



## Invitation To Bid

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August 12, 2021

The R. J. Corman Railroad Company/Tennessee Terminal (“the railroad”) has received a grant from the Mississippi Development Authority for rehabilitating the Olive Branch of the Tennessee Terminal lines. Work consists of replacing 2,011 ties, replacing 240 switch ties, 5 miles of surfacing, and replacing 2 at grade crossings. The railroad invites all interested parties to submit bids for the labor and equipment for project 20TT-TKMDA19MS. Questions should be directed to Jaylen Slaughter at the following email address:

Jaylen.slaughter@rjcorman.com.

A MANDATORY pre-bid conference will be held at 8:00 a.m. EDT, August 24, 2021 at R.J. Corman, 8500 Summit Cove, Olive Branch, MS 38654.

Bids must be received no later than 3:00 p.m. EDT, August 30, 2021 at 1588 Leestown Road, STE 313, Lexington KY 40508. Bids received after that date and time specified above shall not be opened and shall not be considered for award.

All bids will be opened and read aloud at 133 Buchanan St. Building #4 Lexington KY 40508 on August 30, 2021 at 4:00 p.m. EDT. If you would like to join the public bid opening virtually or by phone please contact Jaylen.Slaughter@rjcorman.com. Contract award is anticipated to be before September 20, 2021, and all work completed not later than December 31, 2021.

The contract documents and any addedums will be posted on the R.J. Corman website at: <https://www.rjcorman.com/contact/bidding-opportunities>

# Instructions To Bidders

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## Definitions\*

**Acceptance.** The formal written acceptance by R. J. Corman that all the Work or a specified portion thereof has been satisfactorily completed pursuant to the Agreement.

**Agreement.** The written agreement executed by the Contractor and R. J. Corman covering the performance of the Work, including the furnishing of labor, superintendence, materials, tools and equipment as indicated in the Contract Documents.

**Addenda.** Written revisions including deletions and/or additions to the Contract Documents issued by R. J. Corman prior to opening of the bids.

**Change Order.** A written order issued by the Contracting Officer to the Contractor, covering changes in the Work or an adjustment in the contract sum or the contract time.

**Contract Documents.** Includes the Instructions to Bidders, Bid Forms, Security Forms, Agreement, General Conditions, Supplementary Conditions, Technical Specifications, Contract Drawings, Addenda and Change Orders.

**Contracting Officer.** The Vice President or Engineering or President of R. J. Corman or their duly designated representative.

**Contractor.** The individual, partnership, joint venture, firm or corporation, engaged in a direct contractual relationship with R. J. Corman, primarily liable for the acceptable performance of the Work contracted for and for the payment of all legal debts pertaining to the Work, who acts directly or through lawful agents or employees to complete the Work.

**Days.** Calendar days unless otherwise specified.

**Engineer.** The R. J. Corman Vice President of Engineering or a duly designated representative.

**Final Acceptance.** The formal written acceptance by R. J. Corman of the completed work.

**Notice of Award.** Written notice from R. J. Corman to the Contractor notifying the Contractor that it has been selected as the successful bidder.

**Notice of Intent to Award.** Written notice from R. J. Corman to the Contractor notifying the Contractor that it is likely to be selected as the successful bidder, pending approval by R. J. Corman's Board of Commissioners or Executive Director, and instructing it to proceed with administrative Work such as procurement of insurance.

**Notice to Proceed.** Written notice from R. J. Corman to the Contractor to proceed with the Work.

**Service Proven.** Systems, components, processes, and protocols which offer a demonstrated history of satisfactory performance in North American freight railroad operations, railroad vehicle manufacturing, or similar applications for which actual operating and reliability data and end user testimony can be reviewed.

**Subcontractor.** Any person, firm, corporation, other than the Contractor or the employees of the Contractor, who contracts to furnish labor and/or materials in connection with the project.

**Work.** All the construction, labor, materials, equipment and contractual requirements as specified or indicated in the Contract Documents, including all alterations, amendments or extensions thereto made by change orders.

\* Additional definitions may be found throughout the Contract Documents.

## Examination

Bidders should carefully examine the Contract Documents and have the right to examine the jobsite to obtain firsthand knowledge of existing conditions. Bidders will be expected to be aware of local labor availability, means of transportation, laws and codes bearing upon the construction Work, wage scales, licensing or permit requirements, availability of required insurance and other factors that could affect the Work. The Contractor will not be given extra moneys for conditions which are determinable by examining the Contract Documents or Worksite. Bidders are responsible for consulting standards referenced in the Contract Documents.

All bidders are required to attend a pre-bid conference. The conference will be held 8:00 a.m. EDT, August 24, 2021, at R.J. Corman 8500 Summit Cove, Olive Branch, MS 38654.

## Explanations

Prospective bidders who wish explanations or clarifications of an item within the Contract Documents must submit their inquiries in writing to Jaylen Slaughter at the following address:

Jaylen Slaughter  
Funded Projects Manager  
R. J. Corman Railroad Group, LLC  
P.O. Box 788  
101 R. J. Corman Drive  
Nicholasville, KY 40356  
Email: [Jaylen.slaughter@rjcorman.com](mailto:Jaylen.slaughter@rjcorman.com).

Any response that R. J. Corman may choose to make will be by a written addendum to the Contract Documents and posted on the R.J. Corman website at <https://www.rjcorman.com/contact/bidding-opportunities> and emailed to known holders of the Contract Documents. R. J. Corman will not be bound by any informal explanation, clarification or interpretation, oral or written, by whomsoever made, that is not incorporated into an addendum to the Contract Documents.

## Itemized Proposal

The Itemized Proposal must be completed as follows:

**Prices.** Unit, lump sum and other prices must be entered in the appropriate spaces provided. Unit prices should be multiplied by the amount or estimated quantity and the product inserted in the "Amount Bid" column shown on the Itemized Proposal.

In the case of any bid item for which a fixed amount predetermined by R. J. Corman has already been entered on the Itemized Proposal the amount so entered shall be conclusive on all bidders as the price for such item and shall not be revised unless R. J. Corman directs a change in the scope of the Work affecting the item to which such amount relates.

Only one proposal for the same Work from an individual, firm, partnership or corporation shall be submitted under the same or different names.

If the prices contained in the Itemized Proposal are obviously unbalanced either in excess or below the reasonable cost analysis values, R. J. Corman may elect to attempt to negotiate the unit prices with the apparent low bidder without changing the total amount bid or the specifications, and in the event those negotiations are not successful or R. J. Corman does not elect to negotiate, the bid will be rejected.

Bidders are requested to observe the following instructions in completing the Itemized Proposal. Failure to do so will not necessarily preclude consideration of a bid, but may result in irregularities serious enough that a bid cannot be considered:

1. The Itemized Proposal must be signed by the bidder.
2. The bidder should not delete, modify or supplement the printed matter on the Itemized Proposal, or make any substitutions.
3. The Itemized Proposal and the other forms accompanying it should be legibly completed in ink or typewritten.
4. Receipt of addenda should be acknowledged in the spaces provided on the Itemized Proposal, by entering the number and date of issue of each.
5. All identifying information, such as the bidder's name, address, principals and state of incorporation, for which spaces are provided, should be entered.
6. Any corrections should be initialed by the person who signs the Itemized Proposal.
7. If the bid is submitted by other than a person, or if the Itemized Proposal is signed for a person by another, evidence of the authority of the person signing the Itemized Proposal is required.

## Bid Security

Bidders are required to furnish bid security in an amount not less than five percent of the total bid price and in favor of R. J. Corman if the base bid exceeds \$50,000.00. The bid security may be in the form of a guaranteed negotiable instrument, letter of credit, or a proposal bond. The letter of credit must be an irrevocable letter of credit issued by a financial institution of B-rating or better and in a form satisfactory to R. J. Corman. The proposal bond must be in a form satisfactory to R. J. Corman and in addition to the standard provisions shall provide that 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 extensions of the times within which the R. J. Corman may receive or accept such proposal or within which the Principal(s) may furnish a Performance and Payment Bond or by any waiver by R. J. Corman of any of the

requirements of said proposal; and said Surety does hereby waive notice of any such extensions or waivers. The Surety thereof must be a corporation or corporations acceptable to R. J. Corman and authorized to guarantee the performance of contracts in Mississippi State. The bid securities of the bidders submitting the three lowest bids will be retained either until the successful bidder has signed the Agreement and has furnished Performance and Labor and Material Payment Bonds and Certificates of Insurance or until the 90th calendar day after the bid opening date, whichever is sooner. Other bid securities will be returned within ten calendar days after the bid opening date. Each bidder agrees that if it fails to execute the Agreement and to furnish the bonds and certificates of insurance required, R. J. Corman will retain 100% of the bid security as liquidated damages.

## Bid Submission

Bids should be submitted in an opaque sealed envelope to **R.J. Corman Railroad, 1588 Leestown Road, STE 313, Lexington KY 40508**. The lower left-hand corner should be marked as follows: BID NO. 20TT-TKMDA19MS. The lower right-hand corner should be marked with the contractor's Certificate of Responsibility Number. All bids will be opened and read aloud at 133 Buchanan St. Building #4 Lexington KY 40508 at the date and times specified above.

## Modification and Withdrawal

Bids may be modified after they have been submitted, but only before the bid opening date and time. Modifications must be signed and must be received by R. J. Corman not later than the bid opening time and date.

Envelopes containing modifications should be addressed as provided in Bid Submission, above, and should identify the bidder and should be identified in the lower left corner as follows:

MODIFICATION TO OUR BID FOR  
BID NO. 20TT-TKMDA19MS

Bids may be withdrawn after they have been submitted, but only before the bid opening date and time; withdrawn bids may be resubmitted, but only in the way the bid was originally submitted. Withdrawals must be signed as stipulated above for modification. Bids may not be withdrawn after the bid opening time and date except as may be agreed upon in writing by the bidder and R. J. Corman.

Envelopes containing withdrawals should be addressed as provided in the Invitation to Bid and should identify the withdrawer in the lower left corner as follows:

WITHDRAWAL OF OUR BID FOR  
BID NO. 20TT-TKMDA19MS

## Evaluation and Award

Each bid timely received and in R. J. Corman's hands at the time and place set for the bid opening shall constitute an offer to perform the Work in strict accordance with the terms and conditions found in the Contract Documents. R. J. Corman may accept any bid by giving the bidder Notice of Award. Bids will be evaluated based on determining the lowest total bid price of a bidder whose bid is responsive to the

solicitation, and who is determined to be technically qualified and financially responsible to perform the Work satisfactorily and has submitted all necessary documents.

All extensions of the unit prices shown, and the subsequent addition of extended amounts will be verified by R. J. Corman. In the event of a discrepancy between the sum of the extended amounts and the total bid price, the sum of the extended amounts shall govern. In the event of a discrepancy between the unit price bid and the extension, the unit price bid will be deemed intended by the bidder and the extension will be adjusted. In the event of a discrepancy between the unit price written in words and the unit price written in numerals, the unit price written in words shall govern. R. J. Corman reserves the right, nevertheless, to accept a bid other than the lowest, if it determines that the public interest will best be served by doing so.

## Execution of Contracts/Bond/Insurance

The bidder shall furnish an acceptable Certificate of Insurance as set forth in the General Conditions within ten days after being given Notice of Intent to Award. The bidder shall execute the Agreement and forward same to R. J. Corman within three business days after receipt of the Agreement from R. J. Corman. The bidder shall furnish the Performance Bond and Labor and Material Payment Bond to R. J. Corman within three business days after receipt of a fully executed contract from R. J. Corman. R. J. Corman may require appropriate evidence that the persons executing the Agreement and the Bonds for both the bidder and its surety or sureties are duly empowered to do so. Separate Performance and Labor Payment Bonds are required, each in an amount at least equal to the total bid price. The Bonds shall be in the form as set forth herein. The Surety and Insurance Companies must be corporations acceptable to R. J. Corman and authorized to issue insurance policies in the State of Mississippi. The Performance Bond and the Labor Payment Bond shall remain in effect until Final Acceptance. The Agreement shall not be binding upon R. J. Corman until it is executed by R. J. Corman.

A Maintenance Bond in the amount of 100% of the total bid price shall be provided upon Final Acceptance. Such Maintenance Bond shall be in a form satisfactory to R. J. Corman. The Surety thereon must be a corporation or corporations authorized to issue insurance policies in the State of Mississippi and acceptable to R. J. Corman.

Each of the above referenced bonds shall provide that alterations, extensions of the time of performance, extra and additional Work and other changes authorized by the Agreement may be made without notice from R. J. Corman or consent of the Surety.

## Single Bid Situations

In the event a single bid is received, a price and/or cost analysis will be made, and R. J. Corman may choose to proceed with a negotiated procurement with the bidder rather than accept the bid.

## Contractor's Participation

Except as otherwise provided, the Contractor shall perform the percentage of the Work with its own forces as set forth in the Itemized Proposal. Where less than an entire item is subcontracted, the value of the Work subcontracted will be based on the estimated cost of such portion of the bid item, determined from information submitted by the Contractor, subject to approval by the R. J. Corman. If, during the progress of the Work hereunder, the Contractor requests a reduction in such participation percentage and the Engineer determines that it would be to R. J. Corman's advantage, the percentage of

the Work required to be performed by the Contractor may be reduced provided written approval of such reduction is obtained by the Contractor from R. J. Corman.

## Compliance with Laws and Exemption

The Contractor shall comply with all federal, state, county and municipal laws, codes and regulations in connection with the prosecution of the Work. The Contractor shall also secure and pay for all permits, fees and licenses necessary to comply with applicable federal and state laws. The Contractor shall also secure appropriate permission and permits before commencing sewer or water line connections.

The Public Authorities Law provides that no municipality or political subdivision shall have jurisdiction over any facilities of R. J. Corman. The Contractor therefore is not required to obtain a local building permit but must obtain an R. J. CORMAN building permit.

The Contractor shall protect, indemnify and hold harmless R. J. Corman and all its commissioners, officers, agents and employees against any and all claims and liabilities arising from or based on the violation of any such requirement or law whether by the Contractor, its employees, agents or subcontractors

## Mobilization

The Contractor shall furnish and mobilize all required plants and equipment necessary for the proper construction of the Work. Unless a pay item for mobilization is specifically included in the proposal, no separate payment will be made for furnishing and mobilizing said plants and equipment, but the cost thereof shall be deemed included in the various items of the Itemized Proposal.

# Bid Forms

## Identification

Proposal Of: \_\_\_\_\_  
(Name of Bidder)

Address Line 1: \_\_\_\_\_

Address Line 2: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

## Line Items

Item	Description	Qty	Units	Unit Price	Extended Price	Amount Bid
1	Mobilization	1	Lump Sum			
2	Install ballast and surface	26,400	Track Feet			
3	Cross tie replacement	2,011	Each			
4	Switch tie replacement	240	Each			
5	Tie disposal	2,491	Each			
6	Crossing Replacement	148	Track Feet			

Total Bid Amount: \_\_\_\_\_ \$ \_\_\_\_\_  
(words) (numerals)



## Certification

### INDIVIDUAL

An individual doing business under the firm name of: \_\_\_\_\_

Address: \_\_\_\_\_

Phone: \_\_\_\_\_ Fax: \_\_\_\_\_ NYS VIN: \_\_\_\_\_

Email: \_\_\_\_\_

Individual's Name:

\_\_\_\_\_  
(signature)

\_\_\_\_\_  
(printed)

Witnessed by: \_\_\_\_\_ Date: \_\_\_\_\_

### PARTNERSHIP

Partners trading and doing business under the firm name of:

\_\_\_\_\_

Address: \_\_\_\_\_

Phone: \_\_\_\_\_ Fax: \_\_\_\_\_ NYS VIN: \_\_\_\_\_

Email: \_\_\_\_\_

Partner's Name:

\_\_\_\_\_  
(signature) (printed)

\_\_\_\_\_  
(signature) (printed)

Witnessed by: \_\_\_\_\_ Date: \_\_\_\_\_

**CORPORATION, COMPANY or LIMITED LIABILITY COMPANY**

Name: \_\_\_\_\_

Address: \_\_\_\_\_

Phone: \_\_\_\_\_ Fax: \_\_\_\_\_ NYS VIN: \_\_\_\_\_

Email: \_\_\_\_\_

A CORPORATION COMPANY LLC (circle one) organized under the laws of the State of

\_\_\_\_\_

Authorized Officer:

\_\_\_\_\_  
(signature)

\_\_\_\_\_  
(printed)

Attest: \_\_\_\_\_ Date: \_\_\_\_\_

(corporate seal)

## Non-Collusion Bidding Certification

By submission of this bid, each bidder and each person signing on behalf of any bidder certifies, and in the case of a joint bid each party thereto certifies as to its own organization, under penalty of perjury, that to the best of his/her knowledge and belief:

1. The prices in this bid have been arrived at independently, without collusion, consultation, communication or agreement, for the purpose of restricting competition, as to any matter relating to such prices with any other bidder or with any competitor.
2. Unless otherwise required by law, the prices which have been quoted in this bid have not been knowingly disclosed by the bidder and will not knowingly be disclosed by the bidder prior to opening, directly or indirectly, to any other bidder or to any competitor.
3. No attempt has been made or will be made by the bidder to induce any other person, partnership or corporation to submit or not to submit a bid for the purpose of restricting competition.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Title

# Security Forms

## Proposal Bond

KNOW ALL MEN BY THESE PRESENTS, That we the undersigned

\_\_\_\_\_ as Principal, and

\_\_\_\_\_ as Surety, a corporation authorized to guarantee the performance of contracts and to do business in the State of Mississippi, ARE HELD AND FIRMLY BOUND UNTO R. J. Corman in the penal sum of

\_\_\_\_\_ Dollars (\$\_\_\_\_\_),

to be paid to said R. J. Corman, for the payment of which sum, well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents.

WHEREAS, the said Principal has presented a proposal in writing to R. J. Corman for \_\_\_\_\_, in accordance with Bid Documents prepared under the direction of R. J. Corman.

NOW, THEREFORE, if R. J. Corman shall accept the bid of the Principal and the Principal shall enter into a Contract with R. J. Corman in accordance with the terms of such bid, and give such bond or bonds as may be specified in the Contract Documents with good and sufficient surety for the faithful performance of such contract and for the prompt payment of labor and material furnished in the prosecution thereof, or in the event of the failure of the Principal to enter such contract and give such bond or bonds, if the Principal shall pay to R. J. Corman the difference not to exceed the penalty hereof between the amount specified in said bid and such larger amount for which R. J. Corman may in good faith contract with another party to perform the Work covered by said bid, then this obligation shall be null and void, otherwise to remain in full force and effect.

SIGNED this \_\_\_\_ day of \_\_\_\_\_, 202\_\_

\_\_\_\_\_ Principal

By: \_\_\_\_\_

\_\_\_\_\_ Surety

By: \_\_\_\_\_

## Performance Bond

1. Know all men by these presents, that \_\_\_\_\_,  
as Contractor, hereinafter called the "Principal"), and

\_\_\_\_\_  
(hereinafter called the "Surety") are held and firmly bound unto R. J. Corman in the full and just sum of \_\_\_\_\_ Dollars (\$\_\_\_\_\_)

good and lawful money of the United States of America, to the payment of which said sum of money, well and truly to be made and done the said Principal binds itself, its heirs, executors, administrators or assignees and the said Surety binds itself, its successors or assigns, jointly and severally, firmly by these presents.

2. Signed and dated this \_\_\_ day of \_\_\_\_\_, 202\_\_.

3. Whereas, said Principal has entered into a certain written contract bearing the date of \_\_\_\_\_, 202\_\_, with R. J. Corman for the construction, improvement, maintenance or repair of a public Work, a copy of which contract is made a part hereof by reference with the same effect as if set forth herein in full.

Now, therefore, THE CONDITION OF THIS OBLIGATION IS SUCH that if the said Principal shall well, truly and faithfully perform the Work in accordance with the terms of the contract and as said contract may be modified or amended, and with the plans and specifications, and will commence and complete the Work within the time prescribed in the contract, and shall protect R. J. Corman against, and pay any excess of cost as provided in said contract, and all amounts, damages, costs and judgments which may be recovered against said R. J. Corman or its members, officers or agents of which the said R. J. Corman may be called upon to pay to any person or corporation by reason of any damages, direct or indirect, arising or growing out of the doing of said Work, or from the negligence, nonfeasance, misfeasance or malfeasance of any officer, agent or employee of R. J. Corman, or suffered or claimed on account of said construction, improvement, maintenance or repair of a public Work during the time thereof and until the final completion and acceptance of the Work, or the manner of doing the same, or the neglect of the said Principal, or its agents, or servants, or the improper performance of the said Work by the said Principal, or its agents, or servants, or from any other cause, then this obligation shall be null and void, otherwise to remain in full force and virtue.

In the event of a failure of performance of the contract by the Principal, which shall include, but not be limited to, any breach or default of the contract by the Principal, or in case said contract is forfeited by the Principal in the manner provided for in the contract then the said Surety, for value received, hereby stipulates and agrees, if requested to do so by the R. J. Corman, has the option to either remedy the default or breach or forfeiture of the Principal or take charge and fully perform and complete the Work, mentioned and described in said contract and specifications, pursuant to the terms, conditions and covenants thereof and as may be amended, at its own expense. The procedure by which the Surety undertakes to discharge its obligations under the bond shall be subject to the advance written approval of the R. J. Corman.

If the Surety completes the contract, it shall be paid for the actual items of Work performed in accordance with the Principal's contract terms and prices. In this event the Surety assumes the rights and obligations of the Principal.

It shall be the duty of the Surety to give unequivocal notice in writing to R. J. Corman, within thirty (30) days after receipt of written notice from R. J. Corman, to the Surety, of the Surety's election to remedy default(s) or breach(es) or forfeiture(s) promptly or to perform and fully complete the contract promptly as provided herein, time being of the essence of this bond. In said notice of election, the Surety shall state the date on which the remedy or performance shall commence. During the period between the R. J. Corman's notice and Surety's performance of the contract or remedy of the default, breach or forfeiture, the Surety shall be liable for and agrees to pay any and all reasonable and necessary costs as determined by R. J. Corman to maintain the project site safe and convenient to the public.

It shall also be the duty of the Surety to give prompt notice in writing to R. J. Corman upon the completion of the remedy and/or correction of each breach or default or completion of the contract. The Surety shall not assert solvency of its Principal or its Principal's denial of default as justification for its failure to give notice of election or for its failure to promptly remedy the breach or default or to complete the contract.

In the event the Surety shall fail to exercise either option or to act promptly then R. J. Corman shall give five (5) days notice of such failure, both to Principal and Surety, and after the expiration of the five (5) days R. J. Corman may cause the Work to be completed, and the Surety and the Principal shall be jointly and severally liable for the amount of excess cost of completing the contract Work beyond the amounts remaining for this contract adjusted for the Work actually performed. When the cost of completion of performance is estimated, the Principal and Surety shall pay, free from all liens and encumbrances, R. J. Corman determined estimated completion costs above the funds remaining for this contract, to R. J. Corman within 30 days of receipt of the estimate. Adjustment of R. J. Corman's estimated completion cost will be made upon R. J. Corman's final acceptance of the Work and appropriate refunds, if any, will be promptly made to the Surety. Any actual costs in excess of the estimated price shall be paid to R. J. Corman on demand. Additionally, the Principal and Surety shall be liable for any applicable liquidated and/or engineering costs or damages.

