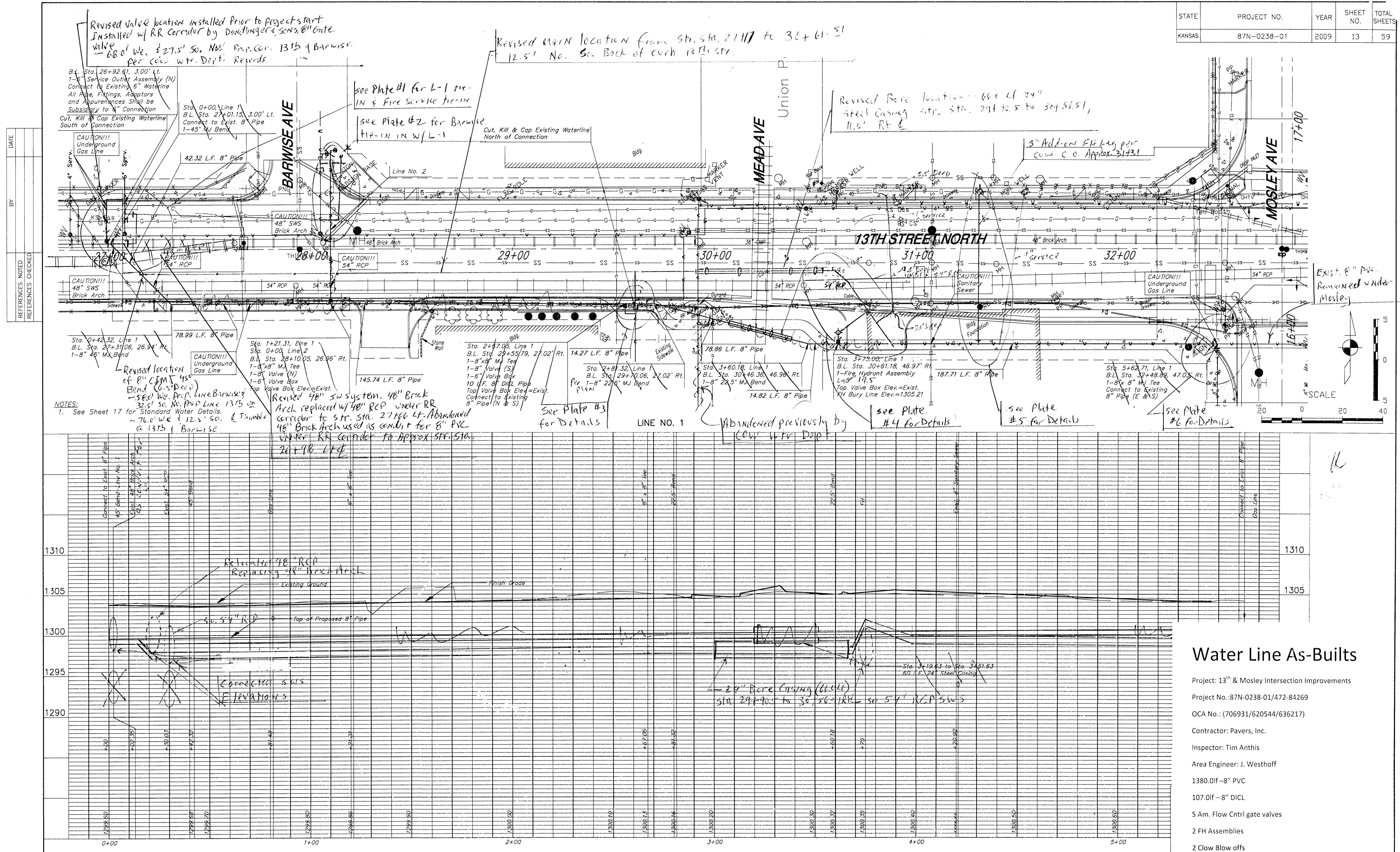
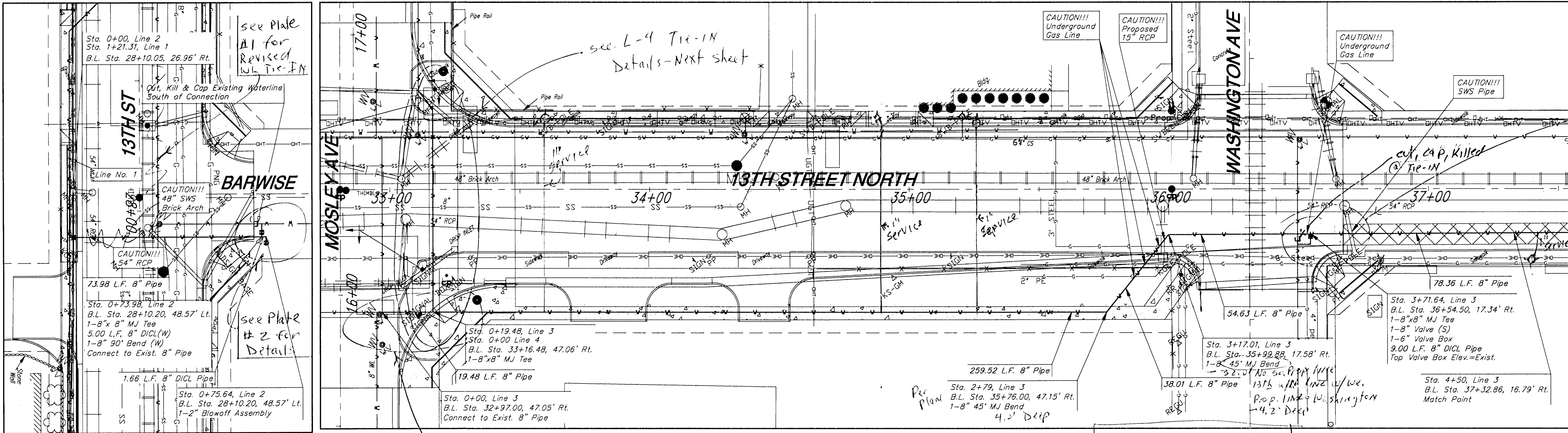


STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	87N-0238-01	2009	13	59



STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	87N-0238-01	2009	14	59

DATE	
BY	
REFERENCES NOTED	
REFERENCES CHECKED	



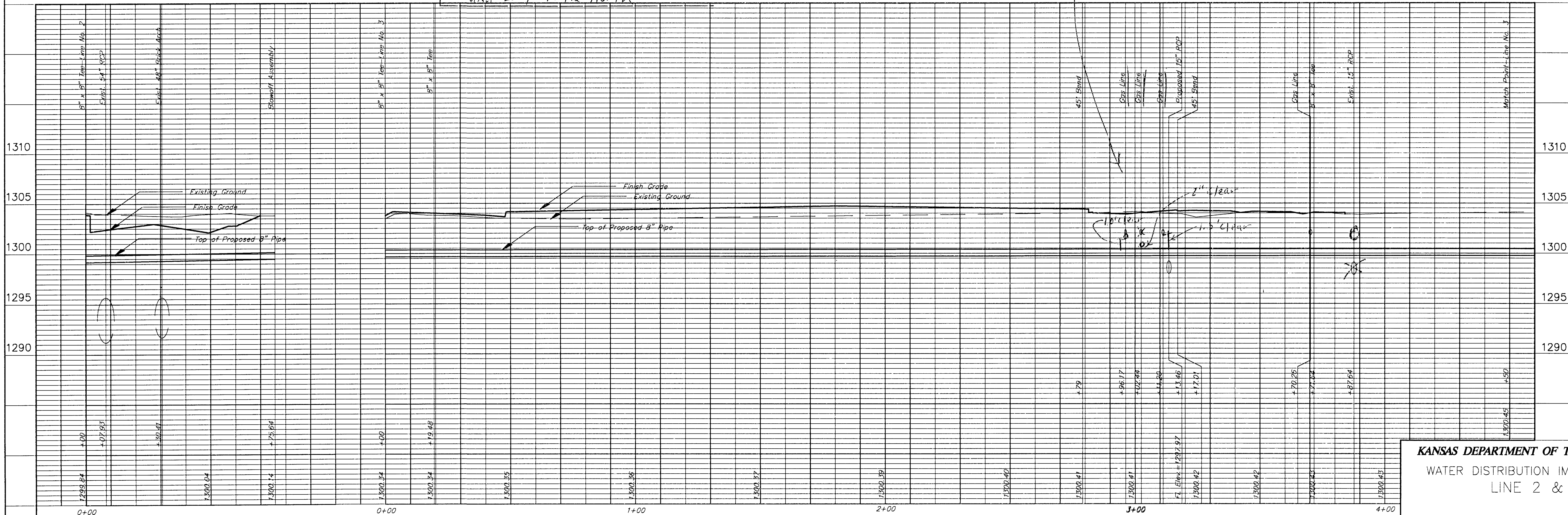
LINE NO. 2

LINE NO. 3

See Plate #7 for Details to L-3 Tie-IN to the West and L-4 to the North

Note close gas line clearances

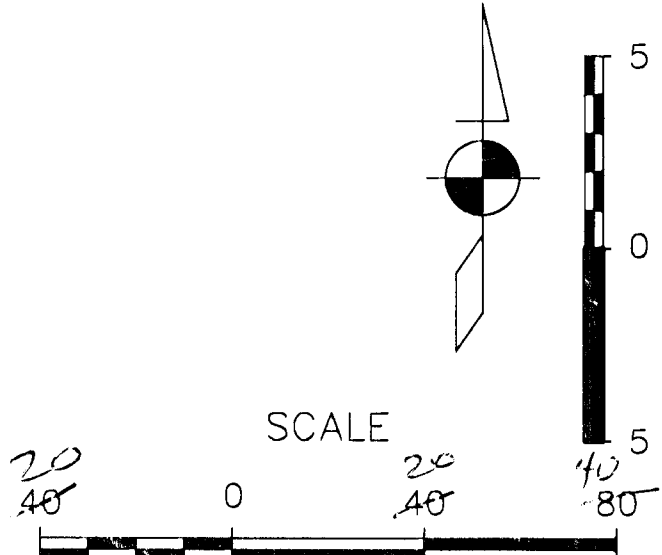
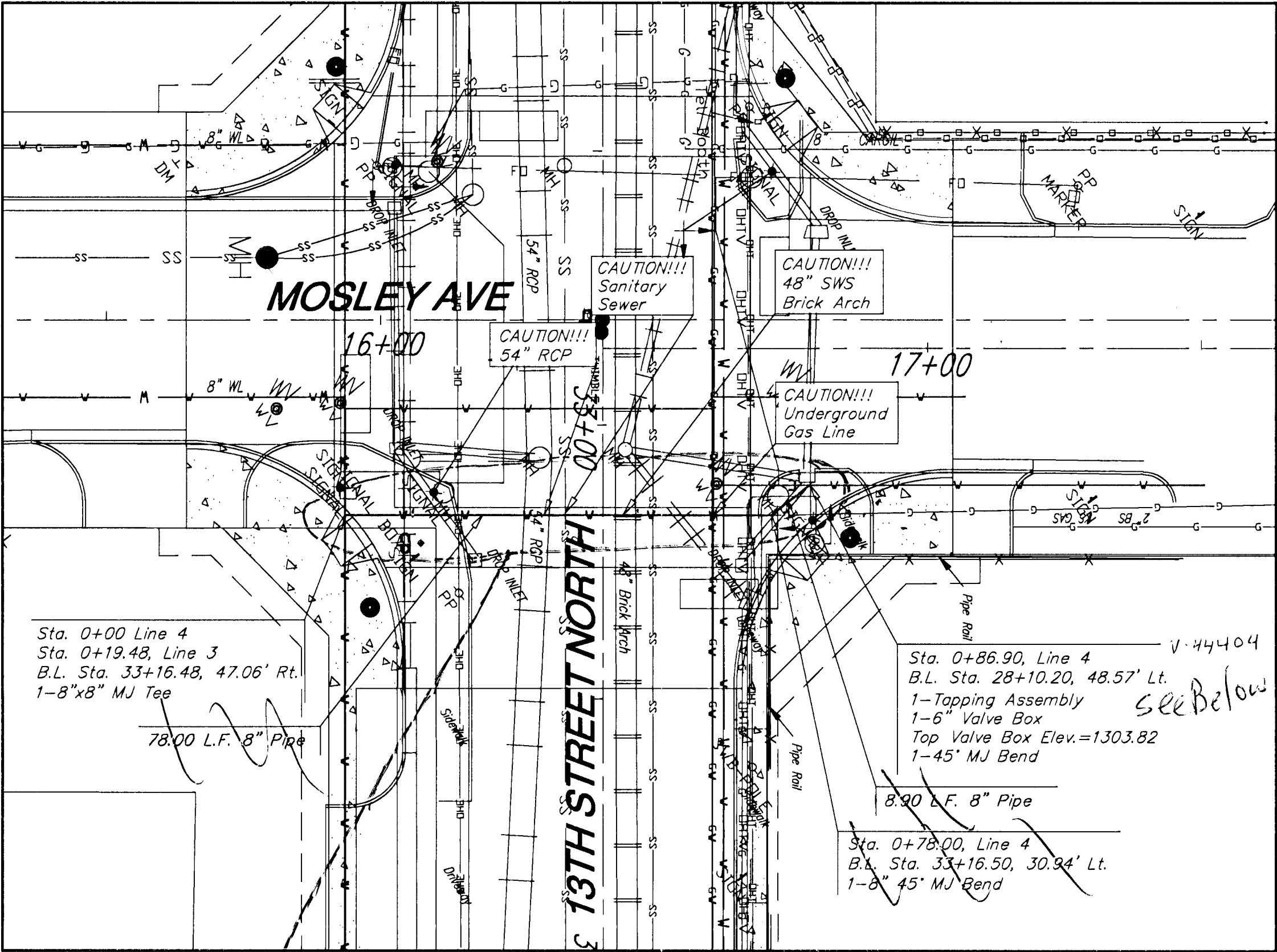
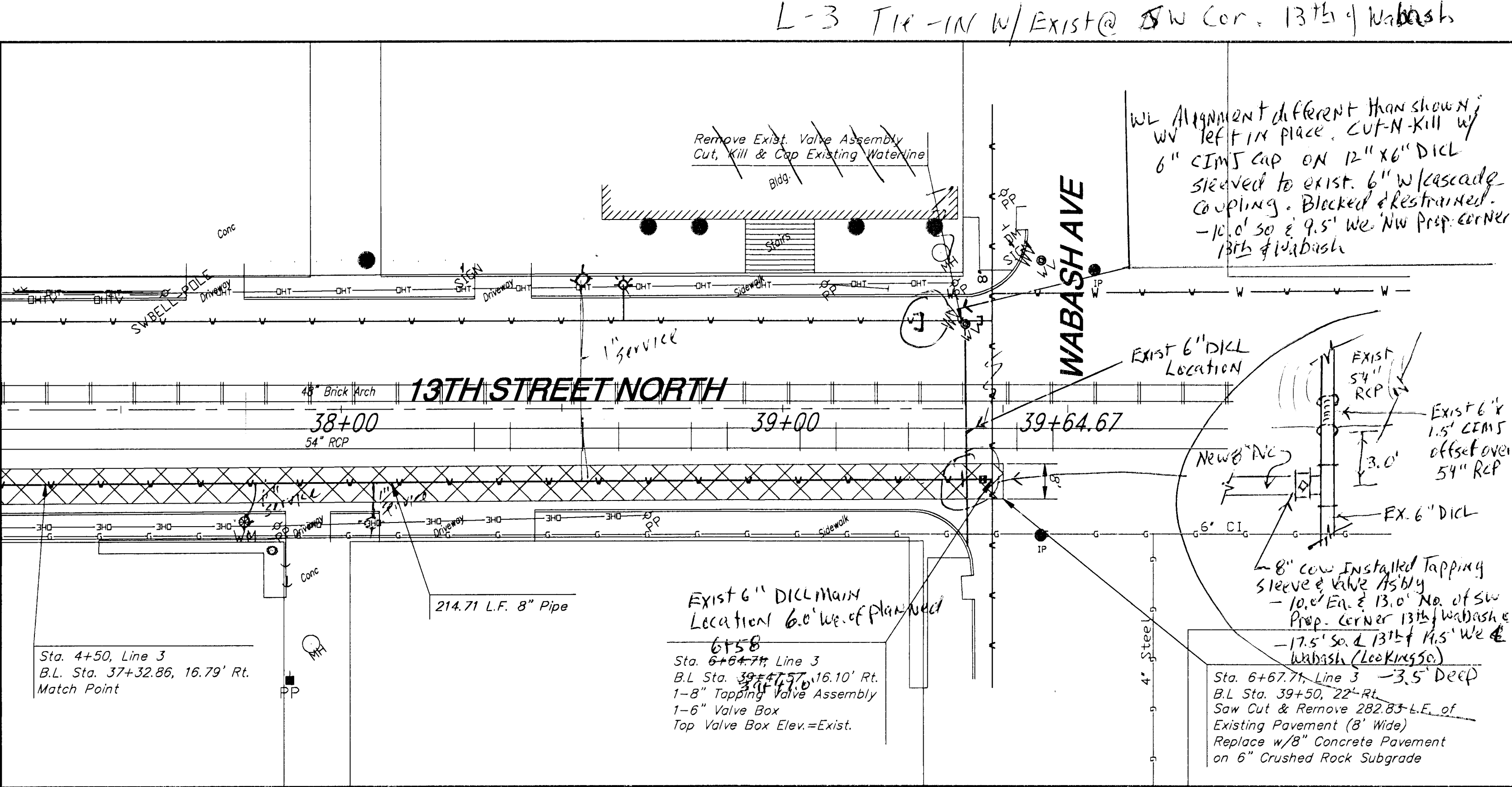
NOTES:
1. See Sheet 17 for Standard Water Details.



KANSAS DEPARTMENT OF TRANSPORTATION
WATER DISTRIBUTION IMPROVEMENTS
LINE 2 & 3

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	87N-0238-01	2009	15	59

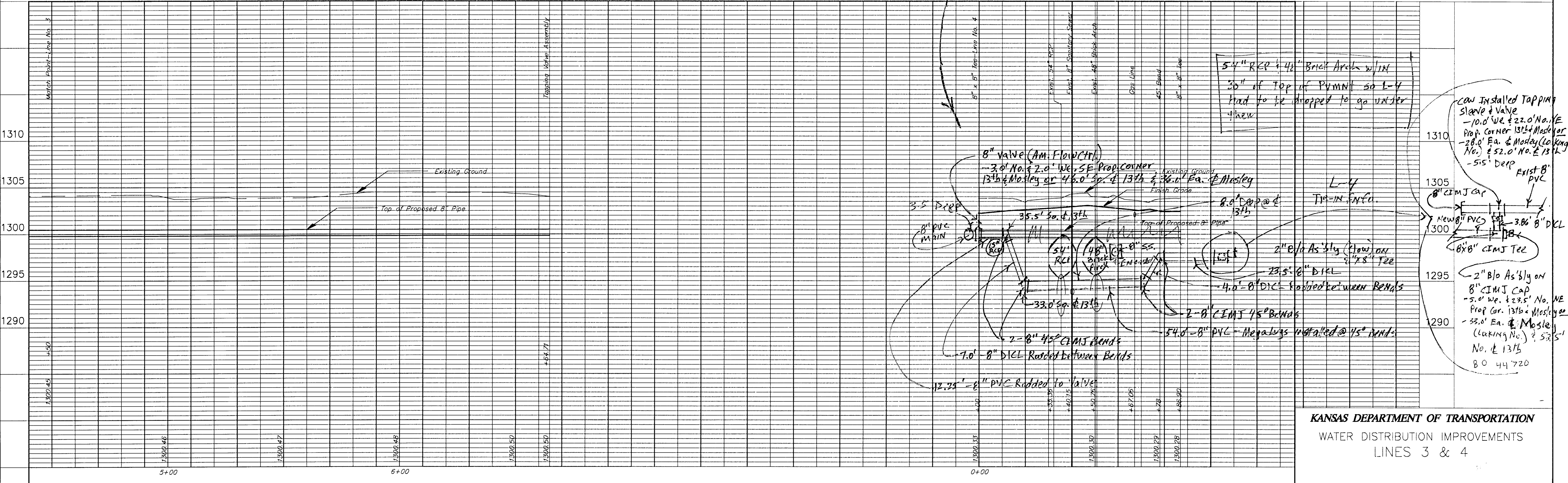
DATE	
BY	
REFERENCES NOTED	
REFERENCES CHECKED	



NOTES:
1. See Sheet 17 for Standard Water Details.

