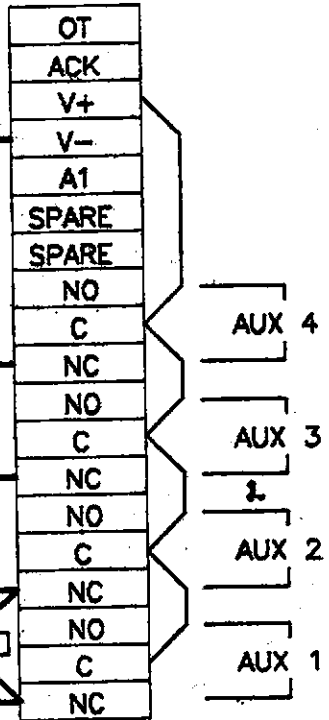
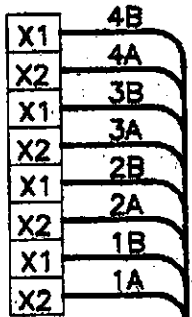
3/4" C, 2#12 &
1#12 GRD.

Ronan Series X76S Leak Detection Monitor

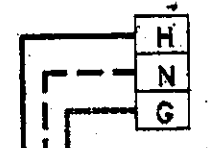
38

JUMPER USED TO MONITOR
SIPHONED UNLEADED TANK
WHEN WASTE OIL TANK
NOT USED

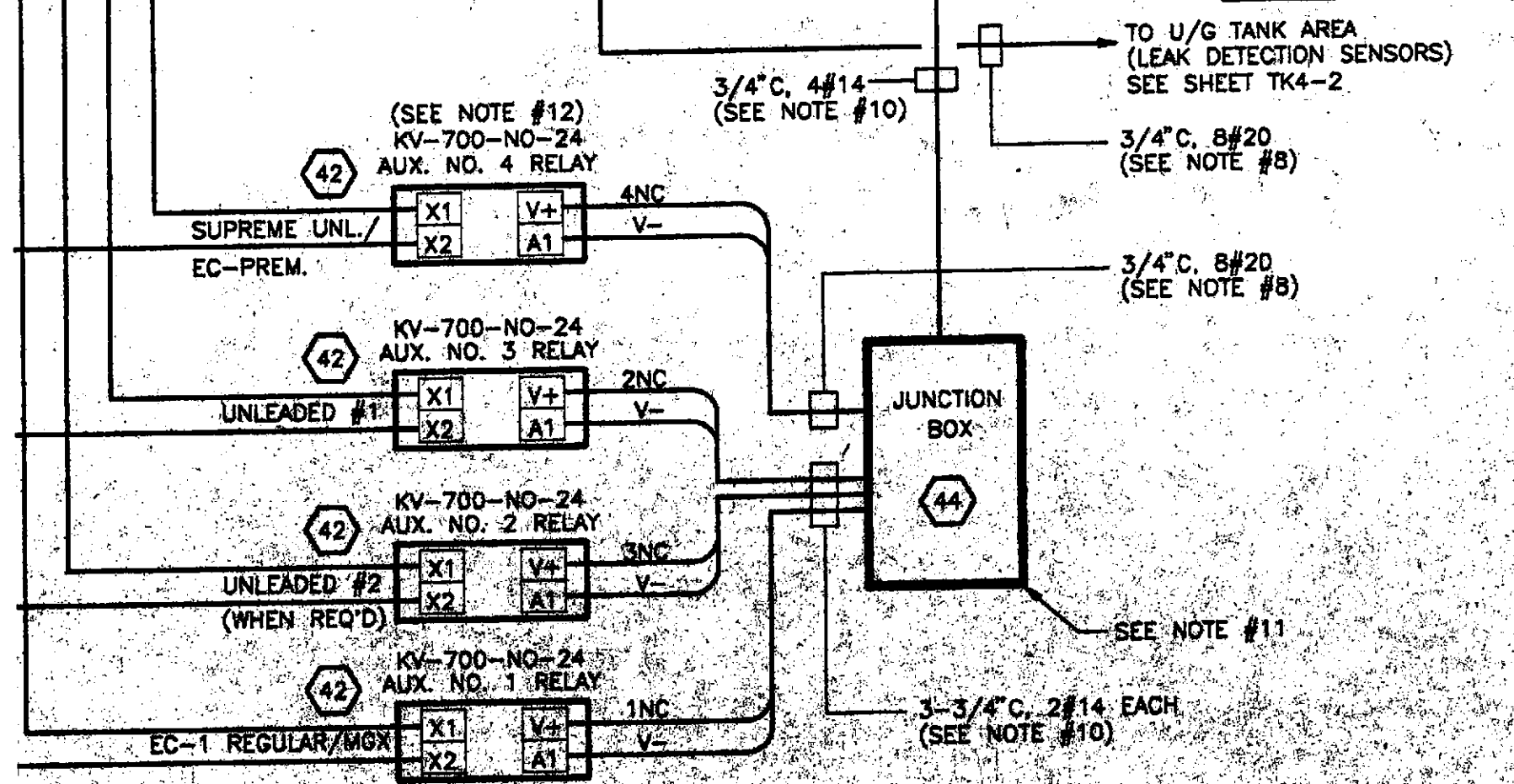
INTRINSICALLY
SAFE INPUTS



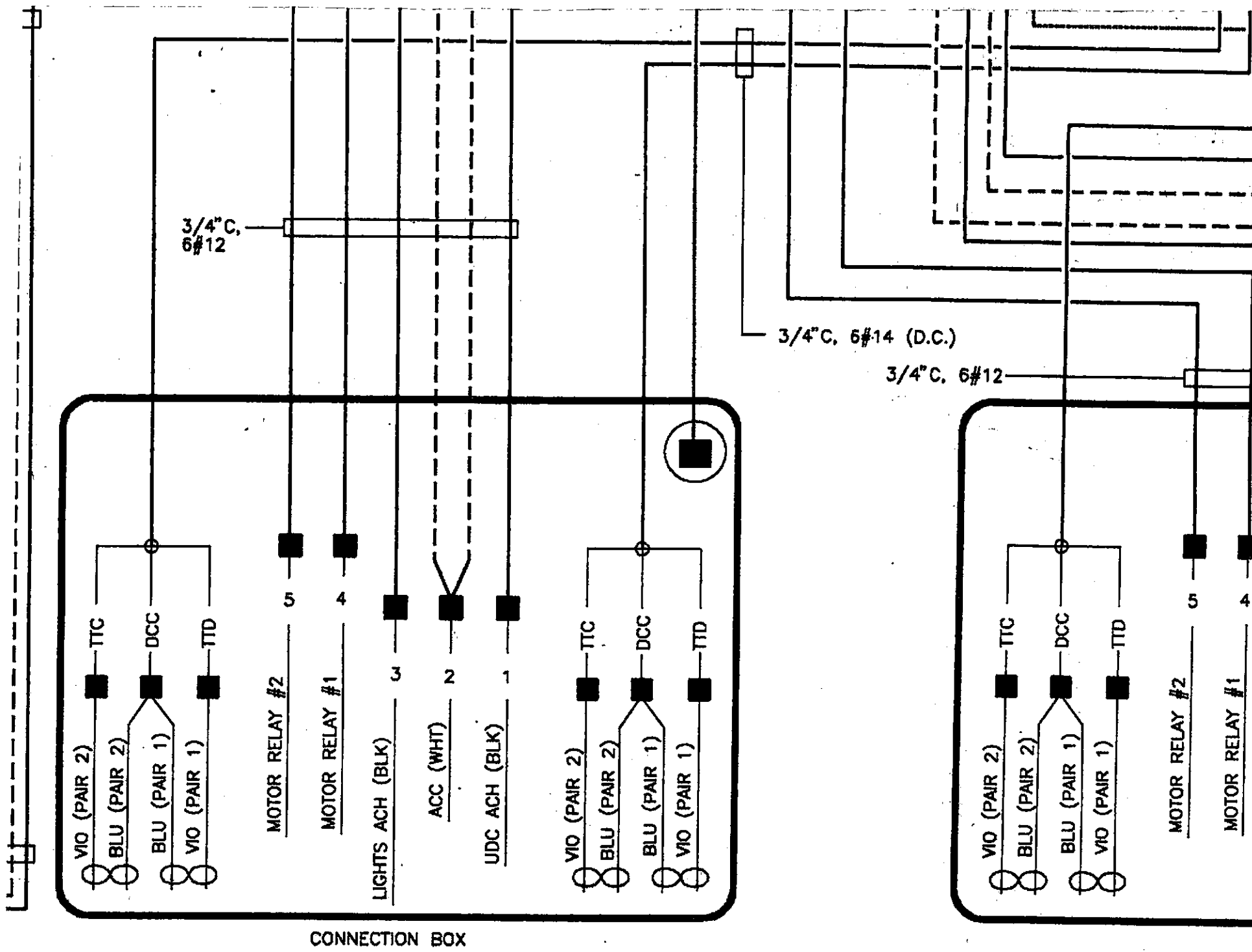
POWER INPUT



SEE NOTE #9



FOR F
A SEC
UNLEA
1st U
BE WI



**Typical Tokeim Dispenser 26
Model #262A (Dual Single Product)
Unleaded**

(SEE DWG. TK1-1 FOR DISPENSER TYPES & COUNT)
ADDITIONAL DISPENSERS WIRED SIMILAR

**Typical Tokeim Dispenser
Model #262A (Dual Single Product)
EC-1 Regular/Micro
EC-Premium/Supreme**

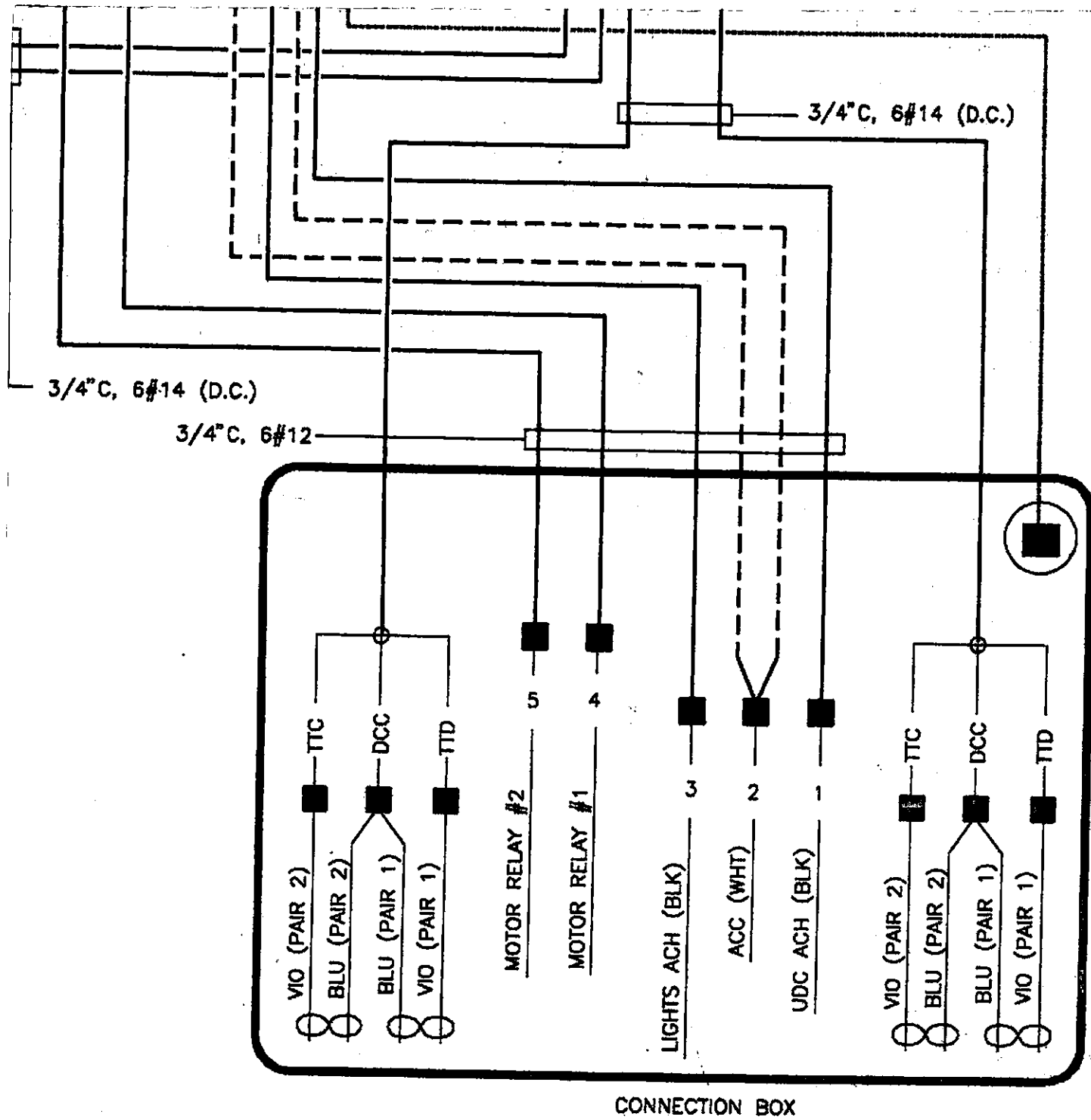
(SEE DWG. TK1-1 FOR DISPENSER TYPES & COUNT)
ADDITIONAL DISPENSERS WIRED SIMILAR

Special Note #1

FOR FACILITIES THAT HAVE MORE THAN (4) UNLEADED DISPENSERS (8 HOSES) A SECOND UNLEADED TURBINE WILL BE INSTALLED IN THE PASSIVE UNLEADED UNLEADED TANK. HALF OF UNLEADED HOSES SHALL BE WIRED TO ACTIVATE 1st UNLEADED TURBINE. THE OTHER HALF OF THE UNLEADED HOSES SHALL BE WIRED TO ACTIVATE 2nd UNLEADED TURBINE.