In addition, the said Principal and Surety further agree, as part of this obligation, to pay all damages of any kind to person or property that may result from a failure in any respect to perform and complete said contract including, but not limited to costs necessary to protect the public or to avoid inconvenience to the public, liquidated damages as provided above, all repair and replacement costs necessary to rectify construction errors, architectural and engineering costs and fees, all consultant fees, all testing and laboratory fees, and all interest, legal fees and litigation costs incurred by R. J. Corman.

And the said Surety thereby stipulates and agrees that no change, extension, alteration, deduction or addition in or to the terms of the said contract or the plans and specifications accompanying the same, shall in anyway affect the obligations of said Surety of its bond.

\_\_\_\_\_ Principal

\_\_\_\_\_ Surety

## PERFORMANCE BOND SURETY ACKNOWLEDGMENT

STATE OF \_\_\_\_\_

COUNTY OF \_\_\_\_\_

On this \_\_\_\_ day of \_\_\_\_\_, 202\_\_, before me personally came and appeared

\_\_\_\_\_, to me known, who, being duly sworn, did

depose and say that he/she resides at

\_\_\_\_\_  
\_\_\_\_\_

that he/she is the \_\_\_\_\_ of

\_\_\_\_\_, the

corporation described in and which executed the foregoing document, that he/she knows the

seal of said corporation, that one of the impressions affixed to said instrument is an impression of such seal, that it was so affixed by order of the directors of said corporation, and that he/she signed his/her name thereto by like order.

\_\_\_\_\_ Notary Public

## Labor Payment Bond

Know all men by these presents, That

\_\_\_\_\_ (hereinafter called the "Principal") and

\_\_\_\_\_ (hereinafter called the "Surety"), are held and firmly bound unto R. J. Corman in the full and just

sum of \_\_\_\_\_ Dollars (\$ \_\_\_\_\_) good and lawful money of the United States of America, for payment of which said sum of money, well and truly to be made and done, the said Principal binds itself, its heirs, executors and administrators, successors and assigns, and the said Surety binds itself, its successors and assigns jointly and severally, firmly by these presents.

Signed and dated this \_\_\_\_\_, 202\_\_.

WHEREAS, said Principal has entered into a certain written contract, bearing the date of \_\_\_\_\_, 202\_\_, with R. J. Corman.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION IS SUCH, that if the said Principal shall promptly pay all moneys due to all persons furnishing labor or materials to it or its subcontractors in the prosecution of the Work provided for in said contract, then this obligation shall be void, otherwise to remain in full force and effect;

Provided, however, that the Chief Financial Officer of R. J. Corman having required the said Principal to furnish this bond in order to comply with the provisions of section 137 of the State Finance Law, all rights and remedies on this bond shall inure solely to such persons and shall be determined in accordance with the provisions, conditions and limitations of said section to the same extent as if they were copied at length herein; and

Further, provided, that the place of trial of any action on this bond shall be in the county in which the said contract was to be performed, or if said contract was to be performed in more than one county, then in any such county, and not elsewhere.

\_\_\_\_\_ Principal

\_\_\_\_\_ Surety



## LABOR PAYMENT BOND SURETY ACKNOWLEDGMENT

STATE OF \_\_\_\_\_

COUNTY OF \_\_\_\_\_

On this \_\_\_\_ day of \_\_\_\_\_, 202\_\_, before me personally came and appeared

\_\_\_\_\_, to me known, who, being duly sworn, did

depose and say that he/she resides at

\_\_\_\_\_  
\_\_\_\_\_

that he/she is the \_\_\_\_\_ of

\_\_\_\_\_, the

corporation described in and which executed the foregoing document, that he/she knows the

seal of said corporation, that one of the impressions affixed to said instrument is an impression of such seal, that it was so affixed by order of the directors of said corporation, and that he/she signed his/her name thereto by like order.

\_\_\_\_\_ Notary Public

## Maintenance Bond

KNOW ALL MEN BY THESE PRESENTS that

\_\_\_\_\_ as Principal, and  
\_\_\_\_\_ as Surety, a corporation of the State  
of \_\_\_\_\_ legally authorized to guarantee the performance of contracts and to  
do business in the State of Mississippi, ARE HELD AND FIRMLY BOUND to R. J. Corman, in the sum of  
\_\_\_\_\_ (\$ ), to be paid to R. J. Corman for its use and  
benefit, for which payment well and truly to be made, we do bind ourselves, our heirs, executors,  
administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, Principal has represented that it has completed the Contract (identify)

\_\_\_\_\_  
in strict and entire conformity with the Contract Documents therefore on file at the offices of RJ  
Corman, a copy of which is made a part hereof by reference with the same effect as if set forth herein in  
full force and virtue.

If within the one year period faulty Workmanship is disclosed, or it appears that defective materials  
were furnished, or it appears that the Work was not performed or the materials were not furnished in  
strict and entire conformity with the terms of the Contract Documents, R. J. Corman shall notify the  
Principal in writing and the Principal shall promptly repair, replace or make good all defective Work or  
materials. In the event that the Principal, after having been so notified, shall refuse or neglect to repair,  
replace or make good such Work or materials within five days from the receipt of such notice (or within  
such other time as R. J. Corman may direct), or shall fail to complete such Work within the time  
prescribed by R. J. Corman then R. J. Corman will proceed to have the Work done by others, and the  
Principal and Surety hereunder shall jointly and severally be liable to pay the cost thereof, subject to the  
monetary limitation first written above.

In case of emergency, as determined by R. J. Corman, R. J. Corman reserves the right to immediately  
effect both temporary and permanent repairs, or to arrange for others to effect such repairs, without  
immediate notification to the Principal, and the Principal and Surety hereunder shall jointly and severally  
be liable to pay the cost thereof.

SIGNED this \_\_\_\_ day of \_\_\_\_\_, 202\_\_

\_\_\_\_\_ Principal

By: \_\_\_\_\_

\_\_\_\_\_ Surety

By: \_\_\_\_\_

## MAINTENANCE BOND SURETY ACKNOWLEDGMENT

STATE OF \_\_\_\_\_

COUNTY OF \_\_\_\_\_

On this \_\_\_\_ day of \_\_\_\_\_, 202\_\_, before me personally came and appeared

\_\_\_\_\_, to me known, who, being duly sworn, did

depose and say that he/she resides at

\_\_\_\_\_  
\_\_\_\_\_

that he/she is the \_\_\_\_\_ of

\_\_\_\_\_, the

corporation described in and which executed the foregoing document, that he/she knows the

seal of said corporation, that one of the impressions affixed to said instrument is an impression of such seal, that it was so affixed by order of the directors of said corporation, and that he/she signed his/her name thereto by like order.

\_\_\_\_\_ Notary Public

# Agreement Between Railroad and Contractor

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CONTRACT BETWEEN

R. J. CORMAN RAILROAD COMPANY

AND

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FOR :

SAMPLE

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## CONTRACTOR AGREEMENT

THIS CONTRACT (this "Agreement") dated and effective as \_\_\_\_\_, 2020 by and between R. J CORMAN RAILROAD COMPANY/ \_\_\_\_\_, the address of which, for purposes of this Agreement, is 101 R J Corman Drive, P.O. Box 788, Nicholasville, Kentucky 40340 ("Railroad") and \_\_\_\_\_, the address of which, for purposes of this Agreement, is \_\_\_\_\_ ("Contractor").

In consideration of the mutual covenants and agreements set forth herein, the parties hereto agree as follows:

### 1. PROJECT DEFINED AND PERFORMANCE STANDARDS

1.1 Contractor will perform all work more particularly described in Addendum 1 attached hereto and made a part hereof (the "Project"), it being understood that the Project is fully described and set forth in the plans and specifications prepared for this Agreement. Should any work or material not directly or indirectly denoted in the plans and specifications be necessary for the proper carrying out of the obvious intentions thereof, Contractor shall furnish any such material and do any such work as fully as if it were particularly delineated or described in the plans and specifications. The plans and specifications shall control all discrepancies between plans and specifications and this Agreement.

1.2 Contractor shall perform work related to the Project in a professional manner, in accordance with American Railway Engineering and Maintenance-of-Way Association (AREMA) Standards and to the sole satisfaction and acceptance of Railroad and Railroad Standard Construction Specifications in Addendum 1.

1.3 All work shall be performed in a safe manner and in accordance with material safety data sheets (MSDS) and all Federal, state and local laws and regulations, including those established by administrative agencies, so as not to create a safety hazard to Railroad, Contractor, their respective agents, employees or subcontractors, or to property, or to third parties and their property or interfere with the normal use and operation of Railroad property and business.

1.4 Whenever the term "Engineer" is used in this Agreement it means the Chief Engineer of the Railroad or his designee.

### 2. EQUIPMENT/RAILROAD OPERATIONS

2.1 Contractor at its sole cost and expense shall furnish all labor, tools, equipment and machinery necessary and appropriate to complete the Project in a substantial and workmanlike manner to the sole satisfaction and acceptance of the Railroad.

2.2 Contractor shall provide all equipment necessary to perform the work properly and complete the Project by the required completion date. Equipment shall be in good operating condition and shall conform to the applicable standards prescribed by the Association of American Railroads and the Federal Railroad Administration ("FRA") for such type of equipment (if any). Contractor must comply with all rules and regulations as set forth by the FRA including the sections concerning Roadway Maintenance Machines. Contractor at its sole cost and expense shall be responsible for the maintenance and repair of any and all equipment used by Contractor during the Project.

2.3 Contractor shall furnish, bear and pay, and shall save Railroad free of, any and all

labor and expense of, and incident to, compliance with the aforementioned rules, regulations and requirements.

2.4 Whenever the work included in this Project is by the side of or contiguous to railroad tracks used and operated by Railroad, Contractor shall use the utmost vigilance in every stage of the execution of the work related to the Project in order to protect effectively against all accidents and/or damages on said railroad by reason of the Project. Contractor shall at all times during the progress of the Project so manage and execute the same in a manner that minimizes the impact on and possible interference with the operation, management and/or maintenance of said railroad or with the business or traffic of the same.

2.5 The Project shall be managed so as not to interfere with the progress of any contiguous work. Contractor is responsible for scheduling the activities of its forces, its subcontractors and vendors as well as other contractors that may be working on or near Railroad's property or in Railroad's facilities. The Engineer may direct changes in the management of the Project to ensure compliance with this Section 2.

2.6 CONTRACTOR SHALL FAMILIARIZE ITSELF WITH ALL APPLICABLE RAILROAD SAFETY RULES, (THE "SAFETY RULES"), WHICH ARE BY REFERENCE MADE A PART OF THIS AGREEMENT. CONTRACTOR SHALL COMPLY WITH THE SAFETY RULES, TOGETHER WITH ALL STATUTES, REGULATIONS AND ORDINANCES OF ANY FEDERAL, STATE OR LOCAL GOVERNMENTAL AUTHORITY AND SHALL REQUIRE ITS EMPLOYEES AND SUBCONTRACTORS TO COMPLY THEREWITH, AND SHALL RELEASE, PROTECT, DEFEND, INDEMNIFY AND SAVE AND HOLD HARMLESS RAILROAD AND ITS PARENTS, SUBSIDIARIES AND AFFILIATES, AND EACH OF THEIR OFFICERS, DIRECTORS, AGENTS AND EMPLOYEES FROM AND AGAINST ANY AND ALL LOSS, DAMAGE, COST AND EXPENSE AND ALL CLAIMS, ACTIONS AND DEMANDS ARISING OUT OF VIOLATION OF ANY OF SAID SAFETY RULES OR REQUIREMENTS THEREUNDER.

2.7 Whenever work related to the Project in any manner affects the use or operation of lines of Railroad or other entities affiliated with Railroad, Contractor shall, at its own cost and expense, comply with all the conditions that may be imposed by Railroad.

### 3. PERIOD OF PERFORMANCE AND UNIT PRICES

Work related to the Project shall be commenced on the first date specified in Addendum 1 and shall be completed to Railroad's specification on or before the second date specified on Addendum 1 (the "Completion Date") which Completion Date may only be delayed by Railroad in writing pursuant to the terms hereof. The parties hereto agree that time is of the essence of this Agreement and all provisions hereof. Contractor shall submit to Railroad a detailed schedule for performance of the Project in a form acceptable to Railroad, which schedule shall comply with all scheduling requirements of this Agreement. Railroad, at its sole discretion, may direct Contractor to make modifications and revisions in said schedules to ensure compliance with this Agreement and non-interference with other work. Contractor agrees to commence work under this Agreement upon the date of "notice to proceed" by the Engineer. Contractor shall submit a work schedule to Engineer, with ample time for Engineer to review and make any needed modifications to the same. prior to work start-up. Should Contractor fail to achieve project completion by the Completion Date, as initially set or as delayed in writing by Railroad, Contractor shall pay to Railroad, in addition to and not in lieu of any and all other remedies available under the circumstances, and as liquidated damages for losses and costs not



reasonably susceptible of accurate calculation, and not as a penalty, the sum of three hundred (\$\_\_\_\_\_.00) dollars per day (seven days per week) and Contractor shall reimburse Railroad all costs incurred as a result of that delay. By way of example, and not of limitation, these costs may include: wages and expenses for Railroad inspectors, delays in train operations, interest and penalties to Railroad vendors and other contractors, administrative and legal costs.

3.1 In the event Railroad deems Contractor to not be proceeding according to the Project schedule or becomes aware of the occurrence of any breach of this Agreement or any event that, with notice or lapse of time or both, would constitute a breach of this Agreement ("Breach of Contract"), Railroad may order that the Project be prosecuted in such order, at such points and with such force as shall be adequate to insure its completion by the Completion Date. If required, Contractor, at its own expense, shall work nights, weekends and/or holidays to ensure that the Project is completed on time and no extra compensation shall be demanded by Contractor for such work.

3.2 If at any time Contractor shall refuse or neglect to execute the Project with a force sufficient, in the opinion of the Engineer, to insure its completion within the time specified in the Agreement, or to furnish sufficient materials as needed for that purpose, a Breach of Contract shall exist and Railroad may direct the employment of such additional laborers and foremen, and the purchase of sufficient materials, as it may deem necessary to perform the Project, regardless of the cost of such wages and such prices, and Contractor shall pay all persons so employed for their services and for materials furnished. Any such amount which shall be paid by Railroad may be claimed by Railroad required by this Agreement, without prejudice, however, to any remedy which Railroad may have or may be entitled to have against Contractor for Breach of Contract. The foregoing is not intended and shall not be deemed to limit or modify Contractor's status as an independent contractor.

3.3 Contractor agrees to perform the work as indicated in this Agreement for the unit prices specified in Addendum 2 attached hereto.

#### 4. TERMINATION

4.1 This Agreement may be terminated by either Contractor or the Railroad with ten (10) days' written notice of termination in the event of either Contractor's or the RAILROAD's bankruptcy, insolvency or assignment of this Agreement for the benefit of creditors or with thirty (30) days' written notice in the event of RAILROAD or Contractor's default of the terms of this Agreement or at any time and for any reason by the RAILROAD with a sixty (60) days' written notice. Projects in process will be completed to the satisfaction of the RAILROAD before final payment and the provisions of Sections 11 survive termination.

4.2 If the Contractor insurance required in Section 14 hereof lapses or is cancelled, Railroad may terminate this Agreement effective the next business day upon notice to Contractor.

4.3 Unless otherwise directed by Railroad, upon receipt of any notice of termination from Railroad, Contractor shall stop the terminated work, direct its subcontractors to stop the terminated work, cancel all existing orders for supplies relating to the terminated work, and otherwise take reasonable actions necessary to mitigate costs.

4.4 Within thirty (30) days after termination, Contractor may submit to Railroad its actual costs incurred to the effective date of termination. In no event shall Railroad be liable to Contractor for any costs that exceed the unpaid balance of the Agreement, or for consequential, special, incidental, punitive or indirect damages, including lost or anticipatory profits or

unabsorbed overhead, even if Railroad has been advised of the possibility of such damages.

4.5 Neither termination nor revocation of this Agreement shall affect any claims and liabilities which have arisen or accrued hereunder, and which, at the time of termination or revocation, have not been satisfied; neither party, however, waiving any third-party defenses or actions.

5. PERFORMANCE AND PAYMENT BONDS

(As determined in the invitation to bid documents)

6. CONTRACTUAL STATUS/RELATIONSHIP OF PARTIES

6.1 In performing services under this Agreement, Contractor shall operate as and have the status of an independent contractor. Contractor shall employ, pay from its own funds, and discharge all persons engaged in the performance of the Project and such persons shall be under Contractor's supervision, direction and control. Contractor shall be subject to the general oversight and guidance of the Engineer or whomever he may appoint in order to ensure safety and compliance with this Agreement. Under no circumstances shall this Agreement be interpreted as creating an employer/employee relationship between Contractor and Railroad. Contractor shall not be treated as an employee of Railroad for tax or any other purposes and Contractor shall be responsible for the payment of its own estimated and self-employment tax, if any, for Federal Income Tax purposes. Contractor shall also be responsible for all tax withholdings of its employees.

6.2 Contractor hereby accepts full and exclusive liability for the payment of any and all contributions or taxes for unemployment insurance, medical and old age retirement benefits, pensions or annuities now or hereinafter imposed under any state or Federal laws which are measured by the wages, salaries or other remuneration paid to persons employed by it on the Project. Contractor shall also indemnify and save harmless Railroad from any such contributions or taxes or liability therefor and further shall obey all lawful rules and regulations and meet all lawful requirements which now or hereafter may be issued or promulgated under said respective laws by duly authorized local, state or Federal officials.

6.3 Contractor shall at all times be represented on the Project by a competent superintendent who shall be satisfactory to the Engineer.

6.4 Contractor shall assign personnel with demonstrated competence and experience in the type of work specified in this Agreement. The credentials of such personnel shall be submitted to Railroad for review should Railroad so request. The foregoing is not intended, and shall not be deemed, to limit or modify Contractor's status as an independent contractor, as provided herein.

6.5 This Agreement is placed subject to all the provisions of the Clayton Anti-Trust Act, and if Railroad is advised by its counsel that this Agreement violates or is contrary to the provisions of Section 10 of said Act of Congress, then Railroad shall inform Contractor and thereupon this Agreement shall be terminated.

7. CHANGES: MODIFICATIONS

7.1 All modifications of this Agreement must be approved by authorized

representatives of Railroad's Engineer and shall be by written agreement of the parties signed by their duly authorized representatives.

8. CLAIMS

8.1 If at any time during the period of performance of this Agreement, Contractor shall deem itself to have become entitled to make any claim or demand against Railroad other than, or additional to, the compensation expressly stipulated in this Agreement, Contractor shall give notice in writing to Railroad, specifying such claim or demand, the ground thereof, and the amount thereof.

9. TRANSPORTATION

9.1 Contractor shall provide, pay for, and be liable for all transportation for men, equipment, tools and materials.

10. COMPLIANCE WITH LAWS/PERMITS

10.1 Whenever doing any work embraced within the Project it may be necessary to occupy temporarily, use or obstruct any street, highway, or public place or to do anything whatever in connection with public property, or whenever it shall be necessary in order to comply with building laws or orders of courts or governmental agencies, Contractor shall, at its own cost and expense, procure all necessary approvals, licenses and permits therefore, and in performing the Project Contractor shall comply with all applicable Federal, state and local laws, regulations, ordinances, and agency or court orders, including, without limitation, laws and regulations: (i) pertaining to building and construction; and (ii) pertaining to environmental protection, air and water pollution, and disposal of debris and refuse; and (iii) prohibiting discrimination on grounds of race, color, national origin or sex. Contractor shall pay for all charges of any kind related to the performance of the Project.

10.2 CONTRACTOR SHALL BE RESPONSIBLE FOR AND SHALL PROTECT, INDEMNIFY, DEFEND AND HOLD RAILROAD AND ITS PARENTS, SUBSIDIARIES, AND AFFILIATES AND THE OFFICERS, DIRECTORS, AGENTS AND EMPLOYEES OF RAILROAD AND ITS PARENTS, SUBSIDIARIES AND AFFILIATES HARMLESS FROM ANY AND ALL COSTS AND EXPENSES, INCLUDING, WITHOUT LIMITATION, JUDGMENTS, FINES, PENALTIES, COSTS AND LOSS OF EVERY KIND WHATSOEVER, WHICH MAY ARISE OR RESULT FROM, OR BY REASON OF THE VIOLATION OF ANY APPLICABLE CITY, BOROUGH, VILLAGE OR OTHER LOCAL GOVERNMENTAL ORDINANCE, OR OF A LAW OF ANY STATE, OR THE DISTRICT OF COLUMBIA, OR OF THE UNITED STATES, OR OF ANY ORDER OF ANY AGENCY OR COURT, DURING CONTRACTOR'S PERFORMANCE HEREUNDER.

10.3 Contractor warrants that its performance of this Agreement, as of the date of its execution, is not prohibited by or in violation of any law.

11. TRANSFERS/ASSIGNS

11.1 This Agreement shall inure to the benefit of and be binding upon the successors and assigns of the parties hereto; provided, however, that Contractor shall not sell, subcontract, assign, delegate or otherwise transfer this Agreement or any of its rights or obligations hereunder without the prior written consent of Railroad.

11.2 No approved assignment, letting, transfer or subcontract, whether for labor or material or both, shall under any circumstances relieve Contractor of its obligations or liabilities

under this Agreement or have any bearing on the granting or refusing of any extension of the Completion Date, should the subcontractor fail to perform the work undertaken by it. Contractor shall give personal attention and superintendence to the Project.

11.3 Any subcontract or further letting of any right or obligation of Contractor hereunder shall include provisions binding the subcontractor or other third party to all obligations and requirements of Contractor hereunder and shall require such subcontractor or third party to waive any right to assert any claim directly against Railroad and any right to assert any lien against any property of Railroad.

## 12. INSPECTION

12.1 All materials of every description used under this Agreement and all workmanship pursuant hereto shall be of the grade specified, and where quality is not specified shall be of the best for the purpose that can be obtained. Material and work shall at all times be open to the inspection, acceptance, or rejection by the Engineer and of such person or persons as they may designate to represent them, as hereinbefore provided. No omission or failure on the part of the Engineer to disapprove or reject any work of the Project at the time of a monthly or other estimate, or during the inspection of the Project shall be construed to be an acceptance of any defective work or part of the Project. Contractor shall be required to correct any imperfect work whenever discovered. If any work be condemned by the Engineer as defective or improperly done, such defective or improper work shall be taken down and rebuilt, or the defects otherwise remedied by Contractor, at its sole expense, as the Engineer in charge of the Project may direct; and in default thereof the same may be done by Railroad at Contractor's expense. The provisions of this section shall apply to work done by subcontractors as well as to work done by direct employees of Contractor.

## 13. WARRANTY

13.1 Contractor warrants that the Project shall be performed in a safe and effective manner and shall be free from latent and patent defects in quality and workmanship and shall be in full conformity with the plans and specifications set forth in Addendum 1. Contractor also warrants that the Project as complete shall be fit for Railroad's purpose as indicted herein and in documents attached hereto or made a part hereof by reference or if otherwise known to Contractor.

