







































SHEET INDEX

1. **Site Plan & Vicinity Map**
2. **Legend & Construction Notes**
3. **Plan & Profile - Line A**
4. **Phasing Plan**
5. **Typical Details**



<div><div>CITY OF LEWISTON</div><div>PUBLIC WORKS DEPARTMENT</div><div>ENGINEERING SERVICES</div><div>184 'F' STREET LEWISTON ID 83501</div><div>(208) 746-3671 FAX (208) 746-9667</div></div> <div></div>	WATER DEPARTMENT									
	SITE PLAN & VICINITY MAP									
	24th Avenue									
	Water System Improvements									
	REVISIONS									

LEGEND					
EXISTING	PROPOSED	ITEM	EXISTING	PROPOSED	ITEM
		Deciduous Tree			Power
		Shrub			Telephone
		Traffic Sign			Storm Drain
		Telephone Riser			Sanitary Sewer
		Utility Pole			Survey Control Point
		Utility Pole Anchor			Monument
		Gas Meter or Gas Valve			Wire Fence
		Catch Basin			Right-of-Way or Property Line
		Storm Drain Manhole			
		Sanitary Sewer Manhole			Edge of Pavement
		Water Meter Setting			Curb & Gutter
		Water Valve			
		Fire Hydrant			
		Pressure Reducing Valve (PRV) Station			
		Remove & Replace (Fire Hydrant, Water Meter Setting, or Valve)			Detail or Section Designation
		Remove (Fire Hydrant, Water Meter Setting, or Valve)			Sheet Number on Which Detail Appears
		Water			Component Location Reference
		Gas			Thrust Block Bearing Area
		Cable TV			

CONSTRUCTION NOTES

1. UTILITY LOCATIONS SHOWN ARE APPROXIMATE. CONTRACTOR SHALL VERIFY EXACT LOCATIONS IN FIELD PRIOR TO EXCAVATION. ANY UTILITIES DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED BY THE CONTRACTOR OR UTILITY COMPANY, AT THE CONTRACTOR'S EXPENSE, TO THE SATISFACTION OF THE UTILITY COMPANY. CONTRACTORS SHALL BE RESPONSIBLE TO CONTACT THE LOCAL ONE-CALL SYTEM AT 811 AT LEAST TWO DAYS PRIOR TO ANY DIGGING.
2. UTILITY FORCES MAY ENGAGE IN MOVING, RECONSTRUCTING OR INSTALLING, OR MAINTAINING UTILITY FACILITIES, AND THE CONTRACTOR SHALL COOPERATE WITH THESE FORCES AND CONDUCT OPERATIONS IN SUCH A MANNER AS TO AVOID ANY DELAY TO WORK BEING PERFORMED BY OTHER FORCES. THE CONTRACTOR SHALL JOIN HIS WORK WITH THE WORK OF THE OTHERS AND PERFORM THE WORK IN PROPER SEQUENCE AND WITH JUDICIOUS HANDLING OF FORCES AND EQUIPMENT.
3. SURVEYING AND CONSTRUCTION STAKING FOR SEWER AND WATER MAIN CONSTRUCTION WILL BE PERFORMED BY THE CITY OF LEWISTON. CONTRACTOR SHALL RETAIN AND PROTECT CONSTRUCTION STAKING, AND SHALL NOTIFY THE ENGINEER OF ANY ERRORS.
4. THE NEW WATER MAIN SHALL BE CONSTRUCTED IN THE SEQUENCE INDICATED BY SHEET 4 OF THE PLANS, UNLESS OTHERWISE DIRECTED.
5. ALL TRENCHES AND EXCAVATED AREAS SHALL BE BACKFILLED TO FINISH GRADE WITH CRUSHED AGGREGATE BACKFILL IN ACCORDANCE WITH SECTION 202 OF THE SPECIFICATIONS. EXCESS AGGREGATE SHALL BE REMOVED PRIOR TO PAVEMENT REPLACEMENT.
6. ALL WATER MAINS SHALL BE INSTALLED WITH MINIMUM HORIZONTAL SEPARATION OF 10' BETWEEN THE WATER AND THE SANITARY OR STORM SEWER MAINS AND IN COMPLIANCE WITH ISPWC STANDARD DRAWING SD-407.
7. THRUST BLOCKS SHALL BE INSTALLED AT ALL FITTING LOCATIONS SPECIFIED BY CITY STANDARD DRAWING W-2. THRUST BLOCKS SHALL BE CONSTRUCTED TO SIZES BASED ON ALLOWABLE SOIL STRESS OF 2000 PSI. ALL MECHANICAL JOINTS 10" AND SMALLER SHALL BE EQUIPPED WITH RING-TYPE GRIP RESTRAINT DEVICES AS REQUIRED BY THE SPECIFICATIONS.
8. REMOVAL OF CURB FOR HYDRANT INSTALLATION SHALL BE INCIDENTAL TO THAT ITEM. PAY LENGTH FOR REPLACEMENT OF CURB AND GUTTER OVER HYDRANT LEADS SHALL BE AS DIRECTED BY THE ENGINEER. WHEN WATER SERVICES ARE REQUIRED BENEATH EXISTING CURBS, THE CONTRACTOR SHALL RESTAIN AND PROTECT EXISTING CURBS.
9. THE CONTRACTOR SHALL PRESSURE TEST THE NEW WATER MAIN IN ACCORDANCE WITH THE SPECIFICATIONS AND AWWA C600.
10. EXCEPT AS REQUIRED IN THE SPECIFICATIONS, THE CONTRACTOR WILL NOT BE REQUIRED TO DISINFECT NEW WATER MAINS; THE CONTRACTOR SHALL INSTALL FITTINGS AND APPURTENANCES AS REQUIRED BY THE OWNER FOR DISINFECTION. THE CITY OF LEWISTON WATER DEPARTMENT WILL THEN PERFORM SYSTEM DISINFECTION AND ALL THE BACTERIOLOGICAL TESTING AS INDICATED BY SHEET 4 OF THE PLANS.
11. ALL DISTURBED AREAS SHALL BE RESTORED TO THEIR ORIGINAL CONDITION. RESTORATION OF PAVEMENT, SIDEWALK, CURB, AND GUTTER SHALL BE IN CONFORMANCE WITH THE PROVISIONS OF SECTION 201 OF THE SPECIFICATIONS. RESTORATION OF ALL OTHER SURFACES SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT.



