

WOLFE BRANCH UTILITY DISTRICT

Morgan and Roane Counties, Tennessee

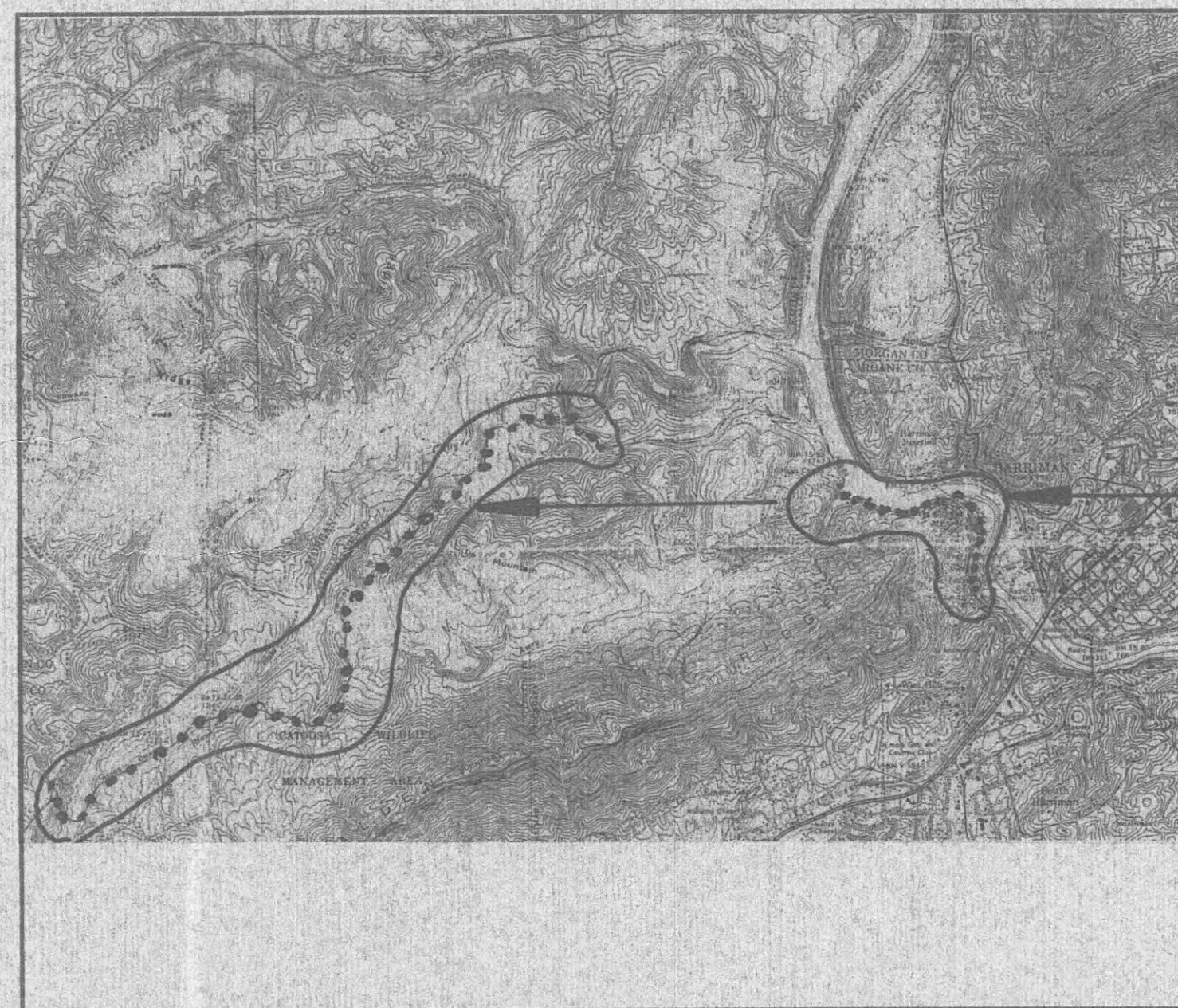
WATER LINE EXTENSIONS

DRY HILL ROAD AND RIGGS CHAPEL ROAD

CONTRACT 102

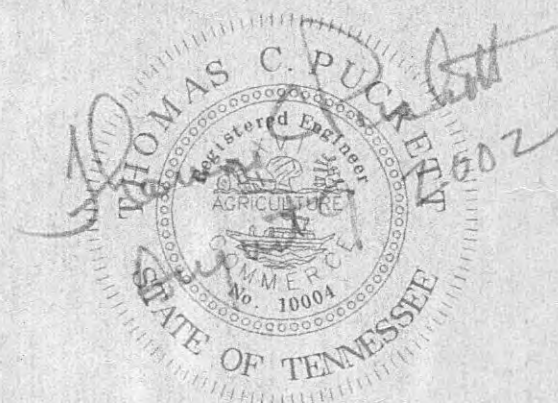
Complete
LP 10/28/03

LOCATION MAP



PROJECT LOCATION

Project Engineer



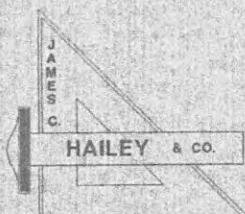
PLANS REVIEWED AND APPROVED BY WOLFE BRANCH UTILITY DISTRICT
Donald Painter 8-9-02
DONALD PAINTER, MANAGER DATE

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David Reagan

JCH PROJECT NO. 97253

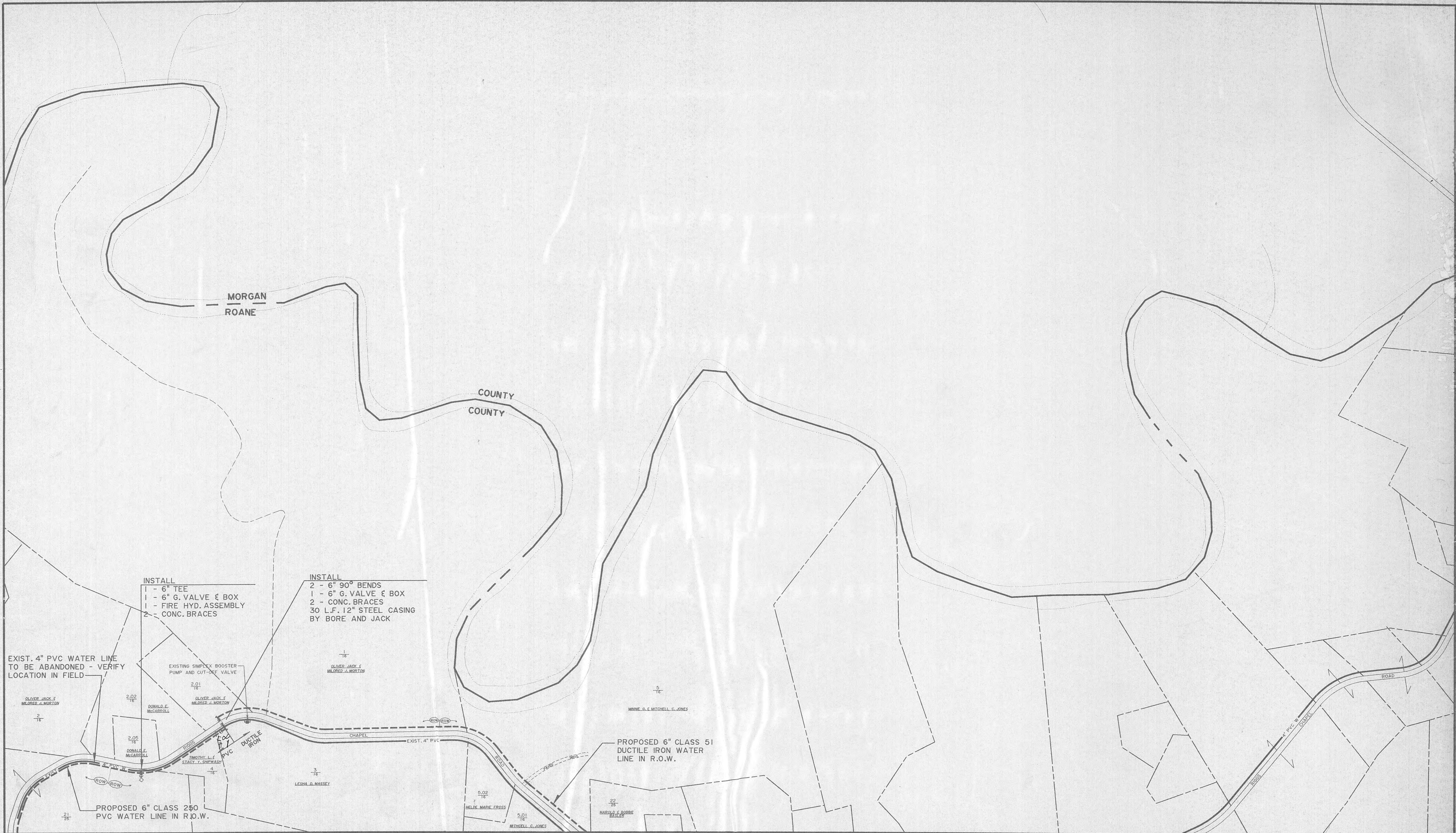


JAMES C. HAILEY & CO. 2622 OLD LEBANON ROAD - SUITE 200 NASHVILLE, TENNESSEE

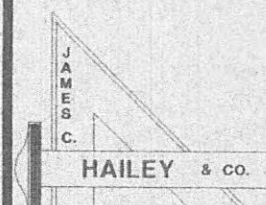
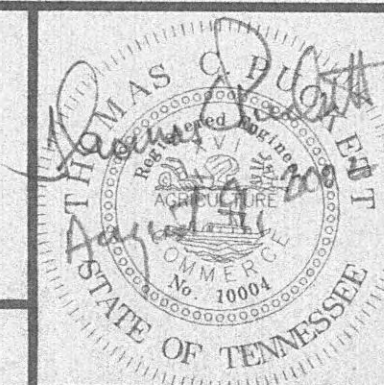
WOLFE BRANCH - CONT. 102 DRY HILL RD / RIGGS CHAPEL RD.

