

**WATER MAIN GENERAL NOTES**

**GENERAL**

1. THE CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS ACCOMPANYING THESE PLANS AND THE FOLLOWING SPECIFICATIONS: (A) "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", BY THE ILLINOIS DEPT. OF TRANSPORTATION, LATEST EDITION, (B) "SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS", BY THE ILLINOIS DEPT. OF TRANSPORTATION, LATEST EDITION, (C) "STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS", LATEST EDITION. (D) ILLINOIS-AMERICAN ILAW WATER COMPANY STANDARD PIPELINE SPECIFICATIONS.
2. ALL PROPOSED WATER MAINS SHALL MEET MINIMUM SEPARATION OR ENCASEMENT REQUIREMENTS PER THE STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION.
3. WATER SERVICE SHUT-OFFS, MAIN CLOSURES, STREET AND PRIVATE DRIVEWAY CLOSURES WILL REQUIRE A MINIMUM OF 48 HOURS ADVANCE NOTICE TO THE CITY OF PEORIA, THE ILLINOIS DEPARTMENT OF TRANSPORTATION, AND THE PUBLIC, AS APPLICABLE.
4. A PRE-CONSTRUCTION VIDEO RECORD OF THE JOB SITE WILL BE REQUIRED TO ENSURE OWNER THAT CONTRACTOR RESTORES AREAS DISTURBED BY CONSTRUCTION ACTIVITIES TO THEIR ORIGINAL CONDITION. A MINIMUM OF TWO (2) DVD FORMAT VIDEOS WILL BE REQUIRED IN ALL AREAS OF PROPOSED WORK AND SHALL BE SUBMITTED TO THE ENGINEER PRIOR TO THE START OF CONSTRUCTION. COSTS FOR PRE-CONSTRUCTION VIDEO RECORD SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
5. ALL CONSTRUCTION OPERATIONS SHALL BE IN ACCORDANCE WITH THE APPLICABLE REGULATIONS OF THE UNITED STATES OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (O.S.H.A.) AND SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
6. THE LOCATION OF EXISTING UNDERGROUND UTILITIES, AS SHOWN ON THESE PLANS, IS BASED UPON FIELD INVESTIGATION, UTILITY MAPS, AND JULIE LOCATES, BUT THE LOCATIONS ARE NOT GUARANTEED. UNLESS OTHER INFORMATION WAS AVAILABLE, ALL EXISTING WATER MAINS HAVE BEEN SHOWN WITH APPROXIMATELY 3.5' OF COVER; HOWEVER, THE ACTUAL DEPTH OF THE MAINS MAY VARY. CONTRACTOR SHALL BE RESPONSIBLE TO DETERMINE ALL CRITICAL LOCATIONS AND ELEVATIONS PRIOR TO CONSTRUCTION.

**INSTALLATION**

1. REFER TO THE SPECIFICATIONS AND STANDARD DETAILS ON THE DRAWINGS FOR BACKFILL AND CRADLE MATERIAL SPECIFICATIONS, INSTALLATION PROCEDURES AND COMPACTION REQUIREMENTS.
2. THE PIPE SHALL BE LAID WITH A COVER OF AT LEAST 42 INCHES AND NO MORE THAN 54 INCHES AS MEASURED FROM THE TOP OF THE PIPE TO FINISHED GRADE OF THE GROUND, UNLESS OTHERWISE DIRECTED BY THE ENGINEER OR NOTED ON THE CONSTRUCTION DRAWINGS.
3. THE CONTRACTOR IS RESPONSIBLE FOR DUST AND MUD CONTROL.
4. WATER MAINS INSTALLED UNDER SEWERS, WHICH ARE NOT CONSTRUCTED WITH WATER MAIN QUALITY PIPE, SHALL BE CONSTRUCTED PER DETAIL 10B ON ILAW STANDARD DETAILS. CASING PIPE SHALL BE C900 PVC. ENDS SHALL BE SEALED WATER TIGHT.