13.2 Contractor, without cost to Railroad, shall remedy any defects that are due to workmanship or to Contractor's failure to fulfill any of its obligations under this Agreement which appears within a period of one (1) year from the date when the Project is fully accepted and certified complete. This obligation is without prejudice to any other rights or remedies afforded by law to Railroad in the event of Breach of Contract by Contractor.

13.3 CONTRACTOR SHALL BE RESPONSIBLE FOR AND SHALL PROTECT, INDEMNIFY, DEFEND AND HOLD RAILROAD AND ITS PARENTS, SUBSIDIARIES AND AFFILIATES, AND THE OFFICERS, DIRECTORS, AGENTS AND EMPLOYEES OF RAILROAD AND ITS SUBSIDIARIES AND AFFILIATES, THEIR CUSTOMERS, AND ANY THIRD PARTY HARMLESS FROM INJURY, DEATH, LOSS, DAMAGE OR EXPENSE WHATSOEVER, AS SET FORTH IN SECTION 14 HEREOF, HOWSOEVER ARISING, WHICH MAY BE SUFFERED AS A RESULT OF OR IN CONNECTION WITH A BREACH OF ANY OF THE FOREGOING WARRANTIES, OR AS A RESULT OF ANY ACCIDENTS OR INCIDENT.

## 14. INSURANCE

14.1 The Contractor shall, at its own cost and expense, prior to entry onto the property of Railroad or the commencement of any of the work related to the Project pursuant to the Agreement, procure and thereafter maintain for the duration of the Agreement the following types and minimum amounts of insurance:

a. Public Liability or Commercial General Liability Insurance (“CGL”), including Contractual Liability Coverage and CG 24 17 “Contractual Liability – Railroads” endorsement, covering all liabilities assumed by the Contractor under this Agreement, without exception or restriction of any kind, with a combined single limit of not less than Two Million Dollars (\$2,000,000) for Bodily Injury and/or Property Damage Liability per occurrence, and an aggregate limit of not less than Six Million Dollars (\$6,000,000) per annual policy period. Such insurance policy shall be endorsed to provide a Waiver of Subrogation in favor of the Railroad and all parents and affiliated companies and shall name the Railroad and all parents and affiliated companies as Additional Insured. An Umbrella policy may be utilized to satisfy the required limits of liability under this section.

b. Commercial Automobile Insurance for all owned, non-owned or hired vehicles with a combined single limit of not less than One Million Dollars (\$1,000,000) for Bodily Injury and Property Damage Liability. Such policy shall be endorsed to provide a Waiver of Subrogation in favor of the Railroad and all parents and affiliated companies and shall name the Railroad and all parents and affiliated companies as Additional Insured. If hauling hazardous materials, such Policy is to be endorsed with the MCS – 90 endorsement as well as CA 9948 Pollution Liability – Broadened Pollution for Covered Autos.

c. Statutory Workers’ Compensation and Employers’ Liability Insurance for its employees (if any) with minimum limits of not less than One Million Dollars (\$1,000,000) for Bodily Injury by Accident, Each Accident; One Million Dollars (\$1,000,000) for Bodily Injury by Disease, Policy Limit; One Million Dollars (\$1,000,000) for Bodily Injury by Disease, Each Employee. Such policy shall be endorsed to provide a Waiver of Subrogation in favor of the Railroad and all parents and affiliated companies.

d. Railroad Protective Liability Insurance written in favor of Railroad with limits of Two Million Dollars (\$2,000,000) each occurrence and Six Million Dollars (\$6,000,000) aggregate limit covering all operations within 50 feet of railroad track.

e. If subcontractors are utilized by the Contractor, Contractor shall furnish evidence that, with respect to the operations performed by subcontractors, such subcontractors are in compliance with all requirements of this Section 14.

f. All railroad exclusions shall be removed by policy endorsements.

g. Punitive damages exclusion, if any, must be deleted (and the deletion indicated on the certificate of insurance), unless (1) insurance coverage may not lawfully be obtained for any punitive damages that may arise under this Agreement; or (2) all punitive damages are prohibited by all states in which this Agreement will be performed.

14.2 The insurance specified in this Agreement must be effected under form policies underwritten by insurers licensed in the state where the work is to be performed, and carry a minimum Best’s rating of “A-” and size “Class VII” or better. The Railroad reserves the right to reject any insurance coverage provided by an insurer that is rated less than the rating specified in this Section 14.

14.3 All coverages shall be primary and non-contributory to any insurance coverage's maintained by the Railroad.

14.4 All insurance policies shall be endorsed to provide the Railroad with thirty (30) days prior written notice of cancellation, non-renewal or material changes.

14.5 Contractor shall furnish, to Railroad, certificates of insurance evidencing the insurance coverages, terms and conditions required and specified in this Agreement, at least ten days prior to commencement of any activities on or about the property. Said certificates should reference this Agreement by date and shall be furnished to the Railroad at the following address, or such other address as the Railroad may hereafter specify:

R. J. Corman Railroad Company/ \_\_\_\_\_  
101 RJ Corman Drive  
P.O. Box 788  
Nicholasville, Kentucky 40340  
Attn: Jaylen Slaughter  
Jaylen.Slaughter@rjcorman.com

14.6 If any policies providing the required coverage are written on a claims-made basis, the following shall apply:

- a. The retroactive date shall be prior to the commencement of the work,
- b. The Contractor shall maintain such policies on a continuous basis, and
- c. If there is a change in insurer or policies are cancelled or not renewed, the Contractor shall purchase an extended reporting period of not less than three (3) years after the Completion Date.

14.7 Contractor shall arrange for adequate time for reporting of any loss under this Agreement.

14.8 Furnishing of insurance by the Contractor shall not limit Contractor's liability under this Agreement, but shall be additional security therefore.

14.9 The above indicated insurance coverages shall be enforceable by any legitimate claimant after the termination or cancellation of this Agreement, or any amendment hereto, whether by expiration of time, by operation of law or otherwise, so long as the basis of the claim against the insurance company occurred during the period of time when the Agreement was in effect and the insurance was in force.

14.10 Failure to provide the required insurance coverage or endorsement (including contractual liability endorsement) or adequate reporting time shall be at the Contractor's sole risk and Railroad, in its sole discretion, may terminate this Agreement for such failure.

## 15. INDEMNITY

15.1 AS BETWEEN RAILROAD AND CONTRACTOR, CONTRACTOR SHALL ASSUME ALL RESPONSIBILITY FOR ANY AND ALL LOSS OR DAMAGE ARISING OUT OF OR IN CONNECTION WITH ANY NEGLIGENT ACT OR OMISSION ON THE PART OF CONTRACTOR OR ANY PERSON OR AGENT EMPLOYED BY IT AND ANY ACT OR OMISSION NOT AUTHORIZED BY THIS AGREEMENT ON THE PART OF CONTRACTOR OR ANY PERSON OR AGENT EMPLOYED BY IT.

15.2 CONTRACTOR AGREES TO INDEMNIFY, DEFEND AND HOLD HARMLESS RAILROAD, ITS PARENT, AFFILIATES, SUBSIDIARIES, AND EACH OF THEIR OFFICERS, DIRECTORS, EMPLOYEES, AGENTS, SERVANTS, SUCCESSORS, AND ASSIGNS (“INDEMNITEES”) FROM AND AGAINST ANY AND ALL LOSSES AND LIABILITIES, PENALTIES, FINES, FORFEITURES, DEMANDS, CLAIMS, CAUSES OF ACTION, SUITS, COSTS AND EXPENSES INCIDENTAL THERETO (INCLUDING COSTS OF DEFENSE AND ATTORNEYS’ FEES), WHICH ANY OR ALL OF THEM MAY HEREAFTER INCUR, BE RESPONSIBLE FOR OR PAY AS A RESULT OF: (A) INJURY OR DEATH OF ANY PERSON, OR DAMAGE TO OR LOSS OF (INCLUDING LOSS OF USE) ANY PROPERTY, INCLUDING PROPERTY OF THE PARTIES HERETO, TO THE EXTENT ARISING OUT OF OR IN ANY DEGREE DIRECTLY OR INDIRECTLY CAUSED BY THE NEGLIGENCE OF CONTRACTOR, CONTRACTOR’S OFFICERS, EMPLOYEES, AGENTS, SUBCONTRACTORS OR REPRESENTATIVES, OR (B) CONTRACTOR’S NEGLIGENT PERFORMANCE OF THE WORK RELATED TO THE PROJECT, OR FAILURE TO PERFORM ITS OBLIGATIONS IN COMPLIANCE WITH THIS AGREEMENT. THERE ARE EXCEPTED FROM THIS OBLIGATION ONLY CLAIMS, DAMAGES OR OTHER LOSSES TO THE EXTENT THAT THE SAME ARE CAUSED BY THE GROSS NEGLIGENCE OR INTENTIONAL WRONGFUL ACT OR OMISSION ONE OR MORE INDEMNITEES.

15.3 CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DAMAGES AND EXPENSES ON ACCOUNT OF INJURIES, (INCLUDING DEATH) TO, AND PROPERTY DAMAGE OF, ANY OF ITS EMPLOYEES, AGENTS, SUBCONTRACTORS OR REPRESENTATIVES WHILE ON THE PREMISES OF RAILROAD, ITS AFFILIATES OR SUBSIDIARIES AND SHALL INDEMNIFY, DEFEND AND HOLD INDEMNITEES HARMLESS FROM ALL CLAIMS OF DAMAGE OR SUITS WHICH MAY ARISE, EXCEPT AND ONLY TO THE EXTENT THAT SUCH CLAIMS, LOSSES, DAMAGES OR EXPENSES ARE CAUSED BY THE GROSS NEGLIGENCE OF THE INDEMNITEES. CONTRACTOR SHALL ALSO REPAIR OR REPLACE ANY PROPERTY OF INDEMNITEES, WHICH IS DAMAGED BY CONTRACTOR’S EMPLOYEES, AGENTS OR SUBCONTRACTORS WHILE PERFORMING THE WORK HEREUNDER.

15.4 Contractor agrees to indemnify and hold harmless Indemnitees irrespective of any fault or negligence on their part, from and against all losses and liabilities, fines, penalties, forfeitures, demands, claims, causes of action, suits, costs and expenses incidental thereto (including reasonable costs of defense and attorneys’ fees) which may arise from the existence, discharge, release, and/or disposal of any materials, including any wastes, brought on to the property of Railroad by Contractor, its employees, agents, subcontractor or representatives in connection with performance of work related to the Project pursuant to the Agreement.

15.5 IN NO EVENT SHALL RAILROAD OR ITS PARENTS, AFFILIATES, OR SUBSIDIARIES BE LIABLE TO CONTRACTOR FOR ANY PUNITIVE, INCIDENTAL, INDIRECT, OR CONSEQUENTIAL DAMAGES.

## 16. REMOVAL OF WASTE AND SURPLUS MATERIAL

16.1 Contractor shall be responsible for the removal and proper discarding of all equipment, materials, supplies, explosives, chemicals and debris. All surplus materials that may accumulate on or about the Project and premises occupied by Contractor during the term of this Agreement including specific Railroad owned salvaged materials of which the Railroad does not desire to retain ownership shall be removed.

16.2 Contractor shall comply with all applicable Federal, state and local laws, ordinances, rules, regulations and all lawful orders of any constituted authority including, without limitation, the Resource, Conservation and Recovery Act (42 U.S.C. S6901 et seq.) and the Toxic Substance Control Act (15 U.S.C. S2601 et seq.) and all other laws pertaining to the generation, transportation, treatment, storage and disposal of solid, hazardous and municipal wastes.

16.3 Railroad's property shall be left in a clean and safe condition as determined by the Engineer and the condition of said premises shall be subject to the approval of Railroad at all times during the course of the Project.

17. AUDIT

17.1 Contractor shall keep and maintain good and accurate records of all matters in any manner pertaining to this Agreement, the performance of the same, payments made to Contractor pursuant hereto, and payments made by Contractor pursuant hereto, including but not limited to payroll and tax liabilities and payments beginning with the effective date of this Agreement and continuing for a period ending three (3) years from the date of final acceptance of all work by Railroad, and shall make those records available for audit and inspection by Railroad or its agents during normal business hours upon seven (7) days notice and request for same.

18. NOTICES

18.1 Notices required or permitted hereunder shall be deemed effective when delivered by commercial overnight courier or electronically:

If to Railroad at:

R. J. Corman Railroad Company  
101 RJ Corman Drive  
P.O. Box 788  
Nicholasville, Kentucky 40340  
Attn: Jaylen Slaughter  
Jaylen.Slaughter@RJCorman.com

Copy to: Deborah.Hawley@rjcorman.com

If to Contractor at:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

19. DISPUTE RESOLUTION

19.1 Dispute resolution shall be by arbitration under the Construction Contract Rules of the American Arbitration Association at a neutral location to be chose by a single arbitrator; provided, however that the existence of a dispute shall not entitle Contractor to suspend performance under this Agreement pending the resolution of the dispute and further provided that each party shall be entitled to seek temporary equitable relief from any court otherwise having jurisdiction over such dispute.



20. WAIVER

20.1 No omission or delay by Railroad in enforcing any right or remedy or in requiring performance of any of the term of this Agreement shall constitute or be deemed to constitute a waiver of any such right or remedy, nor shall it in any way affect the right of Railroad to enforce such provisions thereafter unless such right or remedy is specifically waived by Railroad in writing. No single or partial exercise by or of any right or remedy hereunder shall preclude any other or further exercise thereof or the exercise of any other right or remedy.

21. APPLICABLE LAW

21.1 This Agreement shall be governed by and construed in accordance with the laws of the state where the project work is located.

22. SEVERABILITY

22.1 If any provisions of this Agreement shall be held to be invalid, illegal or unenforceable, the validity of all other provisions hereof shall in no way be affected thereby.

23. NON-EXCLUSIVITY

23.1 Contractor acknowledges that nothing in this Agreement shall be construed to give Contractor exclusive rights to perform the type of work or project identified in this Agreement, or any other service, for Railroad. Railroad specifically reserves the right to enter into agreements with other contractors to perform similar, supplemental, additional or other services as deemed appropriate in the opinion of Railroad.

24. HEADINGS

24.1 Section headings are for convenience only and shall not be construed as part of this Agreement.

25. SURVIVAL

25.1 The indemnities and assumptions of liability and responsibility provided in this Agreement, shall continue in full force and effect notwithstanding the termination or cancellation of this Agreement or any attachment hereto whether by expiration of time, by operation of law or otherwise.

26. ENTIRE AGREEMENT

26.1 This Agreement together with all appendices, schedules and exhibits attached hereto constitutes the entire agreement between the parties and supersedes all previous understandings related to the Project.

27. UNDERSTANDING OF REQUIREMENTS

27.1 The parties hereby distinctly and expressly declare and acknowledge that, before the signing of this Agreement, they have carefully read the same, and the whole thereof, together with and in connection with said specifications, and that they have made such examination of this Agreement and specifications, the location where said work is to be done, the nature of the work required to be done, and the material required to be furnished, as to enable them to understand thoroughly the intention of the same, and the requirements, covenants, agreements, stipulations and restrictions contained herein and in said specifications. Contractor shall not

hereafter make any claim or demand upon Railroad based upon or arising out of any alleged misunderstanding or misconception on its part of the said requirements, covenants, stipulations, and restrictions; and that any information (other than through a Supplemental Agreement), given to Contractor by the Engineer or others as to the quantities in the Project prior to, or during the progress of the Project, shall have no bearing or effect whatsoever upon the total amount to be paid for in the final settlement.

28. THIRD-PARTY BENEFICIARIES

28.1 Other than the referenced state where work is performed, there are no third-party beneficiaries to this Agreement. This Agreement shall not confer any rights or remedies upon any person other than the parties, and to the extent expressly set forth herein, their affiliates, and their respective successors and permitted assigns.

The parties hereto have caused this Agreement to be duly executed by their duly authorized officials as of the date first stated above.

R. J. CORMAN RAILROAD COMPANY/  
(Railroad Line)

(CONTRACTOR)

BY: \_\_\_\_\_

BY: \_\_\_\_\_

TITLE: \_\_\_\_\_

TITLE: \_\_\_\_\_

# General Conditions

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## Interpretation of Contract Documents

The contents of the Contract Documents are intended to be complementary and to describe the performance and completion of the Work. Anything mentioned in the specifications and not shown on the contract drawings or shown on the contract drawings and not mentioned in the specifications shall be of like effect as if shown or mentioned in both.

If doubts or questions arise regarding the meaning of words or items within the Contract Documents, said questions should be presented to the Engineer.

Omissions from the drawings or specifications or the mis-description of details of Work which are necessary to carry out the intent of the drawings and specifications, or which are customarily performed, shall not relieve the Contractor from performing such omitted Work or mis-described details of the Work as if fully and correctly set forth and described in the drawings and specifications.

In the event any article, section, sub-article, paragraph, sentence, clause or phrase contained in the Contract Documents shall be determined, declared or adjudged invalid, illegal, unconstitutional or otherwise unenforceable, such determination, declaration or adjudication shall in no manner affect the other articles, sections, sub-articles, paragraphs, sentences, clauses or phrases of the Contract Documents, which shall remain of full force and effect as if the article, section, sub-article, paragraph, sentence, clause, or phrase declared, determined or adjudged invalid, illegal, unconstitutional or otherwise unenforceable and was not originally a part thereof.

## Engineer

The Engineer shall perform construction monitoring of the Work. The Engineer shall determine the quality, acceptability and fitness of the Work. In performance of the Work the Contractor shall conform to all orders, directives and requirements of the Engineer. The requirements of this Article shall not relieve the Contractor of its responsibility to perform pursuant to the terms of this Agreement.

## Joint and Several Liability

If the Contractor is composed of more than one legal entity, each such entity shall be jointly and severally liable hereunder.

## Agent to Accept Service

The Contractor shall maintain within Mississippi, an agent to accept service of legal process on its behalf and shall keep R. J. Corman advised of such agent's name and address during the term of the Agreement.

## Indemnification

Except to the extent caused by negligence on the part of R. J. Corman, the Contractor agrees to indemnify, defend and save harmless R. J. Corman from and against all loss and damage, claims and demands, costs and charges for injuries to person or property or other causes that may arise or accrue

out of the performance of the Work by the Contractor, or which may be caused by the negligence or default of the Contractor, its agents, employees or servants.

## Contractual Relationships

No contractual relationship shall exist under the Agreement other than the contractual relationship between the R. J. Corman and the Contractor.

## Subcontractors and Suppliers

The Contractor shall clearly and specifically set forth in all subcontracts the terms and conditions of the subcontract.

No subcontractor shall be permitted to perform Work at the site until the Contractor has furnished the Engineer with the subcontractor's evidence of insurance as required by the Article entitled Insurance and the subcontractor has been approved by the Engineer.

Prior to entering any subcontract for Work to be performed at the site, the Contractor shall secure the approval of R. J. Corman regarding the prospective subcontractor's qualifications, employment data and affirmative action program. The forms used to provide the required information shall be supplied by R. J. Corman. R. J. Corman will review the submittal from each subcontractor and will furnish written notification to the Contractor concerning approval of the award of the subcontract. If R. J. Corman objects to the proposed award, the Contractor may furnish written notice of another subcontractor for R. J. Corman's consideration.

Subcontractors shall be nominated and approved a minimum of twenty Working days prior to the anticipated time they intend to commence Work on the project.

Within seven calendar days of the receipt of any payment from R. J. Corman, the Contractor shall pay each of its subcontractors the proceeds from the payment representing the value of the Work performed and/or materials furnished by the subcontractor and reflecting the percentage of the subcontractor's Work completed or the material supplied in the requisition approved by R. J. Corman and based upon the actual value of the subcontract or purchase order less an amount necessary to satisfy any claims, liens or judgments against the subcontractor which have not been suitably discharged and less any retained amount as hereafter described.

Failure by the Contractor to pay any subcontractor within seven calendar days of the receipt of any payment from R. J. Corman shall result in the commencement and accrual of interest on amounts due to such subcontractor for the period beginning on the day immediately following the expiration of such seven-calendar day period and ending on the date on which payment is made by the Contractor to such subcontractor. Such interest payment shall be the sole responsibility of the Contractor and shall be paid at the rate of interest in effect on the date payment is made by the Contractor. Notwithstanding any other provision of law to the contrary, interest shall be computed at the rate equal to the overpayment rate set by the commissioner of taxation and finance pursuant to subsection (e) of section one thousand ninety-six of the tax law.

The Contractor shall retain not more than five percent of each payment to the subcontractor except that the Contractor may retain in excess of five percent but not more than ten percent of each payment to the subcontractor provided that prior to entering into a subcontract with the Contractor, the

subcontractor is unable or unwilling to provide a performance bond and a labor and material bond, both in the full amount of the subcontract, at the request of the Contractor. Within seven calendar days of the receipt of payment from the Contractor, the subcontractor shall pay each of its subcontractors in the same manner as the Contractor has paid the subcontractor, including interest as herein provided above. After the initial progress payment and before any further payments, the Contractor shall provide acknowledgments from all subcontractors included in the previous payment application that they have been paid. Further, payment shall be conditioned on the certification by the Contractor that the subcontractors have satisfactorily progressed the Work and met other contractual and payment obligations. Monthly progress payments may be withheld if the Contractor fails to supply R. J. Corman with all required certified payroll records.

The Contractor shall not, without the consent of the Engineer, either replace any subcontractor previously approved by R. J. Corman, or permit any such subcontract to be assigned or transferred or allow the portion of the Work to be performed by anyone other than the approved subcontractor, except it may perform the Work itself upon written notice to R. J. Corman with qualified personnel in accordance with applicable law.

Nothing provided in this Article shall be construed as: creating privity of contract between R. J. Corman and any subcontractor; limiting or diminishing any rights or remedies which R. J. Corman may have against the Contractor arising out of this Agreement; or relieving the Contractor of any responsibility for performance of this contract because of any action taken by R. J. Corman or the failure to act by R. J. Corman. Nothing provided herein shall create any obligation on the part of R. J. Corman to pay or to see to the payment of any moneys to any subcontractor from any contractor nor shall anything provided herein serve to create any relationship in contract or otherwise, implied or expressed, between the subcontractor and R. J. Corman.

## Workmanship and Unauthorized Work

All Work under this Agreement shall be performed in a skillful and Workmanlike manner. The Contractor is required to remove any employee the Engineer deems incompetent, careless or otherwise objectionable.

Any Work performed beyond the lines and grades shown on the contract drawings or established by the Engineer, or done without proper written authorization from the Engineer, will be considered as unauthorized Work and the Contractor will receive no compensation, therefore. If required by the Engineer, unauthorized Work shall be remedied, removed or replaced by the Contractor at the Contractor's expense.

## Material

All material to be provided by R. J. Corman. Unless otherwise specifically provided in this Agreement, all equipment, material, and articles incorporated in the Work covered by the Contract Documents shall be new and of the most suitable grade for the purpose intended. Unless otherwise specifically indicated, reference to any equipment, material, article or patented process, by brand name, trade name, make or catalog number shall be regarded as establishing a standard of quality and shall not be construed as limiting competition and the Contractor may, subject to the approval of the Engineer, use any equipment, material, article or process which is equivalent to that named.

