

ADDISON, TEXAS

LINDBERGH DRIVE WATERLINE REPLACEMENT

(FROM MIDWAY RD. TO APPROXIMATELY 1,350 L.F. EAST)

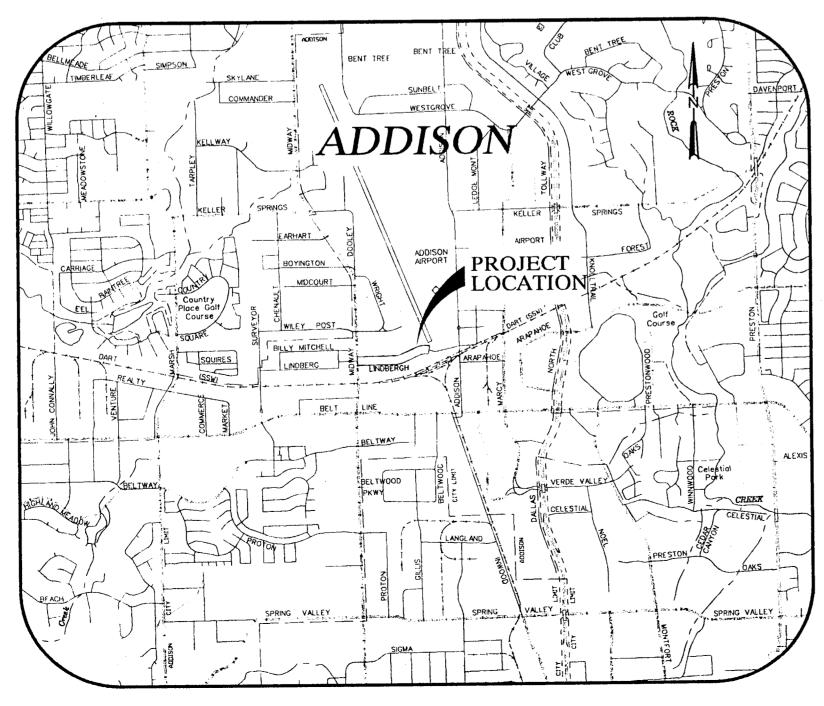
R. SCOTT WHEELER Mayor

FREDRICK M. SILVER RON WHITEHEAD City Manager

CATHY WAYS Deputy Mayor Pro-Tem

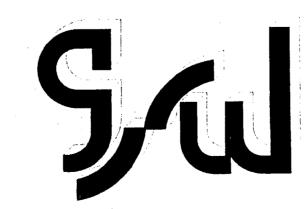
FRANK R. KLEIN Councilman

MIKE MURPHY
Director of Public Works



PROJECT LOCATION

DECEMBER 2001



GUTIERREZ, SMOUSE, WILMUT & ASSOC., INC. 11117 SHADY TRAIL DALLAS, TEXAS 75229 (972) 620–1255 DALLAS - FT. WORTH - HOUSTON - MIDLAND

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ADDISON GENERAL CONSTRUCTION NOTES

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UTILITY LOCATIONS SHOWN ON THE PLANS ARE APPROXIMATE & FOR INFORMATIONAL PURPOSES ONLY AND DOES NOT PRECLUDE THE EXISTENCE OF OTHER UNDERGROUND FACILITIES WHICH ARE NOT SHOWN, IT IS THE CONTRACTORS RESPONSIBILITY TO NOTIFY THE UTILITY OWNERS TO ARRANGE FOR EXACT LOCATIONS AT LEAST 48 HOURS PRIOR TO BEGINNING CONSTRUCTION.

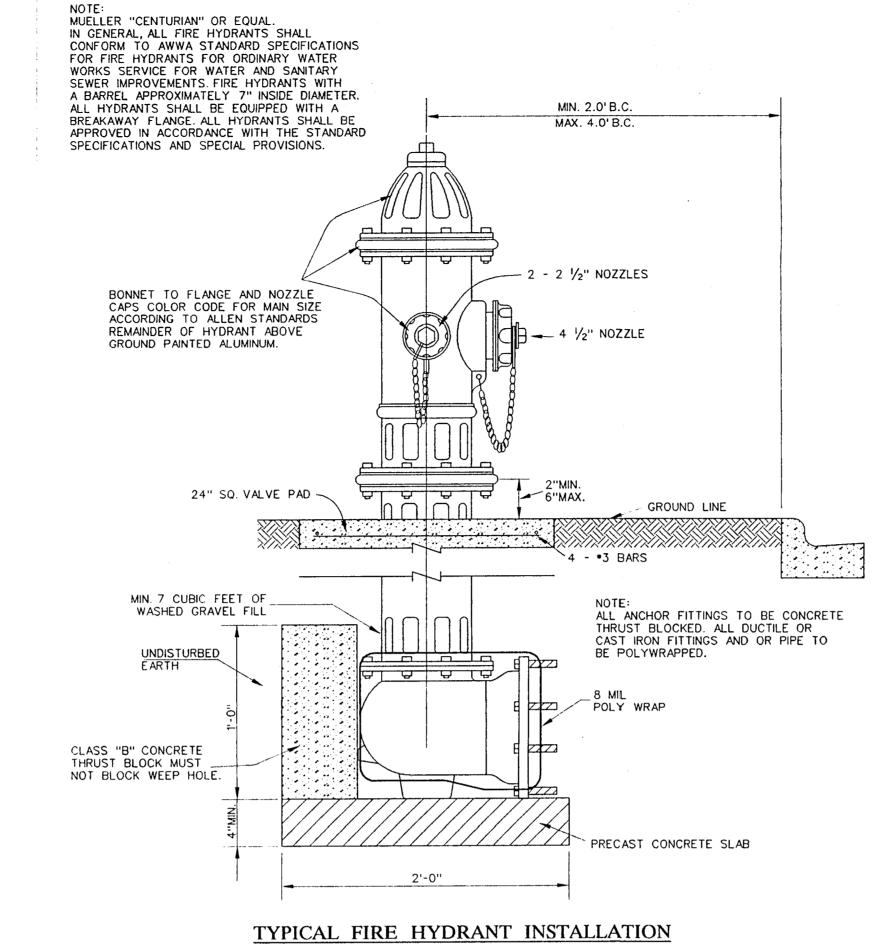
TXU ELECTRIC & GAS GTE TELEPHONE TELE -CABLE DIG -TESS SOUTHWESTERN BELL TELEPHONE

