CITY OF GRAND JUNCTION
DEPARTMENT OF PUBLIC WORKS AND PLANNING
ENGINEERING DIVISION

BID DOCUMENTS
AND
CONSTRUCTION SPECIFICATIONS
FOR

IFB-4070-15-DH

2015 Sewer Line Replacement Phase II
F001625

June, 2015

Book No. ___

CITY OF GRAND JUNCTION

BID DOCUMENTS
FOR
2015 Sewer Line Replacement Phase II

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BID INFORMATION

INVITATION TO BID

The City of Grand Junction will receive sealed bids at the Office of the City Clerk at City Hall, 250 North Fifth Street, Grand Junction, Colorado, 81501, prior to 2:00 p.m. on Friday, July 21, 2015 for 2015 Sewer Replacements Phase II. All bids will be opened and read aloud at the City Auditorium immediately following the submittal deadline. The project generally consists of, but may not be limited to 570 LF of 6" cured in place pipe, 9,500 LF of 8" cured in place pipe, 790 LF of 10" cured in place pipe and 2,780 LF of 12" cured in place pipe; the replacement of eighteen sewer service taps, 130 cubic yards of flow-fill, 104 square yards of 8" concrete pavement and bypass pumping necessary to complete said work.

Contractors submitting bids over $50,000 must be prequalified in accordance with the City's "Rules and Procedures for Prequalification of Contractors." Application forms for prequalification are available at the Administration Office of the Department of Public Works and Planning (970-256-4126) or on the Public Works & Planning/Engineering page at www.gjcity.org. Prequalification applications must be submitted two weeks prior to bid opening date. Bids received from non-prequalified contractors will not be opened.

The July 2010 edition of the "City Standard Contract Documents for Capital Improvements Construction", Plans, Specifications and other Bid Documents are available for review or download on the Public Works & Planning/Engineering page at www.gjcity.org. Electronic copies may be obtained on a CD format at the Department of Public Works and Planning at City Hall.

For technical information, please contact Jerod Timothy, Project Manager at the Department of Public Works and Planning (970-244-1565).

For contractual information, please contact Duane Hoff Jr., Senior Buyer (970-244-1545).

A pre-bid meeting will be held at 2:00 p.m. on July 14, 2015 in the City Hall Auditorium. Attendance at the meeting is mandatory.

The City Clerk's Office will stamp the date and mark the time received on all bids. Bids not received prior to the date and time indicated on the Invitation to Bid will not be considered. The City is not responsible for delays occasioned by the U.S. Postal Service, the internal mail delivery system of the City, or any other means of delivery employed by the Bidder.

Each Bid shall be submitted on a form furnished by the City and must be accompanied by a certified check, cashier's check or Bid Bond in an amount not less than 5% of the amount of the Bid and made payable to the City of Grand Junction, Colorado. The successful Bidder will be required to furnish a Performance Bond and a Labor and Material Payment Bond, both in the amount of 100% of the total Contract amount, in conformity with the requirements of the Contract Documents and on forms provided by the City. Reference

CITY OF GRAND JUNCTION, COLORADO

_____

Duane Hoff Jr., Senior Buyer

Published: The Daily Sentinel –

CITY OF GRAND JUNCTION
DEPARTMENT OF PUBLIC WORKS AND PLANNING
ENGINEERING DIVISION

INSTRUCTIONS TO BIDDERS

The following instructions are given for the purpose of guiding Bidders in properly preparing their bids and constitute a part of the *Contract Documents* and shall be strictly complied with.

1. Definitions and Terms. See Article I, Section 3 of the General Contract Conditions in the *Standard Contract Documents for Capital Improvements Construction.*

2. Copies of *Bid Documents*. Complete sets of the *Bid Documents* may be reviewed at the Administration Office of the Department of Public Works and Planning at City Hall, 250 North 5th Street, Grand Junction, Colorado 81501. Electronic copies thereof may be obtained.

   Complete sets of *Bid Documents* shall be used in preparing Bids; neither City nor Engineer assumes any responsibility for errors or misinterpretations resulting from the use of incomplete sets of *Bid Documents*.

   City and Engineer in making copies of *Bid Documents* available on the above terms do so only for the purpose of obtaining Bids on the Work and do not confer a license or grant for any other use.

3. Prequalification of Bidders: Contractors submitting bids over $50,000 must be prequalified in accordance with the City's "Rules and Procedures for Prequalification of Contractors." Application forms for prequalification are available at the Administration Office of the Department of Public Works and Planning. Contractors who are currently prequalified with the Colorado Department of Transportation (CDOT) will meet the requirements for prequalification by the City, unless the City has information or basis to the contrary. Application forms for Contractor prequalification are available at the Administration Office of the Department of Public Works and Planning, City Hall, 250 North 5th Street, Grand Junction, CO, 81501.

4. Liquidated Damages for Failure to Enter Into Contract. Should the Successful Bidder fail or refuse to enter into the Contract within ten Calendar Days from the issuance of the Notice of Award, the City shall be entitled to collect the amount of such Bidder's Bid Guaranty as Liquidated Damages, not as a penalty but in consideration of the mutual release by the City and the Successful Bidder of all claims arising from the City's issuance of the Notice of Award and the Successful Bidder's failure to enter into the Contract and the costs to award the Contract to any other Bidder, to readvertise, or otherwise dispose of the Work as the City may determine best serves its interest.

5. Time of Completion. Time is of the essence with respect to the time of completion of the Project and any other milestones or deadline which are part of the Contract. It will be necessary for each Bidder to satisfy the City of its ability to complete the Work within the Contract Time set forth in the Contract Documents.

6. Examination of Contract Documents and Site. Before submitting a Bid, each Bidder shall:

   a. Examine the *Contract Documents* thoroughly;

   b. Visit the site to familiarize itself with local conditions that may in any manner affect cost, progress, or performance of the Work;

   c. Become familiar with federal, state, and local laws, ordinances, rules, and regulations that may in any manner affect cost, progress or performance of the Work;

   d. Study and carefully correlate Bidder's observations with the *Contract Documents*, and;

   e. Notify the Engineer of all conflicts, errors, ambiguities or discrepancies in or among the *Contract Documents*

   On request, the City will provide each Bidder access to the site to conduct such investigations and tests as each Bidder deems necessary for submission of a Bid. It shall be the Bidder's responsibility to make or obtain any additional examinations, investigations, explorations, tests and studies and obtain any additional information and data which pertain to the physical conditions (including without limitation, surface, subsurface and underground utilities) at or contiguous to the site or otherwise which may affect cost, progress or performance of the work and which the Bidder deems necessary to determine its Bid for performing the work in accordance with the time, price and other terms and conditions of the Contract Documents. Location of any excavation or boring made by Bidder shall be subject to prior approval of City and applicable agencies. Bidder shall fill all holes, restore all pavements to match the existing structural section and shall clean up and restore the site to its former condition upon completion of such exploration. The City reserves the right to require the Bidder to execute an access agreement with the City prior to accessing the site.

   The lands upon which the Work is to be performed, rights of way, and access thereto, and other lands designated for use by Contractor in performing the Work, are identified on the Drawings.

   Information and data reflected in the *Contract Documents* with respect to underground utilities at or contiguous to the site are based upon information and data furnished to the City and the Engineer by the owners of such underground utilities or others, and the City does not assume responsibility for the accuracy or completeness thereof, unless it is expressly provided otherwise in the *Contract Documents*.

By submission of a Bid, the Bidder shall be conclusively presumed to represent that the Bidder has complied with every requirement of these Instructions to Bidders, that the *Contract Documents* are not ambiguous and are sufficient in scope and detail to indicate and convey understanding of all terms and conditions for performance of the Work.

7. Interpretations. All questions about the meaning or intent of the *Contract Documents* shall be submitted to the Engineer in writing.

   Written comments or questions must be received by the Engineer or Purchasing Supervisor at least forty-eight (48) hours (excluding Saturdays, Sundays, and Holidays) prior to the time set for Bid Opening.

   If questions received by the Engineer are deemed to be sufficiently significant and received sufficiently in advance of the Bid opening, an Addendum to the *Bid Documents* may be issued. Otherwise, a written copy of the question and decision or interpretation will be posted on the Public Works & Planning/Engineering page at www.gjcity.org. It shall be the responsibility of each Bidder to make itself aware of all such posted questions and decisions or interpretations and, by submitting a Bid, each Bidder shall be conclusively be deemed to have such knowledge. After Bid Opening, all Bidders must abide by the decision of the Engineer as to all such decisions or interpretations. Bidders may not rely upon oral interpretations of the meaning of the plans, specifications or other bid documents and any oral or other interpretations or clarifications will be without legal force or effect.

8. Quantities of Work. Materials or quantities stated as unit price items in the Bid are supplied only to give an indication of the general scope of the Work. The City does not expressly or by implication agree that the actual amount of Work or material will correspond therewith, and reserves the right after award to increase or decrease the quantity of any unit item of the Work without a change in the unit price except as set forth in Article VIII, Section 70 of the *General Contract Conditions*. The City also reserves the right to make changes in the Work (including the right to delete any bid item in its entirety or add additional bid items) as set forth in Article VIII, Sections 69 through 71 of the *General Contract Conditions*.

9. Substitutions. The materials, products and equipment described in the *Bid Documents* shall be regarded as establishing a standard of required performance, function, dimension, appearance, or quality to be met by any proposed substitution. No substitution will be considered prior to receipt of Bids unless the Bidder submits a written request for approval to the Engineer at least ten (10) days prior to the date for receipt of Bids. Such requests for approval shall include the name of the material or equipment for which substitution is sought and a complete description of the proposed substitution including drawings, performance and test data, and other information necessary for evaluation, including samples if requested. The Bidder shall set forth changes in other materials, equipment, or other portions of the Work including changes of the work of other contracts, which incorporation of the proposed substitution would require to be included. The Engineer's decision of approval or disapproval of a proposed substitution shall be final. If the Engineer approves a proposed substitution before receipt of Bids, such approval will be set forth in an Addendum. Bidders shall not rely upon approvals made in any other manner.

10. Bid Guaranty. Each Bid shall as a guaranty of good faith on the part of the Bidder be accompanied by a Bid Guaranty consisting of: a certified or cashier's check drawn on an approved national bank or trust company in the State of Colorado, and made payable without condition to the City; or a Bid Bond in the form set forth in the *Bid Documents* executed by an approved corporate surety in favor of the City. The amount of the Bid Guaranty shall not be less than 5% of the total Bid amount.

Once the City issues a Notice of Award, the apparent Successful Bidder has ten (10) Calendar Days to enter into a Contract in the form prescribed and to furnish the required Performance and Payment Bonds. Failure to do so will result in forfeiture of the Bid Guaranty to the City as Liquidated Damages.

Bid Guaranties for all except the three lowest qualified Bids shall be returned within five (5) Working Days of Bid Opening. When the Successful Bidder files satisfactory Performance and Payment Bonds and Certificates of Insurance, the Bid Guaranties of the three lowest Bidders shall be returned.

Each bidder shall guaranty its total bid price for a period of sixty-five (65) Calendar Days from the date of the bid opening. Except for forfeiture due to reasons discussed above, Bid Guaranties of all Bidders shall be returned to them within sixty-five (65) Calendar Days from the date of Bid Opening.

11. Bid Form. The Bid Form, provided by the City, must be completed in ink or by typewriter.

The Bidder shall specify a unit price in figures for each pay item for which a quantity is given and shall provide the products (in numbers) of the respective unit prices and quantities in the Extended Amount column. The total Bid price shall be equal to the sum of all extended amount prices. When an item in the Bid Schedule provides a choice to be made by the Bidder, Bidder's choice shall be indicated in accordance with the specifications for that particular item and thereafter no further choice shall be permitted.

Where the unit of a pay item is lump sum, the lump sum amount shall be shown in the "extended amount" column and included in the summation of the total Bid.

All blank spaces in the Bid Form must be properly filled out.

Bids by corporations must be executed in the corporate name by the president or vice president or other corporate office accompanied by evidence of authority to sign. The corporate seal must be affixed and attested by the secretary or an assistant secretary. The corporate address and state of incorporation shall be shown below the signature.

Bids by partnerships must be executed in the partnership name and signed by a partner whose title must appear under the signature and the official address of the partnership must be shown below the signature.

All names must be typed or printed below the signature.

The Bid shall contain an acknowledgement of receipt of all Addenda, the numbers of which shall be filled in on the Bid Form.

The address to which communications regarding the Bid are to be directed must be shown.

12. Irregular Bids. A Bid will be considered irregular and may be rejected for the following reasons:

    a. Submission of the Bid on forms other than those supplied by the City;

    b. Alteration, interlineation, erasure, or partial detachment of any part of the forms which are supplied herein;

    c. Inclusion of unauthorized additions conditional or alternate Bids or irregularities of any kind which may tend to make the Bid incomplete, indefinite, or ambiguous as to its meaning;

    d. Failure to acknowledge receipt of any or all issued Addenda;

    e. Failure to provide a unit price or a lump sum price, as appropriate, for each pay item listed except in the case of authorized alternative pay items;

    f. Failure to list the names of Subcontractors used in the Bid preparation as required in the Bid Form;

    g. Submission of a Bid that in the opinion of the City Manager is unbalanced so that each item does not reasonably carry its own proportion of cost or which contains inadequate or unreasonable prices for any item;

    h. Tying of the Bid with any other bid or contract; and

    i. Failure to calculate Bid prices as described herein.

13. Submission of Bids. The completed Bid Form and Bid Guaranty shall be submitted at the time and place indicated in the Invitation to Bid and must be in a ten-inch by thirteen-inch opaque sealed envelope marked SEALED BID with the project title and the name and address of the Bidder.

14. Modification and Withdrawal of Bids Before Opening. Bids may be modified or withdrawn by an appropriate document duly executed and delivered to the place where Bids are to be submitted at any time prior to Bid Opening.

15. Opening of Bids. Bids will be opened and read aloud at the time and place stated in the Invitation to Bid. All Bidders, their representatives, and other interested parties are encouraged to attend the Bid Opening.

Within five (5) Working Days after Bid Opening, all Bids will be tabulated and copies sent to all Bidders. The bid tabulation sheet(s) will be available to the public.

16. Disqualification of Bidders. A Bid will not be accepted from, nor shall a Contract be awarded to, any person, firm, or corporation that is in arrears to the City, upon debt or contract, or that has defaulted, as surety or otherwise, upon any obligation to the City, or that is deemed irresponsible or unreliable.

Bidders may be required to submit satisfactory evidence that they are responsible, have a practical knowledge of the project bid upon and that they have the necessary financial and other resources to complete the proposed Work.

Either of the following reasons, without limitation, shall be considered sufficient to disqualify a Bidder and Bid:

a. More than one Bid is submitted for the same Work from an individual, firm, or corporation under the same or different name; and

b. Evidence of collusion among Bidders. Any participant in such collusion shall not receive recognition as a Bidder for any future work of the City until such participant has been reinstated as a qualified bidder.

17. Withdrawal of Bids After Opening. No Bid may be withdrawn by any bidder for sixty-five (65) Calendar Days after the Bid Opening.

18. Evaluation of Bids and Bidders. The City reserves the right to:
- reject any and all Bids,
- waive any and all informalities,
- negotiate final terms with the Successful Bidder, and
- disregard any and all nonconforming, nonresponsive or conditional Bids.

Discrepancies between words and figures will be resolved in favor of words. Discrepancies between Unit Prices and Extended Prices will be resolved in favor of the Unit Prices. Discrepancies between the indicated sum of any column of figures and the correct sum thereof will be resolved in favor of the correct sum. The corrected extensions and totals will be shown in the tabulation of Bids.

The City may consider the qualifications and experience of Subcontractors and other persons and organizations (including those who are to furnish the principal items of material or equipment) proposed for those portions of the work as to which the identity of Subcontractors and other persons and organizations must be submitted. Operating costs, maintenance considerations performance data, and guarantees of materials and equipment may also be considered by the City.

The City will conduct such investigations as deemed necessary to assist in the evaluation of any Bid and to establish the responsibility, qualifications and financial ability of the Bidders, proposed Subcontractors and other persons and organizations to do the Work in accordance with the *Contract Documents* to the City's satisfaction within the Contract Time.

The Bidder shall furnish the City all information and data requested by the City to determine the ability of the Bidder to perform the Work. The City reserves the right to reject the Bid if the evidence submitted by, or investigation of such Bidder fails to satisfy the City that such Bidder is properly qualified to carry out the obligations of the Contract and to complete the Work contemplated therein.

By submitting a Bid, each Bidder authorizes the City to perform such investigation of the Bidder as the City deems necessary to establish the responsibility, qualifications and financial ability of the Bidder and, by its signature thereon, authorizes the City to obtain reference information concerning the Bidder and releases the party providing such information and the City from any and all liability to the Bidder as a result of such reference information so provided.

The City reserves the right to reject the Bid of any Bidder who does not pass any evaluation to the City’s satisfaction.

If the Contract is to be awarded, it will be awarded to the Bidder who, by evaluation, the City determines will best meet the City's interests.

The City reserves the right to accept or reject the Work contained in any of the Bid Schedules or alternates, either in whole or in part.

19. Award of Contract. Unless otherwise indicated, a single award will be made for all the bid items in an individual bid schedule. In the event that the Work is contained in more than one Bid Schedule, the City may award Schedules individually or in combination. In the case of two Bid Schedules which are alternative to each other, only one of such alternative Schedules will be awarded. Within forty-five (45) Calendar Days of Bid Opening, the City will issue a Notice of Award to the Successful Bidder which will be accompanied by four (4) unsigned copies of the Contract and the Performance and Payment Bond forms. Within ten (10) Calendar Days thereafter, the Successful Bidder shall sign and deliver four (4) copies of the Contract, Performance Bond, Payment Bond and Certificates of Insurance to the City. Within ten (10) Calendar Days thereafter, the City will deliver two (2) fully executed counterparts of the Contract to the Contractor. No contract shall exist between the Successful Bidder and the City and the Successful Bidder shall have no rights at law or in equity until the Contract has been duly executed by the City.

The Successful Bidder’s failure to sign and submit a Contract and other documents set forth in this Paragraph within the prescribed time shall be just cause of annulment of the award, and forfeiture of the Bid Guaranty. The award of Contract may then be made to the next qualified Bidder in the same manner as previously prescribed.

20. Insurance. The Contractor shall secure and maintain such insurance policies as will provide the coverage and contain other provisions specified in the General Contract Conditions, or as modified in the Special Contract Conditions.

    The Contractor shall file four (4) copies of the policies or Certificates of Insurance acceptable to the City with the Engineer within ten (10) Calendar Days after issuance of the Notice of Award. These Certificates of Insurance shall contain a provision that coverage afforded under the policies shall not be canceled unless at least thirty (30) Calendar Days prior written notice has been given to the City.

21. Sales and Use Taxes. The Contractor and all Subcontractors are required to obtain exemption certificates from the Colorado Department of Revenue for sales and use taxes in accordance with the provisions of the General Contract Conditions. Bids shall reflect this method of accounting for sales and use taxes on materials, fixtures and equipment.

22. Affirmative Action. In executing a Contract with the City, the Contractor agrees to comply with Affirmative Action and Equal Employment Opportunity regulations presented in the General Contract Conditions.

23. Preconstruction Meeting. Prior to the commencement of construction activities, a preconstruction meeting shall be held which shall include the Contractor, representatives of the City, utility companies and others effected by or involved in the project. Attendance by the Contractor is mandatory.

24. Pre-Bid Meeting. See the Special Conditions for details of pre-bid meeting (if any).

BID FORMS

CITY OF GRAND JUNCTION
DEPARTMENT OF PUBLIC WORKS AND PLANNING
ENGINEERING DIVISION

BID FORM
FOR
2015 Sewer Line Replacement Phase II

TO: The City of Grand Junction
250 North Fifth Street
Grand Junction, Colorado 81501-2668

The undersigned Bidder, having thoroughly examined the Construction Drawings, Specifications, and other Bid Documents; having investigated the location of, and conditions affecting the proposed work, and being acquainted with and fully understanding the extent and character of the Work covered by this Bid; and all other factors and conditions affecting or which may be affected by the Work:

HEREBY PROPOSES and agrees, if this Bid is accepted, to enter into a Contract with the City on the form included in the *Contract Documents* and to furnish all required materials, tools, equipment, and plant; to perform all necessary labor and superintendence; and to undertake and complete the Work or approved portions thereof, in full accordance with and in conformity with the Construction Drawings, Specifications, and all other Contract Documents hereto attached or by reference made a part hereof, and for the following prices.

Bid Schedule: 2015 Sewer line Replacement Phase II

Bid Schedule A

Contractor:_____

Item No.	CDOT, City Ref.	Description	Quantity	Units	Unit Price	Total Price
1	108.3	6" X 4" Sewer Service Tap - See Special Provisions SP- 6 for details.	6.	EA	$ _____	$ _____
2	108.3	8" X 4" Sewer Service Tap - See Special Provisions SP- 6 for details.	7.	EA	$ _____	$ _____
3	108.3	10" X 4" Sewer Service Tap - See Special Provisions SP- 6 for details.	5.	EA	$ _____	$ _____
4	202	Tree Removal (8 Inch)	2.	EA	$ _____	$ _____
5	202	Shrub Removal				
6	203	Disposal of Radio Active Materials	53.	CY	$ _____	$ _____
7	206	Structural Back Fill (Flow-Fill)	130.	CY	$ _____	$ _____
8	210	Reset Landscape Appurtenance (Per Service Repair Location) - See Special Provisions SP - 2.	2.	EA	$ _____	$ _____
9	210	Reset Fence (4" Chain Link)	16.	LF	$ _____	$ _____
10	210	Reset Sprinkler System (Per Property)	2.	EA	$ _____	$ _____
11	401	Hot Mix Asphalt (4" Thick) (Patching) (Grading SX, Binder Grade PG 64-22)	6.	SY	$ _____	$ _____
12	608	Concrete Driveway Section (8" Thick) to Include Dowels. See SP - 4.	97.	SY	$ _____	$ _____
13	620	Erosion Control (Complete in Place)	Lump	SUM	- - -	$ _____
14	626	Portable Sanitary Facility	Lump	SUM	- - -	$ _____
15	630	Mobilization	Lump	SUM	- - -	$ _____
16	630	Traffic Control (Complete In Place) to include flagging	Lump	SUM	- - -	$ _____
17	630	Traffic Control Plan	Lump	SUM	- - -	$ _____
18	SP	Bypass pumping per City Specifications. See Appendix D in Bid Documents.	Lump	SUM	- - -	$ _____
19	SP	Weekly Newsletter- See Bid Documents SC-11	Lump	SUM	- - -	$ _____
20	SP	6 Inch CIPP (Complete in Place) See Appendix C in Bid Documents.	570.	LF	$ _____	$ _____
21	SP	8 Inch CIPP (Complete in Place) See Appendix C in Bid Documents.	5,850.	LF	$ _____	$ _____
22	SP	10 Inch CIPP (Complete in Place) See Appendix C in Bid Documents.	790.	LF	$ _____	$ _____
23	SP	12 Inch CIPP (Complete in Place) See Appendix C in Bid Documents.	2,780.	LF	$ _____	$ _____
MCR		Minor Contract Revisions	- - -	- - -	- - -	$ 35,000.00
				Bid Amount:	**$**	

Bid Amount:

_____ **dollars**

Bid Schedule: 2015 Sewer line Replacement Phase II

Bid Schedule B (Bid Alternate)

Contractor:_____

Item No.	CDOT, City Ref.	Description	Quantity	Units	Unit Price	Total Price
1	108.3	6" X 4" Sewer Service Tap - See Special Provisions SP- 6 for details.	6.	EA	$ _____	$ _____
2	108.3	8" X 4" Sewer Service Tap - See Special Provisions SP- 6 for details.	7.	EA	$ _____	$ _____
3	108.3	10" X 4" Sewer Service Tap - See Special Provisions SP- 6 for details.	5.	EA	$ _____	$ _____
4	202	Tree Removal (8 Inch)	2.	EA	$ _____	$ _____
5	202	Shrub Removal				
6	203	Disposal of Radio Active Materials	53.	CY	$ _____	$ _____
7	206	Structural Back Fill (Flow-Fill)	130.	CY	$ _____	$ _____
8	210	Reset Landscape Appurtenance (Per Service Repair Location) - See Special Provisions SP - 2.	2.	EA	$ _____	$ _____
9	210	Reset Fence (4" Chain Link)	16.	LF	$ _____	$ _____
10	210	Reset Sprinkler System (Per Property)	2.	EA	$ _____	$ _____
11	401	Hot Mix Asphalt (Patching) (4" Thick) (Grading SX, Binder Grade PG 64-22)	6.	SY	$ _____	$ _____
12	608	Concrete Driveway Section (8" Thick) to Include Dowels. See SP - 4.	97.	SY	$ _____	$ _____
13	620	Erosion Control (Complete in Place)	Lump	SUM	- - -	$ _____
14	626	Portable Sanitary Facility	Lump	SUM	- - -	$ _____
15	630	Mobilization	Lump	SUM	- - -	$ _____
16	630	Traffic Control (Complete In Place) to include flagging	Lump	SUM	- - -	$ _____
17	630	Traffic Control Plan	Lump	SUM	- - -	$ _____
18	SP	Bypass pumping per City Specifications. See Appendix D in Bid Documents.	Lump	SUM	- - -	$ _____
19	SP	Weekly Newsletter- See Bid Documents SC-11	Lump	SUM	- - -	$ _____
20	SP	6 Inch CIPP (Complete in Place) See Appendix C in Bid Documents.	570.	LF	$ _____	$ _____
21	SP	8 Inch CIPP (Complete in Place) See Appendix C in Bid Documents.	9,500.	LF	$ _____	$ _____
22	SP	10 Inch CIPP (Complete in Place) See Appendix C in Bid Documents.	790.	LF	$ _____	$ _____
23	SP	12 Inch CIPP (Complete in Place) See Appendix C in Bid Documents.	2,780.	LF	$ _____	$ _____
MCR		Minor Contract Revisions	- - -	- - -	- - -	$ 35,000.00
				Bid Amount:	**$**	

Bid Amount:

_____ **dollars**

The undersigned Bidder hereby agrees to execute the Contract in conformity with this Bid, to have ready and furnish the required Payment and Performance Bonds, executed by a Surety acceptable to the City and provide Certificates of Insurance evidencing the coverage and provisions set forth in Contract within ten (10) Calendar Days of the City's issuance of a Notice of Award.

The _____, a corporation of the State of _____, is hereby proposed as Surety on said Performance and Payment Bonds. If such Surety is not approved by the City, another and satisfactory Surety will be proposed.

Enclosed herewith is a Bid Guaranty as defined in the attached Instructions to Bidders in the amount of _____which Bid Guaranty the undersigned Bidder agrees to be paid to and become the property of the City, as Liquidated Damages and not as a penalty should the Bid be accepted, the Contract Notice of Award issued, and should the Bidder fail or refuse for any reason to enter into the Contract in the form prescribed. The Bidder shall furnish the required Bonds and Insurance Certificates within ten (10) Calendar Days of issuance of the Notice of Award.

The following persons, firms or corporations are interested as joint ventures, partners or otherwise with the undersigned Bidder in this proposal:

Name: _____

Address: _____

Name: _____

Address: _____

If there are no such persons, firms or corporations, please so state in the following space. _____

_____

The undersigned Bidder proposes to subcontract the following portion of Work:

Name & address of Sub-Contractor	Description of work to be performed	% of Contract

The undersigned Bidder acknowledges the right of the City to reject any and all Bids submitted and to waive informalities and irregularities therein in the City's sole discretion.

By submission of the Bid, each Bidder certifies, and in the case of a joint Bid each party thereto certifies as to his own organization, that this Bid has been arrived at independently, without collusion, consultation, communication, or agreement as to any matter relating to this Bid with any other Bidder or with any competitor.

The Work shall be completed within the Contract Time as specified in the Special Conditions.

Bidder hereby acknowledges receipt of Addenda Numbers: ___, ___, ___, ___.

By submission of a Bid, the Bidder shall be conclusively presumed to represent that the Bidder has complied with every requirement of the "Instructions to Bidders".

Bidder, by his signature hereon, hereby authorizes the obtaining of reference information containing the Bidder's qualifications, experience and general ability to perform the work and hereby releases the party providing such information and the City from any and all liability to Bidder as the result of such reference information being provided. Bidder further waives any right to receive copies of information so provided to the City.

Bidder agrees to perform all Work described in the Contract Documents for the unit prices or the lump sum as shown on the Bid Form, and acknowledges that the quantities shown on the Bid Schedule are approximate only and are intended principally to serve as guides for the purpose of comparing and evaluating Bids.

It is further agreed that any quantities of work to be performed at unit prices and material to be furnished may be increased or decreased as may be considered necessary in the opinion of the City, to complete the Work fully as planned and contemplated, and that all quantities of Work, whether

increased or decreased, are to be performed at the unit prices set forth in the Bid, except as otherwise provided for in the Contract Documents.

It is further agreed that any lump sum prices may be increased to cover additional work ordered by the City, but not shown on the Plans or required by the Specifications, in accordance with the provisions of the Contract Documents. Similarly, they may be decrease to cover deletions of work so ordered.

By submitting a Bid, the Bidder acknowledges that the bid process is solely intended to serve the public interest in achieving the highest quality of services and goods at the lowest price, and that no right, interest or expectation shall inure to the benefit of the Bidder as the result of any reliance or participation in the process.

The undersigned Bidder further grants to the City the right to award this Contract on the basis of any possible combination of base bids and alternate(s) (if any) that best suit the City's needs.

Dated this _____ day of _____, 20___.

Bidder: _____

Address: _____

_____

Signature: _____

Name printed: _____

Title: _____

If a corporation:

State of incorporation: _____

Attest: _____ (seal)

BID BOND

KNOW ALL MEN BY THESE PRESENTS,

that we, _____ (___ an individual, ___ a partnership, ___ a corporation incorporated in the State of _____) as Principal, and _____ (incorporated in the State of _____) as Surety, are held and firmly bound unto the City of Grand Junction, Colorado, (hereinafter called "City") in the penal sum of _____ _____ dollars ($ _____), lawful money of the United States, for the payment of which sum we bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH, that WHEREAS the Principal has submitted the accompanying Bid dated _____for construction of _____ _____ (the Project) for the City and

WHEREAS, the City has required as a condition for receiving said Bid that the Principal deposit with the City either a cashier's check or a certified check equivalent to not less than five percent of the amount of said Bid or in lieu thereof furnish a Bid Bond for said amount conditioned that in event of a failure to execute the proposed Contract for such construction and to provide the required Performance and Payment Bonds and Insurance Certificates if the Contract be awarded to the Bidder, that said sum be paid immediately to the City as Liquidated Damages and not as a penalty for the Principal's failure to perform.

NOW, THEREFORE, if the Principal shall, within the period specified therefore, on the attached prescribed forms presented to the Bidder for signature, enter into a written Contract with the City in accordance with said Bid as accepted, and give Performance and Payment Bonds with good and sufficient Surety, or Sureties, as may be required upon the forms prescribed by the City, for the faithful performance and the proper fulfillment of said Contract, provide Certificates of Insurance as required by said Contract, and provide all other information and documentation required by the Contract Documents, then this obligation shall be void and of no effect, otherwise to remain in full force and effect. In the event suit is brought upon this bond by the City and the City prevails, the principal and surety shall pay all costs incurred by the City in such suit, including reasonable attorneys' fees and costs to be fixed by the Court.

IN WITNESS WHEREOF, the above bound parties have executed this instrument under their several seals the name and corporate seal of each corporate party being hereto affixed and duly signed by its undersigned representative pursuant to authority of its governing board.

Dated this _____ day of _____, 20___.

Principal: _____

Address: _____

_____

Signed: _____ (seal)

Title: _____

Surety: _____

Address: _____

_____

Signed: _____ (seal)

Title: _____

INSTRUCTIONS FOR COMPLETING BID BOND

1. The full legal name and residence of each individual executing this Bond as Principal must be inserted in the first paragraph.

2. If the Principal is a partnership, the full name of the partnership and all individuals must be inserted in the first paragraph which must recite that individuals are partners composing the partnership, and all partners must execute the Bond as individuals.

3. The State of incorporation of each corporate Principal or Surety to the Bond must be inserted in the first paragraph and the Bond must be executed under the corporate seal of said party attested by its secretary or other appropriate officer.

