

ADVERTISEMENT FOR BIDS

OWNER: Chattanooga Area Regional Transportation Authority (CARTA)

ADDRESS: 1617 Wilcox Boulevard

Chattanooga, Tennessee 37406

Separate sealed BIDS for the 2027 Rehabilitation Project on the Incline Railway up Lookout Mountain including rail replacement will be received by Annie Powell, Director of Grants & Procurement at the office of CARTA until 2:00 P.M., (Eastern Standard Time) August 12, 2026 and then at said office will be publicly opened and read aloud. The CONTRACT DOCUMENTS, consisting of Advertisement for Bids, Information for Bidders, Bid, Bid Bond, Agreement, General Conditions, Payment Bond, Performance Bond, Notice of Award, Notice to Proceed, Change Order, Drawings, Specifications and Addenda may be examined at the following locations:

CARTA, 1617 Wilcox Boulevard, Chattanooga, Tennessee 37406
CSR Engineering, Inc. 2010 Highway 49E, Pleasant View, TN 37146

Copies of the CONTRACT DOCUMENTS may be obtained at the office of CARTA located at 1617 Wilcox Boulevard upon payment of \$50.00 for each set.

Contracts resulting from the selection of a construction firm will be subject to a financial assistance grant between the Chattanooga Area Regional Transportation Authority and the United States Department of Transportation. Any name appearing on the Comptroller General's list of ineligible contractors for federally financed and assisted construction is not an eligible proposer and will not be considered.

CARTA reserves the right to accept or reject any or all proposals on such basis as CARTA deems to be in its best interest.

CARTA encourages Disadvantaged Business Enterprises to participate in this bid either as prime or subcontractors.

INFORMATION FOR BIDDERS

BIDS will be received by Chattanooga Area Regional Transportation Authority (CARTA) (herein after called the "OWNER"), at 1617 Wilcox Boulevard, Chattanooga, Tennessee 37406 until 2:00 P.M. (Eastern Standard Time) August 12, 2026, and then at said office will be publicly opened and read aloud.

Each BID must be submitted in a sealed envelope, addressed to the OWNER at Chattanooga, Tennessee. Each sealed envelope containing a BID must be plainly marked on the outside as BID for 2027 Rehabilitation Project on the Incline Railway up Lookout Mountain and the envelope should bear on the outside the name of the BIDDER, his address and his contractor's license number, if applicable. If forwarded by mail, the sealed envelope containing the BID must be enclosed in another envelope addressed to the OWNER at Chattanooga, Tennessee. All BIDS must be made on the required BID form. All blank spaces for BID prices must be filled in, in ink or typewritten, and the BID form must be fully completed and executed when submitted. Only one copy of the BID form is required.

Should there be reasons why the contract cannot be awarded within the specified period; the time may be extended by mutual agreement between the OWNER and the BIDDER.

The BIDDER shall have been engaged, for at least five (5) years, and properly experienced in the business of performing the type work required on the PROJECT and hold a Tennessee contractor's license Type HRA.

The BIDDER shall furnish to the OWNER all such information and data as the OWNER may request, to assist the OWNER in determining the ability of the BIDDER to perform the WORK.

BIDDERS must satisfy themselves of the accuracy of the estimated quantities in the Bid Schedule by examination of the site and a review of the drawings and specifications including any issued ADDENDA. After BIDS have been submitted, the BIDDER shall not assert that there was a misunderstanding concerning the quantities of WORK or of the nature of the WORK to be done.

The CONTRACT DOCUMENTS contain the provisions required for the construction of the PROJECT. Information obtained from an officer, agent, or employee of the OWNER or any other person shall not affect the risks or obligations assumed by the CONTRACTOR or relieve him from fulfilling any of the conditions of the contract.

The party to whom the contract is awarded will be required to execute the Agreement and obtain the performance bond and labor and material payment bond within ten (10) calendar days from the date when NOTICE OF AWARD is delivered to the bidder. The NOTICE OF AWARD shall be accompanied by the necessary Agreement and project bond forms. In case of failure of the BIDDER to execute the Agreement, the OWNER may at his option consider the BIDDER in default, in which case the BID bond accompanying the proposal shall become the property of the OWNER.

The OWNER within ten (10) days of receipt of acceptable performance bond, labor and material payment bond, and Agreement signed by the party to whom the Agreement was awarded shall sign the Agreement and return to such party an executed duplicate of the Agreement. Should the OWNER not execute the Agreement within such period, the BIDDER may by written notice withdraw his signed Agreement. Such notice of withdrawal shall be effective upon receipt of the notice by the OWNER.

The NOTICE TO PROCEED shall be issued within ten (10) days of the execution of the Agreement by the OWNER. Should there be any reasons why the NOTICE TO PROCEED cannot be issued within such period; the time may be extended by mutual agreement between the OWNER and CONTRACTOR. If the NOTICE TO PROCEED has not been issued within the ten (10) day period mutually agreed upon, the CONTRACTOR may terminate the Agreement without further liability on the part of either party.

The OWNER reserves the right to reject any BID if the evidence submitted by, or investigation of, such BIDDER fails to satisfy the OWNER that such BIDDER is properly qualified to carry out the obligations of the Agreement and to complete the WORK contemplated herein.

A conditional or qualified BID will not be accepted.

Award will be made as a whole to one BIDDER.

BASIS OF AWARD

The AWARD of the CONTRACT will go to the lowest responsible BIDDER.

All applicable laws, ordinances, and the rules and regulations of all authorities having jurisdiction over construction of the project shall apply to the contract throughout.

Each BIDDER is responsible for inspecting the site and for reading and being thoroughly familiar with the CONTRACT DOCUMENTS. The failure or omission of any BIDDER to do any of the foregoing shall in no way relieve any BIDDER from any obligation in respect to his BID.

The ENGINEER is: CSR Engineering, Inc.
 2010 Highway 49E
 Pleasant View, TN 37146

BID

Proposal of _____ (hereinafter called "BIDDER"),
organized and existing under the laws of the State of _____, doing
business as _____.*. To
the Chattanooga Area Regional Transportation Authority (CARTA) (hereinafter called
"OWNER").

In compliance with your Advertisement for Bids, BIDDER hereby proposes to perform all
WORK for the construction of 2027 Rehabilitation Project on the Incline Railway up
Lookout Mountain in strict accordance with the CONTRACT DOCUMENTS, within the
time set forth there in, and at the prices stated below.

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

BIDDER hereby agrees to commence work under this contract on or before a date to be
specified in the NOTICE TO PROCEED and to fully complete the PROJECT by March 12,
2027. BIDDER also agrees to complete all work

**Insert a corporation, a partnership, or an individual as applicable.*

which requires shut-down of the normal operation of the incline in the shortest time possible and in no event later than the shut-down end date of February 28, 2027. BIDDER further agrees to pay as liquidated damages, the sum of \$200 for each calendar day in which he is in default of the contract completion date and agrees to pay \$1500 for each calendar day in which incomplete work requires extension of the shut-down, as provided in Section 15 of the General Conditions.

BIDDER acknowledges receipt of the following ADDENDUM (A):

BIDDER agrees to perform all the work described in the CONTRACT DOCUMENTS for the following unit prices:

BID FORM					
Item No.	Description	Qty	Unit	Unit Price	Total Price
1	Mobilization	1	LS		\$
(Unit Price in Words) and /100 dollars					
2	Removal of Material	1	LS		\$
(Unit Price in Words) and /100 dollars					
3	F&I Trestle Ties – 6"x8"x 14'-0"	20	EA		\$
(Unit Price in Words) and /100 dollars					
4	F&I Trestle Ties – 7"x9"x 14'-0"	20	EA		\$
(Unit Price in Words) and /100 dollars					
5	F&I ASCE 60# Rail	2,340	LF		\$
(Unit Price in Words) and /100 dollars					
6	F&I Brake Timber – 5½"x3½"	1020	LF		\$
(Unit Price in Words) and /100 dollars					
7	F&I Stringer Shim - 6"x5'-0"	1	EA		\$
(Unit Price in Words) and /100 dollars					
8	F&I Tie Shim – 1/8"	120	EA		\$
(Unit Price in Words) and /100 dollars					
9	F&I Tie Shim – 1/4"	100	EA		\$
(Unit Price in Words) and /100 dollars					

BID FORM					
Item No.	Description	Qty	Unit	Unit Price	Total Price
10	F&I Tie Shim – 1/2”	70	EA		\$
(Unit Price in Words) and /100 dollars					
11	F&I Tie Shim – 3/4”	40	EA		\$
(Unit Price in Words) and /100 dollars					
12	Passing Switch Track Reconstruction	1	LS		\$
(Unit Price in Words) and /100 dollars					
Total Bid Price		Σ			

BID BOND

KNOW ALL MEN BY THESE PRESENTS, that we, the undersigned,

_____ as PRINCIPAL, and _____

as Surety, are hereby held and firmly bound unto Chattanooga Area Regional Transportation Authority (CARTA) as **OWNER** in the penal sum of _____

for the payment of which, well and truly to be made, we hereby jointly and severally bind ourselves, successor and assigns.

Signed, this _____ day of _____, 20____.

The Condition of the above obligation is such that whereas the PRINCIPAL has submitted to CARTA a certain Bid, attached hereto and hereby made a part hereof to enter into a contract in writing, for the 2027 Rehabilitation Project on the Incline Railway up Lookout Mountain.

NOW, THEREFORE,

- a. If said BID shall be rejected, or in the alternate,
- b. If said BID shall be accepted and the PRINCIPAL shall execute and deliver a contract in the Form of Contract attached hereto (properly completed in accordance with said BID) and shall furnish a bond for his faithful performance of said contract, and for the payment of all persons performing labor or furnishing materials in

connection therewith, and shall in all other respects perform the agreement created by the acceptance of said **BID**, then this obligation shall be void, otherwise the same shall remain in force and effect; it being expressly understood and agreed that the liability of the Surety for any and all claims hereunder shall, in no event, exceed the penal amount of this obligation as herein stated.

The Surety, for value received, hereby stipulates and agrees that the obligations of said Surety and its bond shall be in no way impaired or affected by any extension of the time within which the OWNER may accept such Bid; and said Surety does hereby waive notice of any such extension.

IN WITNESS WHEREOF, the PRINCIPAL and the Surety have hereunto set their hands and seals, and such of them as are corporations have caused their corporate seals to be hereto affixed and these presents to be signed by their proper offices, the day and year first set forth above.

Principal

Surety

By: _____

IMPORTANT – Surety companies executing bonds must appear on the Treasury Department’s most current list (Circular 570 as amended) and be authorized to transact business in the State of Tennessee where the project is located.

AGREEMENT

THIS AGREEMENT, made this _____ day of _____, 20_____, by _____ and _____
between Chattanooga Area Regional Transportation Authority (CARTA), hereinafter
called "OWNER" and _____ doing business as (an
individual,) or (a partnership,) or (a corporation) hereinafter called "CONTRACTOR".

WITNESSETH: that for and in consideration of the payments and agreements hereinafter
mentioned:

1. The CONTRACTOR will commence and complete the construction of 2027
Rehabilitation Project on the Incline Railway up Lookout Mountain.
2. The CONTRACTOR will furnish all of the material, supplies, tools, equipment, labor
and other services necessary for the construction and completion of the project
described herein.
3. The CONTRACTOR will commence the work required by the CONTRACT DOCUMENTS
on or before a date to be specified in the NOTICE TO PROCEED and shall complete
the work by March 12, 2027. The CONTRACTOR will perform all work which requires
the shutdown of the normal operations of the Incline Railway during the shut-down
period of January 2, 2027 to February 28, 2027. The CONTRACTOR shall pay, to
owner as liquidated damages, the sum of \$200 for each calendar day in which he is
in default of the contract completion date and agrees to pay \$1500 for each

calendar day in which incomplete work requires extension of the shut-down, as provided in Section 15 of the General Conditions.

4. The CONTRACTOR agrees to perform all the WORK described in the CONTRACT DOCUMENTS for the sum of \$_____
5. The term "CONTRACT DOCUMENTS" means and includes the following:
 - A. Advertisement For Bids
 - B. Information For Bidders
 - C. BID
 - D. BID Bond
 - E. Agreement
 - F. General Conditions
 - G. SUPPLEMENTAL GENERAL CONDITIONS
 - H. Payment Bond
 - I. Performance Bond
 - J. NOTICE OF AWARD
 - K. NOTICE TO PROCEED
 - L. CHANGE ORDER
 - M. Tennessee State Contract Clauses
 - N. Drawings prepared by CSR Engineering, Inc. numbered 1 through 9 and dated June 2026.

O. SPECIFICATIONS prepared or issued by CSR Engineering, Inc. dated June 2026.

P. ADDENDA:

No. _____, dated _____, 20__

No. _____, dated _____, 20__

No. _____, dated _____, 20__

No. _____, dated _____, 20__

6. The OWNER will pay to the CONTRACTOR in the manner and at such times as set forth in the General Conditions such amounts as required by the CONTRACT DOCUMENTS.
7. This Agreement shall be binding upon all parties hereto and their respective heirs, executors, administrators, successors, and assigns.

IN WITNESS WHEREOF, the parties hereto have executed, or caused to be executed by their duly authorized officials, this Agreement in three (3) (number of copies) each of which shall be deemed an original on the date first above written.

OWNER:

By: _____

Name: _____
(Please Type)

Title: _____

ATTEST:

Name: _____
(Please Type)

Title: _____

CONTRACTOR:

By: _____

Name: _____
(Please Type)

Address: _____

(SEAL)

ATTEST:

Name: _____
(Please Type)

Address: _____

LABOR AND MATERIAL PAYMENT BOND

KNOW ALL MEN BY THESE PRESENTS: that

(Name of Contractor)

(Address of Contractor)

a _____, hereinafter called
(Corporation, Partnership, or Individual)

PRINCIPAL, and _____
(Name of Surety)

(Address of Surety)

hereinafter called SURETY, are held and firmly bound unto **Chattanooga Area Regional Transportation Authority (CARTA) located at 1617 Wilcox Boulevard, Chattanooga, Tennessee 37406**

hereinafter called OWNER, in the penal sum of _____

Dollars, \$ (_____) in lawful money of the United States, for the payment of which sum well and truly to be made, we bind ourselves, successor and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION is such that whereas, the PRINCIPAL entered into a certain contract with the OWNER, dated the _____ day of _____, 20____ a copy of which is hereto attached and made a part hereof for construction of: **Bridge Improvements on the Incline Railway up Lookout Mountain.**

NOW THEREFORE, if the PRINCIPAL, shall promptly make payment to all persons, firms, subcontractors, and corporations furnishing materials for or performing labor in the prosecution of the work provided for in such contract, and any authorized extension or modification thereof, including all amounts due for materials, lubricants, oil, gasoline, repairs on machinery, equipment and tools, consumed or used in connection with the construction of such work, and all insurance premiums on said work, and for all labor, performed in such work whether by subcontractor or otherwise, then this obligation shall be void; otherwise to remain in full force and effect.

PROVIDED, FURTHER, that the said SURETY, for value received hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or to the work to be performed thereunder or the specifications accompanying the same shall in any wise affect its obligation on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the contract or to the work or to the specifications.

PROVIDED, FURTHER, that no final settlement between the OWNER and the PRINCIPAL shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.

IN WITNESS WHEREOF, this instrument is executed in three (3) counterparts, each of which shall be deemed an original, this the _____ day of _____, 20__

ATTEST:

Principal

(Principal) Secretary

(SEAL)

By: _____(s)

(Address)

Witness as to Principal

(Address)

ATTEST:

Surety

(Surety) Secretary

(SEAL)

By: _____
Attorney-in-Fact

Witness as to Surety

(Address)

NOTE: Date of the Bond must not be prior to date of Contract. If Contractor is Partnership, all partners should execute the bond.

IMPORTANT: Surety companies executing bonds must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the State of Tennessee where the project is located.

PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS: that

(Name of Contractor)

(Address of Contractor)

a _____, hereinafter called
(Corporation, Partnership, or Individual)

PRINCIPAL, and _____
(Name of Surety)

(Address of Surety)

hereinafter called SURETY, are held and firmly bound unto

Chattanooga Area Regional Transportation Authority (CARTA)

1617 Wilcox Boulevard, Chattanooga, Tennessee 37406

hereinafter called OWNER, in the penal sum of _____

Dollars, \$ (_____) in lawful money of the United States, for the payment of

which sum well and truly to be made, we bind ourselves, successors, and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION is such that whereas, the PRINCIPAL entered into a certain contract with the OWNER, dated the _____ day of _____, 20____

, a copy of which is hereto attached and made a part hereof for the construction of:
Bridge Improvements on the Incline Railway up Lookout Mountain.

NOW, THEREFORE, if the PRINCIPAL shall well, truly and faithfully perform its duties, all the undertaking, covenants, terms, conditions, and agreements of said contract during the original term thereof, and extensions thereof which may be granted by the OWNER, with or without notice to the SURETY and during the one year guaranty period, and if he shall satisfy all claims and demands incurred under such contract, and shall fully indemnify and save harmless the OWNER from all costs and damages which it may suffer by reason of failure to do so, and shall reimburse and repay the OWNER all outlay and expense which the OWNER may incur in making good any default, then this obligation shall be void; otherwise to remain in full force and effect.

PROVIDED, FURTHER, that the said SURETY, for value received hereby stipulates and agrees that no change, extension of time, alternation or addition of the terms of the contract or to work to be performed thereunder or the specifications accompanying the same shall in any wise affect its obligation on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the contract or to the work or to the specifications.

PROVIDED, FURTHER, that no final settlement between the OWNER and the PRINCIPAL shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.

IN WITNESS WHEREOF, this instrument is executed in three (3) counterparts, each one of which shall be deemed an original, this __ day of _____, 20 ____.

ATTEST:

Principal

(Principal) Secretary

(SEAL)

By: _____ (s)

(Address)

Witness as to Principal

(Address)

(Address)

ATTEST:

Surety

(Surety) Secretary

(SEAL)

_____	By: _____
Witness to Surety	Attorney-in-Fact
_____	_____
(Address)	(Address)
_____	_____

NOTE: Date of bond must not be prior to date of Contract. If Contractor is Partnership, all partners should execute bond.

IMPORTANT: Surety companies executing bonds must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the State of Tennessee where the project is located.

NOTICE OF AWARD

To: _____

PROJECT Description:

Bridge Improvements on the Incline Railway up Lookout Mountain, The OWNER has considered the BID submitted by you for the above described WORK in response to its Advertisement for Bids dated _____, 20____, and Information for Bidders. You are hereby notified that your BID has been accepted for the work in the amount of \$ _____.

You are required by the Information for Bidders to execute the Agreement and furnish the required Contractor's Performance Bond and Payment Bond within ten (10) calendar days from the date of this Notice to you.

If you fail to execute said Agreement and to furnish said bonds within ten (10) days from the date of this Notice, said OWNER will be entitled to consider all your rights arising out

of the OWNER'S acceptance of your BID as abandoned and as a forfeiture of your Bid Bond. The OWNER will be entitled to such other rights as may be granted by law.

You are required to return an acknowledged copy of this NOTICE OF AWARD to the OWNER.

Dated this _____ day of _____, 20 _____

Chattanooga Area Regional Transportation Authority (CARTA)

Owner

By: _____

Title: _____

ACCEPTANCE OF NOTICE

Receipt of the NOTICE OF AWARD is hereby acknowledged by _____

_____, this the _____ day of _____, 20_____

By: _____

Title: _____

Contractor should send one completed copy of this form to:

Ms. Annie Powell,
Grants Manager
Chattanooga Area Regional Transportation Authority
1617 Wilcox Boulevard
Chattanooga, Tennessee 37406

NOTICE TO PROCEED

To: _____

Date: _____

Project: 2027 Rehabilitation Project on

the Incline Railway up Lookout Mountain

You are hereby notified to commence work in accordance with the Agreement dated ____
_____, 20____, on or before _____,

and you are to complete all WORK by March 12, 2027, and further agrees to complete
all work which requires shut-down of normal operation of the Incline within the shut-
down period. The shut-down period will occur from January 2, 2027 to February 28,
2027.

The date of completion of all WORK which requires shut-down of the normal operation
of the Incline is February 28, 2027.

Chattanooga Area Regional Transportation Authority
Owner

By: _____

Title: _____

ACCEPTANCE OF NOTICE

Receipt of the NOTICE TO PROCEED is hereby acknowledged by _____

_____, this the _____ day of _____ 20____.

By: _____

Title: _____

Contractor should send one completed copy of this form to:

Ms. Annie Powell,
Grants Manager
Chattanooga Area Regional Transportation Authority
1617 Wilcox Boulevard
Chattanooga, Tennessee 37406

CHANGE ORDER

Order No. _____

Date: _____

Agreement Date: _____

NAME OF PROJECT: 2027 Rehabilitation Project on the Incline Railway up Lookout Mountain

OWNER: Chattanooga Area Regional Transportation Authority (CARTA)

CONTRACTOR: _____

The following changes are hereby made to the CONTRACT DOCUMENTS:

Justification:

Change to CONTRACT PRICE: \$ _____

Original CONTRACT PRICE: \$ _____

Current CONTRACT PRICE adjusted by previous CHANGE ORDER: \$ _____

The CONTRACT PRICE due to this CHANGE ORDER will be (increased) by: \$ _____

The CONTRACT PRICE including this CHANGE ORDER will be: \$ _____

Change to CONTRACT TIME:

The CONTRACT TIME will be (increased) (decreased) by _____ calendar days.

The date for completion of all work will be _____ (Date). Sketch should accompany Change Order when necessary for clarification.

Approvals Required:

To be effective this Order must be approved by the Federal agency if it changes the scope or objective of the project, or if it will increase the budgeted amounts of Federal funds needed to complete the project, or as may otherwise be required by the SUPPLEMENTAL GENERAL CONDITIONS.

Requested by: CARTA

Recommended by: CSR Engineering, Inc.

Ordered by: CARTA

Accepted by: (Contractor)

Federal Agency Approval (where applicable): _____

GENERAL CONDITIONS

1. Definitions
2. Additional Instructions and Detail Drawings
3. Schedules, Reports and Records
4. Drawings and Specifications
5. Shop Drawings
6. Materials, Services and Facilities
7. Inspection and Testing
8. Substitutions
9. Patents
10. Surveys, Permits, Regulations
11. Protection of Work, Property, Persons
12. Supervision by Contractor
13. Changes in Quantities, Plans or Character of the Work
14. Extra Work
15. Time for Completion and Liquidated Damages
16. Correction of Work
17. Suspension of Work, Termination and Delay
18. Payments to Contractor
19. Acceptance of Final Payment as Release
20. Contract Security

21. Assignments

22. Separate Contracts

23. Subcontracting

24. Engineer's Authority

25. Land and Rights-of-Way

26. Guarantee

1. DEFINITIONS

- 1.1 Wherever used in the CONTRACT DOCUMENTS, the following terms shall have the meanings indicated which shall be applicable to both the singular and plural thereof:
- 1.2 **ADDENDA** – Written or graphic instruments issued prior to the execution of the Agreement which modify or interpret the CONTRACT DOCUMENTS, DRAWINGS, and SPECIFICATIONS, by additions, deletions, clarifications or corrections.
- 1.3 **BID** – The offer or proposal of the BIDDER submitted on the prescribed form setting forth the prices for the WORK to be performed.
- 1.4 **BIDDER** – Any person, firm or corporation submitting a BID for the WORK.
- 1.5 **BONDS** – Bid, Performance, and Payment Bonds and other instruments of security, furnished by the CONTRACTOR and his SURETY in accordance with the CONTRACT DOCUMENTS.
- 1.6 **CARTA GENERAL CONTRACT PROVISIONS** – Modifications to the General Conditions required by CARTA and/or a Federal Agency for participation in the Project.
- 1.7 **CARTA SPECIAL CONTRACT PROVISIONS** – Additional Modifications to the General Conditions and/or the CARTA General Contract Provisions required by CARTA and/or Federal Agency for participation in the Project.
- 1.8 **CHANGE ORDER** – A written order to the CONTRACTOR authorizing an addition, deletion or revision in the WORK within the general scope of the CONTRACT DOCUMENTS, or authorizing an adjustment in the CONTRACT PRICE or CONTRACT TIME.
- 1.9 **CONTRACT DOCUMENTS** – The contract, including Advertisement For Bids, Information For Bidders, BID, Bid Bond, Agreement, General Conditions, SUPPLEMENTAL GENERAL CONDITIONS, Payment Bond, Performance Bond, NOTICE OF AWARD, NOTICE TO PROCEED, CHANGE ORDER, Tennessee State Contract Clauses, DRAWINGS, SPECIFICATIONS, GENERAL PROVISIONS, AND CARTA'S GENERAL AND SPECIAL CONTRACT PROVISIONS and ADDENDA.
- 1.10 **CONTRACT ITEM (PAY ITEM)** – A specifically described unit of work for which a price is provided in the CONTRACT DOCUMENTS.

