- ALL CONSTRUCTION AND WORKMANSHIP SHALL CONFORM TO THE MOST RECENT ADOPTED VERSION OF THE WEST SOUND UTILITY DISTRICT'S DEVELOPERS EXTENSION MANUAL, UNLESS OTHERWISE NOTED.
- 2. CONTRACTOR TO POTHOLE AND VERIFY EXISTING PIPE CONNECTION MATERIALS AND SIZE.
- 3. ALL JOINTS TO BE MEGALUG AND THRUST BLOCKED.
- 4. CONTRACTOR RESPONSIBLE FOR HOLDING POWER POLES AS NEEDED DURING CONSTRUCTION.
- ALL WATER MAIN, HYDRANT RUNS, AND SERVICES SHALL HAVE 10 GAUGE TRACE WIRE INSTALLED WITH THE WATER LINE ( UNDERGROUND SPLICES WHERE NEEDED ) AND MAGNETIC WATER TAPE WITH THE WATER LINE IN THE TOP 18" - 24" OF THE TRENCH.
- ALL SHUT-DOWNS AND INSPECTIONS WILL BE COORDINATED WITH WEST SOUND UTILITY DISTRICT, 360-876-2545

### WATER GENERAL NOTES

### **ABANDONMENT OF WATER LINES:**

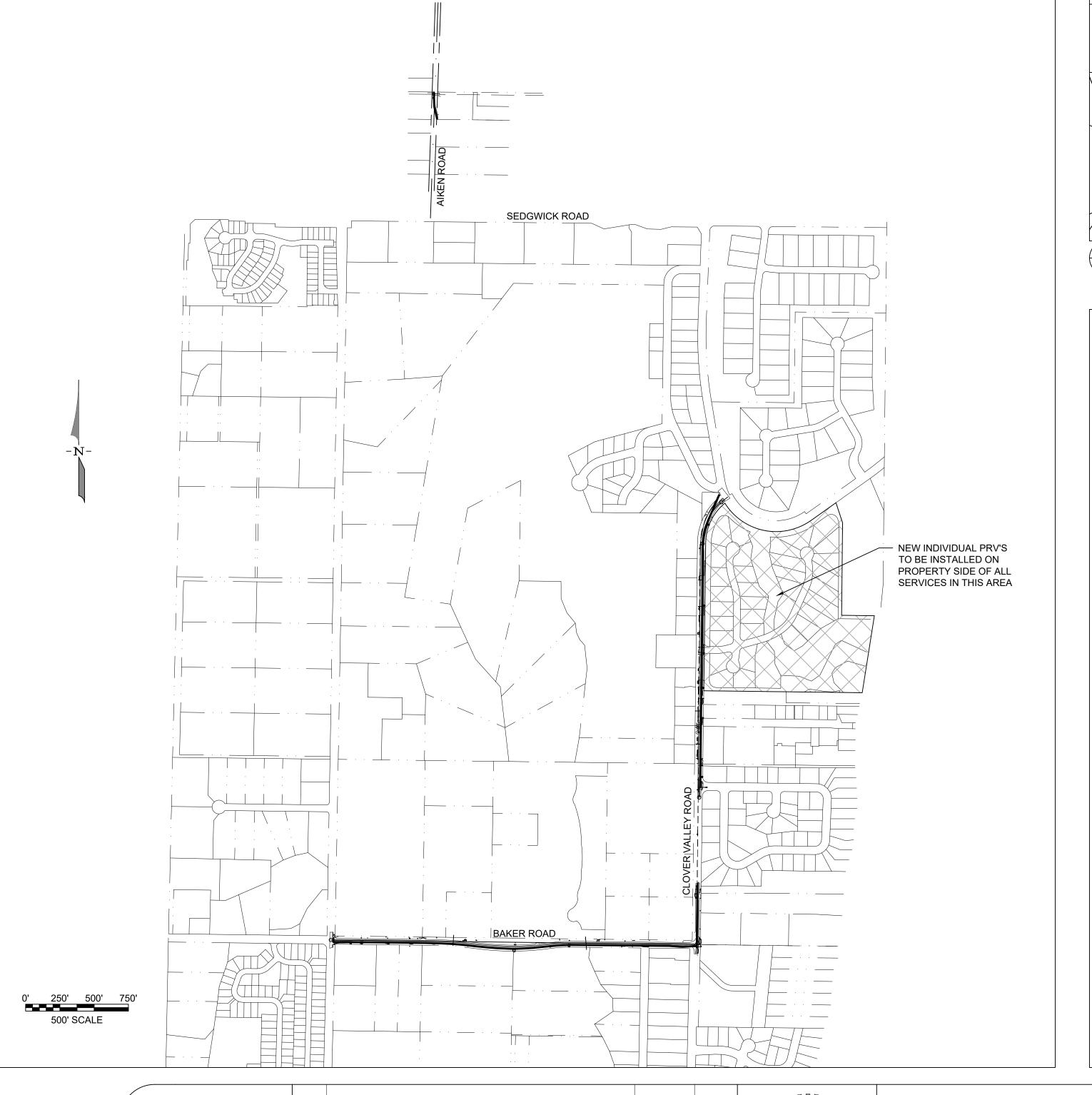
- ABANDONING AND GROUTING OF WATER LINES MUST NOT OCCUR UNTIL ALL EXISTING WATER MAINS AND SERVICES HAVE BEEN TRANSFERRED TO THE NEW WATER MAIN. THE CONTRACTOR IS RESPONSIBLE FOR THE SATISFACTORY COORDINATION OF THE PIPE ABANDONMENTS WITH OTHER CONSTRUCTION ACTIVITIES IN THE AREA. DELAYS IN WORK RESULTING FROM LACK OF COORDINATION WILL NOT BE CAUSE FOR ADDITIONAL COMPENSATION,
- ANY WORK INVOLVING OR IMPACTING ASBESTOS CONCRETE PIPE MUST BE IN ACCORDANCE WITH THE PROCEDURES OUTLINED IN THE APPROVED SPECIFICATIONS FOR THIS PROJECT AND WILL COMPLY WITH ALL FEDERAL, STATE, AND LOCAL LAWS, ORDINANCES AND REGULATIONS REGARDING THE MANAGEMENT OF ASBESTOS CONTAINING MATERIALS.
- COORDINATE WITH WESTSOUND UTILITY DISTRICT (WSUD) FOR WRITTEN NOTIFICATIONS OF WATER SERVICE INTERRUPTION TO ALL AFFECTED ADDRESSES 1 WEEK IN ADVANCE.
- EXCAVATE TO EXPOSE WATER MAINS AND/OR SERVICE LINES AS NEEDED FOR WORK TO BE PERFORMED BY WSUD. WSUD CREWS TO PERFORM WATER MAINS OPERATION OF ISOLATING NECESSARY VALVES. COORDINATE WITH WSUD INSPECTOR IN ADVANCE TO SCHEDULE WORK.
- REMOVE ALL WATER LINE APPURTENANCES SUCH AS HYDRANTS, VALVES, AND VALVE CASING AND CASTINGS. THESE APPURTENANCES MUST BE RETURNED TO THE DESIGNATED WSUD
- WHERE SHOWN IN THE PLANS OR WHERE DESIGNATED BY THE ENGINEER, EXISTING PIPES SHALL BE SECURELY SEALED AT THE PIPE ENDS FOR A DISTANCE OF THE GREATER OF 2 DIAMETERS OR 12 INCHES WITH COMMERCIAL CEMENT CONCRETE.OR GROUT. ENSURE THAT ALL PIPELINES TO BE ABANDONED HAVE A MINIMUM OF A THREE FOOT SEPARATION FROM THE LIVE PORTION OF THE WATER MAIN (A SECTION REMOVED) LINE FOR PIPES 4" INCHES AND LARGER IN
- BACKFILL AND RESTORE THE ROADWAY IN ACCORDANCE WITH WSUD STANDARDS WHEN WORK ON THE WATER MAIN, VALVE OR SERVICE IS COMPLETE. PRIOR APPROVAL BY WSUD IS REQUIRED FOR ANY AFTER-HOUR INSPECTIONS AND/OR SHUTDOWNS.CARE SHALL BE USED IN PLACING THE CONCRETE/GROUT IN THE PIPE TO SEE THAT THE OPENING OF THE PIPE IS COMPLETELY FILLED AND THOROUGHLY PLUGGED.
- MAINTAIN AND PROVIDE TO THE ENGINEER OF RECORD REDLINE IMPROVEMENT PLANS TO IDENTIFY ALL FACILITIES THAT HAVE BEEN ABANDONED OR REMOVED FOR RECORD DRAWINGS.