None

SCALE:

Aug 2009

DATE:

stephan.dwg

DRAWING NO.:

2

OF

5

SHEET

DESIGNED BY:

DRAWN BY:

CHECKED BY:

JOB NO.:

BY

DESCRIPTION

FILENAME

DATE

NO.

WATER DEPARTMENT

LEGEND & CONSTRUCTION NOTES

24th Avenue

Water System Improvements

CITY OF LEWISTON

PUBLIC WORKS DEPARTMENT

ENGINEERING SERVICES

134 F STREET

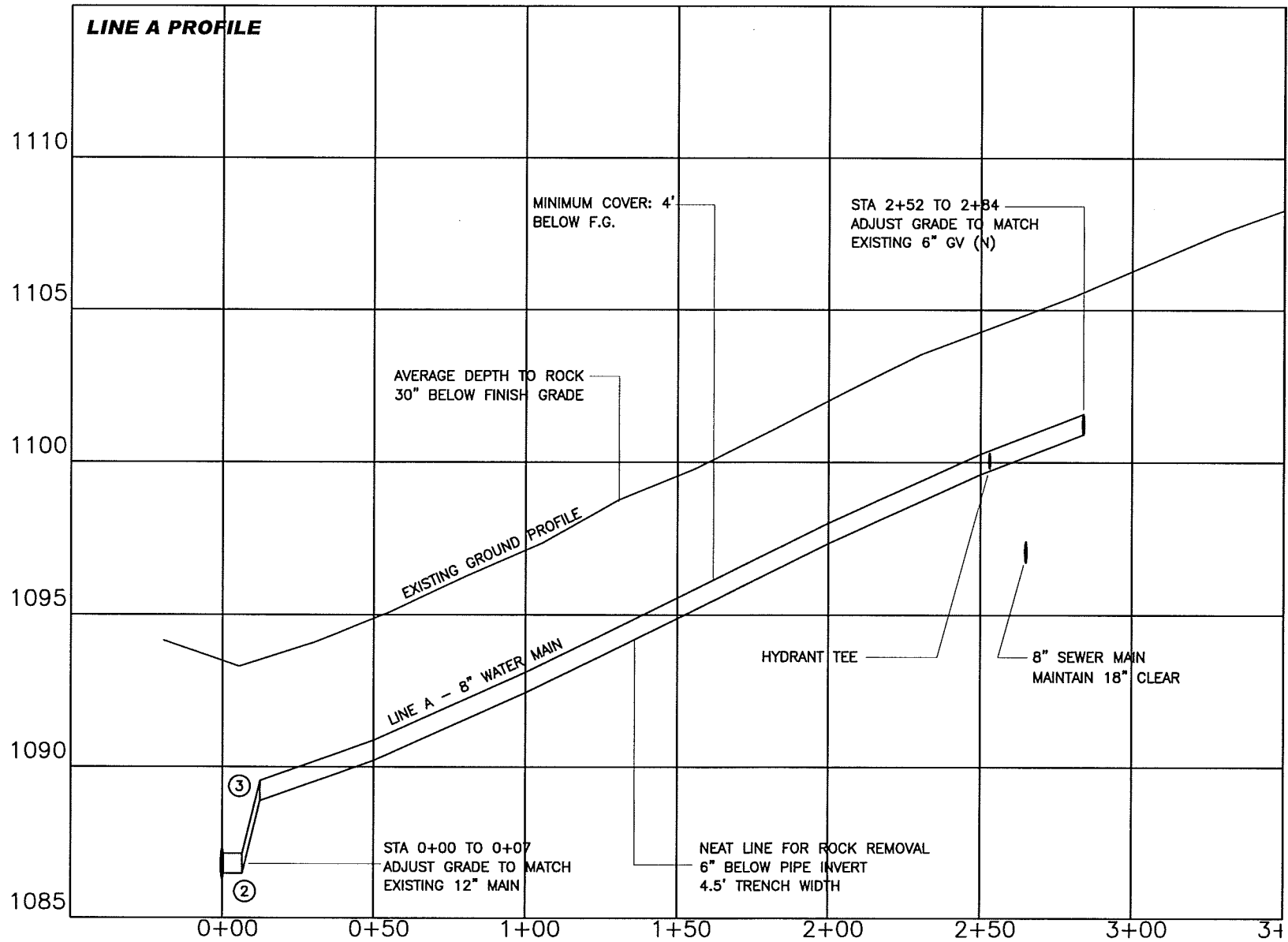
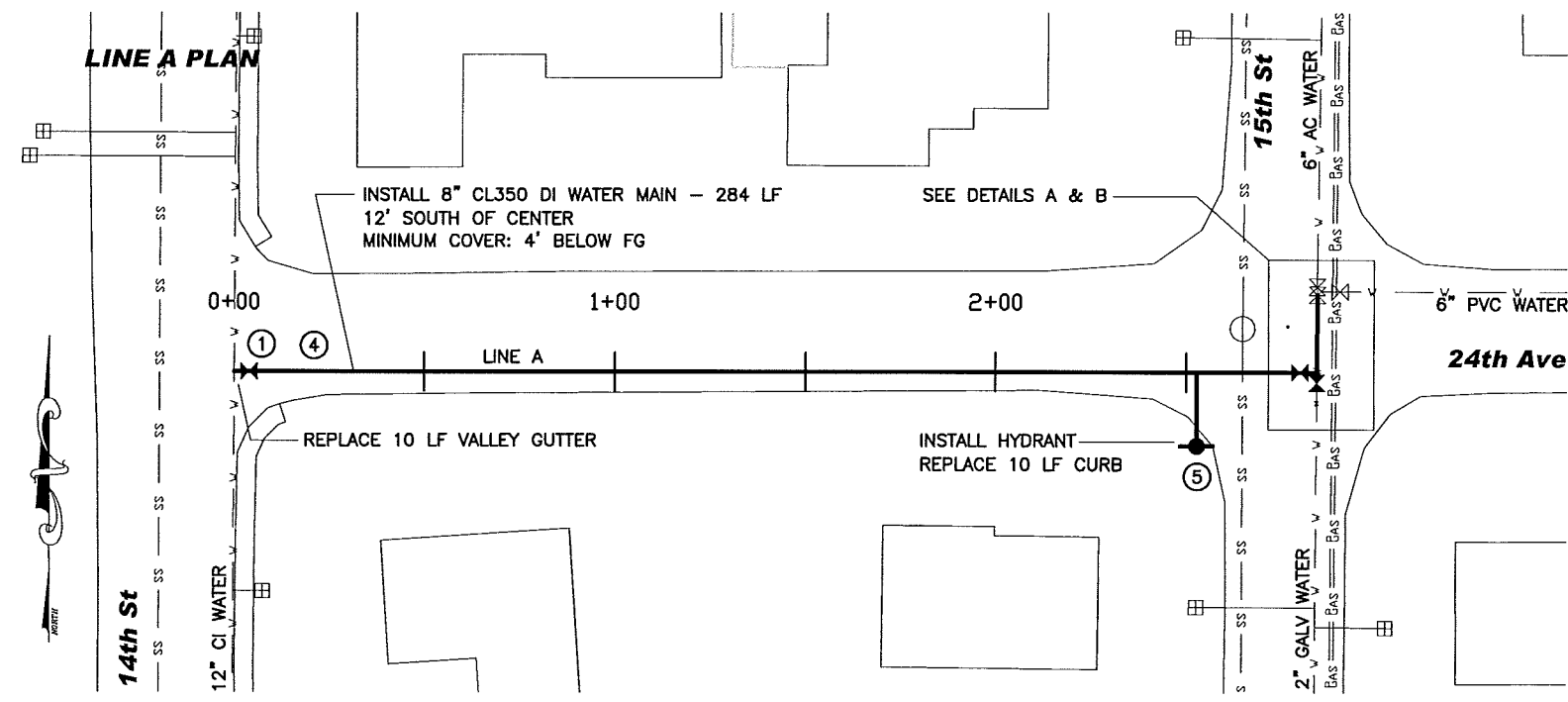
LEWISTON, ID 83501

