



CITY COUNCIL ACTION REPORT

Date: December 15, 2009

TO: John Szerlag, City Manager

FROM: Mark Miller, Assistant City Manager/Economic Development Services
John Lamerato, Assistant City Manager/Finance
Timothy Richnak, Public Works Director

SUBJECT: Scheduled Contract Reopener with Detroit Water and Sewerage (Year 2)

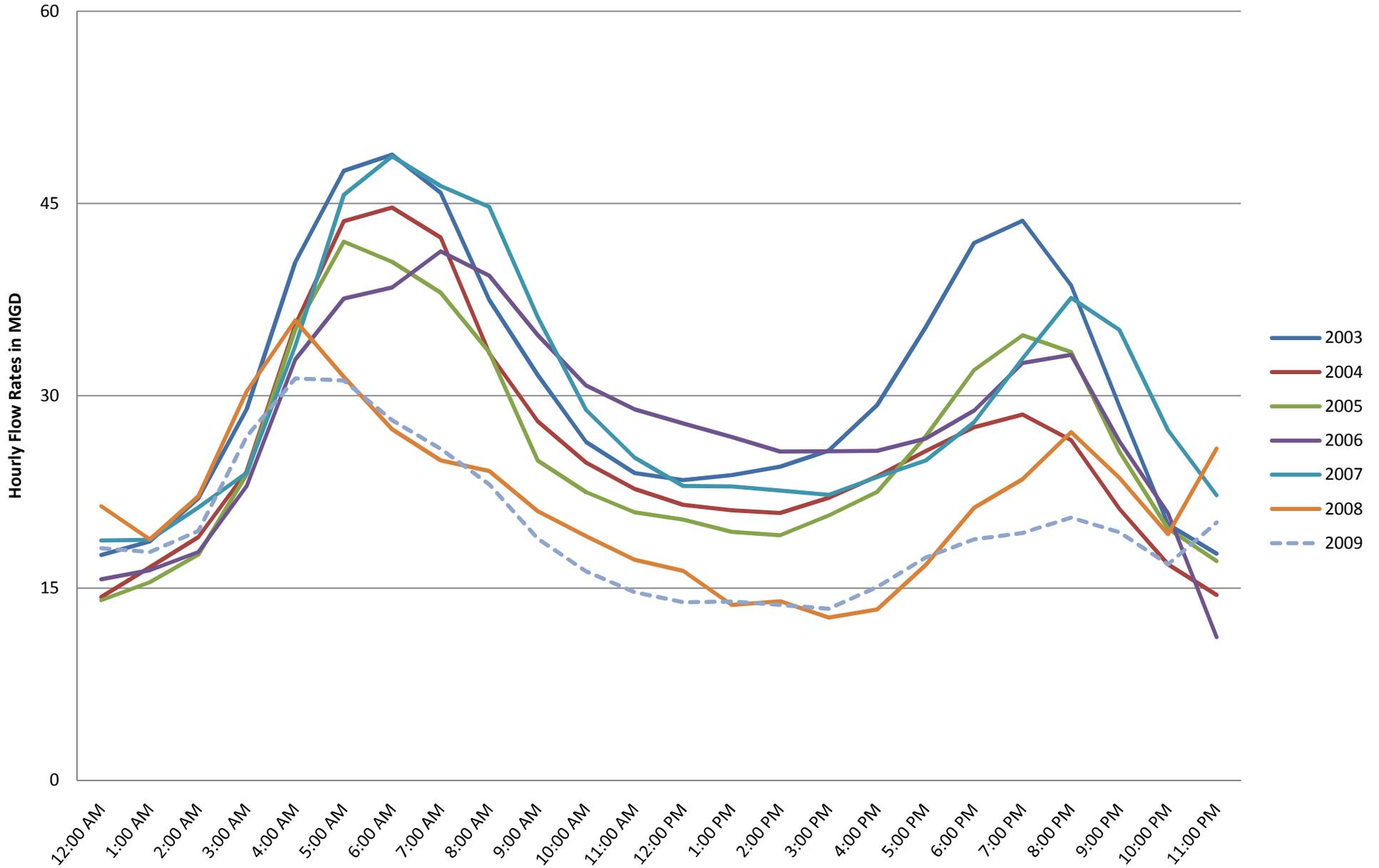
Background:

- The current water contract includes the right of a re-opener of the DWSD commitment and adjusting factors used to develop the water rates charged to the City of Troy.
- City management met with DWSD and provided them with revised peak hour, max day, annual water usage factors and pressures. These adjustments are the primary purpose for the reopener and both parties are in agreement with the proposed changes.
- This contract had been developed to minimize volatility and create equity among wholesale water customers. Each of the customers are subject to the same model contract terms, with the one exception being that some communities will qualify for reduced fees on the schedules, based on limitations to the peak water usage.
- Troy's adoption of an ordinance that limits outdoor peak hour water use, and particularly the regulation of underground sprinkler systems, has reduced Troy's annual water cost by approximately \$500,000. After two years of successfully shifting our peaks the city will benefit by lowering our peak day and max day factors even further. The City of Troy was the only contract community to successfully shift its peak in both of the first two years of the contract and is considered the model city for shifting peak usage by DWSD (see attached graph).
- Troy has already invested in community education, extensive capital improvement programs, and an internal policy that restricts peak hour watering on City operated irrigation systems.
- In this reopener some minor clarifications of contract language has occurred and has been reviewed by our City Attorney, Lori Grigg Bluhm.
- The proposed DWSD contract amendment NO. 1 to the Water Service Contract between the City of Detroit and City of Troy is attached, and is submitted for Council's review and consideration.

Reviewed and approved as to legality:

Lori Grigg Bluhm, City Attorney

D.W.S.D. MAXIMUM HOURLY FLOW RATES IN MILLIONS OF GALLONS PER DAY (MGD) in Troy



| Contract Section | Proposed Change | Explanation for Change | Proposed By |
|------------------|--|--|-------------|
| 3.01 | <p><u>Early Termination Costs.</u> In addition to any other remedies provided for by law or by the terms of this Contract, Customer shall be liable to the Board for the payment of any costs incurred by the Board related to providing water to Customer in the event Customer terminates this Contract before the conclusion of a Contract Term (“Early Termination Costs”), <u>unless Customer terminates this Contract for cause in accordance with Article 10;</u> provided, however, that payment of such Early Termination Costs by Customer shall not entitle Customer to receive water service from the Board.</p> | <p>No early termination costs to be assessed if customer terminates contract for cause. If contract termination is because of DWSD “fault”, then customer should not be required to pay the early termination costs.</p> | Rockwood |
| 3.05 (New) | <p><u>Customer Annexation or Consolidation. In the event the territory of Customer is annexed or consolidated with another Michigan municipal corporation and if said municipal corporation is a current customer of the Board, then such an annexation or consolidation shall not be construed as an early termination of this Contract and this Contract shall be voided upon the approval of a new or amended water service contract with the annexing or consolidating municipal corporation.</u></p> | <p>Not considered an early termination if customer is annexed or consolidated with an existing DWSD water customer.</p> | Hazel Park |

| Contract Section | Proposed Change | Explanation for Change | Proposed By |
|------------------|---|---|-------------|
| 5.01 | <p><u>Pressure Range.</u> The Board shall use its best efforts to deliver water at the Water Distribution Points at a pressure range (“Pressure Range”) adequate to meet the reasonable requirements of Customer. For purposes of evaluating this effort, water pressure shall be determined by reviewing the average hourly pressure measured from top-of-the-hour to top-of-the-hour (e.g. 7:00 a.m. to 8:00 a.m.). The Pressure Range to be provided by the Board to Customer’s Water Distribution Points is specified in Exhibit B. The location at which the water pressure will be measured shall be specified in Exhibit A and identified as point “P”. A Pressure Range will not be established for water meters that are not located on a DWSD transmission main, <u>or which are located on a DWSD transmission main and are downstream of and subject to the flow demands of a water meter for another Board customer.</u></p> | <p>Clarify definition of a “deduct” meter to mirror true situation, which is that a meter may be located on a DWSD transmission main but because it is downstream of the subject to the demands of another DWSD customer pressure cannot be guaranteed, e.g. Westland meters WL-01, WL-13, WL-12 via Wayne meter WY-01.</p> | DWSD |
| 5.10 | <p><u>Customer Costs for Corrective Action Plan.</u> If at any time Customer is required under the terms of this Article 5 to develop and implement a corrective action plan, <u>Customer shall be so informed in writing and</u> Customer will pay all costs related to <u>the corrective action plan.</u></p> | <p>Customer to be notified in writing if they are to bear corrective action costs.</p> | Hazel Park |

