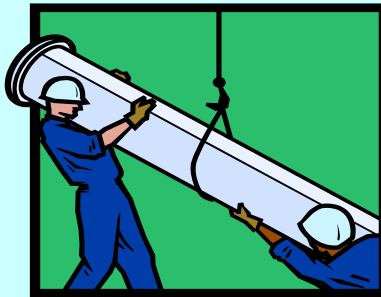


DEPARTMENT OF PUBLIC WORKS & PARKS

WATER OPERATIONS

WORCESTER, MASSACHUSETTS



BID AND SPECIFICATIONS

FOR

**WATER MAIN REPLACEMENT
(185-23)**

JUNE 2023

BID #:8026-M3

WATER MAIN REPLACEMENT 185-23
BID #:8026-M3

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WATER MAIN REPLACEMENT 185-23

BID #: 8026-W3

INFORMATION FOR BIDDERS

This bid consists of the installation of above ground temporary water pipes; the removal of existing old, unlined cast iron water mains; the installation of approximately 6,700 feet of new 6", 8" and 12" polyethylene wrapped, zinc coated ductile iron water main with all associated water service and hydrant connections on various streets throughout the City as listed below.

STREET

**Barrows Road
Fifth Avenue
Hasting Avenue
Indian Lake Parkway
Kenwood Avenue
Northridge Street

Reed Street
Stone Street
Walworth Street**

LIMITS

**from #71 Barrows Road to end
Millbury Street to Raymond Street
Loring Street to Proctor Street
Grove Street to Gifford Drive
from #58 Kenwood Avenue to end
from #18 Northridge Street to
Beaver Brook Pkwy
Geneva Street to Walworth Street
Perry Ave to Ward Street
Chandler Street to May Street**

NOTE: In addition to the work listed above, water mains and proportional quantities of associated items may also be required at additional residential streets to be named later. All work to be done under these to be named streets shall be done at contract bid unit prices and funded through the contingency should that funding remain available.

**NOTE: CITY OF WORCESTER DEPARTMENT OF PUBLIC WORKS
STANDARD SPECIFICATIONS & DETAILS VERSION 02-15-2022 including
subsequent addendum shall APPLY to all listed work.** Specifications (not included in printed version of this document) are available online at the purchasing web site under this bid listing at; <http://www.worcesterma.gov/e-services/bids/open-bids>. They are also located at the DPW&P web location at <http://www.worcesterma.gov/dpw/engineering>

Or they are also available directly at Worcester DPW&P, 20 East Worcester St., Worcester MA.; Monday through Friday 7:30 AM through 4:00 PM.

There will be a pre-bid meeting, at the date and time specified at the beginning of the total bid package. Attendance at this meeting is strongly encouraged.

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The specific limits of the work for the named streets are designated on the drawings, which are part of the contract documents. Bidders should inspect the site of the work and satisfy themselves as to actual conditions and requirements of the work and the accuracy of the estimated quantities.

The bidder should thoroughly acquaint himself with the Agreement Forms used by the City's Law and Purchasing Departments so that they will know what their obligations are before they submit their proposal. These forms can be reviewed at the City of Worcester, Purchasing Department, City Hall, Room 201, 455 Main Street, Worcester, MA.

A certified check or bid bond made payable to the "City Treasurer, City of Worcester" in the amount of 5% of total bid shall accompany this bid.

The bid deposit will be returned within seven (7) days after the opening of the proposals except for the three (3) lowest responsible and eligible bidders.

The Contractor shall be required to perform the work in sequence as directed by the Project Engineer. The Contractor **will be expected to start work as soon as the contract is signed and shall be completed by November 15, 2024.**

The City of Worcester may award or may have awarded other contracts for work on or adjacent to the site and the Contractor shall cooperate fully with such other Contractors by scheduling his own work with that to be performed under other Contracts as may be directed by the Commissioner. The Contractor shall not commit nor permit any act, which will interfere with the performance of work by any other Contractor as scheduled.

BID #: 8026-M3 shall include all specifications and plans as included in the documents. More detailed plans of some drawings may be found on the City's Purchasing web site, <http://www.worcesterma.gov/e-services/bids/open-bids>.

Award of **BID #: 8026-M3** shall be based upon the Total Contract Bid Price from Page 6 of the Proposal section of the bid documents.

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GENERAL SPECIFICATIONS

1.01 DEFINITION OF TERMS

Wherever the following words or phrases are used in these specifications, their intent and meaning shall be as follows:

1. City = the City of Worcester, MA.
2. Commissioner = the Commissioner of Public Works and Parks of the City of Worcester.
3. Assistant Commissioner = the Assistant Commissioner of Public Works and Parks of the City of Worcester.
4. Director = the Director of Water and Sewer Operations, Department of Public Works, and Parks of the City of Worcester.
5. Field Engineer = the field representative of Water Operations, Department of Public Works, and Parks of the City of Worcester.
6. Contractor = the person or persons, co-partnership or corporation who have entered into this contract as parties of the second part, or them or their legal representative.

1.02 EXISTING UNDERGROUND FACILITIES

1. Before making any excavation in a street, the Contractor shall notify all public utilities that they are making an entry, in accordance with Chapter 370, Acts of 1963 Massachusetts Law.
2. The Contractor shall ascertain the location of existing underground facilities and so conduct their work that those facilities shall not be damaged. The Contractor shall be fully responsible for damage to existing facilities and shall pay all costs of repairing damage caused by them or their agents.
3. Sewer connections or drains which are broken by the Contractor shall be repaired by a licensed drain layer, under the inspection of the DPW&P Permits division and paid for by the Contractor.
4. The City of Worcester, Department of Public Works, and Parks, is not a participating member of the "Dig Safe" network. To get water lines, street wires and conduits and sewer mains marked out, the Contractor shall contact **DPW&P Customer Service (508) 929-1300** at least 72 hours in advance of any execution.

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1.03 INVESTIGATION OF CONDITIONS

Contractors are expected to visit the locality of the work and acquaint themselves with all available information concerning local conditions. They are also expected to make their own estimates of the facilities needed and difficulties attending the execution of the proposed contract including the local conditions, availability of labor, uncertainties of weather and other contingencies.

In no event will the City assume any responsibility whatsoever for any interpretation, deduction or conclusion drawn from the inspection of the site. Failure to acquaint himself with all available information concerning these conditions will not relieve the Contractor from responsibility for estimating the difficulties and cost of successfully performing the complete work.

1.04 GENERAL SCOPE OF THE WORK TO BE PERFORMED

The work to be done under these Specifications will consist of the performing of such services and furnishing of such materials, except such material as is agreed to be furnished by the City at the location stated and as listed in the Proposal, and of doing all the miscellaneous work connected therewith. It shall include making excavations and backfilling, protection of the work, temporary street surface patching, furnishing, and installing the necessary temporary by-pass pipes, installing water mains and appurtenances, cleaning up the work site, chlorinating and flushing the water mains, and testing of completed work for leaks.

1.05 DRAWINGS

1. The work shall be done in conformity with the plans and specifications and such modifications thereof as may be determined by the Assistant Commissioner, and with all conditions and requirements of these specifications and under the direction and supervision of the Assistant Commissioner.
2. The length, size and location of the mains and other necessary information will be shown on a plan for each street in which mains are to be laid or as specified herein.
3. The plans are to be considered diagrammatical only. The final location is subject to such changes as may be necessary to avoid surface structures, underground pipes, sewers, conduits, etc. The location may be anywhere within the street limits and will be determined as work proceeds.

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1.06 CITY ORDINANCES

The Contractor shall comply with all City ordinances regarding public work, the use of streets and highways, and the safety of the public, and with the regulations of the Department of Public Works of the Commonwealth of Massachusetts, when working in streets under their control.

1.07 RISKS FOR DELAY

The Contractor shall assume the risk of any and all delays arising from the nature of the work or from any unforeseen casualties, obstructions, or difficulties which may arise or be encountered in the doing of the work, or from the action of the elements, or other Contractors, or persons or otherwise; and further agrees that no claim for damages or extra compensation will be made by reason of any delay whatsoever.

