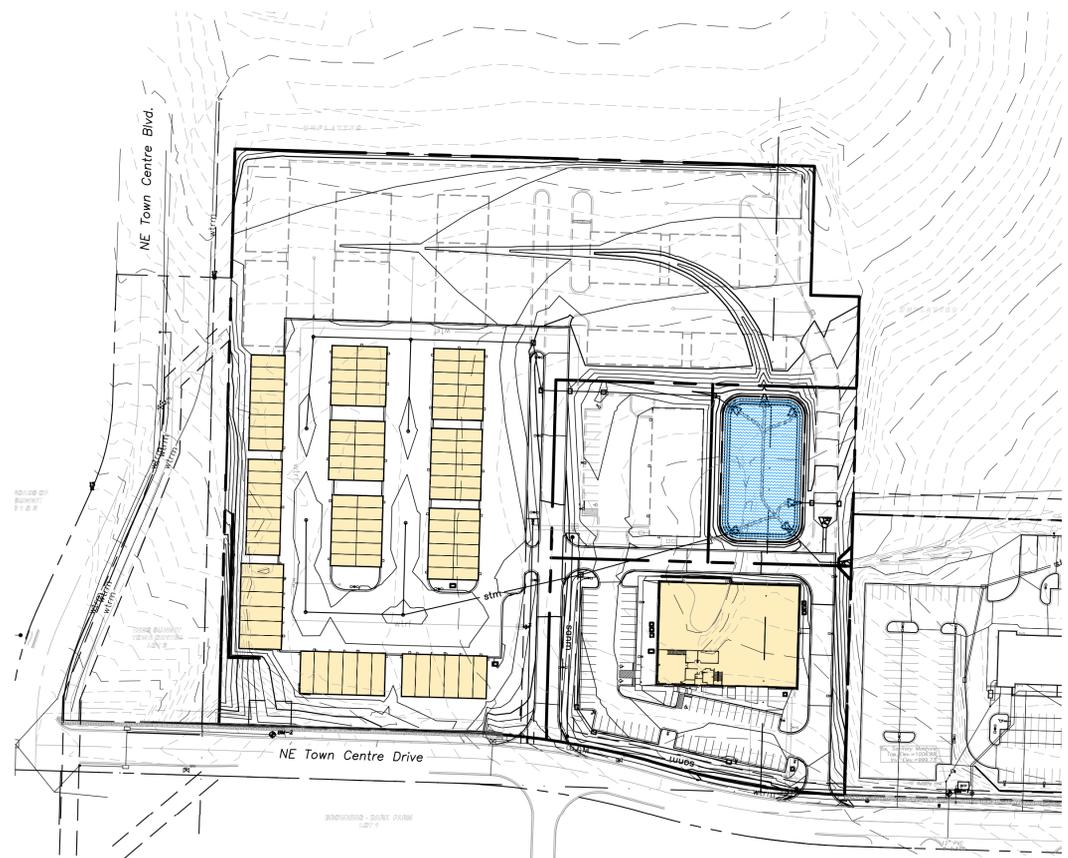
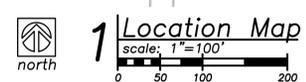
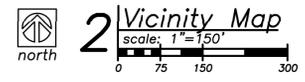
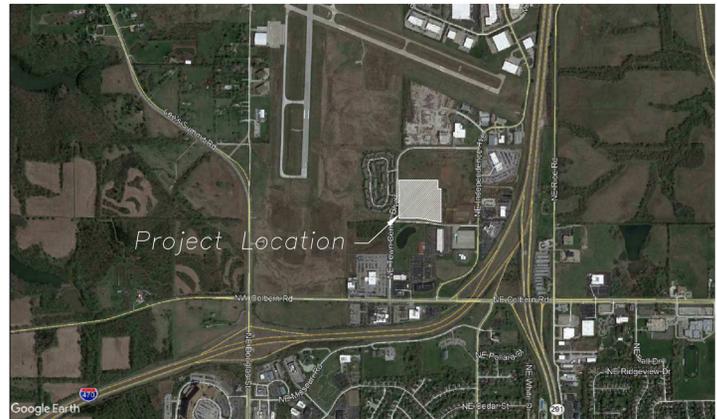


