

PLAINTIFF'S EXHIBIT

CHV-756

SPECIFICATION NO. EP-246-M

CONSTRUCTION OF THE
EAST AND SOUTH OFF-PLOT
PIPEWAY STRUCTURES

EL PASO REFINERY

CHEVRON OIL COMPANY, WESTERN DIVISION
d/b/a STANDARD OIL COMPANY OF TEXAS

JANUARY 6, 1971

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- f) Review and approve field changes or material substitutions, or any other matter where COMPANY'S approval or agreement is required by this Specification.
- g) Negotiate with CONTRACTOR'S Construction Representative the amount of increase or decrease in compensation due CONTRACTOR arising from any Changes in the Work which COMPANY may authorize.

2.22 CONTRACTOR'S Construction Representative

CONTRACTOR shall maintain a Construction Representative in the field at all times who shall act in full charge of CONTRACTOR'S work and maintain field liaison between CONTRACTOR and COMPANY'S Construction Representative.

Examples of his functions are to:

- a) Represent CONTRACTOR in matters pertaining to construction quality, schedule and accounting practice.
- b) Represent CONTRACTOR during acceptance tests.
- c) Negotiate and approve for CONTRACTOR the amount of increase or decrease in compensation due CONTRACTOR arising from COMPANY'S authorized Changes in the Work to be performed by CONTRACTOR.

2.3 OTHER CONTRACTS

COMPANY reserved the right to let other contracts or perform other services in connection with the work. CONTRACTOR shall afford others equitable opportunities for the introduction and storage of their materials and the execution of their work and shall properly coordinate his work with theirs. If any part of CONTRACTOR'S work depends for proper execution upon existing work or work to be performed by others, CONTRACTOR shall inspect and measure such other work and promptly report to COMPANY if there are any discrepancies or defects therein which render it unsuitable for proper execution of CONTRACTOR'S work. Failure of CONTRACTOR to inspect and report any discrepancies or defects in such other work before performing the work hereunder which is dependent upon such other work shall constitute an acceptance thereof by CONTRACTOR.

2.4 CHANGE IN THE WORK

- 2.41 If COMPANY issues an order which it identifies as a "Change in the Work," as defined in Section 2.1 of the Terms and Conditions, CONTRACTOR shall not commence with the work so ordered until either (a) a fixed price for the "Change in the Work" is agreed upon, or (b) a written agreement has been reached between COMPANY and CONTRACTOR as to the basis to be used in evaluating the resulting change in the contract price, if any, or (c) COMPANY elects in writing to adjust the contract price as provided in the "Exhibit - Change in the Work."

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- 2.42 CONTRACTOR shall, within ~~five~~ (5) working days of the receipt of an order which is classified ~~as~~ a "Change in the Work," furnish COMPANY a statement of its proposal for appropriate adjustment occasioned thereby. After receiving CONTRACTOR'S proposal, COMPANY shall within five days either accept the proposal and direct CONTRACTOR to proceed therewith or elect to have the adjustment in contract price be evaluated in accordance with the "Exhibit - Change in the Work," or reject CONTRACTOR'S proposal. If COMPANY rejects CONTRACTOR'S proposal it may request a new proposal from the CONTRACTOR.
- 2.43 Once the amount or a basis for determining the amount is arrived at for a "Change in the Work," COMPANY shall issue a "Change in the Work" order either revising the contract price by such amount or specifying such basis.
- 2.44 COMPANY may issue drawings or instructions to "detail and illustrate the work," under Section 1.2 of the Terms and Conditions, which are not identified as a "Change in the Work." Should any supplementary drawings or instructions be, in the opinion of CONTRACTOR, a "Change in the Work," written notice thereof must be given to COMPANY within 5 days of the receipt of such instructions.
- If such written notice is given, CONTRACTOR shall not proceed with the work so ordered until: (a) COMPANY amends such instruction, (b) written agreement is reached between COMPANY and CONTRACTOR that such instruction is not a "Change in the Work," (c) written agreement is reached between COMPANY and CONTRACTOR that such instruction is a "Change in the Work" and the resulting change in the contract price, if any, is determined in the manner provided in Section 2.41 above, or (d) a written request to proceed is issued, as provided in Section 2.45 below.
- CONTRACTOR'S failure to give such written notice respecting any instruction to "detail and illustrate the work" under said Section 1.2 of the Terms and Conditions shall be deemed his acceptance of and agreement to perform such instruction without any change in the contract price.
- 2.45 If COMPANY and CONTRACTOR fail to agree as to whether or not such an instruction is a "Change in the Work," it may become necessary, in certain limited cases, for COMPANY to issue a written request for CONTRACTOR to proceed with the work without such agreement. In such cases, the change in the contract price, if any, shall be evaluated in accordance with "Exhibit - Change in the Work," if it is subsequently determined that such instruction constitutes a "Change in the Work;" and CONTRACTOR'S performance of the work shall not prejudice his claim that such instruction constitutes a "Change in the Work."