The Engineer shall be the sole judge of the quality and suitability of any proposed alternative equipment, material, article or process. The burden of proving the quality and suitability of an alternative shall be upon the Contractor. Any information required by the Engineer in judging an alternative will be supplied by the Contractor at no expense to R. J. Corman. Any costs incurred by R. J. Corman in evaluating an alternative will be reimbursed by the Contractor. Where use of an alternative material involves redesign of or changes to other parts of the Work, the cost and the time required to affect such redesign or change will be considered in evaluating the suitability of the alternative material. The cost of redesign and changes in other parts of the Work shall be borne by the Contractor.

No tests nor action relating to the approval of alternative materials will be made until the request for substitution is made in writing by the Contractor accompanied by complete data as to the quality and suitability of the materials proposed. Such request shall be made in ample time to permit approval without delaying the Work. The time required for review of alternative materials shall not be considered as justification for a time extension.

Where classification, rating or other certification by a body such as UL, NEMA, or AREA is a part of the specification for any material, proposals for use of alternative materials shall be accompanied by reports from the listed body or equivalent independent testing laboratory, indicating compliance with specification requirements. The cost of all testing required to prove equality of the material proposed shall be borne by the Contractor.

Approval of an alternative material shall be only for the characteristics and use named in such approval and shall not be used to change or modify any contract requirement or to establish approval for material.

Notwithstanding prior inspection and approval, only materials conforming to the requirements of the Contract Documents shall be incorporated into the Work.

Any material or assembly that does not conform to the requirements of the Agreement, plans or specifications shall be considered unacceptable and shall be rejected. The Contractor shall remove any rejected material or assembly from the site of the Work, unless otherwise instructed by the Engineer.

Contractor-furnished materials not conforming to the requirements of the Contract Documents will be rejected, whether in place or not. Rejected material shall be removed immediately from the site of the Work.

No rejected material or assembly, the defects of which have been corrected by the Contractor, shall be returned to the site of the Work until such time as the Engineer has approved its use in the Work.

## Storage of and Payment for Materials on Hand

Partial payments may be made to the extent of the delivered cost of materials to be incorporated in the Work, provided that such materials meet the requirements of the Contract Documents and are delivered to acceptable sites on R. J. CORMAN property or at other sites in the vicinity that are acceptable to the Engineer. Such delivered costs of stored or stockpiled materials may be included in the next partial payment after the following conditions are met:

1. The material has been stored or stockpiled in a manner acceptable to the Engineer at or on an approved site.

2. The Contractor has furnished the Engineer with acceptable evidence of the quantity and quality of such stored or stockpiled materials.
3. The Contractor has furnished the Engineer with satisfactory evidence that the material and transportation costs have been paid.
4. The Contractor has furnished R. J. Corman legal title (free of liens or encumbrances of any kind) to the material so stored or stockpiled.
5. The Contractor has furnished the Engineer evidence that the material so stored or stockpiled is insured against loss by damage to or disappearance of such materials at any time prior to use in the Work.

It is understood and agreed that the transfer of title and R. J. Corman's payment for such stored or stockpiled materials shall in no way relieve the Contractor of its responsibility for furnishing and placing such materials in accordance with the requirements of the Contract Documents.

In no case will the amount of partial payments for materials on hand exceed the Contractor's price for such materials or the contract price for the contract item in which the material is intended to be used.

No partial payment will be made for stored or stockpiled living or perishable plant materials. Materials shall be so stored as to assure the preservation of their quality and fitness for the Work. Stored materials, even though approved before storage, may again be inspected prior to their use in the Work. Stored materials shall be located to facilitate their prompt inspection.

## Changes in Quantities

R. J. Corman reserves and shall have the right to make such changes as may be necessary or desirable to complete the Work originally intended in an acceptable manner. The Engineer is authorized to direct such alterations in the Work as may increase or decrease the originally estimated contract quantities.

For bid items paid for on a unit price basis, payment for increases or decreases in quantities will be determined by comparing the actual quantity of the bid item with the estimated quantities in the Itemized Proposal.

If a bid item has a total cost of less than five percent of the contract sum, payment will be made at the contract unit price regardless of the amount of increased or decreased quantities.

If a bid item has a total cost of five percent or greater of the contract sum, payment will be made at the contract unit price if the amount of increased or decreased quantities varies by twenty-five percent or less from the estimated quantities on the Itemized Proposal.

If a bid item has a total cost of five percent or greater of the contract sum, and the amount of increased or decreased quantities varies by more than twenty-five percent from the estimated quantities on the Itemized Proposal, an adjustment will be made to the contract sum in accordance with the Article entitled Payment for Agreed Prices and a Change Order will be issued. A Change Order for altered Work may also include an extension of the Contract Time pursuant to the Article entitled Delays. If R. J. Corman and the Contractor are unable to agree on an adjustment to the contract sum for any bid item, R. J. Corman reserves the right to delete the bid item, in whole or in part, and make other arrangements for its completion. Alternatively, R. J. Corman may direct the Contractor to complete the Work subject to the Contractor's rights pursuant to the Article entitled Disputes.

## Warranties

Except where longer periods of warranty are indicated for certain items, the Contractor warrants all Work done under the Agreement to be free from faulty materials and Workmanship for a period of one year from the date of Final Acceptance, which one year period shall apply to the Maintenance Bond, except that in the case of defects or failure in a part of the Work which R. J. Corman takes possession of prior to final inspection, such period shall commence on the date R. J. Corman takes possession. Additional warranty periods may be set forth in the Contract Documents. Upon receiving notification from R. J. Corman, the Contractor shall immediately remedy, repair or replace without cost to R. J. Corman, to the entire satisfaction of the Engineer, all defects, damages or imperfections due to faulty materials or Workmanship appearing in said Work within said period of one year. All remedial Work shall carry the same warranty as the original Work starting with the date of acceptable replacement or repair. Payment to the Contractor shall not relieve it of any obligation hereunder.

The Contractor, at no additional expense to R. J. Corman, shall also remedy damage to equipment, the site, the buildings or the contents thereof which is the result of any failure or defect and restore any Work damaged in fulfilling the terms of this Article. Should the Contractor fail to remedy any such failure or defect within a reasonable time after receipt of notice thereof, the Engineer shall have the right to replace, repair or otherwise remedy such failure or defect at the Contractor's expense.

Before acceptance of the project, all subcontractors,' manufacturers,' and suppliers' warranties and guarantees respecting any part of the Work and any material used therein shall be obtained and shall be forwarded by the Contractor to R. J. Corman. Any additional required warranties shall not limit the Contractor's obligation under this Article.

The rights and remedies of R. J. Corman provided in this Article are in addition to and do not limit any rights afforded to R. J. Corman by any other Article of this Agreement.

Nothing in the above intends or implies that these warranties shall apply to Work which has been abused or neglected by R. J. Corman, its agents or employees.

## Superintendent

A qualified superintendent, who is acceptable to the Engineer, shall be maintained on the Work and give efficient supervision to the Work until its completion. The superintendent shall have full authority to act on behalf of the Contractor, and all instruction given to the superintendent shall be considered as given to the Contractor. It shall be the responsibility of the superintendent to coordinate the Work of all the subcontractors. The superintendent shall be always present on the site during the progress of the Work and required to perform adequate supervision and coordination.

## Inspection

All Work (which term includes but is not restricted to materials, Workmanship and manufacture and fabrication of components) shall be subject to inspection and test by the Engineer at all reasonable times and at all places prior to acceptance. Any such inspection and test is for the sole benefit of R. J. Corman and shall not relieve the Contractor of the responsibility of providing quality control measures to assure that the Work strictly complies with the contract requirements. Except to the extent specified by R. J. Corman, an inspection or test by the Engineer shall not be construed as constituting or implying acceptance. Inspection or test shall not relieve the Contractor of responsibility for damage to or loss of



the material prior to acceptance, nor in any way affect the continuing rights of R. J. Corman after acceptance of the completed Work.

The Contractor shall, without charge, replace any material or correct any Workmanship found by the Engineer not to conform to a contract requirement, unless in the public interest R. J. Corman consents to accept such material or Workmanship with an appropriate adjustment in the contract sum. The Contractor shall promptly segregate and remove rejected material from the premises.

If the Contractor does not promptly replace rejected material or correct rejected Workmanship, R. J. Corman may (1) by contract or otherwise, replace such material or correct such Workmanship and charge the cost thereof to the Contractor, and/or (2) terminate the Contractor's right to proceed.

The Contractor shall furnish promptly, without additional charge, all facilities, equipment, labor and material reasonably needed for performing such safe and convenient inspections and tests as may be required by R. J. Corman. All inspections and tests by the Engineer shall be performed in such manner so as not to unnecessarily delay the Work. Performance tests shall be performed as described in the Contract Documents. R. J. Corman reserves the right to charge to the Contractor any additional cost of inspection or test when material or Workmanship is not ready at the time specified by the Contractor for inspection or test, when reinspection or retest is necessitated by prior rejection or when Contractor's quality control test data documentation is deemed insufficient by the Engineer.

Should it be considered necessary or advisable by R. J. Corman at any time before acceptance of the entire Work to make an examination of Work already completed, by removing or tearing out same, the Contractor shall, on request, promptly furnish all necessary facilities, equipment, labor and material. If such Work is found to be defective or nonconforming in any respect due to the fault of the Contractor or its subcontractors, the Contractor shall defray all the expenses of such examination and of satisfactory reconstruction. If however, such Work is found to meet the requirements of the Contract Documents, an equitable adjustment shall be made in the contract sum to compensate the Contractor for the Work involved in such examination and reconstruction and if completion of the Work has been delayed thereby, the Contractor shall, in addition, be granted a suitable extension of time.

The Engineer shall always have access to the Work during construction. All Work done and all materials provided shall be subject to R. J. Corman's on-site and off-site inspection and approval. When Work is to be performed during hours other than its normal schedule, the Contractor shall so advise the Engineer not less than twenty-four hours in advance. The Contractor shall provide access to the Work for authorized representatives of R. J. Corman for the purpose of inspecting the Work.

The Engineer's inspection and approval of Work or materials shall not relieve the Contractor of any of its obligations to fulfill the requirements of the Contract Documents. Work and materials not meeting the requirements indicated shall not be incorporated in the Work. Unsuitable Work or materials may be rejected by R. J. Corman, notwithstanding that such Work or materials may have been previously inspected by R. J. Corman or its Engineer, or that payment therefor has been included in a progress payment.

The Engineer may inspect the production of material and the manufacture of products at the source of supply. Plant inspection, however, will not be undertaken until the Engineer is assured of the cooperation and assistance of both the Contractor and the material producer or manufacturer. The

Engineer shall always have free entry to such parts of the plant as concern the manufacture or production of materials.

Adequate facilities and equipment shall be furnished to make the necessary inspection; however, the Engineer assumes no obligation to inspect materials at the source of supply. However, the Engineer is to be notified in writing of the manufacturing schedule for all items being specifically manufactured for this project. Such notification must be received at least two weeks prior to manufacture. The responsibility of incorporating satisfactory materials in the Work rests entirely with the Contractor, notwithstanding any prior inspections or tests.

## Extra Work

Should acceptable completion of the Agreement require the Contractor to perform an item of Work for which no basis of payment has been provided in the original Agreement or previously issued Change Orders or supplemental agreements, the same shall be called Extra Work. Extra Work that is within the general scope of the Agreement shall be covered by written Change Order. Extra Work that is necessary for acceptable completion of the project but is not within the general scope of the Work covered by the original Agreement, shall be covered by supplemental agreement.

Change orders or supplemental agreements for such Extra Work shall contain the prices for performing the Extra Work in accordance with the requirements specified in the Change Order or supplemental agreement and shall contain any adjustment to the contract time that, in the Engineer's opinion, is necessary for completion of such Extra Work.

Extra Work performed in accordance with this Article will be paid for at the contract prices, agreed prices or force account prices as specified in the Change Order or supplemental agreement authorizing such Extra Work. No Extra Work shall be paid for which is performed prior to written authorization by the Engineer or submission of a notice of claim pursuant to the Article entitled Notice of Potential Claim.

Any claim for payment of Extra Work that is not covered by written Change Order or supplemental agreement shall be rejected by R. J. Corman.

## Differing Site Conditions

The Contractor shall promptly and before such conditions are disturbed, notify the Engineer in writing of: (1) subsurface or latent physical conditions at the site differing materially from those indicated in the Contract Documents, or (2) unknown physical conditions at the site of an unusual nature differing materially from those ordinarily encountered and generally recognized as inherent in Work of the character provided for in the Contract Documents. The Engineer will promptly investigate the conditions and if it finds that such conditions do materially differ and cause an increase or decrease in the Contractor's cost of, or the time required for performance of any part of the Work under the Agreement, whether or not changed as a result of such conditions, an equitable adjustment shall be made, and the Agreement modified in writing accordingly. No claim of the Contractor under this Article shall be allowed unless the Contractor has given the notice of potential claim. No claim by the Contractor for an equitable adjustment hereunder shall be allowed if asserted after final payment under this Agreement. If the Engineer is not given written notice prior to the conditions being disturbed, the Contractor will be deemed to have waived its right to assert a claim for additional time and compensation arising out of such changed conditions.

## Payment for Agreed Prices

When the Change Order or supplemental agreement authorizing the Extra Work specifies that agreed upon prices is to be the method of payment, the following is required:

All Extra Work proposals will be supported by a complete price analysis.

For Work performed by the Contractor, a ten percent factor for overhead will be applied on the labor and materials and equipment and a ten percent factor for profit will be applied to the base cost of labor, materials and equipment.

When an approved subcontractor is involved, the subcontractor may apply a fifteen percent factor for overhead and profit on base cost of labor, material and equipment. The Contractor may take a five percent combined overhead and profit on the subcontracted Work without the subcontractor's mark up. The total percent factor for overhead and profit for the Contractor and all the subcontractors' Work shall not exceed twenty-five percent.

When an approved subcontractor is involved, the subcontractor's price analysis shall be submitted on its company letterhead.

## Extra Work - Auditing and Accounting

When extra Work is ordered through the issuance of a change order or supplemental agreement, reimbursement for all cost items will be subject to the provisions found in the Federal Acquisition Regulations.

## Contractor Proposals

The Contractor may at any time submit to the Engineer for its review and approval or denial proposed modifications to the Contract Documents. Upon acceptance of the proposed changes by the Engineer, a change order will be issued. Denial of a proposed modification shall neither provide the Contractor with any basis for a claim for damages nor release the Contractor from contractual responsibilities. The Contractor shall not be compensated for any direct, incidental or collateral benefits or savings R. J. Corman receives because of the proposal. The Agreement shall be subject to an equitable price adjustment if the change results in increased or decreased Work.

## Value Engineering

The Contractor, at any time, may submit cost reduction proposals which may change the drawings, specifications or other requirements of the Contract Documents. Such proposals shall be identified as Value Engineering Change Proposals (VECP). For a proposal to be accepted under this Article, each VECP shall:

1. Be initiated and originated by the Contractor. In the event the Contractor's proposal encompasses cost reduction proposals which have been considered, identified or initiated by R. J. Corman, the Contractor's proposal may be determined as ineligible for an equitable adjustment under this Article;
2. Be identified by the Contractor at the time of submission to the Engineer as submitted pursuant to this Article;
3. Require a change to the Contract Documents;

4. Decrease the contract price;
5. Comply with the Article entitled Engineering and Architectural Services,
6. Maintain the items' required performance standards, salient features and functions such as service life, reliability, economy of operation, ease of maintenance and necessary standardized features and appearance.

A VECP should reflect the Contractor's expertise or specialization and be based on innovation in the application of materials, techniques or methods of construction. Proposals which merely effect a quantity change or deletion of materials, components or items or which require an unacceptable extension of contract time, may be determined as ineligible for equitable adjustment under this Article.

Any VECP the Contractor submits shall be in sufficient detail to clearly define the proposed change, including:

1. A description of the difference between the existing and the proposed contract requirements, and the comparative advantages and disadvantages of each;
2. Contract requirements recommended to be changed if the proposal is accepted;
3. A detailed estimate of the amount of the net savings, as defined below, that will result from acceptance of the proposal;
4. A prediction of any effects the proposed change would have on costs of maintenance and operation; and
5. A statement of the time by which the proposal must be accepted to obtain the maximum price reduction, noting any effect upon the contract completion time.

The Contracting Officer may accept or reject part or all of any VECP by giving the Contractor written notice thereof. Until such notice is issued, the Contractor shall remain obligated to perform in accordance with the terms of the Contract Documents. VECPs will be processed expeditiously; however, R. J. Corman shall not be liable for any delay in acting upon any proposal submitted pursuant to this Article. The decision of the Contracting Officer as to acceptance of any such proposal shall be final and shall not be subject to the Article entitled Disputes.

The Contractor has the right to withdraw part or all of any VECP at any time prior to acceptance by the Contracting Officer. Each VECP submitted by the Contractor shall remain valid for a period of sixty days from the date submitted. If the Contractor desires to withdraw the proposal prior to the expiration of this period, it shall be liable for the cost incurred by R. J. Corman in reviewing the proposal.

When a VECP submitted pursuant to this Article is accepted:

1. An equitable adjustment in the contract price and in any other affected provisions of the Agreement shall be made, and the Contract modified in accordance with this Article and other applicable articles of this Contract.
2. The net savings resulting from the change shall be shared between the Contractor and R. J. Corman on the basis of fifty percent for the Contractor and fifty percent for R. J. Corman. Net savings shall be determined by deducting from the gross savings the Contractor's costs of developing and implementing the proposal and the amount of increased costs to R. J. Corman resulting from the change.
3. The Contractor is entitled to share in the VECP savings only to the extent provided for in this Article.
4. The Contractor will use its best efforts to include Value Engineering arrangements in any subcontract, which in the Contractor's judgment, appears to offer sufficient value engineering

potential.

A VECP identical to one submitted under any other contract, by this or any other Contractor, may also be submitted under this Agreement.

The Contractor may restrict R. J. Corman's right to use any VECP data by marking it with the following statement:

This data, furnished pursuant to the Article entitled Value Engineering, shall not be duplicated, used or disclosed, in whole or in part, for any purpose except to evaluate the VECP, unless the proposal is accepted by R. J. Corman. This restriction does not limit R. J. Corman's right to use information contained in this data if it is or has been obtained, or is otherwise available, from the Contractor or from another source, without limitations. When this proposal is accepted by R. J. Corman, R. J. Corman shall have the right to duplicate, use and disclose any data in any manner and for any purpose whatsoever, and have others do so whether under this or any other R. J. CORMAN contract.

## Notice of Potential Claim

The Contractor shall not be entitled to additional compensation otherwise payable for any act or failure to act by R. J. Corman, the happening of any event or occurrence or any other cause, unless the Contractor shall have given R. J. Corman a written notice of potential claim.

A written notice of potential claim must be submitted to the Engineer within thirty days from the date the claim arose, i.e., from the date upon which the Contractor first became aware of the condition from which the claim emanates.

The written notice of potential claim shall set forth the reasons for which the Contractor believes additional compensation will or may be due, the nature of the costs involved and insofar as possible, the amount of the potential claim. If the claim is based upon an act or failure to act by R. J. Corman or an alleged differing site condition such notice shall be given to the Engineer prior to the time that the Contractor has started performance of Work giving rise to the potential claim for additional compensation. Thereafter the Contractor shall not proceed with such Work until receipt of written authorization from the Engineer. Any and all Work done by the Contractor prior to the Engineer's authorization to proceed will be at the Contractor's expense.

It is the purpose of this Article that differences between the parties arising under and by virtue of the Agreement shall be brought to the attention of the Engineer at the earliest possible time in order that such matters may be settled or other appropriate action promptly taken before the Contractor begins such Work.

The notice requirements of this Article are in addition to those required in other Articles of the General Conditions.

## Submittal of Claim

Claims filed by the Contractor shall be in sufficient detail to enable the Engineer to ascertain the basis and amount of said claims. The Engineer will review and evaluate the Contractor's claims. It will be the responsibility of the Contractor to furnish details as may be required to determine the facts or

contention involved in its claims. Failure to submit such information and details will be sufficient cause for denying the Contractor's claims.

Any claim the Contractor may make for equitable adjustment on account of delay for any cause must be accompanied by a revised progress schedule reflecting the effects of the delay and proposals to minimize those effects.

All claims must be submitted before Final Acceptance. Claims submitted after Final Acceptance shall be deemed to be waived by the Contractor.

## Disputes

Any dispute arising under this Agreement which is not disposed of by agreement shall be decided by the Contracting Officer who shall reduce the decision to writing and mail or otherwise furnish a copy thereof to the Contractor. The decision of the Contracting Officer shall be final and conclusive unless within thirty days from the date of receipt of such decision, the Contractor mails or otherwise furnishes to the Contracting Officer a written appeal of the original finding addressed to R. J. Corman and requesting a hearing on the claim.

If the Contractor appeals the Contracting Officer's decision, R. J. Corman shall appoint a Hearing Officer and the Contractor shall be afforded an opportunity to be heard and to offer evidence in its appeal. The Contractor hereby agrees that further recourse from the Hearing Officer's decision shall be limited to that available under Article 78 Civil Practice Law and Rules.

The decision of the Hearing Officer shall be final and conclusive unless determined by a court of competent jurisdiction to have been fraudulent or capricious or arbitrary or so grossly erroneous as necessarily to imply bad faith or not supported by substantial evidence.

Pending final decision of the disputes hereunder, the Contractor shall proceed diligently with the performance of this Agreement and in accordance with the decision of the Contracting Officer.

## Termination for Convenience of R. J. Corman

R. J. Corman may terminate performance of Work under this Agreement in whole or, from time to time, in part if the Contracting Officer determines that a termination is in R. J. Corman's interest. The Contracting Officer shall terminate by delivering to the Contractor a Notice of Termination specifying the extent to which performance of Work pursuant to this Agreement is terminated, and the effective date of the termination. If this is a demolition or removal project, and title to property has vested in the Contractor pursuant to this Agreement, upon receipt of the Notice of Termination title shall revert in R. J. Corman regardless of any other clause of the Agreement, except for property that the Contractor disposed of by bona fide sale or removed from the site prior to receipt of the termination notice.

After receipt of a Notice of Termination, and except as directed by the Contracting Officer, the Contractor shall:

1. Stop Work as specified in the notice.
2. Place no further subcontracts or orders for materials, services or facilities, except as necessary to complete the portion of the Work which has not been terminated.
3. Terminate all subcontracts and orders to the extent they relate to the Work terminated.

4. Assign to R. J. Corman, to the extent and as directed by the Contracting Officer, all right, title and interest of the Contractor under the subcontracts or orders terminated, in which case R. J. Corman shall have the right to settle or to pay any termination settlement proposal arising out of those terminations.
5. Settle all outstanding liabilities and all claims arising out of such termination of orders and subcontracts, with the approval or ratification of R. J. Corman, to the extent it may require, which shall be final for all the purposes of this Article.
6. To the extent directed by R. J. Corman, transfer title and deliver to R. J. Corman (a) the fabricated or unfabricated parts, Work in process, completed Work, supplies, and other material produced or acquired for the Work terminated, and (b) the completed or partially completed plans, drawings, information and other property that, if the contract had been completed, would be required to be furnished to R. J. Corman.
7. Use its best efforts to sell, to the extent directed or authorized by R. J. Corman, any property of the types referred to above; provided, however, that the Contractor (a) is not required to extend credit to any purchaser and (b) may acquire the property under the conditions prescribed by and at prices approved by R. J. Corman. The proceeds of any transfer or disposition will be applied to reduce any payments to be made by R. J. Corman under this Agreement, credited to the price or cost of the Work, or paid in any other manner directed by R. J. Corman.
8. Complete performance of each part of the Work which has not been terminated.
9. Take any action that may be necessary, or that R. J. Corman may direct, for the protection and preservation of the property related to this Agreement that is in the possession of the Contractor and in which R. J. Corman has or may acquire an interest.

