			AGENDA ITEM EXECUTIVE SUMMARY							
		Title:	Recommendation to approve Wholesale Water Supply Agreement Between the City of St. Charles and Illinois							
American Water Company for River Grange Area Presenter: John Lamb										
Please	e check annr	opriate box:								
1 icase		nt Operations		X	Gove	ernment	Services	s 09.24.12		
	Planning &	Development			City	Council				
	Public Hea	ring								
Estim	ated Cost:	N/A		Budg	eted:	YES		NO		
If NO	, please expl	ain how item will	be funded:							
	itive Summ									
service area. In Octo The Ri has been	e for the River The area is out ober 2011 the iver Grange a en reviewed b	cached by Illinois And a Grange area. Illinois at the City limits not be Committee approverea meets the condition to the City attorney in points, conditions	ois American Waterth of the Reserves ed a Utility Service tions of the policy tas well as Illinois A	er is a prosubdivistics es Policy therefore America	ivate ut sion an for are e City s	tility curred is contineas outsice taff draft	ently proguous with the Cite t	viding servith the City ty requesting tices agreen	ice to the boundary. g services. nent. This	
 The City is not responsible for maintaining any infrastructure in the River Grange area. Illinois American Water will pay for all improvements related to connecting to City services. The City will bill Illinois American Water current ordinance water rates plus a 40% surcharge. This applies to connection fees, user charges and volume usage fees. Billing will occur on a monthly basis. The City will receive a connection fee of \$43,470.00 based on the current twenty-three homes. Monthly billing for user fees and usage will be approximately \$875.00 totaling \$10,500 annually. The initial term of the agreement is twenty (20) years with successive five (5) year terms. 										
		ovides a revenue s	stream for the wat	er fund	and m	inimum	expense	e for the C	ity.	
	hments: (pla			`						
		greement (to be pro I / Suggested Acti								
		oval of the Water S			oon the	City of	St Char	rles and III	inois	
		Company for River								

Agenda Item Number: 6.k

Clerk to execute same.

For office use only:

WHOLESALE WATER SUPPLY AGREEMENT BETWEEN THE CITY OF ST. CHARLES AND ILLINOIS-AMERICAN WATER COMPANY

THIS AGREEMENT is made and entered into as of the _____ day of ______, 2012 by and between the CITY OF ST. CHARLES, a municipal corporation (hereinafter referred to as "St. Charles" or the "City"), and ILLINOIS-AMERICAN WATER COMPANY, an Illinois corporation (hereinafter referred to as "ILAWC").

WITNESSETH

WHEREAS, pursuant to Section 10 of Article VII of the constitution of the State of Illinois, St. Charles is authorized to contract or otherwise associate with individuals, associations and corporations in any manner not prohibited by law or by ordinance; and

WHEREAS, St. Charles owns and operates a water distribution system; and

WHEREAS, ILAWC owns and operates a water distribution system in the area certificated by the Illinois Commerce Commission ("ICC") known as River Grange Lakes in unincorporated Kane County, said area being legally described on Exhibit "A" attached hereto and incorporated herein, and depicted on the map attached hereto and incorporated herein as Exhibit "B" (the "Certificated Area"); and

WHEREAS, the Certificated Area is located adjacent to the northern corporate limits of St. Charles; and

WHEREAS, ILAWC desires to obtain a supply of water from St. Charles to enable ILAWC to provide an adequate supply of water to its customers in the Certificated Area.

NOW, THEREFORE, in consideration of the foregoing and of the mutual covenants and agreements herein contained, the parties hereby agree as follows:

1. Sale and Purchase of Water.

- (a) <u>Requirements</u>. ILAWC agrees to purchase and take all its water supply requirements to supply its customers within the Certificated Area. The City shall deliver its water to ILAWC through a meter at the City's 8-inch water main at Grandfield Drive and, when necessary, through an emergency connection to the City's 8-inch water main on Foley Lane in the Reserves of St. Charles subdivision (collectively, the "Point of Delivery"). The City agrees to deliver to ILAWC, at the Point of Delivery, all of the potable water requirements of ILAWC within the Certificated Area. No water supplied pursuant to this Agreement shall be used to serve non-residential uses.
- (b) <u>Flow Rate</u>. ILAWC agrees to draw water at a substantially uniform rate. If at any time there is insufficient water pressure at the Point of Delivery, ILAWC may by means of booster pumps increase the pressure in ILAWC's main, provided that the pressure in the City's main shall not at any time be thereby reduced to less than thirty (30) pounds per square inch.

- (c) <u>Adequate System</u>. The City hereby agrees to use its best efforts to maintain and keep its water distribution system in good repair and sufficient to furnish ILAWC with a minimum water pressure of thirty (30) pounds per square inch. Notwithstanding the foregoing, the City shall not be liable for any damages resulting from alleged inadequate water pressure, the failure to supply water or for any interruption of the water supply.
- (d) <u>Limited Service Area.</u> ILAWC agrees that it will not use water purchased under this Agreement outside the Certificated Area. ILAWC will not use water purchased under this Agreement within the St. Charles Facility Planning Area as shown in Exhibit "C", attached hereto and incorporated herein. Without limiting the foregoing, it is expressly agreed that ILAWC shall not sell, furnish or give away, nor shall it permit any of its customers to sell, furnish or give away, water purchased under this Agreement to or for consumers outside the Certificated Area.
- Water Distribution Connection Fees. ILAWC shall pay to the City a one-time non-refundable Water Distribution Connection Fee in the amount of \$43,470.00. The Connection Fee shall be paid in full at the time the City signs the relevant Illinois Environmental Protection Agency permit(s) to connect the Certificated Area to the City System. The payment of the Connection Fee shall entitle ILAWC to provide water to the existing 23 dwelling units located in the Certificated Area, which are listed in Exhibit "D" attached hereto and incorporated herein. In the event that ILAWC seeks to serve additional dwelling units constructed within the Certificated Area, the payment of additional connection fees for such units shall be required and shall be calculated at 1.40 times the maximum connection fee charged for residential users within the corporate limits of the City in accordance with the City ordinances in effect at the time of the proposed connection. In no event shall this Agreement obligate the City to provide water for dwelling units in excess of the 23 existing dwelling units and the 48 platted dwelling units located in the Certificated Area as of the effective date of this Agreement.
- **2. Term.** The term of this Agreement shall be for a period of twenty (20) years from the Effective Date, and shall automatically renew for successive periods of five (5) years unless one party gives written notice of intent not to renew at least six (6) months prior to the expiration of the then-current term (the "Term").

3. Rates: Billing.

- (a) Meter Reading; Monthly Bills. St. Charles shall read ILAWC's water meters at the Point of Delivery monthly, and shall calculate a billing invoice based upon the rates set forth on Exhibit "E" attached hereto and incorporated herein by this reference, as adjusted from time to time pursuant to subsection (d). St. Charles shall send a billing invoice to ILAWC and ILAWC shall make monthly payments pursuant to such billing invoice for all water passing through the meter(s). ILAWC shall, within thirty (30) calendar days after receipt of such monthly statement, tender payment pursuant to the billing invoice. ILAWC will be charged a late payment fee of ten percent (10%) per annum for any past due amount.
- (b) <u>Billing Disputes</u>; <u>Failure to Pay or Other Default</u>. Should ILAWC dispute any billing invoice from the City, ILAWC shall provide written notice of such dispute with thirty (30) calendar days of receipt of the invoice detailing the nature and amount of such dispute. St. Charles shall respond to such billing invoice dispute within fifteen (15) calendar days of

receiving ILAWC's dispute notice.

If ILAWC shall refuse, neglect or fail to pay the full amount of any undisputed billing invoice within thirty (30) calendar days after the due date of such invoice, or if ILAWC shall fail to comply with or perform any of the conditions or obligations on its part under this Agreement within thirty (30) calendar days of written notice of such condition or obligation, and if after such failure St. Charles shall deliver to ILAWC written notice of its intention to shut off the supply of water on account of such failure or default, then St. Charles shall have the right to shut off its water supply to ILAWC at the expiration of five (5) calendar days after the giving of such notice, unless within such five (5) day period ILAWC shall remedy such failure or default or provide written notice of a disputed billing invoice. The shutting off of the supply of water for any such cause shall not release ILAWC from its obligation to make payment of any amount or amounts due or to become due in accordance with the terms of this Agreement. The City shall not be liable for any damages caused by the shut off of water and ILAWC shall indemnify and hold harmless the City against all claims related to such shut off.

(c) <u>Rate Increases</u>. Any water rate fee changes approved by the City for users of its water system during the term of this Agreement will be applied to the rates under this Agreement at a rate of 1.40 times the resident rate. These increases shall be effective after a thirty (30) day notice to ILAWC. The City reserves the right to impose additional charges, applicable to all its own similarly situated customers, if necessary to recover costs attributable to providing water to ILAWC under this Agreement

4. Required Infrastructure and Metering.

- (a) <u>ILAWC Construction of Improvements</u>. ILAWC shall construct all appurtenances to its water system, including meter vaults, water meters, flow control valves and backflow prevention devices in order to receive water under this Agreement, as set forth in the plans attached hereto as Exhibit F, referred to as the "Connection Facilities" The Connection Facilities shall be owned by ILAWC and shall be constructed, repaired and maintained at ILAWC's sole cost. Any future replacements or modification of the Connection Facilities shall be subject to review and approval by St. Charles, which shall not be unreasonably withheld.
- (b) Meter Testing. The parties hereto shall each have the right upon written notice to the other, to demand and have a test made of the accuracy of the meters installed for measuring the quantity of water delivered to ILAWC. Barring such a specific request, the meter(s) shall be tested at one year intervals. The expense for any such tests shall be borne by ILAWC. The results of such test shall be furnished to the parties to this Agreement. In the event of any inaccuracy in any meter, in excess of the allowable error hereinafter described, necessary corrections or replacements will immediately be made. If such test shall show any meter to be registering within two percent (2%), plus or minus of the correct quantity, it shall be considered accurate. If any test shows any meter to be measuring incorrectly greater than plus or minus two percent (2%), an adjustment shall be made to the appropriate party with respect to the amount paid or to be paid to St. Charles or water passing through such meter for the period of half the time elapsed since the last meter test or six (6) months, whichever is shorter.
- (c) <u>Maintenance of System</u>. ILAWC shall be responsible to maintain its water distribution system for the Certificated Area, including the improvements constructed

pursuant to this Agreement in good condition and in accordance with the City's ordinances, rules, and regulations to the extent they are not in conflict with the ICC's tariffs, rules, and regulations.

5. Interconnections.

- (a) No Interconnects; Exceptions for Emergencies. ILAWC agrees that it will not connect any well(s) to its water distribution system in the Certificated Area during the Term of this Agreement, unless its water distribution system is physically disconnected from the St. Charles water system. Notwithstanding the preceding sentence, in the event of an emergency resulting in an insufficient supply of water to meet the demands within the Certificated Area, temporary connections may be made between such well(s) and ILAWC's water distribution system. However, any such temporary connections shall be made in such manner as not to jeopardize the quality of water being supplied by St. Charles and any such temporary connections shall immediately be disconnected upon cessation of the emergency. ILAWC further agrees to comply with any and all present and future applicable sanitary rules, regulations and instructions of the IEPA and the City regarding cross-connection of wells and dual water supplies.
- (b) <u>Inspection</u>. ILAWC further agrees that duly authorized Water Inspectors/Supervisory Personnel of St. Charles shall be allowed to make inspections of the entire water system of ILAWC and to recommend such changes in said system, as may be required to eliminate any cross-connection within ILAWC's water system. Failure, refusal or neglect on the part of ILAWC to promptly and properly eliminate any such cross-connections within thirty (30) calendar days after notice in writing from St. Charles, shall constitute breach of this Agreement and shall be sufficient grounds, upon due notice, for the termination of the water supply provided for herein, or for discontinuance of the service until such cross connections are eliminated.
- **6. Applicable Law.** This Agreement shall be construed and its performance shall be determined in accordance with the laws of the State of Illinois.
- 7. Notices. Any notice, demand or communication required herein or permitted hereunder shall be deemed to have been sufficiently given or served for all purposes if (a) delivered personally to the party or to an authorized representative of the party to whom the same is directed, (b) if sent by a nationally recognized overnight delivery service, charges prepaid, or (c) if sent by certified mail (return receipt requested), postage and charges prepaid, in each case addressed as follows:

If to St. Charles: City of St. Charles 2 East Main Street St. Charles, IL 60174 Attn: City Administrator

With a copy to:

Robin N. Jones Gorski & Good, LLP 211 S. Wheaton Avenue, Suite 305 Wheaton, Illinois 60187

City of St. Charles Director of Public Works 2 East Main Street St. Charles, IL 60174

City of St. Charles Environmental Services Manager 2 East Main Street St. Charles, IL 60174

If to the Company:

Illinois American Water Attn: Network Operations Manager 1000 Internationale Parkway Woodridge, IL 60517

With a copy to:

Illinois American Water Attn: Legal Department 300 North Water Works Drive Belleville, IL 62223

or to such other address with respect to a party as such party shall notify the other in writing as above provided. Except as otherwise provided in this Agreement, any such notice shall be deemed to be given on the day personally delivered, one (1) day after the date on which the same was deposited with a nationally recognized overnight delivery service, or three (3) business days after the date on which the same was deposited in a regularly maintained receptacle for the deposit of United States mail, in each case addressed and sent as aforesaid.

- **8.** Attorneys' Fees. If either party brings or commences any legal action or proceeding to enforce any of the provisions of this Agreement (or for damages by reason of an alleged breach of this Agreement), the party prevailing on the merits in such action shall be entitled to recovery of all its costs and expenses, including, without limitation, reasonable attorneys' fees, expert witness fees, consultant fees and litigation costs.
- **9.** <u>Successors and Assigns</u>. This Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective successors and assigns, but shall not be assignable by any party hereto without the prior written consent of the other party, which consent will not be unreasonably withheld. Any attempted assignment in violation of this Section shall be

void.

- **10. Severability.** The invalidity of any provision or part of this Agreement shall not be deemed to affect the validity of any other provision. In the event that any provision or part hereof is held illegal, unenforceable or invalid, both parties agree that the remaining provisions shall be and remain valid and enforceable to the fullest extent permitted by law.
- 11. <u>Complete Agreement</u>. This Agreement, including all exhibits attached hereto, contains the entire agreement among the parties hereto and supersedes all prior agreements and understandings, whether verbal or written, between the parties with respect to the subject matter hereof.
- 12. <u>Captions</u>. The captions in this Agreement are included for purposes of convenience only and shall not be considered a part of this Agreement in construing or interpreting any provision hereof or herein contained.
- 13. Waiver and Other Action. The failure of any party to exercise any right, power or option given it hereunder, or to insist upon strict compliance with the provisions hereof, shall not constitute a waiver of the terms and conditions of this Agreement with respect to any other or subsequent breach thereof, nor a waiver by such party of its rights at any time to require exact and strict compliance with all the terms hereof. The rights and remedies under this Agreement are cumulative to any other rights or remedies which may be warranted by law.
- **14.** Warranties as to Authority. Each person signing this Agreement on behalf of a party does warrant that the person has authority to execute this Agreement on that party's behalf and that any and all necessary corporate or municipal actions or resolutions, if any, necessary to that party's execution and compliance with this Agreement have been duly adopted.
- 15. Insurance. Throughout the effective term of this Agreement, ILAWC shall procure and keep in full force and effect occurrence-based commercial general liability insurance in a policy amount of not less than Five Million Dollars and shall name the City as an additional insured thereunder. ILAWC shall provide the City with a certificate evidencing compliance with this Section.

16. **Indemnity.**

(a) To the fullest extent permitted by law, ILAWC hereby agrees to defend, indemnify and hold harmless the City against all loss, damages, claims, suits, liabilities, judgments, costs and expenses which may in anyway accrue against the City, its officials, agents and employees, arising in whole or in part or in consequence of the performance of this Agreement or operation of its water distribution system in the Certificated Area by ILAWC, its officials, agents and employees, except that arising out of the sole legal cause of the City, its officials, agents or employees, and ILAWC shall, at its own expense, retain attorneys, appear, defend and pay all charges of attorneys and all costs and other expenses arising therefor or incurred in connection therewith, and, if any judgment shall be rendered against the City, its officials, agents and employees, in any such action, ILAWC shall, at its own expense, satisfy and discharge the same.

- (b) To the fullest extent permitted by law, the City hereby agrees to defend, indemnify and hold harmless ILAWC against all loss, damages, claims, suits, liabilities, judgments, costs and expenses which may in anyway accrue against ILAWC, its officials, agents and employees, arising in whole or in part or in consequence of the performance of this Agreement or operation of its water distribution system by the City, its officials, agents and employees, except that arising out of the sole legal cause of ILAWC, its officials, agents or employees, and the City shall, at its own expense, retain attorneys, appear, defend and pay all charges of attorneys and all costs and other expenses arising therefor or incurred in connection therewith, and, if any judgment shall be rendered against ILAWC, its officials, agents and employees, in any such action, the City shall, at its own expense, satisfy and discharge the same.
- **17. Enforcement.** This Agreement shall be enforceable in the Kane County Circuit Court by any of the parties hereto by an appropriate action at law or equity to secure the performance of the covenants herein contained.
- **18.** <u>Amendments.</u> No amendments to this Agreement shall be effective unless accomplished by written agreement executed pursuant to proper authority granted by the governing boards of each party to this Agreement.
- 19. <u>Autonomy.</u> No provision of this Agreement shall be construed to create any type of joint ownership of any property, any partnership or joint venture, or create any other rights or liabilities except as may be otherwise expressly set forth herein. The City specifically reserves any and all immunities, defenses and privileges it may have under law, including, but not limited to, tort immunities and sovereign immunity.
- **20.** Third Party Beneficiaries. The City and ILAWC agree that this Agreement is for the benefit of the Parties hereto and not for the benefit of any third party beneficiary. No third party shall have any rights or claims against the City or ILAWC arising from this Agreement.
- **21.** Recitals. The recitals set forth herein are substantive in nature and are incorporated into the body of this Agreement.
- **22. Effective Date.** This Agreement shall take effect on the date hereinabove first written.
- **23.** Counterpart Execution. This Agreement may be executed in one or more counterparts, all of which taken together will constitute one and the same instrument, and this Agreement shall not be binding on the signatories hereto until all such parties have executed this Agreement.

IN WITNESS WHEREOF, each party hereto has caused this Agreement to be executed by an authorized officer and attested by its respective City Clerk and/or Secretary with its seals affixed hereto, all as of the date first above written.

	CITY OF ST. CHARLES, ILLINOIS,
	By: Mayor Donald P. DeWitte
ATTEST:	
City Clerk	
	ILLINOIS-AMERICAN WATER COMPANY By:
ATTEST:	
Secretary	_

EXHIBIT "A" LEGAL DESCRIPTION OF CERTIFICATED AREA

EXHIBIT "B" MAP OF CERTIFICATED AREA

EXHIBIT "C" MAP OF ST. CHARLES FACILITY PLANNING AREA

EXHIBIT "D" LIST OF ADDRESSES OF EXISTING DWELLING UNITS

EXHIBIT "E" INITIAL RATES

Description of Rate	Rate
A. Water Service Fee, per number of users*	\$9.88
B. Base Water Charge (based on monthly meter reading) per 1,000 gallons**	\$3.22
C. Excess Seasonal Water Rate ***	\$5.45

- * Calculated at 1.40 times the current residential rate for a 1" meter size per City Code
- ** Calculated at 1.40 times the current base water rate per City Code
- ***Calculated at 1.40 times the current excess seasonal water rate per City Code

EXHIBIT "F" CONSTRUCTION PLANS

STATE OF ILLINOIS

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ILLINOIS COMMERCE COMMISSION

VALLEY WATER COMPANY, INC.

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ORDER

NECESSITA AND CONVENIENCE PUBLIC OF CERTIFICATE

By the Commission

in . ("Petitioner of Public public system the pub Company, Inc. ("Fet. a Certificate of Pub ng it to construct, and distribution systems serve Illinois. to er supply and dist ne 26, 1974, Valley Water Coverified application for a Ce and Necessity authorizing in certain water supply and County, in Kane sewage located d facilities and areas maintain Convenience and

4 area . 197 duly Chicago second continue was represented by of its petition. Water Engineering 9 rules Q the aring the rule 1 before December in ൻ O.F Was Pursuant to notice given in accordance with the regulations of the Commission, a hearing was held befauthorized Examiner of the Commission at its offices Illinois on December 6, 1974. Petitioner was represe counsel and presented evidence in support of its petiappearance was entered by a member of the Water Engin Section of the Commission as well as two residents of proposed to be certificated. At the hearing on December of the Nature of the Nature of the Nature of Paraminer of Table Nature of Paraminer of Table Nature of Table Nature of Paraminer of Nature of ll as two residents of the hearing on Dece. to be certificated in area. The hearing was Taken" οf tificateu.

