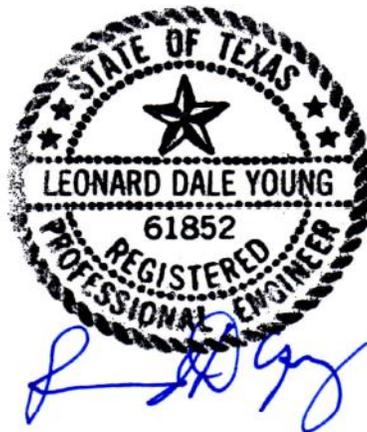




**8601 Midcrown
WINDCREST, TEXAS 78239**

**2020 STREET IMPROVEMENTS- PHASE II MIDCROWN DRIVE
WALZEM RD TO GOLFCREST DRIVE PROJECT
(Re-Bid)
Bid Documents**



3-13-2020

Bid Closing Date: 2:00 PM CST, April 03, 2020

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LEGAL NOTICE

Sealed bids will be received by the City of Windcrest ("WINDCREST"), at the WINDCREST City Hall; 8601 Midcrown Windcrest, Texas 78239, until 2:00 PM CST, April 03, 2020, for the project entitled: **2020 STREET IMPROVEMENTS- PHASE II MIDCROWN DRIVE WALZEM RD TO GOLFCREST DRIVE** project. The City of Windcrest is seeking a qualified and experienced contractor to perform street improvement on streets within the City maintenance.

Copies of the Plans, Contract Documents and Specifications may be obtained from the City of Windcrest website at www.ci.windcrest.tx.us/. Potential Bidders must call the offices of Young Professional Resources (City Engineer) at 210-590-9215 to register so that all addendums or additional information can be forwarded to Potential Bidders. If Bidder is not registered and does not receive addendums or additional information may be considered grounds for rejection of his/her bid.

A Non-Mandatory Pre-Bid Conference will be held at the WINDCREST City Hall, located at 8601 Midcrown Windcrest, Texas 78239, on March 25, 2020 at 10:00 A.M. CST.

This project requires a contractor to provide and install all new materials, laborer and equipment required to make the street improvements in accordance with project specifications and standards. Contractor shall acquire as a part of this proposal all permits required and perform all testing required for this project. Work shall be performed in accordance with all City, local, state and federal regulations as required for performing this type of work.

Each bid shall be enclosed in a sealed envelope and shall be plainly marked on the outside of the envelope: **2020 STREET IMPROVEMENTS- PHASE II MIDCROWN DRIVE WALZEM RD TO GOLFCREST DRIVE**. This envelope shall be addressed to the City Manager; City of Windcrest; 8601 Midcrown Windcrest, Texas 78239. Each bid shall constitute an offer to the WINDCREST, as outlined therein, and shall be irrevocable for at least ninety (90) days after the time announced for the opening thereof.

INSTRUCTIONS TO BIDDERS

Project Summary:

The City of Windcrest is seeking a qualified and experienced contractor to utilize the asphalt mill and overlay to perform street improvement on streets in the City. The Contractor shall provide and install all new materials, laborer and equipment required to make the street improvements utilizing in accordance with project specifications and standards and the newly improved streets must be operational and usable. The contractor shall provide appropriate levels of insurance and show proof of insurance coverages.

In addition to street improvements CPS Energy is joint bidding its gas utility improvements and is seeking a qualified and experienced contractor to provide and install all new materials, laborer and equipment required to make the street improvements utilizing in accordance with project specifications and standards. The contractor shall provide appropriate levels of insurance and show proof of insurance coverages

Intent

It is the intention of the City of Windcrest to award and enter into a contract with one (1) contractor to perform the work outline in this document.

The successful contractor must be able to mobilize with personnel, equipment and materials to begin work within 10 days after issuance of a task order.

INSTRUCTIONS TO BIDDERS

1. Preparation of Bids:

Unless otherwise directed submit one (1) original and two (2) copies bids on the prescribed forms or copies thereof. Prepare bids in accordance with the Contract Documents including but not limited to the Notice to Bidders, the Instructions to Bidders, and any instructions on the Proposal and Bid Sheet. All blank spaces on the Bid Sheet must be filled in, in ink, in both words and figures as required, with amounts extended and totaled. Written amounts shall govern if different from figures. If optional or alternate items are included in the Proposal and bidder does not wish to bid these items, enter the words NO BID in the appropriate space. Alternate bids will not be considered unless specifically requested in the proposal form. Any statement or letter qualifying the bid will be cause for rejection.

2. Owner:

The OWNER reserves the right to reject any or all bids and to waive informalities and irregularities in bidding. Contract award will be made to the responsible bidder who, in the OWNER's judgment, will be most advantageous to the OWNER and result in the best and most economical completion of the project.

3. Bidders:

Bidders desiring further information or interpretation must request such information or interpretation from the ENGINEER. Should a Bidder discover a discrepancy or an omission in plans or specifications, he should at once notify the ENGINEER so that an addendum can be issued. No explanation or interpretation other than an addendum issued by the ENGINEER will be considered official or binding.

4. Award of Contract:

The OWNER reserves the right to reject any and all bids. Unless the OWNER rejects all bids, an award will be made as quickly as possible consistent with the time required to analyze the bids.

5. Conditions of Work:

Bidders are expected to be fully informed of construction and labor conditions under which the work will be performed, and to have thoroughly reviewed the plans, contract documents and specifications. Failure to do so will not relieve a successful bidder of any obligation to furnish material and labor necessary to complete the project.

6. Time of Completion:

Attention is directed to the proposal wherein either a blank space is provided for the bidder to enter the number of calendar days within which he agrees to complete the work, unless the completion time is specified by the OWNER.

7. Substitutions:

Where materials or equipment are specified by a trade or brand name, it is not the intention of OWNER to discriminate against an equivalent product of another manufacturer, but to set a definite standard of quality or performance, and to establish an equivalent basis for the evaluation of bids. In preparing his bid, each bidder is expected to include in his base bid the cost of the items so specified.

8. Telegraphic or Telephonic Modifications:

Any bidder may modify his bid by telegraphic or telephonic facsimile communication at any time prior to the scheduled closing time for receipt of bids, provided such telegraphic or telephonic facsimile communication is received by OWNER prior to said closing time, and provided further, that OWNER is satisfied that a written confirmation of such telegraphic or telephonic facsimile modifications over the signature of the bidder was mailed prior to such closing time.

9. Qualifications of Bidders:

Proposals must be accompanied by a statement of the qualifications of the Bidder to properly execute the work. In addition, complete information on any work which the Bidder failed to complete or abandoned within one year period to date of proposal should be included.

10. Delivery of Proposals:

It is the bidder's responsibility to deliver his Proposal at the proper time to the proper place. The fact that a Proposal was dispatched will not be considered. The bidder must have the Proposal actually delivered.

11. Number of Signed Sets of Documents:

Agreement and will be prepared in not less than two counterpart (original signed) sets. OWNER will furnish CONTRACTOR two sets of conforming Contract Documents.

12. Sales Tax:

Owner is exempt from Texas sales and use taxes pursuant to Texas Tax Code §151.309 as a political subdivision of the State of Texas. Owner shall provide Contractor with a completed Texas Sales and Use Tax Exemption Certification as evidence of the applicability of such exemption and accordingly, Contractor shall not collect Texas sales and use taxes from Owner with respect to this contract. Contractor and all subcontractors to Contractor shall issue a Texas Sales and Use Tax Exemption Certification with respect to, and shall not pay Texas sales and use taxes on, all purchases of the following items that are exempt from Texas sales and use taxes pursuant to

Texas Tax Code §151.311: (i) tangible personal property that will be incorporated into Owner's realty; (ii) tangible personal property that is necessary and essential for the performance of this contract and is consumed entirely on the job site; and (iii) taxable services for use in the performance of this contract that are performed at the job site and are either integral to the performance of this contract or expressly required to be provided by this contract. In addition, Contractor and all subcontractors to Contractor (i) shall not include any provisions for Texas sales and use taxes with respect to such exempt items in any bid or contract amount, and (ii) shall pass on to Owner cost savings due to the exempt status of such exempt items. Contractor's contracts with all subcontractors to Contractor shall include the foregoing provisions regarding the exemption of Texas sales and use taxes.

13. Questions:

A. Submit questions about the bidding instruments to the Engineer by no later than seven (7) full calendar days prior to the bid opening time and date.

Primary Contact Person: Leonard D. Young, P.E

Tele: 210-590-9215

Email: lyoung@yprconsulting.com

Secondary Contact Person: Jaimie Noriega, P.E

Tele: 210-590-9215

Email: Jaimie.noriega@yprconsulting.com

**Address: Young Professional Resources
8209 Roughrider Drive
Suite 101
Windcrest, Texas 78239**

B. Necessary replies will be issued to bidders of record via email, fax, and web posting as addenda, which becomes a part of the bidding instruments. Oral instructions do not form a part of the bidding instruments.

14. RECEIPT AND OPENING OF BIDS:

The City of Windcrest, Texas (hereinafter called OWNER), invites bids on the form attached hereto, all blanks of which must be appropriately filled in using type or legibly written in black ink.

The OWNER may consider informal and non-responsive, any bid not prepared and submitted in accordance with the provisions hereof and may waive any informalities or reject any and all bids. Any bid may be withdrawn prior to the above scheduled time for the opening of bids or authorized postponement thereof. Any bid received after the time and date specified shall not be considered. No BIDDER may withdraw a bid within at least ninety (90) days after the actual date of the opening thereof.

15. LOBBYING OF CITY COUNCIL MEMBERS OR STAFF

The lobbying of City Council Members or City Staff is prohibited and may be used as grounds for disqualifications of Bidders who do so.

16. INSPECTION OF SITE AND DOCUMENT REVIEW

Each BIDDER shall visit the site of the proposed work and fully acquaint himself with the existing conditions there relating to construction and labor and shall fully inform himself as to the facilities involved, the difficulties and restrictions attending the performance of the Contract. The BIDDER should thoroughly examine and familiarize himself with the Technical Specifications, and all other Contract Documents. The Contractor, by the execution of the Contract, shall in no way be relieved of any obligation under it due to his failure to receive or examine any form or legal instrument, or to visit the site and acquaint himself with the conditions there existing and the OWNER will be justified in rejecting any claim for extra time, or compensation, or both, based on facts regarding which Contractor should have been on notice as a result thereof.

17. PREPARATION OF BID ON OWNER'S BID PROPOSAL FORMS:

These Contract Documents include a complete set of bidding documents. The BIDDER shall copy all documents listed in the table of contents under the heading BID PROPOSAL and shall submit his bid on these forms. A bid shall be comprised of the BID PROPOSAL completed by the BIDDER, plus supplemental information required by the specifications and documents, or deemed necessary by the BIDDER, to fully describe his offering.

If any of the information submitted as part of the bid is considered to be proprietary by the BIDDER, he shall identify such in his bid.

- a. Preparation. Each bid shall be carefully prepared using the proposal and proposal data forms included as a part of the bidding documents. Entries on the proposal and proposal data forms shall be typed, using dark black ribbon, or legibly written in black ink. All prices shall be stated in words and figures except where the forms provide for figures only. In case of discrepancy, the amount shown in words will govern.

The BIDDER shall acknowledge, in the space provided in the proposal form, receipt of each addendum issued for the specifications and documents during the bidding period.

The BIDDER shall assemble all drawings, catalog data, and other supplementary information necessary to thoroughly describe materials and equipment covered by the proposal and shall attach such supplemental information to the copies of the specifications and documents submitted.

- b. Signatures. Each BIDDER shall sign the proposal with his usual signature and shall give his full business address. The BIDDER's name stated on the proposal shall be the exact legal name of the firm. The names of all persons signing should also be typed or printed below the signature.

Proposals by partnerships shall be signed with the partnership name followed by the signature and designation of one of the partners or other authorized representative. A complete list of the partners shall be included with the proposal.

Proposals by a corporation shall be signed in the official corporate name of the corporation, followed by the signature and designation of the president, secretary, or other person authorized to bind the corporation.

A proposal by a person who affixes his signature the word "president," "secretary," "agent," or other designation, without disclosing his principal, will be rejected. Satisfactory evidence of the authority of the officer signing in behalf of the corporation shall be furnished. Bidding corporations shall designate the state in which they are incorporated and the address of their principal office.

- c. Submittal. The original proposal (and its accompanying copies) shall be transmitted to arrive at the designated address not later than the date and time stipulated in the Legal Notice and Invitation to Bid.

Bids are to be in a sealed envelope clearly marked **“2020 STREET IMPROVEMENTS- PHASE II MIDCROWN DRIVE WALZEM RD TO GOLFCREST DRIVE PROJECT”** and hand delivered, delivered by U.S. Postal Services or delivered by courier service to **City Manager, City of Windcrest, 8601 Midcrown, Windcrest, Texas 78239** prior to the closing time. Faxed or emailed bids will not be opened or accepted and will be returned to sender.

Each bid must be submitted in a sealed envelope bearing on the outside the name of the BIDDER, his address, and the name of the project for which the bid is submitted. If forwarded by mail, the sealed envelope containing the bid must be enclosed in another envelope addressed as specified in the bid form.

18. METHOD OF BIDDING:

Prices shall be firm, not subject to qualification, condition or adjustment. Prices shall be in United States dollars. Prices shall be lump sum except where unit prices are requested by the bid forms. If unit price items are required by the proposal, the unit prices for each of the several items in the proposal of each BIDDER shall include its pro-rata share of overhead so that the sum of the products obtained by multiplying the quantity shown for each item by the unit price bid represents the total bid. Any bid not conforming to the requirement may be rejected as informal and non-responsive. The special attention of all BIDDERS is called to this provision, for should conditions make it necessary to revise the quantities, no limit will be fixed for such increased or decreased quantities nor extra compensation allowed, provided the net monetary value of all such additive and subtractive changes in quantities of such items of work pursuant to public competitive bidding statutes (i.e., difference in cost) shall not increase or decrease the original contract price by more than twenty-five (25%) percent. A proposed decrease only that exceeds twenty-five (25%) percent of the original contract price must be agreed to in advance by the Contractor.

19. DISCLOSURE BY BIDDER:

Each BIDDER shall submit with the bid documents, on the form furnished for that purpose, his Pre-Bid Disclosure Statement showing his experience record in performing the type of work embraced in the contract, his organization and equipment available for the work contemplated, and, when specifically requested by the OWNER, a detailed financial statement. The OWNER shall have the right to take such steps as it deems necessary to determine the ability and responsibility of the BIDDER to perform his obligations under the Contract and the BIDDER shall be responsive in furnishing the OWNER all such information and data for this purpose as it may request. OWNER reserves the right to reject any bid where an investigation of the available evidence or information does not satisfy the OWNER that the BIDDER is responsible to carry out properly the terms of the Contract. This shall also apply to any proposed subcontractor(s).

20. SUBCONTRACTS:

The BIDDER is specifically advised that any person, firm, or other party to whom it is proposed to award a subcontract under this contract must be acceptable to the OWNER, and that a Pre-Bid Disclosure Statement for each proposed subcontractor must also be submitted with the bid documents.

A minimum of 50% of all work performed must be performed by the Prime Contractor. Items such as signs, pavement marking, concrete work, barricading can be subcontracted.

21. BID SECURITY:

Each bid must be accompanied by cash, certified or cashier's check, or a bid bond prepared on the form of the bid bond attached hereto, duly executed by the BIDDER as principal and having as surety therein a surety company approved by the OWNER, authorized to do business in the State of Texas, in the amount of not less than five (5%) percent of the bid. Such cash, checks, or bid bonds will be returned to all except the three lowest BIDDERS within fifteen (15) days after the opening of bids, and the remaining cash, checks, or bid bonds will be returned promptly after the OWNER and the accepted BIDDER have executed the contract or if no award has been made, within thirty (30) days after the date of the opening of bids. The bid security will be returned upon demand of the BIDDER at any time thereafter, so long as he has not been notified of the acceptance of his bid.

22. ADDENDA AND INTERPRETATIONS:

No oral interpretations by OWNER and its representatives shall be binding upon OWNER as to the meaning of the plans, technical specifications, contract documents, or other pre-bid documents.

Every request for such interpretation should be made in writing, addressed to Young Professional Resources, City Engineer and must be received at least five (5) days prior to the date fixed for the opening of bids in order to be considered. Faxes or emails are permissible however, receipt of such documents shall be confirmed by bidder calling Leonard D. Young and confirm the receipt of said document. Mr. Young is the Owner's representative for this project and may be contacted at:

Tele: 210-590-9215 Email: lyoung@yprconsulting.com

**Address: Young Professional Resources
8209 Roughrider Drive
Suite 101
Windcrest, Texas 78239**

Any and all such interpretations and any supplemental instructions will be in the form of written addenda to the specifications which, if issued, will be posted on the City's website no later than five (5) days prior to the date fixed for opening of bids, and will be mailed by overnight delivery or certified mail with return receipt requested to all prospective BIDDERS (at the respective addresses furnished for such purposes), not later than three (3) days prior to the date fixed for opening of bids. It will be the BIDDER's responsibility to inquire as to any addenda issued and failure of any BIDDER to receive any such addenda or interpretation shall not relieve such

BIDDER from any obligation under his bid as submitted. All addenda so issued shall become part of the contract documents.

Any exceptions by the BIDDER to the plan, technical specifications, contract documents, or other pre-bid documents will not be permitted at the time of submitting the Bid Proposal to the OWNER and any exceptions taken by BIDDER will automatically deem the bid conditional and non-responsive and subject to rejection.

23. TELEGRAPHIC MODIFICATION:

Telegraphic and/or telefax or electronic communication will not be accepted.

24. TIME FOR RECEIVING BIDS:

Bids received prior to the advertised hour of opening will be securely kept sealed. The officer whose duty it is to open them will decide when the specified time has arrived, and no bid received thereafter will be considered; except that when a bid arrives by mail after the time fixed for opening, but before the reading of all other bids is completed, and it is shown to the satisfaction of the OWNER that the non-arrival on time was due solely to delay in the mails for which the BIDDER was not responsible, such bid will be received and considered.

25. OPENING OF BIDS:

At the time and place fixed for the opening of bids, the OWNER will cause to be opened and publicly read aloud every bid received within the time set for receiving bids, irrespective of any irregularities therein. BIDDERS and other persons properly interested may be present, in person or by representative.

26. WITHDRAWAL OF BIDS:

Bids may be withdrawn on written, telegraphic, or telefax request dispatched by the BIDDER in time for delivery in the normal course of business to the time fixed for opening; provided, that written confirmation of any telegraphic withdrawal over the signature of the BIDDER is placed in the mail and postmarked prior to the time set for bid opening. The bid security of any BIDDER withdrawing his bid in accordance with the foregoing conditions will be returned promptly.

27. AWARD OF CONTRACT: REJECTION OF BIDS:

The contract will be awarded to the responsive and responsible BIDDER submitting the lowest bid complying with the conditions of the Legal Notice and Invitation to Bid. The BIDDER to whom the award is made will be notified at the earliest possible date. The OWNER, however, reserves the right to reject any and all bids and to waive any informality in bids received whenever such rejection or waiver is in its interest.

Bids shall be awarded base upon best value and not lowest cost. The contract if awarded will be awarded to the responsible bidder whose bid will be most advantageous to City of Windcrest, price and other factors considered. City of Windcrest will make the determination.

Bids will be evaluated in accordance with best value. Time is of the essence and shall be one factors considered along with cost and contractors ability and experience in performing similar work.

Bidders are expected to examine the drawings, specifications, Schedule, and all instructions. Failure to do so will be at the bidder's risk.

Each bidder shall furnish the information required by the bid form. The bidder shall sign the bid and print or type his name on the Schedule and each Continuation Sheet thereof on which bidder makes an entry. Any modifications or other changes to this bid package must be initialed by the person signing the bid. Bids signed by an agent are to be accompanied by evidence of his or her authority unless such evidence has been previously furnished to the issuing office

28. EXECUTION OF AGREEMENT: PERFORMANCE AND PAYMENT BOND:

Subsequent to the award and within ten (10) days after the prescribed forms are presented for signature, the successful BIDDER shall execute and deliver to the OWNER a Construction agreement in the form included in the contract documents in such number of copies as the OWNER may require.

Having satisfied all conditions of award as set forth elsewhere in these documents, the successful BIDDER shall, within the period specified in the preceding paragraph, furnish a Performance Bond and Payment Bond, in accordance with the following parameters:

- a. For a Contract in excess of \$100,000.00, a Performance Bond shall be executed in the full amount of the Contract conditioned upon the faithful performance of the Work in accordance with the plans, specifications, and Contract Documents. Said Bond shall be solely for the protection of the Owner.
- b. For a Contract in excess of \$25,000.00, a Payment Bond shall be executed in the full amount of the Contract, solely for the protection of all proper claimants supplying labor and material in the prosecution of the Work provided for in the Contract, for the use of each such claimant perfecting a proper claim.

When bonds are required, they shall serve as security for the faithful performance of the contract, and for the payment of all persons, firms or corporations to whom the Contractor may become legally indebted for labor, materials, tools, equipment, or services of any nature including utility and transportation services, employed or used by him in performing the work. Such bonds shall be in the same form as that included in the contract documents and shall bear the same date as, or a date subsequent to that of the Construction Agreement. The current power of attorney for the person who signs for any surety company shall be attached to such bonds. These bonds shall be signed by a guaranty or surety company legally authorized to do business in the State of Texas.

The failure of the successful BIDDER to execute such agreement and to supply the required bonds and insurance certificates within ten (10) days after the prescribed forms are presented for signature, or within such extended period as the OWNER may grant in writing, based upon reasons determined sufficient by the OWNER, shall constitute a default, and the OWNER may either award the contract to the next lowest responsive and responsible BIDDER or re-advertise for bids, and may charge against the defaulting BIDDER the difference between the amount of the defaulted bid and the amount for which a contract for the work is subsequently executed, irrespective of whether the amount thus due exceeds the amount of the bid bond. If a more favorable bid is received by re-advertising, the defaulting BIDDER shall have no claim against the OWNER for a refund."

CONTRACTOR shall furnish Performance and Payment Bonds, each in an amount at least equal to the Contract Price, as security for the faithful performance and payment of all CONTRACTOR's obligations under the Contract Documents. These bonds shall remain in effect at least until one year after the date when final payment becomes due, except as otherwise provided by Law or Regulation, or by the Contract Documents. CONTRACTOR shall also furnish such other Bonds as may be required by the Supplementary General Conditions. All Bonds shall be in the forms prescribed by Law or Regulation, or by the Contract Documents, and be executed by such sureties as are authorized to do business in the State of Texas. All Bonds signed by an agent must be accompanied by a certified copy of the authority to act.

If the surety on any Bond furnished by CONTRACTOR is declared a bankrupt, or becomes insolvent, or its right to do business is terminated in any state where any part of the project is located, or it ceases to meet the requirements of paragraph 5.1, CONTRACTOR shall within five days thereafter, substitute another Bond or Surety, both of which must be acceptable to OWNER."

29. LIQUIDATED DAMAGES FOR FAILURE TO ENTER INTO CONTRACT:

The successful BIDDER, upon his failure or refusal to execute and deliver the contract and insurance certificates required within ten (10) days after the Notice of Award, shall forfeit to the OWNER, as liquidated damages (and not as a penalty) for such failure or refusal, the security deposited with his bid.

30. TIME OF COMPLETION AND LIQUIDATED DAMAGES:

BIDDER must agree to commence work on or before a date to be specified in a written "Notice to Proceed" issued by the OWNER and to fully complete the first task order issued within 195 consecutive calendar days agreed upon thereafter, as provided in Article 3 of the Construction Agreement. Calendar days for future task orders will be agreed upon between Contractor and Owner.

BIDDER must agree also to pay as mutually agreed to liquidated damages, and not as a penalty, the sum of \$500.00 per day for each consecutive calendar day thereafter.

31. EQUIPMENT AND MATERIALS:

The bidder represents that the merchandise to be furnished under this Invitation for Bid is (are) new and that the quality has not deteriorated so as to impair its usefulness. The proposal shall be based on new equipment and materials which comply with specifications and documents in every respect, unless the BIDDER takes specific exception as provided hereinbefore. If alternate or "equal" equipment and materials are indicated in the proposal, it shall be understood that the OWNER will have the option of selecting any one of the alternates so indicated and such selection shall not be a cause for extra compensation or extension of time.

32. NOTICE OF SPECIAL CONDITIONS:

Particular attention is called this part of the contract documents and specifications.

33. LAWS AND REGULATIONS:

The BIDDER's attention is directed to the fact that all applicable federal, state and local laws, statutes, ordinances, codes and the rules and regulations of all authorities having jurisdiction over construction of the project shall apply to the contract throughout, and they will be deemed to be included in the contract the same as though herein written out in full. The contractor shall abide by all state, local laws and ordinances to the extent that they do not conflict with Federal laws and regulations.

34. EQUAL EMPLOYMENT OPPORTUNITY:

Attention of BIDDERS is particularly called to the requirement for ensuring that employees and applicants for employment are not discriminated against because of their race, religion, gender, physically challenged condition or national origin.

35. PRE-BID CONFERENCE:

A Pre-bid Conference shall be held at the WINDCREST City Hall located 8601 Midcrown, Windcrest, Texas 78239, on March 25, 2020 at 10:00 A.M. CST.

36. PREFERENCE LAW:

Proposal evaluations will take into consideration any Preference Laws of the State of Texas and any reciprocity laws of other states as they may be addressed by Texas law.

37. SUBSURFACE GEOLOGIC CONDITIONS:

Each BIDDER shall be responsible for determining prior to bidding, the types of subsurface geology which will be found. No test borings have been made on the site.

It is to be expressly understood and acknowledged by the BIDDER, that any information on subsurface geology made available by OWNER for BIDDER's convenience shall **not be a part of the contract documents and there is no expressed or implied guarantee of the data given, nor of the interpretation thereof.**

All excavation for this project will be unclassified and the BIDDER shall be responsible for investigating and satisfying himself of subsurface geologic conditions (including the presence or likelihood of encountering rock or rock-like materials) prior to submitting his bid, which shall include any and all costs BIDDER associates with avoiding, managing or removing said subsurface geologic conditions without claim for extra compensation against OWNER.

38. DISPOSAL OF EXCESS MATERIALS:

After backfilling and compacting any trench backfill or backfill around structures, there may be in some instances an excess of material over that required to bring the backfill up to the original grade. In such cases where there is an excess of material, BIDDER shall load and haul it away from the job site and dispose of it in a legal manner so as not to trespass, adversely impact any protected wetlands, adversely impact the 100 year flood plain, adversely impact any endangered species, or otherwise create drainage diversions or impoundments. No extra remuneration for this work will be allowed.

39. EROSION AND SEDIMENT CONTROL MEASURES:

The BIDDER is expected to conduct his work in such a manner as to minimize any soil erosion or sediment runoff from the construction site. Earth cuts and fills shall have smooth, flat sideslopes, as generally indicated on the PLANS, to preclude erosion of the soil. Such operations should be timed consistent with the actual need for doing the work and only to leave raw, unprotected surfaces for a minimum of time.

Existing lawns are to remain intact as far as practical. Such areas as are disturbed shall be duly restored by the BIDDER to as good as or better than original condition using the same type of grass, shrubs, or cover as the original. The BIDDER shall be responsible for correcting any erosion that occurs at his sole cost without claim for extra compensation.

As construction progresses, and in accordance with recent federal legislation regulating stormwater runoff and management from construction sites greater than five acres in size, if applicable, (See: Section 405 of the Water Quality Act of 1987, Section 402(P) as amended), and at locations where erosion with sediment runoff occurs or is likely to occur, the BIDDER shall construct temporary ditches, perimeter siltation screens, retainage levees, drains, inlets, or other works to correct the condition. Upon completion of the work, such facilities shall be removed.

During construction, the BIDDER shall take the necessary precautions to see that erosion is controlled and sediment runoff is prevented, to protect the quality of any neighboring water bodies.

40. SAFETY PROVISIONS:

BIDDER shall provide barricades, flares, warning signs, and/or flagmen so that danger and inconvenience to the public, railroad and job site working personnel will be eliminated. In addition to any other requirements of the Contract Documents, the BIDDER shall be responsible for familiarity and compliance with all Federal (OSHA), State, Railroad and local safety rules, laws and requirements with particular attention to be given to excavation and trench safety requirements.

41. PROTECTION OF PROPERTY AND EXISTING UTILITIES:

Within developed areas, all public and private property along and adjacent to the BIDDER'S operations, including lawns, yards, shrubs, drainage gradients, and trees, shall be adequately protected, and when damages occur, they shall be repaired, replaced, or renewed or otherwise put in a condition equal to or better than that which existed before the BIDDER caused the damage or removal.

An attempt has been made to show all known existing utilities on the PLANS, but the possibility remains strong that some underground utilities may exist that have not been shown. The BIDDER, through mandatory contact with local utility owners, shall keep himself informed and take such precautions as necessary to avoid damage.

42. WARRANTY:

The BIDDER shall warranty the work for a period of one (1) years after date of acceptance in writing by the OWNER. During this period, the BIDDER shall make any repairs and/or replacements of defective materials and corrections due to poor workmanship, all as may be required for full compliance with the Specifications. This warranty shall apply to all matters

reported by the OWNER in writing within said **one (1) year period** and this warranty shall be included in the coverage period set forth in the Performance Bond.

43. STATE SALES AND USE TAX EXEMPTION:

Pursuant to recent State legislation enacting 34 Texas Administrative Code 3.291, in order for the City of Windcrest to continue to benefit from its status as a State Sales and Use Tax Exempt Organization, after August 14, 1991 construction contracts must be awarded on a "separated contract" basis. A "separated contract" is one that distinguishes the value of the tangible personal property (materials such as pipe, bricks, lumber, concrete, paint, etc.) to be physically incorporated into the project realty from the total contract price. Under the "separated contract" format, the contractor in effect becomes a "seller" to the City of Windcrest of materials that are to be physically incorporated into the project realty. As a "seller", the contractor will issue a "Texas Certificate of Resale" to the supplier in lieu of paying the sales tax on materials at the time of purchase. The contractor will also issue a "Certificate of Exemption" to the supplier demonstrating that the personal property is being purchased for resale and that the resale is to the City of Windcrest, which is a sales tax exempt entity under UTCA Tax Code Section 151.309(5). Contractors should be careful to consult the most recent guidelines of the State Comptroller of Public Accounts regarding the sales tax status of supplies and equipment that are used and/or consumed during project work (gas, oil, rental equipment), but that are not physically incorporated into the project realty. Such items are generally not tax exempt. Contractors that have questions about the implementation of this new policy are asked to inquire directly with the State Comptroller of Public Accounts, Tax Administration Division, State of Texas, Austin, Texas 78774 (tel. 512-463-4934). Bidders will not include any federal taxes in bid prices since the City of Windcrest is exempt from payment of such federal taxes. "Texas Certificates of Exemption", "Texas Certificates of Resale" and "Texas Sales Tax Permits" are forms available to the contractor through the regional offices of the State Comptroller of Public Accounts.

44. INSURANCE REQUIREMENTS

a. **Workmen’s Compensation and Employer’s Liability.**

The liability limits shall not be less than:

Workmen’s compensation	Statutory
Employer’s liability	\$100,000 each occurrence

b. **Comprehensive Automobile Liability.**

The liability limits shall not be less than:

Bodily Injury and property damage	\$500,000.00 combined single limit each occurrence
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c. **Commercial General Liability.**

The liability limits shall not be less than:

Personal Injury and property damage	\$1,000,000 combined single limit each occurrence and \$1,000,000.00 aggregate
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d. **Umbrella Liability Policy**

The liability limits of the umbrella policy shall not be less than \$1,000,000.00. The policy shall be an "occurrence" type policy.

45. INFORMATION TO BE SUBMITTED WITH PROPOSAL:

- a. The attached **BID FOR CONTRACT** form must be completed, signed and returned as part of the Bid submission or the submission will be rejected. Submit bids in one (1) original and two (2) copies. (Attachment A).
- b. The attached **PRIME BIDDER AFFIDAVIT** form must be completed, signed and returned as part of the Bid submission or the submission will be rejected. Submit bids in one (1) original and two (2) copies. (Attachment B).
- c. The attached **BID PROPOSAL** form must be completed, signed and returned as part of the Bid submission or the submission will be rejected. Submit bids in one (1) original and two (2) copies. (Attachment C).
- d. The attached **BID BOND** form must be completed, signed and returned as part of the Bid submission or the submission will be rejected. Submit bids in one (1) original and two (2) copies. (Attachment D).
- e. The attached **CERTIFICATE AS TO CORPORATE PRINCIPAL** form must be completed, signed and returned as part of the Bid submission or the submission will be rejected. Submit bids in one (1) original and two (2) copies. (Attachment E).
- f. Contractor shall submit along with his/her bid the names and contact information for five references for which the Contractor has performed similar work. Submit bids in one (1) original and two (2) copies.
- g. Contractor shall submit along with his/her bid the name and a copy of any licenses and the resume of the project superintendent responsible for the project. Submit bids in one (1) original and two (2) copies.
- h. **CPS Energy documents required documents are found in Attachment G.**

END OF SECTION

Special Conditions

Special Conditions

Description of Work:

CONTRACTOR shall furnish all materials, appliances, tools, equipment, transportation, services and all labor and superintendence necessary for construction of the work described herein. The completed work shall not lack any part which can be reasonably implied as necessary for proper and useful operation of the facility.

The work, in general, consists of the following:

1. Installation of Traffic Control Measures
2. Installation of Pollution Prevention Measures.
3. Asphalt Mill and Overlay
4. Base Failure Repairs
5. Concrete repairs (curb, sidewalk, driveways)
6. Testing of constructed facilities.
7. Installation of pavement markings
8. Site cleanup and restoration
9. CPS Energy Gas utility upgrades

Laboratory Tests:

OWNER will provide for laboratory testing during construction, except that CONTRACTOR will provide for testing and/or laboratory certification of materials furnished for use in construction, if required elsewhere by these specifications.

Retests of materials or installations found defective in initial tests will be at CONTRACTOR's expense. The final pay estimate will not be processed until the CONTRACTOR has paid his portion of the laboratory testing invoices.

ENGINEER or representative of the ENGINEER has the right to temporarily halt construction for the purpose of acquiring test samples.

Copies of CONTRACTOR performed test results shall be submitted promptly to the ENGINEER.

Protection of Existing Facilities:

Existing facilities including landscaping, grass, etc., disturbed or damaged by construction, shall be restored or repaired to original or better condition at CONTRACTOR's expense.

The CONTRACTOR is responsible for repair and clean-up of broken manholes, buried valve boxes, broken sewer pipe, and all other damage to public and private facilities caused by construction activities.

Sub-Surface Conditions:

It is not represented that all existing underground structures are shown on the plans. When existing utilities or underground structures not shown on the plans are encountered which constitute obstruction to proposed construction, the ENGINEER shall be notified immediately. The ENGINEER is to determine action to be taken.

Form of Specifications:

Specifications are of the abbreviated, simplified or streamlined type and include incomplete sentences. The omission of words or phrases such as "the CONTRACTOR shall", "in conformity therewith", "Shall be", "as noted on the drawings", "according to the plans", "a", "an", "the", and

"all" are intentional. Omitted words or phrases shall be supplied by inference in the same manner as they are when a "note" occurs on the drawings.

The specifications are interpreted to require that the CONTRACTOR shall provide all items, articles, materials, operation or methods listed, mentioned or scheduled whether on the plans or specified therein, or both, including all labor, materials, equipment and incidentals necessary and required for their completion.

Whenever the words "approved", "satisfactory", "designated", "submitted", "observed", or similar words or phrases are used it shall be assumed that the word "ENGINEER" follows the verb as the object of the clause, such as "approved by the ENGINEER".

All references to standard specifications or manufacturer's installation directions shall mean the latest edition thereof.

Reference to technical society, organization, body or code is made in specifications in accordance with the following abbreviations:

AASHTO American Association of State Highway and Transportation Officials

ACI American Concrete Institute

AIEEE American Institute of Electrical and Electronic Engineers

AISC American Institute of Steel Construction

AISI American Iron and Steel Institute

ANSI American National Standards Institute

API American Petroleum Institute

ASA American Standards Association

ASTM American Society for Testing Materials

AWS American Welding Society

AWWA American Waterworks Association

FS Federal Specifications

IPCEA Insulated Power Cable Engineer's Association

NEC National Electric Code

NEMA National Electrical Manufacturer's Association

NESC National Electric Safety Code

NFPA National Fire Protection Association

OSHA Occupational Safety and Health Administration

PCA Portland Cement Association

UL Underwriter's Laboratory

Some specification items cover construction requirements and materials in comprehensive manner, and only pertinent portions of these items apply.

For construction specifications or details not detailed in plans and/or specifications use relevant CITY OF WINDCREST standard.

Certain specifications published by the City of San Antonio and Texas Department of Transportation are included in this contract by reference. Items so referenced shall apply as if fully repeated herein and references shall be interpreted to mean the latest revision thereof with any amendments.

Maintenance of Drainage:

During project construction, the Contractor shall maintain the function and capacity of existing drainage channels, overland flow routes, roadside ditches, storm sewers, or other drainage systems in and adjacent to the project site. It shall be the responsibility of the Contractor to include techniques in his construction procedure necessary to avoid limiting the function of existing drainage systems. These techniques include, but are not limited to, cutting temporary swales and/or pumping surface water to facilitate drainage of the project site or adjacent property. No extra pay.

At no time shall the Contractor construct improvements or temporarily place construction materials which may block overland drainage from property adjacent to the project site or which may result in ponding of water on property adjacent to the project site. Where the Contractor believes improvements called for on the construction drawings may block drainage from adjacent properties, the Contractor shall notify the Engineer prior to construction.

Traffic Control:

Unless otherwise set forth in these specifications, the CONTRACTOR shall receive no direct compensation for furnishing, erecting, and maintaining the necessary barricades, lights, flares, signs or for any other materials necessary for the good and proper safety, convenience, and direction of traffic during the period prior to final inspection and acceptance.

Dewatering:

It is the responsibility of the CONTRACTOR to include techniques in his construction procedure consistent with a wet environment. These techniques would include but not be limited to well points, sheet piles, ditches and sump pumping.

Materials:

All work incorporated into the project shall be constructed with new materials unless otherwise specified.

END OF SECTION

GENERAL CONDITIONS

General Conditions

The following conditions shall apply to this project.

A. WORKMANSHIP AND SUPERVISION

The contractor shall construct this project utilizing the highest standards for the industry. Employees performing the work shall use the utmost care and craftsmanship in their trade. All work shall be performed by competent employees under the direction of a qualified supervisor. City shall have unimpeded access to jobsite at all times.

B. LICENSURE AND PERMITS

The contractor shall ensure that all required licenses and permits are current. Contractor shall not be paid separately for any permits required as those expenses shall be included in the lump sum price.

C. COMPLIANCE WITH REGULATIONS

The Contractor is responsible for performance of work in accordance with these specifications. All work performed under this contract shall conform to the City of Windcrest standards and TCEQ requirements, and all other laws and regulations whether specifically noted or not.

D. MOBILIZATION

The Contractor should assume that there are no utilities and facilities available at or near the project site. The Contractor shall mobilize all equipment, temporary utilities, materials and any other temporary facilities required to perform the work. The Contractor shall furnish clean water and temporary sanitary facilities as required for his crews.

E. ACCESS AND SITE PREPARATION

The Contractor shall establish appropriate access to the project site along a route and in a manner that minimizes damage to the adjacent private property or the environment. The Contractor shall protect all facility components, facility utilities and trees from damage. The Contractor shall maintain work areas in a clean and orderly condition; free of waste materials, debris, and rubbish.

F. SITE RESTORATION

Upon completion of the project to the satisfaction of the City's Representative, the Contractor shall restore the site and the access route to match the surrounding grade, restore any drainage ways open and clear of debris and verify that the site is ready for seeding or alternately restored to the conditions acceptable to the City's Representative.

All disturbed work areas surrounding the project site and areas along the access road where grass existed prior to construction shall be repaired with sod. Upon completion of field work, the Contractor shall remove all equipment, temporary utilities, left over materials and any other temporary facilities from the project site.

- G. SITE CLEANUP** The contractor shall remove all waste, surplus materials, rubbish, and construction facilities from the site and restore it to its original condition.
- H. CITY OF WINDCREST - FURNISHED PROPERTY** - No material, labor, or facilities will be furnished by City of Windcrest unless otherwise provided for in the Invitation.
- I. SILENCE OF SPECIFICATIONS:** The apparent silence of this specification and any supplemental specifications as to any details or the omission from it of a detailed description concerning any point shall be regarded as meaning that only the best commercial practices are to prevail and that only materials of first quality and correct type, size and design are to be used. All workmanship is to be first quality. All interpretations of this specification shall be made upon the basis of this statement, with City of Windcrest's interpretation to prevail.
- J. BRAND NAME OR TRADE NAME/MARK INSTRUCTIONS** - If items in this Invitation to Bid have been identified, described or referenced in the Invitation for Bid by a "brand name or Trade Name/Mark description, such identification is intended to be descriptive, but not restrictive, and is to indicate quality and characteristics of products that maybe offered. "Or equal products" may be considered for award if such products are clearly equal to the product referenced the bids and are determined by City of Windcrest to meet its needs in all respects.
- K.** The contractor shall begin work within five (5) days after he is issued Notice to Proceed by the City.
- L.** Payment – Even though this is a lump sum bid the contractor shall be required to provide a **"Schedule of Values" (SOV)** for the work under this contract. The SOV shall be submitted to the Engineer after Notice of Award and prior to issuance of a Notice to Proceed. The SOV will be reviewed and approved by Engineer.

M. REFERENCES

Codes and standards: Perform all work to meet the requirements of all legally constituted authorities having jurisdiction. All work shall be performed so as to comply with the latest editions, amendments, practices, and ruling of the following documents and organizations, except where the specifications are more stringent.

1. ASTM American Society for Testing and Materials
2. ANSI American Nations Standards Institute
3. UL Underwriters Laboratory
4. AWS American Welding Society
5. OSHA Occupational Safety and Health Administration
6. Local Ordinances of the State of Texas.

- N.** Redline Drawings - Contractor shall provide at the end of this project a set of understandable redlined drawings which accurately shows the locations installed; type of equipment and date installed on all equipment, components and work performed.

SUPPLEMENTAL GENERAL CONDITIONS CONSTRUCTION CONTRACT

SUPPLEMENTAL GENERAL CONDITIONS CONSTRUCTION CONTRACT

SCOPE: The Standard General Conditions of the Construction Contract prepared by the National Society of Professional Engineers (NSPE-1910-8, 1983 Edition) as amended and adapted for local conditions by the PUB to meet local requirements, shall form a part of this Contract, together with any following Supplementary General Conditions. Any following Supplements modify, change, delete, or add to these General Conditions. Where any part of the General Conditions is modified or voided by any Supplementary General Conditions, the unaltered provisions of that part shall remain in effect.

ARTICLE 1. DEFINITIONS

Wherever used in these General Conditions or in the other Contract Documents, the following terms have the meanings indicated which are applicable to both the singular and plural thereof:

Abbreviations - Wherever reference is made to standard specifications, standards of quality or performance, as established by a recognized national authority, the reference may be by initials as generally recognized throughout the industry.

Addenda - Written or graphic instruments issued prior to the opening of Bids which clarify, correct, supplement or change the bidding documents or the Contract Documents. These Addenda shall become a part of the Contract Documents and modify the drawings, specifications or other bid documents as indicated. No verbal changes in the Work as shown or described shall become binding.

Agreement - The written Construction Agreement between OWNER and CONTRACTOR covering the Work to be performed; other Contract Documents are attached to the "Agreement" and made a part thereof as provided therein.

Alternates - Additions to, deletions from, or changes to requirements for the project, each of which shall be bid separately and shall be included in, or deleted from, the Contract at the discretion of OWNER.

Application for Payment - The form accepted by ENGINEER which is to be used by CONTRACTOR in requesting progress or final payments and which is to include such supporting documentation as is required by the Contract Documents.

Bid - The offer or proposal of the bidder submitted on the prescribed form setting forth the prices for the Work to be performed.

Bonds - Bid, Performance and Payment Bonds and any other instruments of security as may be specified by OWNER.

Calendar Day - A **calendar day** consists of twenty-four hours and is measured from midnight, to the next midnight, and shall constitute a single calendar day.

Change Order - A document recommended by ENGINEER, which is signed by CONTRACTOR and OWNER and authorizes an addition, deletion, or revision, in the Work, or an adjustment in the Contract Price, or the Contract Time, issued on, or after, the Effective Date of the Agreement.

Contract Documents - The Legal Notice and Invitation to Bid, Instructions to Bidders, Pre-Bid Disclosure Statements, Notice of Award, Notice to Proceed, Construction Agreement, Addenda (which pertain to the Contract Documents), CONTRACTOR's Bid Proposal (including documentation accompanying the Bid and any post-Bid documentation submitted prior to the Notice of Award) when attached as an exhibit to the Construction Agreement, the Bid, Performance, and Payment Bonds, these Standard General Conditions, the Supplementary General Conditions, the Specifications and the Drawings as the same are more specifically identified in the Construction Agreement, together with all amendments, modifications and supplements issued pursuant to paragraphs 3.4 and 3.5, on or after the Effective Date of the Construction Agreement.

Contract Price - The moneys payable by OWNER to CONTRACTOR under the Contract Documents as stated in the Agreement (subject to the provisions of paragraph 11.9.1 in the case of Unit Price Work).

Contract Time - The number of days (computed as provided in paragraph 17.2) or the date stated in the Agreement for the completion of the Work.

CONTRACTOR - The person, firm or corporation with whom OWNER has entered into the Agreement.

Defective - An adjective which, when modifying the word Work, refers to Work that is unsatisfactory, faulty or deficient, or does not conform to the Contract Documents, or does not meet the requirements of any inspection, reference standard, test or approval referred to in the Contract Documents, or has been damaged prior to ENGINEER's recommendation of final payment (unless responsibility for the protection thereof, has been assumed by OWNER at Substantial Completion in accordance with paragraph 14.8 or 14.10).

Drawings - The drawings which depict the character, design, and scope of the Work to be performed and which have been prepared or approved by ENGINEER and are referred to in the Contract Documents.

Effective Date of the Agreement - The date indicated in the Agreement on which it becomes effective, but if no such date is indicated, it means the date on which the Agreement is signed and delivered by OWNER.

ENGINEER - The person, firm or corporation named as such in the Agreement.

Field Order - A written order issued by ENGINEER which orders minor changes in the Work in accordance with paragraph 9.5, but which does not involve a change in the Contract Price or the Contract Time.

Furnish - To supply at the jobsite the material, equipment, etc., referred to in the technical specifications and/or drawings. Installation is not required of the supplier by the specifications but shall be arranged for by the General CONTRACTOR.