After receipt of a Notice of Termination, the Contractor shall submit to R. J. Corman its termination claim. Such claim shall be submitted promptly but in no event later than one year from the effective date of termination, unless an extension of time in writing is granted by R. J. Corman upon a written request from the Contractor received within such one-year period or authorized extension thereof. Upon failure of the Contractor to submit its termination claim within the time allowed, R. J. Corman may determine, on the basis of information available to it, the amount, if any, due to the Contractor by reason of the termination and shall thereupon pay to the Contractor the amount so determined.

Subject to the provisions of the preceding paragraph, the Contractor and R. J. Corman may agree upon the whole or any part of the amount to be paid because of the termination. The amount may include a reasonable allowance for profit on Work done. However, the agreed amount, whether under this paragraph or the following paragraph, exclusive of costs for settlement of the claim, may not exceed the total contract price as reduced by (a) the amount of payments previously made and (b) the contract price of Work not terminated. The contract shall be amended, and the Contractor paid the agreed amount. The following paragraph shall not limit, restrict or affect the amount that may be agreed upon to be paid under this paragraph.

If the Contractor and R. J. Corman fail to agree on the whole amount to be paid the Contractor because of the termination of Work, R. J. Corman shall pay the Contractor the amounts determined as follows, but without duplication of any amounts agreed upon under the preceding paragraph:

For contract Work performed before the effective date of termination, the total (without duplication of any items) of –

1. The cost of the Work;

2. The cost of settling and paying termination settlement proposals under terminated subcontracts that are properly chargeable to the terminated portion of the contract if not included in the cost of the Work; and
3. A sum as profit on the cost of the Work determined by R. J. Corman to be fair and reasonable; however, if it appears that the Contractor would have sustained a loss on the entire contract had it been completed, R. J. Corman shall allow no profit under this paragraph and shall reduce the settlement to reflect the indicated rate of loss.
4. The reasonable costs of settlement of the Work terminated, including-- Accounting, legal, clerical, and other expenses reasonably necessary for the preparation of termination settlement proposals and supporting data; The termination and settlement of subcontracts (excluding the amounts of such settlements); and Storage, transportation and other costs incurred, reasonably necessary for the preservation, protection or disposition of the termination inventory.

Except for normal spoilage, and except to the extent that R. J. Corman expressly assumed the risk of loss, R. J. Corman shall exclude from the amounts payable to the Contractor the fair value, as determined by R. J. Corman, of property that is destroyed, lost, stolen or damaged so as to become undeliverable to R. J. Corman or to a buyer.

The cost principles and procedures of part 31 of the Federal Acquisition Regulations in effect on the date of this Agreement shall govern all costs claimed, agreed to, or determined under this clause.

The Contractor shall have the right of appeal, under the Disputes Article, from any determination made by R. J. Corman under this Article, except that if the Contractor failed to submit the termination settlement proposal within the time provided and failed to request a time extension there is no right of appeal.

In arriving at the amount due the Contractor under this clause, there shall be deducted—

1. All unliquidated advance or other payments to the Contractor under the terminated portion of this Agreement;
2. Any claim which R. J. Corman has against the Contractor pursuant to this Agreement; and The agreed price for, or the proceeds of sale of, materials, supplies or other things acquired by the Contractor or sold under the provisions of this clause and not recovered by or credited to R. J. Corman.

If the termination is partial, the Contractor may file a proposal with R. J. Corman for an equitable adjustment of the price(s) of the continued portion of the contract. R. J. Corman shall make any equitable adjustment agreed upon. Any proposal by the Contractor for an equitable adjustment under this clause shall be requested within 90 days from the effective date of termination unless extended in writing by R. J. Corman. {49 CFR 18.36 (i)(2)}

## Termination for Default

The Contractor shall be considered in default of this Agreement and such default will be considered as cause for R. J. Corman to terminate this Agreement for any of the following reasons if the Contractor:

1. Fails to begin the Work under the Agreement within the time specified in the “Notice to Proceed;”
2. Fails to perform the Work or any part thereof or fails to provide sufficient Workers, equipment or materials to assure completion of the Work within the time specified in the Agreement;
3. Performs the Work unsuitably or neglects or refuses to remove materials or to perform any such



Work as may be rejected as unacceptable and unsuitable.

4. Discontinues the prosecution of the Work;
5. Fails to resume Work which has been discontinued within a reasonable time after notice to do so;
6. Becomes insolvent or is declared bankrupt, or commits any act of bankruptcy or insolvency;
7. Makes an assignment for the benefit of creditors;
8. In the event of a Work stoppage brought about by labor strife or unrest when it appears that resulting delays will make it unlikely that the Contractor will complete the Work within the time specified in the Agreement;
9. For any cause whatsoever, fails to carry on the Work in an acceptable manner.

Should R. J. Corman consider the Contractor in default of the Agreement, R. J. Corman shall immediately give written notice to the Contractor and the Contractor's surety as to the reasons for considering the Contractor in default and R. J. Corman's intentions to terminate the Agreement.

If the Contractor or surety, within a period of ten days after such notice, does not proceed in accordance therewith, then R. J. Corman will, upon written notification from the Engineer of the facts of such delay, neglect or default, and the Contractor's failure to comply with such notice, have full power and authority without violating the Agreement, to take the prosecution of the Work out of the hands of the Contractor. R. J. Corman may appropriate or use any or all materials and equipment that have been mobilized for use in the Work and are acceptable and may enter into an agreement for the completion of said contract according to the terms and provisions thereof, and such other methods as in the opinion of the Engineer will be required for the completion of the Agreement in an acceptable manner. R. J. Corman will not be required to obtain the lowest prices for completing the Work, but shall make such expenditures as in R. J. Corman's sole judgment are best to accomplish same.

The expense of completing the Work, together with a reasonable charge for engineering, managerial and administrative services, as certified by the Engineer, will be deducted by R. J. Corman out of such moneys as may be due or may at any time thereafter become due to the Contractor. In case such an expense is in excess of the sum which otherwise would have been payable to the Contractor under the Agreement, then the Contractor or its surety shall promptly pay the amount of such excess to R. J. Corman upon notice from R. J. Corman of the excess so due. R. J. Corman may, in its sole discretion, withhold all or any part of any progress payments otherwise due the Contractor until completion and final settlement of the Work covered by the Notice of Termination.

The Contractor shall require in all subcontracts that the subcontractor will stop all Work on the date of or to the extent specified in a Notice of Termination from R. J. Corman and shall require the subcontractors to insert the same provision in sub-subcontracts.

The Contractor shall immediately upon receipt communicate any Notice of Termination issued by R. J. Corman to the affected subcontractors and sub-subcontractors.

## Time is of the Essence

Time is of the essence in this Agreement. All of the Work under the Agreement shall be completed within the time as set forth herein from the effective date of the Notice to Proceed, unless such period of time shall be extended by the Engineer. The Work shall be deemed completed when the entire

project, at the completion of all Work, including the completion of all punch list items, has been finally accepted by R. J. Corman.

## Use and Possession Prior to Completion

R. J. Corman shall have the right to take possession of or use any completed or partially completed part of the Work. Such possession or use shall not be deemed an acceptance of any Work not completed in accordance with the Agreement. While R. J. Corman is in such possession, the Contractor shall be relieved of the responsibility for loss or damage to the Work other than that resulting from the Contractor's fault or negligence. If such prior possession or use by R. J. Corman delays the progress of the Work or causes additional expense to the Contractor, an equitable adjustment in the contract price at the time of completion will be made and the Agreement shall be modified in writing accordingly.

## Rights in Shop Drawings and Working Drawings

Shop drawings, Working drawings and submittals are submitted to the Engineer by the Contractor, pursuant to the Contract Documents, showing in detail the method, fabrication, installation, control, clearance, etc., for all equipment and materials as required by the technical specifications and necessary for proper review and approval. R. J. Corman may duplicate, use and disclose in any manner and for any purpose shop drawings and Working drawings delivered under this Agreement.

## Audit and Inspection

The Contractor shall maintain and require each of its subcontractors to maintain accurate records, documents and other evidence with sound accounting procedures and practices, of all expenditures made and all costs, liabilities and obligations incurred during the performance of this Agreement. The Contractor and its subcontractors shall preserve and make available their records for a period of six years from the date of final payment under this Agreement. The Contractor shall permit and shall require its subcontractors to permit R. J. Corman and its authorized representatives to inspect all Work, materials, payrolls, records of personnel, invoices of materials and other relevant construction equipment, data and records and to audit the books, records and accounts of Contractor pertaining to this Agreement.

The State Comptroller, the Attorney General and any other person or entity authorized to conduct an examination of such records, as well as the agency or agencies involved in this Agreement, shall have access to such records during normal business hours at an office of the Contractor within the State of Mississippi or, if no such office is available, at a mutually agreeable and reasonable venue within the State, for the term specified above for the purposes of inspection, auditing and copying. The State shall take reasonable steps to protect from public disclosure any of the Records which are exempt from disclosure under Section 87 of the Public Officers Law provided that: (i) the Contractor shall timely inform an appropriate State official, in writing, that said records should not be disclosed; and (ii) said records shall be sufficiently identified; and (iii) designation of said records as exempt thereunder is reasonable. Nothing contained herein shall diminish, or in any way adversely affect, any right to discovery in any pending or future litigation.

## Assignment

In accordance with Section 138 of the State Finance Law, this contract may not be assigned by the Contractor or its right, title or interest therein assigned, transferred, conveyed, sublet or otherwise disposed of without the State's previous written consent, and attempts to do so are null and void. Notwithstanding the foregoing, such prior written consent of an assignment of a contract let pursuant to Article XI of the State Finance Law may be waived at the discretion of the contracting agency and with the concurrence of the State Comptroller where the original contract was subject to the State Comptroller's approval, where the assignment is due to a reorganization, merger or consolidation of the Contractor's business entity or enterprise. The State retains its right to approve an assignment and to require that any Contractor demonstrate its responsibility to do business with the State. The Contractor may, however, assign its right to receive payments without the State's prior written consent unless this contract concerns Certificates of Participation pursuant to Article 5-A of the State Finance Law.

Assignment of this Agreement shall not relieve the Contractor from its responsibility for the performance of the Work hereunder in accordance with the terms thereof nor from its responsibility for the performance of any other obligations hereunder, including the reimbursement of all subcontractors. The Agreement may not be assigned without the prior written approval of R. J. Corman.

## Protection of Existing Vegetation, Facilities and Utilities

The Contractor will preserve and protect all existing vegetation such as trees, shrubs and grass on or adjacent to the Worksite, which are not indicated to be removed and which do not unreasonably interfere with the construction Work.

The Contractor will protect from damage all existing facilities at or near the site of the Work and will repair or restore any damage to such facilities at the Contractor's expense resulting from failure to comply with the requirements of this Agreement or the failure to exercise reasonable care in the performance of the Work.

The Contractor shall maintain access to fire hydrants and fire alarm boxes throughout the prosecution of the Work. Hydrants, alarm boxes and standpipe connections shall be kept clear and kept visible at all times unless approved otherwise. If visibility cannot be maintained, the Contractor shall provide clearly visible signs showing the location of the fire hydrant, fire alarm box or standpipe connection.

## Rights in Land and Improvements

The Contractor shall make no arrangements with any person to permit occupancy or use of any land, structure or building within the Worksite for any purpose whatsoever, whether with or without compensation, in conflict with any agreement between R. J. Corman and any owner, former owner or tenant of such land, structure or building. The Contractor shall not occupy R. J. Corman-owned property outside the Worksite without obtaining prior approval from R. J. Corman. Any fire hydrants or sprinkler system components used by the Contractor to supply water shall be pumped or drained to prevent damage resulting from freezing.

## Damage to the Work and Responsibility for Materials

The Contractor shall be responsible for all materials delivered and Work performed until completion and final acceptance of the Work.

The Contractor shall bear the risk of injury, loss or damage to any part of the Work by the elements or from any other cause. The Contractor shall rebuild, repair or restore Work and materials which have been damaged or destroyed from any causes before completion and Final Acceptance of the Work and shall bear the expense thereof. The Contractor shall provide drainage, erect temporary structures and provide security as necessary to protect the Work and materials from damage and unauthorized access.

The Contractor shall be responsible for materials not delivered to the site for which any progress payment has been made to the same extent as if the goods were so delivered.

No provisions of this contract shall operate to relieve the Contractor (including its subcontractors) from the responsibility of carrying insurance to cover loss to the Contractor's (including its subcontractor's) equipment, including, but not limited to, tarpaulin, tools or tools owned by employees, scaffolding, temporary offices and construction sheds.

The Contractor's responsibility for storage and protection of material under this Agreement shall be the same for R. J. CORMAN-furnished material as for Contractor-furnished material.

R. J. Corman may, upon written request, relieve the Contractor of the duty of maintaining and protecting certain portions of the Work, as described in this Article, which have been completed in all respects in accordance with the requirements of the Agreement and thereafter the Contractor will not be required to do further Work thereon. In addition, such action by R. J. Corman will relieve the Contractor of responsibility for injury or damage to said completed portions of the Work resulting from use by R. J. Corman or the public or from the action of the elements or from any other cause, but not from injury or damage resulting from the Contractor's own operation or negligence. Such action does not relieve the Contractor of full responsibility for repairing or replacing defective Work or materials in accordance with the contract requirements.

## Emergencies

In an emergency affecting the safety of life, the Work, or adjacent property, the Contractor shall make reasonable efforts under the circumstances to notify R. J. Corman as early as possible that an emergency exists, then, without special instruction or authorization from R. J. Corman as to the manner of dealing with the emergency, shall act at its own discretion to prevent such threatened loss or injury. As emergency Work proceeds, R. J. Corman may issue instructions which the Contractor shall follow.

## Suspension of Work

The Engineer may order the Contractor in writing to suspend, delay or interrupt all or any part of the Work ("stop Work order") for such period of time as the Engineer may determine to be appropriate for the convenience of R. J. Corman.

No equitable adjustment shall be made for any suspension, delay or interruption to the extent (1) that performance would have been suspended, delayed or interrupted by any other cause including the fault or negligence of the Contractor or (2) for which an equitable adjustment is provided or excluded under any other provision of this contract. Adjustments shall be determined in the manner provided in the Articles entitled Payment for Agreed Prices and Payment for Force Account Work.

No claim under this Article shall be allowed unless a Notice of Potential Claim is submitted as provided in this Agreement.

Upon receipt thereof, the Contractor shall comply immediately with the written order of R. J. Corman to suspend the Work. Work shall be resumed when the Contractor is so advised in writing by R. J. Corman.

The Contractor shall insert in all subcontracts a provision that subcontractors shall comply immediately with a written order of R. J. Corman to the Contractor to suspend the Work and that they shall further insert the same provisions in all subcontracts.

## Accident Prevention

The Contractor is responsible for the provision of safety controls for protection to the life and health of employees and other persons; for prevention of damage to property, materials, supplies and equipment and for avoidance of Work interruptions in the performance of this Agreement. The Contractor shall comply with all local, state and federal safety standards. Nothing contained herein shall relieve the Contractor of any liability imposed by such standards.

## Tools and Equipment

Equipment for use on the Work shall be of established reputation and proven efficiency and in proper satisfactory Working condition. The use of any piece of equipment that at any time produces unsatisfactory results, in the opinion of the Engineer, shall be promptly discontinued and such objectionable piece of equipment shall be replaced or repaired to the satisfaction of the Engineer.

## Barricades, Warning Signs and Hazard Markings

The Contractor shall furnish, erect and maintain all barricades, warning signs and markings for hazards necessary to protect the public and the Work. When used during periods of darkness, such barricades, warning signs and hazard markings shall be suitably illuminated.

For vehicular and pedestrian traffic, the Contractor shall furnish, erect and maintain barricades, warning signs, lights and other traffic control devices in reasonable conformity with the Manual of Uniform Traffic Control Devices for Streets and Highways.

The Contractor shall furnish and erect all barricades, warning signs and markings for hazards prior to commencing Work which requires such erection and shall maintain the barricades, warning signs and markings for hazards until they are dismantled.

## Project Records

The Engineer is required to keep its project records in accordance with the "Manual of Uniform Record Keeping" (MURK) in force at the time the project is started. Such changes as are made in subsequent revisions of the Manual shall be incorporated in the project procedures and records unless authorized to the contrary in writing by the Engineer. The Contractor is invited to review MURK with the Engineer if desired. In several instances (such as Force Account Work, application for Approval of Subcontractors, etc.) the Contractor shall furnish the data and information in the forms as set in MURK. The Engineer will furnish the appropriate forms.

## Progress Schedules and Requirements for Maintaining Progress

The Contractor shall prosecute the Work so as to maintain pace with the progress schedule. Should the Contractor fail to maintain progress according to the schedule it shall furnish such additional manpower,

equipment, additional shifts or other measures that the Engineer directs to bring its operations up to schedule without any additional cost or expense to R. J. Corman. The Engineer may also require the Contractor to prepare a supplemental progress schedule detailing the specific operational changes to be instituted to regain the approved schedule. Failure of the Contractor to comply with the requirements of R. J. Corman under this Article shall be grounds for determination by R. J. Corman that the Contractor is not prosecuting the Work with such diligence as will ensure completion within the time specified. Upon such determination, R. J. Corman may terminate the Contractor's right to proceed with the Work, or any separate part thereof.

## Progress Payments - Retention

Monthly progress payments will be made to the Contractor based upon the payment schedule in the Agreement or the Engineer's estimate of the value of the Work executed and actually complete. The conditions under which such partial payments will be made are as follows:

Each contractor and subcontractor shall submit a certified copy of each weekly payroll within seven days after the regular payroll date. Failure to do so shall be grounds for withholding of progress payments. The certified payroll shall only include persons and hours for Work performed pursuant to this Agreement. Except as otherwise set forth in this Agreement, payrolls shall be filed in a manner consistent with subdivision three-a of section 220 of the Labor Law as a condition precedent to payment.

R. J. Corman shall retain five percent of invoiced progress payments until an amount equal to five percent of the total price of the Agreement has been retained. This amount shall be retained as security for fulfillment of the Agreement until the Work is completed and accepted. R. J. Corman may, at its discretion, retain five percent of the estimated amount of all change orders.

R. J. Corman shall in addition retain an amount necessary to satisfy any claims, liens or judgments pertaining to this Agreement and filed against the Contractor in accordance with the terms of this Agreement and the applicable law.

After the initial progress payment, and before any further progress payments are made, the Contractor is required to obtain an acknowledgment from all subcontractors and suppliers included in the previous payment application that they have been paid. The Contractor shall certify that it has satisfactorily progressed the Work and met other contractual and payment obligations.

## Final Inspection and Acceptance

When the Work has been completed, R. J. Corman will make the final inspection for the purpose of ascertaining that the Work has been completed in accordance with the requirements of the Contract Documents. Upon correction of all deficiencies, R. J. Corman shall accept the Work. Immediately upon and after Final Acceptance, the Contractor will be relieved of the duty of maintaining and protecting the Work as a whole.

Final Acceptance shall be final and conclusive and no further performance of Work shall be required except as regards latent defects, fraud or such gross mistakes as may amount to fraud or as regards R. J. Corman's rights under any warranty or guarantee.

## Final Payment

Final Payment will be made for actual quantities of Work performed and materials in place as determined by the measurements of the Engineer, and the resulting quantities involved in this Agreement shall be accepted as final, conclusive and binding upon the Contractor.

When this final certificate is approved, the money due the Contractor for the performance of the project as determined by said final certificate after deduction of previous payments on account and any amounts of liquidated damages and/or engineering charges assessed against the Contractor, will be paid the Contractor, provided however, that before final payment is made the following requirements shall be satisfied:

1. Final inspection shall have been accomplished.
2. There shall be no outstanding claims against the Contractor filed with R. J. Corman.
3. The Contractor shall have paid all due obligations and shall have furnished when directed by the Engineer receipted bills or other satisfactory evidence that all obligation incurred by the Contractor and its subcontractors in carrying out the project have been satisfied.
4. The Contractor shall have delivered a fully executed Maintenance Bond.
5. The Contractor shall execute and deliver a release substantially in the following form:  
“In consideration of the above payment, we hereby release the R. J. Corman and its members, officers, agents and employees from all claims, demands and liability of whatsoever nature for anything done or furnished or in any manner arising from the performance of the project.”

The acceptance by the Contractor of payment of the final certificate shall operate as and shall be a release to R. J. Corman and its agents from all claims or liability to the Contractor for anything done or furnished or omitted to be done or furnished for or relating to the project, or any act of neglect of R. J. Corman or any person, relating thereto.

Upon final determination of all of the Contractor's claims, R. J. Corman, in exchange for an executed release, will pay the entire sum found due upon the approval of the Chief Financial Officer, based upon final audit.

## Alterations and Omissions

The Work shall be performed in accordance with the true intent and meaning of the Contract Documents without any further expense of any nature whatsoever to R. J. Corman other than the consideration named in this Agreement.

R. J. Corman reserves the right, at any time during the progress of the Work, to alter the plans or omit any portion of the Work as it may deem reasonably necessary for the public interest, making allowances for additions and deductions, with compensation made in accordance with the Contract Documents, for the Work without constituting grounds for any claim by the Contractor for allowance for damages or for loss of anticipated profit, or for any variations between the approximate quantities and the quantities of the Work as done.

## Delays

R. J. Corman and the Contractor agree that delays to the completion of the Work within the number of calendar days established in the Invitation to Bid (hereinafter, the “time of completion” or “Contract Time”), may be the result of a variety of circumstances. Circumstances causing delay may be attributable to the acts or omissions of R. J. Corman, the acts or omissions of the Contractor, the acts or omissions of third parties, or “Acts of God.” These circumstances may act individually or concurrently. As set forth in the succeeding provisions of this Article, delays may result in the assessment of liquidated damages and/or engineering charges against the Contractor; or a “no-cost” extension of the Contract Time; or an extension of the Contract Time and compensation to the Contractor.