# Public Water Improvement Plans for Lee's Summit Town Centre Lot 1 Section 29, Township 48 North, Range 31 West City of Lee's Summit, Jackson County, Missouri



**Sheet Index**

- CW 1 - Cover
- CW 2 - Public Sanitary Main Plan & Profile
- CW 3 - Details

**Civil Engineer:**

Davidson Architecture & Engineering, LLC  
Mr. Paul A. Miller, P.E.  
4301 Indian Creek Pkwy.  
Overland Park, KS 66207  
Phone: (913) 451-9390  
Email: Paul@davidsonae.com

**Owner Information**

WHM Management, LLC  
Mr. Josh Wilson  
PO Box 1059  
Lee's Summit, MO 64063  
Phone: (816) 935-5019  
Email: jjwilson801213.com

**Legal description:**

Lot 1, Lee's Summit Town Centre, Lot 1 & Lot 2, A Subdivision In Lee's Summit, Jackson County, Missouri. Containing 505,722.67 sq. ft. or 11.61 acres more or less.

**General Notes:**

- The Contractor shall be responsible for obtaining all required permits, paying all fees, and otherwise complying with all applicable regulations governing the project.
- All materials, workmanship, and construction shall meet or exceed the city standards. Where there is conflict between these plans and standards, the higher quality standard as determined by the engineer shall apply. All work shall be inspected and approved by contractor.
- All work and materials shall be subject to inspection and approval by the owner or the owner's representative. Any change or deviation from these plans must be authorized in writing by the owner or the owner's representative prior to work being completed.
- The work associated with and based on these plans, shall be subject to the requirements of, and conform to, the Municipal Code of Lee's Summit, Missouri, and the standards and specifications in current use. The standards, specifications, details, and procedures sub-referenced therein are hereby incorporated by reference.
- Lineal foot measurements shown on the plans are horizontal measurements, not slope measurements. All payments shall be made on horizontal measurements.
- No geological information is shown in these plans.
- Prior to commencement of work, the contractor shall notify all utility companies which have facilities in the near vicinity of the construction to be performed.
- All waste material resulting from the project shall be disposed of off-site in an approved landfill. All excavation shall be unclassified. No separate payment will be made for rock excavation. Contractor is responsible for all haul off material.
- The Contractor shall be required to provide a stabilized construction entrance to prevent mud from being deposited onto adjacent roads.
- All mud, dirt, and debris tracked onto the parking lot or any roadway shall be removed immediately by the contractor.
- The Contractor shall be responsible for keeping the public streets in the vicinity of the job site clean and free of rocks, soil and debris. Streets and/or parking areas will be scraped and swept on a daily basis by the general contractor.
- The Contractor shall protect from damage all survey monuments, property markers, benchmarks, etc. Items damaged shall be reset by a professional land surveyor licensed in the state of Missouri, at the contractor's expense.
- Paving shall conform to the minimum design standards as required by the city and these drawings. If a geotechnical report is provided for the project, the greater pavement requirement between the city's minimum design standards and the geotechnical report shall be used.
- The Contractor shall provide 48-hour notification to the city engineering division or proper city staff to schedule all required inspections.
- All concrete for public improvements shall comply with the city standards and specifications. If no city standards and specifications are provided, then the contractor shall comply with the standards and specifications of the Kansas City Metropolitan Materials Board (KCMMB) unless otherwise noted. Structural concrete shall be 5,000 psi and nonstructural concrete shall be 4,000 psi.
- The contractor shall be responsible for the restoration of the right-of-way and for damaged improvements such as curbs, sidewalks, street light and traffic signal junction boxes, traffic signal loop lead-ins, signal poles, etc (offsite and onsite). Damaged improvements shall be repaired in conformance with the latest city standards and to the city's satisfaction.
- All work within the road right-of-way shall conform to the technical specifications and design criteria for public improvement projects of the city of Lee's Summit, Missouri. A right-of-way work permit and/or street excavations permit shall be obtained by the contractor if required to complete all work within the public right-of-way.
- All traffic control in connection with construction in the right-of-way shall be in conformance with the Manual of Uniform Traffic Control Devices and/or the jurisdictional authority. It is the contractor's responsibility to obtain a traffic control permit if required.
- All waste materials, trash and construction debris shall be collected and stored in dumpsters. No construction waste shall be buried on site. All hazardous waste materials will be disposed of in the manner specified by local, state and federal regulations. Site personnel shall be instructed in these practices, and the construction manager shall be responsible for seeing that these practices are followed.
- Recommendations made by the geotechnical engineer, to be retained by the owner, and contained in the geotechnical report shall govern project conditions unless noted otherwise. Paving shall conform to the the greater pavement requirement between the city's minimum design standards and the recommendations made in the geotechnical report.
- The Contractor shall grade areas to provide positive drainage.
- The contractor shall be responsible for the coordination of work between suppliers and subcontractors involved in the project, including staging of construction details.
- All disturbed areas shall be maintained for dust control. Sprinkling tank trucks shall be available at all times & used on on-site disturbed areas, and other areas where dust becomes a problem as a result of construction activity.
- Nothing indicated on these drawings shall relieve the contractor from complying with appropriate safety regulations.
- According to MDNR Record Database and Field Survey, there is no evidence suggesting presence of any active, inactive or capped oil and/or gas wells on the property.