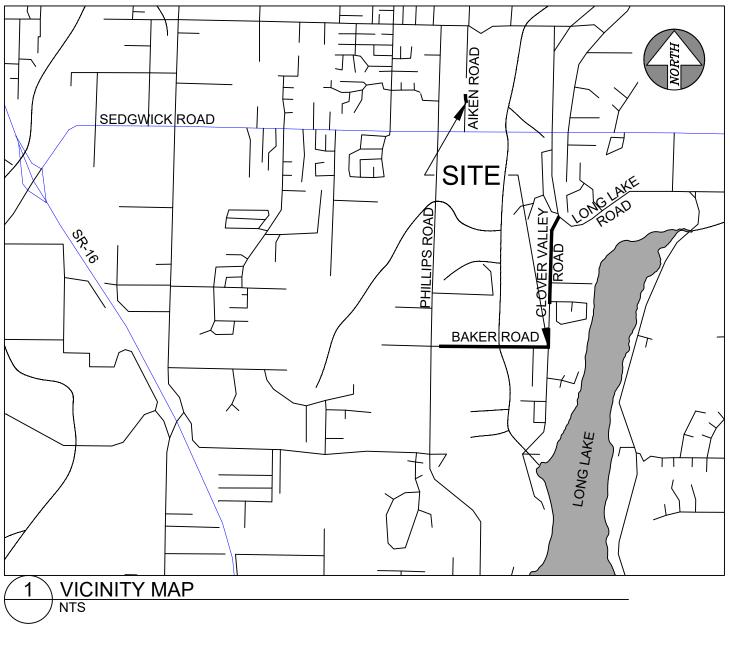
#### 2 ABANDONMENT OF WATER LINES

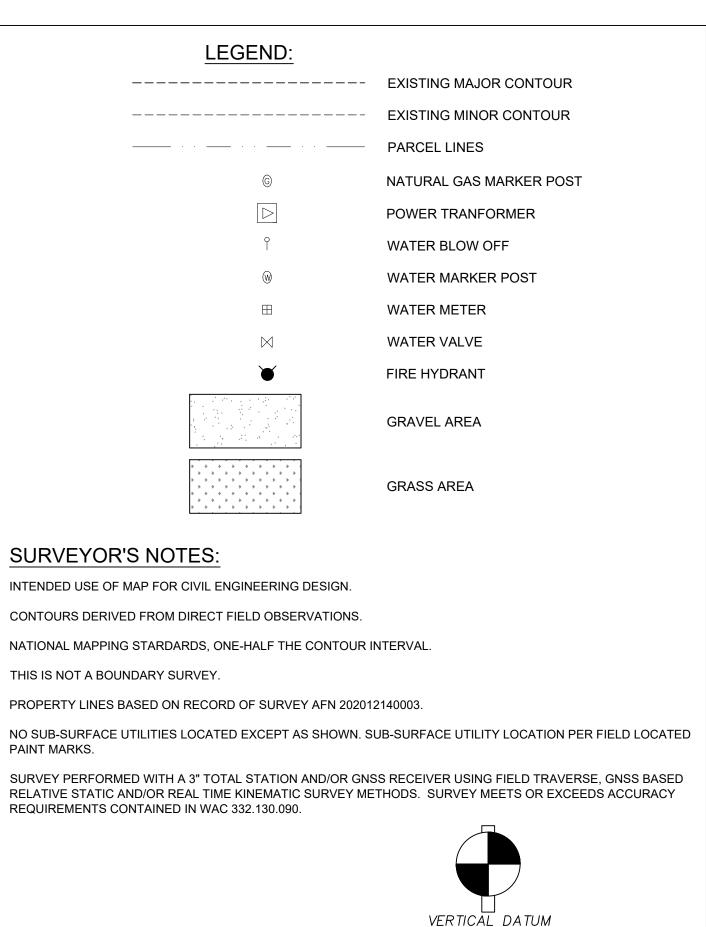
## WSUD - BAKER WATER MAIN

### COVER SHEET

A PORTION OF SECTION 7, TOWNSHIP 23 NORTH, RANGE 2 EAST, W.M. KITSAP COUNTY, WASHINGTON







#### MONUMENT REMOVAL PERMIT PROCESS

NO SURVEY MONUMENT SHALL BE REMOVED OR DESTROYED (THE PHYSICAL DISTURBANCE OR COVERING OF A MONUMENT SUCH THAT THE SURVEY POINT IS NO LONGER VISIBLE OR READILY ACCESSIBLE) BEFORE A PERMIT IS OBTAINED FROM THE DEPARTMENT OF NATURAL RESOURCES (DNR), WAC 332-120-030(2) STATES "IT IS THE RESPONSIBILITY OF THOSE PERFORMING CONSTRUCTION WORK OR OTHER ACTIVITY (INCLUDING ROAD AND STREET RESURFACING PROJECTS) TO ADEQUATELY SEARCH THE RECORDS AND THE PHYSICAL AREA OF THE PROPOSED CONSTRUCTION WORK OR OTHER ACTIVITY FOR THE PURPOSE OF LOCATING AND REFERENCING ANY KNOWN OR EXISTING SURVEY MONUMENTS." CONSTRUCTION SHALL NOT COMMENCE UNTIL WAC OUTLINED IN CHAPTER 332-120 IS COMPLIED WITH.



