

WATER DISTRIBUTION SYSTEM IMPROVEMENTS

TO SERVE

WOODLAND ELEMENTARY ADDITION

PRIVATE PROJECT NO. 1832 PPW (607853)

CITY OF WICHITA, KANSAS

GARY JANZEN, P.E. - CITY ENGINEER

Fitting locations

Fire Hydrant - 278' North and 17'6" West of the center of intersection 16th North and Payne and 3' behind back of curb.

FH valve is 2' west of FH.

Fittings

Fire Hydrant Assembly Clow Storz

GENERAL NOTES

- EACH BIDDER SHALL VISIT THE SITE OF THE PROJECT BEFORE SUBMITTING A PROPOSAL IN ORDER TO BECOME BETTER INFORMED OF THE EXISTING FIELD CONDITIONS AND OBSTACLES WHICH MIGHT BE ENCOUNTERED DURING CONSTRUCTION. EACH BIDDER SHOULD UNDERSTAND THAT NO ADDITIONAL COMPENSATION WILL BE AWARDED FOR EXTRA WORK THAT SHOULD HAVE BEEN EVALUATED PRIOR TO BIDDING.
- THE CONTRACTOR WILL BE REQUIRED TO PROVIDE A MINIMUM ADVANCE NOTICE OF FORTY-EIGHT (48) HOURS TO UTILITY COMPANIES TO STARTING ANY EXCAVATION AS FOLLOWS.

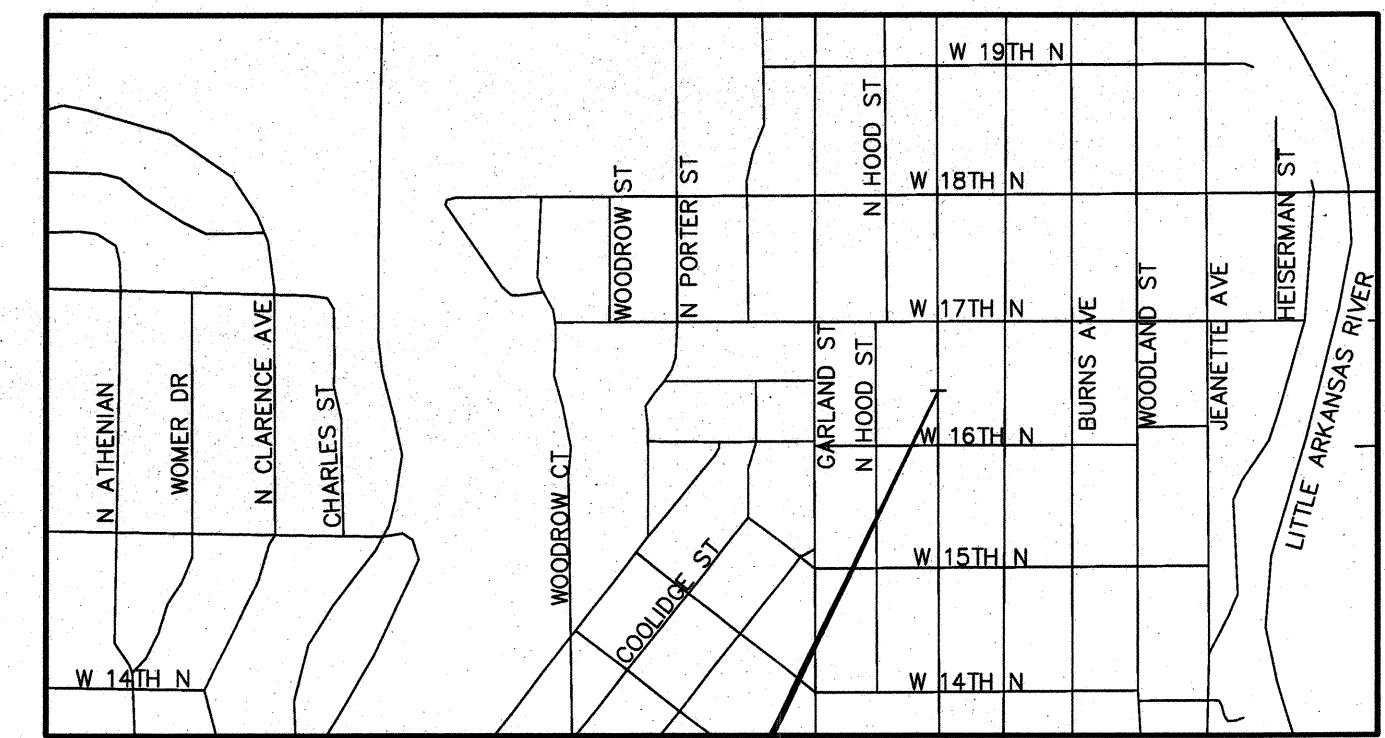
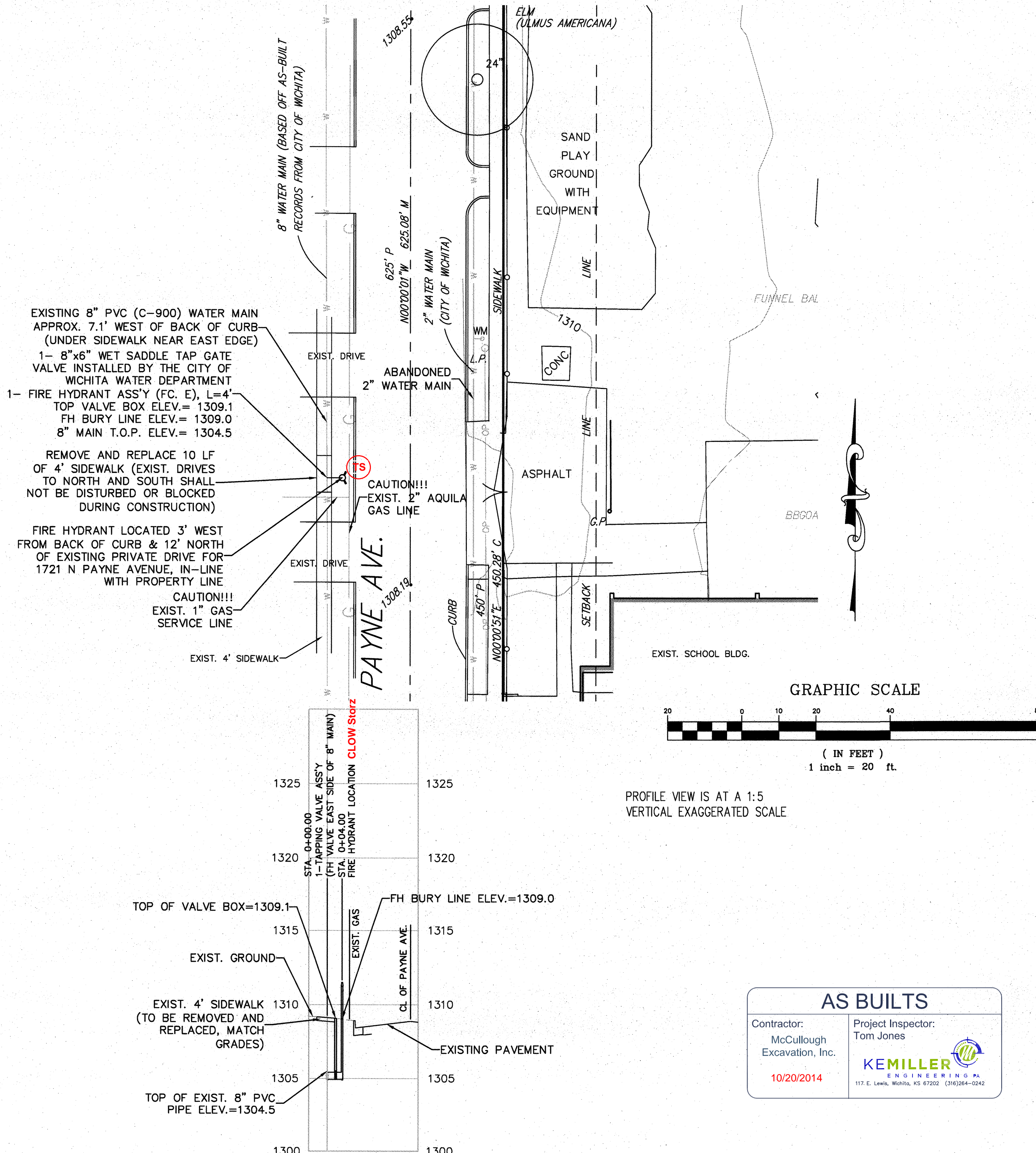
KANSAS ONE-CALL 1-800-344-7233