4. Attach a copy of the power-of-attorney for the Surety's agent.

SPECIAL CONDITIONS

CITY OF GRAND JUNCTION
DEPARTMENT OF PUBLIC WORKS AND PLANNING
ENGINEERING DIVISION

2015 Sewer Line Replacement Phase II

SPECIAL CONDITIONS

The performance of the Work for this Project shall conform to the General Contract conditions presented in the City of Grand Junction's *Standard Contract Documents for Capital Improvements Construction,* July 2010, except as specifically modified or supplemented herein or on the Construction Drawings.

SC-1 **Project Description:** The project generally consists of, but may not be limited to 570 LF of 6" cured in place pipe, 9,500 LF of 8" cured in place pipe, 790 LF of 10" cured in place pipe and 2,780 LF of 12" cured in place pipe; the replacement of eighteen sewer service taps, 130 cubic yards of flow-fill, 104 square yards of 8" concrete pavement and bypass pumping necessary to complete said work.

SC-2 **Project Manager:** The Project Manager for the Project is Jerod Timothy, who can be reached at (970) 244-1565. All notices, letters, submittals, and other communications directed to the City shall be addressed and mailed or delivered to:

City of Grand Junction
Department of Public Works and Planning
Attn: Jerod Timothy, Project Manager
250 North Fifth Street
Grand Junction, CO 81501

SC-3 **Pre-Bid Meeting:** A mandatory pre-bid meeting will be conducted for this project on Tuesday, July 14th, 2015 in the City Hall Auditorium at 2:00 p.m.

SC-4 **Affirmative Action:** The Contractor is not required to submit a written Affirmative Action Program for the Project.

SC-5 **Time of Completion:** The scheduled time of completion for the Project is **68 Calendar Days** from the starting date specified in the Notice to Proceed.

Completion is achieved when site cleanup and all punch list items (resulting from the final inspection) have been completed. Completion shall have the meaning set forth in Article I, Section 3 (Definitions and Terms) of the General Contract Conditions.

The anticipated schedule for the Project is as follows:

Solicitation Available:	June 28, 2015
Mandatory Pre-Bid Meeting:	July 14, 2015
Inquiry Deadline:	July 16, 2015
Bid Opening:	July 21, 2015
City Council approval:	August 5, 2015
Notice of Award:	August 6, 2015
Preconstruction meeting (City):	August 13, 2015
Contractor delivers Contract, Bond and Insurance Cert.	August 13, 2015
Begin work:	August 24, 2015
Final Completion and acceptance of all work:	October 30, 2015
City observed holidays:	September 7, 2015

SC-6 Liquidated Damages:

If the Contractor does not achieve Final Completion of the work specified by the required dates, whether by neglect, refusal or any other reason, the parties agree and stipulate that the Contractor shall pay liquidated damages to the City for each such day that final completion is late. As provided elsewhere, this provision does not apply for delays caused by the City. The date for Final Completion may be extended in writing by the Owner.

The Contractor agrees that as a part of the consideration for the City's awarding of this Contract liquidated damages in the daily amount of $**500.00** is reasonable and necessary to pay for the actual damages resulting from such delay. The parties agree that the real costs and injury to the City for such delay include hard to quantify items such as: additional engineering, inspection and oversight by the City and its agents; additional contract administration; inability to apply the efforts of those employees to the other work of the City; perceived inefficiency of the City; citizens having to deal with the construction and the Work, rather than having the benefit of completed Work, on time; inconvenience to the public; loss of reputation and community standing for the City during times when such things are very important and very difficult to maintain.

The Contractor must complete the Work and achieve final completion included under the Bid Schedule in the number of consecutive calendar days after the City gives its written Notice to Proceed. When the Contractor considers the entire Work ready for its intended use, Contractor shall certify in writing that the Work is substantially complete. In addition to the Work being substantially complete, Final Completion date is the date by which the Contractor shall have fully completed all clean-up, and all items that were identified by the City in the inspection for final completion. Unless otherwise stated in the Special Conditions, for purposes of this liquidated damages clause, the Work shall not be finished and the Contract time shall continue to accrue until the City gives its written Final Acceptance.

If the Contractor shall fail to pay said liquidated damages promptly upon demand thereof after having failed to achieve Final Completion on time, the City shall first look to any retainage or other funds from which to pay said liquidated damages; if retainage or other liquid funds are not available to pay said liquidated damages amounts, the Surety on the Contractor's Performance Bond and Payment Bond shall pay such liquidated damages. In addition, the City may withhold all, or any part of, such liquidated damages from any payment otherwise due the Contractor.

Liquidated damages as provided do not include any sums to reimburse the City for extra costs which the City may become obligated to pay on other contracts which were delayed or extended because of the Contractor's failure to complete the Work within the Contract Time. Should the City incur additional costs because of delays or extensions to other contracts resulting from the Contractor's failure of timely performance, the Contractor agrees to pay these costs that the City incurs because of the Contractor's delay, and these payments are separate from and in addition to any liquidated damages.

The Contractor agrees that the City may use its own forces or hire other parties to obtain Substantial or Final Completion of the work if the time of completion has elapsed and the Contractor is not diligently pursuing completion. In addition to the Liquidated Damages provided for, the Contractor agrees to reimburse the City for all expenses thus incurred.

SC-7 **Working Days and Hours (Trash Pickup):** The working days and hours shall be weekdays only and the working hours shall be between 7:00 am to 5:00 pm, or as stated below:

Highway 340 (Plan Sheet 5)
7:00 am to 5:00 pm

Bass Street (Plan Sheet 6)
7:00 am to 5:00 pm

North 12th Street (Plan Sheet 7-8)
7:00 am to 5:00 pm
*Work to be done at 12th & Patterson Intersection - 6:30 pm to 6:30 am

27 ½ Road (Sheets 9-13)
7:00 am to 5:00 pm

Patterson Road (Plan Sheets 14-21)
8:30 am to 11:30 am
1:00 pm to 3:00 pm
6:30 pm to 6:30 am

Alley 9th – 10th Street (Sheet 22)
7:00 am to 5:00 pm
*Trash Pickup Wednesdays 7:00 am-10:00 am

Alley 10th – 11th Street (Sheet 23)
7:00 am to 5:00 pm
*Trash Pickup Wednesdays 7:00 am-10:00 am

Alley 3rd – 7th between Main St. & Colorado Ave. Street (Sheets 24-26)
8:00 pm to 8:00 am
*Trash Pickup Mon-Fri beginning at 7:00 am

Alley 2nd – 7th between Main St. & Rood Ave. Street (Sheets 27-30)
8:00 pm to 8:00 am
*Trash Pickup Mon-Fri beginning at 7:00 am

Walnut to Bookcliff Ave. (Sheet 31)
7:00 am to 5:00 pm

SC-8 **Permits:** The following permit is required for the Project and will be obtained by the City at no cost to the Contractor.

- CDOT Special Use Permit

The following permits are required for the Project and shall be obtained and paid for by the Contractor, with the costs included in the total bid price for the Project:

- All process water that contains chemicals required for the CIPP work shall be treated prior to being discharged. A chemical makeup of the water and associated Material Safety Data Sheets shall be submitted to the City prior to starting the CIPP work. An **Industrial Pretreatment Discharge Permit** and a **Request to Discharge Industrial Process Wastewater Permit** from the Industrial Pretreatment Division will be required. These Permits include effluent limitations, sampling, and reporting requirements needing approval prior to the discharge of process water. The Contractor shall supply the City with a detailed operational procedure for disposal of process water. The above mention Permits have been supplied in **Appendix E**.

SC-9 **Insurance Limits:** The minimum insurance limits for the Project are as stated in the General Contract Conditions.

SC-10 **City Furnished Materials:** The City will furnish the following materials for the Project:
None

SC-11 **Project Newsletters:** The initial newsletter for the Project will be prepared and distributed by the City. It will include general information about the Project,

interruptions in utility services, street closures and parking restrictions; it will list the names and telephone numbers of the contacts for the City and Contractor; and it will give the Contractor's proposed construction schedule. The City will distribute the first newsletter approximately two weeks before the Contractor commences work.

The Contractor shall then prepare and mail a weekly newsletter until the project is completed. The Contractor's first newsletter shall be mailed one week prior to beginning work (per location) on the Project. For this project, the approximate number of newsletters to be printed and mailed by the Contractor is approximately **250**. The City will supply the Contractor a mailing list for each location.

Newsletters shall be printed on the Contractor's letterhead. Each newsletter shall include the following information:

1. Description of work completed during the previous week
2. Description of work scheduled for the upcoming week
3. Information about any road closures, detours, parking restrictions and other activities that may cause delay on inconvenience to the neighborhood or the general public.
4. Scheduled or planned interruption in any utility services (***in particular, sanitary sewer service),*** trash pickup, mail delivery or other services. If/when sewer construction in alleys will obstruct access for trash collection service, the Contractor shall notify affected residents via the newsletter, directing them to place their trash in front of their homes.
5. Project schedule changes or other information that may be useful or of interest

A draft of each newsletter shall be given to the Project Engineer for review at least two days before the letter is to be mailed. The Contractor shall make any corrections or additions to the final newsletter as requested by the Engineer. When the Engineer is unavailable for review of the draft newsletter shall be submitted to the Inspector for review prior to mailing.

SC-12 **Project Sign:** Project signs, if any, will be furnished and installed by the City.

SC-13 **Authorized Representatives of the City:** Those authorized to represent the City shall include engineers and inspectors employed by the City, only.

SC-14 **Uranium Mill Tailings:** It is anticipated that radioactive mill tailings will be encountered on this Project. Mill tailings may be encountered in alley ways.

SC-15 **Fugitive Petroleum or Other Contamination:** It is anticipated that soil contamination from fugitive petroleum or other contaminant will not be encountered with the Project.

SC-16 **Traffic Control**: The Contractor shall provide and maintain traffic control in accordance with the approved Traffic Control Plan and the *Manual on Uniform Traffic Control Devices*. The following guidelines and limitations shall apply to the traffic control:

1. The Contractor's operations shall cause no unnecessary inconvenience. The access rights of the public shall be considered at all times.
2. Vehicular access to driveways shall be maintained except when necessary work precludes such access for reasonable periods of time.
3. The Contractor shall cooperate with the various parties involved in the pickup and delivery of mail and packages and collection and removal of trash and garbage to maintain existing schedules for these services.
4. All access control provisions need to be addressed in the Traffic Control Plan as required in the General Contract Conditions.

SC-17 **Staging Area:** Staging shall take place at 2549 Riverside Parkway. The Contractor shall coordinate with the engineer to determine the location of equipment to be stored at this site. All stockpiling of materials and equipment shall be in accordance with General Contract Condition Section 51.

SC-18 **Interruption of Utilities and Services:** The Contractor shall notify all property owners affected by the interruption of utilities and other services caused by the Contractor's operations associated with this Project. Such notice shall be given at least 24 hours prior to the interruption. Notice shall be given for, but not limited to the interruption of domestic water, sanitary sewer, trash pickup, mail delivery and changes in access to the property. Notice can be given via the Project Newsletter. When an interruption will occur but was not stated in the Project Newsletter, the Contractor shall, at a minimum, provide written notice and deliver to the resident/occupant; when the resident/occupant is not home at delivery time, the notice shall be attached to the door. Such notices shall provide contact information for the Contractor, the City Inspector and the City Project Engineer.

SC-19 **Stormwater Requirements:** In accordance with the City of Grand Junction Storm Water Ordinance, Section 16-141 through 16-144, there shall be no discharge or cause to be discharged to the storm drainage system any wastewater other than storm runoff. Specifically, the discharge of any storm water construction, process, domestic, or CIPP Project wastewaters to the storm sewer is prohibited. Proper Best Management Practices shall be in place to protect the stormwater system, including the containment of construction-related storm waters on the project to ensure that sewage or project construction-related stormwater runoff does not enter the storm drainage system.

SC-20 **Existing Utilities and Structures:** Sanitary sewer locates were conducted and incorporated into the construction drawings for this project. All other underground utilities were located, however. The location of existing utilities and structures shown in the construction drawings is approximate. The Contractor shall be responsible for locating and protecting all structures and utilities in accordance with General Contract Condition 37.

SC-21 **Schedule of Submittals:** The Contractor shall submit for review by the Project Manager a Schedule of Submittals based on the submittal requirements of the various elements of

work included in the Project. The submittal schedule shall be submitted for review within one week of the start of construction with the exception of a tentative construction schedule and detailed traffic control plan which is to be submitted at least two (2) Calendar Days prior to the pre-construction meeting for review.

The schedule of submittals is presented in Appendix A.

SC-22 **Sanitary Sewer Service Locations:** The location of sewer services shown on the construction drawings are based on TV video of the existing sanitary sewer main. Unfortunately due to poor condition of the existing sewer main line, some services may not have been located. During close circuit television inspection, the contractor shall pay close attention to the existing main in an effort to identify services that may not have been located. **When multiple or newly identified services exist for a single property, the Contractor, in consultation with the Inspector and/or Engineer, shall determine which services are active and which are inactive by using dye, tracing the line with a snake and locator, or smoking the service.** The Contractor shall notify the property owner prior to placing dye or smoke in the service. When using smoke, the Grand Junction Fire Department shall also be notified prior to smoking the service.

SC-23 **Concrete Repair in Alleys:** Concrete replacement in alleyways shall be performed within 48 hours following the completion of subsurface work. The Contractor shall construct and maintain a temporary driving surface (steel plate) for the period between completion of subsurface construction (flow-fill) and restoration of the permanent concrete surface. The temporary driving surface shall be maintained free of ruts and holes during the period prior to permanent restoration. Installation and maintenance of the temporary driving surface (steel plate) shall not be paid for separately, but shall be incidental to the project.

SC-24 **Construction Schedule:** See Special Provisions SP-1.

SC-25 **Bypass Pumping:** Bypass pumping has been identified as a lump sum quantity. For all bypass pumping, the Contractor shall be responsible for estimating flows and providing sufficient pumping capacity to handle all flows. The Contractor is advised that flows vary widely throughout the day and throughout the week. Bypass pumping plans, including spill-containment plans, are required for all bypass pumping that is included in the Bid Schedule or used at the Contractor's discretion.

SC-26 **Payment for Damage to Private Property Beyond Easement Limits/ROW Limits:** Easement and Rights of Way (ROW) lines are indicated on the Construction Drawings. Any and all damage to improvements outside of easements and rights of way, and/or outside the Construction Limit lines shall be repaired at the Contractor's expense. Damage to soft improvements such as sod that is within existing easements or rights of way but outside of Construction Limit lines shall be payable so long as damage occurred as result of necessary equipment activity associated with required construction. All easement and rights of way lines defining demarcation between allowed work areas and

private property not accessible to the Contractor shall be surveyed and marked with flags/stakes to clearly delimit the work zone.

SC-27 **Discrepancy Between Bid Schedule and Construction Notes:** In the event of a discrepancy between a Pay Item description in the Bid Schedule and a description for the same Pay Item in the Construction Notes or Drawings, the language in the Bid Schedule shall govern or supersede that found elsewhere.

SC-28 **Water Fill Station:** The Contractor along with the Project Manager shall coordinate with the City Water Department for location and costs of water supply. As of June 2015 the price per 1000 gallons is $6.60. The Contractor will be supplied a pin for refill stations and will be billed accordingly.

SC-29 **Drying Beds for Waste:** The Contractor along with the Project Manager shall coordinate with the Persigo Plant for location of drying bed to be utilized during the cleaning of the sanitary sewer lines.

SC-30 **Bid Alternate:** The project shall include Bid Schedule A and Bid Schedule B. Bid Schedule B includes plan sheets 14 – 21 as a bid alternate.

SPECIAL PROVISIONS

CITY OF GRAND JUNCTION
DEPARTMENT OF PUBLIC WORKS AND PLANNING
ENGINEERING DIVISION

2015 Sewer Line Replacement Phase II

SPECIAL PROVISIONS

GENERAL:

The descriptions of the pay items listed in the Bid Schedule for this Project may not agree with those listed in the Standard Specifications. Payment for all Work performed, as required in the Contract Documents, will be in accordance with the items and units listed in the Bid Schedule.

STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION:

The ***City of Grand Junction Standard Specifications for Road and Bridge Construction*** are hereby modified or supplemented for this Project by the following modifications to ***The Standard Specifications for Road and Bridge Construction***, State Department of Highways, Division of Highways, State of Colorado:

SP-1 GENERAL CONTRACT CONDITIONS SECTION 28 - SCHEDULES

General Contract Conditions, Section 28 - Schedules of the Standard Specifications are hereby revised for this Project as follows:

Section 28, Schedules, shall include the following:

> The Contractor's detailed estimated progress schedule shall be in written form and shall include the sequencing and estimated start and completion dates for all elements of the Work.
>
> At least two (2) Calendar Days prior to the pre-construction meeting, the Contractor shall submit to the Project Engineer for review, a tentative construction schedule and detailed traffic control plan.
>
> When, during the progress of the Project, significant adjustments to the estimated progress schedule become necessary, the Contractor shall promptly submit pertinent revisions to the Project Engineer to assist in planning the required construction.

SP-2 SECTION 210 – RESET STRUCTURES

Section 210 of the Standard Specifications is hereby revised for this project as follows:

Subsection 210.11, Landscape Appurtenances shall include the following:

The quantity to be measured for "Reset Landscape Appurtenances (per service repair location)" shall include, but not be limited to planters, shrubs, gravel driveways, decorative rock, sod, tree bark, wooden and masonry borders and ornamental objects. When designated to be reset, landscape appurtenances shall be removed, stockpiled during construction and reset as shown on the plans or as directed. When designated for removal, landscape appurtenances shall be disposed of by the contractor, unless otherwise specified or directed.

Subsection 210.13, Basis of Payment shall include the following:

Pay Item	Pay Unit
Reset Landscape Appurtenances (per service repair location)	Each

SP-3 SECTION 608 – CURBS, GUTTERS, SIDEWALKS, AND BIKEWAYS

Section 608 of the Standard Specifications is hereby revised for this project as follows:

Subsections 608.06, Basis of Payment shall include the following:

The Contract Unit Price for the various concrete items shall be full compensation for all equipment, labor, materials, and incidentals required for the complete installation. Incidental items include clearing; excavating to subgrade, subgrade compaction, cutting and removal of asphalt in areas where concrete will be installed; saw cut and removal of existing concrete, disposal of excavated and removed materials; furnishing, placement and compaction of Aggregate Base Course; forming, furnishing and placement, finishing, curing and protection of the concrete; reinforcing steel and joint filler.

SP-4 SECTION 608 – STRUCTURAL CONCRETE

Section 601 of the Standard Specifications is hereby revised for this project as follows:

Subsection 601.02, Classification:

CONCRETE SHALL MEET THE FOLLOWING REQUIREMENTS:

- 4,500 PSI Compressive at 28 Days
- 6% air ±1.5%
- Slump 4", Loads exceeding 4 ½" shall be rejected

- Maximum Water Cement Ratio no greater than 0.45.

Subsection 601.06, Batching:

This CDOT Specification has been added to this Project:

The Contractor shall furnish a batch ticket (delivery ticket) with each load for all concrete. Concrete delivered without a batch ticket containing complete information as specified shall be rejected. The Contractor shall collect and complete the batch ticket at the placement site and deliver all batch tickets to the Engineer or his representative at the end of each day. The Engineer or his representative shall have access to the batch tickets at any time during the placement. The following information shall be provided on each ticket:

1. Suppliers name and date
2. Truck number
3. Project name and location
4. Concrete class and designation number
5. Cubic yards batched
6. Type brand and amount of each admixture
7. Type, brand, and amount of cement and fly ash
8. Weights of fine and course aggregates
9. Moisture of fine and course aggregates
10. Gallons of batch water

The contractor shall add the following information to the batch ticket at time of placement:

1. Gallons of water added by the truck operator.
2. Number of revolutions of the drum for mixing
3. Discharge time

SP-5 SECTION 620 – EROSION CONTROL

For inlet protection along Major Arterial or Collector Street sections the only approved inlet protections shall be a filter sock.

Add the following to this subsection:

208.05(n) Add the Following:

Concrete Washout Structure:

Water for clean-up of equipment used in the mixing or distribution of concrete shall not be discharged to any storm water facilities, drain ways, or deposited into any open fields. The waste water used shall either be wasted on an open excavation area on in an onsite detention facility for future disposal.

Subsection 208.08 Payment for Best Management Practices.

The disposal of wash water shall be considered incidental to the concrete and will not be measured for or paid for separately.

Add the following to this subsection:

Pay Item	**Pay Unit**
Erosion Control (Complete In Place)	Lump Sum

STANDARD SPECIFICATIONS FOR CONSTRUCTION OF WATER LINES, SANITARY SEWERS, STORM DRAINS, UNDERDRAINS AND IRRIGATION SYSTEMS

The City of Grand Junction ***Standard Specifications for Construction of Water Lines, Sanitary Sewers, Storm Drains, Underdrains and Irrigation Systems*** are hereby modified for this Project as follows:

ADD THE FOLLOWING:

SP-6 SECTION 108.3 – SEWER SERVICE TAP

Section 108 of the Standard Specifications is hereby revised for this project as follows:

Subsection 108.3, Sewer Taps shall include the following:

The contract unit prices for Sewer Service Tap" shall include disconnecting existing service and installing full body wye, new mainline pipe on either side of full body wye (approx. 2.5 linear feet), rigid coupler (vcp to pvc) or Fernco encased in concrete and all bends and fittings, vertical piping as required to align and connect to existing service line.

Subsection 108.3, Basis of Payment shall include the following:

Pay Item	Pay Unit
6" x 4" Sewer Service Tap	Each
8" x 4" Sewer Service Tap	Each
10" x 4" Sewer Service Tap	Each

SEE APPENDIX C FOR CURED-IN-PLACE PIPE (CIPP) SPECIFICATIONS

SEE APPENDIX D FOR BYPASS PUMPING SPECIFICATIONS

APPENDIX A

PROJECT SUBMITTAL FORM

PROJECT SUBMITTAL FORM

PROJECT: **2015 Sewer Line Replacement Phase II**

CONTRACTOR: _____

PROJECT MANAGER: Jerod Timothy

Description	Date Received	Resubmittal Requested	Resubmittal Received	Date Accepted

SEWER CONSTRUCTION

CIPP – 6”, 8”, 10” and 12”				
Sewer Service Tap (Full Body Wye)				
4” Sewer Service Pipe (SDR 35)				
Fittings				

STREET CONSTRUCTION

Concrete Mix Design, See Sp-4				
Structural Back Fill (Flow-Fill)				

EROSION CONTROL / STORMWATER MANAGEMENT

Best Management Plan (Inlet Protection & Concrete Washout Facility)				

PROJECT SUBMITTAL FORM (continued)

Description	Date Received	Resubmittal Requested	Resubmittal Received	Date Accepted
PERMITS, PLANS, OTHER				
Traffic Control Plans				
PWWTP Discharge Permits Appendix E				
Bypass Pumping Plan				
Construction Schedule				

APPENDIX B
Video Logs of Existing Sewer
(Thumb Drive Provided Per Request)

APPENDIX C
Cured-In-Place Pipe (CIPP) Specification

CURED -IN-PLACE PIPE (CIPP) SPECIFICATION

1. INTENT

1.1 It is the intent of this specification to provide for the reconstruction of pipelines and conduits by the installation of a resin-impregnated flexible tube, which is formed to the original conduit by use of a hydrostatic head. The resin is cured using hot water under hydrostatic pressure within the tube. The Cured-In-Place Pipe (CIPP) will be continuous and tight fitting. The CIPP must be designed for a "Fully Deteriorated Condition" with a safety factor of 2.0. The following requirements apply generally to the CIPP portion of the work with additional specifications as provided below:

- The subcontractor performing the CIPP work must be prequalified to work for the City of Grand Junction.
- The Subcontractor performing the CIPP work must be identified on the Bid Form and shall not be changed after bid opening without specific written approval from the Project Engineer.
- The Subcontractor shall verify host pipe diameter prior to design and fabrication of liner.
- Prior to installation of the CIPP, a design report shall be submitted to the Project Engineer, showing all assumptions, design calculations, test data and other pertinent information**. The design report must be stamped by the Licensed Professional Engineer that prepared it**. The design report is incidental to the lump sum pay item for installation of the CIPP.

2. REFERENCED DOCUMENTS

2.1 This specification references and incorporates ASTM F1216 (Rehabilitation of pipelines by the inversion and curing of a resin-impregnated tube), ASTM F1743 (Standard Practice for Rehabilitation of Existing Pipelines and Conduits by the pull in and inflate curing of a resin-impregnated tube), and ASTM D790 (Test methods for flexural properties of non-reinforced plastics) which are made a part hereof by such reference and shall be the latest edition and revision thereof. In case of conflicting requirements between this specification and these referenced documents, this specification will govern.

3. PRODUCT, MANUFACTURER/INSTALLER QUALIFICATION REQUIREMENTS

3.1 Since sewer products are intended to have a 50 year design life, and in order to minimize the Owner's risk, only proven products with substantial successful long term track records will be approved. All trenchless rehabilitation products and installers must be pre-approved prior to the formal opening of proposals.

Products and Installing Companies seeking approval must supply information verifying that they meet all of the following criteria to be deemed Commercially Acceptable:

3.1.1 For a Product (materials, process, and workmanship) to be considered Commercially Proven, a minimum of 1,000,000 linear feet or 4,000 manhole-to-

manhole line sections of successful wastewater/storm water collection system installations in the U.S. must be documented to the satisfaction of the Owner to assure commercial viability. In addition, at least 50,000 linear feet of the product shall have been in successful service within the State for a minimum of five years.

3.1.2 For an Installer to be considered as Commercially Proven, the Installer must satisfy all insurance, financial, and bonding requirements of the City, and must have had at least 3 (three) years active experience in the commercial installation of the product bid. In addition, the Installer must have successfully installed at least 3,000 feet of the product bid in wastewater, stormwater, or irrigation water systems. Acceptable documentation of these minimum installations must be included with the bid package as described in the Instructions to Bidders.

Subcontractors that propose to perform CIPP work must be prequalified specifically for CIPP work by the City of Grand Junction. Contact the Project Engineer for information regarding prequalified CIPP subcontractors or to make arrangements for prequalification. Note that the prequalification process can be time consuming. Subcontractors interested in prequalifying should begin the process as soon as possible.

3.1.3 Both the rehabilitation manufacturing and installation processes shall operate under a quality management system which is third-party certified to ISO 9000 or other internationally recognized organization standards. Proof of certification shall be required for approval of the CIPP sub-contractor.

3.1.4 The owner authorizes the use of proven materials that serve to enhance the pipe performance specified herein. Proven materials have passed independent laboratory testing, not excluding long-term (10,000 hour) structural behavior testing, and have been successfully installed to repair failing host pipes in the U. S. for at least 4 years. In addition to the aforementioned, the owner may require that the contractor demonstrate that the enhancements proposed exceed the specifications herein, prior to the installation of the enhanced material systems. This section in no way shall be interpreted as authorization to deviate from the minimum standard practices set forth herein.

3.1.5 **The CIPP subcontractor shall provide resumes of experience for the site supervisor (superintendent) to the City, demonstrating a minimum of 2 years of CIPP installation experience using the methods stipulated for this project.**

4. MATERIALS

4.1 Tube - The sewn Tube shall consist of one or more layers of absorbent non-woven felt fabric and meet the requirements of ASTM F1216, Section 5. The tube shall be constructed to withstand installation pressures, have sufficient strength to bridge missing pipe, and stretch to fit irregular pipe sections.

4.1.1 The wet out Tube shall have a uniform thickness that when compressed at installation pressures will meet or exceed the Design thickness.

4.1.2 The Tube shall be sewn to a size that when installed will tightly fit the internal circumference and length of the original pipe. Allowance should be made for circumferential stretching during inversion. Overlapped layers of felt in longitudinal seams that cause lumps in the final product shall not be utilized.

4.1.3 The outside layer of the Tube (before wet out) shall be coated with an impermeable, flexible membrane that will contain the resin and facilitate monitoring of resin saturation during the resin impregnation (wet out) procedure.

4.1.4 The Tube shall be homogeneous across the entire wall thickness containing no intermediate or encapsulated elastomeric layers. No material shall be included in the Tube that may cause delamination in the cured CIPP. No dry or unsaturated layers shall be evident.

4.1.5 The wall color of the interior pipe surface of CIPP after installation shall be a light reflective color so that a clear detailed examination with closed circuit television inspection equipment may be made.

4.1.6 Seams in the Tube shall be stronger than the non-seamed felt.

4.1.7 The outside of the Tube shall be marked for distance at regular intervals along its entire length, not to exceed 5 ft. Such markings shall include the Manufacturers name or identifying symbol. The tubes must be manufactured in the USA.

4.2 Resin - The resin system shall be a corrosion resistant polyester, vinyl ester, or epoxy and catalyst system that when properly cured within the tube composite meets the requirements of ASTM F1216, ASTM F1743, the physical properties herein, and those which are to be utilized in the Design of the CIPP for this project. The resin shall produce CIPP which will comply with the structural and chemical resistance requirements of this specification.

5. STRUCTURAL REQUIREMENTS

5.1 The CIPP shall be designed as per ASTM F1216, Appendix X.1. The CIPP design shall assume no bonding to the original pipe wall. The CIPP shall be designed for a fully deteriorated host pipe condition.

5.2 The Contractor must have performed long-term testing for flexural creep of the CIPP pipe material installed by his Company. Such testing results are to be used to determine the Long-term, time dependent flexural modulus to be utilized in the product design. This is a performance test of the materials (Tube and Resin) and general workmanship of the installation and curing. A percentage of the instantaneous flexural modulus value (as measured by ASTM D-790 testing) will be used in design calculations for external

buckling. The percentage, or the long-term creep retention value utilized, will be verified by this testing. Values in excess of 50% will not be applied unless substantiated by qualified third party test data. The materials utilized for the contracted project shall be of a quality equal to or better than the materials used in the long-term test with respect to the initial flexural modulus used in Design.

5.3 The layers of the cured CIPP shall be uniformly bonded. It shall not be possible to separate any two layers with a probe or point of a knife blade so that the layers separate cleanly or the probe or knife blade moves freely between the layers. If separation of the layers occur during testing of field samples, new samples will be cut from the work. Any reoccurrence may cause rejection of the work.

5.4 The cured pipe material (CIPP) shall conform to the structural properties, as listed below.

MINIMUM PHYSICAL PROPERTIES

Property	Test Method	**Cured Composite** min. per ASTM F1216	**Cured Composite** (400,000 psi Resin)
Modulus of Elasticity	ASTM D-790 (short term)	250,000 psi	400,000 psi
Flexural Stress	ASTM D-790	4,500 psi	4,500 psi

The required structural CIPP wall thickness shall be based as a minimum, on the physical properties in the table above and in accordance with the Design Equations in the appendix of ASTM F 1216. All calculations shall be submitted to the Project Engineer prior to ordering of the pipe. The submittal shall show ALL information used in the calculations, including original equations, parameters, variables, definitions, values assigned, and intermediate results as well as final results. The purpose of this submittal is to allow the Project Engineer to examine all aspects of the design calculations. Submittal of governing equations and final results shall not be sufficient. Delays in proper submittal of a complete design package will not constitute a valid reason for schedule extension.

5.6 Any layers of the tube that are not saturated with resin prior to insertion into the existing pipe shall not be included in the structural CIPP wall thickness computation.

6. TESTING REQUIREMENTS

6.1 Chemical Resistance - The CIPP shall meet the chemical resistance requirements of ASTM F1216, Appendix X2. CIPP samples for testing shall be of tube and resin system similar to that proposed for actual construction. It is required that CIPP samples with and without plastic coating meet these chemical testing requirements.

6.2 Hydraulic Capacity - Overall, the hydraulic profile shall be maintained as large as possible. The CIPP shall have a minimum of the full flow capacity of the original pipe before rehabilitation. Calculated capacities may be derived using a commonly accepted roughness coefficient for the existing pipe material taking into consideration its age and condition.

6.3 CIPP Field Samples – The Contractor shall submit test results from field installations in the USA of the same resin system and tube materials as proposed for the actual installation. These test results must verify that the CIPP physical properties specified in Section 5.5 have been achieved in previous field applications. Samples for this project shall be made and tested as described in Section 10.1.

6.4 Installed CIPP Testing – The Contractor shall provide samples for testing to the City from the actual installed CIPP. Samples shall be provided at a minimum for one location per 1000 feet of installed CIPP. The sample shall be cut from a section of cured CIPP that has been pulled through a like diameter pipe which has been held in place by a suitable heat sink, such as sandbags. All curing, cutting, and identification of samples shall be witnessed by the City.