DESCRIPTION

DRAWN BY

### WSUD - BAKER WATER MAIN **COVER SHEET**

### WEST SOUND UTILITY DISTRICT

DATE SEALED 9/30/2021

2924 SE LUND AVENUE PORT ORCHARD, WA 98366 (360) 876 - 2545

SHEET INDEX

SHEET 1 - COVER SHEET

SHEET 5 - WATER DETAILS

SHEET 2 - BAKER ROAD WATER PLAN

SHEET 4 - AIKEN ROAD WATER PLAN

SHEET 3 - CLOVER VALLEY ROAD WATER PLAN

# WestSound Engineering, Inc

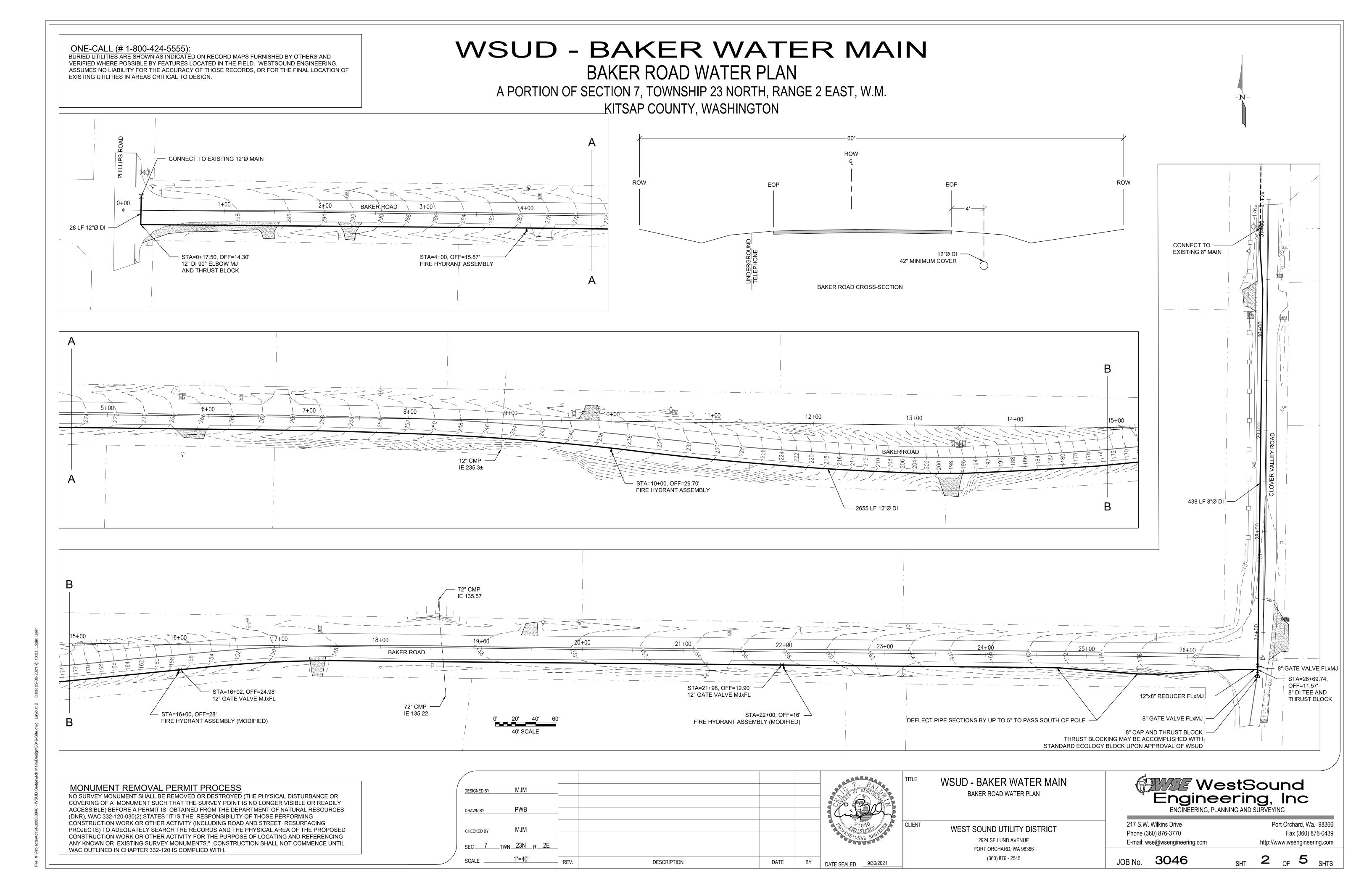
BASED ON GPS OBSERVATION VERTICAL DATUM: NAVD88 WASHINGTON STATE PLANE - NORTH

NAD83-2011 EPOCH 2010.00

217 S.W. Wilkins Drive Phone (360) 876-3770 E-mail: wse@wsengineering.com

Port Orchard, Wa. 98366 Fax (360) 876-0439 http://www.wsengineering.com

JOB No. 3046 \_ OF \_ 5 \_ SHTS



ONE-CALL (# 1-800-424-5555):

BURIED UTILITIES ARE SHOWN AS INDICATED ON RECORD MAPS FURNISHED BY OTHERS AND VERIFIED WHERE POSSIBLE BY FEATURES LOCATED IN THE FIELD. WESTSOUND ENGINEERING, ASSUMES NO LIABILITY FOR THE ACCURACY OF THOSE RECORDS, OR FOR THE FINAL LOCATION OF EXISTING UTILITIES IN AREAS CRITICAL TO DESIGN.

## WSUD - BAKER WATER MAIN

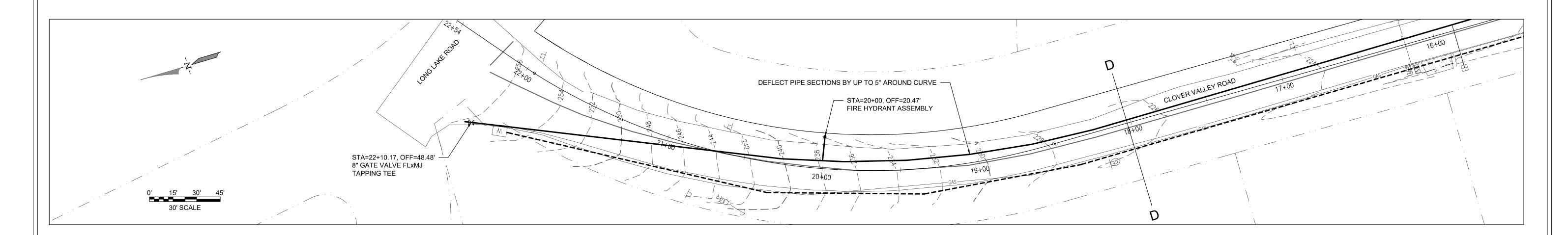
## CLOVER VALLEY ROAD WATER PLAN

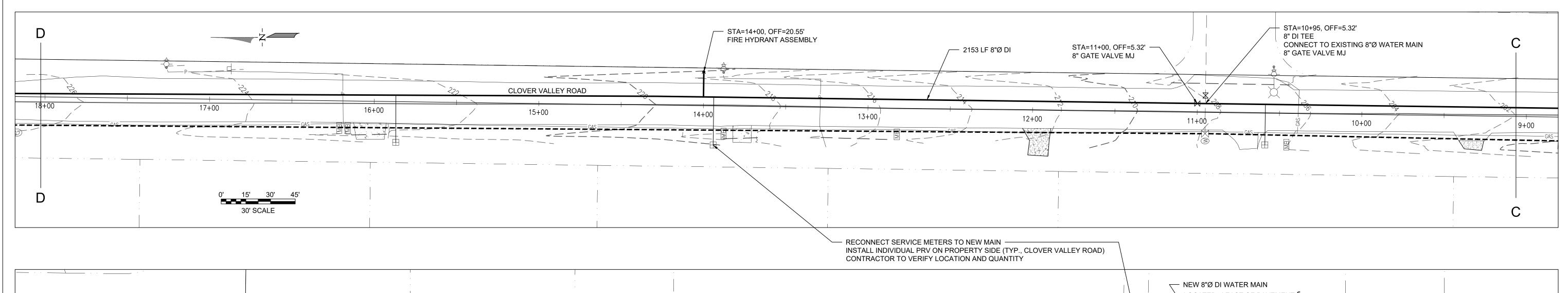
A PORTION OF SECTION 7, TOWNSHIP 23 NORTH, RANGE 2 EAST, W.M. KITSAP COUNTY, WASHINGTON