LINE NO. 3

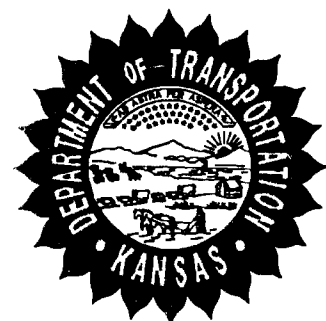
LINE NO. 4



KANSAS DEPARTMENT OF TRANSPORTATION
WATER DISTRIBUTION IMPROVEMENTS
LINES 3 & 4

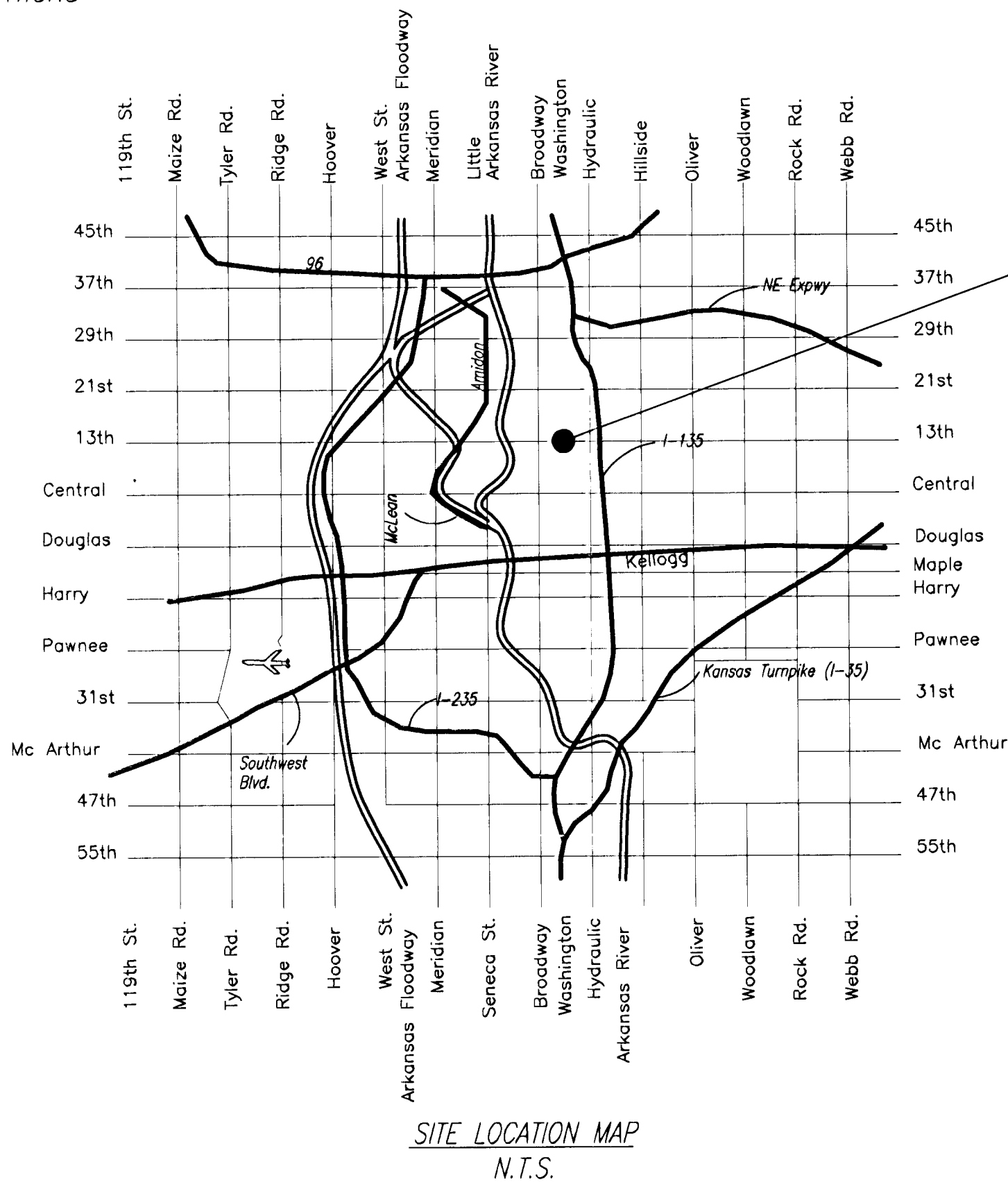
INDEX OF SHEETS	
SHEET NUMBER	DESCRIPTION
1	TITLE SHEET
2	TYPICAL SECTION/GENERAL NOTES
3-5	PLAN SHEETS
6	JOINT PLAN
7-8	INTERSECTION DETAIL
9	STORM SEWER KEY MAP
10-11	STORM SEWER PLAN-PROFILE
12	SANITARY SEWER PLAN-PROFILE
13-15	WATER LINE PLANS-PROFILE
16	STANDARD TYPE "P" MANHOLES
17	STANDARD WATER DETAILS
18	C.O.W. STANDARD DRIVE ENTRANCE DETAIL
19	SUMMARY OF QUANTITIES
20	CONCRETE PAVEMENT DOWEL JOINTED NON-REINFORCED
21	RR X-INGS FOR NEW CONCRETE PAVEMENT
22	CURB, GUTTER, AND COMBINED CURB AND GUTTER
23	VALLEY GUTTER AND WHEELCHAIR RAMP DETAILS
24	SIDEWALK AND STEPS DETAIL
25	STANDARD TYPE I INLET
26-30	EROSION CONTROL-BEST MANAGEMENT PRACTICES
31	TRAFFIC SIGNAL PLAN
32	SIGNAL WIRING DIAGRAM
33	TRAFFIC SIGNAL QUANTITIES SHEET
34	SERVICE-JUNCTION BOX, CONTROLLER PAD CONSTRUCTION-INSTALLATION DETAILS
35	STEEL SIGNAL POLE ASSEMBLY DETAILS
36	TRAFFIC SIGNAL PEDESTAL-CONCRETE BASE DETAILS
37	PAVEMENT MARKING PLAN
38	TYPICAL MISC. PAVEMENT MARKING DETAILS
39	SUMMARY AND RECAPULATION OF PAVEMENT MARKING QUANTITIES
40	TRAFFIC CONTROL GENERAL NOTES
41-43	TEMPORARY SIGNALIZATION
44-47	TRAFFIC CONTROL PLANS
48	SUMMARY OF DEVICES AND RECAPULATION OF QUANTITIES
49	DESIGN DETAILS FOR BARRICADES, CHANNELIZING DEVICES AND SIGN MOUNTING LOCATIONS
50	TYPICAL TRAFFIC CONTROL SIGNS
51	COORDINATE POINTS LIST
52-59	CROSS SECTIONS

STATE OF KANSAS
DEPARTMENT OF TRANSPORTATION



PLAN AND PROFILE OF
FEDERAL AID PROJECT

CITY OF WICHITA PROJECT #472-84269
OCA #706931
13TH & MOSLEY INTERSECTION
WICHITA, SEDGWICK COUNTY, KANSAS
POPULATION = 304,011



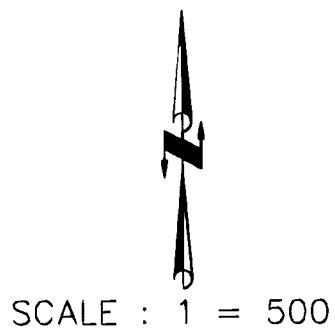
SITE LOCATION MAP
N.T.S.

GROSS LENGTH OF PROJECT	1,250.85 Ft.
EXCEPTIONS	0.00 Ft.
ADDITIONS	0.00 Ft.
NET LENGTH OF PROJECT	1,250.85 Ft.
NET LENGTH OF BRIDGES	0.00 Ft.
NET LENGTH OF ROAD	1,250.85 Ft.

	= Existing Fence		= Existing Gas Meter
	= Concrete		= Underground Electric
	= Guy Anchor		= Underground Telephone
	= Existing Traffic Signal		= Existing Power Pole
	= Existing Stone Wall		= Cedar
	= Existing Sign		= Shrub
	= Proposed Fire Hydrant		= Tree
	= Existing Fire Hydrant		= Water Valve
	= Existing Storm Water Sewer		= Existing Water Valve
	= Railroad Tracks		= Existing Gas Marker
	= Proposed Manhole		= Centerline
	= Overhead Electric		
	= Existing Sanitary Sewer		
	= Existing Water Line		
	= Existing Gas Line		
	= Existing Manhole		

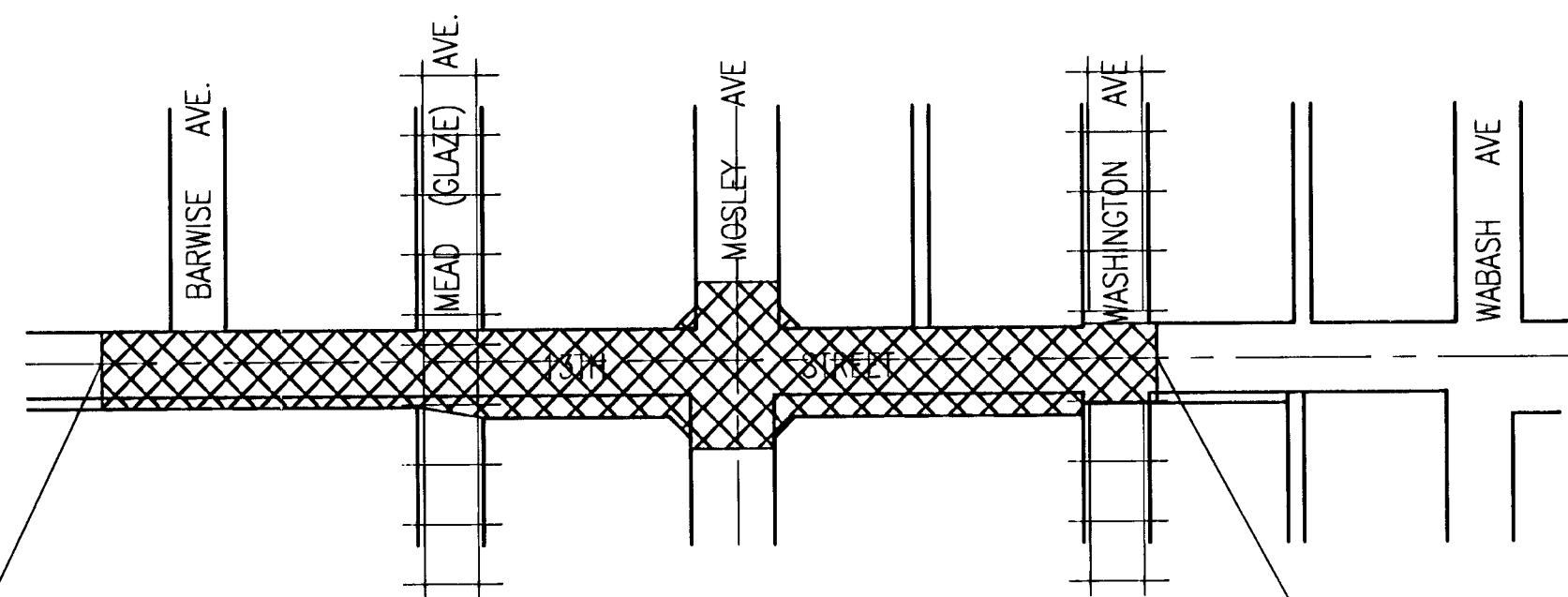
GRADING
SURFACING
SIGNALIZATION

ONE WAY TRAFFIC
TO BE MAINTAINED THROUGH
CONSTRUCTION. SEE SHEETS 43-46
FOR CONSTRUCTION TRAFFIC CONTROL PLAN.