**Utility Contacts**

Sanitary - City of Lee's Summit	(816) 969-1900
Water - City of Lee's Summit	(816) 969-1900
Storm Sewer - City of Lee's Summit	(816) 969-1800
Electric - Evergy	(888) 471-5275
Gas - Spire	(816) 756-5252
Telephone - AT&T	(800) 464-7928
Cable - Spectrum	(816) 358-8833



**Local Benchmarks:**

- BM-1:** (Sanitary Sewer Manhole, Center of Lid)  
Elevation: 1006.88'  
N: 1013449.78  
E: 2826933.88
- BM-2:** (Storm Sewer Curb Inlet, Center of Lid)  
Elevation: 994.34'  
N: 1013518.71  
E: 2826136.03

**Symbols**

- Sanitary manhole
- service cleanout
- force main release valve
- rectangular structure
- circular structure
- fire hydrant
- water valve
- water meter
- backflow preventer
- natural gas meter
- service transformer (pad mount)
- primary switch gear
- light pole
- cable/phone/data junction box
- street light
- pedestrian street light
- electric pole
- guy wire
- end section

**Floodplain Note:**

The site lies entirely with "Zone X", areas determined to be outside the 0.2% annual chance floodplain as depicted on the FEMA Flood Insurance Rate Map (FIRM) no. 29095C0430G, Revision Date: January 20, 2017.

**Property Legend**

- right of way
- property lines
- easements
- setbacks

**Grading Legend**

- existing minor contour
- existing major contour
- proposed minor contour
- proposed major contour

**Utility Legend**

- existing
- proposed

**Linetypes**

- sanm - sanitary main
- sans - sanitary service
- ssm - storm sewer (existing)
- ssm - storm sewer (solid wall, proposed)
- stm - storm sewer (solid wall, proposed)
- ssm - storm sewer (perforated, proposed)
- wtrm - water main
- wtrf - water service (fire)
- wtrd - water service (domestic)
- wtri - water service (irrigation)
- gsrm - natural gas main
- gass - natural gas service schematic
- elpu - underground primary electric
- elsu - underground secondary electric
- elpo - overhead electric
- datu - underground cable/phone/data
- datu - underground cable/phone/data service
- fence-chainlink
- fence-wood
- fence-barbed wire
- tree

