

# WATER MAIN REPLACEMENT PROJECT 2013

## PW - 1219 / 1303 / 1304/ 1305

### GENERAL CONSTRUCTION NOTES

ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE CITY OF WEST LINN DESIGN AND CONSTRUCTION STANDARDS AND ALL APPLICABLE LOCAL STATE AND FEDERAL CODES AND REGULATIONS.

PROJECTS TO BE COMPLETED IN THE ORDER LABELED ON THE MAP. NO MORE THAN TWO PROJECTS TO BE ACTIVE AT THE SAME TIME. IN ORDER TO START PROJECT #3 - PROJECT #1 HAVE TO BE COMPLETED AND ACCEPTED BY THE CITY. THE SAME APPLIES TO PROJECT #4.

#### TRAFFIC CONTROL

- ① Install necessary traffic control measures in accordance with the current MUTCD Manual prior and during construction.
- ② Full roadway closure shall not be permitted without City Manager approval.
- ③ Trench within pavement must be backfilled and covered with cold mix or/and with steel plate at the end of each working day without exception

#### WORKING HOUR

- ① 7:00 AM - 7:00 PM Monday - Friday
- 9:00 AM - 5:00 PM Saturday - Sunday

#### PROTECTION OF PROPERTY AND RESTORATION

- ① Protect all public and private property, insofar as it may be endangered by operations and take every reasonable precaution
- ② Restore and bear the cost of any public or private improvement, facility, structure, or land and landscaping which is damaged or injured directly or indirectly by or on account of an act, omission, or neglect in the execution of the work.
- ③ Restore to a condition substantially equivalent to that existing before such damage or injury occurred, by repairing, rebuilding, or otherwise effecting restoration thereof, or if this is not feasible, make a suitable settlement with the Owner of the damage property.

#### EROSION CONTROL NOTES

- ① Install necessary erosion control measures and BMP'S in accordance with Clackamas County Erosion Prevention Planning and Design Manual prior to construction.

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#### PROJECT MANAGER:

Boris Piatski, P.E.  
 Phone: (503)722-5519  
 email: bpiatski@westlinnoregon.gov

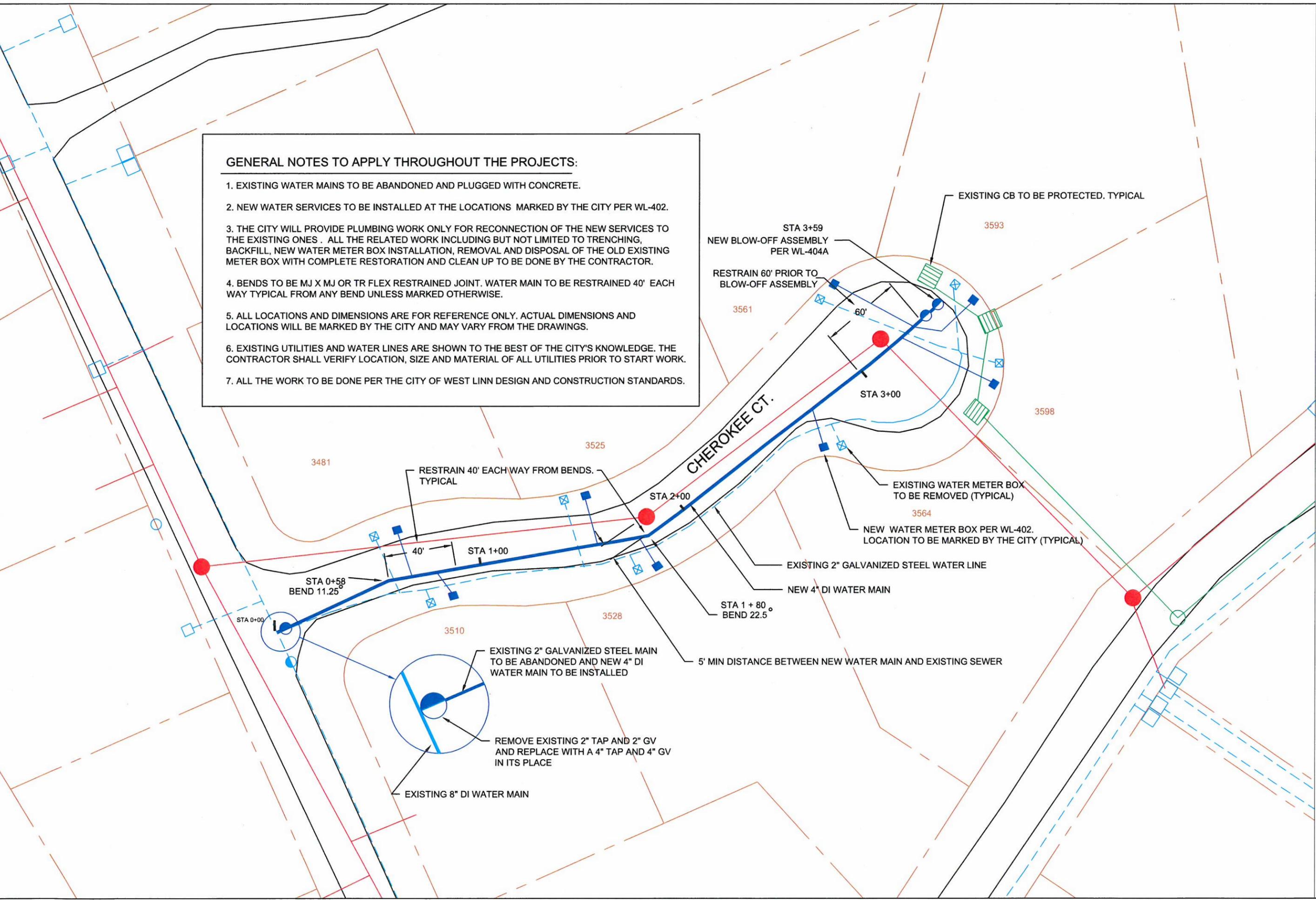
#### LEGEND

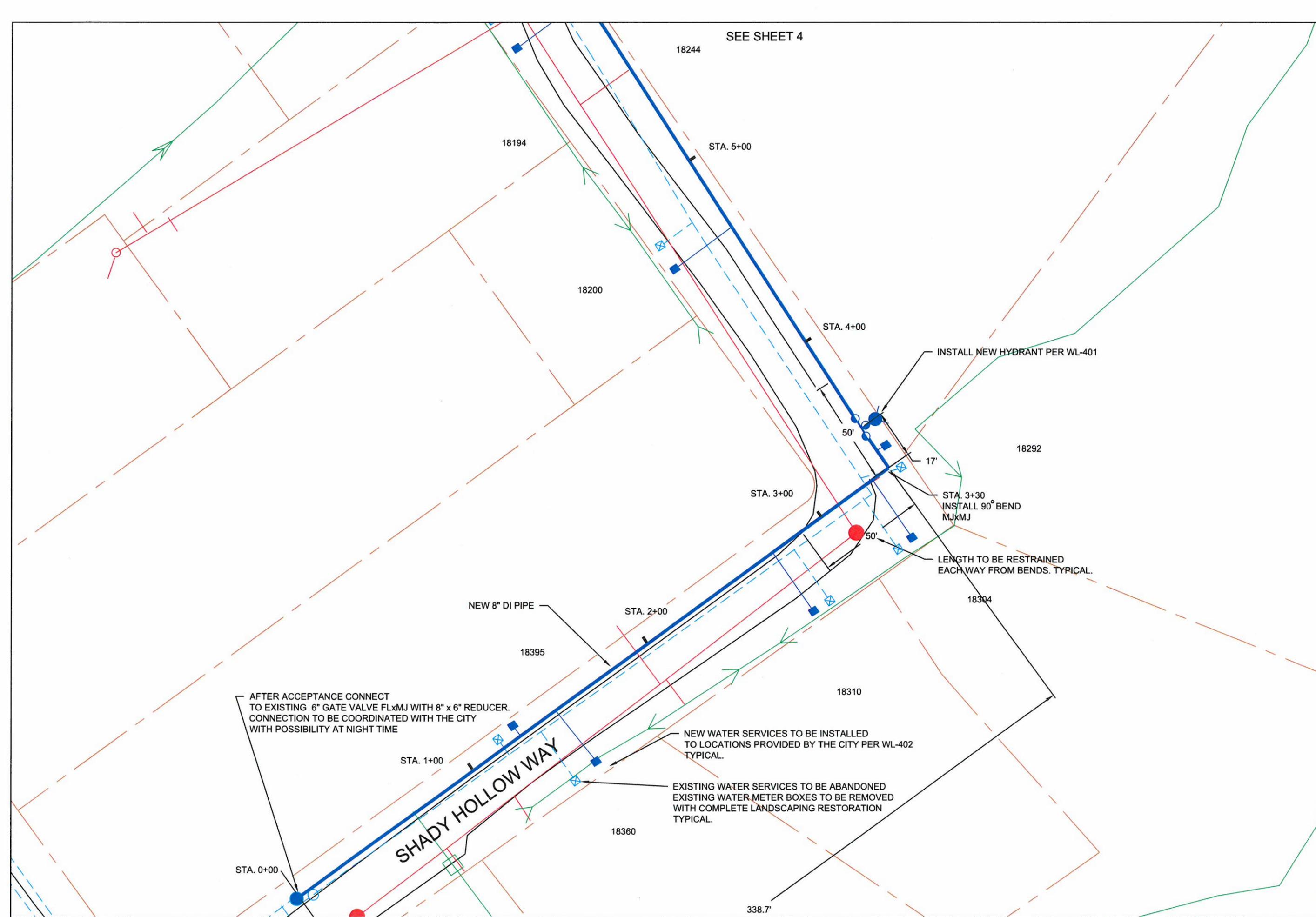
	New water main to be installed		New fire hydrant assembly
	Existing water main to be abandoned		New water valve to be installed
	New water meter box to be installed		Existing water valve
	Existing water meter box to be removed		Existing SA MH and main line
	Existing catch basin (CB) and storm main line		