General Requirements - Sections of Division 1 of the Specifications.

Laws and Regulations; Laws or Regulations - Laws, rules, regulations, ordinances, codes and/or orders.

Notice of Award - The written notice by OWNER to the apparent successful bidder stating that upon compliance by the apparent successful bidder with the conditions precedent enumerated therein, within the time specified, OWNER will sign and deliver the Agreement.

Notice to Proceed - A written notice given by OWNER to CONTRACTOR (with a copy to ENGINEER) fixing the date on which the Contract Time will commence to run and on which CONTRACTOR shall start to perform CONTRACTOR's obligations under the Contract Documents.

OWNER - The City of Windcrest of LaSalle County, Texas and its authorized agents or representatives.

Partial Utilization - Placing a portion of the Work in service for the purpose for which it is intended (or a related purpose) before reaching Substantial Completion for all the Work.

Project - The total construction of the Work to be provided under the Contract Documents, which may be a wholly integrated facility, or a part thereof, as indicated elsewhere in the Contract Documents.

Provide - To furnish and install the material, equipment, etc., referred to in the Contract Documents in the location shown or approved at the job.

Resident Project Representative - The authorized representative of ENGINEER who is assigned to observe the site of the Project, or any part thereof, for the benefit of OWNER.

Shop Drawings - All drawings, diagrams, illustrations, schedules and other data which are specifically prepared by, or for CONTRACTOR, to illustrate some portion of the Work, and all illustrations, brochures, standard schedules, performance charts, instructions, diagrams and other information prepared by a Supplier and submitted by CONTRACTOR to illustrate material or equipment for some portion of the Work.

Specifications - Those portions of the Contract Documents consisting of written technical descriptions of materials, equipment, construction systems, standards and workmanship as applied to the Work, and certain administrative details applicable thereto.

Subcontractor - An individual, firm or corporation having a direct contract with CONTRACTOR, or with any other Subcontractor, for the performance of a part of the Work at the site.

Substantial Completion - The Work (or a specified part thereof) has progressed to the point where, in the opinion of ENGINEER as evidenced by ENGINEER's definitive certificate of Substantial Completion, it is sufficiently complete, in accordance with the Contract Documents, so that the Work (or specified part) can be utilized for the purposes for which it is intended; or if there is no such certificate issued, when final payment is due in accordance with paragraph 14.13. The terms "substantially complete" and "substantially completed" as applied to any Work, refer to the Substantial Completion thereof.

Supplementary General Conditions - The part of the Contract Documents which amends or supplements these General Conditions.

Supplier - A manufacturer, fabricator, provider, distributor, material man or vendor.

Underground Facilities - All pipelines, conduits, ducts, cables, wires, manholes, vaults, tanks, tunnels or other such facilities or attachments, and any encasements containing such facilities which have been installed underground to furnish any of the following services or materials: electricity, gases, steam, liquid petroleum products, telephone or other communications, cable television, sewage and drainage removal, traffic or other control systems or water.

Unit Price Work - Work to be paid for on the basis of unit prices.

Work - The entire completed construction, or the various separately identifiable parts thereof, required to be furnished under the Contract Documents. Work is the result of the CONTRACTOR performing services, furnishing labor and furnishing and incorporating materials and equipment into the construction, all as required by the Contract Documents.

Work Directive Change - A written directive to CONTRACTOR, issued on, or after the Effective Date of the Agreement, and signed by OWNER and recommended by ENGINEER, ordering an addition, deletion, or revision in the Work, or responding to differing or unforeseen physical conditions under which the Work is to be performed, as provided in paragraph 4.2 or 4.3, or to emergencies under paragraph 6.22. A Work Directive Change may not change the Contract Price or the Contract Time, but is evidence that the parties expect that the change directed or documented by a Work Directive Change will be incorporated in a subsequently issued Change Order following negotiations by the parties as to its effect, if any, on the Contract Price, or Contract Time, as provided in paragraph 10.2.

Working Day - A week day (Monday through Friday, inclusive) in which weather conditions are such that Work can be performed in a normal manner. Weekends (Saturday, Sunday) and OWNER designated holidays shall not be considered working days.

Written Amendment - A written amendment of the Contract Documents, signed by OWNER and CONTRACTOR on, or after, the Effective Date of the Agreement, and normally dealing with the non-engineering or nontechnical, rather than strictly Work-related, aspects of the Contract Documents.

ARTICLE 2. PRELIMINARY MATTERS

Delivery of Bonds:

2.1 When CONTRACTOR delivers the executed Agreements to OWNER, CONTRACTOR shall also deliver to OWNER such Bonds as CONTRACTOR may be required to furnish in accordance with paragraph 5.1.

Copies of Documents:

2.2 OWNER shall furnish to CONTRACTOR up to three (3) copies (unless otherwise specified in the Supplementary General Conditions) of the Contract Documents as are reasonably necessary for the execution of the Work. Additional copies will be furnished, upon request by CONTRACTOR, at the cost of reproduction to be paid by CONTRACTOR.

Commencement of Contract Time; Notice to Proceed:

2.3 The Contract Time will commence to run on the date indicated in the Notice to Proceed. A Notice to Proceed may be given at any time after the Effective Date of the Agreement.

Starting the Project:

2.4 CONTRACTOR shall start to perform the Work on the date when the Contract Time commences to run, but no Work shall be done at the site prior to the date on which the Contract Time commences to run.

Before Starting Construction:

2.5 Before undertaking each part of the Work, CONTRACTOR shall carefully study and compare the Contract Documents and check and verify pertinent figures shown thereon and all applicable field measurements. CONTRACTOR shall promptly report in writing to ENGINEER any conflict, error or discrepancy which CONTRACTOR may discover and shall obtain a written interpretation or clarification from ENGINEER before proceeding with any Work affected thereby. CONTRACTOR shall be in default to OWNER for failure to report any conflict, error or discrepancy in the Contract Documents, if CONTRACTOR had actual knowledge thereof, or should reasonably have known thereof.

2.6 Within ten days after the Effective Date of the Agreement (unless otherwise specified in the General Requirements), CONTRACTOR shall submit to ENGINEER for review:

2.6.1. an estimated progress schedule indicating the starting and completion dates of the various stages of the Work;

2.6.2. a preliminary schedule of Shop Drawing submissions; and

2.6.3. a preliminary schedule of values for all of the Work which will include quantities and prices of items aggregating the Contract Price and will subdivide the Work into component parts in sufficient detail to serve as the basis for progress payments during construction. Such prices will include an appropriate amount of overhead and profit applicable to each item of Work which will be confirmed in writing by CONTRACTOR at the time of submission.

2.7 On the date of execution of the Agreement, CONTRACTOR shall deliver to OWNER, with a copy to ENGINEER, certificates (and other evidence) of insurance requested by OWNER which CONTRACTOR is required to purchase and maintain in accordance with paragraphs 5.3, 5.4, and 5.6.

Preconstruction Conference:

2.8. After the Effective Date of the Agreement, but before CONTRACTOR starts the Work at the site, a conference attended by CONTRACTOR, ENGINEER and others as appropriate will be held to discuss the schedules referred to in paragraph 2.6, to discuss procedures for handling Shop Drawings and other submittals and for processing Applications for Payment, and to establish a working understanding among the parties as to the Work.

Finalizing Schedules:

2.9 At least ten days before submission of the first Application for Payment, a conference attended by CONTRACTOR, ENGINEER and others as appropriate will be held to finalize the schedules submitted in accordance with paragraph 2.6. The finalized progress schedule will be acceptable to ENGINEER as providing an orderly progression of the Work to completion within the Contract Time, but such acceptance will neither impose on ENGINEER responsibility for the progress or scheduling of the Work, nor relieve CONTRACTOR from full responsibility therefore. The finalized schedule of Shop Drawing submissions will be acceptable to ENGINEER as providing a workable arrangement for processing the submissions. The finalized schedule of values will be acceptable to ENGINEER as to form and substance.

ARTICLE 3. CONTRACT DOCUMENTS: INTENT, AMENDING, REUSE

Intent:

3.1 The Contract Documents comprise the entire agreement between OWNER and CONTRACTOR concerning the Work. The Contract Documents are complementary; what is called for by one is as binding as if called for by all. The Contract Documents will be construed in accordance with the law of the place of the Project.

3.2 It is the intent of the Contract Documents to describe a functionally complete Project (or part thereof) to be constructed in accordance with the Contract Documents. Any Work, materials or equipment that may reasonably be inferred from the Contract Documents as being required to produce the intended result, will be supplied, whether or not specifically called for. When words which have a well-known technical or trade meaning are used to describe Work, materials or equipment, such words shall be interpreted in accordance with that meaning. Reference to standard specifications, manuals or codes of any technical society, organization or association, whether such reference is specific or by implication, shall mean the latest standard specification, manual, code or Laws or Regulations in effect at the time of opening of Bids (or, on the Effective Date of the Agreement, if there were no Bids), except as may be otherwise specifically stated. However, no provision of any referenced standard specification, manual, or code (whether or not specifically incorporated by reference in the Contract Documents) shall be effective to change the duties and responsibilities of OWNER, CONTRACTOR or ENGINEER, or any of their consultants, agents or employees, from those set forth in the Contract Documents, nor shall it be effective to assign to ENGINEER, or any of ENGINEER's consultants, agents or employees, any duty or authority to supervise or direct the furnishing or performance of the Work, or any duty or authority to undertake responsibility contrary to the provisions of paragraph 9.15 or 9.16. Clarifications and interpretations of the Contract Documents shall be issued by ENGINEER as provided in paragraph 9.4.

3.3 If, during the performance of the Work, CONTRACTOR finds a conflict, error or discrepancy in the Contract Documents, CONTRACTOR shall immediately report same to ENGINEER in writing, and before proceeding with the Work affected thereby, shall obtain a written interpretation or clarification from ENGINEER. CONTRACTOR shall be in default to OWNER for failure to report any conflict, error or discrepancy in the Contract Documents if CONTRACTOR had actual knowledge thereof, or should reasonably have known thereof.

Amending and Supplementing Contract Documents:

3.4 The Contract Documents may be amended to provide for additions, deletions and revisions in the Work, or to modify the terms and conditions thereof, in one or more of the following ways:

- 3.4.1. a formal Written Amendment,
- 3.4.2. a Change Order (pursuant to paragraph 10.4), or
- 3.4.3. a Work Directive Change (pursuant to paragraph 10.1).

As indicated in paragraphs 11.2 and 12.1, Contract Price and Contract Time may only be changed by a Change Order or a Written Amendment.

3.5 In addition, the requirements of the Contract Documents may be supplemented, and minor variations and deviations in the Work may be authorized, in one or more of the following ways:

- 3.5.1. a Field Order (pursuant to paragraph 9.5),
- 3.5.2. ENGINEER's approval of a Shop Drawing or sample (pursuant to paragraphs 6.26 and 6.27), or
- 3.5.3. ENGINEER's written interpretation or clarification (pursuant to paragraph 9.4).

Reuse of Documents:

3.6 Neither CONTRACTOR nor any Subcontractor or Supplier, or other person or organization performing or furnishing any of the Work shall have, or acquire, any title to, or ownership rights in, any of the Drawings, Specifications or other documents (or copies of any thereof) prepared by, or bearing the seal of ENGINEER; and they shall not reuse any of them on extensions of the Project, or any other project, without written consent of OWNER and ENGINEER and specific written verification or adaptation by ENGINEER. All drawings, specifications or other documents (or copies of any thereof) are upon completion of the project to become the property of OWNER. Further use thereof without written consent of OWNER is prohibited.

ARTICLE 4. AVAILABILITY OF LANDS: PHYSICAL CONDITIONS: REFERENCE POINTS

Availability of Lands:

4.1 OWNER shall furnish, as indicated in the Contract Documents, the lands upon which the Work is to be performed, rights-of-way and easements for access thereto, and such other lands which are designated by OWNER for the use of CONTRACTOR. Easements for permanent structures or permanent changes in existing facilities will be obtained and paid for by OWNER, unless otherwise provided in the Contract Documents. If CONTRACTOR believes that any delay in OWNER's furnishing these lands, rights-of-way, or easements, entitles CONTRACTOR to an extension of the Contract Time, CONTRACTOR may make a claim therefore as provided in Article 12. CONTRACTOR shall provide at his own non-reimbursable cost for any and all additional lands, and access thereto, that may be required for temporary construction facilities or storage of materials and equipment.

Physical Condition:

4.2.1. **Explorations and Reports:** Reference is made to the Supplementary General Conditions for identification of any reports of explorations and tests of subsurface conditions at the site that may have been utilized by ENGINEER in preparation of the Contract Documents. CONTRACTOR may rely upon the accuracy of the technical data contained in such reports, but not upon nontechnical data, interpretations, or opinions contained therein, or for the completeness thereof, for CONTRACTOR's purposes. Except as indicated in the immediately preceding sentence and in paragraph 4.2.6, CONTRACTOR shall have full responsibility with respect to subsurface conditions at the site.

4.2.2. **Existing Structures:** Reference is made to the Supplementary General Conditions for identification of any drawings of physical conditions in, or relating to, existing surface or subsurface structures (except Underground Facilities referred to in paragraph 4.3) which are at, or contiguous to, the Work site that may have been utilized by ENGINEER in preparation of the Contract Documents. CONTRACTOR may rely upon the accuracy of the technical data contained in such drawings, but not for the completeness thereof for CONTRACTOR's purposes. Except as indicated in the immediately preceding sentence and in paragraph 4.2.6, CONTRACTOR shall have full responsibility with respect to physical conditions in, or relating to, such structures.

4.2.3. **Report of Differing Conditions:** If CONTRACTOR believes that:

4.2.3.1. any technical data on which CONTRACTOR is entitled to rely as provided in paragraphs 4.2.1 and 4.2.2 is inaccurate, or

4.2.3.2. any physical condition uncovered or revealed at the Work site differs materially from that indicated, reflected, or referred to, in the Contract Documents,

CONTRACTOR shall promptly, after becoming aware thereof, and before performing any Work in connection therewith (except in an emergency as permitted by paragraph 6.22), notify OWNER and ENGINEER in writing about the inaccuracy or difference.

4.2.4. **ENGINEER's Review:** ENGINEER will promptly review the pertinent conditions, determine the necessity of obtaining any additional explorations or tests with respect thereto, and advise OWNER in writing (with a copy to CONTRACTOR) of ENGINEER's findings and conclusions.

4.2.5. **Possible Document Change:** If ENGINEER concludes that there is a material error in the Contract Documents, or that because of newly discovered conditions a change in the Contract Documents is required, a Work Directive Change, or a Change Order, will be issued as provided in Article 10 to reflect and document the consequences of any inaccuracy or difference.

4.2.6. **Possible Price and Time Adjustments:** In each such case, an increase or decrease in the Contract Price, or an extension or shortening of the Contract Time, or any combination thereof, may be allowable to the extent that they are attributable to any such inaccuracy or difference. If OWNER and CONTRACTOR are unable to agree as to the amount or length thereof, a claim may be made therefore as provided in Articles 11

and 12. All increases or decreases in the Contract Price shall be governed by all state and local statutes, codes, laws, ordinances, rules and regulations governing competitive bidding and Change Orders.

Physical Conditions - Underground Facilities:

4.3.1. **Shown or Indicated:** Any information and data shown or indicated in the Contract Documents with respect to existing Underground Facilities at, or contiguous to, the Work site is based on information and data furnished to OWNER or ENGINEER by the owners of such Underground Facilities, or by others. Unless it is otherwise expressly provided in the Supplementary General Conditions:

4.3.1.1. OWNER and ENGINEER shall not be responsible for the accuracy or completeness of any such information or data; and,

4.3.1.2. CONTRACTOR shall have full responsibility for reviewing and checking all such information and data, for independently locating and verifying all Underground Facilities shown or indicated in the Contract Documents, for coordination of the Work with the owners of such Underground Facilities during construction, for the safety and protection thereof as provided in paragraph 6.20 and repairing any damage thereto resulting from the Work, the cost of all of which will be considered as having been included in the Contract Price.

4.3.2. **Not Shown or Not Indicated.** If an Underground Facility is uncovered or revealed at, or contiguous to the Work site, which was not shown or not indicated in the Contract Documents, and which CONTRACTOR could not reasonably have been expected to be aware of, CONTRACTOR shall, promptly after becoming aware thereof, and before performing any Work adversely affected thereby (except in an emergency as permitted by paragraph 6.22), identify the owner of such Underground Facility and give written notice thereof to that owner and to OWNER and ENGINEER. ENGINEER will promptly review the Underground Facility to determine the extent to which the Contract Documents should be modified to reflect and document any adverse consequences of the existence of the Underground Facility, and the Contract Documents will be amended or supplemented to the extent necessary. During such time, CONTRACTOR shall be responsible for the safety and protection of such Underground Facility as provided in paragraph 6.20. CONTRACTOR may be allowed an increase in the Contract Price or an extension of the Contract Time, or both, to the extent that they are attributable to the existence of an Underground Facility adversely affecting the Work that was not shown or indicated in the Contract Documents, and which CONTRACTOR could not reasonably have been expected to be aware of. If the parties are unable to agree as to the amount, or length thereof, CONTRACTOR may make a claim therefore as provided in Articles 11 and 12. All increases or decreases in the Contract Price shall be governed by all state and local statutes, codes, laws, ordinances, rules and regulations governing competitive bidding and Change Orders.

Reference Points:

4.4 Contractor shall provide engineering surveys to establish reference points for construction which in Contractor's judgment are necessary to enable CONTRACTOR to proceed with the Work. CONTRACTOR shall be responsible for laying out the Work (unless otherwise specified in the Technical Specifications), shall protect and preserve the established reference

points, and shall make no changes or relocations without the prior written approval of OWNER. CONTRACTOR shall report to ENGINEER whenever any reference point is lost or destroyed or requires relocation because of necessary changes in grades or locations, and shall be responsible for the accurate replacement or relocation of such reference points by professionally qualified personnel.

ARTICLE 5. INSURANCE

Contractor's Liability Insurance:

5. CONTRACTOR shall purchase and maintain such commercial general liability and other insurance as is appropriate for the Work being performed and furnished, and as will provide protection from claims set forth below, which may arise out of, or result from, CONTRACTOR's performance and furnishing of the Work, and CONTRACTOR's other obligations under the Contract Documents, whether it is to be performed or furnished by CONTRACTOR, by any Subcontractor, by anyone directly or indirectly employed by any of them, to perform or furnish any of the Work, or by anyone for whose acts and/or omissions any of them may be liable:

5.1. Claims under workers' compensation, disability benefits and other similar employee benefit acts;

5.2. Claims for damages because of bodily injury, occupational sickness or disease, or death of CONTRACTOR's employees;

5.3. Claims for damages because of bodily injury, sickness or disease, or death of any person other than CONTRACTOR's employees;

5.4. Claims for damages insured by personal injury liability coverage which are sustained (a) by any person as a result of an offense directly or indirectly related to the employment of such person by CONTRACTOR, or (b) by any other person for any other reason;

5.5. Claims for damages, other than to the Work itself, because of injury to, or destruction of, tangible property wherever located, including loss of use resulting there from;

5.6. Claims arising out of operation of Laws or Regulations for damages because of bodily injury or death of any person, or for damage to property; and

5.7. Claims for damages because of bodily injury or death of any person, or property damage arising out of the ownership, maintenance or use of any motor vehicle.

The insurance required by these paragraphs shall include the specific coverages and be written for not less than the limits of liability and coverages specified by OWNER herein or as may be modified by the Supplementary General Conditions on a project by project basis, or required by law, whichever is greater. The commercial general liability insurance shall include completed operations insurance. All of the policies of insurance so required to be purchased and maintained (or the certificates or other evidence thereof) shall be of an "occurrence" type, and shall contain a provision or endorsement that the coverage afforded will not be canceled, materially changed, or renewal refused, until at least thirty (30) days prior written notice has been given to OWNER and ENGINEER by certified mail. All such insurance shall remain in effect until final payment,

and at all times thereafter when CONTRACTOR may be correcting, removing or replacing defective Work in accordance with paragraph 13.12. **In addition, CONTRACTOR shall maintain such completed operations insurance for at least two years after final payment and furnish OWNER with evidence of continuation of such insurance at final payment and one year thereafter.** All insurance coverages furnished under the Contract Documents shall include the OWNER, ENGINEER and their officials, officers, partners, board members, agents and employees, as named additional insureds and hereinafter be referred to as "additional insureds."

Contractual Liability Insurance:

The commercial general liability insurance required by paragraph 5.3 will include contractual liability insurance applicable to CONTRACTOR's obligations under paragraphs 6.30 and 6.31 addressing "indemnification."

Specific Coverages of Insurance Required by OWNER.

Workmen's Compensation and Employer's Liability. This insurance shall protect the laborer and insure the CONTRACTOR, and insulate the additional insureds, against all claims under applicable state workmen's compensation laws, pursuant to Section 5.3.1. The additional insureds shall also be protected under an Employer's Liability policy against claims for injury, disease, or death of employees which, for any reason, may not fall within the provisions of a workmen's compensation law. This Employer Liability policy shall include an "all states" endorsement.

The liability limits shall not be less than:

Workmen's compensation	Statutory
Employer's liability	\$100,000 each occurrence

Mandatory TWCC Rule 28 TAC Sect. 110.110 Language

(A) **Definitions:**

Certificate of coverage ("certificate") - A copy of a certificate of insurance, a certificate of authority to self-insure issued by the commission, or a coverage agreement (TWCC-81, TWCC- 82, TWCC-83, or TWCC-84), showing statutory workers' compensation insurance coverage for the person's or entity's employees providing services on a project, for the duration of the project.

"Duration of the project" - includes the time from the beginning of the work on the project until the contractor's/person's work on the project has been completed and accepted by the governmental entity.

"Persons providing services on the project" ("subcontractor" in § 406.096) - includes all persons or entities performing all or part of the services the contractor has undertaken to perform on the project, regardless of whether that person contracted directly with the contractor and regardless of whether that person has employees. This includes, without limitation, independent contractors, subcontractors, leasing companies, motor carriers, owner-operators, employees

of any such entity, or employees of any entity which furnishes persons to provide services on the project.

"Services" - include, without limitation, providing, hauling, or delivering equipment or materials, or providing labor, transportation, or other service related to a project.

- (B) The contractor shall provide coverage, based on proper reporting of classification codes and payroll amounts and filing of any coverage agreements, which meets the statutory requirements of Texas Labor Code, § 401.011(44) for all employees of the contractor providing services on the project, for the duration of the project.
- (C) The Contractor must provide a certificate of coverage to the governmental entity prior to being awarded the contract.
- (D) If the coverage period shown on the contractor's current certificate of coverage ends during the duration of the project, the contractor must, prior to the end of the coverage period, file a new certificate of coverage with the governmental entity showing that coverage has been extended.
- (E) The contractor shall obtain from each person providing services on a project, and provide to the governmental entity:
 - (1) a certificate of coverage, prior to that person beginning work on the project, so the governmental entity will have on file certificates of coverage showing coverage for all persons providing services on the project; and
 - (2) no later than seven days after receipt by the contractor, a new certificate of coverage showing extension of coverage, if the coverage period shown on the current certificate of coverage ends during the duration of the project.
- (F) The contractor shall retain all required certificates of coverage for the duration of the project and for three years thereafter.
- (G) The contractor shall notify the governmental entity in writing by certified mail or personal delivery, within 10 days after the contractor knew or should have known, of any change that materially affects the provision of coverage of any person providing services on the project.
- (H) The contractor shall post on each project site a notice, in the text, form and manner prescribed by the Texas Workers' Compensation Commission, informing all persons providing services on the project that they are required to be covered, and stating how a person may verify coverage and report lack of coverage.
- (I) The contractor shall contractually require each person with whom it contracts to provide services on a project, to:
 - (1) provide coverage, based on proper reporting of classification codes and payroll amounts and filing of any coverage agreements, which meets the statutory requirements of Texas Labor Code, § 401.011(44) for all of its employees providing services on the project, for the duration of the project;

- (2) provide to the contractor, prior to that person beginning work on the project, a certificate of coverage showing that coverage is being provided for all employees of the person providing services on the project, for the duration of the project;
 - (3) provide the contractor, prior to the end of the coverage period, a new certificate of coverage showing extension of coverage, if the coverage period shown on the current certificate of coverage ends during the duration of the project;
 - (4) obtain from each other person with whom it contracts, and provide to the contractor:
 - (a) a certificate of coverage, prior to the other person beginning work on the project; and
 - (b) a new certificate of coverage showing extension of coverage, prior to the end of the coverage period, if the coverage period shown on the current certificate of coverage ends during the duration of the project;
 - (5) retain all required certificates of coverage on file for the duration of the project and for three years thereafter;
 - (6) notify the governmental entity in writing by certified mail or personal delivery, within 10 days after the person knew or should have known, of any change that materially affects the provision of coverage of any person providing services on the project; and
 - (7) contractually require each person with whom it contracts, to perform as required by clauses (I)-(1-7) of this subparagraph, with the certificates of coverage to be provided to the person for whom they are providing services.
- (J) By signing this contract or providing or causing to be provided a certificate of coverage, the contractor is representing to the governmental entity that all employees of the contractor who will provide services on the project will be covered by workers' compensation coverage for the duration of the project, that the coverage will be based on proper reporting of classification codes and payroll amounts, and that all coverage agreements will be filed with the appropriate insurance carrier, or, in the case of a self-insured, with the commission's Division of Self-Insurance Regulation. Providing false or misleading information may subject the contractor to administrative penalties, criminal penalties, civil penalties, or other civil actions.
- (K) The contractor's failure to comply with any of these provisions is a breach of contract by the contractor which entitles the governmental entity to declare the contract void if the contractor does not remedy the breach within ten days after receipt of notice of breach from the governmental entity.

5.5.3. **Comprehensive Automobile Liability.** This insurance shall be written in comprehensive form and shall protect the CONTRACTOR and the additional insureds against all claims described under Sections 5.3.6. and 5.3.7. of the General Conditions of the Contract Documents and arising from the use of motor vehicles, and shall cover, on or off the site, all motor vehicles licensed for highway use, whether they are owned, nonowned, or hired.

The liability limits shall not be less than:

Bodily Injury and property damage	\$500,000.00 combined single limit each occurrence
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5.5.4. **Commercial General Liability.** This insurance shall be an “occurrence” type policy written in comprehensive form and shall protect the CONTRACTOR and the additional insureds against all claims described in Sections 5.3.2., 5.3.3., 5.3.4., and 5.3.5. of the General Conditions of the Contract Documents arising out of any intentional or negligent act and/or omissions of the CONTRACTOR or his agents, employees, or subcontractors. This policy shall also include protection against claims insured by usual personal injury liability coverage.

The liability limits shall not be less than:

Personal Injury and property damage	\$1,000,000.00 combined single limit each occurrence and \$1,000,000.00 aggregate
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If the CONTRACTOR’s work, or work under his direction, requires blasting, explosive conditions, or underground operations, the commercial general liability coverage shall contain no exclusion relative to blasting, exploding, collapse of structures, or damage to underground property.

5.5.5. **Umbrella Liability Policy.** This insurance shall protect the CONTRACTOR and the additional insureds against all claims in excess of the limits provided under the employer’s liability, comprehensive automobile liability, and commercial general liability policies. The liability limits of the umbrella policy shall not be less than \$1,000,000.00. The policy shall be an “occurrence” type policy.

5.5.6. **Transportation Insurance.** This insurance shall be of the “all risks” type and shall protect the CONTRACTOR and the OWNER from all insurable risks of physical loss or damage to equipment and materials in transit to the jobsite and until the OWNER receives the equipment and materials at the jobsite. The coverage amount shall be not less than one-half of the full amount of the total contract. Transportation insurance shall provide for losses to be payable to the CONTRACTOR and the OWNER as their interests may appear.

5.5.7. All policies required under Section 5.5 herein shall contain a “cross liability” or “severability of interest” clause or endorsement. Notwithstanding any other provision of these policies, the insurance afforded shall apply separately to each insured, named insured, or additional insured with respect to any claim, suit, or judgment made or brought by or for any other insured, named insured, or additional insured as though a separate policy had been issued to each, except the insurer’s liability shall not be increased beyond

the amount or amounts for which the insurer would have been liable had only one insured been named.

5.5.8. CONTRACTOR shall require each of his Subcontractors to procure and maintain during the life of his subcontract, Subcontractor's Commercial General Liability and Property Damage Insurance of the type specified in subparagraphs 5.5.1., 5.5.3., 5.5.4., 5.5.5. and paragraph 5.6 hereof, in amounts approved by OWNER.

5.5.9. The insurance required under subparagraphs 5.5.3., 5.5.4., 5.5.5. and paragraph 5.6 hereof shall provide adequate protection for CONTRACTOR and his Subcontractors respectively against damage claims which may arise from operations under this Contract, whether such operation be by the insured or by anyone directly or indirectly employed by him, and also, against any special hazards which may be encountered in the performance of this Contract.

5.5.10. CONTRACTOR shall not commence any work under this Contract until he has obtained all the insurance coverage required under this Article and such insurance has been approved by OWNER, nor shall CONTRACTOR allow any Subcontractor to commence work on this Contract until the insurance required by the Subcontractor has been so obtained and approved.

Property Insurance:

5.6. Unless otherwise provided in the Supplementary General Conditions, CONTRACTOR shall purchase and maintain property insurance upon the Work at the site to the full insurable value thereof (subject to any deductible amounts as may be provided in the Supplementary General Conditions, or required by Laws and Regulations). This insurance shall include the interests of OWNER, CONTRACTOR, Subcontractors, ENGINEER and ENGINEER's consultants in the Work, all of whom shall be listed as insureds, or additional insured parties, shall insure against the perils of fire and extended coverage and shall include "all risk" insurance for physical loss and damage including theft, vandalism and malicious mischief, collapse and water damage, and such other perils as may be provided in the Supplementary General Conditions, and shall include damages, losses and expenses arising out of, or resulting from, any insured loss, or incurred in the repair or replacement of any insured property (including but not limited to fees and charges of engineers, architects, attorneys and other professionals). If not covered under the "all risk" insurance, or otherwise provided in the Supplementary General Conditions, CONTRACTOR shall purchase and maintain similar property insurance on portions of the Work stored on and off the site, or in transit, when such portions of the Work are to be included in an Application for Payment. The policies of insurance required to be purchased and maintained by CONTRACTOR in accordance with this paragraph shall be of an "occurrence" type, and contain a provision that the coverage afforded will not be canceled or materially changed until at least thirty (30) days prior written notice has been given to OWNER.

(Sections 5.7 - 5.10 **Reserved**)

Waiver of Rights:

5.11. Waiver:

5.11.1. CONTRACTOR waives all rights against OWNER for all losses and damages caused by any of the perils covered by the policies of insurance provided in

response to paragraph 5.6, and any other property insurance applicable to the Work, and also waives all such rights against the Subcontractors, ENGINEER, ENGINEER's consultants, and all other parties named as insureds in such policies for losses and damages so caused. As required by paragraph 6.11, each subcontract between CONTRACTOR and a Subcontractor will contain similar waiver provisions by the Subcontractor in favor of OWNER, CONTRACTOR, ENGINEER, ENGINEER's consultants, and all other parties named as insureds.

5.11.2. CONTRACTOR intends that any policies provided in response to paragraph 5.6 shall protect all of the parties insured, and provide primary coverage for all losses and damages caused by the perils covered thereby. Accordingly, all such policies shall contain provisions to the effect that in the event of payment of any loss or damage, the insurer will have no rights of recovery against any of the parties named as insureds or additional insureds, and if the insurers require separate waiver forms to be signed by ENGINEER or ENGINEER's consultant or any Subcontractor, CONTRACTOR will obtain the same.

Acceptance of Insurance:

5.14. If OWNER discovers any obvious defect, or has objection to the coverage afforded by the insurance required to be purchased and maintained by CONTRACTOR in accordance with paragraphs 5.3, 5.4, 5.5 and 5.6, on the basis of it not complying with the Contract Documents, OWNER will attempt to notify CONTRACTOR in writing thereof within ten (10) days of the date of delivery of such certificates to OWNER in accordance with paragraph 2.7. CONTRACTOR shall provide to the OWNER such additional information in respect of insurance provided by CONTRACTOR as the OWNER may reasonably request. Failure on the part of the OWNER or its agents to detect an insurance deficiency as compared to the insurance requirements of the Contract shall not constitute a waiver by the OWNER of the insurance requirements which CONTRACTOR and/or Subcontractors must meet to be in compliance herewith.

Partial Utilization - Property Insurance:

5.15. If OWNER finds it necessary to occupy or use a portion, or portions, of the Work prior to Substantial Completion of all the Work, such use or occupancy may be accomplished in accordance with paragraph 14.10. The insurers of CONTRACTOR providing the property insurance shall consent to such use or occupancy by endorsement on the policy or policies, but the property insurance shall not be canceled, or lapse, on account of any such partial use or occupancy.

ARTICLE 6. CONTRACTOR'S RESPONSIBILITIES

Supervision and Superintendence:

6.1. CONTRACTOR shall supervise and direct the Work competently and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the Work in accordance with the Contract Documents. CONTRACTOR shall be solely responsible for the means, methods, techniques, sequences and procedures of construction, but CONTRACTOR shall not be responsible for the negligence of others in the design or selection of a specific means, method, technique, sequence or procedure of construction which is depicted in, and required by the Contract Documents. CONTRACTOR shall be responsible to see that the finished Work complies accurately with the Contract Documents.

6.2. CONTRACTOR shall maintain on the Work at all times during its progress, a competent resident superintendent, who shall not be replaced without written notice to OWNER and ENGINEER, except under extraordinary circumstances. The superintendent will be CONTRACTOR's representative at the site and shall have authority to act on behalf of CONTRACTOR. It is expressly understood by CONTRACTOR that all communications given to the superintendent shall be as binding as if given to CONTRACTOR.

Labor, Materials and Equipment:

6.3. CONTRACTOR shall provide competent, suitably qualified personnel to survey and lay out the Work and perform construction as required by the Contract Documents. CONTRACTOR shall at all times maintain good discipline and order at the site. Except in connection with the safety or protection of persons or the Work or property at the site or adjacent thereto, and except as otherwise indicated in the Contract Documents, all Work at the site shall be performed during regular working hours, and CONTRACTOR will not permit overtime work, or the performance of Work on Saturday, Sunday, or any legal holiday, without OWNER's written consent given after prior written notice by CONTRACTOR to ENGINEER. Preference employment shall be given to resident citizens of the area where such persons are available and fully qualified to perform the Work to which the employment relates.

6.3.1. CONTRACTOR shall acquaint himself with all matters and conditions concerning the site and existing construction. Any practical criticism or exception regarding any feature of the Work must be presented in writing to OWNER at least twenty-one (21) days prior to bidding. After a Construction Agreement to perform the Work has been signed by CONTRACTOR, it shall then be his responsibility to provide satisfactory Work that will meet the full intent of the Contract Documents. CONTRACTOR shall then pursue this Work with the other trades so that all phases of the Work may be properly coordinated without delays or damage to any parts of the Work.

6.4. Unless otherwise specified in the General Requirements, CONTRACTOR shall furnish and assume full responsibility for all materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, sanitary facilities, temporary facilities and all other facilities and incidentals necessary for the furnishing, performance, testing, start-up and completion of the Work.

6.4.1. CONTRACTOR shall provide and maintain suitable weather tight, washable, sanitary toilet facilities for all workmen for the entire construction period. CONTRACTOR shall comply with all requirements of applicable health authorities. When toilet facilities are no longer required, promptly remove from the site, disinfect and clean the area as required. CONTRACTOR shall keep toilet facility swept and supplied with toilet tissue at all times.

6.5. All materials and equipment shall be of good quality and new, except as otherwise provided in the Contract Documents. If required by ENGINEER, CONTRACTOR shall furnish satisfactory evidence (including reports of required tests) as to the kind and quality of materials and equipment. All materials and equipment shall be applied, installed, connected, erected, used, cleaned and conditioned in accordance with the instructions of the applicable Supplier, except as otherwise provided in the Contract Documents; but no provision of any such instructions will be effective to assign to ENGINEER, or any of ENGINEER's consultants, agents or employees, any duty or authority to supervise or direct the furnishing or performance of the Work, or any duty or authority to undertake responsibility contrary to the provisions of paragraph 9.15 or 9.16.

CONTRACTOR shall notify OWNER in writing of any conflict between the manufacturer's directions and the Contract Documents and shall not perform any work on any item until such conflict has been resolved. Upon award of the Contract, CONTRACTOR will secure a certificate of exemption from the State Comptroller to preserve the City of Windcrest's exemption from Limited Sales, Excise and Use Tax in an amount representing that part of the total contract price representative of the value of tangible personal property to be physically incorporated into the project realty. The certificate of exemption must contain a statement to the effect that such materials or property have been, or will be utilized in the performance of the Contract to the full extent of the amount for which a certificate of exemption is requested.

6.5.1. Except where otherwise specified, CONTRACTOR shall, at all times, provide protection against weather, so as to maintain all Work, materials, and fixtures free from injury or damages. All new work likely to be damaged shall be covered or otherwise protected as required.

6.5.2. While it is appreciated that CONTRACTOR has to maintain continuous construction operations and sequences, it should be understood that the Windcrest Wastewater Treatment Plant **electric, water, wastewater, HVAC, etc., system(s) must function during the construction period with a minimum of inconvenience to the Plant operations** on a 24 hour daily basis throughout the year to meet the requirements of the Texas Commission on Environmental (TCEQ). It is therefore incumbent on CONTRACTOR to plan ahead on the basis of integrating his program as far as possible into the normal operating sequence of the system(s). No departure from the normal operating sequence of the system(s) will be allowed except with the specific written agreement of both OWNER and ENGINEER, which will not be unreasonably withheld.

6.5.3. CONTRACTOR shall notify OWNER 48 hours in advance of any Work which will be tied into the existing system(s). Method of tie-in shall be submitted to ENGINEER for his approval prior to any Work being performed. At no time shall contaminated water that has not been disinfected be allowed to seep into the existing waterlines, and at no time shall sewage be allowed to flow into surrounding areas. Connection will be made during times of minimum sewage flows, if required by Project.

6.5.4. CONTRACTOR shall coordinate his Work with that of other CONTRACTORS whose work may occur at a conflicting time and location. The coordination shall be such that Work will be maintained at a normal rate.

6.5.5. All Work that is performed on, across or along the Windcrest Right of way must conform to all contract requirements.

6.5.6. Satisfactory access or detour roads shall be provided where necessary due to construction.

6.5.7. CONTRACTOR and his own or retained Registered Professional Engineer shall develop and submit to OWNER Trench Safety System Plan and shall provide any necessary shoring, bracing and/or sheeting to protect persons and property in and around trenches pursuant to Section 756.023 of the Texas Health and Safety Code and OSHA 29 C.F.R. 1926, Subpart P, Vol. 54, No. 209 of the Federal Register, October 31, 1989, pp. 45959-45991, and, as further provided in the Technical Specifications Section entitled "Trench Excavation and Shoring Safety Plan."

6.5.8 CONTRACTOR shall provide where necessary, adequate barricades and warning devices in conformance with the guidelines for Traffic Control as established by the Texas Department of Transportation ("TXDOT") in the Texas Manual on Uniform Traffic Control Devices (TMUTCD). This provision shall be subsidiary to and included within the rest of the Work in this Contract, and shall not constitute a separate pay item.

6.5.9 CONTRACTOR shall provide to OWNER the services of a technical representative for CONTRACTOR furnished equipment, for a sufficient period after construction to assist in start-up, and initial adjustment of all equipment, and to initially train, advise and consult with OWNER's operating personnel, if specifically required by the Project.

6.5.10 All items of equipment required for this Contract shall be bid to provide as part of the price, literature explaining "Operation and Maintenance" of that items of equipment, if required by Project. If a manufacturer does not routinely print such a standard O&M manual, CONTRACTOR shall devise and provide OWNER with a manual approved in writing by the manufacturer.

Adjusting Progress Schedule:

6.6. CONTRACTOR shall submit to ENGINEER for acceptance (to the extent indicated in paragraph 2.9) adjustments in the progress schedule to reflect the impact thereon of new developments; these will conform generally to the progress schedule then in effect, and additionally will comply with any provisions of the General Requirements applicable thereto.

Substitutes or "Or-Equal" Items:

6.7.1. Whenever materials or equipment are specified or described in the Contract Documents by using the name of a proprietary item, or the name of a particular Supplier, the naming of the item is intended to establish the type, function and quality required. Unless the name is followed by words indicating that no substitution is permitted, materials or equipment of other Suppliers may be accepted by ENGINEER if sufficient information is submitted by CONTRACTOR to allow ENGINEER to determine that the material or equipment proposed is equivalent, or equal to, that named. The procedure for review by ENGINEER will include the following, as supplemented in the General Requirements of the Technical Specifications. Requests for review of substitute items of material and equipment will not be accepted by ENGINEER from anyone other than CONTRACTOR. If CONTRACTOR wishes to furnish or use a substitute item of material or equipment, CONTRACTOR shall make written application to ENGINEER for acceptance thereof, certifying that the proposed substitute will equivalently perform the functions, and achieve the results, called for by the general design, be substantially similar and of equal substance to that specified, and be suited to the same use as that specified. The application will state that the evaluation and acceptance of the proposed substitute will not prejudice CONTRACTOR's achievement of Substantial Completion on time, whether or not acceptance of the substitute for use in the Work will require a change in any of the Contract Documents (or in the provisions of any other direct contract with OWNER for work on the Project) to adapt the design to the proposed substitute, and whether or not incorporation or use of the substitute in connection with the Work is subject to payment of any license fee or royalty. All variations of the proposed substitute, from that specified, will be identified in the application, and available maintenance, repair and replacement service will be indicated. The application will also contain an itemized

estimate of all costs that will result directly or indirectly from acceptance of such substitute, including costs of redesign and any claims of other contractors affected by the resulting change, all of which shall be considered by ENGINEER in evaluating the proposed substitute. ENGINEER may require CONTRACTOR to furnish at CONTRACTOR's expense, additional data about the proposed substitute.

6.7.2. If a specific means, method, technique, sequence, or procedure of construction is indicated in, or required by the Contract Documents, CONTRACTOR may furnish or utilize a substitute means, method, sequence, technique or procedure of construction acceptable to ENGINEER, if CONTRACTOR submits sufficient information to allow ENGINEER to determine that the substitute proposed is equivalent to that indicated, or required by , the Contract Documents. The procedure for review by ENGINEER will be similar to that provided in paragraph 6.7.1 as applied by ENGINEER and as may be supplemented in the General Requirements of the Technical Specifications.

6.7.3. ENGINEER will be allowed a reasonable time within which to evaluate each proposed substitute. ENGINEER will be the sole judge of acceptability, and no substitute will be ordered, installed or utilized without ENGINEER's prior written acceptance, which will be evidenced by either a Change Order or an approved Shop Drawing. OWNER may require CONTRACTOR to furnish at CONTRACTOR's expense, a special performance guaranty, or other surety, with respect to any substitute. ENGINEER will record time required by ENGINEER and ENGINEER's consultants in evaluating substitutions proposed by CONTRACTOR, and in making changes in the Contract Documents occasioned thereby. Whether or not ENGINEER accepts a proposed substitute, CONTRACTOR shall reimburse OWNER for the charges of ENGINEER and ENGINEER's consultants for evaluating each proposed substitute.

Concerning Subcontractors, Suppliers and Others:

6.8.1. CONTRACTOR shall not employ any Subcontractor, Supplier or other person or organization (including those acceptable to OWNER and ENGINEER as indicated in paragraph 6.8.2), whether initially or as a substitute, against whom OWNER or ENGINEER may have reasonable objection. CONTRACTOR shall not be required to employ any Subcontractor, Supplier or other person or organization to furnish or perform any of the Work against whom CONTRACTOR has reasonable objection.

6.8.2. If any Supplementary Conditions require the identity of certain Subcontractors, Suppliers or other persons or organizations (including those who are to furnish the principal items of materials and equipment) to be submitted to OWNER in advance of a specified date, prior to the Effective Date of the Agreement, for acceptance by OWNER and ENGINEER, and if CONTRACTOR has submitted a list thereof in accordance with any Supplementary Conditions, OWNER's or ENGINEER's acceptance (either in writing or by failing to make written objection thereto by the date indicated for acceptance or objection in the bidding documents or the Contract Documents) of any such Subcontractor, Supplier, or other person, or organization so identified, may be revoked on the basis of reasonable objection after due investigation, in which case CONTRACTOR shall submit an acceptable substitute. The Contract Price may be increased by the difference in the cost occasioned by such substitution and an appropriate Change Order will be issued, or Written Amendment signed. All increases or decreases in the Contract Price shall be governed by all state and local statutes, codes, laws, ordinances, rules and

regulations governing competitive bidding and Change Orders. No acceptance by OWNER or ENGINEER of any such Subcontractor, Supplier or other person or organization shall constitute a waiver of any right of OWNER or ENGINEER to reject defective Work.

6.9. CONTRACTOR shall be fully responsible to OWNER and ENGINEER for all acts and/or omissions of the Subcontractors, Suppliers and other persons and organizations performing or furnishing any of the Work under a direct or indirect contract with CONTRACTOR, just as CONTRACTOR is responsible for CONTRACTOR's own acts and/or omissions. **Nothing in the Contract Documents shall create any contractual relationship between OWNER or ENGINEER and any such Subcontractor, Supplier or other person or organization**, nor shall it create any obligation on the part of OWNER or ENGINEER to pay, or to see to the payment of any moneys due any such Subcontractor, Supplier or other person or organization, except as may otherwise be required by Laws and Regulations.

6.10. The divisions and sections of the Specifications and the identifications of any Drawings shall not control CONTRACTOR in dividing the Work among Subcontractors or Suppliers, or delineating the Work to be performed by any specific trade.

6.11. All Work performed for CONTRACTOR by a Subcontractor will be pursuant to an appropriate agreement between CONTRACTOR and the Subcontractor which specifically binds the Subcontractor to the applicable terms and conditions of the Contract Documents for the benefit of OWNER and ENGINEER and contains waiver provisions as required by paragraph 5.11.

Patent Fees and Royalties:

6.12. CONTRACTOR shall pay all license fees and royalties and assume all costs incident to the use in the performance of the Work, or the incorporation in the Work, of any invention, design, process, product or device which is the subject of patent rights or copyrights held by others. If a particular invention, design, process, product or device is specified in the Contract Documents for use in the performance of the Work, and if to the actual knowledge of OWNER its use is subject to patent rights or copyrights calling for the payment of any license fee or royalty to others, the existence of such rights shall be disclosed by OWNER in the Contract Documents. CONTRACTOR shall indemnify and hold harmless OWNER from and against claims, damages, losses and expenses (including attorneys' fees and court costs) arising out of any infringement of patent rights or copyrights incident to the use in the performance of the Work, or resulting from the incorporation in the Work of any invention, design, process, product or device not specified in the Contract Documents, and shall defend all such claims in connection with any alleged infringement of such rights.