1.08 INSPECTION

It is agreed that the Commissioner may appoint and employ at their own expense such officers as may be necessary, who are to act as engineers, inspectors, or agents for the purpose of supervising in the City's interest the materials furnished and the work done, as same progresses. Such officers shall have unrestricted access to all parts of the work and other places at and in which the preparation of materials and the construction of the different parts of the work to be done under these specifications are carried on and conducted and shall be given by said Contractor all facilities and assistance required to carry out their work of inspection and testing in a manner satisfactory to the Commissioner and Assistant Commissioner.

All work shall be completed in the presence of the Field Engineer.

1.09 RIGHT OF REJECTION

Such officers shall have authority to reject any work, materials, and parts thereof, which do not in their opinion, conform to the Plans, Drawings and Specifications; it shall be admissible for them to do so at any time during the progress of the work, and until its completion and acceptance, notwithstanding the fact that any such defective work or materials may have been previously overlooked and received.

1.10 REJECTED MATERIAL AND DEFECTIVE WORK

The Contractor at their own expense shall promptly replace all defective work. At the request of the Commissioner or their representative, the Contractor shall remove any portion of the work done, as they may at some time think necessary

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for the discovery of improper materials or workmanship, and the Contractor shall restore such work, at their own expense in case it is found defective.

1.11 UNLOADING

The said Contractor agrees that they will, at their own expense, furnish all the means, appurtenances, and conveniences necessary for the delivery to the site of all material entering into the construction of the work including the delivery of pipes, valves, valve boxes, and other castings as defined in the specifications; and they agree that said City shall not be held responsible for the care and protection of said material and parts thereof, however, or wherever delivered, until the final acceptance of the work.

1.12 PERMITS TO OPEN STREETS AND INSTALL WATER MAINS AND SERVICES

1. Before any trench is opened in a public or private street and before any water main or water service is installed, replaced, or repaired, in the City of Worcester, a permit shall be obtained from Department of Public Works and Parks, Permit office at 20 East Worcester Street.
2. Before any trench is opened in a State Highway, a permit shall be obtained from the District Highway Engineer. This permit shall be taken out by DPW&P Water Operations.
3. A water and a trench permit shall be drawn regardless of whether the work is being done on public or private property. The Contractor obtaining the permit shall be City of Worcester licensed and bonded drain layer only.

1.13 TRAFFIC TO BE MAINTAINED

Travel over streets where pipes are being laid shall be interrupted or obstructed as little as possible. The Commissioner may, at their discretion, direct that certain portions of the streets shall be clear of all excavated material, that at certain street intersections only a portion of the trench shall be excavated at a time and closed again before the pavement over the balance is removed; and that no two adjoining street intersections be excavated at the same time. The Contractor shall erect temporary bridges and crossings at no additional compensation as determined by the Field Engineer.

1.14 PROTECTION OF TREES AND SHRUBS

The Contractor shall exercise every precaution to protect from injury all trees and shrubs not directly in the line of the water main or water service, and upon completion of the work shall restore the ground to its original condition without

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additional compensation.

1.15 BLASTING

Blasting, where necessary, shall be done with proper precautions to prevent injury or damage to persons and property. The Bond required by law and necessary permit from the Fire Chief shall be secured and filed.

1.16 PIPE LAYING IN PRIVATE STREETS OR RIGHT-OF-WAYS

1. When pipe is laid in a private street, or through private property, the surface of the ground shall, after the laying of the pipe, be carefully and promptly restored to the condition it was in previous to the laying of pipe.
2. When pipe is laid in a street that is being improved, as little interference as possible shall be caused to the street improvement work, and this contractor shall cooperate fully with the street contractor.

1.17 RECONSTRUCTION OF SUB-SURFACE STRUCTURES

1. In case it shall, in the opinion of the Commissioner, become necessary to divert or reconstruct any culvert, sewer, manhole valve chamber, catch basin connection, water main, house connection to water mains or sewers, in a new location, said work shall be done by the Contractor upon order from the said Commissioner.
2. Provisions must be made by the Contractor to take care of the drainage without damage to the work until the culvert, sewer, catch basin connection, and drains shall have been reconstructed and restored to service.
3. In case it shall, in the opinion of the Commissioner, become necessary to divert or reconstruct water mains or water service branches, said work shall be done by the Contractor.
4. In case it shall, in the opinion of the Commissioner, become necessary to divert and/or reconstruct any gas main or electric conduit or any connections thereto, the company owning same shall be notified to divert same by the Commissioner or their agent. In no case shall the Contractor make any change in the position of any gas pipe, electric conduits, or fixtures, without the written consent of the proper parties or an order from the Commissioner.

1.18 FENCES, DANGER SIGNALS, ETC.

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The Contractor, at their own expense, shall erect and maintain all necessary fences, barricades, and danger signals. The lights shall be kept on from sunset until sunrise, and necessary watchmen shall be provided for the safety of the public. The Contractor shall observe such rules relative to signals and safeguards, as the police regulations, laws and ordinances require.

1.19 CLOSING OF VALVES

DPW&P Water Operations employees, assisted by the Contractor, shall do the closing and opening of valves necessary for making connections with existing mains. Sufficient notice shall be given the Director of the time for shutting off. No allowance will be made for any delay in closing of valves. A 24-HOUR NOTICE must be given to residents or businesses affected by the shut-down and will be done by the Contractor under the direction of the Field Engineer.

1.20 CLEANING OF STREETS

Immediately upon completion of the work, refuse material and other material shall be removed by the Contractor at their own expense from the streets occupied by them during construction, and the streets shall be cleaned and restored to their original condition.

1.21 TRESPASS

The Contractor shall not allow anyone in their employ to damage the property of the City, or trespass on premises in the vicinity of the work. At the request of the Assistant Commissioner, they shall discharge from their employ any person guilty of such offenses, and they shall be held responsible for any acts of their employees. All buildings, fences, sidewalks, trees, and other properties shall be protected from injury, and the Contractor shall be held responsible for any damages done to the same in any way, or by his act of neglect, or that of their agents, or by their act of neglect, or that of their agents, employees, or workmen.

1.22 DAMAGES TO PROPERTY

Special care must be taken by the Contractor not to allow any material of any kind to be deposited on any sidewalk, curb or sodding, and any damages caused by violating this provision must be made good by the Contractor at their own cost, and to the satisfaction of the Field Engineer.

1.23 RESPONSIBILITIES

The Contractor shall be responsible for their work for five (5) years starting on the day the work has been accepted by the City.

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1.24 BORROWING OF MATERIALS

In the event the Contractor encounters a material delivery problem and, therefore, desires to borrow City-owned materials, they shall first seek permission to do same from the Director. If the quantity of City-owned materials on hand is such that a loan may be made, the Director may grant approval and the Contractor shall present the original copy of their purchase order showing the vendor's name who can properly replace said borrowed materials to the City storekeeper in charge of the store yard. Said purchase order shall contain the correct quantity and specifications to replace with identical materials to the original point of pick-up and in addition, said purchase order will also bear the signature of an authorized representative of the Contractor.

1.25 PROPER NOTICE BEFORE STARTING WORK

The Contractor shall be responsible for a minimum of one-week notice to Water Operations before starting work on a given street.

1.26 INEFFICIENCY OF INSPECTOR NOT TO PRECLUDE

The Contractor agrees that any omission, inefficiency, negligence, or incapacity on the part of any or all such officers in exacting the full requirements of the Plans, Drawings and Specifications, shall not release the Contractor from supplying the same whenever it may be found that failure to meet requirements have occurred up to the final completion and acceptance of the work.

1.28 SEPARATION OF WATER MAINS AND SEWERS

All sanitary lines shall be laid at least 10 feet horizontally from any existing or proposed water line. The distance shall be measured edge to edge.

In areas where it is necessary to install sanitary lines with less than 10 feet horizontal distance from a water line the sanitary line shall be enclosed in concrete.