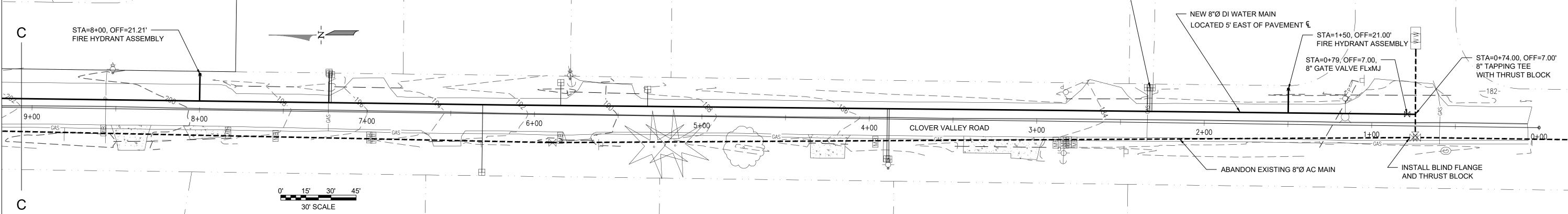
NOTE:

Due to location of new water main within Clover Valley Rd, restoration is anticipated to be a full-lane replacement for the north bound lane from ~sta 0+70 to the end of the project.

Abandoned AC water main to be removed and disposed of off site.