THIS DRAWING USED IN RETANKING/REPIPING PROJECTS WHEN EXISTING BUILDING IS TO REMAIN

	DATE	REVISION
A		ISSUED FOR PLAN C



Typical Tokeim Dispenser 26
 Model #262A (Dual Two Product)
 EC-1 Regular/Mid-Grade Extra and
 EC-Premium/Supreme Unleaded

(SEE DWG. TK1-1 FOR DISPENSER TYPES & COUNT)
 ADDITIONAL DISPENSERS WIRED SIMILAR

DATE	REVISIONS
A	ISSUED FOR PLAN CHECK

OBJECTS WHEN

New amp Facility

appr. **3194**
 L.S. ANDREWS

date 3-1-94 drawn by SHK

project / facility

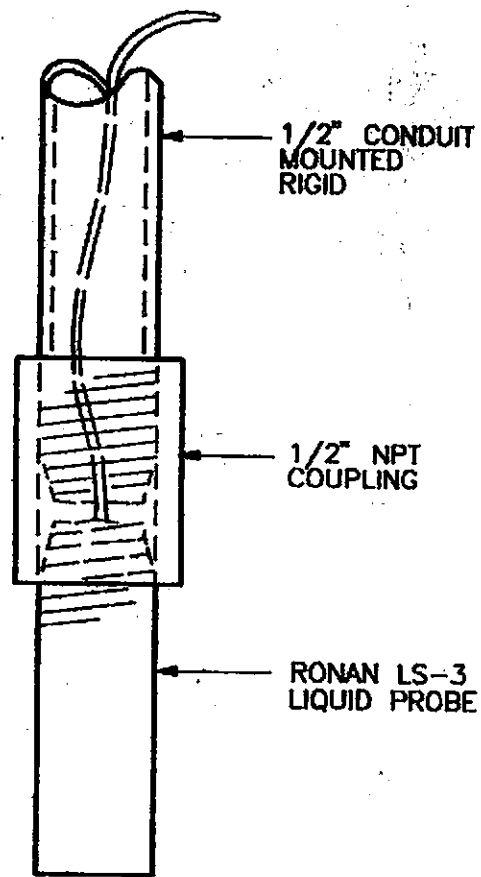
sheet / file
TK4-1

B of

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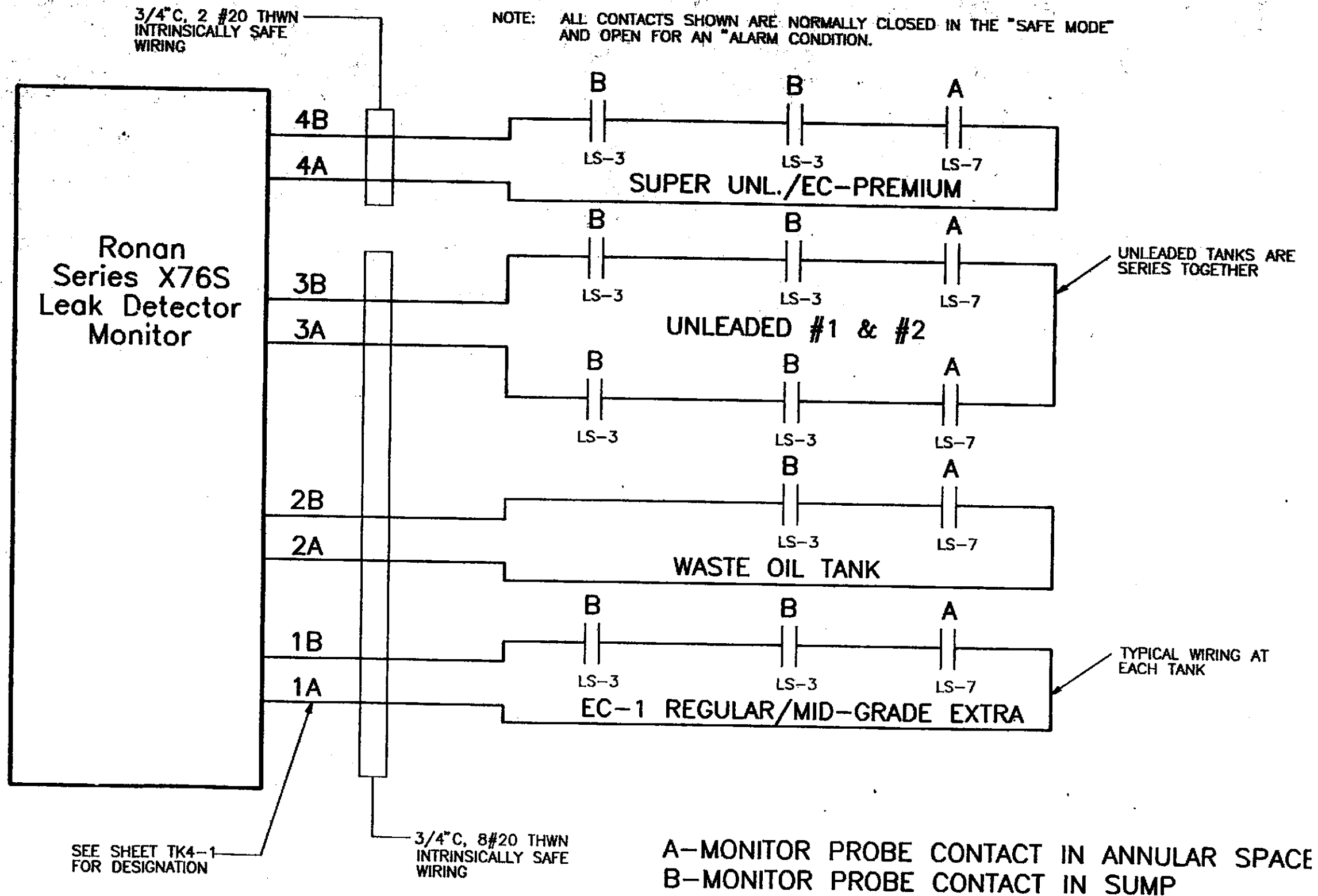
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 5951 LAKESHORE DRIVE, CYPRESS, CA

**API/Ronan Leak Detection and Dispenser
 Wiring Diagram W/O Brown Box (262 Based)**



Liquid Probe Coupling

NOT TO SCALE:



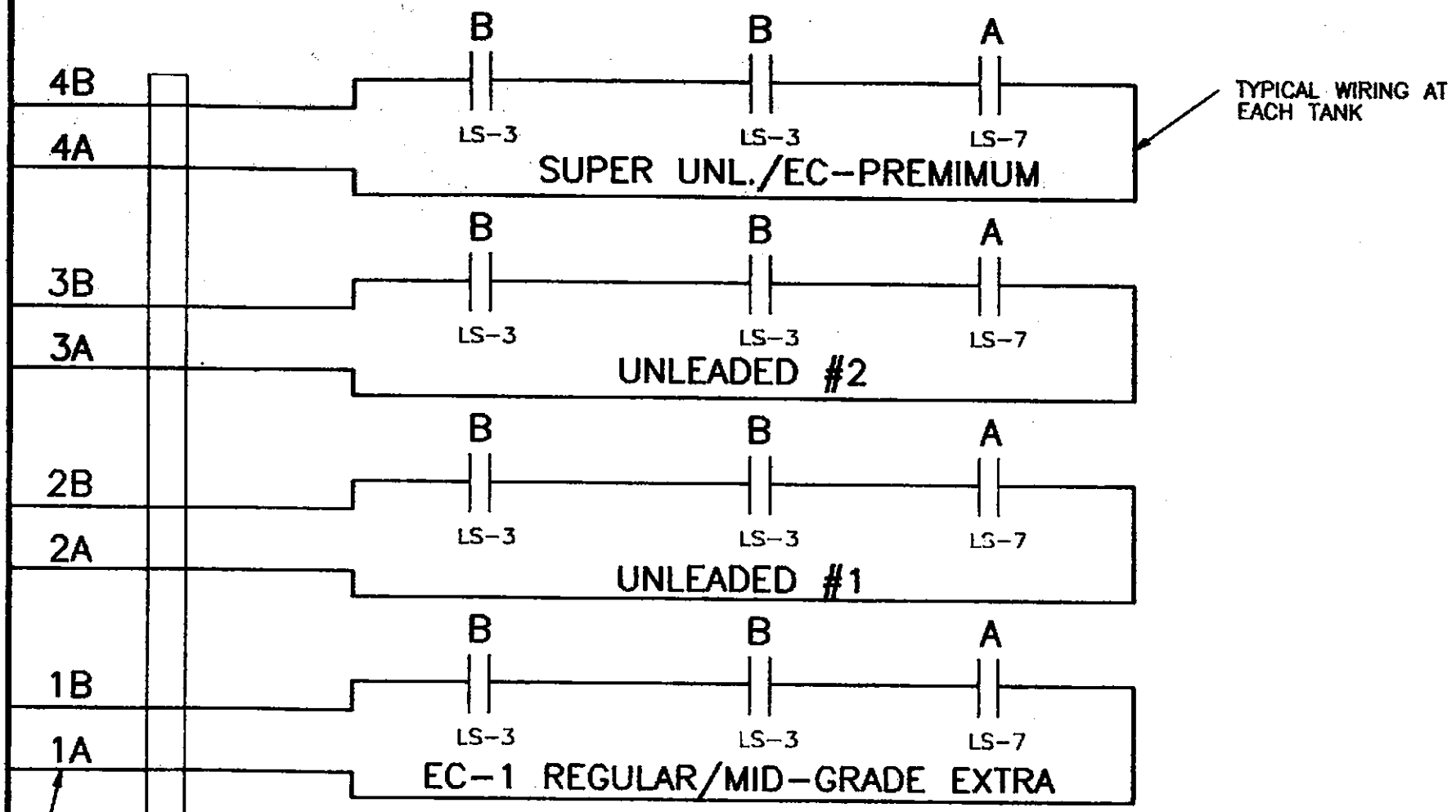
Sensor Wiring Schematic (With Waste Oil Tank)

2

NOT TO SCALE:

Ronan
Series X76S
Leak Detector
Monitor

NOTE: ALL CONTACTS SHOWN ARE NORMALLY CLOSED IN THE "SAFE MODE"
AND OPEN FOR AN "ALARM CONDITION."



TYPICAL WIRING AT EACH TANK

3/4" C, 8#20 THWN
INTRINSICALLY SAFE
WIRING

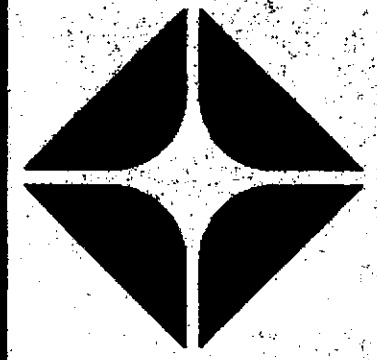
SEE SHEET TK4-1
FOR DESIGNATION

A-MONITOR PROBE CONTACT IN ANNULAR SPACE
B-MONITOR PROBE CONTACT IN SUMPS

Sensor Wiring Schematic (Without Waste Oil Tank)

3

NOT TO SCALE:



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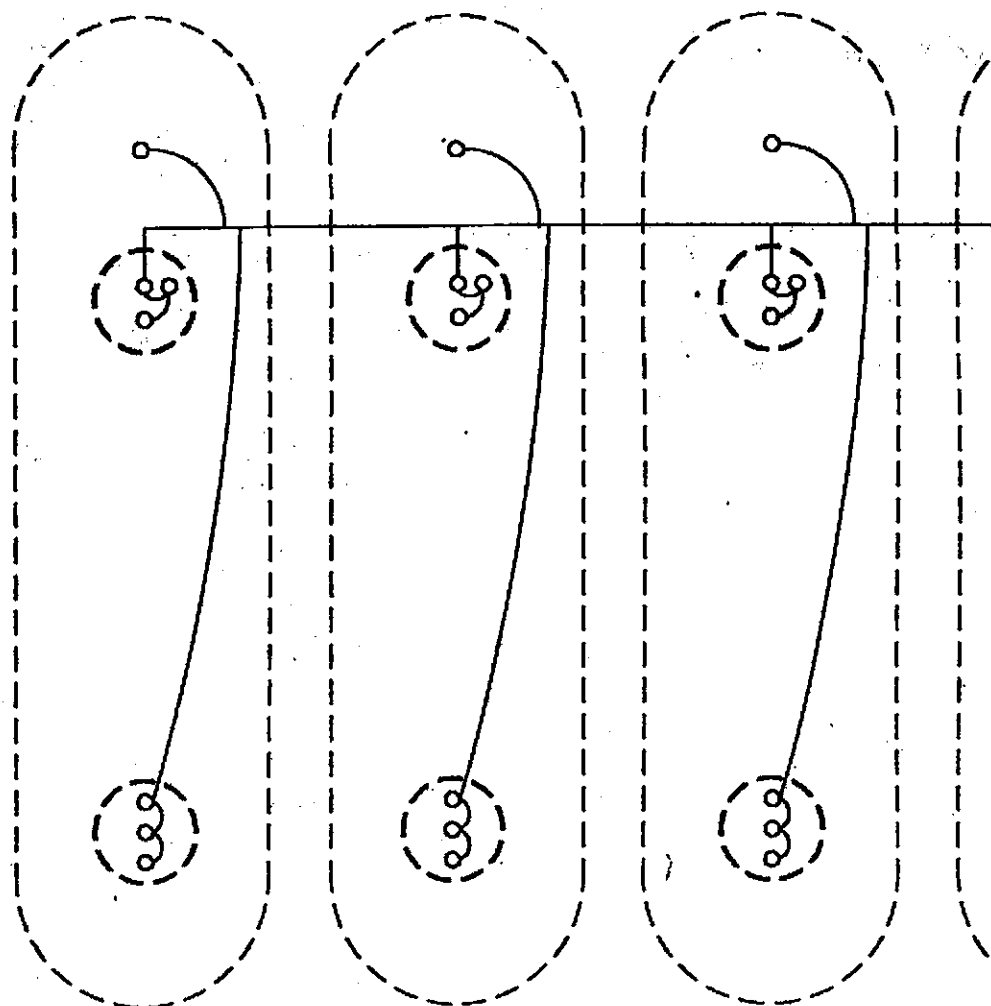
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EC-1 REGULAR/
MID-GRADE EXTRA UNLEADED #1 UNLEADED #2

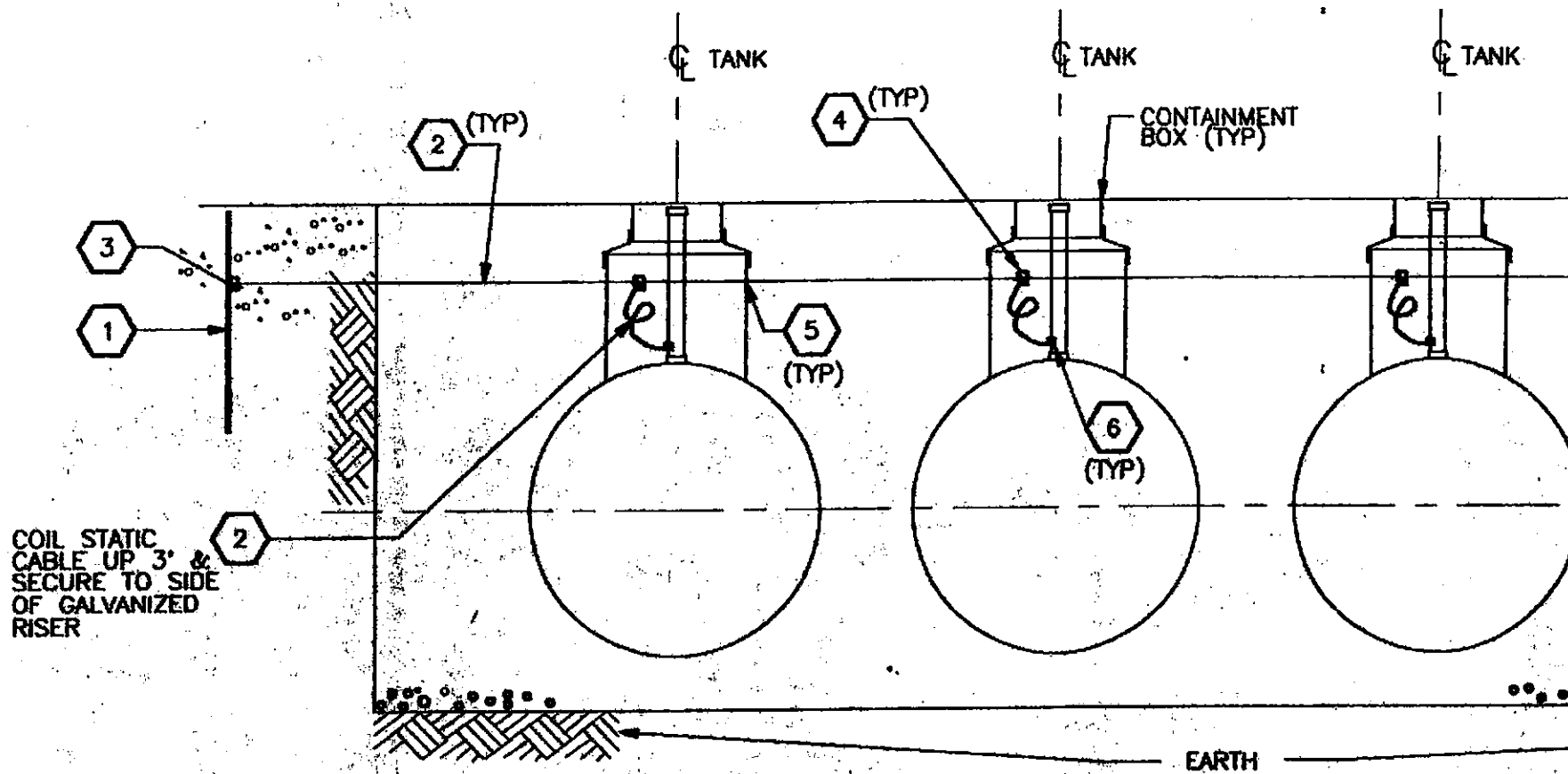
EQUIPMENT SCHEDULE

ITEM NO.	DESCRIPTION	QTY REQD
1	1/2" X 8' LONG CONTINUOUS COPPER CLAD GROUND ROD	1
2	#4 STRANDED AWG BARE COPPER GROUND WIRE. PROVIDE TERMINAL CONNECTORS AT U-BOLT CONNECTIONS	-
3	CADWELD #4 CABLE TO GROUND ROD "T" CONNECTOR MOLD PART NO. GTC-151L, WELD METAL #90	1
4	BURNDY # YGHC2C2 COMPRESSION GROUND TAP	12
5	LIQUID TIGHT CONNECTOR, T&B CAT. NO. 2631	8
6	4" DIAMETER U-BOLT WITH ANCHORING PLATE AND DOUBLE HEX NUTS EACH SIDE FOR GROUND WIRE TERMINAL CONNECTIONS	24