1-800-344-8377 1-800-344-8377 (214) 578 -7573 (214) 578 -7573 1 -800 -395 -0440 1-800-245-4545

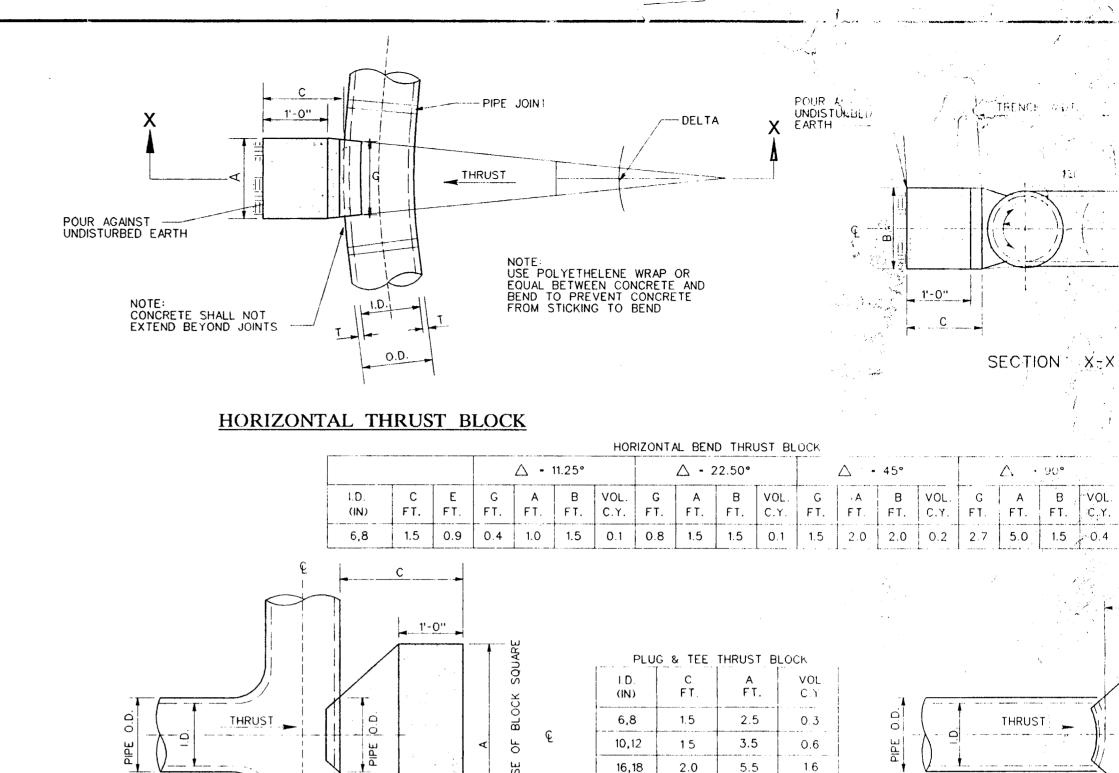
- THE CONTRACTOR SHALL MAINTAIN EXISTING SERVICES AND EXISTING WATER MAINS THROUGHOUT CONSTRUCTION.
- THE CONTRACTOR SHALL MAINTAIN FIRE EMERGENCY VEHICLE ACCESS TO FIRE HYDRANTS THROUGHOUT CONSTRUCTION.
- THE CONTRACTOR SHALL MAINTAIN AT LEAST ONE DRIVEWAY OPENING FOR INGRESS/EGRESS OF VEHICULAR TRAFFIC TO/FROM PRIVATE PROPERTY THROUGHOUT
- EXISTING FIRE HYDRANTS AND VALVE STACKS AND CAPS REMOVED DURING CONSTRUCTION SHALL BE SALVAGED AND DELIVERED TO TOWN OF ADDISON PUBLIC WORKS YARD BY THE CONTRACTOR. (NO SEPARATE PAY ITEM)
- IRRIGATION AND SPRINKLER SYSTEM NOTES:
 - A) THE CONTRACTOR SHALL HIRE A LICENSED IRRIGATOR AS A SUBCONTRACTOR TO OVERSEE ALL ACTIVITIES THAT IMPACT EXISTING, OR PROPOSED IRRIGATION
 - B) PRIOR TO DEMOLITION OR CONSTRUCTION ACTIVITIES, EXISTING IRRIGATION SYSTEMS SHALL BE TURNED ON. THE LOCATION OF THE HEADS, VALVES, AND PIPE SHALL BE MARKED WHERE DEMOLITION OR CONSTRUCTION WILL IMPACT THE SYSTEM. DEFICIENCIES IN THE SYSTEM SHALL BE NOTED AND REPORTED TO THE SYSTEM OWNER. A PHOTOGRAPHIC OR VIDEO RECORD SHALL BE MADE IF APPROPRIATE.
 - C) PIPING SHALL BE CUT, CAPPED AND MARKED AT THE LIMITS OF CONSTRUCTION. D) AT THE COMPLETION OF CONSTRUCTION, THE LICENSED IRRIGATOR SHALL RESTORE AND TEST THE IRRIGATION SYSTEM FOR PROPER FUNCTION. THE TEST SHALL BE CONDUCTED IN THE PRESENCE OF THE TOWN OF ADDISON'S PUBLIC WORKS INSPECTOR, AND THE SYSTEM OWNER.
 - E) ALL COST ASSOCIATED WITH SPRINKLER SYSTEM REPAIR IS SUBSIDIARY TO THE PROJECT.
- CONTRACTOR SHALL CONFORM WITH THE "NORTH CENTRAL TEXAS STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION" (NCTSSPWC), INCLUDING ALL AMENDMENTS, THE TOWN OF ADDISON SPECIAL PROVISIONS TO NCTSSPWC, AND ANY TOWN OF ADDISON STANDARD CONSTRUCTION DETAILS.
- ALL WATER MAINS SHALL HAVE A MINIMUM COVER OF FOUR (4) FEET.
- ALL BENDS AND FIRE HYDRANTS SHALL INCLUDE RESTRAINED TYPE FITTINGS WITH RETAINER GLANDS IN ADDITION TO CONCRETE THRUST BLOCKING. ALL FIRE HYDRANTS SHALL BE INSTALLED PER STANDARD DETAIL.
- 10. ABANDON ALL VALVES ON KILLED WATER MAINS PER VALVE ABANDONMENT DETAIL.
- 11. WATER MAIN SHALL BE AWWA C-909, CL 150.