THE CONTRACTOR MUST NOTIFY THE FOLLOWING IN CASE OF EMERGENCY

BLACK HILLS ENERGY	1-316-258-5606
AQUILA GAS	1-800-303-0752
WESTAR ENERGY	1-316-261-6734
AT&T TELEPHONE COMPANY	1-316-268-2245
COX COMMUNICATIONS	1-316-260-7475
LEVEL 3 COMM	1-877-366-8344
CITY OF WICHITA WATER & SEWER DEPARTMENT	1-316-268-4555

- THE CONTRACTOR SHALL GIVE ALL PROPERTY OWNERS AND/OR TENANTS OF DEVELOPED PROPERTY DIRECTLY ADJUTING THE CONSTRUCTION OF THE PROJECT A MINIMUM OF TEN (10) DAYS NOTICE PRIOR TO THE START OF CONSTRUCTION AND A 24 HOUR NOTICE PRIOR TO ANY PLANNED WATER SHUTDOWN.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PRESERVING PROPERTY IRONS. THE CONTRACTOR SHALL BE REQUIRED TO RE-ESTABLISH ANY PROPERTY IRONS WHICH ARE DAMAGED OR DESTROYED BY HIS CONSTRUCTION OPERATIONS. SUCH IRONS SHALL BE RE-ESTABLISHED BY A LICENSED LAND SURVEYOR IN ACCORDANCE WITH STATE LAWS.
- EXISTING UTILITIES AND THEIR LOCATIONS, AS SHOWN ON THE PLANS REPRESENT THE BEST INFORMATION OBTAINABLE FOR DESIGN. LOCATION INFORMATION HAS BEEN OBTAINED FROM VARIOUS COMPANIES AND IS EITHER FROM COMPANY UTILITY DRAWINGS OR COMPANY PROVIDED FIELD LOCATIONS. THE PLAN LOCATIONS SHOWN ARE NOT GUARANTEED. ADDITIONAL EXISTING UTILITIES MAY BE ENCOUNTERED.
- POWER POLES WITHIN CLOSE PROXIMITY TO THE NEW WATER LINE MAY REQUIRE TEMPORARY BRACING TO FACILITATE CONSTRUCTION. CONTRACTOR SHALL CONTACT SHANE PRICE AT WESTAR ENERGY AT 261-6315 PRIOR TO CONSTRUCTION TO COORDINATE POLE BRACING.
- THE WATER DEPARTMENT SHALL FIELD LOCATE WATER VALVES ONCE DURING CONSTRUCTION WHEN REQUESTED BY THE CONTRACTOR. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PRESERVE SUCH FIELD LOCATIONS DURING THE CONSTRUCTION PROCESS. ANY AND ALL WATER SYSTEM COMPONENTS DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE. CONTACT GREG LOLLEY WITH THE WICHITA WATER DEPARTMENT FOR WATER SERVICE INFORMATION AT 268-4555.
- OPERATION OF WATER VALVES SHALL BE DONE SLOWLY TO PREVENT DAMAGE BY WATER HAMMER. ALL VALVES THAT ARE CLOSED MUST BE REOPENED AS NEW CONSTRUCTION AND TESTING PERMITS.
- ALL TEMPORARY BLOW-OFF VALVES NECESSARY TO FLUSH LINES AT ANY POINT IN THE CONSTRUCTION PROCESS SHALL NOT BE PAID FOR DIRECTLY, AND ARE CONSIDERED INCIDENTAL TO OTHER BID ITEMS.
- ALL WATER PIPE TRENCHING IN PAVEMENT OR DRIVEWAYS, WHICH WILL BE REQUIRED TO CARRY TRAFFIC UNTIL PERMANENT PAVING REPLACEMENT, SHALL BE TOPPED WITH A MINIMUM OF 6" CRUSHED ROCK (COMPACTED) TO BE INCIDENTAL TO THE PROJECT. CONTRACTOR SHALL BE REQUIRED TO MAINTAIN TEMPORARY CRUSHED ROCK UNTIL PERMANENT PAVEMENT IS INSTALLED.
- RUBBLE FROM THE REMOVAL OF MISCELLANEOUS STRUCTURES AND EXCESS EXCAVATION WHICH IS TO BE WASTED SHALL BE DISPOSED OF ON SITES TO BE PROVIDED BY THE CONTRACTOR. THESE SITES SHALL BE APPROVED BY THE ENGINEER AS TO SUITABILITY, APPEARANCE AND SITE LOCATION. LOCATIONS THAT, IN THE OPINION OF THE ENGINEER, WILL LEAVE UNSIGHTLY APPEARANCE WILL NOT BE APPROVED. ALL DISPOSAL SITES MUST BE APPROVED BY THE KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT. MATERIAL EITHER STOCKPILED OR DISPOSED OF IN A FLOOD PLAIN WOULD REQUIRE A KANSAS STATE BOARD OF AGRICULTURE PERMIT. ANY MATERIAL DUMPED IN WATERS OF THE UNITED STATES OR WETLANDS IS SUBJECT TO U.S. CORPS OF ENGINEERS PERMITTING REGULATIONS. ANY MATERIAL BURIED OR STOCKPILED BEYOND APPROVED CONSTRUCTION LIMITS WOULD REQUIRE ADDITIONAL ARCHEOLOGICAL INVESTIGATIONS UNLESS BURIED IN A PREVIOUSLY BORROW LOCATION.