Permits:

6.13. Unless otherwise provided in any Supplementary Conditions, CONTRACTOR shall obtain and pay for all construction permits and licenses. OWNER shall assist CONTRACTOR, when necessary, in obtaining such permits and licenses. CONTRACTOR shall pay all governmental charges and inspection fees necessary for the prosecution of the Work, which are applicable at the time of opening of Bids. CONTRACTOR shall pay all charges of utility owners for connections to the Work, and OWNER shall pay all charges of such utility owners for capital costs that facilitate the project.

Fires shall not be built on the jobsite except by the express consent of OWNER, City Fire Marshall and the TACB.

Laws and Regulations:

6.14.1. CONTRACTOR shall give all notices and comply with all Laws and Regulations applicable to furnishing and performance of the Work. Except where otherwise expressly required by applicable Laws and Regulations, neither OWNER nor ENGINEER shall be responsible for monitoring CONTRACTOR's compliance with any Laws or Regulations.

6.14.2. If CONTRACTOR observes that the Specifications or Drawings are at variance with any Laws or Regulations. CONTRACTOR shall give ENGINEER prompt written notice thereof, and any necessary changes will be authorized by one of the methods indicated in paragraph 3.4. If CONTRACTOR performs any Work knowing, or having reason to know, that it is contrary to such Laws or Regulations, and without such notice to ENGINEER, CONTRACTOR shall bear all construction related costs arising there from; however, it shall not be CONTRACTOR's primary responsibility to make certain that the Specifications and Drawings are in accordance with such Laws and Regulations.

Taxes:

6.15 Pursuant to 34 Texas Administrative Code 3.291, in order for the OWNER to continue to benefit from its status as a State Sales and Use Tax Exempt Organization, after August 14, 1991, construction contracts must be awarded on a "separated contract" basis. A "separated contract" is one that distinguishes the value of the tangible personal property (materials such as pipe, bricks, lumber, concrete, paint, etc.) to be physically incorporated into the Project realty, from the total contract price. Under the "separated contract" format, the CONTRACTOR in effect becomes a "seller" to the OWNER of materials that are to be physically incorporated into the project realty. As a "seller", the CONTRACTOR will issue a "Texas Certificate of Resale" to the supplier in lieu of paying the sales tax on materials at the time of purchase. The CONTRACTOR will also issue a "Certificate of Exemption" to the supplier demonstrating that the personal property is being purchased for resale and that the resale is to the City of Windcrest, which is a sales tax exempt entity under UTCA Tax Code Section 151.309(5). CONTRACTOR should be careful to consult the most recent guidelines of the State Comptroller of Public Accounts regarding the sales tax status of supplies and equipment that are used and/or consumed during Project Work (gas, oil, rental equipment), but that are not physically incorporated into the Project realty. Such items are generally not tax exempt. Contractors that have questions about the implementation of this policy are asked to inquire directly with the State Comptroller of Public Accounts, Tax Administration Division, State of Texas, Austin, Texas 78774 (tel. 512-463-4934). Bidders will not include any federal taxes in bid prices since the City of Windcrest is exempt from payment of such federal taxes. "Texas Certificates of Exemption", "Texas Certificates of Resale" and "Texas Sales Tax Permits" are forms available to the CONTRACTOR through the regional offices of the State Comptroller of Public Accounts.

6.15.1. On the last page of the Construction Agreement a blank is provided for the CONTRACTOR to fill in an amount in dollars and cents indicating the bid price of all materials and other tangible personal property included in the total bid that will be physically incorporated into the project realty The amount to be filled in has reference to all of such materials and other tangible personal property as will actually be physically

incorporated into the final result of the Work covered by the Contract. "Tangible personal property" means personal property which may be seen, weighed, measured, felt or touched, or which is in any other manner perceptible to the senses.

6.15.2. Upon award of the Contract, OWNER will, on written request of CONTRACTOR, furnish CONTRACTOR with a certificate of exemption from the Texas Limited Sales, Excise and Use Tax in only an amount not exceeding the above mentioned bid price for materials and other tangible personal property that will be physically incorporated into the Project realty. Such written request by CONTRACTOR must contain a statement to the effect that such materials or property have been, or will be utilized in the performance of the Contract, to the full extent of the amount for which a certificate of exemption is requested.

Use of Premises:

6.16 CONTRACTOR shall confine construction equipment, the storage of materials and equipment, and the operations of workers, to the Project site and land, and areas identified in, and permitted by, the Contract Documents, and other land and areas permitted by Laws and Regulations, rights-of-way, permits and easements, and shall not unreasonably encumber the premises with construction equipment, or other materials or equipment. CONTRACTOR shall assume full responsibility for any damage to any such land or area, or to the owner or occupant thereof, or any of the land or areas contiguous thereto, resulting from the performance of the Work. Should any claim be made against OWNER by any such owner or occupant because of the performance of the Work, CONTRACTOR shall promptly attempt to settle with such other party by agreement, or otherwise resolve the claim by mediation, arbitration or at law.

CONTRACTOR SHALL, TO THE FULLEST EXTENT PERMITTED BY LAWS AND REGULATIONS, INDEMNIFY AND HOLD HARMLESS OWNER FROM AND AGAINST ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES (INCLUDING, BUT NOT LIMITED TO, FEES OF ENGINEERS, ARCHITECTS, ATTORNEYS AND OTHER PROFESSIONALS AND COURT COSTS) ARISING DIRECTLY, INDIRECTLY OR CONSEQUENTIALLY OUT OF ANY ACTION, LEGAL OR EQUITABLE, BROUGHT BY ANY SUCH OTHER PARTY AGAINST OWNER TO THE EXTENT BASED ON A CLAIM ARISING OUT OF CONTRACTOR'S PERFORMANCE OF THE WORK. IT IS THE EXPRESSED INTENT OF THE PARTIES HERETO THAT THE INDEMNITY PROVIDED FOR IN THIS PARAGRAPHS IS INDEMNITY BY CONTRACTOR TO INDEMNIFY AND PROTECT OWNER FROM THE CONSEQUENCES OF OWNER'S OWN NEGLIGENCE, WHEN THAT NEGLIGENCE ON THE PART OF THE OWNER IS A CONCURRING CAUSE OF THE INJURY, DEATH OR DAMAGE.

FURTHERMORE, THE INDEMNITY PROVIDED FOR IN THIS PARAGRAPH SHALL HAVE NO APPLICATION TO ANY CLAIM, LOSS, DAMAGE, CAUSE OF ACTION, SUIT AND LIABILITY WHERE THE INJURY, DEATH OR DAMAGE RESULTS FROM THE SOLE NEGLIGENCE OF THE OWNER INDEPENDENT OF THE FAULT OF ANY OTHER PERSON OR ENTITY.

6.17 During the progress of the Work, CONTRACTOR shall keep the premises free from accumulations of waste materials, rubbish and other debris resulting from the Work. At the completion of the Work, CONTRACTOR shall remove all waste materials, rubbish and debris from, and about, the premises as well as all tools, appliances, construction equipment and machinery, and surplus materials, and shall leave the site clean and ready for occupancy by

OWNER. CONTRACTOR shall restore to original condition all property not designated for alteration by the Contract Documents.

CONTRACTOR shall be confined to all working easements provided. Storage of excavation material and all CONTRACTOR equipment and material shall remain within the limits of working easements.

6.18 CONTRACTOR shall not load, or permit any part of any structure to be loaded in any manner that will endanger the structure, nor shall CONTRACTOR subject any part of the Work or adjacent property to stresses, excessive vibrations, or pressures that will damage it.

Record Documents:

6.19 CONTRACTOR shall maintain in a safe place at the job site, one record copy of all Drawings, Specifications, Addenda, Written Amendments, Change Orders, Work Directive Changes, Field Orders and written interpretations and clarifications (issued pursuant to paragraph 9.4) in good order and annotated to show all changes made during construction. These Record Documents, together with all approved samples, and a counterpart of all approved Shop Drawings, will be available to ENGINEER for reference. Upon completion of the Work, these record documents, samples and Shop Drawings will be delivered to ENGINEER for OWNER.

Safety and Protection:

6.20 CONTRACTOR shall be solely responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the Work. CONTRACTOR shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury or loss to:

6.20.1. all employees on the Work and other persons and organizations who may be affected thereby;

6.20.2. all the Work and materials and equipment to be incorporated therein, whether in storage on, or off the site; and

6.20.3. other property at the site, or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, utilities and Underground Facilities not designated for removal, relocation or replacement in the course of construction.

6.20.4. Driveways, culverts, storm sewer inlets and laterals, and other public or private property that is destroyed or removed during the construction shall be replaced to its original condition by CONTRACTOR. Temporary drainage is to be provided as necessary.

6.20.5. CONTRACTOR is responsible for locating underground obstacles. It is not represented by OWNER or ENGINEER that the plans show all sewers, waterlines, electric lines, gas lines, telephone lines and other underground obstacles. CONTRACTOR shall exercise caution to prevent damage to existing facilities during the progress of the construction Work, taking care to locate same, where possible, in advance of the actual Work. ENGINEER will render reasonable assistance to CONTRACTOR in the matter of CONTRACTOR determining the location of existing utilities by making available such maps, records, and other existing available information as may be

accessible to OWNER or ENGINEER, when requested to do so by CONTRACTOR, but the accuracy of such information will not be guaranteed by them. CONTRACTOR shall make good all damage to existing utilities resulting from his operations. Where a pipe, duct or other structure of a utility is exposed, which, in the opinion of ENGINEER requires strengthening, altering, shielding or moving, CONTRACTOR shall only perform any such work on same as ENGINEER may order in writing after consultation by ENGINEER with the affected utility owner, which Work, if any, will be paid for by OWNER as extra Work. Should CONTRACTOR, in the layout of his Work, encounter any pipe, underground utility or structure, the location of which has not been furnished to him by ENGINEER, he shall bring such conditions to the attention of ENGINEER for a mutual determination of the method to be used to remove or bypass such obstructions.

6.20.6. It is essential that in the event of any damage being caused to existing utilities by CONTRACTOR, that immediate attention be given to their repair by the appropriate party, if necessary, at the temporary expense of labor and material scheduled to be employed on the new Work. Any repair Work authorized to be carried out by CONTRACTOR shall be at the non-reimbursable cost of CONTRACTOR and shall be to the complete satisfaction of OWNER, who will acknowledge same in writing. It is the obligation of CONTRACTOR, at least twenty-one (21) days prior to submittal of his Bid to inspect and accurately record in writing to OWNER and ENGINEER, the condition of any utility which he reasonably suspects or, knows to already be damaged, faulty, or defective. In addition, any such utilities so recorded, which in the opinion of CONTRACTOR may deteriorate further as a result of the proposed mode of new construction operations, should be protected and/or remedial measures employed as may be agreed to by ENGINEER and OWNER prior to the time of bidding so that appropriate addenda, if any, can be issued to assign the cost to OWNER or the utility owner affected.

CONTRACTOR shall comply with all applicable Laws and Regulations of any public body having jurisdiction for the safety of persons or property, or to protect them from damage, injury or loss; and shall erect and maintain all necessary safeguards for such safety and protection. CONTRACTOR shall notify owners of adjacent property of Underground Facilities and utility owners, when prosecution of the Work may affect them, and shall cooperate with them in the protection, removal, relocation and replacement of their property. All damage, injury or loss to any property referred to in paragraphs 6.20.2 through 6.20.6. caused, directly or indirectly, in whole or in part by CONTRACTOR, any Subcontractor, Supplier or any other person or organization directly or indirectly employed by any of them to perform or furnish any of the Work, or anyone for whose acts any of them may be liable, shall be finally remedied by CONTRACTOR. CONTRACTOR's duties and responsibilities for the safety and protection of the Work shall continue until such time as all the Work is completed and ENGINEER has issued a notice to OWNER and CONTRACTOR in accordance with paragraph 14.13 that the Work is acceptable (except as otherwise expressly provided in connection with Substantial Completion).

6.21 CONTRACTOR shall designate a responsible safety representative at the site whose duty shall be to provide training and observation to prevent accidents. This person shall be CONTRACTOR's superintendent, unless otherwise designated in writing by CONTRACTOR to OWNER.

Emergencies:

6.22 In emergencies affecting the safety or protection of persons, or the Work, or property at the site or adjacent thereto, CONTRACTOR, without special oral instruction or authorization from ENGINEER or OWNER, is obligated to act to prevent threatened damage, injury or loss. CONTRACTOR shall give ENGINEER prompt written notice if CONTRACTOR believes that any significant changes in the Work, or variations from the Contract Documents, have been caused thereby. If ENGINEER determines that a change in the Contract Documents is required because of the responsible action taken by CONTRACTOR in response to an emergency, a Work Directive Change or Change Order will be issued to document the consequences of the changes or variations.

Shop Drawings and Samples:

6.23 After checking and verifying all field measurements, and after complying with applicable procedures specified in the General Requirements of the Technical Specifications, CONTRACTOR shall submit to ENGINEER for review and approval in accordance with the accepted schedule of Shop Drawing submissions (see paragraph 2.9), or for other appropriate action if so indicated in any Supplementary Conditions or Technical Specifications, five (5) copies (unless otherwise specified in the General Requirements of the Technical Specifications) of all Shop Drawings, which will bear a stamp, or specific written indication, that CONTRACTOR has satisfied CONTRACTOR's responsibilities under the Contract Documents with respect to the review of the submission. All submissions will be identified as ENGINEER may require. The data shown on the Shop Drawings will be complete with respect to quantities, dimensions, specified performance and design criteria, materials and similar data to enable ENGINEER to review the information as required.

Before ordering any material, or doing any Work, CONTRACTOR will verify all measurements of any existing and new Work and shall be responsible for their correctness. Any differences which may be found shall be submitted to ENGINEER for consideration before proceeding with the Work. No extra compensation will be allowed because of differences between actual dimensions and measurements indicated on the working drawings.

6.24 CONTRACTOR shall also submit to ENGINEER for review and approval, with such promptness as to cause no delay in Work, all samples required by the Contract Documents. All samples will have been checked by, and accompanied by, a specific written indication that CONTRACTOR has satisfied CONTRACTOR's responsibilities under the Contract Documents with respect to the review of the submission, and it will be identified clearly as to material, Supplier, pertinent data such as catalog numbers, and the use for which intended.

6.25.1. Before submission of each Shop Drawing or sample, CONTRACTOR shall have determined and verified all quantities, dimensions, specified performance criteria, installation requirements, materials, catalog numbers and similar data with respect thereto, and reviewed or coordinated each Shop Drawing or sample with other Shop Drawings and samples, and with the requirements of the Work and the Contract Documents.

6.25.2. At the time of each submission, CONTRACTOR shall give ENGINEER specific written notice of each variation that the Shop Drawings or samples may have from the requirements of the Contract Documents, and, in addition, shall cause a specific

notation to be made on each Shop Drawing submitted to ENGINEER for review and approval of each such variation.

ENGINEER will review and approve with reasonable promptness, Shop Drawings and samples, but ENGINEER's review and approval will be only for conformance with the design concept of the Project, and for compliance with the information given in the Contract Documents, and shall not extend to means, methods, techniques, sequences or procedures of construction (except where a specific means, method, technique, sequence or procedure of construction is indicated in, or required by, the Contract Documents) or to safety precautions or programs incident thereto. The review and approval of a separate item, as such, will not indicate approval of the assembly in which the item functions. CONTRACTOR shall make corrections required by ENGINEER, and shall return the required number of corrected copies of Shop Drawings and submit as required, new samples for review and approval. CONTRACTOR shall direct specific attention in writing to revisions other than the corrections called for by ENGINEER on previous submittals.

6.27. ENGINEER's review and approval of Shop Drawings or samples shall not relieve CONTRACTOR from responsibility for any variation from the requirements of the Contract Documents unless CONTRACTOR has in writing called ENGINEER's attention to each such variation at the time of submission, as required by paragraph 6.25.2, and ENGINEER has given written approval of each such variation by a specific written notation thereof, incorporated in or accompanying, the Shop Drawing or sample approval; nor will any approval by ENGINEER relieve CONTRACTOR from responsibility for errors or omissions in the Shop Drawings, or from responsibility for having complied with the provisions of paragraph 6.25.1.

6.28. Where a Shop Drawing or sample is required by the Specifications, any related Work performed prior to ENGINEER's review and approval of the pertinent submission, will be at the sole risk, non-reimbursable expense, and responsibility of CONTRACTOR.

Continuing the Work:

6.29. CONTRACTOR shall carry on the Work and adhere to the progress schedule during all disputes or disagreements with OWNER. No Work shall be delayed or postponed pending resolution of any disputes or disagreements, except as CONTRACTOR and OWNER may otherwise agree in writing.

Indemnification:

6.30. **TO THE FULLEST EXTENT PERMITTED BY LAWS AND REGULATIONS, CONTRACTOR SHALL INDEMNIFY AND HOLD HARMLESS OWNER AND ITS EMPLOYEES FROM AND AGAINST ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES, DIRECT, INDIRECT OR CONSEQUENTIAL (INCLUDING BUT NOT LIMITED TO FEES AND CHARGES OF ENGINEERS, ARCHITECTS, ATTORNEYS AND OTHER PROFESSIONALS AND COURT COSTS) ARISING OUT OF, OR RESULTING FROM, THE PERFORMANCE OF THE WORK, PROVIDED THAT ANY SUCH CLAIM, DAMAGE, LOSS, OR EXPENSE: (a) IS ATTRIBUTABLE TO BODILY INJURY, SICKNESS, DISEASE OR DEATH, OR TO INJURY TO, OR DESTRUCTION OF, TANGIBLE PROPERTY, INCLUDING THE LOSS OF USE RESULTING THEREFROM; AND (b)(1) IS CAUSED IN WHOLE OR IN PART BY ANY INTENTIONAL, AND/OR NEGLIGENT ACT AND/OR OMISSION OF CONTRACTOR, ANY SUBCONTRACTOR, ANY PERSON OR ORGANIZATION DIRECTLY OR INDIRECTLY EMPLOYED BY ANY OF THEM TO PERFORM OR FURNISH ANY OF THE WORK, OR**

ANYONE FOR WHOSE ACTS ANY OF THE MAY BE LIABLE; OR (b)(2) IS CAUSED IN PART BY OWNER; OR (b)(3) ARISES BY, OR IS IMPOSED BY LAWS AND REGULATIONS REGARDLESS OF THE NEGLIGENCE OF ANY SUCH PARTY. IT IS THE EXPRESSED INTENTION OF THE PARTIES HERETO, BOTH CONTRACTOR AND OWNER, THAT THE INDEMNITY PROVIDED FOR IN THIS PARAGRAPH IS INDEMNITY BY CONTRACTOR TO INDEMNIFY AND PROTECT OWNER FROM THE CONSEQUENCES OF OWNER'S OWN NEGLIGENCE, WHEN THAT NEGLIGENCE ON THE PART OF THE OWNER IS A CONCURRING CAUSE OF THE INJURY, DEATH OR DAMAGE.

SUCH INDEMNITY SHALL APPLY WHERE THE CLAIMS, LOSSES, DAMAGES, CAUSES OF ACTION, SUITS, OR LIABILITY ARISE IN PART FROM THE NEGLIGENCE OF OWNER.

FURTHERMORE, THE INDEMNITY PROVIDED FOR IN THIS PARAGRAPH SHALL HAVE NO APPLICATION TO ANY CLAIM, LOSS, DAMAGE, CAUSE OF ACTION, SUIT, AND LIABILITY WHERE THE INJURY OR DEATH OR DAMAGE RESULTS FROM THE SOLE NEGLIGENCE OF THE OWNER, INDEPENDENT OF THE FAULT OF ANY OTHER PERSON OR ENTITY.

6.31. In any and all claims against OWNER or any of its employees by any employee of CONTRACTOR, any Subcontractor, any person or organization directly or indirectly employed by any of them to perform or furnish any of the Work, or anyone for whose acts any of them may be liable, the indemnification obligation under paragraph 6.30 shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by, or for, CONTRACTOR or any such Subcontractor, or other person or organization under workers' compensation acts, disability benefit acts or other employee benefit acts.

6.32. The obligations of CONTRACTOR under paragraph 6.30 shall not extend to any professional liability of ENGINEER, ENGINEER's consultants, agents or employees arising out of the preparation or approval of maps, drawings, opinions, reports, surveys, Change Orders, designs or specifications.

6.33. CONTRACTOR shall perform all phases of Work other than general clean-up, during Monday through Friday, as defined in these General Conditions. If CONTRACTOR desires to perform Work, other than general clean-up, during weekends or holidays, proper arrangements must be made with OWNER, or any other regulatory agency having jurisdiction regarding such Work.

6.34 **General.** This Contract shall be based upon payment by CONTRACTOR and his Subcontractors of wage rates not less than General Prevailing Wage Rate of per diem wages for work of a similar character in the locality in which the Work is performed, for each type of laborer, workman or mechanic needed to implement the Contract at the Project Site, and not less than the general prevailing rate of per diem wages for legal holiday and overtime Work. The schedule of General Prevailing Wage Rates and other important Wage and Labor Standard Provisions are included in these Contract Documents in the Supplementary General Conditions.

CONTRACTOR shall comply with all requirements of the prevailing wage law of the State of Texas, Texas Revised Civil Statutes, Article 5159a, including the latest amendments thereto.

6.34.1. **Records.** CONTRACTOR and each Subcontractor shall keep an accurate record showing the names and occupations of all laborers, workmen, and mechanics employed, together with the actual wages paid to each worker. At all reasonable hours, such records shall be open to inspection by the representatives of the

OWNER. With each application for payment, CONTRACTOR shall provide a certified copy of such payroll records as necessary to substantiate compliance with this provision during the period of time for which the application for payment pertains. OWNER shall take cognizance of any and all employee complaints regarding any alleged CONTRACTOR violations of the requirements of Article 5159a.

6.34.2. **Penalty.** In case CONTRACTOR and any Subcontractor fail to comply with the prevailing wage law, by statutory authority, CONTRACTOR shall forfeit to the OWNER \$60.00 per calendar day, or portion thereof, for each laborer, workman, or mechanic who is paid less than the specified rate for any Work done under the Contract.

6.34.3. **Hours of Labor.** CONTRACTOR shall comply with all requirements of the hours of work on public works in accordance with the laws of the State of Texas, Vernon's Texas Codes Annotated, Government Code, Title 6, Sections 605.001 to 605.004, including the latest amendments thereto.

No CONTRACTOR or Subcontractor contracting for any part of the Contract Work which may require or involve the employment of laborers, workmen or mechanics at the Project Site shall require or permit any laborer, workman or mechanic in any workweek in which he is employed on such Work to work in excess of forty hours in such workweek unless such laborer, workman or mechanic receives compensation at a rate not less than one and one-half times his basic rate of pay for all hours in excess of forty hours in such workweek.

6.34.4. **Veterans Preference.** Pursuant to Vernon's Texas Codes Annotated, Government Code, Title 6, Sections 657.001 to 657.003, CONTRACTOR shall give preference in employment to honorably discharged veterans who were engaged in the services of the United States in time of war or conflict and who are, and have been, citizens of Texas for not less than five years.

6.34.5. **Equal Employment Opportunities.** The CONTRACTOR shall not discriminate against any employee or applicant for employment because of race, religion, gender, national origin, age, physically challenged condition, or a political belief or affiliation, and will comply with all state and federal statutes applicable to CONTRACTOR which relate to employment discrimination.

ARTICLE 7 - OTHER WORK

Related Work at Site:

7.1. OWNER may perform other work related to the Project at the site by OWNER's own forces, have other work performed by utility owners or let other direct construction contracts therefore which shall contain General Conditions similar to these. If the fact that such other work is to be performed was not noted in the Contract Documents, written notice thereof will be given by OWNER to CONTRACTOR prior to starting any such other work; and, if CONTRACTOR believes that such performance will involve additional expense to CONTRACTOR, or requires additional time, and the parties are unable to agree as to the extent thereof, CONTRACTOR may make a claim therefore as provided in Articles 11 and 12. Any increases or decreases in the Contract Price shall be governed by all state and local laws, statutes, codes, ordinances, rules and regulations governing competitive bidding and Change Orders.

7.2. CONTRACTOR shall afford each utility owner and other contractor who is a party to such other direct contract (or OWNER, if OWNER is performing the additional work with OWNER's employees) proper and safe access to the site, and a reasonable opportunity for the introduction and storage of materials and equipment and the execution of such work, and shall properly connect and coordinate the Work with their work. CONTRACTOR shall do all cutting, fitting and patching of the Work that may be required to make its several parts come together properly and integrate with such other work. CONTRACTOR shall not endanger any work of others by cutting, excavating or otherwise altering their work, and will only cut or alter their work with the written consent of ENGINEER, and the others whose work will be affected. The duties and responsibilities of CONTRACTOR under this paragraph are for the benefit of such utility owners, and other contractors, to the extent that there are comparable provisions for the benefit of CONTRACTOR in said direct contracts between OWNER and such utility owners and other contractors.

7.3. If any part of CONTRACTOR's Work depends, for proper execution or results, upon the work of any such other contractor or utility owner (or OWNER), CONTRACTOR shall inspect and promptly report to ENGINEER in writing any delays, defects or deficiencies in such work that renders it unavailable or unsuitable for such proper execution and results. CONTRACTOR's failure so to report will constitute an acceptance of the other work as fit and proper for integration with CONTRACTOR's Work, except for latent or non-apparent defects and deficiencies in the other work.

Coordination:

7.4. If OWNER contracts with others for the performance of other work on the Project at the site, the person or organization who will have authority and responsibility for coordination of the activities among the various prime contractors will be identified in the Supplementary Conditions, and the specific matters to be covered by such authority and responsibility will be itemized, and the extent of such authority and responsibilities will be provided in the Supplementary Conditions. Unless otherwise provided in the Supplementary Conditions, neither OWNER nor ENGINEER shall have any authority or responsibility in respect of such coordination and each contractor will mutually cooperate with the other as they deem reasonable.

ARTICLE 8 - OWNER'S RESPONSIBILITIES

8.1. OWNER shall issue all communications to CONTRACTOR through ENGINEER.

8.2. In case of termination of the employment of ENGINEER, OWNER shall appoint a substitute engineer whose status under the Contract Documents shall be that of the former ENGINEER.

8.3. OWNER shall promptly furnish the data required of OWNER under the Contract Documents and shall make payments to CONTRACTOR promptly after they are due as provided in paragraphs 14.4 and 14.13.

8.4. OWNER's duties in respect of providing lands and easements and providing engineering surveys to establish reference points are set forth in paragraphs 4.1 and 4.4. Paragraph 4.2 refers to OWNER's identifying and making available to CONTRACTOR copies of existing available reports of explorations and tests of subsurface conditions at the site, and in existing structures, which have been utilized by ENGINEER in preparing the Drawings and Specifications.

8.5. OWNER is obligated to execute Change Orders as indicated in paragraph 10.4.

8.6. OWNER's responsibility in respect of certain inspections, tests and approvals is set forth in paragraph 13.4.

8.7. In connection with OWNER's right to stop Work or suspend Work, see paragraphs 13.10 and 15.1. Paragraph 15.2 deals with OWNER's right to terminate services of CONTRACTOR under certain circumstances.

ARTICLE 9 - OWNER'S STATUS DURING CONSTRUCTION

Owner's Representative:

9.1. ENGINEER will be OWNER's representative during the construction period. The duties and responsibilities and the limitations of authority of ENGINEER as OWNER's representative during construction are set forth in the Contract Documents and shall not be extended without written consent of OWNER and ENGINEER.

Visits to Site:

9.2. ENGINEER will make visits to the site at intervals appropriate to the various stages of construction to observe the progress and quality of the executed Work and to determine, in general, if the Work is proceeding in accordance with the Contract Documents. ENGINEER will not be required to make exhaustive or continuous on-site inspections to check the quality or quantity of the Work. CONTRACTOR is solely responsible to maintain his own quality control assurance and cannot rely upon OWNER or ENGINEER to provide same. ENGINEER's efforts will be directed toward providing for OWNER a greater degree of confidence that the completed Work will conform to the Contract Documents. On the basis of such visits and on-site observations as an experienced and qualified design professional, ENGINEER will keep OWNER informed of the progress of the Work and will endeavor to guard OWNER against any CONTRACTOR defects and deficiencies in the Work.

Project Representation:

9.3. If OWNER and ENGINEER agree, ENGINEER will furnish a Resident Project Representative to assist ENGINEER in observing the performance of the Work. The duties, responsibilities and limitations of authority of any such Resident Project Representative and assistants will be as provided in the Supplementary Conditions. If OWNER designates another agent to represent OWNER at the site who is not ENGINEER's agent or employee, the duties, responsibilities and limitations of authority of such other person will be as provided in the Supplementary Conditions.

Clarifications and Interpretations:

9.4. ENGINEER, after consultation with OWNER, will issue with reasonable promptness, such written clarifications or interpretations of the requirements of the Contract Documents (in the form of Drawings or otherwise) as ENGINEER may determine necessary, which shall be consistent with or reasonably inferable from the overall intent of the Contract Documents. If CONTRACTOR believes that a written clarification or interpretation justifies an increase in the Contract Price, or an extension of the Contract Time, and the parties are unable to agree to the amount or extent thereof, CONTRACTOR may make a claim therefore as provided

in Article 11 or Article 12. All increases or decreases in the Contract Price shall be governed by all state and local laws, statutes, codes, ordinances, rules and regulations governing competitive bidding and Change Orders.

Authorized Variations in Work:

9.5. ENGINEER, after consultation with OWNER, may authorize minor variations in the Work from the requirements of the Contract Documents which do not involve an adjustment in the Contract Price or the Contract Time, and are consistent with the overall intent of the Contract Documents. These may be accomplished by a Field Order and will be binding on OWNER, and also on CONTRACTOR who shall promptly perform the Work involved. If CONTRACTOR believes that a Field Order justifies an increase in the Contract Price, or an extension of the Contract Time, CONTRACTOR may make a claim therefore as provided in Article 11 or 12. All increases or decreases in the Contract Price shall be governed by all state and local laws, statutes, codes, ordinances, rules and regulations governing competitive bidding and Change Orders.

Rejecting Defective Work:

9.6. ENGINEER will have the authority to disapprove or reject Work which ENGINEER believes to be defective, and will also have authority to require special inspection or testing of the Work as provided in paragraph 13.9, whether or not the Work is fabricated, installed, or completed.

Shop Drawings, Change Orders and Payments:

9.7. In connection with ENGINEER's responsibility for Shop Drawings and samples, see paragraphs 6.23 through 6.28 inclusive.

9.8. In connection with ENGINEER's responsibilities as to Change Orders, see Articles 10, 11 and 12.

9.9. In connection with ENGINEER's responsibilities in respect of Applications for Payment, etc., see Article 14.

Determinations for Unit Prices:

9.10. ENGINEER will determine the actual quantities and classifications of Unit Price Work performed by CONTRACTOR. ENGINEER will review with CONTRACTOR, ENGINEER's preliminary determinations on such matters before rendering a written decision thereon (by recommendation of an Application for Payment or otherwise). ENGINEER's written decisions thereon will be final and binding upon OWNER and CONTRACTOR, unless, within ten days after the date of any such decision, either OWNER or CONTRACTOR delivers to the other party to the Agreement, and to ENGINEER, written notice of intention to appeal from such a decision.

Decisions on Disputes:

9.11. ENGINEER will be the interpreter of the requirements of the Contract Documents and judge of the acceptability of the Work thereunder. Claims, disputes and other matters relating to the acceptability of the Work, or the interpretation of the requirements of the Contract Documents pertaining to the performance and furnishing of the Work, and claims under Articles

11 and 12 in respect of changes in the Contract Price or Contract Time, will be referred initially to ENGINEER, in writing, with a request for a formal decision in accordance with this paragraph, which ENGINEER will render in writing within a reasonable time. Written notice of each such claim, dispute and other matter will be delivered by the claimant to ENGINEER and the other party to the Agreement promptly (but in no event later than thirty days) after the occurrence of the event giving rise thereto, and written supporting data will be submitted to ENGINEER, and the other party, within sixty (60) days after such occurrence unless ENGINEER allows an additional period of time to ascertain more accurate data in support of the claim.

9.12. When functioning as interpreter and judge under paragraphs 9.10 and 9.11, ENGINEER will not be liable in connection with any interpretation or decision rendered in good faith in such capacity. The rendering of a decision by ENGINEER pursuant to paragraphs 9.10 and 9.11 with respect to any such claim, dispute or other matter (except any which have been waived by the making or acceptance of final payment as provided in paragraph 14.16) will be a condition precedent to any exercise by OWNER or CONTRACTOR of such rights or remedies as either may otherwise have under the Contract Documents, or by Laws or Regulations, in respect of any such claim, dispute, or other matter.

Limitations on ENGINEER's Responsibilities:

9.13. Neither ENGINEER's authority to act under this Article 9 or elsewhere in the Contract Documents, nor any decision made by ENGINEER in good faith either to exercise, or not exercise, such authority, shall give rise to any duty or responsibility of ENGINEER to CONTRACTOR, any Subcontractor, any Supplier, or any other person or organization performing any of the Work, or to any surety for any of them.

9.14. Whenever in the Contract Documents the term "as ordered", "as directed", "as required", "as allowed", "as approved" or terms of like effect or import are used, or the adjectives "reasonable", "suitable", "acceptable", "proper" or "satisfactory" or adjectives of like effect or import are used to describe a requirement, direction, review or judgment of ENGINEER as to the Work, it is intended that such requirement, direction, review or judgment will be solely to evaluate the Work for compliance with the Contract Documents (unless there is a specific statement indicating otherwise). The use of any such term or adjective shall not be effective to assign to ENGINEER any duty to supervise or direct the furnishing, or performance of the Work, or any duty or authority to undertake responsibility contrary to the provisions of paragraph 9.15 or 9.16.

9.15. ENGINEER will not be responsible for CONTRACTOR's means, methods, techniques, sequences, procedures or quality controls of construction, or the safety precautions and programs incident thereto, for which CONTRACTOR shall be solely responsible. ENGINEER will not be responsible for CONTRACTOR's failure to perform or furnish the Work in accordance with the Contract Documents.

9.16. ENGINEER will not be responsible for the acts and/or omissions of CONTRACTOR, or of any Subcontractor, any Supplier, or of any other person or organization performing, or furnishing, any of the Work.

ARTICLE 10 - CHANGES IN THE WORK

10.1. Without invalidating the Agreement, and without notice to any surety, OWNER may, at any time, or from time to time, order additions, deletions or revisions in the Work; these will be authorized by a Written Amendment, a Change Order, or a Work Directive Change. Upon

receipt of any such document, CONTRACTOR shall promptly proceed with the Work involved which will be performed under the applicable conditions of the Contract Documents (except as otherwise specifically provided).

10.2. If OWNER and CONTRACTOR are unable to agree as to the extent, if any, of an increase or decrease in the Contract Price or an extension or shortening of the Contract Time that should be allowed as a result of a Work Directive Change, a claim may be made therefore as provided in Article 11 or Article 12. All increases or decreases in the Contract Price shall be governed by all state and local laws, statutes, codes, ordinances, rules and regulations governing competitive bidding and Change Orders.

10.3. CONTRACTOR shall not be entitled to an increase in the Contract Price, or an extension of the Contract Time, with respect to any Work performed that is not required by the Contract Documents as amended, modified and supplemented as provided in paragraphs 3.4 and 3.5, except in the case of an emergency, as provided in paragraph 6.22 and except in the case of uncovering Work, as provided in paragraph 13.9.

10.4. OWNER and CONTRACTOR shall execute appropriate Change Orders (or Written Amendments) covering:

10.4.1. changes in the Work which are ordered by OWNER pursuant to paragraph 10.1, are required because of acceptance of defective Work under paragraph 13.13, or correcting defective Work under paragraph 13.14, or are agreed to by the parties;

10.4.2. changes in the Contract Price or Contract Time which are agreed to by the parties; and

10.4.3. changes in the Contract Price or Contract Time which embody the substance of any written decision rendered by ENGINEER pursuant to paragraph 9.11; provided that, in lieu of executing any such Change Order, an appeal may be taken from any such decision in accordance with the provisions of the Contract Documents and applicable Laws and Regulations, but during any such appeal, CONTRACTOR shall carry on the Work and adhere to the progress schedule as provided in paragraph 6.29.

10.5. If notice of any change affecting the general scope of the Work, or the provisions of the Contract Documents (including, but not limited to, Contract Price or Contract Time) is required to be given to a surety by the provisions of any Bond, the giving of any such notice will be CONTRACTOR'S sole responsibility, and the amount of each applicable Bond will be adjusted accordingly.

ARTICLE 11 - CHANGE OF CONTRACT PRICE

11.1. The Contract Price constitutes the total compensation (subject to authorized adjustments) payable to CONTRACTOR for performing the Work. All duties, responsibilities and obligations assigned to, or undertaken by, CONTRACTOR shall be at his expense without change in the Contract Price.

11.2. The Contract price may only be changed by a Change Order, or by a Written Amendment. Any claim for an increase or decrease in the Contract Price shall be based on written notice promptly delivered by the party making the claim to the other party, and to ENGINEER (but in no event later than thirty (30) days) after the occurrence of the event giving

rise to the claim, and stating the general nature of the claim. Notice of the amount of the claim, with supporting data, shall be delivered within sixty (60) days after such occurrence (unless ENGINEER allows an additional period of time to ascertain more accurate data in support of the claim) and shall be accompanied by claimant's written statement that the amount claimed covers all known amounts (direct, indirect and consequential), to which the claimant is entitled as a result of the occurrence of said event. All claims for adjustment in the Contract Price shall be determined by ENGINEER in accordance with paragraph 9.11, if OWNER and CONTRACTOR cannot otherwise agree on the amount involved. No claim for an adjustment in the Contract Price will be valid, and will be deemed waived, if not submitted in accordance with this paragraph 11.2.

11.3. The value of any Work covered by a Change Order, or of any claim for an increase or decrease in the Contract Price, shall be determined in one of the following ways:

11.3.1. Where the Work involved is covered by unit prices contained in the Contract Documents, by application of unit prices to the quantities of the items involved (subject to the provisions of paragraphs 11.9.1. through 11.9.3. inclusive).

11.3.2. By mutual acceptance of a lump sum (which may include an allowance for overhead and profit not necessarily in accordance with paragraph 11.6.2.1).

11.3.3. On the basis of the Cost of the Work (determined as provided in paragraphs 11.4 and 11.5) plus a CONTRACTOR's Fee for overhead and profit (determined as provided in paragraphs 11.6 and 11.7).

Cost of the Work:

11.4. The term "Cost of the Work" means the sum of all costs necessarily incurred and paid by CONTRACTOR in the proper performance of the Work. Except as otherwise may be agreed to in writing by OWNER, such costs shall be in amounts no higher than those prevailing in the locality of the Project, shall include only the following items, and shall not include any of the costs itemized in paragraph 11.5:

11.4.1. Payroll costs for employees in the direct employ of CONTRACTOR in the performance of the Work under schedules of job classifications agreed upon by OWNER and CONTRACTOR. Payroll costs for employees not employed full time on the Work shall be apportioned on the basis of their time spent on the Work. Payroll costs shall include, but not be limited to, salaries and wages, plus the cost of any fringe benefits which shall include social security contributions, unemployment, excise and payroll taxes, workers' compensation, health and retirement benefits, bonuses, sick leave, vacation and holiday as applicable thereto. Such employees shall include superintendents and foremen at the site. The expenses of performing Work after regular working hours, on Saturday, Sunday or legal holidays, shall be included in the above, to the extent authorized by OWNER.

11.4.2. Cost of all materials and equipment furnished and incorporated in the Work, including costs of transportation and storage thereof, and Suppliers' field services required in connection therewith. All cash discounts shall accrue to CONTRACTOR unless OWNER deposits funds with CONTRACTOR with which to make payments, in which case the cash discounts shall accrue to OWNER. All trade discounts, rebates and refunds, and all returns from sale of surplus materials and equipment, shall accrue to OWNER, and CONTRACTOR shall make provisions so that they may be obtained.

11.4.3. Payments made by CONTRACTOR to the Subcontractors for Work performed by Subcontractors. If required by OWNER, CONTRACTOR shall obtain competitive bids from Subcontractors acceptable to CONTRACTOR and shall deliver such bids to OWNER, who will then determine which bid will be accepted. If a subcontract provides that the Subcontractor is to be paid on the basis of Cost of the Work Plus a Fee, the Subcontractor's Cost of the Work shall be determined in the same manner as CONTRACTOR's Cost of the Work. All subcontracts shall be subject to the other provisions of the Contract Documents insofar as applicable.

11.4.4. Costs of special consultants (including but not limited to engineers, architects, testing laboratories, surveyors, attorneys and accountants) employed for services specifically related to the Work.

11.4.5. Supplemental costs, including the following:

11.4.5.1. The proportion of necessary transportation, travel and subsistence expenses of CONTRACTOR's employees incurred in discharge of duties connected with the Work.

11.4.5.2. Cost, including transportation and maintenance, of all materials, supplies, equipment, machinery, appliances, office and temporary facilities at the site, and hand tools not owned by the workers, which are consumed in the performance of the Work, and cost less market value of such items used, but not consumed, which remain the property of CONTRACTOR.

11.4.5.3. Rentals of all construction equipment and machinery and the parts thereof, whether rented from CONTRACTOR or others, in accordance with rental agreements approved by OWNER, with the advice of ENGINEER, and the costs of transportation, loading, unloading, installation, dismantling and removal thereof (all in accordance with terms of said rental agreements). The rental of any such equipment, machinery, or parts shall cease when the use thereof is no longer necessary for the Work.

11.4.5.4. Any sales, consumer, use or similar taxes related to the Work that OWNER is not exempt from paying and are imposed by Laws and Regulations governing the Work, and for which CONTRACTOR is liable.

11.4.5.5. Deposits lost for causes other than negligence of CONTRACTOR, any Subcontractor, or anyone directly or indirectly employed by any of them, or for whose acts any of them may be liable, and royalty payments and fees for permits and licenses.

11.4.5.6. Losses and damages (and related expenses), not compensated by insurance or otherwise, to the Work, provided they have resulted from causes other than the intentional and/or negligent acts and/or omissions of CONTRACTOR, any Subcontractor, or anyone directly or indirectly employed by any of them, or for whose acts and/or omissions any of them may be liable. Such losses shall include settlements made with the written consent and approval of OWNER. No such losses, damages and expenses shall be included in the Cost of the Work for the purpose of determining CONTRACTOR's Fee. If, however, any such loss or damage requires reconstruction, and CONTRACTOR is placed in

charge thereof, CONTRACTOR shall be paid a fee for services proportionate to that stated in paragraph 11.6.2.

11.4.5.7. The cost of utilities, fuel and sanitary facilities at the site.

11.4.5.8. Minor expenses such as telegrams, long distance telephone calls, telephone service at the site, expressage and similar petty cash items in connection with the Work.

11.4.5.9. Cost of premiums for additional Bonds and insurance required because of changes in the Work.

11.5. The term "Cost of the Work" shall not include any of the following:

11.5.1. Payroll costs and other compensation of CONTRACTOR's officers, executives, principals (of partnership and sole proprietorships), general managers, engineers, architects, estimators, attorneys, auditors, accountants, purchasing and contracting agents, expeditors, timekeepers, clerks and other personnel employed by CONTRACTOR, whether at the site, or in CONTRACTOR's principal or a branch office, for general administration of the Work, and not specifically included in the agreed upon schedule of job classifications referred to in paragraph 11.4.1, or specifically covered by paragraph 11.4.4, all of which are to be considered administrative costs covered by the CONTRACTOR's Fee.

11.5.2. Expenses of CONTRACTOR's principal and branch offices, other than CONTRACTOR's office at the site.

11.5.3. Any part of CONTRACTOR's capital expenses, including interest on CONTRACTOR's capital employed for the Work and charges against CONTRACTOR for delinquent payments.

11.5.4. Cost of premiums for all Bonds and for all insurance whether or not CONTRACTOR is required by the Contract Documents to purchase and maintain the same (except for the cost of premiums covered by subparagraph 11.4.5.9 above).

11.5.5. Costs due to the intentional and/or negligent acts and/or omissions of CONTRACTOR, any Subcontractor, or anyone directly or indirectly employed by any of them, or for whose acts and/or omissions any of them may be liable, including but not limited to, the correction of defective Work, disposal of materials or equipment improperly supplied and making good any damage to property.

11.5.6. Other overhead or general expense costs of any kind, and the costs of any item not specifically and expressly included in paragraph 11.4.

CONTRACTOR's Fee:

11.6. The CONTRACTOR's Fee allowed to CONTRACTOR for overhead and profit shall be determined as follows:

11.6.1. a mutually acceptable fixed fee; or if none can be agreed upon,

11.6.2. a fee based on the following percentages of the various portions of the Cost of the Work:

11.6.2.1. for costs incurred under paragraphs 11.4.1 and 11.4.2, the CONTRACTOR's Fee shall be fifteen percent (15%);

11.6.2.2. for costs incurred under paragraph 11.4.3, the CONTRACTOR's Fee shall be five percent (5%); and if a subcontract is on the basis of Cost of the Work Plus a Fee, the maximum allowable to CONTRACTOR on account of overhead and profit of all Subcontractors shall be fifteen percent (15%);

11.6.2.3. no fee shall be payable on the basis of costs itemized under paragraphs 11.4.4, 11.4.5 and 11.5;

11.6.2.4. the amount of credit to be allowed by CONTRACTOR, to OWNER, for any such change which results in a net decrease in cost, will be the amount of the actual net decrease, plus a deduction in CONTRACTOR's Fee by an amount equal to ten percent (10%) of the net decrease; and

11.6.2.5. when both additions and credits are involved in any one change, the adjustment in CONTRACTOR'S Fee shall be computed on the basis of the net change in accordance with paragraphs 11.6.2.1 through 11.6.2.4, inclusive.

11.7. Whenever the cost of any Work is to be determined pursuant to paragraph 11.4 or 11.5, CONTRACTOR will submit in a form acceptable to the ENGINEER, an itemized cost breakdown together with supporting data.

Cash Allowances:

11.8. It is understood that CONTRACTOR has included in the Contract Price, all allowances so named in the Contract Documents and shall cause the Work so covered to be done by such Subcontractors or Suppliers, and for such sums within the limit of the allowances as may be acceptable to ENGINEER. CONTRACTOR agrees that:

11.8.1. The allowances include the cost to CONTRACTOR (less any applicable trade discounts) of materials and equipment required by the allowances to be delivered at the site, and any and all applicable taxes; and

11.8.2. CONTRACTOR's costs for unloading and handling on the site, labor, installation costs, overhead, profit and other expenses contemplated for the allowances have been included in the Contract Price, and not in the allowances. No demand for additional payment on account of any thereof will be valid.