- 1.11 **CONTRACT TIME** – The number of calendar days stated in the CONTRACT DOCUMENTS for the completion of the WORK.
- 1.13 **CONTRACTOR** – The person, firm or corporation with whom the OWNER has executed the Agreement.
- 1.14 **DRAWINGS** – The part of the CONTRACT DOCUMENTS which show the characteristics and scope of the WORK to be performed and which have been prepared or approved by the ENGINEER.
- 1.15 **ENGINEER** – The person, firm or corporation named as such in the CONTRACT DOCUMENTS.
- 1.16 **FIELD ORDER** – A written order effecting a change in the WORK not involving an adjustment in the CONTRACT PRICE or an extension of the CONTRACT TIME, issued by the ENGINEER to the CONTRACTOR during construction.
- 1.17 **NOTICE OF AWARD** – The written notice of the acceptance of the BID from the OWNER to the successful BIDDER.
- 1.18 **NOTICE TO PROCEED** – Written communication issued by the OWNER to the CONTRACTOR authorizing him to proceed with the WORK and establishing the date of commencement of the WORK.
- 1.19 **OWNER** – A public or quasi-public body or authority, corporation, association, partnership, or individual for whom the WORK is to be performed.
- 1.20 **PROJECT** – The undertaking to be performed as provided in the CONTRACT DOCUMENTS.
- 1.21 **RESIDENT PROJECT REPRESENTATIVE** – Authorized representative of the OWNER who is assigned to the PROJECT site or any part thereof.
- 1.22 **SHOP DRAWINGS** – All drawings, diagrams, illustrations, brochures, schedules and other data which are prepared by the CONTRACTOR, a SUBCONTRACTOR, manufacturer, SUPPLIER or distributor, which illustrate how specific portions of the WORK shall be fabricated or installed.
- 1.23 **SUBCONTRACTOR** – An individual, firm or corporation having a direct contract with the CONTRACTOR or with any other SUBCONTRACTOR for the performance of a part of the WORK at the site.

- 1.25 **SUBSTANTIAL COMPLETION** – That date as certified by the ENGINEER when the construction of the PROJECT is sufficiently completed, in accordance with the CONTRACT DOCUMENTS, so that the PROJECT can be utilized for the purposes for which it is intended.
- 1.26 **SUPERINTENDENT** – The CONTRACTOR’S authorized representative in responsible charge of the work.
- 1.27 **SUPPLIERS** – Any person, supplier or organization who supplies materials or equipment for the WORK, including that fabricated to a special design, but who does not perform labor at the site.
- 1.28 **WORK** – All labor necessary to produce the construction required by the CONTRACT DOCUMENTS, and all materials and equipment incorporated in the PROJECT.
- 1.29 **WRITTEN NOTICE** – Any notice to any part of the Agreement relative to any part of this Agreement in writing and considered delivered and the service thereof completed, when posted by certified or registered mail to the said party at his last given address, or delivered in person to said party or his authorized representative on the WORK.

2. ADDITIONAL INSTRUCTIONS AND DETAIL DRAWINGS

- 2.1 The CONTRACTOR may be furnished additional instructions and detail drawings, by the ENGINEER, as necessary to carry out the WORK required by the **CONTRACT DOCUMENTS**.
- 2.2 The additional drawings and instruction thus supplied will become a part of the CONTRACT DOCUMENTS. The CONTRACTOR shall carry out the WORK in accordance with the additional detail drawings and instructions.

3. SCHEDULES, REPORTS AND RECORDS

- 3.1 The CONTRACTOR shall submit to the OWNER such schedule of quantities and costs, progress schedules, payrolls, reports, estimates, records and other data as the OWNER may request concerning WORK performed or to be performed.
- 3.2 Within 10 days after receipt of the NOTICE OF AWARD, the CONTRACTOR shall submit schedules showing the order in which he proposes to carry on the WORK, including dates

at which he will start the various parts of the WORK, estimated date of completion of each part, and, as applicable:

- 3.2.1 The dates at which special detail drawings will be required, and
- 3.2.2 The respective dates for submission of SHOP DRAWINGS, the beginning of manufacture, the testing and the installation of materials, supplies and equipment.
- 3.3 The CONTRACTOR shall also submit a schedule of payments that he anticipates he will earn during the course of the WORK when requested by the OWNER.
- 3.4 If the **CONTRACTOR'S** operations are materially affected by changes in the plan or in the amount of the work or if he has failed to comply with submitted progress schedule, the **CONTRACTOR** shall submit a revised project schedule, if requested by the **ENGINEER**, which schedule will show how he proposes to prosecute the balance of the work. The **CONTRACTOR** shall incorporate into every progress schedule submitted, any contract requirements regarding the order of performance of portions of the work. The **CONTRACTOR** shall use all practical means to make the progress of the work conform to that shown on the progress schedule which is in effect. No payment will be made to the **CONTRACTOR** while he is delinquent in the submission of a progress schedule. Should the prosecution of the work, for any reason, be discontinued, the CONTRACTOR shall notify the ENGINEER at least 24 hours in advance of resuming operations.
- 3.5 The CONTRACTOR and all SUBCONTRACTORS shall have signed and on file with the OWNER a statement that they have read and understood CARTA's System Safety Program Plan prior to commencement of work. A copy of this plan can be obtained from the OWNER.

4. DRAWINGS AND SPECIFICATIONS

- 4.1 The intent of the DRAWINGS and SPECIFICATIONS is that the **CONTRACTOR** shall furnish all labor, materials, tools, equipment, and transportation necessary for the proper execution of the WORK in accordance with the CONTRACT DOCUMENTS and all incidental work necessary to complete the PROJECT in an acceptable manner, ready for use, occupancy or operation by the OWNER.

- 4.2 In case of conflict between the DRAWINGS and SPECIFICATIONS, the SPECIFICATIONS shall govern. Figure dimensions on DRAWINGS shall govern over scale dimensions, and detailed DRAWINGS shall govern over general DRAWINGS.
- 4.3 Any discrepancies found between the DRAWINGS and SPECIFICATIONS and site conditions or any inconsistencies or ambiguities in the DRAWINGS or SPECIFICATIONS shall be immediately reported to the ENGINEER, in writing, who shall promptly correct such inconsistencies or ambiguities in writing. WORK done by the CONTRACTOR after his discovery of such discrepancies, inconsistencies or ambiguities shall be done at the CONTRACTOR'S risk.

5. SHOP DRAWINGS

- 5.1 The CONTRACTOR shall prepare and submit SHOP DRAWINGS as may be necessary for the prosecution of the WORK as required by the CONTRACT DOCUMENTS, showing all details of fabrication for all parts of the structure. The ENGINEER shall promptly review all SHOP DRAWINGS. The ENGINEER'S review and acceptance of any SHOP DRAWINGS shall not release the CONTRACTOR from responsibility for deviations from the CONTRACT DOCUMENTS and shall require a CHANGE ORDER.
- 5.2 When submitted for the ENGINEER'S review, SHOP DRAWINGS shall bear the CONTRACTOR'S certification that he has reviewed, checked and approved the SHOP DRAWINGS and that they are in conformance with the requirements of the CONTRACT DOCUMENTS.
- 5.3 SHOP DRAWINGS prepared by the CONTRACTOR and accepted by the ENGINEER shall be deemed the correct interpretation of the work to be done, but they do not relieve the CONTRACTOR of the responsibility for the accuracy of details and dimensions. Fabrication tolerances shall be shown on the shop drawings. Where necessary to assure proper fit-up members, closer tolerances than those required herein shall be shown.
- 5.4 Portions of the WORK requiring a SHOP DRAWING or sample submission shall not begin until the SHOP DRAWING or submission has been approved by the ENGINEER. A copy of

each approved SHOP DRAWING and each approved sample shall be kept in good order by the CONTRACTOR at the site and shall be available to the ENGINEER.

6. MATERIALS, SERVICES AND FACILITIES

- 6.1 It is understood that, except as otherwise specifically stated in the CONTRACT DOCUMENTS, the CONTRACTOR shall provide and pay for all materials, labor, tools, equipment, water, light, power, transportation, supervision, temporary construction of any nature, and all other services and facilities of any nature whatsoever necessary to execute, complete, and deliver the WORK within the specified time.
- 6.2 Materials and equipment shall be so stored as to insure the preservation of their quality and fitness for the WORK. Stored materials and equipment to be incorporated in the WORK shall be located so as to facilitate prompt inspection.
- 6.3 Manufactured articles, materials and equipment shall be applied, installed, connected, erected, used, cleaned and continued as directed by the manufacture.
- 6.4 Materials, supplies and equipment shall be in accordance with samples submitted by the CONTRACTOR and approved by the ENGINEER.
- 6.5 Materials, supplies or equipment to be incorporated into the WORK shall not be purchased by the CONTRACTOR or the SUBCONTRACTOR subject to a chattel mortgage or under a conditional sale contract or other agreement by which an interest is retained by the seller.

7. INSPECTION AND TESTING

- 7.1 All materials and equipment used in the construction of the PROJECT shall be subject to adequate inspection and testing in accordance with generally accepted standards.
- 7.2 The CONTRACTOR shall provide at his expense the necessary testing and inspection services required by the CONTRACT DOCUMENTS, unless otherwise provided.
- 7.3 The OWNER should inspect the incline cable and system prior to and after construction. Any damage to the incline cable or system caused by the CONTRACTOR's operations will

be the responsibility of the CONTRACTOR and the CONTRACTOR shall reimburse the OWNER prior to final payment.

- 7.4 If the CONTRACT DOCUMENTS, laws, ordinances, rules, regulations or orders of any public authority having jurisdiction require and WORK to specifically be inspected, tested, or approved by someone other than the CONTRACTOR, the CONTRACTOR will give the ENGINEER timely notice of readiness. The CONTRACTOR will then furnish the ENGINEER the required certificates of inspection, testing or approval.
- 7.5 Neither observations by the ENGINEER nor inspections, test or approvals by persons other than the CONTRACTOR shall relieve the CONTRACTOR from his obligations to perform the WORK in accordance with the requirements of the CONTRACT DOCUMENTS.
- 7.6 The ENGINEER and his representatives will at all times have access to the WORK. In addition, authorized representatives and agents of any participating Federal or State agency shall be permitted to inspect all work, materials, payrolls, records of personnel, invoices of materials, and other relevant data and records. The CONTRACTOR will provide proper facilities for such access and observation of the WORK and also for any inspection, or testing thereof.
- 7.7 If any WORK is covered contrary to the written request of the ENGINEER it must, if requested by the ENGINEER, be uncovered for his observation and replaced at the CONTRACTOR'S expense.
- 7.8 If any WORK has been covered which the ENGINEER has not specifically requested to observe prior to its being covered, or if the ENGINEER considers it necessary or advisable that covered WORK be inspected or tested by others, the CONTRACTOR at the ENGINEER'S request, will uncover, expose or otherwise make available for observation, inspection or testing as the ENGINEER may require, that portion of the WORK in question, furnishing all necessary labor, materials, tools, and equipment. If it is found that such WORK is defective, the CONTRACTOR will bear all the expenses of such uncovering, exposure, observation, inspection and testing and of satisfactory reconstruction. If, however, such WORK is not found to be defective, the CONTRACTOR will be allowed an increase in the CONTRACT PRICE or an extension of the CONTRACT TIME, or both, directly

attributable to such uncovering, exposure, observation, inspection, testing and reconstruction and an appropriate CHANGE ORDER shall be issued.

8. SUBSTITUTIONS

- 8.1 Whenever a material, article or piece of equipment is identified on the DRAWINGS or SPECIFICATIONS by reference to brand name or catalogue number, it shall be understood that this is referenced for the purpose of defining the performance or other salient requirements and that other products of equal capacities, quality and function shall be considered. The CONTRACTOR may recommend the substitution of a material, article, or piece of equipment or equal substance and function for those referred to in the CONTRACT DOCUMENTS by reference to brand name or catalogue number, and if, in the opinion of the ENGINEER, such material, article, or piece of equipment is of equal substance and function to the specified, the ENGINEER may approve, with the OWNER'S approval, its substitution and use by the CONTRACTOR. Any cost differential shall be deductible from the CONTRACT PRICE and the CONTRACT DOCUMENTS shall be appropriately modified by CHANGE ORDER. The CONTRACTOR warrants that if substitutes are approved, no major changes in the function or general design of the PROJECT will result. Incidental changes or extra component parts required to accommodate the substitution will be made by the CONTRACTOR without a change in the CONTRACT PRICE or CONTRACT TIME.

9. PATENTS

- 9.1 The CONTRACTOR shall pay all applicable royalties and license fees. He shall defend all suits or claims for infringement of any patent rights and save the OWNER harmless from loss on account thereof, except that the OWNER shall be responsible for any such loss when a particular process, design, or the product of a particular manufacturer or manufacturers is specified, but if the CONTRACTOR has reason to believe that the design, process or product specified in an infringement of a patent, he shall be responsible for such loss unless he promptly gives such information to the ENGINEER.

10. SURVEYS, PERMITS, REGULATIONS

- 10.1 The OWNER shall furnish all land surveys and establish all base lines for locating the principal component parts of the WORK together with a suitable number of bench marks adjacent to the WORK as shown in the CONTRACT DOCUMENTS. From the information provided by the OWNER, unless otherwise specified in the CONTRACT DOCUMENTS, the CONTRACTOR shall develop and make all detail surveys needed for constructing such as slope stakes, batter boards, stakes for pile locations and other working points, lines, elevations, and cut sheets.
- 10.2 The CONTRACTOR shall carefully preserve bench marks, reference points and stakes and, in case of willful or careless destruction, he shall be charged with the resulting expense and shall be responsible for any mistakes that may be caused by their unnecessary loss or dues.
- 10.3 Permits and licenses of a temporary nature necessary for the prosecution of the WORK shall be secured and paid for by the CONTRACTOR. Permits, licenses and easements for permanent structures or permanent changes in existing facilities shall be secured and paid for by the OWNER, unless otherwise specified. The CONTRACTOR shall give all notices and comply with all laws, ordinances, rules and regulations bearing on the conduct of the WORK as drawn and specified. If the CONTRACTOR observes that the CONTRACT DOCUMENTS are at variance therewith, he shall promptly notify the ENGINEER in writing, and any necessary changes shall be adjusted as provided in Section 13, CHANGES IN THE WORK.

11. PROTECTION OF WORK, PROPERTY AND PERSONS

- 11.1 The CONTRACTOR will be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the WORK. He will take all necessary precautions for the safety of, and will provide the necessary protection to prevent damage, injury or loss to all employees on the WORK and other persons who may be affected thereby, all the WORK and all materials or equipment to be incorporated therein,

whether in storage on or off the site, and other property at the site or adjacent thereto, including trees, shrubs, laws, walks, pavements, roadways, structures, and utilities not designated for removal, relocation or replacement in the course of construction.

- 11.2 The CONTRACTOR will comply with all applicable laws, ordinances, rules, regulations and orders of any public body having jurisdiction. He will erect and maintain, as required by the conditions and progress of the WORK, all necessary safeguards for safety and protection. He will notify owners of adjacent utilities when prosecution of the WORK may affect them. The CONTRACTOR will remedy all damage, injury or loss to any property caused, directly or indirectly, in whole or in part, by the CONTRACTOR, any SUBCONTRACTOR or anyone directly or indirectly employed by any of them or anyone for whose acts any of them be liable, except damage or loss attributable to the fault of the CONTRACT DOCUMENTS or to the acts or omissions of the OWNER or the ENGINEER or anyone employed by either of them or anyone for whose acts either of them may be liable, and not attributable, directly or indirectly, in whole or in part, to the fault or negligence of the CONTRACTOR.
- 11.3 In emergencies affecting the safety of persons or the WORK or property at the site or adjacent thereto, the CONTRACTOR, without special instruction or authorization from the ENGINEER or OWNER, shall act to prevent threatened damage, injury or loss. He will give the ENGINEER prompt WRITTEN NOTICE of any significant changes in the WORK or deviations from the CONTRACT DOCUMENTS caused thereby, and a CHANGE ORDER shall thereupon be issued covering the changes and deviations involved.
- 11.4 Until final acceptance of the project, the CONTRACTOR shall have the charge and care thereof and shall take every precaution against injury or damage to any part thereof by the action of the elements or from any other cause arising from the execution or from the non-execution of the work. The CONTRACTOR shall rebuild, repair, restore, and make good all injuries or damages to any portion of the work occasioned by any of the above causes before final acceptance and shall bear the expense thereof except damage to the work due to unforeseeable causes beyond the control of and without the fault or

negligence of the CONTRACTOR, including but not limited to acts of God, or the public enemy or governmental authorities.

12. SUPERVISION BY CONTRACTOR

12.1 The CONTRACTOR will supervise and direct the WORK. He will be solely responsible for the means, methods, techniques, sequences and procedures of construction. The CONTRACTOR will employ and maintain on the WORK a qualified supervisor or superintendent who shall have been designated in writing by the CONTRACTOR as the CONTRACTOR'S representative at the site. The supervisor shall have full authority to act on behalf of the CONTRACTOR and all communications given to the supervisor shall be as binding as if given to the CONTRACTOR. The supervisor shall be present on the site at all times as required to perform adequate supervision and coordination of the WORK.

13. CHANGES IN QUANTITIES, PLANS OR CHARACTER OF THE WORK

13.1 The ENGINEER reserves the right to make, by CHANGE ORDER, at any time during the work, such changes in quantities and such alterations in the work as are necessary to satisfactorily complete the project. Such changes in quantities and alternations shall not invalidate the contract nor release the surety, and by signing a CHANGE ORDER, the CONTRACTOR agrees to perform the work as altered and agrees to accept, as payment in full for such work, the monetary amounts set forth in such CHANGE ORDER, as balanced by the ENGINEER. In addition, by signing the CHANGE ORDER, the CONTRACTOR releases the OWNER from any and all claims for compensation with regard to the items of work specified in the CHANGE ORDER, including but not limited to, any and all claims for delay and overhead, unless the ENGINEER is notified in writing at the time of signing the CHANGE ORDER that the CONTRACTOR refuses to release the OWNER from such claims. All increases in quantities which appear in the CONTRACT as PAY ITEMS shall be paid for at the contract unit prices. Decreases in quantities shall be deducted from the contract at the contract unit price.

13.1a If the alterations or changes in quantities significantly change the character of the work under the Contract, whether or not changed by any such different quantities or alterations, an adjustment will be made to the contract. The basis for the adjustment shall be agreed upon prior to the performance of the work. If the alterations or changes in quantities do not significantly change the character of the work to be performed under the contract, the altered work will be paid for on the basis of the actual quantity completed at the unit price for such named in the Contract.

The term "significant change" shall be construed to apply only to the following circumstances:

1. When the character of the work as altered differs materially in kind or nature from that involved or included in the original proposed construction or
2. When an item or work, whose total cost is determined by multiplying the contract quantity by the contract unit price and is greater than 5 percent of the original contract price, is increased in excess of 125 percent or decreased below 75 percent of the original contract quantity. Any allowance for an increase in quantity shall apply only to that portion in excess of 125 percent of original contract item quantity, or in case of a decrease below 75 percent, to the actual amount of work performed, or
3. When such changes or alterations are sufficient in magnitude to affect the unit cost by 10 percent or more, considering all of the estimated quantity used for bidding purposes, or considering the altered portion of the item, the change in cost shall equal 25,000 dollars or more whichever is the lesser.

13.1b During the progress of the work, if subsurface or latent physical conditions are encountered at the site differing materially from those indicated in the contract or if unknown physical conditions of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in the work provided for in the contract, are encountered at the site, the party discovering such conditions shall promptly notify the other party in writing of the specific differing conditions before they are disturbed and before the affected work is performed. Upon written notification, the ENGINEER will investigate the conditions, and if the ENGINEER determines that the

conditions materially differ and cause an increase or decrease in the cost or time required for the performance of any work under the CONTRACT, an adjustment will be made and the CONTRACT modified in writing accordingly. The ENGINEER will notify the CONTRACTOR of the determination whether or not an adjustment of the CONTRACT is warranted.

No contract adjustment which results in a benefit to the CONTRACTOR will be allowed unless the CONTRACTOR has provided the required written notice.

No contract adjustment will be allowed under this clause for any effects caused on unchanged work.

No contract adjustment will be allowed unless such changes or alterations are sufficient in magnitude to affect the unit cost by 10 percent or more, considering all of the estimated quantity used for bidding purposes, or considering the altered portion of the item, the change in cost shall equal 25,000 dollars or more, whichever is lesser.

In no event shall a differing site condition invalidate the contract or release Surety.

14. EXTRA WORK

- 14.1 In connection with the work covered by the contract, the ENGINEER may, at any time during the progress of the work, order extra work, including materials incidental thereto. The CONTRACTOR shall perform this work whenever it is deemed necessary by the ENGINEER to fully complete the project as contemplated, and such work shall be done in accordance with the intent of the SPECIFICATIONS under the direction of the ENGINEER. Prior to ordering any extra work, the ENGINEER shall furnish written notification stating the location, kind and estimated quantity of the extra work to be done. The CONTRACTOR shall indicate in writing to the Engineer the compensation (unit price or lump sum) for which the extra work will be performed. This proposal shall be submitted to the ENGINEER for approval. If the ENGINEER considers the unit price or lump sum price excessive, the proposal may be disapproved and the work ordered done by force account in accordance with Subsection 14.2.

14.2 When extra work is required, it shall be performed in accordance with the requirements and provisions of Subsection 14.1. Payment for such work will be on the unit price or lump sum basis agreed upon in accordance with Subsection 14.1. When such agreement cannot be reached, the ENGINEER may order such work, including any off-site work, to be done by force account. The compensation as herein provided shall be accepted by the CONTRACTOR as payment in full for extra work done by force account, and the said percentages shall cover profit, superintendence, general expense, overhead, miscellaneous tools and equipment. For approved subcontract work, the CONTRACTOR will be paid an amount equal to 6 percent of the total cost of the subcontract work, as reimbursement for administrative costs incurred in connection with the subcontract work. When it is necessary for the CONTRACTOR to hire a firm to perform a specialized type of work or service for which the CONTRACTOR or SUBCONTRACTORS are not qualified to do, payment will be made at the invoice cost. The CONTRACTOR will be paid an amount equal to 6 percent of invoice cost, as reimbursement for administrative costs. Prior approval by the ENGINEER is required.

14.2a The CONTRACTOR shall furnish to the ENGINEER, itemized reports of the costs of all force account work. The reports shall be furnished each week and shall include a certified copy of the weekly payroll and copies of bills for the materials used and the freight charges paid on same. Discount for prompt payment or penalty for late payment will not be considered in determining the net amount of the bill. The net amount of the bill shall be charged to the force account work. Where materials used are not specifically purchased for use on extra work but are taken from the CONTRACTOR'S stock, the CONTRACTOR shall submit a certification of the quantity, price, and freight on such materials in lieu of original bills and invoices.

The CONTRACTOR shall prepare itemized statements containing the following detailed information:

- Name, class, dates, number of hours worked each day, total hours computed to nearest half hour, rate, and extension for each laborer and foreman engaged.

- Designation, number of hours computed to nearest half hour worked each day, total hours and rental rate for each unit of equipment engaged.
- Quantities of materials and prices.
- Freight on materials.

The CONTRACTOR and the ENGINEER shall compare records of force account work and bring them into agreement at the end of each day.

- 14.2b For all labor and all craft foremen directly engaged in the specific work, the CONTRACTOR shall be paid the actual rate of wages and the number of hours paid said labor and foremen in accordance with approved labor agreements, computed to the nearest half hour, to which the sum of 26 percent will be added. Project Foremen will be classified as Superintendents and their compensation will not be included in the payment provided herein.

Bond premium; Workmen's Compensation Insurance; Personal Injury Public Liability and Property Damage Public Liability Insurance; Unemployment Compensation; Federal Social Security; and payments required to be made to Employer and Employee Trusteships, the proceeds from which accrue exclusively to the benefit of the employee; will be paid for at actual cost, to which sum 20 percent will be added to the taxable fringe benefits. The CONTRACTOR shall furnish satisfactory evidence of the amounts paid for each of these required costs as related to force account work.

- 14.2c For materials, the CONTRACTOR will receive the actual cost delivered on the work including freight charges, as shown by copies of bills, to which the sum of 20 percent will be added.

If a change in the amount or type of force account work results in a surplus of the material ordered and delivered to the project site, the OWNER will reimburse the CONTRACTOR for the costs incurred returning the surplus material to the supplier.

- 14.2d No payment will be allowed for small hand and power tools which are not listed in the Rental Rate Blue Book for Construction Equipment as published by the Equipment Guide-Book Company. All small hand and power tools listed in the Rental Rate Blue Book at a

rate of less than one dollar per hour will be considered as part of overhead and will not be paid for separately.

- 14.2e For any machinery and equipment, including the foreman's transportation unit, which the ENGINEER approves for use on extra work done by force account, the CONTRACTOR will be paid as follows:

The time paid for shall be the period that the equipment is required at the site of the extra work and, in addition, shall include traveling time to the location of the extra work when the equipment is moved under its own power, the actual operating time during periods of loading and unloading will be paid at the regular rental rate and transportation costs will be allowed. When the periods of work are not consecutive and the interval between termination of a period of work and the commencement of the subsequent period does not exceed 30 days, the rates allowed will be the same as if the periods of work were consecutive.

The rental rate established for each piece of CONTRACTOR owned equipment, including appurtenances and attachments to equipment, used will be determined by use of the Rental Rate Blue Book for Construction Equipment Volume 1, 2, or 3 as applicable; the edition which is current at the time the force account work was started will apply. The established rental rate will be equal to the "Monthly" rate divided by 176; modified by the rate adjustment factor and the applicable map adjustment factor, plus the "Estimated Operating Costs per Hour", to which the sum of 10 percent will be added.

For equipment not listed in the Rental Rate Blue Book, Volume 1, 2, or 3, the rental rate will be determined by using the rate listed for a similar piece of equipment or by proportioning a rate listed so that the capacity, size, horsepower, and age are properly considered.

For equipment for which there are no comparable in the Rental Rate Blue Book, Volume 1, 2, or 3, the monthly rate shall be reasonable, but not more than 5 percent of the current list price, or invoice, of the equipment. The base hourly rate shall then be determined by dividing the monthly rate by 176 to which the sum of 20 percent will be added. The 20 percent includes adjustments and operating costs.

The rental rate for the foreman's transportation unit will be 7 dollars per hour, to which the sum of 20 percent will be added.

When leased or rented equipment is used on force account work, the hourly rate used in computation of payment will be the leased or rented rate, except that if the leased or rented rate exceeds the rental rate established by the Rental Rate Blue Book, the established rate determined from the Blue Book will apply. In either case, the Estimated Operating Cost per Hour will be added to the appropriate hourly rate to which the sum of 10 percent will be added.