SW 1/4, SEC. 9-27S-1E

SE 1/4, SEC. 9-27S-1E



NW 1/4, SEC. 16-27S-1E

NE 1/4, SEC. 16-27S-1E

Sta. 26+99.15
BEGIN CONSTRUCTION
PROJ. NO. 87N-0238-01

Sta. 39+50
END CONSTRUCTION
PROJ. NO. 87N-0238-01

DESIGN DESIGNATION

13TH & MOSLEY

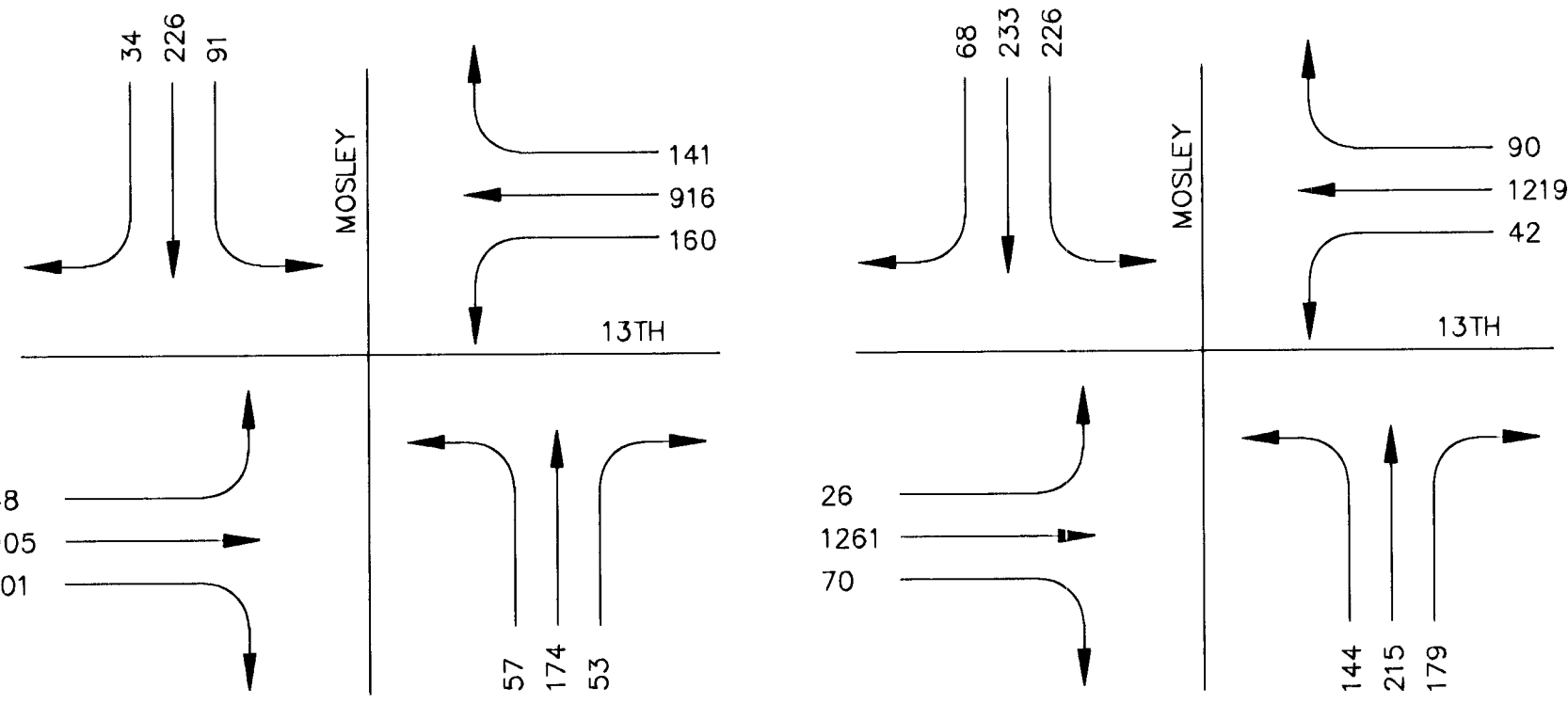
AADT (2002) = 21,860
AADT (2030) = 30,750
T = 10 %
V = 35 M.P.H.
CLEAR ZONE = 6 Ft.

ITEM	MANUFACTURER	SIZE
ANCHOR VALVE ASSEMBLY	AMERICAN FLOW CONTROL	8"
GATE VALVE ASSEMBLY	AMERICAN FLOW CONTROL	8"
FH ASSEMBLY	AMERICAN DARLING	3"
BLOW OFF ASSEMBLY	CLOW	3"
FH VALVE	AMERICAN FLOW CONTROL	6"

PAVERS, INC.- CONTRACTOR
J. WESTHOFF - CITY OF WICHITA, P.D. PROJ. ENGR
T. ANTHIS - CITY OF WICHITA, INSPECTOR
AS-BUILT
RELEASE DATE:
APPROX 09/09/2010

APPROVED-DATE

JIM ARMOUR, P.E.
CITY ENGINEER
CITY OF WICHITA, SEDGWICK COUNTY, KANSAS



A.M. PEAK HOUR
7:00 A.M. TO 8:45 A.M.

P.M. PEAK HOUR
4:00 P.M. TO 5:45 P.M.



POE & ASSOCIATES, INC.
CONSULTING ENGINEERS
2940 E. Central, Suite 200 • Wichita, KS 67208-4242
Phone 316/685-4114 FAX 316/685-4444

DATE	
BY	
REFERENCES NOTED	
REFERENCES CHECKED	

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	87N-0238-01	2009	13	59

NOTE: REVISED VALVE LOCATION INSTALLED PRIOR TO PROJECT START. INSTALLED W/ RR CORRIDOR BY CONDLINGER & SONS. 8" GATE VALVE - 58' N & 27.5' S NWPC OF 13TH & BARNISE (PER COW WATER DEPT. RECORD)

NOTE: SEE PLATE #1 FOR L-1 & FIRE SERVICE TIE-INS

NOTE: SEE PLATE #2 FOR L-1 TIE-IN @ BARNISE ST.

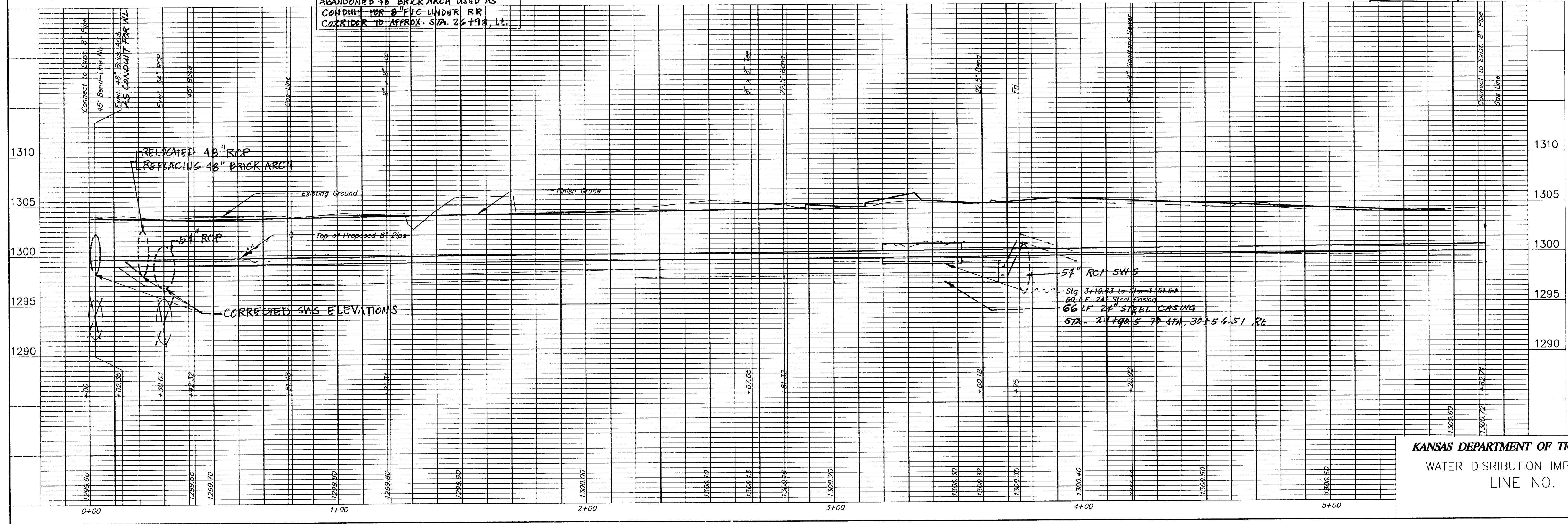
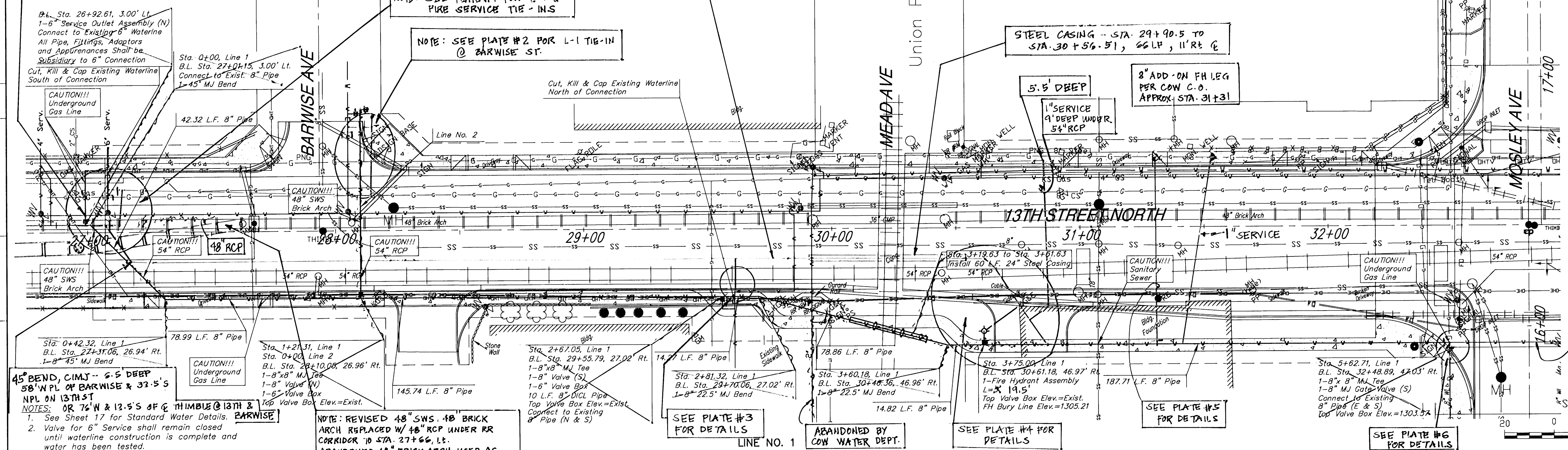
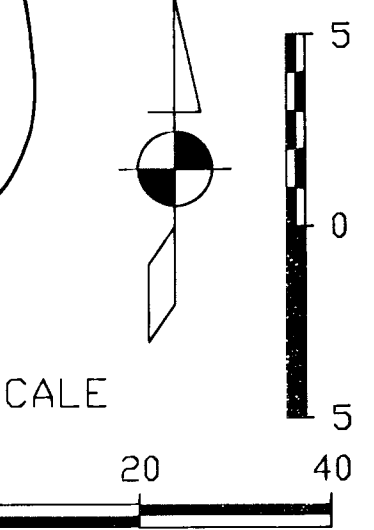
REVISED MAIN - STA. 27+17 TO STA. 30+61.51 - 12.5' N OF S BACK OF CURB ON 13TH ST.