COMPLETE 10/28/03

9A



7	8	10
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WOLFE BRANCH UTILITY DISTRICT Roane County, Tennessee			WATER LINE ADDITIONS RIGGS CHAPEL ROAD		
DESIGN TCP	DRAWN LLB	CHECKED TCP	DATE APR. 2002	SCALE 1" = 200'	PROJECT NO. 97253

SHEET
9
16 SE

CUT-IN AND INSTALL
1 - 4" G. VALVE & BOX

INSTALL
1 - 8" x 6" TEE
3 - 8" G. VALVES & BOXES
1 - 6" G. VALVE & BOX
1 - FIRE HYD. ASSEMBLY
2 - 8" x 4" TEES
1 - 8" PLUG
1 - 2" BLOW OFF ASSEMBLY
4 - CONC. BRACES
1 - END OF LINE CONC. BRACE
30 L.F. 14" BLACK STEEL
CASING BY OPEN CUT

(SEE DETAIL BELOW)
CONNECT TO EXISTING
WATER LINE
INSTALL
1 - 4" D.I. TAPPING SLEEVE
AND VALVE

NOTE TO CONTRACTOR:
EXISTING 2" WATER LINE TO BE ABANDONED.
WOLFE BRANCH UTILITY DISTRICT WILL
MAINTAIN AND PROVIDE SERVICE TO USERS
ON 2" WATER LINE DURING INSTALLATION
OF NEW 8" WATER LINE.

BOOSTER PUMP STATION NO. 1
INSTALL - LUMP SUM
PACKAGE DUPLEX UNDERGROUND
BOOSTER PUMP - SEE SPECIFICATIONS
SITE DETERMINED BY OWNER
(SEE SCHEMATIC SHEET 13)
PUMP DESIGN: 80 GPM @ 244 TDH

CREEK CROSSING
(CONC. CAP)

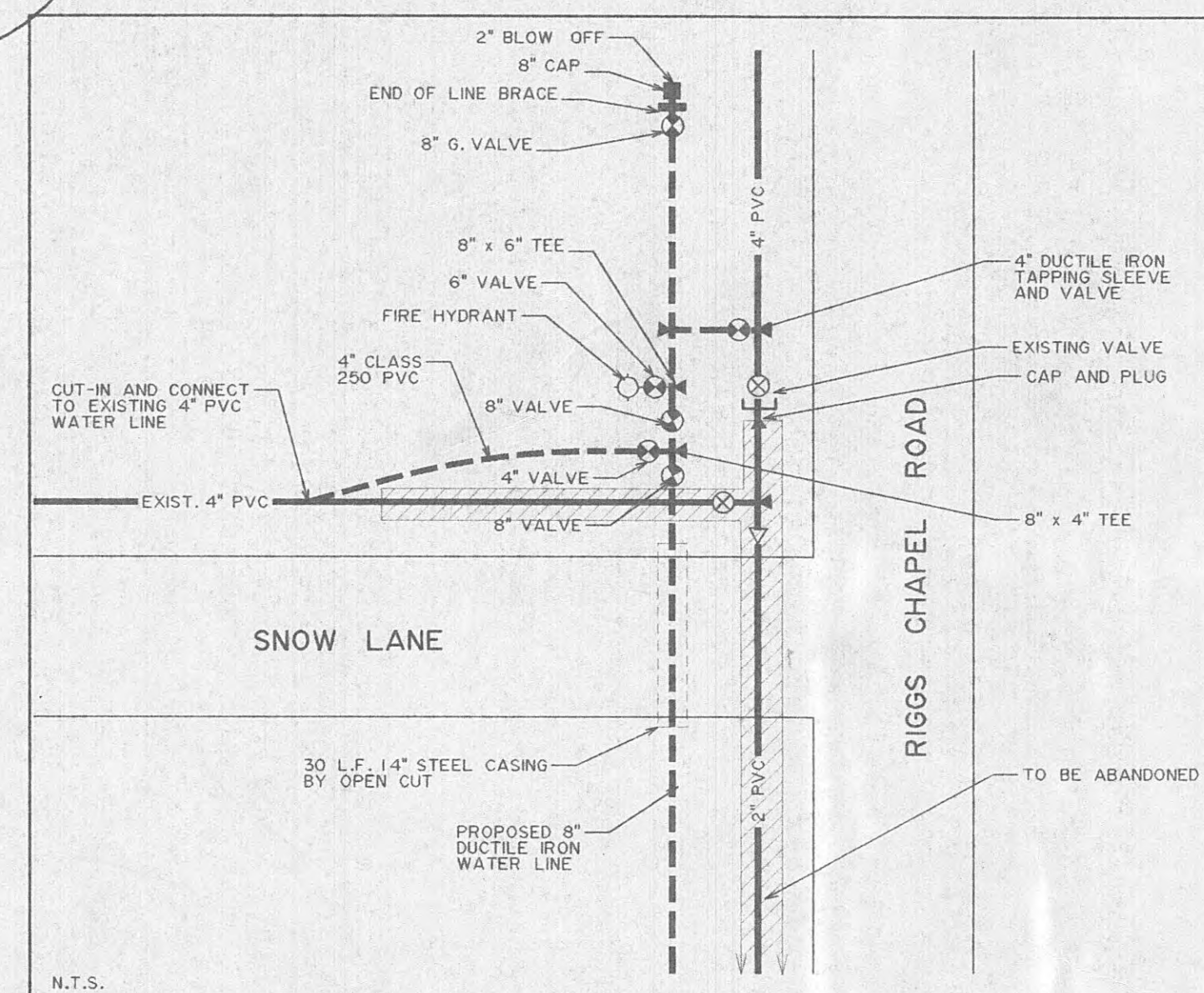
PROPOSED 8" CLASS 51
DUCTILE IRON WATER LINE
LAY IN R.O.W.

INSTALL
1 - 8" G. VALVE & BOX

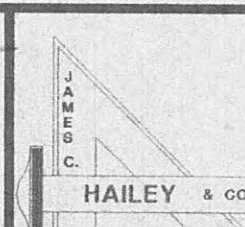
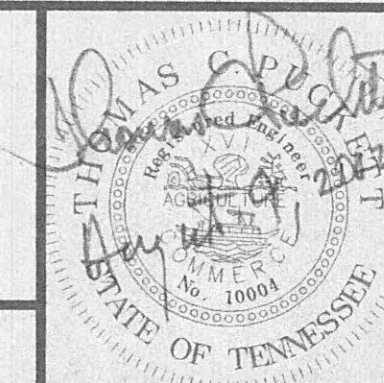
LAY WATER LINE AROUND
RAILROAD BRIDGE FOOTING
IN ACCORDANCE WITH PERMIT
FROM NORFOLK AND SOUTHERN
RAILROAD

INSTALL
2 - 8" 90° BENDS
1 - 8" G. VALVE & BOX
2 - CONC. BRACES
40 L.F. 14" BLACK STEEL
CASING BY BORE & JACK

PROPOSED 8" CLASS 51
DUCTILE IRON WATER LINE
LAY IN R.O.W.



9	10
8	11



WOLFE BRANCH
UTILITY DISTRICT
Roane County, Tennessee

TCP LLB TCP

WATER LINE ADDITIONS
RIGGS CHAPEL ROAD

DATE: APR. 2002
SCALE: 1" = 200'
PROJECT NO.: 97253

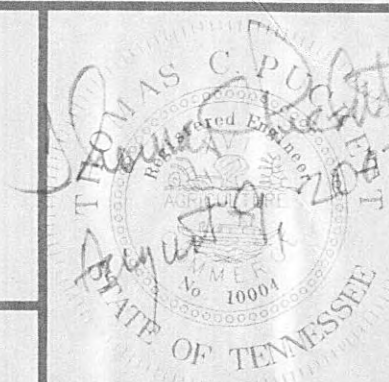
10
26 NW



CONTRACTOR SHALL CONTACT: HARRIMAN UTILITY BOARD
300 ROANE STREET
HARRIMAN, TENNESSEE
(865) 882-3242

TO COORDINATE CONNECTION TO EXISTING HARRIMAN WATER MAIN.

8	10	
	11	
2		



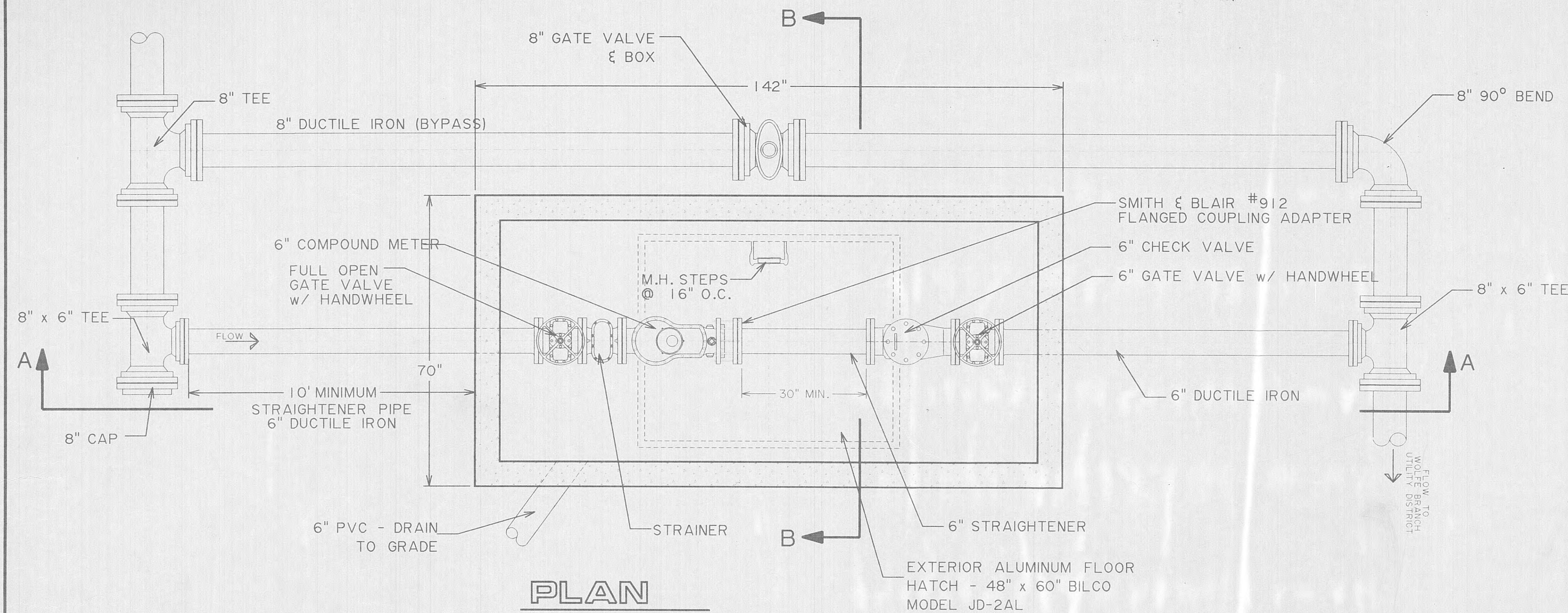
JAMES C. HAILEY & CO.