Prior to final payment, an appropriate Change Order will be issued as recommended by ENGINEER to reflect actual amounts due CONTRACTOR on account of Work covered by allowances, and the Contract Price shall be correspondingly adjusted.

Unit Price Work:

11.9.1. Where the Contract Documents provide that all, or part of the Work, is to be Unit Price Work, initially the Contract Price will be deemed to include for all Unit Price

Work an amount equal to the sum of the established unit prices for each separately identified item of Unit Price Work, times the estimated quantity of each item as indicated in the Agreement. The estimated quantities of items of Unit Price Work are not guaranteed, and are solely for the purpose of comparison of Bids and determining an initial Contract Price. Determinations of the actual quantities and classifications of Unit Price Work performed by CONTRACTOR will be made by ENGINEER in accordance with Paragraph 9.10.

11.9.2. Each unit price will be deemed to include an amount considered by CONTRACTOR to be adequate to cover CONTRACTOR's overhead and profit for each separately identified item.

11.9.3. Where the quantity of any item of Unit Price Work performed by CONTRACTOR differs materially and significantly from the estimated quantity of such item indicated in the Agreement, and there is no corresponding adjustment with respect to any other item of Work, and if CONTRACTOR believes that CONTRACTOR has incurred additional expense as a result thereof, CONTRACTOR may make a claim for an increase in the Contract Price in accordance with Article 11.

ARTICLE 12 - CHANGE OF CONTRACT TIME

12.1. The Contract Time may only be changed by a Change Order or a Written Amendment. Any claim for an extension or shortening of the Contract Time shall be based on written notice delivered promptly by the party making the claim, to the other party, and to ENGINEER (but in no event later than thirty (30) days) after the occurrence of the event giving rise to the claim and stating the general nature of the claim. Notice of the extent of the claim, with supporting data shall be delivered within sixty (60) days after such occurrence (unless ENGINEER allows an additional period of time to ascertain more accurate data in support of the claim), and shall be accompanied by the claimant's written statement that the adjustment claimed is the entire adjustment to which the claimant has reason to believe it is entitled as a result of the occurrence of said event. All claims for adjustment in the Contract Time shall be determined by ENGINEER in accordance with paragraph 9.11, if OWNER and CONTRACTOR cannot otherwise agree. No claim for an adjustment in the Contract Time will be valid, and will be deemed waived, if not submitted in accordance with the requirements of this paragraph 12.1.

12.2. The Contract Time will be extended in an amount equal to time lost due to delays beyond the control of CONTRACTOR, if a claim is made therefore as provided in paragraph 12.1. Such delays shall include, but not be limited to, acts or neglect by OWNER, or others performing additional work as contemplated by Article 7, or to fires, floods, labor disputes, epidemics, abnormal weather conditions, or acts of God.

12.3. All time limits stated in the Contract Documents are of the essence to the Agreement. The provisions of this Article 12 shall not exclude recovery for damages (including but not limited to fees and charges of engineers, architects, attorneys and other professionals and court costs) for delay by either party.

ARTICLE 13 - WARRANTY AND GUARANTEE; TESTS AND INSPECTIONS; CORRECTION, REMOVAL OR ACCEPTANCE OF DEFECTIVE WORK

Warranty and Guarantee:

13.1. CONTRACTOR warrants and guarantees to OWNER and ENGINEER that all Work will be in accordance with the Contract Documents and will not be defective. Prompt notice of all discovered defects shall be given to CONTRACTOR. All defective Work, whether or not in place, may be rejected, corrected, or accepted, as provided in this Article 13.

In case of dispute as to the cause of improper functioning of all, or any part of the Work, the burden of proof that he has complied with the Contract Documents rests with CONTRACTOR for this Work. He shall submit in writing his opinion of the cause, and his recommendation for proving the adequacy of his Work. OWNER shall have those tests made, which OWNER deems advisable, by an independent testing laboratory of OWNER's choice. If any test so made indicates a defect in material or workmanship, or that one or more manufactured components of the Work are performing below the standard set by the manufacturer's public data and specifications, the entire cost of all such tests shall be paid for by CONTRACTOR, and he shall also pay for retesting of the corrected Work, until it functions satisfactorily. The Work shall be guaranteed by CONTRACTOR to be free from defects due to faulty workmanship or materials for a period of one (1) year from the date of issuance of the Certificate of Acceptance. Work found to be improper, or imperfect, shall be replaced or redone without cost to OWNER within the one year guarantee period. Neither the Certificate of Acceptance, final payment, or any provision of the Contract Documents shall free CONTRACTOR from his guarantee. Failure by CONTRACTOR to repair or replace faulty Work entitles OWNER to repair or replace the same and recover the costs from CONTRACTOR and/or his Surety. CONTRACTOR shall be the sole guarantor of the Work installed under this Contract and no third party guarantees by Subcontractors or suppliers of various components or materials will be acceptable, nor shall agreements with Subcontractors or material or component suppliers by CONTRACTOR reduce CONTRACTOR's sole responsibility under this Agreement. All equipment is warranted or guaranteed to OWNER for two (2) year from the date of acceptance of the entire completed Project. At the option of the OWNER, all equipment is also warranted or guaranteed to OWNER for one (1) year from the date of acceptance and beneficial use of a completed system component prior to full integration with the entire completed Project.

Access to Work:

13.2. ENGINEER and ENGINEER's representatives, other representatives of OWNER, testing agencies and governmental agencies, with jurisdictional interests, will have access to the Work at reasonable times for their observation, inspecting and testing. CONTRACTOR shall promptly provide proper and safe conditions for such access in accordance with any OSHA and insurance requirements.

It is agreed by CONTRACTOR that OWNER shall be, and is hereby authorized to appoint from time to time, subordinate ENGINEERS, supervisors, or inspectors, as the said OWNER may deem proper, to inspect the material furnished and observe the Work done under this Agreement, and to see that the said material is furnished, and said Work is done in accordance with the specifications. CONTRACTOR shall furnish all reasonable aid and assistance required by the subordinate ENGINEERS, supervisors, or inspectors for the proper supervision and inspection and examination of the Work, and all parts of the Work. CONTRACTOR shall regard and obey the directions and instructions of any subordinate ENGINEERS, supervisors, or inspector so

appointed, when such directions are consistent with the obligations of this Contract and these accompanying specifications, provided, however, that should CONTRACTOR object to any order by any subordinate ENGINEER, supervisor or inspector, CONTRACTOR may within ten (10) days make written notice to ENGINEER for his decision. Except as herein before provided, the authority of subordinate ENGINEERS, supervisors or inspectors shall be limited to the rejection of unsatisfactory Work and materials, and to the suspension of the Work, until the questions of acceptability can be referred to ENGINEER.

13.2.1. CONTRACTOR shall cooperate with the testing laboratory to the end that the function and services of the laboratory may be properly performed. CONTRACTOR shall give OWNER's representative and testing laboratory a minimum of twenty-four (24) hours notice of readiness for all testing as required. OWNER shall bear no cost of testing. Testing of materials shall be the responsibility of CONTRACTOR and he shall notify ENGINEER and/or inspectors of his scheduled time for such tests so that the test can be witnessed by an OWNER's representative. If initial tests show failure, the CONTRACTOR shall absorb the costs of retesting the areas that failed after corrective action has been taken, as well as the personnel and equipment costs incurred by OWNER in said retesting, on a per diem basis. The per diem costs shall be determined based on hourly wage plus overhead of OWNER's personnel needed and present at the site during retesting, and by the locally prevailing rental rate for the vehicles and equipment utilized in retesting. These retesting time costs shall be paid by CONTRACTOR prior to OWNER's acceptance of the improvements.

Tests and Inspections:

13.3. CONTRACTOR shall give ENGINEER timely notice of readiness of the Work for all required inspections, tests or approvals.

13.4. If Laws or Regulations of any public body having jurisdiction require any Work (or part thereof) to specifically be inspected, tested or approved, CONTRACTOR shall assume full responsibility therefore, pay all costs in connection therewith, and furnish ENGINEER the required certificates of inspection, testing or approval. CONTRACTOR shall also be responsible for, and shall pay all costs in connection with, any inspection or testing required in connection with OWNER's or ENGINEER's acceptance of a Supplier of materials or equipment proposed to be incorporated in the Work, or if materials or equipment submitted for approval prior to CONTRACTOR's purchase thereof for incorporation in the Work. The cost of all inspections, tests and approvals, other than those which are required by the Contract Documents, shall be paid by OWNER (unless otherwise specified).

13.5. All inspections, tests or approvals, other than those required by Laws or Regulations of any public body having jurisdiction, shall be performed by organizations acceptable to OWNER (or by ENGINEER, if so specified).

13.6. If any Work (including the work of others) that is to be inspected, tested or approved is covered without written concurrence of ENGINEER, it must, if requested by ENGINEER, be uncovered for observation. Such uncovering shall be at CONTRACTOR's expense, unless CONTRACTOR has given ENGINEER timely notice of CONTRACTOR's intention to cover the same, and ENGINEER has not acted with reasonable promptness in response to such notice.

13.7. Neither observations by ENGINEER, nor inspections, tests or approvals by others, shall relieve CONTRACTOR from CONTRACTOR's sole obligations to perform the Work in strict accordance with the Contract Documents.

Uncovering Work:

13.8. If any Work is covered contrary to the written request of ENGINEER, it must, if requested by ENGINEER, be uncovered for ENGINEER's observation and potentially replaced at CONTRACTOR's expense.

13.9. If ENGINEER considers it necessary or advisable that covered Work be observed by ENGINEER, or inspected or tested by others, CONTRACTOR, at ENGINEER's request, shall uncover, expose or otherwise make available for observation, inspection or testing, as ENGINEER may require, that portion of the Work in question, furnishing all necessary labor, material and equipment. If it is found that such Work is defective, CONTRACTOR shall bear all direct, indirect and consequential costs of such uncovering, exposure, observation, inspection and testing and of satisfactory reconstruction, (including but not limited to fees and charges of engineers, architects, attorneys and other professionals), and OWNER shall be entitled to an appropriate decrease in the Contract Price, and if the parties are unable to agree as to the amount thereof, may make a claim therefore as provided in Article 11. If, however, such Work is not found to be defective, CONTRACTOR may be allowed an increase in the Contract Price, or an extension of the Contract Time, or both, directly attributable to such uncovering, exposure, observation, inspection, testing and reconstruction; and, if the parties are unable to agree as to the amount or extent thereof, CONTRACTOR may make a claim therefore as provided in Articles 11 and 12. All increases or decreases in the Contract price shall be governed by all state and local laws, statutes, codes, ordinances, rules and regulations governing competitive bidding and Change Orders.

Owner May Stop the Work:

13.10. If the Work is defective, or CONTRACTOR fails to supply sufficient skilled workers, or suitable materials, or equipment, or fails to furnish or perform the Work in such a way that the completed Work will conform to the Contract Documents, OWNER may order CONTRACTOR to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, this right of OWNER to stop the Work shall not give rise to any duty on the part of OWNER to exercise this right for the benefit of CONTRACTOR, or any other party.

Correction or Removal of Defective Work:

13.11. If required by ENGINEER, CONTRACTOR shall promptly, as directed, either correct all defective Work, whether or not fabricated, installed or completed, or, if the Work has been rejected by ENGINEER, remove it from the site and replace it with nondefective Work. CONTRACTOR shall bear all direct, indirect and consequential costs of such correction or removal (including but not limited to fees and charges of engineers, architects, attorneys and other professionals) made necessary thereby.

One Year Correction Period:

13.12. If within one (1) years after the date of issuance of the Certificate of Acceptance, or such longer period of time as may be prescribed by Laws or Regulations, any Work is found to be defective, CONTRACTOR shall promptly, without cost to OWNER, and in accordance with OWNER's written instruction, either correct such defective Work, or, if it has been rejected by OWNER, remove it from the site and replace it with nondefective Work. If CONTRACTOR does not promptly comply with the terms of such instructions, or in an emergency where delay would cause serious risk of loss or damage, OWNER may have the defective Work corrected, or the

rejected Work removed and replaced, and all direct, indirect and consequential costs of such removal and replacement (including but not limited to fees and charges of engineers, architects, attorneys and other professionals) will be paid by CONTRACTOR. In special circumstances where a particular item of equipment is placed in continuous service at OWNER's direction before acceptance of all the Work, the correction period for that item may start to run from an earlier date, if so provided in the Specifications, or by Written Amendment.

Acceptance of Defective Work:

13.13. If, instead of requiring correction or removal and replacement of defective Work, OWNER (and, prior to ENGINEER's recommendation of final payment), prefers to accept it, OWNER may do so. CONTRACTOR shall bear all direct, indirect and consequential costs attributable to OWNER's evaluation of and determination to accept such defective Work, (such costs to be approved by ENGINEER as to reasonableness, and to include but not be limited to fees and charges of engineers, architects, attorneys and other professionals). If any such acceptance occurs prior to ENGINEER's recommendation of final payment, a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work; and OWNER shall be entitled to an appropriate decrease in the Contract Price, and, if the parties are unable to agree as to the amount thereof, OWNER may make a claim therefore as provided in Article 11. If the acceptance occurs after such final payment, an appropriate amount as determined by OWNER will be paid by CONTRACTOR to OWNER.

OWNER May Correct Defective Work:

13.14. If CONTRACTOR fails, within a reasonable time after receipt of written notice from ENGINEER, to proceed to correct, and to correct defective Work, or to remove and replace rejected Work as required by ENGINEER in accordance with paragraph 13.11, or if CONTRACTOR fails to perform the Work in accordance with the Contract Documents, or if CONTRACTOR fails to comply with any other provision of the Contract Documents, OWNER may, after seven (7) days written notice to CONTRACTOR, correct and remedy any such deficiency. In exercising the rights and remedies under this paragraph, OWNER shall proceed expeditiously. To the extent necessary to complete corrective and remedial action, OWNER may exclude CONTRACTOR from all or part of the site, take possession of all or part of the Work, and suspend CONTRACTOR's services related thereto, take possession of CONTRACTOR's tools, appliances, construction equipment and machinery at the site, and incorporate in the Work, all materials and equipment stored at the site, or for which OWNER has paid CONTRACTOR, but which are stored elsewhere. CONTRACTOR shall allow OWNER, OWNER's representatives, agents and employees such access to the site as may be necessary to enable OWNER to exercise the rights and remedies under this paragraph. All direct, indirect and consequential costs of OWNER in exercising such rights and remedies will be charged against CONTRACTOR in an amount approved as to reasonableness by ENGINEER, and a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work; and OWNER shall be entitled to an appropriate decrease in the Contract Price, and, if the parties are unable to agree as to the amount thereof, OWNER may make a claim therefore as provided in Article 11. Such direct, indirect and consequential costs will include, but not be limited to, fees and charges of engineers, architects, attorneys and other professionals, all court costs and all costs of repair and replacement of work performed by others that is destroyed or damaged by correction, removal or replacement of CONTRACTOR's defective Work. CONTRACTOR shall not be allowed an extension of the Contract Time because of any delay in performance of the Work attributable to the exercise by OWNER of OWNER's rights and remedies hereunder.

ARTICLE 14 - PAYMENTS TO CONTRACTOR AND COMPLETION

Schedule of Values:

14.1. The schedule of values established as provided in paragraph 2.9 will serve as the basis for progress payments, and will be incorporated into a form of Application for Payment acceptable to ENGINEER. Progress payments on account of Unit Price Work will be based on the number of units completed.

Application for Progress Payment:

14.2. At least twenty (20) days before each progress payment is scheduled (but not more often than once a month), CONTRACTOR shall submit to ENGINEER for review, an Application for Payment filled out and signed by CONTRACTOR covering the Work completed as of the date of the Application, and accompanied by such supporting documentation as is required by the Contract Documents. If payment is requested on the basis of materials and equipment not incorporated in the Work, but delivered and suitably stored at the site, or at another location agreed to in writing, the Application for Payment shall also be accompanied by a bill of sale, invoice, or other documentation warranting that OWNER has received the materials and equipment free and clear of any attempted liens, charges, security interests and encumbrances (which are hereinafter in these General Conditions referred to as "Liens"), and evidence that the materials and equipment are covered by appropriate property insurance and other arrangements to protect OWNER's interest therein, all of which will be satisfactory to OWNER. The amount of retainage with respect to progress payments will be as stipulated in the Agreement.

CONTRACTOR's Warranty of Title:

14.3. CONTRACTOR warrants and guarantees that title to all Work, materials and equipment covered by any Application for Payment, whether incorporated in the Project or not, will pass to OWNER no later than the time of payment, free and clear of all Liens.

Review of Applications for Progress Payment:

14.4. OWNER will, within twenty days after receipt of each Application for Payment, either indicate in writing a recommendation of payment and present the Application to OWNER, or return the Application to CONTRACTOR indicating in writing, ENGINEER's reasons for refusing to make payment. In the latter case, CONTRACTOR may make the necessary corrections and resubmit the Application. Twenty (20) days after presentation of the Application for Payment with ENGINEER's recommendation, the amount recommended will (subject to the provisions of the last sentence of paragraph 14.7) become due, and when due will be paid by OWNER to CONTRACTOR.

14.5. ENGINEER's recommendation of any payment requested in an Application for Payment will constitute a representation by ENGINEER to OWNER, based upon ENGINEER's on-site observations of the Work in progress as an experienced and qualified design professional, and on ENGINEER's review of the Application for Payment and the accompanying data and schedules, that the Work has progressed to the point indicated; that, to the best of ENGINEER's knowledge, information and belief, the quality of the Work is in accordance with the Contract Documents (subject to an evaluation of the Work as a functioning whole prior to, or upon, Substantial Completion; subject to the results of any subsequent tests called for in the Contract Documents; subject to a final determination of quantities and classifications for Unit Price Work

under paragraph 9.10; and subject to any other qualifications stated in the recommendation); and that CONTRACTOR is entitled to payment of the amount recommended. However, by recommending any such payment, ENGINEER will not thereby be deemed to have represented that exhaustive or continuous on-site inspections have been made to check the quality or the quantity of the Work, beyond the observation responsibilities specifically assigned to ENGINEER in the Contract Documents, or that there may not be other matters or issues between the parties that might entitle CONTRACTOR to be paid additionally by OWNER, or might entitle OWNER to withhold payment to CONTRACTOR.

14.6. ENGINEER's recommendation of final payment will constitute an additional representation by ENGINEER to OWNER that the conditions precedent to CONTRACTOR's being entitled to final payment, as set forth in paragraph 14.13, have been fulfilled.

14.7. ENGINEER may refuse to recommend the whole, or any part of any payment if, in ENGINEER's opinion, it would be incorrect to make such payment, or, because of subsequently discovered evidence, or the results of subsequent inspections or tests, nullify any such payment previously recommended, to such extent as may be necessary in ENGINEER's opinion to protect OWNER from loss because:

14.7.1. the Work is defective, or completed Work has been damaged, requiring correction or replacement.

14.7.2. the Contract Price has been reduced by Written Amendment or Change Order.

14.7.3. OWNER has been required to correct defective Work or complete Work in accordance with paragraph 13.14, or

14.7.4. of ENGINEER's actual knowledge of the occurrence of any of the events enumerated in paragraphs 15.2.1 through 15.2.9 inclusive.

OWNER may refuse to make payment in whole or in part, of the amount recommended by ENGINEER, because claims have been made against OWNER on account of CONTRACTOR's performance or furnishing of the Work, or attempted Liens have been filed in connection with the Work, or there are other items entitling OWNER to a set-off against the amount recommended, but OWNER must give CONTRACTOR written notice (with a copy to ENGINEER) stating the reasons for such action.

Substantial Completion:

14.8. When CONTRACTOR considers the entire Work ready for its intended use, CONTRACTOR shall notify OWNER and ENGINEER in writing that the entire Work is substantially complete (except for items specifically listed by CONTRACTOR as incomplete) and request that ENGINEER issue a certificate of Substantial Completion. Within a reasonable time thereafter, OWNER, CONTRACTOR and ENGINEER shall make an inspection of the Work to determine the status of completion. If ENGINEER does not consider the Work substantially complete, ENGINEER will notify CONTRACTOR in writing giving the reasons therefore. If ENGINEER considers the Work substantially complete, ENGINEER will prepare and deliver to OWNER a tentative certificate of Substantial Completion, which shall fix the date of Substantial Completion. There shall be attached to the certificate, a tentative list of items to be completed or corrected before final payment. OWNER shall have ten (10) days after receipt of the tentative

certificate during which to make written objection to ENGINEER as to any provisions of the certificate or attached list. If, after considering such objections, ENGINEER concludes that the Work is not substantially complete, ENGINEER will within twenty (20) days after submission of the tentative certificate to OWNER, notify CONTRACTOR in writing, stating the reasons therefore. If, after consideration of OWNER's objections, ENGINEER considers the Work substantially complete, ENGINEER will within said twenty (20) days execute and deliver to OWNER and CONTRACTOR, a definitive certificate of Substantial Completion (with a revised tentative list of items to be completed or corrected) reflecting such changes from the tentative certificate as ENGINEER believes justified after consideration of any objections from OWNER. At the time of delivery of the tentative certificate of Substantial Completion, ENGINEER will deliver to OWNER and CONTRACTOR a written recommendation as to division of responsibilities pending final payment between OWNER and CONTRACTOR with respect to security, operation, safety, maintenance, heat, utilities, insurance and warranties. Unless OWNER and CONTRACTOR agree otherwise in writing, and so inform ENGINEER prior to ENGINEER's issuing the definitive certificate of Substantial Completion, ENGINEER's aforesaid recommendation will be binding on OWNER and CONTRACTOR until final payment.

14.9. OWNER shall have the right to exclude CONTRACTOR from the Work after the date of Substantial Completion, but OWNER shall allow CONTRACTOR reasonable access to complete or correct items on the tentative list.

Partial Utilization:

14.10. Use by OWNER of any finished part of the Work, which has specifically been identified in the Contract Documents, or which OWNER, ENGINEER and CONTRACTOR agree constitutes a separately functioning and usable part of the Work that can be used by OWNER without significant interference with CONTRACTOR's performance of the remainder of the Work, may be accomplished prior to Substantial Completion of all the Work, subject to the following:

14.10.1. OWNER at any time may request CONTRACTOR in writing to permit OWNER to use any such part of the Work which OWNER believes to be ready for its intended use and substantially complete. If CONTRACTOR agrees, CONTRACTOR will certify to OWNER and ENGINEER that said part of the Work is substantially complete and request ENGINEER to issue a certificate of Substantial Completion for that part of the Work. CONTRACTOR at any time may notify OWNER and ENGINEER in writing that CONTRACTOR considers any such part of the Work ready for its intended use, and substantially complete, and request ENGINEER to issue a certificate of Substantial Completion for that part of the Work. Within a reasonable time after either such request, OWNER, CONTRACTOR and ENGINEER shall make an inspection of that part of the Work to determine its status of completion. If ENGINEER does not consider that part of the Work to be substantially complete, ENGINEER will notify OWNER and CONTRACTOR in writing giving the reasons therefore. If ENGINEER considers that part of the Work to be substantially complete, the provisions of paragraphs 14.8 and 14.9 will apply with respect to certification of Substantial Completion of that part of the Work, and the division of responsibility in respect thereof, and access thereto.

14.10.2. OWNER may at any time request CONTRACTOR in writing to permit OWNER to take over operation of any such part of the Work, although it is not substantially complete. A copy of such request will be sent to ENGINEER and within a reasonable time thereafter OWNER, CONTRACTOR and ENGINEER shall make an inspection of that part of the Work to determine its status of completion, and will prepare

a list of the items remaining to be completed or corrected thereon before final payment. If CONTRACTOR does not object in writing to OWNER and ENGINEER that such part of the Work is not ready for separate operation by OWNER, ENGINEER will finalize the list of items to be completed or corrected, and will deliver such list to OWNER and CONTRACTOR, together with a written statement as to the division of responsibilities pending final payment between OWNER and CONTRACTOR with respect to security, operation, safety, maintenance, heat, utilities, insurance, warranties and guarantees for that part of the Work, which will become binding upon OWNER and CONTRACTOR at the time when OWNER takes over such operation (unless they shall have otherwise agreed in writing and so informed ENGINEER). During such operation and prior to Substantial Completion of such part of the Work, OWNER shall allow CONTRACTOR reasonable access to complete or correct items on said list and to complete other related Work.

14.10.3. No occupancy or separate operation of part of the Work will be accomplished prior to compliance with the requirements of paragraph 5.15 in respect of property insurance.

Final Inspection:

14.11. Upon written notice from CONTRACTOR that the entire Work, or an agreed portion thereof is complete, ENGINEER will make a final inspection with OWNER and CONTRACTOR and will notify CONTRACTOR in writing of all particulars in which this inspection reveals that the Work is incomplete or defective. CONTRACTOR shall immediately take such measures as are necessary to remedy such deficiencies.

A qualified person representing CONTRACTOR shall be present at this final inspection to demonstrate the systems and prove the performance of the equipment. Prior to this inspection, all work shall have been completed, tested, balanced and adjusted and in final operating condition, if required by the Project.

Final Application for Payment:

14.12. After CONTRACTOR has completed all such corrections to the satisfaction of ENGINEER, and delivered all maintenance and operating instructions, schedules, guarantees, Bonds, certificates of inspection, marked-up record documents (as provided in paragraph 6.19) and other documents--all as required by the Contract Documents, and after ENGINEER has indicated that the Work is acceptable (subject to the provisions of paragraph 14.16), CONTRACTOR may make application for final payment following the procedure for progress payments. The final Application for Payment shall be accompanied by all documentation called for in the Contract Documents, together with complete and legally effective releases or waivers (satisfactory to OWNER) of any attempted Liens arising out of, or filed in connection with, the Work. In lieu thereof and as approved by OWNER, CONTRACTOR may furnish receipts or releases in full; an affidavit of CONTRACTOR that the releases and receipts include all labor, services, material and equipment for which an attempted Lien could be filed, and that all payrolls, material and equipment bills, and other indebtedness connected with the Work for which OWNER, or OWNER's property, might in any way be responsible, have been paid or otherwise satisfied; and consent of the surety, if any, to final payment. If any Subcontractor or Supplier fails to furnish a release or receipt in full, CONTRACTOR may furnish a special indemnity Bond or post other collateral satisfactory to OWNER, to indemnify OWNER against any attempted Lien.

Final Payment and Acceptance:

14.13. If, on the basis of ENGINEER's observation of the Work during construction and final inspection, and ENGINEER's review of the final Application for Payment and accompanying documentation (all as required by the Contract Documents), ENGINEER is satisfied that the Work has been completed and CONTRACTOR's other obligations under the Contract Documents have been fulfilled, ENGINEER will, within twenty (20) days after receipt of the final Application for Payment, indicate in writing ENGINEER's recommendation of payment and present the Application to OWNER for payment. Thereupon ENGINEER will give written notice to OWNER and CONTRACTOR that the Work is acceptable subject to the provisions of paragraph 14.16. Otherwise, ENGINEER will return the Application to CONTRACTOR, indicating in writing the reasons for refusing to recommend final payment, in which case CONTRACTOR shall make the necessary corrections and resubmit the Application. Thirty (30) days after presentation to OWNER of the Application and accompanying documentation, in appropriate form and substance, and with ENGINEER's recommendation and notice of acceptability, the amount recommended by ENGINEER will become due, and will be paid by OWNER to CONTRACTOR.

CONTRACTOR shall submit satisfactory evidence to the OWNER that all payrolls, material bills, and other indebtedness connected with the Work have been paid, before final certificate is issued.

14.14. If, through no fault of CONTRACTOR, final completion of the Work is significantly delayed, and if ENGINEER so confirms, OWNER shall, upon receipt of CONTRACTOR's final Application for Payment and recommendation of ENGINEER, and without terminating the Agreement, make payment of the balance due for that portion of the Work fully completed and accepted. If the remaining balance to be held by OWNER for Work not fully completed or corrected is less than the retainage stipulated in the Agreement, and if Bonds have been furnished as required in paragraph 5.1, the written consent of the surety to the payment of the balance due for that portion of the Work fully completed and accepted, shall be submitted by CONTRACTOR to ENGINEER with the Application for such payment. Such payment shall be made under the terms and conditions governing final payment, except that it shall not constitute a waiver of claims.

Contractor's Continuing Obligation:

14.15. CONTRACTOR's obligation to perform and complete the Work in accordance with the Contract Documents shall be absolute. Neither recommendation of any progress or final payment by ENGINEER; nor the issuance of a certificate of Substantial Completion or Acceptance; nor any payment by OWNER to CONTRACTOR under the Contract Documents; nor any use or occupancy of the Work, or any part thereof, by OWNER; nor any act of acceptance by OWNER; nor any failure to do so; nor any review and approval of a Shop Drawing or sample submission; nor the issuance of a notice of acceptability by ENGINEER pursuant to paragraph 14.13; nor any correction of defective Work by OWNER, will constitute an acceptance of Work not in accordance with the Contract Documents or a release of CONTRACTOR's obligation to perform the Work in accordance with the Contract Documents (except as provided in paragraph 14.16).

Waiver of Claims:

14.16. The making and acceptance of final payment will constitute:

14.16.1. a waiver of all claims by OWNER against CONTRACTOR, except claims arising from attempted and unsettled Liens, from defective Work appearing after final

inspection pursuant to paragraph 14.11, or from failure to comply with the Contract Documents, or the terms of any special guarantees specified therein; however, it will not constitute a waiver by OWNER of any rights in respect of CONTRACTOR's continuing obligations under the Contract Documents; and

14.16.2. a waiver of all claims by CONTRACTOR against OWNER, other than those prior claims properly made in writing in a timely fashion and still unresolved.

ARTICLE 15 - SUSPENSION OF WORK AND TERMINATION

Owner May Suspend Work:

15.1. OWNER may, at any time and without cause, suspend the Work, or any portion thereof, for a period of not more than ninety (90) days by notice in writing to CONTRACTOR and ENGINEER, which will fix the date on which Work will be resumed. CONTRACTOR shall resume the Work on the date so fixed. CONTRACTOR may be allowed an increase in the Contract Price or an extension of the Contract Time, or both; directly attributable to any suspension, if CONTRACTOR makes an approved claim therefore as provided in Articles 11 and 12. Any increase or decrease in the Contract Price shall be governed by all state and local laws, statutes, codes, ordinances, rules and regulations governing competitive bidding and change orders.

Owner May Terminate:

15.2. Upon the occurrence of any one or more of the following events:

15.2.1. if CONTRACTOR commences a voluntary case under any chapter of the Bankruptcy Code (Title 11, United States Code), as now or hereafter in effect, or if CONTRACTOR takes any equivalent or similar action by filing a petition, or otherwise under any other federal or state law in effect at such time relating to the bankruptcy or insolvency;

15.2.2. if a petition is filed against CONTRACTOR under any chapter of the Bankruptcy Code as now or hereafter in effect at the time of filing, or if a petition is filed seeking any such equivalent or similar relief against CONTRACTOR under any other federal or state law in effect at the time relating to bankruptcy or insolvency;

15.2.3. if CONTRACTOR makes a general assignment for the benefit of creditors;

15.2.4. if a trustee, receiver, custodian or agent of CONTRACTOR is appointed under applicable law or under contract, whose appointment or authority to take charge of property of CONTRACTOR is for the purpose of attempting to enforce a Lien against such CONTRACTOR property, or for the purpose of general administration of such CONTRACTOR property, for the benefit of CONTRACTOR's creditors;

15.2.5. if CONTRACTOR admits in writing an inability to pay its debts generally as they become due;

15.2.6. if CONTRACTOR persistently fails to perform the Work in accordance with the Contract Documents (including but not limited to, failure to supply sufficient skilled workers or suitable materials or equipment, or failure to adhere to the progress schedule established under paragraph 29., as revised from time to time;

15.2.7. if CONTRACTOR disregards Laws or Regulations of any public body having jurisdiction;

15.2.8. if CONTRACTOR disregards the rights of OWNER; or

15.2.9. if CONTRACTOR otherwise violates in any substantial way any provisions of the Contract Documents;

OWNER may, after giving CONTRACTOR and the surety, seven (7) days written notice, and to the extent permitted by Laws and Regulations, terminate the services of CONTRACTOR, exclude CONTRACTOR from the site, and take possession of the Work and of all CONTRACTOR's tools, appliances, construction equipment and machinery at the site, and use the same to the full extent they could be used by CONTRACTOR (without OWNER liability to CONTRACTOR for trespass or conversion), incorporate in the Work all materials and equipment stored at the site, or for which OWNER has paid CONTRACTOR, but which are stored elsewhere, and finish the Work as OWNER may deem expedient. In such case, CONTRACTOR shall not be entitled to receive any further payment until the Work is finished. If the unpaid balance of the Contract Price exceeds the direct, indirect and consequential costs of completing the Work (including but not limited to fees and charges of engineers, architects, attorneys and other professionals and court costs) such excess will be paid to CONTRACTOR or his surety. If such costs exceed such unpaid balance, CONTRACTOR or surety shall pay the difference to OWNER. Such costs incurred by OWNER will be approved as to reasonableness by ENGINEER and incorporated into a Change Order, but when exercising any rights or remedies under this paragraph, OWNER shall be required to obtain the lowest price for the Work performed.

15.3. Where CONTRACTOR's services have been so terminated by OWNER, the termination will not affect any rights or remedies of OWNER against CONTRACTOR, then existing, or which may thereafter accrue. Any retention or payment of moneys due CONTRACTOR by OWNER will not release CONTRACTOR from liability.

15.4. Upon seven (7) days written notice to CONTRACTOR and ENGINEER, OWNER may, without cause and without prejudice to any other right or remedy, elect to abandon the Work and terminate the Agreement. In such case, CONTRACTOR shall be paid for all Work executed, and any expense sustained, plus reasonable termination expenses, which will include, but not be limited to, direct, indirect and consequential costs (including, but not limited to, fees and charges of engineers, architects, attorneys and other professionals and court costs).

ARTICLE 16 - TIME FOR COMPLETION AND LIQUIDATED DAMAGES

16.1. It is hereby understood and mutually agreed, by and between the parties hereto, that the date of beginning, rate of progress and the time for completion of the Work to be done hereunder are ESSENTIAL CONDITIONS of this Contract; and it is further mutually understood and agreed, by and between the parties hereto, that the Work embraced in this Contract shall be commenced on a date to be specified in the Notice to Proceed.

16.2. CONTRACTOR agrees that said Work shall be prosecuted regularly, diligently, and uninterrupted at such rate of progress as will insure full completion thereof within the time specified. It is expressly understood and mutually agreed, by and between the parties hereto, that the time for the completion of the Work described herein is a reasonable time for completion

of same, taking into consideration the average climatic range and weather conditions that the CONTRACTOR must reasonably anticipate, and usual industrial conditions prevailing in the locality.

16.3. If CONTRACTOR shall neglect, fail or refuse to complete the Work within the time herein specified, then CONTRACTOR does hereby agree, as a part of the consideration for awarding of this Contract, to pay the OWNER the amount specified in the Contract, not as a penalty, but as liquidated damages, for such breach of Contract as hereinafter set forth, for each and calendar day that CONTRACTOR shall be in default after the time stipulated in the Contract for completing the Work.

16.4. The damage to OWNER by reason of the Contract not being completed as of that date are incapable of definite ascertainment, and the parties hereto have therefore mutually fixed and limited such damages to the sum of \$ 500.00 per day of each calendar day the job runs beyond such date, and the fixing of such damages constitutes a part of the consideration for the Contract. It is further agreed that time is of the essence of each and every portion of this Contract and of the Specifications, wherein a definite and certain length of time is fixed for the performance of any act whatsoever; and where under the Contract, additional time is allowed for the completion of any Work, the new time fixed by such extension shall be of the essence of this Contract. Provided that CONTRACTOR shall not be charged with liquidated damages or any excess cost when the delay in the completion of work is due:

16.4.1. To any preference, priority or allocation order duly issued by the Federal Government.

16.4.2. To unforeseeable cause beyond the control and without the fault or negligence of CONTRACTOR, including, but not restricted to, acts of God, or of the public enemy, acts of the OWNER, acts of another Contractor in the performance of a contract with the OWNER, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes and unusually severe weather.

16.4.3. To any delays of Subcontractors and/or material suppliers occasioned by any of the causes specified in 16.4.1. or 16.4.2.

16.4.4. Provided further, that CONTRACTOR shall, within seven (7) days from the beginning of such delay, notify OWNER, in writing, of the causes of the delay, and OWNER shall ascertain the facts and extent of the delay and notify CONTRACTOR within a reasonable time of OWNER's decision in the matter.

ARTICLE 17 - MISCELLANEOUS

Giving Notice:

17.1. Whenever any provision of the Contract Documents requires the giving of written notice, it will be deemed to have been validly given if delivered in person to the individual, or to a member of the firm, or to an officer of the corporation in the case of the CONTRACTOR, or the General Manager in the case of the OWNER, for whom it is intended, or if delivered at or sent by registered or certified mail, postage prepaid, to the last business address known to the giver of the notice.

Computation of Time:

17.2.

17.2.1. When any period of time is referred to in the Contract Documents by “days”, it will be computed to exclude the first and include the last day of such period. If the last day of any such period falls on a Saturday or Sunday, or on a day made a legal holiday by federal or Texas law, such day will be omitted from the computation.

17.2.2. A **Calendar Day** consists of twenty-four (24) hours and is measured from midnight, to the next midnight, and shall constitute a single calendar day.

General:

17.3. Should OWNER suffer injury or damage to person or property because of any error, omission or act of the CONTRACTOR, or of any of the CONTRACTOR's employees or agents, or others for whose acts and/or omissions CONTRACTOR is legally liable, claim will be made in writing to the other party within a reasonable time of the first observance of such injury or damage. The provisions of this paragraph 17.3 shall not be construed as a substitute for, or a waiver of the provisions of any applicable statute of limitations or repose.

17.4. The duties and obligations imposed by these General Conditions, and the rights and remedies available hereunder to the parties hereto, and, in particular but without limitation, the conditions, warranties, guarantees and obligations imposed upon CONTRACTOR by paragraphs 6.30, 13.1, 13.12, 13.14, 14.3 and 15.2, and all of the rights and remedies available to OWNER thereunder, are in addition to, and are not to be construed in any way as a limitation of, any rights and remedies available to OWNER which are otherwise imposed or available by Laws or Regulations, by special warranty or guarantee, or by other provisions of the Contract Documents, and the provisions of this paragraph will be as effective as if repeated specifically in the Contract Documents in connection with each particular duty, obligation, right and remedy to which they apply. All representations, conditions, warranties and guarantees made in the Contract Documents will survive the execution, final payment, and termination or completion of, the Agreement. All statements contained in any document required by OWNER, whether delivered at the time of the execution of the Contract Documents, or at a later date, shall constitute representations, warranties and guarantees herein.

17.5. CONTRACTOR shall comply with the Copeland Act 48, Statute 948 and all amendments or modifications of the original act of June 13, 1994.

END OF SECTION

TECHNICAL SPECIFICATIONS

Specifications for Street Improvements Construction

TECHNICAL SPECIFICATIONS

All materials, densities, composition, and construction standards to meet City of San Antonio (CoSA) Street Construction standards and any testing specifications, and laboratory work requested by the City of Windcrest will adhere to these specifications. (All completed lanes will adhere to the original lane configuration of the road.)

All of the CoSA standard specs intended for or potentially used in the Contract have been included. Specifications are referenced into this document and may be downloaded from the City of San Antonio Public Works website.

All standard specifications, special provisions, and special specifications applicable to this Project are identified as follows:

STANDARD SPECIFICATIONS

CITY OF SAN ANTONIO (COSA) STANDARD SPECIFICATIONS FOR CONSTRUCTION JUNE 2008 WITH ANY REVISIONS THERETO:

DIVISION I – EARTHWORK

103 Remove Concrete
103.3 Remove Sidewalks and Driveways

DIVISION II - BASE & SURFACE COURSES

202 Prime Coat
203 Tack Coat
205 Hot Mix Asphaltic Type D
206 Asphalt Treated Base
208 Salvaging, Hauling, and Stockpiling Reclaimable Asphaltic Pavement (various depths)
230 Base and Pavement Replacement (various depths)

DIVISION V - INCIDENTAL CONSTRUCTION

500 Concrete Curb
502 Concrete Sidewalks
503 Asphaltic Concrete, Portland Cement Concrete, And Gravel Driveways
506 Concrete Retaining wall -Combination Type
512 Adjusting Existing Manholes
512 Adjusting Existing Valve Boxes
513 Removing and Relocating Mailboxes
515.1 Topsoil
516.2 St. Augustine Sodding
530 Barricades, Signs, and Traffic Handling

535 HOT APPLIED THERMOPLASTIC PAVEMENT MARKINGS

535.1 4 inch wide yellow line
535.2 4 inch wide white line
535.4 8 inch wide white line
535.7 24 inch wide white line
535.8 Right White Arrow (per each)

535.9 Left White Arrow (per each)
535.10 Combination Thru/Right White Arrow (per each)
535.11 Combination Thru/Left White Arrow (per each)
535.12 Word "ONLY" (per word)
535.13 Straight White Arrow (per each)
535.14 Railroad Crossing Symbol, including two R's, crossbuck and 3 transverse bars (per each)
535.15 White Diamond (per each)
535.16 Straight White Arrow Bicycle Facility (per each)
535.17 Bicycle Rider Symbol (per each)
535.18 Solid White Yield Lines (6" x 9") (per each)
535.19 Word "STOP" (per word)
535.20 Word "YIELD" (per word)
535.21 Word "BUS" (per word)
537.6 Pavement Marker (Type I-C)
537.8 Pavement Marker (Type II A-A)
540 Temporary Erosion, Sedimentation and Water Pollution Prevention and Control

In accordance with the use of governing specifications listed in the City of San Antonio Standard Specifications for Public Works Construction as identified above, the terms "City" shall be construed to mean "City of Windcrest" in the definition of all constructing guidelines and specifications.

Any specifications Items referenced in the above specifications will be considered as a part of these specifications.

Additional Specification

Texas Department of Transportation Specifications for portable changeable message sign shall be governed by the following:

TxDOT 6001 Portable Changeable Message Sign

CPS Energy Specifications

CPS Energy Specifications found in Attachment G

ATTACHMENTS

ATTACHMENT A
BID FOR CONTRACT FORM

To:

Gentlemen,

The undersigned, having familiarized themselves with the local conditions affecting the cost of the work and with the Specifications including the Invitation for Bids, Instructions to Bidders, this Bid for Contract, the Form of Contract, the General Conditions for Construction, the Special Conditions, the General Scope of Work, the Technical Specifications and Drawings and Addenda, if any, on file in the office of the City of Windcrest proposes to furnish all labor, materials, equipment, machinery, permits and services including utility and transportation services required to complete the **2020 STREET IMPROVEMENTS- PHASE II MIDCROWN DRIVE WALZEM RD TO GOLFCREST DRIVE PROJECT** all in accordance therewith for the sum of _____

In submitting this bid, it is understood that the right to reject any and all bids is reserved by the City of Windcrest. If written notice of acceptance of this bid is mailed, telegraphed or delivered to the undersigned within forty-five (45) days after the opening thereof, or at any time thereafter before this bid is withdrawn, the undersigned agrees to execute and deliver a contract in the prescribed form and furnish the required bond within ten (10) days after the contract is presented to him for signature.

Bid security in the sum of _____ in the form of _____ is submitted herewith in accordance with the Specifications.

Attached hereto is an affidavit in proof that the undersigned has not entered into any collusion with any person in respect to this proposal or any other proposal or the submitting of proposals for the contract for which this proposal is submitted.

The bidder represents that:

1. He () has, () has not participated in a previous contract or subcontract subject to the equal opportunity clause prescribed by Executive Orders 10925, 11114 or 11246 or the Secretary of Labor
2. He () has, () has not filed all required compliance reports and that representations indication submission of required compliance reports, signed by proposed subcontractors will be obtained prior to subcontract awards.
3. The above representations need not be submitted in connection with contracts or subcontracts which are exempt from the clause.

By signing this bid, the bidder certifies that he does not maintain or provide for his employees any segregated facilities at any of his establishments and that he does not permit his employees to perform their services at any location under his control where segregated facilities are maintained. The bidder agrees that a breach of this certification is a violation of the Equal Opportunity clause in this contract. As used in this certification, the term “segregated facilities” means any waiting rooms, work areas, rest areas, and wash rooms, restaurants and other eating areas, time clocks, locker rooms, other storage or dressing areas, transportation or housing facilities provided for employees which are segregated by explicit directive or are in fact segregated on the basis of race, color, religion or national origin because of habit, local custom or otherwise. He further agrees that, except where he has obtained identical certifications from proposed subcontractors for the specific time periods, he will obtain identical certifications from proposed subcontractors prior to the award of subcontracts exceeding \$10,000.00 which are not exempt from the provisions of the Equal Opportunity clause and that he will retain such certifications in his files and that he will forward a notice to his proposed subcontractors as provided in the Instructions to Bidders.

NOTE: THE PENALTY FOR MAKING FALSE STATEMENTS IN OFFERS IS
PRESCRIBED IN *18 USC 1001*

Date: _____

Name of Bidder: _____

Address of Bidder: _____

By: _____

Title: _____

ATTACHMENT B

Prime Bidder Affidavit

State of: Texas

County of: _____

_____, being first duly sworn, deposes and says that he is a partner, officer of the firm, corporation, etc. of the party making the foregoing proposal or bid and attests to the following:

1. That the affirmant employed no person, corporation, firm association, or other organization, either directly or indirectly to secure the public contract under which he received payment, other than persons regularly employed by the affirmant whose services in connection with the construction of public building or project or in securing the public contract were in the regular course of their duties for the affirmant;
2. That no part of the contract price received by affirmant was paid or will be paid to any person, corporation, firm, association or other organization for soliciting the contract, other than the payment of their normal compensation to persons regularly employed by the affirmant whose services in connection with the construction of public building or project or in securing the public contract were in the regular course of their duties for the affirmant;
3. That such proposal or bid is genuine and not collusive or sham; that said bidder has not colluded, conspired, connived or agreed directly or indirectly with any bidder or person to put in a sham bid or to refrain from bidding and has not in any manner directly or indirectly sought by agreement or collusion or communication or conference with any person to fix the bid price of affirmant or of any other bidder, or to fix overhead, profit or cost element of said bid price, or of that of any other bidder, or to secure any advantage against the Housing Authority of the City of Windcrest or any person interested in the proposal contract; and that all statements in said proposal or bid are true.