| Contract Section | Proposed Change | Explanation for Change | Proposed By |
|------------------|---|--|------------------|
| 18.02 | <p>Relocation of Facilities. Should future construction by an <u>city, township, village</u> or county require relocation of a water transmission main, Meter Facility or other Board facility, the cost incurred by the Board for such relocation, if not reimbursed by the <u>entity</u> requiring the relocation, will be charged in future rates as a common-to-all cost to all System users.</p> <p><i>Otherwise, the cost incurred by the Board for construction requiring the relocation of a water transmission main, Meter Facility or other Board facility that is proposed, required, undertaken, conducted or facilitated by Customer will be charged to Customer.</i></p> | <p>All relocation costs to be paid as a “common-to-all” cost to all customers, if DWSD not reimbursed by the entity requiring the relocation. Creates equitable treatment for all types of municipal corporations.</p> | Farmington Hills |
| 18.03 | <p><u>Easements.</u> Subject to the provisions of Section 18.01 herein and to the extent that Customer has jurisdiction, the Board shall be granted temporary and permanent easements, and shall be permitted to use the streets, alleys and highways within Customer’s legal jurisdiction for the purpose of constructing, operation and maintaining the System, <u>including the relocation of water transmission mains, Meter Facilities or other Board facilities.</u> This consent by Customer is given in compliance with Article 7, Sec. 29 of the Michigan Constitution of 1963, provided that the Board shall provide Customer with a written explanation of the type of easement required and the duration thereof.</p> | <p>To accommodate proposed change to 18.02, clarify that easements shall be granted for constructing, operating, and maintaining the System, including the relocation of mains, etc.</p> | DWSD |

| Contract Section | Proposed Change | Explanation for Change | Proposed By |
|------------------|---|---|---------------------------------------|
| 23.05 | <p>The rights and remedies set forth in this Contract are not exclusive and are in addition to any of the rights or remedies provided by law or equity. This Contract and all actions arising under it shall be governed by, subject to, and construed according to the law of the State of Michigan.</p> <p><u><i>Each Party agrees, consents and submits to the exclusive personal jurisdiction of any state or federal court of competent jurisdiction in Wayne County, Michigan, for any action arising out of this Contract. Each Party also agrees that is shall not commence any action against the other Party because of any matter whatsoever arising out of or relating to the validity, construction, interpretation and enforcement of this Contract in any state or federal court of competent jurisdiction other than one in Wayne County, Michigan.</i></u></p> | <p>Delte stipulation to Wayne County jurisdiction and venue. Parties to rely upon MCL 600.1615 to establish proper venue. Stipulation to personal jurisdiction not required with governmental entities.</p> | <p>Warren, Hazel Park, and others</p> |

**AMENDMENT NO. 1 TO WATER SERVICE CONTRACT
BETWEEN
CITY OF DETROIT
AND
CITY OF TROY**

This Amendment Agreement No. 1 ("Amendment") is made between the City of Detroit, a municipal corporation, by its Water and Sewerage Department and Board of Water Commissioners (the "Board"), and the City of Troy, a municipal corporation ("Customer"). The Board and Customer are collectively referred to as the "Parties".

Whereas, the City of Detroit owns a public water supply system ("System") operated by the Board; and

Whereas, on June 24, 2008, the Parties entered into a Water Service Contract ("Contract") reflecting the terms and conditions governing the delivery and purchase of potable water; and

Whereas, the purpose of the Contract is to provide for the long-term service of potable water to Customer; and

Whereas, Article 15 of the Contract permits the Parties to amend the Contract by mutual agreement; and

Whereas, it is the mutual desire of the Parties to enter into this Amendment to amend the Contract as set out in detail in the following sections; and

ACCORDINGLY, THE PARTIES AGREE AS FOLLOWS:

1.01 Section 3.01 of the Contract is amended by deleting the existing language and substituting the following language in its place:

Early Termination Costs. In addition to any other remedies provided for by law or by the terms of this Contract, Customer shall be liable to the Board for the payment of any costs incurred by the Board related to providing water to Customer in the event Customer terminates this Contract before the conclusion of a Contract Term ("Early Termination Costs"), unless Customer terminates this Contract for cause in accordance with Article 10; provided, however, that payment of such Early Termination Costs by Customer shall not entitle Customer to receive water service from the Board.

2.01 A new Section 3.05 shall be added as follows:

Customer Annexation or Consolidation. In the event the territory of Customer is annexed or consolidated with another Michigan municipal corporation and if said municipal corporation is a current customer of the Board, then such an annexation or consolidation shall not be construed as an early termination of this Contract and this Contract shall be voided upon the approval of a new or amended water service contract with the annexing or consolidating municipal corporation.

- 3.01 Section 5.01 of the Contract is amended by deleting the existing language and substituting the following language in its place:

Pressure Range. The Board shall use its best efforts to deliver water at the Water Distribution Points at a pressure range ("Pressure Range") adequate to meet the reasonable requirements of Customer. For purposes of evaluating this effort, water pressure shall be determined by reviewing the average hourly pressure measured from top-of-the-hour to top-of-the-hour (e.g. 7:00 a.m. to 8:00 a.m.). The Pressure Range to be provided by the Board to Customer's Water Distribution Points is specified in Exhibit B. The location at which the water pressure will be measured shall be specified in Exhibit A and identified as point "P". A Pressure Range will not be established for water meters that are not located on a DWSD transmission main, or which are located on a DWSD transmission main and are downstream of and subject to the flow demands of a water meter for another Board customer.

- 4.01 Section 5.10 of the Contract is amended by deleting the existing language and substituting the following language in its place:

Customer Costs for Corrective Action Plan. If at any time Customer is required under the terms of this Article 5 to develop and implement a corrective action plan, Customer shall be so informed in writing and Customer will pay all costs related to the corrective action plan.

- 5.01 Section 18.02 of the Contract is amended by deleting the existing language and substituting the following language in its place:

Relocation of Facilities. Should future construction by any city, township, village, or county require relocation of a water transmission main, Meter Facility or other Board facility, the cost incurred by the Board for such relocation, if not reimbursed by the entity requiring the relocation, will be charged in future rates as a common-to-all cost to all System users.

- 6.01 Section 18.03 of the Contract is amended by deleting the existing language and substituting the following language in its place:

Easements. Subject to the provisions of Section 18.01 herein and to the extent that Customer has jurisdiction, the Board shall be granted temporary and permanent easements, and shall be permitted to use the streets, alleys and highways within Customer's legal jurisdiction for the purpose of constructing, operating and maintaining the System, including the relocation of water transmission mains, Meter Facilities or other Board facilities. This consent by Customer is given in compliance with Article 7, Sec. 29 of the Michigan Constitution of 1963, provided that the Board shall provide Customer with a written explanation of the type of easement required and the duration thereof.

7.01 Section 23.05 of the Contract is amended by deleting the existing language and substituting the following language in its place:

The rights and remedies set forth in this Contract are not exclusive and are in addition to any of the rights or remedies provided by law or equity. This Contract and all actions arising under it shall be governed by, subject to, and construed according to the law of the State of Michigan.

8.01 Exhibit A of the Contract is amended by deleting the existing document and by substituting the attached First Amended Exhibit A in its place.

9.01 Exhibit B of the Contract is amended by deleting the existing document and by substituting the attached First Amended Exhibit B in its place.

10.01 With the exception of the provisions of the Contract specifically contained in this Amendment, all other terms, conditions and covenants contained in the Contract shall remain in full force and effect and as set forth in the Contract.

11.01 This Amendment to the Contract shall be effective and binding upon the Parties when it is signed and acknowledged by the duly authorized representatives of both Parties, is approved by Customer's governing body, and is approved by the Board and the Detroit City Council.

(Signatures appear on next page)

In Witness Whereof, the City and Customer, by and through their duly authorized officers and representatives, have executed this Amendment.

City of Troy:

By: _____
Louise E. Schilling
Its: Mayor

By: _____
Tonni L. Bartholomew
Its: City Clerk

City of Detroit:

By: _____
Dave Bing
Its: Mayor

APPROVED BY
TROY CITY COUNCIL ON:

Date

APPROVED BY DETROIT
BOARD OF WATER COMMISSIONERS ON:

Date

APPROVED BY
DETROIT CITY COUNCIL ON:

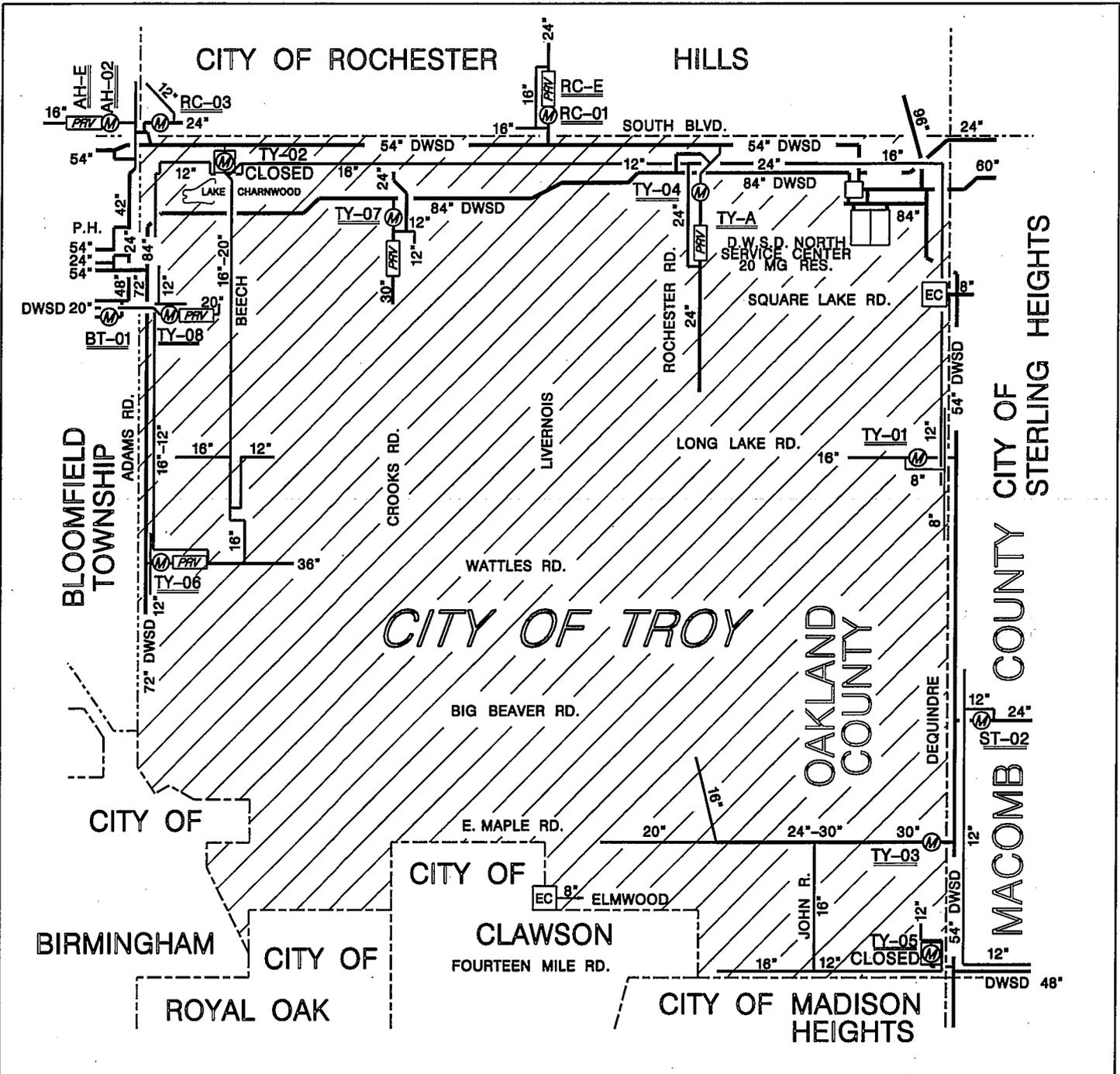
Date

FIRST AMENDED EXHIBIT A

Customer's Water Distribution Points

This Exhibit contains the following information:

1. The corporate limits of Customer;
2. The agreed upon water Service Area of Customer which (a) may or may not be entirely within the corporate limits of Customer and (b) which may or may not include the entire area within the Customer's corporate limits;
3. The specific location of the Water Distribution Points, including any Board approved emergency connections;
4. The designation of appurtenances to be maintained by Customer and those to be maintained by the Board; and
5. A list of any closed meter locations.



LEGEND

| SYMBOL | DESCRIPTION | SYMBOL | DESCRIPTION |
|--------|----------------------|---------------|------------------|
| (M) | DWSD METER PIT | [Hatched Box] | SERVICE AREA |
| (M) | COM METER PIT | [Dashed Line] | CITY OR TWP LINE |
| PRV | PRV | [Dotted Line] | CITY-TWP LINE |
| EC | EMERGENCY CONNECTION | | |

| | | | |
|---------|----------|------------------|----------------------------------|
| REVISED | DATE | EXHIBIT-A | <i>SERVICE AREA LOCATION MAP</i> |
| JT | 04/07/08 | | CITY OF TROY |
| DLE | 04/17/08 | | |

EXHIBIT A

City of Troy Emergency Connections:

Connection to Clawson (SOCWA)

8" GV&W – at the intersection of Main and Elmwood

Connection to Sterling Heights

8" GV&W – across from Beaumont Hospital at 44201 Dequindre Road

City of Troy Water Customers Outside of Corporate Limits:

3300 W. South Blvd., Rochester Hills

3061 Adams Rd., Bloomfield Twp.

6001 Adams Rd., Bloomfield Twp.

City of Troy Master Meters Not In Service:

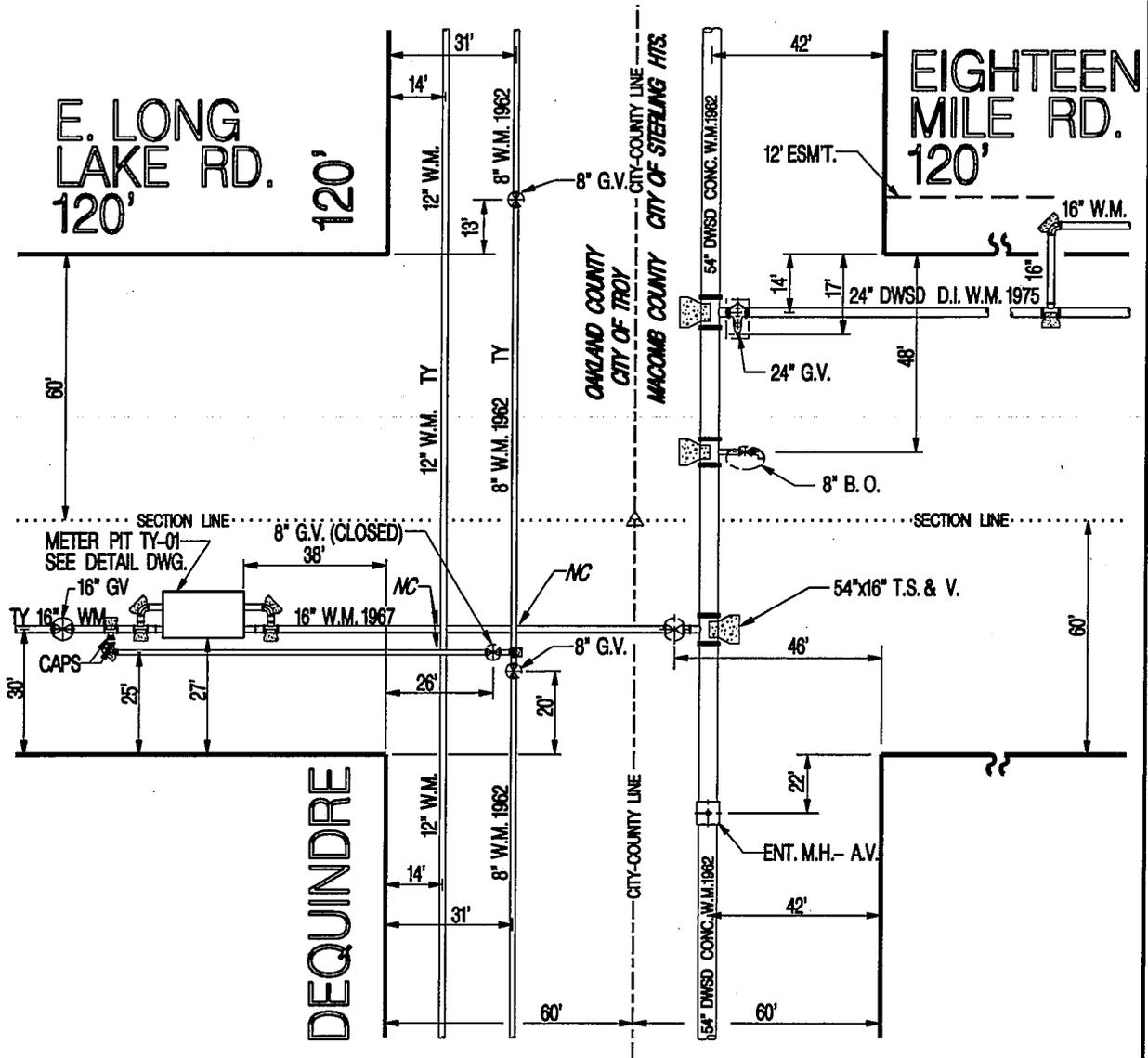
TY-02

TY-05

EXHIBIT A TY-01

DEQUINDRE & LONG LAKE RD.

CITY OF TROY



SITE PLAN
NOT TO SCALE

TY - CITY OF TROY
OWNERSHIP & MAINTENANCE

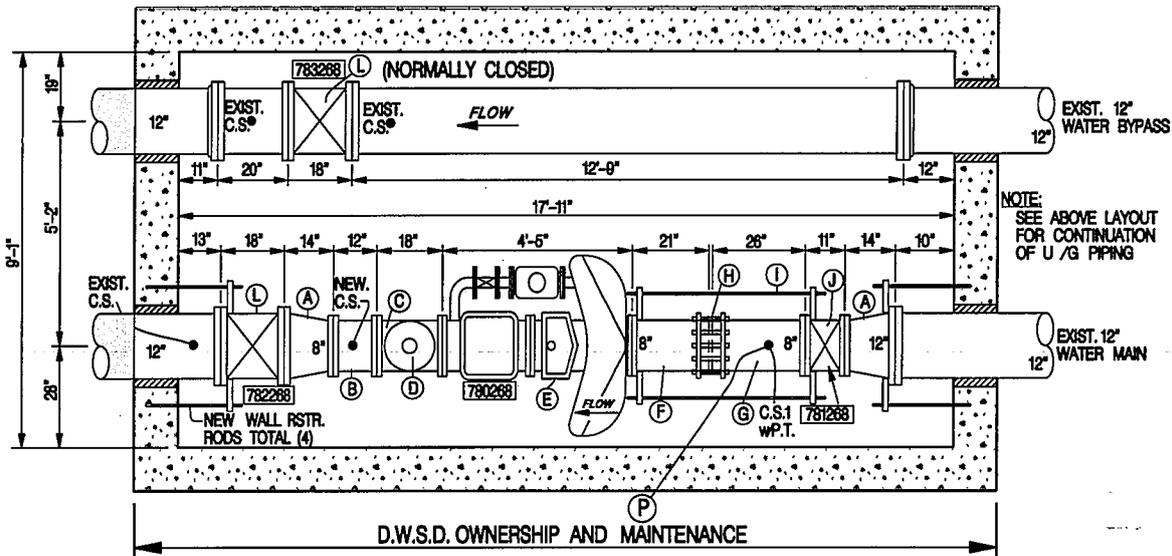
LOCATIONS SUBJECT
TO VERIFICATION IN
THE FIELD.



