TWIN TOWERS OFFICE BUILDING
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32301

BOB GRAHAM
GOVERNOR

Victoria J. Tschinkel
SECRETARY

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

October 15, 1981

CERTIFIED MAIL

Mr. David P. Schofield, President
Central Florida Pipeline Corporation
120 South Riverside Plaza
Chicago, Illinois 60606

Dear Mr. Schofield:

Enclosed is Permit Number AC 48-42931, dated October 15, 1981 to Central Florida Pipeline Corporation issued pursuant to Section 403, Florida Statutes.

Acceptance of the permit constitutes notice and agreement that the Department will periodically review this permit for compliance, including site inspections where applicable, and may initiate enforcement actions for violation of the conditions and requirements thereof.

Sincerely,

C. H. Fancy, P.E.
Deputy Chief
Bureau of Air Quality Management

cc: Chuck Collins, FDER St. Johns River District
Fred Engelman, P.E.
A. L. Fillenwarth, Central Florida Pipeline Corp.

DER Form 17-1.122(65)

STATE OF FLORIDA
DEPARTMENT OF
ENVIRONMENTAL REGULATION

CONSTRUCTION
PERMIT

NO. AC 48-42931

Central Florida Pipeline Corporation
Orange County
Tank Truck Loading Rack

DATE OF ISSUANCE

October 15, 1981

Victoria J. Tschinkel

Victoria J. Tschinkel
Secretary

DATE OF EXPIRATION

November 1, 1982

DER FORM PERM 11-42

FINAL DETERMINATION

Central Florida Pipeline Corporation

Tank Truck Loading Rack

Application Number:
AC 48-42931

Florida Department of Environmental Regulation
Bureau of Air Quality Management
Central Air Permitting

October 15, 1981

Central Florida Pipeline Corporation

Final Determination

The Central Florida Pipeline Corporation application for a permit to construct a new tank truck loading rack has been reviewed by the Bureau of Air Quality Management. Public notice of the Department's Intent to Issue the construction permit was published in the Orlando Sentinel on September 10, 1981. Copies of the preliminary determination have been available for public inspection at the Department's St. John's River District Office in Orlando and the Bureau of Air Quality Management Office in Tallahassee.

Central Florida Pipeline has requested a change of Specific Condition Number 5 that would permit loading through the new rack while only one of the vapor recovery unit vacuum pumps is in operation, if it is demonstrated that such operation will meet the emission limit of 35 mg/liter. The Bureau agrees with the applicant that such operation of the new rack should be permitted, contingent upon demonstration of compliance with the standard, and hence has changed the wording of Specific Condition Number 5 to allow for this.

No other comments were received as a result of the public notice, therefore, the final action by the Department shall be to issue the permit as proposed in the public review process, with the noted change to Specific Condition Number 5.

GATX

CENTRAL FLORIDA PIPELINE CORPORATION
subsidiary of
GATX TERMINALS CORPORATION

1904 Hemlock Avenue
Tampa, FL 33605
813-248-8361

September 21, 1981

Mr. Bill Thomas
Bureau of Air Quality Management
Florida Department of Environmental
Regulation
2600 Blair Stone Road
Tallahassee, Florida 32301

Re: Permit/Certification No. AC 48-42931
Request for Permit Variance

Dear Mr. Thomas:

Paragraph (5), Specific Conditions of the proposed Construction Permit states, "Gasoline loading through the new loading rack is not permitted unless the total vacuum pump capacity (two pumps) of the vapor recovery unit is in operation."

We would suggest the following be added to the above.

", or it can be demonstrated that the use of one (1) vacuum pump will meet the criteria of Paragraph (3)."

We feel that the use of one or two vacuum pumps should be contingent upon actual performance tests of the system. If one pump will do the job, we would prefer to conserve the energy.

Please give this request your consideration and advise if suitable.

Very truly yours,

CENTRAL FLORIDA PIPELINE CORPORATION

A. L. Fillenwarth, Chief Engineer

ALF/sg

cc: D. P. Schofield
F. C. Engelman, P. E.
C. M. Collins, P. E.

TWIN TOWERS OFFICE BUILDING
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32301

BOB GRAHAM
GOVERNOR
Victoria J. Tschinkel
SECRETARY

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

APPLICANT: Central Florida Pipeline Corporation
120 South Riverside Plaza
Chicago, Illinois 60606

PERMIT/CERTIFICATION NO. AC 48-42931

COUNTY: Orange

PROJECT: Petroleum Tank Truck Loading Rack

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Chapter 17-2 and 17-4, Florida Administrative Code. The above named applicant, hereinafter called Permittee, is hereby authorized to perform the work or operate the facility shown on the approved drawing(s), plans, documents, and specifications attached hereto and made a part hereof and specifically described as follows:

For the construction of a gasoline/diesel truck tank loading rack, to be located at 9999 South State Road 527, in Taft, Orange County, Florida. The UTM Coordinates of the proposed source are 463.8 km East and 3143.8 km North.

Construction shall be in accordance with the attached permit application and plans, documents and drawings except as otherwise noted on pages 3 and 4 - "Specific Conditions".

Attachments are as follows:

1. Application to Construct Air Pollution Sources, DER Form 17-1.122(16).
2. Letter of Incompleteness from Steve Smallwood to applicant, date May 28, 1981.
3. Response to Incompleteness letter, from applicant, dated July 15, 1981.

PERMIT NO. AC 48-42931
APPLICANT: Central Florida Pipeline Corporation

GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations, and restrictions set forth herein are "Permit Conditions:, and as such are binding upon the permittee and enforceable pursuant to the authority of Section 403.161(1), Florida Statutes. Permittee is hereby placed on notice that the department will review this permit periodically and may initiate court action for any violation of the "Permit Conditions" by the permittee, its agents, employees, servants or representatives.

2. This permit is valid only for the specific processes and operations indicated in the attached drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit shall constitute grounds for revocation and enforcement action by the department.

3. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately notify and provide the department with the following information: (a) a description of and cause of non-compliance; and (b) the period of non-compliance, including exact dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance. The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the department for penalties or revocation of this permit.

4. As provided in subsection 403.087(6), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Nor does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations.

5. This permit is required to be posted in a conspicuous location at the work site or source during the entire period of construction or operation.

6. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source, which are submitted to the department, may be used by the department as evidence in any enforcement case arising under the Florida Statutes or department rules, except where such use is proscribed by Section 403.111, F.S.

7. In the case of an operation permit, permittee agrees to comply with changes in department rules and Florida Statutes after a reasonable time for compliance; provided, however, the permittee does not waive any other rights granted by Florida Statutes or department rules.

8. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, plant, or aquatic life or property and penalities therefore caused by the construction or operation of this permitted source, nor does it allow the permittee to cause pollution in contravention of Florida Statutes and department rules, except where specifically authorized by an order from the department granting a variance or exception from department rules or state statutes.

9. This permit is not transferable. Upon sale or legal transfer of the property or facility covered by this permit, the permittee shall notify the department within thirty (30) days. The new owner must apply for a permit transfer within thirty (30) days. The permittee shall be liable for any non-compliance of the permitted source until the transferee applies for and receives a transfer of permit.

10. The permittee, by acceptance of this permit, specifically agrees to allow access to permitted source at reasonable times by department personnel presenting credentials for the purposes of inspection and testing to determine compliance with this permit and department rules.

11. This permit does not indicate a waiver of or approval of any other department permit that may be required for other aspects of the total project.

12. This permit conveys no title to land or water, nor constitutes state recognition or acknowledgement of title; and does not constitute authority for the reclamation of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the state. Only the Trustees of the Internal Improvement Trust Fund may express state opinion as to title.

13. This permit also constitutes:

[ ] Determination of Best Available Control Technology (BACT)
[ ] Determination of Prevention of Significant Deterioration (PSD)
[ ] Certification of Compliance with State Water Quality Standards (Section 401, PL 92-500)

PERMIT NO.: AC 48-42931
APPLICANT: Central Florida Pipeline Corporation

SPECIFIC CONDITIONS:

1. Construction should reasonably conform to the plans submitted in the application.

2. The applicant should report any delays in construction and completion of the proposed rack to the Department's St. Johns River District Office.

3. The maximum emission rate of VOC resulting from gasoline loaded through the new loading rack will be 35 mg/liter of gasoline loaded.

4. Before this construction permit expires, loading emissions from the new rack through the vapor recovery unit will be tested for VOC emission. The test procedure will be as given in the Proposed New Source Performance Standards, December 17,1980, Federal Register. The loading rate shall be at least 75% of the capacity of the entire loading equipment at the terminal, both existing and new racks, or maximum loading rate available as limited by the number of trucks the terminal services on a high rate day, whichever is greater.

5. Gasoline loading through the new loading rack is not permitted unless the total vacuum pump capacity (two pumps) of the vapor recovery unit is in operation, or it can be demonstrated, from the specified test method in Specific Condition Number 4, that the use of one (1) vacuum pump will meet the criteria of Specific Condition Number 3.

6. The applicant will demonstrate compliance with the conditions of the construction permit and submit a complete application for an operating permit to the St. Johns River District prior to 90 days of the expiration date of the construction permit. The permittee may continue to operate in compliance with all terms of the construction permit until the expiration date or issuance of an operating permit.

PERMIT NO.: AC 48-42931
APPLICANT: Central Florida Pipeline Corporation

Expiration Date: November 1, 1982

_____ Pages Attached.

Issued this 14 day of October, 19 81.

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

Victoria J. Tschinkel

Signature

FINAL DETERMINATION

CENTRAL FLORIDA PIPELINE CORPORATION

ORANGE COUNTY, FLORIDA

GASOLINE STORAGE TANK

APPLICATION NUMBER:

AC 48-54122

FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION

BUREAU OF AIR QUALITY MANAGEMENT

CENTRAL AIR PERMITTING

JUNE 17, 1982

CENTRAL FLORIDA PIPELINE CORPORATION

The Bureau of Air Quality Management has reviewed the construction permit application from the Central Florida Pipeline Corporation to convert an existing jet kerosine storage tank to gasoline storage upon retrofitting with an internal floating roof. The notice of the Department's intent to issue was published in the Orlando Sentinel Star on May 15, 1982 and the Preliminary Determination was available for public inspection at the DER St. Johns River District office in Orlando, and at the Bureau of Air Quality Management.

No letters or comments were received on the proposed action as a result of the public comment period. Therefore, the construction permit will be issued with the conditions as given in the proposed permit.

Sentinel Star Company

Published Daily
Orlando, Orange County, Florida

ADVERTISING CHARGE $38.17

State of Florida } SS.
COUNTY OF ORANGE }

Before the undersigned authority personally appeared

Betty M. Kinney, who on oath says that she is the Legal Advertising Representative of the Sentinel Star, a Daily newspaper published at Orlando, in Orange County, Florida; that the attached copy of advertisement, being a Notice of Proposed Agency Action in the matter of Permit for the modification to a petroleum storage tank at Taft, FL in the Court, was published in said newspaper in the issues of

May 15, 1982

Affiant further says that the said Sentinel Star is a newspaper published at Orlando, in said Orange County, Florida, and that the said newapaper has heretofore been continuously published in said Orange County, Florida, each Week Day and has been entered as second-class mail matter at the post office in Orlando, in said Orange County, Florida for a period of one year next preceding the first publication of the attached copy of advertisement; and affiant further says that he/she has neither paid nor promised any person, firm or corporation any discount, rebate, commission or refund for the purpose of securing this advertisement for publication in the said newspaper.

Betty M. Kinney

Sworn to and subscribed before me this 21st day of May A.D., 19 82

Virginia M. Hollingsworth
Notary Public

FORM NO. AD-262

NOTICE OF PROPOSED AGENCY ACTION

The Department of Environmental Regulation gives notice of its intent to issue a permit to the Central Florida Pipeline Corporation for the modification to a petroleum storage tank at their terminus near Taft, Orange County, Florida. A determination of Best Available Control Technology (BACT) was not required.

A person who is substantially affected by the Department's proposed permitting decision may request a hearing in accordance with Section 120.57, Florida Statutes, and Chapters 17-1 and 28-5, Florida Administrative Code. The request for hearing must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Twin Towers Office Building, Tallahassee, Florida 32301, within fourteen (14) days of publication of this notice. Failure to file a request for hearing within this time period shall constitute a waiver of any right such person may have to request a hearing under Section 120.57, Florida Statutes.

The application, technical evaluation and departmental intent are available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at the following locations:

DER, Bureau of Air Quality Mgmt.
2600 Blair Stone Road
Tallahassee, Florida 32301

Dept. of Env. Regulation
St. Johns River Dist.
3319 Maguire Blvd.
Suite 232
Orlando, Florida 32803

Comments on this action shall be submitted in writing to Bill Thomas of the Tallahassee office within thirty (30) days of this notice.

CL-467 May15,1982

STATE OF FLORIDA
DEPARTMENT OF
ENVIRONMENTAL REGULATION

CONSTRUCTION
PERMIT
NO.

DATE OF ISSUANCE

DATE OF EXPIRATION

TWIN TOWERS OFFICE BUILDING
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32301

BOB GRAHAM
GOVERNOR
Victoria J. Tschinkel
SECRETARY

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

APPLICANT:

Central Florida Pipeline Corporation
120 South Riverside Plaza
Chicago, Illinois 60606

PERMIT/CERTIFICATION
NO. AC 48-54122

COUNTY: Orange

PROJECT:
Gasoline Storage Tank 1054-Floating Roof Retrofit

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Chapter 17-2, 17-4, Florida Administrative Code. The above named applicant, hereinafter called Permittee, is hereby authorized to perform the work or operate the facility shown on the approved drawing(s), plans, documents, and specifications attached hereto and made a part hereof and specifically described as follows:

For the installation of an internal floating roof or storage tank 1054 at the CFPC terminal located at 9999 South State Road 527 near Taft, Orange County. The UTM coordinates of the proposed source are 463.8 km East and 3143.8 km North.

Construction shall be in accordance with the attached permit application and plans, documents and drawings except as otherwise noted on page 3 - "Specific Conditions".

Attachments are as follows:

1. Application to Construct Air Pollution Sources, DER Form 17-1.122(16).

PERMIT NO.: AC 48-54122
APPLICANT: Central Florida Pipeline Corporation

GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations, and restrictions set forth herein are "Permit Conditions:, and as such are binding upon the permittee and enforceable pursuant to the authority of Section 403.161(1), Florida Statutes. Permittee is hereby placed on notice that the department will review this permit periodically and may initiate court action for any violation of the "Permit Conditions" by the permittee, its agents, employees, servants or representatives.

2. This permit is valid only for the specific processes and operations indicated in the attached drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit shall constitute grounds for revocation and enforcement action by the department.

3. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately notify and provide the department with the following information: (a) a description of and cause of non-compliance; and (b) the period of non-compliance, including exact dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance. The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the department for penalties or revocation of this permit.

4. As provided in subsection 403.087(6), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Nor does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations.

5. This permit is required to be posted in a conspicuous location at the work site or source during the entire period of construction or operation.

6. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source, which are submitted to the department, may be used by the department as evidence in any enforcement case arising under the Florida Statutes or department rules, except where such use is proscribed by Section 403.111, F.S.

7. In the case of an operation permit, permittee agrees to comply with changes in department rules and Florida Statutes after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by Florida Statutes or department rules.

8. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, plant, or aquatic life or property and penalities therefore caused by the construction or operation of this permitted source, nor does it allow the permittee to cause pollution in contravention of Florida Statutes and department rules, except where specifically authorized by an order from the department granting a variance or exception from department rules or state statutes.

9. This permit is not transferable. Upon sale or legal transfer of the property or facility covered by this permit, the permittee shall notify the department within thirty (30) days. The new owner must apply for a permit transfer within thirty (30) days. The permittee shall be liable for any non-compliance of the permitted source until the transferee applies for and receives a transfer of permit.

10. The permittee, by acceptance of this permit, specifically agrees to allow access to permitted source at reasonable times by department personnel presenting credentials for the purposes of inspection and testing to determine compliance with this permit and department rules.

11. This permit does not indicate a waiver of or approval of any other department permit that may be required for other aspects of the total project.

12. This permit conveys no title to land or water, nor constitutes state recognition or acknowledgement of title, and does not constitute authority for the reclamation of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the state. Only the Trustees of the Internal Improvement Trust Fund may express state opinion as to title.

13. This permit also constitutes:

[ ] Determination of Best Available Control Technology (BACT)
[ ] Determination of Prevention of Significant Deterioration (PSD)
[ ] Certification of Compliance with State Water Quality Standards (Section 401, PL 92-500)

PERMIT NO.: AC 48-54122
APPLICANT: Central Florida Pipeline Corporation

SPECIFIC CONDITIONS:

1. Construction should reasonably conform to plans submitted in the application.

2. The applicant should report any delays in construction and completion of the proposed rack to the Department's St. Johns River District Office in Orlando.

3. Thirty days prior to the initial fill, the St. Johns River District office shall be notified so that a Department representative may verify compliance with the conditions of the construction permit.

4. Annual operating and maintenance reports shall be submitted to the St. Johns River District Office and shall include tank gasoline throughput and seal condition.

5. Prior to 90 days of the expiration of the construction permit the applicant will submit a complete application for an operating permit. The permittee may continue to operate in compliance with all terms of the construction permit until the expiration date or issuance of an operating permit.

Expiration Date: April 30, 1983

_____ Pages Attached.

Issued this 19 day of July, 1982.

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

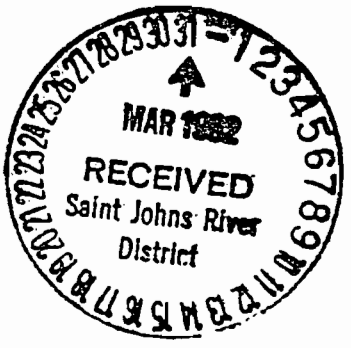
Victoria J. Tschinkel
Signature

GATX

CENTRAL FLORIDA PIPELINE CORPORATION
subsidiary of
GATX TERMINALS CORPORATION

1904 Hemlock Avenue
Tampa, FL 33605
813-248-8361

March 29, 1982



Mr. Charles M. Collins, P. E.
State of Florida
Department of Environmental Regulation
Suite 232
3319 Maguire Boulevard
Orlando, FL 32803

Re: Permit A048-46569

Dear Mr. Collins:

Attached is an application to modify existing Tank 1054 (Cone Roof) to an internal floating roof tank by the addition of a Mayflower floating roof to the tank.

Also attached is Check No. 2559 in the amount of $20.00 for processing fee.

Very truly yours,

CENTRAL FLORIDA PIPELINE CORPORATION

David O. Theung
Project Engineer

DOT/sg

Enclosures

AC 48-54122

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

APPLICATION TO ~~OPERATE~~/CONSTRUCT AIR POLLUTION SOURCES

SOURCE TYPE: Petroleum Tank-Gasoline [ ] New[1] [X] Existing[1]

APPLICATION TYPE: [ ] Construction [ ] Operation [X] Modification

COMPANY NAME: Central Florida Pipeline Corporation COUNTY: Orange

Identify the specific emission point source(s) addressed in this application (i.e. Lime Kiln No. 4 with Venturi Scrubber; Peeking Unit No. 2, Gas Fired) Existing Tank 1054 Cone Roof Petroleum Tank

SOURCE LOCATION: Street S. R. 527 & Vineland Road City Taft, FL 32809

UTM: East 463800 E North 3143800 N

Latitude 28 ° 25 ' 19 "N Longitude 81 ° 22 ' 01 "W

APPLICANT NAME AND TITLE: Central Florida Pipeline Corporation

APPLICANT ADDRESS: 120 South Riverside Plaza, Chicago, IL 60606

SECTION I: STATEMENTS BY APPLICANT AND ENGINEER

A. APPLICANT

I am the undersigned owner or authorized representative* of Central Florida Pipeline Corporation

I certify that the statements made in this application for a Modification permit are true, correct and complete to the best of my knowledge and belief. Further, I agree to maintain and operate the pollution control source and pollution control facilities in such a manner as to comply with the provision of Chapter 403, Florida Statutes, and all the rules and regulations of the department and revisions thereof. I also understand that a permit, if granted by the department, will be non-transferable and I will promptly notify the department upon sale or legal transfer of the permitted establishment.

*Attach letter of authorization

Signed: _____

D. P. Schofield, President
Name and Title (Please Type)

Date: 3/29/82 Telephone No. (312) 621-6200

B. PROFESSIONAL ENGINEER REGISTERED IN FLORIDA (where required by Chapter 471, F.S.)

This is to certify that the engineering features of this pollution control project have been designed/examined by me and found to be in conformity with modern engineering principles applicable to the treatment and disposal of pollutants characterized in the permit application. There is reasonable assurance, in my professional judgment, that the pollution control facilities, when properly maintained and operated, will discharge an effluent that complies with all applicable statutes of the State of Florida and the rules and regulations of the department. It is also agreed that the undersigned will furnish, if authorized by the owner, the applicant a set of instructions for the proper maintenance and operation of the pollution control facilities and, if applicable, pollution sources.

Signed: _____

Fred C. Engelman, P. E.
Name (Please Type)

(Affix Seal)

Consultant Engineer
Company Name (Please Type)

3208 Robson Circle, Tampa, FL 33614
Mailing Address (Please Type)

Florida Registration No. 172928 Date: 3/29/82 Telephone No. (813) 933-5082

[1]See Section 17-2.02(15) and (22), Florida Administrative Code, (F.A.C.)

SECTION II: GENERAL PROJECT INFORMATION

A. Describe the nature and extent of the project. Refer to pollution control equipment, and expected improvements in source performance as a result of installation. State whether the project will result in full compliance. Attach additional sheet if necessary.

We propose to install an internal floating roof in an existing cone roof oil tank (68'Ø x 39'-2" Ht., 25,000 Bbl.) to be used for gasoline storage, max. true vapor pressure is 11.0 PSI, 570 mm Hg. Modification to operation will comply with all applicable regulations of Florida DER.

B. Schedule of project covered in this application (Construction Permit Application Only)

Start of Construction July 1, 1982 Completion of Construction February 2, 1983

C. Costs of pollution control system(s): (Note: Show breakdown of estimated costs only for individual components/units of the project serving pollution control purposes. Information on actual costs shall be furnished with the application for operation permit.)

One (1) 68 Ft. Dia. Internal Floating Roof - $19,900

D. Indicate any previous DER permits, orders and notices associated with the emission point, including permit issuance and expiration dates.

Subject tank is approved as a cone roof for Jet "A" service under Permit No. A048-46569. For other permits at location, see attached sheet.

E. Is this application associated with or part of a Development of Regional Impact (DRI) pursuant to Chapter 380, Florida Statutes, and Chapter 22F-2, Florida Administrative Code? ____ Yes X No

F. Normal equipment operating time: hrs/day 24 ; days/wk 7 ; wks/yr 52 ; if power plant, hrs/yr ____ ; if seasonal, describe: N/A

G. If this is a new source or major modification, answer the following questions. (Yes or No)

1. Is this source in a non-attainment area for a particular pollutant? Yes
   a. If yes, has "offset" been applied? No
   b. If yes, has "Lowest Achievable Emission Rate" been applied? --
   c. If yes, list non-attainment pollutants.
2. Does best available control technology (BACT) apply to this source? If yes, see Section VI. N/A
3. Does the State "Prevention of Significant Deterioriation" (PSD) requirements apply to this source? If yes, see Sections VI and VII. No
4. Do "Standards of Performance for New Stationary Sources" (NSPS) apply to this source? Yes
5. Do "National Emission Standards for Hazardous Air Pollutants" (NESHAP) apply to this source? No

Attach all supportive information related to any answer of "Yes". Attach any justification for any answer of "No" that might be considered questionable.

SECTION III: AIR POLLUTION SOURCES & CONTROL DEVICES (Other than Incinerators)

A. Raw Materials and Chemicals Used in your Process, if applicable: N/A

Description	Contaminants		Utilization Rate - lbs/hr	Relate to Flow Diagram
	Type	% Wt		

B. Process Rate, if applicable: (See Section V, Item 1)

1. Total Process Input Rate (lbs/hr): _____

2. Product Weight (lbs/hr): _____

C. Airborne Contaminants Emitted:

Name of Contaminant	Emission[1]		Allowed Emission[2] Rate per Ch. 17-2, F.A.C.	Allowable[3] Emission lbs/hr	Potential Emission[4]		Relate to Flow Diagram
	Maximum lbs/hr	Actual T/yr			lbs/hr	T/yr	
Hydrocarbon	0.127	0.555	NSPS Applies	There are			
				no criteria			
				for storage			
				tanks			

D. Control Devices: (See Section V, Item 4)

Name and Type (Model & Serial No.)	Contaminant	Efficiency	Range of Particles[5] Size Collected (in microns)	Basis for Efficiency (Sec. V, It[5])
Internal Floating	---	---		
Roof				

[1] See Section V, Item 2.

[2] Reference applicable emission standards and units (e.g., Section 17-2.05(6) Table II, E. (1), F.A.C. – 0.1 pounds per million BTU heat input)

[3] Calculated from operating rate and applicable standard

[4] Emission, if source operated without control (See Section V, Item 3)

[5] If Applicable

E. Fuels N/A

Type (Be Specific)	Consumption*		Maximum Heat Input (MMBTU/hr)
	avg/hr	max./hr	

*Units Natural Gas, MMCF/hr; Fuel Oils, barrels/hr; Coal, lbs/hr

Fuel Analysis:

Percent Sulfur: _____ Percent Ash: _____

Density: _____ lbs/gal Typical Percent Nitrogen: _____

Heat Capacity: _____ BTU/lb _____ BTU/gal

Other Fuel Contaminants (which may cause air pollution): _____

F. If applicable, indicate the percent of fuel used for space heating. Annual Average N/A Maximum _____

G. Indicate liquid or solid wastes generated and method of disposal.

H. Emission Stack Geometry and Flow Characteristics (Provide data for each stack):

Stack Height: Thirty-eight (38') Ft. ft. Stack Diameter: 12" x 6" Vents around Tank Roof ft.

Gas Flow Rate: _____ ACFM Gas Exit Temperature: _____ °F.

Water Vapor Content: _____ % Velocity: _____ FPS

SECTION IV: INCINERATOR INFORMATION

Not Applicable

Type of Waste	Type 0 (Plastics)	Type I (Rubbish)	Type II (Refuse)	Type III (Garbage)	Type IV (Pathological)	Type V (Liq & Gas By-prod.)	Type VI (Solid By-prod.)
Lbs/hr Incinerated							

Description of Waste _____

Total Weight Incinerated (lbs/hr) _____ Design Capacity (lbs/hr) _____

Approximate Number of Hours of Operation per day _____ days/week _____

Manufacturer _____

Date Constructed _____ Model No. _____

	Volume $(ft)^3$	Heat Release (BTU/hr)	Fuel		Temperature (^oF)
			Type	BTU/hr	
Primary Chamber					
Secondary Chamber					

Stack Height: _____ ft. Stack Diameter _____ Stack Temp. _____

Gas Flow Rate: _____ ACFM _____ DSCFM* Velocity _____ FPS

*If 50 or more tons per day design capacity, submit the emissions rate in grains per standard cubic foot dry gas corrected to 50% excess air.

Type of pollution control device: [ ] Cyclone [ ] Wet Scrubber [ ] Afterburner [ ] Other (specify) _____

Brief description of operating characteristics of control devices: _____

N/A

Ultimate disposal of any effluent other than that emitted from the stack (scrubber water, ash, etc.):

N/A

SECTION V: SUPPLEMENTAL REQUIREMENTS

Please provide the following supplements where required for this application.

1. Total process input rate and product weight — show derivation.
2. To a construction application, attach basis of emission estimate (e.g., design calculations, design drawings, pertinent manufacturer's test data, etc.,) and attach proposed methods (e.g., FR Part 60 Methods 1, 2, 3, 4, 5) to show proof of compliance with applicable standards. To an operation application, attach test results or methods used to show proof of compliance. Information provided when applying for an operation permit from a construction permit shall be indicative of the time at which the test was made.
3. Attach basis of potential discharge (e.g., emission factor, that is, AP42 test).
4. With construction permit application, include design details for all air pollution control systems (e.g., for baghouse include cloth to air ratio; for scrubber include cross-section sketch, etc.).
5. With construction permit application, attach derivation of control device(s) efficiency. Include test or design data. Items 2, 3, and 5 should be consistent: actual emissions = potential (1-efficiency).
6. An 8½" x 11" flow diagram which will, without revealing trade secrets, identify the individual operations and/or processes. Indicate where raw materials enter, where solid and liquid waste exit, where gaseous emissions and/or airborne particles are evolved and where finished products are obtained.
7. An 8½" x 11" plot plan showing the location of the establishment, and points of airborne emissions, in relation to the surrounding area, residences and other permanent structures and roadways (Example: Copy of relevant portion of USGS topographic map).
8. An 8½" x 11" plot plan of facility showing the location of manufacturing processes and outlets for airborne emissions. Relate all flows to the flow diagram.

9. An application fee of $20, unless exempted by Section 17-4.05(3), F.A.C. The check should be made payable to the Department of Environmental Regulation.

10. With an application for operation permit, attach a Certificate of Completion of Construction indicating that the source was constructed as shown in the construction permit.

SECTION VI: BEST AVAILABLE CONTROL TECHNOLOGY

A. Are standards of performance for new stationary sources pursuant to 40 C.F.R. Part 60 applicable to the source?
[X] Yes [ ] No

Contaminant	Rate or Concentration
Hydrocarbon	N/A

B. Has EPA declared the best available control technology for this class of sources (If yes, attach copy) [ ] Yes [ ] No

Contaminant	Rate or Concentration
Hydrocarbon - Method being constructed meets LEAR	N/A

C. What emission levels do you propose as best available control technology? N/A

Contaminant	Rate or Concentration

D. Describe the existing control and treatment technology (if any).

1. Control Device/System: Internal Floating Roof with Seals
2. Operating Principles: Seal-off
3. Efficiency:* --
4. Capital Costs: $19,900
5. Useful Life: 10 Years
6. Operating Costs: -0-
7. Energy: --
8. Maintenance Cost: $1,500/Year
9. Emissions: N/A

Contaminant	Rate or Concentration

*Explain method of determining D 3 above.

10. Stack Parameters N/A

a. Height: ft. b. Diameter: ft.

c. Flow Rate: ACFM d. Temperature: °F

e. Velocity: FPS

E. Describe the control and treatment technology available (As many types as applicable, use additional pages if necessary).

1.

a. Control Device: Internal Floating Roof with Seals

b. Operating Principles: Internal Seal-off

c. Efficiency*: -- d. Capital Cost:

e. Useful Life: 10 Years f. Operating Cost: --

g. Energy*: N/A h. Maintenance Cost: $1,500/Year

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes: N/A

k. Ability to construct with control device, install in available space, and operate within proposed levels: N/A

2.

a. Control Device:

b. Operating Principles:

c. Efficiency*: d. Capital Cost:

e. Useful Life: f. Operating Cost:

g. Energy**: h. Maintenance Costs:

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space, and operate within proposed levels:

*Explain method of determining efficiency.

**Energy to be reported in units of electrical power – KWH design rate.

3.

a. Control Device: ---

b. Operating Principles:

c. Efficiency*: d. Capital Cost:

e. Life: f. Operating Cost:

g. Energy: h. Maintenance Cost:

*Explain method of determining efficiency above.

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space and operate within proposed levels:

4.

a. Control Device ---

b. Operating Principles:

c. Efficiency*: d. Capital Cost:

e. Life: f. Operating Cost:

g. Energy: h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space, and operate within proposed levels:

F. Describe the control technology selected: N/A

1. Control Device:
2. Efficiency*: 3. Capital Cost:
4. Life: 5. Operating Cost:
6. Energy: 7. Maintenance Cost:
8. Manufacturer:
9. Other locations where employed on similar processes:

a.

(1) Company:

(2) Mailing Address:

(3) City: (4) State:

(5) Environmental Manager:

(6) Telephone No.:

*Explain method of determining efficiency above.

(7) Emissions*:

Contaminant	Rate or Concentration

(8) Process Rate*:

b.

(1) Company:

(2) Mailing Address:

(3) City: (4) State:

*Applicant must provide this information when available. Should this information not be available, applicant must state the reason(s) why.

(5) Environmental Manager:

(6) Telephone No.:

(7) Emissions*:

Contaminant	Rate or Concentration

(8) Process Rate*:

10. Reason for selection and description of systems:

Economy, useful life, efficiecy

*Applicant must provide this information when available. Should this information not be available, applicant must state the reason(s) why.

SECTION VII – PREVENTION OF SIGNIFICANT DETERIORATION

A. Company Monitored Data

1. _____ no sites _____ TSP _____( ) SO^2* _____ Wind spd/dir

Period of monitoring ____/____/____ to ____/____/____
month day year month day year

Other data recorded _____

Attach all data or statistical summaries to this application.

2. Instrumentation, Field and Laboratory

a) Was instrumentation EPA referenced or its equivalent? _____ Yes _____ No

b) Was instrumentation calibrated in accordance with Department procedures? _____ Yes _____ No _____ Unknown

B. Meteorological Data Used for Air Quality Modeling

1. _____ Year(s) of data from ____/____/____ to ____/____/____
month day year month day year

2. Surface data obtained from (location) _____

3. Upper air (mixing height) data obtained from (location) _____

4. Stability wind rose (STAR) data obtained from (location) _____

C. Computer Models Used

1. N/A Modified? If yes, attach description.

2. _____ Modified? If yes, attach description.

3. _____ Modified? If yes, attach description.

4. _____ Modified? If yes, attach description.

Attach copies of all final model runs showing input data, receptor locations, and principle output tables.

D. Applicants Maximum Allowable Emission Data

Pollutant	Emission Rate
TSP	_____ grams/sec
SO^2	_____ grams/sec

E. Emission Data Used in Modeling

Attach list of emission sources. Emission data required is source name; description on point source (on NEDS point number), UTM coordinates, stack data, allowable emissions, and normal operating time.

F. Attach all other information supportive to the PSD review.

*Specify bubbler (B) or continuous (C).

G. Discuss the social and economic impact of the selected technology versus other applicable technologies (i.e., jobs, payroll, production, taxes, energy, etc.). Include assessment of the environmental impact of the sources.