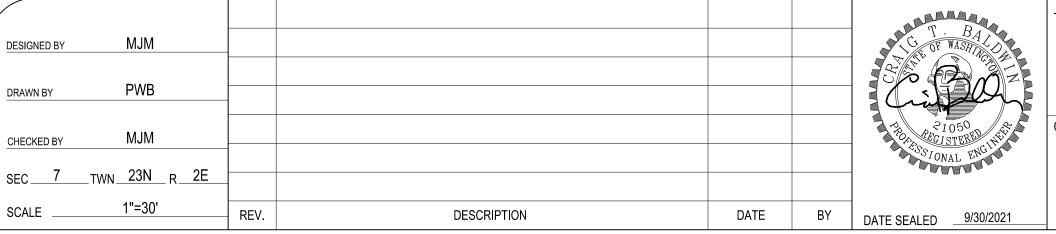






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# WSUD - BAKER WATER MAIN CLOVER VALLEY ROAD WATER PLAN

WEST SOUND UTILITY DISTRICT

2924 SE LUND AVENUE

PORT ORCHARD, WA 98366

(360) 876 - 2545

# WestSound Engineering, Inc ENGINEERING, PLANNING AND SURVEYING

217 S.W. Wilkins Drive
Phone (360) 876-3770
E-mail: wse@wsengineering.com

Port Orchard, Wa. 98366 Fax (360) 876-0439 http://www.wsengineering.com

JOB No. 3046 SHT \_\_\_

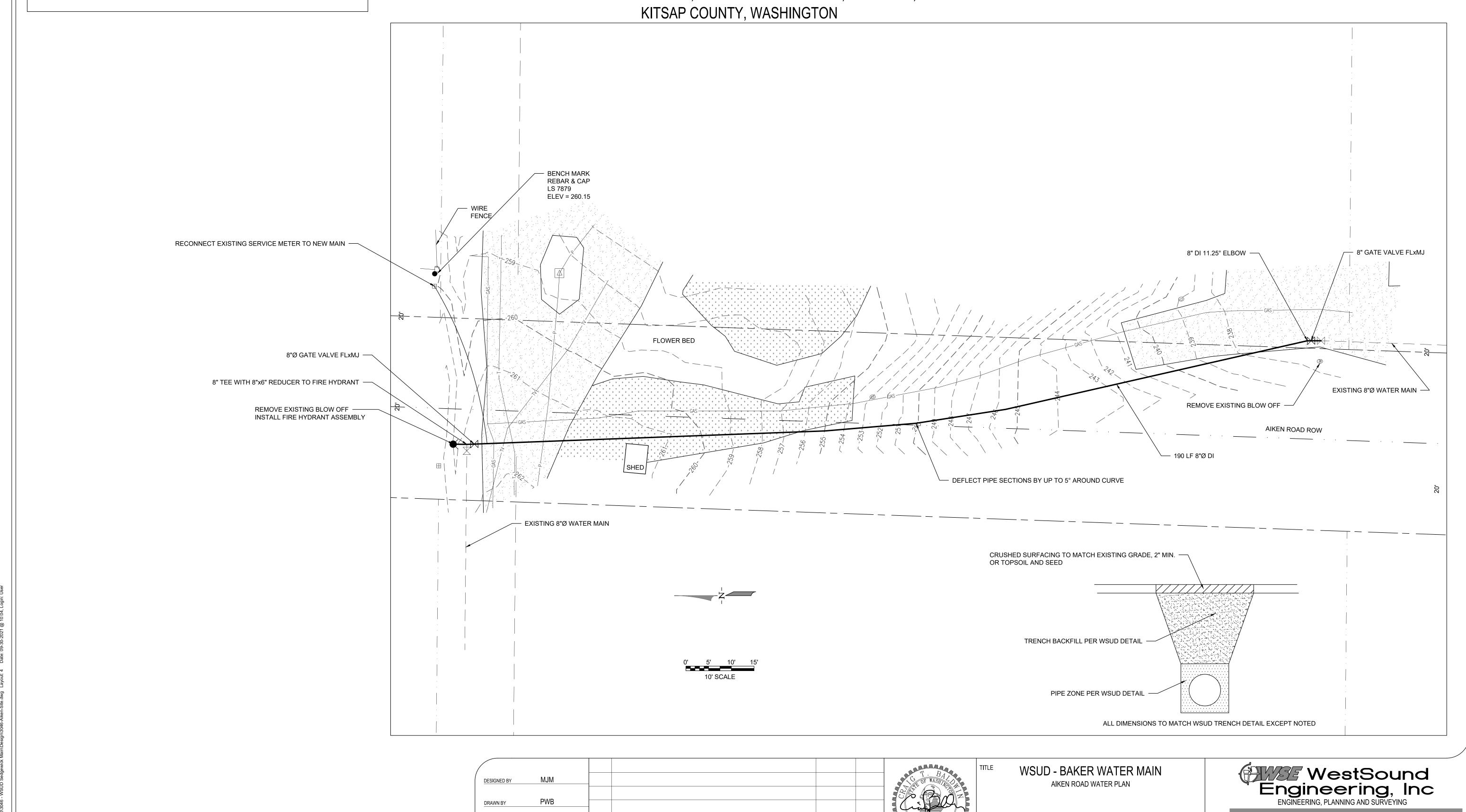
OF \_\_\_\_\_\_\_SH<sup>-</sup>

ONE-CALL (# 1-800-424-5555):
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# WSUD - BAKER WATER MAIN

## AIKEN ROAD WATER PLAN

A PORTION OF SECTION 7, TOWNSHIP 23N NORTH, RANGE 2E, W.M.



DESCRIPTION

SEC 7 TWN 23N R 2E

217 S.W. Wilkins Drive Phone (360) 876-3770 E-mail: wse@wsengineering.com

WEST SOUND UTILITY DISTRICT

2924 SE LUND AVE

PORT ORCHARD, WA 98366

(360) 876 - 2545

Port Orchard, Wa. 98366 Fax (360) 876-0439 http://www.wsengineering.com

JOB No. **3046** 

SHT 4 OF 5 SHTS

West Sound West Sound Utility District UTILITY DEIGTRICT Standard Water Details

Water Main Trench