- UNLESS SHOWN OR STATED OTHERWISE ON THESE DRAWINGS, MATERIALS AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CITY OF WICHITA SPECIFICATIONS.
- SITE RESTORATION AND PREPARATION SHALL BE SUBSIDIARY TO THE PROJECT.
- THE CONTRACTOR SHALL PROVIDE ALL CONSTRUCTION STAKING.
- THE OWNER SHALL PROVIDE ALL CONSTRUCTION INSPECTION, TESTING, AND SHOP DRAWING REVIEW.
- THE CONTRACTOR SHALL USE BEST MANAGEMENT PRACTICES (BMP'S) TO PREVENT ERODED SOIL FROM ENTERING DITCHES, CULVERTS, AND DRAINAGE AREAS. STANDARD DETAILS FOR EROSION BMP'S ARE AVAILABLE FROM THE ENGINEER. THE CONTRACTOR SHALL FOLLOW THE INTENT OF THE BMP'S WHICH ACT AS A GUIDELINE.
- PLANS ARE DESIGNED BASED ON BEST AVAILABLE INFORMATION. THE INTENTION IS FOR FINISHED GRADE TO MATCH PRIOR GRADE CONDITIONS AND ELEVATIONS. CONTRACTOR IS TO MATCH EXISTING CONDITIONS AND GRADE TO SURFACE DRAIN AS CONDITIONS ALLOW TO AVOID PONDING. SIDEWALK SHOULD BE REPLACED IN KIND AT GRADE TO MATCH EXISTING CONDITIONS.

CONTACT PERSON:
SCOTT R. SERVIS, P.E., KAW VALLEY ENGINEERING, INC. (316) 440-4304



LOCATION MAP
WICHITA, KANSAS
NOT TO SCALE

INDEX OF SHEETS

- TITLE SHEET
- STANDARD CITY WATER DETAILS

APPROVED AS NOTED
BY CITY ENGINEER OF WICHITA
& BY WICHITA FIRE DEPARTMENT

Water Mains (Engineering) *Rebecca Anil 7/22/14*
Water Mains (Water) *Greg Lolley 7-22-14*
Fire Prot. Line *Tom Jones 7-22-14*

NOTE TO CONTRACTORS

PUBLIC PROPERTY:
Inspection and testing for the waterline is to be provided by a Licensed Consulting Engineering Firm under contract with the Owner/Developer. Said inspection to be in accordance with the City of Wichita standard construction engineering practices and certified by a Licensed Professional Engineer licensed in the State of Kansas. No work shall be performed in dedicated easements or public right-of-way by the Contractor without such inspection nor shall any work be commenced without written authorization by the City Engineer. All Construction and Materials shall comply with the City of Wichita Specifications and Standards (on file and available in the City Engineer's Office).

PRIVATE PROPERTY:
Installation and testing for the fire protection line is to be performed by a City of Wichita licensed fire protection contractor in accordance with the fire codes as adopted by the City of Wichita. All materials and construction practices for the fire protection line shall comply with the fire codes as adopted by the City of Wichita (available from the City of Wichita Fire Department). The Contractor shall not commence work without notification and approval of the Wichita Fire Department.
Inspection of the fire protection line is to be provided by the City of Wichita Fire Department and by a licensed Consulting Engineering Firm under contract with the Owner/Developer.
The contractor shall not start work until the project inspector is assigned to the project and present on the site. Any work done without inspection will be required to be uncovered for inspection.

SAFETY NOTICE TO CONTRACTOR
IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR WILL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS OF THE JOB SITE, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING PERFORMANCE OF THE WORK. THIS REQUIREMENT WILL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS.