In all cases the "Estimated Operating Cost per Hour" includes all fuel, oil, lubricants, tires, parts, and other operating expendables such as truck and labor assigned to the truck for servicing the equipment.

The rental rates allowed herein include the cost of insurance covering usual insurable risks, including fire and theft. The OWNER will not be liable for losses which can be covered by insurance.

In no instance, however, will the OWNER pay, on a total project basis, equipment costs in excess of the equipment's original invoice cost plus any documented improvements to the piece of equipment. The CONTRACTOR shall furnish to the ENGINEER either original bills and invoices or a certification documenting the equipment's original invoice price plus improvements in any instance which equipment costs are being sought under this Subsection for a period in excess of 30 days.

15. TIME FOR COMPLETION AND LIQUIDATED DAMAGES

15.1 The date of beginning and the time for completion of the work are essential conditions of the CONTRACT DOCUMENTS and the WORK embraced shall be commenced on a date specified in the NOTICE TO PROCEED.

15.2 The CONTRACTOR will proceed with the WORK at such rate of progress to insure full completion within the CONTRACT TIME. The CONTRACTOR shall have completed the work on or before the calendar date specified in the CONTRACT DOCUMENTS, or on or before a later date as extended by CHANGE ORDER. It is expressly understood and

agreed, by and between the CONTRACTOR and the OWNER, that the CONTRACT TIME for the completion of the WORK described herein is a reasonable time, taking into consideration the average climatic and economic conditions and other factors prevailing in the locality of the WORK.

- 15.3 If the CONTRACTOR finds it impossible for reasons beyond his control to complete the WORK by the date as specified in the CONTRACT DOCUMENTS or as extended by CHANGE ORDER, he may make a written request to the ENGINEER for an extension of time setting forth therein the reasons he believes will justify the granting of his request. Requests for extensions of time shall be filed in writing by the CONTRACTOR with the ENGINEER. The CONTRACTOR'S plea that insufficient time was specified is not a valid reason for extension of time. If the OWNER and ENGINEER find that the WORK was delayed because of conditions beyond the control and without the fault of the CONTRACTOR, the OWNER may extend the time for completion in such amount as the conditions justify. An appropriate CHANGE ORDER will be issued for the granting of any time extensions and the extended time for completion shall then be in full force and effect the same as though it were the original time for completion.
- 15.4 Delays caused by weather or season conditions should be anticipated and will be considered as the basis for an extension of time only when the actual number of work days lost exceeds the number of workdays lost each month due to inclement weather as determined by the following schedule:

MONTH	NUMBER OF WORK DAYS LOST DUE TO WEATHER
January	9
February	8
March	8
April	8
May	5
June	5
July	4
August	4
September	5
October	6
November	6
December	8

A work day will be counted as lost if the CONTRACTOR'S efficiency is reduced by more than 50 percent on the critical item under construction at that time. Weekends and Holidays will not be counted as lost work days.

15.5 If the CONTRACTOR shall fail to complete the WORK within the CONTRACT TIME, or extension of time granted through CHANGE ORDER by the OWNER, then the CONTRACTOR will pay to the OWNER the amount for liquidated damages as specified in the BID for each calendar day that the CONTRACTOR shall be in default after the time stipulated in the CONTRACT DOCUMENTS.

15.5.1 If the CONTRACTOR fails to complete the work within the CONTRACT TIME or extension of time granted by CHANGE ORDER, the OWNER, if satisfied that the CONTRACTOR is carrying the work forward with reasonable progress, may allow him to continue in control of the work. It shall be necessary for the CONTRACTOR to make written application to the

OWNER to warrant such continuance. Payments to the CONTRACTOR for work performed and material furnished will be made.

- 15.5.2 For each calendar day that the CONTRACTOR shall be in default after the date stipulated in the CONTRACT DOCUMENTS, the amount for liquidated damages as specified in the BID will be deducted from any money due to the CONTRACTOR; provided, however, that the due amount shall be taken of any adjustment of completion dates granted.
- 15.5.3 Permitting the CONTRACTOR to continue and furnish WORK or any part of it after the date or dates of completion fixed for its completion or after which the date or dates to which completion may have been extended will in no way operate as a waiver on the part of the OWNER of any of its rights under the CONTRACT.
- 15.6 The CONTRACTOR shall not be charged with liquidated damages or any excess cost when the delay in completion of the WORK is due to the following, and the CONTRACTOR has promptly given WRITTEN NOTICE of such delay to the OWNER or ENGINEER.
 - 15.6.1 To any preference, priority or allocation order duly issued by the OWNER.
 - 15.6.2 To unforeseeable causes beyond the control and without the fault or negligence of the CONTRACTOR, including but not restricted to, acts of God, or of the public enemy, acts of the OWNER, acts of another CONTRACTOR in the performance of a contract with the OWNER, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes, and abnormal and unforeseeable weather as defined in Section 15.4; and
 - 15.6.3 To any delays of SUBCONTRACTORS occasioned by any of the causes specified in paragraphs 15.6.1 and 15.6.2 of this article.

16. CORRECTION OF WORK

- 16.1 The CONTRACTOR shall promptly remove from the premises all WORK rejected by the ENGINEER for failure to comply with the CONTRACT DOCUMENTS, whether incorporated in the construction or not, and the CONTRACTOR shall promptly replace and re-execute the WORK in accordance with the CONTRACT DOCUMENTS and without expense to the OWNER and shall bear the expense of making good all WORK of other CONTRACTORS destroyed or damaged by such removal or replacement.

16.2 All removal and replacement WORK shall be done at the CONTRACTOR'S expense. If the CONTRACTOR does not take action to remove such rejected WORK within ten (10) days after receipt of WRITTEN NOTICE, the OWNER may remove such WORK and store the materials at the expense of the CONTRACTOR.

17. SUSPENSION OF WORK, TERMINATION AND DELAY

17.1 The OWNER may at any time and without cause, suspend the WORK or any portion thereof for a period of not more than ninety (90) days of such further time as agrees upon by the CONTRACTOR, by WRITTEN NOTICE to the CONTRACTOR and the ENGINEER which notice shall fix the date on which WORK shall be resumed. The CONTRACTOR will resume that WORK on the date so fixed. The CONTRACTOR will be allowed an increase in the CONTRACT PRICE or an extension of the CONTRACT TIME, or both, directly attributable to any suspension.

17.2 If the CONTRACTOR is adjudged as bankrupt or insolvent, or if he makes a general assignment for the benefit of his creditors, or if a trustee or receiver is appointed for the CONTRACTOR or for any of his property, or if he files a petition to take advantage of any debtor's act, or to reorganize under the bankruptcy or applicable laws, or if he repeatedly fails to supply sufficient skilled workmen or suitable materials or equipment, or if he repeatedly fails to make prompt payments to SUBCONTRACTORS or for labor, materials or equipment or if he disregards laws, ordinances, rules, regulations or orders of any public body having jurisdiction the WORK or if he disregards the authority of the ENGINEER, or if he otherwise violates any provision of the CONTRACT DOCUMENTS, then the OWNER may, without prejudice to any other right or remedy and after giving the CONTRACTOR and his SURETY a minimum of ten (10) days from delivery of a WRITTEN NOTICE, terminate the services of the CONTRACTOR and take possession of the PROJECT and of all materials, equipment, tools, construction equipment and machinery thereon owned by the CONTRACTOR, and finish the WORK by whatever method he may deem expedient. In such case the CONTRACTOR shall not be entitled to receive any further payment until the WORK is finished. If the unpaid balance of the CONTRACT PRICE exceeds the direct and

indirect costs of completing the PROJECT, including compensation for additional professional services, such excess shall be paid to the CONTRACTOR. If such costs exceed such unpaid balance, the CONTRACTOR will pay the difference to the OWNER. Such costs incurred by the OWNER will be determined by the ENGINEER and incorporated in a CHANGE ORDER.

- 17.3 Where the CONTRACTOR'S services have been so terminated by the OWNER, said termination shall not affect any right of the OWNER against the CONTRACTOR then existing or which may thereafter accrue. Any retention or payment of monies by the OWNER due the CONTRACTOR will not release the CONTRACTOR from compliance with the CONTRACT DOCUMENTS.
- 17.4 Upon delivery of a WRITTEN NOTICE to the CONTRACTOR and the ENGINEER, the OWNER may, without cause and without prejudice to any other right or remedy, elect to abandon the PROJECT and terminate the contract. In such case, the CONTRACTOR shall be paid for all WORK executed and any expense sustained plus a prorata share of their profit based on an independent audit of their records. The OWNER shall select and pay the auditor and all parties shall make their records available.
- 17.5 If, through no act or fault of the CONTRACTOR, the WORK is suspended for a period of more than ninety (90) days by the OWNER or under an order of court or other public authority, or the ENGINEER fails to act on any request for payment within thirty (30) days after it is submitted, or the OWNER fails to pay the CONTRACTOR substantially the sum approved by the ENGINEER or awarded by the arbitrators within sixty (60) days of its approval and presentation, then the CONTRACTOR may, after ten (10) days from delivery of a WRITTEN NOTICE to the OWNER and the ENGINEER, terminate the CONTRACT and recover from the OWNER payment for all work executed and all expenses sustained. In addition and in lieu of terminating the CONTRACT, if the ENGINEER has failed to act on a request for payment or if the OWNER has failed to make any payment as aforesaid, the CONTRACTOR may upon ten (10) days notice to the OWNER and the ENGINEER stop the work until he has been paid all amounts then due, in which event and upon resumption of the WORK, CHANGE ORDERS shall be issued for adjusting the CONTRACT PRICE or

extending the CONTRACT TIME or both to compensate for the costs and delays attributable to the stoppage of WORK.

- 17.6 If the performance of all or any portion of the WORK is suspended, delayed, or interrupted as a result of a failure of the OWNER or ENGINEER to act within the time specified in the CONTRACT DOCUMENTS, or if no time is specified, within a reasonable time, an adjustment in the CONTRACT PRICE or an extension of the CONTRACT TIME, or both, shall be made by CHANGE ORDER to compensate the CONTRACTOR for the costs and delays necessary caused by the failure of the OWNER or ENGINEER.

18. PAYMENTS TO CONTRACTOR

- 18.1 At least ten (10) days before each progress payment falls due (but not more often than once a month), the CONTRACTOR will submit to the ENGINEER a partial payment estimate filled out and signed by the CONTRACTOR covering the WORK performed during the period covered by the partial payment estimate and supported by such data as the ENGINEER may reasonably require. If payment is requested on the basis of materials and equipment not incorporated in the WORK but delivered and suitably stored at or near the site, the partial payment estimate shall also be accompanied by such supporting data, satisfactory to the OWNER, as will establish the OWNER'S title to the material and equipment and protect his interest therein, including applicable insurance. The ENGINEER will, within ten (10) days after receipt of each partial payment estimate either indicate in writing his approval of payment and present the partial payment estimate to the OWNER, or return the partial payment estimate to the CONTRACTOR indicating in writing his reasons for refusing to approve payment. In the latter case, the CONTRACTOR may make the necessary corrections and resubmit the partial payment estimate. The OWNER will, within thirty (30) days of presentation to him of an approved partial payment estimate, pay the CONTRACTOR a progress payment on the basis of the approved partial payment estimated. The OWNER shall retain five percent (5%) of the amount of each payment until final completion and acceptance of all WORK covered by the CONTRACT DOCUMENTS. On completion and acceptance of a part of the WORK on which the price is

stated separately in the CONTRACT DOCUMENTS, payment may be made in full, including retained percentages, less authorized deductions.

18.2 The request for payment may also include an allowance for the cost of such major materials and equipment which are suitably stored either at or near the site. This shall be verified by paid invoices.

18.3 Payment for materials stored offsite will be allowed in the following manner:

- Receipted bills or paid invoices must be presented with the partial pay estimate.
- Certificates of compliance with the specifications and plan details shall be provided with each pay estimate for the material which is paid for.
- Off-site storage area shall be identified and accessible for inspection.
- The price allowed for the stored materials shall not exceed 80% of the price of the delivered materials.
- Payment for unpaid bills will be limited to 40% of the total cost of the material. Upon proof of payment to the supplier for the materials, an additional 40% shall be paid. When the partial payment is made for the materials, such materials shall become the property of the OWNER but this does not relieve the CONTRACTOR of the responsibility for any loss or damage to such materials until they are incorporated into the work and the work is accepted.

18.4 All WORK covered by partial payment made shall thereupon become the sole property of the OWNER, but this provision shall not be construed as relieving the CONTRACTOR of the sole responsibility for the care and protection of the WORK upon which payments have been made or the restoration of any damaged WORK, or as a waiver of the right of the OWNER to require the fulfillment of all terms of the CONTRACT DOCUMENTS.

18.5 Upon completion and acceptance of the WORK, the ENGINEER shall issue a certificate attached to the final payment request that the WORK has been accepted by him under the conditions of the CONTRACT DOCUMENTS. The entire balance found to be due the CONTRACTOR, including the retained percentages, but except such sums as may be lawfully retained by the OWNER, shall be paid to the CONTRACTOR within thirty (30) days of completion and acceptance of the WORK.

- 18.6 The CONTRACTOR will indemnify and save the OWNER or the OWNER'S agents harmless from all claims growing out of the lawful demands of SUBCONTRACTORS, laborers, workmen, mechanics, material men, and furnishes or machinery and parts thereof, equipment, tools, and all supplies, incurred in the furtherance of the performance of the WORK. The CONTRACTOR shall, at the OWNER'S request, furnish satisfactory evidence that all obligations of the nature designated above have been paid, discharged, or waived. If the CONTRACTOR fails to do so the OWNER may, after having notified the CONTRACTOR, either pay unpaid bills or withhold from the CONTRACTOR'S unpaid compensation a sum of money deemed reasonably sufficient to pay any and all such lawful claims until satisfactory evidence is furnished that all liabilities have been fully discharged whereupon payment to the CONTRACTOR shall be resumed, in accordance with the terms of the CONTRACT DOCUMENTS, but in no event shall the provisions of this sentence be construed to impose any obligations upon the OWNER to either the CONTRACTOR, his SURETY, or any third party. In paying an unpaid bill of the CONTRACTOR, any payment so made by the OWNER shall be considered as a payment made under the CONTRACT DOCUMENTS by the OWNER to the CONTRACTOR and the OWNER shall not be liable to the CONTRACTOR for any such payments made in good faith.
- 18.7 Sales tax on all material shall be paid for by the Contractor. The cost of the tax shall be passed on to CARTA in the appropriate bid items. No separate compensation or waiver will be given for sales tax on this project.

19. ACCEPTANCE OF FINAL PAYMENT AS RELEASE

- 19.1 The acceptance by the CONTRACTOR of final payment shall be and shall operate as a release to the OWNER of all claims and all liability to the CONTRACTOR other than claims in stated amounts as may be specifically excepted by the CONTRACTOR for all things done or furnished in connection with this WORK and for every act and neglect of the OWNER and others relating to or arising out of this WORK. Any payment, however, final or otherwise, shall not release the CONTRACTOR or his sureties from any obligations under the CONTRACT DOCUMENTS or the Performance Bond and Payment Bonds.

20. CONTRACT SECURITY

20.1 The CONTRACTOR shall within ten (10) days after the receipt of the NOTICE OF AWARD furnish the OWNERS with a Performance Bond and a Labor and Material Payment Bond in penal sums equal to the amount of the CONTRACT PRICE, conditioned upon the performance by the CONTRACTOR of all undertakings, covenants, terms, conditions and agreements of the CONTRACT DOCUMENTS, and upon the prompt payment by the CONTRACTOR to all persons supplying labor and materials in the prosecution of the WORK provided by the CONTRACT DOCUMENTS. Such BONDS shall be executed by the CONTRACTOR and a corporate bonding company licensed to transact such business in the State of Tennessee in which the WORK is to be performed and named on the current list of "Surety Companies Acceptable on Federal Bonds" as published in the Treasury Department Circular Number 570. The expense of these BONDS shall be borne by the CONTRACTOR. If at any time a surety on any such BOND is declared a bankrupt or loses its right to do business in the State of Tennessee in which the WORK is to be performed or is removed from the list of Surety Companies accepted on Federal Bonds, CONTRACTOR shall within ten (10) days after notice from the OWNER to do so, substitute an acceptable BOND (or BONDS) in such form and sum and signed by such other surety or sureties as may be satisfactory to the OWNER. The premiums of such BOND shall be paid by the CONTRACTOR. No further payments shall be deemed due not shall be made until the new surety or sureties shall have furnished an acceptable BOND to the OWNER.

21. ASSIGNMENTS

21.1 Neither the CONTRACTOR nor the OWNER shall sell, transfer, assign or otherwise dispose of the Contract or any portion thereof, or of his right, title or interest therein, or his obligations thereunder, without written consent of the other party.

22. SEPARATE CONTRACTS

22.1 The OWNER reserves the right to let other contracts in connection with this PROJECT. The CONTRACTOR shall afford other CONTRACTORS reasonable opportunity for the

introduction and storage of their materials and the execution of their WORK, and shall properly connect and coordinate his WORK with theirs. If the proper execution or results of any part of the CONTRACTOR'S WORK depends upon the WORK of any other CONTRACTOR, the CONTRACTOR shall inspect and promptly report to the ENGINEER any defects in such WORK that render it unsuitable for such proper execution and results.

22.2 The OWNER may perform additional WORK related to the PROJECT by himself, or he may let other contracts containing provisions similar to these. The CONTRACTOR will afford the other CONTRACTORS who are parties to such Contracts (or the OWNER, if he is performing the additional WORK himself), reasonable opportunity for the introduction and storage of materials and equipment and the execution of WORK, and shall properly connect and coordinate his WORK with theirs.

22.3 If the performance of additional WORK by other CONTRACTORS or the OWNERS is not noted in the CONTRACT DOCUMENTS prior to the execution of the CONTRACT, written notice thereof shall be given to the CONTRACTOR prior to starting any such additional WORK. If the CONTRACTOR believes that the performance of such additional WORK by the OWNER or others involves him in additional expense or entitles him to an extension of the CONTRACT TIME, he may make a claim therefore as provided in Sections 14 and 15.

23. SUBCONTRACTING

23.1 The CONTRACTOR may utilize the services of specialty SUBCONTRACTORS on those parts of the WORK which, under normal contracting practices, are performed by specialty CONTRACTORS.

23.2 The CONTRACTOR shall not award WORK to SUBCONTRACTOR(S) ,in excess of fifty percent (50%) of the CONTRACT PRICE, without prior written approval of the OWNER. Assignment of any portion of the work by subcontract must be approved in advance by the OWNER.

23.3 The CONTRACTOR shall be fully responsible to the OWNER for the acts and omissions of his SUBCONTRACTORS, and of persons either directly or indirectly employed by them, as he is for the acts and omissions of persons directly employed by him.

23.4 The CONTRACTOR shall cause appropriate provisions to be inserted in all subcontracts relative to the WORK to bind SUBCONTRACTORS to the CONTRACTOR by the terms of the CONTRACT DOCUMENTS insofar as applicable to the WORK of SUBCONTRACTORS and to give the CONTRACTOR the same power as regards terminating any subcontract that the OWNER may exercise over the CONTRACTOR under any provision of the CONTRACT DOCUMENTS.

23.5 Nothing contained in this CONTRACT shall create any contractual relation between any SUBCONTRACTOR and the OWNER.

24. ENGINEER'S AUTHORITY

24.1 The ENGINEER shall act as the OWNER'S representative during the construction period. He shall decide questions which may arise as to quality and acceptability of materials furnished and WORK performed. He shall interpret the intent of the CONTRACT DOCUMENTS in a fair and unbiased manner. The ENGINEER will make visits to the site and determine if the WORK is proceeding in accordance with the CONTRACT DOCUMENTS.

24.2 The CONTRACTOR will be held strictly to the intent of the CONTRACT DOCUMENTS in regard to the quality of materials, workmanship and execution of the WORK. Inspection may be made at the factory or fabrication plant of the source of material supply.

24.3 The ENGINEER will not be responsible for the construction means, controls, techniques, sequences, procedures, or construction safety.

24.4 The ENGINEER shall promptly make decisions relative to interpretation of the CONTRACT DOCUMENTS.

25. LAND AND RIGHTS-OF-WAYS

25.1 Prior to insurance of NOTICE TO PROCEED, the OWNER shall obtain all land and rights-of-way necessary for carrying out and for the completion of the WORK to be performed pursuant to the CONTRACT DOCUMENTS, unless otherwise mutually agreed.

25.2 The OWNER shall provide to the CONTRACTOR information which delineates and describes the lands owned and rights-of-way acquired.

25.3 The CONTRACTOR shall provide at his own expense and without liability to the OWNER any additional land and access thereto that the CONTRACTOR may desire for temporary construction facilities, or for storage of materials.

26. GUARANTEE

26.1 The CONTRACTOR shall guarantee all materials and equipment furnished and WORK performed for a period of one (1) year from the date of SUBSTANTIAL COMPLETION. The CONTRACTOR warrants and guarantees for a period of one (1) year from the date of SUBSTANTIAL COMPLETION of the system that the completed system is free from all defects due to faulty materials or workmanship and the CONTRACTOR shall promptly make such corrections as may be necessary by reason of such defects including the repairs of any damage to other parts of the system resulting from such defects. The OWNER will give notice of observed defects with reasonable promptness. In the event that the CONTRACTOR shall fail to make such repairs, adjustments, or other WORK that may be made necessary by such defects, the OWNER may do so and charge the CONTRACTOR the cost thereby incurred. The Performance Bond shall remain in full force and effect through the guarantee period.

26.2 Nothing in the above intends or implies that this guarantee shall apply to work which has been abused or neglected by the OWNER.

ACCESS TO RECORDS AND REPORTS

1. Record Retention. The Contractor will retain, and will require its subcontractors of all tiers to retain, complete and readily accessible records related in whole or in part to the contract, including, but not limited to, data, documents, reports, statistics, leases, subcontracts, arrangements, other third party Contracts of any type, and supporting materials related to those records.
2. Retention Period. The Contractor agrees to comply with the record retention requirements in accordance with 2 C.F.R. § 200.334. The Contractor shall maintain all books, records, accounts and reports required under this Contract for a period of at not less than three (3) years after the date of termination or expiration of this Contract, except in the event of litigation or settlement of claims arising from the performance of this Contract, in which case records shall be maintained until the disposition of all such litigation, appeals, claims or exceptions related thereto.
3. Access to Records. The Contractor agrees to provide sufficient access to FTA and its contractors to inspect and audit records and information, including such records and information the contractor or its subcontractors may regard as confidential or proprietary, related to performance of this contract in accordance with 2 CFR § 200.337.
4. Access to the Sites of Performance. The Contractor agrees to permit FTA and its contractors access to the sites of performance under this contract in accordance with 2 CFR § 200.337.

AMERICANS WITH DISABILITIES ACT(ADA)

The contractor agrees to comply with all applicable requirements of section 504 of the Rehabilitation Act of 1973, as amended, 29 U.S.C. § 794, which prohibits discrimination on the basis of handicaps, with the Americans with Disabilities Act of 1990 (ADA), as amended, 42 U.S.C. §§ 12101 et seq., which requires that accessible facilities and services be made available to persons with disabilities, including any subsequent amendments to that Act, and with the Architectural Barriers act of 1968, as amended, 42 U.S.C. §§ 4151 et seq., which requires that buildings and public accommodations be accessible to persons with disabilities, including any subsequent amendments to that Act. In addition, the contractor agrees to comply with any and all applicable requirements issued by the FTA, DOT, DOJ, U.S. GSA, U.S. EEOC, U.S. FCC, any subsequent amendments thereto and any other nondiscrimination statute(s) that may apply to the Project.

BUY AMERICA REQUIREMENTS

The contractor agrees to comply with 49 U.S.C. 5323(j) and 49 C.F.R. part 661 and 2 CFR § 200.322 Domestic preferences for procurements, which provide that Federal funds may not be obligated unless all steel, iron, and manufactured products used in FTA funded projects are produced in the United States, unless a waiver has been granted by FTA or the product is subject to a general waiver. General waivers are listed in 49 C.F.R. § 661.7.

Build America, Buy America Act. Construction materials used in the Project are subject to the domestic preference requirement of the Build America, Buy America Act, Pub. L. 117-58, div. G, tit. IX, §§ 70911 – 70927 (2021), as implemented by the U.S. Office of Management and Budget's "Buy America Preferences for Infrastructure Projects," 2 CFR Part 184. The Recipient acknowledges that this agreement is neither a waiver of § 70914(a) nor a finding under § 70914(b). In accordance with 2 CFR § 184.2(a), the Recipient shall apply the standards of 49 CFR Part 661 to iron, steel, and manufactured products.

Separate requirements for rolling stock are set out at 49 U.S.C. 5323(j)(2)(C), 49 U.S.C. § 5323(u) and 49 C.F.R. § 661.11. Domestic preferences for procurements

The bidder or offeror must submit to the Agency the appropriate Buy America certification. Bids or offers that are not accompanied by a completed Buy America certification will be rejected as nonresponsive. For more information please see the FTA's Buy America webpage at: <https://www.transit.dot.gov/buyamerica>

CARGO PREFERENCE REQUIREMENTS

The contractor agrees:

- a. to use privately owned United States-Flag commercial vessels to ship at least 50 percent of any equipment, materials or commodities procured, contracted for or otherwise obtained with funds granted, guaranteed, loaned, or advanced by the U.S. Government under this agreement, and which may be transported by ocean vessel, shall be transported on privately owned United States-flag commercial vessels, if available. 46 U.S.C. § 55305, and U.S. Maritime Administration regulations, "Cargo Preference – U.S.-Flag Vessels," 46 CFR Part 381.
- b. to furnish within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, 'on-board' commercial ocean bill-of-lading in English for each shipment of cargo described in 46 CFR § 381.7(a)(1) shall be furnished to both the recipient (through the prime contractor in the case of subcontractor bills-of-lading) and to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, DC 20590; and
- c. to include these requirements in all subcontracts issued pursuant to this contract when the subcontract may involve the transport of equipment, material, or commodities by ocean vessel.