EXHIBIT A TY-01

DEQUINDRE & LONG LAKE RD.

CITY OF TROY



METER PIT DETAIL
NOT TO SCALE

CITY OF TROY
OWNERSHIP & MAINTENANCE

| LEGEND | | | |
|--------|------|--|--------|
| TAG | QTY. | DESCRIPTION | SIZE |
| A | 2 | 12"x8" FLGD. CONCENTRIC REDUCERS, 14" F-F | 12"x8" |
| B | 1 | 8"x1" F-F PIPE w/1" TAP, D.I. | 8" |
| C | 1 | 8"x3" FLGD. TEST TEE, D.I., 9" C-F | 8"x3" |
| D | 1 | TEST TEE ASSEMBLY w/3" COMPANION FLANGE | - |
| E | 1 | 8"x2" FLGD. FIRELINE COMPACT METER, W3500, 53" F-F | 8"x2" |
| F | 1 | 8"x1'-9" F-PE PIPE, GADR, D.I. | 8" |
| G | 1 | 8"x2'-2" F-PE PIPE, w/1" TAP, GADR, D.I. | 8" |
| H | 1 | 8" 'DRESSER STYLE' PIPE COUPLING | 8" |
| I | LOT | COUPLING RESTRAINTS: (4) 60" LONG THRD. RODS, (8) EAR PLATES, 75" DIA. | |
| J | 1 | 8" FLGD. GATE VALVE, RESILIENT SEAT, 11.5" F-F, 'A.F.C.' | 8" |
| K | 1 | 16" M.J. GATE VALVE, 'E.J.I.W.' | 16" |
| L | 2 | GATE VALVE | 12" |

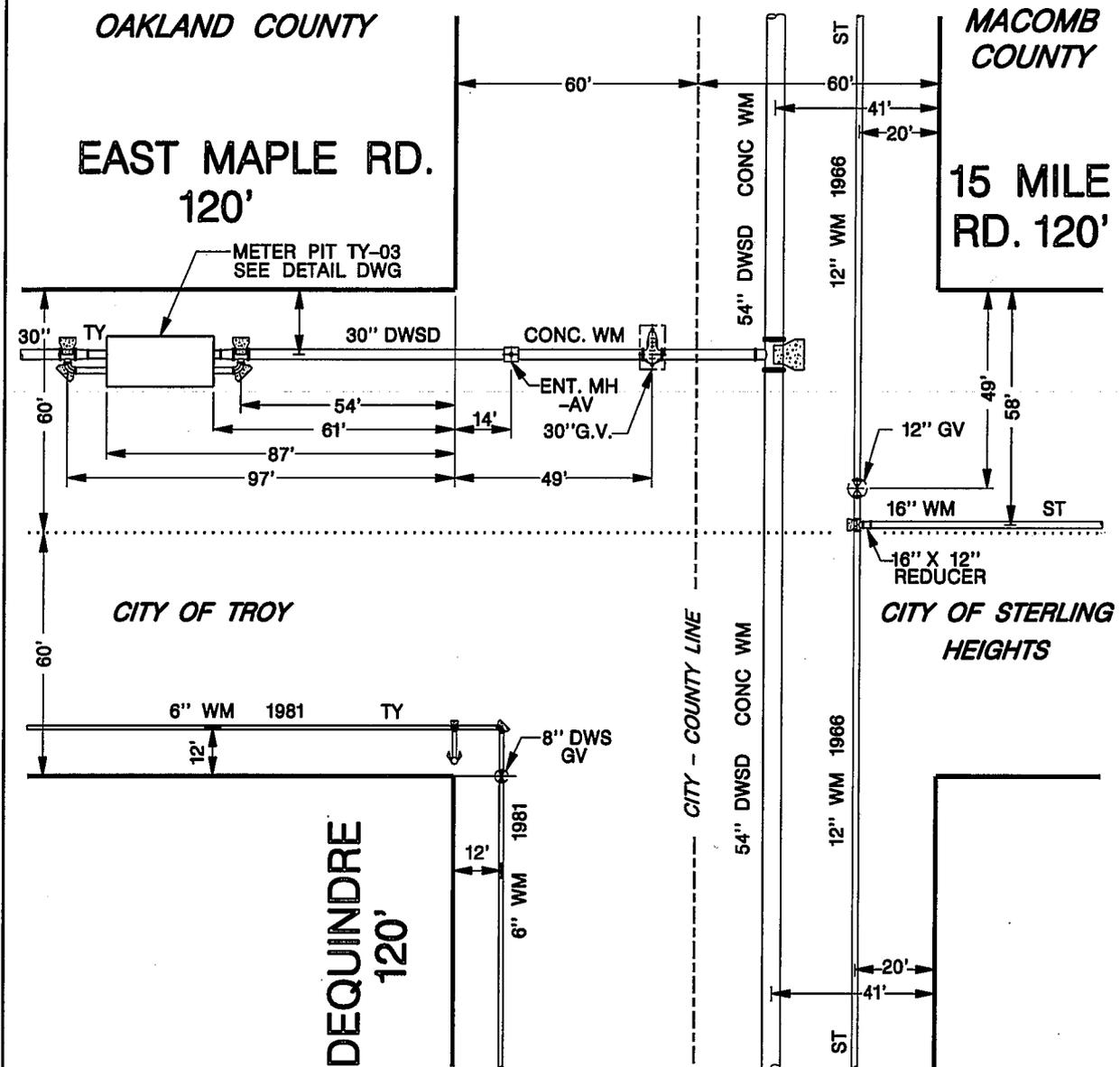
| TYPICAL PRESSURE LOSS THRU METER | |
|----------------------------------|-------------|
| METER TYPE | P.S.I. LOSS |
| VENTURI | 1 TO 2 |
| MAG | 0 |
| TURBINE | 4 - 6 |

Ⓟ - UPSTREAM PRESSURE TRANSMITTER,
D.W.S.D. OWNERSHIP & MAINTENANCE

ADDRESS _____ 40999 DEQUINDRE
 FEED TO _____ CITY OF TROY
 FEED FROM _____ 54" D.W.S.D. TRANS. MAIN
 TYPE OF METER _____ SENSUS TURBO
 SIZE OF METER _____ 8"x2"
 METER NUMBER _____ 8")1413582 & 2")1565827
 DATE METER SET _____ 5 / 4 / 2001
 METER PIT CONST & SIZE _____ 18'-0" x 9'-1" REINF. CONCRETE
 SECTION MAP _____ 20-Y
 REMARKS _____ NONE
 GATE BOOK _____ N-1073
 DRAWN BY _____ NICHOLS 2 / 14 / 08



EXHIBIT A TY-03 EAST MAPLE ROAD AND DEQUINDRE CITY OF TROY



TY - CITY OF TROY
OWNERSHIP & MAINTENANCE

ST - CITY OF STERLING HEIGHTS
OWNERSHIP & MAINTENANCE

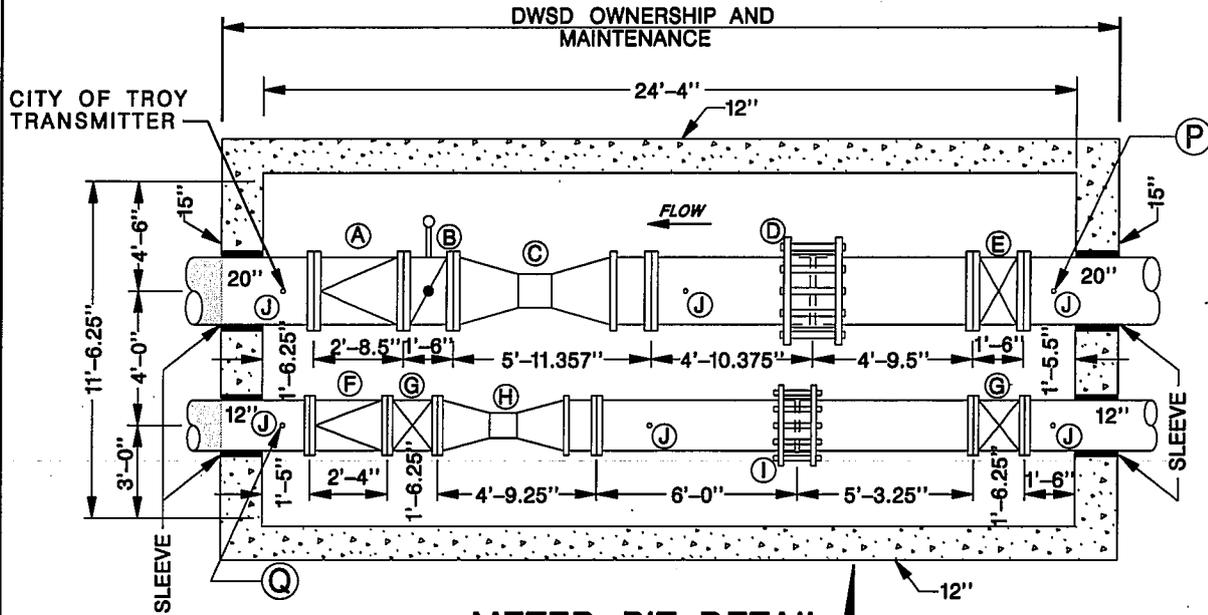
SITE PLAN
NOT TO SCALE



LOCATIONS SUBJECT
TO VERIFICATION IN
THE FIELD.