WOLFE BRANCH
UTILITY DISTRICT
Roane County, Tennessee

WATER LINE ADDITIONS
RIGGS CHAPEL ROAD

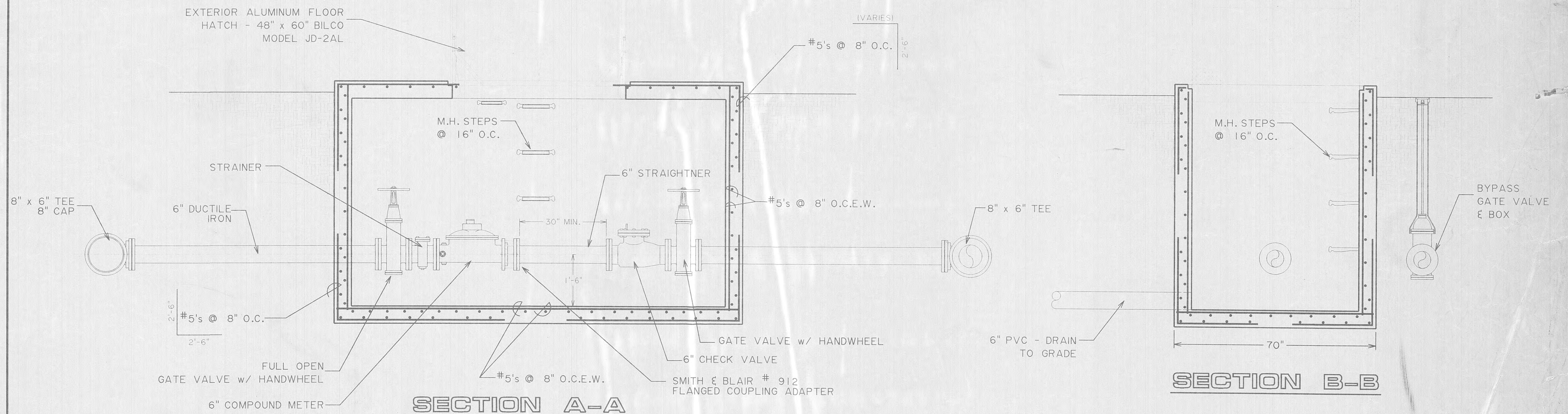
DESIGN	DRAWN	CHECKED	DATE	SCALE	PROJECT NO.
TCP	LLB	TCP	APR. 2002	1" = 200'	97253

6 SW

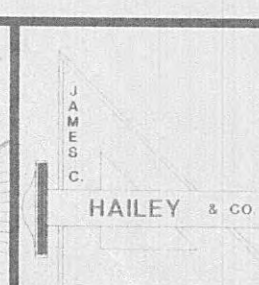
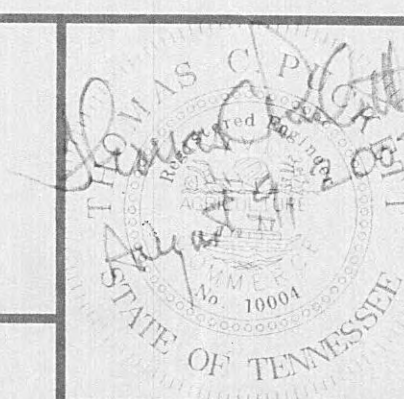


GENERAL NOTES

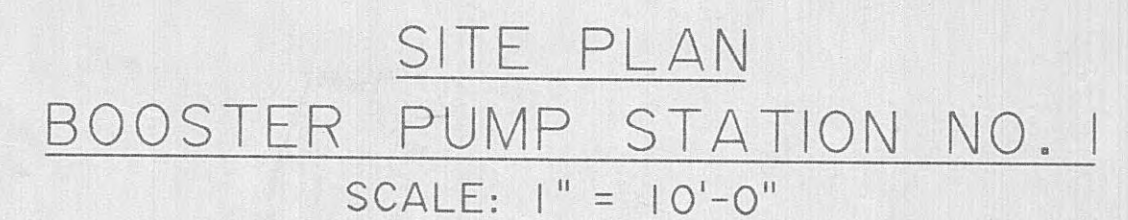
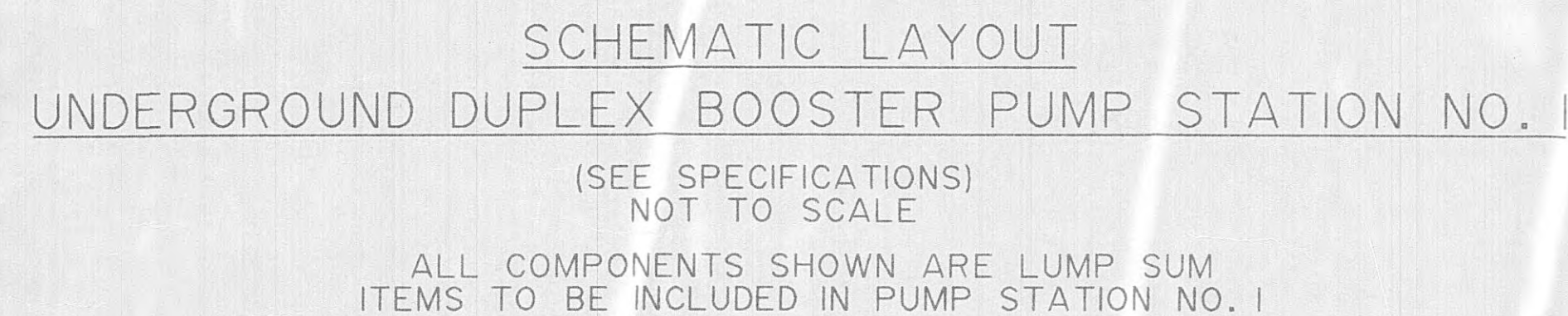
1. COMPOUND METERS MANUFACTURED BY SENSUS TO BE USED ONLY, TO REGISTER IN GALLONS AND STRAINER TO MATCH METER MANUFACTURER.
2. PIPE TO MEET AWWA C150 CLASS 52 DUCTILE IRON.
3. FITTINGS TO MEET AWWA C153 CLASS 350 COMPACT, ALL M.J. FITTINGS SHALL USE WEDGE RESTRAINER GLANDS.
4. VALVES TO BE RESILIENT WEDGE MEETING AWWA C509 REQUIREMENTS. VALVES TO BE FULL-OPEN.
5. CONCRETE VAULT TO MEET REQUIREMENTS OF ASTM C857-95 STRUCTURAL DESIGN.
6. DRAIN LINE SHALL BE 6" SIZE - SLOPED TO GRADE.
7. TEST PORT TO BE 2" WITH GATE VALVE AND PLUG.
8. PROVIDE 2'-0" CRUSHED STONE WHEN POSITIVE DRAIN TO GRADE IS NOT POSSIBLE.
9. METER IS TO BE APPROVED BY HARRIMAN UTILITIES.



11/10/2002 10:00 AM W. J. HARRIS

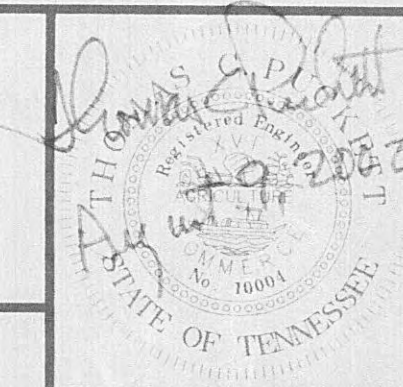


WOLFE BRANCH UTILITY DISTRICT Roane County, Tennessee			COMPOUND METER PLAN & SECTIONS			12
TCP	LLB	TCP	APR. 2002	3/4" = 1'-0"	97253	



- ELECTRICAL SPECIFICATIONS
UNDERGROUND PUMP STATION
1. COORDINATE INSTALLATION OF NEW OVERHEAD SERVICE WITH HARRIMAN UTILITIES. PROVIDE ALL CONDUIT, METER BASE, AND OTHER ITEMS REQUIRED.
 2. ALL WORK SHALL BE IN CONFORMANCE WITH THE NATIONAL ELECTRICAL CODE AND ALL STATE AND LOCAL CODES.
 3. FURNISH ALL THEIR MATERIALS, EQUIPMENT AND SERVICES REQUIRED TO PROVIDE A COMPLETE, WORKING ELECTRICAL SYSTEM.
 4. ALL MATERIALS SHALL BE NEW AND OF COMMERCIAL QUALITY. ALL MATERIALS FOR WHICH AN UNDERWRITERS LABORATORY STANDARD EXISTS SHALL BEAR THE U.L. LABEL.
 5. SECURE AND PAY FOR ALL NECESSARY PERMITS AND CERTIFICATES OF INSPECTION REQUIRED.
 6. GUARANTEE ALL MATERIALS AND WORKMANSHIP FOR A PERIOD OF ONE YEAR FROM DATE OF ACCEPTANCE BY OWNER.
 7. COORDINATE WITH THE LOCAL ELECTRIC UTILITY COMPANY FRO INSTALLATION OF NEW ELECTRICAL SERVICE. PROVIDE CONDUIT, METER BASE AND OTHER ITEMS AS REQUIRED. PAY ALL CHARGES INVOLVED.
 8. COORDINATE ELECTRICAL WORK WITH OTHER TRADES ON THIS PROJECT. VERIFY LOCATION AND ELECTRICAL REQUIREMENTS FOR ALL EQUIPMENT BEFORE ROUGH-IN.
 9. PROVIDE ELECTRICAL SERVICE ENTRANCE EQUIPMENT THAT IS U.L. LABELED "SERVICE ENTRANCE USE."
 10. INSTALL ALL POWER AND CONTROL WIRING IN CONDUIT. USE PVC COATED RIGID GALVANIZED STEEL CONDUIT UNDERGROUND AND USE RIGID GALVANIZED STEEL ABOVE GROUND.
 11. INSTALL ONLY COPPER WIRE WITH THWN OR THHN INSULATION FOR POWER WIRING. SUBMERSIBLE CABLES SHALL BE FURNISHED BY MOTOR, SIGNAL, OR CONTROL DEVICE VENDOR (COORDINATE EXACT CABLE LENGTHS).