Plan View

NOT TO SCALE:



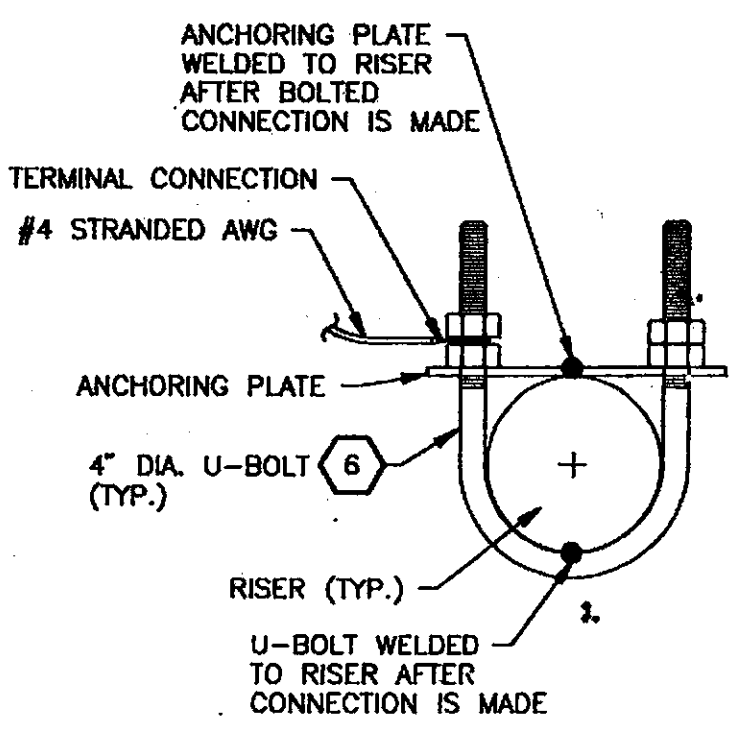
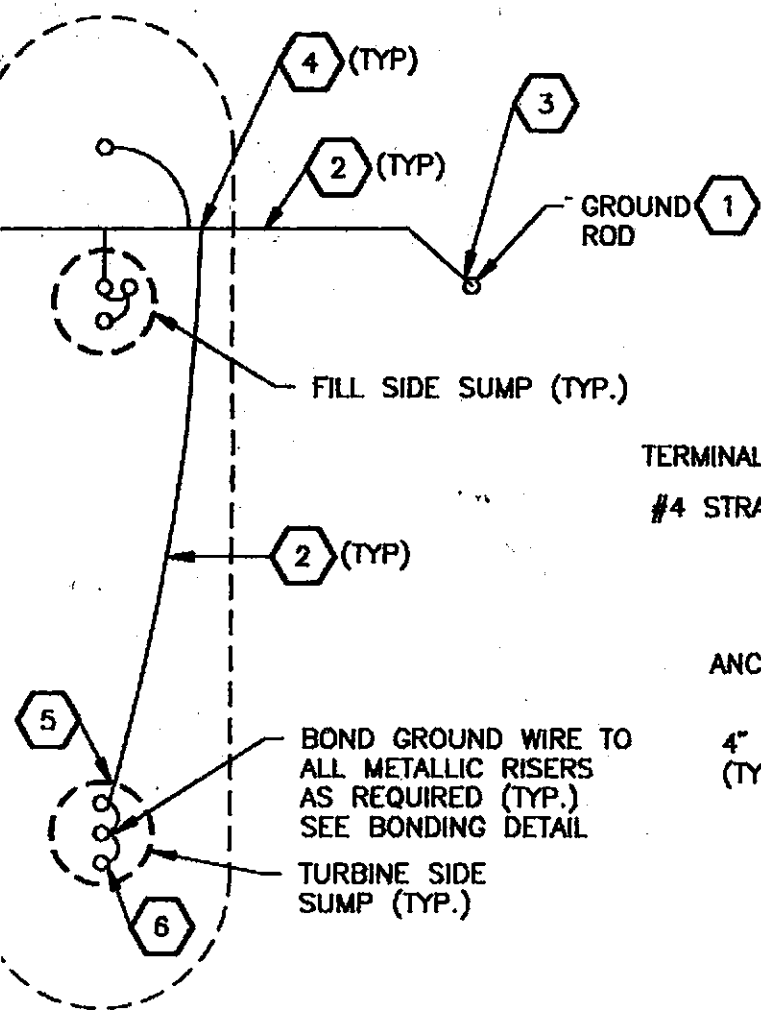
(GROUND ROD INSTALLED IN SOIL NOT PEAGRAVEL/CRUSHED ROCK)

Static Grounding Deta

4

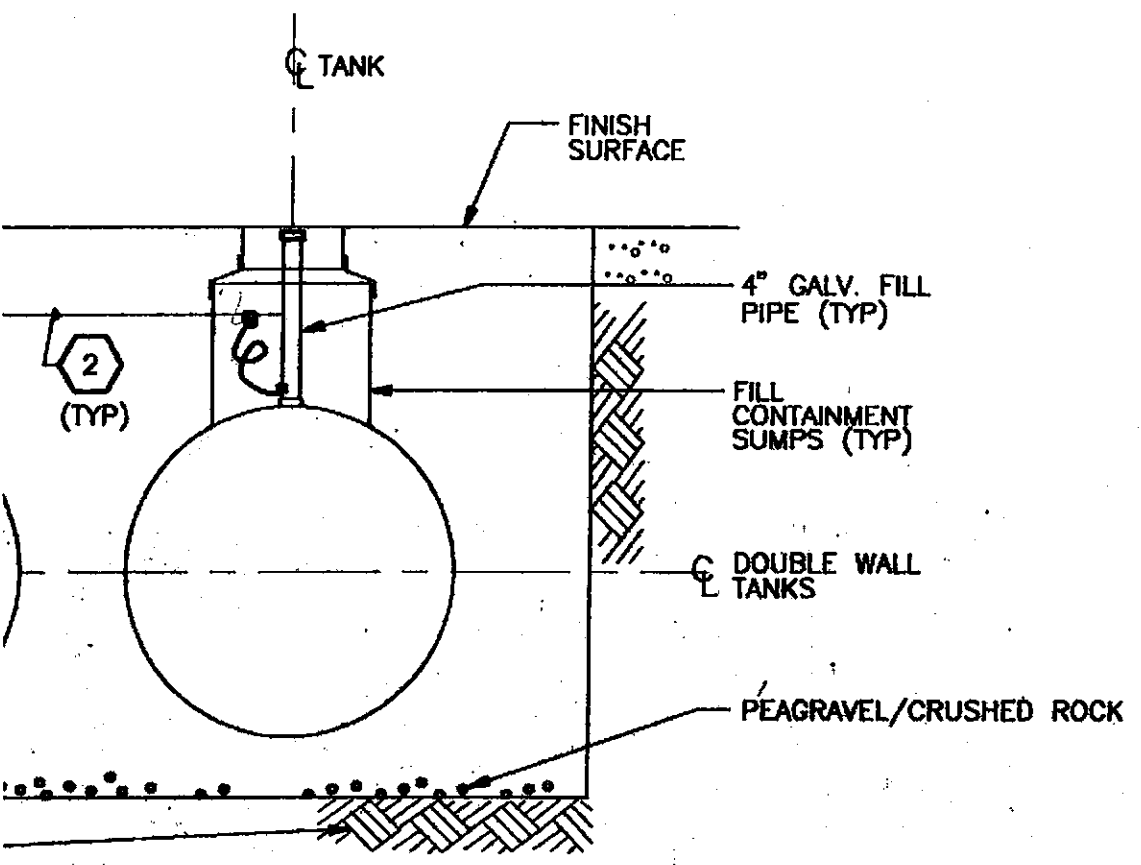
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**SUPER UNL./
EC-PREMIUM**



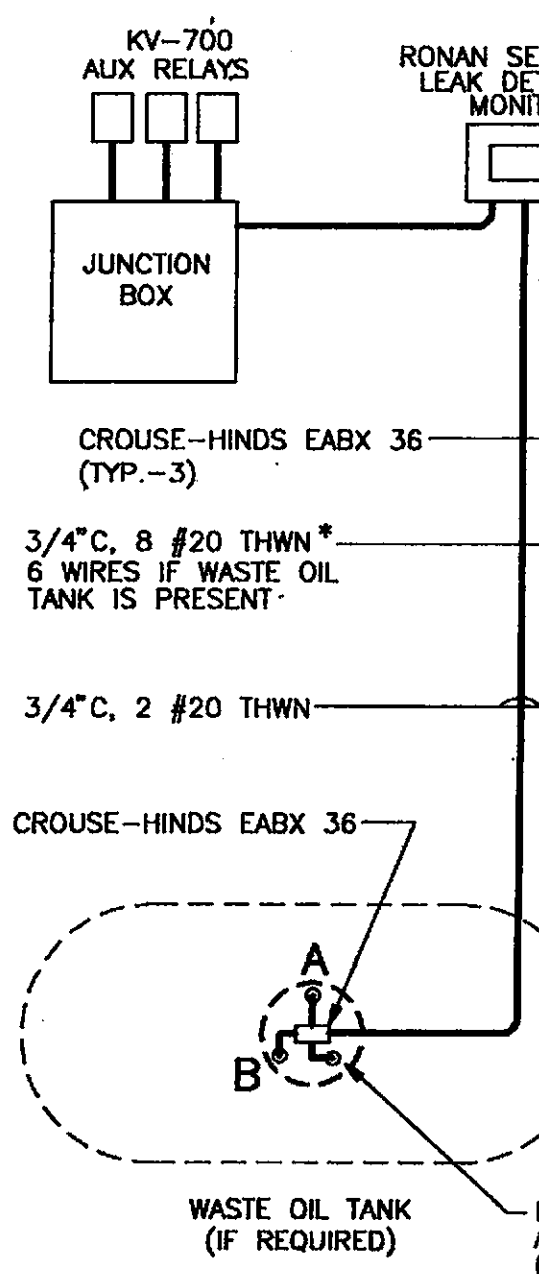
Bonding Detail

NOT TO SCALE:



CK BACKFILL)

CONDUIT RUN FOR FUTURE LEVEL GAUGES TO JUNCTION BOX NEAR THE KV-700 RELAYS

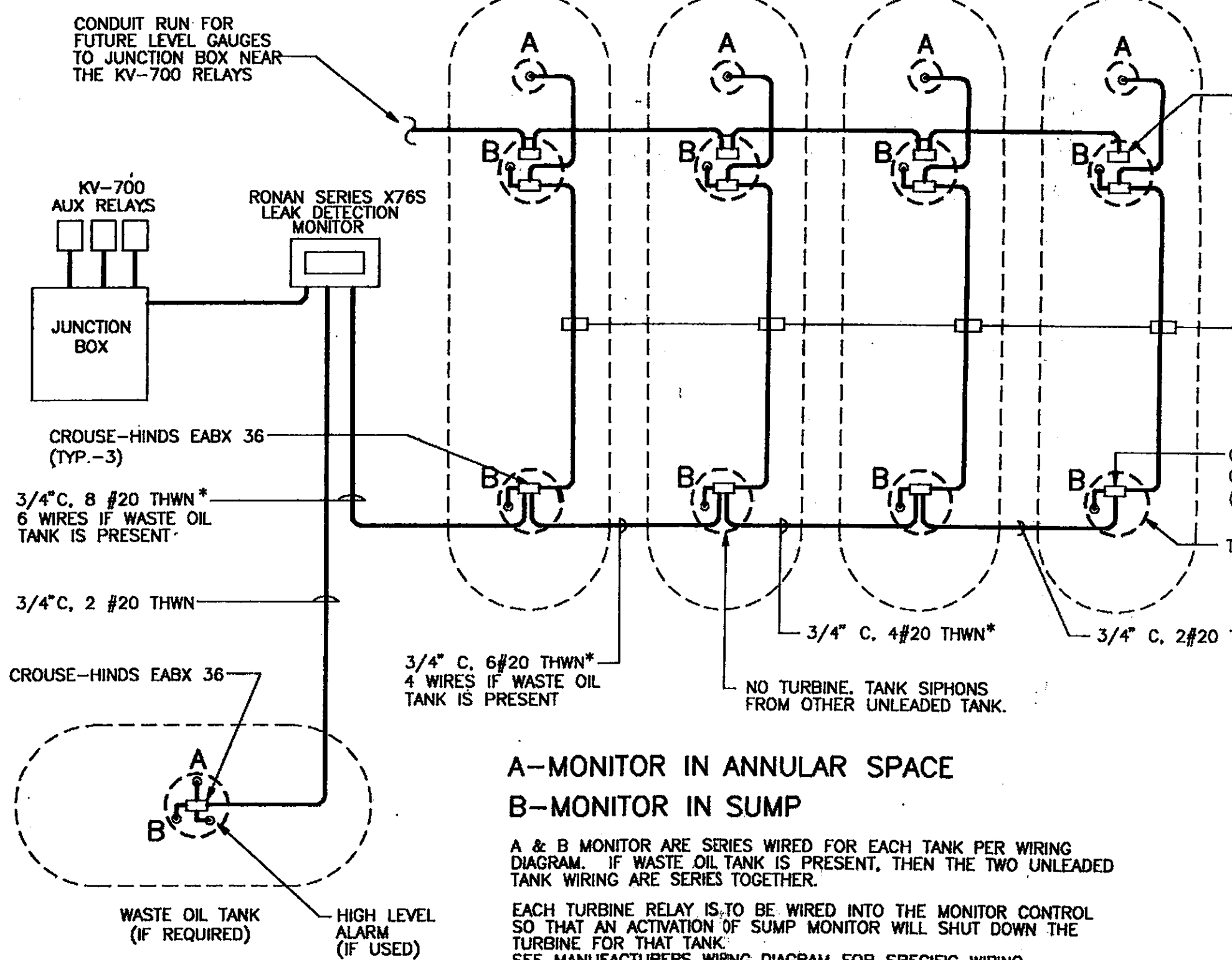


Tank and Conduit S...

5

NOT TO SCALE:

EC-1 REGULAR/
MID-GRADE EXTRA UNLEADED #1 UNLEADED #2 SUPER UNL.
EC-PREMIUM



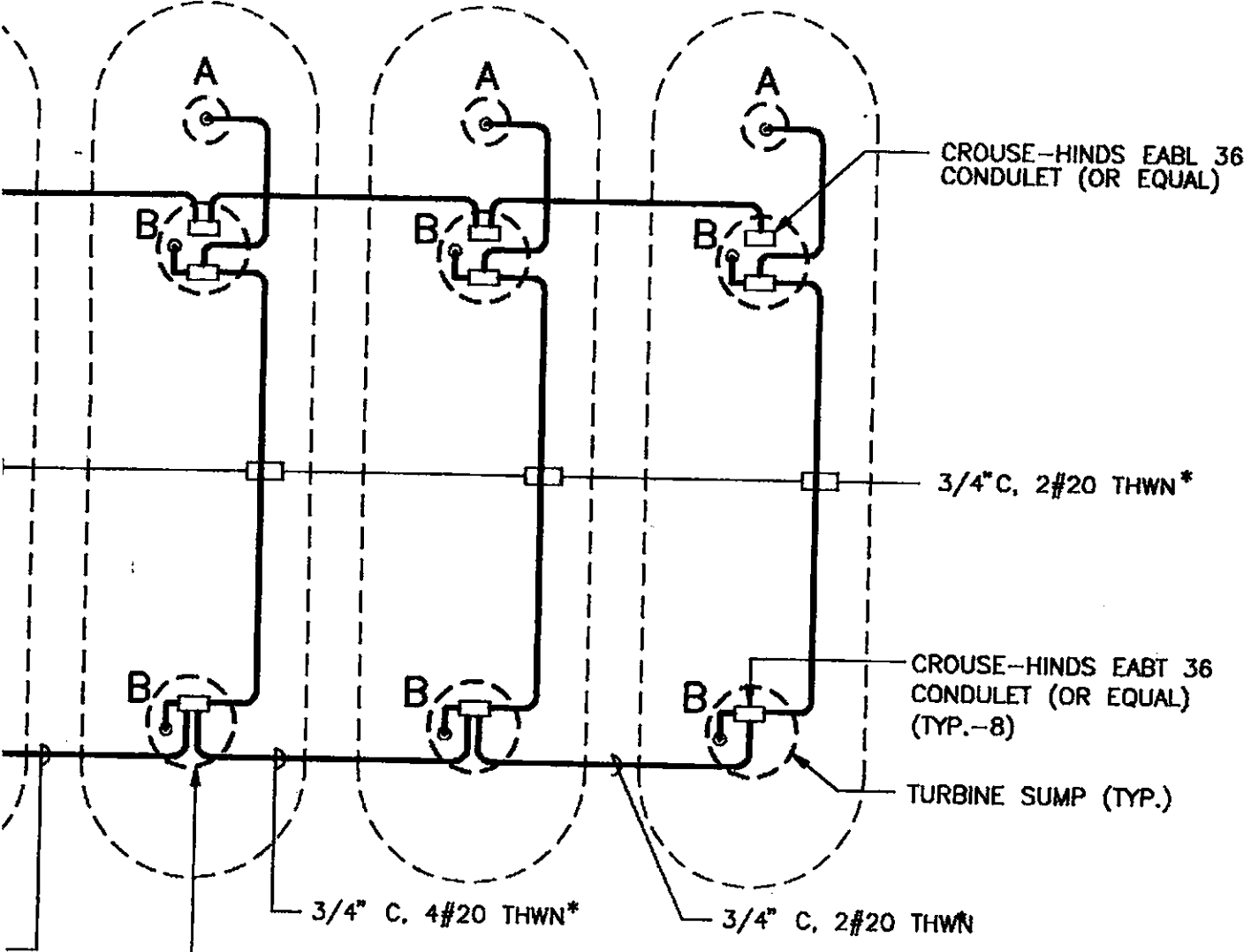
Tank and Monitoring Conduit Schematic

5

NOT TO SCALE:

	DATE	REVISIONS
A		ISSUED FOR PLAN CHECK

R/
XTRA UNLEADED #1 UNLEADED #2 SUPER UNL./
EC-PREMIUM



NO TURBINE. TANK SIPHONS FROM OTHER UNLEADED TANK.

MONITOR IN ANNULAR SPACE
MONITOR IN SUMP

MONITORS ARE SERIES WIRED FOR EACH TANK PER WIRING
IF WASTE OIL TANK IS PRESENT, THEN THE TWO UNLEADED
MONITORS ARE SERIES TOGETHER.

TURBINE RELAY IS TO BE WIRED INTO THE MONITOR CONTROL
ON ACTIVATION OF SUMP MONITOR WILL SHUT DOWN THE
PUMP FOR THAT TANK.

REFER TO MANUFACTURERS WIRING DIAGRAM FOR SPECIFIC WIRING
FOR OTHER INFORMATION, WIRE THE EQUIPMENT AS
SHOWN BY THE MANUFACTURERS WIRING DIAGRAMS.

CONDUIT INCLUDING FITTINGS SHALL BE RIGID GALVANIZED (RSG)
AND HAVE A MINIMUM .040\"/>

USE ONLY SAFELY WIRING. NO OTHER WIRING PERMITTED IN CONDUIT.