**GENERAL NOTES TO APPLY THROUGHOUT THE PROJECTS:**

1. EXISTING WATER MAINS TO BE ABANDONED AND PLUGGED WITH CONCRETE.
2. NEW WATER SERVICES TO BE INSTALLED AT THE LOCATIONS MARKED BY THE CITY PER WL-402.
3. THE CITY WILL PROVIDE PLUMBING WORK ONLY FOR RECONNECTION OF THE NEW SERVICES TO THE EXISTING ONES. ALL THE RELATED WORK INCLUDING BUT NOT LIMITED TO TRENCHING, BACKFILL, NEW WATER METER BOX INSTALLATION, REMOVAL AND DISPOSAL OF THE OLD EXISTING METER BOX WITH COMPLETE RESTORATION AND CLEAN UP TO BE DONE BY THE CONTRACTOR.
4. BENDS TO BE MJ X MJ OR TR FLEX RESTRAINED JOINT. WATER MAIN TO BE RESTRAINED 40' EACH WAY TYPICAL FROM ANY BEND UNLESS MARKED OTHERWISE.
5. ALL LOCATIONS AND DIMENSIONS ARE FOR REFERENCE ONLY. ACTUAL DIMENSIONS AND LOCATIONS WILL BE MARKED BY THE CITY AND MAY VARY FROM THE DRAWINGS.
6. EXISTING UTILITIES AND WATER LINES ARE SHOWN TO THE BEST OF THE CITY'S KNOWLEDGE. THE CONTRACTOR SHALL VERIFY LOCATION, SIZE AND MATERIAL OF ALL UTILITIES PRIOR TO START WORK.
7. ALL THE WORK TO BE DONE PER THE CITY OF WEST LINN DESIGN AND CONSTRUCTION STANDARDS.





PROJECT NO PW-1219/1303/1304/1305

DATE: 10/10/2012

BY: BP

SHEET NO. 3 OF 13

**WATER MAIN REPLACEMENT PROJECT 2013**

Shady Hollow Way Site Plan - 2

**CITY OF WEST LINN  
PUBLIC WORKS**

22500 SALAMO ROAD, NO. 800  
WEST LINN, OR 97068

SCALE: 1"=40'  
ENGINEER: [Signature]

SEE SHEET 4

EXISTING HYDRANT TO BE REMOVED AND RETURNED TO THE CITY. TYPICAL

AFTER ACCEPTANCE CONNECT TO 6" AC PIPE WITH 8"X6" REDUCER MJxMJ

INSTALL NEW HYDRANT PER WL-401

3225

NEW 8" DI PIPE

ARBOR DRIVE

INSTALL 45° BEND MJxMJ

AFTER ACCEPTANCE CONNECT 8" DI PIPE TO 6" AC PIPE WITH 8"X6" REDUCER MJxMJ

INSTALL TWO 45° BENDS MJxMJ AND TWO THRUST BLOCKS

INSTALL 8"x8"x8"x6" CROSS WITH 3 x 8" GV AND ONE 6" GV. ALL CONNECTIONS ARE FLxMJ.

STA. 8+98  
INSTALL 22' BEND MJxMJ

FROM THIS POINT GOING NORTH - ALL JOINTS TO BE RESTRAINED

3260

STA. 8+00

NEW 8" DI PIPE

SHADY HOLLOW WAY

18185

18150

STA. 7+00

LENGTH TO RESTRAIN EACH WAY FROM BENDS. TYPICAL.

INSTALL NEW HYDRANT PER WL-401

LOCATION IS SHOWN FOR REFERENCE ONLY. EXACT LOCATION TO BE MARKED BY THE CITY. TYPICAL.