12. PUMP CONTROL PANEL:
- PROVIDE A DUPLEX PUMP CONTROL PANEL WITH AN ALTERNATOR THAT ALTERNATES EACH PUMP AS LEAD ON EACH CALL FOR SERVICE CYCLE AND TWO PROPERLY SIZED CIRCUIT BREAKER TYPE, STARTERS WITH PROPER AMBIENT COMPENSATED OVERLOAD PROTECTION AND INDIVIDUAL PHASE FAILURE PROTECTION. THERE SHALL BE NO DUPLEX PUMP OPERATION.
- THE FOLLOWING DEVICES SHALL ALSO BE INCLUDED: CONTROL POWER TRANSFORMERS, LIGHTNING ARRESTOR, SYSTEM PHASE MONITOR, DUPLEX RECEPTACLE, AND CABINET HEATER WITH THERMOSTAT. (3) 120V., 15 AMP, POLE BREAKERS; ONE FOR VENTILATION FAN AND HEATER, ONE FOR RECEPTACLES AND ONE FOR LIGHTING CIRCUIT, AND (1) 20 AMP, 1 POLE BREAKER FOR PUMP HOUSE HEATER.
- CABINET MOUNTED ALARM LIGHT: PROVIDE A RED ALARM PILOT LIGHT WITH FOUR INCH (4") RED LEXAN LENS MOUNTED ON TOP OF CONTROL PANEL. THIS EXTERIOR ALARM LIGHT SHALL BURN DIMLY DURING NORMAL CONDITIONS TO INDICATED POWER ON AND LAMP GOOD, AND SHALL FLASH BRIGHTLY DURING ALARM CONDITIONS.
- THE WEATHERPROOF ELECTRICAL CABINET SHALL CONTAIN THE PUMP CONTROL PANEL. CONTRACTOR TO VERIFY SIZE OF ELECTRICAL CABINET BEFORE INSTALLATION.
- THE FOLLOWING SHALL BE PROVIDED IN THE CONCRETE PUMP VAULT:
1. 2 EA. - INCANDESCENT, 150W LAMP, GLASS GLOBE AND GUARD. BENJAMIN-MODEL #11W-150-G OR EQUAL, WITH SWITCH.
 2. WEATHERPROOF GFIPROTECTED RECEPTACLE.
 3. PUMP HOUSE HEATER, QMARK MODEL #WHT500 OR APPROVED EQUAL.
- THE DEVICES SHALL BE MOUNTED 12" BELOW ACCESS DOORS.
13. IF REQUIRED BY LOCATION ELECTRIC UTILITY A SERVICE POLE AND ASSOCIATED HARDWARE SHALL BE IN ACCORDANCE WITH THE LATEST EDITION FO R.E.A., FORM 804 AND BULLETIN 50-3.

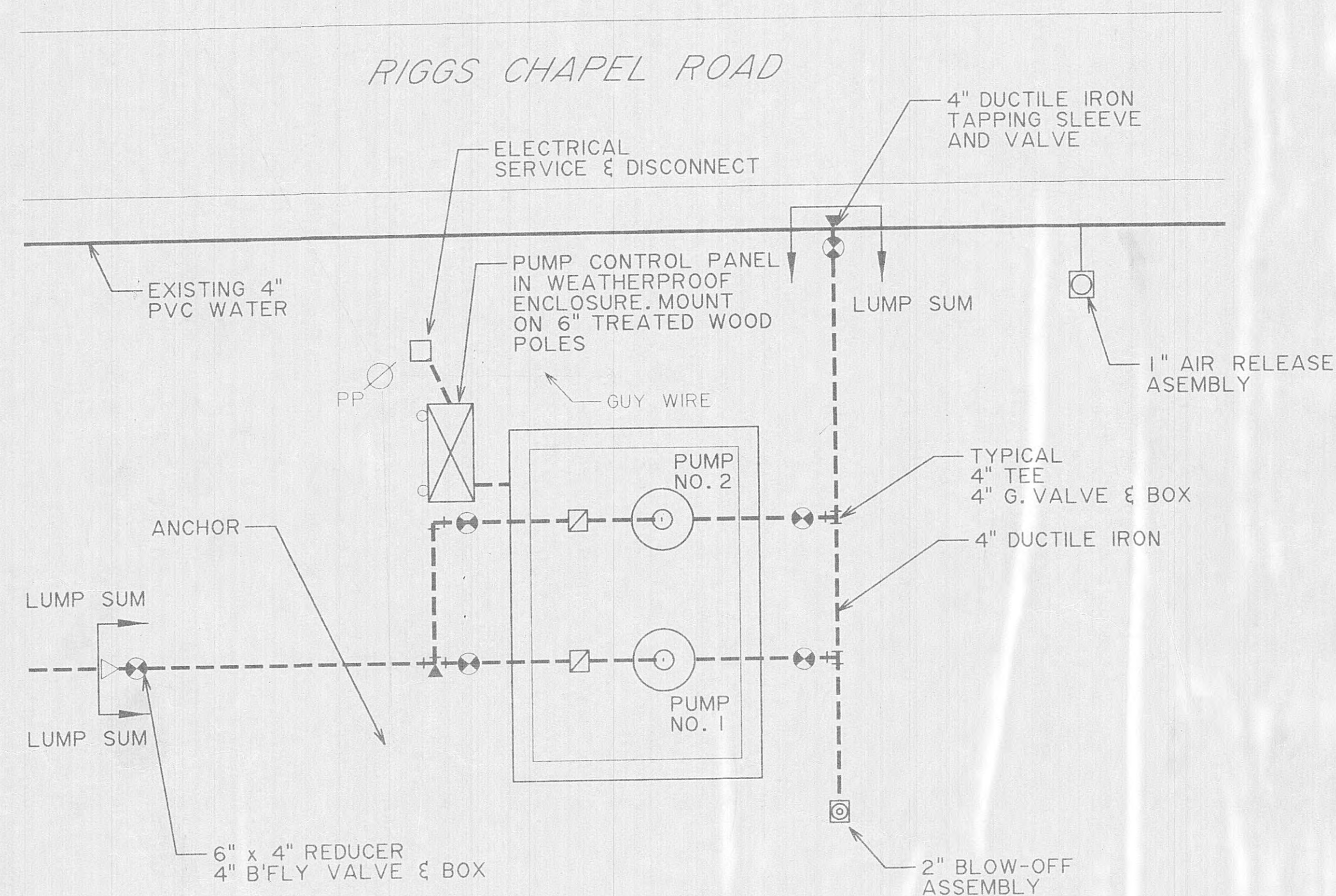


JAMES C. HAILEY & CO.

WOLFE BRANCH
UTILITY DISTRICT
Roane County, Tennessee

BOOSTER PUMP
STATION NO. 1

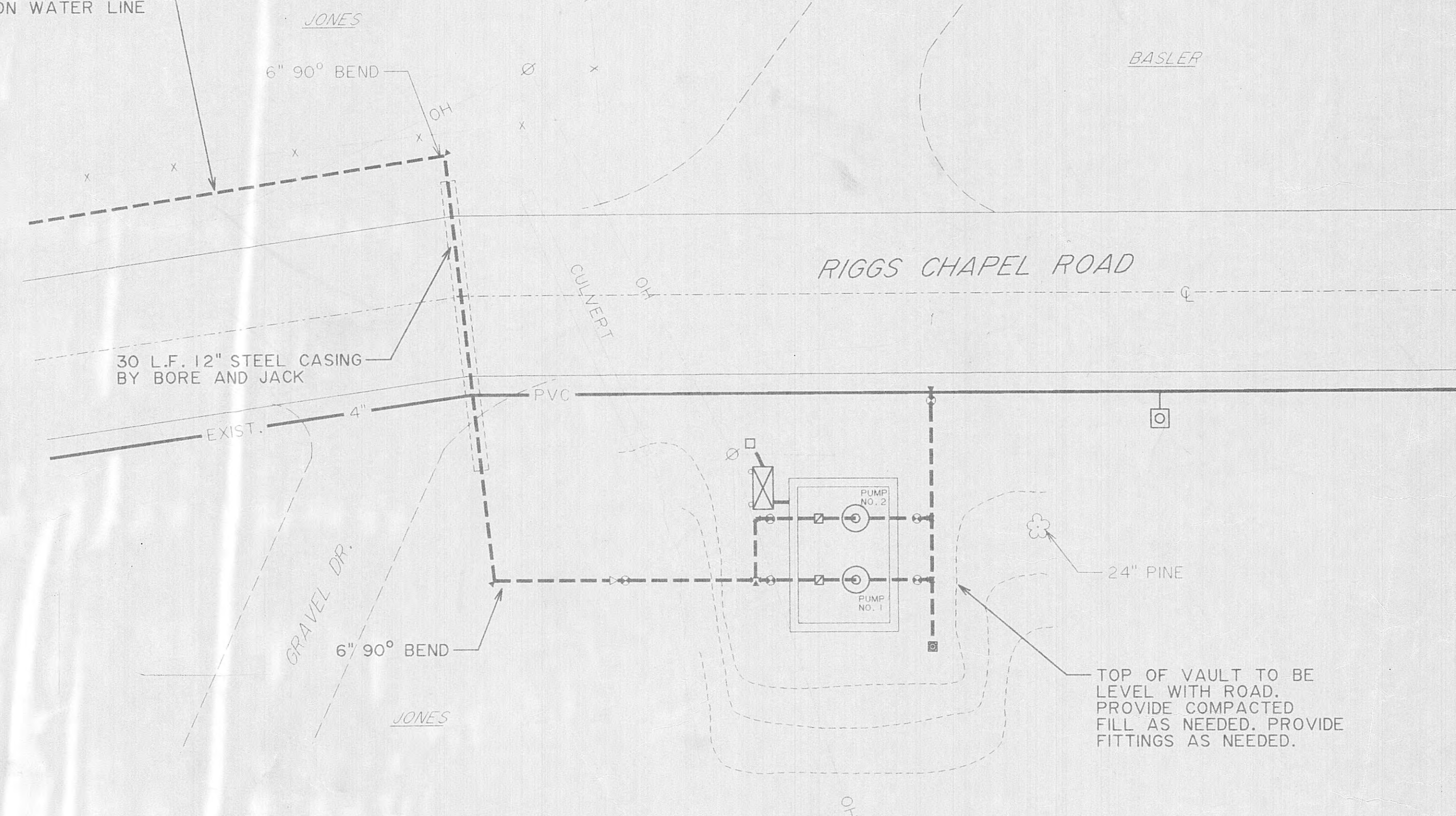
DESCRIPTION	PROPERTY	CHECKED	DATE	STATUS	PROJECT NO.
TCP	LLB	TCP	APR. 2002	AS NOTED	97253