7. INSTALLATION RESPONSIBILITIES FOR INCIDENTAL ITEMS

7.1 The Contractor/subcontractor shall be responsible for reopening connections to all laterals shown on the drawings. This work shall be incidental to the CIPP pay item.

7.2 Cleaning of Host Line - The Contractor, when required, shall remove all internal debris out of the line that will interfere with the installation of CIPP. All debris removed from the sewer line shall be taken to the Persigo Wash Wastewater Treatment Plant located at 2145 River Road. Any hazardous waste material encountered during this project will be considered as a changed condition. The cleaning of the host lines shall be considered incidental to CIPP installation and will not be paid for separately.

7.3 Inspection of Pipelines - Inspection of pipelines shall be performed by experienced personnel trained in locating breaks, obstacles and service connections by close circuit television. The interior of the pipeline shall be carefully inspected to determine the location of any conditions which may prevent proper installation of CIPP into the pipelines, and it shall be noted so that these conditions can be corrected. A video tape and suitable log shall be kept for later reference by the Owner.

7.4 Line Obstructions - It shall be the responsibility of the Contractor to clear the line of obstructions such as solids, roots, projecting service pipes, mineral deposits, and other obstructions that will prevent the insertion of CIPP. If pre-installation inspection reveals an obstruction such as a protruding service connection, dropped joint, or a collapse that will prevent the inversion process, that was not evident on the pre-bid video and it cannot be removed by conventional sewer cleaning equipment, then the Contractor shall make a point repair excavation to uncover and remove or repair the obstruction. Such excavation shall be approved in writing by the Owner's representative prior to the commencement of

the work and shall be considered as a separate pay item.

8. INSTALLATION

8.1 Installation of the CIPP shall conform with Traffic Control specifications and Special Conditions stipulated elsewhere in the Contract Documents. CIPP installation shall be in accordance with ASTM F1743 with the following modifications:

8.1.1 Resin Impregnation - The quantity of resin used for tube impregnation shall be sufficient to fill the volume of air voids in the tube with additional allowances for polymerization shrinkage and the loss of resin through cracks and irregularities in the original pipe wall. A vacuum impregnation process shall be used. To insure thorough resin saturation throughout the length of the felt tube, the point of vacuum shall be no further than 25 feet from the point of initial resin introduction.

After vacuum in the tube is established, a vacuum point shall be no further than 75 feet from the leading edge of the resin. The leading edge of the resin slug shall be as near to perpendicular as possible. A roller system shall be used to uniformly distribute the resin throughout the tube. If the Installer uses an alternate method of resin impregnation, the method must produce the same results. Any alternate resin impregnation method must be proven.

8.1.2 Tube Insertion – The wet out tube shall be positioned in the pipeline using the pull-through or inversion method.

8.1.3 Temperature gauges shall be placed inside the tube at the invert level of each end to monitor the temperatures during the cure cycle.

8.1.4 Curing shall be accomplished by utilizing steam pressure in accordance with the manufacturer’s recommended cure schedule.

8.1.5 Cooling shall be performed using chilled air.

8.1.6 Reinstatement of Services– Sanitary Service connections (taps) at the main be reopened without excavation, utilizing a remotely controlled cutting device, monitored by a video TV camera. The Contractor shall certify that he has a minimum of two complete working units plus spare key components on site before each inversion. No additional payment will be made for excavations for the purpose of reopening connections (unless noted otherwise on the Construction Drawings) and the Contractor will be responsible for all costs and liability associated with such excavation and restoration work. Any damage to the CIPP or service lateral resulting from removing the coupon of CIPP material at the service tap shall be repaired at the Contractor’s expense by open-cut excavation and installation of repair coupling and service tap as directed by the Engineer.

10. INSPECTION

10.1 CIPP samples shall be prepared and physical properties tested in accordance with ASTM, F1216 Section 8, using either method proposed. The flexural properties must meet or exceed the values listed in Table 1 of the applicable ASTM.

10.2 Wall thickness of samples shall be determined as described in ASTM F1216. The minimum wall thickness at any point shall not be less than 87½% of the design thickness as specified in this appendix.

10.3 Visual inspection of the CIPP shall be in accordance with ASTM F1216 and F1743. The Contractor shall provide a TV-log of the installation after all work is complete and prior to placing the sewer back in service.

11. CLEAN-UP

11.1 Upon acceptance of the installation work and testing, the Contractor shall restore the project area affected by the operations to a condition at least equal to that existing prior to the work.

12. PAYMENT

12.1 Payment for the CIPP installation shall be per lineal foot of CIPP installed, measured from end of pipe to end of pipe and shall include all aspects of the work described herein and on the Construction Drawings. Payment for trenchless connection of services shall be made separately.

Add the following to **104.2.b Installation of Sewer Service Lines**:

Verification of Active Taps. It may be necessary in some instances for the Contractor to verify the existing sewer taps that are active by smoke testing, use of dye, inserting a snake through a clean-out or roof vent and tracing to sewer main, etc. and only connect the active taps. There will be no separate measurement or payment for this work which will be considered incidental.

SECTION 105 – PIPELINE TESTING

Delete Section 105.2. The City of Grand Junction will not require the new sanitary sewer main to be pressure or leakage tested. However, the remainder of Section 105 shall apply to this Project.

APPENDIX D
BYPASS PUMPING

BYPASS PUMPING SPECIFICATION

PART 1 – GENERAL

1.1 DESCRIPTION

A. The work covered under this section of the Specifications includes furnishing all plans, labor, equipment, permits, and materials necessary to implement a temporary pumping system for the purpose of diverting existing sewer flow around a work area for the duration of the project.

B. Contractor shall be required to field verify bypass pumping flow and sizing requirements prior to submission of shop drawings. Bypass pumping plan shall be submitted to Project Manager for approval prior to implementation. An estimate of bypass pumping flows is ***NOT*** included at the end of this specification.

C. The bypass system shall provide provisions for maintaining vehicular and pedestrian access, avoiding damage to public and private property, preventing leakage from hoses and minimizing noise from pumps. Sound attenuation is not necessary.

D. It shall be the responsibility of the Contractor to provide protection for the entire bypass system including but not limited to piping, piping connections, pumps and ancillary equipment. Materials utilized for bypass pumping shall be appropriate for use for the intended operation and service. Protection for the bypass piping shall be performed through positive protection means. The Contractor shall be responsible for any damage caused by the Contractor's failure to provide adequate protection to the bypass system.

E. The Contractor shall conduct field surveys prior to any bypass operations to determine if there are any storm drains, waterways, or other similar areas that could be negatively affected in the event of a spill. Any potential hazards will be described in a narrative and on a bypass map. This narrative and map will be included with the bypass plan that will be submitted to the Engineer for review. The Contractor shall prepare an emergency response plan to be followed in the event of a spill or release of sanitary sewage during the WORK. This plan shall be developed to minimize the impacts of the spill or release and include containment, cleanup and rinsate collection. The Contractor shall indicate the availability of the required materials and equipment for emergency response.

1.2 SUBMITTALS

A. For the flow bypassing method(s) utilized during pipe inspection, rehabilitation or reconstruction, the Contractor shall submit the following information specific for each bypass setup 10 days prior to construction:

1. A detailed plan and description outlining all provisions and precautions to be taken by the Contractor regarding the handling of existing pipeline flows. This plan should include schedules, locations, capacities of equipment, materials, sizing and selection data,

location of nearby waterways, reinstate procedures, manufacturer catalog cut sheets and calculations, and all other incidental items necessary and/or required to insure the proper protection of these facilities, including protection of the access and bypass pumping locations from damage due to discharge flows. Drawings indicating the location of the equipment, piping layouts and pumping and discharge manholes shall be included.
2. Copy of all permits required to perform the work.
3. Certification of workmen trained for welding and installing HDPE pipe.
4. Record of measurement or verification of sanitary sewer flow rates.
5. Emergency spill or release plan including site specific requirements.

1.3 DESIGN REQUIREMENTS

A. Bypass pumping systems shall have sufficient capacity to pump **50% more than the maximum measured flow**. It shall be the Contractor's responsibility to verify the estimated flows by measuring flows prior to the work and designing the pumping system accordingly.

The Contractor shall provide all pipeline plugs, pumps of adequate size to handle peak flow, and temporary discharge piping to ensure than the total flow of the sewer can be safely diverted around the WORK. Bypass pumping systems shall be manned at all times while operating.

B. The Contractor shall have adequate standby equipment available and ready for immediate operation and use in the event of emergency or breakdown. Pumps will be selected per the results of the flow calculations and per site requirements. All bypass systems shall have a fully-operational back-up pump available in the event that a primary pump fails. This information shall be specified in the bypass plans.

C. The bypass pumping system shall be capable of bypassing the flow around the work area and of returning any amount of flow up to full available flow into City's sanitary sewer system as necessary for satisfactory performances of the work.

D. The bypass system shall adhere to all local, state and federal codes and regulations as required by the regulatory agencies having jurisdiction.
.
E. The Contractor shall maintain sewer flows around the work area in a manner that will protect and not cause surcharging of' sewers, drains, damage or flooding to public and private property.

F. The Contractor shall protect water resources, wetlands and other natural resources during the WORK.

1.4 RESPONSIBILITY FOR OVERFLOWS OR SPILLS

A. It shall be the responsibility of the Contractor to schedule and perform the WORK in a manner that does not cause or contribute to incidence of overflows, releases or spills of sewage from the sanitary sewer system or the bypass operation.

B. The Contractor shall develop a site-specific spill response plan in the event that a spill

involving sewage should occur. This plan shall include the following:

1. Emergency contact information for the spill response team.
2. Plan for immediately containing the leak or spill.
3. Plan for immediately addressing the source of the leak or spill.
4. Plan for immediately preventing public exposure to the leak or spill, including procedures for diverting pedestrian and automobile traffic away from the impacted area.
5. Contact information for vactor truck services.
6. Contact information for a laboratory certified to test water samples for the presence of fecal coliform.
7. Procedures for collecting water quality samples to assess the magnitude and range of impact of any leak or spill.
8. Procedures for washing down all affected areas with chlorinated potable water, including a requirement that all wastewater generated from this process be collected and disposed of in accordance with the applicable law.
9. Procedures for removing and replacing affected soils.
10. Plans for conducting an investigation to determine the causes of the leak or spill and a review of the results of the implementation of the spill response plan.

A copy of the spill response plan shall be provided to the Engineer for review and comment prior to the commencement of any work. The Contractor shall submit to the Engineer a list of contact information for all supervisory personnel working on the project, including a list of emergency contact numbers available for 24-hour assistance. The Contractor shall also coordinate with the Engineer and City to develop a list of individuals and agencies that must be contacted immediately in the event of a spill. Included on the list shall be the Colorado Department of Public Health and Environment Release and incident Reporting line: 1-877-518-5608. In the event of a spill, the Contractor shall report the spill to CDPHE and conform to all requirements of CDPHE Policy No. WQE-10.

C. In the event that the Contractor's work activities contribute to overflows, releases or spills, the Contractor shall immediately take the appropriate action to contain and stop the overflow, and notify the City of Grand Junction Wastewater Services at 970-256-4180 from 7:30 am to 4:30 pm, at 970-256-8333 after hours and holidays; if that line is busy, call non-emergency police dispatch at 970-242-6707; and as a last resort call police dispatch at 911. Clean up shall include rinsate collection and disinfection of the area affected by the spill to the satisfaction of the Engineer. Site-specific materials shall be used to retain and divert solids and divert flow from environmentally sensitive areas. Storm drains shall be covered to ensure that sewage does not reach the storm water system. Emergency response spill kits and other site-specific spill containment material shall be available on site at all times. An incident report including but not limited to cause of the release or spill, actions taken to mitigate the event and cleanup activities performed shall be submitted to the Engineer by the Contractor within 24 hours of completion of the cleanup activities.

PART 2 – MATERIALS

2.1 MATERIALS

A. Discharge piping will be selected according to flow calculations and system operating calculations. Suction piping will be selected according to pump size, flow calculations, and manhole depth based on manufacturer's specifications and recommendations.

B. Flexible hoses and associated couplings and connectors shall be abrasion resistant, suitable for the intended service, and shall be rated for the external and internal loads anticipated including test pressures. External loading design shall incorporate all anticipated traffic loadings, including traffic impact loading.

1. At a minimum, hose subject to traffic loading shall be composed of a system, such as traffic ramps or covers, but not limited to, capable of withstanding H-20 loading criteria. System shall be installed and maintained to meet H-20 loading requirements while in use or as directed by the Engineer.

C. Valves and fittings will be selected according to flow calculations, the pump sizes previously determined, and system operating pressures.

D. Plugs will be selected and installed according to the size of the line to be plugged, pipe and manhole configurations, and on a site-specific basis. All bypass systems will have additional plugs in the event one plug fails. All plugs will be inspected prior to every use for defects which may lead to failure.

2.2 DELIVERY, STORAGE, AND HANDLING

A. Transportation, handling, and storage of the piping, fittings, pumps and ancillary equipment and materials shall be as recommended by manufacturer.

B. If new materials or equipment become damaged before or during installation, it shall be repaired by the Contractor as recommended by the manufacturer or replaced as required by the Engineer at the Contractor's expense, prior to initiating the WORK.

C. The Contractor shall deliver, store and handle other materials as required to prevent damage. Damaged materials shall be replaced by the Contractor at no additional cost to the City.

D. The Contractor shall inspect all materials and equipment for proper operation prior to initiating the WORK. Any equipment or materials identified by the Engineer which is indicated unsuitable for use by the Contractor for use on this project shall be replaced by the Contractor at no additional cost to the City.

PART 3 – EXECUTION

3.1 PREPARATION

A. The Contractor is responsible for locating any existing utilities in the area that the Contractor selects to locate bypass pipelines. The Contractor shall locate bypass pipelines to minimize any disturbance to existing utilities and shall obtain approval of the pipeline locations from the City. The Contractor is responsible for all costs associated with relocating utilities and obtaining permits.

B. The Contractor shall protect existing facilities from damage during pumping activities.

3.2 INSTALLATION

A. General

1. Plugging or blocking of flows in the line segments to be bypassed shall incorporate a primary and secondary plugging device. When plugging is no longer required for performance of the work, it is to be removed in a manner that permits flows to slowly return to normal without surge, surcharge or other major disturbance.
2. The bypass piping shall be located off streets and sidewalks as required. Where bypass piping crosses, or is installed in driveways, sidewalks and/or other public or private ways, the Contractor shall provide and maintain facilities to permit normal pedestrian and vehicular traffic reasonable access to concourses in accordance with the Contractor’s approved traffic control plan from the jurisdictional or governing authority.
3. Upon completion of the bypass pumping operations, the Contractor shall remove all piping and complete restoration, restoring all property to preconstruction condition including but not limited to pavement. The Contractor is responsible for obtaining any permits and/or permission for placement of the temporary pipeline within public and private properties.
4. Contractor shall not divert flow to new sewer or manhole prior to completion of the work as identified in the Contract Documents and as approved by the Engineer.

B. Piping

1. The pipe shall be assembled and joined at the site using couplings or flanges to provide a leak proof joint in strict accordance with the manufacturer's instructions and ASTM D 2657. Threaded or solvent cement joints and connections are not permitted.
2. All equipment and procedures used shall be used in strict compliance with the manufacturer's instructions and recommendations.
3. All joints shall be subject to acceptance by the Engineer prior to insertion.
4. Any section of the pipe having other defects of manufacturing or handling as determined by the Engineer shall be discarded and not used.

C. Cleanup and system removal

1. The Contractor shall restore bypass pump areas to pre bypass condition including any cleanup measures necessary due to fuel, coolant, oil, and sewage leaks. The Contractor shall document any cleanup measures that were necessary. The Contractor's bypass plan and methods shall ensure that all sewage in the bypass pipes, pumps, and fittings has been emptied into the sanitary sewer and flushed with potable water or scrubbed with a "pig" device before system removal.

PART 4 – MEASUREMENT AND PAYMENT

1. MEASUREMENT

   A. Measurement shall be by the lump sum to include all locations.

2. PAYMENT

   A. Payment shall be by the lump sum and shall include payment for all design costs of bypass pumping system, pumping equipment, pipes, labor, valves, spill prevention plan and equipment, labor, mobilization, fuel, potable water for hydrostatic testing of bypass lines, road crossing devices, costs to restore area to existing condition and all other items necessary to conduct bypass pumping.

APPENDIX E

INDUSTRIAL PRETREATMENT DISCHARGE PERMIT APPLICATION

REQUEST TO DISCHARGE INDUSTRIAL PROCESS WASTEWATER

CITY OF Grand Junction COLORADO

UTILITY AND
STREET SYSTEMS

Persigo Wastewater Treatment Plant
Industrial Pretreatment Division
2145 River Road
Grand Junction, Colorado 81505
(970) 256-4180

Industrial Pretreatment Discharge Permit Application

SHORT FORM PERMIT APPLICATION

SECTION A: ORGANIZATIONAL INFORMATION

1) Company Name:_____

2) Mailing Address:_____

3) Facility Address:_____

4) Chief Executive Officer:_____
(Print Name, Title, Phone #)

5) Signing Official:_____
(Print Name, Title, Phone #)

6) Contact Person:_____
(Print Name, Title, Phone #)

****

CERTIFICATION STATEMENT

I have personally examined and am familiar with the information submitted in this document and attachments. Based upon my inquiry of those individuals immediately responsible for obtaining the information reported herein, I certify under penalty of law, that the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information. (Must be signed by Owner/Officer/Manager of the company)

Printed Name & Title:_____

Signature:_____**Date:**_____

RECEIPT INFORMATION FOR CITY OF GRAND JUNCTION, WWTP OFFICE USE ONLY;

Permit Application Fee:
Payable to the City of Grand Junction

☐ **$ 50.00** for facilities **without** required pretreatment
☐ **$165.00** for facilities **with required pretreatment**

Account Number 902-615-620-380-4340_15

Check Paid by: _____**Check Number:** _____

Received By(signature):_____**Date Fee Received:**_____

TREASURER RECEIPT NUMBER:_____**Date Of Treasurer Receipt:** _____

SECTION B: BUSINESS ACTIVITY & FACILITY OPERATIONS

1) Briefly describe operations at this facility including primary products or services:

_____
_____
_____
_____

2) List (if known) the applicable Standard Industrial Classification code (SIC code) and/or the North American Industry Classification System code (NAICS code) for all processes at your facility:

SIC Code	NAICS Code	Description
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

3) If your facility employs or expects to employ processes in any of the nationally regulated industrial categories or business activities listed below, place a check beside the category or business activity. Check all that apply:

☐ Aluminum Forming
☐ Anodizing
☐ Asbestos Manufacturing
☐ Battery Manufacturing
☐ Canned/Preserved Fruits/Vegetables Processing
☐ Canned & Preserved Seafood Processing
☐ Carbon Black Manufacturing
☐ Cement Manufacturing
☐ Centralized Waste Treatment
☐ Chemical Etching and Milling
☐ Coal Mining
☐ Coating (chromating, phosphating, coloring)
☐ Coil Coating
☐ Concentrated Animal Feeding Operations
☐ Copper Forming
☐ Dairy Products
☐ Electrical & Electronic Components
☐ Electroless Plating
☐ Electroplating
☐ Explosives Manufacturing
☐ Ferroalloy Manufacturing
☐ Fertilizer Manufacturing
☐ Glass Manufacturing
☐ Grain Mills
☐ Gum & Wood Chemicals Manufacturing
☐ Hospital
☐ Ink Formulating
☐ Inorganic Chemicals Manufacturing
☐ Iron & Steel Manufacturing
☐ Landfills
☐ Leather Tanning & Finishing
☐ Meat Products
☐ Metal Finishing
☐ Metal Molding & Casting
☐ Metal Products & Machinery
☐ Mineral Mining & Processing
☐ Nonferrous Metals Forming & Metal Powders
☐ Nonferrous Metals Manufacturing
☐ Oil & Gas Extraction
☐ Ore Mining & Dressing
☐ Organic Chemicals, Plastics & Synthetic Fibers
☐ Paint Formulating
☐ Paving & Roofing Materials (Tars & Asphalts)
☐ Pesticide Chemicals
☐ Petroleum Refining
☐ Pharmaceutical Manufacturing
☐ Phosphate Manufacturing
☐ Photographic
☐ Plastics Molding & Forming
☐ Porcelain Enameling
☐ Printed Circuit Board Manufacturing
☐ Pulp, Paper & Paperboard
☐ Rubber Manufacturing
☐ Soap & Detergent Manufacturing
☐ Steam Electric Power Generating
☐ Sugar Processing
☐ Textile Mills
☐ Timber Products Processing
☐ Transportation Equipment Cleaning
☐ Waste Combustion

4) Indicate which of the activities listed below will be performed at your facility:

☐ Manufacturing	☐ Printing/Labeling	☐ Photo/X-ray Processing
☐ Laundry Operations	☐ Dye-Check Operations	☐ Chemical Mixing
☐ Soldering Operations	☐ Welding Operations	☐ Painting Operations
☐ Stripping/Etching Processes	☐ Vehicle Service/Repair	☐ Vehicle Washing
☐ Equipment Service/Repair	☐ Equipment Washdown	☐ Floor Washdown
☐ Metal Plating Operations	☐ Tumbling Operations	☐ Forklift Battery Servicing
☐ Food Service Operations	☐ Conversion Coating	☐ Solvent Usage
☐ Warehouse Activities	☐ Use of Evaporators	☐ Container Rinsing/Cleaning

5) Indicate the shifts normally worked each day and other shift information:

Shift	**Sun**	**Mon**	**Tue**	**Wed**	**Thu**	**Fri**	**Sat**
1st	☐	☐	☐	☐	☐	☐	☐
2nd	☐	☐	☐	☐	☐	☐	☐
3rd	☐	☐	☐	☐	☐	☐	☐

1st Shift Start Time:_____End Time:_____Total Hours:_____
2nd Shift Start Time:_____End Time:_____Total Hours:_____
3rd Shift Start Time:_____End Time:_____Total Hours:_____

Average Number of Employees per Shift:
1st Shift:_____ 2nd Shift:_____ 3rd Shift:_____
Total Number of Employees:_____

Primary Activity - 1st Shift:_____
Primary Activity - 2nd Shift:_____
Primary Activity - 3rd Shift:_____

Months of Operation: ☐ Full Year ☐Partial Y

☐ Jan ☐Feb ☐Mar ☐Apr ☐May ☐Jun ☐Jul ☐Aug ☐Sep ☐Oct ☐Nov ☐Dec

6) List basic raw materials used in the operation of your facility:_____

_____
_____
_____
_____
_____
_____
_____
_____

7) Provide the following information for each product line:

Principle Product:_____
Materials/Additives:_____
Wastewater Discharge: ☒ Batch ☐Continuous ☐Bo
Peak Production Months:_____
Periods of Shutdown:_____

Principle Product:_____
Materials/Additives:_____
Wastewater Discharge: ☐ Batch ☐Continuous ☐Both
Peak Production Months:_____
Periods of Shutdown:_____

Principle Product:_____
Materials/Additives:_____
Wastewater Discharge: ☐ Batch ☐Continuous ☐Both
Peak Production Months:_____
Periods of Shutdown:_____

- Attach additional pages if necessary for more product lines -

8) Are any significant process changes or expansions planned during the next five years? (a significant change is one of 30% or more) ☐ Yes ☐No

If yes, please provide brief explanation:_____
_____
_____

SECTION C: WATER USE & WASTEWATER DISCHARGE

1) List raw water sources and approximate total volume of water usage:

Source	Usage	Measured	Estimate
City of Grand Junction:	_____gal/day	☐	☐
Ute Water:	_____gal/day	☐	☐
Private Well:	_____gal/day	☐	☐
Surface Water:	_____gal/day	☐	☐
Other (specify): _____	_____gal/day	☐	☐

2) Describe any raw water treatment processes utilized:_____
_____
_____
_____

3) Describe any water recycling or material reclaiming processes utilized:_____
_____

_____
_____

4) List water consumption within the facility:

Type	**Usage**	**Measured**	**Estimate**	
Contact Cooling Water	_____gal/day		☐	☐
Non-Contact Cooling Water	_____gal/day		☐	☐
Boiler Feed Water	_____gal/day		☐	☐
Used in Product/Process	_____gal/day	☐	☐	
Air Pollution Control Unit	_____gal/day	☐	☐	
Domestic/Sanitary	_____gal/day		☐	☐
Landscaping	_____gal/day		☐	☐
Other_____	_____gal/day		☐	
TOTAL	_____gal/day			

5) Water Acct # / Name on Water Bill:_____

6) List wastewater discharge or water losses to:

Outlet	**Estimated Average Gallons Per Day**
Grand Junction Municipal Sewer System	_____
Storm Sewer System	_____
Waste Hauler Disposal	_____
Evaporation	_____
Contained in Product	_____
Landscaping Activities	_____
Other:_____	_____
TOTAL	_____

7) Is wastewater given any form of pretreatment prior to discharge to the sanitary sewer system? ☐ Yes ☐ No

If YES, describe the method of pretreatment and the pretreatment facilities:_____
_____
_____
_____
_____
_____
_____
_____
_____

8) Check which of the following industrial pretreatment equipment or processes will be in use at this facility for pretreating wastewater prior to discharge to any source or disposal as a solid or sludge:

☐ Dissolved Air Flotation	☐ Centrifuge	☐ Plate & Frame Filter Press
☐ Chemical Precipitation	☐ Screening	☐ Sedimentation Processes
☐ Belt Filter Press	☐ Filter Systems	☐ Biological Treatment
☐ Chlorination	☐ Flow Equalization	☐ Septic Tank
☐ Oil & Grease Interceptor	☐ Oil/Sand Interceptor	☐ Oil & Grease Separators
☐ Reverse Osmosis	☐ pH Adjustment	☐ Grit Removal
☐ Ion Exchange	☐ Neutralization Processes	☐ Sumps or Holding Tanks
☐ Sludge Drying Beds	☐ Incineration Processes	☐ Evaporators
☐ Digestion Processes	☐ Lagoons	☐ Composting
☐ Chemical Stabilization	☐ Thermal Conditioning	☐ Solvent Separation
☐ Other_____	☐ Other_____	☐ Other_____

9) Does this facility produce liquid wastes, process wastes, slurries or sludges which must be disposed of? ☐ Yes ☐ No

If YES, below is a list of wastes which may be generated. Please check all that apply and the disposal method used for each particular waste:

Waste	City Sewer Disposal	Waste * Hauler Disposal	On-Site Storage/ Disposal	Off-Site ** Recycled	Other
☐ Acids and Alkalies	☐	☐	☐	☐	☐
☐ Heavy Metal Sludges	☐	☐	☐	☐	☐
☐ Ink/Dye Wastes	☐	☐	☐	☐	☐
☐ Oil/Grease Trap Waste	☐	☐	☐	☐	☐
☐ Organic Compounds	☐	☐	☐	☐	☐
☐ Paints/Coatings	☐	☐	☐	☐	☐
☐ Pesticides/Herbicides	☐	☐	☐	☐	☐
☐ Plating Wastes	☐	☐	☐	☐	☐
☐ Pretreatment Sludges	☐	☐	☐	☐	☐
☐ Solvents/Thinners	☐	☐	☐	☐	☐
☐ X-Ray/Photo Wastes	☐	☐	☐	☐	☐
☐ Sand/Oil Trap Waste	☐	☐	☐	☐	☐
☐ Sump Wastes	☐	☐	☐	☐	☐
☐ Barrel/Pail Rinses	☐	☐	☐	☐	☐
☐ Used Antifreeze	☐	☐	☐	☐	☐
☐ Used glycols	☐	☐	☐	☐	☐
☐ Parts Cleaner Waste	☐	☐	☐	☐	☐
☐ Used oils	☐	☐	☐	☐	☐
☐ Used coolants	☐	☐	☐	☐	☐
☐ Other wastes (list)					
_____	☐	☐	☐	☐	☐
_____	☐	☐	☐	☐	☐
_____	☐	☐	☐	☐	☐

*** Provide Name and Address of Waste Hauler:**_____

_____

_____

**** Provide Name and Address of Recycler:**_____

_____

_____

10) Attach plans showing all sewer connections, manholes, sumps and pretreatment device associated with the facility. Include mechanical/plumbing plans if available.

SECTION D: ENVIRONMENTAL CONTROL

1) Will this facility have a State of Colorado Stormwater Discharge Permit?

☐ Yes ☐ No Permit Number:_____

2) Will this facility utilize the City of Grand Junction's storm water sewer system?

☐ Yes ☐ No

If YES, indicate all that apply: ☐ Roof Drains ☐ Sump Pumps ☐ Outside Drains
☐ Catch Basins ☐ Impoundments ☐ Parking Lots ☐ Loading Docks
☐ Other:_____

3) Describe any outside drains or sump pumps (size, type, location, where stormwater drains to):_____

_____

_____

4) Describe any spill control measures used: _____

_____

_____

5) Describe how spill clean-up would be handled:_____

_____

_____

6) Are chemicals, product or equipment stored outside the facility: Yes / No

If Yes, describe the storage area:_____

_____

7) Does this facility have chemical storage tanks, containers, bins or ponds?

☐ Yes ☐ No

If YES, please give a description of their location, contents, size, type and frequency and method of cleaning. Indicate on a diagram the proximity of these containers to a sanitary sewer or storm drain._____

_____

_____

_____

8) Is a Spill Prevention Control Plan prepared for this facility? ☐ Yes ☐ No

If YES, please attach a copy of the Spill Plan to this application.

9) Is a Solvent Management Plan prepared for this facility? ☐ Yes ☐ No

10) Is a Hazardous Materials Compliance Plan prepared for this facility?
☐ Yes ☐ No

Indicate what the hazardous waste generator category is for this facility :

☐ Not a generator of hazardous waste
☐ Conditionally exempt small quantity generator (less than 220 lbs per month)
☐ Small quantity generator (220 lbs to 2200 lbs per month)
☐ Large quantity generator (more than 2200 lbs per month)

11) List all environmental control permits held by the facility:

Permit Type	**Permit No.**	**Issuing Agency**	**Expiration Date**

SECTION E. WASTE & WASTEWATER INFORMATION

1) Indicate the following constituents that are or could be present in the wastewater discharge: (For any "YES" or checked answer - attach a written explanation)

☐ Heavy metals (Arsenic, Cadmium, Chromium, Copper, Lead, Mercury, Nickel, Selenium, Silver, Molybdenum, Zinc)

☐ Petroleum substances	☐ Fats, wax, grease or oils	☐ Dyes
☐ Tanning solutions	☐ High BOD (>500 mg/l)	☐ High TSS (>500 mg/l)
☐ High TDS (>500 mg/l)	☐ Toxic Gases	☐ Ammonia
☐ Hydrogen Sulfide	☐ Sulfur Dioxide	☐ Chlorine
☐ Nitrous Oxide	☐ Bromine	☐ Iodine
☐ Phenols	☐ PCB's	☐ Cyanide
☐ Pesticides/Herbicides	☐ Salt Brines	☐ Disinfectants
☐ Solvents- Petroleum	☐ Solvent- Citrus	☐ High pH (caustics)
☐ Low pH (acids)	☐ Flammable Substances	☐ Explosive substances
☐ Surfactants (detergents)	☐ Radioactive Substances	☐ Toxic Substances
☐ Antifreeze	☐ Latex Paint	☐ Enamel Paint
☐ Methanol	☐ Manganese Compounds	☐ Barium Compounds
☐ Nitrate Compounds	☐ Chlorine Dioxide	☐ Activated Carbon
☐ Glycols	☐ Boiler & Cooling System Treatment Chemicals	

2) Will there be periodic maintenance performed on any of the following systems? Check all that apply.

Activity	Times Per Year	Gallons Generated/Discharged
☐ Cooling System Cleaning	_____	_____
☐ Cooling System Drainings	_____	_____
☐ Boiler Maintenance	_____	_____
☐ Tank Passivation Activities	_____	_____
☐ Water Softener Maintenance	_____	_____
☐ Air Pollution Control Unit	_____	_____

SECTION F: COMPANY INFORMATION

1) Type of Organization:

☐ Sole Proprietorship ☐ General Partnership ☐ Limited Liability Company

☐ Limited Partnership ☐ Corporation

2) State(s) of Incorporation or Registration: _____

3) Registered Agent: _____

4) Principal Officers (Name/Address): _____

_____

_____

_____

SECTION G: NOTICE TO SIGNING OFFICIAL

1) In consideration of the granting of a discharge permit, the company agrees:

a) To furnish any additional information relating to the installation or use of the industrial sewer for which an industrial discharge permit is sought as may be requested by the City of Grand Junction.

b) To accept and abide by all provisions of the Grand Junction City Code, Chapter 13.04.

c) To operate and maintain any waste pretreatment facilities, as may be required, in an efficient manner at all times, and at no expense to the City.

d) To cooperate at all times with the City and its representatives in their inspecting, sampling, and study of the industrial wastes, and any facilities provided for pretreatment.

e) To notify the City immediately in the event of any accident, or other occurrence that occasions a contribution to the POTW of any wastewater or substances prohibited by City, State, or Federal law.