Signature

Subscribed and sworn to before me this _____ day of _____ 2020

My commission expires _____ , _____

ATTACHMENT C

BID PROPOSAL FORM

PROPOSAL OF _____ a corporation
 a partnership consisting of _____
 an individual doing business as _____

CITY OF WINDCREST:

Pursuant to Instructions and Invitations to Bidders, the undersigned proposes to furnish all labor and materials as specified and perform the work required for the installation street maintenance, in accordance with the Specifications for the following prices to wit:

BID FORM (SCHEDULE OF VALUES)					
ITEM NO.	ITEM DESCRIPTION	UNIT	QTY	UNIT BID PRICE (\$)	TOTAL
100.1	Mobilization	LS	1		
101.1	Preparation of Right-Of-Way	LS	1		
103.1	Remove Concrete Curb	LF	465		
103.3	Remove Sidewalks and Driveways	SY	71		
200.1	Flexible base	SY	1697		
202	Prime Coat	GAL	1,877		
203.1	Tack Coat	GAL	1,003		
205.4	Hot Mix Asphaltic Pavement Type D (2")	SY	10,018		
206.1	Asphalt Treated Base (4" compacted depth)	SY	9,377		
208.1	Salvaging, Hauling & Stockpiling Reclaimable Asphaltic Pavement (2" Depth)	SY	641		
208.1	Salvaging, Hauling & Stockpiling Reclaimable Asphaltic Pavement (6" Depth)	SY	9,377		
230.1	Flexible Pavement Structure Repair (4" Type B)	SY	1,517		
230.2	Concrete Pavement Full-Depth Repair (6" Compacted Depth)	SY	40		
413.2	Flowable Fill	CY	50		
500.4	Concrete Curb and Gutter (< 1000 LF)	LF	465		

502.1	Concrete Sidewalks - Conventionally Formed	SY	280		
503.2	Portland Cement Concrete Driveway-Commercial	SY	61		
506.1	Concrete Retaining wall -Combination Type (<20 CY)	CY	2		
512.3	Valve Box Adjustments	EA	2		
515.1	Topsoil (<500 CY)	CY	12		
516.2	St. Augustine Sodding (< 2,000 SY)	SY	90		
530.1	Barricades, Signs, and Traffic Handling, Include as no separate pay item	LS	1		
535.1	4 inch wide yellow line	LF	3,850		
535.2	4 inch wide white line	LF	4,311		
535.4	8 inch wide white line	LF	95		
535.7	24 inch wide white line	LF	24		
535.9	Left White Arrow	EA	2		
535.10	Combination Thru/Right White Arrow	EA	2		
537.6	Pavement Marker (Type I-C)	EA	10		
537.8	Pavement Marker (Type II A-A)	EA	188		
540.1	Temporary Erosion & SW3P	LS	1		
TxDOT 6001	Portable Changeable Message Sign	EA	2		

TOTAL BID AMOUNT (IN DOLLARS) \$ _____

**TOTAL BID AMOUNT (IN WORDS) _____ DOLLARS
AND _____ CENTS**

The Contractor acknowledges the receipt of the following Addendums: (Insert Addendum Number for each Received)

The bidder offers to construct the project in accordance with the Contract Documents for the contract unit prices, and to complete within Calendar days described in bid documents and after the date, as set forth in the Authorization to Proceed.

BIDDER'S SIGNATURE
& TITLE

FIRM'S NAME (TYPE OR PRINT)

FIRM'S ADDRESS

FIRM'S PHONE NO./FAX NO.

OWNER RESERVES THE RIGHT TO ACCEPT THE OVERALL MOST RESPONSIBLE BID.

ATTACHMENT D

BID BOND FORM

KNOW ALL MEN BY THESE PRESENTS: That we, the undersigned _____
_____ As PRINCIPAL, and _____

As SURETY, are held and firmly bound unto _____
Hereinafter call the "Local Authority", in the penal sum of _____, lawful money of the
United States, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors,
administrators, successors, and assign, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH, that whereas the Principal has submitted the accompanying
bid, dated _____, for _____

_____ ,

NOW THEREFORE, if the Principal shall not withdraw said bid within the period specified therein after the opening
of the same or, if no period be specified within, sixty (60) days after the said opening and shall within the period
specified therefore, or if no period specified, within ten (10) days after the prescribed forms are presented to him for
signature, enter into a written contract with the Local Authority in accordance with the bid as accepted and give bond
with good and sufficient surety or sureties, as may be required, for the faithful performance and proper fulfillment of
such contract; or in the event of the withdrawal of said bid within the period specified, if the principal shall pay the
Local Authority the difference between the amount specified in said bid and the amount for which the Local Authority
may procure the required work or supplies or both, if the latter amount be in excess of the former, then the above
obligation shall be void and no effect, otherwise to remain in full force and virtue.

IN WITNBESS WHEREOF, the above-bounded parties have executed this instrument under their seals, this _____ day
of _____, 20____, the name and corporate seal of each corporate party being hereto affixed and the presents
duly signed by its undersigned representative, pursuant to authority of its governing body.

In Presence of:

_____	_____	Seal)
	Individual Principal	
_____	_____	(Seal)
	Business Address	
_____	_____	(Seal)
	Individual Principal	
_____	_____	(Seal)
	Business Address	
_____	_____	
	Corporate Principal	
_____	_____	
	Business Address	

Attest:

Affix
Corporate
(Seal)

Attest:

Corporate Surety

(Seal)

Business Address

(Seal)

Affix
Corporate
(Seal)

Power of Attorney for person signing for surety company must be attached to bond.

ATTACHMENT E

CERTIFICATE AS TO CORPORATE PRINCIPAL

I, _____, certify that I am the _____
Secretary of the Corporation named as Principal in the within bond; that _____
who signed the sale bond on behalf of the Principal was then _____
of said corporation; that I know his signature and his signature thereto is genuine; and that said bond was duly signed,
sealed and attested to for and in behalf of said corporation by authority of its governing body.

Corporate Seal

ATTACHMENT F

INFORMATIONAL FORMS

THE FOLLOWING FORMS ARE FOR INFORMATIONAL PURPOSES AND DO NOT NEED TO BE SUBMITTED WITH BID PROPOSALS AND WILL ONLY BE NEEDED IF CONTRACT AWARDED TO BIDDER

NOTICE OF AWARD

TO: _____

Project Description: _____

Dear _____,

The Owner has considered the BID submitted by you for the above-described work in response to its Legal Notice and Invitation to Bid dated _____, 20__ and Instruction to Bidders.

You are hereby notified that your BID has been accepted in the amount of \$_____.

You are required by the Instructions to Bidders to execute the Construction Agreement and furnish any required Contractor's Performance Bond, Payment Bond and Certificates of Insurance within ten (10) calendar days from the date of this Notice to you.

If you fail to execute this Agreement and furnish any required bonds and insurance certificates within ten (10) days from the date of this Notice, Owner will be entitled to consider all your rights arising out of the Owner's acceptance of your bid as abandoned and as a forfeiture of your BID BOND.

The Owner will be entitled to such other rights as may be granted by law and equity.

You are required to promptly sign and return an acknowledged copy of this NOTICE OF AWARD to the Owner.

Dated this ____ day of _____, 20__.

CITY OF _____, TEXAS

By: _____
Name: _____
Title: _____

CONTRACTOR'S ACCEPTANCE OF NOTICE OF AWARD

Receipt of the above NOTICE OF AWARD is hereby acknowledged by:

_____ this ____ day of _____, 19__.

By: _____
Name: _____
Title: _____

PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS:

That

_____ (Name of Contractor or Company) _____ (Address of Contractor or Company)

a Corporation Partnership here in called "Principal" and _____ (Name of Surety Company)

_____ (Address of Surety Company)

here in after called "Surety", are held and firmly bound unto _____ (Name of Recipient)

here in after called "Owner", in the penal sum of _____ dollars and _____ cents in lawful money of the United States, for the payment of which sum well and truly to be we bind ourselves, successors and assigns jointly and severally firmly in these presents.

THE CONDITION OF OBLIGATION is such that whereas the Principal entered into a certain contract with the Owner dated the ____day of _____, 20____, a copy of which is here to attached and made a part here of for the construction of:

_____ (Project name & description))

NOW THEREFORE, the condition of this obligation is such that, if Contractor shall promptly and faithfully perform said Contract, then this obligation shall be null and void; otherwise, it shall remain in full force and effect.

Provided, further, that the said Surety, for value received here by stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or the work to be performed thereunder or the specifications accompanying the same in any way affects its obligation on this bond, and it does here by waive notice of any such change, extension of time, alteration or addition to the terms of the contract or to the work or to the specifications.

IN WITNESS WHERE OF, this instrument is executed in _____ parts, one of which shall be deemed an original, this ___Day of _____, 20____.

ATTEST:

(Principal)

By: _____

(Principal Secretary)

(SEAL)

(Witness as to Principal)

(Address)

ATTEST:

By: _____

(Surety)

By: _____

(Witness as to Surety)

(Attorney in Fact)

(Address)

(Address)

Note: Date of bond must not be prior to date of Contract. If contractor is Partnership, all partners should execute bond.

Important: Surety companies executing bonds must appear on the Treasury Department's most current list (Circular 570, as amended) and be authorized to transact business in the State of Texas.

PAYMENT BOND

KNOW ALL MEN BY THESE PRESENTS:

That

_____ (Name of Contractor or Company) _____ (Address of Contractor or Company)

a Corporation Partnership here in called "Principal" and _____ (Name of Surety Company)
_____ (Address of Surety Company)

here in after called "Surety", are held and firmly bound unto _____ (Name of Recipient)

here in after called "Owner", in the penal sum of _____ dollars and _____ cents in lawful money of

the United States, for the payment of which sum well and truly to be we bind ourselves, successors and assigns jointly and severally firmly in these presents.

THE CONDITION OF OBLIGATION is such that whereas the Principal entered into a certain contract with the Owner dated the _____ day of _____, 20____, a copy of which is here to attached and made a part here of for the construction of:

_____ (Project name & description)

NOW THEREFORE, if the Principal shall promptly make payment to all persons, firms, sub-contractors and corporations furnishing materials or performing labor in the prosecution of the work provided for in such contract, and any authorized extension of modification on machinery, equipment and tools consumed or used on said work and for all labor performed in such work whether by subcontractor or otherwise, then the obligation shall be void; otherwise to remain in full force and effect.

Provided, further, that the said Surety, for value received here by stipulates and agrees that no Change, extension of time, alteration or addition to the terms of the contract or the work to be performed or the specifications accompanying the same in any way affects its obligation on this bond, and it does here by waive notice of any such change, extension of time, alteration or addition to the terms of the contract or to the work or to the specifications.

Provided, further, that no final settlement between the Owner and the Contractor shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.

IN WITNESS WHERE OF, this instrument is executed in _____ parts, one of which shall be deemed an original, this ___ Day of _____, 20__.

ATTEST:

(Principal)
By: _____
(Principal Secretary)
(SEAL)

(Witness as to Principal)

(Address)

ATTEST:

(Surety)
By: _____
By: _____
(Witness as to Surety) (Attorney in Fact)

(Address) (Address)

NOTE: Date of bond must not be prior to date of Contract. If contractor is Partnership, all partners should execute bond.

IMPORTANT: *Surety companies executing bonds must appear on the Treasury Department's most current list (Circular 570, as amended) and be authorized to transact business in the State of Texas.*

EXHIBIT G

CPS BID DOCUMENTS

CPS Energy

**CPS ENERGY
REQUIREMENTS AND SPECIFICATIONS
FOR CONSTRUCTION OF
NATURAL GAS DISTRIBUTION FACILITIES
ON THE
MIDCROWN STREET IMPROVEMENT
GAS PLANS**

CPS Energy

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Exhibit GAS-4 Design Standards for Polyethylene Gas Piping	13 – Pages
Exhibit GAS-5 Compensation Schedule (Is included in Envelope 1)	1 – Page
Exhibit GAS-6 Job Sketch for: Midcrown Street Improvement	7 – Pages
Exhibit GAS-7 Covered Tasks Regulated by 49 CFR Part 192	3 – Pages

**CPS ENERGY
EXHIBIT GAS-1**

ADDITIONS TO THE PROJECT BID DOCUMENTS

1. MINIMUM REQUIREMENTS FOR BIDDING ON CPS WORK

A. Contractor used for the gas pipeline work must have performed utility gas pipeline work within the past (3) three years of similar technical scope and magnitude as the services to be performed under this contract. With their bid, Contractor shall provide evidence of qualifications in this regard and of any licenses, permits or registrations possessed that pertain to the services or are required in the specifications. Contractor may contact CPS Energy prior to the letting of this project to determine if their previous experience meets this requirement.

B. The Contractor shall have a program complying with 49 CFR Part 199, "Control of Drug Use in Natural Gas, Liquefied Natural Gas, and Hazardous Liquid Pipeline Operations" and 49 CFR Part 40, "Procedures for Transportation Workplace Drug and Alcohol Testing Programs" to test employees for the presence of prohibited drugs as prescribed and to provide an employee assistance program. The Contractor agrees to provide CPS Energy with an affidavit prior to the date of execution of the Contract which states that Contractor and its employees have complied with all applicable laws, statutes, and regulations pertaining to ensuring a drug free workplace including, but not limited to, the requirements of Part 199 and Part 40. Furthermore, the Contractor agrees to allow CPS Energy Human Resources personnel periodic on-site access to Contractor's records documenting compliance with Part 199 and Part 40. Contractor will provide the name and contact person for the agency or consortium used by the Contractor to comply with this requirement prior to the date of execution of the Contract.

C. The Contractor agrees to provide CPS Energy with an affidavit prior to the date of execution of the contract which states that Contractor and its employees have complied with all applicable laws, statutes, and regulations pertaining to ensuring a drug free workplace including, but not limited to, the requirements of 49 CFR as amended by the Research and Special Programs Administration (RSPA).

D. CPS Energy requires the following to verify Contractor and Sub-Contractor compliance with all applicable laws, statutes and regulations pertaining to the qualification of pipeline personnel including, but not limited to the applicable requirements of 49 CFR Part 192 – Subpart N -“Qualification of Pipeline Personnel” as adopted by the Railroad Commission of Texas (RCC) within the Pipeline Safety Rules.

1. ***A Notarized Affidavit that states the company placing the bid and its sub-contractors are in compliance with 49 CFR 192 and RRC Pipeline Safety Rules pertaining to the qualification of pipeline personnel.***

- 2. A current copy of its Operator Qualification Plan, unless currently on file, and approval of its plan by a CPS Energy Gas Operation's Representative. A copy of CPS Energy Covered Tasks is shown in Exhibit Gas-7 - CPS Energy Covered Tasks Regulated by 49 CFR Part 192.**
- 3. Current listing of employees and qualifications.**

E. The Contractor shall submit a copy of SMWBA Form 101 to CPS Energy prior to date of execution of the contract.

F. Prospective Contractors bidding on the Project shall submit to CPS Energy through the City of San Antonio a properly executed Certificate of Insurance from its insurance agent or carrier of such insurance coverages as required and set forth in the Project Contract Documents prior to award of the contract. Failure to provide proof of insurance will result in City's Contractor not being approved for award of the CPS Energy utility work on the Project.

ADDITIONS TO THE PROJECT CONTRACT DOCUMENTS

1. DEFINITION OF TERMS

Add to the City of San Antonio Article I. Contract Definitions: 49. CPS – CPS Energy Board, a municipal agency of the City of San Antonio.

2. LAWS TO BE OBSERVED

The Contractor shall make himself familiar with and at all times shall observe and comply with all Federal, State, and local laws, ordinances, and regulations which in any manner affect the conduct of the work and shall indemnify and save harmless CPS Energy and its representatives against any claim arising from the violation of any such law, ordinance, or regulation, whether by himself or by his employees.

3. PERMITS, LICENSES AND TAXES

The Contractor and his subcontractors shall procure all permits and licenses, pay all charges, fees, and taxes, and give all notices necessary and incident to the due and lawful prosecution of the work and upon request by the City Engineer give evidence of the same.

4. RESPONSIBILITY FOR DAMAGE CLAIMS

The Contractor agrees to indemnify and save harmless CPS Energy, its agents, and employees from all suits, action or claims and from all liability and damages for any and all injuries or damages sustained by any person or property of any character in consequence of any neglect in the performance of the contract by the Contractor and from any claims or amounts arising or recovered under the “Workers’ Compensation Laws”; Chapter 101, Texas Civil Practice and Remedies Code (Texas Tort Claims Act), or any other laws. He shall further so indemnify and be responsible for all damages or injury to property of any character occurring during the prosecution of the work to the extent resulting in whole or in part from any act, omission, neglect or misconduct on his part in the manner or method of executing the work; or from failure to properly execute the work; or from defective work or materials purchased by Contractor, except those claims for damages caused solely by the negligence of CPS Energy. Contractor shall not be released from these responsibilities until all claims have been settled and suitable evidence to the effect furnished to CPS Energy. The indemnification provided herein shall survive the termination of this Contract.

5. CONTRACTOR REQUIREMENT

A. The Contractor shall abide by the regulations promulgated in 49 Code of Federal Regulations Part 40 and 49 Code of Federal Regulations Part 199 and any modifications thereto listed below in this Article. CPS Energy will require such compliance to be a part of this Contract and will immediately terminate this Contract if Contractor is found to not be in

compliance with said regulations. Contractor shall indemnify CPS Energy against any fines, penalties, damages, costs or attorney fees based upon any violation by Contractor of the same.

B. The Contractor shall abide by the regulations promulgated by the Federal Highway Administration (FHWA) which states that contractors subject to FHWA mandates shall be in compliance with those parts of 49 Code of Federal Regulations (CFR) which relate to the illegal use of alcohol and controlled substances.

6. PROSECUTION AND PROGRESS

All workers or subcontractors employed by the Contractor shall have such skill and experience as will enable them to properly perform the duties assigned them.

7. WARRANTY

The Contractor shall warrant all components, materials and workmanship for a period of at the least one (1) year from the date of final completion of gas pipeline work by Contractor. The Contractor warrants the title and guarantees the equipment, materials and workmanship furnished under this Contract to be specified and to be free from defects in design, workmanship and materials. If within the warranty period the work fails to meet the provisions of this guarantee, CPS Energy shall notify the Contractor thereof immediately and the Contractor shall promptly correct any defects, including nonconformance with the Contract Documents, by adjustment, repair or replacement F.O.B. the Project site of all defective work at its sole costs.

8. INSURANCE

The Contractor agrees to keep in full force during the performance of services hereunder insurance sufficient to fully protect CPS Energy from all damages, claims, suits and/or judgements, caused or claimed to have been caused by or in connection with the performance or failure to perform any services undertaken by Contractor, his subcontractor, or their agents, or employees.

9. COORDINATION

All questions about the gas construction shall be addressed to Brad Carr, CPS Energy Gas Construction, at (210) 353-4251. Design and engineering questions may be addressed to the CPS Energy Gas Engineering Division, Civic Improvements Section, at (210) 353-2430.

**CPS ENERGY
EXHIBIT GAS-2
SPECIFICATIONS FOR CONSTRUCTION OF
NATURAL GAS DISTRIBUTION FACILITIES**

1. GENERAL

The work to be done includes mobilization and clearing right-of-way where necessary; receiving, transporting and unloading all materials from a designated CPS Energy center; stringing pipe, welding steel pipe and pipe fittings, and fusing high density polyethylene gas pipe and pipe fittings; excavating trenches and ditching for the burial of the gas piping facilities; installation of gas piping into the excavation along with required appurtenances such as anodes, anodes lead wires, and tracer wires; backfilling of ditches, repair of damage to any street, road, highway, sidewalk, drainage structures, driveways, signs, other utilities, fencing, or other existing structures; clean-up of right-of-way and any other item enumerated in these specifications.

The work shall conform with Title 49 of the Code of Federal Regulations, Part 192, "Transportation of Natural and Other Gas by Pipeline: Minimum Federal Safety Standards" and to the CPS Energy design standards attached to this document as Exhibits GAS-3 and GAS-4, as applicable.

2. ROUTE OF THE GAS LINE

Construction of the gas line will, in general, follow the route shown on Exhibit GAS-6 (CPS Energy Job Sketch). Gas services to be installed, relocated or adjusted are also indicated on Exhibit GAS-6, as applicable.

CPS Energy reserves the right to make any changes in the routing which may be deemed necessary and such changes shall in no manner alter the terms or compensations payable under this contract except as they are affected by linear measurements of work completed.

All gas lines shall be installed in a separate trench apart from any other utility lines unless joint trenching with other utilities is specifically required on the CPS Energy Job Sketch or prior written approval is obtained from the CPS Energy representative allowing joint trench construction.

3. RIGHT-OF-WAY

The CPS Energy Job Sketch will indicate the planned route of the gas lines to be installed. The construction plans will show as much information as can be reasonably obtained by CPS Energy regarding the location of other existing buried utilities and structures in/or crossing the rights-of-way, but CPS Energy assumes no responsibility for the correctness or completeness of this information. Contractor will be held responsible for locating all such utilities and structures and for avoiding damage to them and for making repairs or paying for any damage thereto. CPS Energy will provide and furnish all necessary right-of-way, federal, state, county and city roadway crossing permits, which shall be necessary for the construction.

Most of CPS Energy's gas facilities are constructed within public rights-of-way; however, CPS Energy may acquire easements on private property for construction of gas distribution facilities when public rights-of-way are not available or unusable. When gas facilities are planned for construction within easements on private property, the exact boundaries of such easements will be shown on the CPS Energy Job Sketch, and CPS Energy will survey and stake the easement boundaries in the field. Contractor shall preserve such field staking of easement boundaries. If the Contractor's construction activities disturb the field survey stakes, then the Contractor shall be responsible for resurveying the easement boundary when necessary. Contractor shall comply with all reasonable requirements of landowners, tenants or lessees which are designed to reduce interference of construction. It will be the Contractor's responsibility to limit traffic on the right-of-way to only such vehicles as may be necessary for construction. Contractor will be held liable for damage claims arising from grass and brush fires that may be set during his operations.

In addition, the term "right-of-way" shall also apply to those portions of public streets, roads or highways in which sections of the utility lines will be constructed. The Contractor working in any public right-of-way is responsible for the safe movement of traffic (pedestrian and/or vehicular) through the construction area. The Contractor shall meet all requirements for barricading and traffic control as specified in the Texas Manual on Uniform Traffic Control Devices (TMUTCD).

4. MATERIALS TO BE FURNISHED BY CPS

CPS Energy agrees to furnish all steel pipe, polyethylene (plastic) gas pipe, casing pipe, valves, valve boxes, stop cocks, service risers, couplings, casing insulators, casing end seals, steel pipe insulating joints, miscellaneous pipe fittings, anodes, cathodic protection test lead boxes, pipeline warning signs, gas pipe tracer wire, tracer wire clamps, pipe coating primer, and pipe coating tape and/or shrink sleeves necessary to complete the job except when these materials are to be specifically provided by the Contractor in accordance with written requirements of the Compensation Schedule (Exhibit GAS-5) or CPS Energy Job Sketch (Exhibit GAS-6).

5. CLEARING, GRADING AND PREPARATION OF RIGHT-OF-WAY

The Contractor shall clear and grade right-of-way sufficiently for his need and for hauling and stringing pipe and other material but not to exceed the width of right-of-way. Contractor shall be responsible for any damages outside of right-of-way limits. Contractor shall perform all necessary grading and compaction at road, stream, and gully crossings and at other locations where needed to permit the passage of equipment, cars, and trucks. Before any brush or timber is cut to clear right-of-way, approval from CPS Energy in writing must be obtained. All brush and timber cut to clear right-of-way must be removed from the right-of-way and disposed of to the satisfaction of the CPS Energy representative. Any trimming of an oak tree will require the contractor to follow **oak wilt suppression procedures**:

- Avoid pruning or wounding any oaks unless absolutely necessary.
- If pruning is required, request assistance as soon as possible from the CPS Energy Tree & ROW Maintenance Section or one of the Inspectors listed below.

- Any pruning wounds or damage caused by equipment (trucks, diggers, trenchers, backhoes, etc.) must be painted immediately, within a minimum of one hour. This includes any cracked or ripped limbs and wounds to trunks, limbs or root flares which may have been damaged by passing equipment.
- Within a known infection center, all tools must be disinfected with a 10% clorox and water solution or Lysol spray before using these tools on any other oak tree.

Requests for Assistance From the Tree & ROW Maintenance Section

When assistance is required, please provide as much notice as possible or call as soon as damage occurs. Contact names and numbers are listed below:

	Office	Radio#	Cellular	Pager#
Section Office	353-3593	2400		
James F. Koenig	353-3798	2401	844-5457	1336
Terri Minnia	353-5218	2405	394-3580	2241
Margie Regalado	353-5243	2403	394-3579	2428
Clyde Stroud	353-5218	2404	394-3578	2301
Ed Scott	353-5243	2402	275-6935	2852

The Contractor shall promptly repair all bridges, private roads, fences, buildings or other property damaged by him in the progress of the work. Permission must be secured from owner before private roads or bridges are used or blocked.

The Contractor will be notified prior to construction of all known requirements or restrictions of right-of-way by CPS Energy.

The Contractor will be responsible for all preparation of right-of-way. This will include construction operations by removing and disposing of all obstructions from the right-of-way and/or gas easement where removal of such obstructions is not otherwise provided for in the plans and specifications.

Such obstructions shall be considered to include, but not be limited to, remains of houses not completely removed by others, foundations, floor slabs, concrete, brick, lumber, plaster, cisterns, septic tanks, basements, abandoned utility pipes or conduits, equipment or other foundations, fences, retaining walls, outhouses, shacks, and all other debris, as well as buried concrete slabs, curbs, driveways and sidewalks.

This item shall also include the removal of trees, stumps, bushes, shrubs, brush, roots, vegetation, logs, rubbish, paved parking areas, miscellaneous stone, brick, drainage structures, manholes, inlets, abandoned railroad tracks, scrap iron and all debris, whether above or below ground, except live utility facilities.

It is the intent of this specification to provide for the removal and disposal of all obstructions to the new construction, together with other objectionable materials, not specifically provided elsewhere by the plans and specifications.

Unless otherwise shown on the plans, all fences along the right-of-way and/or easement which are damaged or temporarily removed by the Contractor shall be replaced by the Contractor to an equal or better condition at no additional cost to CPS Energy.

Unless otherwise indicated on the plans, all underground obstructions shall be removed to in areas to be excavated to 2 feet below the lowest elevation of the excavation.

Holes remaining after removal of all obstructions, objectionable material, vegetation, etc., shall be backfilled and tamped as directed by the inspector, and the entire area shall be bladed to prevent ponding of water and to provide drainage.

All asphaltic material shall be deposited of or recycled at a facility authorized to accept the asphalt for such purposes.

If the contractor encounters hazardous substances, industrial waste, other environmental pollutants, underground storage tanks, or conditions conducive to environmental damage, Contractor shall immediately stop work in the area affected and report the condition to the Owner's representative in writing. Contractor shall not be responsible for or required to conduct any investigation, site monitoring, containment, cleanup, removal, restoration or other remedial work of any kind or nature (the "remedial work") under any applicable level, state or federal law, regulation or ordinance, or any judicial order. If the contractor agrees in writing to commence and/or prosecute some or all of the remedial work, all costs and expenses, to include any extension of the contract time, of such remedial work shall be paid by Owner to Contractor as additional compensation.

6. UNLOADING, HAULING, AND STRINGING MATERIALS

The Contractor shall unload from trucks and string on the right-of-way, as needed, all gas pipe and other materials in such manner as to prevent damage to same. Pipe shall be unloaded with proper equipment, and not dropped from trucks.

When materials in storage are issued to the Contractor, such materials shall become the responsibility of the Contractor, and adequate methods of inventory and material transfer will be set up by the Contractor. The Contractor and CPS Energy jointly shall inspect materials, which have been stockpiled by CPS Energy prior to hauling. After this inspection, the Contractor shall pay CPS Energy delivered cost of any materials lost or damaged beyond use during the construction operation.

Under no circumstances shall pipe be strung in advance of right-of-way clearing operations.

Stringing of pipe on right-of-way shall be done in such a manner as to cause minimum interference with the normal use of driveways, streets, roads, highways, and land crossed. The Contractor shall prevent entrance of dirt or debris into pipe during stringing.

7. LOCATING EXISTING CPS GAS FACILITIES

The Contractor shall be required to locate all existing gas facilities as needed for the construction and installation of new gas facilities. Upon request by the Contractor, the

CPS Energy inspector will provide copies of the appropriate gas maps to facilitate locating activities for the existing gas facilities at the job site, however; CPS Energy does not guarantee the accuracy of such gas facilities map information. The Contractor shall use conventional pipe locating equipment and techniques in conjunction with information from the gas facilities maps to determine the actual location of existing gas facilities. The Contractor shall be solely liable for any damages to existing gas facilities and any damages to other infrastructure such as the street, drainage structures or other utilities, that are incurred by the Contractor.

8. TRENCHING (CONVENTIONAL OPEN EXCAVATION)

A. Equipment and General Methods - Contractor shall use such equipment and methods that may be required to excavate the trench or ditch along the route specified on the CPS Energy Job Sketch, regardless of the type of soil or rock encountered and regardless of the depth of excavation necessary. Contractor shall furnish all equipment, materials and supplies that may be necessary for the completion and maintenance of the trench or ditch, including water control, shoring, coffer dams and sheet piling.

B. Survey Stakes - Contractor shall carefully preserve all survey stakes set by CPS Energy, CPS Energy representatives, or consulting engineers and shall be liable for any extra expense due to Contractor's failure to maintain such stakes.

C. Trench Specifications - The trench or ditch shall have sufficient width and be of such depth to allow installation of piping and valves at depths specified on the CPS Energy Job Sketch and/or the CPS Energy Design Standards. When surfaced streets are cut, the paving shall be cut in neat lines defining the width of the trench to be excavated. The cut shall extend entirely through the asphaltic surfacing and shall break the base material to a sufficient depth to assure the removal of the surfacing and base without breaking beyond the lines of the trench. Concrete saws, pneumatic paving chisels, or mechanically operated drop blades may be used for asphalt surface cutting as approved by the governmental authority exercising jurisdiction. A concrete saw must be used to cut concrete driveways, streets, or other concrete surfaces.

D. Blasting - No blasting will be permitted by CPS Energy.

E. Hand Ditch Requirement - In all cases where shrubbery, trees, or valuable growing timber is encountered in the right-of-way, and in any location where, in the opinion of the CPS Energy representative, the use of ditching equipment may result in unnecessary damage or injury to property crossed by the right-of-way, CPS Energy may require the Contractor to excavate the trench or ditch by hand or other approved method.

F. Temporary Bridges - When the trench or ditch is excavated where it is desirable for a property owner, tenant or other pedestrians to have a passageway across the excavation, the Contractor shall provide safe, temporary bridges or provide other safe means of crossing the ditch.

No streets or driveways shall be blocked at night, except with owner's permission, and any street or driveway opened shall be provided with a strong temporary bridge to allow

traffic to move safely. Open trenches and test holes shall be properly marked by means of barricades and warning lights.

G. Additional Depth of Trench - Where trenching across or adjacent to, or within the right-of-way of roads or highways, railroads, drainage ditches, creeks, ravines, and other water courses and also at points where the contour of the earth may require extra depth, Contractor shall excavate to such additional depth as may be necessary to meet the requirements of CPS Energy and any public or private authority having jurisdiction over same.

H. Dust Suppression - Whenever trenching activities create significant amounts of dust or other undesirable emissions into the atmosphere, then the Contractor may be required, at the sole discretion of the CPS Energy inspector, to take necessary action to reduce such emissions.

I. Trench Excavation Safety - The Contractor must comply with 29 CFR Part 1926, Occupational Safety and Health Standards; Subpart P - Excavations. Contractor and/or Contractor's independently retained employee or safety consultant, if any, shall review the construction plans and any available geotechnical information and the anticipated installation sites within the project work area in order to develop the Contractor's trench excavation safety plan and procedures. The plans and procedures shall, at a minimum, comply with OSHA's standards for trench excavations. Specifically, the Contractor and/or the Contractor's independently retained employee or safety consultant shall develop and implement a trench safety program in accordance with OSHA's standards governing the presence and activities of individuals working in and around trench excavation.

9. TRENCHLESS CONSTRUCTION METHODS

The use of guided or directional boring equipment to install new gas distribution facilities is acceptable to CPS Energy provided that the Contractor demonstrates to the satisfaction of the CPS Energy representative that such equipment is capable of installing the gas pipe along a controlled and relatively constant horizontal and vertical alignment for the specific soil conditions that are encountered at each job site. Special provisions must be made to insure that the gas pipe is not damaged as it is pulled or otherwise inserted into the bored hole. The bored hole must be at least one nominal pipe size larger than the gas pipe that is to be installed (i.e. a 4-inch gas pipe requires at least a 6-inch bored hole). When the bored hole is known to have significant deflections, the bored hole must then be at least two nominal pipe sizes larger than the gas pipe.

When such equipment is used to install polyethylene gas pipe, a fusible link shall be used between the pull head and the gas pipe at all times to prevent damage to the gas pipe during the pull-back operation. The fusible link shall be at least 2 feet in length and it shall be a section of CPS Energy polyethylene pipe that is one nominal pipe size smaller than the gas main being installed. The CPS Energy representative shall inspect the fusible link and the leading edge of the installed gas pipe for any significant gouges or scrapes in the outside wall of the pipe or excessive change in length of the fusible link. If such damages to the fusible link or pipe are found to exist, then the Contractor shall remove and replace all of the damaged pipe at the

Contractor's expense, and the Contractor shall reimburse CPS Energy for the cost of the damaged pipe (including CPS Energy inventory and handling expenses).

When such equipment is used to install steel gas pipe, the CPS Energy representative shall inspect the installed gas pipe for any significant gouges or scrapes in the protective coating on the outside wall of the steel pipe. If such damages to the coating are found to exist, then the Contractor shall repair all of the damaged coating at the Contractor's sole expense.

Whenever gas service lines are planned for installation along a section of gas main that is being installed with guided or directional boring equipment, the Contractor shall excavate at least one service tap location prior to pulling the gas main into the bored hole. The purpose of this excavation is to provide the CPS Energy representative with an intermediate inspection hole where the gas pipe can be inspected during the pipe insertion process. Preferably, the intermediate inspection hole shall be located near the middle of the directionally bored section. If several gas service connections are planned along the insertion route, then the CPS Energy representative shall select the location of the service tap that the Contractor must excavate for the intermediate inspection hole before the gas pipe insertion process.

Gas mains and services that are installed by guided or directional boring equipment shall not be routinely installed at depths greater than seven (7) feet unless one of the following conditions apply:

- 1) The CPS Energy Job Sketch (Exhibit Gas - 6) specifically requires installation depths in excess of seven (7) feet.
- 2) Installation depths in excess of seven (7) feet are the shallowest depths necessary to achieve acceptable clearance between the gas pipe and another buried utility or structure while maintaining the minimum burial depth requirements for the gas pipe.
- 3) The CPS Energy representative approves such installations even though conditions described in Items 1) and 2) above are not applicable.

When guided or directional boring equipment is used to install gas distribution facilities special provisions (if any) in the Compensation Schedule (Exhibit Gas-5) for additional compensation due to extra depth of cover shall not apply.

The method of gas service replacement by Insertion involves sliding a new polyethylene service pipe of smaller diameter into the existing steel service pipe. This is an acceptable method of installation provided that the ends of the existing steel pipe are reamed and fitted with bushings for the pipe to be inserted without damage, and a shrink sleeve is applied to keep components in place and prevent damage thereafter. In order to reduce stress on the service line being inserted from the main, the horizontal distance between the end point of the new service alignment and the point of insertion should be, at least, twice the perpendicular distance between the lines (See Insertion Detail, page 19 of 20, exhibit Gas-3). Tracer wires will be inserted through the existing service along with the new pipe. An electrical continuity test will be conducted on each installed tracer wire to verify that the tracer wire has not been "shorted" against the existing steel service during the installation procedure.

10. STORM WATER POLLUTION PREVENTION PLAN

The gas utility construction work shall be performed in accordance with the City of Windcrest Storm Water Pollution Prevention Plan (SWPPP).

11. PROTECTION OF GAS PIPE ENDS

During the course of construction, diligent care shall be exercised to keep the gas pipelines clean. At the end of each day's work and at the other times that the ends of the installed pipe are left unattended, the pipe ends shall be securely closed to prevent the entrance of water, animals, trash or any other obstructions, and shall not be opened until work is resumed.

If there is reasonable cause to believe that water, trash or other obstruction is in a portion of the lines, the Contractor shall take whatever steps are necessary to assure CPS Energy that there is no water, trash or other obstruction in the line or to remove the water or other foreign matter if it is in the lines. Any and all work required to assure CPS Energy that the gas pipes are clear of debris and other such matter or to remove such obstructions shall be at the Contractor's expense.

12. WELDING

Welding shall be in accordance with API Standard 1104, 17th Edition, dated September, 1994.

Welds shall be made the "shielded metal-arc" process. All equipment and welding rods will be furnished by the Contractor. Brand of welding rods proposed to be used by the Contractor shall be approved by CPS Energy prior to use.

Where determined by the CPS Energy representative to be necessary, back-welding or inside-welding of all tube turns, ells, etc., in the pipe lines shall be required by the Contractor as part of the work covered by the Contract. Back-welding shall be performed at the sole expense of the Contractor.

All welds shall be made with not less than three (3) beads. The second or "Hot Pass Bead", should be run on the full circumference of the pipe as soon as practical. The intent of the above is that the Hot Pass or second bead shall be run before the Stringer Bead has cooled.

Prior to being permitted to weld on the line, each welder shall qualify in accordance with Section 3.0 of API Standard 1104 referred to previously and shall pass the tests listed in paragraph 3.4 of the API Standard. The Contractor will conduct, or make arrangements for, and stand the expense of the qualification tests of the welders. The qualifying tests will be conducted in the presence of the CPS Energy representative.

Each welder will be assigned a specific number and it shall be his duty to personally affix such number in crayon on each weld for future identification. Steel die stamping shall not be used.

CPS Energy rights of welding inspection shall be as given in Section 5.1 of API Standard 1104. Unless otherwise directed, the Contractor will test all welds with soapsuds while subjected to an internal air pressure of 90 psig prior to field coating the joints.

Pin holes, leaks, cold laps, rivers, undercutting or any defects whatsoever occurring in any weld shall, at the discretion of the CPS Energy representative, be repaired by cutting out the entire weld and completely rewelding at no additional expense to CPS Energy. Whenever it thus becomes necessary to remove a weld from the completed line, replacement shall be made, at the sole expense of the Contractor, by welding into the line a pup joint having a minimum length of ten (10) feet.

13. RADIOGRAPHIC INSPECTION

This Section applies when radiographic inspection is specified in the contract documents.

A. Standards and Codes - The latest available edition of the following referenced documents shall be applied when required:

1. Department of Transportation, Title 49, Part 192 - "Transportation of Natural and Other Gas by Pipeline: Minimum Federal Safety Standards."
2. Recommended Practice No. SNT-TC-1A, Supplement A - "Radiographic Testing Method."
3. ANSI B31.8, "Gas Transmission and Distribution Piping Systems."
4. ASME Code Section V, "Nondestructive Examination."
5. United States Nuclear Regulatory Commission, Title 10, Chapter 1, CFR - Energy and other federal, state and local regulations for protection against radiation hazards.

B. Radiographic Procedure - All radiographic inspections shall be performed in accordance with written procedures per Section 8.2 of API Standard 1104. Contractor shall provide a copy of the written procedure to the CPS Energy representative who shall determine the acceptance of the procedure.

C. Personnel Qualifications - Radiographic certification shall be the result of a qualification and certification program that incorporates the requirements of Recommended Practice SNT-TC-1A, Supplement A in accordance with Section 8.7 of API Standard 1104.

D. Equipment and Material - Contractor shall furnish all equipment and materials necessary for the performance of the radiographic inspection. Such materials and equipment include all film and supplies for the processing, film identification, recording, filing and storage of same. Also, Contractor shall provide all barriers, warning systems, film badges, documentation and records as is necessary for the protection and personnel monitoring of every person near a radiation source.

E. Production Radiography Procedures - Contractor will notify the CPS Energy representative if any welds fail to meet the specification. All repaired welds or welded joints, which have been completely replaced, shall be radiographed.

F. Film Identification Procedure - Film identification shall be in accordance with Section 8.6 of API Standard 1104. The exact method of identification will be approved by the CPS Energy representative prior to the start of radiographic inspection.

G. Radiographic Reports and File - Contractor shall be responsible for furnishing the CPS Energy representative with a report for each calendar day the unit is on the project. All radiographs made by Contractor shall be delivered to the CPS Energy representative and shall become the property of CPS Energy.

14. PRESSURE TESTING

A. General - The Contractor shall demonstrate to the satisfaction of the CPS Energy representative, by performing a pressure test, that the mains and/or services installed do not leak and that they will operate safely at the desired maximum allowable operating pressure. Pressure tests are performed to verify satisfactory workmanship and the strength of materials. To the extent practical, the test shall be conducted to the entire pipeline so as to minimize the number of untested tie-in connections. All joints used to tie-in a test segment of pipeline after the test shall be soap bubble tested at not less than its operating pressure. The Contractor shall be responsible for locating and repairing any leaks or failures, which are revealed by the test.

The Contractor shall furnish all supervision, labor, materials and equipment to perform the pressure test required, including but not limited to, pumps, compressors, pigs, test instrumentation and water. Pressure test specifications will be indicated on the CPS Energy Job Sketch (Exhibit GAS-6). The specifications will indicate the minimum and maximum test pressure, test fluid and test duration, as appropriate. The Contractor shall conduct the test in accordance with the applicable requirements of Title 49 CFR 192 and shall take all necessary safety precautions to protect construction personnel and the general public during the course of the test. The Contractor shall be responsible for obtaining all permits necessary to conduct the test except for the Railroad Commission of Texas test water discharge permit that is required for hydrostatic pressure tests.

B. Standard Air Test - A standard air test will generally be specified for gas mains and services to be operated at pressures of 60 psig or less. This test will be indicated on the CPS Energy Job Sketch without a test duration period. The minimum test pressure shall be 90 psig and shall not exceed 120 psig. The test duration shall be a time sufficient to insure discovery of all potentially hazardous leaks. At the minimum, each weld, butt fusion and any other fitting and connection shall be soap bubble tested at the specified test pressure. The test pressure shall be measured with a dial type gauge and shall be monitored during the course of the test to detect leakage. Upon completion of the test(s), the Contractor shall sign and date, in the appropriate location, the "as built" job sketch to indicate successful completion of the test. Pending acceptance by the CPS Energy representative, the CPS Energy representative shall also sign the "as built" job sketch at the appropriate location.

C. High Pressure Test - When the CPS Energy Job Sketch specifies a test pressure greater than 90 psig or if a specific test duration period is specified, then the following requirements for a High Pressure Test shall also apply.

Prior to initiating any work required for a High Pressure Test, the Contractor must hold a pre-test meeting with the CPS Energy representative and a CPS Energy engineer from the Gas Engineering Division. At this meeting, the Contractor will be required to discuss all aspects of plans for conducting the High Pressure Test. The key points of discussion for hydrostatic pressure tests will include the following: 1) optimum direction and injection rate for filling the pipe section with water while minimizing air entrapment; 2) optimum direction and discharge location for safely and completely draining the pipe section; 3) the type, quantity and condition of pipeline pigs; 4) installation and use of temporary pig launchers and/or receivers; 5) capacities of water pumping equipment; 6) pressurization procedures; 7) written test documentation; 8) limitations on refilling and/or discharging test water during the pressure test without invalidating the test and causing the test to be restarted; 9) test water stabilization period after filling the pipe section; 10) appropriate procedure for dewatering the pipe section to minimize the amount of water that remains in the pipe; 11) any other critical aspects of the High Pressure Test.

The test medium may be either air or water and will be specified on the CPS Energy Job Sketch. A hydrostatic test shall be conducted in general conformance with API Recommended Practice 1110. Air tests shall also be conducted in conformance with API RP 1110 with regard to safety and instrumentation.

All filling and pressurization procedures are subject to the approval of the CPS Energy representative. When a hydrostatic test is to be performed, the Contractor shall fill the pipeline in such a manner that no air is entrapped, making use of pipeline pigs as necessary. The Contractor shall be required to furnish all pipeline pigging equipment, including appropriate styles and types of pipeline pigs and temporary pig traps and launchers. The CPS Energy representative must inspect all pigging equipment, and such equipment must be acceptable to the CPS Energy representative prior to use by the Contractor.

The Contractor shall allow a suitable time for temperature stabilization of the test fluid. The stabilization period shall be a minimum of twenty-four (24) hours after the filling operation is complete for a hydrostatic test, and the stabilization period shall be a minimum of eight (8) hours after the pipeline is pressurized to the minimum test pressure for all High Pressure Tests performed with air or other compressed gases. At the sole discretion of the CPS Energy representative, the stabilization period may be reduced for short sections of pipe such as offsets and valve complexes.

The Contractor shall note each significant step or event during the filling, pressurization and testing operation and comments shall be added for any incidents which may affect the results of the tests. Where the specified test duration is two hours or less, deadweight pressure, pipe temperature and ambient temperature measurements shall be recorded at 15 minute intervals. Where the specified test duration is greater than two hours, these measurements shall be recorded at 30 minute intervals.

Upon completion of the test, the Contractor shall obtain the approval of the CPS Energy representative prior to depressurizing the pipeline. The Contractor shall then depressurize, dewater, clean and dry the pipeline to the satisfaction of the CPS Energy

representative. Water shall be disposed of in the manner required by any permits and to the satisfaction of the CPS Energy representative.

D. Test Records - The Contractor shall submit to the CPS Energy representative all documentation associated with the test, including a completed Form I, "Hydrostatic Test Record and Certification" of Appendix I, API RP 1110, (or substantially similar documentation), testing logs and all recorder charts. All documentation shall be labeled to identify the pipeline section that was tested, and it must be signed and dated by the Contractor and approved by the CPS Energy representative.

15. COATING OF PIPE

The Contractor will be furnished coated and wrapped pipe in accordance with such specifications as CPS Energy may in its sole discretion determine. The Contractor will be responsible for coating all field joints and repairing damaged and defective coating on the pipe regardless of the nature, extent or cause of such damage or defect in the coating. However, if the damaged or defective coating is of such magnitude as requires an extra or additional charge by the Contractor, then the Contractor shall first refer such matter to the CPS Energy representative and not proceed until the Contractor has obtained prior written authorization from CPS Energy to do so, in which event the provisions of the Contract relating to extra or additional work shall be applicable.

Coating materials for coating field joints and repairing damaged or defective coating will be furnished by CPS Energy.