SCHEMATIC LAYOUT
UNDERGROUND DUPLEX BOOSTER PUMP STATION NO. 2

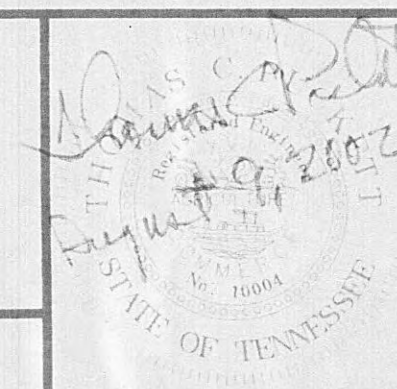
(SEE SPECIFICATIONS)
NOT TO SCALE
ALL COMPONENTS SHOWN ARE LUMP SUM
ITEMS TO BE INCLUDED IN PUMP STATION NO. 2

PROPOSED 6" CLASS 51
DUCTILE IRON WATER LINE



SITE PLAN
BOOSTER PUMP STATION NO. 2
SCALE: 1" = 10'-0"

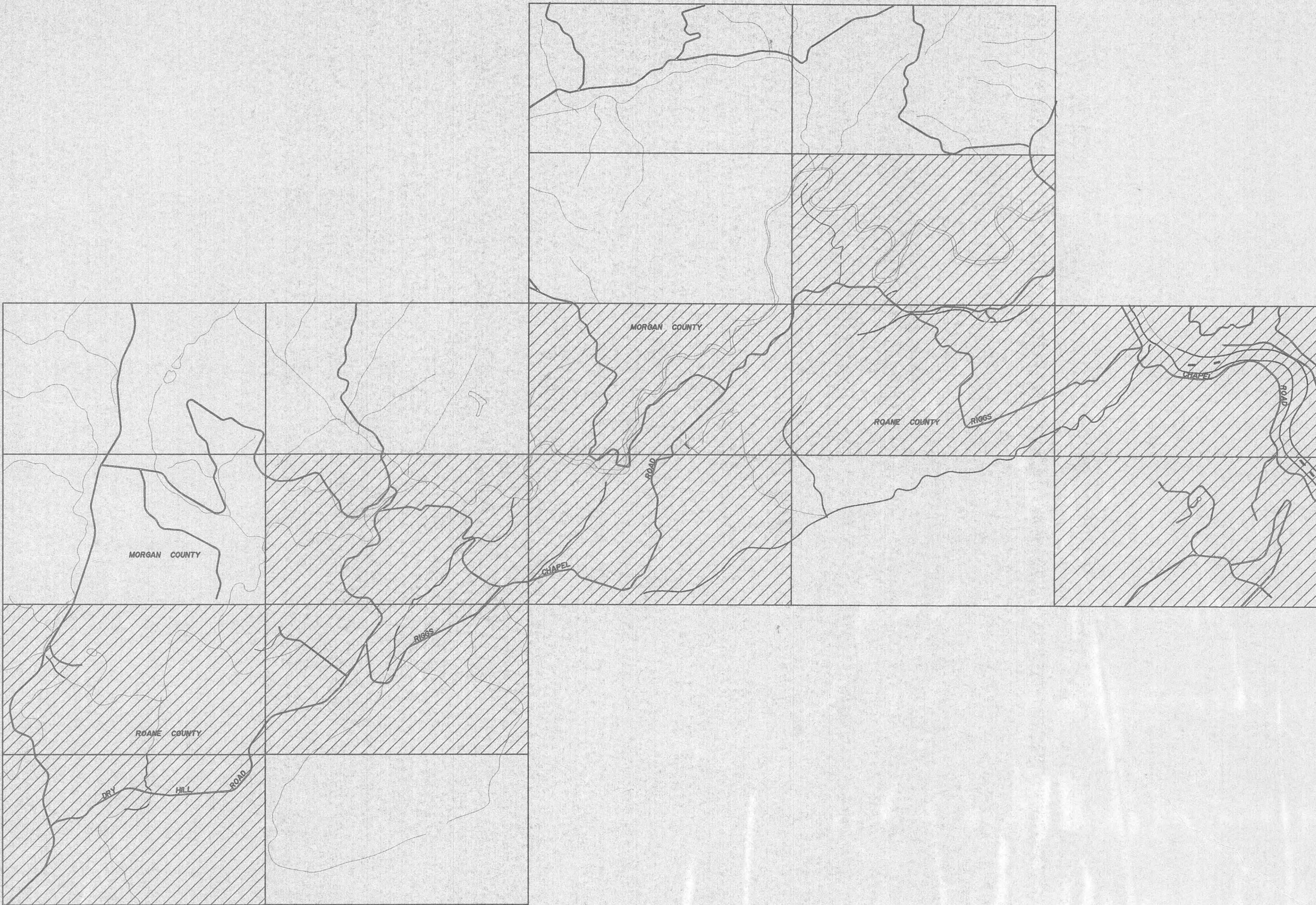
LLB c:\load\morgun\WolfBranch\pump\staPAD 9253.dgn



HAILEY & CO.
ENGINEERS

WOLFE BRANCH
UTILITY DISTRICT
Roane County, Tennessee
TCP LLB TCP

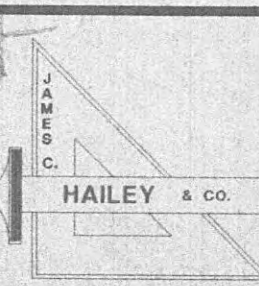
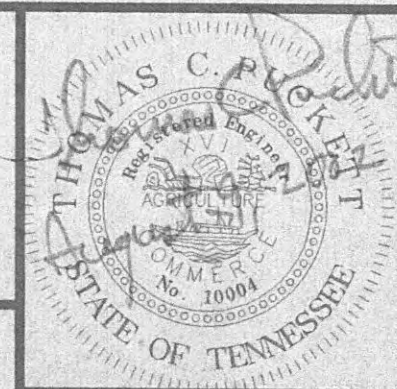
BOOSTER PUMP
STATION NO. 2
APR. 2002 AS NOTED 97253



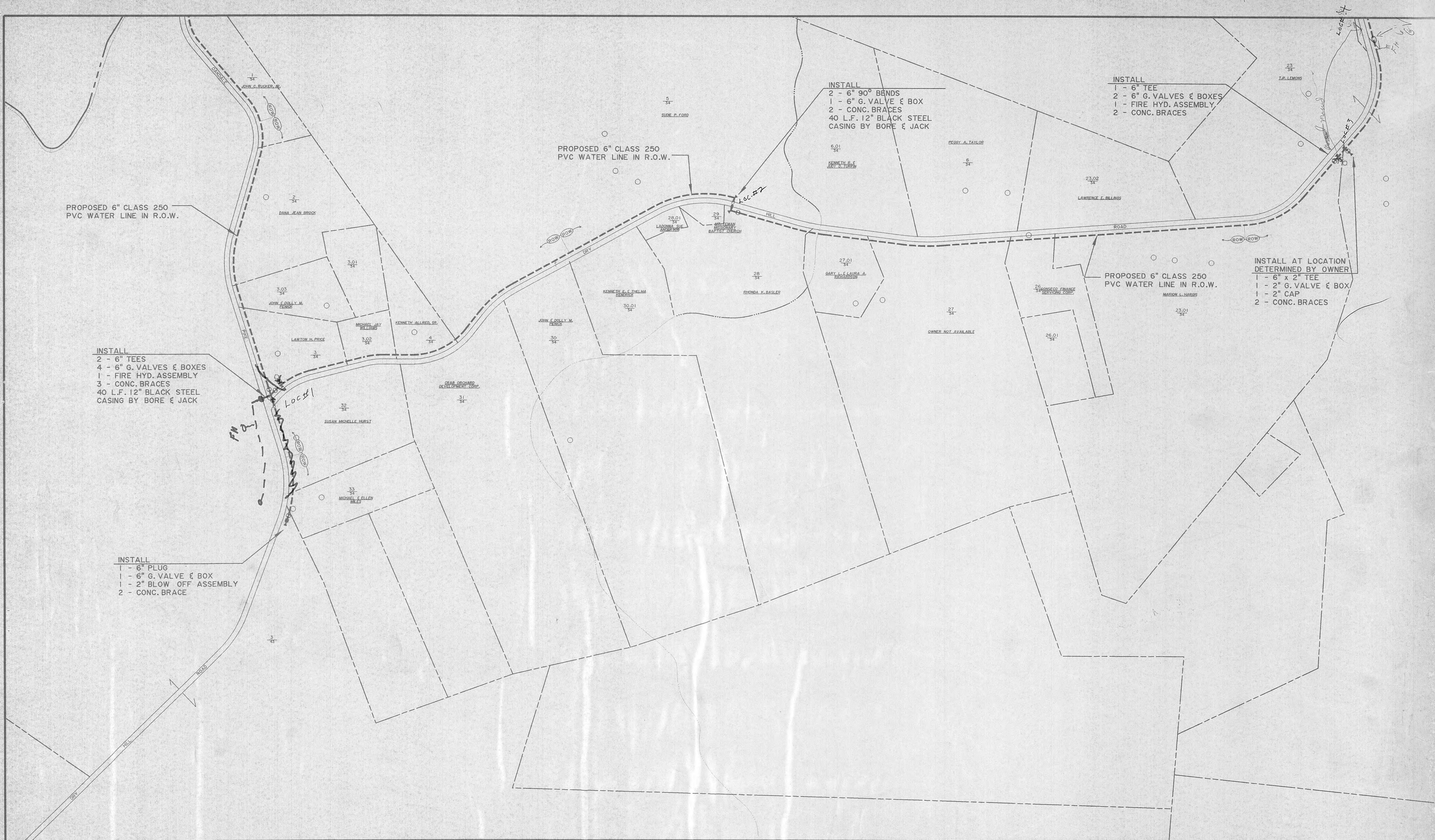
GENERAL NOTES:

- CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATION OF ALL UTILITIES AND CONSIDERATION OF SUCH IN BIDDING THE PROJECT. CONTRACTOR SHALL COORDINATE WITH APPROPRIATE UTILITY (WATER, TELEPHONE, ELECTRIC, ETC.) PRIOR TO EXCAVATION TO AVOID EXISTING UTILITIES AND TO ALLOW FOR POSSIBLE INSTALLATION MODIFICATIONS. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DAMAGE TO ANY UTILITIES.
- CONTRACTOR SHALL OBTAIN ALL PERMITS FROM APPROPRIATE HIGHWAY DEPARTMENTS. CONTRACTOR SHALL CONFORM TO ALL REQUIREMENTS OF THE ROANE OR MORGAN COUNTY HIGHWAY COMMISSION REGULATIONS AND PERMITS:
 - CONTRACTOR SHALL READ AND BE FAMILIAR WITH THE LATEST EDITION OF THE COUNTY HIGHWAY REGULATIONS.
 - CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF EROSION/SEDIMENT CONTROLS.
 - CONTRACTOR SHALL PROVIDE PROPER WARNING DEVICES (i.e. LIGHTS, BARRICADES, SIGNS, ETC.) TO ALERT THE TRAVELING PUBLIC OF WORK IN THE AREA.
 - CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ROAD AND DRAINAGE FACILITIES DAMAGE FOR ANY CONSTRUCTION ACTIVITY, INCLUDING, BUT NOT LIMITED TO, TRANSPORTATION OR DELIVERY OF MATERIAL, EQUIPMENT, CONSTRUCTION MATERIALS, ETC. ONLY RUBBER-TIRED EQUIPMENT IS TO BE USED ON PAVED ROADS.
 - CONTRACTOR SHALL REPAIR ROAD PAVEMENT DAMAGE BY USING A QUALIFIED PAVING COMPANY THAT HAS BEEN APPROVED BY THE COUNTY HIGHWAY DEPARTMENT.
- WATER LINES SHALL BE INSTALLED ON PRIVATE PROPERTY AS SHOWN ON PLANS OR WHEREVER THE DISTRICT CAN OBTAIN EASEMENTS. LOCATION IN GENERAL SHALL BE APPROXIMATELY FIVE FEET (5') BEHIND THE FENCE ROW OR PROPERTY LINE. DEVIATION SHALL BE MADE AS DIRECTED TO AVOID STRUCTURES OR OBSTRUCTIONS.
- WHERE WATERLINES ARE NOTED ON PLANS TO BE INSTALLED ON ROAD RIGHT-OF-WAY, A 4'-0" MINIMUM CLEARANCE BETWEEN THE EDGE OF PAVEMENT AND THE EDGE OF TRENCH SHALL BE MAINTAINED. IF AN OBSTRUCTION IS ENCOUNTERED, CONTRACTOR MAY, WITH RESIDENT INSPECTOR'S APPROVAL, CLOSE TO A 2'-0" CLEARANCE TO CLEAR OBSTACLE. AT NO TIME WILL THE CLEARANCE BE LESS THAN 2'-0" WITHOUT THE PRIOR APPROVAL OF THE COUNTY HIGHWAY SUPERINTENDENT.
- CONTRACTOR TO FIELD VERIFY CASING AND BORE LENGTHS AT ROAD CROSSINGS. ALL WATERLINES SHALL HAVE A MINIMUM COVER OF THIRTY-SIX INCHES (36") UNDER DITCHES AND FORTY-EIGHT INCHES (48") UNDER COUNTY ROADWAYS.
- CONTRACTOR SHALL ATTEMPT TO BORE MAIN LINE ON ALL COUNTY ROADS TO THE SATISFACTION OF THE ENGINEER, DISTRICT AND HIGHWAY SUPERINTENDENT. CONTRACTOR SHALL OPEN CUT MAIN LINE CROSSING ONLY IF BORING IS UNSUCCESSFUL AND APPROVED BY THE COUNTY HIGHWAY SUPERINTENDENT.
- ALL WATERLINES SHALL HAVE A MINIMUM OF THIRTY INCHES (30") OF COVER UNLESS OTHERWISE NOTED. TRENCH WIDTH IN SOIL SHALL BE HELD TO A MINIMUM CONSISTENT WITH PROPER WORKING SPACE FOR ASSEMBLY OF PIPE.
- THE PLANS SHOW DESIRED LOCATION OF THE WATER LINE, VALVES AND APPURTENANCES. SCHEMATIC AND GRAPHIC SYMBOLS SHOWN ON PLANS ARE USED TO INDICATE GENERAL LOCATION BUT ARE NOT DRAWN TO SCALE. ADJUSTMENTS IN THE FIELD ARE TO BE MADE BASED ON EASEMENTS, ROAD DITCHES, CULVERTS, GROUND PROFILE OR OTHER OBSTRUCTIONS, WHICH WOULD IMPROVE LAYING CONDITIONS OR DECREASE INCONVENIENCE TO PROPERTY OWNERS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR STAKING WATER LINE ROUTE PRIOR TO TRENCHING. AFTER THE PROPOSED LOCATION OF THE PIPELINE HAS BEEN ESTABLISHED AND APPROVED, THE CONTRACTOR SHALL PROVIDE SUFFICIENT STAKES AND LINES TO GUIDE THE EQUIPMENT OPERATORS AND TO ASSURE PROPER TRENCHING ALIGNMENT.
- STATION NUMBERS SHOWN ON PLANS ARE APPROXIMATE AND FOR REFERENCE ONLY. THE LOCATION OF VALVES, TEES, END OF LINES, APPURTENANCES, ETC., SHALL BE AS DIRECTED IN THE FIELD BY ENGINEER OR DISTRICT. CONTRACTOR SHALL OBTAIN APPROVAL OF OWNER FOR EXACT LOCATION OF ALL FIRE HYDRANTS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ALL REPAIRS AND/OR REPLACEMENT OF EXISTING DRAINAGE FACILITIES, ROADS, DRIVES, DRAINS, STRUCTURES, YARDS, FENCES, MAILBOXES, ETC., DISTURBED DURING CONSTRUCTION. NO ADDITIONAL COMPENSATION WILL BE MADE FOR THIS WORK.
- CRUSHED STONE BACKFILL SHALL BE USED WHERE LINES ARE LOCATED UNDER EXISTING AND PROPOSED DRIVING SURFACES (ROADS, DRIVEWAYS, ETC.).
- METER LOCATIONS SHALL BE AS DIRECTED IN FIELD BY ENGINEER OR DISTRICT.
- ALL SERVICE LINES ON PAVED ROADS ARE TO BE INSTALLED BY BORE & JACK. NO OPEN CUTTING WILL BE ALLOWED WITHOUT PRIOR APPROVAL OF THE COUNTY HIGHWAY SUPERINTENDENT. SERVICE PIPE SHALL BE CONTINUOUS FROM MAIN TO METER YOKE. ALL SERVICE CONNECTIONS SHALL BE TESTED AND DISINFECTED WITH WATER MAINS.
- CONTRACTOR TO LOCATE AND VERIFY EXISTING FACILITIES AT CONNECTIONS OR TIE-INS PRIOR TO COMMENCEMENT OF CONSTRUCTION OF NEW FACILITIES TO ALLOW FOR POSSIBLE MODIFICATIONS. ADJUSTMENTS WILL BE MADE ACCORDINGLY WITH APPROVAL OF THE ENGINEER.
- SOIL EROSION: THE CONTRACTOR SHALL ADHERE TO ALL MEASURES AS REQUIRED BY FEDERAL, STATE AND LOCAL STANDARDS DURING THE LIFE OF THE PROJECT TO CONTROL EROSION AND WATER POLLUTION. CONTRACTOR SHALL CONFORM TO ALL CONDITIONS AND TERMS OF THE AQUATIC RESOURCE ALTERATION PERMITS.
- CONTRACTOR SHALL OBTAIN APPROVAL FROM COUNTY HIGHWAY DEPARTMENT OR TENNESSEE DEPARTMENT OF TRANSPORTATION (TDOT) PRIOR TO START OF CONSTRUCTION OF HIGHWAY CROSSINGS AND SHALL CONFORM TO ALL REQUIREMENTS OF TDOT PERMIT AND STANDARDS. SAFETY PROCEDURES AND ALL CONSTRUCTION ACTIVITIES SHALL BE IN ACCORDANCE WITH TDOT STANDARDS AND CONDITIONS.
- THE CONTRACTOR SHALL SCHEDULE AND COORDINATE THE WORK WITH THE UTILITY DISTRICT. A CONSTRUCTION SCHEDULE SHALL BE PREPARED BY THE CONTRACTOR AND SUBMITTED TO THE UTILITY DISTRICT FOR APPROVAL. PARTICULAR ATTENTION SHALL BE GIVEN TO THE TIE-IN.
- CONTRACTOR SHALL VERIFY THE LOCATION AND ELEVATIONS OF PROPOSED FACILITIES AND ADJUST WATER LINE FACILITIES AS APPROVED BY DISTRICT AND THE ENGINEER.
- PROVIDE CONCRETE CAP OR CASEMENT AS DIRECTED AT STREAMS AND DRAINAGE DITCHES. INSTALL RIP RAP STONE IN STREAMS AND DITCHES AS NEEDED TO PREVENT EROSION.
- CONTRACTOR SHALL REMOVE, STORE AND REPLACE ALL TOPSOIL IN AFFECTED AREAS. ANY DEFICIENCY SHALL BE PROVIDED BY CONTRACTOR.
- CONTRACTOR SHALL RESTORE ALL AREAS DISTURBED BY CONSTRUCTION ACTIVITIES WITH SEED, FERTILIZER AND STRAW AND SHALL MAINTAIN UNTIL ACCEPTABLE GROWTH OF GRASS IS OBTAINED.
- PROTECTION OF LIVESTOCK - WHERE CONSTRUCTION ACTIVITIES OCCUR ON PRIVATE EASEMENT AND WHERE LIVESTOCK, SUCH AS CATTLE, HORSES, ETC., ARE PRESENT, IN ORDER TO PROTECT THE LIVESTOCK FROM HARM OF DAMAGE, THE CONTRACTOR SHALL COORDINATE ALL CONSTRUCTION ACTIVITIES WITH THE PROPERTY OWNER, AND CONTRACTOR SHALL PROVIDE, FURNISH AND INSTALL APPROPRIATE MEASURES TO PROTECT LIVESTOCK THAT ARE SATISFACTORY TO AND APPROVED BY THE PROPERTY OWNER.
- CONTRACTOR SHALL CONFORM TO ALL CONDITIONS AND TERMS OF APPROPRIATE AQUATIC RESOURCE ALTERATION PERMITS AND WATER QUALITY CONTROL PERMITS.