LBS/SQ. FT.

1,000 2,000 3,000 4,000

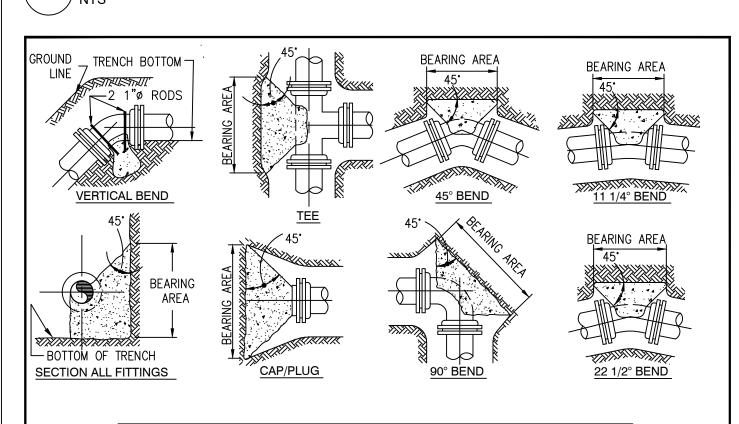
IN MUCK OR PEAT, ALL THRUST SHALL BE RESTRAINED BY PILES OR TIE RODS TO SOLID FOUNDATIONS OR BY REMOVAL OF MUCK

OR PEAT AND REPLACEMENT WITH BALLAST OF SUFFICIENT STABILITY

Thrust Blocking

PEWSED: FEBUARY 2008

1 \ WATER MAIN TRENCH



			BEAR	ING A	REA	REQ	UIRE	D IN	SQU	JARE_	FEET					
		TEE/CAP OR PLUG			90 Degree BEND			45 Degree BEND			22.5 Degree BEND			11.25 Degree BEND		
PIPE SIZE	PIPE SIZE	200	225	250	200	225	250	200	225	250	200	225	250	2	00 225	250
nominal	outside dia.	psi	psi	psi	psi	psi	psi	psi	psi	psi	psi	psi	psi	р	si psi	psi
4	4.80	1.8	2.0	2.3	2.6	2.9	3.2	1.4	1.6	1.7	0.7	0.8	0.9	0.	4 0.4	0.4
6	6.90	3.7	4.2	4.7	5.3	5.9	6.6	2.9	3.2	3.6	1.5	1.6	1.8	0.	7 0.8	0.9
8	9.05	6.4	7.2	8.0	9.1	10.2	11.4	4.9	5.5	6.2	2.5	2.8	3.1	1.	3 1.4	1.6
12	13.20	13.7	15.4	17.1	19.4	21.8	24.2	10.5	11.8	13.1	5.3	6.0	6.7	2.	7 3.0	3.4
16	17.40	23.8	26.8	29.7	33.6	37.8	42.0	18.2	20.5	22.7	9.3	10.4	11.6	4.	7 5.2	5.8
18	19.50	29.9	33.6	37.3	42.2	47.5	52.8	22.9	25.7	28.6	11.7	13.1	14.6	5.	9 6.6	7.3
24	25.80	52.3	58.8	65.3	73.9	83.2	92.4	40.0	45.0	50.0	20.4	22.9	25.5	10.	2 11.5	12.8