2) In accordance with 40 CFR, Part 403, Section 403.14, information provided in this application which is necessary to characterize your industry's wastewater discharge shall be available to the public without restriction. Any other information

provided may be claimed as confidential by the submitter. Such claim must be asserted at the time of submission by stamping the words "Confidential Business Information" on, or similarly identifying the information claimed as confidential. Requests for confidential treatment of information shall be governed by procedures specified in 40 CFR, Part 2.

ATTACHMENT

Following are internet websites which may be used to determine the industrial classification for industrial processes performed at your facility:

North American Industry Classification Code (NAICS Code)
http://naics.com/

Standard Industrial Classification Code (SIC Code)
http://www.osha.gov/pls/imis/sicsearch.html

CITY OF Grand Junction COLORADO

UTILITY AND STREET SYSTEMS

REQUEST TO DISCHARGE INDUSTRIAL PROCESS WASTEWATER

This form shall be used by a permitted industry proposing to discharge directly to the City/County Sewer System. The application must be received and approved by the City's Industrial Pretreatment Program prior to the proposed discharge date.

FACILITY INFORMATION

FACILITY NAME: _____

ADDRESS: _____

CONTACT (name and title): _____

PHONE: _____ FAX: _____ E-MAIL: _____

WASTEWATER INFORMATION

WASTEWATER GENERATED FROM: ( ) PERMITTED OUTFALL #_____
( ) OTHER LOCATION _____

VOLUME OF WASTEWATER TO BE DISCHARGED IS _____ GALLONS

REQUEST TO DISCHARGE ON (date) _____ BETWEEN THE HOURS OF _____ AND _____

ATTACH LAB ANALYSIS RESULTS FOR ALL PARAMETERS REQUESTED TO BE DISCHARGED

CERTIFICATION STATEMENT

I certify under penalty of law that I have personally examined and am familiar with the information herein and based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. Based on my inquiry of the person or persons directly responsible for managing compliance with the permit limitations (or pretreatment standards) for Total Toxic Organics (TTO), I certify that, to the best of my knowledge and belief, no dumping of concentrated Toxic Organics into the wastewaters has occurred since filing of the last discharge monitoring report. I further certify that this facility is implementing the toxic organics management plan submitted to the City of Grand Junction.

Printed Name of Authorized Agent: _____ Title: _____

Signature: _____ Date: _____

Please send/fax application to: Industrial Pretreatment Program
Persigo Wastewater Treatment Plant
2145 River Road
Grand Junction, CO 81505

Phone: (970) 256-4180
Fax: (970) 245-8620

PROJECT NO. F001625

2015 SEWER LINE REPLACEMENT
PHASE II
JUNE, 2015

UTILITIES AND AGENCIES

AGENCY	NAME	POSITION	ROLE	MAILING ADDRESS	STREET ADDRESS	CITY, STATE	VOICE–WK	FAX
GRAND JUNCTION, CITY OF	JEROD TIMOTHY	PROJECT ENGINEER	PROJECT ENGINEER	250 N. 5th STREET	250 N. 5th STREET	GRAND JCT., CO 81501	(970) 244–1565	(970) 256–4022
GRAND JUNCTION, CITY OF	BRET GUILLORY	UTILITY ENGINEER	SANITARY SEWER	250 N. 5th STREET	250 N. 5th STREET	GRAND JCT., CO 81501	(970) 244–1590	(970) 256–4022
GRAND VALLEY IRRIGATION CO.	PHIL BERTRAND		IRRIGATION	688 26 ROAD	688 26 ROAD	GRAND JCT., CO 81506	(970) 242–2762	
BRESNAN	CHUCK WEIDMAN	MANAGER	CABLE TV	2502 FORESIGHT CIRCLE	2502 FORESIGHT CIRCLE	GRAND JCT., CO 81504	(970) 245–8750	(970) 245–6803
U.S. WEST/QWEST	CHRIS JOHNSON	ENGINEER	TELEPHONE	2524 BLICHMANN AVE	2524 BLICHMANN AVE	GRAND JCT., CO 81504	(970) 244–4311	(970) 240–4349
UTE WATER	DARYL MOORE	SUPERVISOR	WATER	PO BOX 460		GRAND JCT., CO 81502	(970) 242–7491	(970) 242–9189
XCEL	DAN STEINKIRCHNER	UNIT MANAGER	GAS, ELECTRIC	2538 BLICHMANN AVE	2538 BLICHMANN AVE	GRAND JCT., CO 81506	(970) 244–2656	(970) 244–2661

CITY OF Grand Junction COLORADO

Public Works & Utilities
Engineering Division

NOTE: NOTIFY AFFECTED UTILITY VENDOR 48 HOURS PRIOR TO EXCAVATIONS THAT WILL EXPOSE UTILITY LINES. THE COVER SHEET WILL HAVE A LISTING OF UTILITY VENDORS AND TELEPHONE NUMBERS.

	DESCRIPTION	DATE
REVISION 1		
REVISION 2		
REVISION 3		
REVISION 4		

DRAWING STATUS:
- PROGRESS
- FINAL CONSTRUCTION DRAWINGS
- ASBUILT

DESIGNED BY:
JEROD TIMOTHY, PROJECT ENGINEER DATE

REVIEWED BY:
BRET GUILLORY, UTILITY ENGINEER DATE

AUTHORIZED FOR CONSTRUCTION
TRENTON C. PRALL, CITY ENGINEER DATE

ACCEPTED AS CONSTRUCTED
JEROD TIMOTHY, PROJECT ENGINEER DATE

N:\Vandpro\2015 Sewer Line Replacement Phase II\DWG\2015 CIPP Aug. 1 7/1/2015 10:47:00 AM

PROJECT NO. F001625

ABBREVIATIONS

AASHTO	AMERICAN ASSOCIATION OF STATE HIGHWAY & TRANSPORTATION OFFICIALS
ABC	AGGREGATE BASE COURSE
AC	ASBESTOS CEMENT
AP	ANGLE POINT
ASB	ANCHORED STRAW BALES
ASP	ALUMINIZED STEEL PIPE
ASTM	AMERICAN SOCIETY FOR TESTING MATERIALS
AWWA	AMERICAN WATER WORKS ASSOCIATION
BC	BACK OF CURB
BF	BUTTERFLY VALVE
BOW	BACK OF WALK
BCR	BEGIN CURB RETURN
BOT	BOTTOM
BSWMP	BETTER STORM WATER MANAGEMENT PRACTICES
CH	CHORD
CAP	CORRUGATED ALUMINUM PIPE
CDOT	COLORADO DEPARTMENT OF TRANSPORTATION
CI	CAST IRON
C,G,& SW	CURB, GUTTER & SIDEWALK
℄	CENTER LINE
CL	CLEAR
CMP	CORRUGATED METAL PIPE
CO	CLEAN OUT
COMB	COMBINATION (AS IN STORM SEWER AND SANITARY SEWER)
CONC	CONCRETE
CSM	CITY SURVEY MONUMENT
CSP	CORRUGATED STEEL PIPE
CU	COPPER
DI	DUCTILE IRON
DWY	DRIVEWAY
E	ELECTRIC
ECR	END CURB RETURN
EG	EDGE OF GUTTER
EL	ELEVATION
EP	EDGE OF PAVEMENT
EX	EXISTING
FB	FULL BODY
FC	FACE OF CURB
FG	FINISHED GRADE
℄	FLOW LINE
FL	FLANGE
FM	FORCE MAIN
FO	FIBER OPTICS
FS	FAR SIDE
FTG	FOOTING
G	GAS
GB	GRADE BREAK
GM	GAS METER
GV	GATE VALVE
HBP	HOT BITUMINOUS PAVEMENT
HDPE	HIGH DENSITY POLYETHYLENE
INV	INVERT
IRR	IRRIGATION
L	LENGTH OF ARC
LC	LONG CHORD
LF	LINEAR FEET
LL	LONG ARC
LS	SHORT ARC
LT	LEFT
MB	MAILBOX
MCSM	MESA COUNTY SURVEY MONUMENT
MH	MANHOLE
MJ	MECHANICAL JOINT
MW	MILL WRAP
N/A	NOT APPLICABLE
NIC	NOT IN CONTRACT
NOP	NO ONE PERSON
NRCP	NON-REINFORCED CONCRETE PIPE
NS	NEAR SIDE
NTS	NOT TO SCALE
OHP	OVERHEAD POWER
OHT	OVERHEAD TELEPHONE
PC	POINT OF CURVATURE
PCC	POINT OF COMPOUND CURVATURE
PE	POLYETHYLENE
PERF	PERFORATED
PI	POINT OF INTERSECTION
PIP	PLASTIC IRRIGATION PIPE
POC	POINT ON CURVE
POT	POINT ON TANGENT
PR	PROPOSED
PRC	POINT OF REVERSE CURVATURE
PT	POINT OF TANGENCY
PVC	POLYVINYL CHLORIDE
R	RADIUS
RCP	REINFORCED CONCRETE PIPE
REQ'D	REQUIRED
RG	RESTRAINED GLANDS
RL	LONG RADIUS
ROW	RIGHT OF WAY
RP	RADIUS POINT
RR	RAIL ROAD
RS	SHORT RADIUS
RT	RIGHT
S	SLOPE
SAN	SANITARY
SC	SHORT CHORD
SCD	STANDARD CONTRACT DOCUMENTS
SCH	SCHEDULE
SF	SILT FENCE
SL	SECTION LINE
SSRB	STANDARD SPECIFICATIONS FOR ROAD & BRIDGE CONSTRUCTION
SSUU	STANDARD SPECIFICATIONS FOR CONSTRUCTION OF UNDERGROUND UTILITIES
STA	STATION
STL	STEEL
STM	STORM
T	TELEPHONE
TAN	LENGTH OF TANGENT
TC	TOP OF CURB
TH	TEST HOLE
TV	TELEVISION
(TYP)	TYPICAL
UU	UNDERGROUND UTILITIES
VC	VERTICAL CURVE
VCP	VITRIFIED CLAY PIPE
VPC	VERTICAL POINT OF CURVATURE
VPCC	VERTICAL POINT OF COMPOUND CURVATURE
VPRC	VERTICAL POINT OF REVERSE CURVATURE
VPI	VERTICAL POINT OF INTERSECTION
VPT	VERTICAL POINT OF TANGENCY
W	WATER
△	DELTA ANGLE

LEGEND

BSWMP DRAINAGE BASIN BOUNDARY

BSWMP ANCHORED STRAW BALES — ASB ASB ASB

BSWMP SILT FENCE — SF SF SF

BUILDING

CONCRETE CURB AND GUTTER — 2' CURB AND GUTTER

CONCRETE CURB,GUTTER, & SIDEWALK — 7' C, G, & SW

CONCRETE DITCH — CONCRETE

CONCRETE SIDEWALK — 4' SW

CULVERT — 18" RCP

EARTH DITCH — EARTH

EDGE OF GRAVEL

EDGE OF PAVEMENT

FENCE (BARBED WIRE)

FENCE (CHAIN LINK)

FENCE (IRON)

FENCE (PLASTIC)

FENCE (TEMPORARY CONSTRUCTION)

FENCE (WOOD)

FENCE (WOVEN WIRE)

GUARD RAIL — B B B

HATCHING: INDICATES ASPHALT REMOVAL

HATCHING: INDICATES CONCRETE REMOVAL

HATCHING: INDICATES STAGING AREA — ~STAGING AREA~

LINE (CENTER OF IMPROVEMENTS) — CENTERLINE

LINE (CITY LIMITS) — CITY LIMITS

LINE (CONTROL) — CONTROL LINE

LINE (EASEMENT)

LINE (MONUMENT/SECTION) — MONUMENT/SECTION LINE

LINE (PROPERTY)

LINE (RIGHT OF WAY)

MATCH LINE — MATCH LINE SEE SHEET NO ?

PIPE (IRRIGATION)

PIPE (SIPHON)

PROPOSED CONCRETE CURB AND GUTTER

PROPOSED CONCRETE CURB,GUTTER,& SIDEWALK

PROPOSED CONCRETE SIDEWALK

PROPOSED "WET" UTILITIES (CONSTRUCTION NOTE WILL INDICATE TYPE, SIZE, AND MATERIAL OF NEW MAIN) — 8" PVC SANITARY SEWER

ALL PROPOSED FEATURES NOT SHOWN IN LEGEND WILL BE SHOWN THE SAME AS THEIR EXISTING COUNTERPART, BUT INDICATED BY BOLDER LINETYPE

RAIL ROAD

RETAINING WALL — 1' RETAINING WALL

STRIPING (CONTINUOUS WHITE) — WHITE

STRIPING (DASHED WHITE) — WHITE

STRIPING (CONTINUOUS YELLOW) — YELLOW

STRIPING (DASHED YELLOW) — YELLOW

4570

TOP OF SLOPE — 4580

CONTOUR LINES (SHOWN BETWEEN TOP & TOE)

TOE OF SLOPE — 4570

TRAFFIC DETECTOR LOOP

UTILITY LINE (ABANDON) (THIS CASE A WATER LINE) — (ABANDONED)

UTILITY LINE (CABLE TV) — TV

UTILITY LINE (ELECTRIC) — E

UTILITY LINE (FIBER OPTIC)

UTILITY LINE (GAS)

UTILITY LINE (HIGH VOLTAGE OVERHEAD POWER)

UTILITY LINE (OVERHEAD POWER)

UTILITY LINE (OVERHEAD TELEPHONE)

UTILITY LINE (SANITARY SEWER)

UTILITY LINE (SANITARY SEWER FORCE MAIN)

UTILITY LINE (SANITARY SEWER SERVICE)

UTILITY LINE (STORM SEWER)

UTILITY LINE (STORM SEWER, PERFORATED)

UTILITY LINE (STORM/SANITARY SEWER SEWER COMBINATION)

UTILITY LINE (TELEPHONE) — T

UTILITY LINE (WATER)

SYMBOLS

BENCH MARK — A

CATCH BASIN

CLEAN OUT

CURB STOP

FIRE HYDRANT

GUY WIRE ANCHOR

HEADGATE

IRRIGATION PUMP — P

MAILBOX

MANHOLE (ELECTRIC) — E

MANHOLE (GAS) — G

MANHOLE (SANITARY/STORM)

MANHOLE (TELEPHONE) — T

MANHOLE (TV) — TV

MANHOLE (WATER) — W

METER (GAS) — GM

METER (WATER)

PEDESTAL (TELEPHONE)

PEDESTAL (TV) — TV

PROPERTY PIN

PULL BOX

REDUCER FITTING

SIGN OR POST (SIGN TYPE NOTED) — STOP

SPRINKLER HEAD

STREET LIGHT

SURVEY MONUMENT (CITY) — CSM

SURVEY MONUMENT (TYPE NOTED) — MCSM

TEST HOLE — TH #1

TRAFFIC PAINT MARKING

TRAFFIC SIGNAL POLE AND MAST ARM

UTILITY POLE

VALVE (GAS) — GAS

VALVE (IRRIGATION) — IRR

VALVE (WATER) — W

VEGETATION (HEDGE OR BUSH)

VEGETATION (TREE STUMP)

VEGETATION (TREE) (CALIPER SIZE NOTED) — 6"

WATER HYDRANT — WH

WEIR — W

YARD LIGHT

NORTH ARROW:

BAR SCALE:

GRAPHIC SCALE

10 0 20 60

(IN FEET)
1 inch = 20 ft.

DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY JKT DATE 2015
DESIGNED BY HMC DATE 2015
CHECKED BY DATE
APPROVED BY DATE

SCALE — PLAN HORIZ. 1"=20' VERT. — PROFILE HORIZ. VERT.

CITY OF Grand Junction COLORADO

PUBLIC WORKS AND UTILITIES ENGINEERING DIVISION

CITY OF GRAND JUNCTION STANDARD ABBREVIATIONS, LEGEND, AND SYMBOLS SHEET

2

N:\Jacobs\2015 Sewer Line Replacement Phase II\DWG\2015 CIPP.dwg, 2, 7/1/2015 10:47:18 AM

Bid Schedule: 2015 Sewer line Replacement Phase II
Bid Schedule A

Contractor:_____

Item No.	CDOT, City Ref.	Description	Quantity	Units	Unit Price	Total Price
1	108.3	6" X 4" Sewer Service Tap - See Special Provisions SP- 6 for details.	6.	EA	$ _____	$ _____
2	108.3	8" X 4" Sewer Service Tap - See Special Provisions SP- 6 for details.	7.	EA	$ _____	$ _____
3	108.3	10" X 4" Sewer Service Tap - See Special Provisions SP- 6 for details.	5.	EA	$ _____	$ _____
4	202	Tree Removal (8 Inch)	2.	EA	$ _____	$ _____
5	202	Shrub Removal				
6	203	Disposal of Radio Active Materials	53.	CY	$ _____	$ _____
7	206	Structural Back Fill (Flow-Fill)	130.	CY	$ _____	$ _____
8	210	Reset Landscape Appurtenance (Per Service Repair Location) - See Special Provisions SP - 2.	2.	EA	$ _____	$ _____
9	210	Reset Fence (4" Chain Link)	16.	LF	$ _____	$ _____
10	210	Reset Sprinkler System (Per Property)	2.	EA	$ _____	$ _____
11	401	Hot Mix Asphalt (4" Thick) (Patching) (Grading SX, Binder Grade PG 64-22)	6.	SY	$ _____	$ _____
12	608	Concrete Driveway Section (8" Thick) to Include Dowels. See SP - 4.	97.	SY	$ _____	$ _____
13	620	Erosion Control (Complete in Place)	Lump	SUM	---	$ _____
14	626	Portable Sanitary Facility	Lump	SUM	---	$ _____
15	630	Mobilization	Lump	SUM	---	$ _____
16	630	Traffic Control (Complete In Place) to include flagging	Lump	SUM	---	$ _____
17	630	Traffic Control Plan	Lump	SUM	---	$ _____
18	SP	Bypass pumping per City Specifications. See Appendix D in Bid Documents.	Lump	SUM	---	$ _____
19	SP	Weekly Newsletter- See Bid Documents SC-11	Lump	SUM	---	$ _____
20	SP	6 Inch CIPP (Complete in Place) See Appendix C in Bid Documents.	570.	LF	$ _____	$ _____
21	SP	8 Inch CIPP (Complete in Place) See Appendix C in Bid Documents.	5,850.	LF	$ _____	$ _____
22	SP	10 Inch CIPP (Complete in Place) See Appendix C in Bid Documents.	790.	LF	$ _____	$ _____
23	SP	12 Inch CIPP (Complete in Place) See Appendix C in Bid Documents.	2,780.	LF	$ _____	$ _____
MCR		Minor Contract Revisions	---	---	---	$ 35,000.00

Bid Amount: $ _____

Bid Amount:

_____ **dollars**

Bid Schedule: 2015 Sewer line Replacement Phase II
Bid Schedule B (Bid Alternate)

Contractor:_____

Item No.	CDOT, City Ref.	Description	Quantity	Units	Unit Price	Total Price
1	108.3	6" X 4" Sewer Service Tap - See Special Provisions SP- 6 for details.	6.	EA	$ _____	$ _____
2	108.3	8" X 4" Sewer Service Tap - See Special Provisions SP- 6 for details.	7.	EA	$ _____	$ _____
3	108.3	10" X 4" Sewer Service Tap - See Special Provisions SP- 6 for details.	5.	EA	$ _____	$ _____
4	202	Tree Removal (8 Inch)	2.	EA	$ _____	$ _____
5	202	Shrub Removal				
6	203	Disposal of Radio Active Materials	53.	CY	$ _____	$ _____
7	206	Structural Back Fill (Flow-Fill)	130.	CY	$ _____	$ _____
8	210	Reset Landscape Appurtenance (Per Service Repair Location) - See Special Provisions SP - 2.	2.	EA	$ _____	$ _____
9	210	Reset Fence (4" Chain Link)	16.	LF	$ _____	$ _____
10	210	Reset Sprinkler System (Per Property)	2.	EA	$ _____	$ _____
11	401	Hot Mix Asphalt (Patching) (4" Thick) (Grading SX, Binder Grade PG 64-22)	6.	SY	$ _____	$ _____
12	608	Concrete Driveway Section (8" Thick) to Include Dowels. See SP - 4.	97.	SY	$ _____	$ _____
13	620	Erosion Control (Complete in Place)	Lump	SUM	---	$ _____
14	626	Portable Sanitary Facility	Lump	SUM	---	$ _____
15	630	Mobilization	Lump	SUM	---	$ _____
16	630	Traffic Control (Complete In Place) to include flagging	Lump	SUM	---	$ _____
17	630	Traffic Control Plan	Lump	SUM	---	$ _____
18	SP	Bypass pumping per City Specifications. See Appendix D in Bid Documents.	Lump	SUM	---	$ _____
19	SP	Weekly Newsletter- See Bid Documents SC-11	Lump	SUM	---	$ _____
20	SP	6 Inch CIPP (Complete in Place) See Appendix C in Bid Documents.	570.	LF	$ _____	$ _____
21	SP	8 Inch CIPP (Complete in Place) See Appendix C in Bid Documents.	9,500.	LF	$ _____	$ _____
22	SP	10 Inch CIPP (Complete in Place) See Appendix C in Bid Documents.	790.	LF	$ _____	$ _____
23	SP	12 Inch CIPP (Complete in Place) See Appendix C in Bid Documents.	2,780.	LF	$ _____	$ _____
MCR		Minor Contract Revisions	---	---	---	$ 35,000.00

Bid Amount: $ _____

Bid Amount:

_____ **dollars**

DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY JKT DATE 2015
DESIGNED BY HMC DATE 2015
CHECKED BY _____ DATE _____
APPROVED BY _____ DATE _____

SCALE: N.T.S.

CITY OF Grand Junction COLORADO

PUBLIC WORKS AND UTILITIES ENGINEERING DIVISION

2015 SEWER LINE REPLACEMENT PHASE II
SUMMARY OF APPROXIMATE QUANTITIES

N:\Vandora\2015 Sewer Line Replacement Phase II\DWG\2015 CIPP.dwg, 3, 7/1/2015 10:48:08 AM

PROJECT NO. F001625

SHEETS 10 - 14

SHEETS 8 - 9

SHEETS 19 - 22

SHEETS 32

SHEETS 15 - 18

SHEETS 7

SHEETS 23

SHEETS 24

SHEETS 28 - 31

SHEETS 25 - 27

SHEETS 5 - 6

DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2015
DESIGNED BY JKT DATE 2015
CHECKED BY DATE
APPROVED BY DATE

SCALE
0 500 1000 2000

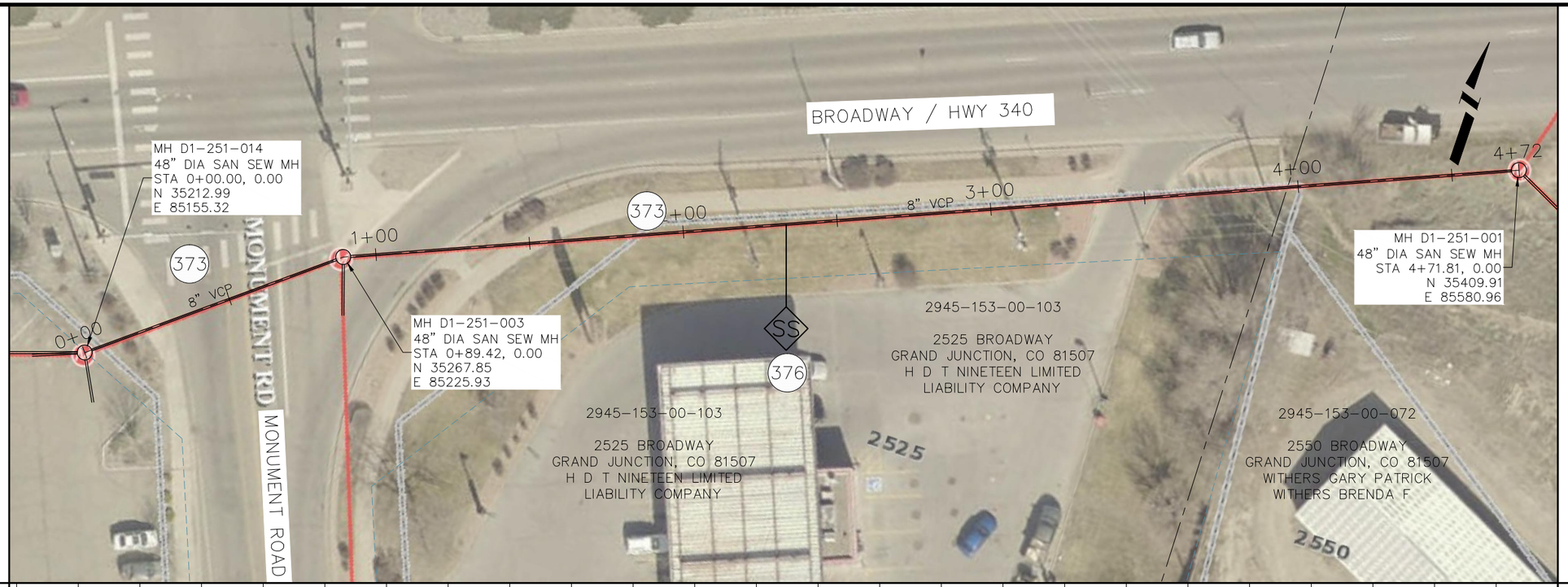
CITY OF Grand Junction COLORADO

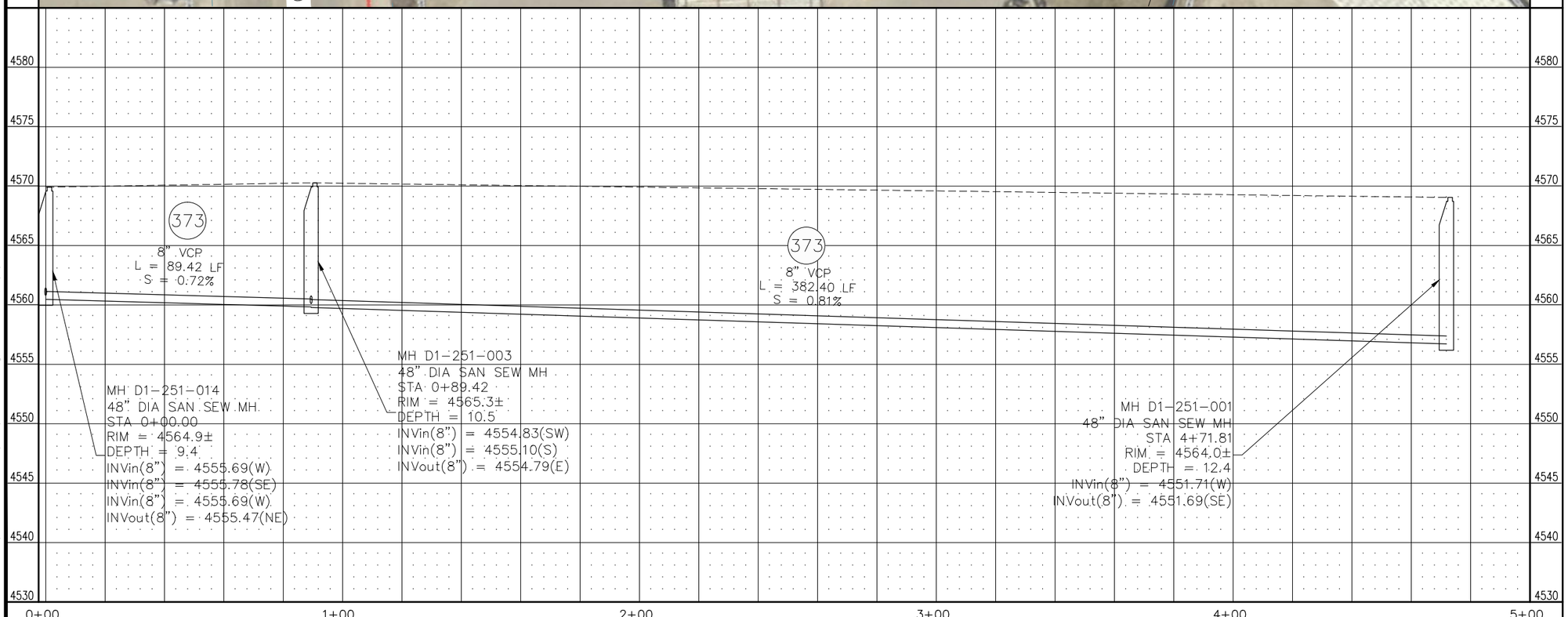
PUBLIC WORKS AND UTILITIES ENGINEERING DIVISION

2015 SEWER LINE REPLACEMENT PHASE II VINICITY MAP

4

N:\Landproj\2015_Sewer_Line_Replacement_Phase_II\DWG\2015_CIPP_Proj_4_Vicinity_Map_7/1/2015_10:48:41_AM





PROJECT NO. F001625

CONSTRUCTION NOTES

(373) SP CURED IN PLACE SANITARY SEWER PIPE PER PROJECT SPECIFICATIONS. DESIGNED, SUBMITTED, AND STAMPED BY P.E. FIELD VERIFY PIPE SIZE/MATERIAL BEFORE ORDERING LINER. DURING NEW PIPE INSTALLATION IT WILL BE NECESSARY TO BYPASS PUMP SEWAGE AROUND WORK AREA TO A DOWNSTREAM MANHOLE. IF NECESSARY PROVIDE TRAFFIC CONTROL IN WORK AREA AND BYPASS AREA. MAINTAIN ACCESS TO ALL BUSINESSES AND RESIDENCES AND TWO WAY TRAFFIC.

(376) REMOVE CIPP COUPON AT SERVICE LOCATION (INCIDENTAL TO CIPP)

DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2015
DESIGNED BY JKT DATE 2015
CHECKED BY DATE
APPROVED BY DATE

SCALES: PLAN HORIZONTAL 0 10 20 40; PROFILE HORIZONTAL 0 10 20 40, VERTICAL 0 2.5 5

CITY OF Grand Junction COLORADO

PUBLIC WORKS
AND UTILITIES
ENGINEERING DIVISION

2015 SEWER LINE REPLACEMENT PHASE II
SANITARY SEWER PLAN AND PROFILE
HWY 340 - STA: 0+00 - 5+00

5

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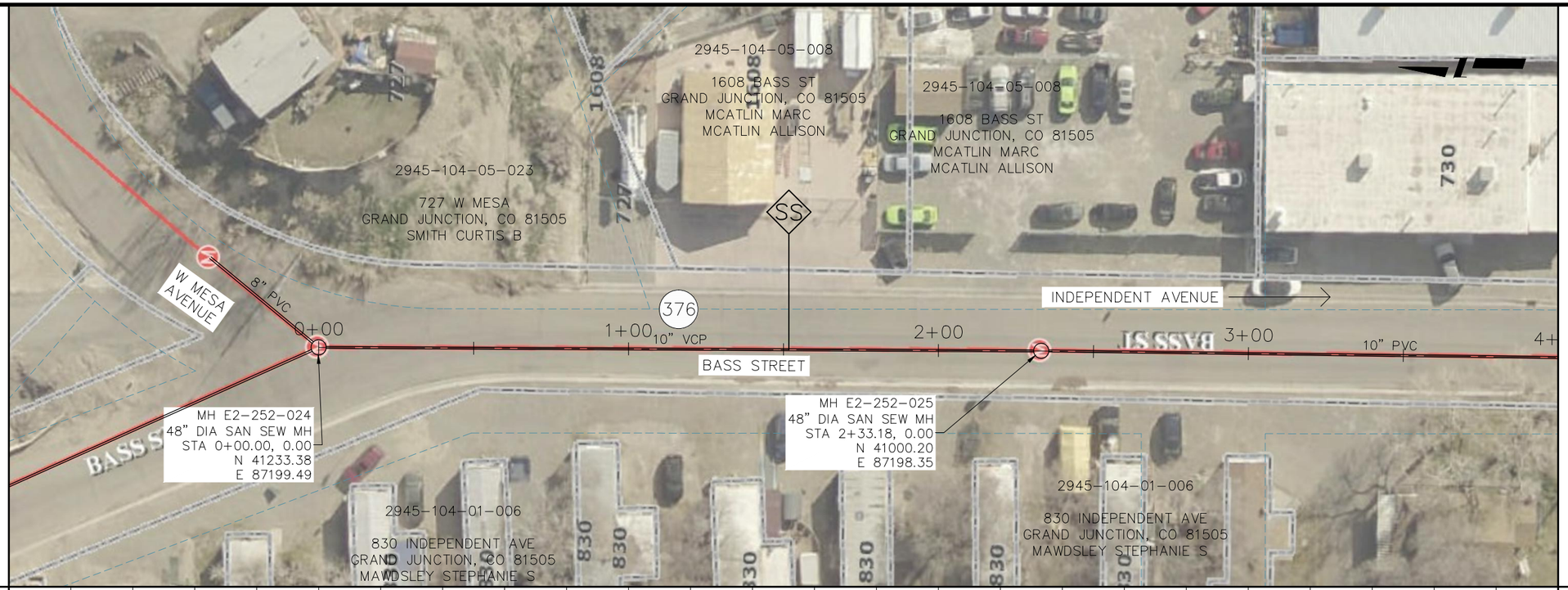
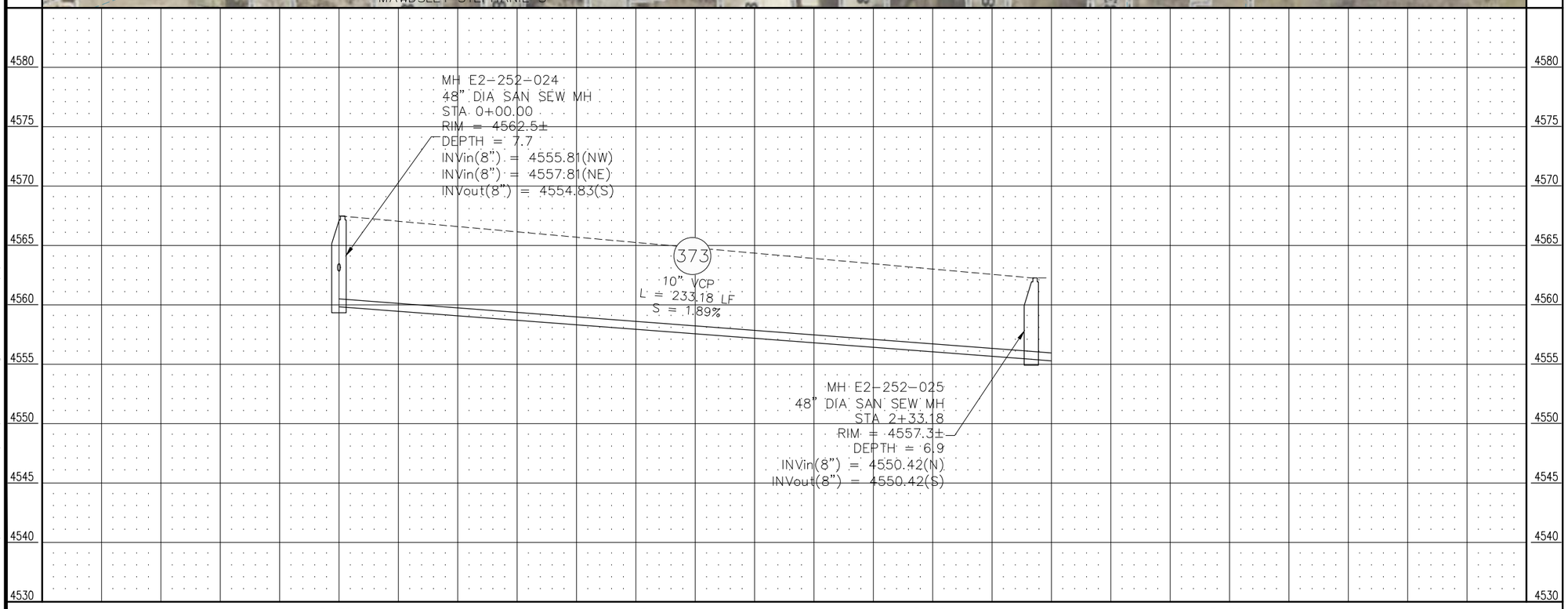




PROJECT NO. F001625

CONSTRUCTION NOTES

373 SP CURED IN PLACE SANITARY SEWER PIPE PER PROJECT SPECIFICATIONS. DESIGNED, SUBMITTED, AND STAMPED BY P.E. FIELD VERIFY PIPE SIZE/MATERIAL BEFORE ORDERING LINER. DURING NEW PIPE INSTALLATION IT WILL BE NECESSARY TO BYPASS PUMP SEWAGE AROUND WORK AREA TO A DOWNSTREAM MANHOLE. IF NECESSARY PROVIDE TRAFFIC CONTROL IN WORK AREA AND BYPASS AREA. MAINTAIN ACCESS TO ALL BUSINESSES AND RESIDENCES AND TWO WAY TRAFFIC.

376 REMOVE CIPP COUPON AT SERVICE LOCATION (INCIDENTAL TO CIPP)

DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2015
DESIGNED BY JKT DATE 2015
CHECKED BY DATE
APPROVED BY DATE

SCALES: PLAN HORIZONTAL 0 10 20 40; PROFILE HORIZONTAL 0 10 20 40, VERTICAL 0 2.5 5

CITY OF Grand Junction COLORADO

PUBLIC WORKS
AND UTILITIES
ENGINEERING DIVISION

2015 SEWER LINE REPLACEMENT – PHASE II
SANITARY SEWER PLAN AND PROFILE
BASS STREET – STA: 0+00 – 6+00

6

N:\projects\2015 Sewer Line Replacement Phase II\DWG\2015 CIPP.dwg, 06 BASS ST, 7/1/2015 10:50:17 AM

PROJECT NO. F001625

CONSTRUCTION NOTES

(373) SP CURED IN PLACE SANITARY SEWER PIPE PER PROJECT SPECIFICATIONS. DESIGNED, SUBMITTED, AND STAMPED BY P.E. FIELD VERIFY PIPE SIZE/MATERIAL BEFORE ORDERING LINER. DURING NEW PIPE INSTALLATION IT WILL BE NECESSARY TO BYPASS PUMP SEWAGE AROUND WORK AREA TO A DOWNSTREAM MANHOLE. IF NECESSARY PROVIDE TRAFFIC CONTROL IN WORK AREA AND BYPASS AREA. MAINTAIN ACCESS TO ALL BUSINESSES AND RESIDENCES AND TWO WAY TRAFFIC.

(376) REMOVE CIPP COUPON AT SERVICE LOCATION (INCIDENTAL TO CIPP)

DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2015
DESIGNED BY JKT DATE 2015
CHECKED BY DATE
APPROVED BY DATE

SCALES: PLAN HORIZONTAL 0 10 20 40; PROFILE HORIZONTAL 0 10 20 40, VERTICAL 0 2.5 5

CITY OF Grand Junction COLORADO

PUBLIC WORKS
AND UTILITIES
ENGINEERING DIVISION

2015 SEWER LINE REPLACEMENT PHASE II
SANITARY SEWER PLAN AND PROFILE
N. 12TH ST – STA: 0+00 – 5+00

7

N:\landpro\2015 Sewer Line Replacement Phase II\DWG\2015 CIPP.dwg, 07 N 12TH, 7/1/2015 10:50:44 AM

SEE SHEET 7

MATCH LINE

2945-122-00-023
2520 N 12TH ST
GRAND JUNCTION, CO 81501
DILLON REAL ESTATE CO INC
c/o PROPERTY TAX 7TH FLOOR

2945-122-00-034
2510 N 12TH ST
GRAND JUNCTION CO 81501
DILLON REAL ESTATE CO INC
c/o PROPERTY TAX 7TH FLOOR

2945-122-00-035
2432 N 12TH ST
GRAND JUNCTION, CO 81501
REIGLES RICHARD
REIGLES CARROL

2945-122-00-036
2424 N 12TH ST
GRAND JUNCTION, CO 81501
REIGLES RICHARD
REIGLES CARROL

2945-122-00-037
2412 N 12TH ST
GRAND JUNCTION, CO 81501
REIGLES RICHARD
REIGLES CARROL

2945-122-00-044
2404 N 12TH ST
GRAND JUNCTION, CO 81501
DELLA C LONG FAMILY TRUST

2945-111-27-002
2531 N 12TH ST
GRAND JUNCTION, CO 81501
BRECKENRIDGE ALE HOUSE GJ LLC

2945-111-00-149
2511 N 12TH ST
GRAND JUNCTION, CO 81501
HORITI LLC

WELLINGTON AVE.

N. 12TH STREET

MH E4-271-003
48" DIA SAN SEW MH
STA 5+56.30, 0.00
N 44184.54
E 94729.31

MH E4-271-004
48" DIA SAN SEW MH
STA 6+71.06, 0.00
N 44069.78
E 94729.12

MH E4-271-007
48" DIA SAN SEW MH
STA 9+87.60, 0.00
N 43753.24
E 94727.88

5+00 6+00 7+00 8+00 9+00 9+88

373 8" VCP

376 SS

MH E4-271-003
48" DIA SAN SEW MH
STA 5+56.30
RIM = 4660.0±
DEPTH = 8.2
INVin(8") = 4651.83(N)
INVin(8") = 4651.81(W)
INVin(8") = 4651.94(E)
INVout(8") = 4651.83(S)

373
8" VCP
L = 114.76 LF
S = 0.86%

MH E4-271-004
48" DIA SAN SEW MH
STA 6+71.06
RIM = 4659.5±
DEPTH = 8.6
INVin(8") = 4650.84(N)
INVin(8") = 4651.32(E)
INVout(8") = 4650.84(S)

373
8" VCP
L = 316.54 LF
S = 0.54%

MH E4-271-007
48" DIA SAN SEW MH
STA 9+87.60
RIM = 4657.8±
DEPTH = 8.8
INVin(8") = 4649.14(N)
INVout(8") = 4649.03(SE)

4580 4575 4570 4565 4560 4555 4550 4545 4540 4530

5+00 6+00 7+00 8+00 9+00 10+00

PROJECT NO. F001625

CONSTRUCTION NOTES

373 SP CURED IN PLACE SANITARY SEWER PIPE PER PROJECT SPECIFICATIONS. DESIGNED, SUBMITTED, AND STAMPED BY P.E. FIELD VERIFY PIPE SIZE/MATERIAL BEFORE ORDERING LINER. DURING NEW PIPE INSTALLATION IT WILL BE NECESSARY TO BYPASS PUMP SEWAGE AROUND WORK AREA TO A DOWNSTREAM MANHOLE. IF NECESSARY PROVIDE TRAFFIC CONTROL IN WORK AREA AND BYPASS AREA. MAINTAIN ACCESS TO ALL BUSINESSES AND RESIDENCES AND TWO WAY TRAFFIC.

376 REMOVE CIPP COUPON AT SERVICE LOCATION (INCIDENTAL TO CIPP)

DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2015
DESIGNED BY JKT DATE 2015
CHECKED BY DATE
APPROVED BY DATE

SCALES: PLAN HORIZONTAL 0 10 20 40; PROFILE HORIZONTAL 0 10 20 40, VERTICAL 0 2.5 5

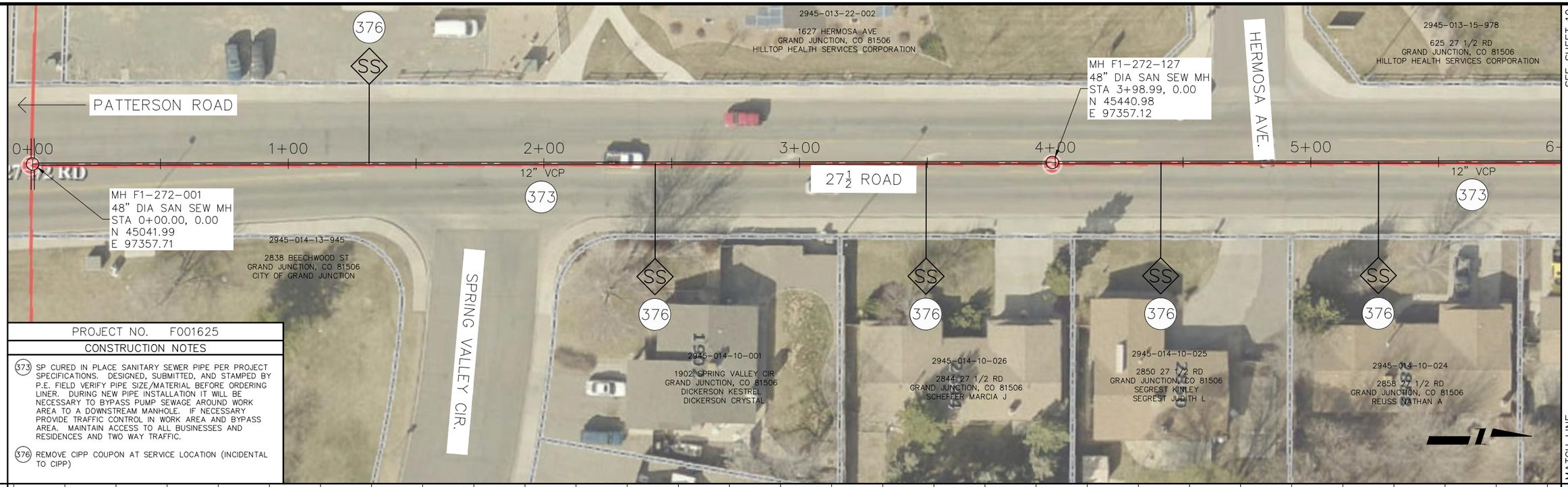
CITY OF Grand Junction COLORADO

PUBLIC WORKS
AND UTILITIES
ENGINEERING DIVISION

2015 SEWER LINE REPLACEMENT PHASE II
SANITARY SEWER PLAN AND PROFILE
N. 12TH ST – STA: 5+00 – 10+00

8

N:\Landproj\2015 Sewer Line Replacement Phase II\DWG\2015 CIPP.dwg, 08 N 12TH (2), 7/1/2015 10:51:17 AM

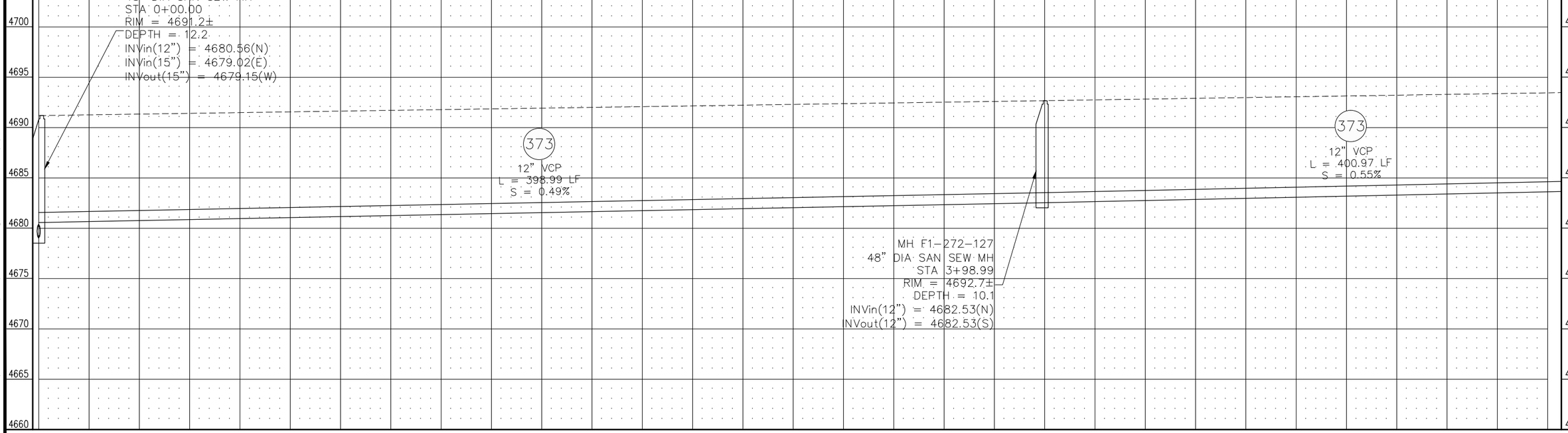


PROJECT NO. F001625

CONSTRUCTION NOTES

(373) SP CURED IN PLACE SANITARY SEWER PIPE PER PROJECT SPECIFICATIONS. DESIGNED, SUBMITTED, AND STAMPED BY P.E. FIELD VERIFY PIPE SIZE/MATERIAL BEFORE ORDERING LINER. DURING NEW PIPE INSTALLATION IT WILL BE NECESSARY TO BYPASS PUMP SEWAGE AROUND WORK AREA TO A DOWNSTREAM MANHOLE. IF NECESSARY PROVIDE TRAFFIC CONTROL IN WORK AREA AND BYPASS AREA. MAINTAIN ACCESS TO ALL BUSINESSES AND RESIDENCES AND TWO WAY TRAFFIC.

(376) REMOVE CIPP COUPON AT SERVICE LOCATION (INCIDENTAL TO CIPP)



DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2015
DESIGNED BY JKT DATE 2015
CHECKED BY DATE
APPROVED BY DATE

SCALES: PLAN HORIZONTAL 0 10 20 40; PROFILE HORIZONTAL 0 10 20 40, VERTICAL 0 2.5 5

CITY OF Grand Junction COLORADO

PUBLIC WORKS
AND UTILITIES
ENGINEERING DIVISION

2015 SEWER LINE REPLACEMENT – PHASE II
SANITARY SEWER PLAN AND PROFILE
27.5 RD – STA: 0+00 – 6+00

9

N:\landpro\2015 Sewer Line Replacement Phase II\DWG\2015 CIPP.dwg, 09 – 27.5 Rd, 7/1/2015 10:51:51 AM

SEE SHEET 9

SEE SHEET 11

MATCH LINE

MATCH LINE

2945-013-15-978
625 27 1/2 RD
GRAND JUNCTION, CO 81506
HILLTOP HEALTH SERVICES CORPORATION

2945-013-00-952
627 27 1/2 RD
GRAND JUNCTION, CO 81506
CALVARY BIBLE CHURCH

MH F1-271-200
48" DIA SAN SEW MH
STA 7+99.97, 0.00
N 45841.95
E 97356.47

MH F1-271-221
48" DIA SAN SEW MH
STA 9+93.24, 0.00
N 46035.22
E 97356.96

MH F2-272-070
48" DIA SAN SEW MH
STA 10+62.63, 0.00
N 46104.61
E 97356.88

7+00 | 8+00 | 9+00 | 10+00 | 11+00 | 12+0

27½ ROAD

27½ ROAD

HAWTHORNE AVENUE

12" VCP (373) | 12" VCP (373) | 12" VCP (373) | 12" VCP (373)

SS (376) | SS (376) | SS (376) | SS (376) | SS (376)

2945-014-10-023
2904 27 1/2 RD
GRAND JUNCTION, CO 81506
MARTIN PHILIP L
MARTIN ANDREA M

2945-014-10-022
2912 27 1/2 RD
GRAND JUNCTION, CO 81506
MURRAY ALLEN L
MURRAY JOANNA B

2945-014-10-021
2918 27 1/2 RD
GRAND JUNCTION, CO 81506
SHARMAN SANDRA

2945-014-04-001
2928 27 1/2 RD
GRAND JUNCTION, CO 81506
CONNOR MELISSA ANN
SCOTT DOUGLAS DOWELL

2945-014-15-003
1910 HAWTHORNE AVE
GRAND JUNCTION, CO 81506
TORLINE CHARLES A
TORLINE LINDA J

2904
2912
2918
2928
1910

PROJECT NO. F001625

CONSTRUCTION NOTES

(373) SP CURED IN PLACE SANITARY SEWER PIPE PER PROJECT SPECIFICATIONS. DESIGNED, SUBMITTED, AND STAMPED BY P.E. FIELD VERIFY PIPE SIZE/MATERIAL BEFORE ORDERING LINER. DURING NEW PIPE INSTALLATION IT WILL BE NECESSARY TO BYPASS PUMP SEWAGE AROUND WORK AREA TO A DOWNSTREAM MANHOLE. IF NECESSARY PROVIDE TRAFFIC CONTROL IN WORK AREA AND BYPASS AREA. MAINTAIN ACCESS TO ALL BUSINESSES AND RESIDENCES AND TWO WAY TRAFFIC.

(376) REMOVE CIPP COUPON AT SERVICE LOCATION (INCIDENTAL TO CIPP)

4705 | 4700 | 4695 | 4690 | 4685 | 4680 | 4675 | 4670 | 4665 | 4660

(373) 12" VCP L = 400.97 LF S = 0.55%

(373) 12" VCP L = 193.27 LF S = 0.55%

(373) 12" VCP L = 69.39 LF S = 1.71%

(373) 12" VCP L = 285.95 LF S = 0.77%

MH F1-271-200
48" DIA SAN SEW MH
STA 7+99.97
RIM = 4694.2±
DEPTH = 9.5
INVin(12") = 4684.72(N)
INVout(12") = 4684.72(S)

MH F1-271-221
48" DIA SAN SEW MH
STA 9+93.24
RIM = 4696.2±
DEPTH = 10.4
INVin(12") = 4687.05(N)
INVout(12") = 4685.79(S)

MH F2-272-070
48" DIA SAN SEW MH
STA 10+62.63
RIM = 4696.5±
DEPTH = 8.3
INVin(12") = 4688.24(N)
INVin(8") = 4688.43(E)
INVout(12") = 4688.24(S)

6+00 | 7+00 | 8+00 | 9+00 | 10+00 | 11+00 | 12+00

N:\projects\2015 Sewer Line Replacement Phase II\DWG\2015 CIPP.dwg, 10 - 27.5 Rd (2), 7/1/2015 10:52:17 AM

DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2015
DESIGNED BY JKT DATE 2015
CHECKED BY DATE
APPROVED BY DATE

SCALES: PLAN HORIZONTAL 0 10 20 40; PROFILE HORIZONTAL 0 10 20 40, VERTICAL 0 2.5 5

CITY OF Grand Junction COLORADO

PUBLIC WORKS
AND UTILITIES
ENGINEERING DIVISION

2015 SEWER LINE REPLACEMENT - PHASE II
SANITARY SEWER PLAN AND PROFILE
27.5 RD - STA: 6+00 - 12+00

10

SEE SHEET 10

MATCH LINE

SEE SHEET 12

MATCH LINE

2945-013-00-952
627 27 1/2 RD
GRAND JUNCTION, CO 81506
CALVARY BIBLE CHURCH

2945-013-00-952
627 27 1/2 RD
GRAND JUNCTION, CO 81506
CALVARY BIBLE CHURCH

1803 VENETIAN DR
GRAND JUNCTION, CO 81506
HOLMES KURT
HOLMES DORA

2945-013-17-001
1895 VENETIAN DR
GRAND JUNCTION, CO 81506
FISH LIP INVESTMENTS LLC

VENETIAN DRIVE

MH F2-272-071
48" DIA SAN SEW MH
STA 13+48.58, 0.00
N 46390.56
E 97357.34

MH F2-271-133
48" DIA SAN SEW MH
STA 14+73.14, 0.00
N 46515.12
E 97356.79

MH F2-271-103
48" DIA SAN SEW MH
STA 16+00.00, 0.00
N 46641.98
E 97357.73

13+00 14+00 15+00 16+00 17+00 18+00

12" VCP 12" VCP 12" VCP 12" VCP

27½ ROAD

2945-014-15-002
3130 27 1/2 RD
GRAND JUNCTION, CO 81506
HIEBERT CAROL L

2945-014-15-001
3150 27 1/2 RD
GRAND JUNCTION, CO 81506
BLACKBURN JASON W
BLACKBURN MINDY

2945-014-59-005
3250 WOODGATE DR
GRAND JUNCTION, CO 81506
MCELHANEY DONALD L

2945-014-59-004
3255 WOODGATE DR
GRAND JUNCTION, CO 81506
NAGY GARY TRUSTEE

2945-014-51-006
3515 HOLLOW CT
GRAND JUNCTION, CO 81506
HANOSH JAMES J JR

3150 3250 3255 3515

PROJECT NO. F001625

CONSTRUCTION NOTES

(373) SP CURED IN PLACE SANITARY SEWER PIPE PER PROJECT SPECIFICATIONS. DESIGNED, SUBMITTED, AND STAMPED BY P.E. FIELD VERIFY PIPE SIZE/MATERIAL BEFORE ORDERING LINER. DURING NEW PIPE INSTALLATION IT WILL BE NECESSARY TO BYPASS PUMP SEWAGE AROUND WORK AREA TO A DOWNSTREAM MANHOLE. IF NECESSARY PROVIDE TRAFFIC CONTROL IN WORK AREA AND BYPASS AREA. MAINTAIN ACCESS TO ALL BUSINESSES AND RESIDENCES AND TWO WAY TRAFFIC.

(376) REMOVE CIPP COUPON AT SERVICE LOCATION (INCIDENTAL TO CIPP)

4715 4710 4705 4700 4695 4690 4685 4680 4675 4670

MH F2-272-071
48" DIA SAN SEW MH
STA 13+48.58
RIM = 4697.4±
DEPTH = 6.9
INVin(12") = 4690.45(N)
INVout(12") = 4690.45(S)

373 12" VCP L = 285.95 LF S = 0.77%

373 12" VCP L = 124.56 LF S = 2.25%

373 12" VCP L = 126.86 LF S = 2.56%

373 12" VCP L = 300.23 LF S = 2.36%

MH F2-271-133
48" DIA SAN SEW MH
STA 14+73.14
RIM = 4698.4±
DEPTH = 5.1
INVin(12") = 4693.25(N)
INVin(8") = 4693.74(W)
INVout(12") = 4693.25(S)

MH F2-271-103
48" DIA SAN SEW MH
STA 16+00.00
RIM = 4701.7±
DEPTH = 5.2
INVin(12") = 4696.50(N)
INVin(8") = 4696.96(E)
INVout(12") = 4696.50(S)

12+00 13+00 14+00 15+00 16+00 17+00 18+00

DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2015
DESIGNED BY JKT DATE 2015
CHECKED BY DATE
APPROVED BY DATE

SCALES: PLAN HORIZONTAL 0 10 20 40; PROFILE HORIZONTAL 0 10 20 40, VERTICAL 0 2.5 5

CITY OF Grand Junction COLORADO

PUBLIC WORKS
AND UTILITIES
ENGINEERING DIVISION

2015 SEWER LINE REPLACEMENT – PHASE II
SANITARY SEWER PLAN AND PROFILE
27.5 RD – STA: 12+00 – 18+00

11

N:\construction\2015 Sewer Line Replacement Phase II\DWG\2015 CIPP Proj 11 - 27.5 Rd (3) 7/1/2015 10:52:58 AM

SEE SHEET 11

SEE SHEET 13

MATCH LINE

MATCH LINE

VENETIAN DRIVE

376

SS

2945-013-00-070
643 27 1/2 RD
GRAND JUNCTION, CO 81506
BRINTON MARY J

MH F2-271-120
48" DIA SAN SEW MH
STA 19+00.23, 0.00
N 46942.21
E 97357.77

2945-013-10-002
1755 CREST VIEW DR #B
GRAND JUNCTION, CO 81506
CHRISTOPHERSON KELLE

2945-013-10-001
1755 CREST VIEW DR #A
GRAND JUNCTION, CO 81506
HUNT DAVID J
HUNT SHERRI S

2945-012-16-016
1831 BELL RIDGE CT
GRAND JUNCTION, CO 81506
HUFF RICHARD DEE
HUFF MICHELLE F

8+00 | 19+00 | 20+00 | 21+00 | 22+00 | 23+00 | 24+

27 1/2 RD

27½ ROAD

12" VCP

373

MH F3-272-092
48" DIA SAN SEW MH
STA 23+37.85, 0.00
N 47379.83
E 97359.14

SS

376

2945-014-51-007
3525 HOLLOW CT
GRAND JUNCTION, CO 81506
CAIN PAUL
CAIN DEBRA LEANNE

2945-014-51-008
3529 HOLLOW CT
GRAND JUNCTION, CO 81506
MILLER RICHARD WILLIAM
ELIZABETH JOAN

PIAZZA WAY

2945-014-07-007
2130 PIAZZA WAY
GRAND JUNCTION, CO 81506
STORCK KENNETH R
STORCK REBECCA N

PROJECT NO. F001625

CONSTRUCTION NOTES

(373) SP CURED IN PLACE SANITARY SEWER PIPE PER PROJECT SPECIFICATIONS. DESIGNED, SUBMITTED, AND STAMPED BY P.E. FIELD VERIFY PIPE SIZE/MATERIAL BEFORE ORDERING LINER. DURING NEW PIPE INSTALLATION IT WILL BE NECESSARY TO BYPASS PUMP SEWAGE AROUND WORK AREA TO A DOWNSTREAM MANHOLE. IF NECESSARY PROVIDE TRAFFIC CONTROL IN WORK AREA AND BYPASS AREA. MAINTAIN ACCESS TO ALL BUSINESSES AND RESIDENCES AND TWO WAY TRAFFIC.

(376) REMOVE CIPP COUPON AT SERVICE LOCATION (INCIDENTAL TO CIPP)

4725 | 4720 | 4715 | 4710 | 4705 | 4700 | 4695 | 4690 | 4685 | 4680

MH F2-271-120
48" DIA SAN SEW MH
STA 19+00.23
RIM = 4713.1±
DEPTH = 9.5
INVin(12") = 4703.67(N)
INVout(12") = 4703.60(S)

373
12" VCP
L = 437.62 LF
S = 0.32%

MH F3-272-092
48" DIA SAN SEW MH
STA 23+37.85
RIM = 4713.6±
DEPTH = 8.6
INVin(12") = 4705.39(N)
INVin(8") = 4705.26(E)
INVout(12") = 4705.05(S)
INVout(10") = 4705.82(W)

18+00 | 19+00 | 20+00 | 21+00 | 22+00 | 23+00 | 24+00

DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2015
DESIGNED BY JKT DATE 2015
CHECKED BY DATE
APPROVED BY DATE

SCALES:
PLAN HORIZONTAL 0 10 20 40
PROFILE HORIZONTAL 0 10 20 40
PROFILE VERTICAL 0 2.5 5

CITY OF Grand Junction COLORADO

PUBLIC WORKS
AND UTILITIES
ENGINEERING DIVISION

2015 SEWER LINE REPLACEMENT – PHASE II
SANITARY SEWER PLAN AND PROFILE
27.5 RD – STA: 18+00 – 24+00

12

SEE SHEET 12

MATCH LINE

2945-012-16-012
1830 BELL RIDGE CT
GRAND JUNCTION, CO 81506
KIKUCHI PAUL C
ROBINSON LESLIE D

2945-012-16-011
1828 BELL RIDGE CT
GRAND JUNCTION, CO 81506
RENARD JASON C
RENARD YVETTE S

2945-012-16-001
1837 RIDGE DR
GRAND JUNCTION, CO 81506
BERSHENYI ROBERT W LIV TRUST

RIDGE DRIVE

2945-012-25-004
1836 RIDGE DR
GRAND JUNCTION, CO 81506
CLEMMER LIVING TRUST

25+00 | 26+00 | 27+00 | 28+00 | 29+00 | 30+00

373

12" VCP

12" VCP

12" PVC

27½ ROAD

MH F3-271-145
48" DIA SAN SEW MH
STA 27+17.84, 0.00
N 47759.82
E 97357.44

MH F3-271-146
48" DIA SAN SEW MH
STA 27+66.97, 0.00
N 47808.94
E 97357.76

MH F3-271-147
48" DIA SAN SEW MH
STA 29+71.64, 0.00
N 48013.39
E 97348.22

2187
2187
2175
2163

PROJECT NO. F001625

CONSTRUCTION NOTES

373 SP CURED IN PLACE SANITARY SEWER PIPE PER PROJECT SPECIFICATIONS. DESIGNED, SUBMITTED, AND STAMPED BY P.E. FIELD VERIFY PIPE SIZE/MATERIAL BEFORE ORDERING LINER. DURING NEW PIPE INSTALLATION IT WILL BE NECESSARY TO BYPASS PUMP SEWAGE AROUND WORK AREA TO A DOWNSTREAM MANHOLE. IF NECESSARY PROVIDE TRAFFIC CONTROL IN WORK AREA AND BYPASS AREA. MAINTAIN ACCESS TO ALL BUSINESSES AND RESIDENCES AND TWO WAY TRAFFIC.

376 REMOVE CIPP COUPON AT SERVICE LOCATION (INCIDENTAL TO CIPP)

4735 4730 4725 4720 4715 4710 4705 4700 4695 4690

373
12" VCP
L = 379.99 LF
S = 2.19%

373
12" VCP
L = 49.12 LF
S = 2.14%

12" PVC
L = 204.67 LF
S = 2.00%

MH F3-271-145
48" DIA SAN SEW MH
STA 27+17.84
RIM = 4726.7±
DEPTH = 13.0
INVin(12") = 4713.79(N)
INVin(8") = 4713.82(E)
INVout(12") = 4713.71(S)

MH F3-271-146
48" DIA SAN SEW MH
STA 27+66.97
RIM = 4728.3±
DEPTH = 13.4
INVin(12") = 4714.84(N)
INVout(12") = 4714.84(S)

MH F3-271-147
48" DIA SAN SEW MH
STA 29+71.64
RIM = 4730.0±
DEPTH = 11.1
INVin(8") = 4721.33(N)
INVout(12") = 4718.93(S)

24+00 | 25+00 | 26+00 | 27+00 | 28+00 | 29+00 | 30+00

DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2015
DESIGNED BY JKT DATE 2015
CHECKED BY DATE
APPROVED BY DATE

SCALES:
PLAN HORIZONTAL 0 10 20 40
PROFILE HORIZONTAL 0 10 20 40
VERTICAL 0 2.5 5

CITY OF Grand Junction COLORADO

PUBLIC WORKS
AND UTILITIES
ENGINEERING DIVISION

2015 SEWER LINE REPLACEMENT – PHASE II
SANITARY SEWER PLAN AND PROFILE
27.5 RD – STA: 24+00 – 30+00

13

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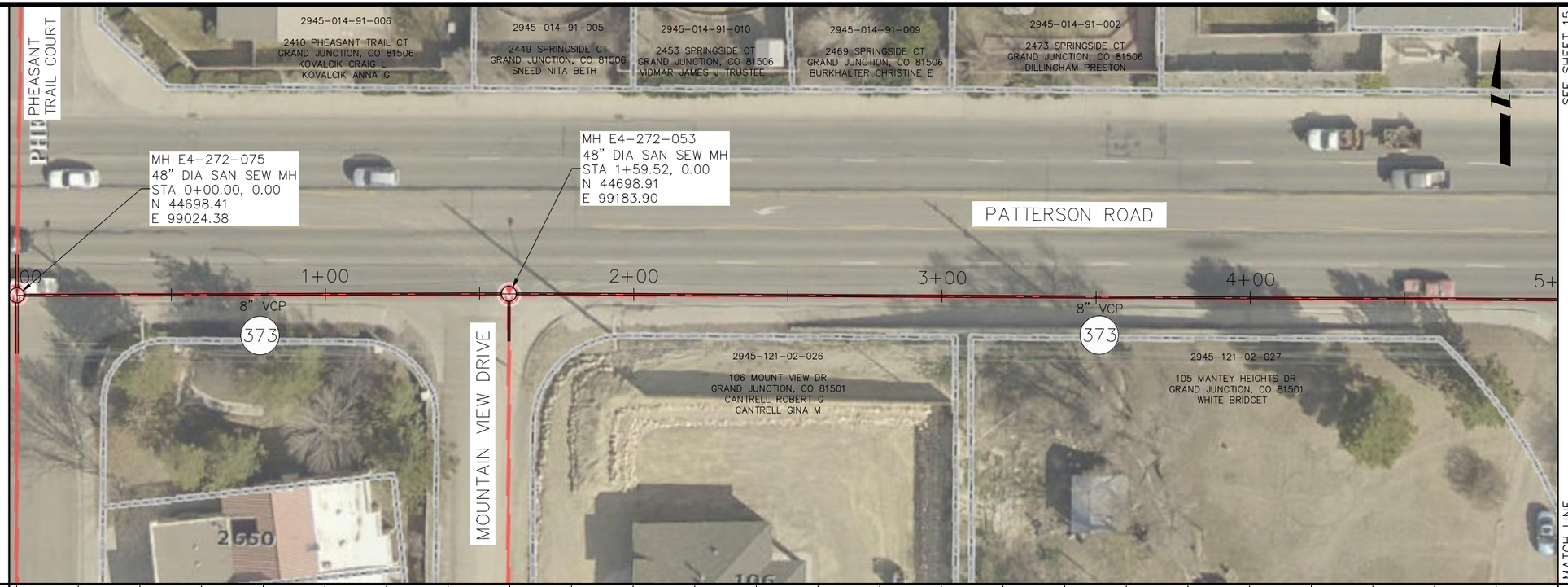

PROJECT NO. F001625

CONSTRUCTION NOTES

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(376) REMOVE CIPP COUPON AT SERVICE LOCATION (INCIDENTAL TO CIPP)

DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2015
DESIGNED BY JKT DATE 2015
CHECKED BY DATE
APPROVED BY DATE

SCALES: PLAN HORIZONTAL 0 10 20 40; PROFILE HORIZONTAL 0 10 20 40, VERTICAL 0 2.5 5

CITY OF Grand Junction COLORADO

PUBLIC WORKS
AND UTILITIES
ENGINEERING DIVISION

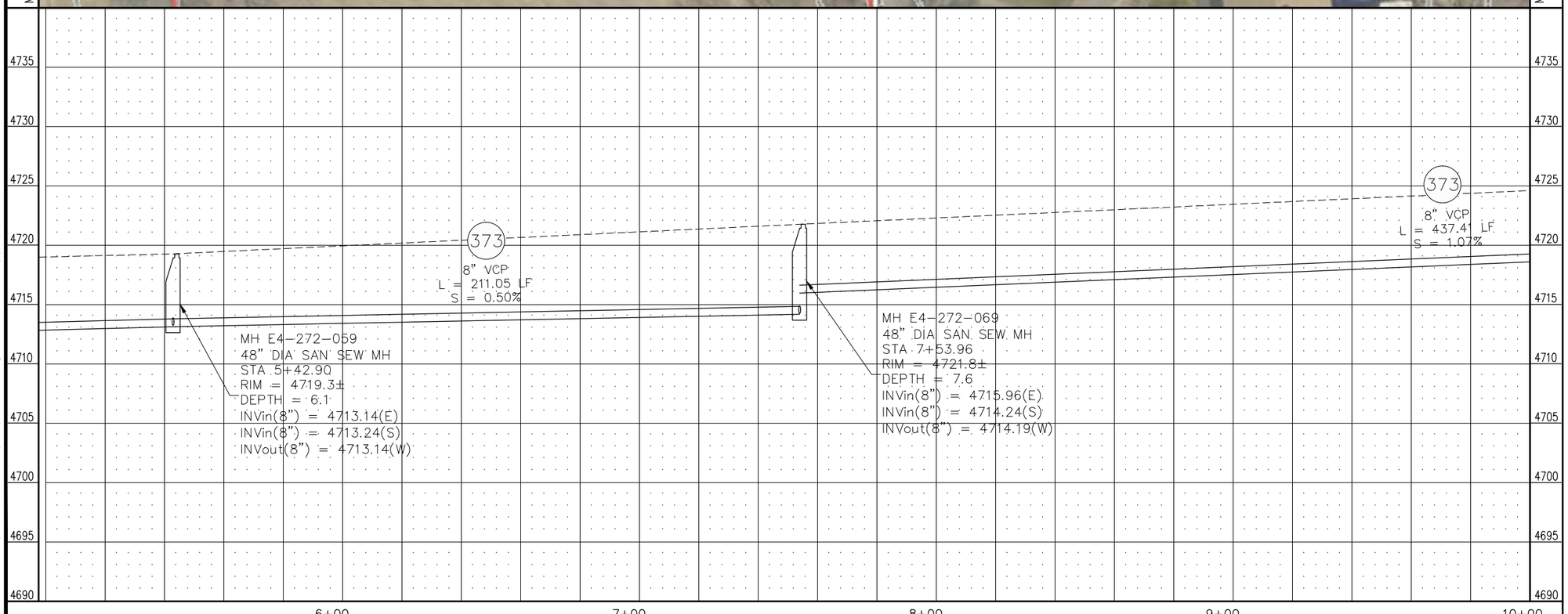
2015 SEWER LINE REPLACEMENT – PHASE II
SANITARY SEWER PLAN AND PROFILE – STA: 0+00 – 5+00
Patterson Rd from El Corona Dr to 28 1/4 Rd

14

N:\landpro\2015 Sewer Line Replacement Phase II\DWG\2015 CIPP.dwg, 14 – Patterson 1, 7/1/2015 10:58:06 AM

SEE SHEET 14

SEE SHEET 16



PROJECT NO. F001625

CONSTRUCTION NOTES

(373) SP CURED IN PLACE SANITARY SEWER PIPE PER PROJECT SPECIFICATIONS. DESIGNED, SUBMITTED, AND STAMPED BY P.E. FIELD VERIFY PIPE SIZE/MATERIAL BEFORE ORDERING LINER. DURING NEW PIPE INSTALLATION IT WILL BE NECESSARY TO BYPASS PUMP SEWAGE AROUND WORK AREA TO A DOWNSTREAM MANHOLE. IF NECESSARY PROVIDE TRAFFIC CONTROL IN WORK AREA AND BYPASS AREA. MAINTAIN ACCESS TO ALL BUSINESSES AND RESIDENCES AND TWO WAY TRAFFIC.

(376) REMOVE CIPP COUPON AT SERVICE LOCATION (INCIDENTAL TO CIPP)

DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2015
DESIGNED BY JKT DATE 2015
CHECKED BY DATE
APPROVED BY DATE

SCALES: PLAN HORIZONTAL 0 10 20 40; PROFILE HORIZONTAL 0 10 20 40, VERTICAL 0 2.5 5

CITY OF Grand Junction COLORADO

PUBLIC WORKS AND UTILITIES ENGINEERING DIVISION

2015 SEWER LINE REPLACEMENT – PHASE II
SANITARY SEWER PLAN AND PROFILE – STA: 5+00 – 10+00
Patterson Rd from El Corona Dr to 28 1/4 Rd

15

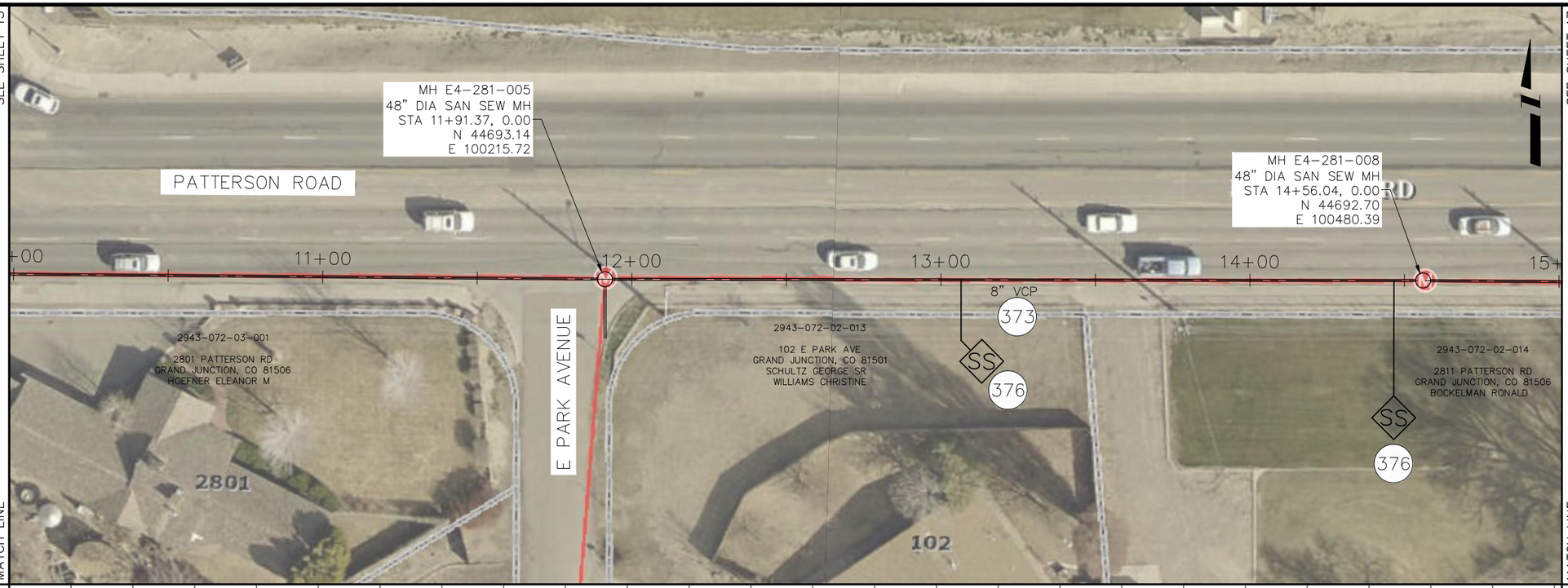
N:\projects\2015 Sewer Line Replacement Phase II\DWG\2015 CIPP.dwg, 15 – Patterson 1 (2), 7/1/2015 10:58:30 AM

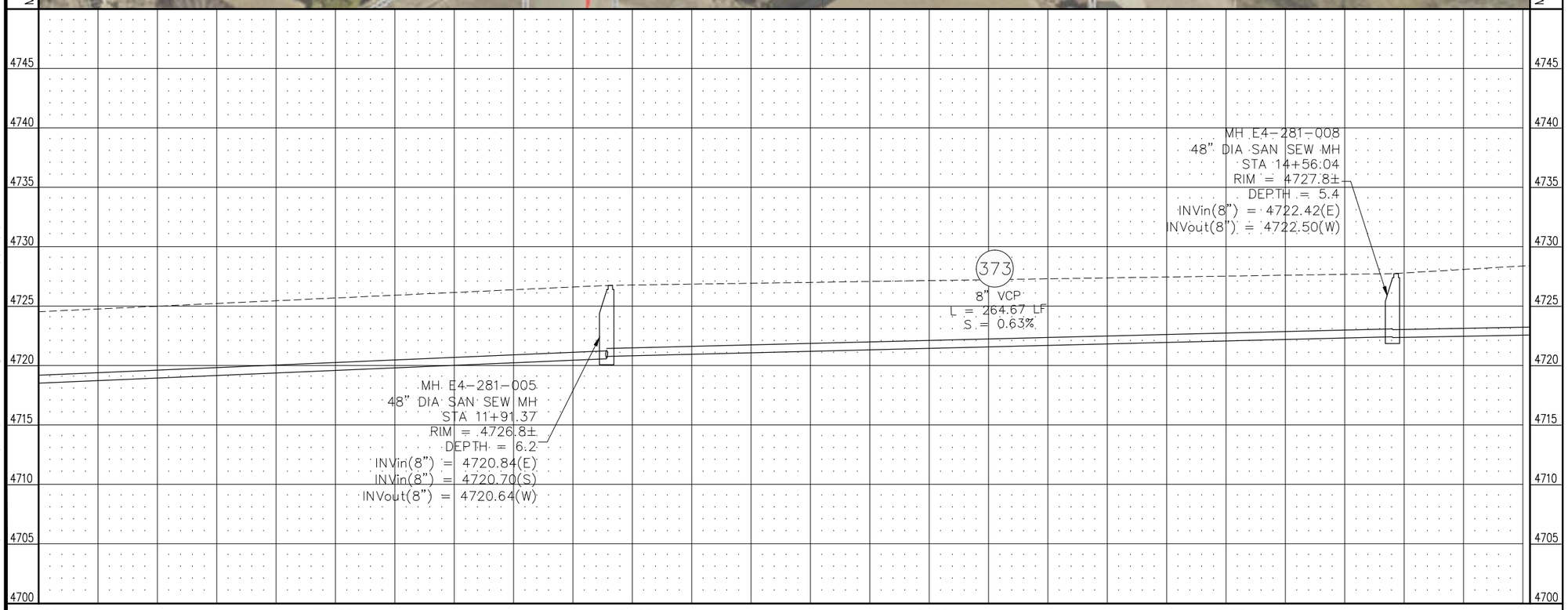
SEE SHEET 15

SEE SHEET 17

MATCH LINE

MATCH LINE





PROJECT NO. F001625

CONSTRUCTION NOTES

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(376) REMOVE CIPP COUPON AT SERVICE LOCATION (INCIDENTAL TO CIPP)

DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2015
DESIGNED BY JKT DATE 2015
CHECKED BY DATE
APPROVED BY DATE

SCALES: PLAN HORIZONTAL 0 10 20 40; PROFILE HORIZONTAL 0 10 20 40, VERTICAL 0 2.5 5

CITY OF Grand Junction COLORADO

PUBLIC WORKS
AND UTILITIES
ENGINEERING DIVISION

2015 SEWER LINE REPLACEMENT – PHASE II
SANITARY SEWER PLAN AND PROFILE – STA: 10+00 – 15+00
Patterson Rd from El Corona Dr to 28 1/4 Rd

16

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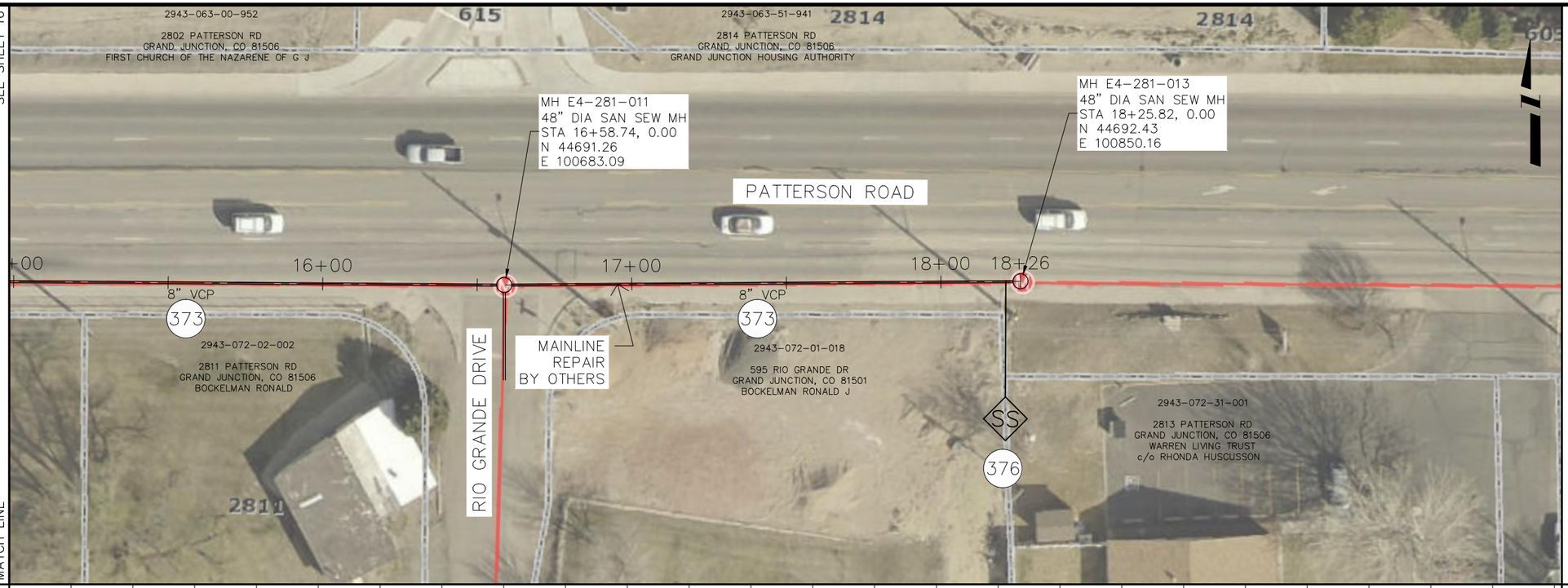
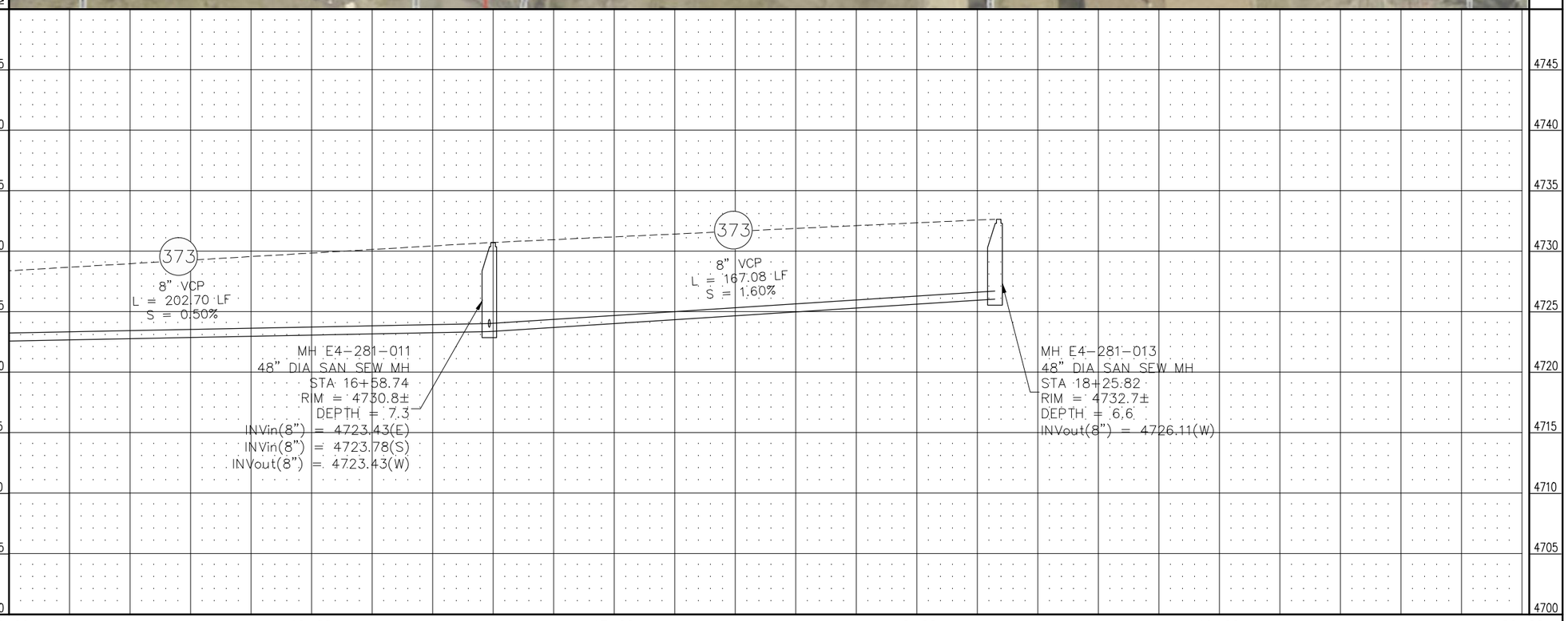
SEE SHEET 16

MATCH LINE





PROJECT NO. F001625

CONSTRUCTION NOTES

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(376) REMOVE CIPP COUPON AT SERVICE LOCATION (INCIDENTAL TO CIPP)

DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2015
DESIGNED BY JKT DATE 2015
CHECKED BY DATE
APPROVED BY DATE

SCALES: PLAN HORIZONTAL 0 10 20 40; PROFILE HORIZONTAL 0 10 20 40, VERTICAL 0 2.5 5

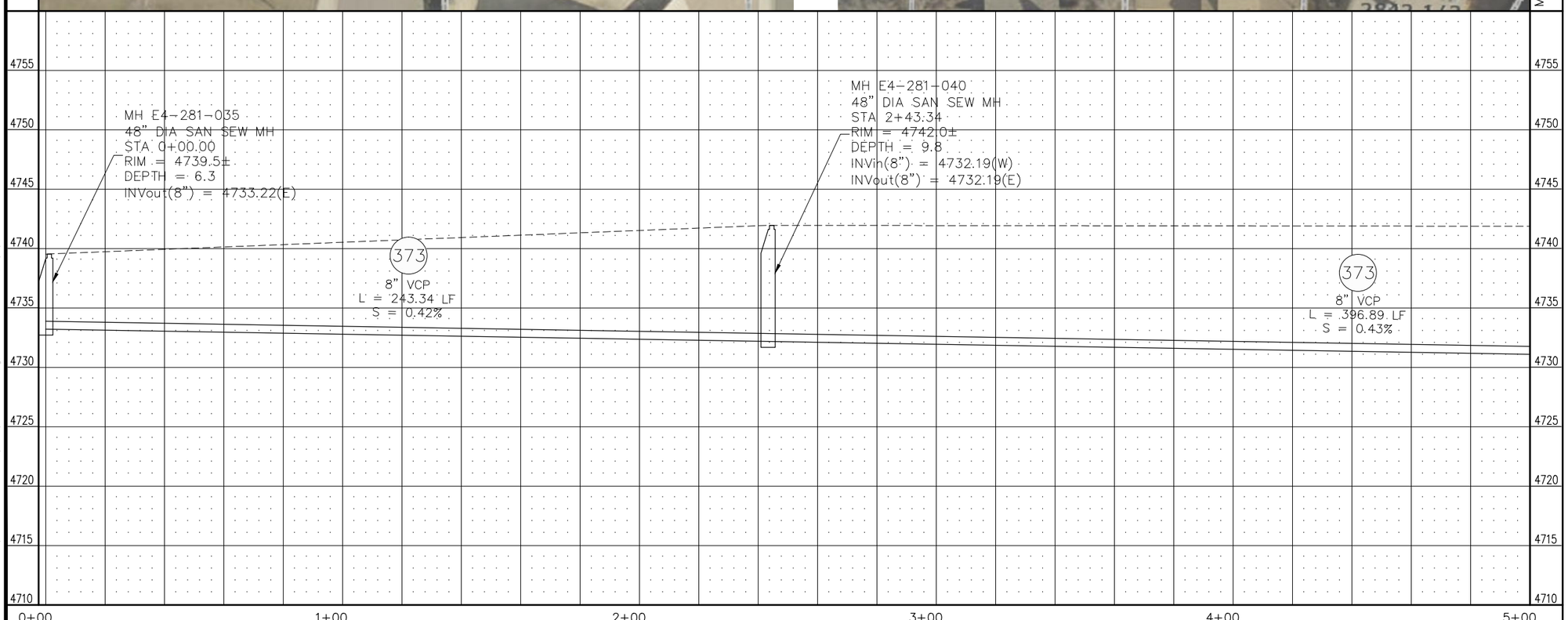
CITY OF Grand Junction COLORADO

PUBLIC WORKS
AND UTILITIES
ENGINEERING DIVISION

2015 SEWER LINE REPLACEMENT – PHASE II
SANITARY SEWER PLAN AND PROFILE – STA: 15+00 – 20+00
Patterson Rd from El Corona Dr to 28 1/4 Rd

17

N:\ronfpro1\2015 Sewer Line Replacement Phase II\DWG\2015 CIPP Proj 17 - Patterson 1 (4) 7/1/2015 11:02:01 AM



PROJECT NO. F001625

CONSTRUCTION NOTES

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376 REMOVE CIPP COUPON AT SERVICE LOCATION (INCIDENTAL TO CIPP)

DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2015
DESIGNED BY JKT DATE 2015
CHECKED BY DATE
APPROVED BY DATE

SCALES: PLAN HORIZONTAL 0 10 20 40; PROFILE HORIZONTAL 0 10 20 40, VERTICAL 0 2.5 5

CITY OF Grand Junction COLORADO

PUBLIC WORKS
AND UTILITIES
ENGINEERING DIVISION

2015 SEWER LINE REPLACEMENT – PHASE II
SANITARY SEWER PLAN AND PROFILE – STA: 0+00 – 5+00
Patterson Rd from 28 1/4 Rd to 28 3/4 Rd

18

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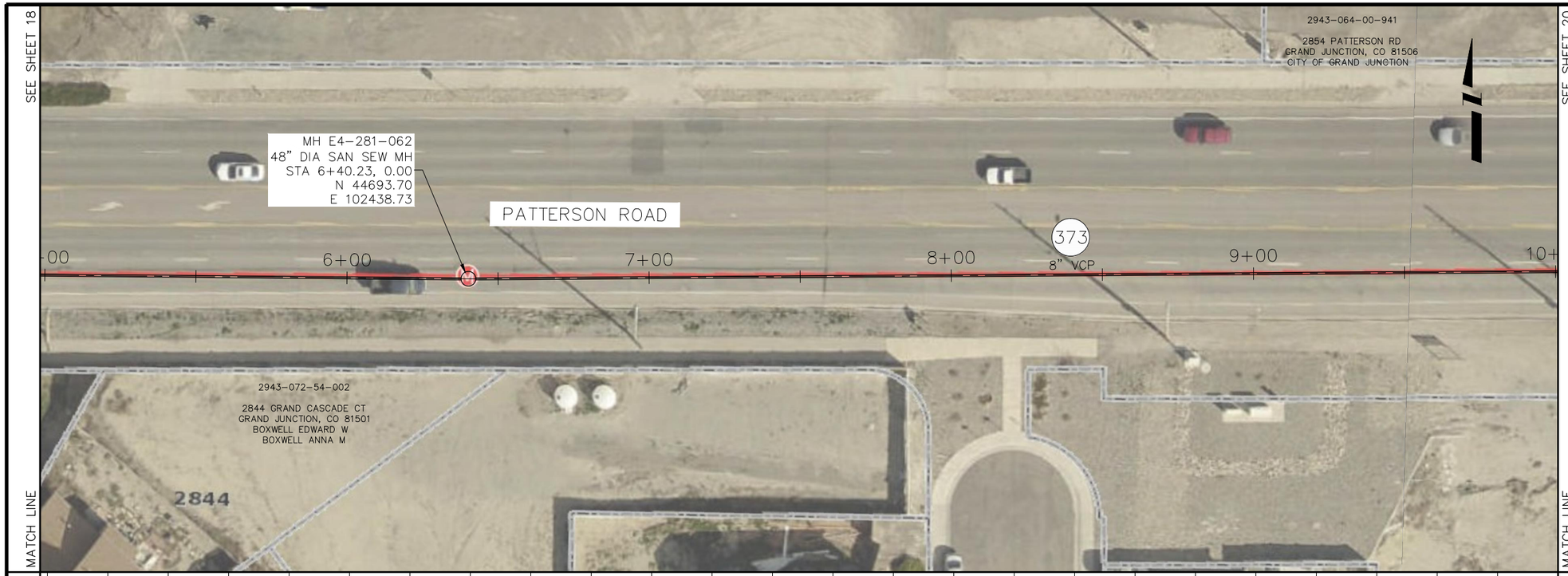

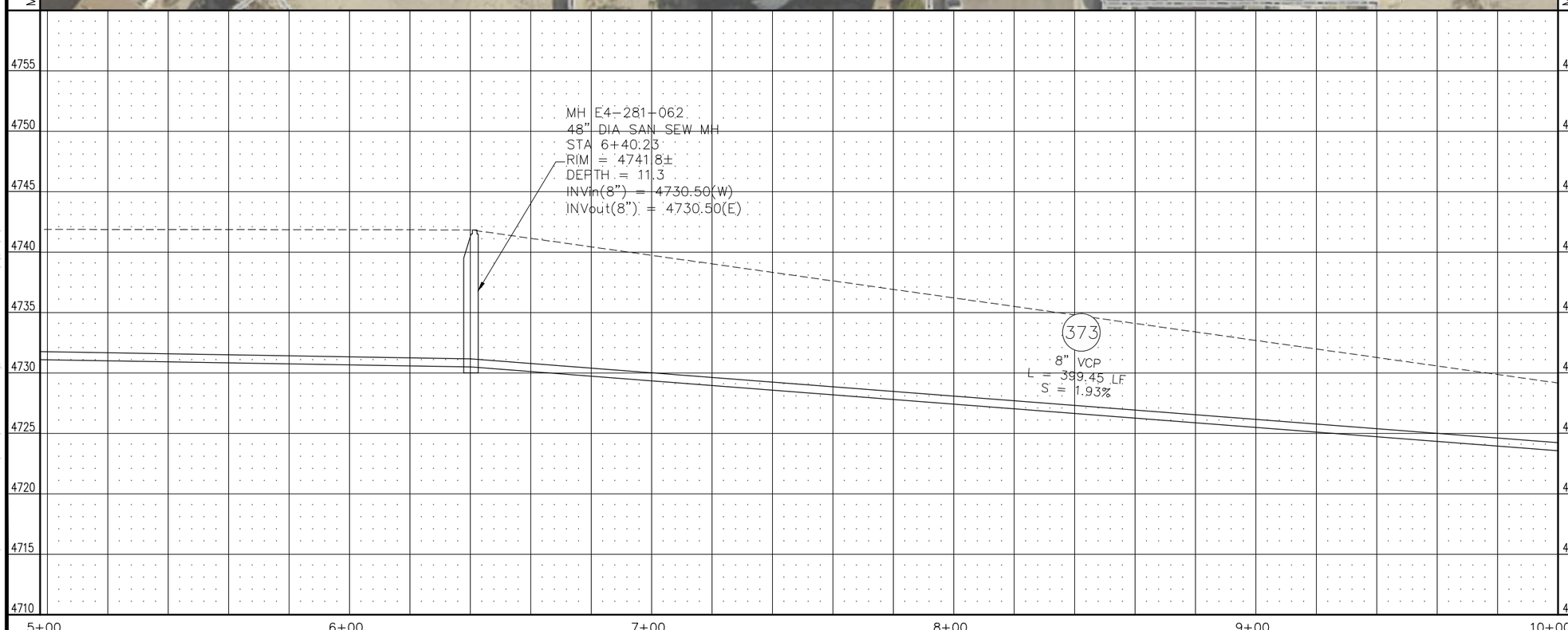

PROJECT NO. F001625

CONSTRUCTION NOTES

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376 REMOVE CIPP COUPON AT SERVICE LOCATION (INCIDENTAL TO CIPP)

DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2015
DESIGNED BY JKT DATE 2015
CHECKED BY DATE
APPROVED BY DATE

SCALES: PLAN HORIZONTAL 0 10 20 40; PROFILE HORIZONTAL 0 10 20 40, VERTICAL 0 2.5 5

CITY OF Grand Junction COLORADO

PUBLIC WORKS
AND UTILITIES
ENGINEERING DIVISION

2015 SEWER LINE REPLACEMENT – PHASE II
SANITARY SEWER PLAN AND PROFILE – STA: 5+00 – 10+00
Patterson Rd from 28 1/4 Rd to 28 3/4 Rd

19

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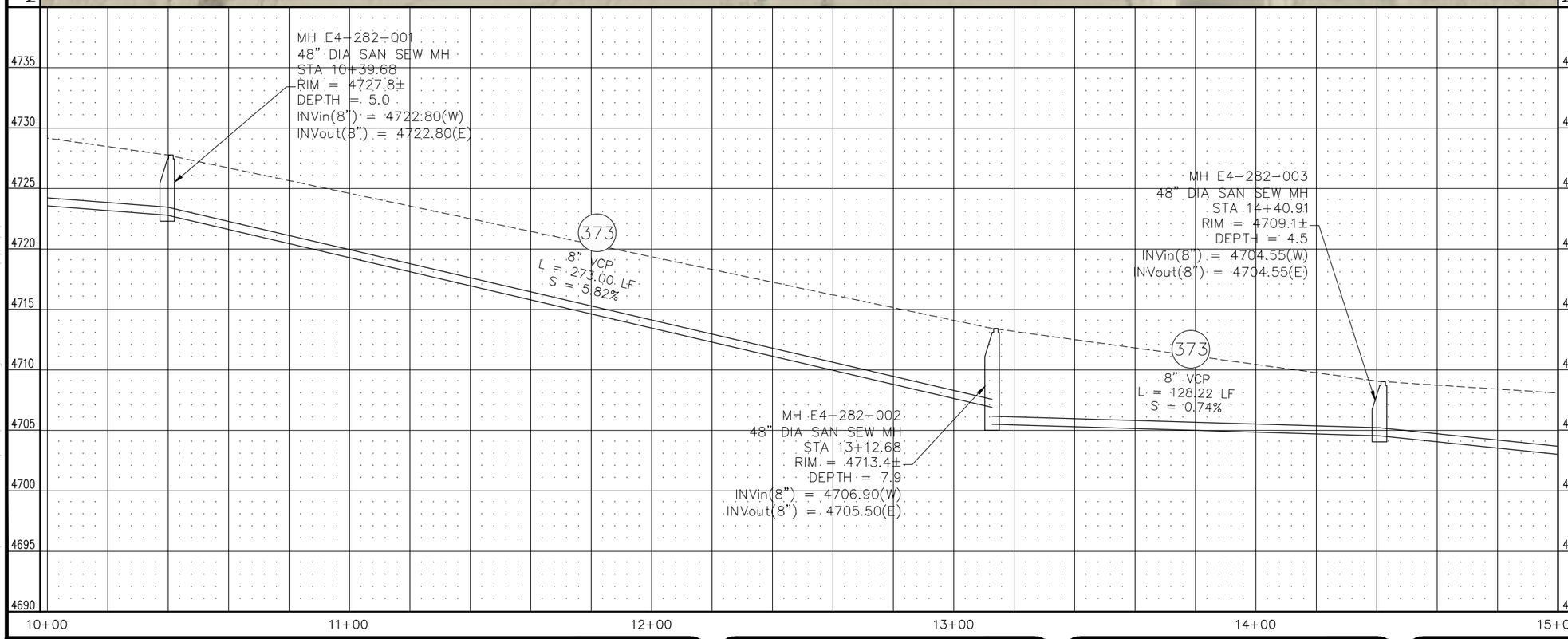

PROJECT NO. F001625

CONSTRUCTION NOTES

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(376) REMOVE CIPP COUPON AT SERVICE LOCATION (INCIDENTAL TO CIPP)

DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2015
DESIGNED BY JKT DATE 2015
CHECKED BY DATE
APPROVED BY DATE

SCALES: PLAN HORIZONTAL 0 10 20 40; PROFILE HORIZONTAL 0 10 20 40, VERTICAL 0 2.5 5

CITY OF Grand Junction COLORADO

PUBLIC WORKS
AND UTILITIES
ENGINEERING DIVISION

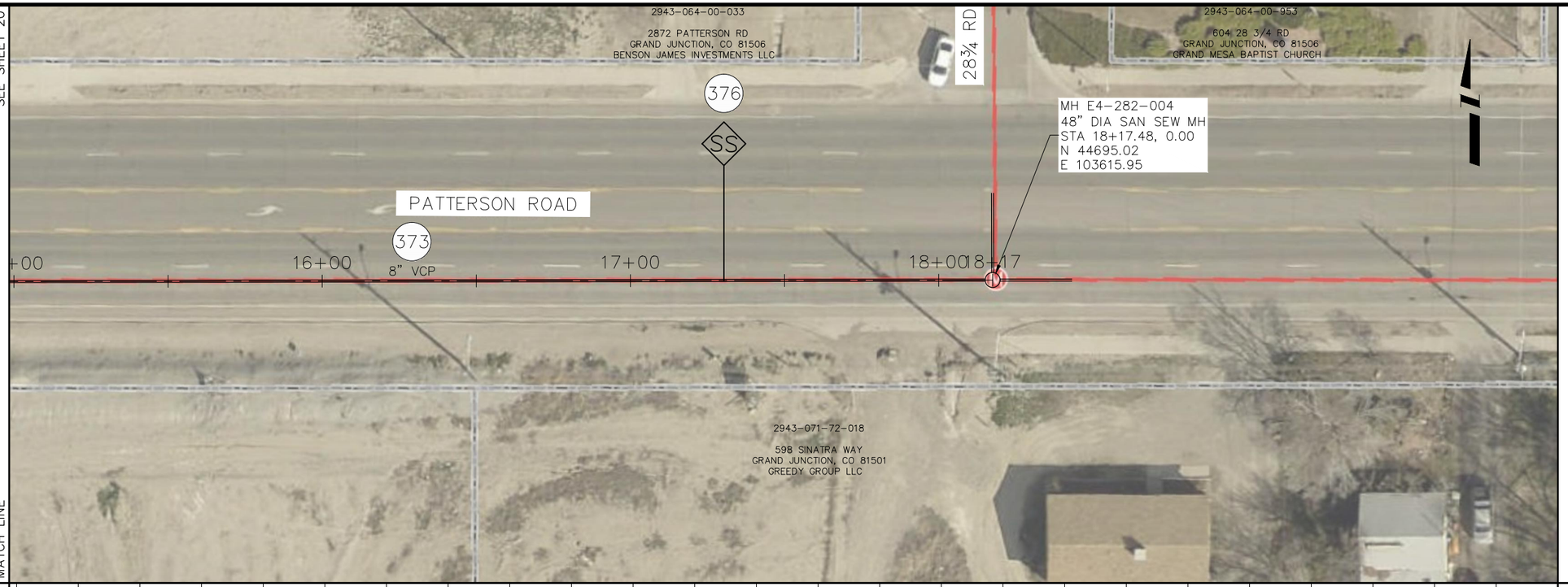
2015 SEWER LINE REPLACEMENT – PHASE II
SANITARY SEWER PLAN AND PROFILE – STA: 10+00 – 15+00
Patterson Rd from 28 1/4 Rd to 28 3/4 Rd

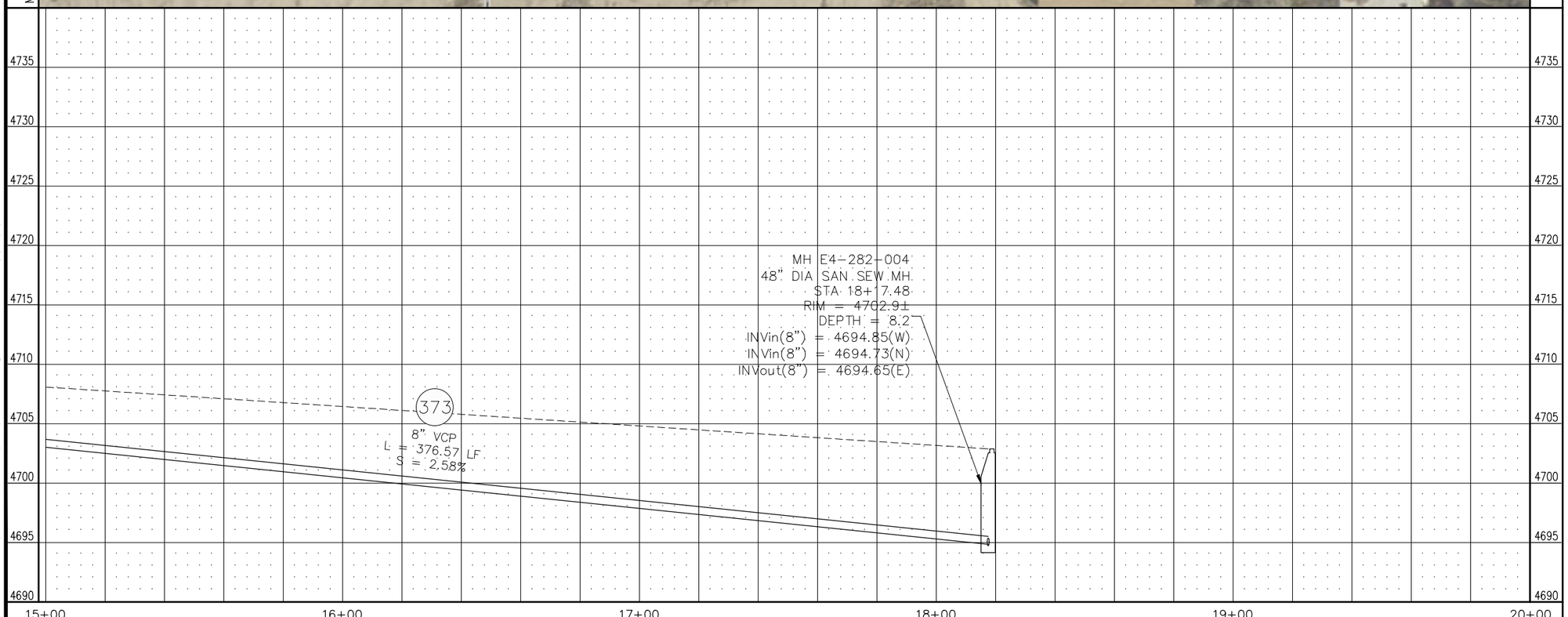
20

N:\Vandpro\2015 Sewer Line Replacement Phase II\DWG\2015 CIPP.dwg, 20 – Patterson 2 (3), 7/1/2015 11:04:16 AM

SEE SHEET 20

MATCH LINE





PROJECT NO. F001625

CONSTRUCTION NOTES

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(376) REMOVE CIPP COUPON AT SERVICE LOCATION (INCIDENTAL TO CIPP)

DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2015
DESIGNED BY JKT DATE 2015
CHECKED BY DATE
APPROVED BY DATE

SCALES: PLAN HORIZONTAL 0 10 20 40; PROFILE HORIZONTAL 0 10 20 40, VERTICAL 0 2.5 5

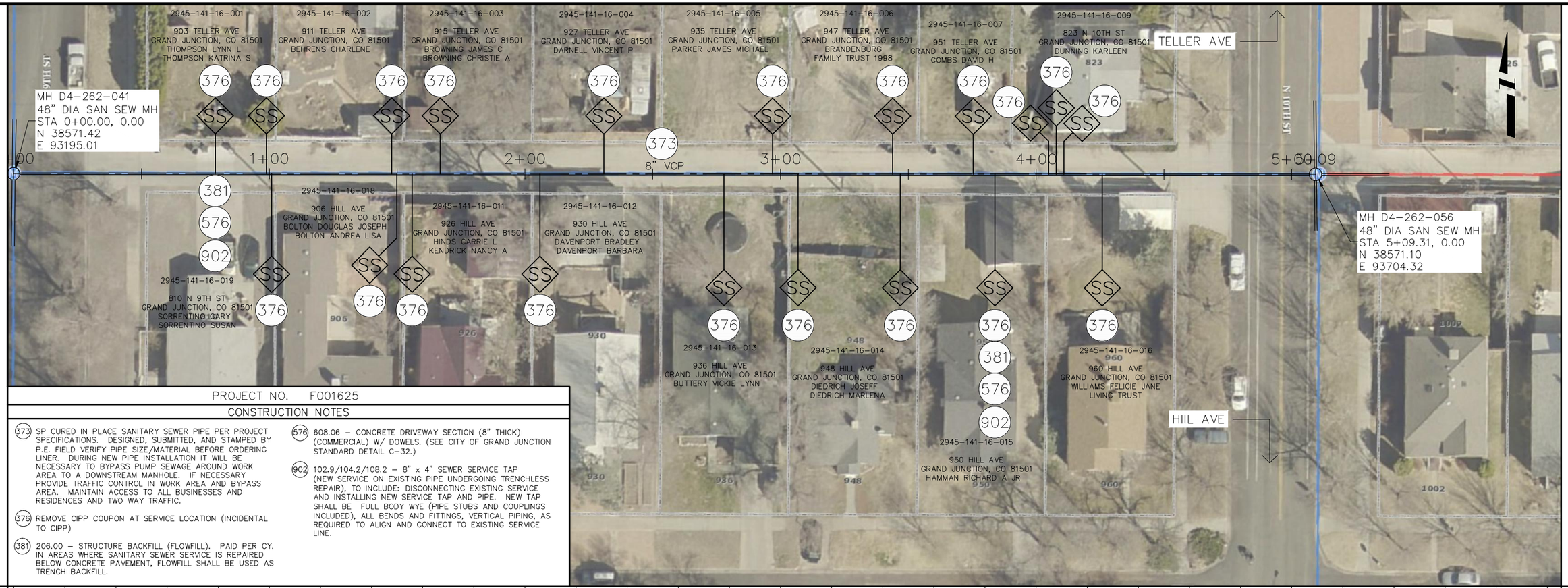
CITY OF Grand Junction COLORADO

PUBLIC WORKS
AND UTILITIES
ENGINEERING DIVISION

2015 SEWER LINE REPLACEMENT – PHASE II
SANITARY SEWER PLAN AND PROFILE – STA: 15+00 – 20+00
Patterson Rd from 28 1/4 Rd to 28 3/4 Rd

21

N:\projects\2015 Sewer Line Replacement Phase II\DWG\2015 CIPP.dwg, 21 – Patterson 2 (4), 7/1/2015 11:05:06 AM



PROJECT NO. F001625

CONSTRUCTION NOTES

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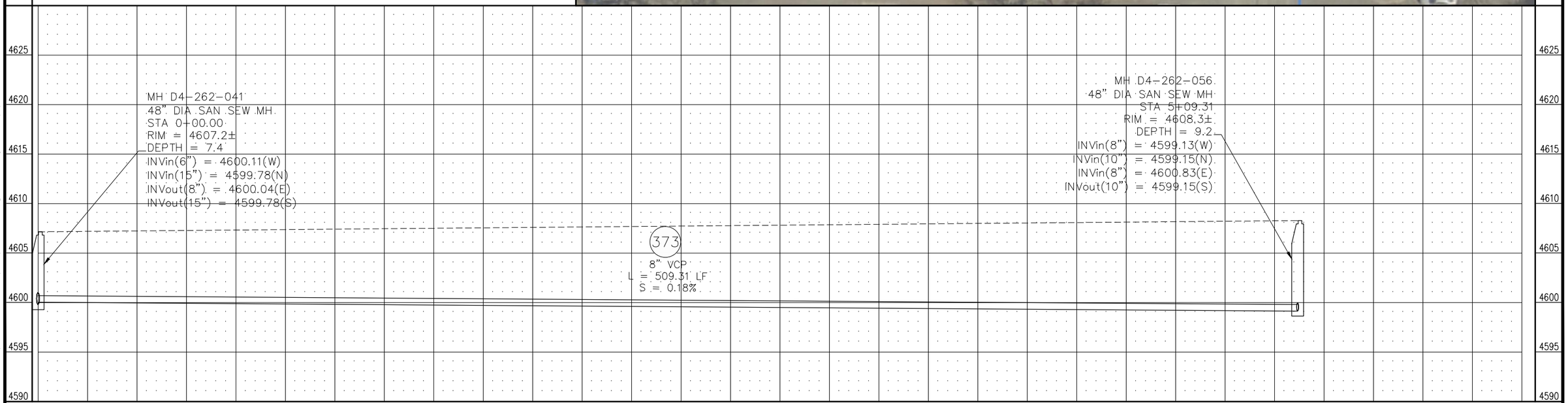
(376) REMOVE CIPP COUPON AT SERVICE LOCATION (INCIDENTAL TO CIPP)

(381) 206.00 – STRUCTURE BACKFILL (FLOWFILL). PAID PER CY. IN AREAS WHERE SANITARY SEWER SERVICE IS REPAIRED BELOW CONCRETE PAVEMENT, FLOWFILL SHALL BE USED AS TRENCH BACKFILL.

(576) 608.06 – CONCRETE DRIVEWAY SECTION (8" THICK) (COMMERCIAL) W/ DOWELS. (SEE CITY OF GRAND JUNCTION STANDARD DETAIL C-32.)

(902) 102.9/104.2/108.2 – 8" x 4" SEWER SERVICE TAP (NEW SERVICE ON EXISTING PIPE UNDERGOING TRENCHLESS REPAIR), TO INCLUDE: DISCONNECTING EXISTING SERVICE AND INSTALLING NEW SERVICE TAP AND PIPE. NEW TAP SHALL BE FULL BODY WYE (PIPE STUBS AND COUPLINGS INCLUDED), ALL BENDS AND FITTINGS, VERTICAL PIPING, AS REQUIRED TO ALIGN AND CONNECT TO EXISTING SERVICE LINE.



DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2015
DESIGNED BY JKT DATE 2015
CHECKED BY DATE
APPROVED BY DATE

SCALES:
PLAN HORIZONTAL 0 10 20 40
PROFILE HORIZONTAL 0 10 20 40
PROFILE VERTICAL 0 2.5 5

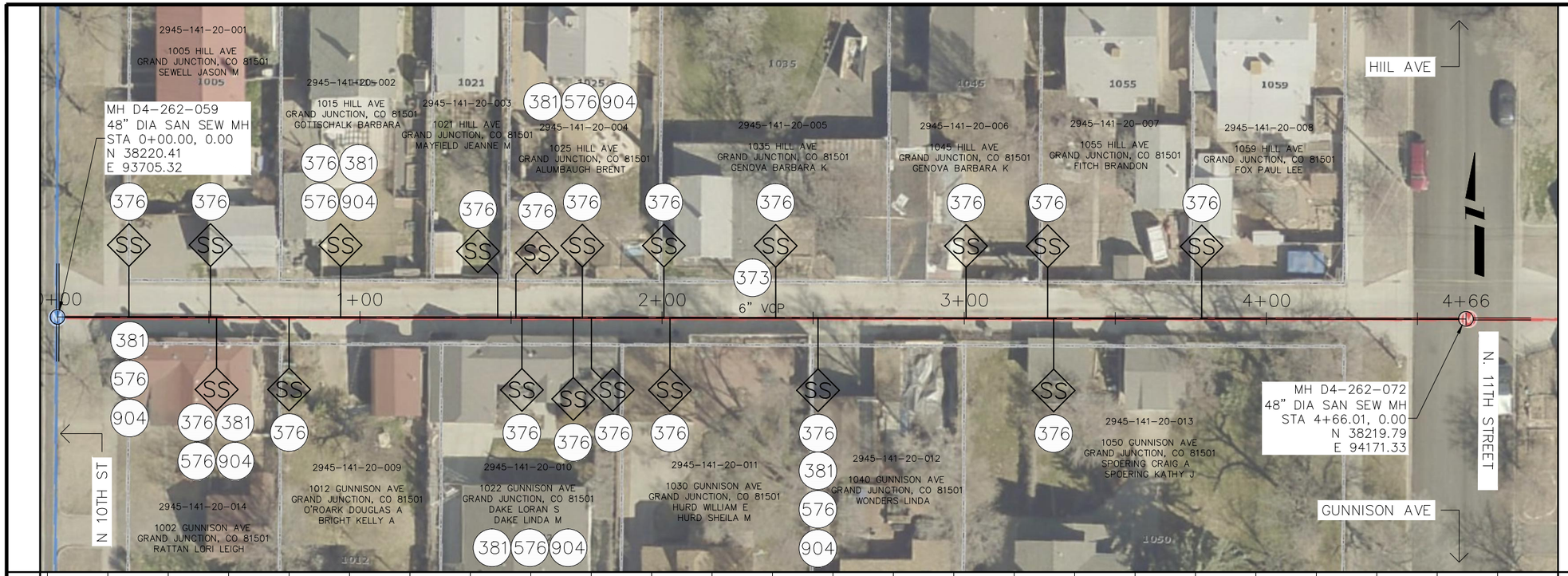
CITY OF Grand Junction COLORADO

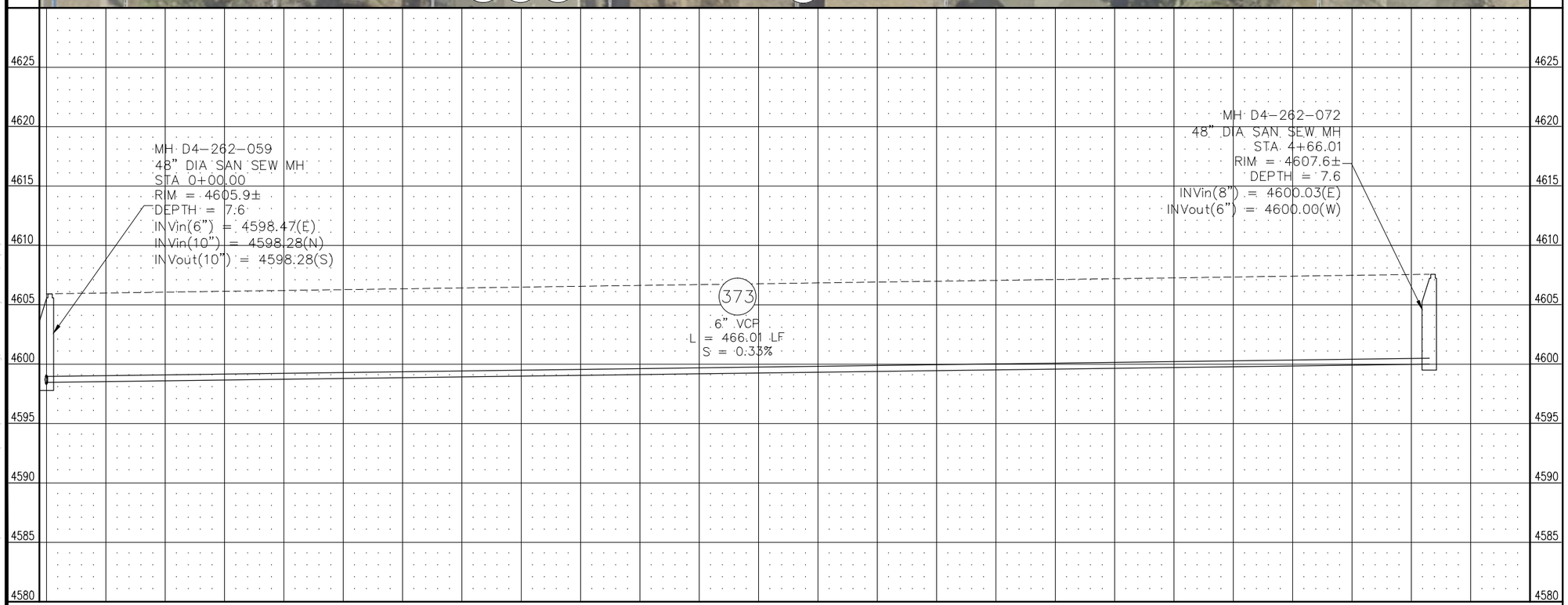
PUBLIC WORKS
AND UTILITIES
ENGINEERING DIVISION

2015 SEWER LINE REPLACEMENT – PHASE II
SANITARY SEWER PLAN AND PROFILE – STA: 0+00–6+00
ALLEY FROM 9TH TO 10TH BETWEEN HILL & TELLER

22

N:\Londpro\2015 Sewer Line Replacement Phase II\DWG\2015 CIPP dwg 22 – Alley 9-10, 7/1/2015 11:05:49 AM





PROJECT NO. F001625

CONSTRUCTION NOTES

(373) SP CURED IN PLACE SANITARY SEWER PIPE PER PROJECT SPECIFICATIONS. DESIGNED, SUBMITTED, AND STAMPED BY P.E. FIELD VERIFY PIPE SIZE/MATERIAL BEFORE ORDERING LINER. DURING NEW PIPE INSTALLATION IT WILL BE NECESSARY TO BYPASS PUMP SEWAGE AROUND WORK AREA TO A DOWNSTREAM MANHOLE. IF NECESSARY PROVIDE TRAFFIC CONTROL IN WORK AREA AND BYPASS AREA. MAINTAIN ACCESS TO ALL BUSINESSES AND RESIDENCES AND TWO WAY TRAFFIC.

(376) REMOVE CIPP COUPON AT SERVICE LOCATION (INCIDENTAL TO CIPP)

(381) 206.00 – STRUCTURE BACKFILL (FLOWFILL). PAID PER CY. IN AREAS WHERE SANITARY SEWER SERVICE IS REPAIRED BELOW CONCRETE PAVEMENT, FLOWFILL SHALL BE USED AS TRENCH BACKFILL.

(576) 608.06 – CONCRETE DRIVEWAY SECTION (8" THICK) (COMMERCIAL) W/ DOWELS. (SEE CITY OF GRAND JUNCTION STANDARD DETAIL C-32.)

(904) 102.9/104.2/108.2 – 6" x 4" SEWER SERVICE TAP (NEW SERVICE ON EXISTING PIPE UNDERGOING TRENCHLESS REPAIR), TO INCLUDE: DISCONNECTING EXISTING SERVICE AND INSTALLING NEW SERVICE TAP AND PIPE. NEW TAP SHALL BE FULL BODY WYE (PIPE STUBS AND COUPLINGS INCLUDED), ALL BENDS AND FITTINGS, VERTICAL PIPING, AS REQUIRED TO ALIGN AND CONNECT TO EXISTING SERVICE LINE.

DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2015
DESIGNED BY JKT DATE 2015
CHECKED BY DATE
APPROVED BY DATE

SCALES: PLAN HORIZONTAL 0 10 20 40; PROFILE HORIZONTAL 0 10 20 40, VERTICAL 0 2.5 5

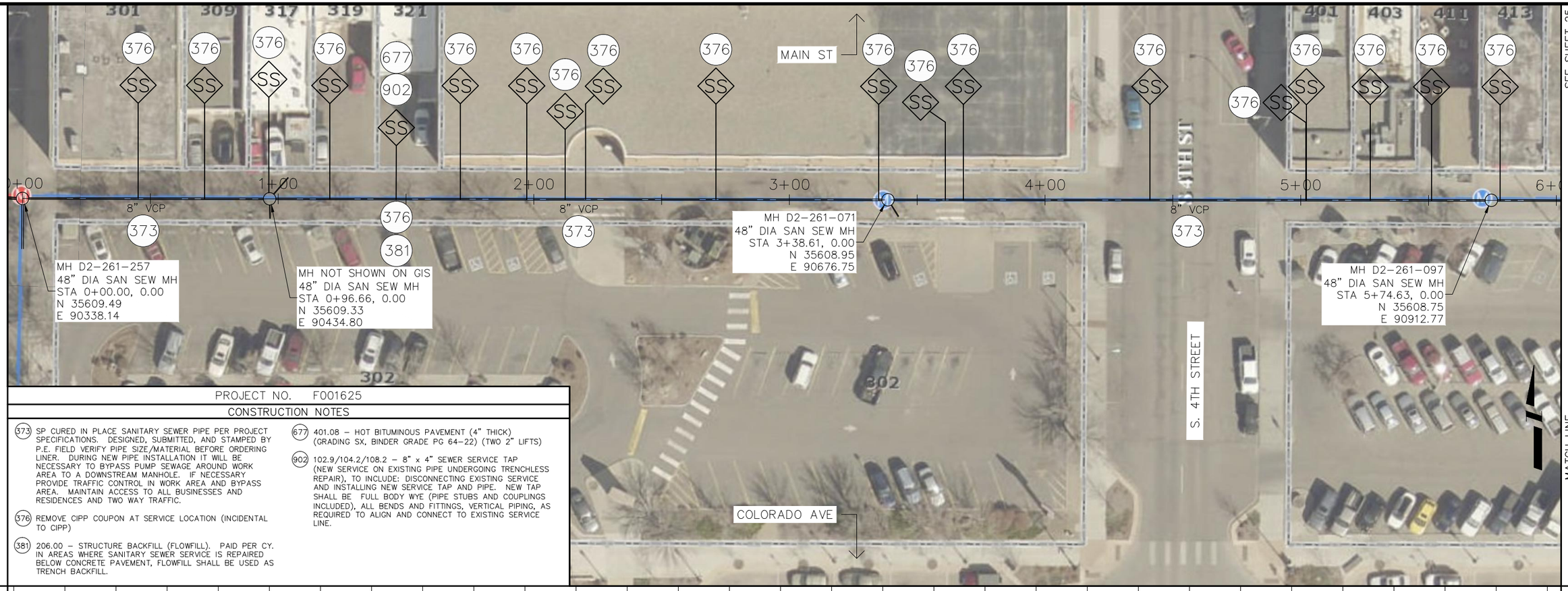
CITY OF Grand Junction COLORADO

PUBLIC WORKS
AND UTILITIES
ENGINEERING DIVISION

2015 SEWER LINE REPLACEMENT – PHASE II
SANITARY SEWER PLAN AND PROFILE – STA: 0+00-5+00
ALLEY FROM 10TH TO 11TH BETWEEN GUNNISON & HILL

23

N:\projects\2015 Sewer Line Replacement Phase II\DWG\2015 CIPP.dwg, 23 – Alley 10-11, 7/1/2015 11:07:12 AM



PROJECT NO. F001625

CONSTRUCTION NOTES

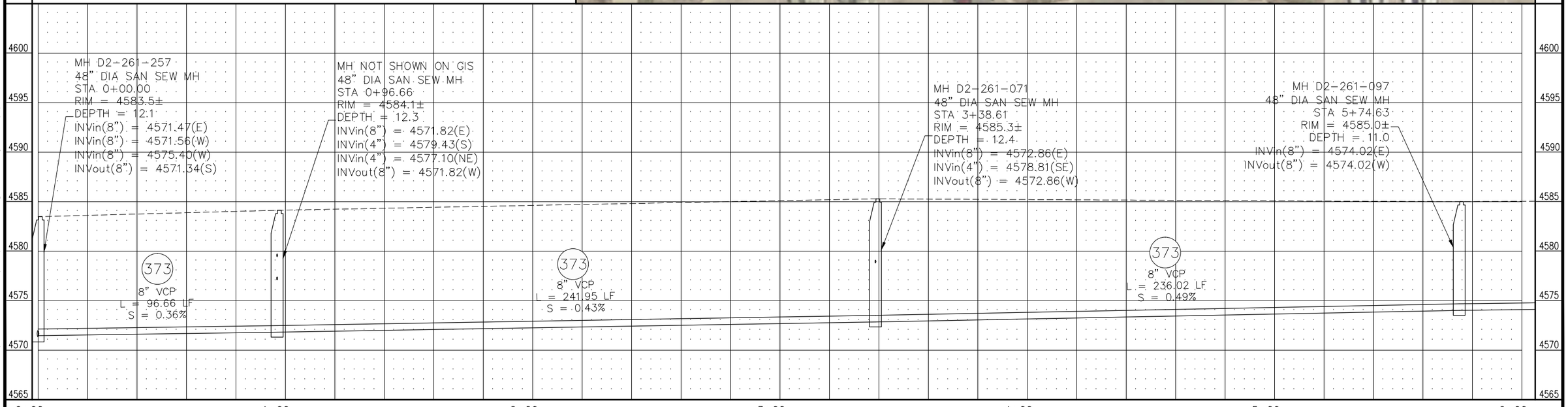
(373) SP CURED IN PLACE SANITARY SEWER PIPE PER PROJECT SPECIFICATIONS. DESIGNED, SUBMITTED, AND STAMPED BY P.E. FIELD VERIFY PIPE SIZE/MATERIAL BEFORE ORDERING LINER. DURING NEW PIPE INSTALLATION IT WILL BE NECESSARY TO BYPASS PUMP SEWAGE AROUND WORK AREA TO A DOWNSTREAM MANHOLE. IF NECESSARY PROVIDE TRAFFIC CONTROL IN WORK AREA AND BYPASS AREA. MAINTAIN ACCESS TO ALL BUSINESSES AND RESIDENCES AND TWO WAY TRAFFIC.