2.5 SCHEDULE

CONTRACTOR shall maintain a detailed construction schedule for all phases of work covered in this Specification.

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- 2.51 Construction schedule shall indicate, for each portion of work, the start of construction, job progress and completion date. Completion dates shall agree with any dates set forth on the Contract.
- 2.52 COMPANY'S Construction Representative will review the schedule with CONTRACTOR'S Construction Representative at periodic intervals to verify that work is being performed as scheduled. Modifications to the schedule which affect the completion date established in the Contract must be approved in writing by both CONTRACTOR and COMPANY.
- 2.53 CONTRACTOR shall submit monthly progress reports which shall state the percent of completion and expected final completion date of each phase of work. The format of the progress report will be developed with COMPANY'S Construction Representative.

2.6 WORK WEEK AND OVERTIME

- 2.61 CONTRACTOR shall pursue the field construction work on a 40-hour per week work schedule, unless modified in accordance with Section 2.64 or 2.65 below.
- 2.62 CONTRACTOR may, at his discretion, work such "incidental" overtime as he may deem practicable and necessary for the proper prosecution of the field work; "incidental" overtime is defined to mean overtime worked for CONTRACTOR'S convenience which is confined to a fraction of the total work force, usually small groups assigned to a specific task such as the completion of a concrete pour not finished during the working day scheduled for the total work force during that period, or a major equipment lift performed on a normally non-working day.
- 2.63 All costs of "incidental" overtime are covered by the basic contract price.
- 2.64 CONTRACTOR shall obtain approval of COMPANY not less than 10 days in advance before changing the field weekly work schedule.
- 2.65 COMPANY reserves the right to modify the field weekly work schedule stated in Section 2.61 above, after consultation with the various prime contractors employed on the site.
- 2.66 If the normal 40-hour per week field work schedule is increased by COMPANY pursuant to Section 2.65 above, the contract compensation shall be increased by the sum of the incremental overtime costs, defined below, for the field labor force directly engaged in the construction, erection and installation of the work hereunder, including craft foreman but no higher supervisory levels. The incremental overtime cost shall be the portion of the following costs for the scheduled overtime worked which would not otherwise have been incurred if the work performed during the scheduled overtime had been performed during the normal 40-hour work week:

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Wages, payroll taxes, premiums for Workmen's Compensation Insurance and benefits which CONTRACTOR must pay in accordance with government regulations or union agreements.

2.7 PLANT REGULATIONS

Prior to commencement of work, CONTRACTOR shall become familiar with the following Refinery Instructions:

- a) Refinery Instruction No. 1404 entitled "General Instructions to Contractor Working Within the Refinery."
- b) Refinery Instruction No. 1007 entitled "Union Business Agent Visits."

CONTRACTOR shall be responsible for compliance with the above regulations.

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SECTION 3 - PERFORMANCE OF WORK

3.1 WORK SPACE AND STORAGE AREA

COMPANY will assign space as directed by COMPANY'S Construction Representative for CONTRACTOR'S office, work space and storage area.

3.2 TEMPORARY CONSTRUCTION FACILITIES

3.21 CONTRACTOR shall supply and install all temporary facilities required for the prosecution of his work including, but not limited to, tool rooms, locker rooms, toilets, office with telephone, and storehouse. All temporary installations shall be subject to approval by COMPANY prior to installation.

