NW CHIPMAN RD.

SEC 01- TWP 47N- RNG 32W NOT TO SCALE

UTILITY CONTACTS

LEE'S SUMMIT, MO 64063 TEL: (816) 969-1600 FAX: (816) 969-1619

PUBLIC WORKS 220 SE GREEN STREET LEE'S SUMMIT, MO 64063

TEL: (816) 969-1800 FAX: (816) 969-1809 LEE'S SUMMIT FIRE DEPARTMENT

207 SE DOUGLAS ROAD LEE'S SUMMIT, MO 64063 TEL: (816) 969-1300

TELEPHONE COMPANY

TEL: (800) 464-7928

TEL: (816) 969-1200 FAX: (816) 969-1201

WATER UTILITIES CITY HALL 1200 SE HAMBLEN RD

LEE'S SUMMIT, MO 64063 TEL: (816) 969-1900 FAX: (816) 969-1935

ELECTRIC COMPANY TEL: (888) 471-5275

GAS COMPANY MISSOURI GAS ENERGY TEL: (816) 756-5252

All existing utility locations shown are approximate only and are not guaranteed to be accurate or all inclusive. Contractor shall be responsible for contacting all utility companies and verifying the actual field locations of all utilities prior to any construction activity. Contractor shall keep all utility locations current. Utilities damaged through the negligence of the contractor to obtain the proper field locations shall be the responsibility of the contractor to repair or replace at their expense and at the direction of the utility company. The contractor shall pothole and survey all utility crossings prior to construction of any portion of storm sewer, sanitary sewer laterals, underdrains, conduit and any other subsurface element of the project. The survey information shall be forwarded to the project engineer for review. The contractor shall not begin construction on any subsurface element on the project without the approval of the project engineer. Utility coordination, potholing/surveying shall be subsidiary to other bid items.



CITY OF LEE'S SUMMIT, MISSOURI JOHN KNOX VILLAGE MEADOWS PUBLIC WATER MAIN IMPROVEMENTS CITY PROJECT NO. PL2021150



VICINITY MAP Not to Scale

Sheet List Table	
Sheet Number	Sheet Title
1	COVER SHEET
2	OVERALL WATER MAIN PLAN
3	WATER MAIN PLAN & PROFILE
4	EROSION CONTROL PLAN
5	WATER MAIN DETAILS
	14/4 TED 14471/ DET 17/ C 2

BENCHMARKS / CONTROL POINTS (DATUM: NAVD88)

BM/CP #5002 SET CUT "+" ± & OF CONCRETE SIDEWALK IN EAST CURB RETURN, NORTH SIDE OF NORTHWEST O'BRIEN ROAD NORTH = 1002910.185EAST = 2814693.406*ELEVATION* = *963.93*

BM/CP #13314 SET CUT "+" IN CONCRETE SIDEWALK, SOUTHWEST CORNER OF NORTHWEST MOORE STREET & NORTHWEST HOPE LANE (NOT SHOWN HEREON) NORTH = 1003090.460EAST = 2815069.800*ELEVATION = 974.62*

BM/CP #13315 SET CUT "+" IN CONCRETE SIDEWALK, NORTHEAST CORNER OF NORTHWEST O'BRIEN ROAD & NORTHWEST MOORE STREET (NOT SHOWN HEREON) NORTH = 1002830.710EAST = 2814916.010*ELEVATION = 974.65*

PREPARED & SUBMITTED BY:

BHC RHODES OVERLAND PARK, KANSAS

ERIC BYRD, P.E.

APPROVED:

BY THE CITY OF LEE'S SUMMIT, MISSOURI.

CITY ENGINEER





Design: *SKT* Drawn: *SK* Issue Date: 05/04/202 Project Number: 02880



VIDENTIFY CONSTRUCTION NOTES

- W WATER SERVICE INFORMATION CITY OF LEE'S SUMMIT
- INSTALL 12"X6" REDUCER.
- REPLACE 1,380 LF OF EXISTING 6" WATER MAIN WITH 12" C900 WATER MAIN. INSTALL AT A MINIMUM DEPTH OF 42".
- INSTALL 12" 22.5° BEND WITH THRUST BLOCKING.
- INSTALL 12" 60° BEND WITH THRUST BLOCKING. INSTALL 12"X8" TEE WITH THRUST BLOCKING. SEE WATER MAIN NOTE 1.
- INSTALL 12"X12" TEE WITH THRUST BLOCKING. SEE WATER MAIN NOTE 1.
- INSTALL 12"X8" CROSS. SEE WATER MAIN NOTE 1. 85 LF OF PIPE TO BE RESTRAINED USING SLIP-JOINTS WITH
- STRADDLE BLOCKING. SEE DETAIL WAT-3 ON SHEET 4 FOR STRADDLE APPROXIMATE LOCATION OF EXISTING SERVICE CONNECTION. SEE DETAIL
- WAT-11 ON SHEET 4. EXISTING VALVE TO REMAIN.
- INSTALL 12" BUTTERFLY VALVE.
- INSTALL 8" GATE VALVE.

JOINT RESTRAINT NOTE

1. AT ALL NEW CROSS AND TEE JOINT CONNECTIONS, THE CONTRACTOR SHALL RESTRAIN ALL JOINTS CONNECTING THE REDUCER TO THE CONNECTION, ALL JOINTS CONNECTING THE CONNECTION TO THE SLIP-JOINT RESTRAINED PIPE, AND ALL VALVES TO THE FITTINGS THEY ARE NEAR.