WARRANTY / DISCLAIMER
THE DESIGNS REPRESENTED IN THESE PLANS ARE IN ACCORDANCE WITH ESTABLISHED PRACTICES OF CIVIL ENGINEERING FOR THE DESIGN FUNCTIONS AND USES INTENDED BY THE OWNER AT THIS TIME. HOWEVER, NEITHER KAW VALLEY ENGINEERING, INC NOR ITS PERSONNEL CAN OR DO WE WARRANT THESE DESIGNS OR PLANS AS CONSTRUCTED, EXCEPT IN THE SPECIFIC CASES WHERE KAW VALLEY ENGINEERING PERSONNEL INSPECT AND CONTROL THE PHYSICAL CONSTRUCTION ON A CONTEMPORARY BASIS AT THE SITE.

CAUTION - NOTICE TO CONTRACTOR
THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH PROPOSED IMPROVEMENTS SHOWN ON THE PLANS. THE CONTRACTOR SHALL EXPOSE EXISTING UTILITIES AT LOCATIONS OF POSSIBLE CONFLICTS PRIOR TO ANY CONSTRUCTION.

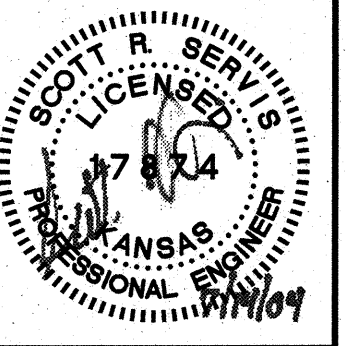
AS BUILTS

Contractor: McCullough Excavation, Inc. 10/20/2014	Project Inspector: Tom Jones KEMILLER 117 E. Linn, Wichita, KS 67202 (316)364-0242
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PROJ. NO.	G1400039
DESIGNER	SRS
DRAWN BY	MLT
CFN	0039TS
SHEET	1 OF 3
DATE	
REV	
DESCRIPTION	
DSN	DWN
CHK	CHK

WOODLAND ELEMENTARY FIRE HYDRANT
1705 SALINA STREET
WICHITA, KANSAS

WATER IMPROVEMENT TITLE AND PLAN SHEET

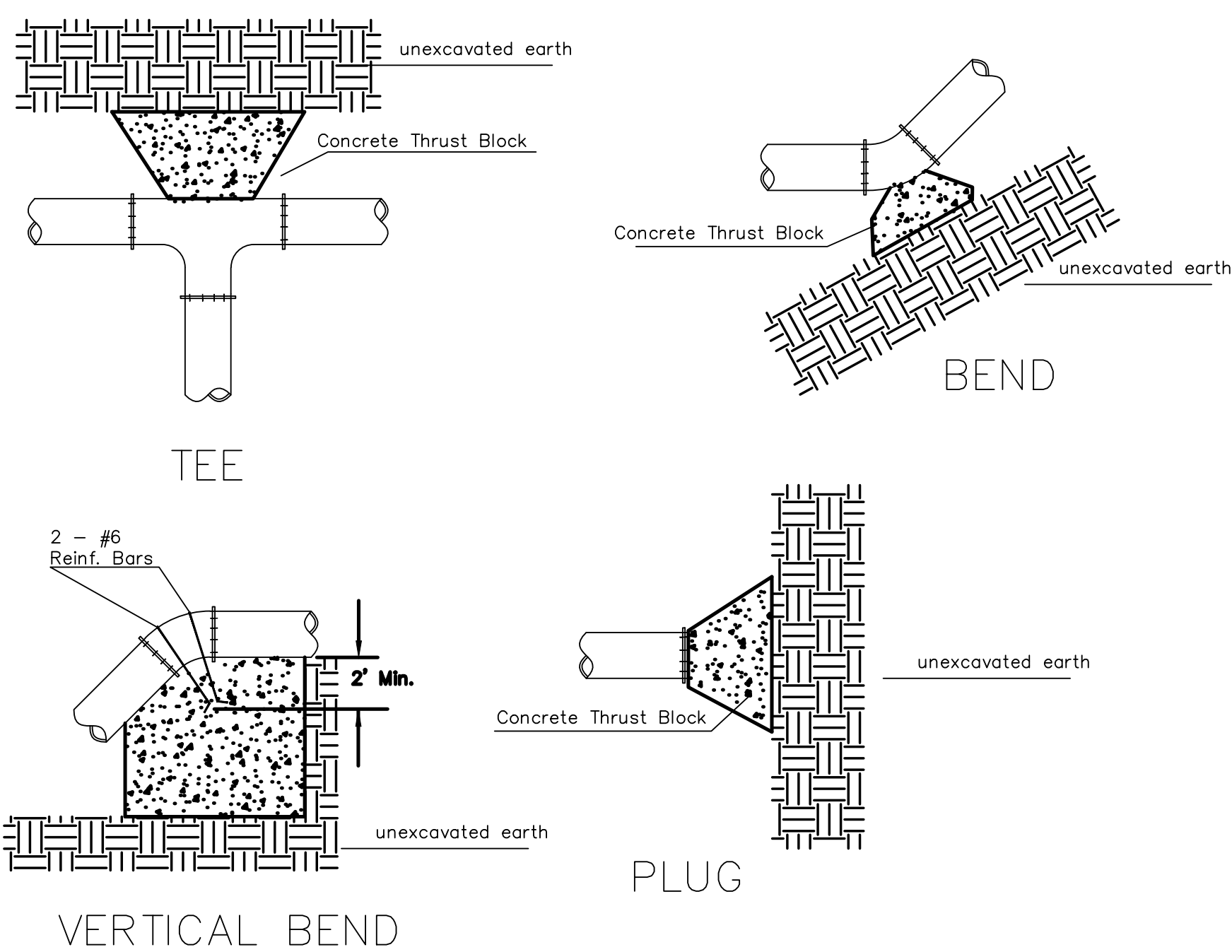


SCOTT R. SERVIS
ENGINEER
KS # 17874

KAW VALLEY ENGINEERING, INC.
CONSULTING ENGINEERS - LAND SURVEYORS
200 N. EMPORIA SUITE 100
WICHITA, KANSAS 67202
PH: (316) 440-4309
www.kaweng.com