**Extension of Contract Time.** The Contractor agrees that it has included in its bid prices for the various items of the contract any additional costs for delay, inefficiencies, or interferences affecting the performance or scheduling of contract Work caused by, or attributable to, the instances set forth hereinafter. Except with regard for the provisions governing “Concurrent Delays” the Contractor may be granted an extension of time and may not be assessed engineering charges or liquidated damages for actual, demonstrable delays arising from:

1. acts of God, acts of public enemy;
2. fires, floods, epidemics;
3. quarantine restrictions;
4. freight embargoes;
5. unusually severe weather;
6. historical, scientific and archaeological discoveries;
7. the presence on or adjacent to the contract site of any third party, other than as contemplated by the Article entitled Cooperation between Contractors, including but not limited to other public bodies, by railroad, transportation or private or public utility companies or corporations, or by private enterprise, or any delay in progressing such Work by any third party;
8. the existence of any facility or appurtenance owned, operated, or maintained by any third party; the act, or failure to act, of any other public or governmental body, including, but not limited to, approvals, permits, restrictions, regulations or ordinances;
9. restraining orders, injunctions or judgments issued by the court;
10. any labor boycott, strike, strife, action, picketing or similar situation, not attributable to the acts or omissions of the Contractor;
11. determinations by R. J. Corman to open certain sections of the project to traffic before completion of the entire contract Work;
12. increases in contract quantities, additional contract Work, or extra Work or for unreasonable delays in the review or issuance of orders on contract, or shop drawings, or field change sheets;
13. failure of R. J. Corman to provide individual rights-of way parcels for an extended period of time beyond that indicated by the contract, if such unavailability, as determined by the Engineer, does not significantly affect the scheduled completion of the contract.
14. Stop Work Orders issued by the Engineer, except as provided for in the subsequent paragraph entitled Additional Compensation.

Notwithstanding clause 11 above, in accordance with Section 220-f of the Labor Law and Section 139-h of the State Finance Law, if this contract exceeds \$5,000, the Contractor agrees, as a material condition of the contract, that neither the Contractor nor any substantially owned or affiliated person, firm,



partnership or corporation has participated, is participating, or shall participate in an international boycott in violation of the federal Export Administration Act of 1979 (50 USC App. Sections 2401 et seq.) or regulations thereunder. If such Contractor, or any of the aforesaid affiliates of Contractor, is convicted or is otherwise found to have violated said laws or regulations upon the final determination of the United States Commerce Department or any other appropriate agency of the United States subsequent to the contract's execution, such contract, amendment or modification thereto shall be rendered forfeit and void. The Contractor shall so notify the State Comptroller within five (5) business days of such conviction, determination or disposition of appeal (2NYCRR 105.4).

An extension of time pursuant to this section will be granted only if the aforesaid causes were not foreseeable at the time the Agreement was executed and did not result from the fault or negligence of the Contractor, and provided further that the Contractor has taken reasonable precautions to prevent further delays owing to such causes.

Unusually severe weather shall apply only as it affects particular portions of the Work and operations of the Contractor, as determined by R. J. Corman. The basis used to define unusually severe weather will be data showing high and low temperatures, snowfall, rainfall, as compiled by the U.S. Department of Commerce National Weather Service.

An extension of time will not be granted for a delay caused by a shortage of materials, except R. J. CORMAN-furnished materials, unless the Contractor furnishes to R. J. Corman documentary proof that it has diligently made every effort to obtain such materials from all known sources within reasonable reach of the Work. The Contractor shall also submit proof that the inability to obtain such materials when originally planned did, in fact, cause delay in final completion of the Work which could not be compensated for by revising the sequence of its operations. Only the physical shortage of material will be considered under these provisions as a cause for extension of time.

No consideration will be given to any claim that material could not be obtained at a reasonable, practical or economical cost, unless it is shown to the satisfaction of R. J. Corman that such material could have been obtained only at exorbitant prices, entirely inconsistent with current rates, taking into account the quantities involved and the usual practices in obtaining such quantities.

**Additional Compensation.** The Contractor agrees that the only claims it may make for extra compensation caused by delay, inefficiencies, or interference affecting the performance or the scheduling of contract will be solely limited to those arising out of the following instances:

1. the issuance by the Engineer of a stop Work order, as provided for in the Article entitled Suspension of Work, relative to a substantial portion of Work, which the Engineer determines to significantly affect the scheduled completion of the contract;
2. the unavailability of critical rights-of-way parcels for such an extended period of time beyond that indicated in the contract which the Engineer determines to significantly affect the scheduled completion of the contract;
3. the unanticipated presence of other contractors retained by R. J. Corman, on or adjacent to the Worksite;
4. unforeseen or unanticipated surface and subsurface conditions, as governed by the Article entitled Differing Site Conditions.

In all of such instances, compensation to be considered will be limited to documented additional direct field costs, including field supervision, escalation of costs for labor, materials and rental equipment; and

documented additional, overabsorbed, or underabsorbed home office overhead, idle equipment, financing and profit, which in the aggregate shall not exceed fifteen percent of the total of additional direct costs as identified above, incurred on the project by the Contractor during the period of the delay.

Failure of the Contractor to adequately progress the completion of the Work will be considered in determining whether the foregoing instances are the primary causes of delay. In all of such instances, for any claim asserted under this section, the Contractor shall keep detailed written records of the costs and agrees to make same available to R. J. Corman at any time for purposes of audit and review.

Any dispute relating to such claims shall be subject to the Article entitled Disputes.

**Notice of Delay Claim.** In order to qualify for an extension of time and/or additional compensation for any delay the Contractor must notify R. J. Corman in writing of the cause or causes of the delay within fifteen days from the beginning of any such delay. Within thirty days after the end of the delay, the Contractor shall furnish R. J. Corman with detailed information concerning the circumstances of the delay, the number of days actually delayed, the appropriate contract references, and the measures taken to prevent or minimize the delay, and, with respect to a claim for additional compensation, detailed information supporting the costs claimed. Failure to submit such information within the specified time frames will be sufficient cause for denying the delay claims. The Engineer will ascertain the facts and the extent of the delay and its findings thereon shall be final and conclusive.

No actions on the part of R. J. Corman shall be deemed to be a waiver of the Contractor's obligation to comply with this section.

**Concurrent Delay.** The Contractor shall not be entitled to receive a separate extension of time, or extension of time and additional compensation, for each one of several causes of delay operating concurrently, but, if at all, only for the actual period of delay in completion of the Work irrespective of the number of causes contributing to produce such delay.

If one of several causes of delay operating concurrently results from any act, fault or omission of the Contractor or of its subcontractors or material men, and would of itself have delayed the Work, no extension of time and no additional compensation will be allowed for the period of delay resulting from such act, fault or omission.

**Engineering Changes.** When any part of the Work remains incomplete, including punch list items, after the expiration of the time allowed for final completion of the Work stipulated in the Agreement, unless the time or times of completion is (are) extended by written consent of R. J. Corman, engineering and inspection expenses incurred by R. J. Corman upon the Work, from the completion date originally fixed in the Agreement to the final date of completion of the Work, may be charged to the Contractor. R. J. Corman may either deduct the engineering charges from any monies due the Contractor or require the Contractor to pay the current amount of the engineering charges prior to the issuance of any subsequent progress payments. Consideration for any extra Work, as well as extenuating circumstances beyond the control of the Contractor, will be given due consideration by R. J. Corman before assessing engineering and inspection charges against the Contractor. Such charges will be assessed, however, in cases where because of unwarranted reasons, inefficient operation, or for any other reason for which R. J. Corman determines the Contractor liable. Engineering expenses will also be charged to the Contractor for any Work performed on close-out of the Agreement more than sixty days after Final Acceptance.

**Liquidated Damages.** When any part of the Work remains incomplete, including punch list items, after the expiration of the time allowed for final completion of the Work stipulated in the Agreement, unless the time or times of completion is (are) extended by written consent of R. J. Corman, a sum of money as set forth in the Invitation to Bid shall either be deducted from any monies due the Contractor or required to be paid to R. J. Corman before any subsequent progress payments will be issued. If no money is due the Contractor, R. J. Corman shall have the right to recover said sum or sums from the Contractor, from the Surety, or from both. The amount(s) of these deductions is (are) to cover liquidated damages to R. J. Corman incurred by additional and other expenses due to the failure of the Contractor to complete the Work or any part of the Work within the time specified, and such deductions are not to be considered as penalties and shall be in addition to any Engineering Charges imposed as hereinabove provided for. Liquidated damages shall be recovered in the event the Contractor abandons the Work.

## Insurance

The Contractor agrees to procure and maintain at its expense during the term of the Agreement insurance of the kinds and in the amounts hereafter required, with insurance companies authorized to do business in Mississippi State, covering all operations under this Agreement, whether performed by the Contractor or its subcontractors. The policies shall provide for a thirty-day notice to R. J. Corman prior to termination, cancellation or change.

Prior to the execution of the Agreement, the Contractor shall supply R. J. Corman, a certificate(s) of insurance providing evidence of insurance coverage for the Contractor for the following coverages:

1. Worker's Compensation Insurance as required by law.
2. Automobile liability insurance in the amount of ONE MILLION AND NO/100 (\$1,000,000.00) per occurrence.
3. Commercial General Liability insurance in the amount of TWO MILLION AND NO/100 (\$2,000,000.00) per occurrence, with no exclusion of railroad liability, contractual or otherwise, from its coverage.
4. R.J. Corman Railroad Company/Owego and Hartford Line and shall be named as additional insured.
5. If SUBCONTRACTOR'S insurance does not have railroad liability coverage a Railroad Protective Liability policy must be purchased with limits of TWO MILLION AND NO/100 (\$2,000,000.00) per occurrence and SIX MILLION AND NO/100 (\$6,000,000.00) aggregate name R.J. Corman Railroad Company, LLC as the insured.

Prior to commencing the Work the Contractor shall supply R. J. Corman with a certificate of insurance providing evidence of insurance coverage for the Contractor for Builder's Risk/Installation Floater "All Risk" insurance protecting the Contractor, R. J. Corman and subcontractors from losses resulting from, but not limited to, natural disasters, fire, extended coverage perils, vandalism, malicious mischief or collapse during the course of construction. The policy shall name R. J. Corman, the Contractor and the Contractor's subcontractors as insureds. The amount of such insurance shall be not less at any time than the total value of the Work in place, on site, in transit or in storage off site and the loss under such policies shall be made payable to R. J. Corman and/or the Contractor or other insureds, as their respective interests may appear. The policy shall cover all property to be used in, or incidental to, the fabrication and/or erection and/or completion of the project. It shall include all materials, machinery, equipment and supplies intended to become part of such property and false Work, temporary trestles and similar structures. It shall not include tools, Contractors' equipment and any other property not a

part of or destined to become part of the project. R. J. Corman should be advised of the amount, if any, of a deductible on the policy. In no case should the deductible amount exceed \$5,000.00. The Contractor shall provide R. J. Corman upon request with copies of any of the insurance policies required to be maintained pursuant to this Article.

R. J. Corman and the Contractor agree to waive all rights against each other for damages to the extent covered by the insurance, except for such rights they may have to the proceeds of such insurance held by R. J. Corman as trustee. The Contractor shall require similar reciprocal waivers by all subcontractors and sub-subcontractors. This policy shall recognize such waivers of recovery by an appropriate Waiver of Subrogation Clause Endorsement, excluding any subrogation of rights granted under Mississippi law to the contrary notwithstanding.

Prior to the commencement of Work by any subcontractor, the Contractor shall supply R. J. Corman with a certificate(s) of insurance providing evidence of insurance coverage for each subcontractor for the following coverages:

1. Commercial General Liability insurance including coverage for property damage, bodily injury, personal injury and completed operations with a single limit of at least \$1,000,000.00 per occurrence with a \$2,000,000.00 aggregate. General Liability insurance provided must not exclude operations within 50 ft of an active rail system. The certificate shall name R. J. Corman as an additional insured.
2. If any motor vehicle is used in the Work, Auto Liability insurance covering bodily injury and property damage with a minimum combined single limit of \$1,000,000.00. The certificate shall name R. J. Corman as an additional insured.
3. Workers' Compensation and Employer's Liability in accordance with the applicable laws of the State of Mississippi.
4. Excess Liability/Umbrella form, \$1,000,000.00.

The insurance coverage provided by subcontractors shall be written with insurance companies authorized to do business in Mississippi State. The policies shall provide for a thirty-day notice to R. J. Corman prior to termination, cancellation or change.

In accordance with Section 142 of the State Finance Law, the underlying agreement shall be void and of no force and effect unless the Contractor shall provide and maintain coverage throughout the term the underlying agreement for the benefit of such employees as are required to be covered by the provisions of the Workers' Compensation Law.

## Prompt Payment Rules and Regulations

The following prompt payment rules and regulations set forth provisions which are intended to improve relationships between R. J. Corman and its contractors, vendors and all those providing services or supplies through contractual relationship with R. J. Corman. These rules and regulations are promulgated consistent with directives set forth in section 2880 of the Public Authorities Law.

**Definitions.** As used in these rules and regulations, the following terms shall have the following meanings unless the context shall indicate another or different meaning or intent:

1. "R. J. CORMAN" means the R. J. Corman Railroad Group its subsidiary corporations.
2. "Contract" means an enforceable agreement entered into between R. J. Corman and a contractor.

3. "Contractor" means any person, partnership, private corporation or association: (i) selling materials, equipment or supplies, or leasing property or equipment to R. J. Corman; (ii) constructing, reconstructing, rehabilitating or repairing buildings, highways or other improvements for or on behalf of R. J. Corman; or (iii) rendering or providing services to R. J. Corman pursuant to a contract.
4. "Designated payment office" means the office designated by R. J. Corman to which a proper invoice is to be submitted by a contractor.
5. "Prompt payment" means payment of a debt due and owing by R. J. Corman before interest accrues thereon pursuant to these rules and regulations.
6. "Proper invoice" means a written request for a contract payment that is submitted by a contractor setting forth the description, price and quantity of goods, property, or services delivered or rendered, in such form and supported by such other substantiating documentation as R. J. Corman may reasonably require.
7. "Receipt of an invoice" means (i) the date on which a proper invoice is actually received in the designated payment office, or (ii) the date on which R. J. Corman receives the purchased goods, property or services covered by the proper invoice, whichever is later.
8. "Set-off" means the reduction by R. J. Corman of a payment due to a contractor by an amount equal to the amount of an unpaid legally enforceable debt owed by the contractor to R. J. Corman. Set-off rights include all rights at common law, in equity and statutory rights of set-off without any limitation with respect to set-off of any amounts due to the Contractor under the underlying agreement and any other contract with R. J. Corman, regardless of the term thereof.
9. "Statement" means these rules and regulations.

**Payment Request Procedure.** The contractor shall submit a proper invoice to R. J. Corman's designated payment office. Said invoice shall be date stamped with the date the invoice is received.

**Interest Eligibility and Computation.** For R. J. Corman not to be liable for the payment of interest, contract payment must be made within thirty calendar days, excluding legal holidays, after the receipt of an invoice for the amount of the contract payment due; except when the contract payment is of the type where the facts and conditions are defined pursuant to sections 5 and 6 of these rules and regulations. Any time taken to satisfy or rectify any of the facts or conditions described in section 5 of these rules and regulations shall extend the date by which contract payment must be made in order for R. J. Corman not to become liable for interest payments by an equal period of time. Notwithstanding any other provision of law to the contrary interest shall be computed at the rate equal to the overpayment rate set by the Commissioner of Taxation and Finance pursuant to subsection (e) of section one thousand ninety-six of the tax law. R. J. Corman will not be liable for payment of interest when such interest is less than ten dollars.

**Sources of Funds.** All interest due and payable to contractors under these regulations will be paid from available revenue sources including R. J. Corman general funds.

**Extensions.** The facts and conditions which will reasonably justify extension of the date by which contract payment must be made for R. J. Corman not to become liable for interest payments are as follows:

1. In accordance with specific statutory or contractual provisions, if payment must be preceded by an inspection period and/or an audit to determine the resources applied or used by the contractor in fulfilling the terms of the contract.

2. If the necessary state government appropriation required to authorize payment has not been enacted, or when statutory, contractual or grant agreement provisions provide for prior federal review before the use of federal funds for payment.
3. If payments must be processed through the State Department of Audit and Control, the State Department of Taxation and Finance, or some other entity not under R. J. Corman's control.
4. If the date by which contract payment must be made is modified in accordance with section 6 herein.
5. if the contract provides that the contractor will be paid at predetermined intervals.

**Defects or Improprieties.** R. J. Corman shall have fifteen calendar days after receipt of an invoice by R. J. Corman at its designated payment office to notify the contractor of:

1. defects in the delivered goods, property or services;
2. defects in the invoice, or
3. suspected improprieties of any kind.

The existence of such defects or improprieties shall prevent the commencement of the time period specified in Interest Eligibility and Computation, above. When R. J. Corman fails to notify a contractor of such defects or suspected improprieties within fifteen calendar days of receiving the invoice, the number of days allowed for payment of the corrected proper invoice will be reduced by the number of days between the fifteenth day and the day than notification was transmitted to the contractor. If R. J. Corman, in such situations, fails to provide reasonable grounds for its contention that a defect or impropriety exists, the date by which contract payment must be made in order for R. J. Corman not to become liable for interest payments shall be calculated from the date of receipt of an invoice.

**Public Service Law.** Notwithstanding any provision of the public service law or any tariffs promulgated pursuant to that law to the contrary, the provisions of this section shall provide the sole basis for determining and making interest payments on invoices submitted by public utilities.

**Public Access.** There shall be public access as follows:

1. Copies of these rules and regulations and the annual report shall be available as public record.

Each contractor doing business with R. J. Corman shall be given a copy of these rules and regulations.

**Inapplicability of Rules and Regulations.** These rules and regulations shall not apply to payment due and owing by R. J. Corman:

1. under the eminent domain procedure law;
2. as interest allowed on judgments rendered by a court pursuant to any provision of law other than those contained in section 2880 of the Public Authorities Law;
3. to the federal government; to any state agency or its instrumentalities; to any duly constituted unit of local government including, but not limited to, counties, cities, towns, villages, school districts, special districts; or any of their related instrumentalities; to any other public authority or public benefit corporation; or to R. J. Corman's employees when acting in, or incidental to, their public employment capacity;
4. in situations where R. J. Corman exercises a legally authorized set-off against all or part of the payment due the contractor.

## Governing Law

This contract shall be governed by the laws of the State of Mississippi except where the Federal supremacy clause requires otherwise.

## No Arbitration and Service of Process

Disputes involving this contract, including the breach or alleged breach thereof, may not be submitted to binding arbitration (except where statutorily authorized), but must, instead, be heard in a court of competent jurisdiction of the State of Mississippi.

In addition to the methods of service allowed by the State Civil Practice Law & Rules ("CPLR"), Contractor hereby consents to service of process upon it by registered or certified mail, return receipt requested. Service hereunder shall be complete upon Contractor's actual receipt of process or upon the State's receipt of the return thereof by the United States Postal Service as refused or undeliverable. Contractor must promptly notify the State, in writing, of each and every change of address to which service of process can be made. Service by the State to the last known address shall be sufficient. Contractor will have thirty (30) calendar days after service hereunder is complete in which to respond.

## Brand Specific References or Equal

When in the Plans and Specifications, a particular brand, name of manufacturer, make of material, device or equipment is shown or specified, such material, device or equipment is to be regarded merely as a standard of comparison. Any other make or brand, which, in the opinion of the Engineer, is equal to that specified in quality or workmanship and will perform its intended purpose as that specified, will be accepted.

Where the phrase "or equal" or "or equal as approved by the Engineer" occurs in the Contract Documents, do not assume that the materials, equipment, or methods will be approved as equal unless the item has been specifically so approved in writing for this Work by the Engineer. The decision of the Engineer shall be final.

The term "approved equivalent" shall mean an item, which is fully equivalent or superior in terms of form, fit, function, performance, and properties, to the specified item.

Whenever the words "equal", "approved equal", "equivalent" or "approved equivalent" are used in connection with a specified component, material, system characteristic or performance requirement, the Contractor shall prepare and submit for Customer approval an analysis that demonstrates that a design, component or system characteristic as proposed by the Contractor has equal or superior appearance, performance interchangeability, availability and compliance with specification requirements to that of the design, component or system as originally specified. This equivalency shall take the form of a specification variance and shall only be permitted with the specific written approval of the Customer. The reason for the variance request must be included in the analysis as submitted.

## Substitutions

**Substitutions for Cause.** Submit requests for substitution immediately on discovery of need for change, but not later than fifteen days prior to time required for preparation and review of related submittals.

Engineer will consider Contractor's request for substitution when the following conditions are satisfied. If the following conditions are not satisfied, Engineer will return requests without action, except to record noncompliance with these requirements:

1. Requested substitution is consistent with the Contract Documents and will produce indicated results.
2. Substitution request is fully documented and properly submitted.
3. Requested substitution will not adversely affect Contractor's construction schedule.
4. Requested substitution has received necessary approvals of authorities having jurisdiction.
5. Requested substitution is compatible with other portions of the Work.
6. Requested substitution has been coordinated with other portions of the Work.
7. Requested substitution provides specified warranty.
8. If requested substitution involves more than one contractor, requested substitution has been coordinated with other portions of the Work, is uniform and consistent, is compatible with other products, and is acceptable to all contractors involved.

**Substitutions for Convenience.** Substitutions for convenience shall not be allowed.

## Comparable Produces

**Conditions for Consideration.** Engineer will consider Contractor's request for comparable product when the following conditions are satisfied. If the following conditions are not satisfied, Engineer may return requests without action, except to record noncompliance with these requirements:

1. Identify Specification section number and title Drawing numbers and titles.
2. Evidence that the proposed product does not require revisions to the Contract Documents, that it is consistent with the Contract Documents and will produce the indicated results, and that it is compatible with other portions of the Work.
3. Detailed comparison of significant qualities of proposed product with those named in the Specifications. Significant qualities include attributes such as performance, weight, size, durability, visual effect, and specific features and requirements indicated.
4. Evidence that proposed product provides specified warranty.
5. List of similar installations for completed projects with project names and addresses and names and addresses of architects and owners, if requested.
6. Samples, if requested.



# Specifications

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THIS PAGE IS INTENTIONAL

**PART 1 – GENERAL****1.1 RELATED DOCUMENTS**

- A. Drawings and general provisions of Contract, including the Agreement, General Conditions, and Supplementary Conditions if incorporated, specified Exhibits and References, other Division 1, and Technical Specification Sections, apply to this Section.
  - 1. Comply with the requirements of the various specifications and standards referred to in the contract Plans and Specifications, except where they conflict with the specific requirements of these contract Plans and Specifications. Such reference specifications and standards shall be the date of latest revision in effect at the time of receiving bids.
  
- B. Priority of Documents
  - 1. Where discrepancies are within the Drawings and Specifications, interpretation shall be given preference in the following order, with later dates taking precedence over earlier dates:
    - a. Change Orders.
    - b. Addenda.
    - c. Supplementary Conditions.
    - d. General Conditions.
    - e. Technical Specifications.
    - f. Drawings.
      - i. Notes take precedence over other Drawing data.
      - ii. Figured Dimensions.
      - iii. Larger Scale Details.
      - iv. Smaller Scale Details.
      - v. Scaled Dimensions.

**1.2 PROJECT DESCRIPTION**

A. The following Work is included in this Contract:

**1. SUMMARY OF WORK**

- a. The Work of this project provides for the furnishing of all labor, appliances, tools, equipment and plant, and the performing of all Work in accordance with these specifications and drawings, with exception of work that is expressly and specifically not included in the project.
- b. The project consists of one (1) contract
- c. BASE BID work shall include, but not be limited to the following work in the vicinity Owego Yard, 25 Delphine St, Owego, NY, Tioga County, New York
  - i. Replace Ties from Milepost 288.4 to 191.7.
  - ii. Replace 5 #10 turnouts.
  - iii. Line and surface track.
  - iv. Dispose of ties and switch ties .
- d. Work by Others shall include, but not be limited to:
  - i. Any other work in the area
- e. Authority furnished materials:
  - i. R. J. Corman will supply the following materials to the Contractor from its stores for use on this Contract:
    - 4000 Ties and OTM required for tie replacement.
    - 5 #10 turnouts.
  - ii- Location of available Materials will be discussed at the Pre-Bid Meeting. Contractor shall be responsible for loading, moving and transportation to the work site.
  - iii. Contractor shall supply all equipment, labor, hardware and other materials needed for installation of supplied materials.