18189

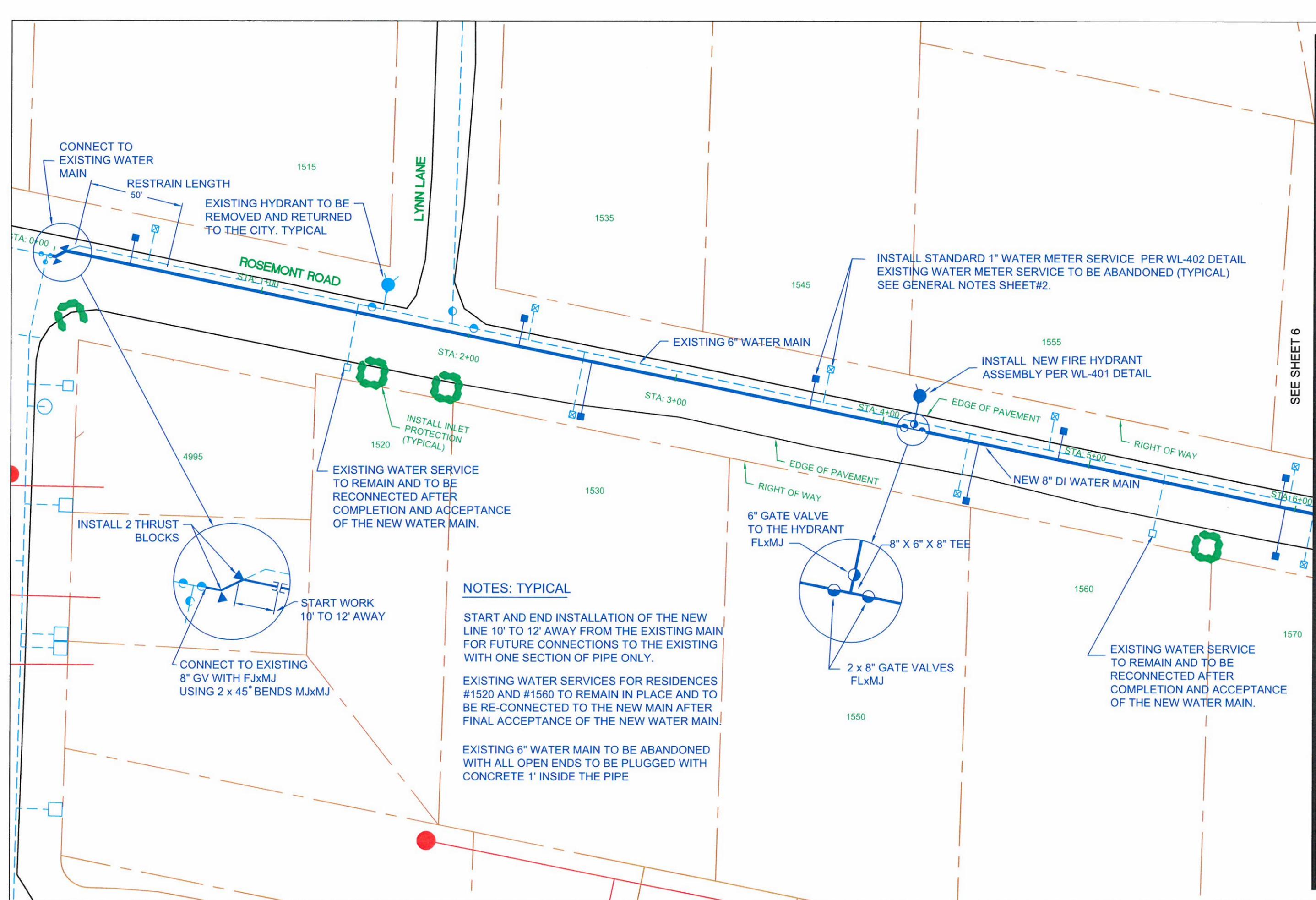
INSTALL 45° BEND MJxMJ

25'

STA. 6+00

18244

SEE SHEET 3



SEE SHEET 6

**NOTES: TYPICAL**

START AND END INSTALLATION OF THE NEW LINE 10' TO 12' AWAY FROM THE EXISTING MAIN FOR FUTURE CONNECTIONS TO THE EXISTING WITH ONE SECTION OF PIPE ONLY.

EXISTING WATER SERVICES FOR RESIDENCES #1520 AND #1560 TO REMAIN IN PLACE AND TO BE RE-CONNECTED TO THE NEW MAIN AFTER FINAL ACCEPTANCE OF THE NEW WATER MAIN!

EXISTING 6" WATER MAIN TO BE ABANDONED WITH ALL OPEN ENDS TO BE PLUGGED WITH CONCRETE 1' INSIDE THE PIPE

CONNECT TO EXISTING WATER MAIN  
RESTRAIN LENGTH 50'  
EXISTING HYDRANT TO BE REMOVED AND RETURNED TO THE CITY. TYPICAL

INSTALL STANDARD 1" WATER METER SERVICE PER WL-402 DETAIL  
EXISTING WATER METER SERVICE TO BE ABANDONED (TYPICAL)  
SEE GENERAL NOTES SHEET#2.

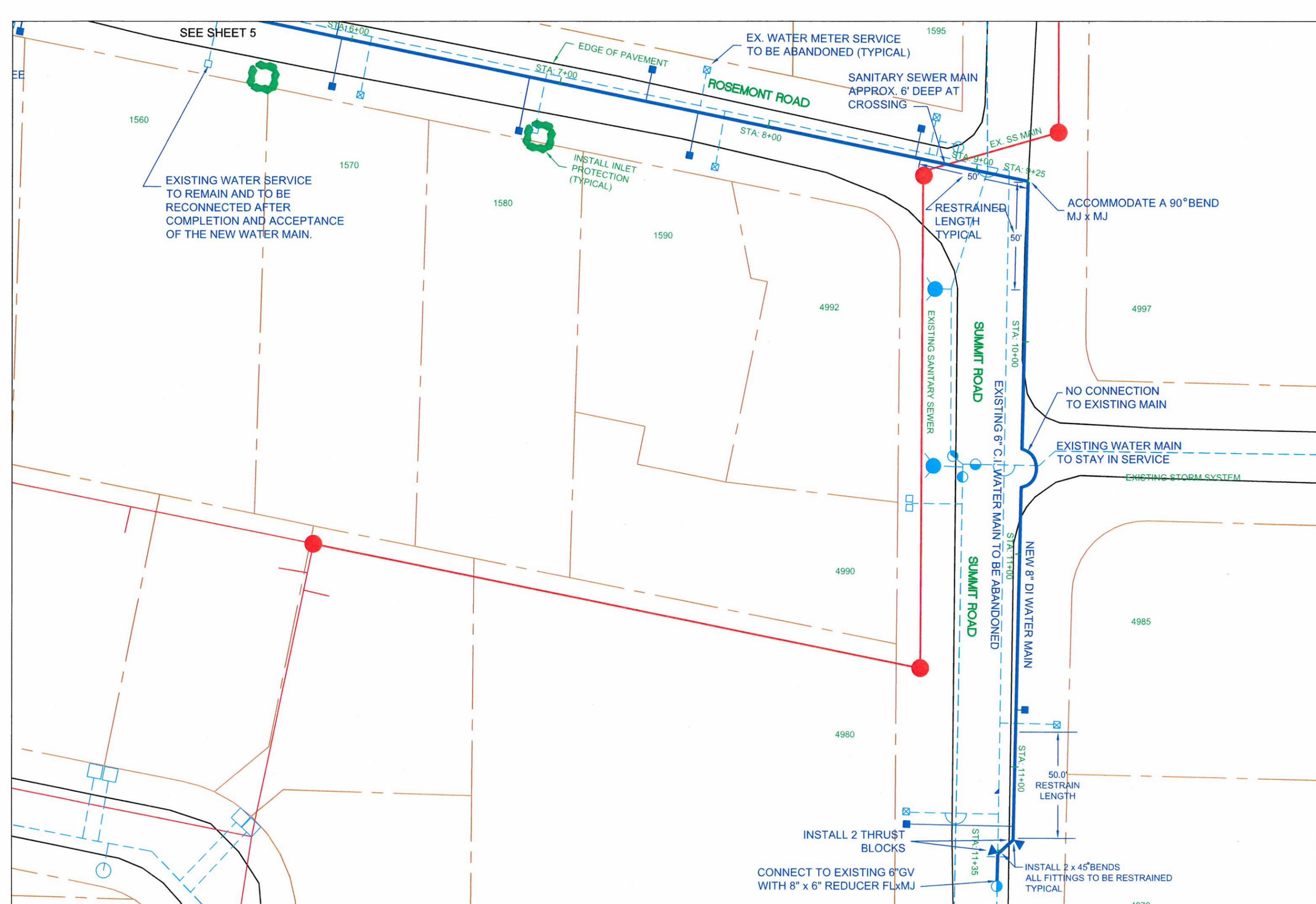
INSTALL NEW FIRE HYDRANT ASSEMBLY PER WL-401 DETAIL

EXISTING WATER SERVICE TO REMAIN AND TO BE RECONNECTED AFTER COMPLETION AND ACCEPTANCE OF THE NEW WATER MAIN.

INSTALL 2 THRUST BLOCKS  
START WORK 10' TO 12' AWAY

CONNECT TO EXISTING 8" GV WITH FJxMJ USING 2 x 45° BENDS MJxMJ

EXISTING WATER SERVICE TO REMAIN AND TO BE RECONNECTED AFTER COMPLETION AND ACCEPTANCE OF THE NEW WATER MAIN.



SEE SHEET 5

EXISTING WATER SERVICE TO REMAIN AND TO BE RECONNECTED AFTER COMPLETION AND ACCEPTANCE OF THE NEW WATER MAIN.