DATE	REVISIONS
A	ISSUED FOR PLAN CHECK

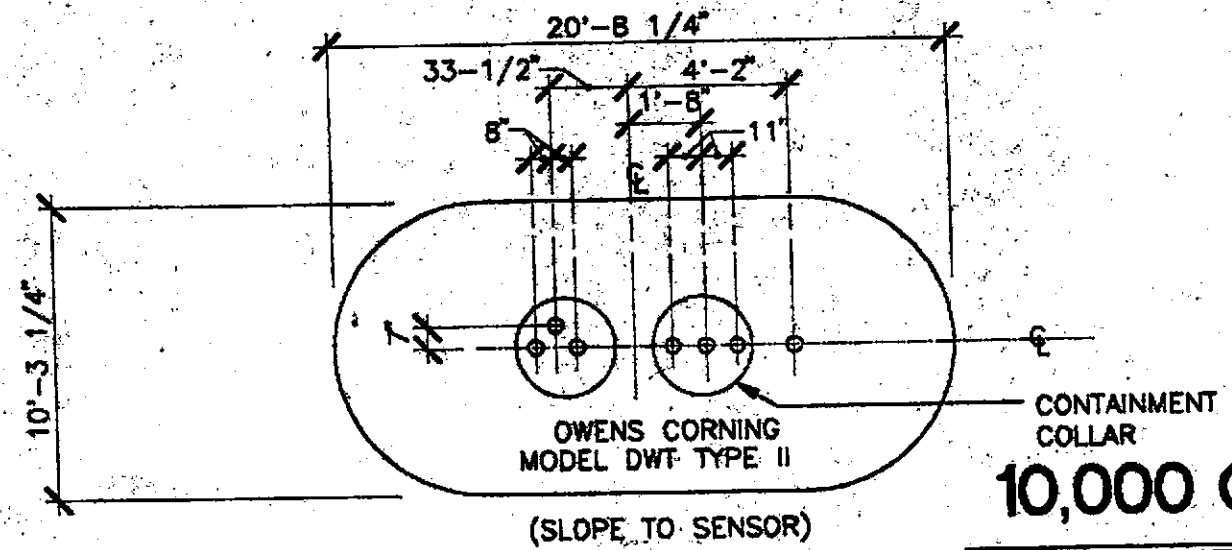
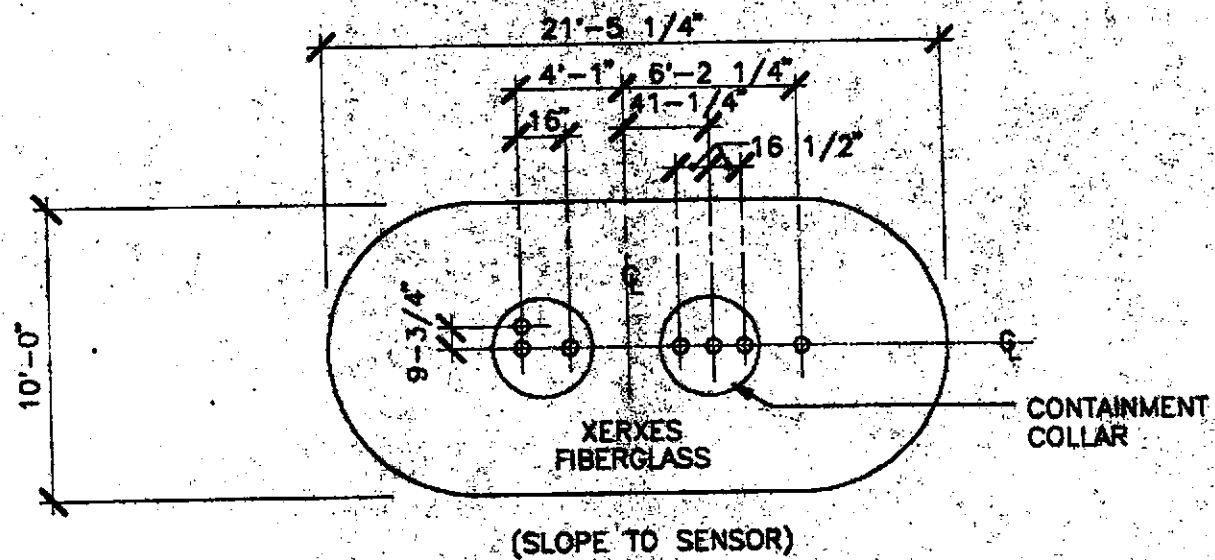
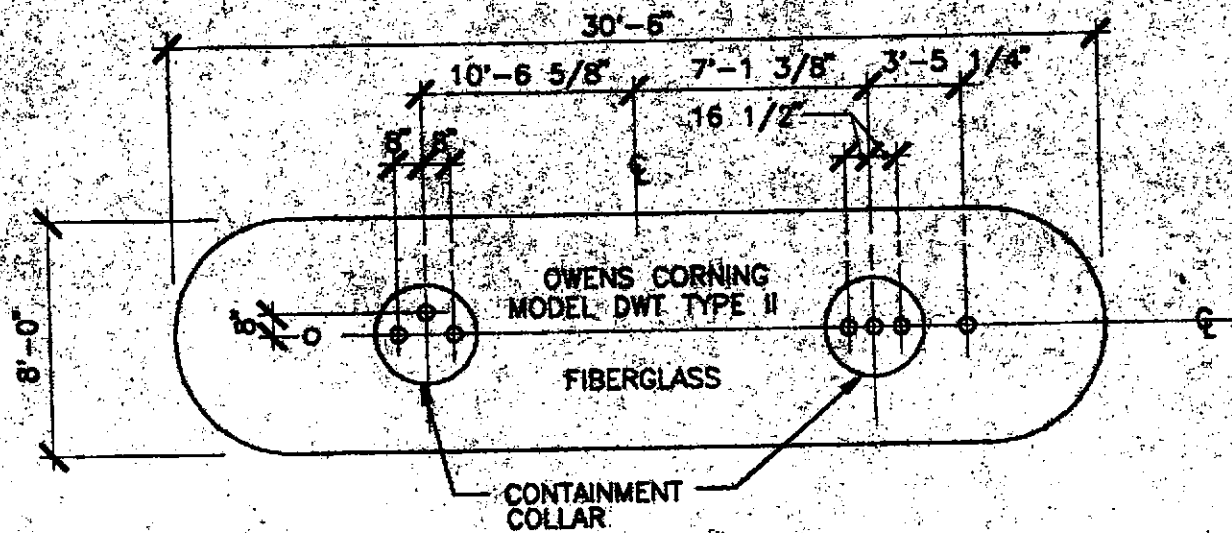
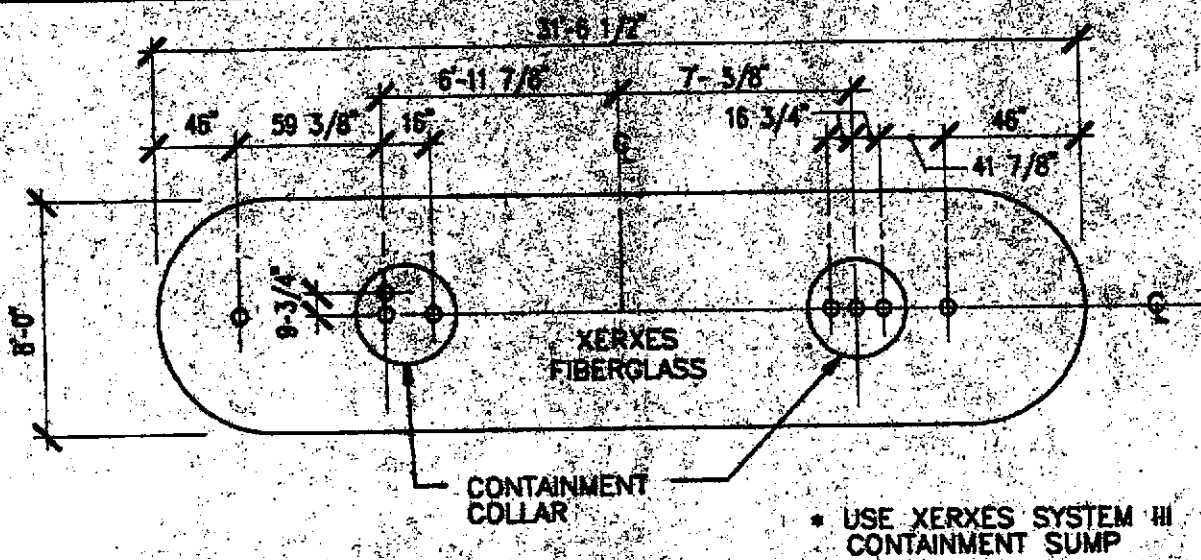
New amp Facility

Tank Electrical Schematic Diagrams

PH. (714) 995-1891 FAX (714) 995-6204
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3194
L.S. ANDREWS