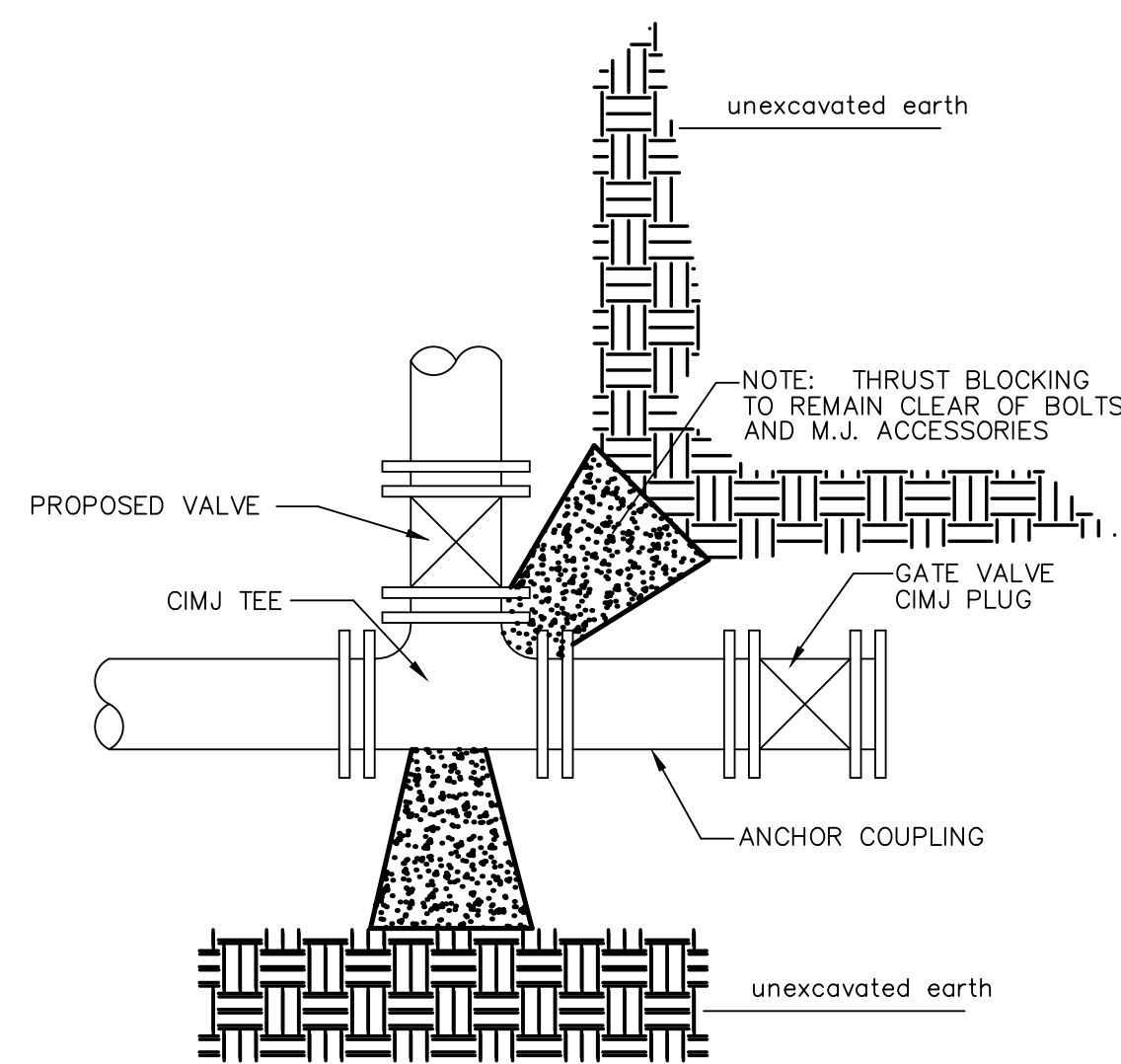
WICHITA, KANSAS
KAW VALLEY ENGINEERING, INC.
SERVICES BY KANSAS STATE CERTIFICATE OF AUTHORIZATION # E-113
EXPIRES 12/31/14