DEVICES AS SHOWN ON THESE PLANS.

- 12. ALL DIMENSIONS ARE FROM BACK OF CURB UNLESS OTHERWISE NOTED.
- 13. THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN TO THE TOWN OF ADDISON ENGINEERING DEPARTMENT FOR APPROVAL PRIOR TO BEGINNING WORK. TWO WAY TRAFFIC MUST BE MAINTAINED DURING CONSTRUCTION.
- 14. ALL STREET AND DRIVEWAY PAVEMENT SHALL BE 8 -INCH, 4000 PSI CONCRETE WITH *3 BARS ON 18-INCH CENTERS BOTH WAYS.
- 15. ALL PORTIONS OF EXISTING DRIVEWAY THAT ARE TO REMAIN SHALL BE PROTECTED BY THE CONTRACTOR, REMOVAL OF ANY CONCRETE THAT IS NOT SHOWN TO BE REMOVED SHALL BE REPLACED BY THE CONTRACTOR AT NO ADDITIONAL COST TO
- 16. ALL WATER SERVICE LINES THAT EXTEND TO THE NORTH SIDE OF THE R.O.W. SHALL BE BORED UNDERNEATH THE EXISTING PAVEMENT
- 17. THE CONTRACTOR SHALL CONNECT ALL NEW SERVICE LINES TO THE EXISTING WATER METERS AND VAULTS. (NO SEPARATE PAY ITEM).
- 18. ALL CONCRETE PAVEMENT WITHIN THE PROJECT LIMITS SHALL BE SAWCUT. ALL SAWCUTS SHALL BE FULL DEPTH.
- 19. NO TREES SHALL BE CUT DOWN OR TRIMMED WITHOUT PRIOR WRITTEN APPROVAL FROM THE TOWN OF ADDISON. ANY WORK DONE TO THE TREE OR WITHIN THE TREE DRIPLINE SHALL BE CONDUCTED IN THE PRESENCE OF THE TOWN OF ADDISON
- THE CONTRACTOR SHALL PROTECT AND SUPPORT ALL EXISTING UTILITY POLES. LIGHT POLES, SIGNALS, AND GUY WIRES. (NO SEPARATE PAY ITEM)
- 21. THE CONTRACTOR SHALL FURNISH, INSTALL & MAINTAIN ALL EROSION CONTROL
- 22. THE CONTACTOR SHALL PROTECT ALL EXISTING MAILBOXES. TEMPORARY MAILBOXES SHALL BE INSTALLED BY THE CONTRACTOR AT ALL LOCATIONS WHERE EXISTING MAILBOXES WILL BE TEMPORARILY REMOVED DURING CONSTRUCTION. MAILBOXES AND MAIL SERVICE SHALL BE MAINTAINED THROUGHOUT THE PROJECT. (NO SEPARATE PAY ITEM)
- 23. AN APPROVED BACKFLOW PREVENTION ASSEMBLY SHALL BE INSTALLED, WHERE ONE DOES NOT CURRENTLY EXIST, ON ALL WATER SERVICES AFTER THE METER, LOCATED IN A SEPARATE BOX WITH A MINIMUM OF AN EIGHTEEN (18) INCH NIPPLE BETWEEN THE METER AND THE ASSEMBLY FOR TESTING AND REPAIRS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO HAVE THE ASSEMBLY TESTED UPON INSTALLATION BY A CERTIFIED TESTER, WHO SHALL PROVIDE THE ORIGINAL OF THE TEST REPORT TO THE TOWN OF ADDISON UTILITY DIVISION PRIOR TO FINAL, CONTINUOUS CONNECTION TO THE TOWN'S WATER SUPPLY TOWN'S WATER SUPPLY
- 24. ALL WATER METERS SHALL HAVE A BACKFLOW PREVENTION ASSEMBLY INSTALLED ON THE PROPERTY OWNER SIDE OF THE WATER METER. ALL BACKFLOW PREVENTION ASSEMBLIES SHALL BE USC CERTIFIED.
- 25. CONSTRUCTION STAKING SHALL BE SUBSIDIARY TO THE WATERLINE CONSTRUCTION. (NO SEPARATE PAY ITEM).
- 26. ALL BARRICADES AND SIGNS SHALL BE PLACED WITH THE TOWN OF ADDISON'S APPROVAL PRIOR TO PLACEMENT
- 27. BEFORE THE NEWLY CONSTRUCTED WATER MAIN IS PERMITTED TO BE PLACED INTO SERVICE, IT SHALL BE PRESSURE TESTED, DISINFECTED AND TESTED FOR BACTERIA AT THE CONTRACTOR'S EXPENSE. TESTING IS TO BE ACCOMPLISHED BY A TOWN OF ADDISON APPROVED LAB. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR DISINFECTION AND TESTING.
- 28. STAGING AND STORAGE FOR THIS PROJECT SHALL BE APPROVED BY THE TOWN OF ADDISON PRIOR TO ANY CONSTRUCTION ACTIVITY. AT NO TIME WILL PUBLIC RIGHT-OF-WAY BE USED FOR STAGING OR STORAGE.
- 29. ALL NEW DUMMY AND EXPANSION JOINTS SHALL MATCH EXISTING JOINT LOCATIONS 30. CONTRACTOR SHALL VIDEO TAPE THE SITE IN IT'S ENTIRETY PRIOR TO ANY CONSTRUCTION. (NO SEPARATE PAY ITEM)
- . CONTRACTOR SHALL SUPPLY ASBUILT DRAWINGS TO THE TOWN OF ADDISON. DIMENSIONS AND LENGTH OF PIPE FROM BENDS AND VALVES SHALL BE LISTED.