CHANGES TO FEDERAL REQUIREMENTS

Federal requirements that apply to the Recipient or the Award, the accompanying Underlying Agreement, and any Amendments thereto may change due to changes in federal law, regulation, other requirements, or guidance, or changes in the Recipient's Underlying Agreement including any information

incorporated by reference and made part of that Underlying Agreement; and

Applicable changes to those federal requirements will apply to each Third Party Agreement and parties thereto at any tier.

CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT

The Contractor agrees to comply with all applicable standards, orders, or regulations issued pursuant to the Clean Air Act (42 U.S.C. § 7401-7671q) and the Federal Water Pollution Control Act as amended (33 U.S.C. § 1251-1387). Violations must be reported to FTA and the Regional Office of the Environmental Protection Agency. The following applies for contracts of amounts in excess of \$150,000:

Clean Air Act

(1) The contractor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act, as amended, 42 U.S.C. § 7401 et seq.

(2) The contractor agrees to report each violation to the Agency and understands and agrees that the Agency will, in turn, report each violation as required to assure notification to the Agency, Federal Emergency Management Agency, and the appropriate Environmental Protection Agency Regional Office.

(3) The contractor agrees to include these requirements in each subcontract exceeding \$150,000 financed in whole or in part with Federal assistance provided by FTA.

Federal Water Pollution Control Act

(1) The contractor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Federal Water Pollution Control Act, as amended, 33 U.S.C. 1251 et seq.

(2) The contractor agrees to report each violation to the Agency and understands and agrees that the Agency will, in turn, report each violation as required to assure notification to the Agency, Federal Emergency Management Agency, and the appropriate Environmental Protection Agency Regional Office.

(3) The contractor agrees to include these requirements in each subcontract exceeding \$150,000 financed in whole or in part with Federal assistance provided by FTA."

CIVIL RIGHTS LAWS AND REGULATIONS

The following Federal Civil Rights laws and regulations apply to all contracts.

The Contractor and any subcontractor agree to comply with all the requirements prohibiting discrimination on the basis of race, color, or national origin of the Title VI of the Civil Rights Act of 1964, as amended 52 U.S.C 2000d, and U.S. DOT regulation "Nondiscrimination in Federally-Assisted Programs of the Department of Transportation – Effectuation of the Title VI of the Civil rights Act," 49 C.F. R. Part 21 and any implementing requirement FTA may issue.

1 Federal Equal Employment Opportunity (EEO) Requirements. These include, but are not limited to:

a) Nondiscrimination in Federal Public Transportation Programs. 49 U.S.C. § 5332, covering projects, programs, and activities financed under 49 U.S.C. Chapter 53, prohibits discrimination on the basis of race, color, religion, national origin, sex (including sexual orientation), disability, or age, and prohibits discrimination in employment or business opportunity.

b) Prohibition against Employment Discrimination. Title VII of the Civil Rights Act of 1964, as amended, 42 U.S.C. § 2000e, Title VI of the Civil Rights Act of 1964," 49 CFR Part 21, and 49 U.S.C. § 5332, prohibits discrimination in employment on the basis of race, color, religion, sex, or national origin.

2 Nondiscrimination on the Basis of Sex. Title IX of the Education Amendments of 1972, as amended, 20 U.S.C. § 1681 et seq. and implementing Federal regulations, "Nondiscrimination on the Basis of Sex in Education Programs or Activities Receiving Federal Financial Assistance," 49 C.F.R. part 25 prohibit discrimination on the basis of sex.

3 Nondiscrimination on the Basis of Age. The "Age Discrimination Act of 1975," as amended, 42 U.S.C. § 6101 et seq., and Department of Health and Human Services implementing regulations, "Nondiscrimination on the Basis of Age in Programs or Activities Receiving Federal Financial Assistance," 45 C.F.R. part 90, prohibit discrimination by participants in federally assisted programs against individuals on the basis of age. The Age Discrimination in Employment Act (ADEA), 29 U.S.C. § 621 et seq., and Equal Employment Opportunity Commission (EEOC) implementing regulations, "Age Discrimination in Employment Act," 29 C.F.R. part 1625, also prohibit employment discrimination against individuals age 40 and over on the basis of age.

4 Federal Protections for Individuals with Disabilities. The Americans with Disabilities Act of 1990, as amended (ADA), 42 U.S.C. § 12101 et seq., prohibits discrimination against qualified individuals with disabilities in programs, activities, and services, and imposes specific requirements on public and private entities. Third party contractors must comply with their responsibilities under Titles I, II, III, IV, and V of the ADA in employment, public services, public accommodations, telecommunications, and other provisions, many of which are subject to regulations issued by other Federal agencies.

Civil Rights and Equal Opportunity

The Agency is an Equal Opportunity Employer. As such, the Agency agrees to comply with all applicable Federal civil rights laws and implementing regulations. Apart from inconsistent requirements imposed by Federal laws or regulations, the Agency agrees to comply with the requirements of 49 U.S.C. § 5323(h) (3) by not using any Federal assistance awarded by FTA to support procurements using exclusionary or discriminatory specifications. Under this Contract, the Contractor shall at all times comply with the following requirements and shall include these requirements in each subcontract entered into as part thereof.

1. Nondiscrimination. In accordance with Federal transit law at 49 U.S.C. § 5332, the Contractor agrees that it will not discriminate against any employee or applicant for employment because of race, color, religion, national origin, sex, disability, or age. In addition, the Contractor agrees to comply with applicable Federal implementing regulations and other implementing requirements FTA may issue.

2. Equal Employment Opportunity. In accordance with Title VII of the Civil Rights Act, as amended, 42 U.S.C. § 2000e et seq., Title I of the Americans with Disabilities Act of 1990, as amended, 42 U.S.C. §§ 12101, et seq.; and Federal transit laws at 49 U.S.C. § 5332, the Contractor agrees to comply with all applicable equal employment opportunity requirements, without regard to their race, color, religion, national origin, or sex (including sexual orientation). In addition, the Contractor agrees to comply with any implementing requirements FTA may issue.

3. Age. In accordance with the Age Discrimination in Employment Act, 29 U.S.C. §§ 621-634, U.S. Equal Employment Opportunity Commission (U.S. EEOC) regulations, "Age Discrimination in Employment Act," 29 C.F.R. part 1625, the Age Discrimination Act of 1975, as amended, 42 U.S.C. § 6101 et seq., U.S. Health and Human Services regulations, "Nondiscrimination on the Basis of Age in Programs or Activities Receiving Federal Financial Assistance," 45 C.F.R. part 90, and Federal transit law at 49 U.S.C. § 5332, the Contractor agrees to refrain from discrimination against present and prospective employees for reason of age. In addition, the Contractor agrees to comply with any Implementing requirements FTA may issue.

4.Disabilities. In accordance with section 504 of the Rehabilitation Act of 1973, as amended, 29 U.S.C. § 794, the Americans with Disabilities Act of 1990, as amended, 42 U.S.C. § 12101 et seq., the Architectural Barriers Act of 1968, as amended, 42 U.S.C. § 4151 et seq., and Federal transit law at 49 U.S.C. § 5332, the Contractor agrees that it will not discriminate against individuals on the basis of disability. In addition, the Contractor agrees to comply with any implementing requirements FTA may issue.

5. Federal Law and Public Policy Requirements. The Contractor shall ensure that Federal funding is expended in full accordance with the U.S. Constitution, Federal Law, and statutory and public policy requirements: including, but not limited to, those protecting free speech, religious liberty, public welfare, the environment, and prohibiting discrimination.

CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

- a. Applicability: This requirement applies to all FTA grant and cooperative agreement programs.
- b. Where applicable (see 40 U.S.C. § 3701), all contracts awarded by the non-Federal entity in excess of \$100,000 that involve the employment of mechanics or laborers must include a provision for compliance with 40 U.S.C. §§ 3702 and 3704, as supplemented by Department of Labor regulations at 29 C.F.R. Part 5. See 2 C.F.R. Part 200, Appendix II.
- c. Under 40 U.S.C. § 3702, each contractor must be required to compute the wages of every mechanic and laborer on the basis of a standard work week of 40 hours. Work in excess of the standard work week is permissible provided that the worker is compensated at a rate of not less than one and a half times the basic rate of pay for all hours worked in excess of 40 hours in the work week.
- d. The requirements of 40 U.S.C. § 3704 are applicable to construction work and provide that no laborer or mechanic must be required to work in surroundings or under working conditions which are unsanitary, hazardous or dangerous. These requirements do not apply to the purchases of supplies or materials or articles ordinarily available on the open market, or contracts for transportation or transmission of intelligence.
- e. The regulation at 29 C.F.R. § 5.5(b) provides the required contract clause concerning compliance with the Contract Work Hours and Safety Standards Act:

Compliance with the Contract Work Hours and Safety Standards Act.

- (1) Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.
- (2) Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (1) of this section the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1) of this section.
- (3) Withholding for unpaid wages and liquidated damages. The agency shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2) of this section.
- (4) Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1) through (4) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1) through (4) of this section."

DAVIS BACON ACT AND COPELAND ANTI-KICKBACK ACT

For all prime construction, alteration or repair contracts in excess of \$2,000 awarded by FTA, the Contractor shall comply with the Davis-Bacon Act and the Copeland "Anti-Kickback" Act. Under 49 U.S.C. § 5333(a), prevailing wage protections apply to laborers and mechanics employed on FTA assisted construction, alteration, or repair projects. The Contractor will comply with the Davis-Bacon Act, 40 U.S.C. §§ 3141-3144, and 3146-3148 as supplemented by DOL regulations at 29 C.F.R. part 5, "Labor Standards Provisions Applicable to Contracts Governing Federally Financed and Assisted Construction." In accordance with the statute, the Contractor shall pay wages to laborers and mechanics at a rate not less than the prevailing wages specified in a wage determination made by the Secretary of Labor. In addition, the Contractor agrees to pay wages not less than once a week. The Contractor shall also comply with the Copeland "Anti-Kickback" Act (40 U.S.C. § 3145), as supplemented by DOL regulations at 29 C.F.R. part 3, "Contractors and Subcontractors on Public Building or Public Work Financed in Whole or in part by Loans or Grants from the United States." The Contractor is prohibited from inducing, by any means, any person employed in the construction, completion, or repair of public work, to give up any part of the compensation to which he or she is otherwise entitled.

DISADVANTAGED BUSINESS ENTERPRISE (DBE)

(Does not apply to projects fully funded by the Tribal Transportation Program (TTP).)

It is the policy of the Agency and the United States Department of Transportation ("DOT") that Disadvantaged Business Enterprises ("DBE's"), as defined herein and in the Federal regulations published at 49 C.F.R. part 26, shall have an equal opportunity to participate in DOT-assisted contracts.

The contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 C.F.R. part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the Agency deems appropriate, which may include, but is not limited to:

- (1) Withholding monthly progress payments;
- (2) Assessing sanctions;
- (3) Liquidated damages; and/or
- (4) Disqualifying the contractor from future bidding as non-responsible. 49 C.F.R. § 26.13(b).

Prime contractors are required to pay subcontractors for satisfactory performance of their contracts no later than 30 days from receipt of each payment the Agency makes to the prime contractor. 49 C.F.R. § 26.29(a).

Finally, for contracts with defined DBE contract goals, the contractor shall utilize the specific DBEs listed unless the contractor obtains the Agency's written

consent; and that, unless the Agency's consent is provided, the contractor shall not be entitled to any payment for work or material unless it is performed or supplied by the listed DBE. 49 C.F.R. § 26.53(f) (1).

DOMESTIC PREFERENCES FOR PROCUREMENTS

a. The recipient or subrecipient should, to the greatest extent practicable and consistent with law, provide a preference for the purchase, acquisition, or use of goods, products, or materials produced in the United States (including but not limited to iron, aluminum, steel, cement, and other manufactured products). The requirements of this section must be included in all subawards, contracts, and purchase orders under Federal awards.

b. For purposes of this section:

(1) "Produced in the United States" means, for iron and steel products, that all manufacturing processes, from the initial melting stage through the application of coatings, occurred in the United States.

(2) "Manufactured products" means items and construction materials composed in whole or in part of non-ferrous metals such as aluminum; plastics and polymer-based products such as polyvinyl chloride pipe; aggregates such as concrete; glass, including optical fiber; and lumber.

c. Federal agencies providing Federal financial assistance for infrastructure projects must implement the Buy America preferences set forth in 2 CFR 184.

DEBARMENT AND SUSPENSION

Debarment and Suspension (Executive Orders 12549 and 12689). A covered transaction (see 2 C.F.R. §§ 180.220 and 1200.220) must not be entered into with any party listed on the governmentwide exclusions in the System for Award Management (SAM), in accordance with the OMB guidelines at 2 C.F.R. 180 that implement Executive Orders 12549 (31 U.S.C. § 6101 note, 51 Fed. Reg. 6370,) and 12689 (31 U.S.C. § 6101 note, 54 Fed. Reg. 34131), "Debarment and Suspension." SAM Exclusions contains the names of parties debarred, suspended, or otherwise excluded by agencies, as well as parties declared ineligible under statutory or regulatory authority other than Executive Order 12549. The Recipient agrees to include, and require each Third Party Participant to include, a similar provision in each lower tier covered transaction, ensuring that each lower tier Third Party Participant:

(1) Complies with federal debarment and suspension requirements; and

(2) Reviews the SAM at <https://www.sam.gov>, if necessary to comply with U.S. DOT regulations, 2 CFR Part 1200.

ENERGY CONSERVATION

The contractor agrees to comply with mandatory standards and policies relating to energy efficiency, which are contained in the state energy conservation plan issued in compliance with the Energy Policy and Conservation Act (42 U.S.C. § 6201).

FLY AMERICA

a) Definitions. As used in this clause—

1) "International air transportation" means transportation by air between a place in the United States and a place outside the United States or between two places both of which are outside the United States. 2) "United States" means the 50 States, the District of Columbia, and outlying areas. 3) "U.S.-flag air carrier" means an air carrier holding a certificate under 49 U.S.C. Chapter 411.

b) When Federal funds are used to fund travel, Section 5 of the International Air Transportation Fair Competitive Practices Act of 1974 (49 U.S.C. 40118) (Fly America Act) requires contractors, Agencies, and others use U.S.-flag air carriers for U.S. Government-financed international air transportation of personnel (and their personal effects) or property, to the extent that service by those carriers is available. It requires the Comptroller General of the United States, in the absence of satisfactory proof of the necessity for foreign-flag air transportation, to disallow expenditures from funds, appropriated or otherwise established for the account of the United States, for international air transportation secured aboard a foreign-flag air carrier if a U.S.-flag air carrier is available to provide such services.

c) If available, the Contractor, in performing work under this contract, shall use U.S.-flag carriers for international air transportation of personnel (and their personal effects) or property.

d) In the event that the Contractor selects a carrier other than a U.S.-flag air carrier for international air transportation, the Contractor shall include a statement on vouchers involving such transportation essentially as follows:

Statement of Unavailability of U.S.-Flag Air Carriers

International air transportation of persons (and their personal effects) or property by U.S.-flag air carrier was not available or it was necessary to use foreign-flag air carrier service for the following reasons. See FAR § 47.403. [State reasons]:

e) Contractor shall include the substance of this clause, including this paragraph (e), in each subcontract or purchase under this contract that may involve international air transportation.

INCORPORATION OF FEDERAL TRANSIT ADMINISTRATION (FTA) TERMS

The provisions within include, in part, certain Standard Terms and Conditions required under the Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards (2 CFR § 200), whether or not expressly set forth in the preceding contract provisions. All contractual provisions required by DOT, detailed in 2 CFR § 200 or as amended by 2 CFR § 1201, or the most recent version of FTA Circular 4220.1 are hereby incorporated by reference. Anything to the contrary herein notwithstanding, all mandated terms shall be deemed to control in the event of a conflict with other provisions contained in this Contract. The Contractor shall not perform any act, fail to perform any act, or refuse to comply with any request which would cause a violation of the FTA terms and conditions.

NO GOVERNMENT OBLIGATION TO THIRD PARTIES

The Recipient and Contractor acknowledge and agree that, notwithstanding any concurrence by the Federal Government in or approval of the solicitation or award of the underlying Contract, absent the express written consent by the Federal Government, the Federal Government is not a party to this Contract and shall not be subject to any obligations or liabilities to the Recipient, Contractor or any other party (whether or not a party to that contract) pertaining to any matter resulting from the underlying Contract. The Contractor agrees to include the above clause in each subcontract financed in whole or in part with Federal assistance provided by the FTA. It is further agreed that the clause shall not be modified, except to identify the subcontractor who will be subject to its provisions.

NOTICE TO FTA AND U.S. DOT INSPECTOR GENERAL OF INFORMATION RELATED TO FRAUD, WASTE, ABUSE, OR OTHER LEGAL MATTERS

If a current or prospective legal matter that may affect the Federal Government emerges, the Recipient must promptly notify the FTA Chief Counsel and FTA Regional Counsel for the Region in which the Recipient is located. The Recipient must include a similar notification requirement in its Third Party Agreements and must require each Third Party Participant to include an equivalent provision in its subagreements at every tier, for any agreement that is a "covered transaction" according to 2 C.F.R. §§ 180.220 and 1200.220.

(1) The types of legal matters that require notification include, but are not limited to, a major dispute, breach, default, litigation, or naming the Federal Government as a party to litigation or a legal disagreement in any forum for any reason.

(2) Matters that may affect the Federal Government include, but are not limited to, the Federal Government's interests in the Award, the accompanying Underlying Agreement, and any Amendments thereto, or the Federal Government's administration or enforcement of federal laws, regulations, and requirements.

(3) The Recipient must promptly notify the U.S. DOT Inspector General in addition to the FTA Chief Counsel or Regional Counsel for the Region in which the Recipient is located, if the Recipient has knowledge of potential fraud, waste, or abuse occurring on a Project receiving assistance from FTA. The notification provision applies if a person has or may have submitted a false claim under the False Claims Act, 31 U.S.C. § 3729 et seq., or has or may have committed a criminal or civil violation of law pertaining to such matters as fraud, conflict of interest, bribery, gratuity, or similar misconduct. This responsibility occurs whether the Project is subject to this Agreement or another agreement between the Recipient and FTA, or an agreement involving a principal, officer, employee, agent, or Third Party Participant of the Recipient. It also applies to subcontractors at any tier. Knowledge, as used in this paragraph, includes, but is not limited to, knowledge of a criminal or civil investigation by a Federal, state, or local law enforcement or other investigative agency, a criminal indictment or civil complaint, or probable cause that could support a criminal indictment, or any other credible information in the possession of the Recipient.

PROGRAM FRAUD AND FALSE OR FRAUDULENT STATEMENTS AND RELATED ACTS

The Contractor acknowledges that the provisions of the Program Fraud Civil Remedies Act of 1986, as amended, 31 U.S.C. § 3801 et seq. and U.S. DOT regulations, "Program Fraud Civil Remedies," 49 C.F.R. part 31, apply to its actions pertaining to this Project. Upon execution of the underlying contract, the Contractor certifies or affirms the truthfulness and accuracy of any statement it has made, it makes, it may make, or causes to be made, pertaining to the underlying contract or the FTA assisted project for which this contract work is being performed. In addition to other penalties that may be applicable, the Contractor further acknowledges that if it makes, or causes to be made, a false, fictitious, or fraudulent claim, statement, submission, or certification, the Federal Government reserves the right to impose the penalties of the Program Fraud Civil Remedies Act of 1986 on the Contractor to the extent the Federal Government deems appropriate.

The Contractor also acknowledges that if it makes, or causes to be made, a false, fictitious, or fraudulent claim, statement, submission, or certification to the Federal Government under a contract connected with a project that is financed in whole or in part with Federal assistance originally awarded by FTA under the authority of 49 U.S.C. chapter 53, the Government reserves the right to impose the penalties of 18 U.S.C. § 1001 and 49 U.S.C. § 5323(l) on the Contractor, to the extent the Federal Government deems appropriate.

The Contractor agrees to include the above two clauses in each subcontract financed in whole or in part with Federal assistance provided by FTA. It is further agreed that the clauses shall not be modified, except to identify the subcontractor who will be subject to the provisions.

PROHIBITION ON CERTAIN TELECOMMUNICATIONS AND VIDEO SURVEILLANCE SERVICES OR EQUIPMENT.

a) Recipients and subrecipients are prohibited from obligating or expending loan or grant funds to:

- 1) Procure or obtain covered telecommunications equipment or services;
- 2) Extend or renew a contract to procure or obtain covered telecommunications equipment or services; or
- 3) Enter into a contract (or extend or renew a contract) to procure or obtain covered telecommunications equipment or services.

(b) As described in section 889 of Public Law 115-232, "covered telecommunications equipment or services" means any of the following:

- (1) Telecommunications equipment produced by Huawei Technologies Company or ZTE Corporation (or any subsidiary or affiliate of such entities);
- (2) For the purpose of public safety, security of government facilities, physical security surveillance of critical infrastructure, and other national security purposes, video surveillance and telecommunications equipment produced by Hytera Communications Corporation, Hangzhou Hikvision Digital Technology Company, or Dahua Technology Company (or any subsidiary or affiliate of such entities);
- (3) Telecommunications or video surveillance services provided by such entities or using such equipment;
- (4) Telecommunications or video surveillance equipment or services produced or provided by an entity that the Secretary of Defense, in consultation with the Director of the National Intelligence or the Director of the Federal Bureau of Investigation, reasonably believes to be an entity owned or controlled by, or otherwise connected to, the government of a covered foreign country;

(c) For the purposes of this section, "covered telecommunications equipment or services" also include systems that use covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system.

(d) In implementing the prohibition under section 889 of Public Law 115-232, heads of executive agencies administering loan, grant, or subsidy programs must prioritize available funding and technical support to assist affected businesses, institutions and organizations as is reasonably necessary for those affected entities to transition from covered telecommunications equipment or services, to procure replacement equipment or services, and to ensure that communications service to users and customers is sustained.

(e) When the recipient or subrecipient accepts a loan or grant, it is certifying that it will comply with the prohibition on covered telecommunications equipment and services in this section. The recipient or subrecipient is not required to certify that funds will not be expended on covered telecommunications equipment or services beyond the certification provided upon accepting the loan or grant and those provided upon submitting payment requests and financial reports.

(f) For additional information, see section 889 of Public Law 115-232 and 200.471.

PROMPT PAYMENT

(Does not apply to projects fully funded by the Tribal Transportation Program (TTP).)

The contractor is required to pay its subcontractors performing work related to this contract for satisfactory performance of that work no later than 30 days after the contractor's receipt of payment for that work. In addition, the contractor is required to return any retainage payments to those subcontractors within 30 days after the subcontractor's work related to this contract is satisfactorily completed.

The contractor must promptly notify the Agency, whenever a DBE subcontractor performing work related to this contract is terminated or fails to complete its work and must make good faith efforts to engage another DBE subcontractor to perform at least the same amount of work. The contractor may not terminate any DBE subcontractor and perform that work through its own forces or those of an affiliate without prior written consent of the Agency.

RESTRICTIONS ON LOBBYING

Conditions on use of funds.

(a) No appropriated funds may be expended by the recipient of a Federal contract, grant, loan, or cooperative agreement to pay any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with any of the following covered Federal actions: the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

(b) Each person who requests or receives from an agency a Federal contract, grant, loan, or cooperative agreement shall file with that agency a certification, that the person has not made, and will not make, any payment prohibited by paragraph (a) of this section.

(c) Each person who requests or receives from an agency a Federal contract, grant, loan, or a cooperative agreement shall file with that agency a disclosure form if such person has made or has agreed to make any payment using nonappropriated funds (to include profits from any covered Federal action), which would be prohibited under paragraph (a) of this section if paid for with appropriated funds.

(d) Each person who requests or receives from an agency a commitment providing for the United States to insure or guarantee a loan shall file with that agency a statement, whether that person has made or has agreed to make any payment to influence or attempt to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with that loan insurance or guarantee.

(e) Each person who requests or receives from an agency a commitment providing for the United States to insure or guarantee a loan shall file with that agency a disclosure form if that person has made or has agreed to make any payment to influence or attempt to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with that loan insurance or guarantee.

Certification and disclosure.

(a) Each person shall file a certification, and a disclosure form, if required, with each submission that initiates agency consideration of such person for:

- (1) Award of a Federal contract, grant, or cooperative agreement exceeding \$100,000; or
- (2) An award of a Federal loan or a commitment providing for the United States to insure or guarantee a loan exceeding \$150,000.

(b) Each person shall file a certification, and a disclosure form, if required, upon receipt by such person of:

- (1) A Federal contract, grant, or cooperative agreement exceeding \$100,000; or
- (2) A Federal loan or a commitment providing for the United States to insure or guarantee a loan exceeding \$150,000,

Unless such person previously filed a certification, and a disclosure form, if required, under paragraph (a) of this section.

(c) Each person shall file a disclosure form at the end of each calendar quarter in which there occurs any event that requires disclosure or that materially affects the accuracy of the information contained in any disclosure form previously filed by such person under paragraphs (a) or (b) of this section. An event that materially affects the accuracy of the information reported includes:

- (1) A cumulative increase of \$25,000 or more in the amount paid or expected to be paid for influencing or attempting to influence a covered Federal action; or
- (2) A change in the person(s) or individual(s) influencing or attempting to influence a covered Federal action; or,
- (3) A change in the officer(s), employee(s), or Member(s) contacted to influence or attempt to influence a covered Federal action.