H. Attach scientific, engineering, and technical material, reports, publications, journals, and other competent relevant information describing the theory and application of the requested best available control technology.

DEPARTMENT OF ENVIRONMENTAL REGULATION PERMITS

Taft, FL Terminal

Permit No.	
A048-2492	Tank #2
A048-2493	Tank #3
A048-4835	Tank #25-1
A048-19085	Tank #9
A048-27686	Tank #37-4
A048-32515	Tank #40-1
A048-46569	Tank Nos. 1054, 1061 and 37-3 1055, 1062 4 1059 37-1 5 1060 37-2 6
AC48-43323	Tank #80-1
AC48-35646	Tank #80-2
A048-46573	Five (5) Tank Truck Loading Racks
AC48-45931	New (1981) Tank Truck Loading Rack
AC48-45792	Tank Nos. 1051, 1052, 1053, 1056 and 1057 (Being modified w/Secondary Seals)

EVAPORATION LOSSES
TANK 1054
Internal Floating Roof
(Calculated in accordance with AP-42)

BREATHING LOSS, 'L_S'

L_S = Losses in pounds/year = $K_S \cdot V^N \cdot P \cdot D \cdot M_V \cdot K_C$

where: K_S = 0.7 (constant)
V = Wind Velocity = 8.7 Mi./Hr.
N = 0.4 (constant)
P = Pressure equation = 0.14

$$= \frac{\left(\frac{P_V}{P_a}\right)}{\left[1+\left(1-\frac{P}{P_a}\right)^{.5}\right]^2} = \frac{\left(\frac{6.2}{14.7}\right)}{\left[1+\left(1-\frac{6.2}{14.7}\right)^{.5}\right]^2} = 0.14$$

D = Dia. in Ft. = 68 Ft.
M_V = Molecular Weight at Average Vapor Pressure = 66
K_C = 1.0

WORKING LOSSES, 'L_W'

L_W = Losses in pounds/year = $0.943 \cdot Q \cdot C \cdot W_1 \div D$

where: Q = Average thruput = 616,000 Bbl./year
C = Shell Clingage = 0.0015 (For light rust)
W_1 = Density of product = 5.0 lbs./Gallon
D = Dia. in Ft. = 68 Ft.

$L_S = K_S \cdot V^N \cdot P \cdot D \cdot M_V \cdot K_C = (0.7)(8.7)^{0.4}(0.14)(68)(66)(1.0) = 1044.93$ lbs./yr.

$L_W = (0.943) \cdot Q \cdot C \cdot W_1 \div D = (0.943)(616{,}000)(.0015)(5) \div (68) = 64.07$ lbs/yr.

1109.00 lbs/yr.

TNK. 1054 (I.F.R)

TOTAL LOSSES = 1109.00 Pounds/Year
= 0.555 Tons/Year
= 0.127 Pounds/Hour

PINE CASTLE, FLA.

N2822.5–W8115/7.5

1953

PHOTOREVISED 1970

AMS 4740 IV NE–SERIES V847

SCALE 1:24000

1 0 1 MIL

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 .5 0 1 KILOMETER

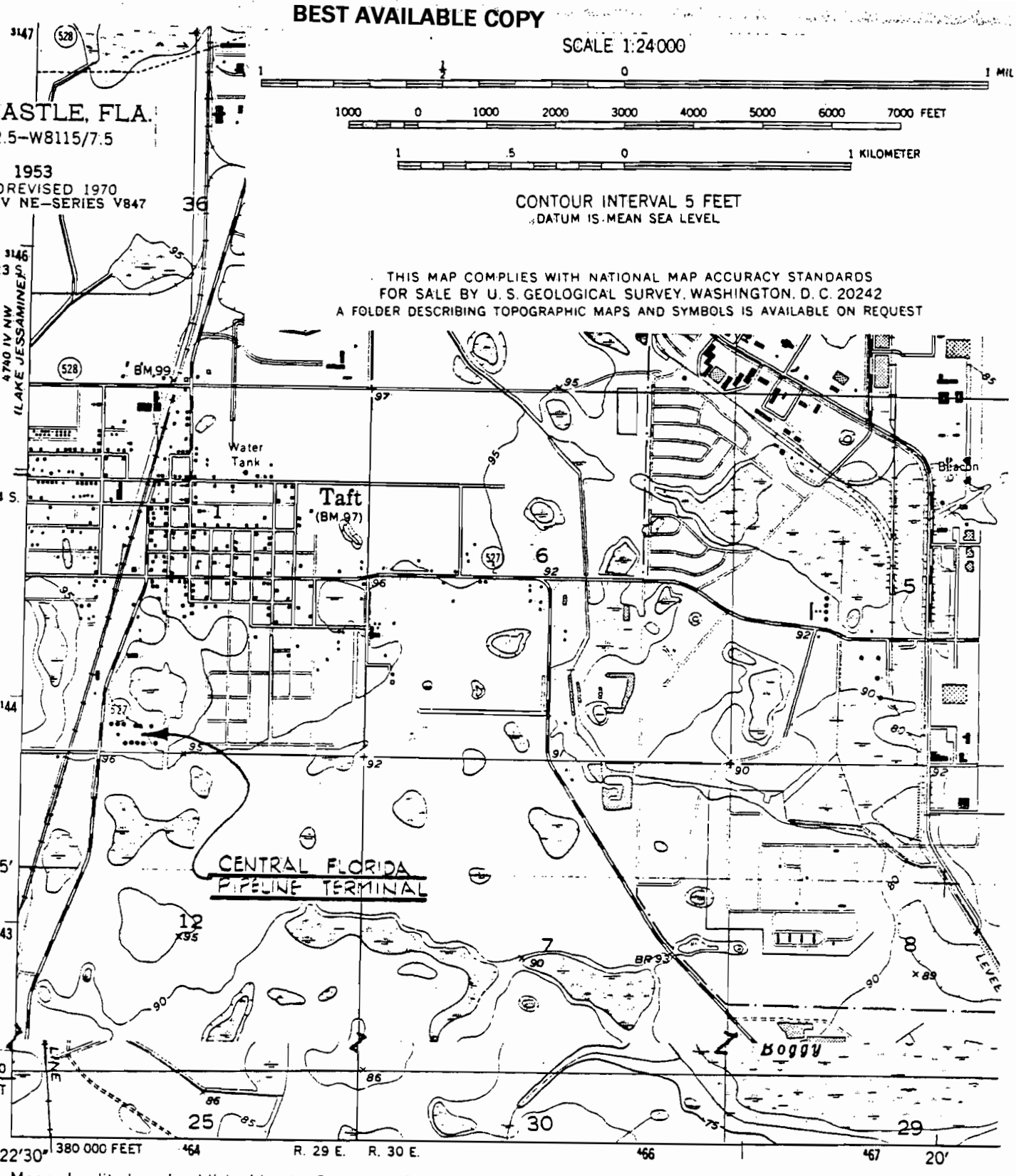
CONTOUR INTERVAL 5 FEET

DATUM IS MEAN SEA LEVEL

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS

FOR SALE BY U. S. GEOLOGICAL SURVEY, WASHINGTON, D. C. 20242

A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST



(KISSIMMEE)
4740 IV SW

Mapped, edited, and published by the Geological Survey

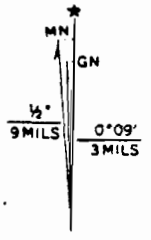
Control by USGS, USC&GS, and USCE

Culture and drainage in part compiled by U. S. Corps of Engineers from aerial photographs taken 1950. Topography by plane-table surveys 1953

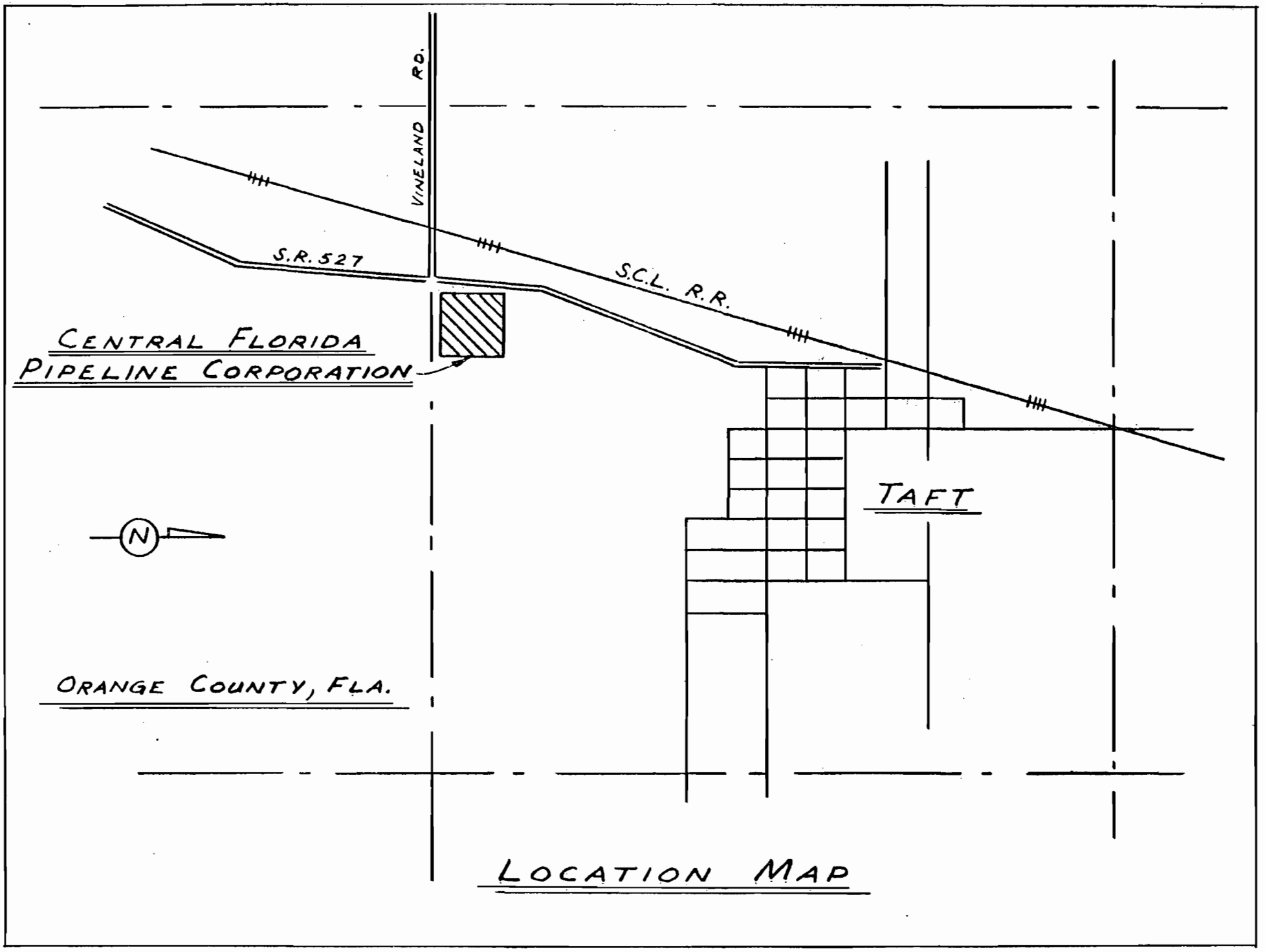
Polyconic projection. 1927 North American datum
10,000-foot grid based on Florida coordinate system, east zone
1000-meter Universal Transverse Mercator grid ticks, zone 17, shown in blue

Revisions shown in purple compiled from aerial photographs taken 1970. This information not field checked

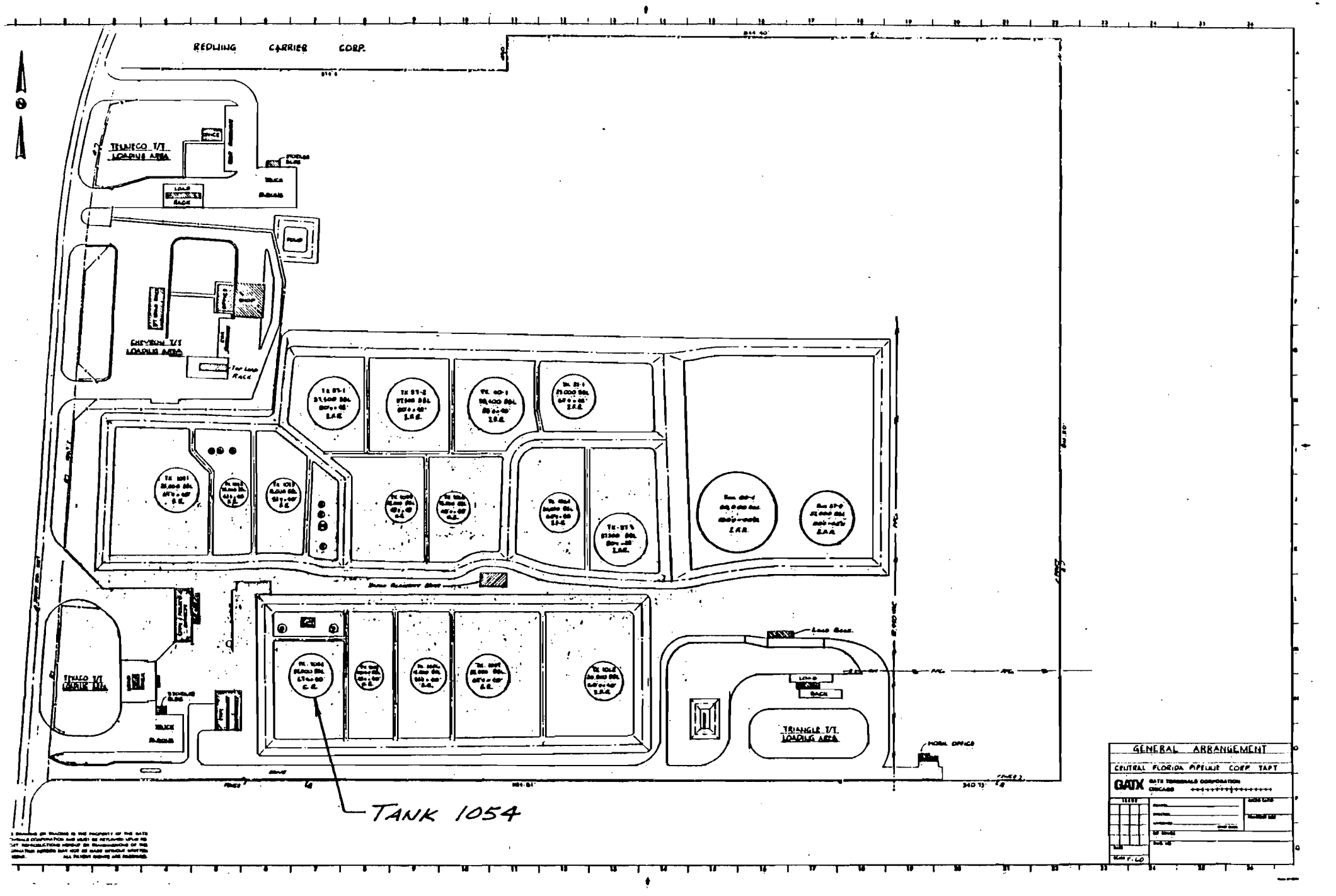
Purple tint indicates extension of urban areas

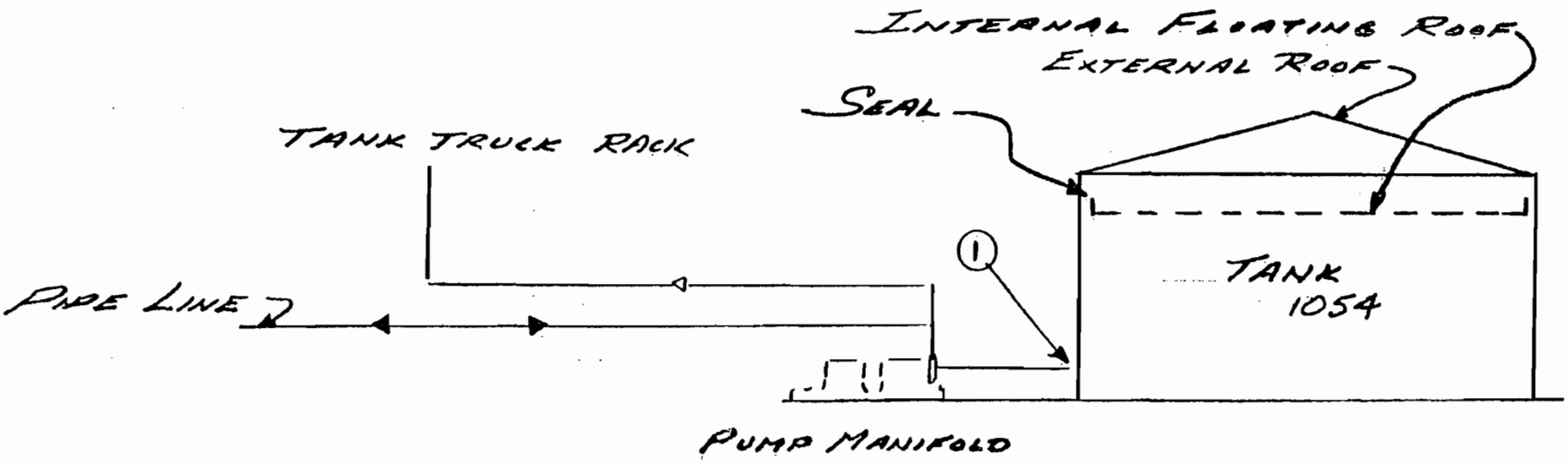


UTM GRID AND 1970 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET



LOCATION MAP





FLOW DIAGRAM

① INDICATES PRODUCT EXIT OR ENTRANCE POINT

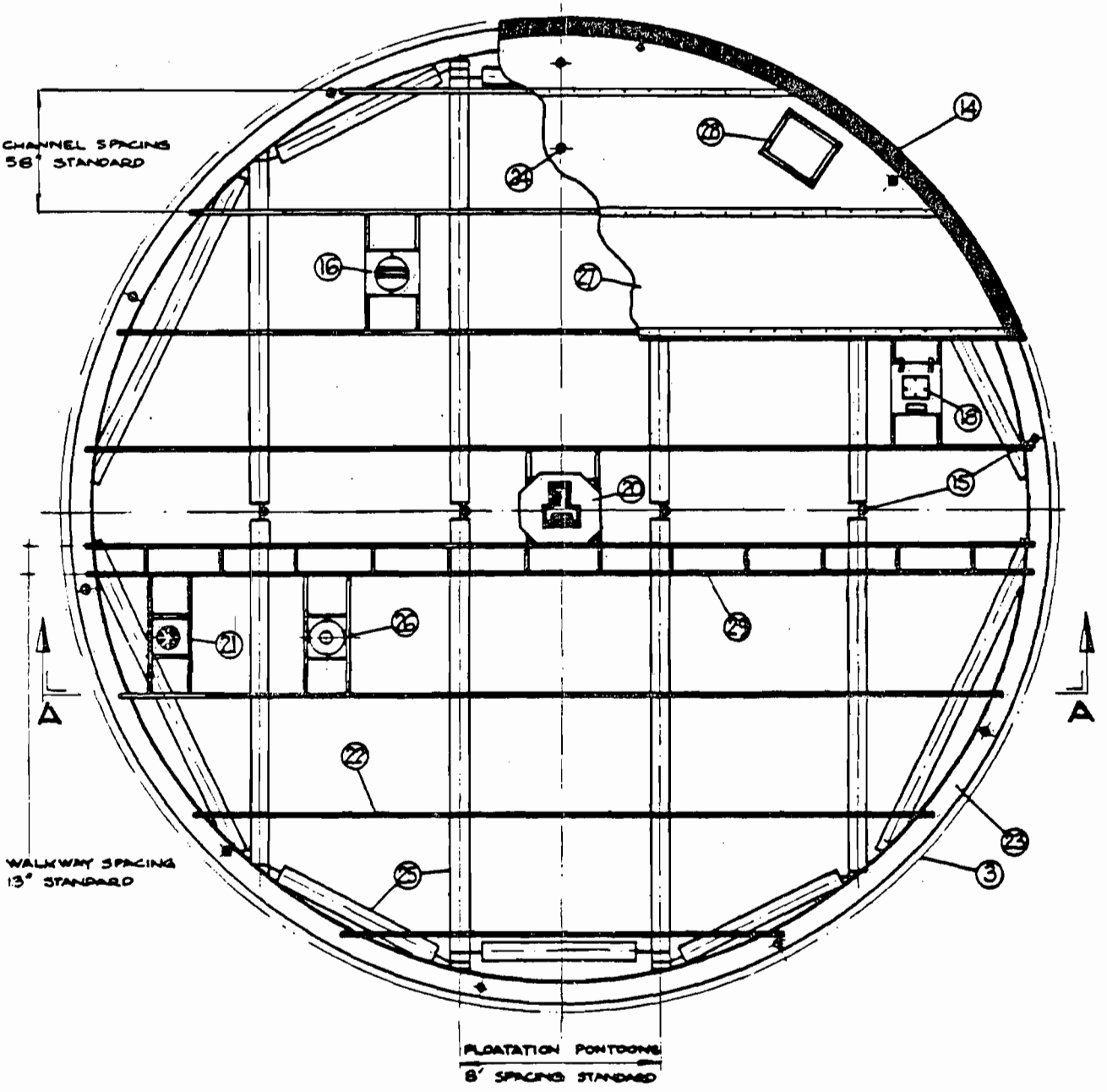
Mayflower
VAPOR SEAL CORPORATION

DESIGN DETAILS
MAYFLOWER VAPOR SEAL
PARTS & ACCESSORIES

16 Industrial Avenue • Little Ferry, New Jersey 07643
phone N. J. (201) 641-0200 • N. Y. (212) CHickering 4-6144

MAYFLOWER VAPOR SEAL
TYPICAL PLAN VIEW OF 40 FT. DIA.

DWG.NO. MVS 100-1276

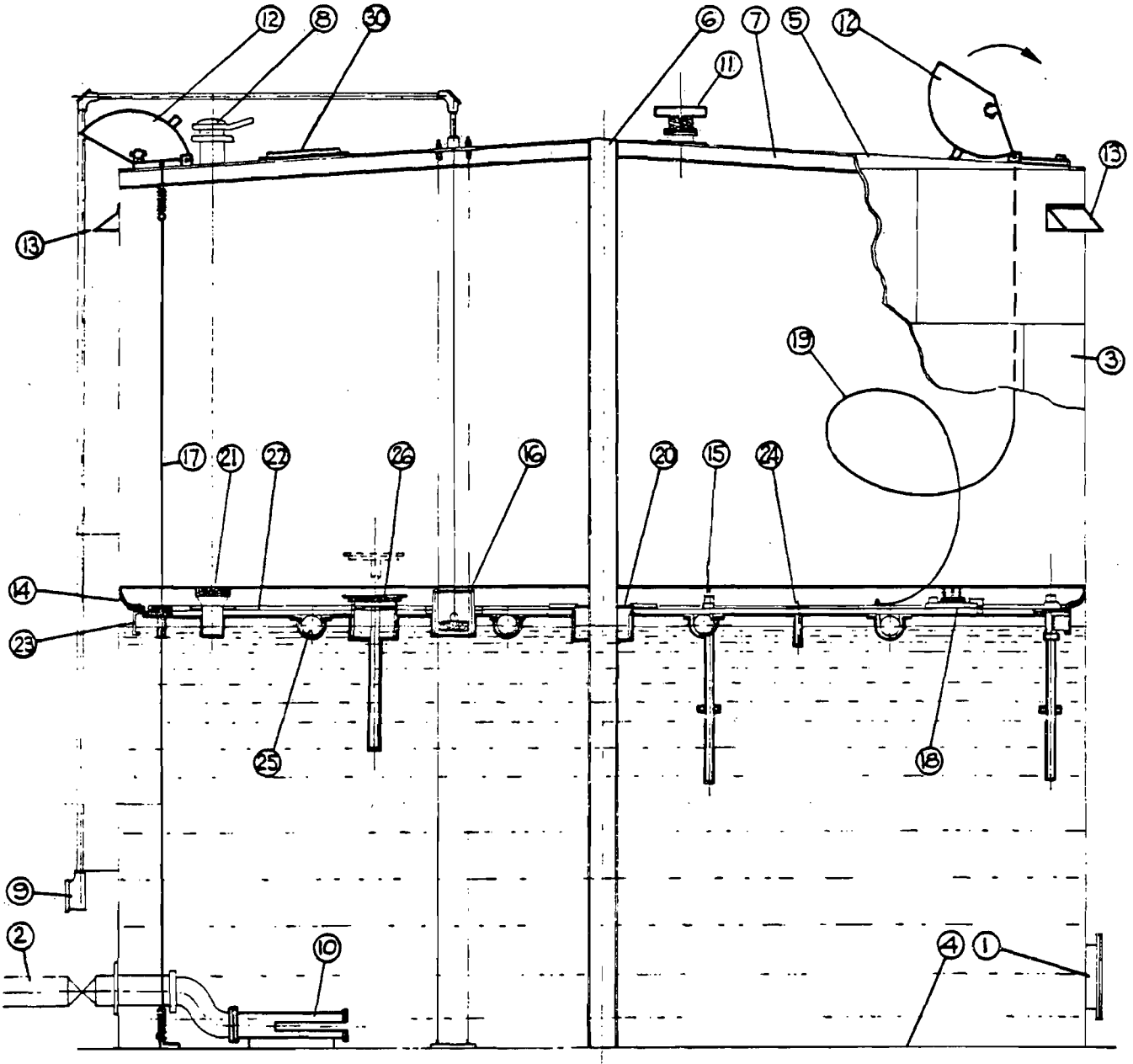


③	TANK SHELL	
⑭	PERIPHERAL WIPER SEAL	P.7
⑮	TOP ADJUSTABLE LEGS	P.3
⑯	FLOATWELL ASSEMBLY	P.9
⑱	HATCHWAY-PRESSURE/VACUUM RELIEF	P.6
⑳	COLUMN SEAL ASSEMBLY	P.8
㉑	SAMPLING FUNNEL ASSEMBLY	P.10
㉒	CHANNELS	P.2
㉓	PERIMETER SEGMENTS	P.3
㉔	DRAIN PIPES	P.6
㉕	FLOATATION PONTOONS	P.3
㉖	BLEEDER VENT ASSEMBLY	P.11
㉗	SHEETING	P.5
㉘	LADDER PAD	P.13
㉙	WALKWAY	P.1

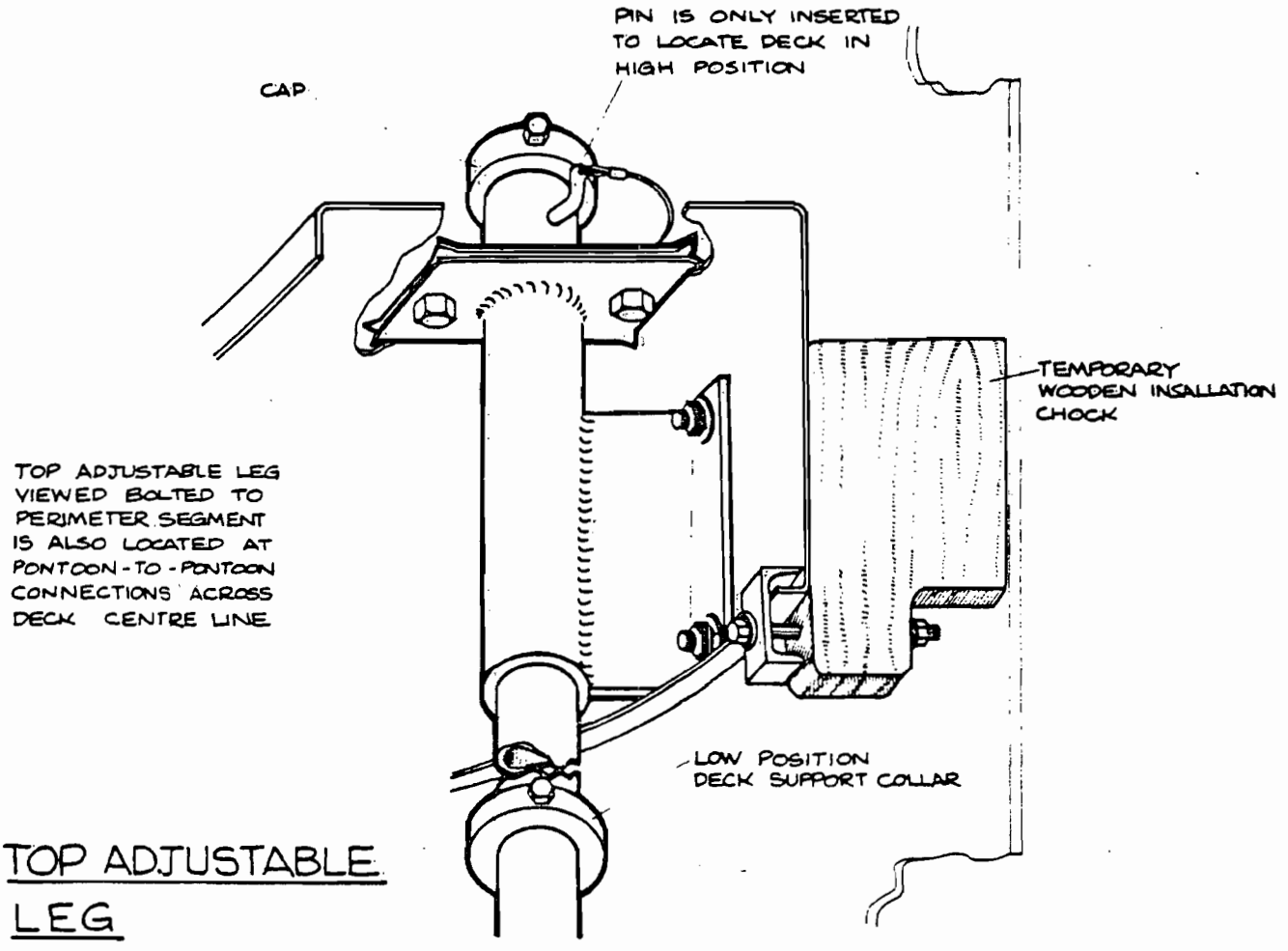
REFER TO PAGE 2 FOR SECTION A - A

MAYFLOWER VAPOR SEAL
TYPICAL ELEVATION VIEW OF 40 FT. DIA.
SECTION A - A

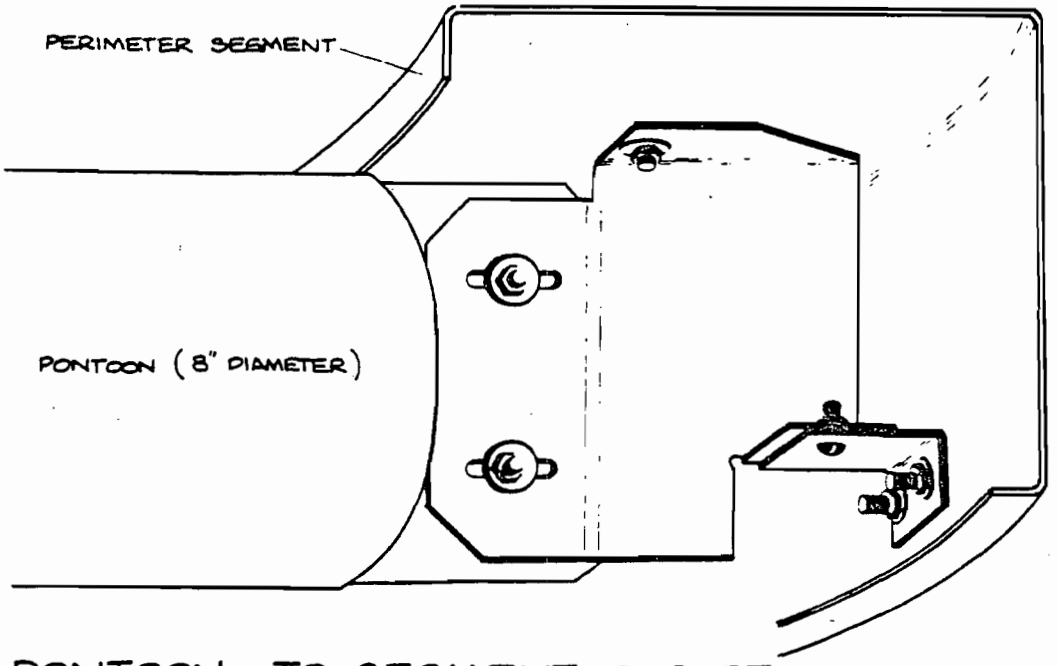
DWG.NO. MVS 101-1276



1	TANK MANHOLE	
2	TANK FILL-LINE	
3	TANK SHELL	
4	TANK FLOOR	
5	TANK CONE ROOF	
6	TANK ROOF SUPPORT COLUMN	
7	TANK ROOF RAFTER	
8	TANK GAUGE HATCH	
9	TANK AUTOMATIC TANK GAUGE	
10	FILL-LINE DIFFUSER	P.16
11	MUSHROOM VENT	P.15
12	AIR SCOOP VENT	P.14
13	OVERFLOW VENT	P.14
14	PERIPHERAL WIPER SEAL	P.7
15	TOP ADJUSTABLE LEGS	P.3
16	FLOATWELL ASSEMBLY	P.9
17	ANTI-ROTATION CABLE (2)	P.17
18	HATCHWAY PRESSURE/VACUUM RELIEF	P.6
19	ANTI-STATIC CABLE (4)	P.2
20	COLUMN SEAL ASSEMBLY	P.8
21	SAMPLING FUNNEL ASSEMBLY	P.10
22	CHANNELS	P.4
23	PERIMETER SEGMENTS	P.3
24	DRAIN PIPE	P.6
25	FLOATATION PONTOONS	P.3
26	BLEEDER VENT ASSEMBLY	P.11
30	ROOF MANWAY	P.18