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to furnish in Kendall supplies in Commission tain areas in Petitioner certain time, this by t e in certificated by sewer service ir At the present t customers. Petitioner is c water and sanitary s County, Illinois. A about 250 customers.

a capacit with a sanitary sewer the area. The Kane plant River serve ent of pumping water designed to ser as Riv Route in has treatment equipped the west side city of St. Charles rtain water and sani residences in the selection well with selection real residences. Charles existing om one 8-inch well per minute. The v The sewage Grange Lakes Subdivision located on the west sapproximately 4 miles north of the city of St. County. Petitioner has acquired certain water facilities serving 14 single family residences subdivision is being served from one 8-inch we equipment rated at 100 gallons per minute. The vater system i 3,000 hydropneumatic storage tank. The sewage has a capacity of 8,000 gallons per day. The storage and sewage treatment facilities are destroying a storage and sewage treatment facilities are de The be expanded accomplished. to be to be would have j. lots and sewage homes and 009 potential about

and in are per month for sewer attes that the homes in residents of the Substion to Petitioner's Subdivision that residents of the Subdicharge of \$20.00 per monthord further indicates that tave meters. Two residents they had no objection to Pe shows that res e record f sently paying a flat er service. The rec Subdivision do not b ision testified that evidence division tes application. presen water the

rein record her the entire s of the the e considered t ion, having advised in The Commission fully being fi and be finds

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- servic as Q water supply collection a meaning of a c utilities, and distribution system and a sewage collection sosal system and to furnish water and sewer the public within the State of Illinois, and it is a public utility within the meaning of entitled "An Act concerning public utilitie ದ maintain and operate o construct, oper nd distribution s isposal system ar o the public with such, and disp Act ဌ
- the Commission for and Necessity for maintain a water a sewage collection The Lakes Subdivision, desc system and a sewage of River Grange Lakes Su as more particularly define the contraction of the contraction the s made application to to of Public Convenience operate as authority to construct, o supply and distribution s and treatment system in R Kane County, Illinois, as in Appendix "A" attached inois, as attached has Petitioner has a Certificate (2)
- of and Petitioner οĘ jurisdiction hereof; Commission has subject matter Commission the the (3)
- hereby thi oĘ are portion and evidence recital fact; the the in by of set forth supported findings ន្ត order are adopted as facts (4)
- such in Appendix sani-Oľ at present no other water available to the public in to serve and meet the need and water area described public for demand the in t tary ser.
 "A" hereto and sanitary sewage system. system and need ៧ is there (2)
- thereto; existing continued operation and maintenance of the existing supply and distribution system and sanitary ge collection and treatment systems by Petitioner erve the area described in Appendix "A" hereto the transaction of a water and sanitary sewer ity business in said area by Petitioner will ote the public convenience and is necessary there and the transaction of utility business in sai promote the public conv serve sewage water ç (9)
- supply collection nd sanitary Necessity and in a Certificate of Public Convenience and Necessi should be granted to Petitioner authorizing it construct and/or operate and maintain a water sand distribution system and a sanitary sewage cand disposal system and to transact a water and sewer utility business in the area described in Appendix "A" hereto; the prayer of Petitioner in granted; рe hereto; t nd should (7)
- er and sanitary n Appendix "A" all requisite Agency and required additional water ea described in 1 to, Petitioner shall secure a the Environmental Protection authorities as may be require mayprior to constructing any add sewer facilities in the area attached hereto, Petitioner s permits from the Environmenta other public authorities as m 8
- Petitioner order, Petition the Commission presently Appendix sewer water and sanitary area described in Aponform to the rates area; days from the date of this c with the Tariff Section of of rates for water and sani the to conform in service service th the rates rates for the charged said 10 d file schedule in service hereto, within shall f being ಥ 6)
- $\mathtt{subsequently}$ its þe Inc Company, Inc shall and service in effect ations and conditions of servarea herein certificated shiffective rules, regulations vice of Valley Water Company the Commission and in effect may they shed ช areas, or er establis the same as the effective conditions of service certificated a in the mannon the rules, regulations applicable to the area ons of service file with the C amended presently be amended on Mou the (10)
- Petitioner for all meters order this water οĘ οĒ from the date installation (days commence 30 within shall (11)

program Appendix Wate said in metered completion of rates for meter upon comple of rates area Commission. service customers in the servi attached hereto, and u shall file a schedule the with ervice

Conveni ence and Necessity be, and it is hereby, granted to Valley Water Company, Inc. for the construction, operation and maintenance of a public water supply and distribution system and a public sewage collection and treatment system and for the transaction of a public water and sewer utility business within the River Grange Lakes Subdivision, a subdivision in Kane County, described in hereto. Appendix

Convenience Public Certificate of Pu be the following at a (shall RDERED that granted sha ORDERED herein IT IS FURTHER Necessity here: and

NECESSITY AND CONVENIENCE OF PUBLIC CERTIFICATE

on convenience IT IS HEREBY CERTIFIED that public convenience and necessity require the construction, operation and maintenance of a public water supply and distribution system and public sanitary sewage collection and treatment system in the area described in Appendix "A" hereto and the transaction of a public water and sanitary sewer utility business by Valley Water Company, Inc. within the subdivision described in Appendix "A" "A" operati utility within thereto.

for t date 1 of t FURTHER ORDERED that within 10 days from the date Petitioner shall file with the Tariff Section of a schedule of rates for water and sanitary sewer the area described in Appendix "A" attached here charged presently being es the 40 conform area the t t this order Commission service in rates in service said

IT IS FURTHER ORDERED that the rules, regulations and conditions of service for water and sewer services applicable to the area herein certificated shall be the same as Petitioner's effective rules, regulations and conditions of service now on file with this Commission for Petitioner's presently certificates certificated in the manner ns of service s presently cerbe amended in subsequently they may as or as area, c stablished service

law Protection secure required by IT IS FURTHER ORDERED that the foregoing certificate ted upon the express condition that Petitioner shall srequisite permits from the Illinois Environmental Protay and other public authorities as and where required granted all requ Agency

meters x "A" ed οĘ meter in Appendix file with t this order Petitioner shall commence installation of water for all customers in the service area described in Appendix hereto and upon completion of said program shall file with Tariff Section of the Commission a sale. service.

zing orders that the foregoing certificate is express condition and provision that authority use the lands to be occupied shall be secured as and/or public authorities as and where and that no authority has been granted authoriz land granted these acquire domain to FURTHER ORDERED use eminent permission to use landowners by law and the 40 nodn $\mathbf{p}\mathbf{y}$ IS required by Petitioner the granted from

Apr: of day 30th S thi the Commission of Order

MG:nms

(SIGNED) MARVIN S. LIEBERMAN

Chairman

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STATE OF ILLINOIS

ILLINOIS COMMERCE COMMISSION

CERTIFICATE

Re: 59094

Secretary of the Illinois Commerce Commission of the State of Illinois I, CLARENCE F. HUTCHES II, do hereby certify that I am and keeper of the records and seal of said Commission.

correct and complete copy of order made and entered of record by I further certify that the above and foregoing is a true, day of April, said Commission on the 30th

day of May, Given under my hand and seal of said Illinois Commerce Commission at Springfield, Illinois this A.D. 1975.

Secretary





District Code	Account Number	Premise Number Account Name	Short Description	Mailing Address Line 1	Mailing Address Line 2	Mailing Address Line 3	Mailing Zip Code Service Address	Service City	Service State	Service Zip
98			Active	6N383 River Grange Rd		Saint Charles IL	601756341 6N383 RIVER GRANGE RD	ST CHARLES	IL.	60174
98			Active	35W991 River Grange Rd		St Charles IL	601756345 35W991 River Grange Rd	St Charles	∤L.	60174
98		, ,	Active	35W990 River Grange Rd		Saint Charles IL	601756393 35W990 RIVER GRANGE RD	ST CHARLES	IL	60174
98			Active	36W040 River Grange Rd		Saint Charles IL	601756344 36W040 River Grange Rd	St Charles	IL	60174
98			Active	36W080 River Grange Rd		Saint Charles IL	601756344 36W080 River Grange Rd	St Charles	IL	60174
98			Active	36W116 River Grange Rd		Saint Charles IL	601756392 36W116 River Grange Rd	St Charles	1L	60174
98			Active	36W186 River Grange Rd		Saint Charles IL	601756392 36W186 River Grange Rd	St Charles	IL	60174
98			Active	36W285 River Grange Rd		Saint Charles IL	601756382 36W285 River Grange Rd	St Charles	IL	60174
		, ,	Active	36W263 River Grange Rd		Saint Charles IL	601756382 36W261 River Grange Rd	St Charles	IL	60174
98			Active	36W260 Barton Dr		Saint Charles IL	601756310 36W260 Barton	St Charles	1L	60174
98			Active	36W290 Barton Dr		Saint Charles IL	601756310 36W290 Barton	St Charles	IL	60174
98			Active	36W312 Barton Dr		Saint Charles IL	601756310 36W312 Barton	St Charles	IL	60174
98			Active	36W315 Barton Dr		Saint Charles IL	601756311 36W315 Barton	St Charles	IL	60174
98				36W283 Barton Dr		Saint Charles IL	601756311 36W283 Barton	St Charles	IL	60174
98			Active	36W255 Barton Dr		Saint Charles IL	601756311 36W255 BARTON	St Charles	IL	60174
98		, ,	Active	6N380 River Grange Rd		St Charles IL	601756340 6N380 River Grange Rd	St Charles	IL	60174
98			Active	6N347 River Grange Rd		St Charles IL	601756341 6N347 RIVER GRANGE RD	ST CHARLES	IL	60174
98		·	Active	36W015 River Grange Rd		St Charles IL	601756345 36W015 River Grange Rd	St Charles	IL	60174
98		• •	Active			St Charles IL	601756342 6N430 River Grange Rd	St. Charles	IL.	60174
98			Active	6N430 River Grange Rd		St Charles IL	60174 36W016 River Grange Rd	St Charles	IL	60174
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98	1 92235	8 90039445 Krueger, Kristin M	Active		36W051 River Grange Rd	St Charles, IL	00174 3000031 River Grange Nu	St Offarios		• • • • • • • • • • • • • • • • • • • •

Illinois American Water Company

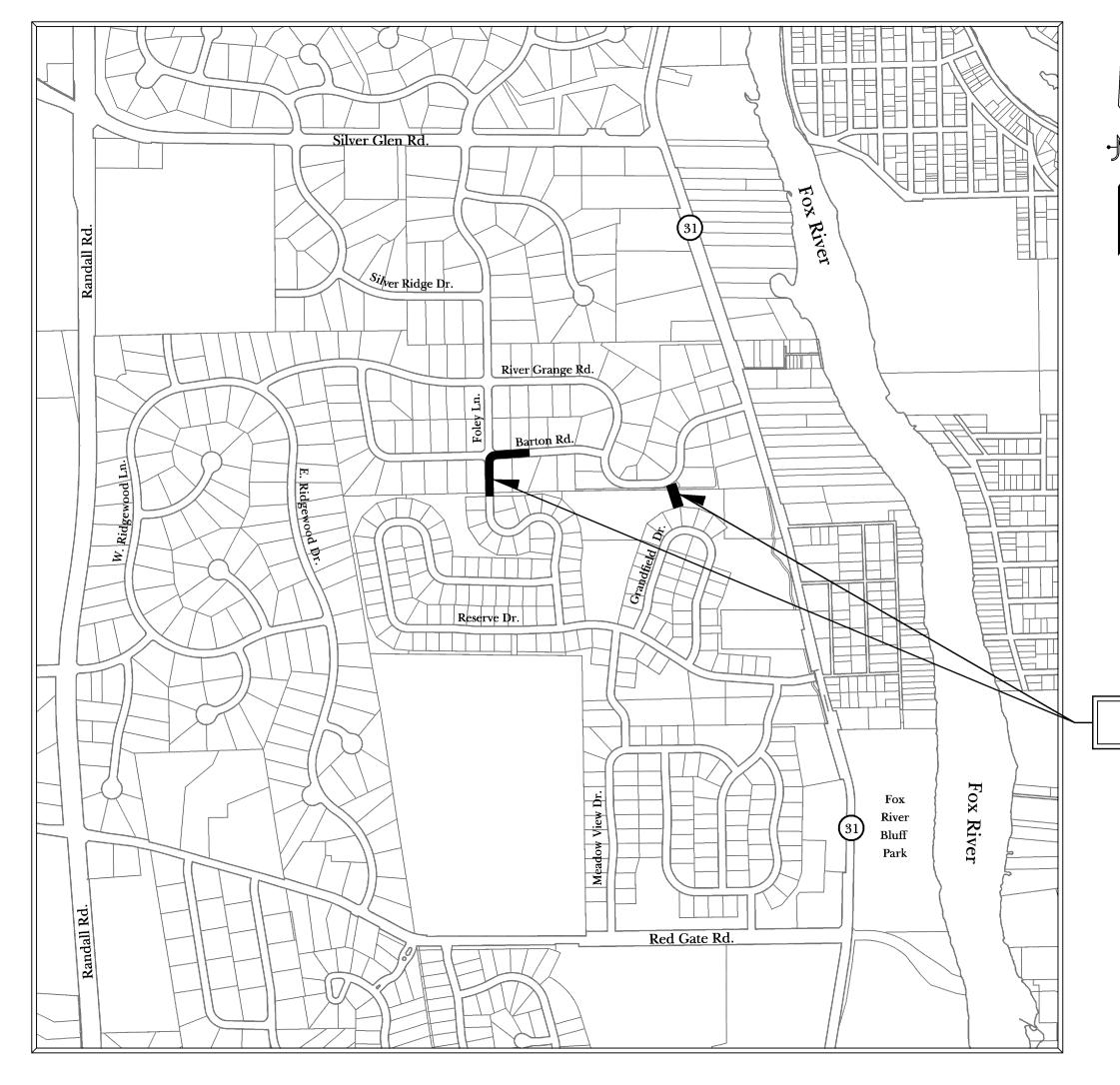
River Grange Water System Improvements

Located in Section 9, Township 40 North, Range 8 East St. Charles Township, Kane County, Illinois

2012



ILLINOIS AMERICAN WATER COMPANY 1000 INTERNATIONALE PARKWAY WOODRIDGE, IL 60517 P. (630) 739-8858 F. (630) 739-0477



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I.1 Process & Instrumentation Diagram

Project Location



THE CONTRACTOR SHALL BE RESPONSIBLE FOR DISTRIBUTING COMPLETE SETS OF THESE PLANS AND PROJECT SPECIFICATIONS TO ALL SUB CONTRACTORS INVOLVED IN THIS PROJECT. A COMPLETE COPY OF THESE PLANS AND PROJECT SPECIFICATIONS SHALL BE IN THE POSSESSION OF THE CONTRACTOR AND ALL SUB CONTRACTORS

Location Map N.T.S.

Benchmarks: BENCHMARK NO. 2500: SOUTH BOLT ON FIRE HYDRANT. RIVER GRANGE RD., 100' WEST OF WELL HOUSE ENTRANCE. ELEVATION

I HEREBY CERTIFY THAT THESE PLANS WERE PREPARED UNDER MY DIRECT SUPERVISION. DATED AT ST. CHARLES, ILLINOIS, THIS ______ DAY OF ______, 2012

Revised: September 5, 2012 ROBERT SCOTT TROTTER, P.E., B.C.E.E., TROTTER AND ASSOCIATES, INC. ILLINOIS REGISTERED PROFESSIONAL ENGINEER No. 062-049660 / EXPIRATION DATE 11-30-2013 ILLINOIS DEPARTMENT OF PROFESSIONAL REGULATION FIRM NUMBER 184-002148 Revised: August 30, 2012 Date: June 18, 2012

PLANS PREPARED BY:

ASSOCIATES Engineers and Surveyors St. Charles, Il. 60175 Ph.: 630-587-0470 • Fax: 630-587-0475

ON THE PROJECT AT ALL TIMES.

General Construction Notes

- THE GOVERNING DOCUMENTS FOR THIS PROJECT SHALL INCLUDE THE PROJECT SPECIFICATIONS, PROJECT PLANS, THE ILLINOIS AMERICAN WATER COMPANY (ILAWC) STANDARDS, THE LATEST EDITION OF STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION IN ILLINOIS AND THE LATEST EDITION OF STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN ILLINOIS.
- 2. CODES OF THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY TITLE35, AND ALL PERTINENT O.S.H.A. REGULATIONS SHALL BE ADHERED TO FOR THE CONSTRUCTION OF THIS PROJECT.
- 3. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL REQUIRED PERMITS FROM REGULATORY AGENCIES FOR PROJECT PRIOR TO BEGINNING WORK.
- ALL PERMIT FEES SHALL BE PAID FOR BY OWNER. THE OWNER HAS ALREADY OBTAINED:
- LLINOIS EPA CONSTRUCT AND OPERATE PERMIT LINOIS DEPARTMENT OF NATURAL RESOURCES SIGNOFF
- LINOIS HISTORIC PRESERVATION AGENCY SIGN-OFF
- THE CONTRACTOR WILL BE RESPONSIBLE FOR OBTAINING

ALL OTHER REQUIRED PERMITS

4. CONTRACTOR SHALL BE RESPONSIBLE FOR SCHEDULING ALL INSPECTIONS REQUIRED BY PERMITTING AGENCIES.

9. CONTRACTOR SHALL COORDINATE PARKING FOR HIS STAFF, WITH THE OWNER, PRIOR TO THE START OF WORK.

- CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES TO MARK FIELD LOCATIONS OF THEIR FACILITIES PRIOR TO BEGINNING CONSTRUCTION. CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES TO MARK FIELD LOCATIONS OF THEIR FACILITIES PRIOR TO BEGINNING CONSTRUCTION. THE
 CONTRACTOR WILL BE RESPONSIBLE FOR THE MAINTENANCE AND PRESERVATION OF THESE FACILITIES. ANY UTILITY LOCATIONS SHOWN ON THE PLANS
 ARE BASED ON AVAILABLE RECORDS AND ARE FOR GENERAL DIRECTION ONLY AND MUST BE VERIFIED BY THE CONTRACTOR IN THE FIELD. CONTRACTOR
 SHALL INFORM THE OWNER/ENGINEER AND THE RESPONSIBLE MUNICIPAL DEPARTMENT PRIOR TO COMMENCING WORK ON EACH CATEGORY OF
 CONSTRUCTION, I.E. ELECTRIC, WATERMAIN, SANITARY, STREET, STORM SEWER IMPROVEMENT, ETC. A TWENTY-FOUR (24) HOUR NOTICE SHALL BE GIVEN
 FOR ANY ITEM THAT REQUIRES FINAL TESTING AND INSPECTION.
- CONTRACTOR SHALL INDEMNIFY OWNER AND ENGINEER AGAINST ANY PERSONAL INJURY CLAIMS OR OTHER CLAIMS RESULTING FROM THE PERFORMANCE OF ANY WORK IN CONNECTION WITH THE INSTALLATION OF WORK. ALL CONTRACTORS AND SUBCONTRACTORS SHALL OBTAIN AND MAINTAIN COMPREHENSIVE GENERAL LIABILITY AND OTHER INSURANCE AS SPECIFIED WHICH WILL PROVIDE PROTECTION FROM ANY OF THE AFORESAID CLAIMS WHICH MAY ARISE OUT OF, OR RESULT FROM, THE PERFORMANCE OF WORK BY ANYONE DIRECTLY OR INDIRECTLY EMPLOYED BY THE CONTRACTOR, OR BY ANYONE WHOSE ACTS THE CONTRACTOR MAY BE LIABLE FOR.
- CONTRACTOR MAY NOT COMMENCE WORK UNTIL HE HAS FILED WITH OWNER A CERTIFICATE OF INSURANCE SHOWING COMPLETE COVERAGE OF ALL INSURANCE REQUIRED, SIGNED BY THE INSURANCE COMPANIES OR THEIR AUTHORIZED AGENTS. EACH CERTIFICATE SHALL PROVIDE THAT COVERAGE SHALL NOT BE TERMINATED OR REDUCED WITHOUT THIRTY (30) DAYS ADVANCE WRITTEN NOTICE TO THE OWNER AND ENGINEER. CONTRACTOR SHALL
- NAME OWNER AND ENGINEER AS ADDITIONAL INSUREDS ON THE COMPREHENSIVE GENERAL LIABILITY AND AUTOMOBILE LIABILITY INSURANCE POLICIES,
- 8. CONTRACTOR SHALL SUBMIT A CONSTRUCTION SCHEDULE, SHOP DRAWING SCHEDULE AND PAYMENT SCHEDULE PRIOR TO THE START OF WORK.
- 10. CONTRACTOR SHALL SUPPLY PORTABLE SANITARY FACILITIES FOR WORKER'S USE. CONTRACTOR SHALL NOT USE OWNER'S FACILITIES. PORTABLE SANITARY FACILITIES SHALL BE PROVIDED TO THE START OF WORK.
- 11. ALL FIELD OFFICES, STORAGE TRAILERS, AND EQUIPMENT SHALL BE PLACED ON SITE. PLACEMENT SHALL BE COORDINATED WITH THE OWNER'S STAFF
- 12. FIELD OFFICES SHALL BE FULLY EQUIPPED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS AND FUNCTIONAL PRIOR TO THE START OF WORK.
- 13. CONTRACTOR SHALL BE RESPONSIBLE FOR SUPPLYING POWER AND TELEPHONE FOR ENGINEER AND CONTRACTOR FIELD OFFICES. COST SHALL BE CONSIDERED INCIDENTAL TO WORK.
- 14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SITE SAFETY AND SECURITY.
- 15. ANY OPEN EXCAVATIONS, OR OTHER POTENTIALLY DANGEROUS AREAS SHALL BE FENCED OR GUARDED IN AN ACCEPTABLE MANNER AT THE END OF EACH DAY FOR THE PROTECTION OF THE CONTRACTOR'S EMPLOYEE, AND GENERAL PUBLIC SAFETY.
- 16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER BRACING, SHORING, AND OTHER REQUIRED PROTECTION OF ALL ROADWAYS BEFORE CONSTRUCTION BEGINS. HE SHALL BE RESPONSIBLE FOR ANY DAMAGE TO THE STREETS OR ROADWAYS AND ASSOCIATED STRUCTURES AND SHALL MAKE REPAIRS AS NECESSARY TO THE SATISFACTION OF THE ENGINEER.
- DIMENSIONS NOT SHOWN IN THESE PLANS ARE TO BE DETERMINED BY THE MANUFACTURER/CONTRACTOR AND/OR FIELD VERIFIED DURING CONSTRUCTION BASED ON ACTUAL CONDITIONS. 18. CONTRACTOR SHALL BE RESPONSIBLE FOR IDENTIFYING CONFLICT'S BETWEEN FIELD CONDITIONS AND CONTRACT DOCUMENTS. ANY CONFLICTS SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION IMMEDIATELY AND CONTRACTOR SHALL REQUEST CLARIFICATION IN WRITING BEFORE PROCEEDING. IF CONTRACTOR PROCEEDS PRIOR TO CLARIFICATION FROM ENGINEER, THE WORK WILL BE PERFORMED AT CONTRACTOR'S
- 19. CONTRACTOR SHALL KEEP A CURRENT AND ACCURATE MASTER SET OF AS-BUILT DRAWINGS. ANY EXISTING CONDITIONS OR WORK WHICH DIFFERS FROM THE CONSTRUCTION PLANS SHALL BE NOTED AND SHOWN CORRECTLY ON THE AS-BUILT SET INCLUDING ALL DISCIPLINES. MULTIPLE SETS OF AS-BUILT DRAWING FOR DIFFERENT DISCIPLINES WILL NOT BE ACCEPTABLE. AS-BUILTS WILL INCLUDE POSITION AND ELEVATION OF ALL (PROPOSED AND EXISTING) PIPES EXPOSED DURING THE PROJECT. LOSS OR FAILURE TO MAINTAIN A COMPREHENSIVE SET OF THE AS-BUILT DRAWINGS WILL RESULT IN A DEDUCT FROM THE CONTRACT VALUE.

20. CONSTRUCTION MEETINGS:

- A. MEETINGS WILL BE HELD BI-WEEKLY MEETINGS OR AS REQUIRED TO EFFECTIVELY MONITOR CONSTRUCTION PROGRESS.
- B. CONTRACTOR'S PROJECT MANAGER AND SUPERINTENDENT SHALL BE IN ATTENDANCE AT ALL CONSTRUCTION MEETINGS.
- C. CONTRACTOR SHALL PROVIDE CONTINUITY BETWEEN ANY CHANGES IN STAFF AND SHALL PROVIDE WRITTEN NOTICE TO THE ENGINEER ONE WEEK PRIOR TO CHANGES IN STAFF.
- D. CONTRACTOR SHALL PRESENT AN UPDATED CONSTRUCTION SCHEDULE, PAY REQUESTS, SHOP DRAWINGS AND MODIFICATIONS TO DRAWINGS AT THE WEEKLY MEETINGS.
- 21. THE OWNER AND THEIR REPRESENTATIVES SHALL BE ALLOWED ACCESS TO THE SITE AT ALL TIMES. THE CONTRACTOR SHALL TAKE WHATEVER STEPS NECESSARY TO ASSURE ON-SITE SAFETY, ACCESSIBILITY AND FULL COOPERATION WITH THE OWNER'S REPRESENTATIVE. "THE OWNER OR THEIR REPRESENTATIVE SHALL BE ALLOWED AT ALL TIMES TO INSPECT QUANTITY AND QUALITY OF THE WORK AND MATERIALS AND SHALL BE GIVEN THE AUTHORITY TO REJECT WORK AND/OR MATERIALS THAT DO NOT COMPLY WITH THE PLANS AND SPECIFICATIONS. THE FINAL ACCEPTANCE OF THE WORK SHALL BE AUTHORIZED BY THE ILAWC.

