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

BID DOCUMENTS

FOR

Las Colonias Park Phase I
IFB-3997-15-DH

Responses Due:
February 17, 2015 prior to 2:00pm
250 N. 5th Street
City Clerk's Office, Room #111
Grand Junction, CO 81501

Purchasing Representative:
Duane Hoff Jr., Senior Buyer
duaneh@gjcity.org
970-244-1545

CITY OF Grand Junction COLORADO

January, 2015

Book No. ___

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

BID DOCUMENTS
FOR
Los Colonias Park Phase I

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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 Tuesday, February 17, 2015 for the Las Colonias Park Phase I Project. All bids will be opened and read aloud at the City Hall Auditorium immediately following the submittal deadline. The Project generally consists of, but may not be limited to 4,015 square yards of asphalt pavement, 2,400 lineal feet of concrete curb & gutter; 2,050 square yards of concrete sidewalk, curb ramp, intersection corner, drainage pan and fillet, 400 lineal feet of 8" PVC sewer pipe, 54 lineal feet of 4" PVC sewer pipe, three sanitary sewer manholes, 260 lineal feet of 6" water pipe (C-900), 120 lineal feet of 1 1/2 " water service line; one fire hydrant, storm inlet, and storm outlet structure.

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 Bids page at www.gjcity.org. 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 mandatory pre-bid meeting will be held for this project on Wednesday, February 4, 2015 at 2:00 pm in the City Hall Auditorium.

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.

CITY OF GRAND JUNCTION, COLORADO

_____

Duane Hoff Jr., Senior Buyer

Published: Published: The Daily Sentinel - _____

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." 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 Purchasing Supervisor in writing.

   Written comments or questions must be received by the Engineer 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 or Purchasing Supervisor 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 Bids 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, interlineations, 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 Purchasing 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 Purchasing Supervisor 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
Las Colonias Park Phase I

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: Las Colonias Park Phase I

Contractor:_____

Item No.	CDOT, City Ref.	Description	Quantity	Units	Unit Price	Total Price
1	108.2	4" Sewer Service Pipe (SDR 35 PVC) Includes type A bedding, haunching, intitial backfill and trench backfill.	54.	LF	$ _____	$ _____
2	108.2	8" Sewer Service Pipe (SDR 35 PVC) Includes type A bedding, haunching, intitial backfill and trench backfill.	400.	LF	$ _____	$ _____
3	108.2	6" Water Pipe (C-900 PVC) Includes type A bedding, haunching, intitial backfill and trench backfill.	260.	LF	$ _____	$ _____
4	108.2	12" Storm Drain Pipe (SDR 35 PVC)	65.	LF	$ _____	$ _____
5	108.2	12" Culvert End Section (Flared)(Concrete)	1.	EA	$ _____	$ _____
6	108.2	Import Trench Backfill	414.	TON	$ _____	$ _____
7	108.3	8" X 4" Sewer Service Tap (Full Body Wye)	1.	EA	$ _____	$ _____
8	108.3	6" Gate Valve	1.	EA	$ _____	$ _____
9	108.3	6", 90-Degree Elbow	2.	EA	$ _____	$ _____
10	108.3	24" x 6" Tapping Sleeve and Valve	1.	EA	$ _____	$ _____
11	108.3	Fire Hydrant	1.	EA	$ _____	$ _____
12	108.3	6" x 6" Tee	1.	EA	$ _____	$ _____
13	108.3	6" x 2" Tapped Plug	1.	EA	$ _____	$ _____
14	108.3	2" x 1 1/2" (Bushing) Tapped Plug to Corporation Stop	1.	EA	$ _____	$ _____
15	108.3	1 1/2" x 1 1/2" Tee	1.	EA	$ _____	$ _____
16	108.3	1 1/2" x 12" Brass Nipple	2.	EA	$ _____	$ _____
17	108.3	Compression Fitting (1 1/2" Brass to 1 1/2" Pure Core)	1.	EA	$ _____	$ _____
18	108.4	1 1/2" Corporation Stop	1.	EA	$ _____	$ _____
19	108.4	1 1/2" Curb Stop	1.	EA	$ _____	$ _____
20	108.4	Meter Pit (Install Only)	1.	EA	$ _____	$ _____
21	108.4	1.5" Natural Virgin Core with Blue Virgin Exterior	120.	LF	$ _____	$ _____
22	108.5	Sanitary Sewer Basic Manhole (48" I.D.)	2.	EA	$ _____	$ _____

23	108.5	Manhole Barrel Section (D>5') (48" I.D.)	2.5	VLF	$ _____	$ _____
24	108.5	Sanitary Sewer Basic Manhole (60" I.D.) (Cast In Place Base) See Standard Contract Documents SS-02.	1.	EA	$ _____	$ _____
25	108.5	Manhole Barrel Section (D>5') (60" I.D.)	5.2	VLF	$ _____	$ _____
26	108.6	Single Storm Drain Inlet (Vertical Curb)	1.	EA	$ _____	$ _____
27	108.6	Water Quality Outfall Structure - Refer to Plan Sheet 6 for Detail.	1.	EA	$ _____	$ _____
28	108.7	Granular Stabilization Material (Type B)(Crushed Rock) (Includes Haul and Disposal of Unsuitable Excavated Material)	110.	TON	$ _____	$ _____
29	202	Removal of Structures and Obstructions - Abandon Water Service (See SP - 2)	2.	EA	$ _____	$ _____
30	203	Excavation and Embankment-Disposal of Radioactive Materials	200.	CY	$ _____	$ _____
31	203	Excavation and Embankment-Earthwork for Water Quality Conrol Pond - Refer to Plan Sheet 6 for Detail. (See SP - 3)	1.	LUMP	$ _____	$ _____
32	304	Aggregate Base Course (Class 3)	3,800.	TON	$ _____	$ _____
33	207	Topsoil (Clean Fill) (Thickness Varies) (See SP-4)	740.	TON	$ _____	$ _____
34	207	Topsoil (6" Thick) - Native Material Generated Onsite. Refer to Plan Sheet 11 for Detail (See Sp - 4).	600.	SY	$ _____	$ _____
35	208	Erosion Control (Complete in Place) (See SP -5).	1.	LUMP	$ _____	$ _____
36	210	Reset Structures - Adjust Sanitary Manhole to Finish Grade	1.	EA	$ _____	$ _____
37	210	Remove/Reset 6' Chain Link Fence	20.	LF	$ _____	$ _____
38	304/401	Hot Mix Asphalt (3" Thick) (Grading SX, Binder Grade PG 64-22) to Include Class 6 Aggregate Base Course (6" Thick)	4,015.	SY	$ _____	$ _____
39	420	Geosynthetics - Mirafi 500x	100.	SY	$ _____	$ _____

40	306	Reconditioning -Scarify and Recompact 12" of Material	5,828.	SY	$ _____	$ _____
41	506	Cobble Stone (6 Inch Dia.) - Stone Shall Cover Bottom of Water Quality Pond.	100.	SY	$ _____	$ _____
42	608	Concrete Intersection Corner (8" Thick) to Include Class 6 Aggregate Base Course (6" Thick)	106.	SY	$ _____	$ _____
43	608	Concrete Curb and Gutter (1.5' Wide) to Include Class 6 Aggregate Base Course (6" Thick)	478.	LF	$ _____	$ _____
44	608	Concrete Curb and Gutter (2' Wide) with Dowels to Include Class 6 Aggregate Base Course (6" Thick)	593.	LF	$ _____	$ _____
45	608	Concrete Curb and Gutter (2' Wide) to Include Class 6 Aggregate Base Course (6" Thick)	1,362.	LF	$ _____	$ _____
46	608	Concrete Drainage Pan (6' Wide) to Include Class 6 Aggregate Base Course (6" Thick)	42.	SY	$ _____	$ _____
47	608	Concrete Sidewalk (4" Thick) to Include Class 6 Aggregate Base Course (6" Thick)	1,790.	SY	$ _____	$ _____
48	608	Concrete Coner Fillet to Include Class 6 Aggregate Base Course (6" Thick)	52.	SY	$ _____	$ _____
49	608	Concrete Curb Ramp to Include Class 6 Aggregate Base Course (6" Thick)	91.	SY	$ _____	$ _____
50	608	Detectable Warning (Wet Set)(City Supplied)	10.	EA	$ _____	$ _____
51	620	Portable Sanitary Facility	1.	LUMP	$ _____	$ _____
52	626	Mobilization	1.	LUMP	$ _____	$ _____
53	630	Construction Zone Traffic Control	1.	LUMP	$ _____	$ _____
54	630	Traffic Control Plan	1.	LUMP	$ _____	$ _____
55	SP-1	Quality Control Testing (Geotechnical Testing)(SP-8). Part Time Inspection Frequencies Shall Apply. See City of Grand Junction Standard Contract Documents R&B 3 for Frequencies.	1.	LUMP	$ _____	$ _____

56	SP-2	4" Conduit (PVC) Per Plan for Future Irrigation	100.	LF	$ _____	$ _____
57	SP-3	Bollard (City Supplied)	1.	EA	$ _____	$ _____
58	SP-4	Trenching and Backfill for Electrical Utilities Per Plan (18"w x 36"d)	304.	LF	$ _____	$ _____
59	SP-5	Trenching and Backfill for Electrical Utilities Per Plan (18"w x 48"d)	418.	LF	$ _____	$ _____
MCR		Minor Contract Revisions	- - -	- - -	- - -	$ 30,000.00

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

Las Colonias Park Phase I

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,* revised 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 4,015 square yards of asphalt pavement, 2,400 lineal feet of concrete curb & gutter; 2,050 square yards of concrete sidewalk, curb ramp, intersection corner, drainage pan and fillet, 400 lineal feet of 8" PVC sewer pipe, 54 lineal feet of 4" PVC sewer pipe, three sanitary sewer manholes, 260 lineal feet of 6" water pipe (C-900), 120 lineal feet of 1 1/2 " water service line; one fire hydrant, storm inlet, and storm outlet structure.

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 held at 2:00 p.m. on Wednesday, February 4, 2015, in the City Hall Auditorium, 250 North 5th Street.

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 **75 Calendar Days** from the starting date specified in the Notice to Proceed.

Completion is achieved when site clean up 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 Posted	January 30, 2015
Mandatory Pre-Bid Meeting	February 4, 2015
Inquiry Deadline	February 6, 2015
Addendum Posted	February 10, 2015
Bid Opening:	February 17, 2015
City Council approval:	March 4, 2015
Notice of Award:	March 5, 2015
Contractor delivers Contract, Bond and Insurance Cert.	March 12, 2015
Preconstruction meeting:	March 12, 2015
Begin work:	March 16, 2015
Final Completion:	May 29, 2015
Holidays:	May 25, 2015

SC-6 **Liquidated Damages:**

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

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** 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 a 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 is 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:** The daytime working hours are as follows:

Weekdays Only
7:00 a.m. to 5:00 p.m.

SC-8 **Permits:** The Contractor shall secure and pay for all permits, governmental fees and licenses necessary for the proper execution and completion of the work ***including the 5-2-1 Storm Water Construction Permit***. The City has applied for the Colorado Discharge Permit and will pay for associated costs.

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:

- **Detectable Warnings** (Wet Set Cast Iron Truncated Domes) Supplied by City installed by the Contractor.
- **Water Meter Yoke and Pit**- Supplied by City installed by the Contractor.
- **Bollard**-Supplied by City installed by the Contractor.

SC-11 **Project Newsletters:** None

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 project engineers, project managers 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.

SC-15 **Fugitive Petroleum or Other Contamination:** It is anticipated that soil contamination from fugitive petroleum or other contaminants 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*. A Traffic Control Plan shall be prepared by the Contractor and reviewed by the City two days prior to the pre-construction meeting.

SC-17 **Stockpiling Materials and Equipment:** All stockpiling/storage shall be in accordance with General Contract Condition Section 51.

SC-18 **Excess Materials:** All excess materials shall be disposed in accordance with General Contract Condition Section 50.

SC-19 **Clean-Up:** The Contractor is responsible for cleaning up all loose materials that have been swept into gutters and storm drains and onto sidewalks and driveways. The costs for all clean-up work shall be considered incidental and will not be paid for separately.

SC-20 **Existing Utilities and Structures:** Utilities were **not** potholed during design of this project. The location of existing utilities and structures shown on the Plans is approximate with the information gathered during design. It is the responsibility of the Contractor to pothole/locate and protect all structures and utilities in accordance with General Contract Condition Section 37.

SC-21 **Interruption of Utilities and Services:** The Contractor shall notify all City facilities affected by the interruption of utilities and other services caused by his operation. 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.

SC-22 **Discrepancy between Bid Schedule and Construction Notes:** In the event of a discrepancy between a Pay Item description in the Bid Schedule and the description for the same Pay Item in the drawings/construction notes; the language in the Bid Schedule shall govern or supersede that found elsewhere.

SC-23 **Incidental Items:** Any item of work not specifically identified or paid for directly, but which is necessary for the satisfactory completion of any paid items of work, will be considered as incidental to those items, and will be included in the cost of those items

SC-24 **Survey:** The City will provide construction staking. The Contractor shall give the City survey crew a minimum of 48 hours notice for all requested survey.

SC-25 **Work to be Performed by the City:**

- Irrigation
- Landscaping
- Striping
- Domestic Water Tap at 24" Waterline

SC-26 **Work to be Performed by the Others:**

- Xcel Energy– Site lighting and electrical supply adjacent to shelter.

SC-27 **Retainage:** The amount to be retained from partial payment shall be five (5) percent of the total value of the work completed as determined from the cumulative request for payment for the entire project.

SPECIAL PROVISIONS

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

Las Colonias Park Phase I

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 as follows:

SP-1 SECTION 201 – CLEARING AND GRUBBING

Section 201 of the Standard Specifications is hereby revised for this project as follows:

Subsection 201.04, add the following:

Clearing and grubbing shall be considered incidental to the construction of the Project and shall not be included in the bid schedule. This includes finish grading adjacent to the shelter and curb, gutter and sidewalk.

SP-2 SECTION 202 – REMOVAL OF STRUCTURES AND OBSTRUCTIONS

Section 202 of the Standard Specifications is hereby revised for this project as follows:

Subsection 202.01, add the following:

Abandon existing water service at main. Work includes excavation of service at the mainline, closure of corporation stop, service line crimped and the removal of the water meter pit and appurtenances. Meter pit and appurtenances shall be delivered to the City Water Department located at City Shops. Work shall also include placement of fill material in accordance with City specifications.

202.12 Basis of Payment

ADD THE FOLLOWING PAY ITEM TO THE TABLE:

Pay Item	Pay Item
Abandon Water Service	EA

SP-3 SECTION 203 – EXCAVATION AND EMBANKMENT

Section 203 of the Standard Specifications is hereby revised for this project as follows:

Subsection 203.01, add the following:

Earthwork for Quality Control Pond. Work shall include excavation and embankment necessary to construct facility per design. Facility shall be constructed prior to asphalt payment operations. See plan sheet 6 for detail.

203.14 Basis of Payment

ADD THE FOLLOWING PAY ITEM TO THE TABLE:

Pay Item	Pay Item
Earthwork for Water Quality Control Pond	LUMP

SP-4 SECTION 207 – TOPSOIL

Section 207 of the Standard Specifications is hereby revised for this project as follows:

Subsection 207.02, add the following:

Topsoil adjacent to sidewalk at dike. Native material generated onsite shall be stockpiled for topsoil "cap" over class 3 material adjacent to dike. Material shall be placed and compacted at a thickness of 6 inches.

Topsoil at back of sidewalk/curb. Place, grade and compact clean fill material in areas designated on plans. Material shall be placed 4" below finish grade of concrete.

207.04 Basis of Payment

ADD THE FOLLOWING PAY ITEM TO THE TABLE:

Pay Item	Pay Item
Topsoil (6" Thick) – Native Material Generated Onsite	SY
Topsoil (Clean Fill)(Thickness Varies)	TON

SP-5 SECTION 208 – EROSION CONTROL

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.

The lump sum price for Erosion Control (complete in place) shall be in full compensation for the Erosion Control Supervisor and all materials, labor and equipment required to furnish, install, maintain, remove and dispose of erosion and settlement control features and Best Management Practices (BMP's) in accordance with the Stormwater Management Plan (SWMP), local permit (5-2-1), and the contract documents.

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

Erosion Control (Complete in Place) shall include storm drain inlet protection, concrete washout structure, stabilized construction entrance and 100 feet of erosion log (12 inch).

SP-6 SECTION 601 – 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
- Water Cement Ratio to be batched no greater than 0.45.
- Field delivery water cement ratio greater than 0.47 will be subject to rejection.

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-7 SECTION 608 – CURBS, GUTTERS, SIDEWALKS, AND TRAILS

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, 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-8 GEOTECHNICAL TESTING

As part of this project the contractor shall be required to supply testing for Quality Control in accordance with the minimum frequencies defined by City of Grand Junction

Standard Specifications. The testing agency shall meet the minimum requirements as stated in the standard specifications section. A submittal of qualified personnel shall be turned in at the preconstruction meeting.

Method of Measurement:

Testing for quality control will not be measured but will be paid for on a lump sum basis.

Basis of Payment shall include the following:

Shall include random site locations not that shall meet the minimum frequencies set fourth in the Road and bridge section of the Standard specifications with the following addition: Portland Concrete shall be tested using the following frequencies:

Test Required	Test Frequency
Slump	Daily
Air	Daily
Water/Cement	Per Truck
Compressive Strength	Minimum of one per area location unless otherwise directed

A report shall be generated by the testing firm that documents tests including re-tests results or nay failed tests, included in the test shall be locations and results. The test shall be presented to the Project Engineer prior to final payment or acceptance of the project.

Pay Item	Pay Unit
Quality Control Testing	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:

SP-9 SECTION 103 – REMOVALS, EXCAVATION, BACKFILLING AND RESTORATION

Add the following:

103.16 Earth Backfill Material (Imported Trench Backfill).

Material excavated on site shall not be used in the trench backfill without approval by the Project Manager. The excavated material deemed unsuitable shall be hauled off site to a location secured by the Contractor and approved by the Project Manager. Imported Trench Backfill shall be pitrun or other approved material meeting the requirements of Section 103.16. During placement of imported backfill over the initial backfill material (Type A) that extends to 6 inches above the top of the pipe, the Contractor shall not place any rocks over 6 inches in diameter within the first 12 inches above the initial backfill material to protect the pipe from damage.

APPENDIX A

PROJECT SUBMITTAL FORM

PROJECT SUBMITTAL FORM

PROJECT: **Las Colonias Park Phase I**

CONTRACTOR: _____

PROJECT ENGINEER: Jerod Timothy

Description	Date Received	Resubmittal Requested	Resubmittal Received	Date Accepted
STREET CONSTRUCTION				
Pavement mix design				
Base course gradation (Class 6), Proctor curve				
Sub-base course gradation (Class 3), Proctor curve				
Concrete Mix Design (Curb, Gutter & Sidewalk)(Class D)				
STORM DRAINAGE CONSTRUCTION				
Pipe - 12” SDR 35				
Bedding gradation				
Backfill gradation, Proctor curve, plasticity index (PI)				
Inlet box				
Outlet Structure				
Grate & frame				
Concrete Flared End Section				

Description	Date Received	Resubmittal Requested	Resubmittal Received	Date Accepted

SEWER CONSTRUCTION

Pipe – 4” and 8” (SDR 35 PVC)				
Connectors				
Bedding gradation				
Backfill gradation, Proctor curve, plasticity index (PI)				
Manhole				
Ring and cover				
Pipe to manhole connection				
8” x 4” Full Body Wye				

WATER CONSTRUCTION

Pipe – 1 ½” (Blue Core) and 6” (C-900)				
Fittings, Bends and Tee’s				
Tapping Sleeve and Valve				
Valves - 6”				
Tracing Wire				
Bedding Gradation				
Backfill Gradation, Procter Curve, Plasticity Index (PI)				
Valve Box				
Fire Hydrant				
Corporation Stop				
Tapped Plug				
Curb Stop				

Description	Date Received	Resubmittal Requested	Resubmittal Received	Date Accepted

EROSION CONTROL / STORMWATER MANAGEMENT

Inlet Protection				
Erosion Log				
Construction Entrance				
Concrete Washout				

PERMITS, PLANS, OTHER

Traffic Control Plan				
Construction Schedule				
5-2-1 Permit				

APPENDIX B

SOILS REPORT

APPENDIX C

CONSTRUCTION STORM WATER MANAGEMENT PLAN

Construction Storm Water Management Plan

For

Project: Las Colonias Park Phase I

Project No.: _____

Project Code: _____

Owner: The City of Grand Junction

(970) 256-4082

CSWMP Preparer: Jerod Timothy, Project Manager

(970)-244-1565

Construction Stormwater Management Plan

For

Las Colonias Park Phase I

Introduction

This CSWMP for the Las Colonias Phase I project is formatted and presented consistent with Mesa County SWMM and State of Colorado SWMP criteria, and local guidance provided by the 5-2-1 Drainage Authority. There are no exceptions to State required inclusions in the plan. The following CSWMP is organized and presented as follows:

Section 1: Site Description

Section 2: Site Map (Storm Water Site Map in Appendix A)

Section 3: Stormwater Management Controls

Section 4: Final Stabilization

Section 5: Inspection and Maintenance Procedures

Appendix A: Storm Water Site Map

Appendix B: Site Photos (existing conditions)

Appendix C: Stormwater Inspection Forms

This CSWMP was prepared by Jerod Timothy, Project Manager, City of Grand Junction, Grand Junction, CO 970-244-1565

1. Site Description

a) The nature of the construction activity at the site. The description should include the physical location and address or cross streets, type of project, a summary of the grading activities, installation of utilities, paving, excavation, landscaping, and the final disposition of the property.

This project is located at 715 Struthers Avenue in Grand Junction, Colorado. This project generally consists of removing an existing parking lot, foundations and concrete slabs to be replaced with concrete curb, gutter, sidewalk, asphalt pavement and one restroom facility. This project will include minor excavation and grading (cut and fill) activities which for the most part includes placing aggregate base course material in order to establish the final subgrade elevation to build the curb, gutter and sidewalk and parking lot upon.

The parking lot will consist of both concrete and asphalt pavement with final landscaping consisting of sod, trees, shrubs and decorative rock.

Any additional work not mentioned may include clearing and grubbing within the project limits as shown on the construction plans, removing asphalt and concrete, excavation and embankment, and placing new concrete/asphalt pavement. Disturbances will be limited to the areas within the property owned by the City of Grand Junction.

The layout of the proposed parking lot and sidewalks is shown on the included Storm Water Site Map in Appendix A.

b) The proposed sequence for major activities. Describe the sequence of events involved in the construction project, such as grading, excavation, final landscaping, etc.

1. Demolition of existing asphalt parking lot.
2. Installation of utilities (power, water and sewer) for restroom/shelter.
3. Grading of the site. Cut and fill area's as necessary
4. Construction of restroom/shelter.
5. Final grading of select roadway base course material.
6. Dust control shall be utilized throughout the duration of the project during grading operations to control dust. The dirt shall not be overly watered to cause muddy conditions and soil tracking problems.
7. Layout and construction of concrete curb, gutter and sidewalk.
8. Asphalt paving operations.
9. Complete all miscellaneous site grading in preparation of final stabilization.
10. Install landscape at all areas located behind top back of curb and sidewalk.

11. Install traffic signs and parking striping.

c) Estimates of the total area of the site, and the area and location expected to be disturbed by clearing, excavation, grading, or other construction activities.

Approximate area to be disturbed by sidewalk and parking lot construction: 3 acres.

d) A summary of any existing data used in the development of the site construction plans or SWMP that describe the soil or existing potential for soil erosion.

According to the Natural Resources Conservation Service, the property consists of one type of soil. The soil type is Massadona silty clay loam, 0 to 2%.

The type of soil at this site would be characterized as NRCS Type Ba soil. The City did perform soils tests and the report is available if necessary. Information of the on-site soils was used in the development of the SWMP and BMP design.

e) A description of the existing vegetation at the site and an estimate of the percent vegetative ground cover.

Vegetation is minimal within the site boundary. The percentage of ground cover is estimated to be less than 40% (Native weeds & grasses).

f) The location and description of all potential pollution sources, including ground surface disturbing activities, vehicle fueling, storage of fertilizers or chemicals, etc.

During a large storm event, any sediment transported by stormwater would most likely follow the current land contours which drain to the southwest to an existing out fall pipe which leads to the Colorado River.

Demolition of existing asphalt along with grading operations will disturb soils causing potential for pollution. This exposed soil is a potential pollution source and will be handled with the installation of erosion logs at the outfall location (lowest point).

Construction workers trash is a possible pollution source. The ECS shall inspect the site daily for trash that can be a pollution source to the waterways. Any loose trash on-site shall be cleaned up and properly disposed of on a daily basis.

It will be the ECS responsibility to designate a specific area for fueling construction equipment and for the portable toilet during this project. Once the ECS determine the best place for a fueling area, the ECS shall mark the location on the construction drawings herein. The fueling area shall exhibit Best Management Practices in order to minimize and/or eliminate the potential of fuel spillage. Any spillage of fuel onto the ground shall be immediately cleaned up and the contaminated soil disposed of properly at the Mesa County Landfill. Refer to the Stormwater Management Manual.

There is the possibility that construction specific chemicals could be stored on site. These chemicals will have to be stored in a manner that protects the chemical containers from weather and the chemicals from spillage. It shall be the contractor's responsibility to protect any chemicals stored on site from spilling, leaking and wet weather. All chemicals stored on site shall be kept at least 50-feet away from the outfall pipe to the Colorado River.

g) The location and description of any anticipated allowable sources of non-stormwater discharge at the site, e.g., uncontaminated springs, landscape irrigation return flow, construction dewatering, and concrete washout.

The contractor and/or ECS shall determine the location of the concrete washout facility prior to any concrete pours. At a minimum, the washout facility shall be at least 100-feet away from any of the surface waters present on-site. It is the responsibility of the contractor to maintain and clean out the washout facility when the capacity reaches 50%.

h) The name of the receiving water (s) and the size, type and location of any outfall(s). If the stormwater discharge is to a municipal separate storm sewer system, the name of that system, the location of the storm sewer discharge, and the ultimate receiving water(s).

The majority of the stormwater runoff generated from the project site will enter into a side channel of the Colorado River. The side channel conveys water to the northwest and merges with the Colorado River. The Colorado River is the ultimate receiving waters for runoff generated at the project site.

The topography of the project site is relatively flat. It is believed that during construction the majority of stormwater will not flow into the side channel, but instead percolate into the ground.

2. Site Map

The SWMP must include a site map showing the entire area and identifying the following components:

a) Construction site boundaries;

A construction site boundary (disturbance boundary) is shown on the Storm Water
Site Map included in Appendix A.

b) All areas of ground surface disturbance;

Ground disturbance activities will be contained within the disturbance boundary shown on the Storm Water Site Map included in Appendix A.

c) Areas of cut and fill;

There is approximately 2000 cubic yards of cut area on this project. All cut areas are underlying the new parking lot and sidewalk locations. Following the removal of existing native material, the new parking lot and sidewalk areas will receive 6 inches of fill material brought in for base course purposes.

d) Areas used for storage of building materials, equipment, soil, or waste;

Storage location of building materials, equipment, soil, or waste will be determined by the ECS.

e) Locations of dedicated asphalt or concrete batch plants;

No dedicated asphalt or concrete batch plants will be located on this project site.

f) Locations of all structural BMPs;

See Storm Water Site Map in Appendix A for the locations of the structural BMP's.

g) Locations of non-structural BMPs as applicable; and

See Storm Water Site Map in Appendix A for the approximate locations of the non- structural BMP's.

h) Locations of springs, streams, wetlands and other surface waters.

See Storm Water Site Map in Appendix A for the location of Las Colonias Park and the outfall which leads to the side channel of the Colorado River.

3. Stormwater Management Controls

The SWMP must include a description of all stormwater management controls that will be implemented as part of the construction activity to control pollutants in stormwater discharges. The appropriateness and priorities of stormwater management controls in the SWMP shall reflect the potential pollutant sources identified at the facility. The description of the stormwater management controls shall address the following, at a minimum:

a) SWMP Administrator- The SWMP shall identify a specific individual(s), position, or title who is responsible for developing, implementing, maintaining, and revising the SWMP. The activities and responsibilities of the administrator shall address all aspects of the facility's SWMP.

The contractor shall assign to the project an individual to serve in the capacity of the ECS.

b) Identification of Potential Pollution Sources- All potential pollutant sources, including materials and activities, at a site must be evaluated for the potential to contribute pollutants to stormwater discharges. The

SWMP shall identify and describe those sources determined to have the potential to contribute pollutants to stormwater discharges, and the sources must be controlled through BMP selection and implementation, as required in paragraph (c) below. At a <u>minimum</u> each of the following sources and activities shall be evaluated for the potential to contribute pollutants to stormwater discharges, and identified in the SWMP if found to have such potential:

1) all disturbed and stored soils;

Disturbed soils will be present during this project and will have the potential to contribute sediment to stormwater runoff and contribute to windblown dust. All disturbed soils will be confined by existing vegetation and the outfall of the site shall have erosion logs in place as a BMP as shown on the SWMP within the construction plans or where deemed appropriate to protect the Colorado River from sediment runoff. As soon as it is practical, the City shall start the sod process.

Stockpiled materials will have adequate erosion protection at the base of the stockpile. ECS shall specify on the Site Map.

2) vehicle tracking of sediments;

Vehicle tracking of sediments is a potential pollutant source in stormwater on this project.

A Stabilized construction entrance (tracking pad) shall be employed during construction. Refer to Stormwater Management Manual.

3) management of contaminated soils;

To the knowledge of the City of Grand Junction, there should be no contaminated soils encountered during construction. Any spillage of fuel or hydraulic fluid onto the ground shall be immediately cleaned up and the contaminated soil disposed of properly at the Mesa County Landfill. The City of Grand Junction's Hazardous Materials Division shall be immediately contacted upon any major spillage of hazardous material. Call 970-244-1470 for Hazardous Material spills.

4) loading and unloading operations;

Loading and unloading operations will occur during this project and have the potential to contribute to dust and vehicle tracking onto the streets. Stabilized construction entrances (tracking pads) shall be employed during construction. The tracking pads shall be maintained throughout construction in order to maintain their cleaning effectiveness.

5) Outdoor storage activities (building materials, fertilizers, chemicals, etc.)

It is unknown at this time if the contractor will provide a construction trailer for this project.

Due to the nature of this project, construction chemicals are not anticipated to be present on-site. Any of the materials to be installed or used for the construction of the shelter, parking lot and sidewalk improvements shall be stored in a designated area to be protected by 6 foot chain link fencing. Any contaminants shall be contained at all times within a spillproof and waterproof container when not being used. Chemicals shall not be stored within 50-feet of outfall.

6) vehicle and equipment maintenance and fueling;

It is anticipated that equipment maintenance will be done on-site. The contractor and ECS shall designate a specific location for fueling and maintenance of equipment.

7) significant dust or particulate generating processes;

The Contractor shall apply water as needed for dust control.

8) routine maintenance activities involving fertilizers, pesticides, detergents, fuels, solvents, oils, etc.;

It is anticipated that equipment maintenance will be done on-site. The contractor and ECS shall designate a specific location for fueling and maintenance of equipment. Management of contaminated soils as a result of equipment maintenance shall be handled per section 3 above, “management of contaminated soils.”

9) On-site waste management practices (waste piles, liquid wastes, dumpsters, etc.);

Provide an on-site covered trash receptacle.

10) concrete truck/equipment washing, including concrete truck chute and associated fixtures and equipment;

A portable concrete washout facility may be used. Detail to be provided by the ECS.

11) dedicated asphalt and concrete batch plants;

No dedicated asphalt or concrete batch plants will be located on this project site.

12) non-industrial waste sources such as worker trash and portable toilets;

One portable toilet is required to be on-site. Location for the portable toilet shall be at least 50-feet from the surface waters and proper precautions taking to prevent from being windblown.

13) Other areas or procedures where potential spills can occur.

No other potential stormwater discharges are known at this time.

c) Best Management Practices. The SWMP shall identify and describe appropriate BMPs, including, but not limited to, those required by paragraphs 1 through 8 below, that will be implemented at the facility to reduce the potential of the sources identified in part b, above, to contribute pollutants to stormwater discharges. The SWMP shall clearly describe the installation and implementation specifications for each BMP identified in the SWMP to ensure proper implementation, operation, and maintenance of the BMP.

1. Structural Practices for Erosion Control. The SWMP shall clearly describe and locate all structural practices implemented at the site to minimize erosion and sediment transport. Practices may include, but are not limited to: straw bales, wattles/sediment control logs, silt fences, earth dikes, drainage swales, sediment traps, subsurface drains, pipe slope drains, inlet protection, outlet protection, gabions, and temporary or permanent sediment basins.

1. Erosion Logs: Reference the preliminary locations, design, installation, and maintenance of these barriers on the Stormwater Site Map. Erosion logs shall be installed at the location shown on the Stormwater Site Map prior to clearing and grubbing operations.
2. Stabilized Construction Entrance (tracking pad): Reference the preliminary location, design, installation, and maintenance of the tracking pad on the Storm Water Site Map. The tracking pad may need to be lengthened during construction if the dimensions provided in the plans are not adequate for sediment removal from vehicle tires. The tracking pad need to be installed before any construction vehicles start entering and leaving the site for hauling operations.
3. Outfall Pipe Protection (ErosionLogs): Reference the locations, design, installation, and maintenance of the erosion logs on the Storm Water Site Map. The contractor shall install erosion logs per the details shown on the Storm Water Site Map. It is the responsibility of the contractor to maintain the erosion logs when/if damaged.
4. Concrete Washout Facility: The contractor and/or ECS shall determine the location of the concrete washout facility prior to any concrete pours. At a minimum, the washout facility shall be at least 50-feet away from any of the surface waters present on-site. It is the responsibility of the contractor to maintain the washout facility.

2) Non-Structural Practices for Erosion and Sediment Control. The SWMP shall clearly describe and locate, as applicable, all non-structural practices implemented at the site to minimize erosion and sediment transport. Description must include interim and permanent stabilization practices, and site-specific scheduling for implementation of the practices. The SWMP should include practices to ensure that existing vegetation is preserved where possible. Non-structural practices may include, but are not limited to: temporary vegetation, permanent vegetation, mulching, geotextiles, sod stabilization, slope roughening, vegetative buffer strips, protection of trees, and preservation of mature vegetation.

1. Dust Abatement: Watering operations to reduce windborne dust. Dust abatement will be used throughout the course of this construction project.
2. Landscaping: Structural BMP's will be completed with landscaping.
3. Preserving Native Vegetation: Minimize existing vegetation disturbance.

3) <u>Phased BMP Implementation</u> The SWMP shall clearly describe the relationship between the phases of construction, and the implementation and maintenance of both structural and non-structural stormwater management controls. The SWMP must identify the stormwater management controls to be implemented during the project phases, which can include, but are not limited to, clearing and grubbing; road construction; utility and infrastructure installation; vertical construction; final grading; and final stabilization.

1. <u>Tracking Pad Installation:</u> The contractor shall install tracking pad as shown on the Stormwater Site Map.
2. <u>Asphalt Removal Operations:</u> It's anticipated that the contractor will first start asphalt removal operations. Before any materials are to be removed, the contractor shall install BMP's at outfall pipe.
3. <u>Clearing and Grubbing Operations:</u> It's anticipated that the contractor will then start with clearing and grubbing operations. The BMP's that need to be installed for clearing and grubbing operations shall be in place prior to construction.
4. <u>Shelter and Utility Construction:</u> BMP's at outfall structure shall be in place prior to any disturbance.
5. <u>Concrete Pavement Operations:</u> The contractor shall have a concrete washout facility prior to any concrete being placed. A disposable, portable concrete washout facility is appropriate for use.
6. <u>Parking Lot Construction:</u> Dust abatement, tracking pads and inlet basin protection shall be implemented.

4) <u>Materials Handling and Spill Prevention.</u> The SWMP shall clearly describe and locate all practices implemented at the site to minimize impacts from procedures or significant materials that could contribute pollutants to runoff. Such procedures or significant materials could include: exposed storage of building materials; paints and solvents; fertilizers or chemicals; waste material; and equipment maintenance or fueling procedures. Areas or procedures where potential spills can occur <u>must</u> have spill prevention and response procedures identified in the SWMP.

To the knowledge of the City of Grand Junction, there should be no contaminated soils encountered during construction. Any spillage of fuel or hydraulic fluid onto the ground shall be immediately cleaned up and the contaminated soil disposed of properly at the Mesa County Landfill. The City of Grand Junction's Hazardous Materials Division shall be immediately contacted upon any major spillage of hazardous material. Call 970-244-1470 for Hazardous Material spills. Refer to the Stormwater Management Manual.

The contractor will be responsible for providing spill clean-up materials and spill prevention and response procedures. The spill prevention and pollution control plans developed by the contractor must be available on-site at all times. The ECS shall refer to section 208.06, Materials Handling and Spill Prevention, of the CDOT specifications for developing the materials and spill prevention response procedure.

5) <u>Dedicated Concrete or Asphalt Batch Plants.</u> The SWMP shall clearly describe and locate all practices implemented at the site to control stormwater pollution from dedicated concrete batch plants or dedicated asphalt batch plants covered by this certification.

No dedicated asphalt or concrete batch plants will be located on this project site.

6) <u>Vehicle Tracking Control</u>. The SWMP shall clearly describe and locate all practices implemented at the site to control potential sediment discharges from vehicle tracking. Practices must be implemented for all areas of potential vehicle tracking, and can include: minimizing site access; street sweeping or scraping; tracking pads; graveled parking areas; requiring that vehicles stay on paved areas on-site; wash racks; contractor education; and/or sediment control BMPs, etc.

There is one direction that the contractor can access the project site from. Currently there is one vehicle tracking pad shown on the Storm Water Site Map. The tracking pad shall be installed to the minimum dimensions and details shown on the Storm Water Site Map.

7) <u>Waste Management and Disposal, Including Concrete Washout.</u> The SWMP shall clearly describe and locate the practices implemented at the site to control stormwater pollution from <u>all</u> construction site wastes (liquid and solid), including concrete washout activities. The practices used for concrete washout must ensure that these activities do not result in the contribution of pollutants associated with the washing activity to stormwater runoff. The SWMP shall clearly describe and locate the practices to be used that will ensure that no washout water from concrete washout activities is discharged from the site as surface runoff or to surface waters.

The contractor will be required to provide one portable toilet for the duration of the project and it shall be maintained throughout construction.

A covered trash receptacle is required.

The concrete washout facility shall be at least 50-feet away from any of the surface waters present on-site. It is the responsibility of the contractor to maintain the washout facility.

8) <u>Groundwater and Stormwater Dewatering</u>. The SWMP shall clearly describe and locate the practices implemented at the site to control stormwater pollution from the dewatering of groundwater or stormwater from excavations, wells, etc. Part I.D.3.d of the permit authorizes the conditional discharge of construction dewatering to the ground. For any construction dewatering of groundwater not authorized under a separate CDPS discharge permit, the SWMP shall clearly describe and locate the practices to be used that will ensure that no groundwater from construction dewatering is discharged from the site as surface runoff or to surface waters.

It is not anticipated that the contractor will not encounter groundwater due to such shallow excavation parameters.

Groundwater cannot be discharged to the surface unless the discharged water is not carrying sediment or other pollution.

4. Final Stabilization and Long-term Stormwater Management

a) The SWMP shall clearly describe the practices used to achieve final stabilization of all disturbed areas at the site, and any planned practices to control pollutants in stormwater discharges that will occur after construction operations have been completed at the site. b) Final stabilization practices for obtaining a vegetative cover should include, as appropriate: seed mix selection and application methods; soil preparation and amendments; soil stabilization practices (e.g. crimed straw, hydro mulch or rolled erosion control products); and appropriate sediment control BMPs as needed until final stabilization is achieved; etc.

Final stabilization will be achieved with landscaping. The City of Grand Junction parks crews will supply and install sod.

c) Final stabilization is reached when all ground surface disturbing activities at the site have been completed, and uniform vegetative cover has been established within an individual plant density of at least 70 percent of pre-disturbance levels, or equivalent permanent, physical erosion reduction methods have been employed.

Final stabilization will be achieved by landscaping shown on the Stormwater Site Map

5. Inspection and Maintenance Procedures

a) The SWMP shall clearly describe the inspection and maintenance procedures implemented at the site to maintain all erosion and sediment control practices and other protective practices identified in the SWMP, in good and effective operation condition.

1. The ECS shall at a minimum inspect and document the project stormwater management system every 14 days and within 24 hours after a precipitation or snowmelt event that causes erosion.

2. The inspections shall include but not limited to observation of:
   - The construction site perimeter and discharge points (including discharges into a storm sewer system)
   - All disturbed areas and making sure the proper BMP is being used, is in the right location, and is installed per the plans.

- Areas used for material/waste storage that are exposed to precipitation.
- Other areas determined to have a significant potential for stormwater pollution, such as the concrete washout facility, tracking pad, and the areas around out fall pipe to Colorado River.
- Erosion and sediment control measures identified on the Storm Water Site Map.
- The inspection must determine if there is evidence of, or the potential for, pollutants entering the drainage system.
- BMP's should be reviewed to determine if they still meet the design and operational criteria in the SWMP, and if they continue to adequately control the stormwater runoff at the site.

APPENDIX A

Storm Water Site Map

STRUTHERS AVENUE

CP /PK/
N 31240.4322
E 92640.45
EL 4568.90

PROJECT NO. _____

CONSTRUCTION NOTES

During Construction (Temporary Measures)

1. BMP Erection Log – The use of erosion logs is proposed at the downhill area of the development outflow throughout most areas to help control sediment from construction site. Exact log spill and undulating challenge ways.

2. Solid Waste Containment – Litter or debris-like BMP Maintenance shall include a temporary Solid Waste Filters. The Solid Waste Filters shall remain in place until the project has been completely paved and all dirt moving operations are complete. The Filters shall be maintained by the Contractor, and the filter shall be either replaced or cleaned when the filter capacity reaches 1/2 of the total capacity.

3. Vehicle Tracking – The contractor shall stop daily any vehicles or equipment tracking on roads or pavement to limit vehicle tracking upon roadway surface. At a minimum a vehicle tracking pad shall be installed at the entrance/exit to the proposed parking lots.

After Construction (Permanent Measures)

1. Inspection and Maintenance shall be required for all permanent BMPs and shall be done by the owner.

General Notes

1. Any poor vegetation and erosion prevention measures for permanent controlled provisions of BMPs. The Contractor may implement these requirements as appropriate for specific circumstances and activities and different phases of construction. Any changes to the provisions above, or their plan must be reviewed by the Project Inspector/Manager prior to implementation.

2. A copy of the SWMP, stormwater permits and construction plans shall be maintained on site at all times.

Maintenance

1. The Contractor's Erosion Control Supervisor shall make routine checks on all erosion control measures on December 15 (spring or equivalent to occupancy).
2. Inspection Records or Maintenance Activities. Weather control measures are to be recorded by the Erosion Control Supervisor. If repairs are needed, they shall be completed immediately.
3. Silt and sediment shall be removed when they reach a height of one-half of the barrier (check dam, silt fence, sediment basin hole or wooden control log).
4. When temporary measures are to be removed, any silt and sediment deposits shall be removed and spread evenly in BMP areas.

General Notes

1. At all times during construction, erosion and sediment control shall be maintained by the Contractor or his assigns (general superintendent).
2. Erosion control system shall be installed on grading equipment.
3. Copyright above any property pay. Other or necessary to any field changes.
4. Materials Handled by Contractor other than stockpiling wastes caused by the steps grading to be monitored and recorded by the Contractor and/or Erosion Control Supervisor.

NOTES:

1. THE CONTRACTOR SHALL MAINTAIN THIS SET OF SWMP PLANS PER BUILDING AND CONTINUOUSLY UPDATING THE PLANS TO SHOW THE CURRENT BMP'S WORK LOCATIONS. THE APPROVED SET OF SWMP PLANS SHALL BE KEPT ONSITE AT ALL TIMES AND AVAILABLE FOR INSPECTION BY THE PROJECT ENGINEER, PROJECT INSPECTOR AND REGULATORY ENFORCEMENT PERSONNEL.

2. WHERE CONSTRUCTION FLUIDS, THE EOR SHALL DESIGNATE AREAS TO BE REMOVED. THE EQUIPMENT FUELING AND MAINTENANCE AREA, THE FUELING AND MAINTENANCE AREA NEEDS TO BE A MINIMUM OF 100-FOOT AWAY FROM ANY SURFACE WATER FEATURES. THE EOR SHALL LABEL ON THE SWMP THE LOCATION OF THE FUELING/MAINTENANCE AREA.

GENERAL NOTES:

1. THE CONTRACTOR SHALL NAMING TO THE PROJECT AN INDIVIDUAL TO SERVE IN THE CAPACITY OF THE EROSION CONTROL SUPERVISOR (ECS). THE ECS SHALL BE EXPERIENCED IN ALL ASPECTS OF IMPLEMENTATION AND HAVE SUCCESSFULLY COMPLETED AN ECS TRAINING PROGRAM APPROVED BY THE CITY. PREVIOUS EXPERIENCE, OTHER THAN ECS, ENFORCEMENT AND MUST SHALL BE SUBMITTED TO THE ENGINEER PRIOR TO CONSTRUCTION STARTING. THE ECS SHALL NOT BE THE SWMP ADMINISTRATOR ON THE PROJECT.

2. THE CONTRACTOR MAY NOT USE AREAS ON SITE DESIGNATED AT THE PRESERVATION AREAS FOR STOCKPILING MATERIALS, EQUIPMENT STORAGE. THE CONTRACTOR MAY OBTAIN OTHER AREAS FOR STAGING AND STOCKPILE, BUT WILL HAVE TO AMEND THE STORM WATER MANAGEMENT PLAN ACCORDINGLY.

3. THE CONTRACTOR CAN EVACUATE A BASIN FOR THE VARIOUS OUT OF DOMESTIC TRUCKS. WATER FROM THE BASIN MAY BE APPLIED TO THE ROADWAY BASE OF SUBGRADE, OUTSIDE OF AREAS TO BE SEEDED OR LANDSCAPED, IN A MANNER SO THE WATER DOES NOT POND OR FLOW OFF. A PORTABLE CONCRETE WASHOUT FACILITY IS ALSO ACCEPTABLE.

4. THE CONTRACTOR SHALL KEEP ALL FUELING AND LUBRICATION OPERATIONS ON THE EAST SIDE OF LOWER CREEK AT LEAST 50 FEET EAST OF MAINTAINED CHANNELS. INDIVIDUAL INDIVIDUAL SHEETS ARE TO BE SHOWN FOR EACH LOCATION, THE CONTRACTOR SHALL NOTE ON THE IMPLEMENTATION PLANS THE LOCATIONS AND TYPES OF BMPS AS THEY ARE INSTALLED AND IMPLEMENTED.

5. PERIMETER SEDIMENT BARRIERS/BMPS CONTINUE FOR ALL STOCKPILES OF MATERIALS USING MATERIAL SILT FENCES, GRADING CONTROLS AND OTHERS.

6. PREVENT TRACK SEDIMENT VIA DUST CONTROL MEASURES, PERIODIC STREET SWEEPING FOR PURPOSE SEDIMENT NOT CONTAINED VIA OTHER BMPS.

7. MANAGE STORM WATER RUN-ON USING MEASURES SUCH AS DIVERSION LOGS, BERTILES, GRADING CONTROLS, BYPASSES AND OTHERS.

8. PROTECT ALL WATER INTO PLAY MAY EXCEED PER DETAIL.

DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY	HNC	DATE	01-2012
DESIGNED BY	JKT	DATE	01-2012
CHECKED BY		DATE	
APPROVED BY		DATE	

REVISED PLAN SHEETS

City of Grand Junction Colorado

PUBLIC WORKS AND PLANNING ENGINEERING DIVISION

LAS COLONIAS PARK PHASE I
STORM WATER SITE MAP

1

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APPENDIX B

Existing Site Photos (Pre-construction)

1) Looking southeast from the north side of Struthers Avenue. Proposed northerly parking lot location.

2) Looking south from north side of Struthers Avenue. Proposed entrance to park.

3) Photo looking north from southerly end. Shelter, parking lot and roadway to be located in this vicinity.

4) Photo looking east. Proposed location of overflow parking lot and sidewalk.

5) Outfall structure located at the southwest corner of the project.

6) Photo looking south at ditch leading to side channel of the Colorado River.

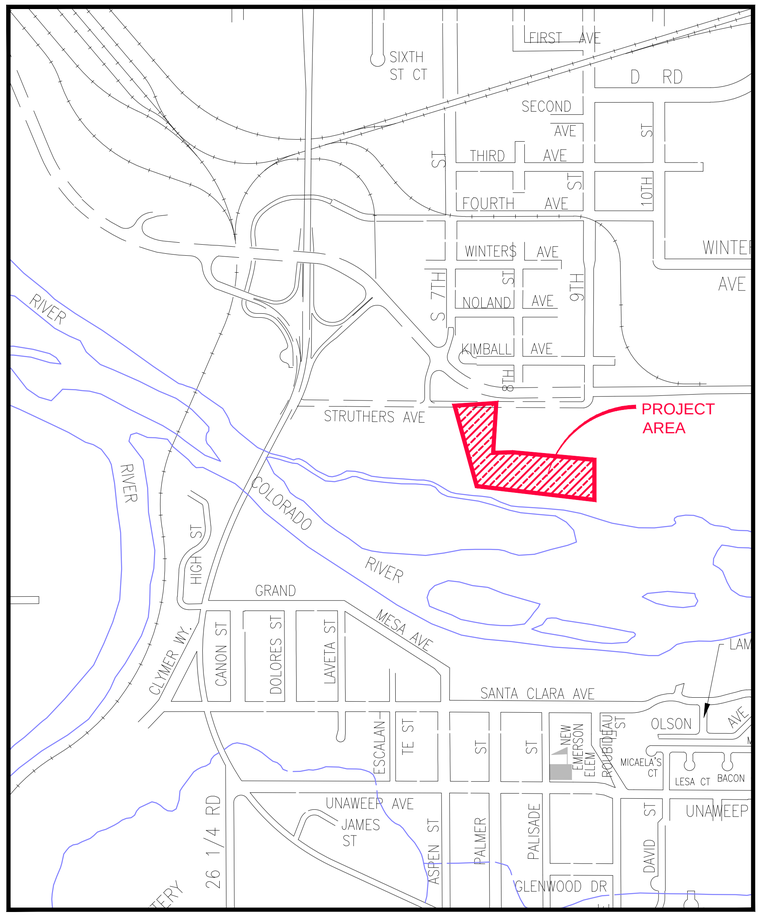
APPENDIX C

Stormwater Inspection Forms
(Contractor will be supplied a fillable form prior to construction)

PROJECT NO. _____

LAS COLONIAS PARK
PHASE I
JANUARY, 2015

VICINITY MAP



N.T.S.

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
CHARTER	CHUCK WEIDMAN	MANAGER	CABLE TV	2502 FORESIGHT CIRCLE	2502 FORESIGHT CIRCLE	GRAND JCT., CO 81504	(970) 245–8750	(970) 245–6803
CENTURY LINK	CHRIS JOHNSON	ENGINEER	TELEPHONE	2524 BLICHMANN AVE	2524 BLICHMANN AVE	GRAND JCT., CO 81504	(970) 244–4311	(970) 240–4349
XCEL	JON PRICE	ENGINEER	ELECTRICAL	2538 BLICHMANN AVE	2538 BLICHMANN AVE	GRAND JCT., CO 81506	(970) 244–2693	(970) 244–2661

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	

Public Works & Utilities
Engineering Division

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:\landproj\LAS COLONIAS PARK\Las Colonias Phase I\Dwg\LAS COLONIAS PARK PHASE I.dwg, 1/29/2015 3:54:15 PM

PROJECT NO. _____

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 ASB ASB ASB ASB

BSWMP
SILT FENCE — SF SF SF SF 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 EARTH 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

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) — 4" IRR

PIPE (SIPHON) — 4" 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) — W (ABANDONED) 8" W

UTILITY LINE (CABLE TV) — TV TV

UTILITY LINE (ELECTRIC) — E E

UTILITY LINE (FIBER OPTIC) — FO QWEST FO

UTILITY LINE (GAS) — G 1 1/4" MW G

UTILITY LINE (HIGH VOLTAGE OVERHEAD POWER) — HVOHP

UTILITY LINE (OVERHEAD POWER) — OHP

UTILITY LINE (OVERHEAD TELEPHONE) — OHT

UTILITY LINE (SANITARY SEWER) — 8" SAN

UTILITY LINE (SANITARY SEWER FORCE MAIN) — 8" FM

UTILITY LINE (SANITARY SEWER SERVICE) — SS

UTILITY LINE (STORM SEWER) — 8" STM

UTILITY LINE (STORM SEWER, PERFORATED) — 6" PERF

UTILITY LINE (STORM/SANITARY SEWER SEWER COMBINATION) — 18" COMB

UTILITY LINE (TELEPHONE) — T T

UTILITY LINE (WATER) — W 8" W

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) — GV

VALVE (IRRIGATION) — IRR

VALVE (WATER)

VEGETATION (HEDGE OR BUSH)

VEGETATION (TREE STUMP)

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

WATER HYDRANT — WH

WEIR

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 HMC DATE 01-2015
DESIGNED BY JKT DATE 01-2015
CHECKED BY _____ DATE _____
APPROVED BY _____ DATE _____

SCALE
PLAN: HORIZ. 1"=20'
PROFILE: HORIZ. _____ VERT. _____

CITY OF Grand Junction COLORADO

PUBLIC WORKS AND PLANNING ENGINEERING DIVISION

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

2

N:\landproj\LAS COLONIAS PARK\Las Colonias Phase 1\Dwg\LAS COLONIAS PARK PHASE 1.dwg, 1/29/2015 3:54:27 PM

PROJECT NO. _____

Bid Schedule: Las Colonias Park Phase I

Contractor:_____

Item No.	CDOT, City Ref.	Description	Quantity	Units	Unit Price	Total Price
1	108.2	4" Sewer Service Pipe (SDR 35 PVC) Includes type A bedding, haunching, intitial backfill and trench backfill.	54.	LF	$ _____	$ _____
2	108.2	8" Sewer Service Pipe (SDR 35 PVC) Includes type A bedding, haunching, intitial backfill and trench backfill.	400.	LF	$ _____	$ _____
3	108.2	6" Water Pipe (C-900 PVC) Includes type A bedding, haunching, intitial backfill and trench backfill.	260.	LF	$ _____	$ _____
4	108.2	12" Storm Drain Pipe (SDR 35 PVC)	65.	LF	$ _____	$ _____
5	108.2	12" Culvert End Section (Flared)(Concrete)	1.	EA	$ _____	$ _____
6	108.2	Import Trench Backfill	414.	TON	$ _____	$ _____
7	108.3	8" X 4" Sewer Service Tap (Full Body Wye)	1.	EA	$ _____	$ _____
8	108.3	6" Gate Valve	1.	EA	$ _____	$ _____
9	108.3	6", 90-Degree Elbow	2.	EA	$ _____	$ _____
10	108.3	24" x 6" Tapping Sleeve and Valve	1.	EA	$ _____	$ _____
11	108.3	Fire Hydrant	1.	EA	$ _____	$ _____
12	108.3	6" x 6" Tee	1.	EA	$ _____	$ _____
13	108.3	6" x 2" Tapped Plug	1.	EA	$ _____	$ _____
14	108.3	2" x 1 1/2" (Bushing) Tapped Plug to Corporation Stop	1.	EA	$ _____	$ _____
15	108.3	1 1/2" x 1 1/2" Tee	1.	EA	$ _____	$ _____
16	108.3	1 1/2" x 12" Brass Nipple	2.	EA	$ _____	$ _____
17	108.3	Compression Fitting (1 1/2" Brass to 1 1/2" Pure Core)	1.	EA	$ _____	$ _____
18	108.4	1 1/2" Corporation Stop	1.	EA	$ _____	$ _____
19	108.4	1 1/2" Curb Stop	1.	EA	$ _____	$ _____
20	108.4	Meter Pit (Install Only)	1.	EA	$ _____	$ _____
21	108.4	1.5" Natural Virgin Core with Blue Virgin Exterior	120.	LF	$ _____	$ _____
22	108.5	Sanitary Sewer Basic Manhole (48" I.D.)	2.	EA	$ _____	$ _____
23	108.5	Manhole Barrel Section (D>5') (48" I.D.)	2.5	VLF	$ _____	$ _____
24	108.5	Sanitary Sewer Basic Manhole (60" I.D.) (Cast In Place Base) See Standard Contract Documents SS-02.	1.	EA	$ _____	$ _____
25	108.5	Manhole Barrel Section (D>5') (60" I.D.)	5.2	VLF	$ _____	$ _____
26	108.6	Single Storm Drain Inlet (Vertical Curb)	1.	EA	$ _____	$ _____
27	108.6	Water Quality Outfall Structure - Refer to Plan Sheet 6 for Detail.	1.	EA	$ _____	$ _____
28	108.7	Granular Stabilization Material (Type B)(Crushed Rock) (Includes Haul and Disposal of Unsuitable Excavated Material)	110.	TON	$ _____	$ _____
29	202	Removal of Structures and Obstructions - Abandon Water Service (See SP - 2)	2.	EA	$ _____	$ _____
30	203	Excavation and Embankment-Disposal of Radioactive Materials	200.	CY	$ _____	$ _____
31	203	Excavation and Embankment-Earthwork for Water Quality Conrol Pond - Refer to Plan Sheet 6 for Detail. (See SP - 3)	1.	LUMP	$ _____	$ _____
32	304	Aggregate Base Course (Class 3)	3,800.	TON	$ _____	$ _____
33	207	Topsoil (Clean Fill) (Thickness Varies) (See SP-4)	740.	TON	$ _____	$ _____
34	207	Topsoil (6" Thick) - Native Material Generated Onsite. Refer to Plan Sheet 11 for Detail (See Sp - 4).	600.	SY	$ _____	$ _____
35	208	Erosion Control (Complete in Place) (See SP -5).	1.	LUMP	$ _____	$ _____
36	210	Reset Structures - Adjust Sanitary Manhole to Finish Grade	1.	EA	$ _____	$ _____
37	210	Remove/Reset 6' Chain Link Fence	20.	LF	$ _____	$ _____
38	304/401	Hot Mix Asphalt (3" Thick) (Grading SX, Binder Grade PG 64-22) to Include Class 6 Aggregate Base Course (6" Thick)	4,015.	SY	$ _____	$ _____
39	420	Geosynthetics - Mirafi 500x	100.	SY	$ _____	$ _____
40	306	Reconditioning -Scarify and Recompact 12" of Material	5,828.	SY	$ _____	$ _____
41	506	Cobble Stone (6 Inch Dia.) - Stone Shall Cover Bottom of Water Quality Pond.	100.	SY	$ _____	$ _____
42	608	Concrete Intersection Corner (8" Thick) to Include Class 6 Aggregate Base Course (6" Thick)	106.	SY	$ _____	$ _____
43	608	Concrete Curb and Gutter (1.5' Wide) to Include Class 6 Aggregate Base Course (6" Thick)	478.	LF	$ _____	$ _____
44	608	Concrete Curb and Gutter (2' Wide) with Dowels to Include Class 6 Aggregate Base Course (6" Thick)	593.	LF	$ _____	$ _____
45	608	Concrete Curb and Gutter (2' Wide) to Include Class 6 Aggregate Base Course (6" Thick)	1,362.	LF	$ _____	$ _____
46	608	Concrete Drainage Pan (6' Wide) to Include Class 6 Aggregate Base Course (6" Thick)	42.	SY	$ _____	$ _____
47	608	Concrete Sidewalk (4" Thick) to Include Class 6 Aggregate Base Course (6" Thick)	1,790.	SY	$ _____	$ _____
48	608	Concrete Coner Fillet to Include Class 6 Aggregate Base Course (6" Thick)	52.	SY	$ _____	$ _____
49	608	Concrete Curb Ramp to Include Class 6 Aggregate Base Course (6" Thick)	91.	SY	$ _____	$ _____
50	608	Detectable Warning (Wet Set)(City Supplied)	10.	EA	$ _____	$ _____
51	620	Portable Sanitary Facility	1.	LUMP	$ _____	$ _____
52	626	Mobilization	1.	LUMP	$ _____	$ _____
53	630	Construction Zone Traffic Control	1.	LUMP	$ _____	$ _____
54	630	Traffic Control Plan	1.	LUMP	$ _____	$ _____
55	SP-1	Quality Control Testing (Geotechnical Testing)(SP-8). Part Time Inspection Frequencies Shall Apply. See City of Grand Junction Standard Contract Documents R&B 3 for Frequencies.	1.	LUMP	$ _____	$ _____
56	SP-2	4" Conduit (PVC) Per Plan for Future Irrigation	100.	LF	$ _____	$ _____
57	SP-3	Bollard (City Supplied)	1.	EA	$ _____	$ _____
58	SP-4	Trenching and Backfill for Electrical Utilities Per Plan (18"w x 36"d)	304.	LF	$ _____	$ _____
59	SP-5	Trenching and Backfill for Electrical Utilities Per Plan (18"w x 48"d)	418.	LF	$ _____	$ _____
MCR		Minor Contract Revisions	---	---	---	$ 30,000.00

Bid Amount: $ _____

Bid Amount:

_____ **dollars**

DESCRIPTION	DATE
REVISION 1	–
REVISION 2	–
REVISION 3	–
REVISION 4	–

DRAWN BY HMC DATE 01-2015
DESIGNED BY JKT DATE 01-2015
CHECKED BY _____ DATE _____
APPROVED BY _____ DATE _____

SCALE
N.T.S.

CITY OF Grand Junction COLORADO

PUBLIC WORKS AND PLANNING ENGINEERING DIVISION

LAS COLONIAS PARK PHASE I
SUMMARY OF APPROXIMATE QUANTITIES

CP /PK STRUTHERS/
N 31573.8612
E 92517.39
EL 4569.59

STRUTHERS AVENUE

S 9TH ST.

2945-234-00-947
715 STRUTHERS AVE
GRAND JUNCTION 81501
CITY OF GRAND JUNCTION

2945-234-11-002
745 STRUTHERS AVE
GRAND JUNCTION 81501
RANDALL VIOLET I

2945-234-00-029
805 STRUTHERS AVE
GRAND JUNCTION 81501
STRUTHERS HOLDINGS LLC

2945-234-38-001
859 STRUTHERS AVE
GRAND JUNCTION 81501
859 STRUTHERS LLC

2945-234-38-001
859 STRUTHERS AVE
GRAND JUNCTION 81501
859 STRUTHERS LLC

2945-234-18-002
905 STRUTHERS AVE
GRAND JUNCTION 81501
905 STRUTHERS LLC

CP /PK/
N 31240.4322
E 92640.45
EL 4568.90

CP /PK/
N 31028.6452
E 92551.22
EL 4576.88

CP /PK/
N 30995.6562
E 92907.23
EL 4577.18

DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 01-2015
DESIGNED BY JKT DATE 01-2015
CHECKED BY DATE
APPROVED BY DATE

SCALES:
PLAN
HORIZONTAL
0 10 20 40

CITY OF Grand Junction COLORADO

PUBLIC WORKS
AND PLANNING
ENGINEERING DIVISION

LAS COLONIAS PARK PHASE I
SITE PLAN

4

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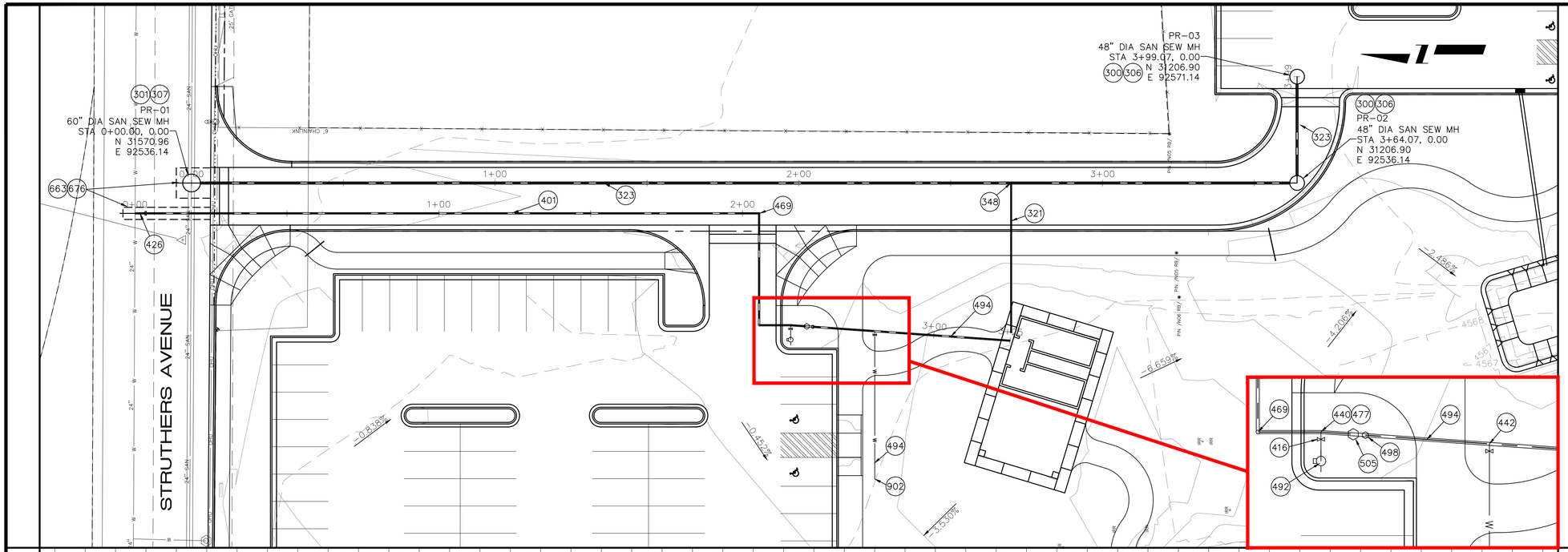
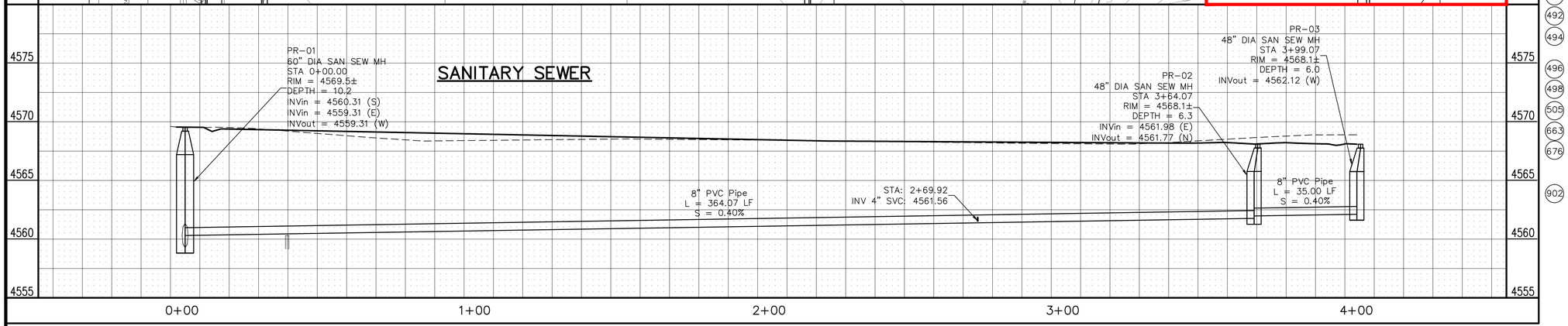
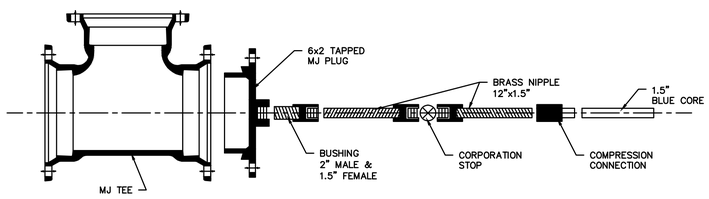




WATER SERVICE CONNECTION DETAIL

N.T.S.



PROJECT NO. _____

CONSTRUCTION NOTES

(300) 102.11/108.5 – SANITARY SEWER BASIC MANHOLE (48" I.D.). INCLUDES CONNECTION OF ADJACENT SEWER LINE, FORMING INVERTS AND ADJUSTING TO FINAL GRADE. (SEE CITY OF GRAND JUNCTION STANDARD DETAIL SS–02).

(301) 102.11/108.5 – SANITARY SEWER BASIC MANHOLE (60" I.D.). CAST IN PLACE BASE, FORMING INVERTS AND ADJUSTING TO FINAL GRADE. (SEE CITY OF GRAND JUNCTION STANDARD DETAIL SS–02).

(306) 102.11/108.5 – MANHOLE BARREL SECTION (D>5') (48" I.D.).

(307) 102.11/108.5 – MANHOLE BARREL SECTION (D>5') (60" I.D.).

(321) 102.9/108.2 – 4" GRAVITY SEWER PIPE (SDR 35 PVC). INCLUDES TYPE A BEDDING AND HAUNCHING MATERIAL AND BACKFILL OF TRENCH WITH NATIVE MATERIALS MEETING 103.16 EARTH BACKFILL MATERIAL.

(323) 102.9/108.2 – 8" GRAVITY SEWER PIPE (SDR 35 PVC). INCLUDES TYPE A BEDDING AND HAUNCHING MATERIAL AND BACKFILL OF TRENCH WITH NATIVE MATERIALS MEETING 103.16 EARTH BACKFILL MATERIAL.

(348) 102.9/108.3 – 6" x 4" SEWER SERVICE TAP. FULL BODY WYE (SEE STD. DETAIL SS–06).

(401) 102.7/108.2 – 6" WATER MAIN PIPE (C–900 PVC). INCLUDES TYPE A BEDDING AND HAUNCHING MATERIAL AND BACKFILL OF TRENCH WITH NATIVE MATERIALS MEETING 103.16 EARTH BACKFILL MATERIAL.

(416) 102.8b/108.3 – 6" GATE VALVE.

(426) 102.8d/108.3 – 24" x6" TAPPING SLEEVE AND VALVE

(440) 102.8/108.3 – 6" X 6" TEE

(442) 102.8/108.3 – 1 1/2" X 1 1/2" TEE

(469) 102.8/108.3 – 6", 90° ELBOW

(477) 102.8/108.3 – 6" TAPPED PLUG (2" OPENING)

(492) 102.8a/108.3 – FIRE HYDRANT

(494) 102.7c/108.4 – 1½" WATER SERVICE LINE (NATURAL VIRGIN CORE WITH BLUE VIRGIN EXTERIOR)

(496) 102.8j/108.4 – CORPORATION STOP

(498) 102.8/108.4 – CURB STOP

(505) 102.8/108.4 – METER PIT (INSTALL ONLY)

(663) 304 – AGGREGATE BASE COURSE (CLASS 6) (6" THICK)

(676) 401.08 – HOT BITUMINOUS PAVEMENT (3" THICK) (GRADING SX, BINDER GRADE PG 64–22) (TWO 1 1/2" LIFTS)

(902) BACKFLOW PREVENTION DEVICE (BY OTHERS)

DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY	HMC	DATE	01–2015
DESIGNED BY	JKT	DATE	01–2015
CHECKED BY		DATE	
APPROVED BY		DATE	

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

CITY OF Grand Junction COLORADO

PUBLIC WORKS AND UTILITIES ENGINEERING DIVISION

LAS COLONIAS PARK PHASE I
WATER AND SANITARY SEWER PLAN & PROFILE
STA 0+00 TO STA 5+00

5

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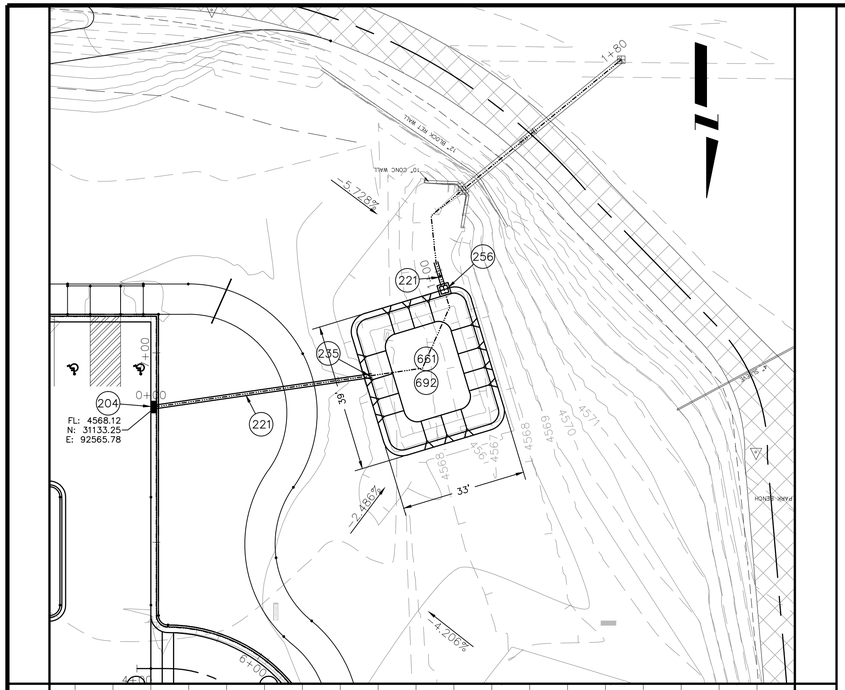
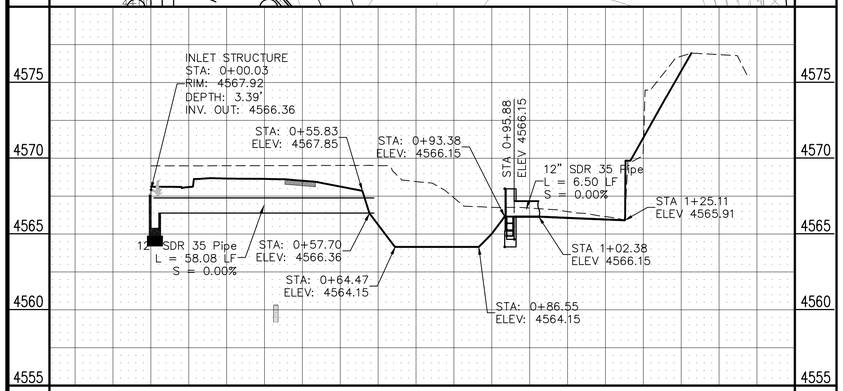
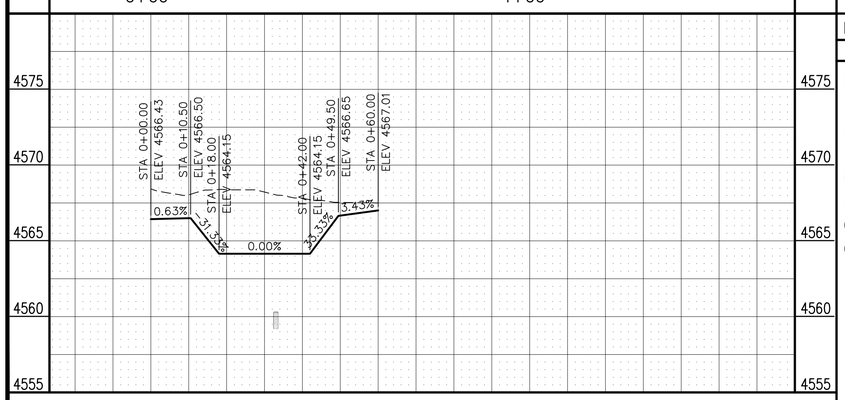
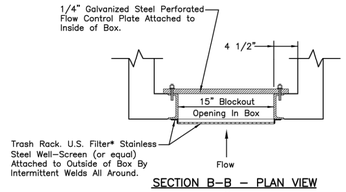
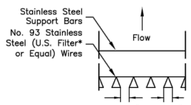




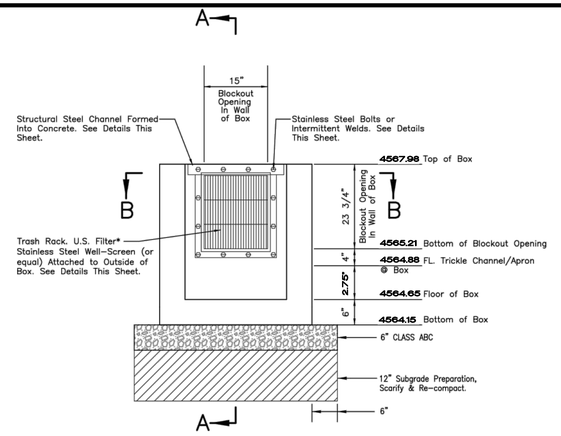




SECTION B–B – PLAN VIEW
No Scale



SECTION C–C
No Scale

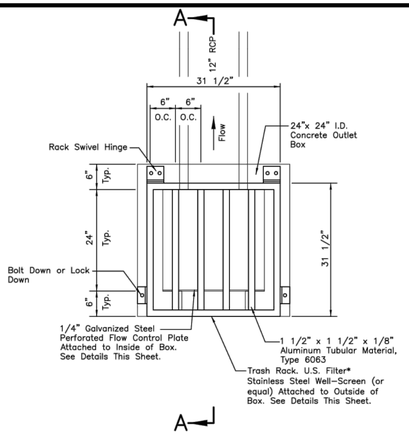


POND OUTLET STRUCTURE & TRASH RACK

ELEVATION VIEW FRONT

No Scale

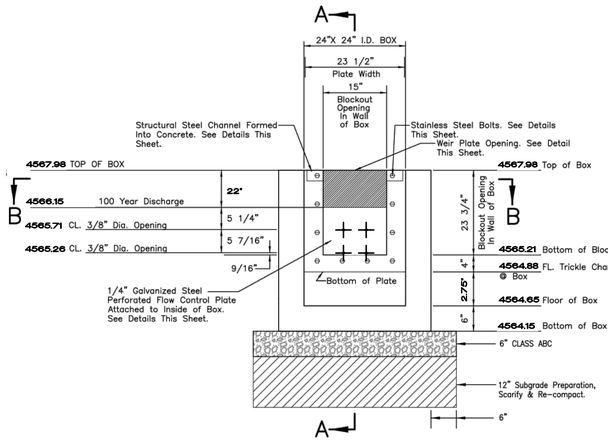
*U.S. FILTER, ST. PAUL, MINNESOTA, USA



POND OUTLET STRUCTURE & TRASH RACK

PLAN VIEW

No Scale

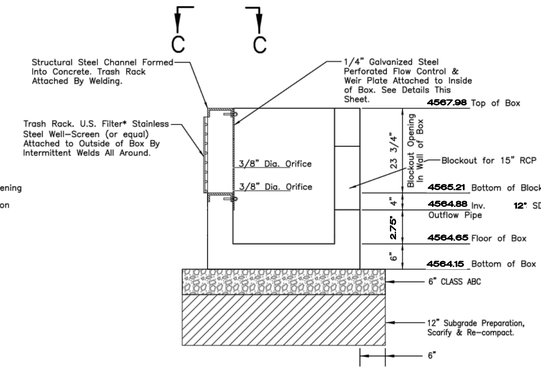


POND OUTLET STRUCTURE & PERFORATED FLOW CONTROL PLATE

ELEVATION VIEW FRONT

No Scale

*U.S. FILTER, ST. PAUL, MINNESOTA, USA



POND OUTLET STRUCTURE

SECTION A–A

No Scale

PROJECT NO. _____

CONSTRUCTION NOTES

(204) 102.13/108.6 – SINGLE STORM DRAIN INLET (VERTICAL CURB) (SEE CITY OF GRAND JUNCTION STANDARD DETAIL D–07).

(221) 12" STORM DRAIN PIPE (SDR 35). INCLUDES TYPE A BEDDING AND HAUNCHING MATERIAL AND BACKFILL OF TRENCH WITH NATIVE MATERIALS MEETING 103.16 EARTH BACKFILL MATERIAL.

(235) 108.2 – 12" CULVERT END SECTION (RCP)

(256) 108.6 WATER QUALITY OUTFALL STRUCTURE PER PLAN

(661) 420 GEOSYNTHETIC MATERIAL – MIRAFI 500x

(692) 506 COBBLE STONE (6" DIA.)

LIST OF ABBREVIATIONS:

E	ELECTRIC
EOC	EDGE OF CONCRETE
EX	EXISTING
FES	FLARED END SECTION
FF	FINISH FLOOR
FG	FINISH GRADE
FL	FLOW LINE
FO	FIBER OPTICS
G	GAS
G.V.&B.	GATE VALVE & BOX
GET	GAS, ELECTRIC & TELEPHONE
L	LENGTH
R	RADIUS
OH	OVERHEAD UTILITY LINES
SS10	SWALE SIDE SLOPE I.D. #10
S	SANITARY SEWER
SD	STORM DRAIN
T	TELEPHONE
TB	TOP OF BERM
TOW	TOP OF WALK
UGE	UNDERGROUND ELECTRIC
UGT	UNDERGROUND TELEPHONE
VC&G	VERTICAL CURB, GUTTER & SIDEWALK
W	WATER
WL	WATER LINE

WQCV Trash Racks:

1. Well–screen trash racks shall be stainless steel and shall be attached by intermittent welds along the edge of the mounting frame.

Well–screen trash specifications are:

U.S. Filter TM Stainless Steel Well–screen Trash Rack Dimensions & Specifications:

- Screen #93 VEE Wire Slot Opening = 0.139"
- Support Rod Type = TE .074" x .50"
- Support Rod On–Center Spacing = 1"
- Total Screen Thickness = 0.655"
- Carbon Steel Frame Type = 3/4" x 1" Angle

Overflow Trash Rack:

1. Trash rack shall be mountable using stainless steel hardware and provided with hinge and lockable or boltable access panels.

Trash Rack Dimensions & Specifications;

- Outer Dimensions = 31 1/2" x 31 1/2"
- Frame and Grate Material = 1 1/2" x 1 1/2" x 1/8" Aluminum Tubular Material. Type 6063.
- Grate Spacing On–Center = 6"

Perforated Flow Control Plate Specifications:

1. The Plate shall be 1/4" Galvanized Steel in accordance with C.D.O.T. Standard Specifications for Road and Bridge Construction, Section 712.06.

DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 01–2015
DESIGNED BY JKT DATE 01–2015
CHECKED BY DATE
APPROVED BY DATE

SCALES:
PLAN HORIZONTAL 0 5 10 20
PROFILE HORIZONTAL 0 5 10 20
PROFILE VERTICAL 0 25 5

CITY OF Grand Junction COLORADO

PUBLIC WORKS AND UTILITIES ENGINEERING DIVISION

LAS COLONIAS PARK PHASE I STORM WATER PLAN & PROFILE STA 0+00 TO STA 5+00

6

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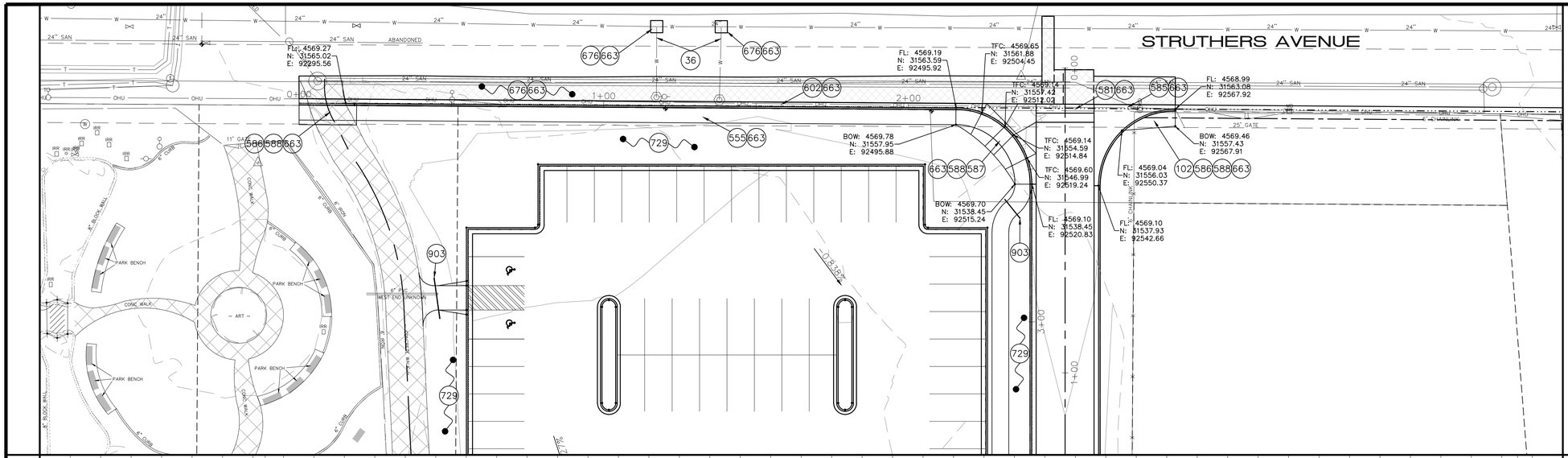
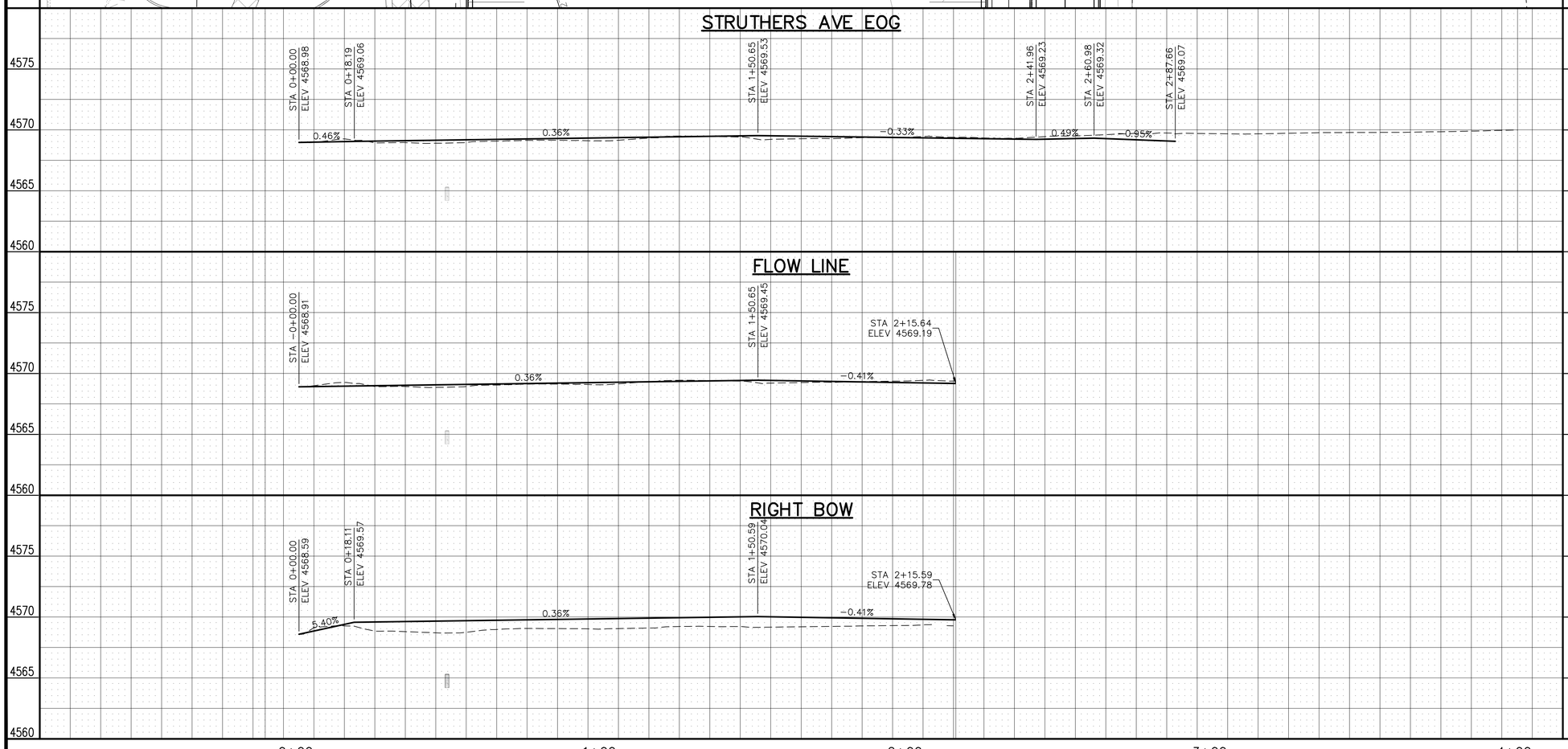




PROJECT NO. _____

CONSTRUCTION NOTES

(36) 202 – ABANDON WATER METER AND SERVICE AT MAIN. CLOSE CORPORATION STOP AND CRIMP SERVICE LINE. REMOVE METER PIT AND APPURTENANCES AND DELIVER TO CITY SHOPS.

(102) 210 – RESET FENCE (6' CHAIN LINK)

(555) 608.06 – CONCRETE SIDEWALK (4" THICK)

(581) 608.06 – CONCRETE DRAINAGE PAN (6'WIDE)

(585) 608.06 – CONCRETE CORNER FILLET

(586) 608.06 – CONCRETE CURB RAMP

(587) 608.06 – CONCRETE INTERSECTION CORNER

(588) 608.06 – DETECTABLE WARNING

(602) 608.06 – CONCRETE CURB AND GUTTER (2' WIDE)

(663) 304 – AGGREGATE BASE COURSE (CLASS 6) (6" THICK)

(676) 401.08 – HOT BITUMINOUS PAVEMENT (3" THICK) (GRADING SX, BINDER GRADE PG 64-22) (TWO 1 1/2" LIFTS)

(729) 207 – PLACE, GRADE AND COMPACT TOPSOIL TO 4" BELOW TOP OF CONCRETE.

(903) 4" CONDUIT (PVC) FUTURE IRRIGATION

DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 01-2015
DESIGNED BY JKT DATE 01-2015
CHECKED BY _____ DATE _____
APPROVED BY _____ DATE _____

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

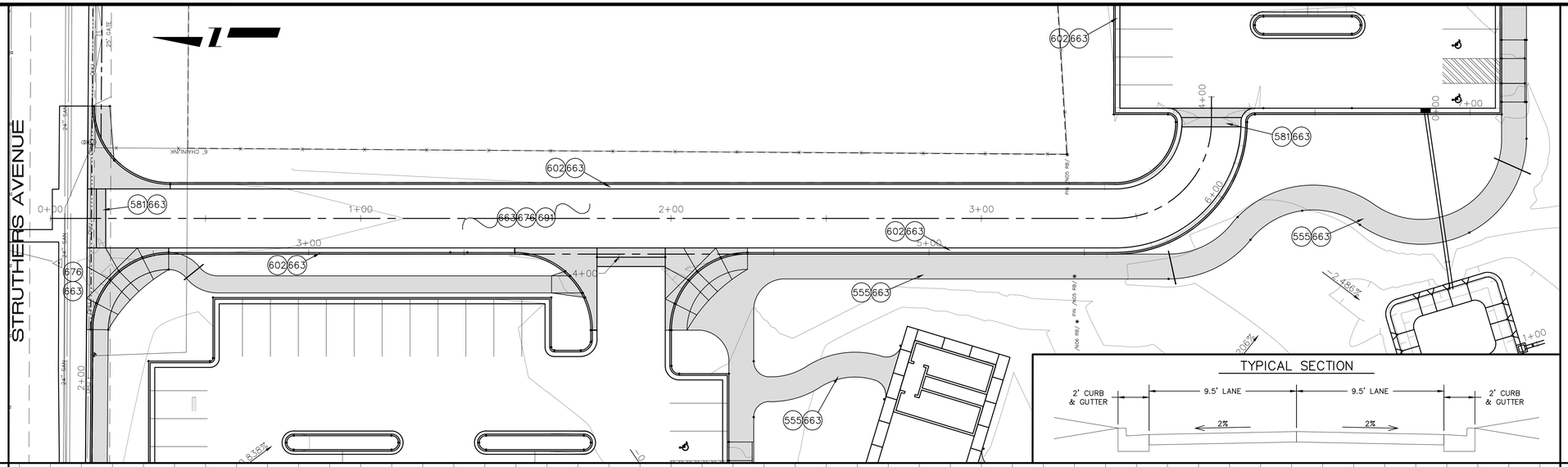
CITY OF Grand Junction COLORADO

PUBLIC WORKS AND PLANNING ENGINEERING DIVISION

LAS COLONIAS PARK PHASE I
STRUTHERS AVE SIDEWALK & RAMPS
STA 0+00 TO STA 5+00

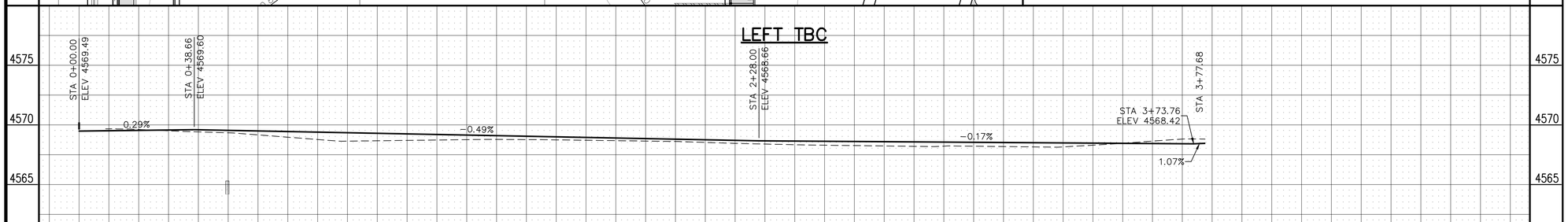
7

N:\landproj\LAS COLONIAS PARK\Las Colonias Phase I\Dwg\LAS COLONIAS PARK PHASE 1.dwg, 1/29/2015 3:58:02 PM

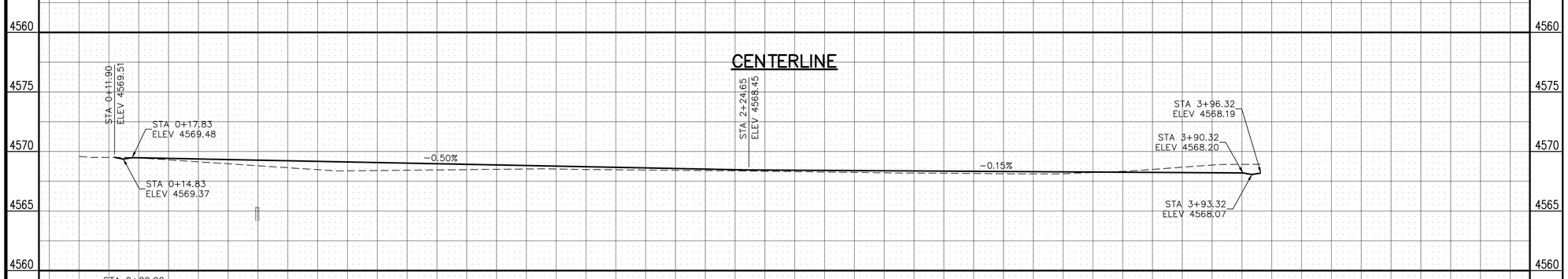


TYPICAL SECTION

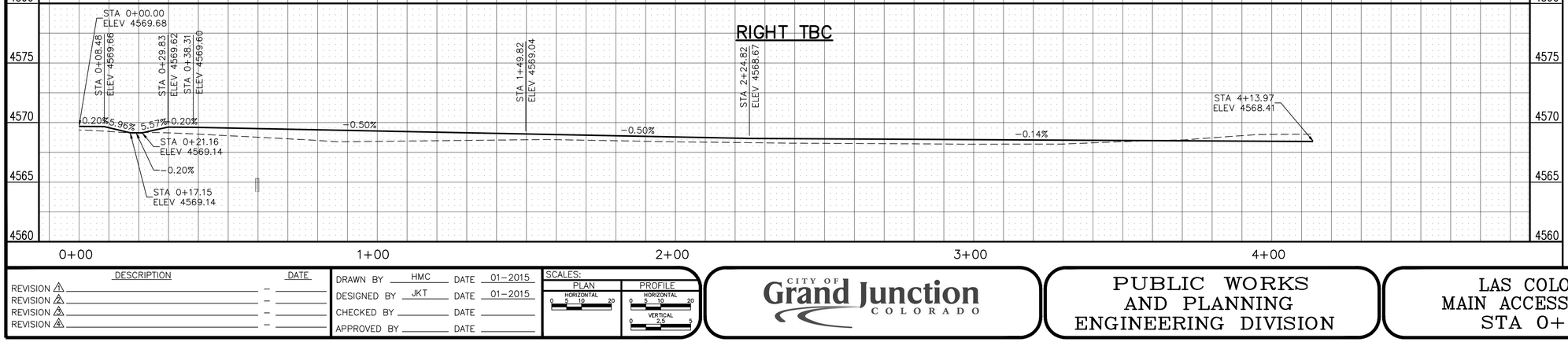
LEFT TBC



CENTERLINE



RIGHT TBC



PROJECT NO. _____

CONSTRUCTION NOTES

(555) 608.06 – CONCRETE SIDEWALK (4" THICK)

(581) 608.06 – CONCRETE DRAINAGE PAN (6' WIDE)

(602) 608.06 – CONCRETE CURB AND GUTTER (2' WIDE)

(663) 304 – AGGREGATE BASE COURSE (CLASS 6) (6" THICK)

(676) 401.08 – HOT BITUMINOUS PAVEMENT (3" THICK) (GRADING SX, BINDER GRADE PG 64–22) (TWO 1 1/2" LIFTS)

(691) SCARIFY AND RECOMPACT 12" OF MATERIAL

DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 01–2015
DESIGNED BY JKT DATE 01–2015
CHECKED BY _____ DATE _____
APPROVED BY _____ DATE _____

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

CITY OF Grand Junction COLORADO

PUBLIC WORKS AND PLANNING ENGINEERING DIVISION

LAS COLONIAS PARK PHASE I
MAIN ACCESS ROAD PLAN & PROFILE
STA 0+00 TO STA 5+00

8

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PROJECT NO. _____

CONSTRUCTION NOTES

555 608.06 – CONCRETE SIDEWALK (4" THICK)
581 608.06 – CONCRETE DRAINAGE PAN (6' WIDE)
585 608.06 – CONCRETE CORNER FILLET
586 608.06 – CONCRETE CURB RAMP
587 608.06 – CONCRETE INTERSECTION CORNER
588 608.06 – DETECTABLE WARNING
602 608.06 – CONCRETE CURB AND GUTTER (2' WIDE)
608 608.06 – CONCRETE CURB WITH SPILL GUTTER (1'–6" WIDE)
663 304 – AGGREGATE BASE COURSE (CLASS 6) (6" THICK)
676 401.08 – HOT BITUMINOUS PAVEMENT (3" THICK) (GRADING SX, BINDER GRADE PG 64–22) (TWO 1 1/2" LIFTS)
691 SCARIFY AND RECOMPACT 12" OF MATERIAL
729 207 – PLACE, GRADE AND COMPACT TOPSOIL TO 4" BELOW TOP OF CONCRETE.
901 PROTECT TREE.
902 SITE ELECTRICAL TO BE DONE BY OTHERS. THE CONTRACTOR SHALL COORDINATE WORK WITH XCEL.
903 4" CONDUIT (PVC) FUTURE IRRIGATION

DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 01–2015
DESIGNED BY JKT DATE 01–2015
CHECKED BY _____ DATE _____
APPROVED BY _____ DATE _____

SCALES: PLAN 0 2.5 5 10

CITY OF Grand Junction COLORADO

PUBLIC WORKS AND PLANNING ENGINEERING DIVISION

LAS COLONIAS PARK PHASE I
NORTH WEST ASPHALT PARKING LOT

9

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PROJECT NO. _____

CONSTRUCTION NOTES

555 608.06 – CONCRETE SIDEWALK (4" THICK)

581 608.06 – CONCRETE DRAINAGE PAN (6'WIDE)

585 608.06 – CONCRETE CORNER FILLET

586 608.06 – CONCRETE CURB RAMP

587 608.06 – CONCRETE INTERSECTION CORNER

588 608.06 – DETECTABLE WARNING

602 608.06 – CONCRETE CURB AND GUTTER (2' WIDE)

608 608.06 – CONCRETE CURB WITH SPILL GUTTER (1'–6" WIDE)

663 304 – AGGREGATE BASE COURSE (CLASS 6) (6" THICK)

673 304 – AGGREGATE BASE COURSE (CLASS 3) (THICKNESS VARIES)

676 401.08 – HOT BITUMINOUS PAVEMENT (3" THICK) (GRADING SX, BINDER GRADE PG 64–22) (TWO 1 1/2" LIFTS)

692 ASPHALT MILLINGS (9" THICK) WORK TO DE DONE BY OTHERS

729 207 – PLACE, GRADE AND COMPACT TOPSOIL TO 4" BELOW TOP OF CONCRETE.

801 PROTECT TREE.

843 REMOVE TREE/BUSH (BY OTHERS)

902 SITE ELECTRICAL TO BE DONE BY OTHERS. THE CONTRACTOR SHALL COORDINATE WORK WITH XCEL.

903 4" CONDUIT (PVC) FUTURE IRRIGATION

DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 01–2015
DESIGNED BY JKT DATE 01–2015
CHECKED BY _____ DATE _____
APPROVED BY _____ DATE _____

SCALES: PLAN 0 2.5 5 10

CITY OF Grand Junction COLORADO

PUBLIC WORKS AND PLANNING ENGINEERING DIVISION

LAS COLONIAS PARK PHASE I
SOUTH EAST ASPHALT PARKING LOT

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CP /PK STRUTHERS/
N 31573.8612
E 92517.39
EL 4569.59

STRUTHERS AVENUE

S 9TH ST.

4569.27
N: 31349.94
E: 92467.71

4569.16
N: 31349.94
E: 92485.71

4570.91
N: 31307.92
E: 92473.49

4570.89
N: 31302.70
E: 92490.72

4" SAN

BY OTHERS
FF = 4571.00

4570.95
N: 31281.13
E: 92440.31

MATCH EXISTING

4570.96
N: 31275.92
E: 92457.54

MATCH EXISTING

1" = 20'

4569.93
N: 31197.40
E: 93205.88

MATCH EOG TO EXISTING

4569.89
N: 31197.33
E: 93213.88

4570.38
N: 31197.31
E: 93215.37

4570.44
N: 31197.41
E: 93204.37

4570.45
N: 31197.02
E: 93204.37

4570.39
N: 31196.90
E: 93215.37

4569.95
N: 31197.01
E: 93205.88

4569.93
N: 31196.90
E: 93213.88

586 663

904 110 102

1" = 5'

CP /PK/
N 31240.4322
E 92640.45
EL 4568.90

903

903

903

3:1 SLOPE

673 905

555 663

903

673

3:1 SLOPE

673 905

CP /PK/
N 31028.6452
E 92551.22
EL 4576.88

MATCH EXISTING

8% MAX

MATCH EXISTING

1" = 20'

CP /PK/
N 30995.6562
E 92907.23
EL 4577.18

8% MAX

MATCH EXISTING

MATCH EXISTING

1" = 20'

PROJECT NO. _____

CONSTRUCTION NOTES

102 210 – RESET FENCE. (6' CHAIN LINK)

110 629 – REFERENCE AND RESET PROPERTY PIN (BY OTHERS)

555 608.06 – CONCRETE SIDEWALK (4" THICK)

586 608.06 – CONCRETE CURB RAMP

663 304 – AGGREGATE BASE COURSE (CLASS 6) (6" THICK)

673 304 – AGGREGATE BASE COURSE (CLASS 3) (THICKNESS VARIES)

903 4" CONDUIT (PVC) FUTURE IRRIGATION

904 BOLLARD (INSTALL ONLY)(CITY SUPPLIED)

905 207 – TOPSOIL (6" THICK) NATIVE MATERIAL GENERATED ON SITE

DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 01-2015
DESIGNED BY JKT DATE 01-2015
CHECKED BY _____ DATE _____
APPROVED BY _____ DATE _____

SCALES:
PLAN
HORIZONTAL 0 10 20 40

CITY OF Grand Junction COLORADO

PUBLIC WORKS AND PLANNING ENGINEERING DIVISION

LAS COLONIAS PARK PHASE I
SIDEWALK LAYOUT

11

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PROJECT NO. _____

CONSTRUCTION NOTES

18" X 48" DEEP TRENCH

18" X 36" DEEP TRENCH

2945-234-11-002
745 STRUTHERS AVE
GRAND JUNCTION 81501
RANDALL VIOLET I

CP /PK/
N 31240.4322
E 92640.45
EL 4568.90

2945-234-00-947
715 STRUTHERS AVE
GRAND JUNCTION 81501
CITY OF GRAND JUNCTION

STRUTHERS

DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY	HMC	DATE	01-2015
DESIGNED BY	JKT	DATE	01-2015
CHECKED BY		DATE	
APPROVED BY		DATE	

SCALES:
PLAN
HORIZONTAL
0 10 20 40

CITY OF Grand Junction COLORADO

PUBLIC WORKS
AND PLANNING
ENGINEERING DIVISION

LAS COLONIAS PARK PHASE I
TRENCHES FOR UNDERGROUND ELECTRICAL

12