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**PL2022031**  
**PRSUBD20220902**

RELEASED FOR CONSTRUCTION  
As Noted on Plans Review  
Development Services Department  
Lee's Summit, Missouri  
04/15/2022

a new development for

**Town Centre Lot 1**

520 NE Town Centre Drive  
Lee's Summit, Missouri

date 01.31.2022  
drawn by JMP  
checked by PAM  
revisions  
03.01.2022 01

sheet number

**CW 1**

drawing type Permit  
project number 20231

- Utility Notes**
- Boundary information, existing utilities and topographic features shown are based on information supplied by owner, surveyor, and others.
  - The existing utility locations shown on these plans are approximate and may not include all utility lines present. The contractor shall be responsible to make One Call and coordinate field location of all existing underground utilities prior to beginning excavation/construction activities.
  - The contractor shall be responsible for any damage to any utilities or their structures during excavation/construction activities.
  - The contractor shall coordinate and be responsible for connection fees, system development fees, taxes, etc. for all main connections and/or extensions with and from the city and/or respective utility unless otherwise coordinated with the Owner. All utility services for this project shall be coordinated with respective utility company by contractor.
  - The contractor shall be responsible for adjusting all at-grade utilities such as manhole covers, valve box covers, etc. to finish grade, whether specifically indicated in these plans or not.
  - Utilities shown on the plan with specific elevations and/or structure locations are SUE quality level "B", ie: storm sewer, sanitary sewer, water hydrants & valves, utility poles, etc. All other existing utility information shown is SUE quality level "D", primarily retracement of one-call and city records.