22. WORKING HOURS SHALL BE 7:00 A.M. TO 6:00 P.M. MONDAY THROUGH SATURDAY.

- 23. CONTRACTOR SHALL BE PRESENT TO RECEIVE ALL DELIVERIES. OWNER WILL NOT BE RESPONSIBLE FOR RECEIVING, UNLOADING OR STORAGE OF DELIVERIES.
- 24. NO CONSTRUCTION SHALL BE PERMITTED WITHIN 1.5 TIMES THE DIAMETER OF THE DRIP LINE OF ANY TREE TO REMAIN, UNLESS NOTED ON THE PLANS. 25. NO BURNING OR INCINERATION OF TREES, BRUSH OR RUBBISH WILL BE PERMITTED.
- 26. THE CONTRACTOR SHALL CLEAN-UP ALL WORK AREAS AT THE END OF EACH WORK DAY SO AS NOT TO INTERFERE WITH OPERATIONS OF THE FACILITY
- 27. THE CONTRACTOR WILL BE RESPONSIBLE FOR DISPOSAL OF ALL DEBRIS, AND OTHER MATERIAL REMOVED DURING THE CLEANING OPERATION.
- 28. CONTRACTOR IS RESPONSIBLE FOR REQUESTING A CERTIFICATE OF SUBSTANTIAL COMPLETION. SUBSTANTIAL COMPLETION INCLUDES AS A MINIMUM: A. SITEWORK COMPLETED WITH THE EXCEPTION OF LANDSCAPING.
- B. ALL INSTALLED, TESTED AND APPROVED AND ALL START-UP REPORT ISSUES ADDRESSED.
- 29. AT THE CONTRACTORS REQUEST, ENGINEER AND OWNER WILL COMPILE A PUNCHLIST REQUIRED TO ACHIEVE SUBSTANTIAL COMPLETION. ITEMS PROVIDED ON THE LIST MUST BE COMPLETED PRIOR TO CONSIDERATION OF REQUEST FOR SUBSTANTIAL COMPLETION.
- 30. THIS PROJECT IS UNDER A COMPLIANCE SCHEDULE. LIQUIDATED DAMAGES SPECIFIED IN THE CONTRACT DOCUMENTS WILL COMMENCE ON THE DAY FOLLOWING THE SPECIFIED SUBSTANTIAL COMPLETION DATE IN THE NOTICE TO PROCEED. LIQUIDATED DAMAGES WILL BE ASSESSED FOR EACH DAY UNTIL THE CERTIFICATE OF SUBSTANTIAL COMPLETION IS ISSUED.
- 31. CONTRACTOR SHALL COMPLETE ALL WORK AND CLEAN ALL ITEMS AFFECTED BY WORK PRIOR TO REQUESTING A FINAL PUNCHLIST.
- 32. THE CONTRACTOR SHALL REQUEST FINAL INSPECTION IN WRITING. THE OWNER AND OWNER WILL PREPARE A FINAL INSPECTION PUNCHLIST, WHICH MAY BE REVISED AT THE OWNER'S REQUEST OR AS OTHER ISSUES ARISE.
- 33. THE CONTRACTOR WILL COMPLETE THE PUNCHLIST AND REQUEST A FINAL INSPECTION.
- 34. BEFORE APPROVAL BY OWNER AND FINAL PAYMENT, ALL WORK SHALL BE INSPECTED BY THE OWNER AND/OR HIS REPRESENTATIVE. FINAL PAYMENT WILL BE MADE AFTER ALL OF THE CONTRACTOR'S WORK HAS BEEN APPROVED AND CERTIFIED COMPLETE. THE CONTRACTOR SHALL GUARANTEE HIS WORK FOR A PERIOD OF AT LEAST ONE (1) YEAR FROM THE DATE ON THE CERTIFICATE OF COMPLETION AND SHALL BE HELD RESPONSIBLE FOR ANY DEFECTS IN MATERIAL OR WORKMANSHIP DURING THAT PERIOD.
- 35. FINAL ACCEPTANCE WILL BE GRANTED ONCE THE CONTRACTOR HAS MET ALL OF HIS OBLIGATIONS UNDER CONTRACT, INCLUDING BUT NOT LIMITED TO ALL BONDS, INSURANCE, WARRANTIES, SPARE PARTS AND FINAL WAIVERS. LIQUIDATED DAMAGES AS PROVIDED FOR IN THE CONTRACT DOCUMENTS WILL BEGIN TO ACCIDE ON THE DAY AFTER THE SPECIFIED FINAL COMPLETION DATE IN THE NOTICE TO PROCEED. LIQUIDATED DAMAGES WILL CEASE TO ACCRUE UPON THE DATE OF FINAL ACCEPTANCE.
- 36. THE CONTRACT VALUE WILL BE REDUCED BY THE AMOUNT OF LIQUIDATED DAMAGES ACCRUED FOR BOTH SUBSTANTIAL AND FINAL COMPLETION.
- 37. QUANTITY LISTS ARE SUPPLIED AS A CONVENIENCE. THE CONTRACTOR SHALL VERIFY ALL QUANTITIES ON-SITE. THE CONTRACTOR SHALL VERIFY LOCATIONS OF ALL UNDERGROUND UTILITIES PRIOR TO PLANNING.

Sequence of Construction

- CONTRACTOR SHALL BE FINANCIALLY RESPONSIBLE FOR ANY FINES, LEGAL AND OPERATION COSTS CAUSED BY HIS ACTIONS DURING THE CONSTRUCTION
- THE CONTRACTOR SHALL SUBMIT A DETAILED SEQUENCE OF CONSTRUCTION NARRATIVE TO THE OWNER AND ENGINEER WITHIN 15 DAYS OF THE NOTICE TO PROCEED FOR APPROVAL. 3. THE SEQUENCE OF CONSTRUCTION SHALL BE UPDATED MONTHLY OR AS DIRECTED BY THE OWNER TO REFLECT CONSTRUCTION PROGRESS AND SHALL BE PROVIDED TO THE OWNER AND ENGINEER.

Traffic Control

- THE CONTRACTOR SHALL PROVIDE FOR THE SAFE AN ORDERLY PASSAGE OF TRAFFIC AND PEDESTRIANS WHERE HIS OPERATION ABUTS PUBLIC THOROUGHFARES AND ALL ADJACENT PROPERTY. NO OVER NIGHT CLOSURES OF DRIVEWAY'S ARE PERMITTED.
- 2. STREET SIGNS TO BE APPROVED BY THE OWNER AND IN ACCORDANCE WITH ALL TOWNSHIP AND STATE STANDARDS, SHALL BE PROVIDED AT ALL STREET INTERSECTIONS.
- AT THE PRECONSTRUCTION MEETING THE CONTRACTOR SHALL FURNISH THE NAME OF THE INDIVIDUAL IN HIS DIRECT EMPLOYMENT WHO IS TO BE RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF THE TRAFFIC CONTROL FOR THIS PROJECT. THE TRAFFIC CONTROL CONTRACTOR SHALL PROVIDE A PHONE NUMBER WHICH CAN BE UTILIZED FOR 24 HOUR EMERGENCY MAINTENANCE OF THE TRAFFIC CONTROL FACILITIES.
- ALL TRAFFIC CONTROL DEVICES USED ON THIS PROJECT SHALL CONFORM TO THE PLANS, SPECIAL PROVISIONS, TRAFFIC CONTROL STANDARDS, "STANDARD SPECIFICATIONS FOR TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS." NO MODIFICATION OF THESE REQUIREMENTS WILL BE ALLOWED WITHOUT PRIOR WRITTEN APPROVAL FROM THE ENGINEER OR THE OWNER.

Earthwork / Grading / Excavation

- ALL GRADING WITHIN THE LIMITS OF THE PROJECT SHALL BE DONE IN ACCORDANCE-WITH THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION IN ILLINOIS, LATEST EDITION, AND ALL SUPPLEMENTS AND REVISIONS THERETO, WITH THE "SPECIAL PROVISIONS," WITH THESE "CONSTRUCTION NOTES" AND WITH THE ILAWC STANDARDS. A COPY OF THE ABOVE SPECIFICATIONS SHALL BE IN THE POSSESSION OF THE
- 2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UNDERGROUND OR SURFACE UTILITIES EVEN THOUGH THEY MAY NOT BE SHOWN ON THE PLANS. ANY UTILITY THAT IS DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED TO THE SATISFACTION OF THE ENGINEER AND THE
- 3. EASEMENTS FOR EXISTING UTILITIES, BOTH PUBLIC AND PRIVATE, AND UTILITIES WITHIN THE PUBLIC RIGHTS-OF-WAY ARE SHOWN ON THE PLANS ACCORDING TO INFORMATION AVAILABLE IN THE RECORDS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT LOCATION IN THE FIELD OF THESE UTILITY LINES AND FOR THEIR PROTECTION FROM DAMAGE DUE TO CONSTRUCTION OPERATIONS. IF EXISTING UTILITY LINES OF ANY NATURE ARE ENCOUNTERED WHICH CONFLICT IN LOCATION WITH NEW CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY SO
- 4. IF REQUIRED BY THE OWNER THE CONTRACTOR WILL BE RESPONSIBLE FOR ERECTING CONSTRUCTION FENCE AROUND ALL EXISTING TREES AND LANDSCAPING TO REMAIN. THIS SHALL BE MAINTAINED AT ALL TIMES UNTIL THE COMPLETION OF THE PROJECT.
- 5. THE CONTRACTORS SHALL BID THEIR WORK BASED ON THEIR OWN BORINGS, EXPLORATIONS AND OBSERVATIONS TO DETERMINE SOIL CONDITIONS AT THE LOCATION OF THE PROPOSED WORK. 6. THE ELEVATIONS SHOWN ON THE CONSTRUCTION PLANS ARE FINISHED GRADE UNLESS NOTED
- 7. THE CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE DURING CONSTRUCTION, AND PREVENT STORMWATER FROM RUNNING INTO OR STANDING IN EXCAVATED AREAS. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR WORK RESULTING FROM CONTRACTOR'S FAILURE TO PROVIDE PROPER
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTATION OF THE "SOIL EROSION AND SEDIMENTATION CONTROL MEASURES". THE INITIAL ESTABLISHMENT OF EROSION CONTROL AND THE PLACEMENT OF SILT AND FILTER FWNCING, ETC. TO PROTECT ADJACENT PROPERTY, WETLANDS, ETC.
- 9. PRIOR TO COMMENCEMENT OF GRADING ACTIVITIES, THE CONTRACTOR SHALL PROTECT ALL TREES DESIGNATED TO BE PRESERVED.
- AND CLAY. THE TRANSITIONAL MATERIAL SHALL BE USED IN NON-STRUCTURAL FILL AREAS OR DISPOSED OF OFF-SITE. TOPSOIL RESPREAD SHALL INCLUDE ANY STOCKPILE, HAULING AND SPREADING 3" OF TOPSOIL ANY ADDITIONAL TOPSOIL HAUL TO THE SITE REQUIRED FOR COMPLETION OF RESTORATION WILL BE CONSIDERED INCIDENTAL TO THE COST OF THE CONTRACT.

10. TOPSOIL STOCKPILED FOR RESPREAD SHALL BE FREE OF CLAY AND SHALL NOT CONTAIN ANY OF THE TRANSITIONAL MATERIAL BETWEEN THE TOPSOIL

- 12. COMPACTION IS REQUIRED IN NON-STRUCTURAL FILL AREAS.
- 13. OVER AREAS TO BE LANDSCAPED WHERE SHOWN ON THE PLANS OR DIRECTED BY (8) INCHES IN THICKNESS, AND THE WATER CONTENT SHALL BE ADJUSTED IN ORDER TO ACHIEVE REQUIRED COMPACTION.
- 14. UNSUITABLE MATERIAL SHALL BE CONSIDERED AS MATERIAL WHICH IS NOT SUITABLE FOR THE SUPPORT OF PAVEMENT AND BUILDING CONSTRUCTION, AND IS ENCOUNTERED BELOW NORMAL TOPSOIL DEPTHS AND THE PROPOSED SUBGRADE ELEVATION. THE DECISION TO REMOVE SAID MATERIAL, AND TO WHAT EXTENT, SHALL BE MADE BY A SOILS ENGINEER WITH THE CONCURRENCE OF THE OWNER. FILL MATERIAL SHALL BE PLACED IN LOOSE LIFTS THAT SHALL NOT EXCEED 8"

Soil Erosion and Sedimentation Control

- 1. ALL EROSION AND SEDIMENTATION CONTROL SHALL BE IN ACCORDANCE WITH THE KANE COUNTY SOIL EROSION AND SEDIMENT CONTROL ORDINANCE.
- 2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER INSTALLATION AND MAINTENANCE OF ALL TEMPORARY AND PERMANENT EROSION CONTROL
- 3. ANY PUBLIC AND/OR PRIVATE ROADS THAT ARE ADJACENT TO THE SITE AND USED FOR INGRESS AND EGRESS, SHALL BE MONITORED AND KEPT CLEAR OF DEBRIS, INSPECTED DAILY AND CLEANED BY THE CONTRACTOR WHEN NECESSARY.
- 4. SILT FENCES SHALL BE INSTALLED AND MAINTAINED AROUND INTAKE STRUCTURES (I.E., INLETS, CATCH BASINS) AS SHOWN ON THE PLAN.
- 5. IF A STOCKPILE IS TO REMAIN IN PLACE FOR MORE THAN 7 CALENDAR DAYS, SEDIMENT AND EROSION CONTROL SHALL BE PROVIDED AROUND SUCH STOCKPILE. IF MORE THAN 2 MONTHS, THEN IT IS REQUIRED THAT THE STOCKPILE BE SEEDED SO AS TO MINIMIZE SOIL EROSION BY BOTH WIND AND WATER. ANY STOCKPILES MUST BE APPROVED BY THE OWNER.
- 6. THE SURFACE OF STRIPPED AREAS SHALL BE PERMANENTLY OR TEMPORARILY SEEDED. STRIPPED AREAS NOT AT FINAL GRADE THAT WILL REMAIN UNDISTURBED FOR MORE THAN 7 CALENDAR DAYS AFTER INITIAL DISTURBANCE SHALL BE PROTECTED FROM EROSION. TEMPORARY COVER SHALL BE MAINTAINED CONTINUOUSLY UNTIL PERMANENT COVER IS ESTABLISHED.
- 7. WATER PUMPED OR OTHERWISE DISCHARGED FROM THE SITE DURING CONSTRUCTION DEWATERING SHALL BE FILTERED. PROTECTED FROM SOIL EROSION WITHIN 7 CALENDAR DAYS AFTER FINAL GRADE IS ESTABLISHED.
- 8. AT THE END OF EACH WORK DAY, THE CONTRACTOR SHALL PLACE EROSION CONTROL AT NEWLY CONSTRUCTED INLET LOCATIONS, AND AT OTHER LOCATIONS SELECTED BY THE ENGINEER, TO MINIMIZE THE AMOUNT OF SILTATION WHICH NORMALLY WOULD ENTER THE STORM SEWER SYSTEM.
- 9. THE TEMPORARY EROSION CONTROL MEASURES SHALL BE IN PLACE AND WORK EFFECTIVELY UNTIL ALL THE PERMANENT EROSION CONTROL ITEMS ARE
- 10. THE CONTRACTOR SHALL INSPECT EROSION CONTROL MEASURES WEEKLY AND AFTER ANY STORM EVENT IN EXCESS OF 1/2 ". ANY DEFICIENCIES
- 11. AT THE COMPLETION OF THE PROJECT, ALL STORM SEWER PIPES AND STRUCTURES SHALL BE CLEANED AND FREE OF DIRT AND DEBRIS. THE SEDIMENTATION SHALL BE REMOVED FROM THE STORM SEWER SYSTEM AND SHALL NOT BE WASHED OUT IN THE STORM SEWER SYSTEM.
- 12. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE DISPOSED OF WITHIN THIRTY (30) DAYS AFTER FINAL SITE STABILIZATION IS ACHIEVED WITH PERMANENT SOIL STABILIZATION MEASURES. TRAPPED SEDIMENT AND OTHER DISTURBED SOILS RESULTING FROM THE DISPOSITION OF TEMPORARY MEASURES SHALL BE PERMANENTLY STABILIZED TO PREVENT FURTHER EROSION AND SEDIMENTATION.

Site Restoration

- SITE PARKWAY AREAS TO REMAIN SHALL BE PROTECTED FROM DAMAGE, AND IF DAMAGED, SHALL BE REPLACED TO MEET THE ILAWC STANDARD
- SPECIFICATIONS IN MATERIALS AND WORKMANSHIP. 2 PARKWAY PESTORATION SHALL BE ACCOMPLISHED WITH THREE (3) INCHES OF PHILVEDIZED TOPSOIL AND SEED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL NECESSARY WATERINGS OF THE SEED OR SOD. ALL RESTORATION SHALL MEET THE SATISFACTION OF THE OWNER.
- OWNER SHALL PROVIDE SUFFICIENT WATER FOR THE CONTRACTOR TO MAINTAIN THE PLANT MATERIAL, SEED AND SOD AREAS. CONTRACTOR SHALL WATER SOD/SEED UNTIL THE TURF HAS BECOME ADEQUATELY ESTABLISHED. CONTRACTOR SHALL WARRANTEE ALL MATERIAL AND LABOR FOR A PERIOD OF ONE YEAR FROM ACCEPTANCE OF ALL WORK. CONTRACTOR SHALL BE RESPONSIBLE FOR SECURING A WATER METER FROM ILAWC, TO RECORD THE AMOUNT OF WATER USED. THE CONTRACTOR IS RESPONSIBLE FOR RETURNING THE WATER METER BACK TO ILAWC UPON COMPLETION OF PROJECT.
- CONTRACTOR WILL NOT BE CHARGED FOR WATER USED. 4. EXCAVATED MATERIALS IN EXCESS OR THOSE NOT REQUIRED OR UNSUITABLE FOR RE-USE SHALL BE DISPOSED OF OFF SITE AT CONTRACTORS EXPENSE. CONTRACTOR SHALL REMOVE ALL DEBRIS DAILY AND MAINTAIN THE SITE IN A NEAT SAFE CONDITION.
- STREET PAVING AND CURBS TO REMAIN SHALL BE PROTECTED FROM DAMAGE, AND, IF DAMAGED, SHALL BE REPLACED TO MEET THE HIGHWAY DISTRICT
- ALL PAVEMENT CONSTRUCTION WITHIN THE LIMITS OF THE PROJECT SHALL BE DONE IN ACCORDANCE-WITH THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION IN ILLINOIS, LATEST EDITION, AND ALL SUPPLEMENTS AND REVISIONS THERETO, WITH THE "SPECIAL PROVISIONS," WITH THESE "CONSTRUCTION NOTES" AND WITH THE LOCAL CODE. A COPY OF THE ABOVE SPECIFICATIONS SHALL BE IN THE POSSESSION OF THE
- CONTRACTOR ON THE PROJECT AT ALL TIMES. THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF ALL REQUIRED PERMITS FOR CONSTRUCTION ALONG OR ACROSS EXISTING STREETS OR HIGHWAYS. HE SHALL MAKE ARRANGEMENTS FOR THE PROPER BRACING, SHORING AND OTHER REQUIRED PROTECTION OF ALL ROADWAYS BEFORE CONSTRUCTION BEGINS. HE SHALL BE RESPONSIBLE FOR ANY DAMAGE TO THE STREETS OR ROADWAYS AND ASSOCIATED STRUCTURES AND SHALL MAKE REPAIRS AS NECESSARY TO THE SATISFACTION OF THE ENGINEER AND THE OWNER.
- 8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ADEQUATE SIGNS AND WARNING DEVICES TO INFORM AND PROTECT THE PUBLIC DURING CONSTRUCTION OPERATIONS.

Sanitary and Storm Sewers

- ALL SEWER CONSTRUCTION WITHIN THE LIMITS OF THIS PROJECT SHALL BE DONE IN ACCORDANCE WITH THE STANDARD SPECIFICATION'S FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS, LATEST EDITION, AND ALL SUPPLEMENTS AND REVISIONS THERETO, WITH THE "SPECIAL PROVISIONS," WITH THESE "CONSTRUCTION NOTES" AND WITH THE ILAWC STANDARDS. A COPY OF THE ABOVE SPECIFICATIONS SHALL BE IN THE POSSESSION OF THE
- TRENCH BACKFILL MATERIAL SHALL BE I.D.O.T. GRADATION CA-6 COMPACTED TO 90% MODIFIED PROCTOR DENSITY AND SHALL BE PROVIDED IN ALL TRENCHES WHICH LIE WITHIN TWO (2) FEET OF PAVEMENT, CURB, OR SIDEWALK.
- MANHOLES, CATCH BASINS AND INLETS SHALL BE IN ACCORDANCE WITH THESE IMPROVEMENT PLANS AND THE APPLICABLE STANDARD SPECIFICATIONS. WHERE GRANULAR TRENCH BACKFILL IS REQUIRED AROUND THESE STRUCTURES, THE COST SHALL BE CONSIDERED AS INCIDENTAL AND SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR THE STRUCTURE.
- 4. ALL GRANULAR BACKFILL FOR SANITARY SERVICES SHALL BE IN ACCORDANCE WITH THE STANDARD.
- STRUCTURES FOR SANITARY AND STORM SEWERS SHALL BE IN ACCORDANCE WITH THESE IMPROVEMENT PLANS AND THE APPLICABLE STANDARD SPECIFICATIONS. WHERE GRANULAR TRENCH BACKFILL IS REQUIRED AROUND THESE STRUCTURES, THE COST SHALL BE CONSIDERED AS INCIDENTAL AND SHALL BE INCLUDED IN THE ALL SURPLUS EXCAVATED MATERIAL FROM THE TRENCHS WILL BE DISPOSED OF BY CONTRACT UNIT PRICE FOR THE