**1.3 DRAWINGS INCLUDED IN CONTRACT DOCUMENTS**

A. Refer to List of Drawings located in the Table of Contents.

**1.4 TIME CONSTRAINTS, MILESTONES, AND LIQUIDATED DAMAGES**

- A. Various Contract Work elements have specific time related constraints that are as specified below.
  - 1. Anticipated NTP date is August 29, 2021. The anticipated NTP is predicated upon timely receipt of the Contactor's supporting bid forms (proposed subcontractor information, joint venture statement, non-collusive bidding certification, New York State Finance Law sections 139-j and 139-k, disclosure statement), proof of insurances, identification of DBE participation, insurance approvals, execution of the agreement, approval of the security forms, (performance bond, labor and material payment bond).
    - a. LD1 – Overall completion by November 30<sup>th</sup>, 2021.

### 1.5 CONTRACT COORDINATION AND CONCURRENT WORK BY OTHERS

- A. The Contractor shall coordinate his work with that of other Contractors or Projects engaged in construction. The Contractor shall conduct his operations in such a manner as to minimize interference with the other Contractor's operations.
- B. In the event that conflicts in scheduling or access occur between Contractors, the Authority shall be the sole judge in resolving the conflict and the Authority's decision shall be final.
- C. The Authority will not be responsible for any inconvenience, delay or loss experienced by the Contractor because of his failure to gain access to the work areas at the time contemplated. The Authority may consider an extension of Contract time based on the amount of time delayed due to the Contractor not gaining access to the work areas, only when such failure is due to no fault or negligence of the Contractor. The Authority will not assume any responsibility for the acts of one Contractor, which delays the Work of the other.
- D. The Work of this Project is within the general vicinity of the following Projects (VERIFY) and requires implementation coordination with others through the Authority.
  - 1. Any other work ongoing?

### 1.6 CONTRACTOR'S USE OF PREMISES

- A. Conform operations at the site to areas and methods permitted by:
  - 1. Laws.
  - 2. Ordinances.
  - 3. Permits.
  - 4. Contract Documents.
- B. Confine operations on site to restricted areas established by the Engineer to allow for daily operation of the facility. Only the R. J. Corman's right to perform work or to retain

other contractors on portions of the Project and the R. J. Corman's right to use adjacent areas limits Contractor's use of premises.

- C. Keep roadways and entrances serving the premises clear and available for the Authority and public at all times. Do not use these areas for parking or storage of materials. Schedule deliveries to minimize space and time requirements for storage of materials, and equipment on site.
- D. Contractor is responsible for protection and safekeeping of materials, products, and equipment stored on the premises or incorporated into the construction, until the Contract is complete and accepted by the Authority.
- E. Move at no additional cost to R. J. Corman all stored materials, products, or equipment that interfere with operations of R. J. Corman or others.
- F. The Contract Documents and/or Engineer shall define the staging area for materials, construction vehicles, and equipment. Dedicated area for vehicles and equipment shall be limited to the minimum necessary, or as required by the Contract Documents, to accomplish the Work on any given day.
- G. The Contractor shall conduct all operations and activities of his personnel such that debris does not scatter on the premises.
- H. The following work restrictions apply to this project:
  - 1. Nonsmoking Facilities: No smoking may occur in R. J. Corman facilities or within 20 feet of entrances, operable windows, or outdoor air intakes.
  - 2. Existing Utility Interruptions: Do not interrupt utilities serving facilities occupied by R. J. Corman, or others, unless permitted under the following conditions and then only after arranging to provide temporary utility services according to requirements indicated.
    - a. Notify the R. J. Corman not less than two days in advance of proposed utility interruptions.
    - b. Do not proceed with utility interruptions without R. J. Corman written permission.
  - 3. On-Site Work Hours:
    - a. The Contractor shall plan work to comply with approved times for access to the Work areas without unplanned disruption to R. J. Corman services.

## 1.7 PERMITS

- A. Contractor shall obtain all permits required to accomplish the Work.
  - 1. A Work Permit is required when performing work on the system.

**1.8 SPECIAL INSPECTIONS**

- A. Chapter 17 of the Building Code of New York State (BCNYS) requires special Inspections and tests. The Engineer will provide inspections and Testing Services unless otherwise noted.
- B. Contractors are responsible for notifying the Engineer regarding individual inspections specifically identified in the contract Plans, Specifications, and referenced materials. Contractors shall provide assistance, cooperate with the inspectors and testing agencies, and allow sufficient notice and lead-time (minimum 48 hours) for inspection and testing.
- C. Where deficiencies exist, the Contractor must take corrective actions to comply with the Contract Documents or remedy the deficiencies in accordance with the "Inspection" article of the General Conditions.

**1.9 CLEANING**

- A. Clean site and premises to Engineer's approval during construction daily.
- B. Maintain site and premises free from accumulations of waste materials and rubbish caused by operations on a daily basis.
- C. Remove from existing finished surfaces soiling caused by Work of this Contract. Repair or replace defaced or disfigured furnishes to the approval of the Engineer.

**1.10 WASTE REMOVAL**

- A. Conduct cleaning and disposal operations in compliance with applicable ordinances and antipollution laws.
- B. Remove waste materials, debris and rubbish from site, and legally dispose in public or private disposal areas off Authority's property. Disposal shall be as approved by the NYSDEC.

**1.11 MONETARY DAMAGES FOR FAILURE TO COMPLETE WORK WITHIN SCHEDULE**

- A. Failure of the Contractor to complete the Work within the time and/or date constraints of the Contract milestone schedule will result in assessment of liquidated damages plus additional costs resulting from delays to other Contractors, additional time required of the Engineer, etc. on a per calendar day and/or per hour basis or any portion thereof.
- B. Liquidated damages will be assessed in accordance with the following:

	<b>Liquidated Damages</b>	<b>Milestone Calendar Day/Date/Hour</b>	<b>Description</b>
LD1	\$500/ Calendar Day	Contract Completion Date	Overall Contract completion.

**PART 2 – PRODUCTS – NOT USED****PART 3 – EXECUTION – NOT USED****PART 4 – MEASUREMENT AND PAYMENT****4.1 METHOD OF MEASUREMENT**

- A. There will be no separate measurement for work required under this section.

**4.2 BASIS OF PAYMENT**

- A. There will be no separate payment for work required under this section. All costs in connection therewith shall be incidental to the Work of this Contract and distributed over other appropriate pay item(s) by the Contractor.

END OF SECTION

**PART 1 – GENERAL****1.1 RELATED DOCUMENTS**

- A. Drawings and general provisions of Contract, including the Agreement, General Conditions, and Supplementary Conditions if incorporated, specified Exhibits and References, other Division 1, and Technical Specification Sections, apply to this Section.
  - 1. Comply with the requirements of the various specifications and standards referred to in the Contract Plans and Specifications, except where they conflict with the specific requirements of these contract Plans and Specifications. Such reference specifications and standards shall be the date of latest revision in effect at the time of receiving bids.

**1.2 SUMMARY**

- A. This Section includes administrative and procedural requirements for accessing Metro Rail facilities.

**1.3 WORK RESTRICTIONS**

- A. Contractor's activities shall not disrupt R. J. Corman's scheduled operations.
  - 1. The following work windows will be made available to the Contractor to accomplish the Work
    - a. Daily Work Windows Monday through Friday – 8 hours of work with one train movement requiring clearing of the track.
    - b. Daily Work Windows Weekends – 24 hour work window

**1.4 WORK PERMITS**

- A. Approved work permits, issued to the Contractor by R. J. Corman, are necessary prior to any access into or on Rail property and/or operating areas. Work permits shall be required for operations or movements by the Contractor within the boundary of the Rail system and yard, within ten (10) feet of either side of the tracks.
- B. The Contractor shall conduct all mobilization efforts in a manner consistent with the work permit. Deviations from the issued work permit will result in revoking the approval to proceed.
- C. Work-permit requests, including the exact times, location, and nature of the Work to be performed for the entire workweek shall be submitted by the Contractor by noon on the Wednesday of the preceding week.
- D. R. J. Corman shall provide work permit form.



**1.5 PARKING, STAGING, AND STORAGE**

- A. Limited storage and staging areas are available, at no charge, in will be identified during the pre-bid meeting.
  - 1. The Contractor may request additional specific areas for storage, staging, and parking locations. Contractor must obtain written R. J. Corman approval prior to use.

**PART 2 – PRODUCTS****2.1 R. J. Corman FURNISHED MATERIALS**

- A. R. J. Corman furnished materials for the Work are as specified in Section 01 11 00, Summary of Work.
  - 1. The Contractor shall submit a requisition to the Engineer to obtain R. J. Corman furnished materials. The requisition must specify the amount of material needed for the work of this Contract.
  - 2. The Contractor shall inventory the materials and inspect condition of materials for use and installation.
  - 3. The Contractor shall immediately report to the Engineer any identified deficiencies prior to installation.
  - 4. The Contractor shall assume total responsibility of R. J. Corman furnished materials upon loading from the storage areas.
- B. The location of Authority furnished materials for the Work is as specified in Section 01 11 00, Summary of Work.
- C. The Contractor shall load and transport the R. J. Corman furnished materials to and from the storage areas and the Work site at no additional cost to R. J. Corman.

**PART 3 – EXECUTION****3.1 GENERAL**

- A. Except within the specified times, the Contractor must assure the site is clear of material, equipment, and personnel.
- B. Contractor shall assure the track is completely and safely operational prior to the end of each permitted time.
  - 1. The Contractor shall clean work areas daily and remove waste matter or rubbish prior to start of Metro Rail operations. Upon completion of daily work, the Contractor shall leave the work areas ready for use and occupancy without the need for further cleaning by the Authority.
    - a. The Contractor, through the change order process, shall be liable for all work and costs by the Authority in assisting the Contractor in cleaning, and making the areas ready for use and occupancy for operations.
- C. The Contractor shall immediately notify the Authority of any unexpected effects upon the operations of scheduled/unscheduled train movements.

- D. The Contractor shall conduct the Work in such manner, and at such times, with such precautions and safeguards, as the Engineer may require for the purpose of avoiding interference with safe and continuous operations of the yard.
- E. Trains will be in daily operations during the performance of the Work under this Contract. The Contractor's right to perform the Work under this Contract assumes that all Work will, except as expressly provided, be without interruption or change in the regular operations schedule of trains. No Work affecting the operations of trains may start until the Contractor has submitted details of this procedure of Work and has secured written permission from the Engineer to proceed.
- F. The Contractor shall make provisions for electrical power, compressed air, etc., as required. The Contractor shall not use existing Authority utilities except drainage systems.
- G. The Contractor shall maintain all equipment in proper operation and repair and shall take measures, to the satisfaction of the Engineer, to prevent the discharge of petroleum-based products. These measures may include installation of oil booms and absorbent pigs.
  - 1. The containment, removal, clean up, and remediation resulting from such discharge shall be at no additional cost to the Authority.
- H. All equipment when used in darkness shall be equipped with operable headlights, marker lights, and yellow strobe lights.
- I. Any violations of the R. J. Corman's construction restrictions by the Contractor will result in immediate shut down of construction activities. Violations of any restrictions may also result in the removal of Contractor's employees and/or subcontractors from the project.

### 3.2 SAFETY

- A. The Contractor's personnel shall wear high visibility lime green reflective vests and carry a flashlight at all times when working within the Rail right-of-way.
- B. The Contractor, and all employees, subcontractors, etc. shall be trained and certified on Roadway Worker Protection in accordance with 49CFR214.
- C. The Contractor must have a Drug and Alcohol Plan compliant with 49 CFR Part 219 that has been reviewed or in the process of being reviewed by the Federal Railroad Administration. The plan and documentation of the review shall be provided to the railroad prior to work commencing

**PART 4 – MEASUREMENT AND PAYMENT**

**4.1 METHOD OF MEASUREMENT**

- A. There will be no separate measurement for work required under this section.

**4.2 BASIS OF PAYMENT**

- A. There will be no separate payment for work required under this section. All costs in connection therewith shall be incidental to the Work of this Contract and distributed over other appropriate pay item(s) by the Contractor.

END OF SECTION

**PART 1 – GENERAL****1.1 RELATED DOCUMENTS**

- A. Drawings and general provisions of Contract, including the Agreement, General Conditions, and Supplementary Conditions if incorporated, specified Exhibits and References, other Division 1, and Technical Specification Sections, apply to this Section.
  - 1. Comply with the requirements of the various specifications and standards referred to in the contract Plans and Specifications, except where they conflict with the specific requirements of these contract Plans and Specifications. Such reference specifications and standards shall be the date of latest revision in effect at the time of receiving bids.

**1.2 SUMMARY**

- A. This Section includes administrative and procedural requirements for handling and processing Contract modifications.

**1.3 REQUESTS FOR INFORMATION (RFI)**

- A. Procedure: Immediately on discovery of the need for information of the Contract Documents prepare and submit an RFI in the form specified.
  - 1. RFIs shall originate with Contractor. RFIs submitted by entities other than Contractor shall not receive a response.
  - 2. Coordinate and submit RFIs in a prompt manner to avoid delays in Contractor's work or work of subcontractors.
- B. Content of the RFI: Include a detailed, legible description of item needing information and the following:
  - 1. Project name.
  - 2. Date.
  - 3. Name of Contractor.
  - 4. Name of Engineer
  - 5. RFI number, numbered sequentially.
  - 6. Reasonable RFI response due date.
  - 7. Specification Section number and title and related paragraphs, as appropriate.
  - 8. Drawing number and detail references, as appropriate.

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9. Field dimensions and conditions, as appropriate.
  10. Contractor's suggested solution(s). If Contractor's solution(s) affect the Contract Time or the Contract Sum, Contractor shall state impact in the RFI.
  11. Contractor's signature.
  12. Attachments: Include drawings, descriptions, measurements, photos, product data, shop drawings, and other information necessary for items requiring Information.
  13. Supplementary drawings prepared by Contractor shall include dimensions, thicknesses, structural grid references, and details of affected materials, assemblies, and attachments.
- C. Hard-Copy RFIs:
1. Identify each page of attachments with the RFI number and sequential page number.
- D. Software-Generated RFIs:
1. Software-generated form with substantially the same content as indicated with Hard-Copy RFIs.
  2. Attachments shall be electronic files in Adobe Acrobat PDF format.
- E. Engineer's Action: Engineer will first determine if a proper response to the Contractor within the requested period is feasible. If not, the Engineer shall contact the Contractor immediately and work out the best possible time frame most agreeable with both parties, then review the RFI, determine action required, and return it.
1. The following RFIs will be returned without action:
    - a. Requests for approval of submittals.
    - b. Requests for approval of substitutions.
    - c. Requests for coordination information already indicated in the Contract Documents.
    - d. Requests for adjustments in the Contract Time or the Contract Sum.
    - e. Incomplete RFIs or RFIs with numerous errors.
  2. Engineer's action may include a request for additional information.
  3. Engineer's action on RFIs that may result in a change to the Contract Time or the Contract Sum may be eligible for Contractor to submit Change Proposal.
    - a. If Contractor believes the RFI response warrants change in the Contract Time or the Contract Sum, notify Engineer in writing no later than 10 calendar days of receipt of the RFI response.
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- F. On receipt of Engineer's action, update the RFI log and immediately distribute the RFI response to affected parties. Review response and notify Engineer in no later than seven calendar days if Contractor disagrees with response. After seven calendar days, the RFI response will stand as part of the contract.
- G. RFI Log: Prepare, maintain, and submit a tabular log of RFIs organized by the RFI number. Submit log weekly, Include the following:
1. Project name.
  2. Name and address of Contractor.
  3. Name and address of Engineer.
  4. RFI number.
  5. RFI description.
  6. RFI submittal Date.
  7. Date Contractor receives Engineer's response.
  8. Identification of related Minor Change in the Work, Construction Change Directive, and Proposal Request, as appropriate.

#### 1.4 CHANGE ORDER REQUESTS

- A. Authority-Initiated Change Order Requests: Engineer will issue a detailed description of proposed changes in the Work that may require adjustment to the Contract Sum and/or Contract Time. If necessary, the description will include supplemental or revised Drawings and Specifications.
1. Proposal Requests issued by Engineer are for information only. Do not consider them instructions either to stop work in progress or to execute the proposed change.
  2. Within time specified in the 'Proposal Request', submit a quotation estimating cost adjustments to the Contract Sum and the Contract Time necessary to execute the change.
    - a. Include a list of quantities of products required or eliminated and unit costs, with total amount of purchases and credits made. If requested, furnish survey data to substantiate quantities.
    - b. Indicate applicable delivery and equipment rental charges.
    - c. Include costs of labor and supervision directly attributable to the change.
    - d. Include an updated Contractor's Construction Schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and finish times, and activity relationship. Use available total float before requesting an extension of the Contract Time. In-lieu of a 'Contract Time' extension request, propose a cost comparison between

- adding additional crews versus working overtime with existing crews to accomplish the proposed change order work without requiring a 'Contract Time' extension.
- e. It becomes fact that no time extensions are required if not specifically addressed.
  - f. A Contractor's position of reserving judgment on requiring a time extension is unacceptable and not allowed for future consideration.
- B. Contractor-Initiated Proposals: If latent or unforeseen conditions require modifications to the Contract, the Contractor may propose changes by submitting a request for a change to Engineer.
- 1. Include a statement outlining reasons for the change and the effect of the change on the Work. Provide a complete description of the proposed change. Indicate the effect of the proposed change on the Contract Sum and Contract Time.
  - 2. Include a list of quantities of products required or eliminated and unit costs, with total amount of purchases and credits made. If requested, furnish survey data to substantiate quantities.
  - 3. Indicate applicable delivery and equipment rental charges.
  - 4. Include costs of labor and supervision directly attributable to the change.
  - 5. Include an updated Contractor's Construction Schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and finish times, and activity relationship. Use available total float before requesting an extension of the Contract Time. In-lieu of a 'Contract Time' extension request, propose a cost comparison between adding additional crews versus working overtime with existing crews to accomplish the proposed change order work without requiring a 'Contract Time' extension.
  - 6. Comply with requirements in Division 1 Section "Product Requirements" if the proposed change requires substitution of one product or system for product or system specified.
- C. Proposal Request Form: Use forms provided by the Authority.

## 1.5 CONSTRUCTION CHANGE DIRECTIVE

- A. Construction Change Directive: R. J. Corman, through the Engineer, may issue a Construction Change Directive on Construction Change Directive form provided by the R. J. Corman. Construction Change Directive instructs Contractor to proceed with a change in the Work, for subsequent inclusion in a Change Order.
- 1. Construction Change Directive contains a complete description of change in the Work. It also designates method to determine change in the Contract Sum or Contract Time.



- B. Documentation: Maintain detailed records on a time and material basis of work required by the Construction Change Directive.
  - 1. After completion of change, submit an itemized account and supporting data necessary to substantiate cost and time adjustments to the Contract.

**1.6 CHANGE ORDERS**

- A. On R. J. Corman's approval of a Proposal Request, Engineer will issue a Change Order for signatures of Contractor and Authority on Change Order form provided by the Authority.

**PART 2 – PRODUCTS – NOT USED**

**PART 3 – EXECUTION**

**3.1 SAMPLE FORMS IDENTIFIED IN THIS SECTION TO BE PROVIDED BY THE AUTHORITY**

- A. Requests for Information (RFI).
- B. Change Order Requests (Authority-initiated and Contractor-initiated).
- C. Construction Change Directive.
- D. Change Orders.

**PART 4 – MEASUREMENT AND PAYMENT**

**4.1 METHOD OF MEASUREMENT**

- A. There will be no separate measurement for work required under this section.

**4.2 BASIS OF PAYMENT**

- A. There will be no separate payment for work required under this section. All costs in connection therewith shall be incidental to the Work of this Contract and distributed over other appropriate pay item(s) by the Contractor.

END OF SECTION

REQUEST FOR INFORMATION

RFI #

Project:

NFTA Project #

Contractor:   
From:

Date:

Engineer:   
Attn.:

Due Date:

Reason for information request:

- Information necessary to complete shop-drawing submittal.
- Information necessary to complete field coordination/erection.
- Other.

Subject:

Reference: Specifications:   
Drawings:

Request/Proposal (Addressing also potential impacts of time and money on Contract):

Contractor's Representation: Undersigned warrants that Contractor has thoroughly researched the Contract Documents, and the information requested does not exist or cannot determine information from the Contract Documents.

Subcontractor's Signature:

Date:

Contractor's Signature:

Date:

att.

cc.

Engineer's Response:

Engineer's Signature:

Date:

**R. J. Corman-INITIATED POTENTIAL CHANGE ORDER REQUEST**

PCO #

Project:  NFTA Project #

Contractor:  Date:   
Attn.:

Engineer:  Due Date:   
From:

Subject:

R. J. Corman is proposing potential changes in the Work that may require adjustment to the Contract Sum and/or Contract Time. This request is for information only. Do not consider this as instructions either to stop work in progress or to execute the proposed change. Within the time specified above, submit a quotation estimating cost adjustments to the Contract Sum and the Contract Time necessary to execute the change. Submit costs in sufficient detail to allow for analysis and negotiations. Include an updated Construction Schedule that indicates the effect of the proposed change. Use available total float and additional work crews or overtime, whichever is more cost effective, before proposing an extension of Contract Time. It becomes fact that no time extensions are required if not specifically addressed in this response. A Contractor's position of reserving judgment on requiring a time extension is unacceptable and not allowed for future consideration.

Special Instructions:

Reference: Specifications:   
Drawings:

**Contractor's Response:**

Undersigned warrants that Contractor has thoroughly investigated the potential impacts to the Contract Sum and/or Contract Time and presents the following response with corresponding breakdown of cost details and Construction Schedule.

Contractor's Signature:  Date:

att.

cc.

**CONTRACTOR-INITIATED POTENTIAL CHANGE ORDER REQUEST**

Project:  NFTA Project #

Contractor:  Date:   
From:

Engineer:  Response Due Date:   
Attn.:

Subject:

The Contractor is proposing potential changes in the Work that may require adjustment to the Contract Sum and/or Contract Time. This request is for information only. The Contractor understands that there is no instruction to stop either work in progress or the authority to execute the proposed change. The Contractor respectfully requests a response within the time specified above. Attached is a quotation estimating adjustments to the Contract Sum and Contract Time necessary to execute the change. The cost breakdown is in sufficient detail to allow for analysis and negotiations. Included is an updated Construction Schedule that accommodates the proposed change. The schedule incorporates the most cost effective approach in using available total float, additional work crews, and/or overtime. The Contractor understands that if negotiations do not specifically address a time extension then none is or will be required.

Description/Information/Request:

Reference: Specifications:   
Drawings:

**Engineer's Response:**

The Engineer, along with the Authority, has reviewed the proposed changes in the Work and makes the following determination:

Assigned PCO #

Engineer's Signature:  Date:

att.

cc.