All sanitary lines crossing water lines shall be laid to provide a minimum vertical distance of 18 inches between the outside of the water main and the outside of the sewer. The sanitary line shall always cross under the water line unless directed by the Field Engineer. When an 18-inch vertical distance is not achievable the sanitary line shall be enclosed in concrete.

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SPECIAL PROVISIONS

The following conditions and restrictions shall apply to all work performed under this contract:

1. The Contractor shall be required to have on-site at all times during the course of construction activities, a full-time superintendent who shall be in responsible charge of the project. This shall be the exclusive agent for the Contractor maintaining continuous correspondence with the Field Engineer.
2. The Contractor shall notify the City in writing whenever there is a change of superintendents.
3. The Contractor shall submit to Water Operations Engineering a schedule of operations within ten (10) days after the mailing of the executed contract to the Contractor. The schedule shall detail the proposed methods of construction, the sequence of work and the time the Contractor proposes to complete the various items of work within the time specified in the contract.
4. The Contract Compliance Office requires certified payrolls be submitted on a weekly basis from the first week of work through the final week of work, regardless of whether they were on site or not. If they did not work during a particular week, they **must** submit a payroll stating that. It shall not be necessary for the Contractor to submit payrolls to any other agency. These submissions shall be a prerequisite to the City making any periodic or final payments to the Contractor. Failure to submit the required certified payroll shall result in the withholding of payments or final retainage release.
5. The Contractor shall, prior to beginning work on each street or phase of the contract, submit to Water Operations Engineering, a digital record the street and sidewalk conditions of the street to be excavated. This record shall consist of video and/or photographic images of the street and street conditions prior to the start of any construction. Special note shall be made of any difficult or problem areas that could present problems for either the Contractor or property owners adjacent to the construction site. Similar post-construction records shall also be submitted after final restoration has been completed. All video and/or photos shall be supplied to the City at no additional expense to the City.
6. A 24-hour emergency telephone number shall be supplied along with the name of the person to be notified for all repairs and emergencies that may occur. Failure to respond shall necessitate the actuation of City crews at the Contractor's expense.

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7. Police Officers for traffic control shall be furnished at the discretion of the Contracting Officer at the City's expense.
8. In accordance with section 1, item 1.12, the Contractor shall be required to obtain a permit to open a public or private street at no additional cost to the Contractor. Failure to obtain the required street opening permits shall result in the withholding of payments or final retainage release. These permits are available at the DPW&P Permit office at 20 East Worcester St.
9. Controlled Density Fill may be required as the backfill material at selected openings in any of the streets included in this bid. Field conditions shall dictate placement and shall be at the discretion of the Field Engineer.
10. The CITY shall employ the services of a certified testing contractor to ensure proper compaction of all trenches. Special note shall be made to Section 3, paragraph D, **EXCAVATION, TRENCING AND BACKFILLING**, of City of Worcester Standard Specifications & Details for related information of compaction requirements.
11. The City, at its discretion, may choose to perform the permanent paving on certain streets with City forces or a different contractor under the DPW's "Cooperative Paving Program". Should a street be done under this cooperative program, the contractor shall be relieved of the responsibility of performing the permanent paving on that street, and the dollar value of the work will be removed from this contract in order to fund the Cooperative Paving Program. No guarantees are made that any streets will or will not be included under this program.
12. **The CITY requires the use of approved ramps for all driveway crossings of temporary by-pass lines. No temporary pavement, gravel or other material will be allowed unless approved by DPW&P in advance.**

Item 301.50 Ductile Iron Pipe and Polyethylene Wrap with Sand Envelope

All ductile iron pipe installed as part of this contract shall be encased in an approved polyethylene wrap. This pipe and wrap shall be bedded in a sand envelope per the revised City of Worcester standard specifications. This sand envelope shall be the width of the trench from 6" below the pipe to 12" above the pipe. The remainder of the trench shall be backfilled per the City Specifications.

Item 301.01 1" Polyethylene Pipe for Change of Services

All water services $\frac{3}{4}$ " or 1" in size shall be relayed or replaced with new 1" polyethylene tubing from the new 1" corporation stop at the new DI water main to the property line. All new service pipes shall be trenched over their entire

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length. No pulling or driving of services shall be allowed. These new service pipes shall be encased in a sand envelope per the revised City of Worcester standard specifications.

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**LIQUIDATED DAMAGES
(CONTRACTS OF \$100,000.00 OR MORE)**

It is expressly understood and agreed, by and between the Contractor and the City, that the time for completion of the work described herein is a reasonable time for the completion of the same, taking into consideration the average climatic range and usual industrial and / or residential conditions prevailing in the locality. If the said Contractor shall neglect, fail or refuse to complete the work within the time herein specified, or any proper extension thereof requested in writing by the Contractor and granted in writing by the Contracting Officer, then the Contractor does hereby agree, as a part consideration for the awarding of this contract, to pay the City the amount of \$150.00 per day, not as a penalty but as liquidated damages for such breach of contract, for each and every calendar day that the contractor shall be in default after the time stipulated for completing the work. The said amount of \$150.00 per day is fixed and agreed upon by and between the Contractor and the City because of the impracticability and extreme difficulty of fixing and ascertaining the actual damages the City would in such event sustain, and the said amount shall be deducted by the City from periodic payments.

It is understood that the winter months of December, January, February, and March shall be excluded from the Liquidated Damages and the Contractor shall not suffer any penalty for not working during that period.

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REFERENCES

The bidder is requested to state below what work of a similar character to that included in the Proposal Contract he/she has done and give references that will enable the City to make inquiries and to judge of his/her experience, skill, available financial resources, credit, and insurance standing.

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

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THE BIDDER MUST FILL IN THESE UNIT PRICES. Also carry out all extensions and fill in "Computed Totals."

In case of error or discrepancies, UNIT PRICES govern and written works take precedence over figures.

ITEM NUMBER AND DESCRIPTION		ESTIMATED QUANTITY	COMPUTED TOTALS
120.0000	CLASS "B" ROCK EXCAVATION AND DISPOSAL		
	<hr/>		
	<hr/>	Dollars	568.00 \$ <hr/>
	(\$ <hr/>) CY		
122.0000	EARTH EXCAVATION BELOW NORMAL GRADE		
	<hr/>		
	<hr/>	Dollars	568.00 \$ <hr/>
	(\$ <hr/>) CY		
125.0000	SAND BORROW		
	<hr/>		
	<hr/>	Dollars	1,887.00 \$ <hr/>
	(\$ <hr/>) CY		
126.0000	GRAVEL BORROW		
	<hr/>		
	<hr/>	Dollars	1,887.00 \$ <hr/>
	(\$ <hr/>) CY		
128.0000	SCREENED LOAM BORROW		
	<hr/>		
	<hr/>	Dollars	27.00 \$ <hr/>
	(\$ <hr/>) CY		
150.0000	FURNISH AND SPREAD CALCIUM CHLORIDE		
	<hr/>		
	<hr/>	Dollars	4,243.00 \$ <hr/>
	(\$ <hr/>) LB		
156.0000	SEEDING		
	<hr/>		
	<hr/>	Dollars	160.00 \$ <hr/>
	(\$ <hr/>) SY		
301.0100	1" Polyethylene Tubing		
	<hr/>		
	<hr/>	Dollars	3,580.00 \$ <hr/>
	(\$ <hr/>) LF		
301.0600	6" CLDI Pipe		
	<hr/>		
	<hr/>	Dollars	237.00 \$ <hr/>
	(\$ <hr/>) LF		