Section 920.120 Abandoned Wells

- ABANDONMENT OF WELLS
 - A. THE OWNER OF A WATER WELL, BORING, OR MONITORING WELL SHALL ASSURE THAT SUCH WELL IS SEALED WITHIN 30 DAYS AFTER IT IS ABANDONED AND WHEN THE WELL IS NO LONGER USED TO SUPPLY WATER OR IS IN SUCH A STATE OF DISREPAIR THAT THE WELL OR BORING HAS THE POTENTIAL FOR TRANSMITTING CONTAMINANTS INTO AN AQUIFER OR OTHERWISE THREATENS THE PUBLIC HEALTH OR SAFETY HAS THE POTENTIAL FOR TRANSMITTING CONTAMINANTS INTO AN AUDIFER OR OTHERWISE THREATENS THE PUBLIC HEALTH OR SAFETY. THE DEPARTMENT SHALL GRANT AN EXTENSION OF THIS TIME PROVIDED THE OWNER SUBMITS A WRITTEN REQUEST TO THE DEPARTMENT INDICATING THE REASONS FOR THE REQUEST AND AN ESTIMATE OF TIME IN WHICH THE WELL WILL BE EITHER SEALED OR REUSED. IN GRANTING AN EXTENSION, THE DEPARTMENT MUST BE ASSURED THAT APPLICABLE PROTECTIVE MEASURES WILL BE TAKEN AND THE METHODS AND MATERIALS WILL BE IN COMPLIANCE WITH THE ACT AND THIS PART. APPLICABLE PROTECTIVE MEASURES MAY INCLUDE ENSURING THAT SOURCES OF CONTAMINATION IN SUCH A MANNER AS TO PREVENT A COURSELY OF CONTAMINATION TO PREVENT A COURSELY OF CONTAMINATION TO REPORT AND THE POTENTIAL SOURCE OF CONTAMINATION TO PREVENT ACCIDENTAL INTRODUCTION OF CONTAMINANTS INTO GROUND WATER.
 - WATER WELLS SHALL BE SEALED BY A LICENSED WATER WELL DRILLER PURSUANT TO THE WATER WELL AND PUMP INSTALLATION CONTRACTOR'S LICENSE ACT. AN INDIVIDUAL WHO IS NOT SO LICENSED MAY SEAL A WELL, PROVIDED THE WELL IS LOCATED ON LAND WHICH IS OWNED OR LEASED BY SUCH INDIVIDUAL AND IS USED BY SUCH INDIVIDUAL FOR FARMING PURPOSES OR AS SUCH INDIVIDUAL'S PLACE OF ABODE AND PROVIDED A REQUEST IS MADE TO THE DEPARTMENT OR LOCAL HEALTH DEPARTMENT PRIOR TO THE COMMENCEMENT OF SEALING INDICATING HOW THE WATER WELL IS TO BE SEALED AND THE MATERIALS TO BE USED. THE DEPARTMENT OR LOCAL HEALTH DEPARTMENT SHALL GRANT APPROVAL WHEN REQUESTED PRIOR TO THE COMMENCEMENT OF SEALING IF THE METHODS AND MATERIALS ARE IN COMPLIANCE WITH THIS
 - 2. SEALING REQUIREMENTS. WATER WELL SHALL BE SEALED, FROM THE BOTTOM UP TO WHERE THE WELL CASING IS REMOVED, WITH NEAT CEMENT GROUT OR ANY BENTONITE PRODUCT MANUFACTURED FOR WATER WELL SEALING. WATER WELLS, BORINGS, OR MONITORING WELLS WHICH ARE ABANDONED SHALL BE DISINFECTED BY INTRODUCING A SUFFICIENT AMOUNT OF CHLORINE TO PRODUCE 100 PARTS PER MILLION OF CHLORINE IN THE WATER IN THE WELL AND SHALL BE SEALED BY PLACING THE SEALING MATERIALS FROM THE BOTTOM OF THE WELL TO THE SURFACE BY METHODS THAT WILL AVOID SEGREGATION OR DILUTION OF MATERIAL IN ACCORDANCE WITH THE FOLLOWING REQUIREMENTS:
 - NON-CREVICED, CONSOLIDATED FORMATIONS. WELLS EXTENDING INTO NON-CREVICED SANDSTONE, OR OTHER WATER BEARING CONSOLIDATED FORMATIONS SHALL BE SEALED BY FILLING THE WELL WITH DISINFECTED CLEAN PEA GRAVEL OR LIMESTONE CHIPS TO WITHIN 10 FEET BELOW THE TOP OF THE WATER BEARING FORMATION OR TO WITHIN 10 FEET OF THE BOTTOM OF THE CASING, WHICHEVER IS LESS. NEAT CEMENT GROUT OR ANY BENTONITE PRODUCT MANUFACTURED FOR WATER WELL SEALING SHALL BE PLACED FOR A MINIMUM OF 20 FEET ABOVE THIS POINT. THE UPPER PART OF THE WELL TO WHERE THE WELL CASING IS REMOVED SHALL BE SEALED BY NEAT CEMENT GROUT OR ANY BENTONITE PRODUCT MANUFACTURED FOR WATER WELL SEALING. CONCRETE OR CEMENT MAY BE USED FOR SUCH SEALING, PROVIDED THE UPPER
 - CREVICED FORMATIONS. WELLS EXTENDED INTO CREVICED FORMATIONS SHALL BE SEALED BY FILLING WITH DISINFECTED CLEAN PEA GRAVEL OR LIMESTONE CHIPS TO WITHIN 10 FEET BELOW THE BOTTOM OF THE CASING WHICHEVER IS LESS. NEAT CEMENT GROUT OR ANY BENTONITE PRODUCT MANUFACTURED FOR WELL SEALING SHALL BE PLACED FOR A MINIMUM OF 20 FEET ABOVE THIS POINT. THE UPPER PART OF THE WELL TO WHERE THE WELL CASING IS REMOVED SHALL BE SEALED BY NEAT CEMENT GROUT OR ANY BENTONITE PRODUCT MANUFACTURED FOR WATER WELL SEALING, CONCRETE OR CEMENT MAY BE USED FOR SUCH SEALING, PROVIDED THE UPPER PART OF THE WELL IS DRY. WHERE THE EARTH COVER IS LESS THAN 30 FEET, THE HOLE SHALL BE GROUTED FROM 10 FEET BELOW THE CREVICED FORMATION TO WHERE THE WELL CASING IS REMOVED. (SEE ILLUSTRATION J.)
 - C. UNCONSOLIDATED FORMATIONS. IN THE EVENT THE WATER BEARING FORMATION CONSISTS OF COARSE GRAVEL AND PRODUCING WELLS ARE LOCATED NEARBY, THE WELL SHALL BE SEALED BY FILLING WITH DISINFECTED CLEAN PEA GRAVEL OR LIMESTONE CHIPS TO 10 FEET BELOW THE TOP OF WATER BEARING FORMATION. NEAT CEMENT GROUT OR ANY BENTONITE PRODUCT MANUFACTURED FOR WATER WELL SEALING SHALL BE PLACED FOR A MINIMUM OF 20 FEET ABOVE THIS POINT. THE UPPER PART OF THE WELL TO WHERE THE WELL CASING IS REMOVED SHALL BE SEALED BY NEAT CEMENT GROUT OR ANY BENTONITE PRODUCT MANUFACTURED FOR WATER WELL SEALING. CONCRETE OR CEMENT MAY BE USED FOR SUCH SEALING, PROVIDED THE UPPER PART OF THE WELL IS DRY. ABANDONED DUG AND BORED WELLS SHALL BE SEALED BY USING ONE OF THE FOLLOWING METHODS:
 - G. FILLING WITH DISINFECTED CLEAN PEA GRAVEL OR LIMESTONE CHIPS TO WITHIN 20 FEET BELOW THE TOP OF THE CASING. THE UPPER PART OF THE WELL TO WHERE THE WELL CASING IS REMOVED SHALL BE SEALED FOR A MINIMUM OF 20 FEET BY FILLING WITH NEAT CEMENT GROUT, ANY BENTONITE PRODUCT MANUFACTURED FOR WATER WELL SEALING, OR IMPERVIOUS MATERIAL SUCH AS CLAY. CONCRETE OR CEMENT MAY BE USED FOR SUCH SEALING, PROVIDED THE UPPER PART OF THE WELL IS DRY.
 - PLACING A ONE FOOT LAYER OF ANY BENTONITE PRODUCT MANUFACTURED FOR WATER WELL SEALING AT THE BOTTOM OF THE WELL FOLLOWED BY ALTERNATING LAYERS OF AGRICULTURAL LIMESTONE (LIMESTONE FINES) AND ANY BENTONITE PRODUCT MANUFACTURED FOR WATER WELL SEALING. THE ALTERNATING LAYERS OF AGRICULTURAL LIME SHALL BE FIVE TO SEVEN FEET THICK AND THE ALTERNATING LAYERS OF ANY BENTONITE PRODUCT MANUFACTURED FOR WATER WELL SEALING SHALL BE SIX INCHES THICK. THE UPPERMOST OR TOP LAYER SHALL BE AGRICULTURAL LIME.
 - c. COMPLETELY FILING WITH CONCRETE, CEMENT GROUT, OR IMPERVIOUS MATERIAL SUCH AS CLAY. (SEE ILLUSTRATION K)
 - MORE THAN ONE WATER BEARING FORMATION. WHERE WELLS EXTEND INTO MORE THAN ONE WATER BEARING FORMATION, EACH WATER BEARING FORMATION SHALL BE SEALED INDEPENDENTLY IN THE MANNER DESCRIBED IN THIS SECTION. NEAT CEMENT GROUT OR ANY BENTONITE PRODUCT MANUFACTURED FOR WATER WELL SEALING SHALL BE PLACED A MINIMUM OF 10 FEET ABOVE AND BELOW AT ALL INTERMITTENT WATER BEARING FORMATIONS EXCEPT ARTESIAN WELLS AND ARTESIAN FORMATIONS. DISINFECTED CLEAN PEA GRAVEL OR LIMESTONE CHIPS SHALL BE PLACED IN EACH WATER BEARING FORMATION BETWEEN PLUGS. WHEN THE LOWER FORMATION HAS AN UPFLOW OF WATER INTO THE UPPER FORMATION, A PRESSURE SEAL IS REQUIRED TO SHUT OFF THE UPFLOW WHILE A NEAT CEMENT PLUG AT LEAST 50 FEET IN LENGTH IS PUMPED IN PLACE AND ALLOWED TO SET. THE UPPER PART OF THE WELL TO WHERE THE WELL CASING IS REMOVED SHALL BE SEALED WITH NEAT CEMENT GROUT OR AND ALLOWED TO SET. ANY BENTONITE PRODUCT MANUFACTURED FOR WATER WELL SEALING. CONCRETE OR CEMENT MAY BE USED FOR SUCH SEALING PROVIDED THE
 - ARTESIAN WELLS. IN SUCH WELLS, A CEMENT RETAINER SHALL BE USED WITH PRESSURE GROUTING EQUIPMENT UTILIZED TO PLACE CEMENT GROUT. NEAT CEMENT GROUT BENTONITE OR AQUAJEL FROM 2% TO 6% BY DRY WEIGHT SHALL BE PLACED FOR A MINIMUM OF 10 FEET BELOW AND 10 FEET ABOVE THE WATER BEARING FORMATION. THE UPPER PART OF THE WELL TO WHERE THE WELL CASING IS REMOVED SHALL BE FILLED WITH NEAT CEMENT GROUT OF THE UPPER PART OF THE WELL SEALING. CONCRETE OR CEMENT MAY BE
 - BURIED SLAB BORED WELLS. SUCH WELLS SHALL BE SEALED BY FILLING WITH DISINFECTED CLEAN PEA GRAVEL OR LIMESTONE CHIPS TO WITHIN ONE FOOT BELOW THE BURIED SLAB. THE UPPER PART OF THE WELL TO WHERE THE CASING IS REMOVED SHALL BE SEALED WITH NEAT CEMENT OR ANY BENTONITE PRODUCT MANUFACTURED FOR WATER WELL SEALING.
 - G. IN LIEU OF FILLING THE WELL WITH DISINFECTED CLEAN PEA GRAVEL OR LIMESTONE CHIPS AS REQUIRED IN SUBSECTIONS (B)(1) THROUGH (6) OF THIS SECTION, WELLS MAY BE SEALED BY GROUTING FROM THE BOTTOM UP BY USING NEAT CEMENT GROUT OR ANY BENTONITE PRODUCT MANUFACTURED FOR WATER WELL SEALING. THIS MATERIAL SHALL BE APPLIED THE FULL DEPTH OF THE WELL AND SHALL TERMINATE WITHIN 2 FEET OF THE GROUND SURFACE. CONCRETE GROUT MAY BE USED IN THE UPPER PART OF THE WELL, PROVIDED THE UPPER PART OF THE WELL
 - 3. NON-PRODUCING WELL. WHERE A WATER WELL IS DRILLED AND A WATER BEARING FORMATION IS NOT LOCATED, THE WATER WELL SHALL BE FILLED WITH CLAY, OR NEAT CEMENT CONTAINING BENTONITE, AQUAJEL OR SIMILAR MATERIALS FROM 2% TO 6% BY WEIGHT, OR PURE BENTONITE IN ANY FORM BY THE WATER WELL DRILLER NOT MORE THAN 10 CALENDAR DAYS AFTER THE WELL HAS BEEN DRILLED. 4. THE WELL CASING OR LINER SHALL BE REMOVED TO AT LEAST 2 FEET BELOW FINAL GRADE OR AS NOTED ON THE FINAL ENGINEERING PLANS.

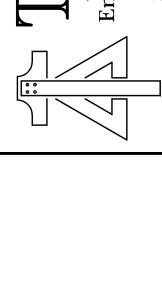
WRITING AT LEAST 48 HOURS PRIOR TO THE COMMENCEMENT OF ANY WORK TO SEAL A WATER WELL OR MONITORING WELL

- THE DEPARTMENT, APPROVED LOCAL HEALTH DEPARTMENT, OR APPROVED UNIT OF LOCAL GOVERNMENT SHALL BE NOTIFIED BY TELEPHONE OR IN
- WHEN A WATER, BORING OR MONITORING WELL IS SEALED, A SEALING FORM SHALL BE SUBMITTED TO THE DEPARTMENT OR APPROVED LOCAL HEALTH DEPARTMENT BY THE INDIVIDUAL PERFORMING THE SEALING NOT MORE THAN 30 DAYS AFTER THE WELL IS SEALED. THE FOLLOWING
 - a. THE DATE THE WATER, BORING OR MONITORING WELL WAS DRILLED;

NFORMATION SHALL BE SUBMITTED ON FORMS PROVIDED BY THE DEPARTMENT:

- b. DEPTH AND DIAMETER OF THE WATER, BORING OR MONITORING WELL;
- c. LOCATION OF THE WATER, BORING OR MONITORING WELL;
- d. TYPE OF SEALING METHOD USED; e. ORIGINAL WATER WELL PERMIT NUMBER IF AVAILABLE;
- f. DATE THE WATER, BORING OR MONITORING WELL WAS SEALED; g. TYPE OF WATER WELL (BORED, DUG, DRIVEN OR DRILLED);
- h. WHETHER THE FORMATION IS CLEAR OF OBSTRUCTIONS;
 - I. CASING RECORD (EXPLANATION OF THE REQUIRED REMOVAL); AND J. WATER WELL DRILLER'S LICENSE NUMBER AND NAME.

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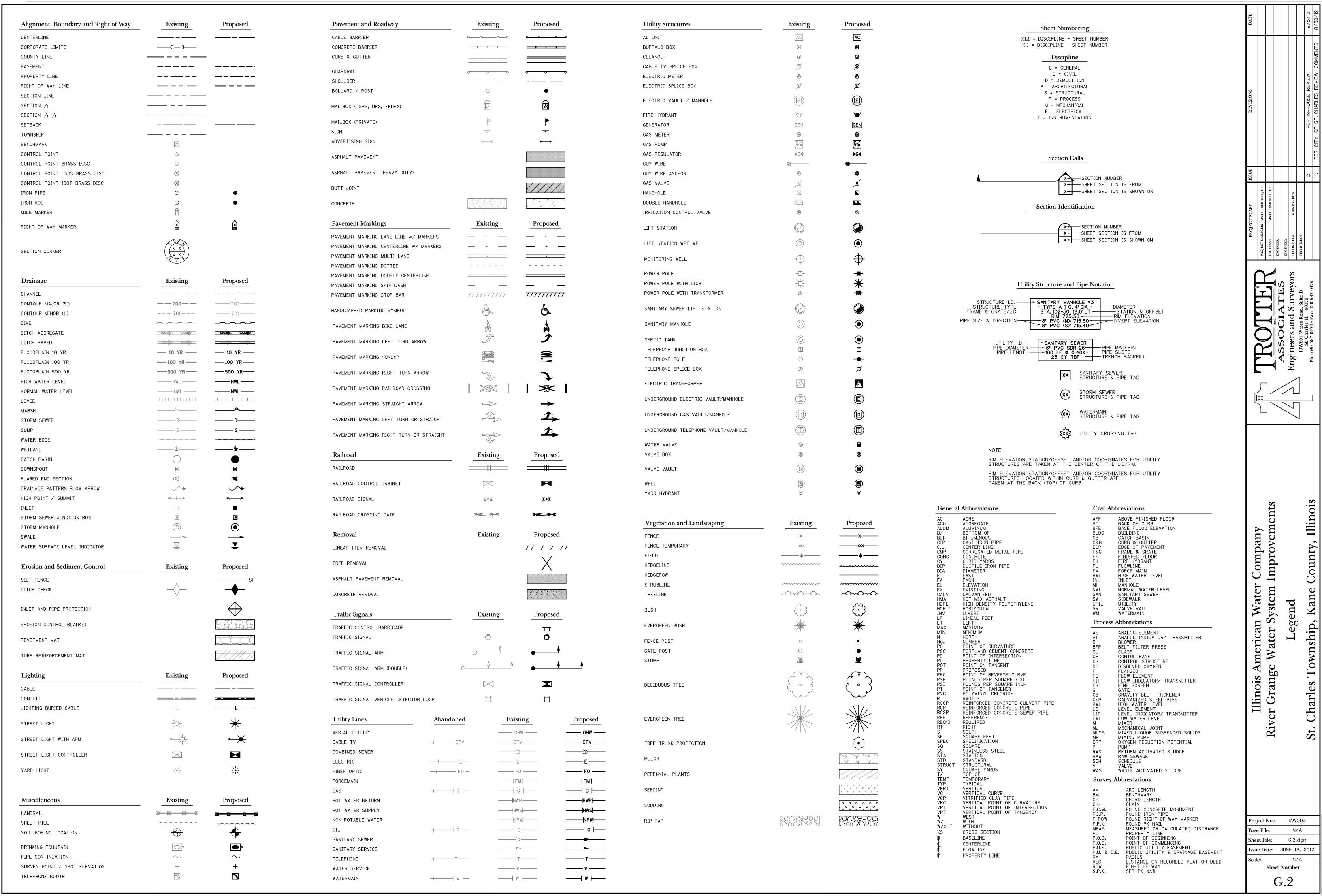
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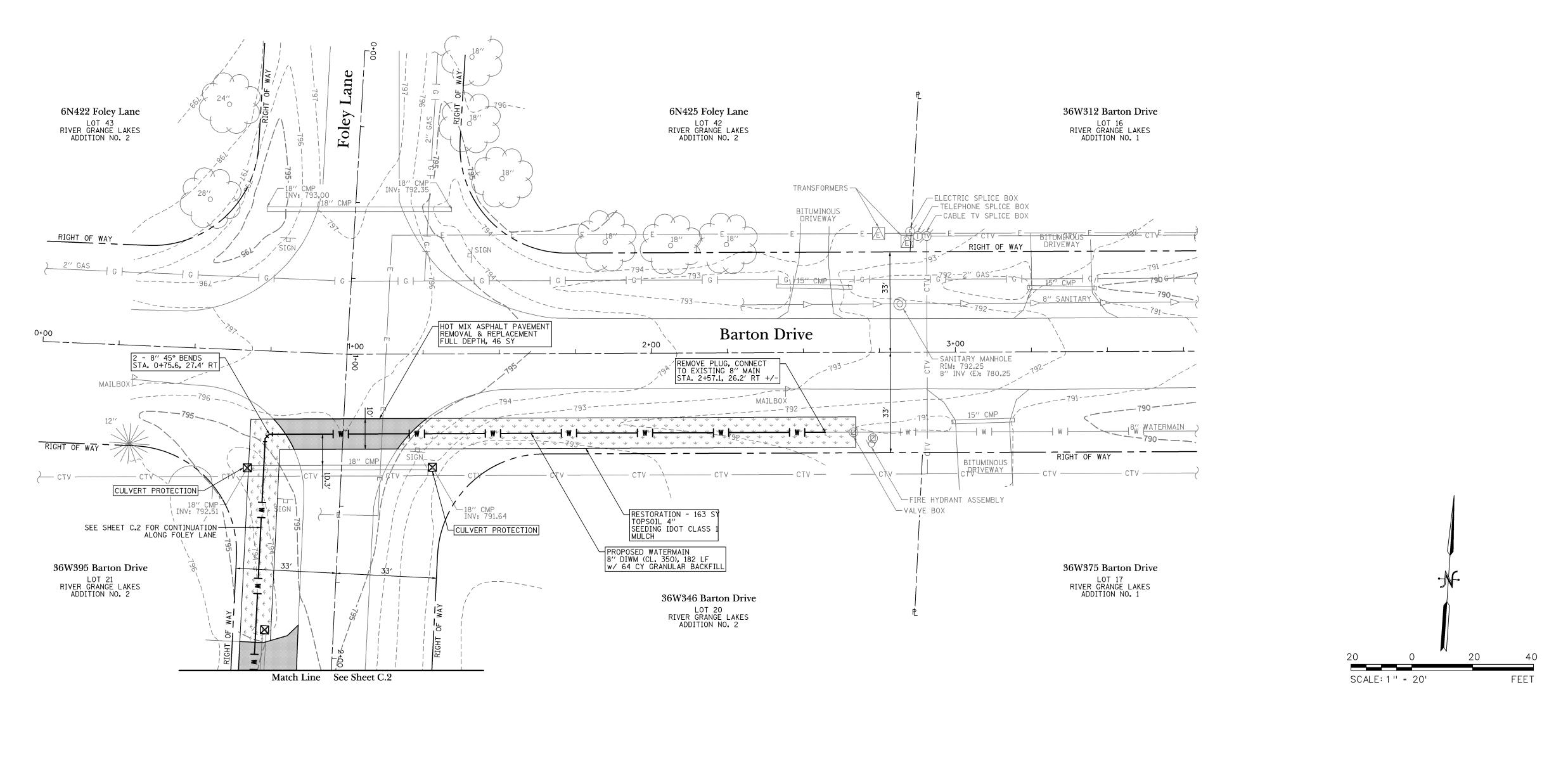
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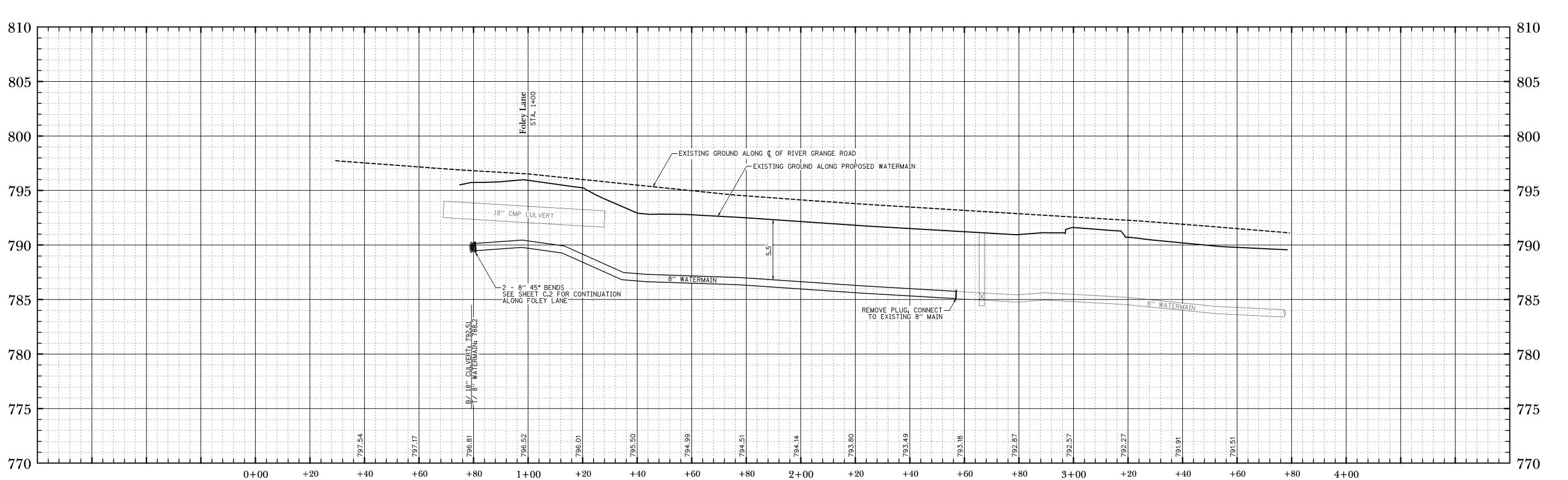
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G.







