ADVERTISEMENT FOR BIDS

LITTLE TRAVERSE BAY BANDS OF ODAWA INDIANS HARBOR SPRINGS, MICHIGAN SEWER CLEANING AND INSPECTION

General Notice

Little Traverse Bay Bands of Odawa Indians (Owner) is requesting Bids for the construction of the following Project:

Sewer Cleaning and Inspection and Video

Bids for the construction of the Project will be received at the Little Traverse Bay Bands of Odawa Indians
Headquarters, Attention: Mandy Szocinski located at 7500 Odawa Cir, Harbor Springs, MI 49740, until August 28,
2024 3:30 pm local time. At that time bids will be received and reviewed as applicable to the project. A team from
LTBB will review and determine to award the project to the most responsive bidder.

The Project includes the following Work:

Sewer Cleaning and Video which consists of cleaning approximately 3,760 LF of sanitary sewer and 21 sanitary structures, videoing sewer, and assessing condition. Deliverable includes documentation of sewer condition, NASSCO rating, and video.

Bids are requested for the following Contract: **Sewer Cleaning and Inspection and Video** Technical specifications located in Section 33 01 30 41 of "Contract Documents and Technical Specifications". Obtaining Full Bidding Documents can be found on the LTBB Web site as noted below.

Information and Bidding Documents for the Project can be found at the following designated website:

https://www.ltbbodawa-nsn.gov

Bidding Documents may be downloaded from the designated website. Prospective Bidders are required to register with Daugherty A. Johnson DJohnson@LTBBODAWA-NSN.GOV as a plan holder. The designated website will be updated periodically with addenda, lists of registered plan holders, reports, and other information relevant to submitting a Bid for the Project. All official notifications, addenda, and other Bidding Documents will be offered only through the designated website. The Owner will not be responsible for Bidding Documents, including addenda, if any, obtained from sources other than the designated website.

Compliance with the Davis Bacon Act and adherence to the current U.S. Department of Labor Wage Decision requires that not less than the minimum salaries and wages as set forth in the Contract Documents must be paid on this project.

Pre-bid Conference

A pre-bid conference for the Project will not be held but prospective bidders are encouraged to visit the site.

This Advertisement is issued by:

Owner: Little Traverse Bay Bands of Odawa

By: Mandy Szocinski

Title: Lead Purchasing Technician

Date: August 6, 2024

Contract Documents and Technical Specifications Sanitary Sewer Cleaning and Video

Little Traverse Bay Bands of Odawa Indians 7500 Odawa Circle Harbor Springs, Michigan 49740

June 10, 2024

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^{*}Must be submitted with BID

ADVERTISEMENT FOR BIDS

LITTLE TRAVERSE BAY BANDS OF ODAWA INDIANS HARBOR SPRINGS, MICHIGAN SEWER CLEANING AND INSPECTION

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Little Traverse Bay Bands of Odawa Indians (Owner) is requesting Bids for the construction of the following Project:

Sewer Cleaning and Inspection

Bids for the construction of the Project will be received at the Little Traverse Bay Bands of Odawa Indians Headquarters, Attention: Mandy Szocinski located at 7500 Odawa Cir, Harbor Springs, MI 49740, until [day], [date] at [time for receipt of Bids] local time. At that time the Bids received will be [insert either "publicly" or "privately" as applicable to the Project] opened and read.

The Project includes the following Work:

Sewer Cleaning and Video which consists of cleaning approximately 3,760 LF of sanitary sewer and 21 sanitary structures, videoing sewer, and assessing condition. Deliverable includes documentation of sewer condition, NASSCO rating, and video.

Bids are requested for the following Contract: Sewer Cleaning and Inspection

Obtaining the Bidding Documents

Information and Bidding Documents for the Project can be found at the following designated website:

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Bidding Documents may be downloaded from the designated website. Prospective Bidders are required to register with Daugherty A. Johnson <u>DJohnson@LTBBODAWA-NSN.GOV</u> as a plan holder. The designated website will be updated periodically with addenda, lists of registered plan holders, reports, and other information relevant to submitting a Bid for the Project. All official notifications, addenda, and other Bidding Documents will be offered only through the designated website. The Owner will not be responsible for Bidding Documents, including addenda, if any, obtained from sources other than the designated website.

Compliance with the Davis Bacon Act and adherence to the current U.S. Department of Labor Wage Decision requires that not less than the minimum salaries and wages as set forth in the Contract Documents must be paid on this project.

Pre-bid Conference

A pre-bid conference for the Project will not be held but prospective bidders are encouraged to visit the site.

This Advertisement is issued by:

Owner: Little Traverse Bay Bands of Odawa

By: Mandy Szocinski

Title: Lead Purchasing Technician

Date: [Date of initial publication of advertisement]

Little Traverse Bay Bands of Odawa Indians - Sanitary Sewer Cleaning and Video - Bid Schedule

Item No.	Description	Unit	Estimated Quantity	Unit Price	Total Price
1	Mobilization	LS	1		
2	8" Sanitary Sewer Cleaning	LF	3,225		
3	10" Sanitary Sewer Cleaning	LF	104		
4	12" Sanitary Sewer Cleaning	LF	173		
5	15" Sanitary Sewer Cleaning	LF	408		
6	4-foot Manhole Cleaning	EA	21		
7	8" Pipe - Television Inspection of Sewers	LF	3,225		
8	10" Pipe - Television Inspection of Sewers	LF	104		
9	12" Pipe - Television Inspection of Sewers	LF	173		
10	15" Pipe - Television Inspection of Sewers	LF	408		
11	Pipe - Root Cutting	LF	20		

TOTAL

INDEPENDENT CONTRACTING AGREEMENT

Parties

1.	The Little Traverse Bay Bands of Odawa Indians (hereafter "LTBB") is a federally recognized Indian Tribe.
2.	(hereafter "Contractor") is an independent contractor.
	SERVICES AND PAYMENT
3.	Services. The Contractor shall provide the following services for the LTBBProject located at, according to the specifications of the Tribal and in accordance with state and tribal building, mechanical, and health standards.
	The Contractor's scope of work shall consist of the following: • • • •
	 Contractor shall contact LTBB Planning to obtain permits prior to starting work, for all repairs/replacements requiring permits and inspections. Contractor understands that failure to submit for permits and inspections shall be considered in violation the LTBB Building Codes and issued a Civil Infraction, for both see LTBB's Building Codes Regulations # REG-WOS-2009-007-061418-001 at https://ltbbodawa-nsn.gov/wp-content/uploads/2020/12/REG-WOS-2009-007-061418-001-Building-Codes-Adoption-Regulations.pdf Inspections will be required and inspector information will be provided by the LTBB Planning Department. Contractor can reach the LTBB Planning department at 231-242-1581. LTBB to pay for first inspection, if violations, Contractor shall cover all subsequent inspections until project passes. Davis Bacon and Related Acts Apply – Davis Bacon Certified Payroll logs are required for each service call. Current Reporting requirements should be based on most current modification date at time of each service. Contractor is required to submit Davis Bacon Certified Payroll logs before payment for invoices can be rendered. See Section 12 and go to https://wdolhome.sam.gov/ for current and specific determinations per county by service date
	The Contractor shall receive an advance payment of \$
	Upon successful completion and final inspection of project, as determined by the LTBB Tribal Administrator, the Contractor shall be paid a final payment of \$
	Any changes to the scope of work for this contract shall require prior written approval of LTBB Accounting Contracts Personnel for payment to be honored.
4.	<u>Payment.</u> LTBB will pay the Contractor up to a total of, and not to exceed \$\square\$ which includes all expenses required for completing the contract objectives. The Contractor shall submit invoices to the LTBB Accounting Department located at 7500 Odawa Circle, Harbor Springs, Michigan 49740.
5.	<u>Term.</u> This Agreement shall begin on and shall terminate on unless terminated earlier under paragraph 6. In the event that the project is incomplete at the expiration date, LTBB shall have the option of extending this agreement or terminating this agreement and adjusting any final payment to the percentage that the job is complete as determined by LTBB Accounting Contracts Personnel.
6.	Termination.
	 A. Voluntary. Either party may terminate this contract on fourteen (14) days written notice to the other Party for any reason at which time all fees will be adjusted on a prorated basis as determined by LTBB Accounting Contracts Personnel. B. Involuntary. LTBB may terminate this contract immediately and without prior notice if the Contractor engages in any

conduct that threatens the health, safety, or welfare of the Tribe or its citizens, or the Contractor engages in any conduct which violates Tribal law and/or applicable Federal or State laws.

7. <u>Assignment.</u> No assignment of the obligations of this contract, whether in whole or in part, may be made without the consent, previously obtained, of LTBB. No assignment or encumbrance of any interest in the compensation to be paid under this contract, whether in whole or in part may be made without the approval of LTBB. In the event an assignment of the obligations under this

- contract or of any interest in the compensation to be paid under this contract is made in violation of this paragraph, the contract may be terminated at the option of LTBB.
- 8. <u>Independent Contractor.</u> The Parties understand and agree that this Agreement is for independent contracting services. LTBB provides no benefits to Contractor including, by way of example only, unemployment insurance, health insurance, worker's compensation insurance or any type of paid leave. Contractor is responsible for payment of all liability insurance, and applicable federal, state, and local income taxes.
- 9. Additional Contractual Requirements. The Parties understand that LTBB has enacted a statute, WOS 2012-008, the Sex Offender Registration and Notification Statute, to fulfill the obligations of sex offender registration and notification. All contractors, including their employees, subcontractors and their employees that are sex offenders that are mandated to register are required to update their registry with the LTBB Law Enforcement when working on sites under the jurisdiction of LTBB.
- 10. <u>Debarred or Excluded</u>. Parties assure LTBB that Contractor and Subcontractors do not appear on the debarred list. Parties understand that LTBB shall verify that Contractor and Subcontractors are not listed as excluded from receiving Federal contracts, certain subcontracts, and certain Federal financial and nonfinancial assistance and benefits, pursuant to the provisions of 31 U.S.C. 6101, note, E.O. 12549, E.O. 12689, 48 CFR 9.404, and each agency's codification of the Common Rule for Nonprocurement suspension and debarment. Contractor shall be immediately terminated by LTBB for assigning, whether in whole or in part, any portion of contracted obligation to a subcontractor listed as debarred or excluded.
- 11. <u>Insurance.</u> The Contractor shall carry Worker's Compensation, Employer's Liability, Commercial General and/or Professional Liability Insurance Coverage, as required by law. In the event that the Contractor uses subcontractors for the performance of services required under this proposal, the Contractor shall ensure that said subcontractors carry Worker's Compensation and Employer's Liability Insurance. The Contractor shall be responsible for insuring all its vehicles, equipment, tools and all materials which it may use and/or leave the work site during work process. The Tribe shall not be responsible for any loss or damage to the Contractor's vehicles, equipment, tools and materials. The Contractor shall procure and maintain during the term of the contract Commercial General Liability Insurance on an "occurrence basis" with limits of liability of not less than \$1,000,000 per occurrence combined single limit, for Personal injury. Bodily injury and Property Damage Coverage shall include the following extensions: 1.) Contractual Liability; 2.) Products and Completed Operations Coverage; 3.) Independent Contractors Coverage; and 4.) Broad Form General Liability Extensions or equivalent. The Contractor shall maintain Vehicle Liability Coverage, and Michigan No-Fault coverages including all owned, non-owned, and hired vehicles, of not less than \$1,000,000 per occurrence combined single limit. The Contractor will provide certificate(s) of insurance coverage prior to start of contract term. If any of the above coverages expire during the term of the contract, the Contractor's insurer shall deliver renewal certification and/or policies to: Little Traverse Bay Bands of Odawa Indians, Attn: Accounting Contracts Personnel, 7500 Odawa Circle, Harbor Springs, Michigan 49740.
- 12. Davis Bacon and Related Acts (DBRA). DBRA are administered by the Wage and Hour Division. Contractors and subcontractors performing on federally funded or assisted contracts in, in excess of \$2,000.00 for the construction, alteration or repairs are required to pay their laborers not less than the prevailing wage rates and fringe benefits as determined by Department of Labor (DOL) and listed on the web site (www.dol.gov) under the Wage and Hour Division (WHD) for corresponding classes of laborers employed on similar project in the area and are listed in this contract (Addendum A i.e. MI20240009 1/06/2024 "Davis-Bacon Wage Determination"). Apprentices may be employed at less than predetermined rates if they are in an apprenticeship program registered with the DOL or with a state apprenticeship agency recognized by the DOL. Trainees may be employed at less than predetermined rates if they are in a training program certified by the DOL. Contractors and subcontractors on prime contracts in excess \$100,000.00 are required, pursuant to the Contract Work Hours and Safety Standards Act, to pay employees one and one-half times their basic rates of pay for all hours over 40 worked on covered contract work in a workweek. Covered Contractors and subcontractors are also required to pay employees weekly and to submit weekly certified payroll records to LTBB, the contracting agency, to the LTBB Accounting Office or designee (form wh347). (40 USC §276a; 29 CFR Parts 1, 3, 5, 6 and 7)
- 13. <u>Disputes.</u> The Contractor acknowledges that LTBB is a sovereign government and therefore retains all aspects of sovereignty including immunity from suit. If a dispute arises regarding any portion of this contract, LTBB may choose to waive its sovereign immunity and adjudicate the issue in LTBB Tribal Court. LTBB Tribal Court is the only forum in which LTBB waives its sovereign immunity.
- 14. **Confidentiality.** Contractor agrees to use any information obtained or accessed from LTBB, only as needed for the performance of his or her scope of work and not to use such information for any other purpose. In addition, the Contractor will not disclose or use any information it may receive or develop as a result of its contacts with LTBB for any purpose other than to perform his or her scope of work. Contractor agrees to maintain in confidence any proprietary information acquired from the Tribe under this Agreement except which becomes available to the public without fault of the Contractor.