**RESTORATION**

1. CONTRACTOR SHALL REMOVE AND REPLACE ANY CONCRETE SIDEWALKS AND DRIVEWAYS PARTIALLY DAMAGED DURING CONSTRUCTION IN FULL SECTIONS (FROM JOINT TO JOINT), IF REQUIRED SOLEY FOR CONSTRUCTION OF THE WATER MAIN.
2. ALL GRASSED AREAS DISTURBED DURING CONSTRUCTION SHALL BE FERTILIZED AND SEEDED IN ACCORDANCE WITH SECTION 21 OF THE "STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS". MULCHING SHALL BE CONDUCTED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 251 OF THE ILLINOIS DEPARTMENT OF TRANSPORTATION (IDOT) "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" ADOPTED JANUARY 1, 2007 AND THE APPLICABLE PROVISIONS OF THE LATEST EDITION OF THE SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS. DISTURBED AREAS LOCATED WITHIN PUBLIC RIGHT-OF-WAY SHALL BE FERTILIZED AND SEEDED WITH A CLASS 2A MIXTURE AND MULCHED ACCORDING TO METHOD 2, PROCEDURE 2. DISTURBED AREAS LOCATED OUTSIDE THE PUBLIC RIGHT- OF-WAY SHALL BE FERTILIZED AND SEEDED WITH A CLASS 1 MIXTURE AND ALSO MULCHED ACCORDING TO METHOD 2, PROCEDURE 2, UNLESS OTHERWISE NOTED IN THESE PLANS.
3. WHERE TOPSOIL IS PRESENT THE ACTUAL DEPTH OF THE TOPSOIL SHALL FIRST BE STRIPPED FROM THE AREA TO BE EXCAVATED FOR A WATER LINE TRENCH, ALL BORE PITS, AND OTHER AREAS OF EXCAVATION. TOPSOIL SHALL BE STOCKPILED ON SITE SEPARATE FROM OTHER SOILS FROM THE EXCAVATION. ALL SUBSOIL MATERIAL WHICH IS REMOVED FROM THE TRENCH SHALL BE PLACED IN A SECOND STOCKPILE THAT IS SEPARATE FROM THE TOPSOIL STOCKPILE. RESTORATION OF ALL SURFACES SHALL BE IN ACCORDANCE WITH SECTION 21 OF THE STANDARD SPECIFICATIONS FOR WATER AND SEWER CONSTRUCTION.

4. IN BACKFILLING THE TRENCH AND OTHER EXCAVATED AREAS, THE STOCKPILED SUBSOIL MATERIAL WILL BE PLACED BACK INTO THE TRENCH FIRST. THE TOPSOIL WILL BE REPLACED LAST SO THAT IT REMAINS THE TOP LAYER OF SOIL.
5. THE TOPSOIL AND SUBSOIL MUST BE REPLACED WITHIN THE TRENCH AND OTHER EXCAVATED AREAS SO THAT AFTER SETTLING OCCURS, THE LAND'S ORIGINAL CONTOUR (WITH AN ALLOWANCE FOR SETTLING) WILL BE ACHIEVED.
6. ALL EROSION CONTROL MEASURES SHALL BE IN ACCORDANCE WITH THE APPLICABLE SECTIONS OF THE IDOT STANDARD SPECIFICATIONS AND THE IEPA/USDA NRCS ILLINOIS URBAN MANUAL, 1995 (FROM THE ILLINOIS DEPARTMENT OF AG. SOIL CONSERVATION SERVICE).
7. WHERE APPLICABLE, THE CONTRACTOR SHALL PROVIDE EROSION CONTROL AS REQUIRED TO PREVENT SOIL EROSION. EROSION CONTROL METHODS SHALL BE PROVIDED AS SPECIFIED IN "ILLINOIS URBAN MANUAL", LATEST EDITION.
8. OIL AND CHIP STREETS SHALL BE REPLACED WITH 3" OF ASPHALT (MINIMUM THICKNESS).