TROTTER	ASSOCIATES Engineers and Surveyors 40W201 Wasco Road, Suite D St. Charles, II. 60175 Ph.: 630-587-0470 • Fax: 630-587-0475
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Illinois American Water Company River Grange Water System Improvements Plan & Profile - Barton Drive

Project No.: IAW003

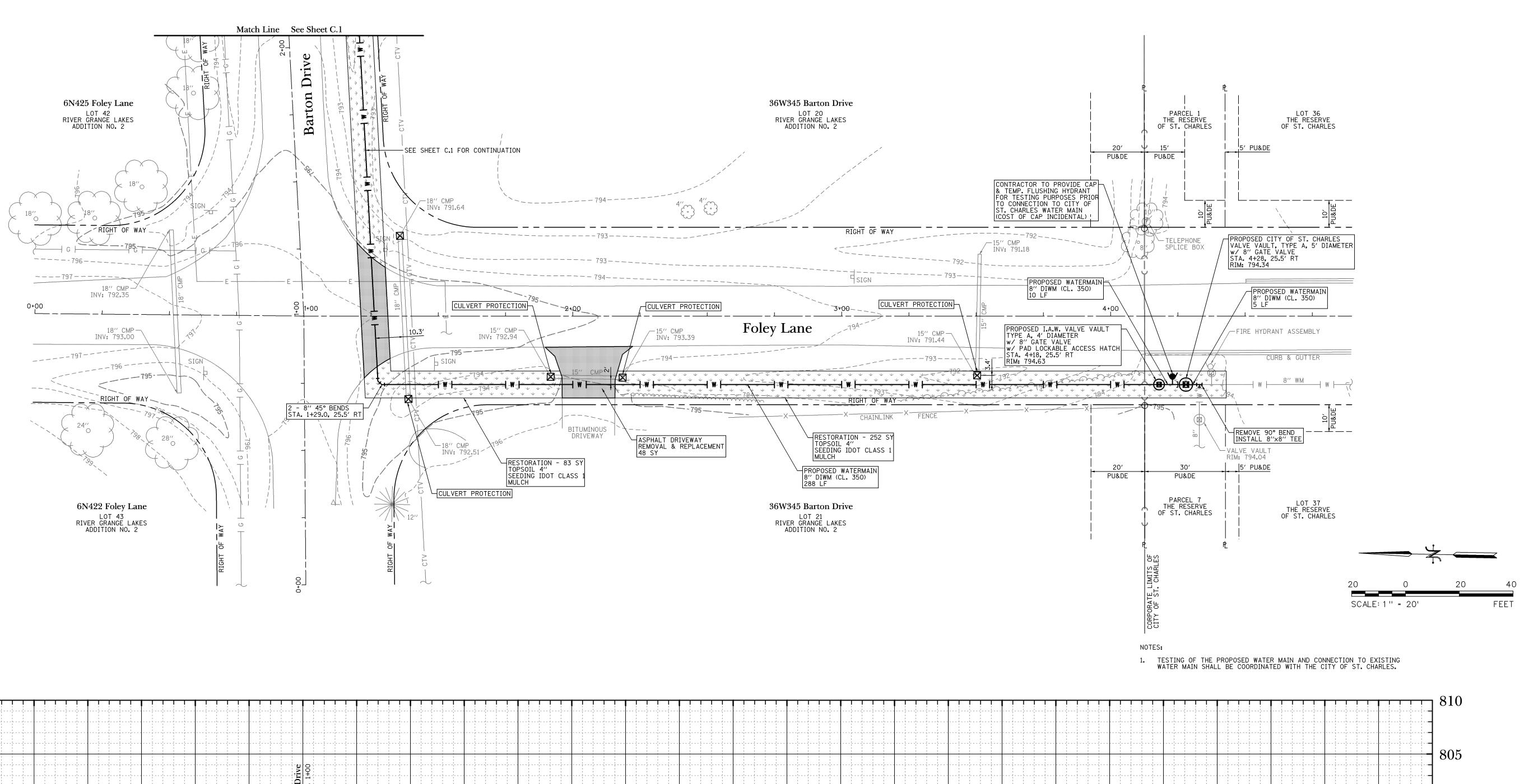
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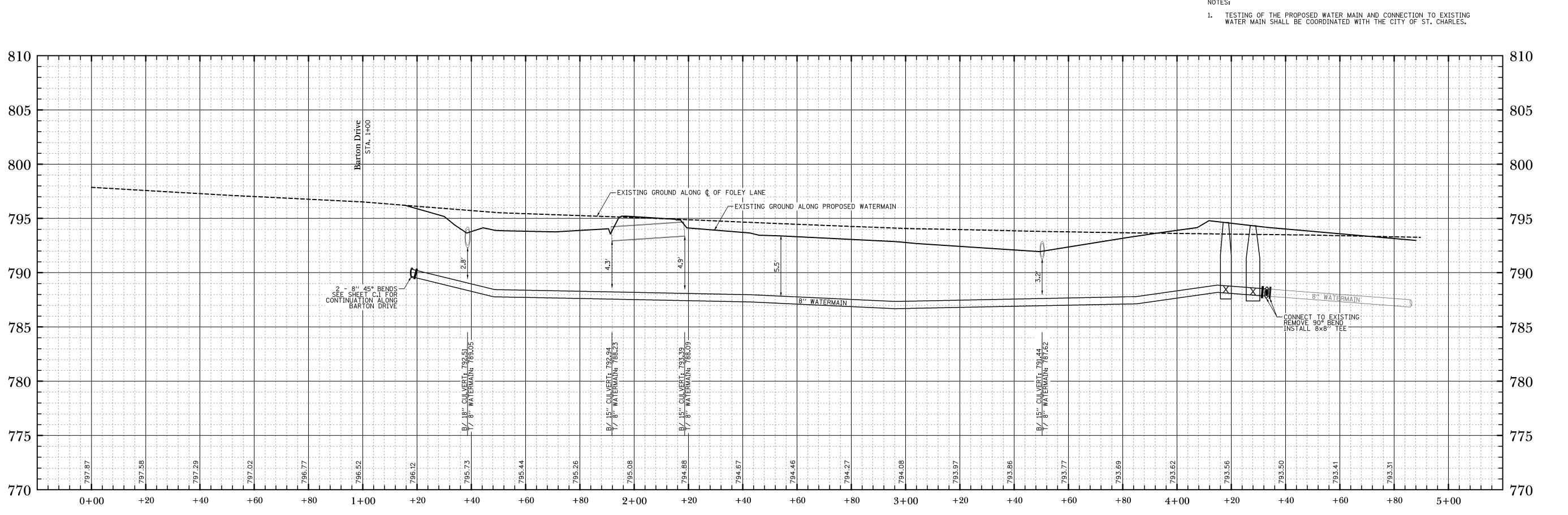
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C. 1





Illinois American Water Company River Grange Water System Improvements Plan & Profile - Foley Lane

Project No.: IAW003

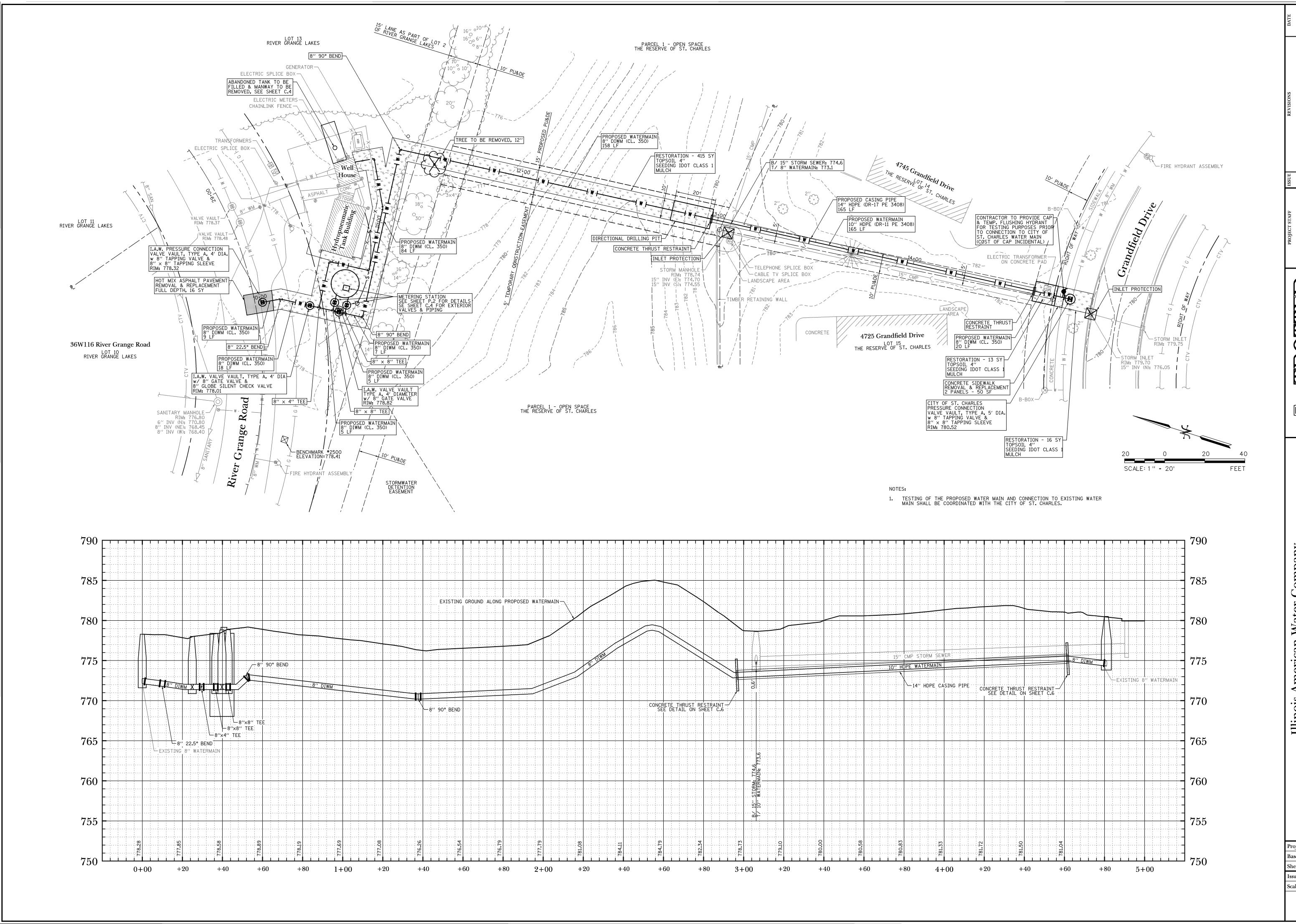
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Issue Date: JUNE 18, 2012

Scale: Horiz: 1" = 20'
Vert: 1" = 5'
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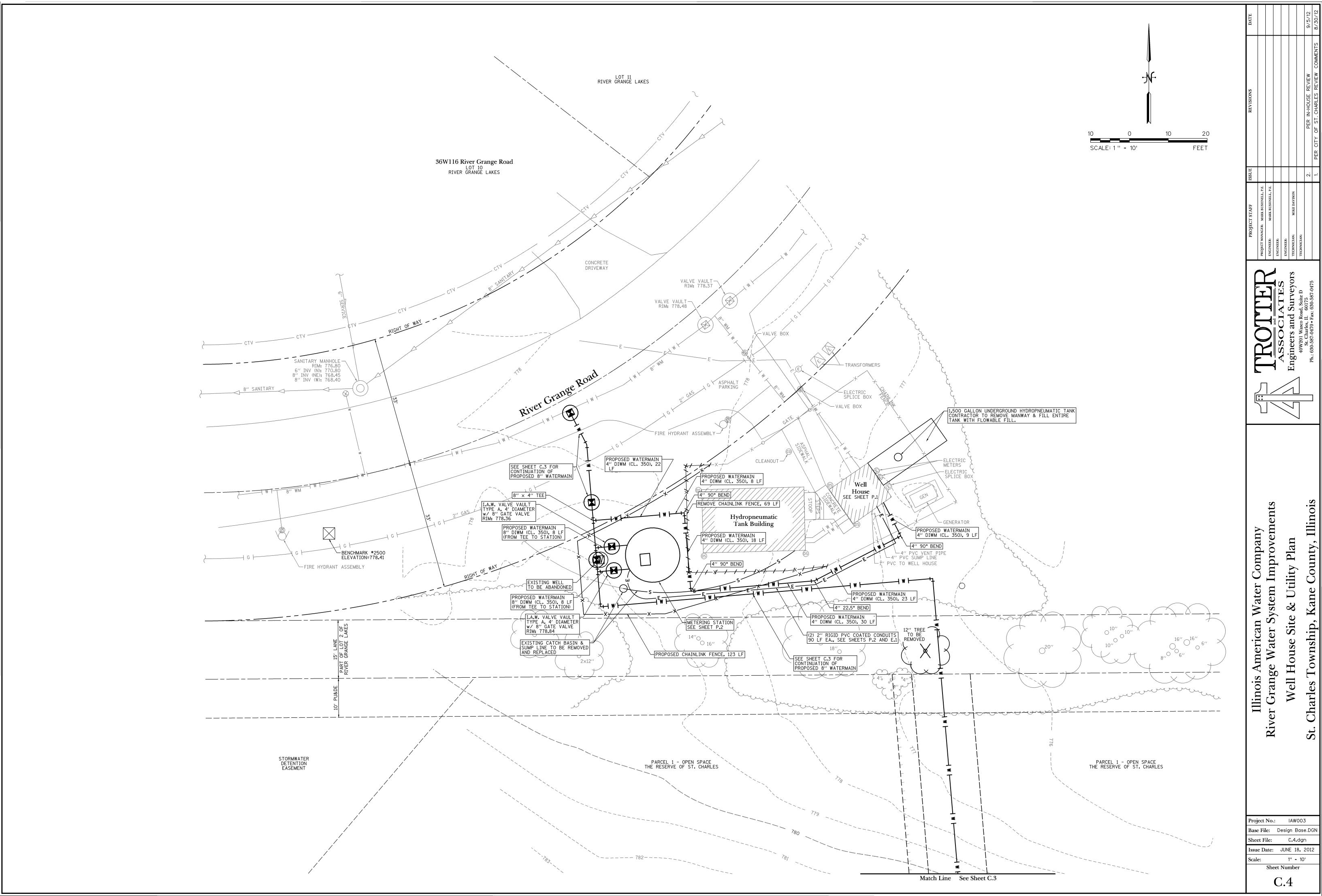


Illinois American Water Company
River Grange Water System Improvements
& Profile - River Grange Road to Grandfield Drive
St. Charles Township, Kane County, Illinois

Project No.: IAW003

Base File: Design Base.DGN

Sheet File: C.3.dgn



A. WATER MAINS SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE. 4" THROUGH 12" SHALL BE PRESSURE CLASS 350. PIPE 16" AND GREATER SHALL BE PRESSURE CLASS 250. ALL WITH CEMENT MORTAR LINING AND SEAL COATING (AWWA-C104). B. THE JOINTS SHALL BE RUBBER GASKET PUSH-ON OR MECHANICAL (AWWA-C111) WATER MAIN FITTINGS SHALL BE OF DUCTILE IRON WITH CEMENT MORTAR LINING AND SEAL COATING WITH MECHANICAL JOINTS AND SHALL CONFORM TO (AWWA-C110). C. ALL PIPE AND FITTINGS SHALL BE MANUFACTURED IN THE UNITED STATES UNLESS PRIOR APPROVAL IS RECEIVED FROM ILLINOIS AMERICAN.

2. FIRE HYDRANTS

A. FIRE HYDRANTS SHALL BE MUELLER "SUPER CENTURIAN". EACH HYDRANT SHALL HAVE A TRAFFIC FLANGE, BE COMPRESSION TYPE, OPEN WITH PRESSURE IN A COUNTERCLOCKWISE DIRECTION WITH RISING STEM, AND MEET OR EXCEED AWWA SPECIFICATION C-502.

B. THREADS FOR FIRE HYDRANTS IN ALL PROPERTIES SHALL BE NATIONAL STANDARD. HYDRANT IS TO HAVE ONE 4 1/2" PUMPER PORT AND TWO 2 1/2" HOSE PORTS. C. HYDRANT LENGTH SHALL BE SUPPLIED TO PROVIDE A MINIMUM OF 5.5 FEET OF

COVER OVER THE TOP OF THE WATER MAIN. D. ALL FIRE HYDRANTS ARE TO BE SUPPLIED PAINTED ON THE EXTERIOR WITH TWO COATS OF TNEMEC BRAND "TNEME-GLOSS" FEDERAL SAFETY YELLOW ENAMEL #2016 (OSHA 1910.44- ANSI 53.1).

E. MECHANICAL JOINT (MJ) ANCHORING TEE'S SHALL BE USED FOR THE AUXILIARY CONNECTION TO THE WATER MAIN. THE AUXILIARY VALVE SHALL BE MECHANICAL JOINT, RESILIENT WEDGE TYPE AS MANUFACTURED BY MUELLER. F. CONNECTION OF THE AUXILIARY VALVE TO THE FIRE HYDRANT SHALL BE COMPLETED UTILIZING A 6" DIA. U.S. PIPE MJ ANCHORING (ONE ROTATING) COUPLING FOR LAYING DISTANCES 12" TO 18". FOR GREATER DISTANCES, USE CLASS 52 DUCTILE IRON PIPE WITH "MEGALUG" (AS MANUFACTURED BY EBBA IRONS SALES, INC.) RETAINER GLANDS.

G. COVER FOR FIRE HYDRANT AUXILIARY VALVE SHALL BE PAINTED WITH INEMEC BRAND "INEME- GLOSS" FEDERAL SAFETY BLUE ENAMEL #2045 (OSHA 1910.144 - ANSI

3. VALVES - 16" AND SMALLER

4. VALVES - LARGER THAN 16"

A. VALVES 16" AND SMALLER SHALL BE MECHANICAL JOINT FITTED RESILIENT WEDGE TYPE (COMPLETE WITH 304 STAINLESS STEEL NUTS AND BOLTS) AND SHALL CONFORM TO AWWA C-509-80. VALVES SHALL OPEN COUNTER CLOCKWISE HAVING NON-RISING

B. VALVES SHALL BE RESILIENT WEDGE TYPE AS MANUFACTURED BY MUELLER.

A. VALVE SHALL BE MANUFACTURED MUELLER. GATE VALVES SHALL BE EPOXY COATED IN ACCORDANCE WITH AWWA C515.

B. VALVES LARGER THAN 16" SHALL BE OF THE BUTTERFLY TYPE WITH RUBBER SEAT AND STAINLESS RING ON THE DISC EDGE TO MATE WITH THE RUBBER SEAT, SHALL OPEN COUNTERCLOCKWISE, SHALL MEET OR EXCEED AWWA C-504 OR AWWA C-505.

THE ENTIRE VALVE BOX ASSEMBLY SHALL BE BINGHAM & TAYLOR 5 1/4" SHAFT, TWO

PIECE SCREW TYPE ADJUSTABE WITH VALVE HOLDER, SIZE 22.

A. VAULTS REQUIRED FOR PRESSURE TAPS, CHECK VALVES AND METER INSTALLATIONS, SHALL BE OF PRECAST CONCRETE UNIT CONSTRUCTION (ASTM-C478) WITH A CONCENTRIC CONE AND JOINTS SEALED WITH BUTYL-BASED MATERIAL. CONCRETE ADJUSTMENT RINGS SHALL BE USED IF ADJUSTMENT IS NECESSARY. ADJUSTMENT SECTIONS SHALL NOT EXCEED 12" VERTICALLY OVERALL. ALL JOINTS SHALL BE SEALED WITH RUBBER-NEC, OR APPROVED EQUAL BUTYL-BASED MATERIAL. CEMENT GROUTING OF THE SEAMS AND JOINTS SHALL NOT BE COMPLETED. BUTYL MATERIAL SHALL TOTAL A MINIMUM WIDTH OF 2" AS APPLIED IN TWO PIECES. B. A FLEXIBLE UNION BETWEEN THE PIPE AND MANHOLE WALL, MEETING ASTM C-923, CAST INTEGRALLY INTO THE MANHOLE WALL, SHALL BE PROVIDED FOR EACH PIPE CONNECTION TO THE MANHOLE. UNIONS SHALL BE INTERPACE LOCK JOINT FLEXIBLE MANHOLE SLEEVE, A-LOK MANHOLE PIPE CONNECTOR, LINK SEAL, OR APPROVED EQUAL SUCH UNIONS SHALL BE SELECTED AND INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS FOR THE SPECIFIC TYPE OF PIPE USED. MANHOLE CASTING SHALL BE NEENAH R-1772-B OR APPROVED EQUAL. LID SHALL BE NEENAH FOUNDRY TYPE B "SELF SEALING" WITH THE WORD "WATER" IMPRINTED. MANHOLE STEPS SHALL BE M-A INDUSTRIES PLASTIC COATED. MANHOLES ARE TO BE WATER-TIGHT.

7. PRESSURE TAPS

PRESSURE TAPS SHALL BE PERFORMED IN THE PRESENCE OF AN ILLINOIS-AMERICAN REPRESENTATIVE. THE OUTSIDE DIAMETER OF THE CUTTER MUST BE AT LEAST 1/4" LESS THAN THE NOMINAL SIZE OF THE TAP TO BE MADE. ILLINOIS-AMERICAN MUST BE PROVIDED WITH A MINIMUM OF 48 HOURS ADVANCE NOTICE (630/739-8831 ISRAEL SANDOVAL) SO THAT INSPECTION BY AN ILLINOIS-AMERICAN REPRESENTATIVE CAN BE SCHEDULED.

8. SIZING OF TAPS

A. TAPS 2" AND LARGER ON:

i. CLOW MODEL F-5205 TAPPING SLEEVE, OR APPROVED EQUAL, FOR SIZES 4 INCH THROUGH 16 INCH. ALL BOLTS SHALL BE STAINLESS STEEL (TYPE 304), OR HIGH STRENGTH, CORROSION RESISTANT, LOW ALLOY MATERIAL SUCH AS ARMCO CORTEN.

b. ASBESTOS CEMENT PIPE

i. CLOW MODEL F-5207 TAPPING SLEEVE, OR APPROVED EQUAL FOR SIZES 4 INCH

THROUGH 12 INCH. ii. IN SPECIFYING TAPPING SLEEVES TO FIT ON THE "ROUGH BARREL" OR, THAT IS, THE FULL OUTSIDE DIAMETER PORTION OF THE PIPE, IT IS IMPORTANT THAT THE OUTSIDE DIAMETER OF THE PIPE BE MEASURED BEFORE ORDERING THE TAPPING SLEEVE. OUTSIDE DIAMETERS OF ASBESTOS PIPE CAN VARY SIGNIFICANTLY AND MAY NOT REMAIN CONSISTENT EVEN WITHIN THE SAME PRESSURE CLASS OF PIPE. iii. ALL BOLTS SHALL BE STAINLESS STEEL (TYPE 304), OR HIGH STRENGTH. CORROSION RESISTANT LOW ALLOY MATERIAL SUCH AS ARMCO COR TEN.

c. DUCTILE IRON PIPE

ROMAC INDUSTRIES, INC., STYLE "SST", STAINLESS STEEL TAPPING SLEEVE MAY USE THE SLEEVE INDICATED ABOVE FOR CAST IRON, OR APPROVED EQUAL. TAPPING VALVES SHALL BE THE RESILIENT WEDGE TYPE AS MANUFACTURED BY MUELLER.

TAPS TWO INCH AND LESS MAY BE MADE BY DIRECT TAP CONNECTION ON CAST OR DUCTILE IRON MAINS. A TWO INCH DIRECT TAP ON A 6" CAST OR DUCTILE IRON MAIN IS NOT ALLOWED AND REQUIRES A SADDLE. ALL ASBESTOS CEMENT AND PVC MAIN TAPS REQUIRE SADDLES. SADDLES MUST BE OFF ALL BRONZE OR ALL STAINLESS STEEL CONSTRUCTION.

STAINLESS STEEL: CASCADE CS22

9. SMALL SERVICE LINE APPURTENANCES

a. CURB BOX SHALL BE MINNEAPOLIS PATTERN, 1-1/2 INCH INSIDE DIAMETER UPPER SECTION WITH A 6 FOOT FULLY EXTENDED LENGTH TAPPED 2 INCH AT THE BOTTOM AND SUPPLIED WITH A BUSHING FOR SMALLER CURB STOPS. THE LID SHALL BE A TWO-PIECE PLUG TYPE, WITH A BRASS SLEEVE IN THE CAP THREADED TO RECEIVE THE BRASS PLUG.

b. ACCEPTABLE UNITS ARE:

MUELLER H-10302-72" WITH LID AND PLUG #89980 WITH AN H-10343 BUSHING

B. CURB STOP

a. FOR 1" SERVICE LINES THE CURB STOP SHALL BE: MUELLER MARK II ORISEAL H-15155

b. FOR 1-1/2" AND 2" SERVICES THE CURB STOP SHALL BE: MUELLER MARK II ORISEAL.

CORPORATION STOPS FOR 1" THROUGH 2" SHALL BE MUELLER 110 #15008

NOTE: THE CURB STOP AND CORPORATION STOP SHALL BE EQUIPPED WITH CONDUCTIVE COMPRESSION CONNECTIONS. FLARED OR SWEAT CONNECTIONS ARE NOT ALLOWED.

A. ALL WATER SERVICE LINES SHALL BE TYPE K COPPER. ONE PIECE SHALL BE USED FROM THE MAIN TO THE CURB STOP AND ONE PIECE FROM THE CURB STOP TO THE METER SPREAD, FOR LENGTHS OF 100 FEET OR LESS. THE MINIMUM SIZE SHALL BE 1" FOR A SINGLE-FAMILY RESIDENCE. LINES FOR LARGER SERVICES SHALL BE IN ACCORD WITH AWWA MANUAL OF PRACTICE #22.