HARD SHALE

REVISED: FEBRUARY, 2008

1. ALL CONCRETE BLOCKING SHALL BE POURED AGAINST DRY, UNDISTURBED SUBGRADE. TABLE IS BASED ON 2000 POUNDS PER SQUARE FOOT ALLOWABLE SOIL BEARING. WEAKER SOIL WILL REQUIRE INCREASED 2. KEEP CONCRETE CLEAR OF JOINTS AND ACCESSORIES. USE FORMING 3. HORIZONTAL ANCHOR BLOCKING CONFIGURATIONS FOR FITTINGS NOT

SAFE BEARING LOADS IN LBS/SQ. FT.
THE SAFE SOIL BEARING LOADS SHOWN BELOW ARE FOR SHOWN SHALL HAVE PRIOR APPROVAL. HORIZONTAL THRUSTS WHEN THE DEPTH OF COVER OVER 4. THE SQUARE FOOT AREAS REQUIRED FOR BEARING ARE CALCULATED BY THE FOLLOWING FORMULAS: FORMULA AT TEE & CAP OR PLUG: T=PA TI K=BEARING AREA REQUIRED IN SQUARE FEET FORMULA AT ALL PIPE BENDS: T = 2PA (SIN  $1/2\triangle$ ) WHERE  $\triangle = THE$  DEGREE BEND OF THE FITTING. T. K=BEARING AREA REQUIRED IN SQUARE FEET SAND, SANDY SILT SAND AND GRAVEL CEMENTED W/CLAY

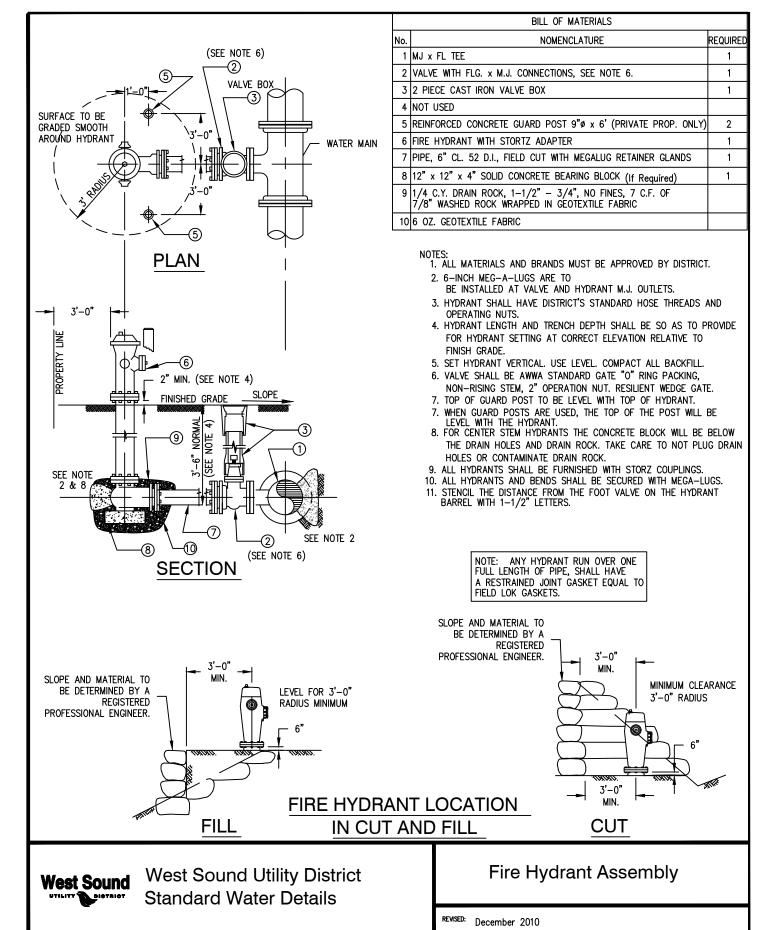
WHERE:
T=THRUST IN POUNDS
P=TEST PRESSURE IN PSI
A=CROSS-SECTIONAL AREA OF PIPE IN SQUARE INCHES K=ASSUMED 2000 PSF SOIL BEARING PRESSURE 5. WRAP FITTINGS WITH VISQUEEN PRIOR TO BLOCK POUR.