EXHIBIT A TY-03 EAST MAPLE ROAD AND DEQUINDRE CITY OF TROY



METER PIT DETAIL

CITY OF TROY OWNERSHIP & MAINTENANCE

NOT TO SCALE

LEGEND

| TAG | QTY. | DESCRIPTION | SIZE |
|-----|------|-------------------------------------|---------------|
| A | 1 | CHECK VALVE | 20" |
| B | 1 | BUTTERFLY VALVE /HYDRAULIC OPERATOR | 20" |
| C | 1 | B.I.F VENTURI TUBE | 20" X 14.046" |
| D | 1 | DRESSER COUPLING | 20" |
| E | 1 | GATE VALVE (CCW) | 20" |
| F | 1 | CHECK VALVE | 12" |
| G | 2 | GATE VALVE | 12" |
| H | 1 | B.I.F VENTURI TUBE | 12" X 6.773" |
| I | 1 | DRESSER COUPLING | 12" |
| J | 6 | CORP | 1" |

| TYPICAL PRESSURE LOSS THRU METER | |
|----------------------------------|-------------|
| METER TYPE | P.S.I. LOSS |
| VENTURI | 1 TO 2 |
| MAG | 0 |
| TURBINE | 4 - 6 |

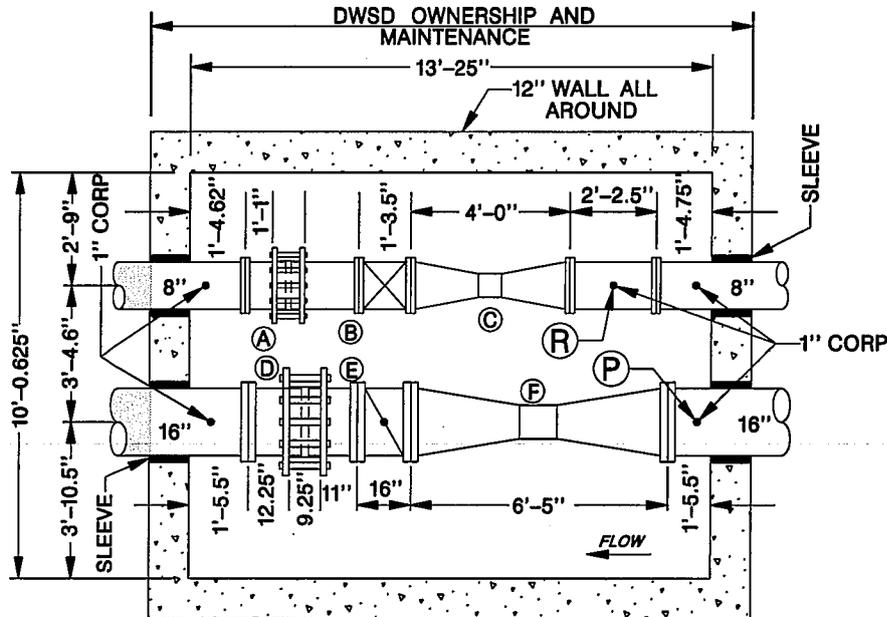
(P)-UPSTREAM PRESSURE TRANSMITTER, D.W.S.D. OWNERSHIP & MAINTENANCE

(Q)-DOWNSTREAM PRESSURE TRANSMITTER, D.W.S.D. OWNERSHIP & MAINTENANCE

ADDRESS _____ 2971 E. MAPLE
 FEED TO _____ CITY OF TROY
 FEED FROM _____ 54" DWSD TRANS. MAIN
 TYPE OF METER _____ B.I.F. VENTURI TUBES (2)
 SIZE OF METER _____ 20" X 14.046" 12" 6.773"
 METER NUMBER _____ 12"-55424-1 20"-55424-2
 DATE METER SET _____ 12/7/1966
 METER PIT CONST & SIZE _____ 24'-4" x 11'-6.25" ID REINF. CONC
 SECTION MAP _____ 20-Y
 GATE BOOK _____ E-1064
 FIELD BOOK _____ 1967-MP-32-35
 DRAWN BY _____ A.D. BOLTON 2/14/08
 REMARKS _____



EXHIBIT A TY-04 ROCHESTER AND SOUTH BLVD. CITY OF TROY



CITY OF TROY
OWNERSHIP & MAINTENANCE

METER PIT DETAIL
NOT TO SCALE

| TYPICAL PRESSURE LOSS THRU METER | |
|-------------------------------------|-------------|
| METER TYPE | P.S.I. LOSS |
| VENTURI | 1 TO 2 |
| MAG | 0 |
| TURBINE | 4 - 6 |

| LEGEND | | | |
|--------|------|-------------------------------|--------------|
| TAG | QTY. | DESCRIPTION | SIZE |
| A | 1 | DRESSER COUPLING | 8" |
| B | 1 | GATE VALVE (CCW) 785271 | 8" |
| C | 1 | B.I.F. VENTURI TUBE 783271 | 8" X 3.494" |
| D | 1 | DRESSER COUPLING | 16" |
| E | 1 | B.FLY VALVE HYD. OPER. 782271 | 16" |
| F | 1 | B.I.F. VENTURI TUBE 780271 | 16" X 9.142" |

- UPSTREAM PRESSURE TRANSMITTER,
D.W.S.D. OWNERSHIP & MAINTENANCE
- OTHER PRESSURE TRANSMITTER
D.W.S.D. OWNERSHIP & MAINTENANCE

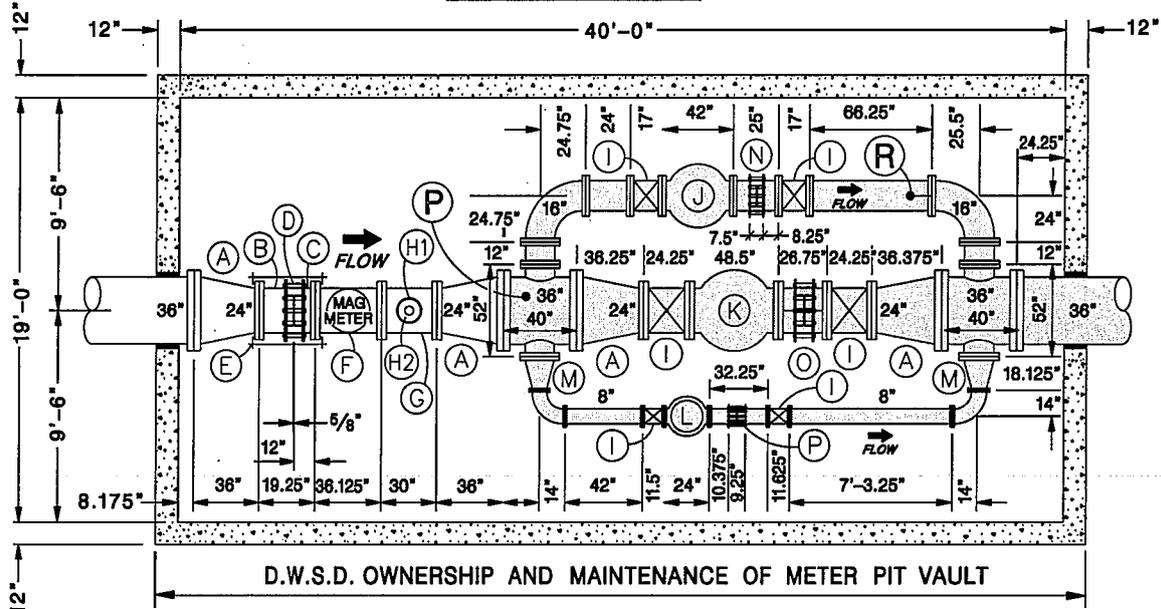
ADDRESS _____ 6971 ROCHESTER
 FEED TO _____ CITY OF TROY
 FEED FROM _____ 54" DWSD TRANS MAIN
 TYPE OF METER _____ 2 - B.I.F. VENTURI TUBES
 SIZE OF METER _____ 16" X 9.142" 8" X 3.494"
 METER NUMBER _____ 16") 83870-1 8") 83869-1
 DATE METER SET _____ 02/02/1971
 METER PIT CONST & SIZE _____ 13'-0.25" X 10'-0.625" ID REINF CONC
 SECTION MAP _____ 18-4
 GATE BOOK _____ N-1087
 FIELD BOOK _____
 DRAWN BY _____ A.D. BOLTON 02/19/2008
 REMARKS _____



EXHIBIT A TY-06

ADAMS AND WATTLES

CITY OF TROY



 CITY OF TROY OWNERSHIP & MAINTENANCE

| TYPICAL PRESSURE LOSS THRU METER | |
|----------------------------------|-------------|
| METER TYPE | P.S.I. LOSS |
| VENTURI | 1 TO 2 |
| MAG | 0 |
| TURBINE | 4 - 6 |

METER PIT DETAIL

N.T.S.