15. <u>Funding Requirements</u> . Contractor acknowledges notification that this grant and may require special terms, conditions, and reporting requirements.	
LITTLE TRAVERSE BAY BANDS IS REQUIRED, PER THE IRS, TO VENDOR OF \$600 OR MORE IN A CALENDAR YEAR TO THE IRS (
The undersigned Parties have read, understood all the terms of, and freely executed until all parties have signed. This agreement cannot be altered o signed by all parties.	
Regina Gasco, Tribal Chair	Date
Contractor's Signature	Date
Contractor Printed Name and Title	Full Legal Name of Business Entity
Contracts Office Use	Only
Contracts Office Osc	Olly
All Documents Received Date Received Notes:	
Signature: Mandy Szocinski, Contracts Manager	 Date

Addendum A Davis-Bacon Wage Determination

"General Decision Number: MI20240157 05/17/2024

Superseded General Decision Number: MI20230157

State: Michigan

Construction Type: Heavy

PIPELINE

Counties: Michigan Statewide.

Note: Contracts subject to the Davis-Bacon Act are generally required to pay at least the applicable minimum wage rate required under Executive Order 14026 or Executive Order 13658. Please note that these Executive Orders apply to covered contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but do not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(1).

If the contract is entered into on or after January 30, 2022, or the contract is renewed or extended (e.g., an |. The contractor must pay option is exercised) on or after January 30, 2022:

- . Executive Order 14026 generally applies to the contract.
- all covered workers at least \$17.20 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in 2024.

If the contract was awarded on |. Executive Order 13658 or between January 1, 2015 and January 29, 2022, and the contract is not renewed or extended on or after January 30, 2022:

- generally applies to the contract.
- . The contractor must pay all covered workers at least \$12.90 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on that contract in 2024.

The applicable Executive Order minimum wage rate will be adjusted annually. If this contract is covered by one of the Executive Orders and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must still submit a conformance request.

Additional information on contractor requirements and worker protections under the Executive Orders is available at http://www.dol.gov/whd/govcontracts.

Modification Number Publication Date а 01/05/2024 1 05/03/2024 2 05/17/2024

* ENGI0325-012 05/01/2024

	Rates	Fringes
Power equipment operators - gas distribution and duct		
installation work:		
GROUP 1\$	37.98	25.25
GROUP 2\$	34.75	25.25

SCOPE OF WORK: The construction, installation, treating and reconditioning of pipelines transporting gas vapors within cities, towns, subdivisions, suburban areas, or within private property boundaries, up to and including private meter settings of private industrial, governmental or other premises, more commonly referred to as ""distribution work,"" starting from the first metering station, connection, similar or related facility, of the main or cross country pipeline and including duct installation.

Group 1: Backhoe, crane, grader, mechanic, dozer (D-6 equivalent or larger), side boom (D-4 equivalent or larger), trencher(except service), endloader (2 yd. capacity or greater).

GROUP 2: Dozer (less than D-6 equivalent), endloader (under 2 yd. capacity), side boom (under D-4 capacity), backfiller, pumps (1 or 2 of 6-inch discharge or greater), boom truck (with powered boom), tractor (wheel type other than backhoe or front endloader). Tamper (self-propelled), boom truck (with non-powered boom), concrete saw (20 hp or larger), pumps (2 to 4 under 6-inch discharge), compressor (2 or more or when one is used continuously into the second day) and trencher(service). Oiler, hydraulic pipe pushing machine, grease person and hydrostatic testing operator.

LAB01076-005 04/01/2024

MICHIGAN STATEWIDE

	Rates	Fringes
LABORER (DISTRIBUTION WORK)		
Zone 1	\$ 27.16	13.45
Zone 2	\$ 25.42	13.45
Zone 3	\$ 23.55	13.45
Zone 4	\$ 22.92	13.45
Zone 5	\$ 22.95	13.45

DISTRIBUTION WORK - The construction, installation, treating and reconditioning of distribution pipelines transporting coal, oil, gas or other similar materials, vapors or liquids, including pipelines within private property boundaries, up to and including the meter settings on residential, commercial, industrial, institutional, private and public structures. All work covering pumping stations and tank farms not covered by the Building Trades Agreement. Other distribution lines with the exception of sewer, water and cable television are included.

Underground Duct Layer Pay: \$.40 per hour above the base pay rate.

Zone 1 - Macomb, Oakland and Wayne

Zone 2 - Monroe and Washtenaw

Zone 3 - Bay, Genesee, Lapeer, Midland, Saginaw, Sanilac, Shiawassee and St. Clair

Zone 4 - Alger, Baraga, Chippewa, Delta, Dickinson, Gogebic, Houghton, Iron, Keweenaw, Luce, Mackinac, Marquette, Menominee, Ontonagon and Schoolcraft

Zone 5 - Remaining Counties in Michigan

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at

https://www.dol.gov/agencies/whd/government-contracts.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (iii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of ""identifiers" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than ""SU"" or ""UAVG"" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the

most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the ""SU"" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

State Adopted Rate Identifiers

Classifications listed under the ""SA"" identifier indicate that the prevailing wage rate set by a state (or local) government was adopted under 29 C.F.R 1.3(g)-(h). Example: SAME2023-007 01/03/2024. SA reflects that the rates are state adopted. ME refers to the State of Maine. 2023 is the year during which the state completed the survey on which the listed classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 01/03/2024 reflects the date on which the classifications and rates under the ?SA? identifier took effect under state law in the state from which the rates were adopted.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

* an existing published wage determination

- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour National Office because National Office has responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations Wage and Hour Division U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

END OF GENERAL DECISION"

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SECTION 01 00 10 SUMMARY OF WORK

PART 1 GENERAL

1.01 WORK COVERED BY CONTRACT DOCUMENTS

Work will include:

1. Sewer Cleaning and Video which consists of cleaning approximately 3,910 LF of sanitary sewer and 21 sanitary structures, videoing sewer, and assessing condition. Deliverable includes documentation of sewer condition, NASSCO rating, and video.

1.02 CONTRACTS

All work will be awarded in one contract.

1.03 ALTERNATES

No alternatives for this work are being requested.

1.04 WORK BY OTHERS

No work by others is anticipated that will affect work under this project.

1.05 FUTURE WORK

No future work is anticipated that will affect work under this project.

1.06 WORK SEQUENCE

No special sequencing is required.

1.07 COORDINATION

Coordinate all work with the OWNER to minimize any inconvenience.

1.08 AVAILABILITY OF LANDS

All work will take place on property owned or controlled by the OWNER or within the public rightof-way.

1.09 PRE-ORDERED ITEMS

No items have been pre-ordered for this project.

1.10 OWNER FURNISHED ITEMS

No items are to be Owner furnished for this project.

1.11 PROJECT IDENTIFICATION AND SIGNS

Project identification signs are required.

1.12 AUDIO-VIDEO ROUTE SURVEY

Contractor shall **not** be required to provide an audio-video route survey for prior to start of construction.

PART 2 PRODUCTS - Not Used

PART 3 EXECUTION - Not Used

SECTION 01 20 00

PRICE AND PAYMENT PROCEDURE

PART 1 GENERAL

1.01 SUMMARY

- A. Bid price includes all labor, tools, equipment, materials, transportation, and applicable fees, use tax, and sales tax necessary to complete the work in accordance with the Plans and Specifications.
- B. All measurement and payment will be based on completed work, ready for use, performed in strict accordance with the Plans and Specifications.
- C. Bid quantities listed in the Bid Schedule have been estimated and are only for the purpose of comparing, on a uniform basis, the Bids offered for the Work. Completed quantities for payment will be based on field measurements.
- D. Neither the Owner nor his agents shall be held responsible should any of the estimated quantities be found incorrect.
- E. Payment will be made only on items listed in the BID SCHEDULE. All other work not listed in the BID SCHEDULE shall be considered incidental to the performance of the Work.
- F. Owner reserves the right to delete any line item or quantity on the BID SCHEDULE.

1.02 APPLICATION FOR PAYMENT

- A. Pay period: 30 days.
- B. Payment requests shall be submitted on the forms included in the Specifications.

1.03 SUBMITTALS

A. Not used.

1.04 ITEMS OF THE BID FORM

Measurement and Payment for the Pay Items listed on the Bid Schedule shall be as follows:

A. Item No. 1 Mobilization

- 1. Payment includes obtaining bond, preparatory work and operation, for the movement of personnel, equipment, supplies, and incidentals to the project site; establishment of a project office and other facilities needed to undertake the Work.
- 2. Unit of measure: Lump Sum.

B. Item Nos. 2-5 Sewer Cleaning

- 1. Cleaning of sewer for each size listed in the bid schedule according to the specifications.
- 2. Unit of Measure: Linear Feet

C. Item No. 6 Manhole Cleaning

1. Cleaning of each manhole for each size listed in the bid schedule according to the specifications.

- 2. Unit of Measure: Each
- D. Item Nos. 7-10 Television Inspection of Sewers Video Recording
 - 1. Television inspection of sewers for each size listed in the bid schedule according to the specifications.
 - 2. Unit of Measure: Linear Feet
- E. Item No. 11
- em No. 11 Root Cutting

 1. Cutting and removal of roots according to the specifications.
 - 2. Unit of Measure: Linear Feet

SECTION 01 56 26

TRAFFIC REGULATION

PART 1 GENERAL

1.01 SUMMARY

A. Section includes:

- 1. Provide and maintain traffic control equipment and personnel to protect the work and workmen, and to ensure the least possible obstruction to traffic and inconvenience to the general public.
- 2. Meet all the requirements of the construction permit issued by the right-of-way owner.

B. Related Sections:

Section 01 20 00 - PRICE AND PAYMENT PROCEDURE Section 01 29 76 - PROGRESS PAYMENT PROCEDURES

1.02 UNIT PRICES

All work under this Section shall be considered as incidental to construction, unless specifically indicated on the BID SCHEDULE and referred to in Section 01 20 00 - PRICE AND PAYMENT PROCEDURE

1.03 REFERENCED STANDARDS

MDOT Michigan Manual of Uniform Traffic Control Devices (MMUTCD)

PART 2 PRODUCTS

2.01 GENERAL

All products shall be in accordance with the Michigan Manual of Uniform Traffic Control Devices.