**MATERIAL REQUIREMENTS**

1. WATER MAIN MATERIAL SHALL BE DUCTILE IRON PRESSURE CLASS 300 (MINIMUM) WITH THE PIPE ADHERING TO ANSI/AWWA C151/ANSI A21.51 AND THE JOINTS ADHERING TO ANSI/AWWA C110/A21.10. PIPING SHALL BE POLYETHYLENE WRAPPED. PIPE SHALL BE INSTALLED BY OPEN EXCAVATION, UNLESS ALTERNATIVE METHODS ARE APPROVED BY ILLINOIS-AMERICAN WATER COMPANY.
2. GATE VALVES, BUTTERFLY VALVES, AND VALVE BOXES SHALL BE IN ACCORDANCE WITH THE ILLINOIS-AMERICAN WATER COMPANY STANDARD PIPELINE SPECIFICATIONS.
3. PROVIDE APPROPRIATE JOINT RESTRAINT FOR ALL WATER MAINS AND FITTINGS IN ACCORDANCE WITH THE DRAWINGS AND SECTION 41-2.09 OF THE STANDARD SPECIFICATIONS FOR WATER AND SEWER CONSTRUCTION. ALL ASPECTS OF JOINT RESTRAINT INSTALLATION SHALL NOT BE PAID FOR SEPARATELY BUT SHALL BE CONSIDERED INCIDENTAL TO THE UNIT PRICE FOR THE ASSOCIATED SIZED "FITTING" INVOLVED.
4. TRACER WIRE AND WARNING TAPE SHALL BE INSTALLED PER THE PROJECT SPECIFICATIONS.
5. CONTRACTOR SHALL MAINTAIN A MINIMUM 2' SPOOL PIECE LENGTH.

**UTILITIES**

1. PROTECTION OF WATER MAINS AND WATER SERVICES (INCLUDING HORIZONTAL AND VERTICAL SEPARATION OF WATER MAINS AND SERVICES FROM STORM AND SANITARY SEWERS) SHALL BE IN ACCORDANCE WITH THE PROVISIONS OF SECTION 41-2.01 OF THE STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION AND THE PROVISIONS OF THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY "ILLINOIS RECOMMENDED STANDARDS FOR SEWAGE WORKS", SECTION 370.350. ANY COSTS FOR THIS WORK INCLUDING CASINGS, THRUST BLOCKS, ETC. SHALL BE CONSIDERED INCIDENTAL TO THE INSTALLATION OF THE PROPOSED WORK.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL UTILITY LOCATIONS AND ELEVATIONS PRIOR TO CONSTRUCTION.

**COORDINATION WITH IDOT**

1. ALL WORK ADJACENT TO IL ROUTE 6 SHALL BE PERFORMED IN COMPLIANCE WITH IDOT'S REQUIREMENTS AND ANY APPLICABLE IDOT UTILITY PERMIT FOR THIS PROJECT.

**PROJECT CLOSEOUT**

1. CONTRACTOR SHALL BE RESPONSIBLE FOR PREPARING AND SUBMITTING ALL RECORD DRAWINGS TO THE OWNER AND ENGINEER WITHIN 30 DAYS OF SUBSTANTIAL COMPLETION. THE CONTRACTOR SHALL KEEP ONE SET OF PLANS UPON WHICH ALL "REVISIONS" OR "VARIATIONS" ARE NOTED IN RED PENCIL. THIS SET SHALL BE TURNED OVER TO THE ENGINEER AT THE END OF THE PROJECT, AS A CONDITION PRECEDENT TO ISSUANCE OF FINAL CERTIFICATE FOR PAYMENT.
2. ALL NEW WATER MAINS SHALL BE PRESSURE TESTED, DISINFECTED AND FLUSHED PRIOR TO PLACING THE MAINS IN SERVICE. THIS WORK SHALL CONFORM TO THE PROJECT SPECIFICATIONS.
3. CONTRACTOR SHALL SATISFACTORILY DISINFECT ALL WATER MAINS PRIOR TO USE. IN ACCORDANCE WITH REQUIREMENTS OF AWWA C651-99, AT LEAST ONE SET OF SAMPLES SHALL BE COLLECTED FROM EVERY 1,200 FEET OF NEW WATER MAIN, PLUS ONE SET FROM THE END OF THE LINE AND AT LEAST ONE SET FROM EACH BRANCH. SATISFACTORY DISINFECTION SHALL BE DEMONSTRATED IN ACCORDANCE WITH THE REQUIREMENTS OF 35 IL ADM. CODE 652-203. CONTRACTOR SHALL FURNISH AND INSTALL CORPORATION STOPS AT REQUIRED SAMPLING LENGTHS.