- Local Benchmarks:**
- BM-1:** (Sanitary Sewer Manhole, Center of Lid)  
Elevation: 1006.88'  
N: 1013449.78  
E: 2826933.88
  - BM-2:** (Storm Sewer Curb Inlet, Center of Lid)  
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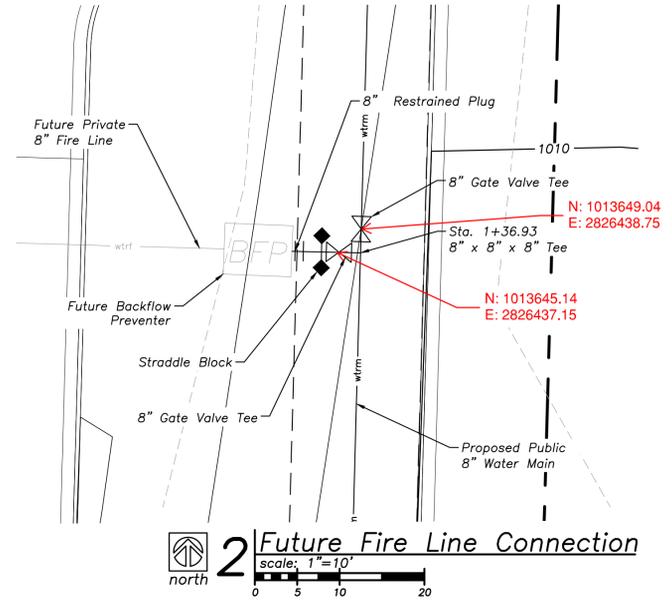
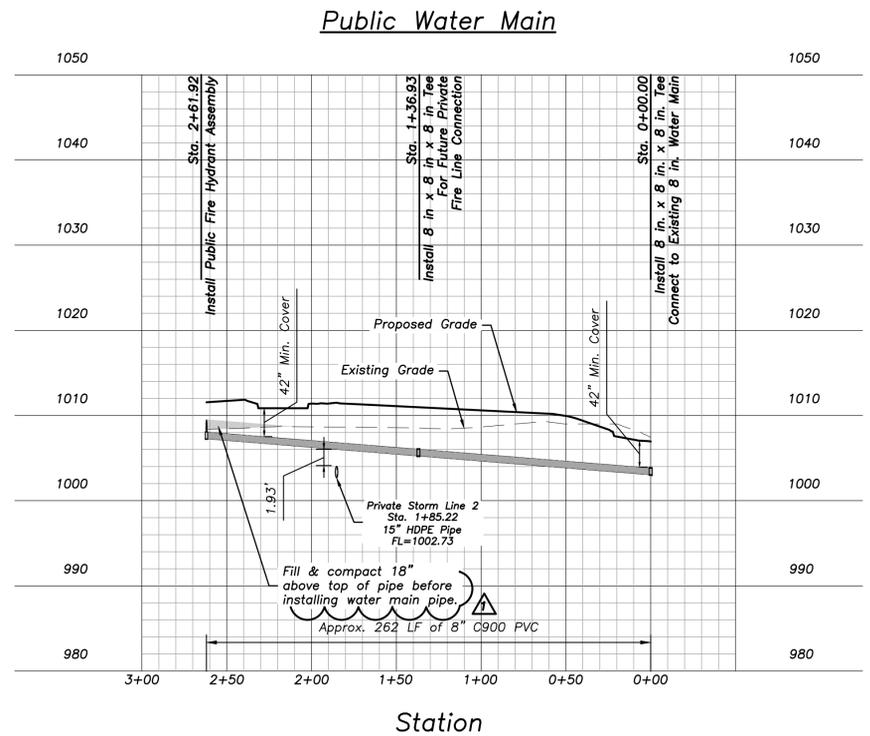
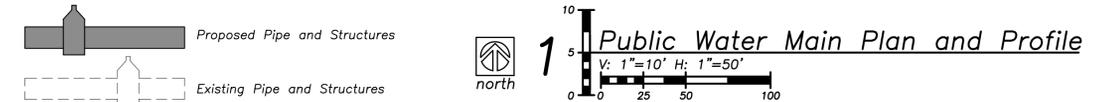
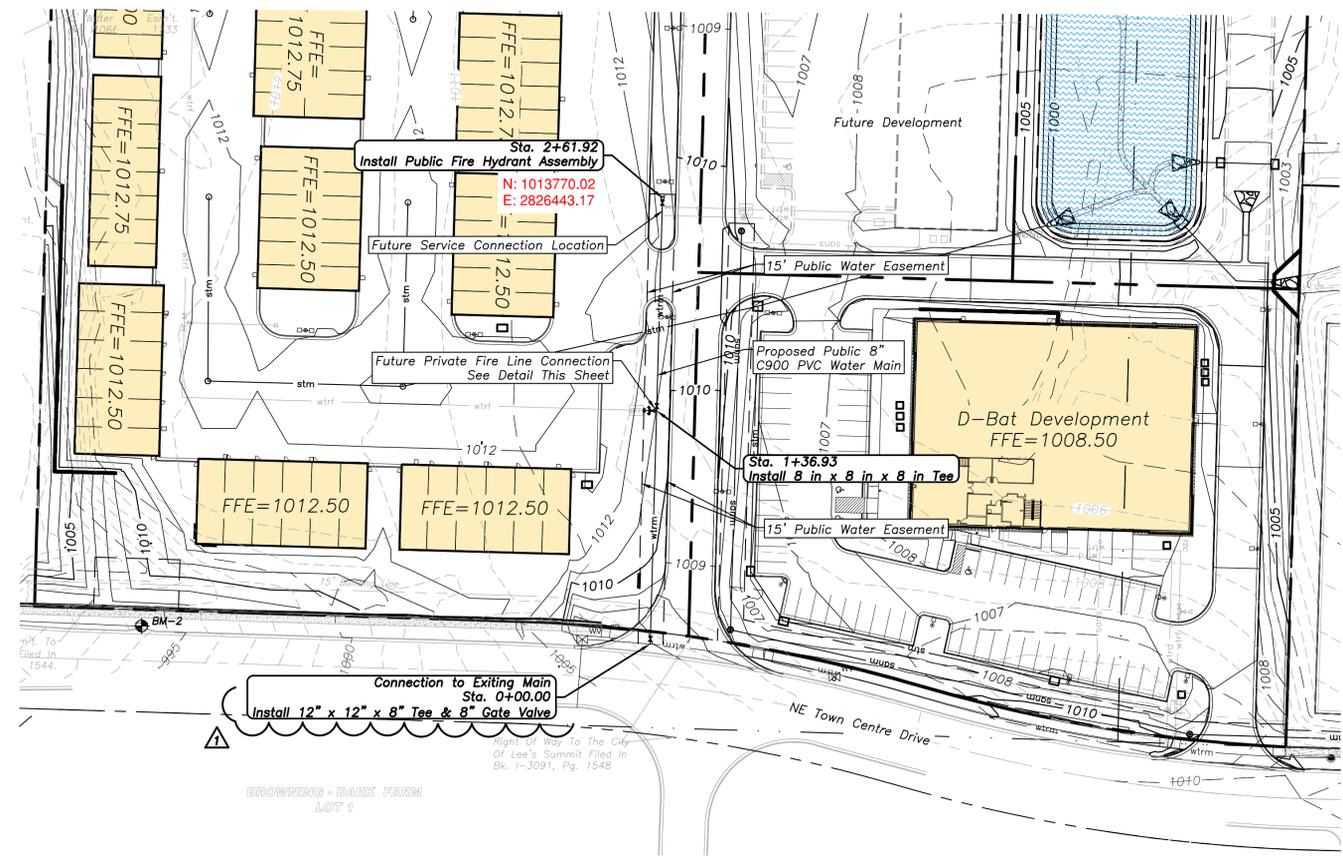
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  - elsu underground secondary electric
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  - fence-chainlink
  - fence-wood
  - fence-barbed wire
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- Symbols**
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  - rectangular structure
  - circular structure
  - fire hydrant
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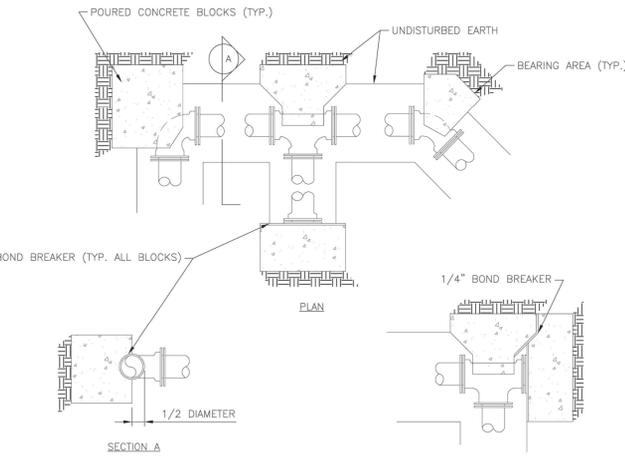
a new development for  
**Town Centre Lot 1**  
520 NE Town Centre Drive  
Lee's Summit, Missouri