PART 3 EXECUTION

3.01 DETOURS

- A. Contractor shall be solely responsible for acts or omissions resulting in any legal proceedings due to improper or inadequate detour or safety controls.
- B. Submit proposed detour route to the Engineer, the municipality, and all emergency services for approval prior to construction in the detour area.
- C. Keep fire hydrants adjacent to the work accessible to firefighting equipment at all times.
- D. Keep police, fire, and other emergency services informed of the status of road closings.

3.02 PUBLIC ACCESS

- A. Maintain traffic access in accordance with local laws and regulations having jurisdiction.
- B. Minimize the time that vehicular and pedestrian access to any occupied home, or other building is interrupted. Maintain continuous access to businesses.
- C. Maintain temporary driveways, roadways, and crosswalks in good, usable condition until they are fully restored. As a minimum, provide 6 inches of compacted 22-A aggregate at all driveways.

SECTION 33 01 30.11

TELEVISION INSPECTION OF SEWERS

PART 1 GENERAL

1.01 SUMMARY

- A. Section Includes: all labor, equipment, materials, and supervision, and perform all work necessary to televise the sanitary sewer lines identified in the plan drawings.
- B. The work progression is as follows:
 - 1. Flow Control
 - 2. TV Inspection
- C. Immediately after cleaning of a sewer section has been performed, the sewer is to be TV Inspected by use of CCTV. Cleaning and TV Inspection must occur hand in hand to provide the clearest report of the sewer inspection.

1.02 UNIT PRICES

Refer to Section 01 20 00 PRICE AND PAYMENT PROCEDURE

1.03 STANDARDS AND QUALITY

- A. Perform all work in accordance with NASSCO PACP Specifications and guidelines.
- B. Perform all CCTV inspections by CCTV personnel trained and certified in the use of NASSCO's Pipeline Assessment and Certification Program (PACP)
- C. Contractor shall utilize software capable of video recording and maintaining the pipe condition database in accordance with NASSCO's PACP.

PART 2 PRODUCTS

2.01 TELEVISION INSPECTION EQUIPMENT

- A. CCTV inspections shall be performed by CCTV personnel trained and certified to use the NASSCO's Pipeline Assessment and Certification Program (PACP).
- B. Closed circuit television equipment specifically designed and constructed for sewer line inspection.
- B. Lighting suitable to allow a clear picture for the entire periphery of the pipe.
- C. Operative in 100% humidity conditions.
- D. Capable of producing a minimum 500 line resolution video picture.
- E. Picture quality and definition satisfactory to Owner and Engineer; refer to NASSCO Specifications for guidance.

F. Above ground measurement feet, accurate to 0.2 feet over the length of the section being inspected.

2.02 CONTRACTOR'S REPORT

- A. Submit two (2) copies of the report to Engineer including each video recording in digital form and electronic reports of the televising activities. These reports are to be submitted to the Engineer on a weekly basis within seven (7) business days of the video being recorded. The reporting is to be performed using PACP certified software with PACP template.
 - 1. Television inspection logs are to be filled out using NASSCO PACP coding
 - a. Each observed defect recorded during inspection must clearly state the location of the defect in relation to an adjacent manhole. The defects recorded must be printed and kept by the Contractor. Structural defects, operational and maintenance defects, construction observations, or miscellaneous feature observations must be in accordance with NASSCO's PACP guidelines. This includes assigning a condition grade (1-5) for effect defect in accordance with NASSCO's PACP Condition Grading System.
 - b. In reference to NASSCO PACP header template, all NASSCO mandated fields shall be provided pipe reach inspected by CCTV. These data fields include:
 - 1. Name of Surveyor
 - 2. Certificate Number
 - 3. Date of CCTV Survey
 - 4. Pre-cleaning Method
 - 5. Direction of Survey
 - 6. Inspection Status
 - 7. Street Address of Starting Manhole
 - 8. Pipe Use
 - 9. Pipe Diameter/Height/Width as applicable
 - 10. Pipe Shape
 - 11. Pipe Material
 - 12. Upstream MH Number
 - 13. Downstream MH Number
 - c. The following NASSCO PACP Optional fields shall also be completed for each pipe reach inspected by CCTV:
 - 1. Date of Pre-cleaning
 - 2. Flow Control Method
 - 3. Length Surveyed
 - 2. Video recordings
 - a. Visual and audio record of inspection of entire length of lines inspected that may be replayed on standard DVD video equipment.
 - b. Video recording shall begin and end within the associated manhole structures and document the initial and final pipe to manhole connections.
 - c. Lateral Video Inspection
 - 1. Pause at each lateral a minimum of 15 seconds.
 - 2. Rotate camera to see into lateral.
 - 3. Identify and quantify any clear water flow.
 - d. Video shall incorporate a running distance feet and reference to location.
 - e. Provide two copies of the video report on DVDs or USB flash drives with file names based on the following nomenclature:

Three Digit Township Identified – Three Digit Original Contract Number – 140 – Upstream Manhole Number

The following three-digit township identifiers are used:

593 - Bear Creek North

- f. Direction of travel shall be noted as Upstream or Downstream.
- g. If multiple videos of the same reach are made on the same day, denote each attempt with a letter suffix (i.e. a, b, c, and so on)

3. Electronic Database

- a. Provide the Engineer with the exported PACP database. The database shall include all fields required in 2.04-A.1 above and provide PACP ratings in the following formats:
 - Structure Quick Rating
 - O&M Quick Rating
 - Segment Grade Scores for structure and O&M
 - Pipe Rating Index (combined)
- b. Export the database in the most current PACP export conversion unless otherwise directed by the Engineer.

PART 3 EXECUTION

3.01 SEWER FLOW CONTROL

A. General

When sewer line flows at any point during the inspection exceed the allowable requirements for television inspection, reduce flow rate to required levels by manual operation of pump stations, plugging or blocking of flow, or bypass pumping.

B. Maximum sewer flows:

- 1. For television inspection:
 - a. 6" 10" pipe: 20% of pipe diameter
 - b. 12" 24" pipe: 25% of pipe diameter
 - c. Over 24" pipe: 30% of pipe diameter
- 2. For joint testing and sealing:
 - a. 6" 12" pipe: 25% of pipe diameter
 - b. 15" 24" pipe: 30% of pipe diameter
 - c. Over 24" pipe: 35% of pipe diameter

C. Plugging or blocking

- Insert sewer line plug into line at a manhole upstream from the section being inspected and/or sealed.
- 2. Plug shall be capable of releasing all or any portion of the sewage flow as necessary.
- 3. Shut off flow or reduce it to within the maximum limits specified above.
- 4. Restore flow to normal when work tasks have been completed.

D. Pumping and bypassing

- 1. When required, furnish all necessary pumps, conduits, other equipment, labor and supervision to divert sewage flow around pipe section in which work is to be performed.
- 2. Bypass system shall be of sufficient capacity to handle existing flows plus additional flow that may occur during precipitation or other event.
- 3. If pumping is required on a 24 hour basis, all engines shall be equipped in a manner to minimize pump noise.
- 4. When flows in sewer lines are blocked, plugged, or bypassed, take sufficient precautions to protect sewer lines from damage by surcharging and to prevent flooding or damage to property served by the sewers involved.

3.03 TELEVISION INSPECTION

- A. Perform inspection one sewer span at a time.
- B. Control flow in sewer as necessary as specified in 3.02.
- C. Move camera through sewer line in either direction at a uniform rate not exceeding 30 feet per minute.
- D. Use manual winches, power winches, TV cable, powered rewinds and other devices that do not obstruct the camera view or interfere with proper documentation of the sewer conditions to move the camera through the sewer line.
- E. If, during the inspection operation, the camera will not pass through the entire sewer section (such as blockage or high water level refer to section 3.02 for flow control), end the inspection for that section of sewer and re-set equipment and perform an additional inspection from the manhole at the opposite end of the span.
- F. Whenever non-remote powered and controlled winches are used to pull the camera through the line, use telephones or other suitable means of communication between crew members at opposite ends of the sewer section being inspected.
- G. Verify accuracy of measurement feet daily with measuring wheel, tape, or other suitable device.

SECTION 33 01 30.41

CLEANING OF SEWERS

PART 1 GENERAL

1.01 SUMMARY

- A. Section Includes: all labor, equipment, materials, and supervision, and perform all work necessary to clean the sanitary sewer lines identified in the plan drawings.
- B. The work progression is as follows:
 - 1. Sewer Line Cleaning
 - 2. Flow Control
 - 3. Root Cutting, as required
- C. Immediately after cleaning of a sewer section has been performed, the sewer is to be TV Inspected by use of CCTV. Cleaning and TV Inspection must occur hand in hand to provide the clearest report of the sewer inspection.

1.02 UNIT PRICES

Refer to Section 01 20 00 PRICE AND PAYMENT PROCEDURE

1.03 STANDARDS AND QUALITY

- A. Perform all work in accordance with NASSCO PACP Specifications and guidelines.
- B. If after Engineer review of television inspections shows the sewer cleaning to be unsatisfactory or does not meet the NASSCO PACP Specifications, the Contractor will be required to clean and inspect said section of sewer line at no additional cost to the Owner.

PART 2 PRODUCTS

2.01 SEWER CLEANING EQUIPMENT

A. General:

- 1. Mechanically powered, hydraulically propelled or high velocity sewer cleaning equipment.
- 2. Select equipment based on conditions in sewer lines and as approved by the Engineer.
- 3. Equipment shall be capable of removing dirt, grease, rocks, sand and other deleterious materials and obstructions from sewer lines and manholes.

B. Hydraulic cleaning equipment:

- 1. Movable dam type, constructed in such a way that a portion of the dam may be collapsed any time during the cleaning operation to protect against flooding of the sewer.
- 2. Movable dam shall be of a diameter equal to that of the pipe being cleaned and shall provide a flexible scraper around the outer periphery to insure total removal of grease.
- C. High velocity hydro-cleaning equipment:
 - Constructed for ease and safety of operation.
 - Selection of two or more high velocity nozzles, capable of producing a scouring action from 15 degrees to 45 degrees in all line sizes designated to be cleaned.

- 3. High velocity gun for washing and scouring manhole walls and floors, capable of producing flows from a fine spray to a long distance solid stream.
- Equipment shall carry its own water tank, auxiliary engines, pumps, and hydraulically driven hose reel.
- 5. All controls shall be located so that equipment can be operated from above ground.

D. Mechanical cleaning equipment:

- Bucket machines shall be in pairs with sufficient power to perform the work in an efficient manner.
- 2. Machine shall be belt operated or have an overload device.
- Machines with direct drive that could cause damage to the pipe will not be allowed.
- Power rodding machines shall be either a sectional or continuous type capable of holding a minimum of 750 feet of rod.
- 5. Rod shall be specifically treated steel.
- 6. To ensure safe operation, the machine shall have a fully enclosed body and an automatic safety throw-out clutch or relief valve.

2.02 ROOT CUTTING EQUIPMENT

- A. Mechanical equipment specifically designed for removal of roots in sewer lines.
- B. Capable of removing roots sufficiently to allow television inspection of the sewer lines to be performed properly.
- C. Capable of removing roots without damaging the pipe.
- D. Capable of being operated from above ground.

PART 3 EXECUTION

3.01 SEWER LINE CLEANING

A. General

- 1. Clean all sewer lines designated for TV inspection using equipment as specified in 2.01.
- 2. Select appropriate equipment based on conditions of sewer lines.
- It is recognized that there may be some conditions such as badly broken or eroded pipe or major blockages that prevent cleaning from being accomplished or where additional sewer line damage would result if cleaning is attempted or continued. Notify Owner and Engineer if conditions of this nature are encountered.
- 4. If cleaning of an entire section of sewer cannot be successfully performed from one manhole, the equipment shall be re-setup on the other manhole and cleaning again attempted. If successful cleaning can still not be performed or the equipment fails to traverse the entire sewer section, it will be assumed that a major blockage exists and the cleaning efforts shall be abandoned. Notify Owner and Engineer of any such blockages prior to suspension of cleaning operations.