LLB in local Morgan Wolf Branch map 722.dgn



WOLFE BRANCH UTILITY DISTRICT Roane County, Tennessee			WATER LINE ADDITIONS KEY MAP		
DESIGN	DRAWN	CHECKED	DATE	SCALE	PROJECT NO.
TCP	LLB	TCP	APR. 2002	NONE	97253



<table border="1"><tr><td></td><td>3</td><td>4</td></tr><tr><td></td><td>2</td><td></td></tr><tr><td></td><td></td><td></td></tr></table>				3	4		2						WOLFE BRANCH UTILITY DISTRICT Roane County, Tennessee		WATER LINE ADDITIONS RIGGS CHAPEL ROAD		2
	3	4															
	2																
DESIGN TCP	DRAWN LLB	CHECKED TCP	DATE APR. 2002	SCALE 1" = 200'	PROJECT NO. 97253												

SHEET 2 OF 14

CONNECT TO EXISTING
4" PVC WATER LINE AND
INSTALL
1 - 4" G. VALVE & BOX
1 - 6" G. VALVE & BOX
1 - 6" x 4" REDUCER
30 L.F. 12" BLACK STEEL
CASING BY OPEN CUT

STATE OF TENNESSEE
13
MORGAN-165

INSTALL
STREAM CROSSING
60 L.F. 6" DUCTILE
IRON WATER LINE
CONC. CAP

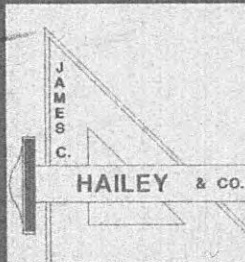
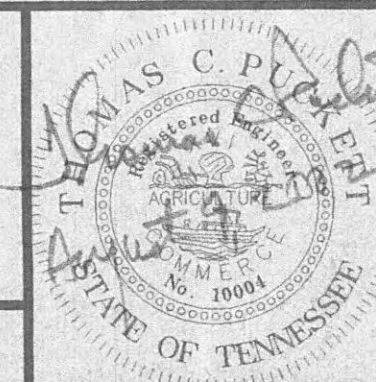
PROPOSED 6" CLASS 250
PVC WATER LINE IN R.O.W.

INSTALL
1 - 6" G. VALVE & BOX

INSTALL
STREAM CROSSING
60 L.F. 6" DUCTILE
IRON WATER LINE
CONC. CAP

PROPOSED 6" CLASS 250
PVC WATER LINE IN R.O.W.

		5
	3	4
	2	



WOLFE BRANCH
UTILITY DISTRICT
Roane County, Tennessee

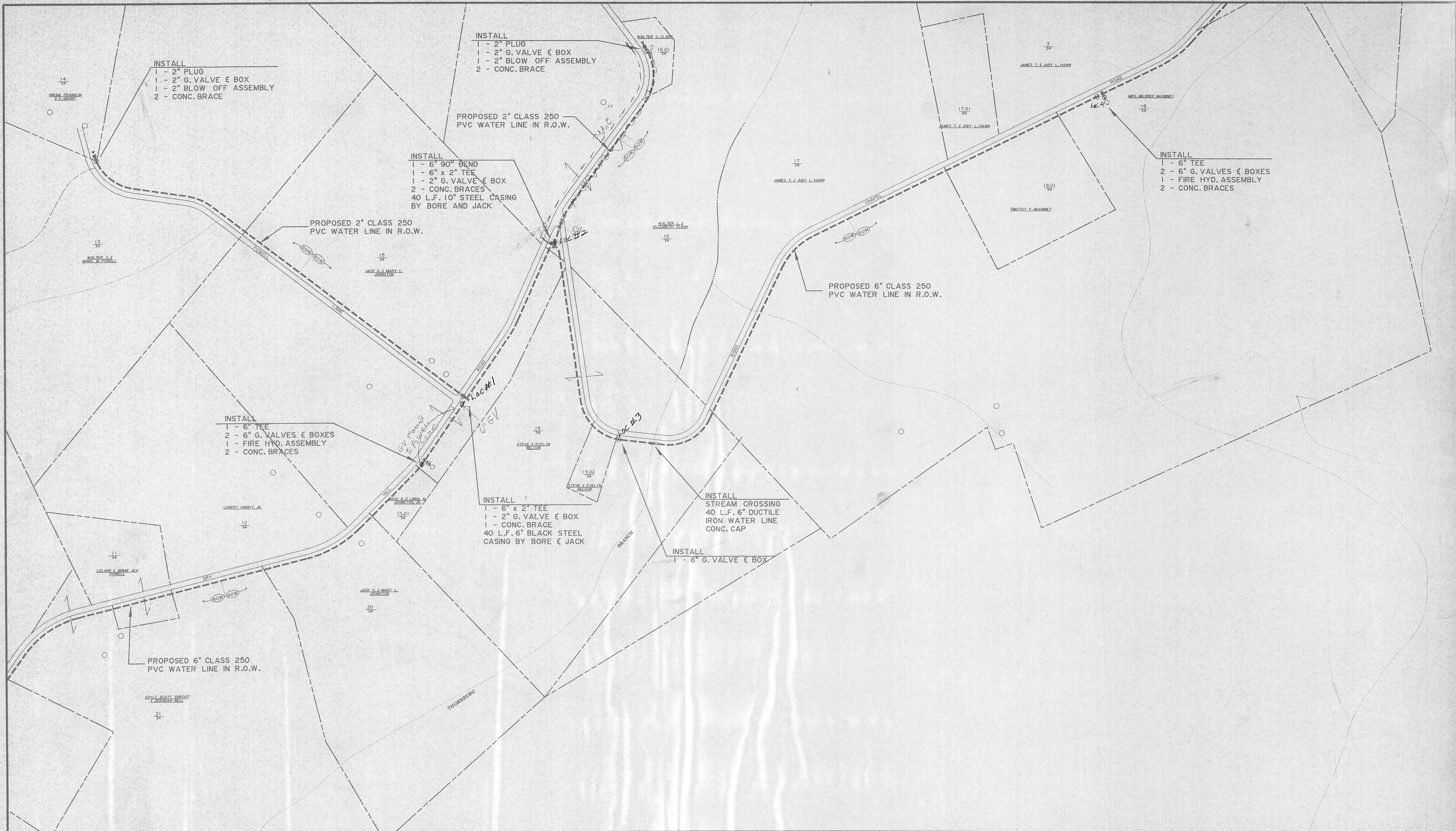
WATER LINE ADDITIONS
RIGGS CHAPEL ROAD

DESIGN	DRAWN	CHECKED	DATE	SCALE	PROJECT NO.
TCP	LLB	TCP	APR. 2002	1" = 200'	97253

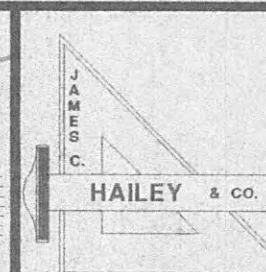
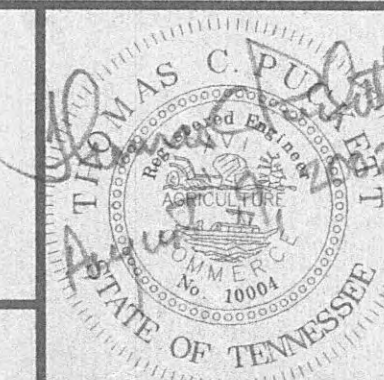
3