STEEL CASING - STA. 29+90.5 TO STA. 30+56.51, 66" L₁, 11' R₁ @

5.5' DEEP
1" SERVICE
9' DEEP UNDER
54" RCP

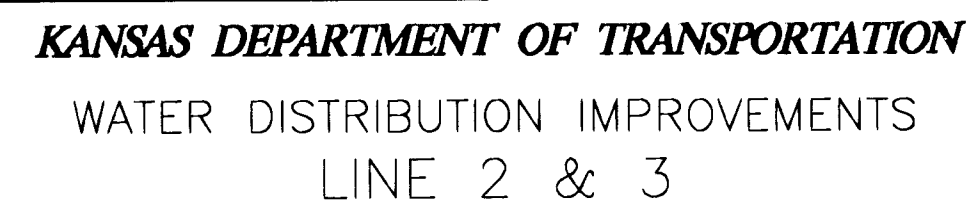
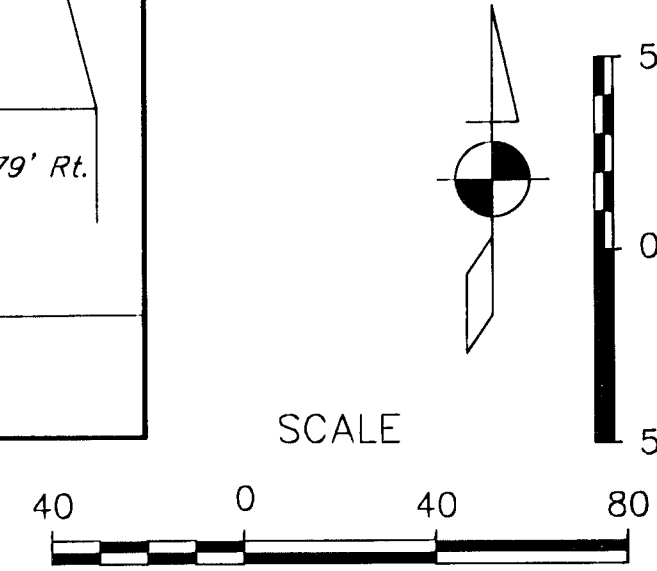
8" ADD-ON FH LEG
PER COW C.O.
APPROX. STA. 31+31

EXISTING 8" PVC
REMAINED
UNDER MOSLEY



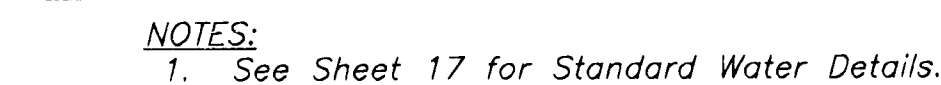
KANSAS DEPARTMENT OF TRANSPORTATION
WATER DISRIBUTION IMPROVEMENTS
LINE NO. 1

	BY	DATE
REFERENCES NOTED		
REFERENCES CHECKED		

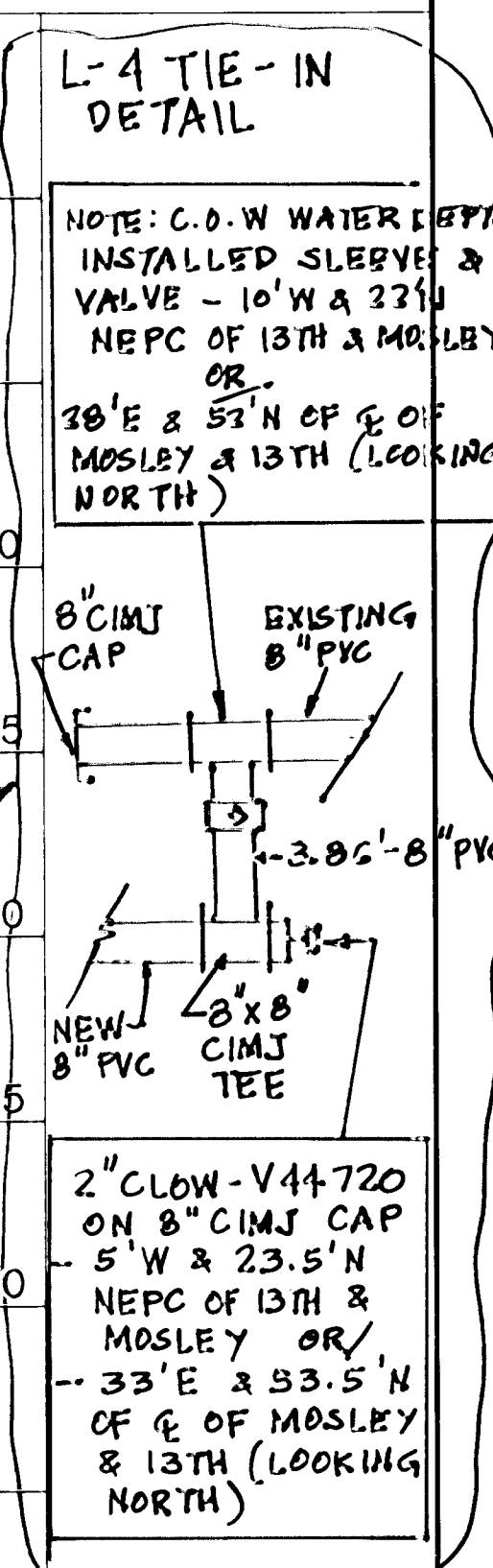
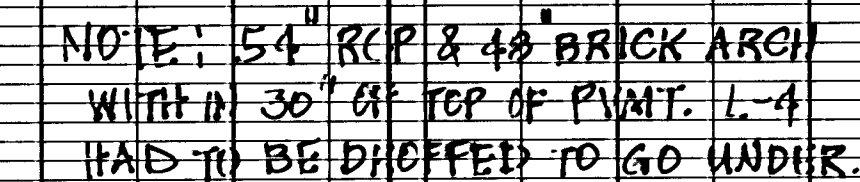
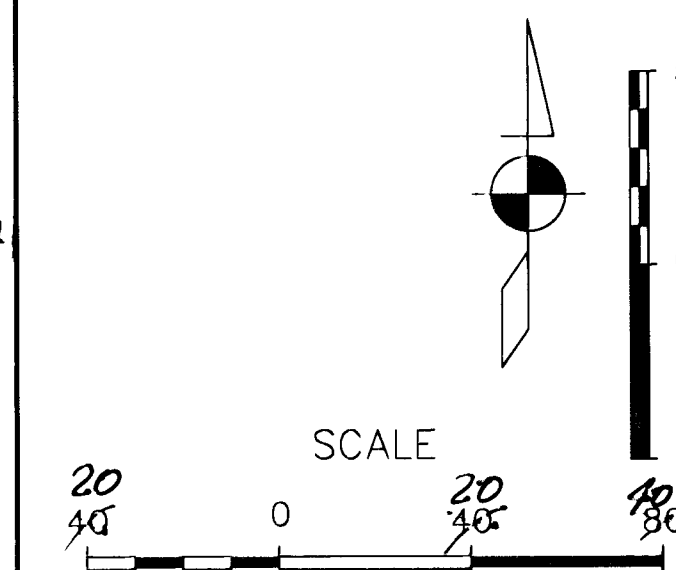