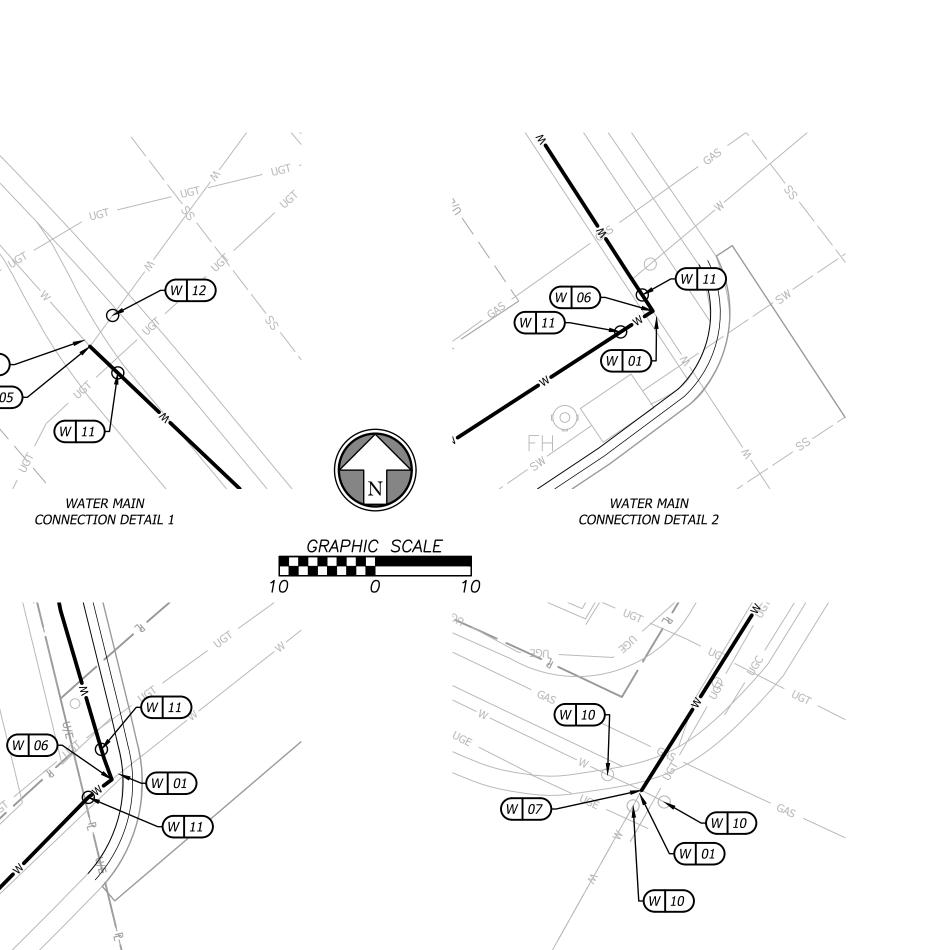
SERVICE LINE RECONNECTION NOTE

CONTRACTOR SHALL RECONNECT ALL EXISTING WATER SERVICE LINES THAT ARE DISCONNECTED DURING THE WATER MAIN DEMOLITION AND CONSTRUCTION. SEE DETAIL WAT-11 ON SHEET 4.

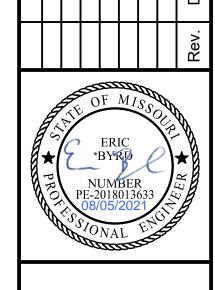
UTILITY GENERAL NOTES

- 1. CONTRACTOR SHALL REFER TO ALL SPECIFICATIONS, GUIDELINES, AND INSTALLATION DRAWINGS FROM THE CITY OF LEE'S SUMMIT, EVERGY, AND MISSOURI GAS ENERGY FOR THE INSTALLATION OF ALL SERVICE LINES.
- 2. CONTRACTOR TO ENSURE 18" MINIMUM SEPARATION BETWEEN WATER MAIN AND STORM/SANITARY LINES AT CROSSINGS PER LEE'S SUMMIT DESIGN STANDARDS. CONTRACTOR TO CALL CIVIL IF ANY CONFLICTS BETWEEN UTILITIES ARE FOUND.
- 3. CONTRACTOR TO RESTORE EXISTING CONDITIONS IF DEMOLISHED/DAMAGED DURING CONSTRUCTION TO MEET CITY OF LEE'S SUMMIT STANDARDS.
- 3.1. REFER TO DETAILS ON SHEET 5 FOR RESTORATION DETAILS