(d) Any person who requests or receives from a person referred to in paragraphs (a) or (b) of this section:

- (1) A subcontract exceeding \$100,000 at any tier under a Federal contract;
- (2) A subgrant, contract, or subcontract exceeding \$100,000 at any tier under a Federal grant;
- (3) A contract or subcontract exceeding \$100,000 at any tier under a Federal loan exceeding \$150,000; or,
- (4) A contract or subcontract exceeding \$100,000 at any tier under a Federal cooperative agreement,

Shall file a certification, and a disclosure form, if required, to the next tier above.

(e) All disclosure forms, but not certifications, shall be forwarded from tier to tier until received by the person referred to in paragraphs (a) or (b) of this section. That person shall forward all disclosure forms to the agency.

(f) Any certification or disclosure form filed under paragraph (e) of this section shall be treated as a material representation of fact upon which all receiving tiers shall rely. All liability arising from an erroneous representation shall be borne solely by the tier filing that representation and shall not be shared by any tier to which the erroneous representation is forwarded. Submitting an erroneous certification or disclosure constitutes a failure to file the required certification or disclosure, respectively. If a person fails to file a required certification or disclosure, the United States may pursue all available remedies, including those authorized by section 1352, title 31, U.S. Code.

(g) For awards and commitments in process prior to December 23, 1989, but not made before that date, certifications shall be required at award or commitment, covering activities occurring between December 23, 1989, and the date of award or commitment. However, for awards and commitments in process prior to the December 23, 1989 effective date of these provisions, but not made before December 23, 1989, disclosure forms shall not be required at time of award or commitment but shall be filed within 30 days.

(h) No reporting is required for an activity paid for with appropriated funds if that activity is allowable under either subpart B or C.

SAFE OPERATION OF MOTOR VEHICLES

Seat Belt Use

The Contractor is encouraged to adopt and promote on-the-job seat belt use policies and programs for its employees and other personnel that operate company-owned vehicles, company rented vehicles, or personally operated vehicles. The terms "company-owned" and "company-leased" refer to vehicles owned or leased either by the Contractor or Agency.

Distracted Driving

The Contractor agrees to adopt and enforce workplace safety policies to decrease crashes caused by distracted drivers, including policies to ban text messaging while using an electronic device supplied by an employer, and driving a vehicle the driver owns or rents, a vehicle Contractor owns, leases, or rents, or a privately-owned vehicle when on official business in connection with the work performed under this Contract.

SEISMIC SAFETY

The contractor agrees that any new building or addition to an existing building will be designed and constructed in accordance with the standards for Seismic Safety required in Department of Transportation (DOT) Seismic Safety Regulations 49 C.F.R. part 41 and will certify to compliance to the extent required by the regulation. The contractor also agrees to ensure that all work performed under this contract, including work performed by a subcontractor, is in compliance with the standards required by the Seismic Safety regulations and the certification of compliance issued on the project.

SOLID WASTES (RECOVERED MATERIALS)

(a) A Recipient or subrecipient that is a State agency or agency of a political subdivision of a State and its contractors must comply with section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976 as amended, 42 U.S.C. 6962. The requirements of Section 6002 include procuring only items designated in the guidelines of the Environmental Protection Agency (EPA) at 40 CFR Part 247 that contain the highest percentage of recovered materials practicable, consistent with maintaining a satisfactory level of competition, where the purchase price of the item exceeds \$10,000 or the value of the quantity acquired during the preceding fiscal year exceeded \$10,000; procuring solid waste management services in a manner that maximizes energy and resource recovery; and establishing an affirmative

procurement program for procurement of recovered materials identified in the EPA guidelines.

(b) The recipient or subrecipient should, to the greatest extent practicable and consistent with law, purchase, acquire, or use products and services that can be reused, refurbished, or recycled; contain recycled content, are biobased, or are energy and water efficient; and are sustainable. This may include purchasing compostable items and other products and services that reduce the use of single-use plastic products. See Executive Order 14057, section 101, Policy.

SPECIAL NOTIFICATION REQUIREMENTS FOR STATES

Applies to States –

a. To the extent required under federal law, the State, as the Recipient, agrees to provide the following information about federal assistance awarded for its State Program, Project, or related activities:

- (1) The Identification of FTA as the federal agency providing the federal assistance for a State Program or Project;
- (2) The Catalog of Federal Domestic Assistance Number of the program from which the federal assistance for a State Program or Project is authorized; and
- (3) The amount of federal assistance FTA has provided for a State Program or Project.

b. Documents - The State agrees to provide the information required under this provision in the following documents:

- (1) applications for federal assistance,
- (2) requests for proposals or solicitations,
- (3) forms,
- (4) notifications,
- (5) press releases,
- (6) other publications.

TERMINATION

Termination for Convenience (General Provision)

The Agency may terminate this contract, in whole or in part, at any time by written notice to the Contractor when it is in the Agency's best interest. The Contractor shall be paid its costs, including contract close-out costs, and profit on work performed up to the time of termination. The Contractor shall promptly submit its termination claim to Agency to be paid the Contractor. If the Contractor has any property in its possession belonging to Agency, the Contractor will account for the same, and dispose of it in the manner Agency directs.

Termination for Default [Breach or Cause] (General Provision)

If the Contractor does not deliver supplies in accordance with the contract delivery schedule, or if the contract is for services, the Contractor fails to perform in the manner called for in the contract, or if the Contractor fails to comply with any other provisions of the contract, the Agency may terminate this contract for default. Termination shall be effected by serving a Notice of Termination on the Contractor setting forth the manner in which the Contractor is in default. The Contractor will be paid only the contract price for supplies delivered and accepted, or services performed in accordance with the manner of performance set forth in the contract. If it is later determined by the Agency that the Contractor had an excusable reason for not performing, such as a strike, fire, or flood, events which are not the fault of or are beyond the control of the Contractor, the Agency, after setting up a new delivery of performance schedule, may allow the Contractor to continue work, or treat the termination as a Termination for Convenience.

Opportunity to Cure (General Provision)

The Agency, in its sole discretion may, in the case of a termination for breach or default, allow the Contractor [an appropriately short period of time] in which to cure the defect. In such case, the Notice of Termination will state the time period in which cure is permitted and other appropriate conditions

If Contractor fails to remedy to Agency's satisfaction the breach or default of any of the terms, covenants, or conditions of this Contract within [10 days] after receipt by Contractor of written notice from Agency setting forth the nature of said breach or default, Agency shall have the right to terminate the contract without any further obligation to Contractor. Any such termination for default shall not in any way operate to preclude Agency from also pursuing all available remedies against Contractor and its sureties for said breach or default.

Waiver of Remedies for any Breach

In the event that Agency elects to waive its remedies for any breach by Contractor of any covenant, term or condition of this contract, such waiver by Agency shall not limit Agency's remedies for any succeeding breach of that or of any other covenant, term, or condition of this contract.

Termination for Convenience (Professional or Transit Service Contracts)

The Agency, by written notice, may terminate this contract, in whole or in part, when it is in the Agency's interest. If this contract is terminated, the Agency shall be liable only for payment under the payment provisions of this contract for services rendered before the effective date of termination.

Termination for Default (Supplies and Service)

If the Contractor fails to deliver supplies or to perform the services within the time specified in this contract or any extension, or if the Contractor fails to comply with any other provisions of this contract, the Agency may terminate this contract for default. The Agency shall terminate by delivering to the Contractor a Notice of Termination specifying the nature of the default. The Contractor will only be paid the contract price for supplies delivered and accepted, or services performed in accordance with the manner or performance set forth in this contract. If, after termination for failure to fulfill contract obligations, it is determined that the Contractor was not in default, the rights and obligations of the parties shall be the same as if the termination had been issued for the convenience of the Agency.

Termination for Default (Transportation Services)

If the Contractor fails to pick up the commodities or to perform the services, including delivery services, within the time specified in this contract or any extension, or if the Contractor fails to comply with any other provisions of this contract, the Agency may terminate this contract for default. The Agency shall terminate by delivering to the Contractor a Notice of Termination specifying the nature of default. The Contractor will only be paid the contract price for services performed in accordance with the manner of performance set forth in this contract.

If this contract is terminated while the Contractor has possession of Agency goods, the Contractor shall, upon direction of the Agency, protect and preserve the goods until surrendered to the Agency or its agent. The Contractor and Agency shall agree on payment for the preservation and protection of goods. Failure to agree on an amount will be resolved under the Dispute clause.

If, after termination for failure to fulfill contract obligations, it is determined that the Contractor was not in default, the rights and obligations of the parties shall be the same as if the termination had been issued for the convenience of the Agency.

Termination for Default (Construction)

If the Contractor refuses or fails to prosecute the work or any separable part, with the diligence that will ensure its completion within the time specified in this contract or any extension or fails to complete the work within this time, or if the Contractor fails to comply with any other provision of this contract, Agency may terminate this contract for default. The Agency shall terminate by delivering to the Contractor a Notice of Termination specifying the nature of the default. In this event, the Agency 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 the Agency resulting from the Contractor's refusal or failure to complete the work within specified time, whether or not the Contractor's right to proceed with the work is terminated. This liability includes any increased costs incurred by the Agency in completing the work.

The Contractor's right to proceed shall not be terminated nor shall the Contractor be charged with damages under this clause 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: acts of God, acts of Agency, acts of another contractor in the performance of a contract with Agency, epidemics, quarantine restrictions, strikes, freight embargoes; and 2. The Contractor, within [10] days from the beginning of any delay, notifies Agency in writing of the causes of delay. If, in the judgment of Agency, the delay is excusable, the time for completing the work shall be extended. The judgment of Agency shall be final and conclusive for the parties, but subject to appeal under the Disputes clause(s) of this contract. 3. 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 Agency.

Termination for Convenience or Default (Architect and Engineering)

The Agency may terminate this contract in whole or in part, for the Agency's convenience or because of the failure of the Contractor to fulfill the contract obligations. The Agency shall terminate by delivering to the Contractor a Notice of Termination specifying the nature, extent, and effective date of the termination. Upon receipt of the notice, the Contractor shall (1) immediately discontinue all services affected (unless the notice directs otherwise), and (2) deliver to the Agency's Contracting Officer all data, drawings, specifications, reports, estimates, summaries, and other information and materials accumulated in performing this contract, whether completed or in process. Agency has a royalty-free, nonexclusive, and irrevocable license to reproduce, publish or otherwise use, all such data, drawings, specifications, reports, estimates, summaries, and other information and materials.

If the termination is for the convenience of the Agency, the Agency's Contracting Officer shall make an equitable adjustment in the contract price but shall allow no anticipated profit on unperformed services.

If the termination is for failure of the Contractor to fulfill the contract obligations, the Agency may complete the work by contract or otherwise and the Contractor shall be liable for any additional cost incurred by the Agency.

If, after termination for failure to fulfill contract obligations, it is determined that the Contractor was not in default, the rights and obligations of the parties shall be the same as if the termination had been issued for the convenience of Agency

Termination for Convenience or Default (Cost-Type Contracts)

The Agency may terminate this contract, or any portion of it, by serving a Notice of Termination on the Contractor. The notice shall state whether the termination is for convenience of Agency or for the default of the Contractor. If the termination is for default, the notice shall state the manner in which the Contractor has failed to perform the requirements of the contract. The Contractor shall account for any property in its possession paid for from funds received from the Agency, or property supplied to the Contractor by the Agency. If the termination is for default, the Agency may fix the fee, if the contract provides for a fee, to be paid the Contractor in proportion to the value, if any, of work performed up to the time of termination. The Contractor shall promptly submit its termination claim to the Agency and the parties shall negotiate the termination settlement to be paid the Contractor.

If the termination is for the convenience of Agency, the Contractor shall be paid its contract close-out costs, and a fee, if the contract provided for payment of a fee, in proportion to the work performed up to the time of termination.

If, after serving a Notice of Termination for Default, the Agency determines that the Contractor has an excusable reason for not performing, the Agency, after setting up a new work schedule, may allow the Contractor to continue work, or treat the termination as a Termination for Convenience.

VETERANS HIRING PREFERENCE

Veterans Employment - Construction contracts of Federal financial assistance shall ensure that contractors working on a capital project funded using such assistance give a hiring preference, to the extent practicable, to veterans (as defined in section 2108 of title 5) who have the requisite skills and abilities to perform the construction work required under the contract. This subsection shall not be understood, construed or enforced in any manner that would require an employer to give a preference to any veteran over any equally qualified applicant who is a member of any racial or ethnic minority, female, an individual with a disability, or a former employee.

OTHER RECOMMENDED CONTRACT REQUIREMENTS

CONFORMANCE WITH ITS NATIONAL ARCHITECTURE

Intelligent Transportation Systems (ITS) projects shall conform to the National ITS Architecture and standards pursuant to 23 CFR § 940. Conformance with the National ITS Architecture is interpreted to mean the use of the National ITS Architecture to develop a regional ITS architecture in support of integration and the subsequent adherence of all ITS projects to that regional ITS architecture. Development of the regional ITS architecture should be consistent with the transportation planning process for Statewide and Metropolitan Transportation Planning (49 CFR Part 613 and 621).

FEDERAL TAX LIABILITY AND RECENT FELONY CONVICTIONS

(1) The contractor certifies that it:

(a) Does not have any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability; and

(b) Was not convicted of the felony criminal violation under any Federal law within the preceding 24 months.

If the contractor cannot so certify, the Recipient will refer the matter to FTA and not enter into any Third Party Agreement with the Third Party Participant without FTA's written approval.

(2) Flow-Down. The Recipient agrees to require the contractor to flow this requirement down to participants at all lower tiers, without regard to the value of any subagreement.

SEVERABILITY

The Contractor agrees that if any provision of this agreement or any amendment thereto is determined to be invalid, then the remaining provisions thereof that conform to federal laws, regulations, requirements, and guidance will continue in effect.

TRAFFICKING IN PERSONS

The contractor agrees that it and its employees that participate in the Recipient's Award, may not:

- (a) Engage in severe forms of trafficking in persons during the period of time that the Recipient's Award is in effect;
- (b) Procure a commercial sex act during the period of time that the Recipient's Award is in effect; or
- (c) Use forced labor in the performance of the Recipient's Award or subagreements thereunder.

**BUY AMERICA CERTIFICATION
STEEL OR MANUFACTURED PRODUCTS**

If steel, iron, or manufactured products (as defined in 49 CFR 661.3 and 661.5) are being procured, the appropriate certificate as set forth below shall be completed and submitted by each bidder or offeror in accordance with the requirement contained in 49 CFR 661.13(b).

Certificate of Compliance with Buy America Requirements

The bidder or offeror hereby certifies that it will comply with the requirements of 49 U.S.C. 5323(j)(1), and the applicable regulations in 49 CFR part 661.

Company _____
Name _____ Title _____
Signature _____ Date _____

Certificate of Non-Compliance with Buy America Steel or Manufactured Products Requirements

The bidder or offeror hereby certifies that it cannot comply with the requirements of 49 U.S.C. 5323(j), but it may qualify for an exception to the requirement pursuant to 49 U.S.C. 5323(j)(2), as amended, and the applicable regulations in 49 C.F.R. 661.7.

Company _____
Name _____ Title _____
Signature _____ Date _____

GOVERNMENT-WIDE DEBARMENT AND SUSPENSION (NONPROCUREMENT)

Recipients, contractors, and subcontractors that enter into covered transactions are required to verify that the entity (as well as its principals and affiliates) with which they propose to contract or subcontract is not excluded or disqualified. This is done by: (a) checking the SAM exclusions; (b) collecting a certification from that person (found below); or (c) adding a clause or condition to the contract or subcontract.

Instructions for Certification: Signing below indicates the prospective lower tier participant is providing the signed certification.

(1) It will comply and facilitate compliance with U.S. DOT regulations, "Nonprocurement Suspension and Debarment," 2 CFR part 1200, which adopts and supplements the U.S. Office of Management and Budget (U.S. OMB) "Guidelines to Agencies on Governmentwide Debarment and Suspension (Nonprocurement)," 2 CFR part 180,

(2) To the best of its knowledge and belief, that its Principals and Subrecipients at the first tier:

a. Are eligible to participate in covered transactions of any Federal department or agency and are not presently:

1. Debarred,
2. Suspension,
3. Proposed for debarment,
4. Declared ineligible,
5. Voluntarily excluded, or
6. Disqualified

b. Its management has not within a three-year period preceding its latest application or proposal been convicted of or had a civil judgment rendered against any of them for:

1. Commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction, or contract under a public transaction,
2. Violation of any Federal or State antitrust statute, or,
3. Commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making any false statement, or receiving stolen property,

c. It is not presently indicted for, or otherwise criminally or civilly charged by a governmental entity (Federal, State, or local) with commission of any of the offenses listed in the preceding subsection 2.b of this Certification,

d. It has not had one or more public transactions (Federal, State, or local) terminated for cause or default within a three-year period preceding this Certification,

e. If, at a later time, it receives any information that contradicts the statements of subsections 2.a – 2.d above, it will promptly provide that information to FTA,

f. It will treat each lower tier contract or lower tier subcontract under its Project as a covered lower tier contract for purposes of 2 CFR part 1200 and 2 CFR part 180 if it:

1. Equals or exceeds \$25,000,
2. Is for audit services, or,
3. Requires the consent of a Federal official, and

g. It will require that each covered lower tier contractor and subcontractor:

1. Comply and facilitate compliance with the Federal requirements of 2 CFR parts 180 and 1200, and
2. Assure that each lower tier participant in its Project is not presently declared by any Federal department or agency to be:
 - a. Debarred from participation in its federally funded Project,
 - b. Suspended from participation in its federally funded Project,
 - c. Proposed for debarment from participation in its federally funded Project,
 - d. Declared ineligible to participate in its federally funded Project,
 - e. Voluntarily excluded from participation in its federally funded Project, or
 - f. Disqualified from participation in its federally funded Project, and

(3) It will provide a written explanation as indicated on a page attached in FTA's TrAMS platform or the Signature Page if it or any of its principals, including any of its first tier Subrecipients or its Third-Party Participants at a lower tier, is unable to certify compliance with the preceding statements in this Certification Group.

Certification

Contractor: _____

Signature of Authorized Official: _____ Date ____/____/____

Name and Title of Contractor's Authorized Official: _____

Federal Certifications

CERTIFICATION AND RESTRICTIONS ON LOBBYING

I, _____ hereby certify
(Name and title of official)

On behalf of _____ that:
(Name of Bidder/Company Name)

- No federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, and officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any federal contract, the making of any federal grant, the making of any federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any federal contract, grant, loan, or cooperative agreement.
- If any funds other than federal appropriated funds have been paid or will be paid to any person influencing or attempting to influence an officer or employee of any agency, a Member of Congress, and officer or employee of Congress, or an employee of a Member of Congress in connection with the federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form – LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
- The undersigned shall require that the language of this certification be included in the award documents for all sub-awards at all tiers (including sub-contracts, sub-grants and contracts under grants, loans, and cooperative agreements) and that all sub-recipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. § 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.,

Name of Bidder/Company Name: _____

Type or print name: _____

Signature of authorized representative: _____ Date _____ / _____ / _____

CARTA Contract Provisions

1. Applicability

The following requirements and conditions shall be considered as an essential part of specifications and proposal. This document will serve as the contract for the project once the bid is awarded. If there is another contract document the following shall be considered part of that contract.

2. No Subcontracting without Permission of CARTA

Contractor shall not assign, sublet, pledge or transfer its rights under this Agreement, in whole or in part, nor delegate or subcontract any of its duties or obligations under this Agreement nor grant any licenses or concessions hereunder, without the prior written approval of CARTA's Executive Director. Such approval may be withheld at the sole discretion of CARTA.

3. Additional Contractor's Insurance Requirements

- a. The Contractor shall obtain, maintain, and pay the premiums for insurance policies of the types and in the limits of not less than the following:
 - 1) (a) Worker's Compensation and (b) Employer's Liability Insurance endorsed with a Broad Form All States Coverage, which shall cover all the Contractor's Employees engaged in the performance of the work.
 - 2) Comprehensive General Liability Insurance Coverage with limits not less than required by the Umbrella Liability Insurance below and covering at least:
 - (a) Operations – Premised Liability
 - (b) Independent Contractor's Liability
 - (c) Broad Form Contractor's Liability covering the Contractor's obligations
 - (d) Products Liability
 - (e) Completed Operations Liability
 - (f) Personal Injury Liability including claims arising from employees of the Contractor
 - (g) Broad Form Property Damage Liability
 - 3) Comprehensive Automobile Liability Insurance covering all owned, hired, and non-owned automobiles required by Umbrella Liability Insurance below.

Excess and Umbrella Liability Insurance in excess of 1)(b), and 2) above and not less than \$1,000,000.

- 4) Contractor shall also obtain and maintain other policies of insurance of the types and limits that contractor deems sufficient for its own protection.

CARTA Contract Provisions

- b. All Such insurance as indicated above shall be provided by insurance companies having a Best's rating of not less than A: XII, as shown in the current issue of Best's Key Rating Guide, Property-Casualty.
- c. Proof that such insurance coverage exists shall be furnished to CARTA in the form of certificates from the insurance companies before the Contractor commences any portion of the contracted work.

CARTA shall be endorsed as an additional insured under such policies.

Such certificates and/or endorsements shall provide that 30 days' notice in writing shall be given to CARTA prior to any change or cancellation of underlying policies.

- d. The Contractor and all of its insurers shall waive all rights of recovery or subrogation against CARTA and its insurance companies.
- e. The Contractor shall be responsible for compliance with all safety rules and regulations of the Federal Occupational Safety and Health Act of 1970 and those of all applicable State Acts, Laws, or Regulations during the conduct of and the Contractor's performance of this Contract. The Contractor shall indemnify CARTA for fines, penalties, and corrective measures that result from the acts of commission or omission of the Contractor, its subcontractors, if any, agents, employees and assigns and their failure to comply with such safety rules and regulations.
- f. CARTA will give to the Contractor prompt notice in writing of the institution of any suit or proceeding and permit the Contractor to defend the same, and will give all needed information, assistance, and authority to enable the Contractor to do so. The Contractor shall similarly give CARTA immediate notice of any suit or action filed or prompt notice of any claim arising out of the performance of the Contract. The Contractor shall furnish immediately to CARTA copies of all pertinent papers received by the Contractor.
- g. The Contractor shall require its subcontractors, if any, to obtain an amount of insurance coverage which is deemed adequate by the Contractor. The Contractor shall be liable to the extent that the subcontractor insurance coverage is inadequate. The subcontractors, prior to commencing any of the work, shall submit certificates evidencing such insurance coverage to the Contractor.
- h. CARTA reserves the right to inspect, in person, prior to commencement of the work, all of the Contractor's insurance policies in regard to insurance required herein.

CARTA Contract Provisions

4. Award Based on Initial Proposals

Awards to proposers may be made, at CARTA's sole discretion, without discussion of proposals with proposers. Proposals should be submitted initially on the most favorable terms possible, from a price and technical standpoint.

5. Liabilities against CARTA

The contractor agrees to indemnify, defend and hold CARTA harmless from any and all claims and lawsuits by third parties (including, but not limited to, employees and agents of CARTA and the contractor), including the payment of all damages, expenses, penalties, fines, costs, royalties, charges and attorneys' fees incurred by CARTA which arise out of, or relate to contractors performance of the work required under this contract, whether concerning personal injury (or death), damage to property, or any other type of loss or claim, whether these claims or lawsuits are based upon negligence, intentional misconduct, breach of warranty, strict liability in tort, any failure by the contractor to comply with any laws pertaining to the contract documents, the use of patent appliances, products or processes, or any breach by the contractor of any of its other duties, representations, covenants, or the agreements in the contract documents. The contractor will defend all suits brought upon all such claims and lawsuits and will pay all costs and expenses incidental thereto, but CARTA shall have the right, at its option, to participate in the defense of any suit, without relieving the Contractor of any of its obligations hereunder.

6. Order of Precedence - Proposal

In the event of inconsistency between provisions of this solicitation prior to the parties entering into a contract, the inconsistency will be resolved by giving precedence in the following order: 1) the CARTA project completion timeline for performance as set forth in the solicitation (if any); 2) solicitation instructions and technical specifications, if included; 3) CARTA General Contract Provisions, CARTA Special Contract Provisions, and CARTA Additional Special Contract Provisions which are included in the solicitation documents; and 4) in the event of any inconsistencies between the technical specifications and a written request for approval that has been approved by CARTA, the request for approval will have precedence.

7. Order of Precedence – Contract

In the event of inconsistency between various documents that constitute the contract, the inconsistency will be resolved by giving precedence in the following order 1) any modifications approved by CARTA after the contract was signed; 2) any contract documents CARTA executes to award the contract (such as a purchase order, letter of contract award, or negotiated contract signed by both parties); 3) the Contractor's proposal including any approved equals or modifications approved by CARTA; and 4) the solicitation.

CARTA Contract Provisions

8. Use of “CARTA’s” Name in Contractor Advertising or Public Relations

The Contractor will not allow the CARTA logo(s) or any CARTA-related copy to be published in the Contractor’s advertisements or public relations programs without CARTA’s written approval and then only upon submitting such material to CARTA for review. The Contractor will agree that published information on CARTA or its services will be factual and in no way imply that CARTA endorsed the Contractor’s firm, service, or product.

9. Protest procedures.

Any bidder wishing to protest prior to or after the award of a contract must follow CARTA’s protest procedures contained below. Deadlines in protest procedures must be adhered to otherwise CARTA will not consider the protest. In addition, the protest must include a statement that that it is a protest, otherwise it will not be considered a protest.