- P UPSTREAM PRESSURE TRANSMITTER, D.S.W.D. OWNERSHIP & MAINTENANCE
- R OTHER PRESSURE TRANSMITTER, D.S.W.D. OWNERSHIP & MAINTENANCE

| LEGEND | | | |
|----------|-----|---|-----------|
| TAG QTY. | | DESCRIPTION | SIZE |
| A | 4 | 36" x 24" FLGD. CONCENTRIC REDUCERS, D.I. 18" F-F | 36" x 24" |
| B | 1 | 24" x 1'-7 1/4" F-PE PIPE, GADR. D.I. | 24" |
| C | 1 | 24" x 1'-0" F-PE PIPE, GADR. D.I. | 24" |
| D | 1 | 24" 'DRESSER STYLE' PIPE COUPLING | 24" |
| E | LOT | COUPLING RESTR.: [8] 43" LONG THRD. RODS. [12] EAR PLATES | 1" Ø |
| F | 1 | 24" FLGD. MAGNETIC FLOWMETER, 36.125" F-F | 24" |
| G | 1 | 24" x 6" FLGD. TEST TEE, D.I. 15" C-F | 24" x 6" |
| H1 | 1 | 8" x 4" FLGD. CONC. REDUCER, D.I., 9" F-F | 8" x 4" |

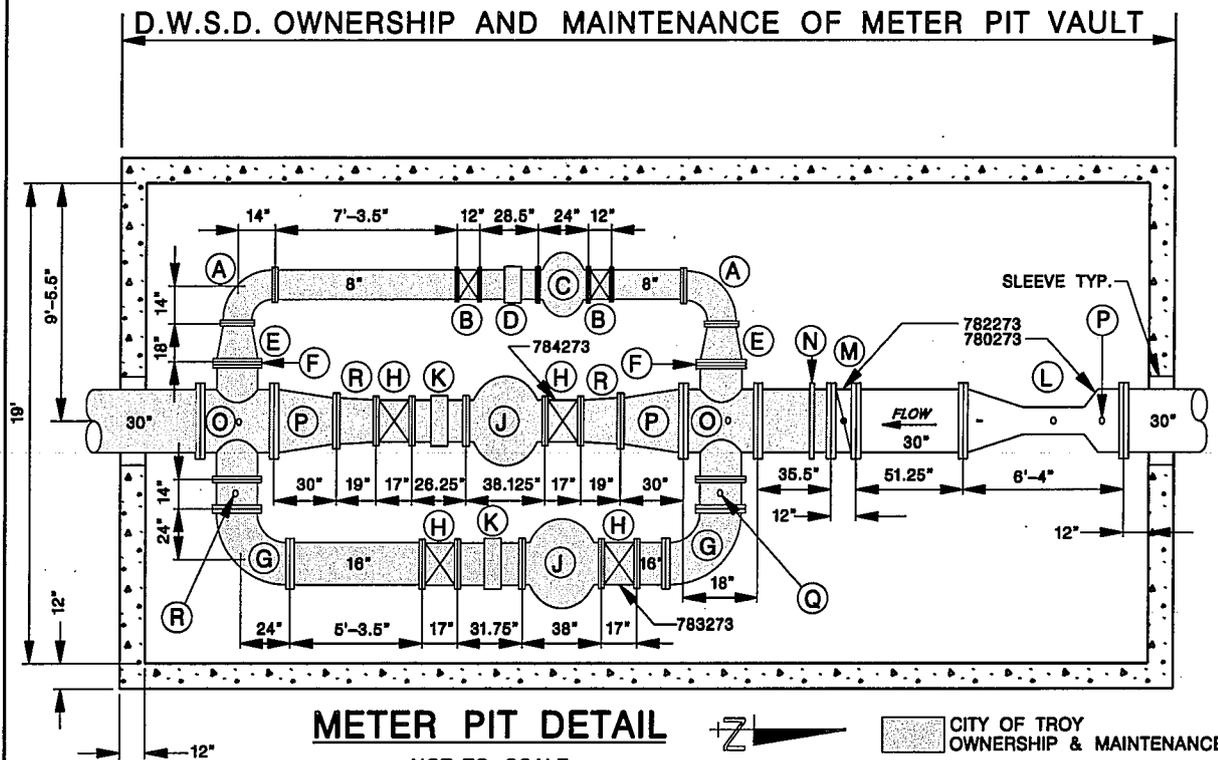
| TAG QTY. | | DESCRIPTION | SIZE |
|----------|---|--|--------------|
| H2 | 1 | TEST TEE ASSEMBLY w/ 3" x 9" O.D. COMPANION FLANGE | - |
| I | 8 | GATE VALVE | 8", 16", 24" |
| J | 1 | 16" ROSS P.R.V. | 16" |
| K | 1 | 24" ROSS P.R.V. | 24" |
| L | 1 | 8" ROSS P.R.V. | 8" |
| M | 1 | 8" x 16" REDUCER | 8" x 16" |
| N | 1 | 16" 'DRESSER STYLE' PIPE COUPLING | 16" |
| O | 1 | 24" 'DRESSER STYLE' PIPE COUPLING | 24" |
| P | 1 | 8" 'DRESSER STYLE' PIPE COUPLING | 8" |

LOCATION _____ ADAMS AND WATTLES
 FEED TO _____ CITY OF TROY
 FEED FROM _____ 72" DWSD TRANSMISSION MAIN
 TYPE OF METER _____ ABB MAG
 SIZE OF METER _____ 24"
 METER NUMBER _____ V/34729/17/1
 DATE OF METER SET _____ 5/12/2000
 METER PIT SIZE & CONST. _____ 19'-0" x 40'-0" REINF CONCRETE
 TYPE & SIZE OF P.R.V. _____ ROSS PRV - 24", 16" & 8"
 DATE VALVE SET _____
 SECTION MAP NO. _____ 13-1
 GATE BOOK NO. _____ NONE
 REMARKS _____ NONE
 DRAWN BY: _____ DWS-805 01/01/2003
 DRAWN BY: _____ D.G. LLAMAS 03/08



EXHIBIT A TY-07

CROOKS AND SOUTH BLVD. CITY OF TROY



METER PIT DETAIL

NOT TO SCALE

| LEGEND | | | |
|--------|------|----------------------------|--------|
| TAG | QTY. | DESCRIPTION | SIZE |
| A | 2 | 8" 90° BEND | 8" |
| B | 2 | 8" G.V. | 8" |
| C | 1 | 8" ROSS P.R.V. | 8" |
| D | 1 | 8" DRESSER COUPLING | 8" |
| E | 2 | 18"x8" REDUCER | 18"x8" |
| F | 2 | 16" FILLER RINGS @ 7" EACH | 16" |
| G | 2 | 16" 90° BEND | 16" |
| H | 2 | 16" G.V. | 16" |
| J | 1 | 16" ROSS P.R.V. | 16" |
| K | 1 | 16" DRESSER COUPLING | 16" |

| LEGEND | | | |
|--------|------|--------------------------|---------|
| TAG | QTY. | DESCRIPTION | SIZE |
| L | 1 | 30" B.I.F. VENTURI METER | 30" |
| M | 1 | 30" BUTTERFLY VALVE | 30" |
| N | 1 | 30" DRESSER COUPLING | 30" |
| O | 2 | 30" X 16" TEE | 30"X16" |
| P | 2 | 30" X 18" REDUCER | 30"X18" |
| R | 2 | 18" X 16" REDUCER | 18"X16" |