EX. WATER METER SERVICE TO BE ABANDONED (TYPICAL)

SANITARY SEWER MAIN APPROX. 6' DEEP AT CROSSING

INSTALL INLET PROTECTION (TYPICAL)

RESTRAINED LENGTH TYPICAL

ACCOMMODATE A 90° BEND MJ x MJ

NO CONNECTION TO EXISTING MAIN

EXISTING WATER MAIN TO STAY IN SERVICE

EXISTING 6" C.I. WATER MAIN TO BE ABANDONED

NEW 8" DI WATER MAIN

INSTALL 2 THRU\$T BLOCKS

CONNECT TO EXISTING 6" GV WITH 8" x 6" REDUCER FLxMJ

INSTALL 2 x 45° BENDS ALL FITTINGS TO BE RESTRAINED TYPICAL

PROJECT: PW-1219/1303/1304/1305

DATE: 10/01/2012

BY: KQL, BP

SHEET NO. 6 OF 13

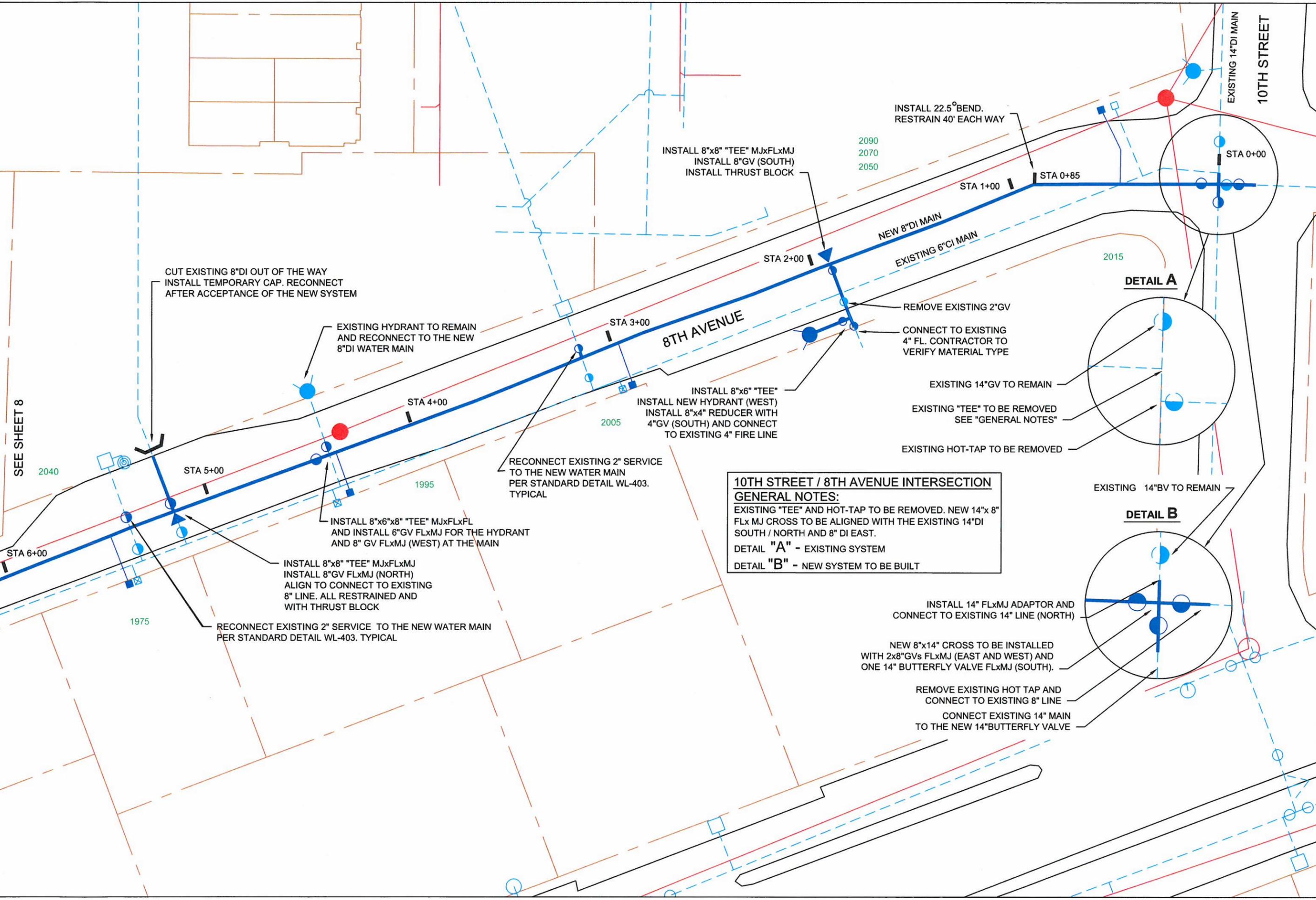
WATER MAIN REPLACEMENT PROJECT 2013

Rosemont Road Site Plan - 2

CITY OF WEST LINN  
PUBLIC WORKS

22500 SALAMO ROAD, NO. 800  
WEST LINN, OR 97068

SCALE: 1"=40'



SEE SHEET 8

CUT EXISTING 8\"/>

EXISTING HYDRANT TO REMAIN AND RECONNECT TO THE NEW 8\"/>

INSTALL 8\"/>

INSTALL 22.5° BEND. RESTRAIN 40' EACH WAY

NEW 8\"/>

EXISTING 6\"/>

INSTALL 8\"/>

REMOVE EXISTING 2\"/>

EXISTING 14\"/>

EXISTING HOT-TAP TO BE REMOVED

INSTALL 8\"/>

RECONNECT EXISTING 2\"/>

**10TH STREET / 8TH AVENUE INTERSECTION**  
**GENERAL NOTES:**  
 EXISTING "TEE" AND HOT-TAP TO BE REMOVED. NEW 14"x 8" FLx MJ CROSS TO BE ALIGNED WITH THE EXISTING 14"DI SOUTH / NORTH AND 8" DI EAST.  
 DETAIL "A" - EXISTING SYSTEM  
 DETAIL "B" - NEW SYSTEM TO BE BUILT

INSTALL 14" FLxMJ ADAPTOR AND CONNECT TO EXISTING 14" LINE (NORTH)

NEW 8"x14" CROSS TO BE INSTALLED WITH 2x8"GVs FLxMJ (EAST AND WEST) AND ONE 14" BUTTERFLY VALVE FLxMJ (SOUTH).