(208) 746-3671

FAX (208) 746-9667

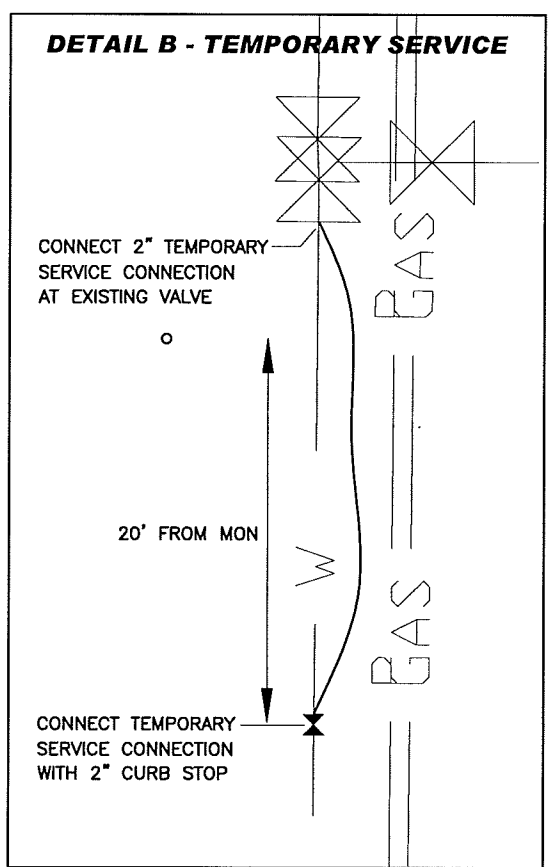
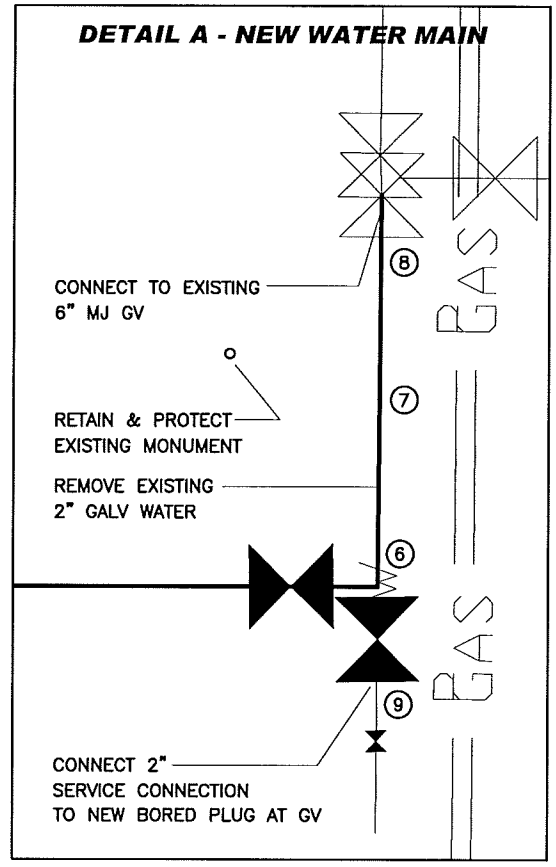
CITY OF LEWISTON

1961



WATER MAIN SCHEDULE

1	12"x8" FL TAPPING SADDLE
	8" FL x MJ GV
	CONNECT TO EXISTING
2	8" MJ 22 ELL (V)
3	8" MJ 22 ELL (V)
4	8" MJ SOLID SLEEVE
5	HYDRANT ASSEMBLY
	(20' RT, 6.5' BURY)
6	8" MJ x FL TEE
	8" FL x MJ GV (W)
	8" FOSTER ADAPTER (S)
	8" MJ x FL GV (S)
	8" X 2" BORED MJ PLUG (S)
	2" FORD C44-77-K COUPLING
7	8" CL350 PIPE - 10 LF
	8" x 6" MJ REDUCER
8	6" CL350 PIPE - 10 LF
	CONNECT TO EXISTING
9	CONNECT TO EXISTING



WATER DEPARTMENT

PLAN & PROFILE

24th Avenue

Water System Improvements

1" = 50'

SCALE: S.M. DATE: Aug 2009

DESIGNED BY: S.M. DRAWN BY: M.D. CHECKED BY: M.D.