Protest Procedures

Protests concerning CARTA’s purchasing policies, the contract requirements, the specifications, the bidding procedures, or the contract award, or any other request for explanation or clarification must be submitted in writing to CARTA’s Executive Director and must include the following information:

- The name and address of the protester.
- The name and telephone number of the protester’s contact person having responsibility.
- A complete statement of the grounds of the protest with full documentation of the protester’s claim.

a. Pre-award Protests

Pre-award protests must be received by CARTA no less than ten (10) working days before the scheduled bid opening. CARTA will respond to the protest in writing and render its final decision at least five (5) working days prior to bid opening. CARTA will report such protests to the FTA regional office.

b. Post-award Protests

Post-award protests will be received no later than five (5) working days after notification of the award bid. CARTA will have ten (10) working days after receipt of the formal protest package to evaluate, and issue a response, except in cases where the original bid has been awarded by the Board. In such cases, the decision to protest will be handled at the next regularly scheduled Board meeting, following completion of the staff review of the protests. CARTA will report such protests to the FTA regional office.

c. Appeals to FTA

CARTA Contract Provisions

It is the responsibility of CARTA to settle contract issues and disputes. CARTA is committed to using good sound administrative practices and business judgments, as well as professional ethics. Reviews of protests by FTA will be limited to alleged failure by CARTA to have followed proper protests procedures, or its failure to review a complaint or protest. Protesters dissatisfied with CARTA's final decision may appeal to FTA regional or Headquarters Office within five (5) working days of the date the protester knew or should have known of the violation.

10. Addenda Acknowledgement

The bidder must submit with the Bid and Addenda Acknowledgement Form acknowledging receipt of all bid addenda issued by CARTA. Acknowledge receipt of addenda on Attachment 14.

11. Terms of Payment

Payment for the specified items shall be net thirty (30) days after acceptance. Bidder should note any discounts for payment before thirty (30) days.

CARTA Contract Provisions

Attachment 14

Addenda Acknowledgement Form

Addenda received

Addendum No: _____ Date Received: _____

Addendum No: _____ Date Received: _____

Addendum No: _____ Date Received: _____

Addendum No: _____ Date Received: _____

Addendum No: _____ Date Received: _____

Addendum No: _____ Date Received: _____

Addendum No: _____ Date Received: _____

Addendum No: _____ Date Received: _____

_____ Signature of Contractor's Authorized Official

_____ Name and Title of Contractor's Authorized Official

_____ Date

Tennessee State Contract Clauses

Conflicts of Interest.

The Grantee warrants that no part of the total Grant Contract Amount shall be paid directly or indirectly to an employee or official of the State of Tennessee as wages, compensation, or gifts in exchange for acting as an officer, agent, employee, subcontractor, or consultant to the Grantee in connection with any work contemplated or performed relative to this Grant Contract

Lobbying.

The Grantee certifies, to the best of its knowledge and belief, that:

- a. No federally appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any federal contract, the making of any federal grant, the making of any federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any federal contract, grant, loan, or cooperative agreement.
- b. If any funds other than federally appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this contract, grant, loan, or cooperative agreement, the Grantee shall complete and submit Standard Form-LLL, "Disclosure of Lobbying Activities," in accordance with its instructions.
- c. The Grantee shall require that the language of this certification be included in the award documents for all sub-awards at all tiers (including subcontracts, sub-grants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into and is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. § 1352

Nondiscrimination.

The Grantee hereby agrees, warrants, and assures that no person shall be excluded from participation in, be denied benefits of, or be otherwise subjected to discrimination in the performance of this Grant

Contract or in the employment practices of the Grantee on the grounds of handicap or disability, age, race, color, religion, sex, national origin, or any other classification protected by federal, Tennessee state constitutional, or statutory law. The Grantee shall, upon request, show proof of nondiscrimination and shall post in conspicuous places, available to all employees and applicants, notices of nondiscrimination.

Public Accountability.

If the Grantee is subject to Tenn. Code Ann. § 8-4-401 et seq., or if this Grant Contract involves the provision of services to citizens by the Grantee on behalf of the State, the Grantee agrees to establish a system through which recipients of services may present grievances about the operation of the service program. The Grantee shall also display in a prominent place, located near the passageway through which the public enters in order to receive Grant supported services, a sign at least eleven inches (11") in height and seventeen inches (17") in width stating:

NOTICE: THIS AGENCY IS A RECIPIENT OF TAXPAYER FUNDING. IF YOU OBSERVE AN AGENCY DIRECTOR OR EMPLOYEE ENGAGING IN ANY ACTIVITY WHICH YOU CONSIDER TO BE ILLEGAL, IMPROPER, OR WASTEFUL, PLEASE CALL THE STATE COMPTROLLER'S TOLL-FREE HOTLINE: 1-800-232-5454.

The sign shall be on the form prescribed by the Comptroller of the Treasury. The Grantor State Agency shall obtain copies of the sign from the Comptroller of the Treasury, and upon request from the Grantee, provide Grantee with any necessary signs.

Public Notice.

All notices, informational pamphlets, press releases, research reports, signs, and similar public notices prepared and released by the Grantee in relation to this Grant Contract shall include the statement, "This project is funded under a grant contract with the State of Tennessee, Department of Transportation." All notices by the Grantee in relation to this Grant Contract shall be approved by the State.

Records.

The Grantee and any approved subcontractor shall maintain documentation for all charges under this Grant Contract. The books, records, and documents of the Grantee and any approved subcontractor, insofar as they relate to work performed or money received under this Grant Contract, shall be maintained in accordance with applicable Tennessee law. In no case shall the records be maintained for a period of less than five (5) full years from the date of the final payment. The Grantee's records shall be subject to audit at any reasonable time and upon reasonable notice by the Grantor State Agency, the Comptroller of the Treasury, or their duly appointed representatives.

The records shall be maintained in accordance with Governmental Accounting Standards Board (GASB) Accounting Standards or the Financial Accounting Standards Board (FASB) Accounting Standards Codification, as applicable, and any related AICPA Industry Audit and Accounting guides.

In addition, documentation of grant applications, budgets, reports, awards, and expenditures will be maintained in accordance with U.S. Office of Management and Budget's Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards.

Grant expenditures shall be made in accordance with local government purchasing policies and procedures and purchasing procedures for local governments authorized under state law.

The Grantee shall also comply with any recordkeeping and reporting requirements prescribed by the Tennessee Comptroller of the Treasury.

The Grantee shall establish a system of internal controls that utilize the COSO Internal Control - Integrated Framework model as the basic foundation for the internal control system. The Grantee shall incorporate any additional Comptroller of the Treasury directives into its internal control system.

Any other required records or reports which are not contemplated in the above standards shall follow the format designated by the head of the Grantor State Agency, the Central Procurement Office, or the Commissioner of Finance and Administration of the State of Tennessee.

Environmental Tobacco Smoke.

Pursuant to the provisions of the federal "Pro-Children Act of 1994" and the "Children's Act for Clean Indoor Air of 1995," Tenn Code Ann. §§39-17-1601 through 1606, the Grantee shall prohibit smoking of tobacco products within any indoor premises in which services are provided to individuals under the age of eighteen (18) years. The Grantee shall post "no smoking" signs in appropriate, permanent sites within such premises. This prohibition shall be applicable during all hours, not just the hours in which children are present. Violators of the prohibition may be subject to civil penalties and fines. This prohibition shall apply to and be made part of any subcontract related to this Grant Contract."

(If the Federal Debarment and Suspension option is included in procurement documents, then this state Debarment and Suspension clause is not needed.)

Debarment and Suspension.

The Grantee certifies, to the best of its knowledge and believe, that the Selected Offeror:

- a. is not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any federal or state department or agency;

- b. has not within a three (3) year period preceding this Grant Contract been convicted of, or had a civil judgment rendered against them from commission of fraud, or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (federal, state, or local) transaction or grant under a public transaction; violation of federal or state antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification, or destruction of records, making false statements, or receiving stolen property;
- c. is not presently indicted or otherwise criminally or civilly charged by a government entity (federal, state, or local) with commission of any of the offenses detailed in section b. of this certification; and
- d. has not within a three (3) year period preceding this Grant Contract had one or more public transactions (federal, state, or local) terminated for cause or default.

The Grantee will provide immediate written notice to the State if at any time it learns that there was an earlier failure to disclose information or that due to changed circumstances, the Selected Offeror is excluded or disqualified, or presently falls under any of the prohibitions of sections a-d.

DETAILED SPECIFICATIONS

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DETAILED SPECIFICATIONS

GENERAL

- A. The Contractor is to understand that any work not specifically mentioned in the specifications, but which is necessary, either directly or indirectly, for the proper carrying out of the intent thereof, shall be required and applied, and he shall perform all such work just as if it were particularly delineated or described. The OWNER and the Manager of the Incline will cooperate, to the maximum extent possible, with the Contractor in the performance of the work required by these Specifications.

Description of Work

- A. In general, this project shall include rail replacement, tie spot-replacement, brake timber replacement, and shimming work.

1 – MOBILIZATION

1.01 Description

- A. This work shall consist of the preparatory work and operations for the assembling and setting up necessary for the project, such as signs, shops, plants, storage areas, sanitary, facilities, moving in of personnel and equipment, incidentals to the project site, and any other facilities, as required by the specifications and special requirements of the contract, as well as by local or state laws and regulations.
- B. The Contractor may utilize the existing rail to convey material, personnel, equipment, etc. to the work area. Any vehicle used on the rails must have a safety system and be in accordance with all applicable safety laws.

1.02 Materials

- A. The Contractor shall furnish all materials and furnishings required for this item. These materials and furnishings will not be considered as a part of the various items of completed contract.

1.03 Construction Requirements

- A. The Contractor shall provide all the tools, equipment, materials, labor and work for the construction and furnishings of the required facilities and services. All work under this item shall be performed in a safe and workmanlike manner.

1.04 Limitation

- A. The sum total of the two payments described in Item 1 and Item 2 under 1.06 will be limited to the amounts shown in the following table under “Maximum total of partial payments, = The balance of the amount bid, if any, will be paid as described in Item 3 under 1.06.

Total Contract Amount		The Maximum Total of Partial Payments
More Than	Up to, Inclusive	Shall Be
0	50,000	0
50,000	100,000	2,000
100,000	200,000	4,000
200,000	500,000	10,000
500,000	1,000,000	20,000
1,000,000	2,000,000	40,000
2,000,000	5,000,000	100,000

- B. If the contract lump sum amount bid for mobilization exceeds the total shown in the table above for partial payments, the excess will be paid on completion of the project.

1.05 Method of Measurement

- A. Work performance under this item will be measured as a unit, acceptable performed.

1.06 Basis of Payment

- A. Mobilization will be paid for at the contract lump sum price, which shall include the cost of all items herein described.
- B. The contract lump sum price for this item shall be payable to the Contractor as specified in Section 18 of the General Conditions and in accordance with the following schedule of partial payments.
 - 1. One-half of the contract lump sum amount bid for mobilization or one half the amount shown in 1.04, whichever is less, will be released to the Contractor with the first estimate payable, but no sooner than 15 days after the start of work at the project site.
 - 2. The second one-half of the contract lump sum bid for mobilization or the second one-half of the amount shown in 1.04, whichever is less, will be released with the first regular estimate after 10 percent of the original total contract amount including payments for delivered materials but excluding mobilization, is earned.
 - 3. Upon completion of all work on the project, payment of any amount of the contract lump sum price for mobilization, in excess of the total amount shown in the table above for partial payment will be released.

2 – REMOVAL OF MATERIAL

2.01 Description

- A. This item consists of the removal and proper disposal of the rail and creosoted timbers on the existing structures within the project limits and as designated for removal on plans.

2.02 Construction Requirements

- A. Creosoted timbers to be removed, shall be disposed of, off site, in accordance with the requirements and regulations of the State of Tennessee. The Contractor shall complete and supply to the Owner the certificate of compliance included in this section.
- B. All designated reusable materials shall be removed, without damage, and stored within the project limits. Precautions shall be taken by the Contractor to prevent damage to the materials in storage.
- C. Removal of the material shall be performed with sufficient care as to leave the remaining portion of the right-of-way undamaged. Further care shall be exercised to prevent materials from falling down the hillside causing subsequent damage to the existing structures downhill from the project limits. In case of damage to the existing track, Incline cars and structures, repair or replacement will be made at the Contractor's expense and to the approval of the Engineer.

2.03 Method of Measurement

- A. Removal of the material will not be measured for payment. Rather it will be a lump sum amount for removal of all items replaced in this project.

2.04 Basis of Payment

- A. Upon removal of all material from the site and the submission of the follow form, payment of the contract lump sum price for removal of material will be released.
- B. Contract prices shall be full compensation for removal and storage or disposal of such items, including excavation and backfill incidental to their removal, and the custody, preservation, storage on the right-of-way, and disposal as provided herein.

**INCLINE RAILWAY UP LOOKOUT MOUNTAIN
REHABILITATION WORK ON THE LOOKOUT MOUNTAIN INCLINE RAILWAY**

I, the undersigned, do hereby certify to Chattanooga Area Regional Transportation Authority that all creosoted timbers and residue removed from the Incline and transported away from the Incline's property, have been disposed of in the following manner (include the name of the disposal site or name of disposal facility, date of disposal, delivery invoice, and other relevant information regarding appropriate means of disposal):

I further certify that these disposal procedures are in accordance with State and Federal laws, and I will indemnify and hold harmless CARTA from any failure to properly complete such disposal.

CONTRACTOR: _____

Signature: _____ **Date:** _____
(Contractor)

The above named Contractor has acknowledged his above signature to me on this day.

Witness _____ **Date:** _____
(Notary Public)

3 – TIMBER

3.01 Description

- A. These items shall include the ties and brake timbers in accordance with the plans.

3.02 Materials

- A. Structural Timber shall be new Southern Pine Dense No. 1 Structural in accordance with the Southern Pine Inspection Bureau No. 65 with 12 pounds of creosote oil in accordance with AWP, P2 and Chapter 17 of AREMA.
- B. The Contractor shall be responsible for furnishing all hardware necessary for the successful completion of the project.

3.03 Construction

- A. AWP's Standard M4-11 for the care of preservative-treated wood products shall be followed including the treatment of all cuts, holes, and abrasions.
- B. Clamps shall be used on timber for the support of staging or other construction facilities and under no circumstances will temporary bolting, spiking or nailing to treated timbers be permitted.
- C. The work when finished will provide solid bearing from the ties down through the stringers, corbels, caps, posts, and sills to the ground. The original profile shall not be changed unless as a defect correction specifically called for on the plans.
- D. Any holes drilled in the field, shall be field treated with a preservative in accordance with AWP Stand M4. A maximum of one inch of the treated end of a timber member will be allowed to be trimmed in the field without the approval of the Engineer. In such cases, these ends shall be given a field treatment of preservative in accordance with AWP Standard M4.
- E. All countersunk holes shall be filled with field treatment after the bolts are inserted. Field cutting of timbers and field drilling of bolt holes shall adhere to the same tolerances as put forth in the section in these specifications entitled Fabrication of Timber. All field cutting and field trimming of timber and all field drilling of bolt holes through timber which is necessary to allow for proper construction of the track, shall be performed with the approval of the Engineer and shall be considered incidental to the reconstruction of the track. No additional payment will be allowed for additional fabrication of timber or steel in the field.

- F. Treated timbers shall be carefully handled without dropping, breaking of outer fibers, bruising or penetrating the surface with tools. Cant hooks, peaveys, pikes, timber dogs or pointed tools shall not be used. Damage to timber during transportation, assembly and erection will be reason for rejection as deemed applicable by the Engineer. Any damaged timber which is deemed acceptable by the Engineer shall be given a field treatment of preservative to the damaged area in accordance with AWP Standard M4.
- G. Clamps shall be used on timber for the support of staging or other construction facilities and under no circumstances will temporary bolting, spiking or nailing to treated timbers be permitted.
- H. Ties shall be spaced and attached to the stringers in accordance with the details shown on the plans. Ties shall be placed with wider heartwood face down, and square to the line of rail. In order to present a trim appearance, the same end of all ties shall be brought to a uniform line with the rail. Ties shall be added, if necessary, in order to give the rail a uniform bearing on all ties. All newly added surfaces shall be given preservative field treatment in accordance with AWP Standard M4.
- I. Brake timbers shall be framed in accordance with the plans and laid to line and uniform top surface. Joints in the top piece of brake timber shall be staggered at least one tie spacing from joints in the bottom piece of brake timber. Brake timber ends at joint locations shall be placed in direct contact with the adjacent brake timber, with no gaps between abutting ends.

3.04 Method of Measurement

- A. Timber will be measured per individual item or linear feet as described in the plans. Hardware necessary for the completion of the project such as bolts, nuts, washers, and spikes will not be measured for payment.

3.05 Basis of Payment

- A. The accepted quantity for payment will be made at the contract price bid for each item.
- B. Contract prices for Structural Timber shall be full compensation for all materials, including all hardware, equipment and labor necessary to complete the work.

4 – TRACKWORK

4.01 Description

- A. This item shall include the repairs to the track in accordance with the plans. This item shall also include resetting of the following in their original locations: rails, splice plates, rail guides, cable sheaves, cable guards, electric eyes, limit switches and all associated conduit.

4.02 Materials for Track Construction

4.02.01 Hardware

- A. Bolts used in timber construction shall be ASTM A307 with washers and self-locking nuts. Self-locking nuts shall be ANCO Pn-Loc or approved equal. Cast iron or malleable iron ogee washers shall be used under both ends of bolts bearing on timbers or ties unless otherwise shown. Anchor bolts and associated nuts, flat washers and beveled washers shall be ASTM A307 and shall conform to the dimensions shown on the plans. All drive spikes, bolts, nuts and washers, including ogee washers shall be hot dipped galvanized in accordance with ASTM A153.

4.02.02 Rail

- A. Where noted on the plans, new rail shall conform to ASCE 60-lb rail, ASTM 4A-1.
- B. Minimum rail length shall be 30ft, with a preferred length of 40ft.

4.02.03 Track Bolts and Nuts

- A. Shall be new carbon steel heat-treated track bolts and shall conform to current AREMA Specification. Bolt heads and nuts shall be of the AREMA design.
- B. All bolts shall receive one spring washer per AREMA Chapter 4, Part 3. The bolt size shall be of the diameter and length required to properly connect the joint bars. The bolt length shall be such that at least two threads are visible behind the end of an installed nut.

4.02.04 Spring Track Washers

- A. Shall be new washers conforming to AREMA, Chapter 4, Part 3.6.

4.02.05 Joint Bars

- A. Joint bars shall be designed for ASCE 60 with medium carbon steel or forged steel, with a minimum length of 20 inches, a four-hole configuration, a hole diameter of 15/16", and a hole spacing of 5 inches specifically designed to match the ASCE60 rail profile.

4.02.06 Track Spikes

- A. Standard spikes, 9/16 x 5 1/2 inches, shall be used for fastening rails to ties. Track spikes shall conform to the AREMA Specifications for Soft-Steel Track Spikes.

4.03 Visual Inspection of Finished Products

- A. All production shall be inspected visually for conformance with the requirements of this specification as to:
 - a) Dimensions
 - b) Shape
 - c) Type, quality and location of joints and their fastenings
 - d) Lumber species and grades

4.04 Construction

- A. When ties are re-spiked, the spike holes must be plugged with a treated tie plug or an expanding foam plugging compound. Top surface of ties shall be clean and smooth to provide full bearing. Rail shim tie pads shall be used where required for even bearing. Cost of tie pads shall be considered incidental to the cost of furnishing and installing rail.
- B. All rail shall be handled, transported, and stored in accordance with current AREMA standards. Only approved lifting devices that do not damage the rail should be used. Rail shall not be struck in the web by any tool or object.
- C. Contractor shall verify the rail is within specifications before installing.
- D. Rail shall be cut square and clean by means of a rail saw or abrasive cutting disk. Under no circumstance shall the rail be torch cut nor holes drilled by torch.
- E. Assemble the joints before fastening rail to ties. Joints shall be made by the way of joint bars of the appropriate size and spacing. Joint bars shall be cleaned of any foreign material, except metal preservative, and properly installed with the full number of correct size bolts, nuts, and spring washers. Accurately space holes for bolting of rail and drill in accordance with each independent rail size as indicated in

AREMA. Bolts placed with nuts alternatively on inside and outside of rail shall be drawn tight before spiking. Before acceptance of work, bolts shall be checked by the Contractor and tightened if necessary.

1. Using power track wrench with pressure adjustment to tighten track bolts.
 2. Center bolts shall be tightened first.
 3. Track bolt units (track bolts, nuts, and washers) shall be tightened to an applied tension of 20,000 to 30,000 lb. for the initial tightening and within a range of 15,000 to 25,000 lb. for subsequent tightening. The Contractor shall provide information to the Engineer that the calibration of the bolt-tightening machine is achieving the desired results.
 4. Nuts shall be applied with the tapered side away from the washer.
 5. Bolts shall extend a minimum of one tread beyond the nut after installation.
 6. Whenever a track bolt cannot be tightened as specified, it shall be removed and replaced.
- F. Rail ends that are mismatched by $1/8$ " or greater at the joint bar, due to previous rail wear, shall be ground down to provide a smooth transition between adjacent rails.
1. In the event that rail wear mismatch exceeds $1/4$ " at the joint, the lower rail shall be welded at the top of the rail and ground to provide a smooth transition between the adjacent rails.
 - i. Weld build up off the joint shall extend 6"-9" from the end of low rail.
 - ii. Mismatched joints shall be ground down through the entire length of the joint bar itself. Contractor shall use 36" straight bar to guide in alignment and grind down on the high rail.
- G. Rail shall be installed that the joints in each line shall be within the middle half of the opposite rail length.
- H. Ensure that field welds are centered in between crossties.
- I. Prior to spiking, ensure the track gage is in compliance. Gaging shall be done at the time the rail is laid. The gage on the tracks is 4' 8-1/2". Track shall be gaged every third tie as spikes are driven.
- J. Spiking shall be two (2) new spikes per rail at each tie.

4.05 Method of Measurement

- A. Track work will be measured per linear foot of rail. The passing switch track will not be measured but will be considered incidental to the cost of furnishing and installing rail.

4.06 Basis of Payment

- A. Contract prices for Track Work shall be full compensation for all materials, including all hardware, equipment and labor necessary to complete the work. Running rail shall be paid by linear feet. All additional costs associated with the passing switch track transition shall be paid by lump sum.

2027 REHABILITATION PROJECT ON THE INCLINE RAILWAY UP LOOKOUT MOUNTAIN CARTA - CHATTANOOGA AREA REGIONAL TRANSPORTATION AUTHORITY CHATTANOOGA, TENNESSEE

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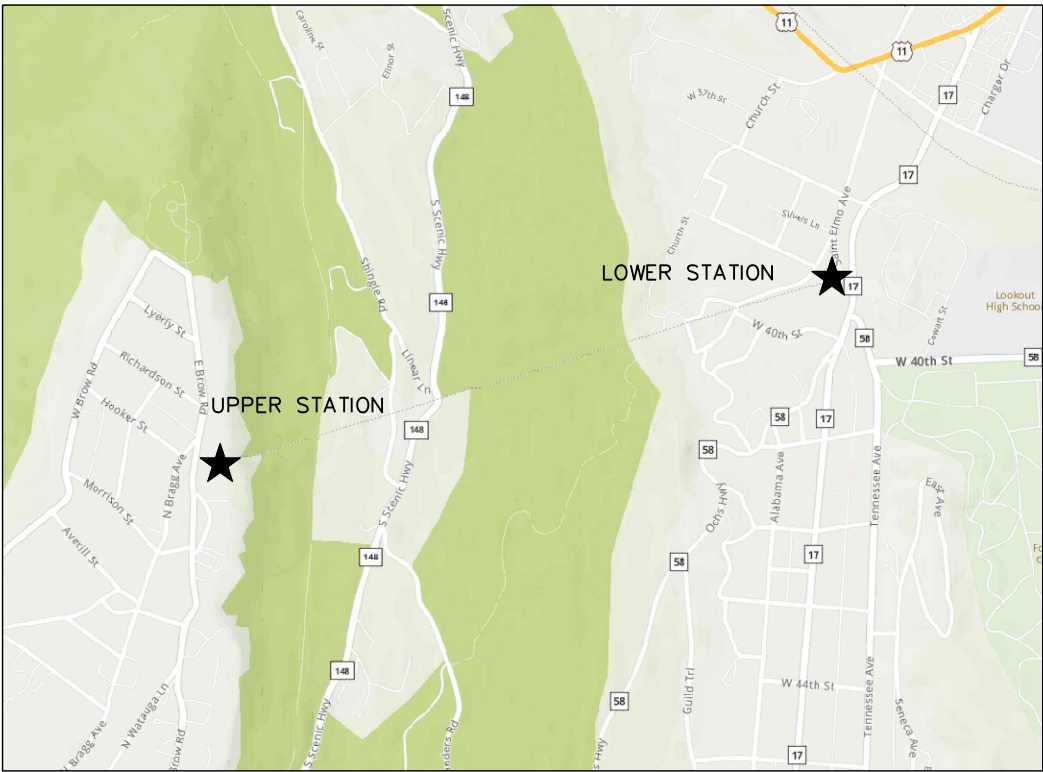
TITLE SHEET

INCLINE RAILWAY AT LOOKOUT MOUNTAIN CARTA

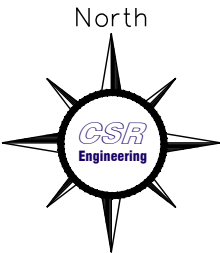
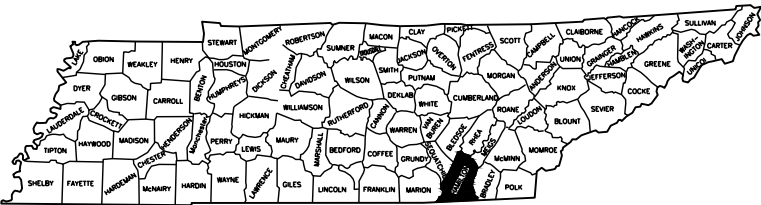
827 E BROW RD
LOOKOUT MOUNTAIN, TN 37350
HAMILTON COUNTY

INDEX OF DRAWINGS

SHEET	DESCRIPTION
1.	TITLE SHEET
2.	GENERAL NOTES & SPECIFICATIONS
3.	ESTIMATED QUANTITIES
4.	OVERALL PLAN & PROFILE
5.	BURIED TRESTLE-1
6.	BURIED TRESTLE-2
7.	TRESTLE 1-1
8.	TRESTLE 1-2
9.	TRACK SECTIONS



LOCATION MAP



CARTA

1617 WILCOX BOULEVARD
CHATTANOOGA, TENNESSEE

REVISIONS		DESCRIPTION
NO.	DATE	BY

DESIGNER	CYH
REVIEWER	KCW

PROJECT	11-090
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DATE	6-26-26
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SHEET	1
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SCOPE OF WORK

THE CONTRACTOR’S SCOPE OF WORK TO BE PERFORMED FOR THE INCLINE RAILWAY REHABILITATION PROJECT ON INCLINE RAILWAY AT LOOKOUT MOUNTAIN CONSISTS OF FURNISHING ALL EQUIPMENT, LABOR, MATERIALS, TOOLS AND SUPERVISION NECESSARY FOR THE TRACK AND BRIDGE REPAIRS SHOWN IN THESE PLANS.