date 01.31.2022  
drawn by JMP  
checked by PAM  
revisions  
03.01.2022 01

sheet number  
**CW 2**  
drawing type  
Permit  
project number  
20231

REQUIRED CONCRETE BEARING AREA (SQUARE FEET - SF)

NOM. DIA. (INCHES)	180 TEE, PLUG	90 BEND	45 BEND	22.5 BEND	11.25 BEND
6	4.7	6.7	4.0	4.0	4.0
8	8.4	11.8	6.4	4.0	4.0
10	13.1	18.5	10.0	5.1	4.0
12	18.8	26.7	14.4	7.4	4.0
14	25.7	36.3	19.6	10.0	5.0
16	33.5	47.4	25.6	13.1	6.6
18	42.4	REST. JT.	32.5	16.5	8.3
20	REST. JT.	REST. JT.	40.1	20.4	10.3
24	REST. JT.	REST. JT.	REST. JT.	29.4	14.8

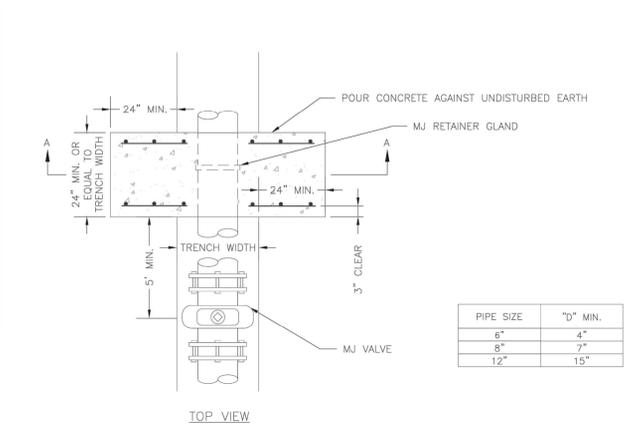


- NOTES:
- ALL BENDS WITHOUT RESTRAINED JOINTS SHALL HAVE CONCRETE THRUST BLOCKS INSTALLED FOR RESTRAINT.
  - MEGA LUGS MAY BE USED ONLY IN CONJUNCTION WITH CONCRETE THRUST BLOCKING.
  - BEARING AREA MUST BE AGAINST UNDISTURBED SOIL.
  - DO NOT COVER JOINTS OR BOLTS (WHERE APPLICABLE) WITH CONCRETE.

**LEE'S SUMMIT MISSOURI**  
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

**LS** **WAT-1**

**HORIZONTAL THRUST BLOCK**

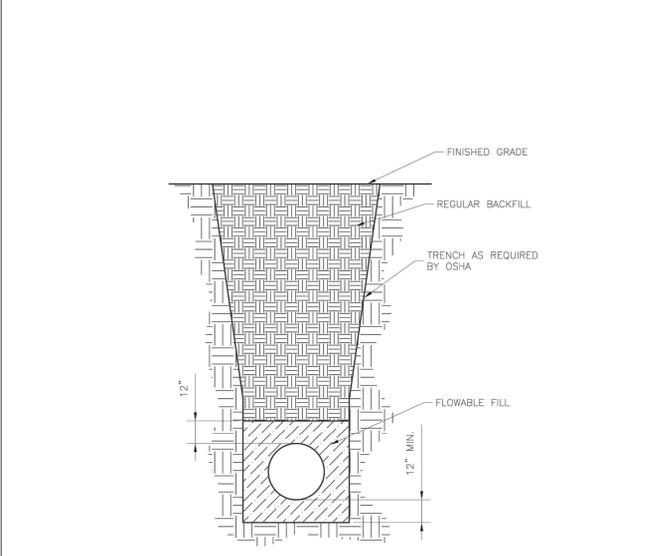


NOTE:  
THIS DETAIL NOT TO BE USED FOR PIPE GREATER THAN 12"