	BY	DATE
REFERENCES NOTED		
REFERENCES CHECKED		

	REFERENCES NOTED
	REFERENCES CHECKED

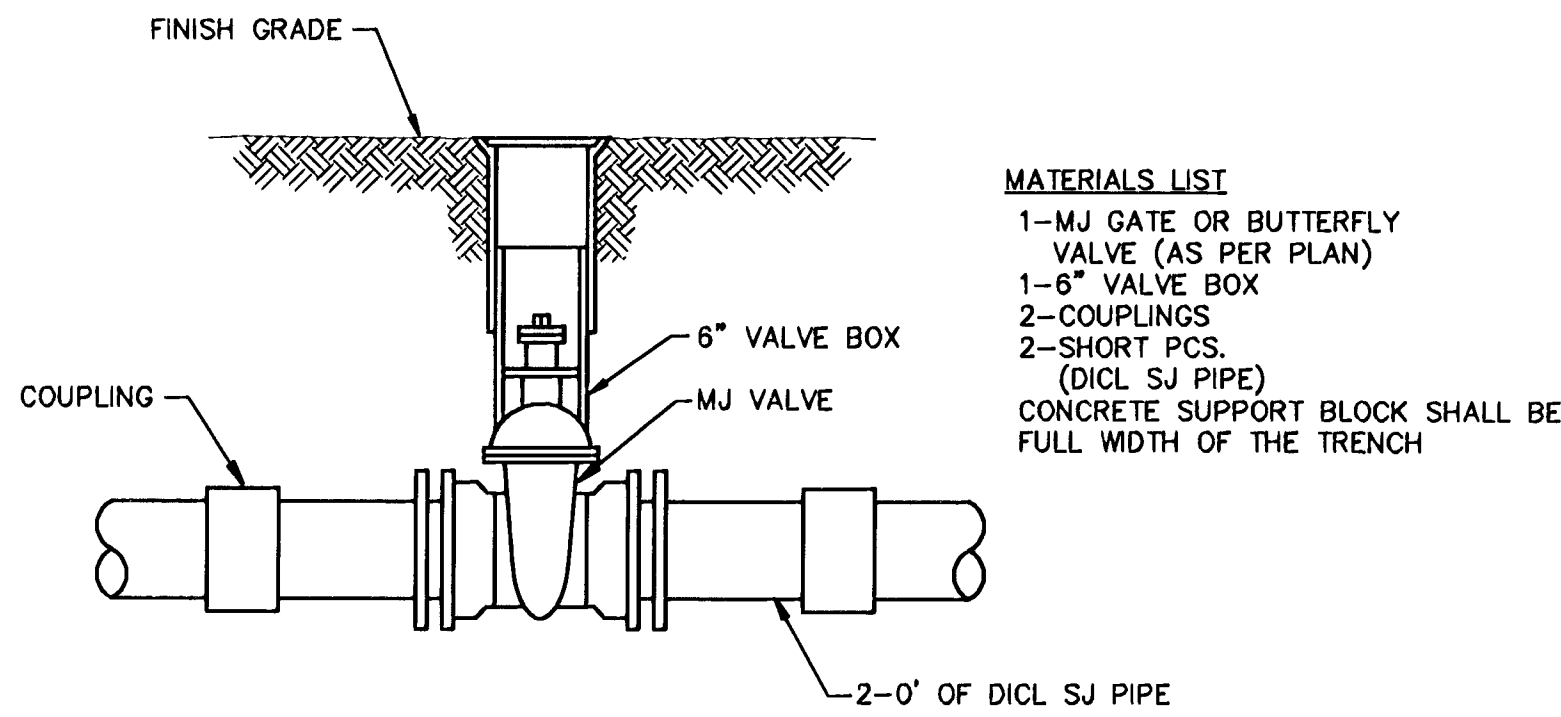


LINE NO. 3

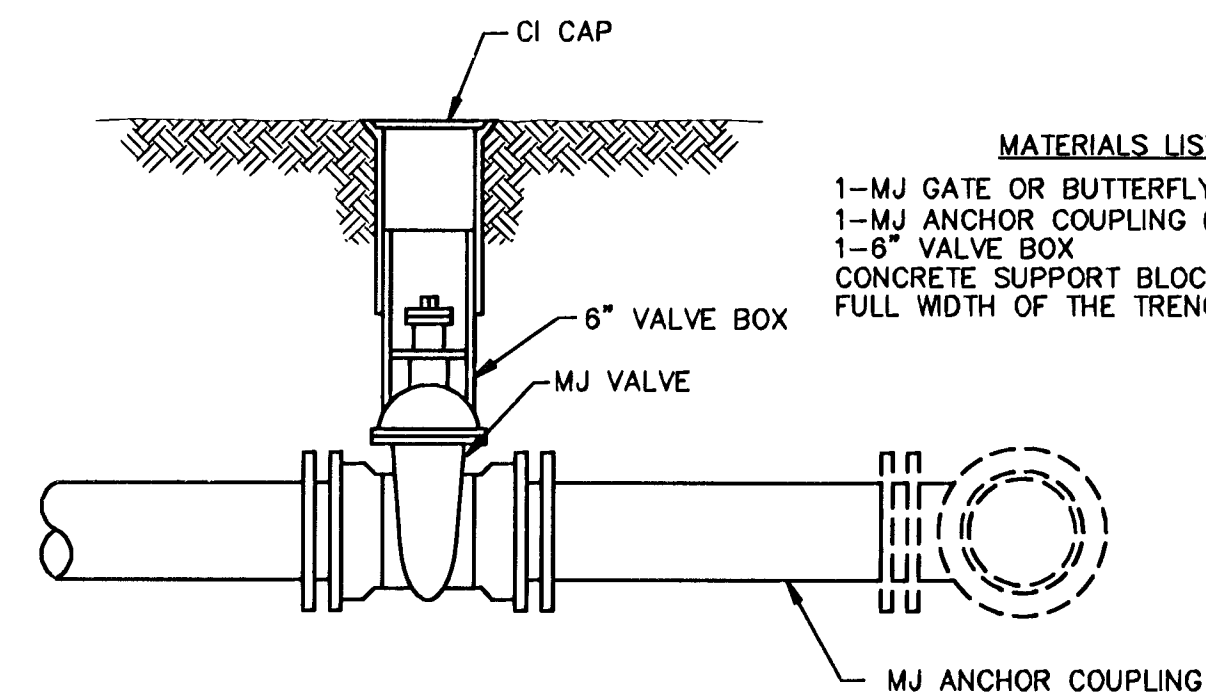


KANSAS DEPARTMENT OF TRANSPORTATION
WATER DISTRIBUTION IMPROVEMENTS
LINES 3 & 4

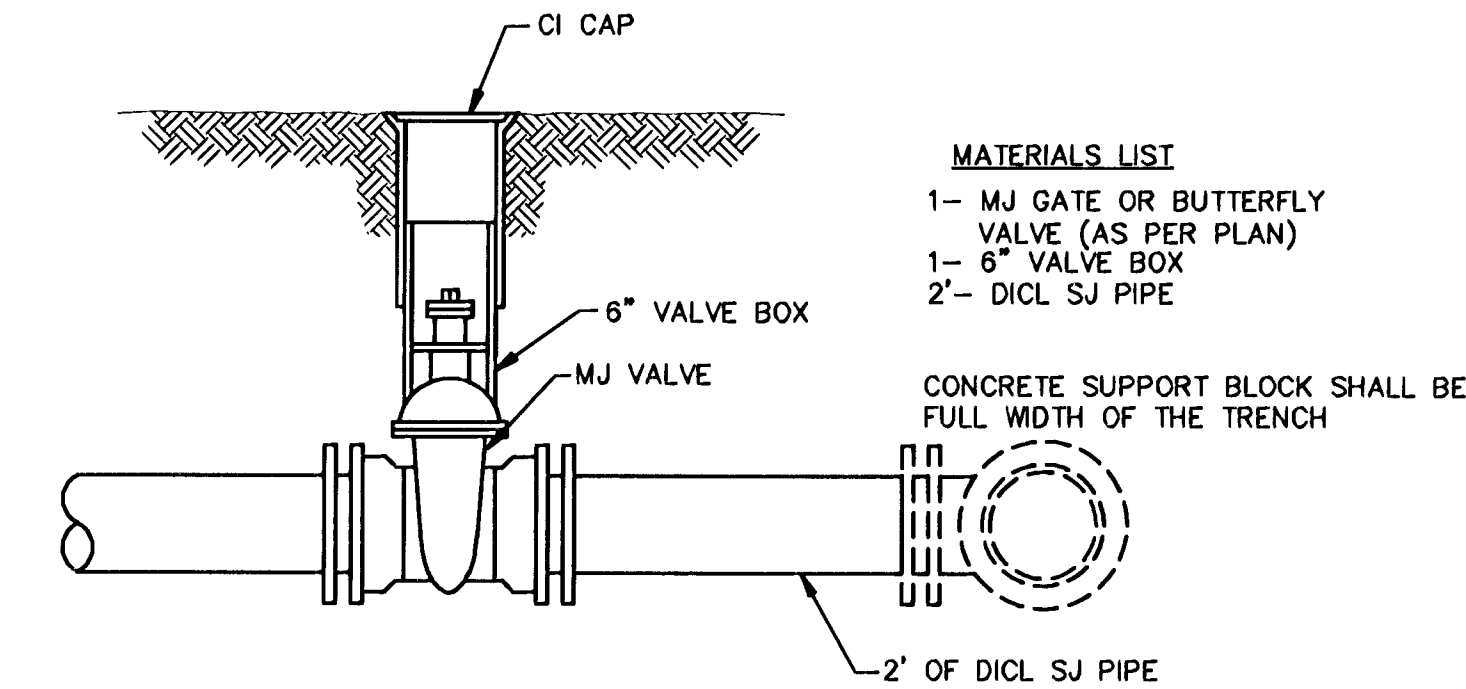
STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	87N-0238-01	2009	17	59



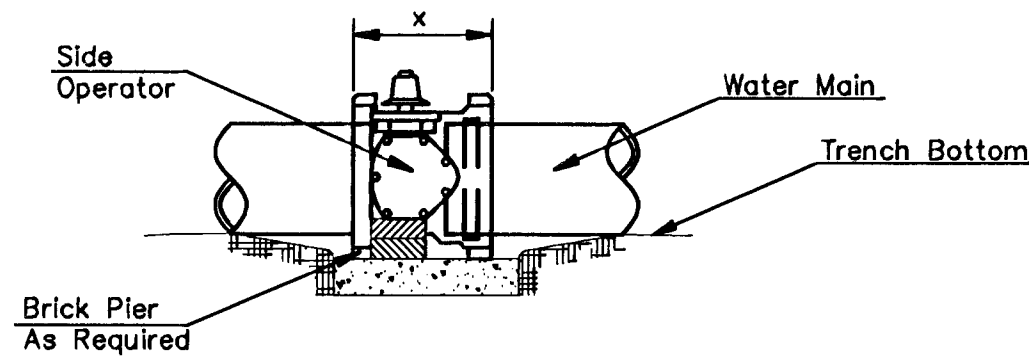
LINE VALVE ASSEMBLY



ANCHORED VALVE ASSEMBLY



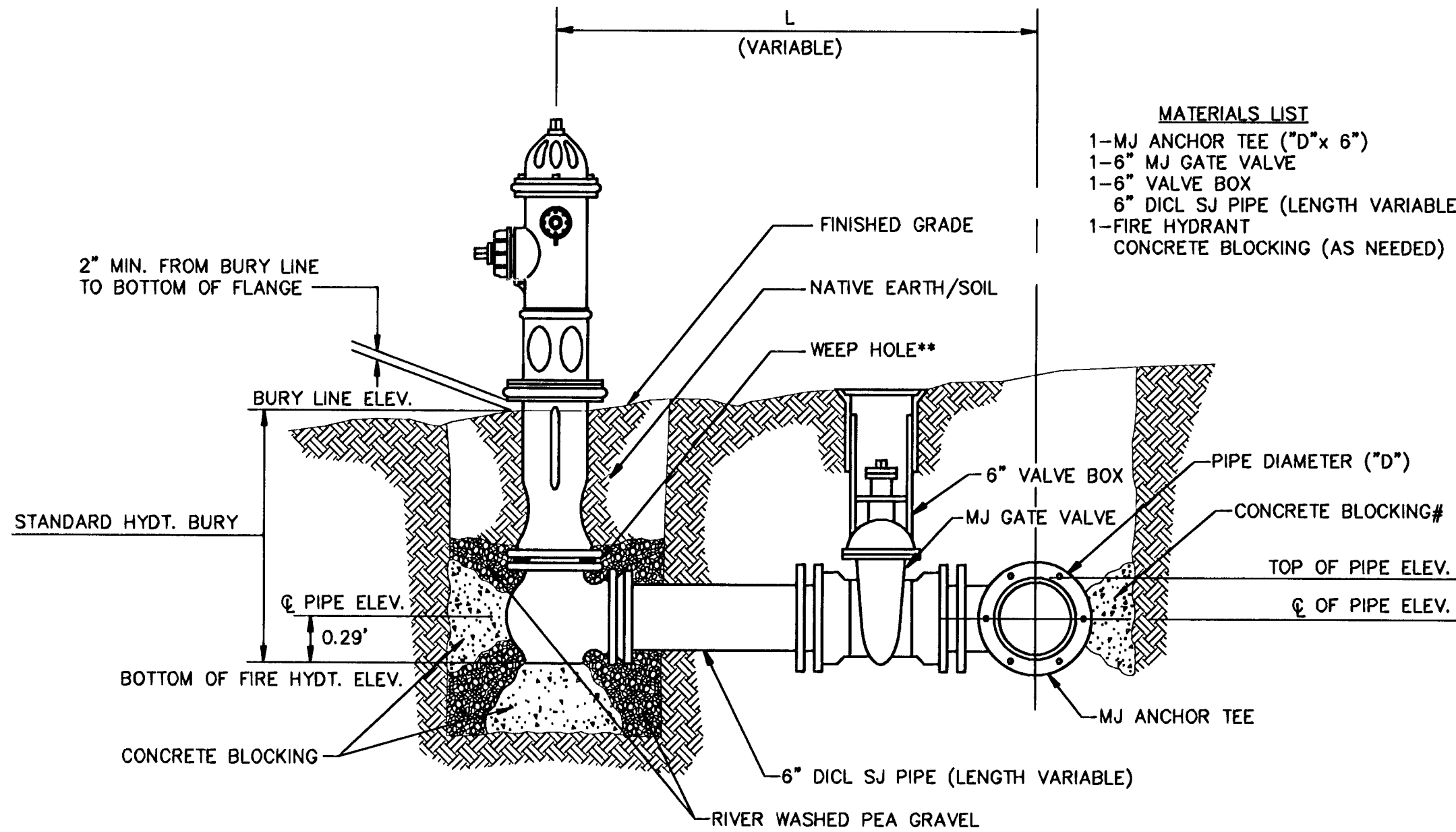
VALVE ASSEMBLY



NOTES

1. This detail covers Butterfly Valve installation, inclusive, regardless of type of pipe or joint used. Larger lines to be detailed on plans.
2. 6" Valve Box and Cover required per City of Wichita Std. Specifications.
3. Conc. Support Block to be full width of trench.