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ITEM NUMBER AND DESCRIPTION	ESTIMATED QUANTITY	COMPUTED TOTALS
301.0800 8" CLDI Pipe		
	Dollars	6,285.00 \$
(\$) LF		
301.5000 Polyethylene Wrap for Ductile Iron Pipe		
	Dollars	7,580.00 \$
(\$) LF		
302.1000 Cast or Ductile Fittings		
	Dollars	6,325.00 \$
(\$) LB		
302.1208 12"x8" Cut-in Tee		
	Dollars	1.00 \$
(\$) EA		
304.0100 VALVE BOX		
	Dollars	50.00 \$
(\$) EA		
304.1000 LOWER STREET SERVICE BOX		
	Dollars	7.00 \$
(\$) EA		
305.0600 6" Gate Valve		
	Dollars	17.00 \$
(\$) EA		
305.0800 8" Gate Valve		
	Dollars	31.00 \$
(\$) EA		
305.1200 12" Gate Valve		
	Dollars	1.00 \$
(\$) EA		
309.1000 Service Connection		
	Dollars	126.00 \$
(\$) EA		

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ITEM NUMBER AND DESCRIPTION		ESTIMATED QUANTITY	COMPUTED TOTALS
309.2000	Service Box and Curb Stop		
		Dollars	126.00 \$
	(\$) EA		
309.3000	Service Box and Cut-in Curb Stop (3/4" - 1")		
		Dollars	7.00 \$
	(\$) EA		
310.1000	New Hydrant		
		Dollars	14.00 \$
	(\$) EA		
310.3000	Hydrant Removed and Stacked		
		Dollars	10.00 \$
	(\$) EA		
310.4000	Hydrant Removed and Reset		
		Dollars	1.00 \$
	(\$) EA		
311.4208	42x8" Tapping Sleeve & Valve		
		Dollars	1.00 \$
	(\$) EA		
312.0600	6" Tie-in		
		Dollars	2.00 \$
	(\$) EA		
312.0800	8" Tie-in		
		Dollars	16.00 \$
	(\$) EA		
312.1200	12" Tie-in		
		Dollars	3.00 \$
	(\$) EA		
313.2000	Thrust Block		
		Dollars	55.00 \$
	(\$) EA		

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ITEM NUMBER AND DESCRIPTION		ESTIMATED QUANTITY	COMPUTED TOTALS
314.1000	1-1/4" Air Release Valve		
		Dollars	2.00 \$
	(\$) EA		
314.3000	Dig and Plug Existing connection up to 2" in size		
		Dollars	1.00 \$
	(\$) EA		
314.3500	Dig and Plug connection larger than 2"		
		Dollars	1.00 \$
	(\$) EA		
316.0200	Temporary 2" By-Pass		
		Dollars	5,290.00 \$
	(\$) LF		
316.0400	Temporary 4" By-Pass		
		Dollars	6,160.00 \$
	(\$) LF		
317.0000	Temporary Taps on Service Laterals		
		Dollars	13.00 \$
	(\$) EA		
416.0000	CURB REMOVE AND RESET		
		Dollars	388.00 \$
	(\$) LF		
430.0000	EXISTING BITUMINOUS CONCRETE DRIVEWAY REPAIR		
		Dollars	49.00 \$
	(\$) SY		
432.0000	EXISTING BITUMINOUS CONCRETE SIDEWALKS REPAIR		
		Dollars	42.00 \$
	(\$) SY		
436.0000	RESURFACE TRENCHES TEMPORARY		
		Dollars	9,258.00 \$
	(\$) LF		

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ITEM NUMBER AND DESCRIPTION	ESTIMATED QUANTITY	COMPUTED TOTALS
436.0100 RESURFACE TRENCHES PERMANENT		
	Dollars	1,945.00 \$
(\$) LF		
438.5000 BITUMINOUS CONCRETE BERM REPAIR		
	Dollars	172.00 \$
(\$) LF		
442.0000 CONCRETE SIDEWALK REPAIR		
	Dollars	153.00 \$
(\$) SY		
446.3000 EXCAVATABLE CONTROL DENSITY FILL (CDF)		
	Dollars	36.00 \$
(\$) CY		
900.0000 Lump Sum Reserve		
five hundred thousand and xx / 100	Dollars	\$ 500,000.00
912.2019 TEST HOLE EXCAVATION & BACKFILL		
	Dollars	2.00 \$
(\$) EA		
953.2020 SILT SACK		
	Dollars	62.00 \$
(\$) EA		

TOTAL BID PRICE INCLUDING CONTINGENCY

_____ Dollars and _____ Cents
(amount in words)

\$ _____
(amount in figures)

This proposal is based on provisions of the following addenda:

No. _____

No. _____

No. _____

No. _____

All amounts and totals given above will be subject to verification by the City. In case of variation between Unit Bid Price and Totals shown by the Bidder, the Unit Price written in words will be considered to be the bid.

The City reserves the right to reject any and all bids, wholly or in part, and to make awards in a manner deemed in the best interests of the City.

The above estimated quantities form an approximate statement of the extent of the work to be done, based upon the estimate of the Contracting Officer. The City does not expressly or by implication agree that the actual quantity of work will correspond therewith, but reserves the right to increase or decrease the quantity of any class or portion of the work, as may be deemed necessary by the Contracting Officer.

All Bldgs within work limits shall receive a CofS
CofS includes:
Service Connection (309.1)
Install New Service on City side with 1" poly (301.015)
Install New Service box and Curb Stop (309.2)
Align New Service with Service entry (Curb Stop)

Install new Kennedy Guardian hydrant(310.1),
New 8X6 Anchor Tee,(302.1),
New 6" GV and (305.06),
New 6" pipe DICL zinc coated.(301.06),
Polywrap (301.50).
Location TBD

12" Tie-in to 1951 Cement Lined Pipe (312.12)
Install 12x8 reducer (302.1)
Install new 8" Gate Valve (305.08)

Remove and stack old hydrant(310.3)
Install new Kennedy Guardian hydrant(310.1),
at new location closer to City line.TBD
New 8X6 AnchorTee,(302.1),
New 6" GV and (305.06),
New 6" pipe DICL zinc coated.(301.06),
Polywrap (301.50).

Install new 8" DICL zinc coated pipe (301.08),
Polywrap (301.50).