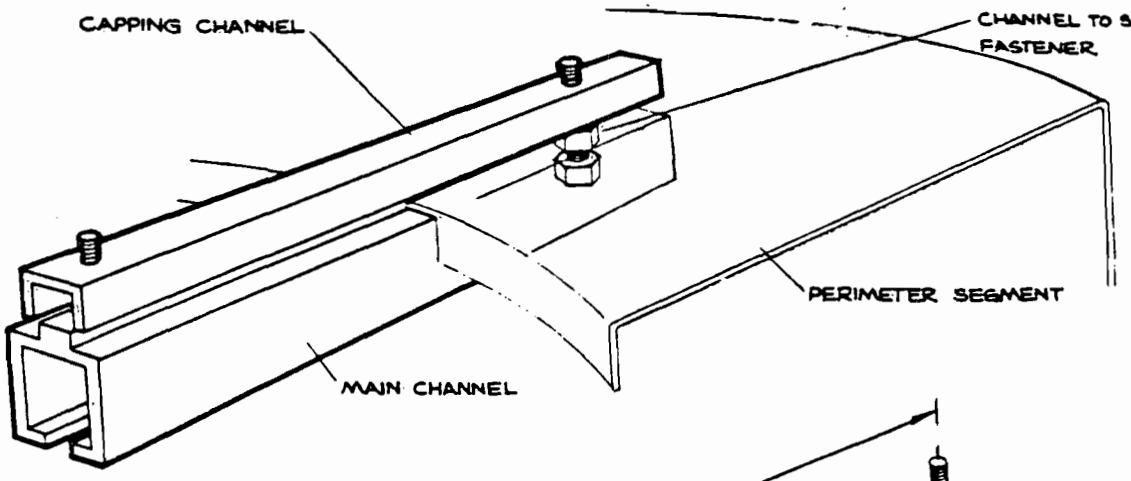
TOP ADJUSTABLE LEG



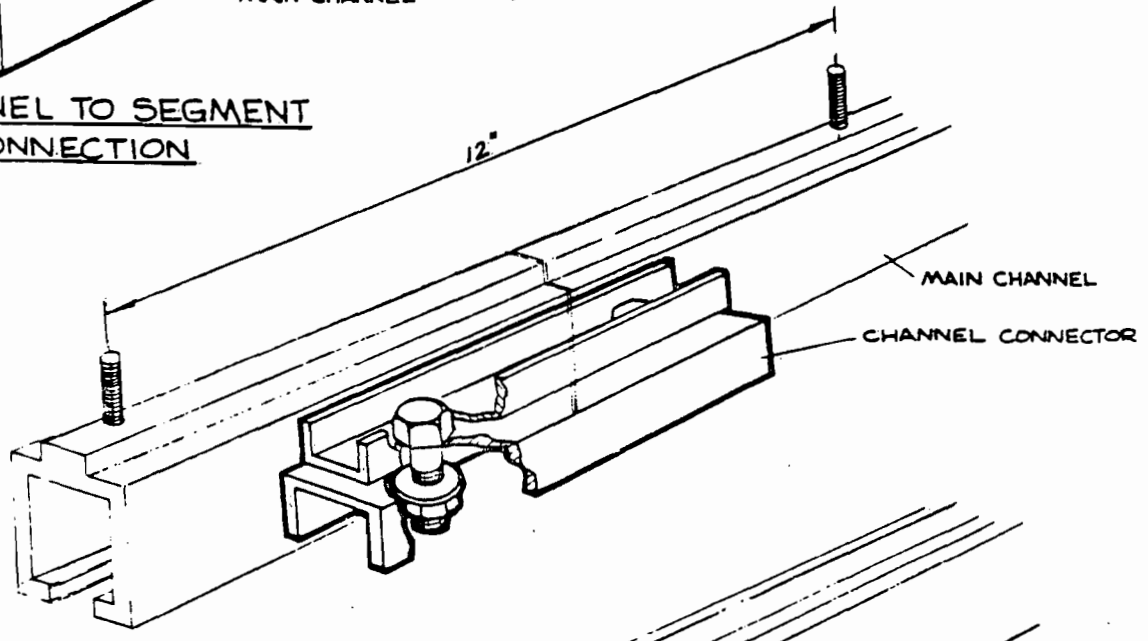
PONTOON TO SEGMENT GUSSET

MAYFLOWER VAPOR SEAL BASIC DECK COMPONENTS
CHANNEL CONNECTION DETAILS

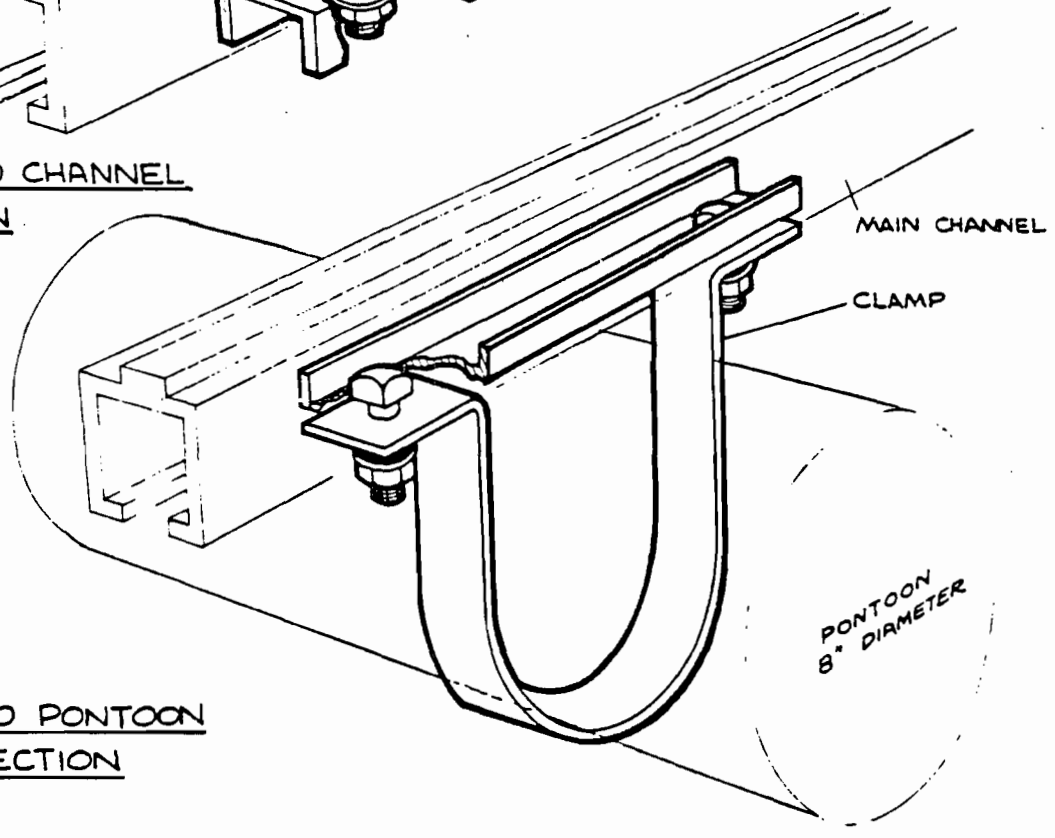
DWG.NO. MVS 103-1276



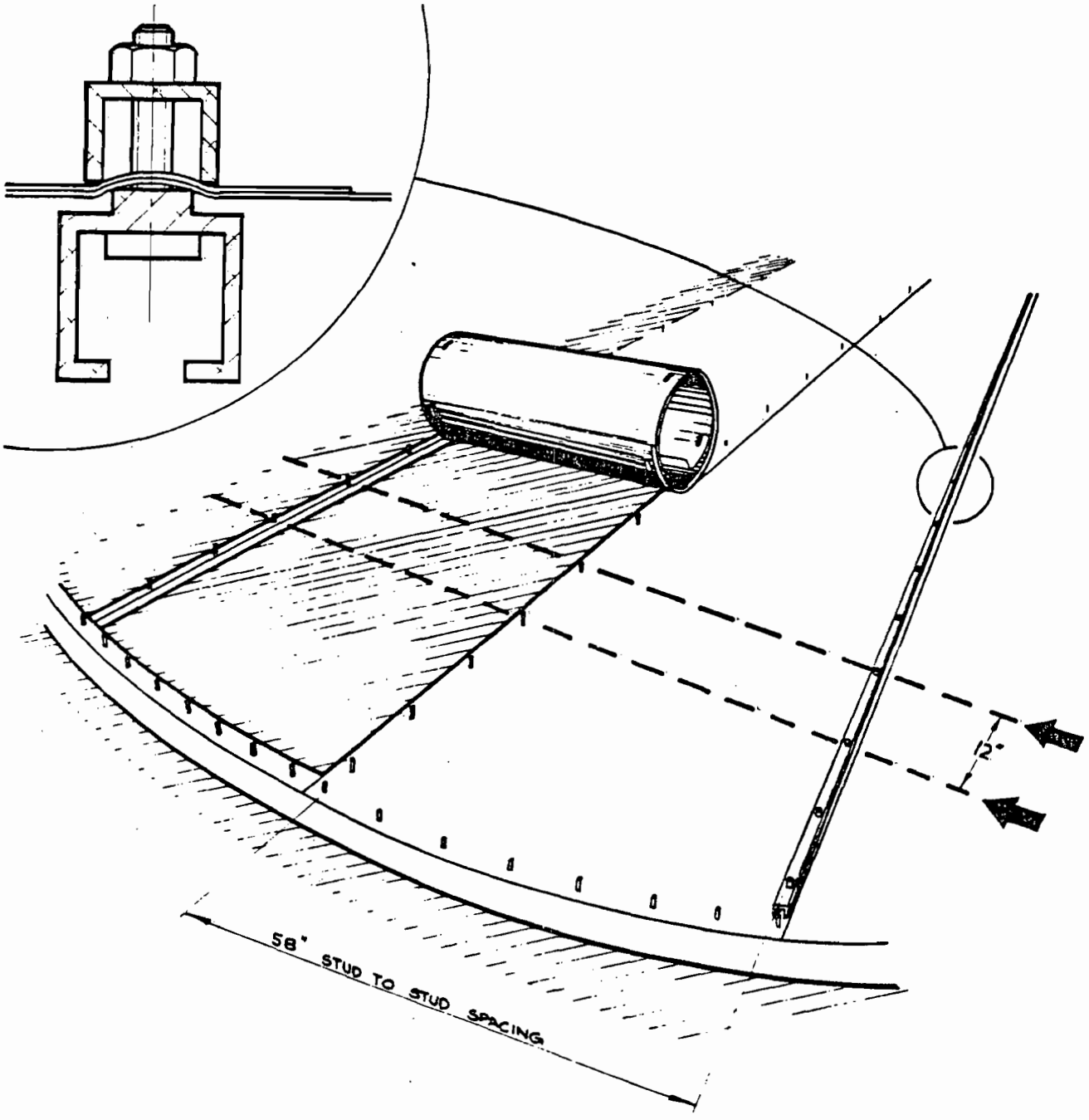
CHANNEL TO SEGMENT CONNECTION



CHANNEL TO CHANNEL CONNECTION

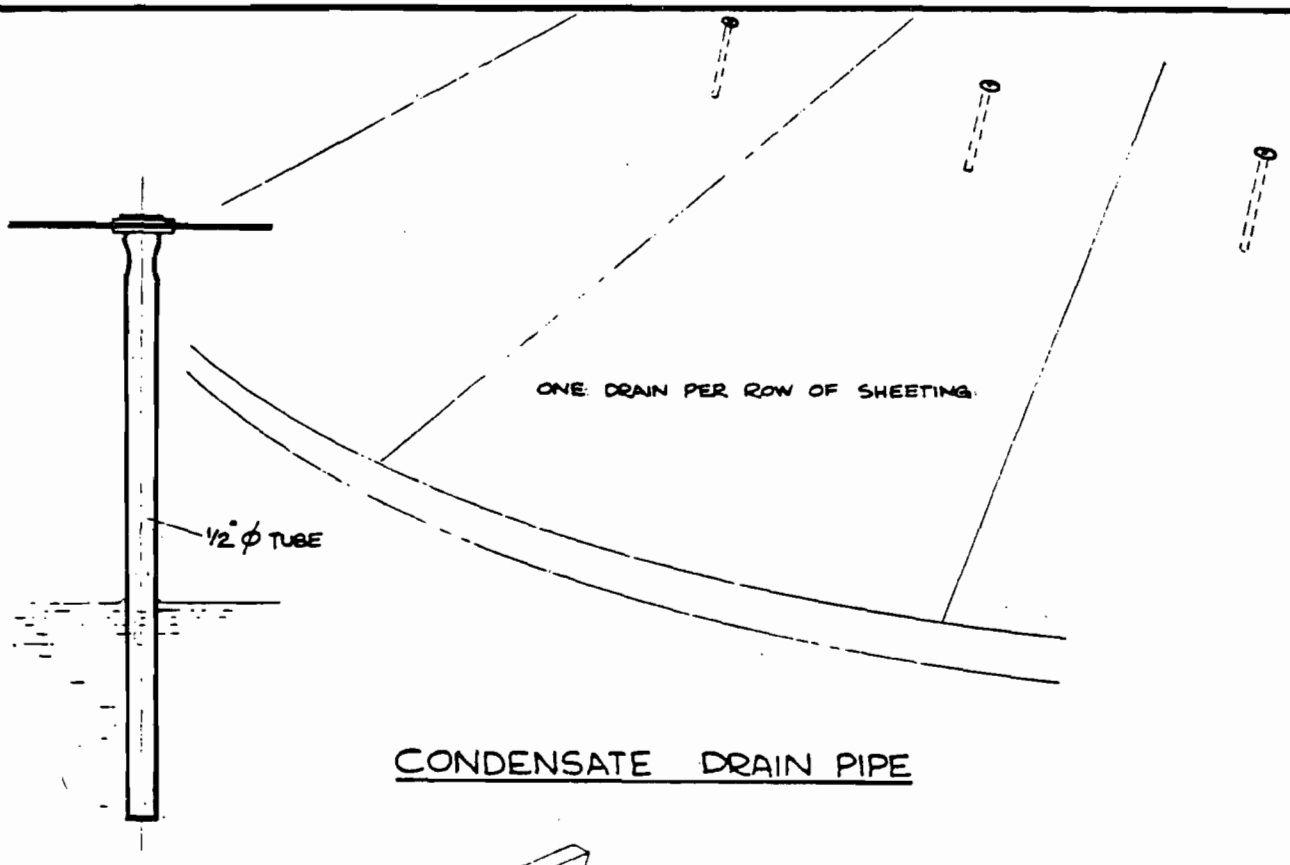


CHANNEL TO PONTOON CONNECTION

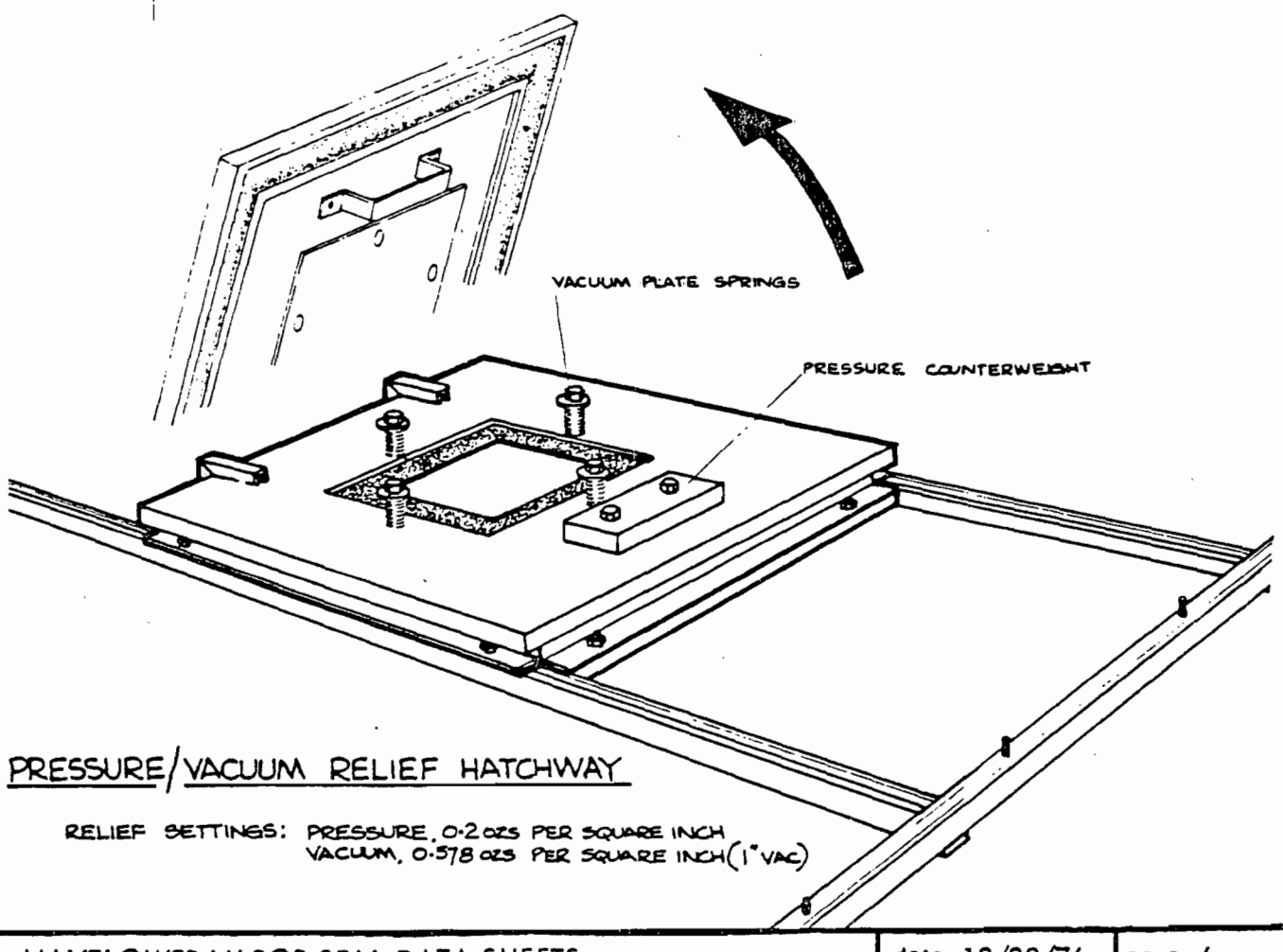


CENTRING OF CHANNELS (58") AND ACCURATE BOLT ALIGNMENT (12") ACROSS ENTIRE SURFACE OF DECK IS MOST IMPORTANT TO PERMIT QUICK INSTALLATION OF THE SHEETING

SHEETING & CHANNELS

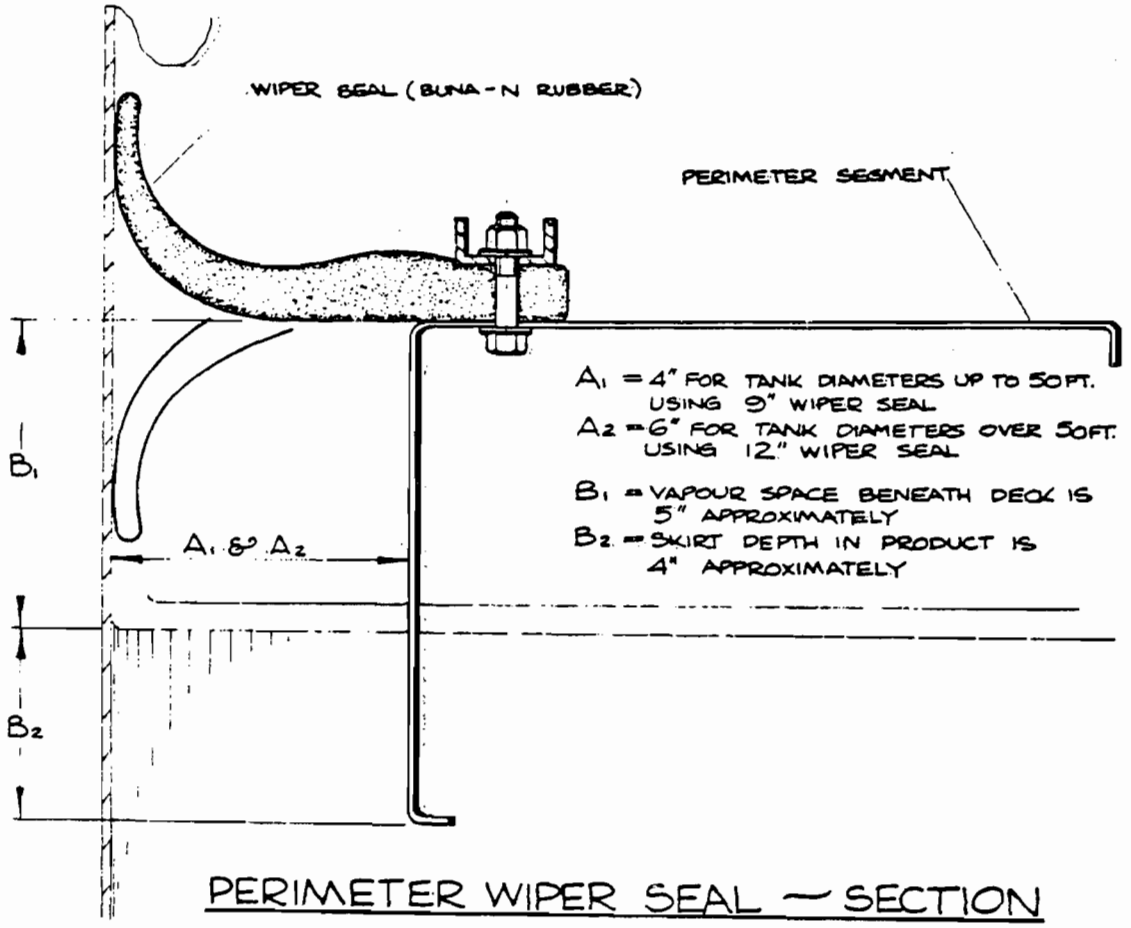


CONDENSATE DRAIN PIPE

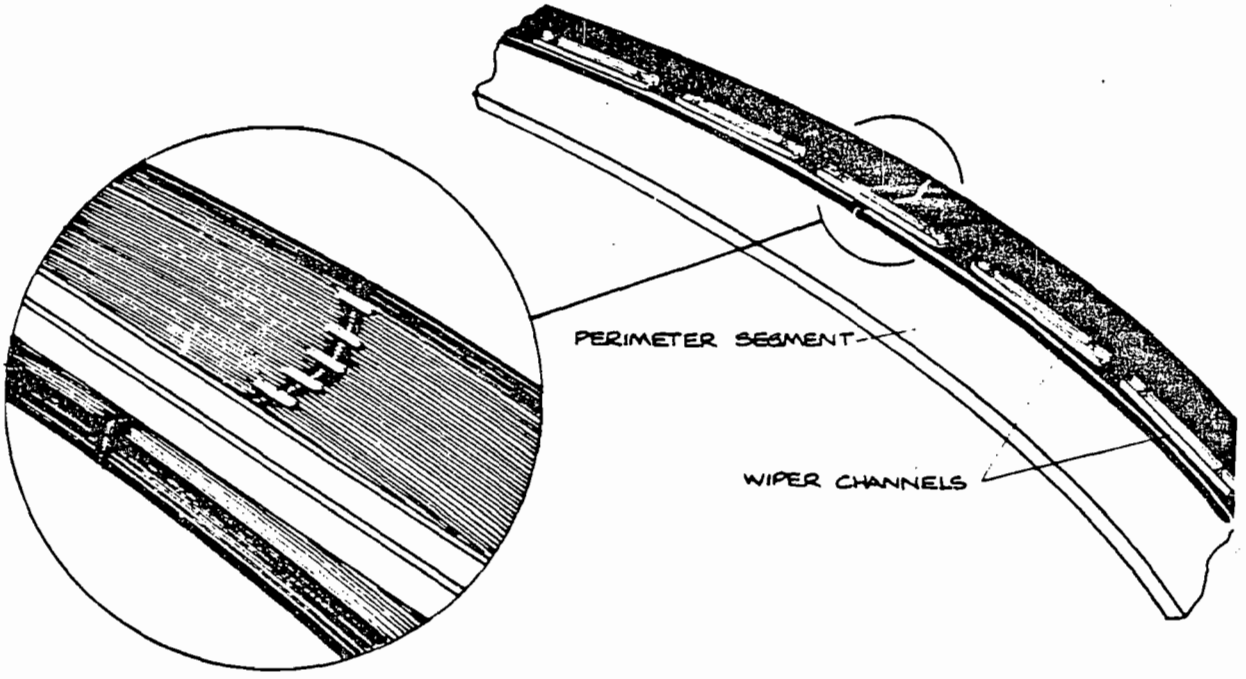


PRESSURE/VACUUM RELIEF HATCHWAY

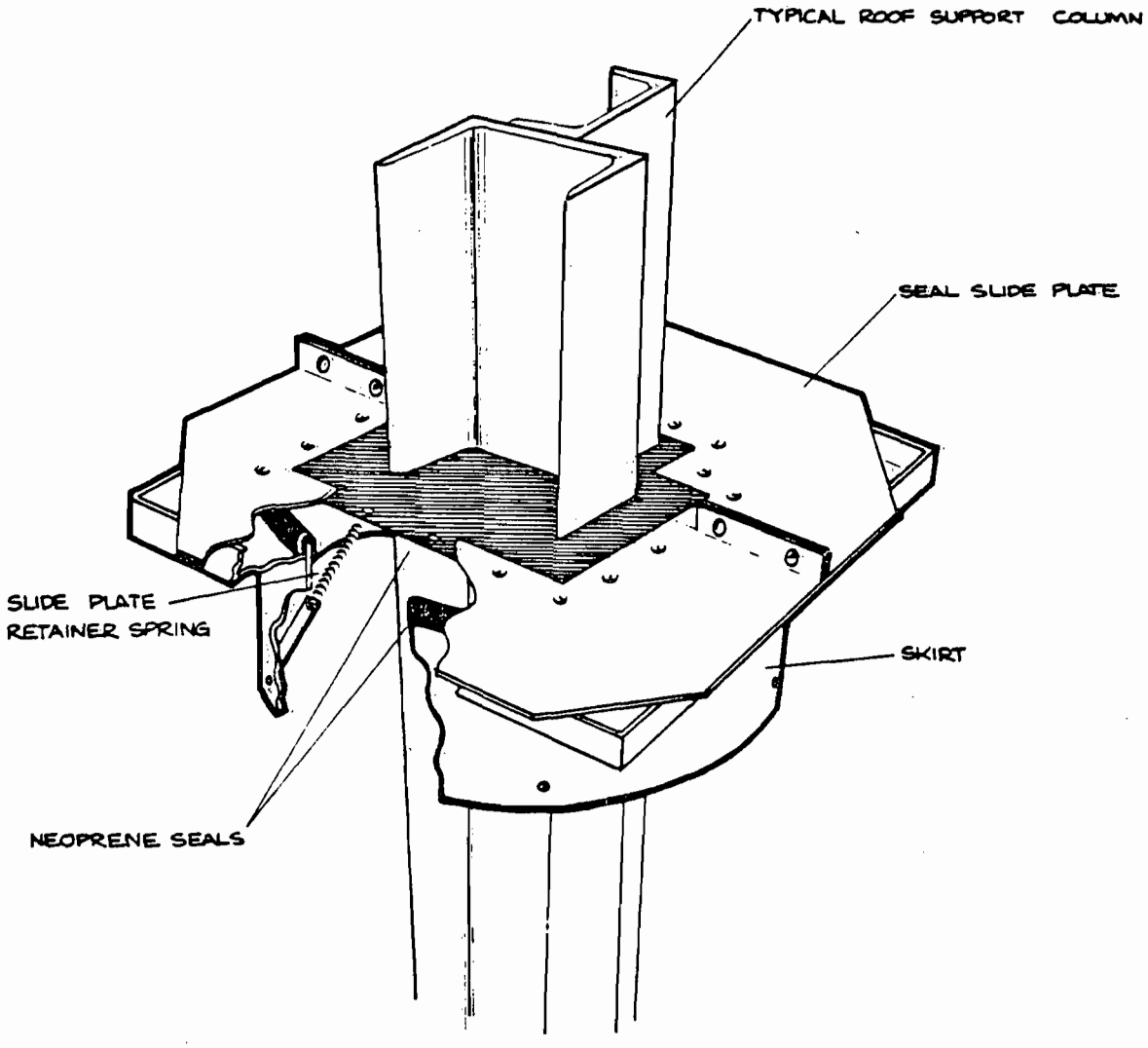
RELIEF SETTINGS: PRESSURE, 0.2 ozs PER SQUARE INCH
VACUUM, 0.578 ozs PER SQUARE INCH (1" VAC)



PERIMETER WIPER SEAL ~ SECTION



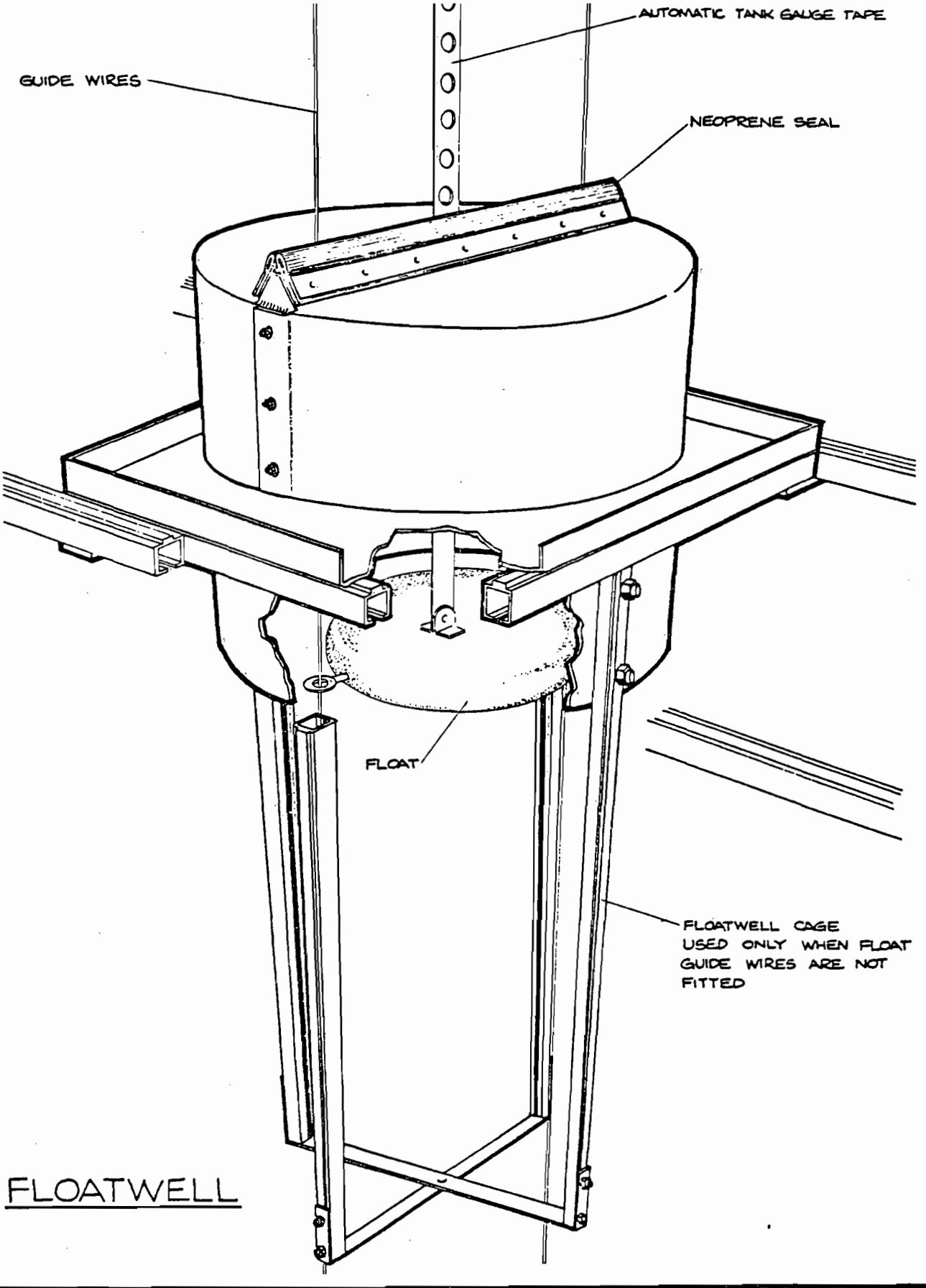
PERIMETER WIPER SEAL ~ JOINT



THE NOMINAL COLUMN SIZE IS THE MAXIMUM CROSS SECTION DIMENSION OF THE COLUMN CONFIGURATION, THE SKIRT DIAMETER BEING 12" GREATER.