West\_Sound West Sound Utility District Standard Water Details

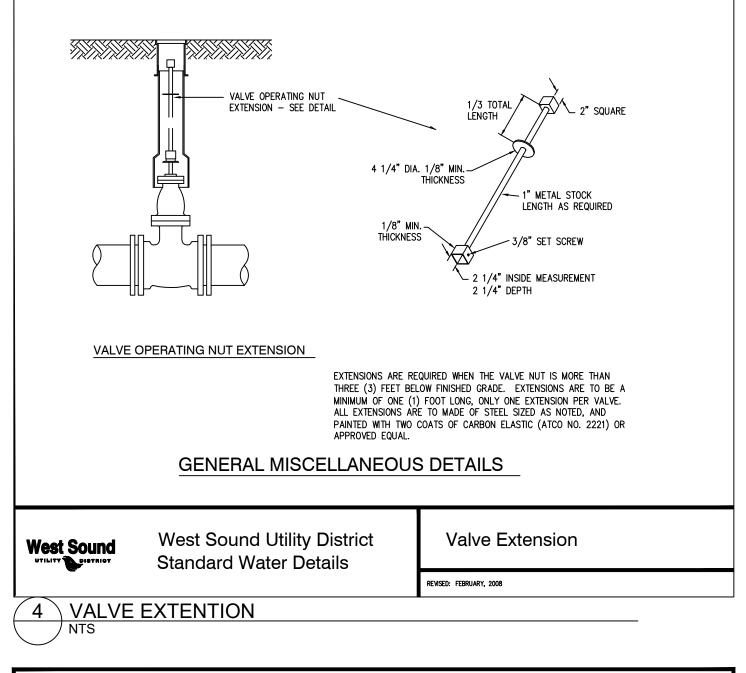
2 THRUST BLOCKING DETAIL

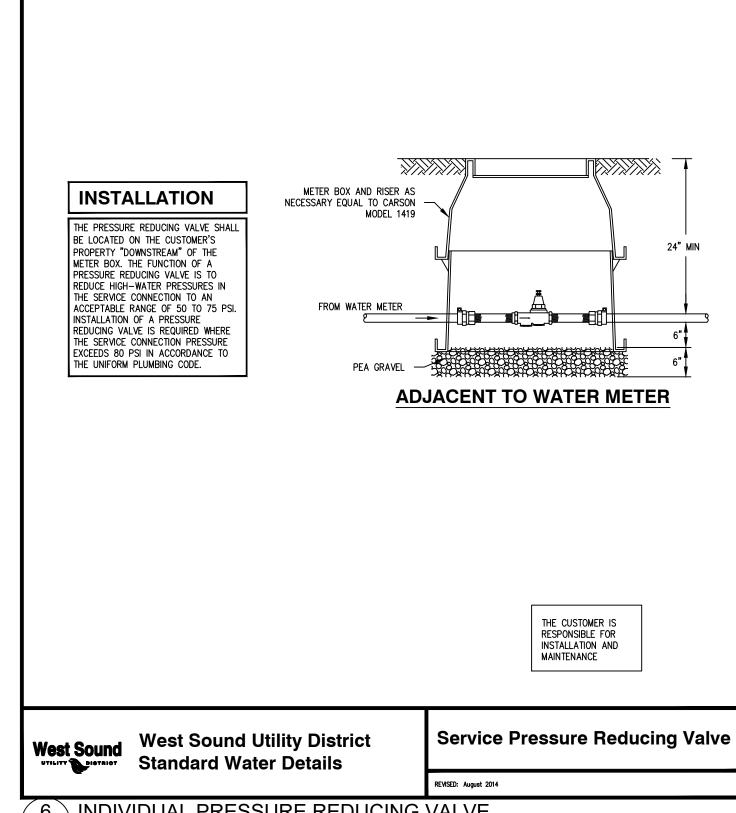
WSUD - BAKER WATER MAIN

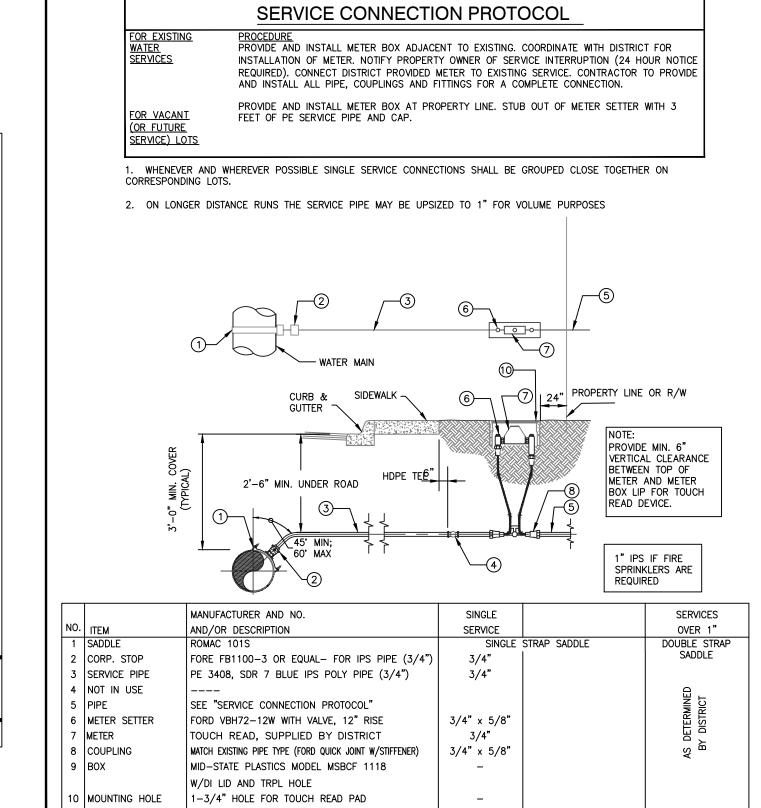
WATER DETAILS



 ${f ackslash}3$   ${ackslash}$  FIRE HYDRANT IN CUT AND FILI



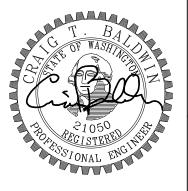




West\_Sound West Sound Utility District Single and Double Water Service Standard Water Details REVISED: MARCH 2019 5 SERVICE DETAIL

√ 6 \ INDIVIDUAL PRESSURE REDUCING VALVE

MJM DESIGNED BY PWB DRAWN BY \_\_<sub>TWN</sub>\_\_23N\_\_<sub>R</sub>\_\_2E **DESCRIPTION** DATE SEALED \_\_\_\_9/30/2021



WSUD - BAKER WATER MAIN WATER DETAILS

WEST SOUND UTILITY DISTRICT

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JOB No. 3046

\_ of \_**5**\_ SHT \_\_\_**5**\_\_\_