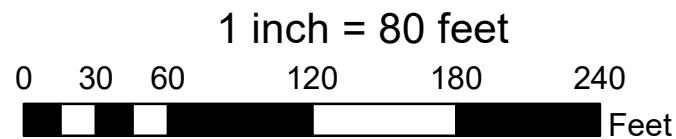
End of new pipe

Proposed Water Main Relay

**Contract
185-23**



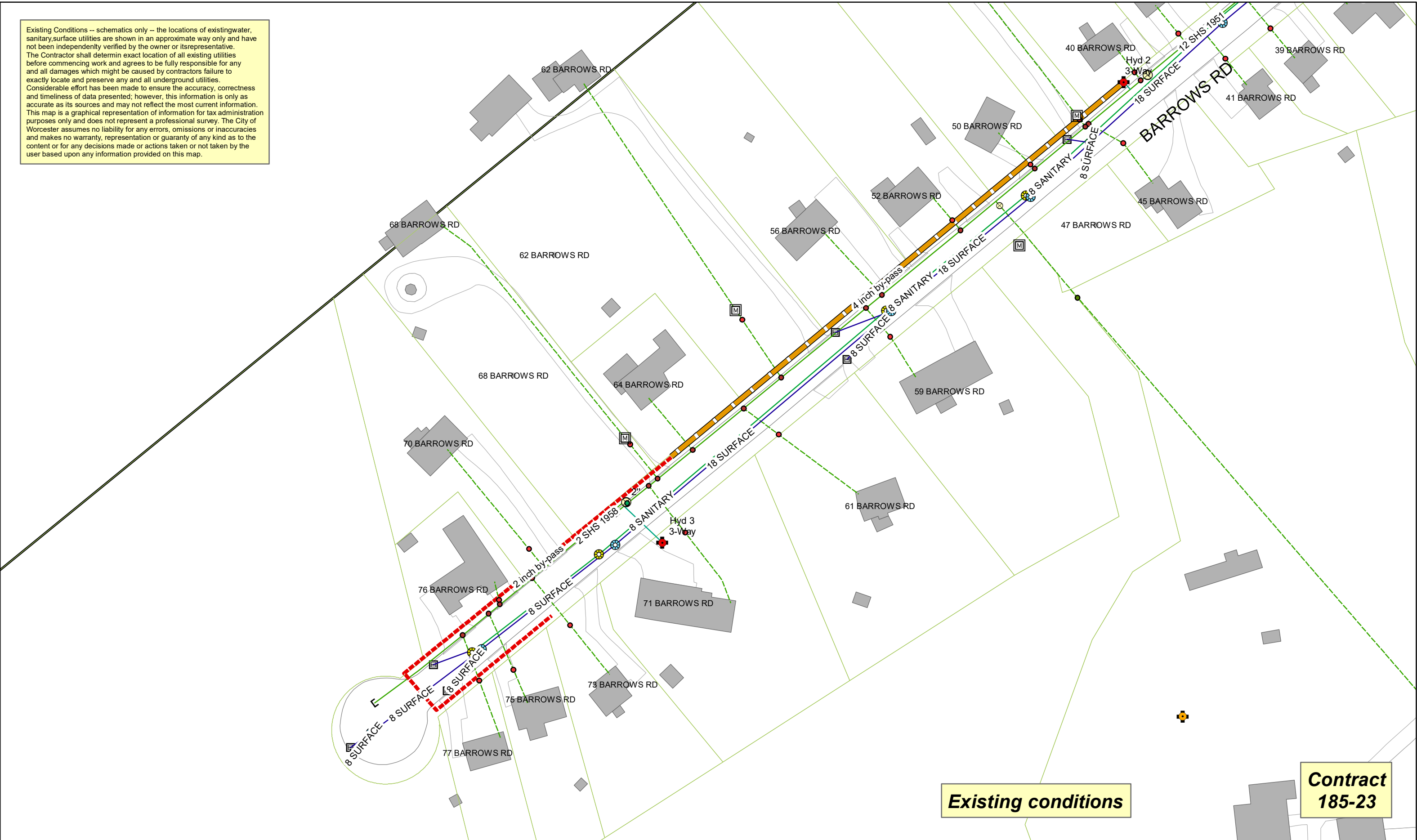
City Of Worcester
Department of Public Works & Parks
Water Operations



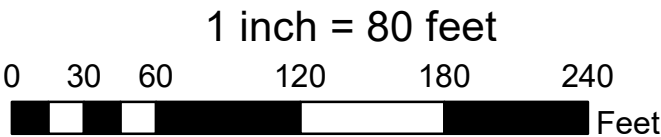
BARROWS RD (From #71 Barrows Rd to SW End)
Relay 300' of 1958 2" pipe with new 8" DICL pipe



Existing Conditions -- schematics only -- the locations of existing water, sanitary, surface utilities are shown in an approximate way only and have not been independently verified by the owner or its representative. The Contractor shall determine exact location of all existing utilities before commencing work and agrees to be fully responsible for any and all damages which might be caused by contractors failure to exactly locate and preserve any and all underground utilities. Considerable effort has been made to ensure the accuracy, correctness and timeliness of data presented; however, this information is only as accurate as its sources and may not reflect the most current information. This map is a graphical representation of information for tax administration purposes only and does not represent a professional survey. The City of Worcester assumes no liability for any errors, omissions or inaccuracies and makes no warranty, representation or guaranty of any kind as to the content or for any decisions made or actions taken or not taken by the user based upon any information provided on this map.



City Of Worcester
Department of Public Works & Parks
Water Operations



BARROWS RD (From #71 Barrows Rd to SW End)
Relay 300' of 1958 2" pipe with new 8" DICL pipe



All Bldgs within work limits shall receive a CofS
CofS includes:
Service Connection (309.1)
Install New Service on City side with 1" poly (301.015)
Install New Service box and Curb Stop (309.2)
Align New Service with Service entry (Curb Stop)

New 8"x8" Tee and fittings as needed (302.1)
3 New 8" Gate Valves (305.08).
8" Tie-in to 1989 pipe (312.08),
Polywrap (301.50).

Gediminas St bypass
Feed thru hydrant

Install new 8" DICL
zinc coated pipe (301.08),
8" fittings as needed (302.1)
Polywrap (301.50).

Remove old hydrant and stack (310.3)
Install new Kennedy Guardian hydrant(310.1),
New 8X6 anchor tee,(302.1),
New 6" GV and (305.06),
New 6" pipe DICL zinc coated.(301.06),
Polywrap installation (301.50).

8" Tie-in to 2004 DI pipe (312.08)
(about 24 ft from Tee)
Install additional New 8" Gate Valve (305.08)
Polywrap (301.50),

Remove and reset 2017 hydrant (310.4)
New 8X6 anchor tee,(302.1),
New 6" GV and (305.06),
New 6" pipe DICL zinc coated.(301.06),
Polywrap installation (301.50).

8" Tie-in to 2008 pipe (312.08),
Install New 8" Gate Valve (305.08)
Polywrap (301.50),

Install new 8" DICL zinc coated pipe (301.08),
8" fittings as needed (302.1)
Polywrap (301.50).

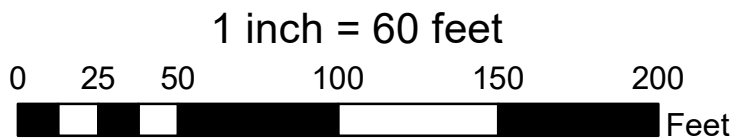
Car wash
2" Service from Millbury St

Proposed Water Main Relay

**Contract
185-23**



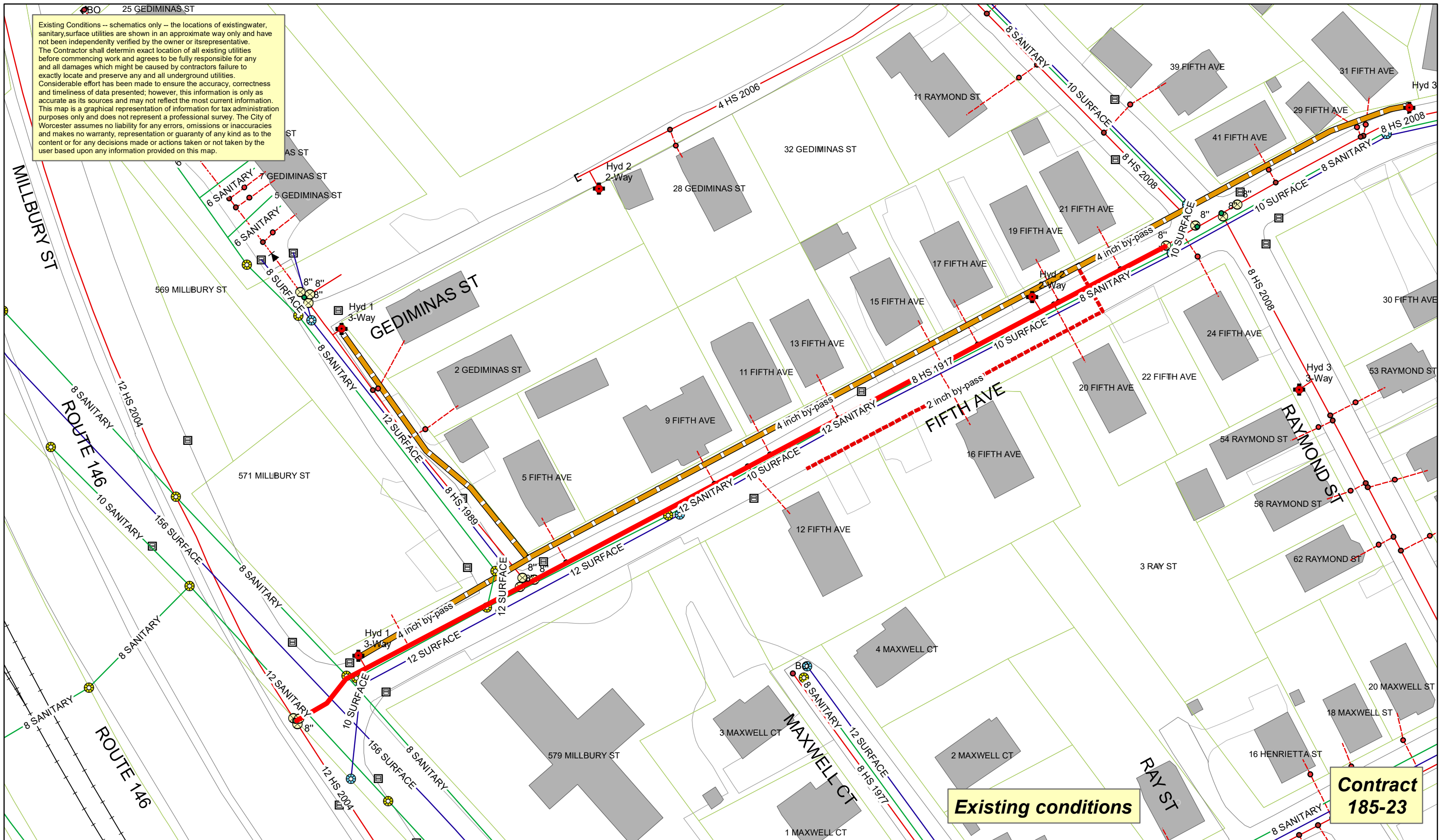
City Of Worcester
Department of Public Works & Parks
Water Operations