REMOVE EXISTING HOT TAP AND CONNECT TO EXISTING 8" LINE

CONNECT EXISTING 14" MAIN TO THE NEW 14" BUTTERFLY VALVE

**DETAIL A**

**DETAIL B**

PROJECT NO PW-1219/1303/1304/1305

DATE: 10/01/2012

BY: BP

SHEET NO. 7 OF 13

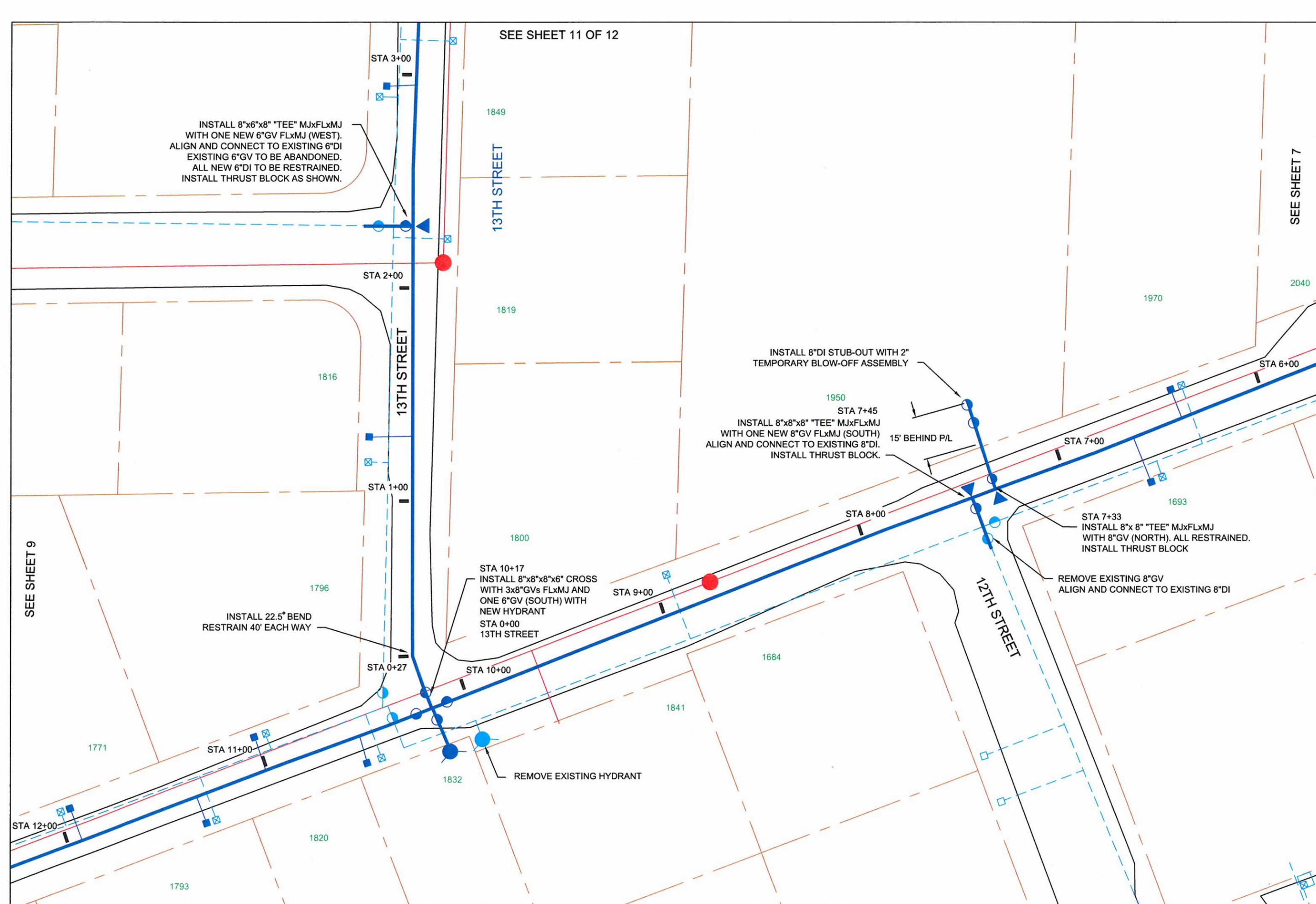
CITY OF WEST LINN  
 PUBLIC WORKS  
 WATER MAIN REPLACEMENT PROJECT 2013

8th Avenue Site Plan-1

CITY OF WEST LINN  
 PUBLIC WORKS

22500 SALAH ROAD, NO. 800  
 WEST LINN, OR 97068

SCALE: 1"=40' • ENGINEER DRAWING



INSTALL 8"x6"x8" "TEE" MJxFLxMJ WITH ONE NEW 6"GV FLxMJ (WEST). ALIGN AND CONNECT TO EXISTING 6"DI EXISTING 6"GV TO BE ABANDONED. ALL NEW 6"DI TO BE RESTRAINED. INSTALL THRUST BLOCK AS SHOWN.

INSTALL 8"DI STUB-OUT WITH 2" TEMPORARY BLOW-OFF ASSEMBLY

1950  
STA 7+45  
INSTALL 8"x8"x8" "TEE" MJxFLxMJ WITH ONE NEW 8"GV FLxMJ (SOUTH) ALIGN AND CONNECT TO EXISTING 8"DI. INSTALL THRUST BLOCK.  
15' BEHIND P/L

1693  
STA 7+33  
INSTALL 8"x 8" "TEE" MJxFLxMJ WITH 8"GV (NORTH). ALL RESTRAINED. INSTALL THRUST BLOCK

REMOVE EXISTING 8"GV ALIGN AND CONNECT TO EXISTING 8"DI

1800  
STA 10+17  
INSTALL 8"x8"x8"x6" CROSS WITH 3x8"GVs FLxMJ AND ONE 6"GV (SOUTH) WITH NEW HYDRANT  
STA 0+00  
13TH STREET