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

**LS** **WAT-3**

**STRADDLE BLOCK**

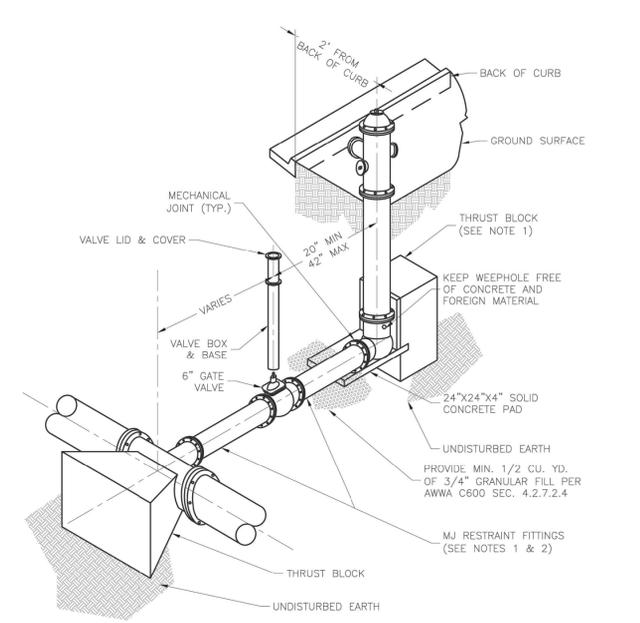


- NOTES:
- FLOWABLE FILL SHALL MEET THE REQUIREMENTS OF THE CITY OF LEE'S SUMMIT DESIGN AND CONSTRUCTION MANUAL.
  - REGULAR BACKFILL ABOVE THE TRENCH CHECK SHALL BE FREE OF DEBRIS, ORGANIC MATTER, AND STONES > 6" IN ANY DIMENSION.
  - TOP OF FLOWABLE BACKFILL SHALL EXTEND 12" ABOVE THE TOP OF THE PIPE.
  - LENGTH OF TRENCH CHECK SHALL BE A MINIMUM OF 12".

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**LS** **WAT-6**

**WATER TRENCH CHECK DETAIL**

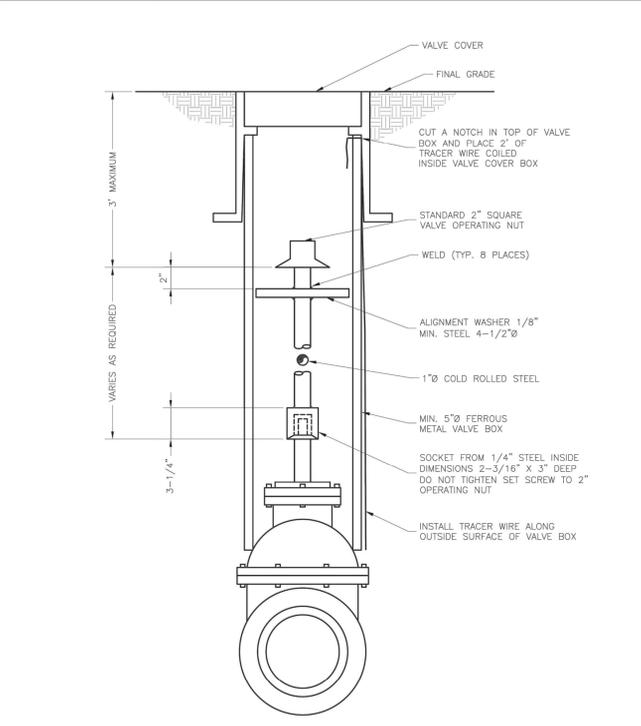


- NOTES:
- WHEN RETAINER GLANDS ARE USED IN LIEU OF MECHANICAL JOINT (MJ) RESTRAINT FITTINGS, HORIZONTAL THRUST BLOCKS ARE REQUIRED.
  - GATE VALVE MAY BE BOLTED DIRECTLY TO MJ RESTRAINT TEE.
  - SEE APPROVED PRODUCTS LIST FOR WATER UTILITIES FOR FIRE HYDRANT, VALVES, VALVE BOX LID, AND COVER.
  - BOTTOM HYDRANT FLANGE SHALL BE 2" TO 6" ABOVE FINISHED GRADE.
  - FOR STREETS WITHOUT CURBS FIRE HYDRANTS SHALL BE PLACED WITHIN 1 FOOT OF THE R/W LINE, BUT NOT MORE THAN 10' FROM EDGE OF PAVEMENT. FIRE HYDRANT SHALL NOT BE PLACED IN BOTTOM OF DITCH.
  - HYDRANT SHALL BE ROTATED AS DIRECTED BY INSPECTOR.

**LEE'S SUMMIT MISSOURI**  
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

**LS** **WAT-7**

**HYDRANT - STRAIGHT SET**



**LEE'S SUMMIT MISSOURI**  
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

**LS** **WAT-9**

**VALVE STEM EXTENSION AND VALVE BOX**

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