PROJ. NO.	G1400039
DESIGNER	SRS
DRAWN BY	MLT
CFN	0039TS
SHEET	1 OF 3



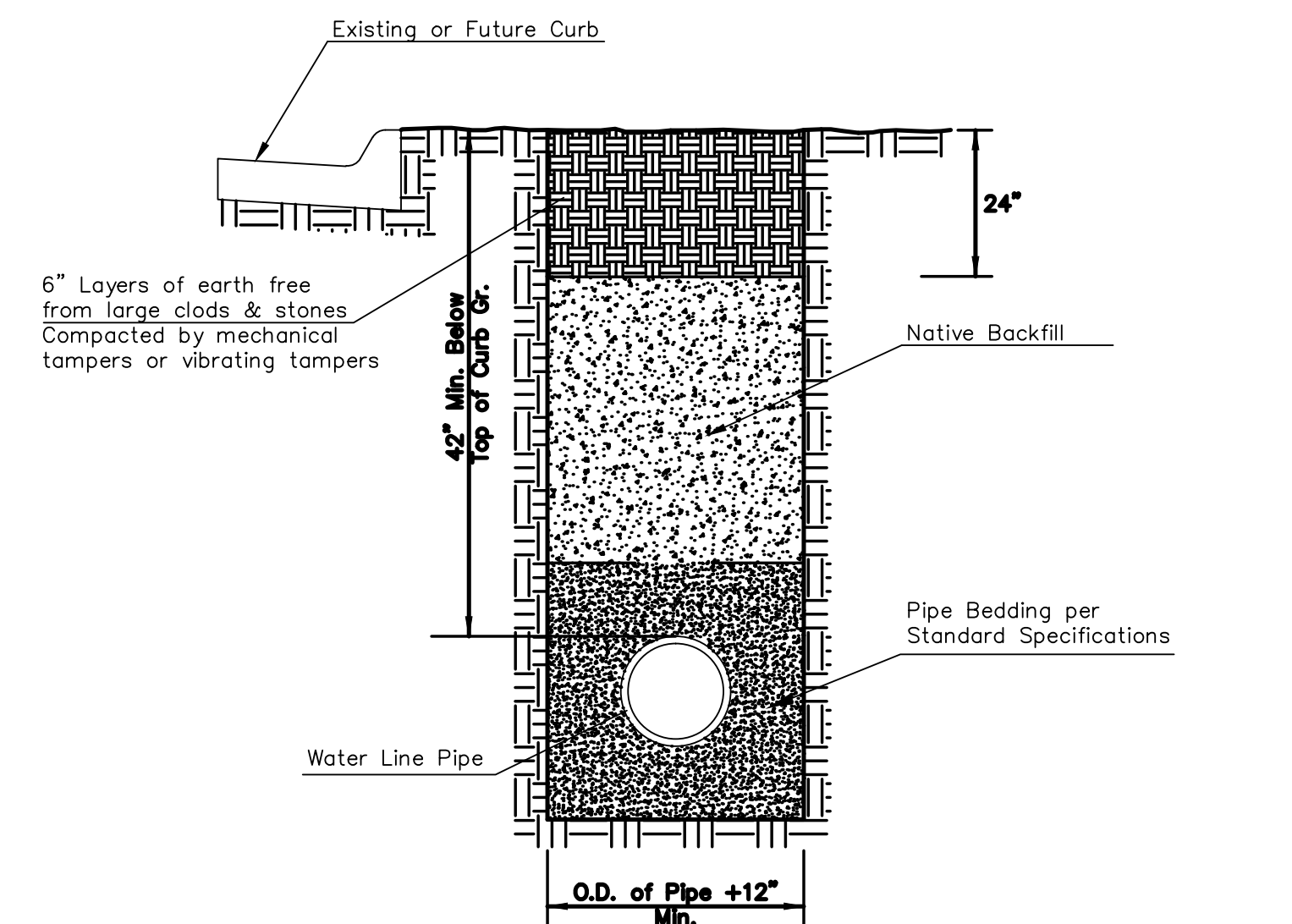
PIPE SIZE	THRUST AT FITTINGS IN TONS--AT 150#/IN ² P					TEE
	PLUG	90°	45°	22 1/2°	11 1/4°	
6"	2.8	3.95	2.15	1.09	.55	2.8
8"	4.9	6.95	3.75	1.90	.96	4.9
12"	11.4	16.1	8.75	4.45	2.25	11.4
16"	20.15	28.5	15.4	7.85	3.95	20.15
20"	31.15	44.0	23.85	12.15	6.10	31.15
24"	44.55	63.0	34.1	17.4	8.75	44.55