B. Material removal and disposal

- Remove all sludge, dirt, sand, rocks, grease, and solid or semi-solid materials resulting from the cleaning operations at the downstream manhole of the section being cleaned. Passing materials to the next manhole section will not be permitted.
- 2. Remove all solids or semi-solids resulting from the cleaning operations from the site and dispose of them in a legal manner off site.
- Transport and remove materials from the site no less often than at the end of each working day.

- 4. Contractor may accumulate debris at the site only in totally enclosed containers and as approved by the Owner.
- Removal and disposal is part of the cleaning costs and the Owner will not provide a disposal site.

C. Cleaning precautions

- Protect sewer lines from damage that may be inflicted by improper use of cleaning equipment.
- 2. Take necessary precautions to ensure that water pressure does not cause any damage or flooding to public or private property served by the sewer section being cleaned.
- 3. Utilize wastewater flow in sewer lines to provide necessary pressures for hydraulic cleaning whenever possible to minimize the quantity of water needed from the distribution system.
- Coordinate obtaining water from the Owner's fire hydrants. Connections to the water supply shall be made with a Michigan Department of Environmental Quality approved backflow prevention device.

C. Incidentals

Weekly submittals of videos and reports will allow the Engineer to verify the cleanliness of the sewers. No payment will be made to the Contract for sewers which are not clean as verified by the CCTV inspection and reviewed by the Engineer. If a sewer section is to be cleaned and CCTV inspected again, this additional work will be incidental.

3.02 SEWER FLOW CONTROL

A. General

When sewer line flows at any point during the inspection exceed the allowable requirements for television inspection, reduce flow rate to required levels by manual operation of pump stations, plugging or blocking of flow, or bypass pumping.

B. Maximum sewer flows:

- 1. For television inspection:
 - a. 6" 10" pipe: 20% of pipe diameter
 - b. 12" 24" pipe: 25% of pipe diameter
 - c. Over 24" pipe: 30% of pipe diameter
- 2. For joint testing and sealing:
 - a. 6" 12" pipe: 25% of pipe diameter
 - b. 15" 24" pipe: 30% of pipe diameter
 - c. Over 24" pipe: 35% of pipe diameter

C. Plugging or blocking

- Insert sewer line plug into line at a manhole upstream from the section being inspected and/or sealed.
- 2. Plug shall be capable of releasing all or any portion of the sewage flow as necessary.
- 3. Shut off flow or reduce it to within the maximum limits specified above.
- 4. Restore flow to normal when work tasks have been completed.

D. Pumping and bypassing

- 1. When required, furnish all necessary pumps, conduits, other equipment, labor and supervision to divert sewage flow around pipe section in which work is to be performed.
- Bypass system shall be of sufficient capacity to handle existing flows plus additional flow that may occur during precipitation or other event.
- 3. If pumping is required on a 24 hour basis, all engines shall be equipped in a manner to minimize pump noise.
- 4. When flows in sewer lines are blocked, plugged, or bypassed, take sufficient precautions to

protect sewer lines from damage by surcharging and to prevent flooding or damage to property served by the sewers involved.

3.03 ROOT CUTTING

Remove all roots that would obscure any portion of the pipe from satisfactory television inspection.

If root cutting is required, the payment including all labor, materials, and equipment required to perform the root cutting will fall under root cutting in the bid schedule.

SECTION 33 01 30.42

CLEANING OF MANHOLES

PART 1 GENERAL

1.01 SUMMARY

- A. Section includes: all labor, equipment, materials, and supervision, and perform all work necessary to clean the sanitary sewer manholes identified in the plan drawings.
- B. The work progression is as follows:
 - 1. Manhole Cleaning
 - 2. Flow Control
- C. Immediately after cleaning of a sewer section has been performed, the sewer is to be TV Inspected by use of CCTV. Cleaning and TV Inspection must occur hand in hand to provide the clearest report of the sewer inspection.

1.02 UNIT PRICES

Refer to Section 01 20 00 PRICE AND PAYMENT PROCEDURE

1.03 STANDARDS AND QUALITY

- A. Perform all work in accordance with NASSCO PACP Specifications and guidelines.
- B. If after Engineer review of television inspections shows the sewer cleaning to be unsatisfactory or does not meet the NASSCO PACP Specifications, the Contractor will be required to clean and inspect said section of sewer line at no additional cost to the Owner.

PART 2 PRODUCTS

2.01 MANHOLE CLEANING EQUIPMENT

A. General:

- 1. Mechanically powered, hydraulically propelled or high velocity sewer cleaning equipment.
- 2. Select equipment based on conditions in manholes and as approved by the Engineer.
- Equipment shall be capable of removing dirt, grease, rocks, sand and other deleterious materials and obstructions from manholes.
- 4. Manholes shall be cleaned from surface rim to flow channel using methods approved by the engineer.
- Manhole cleaning shall remove all deposits of grease and debris adhered to the manhole structure.
- 6. Contractor shall discontinue manhole cleaning and notify Engineer if cleaning effort causes damage to manhole structure.
- Only those manholes designated by the Engineer in the preconstruction meeting shall be eligible for payment. Additional manholes are not eligible for payment without prior approval by the engineer.
- Passing of a sewer pipe jetting, or similar, tool is not sufficient to receive payment for manhole cleaning.

PART 3 EXECUTION

3.01 SEWER FLOW CONTROL

A. General

When sewer line flows at any point during the inspection exceed the allowable requirements for television inspection, reduce flow rate to required levels by manual operation of pump stations, plugging or blocking of flow, or bypass pumping.

B. Maximum sewer flows:

- 1. For television inspection:
 - a. 6" 10" pipe: 20% of pipe diameter
 - b. 12" 24" pipe: 25% of pipe diameter
 - c. Over 24" pipe: 30% of pipe diameter
- 2. For joint testing and sealing:
 - a. 6" 12" pipe: 25% of pipe diameter
 - b. 15" 24" pipe: 30% of pipe diameter
 - c. Over 24" pipe: 35% of pipe diameter

C. Plugging or blocking

- Insert sewer line plug into line at a manhole upstream from the section being inspected and/or sealed.
- 2. Plug shall be capable of releasing all or any portion of the sewage flow as necessary.
- 3. Shut off flow or reduce it to within the maximum limits specified above.
- 4. Restore flow to normal when work tasks have been completed.

D. Pumping and bypassing

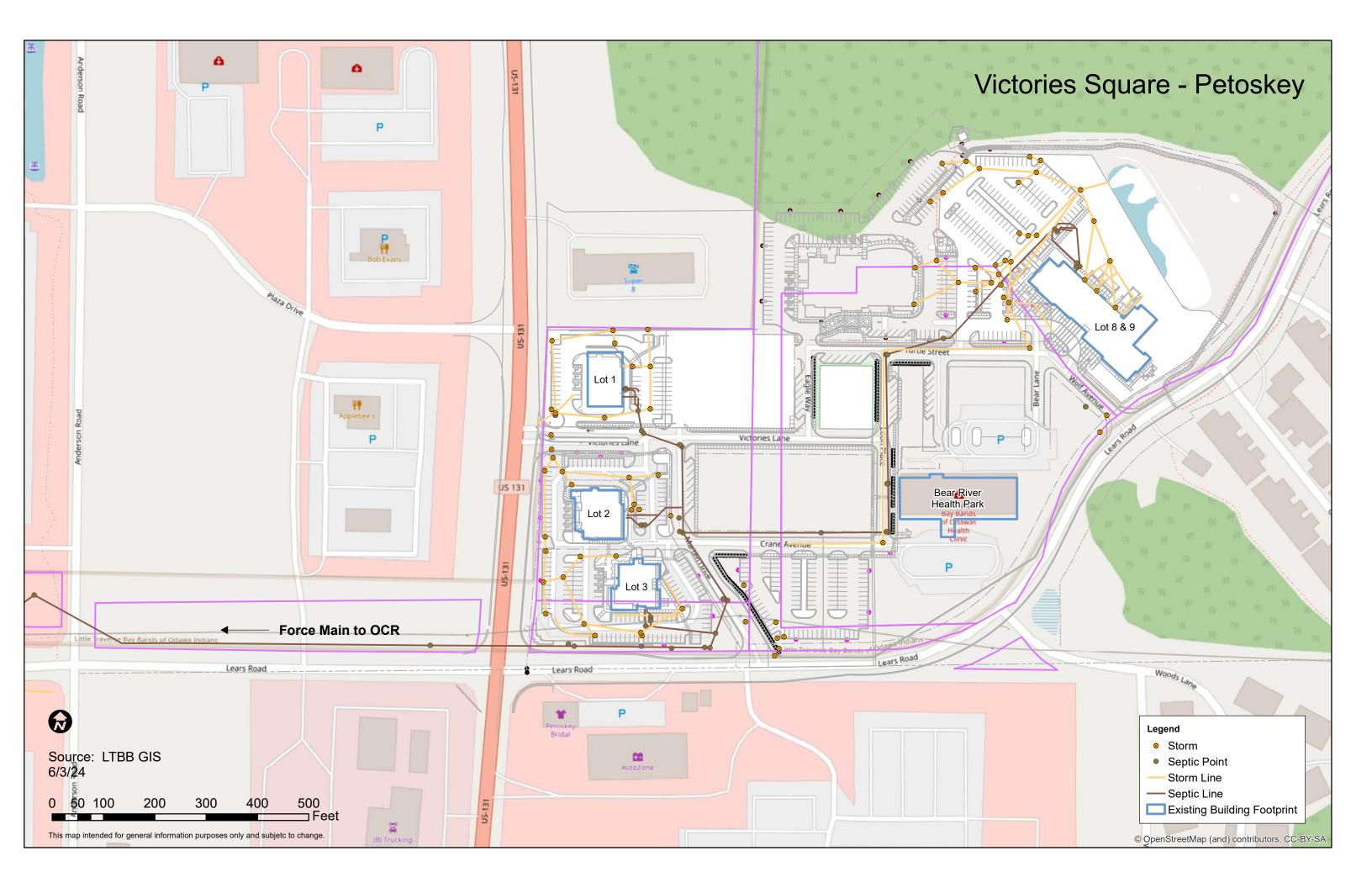
- 1. When required, furnish all necessary pumps, conduits, other equipment, labor and supervision to divert sewage flow around pipe section in which work is to be performed.
- 2. Bypass system shall be of sufficient capacity to handle existing flows plus additional flow that may occur during precipitation or other event.
- 3. If pumping is required on a 24 hour basis, all engines shall be equipped in a manner to minimize pump noise.
- 4. When flows in sewer lines are blocked, plugged, or bypassed, take sufficient precautions to protect sewer lines from damage by surcharging and to prevent flooding or damage to property served by the sewers involved.