DRAWING NO.: plans.dwg

SHEET 3 OF 4

CITY OF LEWISTON

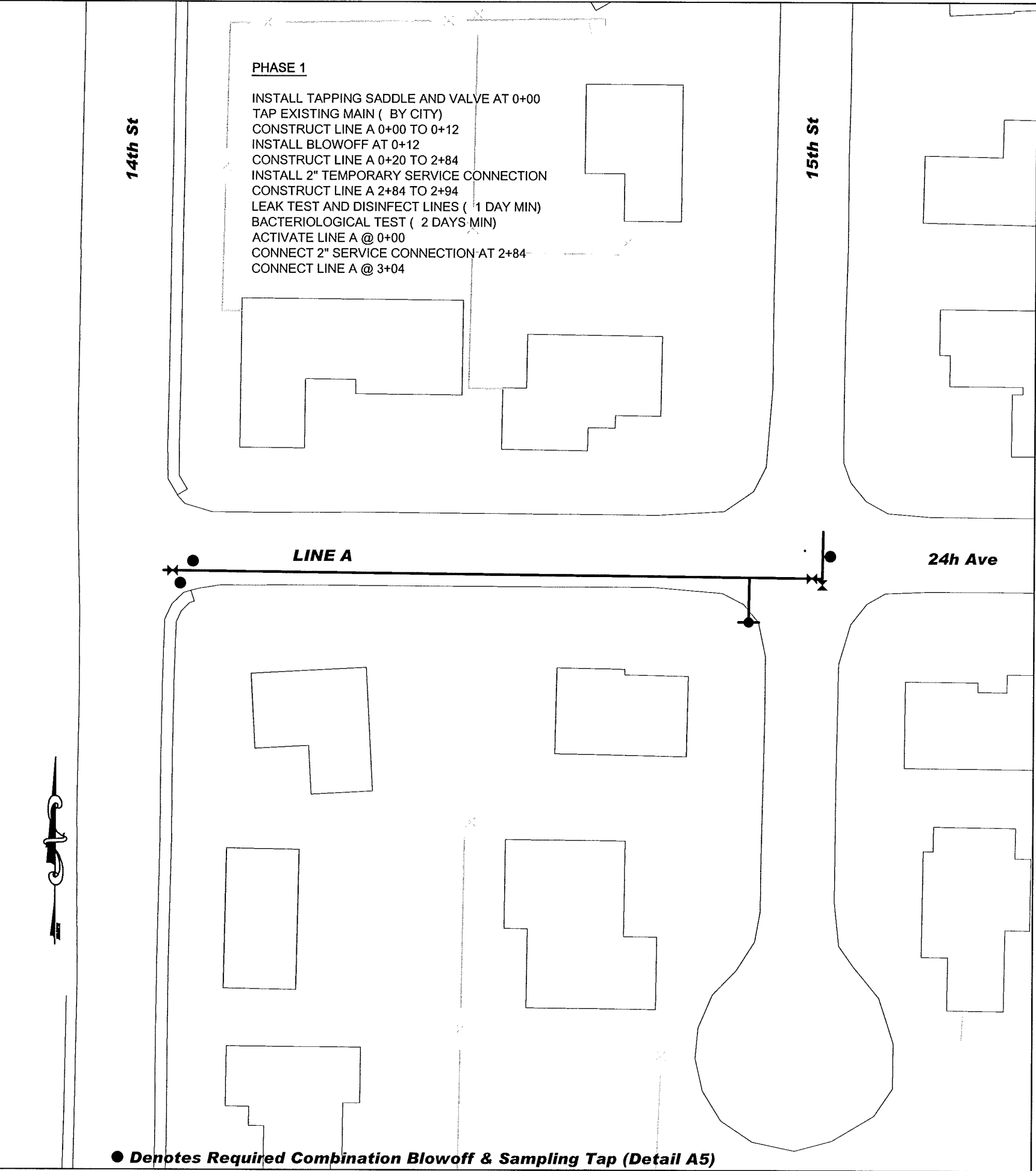
PUBLIC WORKS DEPARTMENT

ENGINEERING SERVICES

134 F STREET LEWISTON ID 83501

(208) 746-3671 FAX (208) 746-9667

PHASING PLAN



PHASE 1

INSTALL TAPPING SADDLE AND VALVE AT 0+00
TAP EXISTING MAIN (BY CITY)
CONSTRUCT LINE A 0+00 TO 0+12
INSTALL BLOWOFF AT 0+12
CONSTRUCT LINE A 0+20 TO 2+84
INSTALL 2" TEMPORARY SERVICE CONNECTION
CONSTRUCT LINE A 2+84 TO 2+94
LEAK TEST AND DISINFECT LINES (1 DAY MIN)
BACTERIOLOGICAL TEST (2 DAYS MIN)
ACTIVATE LINE A @ 0+00
CONNECT 2" SERVICE CONNECTION AT 2+84
CONNECT LINE A @ 3+04