WATER MAIN CONNECTION DETAIL 3



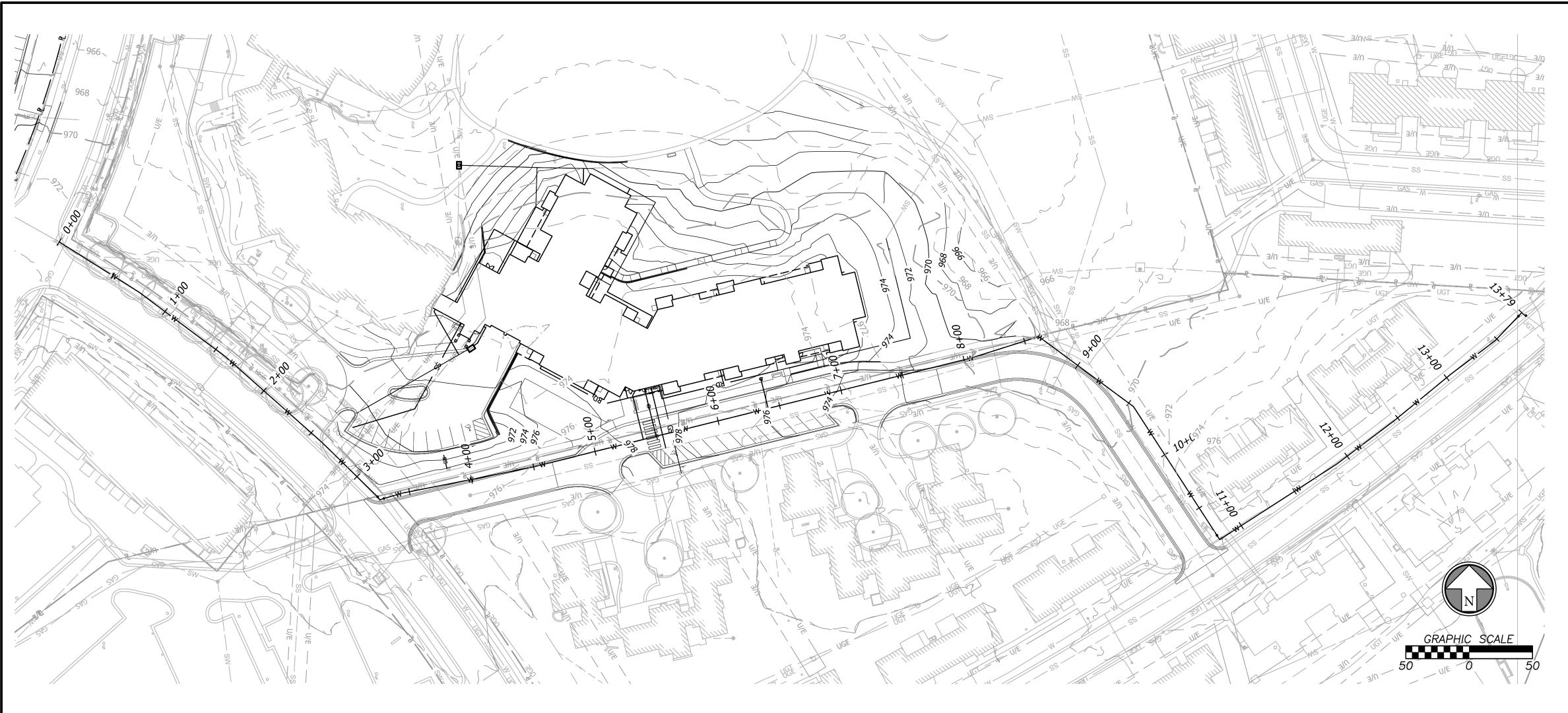
WATER MAIN CONNECTION DETAIL 4





OVERALL WATER MAIN PLAN

Issue Date: 05/04/202 Project Number: 02880

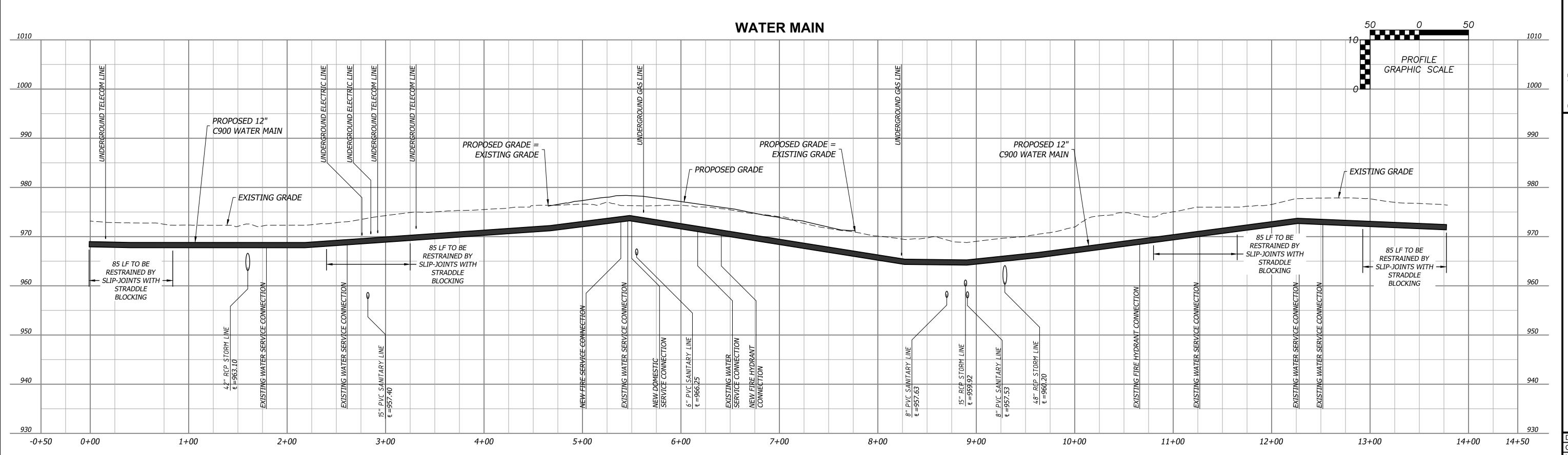


PHASING NOTES

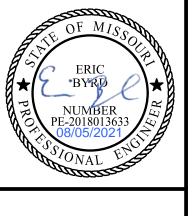
- IN ORDER TO LIMIT THE AMOUNT OF TIME WATER USERS ARE WITHOUT WATER, THE CONSTRUCTION OF THIS WATER MAIN SHALL BE PHASED AS FOLLOWS:
- INSTALL STRADDLE BLOCK ON EXISTING WATER MAIN AT STATION

 1.70
- CUT AND CAP EXISTING WATER MAIN AT STATION 1+60.
- REMOVE THE FIRST 150' OF EXISTING WATER MAIN DURING THE INSTALLATION OF NEW 12" MAIN. THE REMAINDER OF THE WATER MAIN SHALL BE ABANDONED IN PLACE.
- START CONSTRUCTION OF NEW 12" WATER MAIN AT STATION 0+00, PER WATER MAIN CONNECTION DETAIL 4 ON SHEET 2.
- INSTALL THE NEW 12" WATER MAIN FROM STATION 0+00 TO APPROXIMATELY STATION 13+75.
- TEST AND FLUSH INSTALLED 12" WATER MAIN.
- CONNECT TO EXISTING WATER MAIN PER WATER MAIN CONNECTION DETAIL 1 ON SHEET 2.
- USING VARIOUS VALVE CLOSING AND OPENING PATTERNS, TRANSFER SERVICE TO ALL CUSTOMERS WITH A MAXIMUM
- SHUTDOWN TIME OF 8 HOURS.

 UPON COMPLETION OF ALL SERVICE TRANSFERS, INSTALL
 CONNECTIONS SHOWN IN WATER MAIN CONNECTION DETAILS 2
 AND 3 (ON SHEET 2).
- ABANDON EXISTING LINE FROM STATION 1+50 TO 13+75. WATER
 MAIN TO BE ABANDONED SHALL BE PLUGGED AT EACH END. A
 SECTION OF PIPE 10 FEET LONG SHALL BE CUT OUT OF THE
 EXISTING LINE AND WATER SHALL BE DRAINED OUT TO THE
 FULLEST EXTENT POSSIBLE. THE ENDS SHALL BE SEALED WITH A
 1-FOOT THICK PLUG OF NON-SHRINK GROUT SEALED WITH A
 PORTLAND CEMENT GROUT.
- 2. CONTRACTOR TO PROVIDE SUFFICIENT NOTICE TO WATER USERS PRIOR TO SHUT DOWN OF THEIR SERVICE.
- 3. CONTRACTOR TO NOTIFY DEVELOPMENT SERVICES INSPECTIONS PRIOR TO PERFORMING ANY SHUT-DOWNS.
- 4. THE CITY OF LEE'S SUMMIT IS THE ONLY PARTY ALLOWED TO TURN VALVES ON OR OFF.
- 5. DOOR HANGERS MUST BE PLACED ON AFFECTED CUSTOMERS AT LEAST 24 HOURS PRIOR TO THE SCHEDULED DISRUPTION.
- 6. MINIMUM NOTICE OF 48 HOURS SHALL BE GIVEN TO THE CITY OF LEE'S SUMMIT PRIOR TO ANY SHUTDOWN.
- ONCE WORK BEGINS ON A GIVEN PHASE, ALL WORK WITHIN THAT PHASE MUST BE CONTINUOUS UNTIL THE COMPLETION OF THAT PHASE.
- 8. THE MAXIMUM AMOUNT OF TIME FOR ANY WATER CUSTOMER TO BE WITHOUT SERVICE IS 8 HOURS.