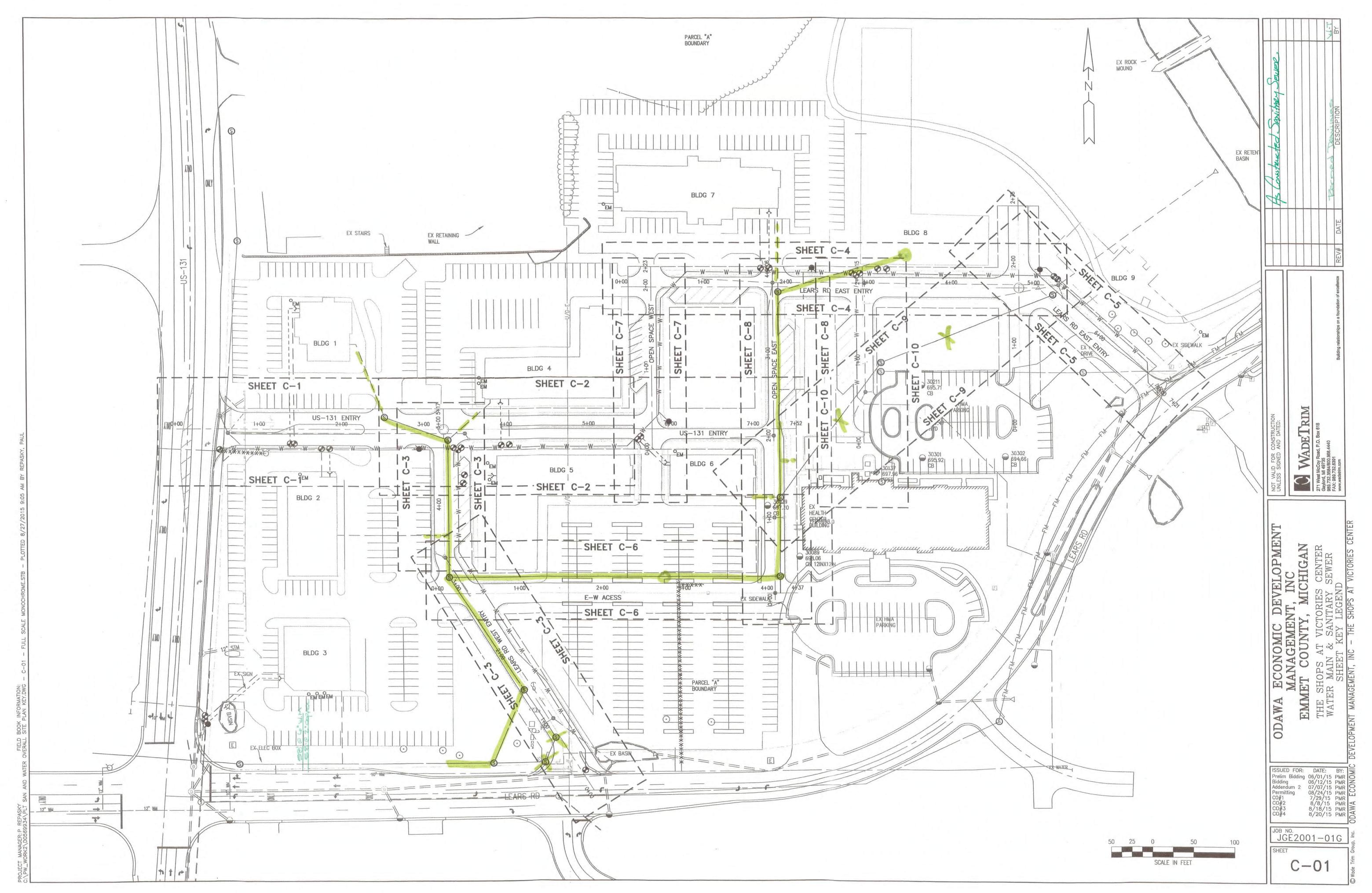
3.02 MANHOLE CLEANING

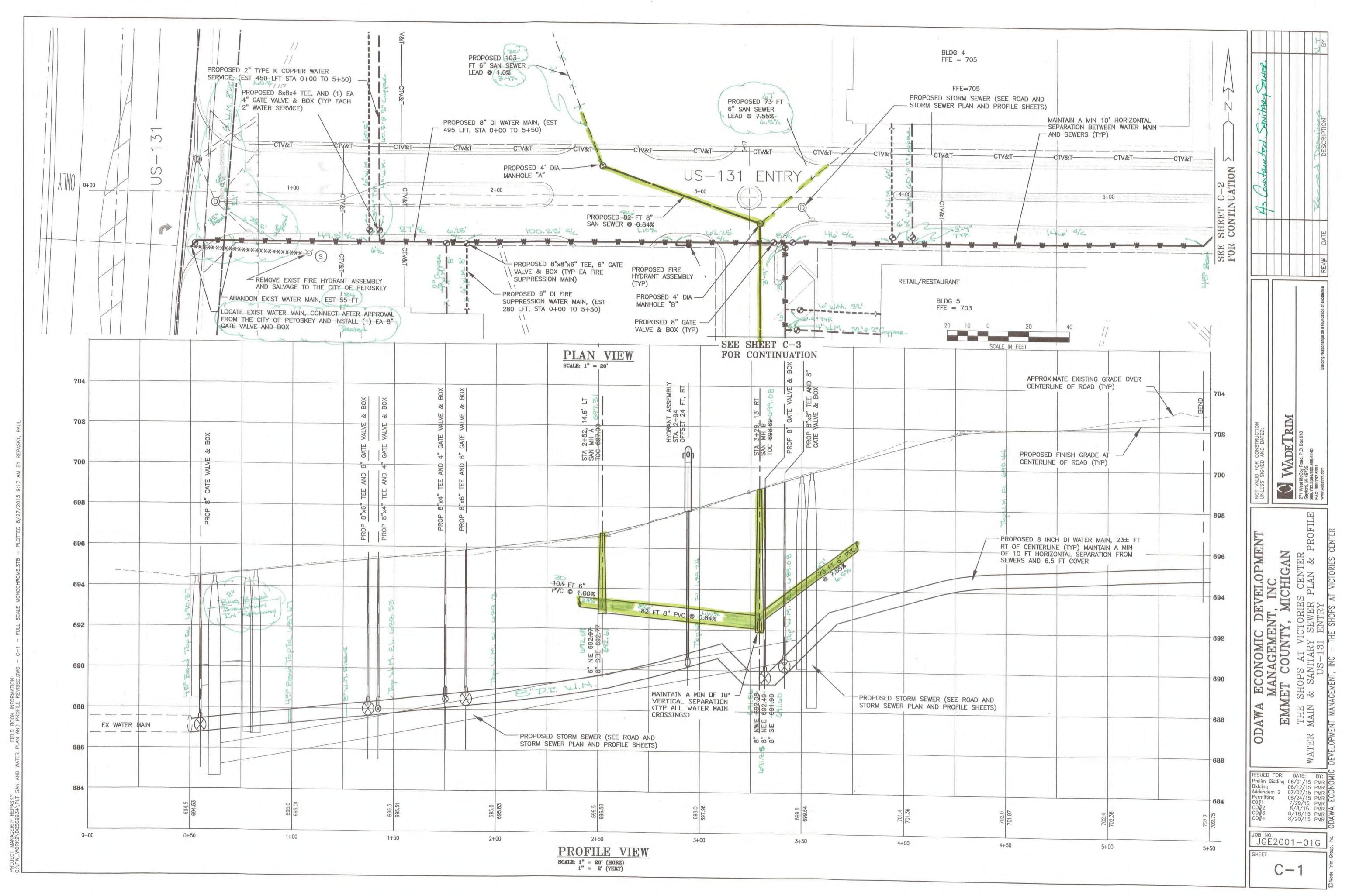
Cleaning manhole interior surfaces (steps, walls, bench, etc.) will remove debris and sediment via the direct application of hydraulic cleaning, high velocity hydro-cleaning, mechanical cleaning or other method approved by the Engineer. Passing pipe cleaning equipment through the flow channel of a manhole will not be considered proper cleaning of any manhole surface.