COLUMN SEAL NUMBER	SKIRT SIZE		NOMINAL COLUMN SIZE	
CS - 001	20"	(001)	8"	Section
CS - 002	25"	(006)	13"	"
CS - 003	28"	(009)	16"	"
CS - 004	31"	(012)	19"	"

COLUMN SEAL

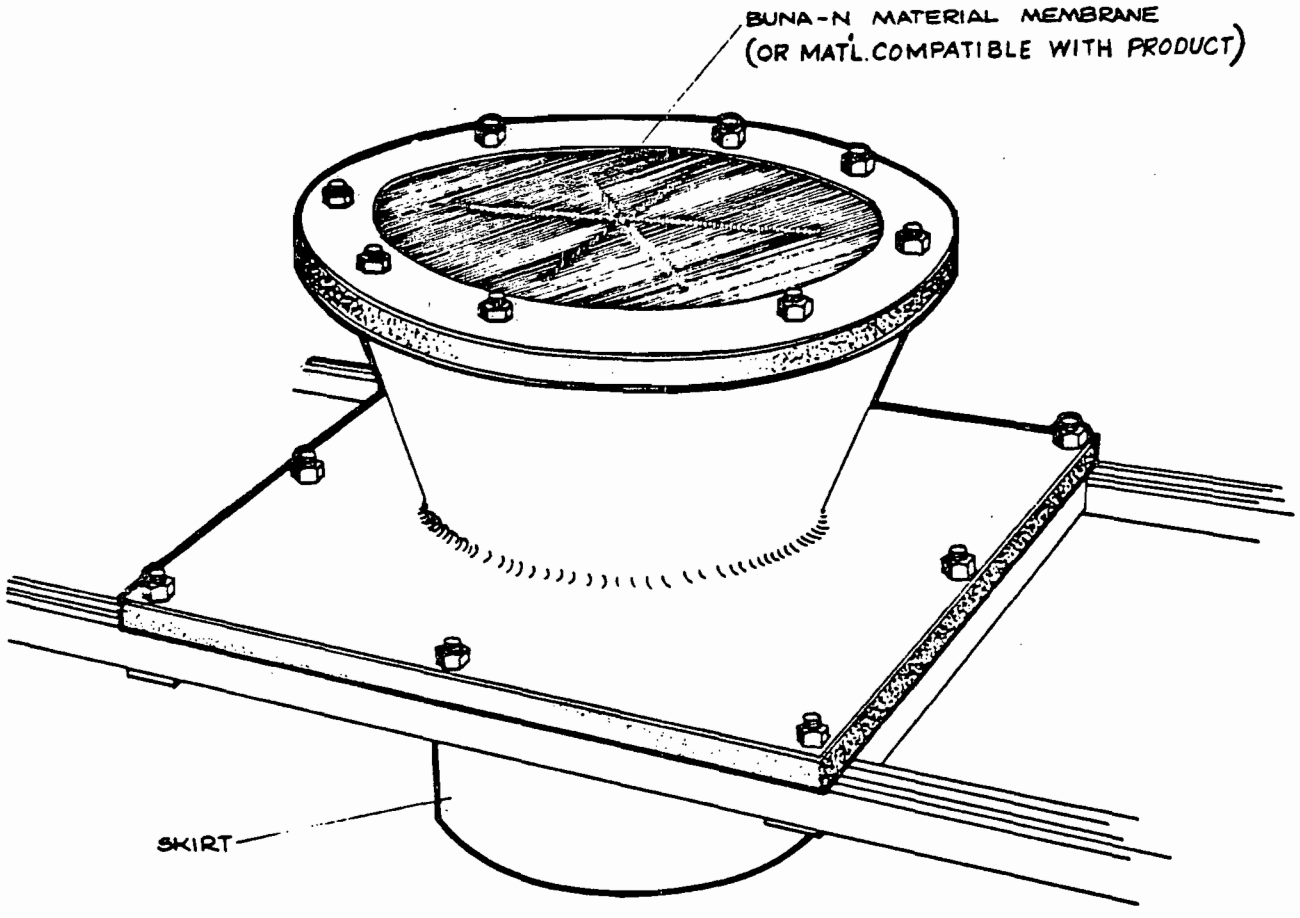

AUTOMATIC TANK GAUGE TAPE
GUIDE WIRES
NEOPRENE SEAL
FLOAT
FLOATWELL CAGE
USED ONLY WHEN FLOAT
GUIDE WIRES ARE NOT
FITTED

FLOATWELL

MAYFLOWER VAPOR SEAL ACCESSORY

GAUGING/SAMPLING FUNNEL

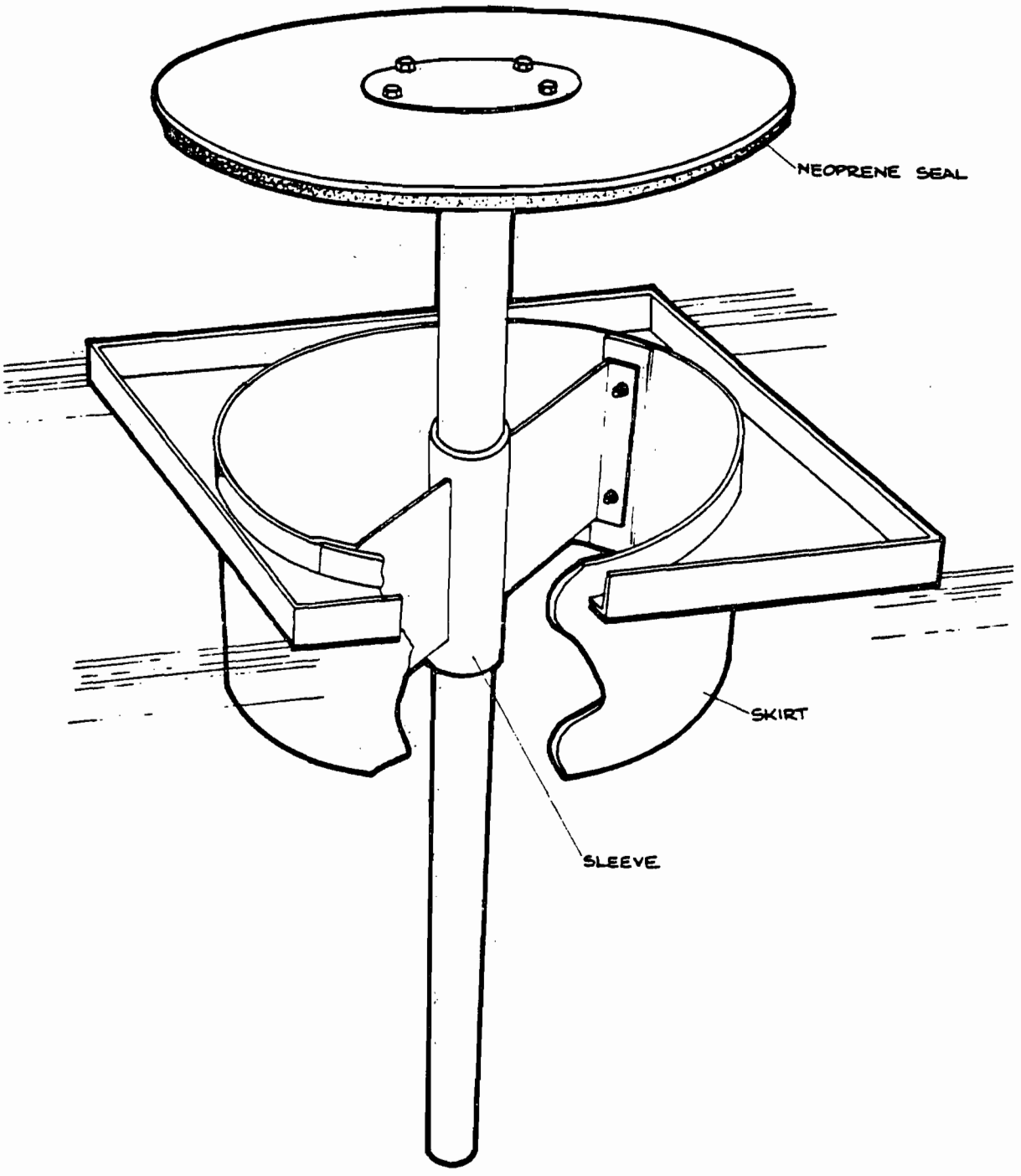
DWG. NO. MVS 109-1276



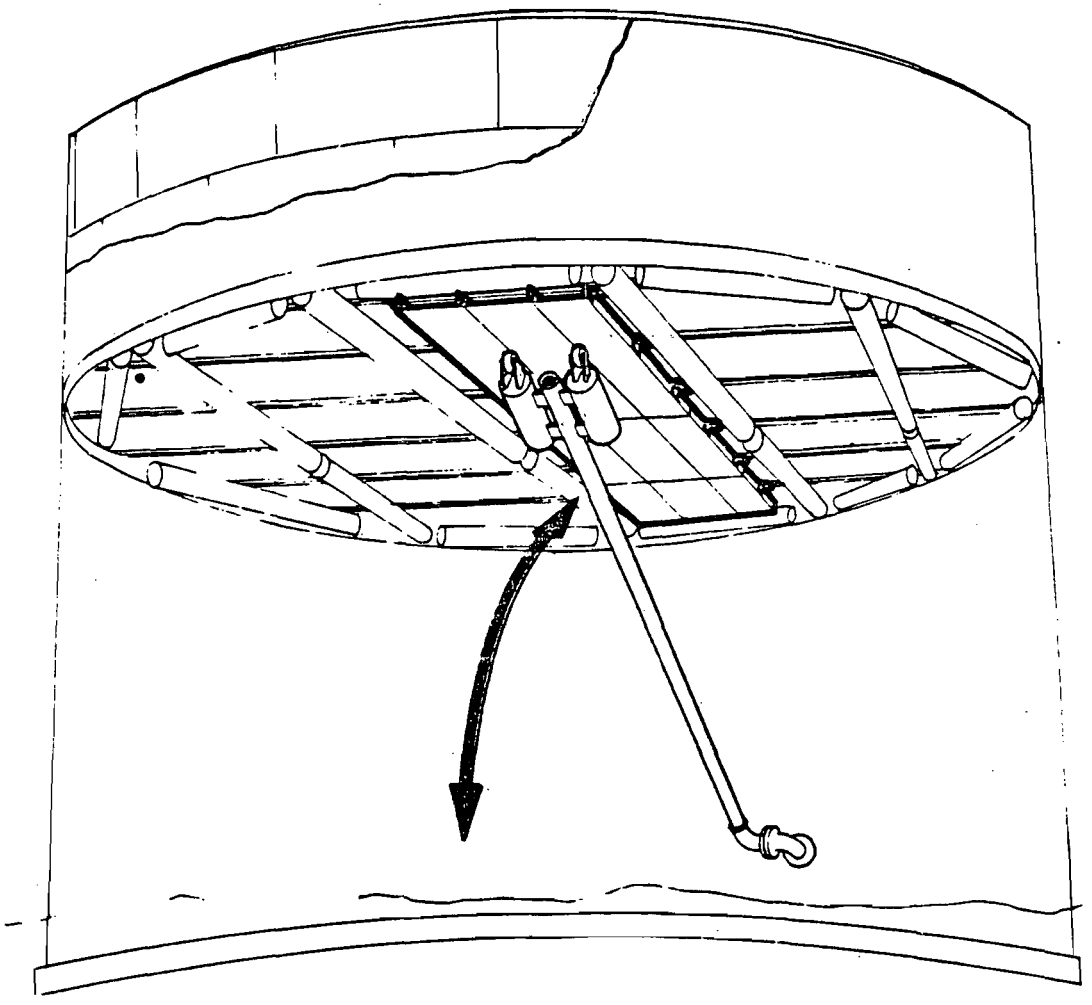
GAUGING / SAMPLING FUNNEL

MAYFLOWER VAPOR SEAL ACCESSORY
BLEEDER VENT

DWG. NO. MVS 110-1276



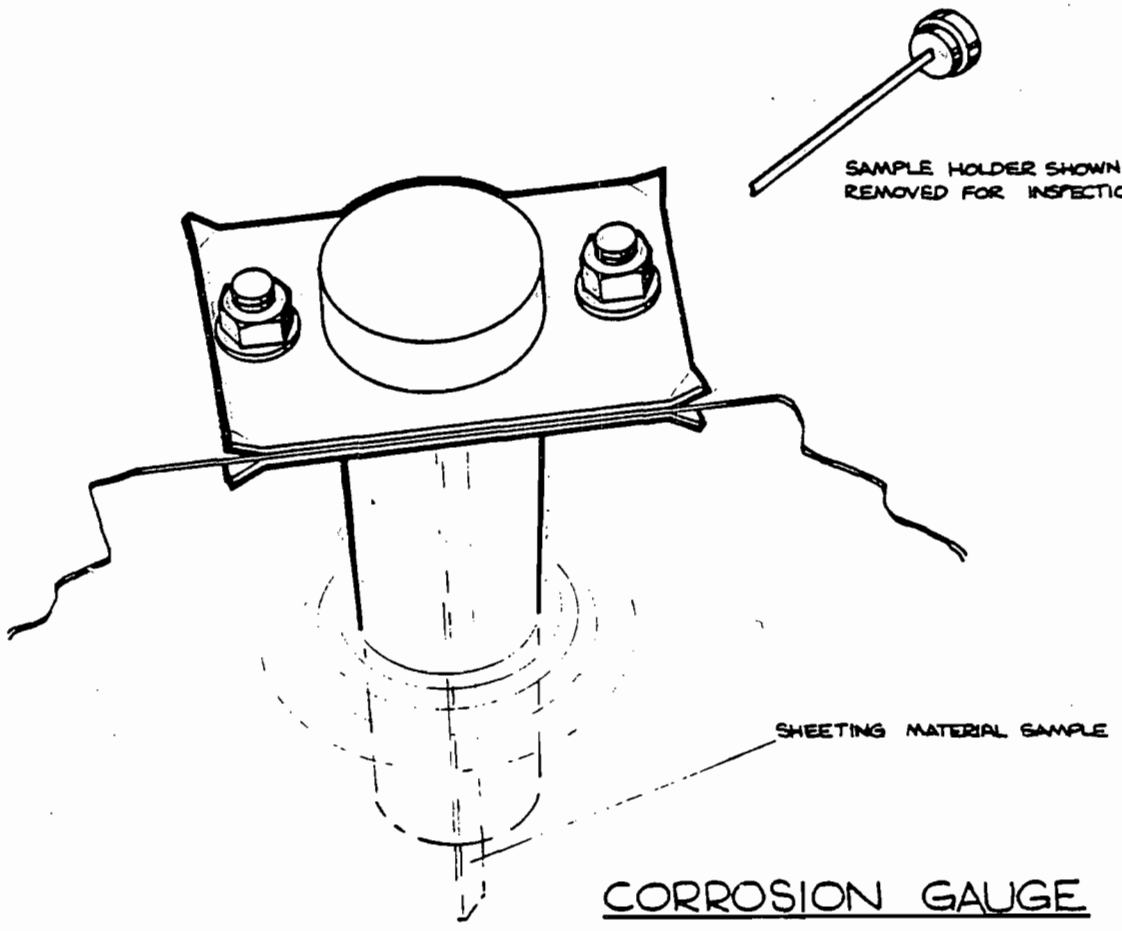
BLEEDER VENT



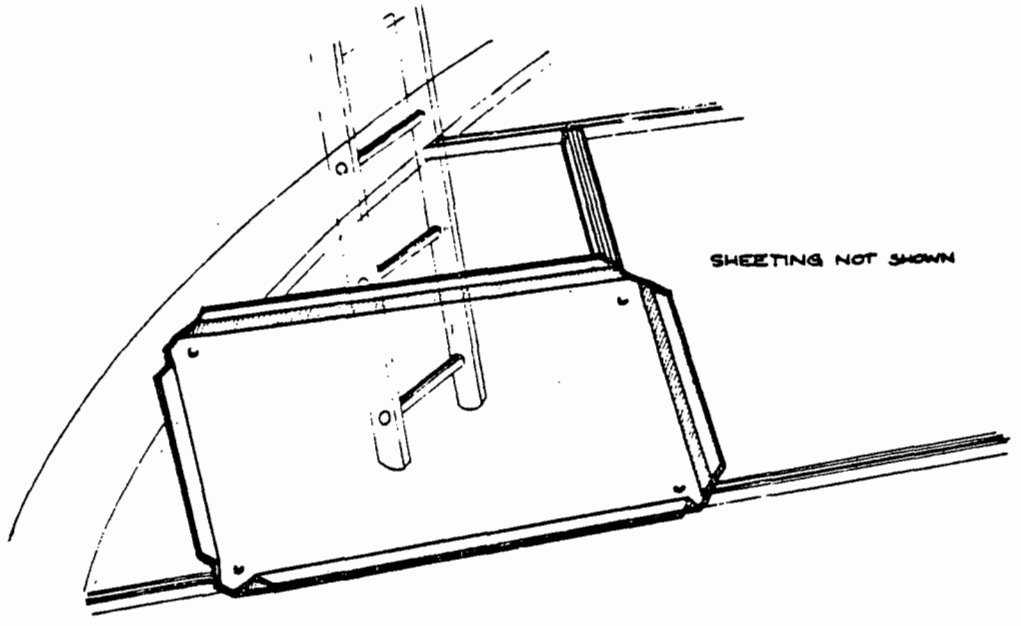
SWINGLINE TRACK ASSEMBLY FOR FLOATING SUCTION LINE

MAYFLOWER VAPOR SEAL ACCESSORY
CORROSION GAUGE AND LADDER PAD

DWG. NO. MVS 112-1276



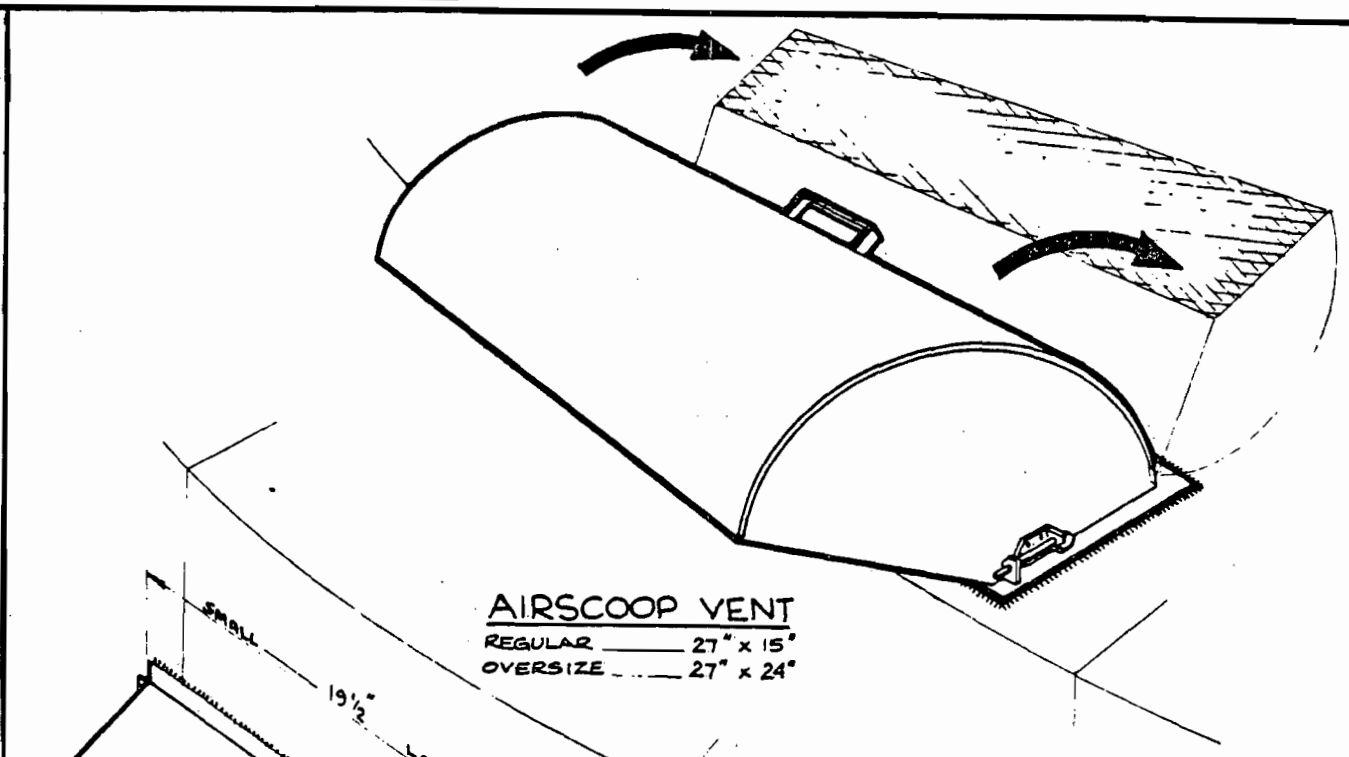
CORROSION GAUGE



LADDER PAD

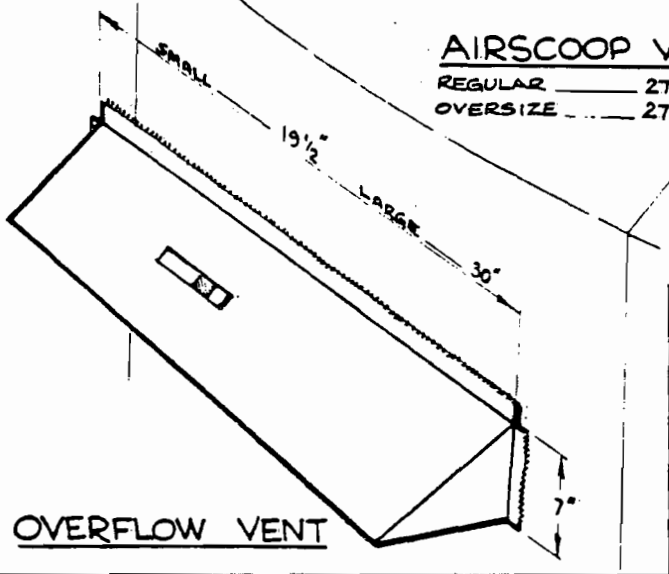
MAYFLOWER VAPOR SEAL ACCESSORY
AIRSCOOP AND OVERFLOW

DWG. NO. MVS 113-1276



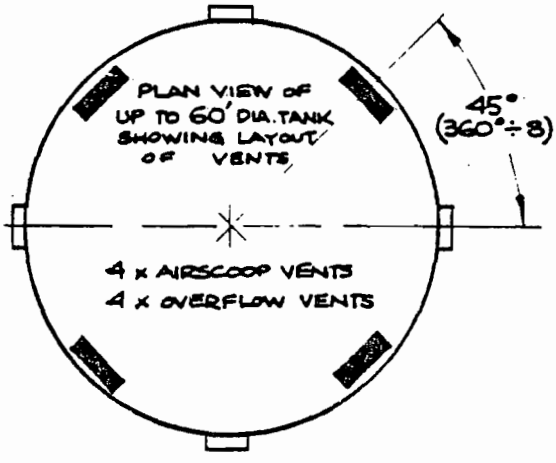
AIRSCOOP VENT

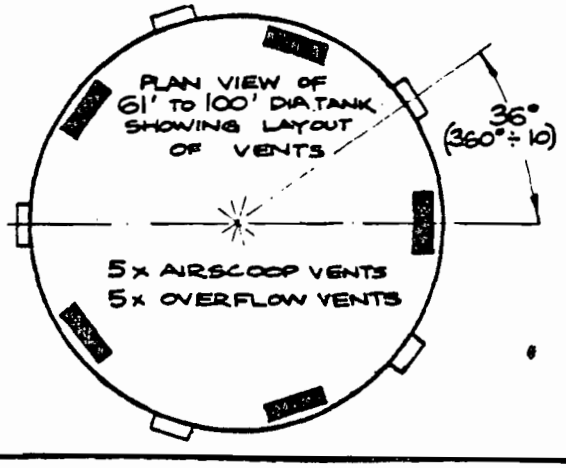
REGULAR ——— 27" x 15"
OVERSIZE ——— 27" x 24"

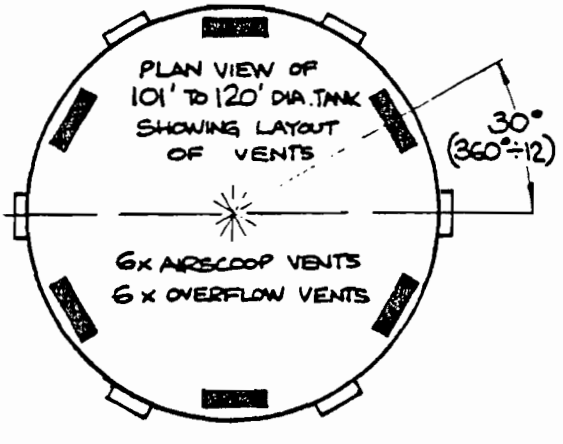


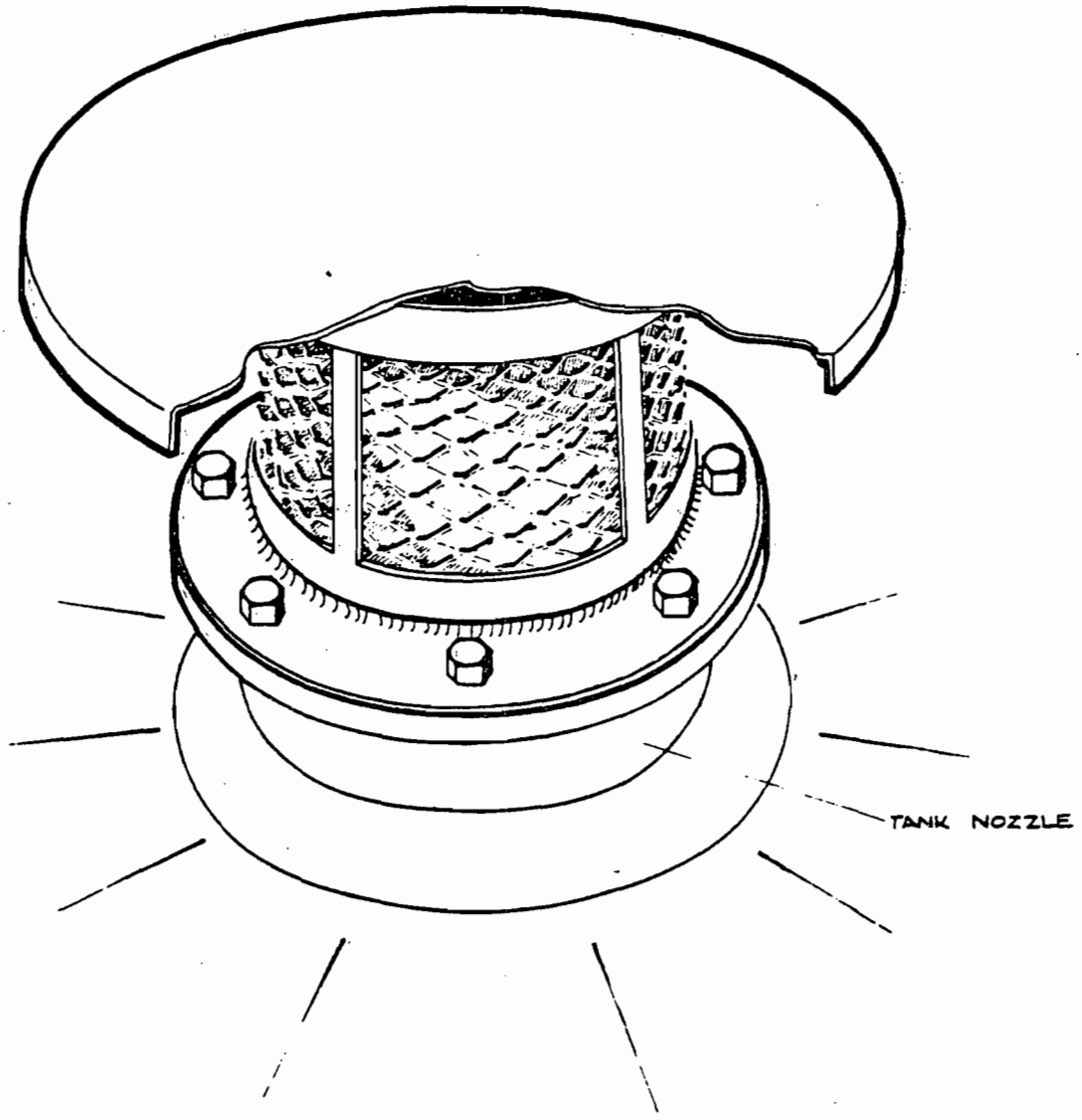
OVERFLOW VENT

USE ONE OVERSIZE AIRSCOOP VENT ON EACH TANK FOR PERSONNEL ACCESS.
USE SMALL OVERFLOW VENTS ON TANK DIAMETERS UP TO 50' AND LARGE OVERFLOW VENTS THEREAFTER.



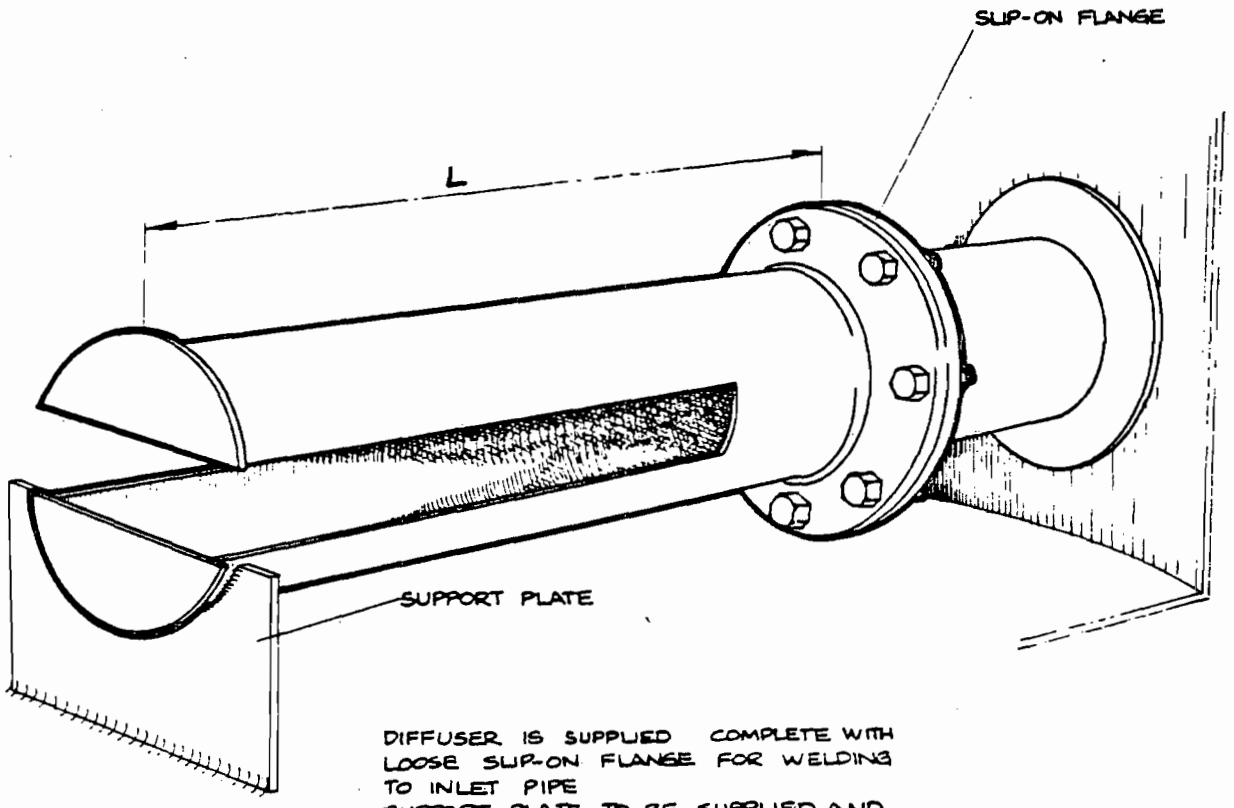






MUSHROOM VENT NUMBER	NOMINAL PIPE BORE
MV - 001	6" (ASA or BS)
MV - 002	8" " "
MV - 003	10" " "
MV - 004	12" " "
MV - 005	18" " "
MV - 006	24" " "
MV - 007	36" " "

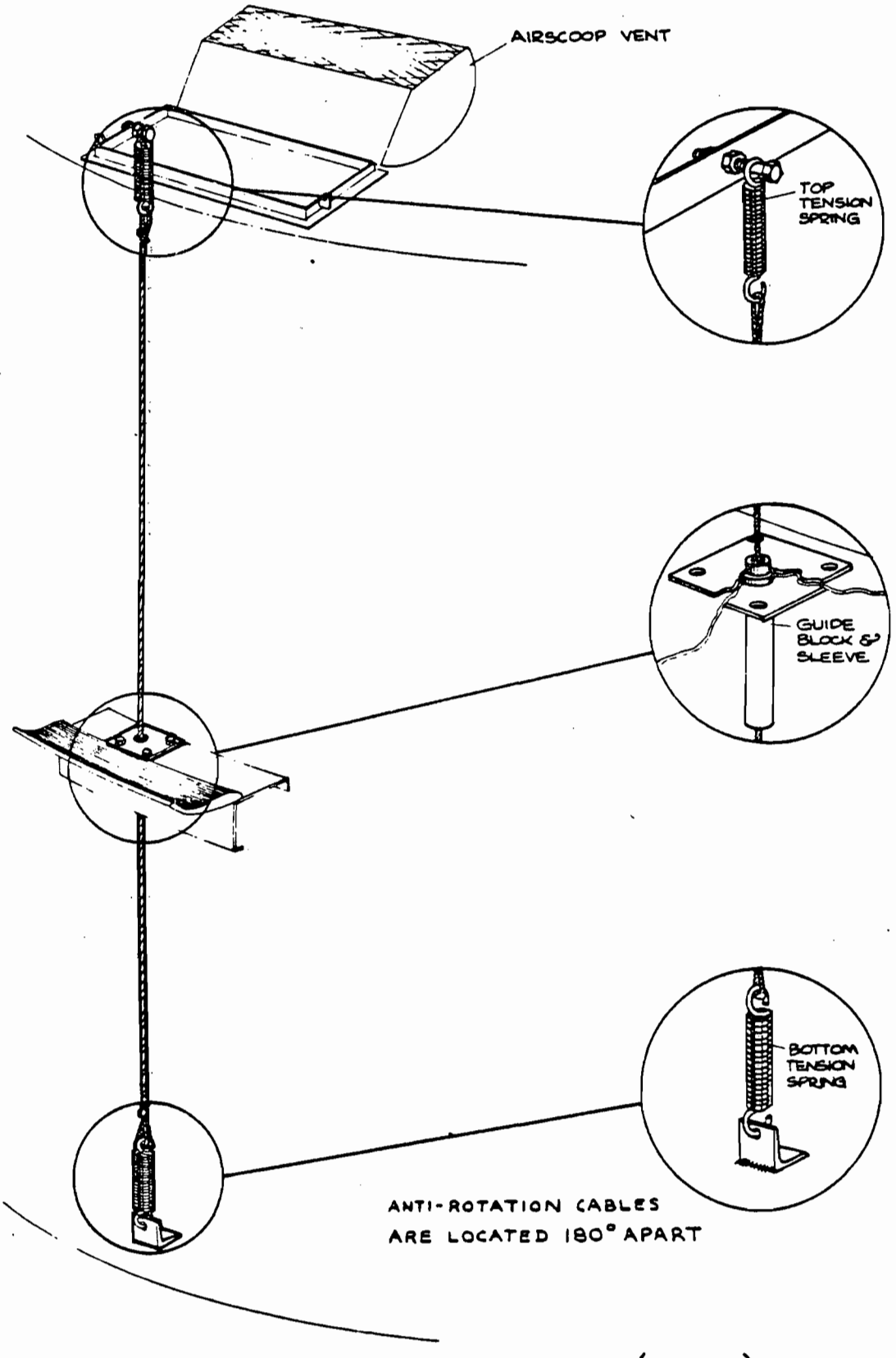
TANK ROOF MUSHROOM VENT



DIFFUSER IS SUPPLIED COMPLETE WITH LOOSE SLIP-ON FLANGE FOR WELDING TO INLET PIPE
SUPPORT PLATE TO BE SUPPLIED AND FITTED IN THE FIELD