SEQUENCE OF CONSTRUCTION

THE SEQUENCE OF CONSTRUCTION APPEARING IN THE CONTRACT PLANS SHOWS THE ANTICIPATED METHOD OF CONSTRUCTING THE PLANNED PROJECT WITH THE FEWEST SERVICE INTERRUPTIONS AND PUBLIC INCONVENIENCE. THE CONTRACTOR SHALL CONDUCT THE PROJECT IN THE MANNER PRESENTED UNLESS OTHERWISE AUTHORIZED. IF THE CONTRACTOR'S PROPOSED METHODS DIFFER FROM THE PLANNED SEQUENCE OF CONSTRUCTION, THE CONTRACTOR MUST SUBMIT THE PROPOSED MODIFICATION OF THE PROJECT SEQUENCE TO THE ENGINEER AT LEAST TEN CALENDAR DAYS IN ADVANCE OF THE REQUESTED CHANGE. THE CONTRACTOR SHALL ALSO PRESENT THE REQUIRED CHANGES IN THE PROJECT'S TRAFFIC CONTROL PLANS BY SHOWING THE NECESSARY CONSTRUCTION SIGNS, FLAGGERS, AND OTHER TRAFFIC CONTROL DEVICES REQUIRED FOR THE CHANGE.

HYDROSTATIC TEST

MAKE PRESSURE AND LEAKAGE TESTS ON ALL NEWLY LAID PIPE AND VALVED SECTIONS OF IT. FURNISH ALL NECESSARY EQUIPMENT AND MATERIAL, MAKE ALL TAPS, AND FURNISH ALL CLOSURE PIECES IN THE PIPE AS REQUIRED. THE CITY WILL MONITOR AND APPROVE A SATISFACTORY TEST. PRESSURE TEST PROCEDURES SHALL CONFORM TO AWWA C600 AS HEREINAFTER MODIFIED OR EXPANDED, AND THE REQUIREMENTS OF ANY GOVERNING AGENCY HAVING JURISDICTION. CONDUCT TESTS AFTER THE TRENCH HAS BEEN PARTIALLY BACK-FILLED WITH THE JOINTS LEFT EXPOSED FOR INSPECTION, OR WHEN COMPLETELY BACK-FILLED, AS PERMITTED BY THE CITY. WHERE ANY SECTION OF PIPE IS PROVIDED WITH CONCRETE THRUST BLOCKING, DO NOT CONDUCT PRESSURE TEST UNTIL AT LEAST 2 DAYS HAVE ELAPSED AFTER THE CONCRETE THRUST BLOCKING WAS INSTALLED. IF HIGH-EARLY CEMENT IS USED FOR THE CONCRETE THRUST BLOCKING, THE TIME MAY BE REDUCED TO 1 DAY. AFTER THE PIPE HAS BEEN BACK-FILLED OR PARTIALLY BACK-FILLED, AS HEREIN SPECIFIED, FILL THE PIPE WITH WATER, EXPELLING AIR DURING FILLING, AND PERMIT IT TO STAND FOR A 24-HOUR PERIOD TO ALLOW NATURAL ABSORPTION TO TAKE PLACE. THE PRESSURE TO BE USED IN THE TEST SHALL BE THE GREATER OF 1.5 TIMES THE WORKING PRESSURE OR 150 PSI. BEFORE DISINFECTING, FLUSH ALL FOREIGN MATTER FROM THE PIPELINE. PROVIDE HOSES, PUMPS, TEMPORARY PIPES, DITCHES, ETC., AS REQUIRED TO DISPOSE OF FLUSHING WATER WITHOUT DAMAGE TO ADJACENT PROPERTIES. FLUSHING VELOCITIES SHALL BE AT LEAST 2.5 FPS. FOR LARGE DIAMETER PIPE WHERE IT IS IMPRACTICAL OR IMPOSSIBLE TO FLUSH THE PIPE AT 2.5 FPS VELOCITY, CLEAN THE PIPELINE IN PLACE FROM THE INSIDE BY BRUSHING AND SWEEPING, THEN FLUSH THE LINE AT A LOWER VELOCITY.