date 3-1-94	drawn by SHK
project / facility	
sheet / file TK4-2	

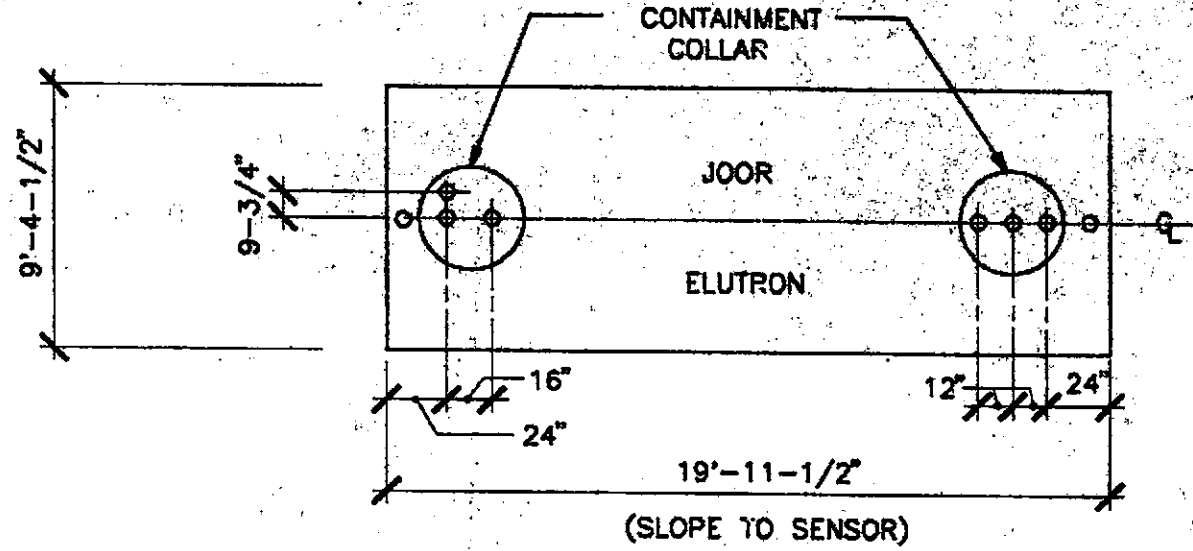
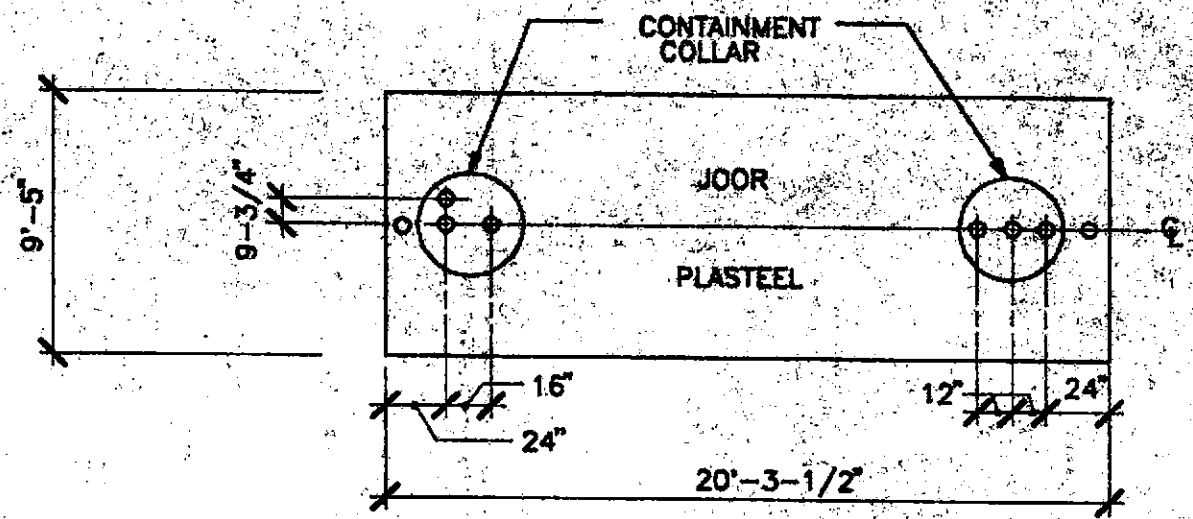
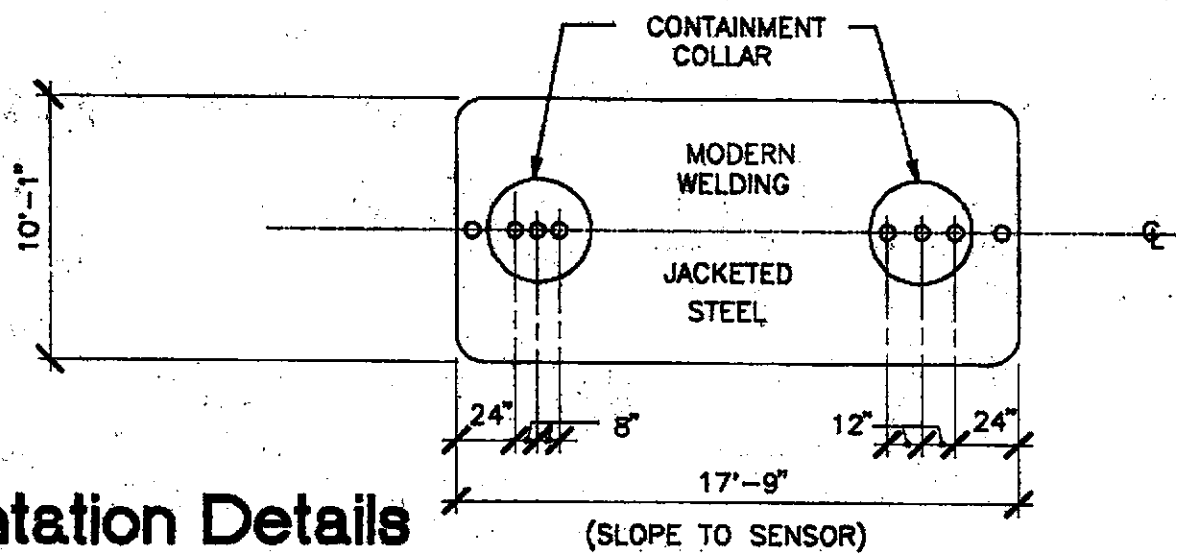
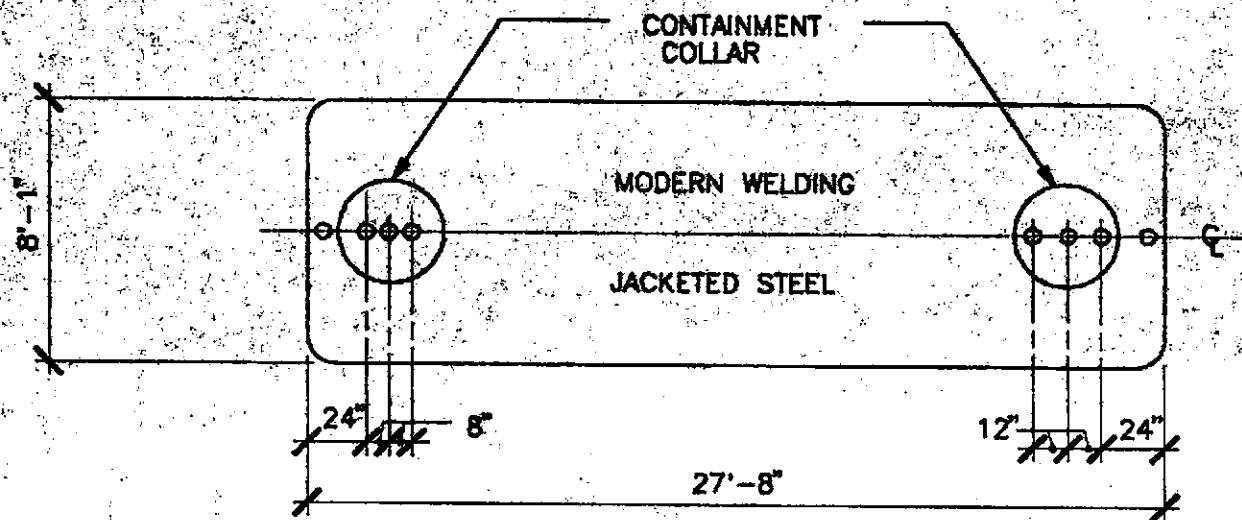


10,000 Gallon Tank Fitting

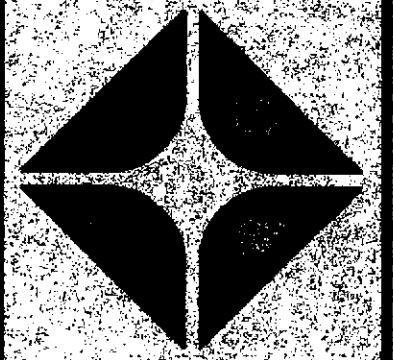
NOT TO SCALE

General Notes

16



Orientation Details



Products Company
 Division of AtlanticRichfieldCompany
Design & Engineering
 1055 West Seventh St.
 Angeles, CA 90051-0570

Material List at Tank

SEE NOTE BELOW

ITEM	DESCRIPTION	POMECO	OPW	EMCO WHEATON	UNIVERSAL	CNI	
1	10,000 GAL. DOUBLE WALL TANK						BY TANK MANF.
2	48" TURBINE & 42" FILL SIDE CONTAINMENT SUMPS (SEE DET. #1 DWG. TK3-1)						BY TANK MANF.
3	COLLAR AT SUMP						BY TANK MANF.
4	36" DIA. MANHOLE RAIN TIGHT	110-36WT			78-3610	7044C	PHIL-TITE # SC-3600-L
5	EXTRACTOR, FITTING 4" X 4" X 2" X 2"		233VM	A79-023	V421-2020	120-FM	EBW 340-300-01
6	RAIN COLLAR CAP						BY TANK MANF.
7	FLOAT VALVE		53VML	A75-004	37-201216	123-12C	EBW 308-207-01
8	TURBINE PUMP 1.5 H.P.	RED JACKET MODEL # P150S1 OR # AGP150S1 F.E. PETRO MODEL # STP-V-150					
9	LEAK (MECHANICAL) DETECTOR	RED JACKET MODEL #116035-5 (PISTON TYPE), #116036-5 (DIAPHRAM TYPE) F.E. PETRO MODEL #STP-MLD (PISTON TYPE), VAPORLESS MODEL #LD-2000					
10	2" x 24" L FLEX CONNECTOR W/SWIVEL END	TITFLEX U.L. LISTED #110165-32-0240, TELEFLEX U.L. LISTED #60-10477-0240 ANAMET U.L. LISTED # 107547-1000 W/ # 522962-4000 (STAINLESS) HOSEMASTER U.L. LISTED # TCMM2.0-24 W/ACSWA (TEFLON) HOSEMASTER U.L. LISTED # FSMM2.0-24 W/ACSWA (STAINLESS)					

CONDUIT

ENGINEERS, INC. #206-KD OR EQUAL

11	3" X 2" TEST REDUCER						TELEFLEX FERNCO	
12	18" DIA INSPECTION WELL MANHOLE (WATERTIGHT)	110-18WT			98MW-1810	7D29		
13	INSPECTION WELL PIPE - 4" SCHEDULE 40 14' LONG .020" SLITS FACTORY CUT				#650		HYDROPHILIC ++ OR EQUAL	
14	36" DIA. MANHOLE WITH 2- 5 GALLON CONTAINMENT SUMPS	"POMECO" # 511C-16, "CNF" # 1052C-(L), "PHIL-TITE" # SC-3600-TSC-2 IN OREGON & WASHINGTON FOR COAXIAL FILL USE "POMECO" MODEL #511D-16. WHEN 15 GAL. SPILL CONTAINMENT REQD. USE: "PHIL-TITE" #SC-3600-TSC-2 W/ 15 GAL.						
15	FILL ADAPTER & CAP	N/A	633-T-8075 634-TT-7085	A30-014 A97-005	724-4040 733-40	613B 64	EBW 778-100-01 777-202-01	EMCO WA & OR WT. A97-005 AB9-001 (COAXIAL)
16	VAPOR CHECK VALVE & CAP	N/A	1611-AV-1620 W/1711-T-7085	A76-005 A99-002	611V-3040 614VC-30	611-DB-4A 611-VR-3	EBW 300-300-01 304-301-01	
17	OVERFILL PREVENTION DROP TUBE		61-SO	A20-004 W/ A1100-001			EBW 708-410	WA & OR OPW 61-SOP (COAXIAL)
18	LIQUID LEAK SENSOR AT SUMP						API/RONAN # LS-3	
19	LIQUID LEAK SENSOR FOR TANK ANNULAR SPACE						API/RONAN # LS-7	
20	SECONDARY CONTAINMENT PIPING	EITHER A.O. SMITH "RED THREAD IIA", AMERON DUALOY "3000/L", OR CONTAINMENT TECHNOLOGIES AS DIRECTED (METHANOL COMPATIBLE)						
21	PRIMARY CONTAINMENT PIPING	EITHER A.O. SMITH "RED THREAD IIA", AMERON DUALOY 3000/L, OR CONTAINMENT TECHNOLOGIES AS DIRECTED (METHANOL COMPATIBLE)						
22	BULKHEAD FITTING	"AMERON", "O.C.- FIBERCAST", "TOTAL CONTAINMENT" TR5002, "CNF", "ENVIRON" SUMP PENETRATION ASSEMBLY						
23	COMPRESSION FITTING, AIRTIGHT	"AMERICAN CONTAINMENT", TOTAL CONTAINMENT TR5001, "CNF"						
24								
▲ CONTRACTOR SUPPLIED, OTHER ITEMS SUPPLIED BY ARCO UNLESS NOTED OTHERWISE.		● THESE ITEMS ARE OPTIONAL DEPENDING ON LOCAL JURISDICTION REQUIREMENTS						