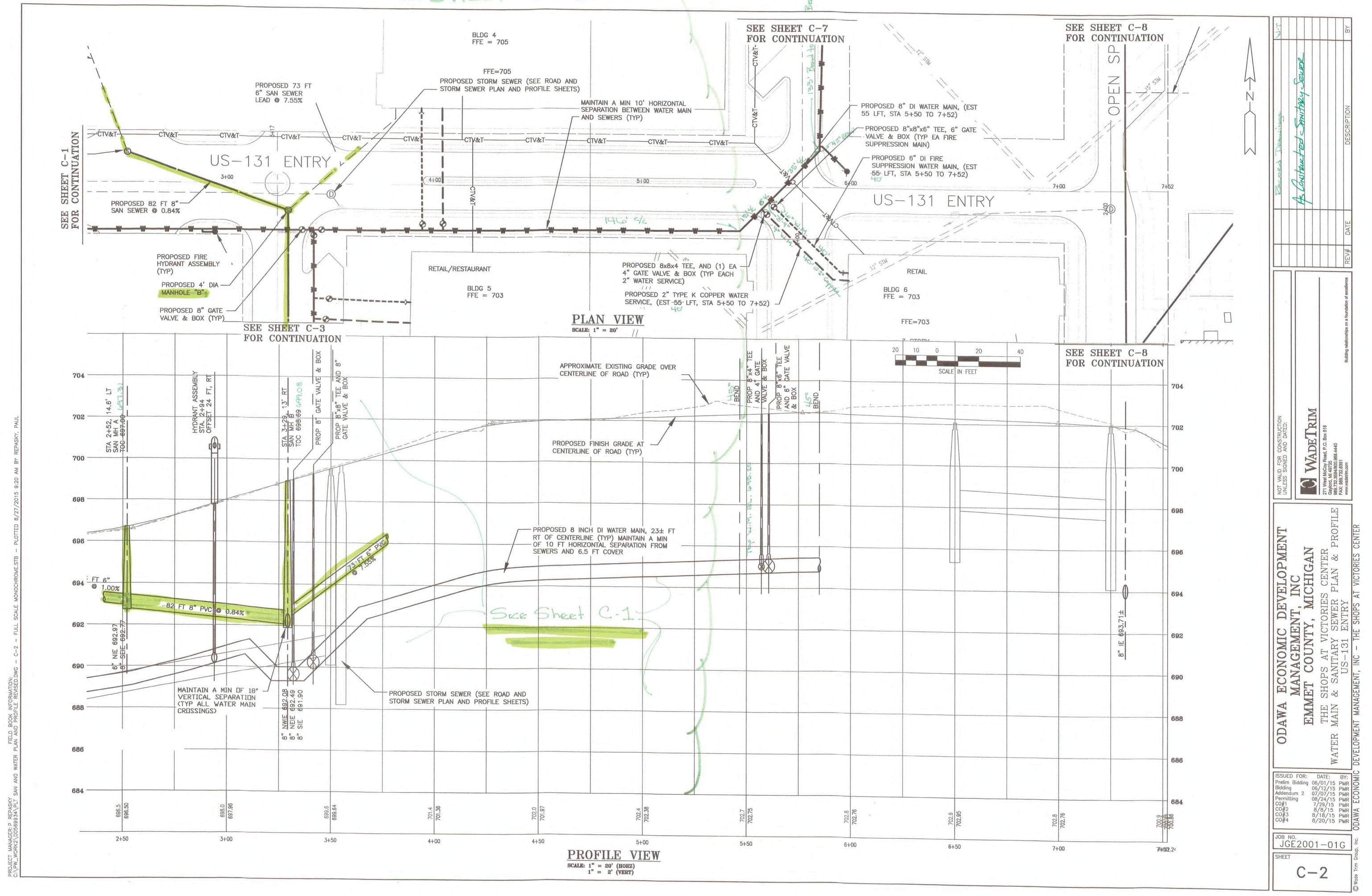
Appendix A

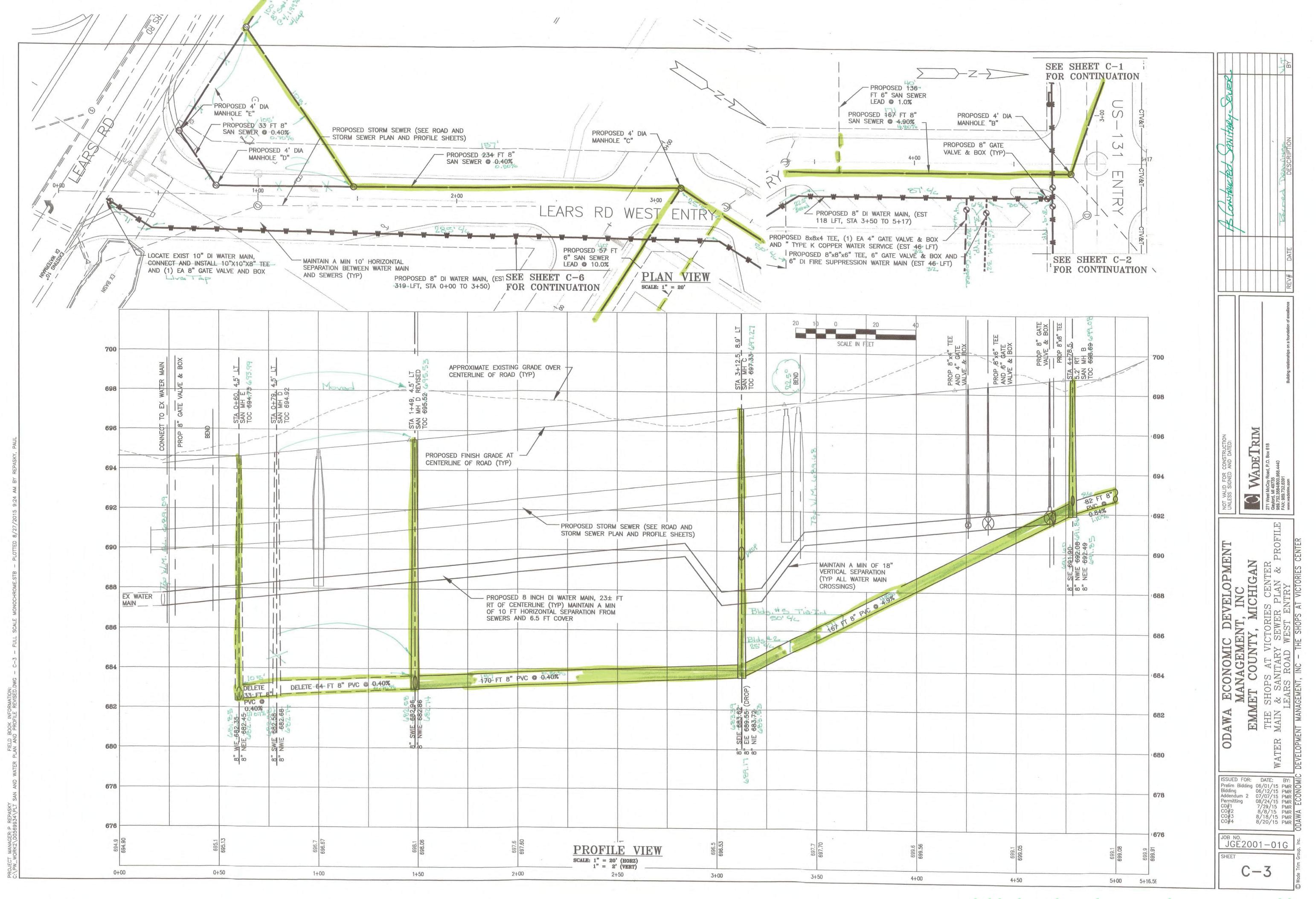
Sanitary Sewer Record Map
Sanitary Sewer As-builts