B. WHEN THE DISTANCE FROM THE CURB STOP TO THE METER IN THE BUILDING EXCEEDS THE LENGTH OF COPPER AVAILABLE, A CONNECTION MAY BE MADE USING A MUELLER THREE-PART UNION (MODEL H-15403) WITH CONDUCTIVE, COMPRESSION CONNECTIONS.

INSTALLATION SPECIFICATIONS

1. PROTECTION OF WATER MAINS FROM SANITARY SEWERS AND STORM SEWERS

WATER MAINS SHALL BE PROTECTED FOR HORIZONTAL AND VERTICAL SEPARATION IN ACCORDANCE WITH THE TECHNICAL POLICY STATEMENTS OR THE REQUIREMENTS OF MWRDGC, WHICHEVER APPLIES. FURTHER, NO WATER MAIN SHALL PASS THROUGH OR COME INTO CONTACT WITH ANY PART OF A SEWER OR SEWER MANHOLE.

2. DEPTH OF PIPE COVER

ILLINOIS-AMERICAN WATER COMPANY

A MINIMUM DEPTH OF FIVE FEET SIX INCHES SHALL BE MAINTAINED FOR ALL WATER MAIN. THE FIVE FEET SIX INCHES DEPTH SHALL BE FROM PROPOSED FINAL GRADE ELEVATION TO THE CROWN OF THE MAIN. MAXIMUM 8.DEPTH OF COVER SHALL BE SEVEN FEET.

MINIMUM BEARING AREA IN SQUARE FEET BENDS (DEGREES) PAPER SIZE 11-1/4 22-1/2 45 90 TEE DEAD END

6" 1.0 2.5 4.5 8.0 5.5 5.5

8" 2.0 4.0 7.5 14.0 10.0 10.0 10" 3.0 6.0 11.0 20.5 14.5 14.5 12" 4.0 8.0 16.0 29.0 20.5 20.5

BEARING AREAS ARE BASED ON SOIL HAVING AN ALLOWABLE SAFE LATERAL BEARING OF ONE TON PER SQUARE FOOT. AREAS MUST BE REVISED FOR SOILS WITH A LOWER BEARING CAPACITY.

3. CORROSION PROTECTION

ALL PIPE, FITTINGS, FIRE HYDRANT LEADS, SLEEVES AND VALVES ARE TO BE ENCASED IN POLYETHYLENE IN ACCORDANCE WITH AWWA C-105, UNLESS A SOIL SURVEY HAS BEEN PERFORMED AND NON-CORROSIVE SOILS ARE SHOWN TO EXIST.

4. LAYING OF PIPE ON CURVES

METHODS AS DESCRIBED BELOW:

A. LONG RADIUS CURVES, EITHER HORIZONTAL OR VERTICAL, MAY BE LAID WITH STANDARD PIPE BY DEFLECTIONS AT THE JOINTS. IF THE PIPE IS SHOWN CURVED ON THE PLANS AND NO SPECIAL FITTINGS ARE SHOWN, IT MAY BE ASSUMED THAT THE CURVES CAN BE MADE BY DEFLECTION OF THE JOINTS WITH STANDARD LENGTHS OF PIPE. IN APPROVED SITUATIONS, SHORTER LENGTHS OF PIPE MAY BE USED TO AVOID

B. MAXIMUM DEFLECTIONS AT PIPE JOINTS AND LAYING RADIUS FOR VARIOUS PIPE LENGTHS SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS BASED ON THE SIZE OF PIPE AND TYPE OF JOINT. WHEN RUBBER GASKETED PIPE IS LAID ON A CURVE, THE PIPE SHALL BE JOINTED IN A STRAIGHT ALIGNMENT, THEN DEFLECTED. TRENCHES SHALL BE MADE WIDER ON CURVES FOR THIS PURPOSE.

ALL FITTINGS, BENDS AND HYDRANTS SHALL BE PROPERLY BRACED BY MEANS OF RESTRAINED JOINT ASSEMBLIES AS SHOWN IN THE STANDARD DETAIL OR USING

A. MECHANICAL JOINT FITTINGS, BENDS AND HYDRANTS SHALL BE PROPERLY ANCHORED BY MEANS OF "MEGALUG" (AS MANUFACTURED BY EBBA IRON SALES, INC.) RETAINER GLANDS. ALL SET SCREWS SHALL BE INSTALLED AND TIGHTENED IN ACCORD WITH

MANUFACTURER'S RECOMMENDATIONS. B. ALL PUSH-ON JOINT FITTINGS AND BENDS SHALL BE PROPERLY ANCHORED BY MEANS OF A U.S. PIPE FIELD LOK GASKET OR APPROVED EQUAL. C. ALL PUSH-ON OR MECHANICAL JOINT FITTINGS, BENDS, AND HYDRANTS SHALL BE

PROPERLY ANCHORED BY MEANS OF A CONCRETE THRUST BLOCK AS OUTLINED IN THE STANDARD DETAILS. THE MINIMUM BEARING AREA SPECIFICATIONS TO BE UTILIZED ARE OUTLINED AS FOLLOWS: D. REACTION BLOCKING SHALL BE DESIGNED FOR A MINIMUM INTERNAL PIPE PRESSURE OF 300 PSI. THE BLOCKING SHALL BE KEPT CLEAR OF THE ENTIRE BELL

CONFIGURATION OF ANY ADJACENT JOINT AND SHALL BE AT LEAST AS LARGE AS IS NECESSARY TO RESTRAIN THE FITTINGS FROM MOVEMENT. ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AT THE END OF 28 DAYS. E. FIRE HYDRANT SHALL BE POSITIVELY ANCHORED DIRECTLY TO THE TEE ON THE MAIN USING MECHANICAL JOINT ANCHORING FITTINGS, OR OTHER APPROVED F. VALVES AT TEES AND CROSSES, WHERE REQUIRED, SHALL BE ANCHORED DIRECTLY

TO THE FITTING USING CLOW (OR EQUAL) MECHANICAL JOINT ANCHORING FITTINGS, OR OTHER APPROVED RESTRAINING SYSTEM.

A. TYPE I BACKFILL IN ACCORDANCE WITH ANSI/AWWA C600-87 AS ILLUSTRATED IN THE STANDARD DETAIL SHALL BE USED UNLESS THE MAIN IS BEING LAID UNDER PAVEMENT OR WITHIN RIGHT-OF-WAY.

B. IF SOIL CONDITIONS ARE ENCOUNTERED WHICH REQUIRE REMOVAL OF UNSUITABLE MATERIAL BELOW THE DEPTH OF THE STANDARD BEDDING, THE MATERIAL REMOVED SHALL BE REPLACED WITH GRANULAR MATERIAL OF THE GRADATION APPROVED BY ILLINOIS-AMERICAN.

TESTING AND DISINFECTION

A. ALL NEWLY LAID WATER MAIN SHALL BE SUBJECTED TO HYDROSTATIC PRESSURE TEST EQUAL TO 200 PSI FOR A PERIOD OF AT LEAST TWO HOURS. THE PRESSURE SHALL BE MAINTAINED AT 200 PSI FOR THE DURATION OF THE TEST. EACH SECTION OF THE MAIN TO BE TESTED, AS DETERMINED BY ILLINOIS-AMERICAN, SHALL BE SLOWLY FILLED WITH WATER TO THE SPECIFIED TEST PRESSURE UTILIZING A TEST PUMP CONNECTED TO THE MAIN IN A SATISFACTORY MANNER. THE TEST PUMP, PIPE CONNECTION AND ALL NECESSARY APPARATUS, INCLUDING GAUGES AND THE METERS, SHALL BE FURNISHED BY THE CONTRACTOR.

B. BEFORE APPLYING THE SPECIFIED TEST PRESSURE, ALL AIR SHALL BE EXPELLED FROM THE MAIN UTILIZING FIRE HYDRANTS OR PRESSURE TAPS, IF NECESSARY, INSTALLED AT POINTS OF HIGHEST ELEVATION ALONG THE WATER MAIN INSTALLATION. C. CONNECTION TO ILLINOIS-AMERICAN'S WATER SYSTEM WILL NOT BE PERMITTED UNLESS THE INSTALLATION HAS BEEN CONSTRUCTED IN ACCORDANCE WITH APPROVED PLANS AND SPECIFICATIONS AND HAS BEEN SATISFACTORILY PRESSURE TESTED IN THE PRESENCE OF AN ILLINOIS-AMERICAN DESIGNATED REPRESENTATIVE. DURING THE TEST, THE ENTIRE LENGTH OF MAIN BEING TESTED, ALONG WITH ALL APPURTENANCES, WILL BE CAREFULLY INSPECTED BY AN ILLINOIS-AMERICAN REPRESENTATIVE.

D. ANY CRACKED OR DEFECTIVE PIPES, FITTINGS, VALVES OR HYDRANTS DISCOVERED AS A RESULT OF THIS PRESSURE TEST SHALL BE REMOVED AND REPLACED BY THE CONTRACTOR AT HIS EXPENSE WITH SOUND, NEW MATERIAL AND RETESTED UNTIL SATISFACTORY TO AN ILLINOIS-AMERICAN REPRESENTATIVE. WHEN PRESSURE TESTING AGAINST AN EXISTING WATER MAIN VALVE AND SHOULD THE VALVE BE FOUND TO BE LEAKING OR FAIL DURING THE PRESSURE TEST, THE CONTRACTOR SHALL PROVIDE AND INSTALL A NEW VALVE AT THE LOCATION OF THE DEFECTIVE VALVE.

2. LEAKAGE TEST

IN CONJUNCTION WITH THE PRESSURE TEST, A LEAKAGE TEST SHALL BE CONDUCTED TO DETERMINE THE QUANTITY OF WATER LOST BY LEAKAGE UNDER THE SPECIFIED TEST PRESSURE. THE ALLOWABLE LEAKAGE IN GALLONS PER HOUR PER PIPELINE SHALL NOT BE GREATER THAN THAT DETERMINED BY THE FORMULA:

L = ALLOWABLE LEAKAGE IN GALLONS PER HOUR

N = NUMBER OF JOINTS FOR LENGTH OF PIPELINE TESTED D = NOMINAL DIAMETER OF THE PIPE IN INCHES

P = AVERAGE TEST PRESSURE DURING THE LEAKAGE TEST IN POUNDS PER SQUARE INCH

THE TEST WILL BE CONDUCTED AT AN AVERAGE PRESSURE OF NOT LESS THAN 200 PSI AT THE HIGH POINT OF THE MAIN AND FOR A PERIOD OF NOT LESS THAN TWO HOURS.

3. DISINFECTION OF WATER

A. THE SECTION OF MAIN TO BE DISINFECTED SHALL FIRST BE FLUSHED TO REMOVE ANY SOLIDS OR CONTAMINATED MATERIAL THAT MAY HAVE BECOME LODGED IN THE MAIN. ALL FLUSHING IS TO BE DONE UNDER CONTINUOUS SUPERVISION OF AN ILLINOIS-AMERICAN REPRESENTATIVE.

B. NO VALVES OR FIRE HYDRANTS OR OTHER APPURTENANCES ARE TO BE PURGED OR FLUSHED UNLESS AN ILLINOIS-AMERICAN REPRESENTATIVE IS PRESENT. ILLINOIS-AMERICAN MUST BE PROVIDED WITH A MINIMUM OF 48 HOURS ADVANCE NOTICE (630/739-8849 TOM CHINSKE) SO THAT INSPECTION BY AN ILLINOIS-AMERICAN REPRESENTATIVE CAN BE SCHEDULED.

C. ALL CHLORINATION, FLUSHING, AND TESTING IS TO BE DONE IN STRICT ACCORD WITH "STANDARD SPECIFICATIONS FOR WATER & SEWER MAIN CONSTRUCTION IN ILLINIOS", DIVISION IV, SECTION 41-2.14. ALL NEW MAINS SHALL BE CHLORINATED SO THAT THE INITIAL CHLORINE RESIDUAL OF NOT LESS THAN 25 MG/L AND THAT A CHLORINE RESIDUAL OF NOT LESS THAN 10 MG/L REMAINS IN THE WATER AFTER STANDING 24 HOURS IN THE PIPE. WATERMAIN DISINFECTION IS PER AWWA STANDARD C651. ALL CHLORINE CONCENTRATIONS LISTED ARE FREE CHLORINE. WATER TEST SAMPLES ARE TO BE COLLECTED ON TWO CONSECUTIVE DAYS AFTER CHLORINATION AND FINAL FLUSHING. THE FIRST SAMPLE IS TO BE COLLECTED 24 HOURS AFTER THE FINAL FLUSHING. CHLORINE SHALL BE APPLIED IN LIQUID OR GAS FORM.

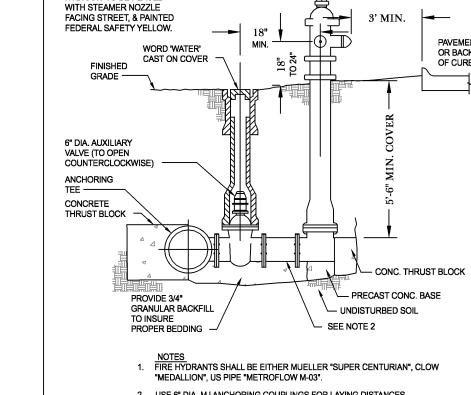
OPERATION OF WATER SYSTEM

THE OPERATION OF MAIN VALVES AND FIRE HYDRANTS ON THE WATER SYSTEM IN SERVICE OFTEN RESULTS IN DISTURBANCE OF THE NATURAL SEDIMENTS AND MINERAL DEPOSITS IN MAINS, CAUSING PROBLEMS FOR ILLINOIS-AMERICAN'S CUSTOMERS. ILLINOIS-AMERICAN HAS A RESPONSIBILITY TO PROVIDE ITS CUSTOMERS THE HIGHEST LEVEL OF SERVICE POSSIBLE. THEREFORE, ILLINOIS-AMERICAN HAS ADOPTED A STRICT POLICY THAT NO ONE, OTHER THAN AN EMPLOYEE OF ILLINOIS-AMERICAN UNLESS EXPRESSLY AUTHORIZED, IS TO OPERATE ANY VALVE, FIRE HYDRANT, OR OTHER APPURTENANCE OF WATER SYSTEM THAT IS IN SERVICE OR WHICH WILL AFFECT THE SYSTEM THAT IS IN SERVICE. THIS OPERATION IS TO BE PERFORMED BY AN EMPLOYEE OF ILLINOIS-AMERICAN OR UNDER HIS DIRECT SUPERVISION.

ILLINOIS-AMERICAN MUST BE PROVIDED WITH A MINIMUM OF 48 HOURS ADVANCE NOTICE (630/739-8831) SO THAT THE FILLING/FLUSHING OPERATIONS CAN BE SCHEDULED.

ILLINOIS-AMERICAN WATER COMPANY STANDARD

HYDRANT TO BE PLACED



2. USE 6" DIA. MJ ANCHORING COUPLINGS FOR LAYING DISTANCES 12" TO 18". FOR GREATER DISTANCES USE CLASS 52 DUCTILE IRON PIPE WITH 'MEGALUG' (AS MANUFACTURED BY EBAA IRON SALES, INC.) RETAINER GLANDS. 3. CONCRETE BASE AND THRUST BLOCK SHALL BE SET SO AS TO

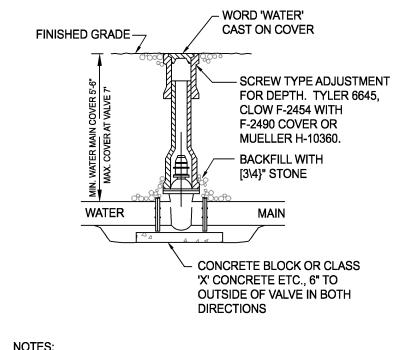
5. AUXILIARY VALVE SHALL BE RESILIENT WEDGE AS MANUFACTURED BY U.S. PIPE, CLOW OR MUELLER. 6. HYDRANT TO BE PLACED WITH STEAMER NOZZLE FACING STREET, AND PAINTED FEDERAL SAFETY YELLOW.

NOT BLOCK OR OBSTRUCT THE HYDRANT DRAIN.

4. MAXIMUM COVER AT VALVE SHALL BE 7 FEET.

ILLINOIS-AMERICAN WATER COMPANY STANDARD

FIRE HYDRANT



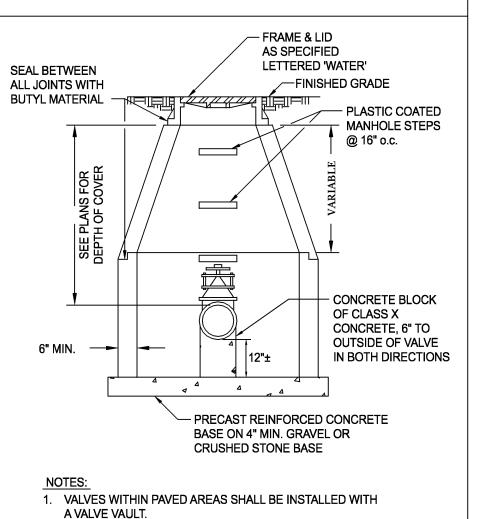
1. RESILIENT WEDGE GATE VALVE-U.S. PIPE, CLOW OR MUELLER 2. VALVE BOX SHALL BE USED FOR WATER MAIN SIZE 6". 8". 10" AND 12" ONLY.

3. BACKFILL THE AREA AROUND THE VALVE BOX WITH [3\4\]"

4. VALVES WITHIN 5' OF PAVED AREAS SHALL BE INSTALLED WITH A VALVE

VALVE BOX INSTALLATION

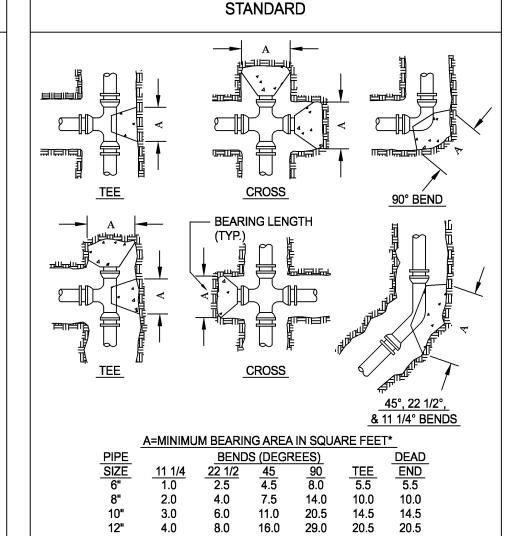
ILLINOIS-AMERICAN WATER COMPANY **STANDARD**



2. VALVE VAULT DIA. SHALL BE 4' FOR 6", 8" AND 10"

VALVES, AND 5' DIA. FOR VALVES GREATED THAN 10".

VALVE VAULT DETAIL

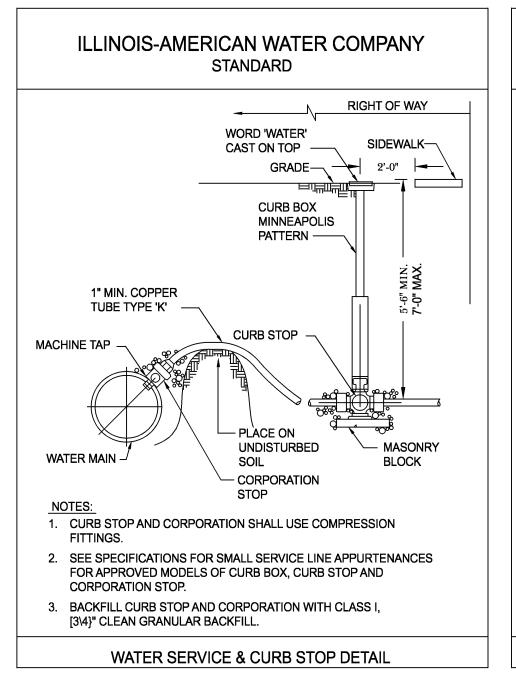


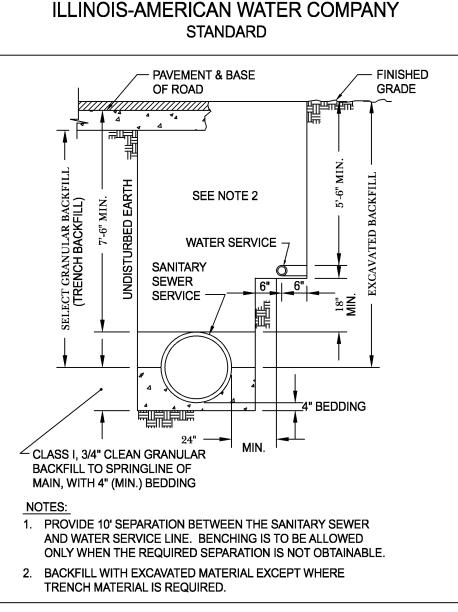
* BEARING AREAS ARE BASED ON SOIL HAVING AN ALLOWED SAFE

REVISED FOR SOILS WITH A LOWER BEARING CAPACITY

LATERAL BEARING OF 1 TON PER SQUARE FOOT. AREAS MUST BE

THRUST BLOCK DETAIL



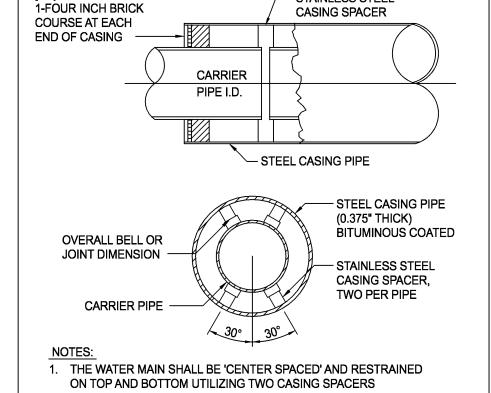


BUILDING SERVICES SEPARATION

ILLINOIS-AMERICAN WATER COMPANY STANDARD

- STAINLESS STEEL

[1\2}" GROUT OVER



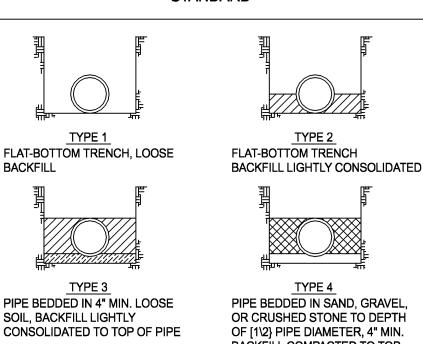
EQUALLY SPACED PER LENGTH OF PIPE. 2. CASING SPACERS ARE TO BE CASCADE MFG. BRAND OR

APPROVED EQUAL. 3. CASING IS TO BE SEALED AT BOTH ENDS WITH A MASONARY CAP AND MADE WATER-TIGHT.