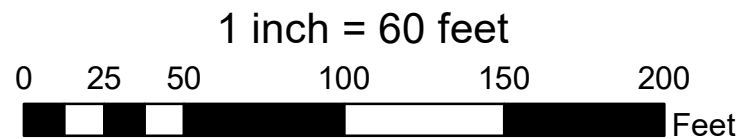
FIFTH AVE from Millbury St to Raymond St
Install 690 Ft of 8" DICL zinc coated pipe



Existing Conditions -- schematics only -- the locations of existing water, sanitary, surface utilities are shown in an approximate way only and have not been independently verified by the owner or its representative. The Contractor shall determine exact location of all existing utilities before commencing work and agrees to be fully responsible for any and all damages which might be caused by contractors failure to exactly locate and preserve any and all underground utilities. Considerable effort has been made to ensure the accuracy, correctness and timeliness of data presented; however, this information is only as accurate as its sources and may not reflect the most current information. This map is a graphical representation of information for tax administration purposes only and does not represent a professional survey. The City of Worcester assumes no liability for any errors, omissions or inaccuracies and makes no warranty, representation or guaranty of any kind as to the content or for any decisions made or actions taken or not taken by the user based upon any information provided on this map.



City Of Worcester
Department of Public Works & Parks
Water Operations

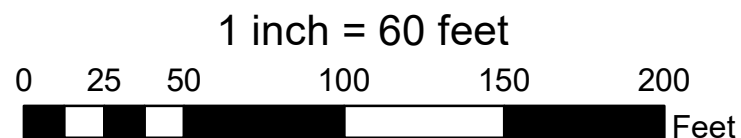


FIFTH AVE from Millbury St to Raymond St
Install 690 Ft of 8\"





City of Worcester
Department of Public Works & Parks
Water Operations

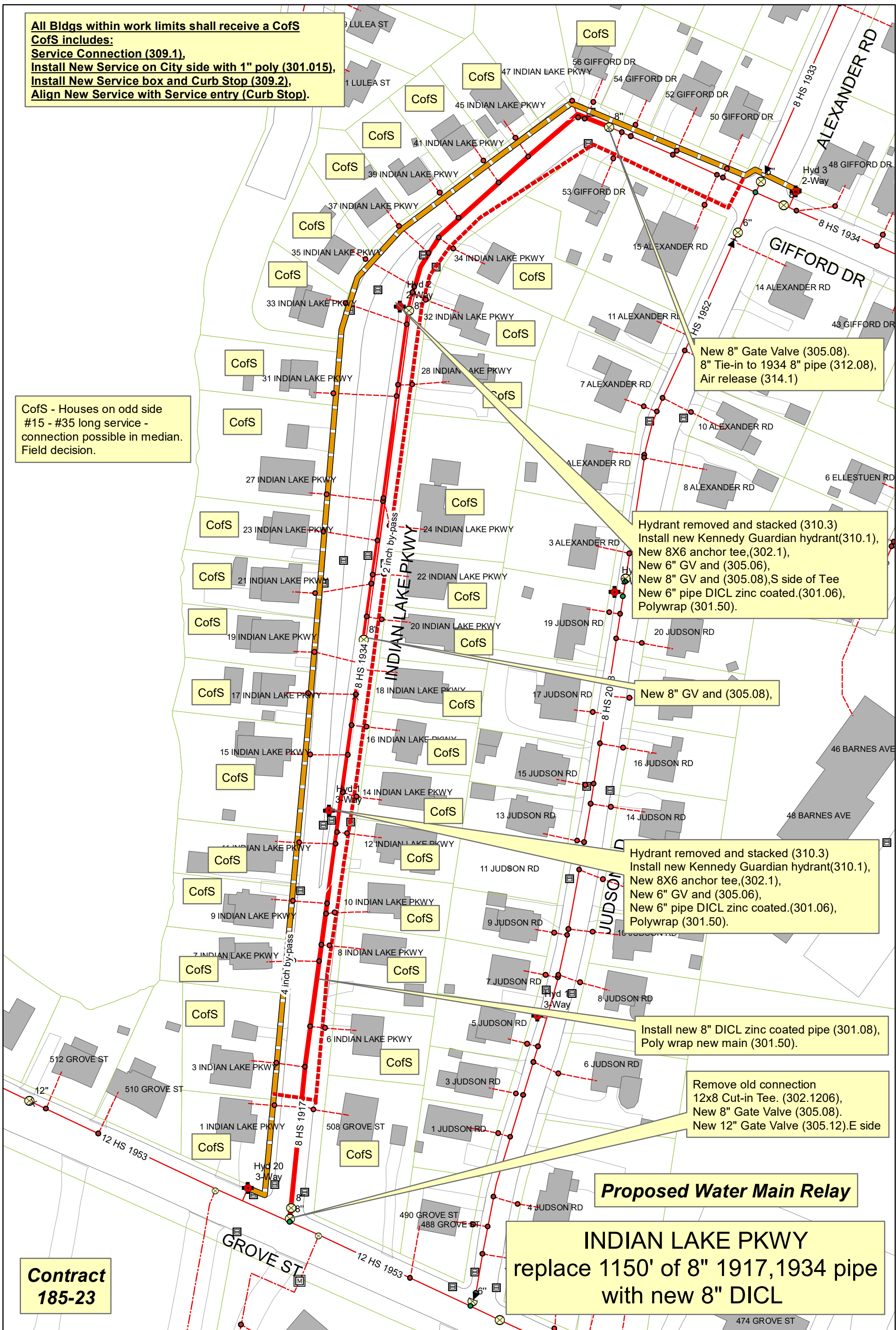


HASTING AVE from Boardman St to Proctor St
Install 800 Ft of 8" DICL zinc coated pipe



All Bldgs within work limits shall receive a CofS
CofS includes:
Service Connection (309.1),
Install New Service on City side with 1" poly (301.015),
Install New Service box and Curb Stop (309.2),
Align New Service with Service entry (Curb Stop).

CofS - Houses on odd side
#15 - #35 long service -
connection possible in median.
Field decision.