1796  
INSTALL 22.5° BEND RESTRAIN 40' EACH WAY

1832  
REMOVE EXISTING HYDRANT

SEE SHEET 9

SEE SHEET 7

PROJECT NO PW-1219/1303/1304/1305

DATE: 10/01/2012

BY: BP

SHEET NO. 8 OF 13

WATER MAIN REPLACEMENT PROJECT 2013

8th Avenue Site Plan-2

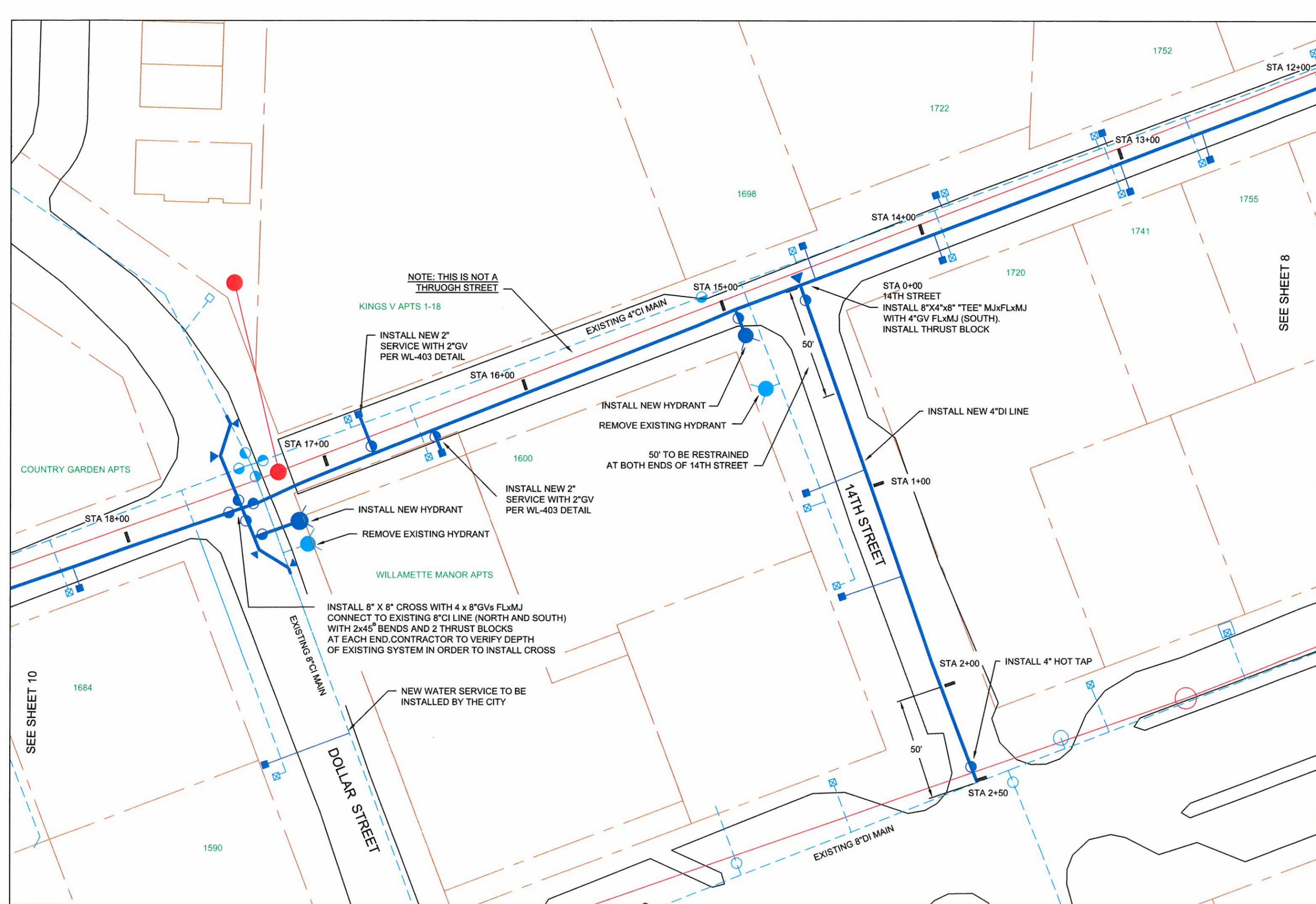
CITY OF WEST LINN  
PUBLIC WORKS

22500 SALAMO ROAD, NO. 800  
WEST LINN, OR 97068

SCALE: 1"=40' • ENGINEER EXEMPT

SEE SHEET 11 OF 12

SEE SHEET 7



NOTE: THIS IS NOT A THROUGH STREET

KINGS V APTS 1-18

INSTALL NEW 2" SERVICE WITH 2"GV PER WL-403 DETAIL

STA 16+00

EXISTING 4"CI MAIN

STA 15+00

INSTALL NEW HYDRANT  
REMOVE EXISTING HYDRANT

50' TO BE RESTRAINED AT BOTH ENDS OF 14TH STREET

STA 0+00  
14TH STREET  
INSTALL 8"x4"x8" "TEE" MJxFLxMJ WITH 4"GV FLxMJ (SOUTH).  
INSTALL THRUST BLOCK

INSTALL NEW 4"DI LINE

STA 1+00

14TH STREET

COUNTRY GARDEN APTS

STA 18+00

INSTALL NEW HYDRANT  
REMOVE EXISTING HYDRANT

INSTALL NEW 2" SERVICE WITH 2"GV PER WL-403 DETAIL

WILLAMETTE MANOR APTS

INSTALL 8" X 8" CROSS WITH 4 x 8"GVs FLxMJ CONNECT TO EXISTING 8"CI LINE (NORTH AND SOUTH) WITH 2x45° BENDS AND 2 THRUST BLOCKS AT EACH END. CONTRACTOR TO VERIFY DEPTH OF EXISTING SYSTEM IN ORDER TO INSTALL CROSS

EXISTING 8"CI MAIN

NEW WATER SERVICE TO BE INSTALLED BY THE CITY

DOLLAR STREET

STA 2+00

INSTALL 4" HOT TAP

STA 2+50

EXISTING 8"DI MAIN

SEE SHEET 10

SEE SHEET 8

PROJECT NO PW-1219/1303/1304/1305

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BY: BP

SHEET NO. 9 OF 13

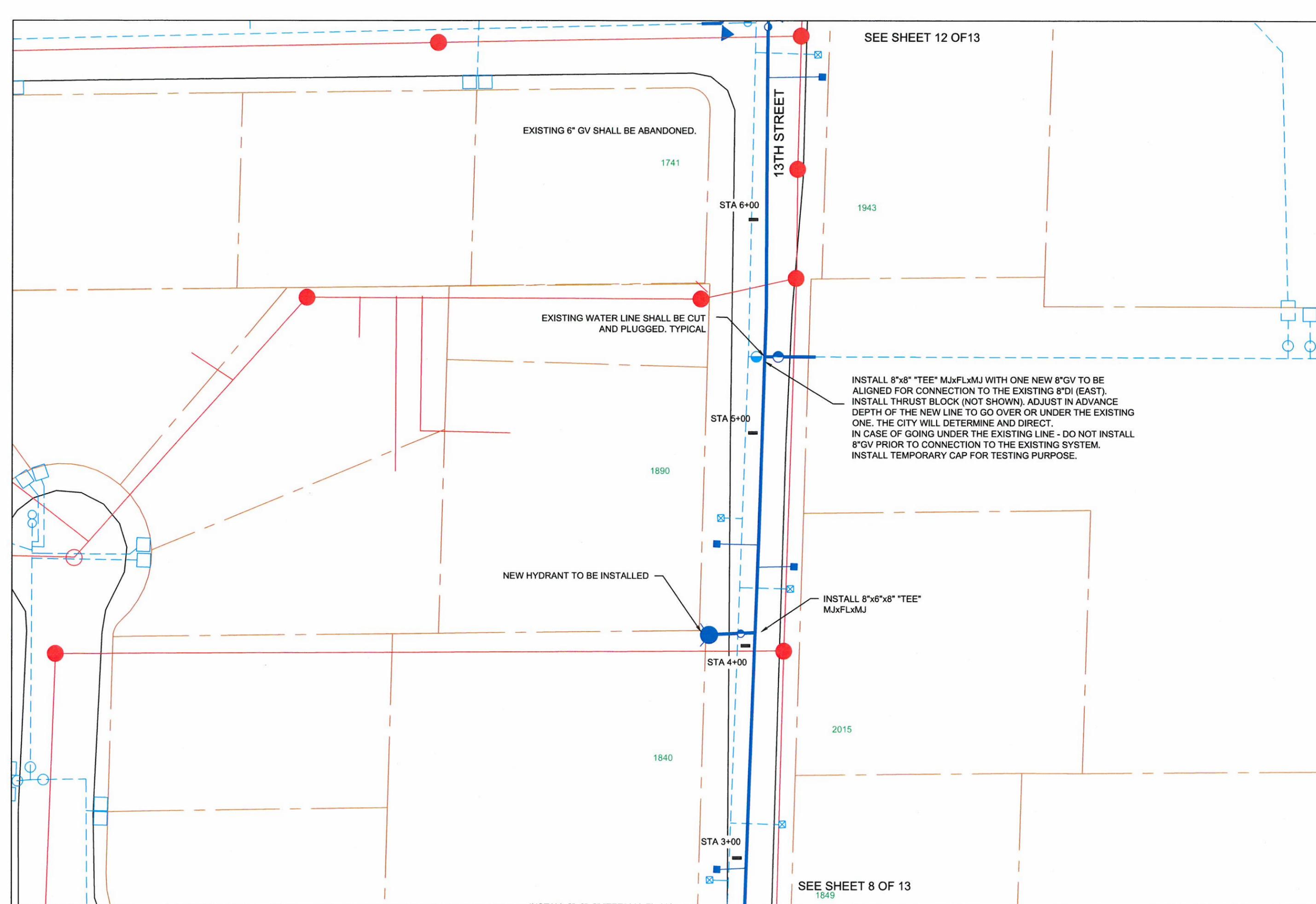
WATER MAIN REPLACEMENT PROJECT 2013

CITY OF WEST LINN PUBLIC WORKS

8th Avenue Site Plan-3

22500 SALAMIO ROAD, NO. 800  
WEST LINN, OR 97068  
SCALE: 1"=40' • ENGINEERING DEPARTMENT





SEE SHEET 12 OF 13

EXISTING 6" GV SHALL BE ABANDONED.

1741

13TH STREET

1943

EXISTING WATER LINE SHALL BE CUT AND PLUGGED. TYPICAL

INSTALL 8"x8" "TEE" MJxFLxMJ WITH ONE NEW 8"GV TO BE ALIGNED FOR CONNECTION TO THE EXISTING 8"DI (EAST). INSTALL THRUST BLOCK (NOT SHOWN). ADJUST IN ADVANCE DEPTH OF THE NEW LINE TO GO OVER OR UNDER THE EXISTING ONE. THE CITY WILL DETERMINE AND DIRECT. IN CASE OF GOING UNDER THE EXISTING LINE - DO NOT INSTALL 8"GV PRIOR TO CONNECTION TO THE EXISTING SYSTEM. INSTALL TEMPORARY CAP FOR TESTING PURPOSE.