UTILIZING U.S. PIPE FIELD LOK GASKETS OR APPROVED EQUAL PIPE CASING DETAIL FOR WATER MAINS

4. WATER MAIN JOINTS WITHIN THE CASING SHALL BE RESTRAINED

ILLINOIS-AMERICAN WATER COMPANY STANDARD



BACKFILL COMPACTED TO TOP OF PIPE, (APPROX. 80% STANDARD PROCTOR, AASHO T-99)

1. FOR 30" AND LARGER PIPE. CONSIDERATION SHOULD BE GIVEN PIPE BEDDED IN COMPACTED 2. "FLAT BOTTOM" IS DEFINED AS **GRANULAR MATERIAL TO CENTER** UNDISTURBED EARTH. LINE OF PIPE, COMPACTED 3. "LOOSE SOIL" IS DEFINED AS NATIVE **GRANULAR OR SELECT MATERIAL** SOIL EXCAVATED FROM THE TRENCH FREE OF ROCKS, FOREIGN MATERIALS, TO TOP OF PIPE, (APPROX. 90% AND FROZEN EARTH. STANDARD PROCTOR, AASHO T-99)

LAYING CONDITIONS FOR DUCTILE IRON PIPE

Base File C.5.dgn heet File ssue Date: JUNE 18, 2012

Improvem

Company

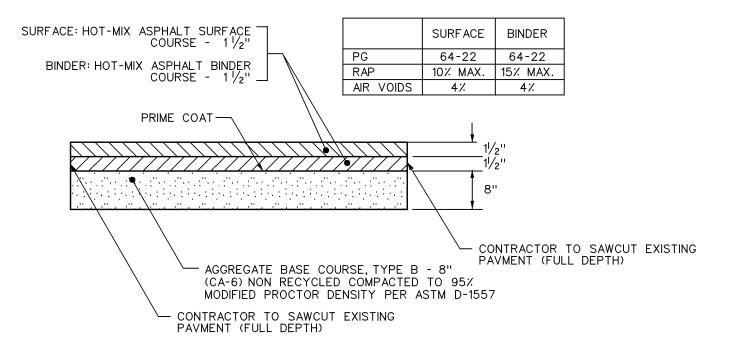
Water

American

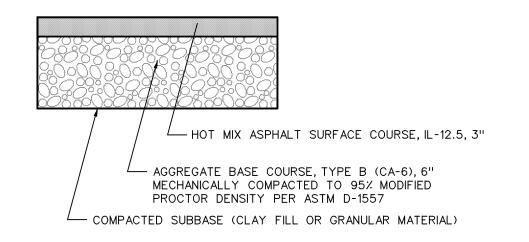
Illinois

IAW003 Project No.: NA NOT TO SCALE Sheet Number

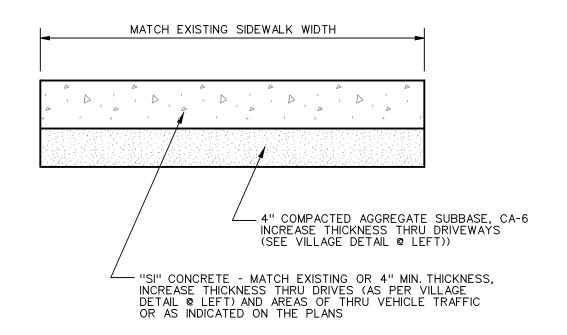
Minimum Restrained Len	ghts	(in feet	t) back f	rom bot	h sides o	of fitting	
Fitting type/nominal size		4"	6"	8"	10"	12"	16"
90 Degree Bend		17	25	32	38	45	59
45 Degree Bend		7	10	13	16	19	24
22.5 Degree Bend		3	5	6	8	9	12
11.25 Degree Bend		2	2	3	4	4	6
Dead End		39	55	73	87	103	134
Top Side Vertical Offset * (45°)		16	23	30	36	43	55
Bottom Side Vertical Offset * (45°	')	4	6	8	10	11	15
Tee Run X Branch ** 6"	' by	1	17				
Tee Run X Branch ** 8'	' by	1	5	34			
Tee Run X Branch ** 10"	by by	1	1	24	49		
Tee Run X Branch ** 12"	by by	1	1	15	41	65	
Tee Run X Branch ** 16"	by	1	1	1	26	52	95
Reducer *** 6"	by by	28					
Reducer *** 8"	' by	52	30				
Reducer *** 10"	bу	71	54	29			
Reducer *** 12"	bу	90	75	55	51		
Reducer *** 16"	by	123	113	97	94	54	
* Vertical offset with MINIMUM 10' o	f solid	l pipe bet	tween upp	er and low	er bend.		
** Tee with MINIMUM 10' solid pipe Number indicates length of branch	on bo	oth sides restrain	of run. ed.				
*** Length back from Large Eng	of Red	ducer.					



Asphalt Pavement Replacement



Driveway Replacement Detail



Concrete Sidewalk Replacement

CONCRETE SIDEWALK REPLACEMENT NOTES:

- 1. THE CONCRETE SIDEWALK SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE APPLICABLE SECTIONS OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (LATEST EDITION)
- 2. THE CONCRETE SHALL CONFORM TO ARTICLE 1020 AND HAVE A 5" SLUMP AND DEVELOP A 3,500 MINIMUM PSI COMPREHENSIVE STRENGTH AT 14 DAYS. 3. NO CHLORIDE ADDITIVE WILL BE PERMITTED IN THE CONCRETE MIXTURE.
- 4. TOOLED CONTROL JOINTS SHALL BE INSTALLED AT INTERVALS MATCHING THE SIDEWALK WIDTHS OR A 5 FOOT MAXIMUM.
- 5. FIBER EXPANSION JOINTS SHALL BE INSTALLED AT A MAXIMUM OF 50 FOOT CENTERS AND WHERE THE SIDEWALK ABUTTS EXISTING OR PROPOSED CURB, CONCRETE DRIVEWAYS OR SIDEWALKS AND AT THE END OF EACH POUR.
- 6. THE SIDEWALK SHALL HAVE A BROOMED FINISH AND BE SEALED WITH A PROTECTIVE SURFACE TREATMENT CONSISTENT TO I.D.O.T. ARTICLE 420.21.

FRAME OPENING TOP OF MASONRY PRECAST SECTIONS SHALL BE PLACED WITH TWO CONTINUOUS ROWS OF PREFORMED BITUMINOUS MASTIC MATERIAL (E-Z STICK or APPROVED EQUAL) WITH ALL INTERIOR JOINTS SEALED WITH NON-SHRINK OR HYDRAULIC GROUT AND ALL EXTERIOR JOINTS SHALL BE WRAPPED USING MAC WRAP (OR AN APPROVED EQUAL) HELD IN PLACE W/ STAINLESS STEEL BANDS, FOR PREVENTION OF WATER INFLOW. PROVIDE RESILIENT WEDGE GATE VALVE CENTERED ON THE VAULT OPENING (SIZE AS NOTED ON PLANS) OPENINGS IN THE VAULT FOR PIPES SHALL BE SEALED USING FLEXIBLE RUBBER BOOTS INTERGAL WITH VAULT WALL WATERMAIN DIAMETER 5'-0'' 6'-0'' 10" OR GREATER AGGREGATE CUSHION SOLID CONCRETE SUPPORT BLOCK - PRECAST REINF. CONC. BASE INTEGRAL WITH P.R.C. WALL SECTION CAST-IN-PLACE
"SI" CONCRETE BASE CONCRETE BASE AGGREGATE CUSHION AGGREGATE CUSHION IN ADDITION TO THE REQUIREMENTS OF ART. 602.15

OF THE STANDARD SPECIFICATIONS, THE CONTRACT UNIT PRICE FOR VALVE VAULT SHALL INCLUDE THE AGGREGATE CUSHION, WHEN REQUIRED, AND FURNISHING AND COMPACTING THE SPECIFIED BACKFILL.

A MAXIMUM OF 2 CONCRETE ADJUSTMENT RINGS WITH A TOTAL MAXIMUM HEIGHT OF 12" WILL BE ALLOWED.

ALL SECTIONS, ADJUSTING RINGS, AND CASTINGS SHALL BE INSTALLED WITH BUTYL ROPE JOINT MATERIAL SEAL

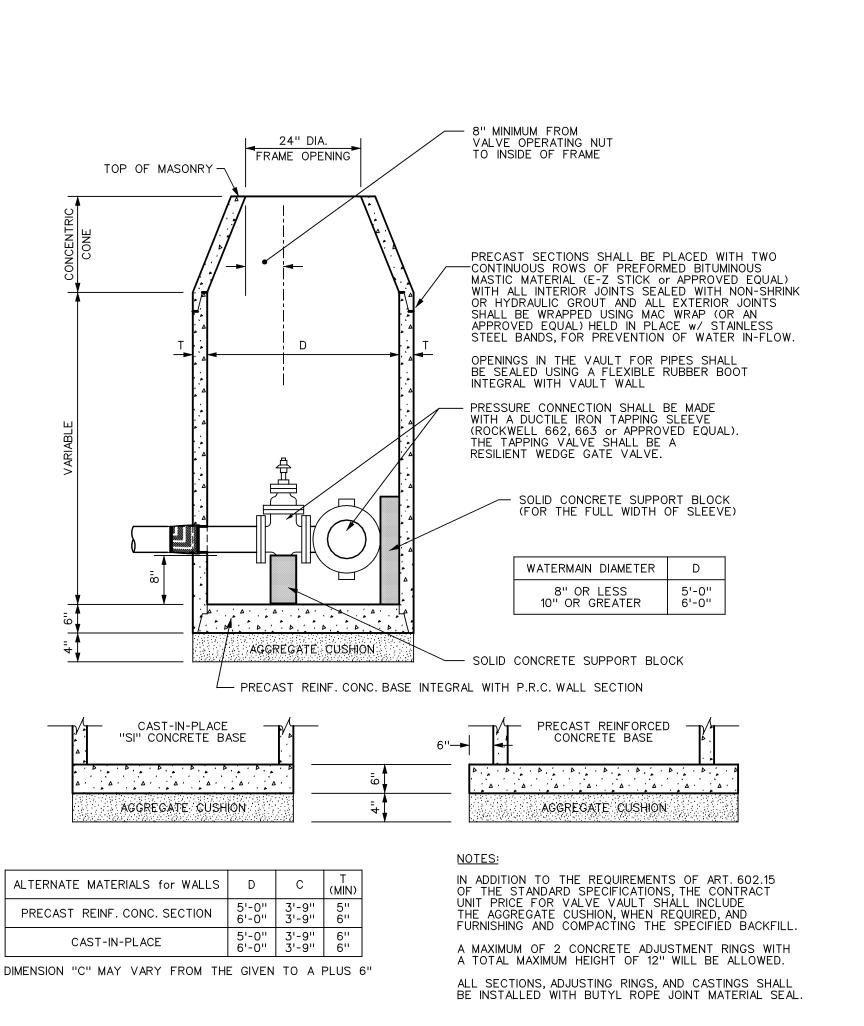
City of St. Charles Valve and Vault Detail

ALTERNATE MATERIALS for WALLS

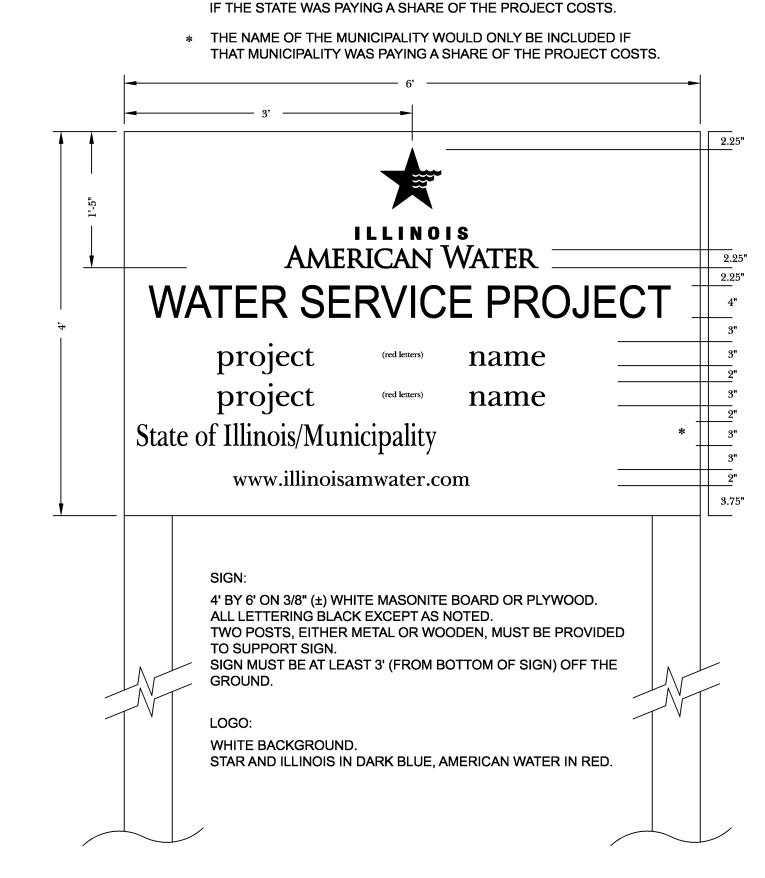
PRECAST REINF. CONC. SECTION

CAST-IN-PLACE

DIMENSION "C" MAY VARY FROM THE GIVEN TO A PLUS 6"

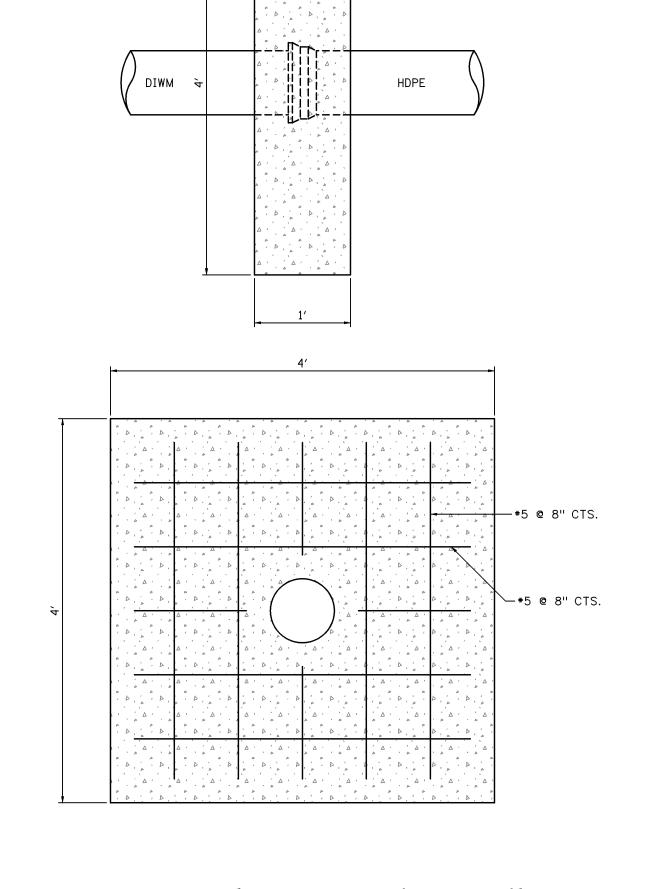


City of St. Charles Pressure Connection Valve and Vault Detail



* THE STATE OF ILLINOIS WOULD ONLY BE ADDED TO THE SIGN

Sign Detail

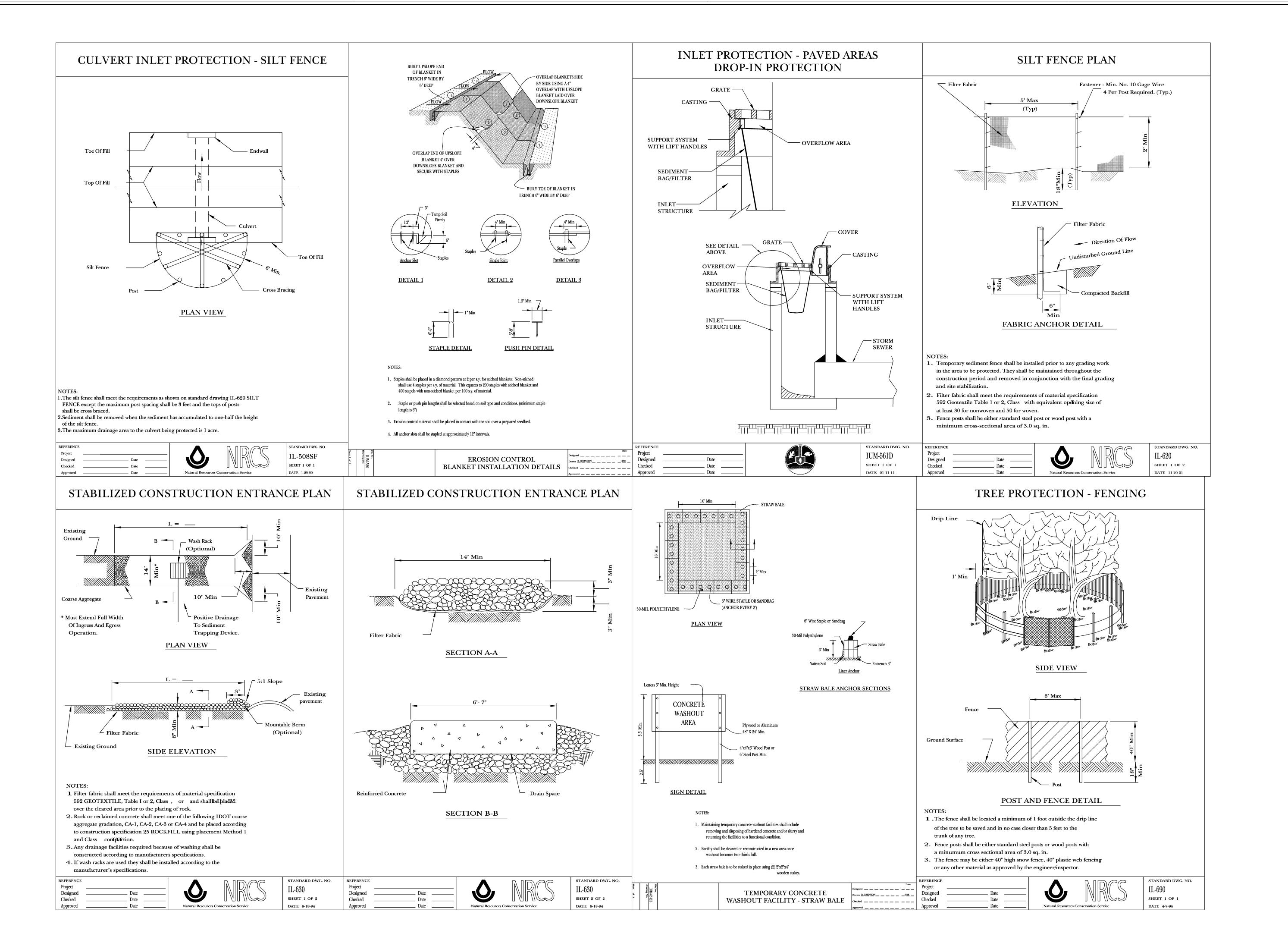


Concrete Thrust Restraint Detail

Illinois American Water Company r Grange Water System Improvements

IAW003 Project No.: Base File: C.6.dgn

Sheet File: Issue Date: JUNE 18, 2012 NOT TO SCALE Sheet Number



PROJECT STAFF ISSUE

PROJECT STAFF ISSUE

PROJECT STAFF ISSUE

PROJECT STAFF ISSUE

PROJECT WANK BUSHNELL, P.E.

ENGINEER:

BUGINEER:

CALATIES

ENGINEER:

PROJECT STAFF ISSUE

PROJECT WANK BUSHNELL, P.E.

ENGINEER:

PROJECT WANK BUSHNELL, P.E.

ENGINEER:

ANKE BUSHNELL, P.E.

ENGINEER:

TECHNICIAN:

MIKE DAVISON

TECHNICIAN:

ANKE BUSHNELL, P.E.

ENGINEER:

TECHNICIAN:

ANKE BUSHNELL, P.E.

ENGINEER:

ANKE BUSHNELL, P.E.

ENGINEER:

TECHNICIAN:

ANKE BUSHNELL, P.E.

ENGINEER:

ANKE BAVIEW OF ST. CHARLES REVIEW COMMENTS

Engineers and Surveyors

St. Charles, II. 60175

Ph.: 630-587-0470 • Fax: 630-587-0475

Illinois American Water Company River Grange Water System Improvements Soil Erosion & Sediment Control Details