DIFFUSER NUMBER	NOMINAL PIPE BORE	'L'
DIFF - 001	3"	30"
DIFF - 002	4"	30"
DIFF - 003	6"	30"
DIFF - 004	8"	30"
DIFF - 005	10"	30"
DIFF - 006	12"	30"
DIFF - 007	14"	30"
DIFF - 008	16"	30"
DIFF - 009	18"	30"
DIFF - 010	20"	30"

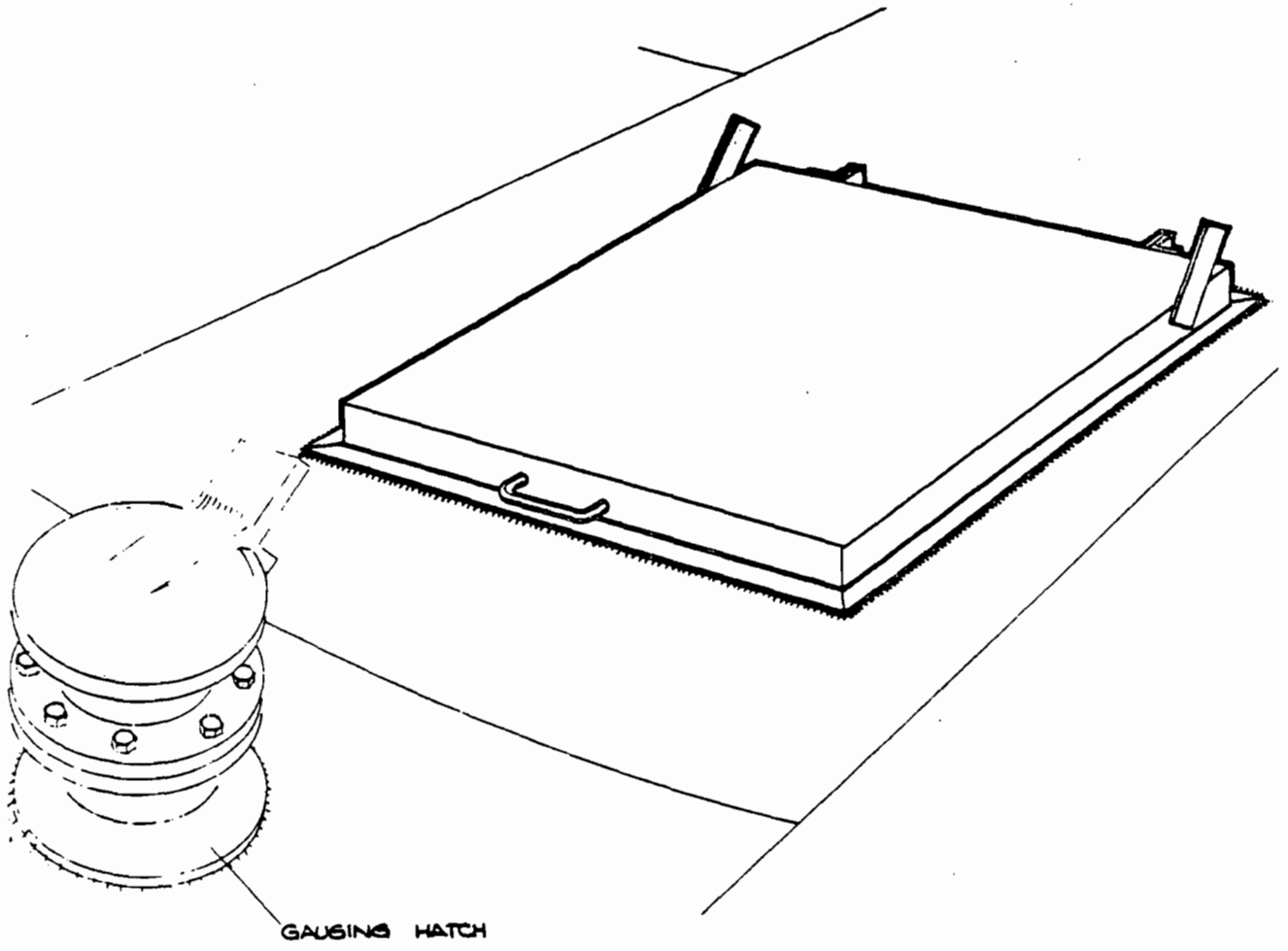
INLET DIFFUSER



ANTI-ROTATION CABLE (2-OFF)

MAYFLOWER VAPOR SEAL ACCESSORY
ROOF MANWAY

DWG. NO. MVS 117-1276



ROOF MANWAY

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32301

BOB GRAHAM
GOVERNOR

VICTORIA J. TSCHINKEL
SECRETARY

M E M O R A N D U M

TO: David O. Theung, Central Florida Pipeline Corp.
D. P. Schofield, Central Florida Pipeline Corp.
Fred C. Engelman, P.E.
Charles M. Collins, DER St. Johns River District

FROM: C. H. Fancy, Deputy Chief, Bureau of Air Quality Management

DATE: May 14, 1982

SUBJ: Preliminary Determination - Central Florida Pipeline Corporation, AC 48-54122

Attached is one copy of the application, Technical Evaluation and Preliminary Determination, and proposed permit to install an internal floating roof on an existing petroleum storage tank at Central Florida Pipeline Corporation's terminal near Taft, Florida.

Please submit any comments which you wish to have considered concerning this action, in writing, to Bill Thomas of the Bureau of Air Quality Management prior to June 15, 1982.

CHF/pa

Attachment

TECHNICAL EVALUATION

AND

PRELIMINARY DETERMINATION

CENTRAL FLORIDA PIPELINE CORPORATION

ORANGE COUNTY, FLORIDA

GASOLINE STORAGE TANK

APPLICATION NUMBER:

AC 48-54122

FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION

BUREAU OF AIR QUALITY MANAGEMENT

CENTRAL AIR PERMITTING

MAY 10, 1982

CENTRAL FLORIDA PIPELINE CORPORATION

The applicant intends to install an internal floating roof on an existing 25,000 barrel cone roof tank currently permitted for jet kerosene fuel storage. The tank will then be used for gasoline storage. Resulting hydrocarbon emissions would amout to .56 tons per year.

The storage tank would be subject to the Reasonably Available Control Technology (RACT) requirements of 17-2.650 (1)(f)8., Florida Administrative Code (FAC), since the terminal is located in the Orange County Ozone Nonattainment Area. This rule requires that all fixed-roof gasoline storage vessels over 1,000 barrel capacity be fitted with an internal floating roof equipped with a closure seal, as well as maintenance and operational provisions.

Although minimal, the new hydrocarbon emissions would be credited towards a significant increase as outlined in 17-2.510, FAC, New Source Review for Nonattainment Areas.

The Department is satisfied that the applicant's proposed technology meets the RACT requirements and intends to issue the permit as applied for, pending comments as a result of public notice of the preliminary determination and proposed permit. The General and Specific Conditions are listed in the proposed permit.

NOTICE OF PROPOSED AGENCY ACTION

The Department of Environmental Regulation gives notice of its intent to issue a permit to the Central Florida Pipeline Corporation for the modification to a petroleum storage tank at their terminal near Taft, Orange County, Florida. A determination of Best Available Control Technology (BACT) was not required.

A person who is substantially affected by the Department's proposed permitting decision may request a hearing in accordance with Section 120.57, Florida Statutes, and Chapters 17-1 and 28-5, Florida Administrative Code. The request for hearing must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Twin Towers Office Building, Tallahassee, Florida 32301, within fourteen (14) days of publication of this notice. Failure to file a request for hearing within this time period shall constitute a waiver of any right such person may have to request a hearing under Section 120.57, Florida Statutes.

The application, technical evaluation and departmental intent are available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at the following locations:

DER, Bureau of Air Quality Mgmt.
2600 Blair Stone Road
Tallahassee, Florida 32301

Dept. of Env. Regulation
St. Johns River Dist.
3319 Maguire Blvd.
Suite 232
Orlando, Florida 32803

Comments on this action shall be submitted in writing to Bill Thomas of the Tallahassee office within thirty (30) days of this notice.

RULES OF THE ADMINISTRATIVE COMMISSION
MODEL RULES OF PROCEDURE
CHAPTER 28-5
DECISIONS DETERMINING SUBSTANTIAL INTERESTS

28-5.15 Requests for Formal and Informal Proceedings

(1) Requests for proceedings shall be made by petition to the agency involved. Each petition shall be printed typewritten or otherwise duplicated in legible form on white paper of standard legal size. Unless printed, the impression shall be on one side of the paper only and lines shall be double spaced and indented.

(2) All petitions filed under these rules should contain:

(a) The name and address of each agency affected and each agency's file or identification number, if known;

(b) The name and address of the petitioner or petitioners;

(c) All disputed issues of material fact. If there are none, the petition must so indicate;

(d) A concise statement of the ultimate facts alleged, and the rules, regulations and constitutional provisions which entitle the petitioner to relief;

(e) A statement summarizing any informal action taken to resolve the issues, and the results of that action;

(f) A demand for the relief to which the petitioner deems himself entitled; and

(g) Such other information which the petitioner contends is material.

PERMIT NO.: AC 48-54122
APPLICANT: Central Florida Pipeline Corporation

GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations, and restrictions set forth herein are "Permit Conditions:, and as such are binding upon the permittee and enforceable pursuant to the authority of Section 403.161(1), Florida Statutes. Permittee is hereby placed on notice that the department will review this permit periodically and may initiate court action for any violation of the "Permit Conditions" by the permittee, its agents, employees, servants or representatives.

2. This permit is valid only for the specific processes and operations indicated in the attached drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit shall constitute grounds for revocation and enforcement action by the department.

3. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately notify and provide the department with the following information: (a) a description of and cause of non-compliance; and (b) the period of non-compliance, including exact dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance. The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the department for penalties or revocation of this permit.

4. As provided in subsection 403.087(6), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Nor does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations.

5. This permit is required to be posted in a conspicuous location at the work site or source during the entire period of construction or operation.

6. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source, which are submitted to the department, may be used by the department as evidence in any enforcement case arising under the Florida Statutes or department rules, except where such use is proscribed by Section 403.111, F.S.

7. In the case of an operation permit, permittee agrees to comply with changes in department rules and Florida Statutes after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by Florida Statutes or department rules.

8. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, plant, or aquatic life or property and penalities therefore caused by the construction or operation of this permitted source, nor does it allow the permittee to cause pollution in contravention of Florida Statutes and department rules, except where specifically authorized by an order from the department granting a variance or exception from department rules or state statutes.

9. This permit is not transferable. Upon sale or legal transfer of the property or facility covered by this permit, the permittee shall notify the department within thirty (30) days. The new owner must apply for a permit transfer within thirty (30) days. The permittee shall be liable for any non-compliance of the permitted source until the transferee applies for and receives a transfer of permit.

10. The permittee, by acceptance of this permit, specifically agrees to allow access to permitted source at reasonable times by department personnel presenting credentials for the purposes of inspection and testing to determine compliance with this permit and department rules.

11. This permit does not indicate a waiver of or approval of any other department permit that may be required for other aspects of the total project.

12. This permit conveys no title to land or water, nor constitutes state recognition or acknowledgement of title, and does not constitute authority for the reclamation of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the state. Only the Trustees of the Internal Improvement Trust Fund may express state opinion as to title.

13. This permit also constitutes:

[ ] Determination of Best Available Control Technology (BACT)
[ ] Determination of Prevention of Significant Deterioration (PSD)
[ ] Certification of Compliance with State Water Quality Standards (Section 401, PL 92-500)

TWIN TOWERS OFFICE BUILDING
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32301

BOB GRAHAM
GOVERNOR
Victoria J. Tschinkel
SECRETARY

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

APPLICANT:

Central Florida Pipeline Corporation
120 South Riverside Plaza
Chicago, Illinois 60606

PERMIT/CERTIFICATION
NO. AC 48-54122

COUNTY: Orange

PROJECT:
Gasoline Storage Tank 1054-Floating Roof Retrofit

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Chapter 17-2, 17-4, Florida Administrative Code. The above named applicant, hereinafter called Permittee, is hereby authorized to perform the work or operate the facility shown on the approved drawing(s), plans, documents, and specifications attached hereto and made a part hereof and specifically described as follows:

For the installation of an internal floating roof or storage tank 1054 at the CFPC terminal located at 9999 South State Road 527 near Taft, Orange County. The UTM coordinates of the proposed source are 463.8 km East and 3143.8 km North.

Construction shall be in accordance with the attached permit application and plans, documents and drawings except as otherwise noted on page 3 - "Specific Conditions".

Attachments are as follows:

1. Application to Construct Air Pollution Sources, DER Form 17-1.122(16).

PERMIT NO.: AC 48-54122
APPLICANT: Central Florida Pipeline Corporation

SPECIFIC CONDITIONS:

1. Construction should reasonably conform to plans submitted in the application.

2. The applicant should report any delays in construction and completion of the proposed rack to the Department's St. Johns River District Office in Orlando.

3. Thirty days prior to the initial fill, the St. Johns River District office shall be notified so that a Department representative may verify compliance with the conditions of the construction permit.

4. Annual operating and maintenance reports shall be submitted to the St. Johns River District Office and shall include tank gasoline throughput and seal condition.

5. Prior to 90 days of the expiration of the construction permit the applicant will submit a complete application for an operating permit. The permitee may continue to perate in compliance with all terms of the construction permit until the expiration date or issuance of an operating permit.

PERMIT NO.:
APPLICANT:

Expiration Date: April 30, 1983

Issued this _____ day of _____, 19____.

_____ Pages Attached.

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

_____
Signature

PAGE _____ OF _____.

GATX

CENTRAL FLORIDA PIPELINE CORPORATION
subsidiary of
GATX TERMINALS CORPORATION

1904 Hemlock Avenue
Tampa, FL 33605
813-248-8361

March 29, 1982

Mr. Charles M. Collins, P. E.
State of Florida
Department of Environmental Regulation
Suite 232
3319 Maguire Boulevard
Orlando, FL 32803

Re: Permit AO48-46569

Dear Mr. Collins:

Attached is an application to modify existing Tank 1054 (Cone Roof) to an internal floating roof tank by the addition of a Mayflower floating roof to the tank.

Also attached is Check No. 2559 in the amount of $20.00 for processing fee.

Very truly yours,

CENTRAL FLORIDA PIPELINE CORPORATION

David O. Theung
Project Engineer

DOT/sg

Enclosures

AC 48-54122

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

APPLICATION TO ~~OPERATE~~/CONSTRUCT AIR POLLUTION SOURCES

RECEIVED MAR 1982 Saint Johns River District

SOURCE TYPE: Petroleum Tank-Gasoline [ ] New[1] [X] Existing[1]

APPLICATION TYPE: [ ] Construction [ ] Operation [X] Modification

COMPANY NAME: Central Florida Pipeline Corporation COUNTY: Orange

Identify the specific emission point source(s) addressed in this application (i.e. Lime Kiln No. 4 with Venturi Scrubber; Peeking Unit No. 2, Gas Fired) Existing Tank 1054 Cone Roof Petroleum Tank

SOURCE LOCATION: Street S. R. 527 & Vineland Road City Taft, FL 32809

UTM: East 463800 E North 3143800 N

Latitude 28 ° 25 ' 19 "N Longitude 81 ° 22 ' 01 "W

APPLICANT NAME AND TITLE: Central Florida Pipeline Corporation

APPLICANT ADDRESS: 120 South Riverside Plaza, Chicago, IL 60606

SECTION I: STATEMENTS BY APPLICANT AND ENGINEER

A. APPLICANT

I am the undersigned owner or authorized representative* of Central Florida Pipeline Corporation

I certify that the statements made in this application for a Modification permit are true, correct and complete to the best of my knowledge and belief. Further, I agree to maintain and operate the pollution control source and pollution control facilities in such a manner as to comply with the provision of Chapter 403, Florida Statutes, and all the rules and regulations of the department and revisions thereof. I also understand that a permit, if granted by the department, will be non-transferable and I will promptly notify the department upon sale or legal transfer of the permitted establishment.

*Attach letter of authorization

Signed: D. P. Schofield

D. P. Schofield, President
Name and Title (Please Type)

Date: 3/29/82 Telephone No. (312) 621-6200

B. PROFESSIONAL ENGINEER REGISTERED IN FLORIDA (where required by Chapter 471, F.S.)

This is to certify that the engineering features of this pollution control project have been designed/examined by me and found to be in conformity with modern engineering principles applicable to the treatment and disposal of pollutants characterized in the permit application. There is reasonable assurance, in my professional judgment, that the pollution control facilities, when properly maintained and operated, will discharge an effluent that complies with all applicable statutes of the State of Florida and the rules and regulations of the department. It is also agreed that the undersigned will furnish, if authorized by the owner, the applicant a set of instructions for the proper maintenance and operation of the pollution control facilities and, if applicable, pollution sources.

Signed: Fred C Engelman PE

Fred C. Engelman, P. E.
Name (Please Type)

(Affix Seal)

Consultant Engineer
Company Name (Please Type)

3208 Robson Circle, Tampa, FL 33614
Mailing Address (Please Type)

Florida Registration No. 172928 Date: 3/29/82 Telephone No. (813) 933-5082

[1]See Section 17-2.02(15) and (22), Florida Administrative Code, (F.A.C.)

SECTION II: GENERAL PROJECT INFORMATION

A. Describe the nature and extent of the project. Refer to pollution control equipment, and expected improvements in source performance as a result of installation. State whether the project will result in full compliance. Attach additional sheet if necessary.

We propose to install an internal floating roof in an existing cone roof oil tank (68'Ø x 39'-2" Ht., 25,000 Bbl.) to be used for gasoline storage, max. true vapor pressure is 11.0 PSI, 570 mm Hg. Modification to operation will comply with all applicable regulations of Florida DER.

B. Schedule of project covered in this application (Construction Permit Application Only)

Start of Construction July 1, 1982 Completion of Construction February 2, 1983

C. Costs of pollution control system(s): (Note: Show breakdown of estimated costs only for individual components/units of the project serving pollution control purposes. Information on actual costs shall be furnished with the application for operation permit.)

One (1) 68 Ft. Dia. Internal Floating Roof - $19,900

D. Indicate any previous DER permits, orders and notices associated with the emission point, including permit issuance and expiration dates.

Subject tank is approved as a cone roof for Jet "A" service under Permit No. A048-46569. For other permits at location, see attached sheet.

E. Is this application associated with or part of a Development of Regional Impact (DRI) pursuant to Chapter 380, Florida Statutes, and Chapter 22F-2, Florida Administrative Code? ____ Yes X No

F. Normal equipment operating time: hrs/day 24 ; days/wk 7 ; wks/yr 52 ; if power plant, hrs/yr ____ ; if seasonal, describe: N/A

G. If this is a new source or major modification, answer the following questions. (Yes or No)

1. Is this source in a non-attainment area for a particular pollutant? Yes
   a. If yes, has "offset" been applied? No
   b. If yes, has "Lowest Achievable Emission Rate" been applied? --
   c. If yes, list non-attainment pollutants.
2. Does best available control technology (BACT) apply to this source? If yes, see Section VI. N/A
3. Does the State "Prevention of Significant Deterioriation" (PSD) requirements apply to this source? If yes, see Sections VI and VII. No
4. Do "Standards of Performance for New Stationary Sources" (NSPS) apply to this source? Yes
5. Do "National Emission Standards for Hazardous Air Pollutants" (NESHAP) apply to this source? No

Attach all supportive information related to any answer of "Yes". Attach any justification for any answer of "No" that might be considered questionable.

SECTION III: AIR POLLUTION SOURCES & CONTROL DEVICES (Other than Incinerators)

A. Raw Materials and Chemicals Used in your Process, if applicable: N/A

Description	Contaminants		Utilization Rate - lbs/hr	Relate to Flow Diagram
	Type	% Wt		

B. Process Rate, if applicable: (See Section V, Item 1)

1. Total Process Input Rate (lbs/hr): _____

2. Product Weight (lbs/hr): _____

C. Airborne Contaminants Emitted:

Name of Contaminant	Emission[1]		Allowed Emission[2] Rate per Ch. 17-2, F.A.C.	Allowable[3] Emission lbs/hr	Potential Emission[4]		Relate to Flow Diagram
	Maximum lbs/hr	Actual T/yr			lbs/hr	T/yr	
Hydrocarbon	0.127	0.555	NSPS Applies	There are			
				no criteria			
				for storage			
				tanks			

D. Control Devices: (See Section V, Item 4)

Name and Type (Model & Serial No.)	Contaminant	Efficiency	Range of Particles[5] Size Collected (in microns)	Basis for Efficiency (Sec. V, It[5]
Internal Floating	---	---		
Roof				

[1] See Section V, Item 2.

[2] Reference applicable emission standards and units (e.g., Section 17-2.05(6) Table II, E. (1), F.A.C. – 0.1 pounds per million BTU heat input)

[3] Calculated from operating rate and applicable standard

[4] Emission, if source operated without control (See Section V, Item 3)

[5] If Applicable

E. Fuels N/A

Type (Be Specific)	Consumption*		Maximum Heat Input (MMBTU/hr)
	avg/hr	max./hr	

*Units Natural Gas, MMCF/hr; Fuel Oils, barrels/hr; Coal, lbs/hr

Fuel Analysis:

Percent Sulfur: _____ Percent Ash: _____

Density: _____ lbs/gal Typical Percent Nitrogen: _____

Heat Capacity: _____ BTU/lb _____ BTU/gal

Other Fuel Contaminants (which may cause air pollution): _____

F. If applicable, indicate the percent of fuel used for space heating. Annual Average N/A Maximum _____

G. Indicate liquid or solid wastes generated and method of disposal.

H. Emission Stack Geometry and Flow Characteristics (Provide data for each stack):

Stack Height: Thirty-eight (38') Ft. ft. Stack Diameter: 12" x 6" Vents around Tank Roof ft.

Gas Flow Rate: _____ ACFM Gas Exit Temperature: _____ °F.

Water Vapor Content: _____ % Velocity: _____ FPS

SECTION IV: INCINERATOR INFORMATION

Not Applicable

Type of Waste	Type 0 (Plastics)	Type I (Rubbish)	Type II (Refuse)	Type III (Garbage)	Type IV (Pathological)	Type V (Liq & Gas By-prod.)	Type VI (Solid By-prod.)
Lbs/hr Incinerated							

Description of Waste _____

Total Weight Incinerated (lbs/hr) _____ Design Capacity (lbs/hr) _____

Approximate Number of Hours of Operation per day _____ days/week _____

Manufacturer _____

Date Constructed _____ Model No. _____

	Volume $(ft)^3$	Heat Release (BTU/hr)	Fuel		Temperature (°F)
			Type	BTU/hr	
Primary Chamber					
Secondary Chamber					

Stack Height: _____ ft. Stack Diameter _____ Stack Temp. _____

Gas Flow Rate: _____ ACFM _____ DSCFM* Velocity _____ FPS

*If 50 or more tons per day design capacity, submit the emissions rate in grains per standard cubic foot dry gas corrected to 50% excess air.

Type of pollution control device: [ ] Cyclone [ ] Wet Scrubber [ ] Afterburner [ ] Other (specify) _____

Brief description of operating characteristics of control devices: _____

N/A

Ultimate disposal of any effluent other than that emitted from the stack (scrubber water, ash, etc.):

N/A

SECTION V: SUPPLEMENTAL REQUIREMENTS

Please provide the following supplements where required for this application.

1. Total process input rate and product weight – show derivation.
2. To a construction application, attach basis of emission estimate (e.g., design calculations, design drawings, pertinent manufacturer's test data, etc.,) and attach proposed methods (e.g., FR Part 60 Methods 1, 2, 3, 4, 5) to show proof of compliance with applicable standards. To an operation application, attach test results or methods used to show proof of compliance. Information provided when applying for an operation permit from a construction permit shall be indicative of the time at which the test was made.
3. Attach basis of potential discharge (e.g., emission factor, that is, AP42 test).
4. With construction permit application, include design details for all air pollution control systems (e.g., for baghouse include cloth to air ratio; for scrubber include cross-section sketch, etc.).
5. With construction permit application, attach derivation of control device(s) efficiency. Include test or design data. Items 2, 3, and 5 should be consistent: actual emissions = potential (1-efficiency).
6. An 8½" x 11" flow diagram which will, without revealing trade secrets, identify the individual operations and/or processes. Indicate where raw materials enter, where solid and liquid waste exit, where gaseous emissions and/or airborne particles are evolved and where finished products are obtained.
7. An 8½" x 11" plot plan showing the location of the establishment, and points of airborne emissions, in relation to the surrounding area, residences and other permanent structures and roadways (Example: Copy of relevant portion of USGS topographic map).
8. An 8½" x 11" plot plan of facility showing the location of manufacturing processes and outlets for airborne emissions. Relate all flows to the flow diagram.

9. An application fee of $20, unless exempted by Section 17-4.05(3), F.A.C. The check should be made payable to the Department of Environmental Regulation.

10. With an application for operation permit, attach a Certificate of Completion of Construction indicating that the source was constructed as shown in the construction permit.

SECTION VI: BEST AVAILABLE CONTROL TECHNOLOGY

A. Are standards of performance for new stationary sources pursuant to 40 C.F.R. Part 60 applicable to the source?
[X] Yes [ ] No

Contaminant	Rate or Concentration
Hydrocarbon	N/A

B. Has EPA declared the best available control technology for this class of sources (If yes, attach copy) [ ] Yes [ ] No

Contaminant	Rate or Concentration
Hydrocarbon - Method being	N/A
constructed meets LEAR	

C. What emission levels do you propose as best available control technology? N/A

Contaminant	Rate or Concentration

D. Describe the existing control and treatment technology (if any).

1. Control Device/System: Internal Floating Roof with Seals
2. Operating Principles: Seal-off
3. Efficiency:* --
4. Capital Costs: $19,900
5. Useful Life: 10 Years
6. Operating Costs: -0-
7. Energy: --
8. Maintenance Cost: $1,500/Year
9. Emissions: N/A

Contaminant	Rate or Concentration

*Explain method of determining D 3 above.

10. Stack Parameters N/A

a. Height: ft. b. Diameter: ft.

c. Flow Rate: ACFM d. Temperature: °F

e. Velocity: FPS

E. Describe the control and treatment technology available (As many types as applicable, use additional pages if necessary).

1.

a. Control Device: Internal Floating Roof with Seals

b. Operating Principles: Internal Seal-off

c. Efficiency*: -- d. Capital Cost:

e. Useful Life: 10 Years f. Operating Cost: --

g. Energy*: N/A h. Maintenance Cost: $1,500/Year

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes: N/A

k. Ability to construct with control device, install in available space, and operate within proposed levels: N/A

2.

a. Control Device:

b. Operating Principles:

c. Efficiency*: d. Capital Cost:

e. Useful Life: f. Operating Cost:

g. Energy**: h. Maintenance Costs:

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space, and operate within proposed levels:

*Explain method of determining efficiency.

**Energy to be reported in units of electrical power – KWH design rate.

3.

a. Control Device: ---

b. Operating Principles:

c. Efficiency*: d. Capital Cost:

e. Life: f. Operating Cost:

g. Energy: h. Maintenance Cost:

*Explain method of determining efficiency above.

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space and operate within proposed levels:

4.

a. Control Device ---

b. Operating Principles:

c. Efficiency*: d. Capital Cost:

e. Life: f. Operating Cost:

g. Energy: h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space, and operate within proposed levels:

F. Describe the control technology selected: N/A

1. Control Device:
2. Efficiency*: 3. Capital Cost:
4. Life: 5. Operating Cost:
6. Energy: 7. Maintenance Cost:
8. Manufacturer:
9. Other locations where employed on similar processes:

a.

(1) Company:

(2) Mailing Address:

(3) City: (4) State:

(5) Environmental Manager:

(6) Telephone No.:

*Explain method of determining efficiency above.

(7) Emissions*:

Contaminant	Rate or Concentration

(8) Process Rate*:

b.

(1) Company:

(2) Mailing Address:

(3) City: (4) State:

*Applicant must provide this information when available. Should this information not be available, applicant must state the reason(s) why.

(5) Environmental Manager:

(6) Telephone No.:

(7) Emissions*:

Contaminant	Rate or Concentration

(8) Process Rate*:

10. Reason for selection and description of systems:

Economy, useful life, efficiecy

*Applicant must provide this information when available. Should this information not be available, applicant must state the reason(s) why.

SECTION VII – PREVENTION OF SIGNIFICANT DETERIORATION

A. Company Monitored Data

1. _____ no sites _____ TSP _____ ( ) SO^2* _____ Wind spd/dir

Period of monitoring ____/____/____ to ____/____/____
month day year month day year

Other data recorded _____

Attach all data or statistical summaries to this application.

2. Instrumentation, Field and Laboratory

a) Was instrumentation EPA referenced or its equivalent? ____ Yes ____ No

b) Was instrumentation calibrated in accordance with Department procedures? ____ Yes ____ No ____ Unknown

B. Meteorological Data Used for Air Quality Modeling

1. _____ Year(s) of data from ____/____/____ to ____/____/____
month day year month day year

2. Surface data obtained from (location) _____

3. Upper air (mixing height) data obtained from (location) _____

4. Stability wind rose (STAR) data obtained from (location) _____

C. Computer Models Used

1. N/A Modified? If yes, attach description.

2. _____ Modified? If yes, attach description.

3. _____ Modified? If yes, attach description.

4. _____ Modified? If yes, attach description.

Attach copies of all final model runs showing input data, receptor locations, and principle output tables.

D. Applicants Maximum Allowable Emission Data

Pollutant	Emission Rate
TSP	_____ grams/sec
SO^2	_____ grams/sec

E. Emission Data Used in Modeling

Attach list of emission sources. Emission data required is source name, description on point source (on NEDS point number), UTM coordinates, stack data, allowable emissions, and normal operating time.

F. Attach all other information supportive to the PSD review.

*Specify bubbler (B) or continuous (C).

G. Discuss the social and economic impact of the selected technology versus other applicable technologies (i.e., jobs, payroll, production, taxes, energy, etc.). Include assessment of the environmental impact of the sources.

H. Attach scientific, engineering, and technical material, reports, publications, journals, and other competent relevant information describing the theory and application of the requested best available control technology.

DEPARTMENT OF ENVIRONMENTAL REGULATION PERMITS

Taft, FL Terminal

Permit No.	
A048-2492	Tank #2
A048-2493	Tank #3
A048-4835	Tank #25-1
A048-19085	Tank #9
A048-27686	Tank #37-4
A048-32515	Tank #40-1
A048-46569	Tank Nos. 1054, 1061 and 37-3 1055, 1062 4 1059 37-1 5 1060 37-2 6
AC48-43323	Tank #80-1
AC48-35646	Tank #80-2
A048-46573	Five (5) Tank Truck Loading Racks
AC48-45931	New (1981) Tank Truck Loading Rack
AC48-45792	Tank Nos. 1051, 1052, 1053, 1056 and 1057 (Being modified w/Secondary Seals)

EVAPORATION LOSSES
TANK 1054
Internal Floating Roof
(Calculated in accordance with AP-42)

BREATHING LOSS, 'L_S'

L_S = Losses in pounds/year = $K_S \cdot V^N \cdot P \cdot D \cdot M_V \cdot K_C$

where: K_S = 0.7 (constant)

V = Wind Velocity = 8.7 Mi./Hr.

N = 0.4 (constant)

P = Pressure equation = 0.14

$$= \frac{\left(\frac{P_V}{P_a}\right)}{\left[1+\left(1-\frac{P}{P_a}\right)^{.5}\right]^2} = \frac{\left(\frac{6.2}{14.7}\right)}{\left[1+\left(1-\frac{6.2}{14.7}\right)^{.5}\right]^2} = 0.14$$

D = Dia. in Ft. = 68 Ft.

M_V = Molecular Weight at Average Vapor Pressure = 66

K_C = 1.0

WORKING LOSSES, 'L_W'

L_W = Losses in pounds/year = $0.943 \cdot Q \cdot C \cdot W_1 \div D$

where: Q = Average thruput = 616,000 Bbl./year

C = Shell Clingage = 0.0015 (For light rust)

W_1 = Density of product = 5.0 lbs./Gallon

D = Dia. in Ft. = 68 Ft.

$L_S = K_S \cdot V^N \cdot P \cdot D \cdot M_V \cdot K_C = (0.7)(8.7)^{0.4}(0.14)(68)(66)(1.0) = 1044.93$ lbs./yr.

$L_W = (0.943) \cdot Q \cdot C \cdot W_1 \div D = (0.943)(616{,}000)(.0015)(5) \div (68) = 64.07$ lbs/yr.

1109.00 lbs/yr.

TNK. 1054 (I.F.R)

TOTAL LOSSES = 1109.00 Pounds/Year

= 0.555 Tons/Year

= 0.127 Pounds/Hour

PINE CASTLE, FLA.

N2822.5–W8115/7.5

1953

PHOTOREVISED 1970

AMS 4740 IV NE–SERIES V847

SCALE 1:24000

1 ½ 0 1 MIL

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 .5 0 1 KILOMETER

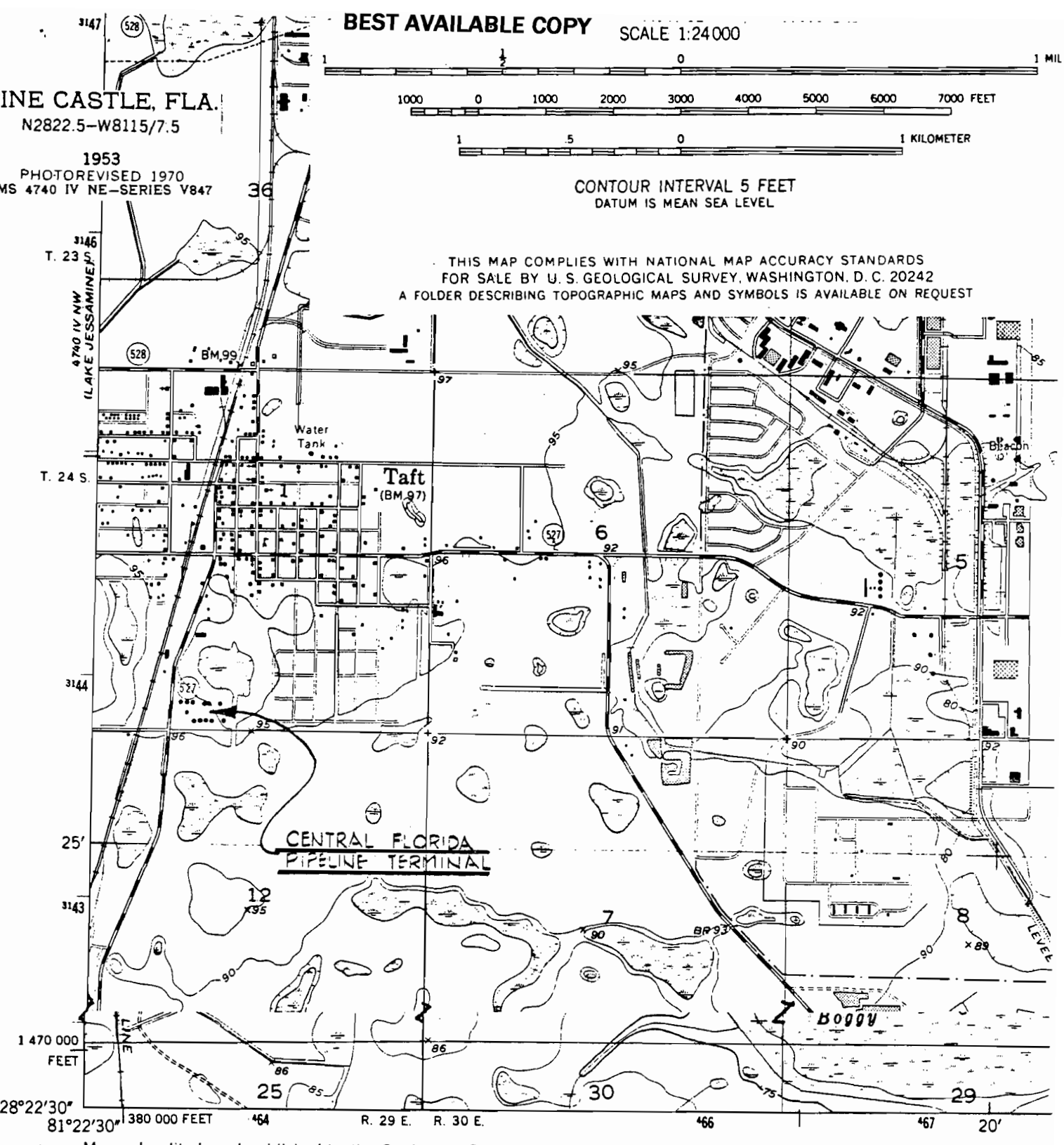
CONTOUR INTERVAL 5 FEET

DATUM IS MEAN SEA LEVEL

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS

FOR SALE BY U. S. GEOLOGICAL SURVEY, WASHINGTON, D. C. 20242

A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST



Mapped, edited, and published by the Geological Survey

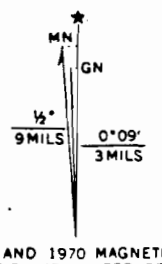
Control by USGS, USC&GS, and USCE

Culture and drainage in part compiled by U. S. Corps of Engineers from aerial photographs taken 1950. Topography by plane-table surveys 1953

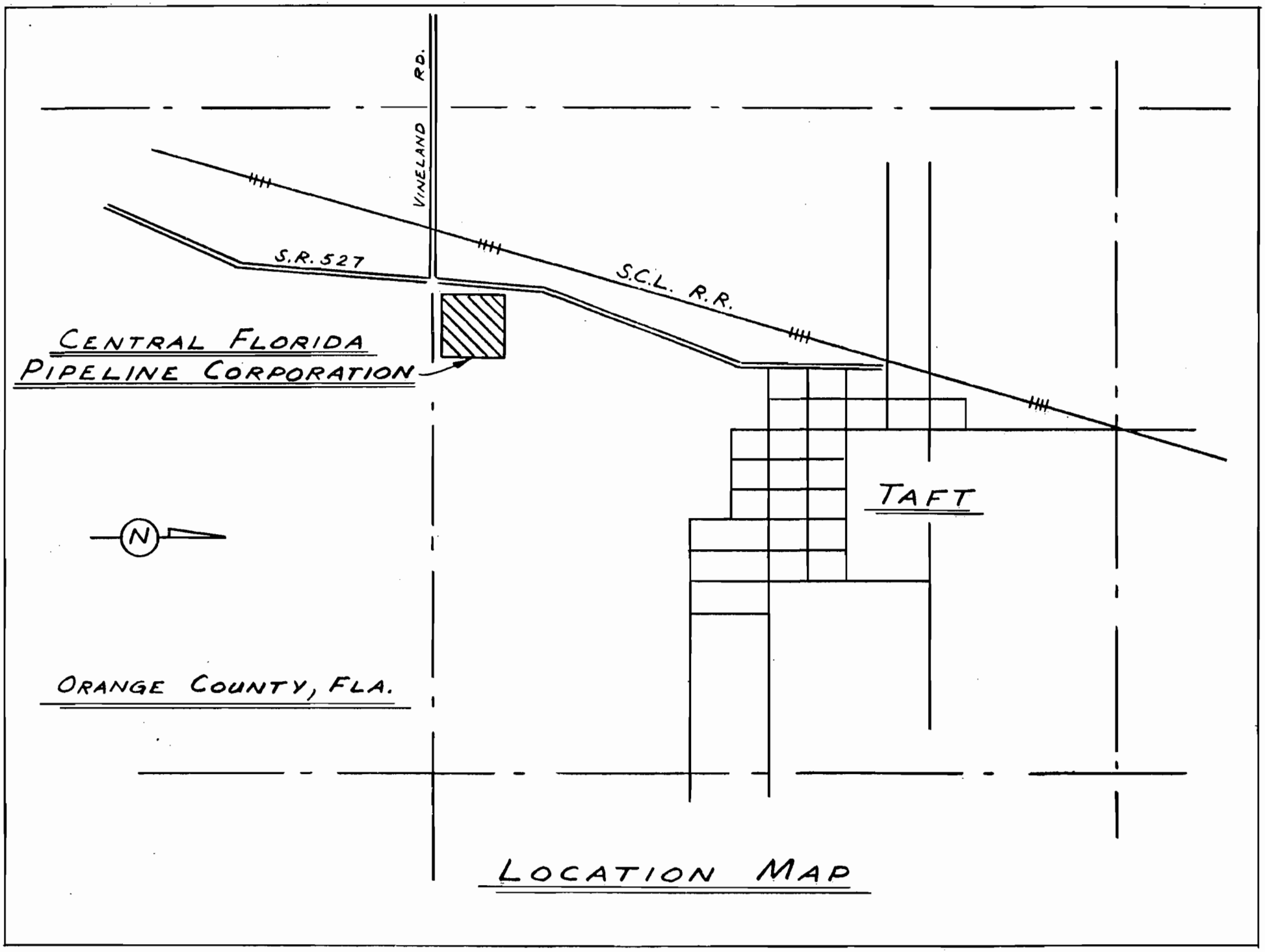
Polyconic projection. 1927 North American datum
10,000-foot grid based on Florida coordinate system, east zone
1000-meter Universal Transverse Mercator grid ticks, zone 17, shown in blue

Revisions shown in purple compiled from aerial photographs taken 1970. This information not field checked

Purple tint indicates extension of urban areas

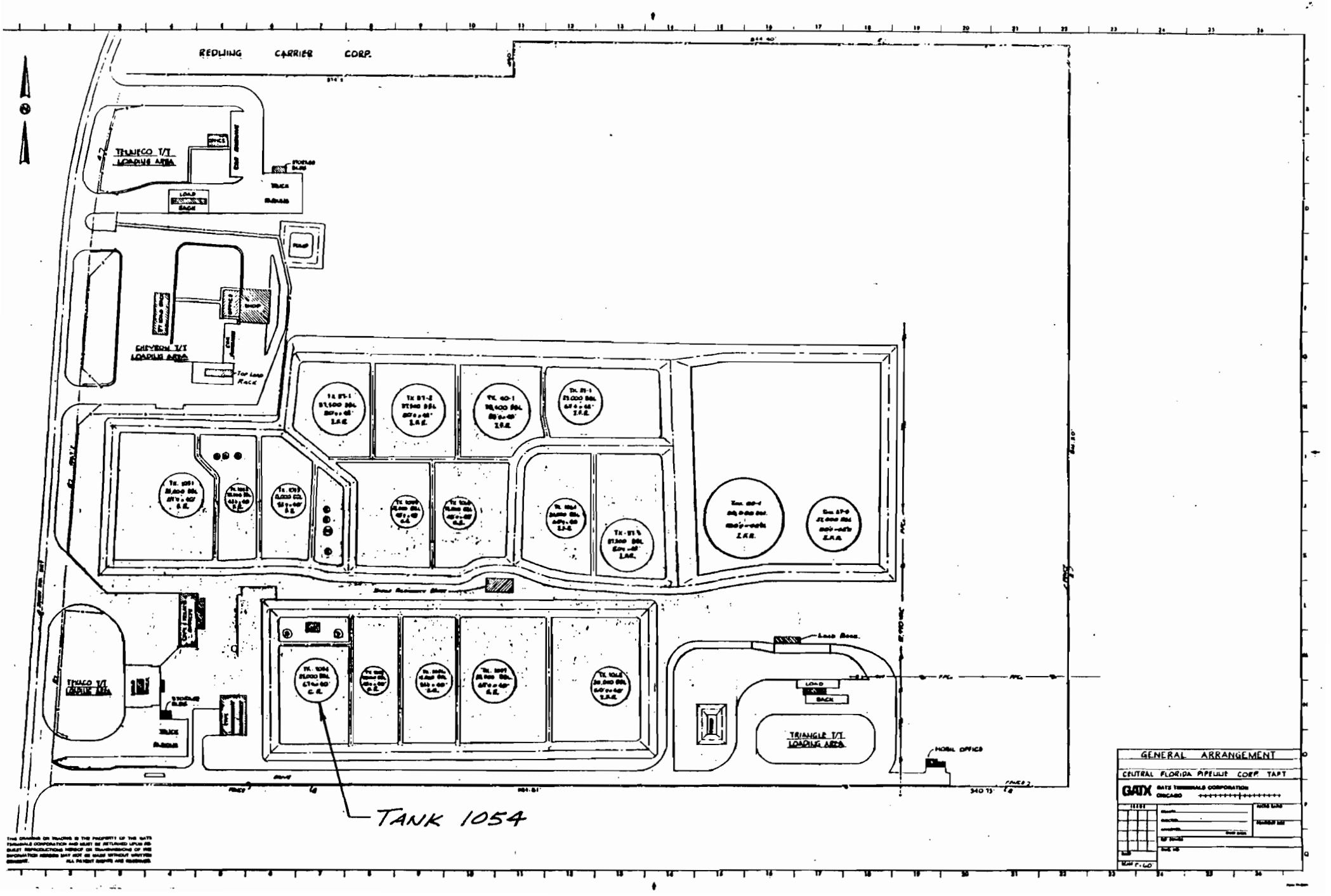


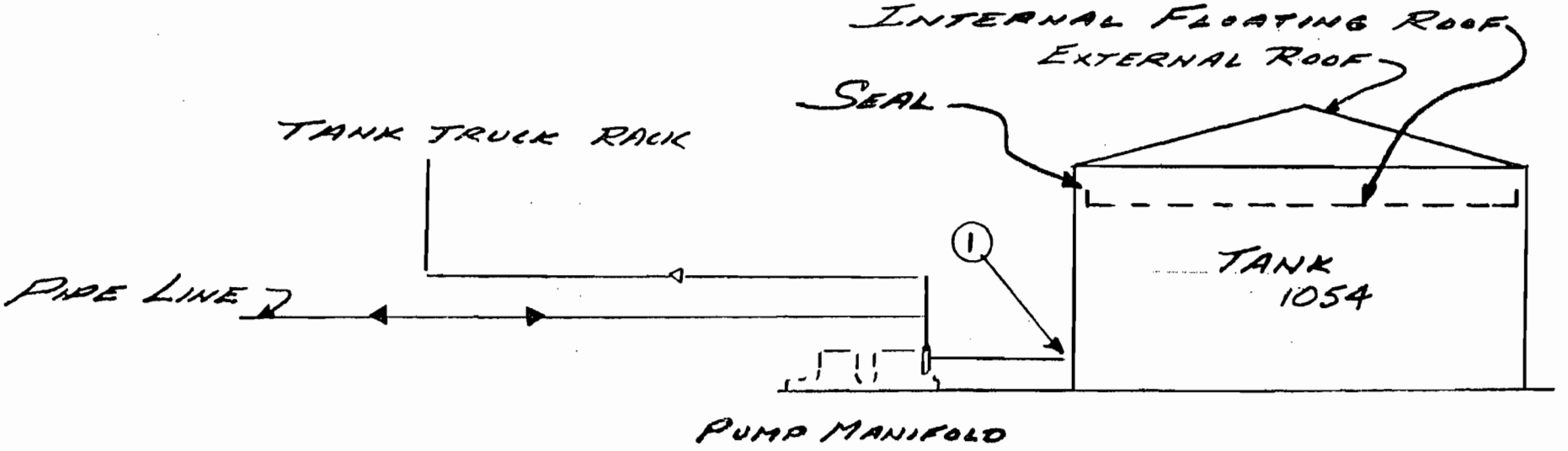
UTM GRID AND 1970 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET



LOCATION MAP

BEST AVAILABLE COPY





FLOW DIAGRAM

① INDICATES PRODUCT EXIT OR ENTRANCE POINT

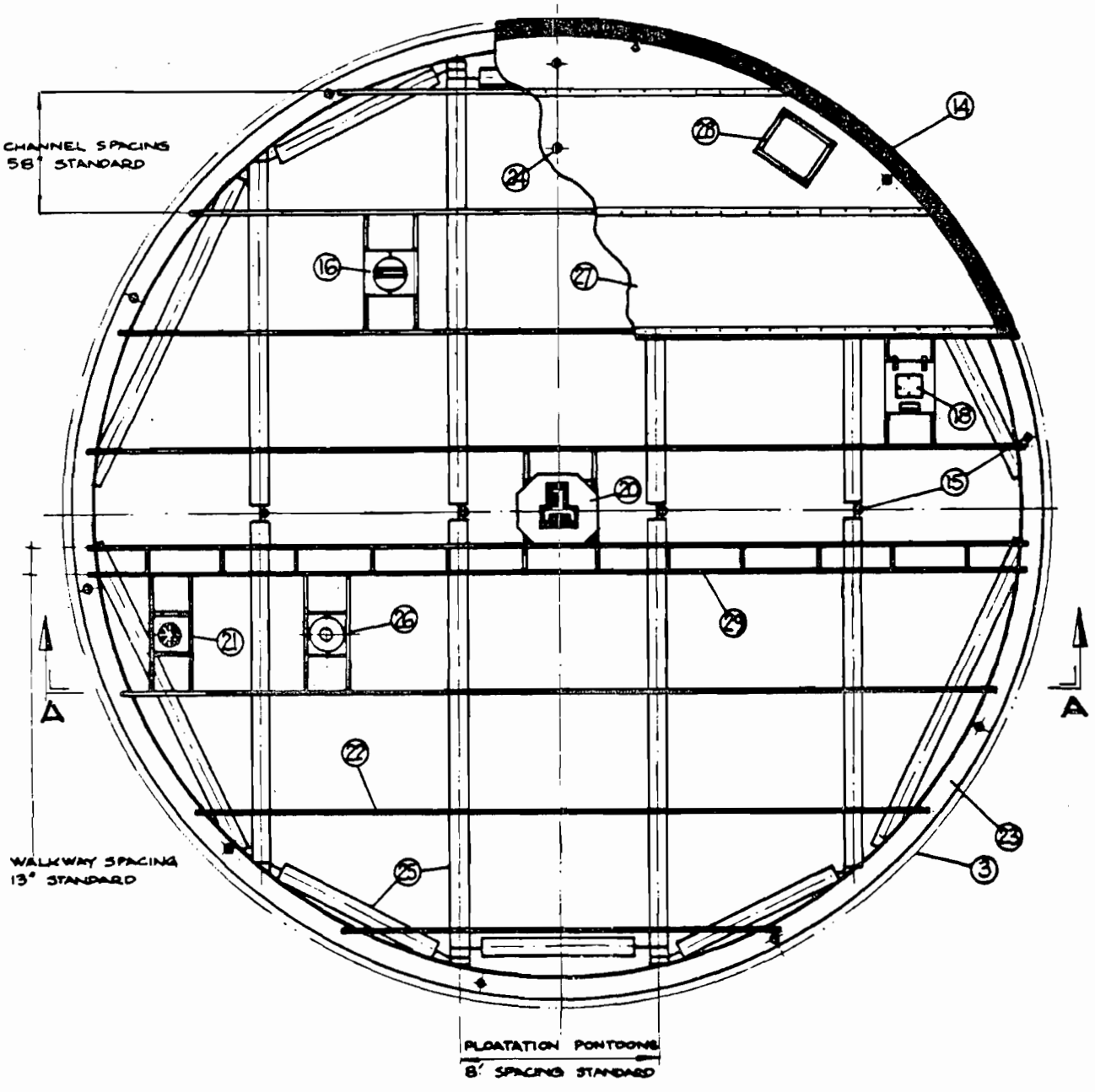
Mayflower
VAPOR SEAL CORPORATION

DESIGN DETAILS
MAYFLOWER VAPOR SEAL
PARTS & ACCESSORIES

16 Industrial Avenue • Little Ferry, New Jersey 07643
phone N. J. (201) 641-0200 • N. Y. (212) CHickering 4-6144

MAYFLOWER VAPOR SEAL
TYPICAL PLAN VIEW OF 40 FT. DIA.

DWG.NO. MVS 100-1276

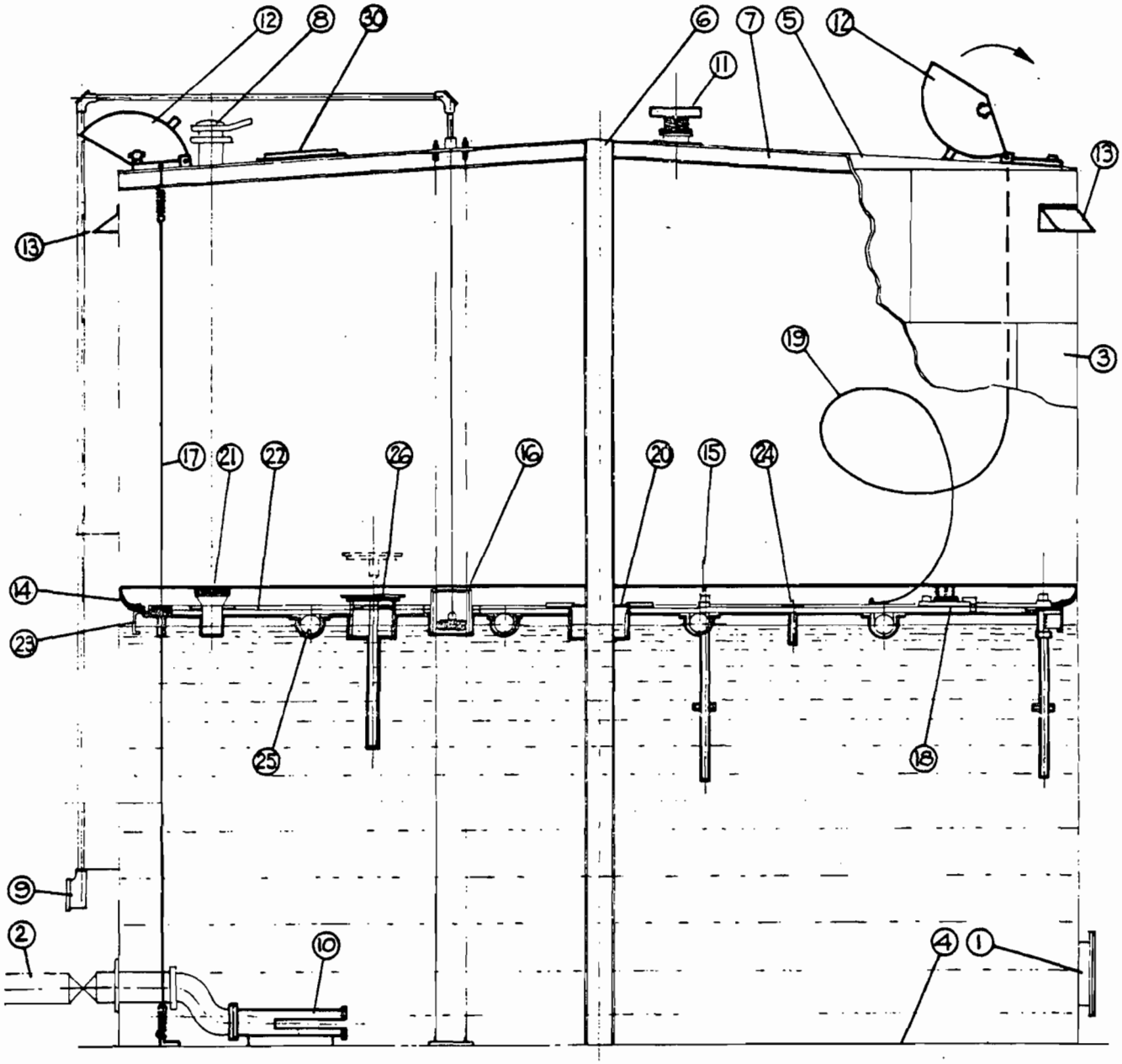


③	TANK SHELL	
⑭	PERIPHERAL WIPER SEAL	P.7
⑮	TOP ADJUSTABLE LEGS	P.3
⑯	FLOATWELL ASSEMBLY	P.9
⑱	HATCHWAY-PRESSURE/VACUUM RELIEF	P.6
⑳	COLUMN SEAL ASSEMBLY	P.8
㉑	SAMPLING FUNNEL ASSEMBLY	P.10
㉒	CHANNELS	P.4
㉓	PERIMETER SEGMENTS	P.3
㉔	DRAIN PIPES	P.6
㉕	FLOATATION PONTOONS	P.3
㉖	BLEEDER VENT ASSEMBLY	P.11
㉗	SHEETING	P.5
㉘	LADDER PAD	P.13
㉙	WALKWAY	P.1

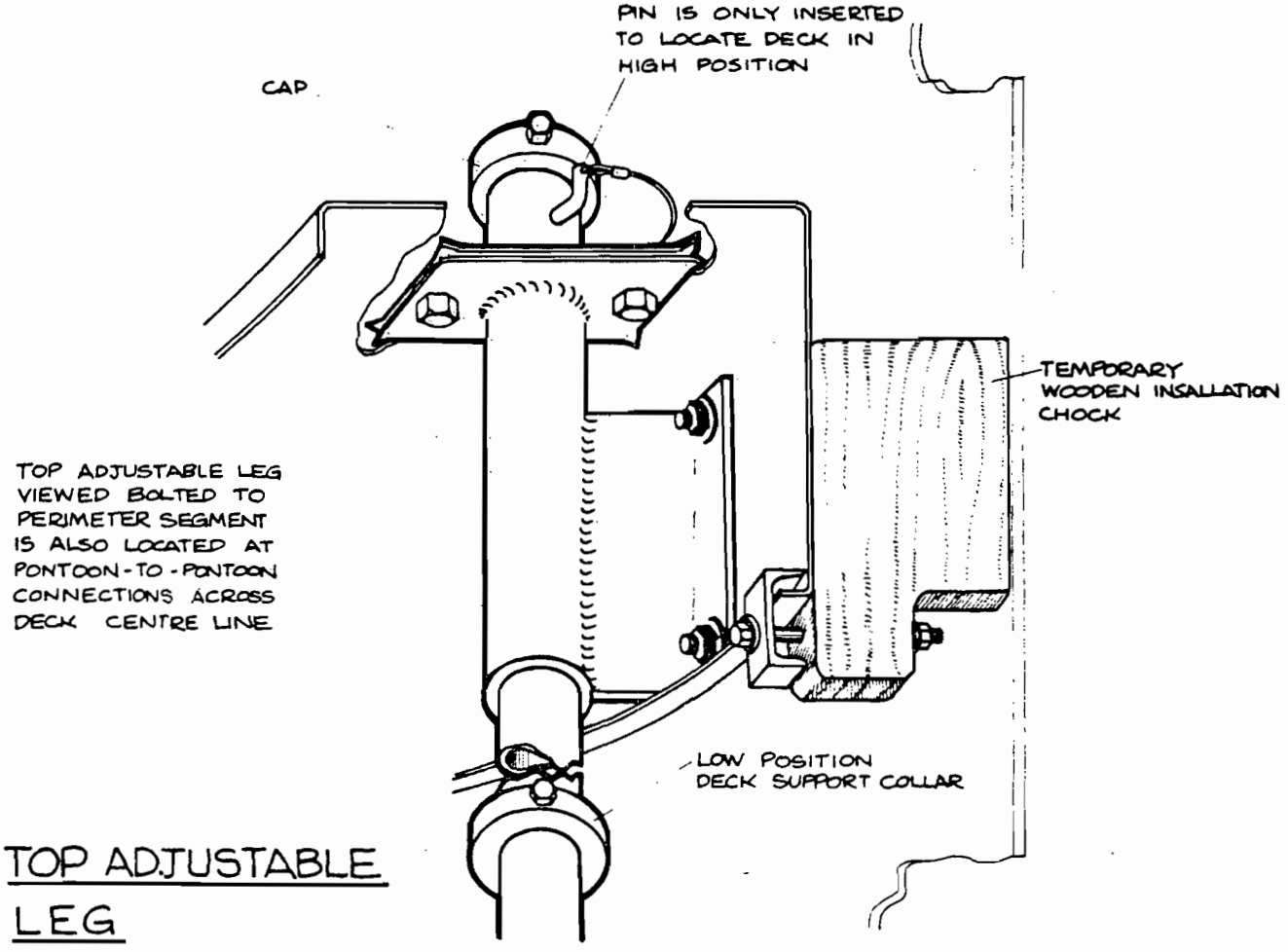
REFER TO PAGE 2 FOR SECTION A - A

MAYFLOWER VAPOR SEAL
TYPICAL ELEVATION VIEW OF 40 FT. DIA.
SECTION A - A

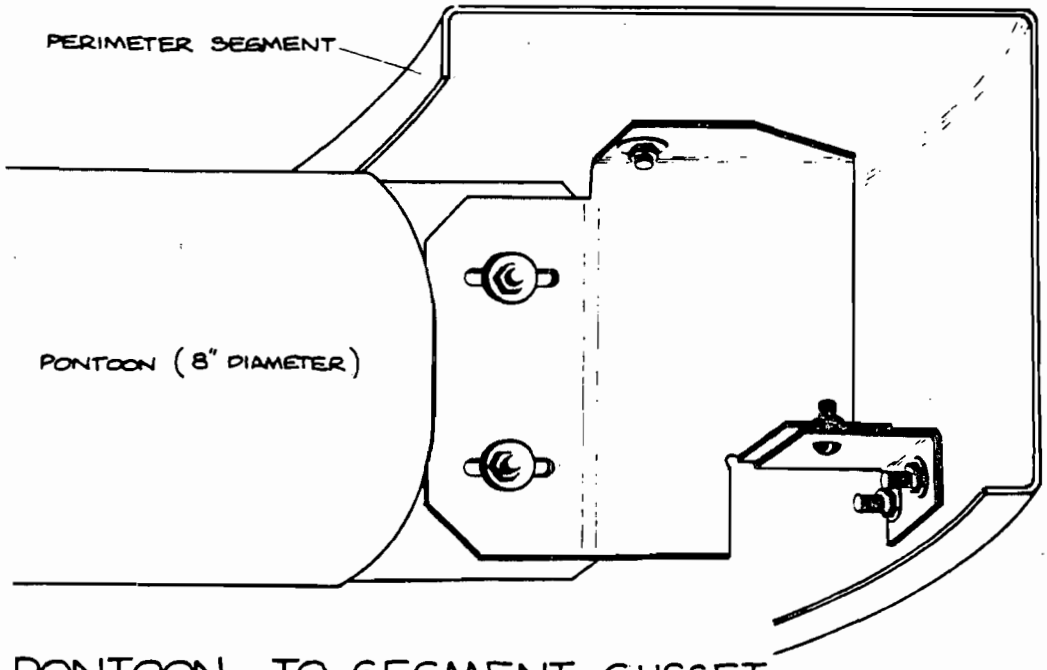
DWG.NO. MVS 101-1276



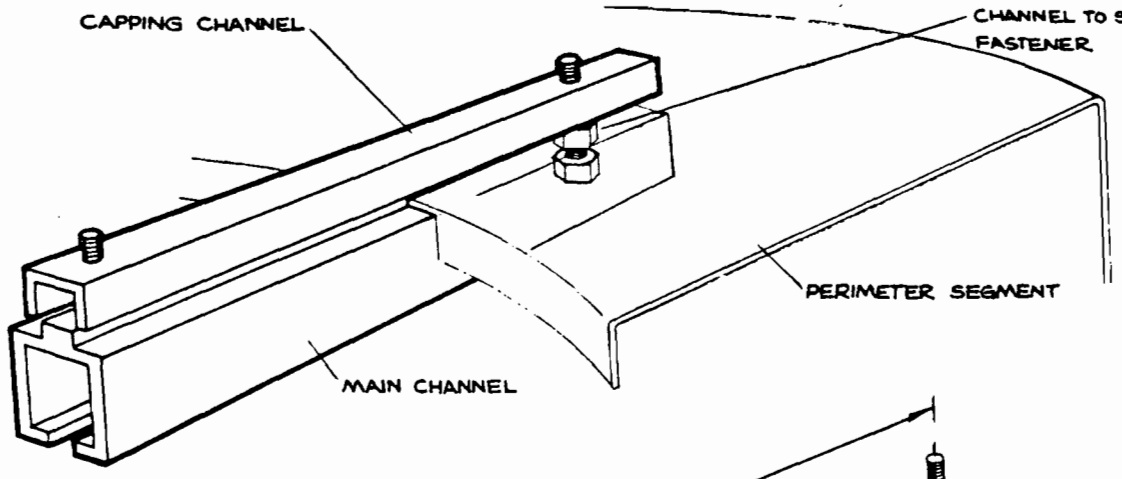
1	TANK MANHOLE	
2	TANK FILL-LINE	
3	TANK SHELL	
4	TANK FLOOR	
5	TANK CONE ROOF	
6	TANK ROOF SUPPORT COLUMN	
7	TANK ROOF RAFTER	
8	TANK GAUGE HATCH	
9	TANK AUTOMATIC TANK GAUGE	
10	FILL-LINE DIFFUSER	P.16
11	MUSHROOM VENT	P.15
12	AIR SCOOP VENT	P.14
13	OVERFLOW VENT	P.14
14	PERIPHERAL WIPER SEAL	P.7
15	TOP ADJUSTABLE LEGS	P.3
16	FLOATWELL ASSEMBLY	P.9
17	ANTI-ROTATION CABLE (2)	P.17
18	HATCHWAY PRESSURE/VACUUM RELIEF	P.6
19	ANTI-STATIC CABLE (4)	P.2
20	COLUMN SEAL ASSEMBLY	P.8
21	SAMPLING FUNNEL ASSEMBLY	P.10
22	CHANNELS	P.4
23	PERIMETER SEGMENTS	P.3
24	DRAIN PIPE	P.6
25	FLOATATION PONTOONS	P.3
26	BLEEDER VENT ASSEMBLY	P.11
30	ROOF MANWAY	P.18