For coating field joints, the coating on the pipe must be cut back a distance of 8" to 12" from the joint. The edge of the enamel and felt wrapping shall be feathered at these points to assure a firm bond between the original coating and the field coating. After the joints are welded and tested, and the welds cleaned and brushed, the bare ends of the pipe shall be thoroughly cleaned, then immediately given a hand-brushed coat of primer to dry surfaces. Care shall be exercised to prevent primer from being applied too heavily, especially at the base of the welds; any runs or sags which have dried or dead primer shall be scraped off and the pipe reprimed. After the tape primer has dried to a tacky consistency, apply cold wrap tape with a 30 percent overlap taking care not to create any voids between the pipe and tap coating. No primer or coating will be applied to wet or damp pipe.

After the field joints have been coated and immediately before the pipe is lowered into the ditch, the entire coating will be tested to locate breaks or pinholes and other flaws in the enamel with an approved "holiday" detector in good working condition capable of producing the testing voltage in pulsating cycles at very low amperage. The voltage used shall not exceed 14,000 volts for pipe coatings of 3/32. All defective places will be plainly marked immediately after they are detected. The Contractor will furnish the holiday detector, and will check the coating for holidays in the presence of the CPS Energy representative.

All repairs to damaged coating which exceeds 2 square inches will be made by breaking out the old coating, scraping the pipe to bare metal, feathering the edges to assure a firm bond and repriming. After the primer has dried to a tacky consistency, apply cold wrap tape taking care not to create any voids between the pipe and the tape coating. For repairs less than 2 square

inches, the pipe need not be scraped to bare metal and primed; however, the good enamel around the damaged portion shall be feathered before the cold wrap is applied.

Compression type couplings, valves, welded fittings, etc., will receive a cold applied mastic after the pipe is in the ditch and they have been tested for leaks. A plastic wrap supplied by CPS Energy will be placed over the mastic to protect the coating during backfilling.

Handling of Coated Pipe - Coated pipe shall be handled only with suitable equipment in such a manner as to prevent damage to the coating. The coated pipe shall be placed on skids alongside the ditch until it is to be welded and lowered into the ditch. The skids shall be of sufficient width or padded with sandbags or resilient pads to prevent the skid edges from cutting the coating and wrapping. The skids shall be arranged to permit the coated pipe to bear on the full width of the skid.

At all times, coated and wrapped pipe shall be carefully handled with wide rubber, leather, composition, or canvas slings or belts containing no protruding rivets or belts that may injure the coating. Wire rope, tongs, chairs, hooks, and bare cables shall not be permitted to come into contact with the coating. Coated pipe shall not be handled when the temperature is low enough to cause cracking of the enamel.

16. CATHODIC PROTECTION

The Contractor shall install packaged anodes, insulating joints and insulating flange sets as provided for in the exhibits. Welding machines will not be used to test insulation or otherwise be grounded across insulating devices. Insulation will be checked by the CPS Energy representative and declared acceptable only after testing establishes satisfactory performance.

17. POLYETHYLENE GAS PIPE

Polyethylene pipe, which is commonly referred to as plastic, PE or HDPE pipe, shall be handled only with suitable equipment in such a manner as to prevent damage to the pipe such as fracture, kinking, deep gouges or cuts. The polyethylene pipe shall not be subjected to abuse by dropping, throwing or dragging except over smooth non-scratching terrain or surface.

An insulated copper wire shall be installed with all polyethylene pipe for the purpose of locating the pipe after backfilling. This wire shall be installed with 2 to 6 inches separation between the tracer wire and the polyethylene pipe. Under no circumstances shall the tracer wire be taped or otherwise secured against the outside wall of the polyethylene pipe or spirally wrapped around the pipe.

Fusion of polyethylene pipe joints shall be done by the Contractor in accordance with requirements of D.O.T., Title 49, Part 192 - Transportation of Natural Gas by Pipeline: Minimum Federal Safety Standards, Paragraphs 192.281, 192.283, 192.285, 192.287.

Prior to starting production fusing under this contract each Contractor employee that will be making polyethylene fusion joints shall qualify according to Paragraph 192.285 of the D.O.T. code using a CPS Energy approved procedure. Qualifying tests will be conducted in the presence of the CPS Energy representative.

The Contractor shall furnish all specialty tools and equipment that are required to handle, install, butt fuse and squeeze-off polyethylene pipe. The Contractor shall insure that all specialty tools and equipment are specifically designed for use on polyethylene piping systems and are in good working condition. The CPS Energy representative shall be allowed to inspect all specialty tools and equipment furnished by the Contractor. The CPS Energy representative may disallow the use of any specialty tools or equipment that are not specifically designed for use on high density polyethylene piping systems or are deemed to not be in good working condition. CPS Energy routinely uses the Steve Vick 6" Mark II Coil Trailer for handling large diameter coiled pipe, McElroy equipment for making butt fusions on polyethylene pipe and Mustang squeeze-off tools for stopping the flow of gas in existing polyethylene piping systems. The Contractor shall be required to provide copies of the original manufacturer's literature for all comparable equipment from other manufacturers. At the sole discretion of CPS Energy, comparable equipment from other manufacturers may be approved for use by the Contractor.

All polyethylene pipe joints shall be tested with soap and water with the line having an internal pressure of between 90 and 120 psig. All pressure tests on polyethylene pipe must be observed and approved by the CPS Energy representative. It shall be the Contractor's responsibility to coordinate pressure tests on polyethylene pipe so that such test can be performed with a CPS Energy representative present.

18. LOWERING IN AND BACKFILLING

The ditch shall be free of rocks and clods before the pipe is lowered into the ditch. No pipe will be lowered into the ditch until the ditch has been inspected and approved by the CPS Energy representative.

All stumps and roots found in the ditch line shall be cut so that they will not come in contact with the pipe. All loose rocks, stones, blocks, skids, chocks, tools, heavy clods, tree limbs, and other items, which may damage the pipe, shall be removed from the bottom of the ditch before the pipe is lowered in.

The ditch shall be excavated with sufficient depth to allow for a minimum thickness of four (4) inches of pit run sand to be placed in the ditch below the pipe. Pit run sand placed in the ditch to cushion the pipe shall be leveled and tamped so that the weight of the pipe is as evenly distributed as possible on solid ground.

Backfilling shall be so conducted that the ditch shall be neatly backfilled and compacted. Rock, gravel or like materials shall not be backfilled directly onto the pipe. The Contractor shall provide and shall haul sufficient pit run sand to be backfilled around and over the pipe to form a protective padding or cushion between the pipe and the rock, gravel and other such unexcavated materials. After the pipe has a six (6) inch minimum cover of pit run sand, the remaining backfill may contain rocks and gravel, except that large rocks in excess of four (4) inches in diameter, width or length, shall not be backfilled into the ditch. Such rocks shall be removed from the right-of-way and disposed of to the satisfaction of the landowner, tenant, and/or CPS Energy representative. Care shall be exercised to prevent hand shovels and tampers from damaging the pipe.

Trenches in public roadways will be backfilled and paved in accordance with the requirements of the governmental authority having jurisdiction over the street or road.

Where paving is cut, backfilling and finishing of the top of the trench will be in accordance with the requirements of the authority having jurisdiction over the pavement. On state highways, U.S. highways, expressways and freeways and their frontage roads, and any streets or roadways that are being maintained or rebuilt by the Texas Department of Transportation (TxDOT), the TxDOT specifications and requirements for backfilling trenches will apply. On county roads, private roads, streets in incorporated townships, driveways or paved parkways the backfill will be a mixture of concrete or other material mixtures with depths as required by the authority having jurisdiction and shall be placed in trench to within one and one-half (1-1/2) inches of the surface of the existing pavement. The Contractor shall apply final and finishing topping to cuts in paving with hot mix, hot lay asphalt. Inspection and approval by the authority having jurisdiction over the pavement shall be obtained by the Contractor before the job will be accepted as completed by CPS Energy.

Backfill in public and private thoroughfares shall be hydra-tamped with special care to prevent settlement or damage to other buried utilities.

The Contractor shall not use soil from the right-of-way except from the spoil bank. Any surplus soil shall be disposed of by the Contractor.

When crossing drainage ditches and minor streams, the Contractor shall furnish and install all materials necessary for bank reinforcement. Such backfill must be properly maintained by the Contractor until the entire job has been completed and accepted by an authorized representative of CPS Energy. No reimbursement will be made for repairing of backfill due to floods and/or other conditions occurring before final acceptance.

The Contractor shall control the ditching and backfilling so as to have a minimum amount of open ditch commensurate with good construction practices.

As soon as backfill is completed on a section of line, Contractor shall immediately clean up the right-of-way, removing all surplus and defective materials to CPS Energy-designated locations. Disposal of all refuse such as brush, broken skids, rock, etc., shall be to the satisfaction of the CPS Energy representative. Insofar as possible, the earth on both sides of the line ditch which has been disturbed during the construction of the line shall be leveled, and the ditch line shall be left in a condition satisfactory to the CPS Energy representative. All temporary fills and bridges shall be removed and the area cleaned to the satisfaction of the CPS Energy representative. The Contractor shall, at his expense, furnish, haul and install black top soil on the ditch line and right-of-way area where necessary in the opinion of the CPS Energy representative to leave such area in the same condition as existed prior to the commencement of the work and/or to obtain the minimum required cover for the utility lines as specified.

Upon completion of all backfilling and cleaning of the right-of-way, permanent repairs shall be made to all fences by using equivalent or new fencing materials. All fence repairs must be satisfactory to CPS Energy representative. These repairs are to be made by Contractor at no extra compensation.

19. FINAL PIPING CONNECTIONS AND/OR TIE-INS

The Contractor will make all connections of new gas lines to existing gas lines. This includes all necessary preparations for tie-ins and purging for all sections of gas lines installed by the Contractor. The Contractor will be required to weld short stop fittings and other necessary fittings on existing steel gas lines that will be used by CPS Energy personnel to control the flow of gas into the new gas lines. CPS Energy personnel will control the flow of gas on all operative gas facilities while the Contractor is making final piping connections and/or tie-ins.

The Contractor shall be responsible for insuring that all tie-ins between new and existing gas mains are performed in a safe manner. The Contractor shall furnish all necessary equipment and instrumentation that is required to insure that the final tie-in welds and/or fusions between new and existing gas facilities are performed in a safe manner. Such equipment and instrumentation may include pneumatic air movers, combustible gas indicators (CGI's), oxygen monitors, self-contained breathing apparatus and fire retardant clothing for construction personnel, and fire extinguishers.

20. REMOVAL OF EXISTING PIPE

The asphaltic wrap on pipe removed under this contract may contain asbestos. In handling the pipe (including the excavation, cutting, removal, loading and unloading of such pipe), Contractor shall observe all State and Federal worker protection regulations and standards, and all environmental and public safety standards that are applicable to such work, including the OSHA standard found at 29 CFR Section 1926.1101, and following, that relates to the occupational exposure standard to asbestos for the construction industry.

The Contractor will indicate in its bid the manner in which the pipe shall be managed after removal. For example, Contractor shall indicate whether the pipe will be disposed at a licensed landfill facility, will be recycled as pipe by Contractor, will be sold to and recycled as pipe by a third party, will be recycled by a third party as scrap metal, etc. If dealing with a third party, Contractor shall identify the various third parties Contractor will rely upon to provide the indicated services.

For all pipe removed from the ground under the terms of this contract, Contractor shall place the following notice, beginning approximately two (2), feet from each end of the pipe, in stenciled or comparable lettering, i.e. not attached labels, of not less than 3 inches in height;

PIPE WRAP MAY CONTAIN ASBESTOS

Upon removal of the pipe from the ground, ownership of the pipe is transferred to the Contractor.

21. PURGING NEW GAS FACILITIES

CPS Energy personnel will purge the new gas mains, and the Contractor will purge all new gas service lines or existing gas service lines that have been tied-over to the new gas mains or otherwise adjusted.

22. GOODWILL OF GAS CUSTOMERS & RESIDENTS IN THE WORK AREA

The Contractor shall make reasonable efforts to create goodwill among the property owners, tenants and lessees along the right-of-way of the gas construction project.

For this reason, no gas service shall be cut-off after 2:30 p.m. each day. All gas services that have been cut-off during the day must be restored before 4:00 p.m. that same day. If the Contractor is consistently late in restoring gas service by 4:00 p.m., the contract may, at CPS Energy's discretion, be adjusted to reflect an earlier cut-off time.

When customer gas service is to be interrupted, the Contractor must use CPS Energy approved door-hangers to inform the customers of the impending construction activity. The door-hangers must be placed on the front door of each residence at least 48 hours prior to construction, and the Contractor must contact each customer by telephone or in person before the gas service is cut off.

The Contractor shall provide approved sanitary facilities in sufficient quantities and at such locations as may be needed for workers on the job.

24. WORKDAYS, WORKING HOURS AND HOLIDAYS

Normal working hours for this contract shall be from 7:30 a.m. to 4:00 p.m. Work days shall include Monday through Friday, except for holidays. Holidays shall include the following days: New Year's Day, San Jacinto Day (observed on Friday of Fiesta Week), Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday after Thanksgiving Day, and Christmas Day. If the holiday falls on a Saturday, it will be observed on the preceding Friday. If the holiday falls on a Sunday, it will be observed on the following Monday. Christmas Eve and New Year's Eve will be observed as holidays when Christmas Day and New Year's Day fall on Tuesday through Friday. Exceptions to these working hours and work days will be allowed by CPS Energy when required by the governing entity, mutually agreed upon by both Contractor and CPS Energy or the customer approves or requests work to be performed outside of these established times. **At the sole discretion of CPS Energy, service renewal work can be suspended during periods of extremely cold weather.**

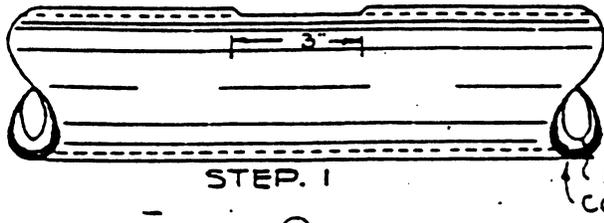
25. ACCEPTANCE

The CPS Energy representative will make all inspections and final acceptance of the work performed by the Contractor for CPS Energy.

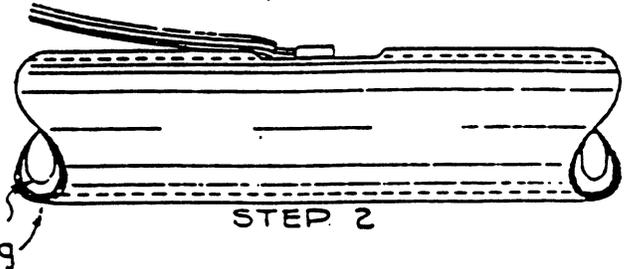
As required by CPS Energy, Contractor shall maintain and provide a copy of the "as-built" job sketch and all associated documents once the work is completed.

**CPS
Design Standards
(Steel Gas Pipe)
Exhibit GAS-3**

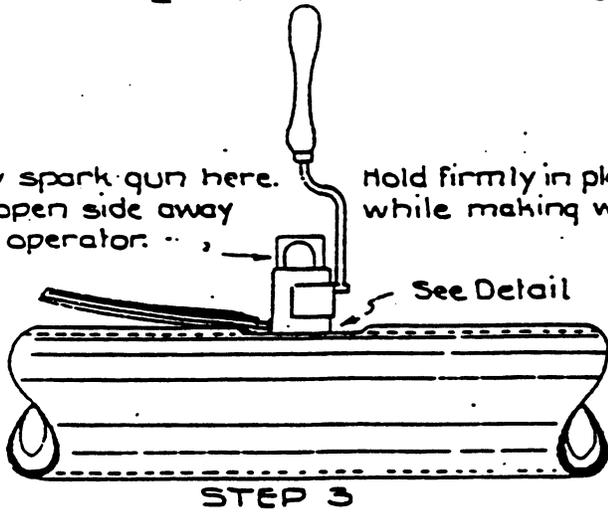
Remove a section of coating 3" long and file pipe bright so that a space 1" wide and 2" long is clean and dry.



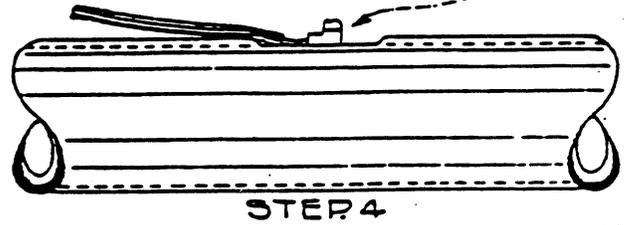
Strip 1/2" of insulation from wire and place copper sleeve on #10 and smaller wire.



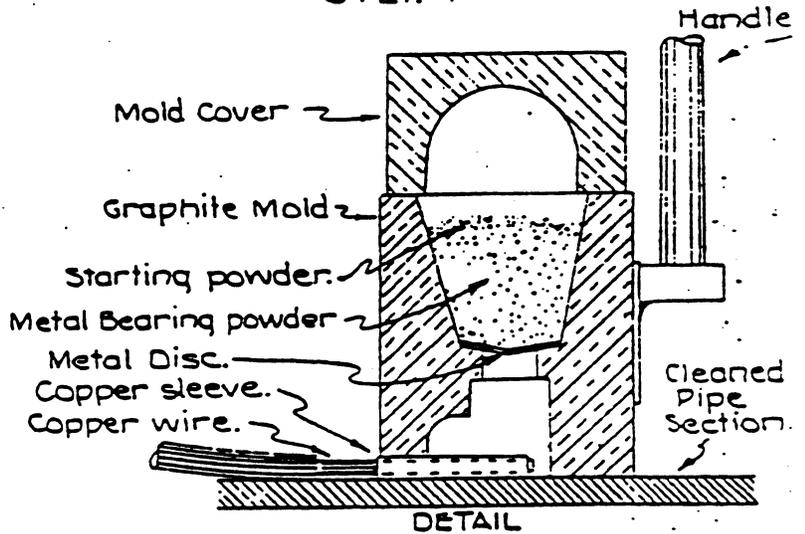
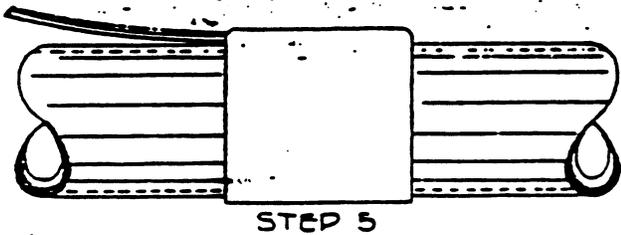
Apply spark gun here. Keep open side away from operator. Hold firmly in place while making weld.



Remove slag with hammer and paint thoroughly with primer.



Repair pipe coating with care. Cover entire weld.



IMPORTANT

1. REMOVE RED CAP OF CADWELD CARTRIDGE AND DUMP ALL OF CONTENTS INTO MOLD. THE CHARGE WILL NOT IGNITE WITHOUT THE FINE STARTING POWDER ON TOP.
2. THE CARTRIDGES MUST BE KEPT DRY AT ALL TIMES.

Cadweld mold with sleeve for #10 wire and smaller.

CITY PUBLIC SERVICE BOARD
SAN ANTONIO, TEXAS
GAS DEPARTMENT

COPPER WIRE CONNECTION TO PIPE USING CADWELD.

INSTRUCTION SHEET - TYPE TB-3 WELDER**PREPARATION OF SURFACE:**

To obtain a good weld, surface must be bright clean and dry.

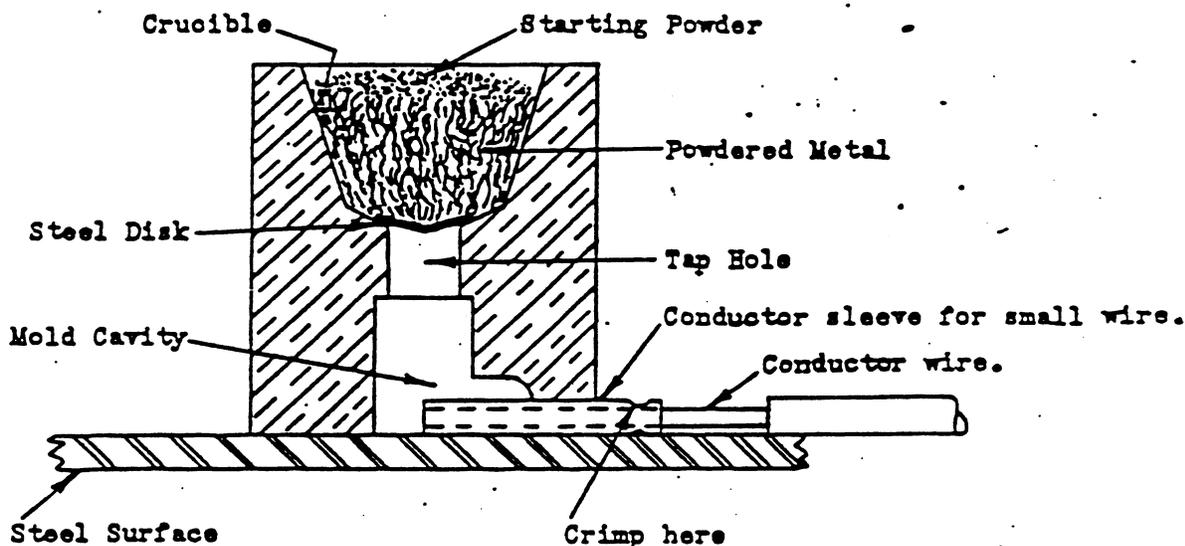
Steel surface should be ground or filed to remove all scale, rust, grease and dirt.

Galvanized steel must be cleaned with emery cloth to remove oxide.

PREPARATION OF WIRE:

Strip the insulation from the conductor and scrape until wire is bright and clean.

For #10 and smaller sizes, place the wire in a copper sleeve, ends flush, and crimp the sleeve tightly to the wire at the insulation to provide additional mechanical strength at the weld.

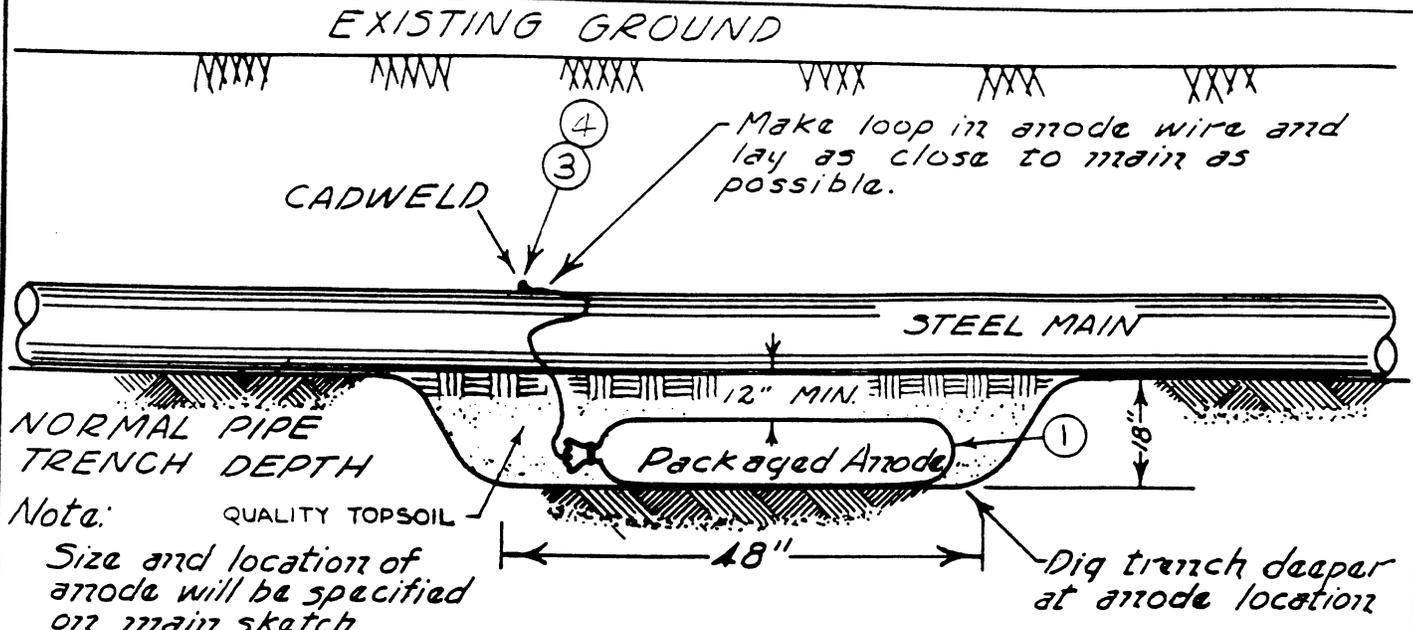
**WELDING PROCEDURE:**

- (1) PLACE WELDER OVER CLEAN STEEL SURFACE and insert the wire until it is under the CENTER of the tap hole.
- (2) COVER TAP HOLE WITH STEEL DISK.
- (3) DUMP CARTRIDGE IN CRUCIBLE AND CLOSE COVER. (Tap bottom of cartridge to be sure starting powder is emptied). Replace empty cartridge in box to keep remaining cartridges in an upright position.
- (4) HOLD DOWN ON WELDER TO PREVENT LEAKS AND IGNITE WITH FLINT GUN. Jerk gun away to prevent fouling. Should gun become fouled, soak in Spirits of Ammonia.
- (5) DO NOT REMOVE WELDER UNTIL METAL HAS SOLIDIFIED.
- (6) ALL SLAG MUST BE CLEANED FROM MOLD BEFORE MAKING NEXT WELD.

Note: Wet or damp molds produce porous welds. Mold can be dried out by firing a charge before making the desired weld.

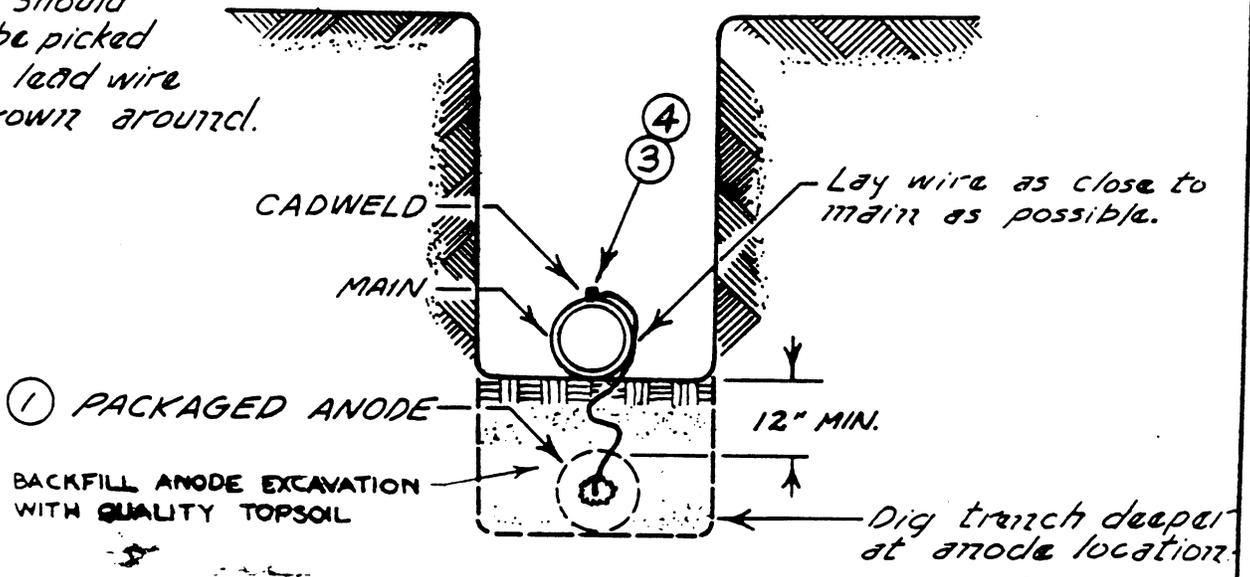
4.5

PACKAGED ANODES



Note: Size and location of anode will be specified on main sketch.

Anode should never be picked up by lead wire or thrown around.

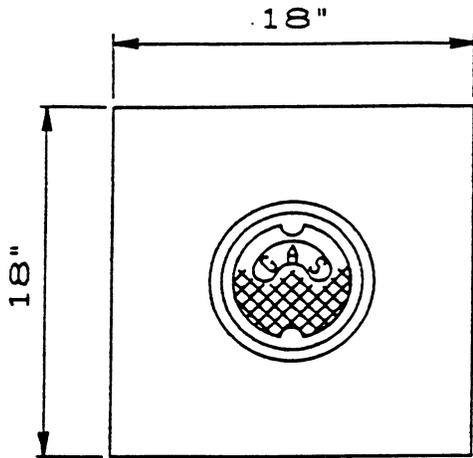


NOTES:

- a. Cadweld connection to be primed and coated carefully.
- b. Packaged anode should be covered with fine soil containing no rocks, clods, or sand.
- c. Pour 5 gallons of water over anode location and tamp thoroughly.
- d. Provide test leads when specified. (See test lead standard)
- e. Anode specification sheet will be attached to main order, and is to be completed by the main construction foreman.

ISSUED	9-1-70	APPROVED	CJH	CITY PUBLIC SERVICE BOARD CONSTRUCTION STANDARD (GAS)	DRAWING DS-33
REVISED	10-1-77		JCL		G-S-171-1-2

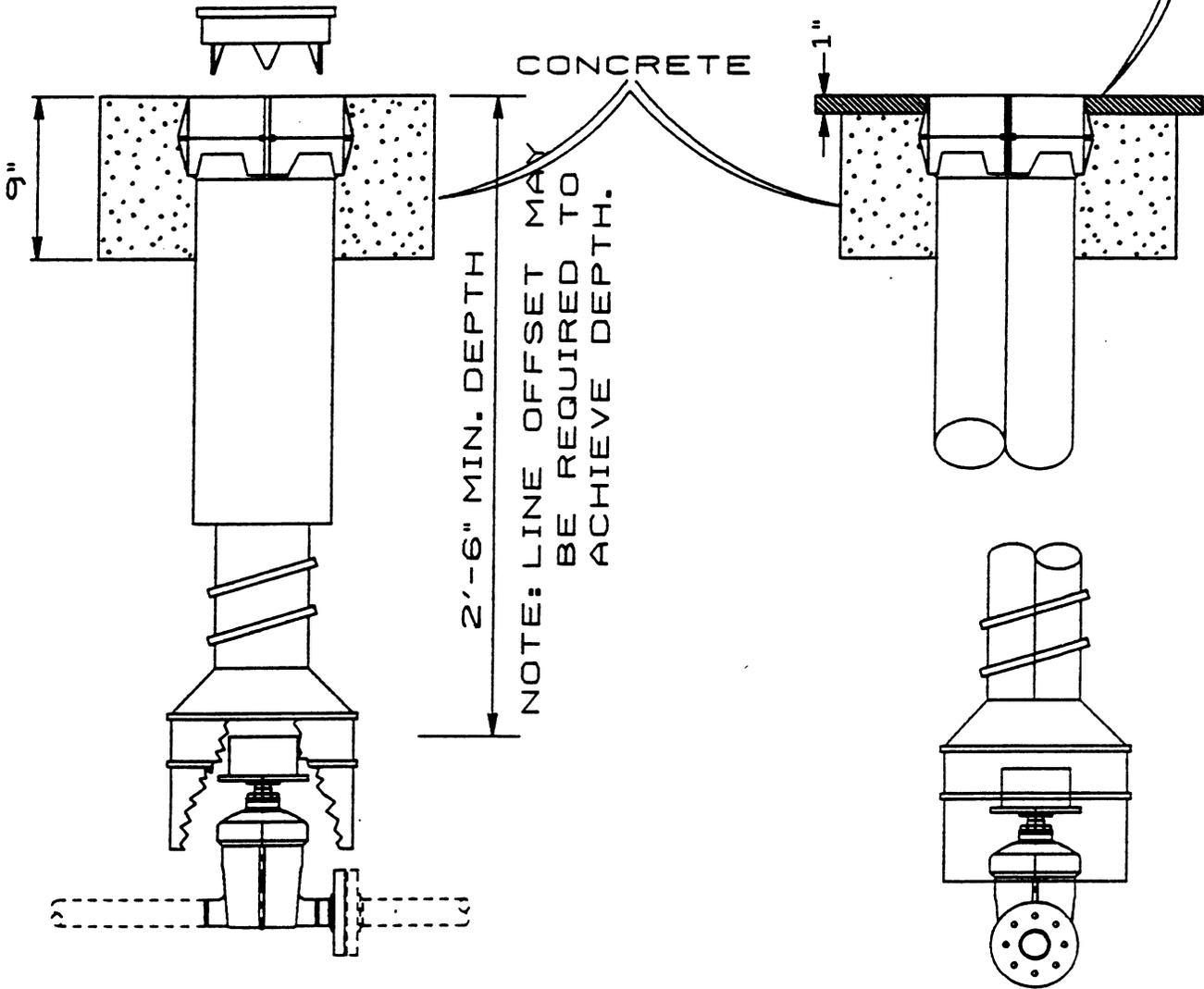
VALVE, STEEL
(WELD x FLANGE)



CAM UNITS
VGS2WXF
VGS4WXF

NOTE: TAMP & BACKFILL
VALVE BOX ABOVE
PIPE.

OPTIONAL METHOD FOR
ASPHALT STREETS

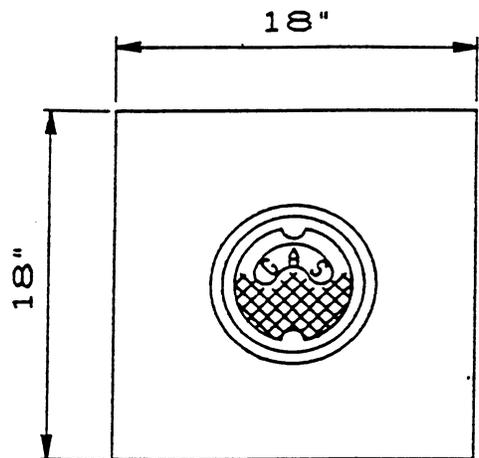


NOTE: COAT VALVE UP TO TOP OF PACKING GLAND.

AVAILABLE SIZES: 2. 4 Page 5 of 19

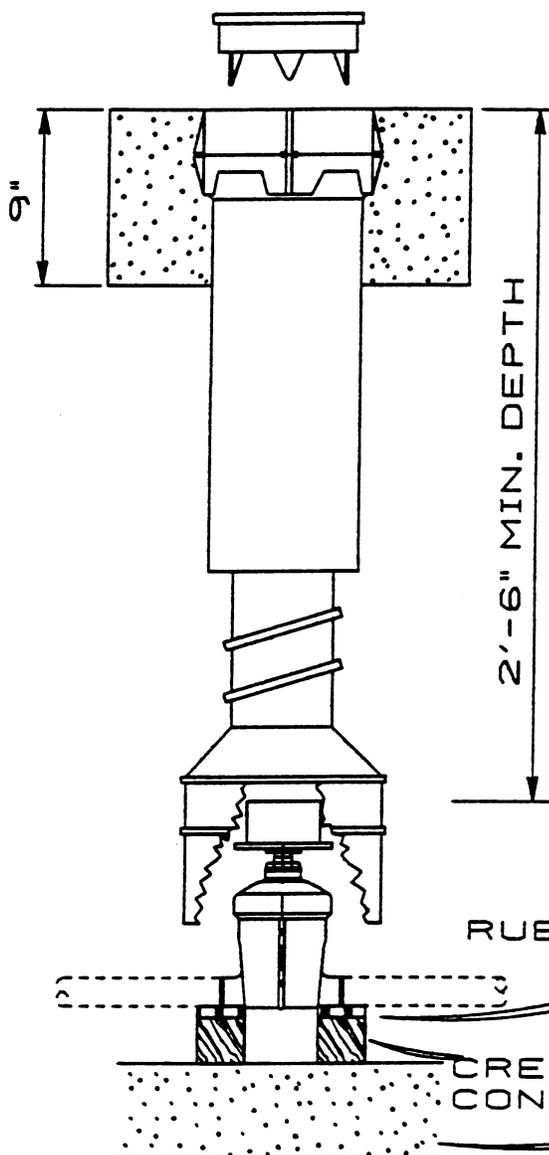
ISSUED	DATE	APPROVED	CITY PUBLIC SERVICE CONSTRUCTION STANDARD (GAS)	G - S - 127 - 1 - 0 DRAWING DS-36
REVIS				

VALVE, STEEL
(WELD x WELD)



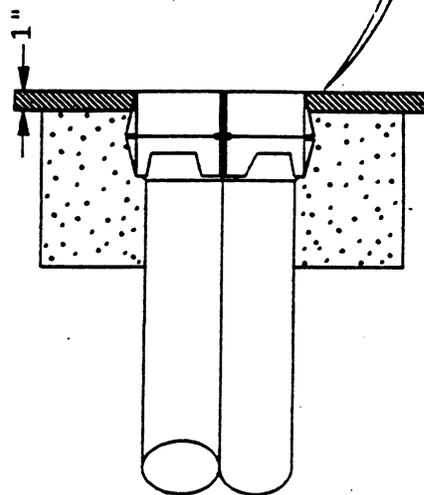
CAM UNITS	
VGS2WE	VGS8WE
VGS4WE	VGS12WE
VGS6X8WE	VGS16WE

OPTIONAL METHOD FOR ASPHALT STREETS



CONCRETE

NOTE: LINE OFFSET MAY BE REQUIRED TO ACHIEVE DEPTH.



RUBBER SUPPORTS

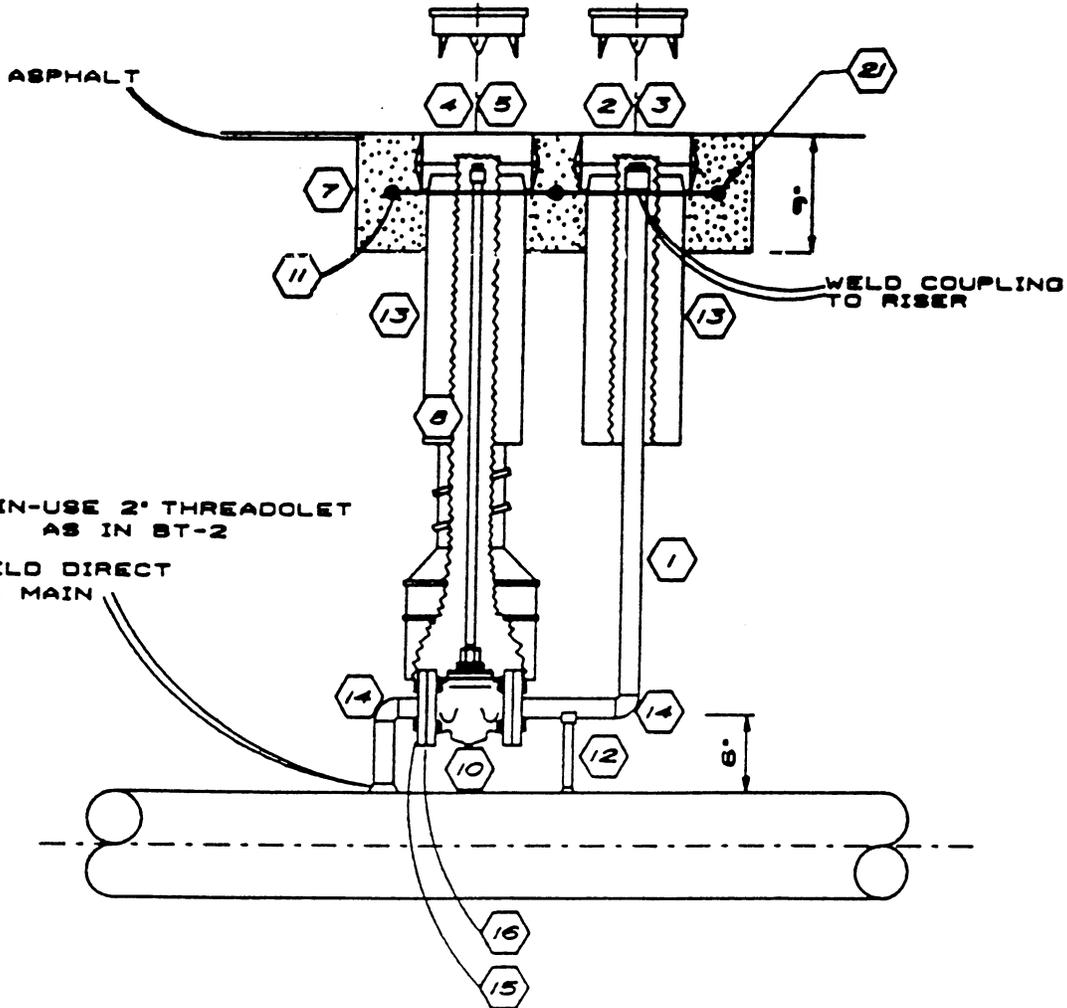
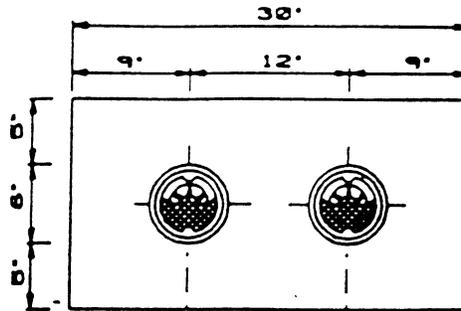
CREOSOTE TIMBER CONCRETE SUPPORT

NOTE: ITEMS 6 AND 11 ARE TO BE INSTALLED FOR 12" VALVES, OR LARGER. COAT VALVE UP TO TOP OF PACKING GLAND.

AVAILABLE SIZES: 2, 4, 8x6, 8, 12

Page 6 of 19

ISSUED	DATE	APPROVED	CITY PUBLIC SERVICE CONSTRUCTION STANDARD (GAS)	6 - 5 - 127 - 2 - 0
REVISED				

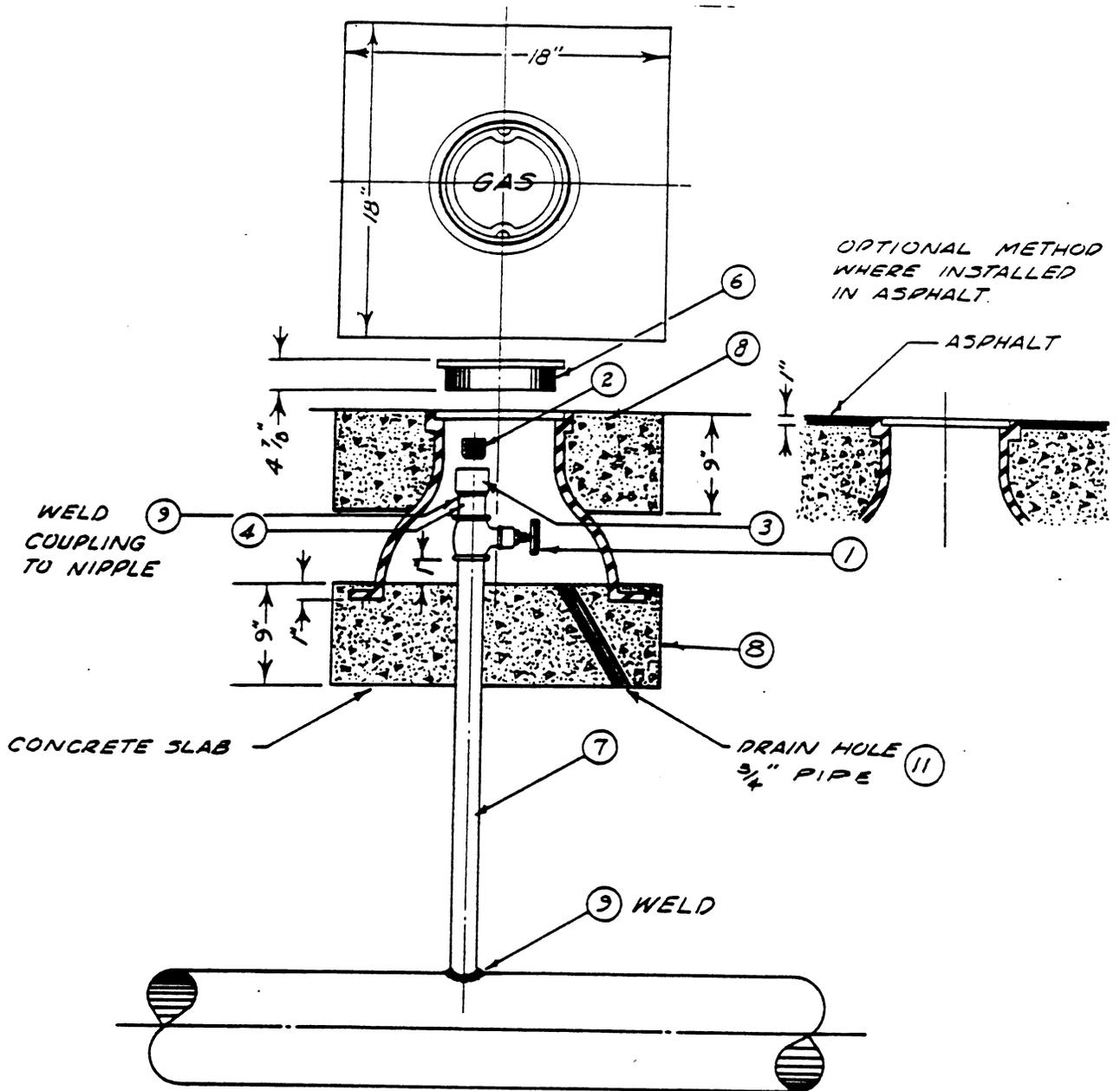


NOTE:
EXISTING MAIN-USE 2" THREDOLET
AS IN ST-2
NEW MAIN-WELD DIRECT
TO MAIN

DATE	APPROVED
9/2/92	<i>D. Vogel</i>
ISSUED	
REVISED	

4.5

TEST RISER, 1 IN.