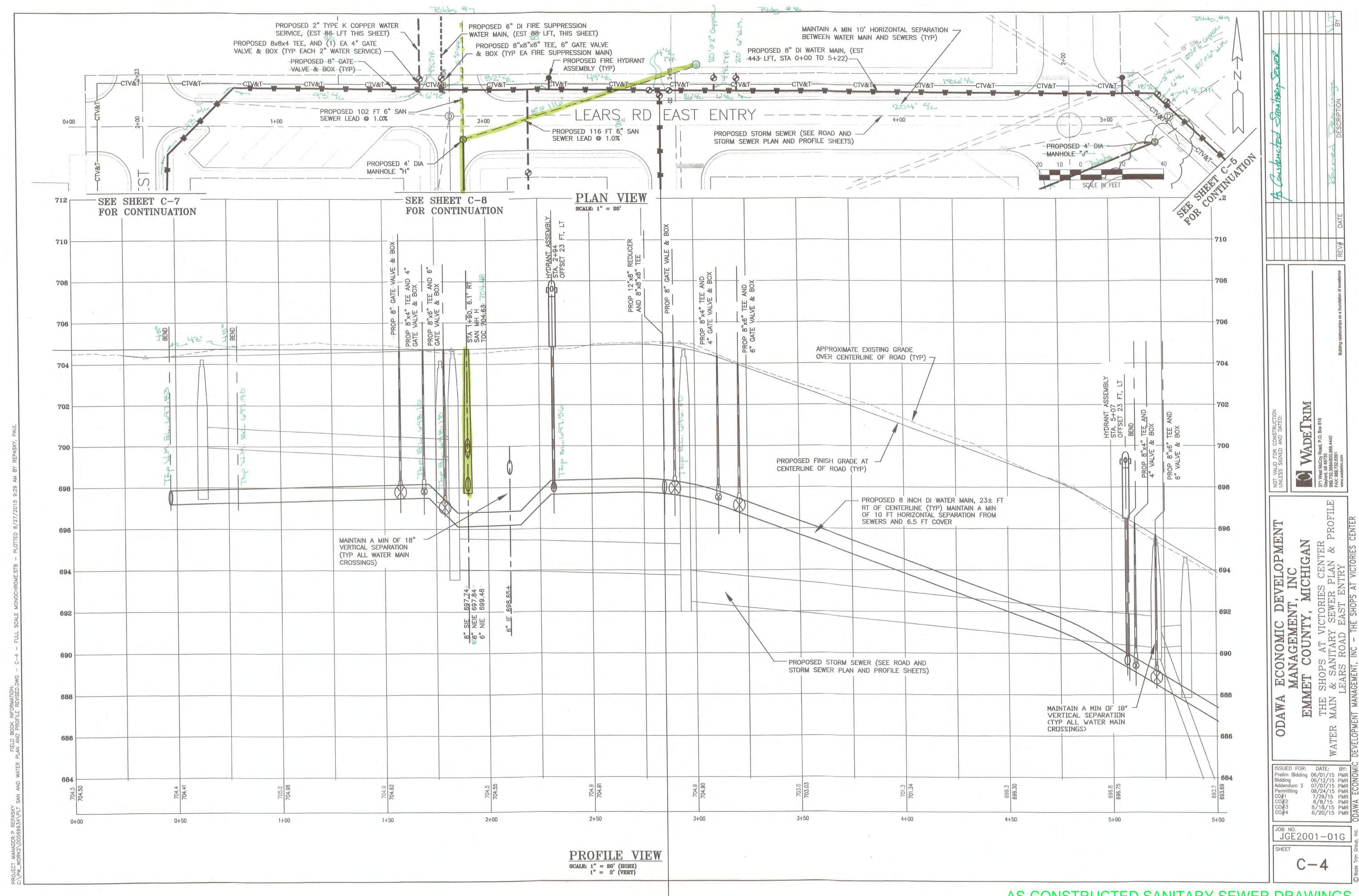


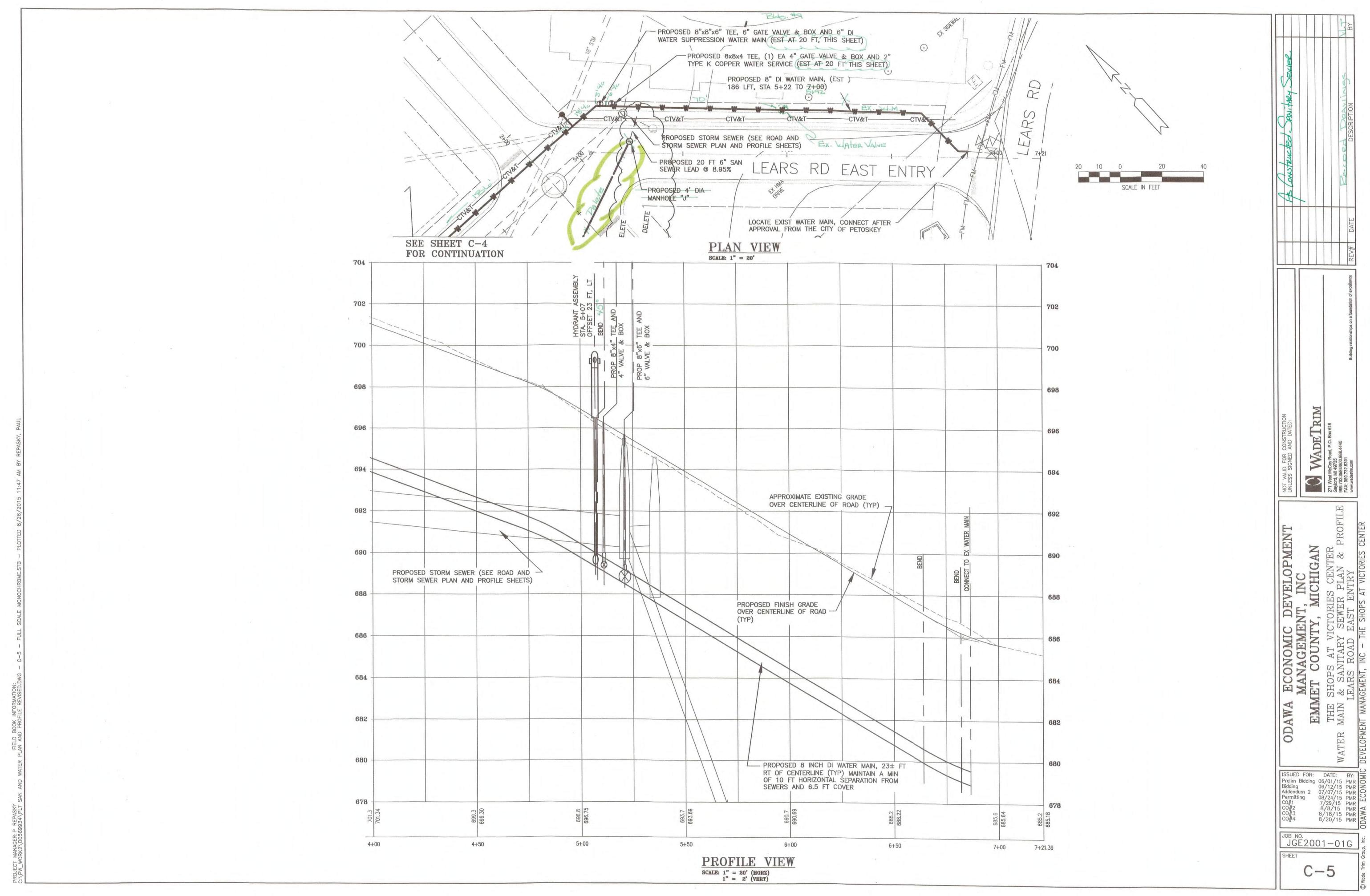


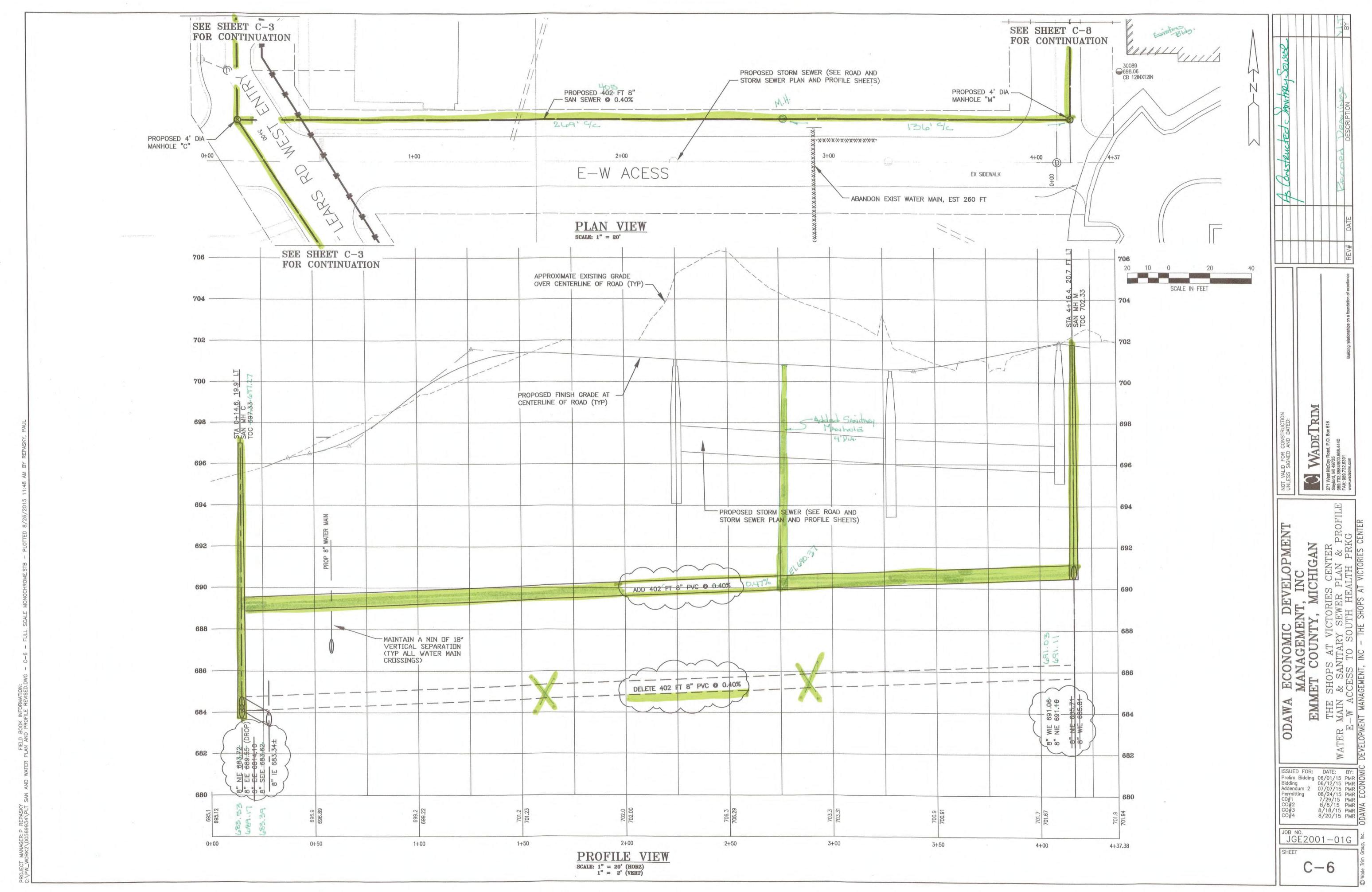


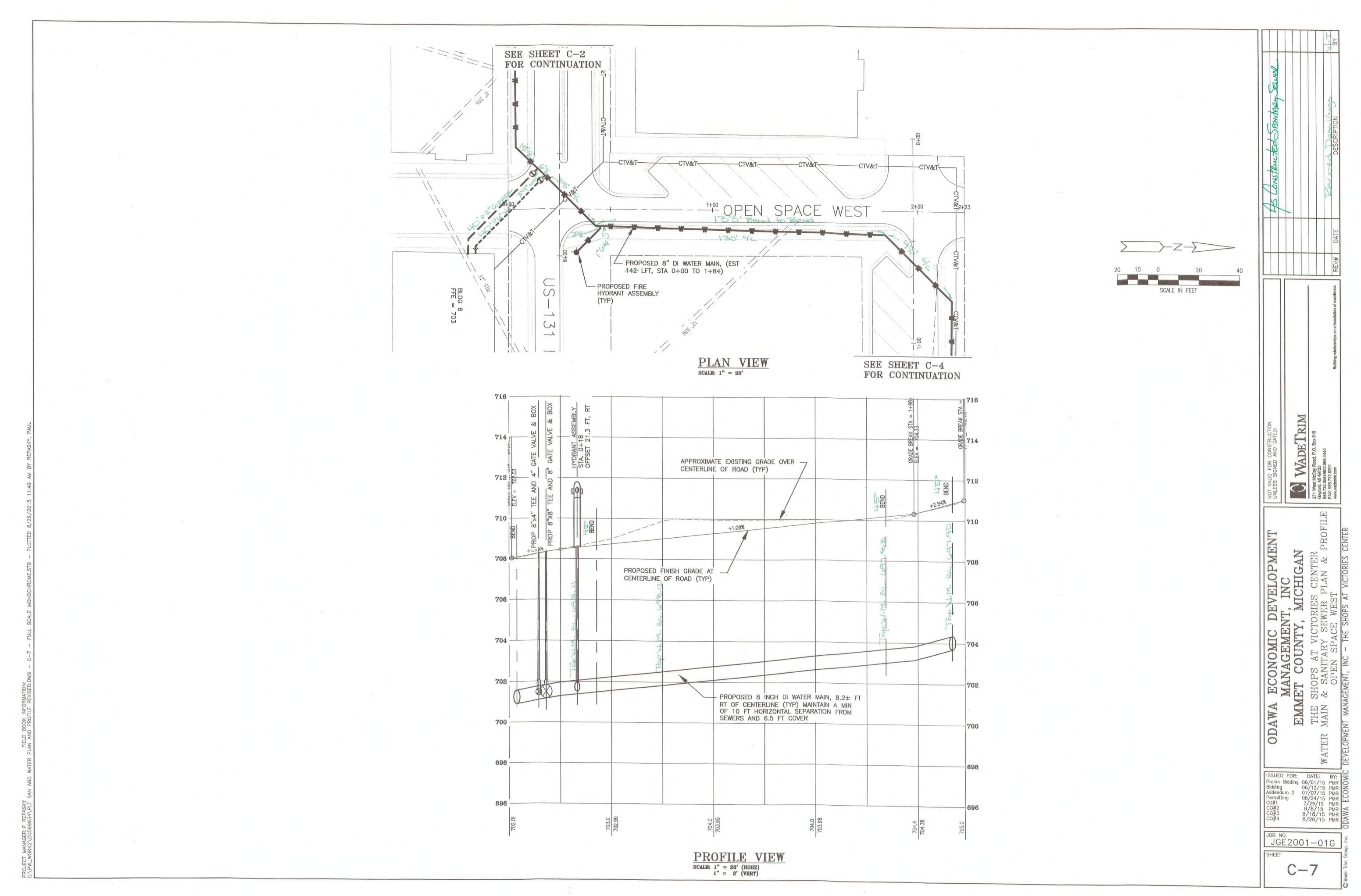


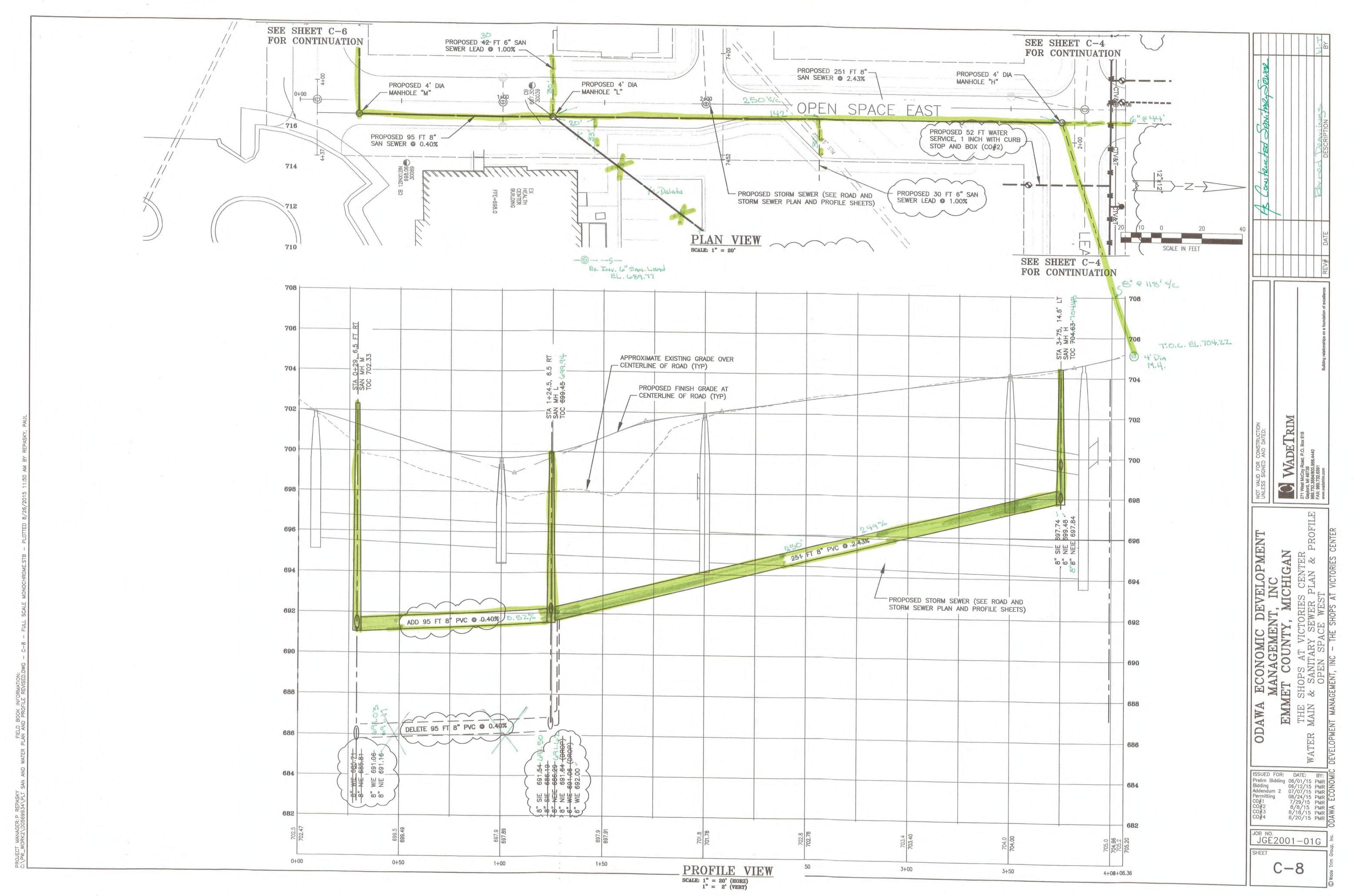


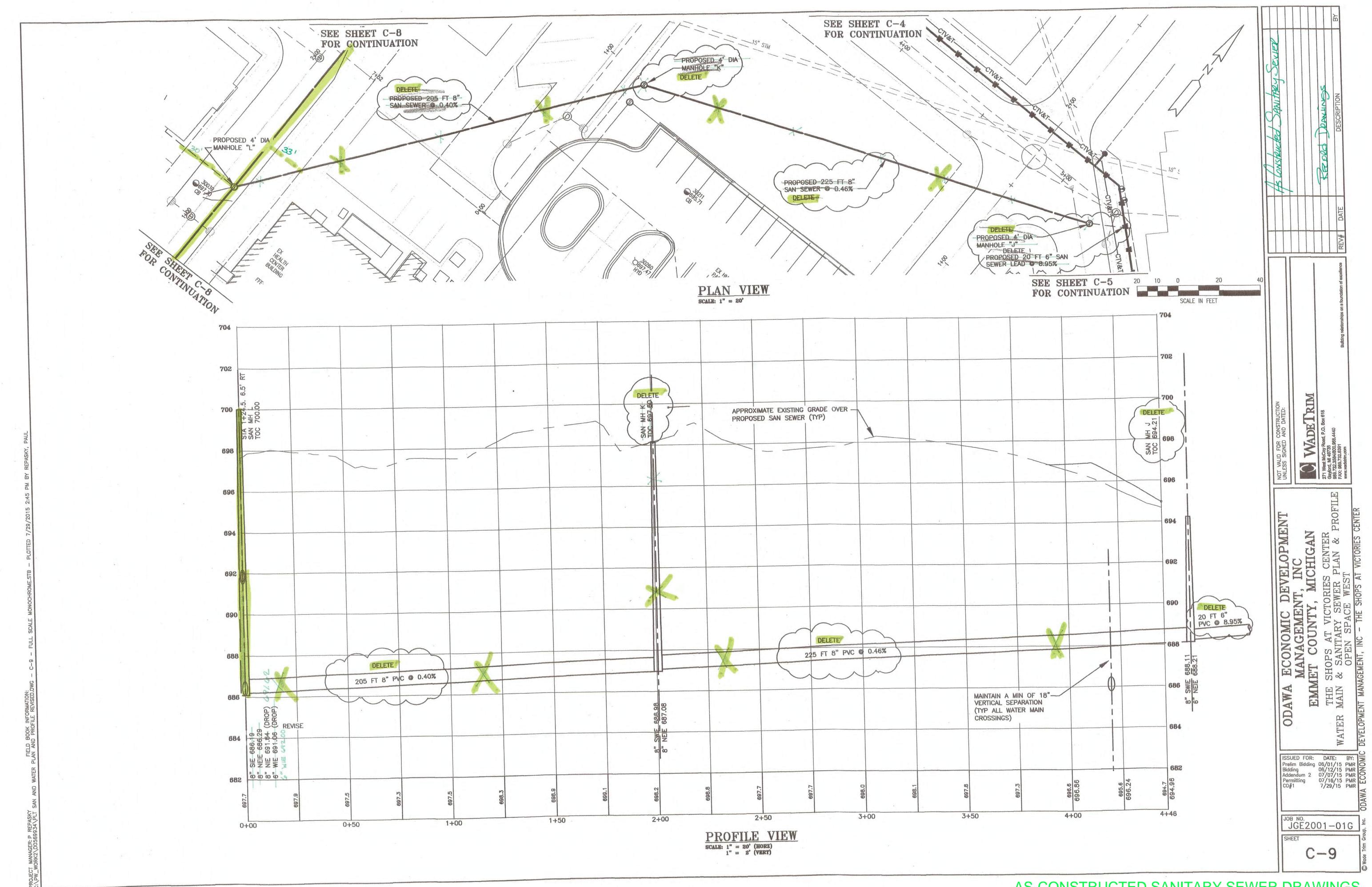


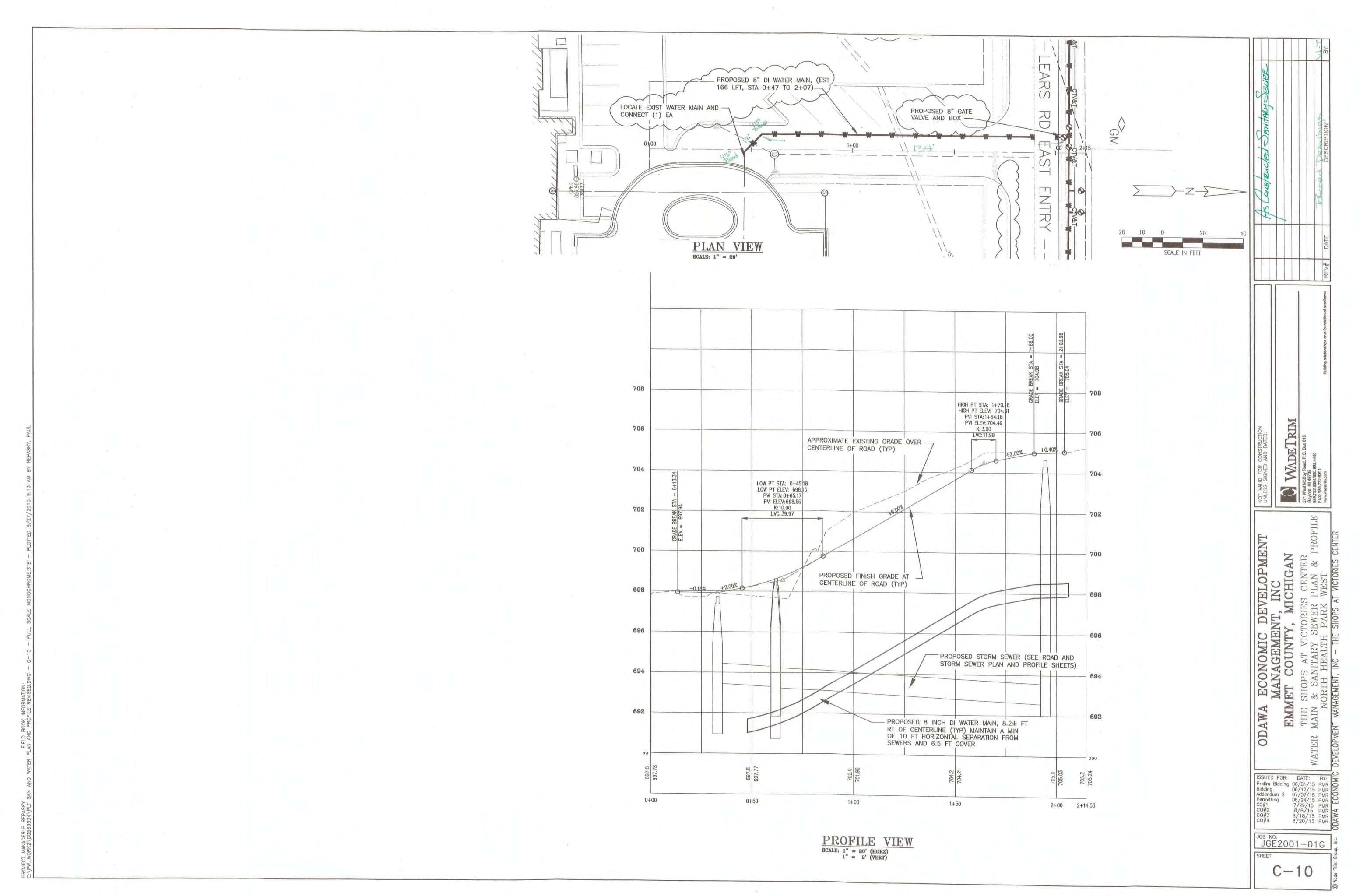




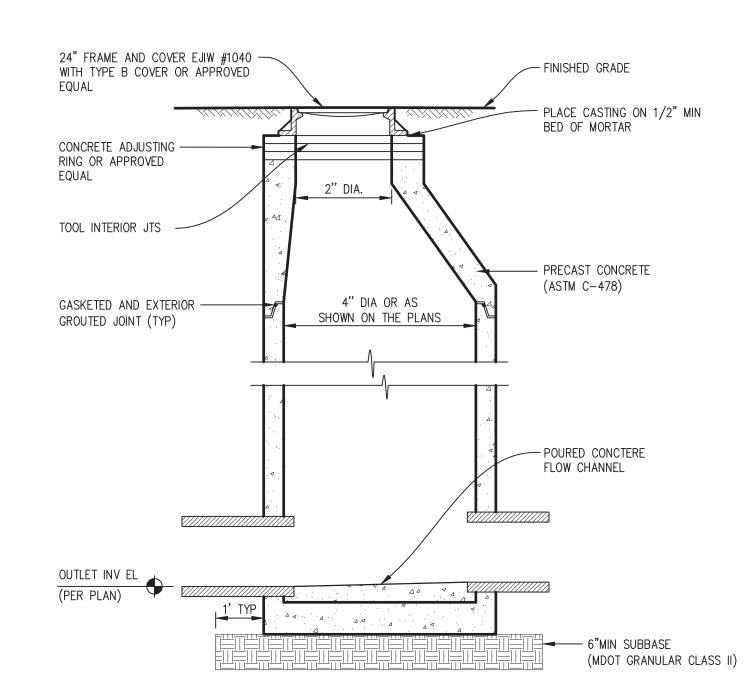




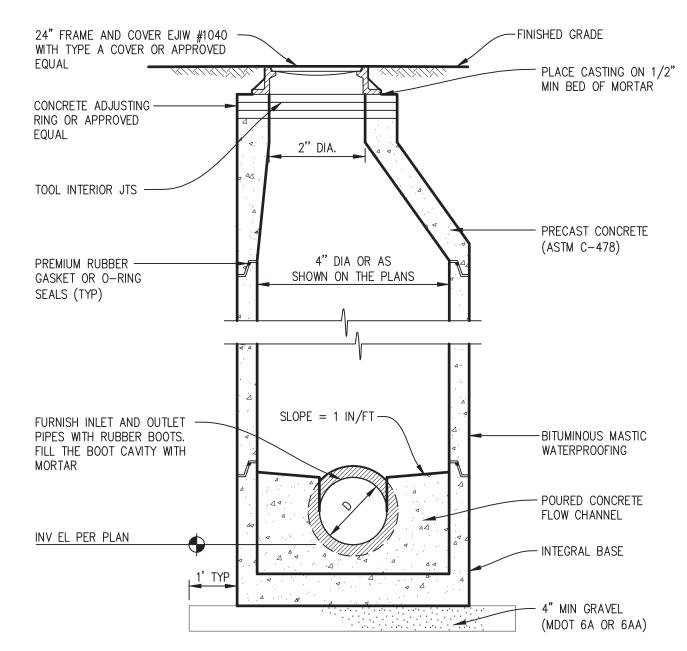






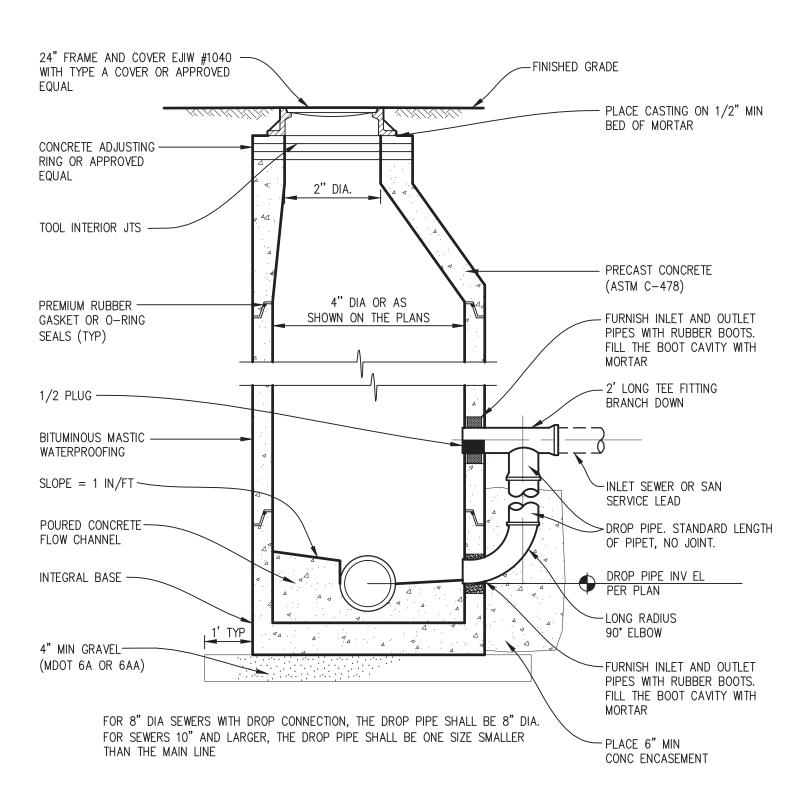


TYPICAL 4' DIA STORM MANHOLE DETAIL



FLOW CHANNELS ARE TO BE FORMED BY RUNNING PVC PIPES THROUGH THE MH (WITH FITTINGS AS REQ'D), CUTTING THE PIPE TO CENTERLINE, FILLING SPACE BETWEEN THE PIPE AND THE STRUCTURE WALLS WITH CONCRETE

TYPICAL 4' DIA SANITARY MANHOLE DETAIL



TYPICAL 4' DIA SANITARY DROP PIPE MANHOLE DETAIL

GENERAL SHEET NOTES

STATIONING, OFFSETS AND RIM ELEVATIONS ON SANITARY AND STORM STRUCTURES ARE TO CENTER OF CASTING. SET CASTINGS 1/4" TO 3/8" BELOW FINISHED PAVEMENT SURFACE.



2940 Parkview Drive Petoskey, Michigan 49770 (v)231.348.1180 (f)231.348.1185 www.ndgconsulting.com

DEVELOPMENT S 里 AND GRADING SITE ENTER, VICTORIES

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FOR: SHOPS EMMET COU PREPARED BIDS 06.12.15 ISSUED FOR BIDS C-501 DETAILS

REVIEW 06.05.15 OWNER REVIEW MARK DATE ISSUED FOR CADD FILE MANAGER LCP DESIGNED BY DSB DRAWN BY CHECKED BY LCP © NORTHWEST DESIGN GROUP, LLC 2015

SHEET TITLE

DETAILS

C - 501