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GENERAL NOTES FOR ALL THRUST BLOCKS

1. ALL CALCULATIONS ARE BASED ON INTERNAL PRESSURE OF 200 P.S.I. (EXCEPT 30" I.D. - 150 P.S.I.)

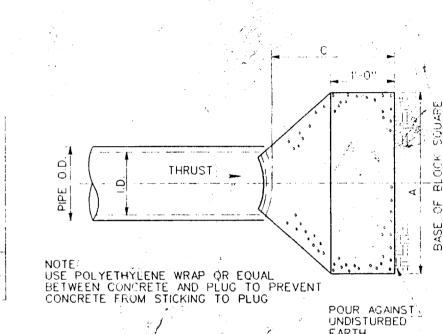
2. CONCRETE FOR BLOCKING SHALL BE CLASS B, 2000 PSI CONCRETE.

3. DIMENSIONS MAY BE VARIED AS REQUIRED BY FIELD CONDITIONS WHERE AND AS DIRECTED BY THE C.M. THE NET VOLUME OF CONCRETE BLOCKING SHALL NOT BE LESS THAN SHOWN IN TABLES.

TEE THRUST THRUST BLOCKING

POUR AGAINST

UNDISTURBED EARTH

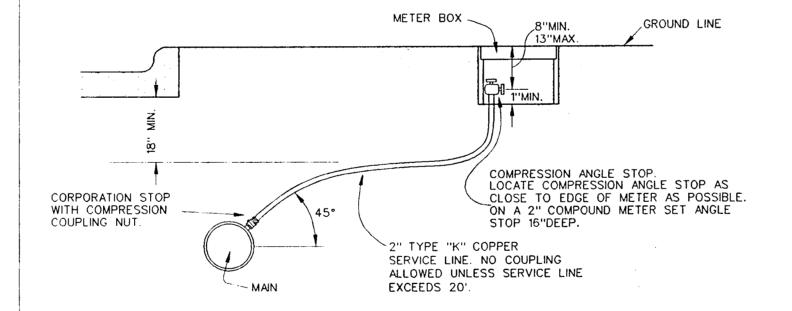


TRENCE WAST

SECTION .

△ · 90°

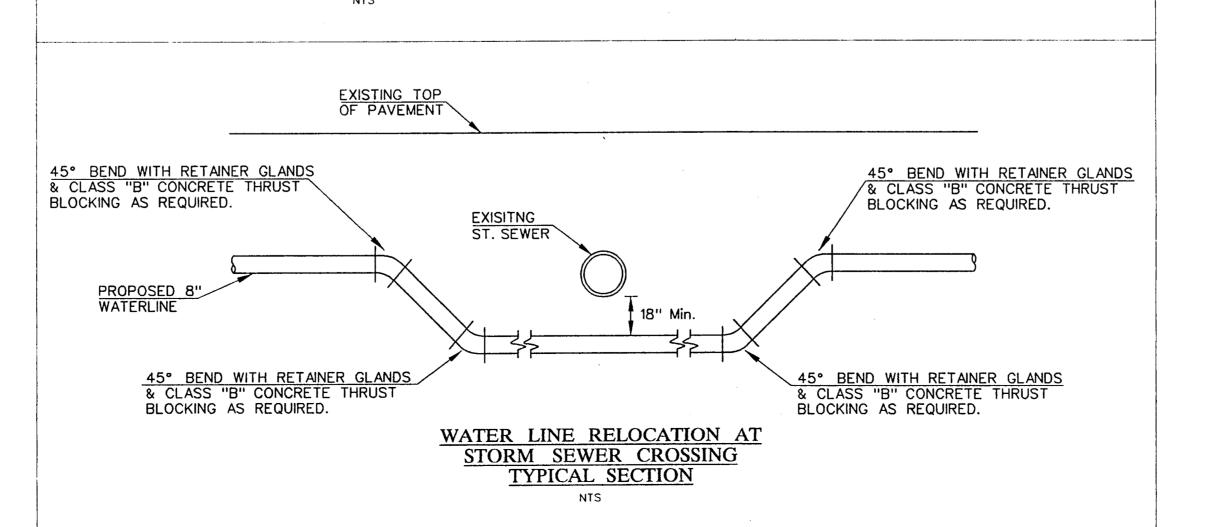
PLAN OF PLUG THRUST BLOCK

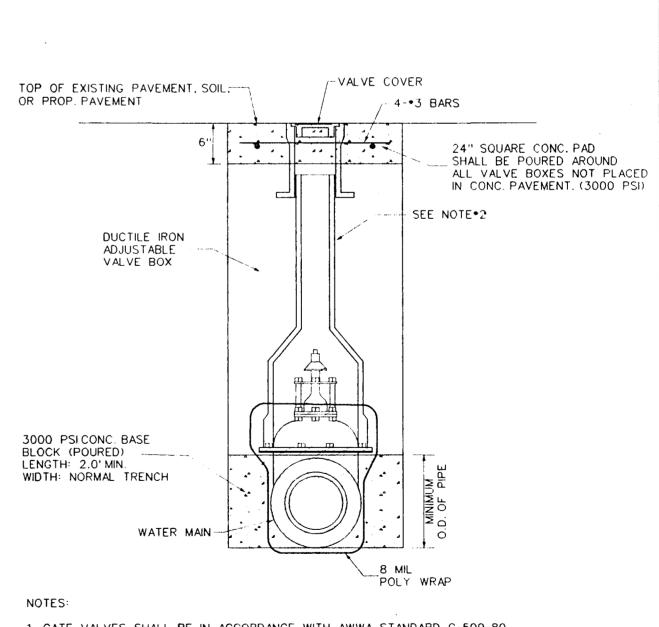


TYPICAL SERVICE CONNECTION WITH METER BOX

WATER SERVICES SHALL NOT BE CONNECTED TO FIRE HYDRANT LINES. ALL MATERIALS SHALL CONFORM TO THE STANDARD SPECIFICATIONS

AND/OR SPECIAL PROVISIONS.