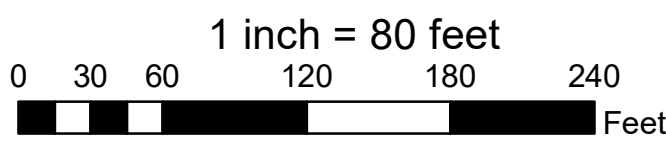
Contract
185-23

Proposed Water Main Relay

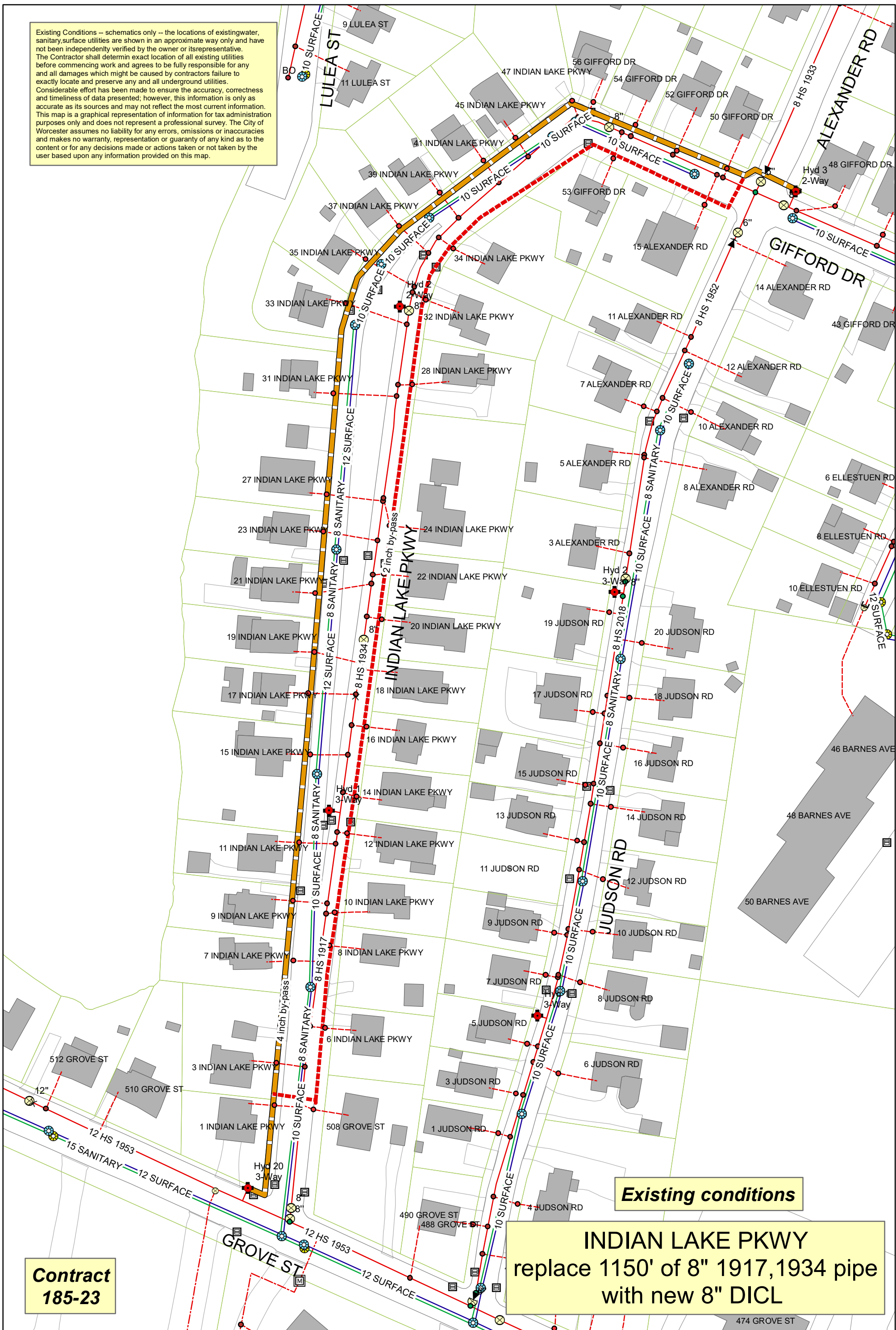
INDIAN LAKE PKWY
replace 1150' of 8" 1917, 1934 pipe
with new 8" DICL



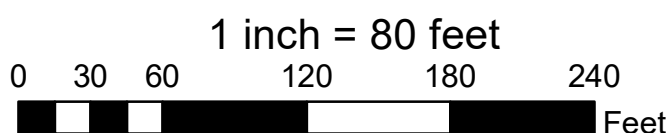
City Of Worcester
Department of Public Works & Parks
Water Operations



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City Of Worcester
Department of Public Works & Parks
Water Operations



All Bldgs within work limits shall receive a CofS
CofS includes:
Service Connection (309.1)
Install New Service on City side with 1" poly (301.015)
Install New Service box and Curb Stop (309.2)
Align New Service with Service entry (Curb Stop)

Install new 6" DICL zinc coated pipe (301.06),
 Polywrap (301.50).

Install new 8" DICL zinc coated pipe (301.08),
 Polywrap (301.50).

Install new Kennedy Guardian hydrant(310.1),
 location TBD
 New 6X6 AnchorTee,(302.1),
 New 6" GV and (305.06),
 New 6" pipe DICL zinc coated.(301.06),
 Polywrap (301.50).

12" Tie-in to 1907 Pipe (312.12)
 Install 12x8 reducer (302.1)
 Install new 8" Gate Valve (305.08)

Remove and reset Kennedy Guardian hydrant(310.4),
 New 6X6 AnchorTee,(302.1),
 New 6" GV and (305.06),
 New 6" pipe DICL zinc coated.(301.06),
 Polywrap (301.50).

Install new 8"x8" Tee (302.1)
 Install 8x6 reducer (302.1) W side
 Install new 6" Gate Valve (305.08) W side
 Install new 8" Gate Valve (305.08) S side
 8" Tie-in to 1952 Cement Lined Pipe (312.08)

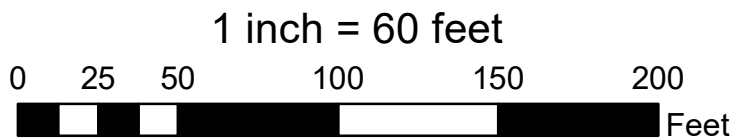
Contract
185-23

Proposed Water Main Relay

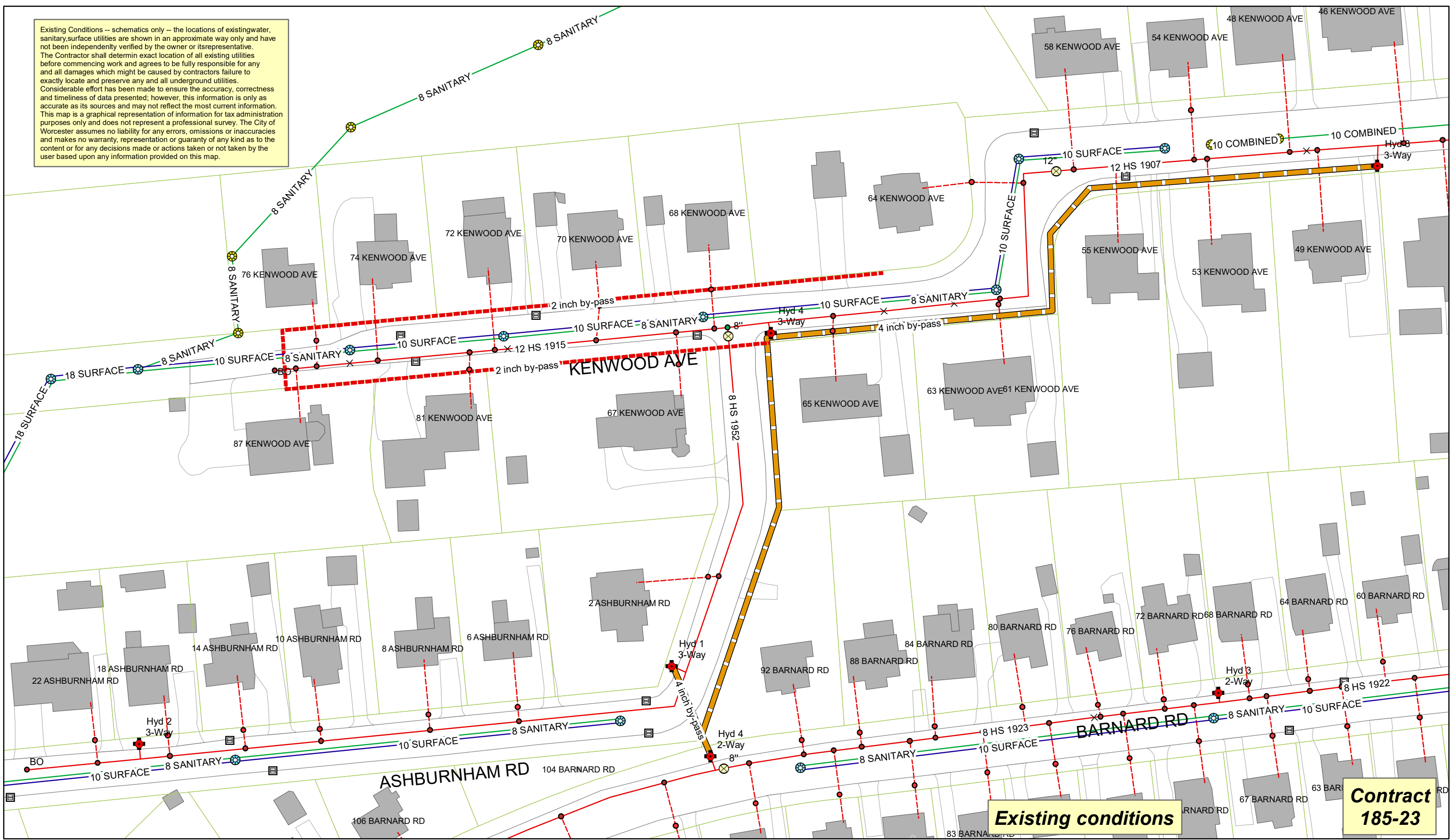
KENWOOD AVE
 Relay 620' of 1907,1915,1952 12" pipe
 with new 6 and 8" DICL pipe