STA 6+00

STA 5+00

1890

NEW HYDRANT TO BE INSTALLED

INSTALL 8"x6"x8" "TEE" MJxFLxMJ

STA 4+00

1840

2015

STA 3+00

SEE SHEET 8 OF 13  
1849

PROJECT NO PW-1219/1303/1304/1305

DATE: 10/01/2012

BY: BP

SHEET NO. 11 OF 13

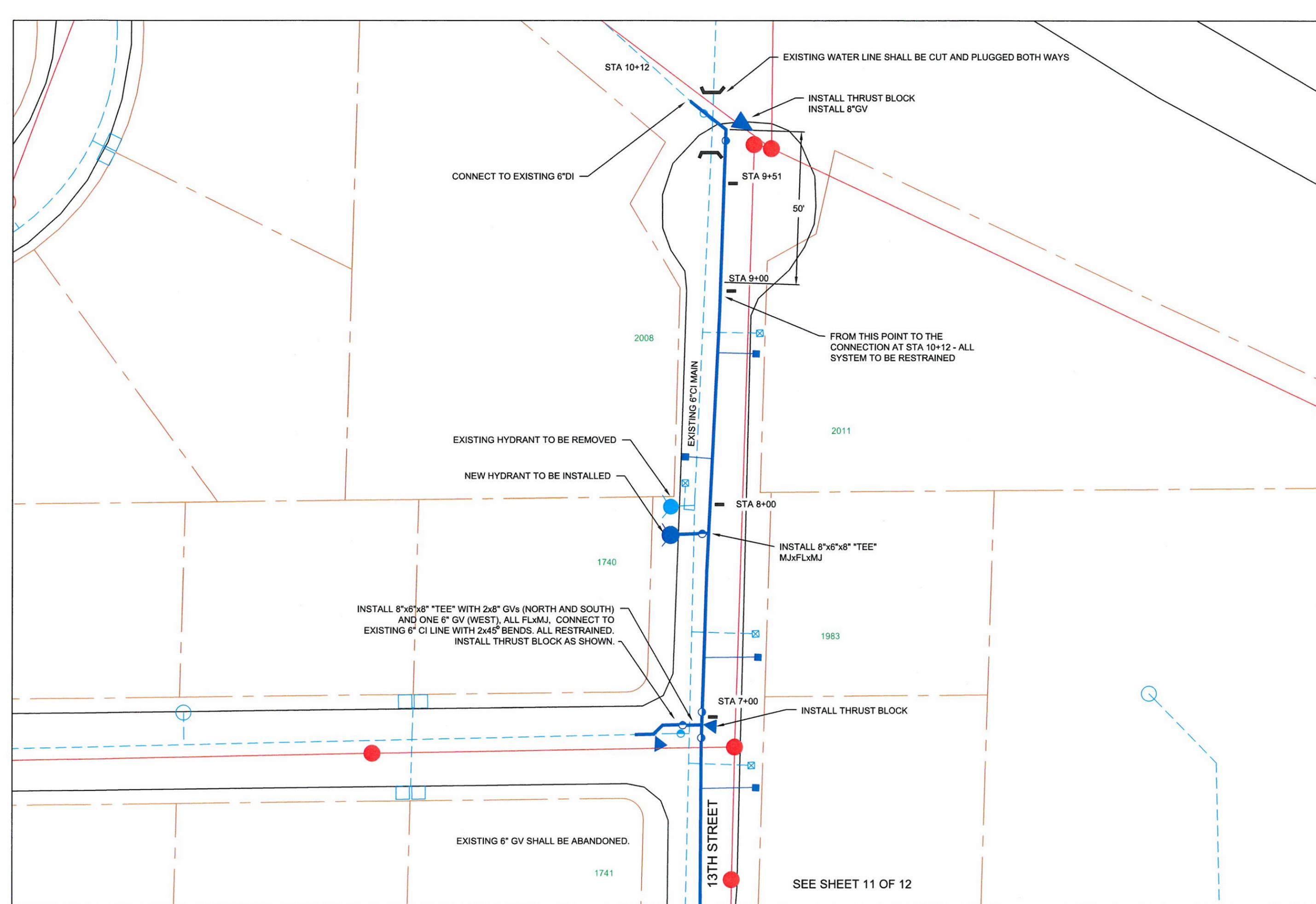
WATER MAIN REPLACEMENT PROJECT 2013

8th Avenue Site Plan-1

CITY OF WEST LINN  
PUBLIC WORKS

22500 SALAH ROAD, NO. 800  
WEST LINN, OR 97068

SCALE: 1"=40' • ENLARGE DEPARTMENT



PROJECT NO PW-1219/1303/1304/1305

DATE: 10/01/2012

BY: BP

SHEET NO. 12 OF 13

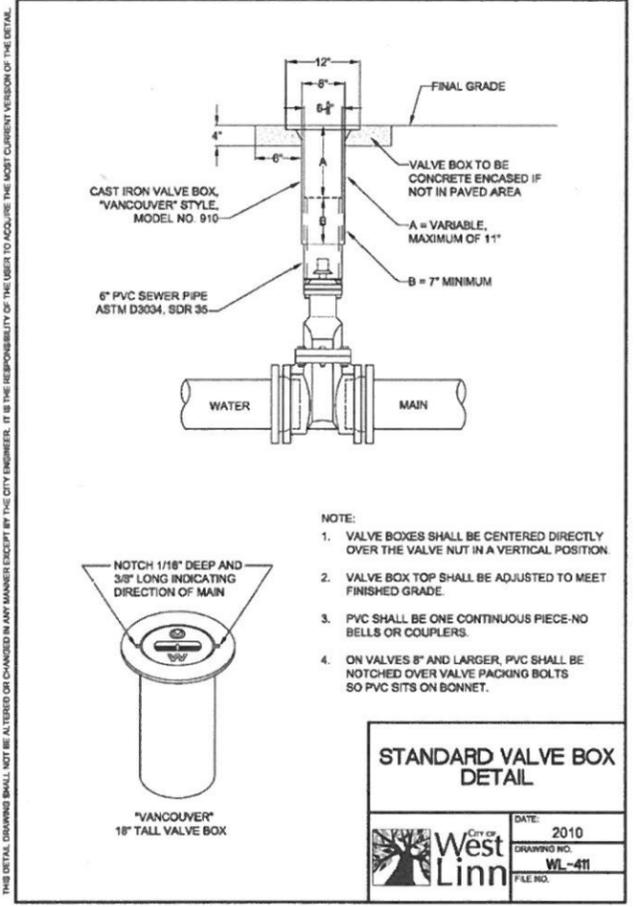
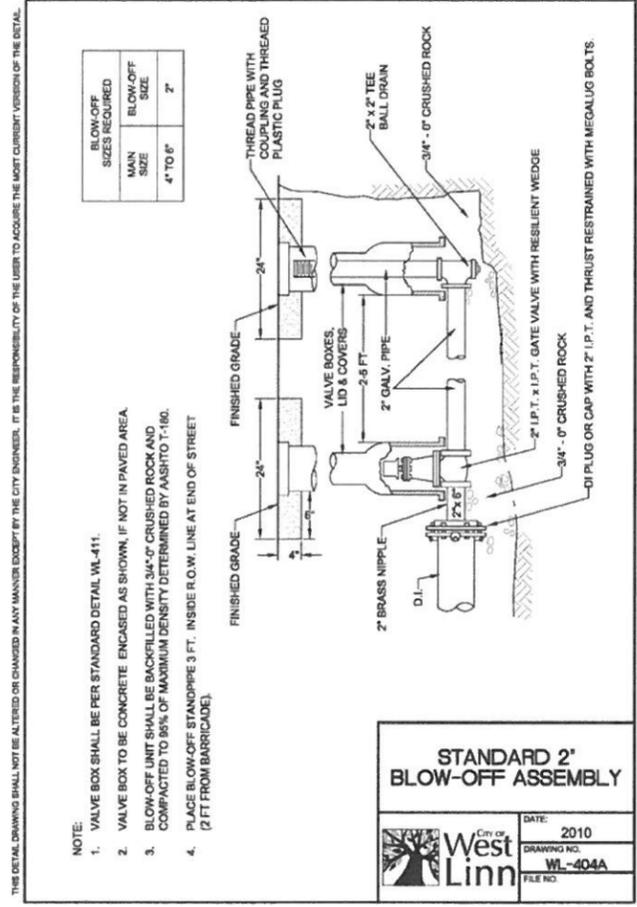
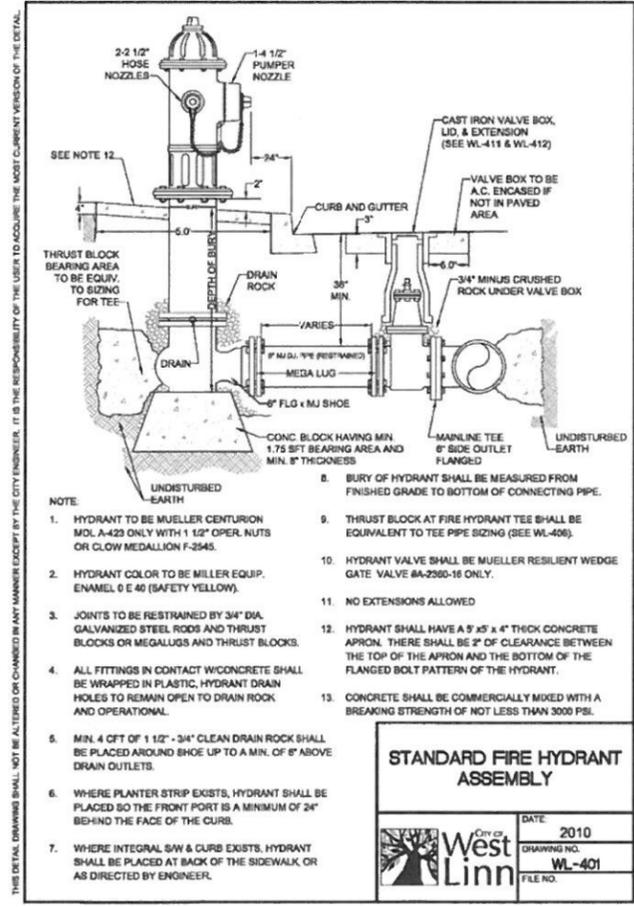
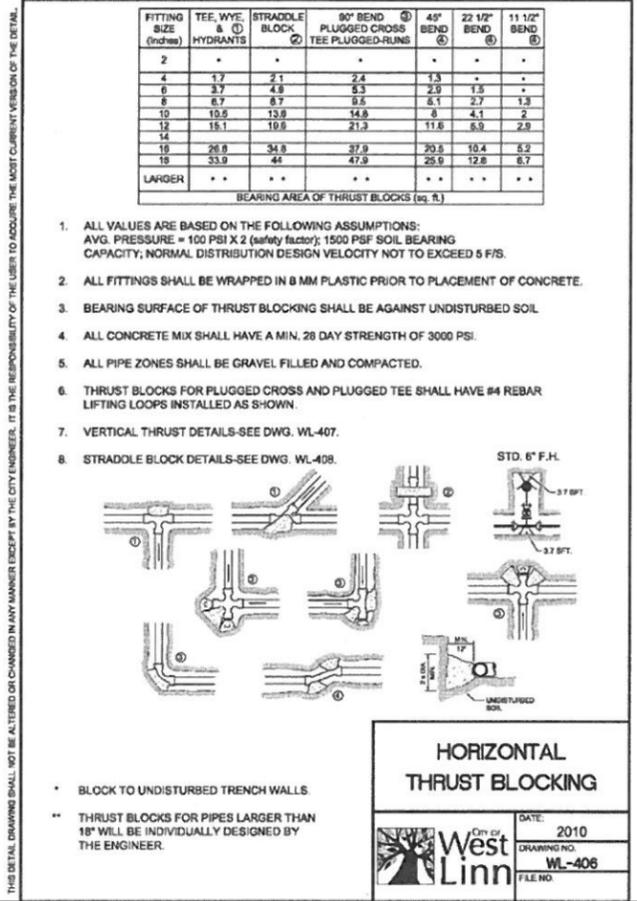
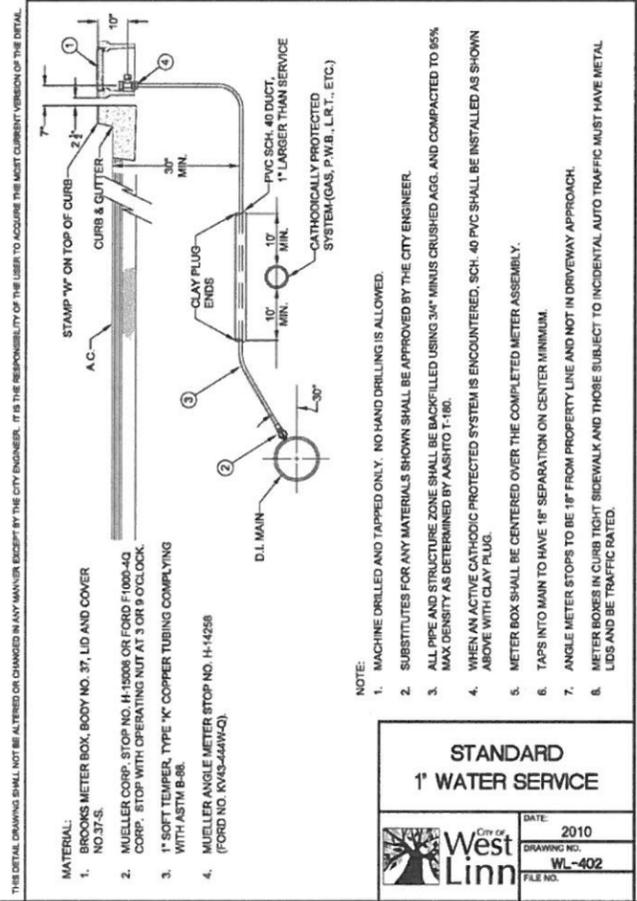
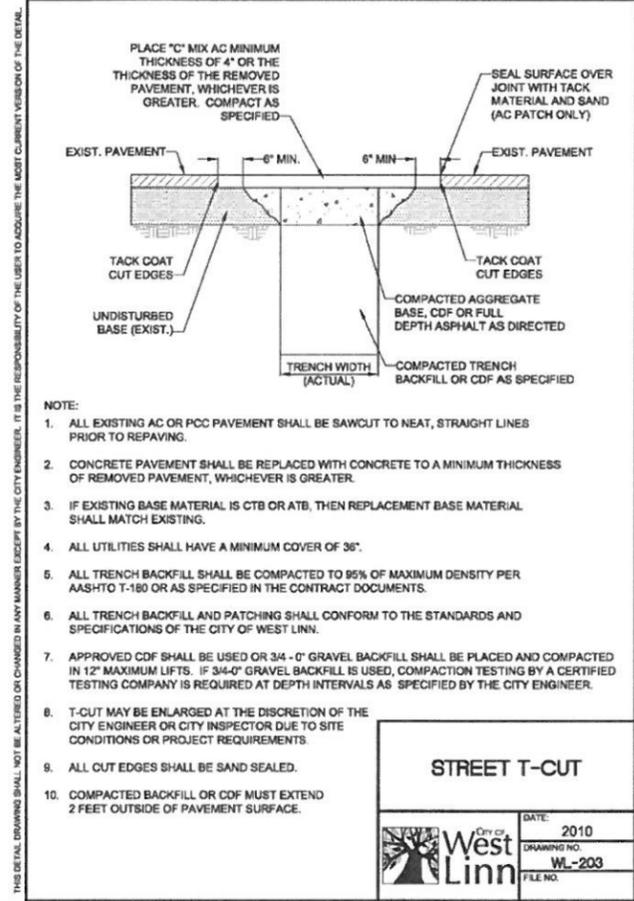
WATER MAIN REPLACEMENT PROJECT 2013

8th Avenue Site Plan-2

CITY OF WEST LINN  
PUBLIC WORKS

22500 SALAMO ROAD, NO. 800  
WEST LINN, OR 97068

SCALE: 1"=40' - ENGINEER'S DRAWING



- WATER CONSTRUCTION NOTES**
- Trench shall be cut, backfilled, and restored per WL-203 detail. Pavement to be done with 2 lifts of hot mix AC 2" each.
  - Trench backfill Bedding and Pipe Zone must be prepared per WL-203 detail.
  - Valve box must be installed per WL-411 detail. Standards Section 402.08.
  - When restrained joint required, all joints must be restrained with EBBA Field Lok gaskets or equal.
  - Fire Hydrant Assembly must be in conformance and installed in accordance with Public Works Standards Section 402.10 and WL-401 respectively.
  - Main line pipe shall be DI Class 52
  - Service lines shall be soft temper, copper water tube type K, meeting ASTM B 88 Specifications. Water service shall be installed per WL-402 detail.
  - Temporary Blow-Off Assembly must be installed per WL-404A detail.
  - New pipe shall be flushed, pressured tested, and disinfected before any connection to the existing water system is made. All tests must be in conformance with Public Works Standards Section 403.13 and 403.14.
  - Permanent Plugs - Contractor shall clean the interior contact surfaces of all pipes to be abandoned. Install concrete plug in end of all 6" pipes. Minimum length of concrete plugs shall be 12". All plugs shall be watertight and capable of withstanding all internal and external pressures without leakage.