Rev. Date Description By Apr



CIVIL ENGINEERING / SURVEYING / UTILITIES
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0 verland Park, Kansas 66210
p. (913) 663-1900
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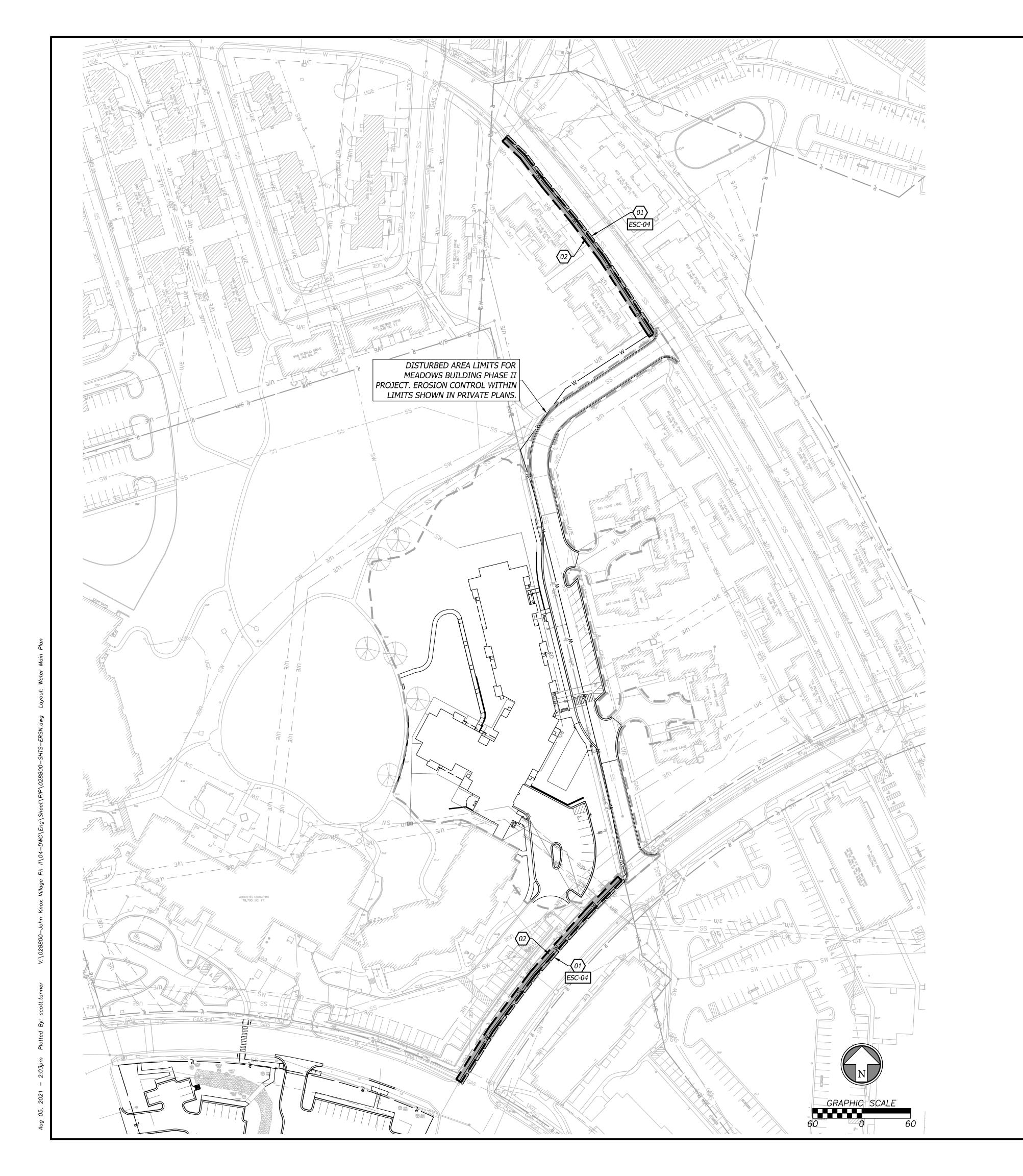
JOHN KNOX VILLAGE 1001 NW CHIPMAN RD. LEE'S SUMMIT, MO 64081

PUBLIC WATER MAIN IMPROVEMENTS
JOHN KNOX VILLAGE MEADOWS
LEE'S SUMMIT, MO 64081
WATER MAIN PLAN & PROFILE

Design: SKT Drawn: SK Checked: ERI

Checked: ERB
Issue Date: 05/04/2021
Project Number: 028800

3



CONSTRUCTION NOTES

01 EROSION CONTROL WATTLE / BIODEGRADABLE LOG (TYP.) TO BE PLACED AT BACK OF CURB 02 CONTRACTOR TO RESTORE AREAS DISTURBED BY WATER MAIN CONSTRUCTION TO PREVIOUS CONDITION. GRASSY AREAS DISTURBED TO BE RESTORED WITH SOD.

EROSION CONTROL LEGEND

WATER MAIN DISTURBED AREA LIMITS (0.07 AC)