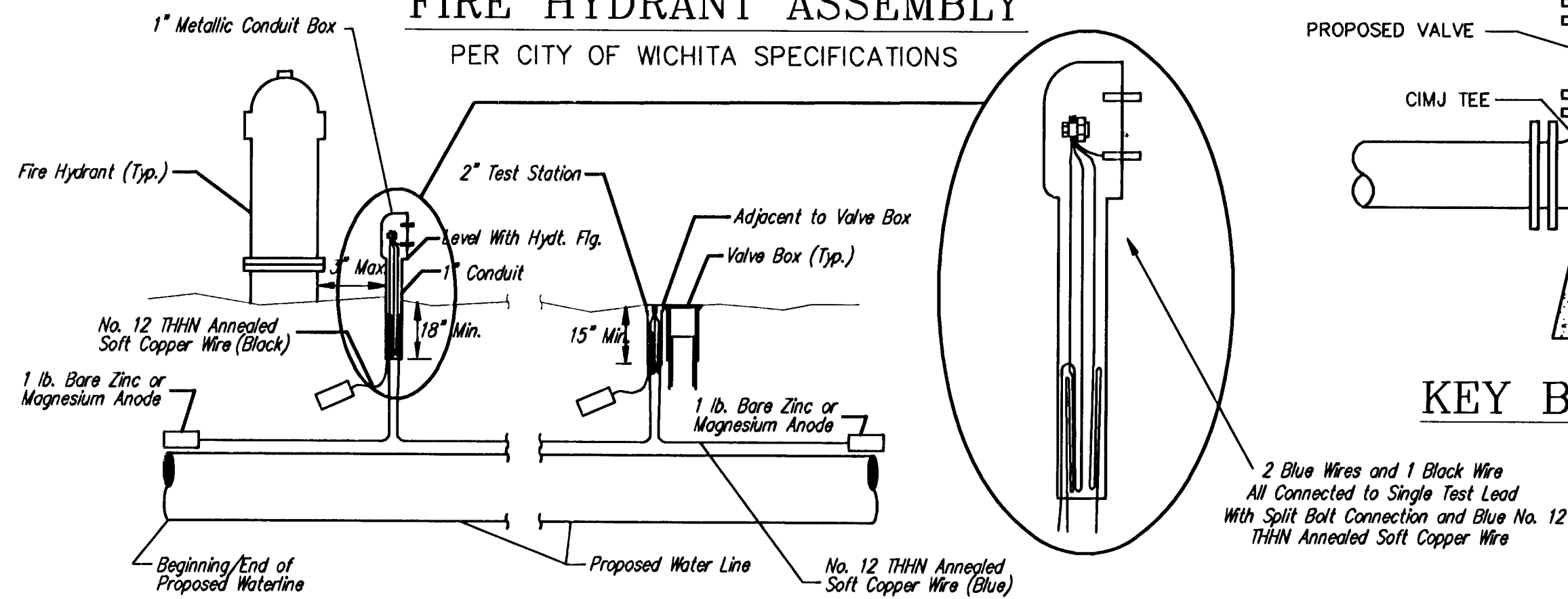
CONCRETE SUPPORT BLOCKING FOR BUTTERFLY VALVE INSTALLATION



- ** CAUTION! WEEP HOLES TO BE KEPT CLEAR DURING CONSTRUCTION AND BACKFILL. CONCRETE FOR THRUST BLOCKING SHALL NOT OBSTRUCT WEEP HOLES.
- # CONCRETE THRUST BLOCKING SHALL BE KEPT CLEAR OF BOLTS, NUTS, AND MJ ACCESSORIES.
- * IF HYDRANT BURY IS IN EXCESS OF 5', CONTRACTOR SHALL USE STANDARD 5" HYDRANT BURY AND HYDRANT BARREL EXTENSIONS AS NECESSARY.

FIRE HYDRANTS REQUIRED			
STATION	BURY LINE ELEVATION	TOP OF PIPE ELEVATION	FIRE HYDRANT BURY REQUIRED*
3+75(LINE 1)	1305.21	1300.35	5'

FIRE HYDRANT ASSEMBLY
PER CITY OF WICHITA SPECIFICATIONS



TRACER WIRE

Conductive type pipe locator/tracer wire shall be installed to locate all waterline pipe regardless of pipe material. The wire shall extend the entire length of the proposed pipe. The wire shall be taped to the waterline and pulled with the pipe. Split-bolt connectors shall be used at splice locations. Electrical tape shall cover all splices so no bare wire is exposed. Test stations shall be installed adjacent to all fire hydrants along the waterline and at blowoffs or valves near the ends of the waterlines. Any exceptions to the location of test stations shall be approved by the engineer. At each test station, the tracer wire shall be connected to a 1 lb. Zinc or magnesium anode. Anodes shall also be attached to the tracer wire at both the beginning and the end of the proposed waterline. A typical layout of the tracer wire and test station is provided in the above figure.

WIRE

The tracer wire shall be Blue No. 12 THHN annealed soft copper wire with thermal plastic insulation. The insulation shall be heat, oil, and gasoline resistant as manufactured by Temple Electric or approved equal. To allow for grade adjustment, a minimum of 12" of excess wire shall be coiled at the bottom of the test station for all wires. The insulation sheathing shall be removed such that 1" bare copper wire is exposed at all points of connection. Contractor shall attach wire being installed with proposed water main to any tracer wire installed with adjacent waterline projects.

TEST STATIONS

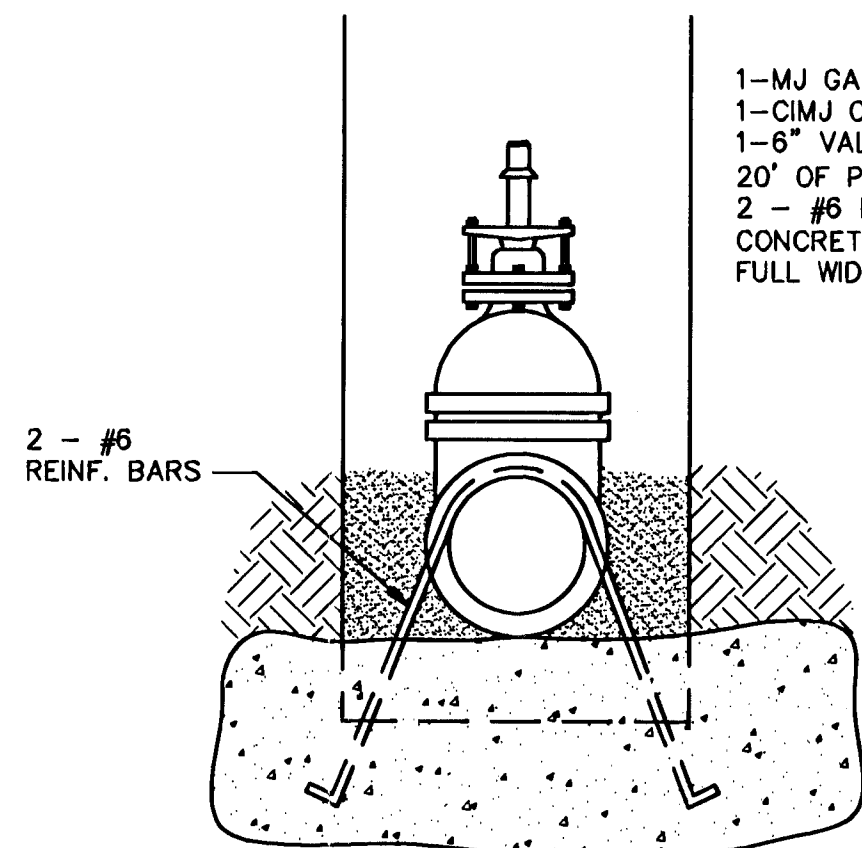
The test station for fire hydrant applications shall be a 1 inch galvanized conduit style test station as manufactured by AGRA Industries with a removable solid cover having two leads extending from the face or approved equal. The test station for valve applications shall be 2 inch flush style test station T2PS38 as manufactured by HANDLEY Industries or approved equal. The conduit style shall be attached to a 1 inch rigid galvanized conduit with a minimum length of 36" and plastic end bushing. The flush style shall have the word "WATER" stamped or molded into the lid. All test stations shall be manufactured using molded blue tops or sufficiently coated with blue enamel paint. The tracer wire and the anode wire shall be installed to allow 10 inches of wire within the test station. In concrete environments such as sidewalks or in the downtown area the contractor shall use the flush style test station. The location of all test stations shall be approved by the engineer, recorded, and shown in the as-built drawings.

ANODES

The anodes shall be 1 lb. bare zinc or magnesium. The anodes shall be buried at the same elevation as the waterline at each test station. The anodes shall be connected to Black No. 12 THHN annealed soft copper wire which shall be extended to the test station.

TRACER WIRE DETAIL

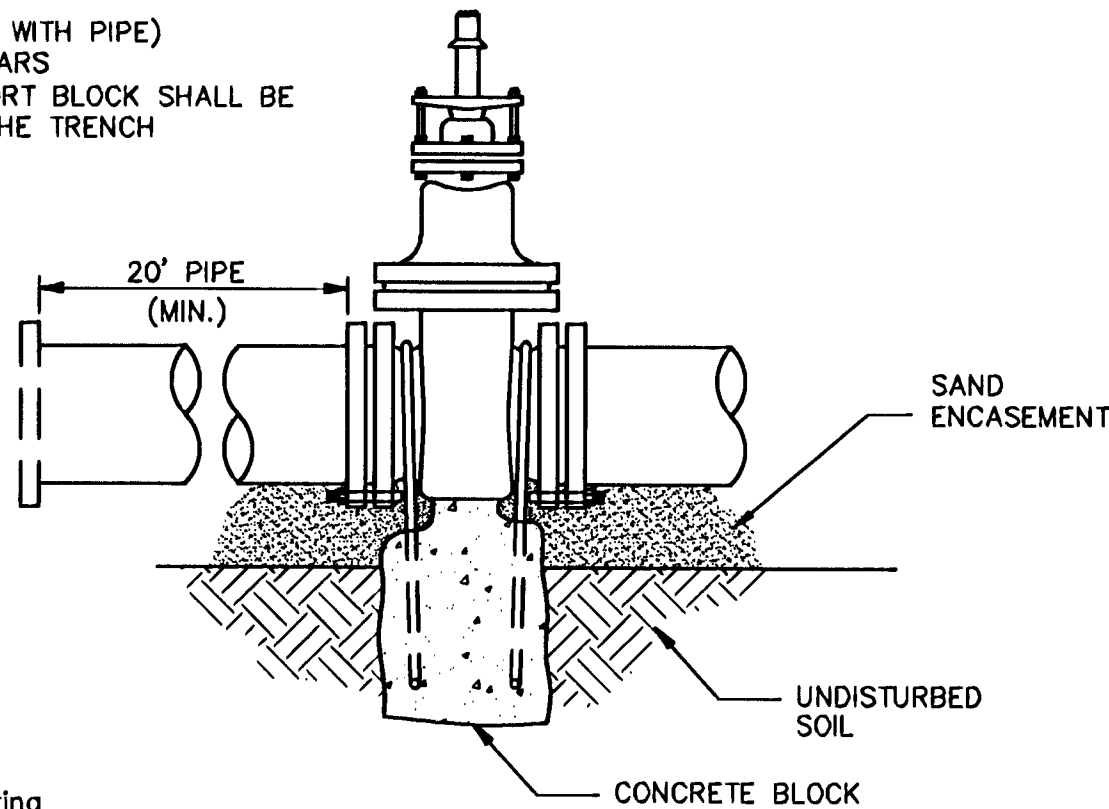
COST IS SUBSIDIARY TO PIPE INSTALLATION



- Notes:
1. Concrete Block at Valve to have sufficient bearing in undisturbed soil to prevent thrust movement as shown in table at right. Field Engineer to determine thrust loading of undisturbed soil and final size of thrust block.
 2. The thrust block shall be constructed such that bolts, nuts, and other MJ accessories are kept clear of concrete.
 3. All valves at dead ends and at other locations as called out on the plans shall be blocked as shown here.