(376) REMOVE CIPP COUPON AT SERVICE LOCATION (INCIDENTAL TO CIPP)

(381) 206.00 – STRUCTURE BACKFILL (FLOWFILL). PAID PER CY. IN AREAS WHERE SANITARY SEWER SERVICE IS REPAIRED BELOW CONCRETE PAVEMENT, FLOWFILL SHALL BE USED AS TRENCH BACKFILL.

(677) 401.08 – HOT BITUMINOUS PAVEMENT (4" THICK) (GRADING SX, BINDER GRADE PG 64-22) (TWO 2" LIFTS)

(902) 102.9/104.2/108.2 – 8" x 4" SEWER SERVICE TAP (NEW SERVICE ON EXISTING PIPE UNDERGOING TRENCHLESS REPAIR), TO INCLUDE: DISCONNECTING EXISTING SERVICE AND INSTALLING NEW SERVICE TAP AND PIPE. NEW TAP SHALL BE FULL BODY WYE (PIPE STUBS AND COUPLINGS INCLUDED), ALL BENDS AND FITTINGS, VERTICAL PIPING, AS REQUIRED TO ALIGN AND CONNECT TO EXISTING SERVICE LINE.



DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2015
DESIGNED BY JKT DATE 2015
CHECKED BY DATE
APPROVED BY DATE

SCALES: PLAN HORIZONTAL 0 10 20 40; PROFILE HORIZONTAL 0 10 20 40, VERTICAL 0 5

CITY OF Grand Junction COLORADO

PUBLIC WORKS AND UTILITIES ENGINEERING DIVISION

2015 SEWER LINE REPLACEMENT – PHASE II
SANITARY SEWER PLAN AND PROFILE – STA: 0+00-6+00
ALLEY FROM 3RD TO 7TH BETWEEN COLORADO & MAIN

24

N:\Landpro\2015 Sewer Line Replacement Phase II\DWG\2015 CIPP dwg 24 – Alley 3-7 7/1/2015 11:08:01 AM

SEE SHEET 24

SEE SHEET 26

MATCH LINE

MATCH LINE

MAIN ST

S 5th ST

COLORADO AVE

MH D2-261-106
48" DIA SAN SEW MH
STA 8+19.28, 0.00
N 35608.06
E 91157.42

MH D2-261-138
48" DIA SAN SEW MH
STA 10+60.26, 0.00
N 35607.92
E 91398.40

PROJECT NO. F001625

CONSTRUCTION NOTES

(373) SP CURED IN PLACE SANITARY SEWER PIPE PER PROJECT SPECIFICATIONS. DESIGNED, SUBMITTED, AND STAMPED BY P.E. FIELD VERIFY PIPE SIZE/MATERIAL BEFORE ORDERING LINER. DURING NEW PIPE INSTALLATION IT WILL BE NECESSARY TO BYPASS PUMP SEWAGE AROUND WORK AREA TO A DOWNSTREAM MANHOLE. IF NECESSARY PROVIDE TRAFFIC CONTROL IN WORK AREA AND BYPASS AREA. MAINTAIN ACCESS TO ALL BUSINESSES AND RESIDENCES AND TWO WAY TRAFFIC.

(376) REMOVE CIPP COUPON AT SERVICE LOCATION (INCIDENTAL TO CIPP)

MH D2-261-106
48" DIA SAN SEW MH
STA 8+19.28
RIM = 4585.4±
DEPTH = 10.5
INVin(8") = 4574.88(E)
INVout(8") = 4574.88(W)

MH D2-261-138
48" DIA SAN SEW MH
STA 10+60.26
RIM = 4586.2±
DEPTH = 10.2
INVin(8") = 4575.99(E)
INVout(8") = 4575.99(W)

373
8" VCP
L = 244.65 LF
S = 0.35%

373
8" VCP
L = 240.98 LF
S = 0.46%

373
8" VCP
L = 241.91 LF
S = 0.35%

DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2015
DESIGNED BY JKT DATE 2015
CHECKED BY DATE
APPROVED BY DATE

SCALES:
PLAN HORIZONTAL 0 10 20 40
PROFILE HORIZONTAL 0 10 20 40
PROFILE VERTICAL 0 2.5 5

CITY OF Grand Junction COLORADO

PUBLIC WORKS
AND UTILITIES
ENGINEERING DIVISION

2015 SEWER LINE REPLACEMENT – PHASE II
SANITARY SEWER PLAN AND PROFILE – STA: 6+00-12+00
ALLEY FROM 3RD TO 7TH BETWEEN COLORADO & MAIN

25

SEE SHEET 25

MAIN ST

S. 6TH STREET

13+00 14+00 15+00 16+00 17+00

MH D2-261-147
48" DIA SAN SEW MH
STA 13+02.16, 0.00
N 35607.76
E 91640.30

MH D2-261-175
48" DIA SAN SEW MH
STA 17+07.11, 0.00
N 35606.65
E 92045.24

8" VCP

PROJECT NO. F001625

CONSTRUCTION NOTES

(373) SP CURED IN PLACE SANITARY SEWER PIPE PER PROJECT SPECIFICATIONS. DESIGNED, SUBMITTED, AND STAMPED BY P.E. FIELD VERIFY PIPE SIZE/MATERIAL BEFORE ORDERING LINER. DURING NEW PIPE INSTALLATION IT WILL BE NECESSARY TO BYPASS PUMP SEWAGE AROUND WORK AREA TO A DOWNSTREAM MANHOLE. IF NECESSARY PROVIDE TRAFFIC CONTROL IN WORK AREA AND BYPASS AREA. MAINTAIN ACCESS TO ALL BUSINESSES AND RESIDENCES AND TWO WAY TRAFFIC.

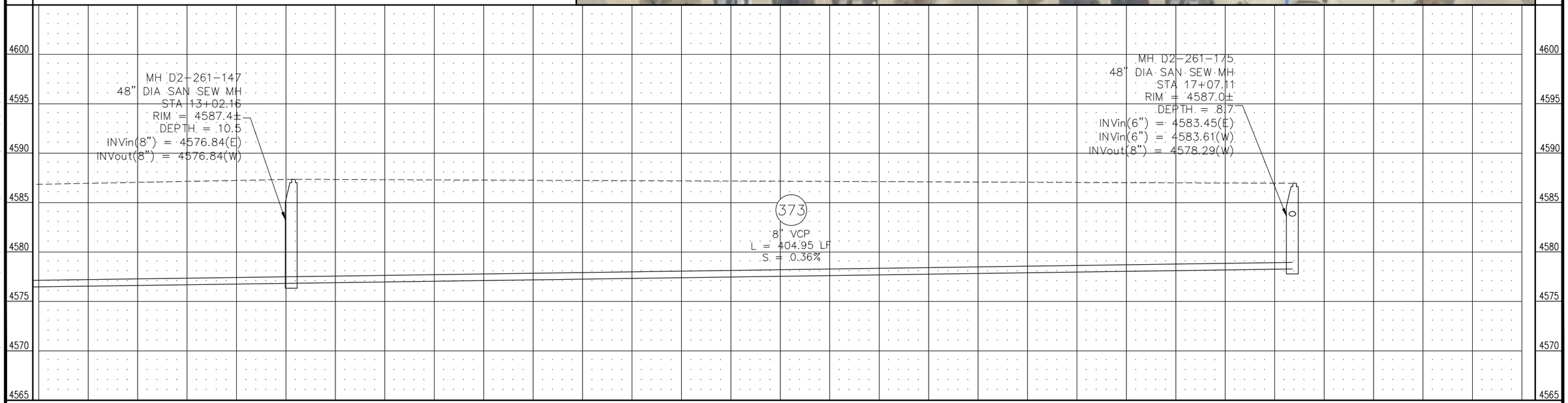
(376) REMOVE CIPP COUPON AT SERVICE LOCATION (INCIDENTAL TO CIPP)

(381) 206.00 - STRUCTURE BACKFILL (FLOWFILL). PAID PER CY. IN AREAS WHERE SANITARY SEWER SERVICE IS REPAIRED BELOW CONCRETE PAVEMENT, FLOWFILL SHALL BE USED AS TRENCH BACKFILL.

(576) 608.06 - CONCRETE DRIVEWAY SECTION (8" THICK) (COMMERCIAL) W/ DOWELS. (SEE CITY OF GRAND JUNCTION STANDARD DETAIL C-32.)

(902) 102.9/104.2/108.2 - 8" x 4" SEWER SERVICE TAP (NEW SERVICE ON EXISTING PIPE UNDERGOING TRENCHLESS REPAIR), TO INCLUDE: DISCONNECTING EXISTING SERVICE AND INSTALLING NEW SERVICE TAP AND PIPE. NEW TAP SHALL BE FULL BODY WYE (PIPE STUBS AND COUPLINGS INCLUDED), ALL BENDS AND FITTINGS, VERTICAL PIPING, AS REQUIRED TO ALIGN AND CONNECT TO EXISTING SERVICE LINE.

COLORADO AVE



DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2015
DESIGNED BY JKT DATE 2015
CHECKED BY DATE
APPROVED BY DATE

SCALES:
PLAN HORIZONTAL 0 10 20 40
PROFILE HORIZONTAL 0 10 20 40
PROFILE VERTICAL 0 2.5 5

CITY OF Grand Junction COLORADO

PUBLIC WORKS
AND UTILITIES
ENGINEERING DIVISION

2015 SEWER LINE REPLACEMENT - PHASE II
SANITARY SEWER PLAN AND PROFILE - STA: 12+00-18+00
ALLEY FROM 3RD TO 7TH BETWEEN COLORADO & MAIN

26

N:\Vandpro\2015 Sewer Line Replacement Phase II\DWG\2015 CIPP dwg, 26 - Alley 3-7 (3), 7/1/2015 11:09:36 AM

MH D2-261-026
48" DIA SAN SEW MH
STA 0+00.00, 0.00
N 35980.47
E 89791.21

MH D2-261-048
48" DIA SAN SEW MH
STA 4+04.98, 0.00
N 35979.88
E 90196.19

MH D2-261-064
48" DIA SAN SEW MH
STA 5+61.50, 0.00
N 35980.19
E 90352.71

ROOD AVE

MAIN ST

N. 3RD STREET

8" VCP

PROJECT NO. F001625

CONSTRUCTION NOTES

(373) SP CURED IN PLACE SANITARY SEWER PIPE PER PROJECT SPECIFICATIONS. DESIGNED, SUBMITTED, AND STAMPED BY P.E. FIELD VERIFY PIPE SIZE/MATERIAL BEFORE ORDERING LINER. DURING NEW PIPE INSTALLATION IT WILL BE NECESSARY TO BYPASS PUMP SEWAGE AROUND WORK AREA TO A DOWNSTREAM MANHOLE. IF NECESSARY PROVIDE TRAFFIC CONTROL IN WORK AREA AND BYPASS AREA. MAINTAIN ACCESS TO ALL BUSINESSES AND RESIDENCES AND TWO WAY TRAFFIC.

(376) REMOVE CIPP COUPON AT SERVICE LOCATION (INCIDENTAL TO CIPP)

MH D2-261-026
48" DIA SAN SEW MH
STA 0+00.00
RIM = 4582.3±
DEPTH = 10.9
INVin(8") = 4571.36(E)
INVout(8") = 4571.36(W)

MH D2-261-048
48" DIA SAN SEW MH
STA 4+04.98
RIM = 4584.2±
DEPTH = 10.7
INVin(8") = 4573.45(E)
INVin(6") = 4579.11(SE)
INVin(6") = 4574.09(S)
INVout(8") = 4573.45(W)

MH D2-261-064
48" DIA SAN SEW MH
STA 5+61.50
RIM = 4585.0±
DEPTH = 10.6
INVin(8") = 4573.95(E)
INVout(8") = 4573.95(W)

373
8" VCP
L = 404.98 LF
S = 0.52%

373
8" VCP
L = 156.52 LF
S = 0.32%

DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2015
DESIGNED BY JKT DATE 2015
CHECKED BY DATE
APPROVED BY DATE

SCALES: PLAN HORIZONTAL 0 10 20 40; PROFILE HORIZONTAL 0 10 20 40, VERTICAL 0 2.5 5

CITY OF Grand Junction COLORADO

PUBLIC WORKS
AND UTILITIES
ENGINEERING DIVISION

2015 SEWER LINE REPLACEMENT – PHASE II
SANITARY SEWER PLAN AND PROFILE – STA: 0+00-6+00
ALLEY FROM 2ND TO 7TH BETWEEN MAIN & ROOD

27

SEE SHEET 28

MATCH LINE

N:\landpro\2015 Sewer Line Replacement Phase II\DWG 2015 CIPP.dwg, 27 – Alley 2-7, 7/1/2015 11:11:04 AM

SEE SHEET 27

SEE SHEET 29

MATCH LINE

MATCH LINE

MH D2-261-072
48" DIA SAN SEW MH
STA 9+03.65, 0.00
N 35980.44
E 90694.86

ROOD AVE

MAIN ST

N 4TH ST

8" VCP

8" VCP

PROJECT NO. F001625

CONSTRUCTION NOTES

(373) SP CURED IN PLACE SANITARY SEWER PIPE PER PROJECT SPECIFICATIONS. DESIGNED, SUBMITTED, AND STAMPED BY P.E. FIELD VERIFY PIPE SIZE/MATERIAL BEFORE ORDERING LINER. DURING NEW PIPE INSTALLATION IT WILL BE NECESSARY TO BYPASS PUMP SEWAGE AROUND WORK AREA TO A DOWNSTREAM MANHOLE. IF NECESSARY PROVIDE TRAFFIC CONTROL IN WORK AREA AND BYPASS AREA. MAINTAIN ACCESS TO ALL BUSINESSES AND RESIDENCES AND TWO WAY TRAFFIC.

(376) REMOVE CIPP COUPON AT SERVICE LOCATION (INCIDENTAL TO CIPP)

MH D2-261-072
48" DIA SAN SEW MH
STA 9+03.65
RIM = 4586.8±
DEPTH = 10.6
INVin(8") = 4576.02(E)
INVout(8") = 4576.02(W)

(373)
8" VCP
L = 342.15 LF
S = 0.60%

(373)
8" VCP
L = 342.14 LF
S = 0.57%

4605 4600 4595 4590 4585 4580 4575 4570 4565 4560

6+00 7+00 8+00 9+00 10+00 11+00 12+00

DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2015
DESIGNED BY JKT DATE 2015
CHECKED BY DATE
APPROVED BY DATE

SCALES: PLAN HORIZONTAL 0 10 20 40; PROFILE HORIZONTAL 0 10 20 40, VERTICAL 0 2.5 5

CITY OF Grand Junction COLORADO

PUBLIC WORKS
AND UTILITIES
ENGINEERING DIVISION

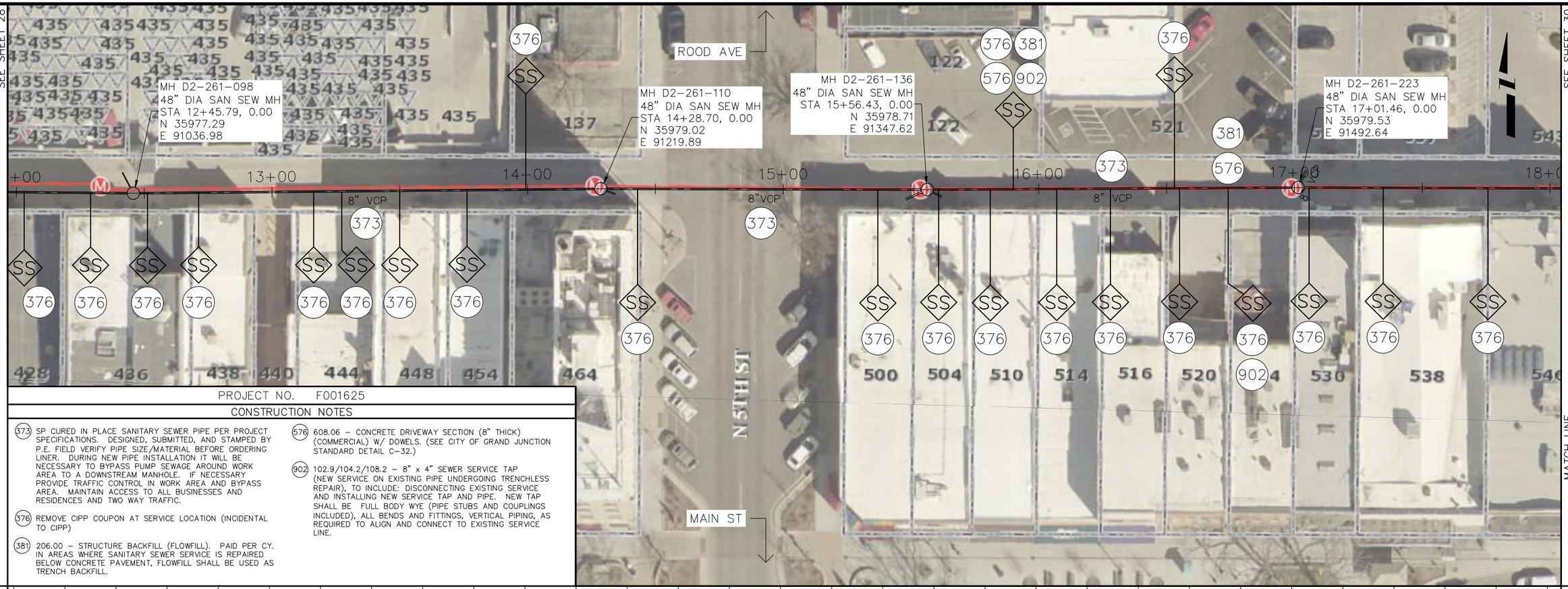
2015 SEWER LINE REPLACEMENT – PHASE II
SANITARY SEWER PLAN AND PROFILE – STA: 6+00-12+00
ALLEY FROM 2ND TO 7TH BETWEEN MAIN & ROOD

28

N:\projects\2015 Sewer Line Replacement Phase II\DWG\2015 CIPP.dwg, 28 – Alley 2-7 (2), 7/1/2015 11:12:13 AM

SEE SHEET 28

SEE SHEET 30



PROJECT NO. F001625

CONSTRUCTION NOTES

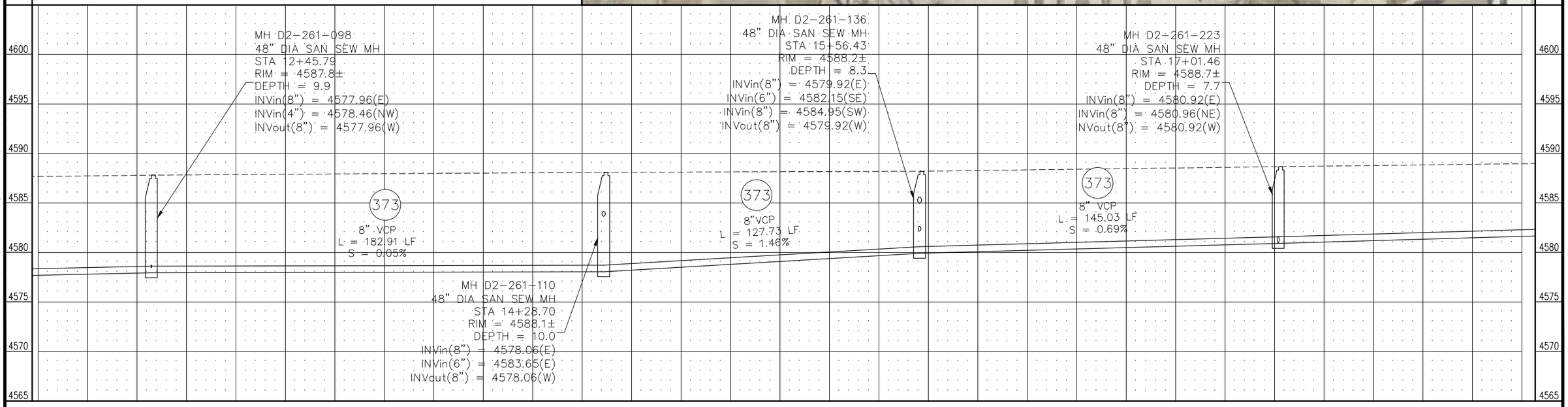
(373) SP CURED IN PLACE SANITARY SEWER PIPE PER PROJECT SPECIFICATIONS. DESIGNED, SUBMITTED, AND STAMPED BY P.E. FIELD VERIFY PIPE SIZE/MATERIAL BEFORE ORDERING LINER. DURING NEW PIPE INSTALLATION IT WILL BE NECESSARY TO BYPASS PUMP SEWAGE AROUND WORK AREA TO A DOWNSTREAM MANHOLE. IF NECESSARY PROVIDE TRAFFIC CONTROL IN WORK AREA AND BYPASS AREA. MAINTAIN ACCESS TO ALL BUSINESSES AND RESIDENCES AND TWO WAY TRAFFIC.

(376) REMOVE CIPP COUPON AT SERVICE LOCATION (INCIDENTAL TO CIPP)

(381) 206.00 – STRUCTURE BACKFILL (FLOWFILL). PAID PER CY. IN AREAS WHERE SANITARY SEWER SERVICE IS REPAIRED BELOW CONCRETE PAVEMENT, FLOWFILL SHALL BE USED AS TRENCH BACKFILL.

(576) 608.06 – CONCRETE DRIVEWAY SECTION (8" THICK) (COMMERCIAL) W/ DOWELS. (SEE CITY OF GRAND JUNCTION STANDARD DETAIL C-32.)

(902) 102.9/104.2/108.2 – 8" x 4" SEWER SERVICE TAP (NEW SERVICE ON EXISTING PIPE UNDERGOING TRENCHLESS REPAIR), TO INCLUDE: DISCONNECTING EXISTING SERVICE AND INSTALLING NEW SERVICE TAP AND PIPE. NEW TAP SHALL BE FULL BODY WYE (PIPE STUBS AND COUPLINGS INCLUDED), ALL BENDS AND FITTINGS, VERTICAL PIPING, AS REQUIRED TO ALIGN AND CONNECT TO EXISTING SERVICE LINE.



DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2015
DESIGNED BY JKT DATE 2015
CHECKED BY DATE
APPROVED BY DATE

SCALES: PLAN HORIZONTAL 0 10 20 40; PROFILE HORIZONTAL 0 10 20 40, VERTICAL 0 5

CITY OF Grand Junction COLORADO

PUBLIC WORKS AND UTILITIES ENGINEERING DIVISION

2015 SEWER LINE REPLACEMENT – PHASE II
SANITARY SEWER PLAN AND PROFILE – STA: 12+00-18+00
ALLEY FROM 2ND TO 7TH BETWEEN MAIN & ROOD

29

N:\Vandorn\2015 Sewer Line Replacement Phase II\DWG\2015 CIPP.dwg, 29 – Alley 2-7 (3), 7/1/2015 11:12:42 AM

SEE SHEET 29

MATCH LINE

ROOD AVE

MAIN ST

N 6TH ST

MH D2-261-230
48" DIA SAN SEW MH
STA 19+49.13, 0.00
N 35978.84
E 91740.31

MH D2-261-258
48" DIA SAN SEW MH
STA 21+72.15, 0.00
N 35978.31
E 91963.33

MH D2-261-177
48" DIA SAN SEW MH
STA 22+67.30, 0.00
N 35976.82
E 92058.46

PROJECT NO. F001625

CONSTRUCTION NOTES

(373) SP CURED IN PLACE SANITARY SEWER PIPE PER PROJECT SPECIFICATIONS. DESIGNED, SUBMITTED, AND STAMPED BY P.E. FIELD VERIFY PIPE SIZE/MATERIAL BEFORE ORDERING LINER. DURING NEW PIPE INSTALLATION IT WILL BE NECESSARY TO BYPASS PUMP SEWAGE AROUND WORK AREA TO A DOWNSTREAM MANHOLE. IF NECESSARY PROVIDE TRAFFIC CONTROL IN WORK AREA AND BYPASS AREA. MAINTAIN ACCESS TO ALL BUSINESSES AND RESIDENCES AND TWO WAY TRAFFIC.

(376) REMOVE CIPP COUPON AT SERVICE LOCATION (INCIDENTAL TO CIPP)

MH D2-261-230
48" DIA SAN SEW MH
STA 19+49.13
RIM = 4589.4±
DEPTH = 6.7
INVin(8") = 4582.69(E)
INVin(6") = 4582.85(N)
INVout(8") = 4582.69(W)

373
8" VCP
L = 247.67 LF
S = 0.71%

373
8" VCP
L = 223.03 LF
S = 0.59%

MH D2-261-258
48" DIA SAN SEW MH
STA 21+72.15
RIM = 4590.3±
DEPTH = 6.3
INVin(6") = 4584.04(E)
INVout(8") = 4584.00(W)

MH D2-261-177
48" DIA SAN SEW MH
STA 22+67.30
RIM = 4590.2±
DEPTH = 8.2
INVin(6") = 4584.53(E)
INVin(6") = 4582.00(N)
INVout(6") = 4584.42(W)
INVout(6") = 4582.00(S)

373
6" VCP
L = 95.14 LF
S = 0.40%

DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2015
DESIGNED BY JKT DATE 2015
CHECKED BY DATE
APPROVED BY DATE

SCALES: PLAN HORIZONTAL 0 10 20 40; PROFILE HORIZONTAL 0 10 20 40, VERTICAL 0 5

CITY OF Grand Junction COLORADO

PUBLIC WORKS
AND UTILITIES
ENGINEERING DIVISION

2015 SEWER LINE REPLACEMENT – PHASE II
SANITARY SEWER PLAN AND PROFILE – STA: 18+00-24+00
ALLEY FROM 2ND TO 7TH BETWEEN MAIN & ROOD

30

N:\projects\2015 Sewer Line Replacement Phase II\DWG\2015 CIPP.dwg, 30 – Alley 2-7 (4), 7/1/2015 11:13:34 AM

BOOKCLIFF AVENUE

N 6th ST

CEDAR AVENUE

WALNUT AVENUE

E3-261-099
48" DIA SAN SEW MH
STA 0+00.00, 0.00
N 43415.49
E 91724.19

E3-261-100
48" DIA SAN SEW MH
STA 5+46.19, 0.00
N 42869.30
E 91723.61

2945-112-02-002
570 CEDAR AVE
GRAND JUNCTION 81501
COOPER SHAWN WILLIAM
COOPER MARY ANN

2945-112-02-004
560 CEDAR AVE
GRAND JUNCTION 81501
SUMMERS SARAH

2945-112-03-002
565 CEDAR AVE
GRAND JUNCTION 81501
COLLOTY DANA LEE ANN

2945-112-03-003
555 CEDAR AVE
GRAND JUNCTION 81501
MCCLURG GERALD L

2945-112-03-014
570 WALNUT AVE
GRAND JUNCTION 81501
STUBBS JEREMY

2945-112-03-015
566 WALNUT AVE
GRAND JUNCTION 81501
ELAM ELIZABETH C

TCE

10" CLAY

PROJECT NO. F001625

CONSTRUCTION NOTES

(4) 202 – REMOVAL OF TREE (8 INCH)

(7) 202 – REMOVAL OF SHRUB

(56) RESET LANDSCAPE APPURTENANCE PER PROPERTY (SEE SPECIAL PROVISIONS SP-2.

(102) 210 – RESET FENCE. (4' CHAIN LINK)

(373) SP CURED IN PLACE SANITARY SEWER PIPE PER PROJECT SPECIFICATIONS. DESIGNED, SUBMITTED, AND STAMPED BY P.E. FIELD VERIFY PIPE SIZE/MATERIAL BEFORE ORDERING LINER. DURING NEW PIPE INSTALLATION IT WILL BE NECESSARY TO BYPASS PUMP SEWAGE AROUND WORK AREA TO A DOWNSTREAM MANHOLE. IF NECESSARY PROVIDE TRAFFIC CONTROL IN WORK AREA AND BYPASS AREA. MAINTAIN ACCESS TO ALL BUSINESSES AND RESIDENCES AND TWO WAY TRAFFIC.

(376) REMOVE CIPP COUPON AT SERVICE LOCATION (INCIDENTAL TO CIPP)

(903) 102.9/104.2/108.2 – 10" x 4" SEWER SERVICE TAP (NEW SERVICE ON EXISTING PIPE UNDERGOING TRENCHLESS REPAIR), TO INCLUDE: DISCONNECTING EXISTING SERVICE AND INSTALLING NEW SERVICE TAP AND PIPE. NEW TAP SHALL BE FULL BODY WYE (PIPE STUBS AND COUPLINGS INCLUDED), ALL BENDS AND FITTINGS, VERTICAL PIPING, AS REQUIRED TO ALIGN AND CONNECT TO EXISTING SERVICE LINE.

E3-261-099
48" DIA SAN SEW MH
STA 0+00.00
RIM = 4634.0±
DEPTH = 8.7
INVin(10") = 4626.07(W)
INVin(6") = 4628.62(E)
INVout(10") = 4625.34(S)

E3-261-100
48" DIA SAN SEW MH
STA 5+46.19
RIM = 4630.1±
DEPTH = 7.9
INVin(10") = 4622.25(N)
INVin(4") = 4623.75(SE)
INVin(6") = 4622.65(E)
INVout(10") = 4622.20(W)

373
10" CLAY
L = 546.19 LF
S = 0.57%

4655 4650 4645 4640 4635 4630 4625 4620 4615 4610

0+00 1+00 2+00 3+00 4+00 5+00 6+00

DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY JKT DATE 2015
DESIGNED BY HMC DATE 2015
CHECKED BY DATE
APPROVED BY DATE

SCALES: PLAN HORIZONTAL 0 10 20 40; PROFILE HORIZONTAL 0 10 20 40, VERTICAL 0 2.5 5

CITY OF Grand Junction COLORADO

PUBLIC WORKS
AND UTILITIES
ENGINEERING DIVISION

2015 SEWER LINE REPLACEMENT – PHASE II
SANITARY SEWER PLAN AND PROFILE
BOOKCLIFF AVE TO WALNUT AVE – STA: 0+00 – 6+00

31

N:\projects\2015 Sewer Line Replacement Phase II\DWG\2015 CIPP.dwg, 31-Bookcliff to Walnut, 7/1/2015 11:14:33 AM