MATERIAL LIST AT DISPENSER ISLAND

SEE NOTE BELOW

ITEM	DESCRIPTION	POMECO	OPW	EMCO WHEATON	UNIVERSAL	CNI	
26	PRODUCT DISPENSERS						TOKHEIM 262A DUAL OR WAYNE 360 SERIES
27	COAXIAL DISPENSER NOZZLE	OPW MODEL # 111-V OR EMCO WHEATON MODEL # 4015 NOTE: USE ONLY STATE APPROVED NOZZELS IN ALL LOCATIONS					
28	COAXIAL FUEL HOSE	GOODYEAR "MAXXIM" 12.5' LENGTH, DAYCO 12.5' LENGTH					
29	OVERHEAD RETRACTOR	RED JACKET # 884-022-5 CNI MODEL # 9930-GYAK W/ GOODYEAR HOSE CLAMP ANTI KINK					
30	PRODUCT IMPACT VALVE DOUBLE POPPET (SEE SEC. D, DWG. TK3-3)		10-BPS	A60	521DP-RM-15		EBW 662-440-02
31	VAPOR RECOVERY IMPACT VALVE	S. BRAVO SYSTEMS MODEL # B-1-SET					
32	STABILIZER BAR ASSEMBLY (SEE DWG. TK3-3) NOT USED WHEN UNDER DISPENSER CONTAINMENT INSTALLED					1321S (SINGLE) 1321D (DUAL)	C.E THOMAS #TPI101 (SINGLE) #TPI102 (DUAL)
33	1-1/2" FLEX CONNECTOR 24" (SEE SEC. C, DWG. TK3-3)	TITFLEX U.L LISTED #110165-24-0240, TELEFLEX U.L. LISTED #60-10473-0240 ANAMET U.L LISTED #107627-1000 HOSEMASTER U.L. LISTED # TCMM1.5-24 W/ACSWA (TEFLON) HOSEMASTER U.L. LISTED # FSMM1.5-24 W/ACSWA (STAINLESS)					
34	SECONDARY CONTAINMENT FLEX SECTION UNDER DISPENSER	TITFLEX # 111466-42, TELEFLEX # 60-10498-0240 W/ #60-10459, AUSTIN ENGINEERING #336-FP4 (FOR ANAMET), CONTAINMENT TECHNOLOGIES					
35	UNDER DISPENSER SPILL CONTAINMENT BASIN	"WESTERN FIBERGLASS", "FIBER TRENCH", "PHIL TITE", "TOTAL CONTAINMENT", "BRAVO" INSTALLED ONLY IF REQUIRED BY AGENCY HAVING LOCAL JURISDICTION					
36	STAINLESS STEEL ISLAND FORMS 4'-0"x12'-3"x9" HT. & OR 4'-0"x15'-6"x9" HT.	AMERICAN FABRICATING ENGINEERS, INC. #206-KD OR EQUAL (INSTALL AT THE DESCRETION OF ARCO ON A SITE SPECIFIC BASIS)					

Material List at Building

SEE NOTE BELOW

ITEM	DESCRIPTION	
37	VENT CAP	OPW MODEL # 523S, UNIVERSAL MODEL # 46CS, CNI MODEL #126 EBW MODEL #800, EMCO WHEATON MODEL #A84 INSTALLED ONLY IF REQUIRED BY AGENCY HAVING LOCAL JURISDICTION
NOTE: THE ITEMS LISTED BELOW ARE REQUIRED FOR TANK INSTALLATIONS WHERE EXISTING BUILDING IS TO REMAIN.		
38	LEAK DETECTION MONITOR	RONAN SERIES X76S (SEE DWG. TK4-1)
39	INTERFACE BOX	TOKHEIM MODEL 67/67A (SEE DWG. TK4-1)
40	EMERGENCY CUT-OFF SWITCH	SQUARE D CLASS 3130 2-WIRE 120V NON FUSED U.L. NEMA TYPE 1 INDOOR (SEE DWG. TK4-1)
41	RELAY CONTROL BOX	TOKHEIM MODEL 168/268 (SEE DWG. TK4-1)
42	AUXILIARY RELAYS	RONAN INTRINSICALLY SAFE RELAYS MODEL # KV-700-NO-24 (SEE DWG. TK4-1)
43	EMERGENCY CUT-OFF RELAY	SQUARE D MODEL # XO 30 CO2, 120V COIL, 60 Hz, 20 AMPS (SEE DWG. TK4-1)
44	JUNCTION BOX	APPLETON MODEL "DER1" (SEE DWG. TK4-1)
45		

NOTE: THIS MATERIALS EQUIPMENT SCHEDULE IS NOT A COMPLETE LIST OF MATERIALS.
CONTRACTOR IS RESPONSIBLE FOR ALL MISCELLANEOUS EQUIPMENT, MATERIALS
AND DEVICES TO PROVIDE A COMPLETE AND OPERABLE SYSTEM.

**THIS DRAWING USED IN RETANKING/REPIPING PROJECTS
WHEN EXISTING BUILDING IS TO REMAIN.**

General Notes

1. THE UNDERGROUND TANK SHALL BE A UNDERWRITER LABORATORIES INCORPORATED TANK LISTED FOR THE UNDERGROUND STORAGE OF ALL FLAMMABLE AND COMBUSTIBLE MOTOR FUELS. LISTING MUST INCLUDE THE ABILITY TO WITHSTAND A VACUUM TEST OF 13.8 INCHES OF HG.
2. UNDERGROUND TANK INSTALLATION AND TESTING SHALL BE PER U. L. LISTED "MANUFACTURER'S INSTALLATION INSTRUCTIONS". INSTALLATION SHALL CONFORM TO NFPA-30 AND ALL APPLICABLE LOCAL AND STATE REGULATIONS.
3. MONITOR SYSTEMS FOR THE INTERSTICE SHALL BE: BY A API/ROGAN LIQUID SENSOR, AND IN ACCORDANCE WITH APPLICABLE LOCAL AND STATE REGULATIONS.
4. BEDDING AND BACKFILL MAY BE SAND, PEA GRAVEL, ROUNDED AGGREGATE CRUSHED STONE OR NATIVE SOIL IN ACCORDANCE WITH MANUFACTURER'S CURRENT INSTALLATION INSTRUCTIONS AND ARCO SPECIFICATION 13800.
5. THE DESIGN, ASSEMBLY, AND TESTING OF THE PIPING SYSTEM SHALL BE IN CONFORMANCE WITH THE APPLICABLE SECTION OF ANSI-B31, AMERICAN NATIONAL STANDARD CODE FOR PRESSURE PIPING, AND NFPA 30, FLAMMABLE AND COMBUSTIBLE LIQUIDS CODE.
6. ALL ASSOCIATED PIPING SHALL BE PROTECTED FROM CORROSION.
7. SEE DRAWINGS FOR NUMBER OF FITTINGS, CONFIGURATION, ACCESSORIES AND SUMP RISER DETAILS.

Abbreviations List

ABBR.	DESCRIPTION	ABBR.	DESCRIPTION
A.C.	ASPHALT CONCRETE	MNPT	MALE NATIONAL PIPE THREADS
API	AMERICAN PETROLEUM INSTITUTE	N.C.	NORMALLY CLOSED
APPROX.	APPROXIMATE	NIP	NIPPLE
AUX.	AUXILIARY	NPT	NATIONAL PIPE THREAD
BLU.	BLUE	NO.	NUMBER
BLK.	BLACK	N.O.	NORMALLY OPEN
C.	CONDUIT	N/A	NOT APPLICABLE
COMB.	COMBINATION	N.T.S.	NOT TO SCALE
CONN.	CONNECTOR/CONNECTION	O.D.	OUTSIDE DIAMETER
CORP.	CORPORATION	P	PRODUCT LINE
☉	CENTER LINE	PVC	POLYVINYL CHLORIDE
DBL.	DOUBLE	QTY.	QUANTITY
D	DEEP	REF.	REFERENCE
DIM.	DIMENSION	REQ.	REQUIRED
D.C.	DIRECT CURRENT	RSG	RIGID STEEL GALVANIZED
DWG.	DRAWING	SPECS.	SPECIFICATIONS
EMT	ELECTRICAL METALLIC TUBING	SCH.	SCHEDULE
ELL	ELBOW	SCR'D.	SCREWED
FT.	FOOT	SEC	SECTION
FLEX.	FLEXIBLE	TYP.	TYPICAL
FRP	FIBERGLASS REINFORCED PLASTIC	U.L.	UNDERWRITERS LABORATORY
FNPT	FEMALE NATIONAL PIPE THREAD	U/G	UNDERGROUND
F.G.	FIBERGLASS	V	VAPOR LINE
GAL.	GALLON	VAC	VOLT AMP CURRENT
GALV.	GALVANIZED	V.R.	VAPOR RECOVERY
HEX	HEXAGON	VIO.	VIOLET
H.P.	HORSEPOWER	WHT.	WHITE
I.D.	INSIDE DIAMETER	W/	WITH
J-BOX	JUNCTION BOX		
L	LONG		
MAX.	MAXIMUM		
MANF.	MANUFACTURER		
MIN.	MINIMUM		

	DATE	REVISIONS
A		ISSUED FOR PLAN CHECK

ARCO

Retail Marketing

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5951 LAKESHORE DRIVE, CYPRESS, CA 90630

New ampm Facility

Material List, Abbreviations, Tank Orientations and General Notes

appr. **3194**
L.S. ANDREWS

date 3-1-84	drawn by SHK
project / facility	
sheet / file TK4-3	

B