34 NW

SHEET 3 OF 14



	5	6
3	4	
2		



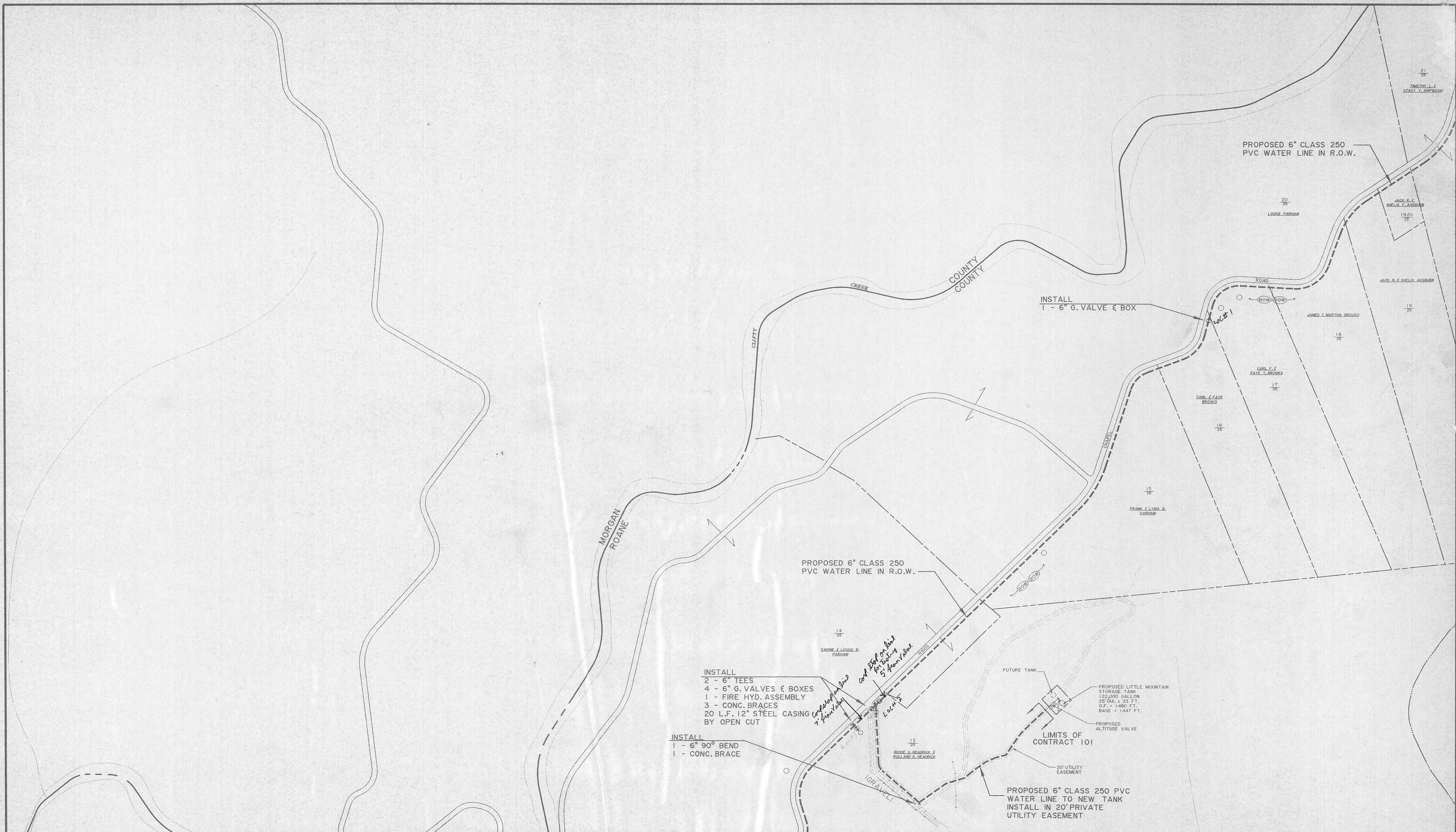
WOLFE BRANCH
UTILITY DISTRICT
Roane County, Tennessee

TCP
LLB
TCP

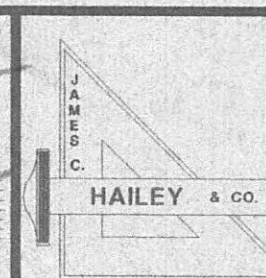
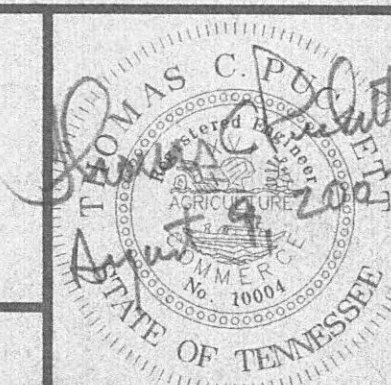
WATER LINE ADDITIONS
RIGGS CHAPEL ROAD

DATE: APR. 2002
SCALE: 1" = 200'
PROJECT NO.: 97253

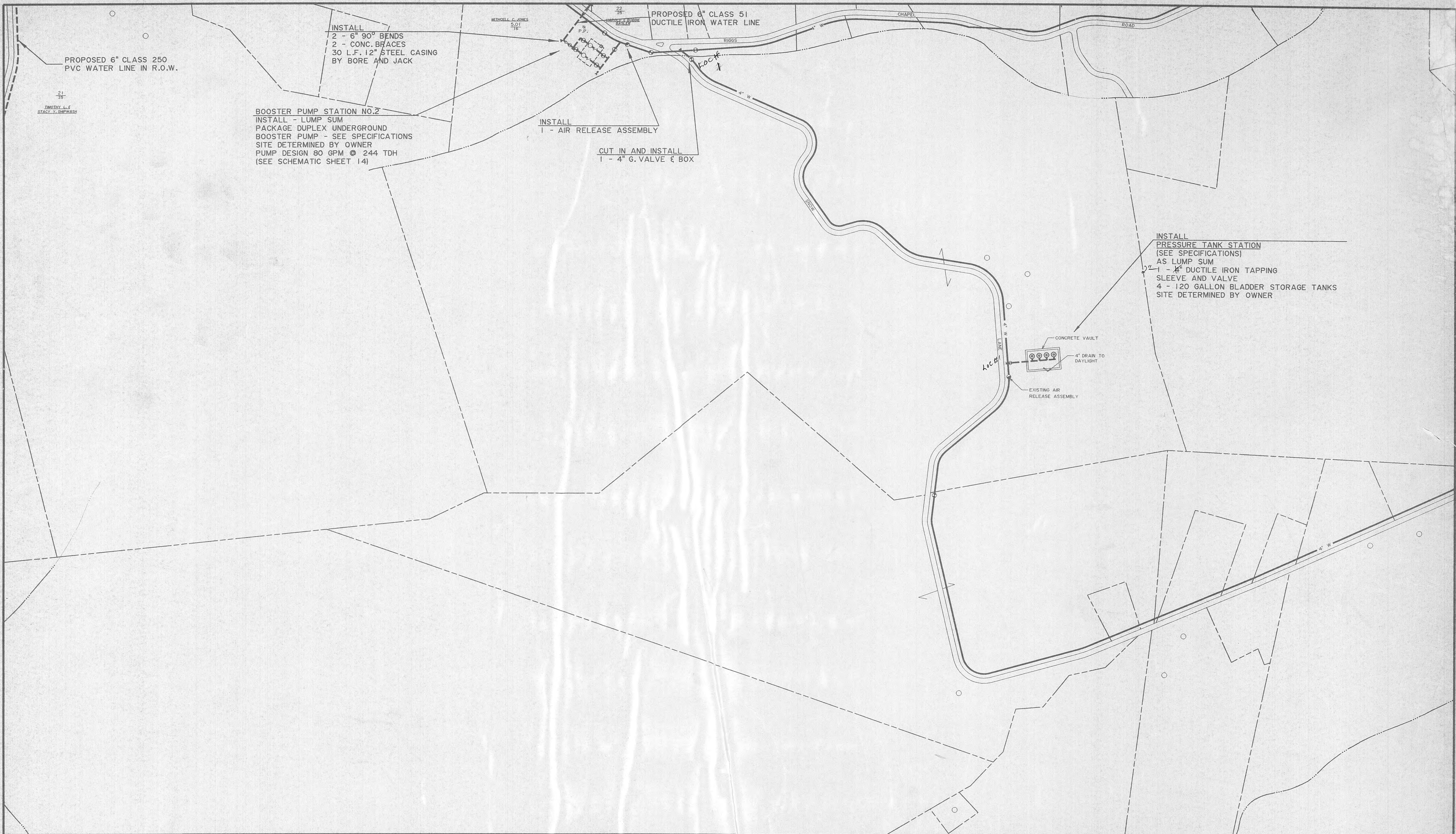
SHEET
4
34 NE



		9
	7	8
5	6	



WOLFE BRANCH UTILITY DISTRICT Roane County, Tennessee			WATER LINE ADDITIONS RIGGS CHAPEL ROAD		
DESIGN TCP	DRAWN LLB	CHECKED TCP	DATE APR. 2002	SCALE 1" = 200'	PROJECT NO. 97253
					SHEET 7 25 NW



PROPOSED 6" CLASS 250
PVC WATER LINE IN R.O.W.

21
25
TIMOTHY L. E.
STACY T. SHAWHAN

INSTALL
2 - 6" 90° BENDS
2 - CONC. BRACES
30 L.F. 12" STEEL CASING
BY BORE AND JACK

BOOSTER PUMP STATION NO. 2
INSTALL - LUMP SUM
PACKAGE DUPLEX UNDERGROUND
BOOSTER PUMP - SEE SPECIFICATIONS
SITE DETERMINED BY OWNER
PUMP DESIGN 80 GPM @ 244 TDH
(SEE SCHEMATIC SHEET 14)

INSTALL
1 - AIR RELEASE ASSEMBLY

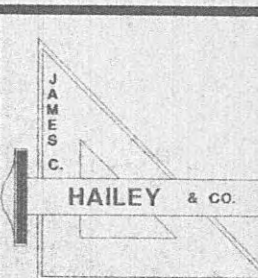
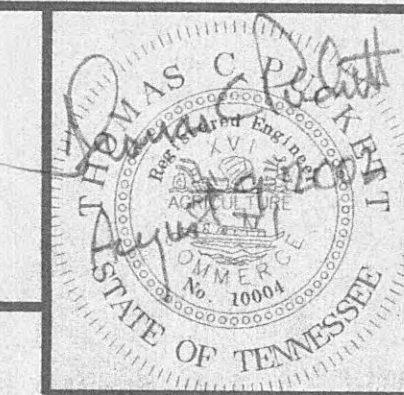
CUT IN AND INSTALL
1 - 4" G. VALVE & BOX

PROPOSED 6" CLASS 51
DUCTILE IRON WATER LINE

INSTALL
PRESSURE TANK STATION
(SEE SPECIFICATIONS)
AS LUMP SUM
1 - 4" DUCTILE IRON TAPPING
SLEEVE AND VALVE
4 - 120 GALLON BLADDER STORAGE TANKS
SITE DETERMINED BY OWNER

CONCRETE VAULT
4" DRAIN TO
DAYLIGHT
EXISTING AIR
RELEASE ASSEMBLY

	9	
7	8	10
6		11



WOLFE BRANCH
UTILITY DISTRICT
Roane County, Tennessee

DESIGN
TCP

DRAWN
LLB

CHECKED
TCP

WATER LINE ADDITIONS
RIGGS CHAPEL ROAD

DATE
APR. 2002

SCALE
1" = 200'

PROJECT NO.
97253

SHEET
8
25 NE