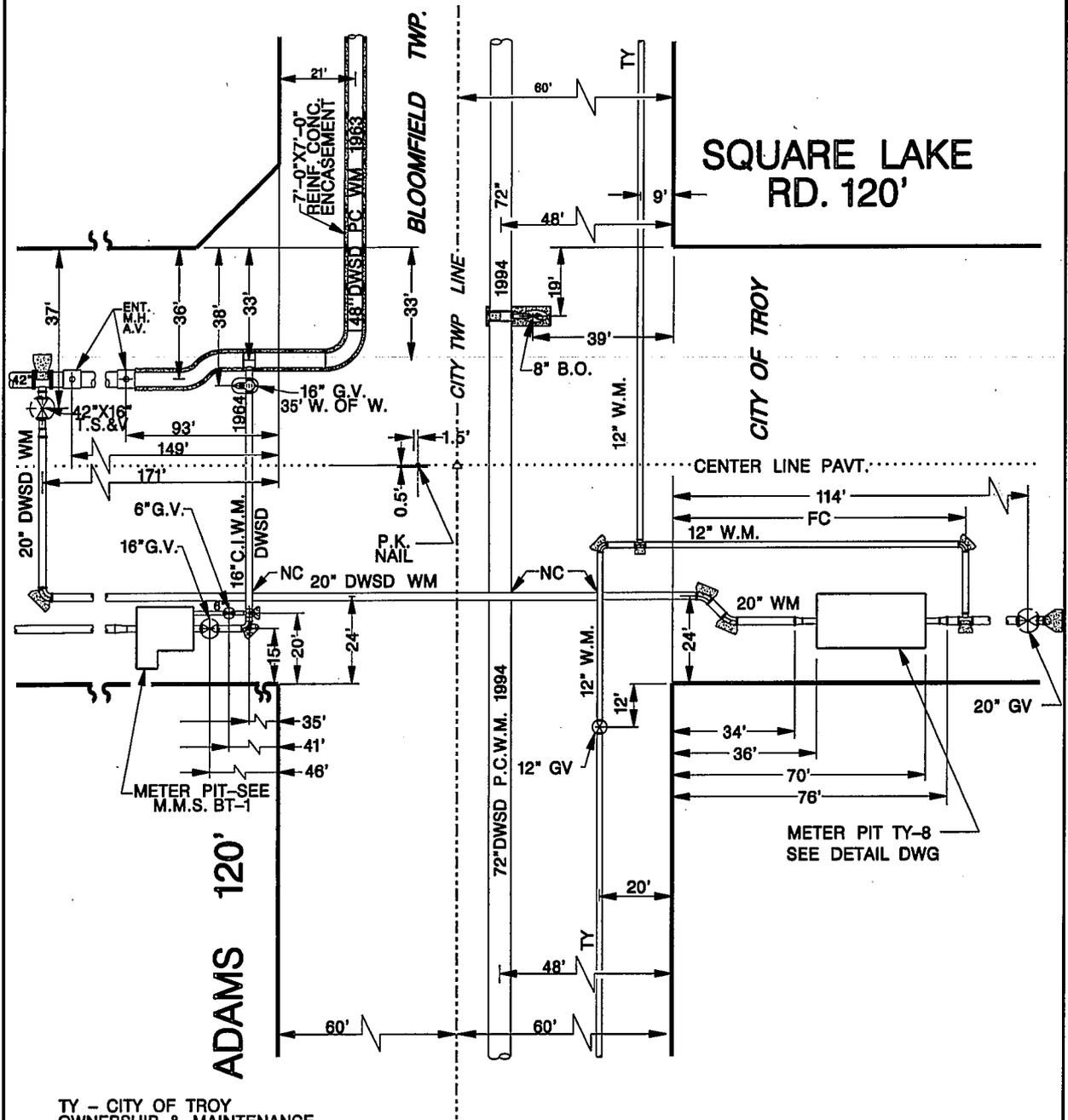
| TYPICAL PRESSURE LOSS THRU METER | |
|----------------------------------|-------------|
| METER TYPE | P.S.I. LOSS |
| VENTURI | 1 TO 2 |
| MAG | 0 |
| TURBINE | 4 - 6 |
| B.I.F. VENTURI | 10 - 15 |

- (P)** UPSTREAM PRESSURE TRANSMITTER, D.W.S.D. OWNERSHIP & MAINTENANCE
- (Q)** DOWNSTREAM PRESSURE TRANSMITTER, D.W.S.D. OWNERSHIP & MAINTENANCE
- (R)** OTHER PRESSURE TRANSMITTER, D.W.S.D. OWNERSHIP & MAINTENANCE

FEED TO _____ CITY OF TROY
 FEED FROM _____ 84" D.W.S.D. TRANS. MAIN
 TYPE OF METER _____ B.I.F. VENTURI & ORIFICE
 SIZE OF METER _____ V) 30" X 17.4" O) 30" X 5.994"
 TYPE OF P.R.V. _____ 8") ROSS 16") ROSS
 SIZE OF P.R.V. _____ 8" 16" X 2
 METER NUMBER _____ O) 37194-1 V) 37200-1
 DATE METER SET _____ 01/06/1981
 METER PIT CONST & SIZE _____ 40'-0" X 19'-0" I.D., REINF. CONC.
 SECTION MAP _____ 14-4 & 16-4
 REMARKS _____
 GATE BOOK _____ N-1095 & N-1145
 DRAWN BY _____ M. SCOTT 03/28/08

TY
07

EXHIBIT-A TY-08 SQUARE LAKE RD. AND ADAMS CITY OF TROY



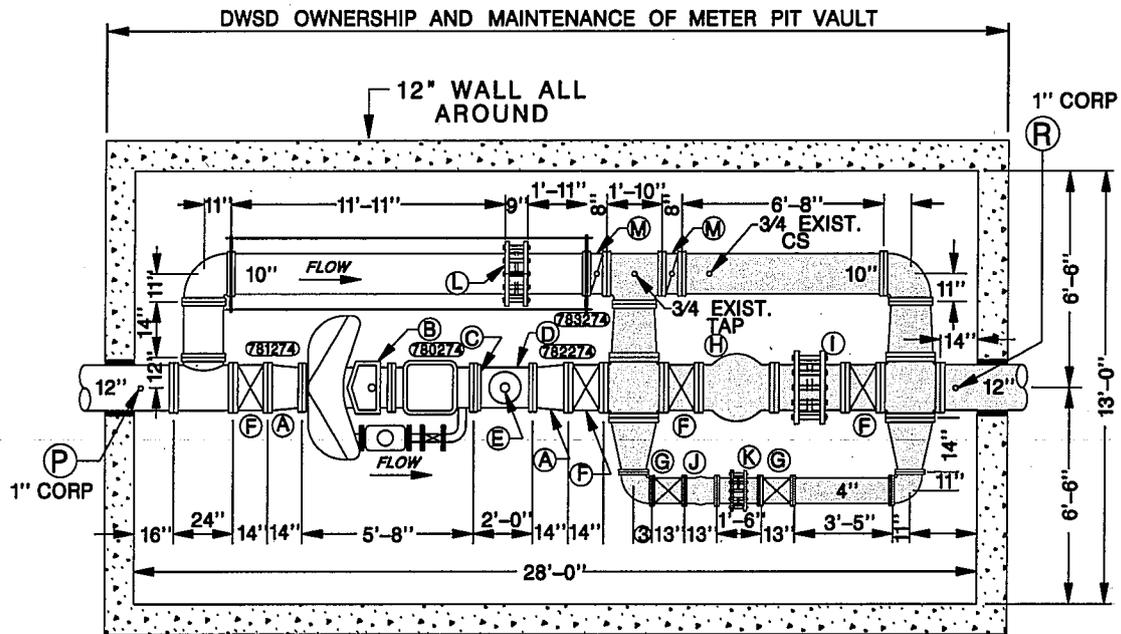
TY - CITY OF TROY
OWNERSHIP & MAINTENANCE
BT - BLOOMFIELD TOWNSHIP
OWNERSHIP & MAINTENANCE

LOCATIONS SUBJECT
TO VERIFICATION IN
THE FIELD.

SITE PLAN
NOT TO SCALE



EXHIBIT-A TY-08 SQUARE LAKE RD. AND ADAMS CITY OF TROY



CITY OF TROY
OWNERSHIP AND MAINTENANCE

- (P) - UPSTREAM PRESSURE TRANSMITTER
D.W.S.D. OWNERSHIP & MAINTENANCE
- (R) - OTHER PRESSURE TRANSMITTER
D.W.S.D. OWNERSHIP & MAINTENANCE

METER PIT DETAIL

NOT TO SCALE

| TYPICAL PRESSURE LOSS THRU METER | |
|-------------------------------------|-------------|
| METER TYPE | P.S.I. LOSS |
| VENTURI | 1 TO 2 |
| MAG | 0 |
| TURBINE | 4 - 6 |

| LEGEND | | | |
|--------|------|-------------------------------------|-----------|
| TAG | QTY. | DESCRIPTION | SIZE |
| A | 2 | FLGD CONC REDUC DI-F | 12" X 10" |
| B | 1 | FIRELINE COMPACT METER W5500 | 10" X 2" |
| C | 1 | MEGALUG FLANGE ADAPTER | 10" |
| D | 1 | 10" X 1'-11.5" F-PE PIPE w3" TOL DI | 10" |
| E | 1 | TEST TEE ASSEMBLY w3" COMP FLANGE | - |
| F | 4 | GATE VALVE | 12" |
| G | 1 | GATE VALVE | 4" |

| LEGEND | | | |
|--------|------|---------------------|------|
| TAG | QTY. | DESCRIPTION | SIZE |
| H | 1 | ROSS PRV | 12" |
| I | 1 | DRESSER CPLG. | 12" |
| J | 1 | GOLDEN ANDERSON PRV | 4" |
| K | 1 | DRESSER CPLG. | 4" |
| L | 1 | DRESSER CPLG. | 10" |
| M | 2 | BFLY. V. BIF TYPE H | 10" |

ADDRESS _____ 2985 E. SQUARE LAKE ROAD
 FEED TO _____ CITY OF TROY
 FEED FROM _____ 42" DWSD TRANS MAIN
 TYPE OF METER _____ FIRELINE COMPACT METER W5500
 SIZE OF METER _____ 10" X 2"
 METER NUMBER _____ 10") 1565968 & 2") 1566097
 DATE METER SET _____ 8/18/1999
 TYPE OF PRV _____ ROSS & GOLDEN ANDERSON
 SIZE OF PRV _____ 12" 4"
 METER PIT CONST & SIZE _____ 28'-0" X 13'-0" ID REINF CONC
 SECTION MAP _____ 13-3
 GATE BOOK _____ N-1127
 FIELD BOOK _____
 DRAWN BY _____ A.D. BOLTON 03/28/2008
 REMARKS _____



FIRST AMENDED EXHIBIT B

Projected Annual Volume and Minimum Annual Volume (Table 1)
Pressure Range and Maximum Flow Rate (Table 2)
Flow Split Assumptions (Table 3)
Addresses for Notice (Table 4)

Table 1 and Table 2 set forth the agreed upon Projected Annual Volumes, Minimum Annual Volumes, Pressure Ranges and Maximum Flow Rates for the term of this Contract provided that figures in bold type face are immediately enforceable pursuant to the terms of Section 5.07 and italicized figures are contained for planning purposes only but will become effective absent the negotiated replacements anticipated in Section 5.07.