GENERAL NOTES

THE CONTRACTOR IS TO UNDERSTAND THAT ANY WORK NOT SPECIFICALLY MENTIONED IN THE PLANS, BUT WHICH IS NECESSARY, EITHER DIRECTLY OR INDIRECTLY, FOR THE PROPER CARRYING OUT OF THE INTENT THEREOF, SHALL BE REQUIRED AND APPLIED, AND HE SHALL PERFORM ALL WORK JUST AS IF IT WERE PARTICULARLY DELINEATED OR DESCRIBED. THE OWNER AND THE MANAGER OF THE INCLINE WILL COOPERATE, TO THE MAXIMUM EXTENT POSSIBLE, WITH THE CONTRACTOR IN THE PERFORMANCE OF THE WORK REQUIRED BY THESE PLANS.

THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND QUANTITIES PRIOR TO ORDERING MATERIAL OR CONSTRUCTION. ANY AND ALL SIGNIFICANT DISCREPANCIES FROM PLAN QUANTITIES OR DIMENSIONS WILL BE REPORTED TO THE ENGINEER IMMEDIATELY SO CORRECTIONS CAN BE MADE IN A TIMELY MANNER.

CERTIFICATIONS OF ALL MATERIALS TO BE USED IN THE CONSTRUCTION OF THIS PROJECT WILL BE SUBMITTED TO THE ENGINEER PRIOR TO BEGINNING CONSTRUCTION.

ALL REUSABLE HARDWARE SHALL BE STORED AND PROTECTED AT THE CONTRACTOR’S EXPENSE. ANY DAMAGED, STORED MATERIALS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER IMMEDIATELY AND REPLACED IN LIKE KIND BY THE CONTRACTOR UPON ENGINEER APPROVAL.

MATERIAL AND WORKMANSHIP

THE CONTRACTOR SHALL CONDUCT HIS WORK IN A MANNER THAT PROTECTS THE INCLINE AND PROPERTIES FROM ANY DAMAGE. THE WORK SHALL BE PERFORMED IN ACCORDANCE WITH REGULATIONS STIPULATED BY THE INCLINE RAILWAY SO AS TO MAINTAIN CLEARANCE AND NOT INTERRUPT TRAFFIC OUTSIDE OF TRACK OUTAGE PERIODS.

PROTECTION OF EXISTING RAIL

TRACK OUTAGE PERIODS ARE ANTICIPATED DURING DEMOLITION AND PROPOSED CONSTRUCTION. ALL WORK, INCLUDING TRACK OUTAGES, SHALL BE COORDINATED WITH THE INCLINE MANAGER BEFORE AND DURING CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE FOR CONTINUOUS RAIL TRAFFIC ACROSS THE EXISTING STRUCTURES OUTSIDE OF TRACK OUTAGE PERIODS.

RIGHT-OF-WAY

ALL CONSTRUCTION ACTIVITIES WILL BE CONFINED WITHIN THE INCLINE RAILWAY RIGHT-OF-WAY UNLESS ARRANGEMENTS HAVE BEEN MADE BY THE CONTRACTOR, IN WRITING, WITH ADJOINING PROPERTY OWNERS.

IF ADDITIONAL STAGING ROOM OR SITE ACCESS IS REQUIRED, THE CONTRACTOR WILL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY EASEMENTS, AND WILL FURNISH PROOF OF EASEMENTS TO THE ENGINEER.

ANY AREAS DISTURBED BY ANY DIRECT OR INDIRECT ACTION ASSOCIATED WITH CONSTRUCTION INCLUDING ALL SITE ACCESS ROADS, WILL BE RETURNED TO PRE-CONSTRUCTION CONDITIONS OR BETTER, AND/OR FINISHED IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS, AT THE CONTRACTOR’S EXPENSE.

TIMBER

TRESTLE TIES & STRUCTURAL TIMBER – SOUTHERN PINE DENSE NO. 1 STRUCTURAL IN ACCORDANCE WITH THE SOUTHERN PINE INSPECTION

BUREAU NO. 65 WITH 12 POUNDS OF CREASOTE OIL IN ACCORDANCE WITH AWP, P2 AND CHAPTER 17 OF AREMA.

WPA’S STANDARD M4-11 FOR THE CARE OF PRESERVATIVE-TREATED WOOD PRODUCTS SHALL BE FOLLOWED INCLUDING THE TREATMENT OF ALL CUTS, HOLES, AND ABRASIONS. CLAMPS SHALL BE USED ON TIMBER FOR THE SUPPORT OF STAGING OR OTHER CONSTRUCTION FACILITIES AND UNDER NO CIRCUMSTANCES WILL TEMPORARY BOLTING, SPIKING OR NAILING TO TREATED TIMBERS BE PERMITTED. THE WORK WHEN FINISHED WILL PROVIDE SOLID BEARING FROM THE TIES DOWN THROUGH THE STRINGERS, CORBELS, CAPS, POSTS, AND SILLS TO THE GROUND. THE ORIGINAL PROFILE SHALL NOT BE CHANGED UNLESS AS A DEFECT CORRECTION SPECIFICALLY CALLED FOR ON THE PLANS.

SHIMS

FIBER REINFORCED ELASTOMER: IRON HORSE ENGINEERING TIE PADS OR APPROVED EQUAL

HARDWARE

TRACK BOLTS AND NUTS – CARBON STEEL HEAT-TREATED TRACK BOLTS CONFORMING TO CURRENT AREMA SPECIFICATION. BOLT HEADS AND NUTS SHALL BE OF THE AREMA DESIGN. ALL BOLTS SHALL RECEIVE ONE SPRING WASHER PER AREMA SPECIFICATION. BOLT SIZE TO BE 1”DIA.x5½”.

SPRING TRACK WASHERS – CONFORMING TO AREMA SPECIFICATIONS.

TIE PLUGS – SOUND, CREOSOTE TREATED, SEASONED, STRAIGHT GRAINED AND FREE FROM KNOTS OR OTHER DEFECTS. ALL TIMBER THAT HAS HAD A SPIKE DRIVEN AND REMOVED SHALL RECEIVE A TREATED TIE PLUG. TIE PLUGS SHALL BE TREATED AND SIZED IN ACCORDANCE WITH AREMA SPECIFICATIONS

BOLTS, DRIVE SCREW SPIKES, AND DRIFT PINS – ASTM A307

REMOVAL OF MATERIAL

CREOSOTED TIMBERS TO BE REMOVED, SHALL BE DISPOSED OF, OFF SITE, IN ACCORDANCE WITH THE REQUIREMENTS AND REGULATIONS OF THE STATE OF TENNESSEE. THE CONTRACTOR SHALL COMPLETE AND SUPPLY TO THE OWNER THE CERTIFICATE OF COMPLIANCE INCLUDED IN THIS SECTION. ALL DESIGNATED REUSABLE MATERIALS SHALL BE REMOVED, WITHOUT DAMAGE, AND STORED WITHIN THE PROJECT LIMITS. PRECAUTIONS SHALL BE TAKEN BY THE CONTRACTOR TO PREVENT DAMAGE TO THE MATERIALS IN STORAGE. REMOVAL OF THE MATERIAL SHALL BE PERFORMED WITH SUFFICIENT CARE AS TO LEAVE THE REMAINING PORTION OF THE RIGHT-OF-WAY UNDAMAGED. FURTHER CARE SHALL BE EXERCISED TO PREVENT MATERIALS FROM FALLING DOWN THE HILLSIDE CAUSING SUBSEQUENT DAMAGE TO THE EXISTING STRUCTURES DOWNHILL FROM THE PROJECT LIMITS. IN CASE OF DAMAGE TO THE EXISTING TRACK, INCLINE CARS AND STRUCTURES, REPAIR OR REPLACEMENT WILL BE MADE AT THE CONTRACTOR’S EXPENSE AND TO THE APPROVAL OF THE ENGINEER.

WELDING

WELDING SHALL BE IN ACCORDANCE WITH THE CURRENT EDITION OF THE AMERICAN WELDING SOCIETY (AWS) BRIDGE WELDING CODE, AWS D1.5 AS MODIFIED OR SUPPLEMENTED BY A.R.E.M.A. MANUAL FOR RAILWAY ENGINEERING.

PRIOR TO WELDING, EACH WELDER SHALL HAVE BEEN CERTIFIED IN ACCORDANCE WITH AWS REQUIREMENTS DURING A PERIOD OF ONE (1) YEAR PRIOR TO WORK ON THE BRIDGE. CERTIFICATION MUST BE PRESENTED UPON REQUEST.

SAFETY

THE CONTRACTOR WILL BE REQUIRED TO CONFORM TO ALL OSHA SAFETY REGULATIONS REGARDING WORKER SAFETY.

THE CONTRACTOR IS RESPONSIBLE FOR ALL ASPECTS OF WORKER AND SITE SAFETY, AND WILL HAVE A RESPONSIBLE EMPLOYEE IN CHARGE ON SITE AT ALL TIMES DURING CONSTRUCTION.

OCCUPATION OR FOULING OF THE TRACK WILL ONLY TAKE PLACE IF THE CONTRACTOR HAS PERMISSION FOR TRACK TIME FROM THE INCLINE, CONFORMING TO THE INCLINE’S RULES.



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GENERAL NOTES &
SPECIFICATIONS
INCLINE RAILWAY AT LOOKOUT MOUNTAIN CARTA
827 E BROW RD
LOOKOUT MOUNTAIN, TN 37350
HAMILTON COUNTY

REVISIONS		DESCRIPTION	
NO.	DATE	BY	



DESIGNER CYH
REVIEWER KCW

PROJECT 11-090

DATE 6-26-26

SHEET 2

REVISIONS		DESCRIPTION	
NO.	DATE	BY	

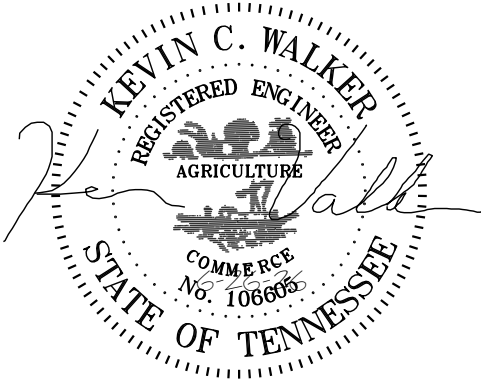
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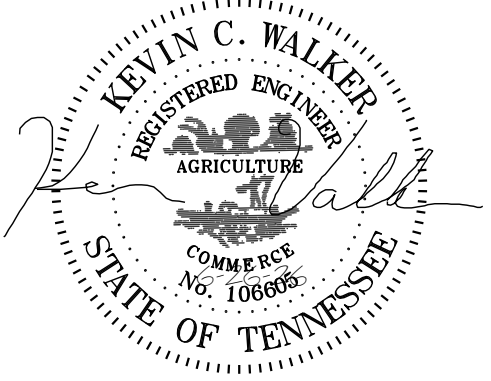
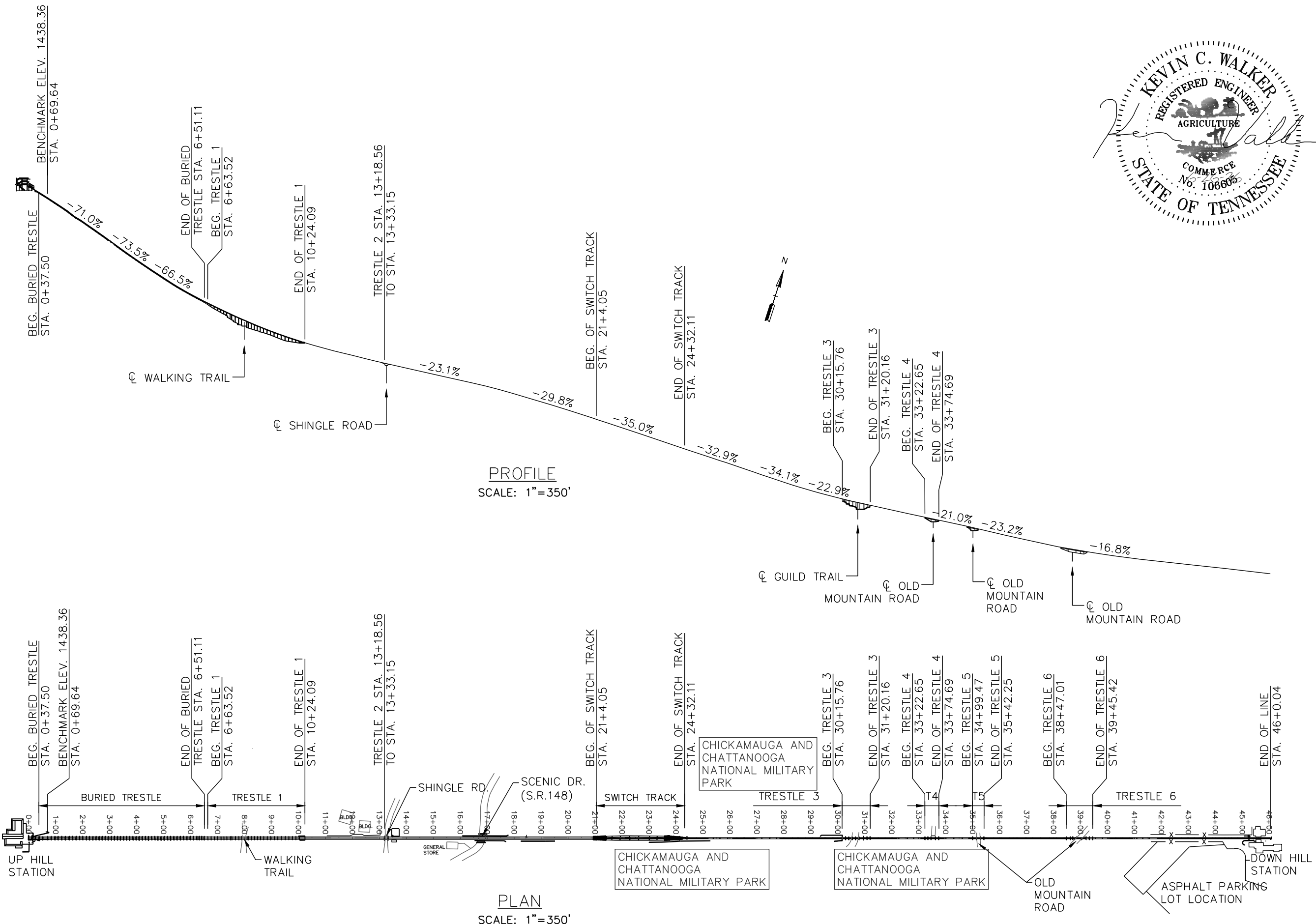
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SHEET 3

ESTIMATED REPAIR QUANTITIES		
ITEM	QTY	UNIT
TRESTLE TIES – 6"x8"x14'-0"	20	EA
TRESTLE TIES – 7"x9"x14'-0"	20	EA
ASCE 60# RAIL	2340	LF
BRAKE TIMBER – 5½"x3½"	1020	LF
STRINGER SHIM – ¾"x6"x5'-0"	1	EA
PASSING SWITCH TRACK RECONSTRUCTION	1	LS
TOTAL ESTIMATED TIE SHIM QUANTITIES FOR BURIED TRESTLE & TRESTLE 1		
ITEM	QTY	UNIT
TIE SHIM – ⅛"	120	EA
TIE SHIM – ¼"	100	EA
TIE SHIM – ½"	70	EA
TIE SHIM – ¾"	40	EA





OVERALL PLAN & PROFILE
INCLINE RAILWAY AT LOOKOUT MOUNTAIN CARTA
827 E BROW RD
LOOKOUT MOUNTAIN, TN 37350
HAMILTON COUNTY

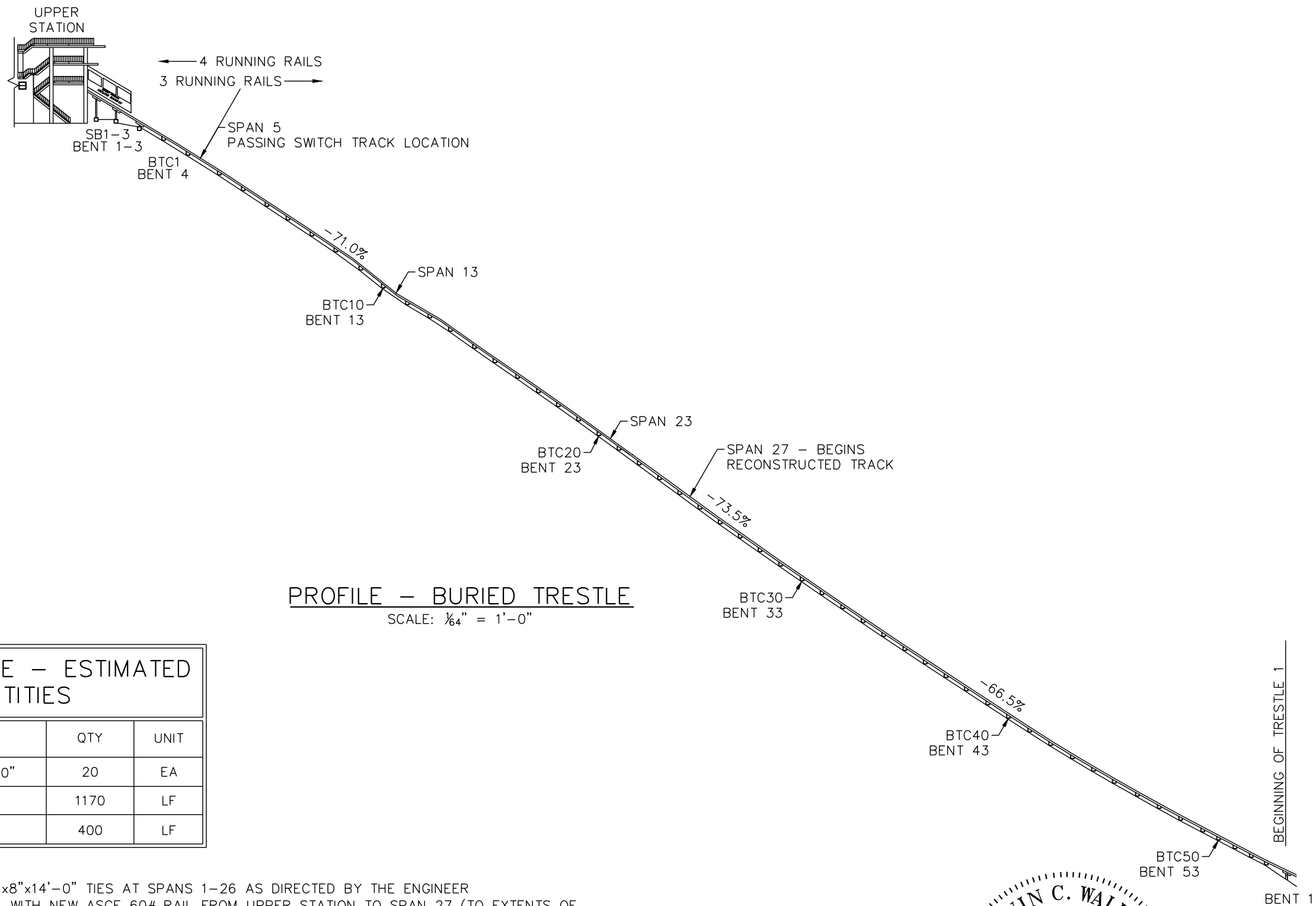
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REVIEWER KCW

PROJECT 11-090

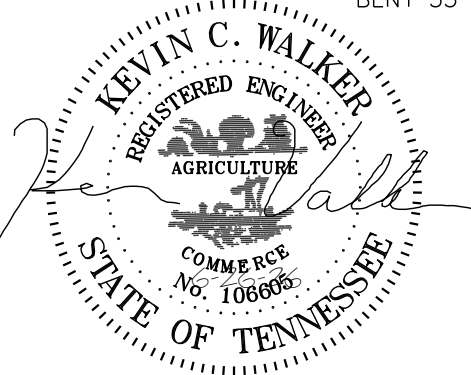
DATE 6-26-26

SHEET 4



PROFILE – BURIED TRESTLE

SCALE: 1/4" = 1'-0"



BURIED TRESTLE – ESTIMATED QUANTITIES

ITEM	QTY	UNIT
TRESTLE TIES – 6"x8"x14'-0"	20	EA
ASCE 60# RAIL	1170	LF
BRAKE TIMBER – 5½"x3½"	400	LF

SCOPE OF WORK:

- SPOT REPLACE (20) 6"x8"x14'-0" TIES AT SPANS 1–26 AS DIRECTED BY THE ENGINEER
- REPLACE EXISTING RAIL WITH NEW ASCE 60# RAIL FROM UPPER STATION TO SPAN 27 (TO EXTENTS OF REPLACED SECTION; ~80TFT OF 4 RUNNING RAILS, ~270TFT OF 3 RUNNING RAILS)
- RECONSTRUCT PASSING SWITCH TRACK AT UPPER STATION WITH NEW RUNNING RAIL, WORK TO BE PAID BY LUMP SUM. ALL RUNNING RAIL SHALL BE PAID BY LINEAR FEET
- INSTALL RAIL SHIMS AS NEEDED FOR TRUE BEARING WITH TIE PADS MADE FROM FIBER-REINFORCED ELASTOMERIC TIE PADS OR AN APPROVED ALTERNATIVE, COST INCIDENTAL TO FURNISHING AND INSTALLING RAIL
- REPLACE BRAKE TIMBER (MEASURED AND PAID BY LF OF (1) 5½"x3½" TIMBER):
 - SPANS 6–12 BOTH SIDES
- INSTALL TIE SHIMS FOR TRUE BEARING BETWEEN STRINGER AND TIE, AS DIRECTED BY THE ENGINEER, SEE TOTAL ESTIMATED QUANTITY ON SHEET 3

NOTE:

- STATIONING AND RAIL LENGTHS ARE APPROXIMATE. CONTRACTOR TO FIELD VERIFY DIMENSIONS AND RAIL QUANTITY

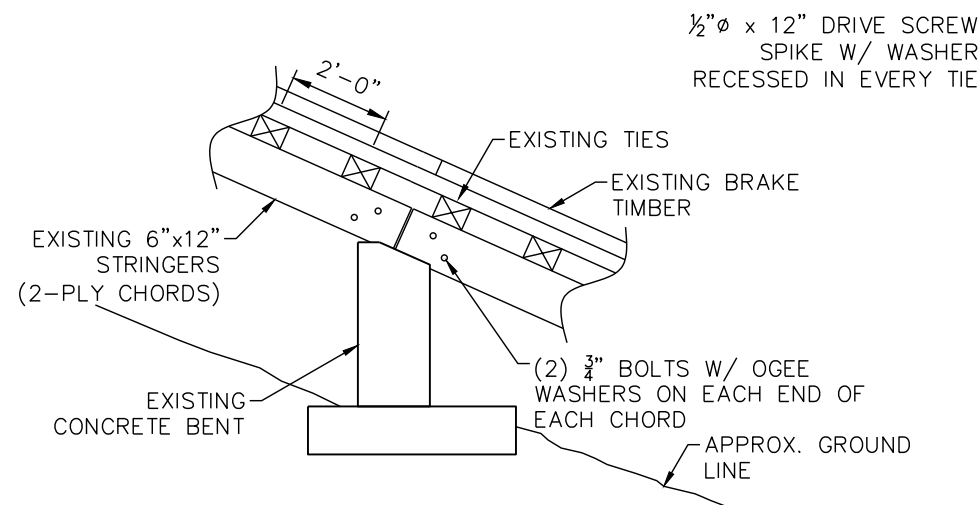
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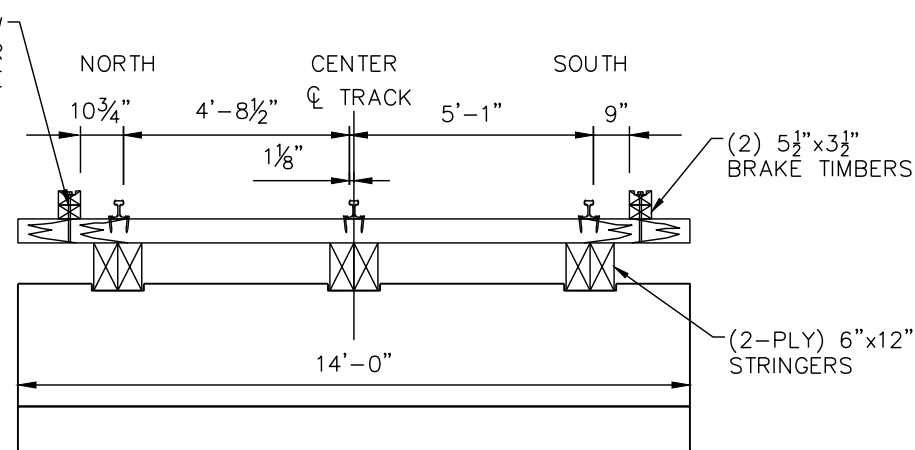
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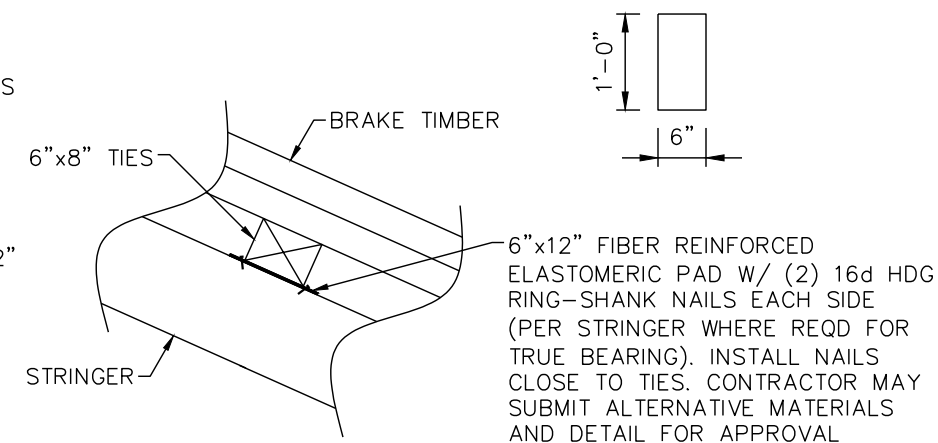
SHEET 5