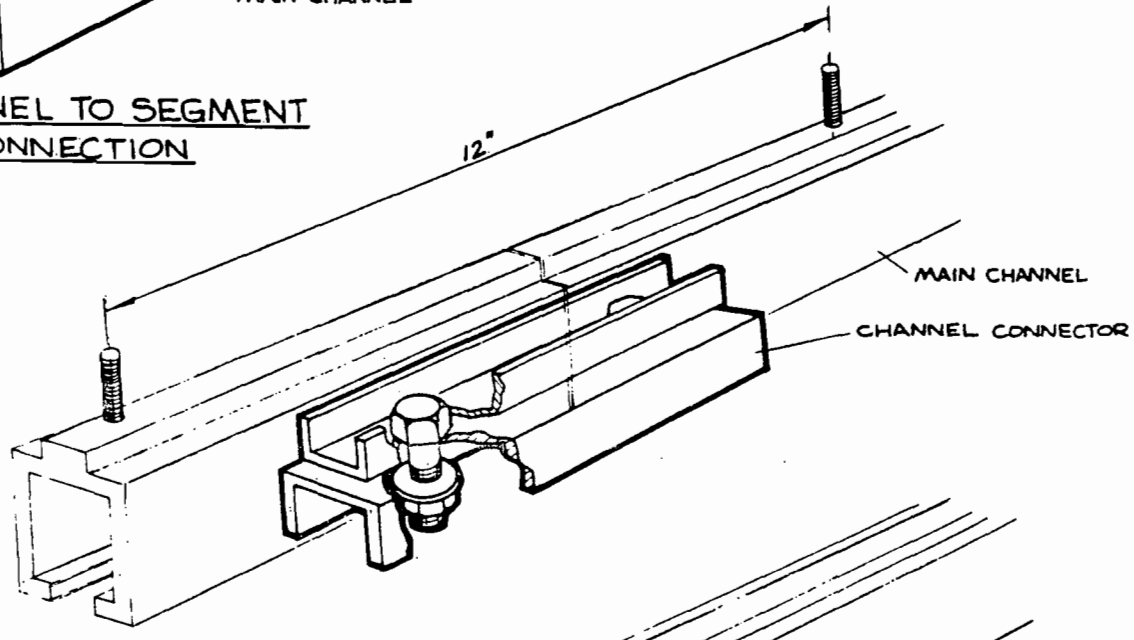
TOP ADJUSTABLE LEG



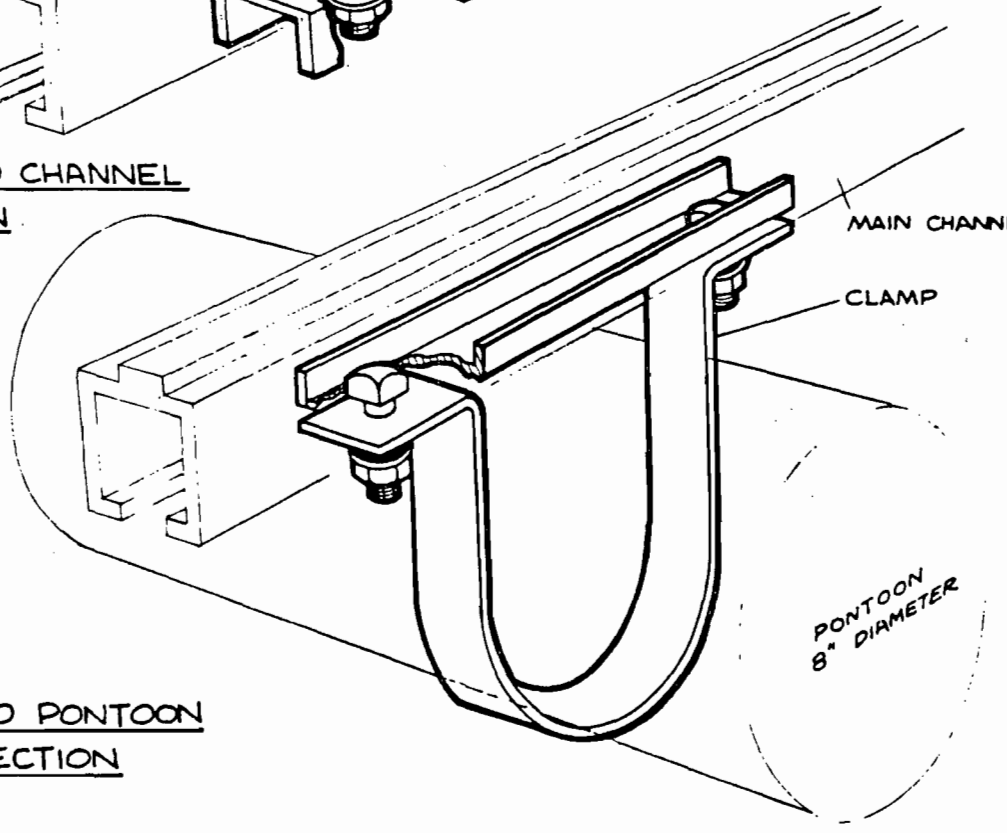
PONTOON TO SEGMENT GUSSET



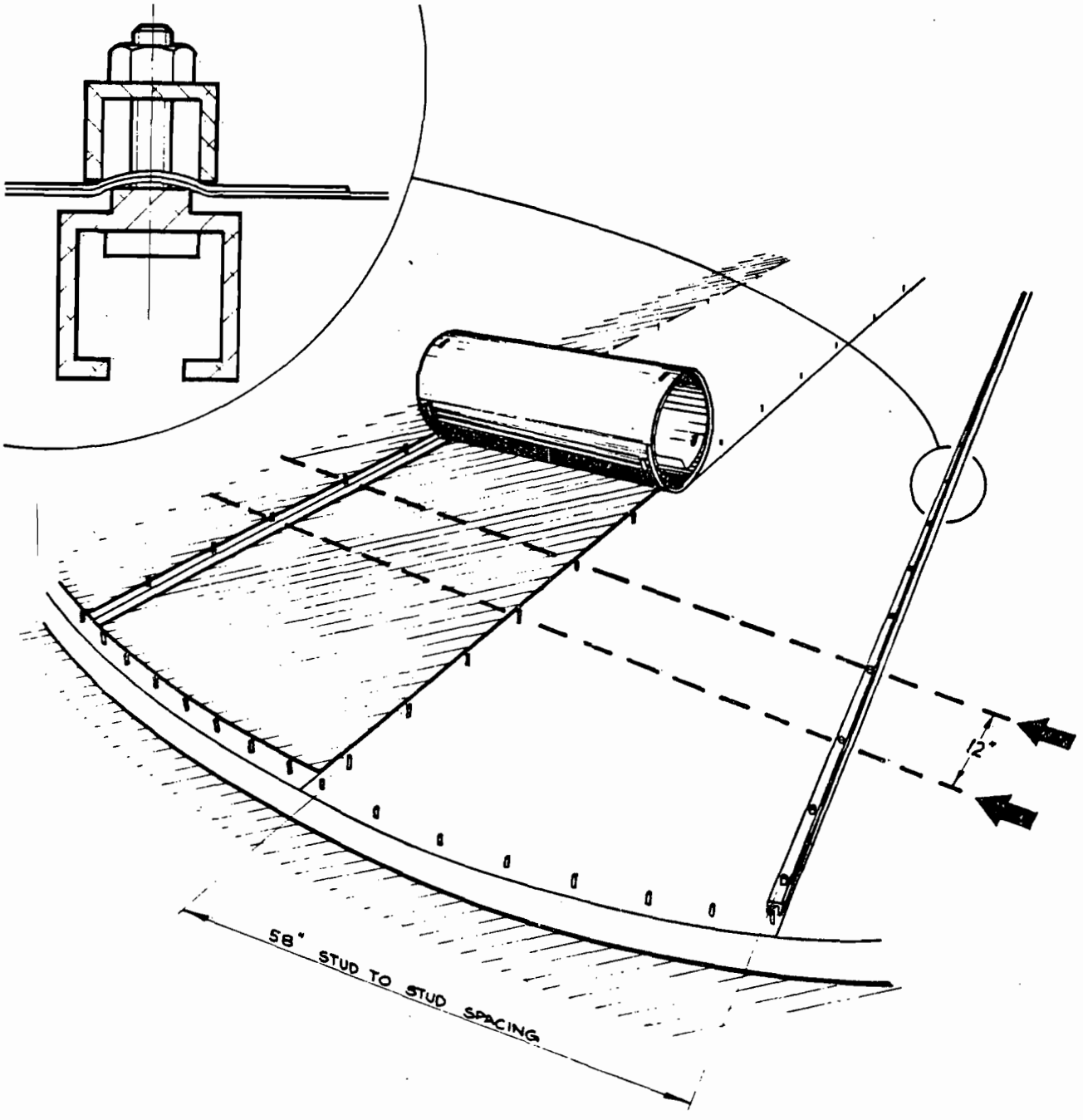
CHANNEL TO SEGMENT CONNECTION



CHANNEL TO CHANNEL CONNECTION



CHANNEL TO PONTOON CONNECTION

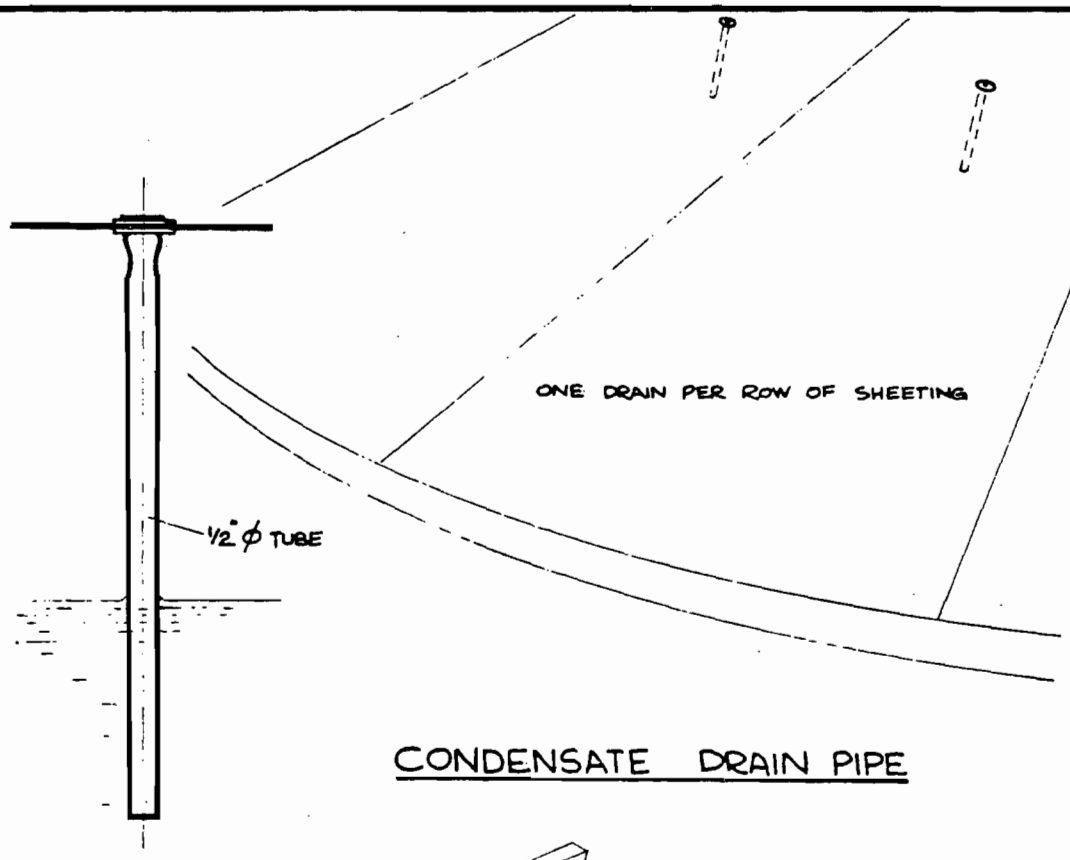


CENTRING OF CHANNELS (58") AND ACCURATE BOLT ALIGNMENT (12") ACROSS ENTIRE SURFACE OF DECK IS MOST IMPORTANT TO PERMIT QUICK INSTALLATION OF THE SHEETING

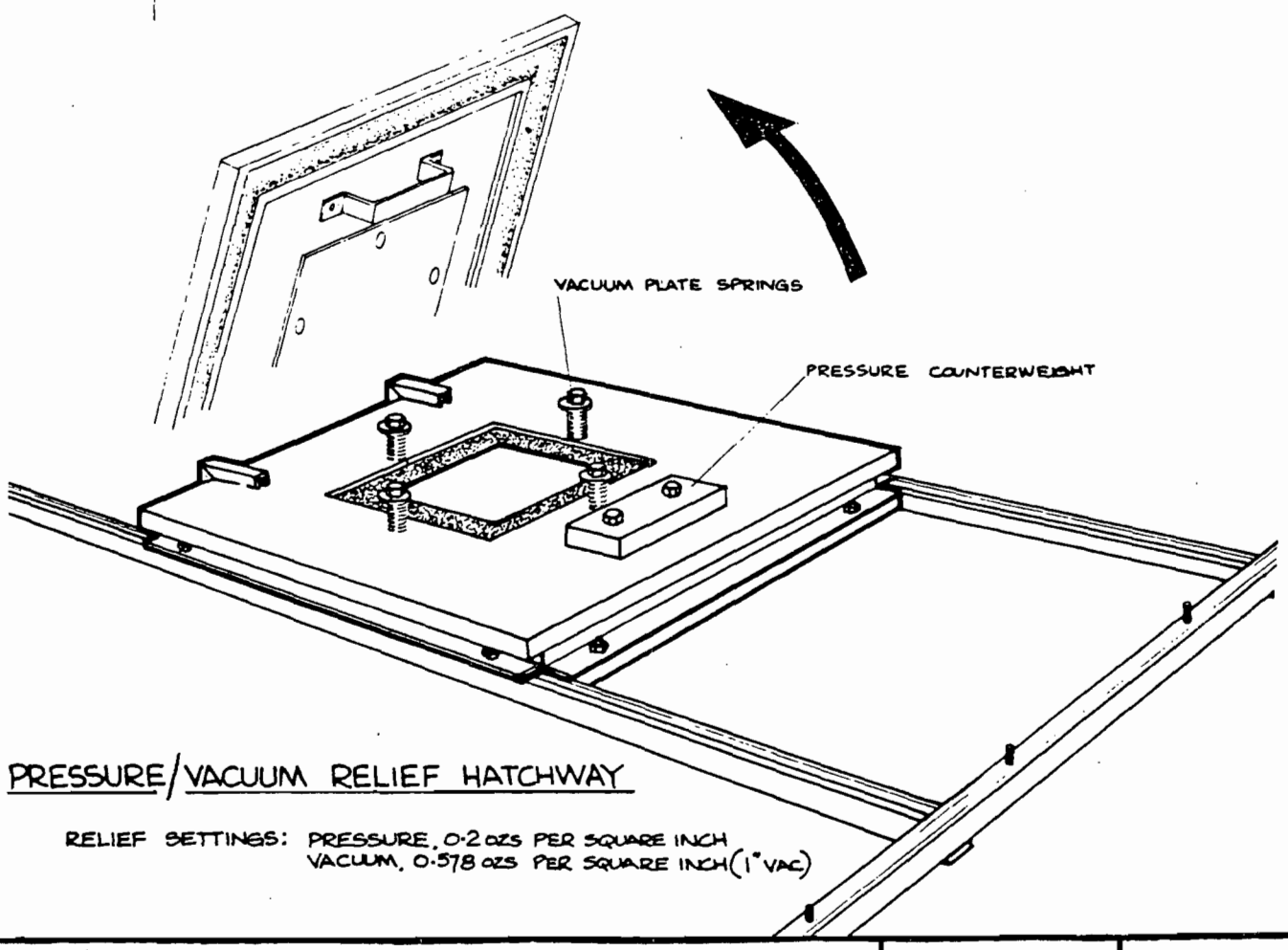
SHEETING & CHANNELS

MAYFLOWER VAPOR SEAL BASIC DECK COMPONENTS
DRAIN PIPE AND PRESSURE/VACUUM RELIEF HATCHWAY

DWG. NO. MVS 105-1276

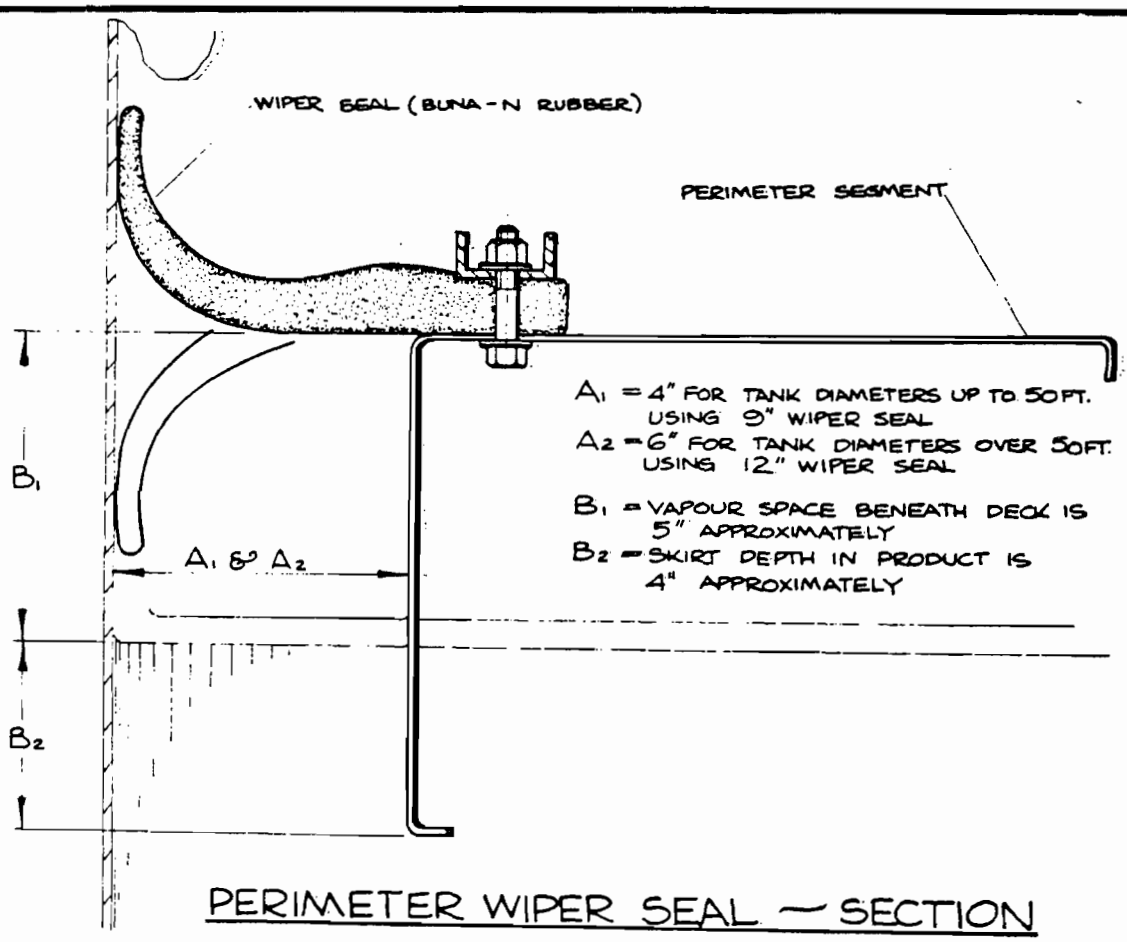


CONDENSATE DRAIN PIPE

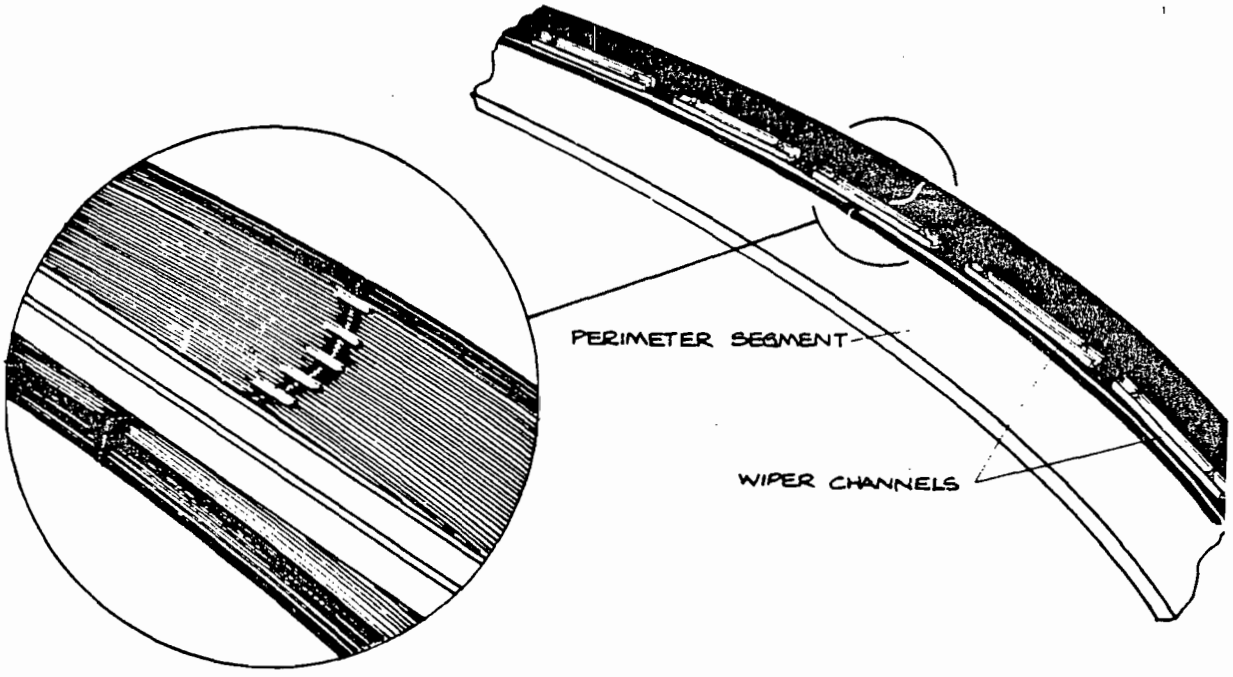


PRESSURE/VACUUM RELIEF HATCHWAY

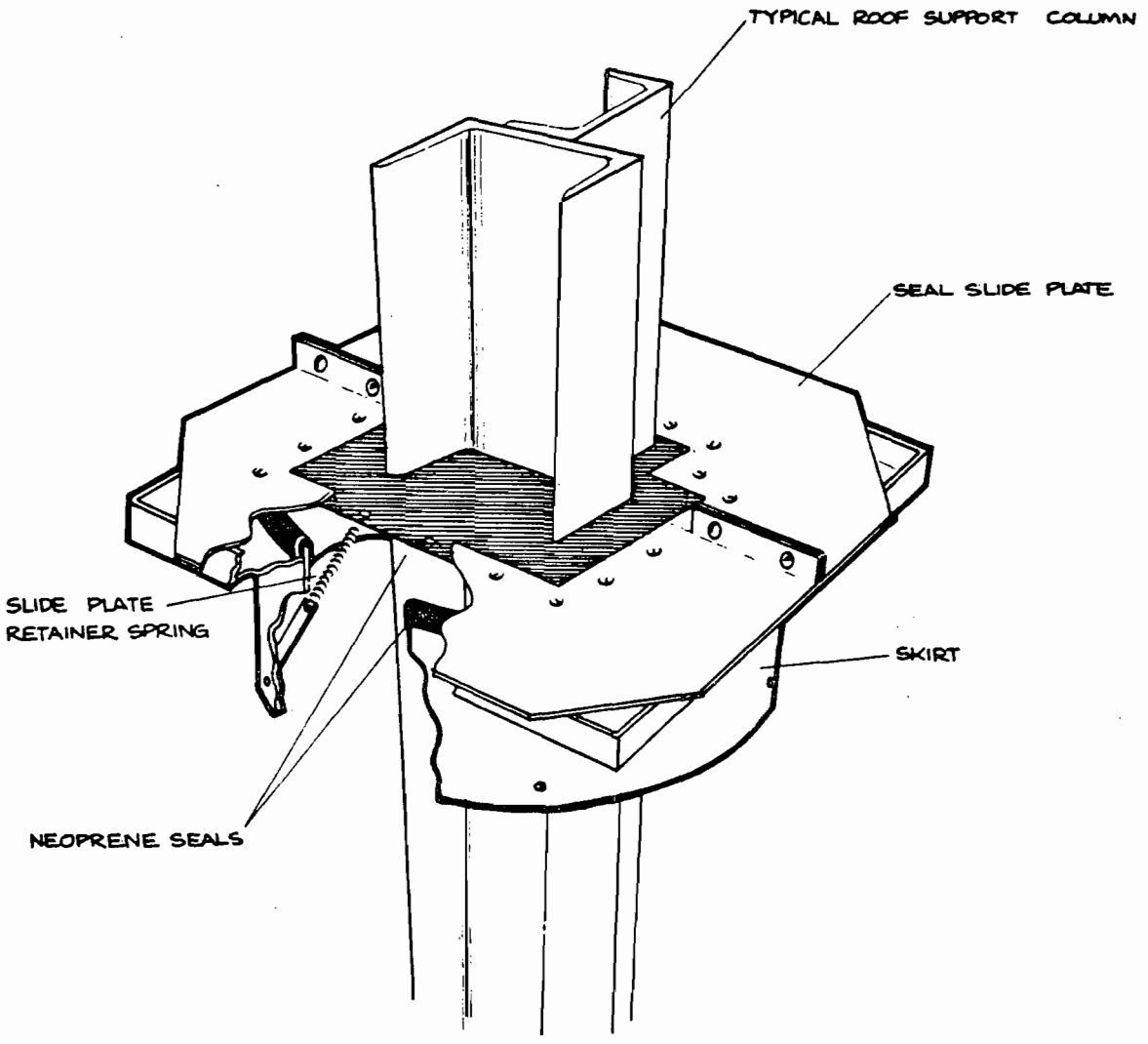
RELIEF SETTINGS: PRESSURE, 0·2 ozs PER SQUARE INCH
VACUUM, 0·578 ozs PER SQUARE INCH (1" VAC)



PERIMETER WIPER SEAL — SECTION



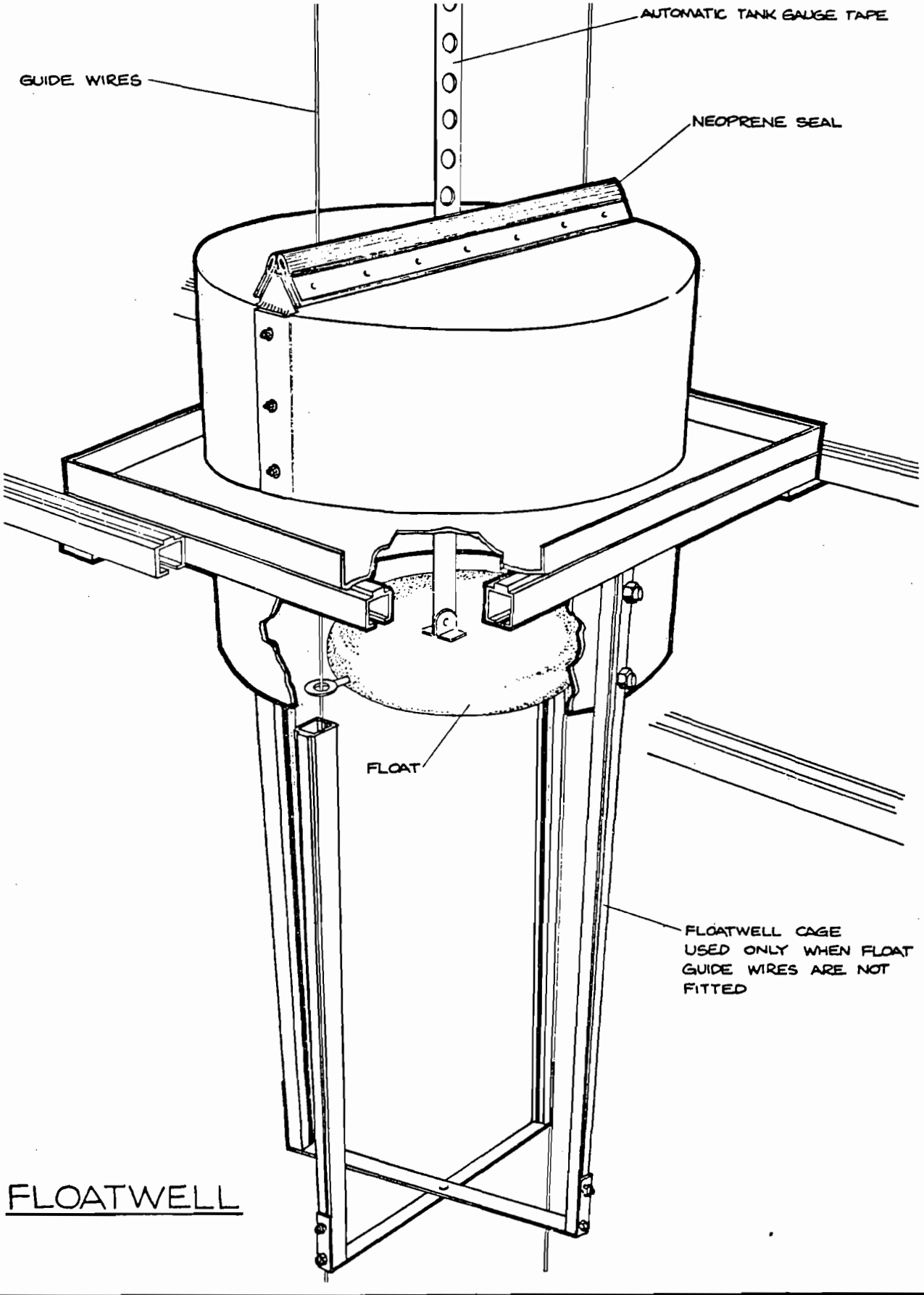
PERIMETER WIPER SEAL — JOINT



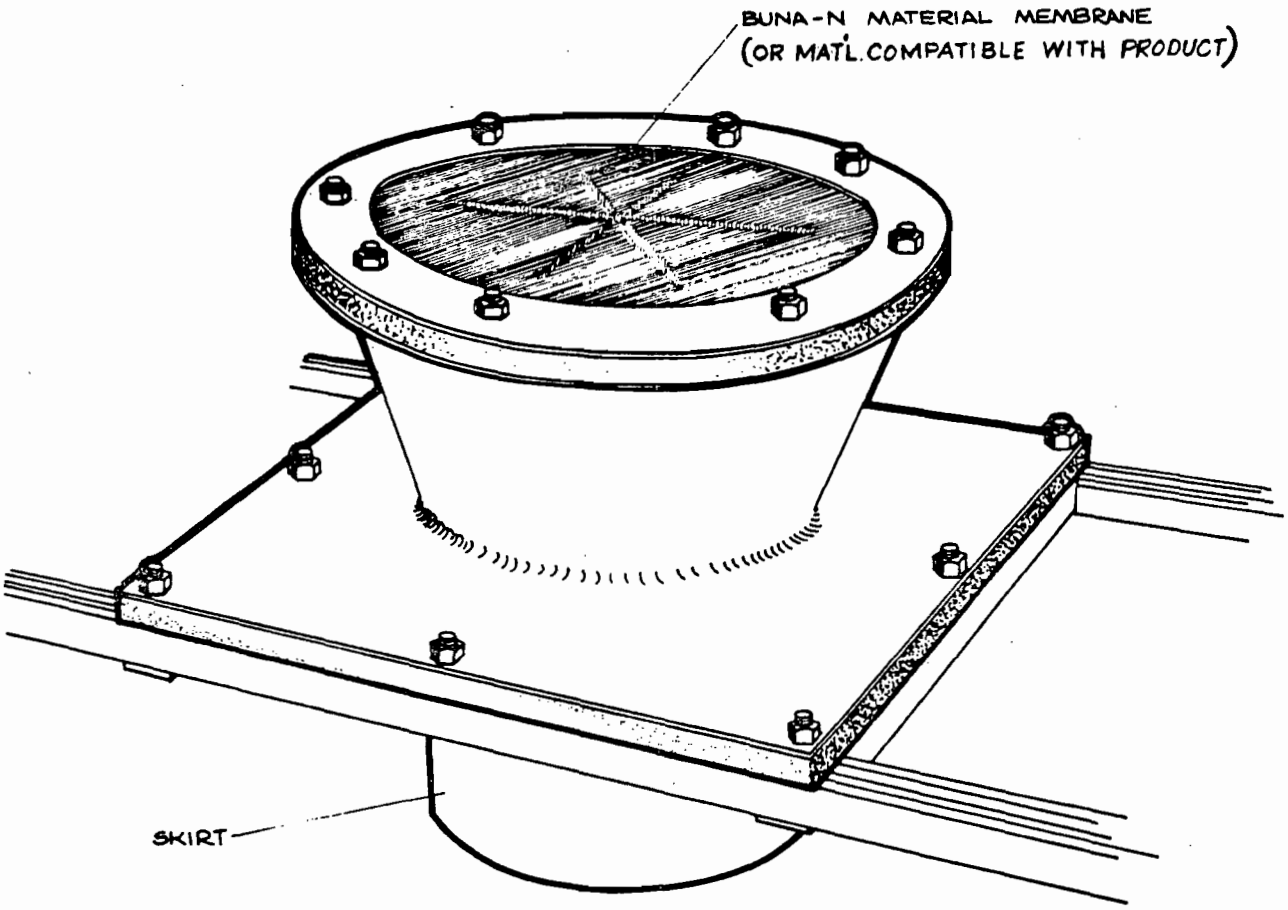
THE NOMINAL COLUMN SIZE IS THE MAXIMUM CROSS SECTION DIMENSION OF THE COLUMN CONFIGURATION, THE SKIRT DIAMETER BEING 12" GREATER.