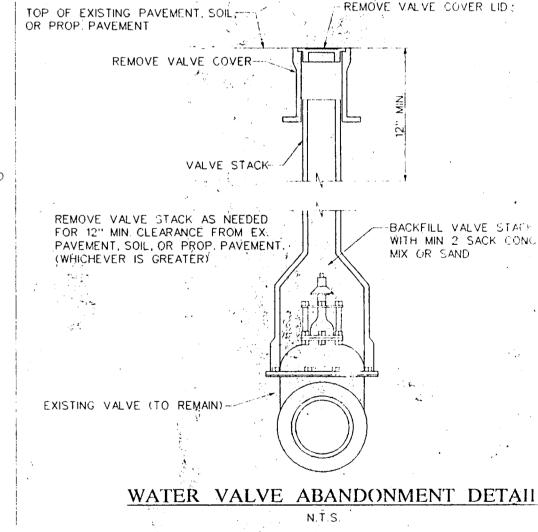




1. GATE VALVES SHALL BE IN ACCORDANCE WITH AWWA STANDARD C-509-80 OR LATEST THEREOF. ALL VALVES SHALL BE "MUELLER" OR APPROVED EQUAL. 2. A PERMANENTLY ATTACHED VALVE EXTENSION STEM SHALL BE REQUIRED FOR ANY VALVE THAT ITS OPERATING NUT IS LOCATED IN EXCESS OF 4'BELOW THE TOP OF THE VALVE BOX. THIS EXTENSION SHALL BE OF SUFFICIENT LENGTH TO INSURE THAT IT'S TOP IS WITHIN 4' OF VALVE BOX LID. MANUFACTURED VALVE STACK DUCTILE IRON PIPE TO BE USED FOR EXTENSION GREATER THAN 4'. BELL END OF STACK TO BE FITTED OVER VALVE. VALVE AND VALVE STACK IS TO BE

3. VALVES SHALL BE OF DUCTILE IRON W/RUBBER ENCAPSULATED DISK. BOLTS SHALL BE STAINLESS STEEL OF SAME SIZE ON EACH VALVE. 4. VALVE COVERS SHALL BE MARKED "WATER"

> TYPICAL VALVE SETTING & BOX N.T.S.



DESCRIPTION TOWN OF ADDISON, TEXAS ENGINEERING DEPARTMENT

LINDBERGH WATER MAIN REPLACEMENT

GENERAL NOTES MISCELLANEOUS DETAILS

GUTIERREZ, SMOUSE, WILMUT & ASS CIVIL / ENVIRONMENTAL ENGINEERS 11117 SHADY TRAIL . DALLAS, TEXAS .

QGS

DESIGN:

ORAWN:

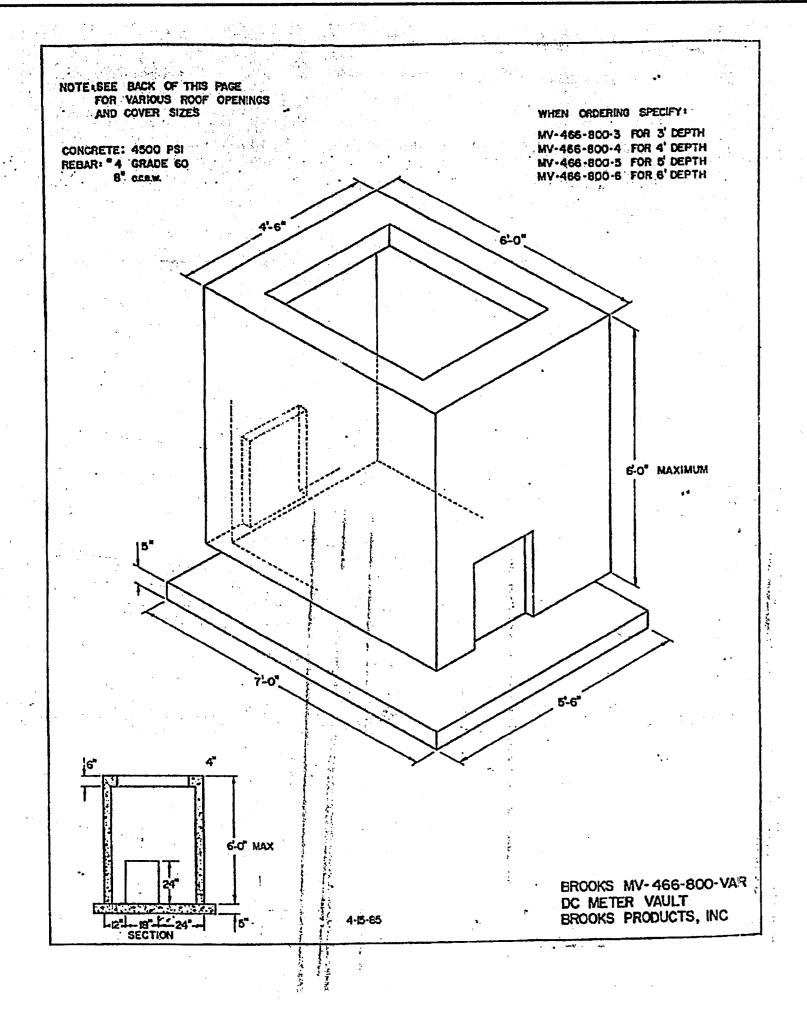
APPROVED:

DATE: DEC. 2001

GSW

SCALE: NOTED

SHLET



COMPANY STATE OF STAT

PLAN VIEW

ELEVATION

D08-A51 7-10 4-4 8-00 2.000
008-A08 8 7-10 4-4 8-0 8.00
2080-A08 8 8 8 8 8 9 9 9 9 1200
008-A010 10 8-2 8-8 7-0 18,000

Specifications

Engineering Data

HATCHWAY

Class 1 concrete with design strength of 4500 PSI at 25 days. Unit is of monolithic construction at floor and first stage of walk with sectional riser to required depth.

1/4" Numburn Carnered plats cover, with 1/4" extruded clumburn frame, Hotch to be furnished with 316 Stainless Steel snop lock & Mages.

The haddles assembly shall be factory exampled in work in hydrastatically tested prior to delivery. Field excavation in preparation shall be complete prior to delivery. Pipe, volves and fittings of the desambly shall be opposed by one or more of the following associations:

OSAY CATE VALVE (TYP.)

