## CITY OF MISSION, KANSAS

#### NOTICE TO BIDDERS

Sealed bids for **2023 Broadmoor Park Trail Project** will be received by the City of Mission, Kansas, at the office of the City Clerk, City Hall, 6090 Woodson Street, Mission, Kansas 66202 until **3:00 PM** CST on Thursday, **June 15, 2023.** At that time all sealed bids will be transferred to the **City Council Chamber**, City Hall, where they will be publicly opened and read aloud. Any bid received after the designated closing time will be returned unopened.

All bids shall be submitted in sealed envelopes addressed to the City Clerks of Mission, Kansas, and marked "#2023 Broadmoor Trail Project".

Copies of plans and specifications can be seen or purchased for a Non-Refundable fee on-line at <a href="www.drexeltech.com">www.drexeltech.com</a> in their eDistribution plan room, additional assistance is available at <a href="distribution@drexeltech.com">distribution@drexeltech.com</a>. Information regarding this project can be found in the "Public Jobs" link on the website. Contractors desiring the Contract Documents for use in preparing bids may also obtain a set of such documents from Drexel Technologies; 10840 West 86th Street, Lenexa, KS 66214, telephone number is 913-371-4430. Bidding documents will be shipped only if the requesting party assumes responsibility for all related charges. Corporate, certified, or cashier's checks shall be made payable to Drexel Technologies, Inc.

Proposers should email questions to the City of Mission, specifically **Penn Almoney, Director of Parks + Recreation**, at the following email address **palmoney@missionks.org**.

Neither the City nor consultant shall be responsible for the accuracy, completeness, or sufficiency of any bid documents obtained from any source other than the source indicated above. Obtaining copies of plans, specifications, bid documents and other contract documents from any other source(s) may result in obtaining incomplete and inaccurate information. Obtaining these documents from any source other than directly from the source listed herein may also result in failure to receive any addenda, corrections, or other revisions to these documents that may be issued.

Contractors should read and be fully familiar with all contract documents before submitting a bid. In submitting a bid, the bidder warrants that it has read the contract documents and is fully familiar therewith and that it has visited the site of the work to fully inform itself as to all existing conditions and limitations and shall include in its bid a sum to cover the cost of all items of the work.

Should a bidder find "defects" as defined in paragraph GC-3 of the General Conditions, it shall follow the procedures outlined in paragraph GC-3 to bring same to the attention of City. Changes necessitated thereby shall be in the form of addenda issued by the consultant.

All bidders shall verify that they have considered all written addenda. Neither the City nor the consultant shall be responsible for oral instructions.

Any written addenda issued during the time of bidding shall be covered and included in the bid. There will be no clarifications or exceptions allowed on the bid. Bids are for a total bid package, total contract price.

Bids shall be made upon the form provided in ink or typewritten. Numbers shall be stated both in writing and in figures; the signature shall be long hand; and the complete form shall be without alteration or erasure. On alternate items for which a bid is not submitted, a written indication of "no bid" on the bid form is required.

1

No oral, telegraphic, facsimile or telephonic bids or alterations will be considered.

The following items must be included in the sealed envelope with the bid:

- a. Bid
- b. Bid Alternate

In the event the successful bidder is unable to execute the contract, for whatever reason, City may exercise its legal prerogatives, including, but not limited to, enforcement of its rights as to the bid security.

The City reserves the right to accept or reject any and all bids and to waive any technicalities or irregularities therein. Bids may be modified or withdrawn by written request of the bidder received in the office of the City Clerk, prior to the time and date for bid opening; provided, however, that no bidder may withdraw its bid for a period of thirty (30) days from the date set for the opening thereof. ALL BIDDERS AGREE THAT REJECTION SHALL CREATE NO LIABILITY ON THE PART OF THE CITY BECAUSE OF SUCH REJECTION. IT IS UNDERSTOOD BY ALL BIDDERS THAT AN UNSUCCESSFUL BIDDER HAS NO CAUSE OF ACTION AGAINST THE CITY FOR BID PREPARATION COSTS. THE FILING OF ANY BID IN RESPONSE TO THIS INVITATION SHALL CONSTITUTE AN AGREEMENT OF THE BIDDER TO THESE CONDITIONS.

A Pre-Bid Conference will be held at: <u>Powell Community Center – 6200 Martway St.</u>

Date & Time: Thursday, June 8, 2023, 3:00 PM CST

Publish: Legal Record DATE: May 30, 2023

#### INSTRUCTIONS TO BIDDERS

IB-1. <u>BIDS</u>: All bids shall be made on the forms provided in this bound volume of contract documents and shall be in compliance with the Notice to Bidders. All appropriate blanks shall be filled in and shall be signed by the appropriate individual on behalf of him/herself or the entity submitting the bid. Each bid must be enclosed in a sealed envelope plainly marked "#2023 Broadmoor Trail Project". As per the Notice to Bidders, bid shall be addressed to:

CITY OF MISSION, KANSAS Attention: City Clerk 6090 Woodson Street, Mission, KS 66202

# IB-2. <u>DEFINITIONS</u>:

- a. All definitions set forth in the General Conditions or in other contract documents are applicable to the Bidding Documents.
- b. "Alternative Bid" (or "Alternate") means an amount stated in the Bid to be added to or deducted from the amount of the Base Bid if the corresponding change in the work, as described in the Bidding Documents, is accepted.
- c. "Base Bid" means the sum stated in the Bid for which the Bidder offers to perform the work described in the Bidding Documents as the base, to which work may be added or from which work may be deleted for sums stated in Alternate Bids.
- d. "Bid" shall mean the offer or proposal of the Bidder submitted on the prescribed form setting forth the prices for the work to be performed (and the City reserves the right to reject any and all bids).
- e. "Bidder" shall mean any individual, partnership, corporation, association or other entity submitting a Bid for the work.
- f. "Bidding Documents" shall mean all documents related to a Bidder's submitting a Bid, including, but not limited to, the advertisement for Bids, if applicable, Instructions to Bidders, the Bid form, other sample bidding and contract forms and the proposed contract documents, including any addenda issued prior to receipt of Bids. At the City's option, Bidders may be required to complete and submit a prequalification statement.
- g. "City" means the City of Mission, Kansas.
- h. "Contractor" shall mean the entity entering into the contract for the performance of the work covered by the contract, together with its duly authorized agents or legal representatives.
- i. "Successful Bidder" means the person or entity who is determined and declared by the City to have submitted the lowest and best responsible Bid in conformity with the terms of the Bidding Documents.

- j. "Unit Price" means an amount stated in the Bid as a price per unit of measurement for materials or services as described in the Bidding Documents or in the proposed contract documents.
- IB-3. <u>BIDDER'S REPRESENTATIONS</u>: Each Bidder by making its Bid represents that:
  - a. It has read and understands the Bidding Documents, and its Bid is made in accordance therewith.
  - b. It has visited the site, has familiarized itself with the local conditions under which the work is to be performed, has reviewed all published reports, inspections and other documents relating to the project and has correlated its observations with the requirements of the proposed contract documents.
  - c. Its Bid is based upon the materials, systems and equipment required by the Bidding Documents without exception.
  - d. It has familiarized itself with state, federal law and local ordinances, regulations, and permitting requirements which may affect cost and/or progress or performance of the work.
- IB-4. <u>BIDDING DOCUMENTS</u>: Copies of plans and specifications can be seen or purchased for a Non-refundable fee on-line at <a href="www.drexeltech.com">www.drexeltech.com</a> in their eDistribution plan room, additional assistance is available at <a href="distribution@drexeltech.com">distribution@drexeltech.com</a>. Information regarding this project can be found in the "Public Jobs" link on the website. Contractors desiring the Contract documents for use in preparing bids may also obtain a set of such documents from Drexel Technologies; 10840 West 86th Street, Lenexa, KS 66214, telephone number is 913-371-4430. Bidding documents will be shipped only if the requesting party assumes responsibility for all related charges. Corporate, certified, or cashier's checks shall be made payable to Drexel Technologies, Inc.

Neither the city nor the consultant shall be responsible for the accuracy, completeness, or sufficiency of any Bidding Documents obtained from any source other than the source indicated in the Notice to Bidders. Obtaining copies of Bidding Documents form any other source(s) may result in obtaining incomplete and inaccurate information or result in failure to receive any addenda, corrections, or other revisions to these documents that may be issued

Bidders shall use complete sets of Bidding Documents in preparing Bids; neither the City nor the consultant assumes any responsibility for errors or misinterpretations resulting from the use of incomplete sets of bidding Documents.

The City in making copies of the Bidding Documents available on the above terms does so only for the purpose of obtaining Bids on the work and does not confer a license or grant for any other use.

IB-5. <u>DEFECTS IN BIDDING DOCUMENTS</u>: Bidders shall promptly notify the City of any errors, omissions, discrepancies or inconsistencies (hereinafter "defects") which they may discover upon examination of the Bidding Documents or of the site and local conditions. Bidders will not be permitted to take advantage of any such defect.

4

Bidders requiring clarification or interpretation of the Bidding Documents shall make a emailed request, specifically **Penn Almoney**, **Director of Parks + Recreation**, at the

following email address **palmoney@missionks.org**, which shall reach the consultant at least seven days prior to the date for receipt of Bids.

Any interpretation, correction or change of the Bidding Documents will be made by Addendum. Interpretations, corrections or changes of the Bidding Documents made in any other manner will not be binding, and Bidders shall not rely upon such interpretations, corrections and changes.

IB-6. <u>SUBSTITUTIONS</u>: The materials, products and equipment described in the Bidding Documents establish a standard of required function, dimension, appearance and quality to be met by any proposed substitution.

No substitution will be considered prior to receipt of Bids unless an emailed request for approval has been received by the consultant at least seven (7) days prior to the date for receipt of Bids. Each such request shall include the name of the material or equipment for which it is to be substituted and a complete description of the proposed substitute including drawings, cuts, performance and test data and any other information necessary for an evaluation. A statement setting forth any changes in other materials, equipment or other work that incorporation of the substitute would require shall be included. The burden of proof of the merit of the proposed substitute is upon the Bidder. The consultant's decision of approval or disapproval of a proposed substitution shall be final.

If the consultant approves any proposed substitution prior to receipt of Bids, such approval will be set forth in a written addendum. Bidders shall not rely upon approvals made in any other manner.

No substitutions will be considered after the contract award unless specifically provided in the contract documents (see GC-61).

IB-7. <u>ADDENDA</u>: Written addenda will be mailed or delivered to all who are known by the consultant to have received a complete set of Bidding Documents.

Copies of written addenda will be made available for inspection wherever Bidding Documents are on file for that purpose.

No written addenda will be issued later than four (4) days prior to the date for receipt of Bids except an addendum withdrawing the request for Bids or one which includes postponement of the date for receipt of Bids.

Each Bidder shall ascertain prior to submitting its Bid that it has received all written addenda issued, and it shall acknowledge its receipt in its Bid.

## IB-8. <u>INSURANCE</u>:

a. <u>General</u>: The Contractor shall secure and maintain, throughout the duration of the agreement, insurance (on an occurrence basis unless otherwise agreed to) of such types and in at least such amounts as required herein. Contractor shall provide certificates of insurance and renewals thereof on forms provided by the City or on forms acceptable to the City. The City shall be notified by receipt of written notice from the insurer or the Contractor at least thirty (30) days prior to material modification or cancellation of any policy listed on the Certificate.

Bidders are referred to Article GC-38 of the General Conditions for additional insurance information.

b. <u>Notice of Claim Reduction of Policy Limits</u>: The Contractor, upon receipt of notice of any claim in connection with the agreement, shall promptly notify the City, providing full details thereof, including an estimate of the amount of loss or liability.

The Contractor shall monitor and promptly notify the City of any reduction in limits of protection afforded under any policy listed in the Certificate (or otherwise required by the contract documents) if the Contractor's limits of protection shall have been impaired or reduced to such extent that the limits fall below the minimum amounts required herein. The Contractor shall promptly reinstate the original limits of liability required hereunder and shall furnish evidence thereof to the City.

c. <u>Commercial General Liability</u>:

Limits -

General Aggregate: \$2,000,000
Products / Completed Operations Aggregate: \$2,000,000
Personal & Advertising Injury: \$1,000,000
Each Occurrence: \$1,000,000

Policy <u>MUST</u> include the following conditions:

- 1. Pollution Liability (Applicable <u>only</u> to contracts involving pollutants such as asbestos & lead abatement, sludge or other waste abatement, etc.)
- 2. NAME CITY OF MISSION AS "ADDITIONAL INSURED"
- d. <u>Automobile Liability</u>: Policy shall protect the Contractor against claims for bodily injury and/or property damage arising from the ownership or use of any owned, hired and/or non-owned vehicle.

Limits (Same as Commercial General Liability) -

Combined Single Limits, Bodily Injury and Property Damage - Each Accident:

Policy MUST include the following condition:

#### NAME CITY OF MISSION AS "ADDITIONAL INSURED"

e. Umbrella Liability: The Umbrella / Excess Liability must be at least as broad as the underlying general liability and automobile liability policies.

Limits -

Each Occurrence \$1,000,000 General Aggregate \$1,000,000

f. <u>Workers' Compensation</u>: This insurance shall protect the Contractor against all claims under applicable state workers' compensation laws. The Contractor shall also be protected against claims for injury, disease or death of employees which, for any reason, may not fall within the provisions of workers' compensation law. The policy limits shall not be less than the following:

Workers' Compensation: Statutory

Employer's Liability:

Bodily Injury by Accident \$100,000 each accident Bodily Injury by Disease \$500,000 policy limit

- g. Owner's Protective Liability: The Contractor shall take out, pay for and deliver to the City, an Owner's Protective Liability insurance policy written on an occurrence basis and naming the City as named insured. The policy shall be maintained during the life of the agreement. Limits of protection shall be at least \$1,000,000 Combined Single Limits, Bodily Injury and Property Damage, and shall contain no exclusion relative to any function performed by the City or its employees and agents in connection with the project.
- h. <u>Industry Ratings</u>: The City will only accept coverage from an insurance carrier who offers proof that it:
  - 1. Is authorized to do business in the State of Kansas;
  - 2. Carries a Best's policy holder rating of A- or better; and
  - 3. Carries at least a Class VIII financial rating, or
  - 4. Is a company mutually agreed upon by the City and Contractor.
- i. <u>Subcontractors' Insurance</u>: If a part of the Contract is to be sublet, the Contractor shall either:
  - 1. Cover all subcontractors in its insurance policies, or
  - 2. Require each subcontractor not so covered to secure insurance which will protect subcontractor against all applicable hazards or risks of loss as and in the minimum amounts designated.

Whichever option is chosen, contractor shall indemnify and hold harmless the City as to any and all damages, claims or losses, including attorney's fees, arising out of the acts or omissions of its subcontractors.

k. <u>Aircraft Liability</u>: Additional requirement applicable for aerial photograph or contract involving any use of aircraft.

Limits- Single Limit Bodily Injury; Including Passengers; and Property Damage: \$1,000,000 Each Occurrence

Coverage must include all Owned, Hired and Non-Owned Aircraft.

Policy MUST include the following condition:

# NAME CITY OF MISSION AS "ADDITIONAL INSURED" ON THE HIRED AND NON-OWNED AIRCRAFT LIABILITY.

I. Contractor Property Insurance ("Builder's Risk"): [Additional requirement when constructing a building.] Unless otherwise provided in the contract documents, Contractor shall procure and maintain property insurance from insurance companies authorized to do business in the State of Kansas upon the entire project to the full insurable value of the project, including professional fees, overtime premiums and all other expenses incurred to replace or repair the insured property. The property insurance obtained by Contractor shall include as additional insured's the interests of City, Contractor, design consultants, subcontractor and subsubcontractors, and shall insure against the risk of direct physical loss including but not limited to fire and extended coverage, theft, vandalism, malicious mischief, collapse, flood, earthquake, debris removal and other perils or causes of loss as called for in the contract documents. The property insurance shall include physical

7

loss or damage to the work, including materials and equipment in transit, at the site or at another location as may be indicated in Contractor's application for payment and approved by City. All deductibles are the responsibility of the Contractor.

- Unless the contract documents provide otherwise, Contractor shall procure and maintain boiler and machinery insurance that will include the interests of City, Contractor, design consultants, subcontractors and subsubcontractors.
- 2. Prior to commencing any work, Contractor shall provide City with certificates evidencing that (1) all Contractor's insurance obligations required by the contract documents are in full force and in effect and will remain in effect until Contractor has completed all of the work and has received final payment from City and (2) no insurance coverage will be canceled, renewal refused, or materially changed unless at least thirty (30) days prior written notice is given to City. Contractor's property insurance shall not lapse or be canceled if City occupies a portion of the work. Contractor shall provide City with the necessary endorsements from the insurance company prior to occupying a portion of the work.
- 3. Any loss covered under Contractor's property insurance shall be adjusted with City and Contractor and made payable to both of them as trustees for the insured's as their interests may appear, subject to any applicable mortgage clause. All insurance proceeds received as a result of any loss will be placed in a separate account and distributed in accordance with such agreement as the interested parties may reach. Any disagreement concerning the distribution of any proceeds will be resolved in accordance with Article II of the Agreement.
- 4. City and Contractor waive against each other and City's separate contractors, design consultants, subcontractors, agents and employees of each and all of them, all damages covered by property insurance provided herein, except such rights as they may have to the proceeds of such insurance. Contractor and City shall, where appropriate, require similar waivers of subrogation from City's separate contractors, design consultants and subcontractors and shall require each of them to include similar waivers in their contracts.
- IB-9. TAXES: It is the intent of the City to supply the Contractor with a Project Exemption Certificate for use in purchasing materials and supplies used on the project. The Contractor shall, in preparing its Bid, omit from its computed costs all sales and compensation taxes. Upon issuance of a Kansas tax exemption number, two (2) copies of the Project Exemption Certificate (Form PR-74a) will be forwarded to the Contractor. Upon completion of the project, the City will provide the State of Kansas with the project completion date and the State will issue a Project Completion Certification. This will be forwarded to the Contractor who must sign and return it to the City. All invoices must be retained by the Contractor for a period of five (5) years and are subject to audit by the Kansas Department of Revenue. Final payment will not be made to the Contractor until the City has received the Project Completion Certification from the Contractor along with a Consent of Surety Company to Final Payment.
- IB-10. <u>LIQUIDATED DAMAGES</u>: In case of failure on the part of the Contractor to effect completion within the time specified, the City shall have the right to deduct from the total compensation otherwise due the Contractor as liquidated damages based on the full Bid

price of the agreement, fixed and agreed to in advance, according to the following schedule:

Contract Amount			<u>Liquidated Damages</u>
\$0	to	\$50,000	\$250.00
\$50,000	to	\$100,000	\$400.00
\$100,000	to	\$500,000	\$800.00
\$500,000	to	\$1,000,000	\$1,000.00
\$1,000,000	to	\$2,000,000	\$1,750.00
\$2,000,000	to	\$5,000,000	\$2,500.00
\$5,000,000	to	\$10,000,000	\$3,500.00
\$10,000,000	to	\$20,000,000	\$5,500.00
\$20,000,000	and up		\$6,000.00

for each twenty-four (24) hour calendar day, including Sundays and holidays, the work remains incomplete over the specified completion time. (THE CITY RESERVES THE RIGHT TO ADJUST THE SCHEDULE OF LIQUIDATED DAMAGES, PRIOR TO ADVERTISING FOR BIDS, BASED ON THE SCOPE AND URGENCY OF THE PROJECT.)

In the event moneys being retained by the City shall not be sufficient to cover the amount of any liquidated damages, City may sue for and recover compensation for damages for nonperformance of the contract at the time stipulated herein and provided for.

- IB-11. MODIFICATION OR WITHDRAWAL OF BIDS: Bids may be modified or withdrawn by written request of the Bidder received in the office of the City Clerk, prior to the time and date for Bid opening. No Bidder may withdraw its Bid for a period of thirty (30) days from the date set for the opening thereof.
- IB-12. <u>ACCEPTANCE AND REJECTION OF BIDS AND AWARD OF CONTRACT</u>: The contract will be awarded to the lowest and best, responsible Bidder as determined by the City.

The City reserves the right to reject any and all Bids; to waive any and all irregularities and informalities; to negotiate contract terms with the Successful Bidder; and the right to disregard all nonconforming, non-responsive or conditional Bids.

In evaluating Bids, the City may consider the qualification of Bidders, whether or not the Bids comply with the prescribed requirements, and alternates and Unit Prices if requested in the Bid forms. The City reserves the right to reject the Bid of any Bidder who does not pass the evaluation to the City's satisfaction.

- IB-13. <u>BONDS</u>: The Contractor to whom the work is awarded will be required to furnish a Performance Bond in the forms hereinafter provided in an amount equal to 100 percent (100%) of the amount of the contract to be awarded in each case in addition to any other bonds, such as Maintenance Bond, Statutory or Labor and Material Payment Bond, as may be required by the contract documents. With each bond there shall be filed with the City one copy of "Power of Attorney" certified to include the date of the bonds.
- IB-14. <u>INDEMNIFICATION</u>: The Contractor shall be required to indemnify and hold the City harmless as set forth in Article GC-33 of the General Conditions.
- IB-15. <u>BID PREFERENCE</u>: Existing State law (K.S.A. 75-3740a) requires that, to the extent permitted by federal law and regulations, the City, when letting contracts for bids, must require any Successful Bidder-Contractor domiciled outside the state of Kansas to submit

a Bid the same percent less than the lowest bid submitted by a responsible Kansas contractor as would be required of such Kansas domiciled contractor to succeed over the bidding Contractor domiciled outside Kansas on a like contract let in the foreign Bidder's domiciliary state. All Bids are received on this condition, and if it is determined by the City that the apparent lowest and best Bidder is a foreign domiciled contractor, such contractor shall be awarded the Contract only if such Contractor's Bid complies with this state law requirement.

All Bidders domiciled outside of the State of Kansas may be requested to furnish the City with a copy of their state's preferential bidding statutes, if any.

- IB-16. NON-DISCRIMINATION, AFFIRMATIVE ACTION AND SEXUAL HARASSMENT: The Contractor shall comply with Article GC-68 of the General Conditions.
- IB-17. <u>APPOINTMENT OF SERVICE AGENT</u>: Kansas Statutes Annotated 16-113 requires that non-resident Contractors appoint an agent for the service of process in Kansas. The executed appointment must then be filed with the Secretary of State, Topeka, Kansas. Any Successful Bidder-Contractor domiciled outside the State of Kansas must comply with these statutory requirements.
- IB-18. <u>SUBCONTRACTING</u>: As provided in Article GC-36, the Contractor may utilize the services of subcontractors on those parts of the work which, under normal contracting practices, are performed by subcontractors.
- IB-19. CONFLICT OF INTEREST: 31 USCS Section 1352 requires all sub-grantees, Contractors, subcontractors and consultants who receive federal funds via the City to certify that they will not use federal funds to pay any person for influencing or attempting to influence a federal agency or Congress in connection with the award of any federal contract, grant, loan or cooperative agreements.

In addition, contract applicants, recipients and sub-recipients must file a form disclosing any expenditures they make for lobbying out of non-federal funds during the agreement period. Necessary forms are available from the City Engineer and should be returned to the City with other contract documents. It is the responsibility of the general Contractor to obtain executed forms from any subcontractors who fall within the provisions of the Code and to provide the City with the same.

## BID

#### 2023 BROADMOOR PARK TRAIL PROJECT

TO: CITY OF MISSION, JOHNSON COUNTY, KANSAS

Neither the City nor Consultant shall be responsible for the accuracy, completeness, or sufficiency of any bid documents obtained from any source other than the source indicated in the Notice to Bidders. Obtaining copies of plans, specifications, bid documents and other contract documents from any other source(s) may result in obtaining incomplete and inaccurate information. Obtaining these documents from any source other than directly from the source listed in the Notice to Bidders may also result in failure to receive any addenda, corrections, or other revisions to these documents that may be issued.

The undersigned bidder hereby proposes to mobilize and furnish all materials, supplies, transportation, tools, equipment and plant, perform all necessary labor and construct, install and complete all work stipulated in, required by, and in conformity with the proposed contract documents (including all documents referred to therein) and any and all addenda thereto, for and in consideration of prices as follows:

# **BID SHEET (BASE BID)**

ITEM					
NO.	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT COST \$	COST \$
1	Force Account	Lump Sum	1	\$2,000	\$2,000
2	Mobilization	Lump Sum	1		
3	Contractor Construction Staking	Lump Sum	1		
4	Removal of Existing Structures	Lump Sum	1		
5	Clearing and Grubbing	Lump Sum	1		
6	Unclassified Excavation	Cu. Yd.	203		
7	Compaction of Earthwork	Cu. Yd.	155		
8	Aggregate Base Course (OP Special) (4")	Sq. Yd.	555		
9	Sidewalk Construction (6")	Sq. Ft.	4,523		
10	Sidewalk Ramp Construction	Sq. Ft.	55		

11	Detectable Warning Surface	Sq. Ft.	20	
12	Curb & Gutter, Combined (Type B)	Lin Ft.	24	
13	Sod (Turf Type Fescue)	Sq. Yd.	857	
14	Topsoil	Cu. Yd.	143	
15	Erosion Control	Lump Sum	1	

TOTAL BASE BID	\$
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BID SHEET (BID ALTERNATE #1)

ITEM					
NO.	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT COST \$	COST \$
16	Force Account	Lump Sum	1	\$6,000	\$6,000
17	Mobilization	Lump Sum	1		
18	Contractor Construction Staking	Lump Sum	1		
19	Removal of Existing Structures	Lump Sum	1		
20	Clearing and Grubbing	Lump Sum	1		
21	Unclassified Excavation	Cu. Yd.	709		
22	Compaction of Earthwork	Cu. Yd.	269		
23	Aggregate Base Course (OP Special) (4")	Sq. Yd.	1,580		
24	Sidewalk Construction (6")	Sq. Ft.	12,815		
25	Sidewalk Ramp Construction	Sq. Ft.	173		

26	Detectable Warning Surface	Sq. Ft.	60	
27	Curb & Gutter, Combined (Type B)	Lin Ft.	120	
28	Sod (Turf Type Fescue)	Sq. Yd.	729	
29	Topsoil	Cu. Yd.	121	
30	Erosion Control	Lump Sum	1	

TOTAL BID ALTERNATE #1	\$
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- 1. The undersigned further agrees to begin upon the date stated in the Notice to Proceed and to complete the work, if this bid is accepted, as stated herein:
  - A. The Notice to Proceed is anticipated to be July 19, 2023.
  - B. The undersigned further agrees to complete the work as described in the plans during total consecutive working days (with daily working hours from 7:00 AM to 6:00 PM Monday through Friday, 8:00 AM to 6:00 PM on Saturdays, and with no work on Sundays).

The undersigned also declares that it understands that if not preset by the City the time to begin construction and to complete the work will be one factor considered in determining the lowest and best responsible bidder.

The undersigned also declares that he/she understands that liquidated damages based on the full bid price of the contract shall be assessed against Contractor, as stipulated liquidated damages and not as a penalty, in an amount as set forth in paragraph GC-46 of the General Conditions for each and every calendar day the work remains incomplete over the specified completion times in parts A through B stated above.

2. In submitting this bid, the undersigned declares that it is of lawful age and executed the accompanying bid on behalf of the bidder therein named, and that it had lawful authority so to do. The undersigned further declares that it has not directly or indirectly entered into any agreement, expressed or implied, with any bidder or bidders, having for its object the controlling of the price or amount of such bid or any bids, the limiting of the bid or bidders, the parceling or farming out to any bidder or bidders, or other persons, of any part of the contract or any part of the subject matter of the bid or bids or of the profits thereof, and that it has not and will not divulge the sealed bid to any person whomsoever, except those

having a partnership or other financial interest with bidder in said bid or bids, until after sealed bid or bids are opened.

- 3. The undersigned further declares that it has carefully examined the Notice to Bidders, Instructions to Bidders and other contract documents, and that it has inspected the actual location of the work, together with the local sources of supply, and has satisfied itself as to all conditions and quantities, and understands that in signing this Bid it waives all right to plead any misunderstanding regarding the same.
- 4. The undersigned hereby agrees to furnish any necessary bonds and insurance certificates and execute an agreement within ten (10) calendar days from and after notice of the award of the contract, and failure of the bidder to do so shall constitute a default, and the City may thereafter take such steps to protect its legal rights as it deems in its best interest, including, but not limited to, enforcement of its rights as to bid security.
- 5. It is understood that the City will pay in a prompt and timely manner pay estimates when submitted and approved by the Architect/Engineer and further approved by the City staff coordinator for the project, all as provided in the contract documents.

6.	Undersigned acknowledges receiptincluding the following addenda (co	ot of the Plans and Specifications for the project implete)		
7.	The undersigned agrees to sign a contract for the bid price on this bid form up until the date of <b>July 19</b> , <b>2023</b> .			
	(SEAL)	Contractor		
		Signature		
		Printed Name		
		Title		
		Street Address or P.O. Box		
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# CITY OF MISSION

# 2023 BROADMOOR PARK TRAIL PROJECT

# PROJECT SPECIAL PROVISIONS

# TABLE OF CONTENTS

GENERAL REQUIREMENTS	16
1 - FORCE ACCOUNT	22
3 - CONTRACTOR CONSTRUCTION STAKING	22
4 - REMOVAL OF EXISTING STRUCTURES	23
5 - CLEARING AND GRUBBING	24
6 - EXCAVATION	24
7 - COMPACTION OF EARTHWORK	25
8 - AB-3 OVERLAND PARK MODIFIED	26
9 - CONCRETE CONSTRUCTION	27
9A - CONCRETE SIDEWALK CONSTRUCTION	28
10 - SIDEWALK RAMPS	31
11 - CURB CONSTRUCTION	
12 - SODDING	
13 - TOPSOIL	36
14 - TEMPORARY EROSION AND POLLUTION CONTROL	

15

# **GENERAL REQUIREMENTS**

#### 1.1 SCOPE OF WORK

The work provided for in these Specifications shall consist of furnishing all labor, materials, appliances, and equipment, and performing all work and operations in connection with the construction of items and all other incidental and related work as set forth in these Specifications and as directed by the Engineer to make a complete and finished job.

#### 1.2 CONTRACT SPECIFICATIONS

The Specifications that shall govern the materials furnished and work performed in the construction of the work covered by the Contract or Contracts based thereon, are divided, classified, designated, and arranged as shown in the PROJECT SPECIAL PROVISIONS, TABLE OF CONTENTS attached hereto. No attempt has been made in the foregoing designated Specifications to segregate work to be performed by any trade, subcontract, or proposal item, under any one specification. Any segregation between trade or craft jurisdiction limits, and the establishment of subcontract limits, will be solely a matter of agreement between the Contractor and his employees and his subcontractors. The Specifications will govern the construction of the entire work, and the provisions thereof will govern each item and unit of work to which such provisions apply.

When reference is made to Engineer, it shall have the same meaning as consulting engineer as set seventh in Paragraph GC-2 of the General Conditions.

#### 1.3 STANDARD SPECIFICATIONS

The work shall conform to these Specifications and to the "Standard Specifications" where reference is made herein. Where reference is made in the Specifications and Contract Documents to "Standard Specifications," it shall mean that the reference is made to the current edition Chapters 13 and 15 of the Overland Park Municipal Code, with such revisions, amendments, and supplements as are contained herein.

## 1.4 CONTRACT DRAWINGS

The Contract Drawings or "Plans" on which the proposals and contracts are to be based, and which are to be supplemented by additional shop and dimension drawings of material and equipment and other drawings, where specified, are shown in the "Index of Sheets" on the cover sheet of the Plans.

#### 1.5 MEASUREMENT AND PAYMENT

#### a. Method of Measurement

The completed work shall be measured by the units described in the Proposal under each bid item that is satisfactorily completed by the Contractor. At monthly intervals, beginning one month after the Notice to Proceed, the Contractor shall submit to the City Engineer an accurate record of the work completed.

## **b.** Basis of Payment

The amount of completed work, measured as set forth above, shall be paid for at the contract unit price bid per item described in the Proposal and shall be full compensation for furnishing all materials, labor, equipment, tools, supplies and incidental related items necessary to complete the work in accordance with the Specifications. Work not measured separately for payment is subsidiary to the item to which it pertains.

# 1.6 MOBILIZATION OF EQUIPMENT

# **Description**

Move required personnel, equipment, materials, supplies and incidentals to the project site prior to beginning work. This work includes other work and costs incurred before the project starts.

All equipment used by the Contractor having metal tracks shall not be driven over City streets other than those streets being constructed. Such equipment must be transported from one work area to the next work area.

Observe legal load restrictions when operating equipment, hauling equipment, or hauling materials on public roads; newly constructed/reconstructed base, pavement, and structures; and any existing base, pavement or structures that will remain in place. Assume responsibility for changes in legal load restrictions that occur after the project was let. Obtain the Engineer's written approval and a special permit to exceed legal load restrictions on the City street system and on newly constructed/reconstructed portions of the project.

Protect roadways and structures within project limits from damage. Observe curing periods before operating equipment or hauling loads on newly constructed pavement, reconstructed pavement, or structures. Do not haul loads of any size on pavement base, except when operations require equipment on pavement base to place material. The Contractor shall assume all responsibility for damages to roadways and structures caused by the Contractor from operating equipment or hauling loads.

No direct payment will be made for Mobilization as it shall be considered subsidiary to other bid items in the contract.

# 1.7 INSPECTION OF WORK

The Contractor shall not commence placing concrete or backfilling of pipe/structures until such time as the City Engineer or his authorized representative has made inspection. Form location, grades, slopes and subgrade shall have been approved prior to placing any concrete.

#### 1.8 BRACING AND SHORING

It shall be the contractor's responsibility to brace and shore existing structures during construction. Any additional damage to or collapse of existing structures during the contract period shall be the sole responsibility of the Contractor.

The Contractor shall brace and shore all trenches in full accordance with Occupational Safety and Health Standards - Excavations; Final Rule 29 CFR Part 1926.

Bracing and shoring shall not be paid for directly but shall be considered subsidiary to other bid items. No additional payment shall be considered for increased quantities of earthwork, asphalt removal and replacement, or increases in other items as a result of compliance with this specification.

## 1.9 TRENCH BACKFILL

Flowable Fill is required for all trenches within all paved portions of the ROW including future paving, if they are known, per the Manual for Infrastructure Standards For Right of Way Restoration and City of Overland Park Standard Details.

#### 1.10 SAMPLING AND TESTING

All sampling and testing deemed necessary by the Engineer shall be performed by a Testing Laboratory selected by the City, except that all Asphaltic Concrete mix design and tests shall be performed by a Certified Testing Laboratory selected by the Contractor, as stated in specification section "Asphaltic Concrete Surface and Intermediate Course". The costs of all such tests, showing compliance with the Specifications, shall be paid by the City, except that all Asphaltic Concrete mix design and testing costs shall be paid by the Contractor. However, in the event that any test indicates non-compliance with the Specifications, additional testing will be paid for by the Contractor to determine acceptability of the material or methods. City reserves the right to weigh any selected truck as determined by the Engineer. The City shall only pay weighing costs and any additional costs shall be at the Contractor's expense.

# 1.11 TRAFFIC SAFETY

When working in the traveled way, the Contractor shall provide adequate and suitable barriers, signs, warning lights, flaggers, and all other equipment necessary to direct and reroute traffic and protect the public from moving or stationary vehicles, equipment, and materials, and other obstructions. Also, adequate protective warning lights and signs shall be provided to warn of any obstruction or excavation in the street, and easement area. All barricades, signs, lights and other protective devices in public right-of-way and easements shall be installed and maintained in conformity with applicable statutory requirements, the latest edition of the "Manual on Uniform Traffic Control Devices", and the "Overland Park Traffic Control Handbook for Street Maintenance and Construction Operations".

The Police Department, Fire Department, and Med-Act shall be notified prior to closing a street with the approval of the City Engineer.

#### 1.12 NOTIFICATION OF PROPERTY OWNERS

The Contractor shall provide advance notification to the adjacent property owners on all phases of the operations.

# 1.13 TREE AND PLANT PROTECTION

All trees and other vegetation which must be removed to perform the work shall be removed and disposed of by the Contractor; however, no trees or cultured plants shall be unnecessarily removed unless their removal is indicated on the drawings. All trees and plants not removed shall be protected against injury from construction operations.

The Contractor shall take extra measures to protect trees designated to be preserved, such as erecting barricades or fences around the drip line, and trimming low hanging branches to prevent damage from construction equipment. Barricade or fence shall not be removed without consent of the Engineer. When installing a pipe, or any other work that may damage the tree, hand excavating or tunneling methods shall be used. Where encroachment by vehicles or equipment is expected within the drip line of the tree, the contractor will be required to place at least a 6 inches layer of organic mulch on top of the affected area to offset possible compaction. Such trees shall not be endangered by stockpiling excavated material or storing equipment within the drip line of the tree. No backfill material exceeding 4 inches in depth shall be placed within the drip line area of any tree designated to be preserved without prior consent from the Engineer.

When excavation is required within the drip line of any protected tree, the contractor shall take extra measures to protect as many roots as possible. All roots to be cut or removed shall be "cut" with a chain saw, trencher, or other methods as approved by the engineer that will leave a smooth cut surface. All roots exposed during excavation shall be protected to prevent the roots from drying out by covering the exposed area with canvas or burlap, peat moss, or mulch, and kept damp until the area has been backfilled. Where shown on the plans, trees requiring root removal of one third or more of the circumference of the root system, may require the pruning of limbs on the opposite side of the root removal or thinning the entire tree equally as directed by the Engineer. All pruning, repair, and replacement of trees and plants shall be performed by qualified nurserymen or arborists. Trees requiring

trimming are as noted on the plans. This work shall not be paid for directly but shall be considered subsidiary to other bid items.

When the injury or removal of trees designated to be preserved cannot be avoided; each tree injured beyond repair or removed shall be replaced with a similar tree, or provide compensation to the City as determined by the Engineer.

#### **1.14 WEEDS**

The Contractor shall restrict the excessive growth of weeds, grasses, and other uncultivated vegetation within the project limits in accordance with the Overland Park Municipal Code. The Contractor shall cut down any excessive growth by mowing or trimming or as directed by the engineer.

No direct payment will be made for this work as it shall be considered subsidiary to other bid items in the contract.

# 1.15 RESTORATION

#### a. Pre-Restoration Meeting

The Contractor shall be responsible for scheduling a pre-restoration meeting within 1 (one) week prior to beginning final grading, select soil placement, and restoration of the sodded areas in the project. The time and location of the meeting shall be approved by the Project Engineer, with required attendance by the Contractor's superintendent and any/all subcontractors involved in the restoration. The purpose of this meeting is to discuss in detail the requirements of sod restoration in the Specifications. At this meeting the Contractor shall provide:

(1) A complete schedule of operations and proposed methods for soil preparation, sod placement, and watering.

A list of the equipment to be used for soil preparation and compaction, fertilizer distribution, sod delivery, placement and rolling, and watering.

The proposed source or sources of the sod, select soil, and water.

A list or set of "marked up" plans indicating the proposed location of each type of sod.

A list of at least 3 locations that the sod crew to be used on this project has placed sod within the previous 2 weeks.

## 1.16 UTILITY MEETINGS AND UTILITY ADJUSTMENT

It shall be the duty of the Contractor to notify the serving utility companies of pending construction operations and the schedule of same, prior to any work being done on this project. The Engineer will furnish plans to the utility companies for their records. These companies will relocate and adjust their own facilities at no cost to the Contractor, except for sanitary and storm sewers. The Contractor shall be responsible for the adjustment and protection of all sanitary and storm sewer facilities. Some minor grading and backfill work may be required of the Contractor at locations of utility adjustments. This work shall be considered subsidiary to other items of work.

The Contractor shall be responsible for holding periodic utility meetings with the City, the Engineer, and utility companies during the relocation of utility lines. The frequency of meetings will initially be bi-weekly (or more frequently if necessary) and then, as relocation work begins to diminish, will be held more infrequently. The Contractor shall keep minutes of the meetings and send copies to all those in attendance.

#### 1.17 RIGHT-OF-WAY

Right-of-way and easements will be available upon notice to proceed for this project.

The Contractor shall confine his construction operations to the right-of-way limits and easements provided for the project. Equipment or materials shall not be stored beyond these limits without the express approval of the owner of such property. The Engineer shall be informed as to any arrangements that Contractor makes on his behalf in these matters.

#### 1.18 CONSTRUCTION SCHEDULE

After being awarded the contract, the Contractor shall immediately prepare a Critical Path Method (CPM) schedule for approval by the City Engineer that will ensure completion of the project within the contract time. This schedule shall be submitted and approved by the City Engineer before a Notice to Proceed is issued. No work on this contract shall begin until said schedule is approved. The City reserves the right to adjust the Contractor's schedule to coordinate with any other projects in the same area.

## A. General Requirements

A computerized network diagram shall be included in the CPM schedule and shall serve as the 'Master Construction Schedule' for the Project, giving mathematical analysis (printout) of that network, which verifies and validates logic and planning and defines critical path. The approved schedule shall be kept on site with the superintendent and reviewed with Subcontractors each week. The CPM schedule shall be utilized for planning, organizing, and directing the work, for reporting progress, and requesting payment for work completed. The schedule shall be reviewed each week as part of the progress meeting. Abbreviations used in CPM schedules shall be clearly explained in a legend of symbols, either separate or attached. Scheduling software shall be compatible with Microsoft Project 2007.

# B. Schedule Requirements

The CPM schedule shall clearly show sequential interdependencies, with activity duration and float clearly represented. Sequence(s) of activities with no float shall be clearly identified as Critical Path(s). The scheduling system shall be capable of baseline comparison analysis. Upon development and approval of the schedule, the Contractor shall 'freeze' the initial schedule as the baseline schedule. As work progresses, Contractor shall provide graphics displaying actual progress bars versus baseline or target bars. Activity durations shall be in calendar days.

The CPM schedule shall include pre-construction tasks, construction tasks (bid items), shop drawing submittal and approval process, material and equipment ordering and delivery, submittal of as-built drawings, clean up and punchlist, inspection coordination activities, utility relocation, final inspection and certificate of completion, and final payment. Submittal activities shall be scheduled to allow sufficient time for materials and equipment to be procured and installed, even if the submittal is unacceptable and resubmittal is required. The CPM schedule shall reflect anticipated delays, such as weather delays.

Contractor shall submit the initial schedule, complete revisions, and periodic reports in three hard copies, one reproducible and two prints or plots, and one copy digitally on CD or DVD. This schedule shall include the completed network program consisting of GANTT chart and mathematical analysis within 10 days of the executed contract. Allow 5 days for the City Engineer to review. Contractor shall submit the schedule of submittal activities extracted from the master schedule within 10 days after receipt of Notice to Proceed. During the preparation period, Contractor shall review this information with the City Engineer.

Submittals to the City Engineer of initial and monthly CPM schedule charts shall include three sets of all reports as outlined below. Plots shall be color, blueline, printed or photocopied prints and, if segmentally generated, fully assembled. Highlight the critical path when the critical path is not clearly defined.

The Contractor will participate in the Engineer's review and evaluation of submitted network diagrams and mathematical analysis of diagrams. Resubmit revisions necessary due to review within 5 days after the review. Contractor and major Subcontractors shall review the network CPM schedule before final submittal.

# C. Report Formats –

Standard set of reports submitted each month including initial submittals shall consist of a GANTT chart of entire project. Progress bar chart shall include target or baseline comparison bars. Bar positions shall be early start/early finish with float clearly defined. GANTT charts shall include a tabulation of each activity. For each activity on the GANTT charts furnish the following:

- Initial/submittal schedule shall include a list of responsible contractors and suppliers, task description, duration, start date, end date, latest start date, latest end date, total slack or float time in calendar days and current schedule bar in Gantt view.
- Progress schedule updates shall include a list of responsible contractors and suppliers, task
  description, duration, actual start date, actual finish date, percentage completion, remaining
  duration in calendar days and current schedule bar in Gantt view.

Graphics outlined above shall comply with the following criteria unless noted otherwise:

- 1. Sheet size of diagram shall be 11 by 17 inches minimum and time scaled in month as the major timescale and weeks as the minor timescale unless approved otherwise.
- 2. On each page include a title block containing at a minimum the following information
  - a. Project Title
  - b. Project Number
  - c. Contractor's Business Name
  - d. Date of Submittal and Revision (The Date shown must clearly show the current preparation date and separately the revision date of the current schedule this is a hard date entered and not an auto or status date)
  - e. Submit a separate Legend Page of Symbols and Abbreviations as applicable.
- 3. Prepare and submit to the City Engineer upon request additional charts, reports, and current copy on disk of Project program.

#### D. CPM Schedule Implementation and Monitoring

Monthly CPM schedule charts and reports shall accompany the Contractor's pay request for work completed. Where the Contractor is shown to be behind schedule, provide accompanying written summary, cause, and explanation of planned remedial action. CPM schedules shall reflect those instances, modifications or other alterations to the schedule, which have an impact on the final completion or interim target dates within the schedule. Payments or portions of payments may be withheld by the City Engineer, upon failure to maintain scheduled progress of the work as shown on the approved CPM schedule. Failure to prepare, submit and maintain a CPM schedule as specified shall be cause for rejection of other schedules submitted and for possible delay of payment. Float time belongs to the project, not to the Contractor or to the City Engineer, and may be utilized by both parties.

# E. Schedule Changes And Updates

At a minimum the Contractor shall update and submit the CPM Schedule for review weekly. A weekly update is required unless agreed upon by the City Engineer. Monthly submittal of the CPM schedule and approval by the City Engineer is required prior to payment for work completed. Activities added to the CPM schedule shall be submitted by the Contractor on schedule charts. It is the City Engineer's intent that the project be managed and operated according to the CPM schedule. Payment requests may be held up until the CPM schedule is brought back into compliance with the contract documents.

Once the CPM schedule is submitted and approved by the City Engineer Contractor shall identify any modifications to activity durations, logic, values, or descriptions resubmit for approval. Such adjustments shall not impact the contracted completion date. Requests for time extensions are addressed in the General Conditions of these contract documents.

## **FORCE ACCOUNT**

#### DESCRIPTION

This work shall cover miscellaneous extra work required during the course of construction.

#### MEASUREMENT AND PAYMENT

Before the extra work is performed, the Contractor shall submit a proposed price in accordance with Paragraph (e) of "Changes in the Work" in the General Conditions for approval by the Engineer, and shall have received the written approval of the Engineer prior to commencing the proposed extra work.

The Engineer will measure each Force Account item as defined in the proposed price approved in accordance with Paragraph (e) of "Changes in the Work" in the General Conditions.

Payment for each Force Account item will be in accordance with the pre-approved proposed price.

Payment for Force Account (SET) shall be paid for on an extra work basis not to exceed the contract set price.

# CONTRACTOR CONSTRUCTION STAKING

#### DESCRIPTION

This work shall be performed in accordance with Section 802 of the Standard Specifications as amended herein. The Contractor shall set construction stakes establishing all lines, slopes, continuous profile-grades, centerlines, and benchmarks necessary to control and perform the work.

## CONSTRUCTION REQUIREMENTS

#### Vertical Control

Prior to construction Johnson County Bench Marks that will be damaged or removed by construction shall be replaced by a benchmark outside of construction area. New benchmarks shall be an aluminum cap (caps will be furnished by the County) set in a rigid concrete structure. A hole shall be drilled into concrete and the cap grouted into place. The preferred locations are traffic signal bases, culvert headwalls and bridge handrails. A standard monument record sheet shall be completed for each permanent benchmark. Elevations shall be determined with a double rod level run using digital level and bar code rods and shall tie into Johnson County vertical control network at each end of the level run. Level runs shall close within 0.1 ft. per 4 miles. Level run data shall be furnished in digital and paper format. Mapping grade state plane coordinates shall also be provided. This effort shall be coordinated with the Johnson County Public Works Department County Surveyor.

## **Horizontal Control**

Prior to construction Section Corner and quarter section corners shall be referenced to points outside construction and a Land Corner Endangerment Report submitted to the Kansas State Historical Society and the County Engineer within 30 days of the survey as required by state law. During construction the surveyor will coordinate with contractor on the placement of the monument box. After construction the surveyor shall use his previous reference ties and preliminarily mark the aluminum cap. This location shall be checked with coordinates from the design survey to insure that the ties match the previous coordinates. If within tolerance the aluminum cap shall be punched at the proper location. New Land Corner Reference Reports with updated references shall be submitted to the Kansas State Historical Society and the County Engineer within 30 days of the survey as required by state law.

# **Property Corners**

The Contractor shall locate all existing property corners within the project limits prior to commencing construction. All existing property corners shall be marked and protected. Property corners anticipated to be disturbed during construction shall be located by ties and shall be reset by the Contractor at the termination of construction activities. All property surveying shall be performed by a qualified land surveyor registered in the State of Kansas.

#### **KCP&L Conduits**

A stamped sealed survey shall be provided by the Contactor for all conduit installed as part of the contract.

## **Swale Staking**

The Contractor shall set cut stakes for all rough swale grading and shall maintain or reset such stakes for checking of the grade as required by the Engineer. Final grade for the swales and berms shall be established by "blue top" surveying or other approved method, and grade devices shall be maintained for inspection by the Engineer prior to sodding.

## MEASUREMENT AND PAYMENT

The Engineer will measure contractor construction staking by the lump sum.

Payment for "Contractor Construction Staking" at the contract lump sum price bid is full compensation for the specified work, which shall include all staking, establishing vertical and horizontal control points and property corner resetting.

Resetting of any vertical and horizontal control monuments or property corners that are disturbed that are not shown in the plans are subsidiary to Contractor Construction Staking.

# **REMOVAL OF EXISTING STRUCTURES**

## **DESCRIPTION**

This work shall conform to Section 202 as amended by Special Provision 07-02007 of the Standard Specifications except as otherwise modified herein and shall include the removal of subsurface structures such as all existing drainage structures, head walls, pipe, inlets, manholes, retaining walls, conduits, foundations, cables, and other obstructions which are encountered during construction. This item shall include any items which may not be specifically listed in the Plans but are in conflict with the new construction and which would normally be encountered upon a careful examination of the site of the work. This includes repair, plugging, or removal of existing pipe after removal of structures.

The work shall also include removal and wasting of surface structures such as concrete curb, pavement of all types, sidewalk, signs and markers, fencing, and abandoned utilities as directed by the Engineer. Excluded are utilities currently in service and structures for which other provisions are made for removal.

## CONSTRUCTION REQUIREMENTS

Erosion control measures shall be in place prior to the commencing of any work on the site in accordance with the "Temporary Erosion and Pollution Control" section. If the erosion control measures are not effective or are not approved by the City Engineer, all removal of existing structures shall be halted until such time as the erosion control measures are approved.

Fences that have portions of the fence removed and not replaced shall be left in a useable condition. The remaining fencing shall be terminated at an existing post, or a new corner post shall be set as shown on the plans or at the direction of the City Engineer.

Existing pavement shall be removed to provide match points as directed by the City Engineer.

Unless otherwise provided, all pipe designated for removal shall be removed and every precaution taken to avoid breaking or damaging those pipes which are to remain. The Contractor shall be held responsible for the repair of any damaged pipe and any such pipe will be replaced at the Contractor's expense. All damaged drainage pipe shall be replaced with the same type, grade and class as exists prior to the damage.

## MEASUREMENT AND PAYMENT

The Engineer will measure the removal of existing structures by the lump sum. Payment for "Removal of Existing Structures" at the contract lump sum price is full compensation for the specified work.

## **CLEARING AND GRUBBING**

#### DESCRIPTION

This work shall consist of clearing, grubbing, removing and disposing of all vegetation and debris as shown on the plans and in accordance with Special Provision 07-02008 of the Standard Specifications, except as otherwise modified herein.

# **CONSTRUCTION REQUIREMENTS**

Erosion control measures shall be in place prior to the commencing of any work on the site in accordance with the "Temporary Erosion and Pollution Control" section. If the erosion control measures are not effective or are not approved by the City Engineer, all clearing, grubbing, and other site work shall be halted until such time as the erosion control measures are approved.

All cleared vegetation and debris including sod, stumps, shrubs, trees, and roots located within the grading limits in cut or fill sections shall be completely removed from the project site and disposed of in accordance with all applicable Federal, State and local ordinances.

Clearing shall consist of removal to the ground surface of all trees, shrubs, and stumps, down timber, snags, brush, rubbish, and other obstructions which are objectionable in the opinion of the City Engineer. In areas to receive more than four (4) feet of embankment, trees, stumps, and brush shall be cut off no more than eight (8) inches above the original ground surface or low water level. Clearing operations shall be conducted so as to prevent damage to trees left standing, to existing structures, to structures under construction, as well as to provide for the safety of employees and others.

Areas within the limits of rights-of-way, construction limits, easements, and side street approaches shall be cleared. Individual trees, groups of trees, and other vegetation within the above limits shall be left standing and undamaged as directed by the City Engineer.

Grubbing shall consist of the removal of all stumps, logs, roots larger than three (3) inches in diameter, matted roots, and other debris, to a depth not less than 18 inches below the excavated surface.

Except in areas to be excavated, stump holes and other holes from which obstructions are removed, shall be backfilled with suitable material and compacted in accordance with the "Compaction of Earthwork" section.

Material shall be disposed of off the site of the public improvements, except in the case in which permission from a private property owner is obtained. If the disposal is on private property, the Contractor shall obtain written permission of the property owner on whose property the material is placed. Copies of all agreements with property owners are to be submitted to the City Engineer.

#### MEASUREMENT AND PAYMENT

The Engineer will measure the clearing and grubbing as a lump sum.

Payment for "Clearing and Grubbing" at the contract lump sum price bid is full compensation for the specified work.

## **EXCAVATION**

#### DESCRIPTION

Excavation of the specified materials shown on the plans shall be done in accordance with Section 205 of the Standard Specifications except as otherwise modified herein.

# CONSTRUCTION REQUIREMENTS

Erosion control measures shall be in place prior to the commencing of any work on the site in accordance with the "Temporary Erosion and Pollution Control" section. If the erosion control measures are not effective or are not approved by the City Engineer, all excavation and other site work shall be halted until such time as the erosion control measures are approved.

## Rough grading

Areas to be graded shall be cut to the approved subgrade elevations. The graded area shall have adequate drainage at all times. All ditches and channels shall be kept free of debris or obstructions.

Erosion control measures shall be taken to protect downstream drainage systems from pollution, sedimentation or erosion caused by grading operations. Any pollution or damage occurring shall be the responsibility of the contractor.

## Excavation

Excavation to the finish graded section for construction shall be considered Unclassified Excavation.

All stable and suitable materials from excavation shall be used as far as practicable for fills as shown on the drawings. All stable and suitable material that is hauled offsite by the contractor and is required for fill shall be hauled back onsite by the contractor at no cost to the Owner.

Suitable materials shall be defined as entirely imperishable material with that portion passing the No. 40 Sieve having a liquid limit not exceeding 40 and a plasticity index not exceeding 25 when tested in accordance with ASTM D 4318.

For publicly funded projects the City Engineer may waive or redefine the requirements for suitable material if soil mitigation measures are included in the contract documents.

For privately funded street improvements, the Engineer shall provide a geotechnical report for approval by the City Engineer. The geotechnical report shall analyze proposed subgrade materials and if necessary make recommendations for fly ash or other soil modification as required to meet the soil stability requirements in this specification or shall provide alternate mitigation recommendations.

<u>Unsuitable material</u> encountered in the subgrade during construction shall be removed, wasted, and suitable backfill placed in accordance with "Compaction of Earthwork". All waste sites shall be provided by the Contractor and approved by the City Engineer.

<u>Unstable material</u> is considered to be material that has moisture content above the plastic limit of the soil. Suitable material with excess moisture caused by the Contractor's negligent operations is not classified as unstable excavation. Excavate and use unstable material in accordance with Subsection 205.4.d.

Where rock, shale or similar material is found, the excavation shall be carried 15 inches below the subgrade for the full width of the paved area, plus an additional width for form work for curbs, catch basins, curb inlets, etc. The excavated area shall be backfilled to the subgrade and shoulder elevations with suitable materials, and compacted as described in "Compaction of Earthwork".

No separate payment will be made for undercutting and overbreakage in rock excavation and for backfilling and compacting this area with the materials as shown in the plans.

## MEASUREMENT AND PAYMENT

Payment for this work shall be based on plan quantity and will be paid for at the contract unit price bid per cubic yard for "Unclassified Excavation".

The Engineer will measure excavation of unstable and unsuitable material by the cubic yard. The Contractor shall conduct his operation in such a way that the Engineer can take the necessary cross sectional measurements before the backfill is placed.

Payment for "Excavation (Unsuitable)" and "Excavation (Unstable)" at the contract unit prices bid is full compensation for the specified work. No additional payment will be made for furnishing, backfilling and compacting these areas with suitable material.

## **COMPACTION OF EARTHWORK**

#### DESCRIPTION

All subgrade shall be uniformly compacted as indicated on the plans and in accordance with Section 205 as amended by Special Provision 07-02003-R01 of the Standard Specifications except as otherwise modified herein.

## **CONSTRUCTION REQUIREMENTS**

The embankment fill area shall be cleared and grubbed prior to placing the fill layers. Suitable materials, as specified in "Excavation", shall be used within the top three feet of subgrade. Where the fill is less than four feet below the subgrade, all sod and vegetable matter shall be removed from the surface

upon which the fill is to be placed. The cleared surface shall be completely broken up by plowing, scarifying or stepping to a minimum depth of six inches. The material shall be recompacted. The fill shall be spread in layers not to exceed eight inches loose, free from clods, bladed or disced to an even surface, and compacted. In no case shall rocks, larger than three inches in any dimension be deposited within one foot of subgrade elevation. In no instance shall any lift or layer exceed six inches of compacted thickness. The entire embankment fill shall be spread in layers and compacted as hereinafter specified.

After each fill layer has been spread as outlined above, the entire area shall be compacted as set forth in these specifications. The Contractor shall have available adequate hand or mechanical compaction equipment to accomplish the compaction .

Filling and compacting operations shall continue alternately until the fill conforms with the lines, grades, and typical cross-sections shown on the approved drawings.

All subgrade shall be uniformly compacted to a minimum of Type AA, MR-3.

All fill areas outside the limits of pavement shall be uniformly compacted to a minimum of Type B, MR-90, in accordance with Section 205 of the Standard Specifications.

## **Compaction in Fill Sections**

Compacted density of soil in fill areas in the top 18 inches shall be equal to or greater than 95% of standard proctor density, Type AA compaction with a moisture range of MR-3-3 except as recommended by a qualified laboratory and approved by the City Engineer. The fill area below the top 18 inches shall be Type B compaction with a moisture range of MR-90 unless more stringent compaction is required by the City Engineer. The maximum density for the material used shall be as determined by ASTM D-698 and within the tolerances of the optimum moisture at maximum density as determined by the Moisture Density Curve obtained for the given material.

Sand and gravel which cannot be compacted satisfactorily with a sheeps-foot roller shall be rolled with a pneumatic-tired roller. Each lift shall be rolled until no further consolidation is evident.

## **Compaction in Cut Sections**

The soil six inches below the finish subgrade line in cut sections shall be scarified, broken up, and then compacted as specified in the "Compaction in Fill Sections" paragraph. The depth of compaction in cut sections shall be a minimum of six inches.

Highly plastic and non-plastic fine-grained material and all unstable and unsuitable material as defined in "Excavation" shall be removed within the top three feet of the subgrade and suitable soil replaced and compacted as specified in the "Compaction in Fill Sections" paragraph.

Excavated rock and shale shall be used in fill sections at locations at least 3 feet below the subgrade elevations. All rock fill shall be tracked in with dirt or shale to minimize voids in accordance with the Standard Specifications. Non-durable shale shall manipulated (i.e. sized) with equipment and water until 100% of the material is smaller than 6 inches in all dimensions, and until a minimum 90% of the material is smaller than 3 inches in all dimensions. Shale shall be tilled or pulverized, if necessary, so that it may be compacted to a minimum of Type A (MR-90). The Engineer will verify manipulation requirements with a visual inspection (e.g. have the Contractor scarify a known area to a known depth, calculate theoretical volume scarified, calculate an average volume for the stones between 3 inches and 6 inches and if the volume for the stones exceed 10%, the test fails). Continue manipulation and retest until the above requirements are met. No additional payment will be made for any work or equipment required for compliance with this specification.

#### MEASUREMENT AND PAYMENT

No separate payment will be made for water required for compaction of subgrade.

The amount of completed and accepted work shall be paid for based on plan quantity at the contract unit price bid per cubic yard for "Compaction of Earthwork" of the specified type and moisture range.

#### AB-3 OVERLAND PARK MODIFIED

#### DESCRIPTION

AB-3 Overland Park Modified shall be supplied in accordance with Section 1104 of the Standard Specifications, except as otherwise modified herein.

#### **MATERIALS**

Paragraph 1104.2(a) composition shall be modified so that the AB-3 Overland Park modified shall consist of 100% limestone or dolomite produced by mechanical crushing.

Table 1104-1: Gradation and Plasticity of Aggregates for Aggregate Base Construction shall be modified so that the AB-3 Overland Park modified shall have the gradation shown on line AB-3; however, the P.I. shall be between 0 and 5 and the liquid limit shall be 25 maximum.

The material shall be mixed with water in a stationary plant, before delivery to the project site, to obtain the moisture content as directed by the City Engineer.

#### CERTIFICATION OF THE MATERIAL

The Contractor shall submit with the delivery of the material to the project, a certificate indicating the gradation, plasticity index, and the moisture-density relationships of the material using ASTM D698 complies with the above material specification.

#### **CONCRETE CONSTRUCTION**

#### DESCRIPTION

All concrete construction shall meet the requirements of Section 401 and Special Provision 07-04001-R01 of the Standard Specifications except as otherwise modified herein.

#### **MATERIALS**

#### **Mix Designs**

The mix designs shall be approved by the Kansas City Metro Materials Board as meeting the designation "KCMMB 4K"

## **Ready-mixed Concrete**

Ready-mixed concrete shall be mixed and placed in accordance with the requirements of the Standard Specifications, except that ready-mixed concrete shall be transported with agitation. All concrete shall meet the slump requirements specified. Any addition of water shall be in accordance with the KCMMB specification and prior approval of the Engineer. A diligent effort shall be made by the Contractor and the ready-mix concrete producer to deliver concrete at regular intervals, and to maintain a uniform mix throughout each concrete pour. Concrete shall be delivered at intervals frequent enough to prevent any cold joints.

Reinforcing Steel

Reinforcing bars shall be in accordance with "Reinforcing Steel".

Welded wire fabric shall conform to the requirements of ASTM A 185, Grade 60 and shall be supplied in sheets. Rolls shall not be used.

#### Water

Water shall be clean and free from deleterious substances.

#### CONSTRUCTION REQUIREMENTS

## **Placement and Curing**

The Contractor shall provide 24 hours' notice of his intention to place concrete to allow for adequate supervision.

Table 710-1 of the Standard Specifications shall be modified to require a minimum curing period of 5 days for Other Formed Surfaces.

Wet covering and waterproof covering shall conform to KDOT Sections 1405-1407 of the Standard Specifications. Liquid membrane-forming compound shall conform to the requirements for Type 2 White Pigmented Compound as specified in AASHTO M148. Clear liquid membrane-forming compound shall not be used.

#### Admixtures

KCMMB Concrete shall not be supplied with any admixtures designated as (Optional) in the Mix Design Testing Data without prior approval of the City Engineer.

Concrete admixtures will not be added to concrete after leaving the batch plant without approval of the City Engineer.

#### **Forms**

Forms shall be of steel or wood, free from warp and shall be sufficiently strong and rigid and securely staked and braced to obtain a finished product correct to the dimensions, lines and grades required. All forms must be cleaned and oiled before each use. In no case shall forms obstruct the waterways of the storm sewer system.

# **Special Weather Conditions**

Cold Weather

The Contractor shall comply fully with the provisions of ACI 306.1-90 as modified below:

Average daily temperatures as defined in ACI 306.1-90 will be determined and recorded by the City Engineer.

Concrete temperatures will be determined through the use of high-low thermometers placed and operated by the City below insulated blankets, or where the concrete is uncovered, by checking air temperatures. Uncovered concrete, which has been subjected to freezing temperatures of any duration during the first 24 hours will be considered "frozen," and shall be rejected.

Concrete shall reach 75% of its design strength prior to backfilling. This strength can be determined through the use of field-cured cylinders, made and tested at contractor's expense. Concrete must have 5 days where the average daily temperature is above 50 degrees F prior to backfilling unless field cured cylinders are taken. These days do not need to be consecutive.

Concrete operations in hot weather shall conform to Section 4012.087 (a) of the Standard Specifications.

## Backfill

Backfill of concrete structures shall be in accordance with Section 204.3.f of the Standard Specifications.

#### **Strength Acceptance Requirements**

Cylinders used for determination of concrete strength shall be sampled and field cured in accordance with KT-22, and tested in accordance with ASTM C39. Testing frequency shall be in accordance with the City Sampling and Testing Frequency Chart. All KCMMB 4K concrete shall have a minimum compressive strength of 4000 psi at 28 days. All KCMMB 5K concrete shall have a minimum compressive strength of 5000 psi at 28 days. Concrete not meeting these strength requirements as determined by ACI 318-11 Section 5.6.3.3 shall be removed and replaced at the contractor's expense.

## MEASUREMENT AND PAYMENT

#### **KCMMB 4K Construction**

All concrete used in construction of concrete pavement and driveways, curbs and gutters, storm sewer inlets and junction boxes, concrete inverts, aprons, collars, sidewalks, integral sidewalk retaining walls, concrete ditch liner, and median noses shall be classified as KCMMB 4K. The actual mixed proportions of cement, aggregates and water shall be determined by the Contractor.

## CONCRETE SIDEWALK CONSTRUCTION

## **DESCRIPTION**

All sidewalk construction shall be constructed to the lines and grades shown on the Drawings or established by the City Engineer.

#### **MATERIALS**

All sidewalks shall be constructed using Portland Cement Concrete or concrete paver brick. Portland Cement Concrete and concrete paver brick shall conform to "Concrete Construction" and "Concrete Paver Stones", respectively.

All concrete used in construction of sidewalks shall be classified as KCMMB 4K.

## **CONSTRUCTION REQUIREMENTS**

All sidewalks shall be constructed in compliance with the American with Disabilities Act of 1990, 42 U.S.C. 12101 et seq.

#### Location

All public sidewalks constructed within the City shall be located in the public right-of-way or within a public sidewalk easement. The standard location shall be one foot from the right-of-way or easement line, except when a ditch section is used in RE Districts where they shall be one foot from the shoulder. Sidewalks shall be constructed to allow access to all pedestrian signal actuation devices.

#### **Dimensions**

The width of any sidewalk repair shall be the same as that being replaced. The width of new sidewalk construction shall be as indicated on the plans. The minimum width of public sidewalks shall be four feet with a five foot square passing space every 200 feet. The minimum width of public sidewalks along thoroughfare corridors shall be five feet. The minimum allowable thickness shall be four inches, except within a driveway approach area, where the minimum allowable thickness shall be six inches. Sidewalks constructed with concrete paver brick shall meet the following specifications: Four inches of concrete shall be used as a base plus one inch of bedding sand for the pavers. Edge restraint must be provided in any case to confine the paved section to the design dimensions.

# **Grades and Slopes**

The grade or slope along the length of the walk shall be as near parallel to the street gradient as practical. The maximum longitudinal slope shall be one inch per foot, except where a variance from street grade has been approved by the City Engineer. The cross slope shown on the Overland Park Standard Details is one foot per 100 feet or 1%; with the intention of enforcing a 2% maximum with absolutely no tolerance for exceeding 2%, due to Federal requirements. This maximum cross slope standard also applies when the walk crosses drives and shall slope toward the street, except in RE Districts where a ditch section is used. The finish grade of the sidewalk shall be such that the slope of the finish grade between the curb and the sidewalk will not exceed one-half inch per foot and will not be less than one-quarter inch per foot and shall slope toward the street, except in RE Districts where a ditch section is used.

## **Subgrade Preparation**

The subgrade shall be uniformly compacted to a Type B density of 90% with a moisture range of MR-90. The subgrade shall be evenly graded to the required subgrade elevation. All loose or extraneous material shall be removed from the subgrade and soft spots shall be uniformly recompacted prior to placement of concrete. Sidewalk concrete material shall not be placed on frozen subgrade. The Contractor shall have available adequate hand or mechanical compaction equipment to accomplish the compaction as set forth in these specifications. The subgrade shall be properly moistened prior to placing concrete.

#### **Forms**

All forms shall be sufficiently strong and rigid and securely staked and braced to obtain a finished product correct to the dimensions, lines and grades required. Forms may be of steel or wood at the option of the contractor.

Each form shall not vary more than one-quarter inch in longitudinal and vertical alignment for each ten feet in length. All forms must be cleaned and oiled before each use. A slip-form machine, equipped with electronics, may be used in lieu of forms. The machine shall be equipped with mechanical internal vibrators and shall be capable of placing the finished sidewalk to the correct cross section, line and grade as required in this section. Adjustments of the string line and/or slip-form machine shall be made to give a smooth and accurate line and grade.

## Reinforcing

Reinforcing of sidewalks will not be required except in unusual conditions where the City Engineer may require reinforcing or welded wire fabric. When welded wire fabric is used it shall be placed two inches (2") from the finished surface of the sidewalk. The reinforcement shall be supported

using set spacing such that between the supports, the reinforcement does not deflect or sag excessively. There will be no direct payment for this item, and it shall be subsidiary to the unit price bid for sidewalk replacement.

## **Placing and Finishing Concrete**

The contractor shall provide adequate tools and equipment to produce quality workmanship in placing and finishing concrete. The sidewalk and ramps shall be finished to the top of the forms and the surface finished with a wood or steel float and surface texture shall be a course broom finish transverse to the slope of the sidewalk or ramp. No "plastering" of the surface shall be permitted.

**Contraction Joints** 

The sidewalk surface shall be marked off into nominal squares of dimensions equal to the width of the sidewalk with a maximum distance between joints of seven feet.

All joints in formed concrete sidewalks shall be tooled. Joints shall be tooled after brooming to provide a "picture frame" appearance. A standard joint tool having a width of one-eighth inch and one inch deep having a lip radius of one-eighth inch to one-quarter inch shall be used in forming the joints.

All joints in slip-formed concrete sidewalks shall be sawed. If sawing joints, the contractor shall begin as soon as the concrete hardens sufficiently to prevent excessive raveling along the saw cut and shall finish before conditions induce uncontrolled cracks, regardless of the time or weather.

**Expansion Joints** 

Expansion joints shall be constructed at locations where the sidewalk abuts existing concrete curbs, driveways, and similar structures, and every two hundred fifty feet and as shown on approved plans. Expansion joints shall be formed with one-half inch prefabricated non-extruding filler and shall extend the full depth of the slab.

# **Curing Concrete**

Sidewalk slabs shall be cured either by wet covering, waterproof covering, or liquid membrane-forming compound in accordance with "Concrete Construction". The curing period shall be a minimum of five days. Curing shall be commenced as soon as possible after the finishing operation and when the concrete has set sufficiently so that it will not be damaged in the process.

#### **Backfilling Concrete**

Backfilling operations shall not commence prior to the completion of the five day curing period, or until the concrete attains 75% of design strength. All backfill material shall consist of soil suitable for vegetation. The area shall be prepared such that sod can be placed on bare soil.

# **Sidewalk Repair Details**

Limits

The areas of sidewalk to be removed and replaced shall be as directed by the Engineer, and sawed to provide a neat and straight joint. The Contractor will be responsible for any damage to existing sidewalk resulting from his operations beyond the limits marked or designated by the Engineer or his authorized representative, and shall satisfactorily repair any such damage at his own expense. All disturbed areas shall be restored to their original condition, which includes backfilling, sod, driveways, underground sprinkler systems, and any other items damaged by the contractor.

**Subgrade Preparation** 

Defective sidewalk, excess base materials, and tree roots shall be removed from the construction site and disposed of by the Contractor. Whenever practical, the areas to be removed will be marked at a construction or contraction joint, otherwise concrete sawing will be required to provide a neat and straight joint. Sawing at a contraction or construction joint will be required only when the joint is not of sufficient depth to provide a neat and straight break line.

After the defective sidewalk, excess materials, and tree roots have been removed, the subgrade shall be uniformly compacted to a density equivalent to the density of the immediately surrounding undisturbed soil and evenly graded to the required subgrade elevation.

Concrete shall not be placed on frozen subgrade.

Subgrade shall be properly moistened prior to placing concrete.

Grades and Slopes

The grade or slope along the length of the sidewalk repair shall be a uniform transition between ends of undisturbed sidewalk unless otherwise directed by the Engineer. The standard cross slope for

sidewalk shall be 1/8 inch per foot and shall slope toward the street. Providing the existing sidewalk does not have standard cross-slope, a uniform transition shall be made to existing sidewalk.

# **Notification of Property Owner**

The City will give advance notice to property owners whose sidewalk has been marked for repairs. The Contractor shall notify each property owner when the work will actually commence.

#### MEASUREMENT AND PAYMENT

The Engineer will measure the sidewalk construction by the square foot of exposed surface of specified thickness.

Payment for "Sidewalk Construction" at the contract unit price bid is full compensation for the specified work.

The Engineer will measure the sidewalk construction by the square foot of exposed surface of specified thickness and will measure the construction of concrete steps by the cubic yard of placed material.

Payment for "Sidewalk Construction" at the contract unit price bid is full compensation for the specified work.

Payment for construction of concrete steps, "KCMMB 4K Concrete" at the contract unit price bid is full compensation for the specified work.

#### SIDEWALK RAMPS

#### DESCRIPTION

This work shall be constructed in accordance with the lines and grades shown on the Drawings.

#### **MATERIALS**

#### **Detectable warning surfaces**

Detectable warning surfaces shall be Armor Tile Tactile System (Cast in Place) or approved equal. The color shall be "Brick Red".

## **CONSTRUCTION REQUIREMENTS**

## **Curb Return Verification**

After the construction of the adjacent curb and gutter section, and not less than one week prior to the construction of all wheelchair ramps, the contractor shall verify that the curb return elevations and the location of the depressed section is constructed in conformance with the design drawings. If the absolute elevation of any of the control points shown in sidewalk ramp drawings is not within .5 inches, or if the relative difference between any two control points is not within .125 inches, or if the depression location is not within 1" of the design drawings, the contractor shall either 1) remove and replace the non-compliant curb, or 2) submit a shop drawing showing how the ramp can be constructed to be ADA compliant. In the event that the original design drawings showed a ramp with elements that were not ADA compliant, the shop drawing shall show that the proposed element is as or more ADA complaint than the original design drawing. If this cannot be accomplished, the curb shall be removed and replaced.

## Wheelchair Accessible Curb Ramps

Wheelchair accessible curb ramps shall be constructed at all street crossings. Maximum desirable slope of ramps shall be one inch per foot. Minimum width shall be four feet, except along thoroughfare corridors where the width shall be five feet. The minimum allowable thickness for wheelchair accessible curb ramps shall be six inches. Curbs at ramp locations must provide a gradual transition from gutter line to back of curb, not exceeding one inch in height or slopes of greater than one inch per foot. Side slopes of ramps shall not exceed one inch per foot where such side slopes are in the normal path of pedestrians on adjacent portions of sidewalk. If the street curb has not been constructed to receive the sidewalk ramp, the sidewalk constructor shall remove a section of the curb and reconstruct as required.

Ramps shall be constructed with or without a detectable warning surface as specified on the plans.

#### MEASUREMENT AND PAYMENT

The Engineer will measure sidewalk ramps by the square foot of final exposed area of the entire ramp.

The Engineer will measure the detectable warning surface by the square foot of final exposed area. Final exposed area shall be that area exposed after installation of detectable warning surfaces and backfill operations are complete.

Payment for "Sidewalk Ramp (6")", and "Detectable Warning Surface" at the contract unit prices bid is full compensation for the specified work.

## **CURB CONSTRUCTION**

#### DESCRIPTION

Concrete curb shall be installed, or removed and replaced as shown on the plans and in accordance with the requirements of the "Concrete Construction" specification and Section 825 of the Standard Specifications except as otherwise modified herein.

#### **MATERIALS**

## **Reinforcing Steel**

Reinforcement for curb and gutter shall be three No. 4 bars in accordance with "Reinforcing Steel".

#### Concrete

Concrete for curb and gutter shall be in accordance with "Concrete Construction".

## **CONSTRUCTION REQUIREMENTS**

#### **Concrete Placement**

A slip form curb machine, with electronic control, shall be required on all continuous curb construction of lengths greater than 100 feet.

The concrete shall not be placed until the subgrade has been inspected for compaction and moisture. The concrete shall be consolidated with an approved internal type vibrator. The surface shall be shaped by use of a steel tool to produce the sections shown on the drawings. The edges shall be rounded with edgers to form the radii indicated on the drawings.

The surfaces shall be finished with a wooden or metallic float and brushed. All concrete shall be cured in accordance with the "Concrete Construction" specification.

#### Reinforcement

No reinforcement shall be required when curb and gutter is laid on four inches or more of asphaltic concrete base.

## Joints

All joints shall be formed at right angles to the alignment of the curbing.

**Expansion Joints** 

Expansion joints shall be placed at points of curvature, curb returns, curb inlet transitions, and at intervals not to exceed 250 feet. The expansion joints shall consist of one-half inch premoulded bituminous, nonextruding and resilient expansion joint material cut to the configuration of the curb section. The material shall extend through the full curb section. The edges of the joints shall be rounded with an edging tool of one-quarter inch radius.

After curing, the joints shall be sealed with urethane sealant meeting ASTM C 920. The sealant shall be Class 35 ( $\pm$ 35% Joint Movement), Type S and Grade NS.

**Contraction Joints** 

Curbing shall have contraction joints formed at 15 feet intervals. They shall extend across the entire curb section The cut shall be approximately 1/4 inch wide, and the depth shall be one-third the thickness of the curb (minimum) or as shown in the plans. The contraction joints may be formed by any approved method. If sawing joints, the contractor shall begin as soon as the concrete hardens sufficiently

to prevent excessive raveling along the saw cut and shall finish before conditions induce uncontrolled cracks, regardless of the time or weather.

#### Line and Grade

The new concrete curb and gutter shall be accurately placed in accordance with the line and grade as established by the Engineer. Curbs shall be formed to the cross section as shown on the drawings with a mule; or templates supported on the side forms and with a float not less than 4 feet in length, for hand placed curb.

The finished surface of the curb and gutter shall be checked for no more than 1/4 inch deviation, by the use of a 10 foot straightedge, and corrected if necessary. Where grades are flat and while the concrete is still plastic, the drainage of the gutter should be checked with a 4 foot carpenter's level.

#### **Finish**

The surfaces of curb and gutter shall be finished with a wooden or steel float and broomed. Brooming shall be perpendicular to the curb line. The brooming operation shall be so executed that the marks will be uniform in appearance and not more than one-sixteenth inch in depth. Brooming shall be completed before the concrete is in such condition that it will be torn or unduly roughened and before the concrete has attained its initial set.

# **Curing and Backfilling**

Curing

Concrete curbs and gutters shall be cured in accordance with "Concrete Construction".

Backfilling

Backfilling operations shall not commence prior to the completion of the curing period, or until the concrete attains 75% design strength, as shown by compressive tests of field cured cylinders. All backfill material shall consist of soil suitable for vegetation. The area shall be prepared such that sod can be placed on bare soil.

#### MEASUREMENT AND PAYMENT

Removal

Excavation, removal of concrete, concrete curbing, sidewalks, pavement material, or any other items required to be removed for the completion of this project shall be removed from the construction site and disposed of by the Contractor. The pavement shall be saw cut full depth in a true line a minimum of 2 inches in front of the section of curb marked to be removed. The concrete curb shall be sawed at each end of the section of curb marked to be removed. The curb shall be removed as not to disturb the adjacent pavement and adjacent curb. The Contractor will be responsible for repairing all damage to the pavement and curb and gutter resulting from his operations beyond the limits marked for repair.

## Replacement

The subgrade shall be compacted as required by the plans and specifications, but not less than Type AA (MR-5), clean of any foreign material, and moistened prior to placing concrete. If additional fill is required for subgrade, aggregate designated as AB-3 shall be used in accordance with Section 1104 of the Standard Specifications, or as approved by the Engineer, and 95% compacted. The Contractor shall have available adequate hand or mechanical compaction equipment to accomplish the compaction as set forth in these Specifications. Concrete, as a base material, shall be placed in front of the new curb and shall have obtained 75% design strength, as shown by compressive tests of field cured cylinders, prior to placement of asphalt surface. The concrete shall be left below the existing surface by the surface thickness, and an asphaltic concrete surface shall be placed over the concrete and compacted. Concrete and asphalt in front of the new curb shall not be paid for directly but shall be considered subsidiary to the contract price bid per linear foot of "Curb & Gutter Replacement" of the specified type.

The Engineer will measure the curb and gutter of the specified type by linear foot along the lip of gutter.

Payment for "Curb and Gutter, Combined" and "Curb" at the contract unit prices bid is full compensation for the specified work. Curb in front of sidewalk ramps, curb transitions, Type C curbs, and other locations not a standard width or section, will be paid for as "Curb and Gutter, Combined" of the more prevalent type unless otherwise specified.

Curbs constructed in front of existing inlets shall be paid for at the contract unit price bid per linear foot of concrete curb. (See Standard Curb Inlet Detail).

No direct payment shall be made for sawing as it shall be considered subsidiary to curb construction.

#### **SODDING**

#### DESCRIPTION

This work shall consist of furnishing and placing sod at those locations indicated on the plans or as designated by the Engineer in accordance with Section 906 of the Standard Specifications except as modified herein.

#### **MATERIALS**

#### **Sod Types**

The type of sod to be used will be Turf Type Fescue sod, except where Zoysia sod or Kentucky Bluegrass sod is identified under the property owners name and address on the plans, or designated by the Engineer. In the case of mixtures of Bluegrass and Zoysia sod, Zoysia shall be used unless otherwise directed by the Engineer.

## **Sod Material**

All materials shall conform to the requirements of these Specifications and to Section 2104 of the Standard Specifications. The Contractor shall retain a person knowledgeable of the different types of sod to ascertain prior to bidding, the location and types of existing sods. Sod shall be of best quality Bluegrass, Zoysia, or Turf Type Fescue, not more than two years old, shall conform to the quality standards of Nursery Grown Sod as defined by the American Sod Producers Association, and shall meet the following standards:

Thickness of Cut: Sod shall be machine cut at a uniform soil thickness of 5/8 inch, plus or minus 1/4 inch, at the time of cutting. Measurement for thickness shall exclude top growth and thatch. Pad Size: Individual pieces of sod shall be cut to the suppliers's standard width and length as approved by the Engineer. Maximum allowable deviation from standard widths and lengths shall be plus or minus 1/2 inch on width and plus or minus 5 percent on length. Broken pads and torn or uneven ends will not be acceptable.

Strength of Sod Sections: Standard size sections of sod shall be strong enough to support their own weight and should retain their size and shape when suspended vertically from a firm grasp on the upper 10 percent of the section.

Moisture Content: Sod shall not be harvested or transplanted when moisture content (excessively dry or wet) will adversely affect its survival.

Mowing Height: Before stripping, sod shall be moved uniformly at a height of 2 to 3 inches.

Thatch: Sod shall be relatively free of thatch, up to 1/2 inch allowable (uncompressed).

Diseases, Nematodes, and Insects: Sod shall be reasonably free of diseases, nematodes, and soil-borne insects. State nursery and/or plant materials' laws require that all sod entering inter-state commerce be inspected and approved for sale. The same applies to sod being shipped intra-state. The inspections and approval must be made by the state agricultural department, office of the state entomologist.

Weeds: Sod shall be free of objectionable grassy and broad leaf weeds. Sod shall be considered free of such weeds if less than 5 such plants are found per 200 square feet of area. Sod will not be acceptable if it contains any of the following weeds: quackgrass, Johnson grass, poison ivy, nutsedge, nimblewill, Canada thistle, bindweed, wild garlic, ground ivy, perennial sorrel, bromegrass, bentgrass, and Bermuda grass.

## **Fertilizer**

Fertilizer shall conform to the State fertilizer laws, and shall conform to Section 2108 of the Standard Specifications.

Furnishing and placing fertilizer shall be in accordance with Section 902 of the Standard Specifications. Fertilizer shall be uniform in composition, dry and free flowing, and shall be delivered to the site in the original unopened containers, each bearing the manufacturer's guaranteed analysis. Certification shall be submitted to the city on the fertilizer. Any fertilizer which becomes caked or

otherwise damaged, making it unsuitable for use, will not be accepted. Fertilizer shall be placed prior to sodding at not less than 1 lb. of pure nitrogen per 1000 square feet of sodding area unless otherwise determined by a soil test. Fertilizer shall be subsidiary to sodding bid items.

## **CONSTRUCTION REQUIREMENTS**

#### **Sod Season**

Bluegrass and Fescue sod may be planted during the periods of March 1 to May 15 and September 1 to November 15. Bluegrass and Fescue sod may be planted during the period, November 15 to March 1, when the soil and sod is workable and with the approval of the Engineer. If sod is planted between November 15 and March 1, the Contractor will maintain the sod until 20 days after the beginning of the spring sodding season. The Engineer reserves the right to delay the sodding of all types of sod or to vary the permissible sodding seasons, due to weather, soil conditions, or for other causes.

Zoysia sod may be planted during the period April 1 to October 15.

# **Bed Preparation and Moisture Requirements**

Where the width of the disturbed area to be sodded exceeds 18 inches, the area shall be widened to a uniform size by removing enough existing turf from behind the disturbed area, creating an area whose width is a multiple of 18 inches (width of sod roll). A clean edge should be established at the outer limits of the area to be sodded, so that good contact can be made between the new sod and the established turf.

Where the width of the disturbed area is less than 18 inches, enough existing turf shall be removed to create an area of uniform width, no less than six (6) inches.

All backfill shall consist of soil suitable for vegetation. The area shall be prepared such that sodding can be placed on bare soil. This will consist of cultivating, smoothing, removing of clods, surface stones 1 inch in diameter or larger, and weeds. All backfilling shall be subsidiary to other bid items.

Area to be sodded shall consist a minimum of 6 inches of top soil, free from clods, rocks, trash, and other debris. Any fertilizer applied shall be incorporated into the top soil. If the area has been severely compacted by heavy trucks or other equipment, it shall be cultivated to a depth of 6 to 8 inches by tilling or disking. Backfill areas shall be compacted to a sufficient density to prevent excessive settling after placement of sod. If footprints left by an adult walking across the area are more than 1/2 inch deep, the compaction is not sufficient.

Grade of the area shall be approximately 1 inch below desired final grade, to allow for the thickness of the sod.

#### Water

Water used in this work shall be furnished by the Contractor and will be suitable for irrigation and free from ingredients harmful to plant life. All watering equipment required for the work shall be furnished by the Contractor. Under no circumstances shall the Contractor use water except that metered from adjacent fire hydrants or public water lines.

# **Placing Sod**

Sod strips shall be laid parallel with the ends staggered in a running bond pattern. Each successively laid strip shall be pressed firmly up against the one next to it or up against the edge of the existing turf, to ensure good contact with no overlapping. Sod shall be staked in places where the slope exceeds 3:1. Sod shall be staked with a minimum of two to four stakes per square yard or roll, as determined by the Engineer. Stakes shall be of lath or similar materials and shall be driven six inches into the ground, leaving approximately 1/2 inch of the top above the sod line.

After placing sod, the area shall be tamped with a hand tamp or rolled with a lawn roller half filled with water. Rolling shall be done in a direction perpendicular to the direction in which the sod lengths were laid.

# **Sod Watering and Maintenance**

After each days sod is placed, it shall be watered sufficiently to wet the sod pads and at least 2 inches of the sod bed. Thereafter in the absence of adequate rainfall, watering shall be performed daily and as often as necessary to keep the sod pads moist at all times. Watering by the Contractor shall continue until the roots of the sod are anchored in placed, and the sod is growing and accepted.

All sodded areas shall be mowed immediately prior to the Engineer's inspection for acceptance. Mowing is required to facilitate visual assessment and acceptability of the work. Mowing shall not be

attempted until the sod is firmly rooted and secure in place. Not more than 1/3 of the grass leaf shall be removed. Any debris that would interfere with mowing shall be collected and removed.

## **Sod Acceptance**

All sodded areas shall be kept free of weeds until the sod has been accepted.

All sodded areas shall be kept thoroughly watered by the Contractor for a period of 20 days after laying and as often as required thereafter, until completion of all other items of work in the contract. If sodding is the last item of work to be performed, the Contractor shall continue watering until all sod is growing and accepted.

The Contractor shall be fully responsible for the condition of the sod work until written notification that his obligation to maintain the sod is terminated, and the sod has been accepted. At that time the property owners shall be notified by the Engineer that further maintenance of the sod is their responsibility.

#### MEASUREMENT AND PAYMENT

The Engineer will measure sod of specified type by the square yard.

Payment for "Sod" at the contract unit price bid is full compensation for the specified work, including bed preparation, transporting, placing, firming, watering, cultivating, and maintaining the sod.

## **TOPSOIL**

#### DESCRIPTION

Topsoil shall be furnished and placed at the locations shown on the plans, or as directed by the Engineer. Topsoil shall consist of suitable surface soil as stipulated in Section 2101 of the Standard Specifications and as approved by the Engineer. Furnishing topsoil shall be in accordance with Section 905 of the Standard Specifications and placing topsoil shall be in accordance with Section 206 and Special Provision 07-02002 of the Standard Specifications except as otherwise modified herein.

## **CONSTRUCTION REQUIREMENTS**

The Contractor shall stockpile existing top soil, unless specifically authorized and approved by the Engineer, prior to deep excavations and reuse it in the same general locations. No payment will be made for topsoil furnishing and placement necessary due to excessive hauling off of existing top soil on the project site.

Contractor's source of furnished topsoil shall be approved by the Engineer. All areas to be seeded or sodded shall consist of a minimum of 6 inches of topsoil, free from clods, rocks, trash, and other debris. If the area has been severely compacted by heavy trucks or other equipment, it shall be cultivated to a depth of 6 inches - 8 inches by tilling or disking. At locations where excavation to final grade results in material unsuitable for vegetation, as determined by the Engineer, the Contractor shall undercut and remove the material and place topsoil.

#### MEASUREMENT AND PAYMENT

The Engineer will measure topsoil by the cubic yard.

No measurement of topsoil obtained onsite will be taken.

Payment for "Topsoil" at the contract unit price bid is full compensation for the specified work, including hauling, stockpiling if required, removing unsuitable soils, scarifying if required, and placement.

No payment will be made for offsite topsoil acquisition and placement that was not specifically authorized and directed by the Engineer. This item does not include any topsoil that is obtained at the project site and reused, pertaining only to any additional soil furnished by the Contractor at the specific request of the Project Engineer.

No direct payment shall be made for undercutting and removing unsuitable materials in cut sections to the required depth of topsoil, or stockpiling and placement of topsoil obtained from the project site, as this work shall be considered subsidiary to other bid items.

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#### TEMPORARY EROSION AND POLLUTION CONTROL

#### **DESCRIPTION**

At the locations shown on the plans or as directed by the Engineer, temporary erosion and pollution control Best Management Practices (BMPs) shall be installed, maintained and removed in accordance with Section 901 of the Standard Specifications except as otherwise modified herein.

#### **GENERAL REQUIREMENTS**

Take all measures necessary including, but not limited to, the installation, maintenance and removal of temporary erosion and pollution control BMPs as required during the construction of the project to prevent erosion and pollution on the project and project related borrow areas in accordance with the requirements of the Kansas Department of Health and Environment (KDHE) National Pollution Discharge Elimination System (NPDES) Stormwater Runoff from Construction Activities General Permit (herein after referred to as Construction General Permit), City Ordinances, and the Stormwater Pollution Prevention Plan (SWPPP) developed for the project.

#### **Permits**

Owners or operators of construction activities which may disturb one (1.0) or more acres of soil or are part of a larger common plan of development or sale which may disturb a cumulative total of one (1.0) or more acres of soil must obtain a Construction General Permit and other local permits as required. Where such permits are required, the Owner will provide the Contractor with a Stormwater Pollution Prevention Plan (SWPPP) which has been prepared by the Engineer or other qualified professional. The Contractor shall comply with all requirements of such permits and the SWPPP, and shall enforce compliance with such requirements by all Subcontractors.

If a Construction General Permit is not required for a project, the Engineer may waive certain documentation and record-keeping provisions of this specification. The Contractor is required to comply with all other provisions in this specification and is required to install such measures for erosion and pollution control as may be called for in the plan or ordered by the Engineer.

#### Installation, Maintenance, and Removal of BMPs

- (1) Installation: Install erosion and pollution control BMPS as shown on the plans. Do not perform any land disturbance until erosion and pollution control BMPs are in place and approved by the Engineer. As approved by the Engineer, installation of BMPs may occur simultaneously with the clearing and grubbing operations. Install BMPs to establish perimeter control of the project in areas where it is anticipated that storm water runoff will leave the project.
- (2) Maintenance: All installed erosion and pollution control BMPs shall be maintained in a manner that preserves their effectiveness until all Construction General Permit requirements are met. If any BMP in place does not provide adequate protection, at any time during the project, alternate BMPs to provide effective control shall be provided. The obligation to conduct formal inspections and complete an associated report every 14 days and within 24 hours of a rainfall event of ½ inch or more does not limit or otherwise modify the Contractor's obligation to monitor and maintain temporary erosion and pollution control BMPs daily.
- (3) Any deficiencies noted shall be corrected by the Contractor prior to the next anticipated rain event or within 7 calendar days of the inspection, whichever occurs first, despite weather conditions that make it difficult (but not impossible) to perform corrections. The Contractor shall receive no additional time for making corrections unless approved by the Engineer.
- (4) Removal: Completely remove BMPs from the site when they are no longer needed, unless approved by the Engineer to remain in place for permanent stabilization or biodegradation. After removing BMPs, remove and dispose of accumulated sediment and permanently stabilize disturbed areas.

#### **Maximum Areas Of Disturbance At One Time**

Limit the erodible earth material exposed by clearing and grubbing, excavation, borrow and embankment operations according to the capability and progress, and in keeping with the approved

schedule. Existing vegetation shall be preserved or retained as long as practical and the time period for soil areas to be without permanent surface or vegetative cover shall be minimized.

Unless requested in writing from the Contractor, and approved in writing by the Engineer, or specified otherwise on the plans, do not exceed 750,000 square feet (17.2 acres) of surface area of erodible earth material at one time.

Disturbed areas which have been graded, stabilized and restricted from access will not count toward the 750,000 square feet limit.

#### **Stabilization Of Disturbed Areas**

Immediately initiate placement of appropriate erosion control BMPs in any exposed steep slope areas where construction activities have permanently or temporarily ceased, and will not resume for a period exceeding 7 calendar days. For vegetative cover areas, in addition to seeding, watering, mulching, and any other required activities related to the planting and establishment of vegetation, utilize other appropriate erosion control BMPs such as erosion control blankets and turf reinforcement mats.

Immediately initiate stabilization on areas that have been disturbed after construction activities have permanently ceased on that portion of the project site. Immediately initiate temporary stabilization BMPs on areas that have been disturbed after construction activities have temporarily ceased on that portion of the project site if construction activities will not resume for a period exceeding 14 calendar days. Temporary stabilization may include establishment of vegetation, geotextiles, mulches or other techniques to reduce or eliminate erosion until either final stabilization can be achieved or until further construction activities take place to re-disturb the area. This stabilization must be completed within 21 calendar days.

#### **Construction Near Or In Water Bodies**

Restrict construction operations near or in water bodies to those areas essential for the construction of temporary or permanent structures. When no longer required, promptly remove all falsework, piling, temporary crossings and other obstructions caused by the construction.

Minimize the duration of time over which area is disturbed. Once begun, construction shall proceed expeditiously to completion. Use temporary erosion and pollution control BMPs to prevent contamination of adjacent water bodies including the use of turbidity curtains, as approved by the Engineer. Immediately initiate stabilization on areas that have been disturbed after construction activities have ceased on that portion of the project site.

Where practical, do not store equipment or materials (including soil stockpiles) within 50 feet of water bodies. Avoid storing equipment or materials (including soil stockpiles) in flowlines of ditches or other drainage courses. Where such storage is necessary, obtain the Engineer's written approval and include in the SWPPP appropriate BMPs for the storage area.

Temporary channels used to divert flow shall be constructed as shown in detail and shall be stabilized immediately.

Contractor shall not ford live streams with equipment, but shall use temporary stream crossing as detailed in the plans.

#### **Borrow Areas**

When borrow or plant sites are outside the project limits, Contractor shall obtain all required permits and clearances required for compliance.

#### **Dewatering**

During pumping or dewatering activities, a manufactured device, or other BMP that provides equal or better performance, for filtering sediments from water shall be provided as approved by the Engineer. Repair and/or replace as necessary to maintain function and integrity.

#### **Sediment Removal**

Accumulated sediment shall be removed when it exceeds the volumes specified for any particular BMP or when ordered by the Engineer. Sediments removed shall be mixed with other onsite materials and incorporated into project fills, spread loosely across the site, or hauled offsite as necessary. Sediments

shall be located and stabilized to prevent erosion of sediment. Sediments hauled offsite shall be dewatered first or hauled in a water tight truck. When hauled offsite, Contractor shall obtain all required permits and clearances required for compliance.

#### **Chemical And Waste Controls**

- (1) Solid Waste: Trash and debris shall be contained and hauled offsite for proper disposal. Floating debris, found in any waterbody on or adjacent to the construction site, shall be removed immediately regardless of source.
- (2) Sanitary Waste: Portable facilities shall be properly anchored and not be placed within 20 feet of any storm water inlet.
- (3) Chemicals: Shall be stored onsite in their original container. Materials stored outside shall be in closed and sealed water-proof containers and located outside of drainageways or areas subject to flooding.
- (4) Leak Prevention: All equipment used onsite shall be free of leaks. No fueling, servicing, maintenance, or repair of equipment shall be done within 50 feet of a water body. Onsite fuel tanks shall be in good condition, free of leaks or drips, painted brightly for visibility, and monitored daily. All fuel tanks, including mobile trailers, shall be protected by a secondary containment system or earthen berm sized to contain 110% of the full tank volume.
- (5) Concrete Washout: Concrete wash or rinse water from concrete mixing equipment, tools and/or ready-mix trucks, etc, shall be contained and not be discharged into or be allowed to run directly into any existing water body or storm inlet. One or more locations for concrete wash out shall be designated on site, such that discharges during concrete washout shall be contained in a small area where waste concrete can solidify. If the washout facility is not within view from the pour location, signage will be required to direct the truck drivers.
- (6) Spill Reporting and Management: In case of a spill notify the following in accordance with KDHE under part 10 of the Construction General Permit:

#### U.S. EPA National Response Center:

(24 hours a day) (800) 424-8802

Kansas Division of Emergency Management: (KDEM)

(24 hours a day) (785) 296-8013

or (800) 275-0297

Website: www.ksready.gov

KDHE: (24 hours a day) (785) 296-1679

Spills that pose an immediate threat to public safety or contamination of a water body shall be reported immediately to the Overland Park Fire Department at 911 in addition to the afore mentioned emergency spill contacts.

Notify the Engineer in writing within 24 hours of any chemical, sewage or other material spill which is required to be reported to the KDHE under part 10 of the Construction General Permit. The notification shall include at a minimum the material spilled, location of the spill, and a description of containment or remediation actions taken. This notice to the Engineer does not relieve the Contractor of responsibility to report to the KDHE or to any other agency.

If it is safe to do so, Contractor shall stop the source of any spills or leaks and shall contain spills immediately with an appropriate BMP, earthen berm, sawdust, sand, kitty litter, rags or other absorbents. Contractor shall have the tools, equipment, and supplies necessary for spill response onsite at all times and ready for immediate use. All spills shall be cleaned up and disposed of in accordance with applicable federal, state, and local regulations.

#### TEMPORARY EROSION CONTROL

#### **Compost Cover**

- (1) Description: Organic material applied with or without seed to protect the soil surface from water and wind erosion.
- (2) Materials: Shall meet the requirements of Section 909 of the Standard Specifications.

- (3) Construction Requirements: Soil shall be prepared to eliminate compaction, gullies, depressions, and large clods. Compost shall be uniformly applied to a depth of 1.5 to 2 inches when alone or uniformly applied 1 to 1.5 inches when used in conjunction with seeding operations.
- (4) Maintenance: Compost shall be replaced or repaired as needed. Bare spots shall be filled in, by hand if necessary. Vehicle and personnel traffic shall be minimized in areas covered.

#### Erosion Control Blankets (ECB) and Turf Reinforcement Mats (TRM)

- (1) Description: Manufactured product placed on bare soil including slopes, channels, ditches, or areas of concentrated flow for short-term, long-term, or permanent protection.
- (2) Materials: Shall meet the requirements of Section 2113 of the Standard Specifications.
- (3) Construction Requirements: Install according to the manufacturer's recommendations for trenching, splice and longitudinal overlaps, staple size and staple pattern. In no instance shall the overlaps be less than the minimum shown on the standard details. Installation areas shall be free of erosion rills, rocks, clods or other debris that may cause "tenting" or otherwise inhibit uniform soil contact. To avoid jointing in the center of the channel, install single width of erosion control material in direction of flow. Do not cover erosion control materials with soil or mulch unless recommended by the manufacturer and approved by the Engineer.
- (4) Maintenance: Torn or degraded product shall be repaired or replaced, unless such degradation is within the functional longevity specified by the manufacturer. Edges or seams which are loose or fraved shall be secured.

#### **Hydraulic Erosion Control**

- (1) Description: A manufactured product composed of fibrous material mixed with water and hydraulically broadcast as a slurry designed to reduce soil erosion and/or assist in the establishment and growth of vegetation.
- (2) Materials: Shall meet the performance standard of the type specified on the plans. The hydraulic erosion control type and performance standard are categorized as shown in Table A below. Manufacturer's product certification for performance and packaging requirements shall be submitted to the Engineer for approval.

	Table A	A - Hydraulic Erosio	n Control	
Туре	Estimated Longevity (months)	Typical Application Rate (lb/acre)	Typical Maximum Slope Gradient	Maximum Uninterrupted Slope Length
1	1	1500 - 2500	≤ 5:1	20
2	2	2000 - 3000	≤ 4:1	25
3	3	2000 - 3500	≤ 3:1	50
4	6	2500 - 4000	≤ 2:1	75
5	12	3000 - 4500	≤ 2:1	100

Deliver, store and handle in strict compliance with manufacturer's instructions and recommendations. Protect product from damage due to weather conditions and construction operations.

Water used in this work shall be furnished by the Contractor and will be suitable for irrigation and free from ingredients harmful to plant life. All watering equipment required for the work shall be furnished by the Contractor. Under no circumstances shall the Contractor use water except that metered from adjacent fire hydrants or public water lines.

(3) Construction Requirements: Shall conform to the manufacturer's application rates and installation requirements, or as approved by the Engineer. The soil shall be prepared to eliminate

compaction, gullies, depressions, and large clods. Apply from opposing directions to achieve best soil coverage. It is not intended to be applied in channels, swales or other areas where concentrated flows are anticipated.

The Contractor shall schedule the application of the hydraulic erosion control slurry in conjunction with suitable weather on unsaturated soils and allowed to dry 24 hours prior to a rain event in order to ensure the adequacy of the cure.

When specified in the plans or as directed by the Engineer, the Contractor shall apply temporary or permanent seeding to all areas to where hydraulic erosion control will be applied before application occurs. Seeding shall be in accordance with the requirements set forth in the "Seeding" section of this special provision.

The Contractor shall notify the Engineer prior to commencing hydraulic erosion control application operations. If stages of construction have been established by the Engineer, the Contractor shall notify the Engineer upon completing a stage of construction and obtain approval prior to commencing with subsequent stages of construction.

Upon completion of the application operations, the Contractor shall immediately remove all debris and excess materials from the site.

The performance of the hydraulic erosion control product must proceed unabated until the designated area is completed. Areas shall be protected from disturbance including but not limited to foot and vehicle traffic. Any erosion of the area prior to drying shall be repaired by the Contractor at no additional cost to the City. Severe damage to any area caused by the Contractor's activities shall be repaired by the Contractor at no additional cost to the City.

(4) Maintenance: Any damaged areas shall be repaired utilizing the exact blend and application procedure as specified above or as directed by the Engineer.

#### **Temporary Slope Drain**

- (1) Description: Flexible tubing or conduit used to convey concentrated water from the top of a slope down to the toe and thereby preventing erosion over the slope face.
- (2) Materials: Shall be metal, plastic, or flexible rubber pipe having a minimum 6 inch diameter. Pipe walls shall be impermeable and not slotted. Standard flared end sections shall be provided at both the inlet and outlet. Energy dissipation shall be provided at the outlet to provide stabilization and prevent scour. The Engineer will accept the material based on the condition of the pipe and visual inspection of the installed drain.
- (3) Construction Requirements: Install as shown on the plans. Water shall be directed towards the inlets by the use of temporary berms, silt fence, gravel bags, or other barrier systems shown on the plans or approved by the Engineer.
- (4) Maintenance: Accumulation of any visible sediment at the inlet and outlet shall be removed promptly. Outlet conditions shall be repaired if scour is observed. Leaking or damaged sections of pipe shall be repaired immediately. Barriers directing water to the inlet shall be monitored for continuity and effectiveness.

#### TEMPORARY POLLUTION CONTROL

#### **Biodegradable Log**

- (1) Description: Commercially manufactured biodegradable sediment barrier of material bound with a containment netting.
- (2) Materials: Filler consists of straw, excelsior wood fiber, coconut fiber, jute or other biodegradable material. Containment netting includes open mesh fabric made of jute or light weight plastic. Stakes are per manufacturer's requirements.
- (3) Construction Requirements: Install as shown on the plans. Individual units shall be installed in accordance with manufacturer's recommendations. Do not use biodegradable logs manufactured from straw for ditch checks or inlet sediment barriers.
- (4) Maintenance: Remove and dispose of sediment deposits when the deposit approaches 1/2 the height of the biodegradable log. Avoid driving over logs and replace segments damaged by vehicles. Replace as necessary to maintain function and integrity of installation.

#### **Construction Entrance**

- (1) Description: Stabilized access point intended to remove mud from vehicle tires to prevent offsite tracking.
- (2) Materials: Aggregate shall be clean 2" to 3" coarse aggregate. Geotextile fabric shall be non-woven.
- (3) Construction Requirements: Install as shown on the plans or as approved by the Engineer. Remove all vegetation and other unsuitable material from the foundation area, grade and crown for positive drainage. Divert all surface runoff and drainage from the entrance to a sediment control BMP. If conditions warrant, install geotextile fabric under aggregate. Rumble strips, track pads, wash racks, or similar track out prevention BMPs may be needed in conjunction with construction entrance.
- (4) Maintenance: Reshape entrance as needed to maintain function and integrity of installation. Top dress with clean aggregate as needed.

#### **Temporary Ditch Check**

- (1) Description: Barriers used to impede concentrated flow to allow settlement of soil particles.
- (2) Materials: Rock shall consist of clean aggregate free of deleterious material. Refer to "Ditch Check" Standard Detail for sizing. Synthetic Sediment Barriers and Biodegradable Logs shall meet the material requirements given by other items of this special provision
- (3) Construction Requirements: Install as shown on the plans and refer to "Ditch Check" Standard Detail for spacing. Rock shall be keyed into the bottom and sides of slope a minimum of 6 inches. Synthetic Sediment Barriers and Biodegradable Logs shall meet the material requirements given by other items of this special provision
- (4) Maintenance: Remove and dispose of sediment deposits when the deposit approaches 1/2 the height of the ditch checks. Replace and reshape as necessary to maintain function and integrity of installation.

#### **Temporary Diversion Berm**

- (1) Description: Earthen berm generally installed along the contour to divert storm runoff or to trap small areas of overland flow. A furrow is typically excavated adjacent to the berm on the upstream side, so as to further establish the drainageway.
- (2) Materials: Shall consist of soil material that is capable of being compacted.
- (3) Construction Requirements: Install as shown on the plans. Berm shall be compacted until no further consolidation is observed, using a dozer track, grader wheel or other equipment. Berm shall be temporarily stabilized immediately after installation.
- (4) Maintenance: Berm shall be reshaped, compacted, and stabilized as necessary to maintain their function. Breaches in the berm shall be repaired immediately.

#### **Temporary Filter Berm**

- (1) Description: Berm or dike of compost or wood mulch to contain and filter storm runoff from small areas of overland flow.
- (2) Materials: Compost shall meet the requirements of Section 909 of the Standard Specifications. Wood mulch shall consist of tree and shrub debris ground by mechanical means. Mulch sizing may vary with a maximum width of 2 inches and a maximum length of 10 inches.
- (3) Construction Requirements: Place in un-compacted windrows as shown on the plans. The berm shall be of uniform height and width. (Refer to "Filter Berm" Standard Detail). Do not use filter berms in concentrated flow paths.
- (4) Maintenance: Berm shall be reshaped and material added as necessary to maintain function and dimensions. Breaches in the berm shall be repaired promptly.

#### **Filter Sock**

(1) Description: Commercially manufactured mesh bags containing permeable material to slow and filter stormwater runoff.

- (2) Materials: Filler shall consist of clean coarse aggregate ½" to 1" diameter; compost meeting the requirements of Section 909 of the Standard Specifications; or other permeable filler material. Mesh Bag shall consist of pervious non-biodegradable material having a minimum unit weight of 4 ounces per square yard. The Mullen burst strength shall exceed 300 pounds per square inch per ASTM D3786 and shall have ultraviolet stability exceeding 70% per ASTM D4355.
- (3) Construction Requirements: Shall be located as shown on the plans and installed in accordance with manufacturer's recommendations.
- (4) Maintenance: Remove any visible accumulation of sediment. Replace as necessary to maintain function and integrity of installation.

#### **Temporary Inlet Sediment Barrier**

- (1) Description: A variety of BMPs or procedures used to allow water to enter a stormwater inlet while filtering or temporarily impeding the flow sufficiently to reduce the quantity of sediment carried.
- (2) Materials: Filter sock, synthetic sediment barriers, silt fence, and rock ditch checks shall meet the material requirements given by other items of this special provision. Prefabricated BMPs or alternative systems may be used with the Engineer's approval.
- (3) Construction Requirements: Install as shown on the plans. Filter sock, synthetic sediment barriers, silt fence, and rock ditch checks shall meet the construction requirements given by the respective items of this special provision. Placement shall not increase the risk of flooding or other hazards.

Inlets under construction may block or impede flow and shall provide an excavated area around inlet to allow settling of soil particles. Completed and existing inlets shall allow runoff to enter the inlet and be protected with stabilization and filter sock or similar.

(4) Maintenance: Remove deposited sediment from excavated storage areas when available storage has been reduced by 20%. Remove deposited sediment from filter socks or similar when any accumulation of sediment is visible. Repair or replace as necessary to maintain function and integrity of installation.

#### **Temporary Sediment Basin**

- (1) Description: Reservoir and embankment with engineered spillways and surface dewatering that is constructed to intercept sediment-laden runoff from large areas and provide retention to settle out soil particles.
- (2) Materials: Refer to "Temporary Sediment Basin" Standard Detail for material requirements.
- (3) Construction Requirements: Embankment, reservoir, spillway and appurtenances shall be constructed as shown on the plans and "Temporary Sediment Basin" Standard Detail. Surface dewatering shall be achieved by use of skimmer or other approved equivalent. Baffles are required. Basin shall be stabilized immediately following installation.

Construction warning fence shall be installed around the perimeter of the pond and warning signs erected when directed by the Engineer.

Construction of the sediment basin shall be carried out in a manner such that it does not result in sediment problems downstream.

(4) Maintenance: Check sediment basins after periods of significant runoff. Remove sediment and restore the basin to its original dimensions when sediment accumulates to 20% of the storage capacity. Immediately repair any erosion damage to the embankment and outlets. Repair and/or replace baffles as necessary to maintain function and integrity of installation. Keep outlet, skimmer, and pool area free of all trash and other debris.

#### **Temporary Sediment Trap**

- (1) Description: Reservoir and embankment with a stone outlet that is constructed to intercept sediment-laden runoff and provide retention to settle out soil particles.
- (2) Materials: As shown on the plans and "Temporary Sediment Trap" Standard Detail.
- (3) Construction Requirements: Install as shown on the plans and "Temporary Sediment Trap" Standard Detail. Trap shall be stabilized immediately following installation.

(4) Maintenance: Check sediment traps after periods of significant runoff. Remove sediment and restore the trap to its original dimensions when sediment accumulates to 20% of the storage capacity. Immediately repair any erosion damage to the embankment and outlet. Keep outlet and pool area free of all trash and other debris.

#### Silt Fence

- (1) Description: Barrier of geotextile fabric generally installed along the contour to divert and/or contain storm runoff to allow settlement of soil particles.
- (2) Materials: Geotextile Fabric shall consist of material that complies with AASHTO M 288 for unsupported silt fence, with 4 ft. maximum post spacing.

Provide wood, steel, or synthetic posts of sufficient strength to resist damage during installation and to support the applied loads. Length is to be a minimum of 4 feet. Hardwood posts having dimensions of at least 1 3/16 x 1 3/16 inch, No. 2 Southern Pine at least 2 5/8 x 2 5/8 inch or steel posts of U, T, L, or C shape, weighing 1.33 lbs per foot minimum are satisfactory.

When conditions warrant, supplement the silt fence with woven-wire fencing with a minimum wire gage between 9 and 14 and a maximum mesh spacing of 6 inches in all directions. Wiresupported fence requires steel posts.

- (3) Construction Requirements: Install as shown on the plans and "Silt Fence" Standard Detail. Installation shall be made by a specialized machine capable of inserting the fence securely into the ground with a slicing method and firmly compacting the slice closed. Trenching will only be allowed for small or difficult areas where slicing cannot be reasonably used. Silt fence shall be firmly embedded and anchored to the ground such that runoff cannot undermine the fence. Joints in silt fence shall overlap to prevent leakage. Securely attach the fabric to the upstream side of post with staples or plastic zip ties.
- (4) Maintenance: Remove and dispose of sediment deposits when the deposit approaches ½ the height of the silt fence. Repair as necessary to maintain function and structure.

#### **Synthetic Sediment Barrier**

- (1) Description: Commercially manufactured BMP such as Geo-Ridge Permeable Berm<sup>TM</sup>, Triangular Silt Dike<sup>TM</sup> or equivalent used for slope barriers or ditch checks. The synthetic sediment barrier shall be accepted based on the City's Approved Materials List or as approved by the Engineer.
- (2) Materials: Shall conform to the manufacturer's specifications.
- (3) Construction Requirements: Shall be located as shown on the plans. Individual units shall be installed in accordance with manufacturer's recommendations.
- (4) Maintenance: Remove and dispose of sediment deposits when the deposit approaches 1/2 the height of the barrier. Replace as necessary to maintain function and integrity of installation.

#### **Temporary Stream Crossing**

- (1) Description: Culvert crossing, stream ford, or temporary bridge constructed in a water body to allow construction access and crossing.
- (2) Materials: As shown on the plans and Temporary Stream Crossing Detail.
- (3) Construction Requirements: Construct as shown on the plans. When the Contractor's operations require a temporary stream crossing, and one is not shown on the plans, the Contractor shall notify the Engineer and comply with all applicable rules and regulations, obtain all required permits and provide copies of all permits to the Engineer.

Before beginning work in the streambed, record existing stream channel elevations.

Place 1 pipe buried 6 inches into the stream bottom, in the lowest point of the channel to allow the passage of aquatic organisms, with additional pipes placed along the remainder of the stream channel bottom such that ordinary high water (OHW) flows designated on the plans shall flow through the pipes without overtopping the crossing. If the OHW is not designated on the plans, the Engineer will determine the OHW.

Submit to the Engineer for review and approval, the design flow calculations to determine the number and diameter of pipes required. A minimum 12 inch diameter pipe is required, place pipes parallel to flow, and cover pipes with a minimum of 12 inches of clean aggregate fill. (4) Maintenance: Repair stream bank erosion by stabilizing with erosion control BMPs such as erosion control blankets. For in-stream degradation, armor the culvert outlet(s) with riprap to dissipate energy. If sediment or debris is accumulating upstream of the crossing, remove as needed to maintain the functionality of the crossing.

If a temporary crossing is requiring excessive maintenance, replacement with a larger culvert or alternate design may be necessary. Remove the temporary crossing as soon as no longer needed. Restore the disturbed bed and bank area of the stream channel to its pre-existing elevation and stabilize immediately. Take care to minimize the amount of sediment lost into the stream upon removal.

#### **Storm Water Pollution Prevention Plan (SWPPP)**

Projects disturbing 1 or more acres shall have a SWPPP in accordance with the Construction General Permit. Projects disturbing less than 1 acre, neither Construction General Permit coverage nor a SWPPP will be required. Even though a SWPPP is not required, the Contractor is required to comply with the City Ordinances and utilize appropriate BMPs to minimize stormwater pollution.

Prior to the Pre-construction conference, the Contractor shall provide the following SWPPP components for approval by the Engineer:

- (1) A detailed schedule of work to include phasing; overall job completion; and timing, duration, and sequencing of erosion and pollution control BMPs.
- (2) Written recommendations to amend or modify the Erosion and Sediment Control Plans to meet the Contractor's method of operations. The Contractor shall also advise the Engineer of any omissions or deficiencies they find in the SWPPP.
- (3) The City's Contractor Certification Form for discharge of stormwater runoff from construction activities.
- (4) Certification of KDOT's Environmental Inspector Training and Environmental Manager Training for designated Environmental Inspector and Water Pollution Control Manager.
- (5) Contractor shall indicate the following additional BMPs, as applicable, to minimize or eliminate contamination of stormwater runoff:
- (i) Equipment and vehicle washing area;
- (ii) Chemical, fuel and material storage area(s);
- (iii) Construction entrance(s)
- (iv) Stockpile(s)
- (v) Dewatering
- (vi) Location and type of waste management including but not limited to: solid (scrap material, product/shipping material, food containers and cups, etc); sanitary (portable toilet); paints, solvents, and cleaning compounds; concrete washout

A copy of the SWPPP shall be retained and available onsite. Copies of SWPPP inspections, as detailed in subsection 1.2.1 of this special provision, shall be retained within the SWPPP.

The SWPPP shall be maintained to reflect modifications or amendments to the plans until all Construction General Permit requirements are met. During the progress of the job, the effectiveness and performance of the BMPs used shall be monitored and additional modifications and amendments proposed as needed. Update the SWPPP Erosion and Sediment Control Plans as work progresses to show changes due to revisions in work schedules or sequence of construction, or as directed by the Engineer. Update the Erosion and Sediment Control Plans to reflect BMPs that have been installed or removed.

#### **Water Pollution Control Manager**

A Water Pollution Control Manager (WPCM) will be required for all projects disturbing 1 or more acres. The WPCM will visit the Project during normal work hours on a frequent basis and in no instance less than once per week once construction activities commence and until all Construction

General Permit requirements are met. The WPCM shall thoroughly review the project and SWPPP documentation during these site visits to ensure the Contractor's compliance with this specification and with the Construction General Permit. In addition, the WPCM shall:

- (1) Have the authority to supervise all work performed by the Contractor and subcontractors that involves stormwater requirements or affects stormwater compliance;
- (2) Have the responsibility to order Contractor employees and subcontractors to take appropriate corrective action to comply with stormwater requirements, including requiring any such person to cease or correct a violation of stormwater requirements and to order or recommend such other actions or sanctions as necessary to meet stormwater requirements;
- (3) Be familiar with the SWPPP;
- (4) Be responsible for updating the SWPPP to accurately reflect the BMPs in use on the Project;
- (5) Be the point of contact for the City regarding stormwater compliance;
- (6) Attend the pre-construction conference and scheduled weekly project progress meetings between the City and Contractor
- (7) Have obtained KDOT's Environmental Inspector Training and Environmental Manager Training certifications within the thirty-six months prior to beginning construction activities. These certifications shall be maintained for the duration of the project;
- (8) Be responsible for reviewing inspection reports within 3 days after receiving such reports, acknowledging awareness of any deficiencies and ensuring the correction of all deficiencies.
- (9) Maintain and monitor an active email account capable of receiving electronic communications including inspection reports, photos and other documents relevant to stormwater compliance.

The WPCM may, when practical, perform SWPPP Inspections according to subsection titled "SWPPP Inspections" of this special provision. Immediately notify the Engineer in writing if the designated WPCM is replaced. The replacement WPCM shall comply with the above requirements. The notification shall include training certificates and contact information for the replacement WPCM.

#### **SWPPP Inspections**

SWPPP inspections shall be performed for all projects disturbing 1 or more acres. SWPPP inspections shall be performed by the Contractor's Environmental Inspector. The Environmental Inspector shall have completed KDOT's Environmental Inspector Training within the last thirty-six months. These certifications shall be maintained for the duration of the project. Where practical, the WPCM may also serve as Contractor's Environmental Inspector.

The Contractor's Environmental Inspector shall perform an inspection of the temporary erosion and pollution control BMPs every 14 days during normal work hours and within 24 hours of a rainfall event of ½ inch or more. Inspections shall continue at this frequency once construction activities commence and until all Construction General Permit requirements are met. Document the SWPPP inspections on the City's inspection form titled "Stormwater Construction Site Inspection Report" (City's Inspection Form). The Contractor's Environmental Inspector shall sign the report.

Submit, via email, completed and signed copies of City's Inspection Form to the Engineer and Contractor's WPCM within 24 hours of the inspection. The WPCM shall review and sign the City's Inspection Form, and retain in the SWPPP within 3 calendar days of receipt. The WPCM's signature acknowledges awareness of all reported deficiencies and corrective actions required to be taken prior to the next anticipated rain event or within 7 calendar days of the inspection, whichever occurs first.

#### **Stormwater Compliance Disincentive Assessment**

In case of failure on the part of the Contractor to follow a requirement in this special provision; Part 7, Part 10, and Part 11 of the Construction General Permit, (or equivalent provisions in the event section numbers change in any future Permit), the Contractor shall pay the City a stipulated disincentive, not a penalty, to compensate the City for the probable and presumptive loss to the City for the Contractor's breach of its obligation under this special provision, according to the amount specified in the following schedule:

<u>Deficiency</u>	<u>Amount</u>
Failure to perform and/or document an inspection at least once every 14	
days and within 24 hours after storm events with precipitation of 0.5	
inches or greater. (CGP 7.2.10). Each failure is counted as one	
deficiency.	\$250.00 each
Failure to correct a documented BMP deficiency prior to the next anticipated rain event, or within 7 calendar days, whichever occurs first (CGP 7.2.10). Each failure is counted as one deficiency.	\$250.00 per calendar day for each
Failure to maintain the SWPPP to include, but not limited to, required documentation, updates, and modifications to site conditions and BMPs (CGP 7.3). Each omission is counted as one deficiency.	\$50.00 each

The Stormwater Compliance Disincentive Assessment will be deducted from contract funds. The disincentive assessment(s) are in addition to federal and state statutory penalties and fines that are allowed against the Contractor under the Clean Water Act and other environmental laws for violation of those laws.

Nothing in this special provision prevents KDHE, EPA, or both from assessing penalties and fines against the Contractor because of the Contractor's failure to comply with applicable laws, regulations, ordinances, Construction General Permit, other permits, the SWPPP, governmental administrative compliance orders or corrective orders for the Project, or a combination thereof.

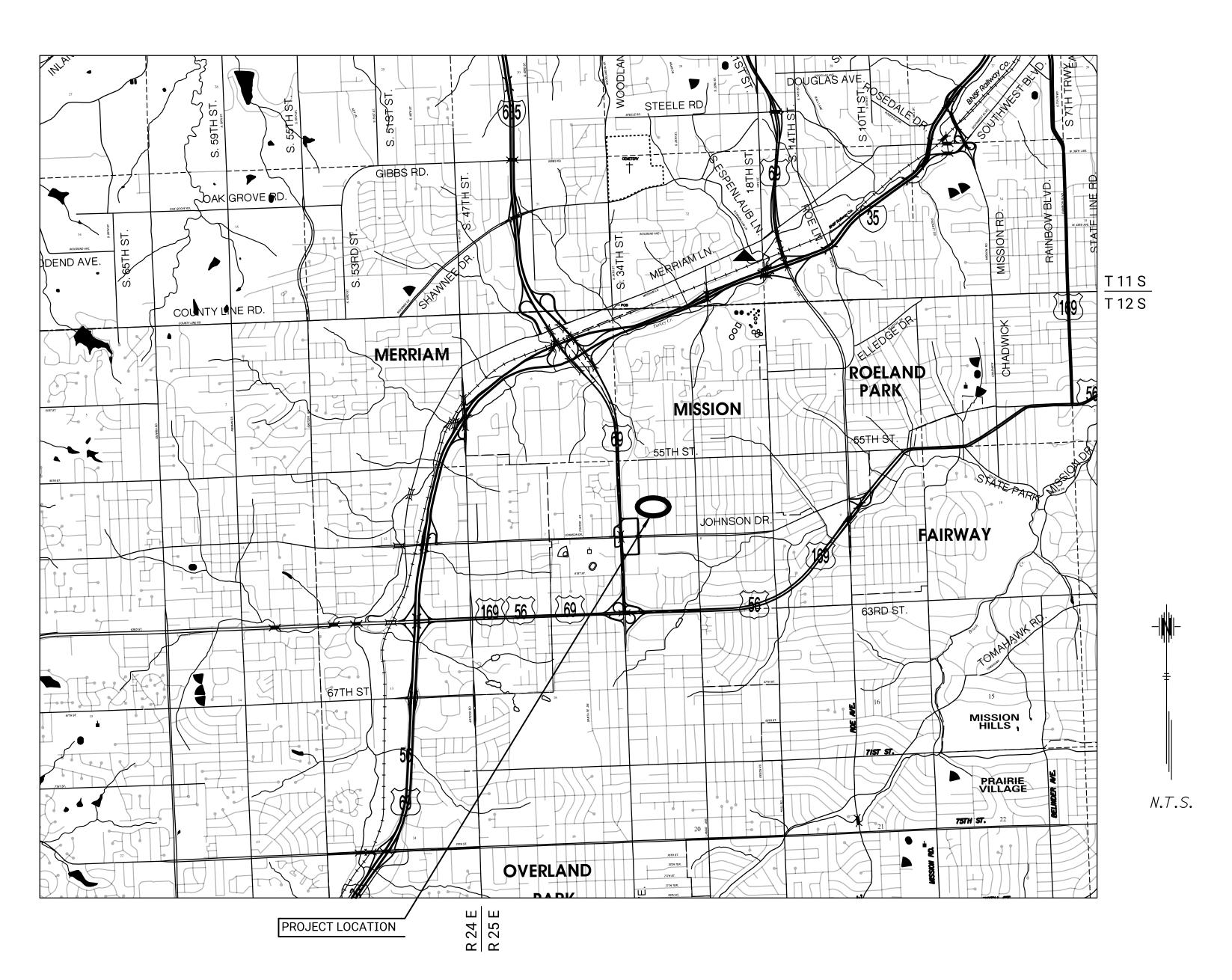
# CITY OF MISSION PARKS AND RECREATION BROADMOOR PARK TRAIL REPLACEMENT FINAL PLANS

# **INDEX OF SHEETS**

- TITLE SHEET
- **GENERAL NOTES**
- TYPICAL SECTION
- 4-5 QUANTITIES
- COORDINATE POINT SHEET
- PROJECT CONTROL SHEET
- PLAN SHEET
- 9-15 CONSTRUCTION DETAILS
- 16-33 CROSS SECTIONS

# LEGEND

EXISTING RIGHT OF WAY	——— EX ROW ———
PROPOSED RIGHT OF WAY	PR R0W
SECTION LINE	SL
PROPERTY LINE	PL
EXISTING PERMANENT EASEMENT	PE
PERMANENT DRAINAGE EASEMENT	———— PDE ————
TEMPORARY CONSTRUCTION EASEMENT	TCE
EVERGY OVERHEAD ELECTRIC	OHE
EVERGY UNDERGROUND ELECTRIC	———— UGE ————
FIBER OPTIC	
WATER	
GAS	
EXISTING GUARDRAIL	
PROPOSED GUARDRAIL	<u> </u>
TREE LINE	
EXISTING FENCE	××



0.057 MILES

0.028 MILES

0.154 MILES

0.084 MILES

0.323 MILES

BASE BID

BID ALTERNATE #1

TOTAL LENGTH

STA. 1+00.00 TO STA. 9+15.90

STA. 9+50.76 TO STA. 12+52.07 301.31 FT.

STA. 20+00.00 TO STA. 21+46.94 146.94 FT.

STA. 12+52.07 TO STA. 16+95.51 443.44 FT.

815.90 FT.

1,707.59FT.

UTILITY CONTACTS

EVERGY: BRYSON HEENAN 913-579-0652 bryson.heenan@evergy.com

WATERONE: PETER GASKAMP 913-207-6829 pgaskamp@waterone.org

14184.51

CITY OF MISSION, KANSAS BROADMOOR PARK TRAIL REPLACEMENT

NDY GASKIN	
3-713-9919	
9513@att.com	

9801 Renner Blvd., Ste. 300 Lenexa, KS 66219 913.492.0400 gbateam.com

CITY OF MISSION

DATE

CENSES: ICENSES: ICEN
WWW County

- 101. The City of Overland Park Design and Construction Standards, latest edition, shall govern construction of this project. The Contractor shall thoroughly review and become familiar with the Specifications and Project Special Provisions of the Contract Documents prior to begining construction on this project, as not all references to Overland Park may pertain to this project.
- 102. The Contractor shall thoroughly review and become familiar with the specifications and special conditions of the contract documents prior to beginning construction on this project.
- 103. All workmanship and materials shall be subject to the inspection and approval by City personnel.
- 104. All work shall be confined within the easements and/or construction limits as shown on the plans. All construction limits shown are approximate and may be extended or reduced at the direction of the Engineer.
- 105. As intended in the plans, the Contractor shall be responsible for constructing the project improvements in accordance with the ADA Accessibility Guidelines as set forth in the most current Public Rights-of-Way Accessibility Guidelines (PROWAG).

## Utilities

- 201. The information shown on these plans concerning the type and location of underground utilities is not guaranteed to be accurate or all inclusive. The Contractor is responsible for contacting all utility companies for field location of all underground utility lines prior to any excavation and for making their own verification as to the type and location of underground utilities as may be necessary to avoid damage thereto.
- 202. The Contractor shall pothole and survey all utility crossings prior to construction of any portion of pavement, curb, storm sewer, underdrains, conduit, and any other subsurface element of the project. This survey information shall be forwarded to the project Engineer for review. The Contractor shall not begin construction on any subsurface element on the project without the approval of the project Engineer. Utility coordination, surveying, and potholing shall be subsidiary to other bid items.
- 203. Utilities damaged due to the negligence of the Contractor to obtain the exact utility locations shall be repaired or replaced at the Contractor's expense.
- 204. Contractor shall coordinate with all Public and Private utility facilities to be moved or adjusted as necessary by the owners for the new construction unless otherwise noted in the plans or in the proposal. Contractor shall be responsible for coordinating with Utility Companies on the location of relocated utilities and final adjustments required to bring the finished grade to sufficient clearance.
- 205. Public and private utility facilities shall be moved or adjusted as necessary by the owners to fit the new construction, unless otherwise noted on the plans.

## Acceptable Materials

301. All concrete used in this work shall meet the requirements of the Overland Park Design and Construction Manual. KCMMB concrete shall be used throughout, unless otherwise noted. The Contractor shall, at the Contractor's expense, submit and receive approval of a concrete mix design by the City Engineer prior to placement of any concrete. The mix design shall include certified test results by on independent laboratory for the aggregate tests required by the Overland Park Municipal Code. All ready-mix concrete delivered to the job site shall be so certified. Any reference(s) made to JCCB shall be hereto revised to KCMMB.

## Traffic Control

- 401. Any and all traffic control necessary for the project shall be the responsibility of the contractor and shall be subsidiary to other bid items. Access to the park entrance shall be maintained at all times during construction. The Contractor shall be responsible for selecting the proper traffic control devices and implementation procedures that will ensure the safety of motorists, pedestrians, and workers at all times. All traffic control shall be in conformance with the current edition of the Manual on Uniform Traffic Control Devices (MUTCD). The Contractor may develop their own temporary traffic control plan, including construction phasing, and submit to the Engineer for approval to use on this project.
- 402. Police, Fire, Med-Act, school bus, and any other emergency companies shall be notified prior to closing of any street with approval of the City Engineer.

## Removals

- 501. All existing structures within the construction limits shall be removed, unless otherwise noted on the plans. This work shall be paid for under the bid item "Removal of Existing Structures".
- 502. The removal of existing signs shall be subsidiary to "Removal of Existing Structures".
- 503. Contractor shall be required to remove trees, bushes, shrubs, and other vegetation within the construction limits, with the exception of all trees marked DND (Do Not Disturb). Exceptionally good trees shall be spared (if possible) by adjusting slope lines during construction, as directed by the Engineer. All trees within the construction limits to be saved shall have their trunks physically protected prior to construction operations by methods approved by the Engineer. The Contractor shall attempt to save all trees when adjacent or near a construction area. The Contractor shall be responsible for trees that die because of any unnecessary root removal or Contractor negligence. Any unnecessarily removed tree, bush or shrub shall be replaced with a nursery plant of similar type. This item of work shall be considered subsidiary to the contract therefore there will be no direct payment for this work. All tree removals shall be approved by the Engineer prior to commencement of construction.

### **Erosion Control**

- 601. The Contractor is responsible for all BMPs (Best Management Practices) to prevent construction storm water runoff, and shall provide any additional berms, silt fences, or other approved means to prevent eroded materials from entering streets open to traffic, the storm sewer systems, or properties adjacent to the project. In the event the preventative measures are not effective, the Contractor shall remove any debris, silt, or mud and restore the affected area to its original or better condition and reinstall any damaged BMPs. All costs associated with this work shall be subsidiary to "Erosion Control" bid item.
- 602. The Contractor shall be responsible for, provide, and maintain all temporary erosion and water pollution control measures during the life of the contract.

## **Excavation and Grading**

- 701. The Contractor is responsible for the protection of all property corners and section corners. Any property corner and/or section corner disturbed or damaged by construction activities shall be reset by a registered land surveyor licensed in the State of Kansas, at the Contractor's expense, unless otherwise noted.
- 702. All excavation shall be unclassified. No separate or additional payment will be made for any rock excavation required for these improvements. Trench excavation shall be subsidiary to other items of work. Off-site waste of pavement, unsuitable material, and undercut shall be subsidiary to unclassified excavation.
- 703. The Contractor shall be responsible for the restoration of right-of- way and for damaged improvements such as curbs, sidewalks, driveways, streetlight and traffic signal boxes, traffic signal loop lead-ins, signal poles. etc. Damaged improvements shall be repaired to the City's satisfaction at the Contractor's expense.
- 704. The Contractor shall be responsible for maintaining and, if damaged, restoring mailboxes, driveway markers, yard lights, basement drains, roof drains, sprinkler systems, utility service line connections and septic systems to a condition equal to that before damage occurred. If damage occurs, all repairs shall be made by the Contractor at their expense.
- 705. All removal, relocation, or adjustment of landscaping is subsidiary to other bid items. Contractor required to grade/fill berm areas that are created after removal of entrances/sidewalks.
- 706. The Contractor shall be responsible for maintaining existing drainage patterns as intended in the plans.
- 707. The Contractor shall sod all disturbed areas within the project limits, unless noted otherwise on the plans.
- 708. All manholes, catch basins, utility valves, and meter pits shall be adjusted or rebuilt to grade as required and set in concrete if in roadway for field adjustment. This work shall be subsidiary to all other bid items unless otherwise noted.
- 709. All backfill shall be tamped. Backfill within the right-of-way shall be compacted to 95 percent (95%) of maximum density at the optimum moisture content.
- 710. The Contractor shall be responsible for damage to irrigation systems except as noted in the plans. All repairs shall be made by the Contractor at their expense.

#### Miscellaneous

- 801. All public street sidewalk and sidewalk ramps constructed shall be required to comply with the Americans with Disabilities Act (ADA) and Overland Park sidewalk details.
- 802. Spot elevations for sidewalk ramps and entrances have not and will not be provided by the Engineer. Curbs and flares required to properly construct curb ramps shall be considered subsidiary to curb ramp bid item.
- 803. All existing pavement, curb and gutter, driveways, sidewalks, or bituminous surfacing to be removed shall be saw-cut as shown on the plans or to the nearest joint as directed by the Engineer. Saw-cuts shall be full depth. Additional removal may be ordered by the Engineer. All waste materials shall be disposed of at the Contractor's expense. Saw-cuts shall be subsidiary to the bid item "Removal of Existing Structures".
- The Contractor shall provide temporary walks, fencing, barricades, or other protective measures as necessary to assure the safety of the public traversing the project site. Equipment storage areas and material stockpiles shall be located on sites provided by the Contractor with due regard to location, appearance, and hazard potential to the traveling public.
- 805. The Contractor shall at no time leave equipment, materials, or debris at locations that could obstruct intersection sight distance, impede pedestrian traffic, obstruct the existing capacity of storm sewer systems, impede vehicular traffic, or cause flooding or erosion to residences.
- 806. At all locations where the new curb connects to an existing curb of different shape, a transition shall be made in the new curb to match the existing curb. The transition length shall be five feet (5') in length unless otherwise indicated in the plans.
- 807. The Contractor is responsible for keeping the construction area free of all construction debris, plant materials, trash, and other refuse that may appear as a result of Contractor activities, City activities, utility work, or any other activities that may occur within the construction limits.

SHEET TOTAL SHEETS

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PROJECT NO.

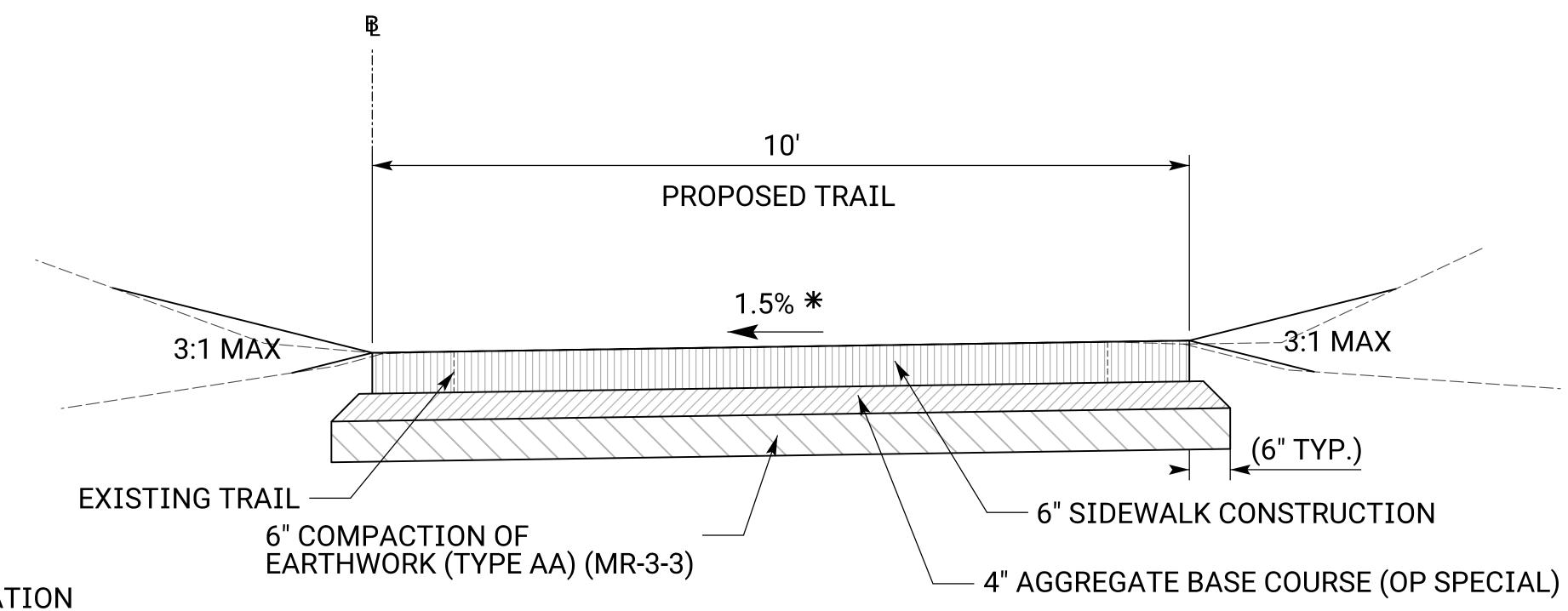
14184.51

CITY OF MISSION, KANSAS BROADMOOR PARK TRAIL REPLACEMENT

GENERAL NOTES



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\* SUPERELEVATION

START STA.	END STA.	START SLOPE	END SLOPE
1+00.00	5+60.00	1.5%	1.5%
5+60.00	6+20.00	1.5%	-1.5%
6+20.00	9+15.90	-1.5%	-1.5%
9+50.76	10+59.00	1.5%	1.5%
10+59.00	10+95.00	1.5%	0.0%
10+95.00	11+25.00	0.0%	-1.5%
11+25.00	12+55.00	-1.5%	-1.5%
12+55.00	12+90.00	-1.5%	0.0%
12+90.00	13+00.00	0.0%	1.5%
13+00.00	16+60.00	1.5%	1.5%
16+60.00	16+73.00	1.5%	0.0%
16+73.00	16+95.51	0.0%	-0.1%
20+00.00	20+15.00	-0.6%	-0.6%
20+15.00	20+35.00	-0.6%	-1.5%
20+35.00	20+65.00	-1.5%	-1.5%
20+65.00	20+75.00	-1.5%	1.5%
20+75.00	21+46.94	1.5%	1.5%

BROADMOOR PARK TRAIL STA. 1+00.00 TO STA. 16+95.51 STA. 20+00.00 TO STA. 21+46.94

	RECAPITULATION OF QUANTITIES	(BASE BID)	
TEM NO	ITEM	QUANTITY	UNIT
1	FORCE ACCOUNT	1	LUMP SUM
2	MOBILIZATION	1	LUMP SUM
3	CONTRACTOR CONSTRUCTION STAKING	1	LUMP SUM
4	REMOVAL OF EXISTING STRUCTURES	1	LUMP SUM
5	CLEARING AND GRUBBING	1	LUMP SUM
6	UNCLASSIFIED EXCAVATION	203	CY
7	COMPACTION OF EARTHWORK	155	CY
8	AGGREGATE BASE COURSE (OP SPECIAL) (4")	555	SY
9	SIDEWALK CONSTRUCTION (6")	4,523	SF
10	SIDEWALK RAMP CONSTRUCTION	55	SF
11	DETECTABLE WARNING SURFACE	20	SF
12	CURB AND GUTTER, COMBINED (TYPE B)	24	LF
13	SOD (TURF TYPE FESCUE)	857	SY
14	TOPSOIL	143	CY
15	EROSION CONTROL	1	LUMP SUM

	RECAPITULATION OF QUANTITIES (BID ALTERNATE #1)				
ITEM NO	ITEM	QUANTITY	UNIT		
16	FORCE ACCOUNT	1	LUMP SUM		
17	MOBILIZATION	1	LUMP SUM		
18	CONTRACTOR CONSTRUCTION STAKING	1	LUMP SUM		
19	REMOVAL OF EXISTING STRUCTURES	1	LUMP SUM		
20	CLEARING AND GRUBBING	1	LUMP SUM		
21	UNCLASSIFIED EXCAVATION	709	CY		
22	COMPACTION OF EARTHWORK	269	CY		
23	AGGREGATE BASE COURSE (OP SPECIAL) (4")	1,580	SY		
24	SIDEWALK CONSTRUCTION (6")	12,815	SF		
25	SIDEWALK RAMP CONSTRUCTION	173	SF		
26	DETECTABLE WARNING SURFACE	60	SF		
27	CURB AND GUTTER, COMBINED (TYPE B)	120	LF		
28	SOD (TURF TYPE FESCUE)	729	SY		
29	TOPSOIL	121	CY		
30	EROSION CONTROL	1	LUMP SUM		

**MOBILIZATION (BASE BID)** 

1 LUMP SUM

MOBILIZATION (BID ALTERNATE #1)
1 LUMP SUM

CONTRACTOR CONSTRUCTION STAKING (BASE BID)

1 LUMP SUM

CONTRACTOR CONSTRUCTION STAKING (BID ALTERNATE #1)

1 LUMP SUM

REMOVAL OF EXISTING STRUCTURES (BASE BID)

1 LUMP SUM

REMOVAL OF EXISTING STRUCTURES (BID ALTERNATE #1)

1 LUMP SUM

# **CLEARING AND GRUBBING (BASE BID)**

1 LUMP SUM

# **CLEARING AND GRUBBING (BID ALTERNATE #1)**

1 LUMP SUM

# **EROSION CONTROL (BASE BID)**

1 LUMP SUM

# **EROSION CONTROL (BID ALTERNATE #1)**

1 LUMP SUM

# REMOVAL OF EXISTING STRUCTURES (BASE BID) (FOR INFORMATION ONLY)

STA. FROM	STA. TO	LOCATION	ITEM	UNIT	QUANTITY
9+54.21	-	RT	TREE	EACH	1
9+80.43	-	RT	TREE	EACH	1
20+40.75	-	RT	TREE	EACH	1
20+68.09	-	LT	TREE	EACH	1
21+41.91	-	LT	SIGN	EACH	1
21+46.94	21+46.94	LT/RT	CURB AND GUTTER	LF	24

EXISTING TRAIL AND SIDEWALK REMOVAL QUANTIFIED AND PAID FOR AS "UNCLASSIFIED EXCAVATION".

# REMOVAL OF EXISTING STRUCTURES (BID ALTERNATE #1) (FOR INFORMATION ONLY)

		(FUR I	NFORMATION ONLY)		
STA. FROM	STA. TO	LOCATION	ITEM	UNIT	QUANTITY
1+24.20	1+51.36	LT/RT	CURB AND GUTTER	LF	94
13+13.62	-	RT	SIGN	EACH	1
13+96.23	14+20.32	LT/RT	CURB AND GUTTER	LF	26
14+15.79	-	RT	BENCH	EACH	1
14+26.08	- -	LT	TREE	EACH	1
16+17.00	-	RT	SIGNS	EACH	2

EXISTING TRAIL AND SIDEWALK REMOVAL QUANTIFIED AND PAID FOR AS "UNCLASSIFIED EXCAVATION".

DETECTABLE WARNING SURFACE				
STA. FROM	STA. TO	DETECTABLE WARNING SURFACE (SF)		
21+44.94	21+46.94	20		
BASE BI	D TOTAL	20		
1+24.09	1+26.77	20		
1+49.93	1+51.93	20		
14+01.07	14+11.07	20		
BID ALTERNA	TE #1 TOTAL	60		
PROJEC <sup>*</sup>	Γ TOTAL	80		

SHEET TOTAL SHEETS

4 33

YEAR
2023

PROJECT NO.

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CITY OF MISSION, KANSAS BROADMOOR PARK TRAIL REPLACEMENT

DESCRIPTION

QUANTITIES SHEET 1 OF 2



By : Irosenbaum .	1418451R 0401 dan
rawn By	1418
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			TRAIL		
STA. FROM	STA. TO	LOCATION	SIDEWALK CONSTRUCTION (6") (SF)	SIDEWALK RAMP CONSTRUCTION (SF)	AGGREGATE BASE COURSE (OP SPECIA (4") (SY)
9+50.76	12+52.07	RT	3,082	-	374
20+10.10	21+46.94	RT	1,441	-	174
21+46.94	21+46.94	RT	-	55	7
	BASE BID	TOTAL	4,523	55	555
1+00.00	1+21.09	RT	268	-	32
1+21.09	1+26.84	LT/RT	-	59	7
1+49.85	1+55.66	LT/RT	-	59	7
1+55.66	9+15.90	RT	7,732	-	944
12+52.07	16+95.51	RT	4,815	-	583
14+00.35	14+12.07	LT	-	55	7
	BID ALTERNAT	E #1 TOTAL	12,815	173	1,580
	PROJECT	TOTAL	17,338	228	2,135

	EARTHWORK			
BEGIN STATION	END STATION	UNCLASSIFIED EXCAVATION (CY)	COMPACTION OF EARTHWORK (TYPE AA) (MR-3-3) (CY)	
9+50.76	12+52.07	143	75	
20+10.10	21+46.94	60	80	
BASE B	ID TOTAL	203	155	
1+00.00	9+15.90	461	168	
12+52.07	16+95.51	248	101	
BID ALTERN	ATE #1 TOTAL	709	269	
PROJEC	T TOTAL	912	424	

VMF = 1.0

SODDING				
STA. FROM	STA. TO	LOCATION	SOD (TURF TYPE FESCUE) (SY)	TOPSOIL (CY)
9+50.76	12+52.07	LT	158	26
9+50.76	12+52.07	RT	153	26
20+25.00	21+46.94	LT	296	49
20+25.00	21+46.94	RT	250	42
	BASE B	ID TOTAL	857	143
1+00.00	9+15.90	LT	224	37
1+00.00	9+15.90	RT	137	23
12+52.07	16+95.51	LT	146	24
12+52.07	16+95.51	RT	222	37
	BID ALTERN	ATE #1 TOTAL	729	121
	PROJEC	T TOTAL	1,586	264

	CURB & GUTTER				
STA. FROM	STA. TO	LOCATION	CURB & GUTTER, COMBINED (TYPE B) (LF)		
21+46.94	21+46.94	LT/RT	24		
	BASE BI	D TOTAL	24		
1+24.20	1+29.36	LT/RT	47		
1+45.91	1+51.36	LT/RT	47		
13+96.23	14+20.32	LT	26		
	BID ALTERNA	ATE #1 TOTAL	120		
	PROJEC	T TOTAL	144		

SHEET TOTAL SHEETS

5 33

YEAR
2023
PROJECT NO.

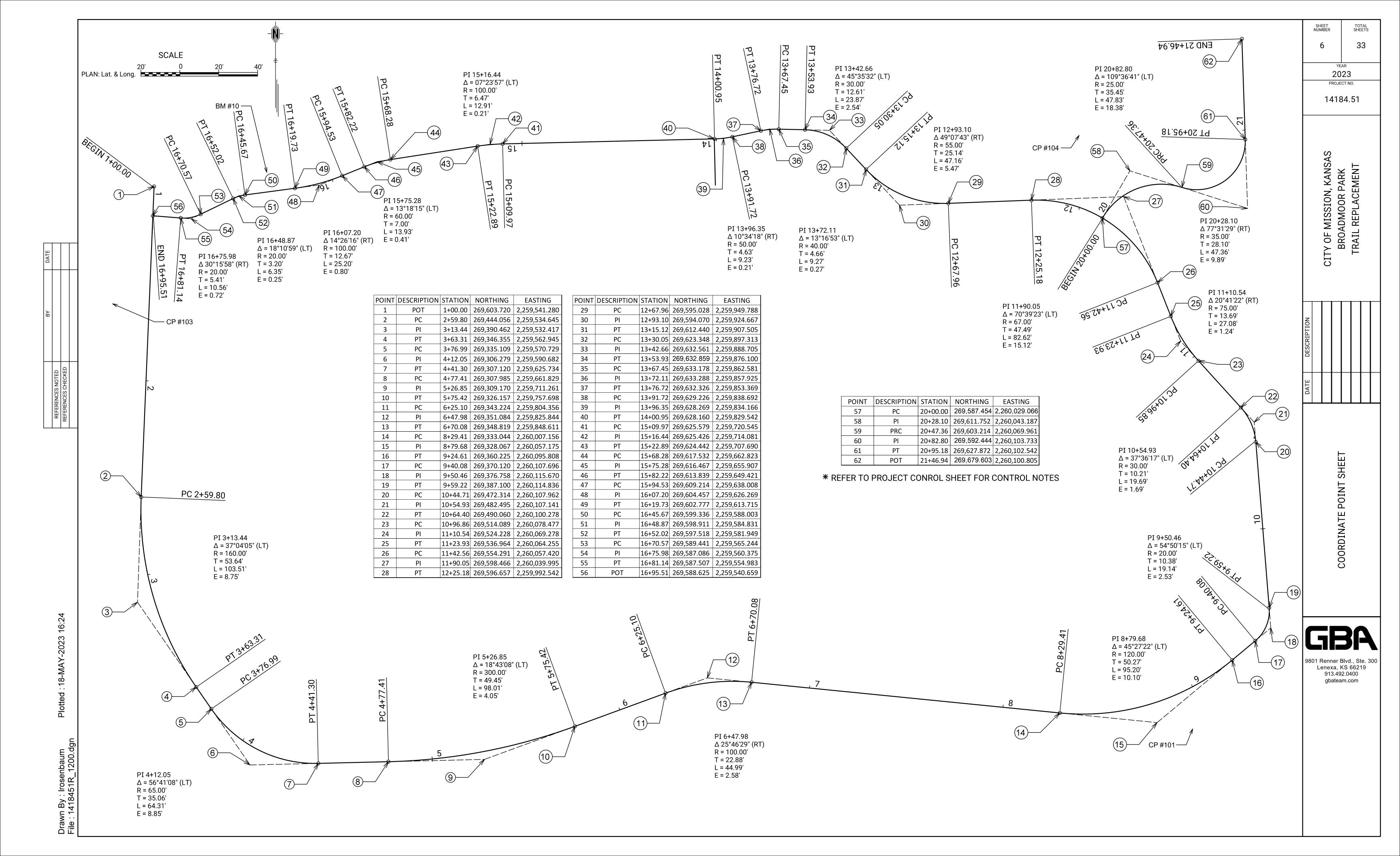
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CITY OF MISSION, KANSAS BROADMOOR PARK TRAIL REPLACEMENT

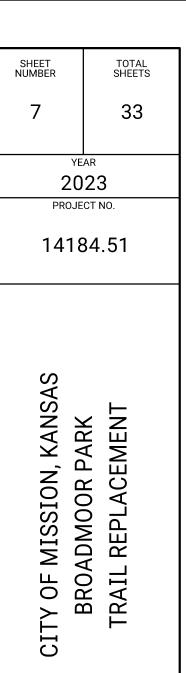
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QUANTITIES SHEET 2 OF 2





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14184.51- Broadmoor Park Control Note
Coordinates Shown Hereon:
Modified State Plane (Project Ground Coordinates), NAD83
1501 - Kansas North, U.S. Feet
Vertical - NAVD88, U.S. Feet
CAF: 0.99992081
To get to State Plane:
Coordinates x CAF = State Plane
CP #100 STA. 5+82.82, 279.80' RT. - Set 1/2" Iron bar at east end of grass island in parking lot South of park property. First island East of building and North of 58th Street
      3.80 feet East to East nose of island
57.40 feet Southwest to most Southwest corner of parking lot
.69.65 feet West Northwest to top centerline of East end of concrete retaining wall near Southeast corner of building
Coordinates:
N: 269065.932
E: 2259860.767
El: 1025.08
CP #101 STA. 8+91.30, 19.51' RT. - Set 1/2" Iron bar at Southeast corner of park property South of path
       11.19 feet North to South edge of asphalt path 37.98 feet Northeast to top Southeast corner concrete approach slab to wood bridge spanning creek 15.39 feet East Southeast to Northwest corner brick column at North end wood plank fence line
Coordinates:
       269324.878
2260075.488
        1027.25
CP #102 STA. 3+23.41, 88.35' RT. - Set 1/2" Iron bar West side concrete walk along west side Broadmoor Rd. just South of South most entrance to 5700 Broadmoor Rd. 6.12 feet North to back of curb at West edge of concrete walk
       52.89 feet South Southeast to top centerline fire hydrant 23.44 Southwest to near side 10" tree
       11.97 feet to top centerline sprinkler control box
Coordinates:
       269350.856
       2259461.729
       1043.570
CP #103 STA. 1+61.14, 18.85' RT. - Set 1/2" Iron bar East side Broadmoor Rd. at South side park entrance
        9.78 feet North to back of curb at curb return
       9.84 feet North Northeast to near side steel gate post
       13.25 feet South Southeast to Northeast corner stone monument park sign
       12.73 feet South Southwest to Northwest corner stone monument park sign
Coordinates:
N 269543 415
       2259519.905
El: 1045.480
CP #104 STA. 12+08.16, 35.64' RT. - Set 1/2" Iron bar near Northeast corner of park property
        40.35 feet Northwest to near side of 24" oak tree, fourth tree West of path
        26.47 feet Northeast to near side of 24" oak tree, third tree West of path
        52.82 feet Southeast to top Northwest corner concrete wall around swing set area
       45.30 feet Southwest to Northeast corner of concrete pad under park bench
Coordinates:
       269629.963
       2260017.084
       1033.790
BM #10 STA. 16+33.04, 10.14' RT. - Set Chiseled "+" cut top Southeast corner of concrete pad along South side of bathroom building at Northwest corner of park property
Coordinates
N: 269611.0630
       2259599.177
       1043.00
```



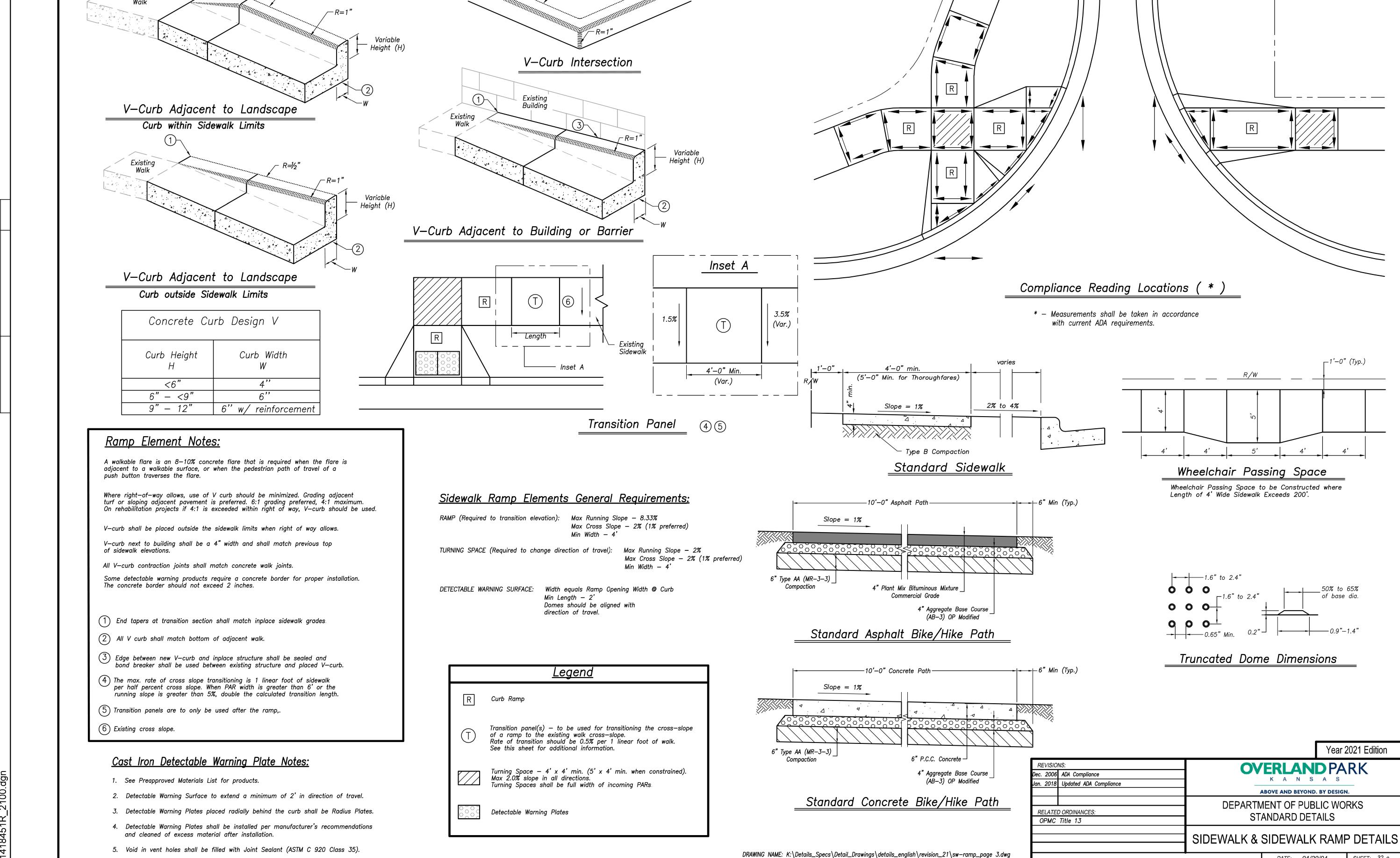


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2023

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OF MISSION, KANSAS FOXRIDGE DR. ST. TO LAMAR AVENUE)

—1'**—**0" (Тур.)

Year 2021 Edition

KANSAS

ABOVE AND BEYOND, BY DESIGN.

DATE: 01/20/04 SHEET: 32\_c

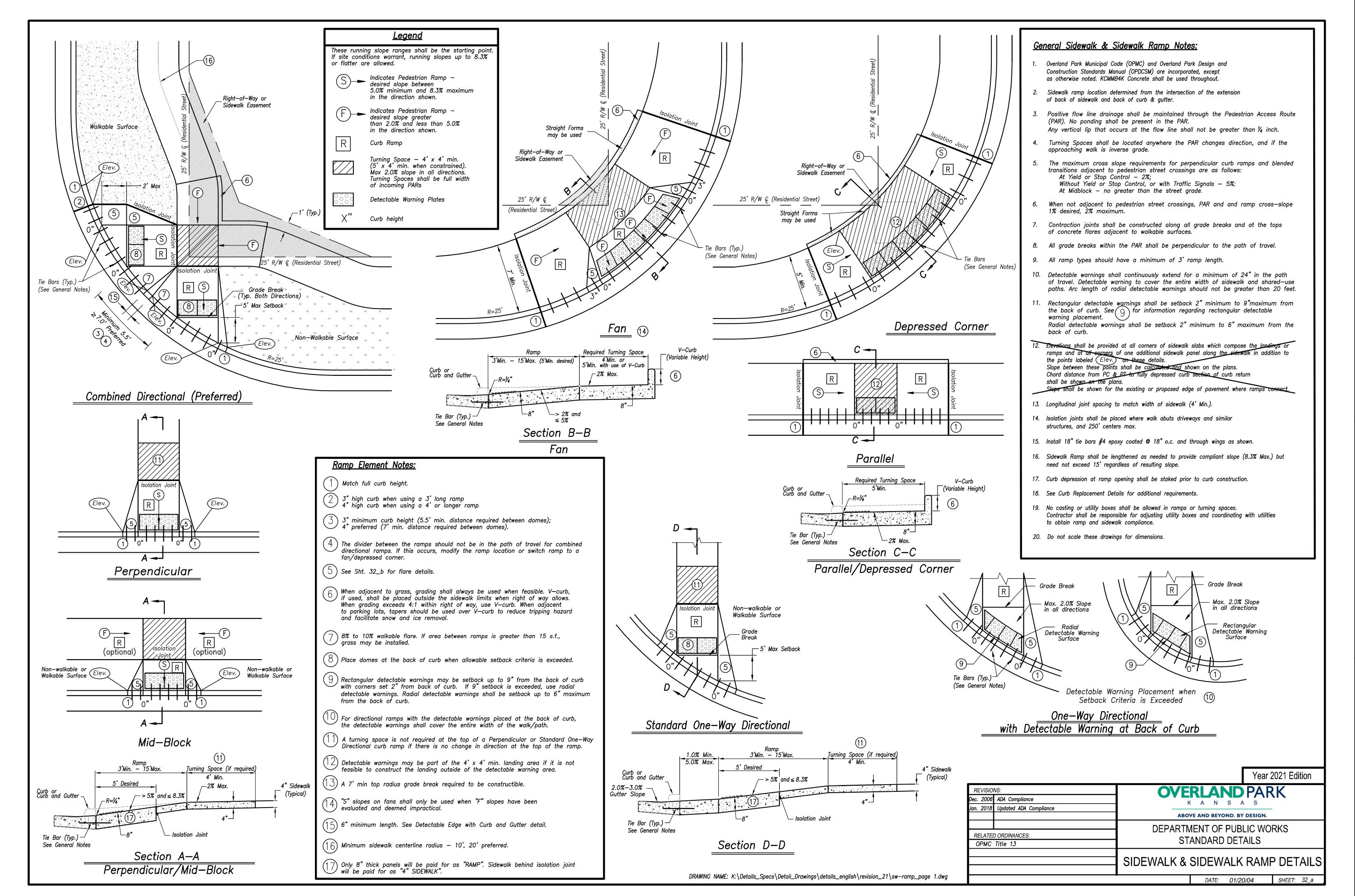
STANDARD DETAILS

R/W

0F ONSTRUCT

GBP 9801 Renner Blvd., Ste. 300 Lenexa, KS 66219 913.492.0400 gbateam.com

Drawn By : Irosenbaum File : 1418451R\_2100.dgn



By : Irosenbaum 418451R\_2100.dgn

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AVENUE)

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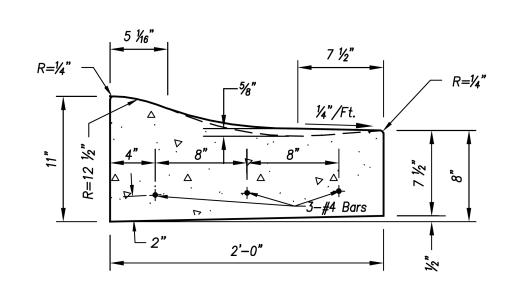
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**GBA** 9801 Renner Blvd., Ste. 300 Lenexa, KS 66219 913.492.0400

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Standard Type "A" Curb



Type "A - Dry" Curb

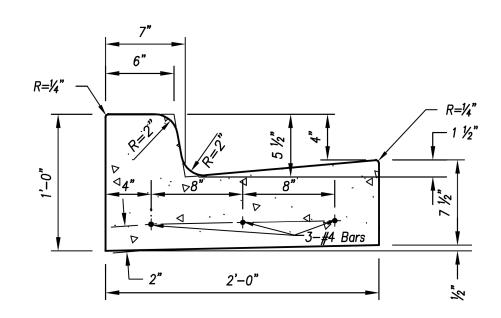
NOTE: in transitions, water shall flow from the gutter of Type "A" curb to the lip of Type "A—Dry" curb at 0.5% min. slope.

## Curb & Gutter Notes:

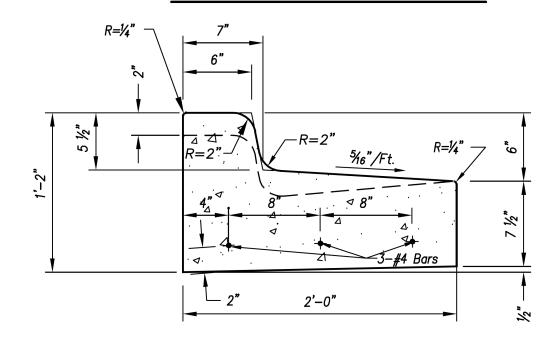
- The Overland Park Municipal Code (OPMC) and Overland Park Design and Construction Standards Manual (OPDCSM) are incorporated, except as otherwise noted.
- 2. 1/2" premolded expansion joints shall be placed at points of The expansion joints shall be sealed in accordance with Contraction joints shall be 2" deep, and placed at 15' intervals equally spaced between expansion joints.
- 3. All concrete used in this work shall meet the requirements of the OPMC. KCMMB4K Concrete shall be used throughout.
- 4. For hand-formed curb all reinforcing steel shall be supported on fabricated steel bar supports @ 3'-ŏ" maximum spacing, or as directed by the City Engineer.
- 5. See sidewalk ramp details for typical sidewalk ramp curb & gutter sections.

CONCRETE CURB & GUTTER

Not to Scale



Standard Type "B" Curb



Type "B - Dry" Curb

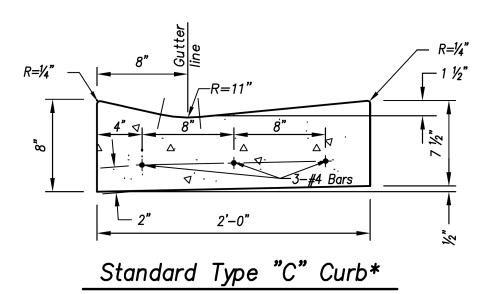
NOTE: in transitions, water shall flow from the gutter of Type "B" curb to the lip of Type "B—Dry" curb at 0.5% min. slope.

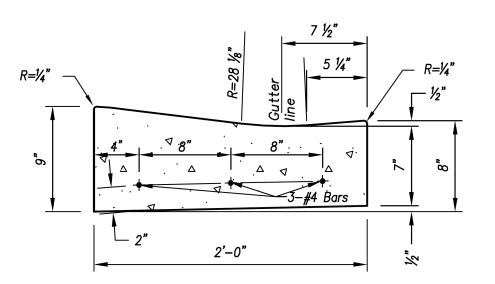
## Curb & Gutter Notes:

- The Overland Park Municipal Code (OPMC) and Overland Park Design and Construction Standards Manual (OPDCSM) are incorporated, except as otherwise noted.
- 2. 1/2" premolded expansion joints shall be placed at points of The expansion joints shall be sealed in accordance with Contraction joints shall be 2" deep, and placed at 15' intervals equally spaced between expansion joints.
- 3. All concrete used in this work shall meet the requirements of the OPMC. KCMMB4K Concrete shall be used throughout.
- 4. For hand-formed curb all reinforcing steel shall be supported on fabricated steel bar supports @  $3'-\check{0}"$  maximum spacing, or as directed by the City Engineer.
- 5. See sidewalk ramp details for typical sidewalk ramp curb & gutter sections.

CONCRETE CURB & GUTTER

Not to Scale





Type "C-1" Curb \* (Use w/ type "A" curb)

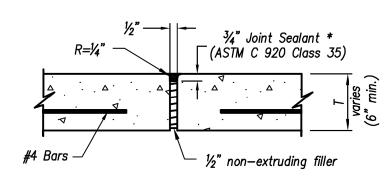
\* Use for commercial entrances

# Curb & Gutter Notes:

- 1. The Overland Park Municipal Code (OPMC) and Overland Park Design and Construction Standards Manual (OPDCSM) are incorporated, except as otherwise noted.
- 2.  $\frac{1}{2}$  premolded expansion joints shall be placed at points of The expansion joints shall be sealed in accordance with Contraction joints shall be 2" deep, and placed at 15' intervals
- equally spaced between expansion joints. 3. All concrete used in this work shall meet the requirements of the OPMC. KCMMB4K Concrete shall be used throughout.
- 4. For hand-formed curb all reinforcing steel shall be supported on fabricated steel bar supports @ 3'-ŏ" maximum spacing, or as directed by the City Engineer.
- 5. See sidewalk ramp details for typical sidewalk ramp curb & gutter sections.

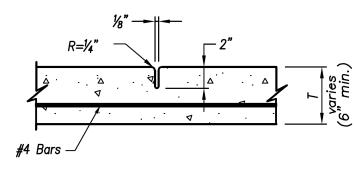
CONCRETE CURB & GUTTER

Not to Scale

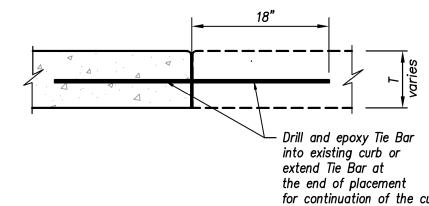


\* – Joint Sealant shall be installed within 48 Hours of curb placement

Expansion Joint



Contraction Joint



JOINT DETAILS

Not to Scale

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REVISIONS: **OVERLAND PARK** 07/01/03 Concrete Mix Designation; KANSAS Jan. 2006 Notes ABOVE AND BEYOND. BY DESIGN. Feb. 2008 OPMC Reference DEPARTMENT OF PUBLIC WORKS RELATED ORDINANCES: STANDARD DETAILS OPMC Title 13 CONCRETE CURB WITH ASPHALT PAVEMENT (COLLECTOR AND RESIDENTIAL STREETS)

DRAWING NAME: K: \Details\_Specs\Detail\_Drawings\details\_english\revision\_21\curb\_asphalt.dwg

for continuation of the curb Construction Joint

Year 2021 Edition

DATE: 09/28/99 SHEET: 10 OF MISSION, KANSAS FOXRIDGE DR. ST. TO LAMAR AVENUE) 0F (51ST

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ONSTRUCT

Erosion and Pollution Control General Notes

(Updated 3/15/2018)

- 1. Prior to Land Disturbance activities, the following shell
- a) Delineate the outer limits of any natural stream corridor designated in accordance with OPMC Chapter 18.365 with construction fencing;
- b) Identify the limits of construction on the ground with easily recognizable indications such as construction staking, construction fencing and placement of physical barriers or other means acceptable to the City inspector and in conformance with the erosion and pollution control plan;
- c) Construct a stabilized entrance/parking/staging area;
- d) Install perimiter controls and protect any existing stormwater inlets:
- e) Request an initial inspection of the installed Phase I pollution control measures designated on the approved erosion and pollution control plan. Land disturbance work shall not proceed until there is a passed inspection.
- 2. The site shall comply with all requirements of the Kansas Water Pollution Control and NPDES Stormwater Runoff from Construction Sites General Permit. OPMC Chapter 16.200 and Title 18, and the City of Overland Park Design and Construction Standards Manual including but not limited to:
- a) Immediate initiation of temporary stabilization BMPs on disturbed areas where construction activities have temporarily ceased on that portion of the project site if construction activities will not resume for a period exceeding 14 calendar days. Temporary stabilization may include establishment of vegetation, geotextiles, mulches or other techniques to reduce or eliminate erosion until either final stabilization can be achieved or until further construction activities take place to re-disturb the area. This stabilization must be completed within 14 calendar days;
- b) Inspection of erosion and sediment control measures shall be performed to meet or exceed the minimum inspection frequency in the Kansas General Permit. At a minimum, inspections shall be performed during all phases of construction at least once every 14 days and within 24 hours of each precipitation event as defined in Kansas General Permit;
- c) An inspection log shall be maintained and shall be available for review by the regulatory authority;
- d) The erosion and pollution control plan shall be routinely updated to show all modifications and amendments to the original plan. A copy of the erosion and pollution control plan shall be kept on site and made available for review by the regulatory authority.

- 3. Unless otherwise noted on the plans, all seeding must conform to the City of Overland Park Design and Construction Standards Manual, Current Edition. Temporary seeding shall only be used for periods not to exceed 12 months. For final stabilization, temporary seeding shall only be used to establish vegetation outside the permanent seeding or sodding dates as specified in the Standard Specifications. Final stabilization requires a uniform perennial vegetative cover with a density of 70% over 100% of disturbed
- 4. Erosion and pollution control shall be provided for the duration of a project. All installed erosion and pollution control BMPs shall be maintained in a manner that preserves their effectiveness. If the City determines that the BMPs in place do not provide adequate erosion and pollution control at any time during the project, additional or alternate measures that provide effective control shall be required. Failure to do so is a violation of the provisions of OPMC Chapter 16.200.
- 5. Concrete wash or rinsewater from concrete mixing equipment, tools and/or ready-mix trucks, etc. may not be discharged into or be allowed to run to any existing water body or portion of the stormwater system. One or more locations for concrete washout will be designated on site, such that discharges during concrete washout will be contained in a small area where waste concrete can solidify in place. Proper signage will be installed to direct users to the concrete washout. Concrete washouts must be installed prior to pouring any concrete.
- 6. Work in or near water bodies shall limit disturbance area and duration of disturbance as described in the City of Overland Park Design and Construction Standards Manual.
- 7. Pollution of streams, lakes, wetlands, drainage ways or storm sewers from fuel, oils, hazardous chemicals, sediment, trash, debris, or other substances resulting from construction activities shall not be allowed. All spills in excess of reportable quantities shall be reported to all of the following within 24 hours of their occurrence: KDHE 24-hour spill response center (785)296—1679; KDHE Northeast District, Lawrence, (785)842-4600; National Spill Response Center 1-800-424-8802. Spills that pose immediate threat to public safety or contamination of a water body, shall be reported immediately to the Overland Park Fire Department at 911. Such spills shall also be reported to the Kansas Division of Emergency Management, (800)275-0297 or (785)296-8013.

- 8. Silt fences and sediment control BMPs which are shown along the back of curb must be installed within two weeks of curb backfill and prior to placement of base asphalt. Exact locations of these erosion control methods may be field adjusted to minimize conflicts with utility construction. However, anticipated disturbance by utility construction shall not delay installation.
- 9. Required sediment basins and traps shall be installed as early as possible during mass grading as indicated in the staging chart. Sediment basins and traps shall be cleaned out when the sediment capacity has been reduced by 20% of its original design volume.
- 10. All manufactured BMPs such as erosion control blankets. TRMs, biodegradable logs, filter socks, synthetic sediment barriers and hydraulic erosion control shall be installed as directed by the manufacturer.
- 11. The above requirements are the responsibility of the permittee for the site. Responsibility may be transferred to another party by the permittee, but the permittee shall remain liable by the City of Overland Park if any of the above conditions are not met.

2023 PROJECT NO.

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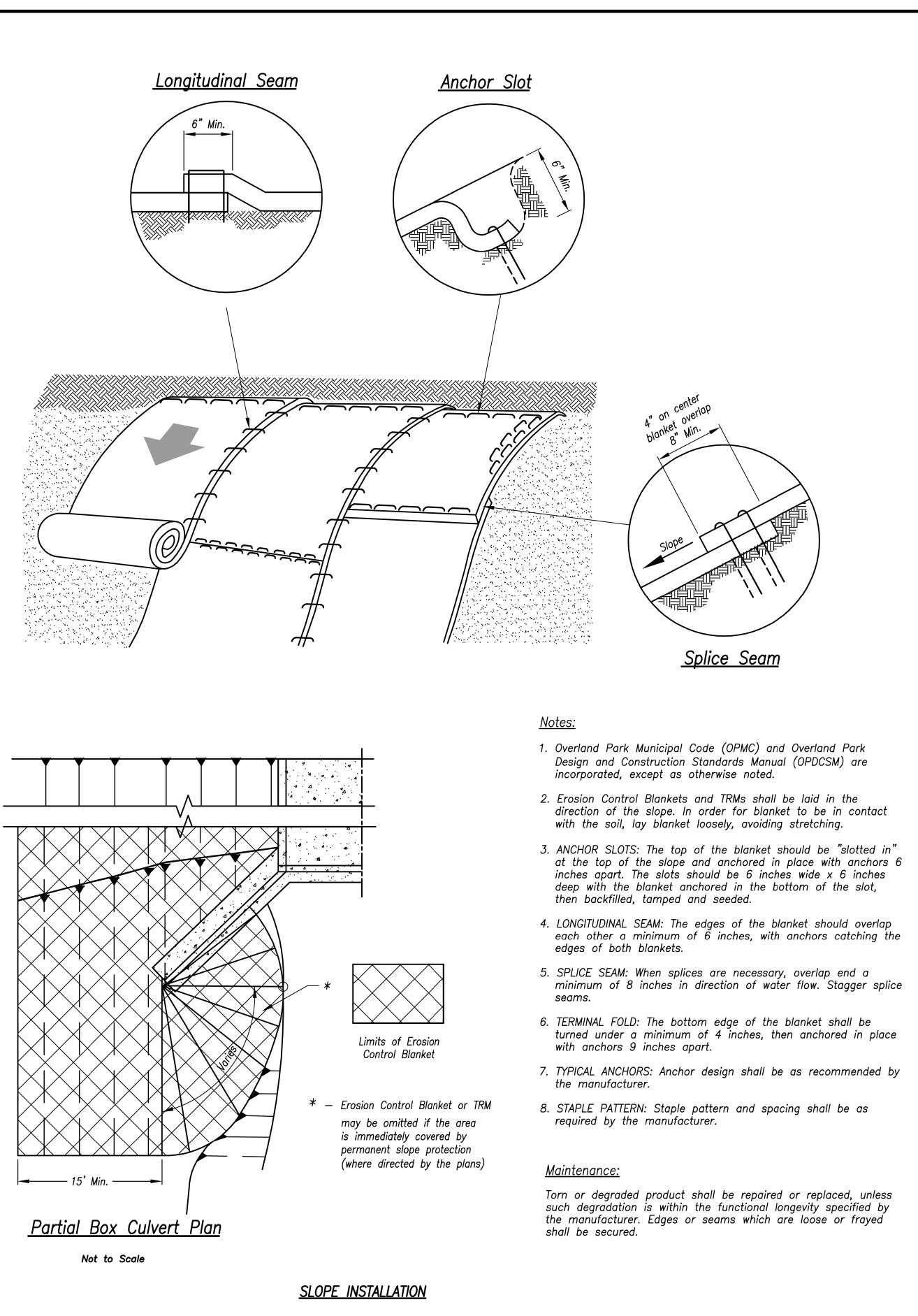
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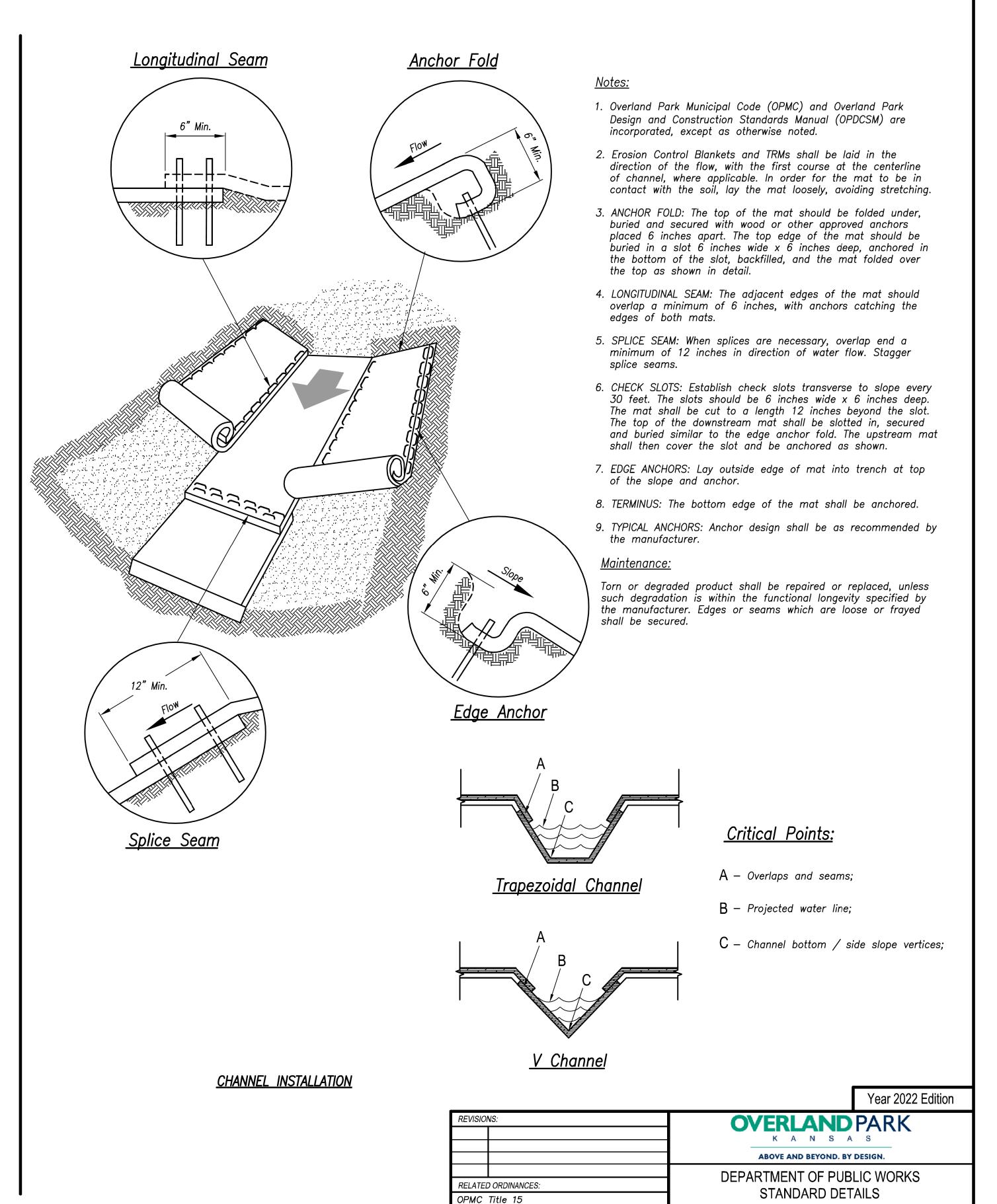
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Year 2022 Edition REVISIONS: **OVERLAND** PARK KANSAS ABOVE AND BEYOND. BY DESIGN. DEPARTMENT OF PUBLIC WORKS RELATED ORDINANCES: STANDARD DETAILS OPMC Title 15 **EROSION AND POLLUTION CONTROL GENERAL NOTES** DATE: 01/20/2015 SHEET: 50







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CONSTRUCTI SHEET

GBP

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Lenexa, KS 66219 913.492.0400

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**EROSION CONTROL BLANKETS &** TURF REINFORCEMENT MATS

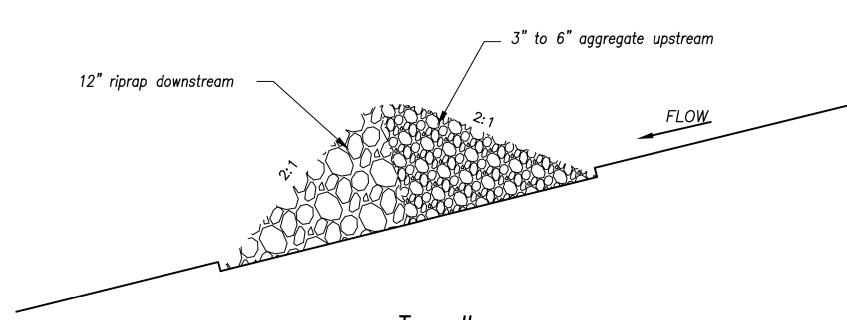
DATE: 01/10/2015 SHEET: 48

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Drawn By : Irosenbaum File : 1418451R\_2100.dgn

3" to 6" aggregate

<u>Type I</u> (2 Acres or less of Drainage Area)



<u>Type II</u> (2–10 Acres of Drainage Area)

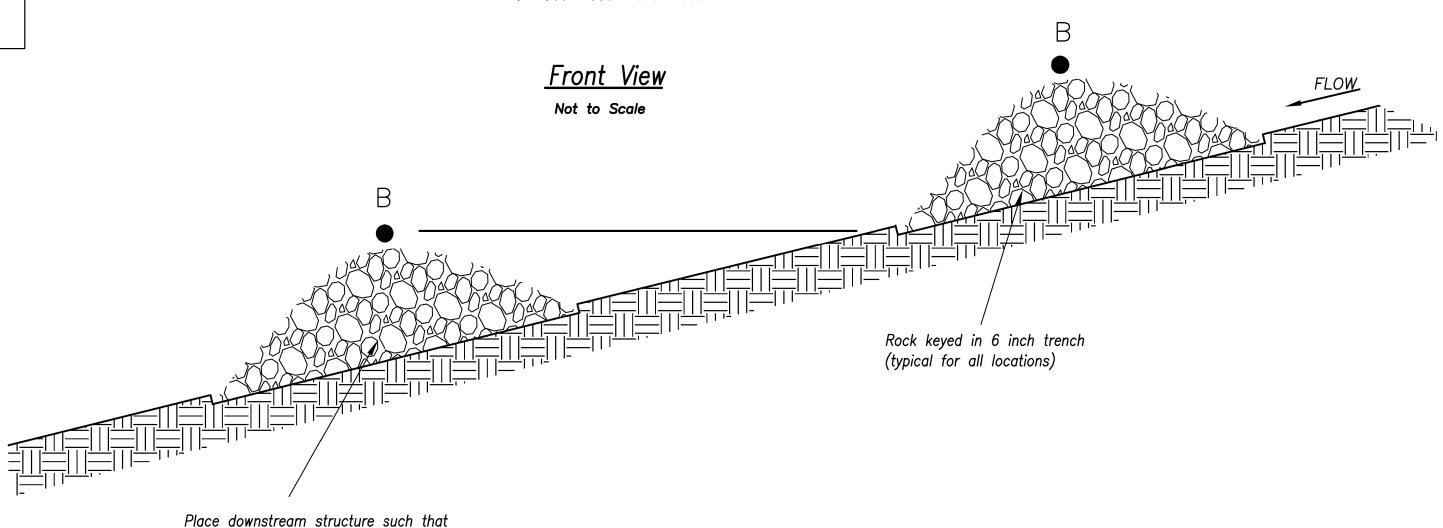
ROCK DITCH CHECK

<u>Temporary</u> Ditch Check Spacing		
Ditch Centerline Slope (%)	Spacing Interval (Feet)	
1.0	200	
2.0	100	
3.0	65	
4.0	50	
5.0	40	
6.0	33	
Note: Use this spacing for all except Rock Ditch Checks.		

# ALTERNATIVE DITCH CHECK:

- 1. Synthetic Sediment Barrier (\*)
- 2. Biodegradable Log (\*)
- \* Install per manufacturer's instructions.

Temporary Rock Ditch Check Spacing				
Ditch Centerline Slope (%)	Spacing Interval (Feet)			
5.0	60			
6.0	50			
7.0	43			
8.0	36			
9.0	33			
10.0	29			
Note: Use this spacing only for Rock Ditch Checks.				



3' Max.

Elevation at end Points "A" must be minimum 6" higher than elevation of flow line at point "B"

Spacing Between Check Dams (all types)

Not to Scale

# <u>Notes</u>:

structure

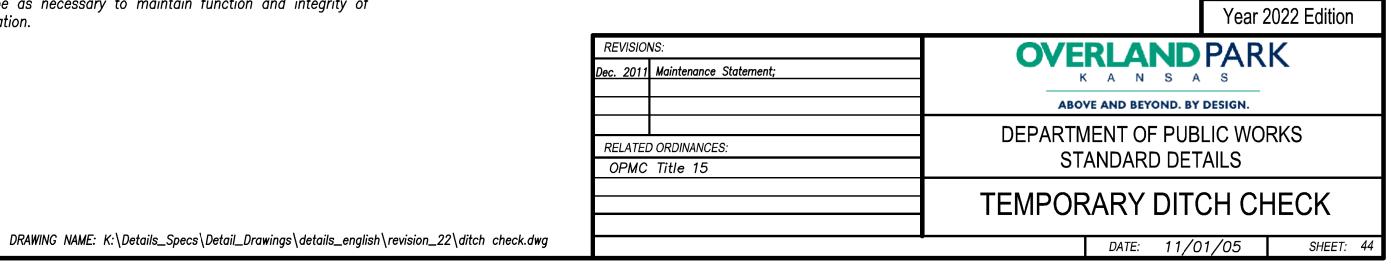
1. Overland Park Municipal Code (OPMC) and Overland Park Design and Construction Standards Manual (OPDCSM) are incorporated, except as otherwise noted.

Point "B" is approximately level with the toe elevation of the upstream

- 2. Rock check dams shall be used only for drainage areas less that 10 acres unless approved by the City.
- 3. Use rock checks only in situations where the ditch slope exceeds 6%.

## <u>Maintenance:</u>

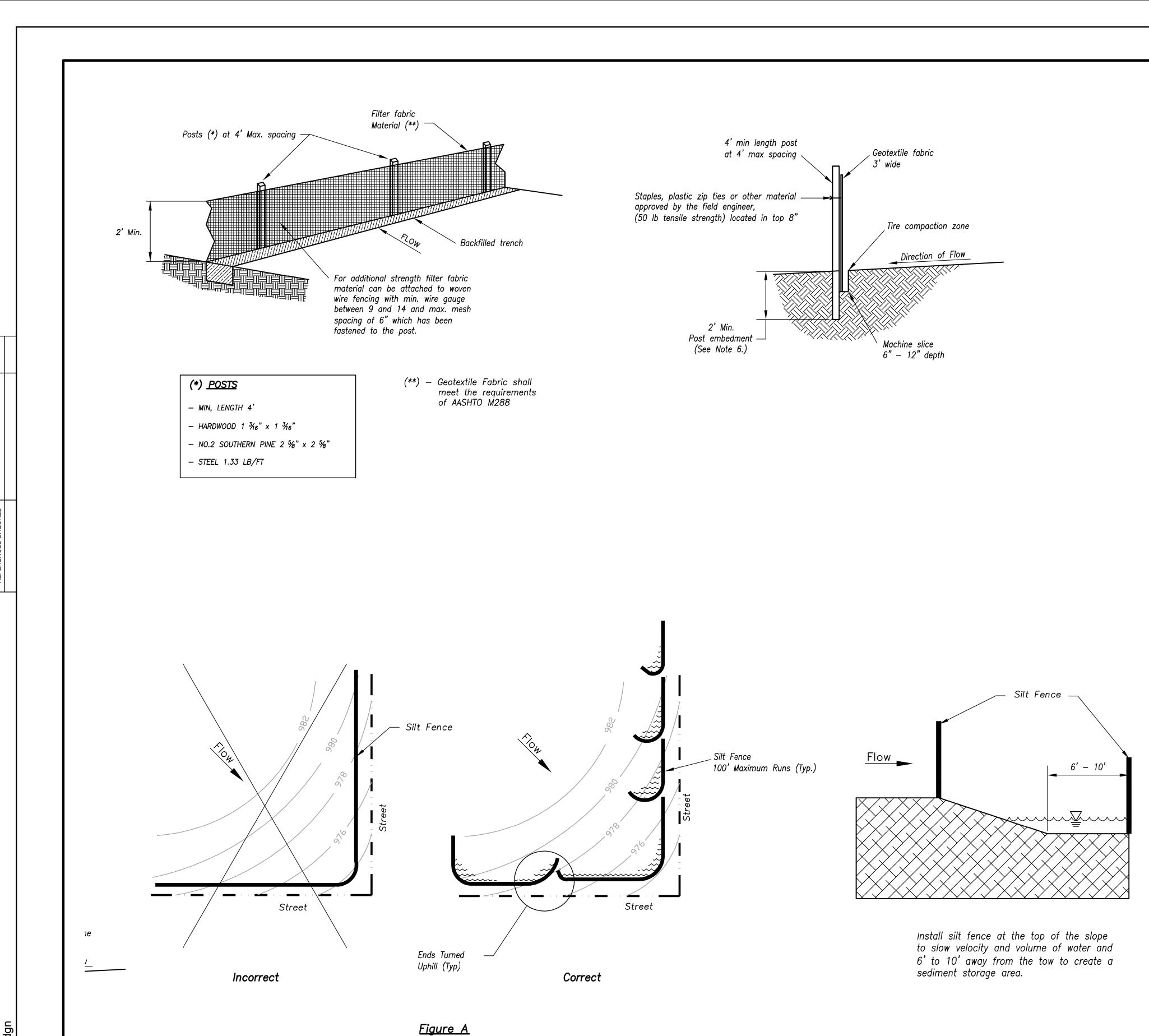
Remove and dispose of sediment deposits when the deposit approaches ½ the height of the ditch check. Replace and reshape as necessary to maintain function and integrity of



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SILT FENCE LAYOUT

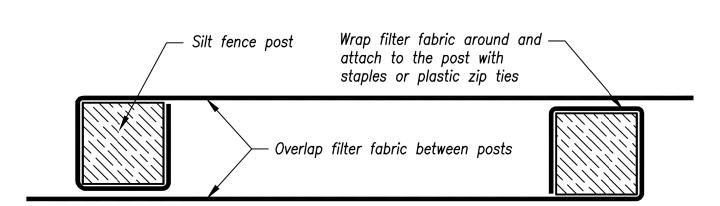
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# <u>Notes:</u>

- Overland Park Municipal Code (OPMC) and Overland Park
   Design and Construction Standards Manual (OPDCSM) are
   incorporated, except as otherwise noted.
- 2. In order to contain water, the ends of the silt fence must be turned uphill (Figure A).
- Long perimeter runs of silt fence must be limited to 100'. Runs should be broken up into several smaller segments to minimize water concentrations (Figure A).
- 4. Long slopes should be broken up with intermediate rows of silt fence to slow runoff velocities.
- 5. Attach fabric to upstream side of post.
- 6. Install posts a minimum of 2' into the ground.
- 7. Trenching will only be allowed for small or difficult installation, where slicing machine cannot be reasonably used.

### <u>Maintenance:</u>

Remove and dispose of sediment deposits when the deposit approaches ½ the height of silt fence. Repair as necessary to maintain function and structure.



JOINING FENCE SECTIONS

Not to Scale

	Year 2022 Edition		
REVISIONS:	<b>OVERLAND</b> PARK		
Jan. 2009 Miscellaneous;	K A N S A S		
Dec. 2011 Maintenance Statement;	ABOVE AND BEYOND. BY DESIGN.		
	DEPARTMENT OF PUBLIC WORKS		
RELATED ORDINANCES:	STANDARD DETAILS		
OPMC Title 15	STANDARD DETAILS		
	SILT FENCE		
	DATE: 11/01/05 SHEET: 46		

Lenexa, KS 66219 913.492.0400 gbateam.com

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2023

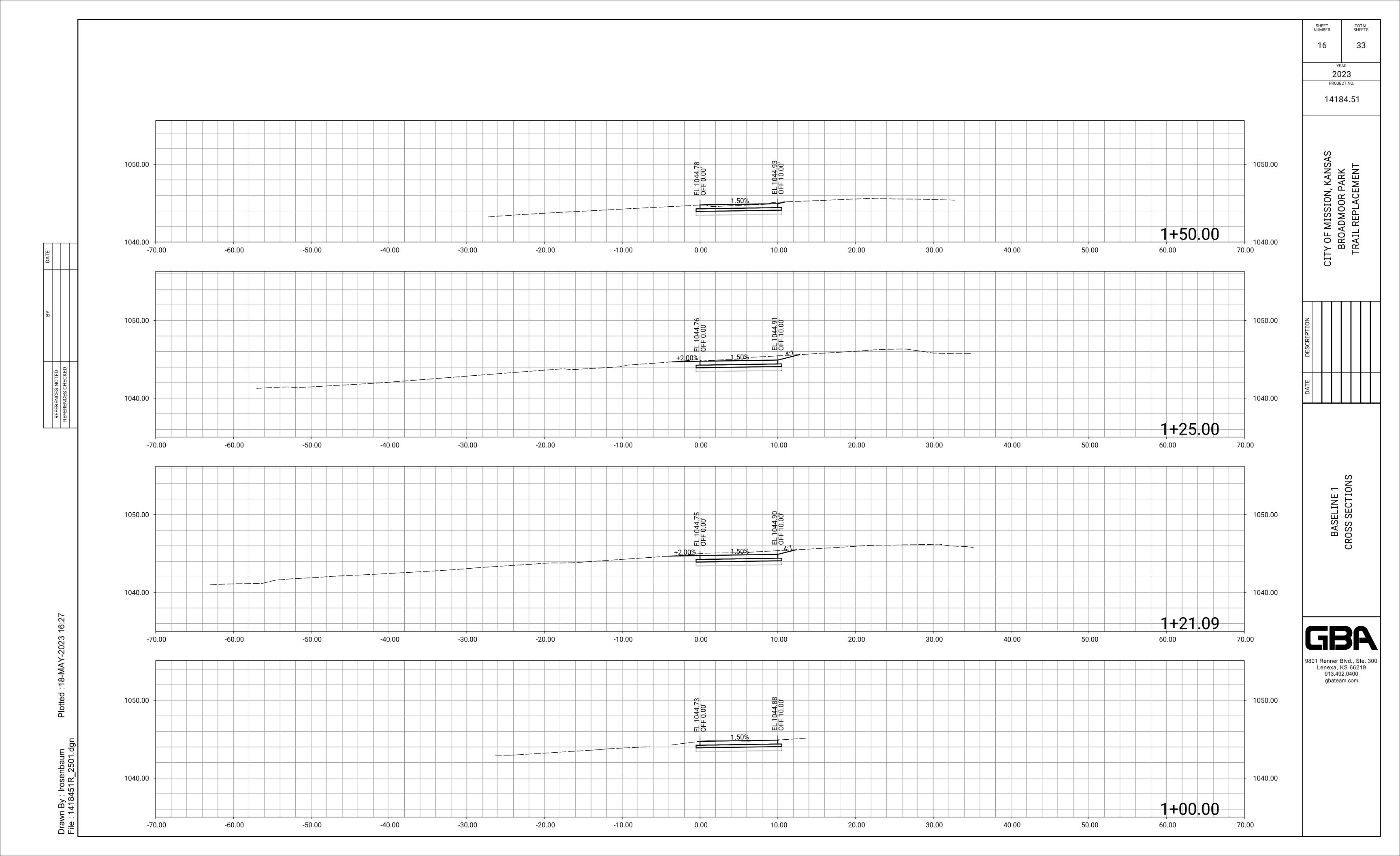
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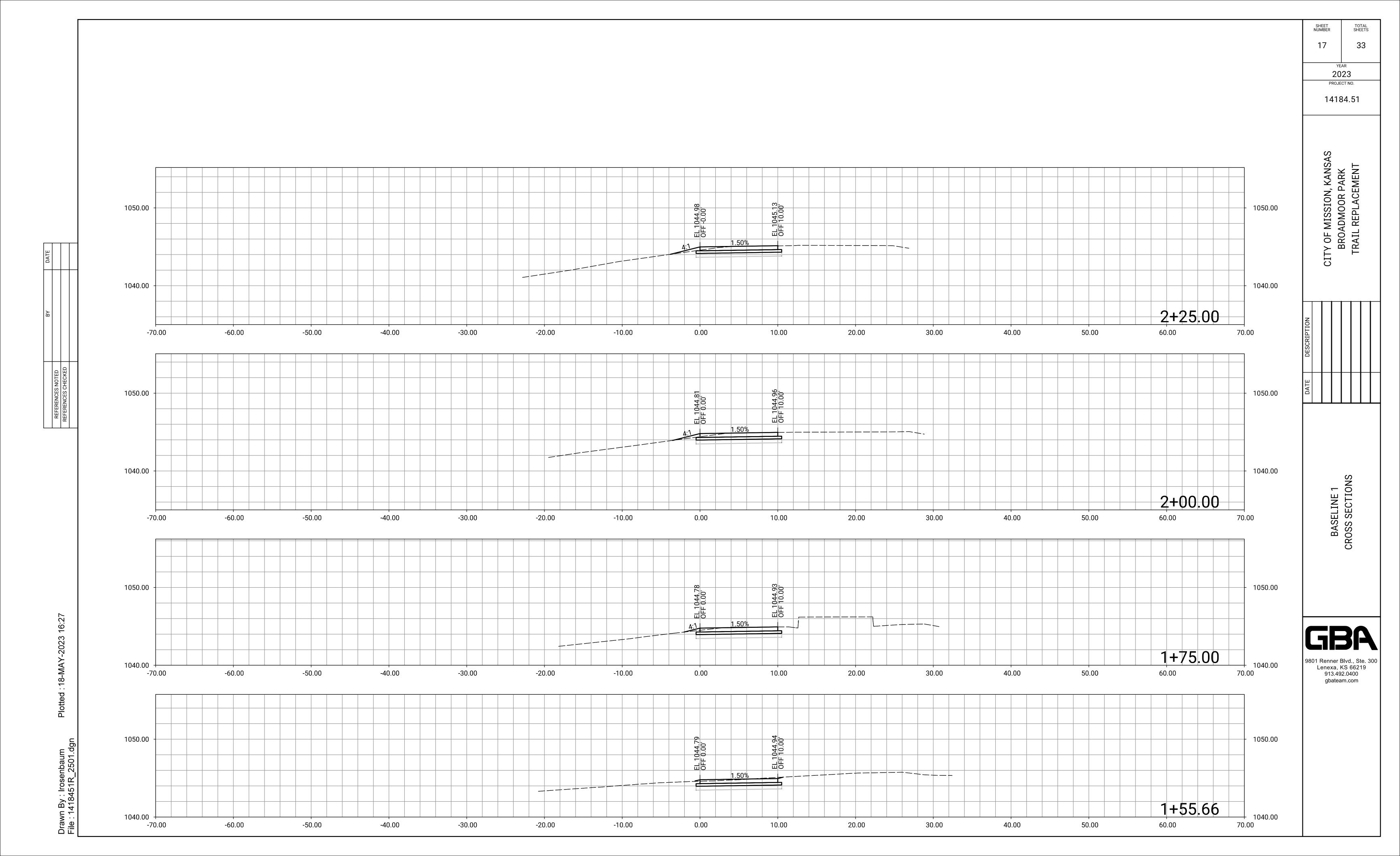
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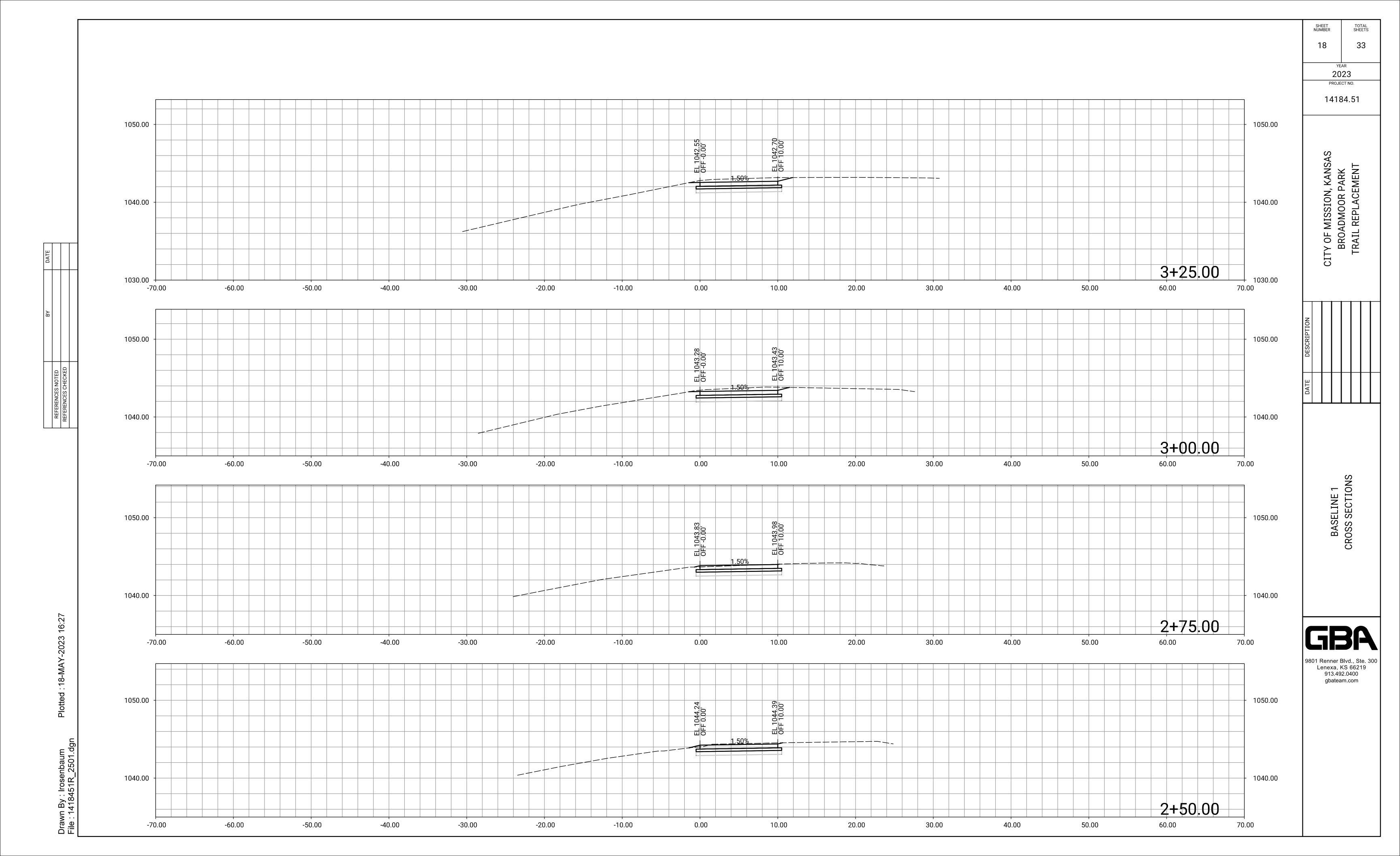
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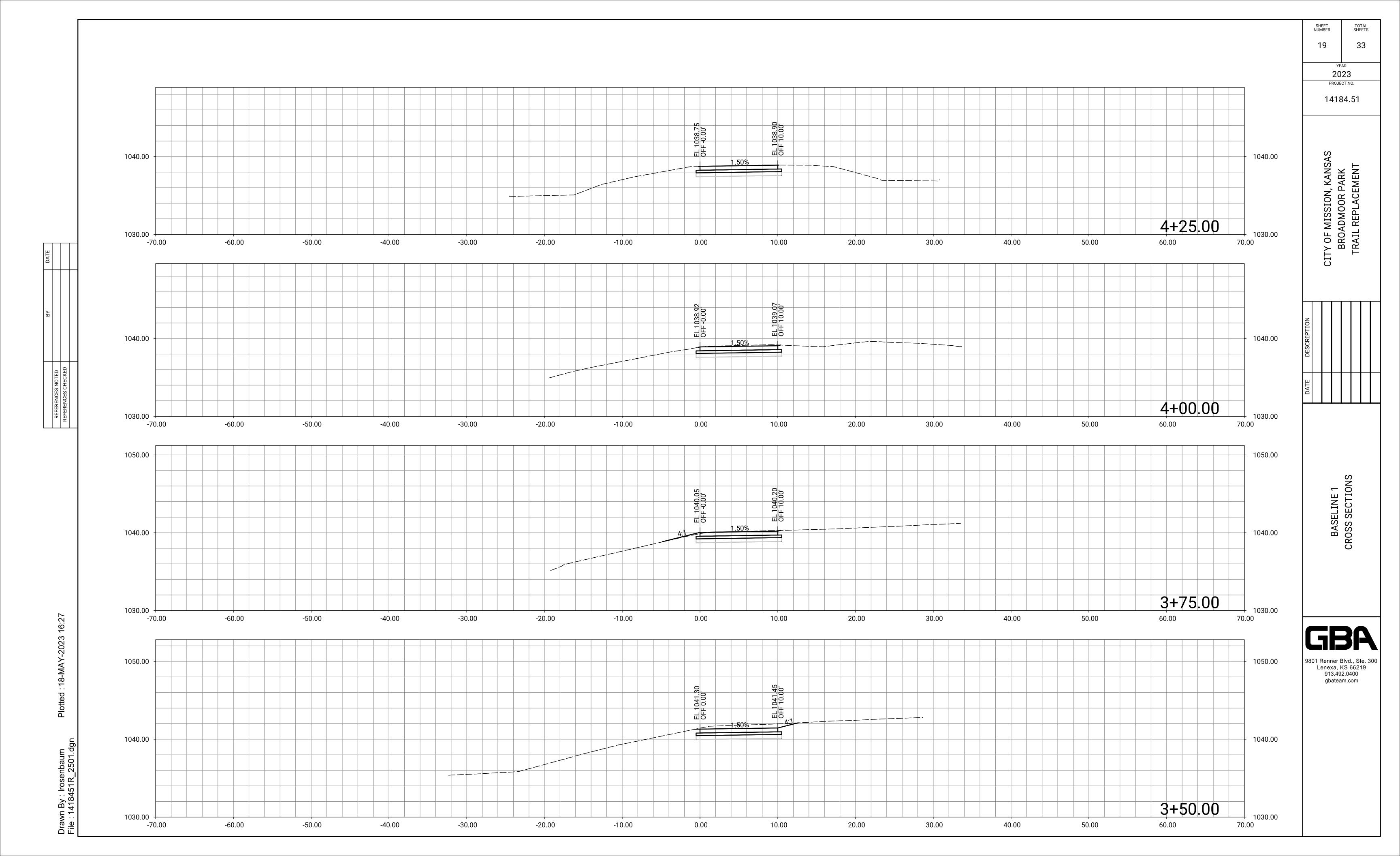
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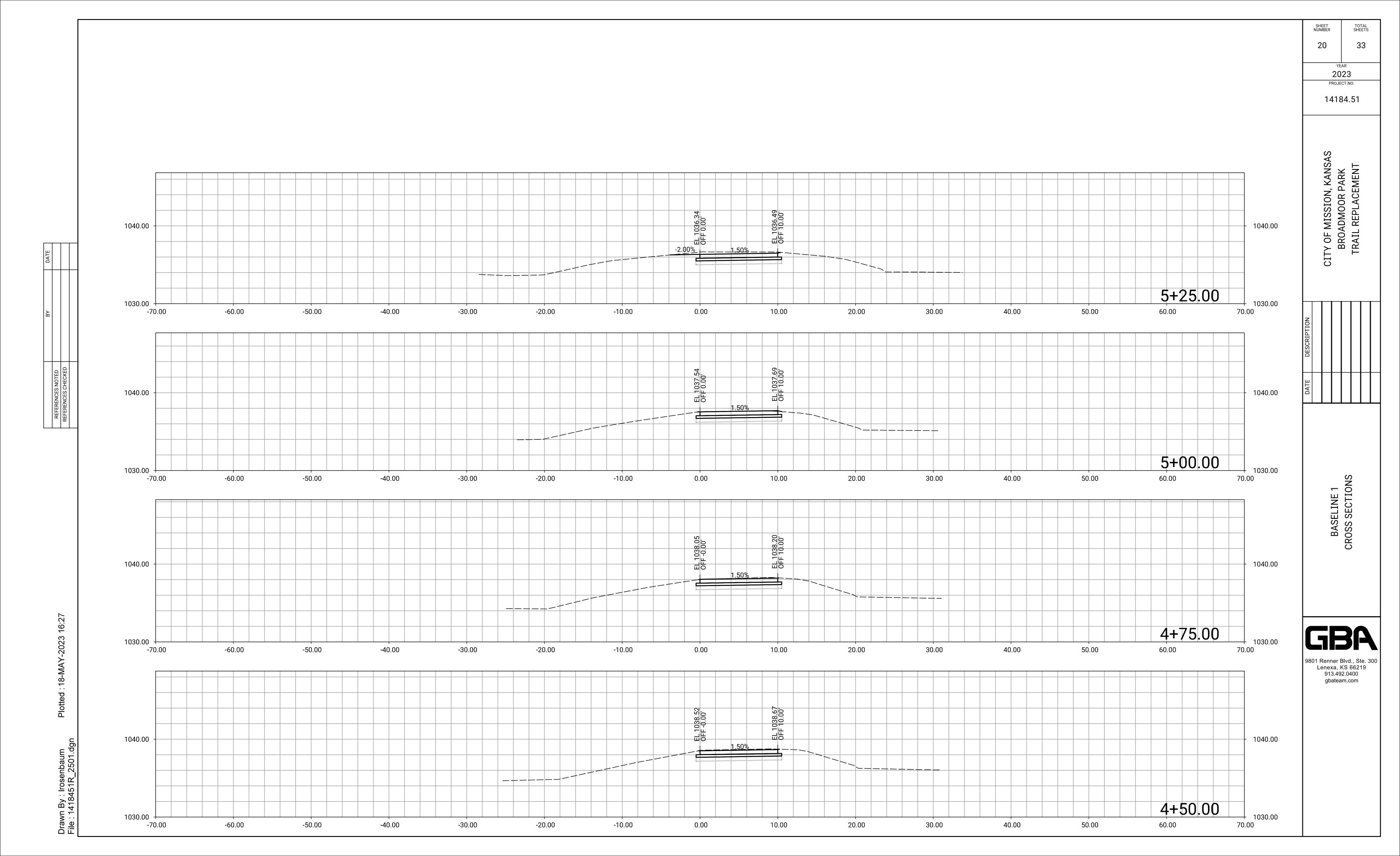
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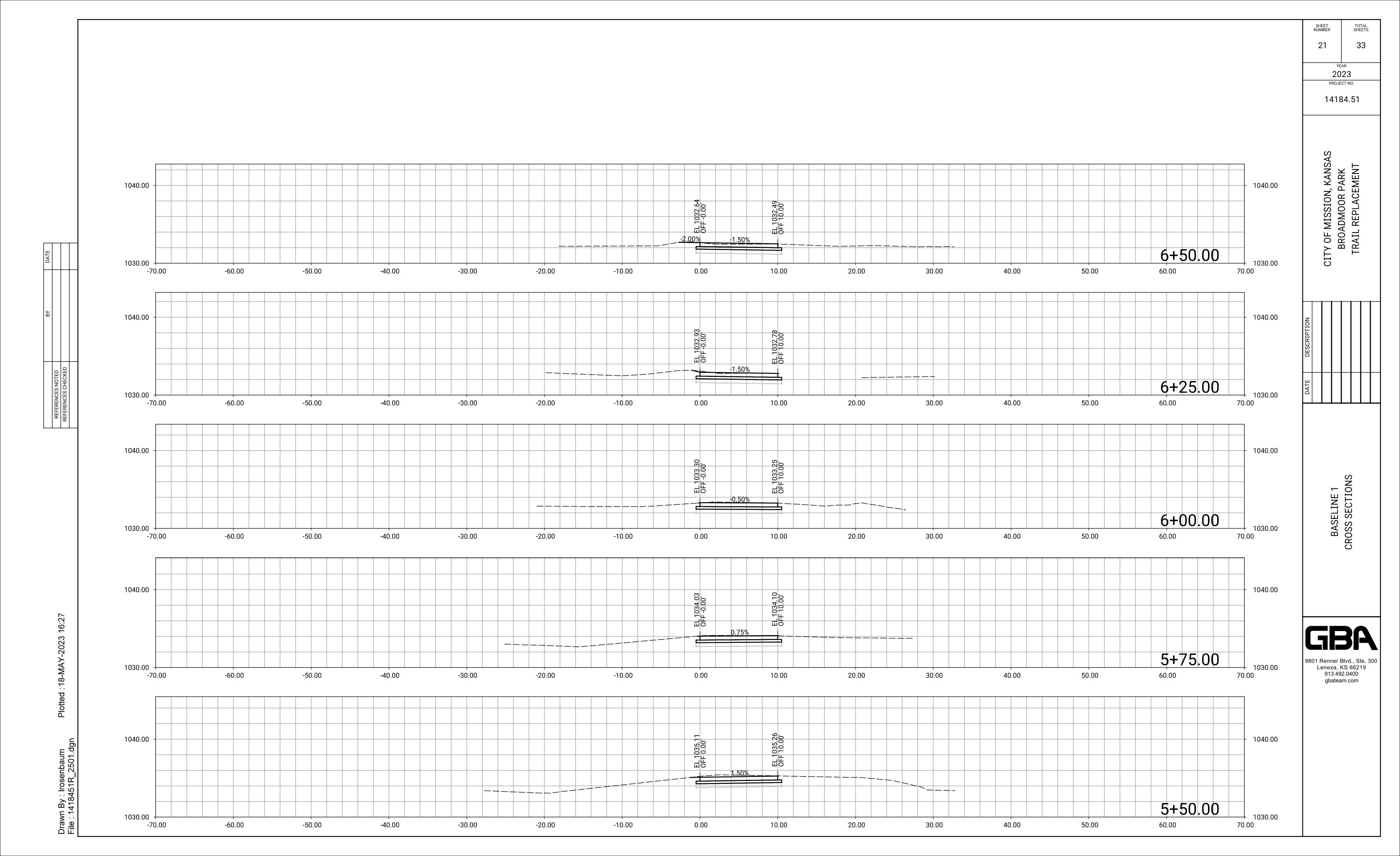


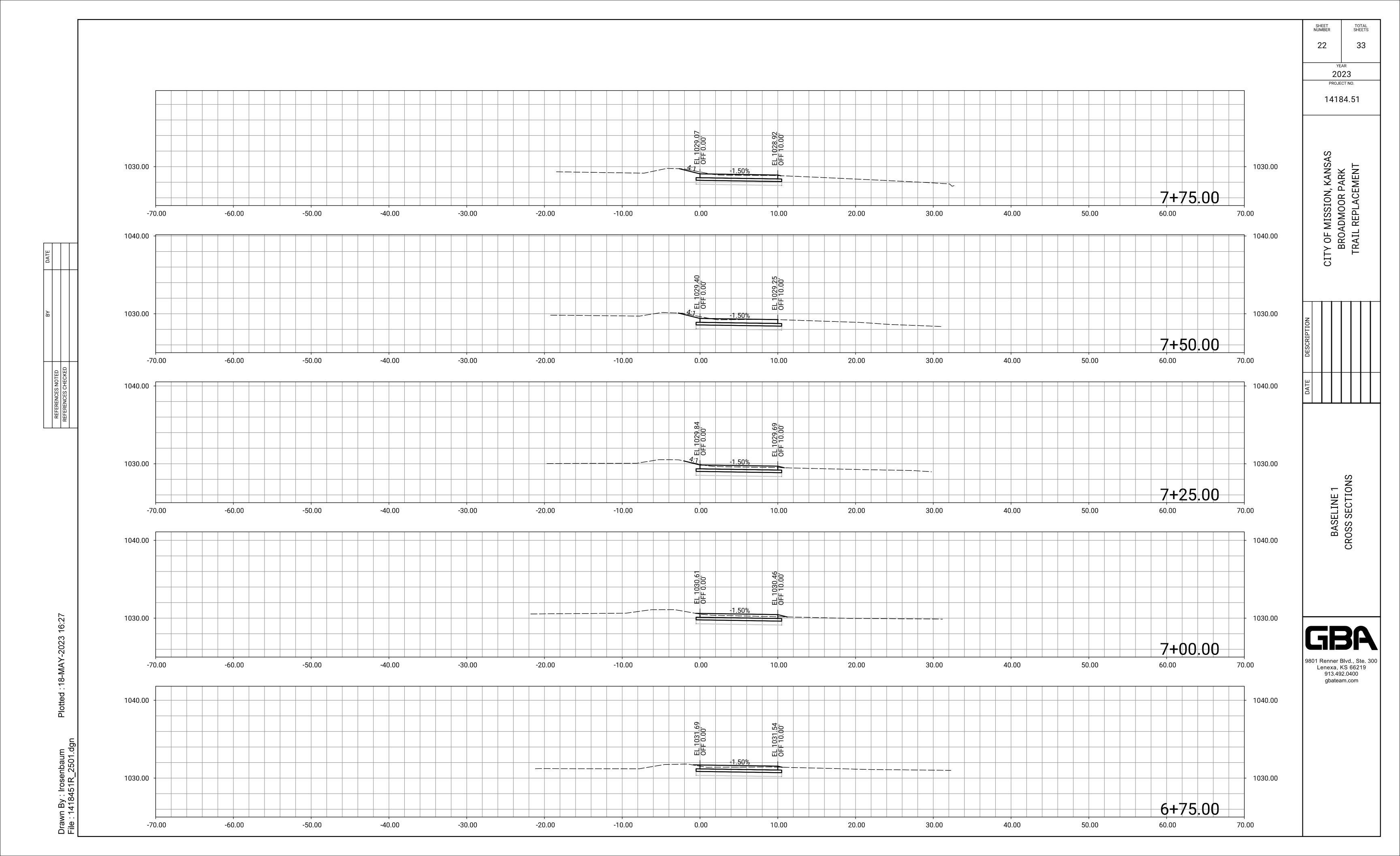


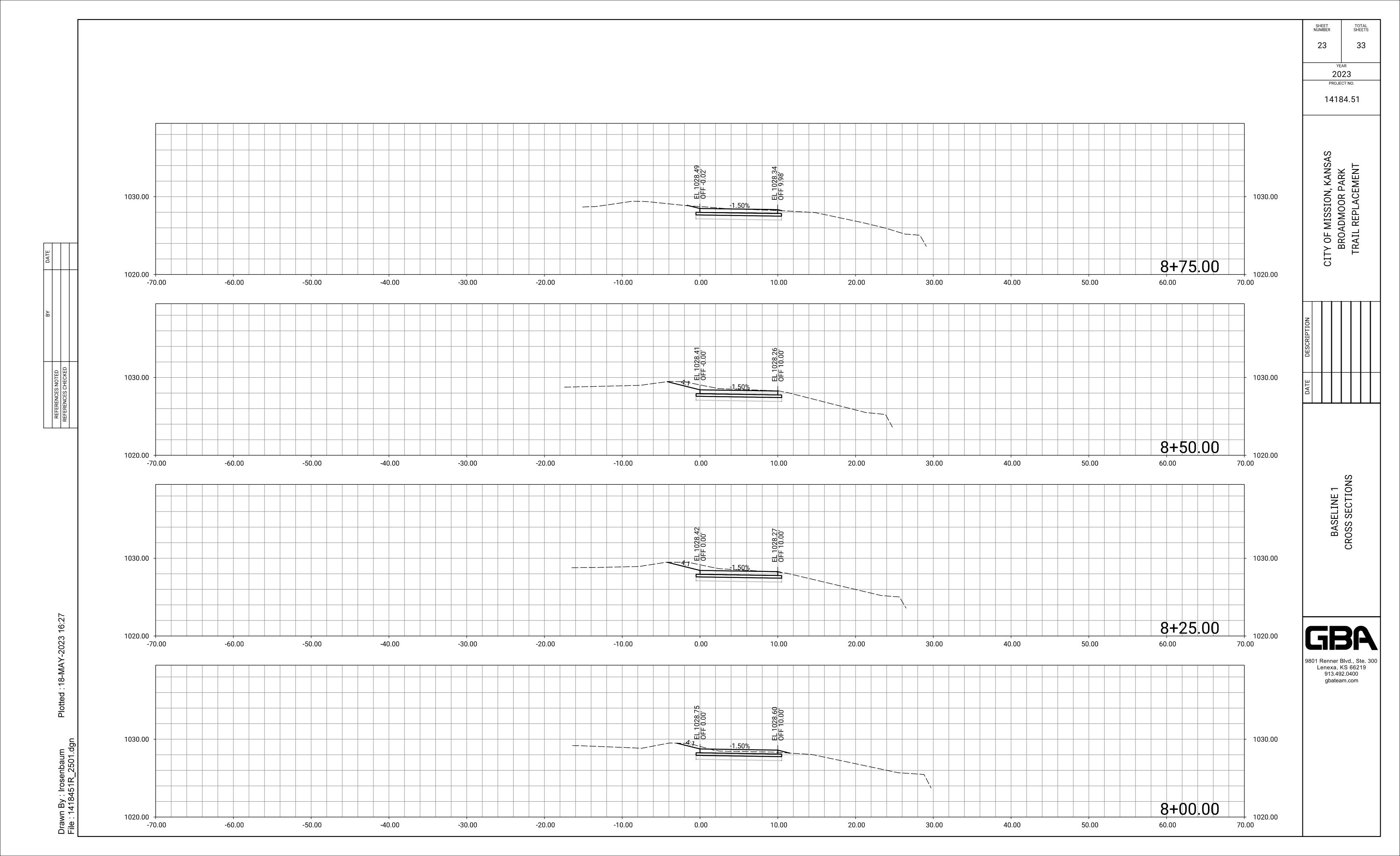


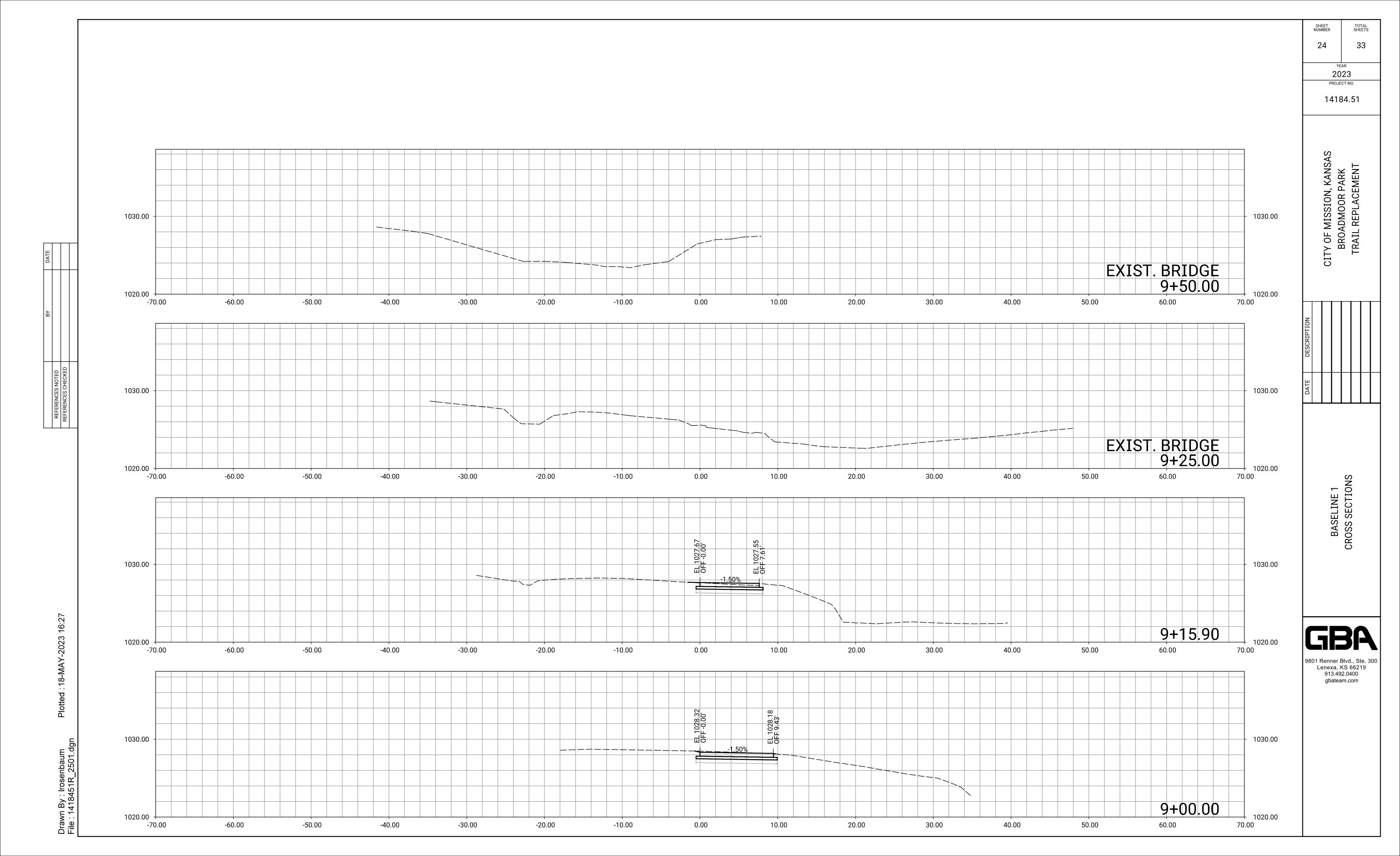


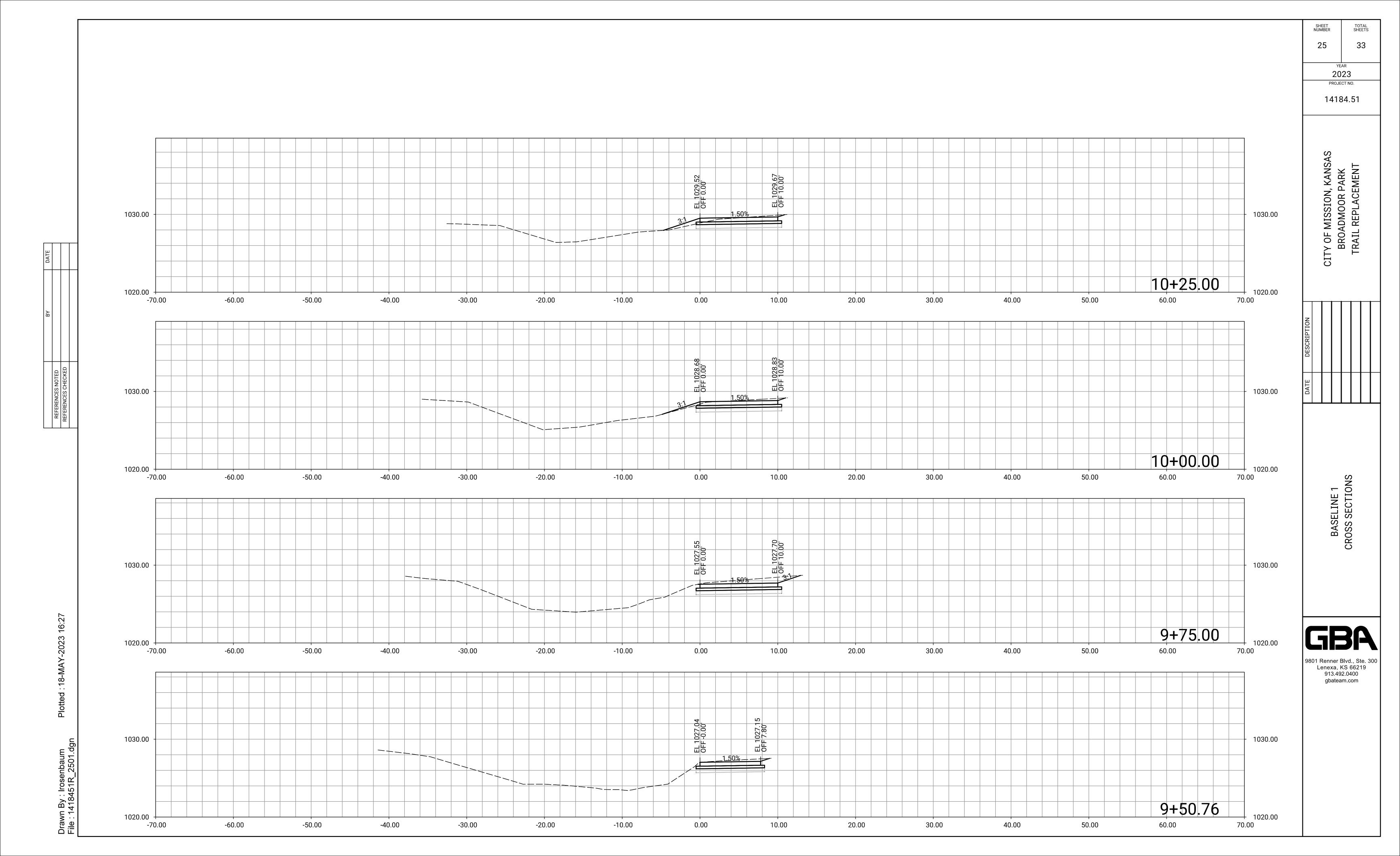


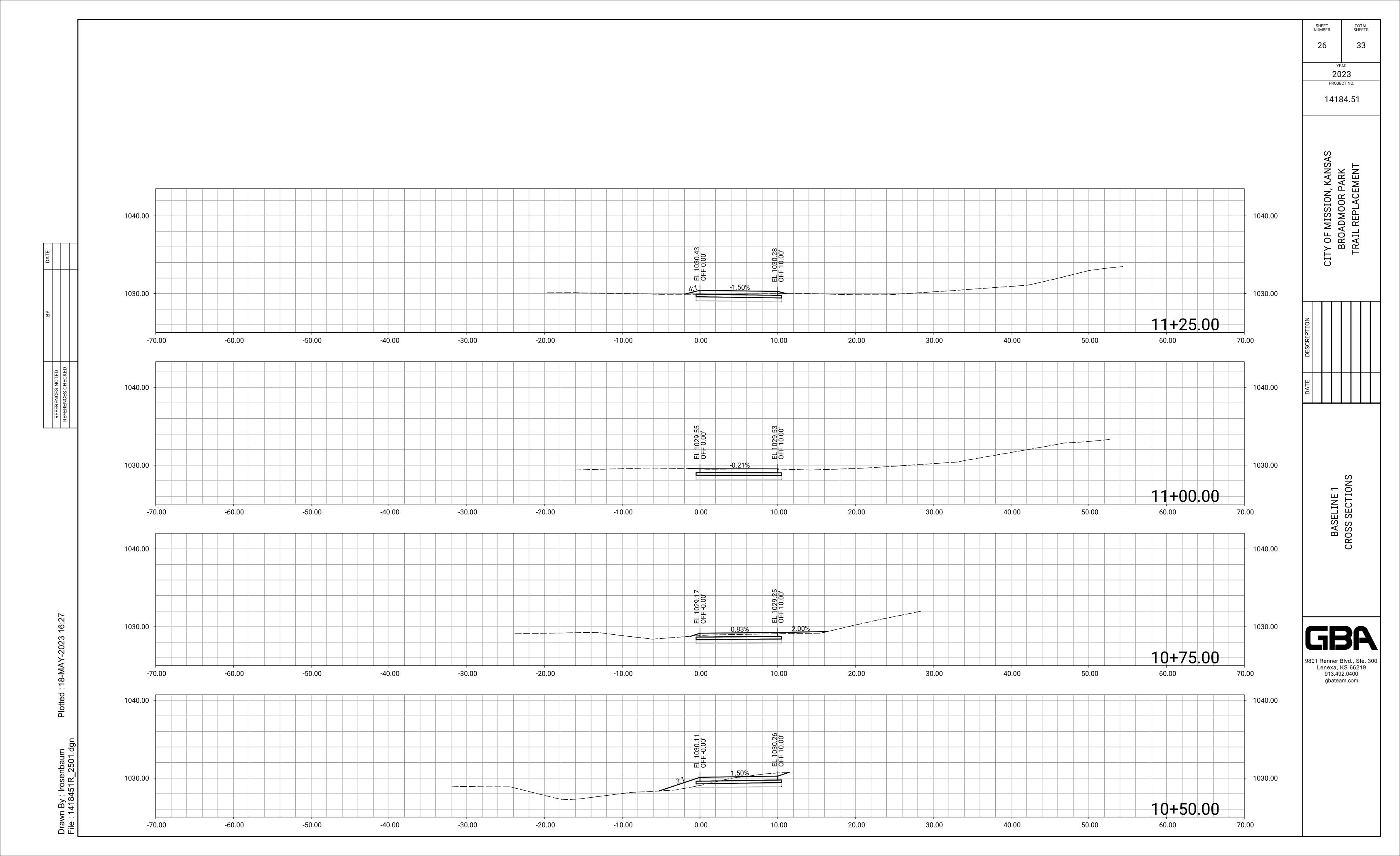


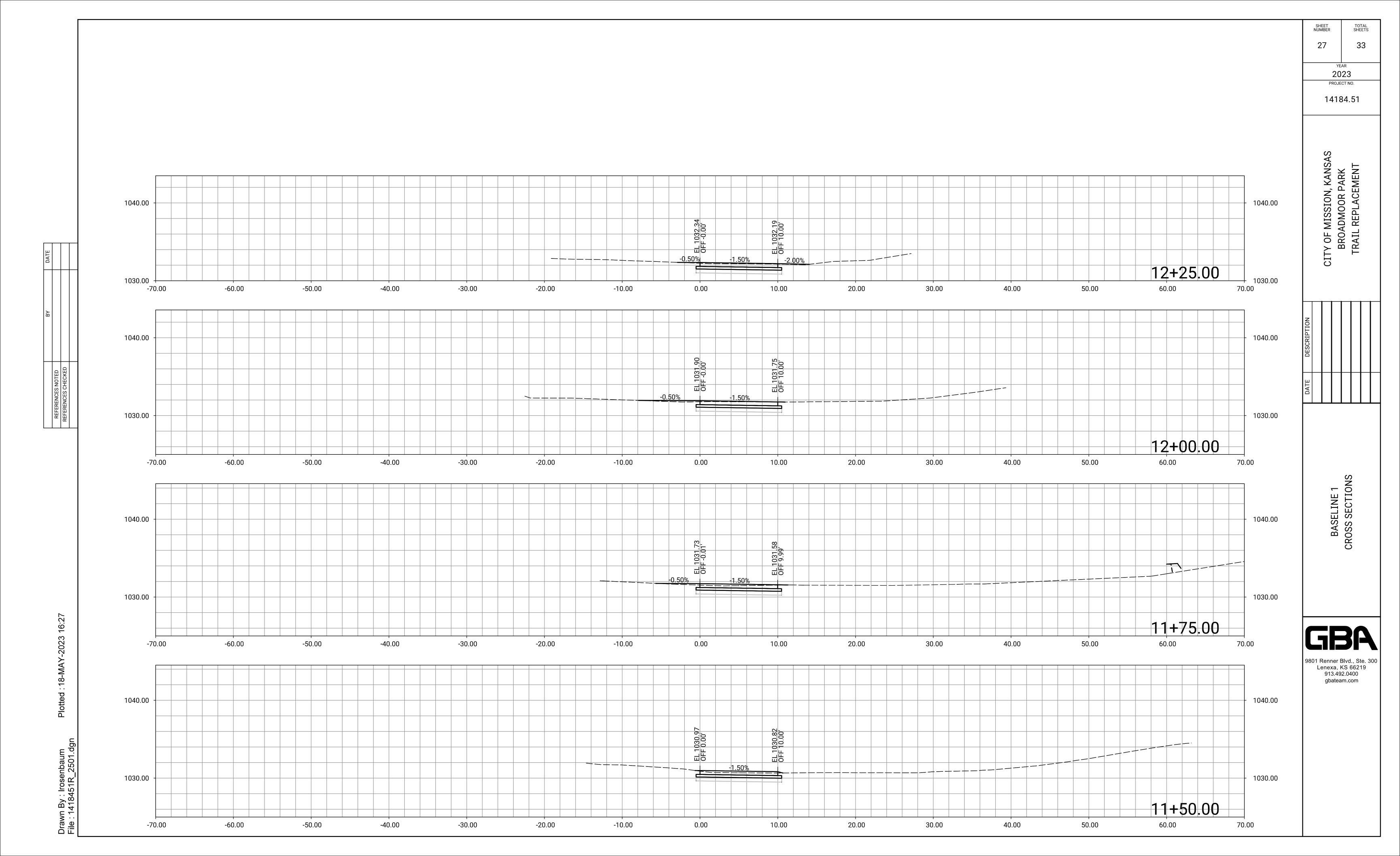


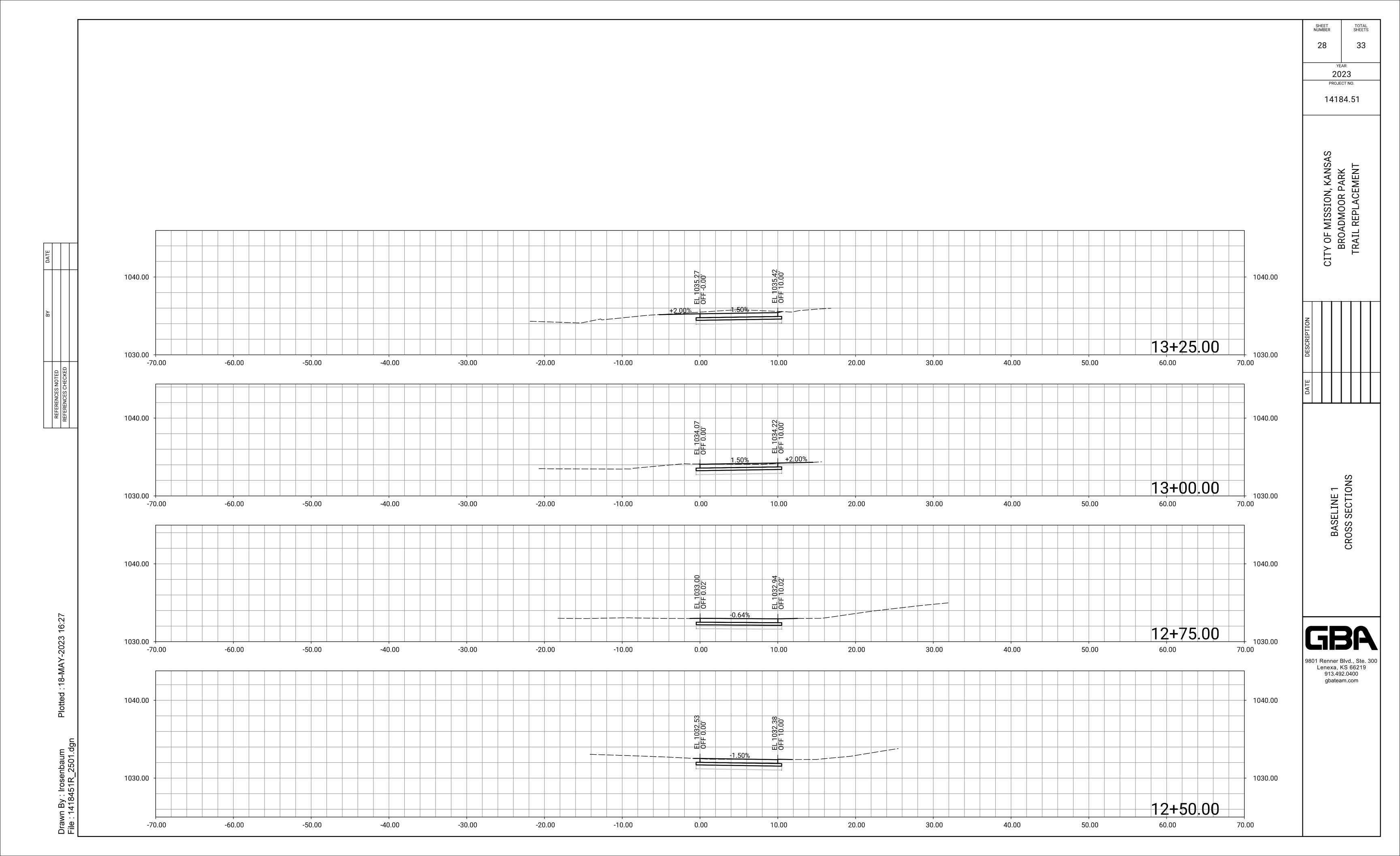


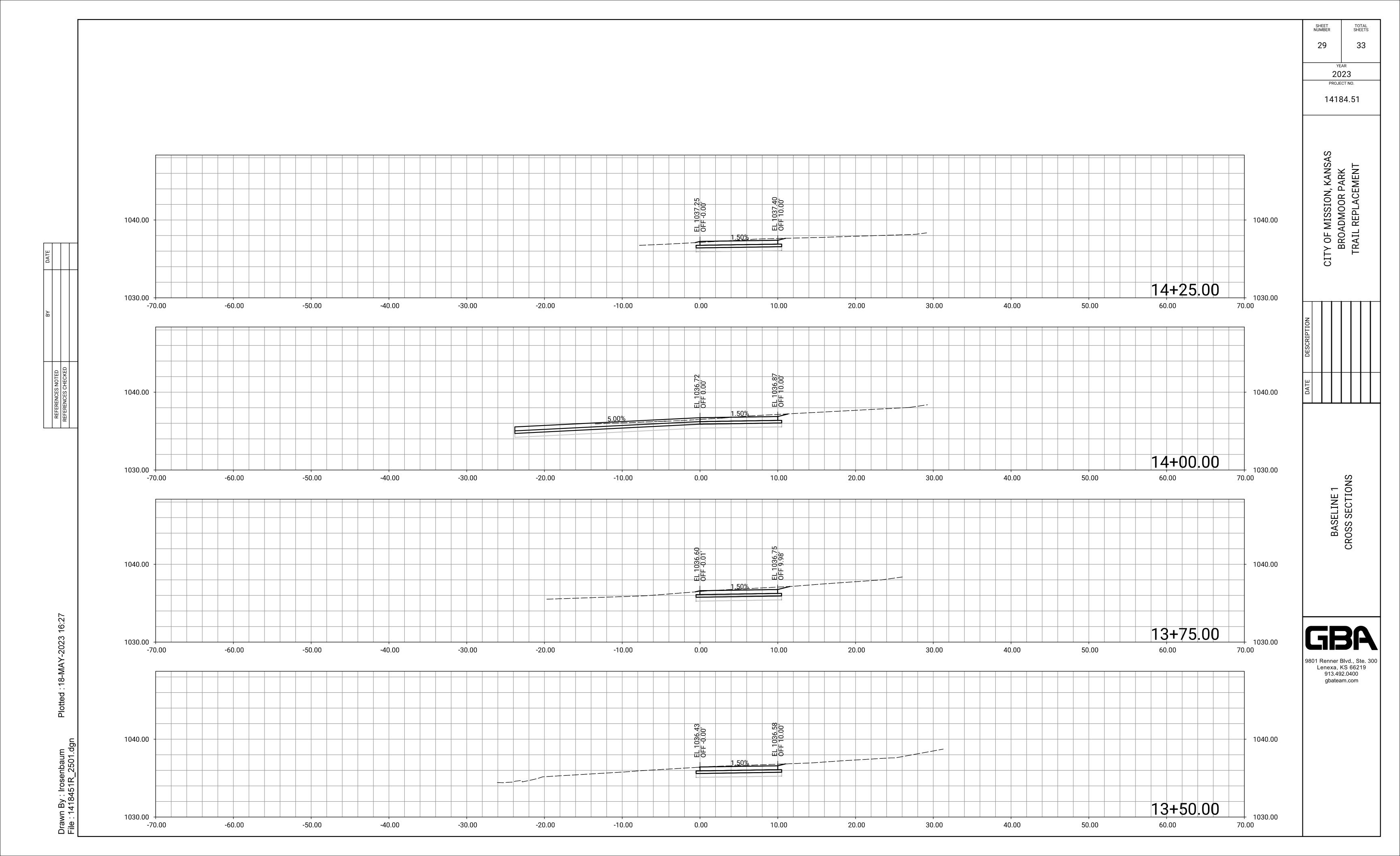


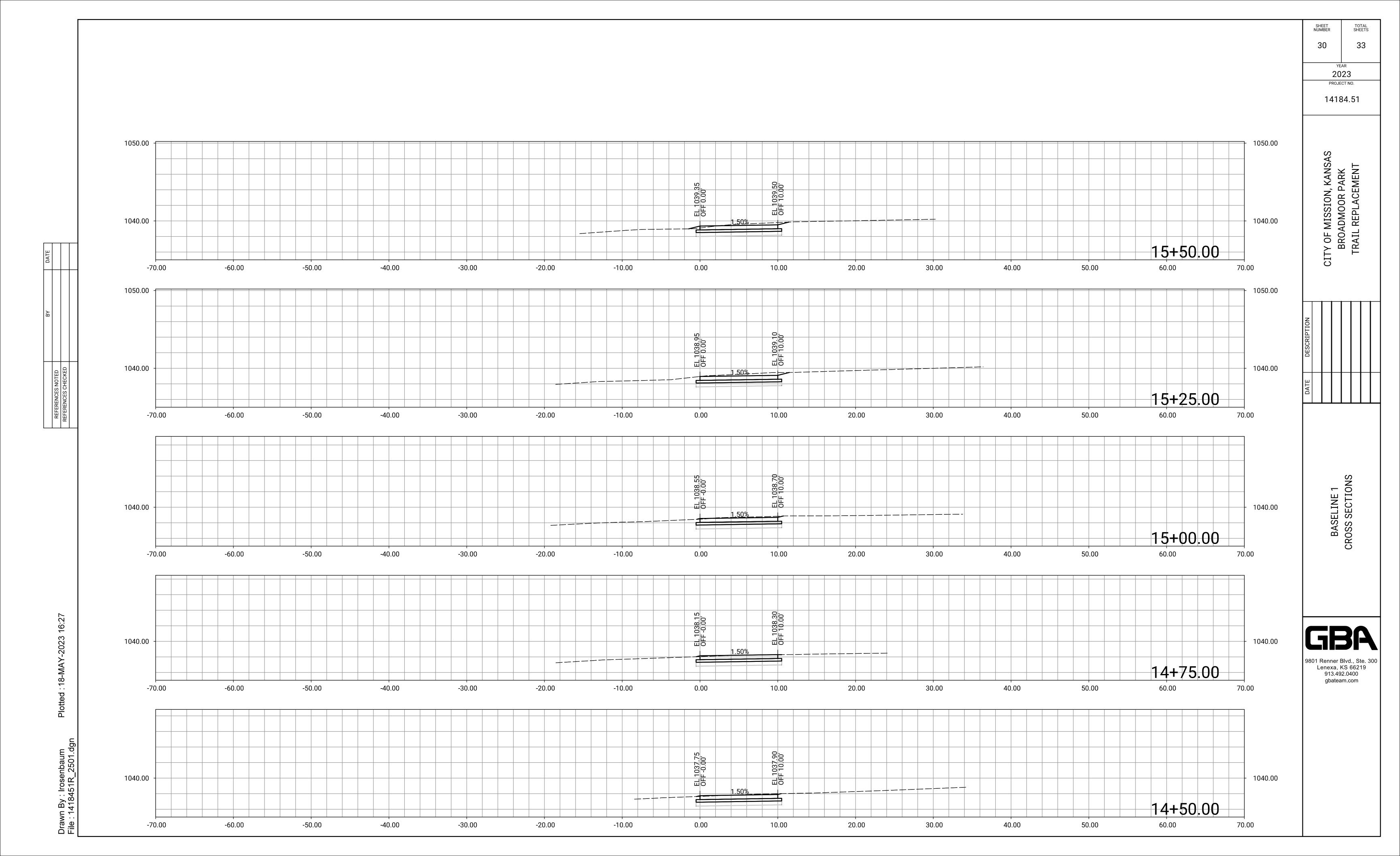


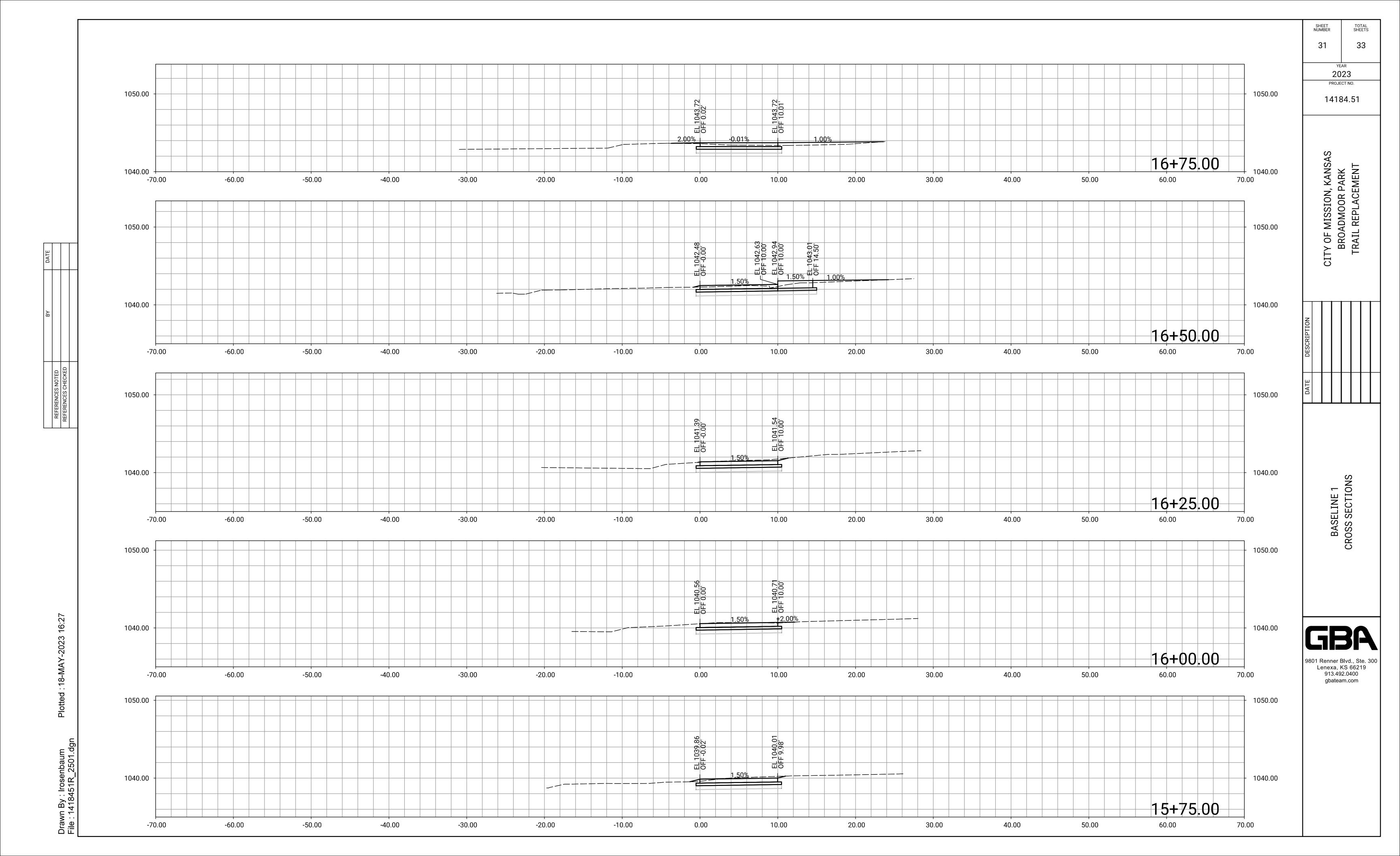






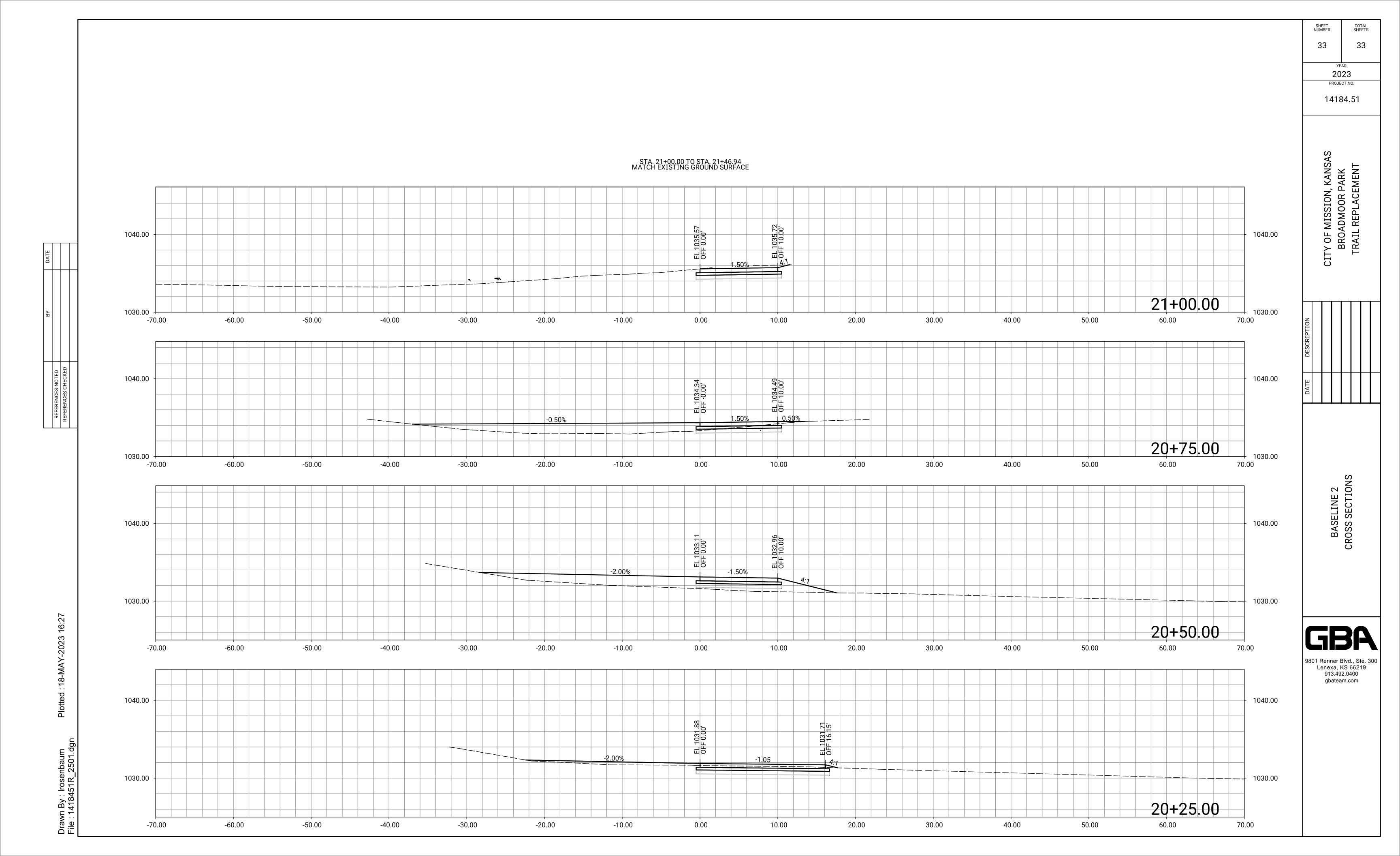






YEAR 2023 PROJECT NO. 14184.51 CITY OF MISSION, KANSAS BROADMOOR PARK TRAIL REPLACEMENT BASELINE 1 CROSS SECTIONS 9801 Renner Blvd., Ste. 300 Lenexa, KS 66219 913.492.0400 gbateam.com 1050.00 EL 1044.75 OFF -0.00' 1050.00 Drawn By : Irosenbaum File : 1418451R\_2501.dgn -0.10% 16+95.51 → 1040.00 1040.00 ↓ 60.00 -50.00 -40.00 -30.00 -10.00 30.00 40.00 50.00 -70.00 -60.00 -20.00 0.00 10.00 20.00 70.00

TOTAL SHEETS SHEET NUMBER



## **2022 STREET RECONSTRUCTION PROJECTS**

## TABLE OF CONTENTS FOR GENERAL CONDITIONS

ARTICLE SUBJECT	PAGE
GC-1 CONTRACT DOCUMENTS/CONTRACT FOR CONSTRUCTION	
GC-2 DEFINITIONS	1
GC-3 DEFECTS IN CONTRACT DOCUMENTS	
GC-4 BID	5
GC-5 COPIES OF THE CONTRACT	
GC-6 SCOPE, NATURE AND INTENT OF PLANS AND SPECIFICATIONS	
GC-7 BEGINNING, PROGRESS AND TIME OF COMPLETION OF WORK	
GC-8 SHOP DRAWINGS	7
GC-9 CONTRACTOR'S RESPONSIBILITIES AS TO AMBIGUITIES	
GC-10 CONCEALED CONDITIONS	
GC-11 CONTRACTOR TO FURNISH STAKES AND HELP	8
GC-12 PRESERVATION OF MONUMENTS AND STAKES	
GC-13 PERMITS AND NOTICES	8
GC-14 GENERAL ADMINISTRATION OF THE CONTRACT	9
GC-15 CONTRACTOR'S EMPLOYEES	10
GC-16 SAMPLES	10
GC-17 PROTECTION AND MAINTENANCE OF PUBLIC AND PRIVATE PROPE	
LIABILITY	
GC-18 WORK IN OR ACROSS STREET OR HIGHWAY RIGHT-OF-WAY	
GC-19 MAINTENANCE OF TRAFFIC	
GC-20 NOISE CONTROL	
GC-21 DUST CONTROL	
GC-22 INSPECTION OF WORK	
GC-23 SUPERINTENDENCE AND SUPERVISION	
GC-24 CONTRACTOR'S OFFICE AT SITE OF WORK	
GC-25 CHANGES IN THE WORK	
GC-26 DEDUCTIONS FOR UNCORRECTED WORK	
GC-27 DELAYS AND EXTENSION OF TIME	
GC-28 WORK STOPPAGES	
GC-29 PATENT LIABILITY CLAUSE	18
GC-30 INDEPENDENT CONTRACTOR	18
GC-31 SEPARATE CONTRACTS	
GC-32 RELATIONS WITH OTHER CONTRACTORS	
GC-33 INDEMNITY	
GC-34 PROTECTION OF PROPERTY/LIABILITY	
GC-35 PROVISION FOR EMERGENCIES	
GC-36 ASSIGNMENT AND SUBLETTING OF CONTRACT	
GC-37 DISPUTE RESOLUTION	
GC-38 INSURANCE	
GC-39 AUTHORITY AND DUTY OF THE CONSULTING ENGINEER	
GC-40 CORRECTION OF LABOR, ETC BEFORE FINAL PAYMENT	
GC-41 CORRECTION OF LABOR, ETC AFTER FINAL PAYMENT	
GC-42 RIGHT OF CITY TO TERMINATE CONTRACT	
GC-43 CITY'S RIGHT TO DO WORK	26

GC-44 PAYMENTS	26
GC-45 PAYMENTS WITHHELD	28
GC-46 LIQUIDATED DAMAGES	28
GC-47 BONDS	
GC-48 EASEMENTS AND RIGHTS-OF-WAY	29
GC-49 UTILITIES	
GC-50 USE OF PREMISES	29
GC-51 ALLOWANCES	
GC-52 CUTTING, PATCHING AND DIGGING	30
GC-53 CLEANING UP	30
GC-54 TEMPORARY FACILITIES	30
GC-55 SANITARY REGULATIONS AND WATER	31
GC-56 COMPLIANCE WITH LAWS	
GC-57 UNFAVORABLE CONSTRUCTION CONDITIONS	31
GC-58 CONTRACTOR'S RISK	31
GC-59 SAFETY RULES	
GC-60 WEEKENDS, HOLIDAY AND NIGHT WORK	
GC-61 APPROVAL OF EQUALS	
GC-62 TEST OF MATERIALS OFFERED BY CONTRACTOR	
GC-63 TESTING OF COMPLETED WORK	
GC-64 BORROW AND WASTE AREAS	
GC-65 PARKING AREAS, DRIVES AND WALKS	
GC-66 STREET SIGNS AND TRAFFIC AIDS	
GC-67 PLACING WORK IN SERVICE/PARTIAL UTILIZATION	
GC-68 NON-DISCRIMINATION/OTHER LAWS	
GC-69 FEDERAL LOBBYING ACTIVITIES	35
GC-70 RECORDS	
GC-71 TITLES, SUBHEADS AND CAPITALIZATION	
GC-72 NO WAIVER OF RIGHTS	
GC-73 SEVERABILITY	
GC-74 GOVERNING LAW	35
GC-75 VENUE	36

# GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION

## GC-1 CONTRACT DOCUMENTS/CONTRACT FOR CONSTRUCTION

The Contract Documents are complementary, and what is called for by any one shall be as binding as if called for by all. The intention of the Contract Documents is to include all construction, labor, materials, tools, equipment and transportation necessary for the workmanlike construction of the Project in accordance with the Contract Documents.

The Contract Documents shall consist of (but not necessarily be limited to) the Agreement between the City and Contractor (sometimes referred to herein as the "Agreement"), these General Conditions, the Project Special Provisions, the Plans, the Specifications, all addenda issued prior to and all modifications issued after execution of the Contract (modifications consisting of written amendments to the Contract signed by both parties, Change Orders, written interpretations issued by the Consulting Engineer, written orders for minor changes in the Work issued by the Consulting Engineer and changes in the Work identified in Article GC-25), drawings and data which may be furnished by the Contractor and approved by the City, additional drawings which may be furnished by the Architect/Engineer which the Consulting Engineer deems necessary to make clear the intent of the Contract Documents (and, in particular, the Specifications), and the Bidding Documents. It is understood that the Work shall be carried out and the Project shall be constructed fully in accordance with the Contract Documents.

It is expressly understood and agreed that the bound volume of Contract Documents, any plans, schedules and other drawings herein referred to, and data which may be furnished by the Engineer as are necessary to make clear the intent of the Specifications and Plans, are each and all included in this Contract and the Work shall be done fully in accordance therewith.

If there is any conflict or discrepancy between the Agreement between the City and Contractor and these General Conditions or between the Agreement between City and Contractor and any other of the Contract Documents, the Agreement between City and Contractor shall prevail. If there is any discrepancy between the General Conditions and any other Contract Documents other than the Agreement between City and Contractor, the General Conditions shall prevail, unless such discrepancy is between the General Conditions and the Project Special Provisions, if any, in which case the Project Special Provisions shall prevail. The Contract Documents supersede all previous agreements and understandings between the parties, which previous agreements and understandings are of no further force and effect.

The Contract Documents as enumerated herein form the Contract for construction. The Contract may not be amended or modified except by a modification as hereinabove defined. These Contract Documents do not, nor shall they be construed to, create any contractual relationship of any kind between the City and any Subcontractor or remote tier Subcontractor.

All time limits stated in the Contract Documents are of the essence of the Contract.

#### GC-2 <u>DEFINITIONS</u>

Whenever any word or expression defined herein, or pronoun used in its stead, occurs in these Contract Documents, it shall have and is mutually understood to have the meaning herein given. Work described in words which so applied have a well-known technical or trade meaning shall be held to refer to such recognized standards.

G-1 Rev. 9/09/13

- 1. "Bid" shall mean the offer or proposal of the Bidder submitted on the prescribed form setting forth the prices for the Work to be performed (and the City reserves the right to reject any and all bids).
- 2. "Bidder" shall mean any individual, partnership, corporation, association or other entity submitting a Bid for the Work.
- 3. "Bidding Documents" shall mean all documents related to a Bidder's submitting a Bid, including, but not limited to, the advertisement for Bids, if applicable, Instructions to Bidders, the Bid form, other sample bidding and contract forms and the proposed Contract Documents, including any addenda issued prior to receipt of Bids. At the City's option, Bidders may be required to complete and submit a prequalification statement.
- 4. "Bonds" shall mean the Bid, Performance, Maintenance, and Statutory or Labor and Material Payment Bond, together with such other instruments of security as may be required by the Contract Documents.
- 5. "Change Order" is a written order issued after the Agreement is executed by which the City, the Consulting Engineer and the Contractor agree to construct additional items of work, to modify the Contract Time, or, in lump sum contracts, to change the character and scope of Work shown on the Contract Plans, or as otherwise provided in Article GC-25. Change Orders must be signed by the City and the Contractor to be binding.
  - 6. "City" shall mean the City of Mission, Kansas.
- 7. "Consultant" or "Consulting Engineer" shall mean the individual, firm or entity designated in the Contract Documents which has been employed by the City for the performance of professional engineering services in connection with the Project; or shall mean the City if the City acts as its own Engineer.
- 8. "Contract" and "Contract Documents" shall have the meaning ascribed to them in Article GC-1, such terms sometimes being used interchangeably.
- 9. "Contract Price" shall be the amount identified in the Agreement between City and Contractor as the total amount due Contractor for total completion of the Work as per the Contract Documents. Where the Contract provides that all or a part of the Work is to be Unit Price Work the Contract Price shall initially be deemed to include for all Unit Price Work an amount equal to the sum of the established unit prices for each separately identified item of Unit Price Work multiplied by the estimated quantity of each item required for the Work. It is understood and agreed that estimated quantities of items for Unit Price Work are not guaranteed and are solely for the purpose of comparison of bids and determining an initial Contract Price. Determinations of actual quantities and classifications of Unit Price Work shall be made by the Consulting Engineer. Each unit price shall be deemed to include Contractor's overhead and profit for each separately identified item.
- 10. "Contract Time" shall be the number of working days stated in the Contract Documents for the completion of the Work or shall be a date certain if so designated in the Contract Documents.
- 11. "Contractor" shall mean the entity entering into the Contract for the performance of the Work covered by this Contract, together with its duly authorized agents or legal representatives. (For purposes of indemnification, see GC-33 for definition of "Contractor".)

G-2 Rev. 9/09/13

- 12. "Defective Work" shall mean Work which is unsatisfactory, faulty or deficient, or not in conformity with the Contract Documents. It shall also include Work damaged prior to approval of final payment unless responsibility for such damage shall have been expressly assumed by the City at substantial completion.
- 13. "Effective Date of the Agreement" shall mean the date indicated in the Agreement on which it becomes effective, but, if no such date is indicated, it shall mean the date on which the Agreement is signed and delivered by the City to the Contractor. For this purpose, delivery shall be accomplished by either hand-delivery to the Contractor or placing a copy in the mail, first class, postage prepaid.
- 14. "Field Order" shall mean a written order issued by the Consulting Engineer which orders minor changes in the Work in accordance with Article GC-25 but which does not involve a change in the Contract Price or Contract Time.
- 15. "Final Acceptance" shall mean the date when the Consulting Engineer accepts in writing that the construction of the Project is complete in accordance with the Contract Documents such that the entire project can be utilized for the purposes for which it is intended and Contractor is entitled to final payment.
- 16. "General Requirements" shall mean those provisions of the Specifications which apply to the entire Work.
- 17. "Inspector" shall mean the engineering or technical inspector or inspectors duly authorized by the Consulting Engineer or the City.
- 18. "Notice of Award" shall mean the written notice by the City to the apparent successful Bidder stating that upon compliance with the conditions precedent enumerated therein, within the time specified, the City will sign and deliver the Agreement.
- 19. "Notice to Proceed" shall mean the written notice by the City to the Contractor fixing the date on which the Contract Time is to commence and on which the Contractor shall start to perform its obligations under the Contract Documents. Without the prior express written consent of the City, Contractor shall do no Work until the date set forth in the Notice to Proceed.
- 20. "Partial Utilization" shall mean placing a portion of the Work to be provided under the Contract Documents to the use intended by the City.
- 21. "Pay Estimate No.\_\_\_\_\_" or "Final Pay Estimate" shall mean the form to be used by the Contractor in requesting progress and final payments, including supporting documentation required by the Contract Documents.
- 22. "Plans" or "the Plans" shall mean and include all drawings which may have been prepared by the City and/or the Consulting Engineer on the City's behalf as a basis for Bids, all drawings (other than Shop Drawings, as defined in Definition No. 23, below.) submitted by the successful Bidder with its Bid or by the Contractor to the City, if and when approved by the Consulting Engineer, and all drawings submitted by the City to the Contractor during the progress of the Work, all of which show the character and scope of the Work to be performed.
- 23. "Shop Drawings" shall mean all drawings, diagrams, illustrations, schedules and other data which are specifically prepared by the Contractor, a Subcontractor, manufacturer, fabricator, supplier or distributor to illustrate some portion of the Work and all illustrations, brochures, standard schedules, performance charts, instructions, diagrams and other information

G-3 Rev. 9/09/13

prepared by a manufacturer, fabricator, supplier or distributor and submitted by the Contractor to illustrate material or equipment for some portion of the Work.

- 24. "Specifications" shall mean those portions of the Contract Documents consisting of written technical descriptions of materials, equipment, construction methods, standards and workmanship as applied to the Work and certain administrative details applicable thereto. They may include, but not necessarily be limited to:
  - (1) design specifications, e.g. measurements, tolerances, materials, inspection requirements and other information relative to the Work;
  - (2) performance specifications, e.g., performance characteristics required, if any;
  - (3) purchase description specifications, e.g. products or equipment required by manufacturer, trade name and/or type; provided, however, equivalent alternatives (including aesthetics, warranty and manufacturer reputation) may be substituted upon written request and written approval therefore by the City in accordance with Article GC-61;
  - (4) such other information deemed appropriate by the City for inclusion in the Specifications for the proper construction of the Project.
- 25. "Subcontractor" shall mean an individual, firm or corporation having a direct contract with the Contractor or with another Subcontractor for the performance of a part of the Work.
- 26. "The Work" or "The Project" (used interchangeably) shall mean the work to be done necessary to complete the construction required of the Contractor by the Contract Documents, and includes all construction, labor, materials, tools, equipment and transportation necessary to produce such construction in accordance with the Contract Documents.
- 27. "Underground Facilities" shall mean all pipelines, conduits, ducts, cables, wires, manholes, vaults, tanks, tunnels or other such facilities or attachments, and any encasements containing such facilities which have been installed underground to furnish services or materials including, but not limited to, electricity, gases, steam, liquid petroleum products, telephone or other communications, cable television, sewage and drainage removal, traffic or other control systems or water.
- 28. "Unit Price Work" shall mean Work to be paid for on the basis of unit prices (quantity variations).
- 29. Whenever in these Contract Documents the words "as ordered," "as directed," "as required," "as permitted," "as allowed," or words or phrases of like import are used, it is understood that the order, direction, requirement, permission or allowance of the City and/or the Consulting Engineer is intended.
- 30. Whenever any statement is made in the Contract Documents containing the expression "it is understood and agreed," or an expression of like import, such expression means the mutual understanding and agreement of the parties hereto.
- 31. The words "approved," "reasonable," "suitable," "acceptable," "properly," "satisfactory," or words of like effect in import, unless otherwise particularly specified herein, shall

G-4 Rev. 9/09/13

mean approved, reasonable, suitable, acceptable, proper or satisfactory in the judgment of the City and/or the Consulting Engineer.

## GC-3 <u>DEFECTS IN CONTRACT DOCUMENTS</u>

If Contractor has reasonable cause such that it should, in the exercise of ordinary care of someone in its position, know that any errors, omissions, discrepancies or inconsistencies (hereinafter "defects") appear in the Contract Documents, including, but not limited to, the Plans, Specifications and other documents or the Work, Contractor shall, notify the Consulting Engineer in writing of such defects. Contractor shall remedy any such defects whether or not disclosed to the Consulting Engineer without any increase in the cost of the Work. The Contract Documents shall be appended to all contracts between the Contractor and any Subcontractor or any more remote tier Subcontractor, and such Subcontractors and remote tier Subcontractors shall, likewise, notify the Contractor in writing of any defects therein, and it shall be the obligation of the Contractor to remedy same as if Contractor had discovered such defects itself. The Contractor will not be permitted to take advantage of any such defect.

#### GC-4 BID

The Contractor acknowledges and agrees that the unit prices and/or lump sum prices shown in the Bid contemplate the construction of all facilities, complete, and in conformance with the Plans and Specifications. Any item or items required in construction for which a specific unit price and/or lump sum price is not provided shall be included in the price for the closest applicable items.

## GC-5 COPIES OF THE CONTRACT

Unless otherwise provided in the Contract Documents, City will furnish to Contractor a maximum of five (5) copies of the Contract Documents, free of charge, necessary for the execution of the Work.

Sufficient copies of the Bidding Documents, Bonds and Agreement between City and Contractor shall be prepared, each containing an exact copy of the Contractor's Bid as submitted, the Bonds properly executed and the Contract signed by both parties hereto. These executed counterparts shall be filed with the City, Contractor and the surety company executing the Bonds. The original Bid submitted by the Contractor will be retained by the City.

Contractor shall keep, and make available to City at the Project site, one copy of all Contract Documents for the Work at the Project site, in good order and legibly marked to reflect actual construction. Contractor shall also maintain at the site all approved samples and a print of all approved Shop Drawings. Such Documents, samples and Shop Drawings shall be turned over to the City at the completion of the Work if requested by the City.

Contract Documents are the property of the City, and none of the Contract Documents are to be used on other work by Contractor. At City's request, all Contract Documents shall be returned to the City with the exception of one record set for Contractor. All models and calculations are the property of City.

## GC-6 SCOPE, NATURE AND INTENT OF PLANS AND SPECIFICATIONS

The Plans and Specifications are intended to complement, but not necessarily duplicate each other. Together they shall constitute one complete set of the Plans and Specifications, and any Work exhibited in one but not in the other shall be executed just as if it had been set forth in

G-5 Rev. 9/09/13

both in order that the Work shall be completed according to the complete design or designs as decided and determined by the Consulting Engineer.

Should anything be omitted from the Plans and Specifications which is necessary to a clear understanding of the Work, or should it appear that various instructions are in conflict, or in the event the Plans and Specifications are silent as to any detail, then it shall be the duty of the Contractor to **secure written instructions from the Consulting Engineer** before proceeding with the construction affected by such omissions, discrepancies or silence. In accordance with Article GC-3, Contractor's failure to bring any such matter to the attention of the Consulting Engineer shall be at the Contractor's peril, and there shall be no compensation for extra work necessitated thereby.

Dimensions and elevations shown on the Plans shall be accurately followed, even though they may differ from scaled measurements. No Work shown on the Plans, the dimensions of which are not indicated, shall be executed until the required dimensions have been obtained from the Consulting Engineer. Contractor shall be responsible for verification of all locations, dimensions and elevations in the field (including, but not limited to verification of location of Underground Facilities and utilities) and shall verify all field dimensions shown on the Contract Documents.

All Work performed under this Contract shall be done to the lines, grades, and elevations shown on the Plans. The Contractor shall keep the Consulting Engineer informed, a reasonable time in advance of the times and places at which it wishes to do Work, in order that lines and grades may be furnished and necessary measurements for record and payment may be made with the minimum of inconvenience and delay to the Consulting Engineer and the Contractor.

Any Work done without being properly located and established by base lines, offset stakes, bench marks, or other basic reference points may be ordered removed and replaced at the Contractor's cost and expense.

Contractor, together with its Subcontractors, shall carefully examine the Plans and Specifications for any interferences with the Work and clearances that may be required. Contractor shall be responsible for the proper fitting of materials and equipment without substantial alterations. Contractor shall be responsible for eliminating interferences without additional cost to City. If departures from the Plans and Specifications, or other Contract Documents, are deemed necessary by Contractor, details of such departures and reasons therefore shall be submitted to Consulting Engineer, with drawings (if Consulting Engineer determines that drawings are necessary), for approval as soon as practical. No such departure shall be made except at the peril of the Contractor without the prior written approval of the Consulting Engineer.

#### GC-7 BEGINNING, PROGRESS AND TIME OF COMPLETION OF WORK

After being awarded the Contract, the Contractor shall immediately prepare and submit for approval by the City Engineer a construction schedule giving the dates on which it expects to start and to complete separate portions of the Work, which schedule shall be strictly adhered to unless agreed to in writing by all parties or modified by any extension or extensions of time as hereinafter provided. The schedule shall be submitted before the Notice to Proceed is issued. No Work on this Contract shall begin until said schedule is approved. The City reserves the right to adjust the Contractor's schedule to coordinate with any other projects in the same area.

The Contractor shall, within ten (10) days after being instructed to do so in the written "Notice to Proceed" from the City, commence the Work to be done under this Contract; and the

G-6 Rev. 9/09/13

rate of progress shall be such that the Work shall have been completed in accordance with the terms of the Contract on or before the termination of the construction period contractually specified, subject to any extension or extensions of such time made as hereinafter provided.

The Contractor shall submit monthly progress reports and schedules. The progress report shall summarize Work completed, identify any weather and/or utility delays encountered, and indicate Work anticipated for the upcoming month. The schedule will be detailed indicating how the remaining Work will be completed within the stated deadlines (the remaining Work shall include identifying/incorporating utility relocation work with the project-related construction work). The progress report and schedule will be required before payment of monthly pay estimates.

If requested, a weekly construction schedule shall be submitted to the City and approved by the City Engineer. Modifications and/or revisions to the schedule shall have twenty-four (24) hour notice with approval by the City Engineer.

#### GC-8 SHOP DRAWINGS

Contractor shall review, approve, and submit, with such promptness as to cause no delay in its own Work or in that of any Subcontractor or other Contractor, three (3) copies of all shop, fabrication, assembly, foundation and other drawings and schedules required by the Specifications, including, but not limited to: (1) drawings of equipment and devices offered by the Contractor for approval of the Consulting Engineer in sufficient detail to adequately show the construction and operation thereof: (2) drawings showing essential details of any change in design of construction proposed, for consideration by the Consulting Engineer, by the Contractor in lieu of the design or arrangement required by the Contract Documents, or any item of extra work there under; (3) all required wiring and piping layouts; and (4) structural and reinforcing fabrication drawings. All submittals, regardless of origin, shall be stamped with the approval of the Contractor and identified with the name and number of this Contract, Contractor's name and references to applicable specification paragraphs and Contract drawings. Each submittal shall indicate the intended use of the item in the Work. Contractor's stamp of approval is representation to the Consulting Engineer, that the Contractor accepts full responsibility for determining and verifying all quantities, dimensions, field construction criteria, materials, and similar data, and that he has reviewed or coordinated each submittal with the requirements of the Work and the Contract Documents. All deviations from the Contract Documents shall be identified on each submittal and shall be tabulated in the Contractor's letter of transmittal. Such submittals shall, as pertinent to the deviation, indicate essential details of all changes proposed by Contractor (including modifications to other facilities that may be a result of each deviation).

The Consulting Engineer shall review the Shop Drawings for conformance with the design concept of the Work and information as given in the Contract Documents. The Contractor is not relieved of responsibility for any deviation from the requirements of the Contract Documents by the Consulting Engineer's approval of the Shop Drawings, product data, or samples. The Contractor is not relieved from responsibility for errors or omissions in Shop Drawings by the Engineer's approval thereof. The Consulting Engineer shall respond to, accept or reject such submissions within a reasonable time after receipt thereof. Contractor shall make such revisions as deemed necessary. On Final Acceptance, the Consulting Engineer shall be furnished with a total of five (5) copies of each drawing as finally approved, such number to include any copies of preliminary or revised drawings which are approved as submitted. No Work shall be performed in connection with the fabrication or manufacture of material or equipment shown by any drawing thereof, nor shall any accessory, appurtenance or device not fabricated or manufactured by the Contractor or its Subcontractors be purchased, until the drawing or drawings therefore have been approved as stipulated, except at the Contractor's own risk and responsibility.

G-7 Rev. 9/09/13

#### GC-9 CONTRACTOR'S RESPONSIBILITIES AS TO AMBIGUITIES

If there is any ambiguity in Consulting Engineer's drawings or instructions, Contractor shall ask the Consulting Engineer for clarification. Upon written request of Contractor, the Consulting Engineer shall furnish, with reasonable promptness, additional instructions by means of drawings, Specifications or other information necessary for the proper execution of the Work. The Work shall be executed in conformity therewith, and, in accordance with Article GC-3, Contractor shall do no Work without proper instructions except at its peril. Nothing herein to the contrary shall affect Contractor's responsibilities with regard to defects as set forth in Article GC-3.

#### **GC-10 CONCEALED CONDITIONS**

The Contractor understands that the City does not warrant that the various and sundry materials and information, including, for example, soil tests, bore reports, utility locations and other such data and as-builts in the case of renovation of or addition to existing facilities, reflect actual conditions. The Contractor warrants that it has examined the site and conducted such tests and examinations as it deems necessary. That being the case, should concealed conditions encountered in the performance of the Work below the ground or should concealed or unknown conditions in an existing structure be at variance with the conditions indicated by the Contract Documents, or should unknown physical conditions below the surface of the ground or should concealed or unknown conditions in an existing structure of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in this Contract, be encountered, there shall be no adjustment in the Contract Price for any extra work necessitated thereby, although, if necessary, the Contract Time may be adjusted.

#### GC-11 CONTRACTOR TO FURNISH STAKES AND HELP

The Contractor, unless otherwise instructed, shall stake the Work and shall furnish, without charge, competent people from its force and such tools, stakes, and other materials as required in properly staking out the Work, in making measurements and surveys and in establishing temporary or permanent reference marks in connection with said Work. The stakes furnished for the staking of the Work shall be of such type, size and quality as to be acceptable to the Consulting Engineer.

#### GC-12 PRESERVATION OF MONUMENTS AND STAKES

The Contractor shall carefully preserve all monuments, property corners, bench marks, reference points and stakes, and in case of destruction of the same, will be responsible for proper replacement and for any mistakes or loss of time that may be caused by their unnecessary loss or disturbance. In the event that the loss of stakes, etc., causes a delay in the Work, the Contractor shall have no claim for damages or extensions of time. In the case of any permanent monuments, property corners or bench marks which must of necessity be removed or disturbed in the construction of the Work, the Contractor shall carefully protect and preserve the same until they can be properly referenced for relocation. The Contractor shall furnish at its own expense such materials, surveyors and assistance as are necessary for the proper replacement of monuments, property corners or bench marks that have been moved or destroyed.

#### GC-13 PERMITS AND NOTICES

(a) All permits and licenses shall be secured and paid for by Contractor, unless otherwise specified.

G-8 Rev. 9/09/13

- (b) Contractor shall give all notices required by and all Work shall be done in accordance with all applicable federal and state laws, City and County laws and ordinances, building codes and rules and regulations bearing on the conduct of the Work.
- (c) Contractor shall notify all affected utilities of the Work and coordinate with the utilities to avoid interruption of utility service and damage to utility lines and property. This notice requirement shall also apply as to the owner/operator of any affected Underground Facility. Any project delay, damages or increase in construction costs due to utility relocation delays shall be at the Contractor's risk.

## GC-14 GENERAL ADMINISTRATION OF THE CONTRACT

- (a) Unless otherwise stipulated, Contractor shall provide and initially pay for all Work (including labor, transportation, tools, equipment, machinery, plant and appliances) necessary in producing the results called for by the Contract Documents.
- (b) Unless otherwise specified, all supplies, materials, equipment and other facilities are guaranteed to be new and all Work shall be of good quality and workmanship and free from defects or fault. Contractor shall, if required, furnish satisfactory evidence as to the kind and quality of the Work.
- (c) The Contractor shall be solely responsible for and have complete control and charge of construction means, methods, techniques, sequences and procedures, and for safety precautions and programs in connection with the Work. The City shall not be responsible for nor have control or charge over the acts or omissions of the Contractor, Subcontractors, or any of their agents or employees, or any other persons performing any of the Work.
- (d) The Contractor shall, in addition to the schedule required by Article GC-7, give to the Consulting Engineer full information in advance as to its plans for carrying on any part of the Work. If at any time before the beginning or during the progress of the Work, any part of the Contractor's plant or equipment or any of its methods of executing the Work, appear to the Consulting Engineer to be unsafe, inefficient or inadequate to ensure the required quality or rate of progress of the Work, the Consulting Engineer may order the Contractor to increase or improve its facilities or methods, and the Contractor shall promptly comply with such orders; but neither compliance with such orders nor failure of the Consulting Engineer to issue such orders shall relieve the Contractor from its obligation to secure the degree of safety, the quality of Work and the rate of progress required by the Contract.
- (e) The approval by the Consulting Engineer of any plan, schedule or method of work proposed by the Contractor shall not relieve the Contractor of any responsibility therefore, and such approval shall not be considered as an assumption by the City, or any officer, agent or employee thereof, of any risk or liability, and the Contractor shall have no claim under this Contract on account of the failure or inefficiency of any plan or method so approved. Such approval shall be considered and shall mean that the Consulting Engineer has no objection to the Contractor's use or adoption, at the Contractor's own risk and responsibility, of the plan or method so proposed by the Contractor.
- (f) Any plan or method of Work suggested by the Consulting Engineer or the City, to the Contractor, but not specified or required, if adopted or followed by the Contractor in whole or in part, shall be used at the risk and responsibility of the Contractor, and the Consulting Engineer and the City will assume no responsibility therefor.

G-9 Rev. 9/09/13

#### GC-15 CONTRACTOR'S EMPLOYEES

- (a) Contractor shall at all times enforce strict discipline and good order among its employees and shall not employ on the Work any unfit person or anyone not skilled in the Work assigned to him.
- (b) Contractor shall be responsible for compliance with all state and federal laws, if applicable, pertaining to wages, hours and benefits for workers employed to carry out the Work.

#### GC-16 SAMPLES

Contractor shall furnish for approval samples if directed by the Consulting Engineer or the Contract Documents. The Work shall be in accordance with approved samples.

## GC-17 <u>PROTECTION AND MAINTENANCE OF PUBLIC AND PRIVATE PROPERTY;</u> <u>LIABILITY</u>

- (a) Contractor shall be solely liable for all damages to the City or the property of the City, to other contractors or other employees of the City, to neighboring premises, or to any private or personal property, due to improper, illegal or negligent conduct of the Contractor, its Subcontractors, employees or agents in and about said Work, or in the execution of the Work. The Contractor shall be liable to the City for any damages, whether property damage or personal injury, occasioned by Contractor's use of any scaffolding, shoring, apparatus, ways, works, machinery, plant or any other process or thing that is required for the Work.
- (b) Without in any manner limiting Contractor's responsibilities as provided elsewhere in the Contract Documents, the Contractor shall maintain at all times, as required by the conditions and progress of the Work, all necessary safeguards, and assume full responsibility, for the protection of all public and private property, life, the Work, supplies, materials and equipment on the Project site not yet incorporated in the Work, structures, sewers and utilities both above the ground and Underground Facilities, along, beneath, above, across or near the site or sites of the Work being performed under this Contract, or which are in any manner affected by the prosecution of the Work or the transportation of people or materials in connection therewith.
- Protection may include, shoring, bracing, supporting and maintaining all (c) underground pipes, conduits, drains and other underground construction uncovered or otherwise affected by the construction Work performed by Contractor. Barriers shall be kept placed at all times to protect bracing and shoring of the trenches shall be in full accordance with Occupational Safety and Health Standards – Excavations; Final Rule 29 CFR Part 1926. All open trenches and other excavations shall be provided with suitable barriers, signs and lights, at Contractor's expense, such that adequate protection is provided to the public against accident by reason of such open construction. Obstructions such as material piles and equipment shall be provided with similar warning lights and signs. All pavement, surfaces, driveways, curbs, walks, buildings, utility poles, guy wires, and other surface structures affected by construction operations in connection with the performance of the Contract, shall be maintained, and if removed or otherwise damaged, shall be restored to the original condition thereof, as determined and approved by the Engineer. All replacement of such underground construction and surface structures or parts thereof shall be made with new materials conforming to the requirements of these Specifications, or if not specified, as approved by the Engineer, at the Contractor's own expense, unless otherwise provided by the Contract.
- (d) Barriers shall be kept placed at all times to protect other than those engaged on or about the Work from accident and the Contractor shall be held responsible for all accidents to

G-10 Rev. 9/09/13

persons or property resulting from the acts of Contractor or its employees. Contractor shall give reasonable notice to any affected owner or owners when any property is liable to injury or damage through the performance of the Work and shall make all necessary arrangements with such owner or owners relative to the removal and replacement or protection of such property and/or utilities.

- (e) Contractor shall comply with any and all instructions from the Consulting Engineer regarding prevention of accidents, fires or for the elimination of any unsafe practice and shall observe all the applicable recommendations of the National Fire Protection Association Standard No. 241 (or other, later revision) "Standards For Safeguarding Building Construction and Demolition Operations".
- (f) Contractor shall post danger signs warning against the hazards created by such features of construction as protruding nails, hood hoists, well holes, elevator hatchways, scaffolding, window openings, stairways, falling materials, open trenches, other excavations, obstructions and similar conditions. It shall designate a responsible member of its organization on the Project whose duty shall be the prevention of accidents. The name and position of the person so designated shall be reported to the Consulting Engineer by Contractor.
- (g) In an emergency affecting the safety of life, the Work, City's property or of adjoining property, Contractor, without special instruction or authorization from the Consulting Engineer, is hereby permitted to act, at its discretion, to prevent such threatened injury or loss. Any compensation claimed by Contractor on account of emergency work shall be determined by mutual agreement of City and Contractor.
- (h) Contractor shall develop and maintain an up-to-date emergency action plan, taking into account fires, hazardous materials, explosions, adverse weather, floods, etc., which shall be in compliance with all federal, state and local laws and ordinances. The procedures should outline specific action to be taken to protect life and to secure and protect the building materials, constructed work, buildings, equipment and the position of cranes. Contractor shall be fully responsible for the contents of and procedures outlined in said plan, including deficiencies therein, whether or not City shall have reviewed said plan.
- (i) Contractor shall be responsible for any damage caused by settlement of backfill placed beneath pavement, street, road, and driveway surfacing, and drainage and other structures beneath yards, parking and parks, which may occur at any time prior to and during a period of two (2) years from and after the date of Final Acceptance of Work covered by the Contract; during such period, the Contractor shall at his own expense, refill all excavations where backfill settlement has occurred, and shall repair or cause to be repaired all damage to structures, pavements, surfacing and sod caused by such settlement, to the satisfaction of the City. Should the Contractor fail to repair settlements, which may occur as described above within thirty (30) days after being given notice thereof, the City shall have the right to repair such settlement and charge the cost of such repairs to the Contractor.
- (j) Contractor shall be held responsible for all damage to roads, highways, shoulders, ditches, embankments, bridges, culverts, and other property, caused by the Contractor or any of the Contractor's Subcontractors in hauling or otherwise transporting materials to or from the several sites of Work, regardless of the location of such damage. Contractor shall make arrangements relative to the payment for, or repair or replacement of, such damage or damaged surfaces of structures; said arrangements shall be satisfactory and acceptable to the owner or owners of such damaged surfaces or structures, or to their legally responsible officers, agents or other representatives, and said payment shall be at the Contractor's own cost and expense, unless otherwise provided by the Contract.

G-11 Rev. 9/09/13

- (k) All streets, roads, highways and other public thoroughfares which are closed to traffic, under the authority of a proper permit, shall be protected, at Contractor's expense, by means of effective barricades on which shall be placed proper warning signs; such barricades being located at the nearest intersecting public highway or street on each side of the blocked section of such public thoroughfare.
- (I) All barricades and obstructions shall be illuminated by means of amber lights at night and all lights used for this purpose shall be at Contractor's expense and shall be kept burning from sunset to sunrise. Materials stored upon or alongside public streets and highways shall be so placed, and the Work at all times shall be so conducted, as to cause the minimum obstruction and inconvenience to the traveling public.
- (m) All barricades, signs, lights and other protective devices in public rights-of-way shall be installed and maintained in conformity with applicable statutory requirements and as required by the Manual on Uniform Control Devices, as amended, or any other applicable statutes or ordinances.

#### GC-18 WORK IN OR ACROSS STREET OR HIGHWAY RIGHT-OF-WAY

All Work performed and all preparations of the Contractor or its employees, and Subcontractors, if any, within the limits of street or highway rights-of-way shall be in conformity with the requirements, and be under the control, through the City, of the street or highway authority owning or having jurisdiction and control over such rights-of-way in each case. Any costs incurred to comply with such requirements are the responsibility of Contractor.

#### GC-19 MAINTENANCE OF TRAFFIC

Local traffic on all streets shall be carried through construction whenever possible. Detours of traffic will be permitted when necessary and with the prior permission of the City. Streets may be closed for short periods of time under authority of proper permit issued by the City or authority having jurisdiction. However, the Contractor shall conduct its Work so as to interfere as little as possible with public travel, whether vehicular or pedestrian, on such streets. Proper notification to County and City police units and to Fire Districts shall be given by the Contractor before closing any public thoroughfare.

Where construction operations require the closing of private driveways, the Contractor shall give adequate notice to the owner or owners thereof and where necessary shall provide temporary access to private property.

#### **GC-20 NOISE CONTROL**

Contractor shall take reasonable measures to avoid unnecessary noise. Such measures shall be appropriate for the normal ambient sound levels in the area during working hours. All construction machinery and vehicles shall be equipped with practical sound muffling devices, and operated in a manner to cause the least noise consistent with efficient performance of the Work.

#### GC-21 DUST CONTROL

Adequate precaution shall be taken to insure that excessive dust does not become airborne during construction. The Contractor shall comply with any local, state, or federal regulations which apply to this matter in the geographical area of the Work. No separate payment will be made for performing dust control or for applying water for this purpose.

G-12 Rev. 9/09/13

## GC-22 INSPECTION OF WORK

- (a) Consulting Engineer shall at all times have access to the Work for the observation and inspection thereof wherever it is in preparation or progress, and Contractor shall provide proper facilities for such inspection. The Contractor shall furnish all reasonable aid and assistance required for any such inspection.
- (b) All Work must be inspected, tested or approved and the Contractor shall give the Consulting Engineer timely notice of its readiness for such inspection, testing or approval and the date fixed for such inspection, testing or approval, if the inspection, testing or approval is by an authority other than Consulting Engineer. If any Work should be covered up which is required by the above to be inspected, tested or approved and which, by virtue of being so covered up, is not susceptible to being properly inspected, tested or approved, Contractor shall, if requested by Consulting Engineer, uncover such Work and at Contractor's expense bear the cost of uncovering such Work and redoing same after inspection, testing or approval and redoing such other Work damaged as a result of having to uncover and redo same.
- (c) Consulting Engineer reserves the right to inspect any and all Work before it is covered up; and, accordingly, Contractor must notify Consulting Engineer before covering any Work. Consulting Engineer shall be given a reasonable time to make its inspection. Contractor shall not cover any Work prior to Consulting Engineer having a reasonable time to inspect. If Work to be covered does not conform to the Contract Documents, Consulting Engineer can withhold its consent to covering up Work until such Work is made to conform at Contractor's expense.
- (d) If any labor, supplies, materials or equipment are found not to be in accordance with the Contract Documents, Contractor shall at its own expense bear the cost of uncovering such labor, supplies, materials or equipment, the cost of removing same, as well as the cost of undoing and redoing the Work and other Work damaged by such nonconforming labor, supplies, materials or equipment.
- (e) The Contractor shall comply with the directions and instructions of the Consulting Engineer.
- (f) The City, the Consulting Engineer and all designated Inspectors shall be free at all times to perform their duties, including the observation and inspection of the Work, and intimidation or attempted intimidation of any one of them by the Contractor or by any of its employees shall be sufficient reason, if the City so desires, to terminate the Contract.
- (g) Any inspection, by whosoever conducted, shall not relieve the Contractor from any obligation to perform the Work strictly in accordance with the Plans and Specifications, and any of the Work not so constructed shall be removed and made good by the Contractor at its own expense.

## GC-23 SUPERINTENDENCE AND SUPERVISION

The Contractor shall be responsible for coordination between all phases of the Work and provide all necessary supervision to the Work using its best skill, care, judgment and attention and shall keep on the Work, during its progress, a competent superintendent and any necessary assistants, all satisfactory to Consulting Engineer. The Contractor shall coordinate the activities and scheduling of all operations in accordance with the approved schedule. All unsupervised Work shall be unacceptable and subject to removal and replacement at the Contractors expense.

G-13 Rev. 9/09/13

The superintendent shall not be changed except with the consent of the Consulting Engineer unless the superintendent proves to be unsatisfactory to the Contractor and/or ceases to be in its employ; provided however, that the Consulting Engineer retains the right to require that the Contractor replace the superintendent at any time, such right not to be arbitrarily exercised.

The superintendent shall be fully authorized to act for the Contractor and receive whatever orders as may be given for the proper prosecution of the Work or notices in connection therewith. Use of Subcontractors on portions of the Work shall not relieve the Contractor of its obligation to have a competent superintendent directly employed by the Contractor on the Work at all times.

#### GC-24 CONTRACTOR'S OFFICE AT SITE OF WORK

During the performance of this Contract, the Contractor shall maintain a suitable office at or near the site of the Work which shall be the headquarters of the superintendent authorized to receive drawings, instructions, or other communications or articles from the Consulting Engineer, and any such communication given to the said superintendent or delivered at the Contractor's office at the site of the Work in his/her absence shall be deemed to have been given to the Contractor.

#### GC-25 CHANGES IN THE WORK

(a) <u>Change Orders</u>. City, without invalidating the Contract, may by Change Order direct changes in the Work which may result in an addition to or deduction from the Contract Price and/or changes in the Contract Time. All Change Orders shall be executed under the provisions of the original Contract Documents. If the Change Order consists of a modification to the Contract Price, the value of such change shall be determined as per paragraph (e) below.

Except for Work done as a result of an emergency endangering life or property, no Work resulting in an additional pay item shall be performed unless pursuant to the provisions of a Change Order.

- (b) <u>Quantity Variations</u>. Where changes in the Work involve a change in the quantity of any Bid item, the Contract Price shall be revised by extension of the quantities and unit price of all Bid items so changed subject to written approval of the Consulting Engineer.
- (c) <u>Field Orders</u>. Consulting Engineer may order minor changes in the Work through Field Orders, which in no specific, concrete or substantial way increase or decrease the Work; and such minor changes in the Work shall not involve an addition or deduction from the Contract Price.
- (d) From time to time the Consulting Engineer may also issue written orders to Contractor for needed clarifications, modifications or corrections. Should a difference of opinion arise as to whether the order constitutes extra work for which additional compensation is due, and the City insists on its performance, the Contractor shall proceed with the Work after making a written request for a Change Order, and it shall keep an accurate account of the actual field cost thereof as provided for in (e)(3) below. The Contractor will thereby preserve the right to submit a claim therefor.
- (e) The value of any change in the Work which results in an addition/deletion to the Contract Price shall be determined in one or more of the following ways, at the option of City:

G-14 Rev. 9/09/13

- (1) By agreed lump sum.
- (2) By unit prices named in the Contract or subsequently agreed upon.
- (3) By actual field cost (time and material) plus fifteen percent (15%) and shall include a "Not to Exceed" figure.

In order to arrive at the value for any change, Contractor shall credit City with its projected cost(s), including overhead and fee for any Work which was previously included but which has been excluded by any such change.

- (f) No change in the Work shall entail additional time unless the Consulting Engineer determines that additional time is required and specifically so provides in the Change Order. No change in the Work shall entitle the Contractor to delay damages.
- (g) Where extra work is performed under (e)(3) above, the term "actual field cost" of such extra work is hereby defined to be and shall include:
  - (1) The cost of all workers, such as foremen, timekeepers, mechanics, and laborers, for the time actually employed in the performance of the said extra work;
  - (2) All materials and supplies;
  - (3) Trucks and rentals on machinery and equipment for the time actually employed or used in the performance of said extra work;
  - (4) Any transportation charges necessarily incurred in connection with said equipment authorized by the Consulting Engineer for use on said Work and similar operating expenses;
  - (5) All incidental expenses incurred as a direct result of such extra work, including payroll taxes and a ratable proportion of premiums on construction Bonds and, where the premiums therefore are based on payroll costs, public liability and property damage, worker's compensation, and other insurance required by the Contract; provided, however, Contractor must enumerate and justify to City's satisfaction any such claimed incidental expenses; and provided, further, that without in any way limiting City's right to challenge any individual costs claimed by Contractor, incidental costs shall not include:
    - (A) Payroll costs and other compensation of Contractor's officers, executives, principals (of partnership and sole proprietorships), general managers, engineers, architects, estimators, lawyers, auditors, accountants, purchasing and contracting agents, expeditors, timekeepers, clerks and other personnel employed by Contractor whether at the site or in Contractor's principal or a branch office for general administration of the Work unless specifically agreed to by City all of which are to be considered administrative costs covered by the Contractor's overhead and profit.
    - (B) Expenses of Contractor's principal and branch offices other than Contractor's office at the site.

G-15 Rev. 9/09/13

- (C) Any part of Contractor's capital expenses, including interest on Contractor's capital employed for the Work and charges against Contractor for delinquent payments.
- (D) Costs due to the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, including but not limited to, the correction of Defective Work, disposal of materials or equipment wrongly supplied and making good any damage to property.
- (E) Other overhead of general expense costs of any kind and the costs of any item not specifically and expressly agreed to by City.

The Consulting Engineer may direct the form in which accounts of the actual field cost shall be kept and may also specify in writing, before the Work commences, the method of doing the Work and the type and kind of machinery and equipment, if required, which shall be used in the performance of extra work under (e)(3) above. In the event that machinery and heavy construction equipment shall be required for such extra work, the authorization and basis of payment for the use thereof shall be stipulated in the written extra work order.

The fifteen percent (15%) of the actual field cost to be paid to the Contractor shall cover, and be full compensation for, the Contractor's profit, overhead, general superintendence, field office expense and all other elements of cost not embraced within the "actual field cost" as herein defined.

- (h) In the event that unit prices are provided for in the Contract Documents as to all or a part of the Work, if the quantities originally contemplated are so changed in a proposed Change Order that application of the agreed unit prices to the quantities of Work proposed is substantially inequitable to either the City or the Contractor, the unit prices shall be reevaluated and adjusted in accordance with the following:
  - (1) If the total cost of a particular item of Unit Price Work amounts to twenty percent (20%) or more of the Contract price and the variation in the quantity of that particular item of Unit Price Work performed by Contractor differs by more than thirty-three percent (33%) from the estimated quantity of such item indicated in the Contract; and
  - (2) If there is no corresponding adjustment with respect to any other item of Work; and
  - (3) If Contractor has incurred additional expense as a result thereof; or
  - (4) If City believes that the quantity variation entitles it to an adjustment in the unit price and, the parties are unable to agree as to effect of any such variations in the quantity of Unit Price Work performed; then either City or Contractor may request the Consulting Engineer to make an adjustment in the Contract price.
- (i) No claim for extra work of any kind will be allowed except as provided herein. If extra work orders are given in accordance with the provisions of this Contract, such Work shall be considered a part hereof and subject to each and all of the terms and requirements of this Contract.

G-16 Rev. 9/09/13

(j) Contractor shall be responsible for notifying its surety(ies) of any modifications to the Contract price or time, and said surety(ies) shall not seek discharge as a result of any failure on Contractor's part to notify surety(ies).

## GC-26 <u>DEDUCTIONS FOR UNCORRECTED WORK</u>

If City deems it inexpedient to have corrected any Work which is not in accordance with the Contract Documents, an equitable deduction from the Contract Price shall be made therefor.

#### GC-27 DELAYS AND EXTENSION OF TIME

- (a) If Contractor shall be delayed at any time in the progress of the Work by an act or omission of City or by any separate contractor employed by City and over which Contractor has no control and which is not a result of the Contractor's acts or the acts of any of its employees, Subcontractor or suppliers, negligent or otherwise, then the time of completion shall be extended for such reasonable time as the Consulting Engineer shall decide, and no adjustment shall be made in the Contract Price.
- (b) No such extension shall be made for delay unless Contractor provides written notice to Consulting Engineer of such delay, the reasons therefore and the expected length of delay within seven (7) days of the commencement of such delay. In the case of a continuing cause of delay, only one claim is necessary.
- (c) In executing the Contract, the Contractor expressly covenants and agrees that, in undertaking to complete the Work within the time therein fixed, it has taken into consideration and made allowances for all hindrances and delays incident to such Work, whether growing out of delays in securing materials, workers, weather conditions or otherwise. No charge shall be made by the Contractor for hindrances or delays from any cause during the progress of the Work, or any portion thereof, included in this Contract, except as provided in subparagraph (a), (b), or (d) of this Article.
- (d) The Contractor shall delay or suspend the progress of the Work or any part thereof, whenever it shall be so required by written order of the Consulting Engineer, and for such periods of time as the Consulting Engineer shall require; provided, that in the event of such delay or delays or of such suspension or suspensions of the progress of the Work, or any part thereof, the time for completion of Work so suspended or of Work so delayed by such suspension or suspensions shall be extended for a period equivalent to the time lost by reason of such suspension or suspensions; but such order of the Consulting Engineer shall not otherwise modify or invalidate in any way, any of the provisions of this Contract. In the event that the Work shall be stopped by order of the Consulting Engineer, through no fault of the Contractor, its employees, Subcontractors or suppliers, any incidental expenses (see Article GC-25 (g)(5)) which, in the opinion and judgment of the Consulting Engineer, are caused thereby shall be paid by the City to the Contractor; provided, however, that such suspension or suspensions shall not be the basis for any claim by Contractor for additional compensation or damages for delay.
- (e) The City reserves the right and may delay Work on certain portions of Work until such time as weather and/or utility relocations will allow proper progress on major items of Work. The City may direct the Contractor to clear the right-of-way before utility relocations, if, in the opinion of the Engineer, such clearing would expedite utility relocation. Also, the City may direct the Contractor to work on certain items of Work after partial utility relocations have been made. There shall be no charge made by the City or the Contractor for delays arising from the issuance of such delayed Work direction other than provided for in paragraphs (a) through (d) in this Article.

G-17 Rev. 9/09/13

#### GC-28 WORK STOPPAGES

Contractor warrants to the City that there shall be no work stoppages or interruptions arising out of labor disputes, including, but not limited to, those due to the presence of both union and non-union workforces at the job site. Contractor further agrees that in the event of any strike, picket, sympathy strike, work stoppage or other form of labor dispute or picket in connection with the Work of the Contractor, other contractors, Subcontractors, the City, or any other person, the Contractor will, contingent upon the City providing a picket-free entrance, continue to perform the Work required herein without interruption or delay. Anything in this Contract to the contrary notwithstanding, in the event the Contractor fails to continue performance of the Work included herein without interruption or delay, because of such picket or other form of labor dispute, the City may terminate the services of said Contractor after giving forty-eight (48) hours written notice to Contractor and its sureties of its intent to do so, or the City may invoke any of the rights set forth elsewhere in the Contract Documents.

#### GC-29 PATENT LIABILITY CLAUSE

Contractor agrees to defend any claim, action or suit that may be brought against City, its Governing Body, officers, agents or employees for infringement of any patents arising out of the performance of this Contract or out of the use or disposal by or for the account of City of supplies furnished or construction Work performed hereunder, and also to indemnify and hold harmless City, its Governing Body, officers, agents, and employees against all judgments, decrees, damages, costs and expenses recovered against it or them or sustained by it or them on account of any such actual or alleged infringement.

It is understood that all royalties and fees for and in connection with patents, or patent infringement, claims for materials, articles, apparatus, devices or equipment used in or furnished for the Work shall be included in the Contract Price. Final payment to the Contractor by the City shall not be made while any suit or claim involving infringement or alleged infringement of any patent remains unsettled.

## GC-30 INDEPENDENT CONTRACTOR

The right of general supervision of the City and/or the Consulting Engineer shall not make the Contractor an agent of the City, and the liability of the Contractor for all damages to persons, firms and corporations arising from the Contractor's execution of the Work shall not be lessened because of such general supervision, but as to all such persons, firms and corporations, and the damages, if any, to them or their property, the Contractor herein is an independent contractor in respect to the Work.

#### GC-31 SEPARATE CONTRACTS

- (a) City reserves the right to perform by itself or let other contracts in connection with Work. Contractor shall afford reasonable opportunity for the introduction and storage of materials and the execution of Work by City or others and shall properly connect and coordinate its Work with the Work of City or others.
- (b) If any part of Contractor's Work depends upon the Work of the City or others, Contractor shall inspect and promptly report to City any defects in any such Work that render it unsuitable for proper execution or results. Its failure to so inspect and report shall constitute an acceptance by it of such other Work as fit and proper for the reception of its Work.

G-18 Rev. 9/09/13

#### GC-32 RELATIONS WITH OTHER CONTRACTORS

The Contractor shall cooperate with all other contractors or workers who may be performing Work on behalf of the City or any other entity on any Work in the vicinity of the Work to be done under this Contract, and it shall so conduct its operations as to interfere to the least possible extent with the Work of such Contractors or workers. Contractor shall be responsible for any injury or damages that may be sustained by other contractors, workers or their Work because of any fault or negligence on Contractor's part, and shall at its own expense repair or pay for such injury or damage. Any difference or conflict which may arise between the Contractor and other contractors, or between the Contractor and the workers of the City or any other entity, in regard to their Work, shall be adjusted and determined by the Consulting Engineer. If the Work of the Contractor is delayed or damaged because of any acts or omissions of any other contractor or contractors, the Contractor shall have no claim against the City on that account; provided, however, the City may, in its discretion, grant an extension of time.

When two or more contracts are being executed at one time in such manner that Work on one Contract may interfere with that on another, the Consulting Engineer shall decide which contractor shall cease Work and which shall continue, whether the Work on both contracts shall progress at the same time, and in what manner the Work is to proceed.

When the territory of one contract is the necessary or convenient means of access for the transportation or movement of men/women, materials or appliances required for the execution of another contract, such privileges of access or any other responsible privilege may be granted by Consulting Engineer to the Contractor so desiring to the extent which may be reasonably necessary.

In the event that Contractor is performing Work at a site or on a project involving City and one or more other private or governmental entities, which have their own contractors on site as well, Contractor shall advise Consulting Engineer when it anticipates that there may be interference with the Contractor's Work or with the Work of any other contractor. Consulting Engineer shall, to the best of its ability, with input from Contractor as to coordination of the Work, seek to schedule Work of the various contractors so as to avoid as much inconvenience and delay as possible; provided, however, that in the event Contractor experiences a delay or damage to the Contractor's Work as a result of the presence of other such contractors, Contractor shall not be entitled to additional compensation or damages for delay or damage to the Contractor's Work; rather, Contractor's only recourse shall be an extension of time to be determined by the Consulting Engineer.

#### **GC-33 INDEMNITY**

#### (a) Definitions

For purposes of indemnification requirements as set forth throughout the Contract, the following terms shall have the meanings set forth below:

- (1) "The Contractor" means and includes Contractor, all of its affiliates and subsidiaries, its Subcontractors and materialmen and their respective servants, agents and employees; and
- "Loss" means any and all loss, damage, liability or expense, of any nature whatsoever, whether incurred as a judgment, settlement, penalty, fine or otherwise (including attorney's fees and the cost of defense), in connection with any action, proceeding, demand or claim, whether real or spurious, for

G-19 Rev. 9/09/13

injury, including death, to any person or persons or damages to or loss of, or loss of the use of, property of any person, firm or corporation, including the parties hereto, which arise out of or are connected with, or are claimed to arise out of or be connected with, the performance of this Contract whether arising before or after the completion of the Work required hereunder.

#### (b) The Indemnity

For purposes of this Contract, and without in any way limiting indemnification obligations that may be set forth elsewhere in the Contract, Contractor hereby agrees to indemnify, defend and hold harmless the City from any and all Loss where Loss is caused or incurred or alleged to be caused or incurred in whole or in part as a result of the negligence or other actionable fault of the Contractor, its employees, agents, Subcontractors and suppliers.

It is agreed as a specific element of consideration of this Contract that this indemnity shall apply notwithstanding the joint, concurring or contributory or comparative fault or negligence of the City or any third party and, further, notwithstanding any theory of law including, but not limited to, a characterization of the City's or any third party's joint, concurring or contributory or comparative fault or negligence as either passive or active in nature.

#### (c) General Limitation

Nothing in this Article shall be deemed to impose liability on the Contractor to indemnify the City for Loss when the City's negligence or other actionable fault is the sole cause of Loss.

#### (d) <u>Waiver of Statutory Defenses</u>

With respect to the City's rights as set forth herein, the Contractor expressly waives all statutory defenses, including, but not limited to, those under workers compensation, contribution, comparative fault or similar statutes to the extent said defenses are inconsistent with or would defeat the purposes of this Article.

## GC-34 PROTECTION OF PROPERTY/LIABILITY

Without in any manner limiting Contractor's responsibilities as provided elsewhere in the Contract Documents, the Contractor shall assume full responsibility for the protection of all public and private property, structures, sewers and utilities, both above the ground and Underground Facilities, along, beneath, above, across or near the site or sites of the Work being performed under this Contract, or which are in any manner affected by the prosecution of the Work or the transportation of men/women or materials in connection therewith. Barriers shall be kept placed at all times to protect persons other than those engaged on or about the Work from accident, and the Contractor will be held responsible for all accidents to persons or property resulting from the acts of Contractor or its employees.

The Contractor shall give reasonable notice to the affected owner or owners when any such property is liable to injury or damage through the performance of the Work and shall make all necessary arrangements with such owner or owners relative to the removal and replacement or protection of such property and/or utilities.

The Contractor shall satisfactorily shore, support and protect any and all structures and all pipes, sewers, drains, conduits and other facilities and shall be responsible for any damage resulting thereto. The Contractor shall not be entitled to any additional time on account of any

G-20 Rev. 9/09/13

postponement, interference or delay caused by any such structures and facilities being on the line of the Work, whether they are shown on the Plans or not.

#### GC-35 PROVISION FOR EMERGENCIES

Whenever, in the opinion of the Consulting Engineer, the Contractor has not taken sufficient precaution for the safety of the public or the protection of the Work to be constructed under this Contract, or of adjacent structures or property which may be injured by process of construction, and whenever, in the opinion of the Consulting Engineer, an emergency shall arise and immediate action shall be considered necessary in order to protect property interests and to avoid personal injury and/or death, then the Consulting Engineer, with or without notice to the Contractor, shall, upon notification to the City, provide suitable protection to the said interests by causing such Work to be done and materials to be furnished at places as the Consulting Engineer may consider necessary and adequate. The cost and expense of such Work and material so furnished shall be borne by the Contractor and, if the same shall not be paid on presentation of the bills therefore, such costs shall be deducted from any amounts due or to become due the Contractor. The performance of such emergency work shall in no way relieve the Contractor of responsibility for damages which may occur during or after such precaution has been duly taken.

#### GC-36 ASSIGNMENT AND SUBLETTING OF CONTRACT

In case the Contractor assigns all, or any part, of the monies due or to become due under this Contract, the instrument of assignment shall contain a clause substantially to the effect that it is agreed that the right of the assignee in and to any monies due or to become due the Contractor shall be subject to all prior claims of all persons, firms and corporations for services rendered or materials supplied for the performance of the Work called for in this Contract and that no money shall be paid assignee on behalf of the Contractor by the City until such time as the Contractor has discharged its obligations to the City under the Contract. It is expressly understood and agreed that no assignment shall be effective as against the City unless it complies with the foregoing.

The Contractor shall not award subcontracts which total more than sixty percent (60%) of the total Contract Price based upon the unit prices within the Bid submitted to the City by the Contractor and shall self-perform not less than forty percent (40%) of the total Contract Price based upon the unit prices within the Bid submitted to the City by the Contractor. Should any Subcontractor fail to perform in a satisfactory manner, the Work undertaken by such Subcontractor shall be immediately terminated by the Contractor. The Contractor shall be as fully responsible to the City for the acts and omissions of its Subcontractors, and of persons either directly or indirectly employed by them, as Contractor is for the acts and omissions of persons directly employed by it. Approval by the City of any Subcontractor shall not constitute a waiver of any right of the City to reject Defective Work, material or equipment not in compliance with the requirements of the Contract Documents. The Contractor shall not make any substitution for any Subcontractor accepted by the City unless the City so agrees in writing.

The Contractor shall cause appropriate provisions to be inserted in all subcontracts relative to the Work to bind Subcontractors to the Contractor by the terms of the Contract Documents insofar as applicable to the Work of the Subcontractor and to give the Contractor the same power to terminate any subcontract as the City has to terminate the Contractor under any provisions of the Contract Documents.

Nothing contained in the Contract Documents shall create any contractual relationship between any Subcontractor and the City, nor shall anything contained in the Contract Documents

G-21 Rev. 9/09/13

create any obligation on the part of the City to pay to or to see to the payment of any sums due any Subcontractor.

Prior to the City's approval of the Contract Bid, the successful Bidder shall submit to the City Engineer or the City's designated representative for City acceptance a list of the names of all Subcontractors proposed for portions of the Work and shall designate which Work each is to perform.

The City Engineer or the City's designated representative shall, prior to City's approval of the Contract Bid, notify the successful Bidder, in writing, if the City, after due investigation, has reasonable objection to any Subcontractor on such list, and the Contractor shall substitute a Subcontractor acceptable to the City at no additional cost to the City or shall be allowed to withdraw its Bid, and the City shall either rebid the Project or accept the next best lowest and responsible Bidder. The failure of the City to make objection to a Subcontractor shall constitute an acceptance of such Subcontractor but shall not constitute a waiver of any right of the City to reject Defective Work, material or equipment not in conformance with the requirements of the Contract Documents.

The Contractor shall not make any substitution for any Subcontractor who has been accepted by the City unless the City Engineer or the City's designated representative determines that there is a good cause for doing so. The City's disapproval of any Subcontractor shall not, under any circumstance, be the basis for an increase in the Contract Price or a claim for delay damages.

#### GC-37 <u>DISPUTE RESOLUTION</u>

City and Contractor agree that disputes relative to the Work shall first be addressed by negotiations between the parties. If direct negotiations fail to resolve the dispute, the party initiating the claim that is the basis for the dispute shall be free to take such steps as it deems necessary to protect its interests; provided, however, that notwithstanding any such dispute Contractor shall proceed with the Work as per the Contract Documents as if no dispute existed; and provided further that no dispute will be submitted to arbitration without the City's express written consent.

In order to preserve its rights to dispute a matter hereunder, the complaining party must submit a written notice to the other party setting forth the basis for its complaint within twenty (20) calendar days following receipt of the decision of the Consulting Engineer as to such matter as per Article GC-39. No dispute resolution shall be a condition precedent to any legal action.

#### GC-38 INSURANCE

The Contractor shall secure and maintain through the duration of this Contract insurance (on an occurrence basis unless otherwise agreed to) of such types and in such amounts (but not less than the amounts set forth in Section IB-8 of the Instructions to Bidders) as may be necessary to protect the Contractor and the City and agents of the City against all hazards or risks of Loss as hereinafter specified. The form and limits of such insurance, together with the underwriter thereof in each case, shall be approved by the City, but regardless of such approval it shall be the responsibility of the Contractor to maintain adequate insurance coverage at all times. Failure of the Contractor to maintain adequate coverage shall not relieve it of any contractual responsibility or obligation, including, but not limited to, the indemnification obligation.

Satisfactory certificates of insurance shall be filed with the City prior to Contractor's starting any construction work on this Contract. The certificates shall state that thirty (30) days written

G-22 Rev. 9/09/13

notice will be given to the City before any policy covered thereby is changed or cancelled. Failure by the Contractor to furnish the required insurance within the time specified in the Notice of Award of the Contract by the City may, at the City's option, be the basis for the City's exercising its right to terminate the Contract pursuant to Article GC-42.

(a) <u>Commercial General Liability</u> - This insurance shall protect the Contractor against all claims arising from the injuries to members of the public or damage to property of others arising out of any act or omission of the Contractor or its agents, employees or Subcontractors. In addition, this policy shall specifically insure the contractual liability assumed by the Contractor under Article GC-33.

The liability limits shall be as stated in the Instructions to Bidders or in the Project Special Provisions.

(b) <u>Automobile Liability</u> - This insurance shall protect the Contractor against all claims for injuries to members of the public and damage to property of others arising from the use of motor vehicles, and shall cover operation on and off the site of all motor vehicles licensed for highway use, whether they are owned, non-owned or hired.

The liability limits shall be as stated in the Instructions to Bidders or in the Project Special Provisions.

(c) Worker's Compensation and Employer's Liability - This insurance shall protect the Contractor against all claims under applicable state worker's compensation laws. The Contractor shall also be protected against claims for injury, disease or death of employees which, for any reason, may not fall within the provisions of a worker's compensation law. This policy shall include an "all states" endorsement.

The liability limits shall be as stated in the Instructions to Bidders or in the Project Special Provisions.

#### (d) Additional Insurance -

- (1) The Contractor shall be required to purchase an Owner's Protective Liability Insurance Policy, issued on an occurrence basis and covering bodily injury (and death) and property damage, naming the City as named insured. The liability limits shall be as stated in the Instructions to Bidders or in the Project Special Provisions. The original policy shall be placed on file with the City and maintained during the life of the Contract. Such policy shall contain no exclusion relative to any function performed by the City or its employees and agents in connection with the Work.
- (2) Additional insurance covering special hazards may be required on certain projects. Such additional insurance requirements shall be as specified in Instructions to Bidders or Project Special Provisions.
- (e) <u>Subcontractors' Insurance</u> If a part of the Contract is to be sublet, the Contractor shall either:
  - (1) Cover all Subcontractors in its insurance policies; or

G-23 Rev. 9/09/13

(2) Require each Subcontractor not so covered to secure insurance which will protect Subcontractor and the City against all applicable hazards or risks of loss as and in the minimum amounts designated for the Contractor.

## GC-39 <u>AUTHORITY AND DUTY OF THE CONSULTING ENGINEER</u>

Unless the City acts as its own Consulting Engineer, the Consulting Engineer is an independent contractor. It is mutually agreed by and between the parties to this Contract that the Consulting Engineer shall observe and inspect all Work included herein (provided, however, that any such observations and inspections shall not alter the rights, responsibilities and obligations of the parties as set forth in Article GC-22). Anything in the Contract Documents to the contrary notwithstanding, in order to prevent delays and disputes, it is further agreed by and between the parties to this Contract that the Consulting Engineer shall in all cases determine the amount and quantities of the several kinds of Work which are to be paid for under this Contract; that Consulting Engineer shall determine all questions relating to the Plans and Specifications for the Project; that Consulting Engineer shall issue promptly any written clarifications or interpretations of the requirements of the Contract Documents (in the form of drawings or otherwise) which Consulting Engineer may determine are necessary, which shall be consistent with or reasonably inferable from the overall intent of the Contract Documents; that Consulting Engineer's decisions and findings shall be a condition precedent to the right of the parties to submit any proper matter and to any rights of the Contractor to receive any money under this Contract; provided, however, that should the Consulting Engineer render any decision or give any direction which, in the opinion of either party hereto, is not in accordance with the meaning and intent of this Contract, either party may file with the other, within twenty (20) days a written objection to the decision or direction so rendered and, by such action, may reserve the right to submit the question so raised as herein provided, except as otherwise provided in Article GC-37. It is the intent of the Contract that there shall be no delay in the execution of the Work, and the decisions or directions of the Consulting Engineer as rendered shall be promptly carried out.

#### GC-40 CORRECTION OF LABOR, ETC. - BEFORE FINAL PAYMENT

At Consulting Engineer's request, Contractor shall, at Contractor's expense, promptly remove from the job site all labor, supplies, materials, equipment and/or other facilities condemned by Consulting Engineer as not in accordance with the Contract Documents, whether incorporated or not; and the Contractor shall, at Contractor's expense, promptly replace and reexecute all labor, supplies, materials, equipment and/or other facilities in accordance therewith and, at Contractor's expense, restore all Work of other Contractors and Subcontractors destroyed or damaged as a result of such removal, replacement and re-execution.

#### GC-41 CORRECTION OF LABOR, ETC. - AFTER FINAL PAYMENT

- (a) Contractor guarantees to City that all Work performed under this Contract shall be free from defects in material or workmanship for a period of not less than two (2) full years from the date of final payment by City; provided, however, that whenever any provision of the Contract Documents requires a guarantee for a period in excess of two (2) years to be furnished by Contractor, Contractor shall promptly execute same in writing and shall promptly deliver same to City.
- (b) Contractor shall promptly procure from each Subcontractor a written guarantee that all Work performed by such Subcontractor shall be free from defects in material or workmanship for a period of not less than two full (2) years from the date of final payment by City to Contractor and shall promptly deliver same to City; provided, however, that wherever any