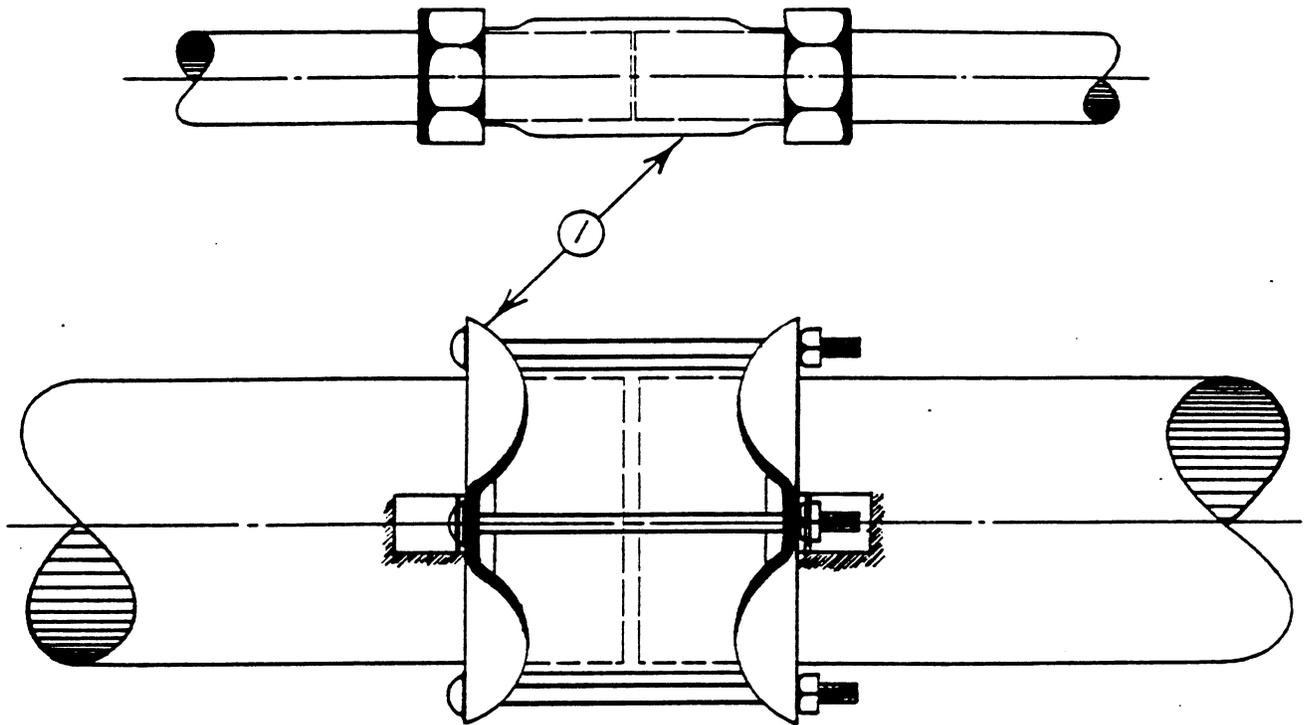


	DATE	APPROVED	CITY PUBLIC SERVICE BOARD CONSTRUCTION STANDARD (GAS)	DRAWING DS-39
ISSUED	9-1-70	WHP		G-S-141-1-0
REVISED				

4.5

COUPLING, BONDED

WITH WELD LUGS



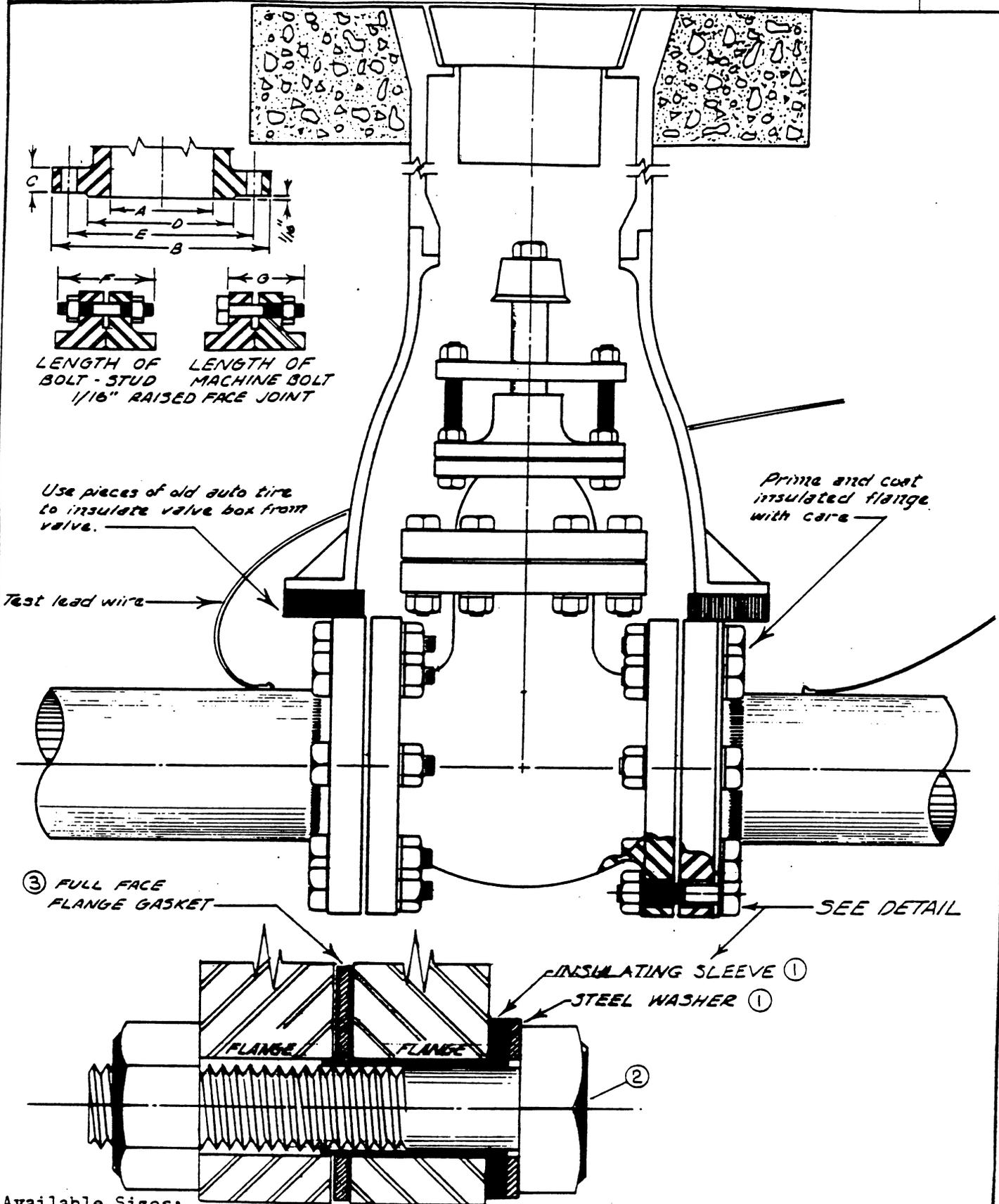
- NOTE: 1 All couplings to be centered over pipe joint with minimum spacing between pipe ends. Spacing shall not exceed 1".
 2 File pipe to bright finish over areas covered by bonding gaskets. Area should be a minimum of 2-1/2" wide.
 3 Lubricate gaskets with soap water before installing.
 4 Tighten all bolts on coupling uniformly.

AVAILABLE SIZES: 3/4", 1", 1-1/4", 1-1/2"
 2", 4", 8", 12", 16", 18", 20", 24", 30"

	DATE	APPROVED	CITY PUBLIC SERVICE BOARD CONSTRUCTION STANDARD (GAS)	DRAWING DS-40
ISSUED	9-1-70	CJH		G-S-051-1-1
REVISED				

4.5

INSULATE FLANGE



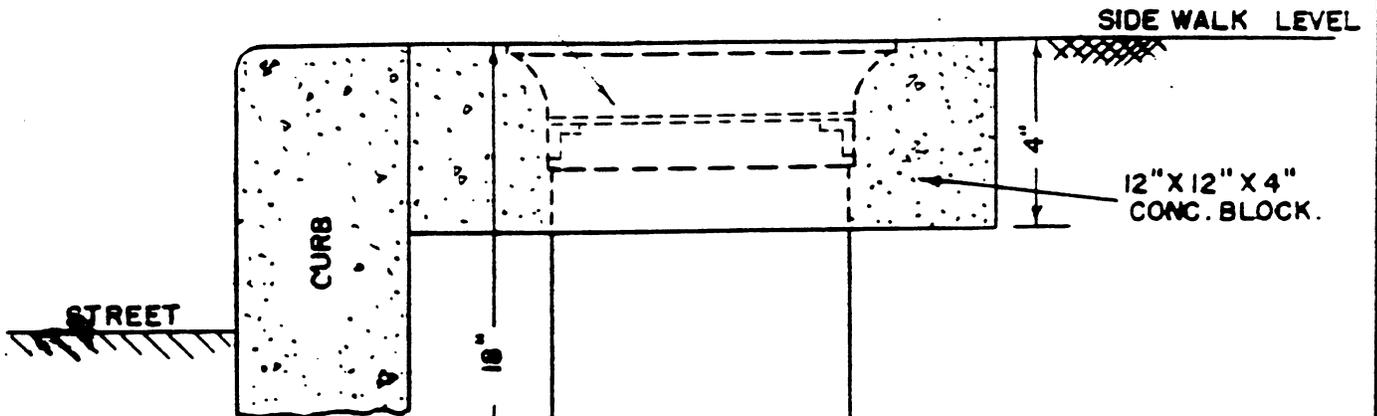
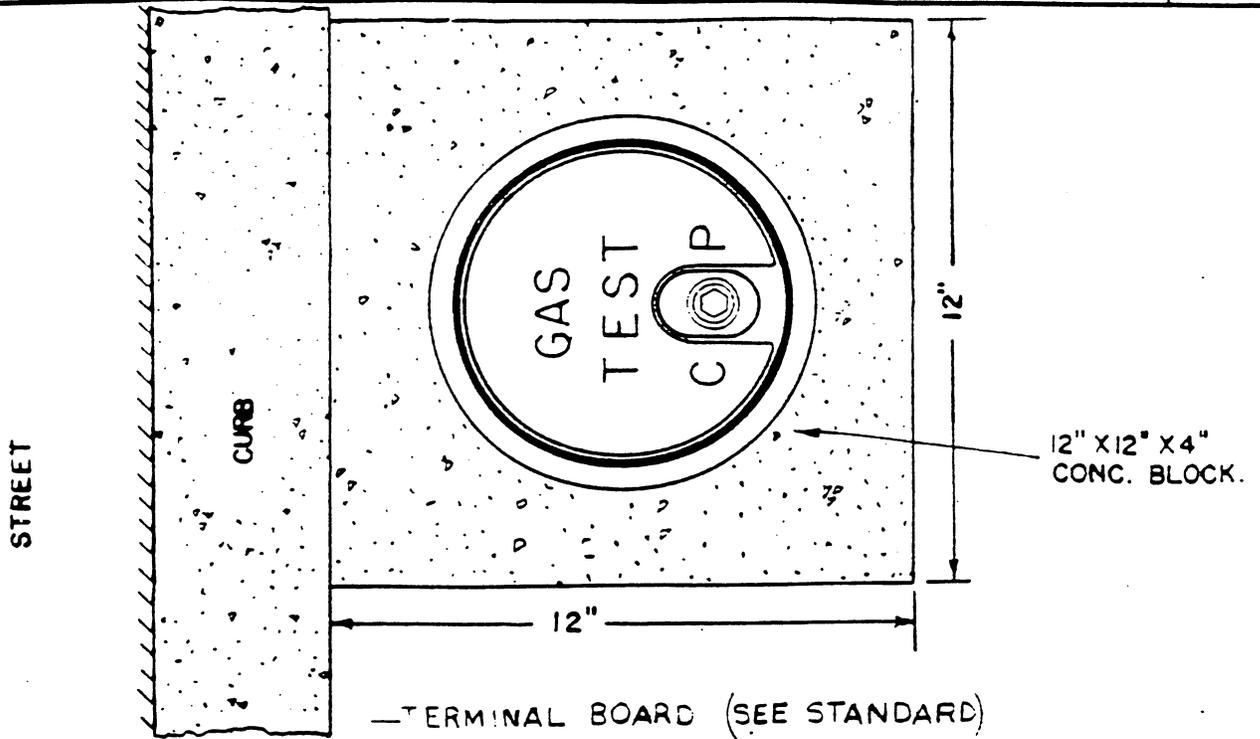
Available Sizes:

150# Flg (2, 4, 8, 12, 16); 150# Exist Flg (2, 4, 8, 12, 16); 300# Flg (8, 12, 16, 20)

ISSUED	DATE	APPROVED	CITY PUBLIC SERVICE BOARD CONSTRUCTION STANDARD (GAS)	DRAWING DS-41
REVIS	9-1-70	JH		G-S-118-1-1

4.5

CATHODIC PROTECTION TEST POINT



NOTE:

1. BE SURE BOTTOM OF TEST LEAD OFFON IS AT LEAST 6" BELOW END OF TEST POINT BARREL.

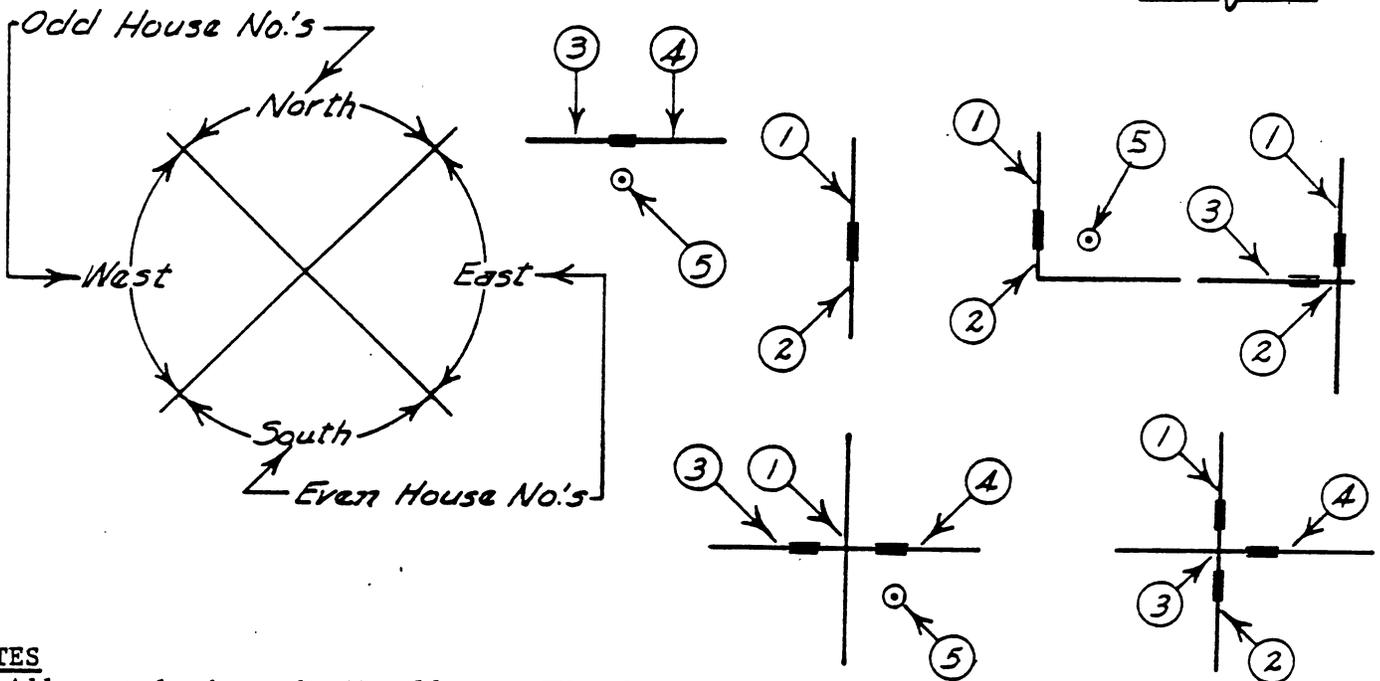
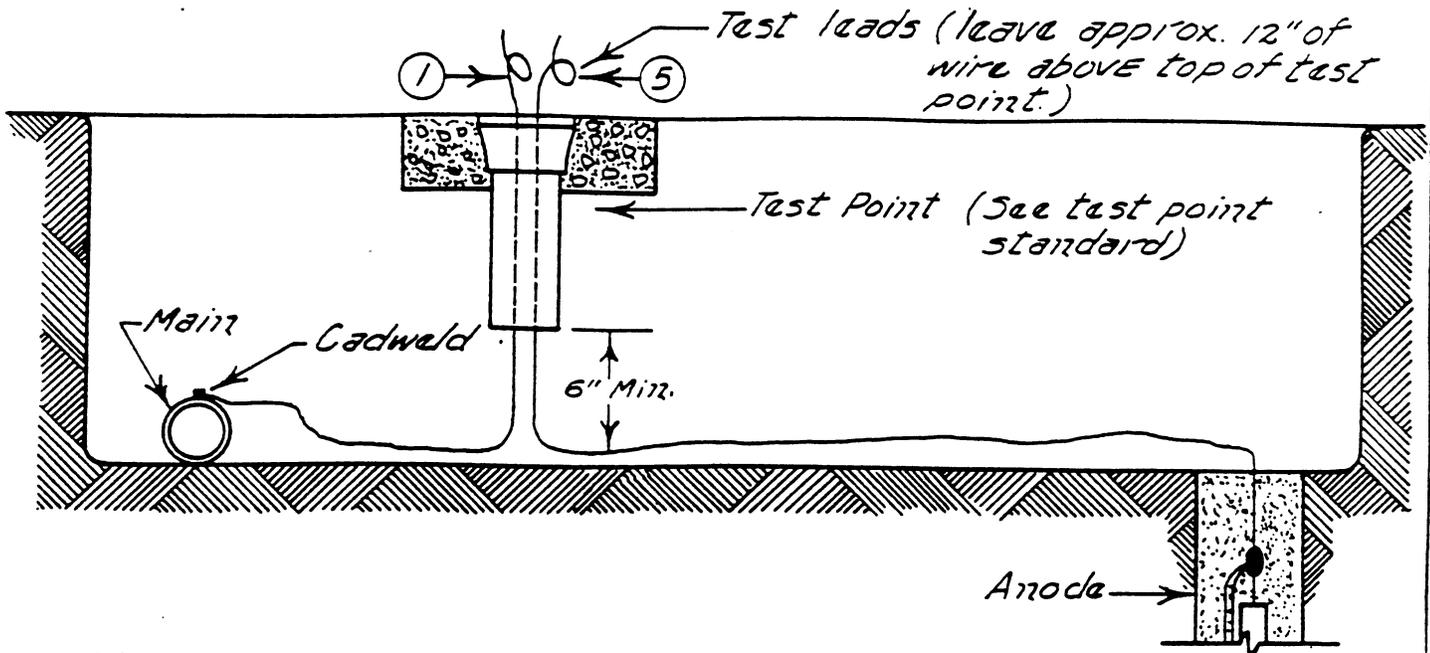
2. TEST POINT RECORD SHEETS WILL BE ATTACHED TO MAIN ORDER AND ARE TO BE COMPLETED BY MAIN FOREMAN.

TEST LEADS (NO 10 TYPE TW COPPER WIRE)

	DATE	APPROVED	CITY PUBLIC SERVICE BOARD	DRAWING DS-42
ISSUED	9-1-70	CJP		G-S-182-2-0
REVISED				

4.5

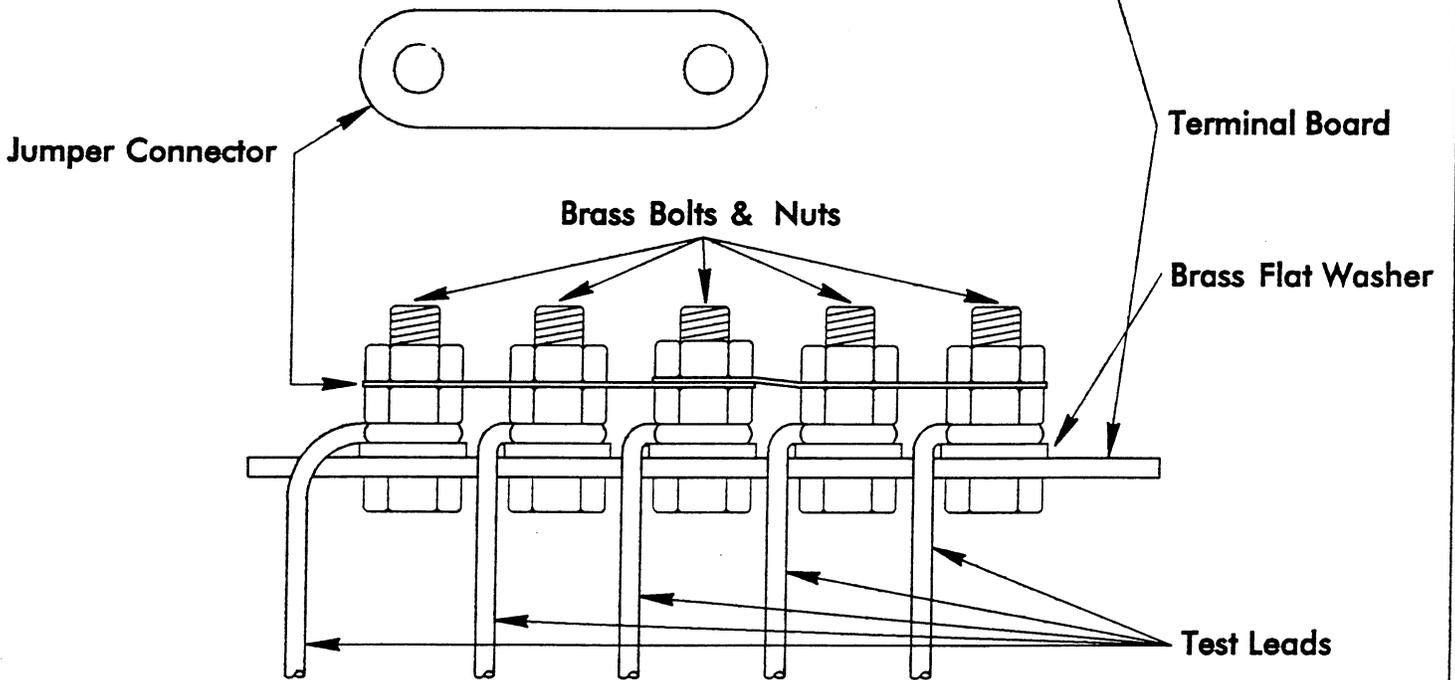
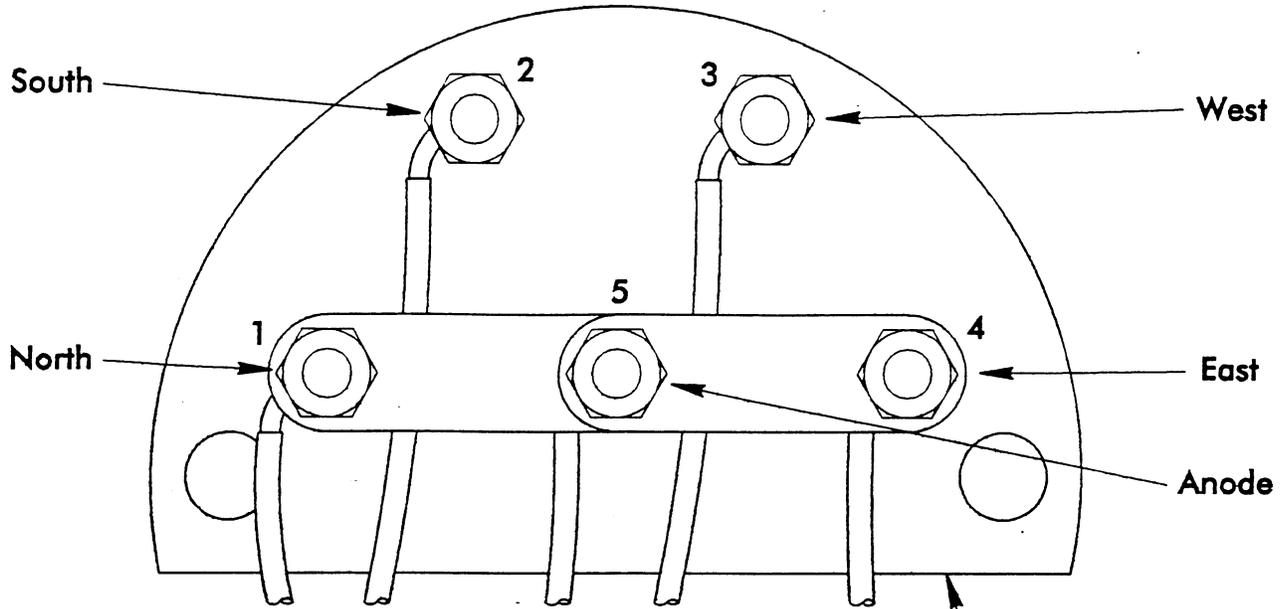
CATHODIC PROTECTION TEST LEAD CONNECTION TO MAIN



NOTES

1. All test leads to be No. 10 type TW solid copper wire.
2. Test point record cards will be attached to main order, and are to be completed by the main foreman.
3. All test leads should be tagged with a metal tag about 6" from end of lead according to the following numbering code:
 - 1 North
 - 2 South
 - 3 West
 - 4 East
 - 5 Anode

	DATE	APPROVED	CITY PUBLIC SERVICE BOARD	DRAWING DS-43
ISSUED	9-1-70	CJH		G-S-182-1-0
REVISED				

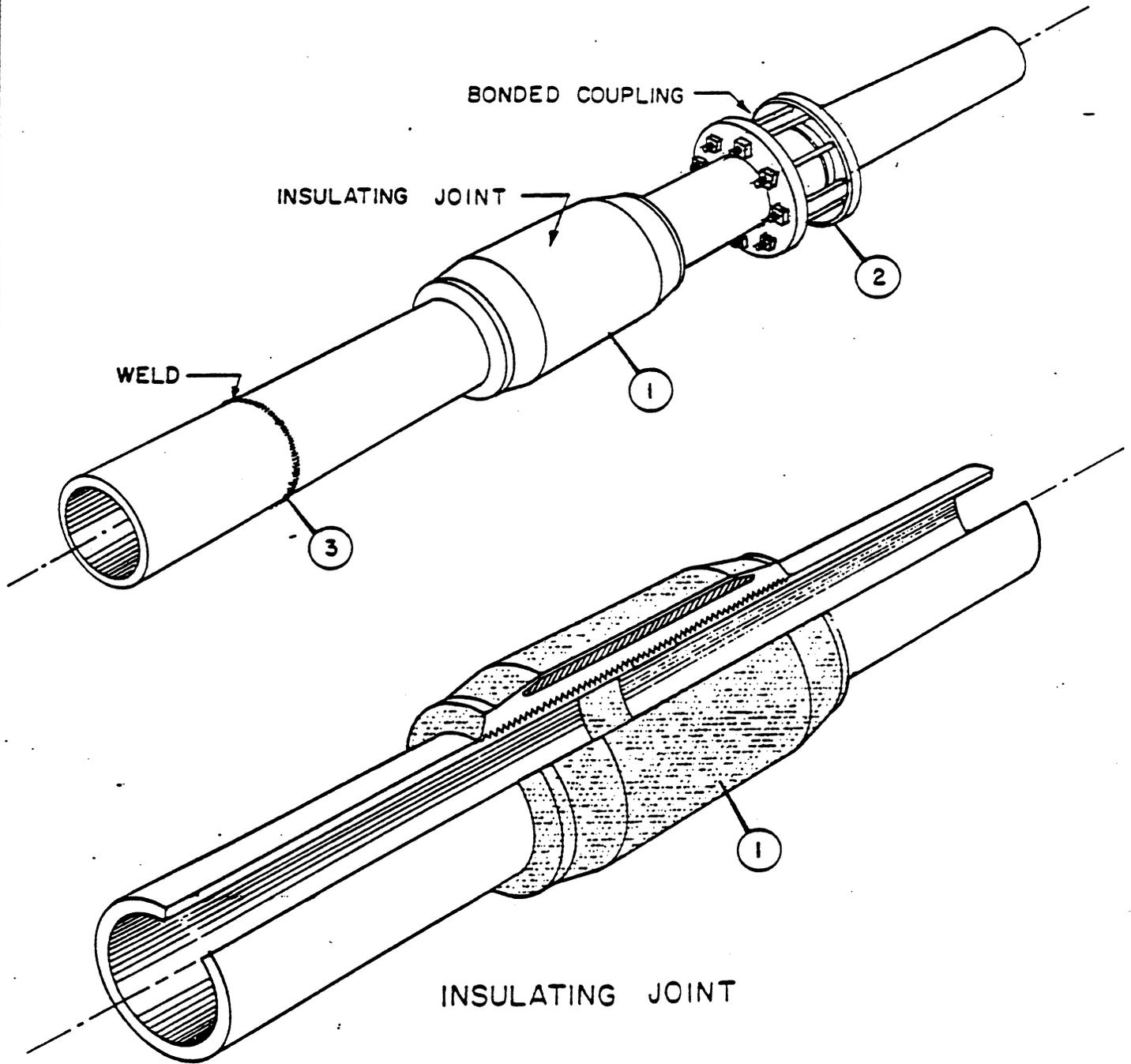


Note:
Connect test leads on top
side of terminal board

	Date	Approved
Issued	11-28-94	<i>M. Kotara</i>
Revised		

4.5

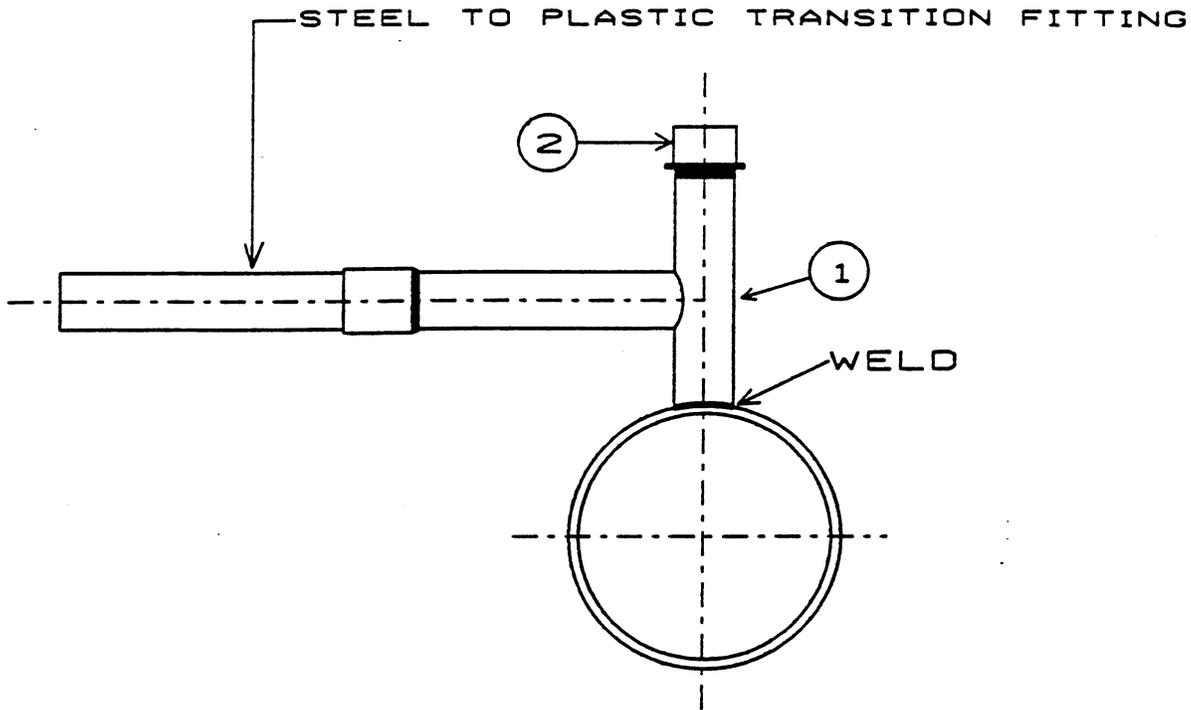
INSULATING JOINT 8" & 12"



AVAILABLE SIZES: 8" & 12"

DATE	APPROVED	CITY PUBLIC SERVICE BOARD	DRAWING DS-45
ISSUED 6/5/80	S.R.L.	CONSTRUCTION DRAWING (GAS)	

TEE SERVICE WELDED TRANSITION
STEEL TO PLASTIC



SIZE SERVICE	DRILL SIZE
1"	7/8"
1-1/4"	1-1/8"

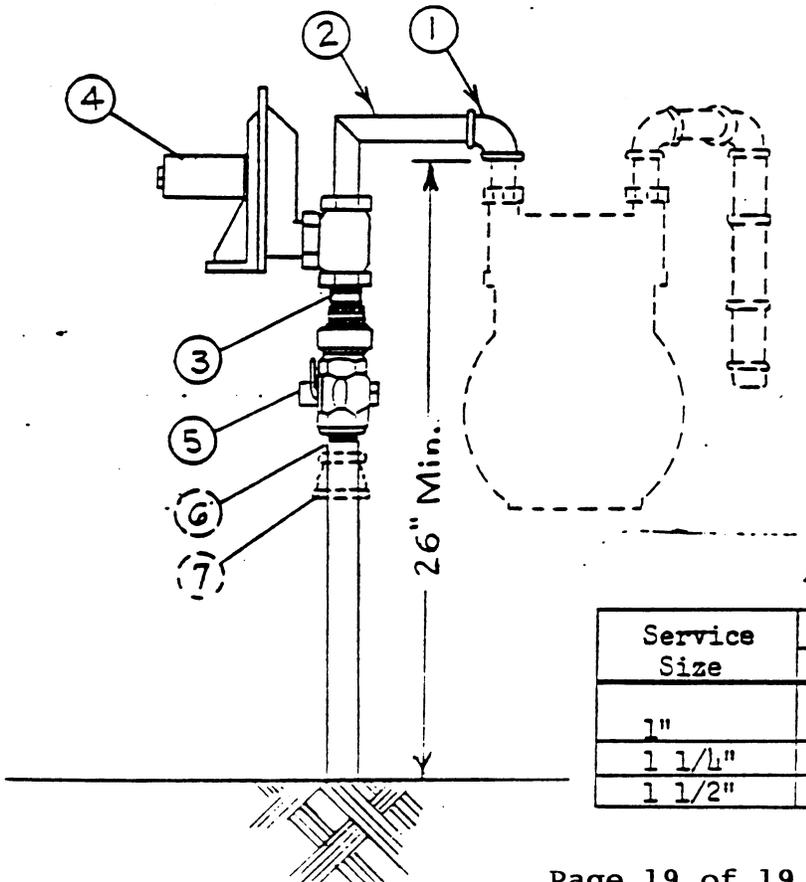
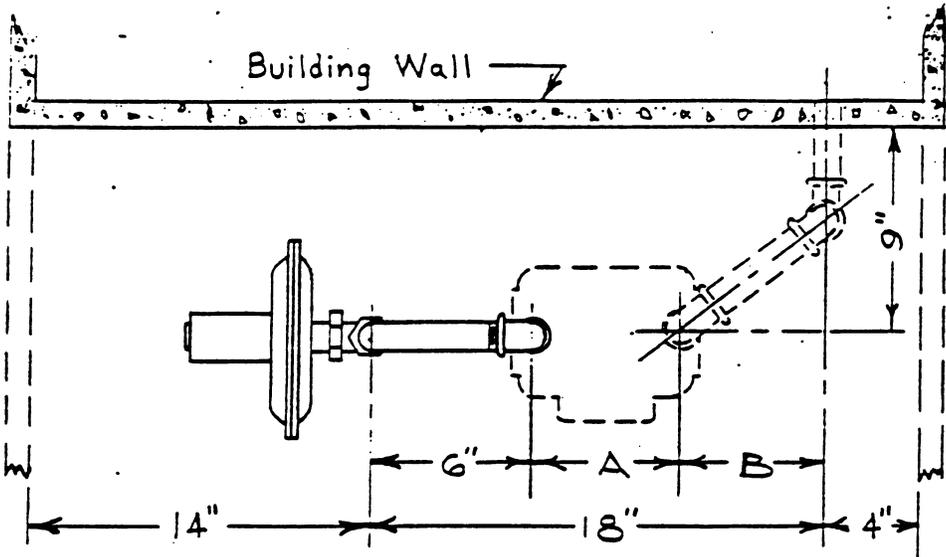
TEE SERVICE WELDED TRANSITION STEEL TO PLASTIC 1"
C.P.S. STOCK *520700204
TEE SERVICE WELDED TRANSITION STEEL TO PLASTIC 1 1/4"
C.P.S. STOCK *520700220

ISSUED	DATE	APPROVED	CITY PUBLIC SERVICE CONSTRUCTION STANDARD (GAS)	G - 8 - 127 - 2 - 8
REVIS				DRAWING DS-49

4.5

RISER AND REGULATOR FOR 5, 10, 30 & 35 LT. METERS

NOTE: FOR DIMENSIONS OF METERS REFER TO EXHIBIT 8-1 IN THE PLANNING INSTRUCTIONS.



Available Sizes: ●

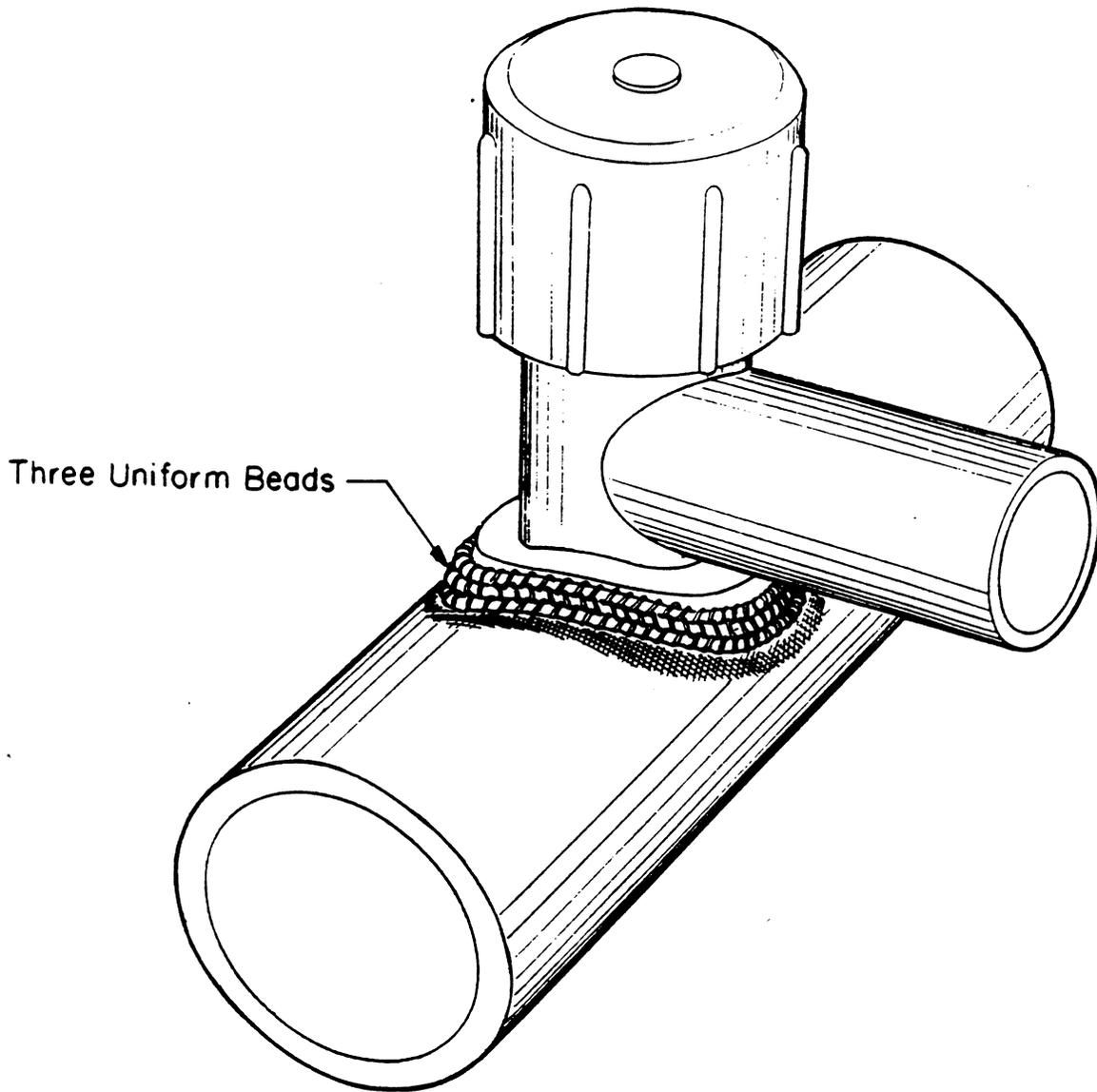
Service Size	Size of Meter Connection		
	1"	1 1/4"	1 1/2"
1"	●	●	●
1 1/4"	●	●	●
1 1/2"			●

ISSUED	DATE	APPROVED	CITY PUBLIC SERVICE BOARD CONSTRUCTION STANDARD (GAS)	DRAWING DS-50
REVISED				G-S-222-1-1

**CPS
Design Standards
(Plastic Gas Pipe)
Exhibit GAS-4**

4.5

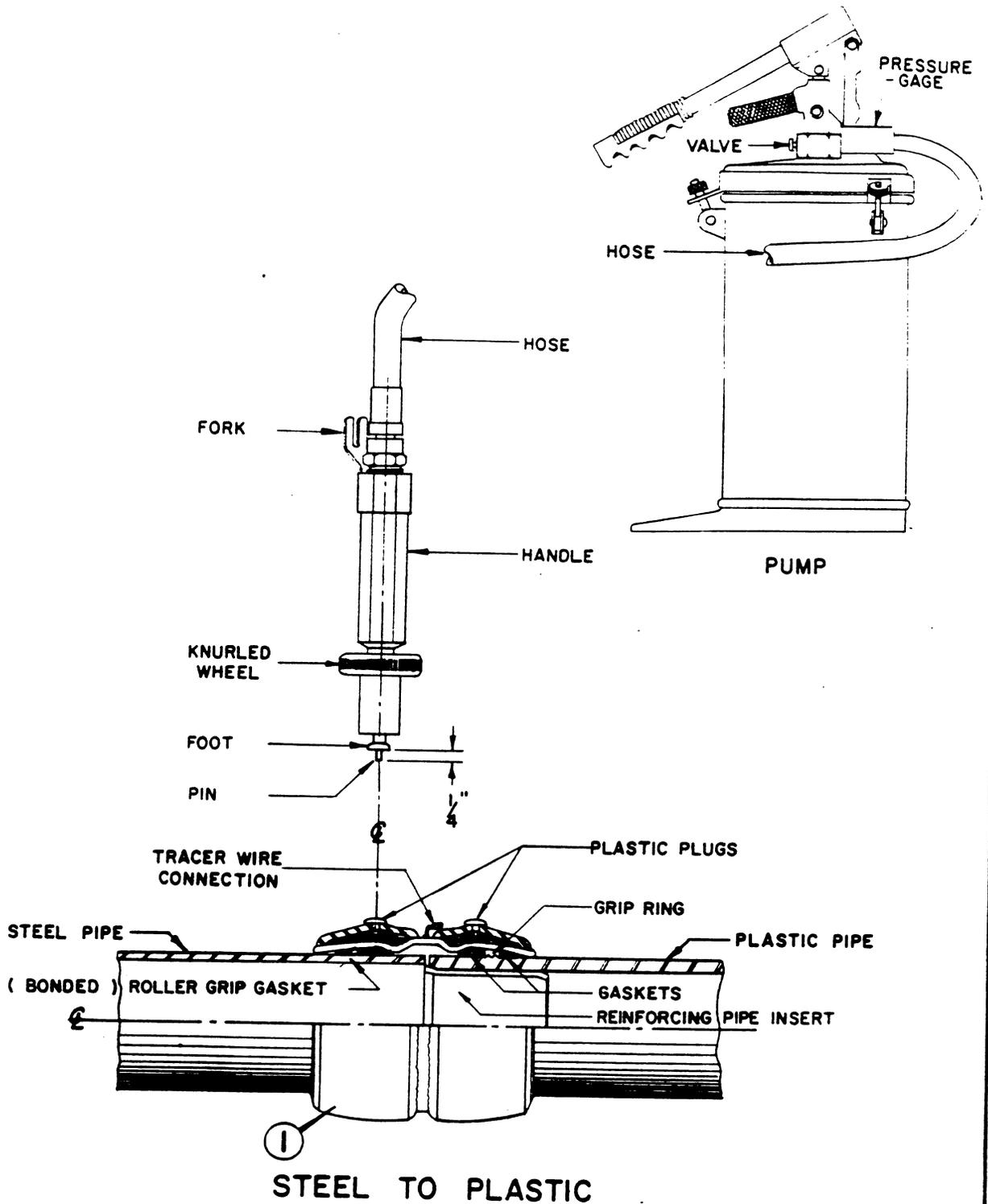
PLASTIC PIPE, TAPPING TEE



	DATE	APPROVED	CITY PUBLIC SERVICE BOARD CONSTRUCTION STANDARD (GAS)	DRAWING DS-21
ISSUED	3/00	RKJ.		G-S-505-6-0
REVISED				

4.5

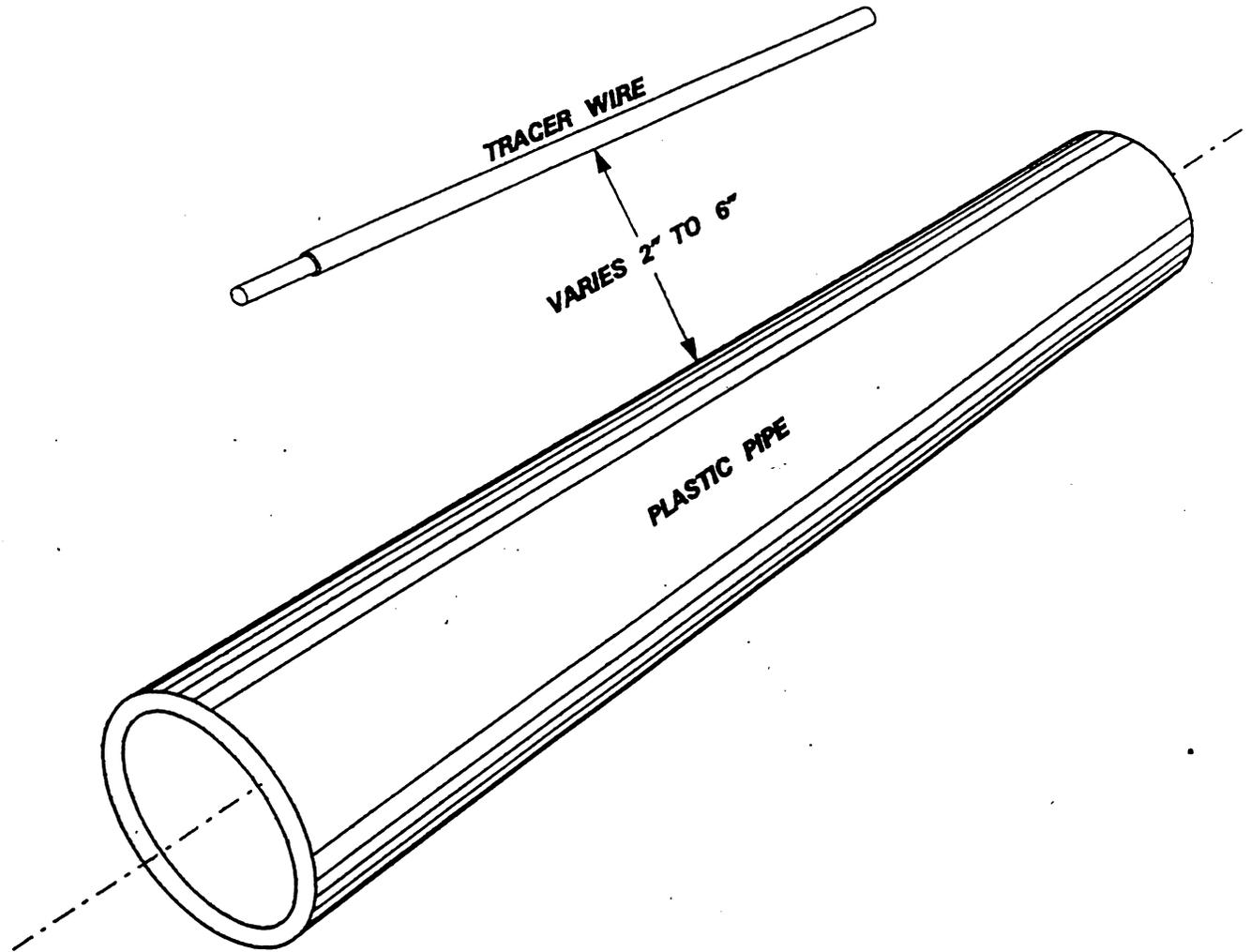
POSI-HOLD COUPLING INSTALLATION



	DATE	APPROVED	CITY PUBLIC SERVICE BOARD CONSTRUCTION DRAWING (GAS)	DRAWING DS-24
ISSUED	5/60	<i>BAR</i>		G-S-507-8-0
REVISED				

4.5

PLASTIC PIPE & TRACER WIRE



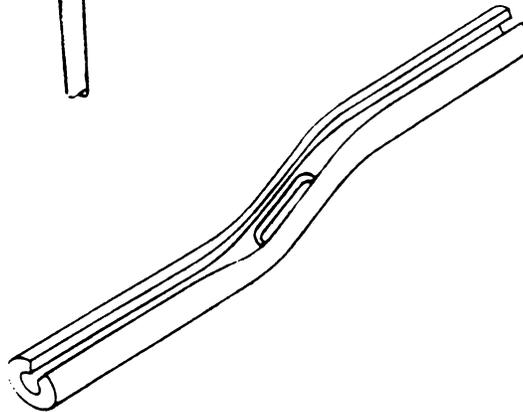
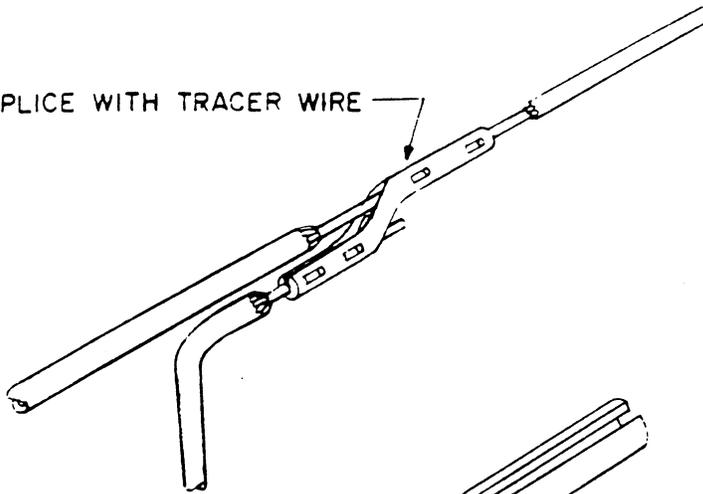
NOTE: THERE IS TO BE 2" TO 6" OF SEPARATION BETWEEN PIPE AND TRACER WIRE.