PRIVATE PROJECT DISTURBED AREA LIMITS

DISTURBED AREA TO BE RESTORED

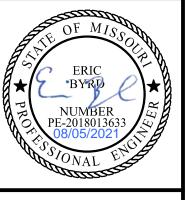
STRAW WATTLE / BIODEGRADABLE LOG

000 DETAILS

SEE EROSION CONTROL DETAIL SHEET FOR THE FOLLOWING

ESC-04 APWA WATTLE / BIODEGRADABLE LOG DETAIL

Rev. Date Description By



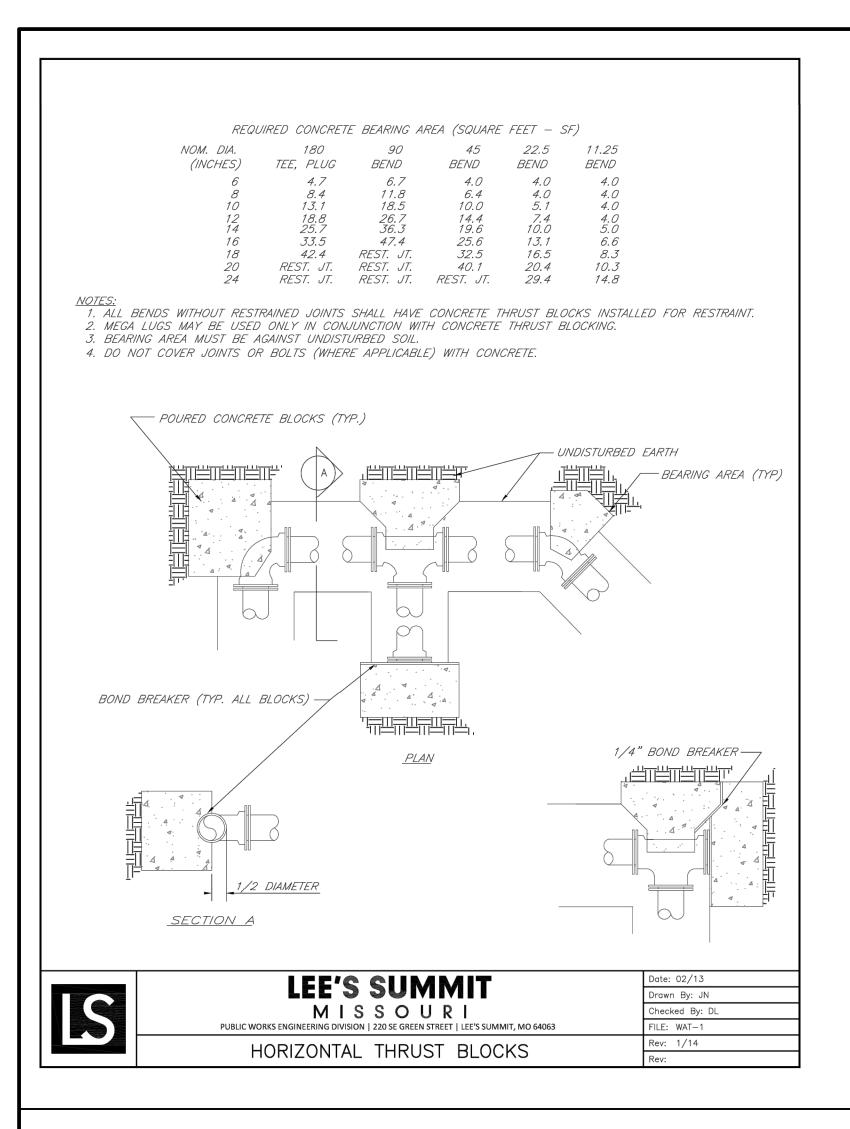
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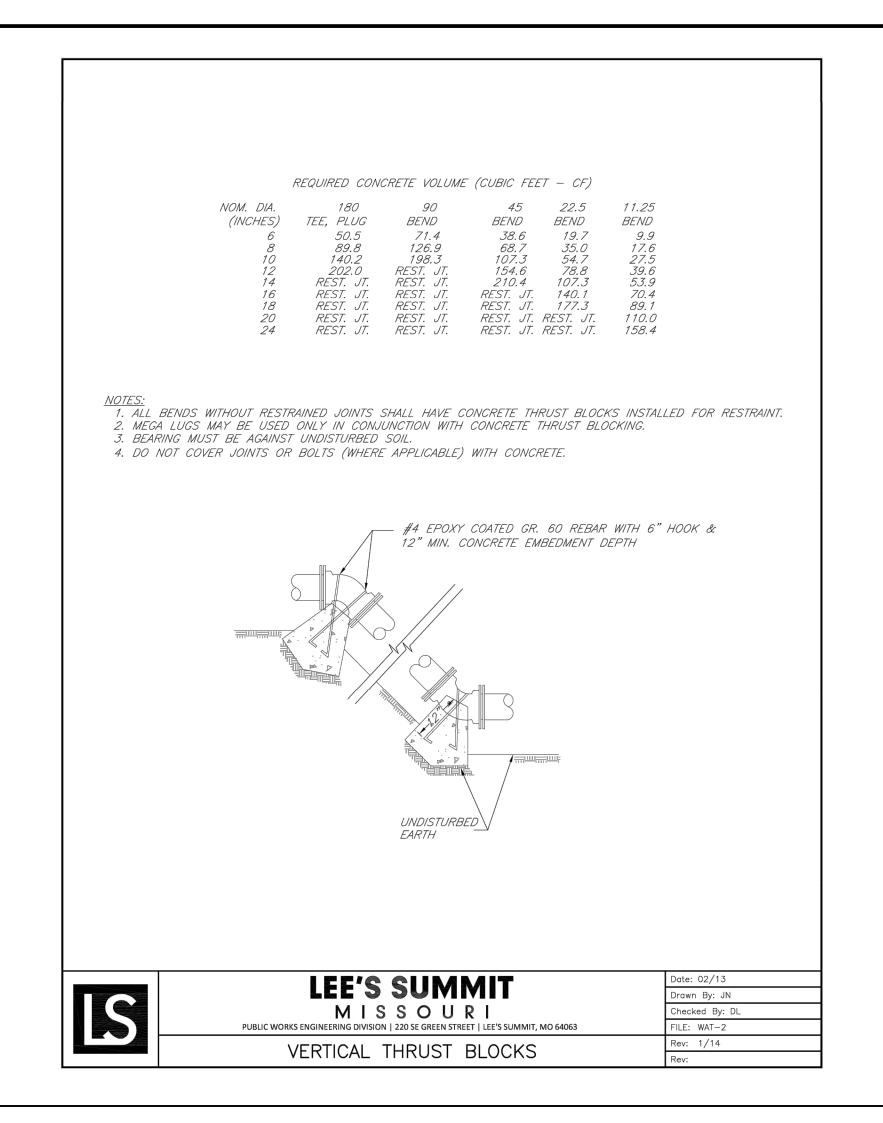
JOHN KNOX VILLAGE 1001 NW CHIPMAN RD. LEE'S SUMMIT, MO 64081

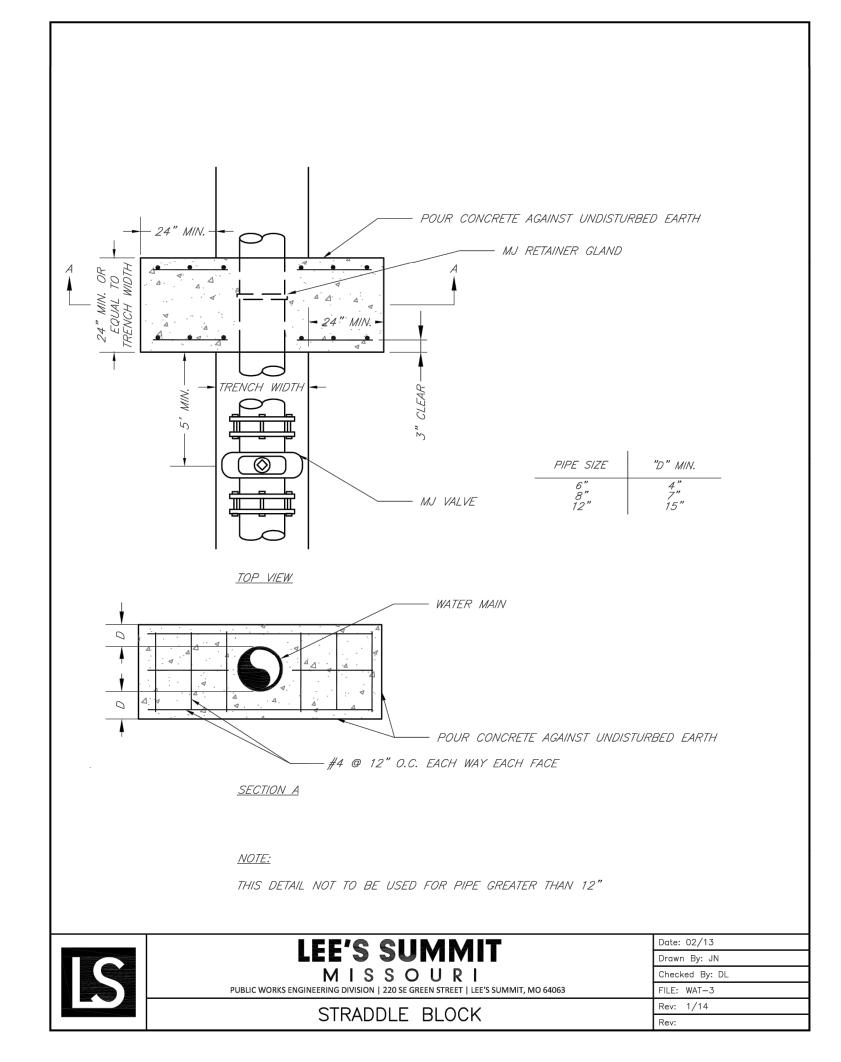
4N KNOX VILLAGE MEADOWS
LEE'S SUMMIT, MO 64081
EROSION CONTROL PLAN