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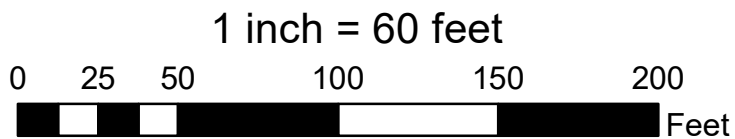
Existing Conditions -- schematics only -- the locations of existing water, sanitary, surface utilities are shown in an approximate way only and have not been independently verified by the owner or its representative. The Contractor shall determine exact location of all existing utilities before commencing work and agrees to be fully responsible for any and all damages which might be caused by contractors failure to exactly locate and preserve any and all underground utilities. Considerable effort has been made to ensure the accuracy, correctness and timeliness of data presented; however, this information is only as accurate as its sources and may not reflect the most current information. This map is a graphical representation of information for tax administration purposes only and does not represent a professional survey. The City of Worcester assumes no liability for any errors, omissions or inaccuracies and makes no warranty, representation or guaranty of any kind as to the content or for any decisions made or actions taken or not taken by the user based upon any information provided on this map.



**Contract
185-23**



City Of Worcester
Department of Public Works & Parks
Water Operations



KENWOOD AVE
 Relay 620' of 1907, 1915, 1952 12" pipe
 with new 6 and 8" DICAL pipe



All Bldgs within work limits shall receive a CofS
CofS includes:
Service Connection (309.1)
Install New Service on City side with 1" poly (301.015)
Install New Service box and Curb Stop (309.2)
Align New Service with Service entry (Curb Stop)

Remove reducer 8"x6"
8" Tie-in to 1995 8" MJ Tee (312.08),
New 8" Gate Valve (305.08)
New 8" pipe DICL zinc coated.(301.08),
Polywrap (301.50).

Install new 8" DICL zinc coated pipe (301.08),
Polywrap (301.50).

Do not connect 6" 1932 pipe,
Cemet plug or cap the end.

Abandon 6" 1932 pipe

Dig and plug 6" connection (314.5)
Polywrap(301.50),

6" Tie-in to existing 2009 8"x6" Anchor Tee (312.06)
New 6" Gate Valve (305.06).
New increaser 6"x8"(302.1)

CofS - long service
1" service connection for House #3 Roy St
Install new 1" poly pipe (301.01),

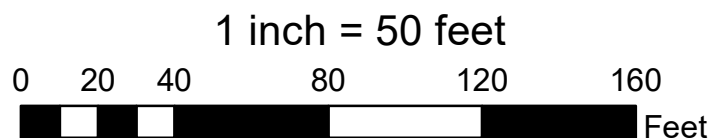
Proposed Water Main Relay

**Contract
185-23**

NORTHBRIDGE ST
Install 350' of new 8" DICL pipe



City Of Worcester
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Water Operations



Existing Conditions -- schematics only -- the locations of existing water, sanitary, surface utilities are shown in an approximate way only and have not been independently verified by the owner or its representative. The Contractor shall determine exact location of all existing utilities before commencing work and agrees to be fully responsible for any and all damages which might be caused by contractors failure to exactly locate and preserve any and all underground utilities. Considerable effort has been made to ensure the accuracy, correctness and timeliness of data presented; however, this information is only as accurate as its sources and may not reflect the most current information. This map is a graphical representation of information for tax administration purposes only and does not represent a professional survey. The City of Worcester assumes no liability for any errors, omissions or inaccuracies and makes no warranty, representation or guaranty of any kind as to the content or for any decisions made or actions taken or not taken by the user based upon any information provided on this map.

Contract 185-23

Existing conditions

NORTHRIDGE ST
Install 350' of new 8" DICL pipe



All Bldgs within work limits shall receive a CofS
CofS includes:
Service Connection (309.1)
Install New Service on City side with 1" poly (301.015)
Install New Service box and Curb Stop (309.2)
Align New Service with Service entry (Curb Stop)

Remove and stack old hydrant(310.3)
Install new Kennedy Guardian hydrant(310.1),
New 8X6 AnchorTee,(302.1),
New 6" GV and (305.06),
New 6" pipe DICL zinc coated.(301.06),
Polywrap (301.50).

8" Tie-in to 1961 pipe (312.08)
7 Ft of 1961 CL pipe from Smith Gate at Tee
Install new 8" Gate Valve (305.08)

8" Tie-in to 1993 Tee (312.08)
Install new 8" Gate Valve (305.08)

Install new 8" DICL zinc coated pipe (301.08),
Polywrap (301.50).

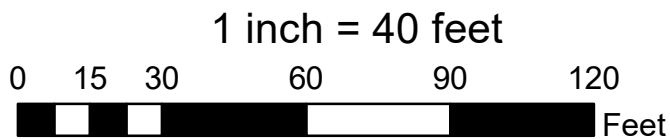
Contract
185-23

Proposed Water Main Relay

STONE ST
Relay 300' of 1916 8" pipe with new 8" DICL pipe



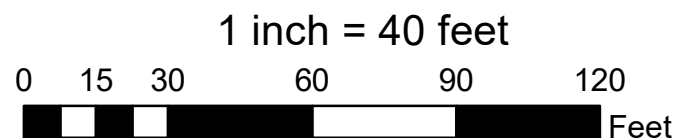
City Of Worcester
Department of Public Works & Parks
Water Operations



Existing Conditions -- schematics only -- the locations of existing water, sanitary, surface utilities are shown in an approximate way only and have not been independently verified by the owner or its representative. The Contractor shall determine exact location of all existing utilities before commencing work and agrees to be fully responsible for any and all damages which might be caused by contractors failure to exactly locate and preserve any and all underground utilities. Considerable effort has been made to ensure the accuracy, correctness and timeliness of data presented; however, this information is only as accurate as its sources and may not reflect the most current information. This map is a graphical representation of information for tax administration purposes only and does not represent a professional survey. The City of Worcester assumes no liability for any errors, omissions or inaccuracies and makes no warranty, representation or guaranty of any kind as to the content or for any decisions made or actions taken or not taken by the user based upon any information provided on this map.



City of Worcester
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STONE ST
Relay 300' of 1916 8" pipe with new 8" DICL pipe