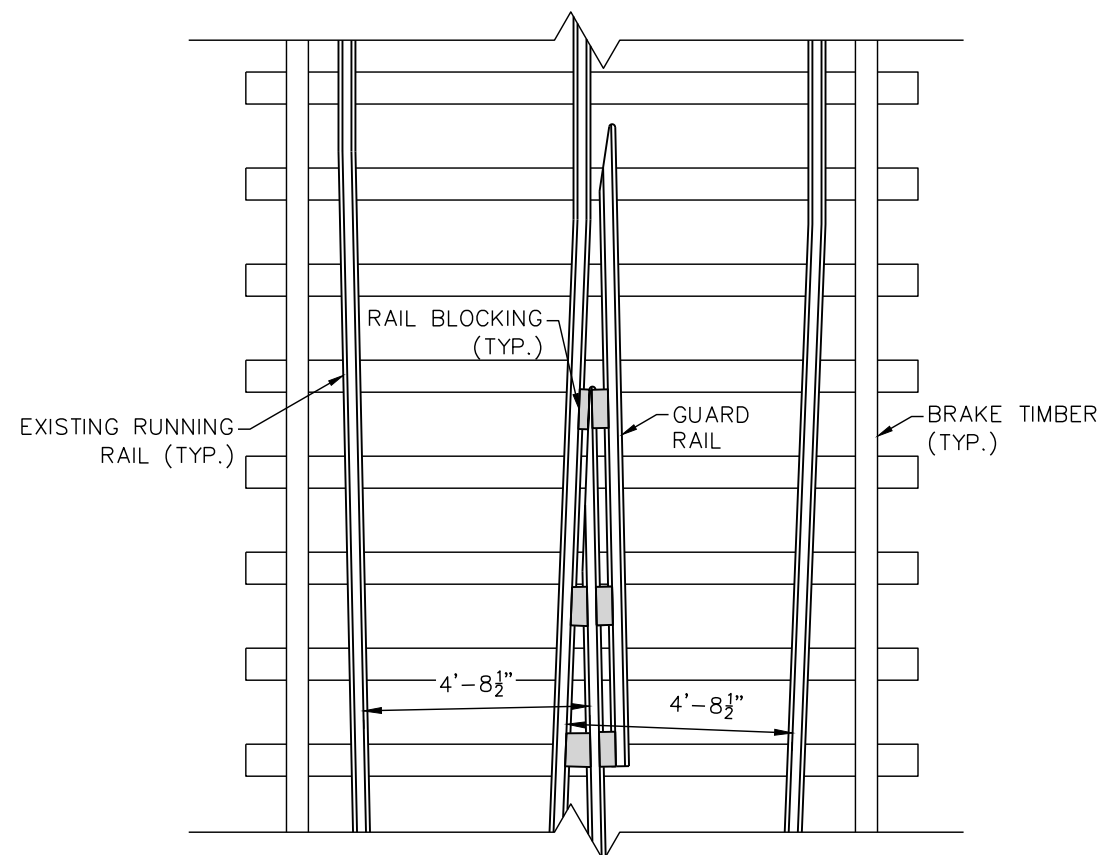
TYPICAL BURIED TRESTLE PROFILE



TYPICAL BURIED TRESTLE CAP SECTION



TIE SHIM DETAIL



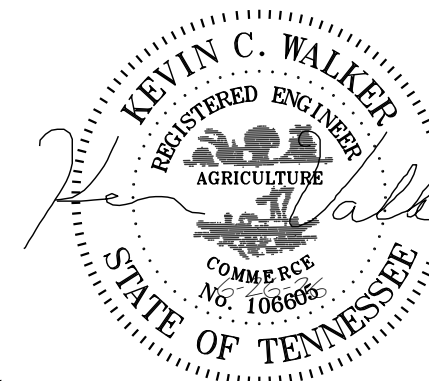
UPPER STATION PASSING SWITCH PLAN

NOTES:

THE PASSING SWITCH TRACK SHALL BE RECONSTRUCTED TO MATCH THE EXISTING CONFIGURATION, ALIGNMENT, GAUGE, FLANGWAY DIMENSIONS, RAIL BLOCKING, AND ANY OTM. PRIOR TO REMOVAL OF ANY EXISTING TRACKWORK, THE CONTRACTOR SHALL FIELD-MEASURE AND DOCUMENT THE EXISTING RAIL LAYOUT, GAUGE, GUARD RAIL PLACEMENT, AND FLANGWAY OPENINGS. THE CONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS IN THE FIELD. NO DIMENSIONAL CHANGES TO THE PASSING ARRANGEMENT SHALL BE MADE WITHOUT ENGINEER APPROVAL

EXISTING GUARD RAIL MAY BE REUSED OR SHALL BE REPLACED WITH RELAY RAIL TO MATCH EXISTING GEOMETRY.

ALL COSTS FOR THE PASSING TRACK TRANSITION SHALL BE PAID BY LUMP SUM. ALL RUNNING RAIL SHALL BE PAID SEPARATELY BY LINEAR FEET.



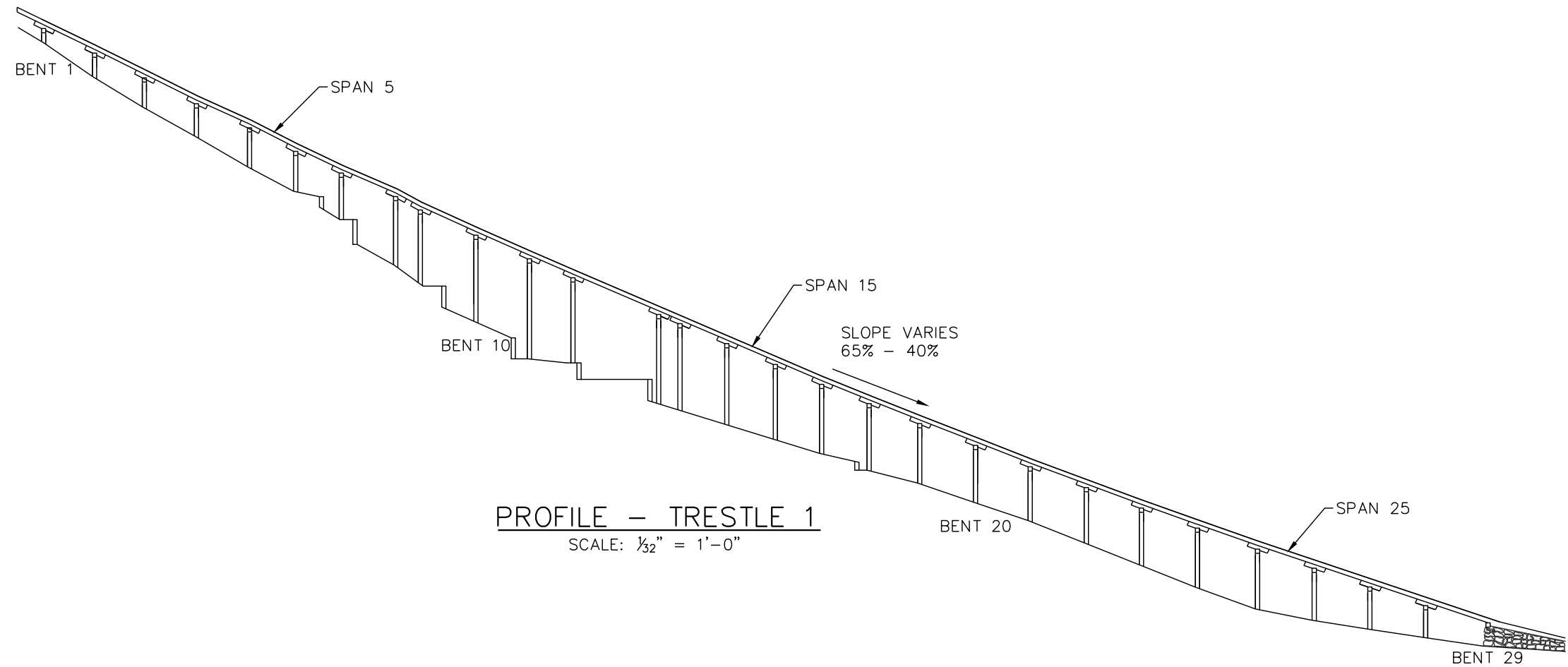
NO.	REVISIONS		DESCRIPTION
	DATE	BY	

DESIGNER CYH
REVIEWER KCW

PROJECT 11-090

DATE 6-26-26

SHEET 6



TRESTLE 1 – ESTIMATED QUANTITIES		
ITEM	QTY	UNIT
ASCE 60# RAIL	1170	LF
TRESTLE TIES – 7"x9"x14'-0"	20	EA
BRAKE TIMBER – 5½"x3½"	620	LF
STRINGER SHIM – ¾"x6"x5'-0"	1	EA

- SCOPE OF WORK:
1. SPOT REPLACE (15) 7"x9"x14'-0" TIES AS DIRECTED BY THE ENGINEER
 2. ADD (5) 7"x9"x14'-0" TIES TO REDUCE SPACING AS DIRECTED BY THE ENGINEER
 3. REPLACE EXISTING RAIL WITH NEW ASCE 60LB RAIL TO THE FIRST JOINT BEYOND THE BOTTOM OF TRESTLE 1 (~390 TFT)
 4. REPLACE BRAKE TIMBER:
 - 4.1. SPANS 12-15 NORTH SIDE
 - 4.2. SPANS 19-20 SOUTH SIDE
 - 4.3. SPANS 21-28 BOTH SIDES
 5. INSTALL SHIM BETWEEN CORBEL AND STRINGER AT STRINGER 6 OVER BENT 26 (FIBER REINFORCED ELASTOMER OR HARDWOOD, SEE SHEET 8)
 6. INSTALL TIE SHIMS FOR TRUE BEARING AS DIRECTED BY THE ENGINEER, SEE TOTAL ESTIMATED QUANTITY ON SHEET 3
- NOTE:
1. STATIONING AND RAIL LENGTHS ARE APPROXIMATE. CONTRACTOR TO FIELD VERIFY DIMENSIONS AND RAIL QUANTITY



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TRESTLE 1-1
INCLINE RAILWAY AT LOOKOUT MOUNTAIN CARTA
827 E BROW RD
LOOKOUT MOUNTAIN, TN 37350
HAMILTON COUNTY

REVISIONS		DESCRIPTION	
NO.	DATE	BY	

DESIGNER CYH
REVIEWER KCW

PROJECT 11-090

DATE 6-26-26

SHEET 7

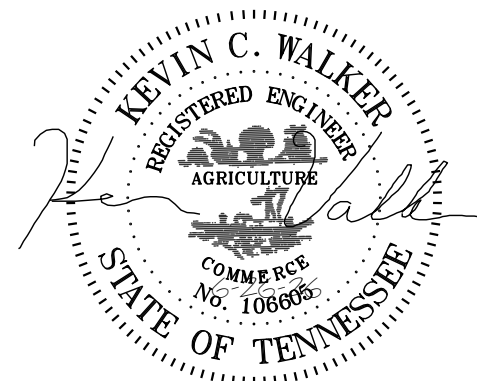
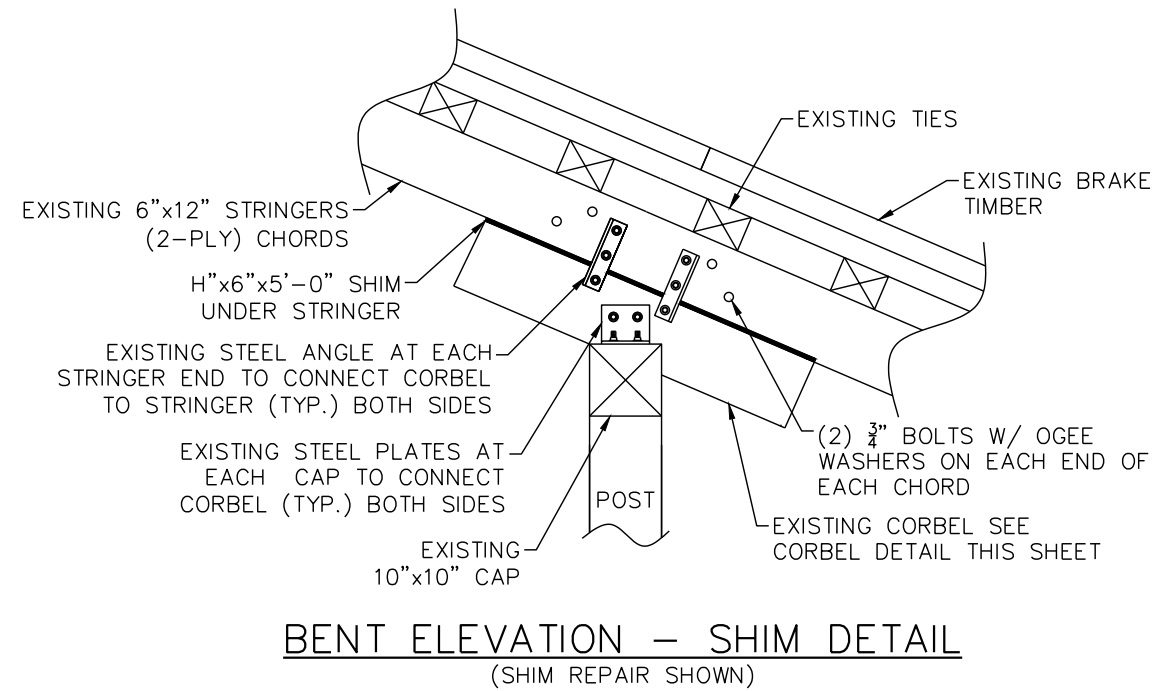
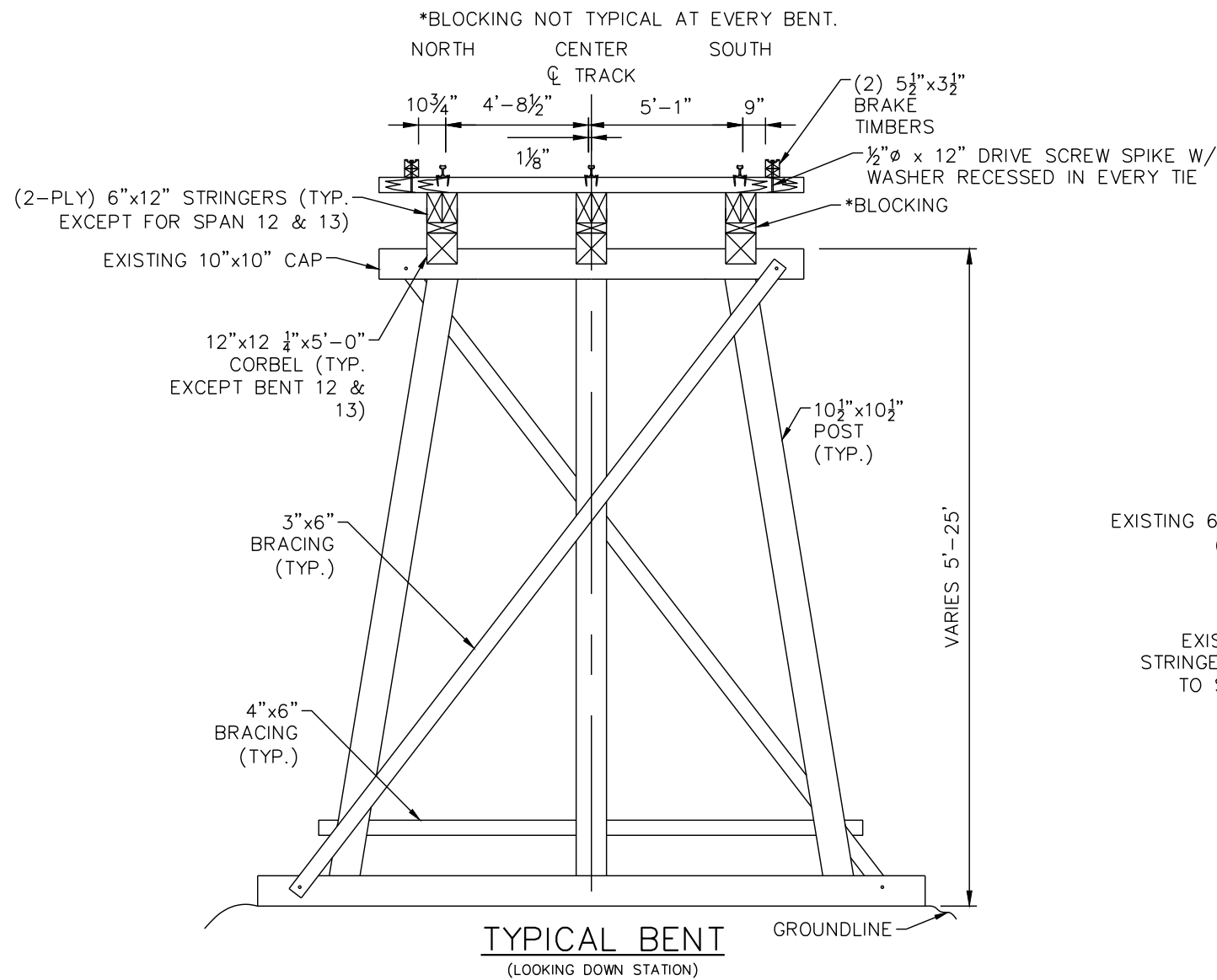
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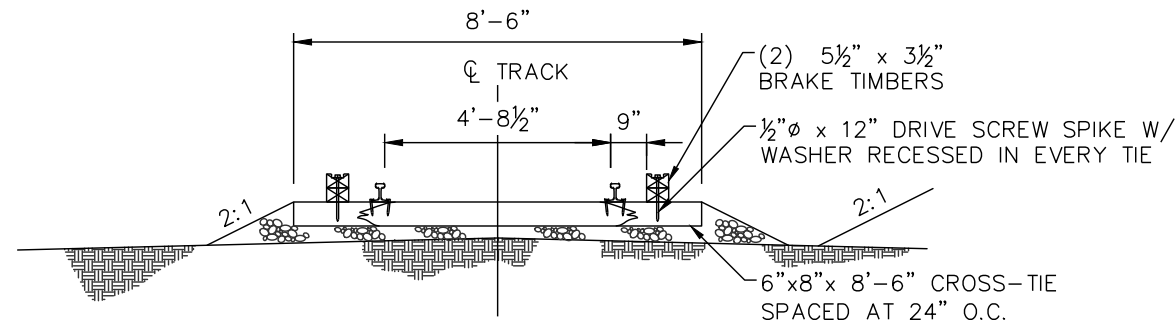
DESIGNER CYH
REVIEWER KCW

PROJECT 11-090

DATE 6-26-26

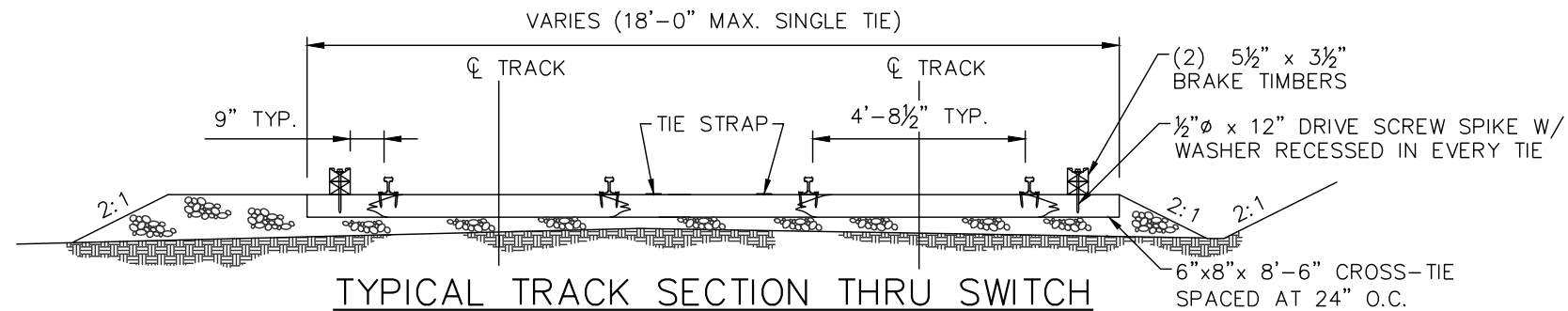
SHEET 8





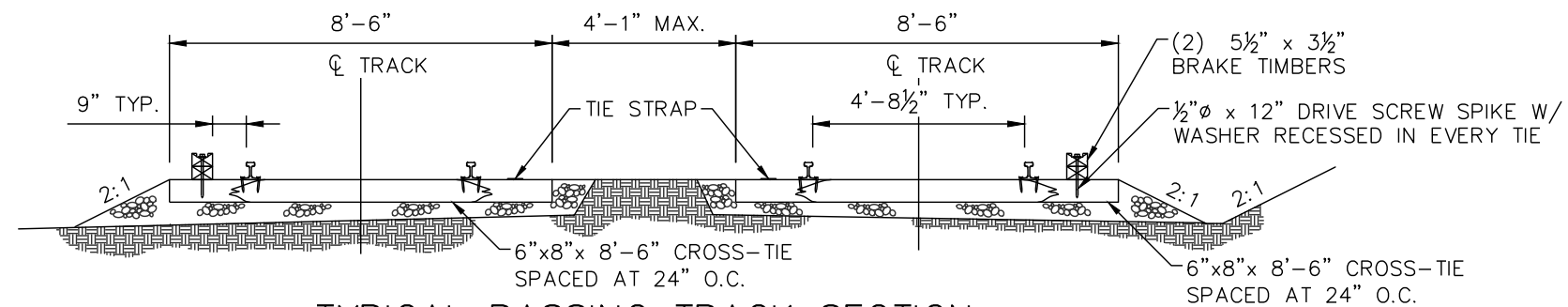
TYPICAL SINGLE TRACK SECTION

(LOOKING UPHILL)
(BELOW SWITCH)



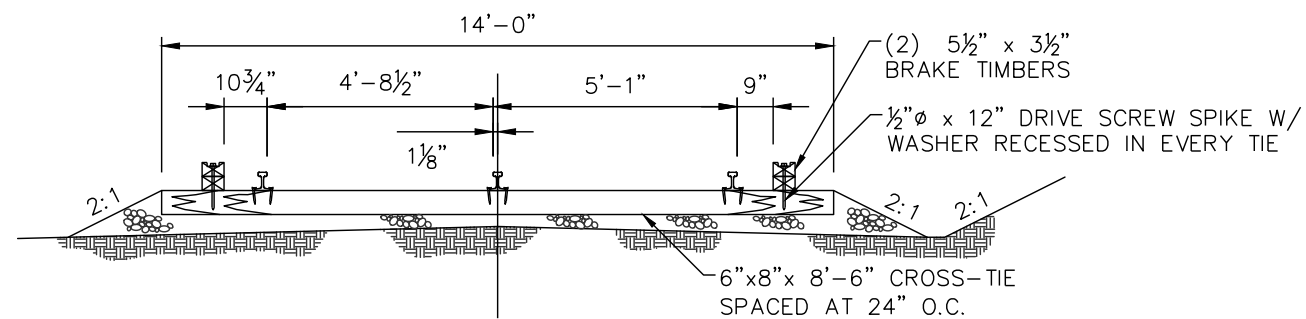
TYPICAL TRACK SECTION THRU SWITCH

(LOOKING UPHILL)
(SINGLE TIE)



TYPICAL PASSING TRACK SECTION

(LOOKING UPHILL)
(DOUBLE TIE)



TYPICAL DOUBLE TRACK SECTION

(LOOKING UPHILL)
(ABOVE SWITCH)



NO.	DATE	BY	REVISIONS	DESCRIPTION

DESIGNER CYH
REVIEWER KCW

PROJECT 11-090

DATE 6-26-26

SHEET 9