The approximate rate of flow by individual meter set forth in Table 3 is the assumption upon which the Pressure Range commitments established in Table 2 have been devised. Should Customer deviate from these assumptions at any meter(s), the Board may be unable to meet the stated Pressure Range commitments in this Contract or in the contract of another customer of the Board and Section 5.08 of this Contract may be invoked.

FIRST AMENDED EXHIBIT B

Table 1
 Projected Annual Volume and Minimum Annual Volume

| Fiscal Year Ending June 30 | Projected Annual Volume (mcf) | Minimum Annual Volume (mcf) |
|----------------------------------|-------------------------------------|-----------------------------------|
| 2009 | 630,000 | 315,000 |
| 2010 | 630,000 | 315,000 |
| 2011 | 576,000 | 288,000 |
| 2012 | 576,000 | 288,000 |
| 2013 | 576,000 | 288,000 |
| 2014 | 576,000 | 288,000 |
| 2015 | 576,000 | 288,000 |
| 2016 | 576,000 | 288,000 |
| 2017 | 576,000 | 288,000 |
| 2018 | 576,000 | 288,000 |
| 2019 | 576,000 | 288,000 |
| 2020 | 576,000 | 288,000 |
| 2021 | 576,000 | 288,000 |
| 2022 | 576,000 | 288,000 |
| 2023 | 576,000 | 288,000 |
| 2024 | 576,000 | 288,000 |
| 2025 | 576,000 | 288,000 |
| 2026 | 576,000 | 288,000 |
| 2027 | 576,000 | 288,000 |
| 2028 | 576,000 | 288,000 |
| 2029 | 576,000 | 288,000 |
| 2030 | 576,000 | 288,000 |
| 2031 | 576,000 | 288,000 |
| 2032 | 576,000 | 288,000 |
| 2033 | 576,000 | 288,000 |
| 2034 | 576,000 | 288,000 |
| 2035 | 576,000 | 288,000 |
| 2036 | 576,000 | 288,000 |
| 2037 | 576,000 | 288,000 |
| 2038 | 576,000 | 288,000 |

FIRST AMENDED EXHIBIT B

Table 2
Pressure Range and Maximum Flow Rate

| Calendar Year | Pressure Range (psi) | |
|---------------|----------------------|-----|----------------------|-----|----------------------|-----|----------------------|-----|----------------------|-----|----------------------|-----|
| | Meter TY-01 | | Meter TY-03 | | Meter TY-04 | | Meter TY-06 | | Meter TY-07 | | Meter TY-08 | |
| | Min | Max |
| 2008 | 35 | 74 | 51 | 77 | 114 | 149 | 87 | 111 | 72 | 96 | 104 | 134 |
| 2009 | 35 | 74 | 51 | 77 | 114 | 149 | 87 | 111 | 72 | 96 | 104 | 134 |
| 2010 | 35 | 74 | 51 | 77 | 114 | 149 | 87 | 111 | 72 | 96 | 104 | 134 |
| 2011 | 35 | 74 | 51 | 77 | 114 | 149 | 87 | 111 | 72 | 96 | 104 | 134 |
| 2012 | 35 | 74 | 51 | 77 | 114 | 149 | 87 | 111 | 72 | 96 | 104 | 134 |
| 2013 | 35 | 74 | 51 | 77 | 114 | 149 | 87 | 111 | 72 | 96 | 104 | 134 |
| 2014 | 35 | 74 | 51 | 77 | 114 | 149 | 87 | 111 | 72 | 96 | 104 | 134 |
| 2015 | 50 | 75 | 65 | 82 | 114 | 149 | 87 | 111 | 80 | 96 | 104 | 134 |
| 2016 | 50 | 75 | 65 | 82 | 114 | 149 | 87 | 111 | 80 | 96 | 104 | 134 |
| 2017 | 50 | 75 | 65 | 82 | 114 | 149 | 87 | 111 | 80 | 96 | 104 | 134 |
| 2018 | 50 | 75 | 65 | 82 | 114 | 149 | 87 | 111 | 80 | 96 | 104 | 134 |
| 2019 | 50 | 75 | 65 | 82 | 114 | 149 | 87 | 111 | 80 | 96 | 104 | 134 |
| 2020 | 50 | 75 | 65 | 82 | 114 | 149 | 87 | 111 | 80 | 96 | 104 | 134 |
| 2021 | 50 | 75 | 65 | 82 | 114 | 149 | 87 | 111 | 80 | 96 | 104 | 134 |
| 2022 | 50 | 75 | 65 | 82 | 114 | 149 | 87 | 111 | 80 | 96 | 104 | 134 |
| 2023 | 50 | 75 | 65 | 82 | 114 | 149 | 87 | 111 | 80 | 96 | 104 | 134 |
| 2024 | 50 | 75 | 65 | 82 | 114 | 149 | 87 | 111 | 80 | 96 | 104 | 134 |
| 2025 | 50 | 75 | 65 | 82 | 114 | 149 | 87 | 111 | 80 | 96 | 104 | 134 |
| 2026 | 50 | 75 | 65 | 82 | 114 | 149 | 87 | 111 | 80 | 96 | 104 | 134 |
| 2027 | 50 | 75 | 65 | 82 | 114 | 149 | 87 | 111 | 80 | 96 | 104 | 134 |
| 2028 | 50 | 75 | 65 | 82 | 114 | 149 | 87 | 111 | 80 | 96 | 104 | 134 |
| 2029 | 50 | 75 | 65 | 82 | 114 | 149 | 87 | 111 | 80 | 96 | 104 | 134 |
| 2030 | 50 | 75 | 65 | 82 | 114 | 149 | 87 | 111 | 80 | 96 | 104 | 134 |
| 2031 | 50 | 75 | 65 | 82 | 114 | 149 | 87 | 111 | 80 | 96 | 104 | 134 |
| 2032 | 50 | 75 | 65 | 82 | 114 | 149 | 87 | 111 | 80 | 96 | 104 | 134 |
| 2033 | 50 | 75 | 65 | 82 | 114 | 149 | 87 | 111 | 80 | 96 | 104 | 134 |
| 2034 | 50 | 75 | 65 | 82 | 114 | 149 | 87 | 111 | 80 | 96 | 104 | 134 |
| 2035 | 50 | 75 | 65 | 82 | 114 | 149 | 87 | 111 | 80 | 96 | 104 | 134 |
| 2036 | 50 | 75 | 65 | 82 | 114 | 149 | 87 | 111 | 80 | 96 | 104 | 134 |
| 2037 | 50 | 75 | 65 | 82 | 114 | 149 | 87 | 111 | 80 | 96 | 104 | 134 |

FIRST AMENDED EXHIBIT B

Table 2 (continued)
 Pressure Range and Maximum Flow Rate

| Calendar Year | Maximum Flow Rate (mgd) | |
|---------------|-------------------------|------------------|
| | <u>Max Day</u> | <u>Peak Hour</u> |
| 2008 | 35.0 | 55.0 |
| 2009 | 35.0 | 55.0 |
| 2010 | 28.0 | 38.0 |
| 2011 | 28.0 | 38.0 |
| 2012 | 28.0 | 38.0 |
| 2013 | 28.0 | 38.0 |
| 2014 | 28.0 | 38.0 |
| 2015 | 28.0 | 38.0 |
| 2016 | 28.0 | 38.0 |
| 2017 | 28.0 | 38.0 |
| 2018 | 28.0 | 38.0 |
| 2019 | 28.0 | 38.0 |
| 2020 | 28.0 | 38.0 |
| 2021 | 28.0 | 38.0 |
| 2022 | 28.0 | 38.0 |
| 2023 | 28.0 | 38.0 |
| 2024 | 28.0 | 38.0 |
| 2025 | 28.0 | 38.0 |
| 2026 | 28.0 | 38.0 |
| 2027 | 28.0 | 38.0 |
| 2028 | 28.0 | 38.0 |
| 2029 | 28.0 | 38.0 |
| 2030 | 28.0 | 38.0 |
| 2031 | 28.0 | 38.0 |
| 2032 | 28.0 | 38.0 |
| 2033 | 28.0 | 38.0 |
| 2034 | 28.0 | 38.0 |
| 2035 | 28.0 | 38.0 |
| 2036 | 28.0 | 38.0 |
| 2037 | 28.0 | 38.0 |

FIRST AMENDED EXHIBIT B

Table 3
Flow Split Assumptions

| Meter | Assumed Flow Split (2010-2012) |
|-------|--------------------------------|
| TY-01 | 1% |
| TY-03 | 11% |
| TY-04 | 45% |
| TY-06 | 5% |
| TY-07 | 31% |
| TY-08 | 7% |

Table 4
Addresses for Notice

| If to the Board: | If to Customer: |
|--|---|
| Director Detroit Water and Sewerage Department 735 Randolph Detroit, Michigan 48226 | City Clerk City of Troy 500 West Big Beaver Troy, Michigan 48084 |