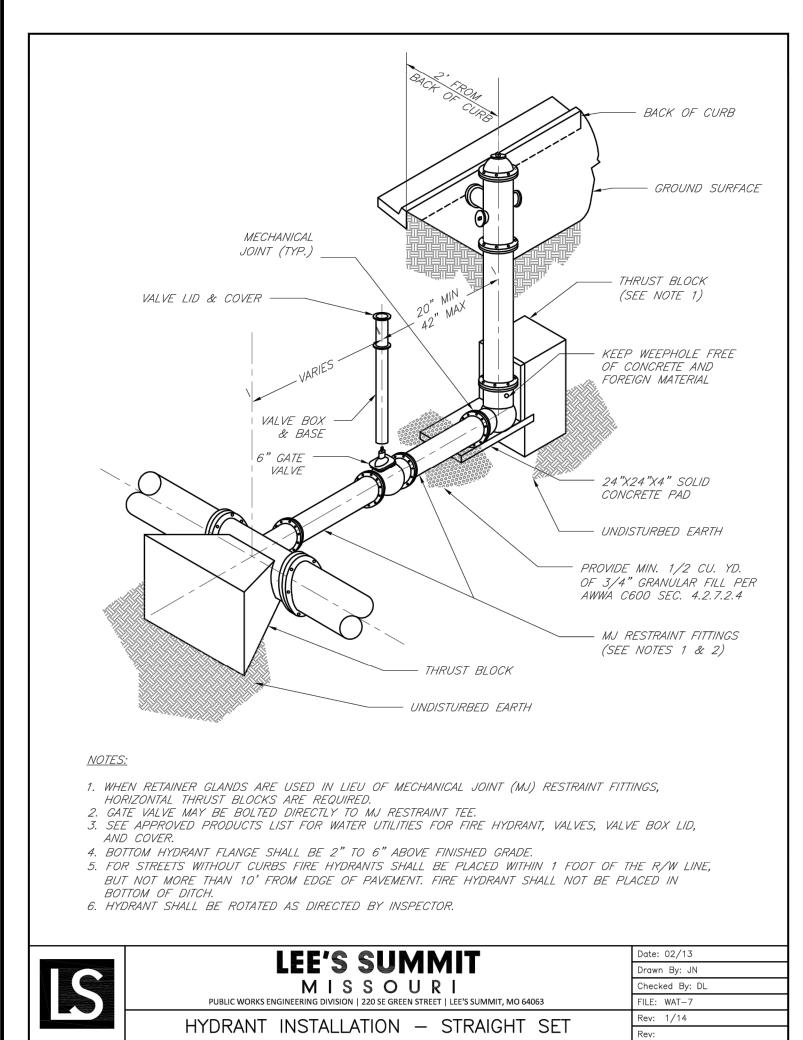
Design: SKT Drawn: SKT
Checked: ERE
Issue Date: 05/04/2021
Project Number: 028800