Project No.: IAW003

Base File: NA

Sheet File: C.7.dgn

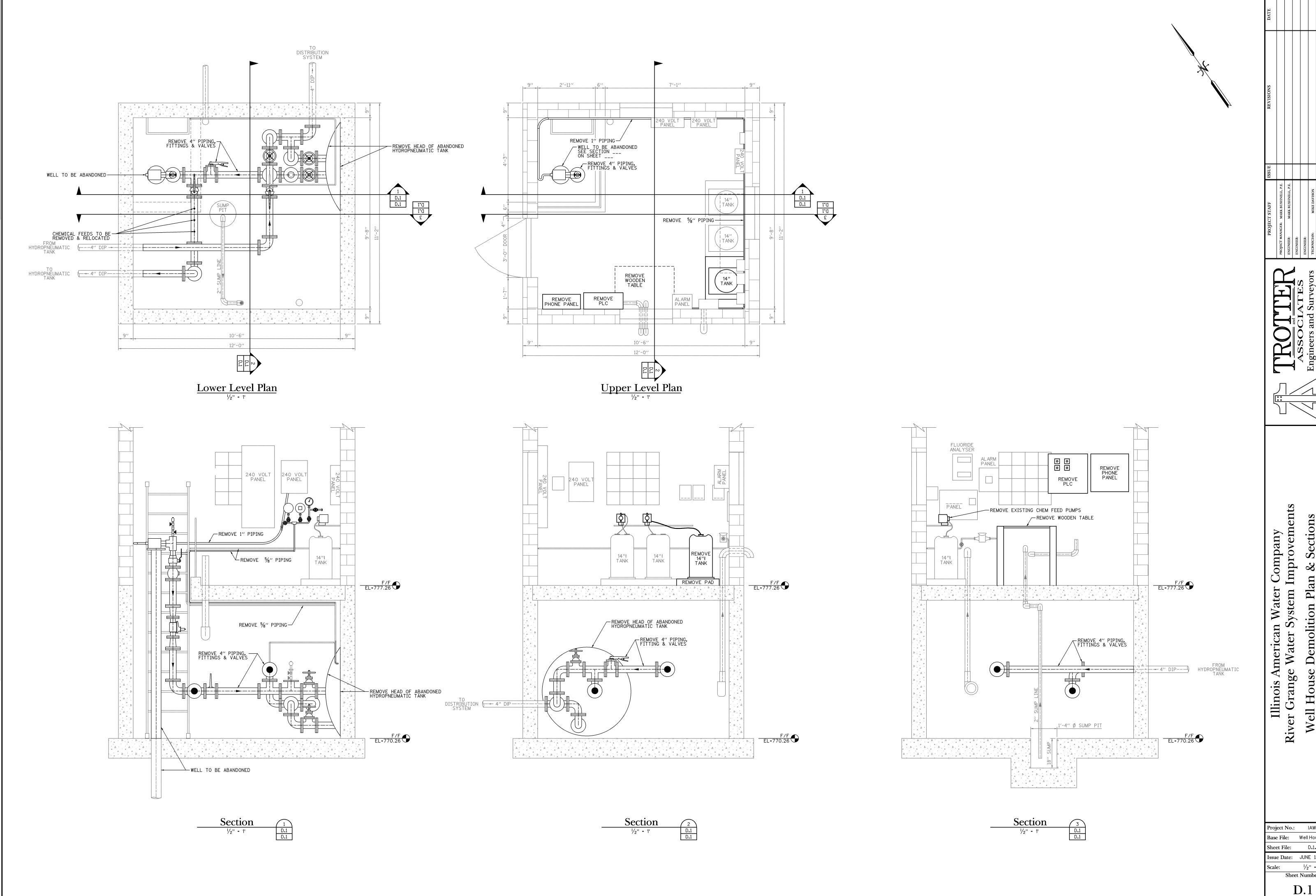
Sheet File: C.7.dgn

Issue Date: JUNE 18, 2012

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Sheet Number

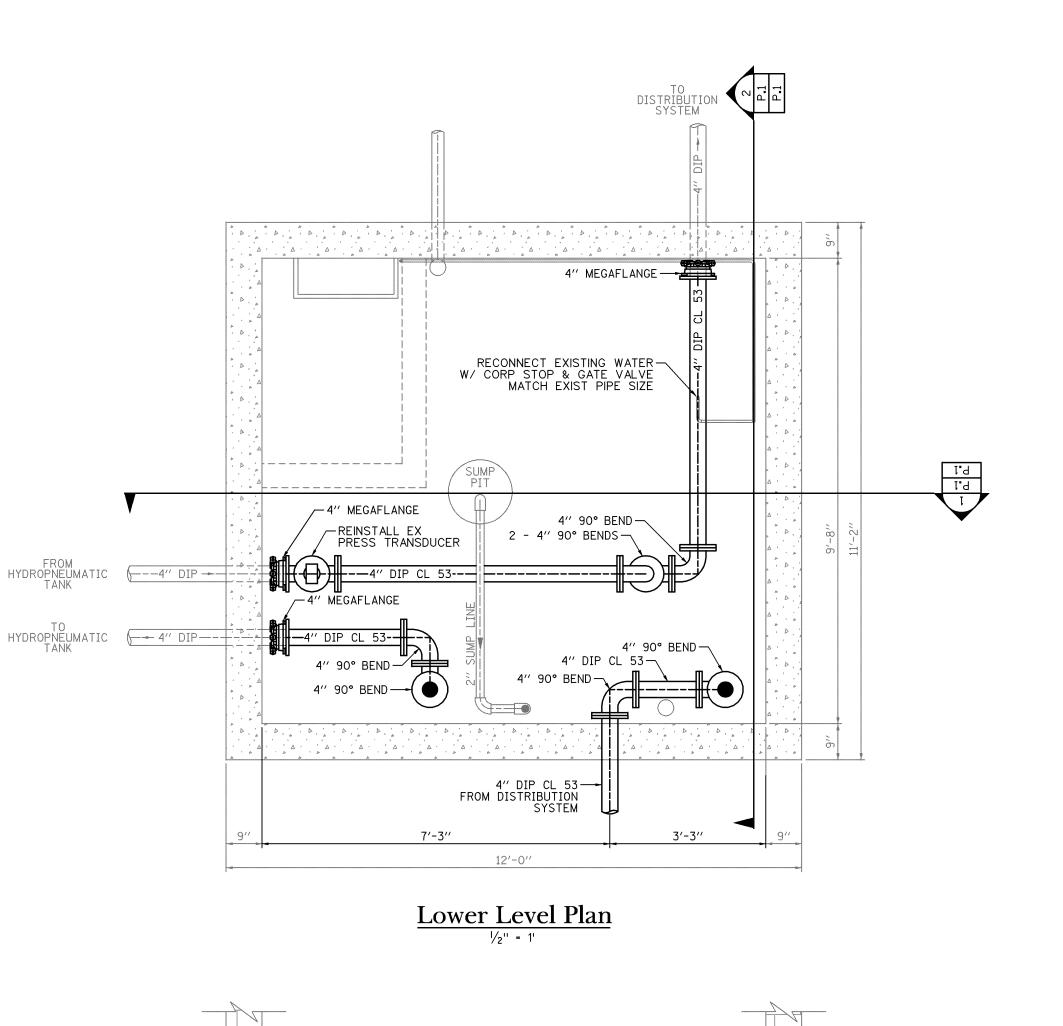
C.7

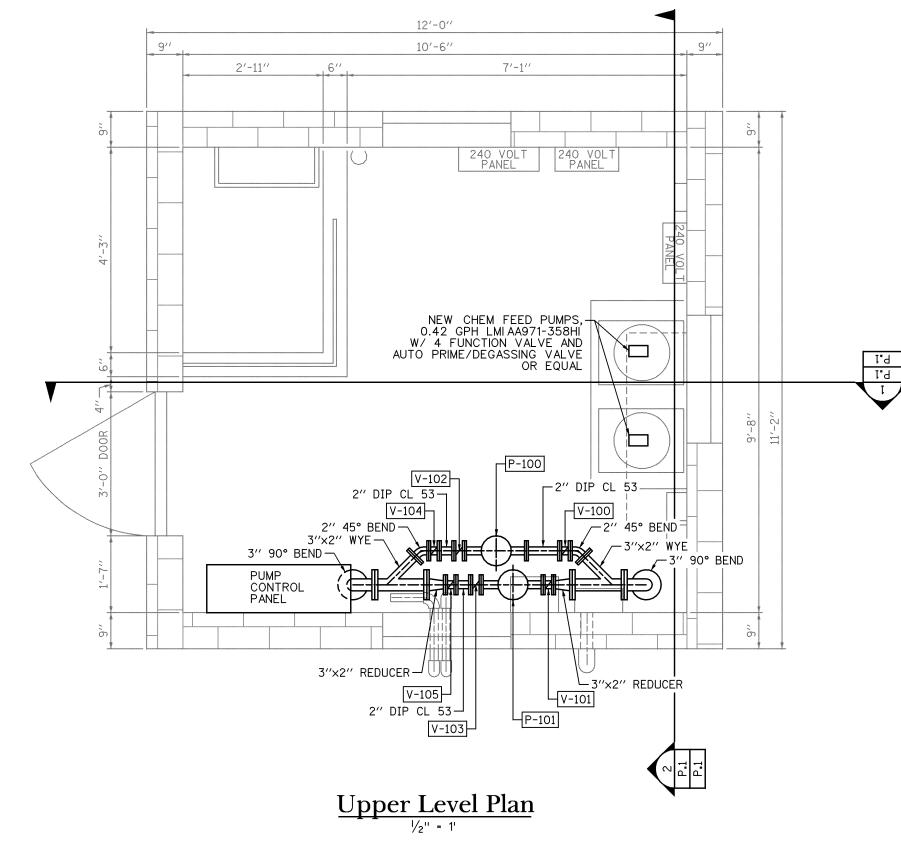


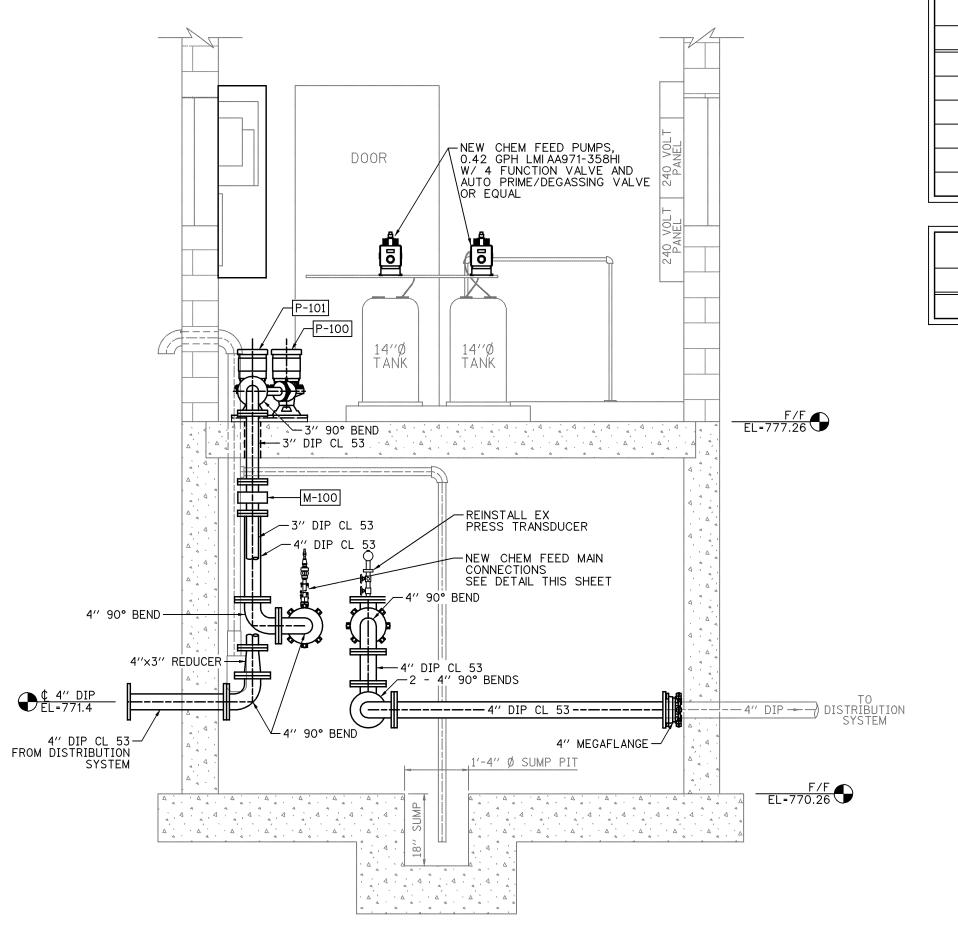
Charles Township, Kane County, Illinois

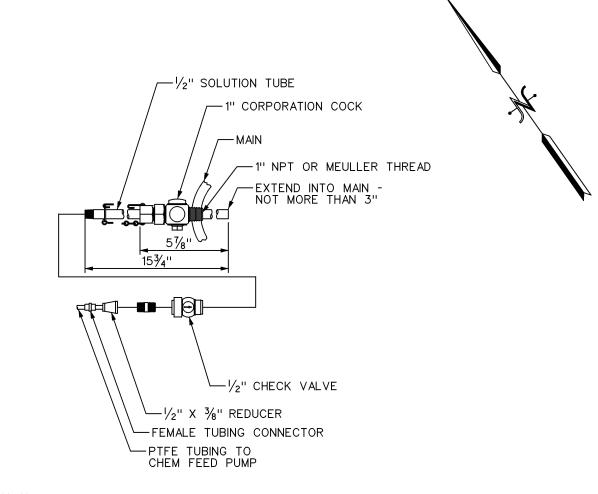
Well House Demolition Plan & Sections

1AW003 Base File: Well House.DGN D.1.dgn Issue Date: JUNE 18, 2012 1/2" = 1'-0" Sheet Number









NOTES:
1. PIPING AND VALVES SHALL BE CONSTRUCTED FROM PVC.
2. VALVES SHALL HAVE PTFE SEATS.
3. ALL COMPONENTS SHALL BE RATED AT 250 PSIOR HIGHER.
4. ROUTE PTFE TUBING TO NEW CHEM FEED PUMPS AND CONNECT

Chemical Feed Main Connection

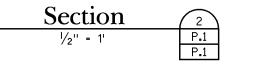
Pump Schedule						
NO.	SIZE	DESCRIPTION	SPECIFICATION SECTION			
P-100	80 GPM	VERTICAL IN-LINE CENTRIFUGAL BOOSTER	SECTION 11350			
P-101	80 GPM	VERTICAL IN-LINE CENTRIFUGAL BOOSTER	SECTION 11350			

Valve Schedule						
NO.	SIZE	DESCRIPTION	SPECIFICATION SECTION			
V-100	2"	BUTTERFLY VALVE	SECTION 15110			
V-101	2"	BUTTERFLY VALVE	SECTION 15110			
V-102	2"	GLOBE SILENT CHECK VALVE	SECTION 15110			
V-103	2"	GLOBE SILENT CHECK VALVE	SECTION 15110			
V-104	2"	BUTTERFLY VALVE	SECTION 15110			
V-105	2"	BUTTERFLY VALVE	SECTION 15110			

Meter Schedule						
NO.	SIZE	DESCRIPTION	SPECIFICATION SECTION			
M-100	3''	ENDRESS & HAUSER PROMAG 53	N/A			

			And the second	
	FLOURIDE			
	ANALYSER ALARM PANEL PANEL P-101	PUMP CONTROL PANEL		
	P-100			
	V-100			
	DUCER	~_V-104] /─-3''×2'' REDUCER		
2" 45° 3"×2" V	BEND \ \\ \\	2" 45° BEND -3"×2" WYE	1883282 1	
3" 90° BEND		3" 90° BEND		
				F/F 77.26
			EL=77	7.20
	3″ DIP CL 53	3" DIP CL 53	, a	
	M-100	4"x3" REDUCER	CONN	CHEM FEED MAIN
NEW MAG METER	DI I # I	4" DIP CL 53		DETAIL THIS SHEET
3" DIAMETER, COMPACT 4-20 mA OUTPUT ENDRESS & HAUSER			REINST	ALL EXIST PRESSURE ANSDUCER ASSEMBLY
PROMAG 53			, a.	
A	9 ————————————————————————————————————		4" DI	FROM HYDROPNEUMATIC
4"×3" REDUCER —	₽	4" 90° BEND /	LI-143	TANK
	4" DIP CL 53	4" MEGAFLANGE	, A	
, , , , , , , , , , , , , , , , , , ,				
, , , , , , , , , , , , , , , , , , ,	4" 90° BEND		β	
1	4" 90° BEND	1'-4" Ø SUMP PIT		
	Δ΄ ΄Δ΄ ΄Δ΄ Δ΄ Δ΄ ΄Δ΄ ΄Δ΄ ΄Δ΄ ΄Δ΄ ΄Δ΄ ΄Δ	QW	~ ,	F/F _=770.26
		NOW A CONTRACT OF THE PROPERTY	in in in in	

Section	
1/2" = 1'	P . 1
· -	P . 1



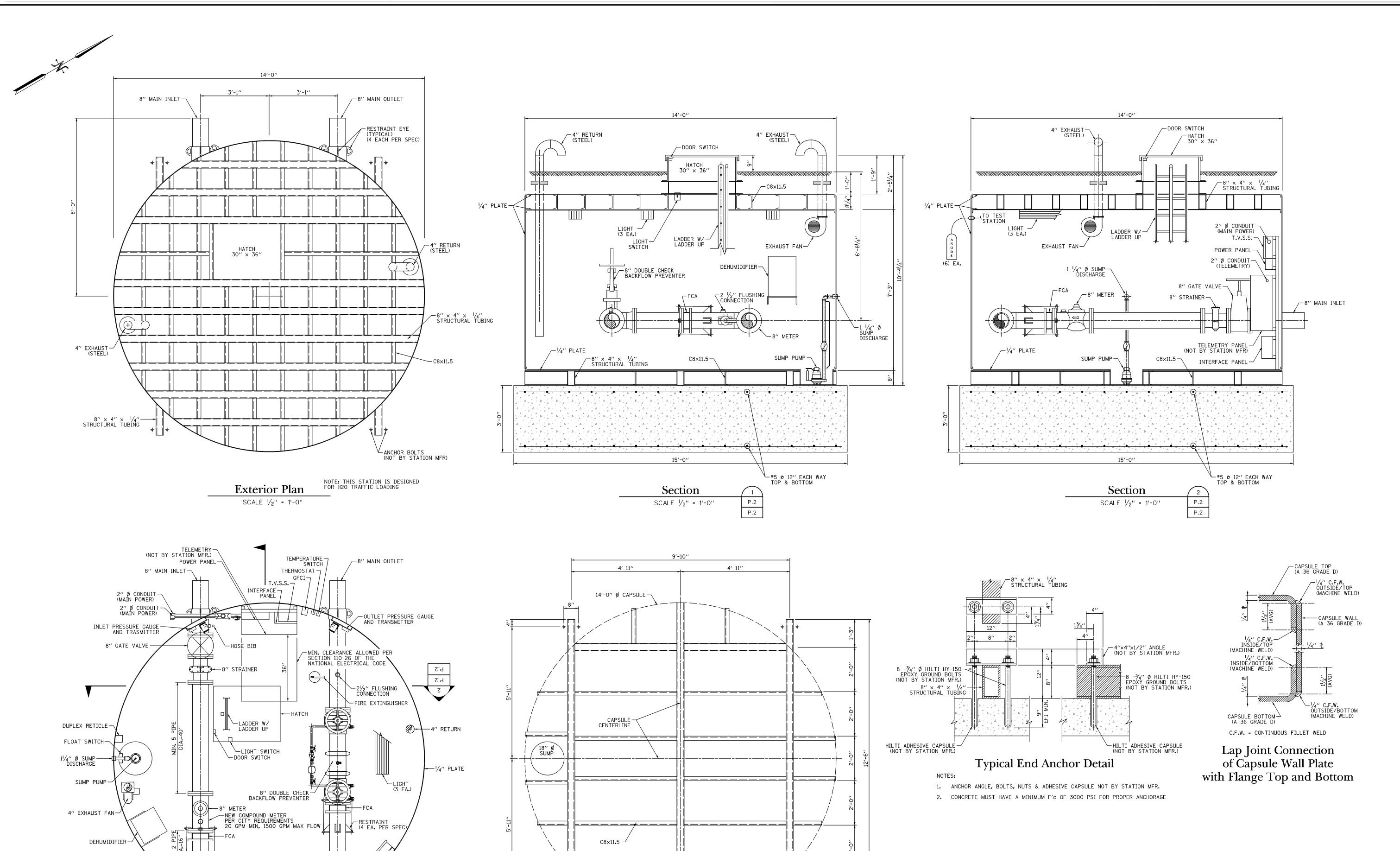
Illinois American Water Company River Grange Water System Improvements Well House Piping Plan

& Sections

Project No.: IAW003 Well House.DGN Sheet File: P.1.dgn Issue Date: JUNE 18, 2012

P.1

1/2" = 1'-0" Sheet Number



C8×11.5 -

 $8'' \times 4'' \times \frac{1}{4}''$ STRUCTURAL TUBING

ANCHOR BOLTS— (NOT BY STATION MFR)

Skid Plan

SCALE $\frac{1}{2}$ " = 1'-0"

2" Ø CONDUIT — ORION TRANSMITTER

ER 420 DC-

RESTRAINT -(4 EA. PER SPEC)

21/2" FLUSHING —/ CONNECTION

ANODE TEST STATION—

∽RESTRAINT (4 EA. PER SPEC)

Plan

SCALE $\frac{1}{2}$ " = 1'-0"

NOTE: THIS STATION IS DESIGNED FOR H20 TRAFFIC LOADING

General Notes

CONTRACTOR'S NOTE: SCHEDULE 40 STEEL PIPE

MAIN INLET: 8.6250" O.D. MAIN OUTLET: 8.6250" O.D.

- 1. ALL PIPING AND EQUIPMENT WILL BE ADEQUATELY SUPPORTED AND BRACED
- 2. CAPSULE & STRUCTURAL STEEL: ASTM A-36
- 3. STRUCTURAL TUBING: A500, GRADE B
- 4. STRUCTURE WILL BE FULLY WELDED TO OTHER STRUCTURE AND PLATE

Contractor's Notes

- SUMP PUMP AND DEHUMIDIFIER MUST BE POWERED UP AND TURNED ON IMMEDIATELY AFTER THIS STATION IS SET IN PLACE.
- 2. DO NOT SHIM STATION. IT IS INTENDED THAT THE MAIN FLOOR MEMBERS BE IN CONTINUOUS CONTACT WITH THE CONCRETE PAD.
- 3. PLEASE NOTE ORIENTATION OF THE INLET AND OUTLET PIPES AND ELECTRICAL CONDUIT LOCATIONS IN REFERENCE TO THE JOBSITE LAYOUT.
- 4. EFI CANNOT BE HELD RESPONSIBLE UNLESS CONFIRMATION OF THESE ORIENTATIONS IS RECEIVED THROUGH THE APPROVED SUBMITTALS.
- THE STATION IS NOT DESIGNED TO ACCEPT PIPELINE FORCES. THRUST BLOCKING MUST BE PROVIDED EXTERNAL TO THE STATION.

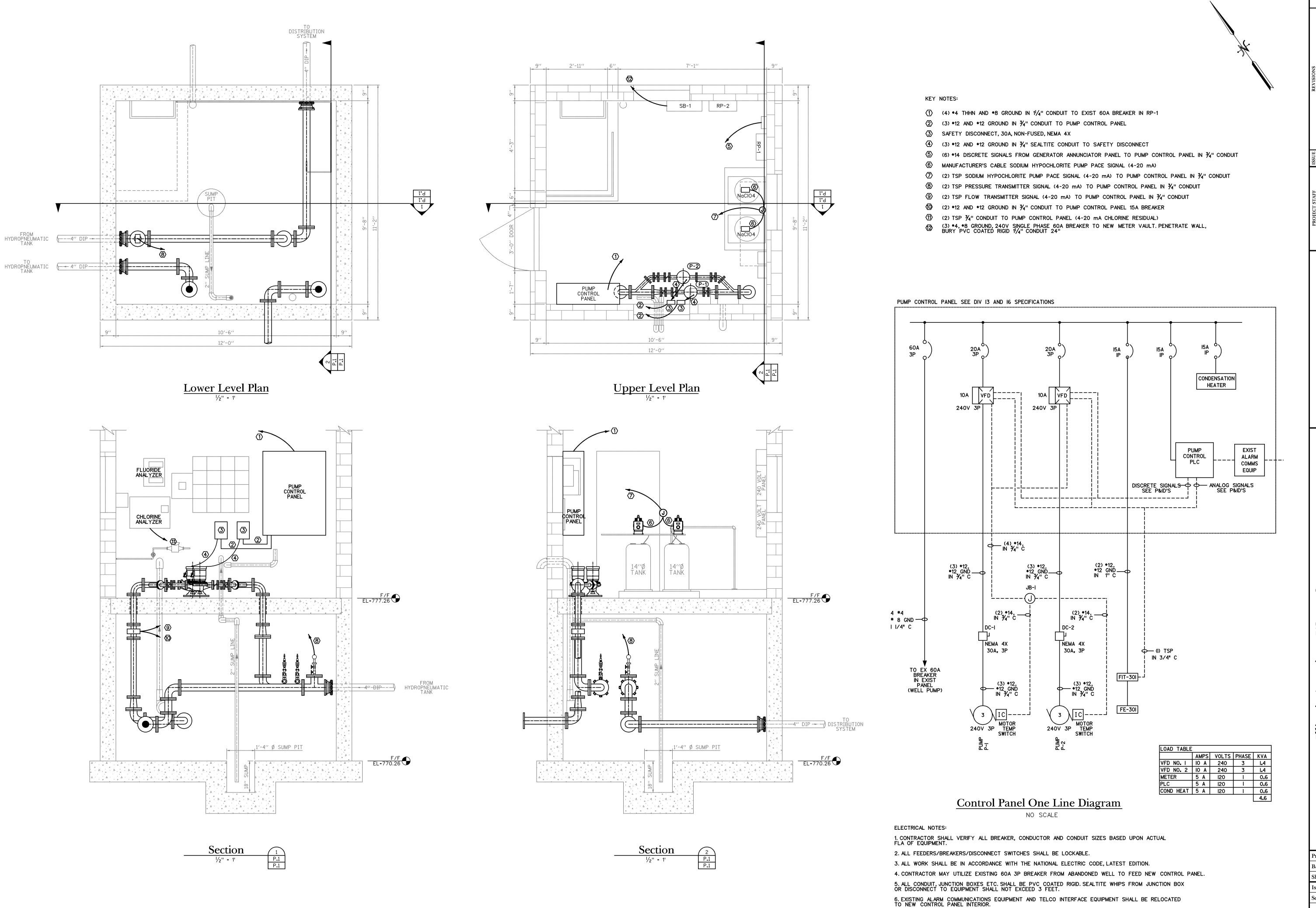
IAW003 Project No.: Base File: P.2.dgn Sheet File: Issue Date: JUNE 18, 2012

Company

Illinois American

[|]/₂'' = 1'-0'' Sheet Number

STATION TO BE FURNISHED BY OTHERS & INSTALLED BY CONTRACTOR



PROJECT MANAGER: MARK BUSHNELL, P.E.

ENGINEER:

AND CALATTES

ENGINEER:

ENGINEER:

ENGINEER:

AUW201 Wasco Road, Suite D
St. Charles, 11. 60175

St. Charles, 11. 60175

St. Charles, 12. 630-587-0475

1. PER CITY OF ST. CHARLES REVI

Illinois American Water Company er Grange Water System Improvements Well House Electric Plan & Sections

Project No.: IAW003

Base File: Well House.DGN

Sheet File: E.1.dgn

Issue Date: JUNE 18, 2012

Scale: '/2" = 1'-0"

Sheet Number
E.1

7. EXISTING SERVICE IS 240V 3 PHASE 4 WIRE (HIGH LEG)