3.22 In addition, CONTRACTOR shall provide as required for completion of the job any temporary equipment and/or material including, but not limited to, shoring, concrete forms, bracing, ladders, scaffolding, staging, drop cloths and tarpaulins.

3.23 CONTRACTOR shall maintain all temporary installations in a safe and adequate manner and remove them immediately upon completion of the work.

3.3 SURVEYING

3.31 CONTRACTOR shall perform all surveying necessary from base lines and bench marks established by COMPANY. The accuracy for all grades, elevations and plumbing of any structures and location of facilities described in this Specification shall be the responsibility of the CONTRACTOR.

3.32 CONTRACTOR shall preserve all permanent survey monuments and bench marks. In the event CONTRACTOR disturbs any permanent monuments or bench marks, they will be replaced by a Land Surveyor acting under COMPANY'S instructions; replacement cost will be deducted from the sums due or to become due the CONTRACTOR.

3.4 DRAWINGS AND DIMENSIONS

3.41 COMPANY will furnish to CONTRACTOR four copies of all pertinent standard specifications and construction drawings.

3.42 CONTRACTOR shall receipt for all drawings received and, except for one Contract set, shall return all drawings to COMPANY upon completion of job or when superseded by revised issues. CONTRACTOR shall maintain at all times in his field office a complete up-to-date file of all drawings furnished him.

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- 3.43 Upon completion of construction, CONTRACTOR shall mark a print of each major drawing to indicate any changes or deviations made in the actual installation. However, minor construction drawings such as structural details and small foundations need not be so marked. These marked drawings shall be turned over to COMPANY.

3.5 INSPECTION AND TESTING

3.51 General

CONTRACTOR shall be solely responsible for thorough inspection during construction and for the quality of the work. COMPANY will make such inspection as COMPANY may desire in order to check the progress and quality of the work, to see that CONTRACTOR'S employees are properly qualified in their respective crafts, that workmanship is of an acceptable grade, and that all requirements of this Specification are being met. Such inspection or any other inspection or testing by COMPANY shall not relieve CONTRACTOR of full responsibility for the work hereunder.

3.52 Welding Inspection

- 3.521 CONTRACTOR shall arrange for welding qualification tests at his own expense at Dickinson Laboratories, Inc. 201 N. Clark, El Paso, Texas.
- 3.522 The required qualification tests shall be the 3/8" Plate Test as described in Appendix II of Engineering Instruction 310 (see Appendix A.3 for copy of Eng. Inst. 310, Appendix II). The required welding positions are the vertical weld and overhead weld.
- 3.523 The face and root bend specimens shall be tested in the guided bend test jig described in Fig. Q-7 of the ASME Boiler and Pressure Vessel Code, Section IX, Welding Qualifications.
- 3.524 The convex surface of the bend specimens shall be examined for cracks or other open defects. Any specimen in which a crack or open defect is present, after bending, exceeding 1/8" measured in any direction shall be considered as having failed. Cracks which originate along the edges of the specimen during testing and that are minor in extent shall not be considered unless there is definite evidence that they result from slag inclusions or other internal defects.
- 3.525 The fractured surfaces of the nick-break test shall show complete penetration throughout the entire thickness of the weld, absence of oxide or slag inclusions, and a degree of porosity not to exceed six gas pockets per square inch of the total area of the weld surface exposed in the fracture, the maximum dimension of any such pocket not to be in excess of 1/16".

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3.526 If the welder fails in one of the test positions, he may be allowed to take an immediate retest by making two test pieces in the failed position. Both of the test pieces shall pass the test requirements.

3.527 If the welder fails in more than one position, he shall not be allowed to take a retest.

3.53 Concrete Samples

COMPANY may perform compression and slump tests on concrete. CONTRACTOR shall furnish samples (including the metal cylinder with top for compression test samples) taken in accordance with ASTM Specifications as may be requested for the following tests and inspections:

a) Compression Tests: Up to two cylinders from each ten cu. yd. of structural concrete placed each day.

b) Slump Tests: Periodic samples daily during the pouring of concrete.