COLUMN SEAL NUMBER	SKIRT SIZE		NOMINAL COLUMN SIZE	
CS - 001	20"	(001)	8"	Section
CS - 002	25"	(006)	13"	"
CS - 003	28"	(009)	16"	"
CS - 004	31"	(012)	19"	"

COLUMN SEAL


AUTOMATIC TANK GAUGE TAPE
GUIDE WIRES
NEOPRENE SEAL
FLOAT
FLOATWELL CAGE
USED ONLY WHEN FLOAT
GUIDE WIRES ARE NOT
FITTED

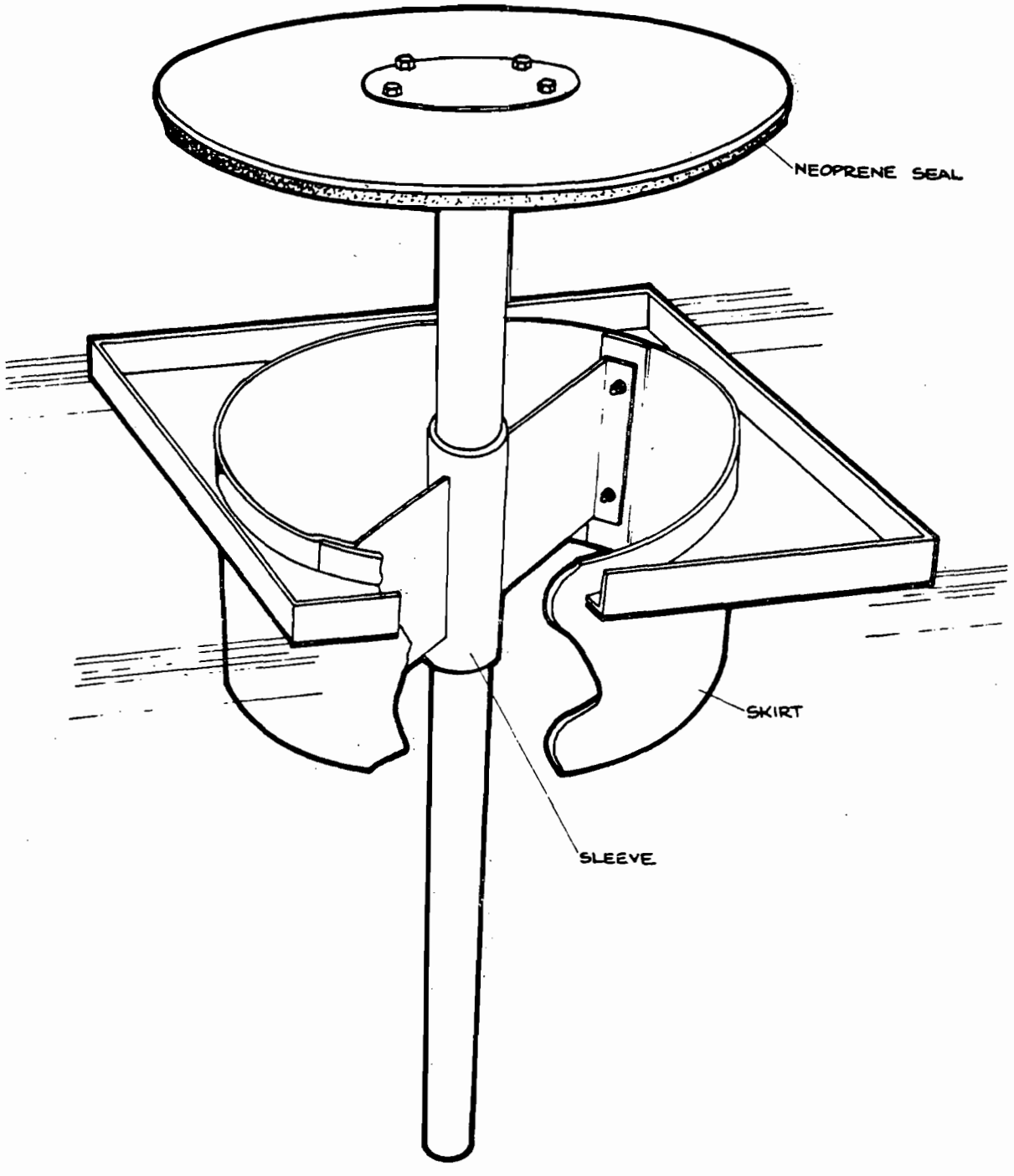
FLOATWELL



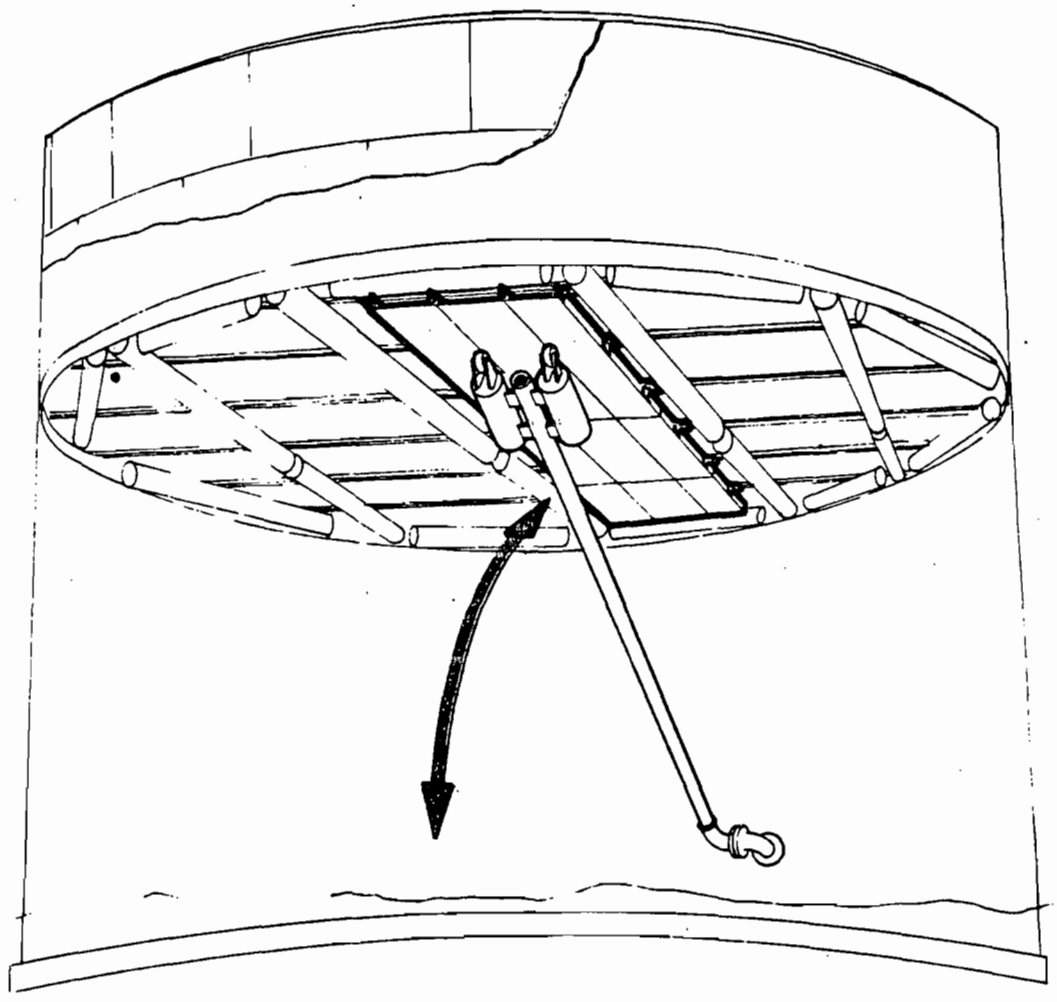
GAUGING / SAMPLING FUNNEL

MAYFLOWER VAPOR SEAL ACCESSORY
BLEEDER VENT

DWG. NO. MVS 110-1276



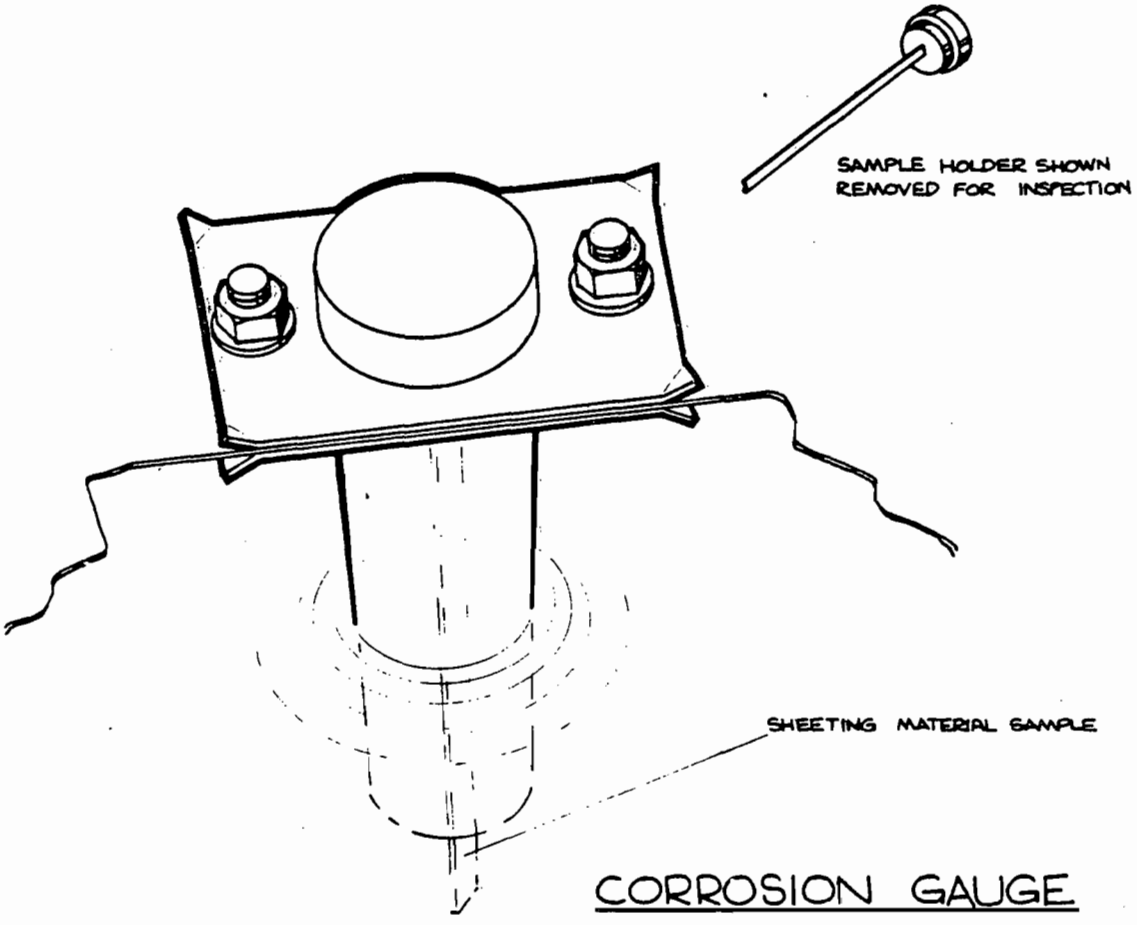
BLEEDER VENT



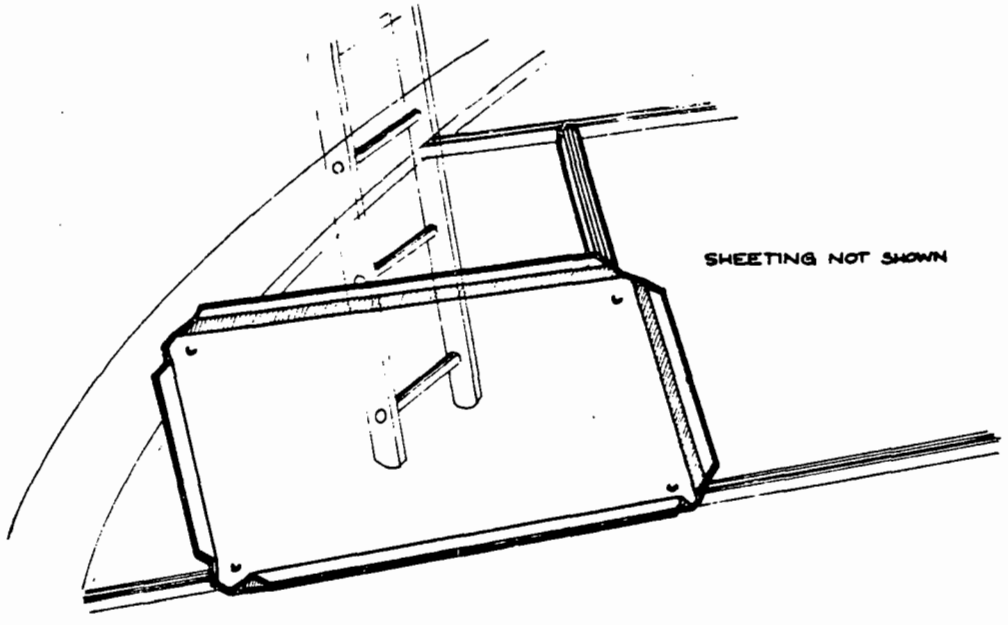
SWINGLINE TRACK ASSEMBLY
FOR FLOATING SUCTION LINE

MAYFLOWER VAPOR SEAL ACCESSORY
CORROSION GAUGE AND LADDER PAD

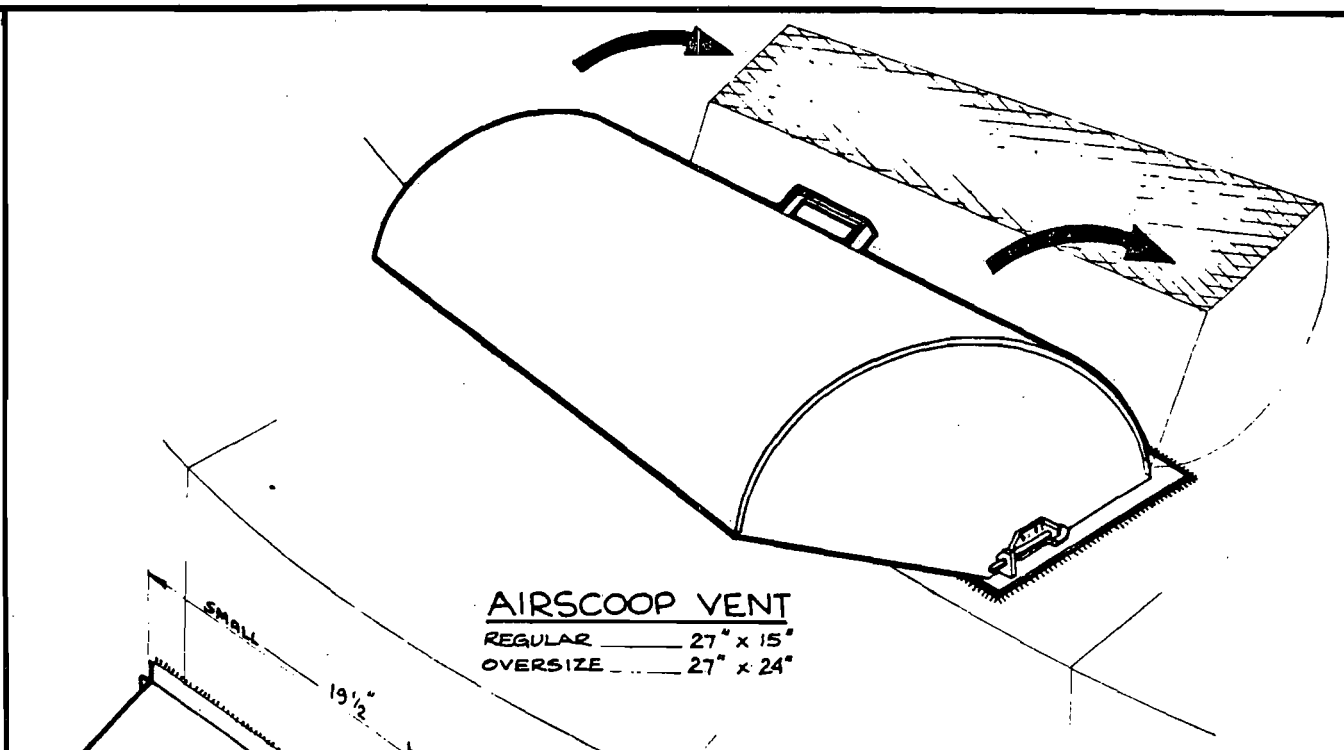
DWG. NO. MVS 112-1276



CORROSION GAUGE

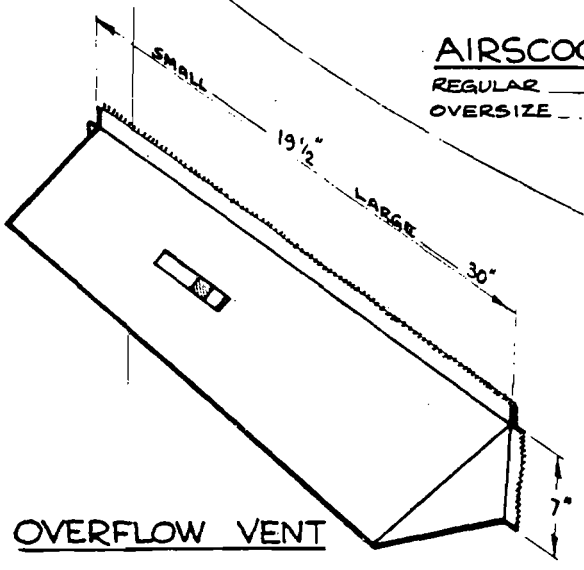


LADDER PAD



AIRSCOOP VENT

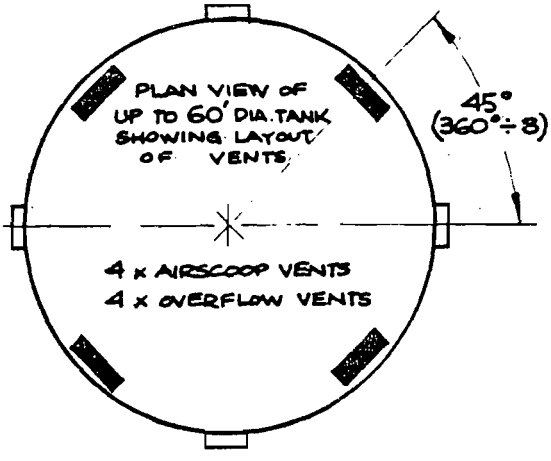
REGULAR _____ 27" x 15"
OVERSIZE _____ 27" x 24"

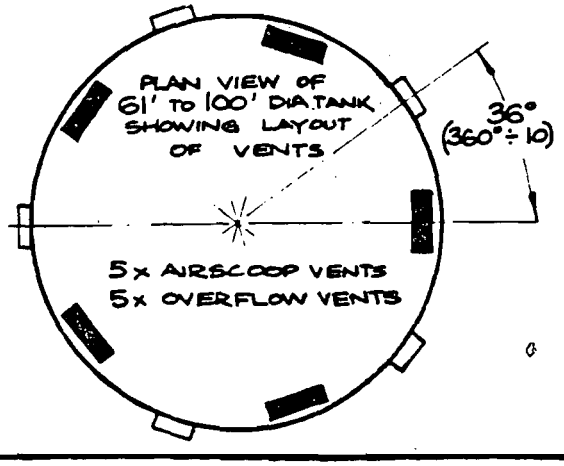


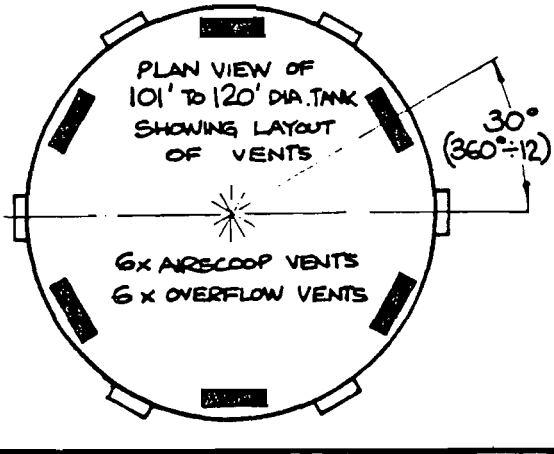
OVERFLOW VENT

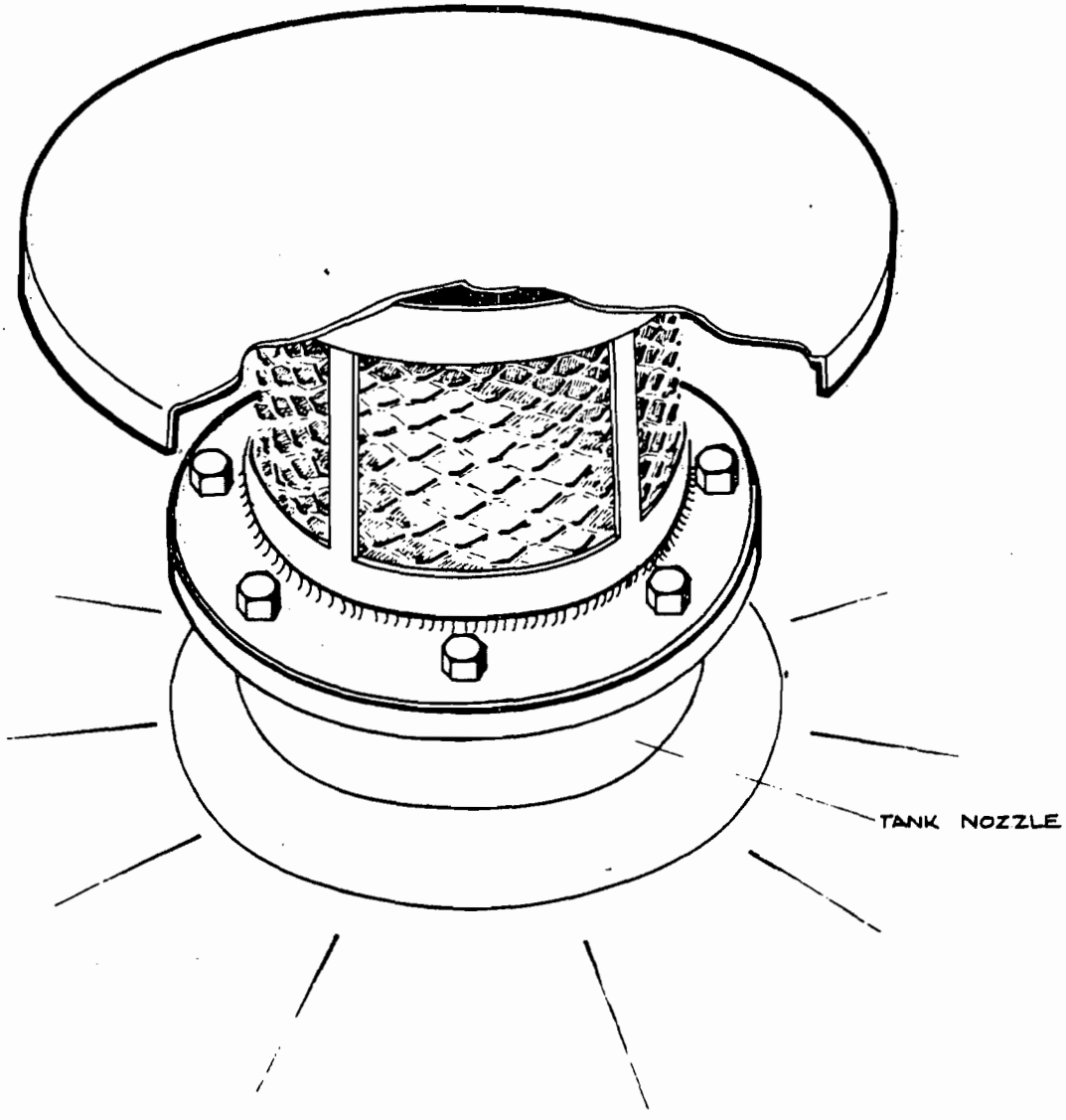
USE ONE OVERSIZE AIRSCOOP VENT ON EACH TANK FOR PERSONNEL ACCESS.

USE SMALL OVERFLOW VENTS ON TANK DIAMETERS UP TO 50' AND LARGE OVERFLOW VENTS THEREAFTER.



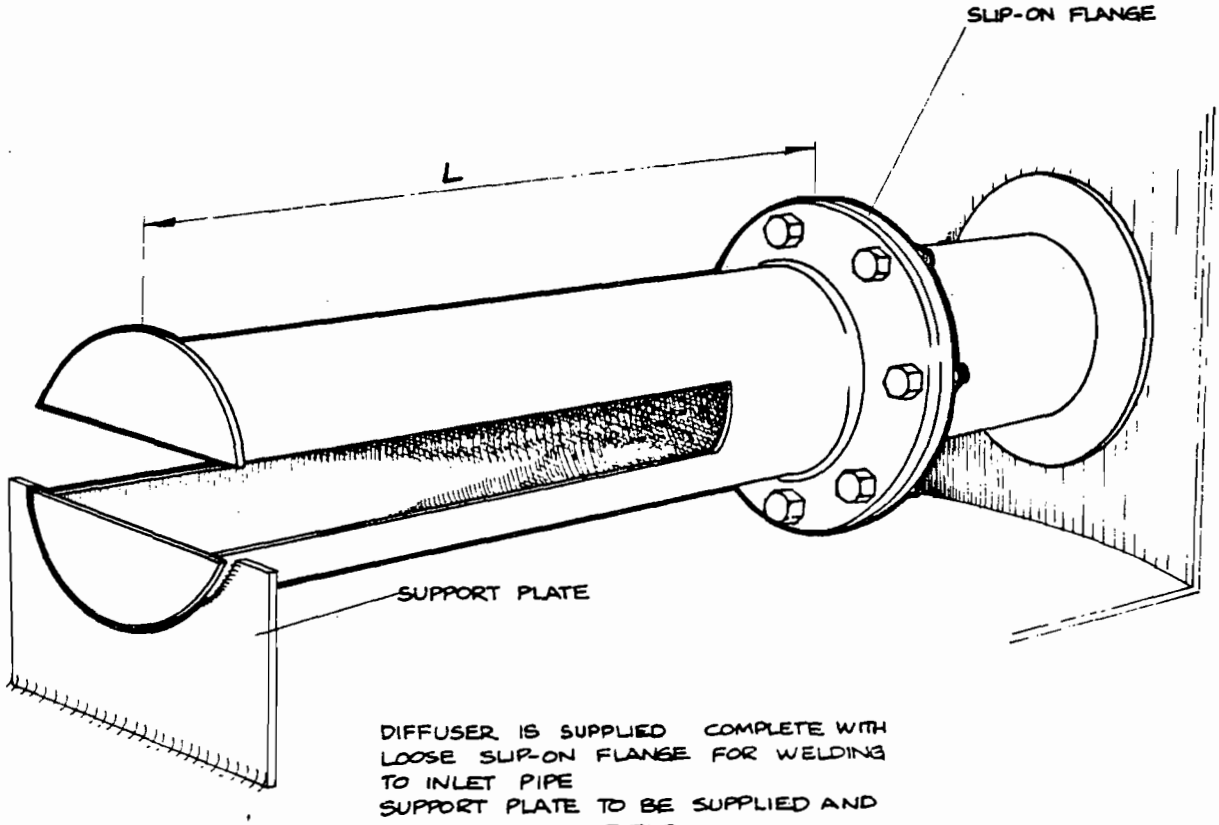






MUSHROOM VENT NUMBER	NOMINAL PIPE BORE
MV - 001	6" (ASA or BS)
MV - 002	8" " "
MV - 003	10" " "
MV - 004	12" " "
MV - 005	18" " "
MV - 006	24" " "
MV - 007	36" " "

TANK ROOF MUSHROOM VENT



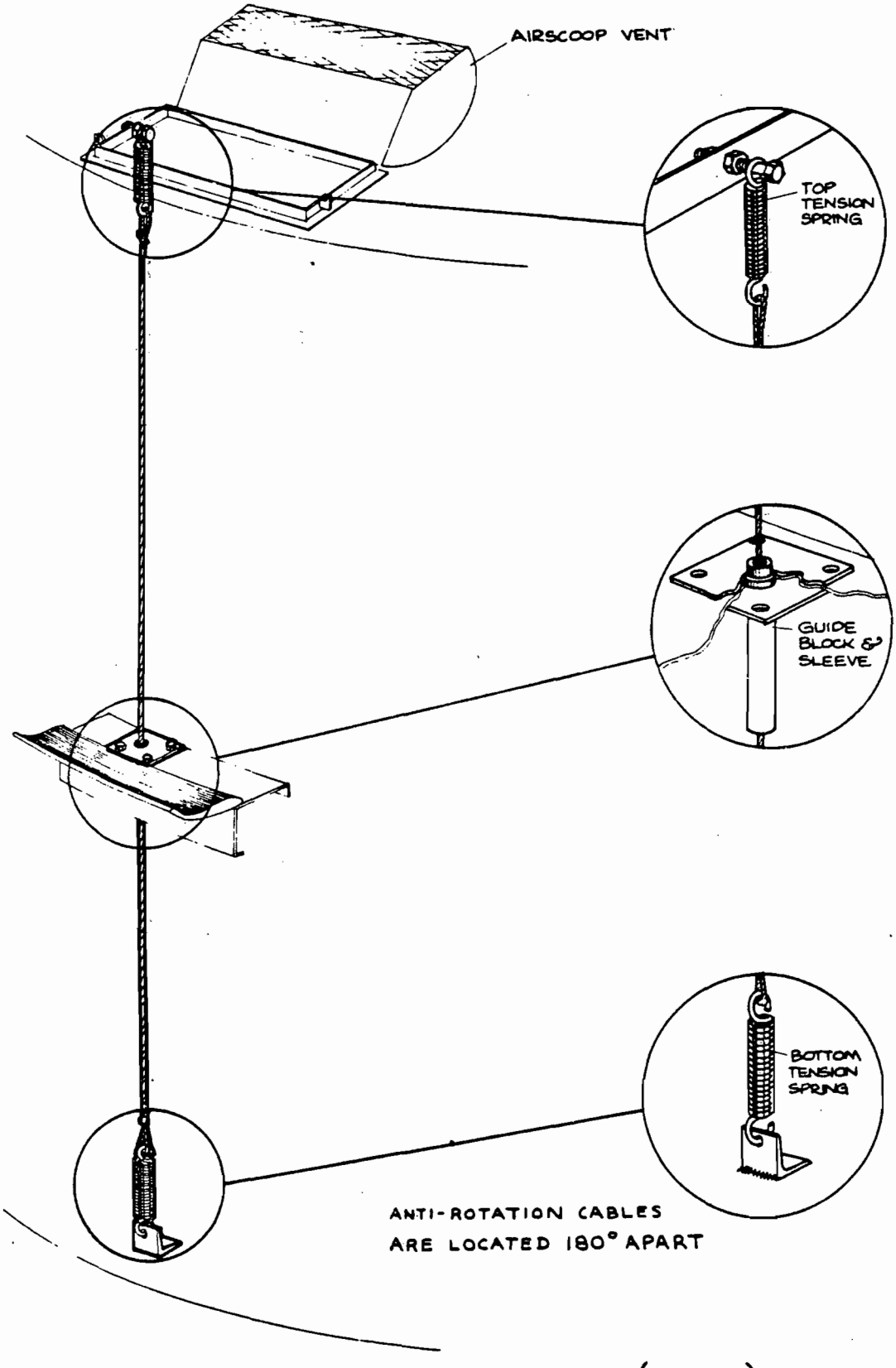
DIFFUSER IS SUPPLIED COMPLETE WITH LOOSE SLIP-ON FLANGE FOR WELDING TO INLET PIPE
SUPPORT PLATE TO BE SUPPLIED AND FITTED IN THE FIELD

DIFFUSER NUMBER	NOMINAL PIPE BORE	'L'
DIFF - 001	3"	30"
DIFF - 002	4"	30"
DIFF - 003	6"	30"
DIFF - 004	8"	30"
DIFF - 005	10"	30"
DIFF - 006	12"	30"
DIFF - 007	14"	30"
DIFF - 008	16"	30"
DIFF - 009	18"	30"
DIFF - 010	20"	30"

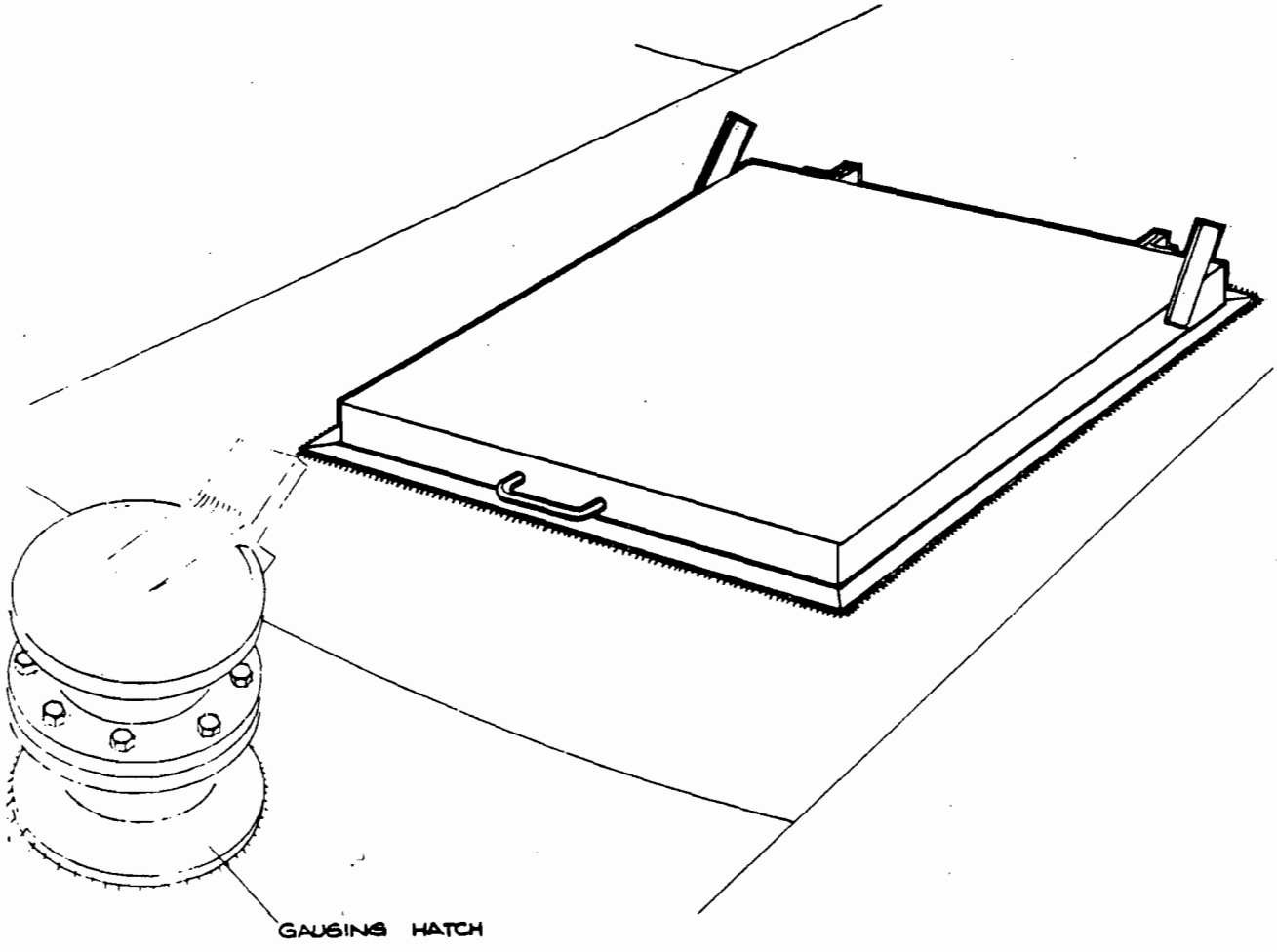
INLET DIFFUSER

MAYFLOWER VAPOR SEAL ACCESSORY
ANTI ROTATION CABLE

DWG. NO. MVS 116-1276



ANTI-ROTATION CABLE (2-OFF)



ROOF MANWAY