4. FLUSHING OF THE 16H MAIN SHALL BE ACCOMPLISHED BY INSTALLING A TEMPORARY 6H VALVE & HYDRANT (SUPPLIED BY ILAW) AT APPROPRIATE LOCATIONS. UPON COMPLETION OF FLUSHING WORK THE HYDRANT AND VALVE SHALL BE REMOVED AND THE 6H CONNECTION SHALL BE CAPPED AT THE MAIN. THIS WORK, INCLUDING ANY FITTINGS AND APPURTENANCES, SHALL BE CONSIDERED INCIDENTAL TO THE WATER MAIN INSTALLATION.

**ILLINOIS-AMERICAN WATER COMPANY (ILAWC)**

1. CONTRACTOR SHALL FURNISH ALL WATER MAIN PIPE, FITTINGS, VALVES AND APPURTENANCES AS REQUIRED FOR THE PROJECT AND SHALL PERFORM ALL INSTALLATION WORK.
2. ILAWC WILL OPERATE ALL VALVES AND ILAW REQUIRES A 24 HOUR ADVANCE NOTICE FROM THE CONTRACTOR FOR OPERATION OF ANY VALVES..
3. THE CONTRACTOR SHALL PERFORM ALL HOT TAPS AND CUT IN CONNECTIONS. SCHEDULE WORK 48 HOURS IN ADVANCE WITH ILAW.
4. PROPOSED VALVES SHALL BE INSTALLED PER THE ILAW STANDARD.
5. TRACER WIRE SHALL BE THREADED UP THE OUTSIDE OF VALVE BOXES. THE CONTRACTOR SHALL NOTCH THE LIP WITH A SAW AND LAY THE WIRE INTO THE BOX (SEE DETAIL 22 ON ILAW STANDARD DETAILS FOR MORE INFORMATION ON TRACER WIRE INSTALLATION).
6. EXISTING WATERLINES SHALL BE DECOMMISSIONED BY THE CONTRACTOR ONCE THE INTERCONNECTS HAVE BEEN SUCCESSFULLY COMPLETED.

**BILL OF MATERIALS**

Item	Unit	Total Quantity	C.O.P. Quantity	IDOT Quantity
TRENCH BACKFILL	CY	50	21	29
CLASS B PATCHES, TYPE II, 10 INCH	SY	30	30	0
DOWEL BARS 1 1/2"	EA	84	84	0
SAW CUTS	LF	144	144	0
DUCTILE IRON WATER MAIN 8"	LF	439	29	410
DUCTILE IRON WATER MAIN 12"	LF	29	29	0
DUCTILE IRON WATER MAIN 16"	LF	3230	1910	1320
WATER VALVES 8"	EA	5	2	3
WATER VALVES 12"	EA	1	1	0
BUTTERFLY VALVES 16"	EA	1	0	1
TAPPING VALVES AND SLEEVES 16"	EA	3	2	1
CONNECTION TO EXISTING WATER MAIN 8"	EA	4	1	3
CONNECTION TO EXISTING WATER MAIN 12"	EA	1	1	0
CONNECTION TO EXISTING WATER MAIN 16"	EA	3	1	2
CUT AND CAP EXISTING 8" WATER MAIN	EA	5	2	3
CUT AND CAP EXISTING 12" WATER MAIN	EA	1	1	0
CUT AND CAP EXISTING 16" WATER MAIN	EA	9	5	4
STEEL CASINGS 30"	LF	40	0	40
8" D.I. FITTING	EA	20	6	14
12" D.I. FITTING	EA	4	4	0
16" D.I. FITTING	EA	19	7	12



FILE NAME =	USER NAME = jeandrews	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>		<b>ALLEN ROAD IMPROVEMENTS WATER MAIN RELOCATION - GENERAL NOTES</b>		F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S:\237\2013\23713009.00\11enRdP11\CADD\CADD Sheets\0468683-sht-WM general notes.dwg	DRAWN -	REVISED -	REVISED -					6584	105; (72-7HB)BY	PEORIA	487	355
Default	PLOT SCALE = 20.0000' / in.	CHECKED -	REVISED -					6585	<b>CONTRACT NO. 68683</b>			
	PLOT DATE = 1/28/2014 10:24:47 AM	DATE -	REVISED -			SCALE:	SHEET 1 OF 17 SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT		