



Regional Transportation District

Contracting and Procurement

1660 Blake St.
Denver, CO 80202

Request for Proposals

No. 122DR005

TREX Coping Panel Repair and Replacement

REQUEST FOR PROPOSALS TABLE OF CONTENTS

Part 1	Instructions to Proposers
Part 2	Proposal Contents Checklist <ul style="list-style-type: none">• Forms to Be Completed and Submitted With Proposal
Part 3	Scope of Work/Specifications
Part 4	Form of the Contract <ul style="list-style-type: none">• Contract Award and Signature Page• Section I, Statement of Contract Cost<ul style="list-style-type: none">○ Price Form (Attachment A – Cost Submittal Form)• Section II, Scope of Work (provided as Part 3 above)• Section III, Terms and Conditions<ul style="list-style-type: none">○ Construction Terms and Conditions○ Exhibit 1, Contractor's Key Personnel○ Exhibit 2, Insurance and Bond Requirements○ Exhibit 3, Special Provisions/Alterations○ Exhibit 4, Completed Certifications• Section IV, Attachments<ul style="list-style-type: none">○ Contract Closing Documents

PART 1
INSTRUCTIONS TO PROPOSERS

INSTRUCTIONS TO PROPOSERS

RFP SUMMARY

A. RFP Schedule

10/14/2022	RFP advertised and made available to prospective proposers.
10/25/2022 10:00 a.m.	Mandatory Pre-bid briefing will be held virtually via a Microsoft Teams meeting. Please send a request for an invitation to eva.boyd@rtd-denver.com no later than Monday, October 24, 2022, by 4:00 pm, should you wish to attend.
10/31/2022	Inquiry Period: Emailed questions from prospective proposers are to be received by close of business. Questions must be directed to Eva Boyd, eva.boyd@rtd-denver.com
11/07/2022	RTD sends responses to written questions, if any, to all prospective proposers.
11/14/2022 02:00 p.m. prevailing local time	Proposals due: Emailed proposals must be received by Eva Boyd (eva.boyd@rtd-denver.com). Please reference RFP# 122DR005 in the e-mail subject line.
Week of 11/21/2022	If necessary, oral presentations by selected finalists will be held at RTD, 1660 Blake St., Denver, Colorado 80202 or in an online meeting.
12/05/2022	RTD anticipates making final selection.

- B. Work – RTD is seeking proposals from qualified firms to provide TREX Coping Panel Repair and Replacement.
- C. Cost Type – Payments are anticipated to be made on a “Fixed Price” basis.
- D. Award of Contract – Award of a Contract from this RFP will be based upon best value competitive proposal procedures.
- E. Period of Performance – Subject to the Termination provision of the Contract, performance shall commence as of the date specified in the notice to proceed or, if **no date is specified, upon Contractor’s receipt of notice to proceed, and shall continue for one (1) year.** If mailed, receipt of the notice to proceed is presumed to be five days after mailing.
- F. Disadvantaged and Small Business Requirement for Contracts with No SBE Goal – RTD has not specified a SBE participation goal for the Work to be performed under the Contract. However, RTD encourages and expects proposers to pursue

subcontracting, mentoring, joint venturing, teaming and partnering opportunities with SBE firms in the ordinary course of its business/teaming strategies. To date, RTD has achieved greater than 20% SBE participation on its overall FasTracks SBE Program. Proposers are encouraged and expected to create a level playing field to the maximum practicable extent consistent with the objectives and requirements of the RTD SBE **program based on federal regulations codified at 49 CFR Part 26 and RTD's SBE Program Policy**. Therefore, proposers are requested to document their efforts to include SBEs in this contracting opportunity, if any. Proposers are also requested to explain in their executive summary how they intend to utilize and/or will encourage subcontracting, mentoring, joint venturing and/or partnering opportunities with SBEs for this project. Furthermore, proposers are to submit a general workforce breakdown for their company (including affiliates) and the project specifically (Enclosure 5: Employer Certification of Workforce). RTD is interested in your strategies and approach to seeking diversity in the proposer team to include SBEs, minorities and women in all phases of subcontracting, supplier and workforce opportunities associated with the Contract. RTD is an equal opportunity employer and also operates a successful Small Business Opportunity Office. Therefore, RTD expects proposers to demonstrate the same meaningful level of commitment to diversity from businesses **that participate in RTD's procurement process**.

- G. Proposals shall be valid for a duration of no less than 90 days from proposal due date.

GENERAL INSTRUCTIONS

A. General. The Contractor shall be responsible for repairing and replacing coping panels related to the Transportation Expansion (TREX) as needed. The work includes mobilization of equipment and manpower to the TREX Southeast Corridor (SEC) light rail line. Performance shall commence as of the date specified in the notice to proceed or, if no date is specified, upon **Contractor's receipt of notice to proceed, and shall** continue for one (1) year.

1. Brand Name or Equal. If an item in this RFP is identified as "brand name or approved equal," the purchase description reflects the characteristics and level of quality that will **satisfy RTD's needs. The salient physical, functional, or performance** characteristics that "approved equal" products must meet are specified in the RFP. To be considered for award, offers of "approved equal" products, including "approved equal" products of the brand name manufacturer, must meet the salient physical, functional, or performance characteristic specified by this RFP; clearly identify the item by brand name, if any, and make or model number; include descriptive literature such as illustrations, drawings, or a clear reference to previously furnished descriptive data or information available to the Contracting Officer; and clearly describe any modifications the proposer plans to make in a product to make it conform to the RFP requirements. The proposer must also mark any descriptive material to clearly show such modifications. RTD will evaluate "approved equal" products on the basis of information furnished by the proposer. Requests for approved equals must be received by the Purchasing Agent Eva Boyd by email during the Inquiry Period stated in the RFP Schedule. Any request for an approved equal must be fully supported with technical data, test results, or other pertinent information as evidence that the substitute offered is equal to or better than the Specifications requirement. In addition, any test requirements in the Specifications that pertain to an item under consideration for approved equal must be submitted with the request for approved equal. Decisions of RTD shall be reduced to writing by the Purchasing Agent and shall be final. Responses to requests for approved equals will be issued by Addendum per the RFP Schedule date for responses to questions.

2. **The Proposal Contents Checklist, Part 2 of the RFP, is included for the proposer's** convenience. Each proposer is solely responsible for submitting any necessary forms and certifications that may be required by the RFP.

3. Part 4 of this RFP is a copy of the Contract contemplated for award substantially in the form to be executed.

4. A list of all holders of the RFP is available for view and/or print on the RTD website. The list is obtainable from the RFP advertisement date through the RFP close date.

B. Addenda to RFP. In the event that it becomes necessary to revise any part of this RFP, or if additional information is necessary to enable potential proposers to make an adequate interpretation of the provisions of this RFP, an addendum to the RFP will be provided to each recipient of this RFP.

C. Inquiries. Questions about RTD and this RFP shall be directed by email, to:

Eva Boyd, Purchasing Agent
Regional Transportation District
1660 Blake St.
Denver, CO 80202-1399
FAX: 303.299.2010
Eva.Boyd@rtd-denver.com

- a. From the issuance date of this RFP until RTD selects a proposal for award, Eva Boyd, Purchasing Agent is the sole point of contact for RTD and **RTD's project** team members concerning this RFP. (In this RFP and the Contract Documents, this point of contact may be referred to as the Contract Administrator, Contracting Officer, Purchasing Agent, Buyer, or the like.) Any violation of this condition may be **cause for RTD to reject the offending proposer's proposal**. If RTD later discovers that the proposer has engaged in any violations of this **condition, RTD may reject the offending proposer's proposal or rescind its** Contract award. Proposers must agree not to distribute any part of their proposals beyond RTD. A proposer that shares information contained in its proposal with other RTD personnel, RTD project team members, RTD board members, and/or competing proposer personnel may be disqualified.
- b. **Proposers' questions** must be submitted in writing via e-mail submission. All requests for clarifications and/or changes to the form of the Contract, including suggested changes to the Terms and Conditions, must be made during the Inquiry Period. RTD has no obligation to respond to questions or requests for clarifications or amendments that are not submitted in writing, nor to those **submitted outside of the Inquiry Period**. **Except as provided below, RTD's** responses to all inquiries properly submitted will be answered in the form of an addendum that will be provided to all recipients of this RFP.
- c. If the RFP Schedule provides for a pre-**proposal briefing ("Briefing")**, RTD will not respond to any questions regarding the RFP until the Briefing. Firms that have received this RFP, whether present for the Briefing or not, will receive: (1) a copy of the minutes; (2) answers to all questions presented; (3) a listing of all recipients of the RFP (current to date of Briefing), and (4) a copy of the sign-in sheet from the Briefing.

PROPOSALS

A. Submission Requirements.

1. Any alteration, insertion, or erasure by the proposer in the form of the RFP documents as originally prepared by RTD shall render the accompanying proposal non-responsive and may constitute cause for rejection. Conditional proposals or those that take exception to the RFP documents or Scope of Work may be treated as non-responsive.

2. Proposal Submission. **RTD's** Purchasing Agent must receive:

- a) One emailed copy of the technical proposal in Adobe PDF format that is in compliance with The Rehabilitation Act of 1973, 29 USC 701, Section 508, which requires that the document be readable by all, including those with disabilities, and marked as such;
- b) **One "Open Records" copy of your technical and cost proposals** per the Colorado Open Records Act, C.R.S. § 24-72-200.1 et seq. (as amended), in Adobe PDF format that is in compliance with The Rehabilitation Act of 1973, 29 USC 701, Section 508, which requires that the document be readable by all, including those with disabilities, marked as such and saved as separate documents;
- c) One emailed copy of Attachment A – Cost Submittal Form, in Excel format.
- d) One emailed copy of each of the RTD-required submissions contained in Part 2., Forms to be Completed and Submitted with Proposal.

Your proposal must be received no later than the time and date set forth in the RFP Schedule. Proposals received by RTD after the time and date specified shall be considered non-responsive and shall be returned unopened to the proposer.

3. Signatures. Proposals must be signed by a duly authorized official of the firm. Proposals submitted by consortiums, joint ventures, or teams, although permitted and encouraged, will not be considered responsive unless it is established that all contractual responsibility rests solely with one contractor or one legal entity which shall not be a subsidiary or affiliate with limited resources. Each submittal should indicate the entity responsible for execution on behalf of the consortium, joint venture, or team.

4. Proposal Format.

- a) Technical proposals should not exceed 30 single-sided pages. (One "page" is defined as one standard 8½ x 11-inch sheet of paper in Times New Roman, in no less than 12-point font.) All charts, graphic displays, *etc.*, must be of readable size. Foldouts to illustrate particular items are permitted but will be included in page count. Cover letters should be no longer than two pages.
- b) Submission of standard promotional material and corporate literature not specifically requested by RTD is discouraged. Any such information may not be fully considered in the evaluation.

B. Content Requirements.

1. All proposals must include the signed Addenda acknowledgement included with Part 2, where the proposer should list all addenda received. Failure to provide this acknowledgement form or list addenda may cause the proposal to be rejected as non-responsive.
2. In addition to any information required elsewhere in this RFP and in the Scope of Work, all proposals shall contain and will be evaluated based on the following sections:

- a) A cover letter (maximum two pages) briefly describing the firm or firms (including subcontractors, if any) on the proposed project team, referencing the RFP by name and number.
 - b) A detailed technical proposal (maximum 30 pages) in narrative form describing the proposer and proposed team. Proposals shall include the following items in the order listed below and shall not exceed 30 pages, excluding attachments. Items that will not be counted in the 30-page limit are: **the firm's cover letter, résumés, and certifications.** Proposals shall address the following:
 - (i) Previous experience of the proposed team (including subcontractors) and key personnel in performing on projects of a similar nature and scope.
 - (ii) A demonstrated ability to perform under the Contract.
 - c) Supplemental project information appendix, including:
 - (i) Description, including name of client, of at least two recent projects that demonstrate successful completion of projects of similar nature and scope. Clients may be contacted for references.
 - (ii) An organizational chart for each firm on the proposed team and résumés for all staff listed on the organizational chart.
 - (iii) Résumés of all proposed key personnel and the availability during Contract performance periods of all key personnel.
 - d) Completed forms and certifications required by the RFP.
 - e) Contract Cost Proposal, as described below.
- C. Contract Cost Proposal. Each proposer shall submit Attachment A – Cost Submittal Form (Excel format) in a separated emailed document, one copy only of the information required below:
- 1. Cost proposals must clearly identify pricing proposed for the type of Contract to be awarded.
 - 2. All supporting documentation for the cost proposal, including, without limitation:
 - a) Information demonstrating to RTD that the proposer has the necessary financial resources to perform the Contract. This information should include:
 - (i) Financial statement for the last three years (or since the entity commenced operations, if less than three years). The most recent financial statements must **include either an Auditor's Report Letter or an Accountant's Review Letter. The financial statements shall include Balance Sheets, Statements of Income and Stockholder's Equity, and a Statement of Change in Financial Position. If the proposer is a parent or subsidiary of another entity, consolidated financial statements are also required.**
 - (ii) Un-audited balance sheets of the proposer and un-audited balance sheets of proposer and its subsidiaries, if any, for interim quarterly periods since the close of its last fiscal year.

- b) Names of banks or other financial institutions with which the proposer conducts business; and
 - c) Letter of credit commitments (if any).
- D. Only One Proposal Accepted. RTD will accept only one proposal for the Work from any one proposer. This includes proposals that may be submitted under different names by one firm or corporation.

AWARD PROCESS

- A. Evaluation Criteria. Proposals will be evaluated according to the following criteria, listed in descending order of importance:

1. Cost.	50%
2. Ability to provide the services including developing a timeline, budgeting, planning, software customization, team training, scheduling and production.	20%
3. Approach to accomplishing the expectations stated above, ensuring that entire scope of services is fully executed to the satisfaction of RTD's worksheet results .	10%
4. Past relevant experience with the subject matter. Consider references. Experience working with government entities a plus.	10%
5. Qualifications of staff.	10%

- B. Notification to Successful Proposer. Award decisions of RTD shall be reduced to writing by the Director of Contracting and Procurement, or delegate, and shall be final. RTD will notify the successful proposer, if any, by sending a notice of intent to award, which is subject to any required RTD approval. Following RTD approval, the Contracting Officer will initiate the Contract signature process and then issue the notice to proceed with the executed Contract.
- C. Notifications to Unsuccessful Proposers.
1. Pre- and Post-Award Notices of Exclusion. The Purchasing Agent shall notify unsuccessful proposers in writing of exclusion from award. Requests for a debriefing must be submitted to the Purchasing Agent by email within three days of receipt of such notice. Debriefings requested for and provided prior to Contract award shall **address only the requesting proposer's proposal**; post-award debriefings may address all proposals submitted. Only one pre-award or post-award debriefing shall be provided per proposer.

2. Protests. Protests related to this RFP must be submitted by email to the Purchasing Agent and will only be accepted from proposers whose direct economic interest would **be affected by the award of a Contract or failure to award a Contract**. Copies of RTD's protest procedures are available upon request to the Purchasing Agent. Proposers **must exhaust all administrative remedies prescribed by RTD's protest procedures** before proceeding to court.

LEGAL NOTICE TO PROPOSERS

A. Organizational Conflict Of Interest.

1. The proposer shall review the attached Organizational Conflicts of Interest Disclosure Requirements and submit its Organizational Conflicts of Interest Certification with the proposal.
2. If the proposer prepared or assisted RTD in the preparation of a statement of work, work program, or system specifications to be used in a competitive procurement by RTD, the proposer will be ineligible to supply the same in connection with this Contract. The proposer may otherwise compete for RTD business on an equal basis with other parties.
3. Except as provided above, if RTD determines that a potential conflict exists, the proposer shall be excluded from award unless the conflict can be avoided or otherwise resolved through the inclusion of a special Contract provision or other appropriate means.

B. Insurance and Bond Requirements. Proposers' attention is directed to the insurance and bond requirements prescribed in Exhibit 2 to the Terms and Conditions. It is highly recommended that proposers confer with their insurance carriers or brokers in advance of proposal submission to determine the availability of bonds, insurance certificates and any endorsements.

C. News Releases. RTD's written approval is required prior to any communication with the press or any public disclosure relating to this RFP or any subsequent awards.

D. Pre-Award Audit. RTD reserves the right to conduct a pre-award audit to verify labor rates, overhead rates, *etc.* should RTD determine that such an audit is required prior to negotiation or award of a Contract.

E. Cost of Proposal Preparation. RTD shall not reimburse proposers for costs incurred for preparation of proposals or required documentation.

F. Materials Submitted. All materials submitted shall become the property of RTD and will not be returned to the proposer.

G. Confidentiality. RTD is a public entity subject to the provisions of the Colorado Open Records Act, C.R.S. § 24-72-200.1 et seq. ("**CORA**"), and all materials submitted with this RFP, with the exception of trade secrets, privileged information, and confidential commercial, financial, geological, or geophysical data pursuant to C.R.S. § 24-72-204(3)(a)(IV), may become public records subject to inspection by the public at any time

after the Contract is executed. Therefore, any confidential or proprietary information that the proposer discloses to RTD with respect to this RFP must be clearly designated as confidential or proprietary at the time of disclosure by the proposer to RTD. RTD shall not disclose properly designated information unless such information is required to be disclosed by law or court order. In the event of a legal challenge to the confidentiality of records so designated by the proposer, RTD shall make reasonable efforts to notify the proposer prior to disclosing any such information, and in some cases may tender to the proposer the defense of any action filed. By submitting a proposal under this RFP, the proposer agrees to accept such tender of defense and in all cases assumes exclusive responsibility for defending its position as to the confidentiality of the requested information. RTD is not obligated to assist in such defense and cannot and does not guarantee that the confidentiality of records so designated will be upheld by a reviewing court. If the proposer fails to submit a copy of its proposal that may be released under CORA, the proposer acknowledges that RTD has the authority to disclose, and may disclose in its discretion, any non-designated information contained in the proposal in response to a CORA request.

H. Rights Reserved to RTD.

1. All proposers are notified that the execution of a Contract pursuant to this RFP is dependent upon negotiation of a mutually acceptable Contract with the successful **proposer(s) and subsequent appropriation by RTD's Board of Directors of the necessary funds**. Successful proposers must be prepared to execute the Contract (as may be amended by the issuance of Addenda) that is provided with this RFP. RTD has no obligation to accept requested changes to the form of the Contract terms beyond the Inquiry Period, and no changes will be made after award to the successful proposer(s) (other than in respect of typographical errors).
2. It is the intent of RTD to make an award within 60 days from the proposal due date; however, all proposals shall be valid for no less than 90 days.
3. RTD reserves the right to reject all offers and re-solicit or cancel this RFP if deemed by RTD to be in its best interest.
4. RTD reserves the right to enter into a Contract with any proposer based upon the initial proposal or on the basis of a best and final offer without conducting oral discussions.

I. Prohibited Interests. No employee of RTD or any member of its governing body shall have any personal or financial interest, direct or indirect, in this Contract or any contract executed subsequently in connection with this Contract during his or her tenure or for one year thereafter. No director, officer, employee, or agent of RTD shall be interested in any contract or transaction with RTD except in his or her official representative capacity.

J. Competition in Subcontracting. Proposers shall select subcontractors (including suppliers) on a competitive basis to the maximum practicable extent consistent with the objectives and requirements of any Contract awarded.

K. Personnel Availability. By submitting its proposal, the proposer certifies that it and each of its subcontractors possess an adequate supply of workers qualified to perform the work specified within the Contract schedule; that there is no existing or impending dispute

between it and any labor organization; and that it is prepared to comply fully with prevailing wage requirements, minimum wages, maximum hours of work, and equal opportunity provisions contained in the Contract Terms and Conditions.

PART 2

PROPOSAL CONTENTS CHECKLIST

PROPOSAL CONTENTS CHECKLIST

Your submitted proposal must contain the following items in emailed form, in this order. See the Instructions to Proposers (Part 1) for details.

- ☐ Cover Letter (Maximum 2 Pages)
- ☐ Addenda Acknowledgement Form
- ☐ Technical Proposal (Maximum 30 Pages)
 - ☐ One emailed copy of the technical proposal in Adobe PDF format that is in compliance with The Rehabilitation Act of 1973, 29 USC 701, Section 508, which requires that the document be readable by all, including those with disabilities, and marked as such
 - ☐ **One "Open Records" copy of your technical proposal per the Colorado** Open Records Act, C.R.S. § 24-72-200.1 et seq. (as amended) in Adobe PDF format that is in compliance with The Rehabilitation Act of 1973, 29 USC 701, Section 508, which requires that the document be readable by all, including those with disabilities, marked as such
- ☐ Attachment A-Cost Submittal Form (Excel format)
- ☐ Certification Regarding Organizational Conflict of Interest
- ☐ W-9 Taxpayer Identification Number Request Form
- ☐ Solicitation Statistics

* Items In Bold Have Been Provided.

ACKNOWLEDGMENT OF ADDENDA RECEIVED

The undersigned acknowledges receipt of the following addenda to RTD Request for Proposals documents (give number and date of each):

Addendum Number _____ Dated: _____

Addendum Number _____ Dated: _____

Addendum Number _____ Dated: _____

Addendum Number _____ Dated: _____

Addendum Number _____ Dated: _____

Addendum Number _____ Dated: _____

Failure to acknowledge receipt of all addenda may cause the proposal to be considered non-responsive to the request, which would require rejection of the proposal.

The undersigned understands that any condition stated above, clarification of the above, or information submitted on or with this form other than requested will render the proposal non-responsive.

Proposer Name: _____

Address: _____

By: _____

Signature of Authorized Official

Title:

Date:

ORGANIZATIONAL CONFLICTS OF INTEREST DISCLOSURE REQUIREMENTS

(a) Organizational conflict of interest means that, because of other activities or relationships with other persons, a person is unable or potentially unable to render impartial assistance or advice to RTD, or the person's objectivity in performing the Work is or might be otherwise impaired, or a person has an unfair competitive advantage.

(b) Each firm responding to the RFP shall provide the statement described in paragraph (c). **This requirement will apply individually to any of the firm's consultants or lower-tier subcontractors that also furnish Work in performance of the Contract to be awarded.**

(c) The statement must contain the following:

(1) Name of the firm and the number of the RFP in question.

(2) The name, address, telephone number, and federal taxpayer identification number, if applicable, of the firm.

(3) A description of the nature of the Work rendered by or to be rendered on the Contract or related to the Contract.

(4) A statement of any past (within the past 12 months), present, or currently planned financial, contractual, organizational, or other interests relating to the performance of the Contract. For contractual interests, such statement must include the name, address, and telephone number of the client or client(s), a description of the services rendered to the previous client(s), and the name of a responsible officer or employee of the firm who is knowledgeable about the services rendered to each client, if, in the 12 months preceding the date of the statement, services were rendered to RTD or any other client respecting the same subject matter of the RFP or directly relating to such subject matter. The client and contract number under which the services were rendered must also be included, if applicable. For financial interests, the statement must include the nature and extent of the interest and any entity or entities involved in the financial relationship. For these and any other interests, enough information must be provided to allow a meaningful evaluation of the potential effect of the interest on the performance of the Contract.

(5) A statement that no actual or potential conflict of interest or unfair competitive advantage exists with respect to the Work to be provided in connection with the Contract or that any actual or potential conflict of interest or unfair competitive advantage that does or may exist with respect to the Contract or related to the Contract has been communicated as part of the statement required by section (c).

(d) Failure of a firm to provide the required statement may result in the firm being determined ineligible for award. Misrepresentation or failure to report any fact may result in the assessment of penalties associated with false statements or such other provisions provided for by law or regulation.

ORGANIZATIONAL CONFLICT OF INTEREST CERTIFICATION

The proposer ☐ is ☐ is not aware of any information bearing on the existence of any potential organizational conflict of interest as described in the Disclosure Requirements on the previous page.

If the proposer is aware of information bearing on whether a potential conflict may exist, the proposer shall provide a disclosure statement describing this information as described in the Disclosure Requirements on the previous page.

Signature _____

Title _____

Date _____

Form W-9 Taxpayer Identification Number Request (Use this form to obtain TIN for payments of interest, dividends, or Form 1099-B gross proceeds)

To: _____ Account: _____

Please complete the following information. We are required by law to obtain this information from you when making a reportable payment to you, and because the payment is reportable on an information return to the IRS, you are required by law to provide your correct Social Security Number or Employer Identification Number to us. If you do not provide us with this information, your payments may be subject to 30% federal income tax backup withholding (29% after December 31, 2003). Also, if you do not provide us with this information, you may be subject to a \$50 penalty imposed by the Internal Revenue Service under section 6723.

Federal law on backup withholding preempts any state or local law remedies, such as any right to a mechanic's lien. If you do not furnish a valid TIN, or if you are subject to backup withholding, the payer is required to withhold 30% of its payment to you (29% after December 31, 2003). Backup withholding is not a failure to pay you. It is an advance tax payment. You should report all backup withholding as a credit for taxes paid on your federal income tax return.

Use this form only if you are a U.S. person (including U.S. resident alien). If you are a foreign person, use the appropriate Form W-8.

- Instructions:**
1. Complete Part 1 by completing the one row of boxes that corresponds to your tax status.
 2. Complete Part 2 if you are exempt from Form 1099 reporting.
 3. Complete Part 3 by filling in all lines.
 4. Return this completed form to us in the enclosed envelope.

Part 1 - Tax Status: (complete only one row of boxes)

Individuals:
(Fill out this row.)

Individual Name: (First name, middle initial, last name) _____	Individual's Social Security Number ____-____-____
---	---

A sole proprietorship may have a "doing business as" trade name, but the legal name is the name of the business owner.

Sole Proprietor
(or an LLC with one owner):
(Fill out this row.)

Business Owner's Name: (REQUIRED) _____ (First name) (Middle Initial) _____ (Last name)	Business Owner's Social Security Number ____-____-____ Or Employer ID Number ____-____-____	Business or Trade Name (OPTIONAL) _____ _____
---	---	---

Partnership
(or an LLC with multiple owners):
(Fill out this row.)

Name of Partnership: _____ _____	Partnership's Employer Identification Number ____-____-____	Partnership's Name on IRS records (see IRS mailing label) _____ _____
--	--	--

A corporation may use an abbreviated name or its initials, but its legal name is the name on the articles of incorporation.

Corporation, or Tax

Name of Corporation or Entity: _____ _____	Employer Identification Number ____-____-____
--	--

Exempt Entity
(Fill out this row.)

Part 2 - Exemption: If exempt from reporting, check your qualifying exemption reason below:

- ☐ Corporation
Note that there is no corporate exemption for medical and healthcare payments or payments for legal services.
- ☐ Tax Exempt Entity
under 501(a)
(includes 501(c)(3), or IRA)
- ☐ The United States
or any of its
agencies or
instrumentalities
- ☐ A state, the District of
Columbia, a possession
of the United States, or
any of their political
subdivisions or agencies
- ☐ A foreign government or any
of its political subdivisions or
an international organization
in which the United States
participates under a treaty
or Act of Congress

Part 3 - Certification: Under penalties of perjury, I certify that:

1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me), **and**
2. I am not subject to backup withholding because: **(a)** I am exempt from backup withholding, or **(b)** I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or **(c)** the IRS has notified me that I am no longer subject to backup withholding **and**
3. I am a U.S. person (including a U.S. resident alien).

Certification Instructions - You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return.

Person completing this form: _____

Signature: _____ Date: _____ Phone: (_____) _____

Address: _____ City: _____ State: _____ ZIP: _____

SOLICITATION STATISTICS

RTD must create and maintain proposers' statistics, consisting of all firms proposing on prime contracts and proposing or quoting subcontracts on DOT-assisted projects per 49 CFR Part 26.11. We suggest you make copies of this form and send with your initial contact to the subcontractor(s) (both DBEs and non-DBEs) and ask them to return the filled-out form with their proposal to you. (A DBE is a Disadvantaged Business Enterprise, a firm that is 51% owned/operated by a woman or minority and certified.) You will then include these with your proposal, as well as your copy of this form.

This information will be used for statistical information only.

Firm Name: _____

Firm Address: _____

Status: Non-DBE ____ DBE ____

Type of Work Proposed On: _____

Month/Year firm started: _____

Ethnic Background:

____ Asian
____ Black
____ Hispanic
____ Native American
____ White Female
____ White Male
____ Other _____

Annual Gross Receipts of the Firm: (check one)

0 to \$500,000 ____

\$500,000 - \$1,000,000 ____

\$1 Million - \$5 Million ____

\$5 Million - \$10 Million ____

\$10 Million - \$16.7 Million ____

Above \$16.7 Million ____

Solicitation Number: _____

FOR EMPLOYER CERTIFICATION OF WORKFORCE

Please note that this data may be obtained by visual survey or post-employment records. Neither visual surveys nor post-employment records are prohibited by Federal, State or local law. All specified data are required to be filled in by law.

Current utilization as of _____

Job Categories	Total Employees in Establishment			Black		Hispanic		American Indian & Alaskan		Asian		Other	
	Total Employees Including Minorities (1)	Total Male Employees Including Minorities (2)	Total Female Employees Including Minorities (3)	Male (4)	Female (5)	Male (6)	Female (7)	Male (8)	Female (9)	Male (10)	Female (11)	Male (12)	Female (13)
Officials & Managers													
Professionals													
Technicians													
Sales													
Office & Clerical													
Craft Workers (skilled)													
Operatives (semi-skilled)													
Labors (unskilled)													
Service Workers													
TOTAL													

The undersigned certified that he/she is legally authorized by the proposer to make the statements and representations contained in this report; that he/she has read all of the foregoing statements and representations and they are true and correct to the best of his/her knowledge and belief. The undersigned understands that if any of the statements and representations are made knowing them to be false or there is a failure to implement any of the stated intentions or objectives set forth herein without prior notice to RTD, the proposer will be subject to the loss of all future awards.

Firm or Corporate Name _____

Address of Office Reporting _____

Signature _____

Date of Signing _____

DESCRIPTION OF JOB CATEGORIES

Officials and manager – Occupations requiring administrative personnel who set board policies, exercise full responsibility for execution of these policies, and individual departments or special phases of the operations.

Professionals – Occupations requiring either college education or experience of such kind and amount as to provide a comparable background.

Technicians – Occupations requiring a combination of specific scientific knowledge and manual skill which can be obtained through about 2 years of post-high school education, such as is offered in many technical institutes and junior colleges, or through equivalent on-the-job training.

Sales – Occupations engaging wholly or primarily in selling.

Office and clerical – Includes all clerical-type work, regardless of level of difficulty, where the activities are predominately non-manual though some manual work directly involved with altering or transporting the products is included.

Craft Worker (skilled) – Manual workers of relatively high skill level having a thorough and comprehensive knowledge of the processes involved in their work. Exercises considerable independent judgment and usually requires an extensive period of training.

Operatives (semi-skilled) – Workers who operate machines or processing equipment or perform other factory-related duties of intermediate skill level

which can be mastered in a few weeks and require only limited training.

Laborers (unskilled) – Workers in manual occupations which generally require no special training perform rudimentary duties that may be learned in a few days and require the application of little or no independent judgment.

Service Workers – Workers in both protective and unprotective service occupations.

RACE/ETHNIC IDENTIFICATION

White (not Hispanic origin) – All persons having origins in any of the original peoples of Europe, North Africa, or the Middle East.

Black (not Hispanic origin) – All persons having origins in any of the Black racial groups of Africa.

Hispanic – All persons of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race.

Asian or Pacific Islander – All persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands. This area includes, for example, China, Japan, Korea, the Philippine Islands and Samoa.

Native American – All persons having origins in any of the original peoples of North American, and who maintain cultural identification through tribal affiliation or community recognition

PART 3
SCOPE OF WORK SERVICES

REGIONAL TRANSPORTATION DISTRICT

TREX COPING PANEL REPAIR/REPLACEMENT/PROJECT

SUMMARY

The Contractor shall be responsible for the RTD TRENCH Coping Panel Repair and Replacement as needed. The work includes mobilization of equipment and manpower to the TRENCH South East corridor (SEC) light rail line. Contractor shall install stainless steel threaded rod into all applicable coping panels along the SEC light rail line as indicated in the Contract Specifications.

GENERAL

- a) The Contractor shall have limited use of the Project site for construction operations as indicated in the Contract Specifications.
- b) The Contractor shall limit use of the Project site to areas within the Contract limits indicated. The Contractor shall not disturb portions of Project site beyond areas in which the work is indicated.
- c) RTD will suspend LRT service for the work duration via manual blocks. Adjacent track will be active/operational under a slow order.
- d) The Contractor is responsible for obtaining all necessary materials as indicated in the Contract Specifications, as well as performing pull tests per the Contract Specifications.
- e) The Contractor is also responsible for securing panels as needed for worker safety. Structural shoring will be required for the Project.
- f) All Contractor subcontractor personnel who will be working on site will obtain RTD's On Track Safety Training prior to accessing the Project site.
- g) Use of controlled substances on the Project site is not permitted under any circumstances.
- h) The Contractor shall be qualified/trained and proficient in the work requirements listed within this Contract.
- i) The Contractor proposal should include a Baseline schedule to complete the work specified in this Contract.
- j) All work shall be done in a manner of workmanship that shall reflect full journeyman capabilities in the required trade and meets industry standards.
- k) The Contractor will also be responsible for the removal of all trash, removed/replaced parts and or debris the Contractor generates daily to a location off RTD property; all discarded material will be disposed of per applicable EPA regulations.
- l) The Contractor will be responsible for all measurements needed to build, procure, repair, and install all products.
- m) The Contractor shall not assume the Overhead Contract System (OCS) will be removed for access. Contractor shall verify with RTD MOW that the OCS is de-energized in the

work zone. This shall be completed at the beginning of every shift during the required safety briefing.

- n) The Contractor will be responsible for verifying equipment needed for the work will fit through access gate areas. Constricted areas may require Hi-Rail equipment.
- o) All prospective proposers shall have a representative attend the mandatory pre-bid site walk at a date and time to be announced by RTD.

SCOPE OF WORK

- a) The project is located along RTD's SEC light rail line, between the Broadway and Lincoln stations.
- b) The intent of this scope of work is to augment the existing coping panels with additional stainless-steel threaded rods. Should funding allow, two additional add-alternate projects will be added to the scope of work. The first of these shall be the removal and replacement of the existing caulking of the coping panels and the second will consist of placement of stainless-steel identification tags on the face of each coping panel.
- c) Work is to be completed on all track-way work within the consecutive calendar days agreed upon by RTD. It is anticipated that this project will take five to seven months to complete depending on site conditions/weather, with working hours of 7:00 a.m. to 7:00 p.m. Monday through Sunday. Extended hours and shifts to be agreed upon by RTD.
- d) The Contractor shall protect all existing utilities/rail/ballast in place. The Contractor is responsible for calling the Utility Notification Center of Colorado (UNCC) and hiring a private locate company to locate RTD and any other utilities prior to commencement of construction.
- e) Upon completion, the RTD Project Manager or his/her designee will inspect the work for compliance with the Issued for Construction Drawings.
- f) The Contractor shall provide RTD with P.E. stamped drawings and calculations regarding coping panel bracing.
- g) After construction is complete, RTD will inspect and sign off on the Certifiable Items List generated by RTD prior to opening rail service. The Contractor shall immediately address any concerns identified during this inspection.
- h) Contractor shall hold daily safety meetings prior to work commencing. All Contractor and subcontractor personnel shall be required to attend the daily safety meeting in order to engage in work on the Project site.
- i) The Contractor shall only be allowed to work within manual blocks set up by RTD MOW. If the Contractor wishes to dedicate additional forces to completing the work, it may be possible to work in more than one manual block at a time; however, this will need to be discussed and approved by RTD MOW prior to starting work.
- j) There are at minimum three panels that have fallen which need to be re-attached or replaced (pre-cast or cast in place).

- k) The Contractor will be required to submit a MOW Access Permit at least one week prior to starting work and will also be required to attend the Access Permit meeting every Wednesday while the work is progressing.
- l) The Contractor shall follow the RTD BGAP process if it wishes to store materials or equipment on RTD property while the work is progressing. A separate BGAP will be required for each location the Contractor uses for staging.
- m) The Contractor is hereby notified that RTD MOW will be performing TREX Coving Panel Repair/Replacement work on the SEC corridor during the third shift or overnight timeframe. The Contractor shall coordinate with RTD MOW to ensure no overlap of work areas.

SPECIAL PROVISIONS TREX Wall Coping Repair

The 2021 Colorado Department of Transportation Standard Specifications for Road and Bridge Construction ("Standard Specifications") (available at <https://www.codot.gov/business/designsupport/cdot-construction-specifications/2021-construction-specifications/2021-specs-book>) controls construction of this project and is incorporated by reference herein in its entirety."

PROJECT SPECIAL PROVISIONS

	<u>Date</u>	<u>Pages</u>
Revision Of Section 107 - Performance Of Safety Critical Work	(October 1, 2021)	12-13
Revision Of Section 210 – Rebuild Portions of Present Structure	(October 1, 2021)	14
Revision Of Section 240 Protection Of Migratory Birds Biological Work Performed By The Contractor's Biologist	(October 1, 2021)	15-17
Revision Of Section 504 - Retaining Wall Coping Anchors	(October 1, 2021)	18-20

REVISION OF SECTION 107 PERFORMANCE OF SAFETY CRITICAL WORK

Section 107 of the Standard Specifications is hereby revised as follows:

Add subsection 107.061 immediately following subsection 107.06 as follows:

107.061 Performance of Safety Critical Work. The following work elements are considered safety critical work for this project:

- (1) Item 504 – Retaining Wall Coping Anchor – performed on coping sections identified as unstable either prior to or during the work
- (2) Item 504 – Retaining Wall Coping Anchor (Special) – performed on coping sections identified as unstable either prior to or during the work
- (3) Item 210 – Rebuild Portions of Present Structures
- (4) Temporary works: falsework, shoring that exceeds 5 feet in height
- (5) Work requiring the use of cranes or other heavy lifting equipment to set replacement coping, or to make overhead repairs. Also when construction materials are being lifted that may fall onto active traffic lanes or RTD Light Rail Tracks.

The Contractor shall submit, for record purposes only, an initial detailed construction plan that addresses safe construction of each of the safety critical elements. The detailed construction plan shall be submitted two weeks prior to the safety critical element conference described below. The **construction plan shall be stamped "Approved for Construction" and signed by the Contractor**. The construction plan will not be approved by the Engineer.

The Construction Plan shall include the following:

- (1) Safety Critical Element for which the plan is being prepared and submitted.
- (2) Contractor or subcontractor responsible for the plan preparation and the work.
- (3) Schedule, procedures, equipment, and sequence of operations that comply with the working hour limitations.
- (4) Additional actions that will be taken to ensure that the work will be performed safely, including but not limited to:
 - A. Work required for the safe repair, removal, or replacement of coping sections identified as unstable either prior to or during the work
 - B. Demolition or removal of coping sections identified as unstable beyond the level of the specified repair or requiring emergency removal
 - C. Precautions during coping removal to prevent damage to RTD tracks, roadway elements, or other coping sections
- (5) Temporary works required: falsework, bracing, shoring, etc.
- (6) Names and qualifications of workers who will be in responsible charge of the work:
 - A. Years of experience performing similar work
 - B. Training taken in performing similar work
 - C. Certifications earned in performing similar work
- (7) Names and qualifications of workers operating cranes or other lifting equipment:

- A. Years of experience performing similar work
- B. Training taken in performing similar work
- C. Certifications earned in performing similar work

REVISION OF SECTION 107 PERFORMANCE OF SAFETY CRITICAL WORK

- (8) The construction plan shall address how the Contractor will handle contingencies such as:
 - A. Procedure for immediate notification of CDOT and RTD of structurally unstable coping sections identified by the Contractor either prior to or during the work
 - B. Unplanned events (storms, traffic accidents, etc.)
 - C. Structural **elements that don't fit or line up**
 - D.
 - E. **Replacement of workers who don't perform the work safely**
 - F. Equipment failure
 - G. Other potential difficulties inherent in the type of work being performed
- (9) Name and qualifications of Contractor's **person designated to determine** and notify the Engineer and RTD Flaggers in writing when it is safe to open a route to traffic after it has been closed for safety critical work.

A safety critical element conference shall be held two weeks prior to beginning construction on each safety critical element. The Engineer, the Contractor, the safety critical element subcontractors, and the Contractor's **Engineer shall attend the conference.**

After the safety critical element conference, and prior to beginning work on the safety critical element, the Contractor shall submit a final construction plan to the Engineer for record purposes only. The Contractor's **Engineer shall sign and seal temporary** works, such as falsework, shoring etc., related to construction plans for the safety critical elements, (5) Temporary works required. The final construction **plan shall be stamped "Approved for Construction" and signed by the** Contractor.

The Contractor's **Engineer shall be on site to inspect and provide written approval of safety critical** work for which he provided signed and sealed construction details. Unless otherwise directed or approved, the Contractor's **Engineer need not be on site during the actual performance of safety critical** work, but shall be present to conduct inspection for written approval of the safety critical work.

When ordered by the Engineer, the Contractor shall immediately stop safety critical work that is being performed in an unsafe manner or will result in an unsafe situation for the traveling public. Prior to stopping work, the Contractor shall make the situation safe for work stoppage. The Contractor shall submit an acceptable plan to correct the unsafe process before the Engineer will authorize resumption of the work.

When ordered by the Engineer, the Contractor shall remove workers from the project that are performing the safety critical work in a manner that creates an unsafe situation for the public in accordance with subsection 108.05.

Should an unplanned event occur or the safety critical operation deviate from the submitted plan, the Contractor shall immediately cease operations on the safety critical element, except for performing any work necessary to ensure worksite safety, and provide proper protection of the work and the traveling public. If the Contractor intends to modify the submitted plan, he shall submit a revised plan to the Engineer prior to resuming operations.

All costs associated with the preparation and implementation of each safety critical element construction plan will not be measured and paid for separately, but shall be included in the work.

Nothing in this section shall be construed to relieve the Contractor from ultimate liability for unsafe or negligent acts or to be a waiver of the Colorado Governmental Immunity Act on behalf of the Department.

REVISION OF SECTION 210
REBUILD PORTIONS OF PRESENT STRUCTURES

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

Subsection 210.01 shall include the following:

This work consists of the removal and replacement of any coping sections as approved by the Engineer. Coping sections which can not be repaired as specified by the plans shall be removed and replaced using details provided in the Contract documents.

Subsection 202.02 shall include the following:

The Contractor shall submit to the Engineer details of coping removal and replacement operations showing the methods and equipment to be used in accordance with Section 107. .

Coping sections in good condition removed from structures may be re-used as determined by the Engineer. Non-salvable material which is not reused shall be disposed by the Contractor. All other material required for the repair shall be provided by the Contractor.

Portions of the existing retaining wall shall remain as approved by the Engineer. The Contractor shall take all steps necessary to prevent damage to any other retaining wall elements. Anchoring of the replacement sections shall conform to Section 504 – Retaining Wall Coping Anchors, and as directed by the Engineer.

Subsection 210.12 shall include the following:

The quantity to be measured **on an "each" basis shall be the actual** number of coping sections actually removed and replaced as approved by the engineer.

Subsection 202.13 shall include the following:

Payment will be made under:

Pay Item	Pay Unit
Rebuild Portions of Present Structure	Each

Payment will be full compensation for all work, equipment, and materials required to remove the coping sections.

SECTION 240
PROTECTION OF MIGRATORY BIRDS
BIOLOGICAL WORK PERFORMED BY THE CONTRACTOR'S BIOLOGIST

Section 240 is hereby added to the Standard Specifications for this project as follows:

DESCRIPTION

240.01 This work consists of protecting migratory birds during construction.

MATERIALS AND CONSTRUCTION REQUIREMENTS

240.02 The Contractor shall schedule construction activities, including clearing and grubbing operations and work on structures to avoid taking (pursue, hunt, take, capture, or kill; attempt to take, capture, kill or possess) migratory birds or their nests protected by the Migratory Bird Treaty Act (MBTA). The Contractor shall retain a qualified wildlife biologist for this project. The wildlife biologist shall have a minimum of three **years' experience** conducting migratory bird surveys and implementing the requirements of the MBTA. The Contractor shall submit documentation of the biologist's education and experience to the Engineer for acceptance. A biologist with less experience may be used by the Contractor subject to the approval of the Engineer based on review of the biologist's qualifications.

The wildlife biologist shall record the location of each protected nest, bird species, the protection method used, and the date installed. A copy of these records shall be submitted to the Engineer.

(a) Vegetation Removal. When possible, vegetation shall be cleared prior to the time when active nests are present. Vegetation removal activities shall be timed to avoid the migratory bird breeding season which begins on April 1 and runs to August 31. All areas scheduled for clearing and grubbing between April 1 and August 31 shall first be surveyed within the work limits for active migratory bird nests. The Contractor's wildlife biologist shall also survey for active migratory bird nests within 50 feet outside work limits. Contractor personnel shall enter areas outside RTD right of way only if a written, signed document granting permission to enter the property has been obtained from the property owner. The Contractor shall document all denials of permission to enter property. The Contractor shall avoid all active migratory bird nests. The Contractor shall avoid the area within 50 feet of the active nests or the area within the distance recommended by the biologist until all nests within that area have become inactive. Inactive nest removal and other necessary measures shall be incorporated into the work as follows:

1. Tree and Shrub Removal or Trimming. Tree and shrub removal or trimming shall occur before April 1 or after August 31 if possible. If tree and shrub removal or trimming will occur between April 1 and August 31, a survey for active nests shall be conducted by the wildlife biologist within the seven days immediately prior to the beginning of work in each area of tree and shrub removal or trimming. The survey shall be conducted for each phase of tree and shrub removal or trimming.

If an active nest containing eggs or young birds is found, the tree or shrub containing the active nest shall remain undisturbed and protected until the nest becomes inactive. The nest shall be protected by placing fence (plastic) a minimum distance of 50 feet from each nest to be undisturbed. This buffer dimension may be changed if determined appropriate by the wildlife biologist and approved by the Engineer. Work shall not proceed within the fenced buffer area until the young have fledged or the nests have become inactive.

SECTION 240
PROTECTION OF MIGRATORY BIRDS
BIOLOGICAL WORK PERFORMED BY THE CONTRACTOR'S BIOLOGIST

If the fence is knocked down or destroyed by the Contractor, the Engineer will suspend the work, wholly or in part, until the fence is satisfactorily repaired at the Contractor's expense. Time lost due to such suspension will not be considered a basis for adjustment of time charges, but will be charged as contract time.

2. Grasses and Other Vegetation Management. Due to the potential for encountering ground nesting birds' habitat, if work occurs between April 1 and August 31, the area shall be surveyed by a wildlife biologist within the seven days immediately prior to ground disturbing activities.

The undisturbed ground cover to 50 feet beyond the planned disturbance, or to the right of way line, whichever is less, shall be maintained at a height of 6 inches or less beginning April 1 and continuing until August 31 or until the end of ground disturbance work, whichever comes first.

If birds establish a nest within the survey area, an appropriate buffer of 50 feet will be established around the nest by the RTD representative. This buffer dimension may be changed if determined appropriate by the RTD Engineer. The Contractor shall install fence (plastic) at the perimeter of the buffer. Work shall not proceed within the buffer until the young have fledged or the nests have become inactive.

If the fence is knocked down or destroyed by the Contractor, the Engineer will suspend the work, wholly or in part, until the fence is satisfactorily repaired at the Contractor's expense. Time lost due to such suspension will not be considered a basis for adjustment of time charges, but will be charged as contract time.

- (b) Work on Structures. The Contractor shall prosecute work on structures in a manner that does not result in a taking of migratory birds protected by the Migratory Bird Treaty Act (MBTA). The Contractor shall not prosecute the work on structures during the primary breeding season, April 1 through August 31, unless he takes the following actions:

- (1) The Contractor shall remove existing nests prior to April 1
- (2) During the time that the birds are trying to build or occupy their nests, between April 1 and August 31, the Contractor shall monitor the structures at least once every three days for any nesting activity.
- (3) If the birds have started to build any nests, they shall be removed before the nest is completed. Water shall not be used to remove the nests if nests are located within 50 feet of any surface waters.
- (4) Installation of netting may be used to prevent nest building. The netting shall be monitored and repaired or replaced as needed. Netting shall consist of a mesh with openings that are $\frac{3}{4}$ inch by $\frac{3}{4}$ inch or less.

If an active nest become established, i.e., there are eggs or young in the nest, all work that could result in abandonment or destruction of the nest shall be avoided until the young have fledged or the nest is unoccupied as determined by the wildlife biologist and approved by the Engineer. The Contractor shall prevent construction activity from displacing birds after they have laid their eggs and before the young have fledged.

SECTION 240
PROTECTION OF MIGRATORY BIRDS
BIOLOGICAL WORK PERFORMED BY THE CONTRACTOR'S BIOLOGIST

If the project continues into the following spring, this cycle shall be repeated. When work on the structure is complete, the Contractor shall remove and properly dispose of netting used on the structure.

- (c) Taking of a Migratory Bird. The taking of a migratory bird shall be reported to the Engineer. The Contractor shall be responsible for all penalties levied by the U. S. Fish and Wildlife Service (USFWS) for the taking of a migratory bird.

METHOD OF MEASUREMENT

240.03 Wildlife Biologist will be measured by the actual authorized number of hours a wildlife biologist is on site performing the required tasks.

Removal of nests will be measured by the actual number of man-hours spent removing inactive nests just prior to and during the breeding season, April 1 through August 31. During this period, the Contractor shall submit to the Engineer each week for approval a list of the workers who removed nests and the number of hours each one spent removing nests.

Netting will be measured by the square yard of material placed to keep birds from nesting on the structure. Square yards will be calculated using the length of netting measured where it is attached to the ground and the average height of the netting where it is attached to the structure.

BASIS OF PAYMENT

240.04 The accepted quantities measured as provided above will be paid for at the contract unit price for each of the pay items listed below that appear in the bid schedule.

Payment will be made under:

Pay Item	Pay Unit
Wildlife Biologist	Hour
Removal of Nests	Hour
Netting	Square Yard

Payment for Wildlife Biologist will be full compensation for all work and materials required to complete the item, including wildlife biologist, wildlife survey, and documentation (record of nest location and protection method)

Payment for Removal of Nests will be full compensation for all work and material required to complete the work.

Payment for netting will be full compensation for all work and material required to complete the item. Overlaps of netting will not be measured and paid for separately but shall be included in the work. Maintenance and replacement, removal, and disposal of netting will not be measured and paid for separately but shall be included in the work.

Any Fence (Plastic) required will not be measured and paid for separately but shall be included in the work.

REVISION OF SECTION 504 RETAINING WALL COPING ANCHORS

Section 504 of the Standard Specification is hereby revised to include the following:

DESCRIPTION

This work consists of the installation of stainless-steel connections through the existing precast concrete copings at the top of existing retaining walls into the base (structural) concrete in accordance with the specifications and in conformity with the details shown on the plans.

MATERIALS

504.02 Threaded rods, hex nuts, lock washers, and washers shall be stainless steel Type 304 (18-8). Threaded rods shall conform to ASTM F593.

Anchoring adhesive shall be a two-component, epoxy-based or acrylic-based system supplied in manufacturer's standard cartridge and dispensed through a static mixing nozzle supplied by the manufacturer. The adhesive anchor shall have been tested and qualified for performance in cracked and uncracked concrete per ICC-ES AC308 and qualify under ACI 355.4.

A Certified Test Report (CTR) shall be provided to the Engineer three weeks prior to starting anchor installation. The CTR shall confirm the adhesive was evaluated in accordance of ICC-ES AC308, and therefore shown to provide resistance to long term creep when subjected to a sustained tensile load. Manufacturer's specifications shall show the adhesive is suitable for installations in concrete substrate temperatures of 15 degrees Fahrenheit or lower. Manufacturer's installation procedures for all conditions, including any special provisions for installing anchors in the adverse conditions of low temperatures and water-saturated holes, shall be submitted with the CTR. A separate CTR shall be submitted if a different adhesive will be used for substrate temperatures over 40 degrees. Adhesive materials shall not be ordered until approved by the Engineer.

Shims shall be made from a corrosion-resistant material such as multipolymer plastic and/or plastic lumber and shall be submitted to the Engineer for approval prior to ordering materials.

Epoxy(s) used to protect ends of threaded rods after cutting, bond shims together, and bond shims to existing concrete shall be applicable for saturated-concrete conditions and cold temperatures during installation. Proposed epoxy(s) shall be submitted to the Engineer for approval prior to ordering materials.

CONSTRUCTION REQUIREMENTS

Prior to construction, the Contractor shall submit a method statement for accessing the locations and installation of the anchors in accordance with Section 108.03 (a). The statement shall include safety precautions and equipment used to access and perform the work. The statement shall be submitted a minimum of 3 weeks prior to the start of the work. The statement will be reviewed by RTD for acceptance. Work shall not begin until the Engineer has provided the Contractor with written approval of the method statement.

The **Owner's inspector will** be on site for special inspection of anchor installation as well as determination of the structural adequacy of the base (structural) concrete for anchor installation. At the discretion of this inspector, the location of anchors may be revised from plan location, and additional anchors per coping panel may be required

2
REVISION OF SECTION 504
RETAINING WALL COPING ANCHORS

Anchor installation shall be performed by personnel certified by an applicable certification program. Certification shall include written and performance tests in accordance with the ACI/CRSI Adhesive Anchor Installer Certification program, or equivalent, as approved by the Engineer.

Installation shall be in **accordance with the manufacturer's printed installation instructions** appropriate for the existing conditions when performing the work.

The Contractor shall core drill through the thickness of precast concrete coping and expansion joint materials and grout, if present, to the face of base (structural) concrete as shown in the plans. Concrete core shall be removed prior to hammer drilling into base (structural) concrete to a minimum depth in accordance **with the manufacturer's installation instructions** but no less than a minimum of 4 inches. If reinforcing steel is encountered during hammer drilling, the Contractor may propose an alternative drilling method to be approved by the Engineer.

Upon completion of the drilling, the full depth of the hole shall be cleaned out in accordance with the **manufacturer's recommendations prior to installation of the** adhesive anchor. All cored and drilled hole dimensions shall meet the adhesive anchor manufacturer's recommendations. The stainless steel threaded rod shall be **mechanically cut such that its end will be recessed 1/2" below the face of the coping**. Torch cutting will not be allowed. The cut bar shall be installed and set into the adhesive such **that its end is recessed 1/2" below the face of the coping**. Installation of the anchored rod shall be completed within 24 hours of the coring of the coping or as approved by the Engineer.

Upon completion of the anchor installation, the cut surface of the bolt shall be coated with epoxy, and the bolt, recessed.

504.031 Tensile Proof Testing Of Anchors

At test locations, adhesive shall be placed to a depth only to fill the hole in the base (structural) concrete prior to installing the threaded rod. Adhesive shall not be placed in the hole in the coping prior to testing.

The frequency of anchors to be tested shall be as follows:

- (1) Upon initiation of the work, 2 anchors per crew shall be proof load tested during their initial shift. Anchor locations shall be designated by the Engineer at the beginning of that shift.
- (2) Subsequent tests shall be 1% of the anchors distributed equally as the work continues. Anchor locations to be proof load tested shall be designated by the Engineer at the beginning of the shift.
- (3) **Additional proof testing may be required by the Engineer due to a change in the Contractor's crew, installation procedure, or weather conditions.**
- (4) Upon observing a failed test, the Engineer may require two additional, consecutive passing test locations prior to resuming the 1% test sampling at no additional cost to the project.

Proof load testing of designated anchors shall be in accordance with ASTM E488. Tensile load shall be applied incrementally up to a maximum loading of twice the allowable tension load of the adhesive anchor as specified by the manufacturer. The load shall be held for 10 seconds, with no discernable movement, and then incrementally unloaded.

REVISION OF SECTION 504 RETAINING WALL COPING ANCHORS

If an anchor fails the proof-load test, **a location within 2'-0"** of the original location shall be identified by the **Engineer or Engineer's** Inspector for installation and testing of a replacement anchor. The location of the failed test will be epoxy grouted and finished in accordance with Section 601 of the Project Special Provisions.

Upon completion of each successful test, the rod shall be fitted with a lock washer, washer and nut and snug-tightened as shown in the Contract documents. Portions of the threaded rod that protrude more than 1/2 inch beyond the face of the nut shall be cut off. Peen threads upon completion.

Upon completion of each anchor installation, fill all holes from installation and testing with epoxy grout.

All work performed within the RTD right-of-way will be in accordance with the requirements in the RTD Special Construction Section.

METHOD OF MEASUREMENT

The quantity of Retaining Wall Coping Anchors of various types and lengths will be measured as the actual number of anchors installed and accepted.

BASIS OF PAYMENT

Payment shall be made under:

Pay Item	Pay Unit
Retaining Wall Coping Anchor	Each

The coring, drilling, placement and removal of the temporary fence, and installation and testing of the anchoring system (rod, anchoring adhesive, anchor, shims, epoxy and epoxy grout, nut, washers, , etc.) will not be measured and paid for separately, but shall be included in the work. Payment will be made for full compensation for all work, material, and equipment required to complete the item.

RTD SECTION 01 14 13 ACCESS TO SITE

SUMMARY

This section details the requirements for access to the Project sites.

EXECUTION

Section A4.10 of the RTD PART A, General Terms and Conditions is hereby revised to include:

The Contractor shall request and obtain a Right-of-Way (ROW) Access Permit from RTD prior to commencing any Work to be done within RTD ROW at each site. The request for the ROW Access Permit shall be submitted prior to the Wednesday Access permit meeting of the week prior to the work. A qualified representative of the Contractor shall attend a mandatory Light Rail Right-of-Way (ROW) Access Permit meeting for work in or around the RTD track. This meeting is held each week on Wednesday at 2:00 p.m., at 1350 Rio Court, Denver, CO. 80204. When the access permit is approved, it will be valid from Sunday at 12:00 a.m. to the next Saturday at 11:59 p.m. **If the Contractors'** representative is not present at the meeting, the permit will not be granted for the following week. A sample permit form is included with this specification.

The Contractor shall submit the completed ROW Access Permit request form to railopspermit@RTD-denver.com for approval. The ROW Access Permit request form may be found at www.RTD-denver.com/Reports.shtml under the section headed **"Policies -- Right-of-Way Access Policy"**. RTD On-Track Safety Training shall be completed, and the ROW Access Permit approved in advance of the scheduled work.

Prior to beginning any Work, the Contractor shall furnish RTD with a list of all other permits required for the proper completion of the Contract. The list shall clearly identify the types of permits that must be obtained before work on any particular phase of Contract Work can be started and shall be submitted in accordance with the provisions of Section 01 33 00 - Submittals. Copies of the fully executed permits shall be furnished to the Engineer. The Contractor shall obtain all necessary permits and pay all the associated fees.

MEASUREMENT AND PAYMENT

The Work in this Section shall not be measured or paid for separately but shall be considered incidental to the Work.

RTD Light Rail Right of Way Access Request / Permit

Complete all fields that are in Blue (and have asterisks)

*Company Representing:		
*Person Submitting Request:		*LRT Safety Training certification expires:
*Contact Person:		*Contact Phone:
*Approved permit to be emailed to:		
Dates of Access: (Not to exceed 7 days)	FROM SUNDAY THROUGH SATURDAY	
	*Requested From:	*To:
Time Period (military time)	*Requested From:	*To:
*Description of Work:		
*Location:		
*Equipment On Site:		

Right of Way Access Rules:

1. Access permit requests will be reviewed and granted upon completion of LRT Safety Training.
2. Contractor must have LRT Safety trained and qualified look-out(s) on-site at each work location.
3. A copy of this completed access permit must accompany the work crew on each work site.
4. All personnel must wear reflective safety vests at all times.
5. Contractor must notify control (303-299-3480) prior to entering and when clear of any job site.
6. All active tracks must be 100% useable at all hours by the Light Rail trains. All rail flangeways and work areas must be cleared of debris prior to leaving the work area. Trains cannot be delayed.
7. When equipment or tools are used within the Right-of-Way that may impact safety or train operation, the Contractor must have an RTD flag person to protect and expedite train movement.
Flagger rates: Mon – Fri 7:00am – 5:00pm, \$35.00/hr; Off-shift, Weekends and Holidays - \$57.00/hr.
8. The overhead catenary is to be considered Live and Hot at all times. If de-energization is requested, Contractor must confirm with MOW personnel prior to entry.

Please email to railopspermits@rtd-denver.com (ELECTRONIC FORM ONLY – not pdf format)

Requestor Confirmation and Agreement

- ☐ ***By checking this box, I acknowledge full understanding of RTD Access Permit rules and procedures and certify that LRT Safety training has been completed and is current.**

***Requestor: Type Name Here** _____ ***Date** _____

FAILURE TO COMPLY WITH ACCESS PERMIT RULES WILL RESULT IN PERMIT REVOCATION

THE SECTION BELOW IS FOR RTD USE ONLY

Approved Dates of Access:	From:	To:
Approved Time Period (military time):	From:	To:
Approved Limits of Access:	Inbound:	To:
	Outbound:	To:
De-energize Overhead Power Required:	Yes	No
Operating Restrictions:		

RTD – Manager, Maintenance of Way

RTD – Manager, Light Rail Transportation

RTD – Safety Representative

Permit Number

RTD SPECIAL CONSTRUCTION REQUIREMENTS SAFETY AND ACCESS IN RTD RIGHT-OF-WAY

The work within Regional Transportation District (RTD) Right-of-Way and require special considerations for safety and access to the work.

- (1) A qualified representative of the Contractor shall attend a mandatory Light Rail Right-of-Way (ROW) Access Permit meeting for work in or around the RTD track. This meeting is held each week on Wednesday at 2:00 p.m., at 1350 Rio Court, Denver, CO. 80204. When the access permit is approved, it will be valid from Sunday at 12:00 a.m. to the next Saturday at 11:59 p.m. If the Contractor's **representative is not present at the meeting, the permit will not be** granted for the following week. Light Rail Right-of-Way (ROW) Access Permit shall be obtained in accordance with RTD Section 01 14 13.
- (2) The access permit is required for all work accessed by high rail car or within 25 feet of a track.
- (3) The Contractor shall provide RTD with weekly and daily notification of scheduled working hours by contacting Brian Farris by the preferred method of e-mail (Brian.Farris@RTD-denver.com) or by phone (303-253-4732). The Light Rail Control number 303-299-3480 is to be used if the Contractor is unable to reach Brian Farris at the above number.
- (4) Access may not be allowed due to RTD train restrictions, extreme weather (heavy snow, icy conditions), and emergency situations as required by RTD. RTD will inform the Contractor when daily notifications are provided to RTD if work would not be allowed due to weather conditions. The LRT flaggers will alert the work crews when then need to exit the work zone in case of emergency.
- (5) **RTD will schedule flaggers for each night's work based upon the weekly access request.** Flaggers will be onsite to have a meeting with all personnel that will be on the track for that **shift's** work and be in contact with all workers throughout the night and alert them when it is time to begin clearing the track.
- (6) The LRT work limits will be within one manual block along the tracks to allow trains to run on the opposite track. The Contractor may utilize more than one work crew within the LRT work limits at a time. However, only two flaggers and two switch tenders are available during these work hours. One flagger and one switch tender will be positioned at each end of the work limits. Limitations on how much work zone length along the tracks will be allowed will be as determined by flagger based on sight distance and location of the track switches at the ends of the manual blocks. These limitations will be provided to the Contractor during the weekly permit request meetings.
- (7) RTD work zone access shall be by high rail car from the following stations:
 - i. University Station
 - ii. Hampden - West side of I-25
 - iii. Bellevue Station
 - iv. Orchard Station
 - v. Lincoln Station
- (8) Equipment used alongside LRT tracks shall be of a size that can access the track via 12 foot access gates and not be more than 8 feet in width.

- (9) All workers scheduled to work along the LRT tracks shall complete the On Track Safety Training (OTST) provided by RTD at no cost. Class registration shall be arranged by contacting Mathew Cross at mathew.cross@RTD-denver.com or 303-299-3823.

RTD SPECIAL CONSTRUCTION REQUIREMENTS
SAFETY AND ACCESS IN RTD RIGHT-OF-WAY

- (10) LRT power lines shall be de-energized before any work may be performed within 10 feet of the line.
- (11) The Contractor shall contact Brian Farris with all requests to power down Light Rail Power lines. **This request is to be discussed at weekly access request meetings and with each night's** notification of work.
- (12) De-energizing and re-energizing the line each takes 15 min, therefore reducing the available work hours to between 11:15 p.m. and 3:45 a.m.
- (13) The Contractor shall install temporary orange fence to designate safe work areas as approved by RTD. The Contractor shall install flag stands at each end of the work zone for RTD flaggers. The Contractor shall confirm appropriate placement of the fence and flag stands with the RTD inspector before work begins. Temporary fence may remain in place between shifts if properly secured and approved by the RTD inspector. The fence shall be 36 inches to 40 inches in height, orange construction fence secured to T-posts between the two tracks. Temporary fence posts shall not be pounded into the ballast and shall be secured with a ten-pound weight at the base of the post. The fence to be installed shall not interfere with train movement on the opposite (live) track during construction and to both live tracks between shifts.

SECTION 03 00 05

CONCRETE

PART 1 - GENERAL

For all additional information needed for Class G concrete see CDOT specifications.

PART 2 - MEASUREMENT AND PAYMENT

2.1 METHOD OF MEASUREMENT

A. Cast-in-place coping will be measured as length of coping to be cast. This work shall include all concrete, anchors, reinforcing steel (stainless), concrete coating, concrete joint sealant, formwork and shoring needed to complete the installation of the panel. This work will also include the removal of existing coping panels.

B. Cast-in-place Slab will be measured as a square foot taken from the plan view of the slabs to be replaced. This work shall include all concrete, anchors, reinforcing steel (stainless), bridge expansion devices, concrete joint sealant, and finish work to complete the installation of the slabs. This work will also include the removal of sidewalk, and removal expansion devices as shown on the plans.

2.2 BASIS OF PAYMENT

The accepted quantities will be paid for at the Contract unit bid price per unit of measurement for each of the pay items listed below that appear in the bid schedule. Payment will be made under:

Pay Item	Pay Unit
Cast-in-place Coping	Linear Foot
Cast-in-place Slab	Square Foot

Payment will be full compensation for all work and materials necessary to complete the designated pay item.

END OF SECTION

Technical Specifications

SECTION 07 92 51 CONCRETE JOINT SEALANT

PART 1 -GENERAL

1) SECTION INCLUDES

Preparing substrate surfaces.

Sealant and joint backing.

2) RELATED SECTIONS

- i) 01 02 50 – Measurement and Payment
- ii) 01 25 00 – Substitution Procedures
- iii) 01 33 00 – Submittal Procedures
- iv) 01 43 00 – Quality Assurance
- v) 01 45 00 – Quality Control
- vi) 01 66 00 – Product Storage and Handling Requirements

vii) 01 74 00 – Cleaning and Waste Management

viii) 01 76 00 – Protecting Installed Construction

3) REFERENCES

- i) ASTM International (Formerly known as American Society for Testing and Materials) (ASTM):
- ii) ASTM C920 - Standard Specification for Elastomeric Joint Sealants.
- iii) ASTM C1193-05a - Standard Guide for Use of Joint Sealants.
- iv) ASTM C1330-02(2007) - Standard Specification for Cylindrical Sealant Backing for Use with Cold Liquid-Applied Sealants.

4) PERFORMANCE REQUIREMENTS

- i) Sealant shall withstand:
- ii) Movement from ambient temperature range of 120 degrees F.
- iii) Water penetration.

5) SUBMITTALS

- i) Submittals shall be made in accordance with Section 01 33 00 and as specified in this section.
- ii) Contractor Qualifications: The Contractor shall provide at least five references showing previous successful experience on projects involving work similar to this section. References shall include the name, address, and telephone number for the owner of each project for which the Contractor provided the service.
- iii) Personnel Qualifications: The Contractor shall provide evidence that all personnel working on the project have appropriate qualifications to perform the work in this section.
- iv) Preconstruction Submittals: The following submittals shall be made 7 days prior to the preconstruction meeting of commencement of work.
- v) **Product Data: Provide manufacturer's product data sheets for each product proposed for use.**

- vi) Shop drawings: **Manufacturer's standard details and shop drawings for the specified joint sealant.**
- vii) Safety Plan: Submit a written plan to keep the workers and general public safe during the repair operations. The plan shall include methods and a plan for dust control and mitigation.
- viii) Traffic Control Plan: Provide a written vehicular and pedestrian control plan for the work. This plan shall include drawings, written procedures, durations, and work times.
- ix) Work Plan: Submit written procedures for demolition, surface preparation, material batching, placement, finishing, and curing of the application.
- x) Quality Control Plan: Submit a written quality control plan.
- xi) Applicator qualifications: Provide list of employees planned to perform the work in this section; provide work record of relevant experience for each employee listed.
- xii) Construction Submittals: The following submittals shall be made during, and following, the construction operations in a timely manner.
- xiii) As-Built Drawings: As-Built drawings, record documents, and surveys shall be submitted to RTD, in PDF form, prior to Punch-list walks. As-built drawings must be accepted by RTD prior to substantial completion.

6) QUALIFICATIONS

- i) Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum ten years documented experience.
- ii) Contractor Qualifications: Company specializing in performing the work of this section with minimum 5 years documented experience.
- iii) Personnel Qualifications: Contractor shall maintain qualified personnel who have **received product training by the Manufacturer's representative.**

7) MOCK-UP

- i) The Mockup shall consist of a representative section of joint sealant in accordance with this section and manufacturer written instructions. The mockup location shall be as agreed upon by RTD. Upon acceptance by RTD the mockup shall become a part of the work and shall be used as a quality standard for acceptance of similar installations.
- ii) The contractor shall install a mockup or test section for any job location with more than 250 lineal feet of sealant. The mockup shall be a minimum of 50 lineal feet and shall include all aspects of the sealant process including but not limited to saw cutting, abrasive blasting, sealant placement techniques, meniscus profile, and pull tests for bond strength verification.
- iii) Obtain RTD written approval prior to proceeding with further sealant application, including approval of aesthetics, color, texture and appearance.

8) ENVIRONMENTAL REQUIREMENTS

- i) Apply sealant under environmental conditions as recommended by the manufacturer except where more stringent requirements are shown on the drawings or specified within this section.
- ii) Apply sealant only when ambient and surface temperatures are 40°F and rising. Do not apply repair materials if the ambient temperature is expected to fall below 40°F within 24 hours after placement unless RTD approved external heating methods are in place.

9) DELIVERY, STORAGE, AND HANDLING

- i) **Deliver sealant in original, unopened containers with the Manufacturer's name,** labels, product identification, date of preparation, and batch numbers.
- ii) Store material per manufacturer recommendations, under cover, and protected from weather. Replace any material that shows signs of damage or does not meet the requirements of this section at no additional cost to RTD.
- iii) Coordinate material storage with RTD. At no time may material be stored in a location that will increase loading on an area that is being repaired, to be repaired, or recently repaired without consent from RTD.

10) COORDINATION

- i) Coordinate the Work with all sections referencing this section and all sections referenced within this section.
- ii) Materials used in the Work shall be compatible with all materials in which they contact during the Work or will contact during related Work.
- iii) Coordinate the Work with all other contractors whose Work is related and distribute reviewed submittals to them.
- iv) **The Contractor shall follow RTD's Public Information** Procedures for closures or impacts to the public resulting from the work in this section.

11) WARRANTY

- i) Reference Contract General Terms and Conditions, Article A2.6 - Warranty of Work.
- ii) Provide one-**year installer's warranty commencing with the date of acceptance** of the Work.
- iii) **Provide manufacturer's five-year** material warranty for installed sealant commencing from the date of acceptance of the Work.
- iv) Include coverage for installed sealants and accessories that fail to achieve watertight seal, exhibit loss of adhesion or cohesion, or do not cure.
- v) Provide any repair under this Warranty at no additional cost to RTD, this is to include material and labor.

PART 2 -PRODUCTS

1) MANUFACTURERS

- i) Subject to compliance with requirements, provide products manufactured by one of the following or an RTD approved equal:
 - (1) BASF Corporation Construction Chemicals
 - (2) Sika Corporation

2) MATERIALS

- i) Polyurethane Elastomeric Sealant: Multi-Component, Self-Leveling, Neutral-Curing Silicone Joint Sealant: ASTM C920 (Standard Specification for Elastomeric Joint Sealants), Type M, Grade P, Class 25, use T.
 - (1) Products: Subject to compliance with requirements, acceptable repair materials for this work are:
 - (a) BASF, MasterSeal SL 2

(b) Sika Corporation, Sikaflex 2c SL

(c) RTD approved equal

3) MATERIAL ACCESSORIES

- i) Primer: Non-staining type, recommended by sealant manufacturer to suit application.
- ii) Joint Cleaner: Non-corrosive and non-staining type, recommended by sealant manufacturer; compatible with joint forming materials.
- iii) Masking tape: non-staining, non-absorbent type compatible with sealant and adjacent surfaces.
- iv) Backer Rod: Closed cell polyethylene 25 percent larger than joint opening, or as otherwise recommended by sealant manufacturer and approved by RTD.

PART 3 EXECUTION

1) EXAMINATION

- i) Verify existing conditions before starting the Work. The Contractor is responsible for documentation and photographs of existing conditions prior to commencing work.
- ii) Verify that concrete surfaces are finished as acceptable and completely cured for sealant to be installed.
- iii) Verify that substrate surfaces and joint openings are clean, dry, and free of frost and ready to receive work.
- iv) Verify that joint backing and release tapes are compatible with sealant materials.
- v) Field measure to verify all dimensions for the Work.

2) PREPARATION

- i) Substrate preparation shall comply with manufacturer written instructions and requirements of project plans and specifications.
- ii) Remove loose materials and foreign matter that might impair adhesion of sealant. Grind joint edges smooth and straight. The Contractor shall get written approval, from the Manufacturer, of their planned preparation method prior to the commencement of the Work.
- iii) Do not use alcohol or solvent wipe prior to installation of joint sealant. Acid etching is prohibited.
- iv) Perform preparation in accordance with ASTM C1193 (Standard Guide for Use of Joint Sealants).
- v) Concrete contact surfaces for sealant shall be abrasion blasted with a medium that removes dust and ground material immediately prior to sealant installation as part of concrete surface preparation for deck sealer.
- vi) Check substrate preparation for adhesion of sealant.
- vii) A primer coat is required for all systems.
- viii) Protect all RTD property and RTD patron property in the area surrounding the work from damage. Any damage caused by the Contractor shall be repaired to the satisfaction of RTD at the expense of the Contractor.

3) INSTALLATION

- i) Installation shall comply with Manufacturers written instructions except where more stringent requirements are shown on the drawings or specified within this section.
- ii) Perform installation in accordance with ASTM C1193 (Standard Guide for Use of Joint Sealants).
- iii) Install backer rod or other approved bond breakers in order to prevent 3-sided adhesion.
- iv) Completely fill joints without sagging or smearing onto adjacent surfaces. Excess material that smears on adjacent surfaces shall be cleaned, using methods and materials approved by the Manufacturer, as the work progresses.
- v) Minimum depth of joint sealant shall be 1/4-inch.
- vi) Maximum depth of joint sealant shall be 1/2-inch.
- vii) Install joint backer rod to achieve sealant neck thickness dimension after tooling equal to 1/2 of the joint width.
- viii) Install sealant free of air pockets, foreign embedded matter, ridges, and sags.
- ix) Self-Leveling Sealants: Fill horizontal joints slightly recessed from the surface.
- x) Non-Sag Sealants: Tool sealant surface at joints concave, wet tooling is not permitted.

4) CURING

- i) Curing shall be per manufacturer recommendation except where more stringent requirements are shown on the drawings or specified within this section.
- ii) Do not open to pedestrian or vehicular traffic until full cure has been achieved or approved by RTD.

5) QUALITY CONTROL TESTING

- i) Quality Control shall be performed in accordance with Section 01 45 00 and as specified in this section.
- ii) Testing Agency: The Contractor shall engage a qualified, independent, testing and inspection agency acceptable to RTD to sample materials, perform laboratory and field-testing, and submit test reports. This is an exception to Section 01 40 00 – Quality Requirements, 1.1 B. 2.
- iii) Testing Frequency:
- iv) Cut out sections: The Contractor will cut out sections of joint sealant as selected by RTD, not to exceed 1% of total lineal feet. The Contractor shall then repair joint sealant cut out sections at no cost to RTD.
- v) Shore hardness test: Testing Agency shall check shore hardness per ASTM standard specified in the Manufacturers product data, as requested by RTD.
- vi) Flood Test: A flood test shall be as required by RTD.
- vii) Testing Agency shall submit a report that includes the following information for a field test unless modified by RTD:
 - (1) Project Name and Location
 - (2) **Contractor's** name
 - (3) **Testing agency's name**, address, and phone number
 - (4) Testing agency technicians name
 - (5) Product Manufacturer
 - (6) Date of report
 - (7) Placement location within the structure

- (8) Weather data
- (9) Date, time, and place of test
- (10) Name of test completed
- (11) Test Results

6) EVALUATION AND ACCEPTANCE OF WORK

- i) Upon completion of the curing process, the installed joint sealant shall be checked by RTD for compliance with the Specifications and Drawings. The Contractor shall repair any discrepancies found at no additional expense to RTD.
- ii) The RTD Construction Manager shall be the sole judge regarding compliance and acceptability of the Work.

7) CLEANING

- i) Cleaning shall be performed in accordance with Section 01 74 00 and as specified in this section.
- ii) Do not allow trash, waste, and/or debris to collect on the work area. Trash, waste, and/or debris shall be removed from the work area daily.
- iii) Debris shall not be flushed down the existing drains.
- iv) Clean and restore all damaged or soiled surfaces to their original condition at no additional expense to RTD.
- v) The Contractor shall leave the finished work area in a neat, clean condition without evidence of spillovers onto adjacent surfaces or areas.

8) PROTECTION OF FINISHED WORK

- i) Protection of the finished work shall be performed in accordance with the Section 01 76 00 and as specified in this section.
- ii) Protect sealants until fully cured.

PART 4 - MEASUREMENT AND PAYMENT

1) METHOD OF MEASUREMENT

- i) The work of this Section will be separately measured for payment per this specification and includes all work associated with furnishing and installing the concrete joint sealant.

2) BASIS OF PAYMENT

- i) The accepted quantities will be paid for at the Contract unit price for each of the pay items listed below that appear in the bid schedule.

Concrete Joint Sealant	LF
------------------------	----

END OF SECTION

Technical Specifications

SECTION 10 14 16 IDENTIFICATION TAGS

1) GENERAL

(1) SUMMARY

- (a) Section includes identification (ID) tags and reference to attachment method.

(2) ACTION SUBMITTALS

- (a) Shop Drawings: Include plans and attachment details.
- (b) Samples: For each exposed product specified.

(3) RELATED SECTIONS

- (a) Section 01 33 00 – Submittal Procedures.
- (b) Section 01 02 50 – Measurement and Payment
- (c) Section 01 25 00 – Substitution Procedures
- (d) Section 01 33 00 – Submittal Procedures
- (e) Section 01 43 00 – Quality Assurance
- (f) Section 01 45 00 – Quality Control
- (g) Section 01 66 00 – Product Storage and Handling Requirements
- (h) Section 01 74 00 – Cleaning and Waste Management
- (i) Section 01 76 00 – Protecting Installed Construction

PRODUCTS

(4) MANUFACTURERS

- (a) National Band and Tag Co.
- (b) Sika Corporation
- (c) Hilti
- (d) RTD Approved Equal

(5) MATERIALS

(a) Style 14 (V14) - Round Corner Plate Tags

1. Materials:
 - a. Stainless steel – 304 SS
2. Size:
 - a. **3" H x 5" W**
 - b. **Thickness: 0.030" minimum**
3. Fabrication:
 - a. **Embedded nomenclature of retaining wall number, letters to be 7/8" tall**
 - b. 3/16 IN minimum mounting hole.
4. Color:
 - a. Natural

(b) Sikaflex-11 FC

- (i) Tensile Strength: 225psi
- (ii) Elongation at Break 600%

(c) Hilti X-P MX Universal Nails

- (i) **0.16" dia x 1" min embed**
- (ii) **5/16" washer**

(d) RTD Approved Equal

EXECUTION

(6) INSTALLATION

- (a) Install identification tags on the upper left corner of each of the repaired panels.
- (b) Clean wall panel surface and apply Sikaflex-11 FC to the back of the identification tags and install per the **manufacturer's specifications.**
- (c) Secure tags with Hilti X-P MX Universal Nails per **manufacturer's specifications.**

PART 4 – MEASUREMENT AND PAYMENT

4.1 MEASUREMENT

- A. The work of this Section will be separately measured for payment per this specification and includes all work associated with furnishing and installing the identification tags.
- B. Contractor to verify quantity of identification tags needed per wall.

4.2 PAYMENT

- A. The accepted quantities will be paid for at the contract unit price for each of the pay items listed below that appear in the bid schedule.

Identification Tag EA

END OF SECTION 10 14 16

Oversight / NHS

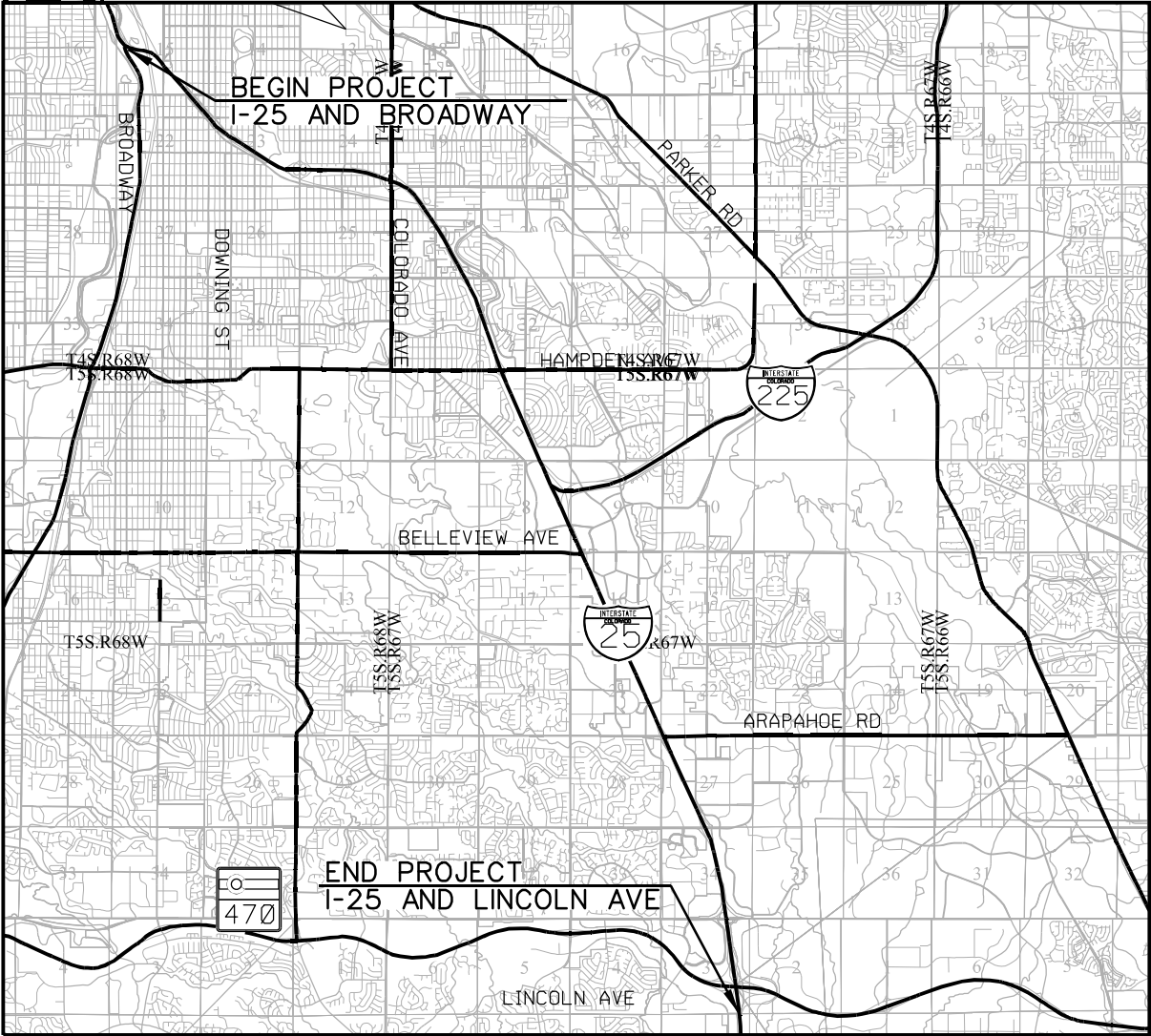
FHWA REGION VIII OVERSIGHT? ☐ NO ☐ YES

NATIONAL HIGHWAY SYSTEM? ☐ NO ☐ YES

REGIONAL TRANSPORTATION DISTRICT

TREX COPING REPAIR PLANS

PROJECT DESCRIPTION:
INSTALLATION OF STAINLESS STEEL ANCHOR BOLTS TO
SECURE EXISTING RETAINING WALL COPING ALONG PORTIONS
OF RTD RIGHTS-OF-WAY. REPAIRS ARE REQUIRED ALONG
I-25 FROM THE BROADWAY LIGHTRAIL STATION TO THE
LINCOLN LIGHT RAIL STATION.



SHEET INDEX	
SHEET	DESCRIPTION
1	TITLE SHEET
2	SUMMARY OF APPROXIMATE QUANTITIES
3 TO 4	GENERAL NOTES
5 TO 6	TABULATION OF STRUCTURAL ELEMENTS
7 TO 31	WALL COPING REPAIR PLANS
32 TO 36	WALL COPING REPAIR DETAILS
37	TYPICAL LRT SECTION
38-41	COLORADO STATION DETAILS

PROJECT LOCATION MAP

Print Date: 6/6/2022
File Name: 19869DES_Titlesheet.dgn
Horiz. Scale: 1:1 Vert. Scale: As Noted

HDR 1670 BROADWAY, SUITE 3400 DENVER, COLORADO 80202
Phone: 303-764-1520 FAX: 303-860-7139



Sheet Revisions		
Date:	Comments	Init.

As Constructed

No Revisions:

Revised:

Void:

Contract Information

Contractor:

Resident Engineer:

Project Engineer:

PROJECT STARTED: / / ACCEPTED: / /

Comments:

Project No./Code

Sheet Number 01


INDEX			ITEM NO.	CONTRACT ITEM	UNITS	ROADWAY				0		0		0		0		0		0		PROJECT TOTALS	
BOOK	PAGE	SHEET				PLAN	AS. CONST.	PLAN	AS. CONST.	PLAN	AS. CONST.	PLAN	AS. CONST.	PLAN	AS. CONST.	PLAN	AS. CONST.	PLAN	AS. CONST.	PLAN	AS. CONST.	PLAN	AS. CONST.
			240-00000	Wildlife Biologist	HOUR	8																8	
			240-00010	Removal of Nests	HOUR	8																0	
																						8	
			240-00020	Netting	SY	20																0	
																						20	
																						0	
			504-03405	Retaining Wall Coping Anchor (Special)	EACH	5675																5675	
																						0	
			601-04550	Cast-in-Place Coping	LF	60																60	
																						0	
			601-04560	Cast-in-Place slab	SF	103																103	
																						0	
			620-00020	Sanitary Facility	EACH	1																1	
																						0	
			07-92-51	Concrete Joint Sealant	LF	28402																28402	

Print Date: 6/23/2022

File Name: 19869DES_SAQ.dgn

Horiz. Scale: 1:1 Vert. Scale: As Noted

Unit Information - Unit 224 AJP

1670 BROADWAY, SUITE 3400 DENVER, COLORADO 80202
Phone: 303-764-1520 FAX: 303-860-7139

0000

Sheet Revisions		
Date:	Comments	Init.

As Constructed

No Revisions:

Revised:

Void:

SUMMARY OF APPROXIMATE QUANTITIES

Designer: L. SWEENHART

Detailer: B. TERRELL

Sheet Subset:

Structure Numbers

Subset Sheets:

Project No./Code

Sheet Number 02

GENERAL NOTES

GENERAL

- 1. THE CONTRACTOR SHALL HAVE ONE COPY OF THE PLANS APPROVED BY RTD, ONE COPY OF THE APPROPRIATE STANDARDS AND SPECIFICATION, AND ONE COPY OF ALL NECESSARY PERMITS AT THE JOB SITE AND AVAILABLE AT ALL TIMES.
- 2. CONTRACTOR SUPERINTENDENT SHALL BE AVAILABLE ON A 24 HOURS/7 DAYS PERIOD AND CREW SHALL RESPOND WITHIN 4 HOURS OF CONTACT.
- 3. THE CONTRACTOR SHALL MAINTAIN ACCESS TO AFFECTED PROPERTY OWNERS AT ALL TIMES DURING CONSTRUCTION.
- 4. CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMISSIONS AND TEMPORARY CONSTRUCTION EASEMENTS FROM THE OWNERS OF THE PROPERTIES PRIOR TO PROCEEDING WITH CONSTRUCTION OF THE PROPOSED IMPROVEMENTS.
- 5. CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS AND BONDS REQUIRED.
- 6. A PRE-CONSTRUCTION MEETING MUST BE SET UP WITH RTD.
- 7. THE CONTRACTOR IS REQUIRED TO KEEP EXISTING DRAINAGE STRUCTURES FUNCTIONAL AND MAINTAIN DRAINAGE TO THOSE STRUCTURES AT ALL TIMES DURING CONSTRUCTION.
- 8. THE CONTRACTOR SHALL PROTECT ALL WORK AREAS AND FACILITIES FROM WATER AT ALL TIMES. AREAS AND FACILITIES SUBJECTED TO FLOODING, REGARDLESS OF THE SOURCE OF WATER, SHALL BE PROMPTLY DEWATERED AND RESTORED AT NO COST TO THE OWNER.
- 9. DIMENSIONS IN THESE PLANS ARE CALCULATED FROM AS-BUILT DRAWINGS. THE CONTRACTOR SHALL VERIFY ALL DEPENDENT DIMENSIONS IN THE FIELD BEFORE ORDERING OR FABRICATING ANY MATERIAL.
- 10. THERE ARE THREE TYPES OF COPING BEING REPAIRED: TYPE 1, TYPE 1V, AND TYPE 2. TYPES 1 AND 2 ARE HORIZONTAL AND TYPE 1V IS VERTICAL.

CONSTRUCTION - DUST CONTROL

- 1. DUST CONTROL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE COST OF THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE WORK.
- 2. WATER SHALL BE USED AS A DUST PALLIATIVE WHERE REQUIRED BY THE ENGINEER. LOCATIONS SHALL BE AS DIRECTED BY THE ENGINEER.

CONSTRUCTION - GENERAL

- 1. THE CONTRACTOR SHALL LIMIT CONSTRUCTION ACTIVITIES TO THOSE AREAS WITHIN THE AREAS SHOWN ON THE PLANS.
- 2. THE CONTRACTOR SHALL PERFORM CONSTRUCTION ACTIVITIES TO AVOID UNNECESSARY IMPACTS TO EXISTING VEGETATION. ANY DISTURBANCE BEYOND THESE LIMITS SHALL BE RESTORED TO ORIGINAL CONDITIONS BY THE CONTRACTOR AT HIS/HER OWN EXPENSE.
- 3. CONSTRUCTION ACTIVITIES, IN ADDITION TO NORMAL CONSTRUCTION PROCEDURES, SHALL INCLUDE THE PARKING OF VEHICLES OR EQUIPMENT, DISPOSAL OF LITTER AND ANY OTHER ACTION WHICH WOULD ALTER EXISTING CONDITIONS.
- 4. DURING ALL CONSTRUCTION ACTIVITIES, INCLUDING FENCING, THE CONTRACTOR SHALL KEEP ALL EQUIPMENT AND MATERIALS WITHIN THE PROJECT AREA.
- 5. ALL WORK SHALL BE WITHIN THE RIGHT-OF-WAY OR EASEMENTS UNLESS OTHERWISE NOTED ON THE PLANS.

- 6. THE CONTRACTOR IS RESPONSIBLE FOR THE STABILITY OF THE COPING DURING CONSTRUCTION. TEMPORARY SHORING WILL BE REQUIRED FOR ANY PANEL BEING WORKED ON THAT HAS NOT ALREADY HAD ANCHORS INSTALLED.

CONSTRUCTION – MISCELLANEOUS

- 1. ALL REMOVALS SHALL BECOME THE PROPERTY OF THE CONTRACTOR UNLESS OTHERWISE INDICATED IN THE PLANS AND PROJECT SPECIFICATIONS. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO OBTAIN A DISPOSAL SITE FOR THE UNUSABLE MATERIALS.
- 2. ALL WASTE MATERIAL GENERATED WITHIN THE PROJECT LIMITS SHALL BE REMOVED FROM THE PROJECT SITE AT NO COST TO THE PROJECT UNLESS SPECIFIED IN THE CONTRACT OTHERWISE.
- 3. IT IS ESTIMATED THAT THE FOLLOWING ITEMS WILL BE REQUIRED FOR THIS PROJECT:

240 – WILDLIFE BIOLOGIST

240 – REMOVAL OF NESTS

240 – NETTING

620 – SANITARY FACILITY

8 HOUR

8 HOUR

20 SQUARE YARDS

1 EACH

UTILITIES

- 1. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITY LOCATIONS PRIOR TO CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING UNDERGROUND UTILITY LOCATIONS AS SPECIFIED IN THE UTILITIES PROJECT SPECIAL PROVISIONS PRIOR TO COMMENCING ANY EXCAVATION OR DRILLING ON THE PROJECT.
- 2. THE CONTRACTOR'S ATTENTION IS DIRECTED TO SECTION 105 OF THE STANDARD SPECIFICATION AND PROJECT SPECIAL PROVISIONS CONCERNING UTILITIES.
- 3. THE CONTRACTOR SHALL HAVE THE RESPONSIBILITY OF PROTECTING ALL LIVE UTILITIES AT ALL TIMES DURING CONSTRUCTION OPERATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTION OF THESE UTILITIES AND FOR THE SAFETY OF THE GENERAL PUBLIC, WORKERS AND THE ENVIRONMENT IN ACCORDANCE WITH THE PROJECT STANDARD AND SPECIAL PROVISIONS. THE CONTRACTOR SHALL HOLD CDOT HARMLESS FOR ANY AND ALL DAMAGES TO LIVE UTILITIES ARISING FROM CONSTRUCTION OPERATIONS.
- 4. TRACTION POWER TO THE LIGHT RAIL SECTION WITHIN THE PROJECT LIMITS WILL BE SHUT DOWN WITH A LOCKOUT/TAGOUT PROCESS. CONTRACTOR SHALL VERIFY LOCKOUT/TAGOUT PRIOR TO DOING THE WORK. POWER TO THE LIGHT RAIL OVERHEAD WIRE ABOVE THE PROJECT WILL BE TEMPORARILY SHUT DOWN. HOWEVER, CONTRACTOR SHALL NOT ALLOW ANY EQUIPMENT TO MAKE CONTACT WITH THE OVERHEAD WIRE (SEE PLANS FOR APPROXIMATE LOCATIONS).

Print Date: 6/14/2022		<div>0000</div>	Sheet Revisions				As Constructed		GENERAL NOTES			Project No./Code	
File Name: 19869DES_GeneralNotes01.dgn			Date:	Comments	Init.		No Revisions:						
Horiz. Scale: 1:1 Vert. Scale: As Noted							Revised:		Designer: L. SWEENHART		Structure		
Unit Information - Unit 224 AJP							Void:		Detailer: B. TERRELL		Numbers		
<div><div><div></div><div></div><div></div></div><div>1670 BROADWAY, SUITE 3400 DENVER, COLORADO 80202 Phone: 303-764-1520 FAX: 303-860-7139</div></div>													
						Sheet Subset:		Subset Sheets:		Sheet Number 03			

BTERRELL 10:44:34 AM C:\Users\BTERRELL\Documents\RTD\19869DES_GeneralNotes01.dgn

GENERAL NOTES

RTD PERMIT REQUIREMENTS:

CONSTRUCTION IMPACTING RTD RAIL AND/OR WITHIN 25 FEET OF RTD TRACKS:

1. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING MAINTENANCE OF WAY (MOW) LIGHT RAIL RIGHT OF WAY ACCESS PERMIT TO PERFORM WORK. THE RTD LIGHT RAIL RIGHT OF WAY ACCESS REQUEST PERMIT CAN BE FOUND AT: WWW.RTD-DENVER.COM/DOCUMENTS/RAILOPERATIONSACCESSPERMIT.DOC
2. CONTRACTOR IS RESPONSIBLE FOR PROVIDING AND MAINTAINING A WRITTEN SAFETY PROGRAM CONFORMING TO THE REQUIREMENTS OF THE RTD CONSTRUCTION SAFETY MANUAL. RTD'S ON-TRACK SAFETY TRAINING IS REQUIRED FOR ALL PERSONNEL PERFORMING WORK IN THE VICINITY OF LIGHT RAIL, COMMUTER RAIL AND FREIGHT RAIL SYSTEMS. CONTACT REBECCA BAER, SAFETY COMPLIANCE OFFICER, AT 303-299-2077 TO SCHEDULE BIWEEKLY.
3. CONTRACTOR MUST ATTEND MANDATORY MAINTENANCE OF WAY (MOW) WEDNESDAY MEETING AT 1350 RIO COURT, DENVER, CO 80204. CONTACT BRIAN FARRIS AT 303 299-3457.
4. CONSTRUCTION IMPACTING RTD BUILDING, PARK-N-RIDE, OR OTHER RTD PROPERTY:
 - a. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING PERMITS AND LICENSES TO PERFORM WORK WITHIN RTD ROW. THE BUILDING AND GROUNDS ACCESS PERMIT (BGAP) CAN BE FOUND AT: [HTTPS://WWW.RTD-DENVER.COM/SITES/DEFAULT/FILES/FILES/2021-05/BUILDING-AND-GROUNDS-ACCESS-PERMITV.2021_0.PDF](https://WWW.RTD-DENVER.COM/SITES/DEFAULT/FILES/FILES/2021-05/BUILDING-AND-GROUNDS-ACCESS-PERMITV.2021_0.PDF). CONTACT FACILITIES MAINTENANCE AT 303-299-2977 FOR PERMIT (BGAP) INFORMATION.
 - b. CONTRACTOR IS RESPONSIBLE TO PROVIDE AND MAINTAIN A WRITTEN SAFETY PROGRAM CONFORMING TO THE REQUIREMENTS OF THE RTD CONSTRUCTION SAFETY MANUAL. RTD'S ON-TRACK SAFETY TRAINING IS REQUIRED FOR ALL PERSONNEL PERFORMING WORK WITHIN RTD ROW. CONTACT REBECCA BAER, SAFETY COMPLIANCE OFFICER, AT 303-299-2077 TO SCHEDULE.
5. CONTRACTOR MUST CONTACT RTD ENGINEERING A MINIMUM OF 48 HOURS PRIOR TO START OF CONSTRUCTION TO SCHEDULE A PRE-CONSTRUCTION MEETING AND ARRANGE FOR ON-SITE INSPECTION DURING CONSTRUCTION. CONTACT MITCH KUHARSKI AT 720-736-4510.

Print Date: 6/14/2022		<div>0000</div>	Sheet Revisions				As Constructed	GENERAL NOTES			Project No./Code
File Name: 19869DES_GeneralNotes02.dgn			Date:	Comments	Init.		No Revisions:				
Horiz. Scale: 1:1 Vert. Scale: As Noted							Revised:	Designer: L. SWEENHART	Structure		
Unit Information - Unit 224 AJP								Detailer: B. TERRELL	Numbers		
<div><div><div></div></div><div>1670 BROADWAY, SUITE 3400 DENVER, COLORADO 80202 Phone: 303-764-1520 FAX: 303-860-7139</div></div>							Void:	Sheet Subset:	Subset Sheets:		Sheet Number 04

BTERRELL 11:04:09 AM C:\Users\BTERRELL\Documents\RTD\19869DES_GeneralNotes02.dgn

BTERRELL 11:05:12 AM C:\Users\BTERRELL\Documents\RTD\19869WALL_StructureTab_01.dgn

TABULATION OF STRUCTURAL ELEMENTS												
								504-03405 RETAINING WALL COPING ANCHOR (SPECIAL) (EACH)		10-14-16 RETAINING WALL IDENTIFICATION TAG (EACH)		
WALL	WALL TYPE	Total LENGTH	REPAIRED LAST CONTRACT	REPAIR LENGTH NEEDED	WALL HEIGHT	COPING TYPE	NO. OF 1V COPING PANELS	LRT-1	LRT-2	LRT-1	LRT-2	MAINTENANCE OF TRAFFIC COMMENTS
								EACH	EACH	EACH	EACH	
SB LIGHTRAIL												
L1-E(A)	CIP	447	115	332	3 TO 8	1		83		49		
L1-E(B)	Soldier Wall	340	0	340	8 TO 19	2			85		37	POWER DOWN
L1-E(C)	CAISSON	210	0	210	19 TO 24	2			53		23	POWER DOWN
L1-F	FACING PANELS	115	0	115	14	2	2		33		15	POWER DOWN
L1-G(A)	TIEBACK	783	0	783	22 TO 26	1			196		86	POWER DOWN
L1-G(B)	CAISSON	305	0	305	26	2			76		34	POWER DOWN
L1-G(C)	FACING PANELS	119	0	119	19	2	2		34		15	POWER DOWN
L1-G(D)	CAISSON	174	0	174	24 TO 25	2			44		19	POWER DOWN
L1-G(E)	FACING PANELS	107	0	107	16 TO 17	2	1		29		13	POWER DOWN
L1-I(A)	CAISSON	192	0	192	25	2			48		21	POWER DOWN
L1-I(B)	FACING PANELS	130	0	130	16	2	1		35		15	POWER DOWN
L1-J(A)	CAISSON	557	0	557	22 TO 23	1	2		143		63	POWER DOWN
L1-J(B)	FACING PANELS	116	0	116	16	2			29		13	POWER DOWN
L1-K(A)	CAISSON	107	0	107	19 TO 23	2	1		29		13	POWER DOWN
L1-K(B)	FACING PANELS	75	0	75	21	2	3		25		11	POWER DOWN
L1-K(C)	CAISSON	50	0	50	25 TO 26	2			13		6	POWER DOWN
L1-L	TIEBACK	837	0	837	16 TO 25	2			209		92	POWER DOWN
L1-L	CAISSON	12	0	12	26	2	2		7		3	POWER DOWN
L1-O	FACING PANELS	84	0	84	17	2			21		9	POWER DOWN
L1-P(A)	CAISSON	12	0	12	24	2	2		7		3	POWER DOWN
L1-P(A)	TIEBACK	428	0	428	13 TO 24	2	1		109		48	POWER DOWN
L1-P(B)	CAISSON	1038	0	1038	24 TO 26	2	1		262		115	POWER DOWN
L1-S	FACING PANELS	69	0	69	16 TO 17	2	2		21		10	POWER DOWN
L1-T(A)	CAISSON	601	601	0	13 TO 26	2			0		66	POWER DOWN
L1-T(B)	CIP	170	170	0	3 TO 13	1		0		19	19	POWER DOWN
L1A-A(A)	CAISSON	100	0	100	14 TO 25	2			25		11	POWER DOWN
L1A-A(B)	FACING PANELS	61	0	61	16	1	2		19		9	POWER DOWN
L1A-A(C)	CAISSON	75	0	75	13 TO 25	2			19		8	POWER DOWN
L1A-A(C)	CAISSON	719	508	211	3 TO 13	2		53		79		
L1A-B(A)	CAISSON	520	520	0	2 TO 4	2		0		57		ON FOOT
L1A-B(C)	CAISSON	120	109	11	2 TO 5	2		3		13		ON FOOT
L1A-C	CAISSON	144	0	144	10 TO 23	2			36		16	POWER DOWN
L1A-C(A)	FACING PANELS	730	0	730	19 TO 21	2			183		80	POWER DOWN
L1A-E	CAISSON	1331	345	986	16 TO 27	2	2		251		148	POWER DOWN
L1A-E(A)	FACING PANELS	151	0	151	19 TO 29	2			38		17	POWER DOWN
L1A-E(B)	FACING PANELS	435	0	435	14 TO 28	2			109		48	POWER DOWN
L1A-G	CAISSON	580	0	580	13 TO 28	2			145		64	POWER DOWN
L1A-G	CAISSON	160	35	125	5 TO 13	2		31		18		
L2-K	CIP	80	23	57	2 TO 21	1			14		9	POWER DOWN
L2-L	CAISSON	1270	105	1165	3 TO 14	2		291		140		UNDER 13' FOR MOST OF IT
L2-P	CIP	835	420	415	6 TO 8	1		104		92		
L2-GG(A)	FACING PANELS	120	0	120	17 TO 20	2			30		13	
L2-OO	FACING PANELS	209	0	209	17 TO 20	2	1		54		24	
L2-UU	SOIL NAIL WALL	90	0	90	0 TO 31	2			23		10	
SHEET SUBTOTAL 1		14808	2951	11857				565	2454	467	1206	

HWY-3	SPECIAL
LRT-1	NO POWER DOWN, 1 LIVE TRACK (WALL LESS THAN 13')
LRT-2	FULL POWER DOWN, 1 LIVE TRACK (WALL GREATER THAN 13')

NOTE:
1. THERE ARE 3 TYPES OF COPINGS: TYPE 1, TYPE 1V, AND TYPE 2. TYPE 1V COPINGS ARE THE SAME DIMENSIONS AS THE TYPE 1 COPINGS BUT ARE ORIENTED VERTICALLY. FOR DETAILS, SEE COPING REPAIR DETAILS SHEET.
2. THE LENGTH OF THE COPINGS VARY FROM 3-FEET TO 10-FEET LONG. THE AVERAGE LENGTH OF COPING IS 8-FEET. IT IS ASSUMED A BOLT WILL BE INSTALLED ON AVERAGE EVERY 4-FEET.

Print Date: 6/14/2022
File Name: 19869WALL_StructureTab_01.dgn
Horiz. Scale: 1:1 Vert. Scale: As Noted
Unit Information - Unit 224 AJP

 1670 BROADWAY, SUITE 3400 DENVER, COLORADO 80202
Phone: 303-764-1520 FAX: 303-860-7139

0000

Sheet Revisions

Date:	Comments	Init.

As Constructed

No Revisions:

Revised:

Void:

TABULATION OF
STRUCTURAL ELEMENTS

Designer: L. SWEENHART

Detailer: B. TERRELL

Sheet Subset:

Structure
Numbers

Subset Sheets:

Project No./Code

Sheet Number 05

BTERRELL 11:05:43 AM C:\Users\BTERRELL\Documents\RTD\19869WALL_StructureTab_03.dgn

TABULATION OF STRUCTURAL ELEMENTS												
								504-03405 RETAINING WALL COPING ANCHOR (SPECIAL) (EACH)		10-14-16 RETAINING WALL IDENTIFICATION TAG (EACH)		
WALL	WALL TYPE	Total LENGTH	REPAIRED LAST CONTRACT	REPAIR LENGTH NEEDED	WALL HEIGHT	COPING TYPE	NO. OF 1V COPING PANELS	LRT-1	LRT-2	LRT-1	LRT-2	MAINTENANCE OF TRAFFIC COMMENTS
								EACH	EACH	EACH	EACH	
1V AT QUINCY AVE	MSE		0			1V	2		4		2	
L2-T(A)	CIP	1325	540	785	0 TO 9	1		196		146		
L2-T(B)	CAISSON	190	190	0	0 TO 6	2		0		21		
L2-JJ	CAISSON	40	0	40	8 TO 20	2	2		14		6	
L2-T(C)	CIP	1380	585	795	2 TO 8	1		199		152		
L3-F	CIP	90	90	0	0 TO 7	2		0		10		
L4-J	CAISSON	992	742	250	4 TO 17	2	2		67		111	
L4-L	CAISSON	212	212	0	0 TO 5	2		0		23		
L4-U	CAISSON	277	277	0	5 TO 6	2		0		30		
L4-Q	CAISSON	826	366	460	3 TO 10	2		115		91		
L4-X		388	388	0	0 TO 6	1		0		43		
L4-Y	CAISSON	232	232	0	3 TO 6	2		0		26		
L4-BB		790	790	0	0 TO 6	1		0		87		
L4-AP	SOIL NAIL WALL	165	0	165	0 TO 14	2			41		18	
L4-RR	SOIL NAIL WALL/CAISSON	658	0	658	0 TO 20	2			165		72	
NB LIGHTRAIL			0									
1V UNDER DOWNING BRIDGE	MSE		0			1V	1		2		1	POWER DOWN-UNDER DOWNING TO SB ON-RAMP
L1A-D	CAISSON	560	51	509	3 TO 16	1		127		62		UNDER 13' FOR MOST OF IT
L1A-D(A)	FACING PANELS	711	0	711	17 TO 21	2			178		78	POWER DOWN
L1A-F	CAISSON	1331	420	911	15 TO 24	2	2		232		148	POWER DOWN
L2-J(A)	CAISSON	240	90	150	3 TO 13	2		38		26		UNDER 13' FOR MOST OF IT
L2-J(A)	CAISSON	50	0	50	13 TO 15	2			13		6	POWER DOWN
L2-J(A)	SOIL NAIL WALL	200	0	200	15 TO 23	2			50		22	POWER DOWN
L2-M	SOIL NAIL WALL/TIEBACK	441	0	441	13 TO 23	2			110		49	POWER DOWN
L2-M	CAISSON	480	130	350	4 TO 13	2		88		53		UNDER 13' FOR MOST OF IT
L2-XX	CAISSON	285	41	244	2 TO 10	1	1	63		32		WHERE PANEL FELL
L2-KK	CAISSON	227	0	227	0 TO 17	2			57		25	
L2-QQ	CIP	218	0	218	17 TO 21	2			55		24	
L2-VV	SOIL NAIL WALL	70	0	70	0 TO 31	2			18		8	
L4-SS	SOIL NAIL WALL	1216	0	1216	3 TO 31	2	2		308		136	
EXTRA BOLTS	10%							139	377			
SHEET SUBTOTAL 2		13594	5144	8450				826	1314	802	706	
SHEET SUBTOTAL 1		14808	2951	11857				565	2454	467	1206	
TOTAL		28402	8095	20307				5675		3181		

FOR INFORMATION ONLY - BOLTS PER COPING TYPE							
COPING TYPE	BOLT LENGTH	CDOT - HWY			RTD - LRT		TOTAL
		HWY-1	HWY-2	HWY-3	LRT-1	LRT-2	
	INCHES	EACH	EACH	EACH	EACH	EACH	
TYPE 1	10" TO 14"	451	48	107	1778	422	2806
TYPE 2	17" TO 25"	850	1772	0	1470	4308	8400
TOTAL		1301	1821	107	3247	4730	11206


LRT-1	NO POWER DOWN, 1 LIVE TRACK (WALL LESS THAN 13')
LRT-2	FULL POWER DOWN, 1 LIVE TRACK (WALL GREATER THAN 13')

Print Date: 6/14/2022

File Name: 19869WALL_StructureTab_03.dgn

Horiz. Scale: 1:1 Vert. Scale: As Noted

Unit Information - Unit 224 AJP

1670 BROADWAY, SUITE 3400
DENVER, COLORADO 80202
Phone: 303-764-1520 FAX: 303-860-7139

0000

Sheet Revisions		
Date:	Comments	Init.

As Constructed

No Revisions:

Revised:

Void:

TABULATION OF
STRUCTURAL ELEMENTS

Designer: L. SWEENHART

Detailer: B. TERRELL

Sheet Subset:

Structure Numbers

Subset Sheets:

Project No./Code

Sheet Number

06



NOTES:

- 1. REPAIR COMPLETED UNDER PVIOUS CONTRACT. CONTRACTOR TO VERIFY LIMITS OF COMPLETED REPAIRS.

Print Date: 6/6/2022		<div>000000</div>	Sheet Revisions				As Constructed	WALL COPING REPAIR PLAN			Project No./Code
File Name: 19869WALL_Plan01.dgn			Date:	Comments	Init.		No Revisions:				
Horiz. Scale: 1:200 Vert. Scale: As Noted							Revised:	Designer: L. SWEENHART	Structure		
Unit Information - Unit 224 AJP							Void:	Detailer: B. TERRELL	Numbers		
<div><div><div></div><div></div><div></div></div><div>1670 BROADWAY, SUITE 3400 DENVER, COLORADO 80202 Phone: 303-764-1520 FAX: 303-860-7139</div></div>								Sheet Subset: WALL	Subset Sheets:	Sheet Number	07

BTERRELL 1:39:51 PM C:\Users\BTERRELL\Documents\RTD\19869WALL_Plan01.dgn



Print Date: 6/6/2022		<div>0000</div>	Sheet Revisions				As Constructed	WALL COPING REPAIR PLAN			Project No./Code	
File Name: 19869WALL_Plan03.dgn			Date:	Comments	Init.		No Revisions:					
Horiz. Scale: 1:200 Vert. Scale: As Noted							Revised:	Designer: L. SWEENHART	Structure Numbers			
Unit Information - Unit 224 AJP							Void:	Detailer: B. TERRELL				
<div><div>HDR</div><div>1670 BROADWAY, SUITE 3400 DENVER, COLORADO 80202</div><div>Phone: 303-764-1520 FAX: 303-860-7139</div></div>							Sheet Subset:	Subset Sheets:		Sheet Number 09		



Print Date: 6/6/2022		<div>0000</div>	Sheet Revisions				As Constructed	WALL COPING REPAIR PLAN			Project No./Code	
File Name: 19869WALL_Plan04.dgn			Date:	Comments	Init.		No Revisions:					
Horiz. Scale: 1:200			Vert. Scale: As Noted									
Unit Information - Unit 224			AJP									
<div><div>HDR</div><div>1670 BROADWAY, SUITE 3400 Phone: 303-764-1520</div><div>DENVER, COLORADO 80202 FAX: 303-860-7139</div></div>												
							Revised:	Designer: L. SWEENHART	Structure Numbers			
							Void:	Detailer: B. TERRELL				
								Sheet Subset:	Subset Sheets:	Sheet Number 10		

BTERRELL 14:50:03 PM C:\Users\BTERRELL\Documents\RTD\19869WALL_Plan04.dgn



Print Date: 6/6/2022		<div>0000</div>	Sheet Revisions				As Constructed	WALL COPING REPAIR PLAN			Project No./Code	
File Name: 19869WALL_Plan05.dgn			Date:	Comments	Init.		No Revisions:					
Horiz. Scale: 1:200			Vert. Scale: As Noted				Revised:	Designer: L. SWEENHART	Structure			
Unit Information - Unit 224			AJP				Void:	Detailer: B. TERRELL	Numbers			
<div><div>HDR</div><div>1670 BROADWAY, SUITE 3400</div><div>Phone: 303-764-1520</div></div> <div><div>DENVER, COLORADO 80202</div><div>FAX: 303-860-7139</div></div>								Sheet Subset:	Subset Sheets:	Sheet Number	11	



Print Date: 6/6/2022		<div>0000</div>	Sheet Revisions				As Constructed	WALL COPING REPAIR PLAN			Project No./Code	
File Name: 19869WALL_Plan06.dgn			Date:	Comments	Init.		No Revisions:					
Horiz. Scale: 1:200			Vert. Scale: As Noted				Revised:	Designer: L. SWEENHART	Structure			
Unit Information - Unit 224			AJP				Void:	Detailer: B. TERRELL	Numbers			
<div><div>HDR</div><div>1670 BROADWAY, SUITE 3400</div><div>DENVER, COLORADO 80202</div><div>Phone: 303-764-1520</div><div>FAX: 303-860-7139</div></div>							Sheet Subset:	Subset Sheets:		Sheet Number 12		



Print Date: 6/6/2022		<div>00000</div>	Sheet Revisions				As Constructed	WALL COPING REPAIR PLAN			Project No./Code	
File Name: 19869WALL_Plan07.dgn			Date:	Comments	Init.		No Revisions:					
Horiz. Scale: 1:200 Vert. Scale: As Noted							Revised:	Designer: L. SWEENHART	Structure Numbers			
Unit Information - Unit 224 AJP							Void:	Detailer: B. TERRELL				
<div><div>HDR</div><div>1670 BROADWAY, SUITE 3400 DENVER, COLORADO 80202</div><div>Phone: 303-764-1520 FAX: 303-860-7139</div></div>							Sheet Subset:	Subset Sheets:		Sheet Number	13	

BTERRELL 15:05:58 PM C:\Users\BTERRELL\Documents\19869WALL_Plan07.dgn



Print Date: 6/6/2022		<div>0000</div>	Sheet Revisions				As Constructed	WALL COPING REPAIR PLAN			Project No./Code	
File Name: 19869WALL_Plan08.dgn			Date:	Comments	Init.		No Revisions:					
Horiz. Scale: 1:200 Vert. Scale: As Noted							Revised:	Designer: L. SWEENHART	Structure Numbers			
Unit Information - Unit 224 AJP							Void:	Detailer: B. TERRELL				
<div><div>HDR</div><div>1670 BROADWAY, SUITE 3400 DENVER, COLORADO 80202</div><div>Phone: 303-764-1520 FAX: 303-860-7139</div></div>								Sheet Subset:	Subset Sheets:	Sheet Number 14		



Print Date: 6/6/2022		<div>0000</div>	Sheet Revisions				As Constructed	WALL COPING REPAIR PLAN			Project No./Code	
File Name: 19869WALL_Plan09.dgn			Date:	Comments	Init.		No Revisions:					
Horiz. Scale: 1:200 Vert. Scale: As Noted							Revised:	Designer: L. SWEENHART	Structure Numbers			
Unit Information - Unit 224 AJP							Void:	Detailer: B. TERRELL				
<div><div><div></div></div><div>1670 BROADWAY, SUITE 3400 DENVER, COLORADO 80202</div><div>Phone: 303-764-1520 FAX: 303-860-7139</div></div>							Sheet Subset:	Subset Sheets:		Sheet Number 15		



Print Date: 6/6/2022		<div>0000</div>	Sheet Revisions				As Constructed	WALL COPING REPAIR PLAN			Project No./Code	
File Name: 19869WALL_Plan10.dgn			Date:	Comments	Init.		No Revisions:					
Horiz. Scale: 1:200			Vert. Scale: As Noted				Revised:	Designer: L. SWEENHART	Structure Numbers			
Unit Information - Unit 224			AJP				Void:	Detailer: B. TERRELL				
<div><div><div></div><div></div><div></div></div><div>1670 BROADWAY, SUITE 3400 Phone: 303-764-1520</div><div>DENVER, COLORADO 80202 FAX: 303-860-7139</div></div>							Sheet Subset:	Subset Sheets:	Sheet Number 16			



Print Date: 6/6/2022		<div><div></div><div></div><div></div><div></div><div></div></div>	Sheet Revisions				As Constructed	WALL COPING REPAIR PLAN			Project No./Code	
File Name: 19869WALL_Plan11.dgn			Date:	Comments	Init.		No Revisions:					
Horiz. Scale: 1:200 Vert. Scale: As Noted							Revised:	Designer: L. SWEENHART	Structure Numbers			
Unit Information - Unit 224 AJP							Void:	Detailer: B. TERRELL				
<div><div><div></div></div><div>1670 BROADWAY, SUITE 3400 DENVER, COLORADO 80202 Phone: 303-764-1520 FAX: 303-860-7139</div></div>							Sheet Subset:	Subset Sheets:		Sheet Number 17		

BTERRELL 2:00:47 PM C:\Users\BTERRELL\Documents\RTD\19869WALL_Plan11.dgn



Print Date: 6/6/2022		<div>0000</div>	Sheet Revisions				As Constructed	WALL COPING REPAIR PLAN			Project No./Code	
File Name: 19869WALL_Plan12.dgn			Date:	Comments	Init.		No Revisions:					
Horiz. Scale: 1:200			Vert. Scale: As Noted									
Unit Information - Unit 224			AJP									
<div><div><div></div></div><div>1670 BROADWAY, SUITE 3400 Phone: 303-764-1520</div><div>DENVER, COLORADO 80202 FAX: 303-860-7139</div></div>												
							Revised:	Designer: L. SWEENHART	Structure Numbers			
								Detailer: B. TERRELL				
							Void:	Sheet Subset:	Subset Sheets:		Sheet Number 18	

BTERR 2:02:00 PM C:\Users\BTERR\Documents\RTD\19869WALL_Plan13.dgn



Print Date: 6/6/2022		<div><div></div><div></div><div></div><div></div><div></div></div>	Sheet Revisions				As Constructed	WALL COPING REPAIR PLAN			Project No./Code	
File Name: 19869WALL_Plan13.dgn			Date:	Comments	Init.		No Revisions:					
Horiz. Scale: 1:200 Vert. Scale: As Noted							Revised:	Designer: L. SWEENHART	Structure			
Unit Information - Unit 224 AJP							Void:	Detailer: B. TERRELL	Numbers			
<div><div><div></div></div><div>1670 BROADWAY, SUITE 3400 DENVER, COLORADO 80202</div><div>Phone: 303-764-1520 FAX: 303-860-7139</div></div>								Sheet Subset:	Subset Sheets:		Sheet Number 19	

BTERRELL 2:03:09 PM C:\Users\BTERRELL\Documents\RTD\19869WALL_Plan14.dgn



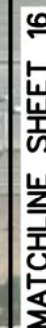
Print Date: 6/6/2022
File Name: 19869WALL_Plan14.dgn
Horiz. Scale: 1:200 Vert. Scale: As Noted
Unit Information - Unit 224 AJP
HR 1670 BROADWAY, SUITE 3400 DENVER, COLORADO 80202
Phone: 303-764-1520 FAX: 303-860-7139

Sheet Revisions		
Date:	Comments	Init.

As Constructed
No Revisions:
Revised:
Void:

WALL COPING REPAIR PLAN		
Designer: L. SWEENHART	Structure Numbers	
Detailer: B. TERRELL		
Sheet Subset:	Subset Sheets:	

Project No./Code
Sheet Number 20

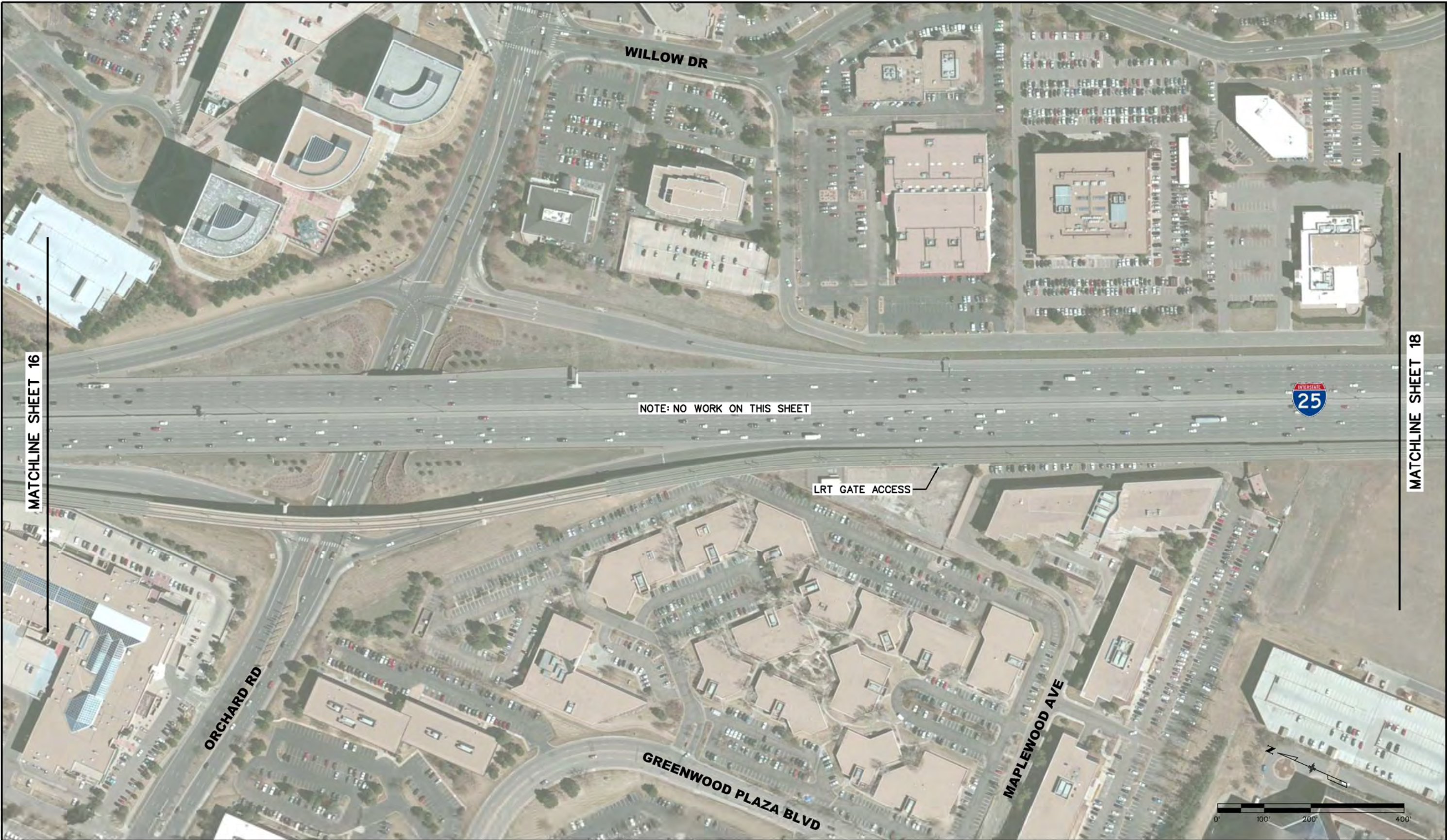


Print Date: 6/6/2022		0000	Sheet Revisions				As Constructed		WALL COPING REPAIR PLAN			Project No./Code	
File Name: 19869WALL_Plan15.dgn			Date:	Comments	Init.		No Revisions:						
Horiz. Scale: 1:200 Vert. Scale: As Noted							Revised:		Designer: L. SWEENHART	Structure Numbers			
Unit Information - Unit 224 AJP							Void:		Detailer: B. TERRELL				
 1670 BROADWAY, SUITE 3400 DENVER, COLORADO 80202 Phone: 303-764-1520 FAX: 303-860-7139									Sheet Subset:	Subset Sheets:	Sheet Number 2		



Print Date: 6/6/2022		<div>0000</div>	Sheet Revisions				As Constructed	WALL COPING REPAIR PLAN			Project No./Code	
File Name: 19869WALL_Plan16.dgn			Date:	Comments	Init.		No Revisions:					
Horiz. Scale: 1:200			Vert. Scale: As Noted				Revised:	Designer: L. SWEENHART	Structure Numbers			
Unit Information - Unit 224			AJP				Void:	Detailer: B. TERRELL				
<div><div>HDR</div><div>1670 BROADWAY, SUITE 3400 Phone: 303-764-1520</div><div>DENVER, COLORADO 80202 FAX: 303-860-7139</div></div>							Sheet Subset:	Subset Sheets:	Sheet Number 22			

BTERRELL 2:10:48 PM C:\Users\BTERRELL\Documents\RTD\19869WALL_Plan17.dgn



Print Date: 6/6/2022		<div>0000</div>	Sheet Revisions				As Constructed	WALL COPING REPAIR PLAN			Project No./Code	
File Name: 19869WALL_Plan17.dgn			Date:	Comments	Init.		No Revisions:					
Horiz. Scale: 1:200 Vert. Scale: As Noted							Revised:	Designer: L. SWEENHART	Structure			
Unit Information - Unit 224 AJP							Void:	Detailer: B. TERRELL	Numbers			
<div><div><div></div></div><div>1670 BROADWAY, SUITE 3400 DENVER, COLORADO 80202</div><div>Phone: 303-764-1520 FAX: 303-860-7139</div></div>							Sheet Subset:	Subset Sheets:		Sheet Number 23		



Print Date: 6/6/2022		<div>0000</div>	Sheet Revisions				As Constructed	WALL COPING REPAIR PLAN			Project No./Code	
File Name: 19869WALL_Plan18.dgn			Date:	Comments	Init.		No Revisions:					
Horiz. Scale: 1:200 Vert. Scale: As Noted							Revised:	Designer: L. SWEENHART	Structure Numbers			
Unit Information - Unit 224 AJP							Void:	Detailer: B. TERRELL				
<div><div>HDR</div><div>1670 BROADWAY, SUITE 3400 DENVER, COLORADO 80202 Phone: 303-764-1520 FAX: 303-860-7139</div></div>							Sheet Subset:	Subset Sheets:		Sheet Number 24		



MATCHLINE SHEET 18

MATCHLINE SHEET 20

Print Date: 6/6/2022		<div><div></div><div></div><div></div><div></div><div></div></div>	Sheet Revisions				As Constructed	WALL COPING REPAIR PLAN			Project No./Code	
File Name: 19869WALL_Plan19.dgn			Date:	Comments	Init.		No Revisions:					
Horiz. Scale: 1:200 Vert. Scale: As Noted							Revised:	Designer: L. SWEENHART	Structure Numbers			
Unit Information - Unit 224 AJP							Void:	Detailer: B. TERRELL				
<div><div><div></div></div><div>1670 BROADWAY, SUITE 3400 DENVER, COLORADO 80202 Phone: 303-764-1520 FAX: 303-860-7139</div></div>							Sheet Subset:	Subset Sheets:		Sheet Number 25		



Print Date: 6/6/2022		<div>00000</div>	Sheet Revisions				As Constructed	WALL COPING REPAIR PLAN			Project No./Code	
File Name: 19869WALL_Plan20.dgn			Date:	Comments	Init.		No Revisions:					
Horiz. Scale: 1:200 Vert. Scale: As Noted							Revised:	Designer: L. SWEENHART	Structure			
Unit Information - Unit 224 AJP							Void:	Detailer: B. TERRELL	Numbers			
<div><div>HDR</div><div>1670 BROADWAY, SUITE 3400 DENVER, COLORADO 80202</div><div>Phone: 303-764-1520 FAX: 303-860-7139</div></div>								Sheet Subset:	Subset Sheets:	Sheet Number	26	

BTERRELL 2:17:09 PM C:\Users\BTERRELL\Documents\RTD\19869WALL_Plan21.dgn



MATCHLINE SHEET 22

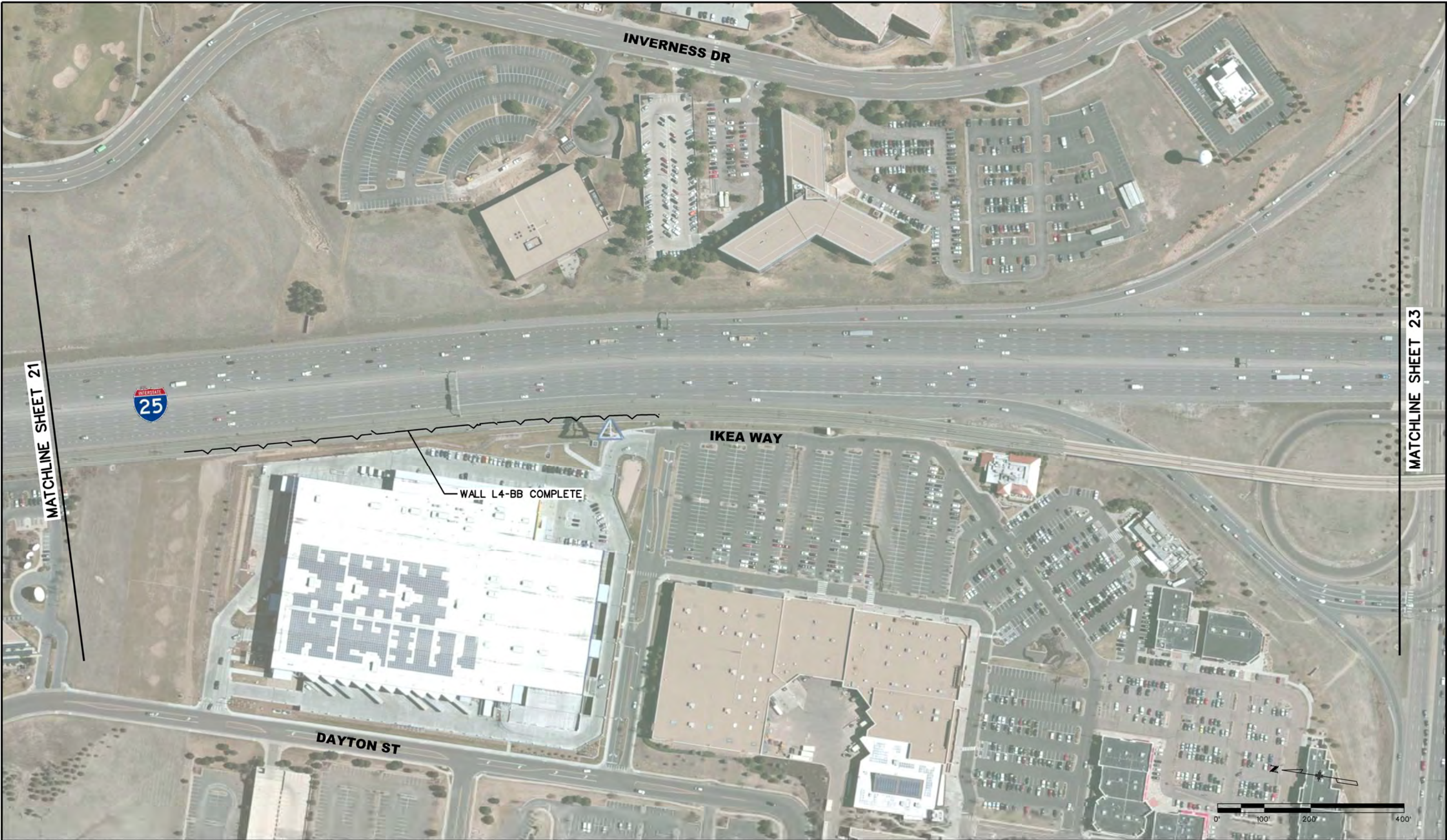
Print Date: 6/6/2022
File Name: 19869WALL_Plan21.dgn
Horiz. Scale: 1:200 Vert. Scale: As Noted
Unit Information - Unit 224 AJP
HDR 1670 BROADWAY, SUITE 3400 DENVER, COLORADO 80202 Phone: 303-764-1520 FAX: 303-860-7139

0000	Sheet Revisions		
	Date:	Comments	Init.

As Constructed
No Revisions:
Revised:
Void:

WALL COPING REPAIR PLAN			
Designer: L. SWEENHART	Structure Numbers		
Detailer: B. TERRELL			
Sheet Subset:	Subset Sheets:		

Project No./Code
Sheet Number 27



Print Date: 6/6/2022		<div>0000</div>	Sheet Revisions				As Constructed	WALL COPING REPAIR PLAN			Project No./Code	
File Name: 19869WALL_Plan22.dgn			Date:	Comments	Init.		No Revisions:					
Horiz. Scale: 1:200			Vert. Scale: As Noted				Revised:	Designer: L. SWEENHART	Structure Numbers			
Unit Information - Unit 224			AJP				Void:	Detailer: B. TERRELL				
<div><div>HDR</div><div>1670 BROADWAY, SUITE 3400 Phone: 303-764-1520</div><div>DENVER, COLORADO 80202 FAX: 303-860-7139</div></div>							Sheet Subset:	Subset Sheets:	Sheet Number 28			



MATCHLINE SHEET 22

MATCHLINE SHEET 24



NOTE: NO WORK ON THIS SHEET

PARK MEADOWS CENTER DR

COUNTY LINE STATION

LRT ACCESS AT
COUNTY LINE STATION




Print Date: 6/6/2022

File Name: 19869WALL_Plan23.dgn

Horiz. Scale: 1:200 Vert. Scale: As Noted

Unit Information - Unit 224 AJP



1670 BROADWAY, SUITE 3400 DENVER, COLORADO 80202
Phone: 303-764-1520 FAX: 303-860-7139

Sheet Revisions		
Date:	Comments	Init.
0000		

As Constructed
No Revisions:
Revised:
Void:

WALL COPING REPAIR PLAN		
Designer: L. SWEENHART	Structure Numbers	
Detailer: B. TERRELL		
Sheet Subset:	Subset Sheets:	

Project No./Code
Sheet Number 29



MATCHLINE SHEET 23

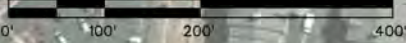
MATCHLINE SHEET 25

WALL L4-SS
COPING TYPE: TYPE 2
CONSTRUCTION TYPE: LRT-2
LENGTH OF REMAINING COPING REPAIR: 1216 LF

WALL L4-AP
COPING TYPE: TYPE 2
CONSTRUCTION TYPE: LRT-2
LENGTH OF REMAINING COPING REPAIR: 165 LF

WALL L4-RR
COPING TYPE: TYPE 2
CONSTRUCTION TYPE: LRT-2
LENGTH OF REMAINING COPING REPAIR: 658 LF

PARK MEADOWS DR




Print Date: 6/6/2022

File Name: 19869WALL_Plan24.dgn

Horiz. Scale: 1:200 Vert. Scale: As Noted

Unit Information - Unit 224 AJP



1670 BROADWAY, SUITE 3400 DENVER, COLORADO 80202
Phone: 303-764-1520 FAX: 303-860-7139

Sheet Revisions		
Date:	Comments	Init.

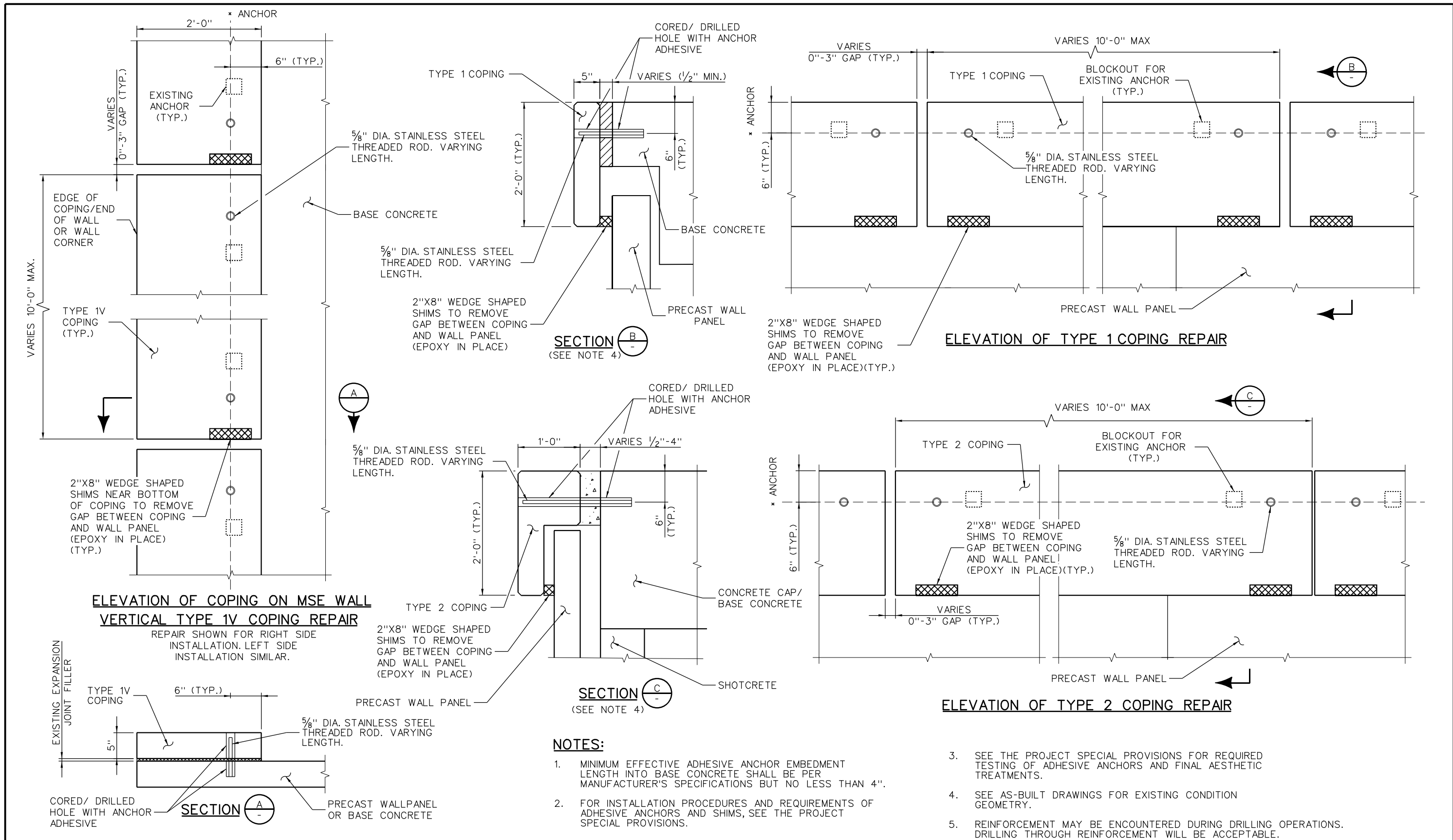
As Constructed
No Revisions:
Revised:
Void:

WALL COPING REPAIR PLAN		
Designer: L. SWEENHART	Structure Numbers	
Detailer: B. TERRELL		
Sheet Subset:	Subset Sheets:	

Project No./Code
Sheet Number 30

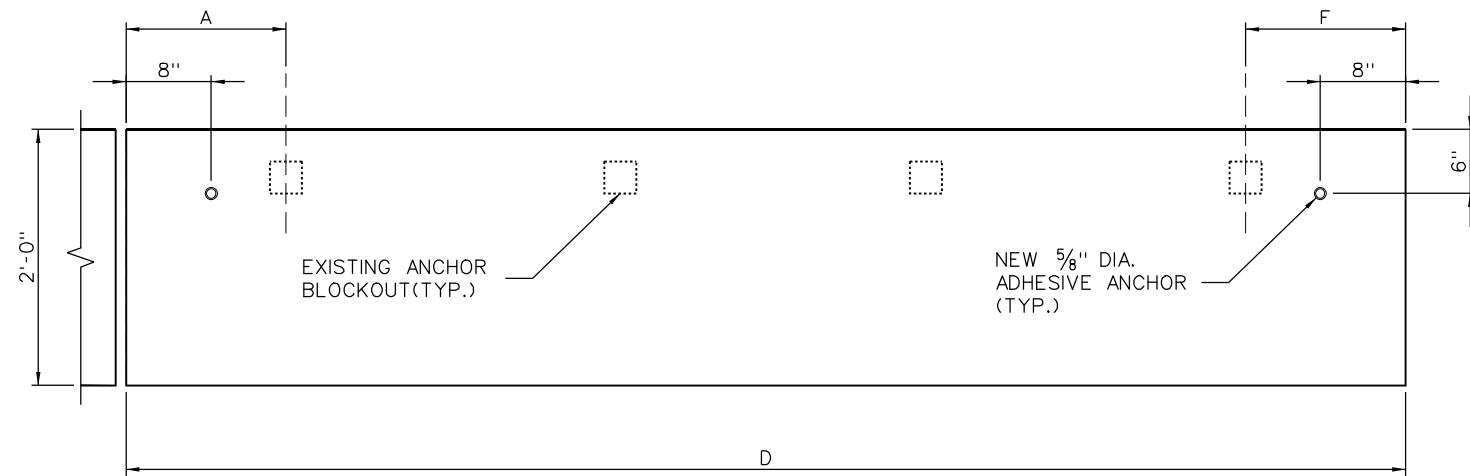


Print Date: 6/6/2022		<div>0000</div>	Sheet Revisions				As Constructed	WALL COPING REPAIR PLAN			Project No./Code	
File Name: 19869WALL_Plan25.dgn			Date:	Comments	Init.		No Revisions:					
Horiz. Scale: 1:200			Vert. Scale: As Noted				Revised:	Designer: L. SWEENHART	Structure Numbers			
Unit Information - Unit 224			AJP				Void:	Detailer: B. TERRELL				
<div><div>HDR</div><div>1670 BROADWAY, SUITE 3400 Phone: 303-764-1520</div><div>DENVER, COLORADO 80202 FAX: 303-860-7139</div></div>							Sheet Subset:	Subset Sheets:	Sheet Number 31			



Print Date: 6/6/2022		<div>00000</div>	Sheet Revisions				As Constructed		COPING REPAIR DETAILS			Project No./Code	
File Name: TREX_COPING REPAIR_DETAILS-1.dgn			Date:	Comments	Init.		No Revisions:						
Horiz. Scale: 1:1 Vert. Scale: As Noted							Revised:		Designer: L. SWEENHART	Structure			
Unit Information - Unit 224 AJP							Detailer: B. TERRELL		Numbers				
<div><div><div></div></div><div>1670 BROADWAY, SUITE 3400 DENVER, COLORADO 80202 Phone: 303-764-1520 FAX: 303-860-7139</div></div>							Void:		Sheet Subset:	Subset Sheets:	of	Sheet Number 32	

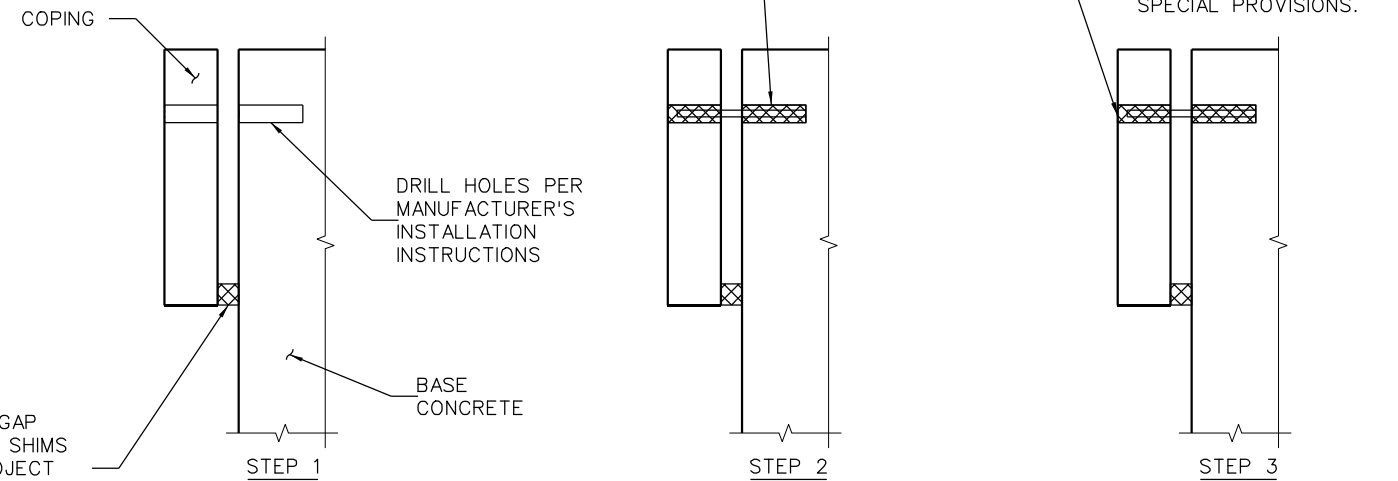
BTERRELL 2:25:02 PM C:\Users\BTERRELL\Documents\RTD\Trex\COPING REPAIR_DETAILS-2.dgn



COPING ELEVATION
D > 3.67'

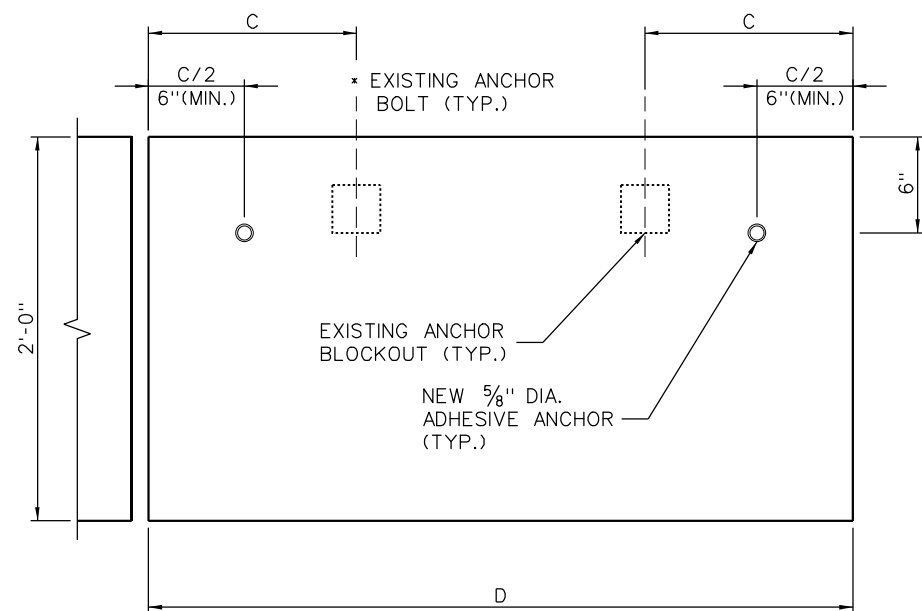
CLEAN DEBRIS FROM GAP AND INSTALL PLASTIC SHIMS WITH EPOXY PER PROJECT SPECIAL PROVISIONS IF GAP LARGER THAN 1/8" EXISTS.

ONCE HOLES ARE DRILLED AND PRIOR TO INSTALLATION, FIELD MEASURE LENGTH OF BOLT THAT EXTENDS TO BOTTOM OF HOLE AND IS RECESSED 1/2" BELOW FACE OF COPING. INSTALL ANCHOR PER MANUFACTURER'S INSTALLATION INSTRUCTIONS. ADHESIVE IN BOTH COPING AND BASE CONCRETE



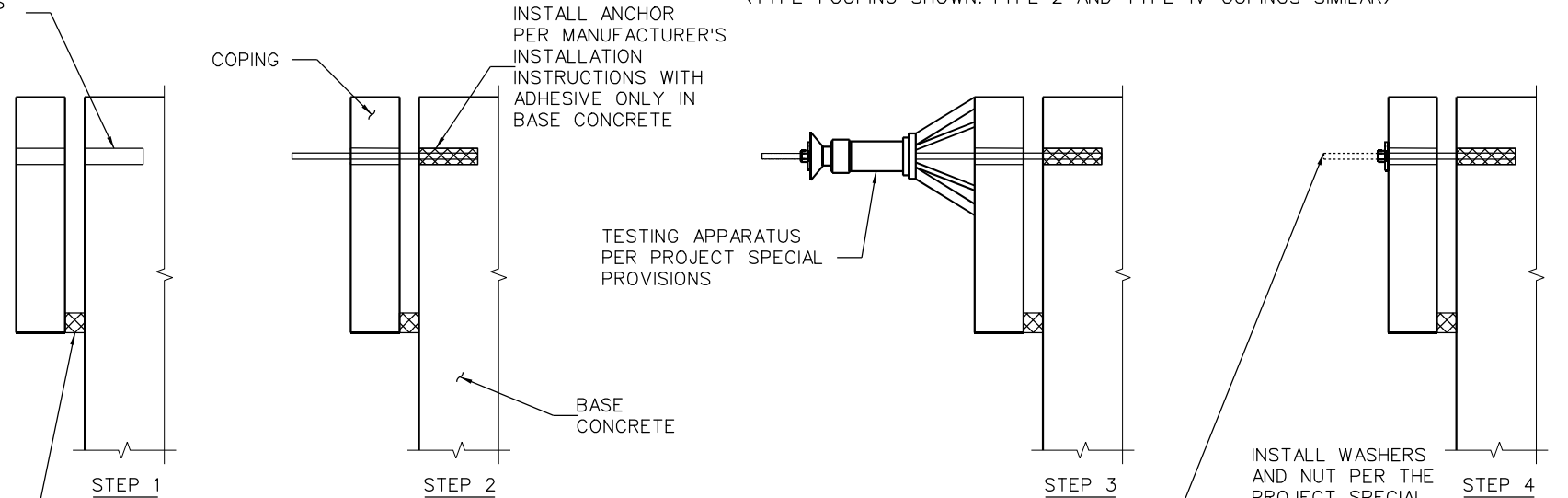
GENERAL ANCHOR INSTALLATION

INSTALL PER MANUFACTURER'S INSTALLATION INSTRUCTIONS (TYPE 1 COPING SHOWN. TYPE 2 AND TYPE 1V COPINGS SIMILAR)



COPING ELEVATION
D < 3.67'

DRILL HOLES PER MANUFACTURER'S INSTALLATION INSTRUCTIONS



GENERAL ANCHOR TESTING PROCEDURE

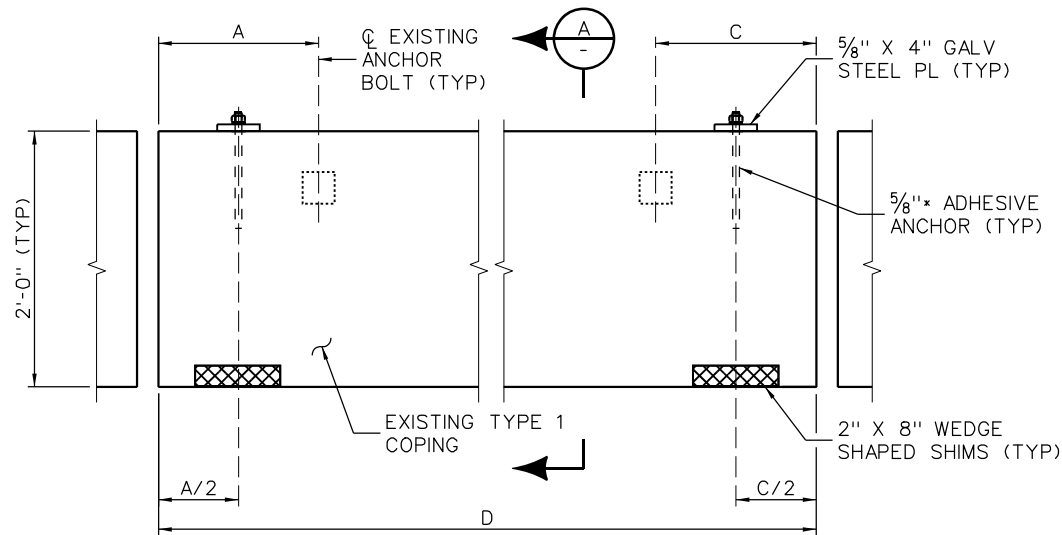
TEST PER PROJECT SPECIAL PROVISIONS (TYPE 1 COPING SHOWN. TYPE 2 AND TYPE 1V COPINGS SIMILAR)

NOTES:

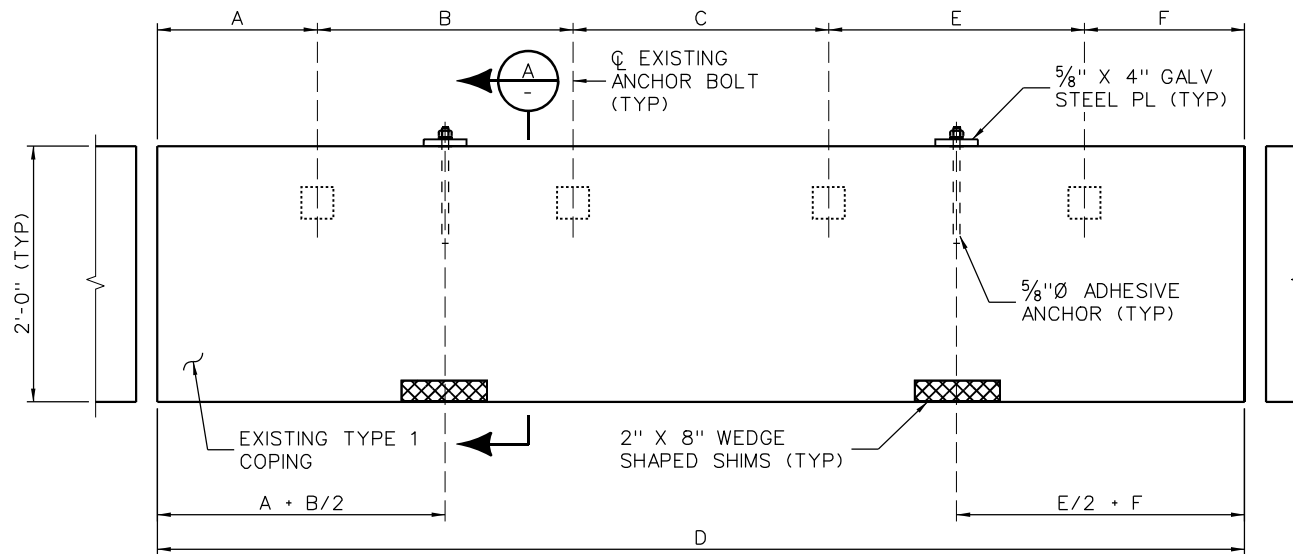
1. THE MAX SHEAR FORCE PER BOLT FROM THE SERVICE LOADS IS: 0.97 KIPS
2. THE MAX TENSION FORCE PER BOLT FROM THE SERVICE LOADS IS: 1.01 KIPS
3. BASE CONCRETE: f'c = 4,000 psi
PRECAST PANEL: f'c = 4,000 psi
4. DIMENSIONS A, C, D AND F TO BE FIELD MEASURED.

Print Date: 6/6/2022		0000	Sheet Revisions			As Constructed		COPING REPAIR DETAILS 2			Project No./Code	
File Name: TREX_COPING REPAIR_DETAILS-2.dgn			Date:	Comments	Init.	No Revisions:						
Horiz. Scale: 1:1 Vert. Scale: As Noted						Revised:		Designer: L. SWEENHART	Structure			
Unit Information - Unit 224 AJP						Void:		Detailer: B. TERRELL	Numbers			
<div><div><div></div><div></div><div></div><div></div><div></div></div><div>1670 BROADWAY, SUITE 3400 DENVER, COLORADO 80202 Phone: 303-764-1520 FAX: 303-860-7139</div></div>								Sheet Subset:	Subset Sheets:		Sheet Number 33	

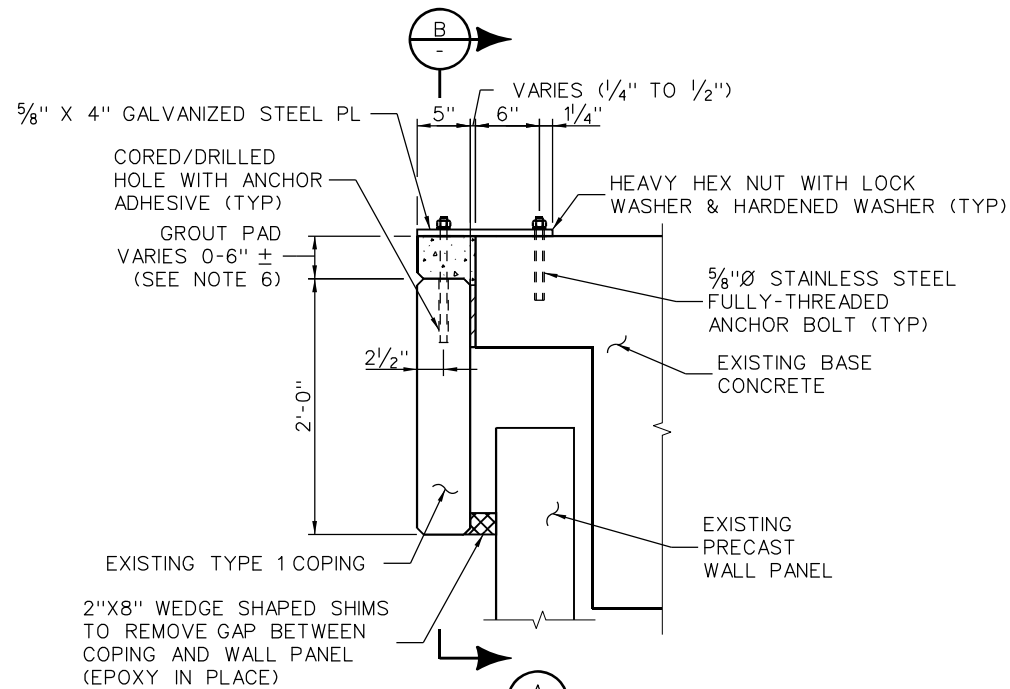
BTERRRELL 2:27:44 PM C:\Users\BTERRRELL\Documents\RTD\TREX_MODIFIED TYPE 1 COPING REPAIR_DETAILS-1.dgn



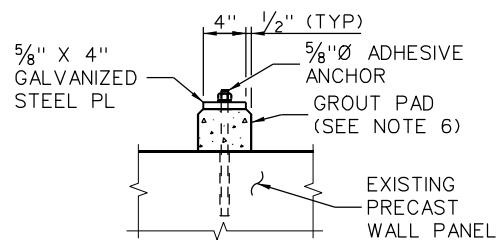
COPING ELEVATION (3' ≤ D ≤ 7.5')



COPING ELEVATION (7.5' ≤ D ≤ 9.94')



SECTION A-A



SECTION B-B

NOTES:

1. MODIFIED REPAIR TYPE 1 SHALL ONLY BE USED WHEN APPROVED BY THE ENGINEER AT LOCATIONS WITH INSUFFICIENT HORIZONTAL CLEARANCE TO INSTALL THE TYPE 1 COPING REPAIR SHOWN ON COPING REPAIR DETAILS SHEETS.
2. GALVANIZED STEEL PLATES SHALL BE AASHTO M270 (ASTM A709) GRADE 50. CONTRACTOR SHALL FIELD VERIFY REQUIRED LENGTH OF PLATES PRIOR TO FABRICATION. ANCHORS TO BE OF THE SAME MATERIAL AND SPECIFICATIONS AS USED IN THE COPING REPAIR DETAIL SHEETS.
3. MINIMUM EFFECTIVE ADHESIVE ANCHOR EMBEDMENT LENGTH INTO COPING CONCRETE / BASE CONCRETE SHALL BE 6". THE THICKNESS OF THE GROUT PAD SHALL NOT BE CONSIDERED IN THIS EMBEDMENT LENGTH.
4. INSTALL ADHESIVE ANCHORS PER MANUFACTURER'S RECOMMENDATIONS. DO NOT TIGHTEN ANCHOR BOLT NUTS UNTIL THE ADHESIVE HAS REACHED ITS DESIGN STRENGTH.
5. THE MAXIMUM TENSION FORCE PER ANCHOR FROM SERVICE LOAD COMBINATIONS IS 0.8 KIPS.
6. A GROUT PAD IS ONLY NECESSARY IF THERE IS A DIFFERENCE IN ELEVATION BETWEEN THE TOP OF COPING AND TOP OF BASE CONCRETE. GROUT SHALL BE FROM THE CDOT APPROVED PRODUCTS LIST. THE ADDITION OF AGGREGATE MAY BE REQUIRED FOR TALLER GROUT PADS; CONTRACTOR SHALL REFER TO THE MANUFACTURER'S RECOMMENDATIONS FOR MAXIMUM RECOMMENDED GROUT THICKNESS. STEEL SHIMS MAY BE USED AS AN ALTERNATIVE IF THE ELEVATION DIFFERENCE IS LESS THAN THE MANUFACTURER'S MINIMUM RECOMMENDED GROUT THICKNESS.
7. THE 2" X 8" WEDGE SHAPED SHIMS MAY BE SUBSTITUTED WITH AN APPROVED EQUIVALENT.
8. CONCRETE STRENGTH OF THE EXISTING PRECAST PANEL AND BASE CONCRETE IS ASSUMED TO BE 4,500 PSI.
9. REFER TO THE PROJECT SPECIAL PROVISIONS FOR ADDITIONAL INSTALLATION PROCEDURES AND REQUIREMENTS OF THE ADHESIVE ANCHORS AND SHIMS, TESTING REQUIREMENTS FOR THE ADHESIVE ANCHORS, AND FINAL AESTHETIC TREATMENTS.
10. SEE AS-BUILT DRAWINGS FOR EXISTING CONDITION GEOMETRY. CONTRACTOR SHALL FIELD VERIFY ALL RELEVANT DIMENSIONS.

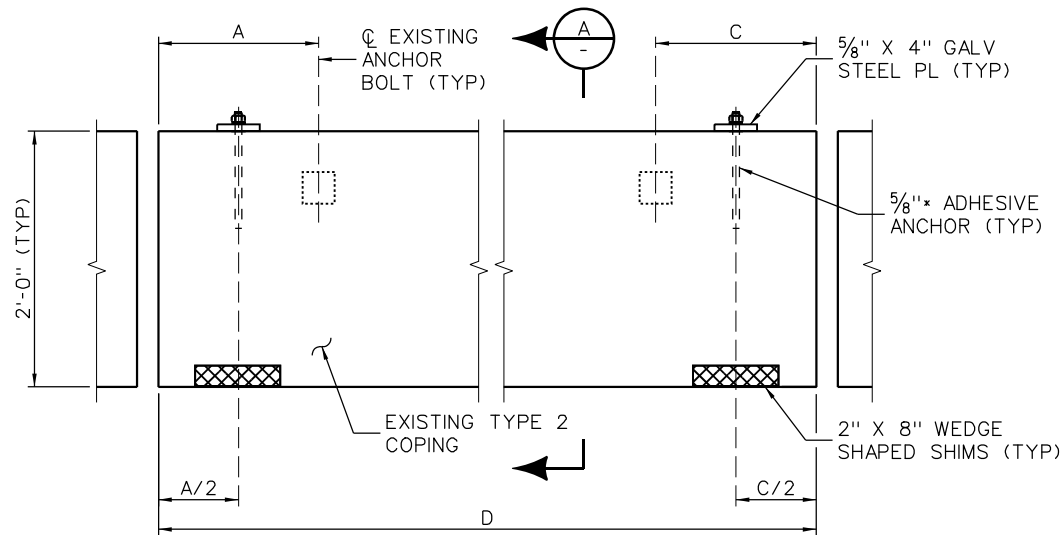
Print Date: 6/6/2022	
File Name: TREX_MODIFIED TYPE 1 COPING REPAIR_DETAILS-1.dgn	
Horiz. Scale: 1:1	Vert. Scale: As Noted
Unit Information - Unit 224	
AJP	
1670 BROADWAY, SUITE 3400 DENVER, COLORADO 80202	
Phone: 303-764-1520 FAX: 303-860-7139	

0000

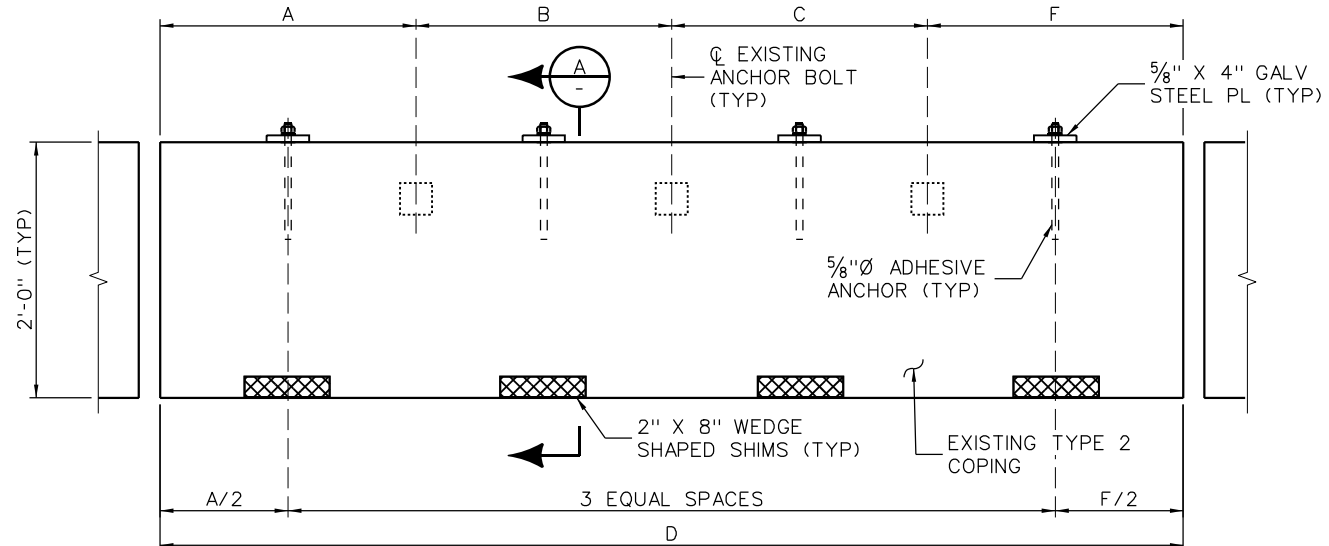
Sheet Revisions		
Date:	Comments	Init.

As Constructed		MODIFIED TYPE 1 COPING REPAIR DETAILS		Project No./Code
No Revisions:				
Revised:		Designer: L. SWEENHART	Structure Numbers	
Void:		Detailer: B. TERRELL		
		Sheet Subset:	Subset Sheets:	Sheet Number 34

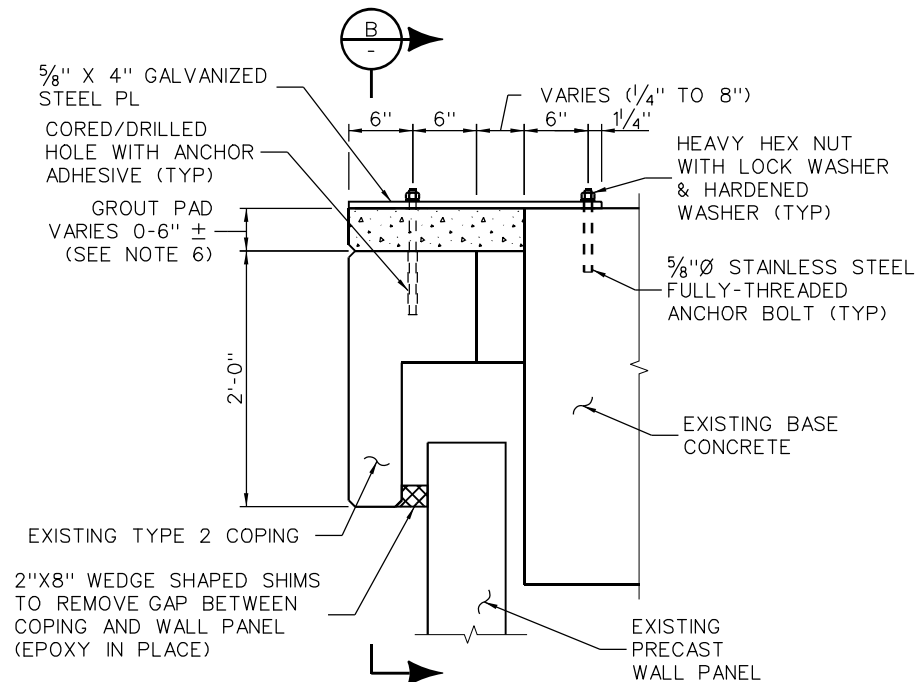
BTERRELL 2:29:34 PM C:\Users\BTERRELL\Documents\RTD\TREX_MODIFIED TYPE 2 COPING REPAIR_DETAILS-1.dgn



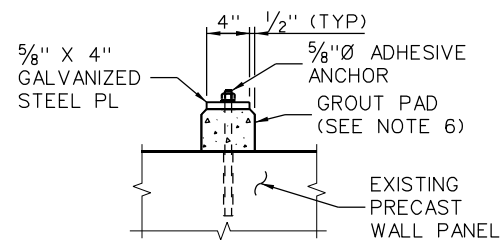
COPING ELEVATION (3' ≤ D ≤ 5')



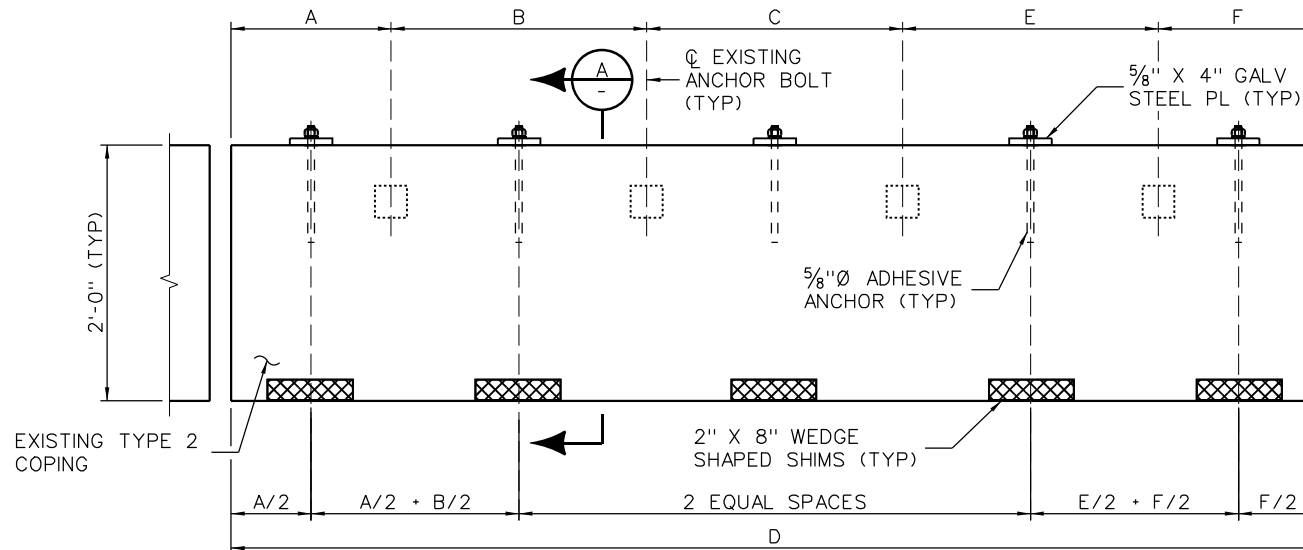
COPING ELEVATION (5' ≤ D ≤ 7.5')



SECTION A-A



SECTION B-B



COPING ELEVATION (7.5' ≤ D ≤ 9.94')

NOTES:

1. MODIFIED REPAIR TYPE 2 SHALL ONLY BE USED WHEN APPROVED BY THE ENGINEER AT LOCATIONS WITH INSUFFICIENT HORIZONTAL CLEARANCE TO INSTALL THE TYPE 2 COPING REPAIR SHOWN ON COPING REPAIR DETAILS.
2. GALVANIZED STEEL PLATES SHALL BE AASHTO M270 (ASTM A709) GRADE 50. CONTRACTOR SHALL FIELD VERIFY REQUIRED LENGTH OF PLATES PRIOR TO FABRICATION. ANCHORS TO BE OF SAME MATERIAL AND SPECIFICATIONS AS USED IN THE COPING REPAIR DETAIL SHEETS.
3. MINIMUM EFFECTIVE ADHESIVE ANCHOR EMBEDMENT LENGTH INTO COPING CONCRETE / BASE CONCRETE SHALL BE 6". THE THICKNESS OF THE GROUT PAD SHALL NOT BE CONSIDERED IN THIS EMBEDMENT LENGTH.
4. INSTALL ADHESIVE ANCHORS PER MANUFACTURER'S RECOMMENDATIONS. DO NOT TIGHTEN ANCHOR BOLT NUTS UNTIL THE ADHESIVE HAS REACHED ITS DESIGN STRENGTH.
5. THE MAXIMUM TENSION FORCE PER ANCHOR FROM SERVICE LOAD COMBINATIONS IS 2.4 KIPS.
6. A GROUT PAD IS ONLY NECESSARY IF THERE IS A DIFFERENCE IN ELEVATION BETWEEN THE TOP OF COPING AND TOP OF BASE CONCRETE. GROUT SHALL BE FROM THE CDOT APPROVED PRODUCTS LIST. THE ADDITION OF AGGREGATE MAY BE REQUIRED FOR TALLER GROUT PADS; CONTRACTOR SHALL REFER TO THE MANUFACTURER'S RECOMMENDATIONS FOR MAXIMUM RECOMMENDED GROUT THICKNESS. STEEL SHIMS MAY BE USED AS AN ALTERNATIVE IF THE ELEVATION DIFFERENCE IS LESS THAN THE MANUFACTURER'S MINIMUM RECOMMENDED GROUT THICKNESS.
7. THE 2" X 8" WEDGE SHAPED SHIMS MAY BE SUBSTITUTED WITH AN APPROVED EQUIVALENT.
8. CONCRETE STRENGTH OF THE EXISTING PRECAST PANEL AND BASE CONCRETE IS ASSUMED TO BE 4,500 PSI.
9. REFER TO THE PROJECT SPECIAL PROVISIONS FOR ADDITIONAL INSTALLATION PROCEDURES AND REQUIREMENTS OF THE ADHESIVE ANCHORS AND SHIMS, TESTING REQUIREMENTS FOR THE ADHESIVE ANCHORS, AND FINAL AESTHETIC TREATMENTS.
10. SEE AS-BUILT DRAWINGS FOR EXISTING CONDITION GEOMETRY. CONTRACTOR SHALL FIELD VERIFY ALL RELEVANT DIMENSIONS.

Print Date: 6/6/2022

File Name: TREX_MODIFIED TYPE 2 COPING REPAIR_DETAILS-1.dgn

Horiz. Scale: 1:1

Vert. Scale: As Noted

Unit Information - Unit 224

AJP



1670 BROADWAY, SUITE 3400 DENVER, COLORADO 80202
Phone: 303-764-1520 FAX: 303-860-7139

0000

Sheet Revisions

Date:	Comments	Init.

As Constructed

No Revisions:

Revised:

Void:

MODIFIED TYPE 2 COPING
REPAIR DETAILS

Designer: L. SWEENHART

Detailer: B. TERRELL

Sheet Subset:

Structure

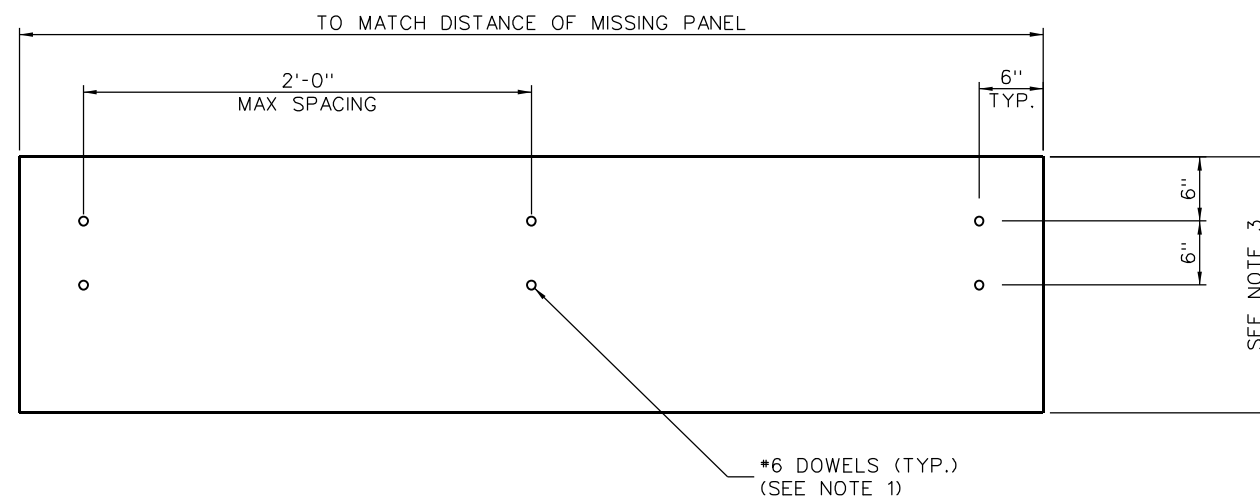
Numbers

Subset Sheets:

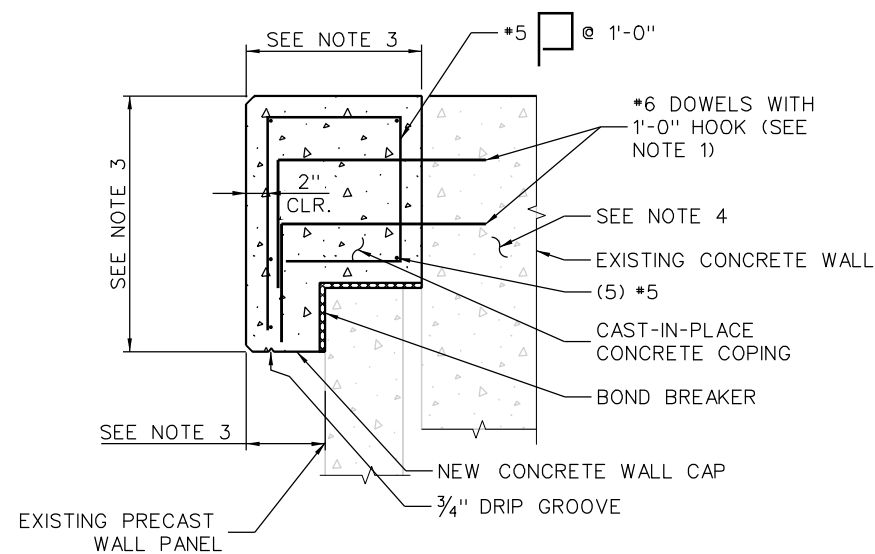
Project No./Code

Sheet Number

35



COPING ELEVATION




SECTION AT NORTH ABUTMENT

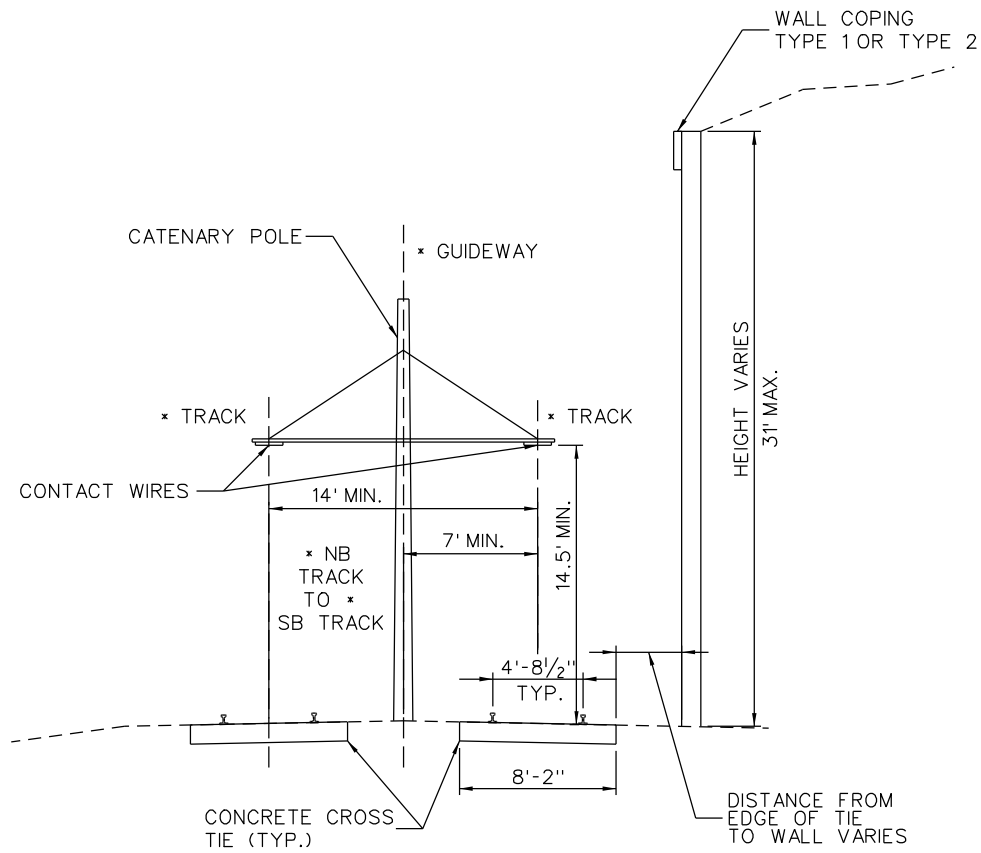
NOTES:

1. DOWELS SHALL HAVE A MINIMUM EMBED OF 10" INTO THE EXISTING CONCRETE WALL.
2. ANY EXPOSED METAL BRACKETS BETWEEN WALL PANEL AND BACKWALL TO BE COATED IN CORROSION RESISTANT COATING AS APPROVED BY PROJECT ENGINEER.
3. DIMENSION OF CAP WILL BE FIELD MEASURED TO MATCH ADJACENT PANELS
4. ALL REINFORCING SHALL BE STAINLESS STEEL IN ACCORDANCE TO: ASTM A955 $f_y = 75 \text{ ksi}$ MIN
STAINLESS STEEL REINFORCING BARS SHALL CONFORM TO ASTM 955, UNSIDENATIONS S24000, S31803, S32101 AND S32304

ASTM A1035CS, GRADE 100, fy = 100 ksi MIN
REINFORCING STEEL SHALL BE LOW-CARBON, CHROMIUM,
CONFORMING TO ASTM A1035/A1035M ALLOY TYPE 1035
CS GRADE 100 WITH A MINIMUM CHROMIUM CONTENT OF
9.2% STAINLESS STEEL PER ASTM A1955 MAY BE
SUBSTITUTED.

Print Date: 6/6/2022		0000	Sheet Revisions			As Constructed		CAST-IN-PLACE COPING DETAILS			Project No./Code	
File Name: 19869DES_Coping Details.dgn			Date:	Comments	Init.	No Revisions:						
Horiz. Scale: 1:1 Vert. Scale: As Noted						Revised:		Designer: L. SWEENHART	Structure			
Unit Information - Unit 224 AJP						Detailer: B. TERRELL		Numbers				
<div><div></div><div>1670 BROADWAY, SUITE 3400 DENVER, COLORADO 80202 Phone: 303-764-1520 FAX: 303-860-7139</div></div>						Void:		Sheet Subset:	Subset Sheets:		Sheet Number	36

BTERRELL 2:38:45 PM C:\Users\BTERRELL\Documents\RTD\19869WALL_Details_01.dgn

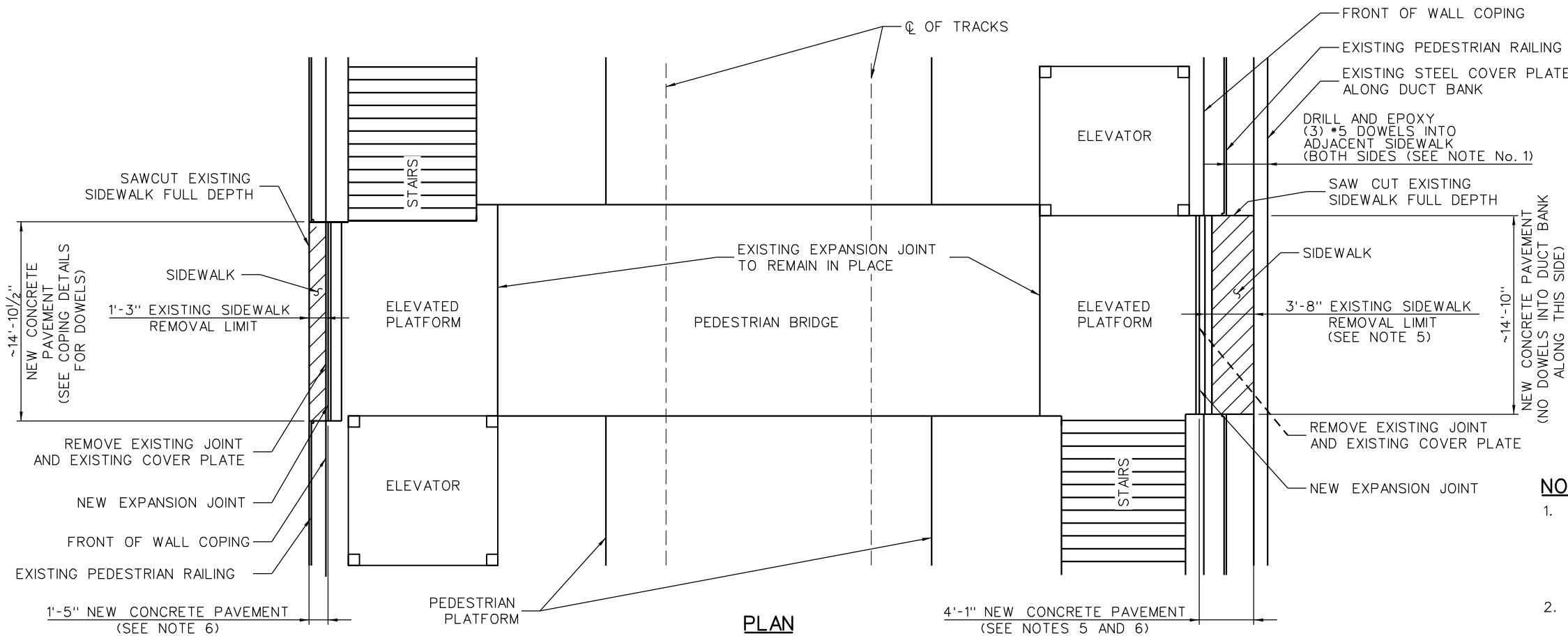


TYPICAL LRT SECTION

NOTE:
1. FOR WALL HEIGHTS, SEE TABULATION OF STRUCTURAL ELEMENTS SHEETS.

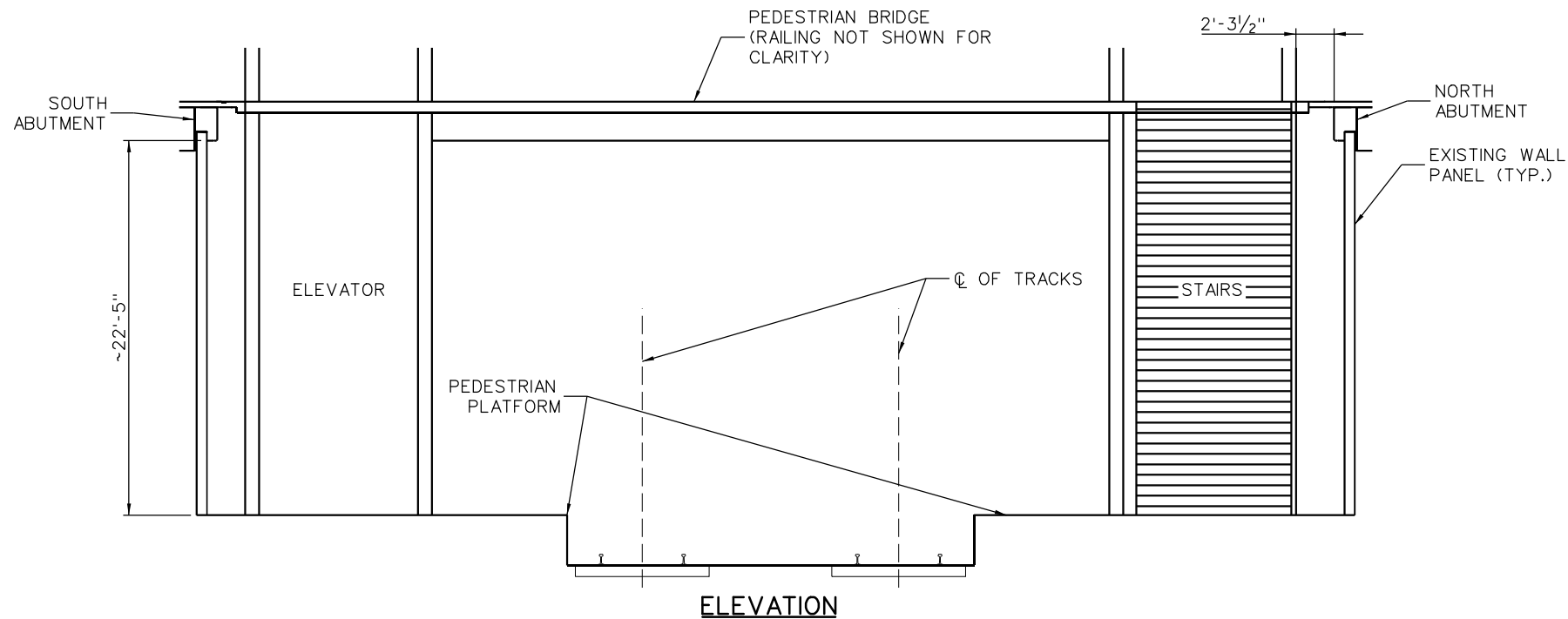
Print Date: 6/6/2022		<div>0000</div>	Sheet Revisions				As Constructed	TYPICAL LRT SECTION			Project No./Code
File Name: 19869WALL_Details_01.dgn			Date:	Comments	Init.		No Revisions:				
Horiz. Scale: 1:10 Vert. Scale: As Noted							Revised:	Designer: L. SWEENHART	Structure		
Unit Information - Unit 224 AJP							Void:	Detailer: B. TERRELL	Numbers		
<div><div><div></div></div><div>1670 BROADWAY, SUITE 3400 DENVER, COLORADO 80202 Phone: 303-764-1520 FAX: 303-860-7139</div></div>							Sheet Subset:	Subset Sheets:		Sheet Number	37


BTERRELL 2:40:16 PM C:\Users\BTERRELL\Documents\RTD\19869DES_GeneralLayout.dgn



NOTES:

1. ON THE SIDEWALK REPLACEMENT ON THE NORTH SIDE #5 REINFORCING DOWEL SHALL BE DRILLED AND EPOXIED INTO THE CENTER OF THE EXISTING ADJACENT SIDEWALK. FOLLOW MANUFACTURERS RECOMMENDATIONS FOR DRILL AND EPOXY WORK.
2. SEE COPING DETAILS SHEET FOR REPLACEMENT DETAILS FOR WALL COPING, CONCRETE SLAB/SIDEWALK AND EXPANSION JOINTS.
3. THE REPAIR WORK WILL BE DONE IN TWO PHASES TO FACILITATE THE FACILITY BEING OPEN DURING CONSTRUCTION. THE CONTRACTOR SHALL SUBMIT PLANS DETAILING HOW WORK WILL BE COMPLETED AND CONSTRUCTION JOINT LOCATIONS.
4. PORTIONS OF THE PEDESTRIAN RAIL MAY NEED TO BE REMOVED AND RESET FOR THE WORK. THE CONTRACTOR SHALL SUBMIT A PLAN FOR MAINTAINING FALL PROTECTION DURING CONSTRUCTION.
5. CONCRETE SIDEWALK DIMENSIONS ON THE NORTH SIDE ARE APPROXIMATE SINCE EXISTING DUCT BANK COVER PLATE COVERS THE EXISTING EDGE OF CONCRETE. CONTRACTOR SHALL FIELD VERIFY DIMENSIONS.
6. REPLACEMENT CONCRETE DIMENSIONS WILL NEED TO BE COORDINATED WITH THE EXPANSION JOINT LOCATION. SEE THE SECTION VIEWS FOR ADDITIONAL DIMENSION INFORMATION. MINOR ADJUSTMENTS MAY BE REQUIRED.
7. THE EXISTING COPING SHALL BE REMOVED AND REPLACED AT THE EXISTING JOINT LOCATIONS IN THE COPING. THE LIMITS SHOWN IN THE PLAN VIEW ARE APPROXIMATE AND SHALL BE FIELD VERIFIED.
8. THE COST OF REMOVAL OF COPING UNDER PED BRIDGE SHALL BE INCLUDED IN REMOVAL OF SIDEWALKS. 1 PANEL TO BE REMOVED ON NORTH SIDE OF PROJECT AND 2 ON SOUTH SIDE OF PROJECT.



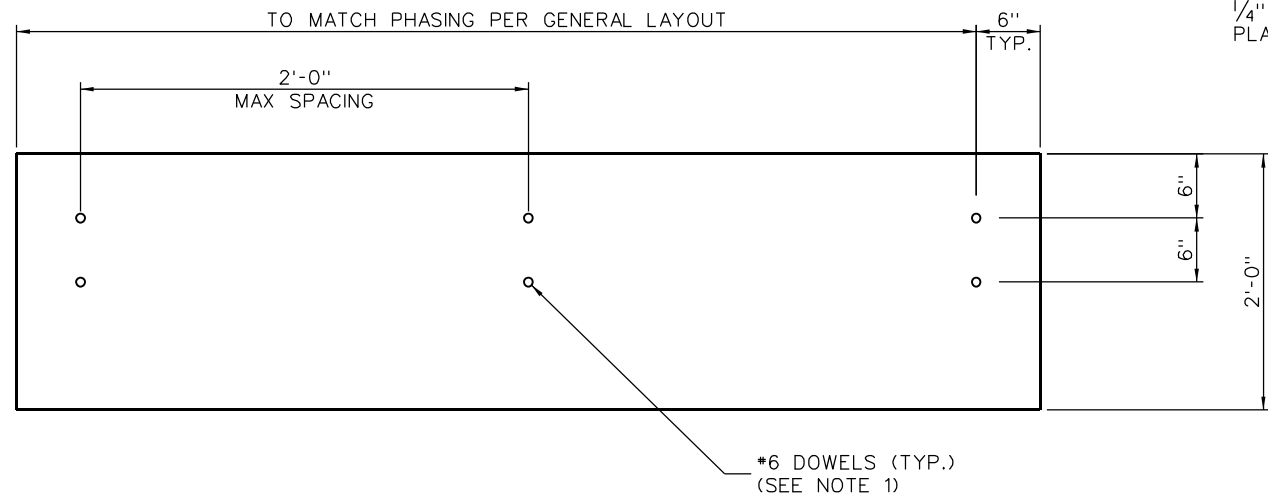
Print Date: 6/6/2022	
File Name: 19869DES_GeneralLayout.dgn	
Horiz. Scale: 1:1	Vert. Scale: As Noted
Unit Information - Unit 224 AJP	
 1670 BROADWAY, SUITE 3400 DENVER, COLORADO 80202 Phone: 303-764-1520 FAX: 303-860-7139	

0000

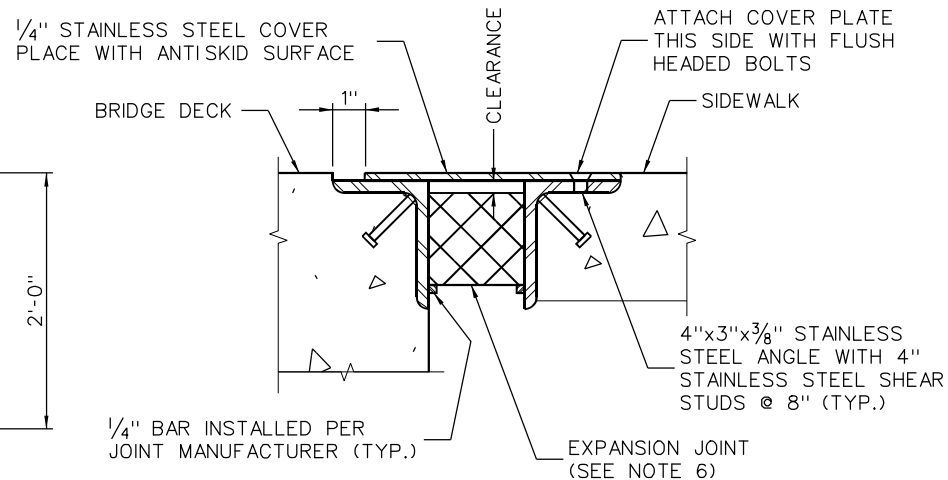
Sheet Revisions		
Date:	Comments	Init.

As Constructed		GENERAL LAYOUT		Project No./Code
No Revisions:				
Revised:		Designer: L. SWEENHART	Structure Numbers	
Void:		Detailer: B. TERRELL		
		Sheet Subset:	Subset Sheets:	Sheet Number 38

BTERRELL 2:44:30 PM C:\Users\BTERRELL\Documents\RTD\MOT\19869DES_Coping Details_03.dgn



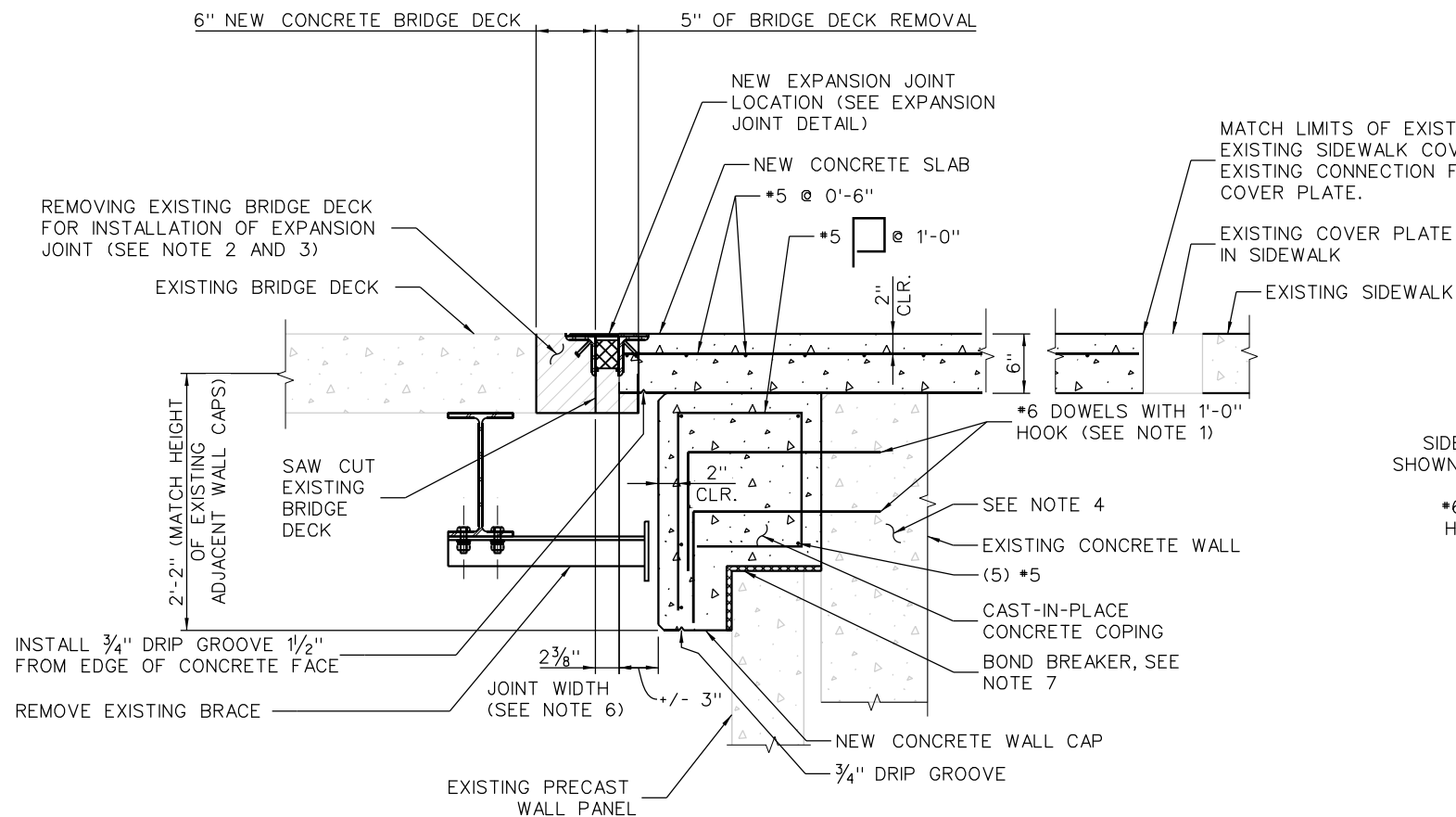
COPING ELEVATION



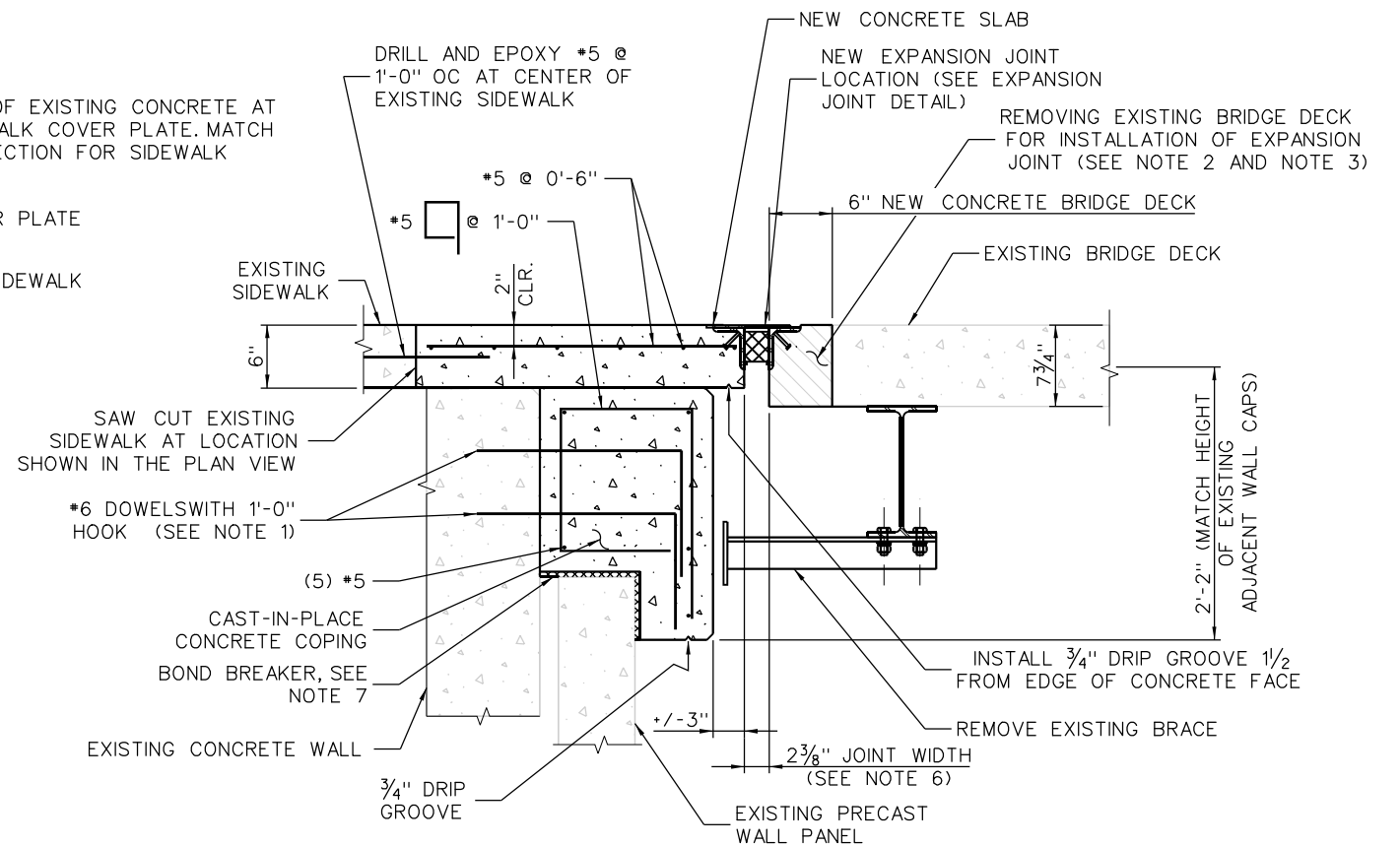
EXPANSION JOINT DETAIL

NOTES:

1. DOWELS SHALL HAVE A MINIMUM EMBED OF 10" INTO THE EXISTING CONCRETE WALL.
2. SAW CUT 3/4" DEEP FOR LIMIT OF DECK REMOVAL TO ESTABLISH A CLEAN CUT LINE. EXISTING BRIDGE DECK REINFORCING TO REMAIN IN PLACE AND UNDAAGED.
3. ALL REINFORCING SHALL BE CLEANED AND ANY DAMAGE TO EPOXY COATED REPAIRED. IF REINFORCING IS DAMAGED OR CUT NOTIFY ENGINEER.
4. ANY EXPOSED METAL BRACKETS BETWEEN WALL PANEL AND BACKWALL TO BE COATED IN CORROSION RESISTANT COATING AS APPROVED BY PROJECT ENGINEER.
5. JOINT WIDTH AND LENGTH TO BE PER MANUFACTURERS RECOMMENDATIONS. EXPANSION JOINT MATERIAL TO BE SUBMITTED FOR APPROVAL BY PROJECT ENGINEER.
6. EXPANSION JOINT SHALL BE EMSEAL SJS JOINT SYSTEM OR APPROVED EQUAL. THE ACTUAL JOINT WIDTH SHALL BE COORDINATED WITH THE MANUFACTURER PRIOR TO INSTALLING THE STEEL ANGLES. ANY CHANGE IN THE DIMENSIONS SHALL BE SUBMITTED TO THE ENGINEER.
7. BOND BREAKER TO BE INCLUDED IN THE COST OF THE CAST-IN-PLACE COPING. SUBMIT PRODUCT TO ENGINEER FOR APPROVAL.

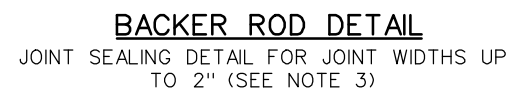


SECTION AT NORTH ABUTMENT



SECTION AT SOUTH ABUTMENT

Print Date: 6/6/2022		0000	Sheet Revisions				As Constructed		COPING DETAILS			Project No./Code	
File Name: 19869DES_Coping Details_03.dgn			Date:	Comments	Init.		No Revisions:						
Horiz. Scale: 1:1 Vert. Scale: As Noted							Revised:		Designer: T. POWERS	Structure			
Unit Information - Unit 224 AJP							Detailer: P. GREHAN		Numbers				
 1670 BROADWAY, SUITE 3400 DENVER, COLORADO 80202 Phone: 303-764-1520 FAX: 303-860-7139							Void:		Sheet Subset:	Subset Sheets:	Sheet Number	39	



1. FOLLOW MANUFACTURERS RECOMMENDATIONS FOR PROPER SIZE OF BACKER ROD FOR THE JOINT WIDTH TO ENSURE A SNUG FIT.
2. THE JOINT SEALER SHALL BE INSTALLED PER THE MANUFACTURERS RECOMMENDATIONS. THE THICKNESS OF THE JOINT SEALER ABOVE THE BACKER ROD SHALL BE PER THE MANUFACTURES GUIDANCE BASED ON THE JOINT WIDTH.
3. FOR JOINTS WIDER THAN 2" NOTIFY THE ENGINEER. THE WIDER JOINTS MAY REQUIRE SPECIAL DETAILS.
4. SEE THE CONCRETE JOINT SEALANT SPECIFICATION FOR ADDITIONAL BACKER ROD DETAILS AND PAYMENT INFORMATION.
5. BACKER ROD DETAIL TO BE APPLIED TO ALL COPING PANELS ALONG PROJECT LIMITS WITHIN RTD ROW. "COMPLETE" IN THESE PLANS DOES NOT REFER TO THIS REPAIR AS BEING COMPLETE.
6. TEMPORARY SHORING REQUIRED DURING WORK IF COPING REPAIRS HAVE NOT ALREADY BEEN INSTALLED.

BTRELL 10:41:35 AM C:\Users\BTRELL\Documents\RTD\Trex_MODIFIED BACKER ROD.dgn

PART 4
FORM OF THE CONTRACT

THIS PAGE INTENTIONALLY BLANK

CONTRACT AWARD and SIGNATURE PAGE

RTD Contract Number 122DR005

ISSUED BY

Regional Transportation District
1660 Blake St.
Denver, Colorado 80202 - 1399
Notices to: Eva Boyd, Purchasing Agent

CONTRACTOR

[Name]
[Address]
[City, State, ZIP]
Notices to: [CONTRACT REP NAME], Contract Representative

Invoices: Submit invoices as stated in Contract Section I, Statement of Contract Cost, Invoicing

Products/Services: TREX Coping Panel Repair

Contract Cost: [Inclusive of any fixed fee and cost detailed on Statement of Contract Cost]

Type: Firm Fixed Price

Effective Date: Date of execution by RTD of this Contract Award and Signature Page

Period of Performance: Subject to the Termination provision of the Contract, performance shall commence as of the date specified in the notice to proceed or, if no date is specified, upon **Contractor's receipt of** notice to proceed, and shall continue for 1 year. If mailed, receipt of the notice to proceed is presumed to be five days after mailing.

This Contract consists of: Contract Award and Signature Page; Section I – Statement of Contract Cost; Section II - Scope of Work (provided as Part 3 of RFP); Section III – Terms and Conditions, including exhibits; and Section IV – Attachments. These Contract Documents constitute the entire Contract between the parties.

Contractor's Agreement**Award**

Contractor agrees to perform the Work identified above and on the continuation pages for the consideration stated herein and to otherwise perform according to the terms of the Contract. In executing this Contract, the Contractor warrants that it is familiar with the Scope of Work attached and that it is qualified to provide the associated level of effort required to successfully complete such tasks and that it can satisfactorily perform such tasks within the Contract Cost.

FOR

By: _____

Name (print): _____

Title: _____

Date: _____

Regional Transportation District hereby accepts your offer to perform the Work identified above and on the continuation pages, for the consideration stated above, and in accordance with the terms and conditions of the Contract.

FOR THE REGIONAL TRANSPORTATION DISTRICT

By: _____

Debra A. Johnson
General Manager and CEO

Date: _____

Approved as to legal form for the Regional Transportation District

By: _____

Legal Counsel

Name (print): _____

Date: _____

FIXED PRICE CONTRACT

SECTION I STATEMENT OF CONTRACT COST

STATEMENT OF CONTRACT COST

For the satisfactory performance and completion of the Work, RTD will pay the Contractor compensation as set forth below. Capitalized terms shall have the meaning prescribed in the Contract, unless the context requires otherwise.

A. Term. Subject to the Termination provision of the Contract, performance shall commence as **of the date specified in the notice to proceed or, if no date is specified, upon Contractor's** receipt of notice to proceed, and shall continue for One year. If mailed, receipt of the notice to proceed is presumed to be five days after mailing.

B. Compensation.

1. This is a fixed-price Contract with a maximum price not to exceed [\$ _____ TOTAL CONTRACT PRICE], within which price Contractor agrees to complete the Work as per the Contract Documents. Compensation for Work shall be on a fixed price per unit of supplies ordered and for installation of such equipment, if required, and/or on a fixed price per hour for services in accordance with the negotiated pricing schedule included with this Statement of Contract Cost.

2. All prices, rates and costs shall be inclusive of all fees associated with the Contractor's efforts, including but not limited to salaries, benefits, expenses, overhead, administration, profits, and outside consultant fees. No hourly charges shall exceed any hourly rates identified in this Statement of Contract Cost or Contract amendment. Contractor shall not invoice separately for mileage, travel time, parking expenses or any other miscellaneous charges, except as stated in this Statement of Contract Cost or approved by RTD.

3. RTD shall not pay the Contractor for any Work performed or for any cost incurred by the Contractor or subcontractors prior to the Period of Performance, unless those costs are incurred pursuant to RTD written notice to proceed and the costs are directly related to deliverable items set forth in the Scope of Work. RTD shall not be required to pay any amount in excess of the Contract Cost, unless the Contractor has secured a written amendment to this Contract providing for such increase.

C. Discounts. If a prompt-payment discount is negotiated, its terms will be specifically identified in this Statement of Contract Cost. For purposes of earning such discount, payment shall be deemed tendered as of the date such payment is placed in the U.S. Mail.

D. Invoicing.

Not later than ten days following the end of each calendar month within the Period of Performance, the Contractor shall submit an invoice covering Work performed over the preceding month.

1. Invoices shall include:

- a) **The Contractor's legal name;**
- b) The Contract number;
- c) The Purchase Order number;
- d) The period covered by the invoice;

- e) The work order(s), if any, covered by the invoice;
 - f) The total Contract Cost;
 - g) The total amount due on the invoice, specifying amount of supplies and services, respectively, due under the invoice, and all documentation; and
 - h) All other information specifically required by the Scope of Work.
2. Contractor shall submit the following with its invoices:
- a) A Monthly Progress Report detailing all Work accomplished during that month. Monthly Progress Reports shall be in narrative form, brief and informal in content, but shall include:
 - (i) A quantitative description detailing all Work performed and percentage of completion by phases of the Scope of Work and required deliverable items;
 - (ii) Identification of any current or anticipated problems which may impede **Contractor's** performance and the proposed corrective action; and
 - (iii) A brief discussion of the Work to be performed during the next monthly reporting period.
3. Submit invoices to:
- AP.Department@RTD-Denver.com
- E. Payment. Payment to the Contractor **shall be made upon RTD's determination that all Work** submitted for payment has been performed and all information and documentation required under the invoice and work order, if any, has been submitted. Payment will be made to the Contractor within 30 days after RTD approval of submitted invoices.
1. Prompt Payment of Subcontractors. The Contractor agrees that:
- a) It shall pay its subcontractor(s) any undisputed amounts for the satisfactory **performance of their Work within seven days of the Contractor's receipt of payment** from RTD for such Work;
 - b) **Within 30 days after a subcontractor's Work has been satisfactorily completed and accepted by RTD's Project Manager or by the Contractor, whichever is earlier, the Contractor shall make full payment to the subcontractor of any retainage the Contractor has kept related to such subcontractor's Work, unless a claim is filed against the subcontractor related to such Work;**
 - c) Failure to comply with the above may give RTD just cause to impose one or more of **the following penalties, until the required payment(s) to the Contractor's** subcontractor(s) is satisfied, unless RTD has given prior written approval to the Contractor for the delay or postponement of payment(s): (1) withhold payments to the Contractor; (2) assess sanctions against the Contractor; (3) assess the **subcontractor's indirect or consequential damages against the Contractor;** (4) disqualify the Contractor from future bidding on RTD contracts as non-responsible; (5) enforce the payment bond against the Contractor; (6) pay the subcontractor(s)

- directly and deduct this amount from any retainage owed to the Contractor; (7) provide notice of default to the Contractor, stating the potential for termination or suspension of the Contract, in whole or in part; (8) issue a stop-work order until the subcontractor(s) is paid, which order shall constitute an unauthorized delay under the Contract that could result in liquidated damages against the Contractor. Unless **approved by RTD, the Contractor's failure to comply with this Section is a material breach of the Contract;**
- d) It shall ensure that tiered subcontractors comply with this Section and that they insert provisions (a) and (b) of this Section into all lower-tiered subcontractor agreements; and

SECTION II SCOPE OF WORK
(See Part 3 of the RFP)

SECTION III
CONSTRUCTION TERMS AND CONDITIONS

Index to Construction Terms and Conditions

ARTICLE A1: DEFINITIONS	6
A1.1 AS-BUILT DRAWINGS.....	6
A1.2 BASELINE SCHEDULE	6
A1.3 BID or PROPOSAL	6
A1.4 BIDDER or PROPOSER.....	6
A1.5 CONTRACT or CONTRACT DOCUMENTS:	6
A1.6 CONTRACT COST	6
A1.7 CONTRACT SCHEDULE or TERM OF PERFORMANCE	6
A1.8 CONTRACTING OFFICER	6
A1.9 CONTRACTOR	7
A1.10 DAY	7
A1.11 DUE DILIGENCE	7
A1.12 FINAL ACCEPTANCE.....	7
A1.13 GENERAL FLOAT TIME	7
A1.14 PROJECT.....	7
A1.15 PROJECT MANAGER (PM)	7
A1.16 RECORD DOCUMENTS.....	7
A1.17 REGIONAL TRANSPORTATION DISTRICT, RTD, and DISTRICT	7
A1.18 RTD REPRESENTATIVE or ENGINEER	7
A1.19 SHOP DRAWINGS	8
A1.20 SUBSTANTIAL COMPLETION.....	8
A1.21 TECHNICAL SPECIFICATIONS	8
A1.22 WORK or SCOPE OF WORK.....	8
ARTICLE A2: LEGAL REQUIREMENTS	9
A2.1 SOCIO-ECONOMIC PROGRAMS	9
A2.2 NONDISCRIMINATION	9
A2.3 NONCOMPLIANCE	9
A2.4 ENVIRONMENTAL PROTECTION:	10
A2.5 PROHIBITED INTERESTS.....	11
A2.6 ANTI-KICKBACK PROVISION.....	11

A2.7	CONTRACT HEADINGS	11
A2.8	LAWS GOVERNING	11
A2.9	COVENANT AGAINST CONTINGENT FEES	12
A2.10	ORDER OF PRECEDENCE	12
A2.11	PROTECTING RTD'S INTEREST WHEN SUBCONTRACTING WITH CONTRACTORS DEBARRED, SUSPENDED, OR PROPOSED FOR DEBARMENT .	12
A2.12	HOLD HARMLESS.....	13
A2.13	NOTICE OF CLAIM OR ACTION FILED.....	14
A2.14	COLORADO GOVERNMENTAL IMMUNITY ACT	14
A2.15	APPROPRIATIONS.....	14
ARTICLE A3: PRE-CONSTRUCTION RIGHTS AND DUTIES, AND USE OF DOCUMENTS .		15
A3.1	PURPOSE OF THE CONTRACT	15
A3.2	BID OR PROPOSAL DOCUMENTS.....	15
A3.3	TECHNICAL SPECIFICATIONS	15
A3.4	REVIEW OF CONTRACT DOCUMENTS AND LEGAL REQUIREMENTS	16
A3.5	INFORMATION FURNISHED BY RTD	17
A3.6	SITE INVESTIGATION AND CONDITIONS AFFECTING THE WORK	17
A3.7	DIFFERING SITE CONDITIONS	18
A3.8	EQUIPMENT, MATERIAL, AND APPROVAL OF ALTERNATIVES:	19
A3.9	PRE-CONSTRUCTION MEETING	21
A3.10	NOTICE TO PROCEED	21
A3.11	SHOP DRAWINGS	21
A3.12	PERMITS AND LICENSES	23
A3.13	DESIGNATION OF SUBCONTRACTORS	24
ARTICLE A4: CONTROL, PROSECUTION, AND PROGRESS OF WORK.....		25
A4.1	ADMINISTRATION OF THE CONTRACT	25
A4.2	MATERIALS AND WORKMANSHIP.....	26
A4.3	SAFETY REQUIREMENTS	26
A4.4	TESTS AND INSPECTIONS.....	28
A4.5	QUALITY CONTROL AND INSPECTION OF CONSTRUCTION.....	28
A4.6	SUPERINTENDENCE BY THE CONTRACTOR	31
A4.7	PROTECTION OF PERSONS AND PROPERTY.....	31

A4.8	CONTROL OF MATERIALS AND EQUIPMENT	32
A4.9	CONTRACTOR'S RESPONSIBILITY FOR THE WORK AND MATERIALS	32
A4.10	RELIEF FROM MAINTENANCE AND RESPONSIBILITY	32
A4.11	ASSIGNMENT	33
A4.12	WARRANTIES	33
ARTICLE A5: SCHEDULES, COMPLETION OF WORK, AND TERMINATION		35
A5.1	SCHEDULES, PROGRESS REPORTS, AND MEETINGS:	35
A5.2	EXPEDITED SCHEDULES	36
A5.3	GENERAL FLOAT TIME	36
A5.4	TIMING OF WORK	37
A5.5	SUBSTANTIAL COMPLETION	37
A5.6	USE AND POSSESSION PRIOR TO COMPLETION	38
A5.7	FINAL ACCEPTANCE OF THE WORK	38
A5.8	RECORD DOCUMENTS	39
A5.9	SUSPENSION OF WORK	39
A5.10	TERMINATION	40
ARTICLE A6: PAYMENT		44
A6.1	CONTRACT COST	44
A6.2	LUMP SUM CONTRACTS	44
A6.3	UNIT PRICE CONTRACTS	44
A6.4	PROGRESS PAYMENTS	44
A6.5	FINAL PAYMENT	47
A6.6	PAYMENT OF RETAINAGE	48
A6.7	PAYMENTS WITHHELD	48
A6.8	HOLD HARMLESS	49
ARTICLE A7: CHANGES, CLAIMS, AND DISPUTE RESOLUTION		50
A7.1	CHANGE DEFINITIONS	50
A7.2	CHANGES DIRECTED BY RTD; POTENTIAL CHANGES REQUESTED BY RTD OR SUGGESTED BY THE CONTRACTOR	52
A7.3	CLAIMS	53
A7.4	DISPUTE RESOLUTION	56

A7.5 PRICING OF CHANGE ORDERS.....	56
A7.6 UNIT PRICE CONTRACT CHANGES	61
A7.7 DELAY DAMAGES:	61
A.7.8 TIME IMPACT ANALYSIS FOR CHANGE ORDERS, DELAYS, AND CONTRACTOR REQUESTS	64
A7.9 LIQUIDATED DAMAGES.....	65
A7.10 DUTY TO MITIGATE.....	66
ARTICLE A8: MISCELLANEOUS PROVISIONS.....	67
A8.1 TAXES.....	67
A8.2 PUBLICITY AND ADVERTISING	67
A8.3 FINDINGS CONFIDENTIAL.....	67
A8.4 OTHER CONTRACTS:	67
A8.5 RELATIONSHIP OF RTD.....	67
A8.6 NOTICES – TIME REQUIREMENTS.....	67
A8.7 VALUE ENGINEERING	68
A8.8 AUDIT AND RECORDS.....	71
A8.9 AUDIT	71
A8.10 PROJECT SIGN	72
A8.11 AUTHORITY.....	72
A8.12 SEVERABILITY OF CONTRACT CLAUSES.....	72
A8.13 IDENTIFICATION OF EMPLOYEES.....	72
A8.14 ELECTRONIC SIGNATURES	73

ARTICLE A1: DEFINITIONS

A1.1 AS-BUILT DRAWINGS: A required submittal at the end of the Work from the Contractor showing the actual quantities, dimensions, and locations of the Work performed under the Contract. As-Built Drawings must be stamped and signed by a Colorado Professional Engineer.

A1.2 BASELINE SCHEDULE: **The Contractor's schedule to be provided to the Contracting Officer before starting Work, which may differ from the Contract Schedule provided by RTD in the Invitation for Bids or Request for Proposals. It shall be used as the basis to establish the Monthly Progress Schedule. A Contractor's Baseline Schedule is not the Term of Performance or the Contract Schedule unless made so by a Contract Amendment.**

A1.3 BID or PROPOSAL: The Bid or offer or Proposal of the Bidder or Proposer for the Work when made out and submitted on the prescribed Bid or Proposal form, as directed by the Invitation for Bids or Request for Proposals, and properly signed and guaranteed and including the schedule of bid or proposed items. The Bid or Proposal will be incorporated as an essential part of the Contract.

A1.4 BIDDER or PROPOSER: Any individual, firm, partnership, corporation, or combination thereof submitting a Bid or Proposal for the Work contemplated, acting directly or through a duly authorized representative.

A1.5 CONTRACT or CONTRACT DOCUMENTS: The executed document that controls the rights and duties of the parties including the Invitation for Bids or Request for Proposals and any Addenda, the Bid (or Proposal), the terms and conditions, drawings, Technical Specifications, the Scope of Work (if not included in the Technical Specifications), Record Documents, any Attachments, any Change Orders and any amendments.

A1.6 CONTRACT COST: The total amount payable by RTD to the Contractor for the performance of the Work under the Contract, which is stated in the Statement of Contract Cost.

A1.7 CONTRACT SCHEDULE or TERM OF PERFORMANCE: The period of time allowed in the Contract Documents for completion of the Work. The Work is required to be done by the end of this period of time. The Term of Performance and all milestones constitute the Contract Schedule, which is established by RTD in the Contract (usually the Technical Specifications) and does not change unless changed by a Contract Amendment.

A1.8 CONTRACTING OFFICER: The General Manager of RTD or such person(s) as **he/she shall designate to act on his/her behalf in writing. Whenever the term "Contracting Officer" shall appear in the Contract, the term shall also include his/her duly authorized representative(s), which may include the RTD Project Manager, Contract Administrator, Purchasing Agent, Buyer, or the like. At the Work site, the Contracting Officer's duly authorized representative is generally the RTD Project Manager.**

A1.9 CONTRACTOR: The person or organization identified as the Contractor in the Contract Documents and referred to throughout the Contract Documents as if singular in number. **The term "Contractor" includes the Contractor's authorized representative, employees, agents, and subcontractors.**

A1.10 DAY: A calendar day, unless otherwise specified in the Contract Documents.

A1.11 DUE DILIGENCE: The measure of diligence and skill required of a good and competent contractor in bidding or proposing and performing the Work as contemplated by peers in the industry and measured by standard contracting practices commensurate with the duty to be performed and the individual circumstances of the situation.

A1.12 FINAL ACCEPTANCE: Final Acceptance of the Work occurs when the Work is fully, completely, and finally accomplished in full, absolute, and strict compliance with the Contract Documents, including As-Built Drawings.

A1.13 GENERAL FLOAT TIME: The time period differences between the milestones and the completion date established by RTD (according to the Contract Schedule contained in the Invitation for Bids, Request for Proposals, Technical Specifications or the Scope of Work) and any earlier milestones and/or completion date in the Baseline Schedule or Monthly Progress Schedule. General Float Time is also the time period that **the Contractor has put into its schedule and noted in some form as "float."**

A1.14 PROJECT: The intended end product (facility, parking lot, road, building, equipment, etc.) of the Contract in full compliance with the Technical Specifications including the Scope of Work.

A1.15 PROJECT MANAGER (PM): At the Work site, the Project Manager is the duly authorized representative of both the Contracting Officer and the RTD Representative and has the authority to act for and on behalf of RTD in all matters connected with this Contract, unless the Contractor is otherwise notified in writing by either the Contracting Officer or the RTD Representative. [The level of authority flows from the Contracting Officer to the RTD Representative to the Project Manager.] The Project Manager or PM **includes the PM's duly authorized agents or representatives.**

A1.16 RECORD DOCUMENTS: All drawings, Technical Specifications, and related documents marked to record all changes made during construction to reflect actual conditions; all submitted schedules including all updated Monthly Progress Schedules; and daily logs or diaries signed by the superintendent of record.

A1.17 REGIONAL TRANSPORTATION DISTRICT, RTD, and DISTRICT: The Regional Transportation District, a political subdivision of the State of Colorado, and its authorized representatives including the Contracting Officer.

A1.18 RTD REPRESENTATIVE or ENGINEER: **RTD's** Assistant General Manager for Capital Programs or his/her delegate who has the authority to act for and on behalf of

RTD in all matters connected with this Contract. At the Work site, the RTD Representative is generally the RTD Project Manager.

A1.19 SHOP DRAWINGS: Items such as detail drawings, calculations, and catalog cuts, which are prepared by the Contractor to supplement or detail Contract drawings or Technical Specifications, and which are contractual requirements or are prepared at the Contractor's option to detail its Work. **Shop Drawings shall include those drawings, plans, lists, schedules, diagrams, catalogs, and other details, charts, calculations, and data necessary to control the Work adequately.**

A1.20 SUBSTANTIAL COMPLETION: Substantial Completion occurs when all Work is sufficiently complete to allow RTD full use of the Work for its intended purpose, and such items of Work that remain to be done are minor in nature and can be accomplished without significant interference with RTD operations.

A1.21 TECHNICAL SPECIFICATIONS: All written material specifications, written equipment specifications, drawings, designs, terms, conditions, criteria, Scope of Work details (including all Work requirements and restrictions), directives, etc., that show the materials and equipment to be installed or constructed and the Work to be performed.

A1.22 WORK or SCOPE OF WORK: The Work is comprised of the completed Work including the construction required by the Contract Documents performed to the complete satisfaction of RTD, and includes all labor necessary to produce such construction, all materials and equipment incorporated or to be incorporated in such construction, and final clean-up.

ARTICLE A2: LEGAL REQUIREMENTS

A2.1 SOCIO-ECONOMIC PROGRAMS:

A2.1.1 In connection with the performance of this Contract, the Contractor shall cooperate with RTD in meeting its commitments and goals with regard to the utilization of small business enterprises (SBEs) and disadvantaged business enterprises (DBEs). The Contractor shall use its best efforts to ensure that SBEs and DBEs have the opportunity to compete for and participate in subcontract Work under this Contract.

A2.1.2 If this Contract has been assigned a DBE or an SBE goal, the Contractor, to be responsive, must comply with all the terms contained in the DBE or SBE Contract Requirements, as applicable.

A2.1.3 To be responsible under this Contract and to be considered responsible for future work with RTD, the Contractor agrees to make reasonable efforts to encourage participation of SBEs and DBEs through the use of several or all of the following non-exclusive methods: arranging solicitations through all reasonable and available means to get bids from SBEs and DBEs (e.g., attendance at pre-bid meetings, advertising, written notices, contacting SBE and DBE chambers or organizations, etc.); taking steps to follow up on the initial solicitations (e.g., provide information and time); setting aside time for assistance to subcontractors in preparing bids, offers, quantities, and specifications; negotiating in good faith with subcontractors to increase SBE and DBE participation; purchasing or renting equipment, materials, supplies and services from SBEs and DBEs; using Contractor Controlled Insurance Packages; breaking down the Work into more and smaller subcontracts to gain more participation from SBE and DBE subcontractors; not requiring bonds from subcontractors; assisting SBEs and DBEs in obtaining bonding, lines of credit, or insurance; and facilitating delivery and payment schedules so as to maximize potential participation of SBEs and DBEs.

A2.2 NONDISCRIMINATION: In accordance with Title VI of the Civil Rights Act, as amended, 42 U.S.C. § 2000d, Section 303 of the Age Discrimination Act of 1975, as amended, 42 U.S.C. § 6102, Section 202 of the Americans with Disabilities Act of 1990, 42 U.S.C. § 12132, and federal transit law at 49 U.S.C. § 5332, Contractor agrees that it will not discriminate against any employee or applicant for employment because of race, color, creed, national origin, sex, age, or disability. In addition, Contractor agrees to comply with applicable federal implementing regulations.

A2.3 NONCOMPLIANCE: **In the event of the Contractor's noncompliance with the nondiscrimination provision of the Contract or noncompliance with RTD's DBE/SBE programs, RTD shall impose such Contract sanctions as it may determine to be appropriate, including but not limited to:**

- (a) Withholding of payments under the Contract until the Contractor complies;

- (b) Cancellation, termination, or suspension of the Contract, in whole or in part; and/or
- (c) Determination by RTD that the Contractor is not a responsible contractor for the purposes of doing future RTD work.

A2.4 ENVIRONMENTAL PROTECTION: The Contractor shall be responsible for the protection and preservation of the general environment along and adjacent to construction sites from its activities, and shall use every precaution necessary to prevent damage or injury to such environment, unless the removal, alteration, or destruction of such property is provided for under the Contract. At all times, the Contractor shall comply with all **applicable federal, state, and local governments' and agencies' laws, rules, ordinances and regulations**, and those of any other entities or authorities under whose control or direction the Work is performed, all Contract Documents including all Technical Specifications, drawings, footnotes, etc., and all supplier and product manufacturer specifications.

A2.4.1 DRAINAGE, EROSION, AND SILTING: The Contractor shall take all necessary measures to control erosion and silting of rivers, streams, and impoundments (ponds, lakes, and reservoirs). Construction of drainage facilities as well as performance of other Work which will contribute to the control of erosion and siltation shall be carried out in conjunction with clearing and grubbing and earthwork operations. The Contractor shall refer to the Technical Specifications for detailed requirements on erosion and sediment control.

A2.4.2 WATER POLLUTION: The Contractor shall exercise every reasonable precaution to prevent pollution of rivers, streams, or impoundments. Pollutants such as chemicals, fuels, lubricants, bitumens, raw sewage and other harmful wastes shall not be discharged into or alongside rivers, streams, and impoundments, or into the natural or man-made channels leading to them.

A2.4.3 AIR POLLUTION: The Contractor must submit evidence to RTD that the governing air pollution criteria will be met. In complying with this Section, the Contractor agrees to comply with all applicable standards, orders, or regulations issued pursuant to the Air Pollution Control Act, 42 USC 7401, et seq., and any other laws, rules and regulations of the entities or authorities under whose control or direction the Work is performed.

A2.4.4 DUST CONTROL: Contractor shall be responsible for control of dust related to its construction activities during performance of this Contract. Between the Contractor and RTD, the RTD PM **is the sole judge in determining the sufficiency of the Contractor's dust-control measures**. Contractor shall use non-toxic substances to control dust and shall comply with all applicable laws, rules, regulations, etc.; Contract Documents; and supplier/manufacturer specifications.

A2.4.5 NOISE/VIBRATIONS: In performance of this Contract, Contractor shall comply with all applicable noise and vibration laws, rules, ordinances and regulations. Contractor shall maintain its equipment in good working order to minimize noise and shall use its

best efforts to ensure that significant vibration and noise-generating activities occur only during the daylight hours.

A2.4.6 ASBESTOS: Contractor is advised that RTD properties may have building materials that contain asbestos. The asbestos may be (1) confirmed asbestos-containing material (ACM) (verified to be greater than 1% by laboratory analysis); (2) presumed to be asbestos-containing material (PACM); or (3) material with the presence of asbestos (materials containing trace-1% asbestos). Prior to disturbing any building material, Contractor shall provide to the RTD Safety and Environmental Division a summary of the scope of Work planned at that building, including specific Work area/location and specific Work practices. The RTD Safety and Environmental Division will review the scope of Work in conjunction with asbestos inspection information to determine if any asbestos material will be impacted and what steps are necessary (if any) prior to disturbing the building material. In addition, Contractor shall obtain written clearance to conduct Work from the RTD Safety and Environmental Division prior to disturbing any building material. **Contractor shall obtain this clearance by contacting RTD's Environmental Compliance Manager, Walt Pierce, in the Public Safety Division at 303-299-4083.**

Contractor shall comply with all applicable federal, state and local asbestos regulations. The application or installation of any material or product with the presence of asbestos is prohibited by RTD. Contractor shall be responsible for all costs associated with removal of any installation or application of material with the presence of asbestos (detectable levels of asbestos). Contractor shall provide RTD with manufacturer certifications that products used do not contain the presence of asbestos (detectable levels of asbestos) or provide RTD with product-testing data that demonstrates the products do not contain the presence of asbestos fibers.

A2.5 PROHIBITED INTERESTS: No employee of RTD or any member of its governing body shall have any personal or financial interest, direct or indirect, in this Contract or any contract executed subsequently in connection with this Contract during his or her tenure or for one year thereafter. No director, officer, employee, or agent of RTD shall be interested in any contract or transaction with the District except in his or her official representative capacity.

A2.6 ANTI-KICKBACK PROVISION: The Contractor is prohibited from inducing, by any means, any person employed under this Contract to give up any part of the compensation to which he/she is otherwise entitled.

A2.7 CONTRACT HEADINGS: The headings of the Articles and Sections of this Contract are inserted for reference purposes and are not restrictive as to content.

A2.8 LAWS GOVERNING: The laws (statutes, ordinances, rules, regulations, guidelines, codes, building codes, RTD requirements, etc. and the common law) of the State of Colorado and the municipality, county and/or district where the Work, or any portion of it, is performed or supplied and applicable federal laws, rules, regulations, and Executive Orders shall govern this Contract.

A2.9 COVENANT AGAINST CONTINGENT FEES: The Contractor warrants that no person or selling agency has been employed or retained to solicit or secure this Contract upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee, excepting bona fide employees or bona fide established commercial or selling agencies maintained by the Contractor for the purpose of securing business. For breach or violation of this warranty, RTD shall have the right to annul this Contract without liability or, at its discretion, to deduct from the Contract Cost or consideration, or otherwise recover, the full amount of such commission, percentage, brokerage, or contingent fee.

A2.10 ORDER OF PRECEDENCE: Any inconsistency in this Contract shall be resolved by giving precedence in the following order:

- (a) the laws governing the Contract and the Work;
- (b) Amendments to the Contract, if any;
- (c) Special Provisions/Alterations prescribed by Exhibit 3 to the Terms and Conditions, if any;
- (d) Terms and Conditions that supplement the Construction Terms and Conditions, if any;
- (e) the Contract including the Construction Terms and Conditions;
- (f) Change Notices, Change Orders, representations and other instructions from the Contracting Officer that amend, or will lead to amendments of, the Contract;
- (g) the Technical Specifications. If, and to the extent that, the Technical Specifications provide for a higher standard or more stringent requirement than the Terms and Conditions, the Technical Specifications shall be given precedence in such respects. In the event of conflict or inconsistency between provisions of the Technical Specifications, the more stringent shall be given precedence over the less stringent;
- (h) the Contract drawings. Larger-scale drawings shall be given precedence over smaller-scale drawings (for example: 1" = 1' is larger scale than 1" = 40' and 1" = 1' is larger than 1/8"=1'). Where appearing on drawings, computed dimensions shall govern over scaled dimensions.
- (i) other documents, exhibits and attachments.

A2.11 PROTECTING RTD'S INTEREST WHEN SUBCONTRACTING WITH CONTRACTORS DEBARRED, SUSPENDED, OR PROPOSED FOR DEBARMENT: Any contractor or subcontractor that has been determined by RTD to be non-responsible

or incompetent is automatically suspended and debarred from doing Work on this Project. The Contractor shall not enter into any subcontract with a contractor or subcontractor that has been debarred, suspended, or proposed for debarment unless there is a compelling reason to do so. If the Contractor intends to subcontract with a party that is debarred, suspended or proposed for debarment, a corporate officer or designee of the Contractor shall notify the Contracting Officer, in writing, before entering into such subcontract. The notice must include the following:

- (a) The name of the subcontractor;
- (b) The **Contractor's knowledge of the reasons for the subcontractor** being on the list of parties excluded from procurement programs;
- (c) The compelling reason(s) for doing business with the subcontractor, notwithstanding its inclusion on the list of parties excluded from procurement programs; and
- (d) The systems and procedures the Contractor has established to **ensure that it is fully protecting RTD's interests when dealing with such subcontractor in view of the specific basis for the party's** debarment, suspension, or proposed debarment.

A2.12 HOLD HARMLESS: The Contractor agrees to defend, indemnify, and hold harmless RTD, its directors, managers, employees, agents and assigns, from and against any and all claims, suits, demands, liabilities, and court awards including costs, expenses, **and reasonable attorneys' fees, to the extent such claims are caused, in whole or in part,** by:

- (a) any act or omission of, or breach of contract by, the Contractor, its employees, agents, subcontractors, or assignees arising from, related to, in connection with, or in any way involving Work performed or equipment and materials provided under this Contract;;
- (b) any alleged infringement of any patent rights resulting from Work done by the Contractor; and
- (c) the use of any patented material, process, device, or article that may enter into the Work covered by this Contract;

but not to the extent such claims are caused solely by any act or omission by RTD, its directors, managers, employees, agents, or other contractors or assignees. The Contractor, at its own expense, will be associated with RTD in the settlement or defense of any claims or litigation arising out of the performance of this Contract.

The Contractor agrees to fully cooperate with and assist RTD in all suits, claims, and demands arising from,, related to, in connection with, or in any way involving Work performed or equipment and materials provided under the Contract or that are based

upon evidence (including observations) that the Contractor or its employees may have obtained while performing the Work. Failure to cooperate and assist RTD when requested may be a breach of the Contract and/or result in a determination that the Contractor is ineligible for future RTD work.

To the extent this section is more expansive than permitted by law, it shall not be null and void, but, rather, shall be conformed to be consistent with and to follow the applicable law. To the extent inconsistent, shall be modified to conform to existing law.

A2.13 NOTICE OF CLAIM OR ACTION FILED: The Contractor shall give RTD through the Contracting Officer immediate written notice of any suit or action filed or any claim or demand made against the Contractor, its employees, agents, subcontractors or assignees arising from, related to, in connection with or in any way involving Work performed or equipment and materials provide under this Contract. The Contractor shall furnish immediately to the Contracting Officer copies of all pertinent papers received by the Contractor. If the amount of the liability claimed exceeds the amount of coverage of the **Contractor's insurance against such claim, the Contractor shall authorize and direct the Contractor's counsel and the Contractor's insurer(s), if any, to collaborate and cooperate** with RTD representatives in settling or defending such claim.

A2.14 COLORADO GOVERNMENTAL IMMUNITY ACT: Notwithstanding any other provision of this Contract to the contrary, no term or condition of this Contract shall be construed or interpreted as a waiver, express or implied, of any of the immunities, rights, benefits, protections, or other provisions of the Colorado Governmental Immunity Act, C.R.S. § 24-10-101, et seq., as amended.

A2.15 APPROPRIATIONS: All obligations of RTD under this Contract that require funding are subject to prior annual appropriations of monies expressly made by the Board of Directors of RTD for the purposes of this Contract. Nothing in this Contract shall be construed by either the Contractor or RTD as a multiple fiscal year obligation as described by Article X, Section 20 of the Colorado Constitution. If funding is not appropriated by the Board of Directors, RTD may terminate or modify the Contract as required. Additional funding to the Contract will be accomplished by a Contract amendment. No legal liability on the part of RTD for any payment may arise for performance under this Contract beyond the current funding year, until funds are made available to the Contracting Officer for performance and until the Contractor receives notice of availability.

ARTICLE A3: PRE-CONSTRUCTION RIGHTS AND DUTIES, AND USE OF DOCUMENTS

A3.1 PURPOSE OF THE CONTRACT: The purpose of the Contract is to provide the requirements, duties and rights of the parties for the pre-construction work/requirements, construction, and completion of every detail of the Project as defined in the Scope of Work and the Technical Specifications. Unless otherwise specified, the Contractor shall furnish all labor, supervision, materials, tools, equipment, and incidentals necessary to complete the Project in a proper, thorough, skillful, and workmanlike manner using Due Diligence and in accordance with the Technical Specifications (including Drawings), Scope of Work, and all schedule requirements.

A3.2 BID OR PROPOSAL DOCUMENTS: In the Invitation for Bids or Request for Proposals, RTD will include some form of a schedule of values or a Work breakdown structure that the Bidder or Proposer must complete when it bids the Project. The Bid or Proposal documents are an essential part of the Contract and will be used as an aid to determine:

- (a) The amount of progress payments.
- (b) The proper amount of equitable adjustments based on Change Orders and Change Notices.
- (c) The proper amount of Claims or equitable adjustments based on Claims.
- (d) The proper amount of equitable adjustments based on the termination of the Work in whole or in part, whether or not there are Claims.

The Bid or Proposal documents are admissible evidence at trial, arbitration or any other proceedings and could become public records at that time. If the Contractor requests in writing at the time of submitting its Bid or Proposal that its Bid or Proposal documents remain confidential, until the Bid or Proposal documents become evidence at such a **proceeding, the documents will be held by RTD in escrow as the Contractor's confidential work product.** If such documents are requested under the Colorado Open Records Act, RTD will continue to hold the documents confidential subject to the Contractor defending that position should the matter proceed to court. If the Contractor does not defend the action, RTD will release the documents.

A3.3 TECHNICAL SPECIFICATIONS:

A.3.3.1 The Contractor is expected to have thoroughly read and understood all of the Technical Specifications, including the Scope of Work. The Contractor will be expected to strictly adhere to the Technical Specifications, including the Scope of Work, throughout the course of the Project. The Contractor shall keep on the Work site a full-size copy of the drawings and Technical Specifications and shall at all times give any subcontractor, the Contracting Officer or RTD PM access to the Technical Specifications.

A.3.3.2 Anything mentioned in the Technical Specifications and not shown on the drawings, or shown on the drawings and not mentioned in the Technical Specifications, shall be of like effect as if shown or mentioned in both. In case of discrepancy either in the figures, in the drawings, or in the Technical Specifications, written specifically as specifications (often in the form of standardized divisions), that comes to the attention of the Contractor, the matter shall be submitted within five Days to the Contracting Officer or the RTD PM, who shall, in writing, make a determination resolving the discrepancy. At any time before Work has actually begun on the portion of the Work where the discrepancy exists, the Contracting Officer or PM can issue a written determination resolving the discrepancy.

A.3.3.3 In case of discrepancy that does not come to the attention of the Contractor or that is not resolved timely by the Contracting Officer or PM, drawings and notes shall govern over figures and standardized written specifications. However, specifications that were written specifically for this Project shall govern over figures, drawings, and notes. Any adjustment by the Contractor without such a determination as to the priority of the drawings versus written specifications shall be at its own risk and expense.

A.3.3.4 The Contracting Officer or RTD PM shall furnish from time to time such detail drawings, written specifications and other information as he or she may consider necessary, which then become part of the Technical Specifications, possibly allowing the Contractor to seek a Change Order.

A.3.3.5 All Technical Specifications are and shall remain RTD property. They are not to be used on any other project, and, with the exception of one set of Contract Documents for each party to the Contract, they are to be returned to RTD at the completion of the Work.

A3.4 REVIEW OF CONTRACT DOCUMENTS AND LEGAL REQUIREMENTS:

A.3.4.1 The Contractor shall at once report to the Contracting Officer any error, inconsistency, or omission it may discover in the Contract Documents, including in the Technical Specifications. Failure to report such errors, inconsistencies or omissions immediately when the Contractor first discovers them, or should have discovered them if the Contractor had used Due Diligence, will void any Claim by the Contractor for an equitable adjustment based on the errors, inconsistencies or omissions.

A.3.4.2 The Contractor is required to know the general and local codes, statutes, ordinances, rules, standards, guidelines and regulations of RTD, the railroads, governmental entities, and all other authorities or entities that control or affect the Work. Should the Contract Documents including the Technical Specifications have specifications, drawings, figures, footnotes, etc. that violate any of the general or local codes, statutes, rules, etc., such Contract Documents are considered to contain errors, inconsistencies or omissions requiring the Contractor, under this Section, to report them to RTD as soon as discovered, or as soon as they should have been discovered had the Contractor used Due Diligence. Failure to report items in the Contract Documents that violate general or local

codes, rules, etc. voids any Claim the Contractor may have based on the errors, and it subjects the Contractor to the liability aforementioned in this Section.

A.3.4.3 Any inconsistencies or errors in the Technical Specifications, including drawings, should be brought to the attention of RTD prior to the date when the Shop Drawings are due. Any Technical Specification that violates any code, rule, statute, etc. should also be brought to the attention of RTD prior to the date when the Shop Drawings are due. Additionally, if the failure to report such errors, inconsistencies or omissions results in damages to RTD, the Contractor will be responsible to compensate RTD for those damages to the extent that the damages could have been avoided had the Contractor reported the errors, inconsistencies or omissions when it first discovered them or should have discovered them had the Contractor used Due Diligence. This includes errors, inconsistencies or omissions that the Contractor should have discovered in the Contract Documents had it used Due Diligence when bidding the Work.

A3.5 INFORMATION FURNISHED BY RTD:

A.3.5.1 In the course of the planning of the Project and primarily for its own internal purposes, RTD may obtain data regarding engineering work, geological work, studies, rock or survey reports, soil boring reports, and any other matter whatsoever of an informational nature. RTD does not warrant, guarantee, or in any way or manner assume responsibility for the accuracy or uniformity of any statements, data assertions, analyses, evaluations or recommendations contained in any materials furnished. The Contractor is responsible for any conclusions drawn from such furnished data. If the Contractor does not wish to assume the risk of drawing conclusions from the same, it may employ, at no cost to RTD, its own experts to analyze the data presented or to make such additional explorations, tests, or studies as it may deem appropriate.

A.3.5.2 The Contractor acknowledges and agrees that it will not and cannot assume conditions affecting the Project or the Work based upon documents and information provided by RTD or representations and statements made by RTD personnel. RTD assumes no responsibility for any conclusions or interpretations made by the Contractor based on the information made available by RTD. Nor does RTD assume responsibility for any understanding reached or representation made concerning conditions which can affect the Work by any of its officers or agents before the execution of this Contract, unless that understanding or representation is expressly stated in this Contract.

A3.6 SITE INVESTIGATION AND CONDITIONS AFFECTING THE WORK:

A.3.6.1 The Contractor acknowledges and agrees that it has taken all steps reasonably necessary to ascertain the nature and location of the Work, and that it investigated and satisfied itself as to the general and local conditions which can affect the Work or its cost, including but not limited to: (1) conditions bearing upon transportation, disposal (including disposal of contaminated and hazardous material, if any), handling, and storage of materials including space availability; (2) the availability of labor, water, electric power, roads, site access, lane closures, and traffic control; (3) uncertainties of weather, river stages, tides, or similar physical conditions at the site; (4) the conformation and conditions

of the site including ground material, soils, rock material, water, drainage, plants, bushes, trees, buildings, building materials, waste, trash and any other materials (contaminated, hazardous or otherwise); (5) the character of equipment and facilities needed preliminary to and during Work performance; (6) all codes, statutes, ordinances, rules and regulations of RTD, railroads, governmental entities, and all other authorities or entities that control or affect the Work; and (7) the historical use of the site (such as its use as a landfill or a building which could have had asbestos in it).

A.3.6.2 The Contractor also acknowledges that it has visited the Work site and has satisfied itself as to the character, quality, and quantity of surface and subsurface materials or obstacles to be encountered insofar as this information is reasonably ascertainable from an inspection of the site, including all exploratory work done by RTD, as well as from the drawings and Technical Specifications made a part of this Contract. Any failure of the Contractor to take the actions described and acknowledged in this Section will not relieve the Contractor from responsibility for estimating properly the difficulty and cost of successfully performing the Work or for proceeding to successfully perform the Work without additional expense to RTD.

A3.7 DIFFERING SITE CONDITIONS:

A3.7.1 Section 3.6 requires the Contractor to take all steps reasonably necessary to ascertain the nature and condition of the Work site which can affect the Work or costs. Within five business days of discovery of the conditions described below, and before such conditions are disturbed, the Contractor shall give notice to the Contracting Officer or the RTD PM in writing of:

(1) subsurface or latent physical conditions at the site differing materially from those indicated in this Contract or that the Contractor could not have ascertained under a thorough investigation of the site as required by Section A3.6, or

(2) physical conditions at the site of an unusual nature, differing materially from those ordinarily encountered and generally recognized by prudent and experienced contractors as inherent in Work of the character provided for in this Contract.

The Contractor shall not disturb the differing site condition for at least seven business days after notice of the condition has been given to the Contracting Officer or the RTD PM unless permission is granted by the Contracting Officer or the RTD PM.

The notice given pursuant to this Section does not automatically become a Written Notice of Claim or an NCOP. If the Contractor believes it has a Claim based on the differing site conditions, it must follow the procedures outlined in Article A7.

A3.7.2 The RTD PM shall investigate the site conditions promptly after receiving the notice described in A3.7.1. If the conditions materially differ so as to cause an increase or decrease in **the Contractor's cost of, or the time required for, performing any part of the** Work, whether or not the Technical Specifications are changed as a result of the conditions, an equitable adjustment shall be made under this Article and the Contract

modified in writing accordingly. If the parties cannot agree that a differing site condition exists or cannot agree upon an equitable adjustment to the Contract and/or a change to the Term of Performance (Contract Schedule), the Contractor is still required to complete the Work in accordance with the Technical Specifications. The parties must resort to Article A7 for resolution. However, the parties specifically acknowledge and agree that no Claim or request by the Contractor for an equitable adjustment to the Contract under this Article shall be allowed unless the Contractor has given the required written notice and has left the differing site condition undisturbed as required by A3.7.1.

A3.7.3 No equitable adjustment to the Contract for differing site conditions shall be allowed after final payment under this Contract except as described in this Section 3.7.

A3.7.4 The Contractor must also report and give notice of all differing site conditions benefiting RTD. Such conditions may lead to an equitable adjustment that decreases the Contract Cost or shortens the term of the Contract. Failure to report and give notice of differing site conditions that benefit RTD will result in a Claim by RTD when it becomes aware of the condition (or a lawsuit if the Contract is finalized) and the automatic determination that the Contractor is not a responsible contractor for future RTD work.

A3.8 EQUIPMENT, MATERIAL, AND APPROVAL OF ALTERNATIVES:

A3.8.1 MATERIAL: All equipment, material, and items incorporated into the Work shall be new and of the most suitable grade for the purpose intended, unless otherwise specifically provided in this Contract. References in the specifications to equipment, material, items, or patented processes by trade name, make, or catalog number shall be regarded as establishing a standard of quality and shall not be construed as limiting competition. The Contractor may use any equipment, material, article, or process that, in the sole judgment and approval of the Contracting Officer, is equal to that named in the specifications, unless otherwise specifically provided in this Contract.

A3.8.2 APPROVAL OF ALTERNATIVES: Unless otherwise specifically provided in the Technical Specifications, the following procedures shall be in effect for approval of alternatives after Contract award. For convenience in designation on the Contract drawings or in the Technical Specifications, certain articles or materials to be incorporated in the Work may be designated under trade names or the names of manufacturers and their catalog information; these references shall be regarded as establishing a standard of quality and shall not be construed as limiting competition. Except in those instances where the product is specifically designated as unique or without an approved equal in the sole opinion of RTD or designated to match others in use in a particular improvement, either completed or in the course of completion, the use of an alternative article or material which the Contractor represents to be of at least equal quality and of the required characteristics for the purpose intended will be permitted, subject to all of the following requirements:

- (a) The burden of proof as to the quality and suitability of alternatives shall be upon the Contractor, and it shall furnish all information required by RTD at no additional cost to RTD. The Contracting

Officer shall be the sole judge as to the quality and suitability of alternative materials and that decision shall be final.

- (b) No tests or action relating to the approval of substitute materials will be made until the request for substitution is made in writing by the Contractor, accompanied by complete data as to the equality of materials proposed. The data submitted must be full and complete to the satisfaction of RTD; incomplete submittals will not be acted upon by RTD but will be returned to the Contractor. Submittal procedures for approval of alternatives shall follow the procedures set forth in A3.11.1. Such request shall be made at least 20 Days prior to the commencement of Work using such equipment, material, or articles to permit approval without delaying the Work, unless otherwise listed in the Technical Specifications.
- (c) Whenever classification, rating, or other certification by a body such as UL, NEMA, AREMA, or AREA, etc., is part of the Technical Specification for any material, proposals for use of alternative materials shall be accompanied by reports from the listed or equivalent independent testing laboratory indicating compliance with the Technical Specification.
- (d) The cost of all testing required to prove equality of the material proposed shall be borne by the Contractor.
- (e) Approval of an alternative material shall be only for the characteristics or use named in such approval and shall not be used to change or modify any Contract requirement or to establish approval for material to be used on any other phase of the Work.

A3.8.3 The Contracting Officer will either approve or reject the request for alternatives within 21 Days of receipt of the request, unless the Contracting Officer or the RTD PM informs the Contractor in writing of the need for an additional seven Days to review the request.

- (a) The application and review process, including any extended time required by the Contracting Officer to review the submittal, does **not constitute an excuse for the Contractor's failure to complete the** Work within the Term of Performance. Failure to complete the Work when required subjects the Contractor to the damages suffered by RTD due to the failure or to the liquidated damages, if any, listed in the Contract.
- (b) The application and review process, including any extended time required by the Contracting Officer to review the submittal, does not and cannot form the basis for any Claim on the part of the Contractor including any Claim for equitable adjustments for

damages (due to delays, increased costs, etc.) or for an extension of time to perform the Contract.

- (c) RTD is the sole judge for the approval or rejection of alternatives. The rejection of a request for alternatives does not and cannot form the basis for any Claim on the part of the Contractor including any Claim for damages (for delays, increased costs, etc.) or any Claim for an extension of time to perform the Contract.

A3.9 PRE-CONSTRUCTION MEETING: After receipt of all required documentation and prior to Notice to Proceed, the Contractor and Contracting Officer shall meet to discuss the Contract implementation, administration, and working relationships. The Contracting Officer shall prepare a record of all discussions held at this meeting and distribute it to all attendees.

A3.10 NOTICE TO PROCEED: RTD will furnish the Contractor written direction to **commence performance of Work, entitled "Notice to Proceed," within 10 Days after receipt** by RTD of all required performance and payment bonds, insurance certificates, permits, and such other documentation which Contractor is required to submit for RTD approval prior to commencement of Work under this Contract. RTD shall not be responsible for any costs of any type whatsoever incurred by Contractor prior to the issuance of the Notice to Proceed. The date of receipt of the Notice to Proceed shall be the official date from which all scheduled activities and requirements, including the Term of Performance (Contract Schedule), are computed.

A3.11 SHOP DRAWINGS:

A3.11.1 SHOP DRAWINGS AND SAMPLES: The Contractor shall submit to the Contracting Officer, for approval by RTD, all Shop Drawings called for or implied by the Technical Specifications or at the request of the Contracting Officer.

Unless modified by the Technical Specifications, the following requirements apply to all Shop Drawings and submittals:

- (a) The Contractor shall submit three copies of all manufacturers' catalogs and, for all other Shop Drawings, shall submit one reproducible and two sets of prints to the Contracting Officer for review. The Contractor shall submit the number of samples required in the Technical Specifications to the Contracting Officer for review. Samples are physical examples furnished by the Contractor to illustrate materials, equipment, or workmanship, and to establish standards by which the Work will be judged. Prints shall be blue-line or black-line on a white background. Each drawing prepared by the Contractor and submitted for approval shall have, in the lower, right-hand corner just above the title, a white space three inches by four inches in which the action taken

can be indicated. Each Shop Drawing and sample shall be identified with the following information:

Contract Name and Number

Contractor

Subcontractor/Manufacturer/Supplier

- (b) Before submitting Shop Drawings and samples, the Contractor shall review all Shop Drawings and samples for completeness and accuracy. Shop Drawings and samples shall be submitted in a timely and orderly sequence so as to cause no delay to the Work. At the time of submission, the Contractor shall direct in writing specific attention to any and all deviations in the Shop Drawings or samples from the requirements of the Contract Documents.
- (c) By submitting Shop Drawings and samples, the Contractor represents that it has determined and verified all field measurements, field construction criteria, materials, catalog numbers, and similar data, and that it has checked and coordinated each Shop Drawing and sample with all its subcontractors involved in the Work and with the requirements of the Work and of the Contract Documents.
- (d) Approval of Shop Drawings or samples shall not relieve the Contractor of responsibility for any deviation from the requirements of the Contract Documents unless the Contractor has informed the Contracting Officer, in writing, of such deviation at the time of submission and written approval has been given to the specific deviation, nor shall approval relieve the Contractor from responsibility for errors or omissions in the Shop Drawings or samples.
- (e) **Approval of the Contractor's Shop Drawings will not relieve the Contractor of any responsibility, including responsibility for accuracy of dimensions and details and for mutual agreement and conformity of its drawings with the Contract drawings and Technical Specifications.**

When so directed, samples shall be submitted for approval at the **Contractor's expense, with all shipping charges prepaid. Machinery, equipment, material, and articles installed or used without required approval shall be at the risk of subsequent rejection.**

- (f) Shop Drawings and samples must be approved before any Work involving such drawings or samples commences. The Contractor

must submit Shop Drawings and samples to the Contracting Officer a minimum of 21 Days before any Work involving such drawings or samples is scheduled to commence, unless otherwise noted in the Technical Specifications. Approval of a separate item shall not indicate approval of an assembly in which the item functions.

- (g) Within 21 Days after receipt of the Shop Drawings and samples from the Contractor, RTD will review them and return one reproducible set of the Shop Drawings and samples to the Contractor, approved or disapproved, and marked with corrections. All changes made by the Contracting Officer in Shop Drawings or samples shall be resubmitted for review in the same manner as an original submittal. On resubmitted Shop Drawings or samples, the Contractor shall direct specific attention, in writing, to revisions other than the corrections requested by RTD on previous submissions. No extension of time will be granted, nor will any **consideration be given to Claims arising out of the Contractor's failure to submit any Shop Drawings, product data, samples, or related submittals which do not allow adequate lead time for RTD's review and do not allow ample time for revision, resubmission, and subsequent review by RTD as required.**
- (h) The review process does not affect the Contract Schedule. The review process, even when numerous rejections and resubmissions of Shop Drawings and samples are required, does not and cannot **constitute an excuse for the Contractor's failure to complete the Work** within the Term of Performance (Contract Schedule) established in the Contract. Failure to complete the Work when required by the Contract subjects the Contractor to the damages suffered by RTD or to the liquidated damages, if any, listed in the Contract.
- (i) The review process, even when numerous rejections and resubmissions of Shop Drawings and samples are required, does not and cannot form the basis for any Claim on the part of the Contractor including any Claim for damages (for delays, increased costs, etc.) or any Claim for an extension of time to perform the Contract.
- (j) RTD is the sole judge for the approval or rejection of Shop Drawings and samples. The rejection of Shop Drawings and samples does not and cannot form the basis for any Claim on the part of the Contractor including any Claim for damages (for delays, increased costs, etc.) or any Claim for an extension of time to perform the Contract.

A3.12 PERMITS AND LICENSES:

A3.12.1 To the extent permit and licensing requirements are applicable, which the Contractor shall include on the Baseline Schedule, the Contractor shall procure all required permits and licenses (including permits for traffic lane closures) whether or not they are listed in the Technical Specifications or drawings, pay all charges and fees, and give all notices necessary and incident to the due and lawful prosecution of the Work. The Contractor must apply for the required permits and licenses within five Days of the Notice to Proceed, or as soon as practically possible, and must notify RTD of any problems in obtaining the permits or licenses within three business days of discovery of any problem or difficulty. Failure to obtain permits and licenses, shall it cause a delay, shall not be deemed an excusable delay. It is the sole responsibility of the Contractor to determine what permits and licenses are needed.

A3.12.2 Any permits and licenses listed in the Contract Documents, including the Technical Specifications and drawings, are informational only and do not limit the permits and licenses needed to be determined and obtained by the Contractor.

A3.12.3 Any assistance, or offer of assistance, on the part of RTD in obtaining the permits or licenses is purely gratuitous and does not obligate RTD in any manner and cannot be the factual basis for any Claim or Contract Amendment.

A3.12.4 Any delay caused by the entity or authority that issues permits or licenses cannot be the basis for any Claim against RTD, and the Contractor must still abide by the terms of the Contract.

A3.13 DESIGNATION OF SUBCONTRACTORS: The Contractor shall, prior to start of Work, have set forth on forms provided with the Bid or Proposal documents or other documents approved by RTD, the name, address, phone number and contact person of each subcontractor, every tier sub-subcontractor, and supplier (including suppliers of rental equipment) who will perform Work or labor or render service, supplies, equipment or materials to the Contractor in performance of the Contract, and the portion of the Work which will be done by each such subcontractor, sub-subcontractor and supplier. The Contractor shall not, without the written consent of RTD, substitute any subcontractor, sub-subcontractor or supplier in place of the original designee or permit any subcontract or contract for supplies, equipment and materials to be assigned or transferred or allow it to be performed by anyone other than the original designee.

ARTICLE A4: CONTROL, PROSECUTION, AND PROGRESS OF WORK

A4.1 ADMINISTRATION OF THE CONTRACT:

A4.1.1 **AUTHORITY:** The Contracting Officer, under his/her authority from RTD's Board of Directors, has the responsibility to administer contracts so that their completion may be accomplished in accordance with their requirements.

Generally, the Contracting Officer's duly authorized representative at the construction site is the RTD Project Manager or PM. The PM, or his/her authorized representative, notice of which shall be given to the Contractor in writing, is the only person who has the authority to give written or oral direction to the Contractor at the Work site regarding any provisions or interpretations of this Contract. Should, in the opinion of the PM, the performance of the Contractor or the quality of its Work, or materials furnished, not meet the standards specified, the PM may take such measures as he/she deems necessary to ensure compliance with the Contract requirements.

RTD shall not be liable for any costs, expenses, damages, or Claims of any nature, which result from the Contractor proceeding, in any manner, under the direction of anyone other than the Contracting Officer, RTD Representative or the PM. The Contractor shall be required to obtain written verification from the Contracting Officer, RTD Representative or the PM for any direction the Contractor receives which alters, amends, or modifies the scope, nature, or price of the Work required or the rights, remedies or responsibilities of the parties.

A4.1.2 **CONTRACT ADMINISTRATION:** The Contracting Officer, or his/her duly authorized representative, usually the Project Manager (PM), shall have the right and duty to administer the Contract Documents and to inspect the performance of this Contract by the Contractor; he/she shall issue all instructions to the Contractor. The decisions of the PM relating to the Contract Documents shall be final, subject to Dispute Resolution under Article A7.

The PM shall, at all times, have access to the Work whenever it is in preparation or progress. The Contractor shall provide safe facilities for such access so the PM may perform his/her function under the Contract Documents.

A4.1.3 **PROJECT MANAGER (PM) RESPONSIBILITIES:** The responsibilities of the Project Manager (PM) include, but are not limited to, the following:

- (a) The PM will be the interpreter of the requirements of the Contract Documents. The PM will, within reasonable time, render such interpretations as may be necessary for the proper execution of **progress of the Work. The PM's decisions regarding the Work** shall be final, subject to Dispute Resolution under Article A7.

- (b) The PM shall have the authority to order the Contractor to stop Work if, in the judgment of the PM, safety hazards exist or Work is not being performed in accordance with the Contract Documents.
- (c) The PM shall obtain and certify complete records of all taxes paid for the Work.
- (d) Nothing in this Section shall be deemed to relieve the Contractor from any responsibilities or obligations set forth elsewhere in the Contract.

A4.2 MATERIALS AND WORKMANSHIP:

A4.2.1 **The Contractor must obtain the PM's approval of all materials, items, processes, articles, machinery, and mechanical and other equipment to be incorporated into the Work.** When requesting approval, the Contractor shall furnish to the PM the name of the supplier, manufacturer, the model number, and other information concerning the performance, capacity, nature, and rating of the materials, items, processes, articles, machinery, and mechanical and other equipment. When directed to do so, the Contractor **shall submit samples for approval at the Contractor's expense with all shipping charges prepaid.** Machinery, equipment, material, and items installed or used without the required approval run the risk of subsequent rejection by RTD.

A4.2.2 All Work under this Contract shall be performed in a safe, careful, skillful and workmanlike manner. The PM may require that the Contractor remove from the Work any employee, including an employee of any tier of supplier or subcontractor, whom the PM deems incompetent, incapable, unskillful, unsafe, careless, or otherwise objectionable. This applies to warranty Work as well as to Work prior to Final Acceptance.

A4.3 SAFETY REQUIREMENTS:

A4.3.1 The Contractor is responsible for complying fully with all applicable laws and Contract requirements as they relate to the safety of persons, environment, public, or **property. The Contractor shall ensure that the Contractor's employees and subcontractors** have sufficient training to perform the Work.

A4.3.2 All furnished materials and equipment used by the Contractor must be safe, new and not used or reconditioned, not of such age or so deteriorated as to impair their usefulness or safety, approved by RTD, and only be used for their intended purpose.

A4.3.3 The Contractor shall develop and administer a site-specific safety plan that identifies specific safety requirements, potential exposures and hazards associated with the Work, and the means and methods employed to address those exposures and hazards. The Contractor shall submit its **site-specific safety plan to RTD's Engineer for review and comment prior to the start of any Work.** The plan must meet or exceed the requirements of this Contract and must comply with all applicable laws. RTD shall have the right, but **not the obligation, to review and comment on the Contractor's plan and any amendments**

to it. The Contractor shall carefully consider all RTD comments on the plan, but the Contractor bears final responsibility for the scope, detail, and administration of the plan. The Contractor shall indemnify, defend, and hold harmless RTD from any and all claims, **damages, liability and court awards, including costs, expenses and reasonable attorneys' fees, related to RTD's comments on the plan.**

A4.3.4 The Contractor shall ensure that each subcontractor develops and administers its own site-specific safety plan, which it shall submit to the Contractor for review and comment.

A4.3.5 The Contractor shall at all times provide a safe, clean, and secure Work area. Pedestrian and vehicle access around the site shall be maintained at all times by the Contractor. The Contractor shall secure the Work site from the date of the Notice to Proceed until final completion and acceptance of the Work, including but not limited to protecting all Work and materials from vandalism and theft and preventing unauthorized **access to RTD's transit system. The Contractor is responsible for any theft of or damage** to materials and equipment, whether the materials and equipment are installed on the Project or stored on-site or off-site.

A4.3.6 The Contractor shall at all times keep the construction site, including storage areas, free from accumulations of waste material or rubbish. Removal of all waste material and rubbish must be completed at least once a week unless the RTD PM agrees to a longer period of time. Prior to completion of the Work, the Contractor shall remove any rubbish from the premises including all tools, scaffolding, equipment, and materials not the property of RTD. Upon completion of the construction, the Contractor shall leave the Work and premises in a clean, neat, and workmanlike condition satisfactory to the Engineer. Additional requirements are detailed in the Technical Specifications.

A4.3.7 RTD may require a safety and security certification, preliminary hazard analysis, **and/or threat and vulnerability assessment for any construction projects on RTD's** property.

A4.3.8 In the event RTD determines that the applicable safety and security requirements are not being met, RTD reserves the right to stop any Work, without incurring liability for delays or additional costs, until such time that RTD determines that proper changes or mitigations have been made to ensure safety and security at the Work site.

A4.3.9 The failure of the Contractor to satisfy the requirements of this Article shall be deemed a material breach of the Contract.

A4.3.10 In the event these requirements conflict with or exceed federal, state, or local safety and environmental standards, the Contractor shall implement and comply with the more stringent safety procedures. In the event of a dispute over the applicability of a particular safety procedure, the RTD Capital, Facilities, and Safety staff will identify the safety procedures required.

A4.4 TESTS AND INSPECTIONS: This Article, as modified by the Technical Specifications, applies to all Work performed under this Contract.

A4.4.1 If the Contract Documents (including but not limited to Technical Specifications, drawings, figures, footnotes, etc.), codes, product specifications, laws, ordinances, rules, regulations, warranties, or orders of any private or public entity or authority that provides, affects or controls any portion of the Work require any Work to be inspected, tested, or approved, the Contractor shall give the PM timely notice of readiness at least two working days before the inspections or testing and shall allow the PM to observe the inspections or testing. The Contractor shall furnish to the PM certificates of inspection, testing, or approval. If such Work required to be inspected, tested, or approved must also be maintained in the same condition as when inspected, tested or approved, the Contractor shall properly maintain the same condition until such time as the PM approves a change in the condition or approves additional Work. If Work that is to be maintained in an approved condition is allowed by the Contractor to change without the permission of the PM, the Contractor shall recondition the Work and have it again inspected, tested or approved **at the Contractor's expense. If such Work required to be inspected, tested, approved and/or maintained is covered up without prior written approval of the PM, it must, if directed by the PM, be uncovered at the Contractor's expense. Cost of all such inspections, tests, approval and maintenance described in this Section shall be borne by the Contractor.**

A4.4.2 If, after the commencement of the Work, the PM determines that any Work requires special inspection, testing, or approval which is not included in Section A4.4.1, the PM may instruct the Contractor to order such special inspection, testing, or approval. Upon receipt of such instruction, the Contractor shall give the PM notice at least two working days before the date arranged for such purpose so that the PM may observe the inspection, testing, or approval. If any Work has been covered which the PM had not requested to observe prior to being covered, or if the PM considers it necessary or advisable that covered Work be inspected or tested by others, the Contractor at the PM's request will uncover, expose, or otherwise make available for observation, inspection, and testing that portion of the Work in question in accordance with Section A4.5.7. The type and extent of inspections or tests performed shall be at the sole discretion of the PM. However, since the Contractor may ultimately bear the delays and costs of the inspections or tests, the Contractor can object, in writing, to the type and/or extent of the inspections or tests. The written objection must be submitted to the PM within seven Days of the order to perform the inspections or tests. The written objection should explain specifically to what the Contractor is objecting and why. The written objection should also contain alternative suggestions on how to assure that the Work conforms to the Contract Documents. The Contractor acknowledges and agrees that failure to provide a written **objection waives the Contractor's right to later contest the type and/or extent of the inspections or tests in any Claim or defense regarding the costs and schedule impacts caused by or associated with the inspections and testing.**

A4.5 QUALITY CONTROL AND INSPECTION OF CONSTRUCTION: In the event of a conflict between this Section and the Technical Specifications, the Technical Specifications shall control.

A4.5.1 The Contractor shall assure the quality of its Work by adhering to the following:

- (a) During the pre-construction meeting or shortly thereafter, the Contractor shall submit a Quality Control Plan to the Contracting Officer. The PM must approve the Quality Control Plan before Work begins. As part of the Quality Control Plan, the Contractor shall maintain an adequate inspection system and perform such inspections and tests as will ensure that the Work conforms to Contract requirements. The Quality Control Plan must include proposed inspection checklists and planned tests to assure compliance with all Contract Documents. The Quality Control Plan should also include a schedule indicating when the Contractor will perform inspections and tests. Approval of the Quality Control Plan **is within the PM's sole discretion. The PM will approve or reject** the Plan within 21 Days of his or her receipt of the Plan. If the PM rejects the Plan, the Contractor must re-submit Quality Control Plans until accepted by the PM. The review process, even when numerous rejections and resubmissions of Quality Control Plans are required, does not and cannot form the basis for any Claim on the part of the Contractor including any Claim for damages (for delays, increased costs, etc.) or any Claim for an extension of time to perform the Contract.
- (b) The Contractor shall designate one or more of its employees as the Quality Control Inspector(s) who will remain in contact with the PM regarding the Quality Control Plan and supplement all Quality Control Documents.
- (c) **The Contractor's Quality Control Inspector(s) shall** maintain complete Quality Control Documents which will include the **Quality Control Inspector's daily logs and the inspection and test records.** The documents shall be readily available to RTD. At the request of the PM, the Quality Control Documents will be provided immediately, and in no event longer than two hours after the request unless allowed by the PM.
- (d) RTD is allowed to observe all inspections and tests performed by **the Contractor as part of the Quality Control Plan. The Contractor's** schedule indicating when inspections and tests will be done must be kept up to date and sent in a timely manner to the PM so that RTD has notification and can attend inspections and tests as it desires. Failure to comply subjects the Contractor to uncovering Work so that RTD can observe the inspections and tests at the **Contractor's expense.**

- (e) All Work is subject to RTD inspection and test at all places and at all reasonable times before acceptance to ensure strict compliance with all of the Contract Documents. The Contractor shall coordinate the schedule with the PM to assure that RTD can inspect and test materials, equipment, work product, etc., as RTD desires and before additional Work proceeds. RTD may require photographs to be taken of the Work at intervals during the course of construction to show the status and progress of the construction.
- (f) Contractor shall notify the PM of failed inspections or tests or other deficiencies within five Days of discovery. The Contractor shall promptly submit a plan to correct the deficiencies, if appropriate. If the Contractor does not notify RTD of failed inspections, failed tests or other deficiencies, the Contractor will be responsible to compensate RTD for all damages associated with the deficiencies including incidental and consequential damages. If the Contractor is not responsible for the deficiencies, failure to notify RTD of the failed inspections, failed tests or deficiencies will result in the Contractor being responsible for damages to RTD to the extent that the damages could have been avoided had the Contractor reported the deficiencies when it first discovered them or when it should have discovered them had the Contractor used Due Diligence.

A4.5.2 RTD inspections and tests are for the sole benefit of RTD and do not:

- (a) Relieve the Contractor of responsibility for providing adequate quality control measures and following the Quality Control Plan;
- (b) Relieve the Contractor of responsibility for damage to or loss of the material before acceptance;
- (c) Constitute or imply acceptance; or
- (d) Affect the continuing rights of RTD after acceptance of the completed Work under Section A4.5.8 below.

A4.5.3 The presence or absence of an RTD inspector does not relieve the Contractor from any Contract requirement, nor is an RTD inspector authorized to change any term or **condition of the Technical Specifications without the Contracting Officer's written** authorization.

A4.5.4 The Contractor shall promptly furnish, without additional charge, all facilities, labor, and material reasonably needed for performing such safe and convenient inspections and tests as may be required by the PM. RTD may charge to the Contractor any additional cost of inspection or test when Work is not ready at the time and/or location specified by the Contractor for inspection or test, or when prior rejection makes re-inspection or retest necessary. RTD shall perform all inspections and tests in a manner

that will not unnecessarily delay the Work. Special, full-size, and performance tests shall be performed as described in the Contract Documents.

A4.5.5 The Contractor shall, without charge, replace or correct Work found by RTD not to conform to Contract requirements, unless, in the public interest, RTD consents to accept the Work with an appropriate adjustment in Contract Cost. The Contractor shall, as soon as possible or as directed by the PM, segregate and remove rejected materials from the premises.

A4.5.6 If the Contractor does not promptly replace or correct rejected Work, RTD may (1) by contract or otherwise, replace or correct the Work and charge the cost to the Contractor or (2) terminate the Contract for default.

A4.5.7 If, before acceptance of the entire Work, RTD decides to examine and/or test already completed Work by uncovering it, removing it or tearing it out, the Contractor, on request, shall promptly furnish all necessary facilities, labor, and material. If the Work is found to be defective or nonconforming in any material respect due to the fault of the Contractor or its subcontractors, the Contractor shall be responsible for and bear all expenses for the uncovering, removal, tearing out, examination, testing and satisfactory reconstruction. However, if the Work is found to meet Contract requirements, the PM shall make an equitable adjustment for the additional services involved in the uncovering, removal, tearing out, examination, testing and reconstruction, including, if completion of the Work was delayed, an extension of time.

A4.5.8 Unless otherwise specified in the Contract, RTD shall accept, as promptly as practicable after completion and inspection, all Work required by the Contract or that portion of the Work the PM determines can be accepted separately. Acceptance shall be final and conclusive except for defects, latent defects, negligence, fraud, mistakes, or **RTD's rights under any guarantee or warranty.**

A4.6 SUPERINTENDENCE BY THE CONTRACTOR: At all times (every working hour of every Work day) during performance of this Contract and until the Work is completed and accepted by RTD, the Contractor shall directly superintend the Work or assign and have on the Work site a competent superintendent who is acceptable to the Contracting Officer and has authority to act for the Contractor. The Contractor shall provide its **superintendent's name and resume to the Contracting Officer. RTD shall give notice to the Contractor if a superintendent is not on the site when Work is being performed, unless permission is granted by RTD for the superintendent's absence. Upon the second notice RTD will charge the Contractor for RTD's actual damages or the amount established as liquidated damages for each time that Work is being performed without a superintendent present, unless permission is granted by RTD for the superintendent's absence.**

A4.7 PROTECTION OF PERSONS AND PROPERTY: The Contractor is responsible for the protection of all persons and property and compliance with all federal, state and local rules and regulations during performance of the Work. The Contractor shall conform to all requirements of the Technical Specifications.

A4.8 CONTROL OF MATERIALS AND EQUIPMENT:

A4.8.1 All materials and equipment shall be delivered, handled, stored, installed, and protected to prevent damage and ensure preservation of quality and fitness for the Work **in accordance with best current practice in the industry, in accordance with manufacturers' specifications and recommendations, and in accordance with Contract Documents'** requirements. Contractor shall store packaged materials and equipment in their original **and sealed containers, marked with the brand and manufacturer's name, until ready for use.** Contractor shall deliver materials and equipment in ample time to facilitate inspection **and tests prior to installation.** The term "delivery," in reference to any item specified or indicated, means the unloading and storing with proper protection at the Work site. Damaged materials or equipment will be rejected.

A4.8.2 Before ordering materials, equipment, or performing Work, the Contractor shall verify indicated dimensions. If a discrepancy exists, the Contractor shall notify the Contracting Officer of the discrepancy immediately in writing. The Contracting Officer will then clarify the intended design to the Contractor. The Contractor shall take field measurements required for the proper fabrication and installation of the Work. Upon commencement of any item of Work, the Contractor shall be responsible for dimensions related to such items of Work.

A4.9 CONTRACTOR'S RESPONSIBILITY FOR THE WORK AND MATERIALS:

Until the Final Acceptance of the Work, the Contractor shall have the charge and care of the site, the Work and of the materials to be used, except as limited above, including materials for which it has received partial payment, and materials which have been furnished by RTD, and shall bear the risk of injury, loss, or damage to any part thereof by the action of the elements or from any other cause, whether arising from the execution or from the non-execution of the Work. The Contractor shall rebuild, repair, or restore all injuries, losses, or damages to any portion of the site, the Work and materials occasioned **by any cause before the Work's completion and acceptance and shall bear the expense** thereof, except for such injuries, losses, or damages as are directly and approximately caused by acts of God, acts of war, or governmental authorities. Where necessary, the Contractor shall, at its expense, provide suitable drainage and erect such temporary structures as are necessary to protect the site, the Work and materials from damage. The suspension of the Work from any cause whatever shall not relieve the Contractor of its responsibility for the site, the Work and materials as specified in this Contract. The Contractor shall properly store materials which have been partially paid for by RTD or which have been furnished by RTD. Such storage by the Contractor shall be on behalf of RTD, and RTD shall at all times be entitled to the possession of such materials, and the Contractor shall promptly return the same to the site of the Work when requested. The Contractor shall not dispose of any of the materials so stored except on written authorization from the Contracting Officer.

A4.10 RELIEF FROM MAINTENANCE AND RESPONSIBILITY: Upon the written notice to the Contractor, RTD may relieve the Contractor of the duty of maintaining and protecting certain significant portions of the Work, which have been completed in all respects in accordance with the requirements of the Contract, and thereafter, except with

the Contractor's consent, the Contractor will not be required to do further Work thereon. In addition, such action by RTD will relieve the Contractor of responsibility for injury or damage to those completed portions of the Work resulting from use by public traffic or from the action of the elements or from any other cause, but not from injury or damage **resulting from the Contractor's own operations nor from its negligence.**

A4.11 ASSIGNMENT: The Contractor shall not assign, hypothecate, encumber, use as security, transfer, convey, sublet, or otherwise dispose of all or any portion of the property upon which the Work is performed. The Contractor shall not assign, hypothecate, encumber, use as security, transfer, convey, sublet, or otherwise dispose of the Contract or any of its rights, title or interest in or to the Contract or any parts of the Contract without the prior written consent of RTD.

A4.12 WARRANTIES:

A4.12.1 In addition to any other warranties in the Contract, including those found in the Technical Specifications, drawings, figures and footnotes, the Contractor warrants, except as provided in Section A4.12.8 below, that Work performed under this Contract conforms to the Contract requirements and is free of any defect in equipment, material, or design furnished or workmanship performed by the Contractor or any subcontractor or supplier at any tier. This warranty shall continue for a period of one year from the date of Final Acceptance of the Work. If RTD takes possession and begins using any part of the Work before Final Acceptance, the warranty on that portion of the Work that RTD is using shall continue for a period of one year from the date RTD begins its use; the one-year warranty on all other Work begins on the date of Final Acceptance. To the extent that **the Contractor's standard warranty exceeds one year, the Contractor's standard warranty** shall apply.

A4.12.2 **The Contractor shall remedy at the Contractor's expense any failure to conform or any defect. In addition, the Contractor shall remedy at the Contractor's expense any damage to real or personal property when that damage is the result of:**

- (a) **The Contractor's failure to conform to Contract requirements; or,**
- (b) Any defect of equipment, material, or workmanship.

A4.12.3 As regards repaired or replaced Work:

- (a) The Contractor shall restore any Work damaged in fulfilling the **terms and conditions of this Article at the Contractor's sole expense.**
- (b) **The Contractor's warranty with respect to Work repaired or replaced will run for one year from the date of repair or replacement.**
- (c) Landscaping replacement shall be warranted for two years and, if the second year ends in a growing season, the warranty extends

through the remainder of the growing season, unless otherwise specified.

A4.12.4 The Contracting Officer shall notify the Contractor, in writing, within a reasonable time after the discovery of any failure, defect, or damage in the Work. If the Contractor fails to remedy any failure, defect, or damage in the Work within 30 Days of the notification from RTD, RTD shall have the right to replace, repair, or otherwise remedy **the failure, defect, or damage at the Contractor's expense.**

A4.12.5 With respect to all warranties, express or implied, from subcontractors, manufacturers, or suppliers for Work performed and materials furnished under this Contract, the Contractor shall:

- (a) Obtain all warranties that would be given in normal commercial practice,
- (b) Assign all rights in the warranties to RTD. Contractor shall require all warranties to be executed, in writing, for the benefit of RTD, and
- (c) Enforce all warranties for the benefit of RTD, if directed by the Contracting Officer.

A4.12.6 **In the event the Contractor's warranty under Section A4.12.1 above has expired, RTD may bring suit at its expense to enforce a subcontractor's, manufacturer's, or supplier's warranty.**

A4.12.7 Unless a defect is caused by the negligence of the Contractor or subcontractor or supplier at any tier, the Contractor shall not be liable for the repair of any defects of material or design furnished by RTD nor for the repair of any damage that results from any defect in RTD-furnished material or design.

A4.12.8 **None of the warranties in this Article shall limit RTD's rights with respect to defects, latent defects, negligence, mistakes, or fraud.**

A4.12.9 Neither the foregoing nor any provision in the Contract Documents, nor **any special guarantee time limit, shall be held to limit the Contractor's liability for defects** to less than the legal limit of liability in accordance with Colorado law.

A4.12.10 The Contractor acknowledges and agrees that performance of the Contract **includes the performance of all the warranty provisions in this Article. Contractor's failure** to perform under a warranty provision is a breach of the Contract and a default.

ARTICLE A5: SCHEDULES, COMPLETION OF WORK, AND TERMINATION

A5.1 SCHEDULES, PROGRESS REPORTS, AND MEETINGS:

A5.1.1 The Contractor shall provide a Baseline Schedule (resource- and cost-loaded), Monthly Progress Schedules and 4-Week Look-Ahead Schedule in accordance with the requirements of the Technical Specifications, detailing completed and planned activities, including permits, submittals, and review periods, and sequencing of the Work.

A5.1.2 The Monthly Progress Schedule shows the anticipated sequence of operations. It must be updated every month to show changes in the planning of the operations and the actual progress of Work, the earned value of Work accomplished and the forecast of remaining Work (including Approved Change Orders and Work Orders). The updates are needed for RTD to anticipate when Work is to be tested, inspected, and completed and to coordinate with the Contractor and other contractors if necessary. It must be provided to aid in making payments and to help resolve claims.

A5.1.3 **When, in the Contracting Officer's opinion, the Monthly Progress Schedule fails to** reflect the Project's actual plan and method of operation or the projected completion date or is behind the Contract completion date, the Contracting Officer may require that the Contractor submit for review within 14 Days a Recovery Schedule for completion of the remaining Work by the Contract completion date.

A5.1.4 The last Monthly Progress Schedule submitted shall be identified by the Contractor **as the "As-Built Schedule."** The As-Built Schedule shall reflect the exact manner in which the Contract was actually executed, including actual start and completion dates, activities, actual durations, sequences, and logic, and shall be signed and certified by the **Contractor's Project manager and the Contractor's scheduler as being a true reflection of** the way in which the Work was actually executed as of the time of final completion.

A5.1.5 The Contractor shall be responsible for any costs incurred in revising any of the required submitted schedules.

A5.1.6 The Contractor will receive an administrative procedures package from the Contracting Officer which shall be construed to be part of the Contract Documents; if it contains forms or instructions, including daily report forms, instructions for correspondence, approvals, etc., the Contractor will be required to use those forms and instructions. Otherwise, the Contractor will use forms and instructions described in the Technical Specifications or as directed by the Contracting Officer.

A5.1.7 During the construction period, progress meetings chaired by the Engineer will be held with representatives of the Contractor, major subcontractors, and such other subcontractors or material suppliers whose presence may be deemed necessary or **desirable by the Contracting Officer or Engineer.** The Contractor's Quality Control Inspector(s) and Safety Officer(s) should attend each progress meeting. The Contractor shall bring a current 4-Week Look-Ahead Schedule, as required by the Technical Specifications, to each progress meeting. The purpose of these meetings shall include,

without limitation, expediting the Work (including all tests and inspections), coordination of various phases of the Work and scheduling of Work. Frequency, time, and place of meetings will be determined by the Engineer, who shall give all persons expected to attend **the meeting at least one Day's notice of the date, time, and place of the meeting. Unless** a Contract Amendment or Change Order is issued as a result of these meetings, nothing discussed shall be construed as a modification, alteration, or amendment of any written Contract provision. Additional meeting requirements are detailed in the Technical Specifications.

A5.2 EXPEDITED SCHEDULES:

A5.2.1 The milestone dates, if any, and the completion date established by RTD in the Contract are controlling. If the Contractor proposes a schedule that is expedited (i.e., milestones and completion date earlier than those established by RTD in the Contract), **the schedule is considered "informational only" to show RTD that the Contractor can meet the milestones and the completion date established in the Contract. This expedited schedule remains "informational only" even if it is accepted by RTD and used by both parties to coordinate activities such as tests, inspections, delivery of material or equipment, coordination with other contractors or entities, etc. While the expedited schedule remains "informational only," if both parties are using it to coordinate activities, the time period differences between the milestones and the completion date established by RTD (the Contract Schedule) and the earlier milestones and completion date in the Contractor's expedited schedule are General Float Time.**

A5.2.2 Since any expedited schedule will be considered "informational" and will not change the milestones and the completion date established by RTD in the Contract, it should be expected that RTD may use the General Float Time.

A5.2.3 **If a Contractor's expedited schedule is accepted by RTD as controlling, rather than just "informational," an amendment will be added to the Contract establishing the Contractor's milestone dates and the completion date as the controlling time periods under the Contract, replacing the original Contract Schedule. The dates proposed by the Contractor in an expedited schedule will not be controlling unless and until the amendment is prepared and signed by both parties. The Contractor must then meet the new Contract Schedule or be assessed the liquidated damages or price reductions as established in the Contract. Or, if no liquidated damages or price reductions are listed in the Contract, the Contractor shall be assessed the actual damages sustained by RTD for the Contractor's failure to meet the new Contract Schedule.**

A5.3 GENERAL FLOAT TIME:

A5.3.1 General Float Time can be used by RTD or the Contractor or both to accommodate delays caused by whatever reason.

A5.3.2 Since General Float Time can be used by the Contractor or RTD or both, it is insufficient for the Contractor to seek damages simply because it was delayed past milestones or the completion date listed in its expedited schedule. To claim an equitable

adjustment, including damages based upon delays, the Contractor must have suffered actual damages that can be readily supported with documentary evidence caused by some specific incident or circumstance. The actual damages must be for cost items not already calculated in the Bid. Expenses throughout the entire Term of Performance as established in the Contract should have been calculated into the Bid and cannot be recovered unless the delays extend expenses past the Term of Performance established by RTD in the Contract.

A5.3.3 Should the Contractor have a Claim for compensation or an extension of time based upon a delay, the Contractor must follow the procedures outlined in Article A7.

A5.4 TIMING OF WORK:

A5.4.1 COMMENCEMENT, EXECUTION, AND COMPLETION OF WORK: The Contractor shall be required to commence Work within five Days after the date of receipt of the Notice to Proceed, to execute the Work diligently, and to complete the entire Work, in compliance with all milestones, Substantial Completion deadline, and Final Acceptance deadline, including final cleanup, so that the Project is ready for use as specifically set forth in the Contract.

A5.4.2 TIME LIMITS: All time limits, time periods, milestones and completion dates stated in the Contract Documents are of the essence of the Contract and shall be strictly construed.

A5.5 SUBSTANTIAL COMPLETION: When all or any designated portion of the Work has, in the opinion of the Contractor, been substantially completed, the Contractor shall request the RTD PM to examine all or any designated portion of the Work to determine whether it has been substantially completed. If the RTD PM determines that Substantial Completion has been achieved, the Contracting Officer can issue a Notice of Substantial Completion pertaining to all or any designated portion of the Work. Notice of Substantial Completion shall not relieve the Contractor from any requirement under the Contract.

With the Notice of Substantial Completion, RTD shall issue a "Punch List." A Punch List is a list of items that need to be completed before RTD will issue Final Acceptance of the Work. Within 30 Days of the date the Contractor receives Notice of Substantial Completion, it shall complete any and all Punch List items unless the Contracting Officer grants a longer period. Should the Contractor not complete the Punch List items in the 30-Day period, RTD shall impose such Contract sanctions as it may determine to be appropriate, including but not limited to:

- (a) Charging the Contractor liquidated damages, or actual damages (whichever is most appropriate in the discretion of the Contracting Officer), for each Day after the term of the Contract that Final Acceptance is not achieved;
- (b) Withholding of all payments under the Contract until the Contractor complies;

- (c) Cancellation, termination, or suspension of the Contract, in whole or in part, with or without declaring a default or a breach of the Contract;
- (d) Informing the surety on the performance bond of the pending or actual breach of the Contract, termination, suspension, etc.;
- (e) Having the Work completed by others and charging the expense against the Contractor; and/or
- (f) Determination by RTD that the Contractor is not a responsible contractor for the purposes of future RTD work.

Substantial Completion does not equate with Final Acceptance of the Work, and the Contract is not complete until Final Acceptance.

A5.6 USE AND POSSESSION PRIOR TO COMPLETION: Prior to Substantial Completion, RTD shall have the right to take possession of or use any completed or partially completed part of the Work. Prior to such possession or use, the PM shall furnish the Contractor an itemized list of Work remaining to be performed or corrected on such portions of the Work as are to be possessed or used by RTD, provided that failure to list any item of Work shall not relieve the Contractor of responsibility for compliance with the terms of the Contract. Such possession or use shall not be deemed Substantial Completion or Final Acceptance of any Work under the Contract. While RTD has such possession or use, the Contractor, notwithstanding the provisions of Section 3.12 of this Contract, shall **be relieved of the responsibility for the loss or damage to the Work resulting from RTD's possession or use.** However, the Contractor remains responsible for all loss or damage to **any portion of the Work in RTD's possession or use if the loss or damage is not the result of RTD's possession or use.** If such prior possession or use by RTD delays the progress of the Work or causes additional expense to the Contractor, an equitable adjustment in the Contract Cost or the time of completion may be made, and the Contract shall be modified in writing accordingly.

A5.7 FINAL ACCEPTANCE OF THE WORK: The Contractor shall request of the RTD PM, in writing, a final inspection when the Work has been completed in all respects in accordance with the Contract, drawings, and Technical Specifications. Contractor compliance with the requirements of the Technical Specifications, including the Safety Certification Program, is a condition precedent to the request for final inspection. Upon **receipt of the Contractor's written request, the RTD PM will perform a final inspection and** determine whether the Work has been completed as specified in the Contract. If the Work has not been completed as specified in the Contract, the Contracting Officer will inform the Contractor in writing of the remaining Work to be completed. If the Work has been completed as specified in the Contract, the Contracting Officer will recommend that RTD formally accept the Work and will give written notification of the date of Final Acceptance. Immediately upon and after such written Final Acceptance by RTD, the Contractor will be relieved of the duty of maintaining and protecting the Work as a whole, and it will not be

required to perform any further Work thereon except as provided in Section A4.12. The Contractor shall also be relieved of its responsibility for injury to persons or property or damage to the Work which occurs after the Final Acceptance by RTD, except that the Contractor shall not be relieved of its responsibility for injury to persons or property due **to its negligence, latent defects or hidden defects or arising from the Contractor's duties** and obligations under Section A2.12.

A5.8 RECORD DOCUMENTS:

A5.8.1 Contractor shall maintain the Record Documents in good order. The Record Documents shall be updated on a daily basis, kept at the Work site (or in the **superintendent's possession**) and be immediately available upon request to the Contracting Officer, the Engineer, or their agents at all times during performance of the Contract. The Contractor shall use the daily log or diary forms provided by RTD or described in the Technical Specifications. The daily logs or diaries must contain a description of everyone who was on the Work site, what Work was performed, what materials and equipment were delivered to the site, testing, inspections, and all other pertinent information. Detailed requirements for the preparation and maintenance of Record Documents are contained in the Technical Specifications.

A5.8.2 At the completion of the Work, Contractor shall deliver all of the Record Documents, including the As-Built Drawings (the final form to be certified by a Professional Engineer or Land Surveyor, as required by the Contracting Officer) and the As-Built Schedule to the Contracting Officer with a transmittal letter containing the date, Contract **title and number, Contractor's name and address, the title and number of each Record Document**, and a certification that each document is complete and accurate. The Contractor shall also submit and certify all daily logs and diaries if requested by the Contracting Officer. The Final Submittal of Record Documents must be made prior to final payment.

A5.8.3 **The Contractor shall also submit a certification by a Professional Engineer ("PE")**, employed or hired by the Contractor, that all Work under the Contract, the completed construction product, and the materials, inspections, testing, and construction methods conform to the Technical Specifications, plans, dimensions, drawings, and purpose of design. The PE shall be experienced and competent in the applicable construction management, inspection and materials testing. The certification is a statement signed and sealed by a PE representing that the engineering services addressed in the certification have been performed by a PE or under the PE In Responsible Charge.

A5.8.4 Contractor shall also comply with all submittal requirements as set forth in the Technical Specifications and all other Sections of the Contract referencing submittals.

A5.9 SUSPENSION OF WORK:

A5.9.1 The Contracting Officer may order the Contractor in writing to suspend, delay, or interrupt all or any part of the Work for such period of time as he or she may determine to be appropriate for the convenience of RTD. Upon receipt of the order, the Contractor

shall immediately comply with its terms and take all reasonable steps to minimize the incurrence of costs allocable to the Work covered by the order during the period of Work stoppage.

A5.9.2 If the performance of all or any part of the Work is, for an unreasonable period of time, suspended, delayed, or interrupted (1) by an act of RTD in the administration of this **Contract, or (2) by RTD's failure to act within the time specified in this Contract (or within a reasonable time if not specified)**, an adjustment to the Statement of Contract Cost shall be made for any increase in the cost of performance of this Contract (excluding profit) necessarily caused by the unreasonable suspension, delay, or interruption, and the Contract shall be modified in writing accordingly. An unreasonable period of suspension, delay or interruption is one that makes completion of the Work by the completion date established in the Contract impossible without the acceleration of labor forces beyond what the Contractor had anticipated (as reflected in the Baseline Schedule). However, no adjustment shall be made under this Section for any suspension, delay, or interruption to the extent (1) that performance would have been so suspended, delayed, or interrupted by any other cause, including the fault or negligence of the Contractor, an act of a controlling entity or authority, weather, an act of God, vandalism or an act of war or (2) for which an equitable adjustment is provided for or excluded under any other provision of this Contract.

A5.9.3 All Claims under this Section must comply with the requirements and limitations found in Article A7. However, for all Claims under this Section other than those described in Section A5.9.4, no Written Notice of Claim is required and the Certified Claim is due 60 Days after the written order of suspension, delay, or interruption, unless a longer time is permitted by the Contracting Officer.

A5.9.4 **The Contractor's responsibility under Section A4.9 for the Work and materials** remains in effect for the entire term of the suspension, delay or interruption unless a Contract Amendment **alters the Contractor's responsibilities. If the Contractor believes it** has compensable expenses associated with meeting its responsibilities under Section A4.9 during the term of suspension, delay or interruption, it can pursue a Claim that complies with all the requirements and limitations found in Article A7, including Written Notice of Claim within seven Days of the written order of suspension, delay or interruption, explaining what costs are associated with the protection and maintenance of the site, the completed Work and the materials.

A5.10 TERMINATION:

A5.10.1 TERMINATION FOR DEFAULT:

- (a) If the Contractor refuses or fails to properly prosecute the Work or any separable part, with the diligence and good workmanship that will ensure its completion and acceptance within the time specified in this Contract including any extension, or fails to complete the Work within this time, RTD may, by written notice to the Contractor, terminate the right to proceed with the Work (or the separable part

of the Work) that has been delayed or not performed in a good workmanship-like manner. In this event, RTD may take over the Work and complete it by contract or otherwise, and may take possession of and use any materials, appliances, and plant on the Work site necessary for completing the Work. The Contractor and its sureties shall be liable for any damage to RTD resulting from the **Contractor's refusal or failure to complete the Work within the specified time or not performed in a good workmanship-like manner, whether or not the Contractor's right to proceed with the Work is terminated.** This liability includes any increased costs incurred by RTD in completing the Work.

- (b) **The Contractor's right to proceed shall not be terminated nor the Contractor charged with damages under this Article, if:**
 - (1) The delay in completing the Work arises from unforeseeable causes beyond the control and without the fault or negligence of the Contractor. Examples of such causes include (i) acts of God or acts of war, (ii) acts of another contractor in the performance of a contract with RTD, (iii) fires, (iv) floods, (v) epidemics, (vi) quarantine restrictions, (vii) strikes, (viii) freight embargoes, (ix) unusually severe weather, or (x) delays of subcontractors or suppliers at any tier arising from unforeseeable causes beyond the control and without the fault or negligence of both the Contractor and the subcontractors or suppliers; and
 - (2) The Contractor, within 10 Days from the beginning of any delay (unless extended by the Contracting Officer), notifies the Contracting Officer in writing of the causes of delay. The Contracting Officer shall ascertain the facts and the extent of delay. If, in the judgment of the Contracting Officer, the findings of fact warrant such action, the time for completing the Work shall be extended with an appropriate Contract Amendment, the right to proceed terminated or no action taken by the Contracting Officer. The findings of the Contracting Officer shall be final and conclusive on the parties, but subject to Claims under the Article A7.
- (c) **If, after termination of the Contractor's right to proceed, it is** determined that the Contractor was not in default, or that the delay was excusable, the rights and obligations of the parties will be the same as if the termination had been issued for the convenience of RTD.
- (d) The Contractor and RTD shall comply with all of the requirements listed in this Section.

A5.10.2 TERMINATION FOR CONVENIENCE: RTD may terminate the performance of Work under this Contract in whole or in part upon written notice to the Contractor in accordance with this Article whenever RTD determines that such termination is in its best interest.

A5.10.3 FOLLOWING TERMINATION: **After receipt of RTD's termination notice the Contractor shall:** (a) stop Work under the Contract on the date and to the extent specified in the notice; (b) terminate all orders and subcontracts to the extent that they relate to the performance of Work terminated and place no further orders or subcontracts for materials, equipment, services, or facilities, except as may be necessary for the completion of such portion of the Work under the Contract as if not terminated; (c) if directed by the Contracting Officer, assign to RTD all of the right, title, and interest of the Contractor under the orders or subcontracts so terminated; (d) if directed by the Contracting Officer, transfer title and deliver to the District: (1) the fabricated or unfabricated parts, Work in progress, completed Work, supplies, and other material produced as a part of, or acquired in connection with the performance of, the Work, and (2) updated Record Documents to current status including working plans, As-Built Drawings, As-Built Schedule, daily logs and diaries, other information, and other property which, if the Contract had been complete, would have been required to be furnished to RTD; (e) complete performance **of any part of the Work that has not been terminated by RTD's notice; and (f) take such action as may be necessary, or as the Contracting Officer may direct, for the protection and preservation of the property related to this Contract which is in the possession of the Contractor and in which RTD has or may acquire an interest.**

A5.10.4 PROCEED WITH PERFORMANCE: The Contractor shall proceed immediately with the performance of the above obligations notwithstanding any delay in determining or adjusting the amount or amounts to be paid to the Contractor by reason of the total or partial termination of Work under this Article. The Contractor may submit to the Contracting Officer a list, certified as to quantity and quality, of any or all items of termination inventory not previously disposed of, exclusive of items the disposition of which has been directed or authorized by the Contracting Officer. Not later than 15 Days thereafter, RTD will accept such items and remove them or enter into a storage agreement covering them, provided that the list submitted shall be subject to verification by the Contracting Officer upon removal of the items or, if the items are stored, within 45 Days from the date of submission of the list, and any necessary adjustment to correct the list as submitted shall be made prior to final settlement.

A5.10.5 CLAIMS UPON TERMINATION: If RTD serves a written notice of termination (due to the default of the Contractor OR for convenience), to pursue Claims, the parties must follow the procedures and requirements of Article A7, except that neither party needs to file a Written Notice of Claim. The Contractor must file a Certified Claim identifying supporting data within 60 Days after receipt of the written notice of termination. If the Work specified in the Contract is completed by RTD or someone else, RTD must file a Certified Claim within 60 Days after the Final Acceptance of the Work. RTD must file a Certified Claim within 120 Days of the service of the written notice of termination if no further Work is done.

A5.10.6 Upon failure of the Contractor to submit its termination Certified Claim within the time allowed, the Contracting Officer may, within 60 Days after Final Acceptance, determine the amount, if any, due to the Contractor by reason of the termination. RTD shall pay that amount to the Contractor, or hold that amount in escrow if Claims have been asserted against the Contractor by RTD or others. The amount determined by the Contracting Officer under these circumstances cannot be challenged by the Contractor or its assigns by any means, including a lawsuit, as the Contractor failed to perform a condition precedent by failing to serve a Certified Claim as required by this Article and Article A7. To determine the amount owed to the Contractor under these circumstances, the Contracting Officer, in good faith, must consider the costs to RTD to have the Work finished by RTD or others (if applicable) and should also consider a reasonable allowance for overhead and profit on Work done and accepted and for materials and equipment provided by the Contractor. The Contracting Officer should use the documents provided with the Bid or Proposal to determine the proper amount to be paid to the Contractor. The Contracting Officer may also contact the Contractor, if possible, to attempt an agreement on the amount to be paid under this Article. Whether or not an agreement can be made, the Contract shall be amended accordingly (either by agreement or unilaterally by RTD), and the determined amount shall be paid to the Contractor or placed into escrow if there are claims against the Contractor by RTD or others. In arriving at the amount due the Contractor under this Article, there shall be deducted (1) all unliquidated advance or other payments made to the Contractor, applicable to the terminated portion of this Contract, (2) any Claim which RTD may have against the Contractor in connection with this Contract, (3) the agreed price for, or the proceeds of sale of, any materials, supplies, or other things acquired by the Contractor or sold pursuant to the provisions of this Article and not otherwise recovered by or credited to RTD, and (4) any outstanding claims of subcontractors or suppliers (of any tier).

A5.10.7 In the event of a partial termination, **the Contractor's costs for labor, equipment, materials, overhead and profit** shall be reduced by agreement between the parties to reflect the lack of costs, overhead and profit on the Work not performed by the Contractor. Such adjustment shall be evidenced by a Contract Amendment. The Bid or Proposal documents can be used to arrive at an equitable adjustment. If an agreement cannot be achieved, the Contracting Officer will use his or her best judgment to unilaterally adjust the Contract, and the Contractor may file a Claim, following the procedures and restrictions found in this Article and Article A7.

A5.10.8 RTD may make payments for costs incurred by the Contractor in connection with the terminated portion of the Contract. The aggregate of such payments shall be within the amount to which the Contractor is entitled under the Contract. In the sole opinion of the Contracting Officer, if the total of such payments is in excess of the amounts owed to the Contractor, the excess shall be paid by the Contractor to RTD upon demand, together with interest computed pursuant to the Colorado Revised Statutes, for the period from the date such excess payment is received by the Contractor to the date on which such excess is repaid to RTD.

ARTICLE A6: PAYMENT

A6.1 CONTRACT COST: In addition to the information and requirements in this Article, see the Statement of Contract Cost. In the event of a conflict between this Article and the Statement of Contract Cost, the Statement of Contract Cost shall control.

A6.2 LUMP SUM CONTRACTS: In a "Lump Sum" contract, the Contractor bids one amount to do all the Work under the Contract, except there may be contracts wherein the Contractor is asked to submit bids for one or more alternate Work descriptions. Each alternate will be bid as a Lump Sum. The Contract Cost is the amount of the lump sum bid by the Contractor for the base Contract Work description and any alternates chosen by RTD to be performed under the Contract. The Bid or Proposal documents will be used to calculate progress payments under Section A6.4. RTD can make progress payments based on the costs to the Contractor of the Work performed (plus an appropriate amount for overhead costs and profit) or based upon the value of the Work completed.

A6.3 UNIT PRICE CONTRACTS: The Contract Cost for unit price contracts will be the sum of the products of the estimated quantities shown on the Bid or Proposal form multiplied by the unit prices bid or proposed. In the event of a discrepancy between the unit prices bid or proposed and extensions (sum totals), the unit price shall govern.

A6.3.1 MEASUREMENT OF QUANTITIES: Measurement of quantities for payment on unit price items shall be in accordance with the measurement and payment sections of the appropriate Technical Specification covering that item of Work, or, absent such provisions in the Technical Specifications, such measurements shall be in accordance with local industry practices and standards.

A6.3.2 VARIATION IN ESTIMATED QUANTITY: If the quantity of a unit-priced item in this Contract is an estimated quantity and the actual quantity of the unit-priced item varies more than 25 percent above or below the estimated quantity, an equitable adjustment in the Contract Cost shall be made upon demand of either party. The equitable adjustment shall be based upon any increase or decrease in costs due solely to the variation above 125 percent or below 75 percent of the estimated quantity. Changes outside these parameters will be handled in accordance with Article A7 when proper notices are made.

A6.4 PROGRESS PAYMENTS:

A6.4.1 RTD shall make progress payments monthly as the Work proceeds, or at more frequent intervals as determined by the Contracting Officer based on written estimates of Work accomplished which meets the standards of quality established under the Contract, as approved by the Contracting Officer. If required by the Technical Specifications, the Contractor shall prepare a cost-loaded Project schedule. Monthly Progress Schedule updates, in such detail as requested by the Contracting Officer, will substantiate the payment amount requested in order to provide a basis for determining progress payments. In the preparation of estimates, the Contracting Officer may authorize material delivered

on the site and preparatory Work done to be taken into consideration. Material delivered to the Contractor at locations other than the site may also be taken into consideration if:

- (a) Consideration is specifically authorized by this Contract; and
- (b) The Contractor furnishes satisfactory evidence that it has acquired title to such material and that the material will be used to perform this Contract; and
- (c) The Contractor, at its expense, has the material stored in a bonded warehouse or other secured area acceptable to RTD and insured in the name of RTD at its full replacement value.

A6.4.2 RETAINAGE: RTD shall retain and hold five percent of each progress payment until Final Acceptance of the Work. If verified statements of Claim are filed against the Contract, the Contracting Officer will also withhold the sum total of such verified statements of Claim from the progress payments following the receipt of such verified statements of Claim. The total retention should always be at least five percent of the total sum of progress payments made to date plus any retention paid to the Contractor plus the sum total of all verified statements of Claim filed against the Contract Cost. Such Claims can be made by RTD, the surety or any tier subcontractor or supplier. If verified statements of Claim have been filed against the Contractor by RTD, the surety or any tier subcontractor or supplier, the sum total of the Claims will continue to be held in retainage until the Claims are resolved or retention is returned to the Contractor pursuant to Section A6.6. The Contractor cannot file a Claim or take other legal proceedings against RTD for the retainage held to resolve verified statements of Claim.

A6.4.3 All material and Work covered by progress payments shall, at the time of payment, become the sole property of RTD, but this shall not be construed as:

- (a) Relieving the Contractor from its sole responsibility for all material and Work upon which payments have been made, the restoration of any damaged Work or the replacement of any defective Work; or
- (b) Waiving the right of RTD to require the fulfillment of all of the terms of the Contract.

A6.4.4 Along with each request for progress payments, the Contractor shall furnish the following certification, or payment shall not be made:

I certify, to the best of my knowledge and belief, that:

- (a) The amounts requested are only for performance in accordance with the Technical Specifications, terms and conditions of the Contract;

- (b) Payments to subcontractors and suppliers have been made from previous payments received under the Contract, and timely payments will be made from the proceeds of the payment covered by this certification, in accordance with the requirements of this Contract and federal and state law;
- (c) This request for progress payment does not include any amount which the Contractor intends to withhold or retain from a subcontractor or supplier.

(Name)

(Title)

(Date)

A6.4.5 The certification required in Section A6.4.4 must be signed by either the Project **superintendent, the Contractor's Project manager or an owner/officer of the Contractor.** The Contractor must provide a letter of authorization giving authority to the person signing the certification. The signer must have or must obtain the actual knowledge of the items listed in the certification before signing it.

Any non-compliance with Sections A6.4.4 or A6.4.5, including a false certification, constitutes a breach of the Contract and the classification of the Contractor as non-responsible for future RTD work.

A6.4.6 **In order for RTD to verify the Contractor's compliance with Disadvantaged Business Enterprise (DBE) provisions of this Contract, if any, and the requirements that the Contractor perform a certain percentage of the Work, the Contractor, with each request for payment, shall submit status reports itemizing past payments (if different from prior status reports) and anticipated payments (status report) out of the present payment request to all subcontractors and suppliers.**

A6.4.7 RTD shall pay the progress payment to the Contractor after:

- (a) Presentation of a properly executed voucher, including an approved Monthly Progress Schedule;
- (b) Completion and acceptance of all Work listed in the voucher; and
- (c) Presentation of a release of all Claims against RTD for any and all items provided or portions of the Work performed that is included in whole or in part in the progress payment application or voucher, other than those Claims previously filed by a Written Notice of Claim

or a Certified Claim. A release may also be required of the assignee **if the Contractor's Claim to amounts payable under this Contract** has been assigned. If no release is attached to the payment application or voucher, the mere act of presenting the application or voucher to RTD for payment acts, by operation of this Article, as a release of all Claims against RTD for any and all items provided or portions of the Work performed that is included in whole or in part in the progress payment application or voucher, other than those Claims previously filed by a Written Notice of Claim or a Certified Claim.

If the Contractor has presented a payment application or voucher, the Contractor is foreclosed or prevented from later filing a Written Notice of Claim or a Certified Claim for those items or portions of Work that are included in whole or in part in the payment application or voucher. Except the Contractor can file a Written Notice of Claim or a Certified Claim for those items or portions of Work listed in the payment application or voucher that RTD fails or refuses to pay. Such Written Notice of Claim or Certified Claim must comply with the time limitations and other requirements of Article A7 and the requirements of all other Articles.

A6.5 FINAL PAYMENT:

A6.5.1 RTD shall pay the final amount due to the Contractor under this Contract after:

- (a) Completion and Final Acceptance of the Work;
- (b) Presentation of a properly executed application for payment by the Contractor on a form approved by the Contracting Officer;
- (c) **Presentation of Contractor's release of all Claims against RTD** arising by virtue of this Contract, other than those Claims previously filed by a Written Notice of Claim or a Certified Claim or those Claims presently being excepted from the release by a timely Written Notice of Claim. A release may also be required of the **assignee if the Contractor's Claim to amounts payable under this Contract** has been assigned;
- (d) **Contractor's furnishing to** RTD, in organized and indexed loose-leaf binders, all operating instructions, manuals, warranties, guaranties, bonds and the like required by the Contract Documents or normally furnished under local practice; and
- (e) **Contractor's submission of all Record Documents**, including complete As-Built Drawings showing the exact location of all Work; utility locations and connections; clean-out, wiring and duct diagrams and the like; and a complete As-Built Schedule showing when the Work was actually completed.

A6.5.2 The Contractor acknowledges and agrees that its acceptance of final payment from RTD shall constitute its release of all Claims against the District except those for which a Written Notice of Claim has previously been served upon the Contracting Officer. The Contractor further acknowledges and agrees that all Written Notices of Claims must be served upon the Contracting Officer prior to or at the time of the application for final payment. Failure to provide Written Notice of Claim prior to or at the time of the application for final payment is a complete bar to pursuing the Claim. This requirement is an addition to the requirement, which also applies, under Article A7, that all Written Notices of Claims be served upon the Contracting Officer or the RTD PM within seven Days of the incident or obtaining knowledge of the circumstance which forms the basis of the Claim.

A6.6. PAYMENT OF RETAINAGE: Final payment does not include the payment of the amounts held by RTD in retainage. After Final Acceptance of the Work and completion of all requirements under the Contract, RTD will twice advertise a final settlement date in a newspaper of general circulation. The final settlement date is the date by which claims against the Contractor must be received by RTD, in written form as prescribed by C.R.S. § 38-26-107. RTD will continue to hold retainage in the sum total of verified statements of Claim filed by RTD against the Contractor and the amounts indicated in the received verified statements of Claim pursuant to C.R.S. § 38-26-107. The remaining retainage will be paid as soon as practicable after the final settlement date. Should the Claims asserted against the Contractor by RTD, the surety, any tier subcontractor or supplier exceed the amount held in retainage, the final payment or any progress payment will be reduced by the difference and that amount will be added to the retainage. If verified statements of Claim have been filed against the Contractor by RTD, the surety, or any tier subcontractor or supplier, the sum total of the verified statements of Claim will continue to be held in retainage until the Claims are resolved. The Contractor cannot file a Claim or take other legal proceedings against RTD for the retainage held to resolve verified statements of Claim.

A6.7 PAYMENTS WITHHELD:

A6.7.1 The Contracting Officer or the PM may decline to approve an application for payment and may withhold the payment in whole or in part, to the extent necessary and reasonable to protect RTD. Similarly, because of subsequently discovered evidence or subsequent inspection, the Contracting Officer may nullify the whole or any part of any payment due to such extent as may be necessary, in his/her opinion, to protect RTD from loss because of any reasonable reason, including, for purposes of demonstration and not limiting:

- (a) Any Claim asserted by RTD against the Contractor including any Claim for defective Work not remedied;
- (b) Third-party claims filed or reasonable evidence indicating the probability of the filing of such claims;

- (c) Failure of the Contractor to make payments properly to subcontractors for labor, materials or equipment;
- (d) Reasonable doubt that the Work can be completed for the unpaid balance of the Contract Cost;
- (e) Damage to RTD or a third party, including but not limited to damage to the Work site, completed Work or materials, or supplies or equipment used, or to be used, to complete the Work;
- (f) Reasonable indication that the Work will not be completed (Final Acceptance and completion of all requirements under the Contract including complete Record Documents including As-Built Drawings and the As-Built Schedule) within the Contract Schedule;
- (g) Failure of the Contractor to carry out the Work in strict accordance with the Contract Documents; or
- (h) Lack of an updated or realistic Monthly Progress Schedule or an accurate As-Built Schedule.

A6.7.2 When the grounds enumerated in A6.7.1 above are removed, payments shall be made from amounts withheld.

A6.7.3 Contractor shall not be entitled to interest on sums withheld by RTD pursuant to A6.7.1.

A6.8 HOLD HARMLESS: In the event that any claimant that has furnished labor, materials, equipment, supplies or other goods or services to the Contractor sues RTD for payment of any money allegedly due by the Contractor and/or any tier subcontractor, then the Contractor shall protect, defend, save and hold RTD harmless from any such suit and pay or reimburse RTD for all expenses incurred in connection with any such lawsuit, including but not limited to reasonable **attorneys' fees and court costs.**

ARTICLE A7: CHANGES, CLAIMS, AND DISPUTE RESOLUTION

A7.1 CHANGE DEFINITIONS:

A7.1.1 CERTIFIED CLAIM: A written document that describes the basis for a Claim and must be submitted according to the requirements of the Contract. It must include: the date of the incident or the date when the Contractor obtained knowledge of the circumstance that is the basis of the Claim, a detailed summary of the pertinent facts, and the names and addresses (including phone numbers) of all witnesses to the pertinent facts. The Certified Claim must contain a Change Order Proposal (COP) which shall contain the specific and calculated remedy that the Contractor is seeking (i.e., the amount of compensation, amount of time extension, etc.) and the rationale and calculations for the remedy (how the remedy was calculated). The Certified Claim must also contain verified statements that the Claim is made in good faith, that supporting data is accurate and complete, and that the requested relief (i.e., the amounts of compensation and/or time extension, etc.) accurately reflects the Contract adjustments for which the Contractor believes it is entitled. The statements must be certified by the sole proprietor, an officer, general partner, director or a senior company official of the Contractor. The Certified Claim must also include a **detailed summary of all supporting documents and data and a detailed summary of all witnesses' and experts' testimony and/or reports that establish and prove the nature of the Claim and the amount of compensation and/or time extension requested.**

A7.1.2 CHANGE NOTICE (CN): A notice issued by the RTD Representative specifying a potential change in the Work, the Technical Specifications and/or the Contract Schedule. The CN is not an authorization to proceed with the potential change to the Work, Technical Specifications, and/or schedule. The CN may, at the discretion of RTD, include a request that the Contractor provide a Change Summary or a Change Order Proposal (COP).

A7.1.3 CHANGE ORDER (CO) / CONTRACT AMENDMENT (CA): A bilateral document that modifies the Technical Specifications, the Scope of Work, the Contract Cost, and/or the Project schedule, and/or revises other terms and conditions of the Contract within the parameters of the original Scope of Work. It is to be signed by the Contracting Officer or the RTD PM and the Contractor, acknowledging agreement and consent of both parties.

Each CO shall contain a sworn certification by the Contractor, in form acceptable to RTD, that the amount of time and/or compensation requested includes all known and anticipated impacts or amounts, direct, indirect and consequential, which may be incurred as a result of the event or matter giving rise to such proposed change and that the Contractor has no reason to believe and does not believe that the factual basis for the CO is falsely represented. RTD shall have the **right to request all records and correspondence between the Contractor's staff and subcontractors relating to such CO to verify any amounts or statements made in the CO.**

A7.1.4 CHANGE ORDER PROPOSAL (COP): A written offer prepared by the Contractor and submitted to RTD which sets out the full details of the proposed change and the impacts of the **proposed change on the parties' rights and obligations under this Contract, including proposed impacts on the Scope of Work, the Contract Cost and/or the Project schedule, such as to make the COP the basis for a CO or CA.** The additional costs that the Contractor reasonably expects to incur (the labor, material, equipment, field/office overhead and profit elements) shall be

estimated with all necessary supporting calculations and information, including detailed particulars of additional sums to be paid to the subcontractors and mark-ups on subcontracted Work. The COP should show the exact nature of the proposed improvements, the specific changes that would be required to the final Project design, Technical Specifications, or to the design and construction requirements (as applicable). It should also indicate any impact on the achievement of the DBE goals, if any, and any impacts on requirements detailed in the Environmental Assessment (EA)/Finding of No Significant Impact (FONSI), if any.

If the COP is being provided to support a Claim, the COP should contain the date of the incident or the date when the Contractor obtained knowledge of the circumstance that is the basis of the Claim, a detailed summary of the pertinent facts, the names and addresses (including phone numbers) of all witnesses to the pertinent facts, the specific and calculated remedy that the Contractor is seeking (i.e., the amount of compensation, amount of time extension, etc.), and the rationale and calculations for the remedy (how the remedy was calculated).

A7.1.5 CHANGE SUMMARY (CS): A short document prepared by the Contractor setting out the general nature and a rough order of magnitude (ROM) of a Change being proposed for consideration by the RTD PM and the impact of such proposed change, including any impacts on the Scope of Work, Technical Specifications, estimates of changes to the Contract Cost, and/or to the Project schedule. A CS can be prepared to support a Claim, in response to a **request from RTD or it can be the Contractor's value-added or cost-savings suggestion to vary the Scope of Work and/or Technical Specifications**; this latter form of a CS should be considered an offer to which RTD is allowed 90 Days to respond in order to maintain the ROM listed in terms of Contract Cost and schedule impact.

A7.1.6 CLAIM: A demand or assertion by one of the parties seeking an adjustment, interpretation or amendment of the Contract terms, compensation, payment of (or credit for) money, extension (or reduction) of time or other relief with respect to the terms of the Contract. It also includes other disputes and matters in question between RTD and the Contractor arising out of the Contract. A Notice of Non-Compliance is not a Claim unless the Contractor does not bring the Work into compliance as specified in the Notice of Non-Compliance. A voucher, invoice, or other **routine request for payment that is not listed in some form as a "Claim" is not a Claim.**

A7.1.7 CONTRACT DIRECTIVE (CD): A unilateral order signed by the Contracting Officer or the RTD PM that directs the Contractor to perform as the PM directs in compliance with the Scope of Work/Technical Specifications/Project schedule and/or directs a change in the Scope of **Work/Technical Specifications/Project schedule. A CD may or may not list the PM's decision as to** an increase (or decrease) in the Contract Cost and/or Contract Schedule. Whether or not the Contractor disputes any portion of the CD, the Contractor must proceed as directed in the CD or be in default of the Contract subject to termination. Should either party believe that the CD will require a change in the Technical Specifications, the Scope of Work, the Contract Cost and/or the Project schedule, the parties must negotiate a Change Order or Contract Amendment before any modification of the Contract can be allowed.

A7.1.8 NOTICE OF CHANGE ORDER PROPOSAL (NCOP) also referred to as a WRITTEN NOTICE OF CLAIM: A written notice from the Contractor indicating that it believes it is entitled to a change in the Scope of Work or the Technical Specifications or an increase in the Contract Cost and/or

Contract Schedule, often based upon a verbal or written communication that it considers to be a CD, Field Design Change (FDC) or Field Clarification Notice (FCN). The NCOP shall contain the date of the incident or the date when the Contractor obtained knowledge of the circumstance that is the basis of the Claim; the circumstances which are the basis for the Claim; (if applicable) the source of the communication that the Contractor regards as a CD, FDC, or FCN; the remedy that the Contractor is seeking (i.e., compensation, time extension, etc.); and the rationale for the remedy. A brief summary of the pertinent facts, the names and addresses (including phone numbers) of all witnesses is required if known. If the basis for a Claim or a CO is a differing site condition or a delay caused by RTD that extends the Term of Performance, the Contractor must supply all of the information required by this Section and be timely filed with RTD. A verbal or written communication from the Contractor that it may potentially have a Claim is not a NCOP nor a Written Notice of Claim. To constitute a NCOP or a Written Notice of Claim the document must state that the Contractor has a Claim, state the requirements of such a Claim listed in this Section, and timely follow with a CS and a COP as appropriate.

A7.1.9 REQUEST FOR A CHANGE ORDER PROPOSAL (RCOP): A written request from the Contracting Officer or the RTD PM to the Contractor that the Contractor provide a COP in response to a CN, CS, CD, FDC, or FCN. The CN can be included in the RCOP. A COP must be provided within 21 Days of the request, unless the parties can agree in writing to a different time. Failure to meet the deadline listed will entitle RTD to liquidated damages (See Form 5-13c)

A7.2 CHANGES DIRECTED BY RTD; POTENTIAL CHANGES REQUESTED BY RTD OR SUGGESTED BY THE CONTRACTOR:

A7.2.1 The Contracting Officer or the RTD PM may, at any time, without notice to the sureties, if any, by written order designated or indicated to be a CD, make changes in the Work within the general scope of the Contract, including changes:

- (a) In the Technical Specifications (including drawings and designs) and including changes to materials and equipment;
- (b) In the Scope of Work, method or manner of performance of the Work;
- (c) In RTD-furnished facilities, equipment, materials, services, or site; or
- (d) Directing acceleration in the performance of the Work.

A7.2.2 Except as provided in this Article, no order, statement, or conduct of the Contracting Officer or RTD PM shall be treated as a change under this Article or entitle the Contractor to an equitable adjustment. Any written or oral communication not specifically designated or indicated to be a CN, CD, or RCOP, which includes direction, instruction, interpretation, or determination **from RTD personnel, including the Contracting Officer or PM, shall be considered "informational only" and does not entitle the Contractor to a CO. However, any communication dealing specifically with immediate public safety concerns, including the safety of RTD and Contractor personnel, shall be considered a CD and not "informational only."**

A7.2.3 Whenever the Contracting Officer or the RTD PM requests a CS either through a CN or CD, a written CS must be submitted within seven Days of the request, unless the parties agree in writing to a different time. Failure to meet the deadline listed will entitle RTD to liquidated damages.

A7.2.4 Whenever the Contracting Officer or the RTD PM requests a COP either through a CN, CD or RCOP, a COP must be submitted within 21 Days of the request, unless the parties agree in writing to a different time. Failure to meet the deadline listed will entitle RTD to liquidated damages.

A7.2.5 **The COP should be signed by the Contractor's representative and is considered an offer from the Contractor to perform the changes listed for the amounts listed, the changes to the Work or Technical Specifications, and for the impacts to the Project schedule listed. The elements (costs, schedule impacts, Scope of Work impacts, etc.) of the COP, since it is an offer, shall be left open to acceptance by the RTD Representative for a period of 90 Days after RTD's receipt of the COP. Attempted withdrawal of a COP before the 90-Day expiration date will subject the Contractor to a CD from RTD containing the terms of the COP and not subject to dispute resolution procedures. (See Form 5-13a)**

The cost of preparing a COP will be borne by the Contractor unless the parties agree to some other cost arrangement prior to the preparation of the COP.

A7.3 CLAIMS:

A7.3.1 If the Contractor believes that a written or oral communication from the **Contracting Officer or PM is not "informational only" and constitutes a CD with a substantial** change in the Scope of Work or the Technical Specifications and the Contractor believes it is entitled to a CO or CA based upon the verbal or written communication, or if the Contractor believes it is entitled to a CO for any other reason (including delays caused by RTD), or if it has the basis for a Claim against RTD for any reason related in any way to the Contract, the Contractor must serve the Contracting Officer or the PM with a written NCOP or Written Notice of Claim. The NCOP should be followed with a CS and a Certified Claim as appropriate in the circumstances and timely served as required in this Article. (See Form 5-13b)

A7.3.2 Contractor acknowledges that it is a condition precedent to pursue a Claim for the Contractor to timely serve the RTD Representative with a written NCOP or Written Notice of Claim in order for it to proceed with any Claim against RTD. The Contractor must serve the RTD Representative or Contracting Officer with the written NCOP or a Written Notice of Claim within seven Days of when it has knowledge (or reasonably should have obtained knowledge if acting as a prudent and knowledgeable contractor) that it has a basis for a Claim against RTD. This Section also applies to delay Claims. A NCOP or a Written Notice of Claim must be served upon RTD when the Contractor has knowledge that an event or condition has occurred that gives rise to a delay Claim.

A7.3.3 The Contractor has knowledge of the circumstance that is the basis for the Claim when a reasonable person in the position of the Contractor should have, through the use of Due Diligence, realized the circumstance that is the basis for the Claim.

A7.3.4 The date of service of any required document described in this Article including a Written Notice of Claim, NCOP, CS or Certified Claim is the date it is actually received by the Contracting Officer or the RTD Representative, no matter the method of delivery, and that date cannot be disputed by the Contractor.

A7.3.5 Failure to provide the RTD Representative with a written NCOP or Written Notice of Claim within seven Days of the Contractor obtaining knowledge of the circumstance giving rise to a Claim will foreclose the Contractor from pursuing the Claim. The time period to provide the written NCOP can be extended by a written agreement of the Parties.

A7.3.6 The following circumstances do NOT relieve or stay the Contractor of the need to timely **file an NCOP or a Written Notice of Claim: (1) RTD's actual knowledge of the incident or the circumstance which forms the basis of a Claim; (2) a verbal notice from the Contractor to any RTD personnel including the Contracting Officer or the PM of the potential Claim; or (3) negotiations between the parties for an equitable adjustment or other relief based on the Claim within the seven-Day period.**

A7.3.7 Once a written NCOP or Written Notice of Claim is received by RTD, it can attempt to negotiate a CO, it can deny the Claim, or it can take no action. Regardless of what RTD does, the Contractor must serve RTD with a written CS within 14 Days of the service of the NCOP or Written Notice of Claim (even if negotiations are taking place). The time period can be extended by a written agreement of the Parties

A7.3.8 The Contractor acknowledges that it is a condition precedent to pursue a Claim **for the Contractor to serve RTD's Representative with a written CS within 14 Days** of the service of the NCOP upon RTD or within a reasonable time period agreed upon by the parties in writing. **Failure to provide RTD's Contracting Officer or PM with a CS within 14 Days after the service of the NCOP (or Written Notice of Claim) will preclude the Contractor from pursuing the Claim.** Negotiations between the parties for an equitable adjustment or other relief based on the Claim within the 14-Day period do not relieve or stay the Contractor of the need to timely file a written CS.

A7.3.9 Once a written CS is received by RTD, it can attempt to negotiate a CO, it can deny the Claim, or it can take no action. Regardless of what RTD does, the Contractor must serve RTD with a written COP within 21 Days of the service of the CS (even if negotiations are taking place). Contractor acknowledges that it is a condition precedent to pursue a Claim that a written COP must then be submitted within 21 Days of the service of CS upon RTD, or within a reasonable time period agreed upon by the parties in writing. Failure to provide a COP within 21 Days after the service of the CS will preclude the Contractor from pursuing the Claim.

A7.3.10 Settlement of any Claim is desirable and encouraged. Each party should willingly exchange any information or documents, especially those requested of the other party. If RTD gives no response to the Contractor within 30 Days following receipt of the COP that supports **the Contractor's Claim, or if the parties cannot come to an agreement as to a CO or CA within 30 Days following receipt of the COP, RTD shall be deemed to have rejected the COP and the matter is to be referred to the Dispute Resolution Procedures.** The time period to attempt to

resolve the Claim before taking it to the Dispute Resolution Procedures can be extended by a written agreement of the parties. However, the attempted resolution of a Claim before taking it to the Dispute Resolution Procedures can only be extended to a maximum period of 120 Days. After that time period the Contractor is foreclosed from pursuing the Claim.

A7.3.11 **Regardless of RTD's rejection of the Claim, the ongoing attempts to negotiate a** resolution of the Claim, or whether the Claim is taken to the Dispute Resolution Procedures, the Contractor shall continue to complete the Work required under the Contract and as directed by RTD. The Contractor cannot delay its completion of the Work or its other obligations under the Contract pending the outcome of its Claim against RTD. The Contractor shall, and shall ensure that the subcontractors shall, use all reasonable efforts to mitigate costs and to meet the approved Project schedule. Such efforts include:

- (a) Rearranging the order in which the Work is scheduled to be performed under the Project schedule;
- (b) Ensuring that the Work be divided (or further divided) into components that can be undertaken separately and/or concurrently; and
- (c) Minimizing the costs (including overhead) that are incurred during the continuance of Claim negotiations and/or the Dispute Resolution Procedures.

A7.3.12 Any Contractor that fails to proceed diligently to perform a Contract based on the outcome of a Claim or pending a Claim, or who asserts or defends a Claim in bad faith (in the sole determination of RTD), is in breach of the Contract subject to Termination for Cause and may be declared non-responsible for future RTD work.

A7.3.13 The Contractor shall not make any changes to, or deviate in any way from, the Scope of Work and Technical Specifications, except as permitted under this Article. As a condition **precedent to Contractor's right to receive additional payment or an extension of a completion** milestone for work that is outside the original scope of the Work, the Contractor shall have received either a CD from RTD or a CO for such Work signed by RTD and the Contractor. To the extent that Contractor undertakes any such Work without receiving a CD or a CO, the Contractor shall be deemed to have performed such Work voluntarily and shall not be entitled to a CO in connection with such Work. In addition, the Contractor may be required to remove or otherwise undo any such Work, at its sole cost and expense.

A7.3.14 Any increase in the Contract Cost allowed under the Contract shall exclude:

- (a) costs caused by the breach of contract, fault, negligence, act or failure to act of Contractor, its employees, agents, officers or subcontractors or any other persons for whom the Contractor may be contractually or legally responsible;
- (b) costs which could reasonably have been avoided by Contractor by re-sequencing, reallocating or redeploying its forces to other portions of the

Work or to other activities unrelated to the Work; and

- (c) costs for any rejected Work which failed to meet the requirements of the Contract Documents and for any necessary remedial Work.

A7.3.15 If no CD or CN has been provided by RTD, but it becomes obvious that there is a defect in the Technical Specifications (such as a violation of the building code or the fact that the Work is not constructible as drawn) that requires the Work to be changed from the Technical Specifications, the Notice to Proceed assumes an order to perform the Work properly and constitutes a communication that the Contractor can assume is a CN based upon the defective Technical Specifications. The Contractor must send a NCOP written confirmation of the change as described in this Article within seven Days once it becomes apparent to the Contractor, or **should have become apparent with the Contractor's use of Due Diligence, that the Technical Specifications are defective.** The Contractor should then proceed as directed in this Article. Failure to provide the timely NCOP precludes and prevents the Contractor from seeking an equitable adjustment for the change, and RTD will correct the Technical Specifications without the Contractor being entitled to a CO. The NCOP is subject to challenge by RTD based upon Section A3.4.

A7.4 DISPUTE RESOLUTION:

A7.4.1 The first stage of the Dispute Resolution Procedures is for the Parties to meet at a higher managerial level and discuss the possibility of settlement. Since settlement of any Claim is desirable and encouraged, each Party is required to exchange any information or documents requested of the other party before the higher-level managers meet. If the meeting proves unsuccessful, the Parties shall engage a professional mediator, paid equally by the Parties, to conduct a non-binding settlement conference with the higher-level managers.

A7.4.2 If settlement still cannot be achieved and the parties do not agree upon another form of dispute resolution, in order to pursue the Claim, the Contractor must file suit in the State District Court for the City and County of Denver and adhere to all of the Colorado Rules of Civil Procedure including discovery rules and the Colorado Rules of Evidence. The parties agree to this jurisdiction **and venue as it is the location of RTD's managerial offices and where the Contract was negotiated, signed and administered.**

Regardless of any denial of the Claim, negotiations or other dispute resolution process, or the dates of Substantial Completion or Final Acceptance, the statute of limitations for a civil action on the Claim begins to run from the date of the incident or the date when the Contractor obtained knowledge of the circumstance that is the basis of the Claim (or should have obtained knowledge through the use of Due Diligence).

A7.5 PRICING OF CHANGE ORDERS:

A7.5.1 RTD and the Contractor (on its own behalf and on behalf of its subcontractors) shall endeavor to negotiate, in good faith, a reasonable cost for each CO. In general, the price of a CO shall be negotiated as a lump sum price. However, the Contractor is to follow the protocol described below in estimating the price of a CO. The same protocol is to be used on COs which

are based on time and material costs.

- (a) RTD will obtain or calculate an Internal Cost Estimate (ICE) for the cost of the Work described in the CO using the protocol described below.
- (b) **The Contractor's estimated price for the CO will be calculated in terms of** actual costs for labor, material, rentals, etc., and then mark-ups for overhead and profit will be added in accordance with this Section.
- (c) The actual cost of construction labor should include a labor surcharge of 46 percent of actual unburdened wages; construction labor are those individuals who are working full-time with materials or equipment at construction or storage sites. The actual cost of labor for non-construction field workers [such as field supervisors, quality control/quality assurance personnel, safety managers, construction managers, etc. who spend at least two-thirds of their time at the construction site] should include a labor surcharge of 60 percent of actual unburdened wages. The actual cost of labor for design and other professional services (excluding the **Contractor's management or professional personnel**) should include a labor surcharge of 120 percent of actual unburdened wages.
- (d) Whether the CO is based upon a negotiated lump sum price or time and materials method, the mark-ups for general and administrative overhead (including all management) and profit shall be calculated as set forth in Section A7.5.2.
- (e) Actual labor rates must be established by certified payroll records. However, if the rates are higher than customary for that type of labor in the local market, the rates can be negotiated. If there remains a dispute over labor costs, the labor rates will be calculated using the appropriate, unburdened Davis Bacon rates in force at the time of the CO for the location of the Work or the average salary of such personnel in the Denver Metro area.
- (f) If the proposed price is within five percent of the ICE, which percentage may **be adjusted at RTD's sole discretion, the PM can accept it. However,** if a proposed price from the Contractor exceeds the ICE by more than five percent, or the percentage determined by RTD, there are several options available to the PM: the Parties can negotiate a higher amount but there must be a compelling reason articulated in the justification narrative; RTD can issue a CD for the Work to be done on a time and materials basis following the protocols detailed in this Section 7.4; or RTD can submit a CD in the amount of the ICE and the Contractor can file a Claim for the difference to be resolved by the Claim process.
- (g) Subcontracts shall be subject to the pricing procedure and follow the same protocols listed in this Section when calculating a subcontract price.

This includes the price being less than seven percent over the RTD ICE amount. The provisions in this Section 7.4 are flow-down provisions that apply to all subcontracts.

A7.5.2 MARK-UPS:

- (a) In addition to costs for labor, equipment and materials listed in A7.5.1(b) and (c), the Contractor or subcontractor directly performing the Work will be entitled to a mark-up of 14 percent of the actual costs and surcharges.
- (b) A subsidiary of the Contractor or a subsidiary of the parent of the Contractor including any member of a joint venture is considered the Contractor, not a subcontractor.
- (c) Items Included in the mark-up:
 - (i) The mark-up amount (14 percent) is a full and complete compensation for profit, fee, and all overhead including equipment and tools consumed or depreciated in the performance of the Work.
 - (ii) The mark-up also includes other indirect costs of the added or changed Work, as well as profit and costs thereon, including any and all costs and expenses incurred due to any delay or inefficiencies in connection with the added or changed Work, even if the CO extends milestones including Substantial Completion and/or Final Acceptance.
 - (iii) The mark-up shall be considered to include, among other costs: bond premiums; incidental job burdens; bonuses; field, jobsite and general home office expenses of all types (including timekeepers, bookkeepers and other general office help); and management and supervisory expenses of all types.
 - (iv) The mark-up rate includes the salaries of all field and home office personnel, including management, who do not spend at least 67 percent of their time outside, on the construction site including: supervisors, controllers, design reviewers, other reviewers, inspectors, accountants, book keepers, and workers of any type and of every level who do not work primarily on the construction site. Personnel which are at least 67 percent on the construction site are considered construction labor or non-construction field workers whose salaries are actual costs with labor surcharges as listed in A7.5.1(b) and (c).

- (v) The mark-up percentage also includes: all costs for any and all travel, transportation, lodging, food or other sustenance expenses (except for any experts or consultants specifically required for some extraordinary purpose and pre-approved by RTD); all field trailers; all field office costs, including office equipment (owned or rented); mobilization; telecommunications charges; fuel for vehicles or equipment; autos and trucks (either owned or rented); the use of equipment owned by the Contractor; permits including any fees charged by relevant authorities; performance and payment bonds; all insurances required under the Contract; the **employer's share of taxes, fees, insurances and other benefits** provided by the employer for the benefit of the employees; all administrative and general costs (field and home offices); and all other overhead, general conditions, and indirect costs.
- (vi) With respect to construction- and non-construction-related labor costs, overhead is included as part of the labor surcharge described in A7.5.1(b) and (c). This includes hand tools, phones, tablets, computers, etc. used in the field. With respect to professional services, overhead is included as part of the labor surcharge described in A7.5.1(b) and (c), including computer-assisted drafting and design systems, computers, facsimile transmission machines, scanners, paper, etc.
- (d) Subcontracted Work. In the case of subcontracted Work, in addition to the 14 percent mark-up amount paid to the subcontractor which has done the Work, only one additional mark-up shall be allowed, notwithstanding the actual number of intervening subcontractors. This one-time 7.5 percent mark-up on the subcontract amount shall fully compensate the Contractor and any intervening subcontractors for oversight, administration, overhead and profit with respect to the subcontracted Work.
- (e) Higher-Tier Subcontractor Costs. If Work is being performed by a lower-tier subcontractor, the Contractor and higher-tier subcontractor(s) will share in the 7.5 percent markup as agreed upon between the Contractor and the higher-tier subcontractor(s). If no agreement can be achieved, the Contractor and any intervening higher tier subcontractors shall equally share in the 7.5 percent mark-up of the subcontract amount.
- (f) Materials and Equipment. No mark-up will be paid to Contractor for any materials or equipment furnished by RTD.
- (g) **Credit Items. Where the Contractor's or any subcontractor's portion of a change involves credit items, or the proposed change is a net deductive change, the Contractor shall include all the Contractor's and**

subcontractors' overhead and profits in computing the value of the credit.

- (h) Contingency. Contingency is built into the mark-ups. No additional contingency will be allowed, including a contingency for risk or complexity of any sort, except that the Contractor or a subcontractor whose scope of work involves an extraordinary higher than normal risk or complexity, such as high voltage electrical systems work or train control software, can negotiate up to an additional five percent fee as overhead on the actual costs. The amount of a contingency fee may be the subject of a Claim and dispute resolution.

A7.5.3 SUBCONTRACTOR COST OR PRICING DATA: Before awarding any subcontract or subcontract modification, the Contractor shall require the subcontractor to submit cost or pricing data (actually or by specific identification in writing), unless the price is:

- (a) Based on adequate price competition;
- (b) Based on established catalog or market prices or commercial items sold in substantial quantities to the general public; or
- (c) Set by law or regulation.

The Contractor shall require the subcontractor to certify that, to the best of its knowledge and belief, the data submitted was accurate, complete, and current as of the date of agreement on the negotiated price of the subcontract or subcontract modification.

A7.5.4 PRICE REDUCTION FOR DEFECTIVE PRICING DATA: This clause does not apply to any modification for which the price is:

- (a) Based on adequate price competition;
- (b) Based on established catalog or market prices of commercial items sold in substantial quantities to the general public; or
- (c) Set by law or regulation.

If any price, including profit, negotiated in connection with any modification under this Article was increased by at least 20 percent because:

- (a) the Contractor or a subcontractor furnished cost or pricing data that was not complete, accurate, or current, or
- (b) a subcontractor or prospective subcontractor furnished the Contractor cost or pricing data that was not complete, accurate, or current, or
- (c) the Contractor or a subcontractor furnished data of any description that was not accurate,

then the price shall be reduced accordingly and the Contract shall be modified to reflect the reduction.

Any reduction in the Contract Cost due to defective data from a prospective subcontractor that was not subsequently awarded the subcontract shall be limited to the amount plus applicable overhead and profit markup, by which (1) the actual subcontract or (2) the actual cost to the Contractor, if there was no subcontract, was less than the prospective estimate submitted by the Contractor, provided that the actual subcontract price or actual cost to the Contractor was not itself affected by defective cost or pricing data.

A7.6 UNIT PRICE CONTRACT CHANGES: On unit-price contracts, if no CD or CN has been provided by RTD but the actual quantities used when following the Technical Specifications exceed the estimated quantities by more than 20 percent, the Notice to Proceed assumes an order to proceed as per the Technical Specifications and constitutes a communication that the Contractor can assume is a CD. The Contractor must send a written NCOP as described in this Section within five business days once it becomes apparent to the Contractor, or should have **become apparent with the Contractor's use of Due Diligence, that the actual quantities will exceed** the estimated quantities by more than 20 percent. The Contractor should then proceed as directed in this Article.

A7.7 DELAY DAMAGES:

A7.7.1 Notwithstanding the fact that RTD is entitled to use General Float Time, a Contractor can submit Claims for equitable adjustments due to delays caused by RTD or its agents (after all General Float Time has been used by RTD), subject to the following Sections and only if the Contractor has complied with all of the conditions precedent listed above (i.e., a timely NCOP or Written Notice of Claim, a timely CS, and a timely Certified Claim).

A7.7.2 Since General Float Time can be used by the Contractor or RTD or both, it is insufficient for the Contractor to seek damages simply because it was delayed past milestones or the completion date listed in its expedited schedule. To claim an equitable adjustment, including damages based upon delays, the Contractor must have suffered actual damages that can be readily supported with documentary evidence caused by some specific incident or circumstance. The actual damages must be for cost items not already calculated in the Bid or Proposal. Expenses throughout the entire Term of Performance as established in the Contract by RTD should have been calculated into the Bid or Proposal (as shown in the schedule of values) and cannot be recovered unless the delays extend days and expenses past the milestones, Substantial Completion deadline, Final Acceptance deadline, and the Term of Performance established by RTD in the Contract.

A7.7.3 RTD is not responsible for damages or delays caused by weather, force majeure, acts of God, acts of war, vandals, terrorists, or persons or entities acting outside of RTD's direction and control including but not limited to building or zoning departments and other entities or authorities under whose control or direction the Work is performed.

A7.7.4 Basis for Delay Damages, Calculations of Cost and Acceleration Costs:

- (a) Only critical path delays and disruption damages shall be compensable and only in the case of (1) an RTD-caused delay to the extent that it entitles the Contractor to an extension of a completion deadline, (2) an RTD-directed change to the extent that it necessitates rearrangement of **Contractor's Work plan**, (3) a critical path delay caused by another RTD contractor, or (4) a critical path delay related to an unknown environmental condition or differing site condition.
- (b) When determining the number of days extending a completion deadline, the parties should meet and attempt to restructure Work and schedules to minimize the time extension required due to the delay or change. This would include the re-sequencing, reallocating or redeploying its forces to other portions of the Work. The Contractor cannot seek compensation for construction labor and non-construction labor forces as defined in Section A7.5 as a result of the event causing the delay.
- (c) The cost of the delay damages will be calculated on a per-day basis. Therefore, the Parties must agree upon the number of days the completion deadline must be extended due to the delay. Days in this Section mean work days; weekend days and holidays are not counted for delay damages unless actually worked.
- (d) The delay costs shall only be for the extended overhead costs incurred by the Contractor. If the basis for the delay involves additional work, the direct costs (labor, materials, supplies, rentals, etc. to do the work) and profit on the work will be included in the Change Order or amendment that pays for the additional work. The Contractor will not be entitled to profit on the delay costs as the delay Change Order only compensates the Contractor for its per-day costs associated with the delay.
- (e) If the delay is associated with additional Scope of Work, a time extension can be agreed upon, daily delay costs calculated for the time period involved and the amount included in the Change Order that pays for the additional Scope of Work.
- (f) If the parties agree in writing and indicate in contemporaneous writings what delay Claims are included, the parties can calculate a sum total of delay damages caused by a number of events that affected the critical path. The costs for each delay event must be calculated on a per-day basis as indicated above. That summary can be formalized in a Change Order at any stage of the Work, even at the Final Acceptance date, if the parties so agree; however, the Contractor cannot make the assumption that its inability to meet either or both the Substantial Completion Deadline or the Final Acceptance deadline was due to the delay events. The Contractor must establish the claimed time extension for each alleged delay event.

- (g) Instead of extending the completion deadline, the parties can agree to acceleration costs compensable hereunder only with respect to Change Orders issued by RTD as an alternative to allowing an extension of a completion deadline. If the parties agree to acceleration, the acceleration cost will be incorporated into a Change Order calculated using the procedures established in this Article but based upon actual acceleration costs and not on theories of productivity, including theories of lost productivity on non-critical path delays.

A7.7.5 To obtain a Change Order for acceleration costs or other damages relating to delay, the Contractor shall **have demonstrated to RTD's satisfaction that:**

- (a) its Project schedule, which defines the affected critical path, in fact set forth a reasonable method for completion of the Work;
- (b) the change in the Work or other event or situation which is the subject of the request for CO has caused or will result in an identifiable and measurable disruption (in days) of the Work that impacted the critical path activity (i.e., consumed all available float and extended the Work required for milestone completion beyond the completion deadline(s));
- (c) the delay or damage was not due to any breach of contract, fault, negligence, act or failure to act of Contractor, its employees, agents, officers or subcontractors or any other persons for whom the Contractor may be contractually or legally responsible, and could not reasonably have been avoided by Contractor, including by re-sequencing, reallocating or redeploying its forces to other portions of the Work or other activities unrelated to the Work (subject to reimbursement for additional costs reasonably incurred in connection with such reallocation or redeployment);
- (d) the delay for which compensation is sought is not concurrent with any delay for which the Contractor is responsible;
- (e) the delay for which compensation is sought is not offset by a delay caused by the Contractor at a different time (often referred to as consecutive delays);
- (f) the Contractor has suffered or will suffer actual costs due to such delay, each of which costs shall be documented and calculated as indicated above; and
- (g) the Contractor has timely filed the required NCOP (or Written Notice of Claim), the CS, and the COP.

If the Contractor has failed to meet a scheduled milestone unrelated to a delay caused by RTD,

and RTD has not assessed liquidated damages for that failure, then RTD is entitled to an offset (in terms of days) for any delay to the critical path that RTD has caused the Contractor.

A delay Claim alleged by the Contractor can be stayed for a period of three months if RTD can make a good faith allegation that the Contractor is or will cause a delay during that period.

A7.7.6 Any extension of a completion deadline allowed under this Contract shall exclude any delay damages to the extent that it:

- (a) did not impact the critical path;
- (b) was due to the fault, negligence, act or failure to act of the Contractor, its employees, agents, officers or subcontractors or any other persons for whom the Contractor may be contractually or legally responsible; or
- (c) could reasonably have been avoided by the Contractor by re-sequencing, reallocating or redeploying its forces to other portions of the Work.

A7.7.7 **The Contractor shall be required to demonstrate to RTD's satisfaction that the change in the Work or other event or situation that is the subject of the request for CO seeking a change in a completion deadline has caused or will result in an identifiable and measurable disruption of the Work. It will also have to demonstrate that the delay has impacted the critical path activity (i.e., consumed all available float and extended the Work required for milestone completion beyond the applicable completion deadline(s)). It will also have to demonstrate that the delay cannot be mitigated by re-sequencing, reallocating or redeploying its forces to other portions of the Work or other activities unrelated to the Work that was delayed.**

A.7.8 TIME IMPACT ANALYSIS FOR CHANGE ORDERS, DELAYS, AND CONTRACTOR REQUESTS:

A7.8.1 Changes, Delays, and Revisions

When changes are initiated, delays are experienced, or the Contractor desires to revise the Baseline Schedule, the Contractor shall submit to the Contracting Officer or the PM a written time impact analysis illustrating the influence of each change or delay on any milestone. Each time impact analysis shall include a fragmentary network (network analysis) demonstrating how the Contractor proposes to incorporate the change, delay or Contractor request into the Baseline Schedule. The time impact analysis shall demonstrate the time impact to each and every affected activity in the Baseline Schedule utilizing the most recent schedule update as the basis for the analysis. The date of the most recent schedule update shall be a date prior to the date the change is given to the Contractor, the date the delay occurred or the date the Contractor submits a request for a change. The event times used in the time impact analysis shall include the most recent schedule update or as adjusted by mutual agreement. The time impact analysis shall contain the detail of the change, including but not limited to added, changed or deleted data for activities and logic restraints. If the Baseline Schedule is revised subsequent to submittal of a time impact analysis but prior to its approval, the Contractor shall promptly indicate in writing to the Contracting Officer or the PM the need for any modification to its time impact analysis.

A7.8.2 Activity Delays

Activity delays shall not automatically mean that an extension of any milestone is warranted or adjustments are due to the Contractor. A change or delay may not affect existing critical activities or cause non-critical activities to become critical. A change or delay may result in only absorbing a part of the available total float that may exist within an activity chain of the network, thereby not causing any effect on any milestone. Such activity delays may cause the Contractor to experience an inefficiency in its progress but does not entitle it to a CO.

A7.8.3 Milestone Extensions

Milestone extensions will be permitted only to the extent that equitable time adjustments to the activity or activities affected by the change or delay exceeds the total (positive or zero) float of a critical activity (or path) and extends the affected milestone(s). In the case of multiple lines of negative float, the change or delay must cause the affected path to exceed all others before a milestone extension will be granted.

A7.8.4 Time Impact Submittals

A comprehensive narrative of each time impact analysis shall be submitted within seven Days after the commencement of a delay, the notice (CN) for a change is given to the Contractor, or the Contractor has submitted a NCOP (or a Written Notice of Claim).

A7.8.5 Non-Submission Remedy

In cases where the Contractor does not submit a time impact analysis to justify the delay Claim within seven Days of the occurrence of the event which caused the delay, it is mutually agreed that the particular change, delay or Contractor request does not require an extension of time to a milestone and the Contractor waives its rights to subsequently request a time extension or a CO.

A7.9 LIQUIDATED DAMAGES: Time is of the essence in completing the Work. In the event of delay in the completion of the Work as specified beyond the dates in the Contract, time is of the essence in any and all listed milestones, the Substantial Completion date, and the Final Acceptance date. It would be difficult to determine the exact amount of the loss or damages suffered by RTD due to delays in completion of the Contract. Therefore, for every Day of delay past the scheduled milestone and completion date of the Contract (including the due dates for any RTD-requested CS or COP), the Contractor will be liable to RTD, as liquidated damages and not as penalty, in the amount of *** AND NO/100 DOLLARS (\$*)**.

This Section will not apply to delays in completion of the Work due to acts of God, acts of war, acts of the government (in either its sovereign or contractual capacity), fires, floods, strikes, and unusually severe weather, provided that the Contractor shall, within three Days of the onset of any such delay, notify the Contracting Officer in writing of the causes of delay and the related facts.

The use of liquidated damages is limited to damages suffered by RTD due to its daily overhead costs and loss of use of the Project. Nothing in this clause shall be interpreted as limiting in any way RTD's right to proceed against the Contractor for other actual damages. **Nothing in this clause shall be interpreted as limiting in any way RTD's right to proceed against the Contractor for additional damages, other than delay damages.**

RTD reserves the right to deduct the liquidated damages from any amount due the Contractor under this Contract, or, at its option, to collect such liquidated damages directly from the **Contractor or its surety. If the Contractor disputes RTD's damages or the determination that it** failed to meet Contract milestones or complete the Work on time, the Contractor must file a NCOP or Written Notice of Claim within seven Days after the assessment of damages from a payment, and the parties will proceed as required under this Article. RTD will withhold the disputed amount from the final payment and put it aside until the matter is resolved.

The right to assert liquidated damages occurs once a milestone or completion date is missed and does not require RTD to file any sort of Written Notice of Claim or NCOP.

The Contracting Officer or the PM shall consider the facts, ascertain the extent of the delay, and extend in writing the time for completing the Work when, in his/her judgment, the facts justify such an extension.

The Contractor, by accepting this Contract, warrants that it has the necessary material, equipment, finances and personnel to achieve its scheduled completion; shortages of labor, material or equipment are no excuse to avoid damages (liquidated damages or actual damages). Delays due to shortages in labor, material and equipment will entitle RTD, at its sole discretion, to assess the actual damages sustained rather than assess liquidated damages.

A7.10 DUTY TO MITIGATE: Both parties are under a duty to mitigate damages. Should an incident occur or a circumstance arise that does or could result in a Claim for damages or a time extension, each party has an affirmative duty to take steps to limit the extent of damages as much as possible. Failure to mitigate damages will result in disallowing those damages that could have been avoided had the Claimant taken the appropriate steps. This applies to all Claims including delay Claims and Claims for differing site conditions.

ARTICLE A8: MISCELLANEOUS PROVISIONS

A8.1 TAXES:

A8.1.1 TAX EXEMPTION: RTD is a political subdivision of the State of Colorado and is exempt from federal excise tax under 26 U.S.C.A. § 4221-4222 (2002). RTD is exempt from Colorado state sales and state-collected sales taxes (Colorado State: 98-00688). RTD is not exempt from any local sales and use tax levied by a home rule city unless that municipality specifically exempts political subdivisions from payment of such sales and use taxes.

All local sales and use taxes which are due are to be paid by the Contractor and should be included in the Bid price or Proposal price. It is up to the Contractor to determine which sales and use taxes need to be paid. A separate reimbursement from RTD for taxes paid by the Contractor will not be allowed. Compensation for the taxes paid by the Contractor should be included when RTD pays for materials and/or services as part of the normal billing process.

A8.1.2 TAX ACCOUNTING: The Contractor shall maintain records of all sales and use taxes paid under this Contract and shall provide all related information to the Contracting Officer.

A8.2 PUBLICITY AND ADVERTISING: **The Contractor shall obtain RTD's prior written approval** before any information relating to the Work is released to anyone other than employees of the Contractor, material suppliers, and the subcontractors who require the information for the performance of their duties. No reference to RTD or the Work contemplated by the Contract Documents nor any advertising done by or for the Contractor with respect to the Work shall be made without prior written permission of RTD.

A8.3 FINDINGS CONFIDENTIAL: The Contractor shall not make available any reports, information, data, etc., available to or prepared or assembled by the Contractor under this Contract, without the prior written consent of RTD.

A8.4 OTHER CONTRACTS: RTD may undertake or award other contracts for additional work at or near the site of the Work under this Contract. The Contractor shall fully cooperate with the other contractors, utility companies and with RTD employees, and shall carefully adapt scheduling and performing the Work under this Contract to accommodate the additional Work, heeding any direction that may be provided by the Contracting Officer or the PM. The Contractor shall not commit or permit any act that will interfere with the performance of Work by any other contractor, utility company or by RTD employees.

A8.5 RELATIONSHIP OF RTD: Nothing contained in the Contract Documents or the bonds required under this Contract shall create any contractual, third-party beneficiary, or trustee relationship between RTD and any tier subcontractor, supplier, material man, laborer, or any other person whatsoever.

A8.6 NOTICES – TIME REQUIREMENTS: Notices and all other documents that need to be timely filed as required in this Contract shall be deemed filed or served when placed in the U.S. Mail, if sent by certified mail, or by special messenger, return receipt requested. Otherwise, notices are not filed or served until received by the party to whom they are sent. In computing

time under this Contract, the Day of the event from which the time period begins to run shall not be included. The last Day of the time period shall be included, unless it is a Saturday, Sunday, or legal holiday in Colorado, in which event the period runs until the end of the next Day which is not a Saturday, Sunday, or legal holiday in Colorado. When the time period is less than seven Days, Saturdays, Sundays, and legal holidays in Colorado shall be excluded in the computation.

A8.7 VALUE ENGINEERING: The following is applicable to contracts of \$1 million and more unless otherwise indicated.

A8.7.1 GENERAL: The Contractor is encouraged to develop, prepare, and submit value engineering change proposals (VECPs) voluntarily. The Contractor shall share in any Instant Contract Savings realized from accepted VECPs, in accordance with Section 8.7.6 below.

A8.7.2 DEFINITIONS OF TERMS USED IN THIS ARTICLE:

- (a) Collateral Costs means RTD costs of operation, maintenance, logistic support, or RTD-furnished property.
- (b) Collateral Savings means those measurable net reductions resulting from **a VECP in RTD's overall projected Collateral Costs, exclusive of acquisition savings**, whether or not the acquisition cost changes.
- (c) **Contractor's Development and Implementation Costs** means those costs the Contractor incurs on a VECP specifically in developing, testing, preparing, and submitting the VECP, as well as those costs the Contractor incurs to make the contractual changes required by RTD acceptance of a VECP.
- (d) RTD Costs means those costs that result directly from developing and implementing the VECP, such as any net increases in the cost of design review, testing, operations, maintenance, and logistic support. The term does not include the normal administrative costs of processing the VECP.
- (e) Instant Contract Savings means the estimated reduction in Contractor cost of performance resulting from acceptance of the VECP, minus allowable **Contractor's Development and Implementation Costs, including subcontractor's development and implementation costs (see Section A8.7.8 below)**.
- (f) **"Value engineering change proposal (VECP)" means a proposal that:**
 - (1) Requires a change to the Contract to implement; and
 - (2) Results in reducing the Contract Cost or estimated cost without impairing essential functions or characteristics, provided that it does not involve a change in deliverable end item quantities only.

A8.7.3 VECP PREPARATION: At a minimum, the Contractor shall include in each VECP the information described in subsections (a) through (f) below. If the proposed change is affected by contractually required configuration management or similar procedures, the instructions in those procedures relating to format, identification, and priority assignment shall govern VECP preparation. The VECP shall include the following:

- (a) A description of the difference between the existing Contract requirement and the requirement proposed, the comparative advantages and **disadvantages of each, a justification when an item's function or characteristics are being altered, and the effect of the change on the end item's performance.**
- (b) A list and analysis of the Contract requirements that must be changed if the VECP is accepted, including any suggested Technical Specifications revisions.
- (c) A separate detailed cost estimate for (i) the affected portions of the existing Contract requirement and (ii) the VECP. The cost reduction associated with the VECP shall take into **account the allowable Contractor's Development and Implementation Costs**, including any amount attributable to subcontracts under Section A8.7.8 below.
- (d) A description and estimate of the costs RTD may incur in implementing the VECP, such as test and evaluation and operating and support costs.
- (e) A prediction of any effects the proposed change would have on Collateral Costs to RTD.
- (f) A statement of the time by which a Contract modification accepting the VECP must be issued in order to achieve the maximum cost reduction, noting any effect on the Contract Schedule.

A8.7.4 SUBMISSION: The Contractor shall submit VECs in writing to the Engineer or PM at the Work site, with a copy to the Contracting Officer.

A8.7.5 RTD ACTION:

- (a) The Contracting Officer or the PM shall notify the Contractor of the status of the VECP within 45 Days after receipt. If additional time is required, the Contracting Officer shall notify the Contractor within the 45-Day period and provide the reason for the delay and the expected date of the decision. RTD will process VECs expeditiously; however, it shall not be liable for any delay in acting on a VECP.
- (b) If the VECP is not accepted, the Contracting Officer or PM shall notify the Contractor in writing explaining the reasons for rejection. The Contractor may withdraw any VECP, in whole or in part, at any time before it is

accepted by RTD. The Contracting Officer may require that the Contractor provide written notification before undertaking significant expenditures for VECP effort.

- (c) Any VECP may be accepted, in whole or in part, by the Contracting Officer's or PM's modification to this Contract citing this clause. The Contracting Officer may accept the VECP, even though an agreement on price reduction has not been reached, by issuing the Contractor a Change Order with the change. Until a Contract modification applies a VECP to this Contract, the Contractor shall perform in accordance with the existing Contract. The **Contracting Officer's or PM's decision to accept or reject all or part of** any VECP shall be final and not subject to an equitable adjustment or a Claim under Article A7.

A8.7.6 SHARING:

- (a) **Rates. RTD's share of savings is determined by subtracting RTD Costs from** Instant Contract Savings and multiplying the result by 45 percent for fixed price contracts.
- (b) Payment. Payment of any share due the Contractor for use of a VECP on this Contract shall be authorized by a modification to this Contract to:
 - (1) Accept the VECP;
 - (2) Reduce the Contract Cost or estimated cost by the amount of Instant Contract Savings; and
 - (3) **Provide the Contractor's share of savings by adding the amount** calculated to the Contract Cost.

A8.7.7 COLLATERAL SAVINGS: If a VECP is accepted, the Contract Cost shall be increased by 20 percent of any projected Collateral Savings determined to be realized in a typical year of use after **subtracting any RTD Costs not previously offset. However, the Contractor's share of Collateral Savings shall not exceed (1) the Contract's firm-fixed-price at the time the VECP is accepted, or (2) \$100,000, whichever is greater.** The Contracting Officer or the PM shall be the sole determiner of the amount of Collateral Savings, and that amount shall not be subject to the Disputes Section or otherwise subject to litigation under 41 U.S.C. 601-613.

A8.7.8 SUBCONTRACTS: The Contractor shall include an appropriate value engineering clause in any subcontract of \$50,000 or more and may include one in subcontracts of lesser value. In computing any adjustment in the Contract Cost under Section A8.7.6, **the allowable Contractor's Development and Implementation Costs shall include any subcontractor's allowable development and implementation costs clearly resulting from a VECP accepted by RTD under this Contract, but shall exclude any value engineering incentive payments to a subcontractor.** The Contractor may choose any arrangement for subcontractor value engineering incentive payments, provided that **these payments shall not reduce RTD's share of the savings resulting from the VECP.**

A8.7.9 DATA: The Contractor may restrict RTD's right to use any part of a VECP or the supporting data by marking the following legend on the affected parts:

"The data, furnished under the Value Engineering clause of the Contract, shall not be disclosed outside RTD or duplicated, used, or disclosed in whole or in part, for any purpose other than to evaluate a value engineering change proposal submitted under the clause. This restriction does not limit RTD's right to use information contained in these data if it has been obtained or is otherwise available from the Contractor or from another source without limitations."

If a VECP is accepted, the Contractor grants RTD unlimited rights in the VECP and supporting data, except that, with respect to data qualifying and submitted as limited rights technical data, RTD shall have the rights specified in the Contract modification implementing the VECP and shall appropriately mark the data.

A8.8 AUDIT AND RECORDS: The Contractor shall maintain all data and records pertinent to the Work performed under this Contract, in accordance with generally accepted accounting principles, and shall preserve and make available all data and records until the expiration of eight years from the date of final payment under this Contract, or for such longer period, if any, as is required by applicable statute or by other articles of this Contract. The authorized representatives of the State of Colorado and the District shall have access to all such data and records for such time period to inspect, audit and make copies of the data and records during normal business hours. Contractor covenants and agrees that it shall require that any subcontractor utilized in the performance of this Contract shall permit the authorized representatives of the State of Colorado and the District to similarly inspect and audit all data and records of the subcontractors relating to the performance of the subcontractors under this Contract for the same time period. The federal government shall also have access rights under Federal Transit Administration (FTA)-funded contracts.

A8.9 AUDIT:

- (a) Cost or Pricing Data: If the Contractor has submitted cost or pricing data in connection with the pricing of any modification to this Contract, unless the pricing was based on adequate price competition, established catalog or market prices by law or regulation, the Contracting Officer or a representative who is an employee of RTD shall have the right to examine and audit all books, records, documents, and other data of the Contractor (including computations and projections) related to negotiating, pricing or performing the modification, in order to evaluate the accuracy, completeness, and currency of the cost and pricing data. In the case of pricing any modification, the authorized representative of the State of Colorado and federal government (under FTA-funded contracts) shall have the same rights.
- (b) Availability: The Contractor shall make available at its office at all reasonable times the materials described in Section A8.8 for examination, audit, reproduction, until eight years after final payment under this

Contract, or for any other period, if any, as is required by applicable statute or by other articles in this Contract.

- (1) If this Contract is completely or partially terminated, the records relating to the Work terminated shall be made available for three years after any resulting final termination settlement.
 - (2) Records pertaining to appeals under Section 7.4 or to litigation or settlement of claims arising under or relating to the performance of this Contract shall be made available until disposition of such appeals, litigation, or claims.
- (c) The Contractor shall insert a clause containing all the provisions of this clause, including this subsection (c), in all subcontracts of more than \$100,000 under this Contract, altering the clause only as necessary to identify properly the contracting parties.

A8.10 PROJECT SIGN: The Contractor shall furnish, install, and maintain at each major entrance a Project sign for maximum public identification of the Work. No more than two Project signs will be erected at any site.

Each sign is to be made of exterior-grade plywood, **4' X 8' or 2' X 4' (at the discretion of the Engineer), 3/4" cut to shape as shown on the drawing. The sign shall contain all information shown on the drawing in the colors specified. The sign is to be supported by two nominal 4" X 4" wood posts, to be installed as shown on the drawing.**

The RTD Engineer or PM will determine the location of the sign on the site and, upon completion of the Work, the Contractor will remove the sign from the site.

A8.11 AUTHORITY: The authority of an employee or independent contractor to act on the behalf of the Contractor in the capacity of a Superintendent, Project Manager, Quality Control Officer or Safety Officer for the Contractor must be confirmed in writing and signed by an owner/officer of the Contractor. Employees or independent contractors cannot act in those capacities without the written authority from the Contractor.

A8.12 SEVERABILITY OF CONTRACT CLAUSES: If, for any reason, any Article or any portion, Section or clause of any Article in this Contract is deemed to be void, unlawful or invalid, that Article portion, Section or clause is considered severable and severed from the Contract and does not make the Contract, or any other Article, portion, Section or clause of the Contract, void, unlawful or invalid. The parties will proceed under the Contract without any reference or utilization of the void, unlawful, or invalid Article, portion, Section or clause of the Contract.

A8.13 IDENTIFICATION OF EMPLOYEES: The Contractor shall be responsible for requiring each employee engaged on the Work to display identification furnished by RTD. The Contractor will request RTD in writing to furnish the total number of identification badges required for its employees and will return all identification to RTD upon completion of the Work. Lost identification badges will be cause for an assessment of \$25.00 each. This amount may be

deducted from RTD payments. Final payment will not be made until identification badges are returned to RTD upon completion of the Work.

A8.14 ELECTRONIC SIGNATURES: This Contract may be executed by electronic signature, which shall be considered as an original signature for all purposes and shall have the same force and effect as an **original signature. Without limitation, "electronic signature" shall include faxed** versions of an original signature, electronically scanned and transmitted versions of an original signature, and digital signatures.

EXHIBIT 1

CONTRACTOR'S KEY PERSONNEL

The personnel listed below are considered to be essential to the Work required under this Contract. Prior to removing any key personnel from Contract Work, the Contractor shall notify RTD within 14 days of such proposed removal and shall submit justification (including proposed substitutions) in sufficient detail to permit evaluation of the impact on the Contract. No removal of key personnel shall be made by the Contractor without the written consent of RTD by Contract Amendment.

Name

Title

Company

EXHIBIT 2
REGIONAL TRANSPORTATION DISTRICT
INSURANCE & BOND REQUIREMENTS
CONSTRUCTION & FACILITY IMPROVEMENT CONTRACTS

General

All defined terms contained in this Exhibit 2 shall have the same meaning ascribed to them in the Contract.

The Contractor shall procure and maintain, and shall require that its subcontractors purchase and continuously maintain, in full force and effect for the Contract period specified herein, all insurance policies specified in this Exhibit 2. The Contractor shall forward updated certificates of insurance and endorsement(s) when policies are renewed or changed.

The insurance required hereunder shall not be interpreted to relieve the Contractor of any obligations under the Contract, and liability of the Contractor under this Exhibit 2 shall not be limited to coverage provided under said insurance policies. The Contractor and its subcontractors shall remain solely and fully liable for all deductibles, self-insured retentions, and amounts in excess of the coverage actually realized.

Commercial General Liability Insurance

At all times during performance of the Contract, the Contractor and its subcontractors shall have and maintain Commercial General Liability Insurance insuring against claims for bodily injury, property damage, personal injury and advertising injury. By its terms or appropriate endorsements such insurance shall include the following coverage: Bodily Injury, Property Damage, Fire Legal Liability, Personal Injury, Blanket Contractual Liability, Independent Contractors, Premises Operations, and Products and Completed Operations Hazard for a minimum of eight (8) years following final completion of the Project or the applicable statute of limitations or statute of repose, whichever is greater. The policy cannot be endorsed to exclude cause of loss related to earth movement, explosion, collapse and underground exposures without the specific written approval of RTD, nor may the policy exclude or limit the **Contractor's** or its **subcontractors'** liability for acts or omissions of any independent contractor or subcontractor, nor may the policy exclude work of any independent contractor or subcontractor; nor contain any conditions regarding when coverage is available for acts, omissions or work of a Contractor or subcontractor nor may the policy limit coverage to a designated premises, nor may the policy exclude or limit coverage for liability arising from the Products and Completed Operations Hazard.

The Commercial General Liability policy shall include the Limited Pollution Liability Extension, ISO form CG2415 10 01.

If any construction work performed under this Contract **is within fifty (50) feet of RTD's light rail or commuter rail alignment**, then the Contractor and its subcontractors shall have and maintain ISO form CG 2417 1001 – Contractual Liability – Railroads.

If Commercial General Liability Insurance or other form with general aggregate limit and products and completed operations aggregate limit is used, then the aggregate limits shall apply separately to the Project, or the Contractor and/or its subcontractors may obtain separate insurance to provide the required limit which shall not be subject to depletion because of claims arising out of any other project or activity of the Contractor and/or its subcontractors. General aggregate limit applies per construction project.

The policy or policies shall have minimum limits of liability as follows:

Amount of Coverage:	\$1,000,000 per occurrence
	\$2,000,000 aggregate

There shall be a separate minimum limit of liability for the Products and Completed Operations Hazard not included within the general aggregate.

Amount of Coverage	\$1,000,000 per occurrence
	\$2,000,000 aggregate

Commercial Automobile Liability Insurance

At all times during the performance of the Contract, the Contractor and its subcontractors shall have and maintain Automobile Liability Insurance insuring against claims for bodily injury and property damage arising out of the ownership, maintenance or use of all owned/leased as well as hired and non-owned vehicles. The Automobile Liability policies shall have minimum limits of liability as follows:

Amount of Coverage:	\$1,000,000 combined single limit
---------------------	-----------------------------------

Workers' Compensation and Employer's Liability Insurance

At all times during the performance of the Contract, the Contractor and its subcontractors shall have and maintain **Workers' Compensation** Insurance sufficient to meet its statutory obligations to provide benefits for their contractual and statutory employees with claims of bodily injury or occupational disease (including resulting death).

The Contractor and its subcontractors shall each provide **Employer's Liability** Insurance covering their legal obligation to pay damages because of bodily injury or occupational disease (including resulting death) sustained by their contractual and statutory employees with minimum limits of liability as follows:

Amount of Coverage:	\$1,000,000 bodily injury by accident
	\$1,000,000 bodily injury by disease
	\$1,000,000 policy limit

Umbrella/Excess Liability

At all times during the performance of the Contract, the Contractor and its subcontractors shall have and maintain Umbrella and Excess Liability insurance on a following form basis with minimum limits of liability as follows for a minimum of eight (8) years following final completion of the Project or the applicable statute of limitations or statute of repose, whichever is greater:

Amount of Coverage:	\$5,000,000 per occurrence
	\$5,000,000 aggregate

This excess insurance shall follow form and be at least as broad as the Contractor's and/or its subcontractors' primary Commercial General Liability (including additional insureds), Commercial Auto Liability and **Employer's Liability** insurance. The above insurance levels may be met through any combination of primary insurance and excess liability/umbrella insurance so long as the total amount meets the stated minimum requirements.

Endorsements, Waivers and Related Requirements

Prior to entry upon, above or adjacent to RTD property, the Contractor shall furnish RTD with proof of insurance and a certificate of insurance for each of the **Contractor's** and each of its **subcontractors'** policies. All insurance policies required hereunder shall contain or be endorsed to contain the following provisions:

1. The Contractor and its subcontractors shall request their insurance policies contain language requiring the insurer to **provide RTD with 30 days' advance notice of cancellation of policies** by Registered or Certified mail. Regardless, the Contractor and its subcontractors shall be responsible to immediately notify RTD in writing by email of any changes to, cancellations of **or notices of an insurer's intent to not renew** its insurance. Such notice shall be provided no later than 24 hours after the Contractor or any of its subcontractors receives notice of any **changes, cancellations or notice of an insurer's intent to not renew. Failure to provide the** notice shall be breach of the Contract and the Contract may be terminated. Any notice of changes, cancellation or intent to not renew shall be provided to the designated RTD Department or Division as provided herein. Such notice requirement does not waive the insurance requirements contained herein.
2. For the insurance specified herein, RTD and its members, directors, officers, employees and agents shall be named as an additional insured (except **Workers' Compensation**). Coverage shall be provided by Forms CG 2038 (ongoing operations) and CG 2040 (completed operations) or by an alternative endorsement approved by RTD.
3. For the insurance specified herein, the **Contractor's** and its subcontractors' insurance shall be primary and non-contributory insurance with respect to the **Contractor's** and its subcontractors' insurance for RTD and its members, directors, officers, employees and agents. Contractor and subcontractor policy/policies shall contain ISO Form 2001 04 13, or such other form or endorsement approved by RTD.

4. The insurance specified herein shall contain an express waiver of subrogation in favor of RTD as by ISO form CG 2453 or CG 2404. The Contractor and its subcontractors and their agents **and employees waive all rights of subrogation against RTD for any liability and workers' compensation claims they incur in relation to the Contract and agree to have all such policies appropriately endorsed with a Waiver of Subrogation endorsement.**
5. The insurance shall apply separately to each insured and additional insured party against whom a claim is made **or suit is brought, except with respect to the limits of the insurer's liability.**
6. The amount of insurance must be at least equal to the limits of liability required herein.

Acceptable Insurance Company

The insurance company providing any of the insurance coverage required herein shall have at a minimum an AM Best Key Rating of A, with a Financial Strength of VII or higher, (i.e., A VII, A VIII, A IX, A X, etc.) or equivalent from similar rating agency and shall be subject to prior approval by RTD. **Each insurance company's rating as shown in the latest** AM Best Key Rating Guide shall be fully disclosed and entered on the required certificate of insurance.

Premiums, Deductibles and Self-Insured Retentions

The Contractor and its subcontractors shall be responsible for payment of premiums for all of the insurance coverages required hereunder. The Contractor and its subcontractors further agree that for each claim, suit or action made against insurance provided hereunder, with respect to all matters for which the Contractor and its subcontractors are responsible hereunder, the Contractor and its subcontractors shall be solely responsible for all deductibles and self-insured retentions. Any deductibles or self-insured retentions over \$25,000 in the **Contractor's** and its subcontractors' insurance must be declared and approved in writing by RTD prior to entry upon, above or adjacent to RTD property and prior to commencement of any work under the Contract.

Certificate of Insurance

The Contractor will deliver to the designated RTD Department or Division a certificate of insurance with respect to each required policy to be provided by the Contractor and its subcontractors. The required certificates must be signed by the authorized broker or agent representative of the insurance company shown on the certificate and authorized to bind the named underwriter(s) and their company to the coverage, limits and termination provisions shown thereon. All endorsements, waivers, and related requirements described above shall be attached to the certificates of insurance when submitted to RTD. A certified, true and exact copy of each insurance policy (including renewal policies) required under this Contract shall be provided to RTD if so requested within three (3) days.

Maintenance of Coverage and Renewal Policies

No less than 21 calendar days prior to the expiration date of any policy to be provided by the Contractor and its subcontractors, the Contractor shall promptly deliver to RTD proof of insurance required by the terms specified herein for at least the next twelve months after the expiration date of any policy. Such insurance may be either a renewal policy or a new policy or policies.

No Recourse

There shall be no recourse by any party, insurer, the Contractor or its subcontractors against RTD for the payment of premiums, deductibles, self-insured retentions or other amounts with respect to the insurance required from the Contractor or its subcontractors.

Failure to Provide or Maintain Insurance Coverages

The Contractor's failure to have or maintain, or failure to require its subcontractors to have or maintain, any of the insurance coverage required herein shall constitute a breach of the Contract. In addition to the remedies that RTD may have under the insurance specified herein, RTD may take whatever action is necessary to maintain the current policies in effect (including the payment of any premiums that may be due and owing by the Contractor or its subcontractors) or RTD may procure substitute insurance. The Contractor is responsible for any costs incurred by RTD in maintaining the insurance coverage required by the terms specified herein or providing substitute insurance. Such costs may be charged to the Contractor or may be deducted from any sums due and owing to the Contractor.

BOND REQUIREMENTS

CONTRACT SECURITY (PERFORMANCE BOND):

The Contractor shall post with RTD, not later than ten calendar days after Notice of Award, a performance bond, naming RTD as sole beneficiary, of Fifty Percent (50%) of the Contract Cost in such form and with such sureties or guarantors as are satisfactory to RTD (e.g., American Institute of Architects (AIA) Forms A-311 (1970) or A-312 (1984)). This bond shall be executed to secure fulfillment of all the **Contractor's** obligations under the Contract. The Contractor shall notify its sureties of any Contract changes.

PAYMENT BOND:

The Contractor shall post with RTD, not later than ten calendar days after Notice of Award, a payment bond, naming RTD as sole beneficiary, of Fifty Percent (50%) of the Contract Cost in such form and with such sureties or guarantors as are satisfactory to RTD (e.g., American Institute of Architects (AIA) Forms A-311 (1970) or A-312 (1984)). This bond shall be executed to assure payment as required by law of all persons supplying labor and material in the execution of the Work under the Contract. The Contractor shall notify its sureties of any Contract changes.

BID GUARANTEE:

The Contractor shall post with RTD, not later than ten calendar days after Notice of Award, a bid bond, naming RTD as sole beneficiary, of Five Percent (5%) of the Contract Cost in such form and with such sureties or guarantors as are satisfactory to RTD (e.g., American Institute of Architects (AIA) Forms A-311 (1970) or A-312 (1984)). This bond shall be executed to assure the Contractor will not withdraw the bid within the period specified for acceptance, and will execute a written Contract, and will furnish required bonds. The Contractor shall notify its sureties of any Contract changes.

EXHIBIT 3—SPECIAL PROVISIONS/ALTERATIONS

SPECIAL TERMS

The following provisions have been specifically negotiated for this Contract and shall supersede to the extent that they conflict with corresponding provisions contained in Section III, Terms and Conditions, or any other conflicting requirements in the Contract Documents.

NONE

DELETED ARTICLES

The following provisions are deleted in their entirety from Section III, Terms and Conditions:

NONE

SECTION IV ATTACHMENTS

ATTACHMENTS TO CONTRACT NO. 122DR005

TREX Coping Panel Repair

The following attachments contain material representations upon which the Contractor was selected for award of the Contract. These attachments form a part of the Contract Documents and are stored in the Contract file. Each of these attachments is incorporated in the Contract by this reference.

1. Request For Proposals Instructions
2. RFP Addenda
3. Contractor Submissions in Response to Request For Proposals
 - a. Technical Proposal
 - b. Attachment A – Cost Submittal Form, in Excel format.
 - c. Any Supplemental Information Utilized in Evaluating Award
4. Contractor Agreements, if any, Executed in Connection With the Contract
5. **Contractor's Release**
6. **Contractor's Assignment of Refunds, Rebates, Credits, and Other Amounts**