	DATE	APPROVED	CITY PUBLIC SERVICE CONSTRUCTION STANDARD	G-S-501-2-1
ISSUED	6-6-80	D.R.S.		
REVISED				DATE: 18-Dec-82 12:47

4.5

TEE SPLICE

TEE SPLICE WITH TRACER WIRE



TEE SPLICE

NOTE:

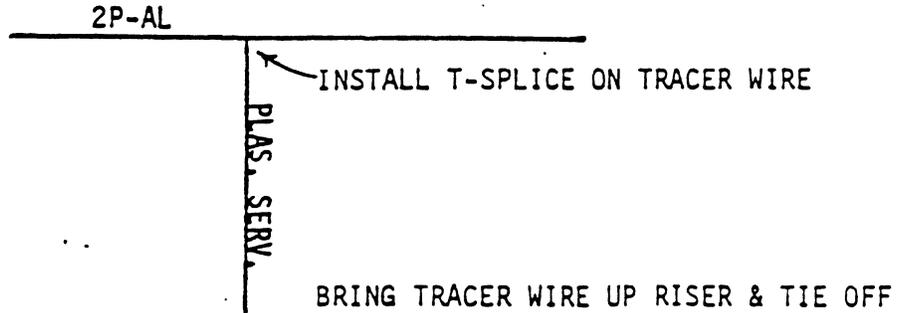
1. APPLY PIPELINE TAPE WRAP PRIMER (ALLOW TO DRY UNTIL TACKY)
2. USE PIPELINE TAPE WRAP ONLY (CIGARETTE WRAP)

	DATE	APPROVED	CITY PUBLIC SERVICE BOARD CONSTRUCTION DRAWING (GAS)	DRAWING DS-27
ISSUED	6/25/00	A.R.S.		G-S-541-1-0
REVISED				

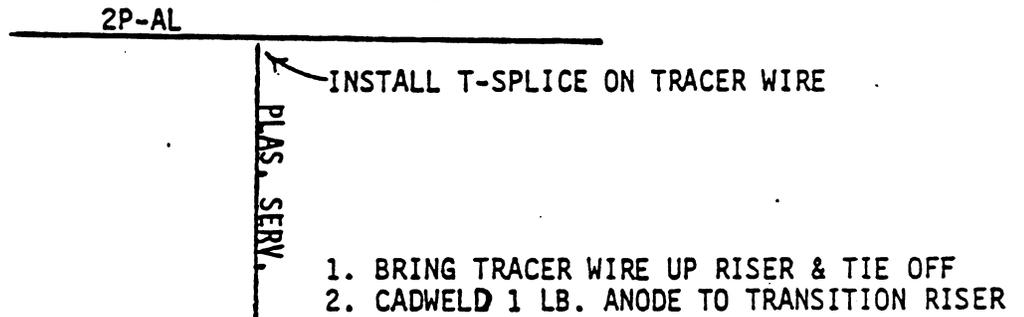
DRAWING DS-28
 EXAMPLES FOR ANODELESS RISERS
 (Page 1 of 2)

4/1/03

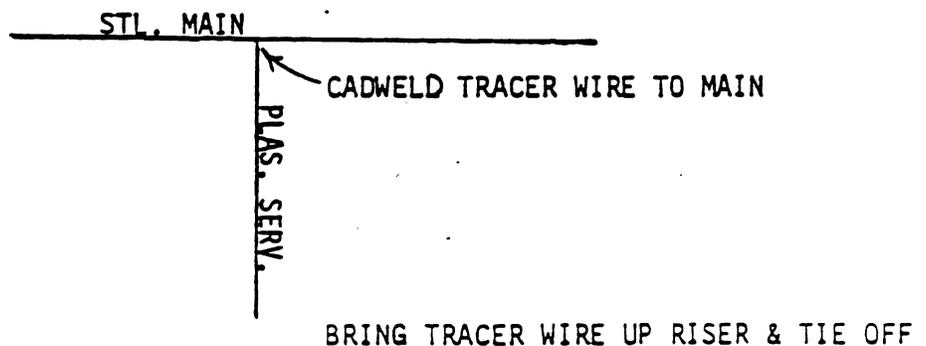
- ① ANODELESS TRACER WIRE ON PLASTIC MAIN - PLASTIC SERVICE WITH ANODELESS RISER



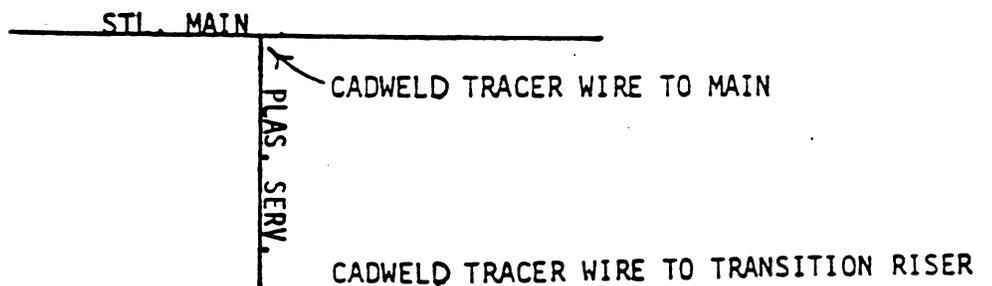
- ② ANODELESS TRACER WIRE ON PLASTIC MAIN - PLASTIC SERVICE WITH STEEL TRANSITION RISER



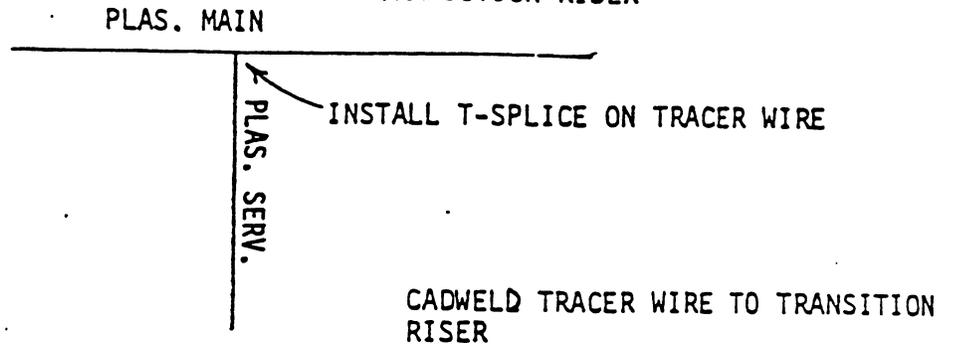
- ③ STEEL MAIN - PLASTIC SERVICE WITH ANODELESS RISER - ALSO RERUNS



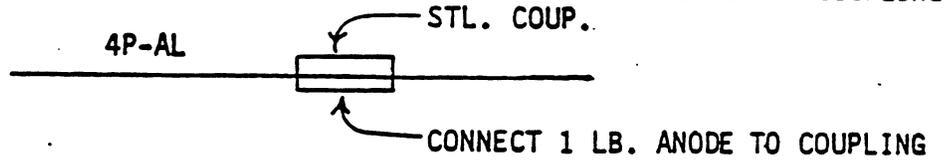
- ④ STEEL MAIN - PLASTIC SERVICE WITH STEEL TRANSITION RISER



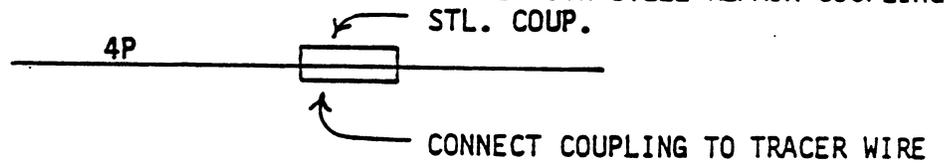
- ⑤ PROTECTED TRACER WIRE ON PLASTIC MAIN - 2" OR 4" PLASTIC SERVICE WITH STEEL TRANSITION RISER



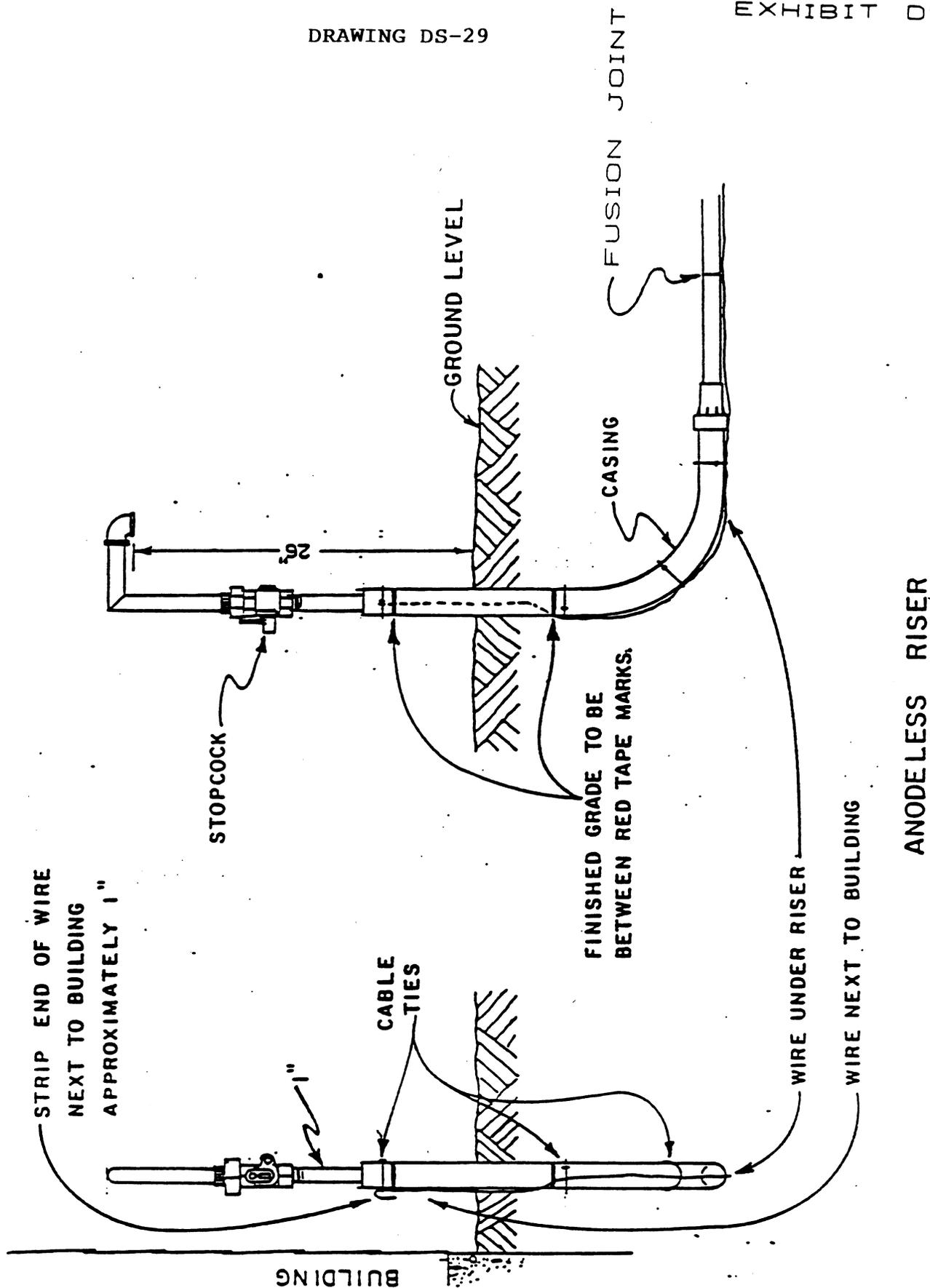
- ⑥ ANODELESS TRACER WIRE ON PLASTIC MAIN OR SERVICE WITH STEEL REPAIR COUPLING



- ⑦ PROTECTED TRACER WIRE ON PLASTIC MAIN OR SERVICE WITH STEEL REPAIR COUPLING

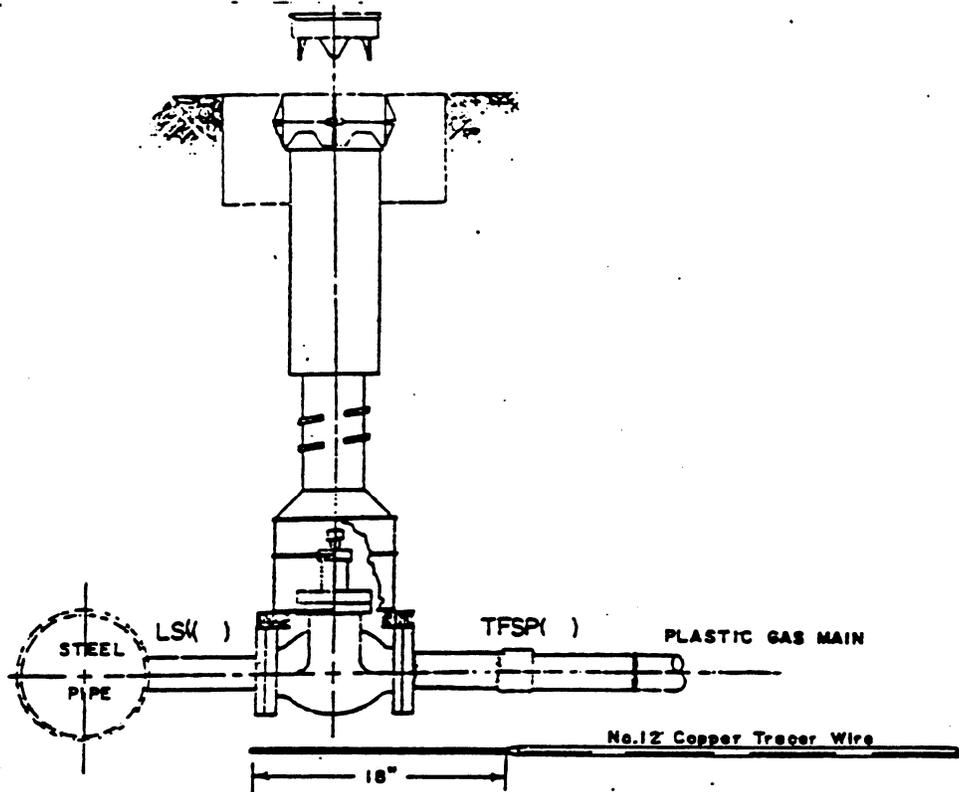


NOTE - NEVER CADWELD TRACER WIRE TO THE NEW ANODELESS SERVICE RISER

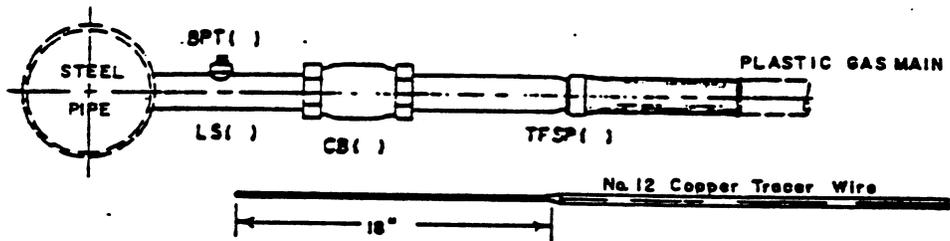


ANODELESS RISER

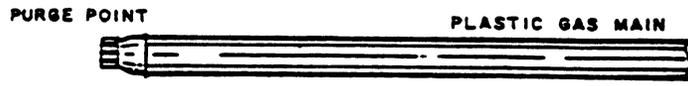
TERMINATION OF TRACER WIRE ON ANODELESS SYSTEMS



REMOVE 18" OF INSULATION AT END OF TRACER WIRE - LEAVE WIRE BARE
DO NOT LET WIRE TOUCH STEEL MAIN OR FITTINGS

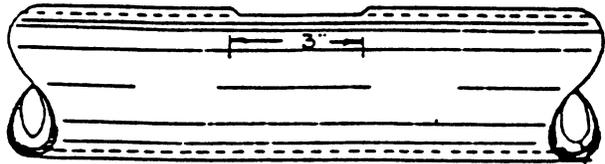


REMOVE 18" OF INSULATION AT END OF TRACER WIRE - LEAVE WIRE BARE
DO NOT LET WIRE TOUCH STEEL MAIN OR FITTINGS



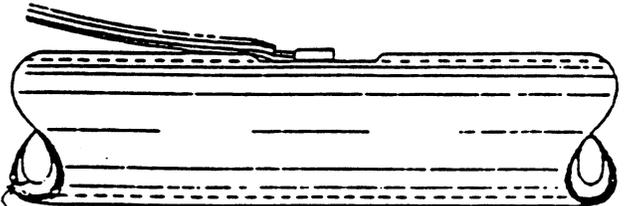
REMOVE 18" OF INSULATION AT END OF TRACER WIRE - LEAVE WIRE BARE

Remove a section of coating 3" long and file pipe bright so that a space 1" wide and 2" long is clean and dry.



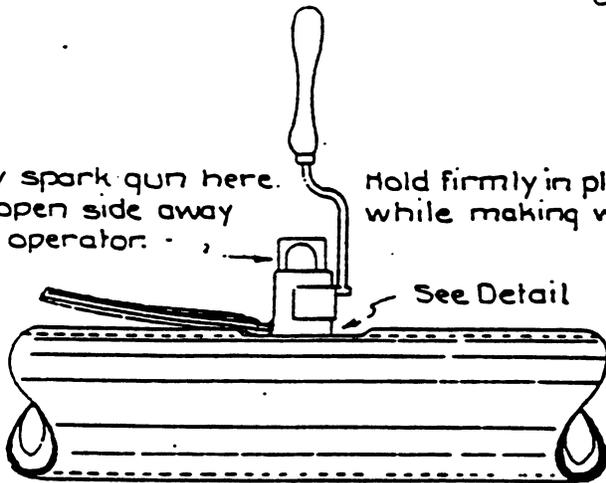
STEP 1

Strip 1/2" of insulation from wire and place copper sleeve on #10 and smaller wire.



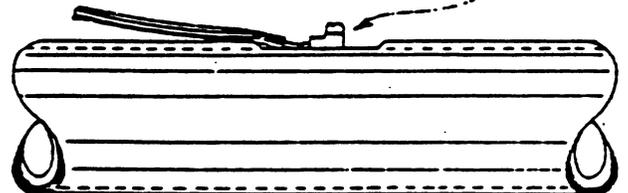
STEP 2

Apply spark gun here. Keep open side away from operator. Hold firmly in place while making weld.



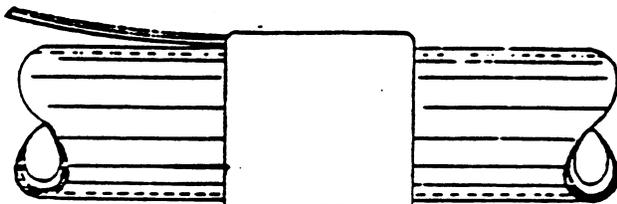
STEP 3

Remove slag with hammer and paint thoroughly with primer.

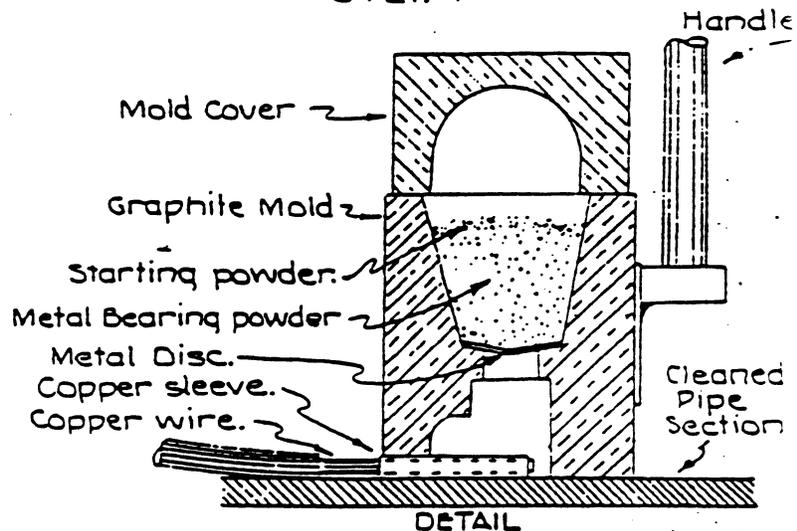


STEP 4

Repair pipe coating with care. Cover entire weld.



STEP 5



DETAIL

IMPORTANT

1. REMOVE RED CAP OF CADWELD CARTRIDGE AND DUMP ALL OF CONTENTS INTO MOLD. THE CHARGE WILL NOT IGNITE WITHOUT THE FINE STARTING POWDER ON TOP.
2. THE CARTRIDGES MUST BE KEPT DRY AT ALL TIMES.

Cadweld mold with sleeve for #10 wire and smaller.

CITY PUBLIC SERVICE BOARD
SAN ANTONIO TEXAS
GAS DEPARTMENT

COPPER WIRE CONNECTION TO PIPE USING CADWELD.

INSTRUCTION SHEET - TYPE TB-3 WELDER**PREPARATION OF SURFACE:**

To obtain a good weld, surface must be bright clean and dry.

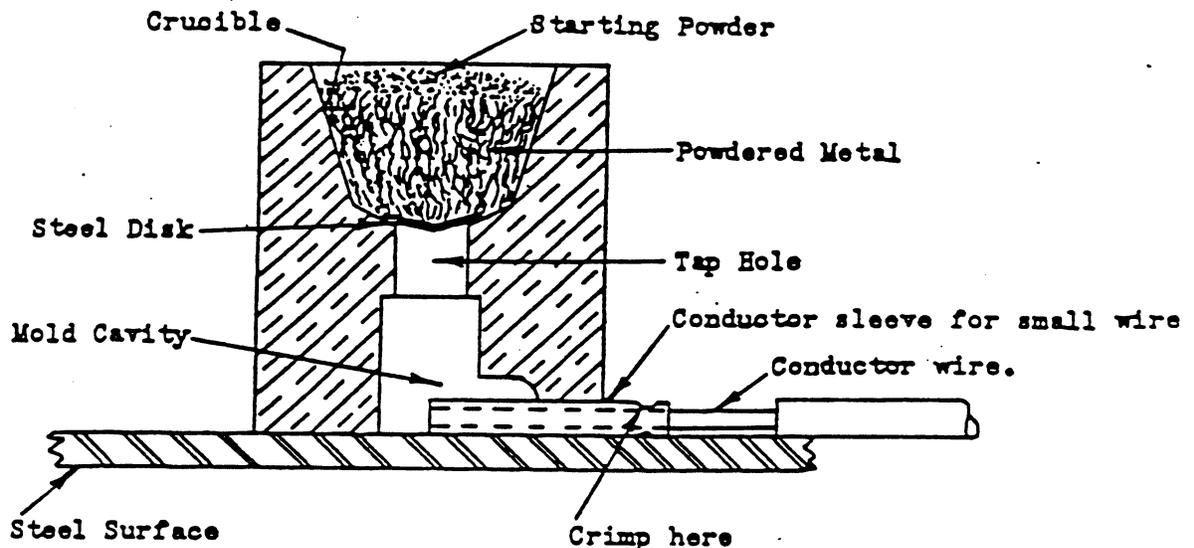
Steel surface should be ground or filed to remove all scale, rust, grease and dirt.

Galvanized steel must be cleaned with emery cloth to remove oxide.

PREPARATION OF WIRE:

Strip the insulation from the conductor and scrape until wire is bright and clean.

For #10 and smaller sizes, place the wire in a copper sleeve, ends flush, and crimp the sleeve tightly to the wire at the insulation to provide additional mechanical strength at the weld.

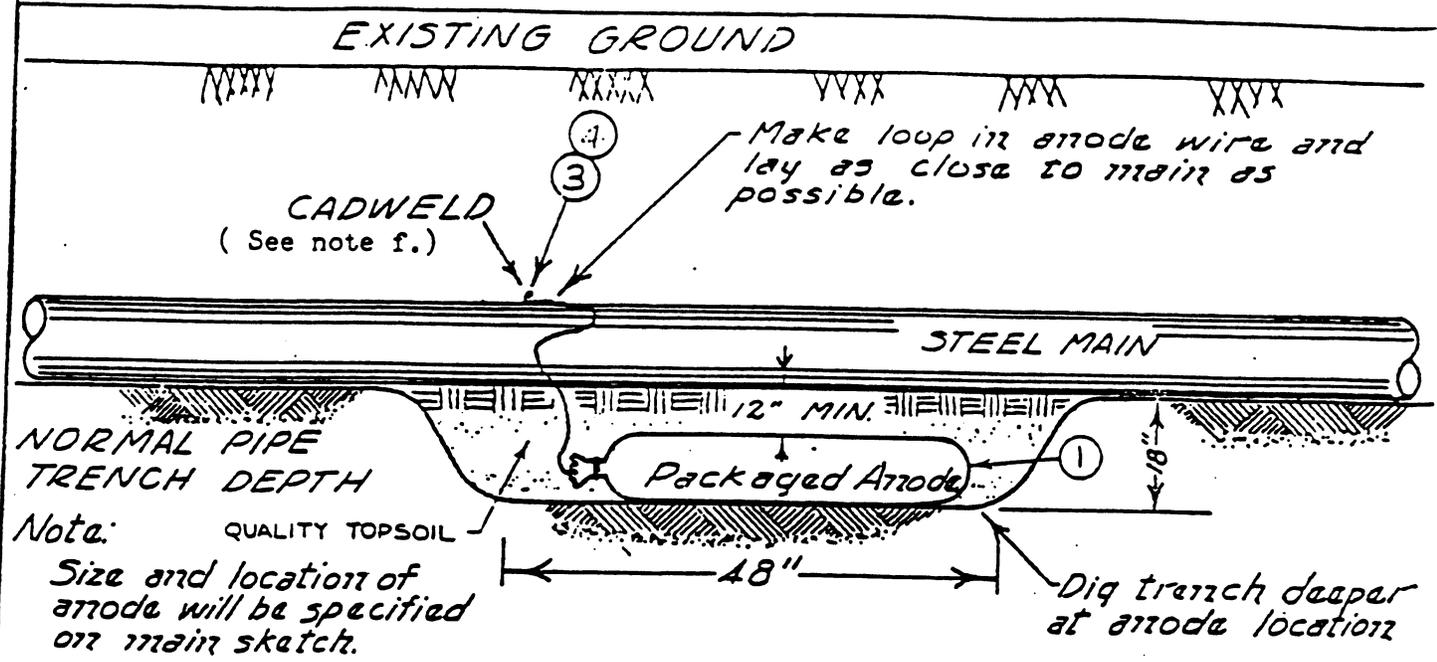
**WELDING PROCEDURE:**

- (1) PLACE WELDER OVER CLEAN STEEL SURFACE and insert the wire until it is under the CENTER of the tap hole.
- (2) COVER TAP HOLE WITH STEEL DISK.
- (3) DUMP CARTRIDGE IN CRUCIBLE AND CLOSE COVER. (Tap bottom of cartridge to be sure starting powder is emptied). Replace empty cartridge in box to keep remaining cartridges in an upright position.
- (4) HOLD DOWN ON WELDER TO PREVENT LEAKS AND IGNITE WITH FLINT GUN. Jerk gun away to prevent fouling. Should gun become fouled, soak in Spirits of Ammonia.
- (5) DO NOT REMOVE WELDER UNTIL METAL HAS SOLIDIFIED.
- (6) ALL SLAG MUST BE CLEANED FROM MOLD BEFORE MAKING NEXT WELD.

Note: Wet or damp molds produce porous welds. Mold can be dried out by firing a charge before making the desired weld.

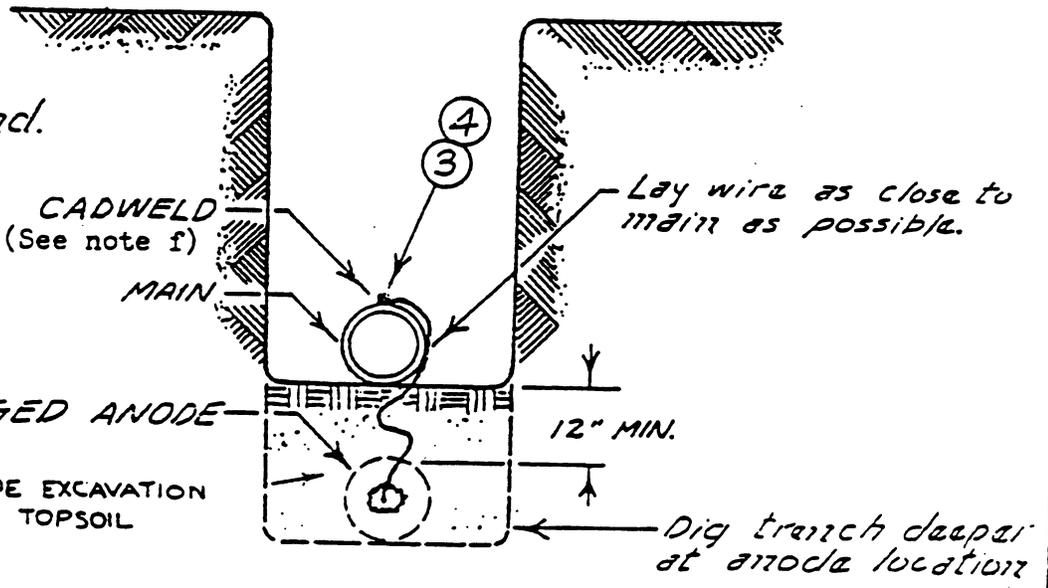
4.5

PACKAGED ANODES



Note: Size and location of anode will be specified on main sketch.

Anode should never be picked up by lead wire or thrown around.



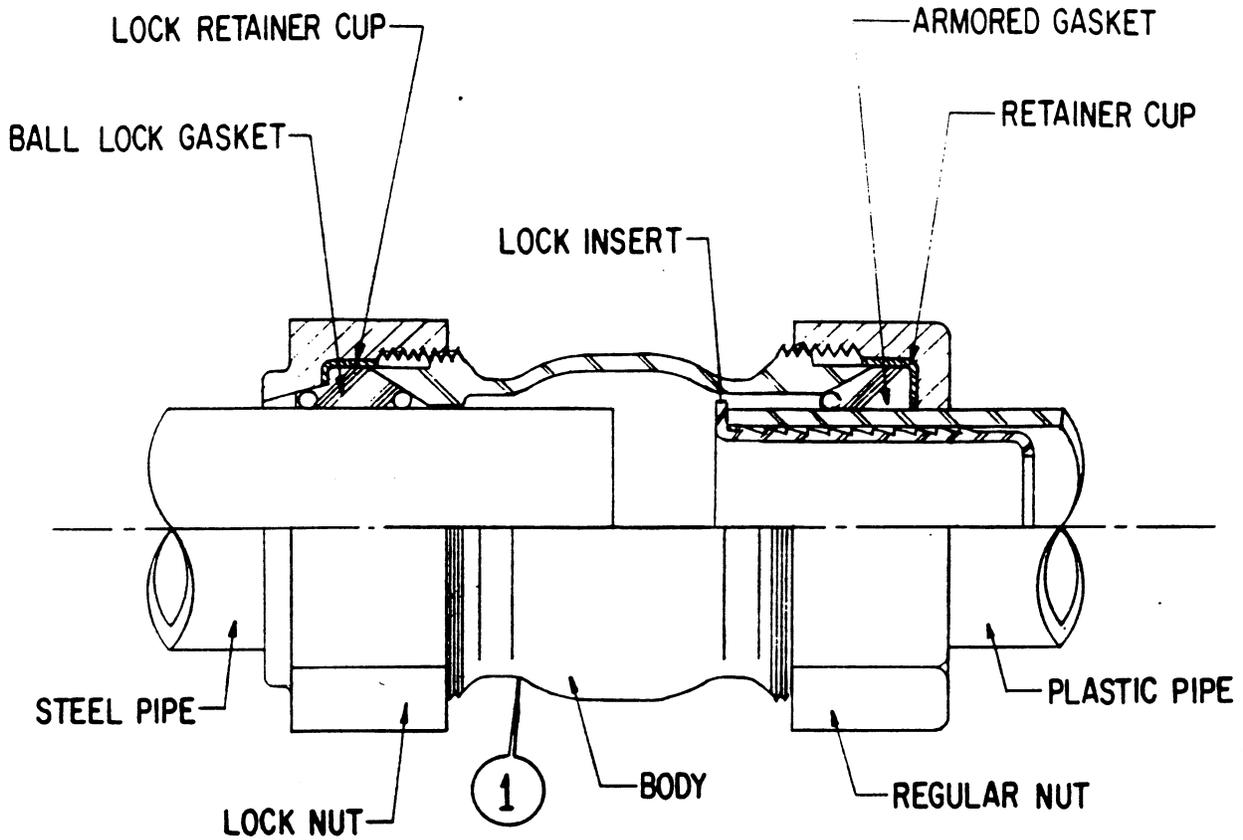
NOTES:

- a. Cadweld connection to be primed and coated carefully.
- b. Packaged anode should be covered with fine soil containing no rocks, clods, or sand.
- c. Pour 5 gallons of water over anode location and camp thoroughly.
- d. Provide test leads when specified. (See test lead standard)
- e. Anode specification sheet will be attached to main order, and is to be completed by the main construction foreman..
- f. Where plastic main is installed in place of steel, use tee splice to connect anode wire to tracer wire.

	DATE	APPROVED	CITY PUBLIC SERVICE BOARD CONSTRUCTION STANDARD (GAS)	DRAWING DS-33
ISSUED				G-S-171-1-2
REVISED	12-14-77	J. J. L.		

4.5

PLASTI-LOK TRANSITION COUPLING INSTALLED



STEEL TO PLASTIC

AVAILABLE SIZES: 1", 1 1/4", 2"

	DATE	APPROVED	CITY PUBLIC SERVICE BOARD CONSTRUCTION DRAWING (GAS)	DRAWING DS-34
ISSUED	9/81	GRB		G-S-507-4-Ø
REVISED				

**CPS ENERGY
EXHIBIT GAS-5
COMPENSATION SCHEDULE
CONSTRUCTION OF NATURAL GAS DISTRIBUTION FACILITIES**

PROJECT NAME: MIDCROWN STREET IMPROVEMENT – GAS PLANS

W.R. #: 40377209

NOTE A: For each of the items below, the Contractor's work is to include: trenching, joining, testing, coating steel, connecting new pipe to existing pipe and all necessary fittings for tie-ins such as, stopper fittings and 3-way stopper tees, sand padding, backfilling and compacting to consistency of original soil, installing all necessary cathodic protection devices such as CPTLB's and anodes, replacing paving, curbs, and sidewalks removed or damaged during construction, and cleanup as may be necessary in each instance.

NOTE B: Trenching is considered to be the normal method of service installation and is required on all service adjustments. A gas service can be rerun by INSERTION, when the old service is PULLED from the riser to one foot inside the property line, ONLY at the discretion of the CPS Inspector.

NOTE C: Bid quantities shown are estimates by CPS. Per foot prices shall be applied to the actual distance measured along the top of the trench or the actual length of the bore, as applicable.

NOTE D: Unit prices shall include insurance costs. CPS' insurance requirements are specified in Exhibit GAS-1.

BASE BID:

ITEM NO.	DESCRIPTION	UNIT	UNIT PRICE	BID QUANTITY	TOTAL PRICE
1.	Rerun and Lower Gas Service Off New Main to Meter, Sizes 1/2" thru 4" (including replacing riser if necessary).				
	Size 1/2" thru 2" Short Side	1 ea.	\$ _____	X _____	= \$ _____
	Size 1/2" thru 2" Long Side	1 ea.	\$ _____	X _____	= \$ _____
2.	Install Gas Main or Casing (Distance As Measured Along the Top of Trench)				
	2" Plastic Pipe and Tracer Wire	1 ft.	\$ _____	X _____	= \$ _____
	4" Plastic Pipe and Tracer Wire	1 ft.	\$ _____	X _____	= \$ _____

The COST to abandon the existing main(s) is not an ADDITIONAL item and is to be included in the Unit Price(s) for this item.

3.	Street Restoration Adjustment, when required. To be used as directed by the CPS Energy Representative. Flexible Pavement Repair 2" HMA C Typed D with 10" Asphalt Treated Base Type D or Flowable Fill	1 SY.	\$ _____	X _____	= \$ 0.00
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TOTAL COST: \$ _____

COMPANY: CPS ENERGY

PREPARED BY: OSCAR LUEVANOS, EIT

TITLE: ENGINEERING ASSOCIATE 2

**CPS ENERGY
EXHIBIT GAS-5
COMPENSATION SCHEDULE
CONSTRUCTION OF NATURAL GAS DISTRIBUTION FACILITIES**

DATE: 1/24/2019



Exhibit GAS-7: Project OQ Covered Task Checklist

CPS Energy

Project OQ Covered Task Checklist

Project Name:	Midcrown Street Improvements
Date:	1/24/2020
Work Request #:	40377209
CPS Energy Project Manager:	Oscar Luevanos
Contractor:	

1. Are OQ covered tasks identified on this project? Circle one: **YES** NO

Project Manager

- a. If **NO**, attach this documentation completed up to this point to the project work package, WMIS Task 11100 "Accept Work Request for Construction".
- b. If **YES**, Project Manager will complete remaining portion of this form by identifying all covered tasks on this project that will be performed by either CPS Energy personnel or contractors and forward to contractor.
- c. Upon return of completed form from contractor, attach to the project work package, WMIS Task 11100 "Accept Work Request for Construction".

Contractor

- d. Contractor is to complete far right column identifying all covered tasks that they will have OQ'ed personnel available to perform and sign and date at end of form (last page).

Covered Task	To be Performed by CPS Energy	To Be Performed by Contractor	Contractor Qualified Personnel Available
Abandoning or deactivating pipeline facilities		X	
Backfilling (0981)		X	
Cathodic Protection Remediation/Install Anode (0031)		X	
Coating Application and Repair (0991, 1001, 1011)		X	
Conduct odor concentration tests (1211)			



Exhibit GAS-7: Project OQ Covered Task Checklist

CPS Energy

Project OQ Covered Task Checklist

Covered Task	To be Performed by CPS Energy	To Be Performed by Contractor	Contractor Qualified Personnel Available
Conducting leakage surveys (1261, 1271, 1281)			
Conducting Leakage Surveys- Aerial Survey (1281)			
Connecting test lead wires to the pipeline (0051)		X	
Customer Meters and Regulators (1161,1171,1181,1191)			
Direct Examination Techniques (1421)		X	
Excavation (1321)		X	
General Pipeline Repairs (1051, 1071)		X	
Identify and mitigate areas of active corrosion (0171, 0181,0191)			
Inspect interference bonds, diodes & reverse current switches (0061)			
Inspect, Test and Maintain Sensing Devices (0221)			
Inspecting for atmospheric corrosion (0141)			
Inspecting for evidence of internal corrosion (0161)			
Inspecting Pipe Coating and Examining Exposed Pipe for External Corrosion (0151)			
Inspecting pipelines for third party damage (0201, 0211)			
Inspecting rectifiers or other impressed current power sources (0101, 0111)			
Inspection and testing of pipeline valves (0331)		X	
Inspection and testing of pressure regulation stations (0381, 0391, 0401)			
Inspection and testing of relief or pressure limiting devices (0411, 0421, 0431)			



Exhibit GAS-7: Project OQ Covered Task Checklist

CPS Energy

Project OQ Covered Task Checklist

Covered Task	To be Performed by CPS Energy	To Be Performed by Contractor	Contractor Qualified Personnel Available
Inspection of regulator vaults (1351)			
Install and Maintain Pipeline Markers (1301)		X	
Install Mechanical Clamps and Sleeves - Bolted (1041)		X	
Installation and Maintenance of Mechanical Electrical Connections (0041)			
Installation of Aboveground Pipe/Support and Anchors (0951,0961)		X	
Installation of Pipe (0861, 0871, 0881, 0901, 0911, 0921, 0941, 0971)			
Installation of Plastic Service by Insertion (0901,0921,0941)			
Investigating Inside Leak Complaints (1231)			
Investigating Outside Leak Complaints (1241)			
Joining of Pipe -- Flange Assembly(0731)			
Joining of Pipe -- Threaded Joints (0721)			
Joining Pipe by Electrofusion (0781)		X	
Joining Pipe by Heat Fusion- Butt Fusion, Manual and Hydraulic (0751, 0761)		X	
Joining Pipe by Heat Fusion- Sidewall Fusion (0771)		X	
Joining Pipe by Mechanical Joint (0711)			
Joining Pipe by Solvent Cement (0671)			
Launching and/or Receiving Internal Devices (Pigs) for Lines In-Service (1641)			
Locating and Temporary Marking Pipelines (1291)	X		



Exhibit GAS-7: Project OQ Covered Task Checklist

CPS Energy

Project OQ Covered Task Checklist

Covered Task	To be Performed by CPS Energy	To Be Performed by Contractor	Contractor Qualified Personnel Available
Maintain and Adjust Rectifier (0111)			
NDT- Liquid Penetrant Testing (0611)			
NDT- Magnetic Particle Testing (0621)			
NDT- Radiographic Testing (0601)			
NDT- Ultrasonic Testing (0631)			
NRI(Notice of Required Inspection for excavation activities by third parties) (1331, 1341)		X	
Odorizing gas (1221)			
Operate Gas Pipeline - Local Facility Remote-Control Operations (1381)			
Operate Gas Pipeline - System Control Center Operations (1371)			
Operating Pipeline for Emergency Shutdown or Pressure Reduction Including Startup/Shutdown (0301,0311)			
Patrolling pipelines (1311)			
Pipeline pressure testing (0561, 0571, 0581, 0591)		X	
Purging of pipelines (1651)		X	
Squeeze Off Pipe (1141,1151)		X	
Taking remedial action for atmospheric corrosion (1001)			
Tapping and Stopple Pipelines Under Pressure (1131)	X		
Tapping Pipelines Under Pressure (1081, 1101)	X		
Temporary Meter/Service Disconnect (1201)			



Exhibit GAS-7: Project OQ Covered Task Checklist

CPS Energy

Project OQ Covered Task Checklist

Covered Task	To be Performed by CPS Energy	To Be Performed by Contractor	Contractor Qualified Personnel Available
Testing cathodic protection system with pipe-to-soil reads (0001, 0021)			
Testing to determine cathodic protection current requirements (0091)			
Valve Maintenance/Repair (0321, 0341)			
Visually inspecting and approving welds (0811)	X	X	
Visually Inspecting Pipeline and Components for Defects (0641)	X	X	
Welding (0801)		X	

Contractor Name: _____

Signature: _____

Date: _____

Contractor shall provide evidence of operator qualification to support the information upon request. For any questions, please contact the CPS Energy Project Manager or OQ Administrator.