TYPICAL THRUST BLOCKS



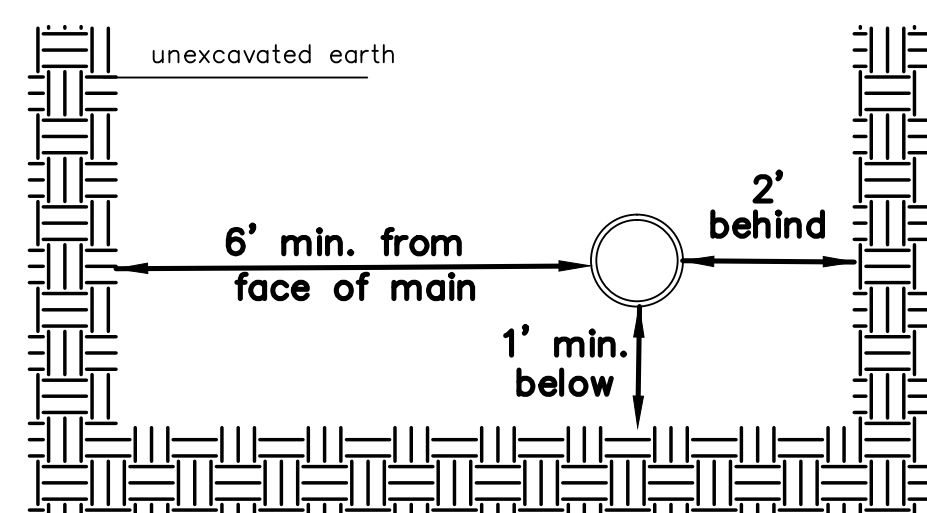
KEY BLOCK DETAIL

* PLANS GOVERN
UNLESS OTHERWISE NOTED ON PLANS



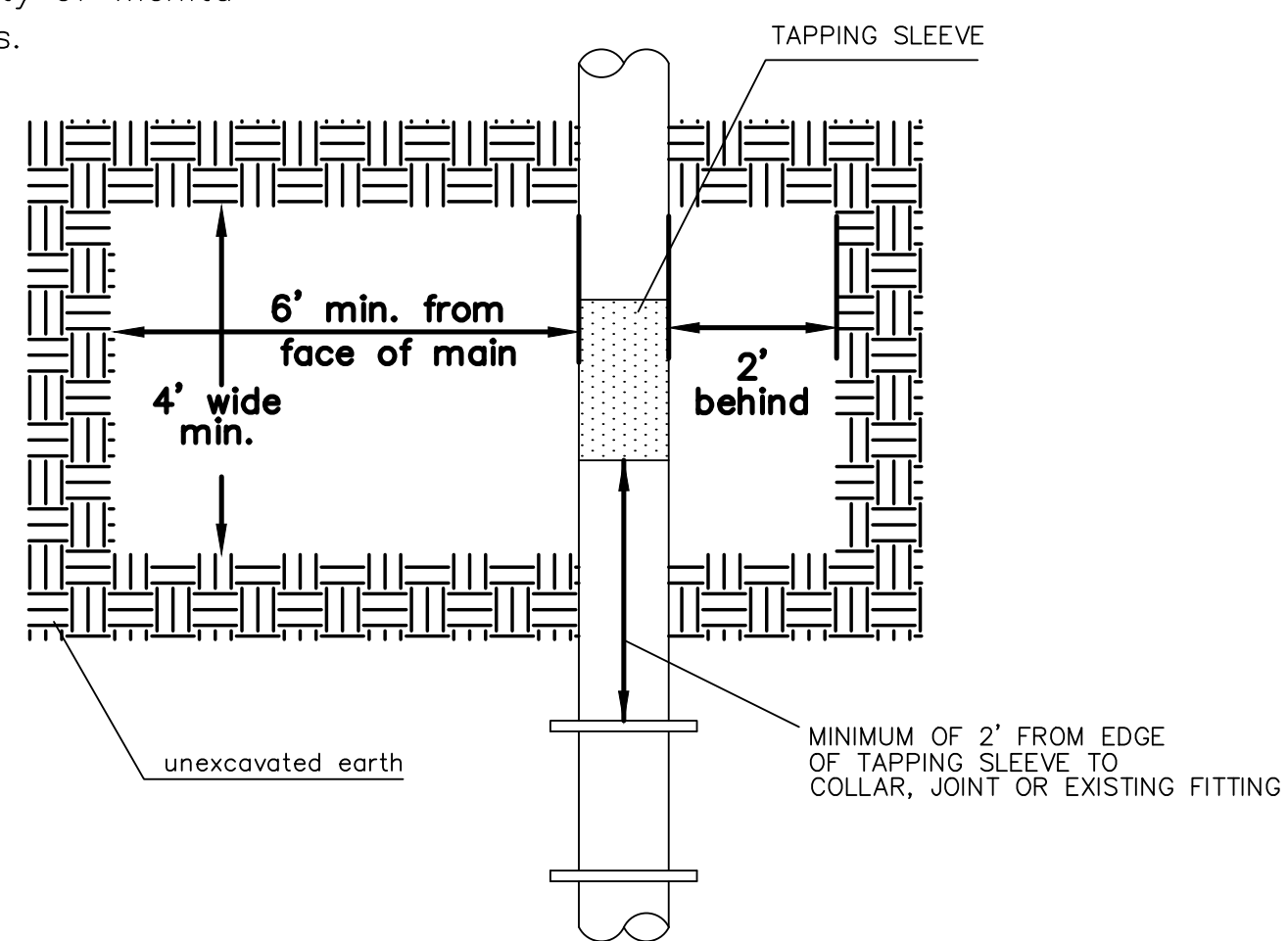
TRENCH COMPACTION IN ROAD RIGHT-OF-WAY

SIDE VIEW

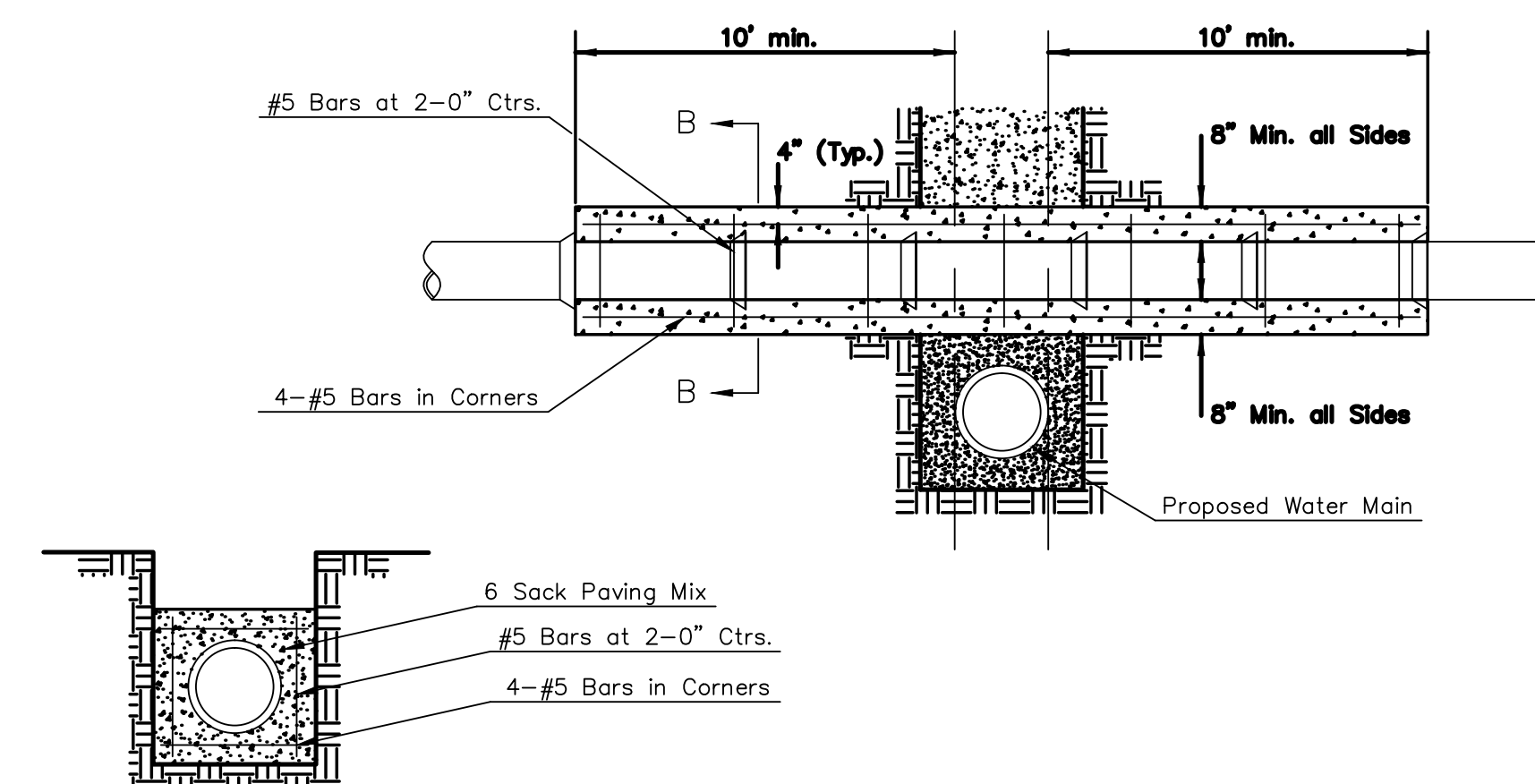


TOP VIEW

Note: When shoring is required it is to be per The City of Wichita Standard Specifications.



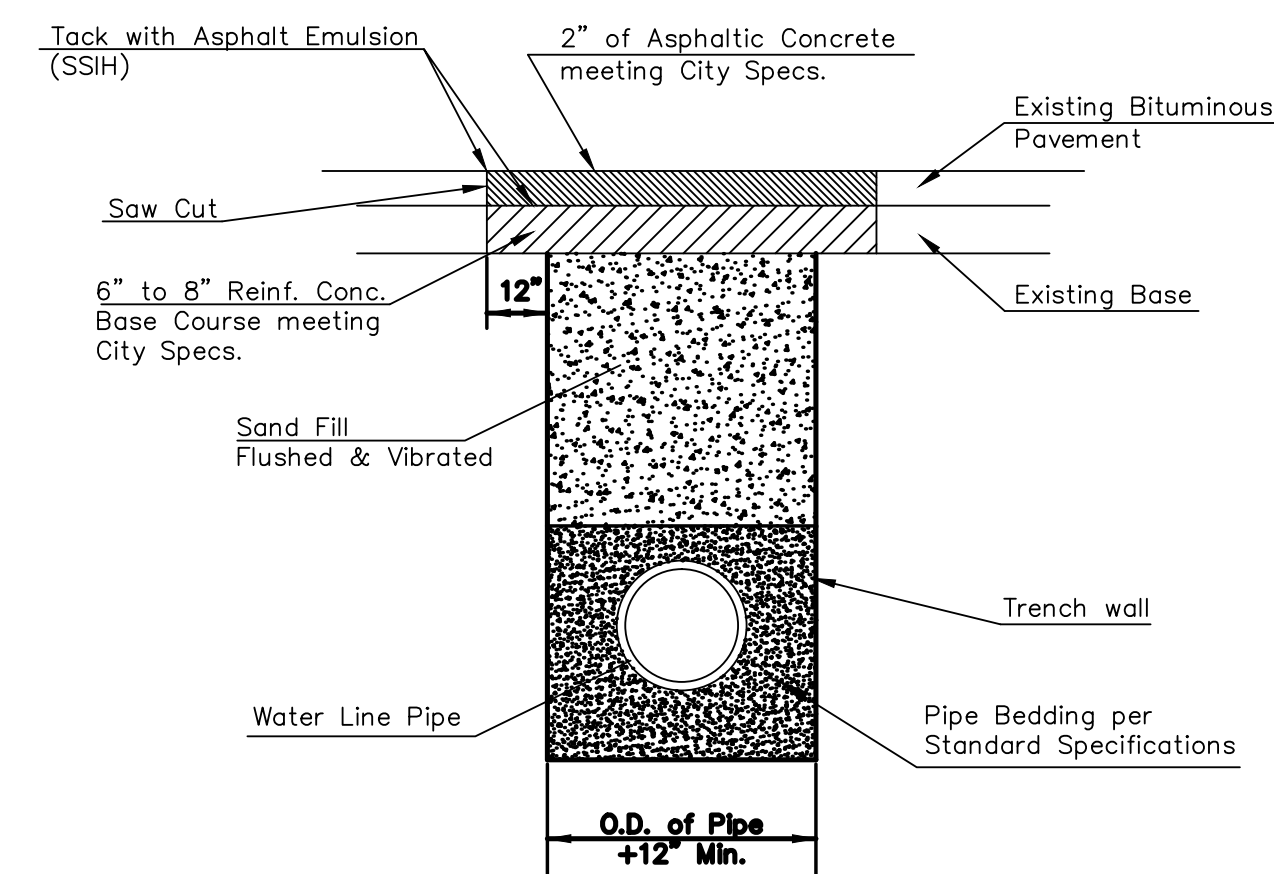
EXCAVATION FOR WET TAP



SECTION B-B

REINFORCED CONCRETE ENCASEMENT OF SANITARY SEWER

Note: Encasement to begin and end at a Bell on Sanitary Sewer Pipe.



PAVEMENT REPLACEMENT & TRENCH COMPACTION UNDER EXISTING AND PROPOSED CITY ROADS



<p>CITY OF WICHITA PUBLIC WORKS & UTILITIES ENGINEERING DIVISION</p>	<p>MISCELLANEOUS WATER DETAILS</p> <p>CITY ENGINEER GARY JANZEN, P.E.</p>	
	<p>PROJECT NUMBER</p>	<p>OCA NUMBER</p>
<p>CITY ENGINEER'S OFFICE CITY HALL - SEVENTH FLOOR 455 NORTH MAIN STREET WICHITA, KANSAS 67202-1620 (316) 268-4301</p>		<p>SHEET _ of _</p>

WL-104

PROJ. NO.	G1400039
DESIGNER	SRS
DRAWN BY	BKR
CFN	REV
SHEET	0039DET
	3 OF 3
REV	DATE DESCRIPTION
DSN	DWN
CHK	CHK

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WOODLAND ELEMENTARY FIRE HYDRANT
1705 SALINA STREET
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STANDARD WATER CITY DETAILS

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