DISINFECTION

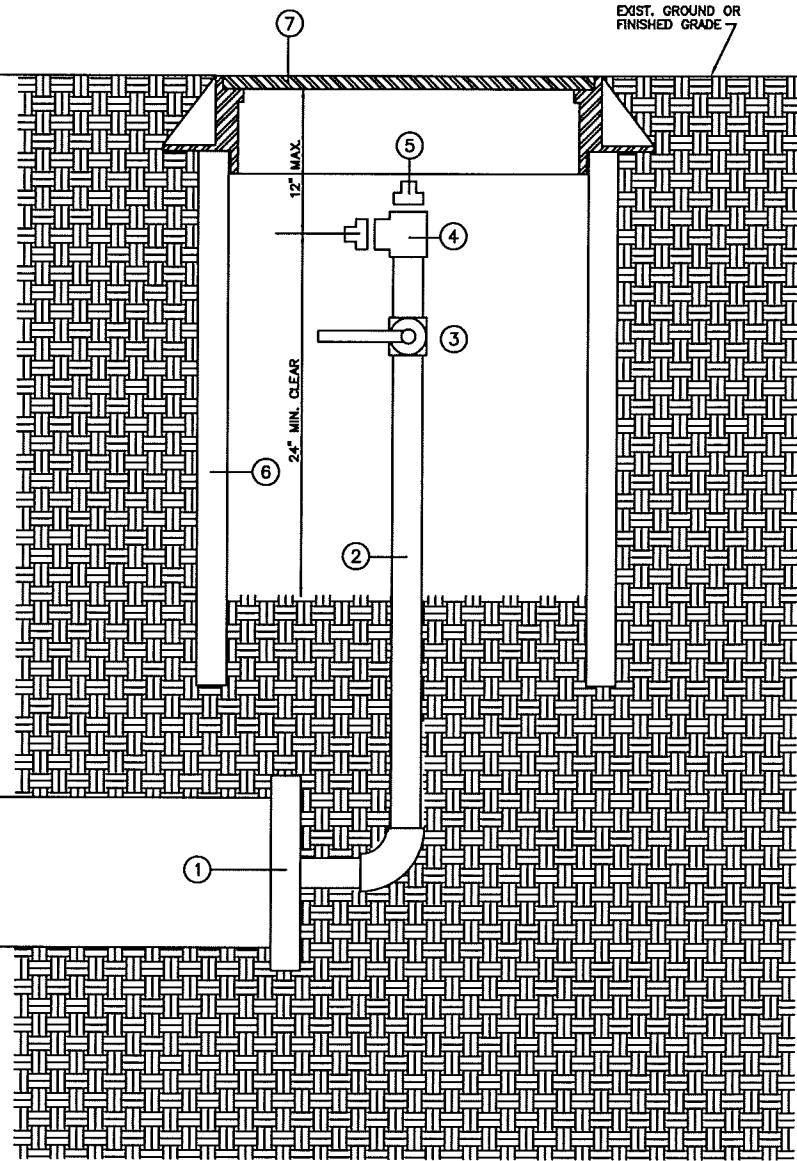
PIPELINES INTENDED TO CARRY POTABLE WATER SHALL BE DISINFECTED AND TESTED BY THE CITY BEFORE PLACING IN SERVICE. DISINFECTION PROCEDURES SHALL CONFORM TO AWWA C651 AS HEREINAFTER MODIFIED OR EXPANDED, AND THE REQUIREMENTS OF ANY GOVERNING AGENCY HAVING JURISDICTION. TREATED WATER SHALL BE RETAINED IN THE PIPELINE LONG ENOUGH TO DESTROY ALL NONSPORE-FORMING BACTERIA, OR AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE TO OPERATE ALL NEW VALVES, HYDRANTS AND OTHER APPURTENANCES DURING DISINFECTION TO ASSURE THAT THE DISINFECTING MIXTURE IS DISPERSED INTO ALL PARTS OF THE LINE, INCLUDING DEAD ENDS, NEW SERVICES AND SIMILAR AREAS THAT OTHERWISE MAY NOT RECEIVE THE TREATED WATER. AFTER THE APPLICABLE RETENTION PERIOD, HEAVILY CHLORINATED WATER WILL BE FLUSHED FROM THE NEW WATER MAIN. AFTER FINAL FLUSHING AND BEFORE THE NEW MAIN IS CONNECTED TO THE DISTRIBUTION SYSTEM, TWO CONSECUTIVE SETS OF ACCEPTABLE SAMPLES, TAKEN AT LEAST 24 HOURS APART, SHALL BE COLLECTED FROM THE NEW MAIN.

THE CONTRACTOR SHALL PROVIDE TESTING LOCATIONS AS REQUIRED BY THE PLANS OR AS DIRECTED BY THE ENGINEER. A COMBINATION BLOWOFF AND SAMPLING TAP IS RECOMMENDED, BUT SAMPLES MAY BE TAKEN AT TAPPED SADDLE LOCATIONS PROVIDED THAT THE SADDLE IS USED FOR A SERVICE CONNECTION AT THE COMPLETION OF THE PROJECT. NO HOSE OR FIRE HYDRANT MAY BE USED IN THE COLLECTION OF SAMPLES. ALL SAMPLES SHALL BE TESTED FOR BACTERIOLOGICAL QUALITY IN ACCORDANCE WITH STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, AND SHALL SHOW THE ABSENCE OF COLIFORM ORGANISMS. EACH TEST REQUIRES A MINIMUM 24 HOUR PERIOD FOR RESULTS.