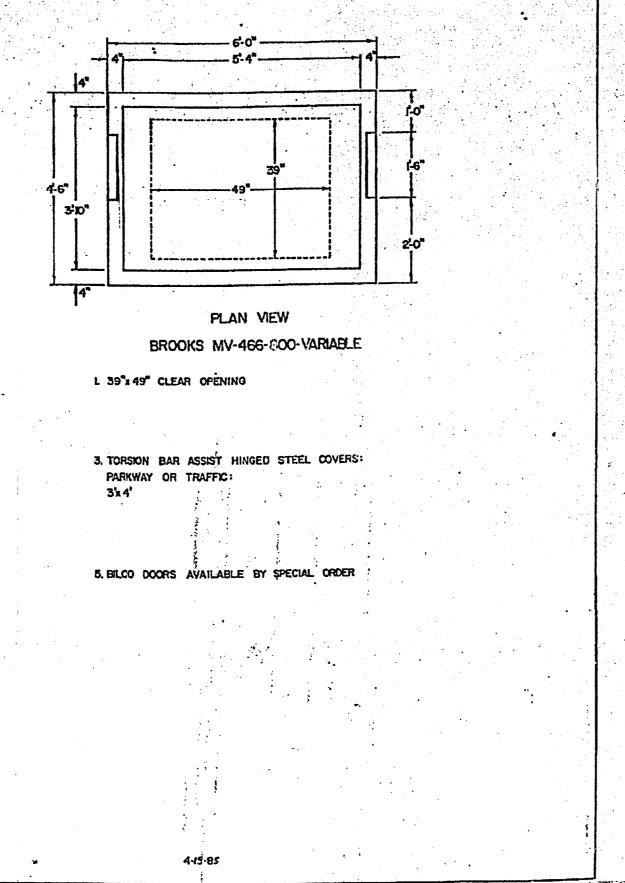
HERSEY — PIT-PAK
3/4° DETECTOR METER W/
2 SHUT-DITS VALVES AND
BACKGLOW PREVENTER.

RELIGIE REGISTER SENSOR TOUCH PAD (PITPAK)

-Precast concrete LID v/ Cast in 30"x48" allibenum hatchway Spring assisted

4" THRU 10" DOUBLE DETECTOR CHECK BACKFLOW PREVENTER ASSEMBLY

--- CRAVEL BED (B.O)



PUBLIC WORKS DEPARTMENT

(972) 450-2871

FIRE LINE WATER SERVICE > 2"

The following diagrams are for example only and do not endorse any particular manufacturer over another. Clearance dimensions should be at minimum in accord with the manufacturer's recommendations. Overall dimensions of the vault will be dependent on the size of the device that it contains. Be sure to read and follow all the specifications provided on separate sheet. Questions for clarification may be directed to: Utility Inspections at 972-450-7047 or the Utility Division of the Public Works Department at 972-450-2871.

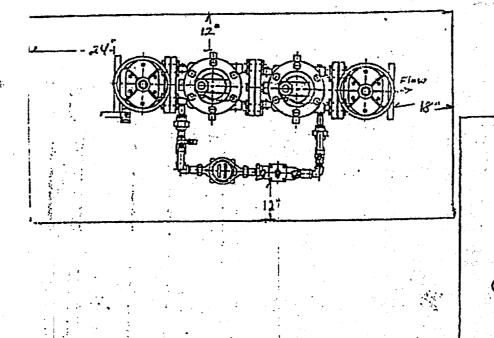


Figure FL-1

Iniv 24"

Hersey

Model ER-1

Electronic Encoder Register

Features

Dimensions

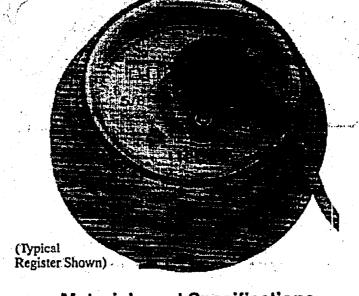
APPLICATIONS: The Hersey Model ER-1 Electronic Encoder Register is available on Hersey meters for remote reading of hard-to-access commercial, institutional and residential installations. With minimal cost and labor, it also can be retrofitted to virtually any Hersey meter already in service. The Model ER-1 register is compatible with any of the meter reading register is compatible with any of the meter reading methods in the Hersey AMR System, which simplifies migration and provides additional cost savings.

circuitry to generate two electronic switch closures per revolution of the sweep hand. It provides extremely high "sixth wheel" resolution for greater accuracy. It also avoids metal-to-metal contacts which could corrode or wear. For direct reading, the register face has a low-flow (leak) detector, a straight reading odometer with large, easy to read numerals, and a sweep hand. It can be specified miles gallons, cubic feet, cubic meters, or

CONFORMANCE TO STANDARDS: Compiles with AWWA Standard C707 for Encoded Remote Reading Systems when used with the Hersey Remote Heading

CONSTRUCTION: The fully encapsulated electronics do not penetrate the lens, assuring that the register is permanently sealed. Tamper resistant screws hold the electronics securely to the lens, and the register mounting has an integral tamper-proof feature. The connection between the electronics and the register's wiring cable is

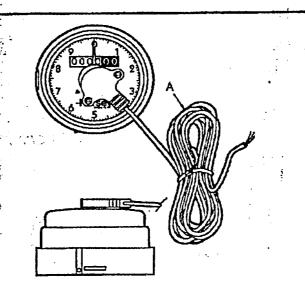
A l'Length, 15' Length, 30' Length, 75' Length



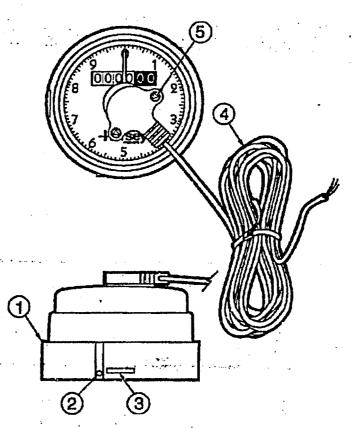
Materials and Specifications

	STANDARDS				
Į	REGISTER TYPE Electronic encoding with visual readout				
I	CABLE 3-wire (2-wire if alarm circuit not commerced)				

TEMPERATURE RANGE.