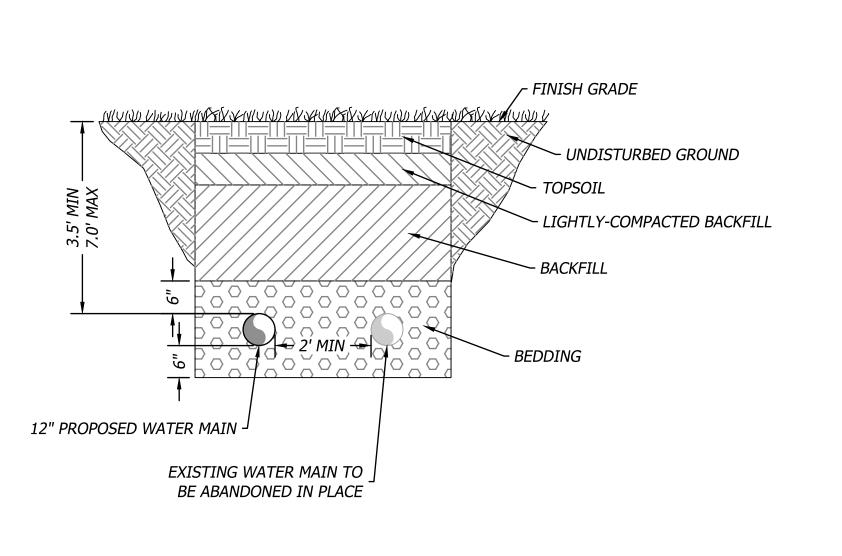
4





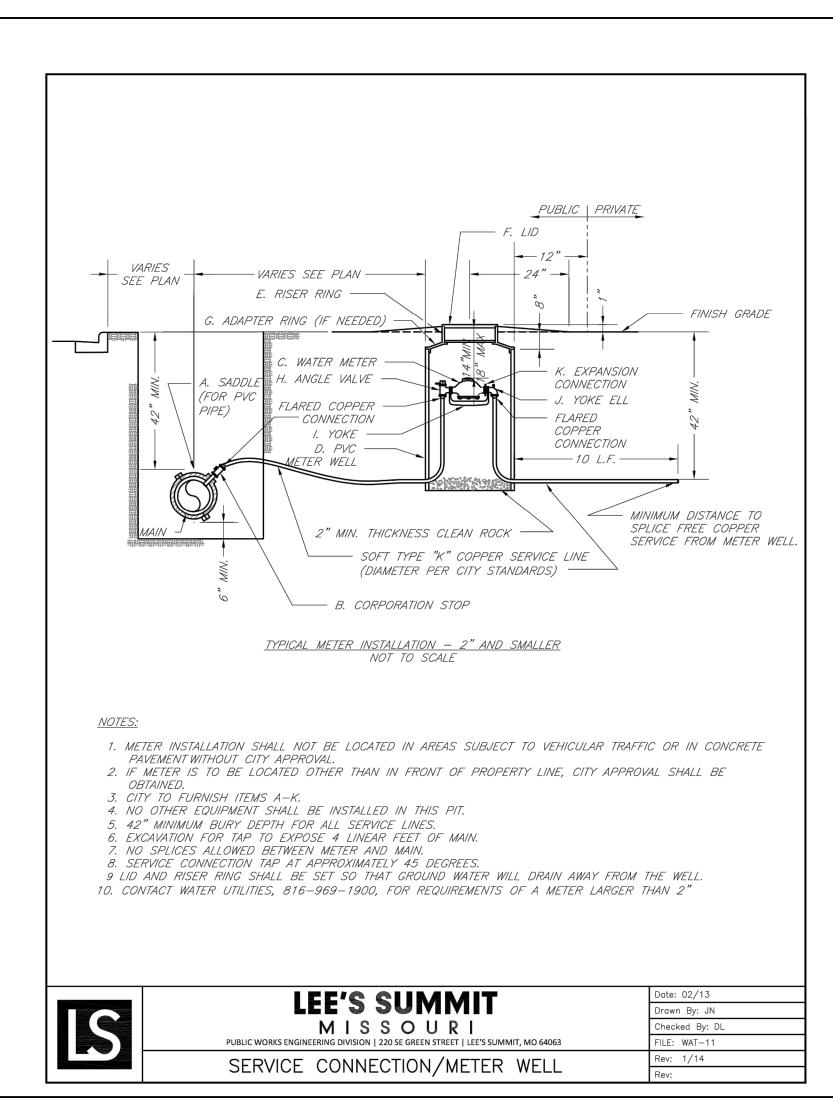


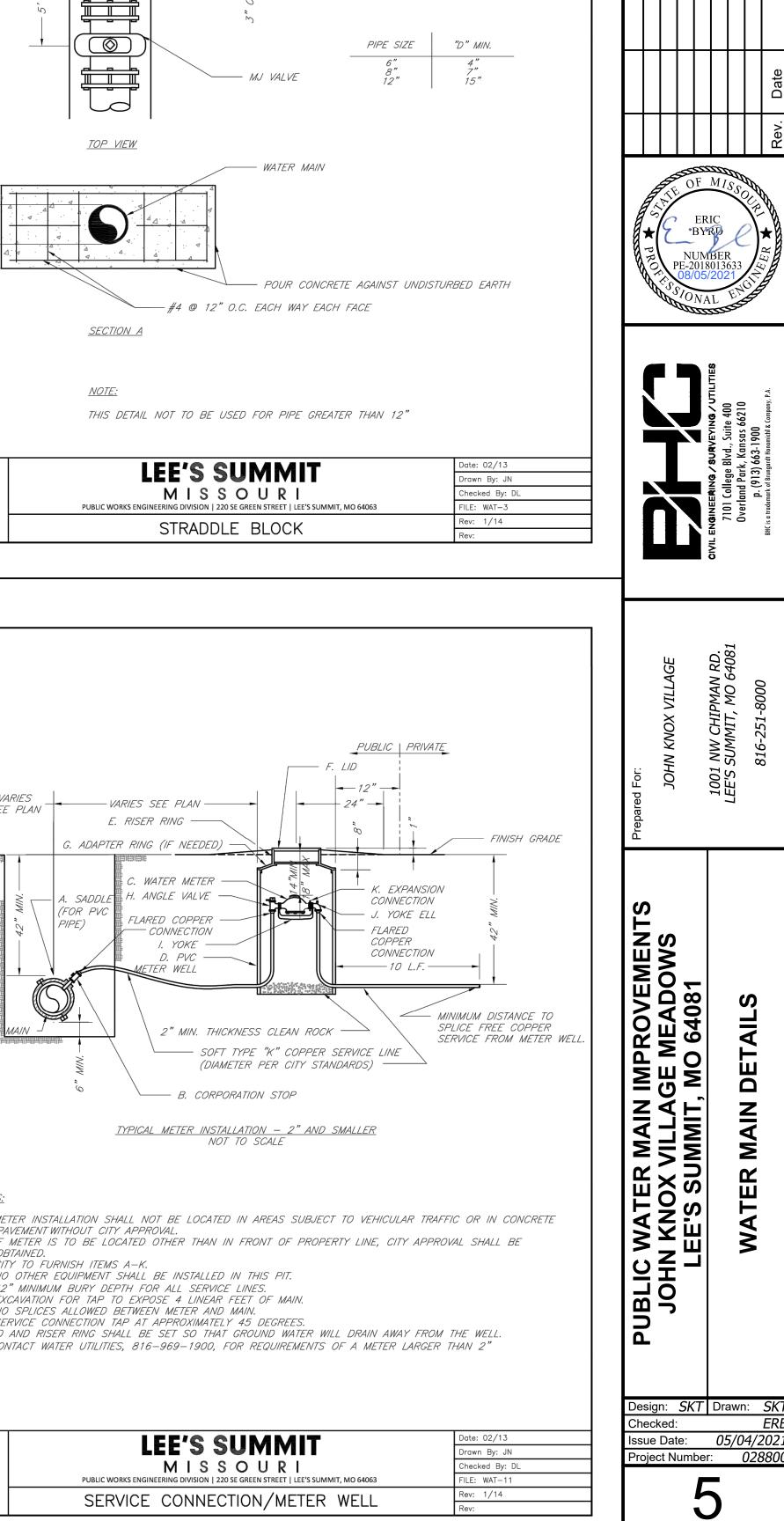


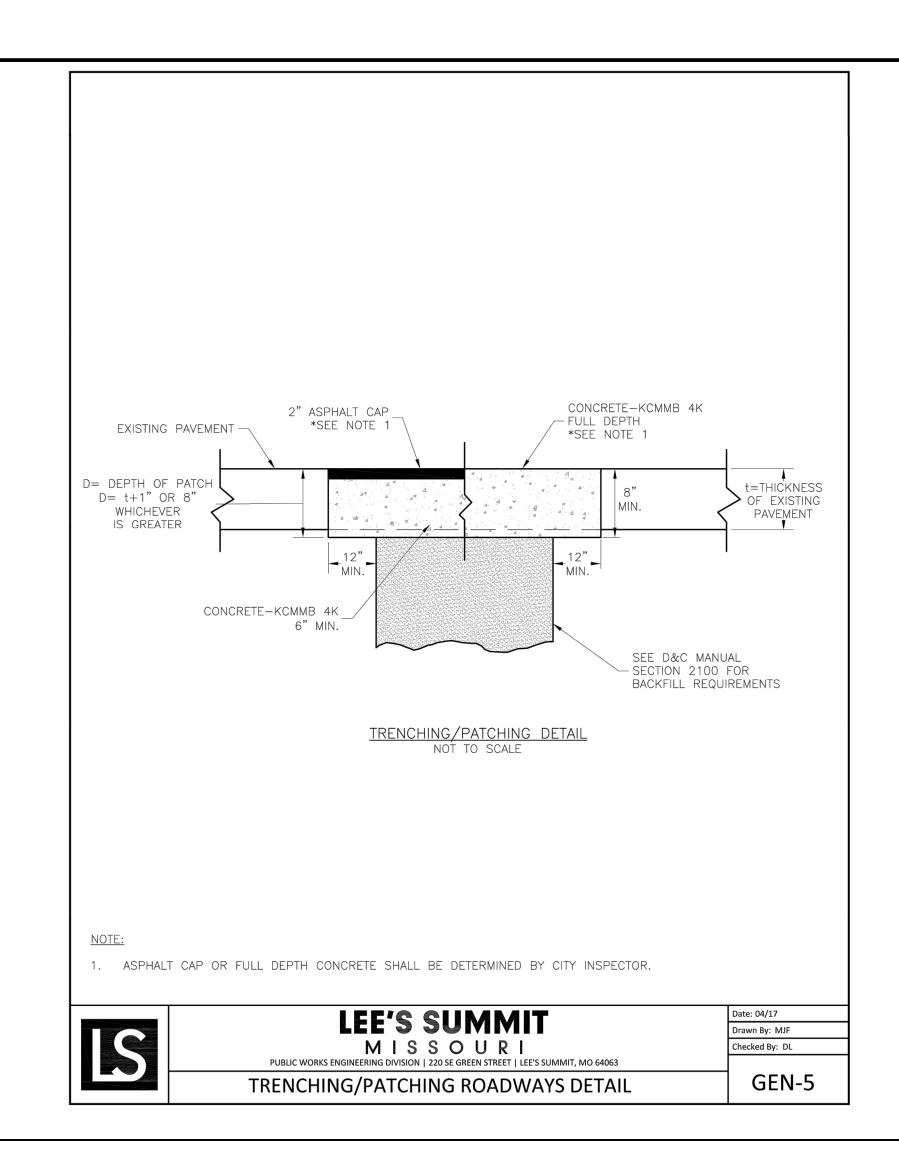


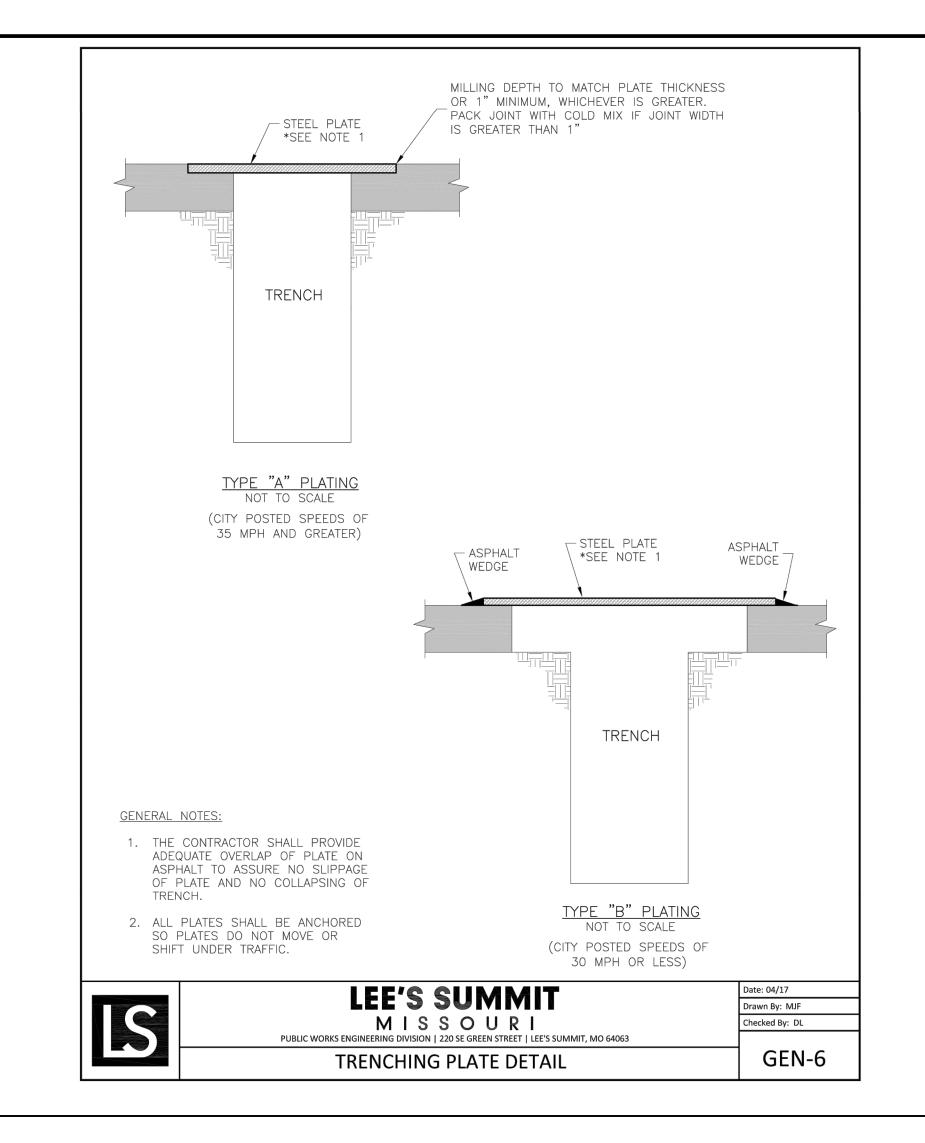
TYPICAL WATER MAIN TRENCH WITH ABANDONED IN PLACE PIPE

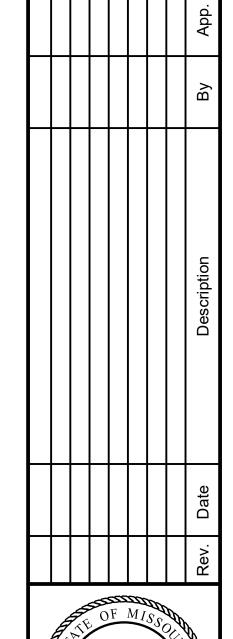
Not to Scale

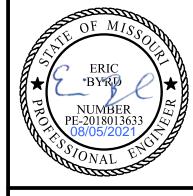














1001 NW CHIPMAN RD. LEE'S SUMMIT, MO 64081 JOHN KNOX VILLAGE

WATER MAIN DETAILS

PUBLIC WATER MAIN IMPROVEMENTS JOHN KNOX VILLAGE MEADOWS LEE'S SUMMIT, MO 64081

Design: SKT Drawn: SK Issue Date: 05/04/202 Project Number: 02880

4' (max.) Stakes (typ.) Notes for Wattles and Biodegradable Log Slope Protection: Wattle or Biodegradable Log The Slope barriers shall be placed along contour lines, with a short section turned upgrade at each end of the barrier. The maximum length of the slope barrier shall not exceed 250 feet, and the barrier ends need to be staggered. Direction of Flow 2. Install wattles and biodegradable logs per manufacturer's instructions. Spacing of stakes per manufacturer's instructions with 4' max. spacing.
 Length of stakes shall be a minimum of 2 times the diameter
 of the log with minimum of 24". Trenching per manufactures instructions. Typical Elevation Section A-A AMERICAN PUBLIC WORKS ASSOCIATION WATTLES AND BIODEGRADABLE LOG KANSAS CITY METRO CHAPTER STANDARD DRAWING WATTLES/BIODEGRADABLE LOG NUMBER ESC-04 ADOPTED: MULCH/COMPOST FILTER BERM 10/24/2016