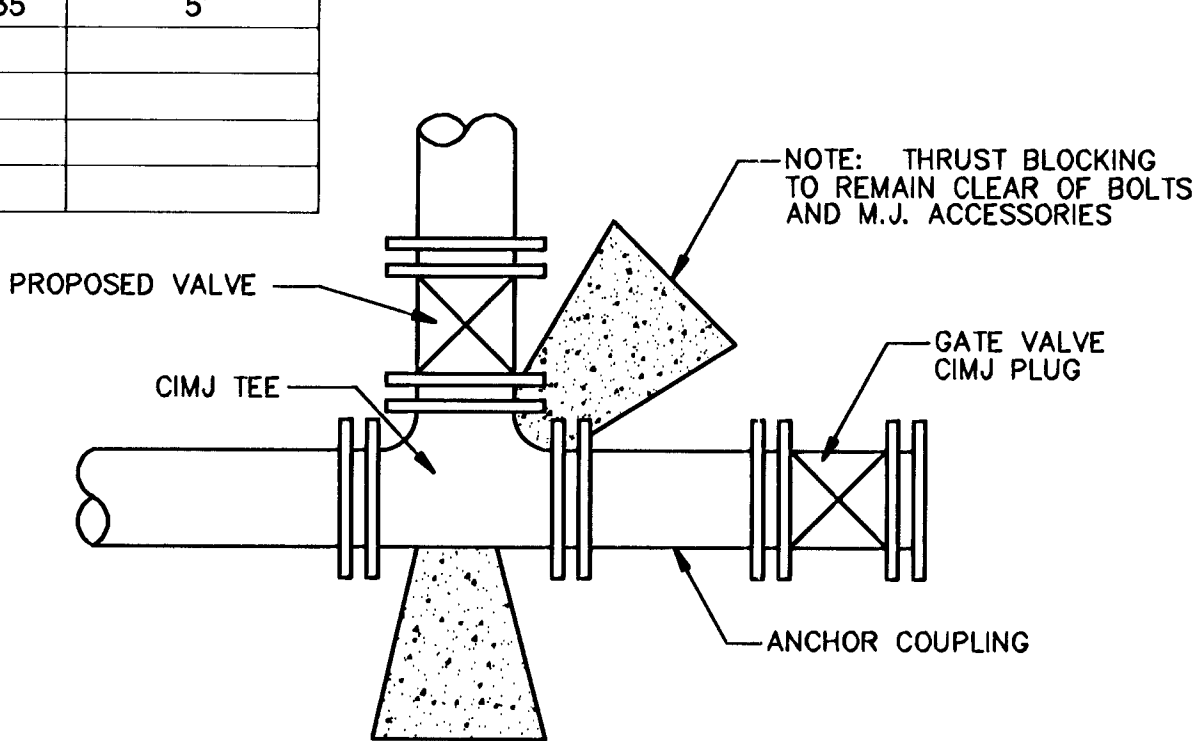
MATERIALS LIST

- 1-MJ GATE OR BUTTERFLY VALVE (AS PER PLAN)
- 1-CIMJ CAP WHEN NECESSARY
- 1-6" VALVE BOX
- 20' OF PIPE (BID WITH PIPE)
- 2 - #6 REINF. BARS
- CONCRETE SUPPORT BLOCK SHALL BE FULL WIDTH OF THE TRENCH

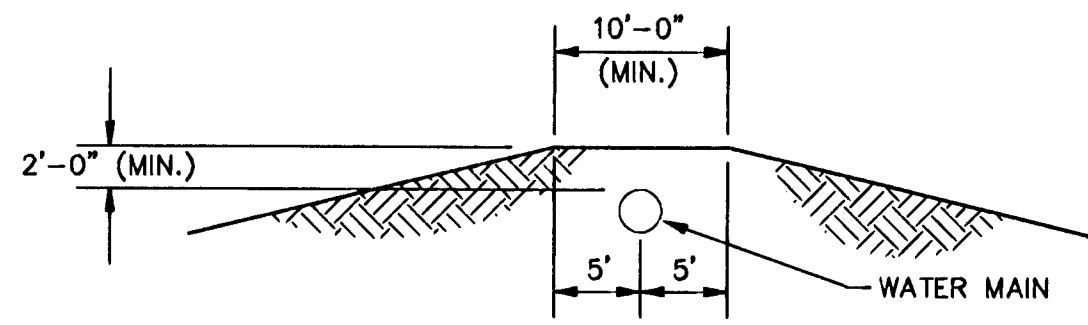


THRUST AT VALVES	
VALVE	THRUST AT 150 #/sq ft
4"	1809 lbs.
6"	4245 lbs.
8"	7540 lbs.
12"	16965 lbs.

ANCHORED VALVE ASSEMBLY, SPECIAL

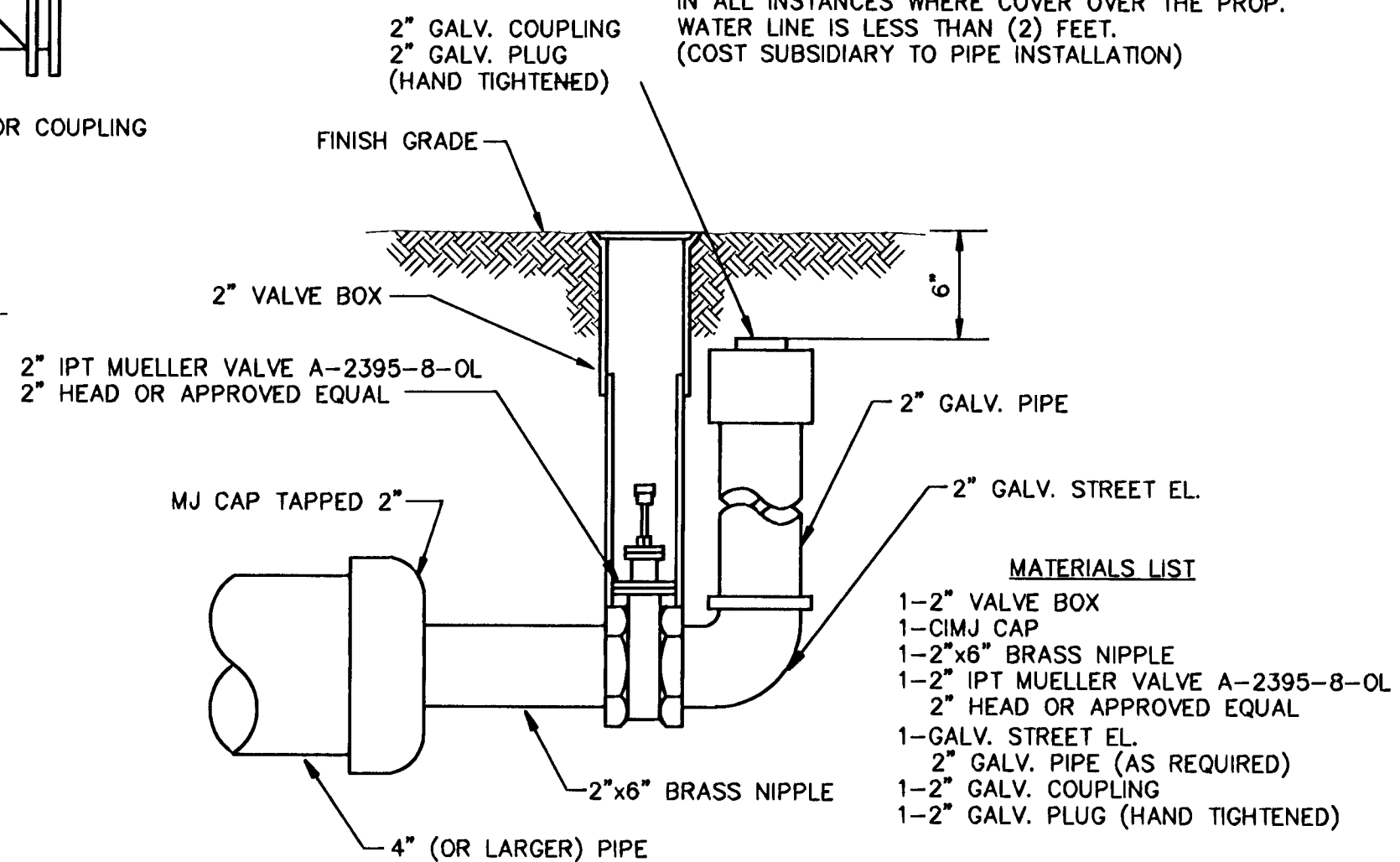


KEY BLOCK DETAIL



PROTECTIVE FILL DETAIL

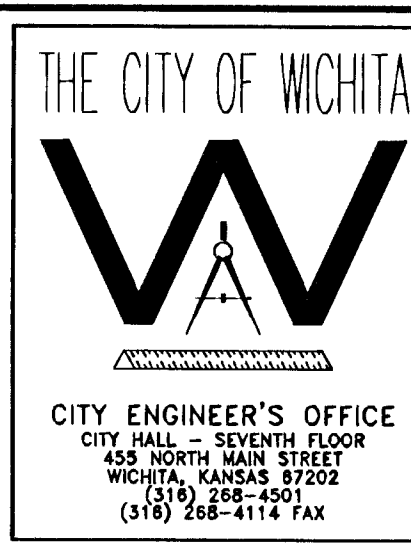
MINIMUM PROTECTIVE FILL SHALL BE PROVIDED IN ALL INSTANCES WHERE COVER OVER THE PROP. WATER LINE IS LESS THAN (2) FEET. (COST SUBSIDIARY TO PIPE INSTALLATION)



MATERIALS LIST

- 1-2" VALVE BOX
- 1-CIMJ CAP
- 1-2"x6" BRASS NIPPLE
- 1-2" IPT MUELLER VALVE A-2395-8-OL
- 2" HEAD OR APPROVED EQUAL
- 1-GALV. STREET EL.
- 2" GALV. PIPE (AS REQUIRED)
- 1-2" GALV. COUPLING
- 1-2" GALV. PLUG (HAND TIGHTENED)

2" BLOWOFF ASSEMBLY



STANDARD
WATER ASSEMBLY
DETAILS

M. E. LINDEBAK P.E. - CITY ENGINEER

PROJECT NUMBER XXX-XXXX INDEX CODE XXXXXX

DATE DEC 98 SHEET OF

Revised: 6-7-00, MCG