Model ER-1 Parts Electronic Encoder Register



		<u> </u>			
	Ref. No.	Description	Part No.		
	1	Register Housing Base	C5805		
Ì	2	Register Locking Pin (Plastic)	A12658		
Ì	3	Register Housing Insert	C5582		
	4	ER-1 Non-encapsulated Module with 1' wire ER-1 Encapsulated Module with 15' wire ER-1 Encapsulated Module with 30' wire ER-1 Encapsulated Module with 75' wire	B7890 B81040 B81041 B81042		
	_ 5	Trl-wing Screw	AS7281.		
٠	*	Tri-wing Tool (screwdriver style, less bit)	ERTOOL		
	•	Tri-wing Tool Bit	ERTOOLBIT		
- 1		O-ring	02301		

Hersey'



PUBLIC WORKS DEPARTMENT

(972) 450-2871 16801 Westgrove

FIRE PROTECTION SYSTEM REQUIREMENTS FOR FINAL ACCEPTANCE

To whom it may concern:

The following will be required before the final acceptance of the underground portion (from water main to riser) of your fire protection system.

- 1. A State Fire Marshal Certificate of Registration for sales, installation, and service of fire protection sprinkler systems must be on file with the Town of Addison Fire Marshal's office. Copy to Public Works Inspector.
- 2. The name and license number of the Responsible Managing Employee must be on file with the Town of Addison Fire Marshal's Office. Copy to Public Works Inspector.
- 3. "As-Built" plans of the underground system, which have been signed by the Responsible Managing Employee, must be submitted to the Public Works
- 4. Visual inspection, pressure test, and flush test will have been satisfactorily completed and verified by the Public Works Department.

After completion of the above items, a letter of acceptance will be sent to the contractor, and a copy will be sent to the Town of Addison Fire Marshal's Office.



PUBLIC WORKS DEPARTMENT

(972) 450-2871

FIRE LINE WATER SERVICE >2"

Contractors and/or plumbers are responsible for compliance with the following specifications:

All fire line services shall include an approved Double-Check Detector Assembly or Reduced Pressure Zone Detector Assembly at the point of connection to the City's water supply. An approved assembly shall be taken from the most current edition of the List of Approved Backflow Prevention Assemblies as published by the Foundation for Cross-Connection Control and Hydraulic Research, University of Southern California.

The Assembly shall be placed in a concrete vault of sufficient size to allow for convenient testing and/or repair. The vault shall have a concrete floor, and any joints shall be sealed to prevent infiltration of mud and silt. The vault doors shall be aluminum of the "Bilco" type (but not necessarily that brand), lockable, large enough to allow removal of the complete Assembly as a unit, and placed directly over the unit for ease of access. RPZ assemblies must be installed above ground according to manufacturer's specs, and protected from freezing and/or tampering with an approved enclosure.

The Assembly and piping shall be supported with manufactured supports designed for such application. (For clarification, reference Specification for Standon Pipe Supports as manufactured by Material Resources Co., Hillsboro, Oregon, 503-693-0727 - Models S89 or S92.

The Assembly shall be complete with the approved appurtenances. The detector meter shall be any one of the following: Hersey Model 430, Hersey MVR-30.

The detector meter piping shall have an in-line or angle curb-stop or an approved ball valve before the meter and the compatible Double-Check or RPZ Assembly after the meter, and a test port after the assembly.

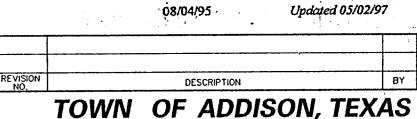
Meters > 18" deep shall be equipped with Hersey ER-1 registers and PitPak for connecting to touchless AMR

Mainline piping shall include a mechanical-joint flange adapter on the inlet end of the Assembly to facilitate future removal or replacement of the Assembly.

The contractor shall be responsible for having the Assembly tested by a "certified" Fire-Line Tester upon installation of the system, and prior to final, continuous connection to the City's water supply. A copy of the report shall be supplied to the Town of Addison Utility Division of the Public Works Department.

A meter deposit is required for all meters prior to initiation of service. Application and deposit will be made to the Town of Addison Utility Billing Department (972-450-7081) by the party responsible for the water bill.

See Figure FL-1 for dimensions of the vault etc. Deviations from this standard may be considered at the discretion of the Director of Public Works only insofar as the protection of the Public Water Supply is not compromised.