G-24 Rev. 9/09/13

provision of the Contract Documents requires a guarantee for a period in excess of two (2) years to be furnished by a Subcontractor, Contractor shall promptly procure same in writing from the appropriate Subcontractor and shall promptly deliver same to City.

- (c) Whenever any provision of the Contract Documents requires a guarantee for a period in excess of two (2) years, but does not specify who is to give such a guarantee, it shall be given by the Contractor regardless of who is performing the Work for which the guarantee is required. All such guarantees shall be in writing and shall be promptly delivered to City.
- (d) The furnishing of guarantees by Subcontractors and materialmen shall not relieve Contractor of its obligations under guarantees required of Contractor under the Contract Documents. In addition to the above guarantees, Contractor will (1) obtain and assign to City all available manufacturers and suppliers warranties; and (2) at City's sole option, assign to City any rights Contractor may have against any Subcontractor and/or supplier for Defective Work, materials or equipment.
- (e) Any provision of the Contract Documents to the contrary notwithstanding, all guarantees provided for in the Contract Documents shall begin to run from the date of final payment by City to Contractor.
- Neither the issuance of the final certificate, payment nor any provision in the Contract Documents shall relieve the Contractor of responsibility for Work determined by City not to be in accordance with the Contract Documents. If, within two (2) years of the date of final payment to Contractor or within any longer period of time as may be prescribed by applicable law or by the terms of any applicable special warranty required by the Contract Documents, any of the Work is found by City to be defective or not in conformance with the Contract Documents then, at City's request, Contractor shall, at Contractor's expense, promptly remove from the premises all Work determined by the City to be defective or not in accordance with the Contract Documents; and Contractor shall, at Contractor's expense, promptly replace and re-execute all Work in accordance therewith and, at Contractor's expense, restore all Subcontractors' Work and Work of other Contractors and Subcontractors damaged as a result of such removal, replacement and re-execution. City shall with reasonable promptness give notice of any Work condemned by City as not in accordance with the Contract Documents. If, within ten (10) days after the mailing of such notice, the Contractor shall fail or neglect to make, or undertake to make, with due diligence any required repairs or corrections, the City shall make such repairs at Contractor's expense; provided, however, that, in case of an emergency which, in the judgment of City, would cause serious loss, hazard or damage if not corrected immediately, such repairs may be made without prior notice being sent to the Contractor, and Contractor shall nevertheless be liable to the City for the cost thereof.

#### GC-42 RIGHT OF CITY TO TERMINATE CONTRACT

Without in any manner limiting the right of the City to terminate the Contract or declare the Contractor in default thereof for any reason set forth in the Contract Documents, if the Work to be done under this Contract shall be abandoned by the Contractor; or if this Contract shall be assigned by Contractor otherwise than as herein provided; or if the Contractor should be judged as bankrupt; or if a general assignment of its assets should be made for the benefit of its creditors; or if a receiver should be appointed for the Contractor or any of its property; or if at any time the Consulting Engineer shall certify in writing to the City that the performance of the Work under this Contract is being unnecessarily delayed, that the Contractor is violating any of the conditions or covenants of this Contract or the Specifications therefore, that it is executing the same in bad faith or otherwise not in accordance with the terms of said Contract; or if all Bid items of the Project are not completed within the time named for their completion or within the time to which such

G-25 Rev. 9/09/13

completion date may be extended; then, in addition to other rights the City may choose to exercise, the City may, at its option, serve written notice upon the Contractor and its surety of City's intention to terminate this Contract, and, unless within five (5) days after the serving of such notice upon the Contractor, a satisfactory arrangement be made for the continuance thereof, this Contract shall cease and terminate. In the event of such termination, the City shall immediately serve notice thereof upon the surety and the Contractor, and the surety shall have the right to take over and complete the Work; provided, however, that if the surety does not commence performance thereof within thirty (30) days from the date of said notice of termination, the City may take over the Work and prosecute same to completion, by contract or otherwise, for the amount and at the expense of the Contractor, and the Contractor and its surety shall be liable to the City for any and all excess cost sustained by the City by reason of such prosecution and completion; and in such event the City may take possession of, and utilize in completing the Work, all such materials, equipment, tools and plant as may be on the site of the Work and necessary therefore. When Contractor's services have been so terminated, such termination shall not affect any rights or remedies of City against Contractor then existing or which may later accrue. Similarly, any retention or payment of monies due Contractor shall not release Contractor from liability.

City reserves the right, in its sole discretion and for its convenience and without cause or default on the part of Contractor, to terminate the Contract by providing written notice of such termination to Contractor. Upon receipt of such notice from City, Contractor shall: (1) immediately cease all Work; or (2) meet with City and, subject to City's approval, determine what Work shall be required of Contractor in order to bring the Project to a reasonable termination in accordance with the request of City. If City shall terminate for its convenience as herein provided, City shall: (1) compensate Contractor for all purchased materials and actual cost of Work completed to date of termination; and (2) release and indemnify Contractor against any liability Contractor may have to any third parties as the result of any contracts, commitments, purchase orders or any other such liabilities Contractor may have incurred as a result of its obligations under the provisions of the Contract. Contractor agrees that it shall minimize such potential liabilities by, where practical, informing third parties of City's right to terminate and attempting to obtain from such third parties a waiver of any liability in the event of such termination.

Any termination of the Contract for alleged default by Contractor that is ultimately determined to be unjustified shall automatically be deemed a termination for convenience of the City.

#### GC-43 CITY'S RIGHT TO DO WORK

Without otherwise limiting City's rights under the Contract Documents, if Contractor should neglect to prosecute the Work properly or fail to perform any provision of the Contract Documents, City, after three (3) days' written notice to Contractor may, without prejudice to any other remedy it may have, make good such deficiencies and may deduct the cost thereof from the payment then or thereafter due Contractor.

#### GC-44 PAYMENTS

(a) Before the first application for payment, the Contractor shall submit to the Consulting Engineer a schedule of values allocated to the various portions of the Work, prepared in such form and supported by such data to substantiate its accuracy as the Consulting Engineer may require. This schedule, unless objected to by the Consulting Engineer, shall be used only as a basis for the Contractor's applications for payment and does not constitute approval by the Consulting Engineer of the method or performance by the Contractor.

G-26 Rev. 9/09/13

- (b) Payment will be made to Contractor monthly from funds available within thirty (30) days of the City's receipt of a proper undisputed pay request from the Contractor on the basis of a duly certified estimate of the value of all labor and materials delivered on the site and accepted by the Consulting Engineer during the preceding month, calculated in proportion to the Contract Price, but to ensure the proper performance of the Contract, ten percent (10%) of the amount of each estimate will be retained until final completion and acceptance of all Work covered by the Contract.
- (c) Each payment made to the Contractor shall be on account of the total amount payable to the Contractor by or for the City, and all materials and Work covered by the partial payments made shall therefore become the sole property of the City. This provision shall not be construed as relieving the Contractor from the responsibility imposed by the Contract Documents for the care and protection of materials and Work upon which payments have been made, for the restoration of any damaged Work, or as a waiver of the right of the City to require the fulfillment of all the terms of the Contract. Progress payments in respect to materials will be made only for materials delivered on the site and accepted by the Consulting Engineer, all calculated in proportion to the Contract Price.
- (d) In general, no allowance will be made in estimates for materials delivered on the site and not incorporated in the Work except in case of those items considered by the Consulting Engineer to be major items of considerable magnitude, which will be allowed in estimates on the basis of ninety percent (90%) of invoices, the value calculated in proportion to the Contract Price.
- (e) The retained percentages herein provided for are to be retained and held for the sole protection and benefit of the City, and no other person, firm or corporation shall have or assert any lien, claim, right or priority therein, thereon or thereto, or be entitled to receive any part thereof, except as herein expressly provided.
- (f) The City shall require at intervals as it shall determine and at any time before final payment is made for the Work specified herein that the Contractor furnish the City with written acknowledgments (to the extent of payment made) by all Subcontractors and vendors who have done work or labor on, or who have furnished materials for, this Project that they have been fully paid in whole or in part by the Contractor for such work or labor done or materials furnished by them. Contractor's failure to furnish said list or to include all such Subcontractors and vendors shall not relieve Contractor or its surety of any obligation assumed under this Contract, nor shall the City's request for such list create any obligation on City's part to verify accuracy. City may require, at its option, lien waivers on forms supplied by City.
- (g) The Contractor has, per the Instructions to Bidders, Bid this job net of all sales and compensation taxes. No application for payment shall include any amount for reimbursement of such taxes paid by Contractor resulting from Contractor's failure to use the Project Exemption Certificate for any purchase in connection with the Work. Final payment will not be made to Contractor until the City has received the Project Completion Certification from the Contractor along with a Consent of Surety to Final Payment.
- (h) The Contractor shall be responsible for the return and/or exchange of surplus materials, and all credits for returned or exchanged materials shall be first submitted to the Consulting Engineer for approval. Applications for payment shall reflect any such credits, and the Contract Price shall be adjusted as necessary to reflect such credits. Non-returnable excess materials shall be turned over to the City, or, at its option, be removed from the Project site at Contractor's expense.

G-27 Rev. 9/09/13

(i) The acceptance by the Contractor of final payment shall be and shall operate as a release to the City of all claims and all liability to the Contractor other than written claims in stated amounts as may be specifically excepted by the Contractor for all things done or furnished in connection with this Contract and for every act and neglect of the City and others relating to or arising out of this Contract. Any payment, however, final or otherwise, shall not release the Contractor or its sureties from any obligations under the Contract Documents, the Bonds, or insurance coverage's.

#### GC-45 PAYMENTS WITHHELD

City may withhold or, on account of subsequently discovered evidence, nullify the whole or a part of any application for payment to the extent necessary to protect City from loss on account of:

- (a) Incomplete Work or Defective Work not remedied;
- (b) A reasonable doubt that the Work can be completed for the balance of the Contract Price then unpaid;
- (c) Damage to City; or
- (d) A breach of this Contract.

#### GC-46 LIQUIDATED DAMAGES

It is mutually understood and agreed by and between the parties to this Contract that time is of the essence of this Contract, and that in the event that the Contractor shall fail in the performance of the Work specified and required to be performed within the period of time stipulated therefore in the Contract, after due allowance for any extension or extensions of time which may be granted under the Contract, the said Contractor shall pay to City, as stipulated liquidated damages and not as a penalty, the sum stipulated herein for each and every day that the Contractor shall be in default.

In the case of joint responsibility for any delay in the final completion of the Work covered by this Contract, where two or more separate contracts are in force at the same time and cover work on the same project and at the same site, the total amount of liquidated damages assessed against all contractors under such contracts, for any one day of delay in the final completion of the Work will not be greater than the approximate total of the damages sustained by the City by reason of such delay in completion of the Work as set forth in the table below, and the amount assessed against any one contractor for such one day of delay will be based upon the individual responsibility of such contractor for the aforesaid delay as determined by, and in the judgment of, the City.

In case of failure on the part of the Contractor to effect completion within the time specified, the City shall have the right to deduct from the total compensation otherwise due the Contractor as liquidated damages based on the full Bid price of the Contract, fixed and agreed to in advance, an amount according to the following schedule:

<u>Cor</u>	<u>ntract Amo</u>	<u>ount</u>	<u>Liquidated Damages</u>
\$0	to	\$50,000	\$250.00
\$50,000	to	\$100,000	\$400.00
\$100,000	to	\$500,000	\$800.00

G-28 Rev. 9/09/13

\$500,000	to	\$1,000,000	\$1,000.00
\$1,000,000	to	\$2,000,000	\$1,750.00
\$2,000,000	to	\$5,000,000	\$2,500.00
\$5,000,000	to	\$10,000,000	\$3,500.00
\$10,000,000	to	\$20,000,000	\$5,500.00
\$20,000,000	and up		\$6,000.00

for each twenty-four (24) hour calendar day, including weekends and holidays, the Work remains incomplete over the specified completion time. (THE CITY RESERVES THE RIGHT TO ADJUST THE SCHEDULE OF LIQUIDATED DAMAGES, PRIOR TO ADVERTISING FOR BIDS, BASED ON THE SCOPE AND URGENCY OF THE PROJECT.)

The City shall have the right to deduct said liquidated damages from any moneys in its hands, otherwise due or to come due, to the Contractor, or to sue for and recover compensation for damages for nonperformance of this Contract.

#### GC-47 BONDS

Contractor shall after Notice of Award furnish City the Performance, Maintenance, and Statutory or Labor and Material Payment Bond as required by the Instructions to Bidders. Failure to furnish such Bonds within the time specified in the Notice of Award may, at the City's option, be the basis for declaring Contractor in default and pursuing such legal rights as the City deems in its best interest, including, but not limited to, enforcement of the City's rights as to Bid security.

#### GC-48 EASEMENTS AND RIGHTS-OF-WAY

Permanent and temporary (construction) easements and rights-of-way will be provided by the City as shown on the Plans. The Contractor shall confine its operations to the easements provided and shall carefully note where buildings, structures or other obstructions will limit its working space. In the event that easements and rights-of-way are not available or if they have not been secured, or if entry to property is denied by court order, injunction, litigation or any other reason, the Contractor shall cease operations in such area and confine its Work to other areas approved by the City. In the event of any delay arising from delays in securing easements and rights-of-way, the Contractor shall have no claim against the City for damages arising from such delay but may request an extension of time under Article GC-27.

#### GC-49 UNDERGROUND FACILITIES AND UTILITIES

Underground Facilities and utilities, including sewer, water, gas, sprinkler systems, etc. damaged by the Contractor within or outside the right-of-way shall be restored at the Contractor's expense and at no cost to the City. The Contractor shall make every effort to locate these lines and protect them.

#### GC-50 <u>USE OF PREMISES</u>

- (a) Contractor shall confine its operations to limits indicated by law, ordinances, rules, regulations, permits of City or directions of Consulting Engineer and shall not unreasonably encumber the premises and/or site.
- (b) Contractor shall not load or permit any part of any structure, streets or highways to be loaded with a weight that exceeds load limits which will endanger their safety.

G-29 Rev. 9/09/13

- (c) Contractor shall comply with federal, state and local laws and ordinances, as well as any specific instructions regarding signs, advertisements, fires and smoking from Consulting Engineer.
- (d) A laydown area or staging area will be provided at the site and shall be chosen by Consulting Engineer. Contractor will furnish its own weather protection if required.
- (e) No City equipment will be taken out of service or put into service without approval of City.

#### GC-51 <u>ALLOWANCES</u>

Contractor agrees that the Contract Price includes all allowances required by the Contract Documents. Contractor declares that the Contract Price includes all other sums for expenses and overhead and fee on account of allowances as it deems proper. No demand for expenses or overhead and fee other than those included in the Contract Price shall be allowed.

#### GC-52 CUTTING, PATCHING AND DIGGING

- (a) Contractor shall do all cutting, fitting or patching of its Work that may be required to make its several parts come together properly and fit it to receive or be received by Work of others shown upon or reasonably implied by the Contract Documents.
- (b) Contractor shall not endanger any property of City or any other individual or entity, or the Work by cutting, digging or otherwise and shall not cut or alter the work of others except with the written consent of City.
- (c) Contractor shall assume responsibility for the patching or repairs, by the proper trade, of damages caused by Work under this Contract.
- (d) Contractor shall comply with all local ordinances dealing with cutting, patching and digging and shall obtain all necessary permits.

#### GC-53 CLEANING UP

Contractor shall at all times keep the premises/site free from accumulations of waste material or rubbish caused by its employees or Work; and at the completion of the daily Work it shall remove all its rubbish from and about the premises/site and all its tools, scaffolding and surplus materials, and shall leave its Work "broom clean" or its equivalent unless more exactly specified. In case of dispute, City may remove the rubbish and charge the cost to Contractor.

#### GC-54 TEMPORARY FACILITIES

(a) Except where special permission has been granted by City to use existing toilet facilities belonging to City, Contractor shall provide and maintain sanitary temporary toilet facilities located where directed by Consulting Engineer for accommodation of all persons engaged on the Work. Sanitary facilities shall be of reasonable capacity, properly maintained throughout the construction period, and obscured from public view to the greatest practical extent. If toilets of the chemically treated type are used, at least one toilet will be furnished for each twenty workers. Contractor shall enforce the use of such sanitary facilities by all personnel at the site.

G-30 Rev. 9/09/13

Temporary toilets shall be enclosed and weatherproof and kept in sanitary and approved condition at all times. After use for same has ceased, Contractor shall remove the temporary toilet facilities from City's premises and disinfect and fill any vaults.

- (b) Contractor shall provide and maintain any necessary temporary offices, storerooms, roadways, etc., as may be required for its Work. Same shall be located and constructed in an approved manner acceptable to Consulting Engineer. Upon completion of Work or when requested by Consulting Engineer, Contractor shall remove same from City's premises and leave the area in a clean and orderly condition.
- (c) Contractor shall provide and maintain temporary heat as required to protect all Work and material against injury from dampness and/or cold to the satisfaction of Consulting Engineer.
- (d) Unless otherwise specified in the Contract Documents, Contractor shall provide, at its cost and expense, temporary power, wiring and lights from City's provided source as may be required for its operations.

#### GC-55 SANITARY REGULATIONS AND WATER

The operations of the Contractor shall be in full conformity with all of the rules and regulations of boards and bodies having jurisdiction with respect to sanitation. The Contractor shall supply safe and sufficient drinking water to all of its employees. The Contractor shall obey and enforce all sanitary regulations and orders, and shall take precautions against infectious diseases and the spread of same.

All water used in the course of the Work shall be hauled in or purchased from the local water company's distribution system at the Contractor's own cost and expense.

#### GC-56 COMPLIANCE WITH LAWS

The Contractor shall be fully familiar with all City, county, state and federal laws, ordinances or regulations which would in any way control the actions or operations of those engaged in the Work under this Contract or which would affect the materials supplied to or by them. It shall at all times observe and comply with all ordinances, laws and regulations and shall protect and indemnify and defend the City and the City's officers and agents against any claims or liability arising from or based on any violation of same.

#### GC-57 UNFAVORABLE CONSTRUCTION CONDITIONS

During unfavorable weather, or other unfavorable conditions for construction operations, the Contractor shall pursue only such portions of the Work as will not be damaged thereby. No portions of the Work, the satisfactory quality or efficiency of which will be affected by any unfavorable conditions, shall be constructed while these conditions exist, unless, by special means or precautions approved by the Consulting Engineer, the Contractor shall be able to perform the Work in a proper and satisfactory manner.

#### GC-58 CONTRACTOR'S RISK

The Contractor shall assume full responsibility for the Work and shall bear any loss and repair any damage at his/her own cost occasioned by neglect, accident, vandalism or natural cause, whether foreseen or unforeseen, during the progress of the Work and until the Work is completed and accepted by the City.

G-31 Rev. 9/09/13

## GC-59 SAFETY RULES

- (a) Contractor shall be responsible for enforcing safety rules to ensure protection of the employees and property of City, to assure uninterrupted production and to assure safe working conditions for Contractor and Subcontractors and their employees and to assure the safety of the general public. In addition to any other rights the City might exercise, Contractor and/or any Subcontractor failing to follow safety rules shall be subject to eviction from the job site and may be refused reentry.
- (b) Contractor is expected to establish and enforce a comprehensive safety program on this Project for the protection of its personnel, its Subcontractors' personnel, City's employees and all other persons exposed to hazards resulting from Contractor's operations. As a minimum requirement, Contractor shall review and discuss the details of its program with Consulting Engineer at the first project meeting. The items to be covered shall include, but not necessarily be limited to.
  - (1) Personal protective equipment;
  - (2) First aid personnel and facilities;
  - (3) Arrangements for medical attention;
  - (4) Sanitary facilities;
  - (5) Fire protection;
  - (6) Signs, signals and barricades;
  - (7) Security regulations;
  - (8) Safety inspections;
  - (9) Designation of persons responsible for the program;
  - (10) Reporting forms and procedures;
  - (11) Material handling and storage;
  - (12) Lines of communication;
  - (13) Determination of potential hazards;
  - (14) Personnel safety meetings and education;
  - (15) Access to work areas;
  - (16) Subcontractors involvement in the program:
  - (17) Inspections and corrective action.

Contractor is fully responsible for the safety program and any and all methods and procedures provided for therein whether or not City or Consulting Engineer shall have reviewed and/or accepted such program.

#### GC-60 WEEKENDS, HOLIDAY AND NIGHT WORK

No Work shall be done between the hours of 6:00 p.m. and 7:00 a.m. Monday through Friday, nor the hours of 6:00 p.m. and 8:00 a.m on Saturdays, nor Sundays and City holidays, without the written approval or permission of the City forty-eight (48) hours in advance in each case, except such Work as may be necessary for the proper care, maintenance and protection of Work already done or of equipment, or in the case of an emergency.

Night Work may be established by the Contractor, as a regular procedure, with the written permission of the City; such permission, however, may be revoked at any time by the City.

#### GC-61 APPROVAL OF EQUALS

G-32 Rev. 9/09/13

"Approved Equals," where permitted by the Contract Documents or otherwise made feasible by market conditions, shall be considered for approval as follows:

- (a) Contractor shall notify City in writing if it wishes to use an approved equal specifically named in the Contract Documents.
- (b) If Contractor desires to use an "equal" not specifically named in the Contract Documents, it must first inform City and receive written approval for such substitutions. City has no obligation to approve such request and is not responsible for any delay or cost incurred caused by Contractor's making such request.

The Contractor shall be solely responsible for design risks, delays and other claims arising out of any approved alternates.

#### GC-62 TEST OF MATERIALS OFFERED BY CONTRACTOR

All specified and required tests for approval of material shall be made at the expense of the Contractor by a properly equipped laboratory of established reputation, whose work and testing facilities shall be approved by the Consulting Engineer. Approval of materials based on acceptable tests will apply only while such materials as furnished equal or exceed the tested samples or test specimens in quality and minimum requirements. Any change in origin, method of preparation or manufacture of such materials will require new tests and approval thereof. Reports of all tests shall be furnished to the Consulting Engineer in as many certified counterparts as may be required by the Consulting Engineer.

## GC-63 TESTING OF COMPLETED WORK

Before Final Acceptance, all installed and constructed equipment, devices and other work which is to be tested under the Contract Documents shall be tested and each part shall be in good condition and working order or shall be placed in such condition and order at the expense of the Contractor. All tests of such completed Work required under this Contract shall be made under the direction of the Consulting Engineer.

#### GC-64 BORROW AND WASTE AREAS

All borrow materials shall be obtained by the Contractor at its own cost and expense. The borrow area and materials shall be approved by the Consulting Engineer and shall be friable material suitable for compaction.

All waste areas shall be located off the site and arrangements and payment for use of such areas shall be the sole responsibility of the Contractor. All waste disposal shall be in compliance with federal, state and local laws, ordinances and regulations.

## GC-65 PARKING AREAS, DRIVES AND WALKS

All existing parking areas, drives and walks within the Project limits shall be adjusted to conform to the lines and grades shown on the Plans. Any of the above structures that are removed or damaged during construction shall be reconstructed at Contractor's expense of materials that will create a quality equal to or better than the condition of the existing facility prior to construction operation.

#### GC-66 STREET SIGNS AND TRAFFIC AIDS

G-33 Rev. 9/09/13

The Contractor shall be responsible for all preexisting traffic control devices at the Project site, including installation, maintenance, removal and storage of such devices. All temporary and permanent traffic control devices supplied by the Contractor shall comply with and be installed in accordance with the Manual on Uniform Traffic Control Devices, current edition as revised, and the Traffic Control Devices Handbook.

#### GC-67 PLACING WORK IN SERVICE/PARTIAL UTILIZATION

If desired by the City, portions of the Work may be placed in service when completed for Partial Utilization by the City, and the Contractor shall give proper access to the Work for this purpose; but such use and operation shall not constitute an acceptance of the Work, and the Contractor shall be liable for defects due to faulty construction until the entire Work under this Contract is finally accepted and for such periods of time as designated in the Contract Documents or otherwise permitted by law.

#### GC-68 NON-DISCRIMINATION/OTHER LAWS

- (a) The Contractor agrees that:
  - (1) The Contractor shall observe the provisions of the Kansas Act Against Discrimination and shall not discriminate against any person in the performance of work under the present contract because of race, religion, color, sex, disability, national origin, ancestry or age;
  - (2) In all solicitations or advertisements for employees, the Contractor shall include the phrase, "equal opportunity employer," or a similar phrase to be approved by the Kansas Human Rights Commission ("Commission");
  - (3) If the Contractor fails to comply with the manner in which the Contractor reports to the Commission in accordance with the provisions of K.S.A. 44-1031 and amendments thereto, the Contractor shall be deemed to have breached the present Contract and it may be cancelled, terminated or suspended, in whole or in part, by the City;
  - (4) If the Contractor is found guilty of a violation of the Kansas Act Against Discrimination under a decision or order of the Commission which has become final, the Contractor shall be deemed to have breached the present contract and it may be cancelled, terminated or suspended, in whole or in part, by the City; and
  - (5) The Contractor shall include the provisions of Subsections (1) through (4) in every subcontract or purchase order so that such provisions will be binding upon such Subcontractor or vendor.

The provisions of this Article shall not apply to a contract entered into by a Contractor:

- (A) Who employs fewer than four employees during the term of such contract; or
- (B) Whose contracts with the City cumulatively total \$5,000 or less during the fiscal year of the City.

G-34 Rev. 9/09/13

(b) The Contractor further agrees that the Contractor shall abide by the Kansas Age Discrimination In Employment Act (K.S.A. 44-1111 et seq.) and the applicable provision of the Americans With Disabilities Act (42 U.S.C. 12101 et seq.) as well as all other federal, state and local laws, ordinances and regulations applicable to this Project and to furnish any certification required by any federal, state or local governmental agency in connection therewith.

#### GC-69 FEDERAL LOBBYING ACTIVITIES

31 USCS Section 1352 requires all subgrantees, contractors, subcontractors and consultants who receive federal funds via the City to certify that they will not use federal funds to pay any person for influencing or attempting to influence a federal agency or Congress in connection with the award of any federal contract, grant, loan or cooperative agreements.

In addition, contract applicants, recipients and subrecipients <u>must file</u> a form disclosing any expenditures they make for lobbying out of non-federal funds during the Contract period.

Necessary forms are available from the City Engineer and must be returned to the City with other Contract Documents. It is the responsibility of the general Contractor to obtain executed forms from any Subcontractors who fall within the provisions of the Code and to provide the City with the same.

#### GC-70 RECORDS

Contractor shall maintain copies of records pertaining to the construction of this Project for a period of five (5) years from the date of final payment. Such records shall be made available to the City for audit and review purposes upon written request therefor from City or its authorized agent(s) during the construction period and the five (5) year period following final payment.

#### GC-71 TITLES, SUBHEADS AND CAPITALIZATION

Titles and subheadings as used herein and other Contract Documents are provided only as a matter of convenience and shall have no legal bearing on the interpretation of any provision of the Contract Documents. Some terms are capitalized throughout the Contract Documents, but the use of or failure to use capitals shall have no legal bearing on the interpretation of such terms.

#### GC-72 NO WAIVER OF RIGHTS

No waiver of any breach of this Contract shall be construed to be a waiver of any other or subsequent breach.

#### GC-73 SEVERABILITY

The parties agree that should any provision of the Contract Documents be determined to be void, invalid, unenforceable or illegal for whatever reason such provision(s) shall be null and void but that the remaining provisions of the Contract Documents shall be unaffected thereby and shall continue to be valid and enforceable.

#### GC-74 GOVERNING LAW

This Agreement shall be governed by, and construed in accordance with, the laws of the State of Kansas.

G-35 Rev. 9/09/13

## GC-75 <u>VENUE</u>

Venue of any litigation arising in connection with this Agreement shall be the State courts of Johnson County, Kansas.

G-36 Rev. 9/09/13