CITY OF LEWISTON PUBLIC WORKS DEPARTMENT ENGINEERING SERVICES 104 F STREET (208) 746-3671 FAX (208) 746-9667	WATER DEPARTMENT PHASING PLAN 24th Avenue Water System Improvements	REVISIONS		DESIGNED BY:	S.M.	SCALE:	1"=50' (11x17)
		DRAWN BY:	S.M.	DATE:	Aug 2009		
		CHECKED BY:	D.S.	DRAWING NO.:	sileplan.dwg		SHEET
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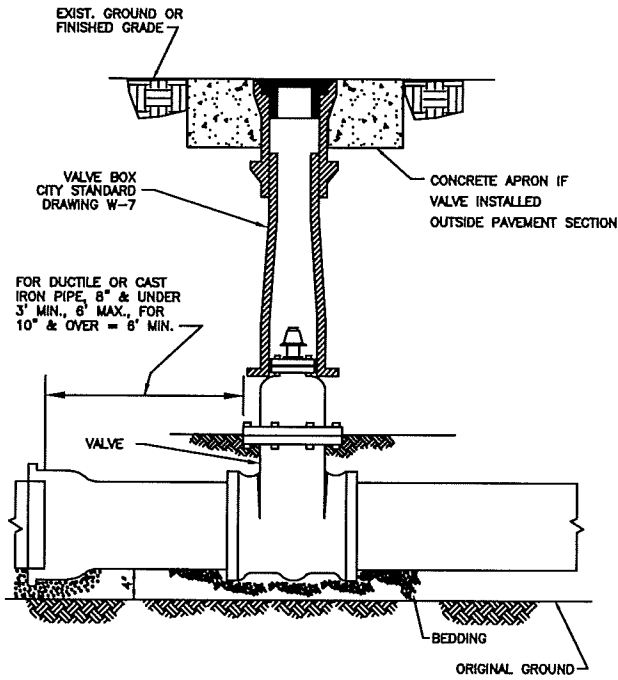
COMBINATION BLOWOFF & SAMPLING TAP
NOT TO SCALE

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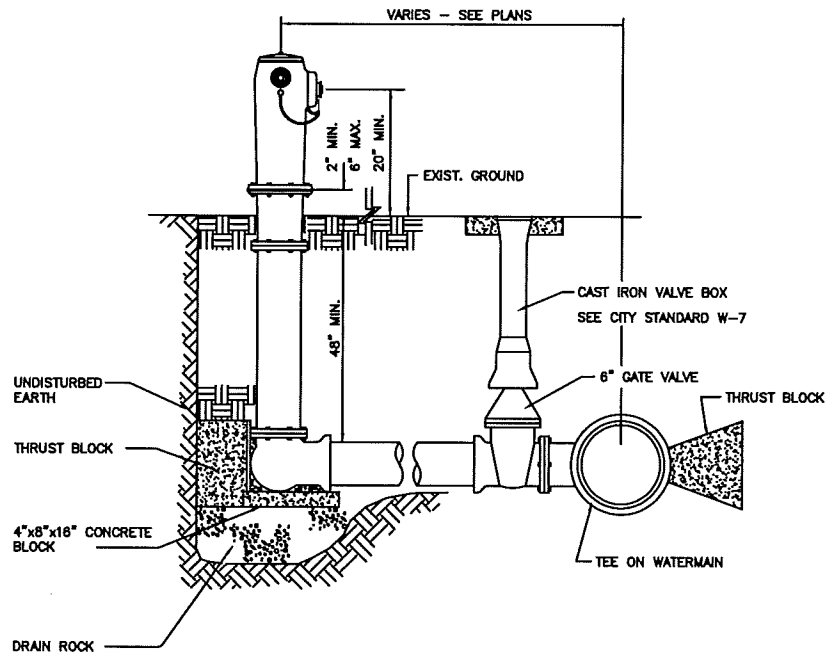
REQUIRED COMPONENTS

- ① CAP OR PLUG ON WATER MAIN
- ② 2" GALVANIZED PIPE
- ③ 2" BALL VALVE
- ④ 2" THREADED TEE
- ⑤ 2" THREADED PLUG (2)
- ⑥ 24" HDPE PIPE
- ⑦ OLYMPIC FOUNDRY MH-23 MANHOLE & COVER
- ⑧ THRUST BLOCK OR RESTRAINTS (NOT SHOWN)



GATE VALVE INSTALLATION DETAIL
NOT TO SCALE

B
5



FIRE HYDRANT ASSEMBLY DETAIL
NOT TO SCALE

C
5

WATER DEPARTMENT

TYPICAL SECTIONS

24th Avenue

Water System Improvements



CITY OF LEWISTON

PUBLIC WORKS DEPARTMENT

ENGINEERING SERVICES

184 P STREET LEWISTON, ID 83601

(200) 746-3671 FAX (200) 746-9667



REVISIONS	DESIGNED BY:	S.M.	SCALE:	NONE
	DRAWN BY:	S.M.	DATE:	August 2009
	CHECKED BY:	D.S.	DRAWING NO.:	xsection.dwg
	DATE:		SHEET	5 OF 5