3.6 CORRECTION OF DEFECTS

CONTRACTOR shall perform all necessary repair work to correct all defects and any damage caused thereby. When repair work is necessary due to faulty workmanship of CONTRACTOR or due to defective or unsatisfactory material furnished by CONTRACTOR, the cost of such repair work shall be borne by CONTRACTOR in the manner provided by Section 4.2 of the Terms and Conditions. Where a defect is due to defective material furnished by COMPANY, the correction of the defect and any damage caused thereby shall be performed by CONTRACTOR and the contract price shall be adjusted in accordance with the "Exhibit - Change in the Work" for such correction work.

3.7 CLEANING UP

During the course of the work, the CONTRACTOR shall keep a reasonable degree of order by disposing of accumulated rubbish and waste material and, at the completion of the work, the site shall be cleared of all debris, left-over tools, material and equipment which may have accumulated in the execution of the work. All temporary shops, storehouses, offices, toilets, etc., erected by CONTRACTOR shall be removed. Where the CONTRACTOR, after due notice, fails to keep the area of his work reasonably clean and safe, or fails to clean this area at the completion of the work, the COMPANY may perform this work and deduct the cost from the sums due or to become due the CONTRACTOR.

3.8 COMPLETION

The work will be considered "complete" when CONTRACTOR has performed all work specifically stated or manifestly implied in this Specification.

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SECTION 4 - CONSTRUCTION

This Section amplifies the construction details for some portions of CONTRACTOR'S work.

4.1 SHORING AND BRACING OF EXCAVATIONS

All excavations greater than five feet in depth shall be:

4.11 Shored and braced. Appendix A.1 illustrates the minimum required shoring and bracing.

4.12 Or excavated to 1.5 to 1.0 slopes, horizontal to vertical.

4.2 COMPACTION OF BACKFILL

4.21 Backfill shall be placed in horizontal lifts not exceeding six inches in loose depth.

4.22 All backfill material shall be compacted to at least a dry density of 95% of the maximum dry density as determined by the A.A.S.H.O. T-180-57 Method of Compaction. In no case shall fill material be water-settled.

4.23 All excavated areas shall be backfilled to original grade.

4.24 All excess excavated materials shall be disposed of at a site within the refinery property approximately one mile from the construction site.

4.3 REINFORCED CONCRETE

4.31 Placing and curing concrete shall be in accordance with Specification EG-850. Paragraph 9.0 (of Specification EG-850) entitled "Cold Weather Protection" shall be strictly enforced.

4.32 Material and fabrication of reinforcing shall conform to Specification EG-516.

4.33 Ready mix concrete shall be furnished in accordance with ASTM Specification C-94.

4.34 If field mix concrete is used, materials to be used and the procedure to be followed in proportioning and mixing Portland Cement Concrete in the field shall conform with Specification EG-851. Consistency and workability shall be in accordance with Specification EG-851 with a minimum ultimate compressive strength of 3000 psi after 28 days of curing.

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Method of measuring materials shall be such that the proportions can be accurately controlled and easily checked at any time during the work.

4.4 STRUCTURAL STEEL

4.41 Fabrication and Painting

CONTRACTOR shall fabricate and paint all structural steel in accordance with Specification EG-398.

4.42 Steel Erection

All work shall comply with latest editions of the AISC Code of Standard Practice for steel building and bridges, AISC Specifications for design, fabrication and erection of structural steel for buildings and AWS Standard Code for arc and gas welding in building construction.

4.5 ANCHOR BOLTS

All anchor bolts in the foundations shall be provided with sleeves in accordance with Drawing GB-Q-68922. After setting the pipeway structures, these sleeves shall be filled with grout. Anchor bolts shall be accurately placed and securely tied to avoid movement during concrete placement.