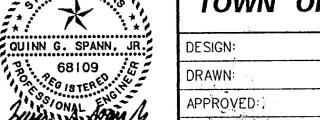


ENGINEERING DEPARTMENT LINDBERGH WATER MAIN

REPLACEMENT

FIRE VAULT DETAIL



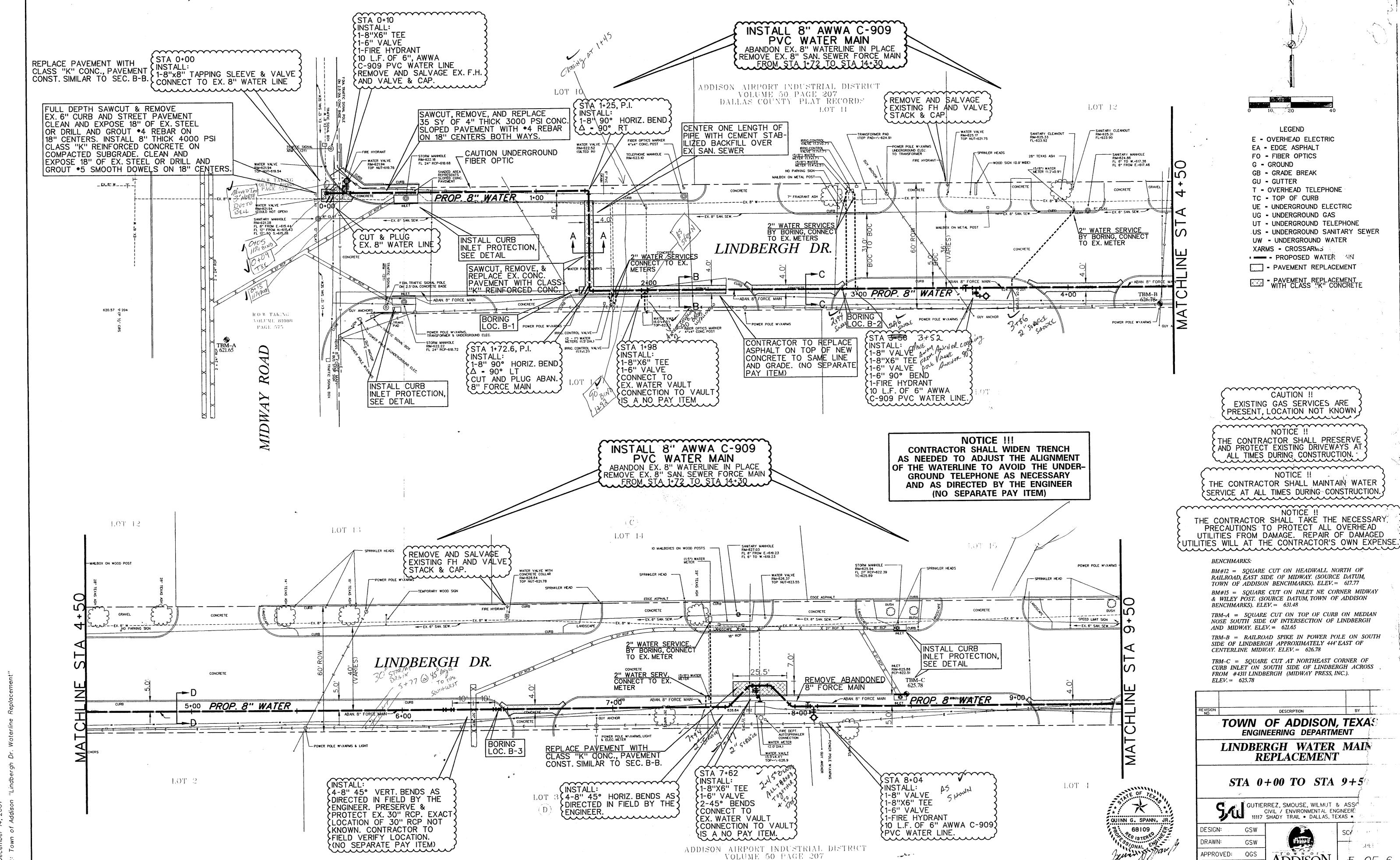


DATE SEPT. 2001

ADDISON

SHEET 4 OF 6

SCALE:

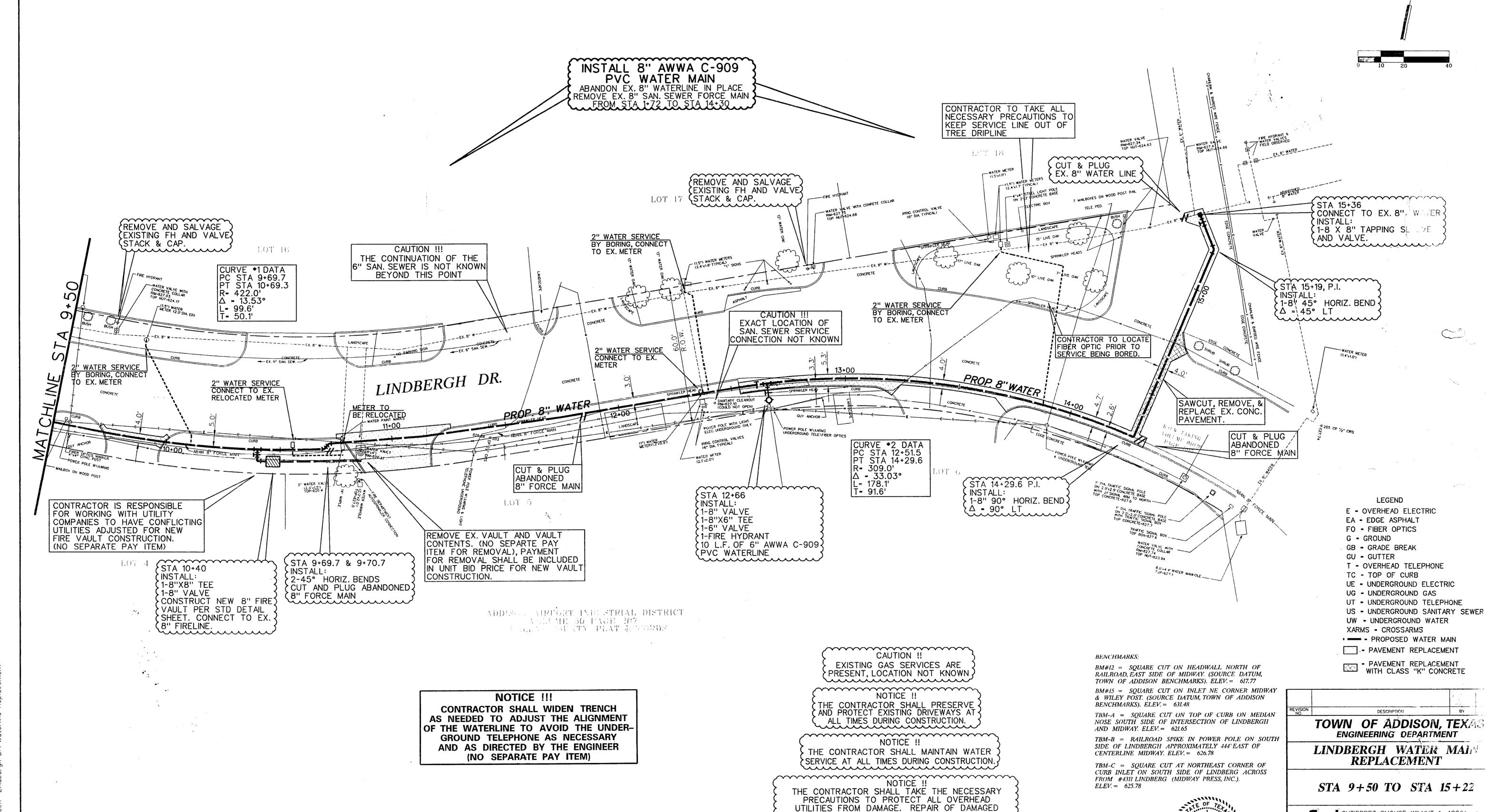


DALLAS COUNTY PLAT RECORDS

12-21-01

DATE: DEC. 2001

ADDISON



UTILITIES WILL AT THE CONTRACTOR'S OWN EXPENSE.

Pit Driver: Date: Dec \$FILE\$ Project:

GSW QGS

DESIGN:

DRAWN:

APPROVED:

DATE: DEC. 2001

QUINN G. SPANN, JR.

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GUTIERREZ, SMOUSE, WILMUT & ASSOC.

CIVIL / ENVIRONMENTAL ENGINEERS

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