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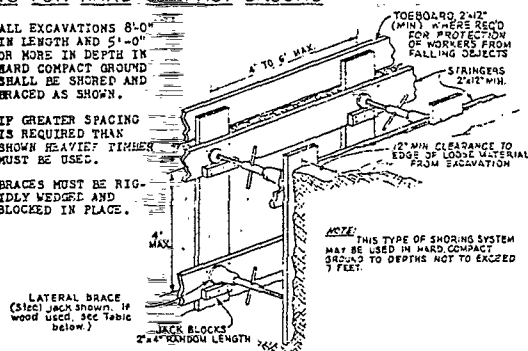
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SHORING FOR HARD ~~COM~~ACT GROUND

NOTES:

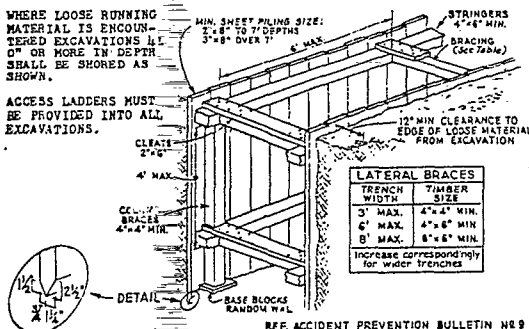
1. ALL EXCAVATIONS 8'-0" IN LENGTH AND 5'-0" OR MORE IN DEPTH IN HARD COMPACT GROUND SHALL BE SHORED AND BRACED AS SHOWN.
2. IF GREATER SPACING IS REQUIRED THAN SHOWN HEAVIER TIMBER MUST BE USED.
3. BRACES MUST BE RIGIDLY WEDGED AND BLOCCED IN PLACE.



SHORING FOR LOOSE RUNNING MATERIAL

NOTES:

1. WHERE LOOSE RUNNING MATERIAL IS ENCOUNTERED EXCAVATIONS 41 0" OR MORE IN DEPTH SHALL BE SHORED AS SHOWN.
2. ACCESS LADDERS MUST BE PROVIDED INTO ALL EXCAVATIONS.



REF. ACCIDENT PREVENTION BULLETIN NO. 9

7.02

APRIL, 1961

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A.2 CONSTRUCTION DRAWINGS

<u>DRAWING NUMBER</u>	<u>TITLE</u>
PA-13-28117-2	Plan of Overhead Stanchions: "C", East & South Pipeways
PA-13-28119-1	Foundation Layout & Details: East & South Pipeways
PD-13-28120-1	Foundation Reinforcing Schedule: East & South Pipeways
PA-13-28121-1	Elevations & Details: East Pipeway Stanchions E-1 thru E-6
PD-13-28122-1	Stanchion Reinforcing Schedule: East Pipeway Stanchions E-1 thru E-6
PA-13-28123-1	Elevations & Details: South Pipeway Stanchions S-2 thru S-5
PD-13-28124-1	Stanchion Reinforcing Schedule: South Pipeway Stanchions S-2 thru S-5
PA-13-28125-1	Elevations & Details: South Pipeway Stanchion S-1
PD-13-28126-1	Stanchion Reinforcing Schedule: South Pipeway Stanchion S-1
PA-13-28127-1	Steel Layout & Details: East & South Pipeway
GB-Q68922-11	Standard Anchor Bolts
PD-27220-2	Rough Grading Plan, Plant 41, Control House & Gasoline Splitter Area

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A.3 STANDARD SPECIFICATIONS AND REFINERY INSTRUCTIONS

<u>SPECIFICATION NUMBER</u>	<u>TITLE</u>
EG-398	Steel Fabrication
EG-516	Reinforcing Steel Fabrication
EG-850	Placing and Curing Concrete
EG-851	Concrete Proportioning and Mixing
EG-1048	Small Tools and Equipment
EG-1049	Supplies

<u>REFINERY INSTRUCTIONS NUMBER</u>	<u>TITLE</u>
Refinery Instruction No. 1007	Union Business Agent Visits
Refinery Instruction No. 1404	General Instructions to Contractor Working Within the Refinery

<u>ENGINEERING INSTRUCTION NUMBER</u>	<u>TITLE</u>
Engineering Instruction No. 310 (Appendix II)	Qualification of Welders

THIS PAGE ENDS APPENDIX A.3