**CONSTRUCTION CHANGE DIRECTIVE**

CCD #

Project:

Project #

Contractor:

Date:

Attn.:

Engineer:

From:

Subject:

Time is of the essence. The Engineer directs the Contractor to proceed with the following change in the Work, for subsequent inclusion in a Change Order.

Description of change in the Work:

The following designates the method to determine change in the Contract Sum or Contract Time.

Authority's Concurrence:

Date:

The Contractor shall maintain detailed records on a time and material basis of Work required and submit an itemized account and supporting data necessary to substantiate cost and time adjustments to the Contract.

Contractor's Signature:

Date:

att.

cc.



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**PART 1 – GENERAL****1.1 RELATED DOCUMENTS**

- A. Drawings and general provisions of Contract, including the Agreement, General Conditions, and Supplementary Conditions if incorporated, specified Exhibits and References, other Division 1, and Technical Specification Sections, apply to this Section.
  - 1. Comply with the requirements of the various specifications and standards referred to in the contract Plans and Specifications, except where they conflict with the specific requirements of these contract Plans and Specifications. Such reference specifications and standards shall be the date of latest revision in effect at the time of receiving bids.

**1.2 SUMMARY**

- A. This Section includes administrative and procedural requirements necessary to prepare and process 'Applications for Payment'.

**1.3 DEFINITIONS**

- A. Schedule of Values: A statement furnished by Contractor allocating portions of the Contract Sum to various portions of the Work and used as the basis for reviewing Contractor's Applications for Payment.

**1.4 SCHEDULE OF VALUES**

- A. Schedule of Values will be basis for Contractor's Applications for Payment and not legally binding in negotiations associated with Change Orders.
- B. Coordination: Coordinate preparation of the Schedule of Values with preparation of Contractor's Construction Schedule.
  - 1. Correlate line items in the Schedule of Values with other required administrative forms and schedules, including the following:
    - a. Application for Payment forms with Continuation Sheets.
    - b. Submittals Schedule.
    - c. Contractor's Construction Schedule.
  - 2. Submit the Schedule of Values to Engineer, for review, at earliest date but no later than seven calendar days before the date scheduled for submittal of initial Application for Payment.

- 
3. Sub-schedules: Where the Work is in phases requiring separately phased payments, provide Sub-schedules showing values correlated with each phase of payment.
- C. Format and Content: Use the Technical Specifications sections as a guide to establish line items for the Schedule of Values. Provide at least one line item for each Specification Section as appropriate.
1. Identification: Include the following Project identification on the Schedule of Values:
    - a. Project location and name.
    - b. Name and address of Prime Consultant.
    - c. Construction Project No.
    - d. Contractor's name and address.
    - e. Date of Submittal.
  2. Arrange the Schedule of Values in tabular form with separate columns to indicate the following for each item listed:
    - a. Related Specification Section or Division.
    - b. Description of the Work.
    - c. Name of subcontractor.
    - d. Name of manufacturer or fabricator.
    - e. Name of supplier.
    - f. Change Orders (numbers) that affect value.
    - g. Dollar value.
    - h. Percentage of the Contract Sum to nearest one-hundredth percent, adjusted to total 100 percent.
  3. Provide a breakdown of the Contract Sum in sufficient detail to facilitate continued evaluation of Applications for Payment and required progress reports. Coordinate with the Technical Specifications sections. Provide several line items for principal subcontract amounts, where appropriate. Include separate line items under required principal subcontracts for operation and maintenance manuals, punch list activities, Project Record Documents, commissioning, and training for 5 percent of the Contract Sum.
  4. Round amounts to nearest whole dollar; total shall equal the Contract Sum.
-



5. Provide a separate line item in the schedule of Values for each part of the Work where Applications for Payment may include materials or equipment purchased or fabricated and stored, but not installed.
  - a. Differentiate between items stored on-site and items stored off-site. If required, provide evidence of insurance or bonded warehousing.
6. Provide separate line items in the Schedule of Values for initial cost of material, for each subsequent stage of completion, and for total installed value of that part of the Work.
7. Each item in the Schedule of Values and Applications for Payment shall be complete. Include total cost and proportionate share of general overhead and profit for each item.
  - a. Temporary facilities and other major cost items that are not direct cost of actual work-in-place may be separate line items in the Schedule of Values or distributed as general overhead expense, at Contractor's option.
8. Schedule Updating: Update and resubmit the Schedule of Values, for review by the Engineer, before the next Applications for Payment when Change Orders Construction Change Directives result in a change in the Contract Sum.

#### **1.5 PROGRESS PAYMENT PROCEDURES**

- A. Each Application for Payment shall be consistent with previous applications and payments as reviewed by Engineer and paid for by the Authority.
  1. Initial Application for Payment, Application for Payment at time of Substantial Completion, and final Application for Payment involve additional requirements.
- B. Payment Application Forms: Use forms provided or approved by R. J. Corman.
- C. Application Preparation: Complete every applicable entry on forms. Notarize and executed by a person authorized to sign legal documents on behalf of Contractor. Engineer will return incomplete applications without action.
  1. Entries shall match data on the Schedule of Values and Contractor's Construction Schedule. Use updated schedules with appropriate revisions.
  2. Include amounts of Change Orders and Construction Change Directives issued before last day of construction period covered by application.
- D. Transmittal: Submit three (3) signed and notarized original copies of each Application for Payment to Engineer by a method ensuring receipt within 24 hours. One copy shall include waivers of lien, certification that all sub-contractors and suppliers are fully paid and current to last Application for Payment amount, and other attachments as required.

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1. Transmit each copy with a transmittal form listing attachments and recording appropriate information about application.
- E. Waivers of Mechanic's Lien: With each Application for Payment, submit waivers of mechanic's lien from every entity who is lawfully entitled to file a mechanic's lien arising out of the Contract and related to the Work covered by the payment.
1. Submit partial waivers on each item for amount requested in previous application, after deduction for retainage, on each item.
  2. When an application shows completion of an item, submit final or full waivers.
  3. The Authority reserves the right to designate which entities involved in the Work require waivers.
  4. Waiver Forms: Submit waivers of lien on forms, executed in a manner acceptable to the Authority.
- F. Initial Application for Payment: Administrative actions and submittals that must precede or coincide with submittal of first Application for Payment include the following:
1. List of subcontractors.
  2. Schedule of Values.
    - a. Each item listed shall have a separate amount for labor and a separate amount for material and other costs.
    - b. Upon request by Engineer, submit data that will substantiate values given.
    - c. Use schedule of values only as basis for Contractor's application for payment. This information shall be of no consideration in negotiating change orders.
  3. Contractor's Construction Schedule (preliminary if not final).
  4. Contractor's Submittals Schedule (preliminary if not final).
  5. List of Contractor's staff assignments, including applicable emergency and contact information.
  6. Copies of applicable permits, authorizations, and licenses from authorities having jurisdiction for performance of the Work.
  7. Certified Payroll records.
  8. EEO, DBE/MWBE commitments.

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- G. Application for Payment at Substantial Completion: After issuing the Certificate of Substantial Completion, submit an Application for Payment showing 100 percent completion for portion of the Work claimed as substantially complete.
1. Include documentation supporting claim that the Work is substantially complete and a statement showing an accounting of changes to the Contract Sum.
  2. This application shall reflect Certificates of Partial Substantial Completion issued previously for Authority occupancy of designated portions of the Work.
- H. Final Payment Application: Submit final Application for Payment with releases and supporting documentation not previously submitted and accepted, including, but not limited, to the following:
1. Evidence of completion of Project closeout requirements.
  2. Certification that all sub-contractors and suppliers are fully paid and current to last Application for Payment amount.
  3. Updated final statement, accounting for final changes to the Contract Sum.
  4. AIA Document G706, "Contractor's Affidavit of Payment of Debts and Claims" or approved equal.
  5. AIA Document G706A, "Contractor's Affidavit of Release of Liens" or approved equal.
  6. AIA Document G707, "Consent of Surety to Final Payment" or approved equal.
  7. Evidence that there are no outstanding claims.
  8. Final meter readings for utilities, a measured record of stored fuel, and similar data as of Substantial Completion date or when the Authority took possession of and assumed responsibility for corresponding elements of the Work.
  9. Final, liquidated damages and Engineering charges settlement statement.

**PART 2 – PRODUCTS – NOT USED**

**PART 3 – EXECUTION – NOT USED**

**PART 4 – MEASUREMENT AND PAYMENT**

**4.1 METHOD OF MEASUREMENT**

- A. There will be no separate measurement for work required under this section.

**4.2 BASIS OF PAYMENT**

- A. There will be no separate payment for work required under this section. All costs in connection therewith shall be incidental to the Work of this Contract and distributed over other appropriate pay item(s) by the Contractor.

END OF SECTION

**PART 1 – GENERAL****1.1 RELATED DOCUMENTS**

- A. Drawings and general provisions of Contract, including the Agreement, General Conditions, and Supplementary Conditions if incorporated, specified Exhibits and References, other Division 1, and Technical Specification Sections, apply to this Section.
  - 1. Comply with the requirements of the various specifications and standards referred to in the contract Plans and Specifications, except where they conflict with the specific requirements of these contract Plans and Specifications. Such reference specifications and standards shall be the date of latest revision in effect at the time of receiving bids.

**1.2 SUMMARY**

- A. The Engineer will schedule and administer project meetings throughout the construction period to enable orderly review during progress of the work and provide for systematic discussion of problems.
- B. The Contractor's relations with his subcontractors and suppliers, and discussions relative thereto, are the Contractor's responsibility and are not necessarily part of the project meeting's content.
  - 1. Persons designated by the Contractor, to attend and participate in the project meetings, shall have the authority to commit the Contractor to solutions agreed upon with respect to the project as per the General Conditions.
  - 2. Coordination discussions between Contractor and subcontractor/supplier shall be prior to scheduled project meetings for facilitating discussions later with Engineer.
- C. This Section includes administrative provisions for coordinating construction operations on the Project including, but not limited to, the following:
  - 1. Coordination Drawings.
  - 2. Administrative and supervisory personnel.
  - 3. Project meetings.

**1.3 COORDINATION**

- A. Coordination: Coordinate construction operations included in different Sections of the Specifications to ensure efficient and orderly installation of each part of the Work and that depends on each other for proper installation, connection, and operation. Re-work required to attain the following shall be at no additional cost to the Authority.

1. Schedule construction operations in sequence required to obtain the best results where installation of one part of the Work depends on installation of other components, before or after its own installation.
  2. Coordinate installation of different components to ensure maximum accessibility for required maintenance, service, and repair.
  3. Make adequate provisions to accommodate items scheduled for later installation.
  4. Coordinate installation of different components, where availability of space is limited, to ensure maximum performance and accessibility for required maintenance, service, and repair of all components, including mechanical and electrical.
- B. Prepare memoranda for distribution to each party involved, outlining special procedures required for coordination. Include such items as required notices, reports, and list of attendees at meetings.
1. Prepare similar memoranda for the Authority if coordination of their Work is required.
- C. Administrative Procedures: Coordinate scheduling and timing of required administrative procedures with other construction activities and activities of other contractors to avoid conflicts and to ensure orderly progress of the Work. Such administrative activities include, but are not limited to the following:
1. Preparation of Contractor's Construction Schedule.
  2. Preparation of the Schedule of Values.
  3. Installation and removal of temporary facilities and controls.
  4. Delivery and processing of submittals.
  5. Progress meetings.
  6. Pre-installation conferences.
  7. Startup and adjustment of systems.
  8. Commissioning.
  9. Project closeout activities.
- D. Conservation: Coordinate construction activities to ensure that operations incorporate conservation of energy, water, and materials.
1. Salvage materials and equipment involved in performance of, but not actually incorporated into, the Work. Refer to other Sections for disposition of salvaged materials identified as the Authority's property.

**1.4 SUBMITTALS**

- A. Key Personnel Names: Before 15 calendar days of starting construction operations, submit a list of key personnel assignments, including superintendent and other personnel in attendance at Project site. Identify individuals and their duties and responsibilities; list addresses and telephone numbers, including home and office telephone numbers. Provide names, addresses, and telephone numbers of individuals assigned as standbys in the absence of individuals assigned to Project.
1. Post copies of list at appropriate locations of the work site and keep the list current at all times.

**1.5 ADMINISTRATIVE AND SUPERVISORY PERSONNEL**

- A. General: In addition to Project Superintendent, provide other administrative and supervisory personnel as required for proper performance of the Work.
  - 1. Include special personnel required for coordination of operations with other contractors.

**1.6 SUBCONTRACTOR APPROVALS**

- A. The Contractor must submit all of its Subcontractors for review and approval and resubmit all documentation as necessary to establish compliance with the specified requirements. No Subcontractors may work on the site until approved by the Engineer.
- B. The Contractor may not place a proposed Subcontractor on the Contractor's payroll prior to Subcontractor approval unless the Contractor furnishes written notification of this condition, 15 calendar days prior to the fact.

**1.7 PROJECT MEETINGS**

- A. General: Schedule and conduct Contractor's meetings and conferences at Project site, unless otherwise indicated.
  - 1. Attendees: Inform participants and others involved, and individuals whose presence is required, of date and time of each meeting. Notify the Authority and Engineer of scheduled meeting dates and times. To the maximum extent possible, assign the same person to represent the Contractor, Subcontractors, material suppliers, and others throughout progress of the work.
  - 2. Agenda: Prepare the meeting agenda. Distribute the agenda to all invited attendees.
  - 3. Minutes: Record significant discussions and agreements achieved. Distribute the meeting minutes to everyone concerned, including the Authority and Engineer, within three days of the meeting.
- B. Preconstruction Conference: The R. J. Corman shall schedule a preconstruction conference at Project site or another convenient location before starting construction.
  - 1. Attendees: Authorized representatives of the Authority and Engineer; Contractor and its superintendent; major subcontractors; suppliers; and other concerned parties shall attend the conference. All participants at the conference shall be familiar with Project and authorized to conclude matters relating to the Work.
  - 2. Agenda: R. J. Corman shall develop the agenda of significant items that could affect the progress of the work, including requirements for the following:
    - a. Distribute data on, and discuss:



- i. List of Subcontractors and Suppliers.
      - ii. Tentative construction schedule.
    - b. Critical work sequencing.
    - c. Channels and procedures for communications.
    - d. Designation of responsible personnel.
    - e. Processing of field decisions and change orders.
    - f. Adequacy of distribution of Contract Documents.
    - g. Submittal of shop drawings, project data, and samples.
    - h. Rules and regulations governing performance of the work.
    - i. Procedures for maintaining record documents.
    - j. Use of premises:
      - i. Office and storage areas.
      - ii. Authority's requirements.
    - k. Major equipment deliveries and priorities.
    - l. Security procedures.
    - m. Housekeeping procedures.
    - n. Payment procedures.
  - 3. Minutes: Engineer will record and distribute meeting minutes.
- C. Pre-installation Conferences: Contractor shall conduct a pre-installation conference at Project site before each construction activity that requires coordination with other construction.
- 1. Attendees: Installer and representatives of manufacturers and fabricators involved in or affected by the installation and its coordination or integration with other materials and installations that have preceded or will follow, shall attend the meeting. Advise Engineer of scheduled meeting dates.
  - 2. Agenda: Review progress of other construction activities and preparations for the particular activity under consideration, including requirements for the following:

- a. The Contract Documents.
- b. Options.
- c. Related RFIs.
- d. Related Change Orders.
- e. Purchases.
- f. Deliveries.
- g. Submittals.
- h. Review of mockups.
- i. Possible conflicts.
- j. Compatibility problems.
- k. Time schedules.
- l. Weather limitations.
- m. Manufacturer's written recommendations.
- n. Warranty requirements.
- o. Compatibility of materials.
- p. Acceptability of substrates.
- q. Temporary facilities and controls.
- r. Space and access limitations.
- s. Regulations of authorities having jurisdiction.
- t. Testing and inspecting requirements.
- u. Installation procedures.
- v. Coordination with other work.
- w. Required performance results.
- x. Protection of adjacent work.
- y. Protection of construction and personnel.

3. Record significant conference discussions, agreements, and disagreements, including required corrective measures and actions.
  4. Reporting: Distribute minutes of the meeting to each party present and to parties who should have been present.
  5. The conference must successfully conclude prior to proceeding with the installation. Initiate whatever actions are necessary to resolve impediments to performance of the Work and reconvene the conference at earliest feasible date.
- D. Progress Meetings: Engineer shall conduct progress meetings at designated intervals. Coordinate dates of meetings with preparation of payment requests.
1. Attendees: In addition to representatives of the R. J. Corman and Engineer, Contractor, subcontractor, supplier, and other entity concerned with current progress or involved in planning, coordination, or performance of future activities shall be present at these meetings. All participants at the conference shall be familiar with Project and authorized to conclude matters relating to the Work.
  2. Agenda: Review and correct or approve minutes of previous progress meeting. Review other items of significance that could affect progress. Include topics for discussion as appropriated to status of Project.
    - a. Contractor's Construction Schedule: Review progress since the last meeting. Determine whether each activity is on time, ahead of schedule, or behind schedule, in relation to Contractor's Construction Schedule. Determine how to recover construction behind schedule; secure commitments from parties involved to do so. Discuss whether schedule revisions are required to ensure that current and subsequent activities will occur within the Contract Time.
      - i. Review schedule for next period.
    - b. Review present and future needs of each entity present, including the following:
      - i. Interface requirements.
      - ii. Sequence of operations.
      - iii. Status of submittals.
      - iv. Deliveries.
      - v. Off-site fabrication.
      - vi. Access.
      - vii. Site utilization.

- viii. Temporary facilities and controls.
  - ix. Work hours.
  - x. Hazards and risks.
  - xi. Progress cleaning.
  - xii. Quality and work standards.
  - xiii. Status of correction of deficient items.
  - xiv. Field observations.
  - xv. RFIs.
  - xvi. Status of proposal requests.
  - xvii. Pending changes.
  - xviii. Status of Change Orders.
  - xix. Pending claims and disputes.
  - xx. Documentation of information for payment requests.
- 3. Minutes: Engineer will record the meeting minutes.
  - 4. Reporting: Distribute minutes of the meeting to each part present and to parties should have been present.
    - a. Schedule Updating: Revise Contractor's Construction Schedule after each progress meeting where revisions to the schedule occur. Issue revised schedule concurrently with the report of each meeting.
- E. Coordination Meetings: Conduct Project coordination meetings at regular intervals. Project coordination meetings are in addition to specific meetings held for other purposes, such as progress meetings and pre-installation conferences.
- 1. Attendees: In addition to representatives of the Authority and Engineer, Contractor, subcontractor, supplier, and other entity concerned with current progress or involved in planning, coordination, or performance of future activities shall be present at these meetings. All participants at the conference shall be familiar with Project and authorized to conclude matters relating to the Work.
  - 2. Agenda: Review and correct or approve minutes of the previous coordination meeting. Review other items of significance that could affect progress. Include topics for discussion as appropriate to status of Project.

- a. Combined Contractor's Construction Schedule: Review progress since the last coordination meeting. Determine whether each contract is on time, ahead of schedule, or behind schedule, in relation to Combined Contractor's Construction Schedule. Determine how to recover construction behind schedule; secure commitments from parties involved to do so. Discuss whether schedule revisions are required to ensure that current and subsequent activities will be complete within the Contract Time.
  - b. Schedule Updating: Revise Combined Contractor's Construction Schedule after each coordination meeting where revisions to the schedule occur. Issue revised schedule concurrently with report of each meeting.
  - c. Review present and future needs of each contractor present, including the following:
    - i. Interface requirements.
    - ii. Sequence of operations.
    - iii. Status of submittals.
    - iv. Deliveries.
    - v. Off-site fabrication.
    - vi. Access.
    - vii. Site utilization.
    - viii. Temporary facilities and controls.
    - ix. Work hours.
    - x. Hazards and risks.
    - xi. Progress cleaning.
    - xii. Quality and work standards.
    - xiii. Change Orders.
3. Reporting: Record meeting results and distribute copies to everyone in attendance and to others affected by decisions or actions resulting from each meeting.

**PART 2 – PRODUCTS – NOT USED**

**PART 3 – EXECUTION – NOT USED**

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**PART 4 – MEASUREMENT AND PAYMENT**

**4.1 METHOD OF MEASUREMENT**

- A. There will be no separate measurement for work required under this section.

**4.2 BASIS OF PAYMENT**

- A. There will be no separate payment for work required under this section. All costs in connection therewith shall be incidental to the Work of this Contract and distributed over other appropriate pay item(s) by the Contractor.

END OF SECTION

**PART 1 – GENERAL****1.1 RELATED DOCUMENTS**

- A. Drawings and general provisions of Contract, including the Agreement, General Conditions, and Supplementary Conditions if incorporated, specified Exhibits and References, other Division 1, and Technical Specification Sections, apply to this Section.
  - 1. Comply with the requirements of the various specifications and standards referred to in the contract Plans and Specifications, except where they conflict with the specific requirements of these contract Plans and Specifications. Such reference specifications and standards shall be the date of latest revision in effect at the time of receiving bids.

**1.2 SUMMARY**

- A. This Section includes administrative and procedural requirements for documenting the progress of construction during performance of the Work, including the following:
  - 1. Preliminary Construction Schedule.
  - 2. Contractor's Construction Schedule.
  - 3. Submittals Schedule.
  - 4. Daily construction reports.
  - 5. Material location reports.
  - 6. Field condition reports.
  - 7. Special reports.

**1.3 DEFINITIONS**

- A. Activity: A discrete part of a project identified for planning, scheduling, monitoring, and controlling the construction project. Activities included in a construction schedule consume time and resources.
  - 1. Critical activities are activities on the critical path. They must start and finish on the planned early start and finish times.
  - 2. Predecessor Activity: An activity that precedes another activity in the network.
  - 3. Successor Activity: An activity that follows another activity in the network.
- B. Cost Loading: The allocation of the Schedule of Values for the completion of an activity as scheduled. The sum of costs for all activities must equal the total Contract Sum, unless otherwise approved by Engineer.
- C. CPM: critical path method, which is a method of planning and scheduling a construction project where activities are related. Determine the scheduling of activities and the critical path of Project with network calculations.
- D. Critical Path: The longest connected chain of interdependent activities through the network schedule that establishes the minimum overall Project duration and contains no float.

- E. Event: That starting or ending point of an activity.
- F. Float: The measure of leeway in starting and completing an activity.
  - 1. Float time is not the exclusive use or benefit of either the Authority or Contractor, but jointly owned.
  - 2. Free float is the amount of time an activity may delay without adversely affecting the early start of the successor activity.
  - 3. Total float is the measure of leeway in starting or completing an activity without adversely affecting the planned Project completion date.
- G. Fragnet: A partial or fragmentary network that breaks down activities into smaller activities of detail.
- H. Major Area: A story of construction, a separate building, or a similar significant construction element.
- I. Milestone: A key or critical point in time for reference or measurement.
- J. Network Diagram: A graphic diagram of a network schedule, showing activities and activity relationships.
- K. Resource Loading: The allocation of labor and equipment necessary for the completion of an activity as scheduled.

#### **1.4 SUBMITTALS**

- A. Qualification Data: For scheduling consultant.
- B. Submittals Schedule: Submit schedule by confirmed email to engineer. Arrange the following information in a tabular format:
  - 1. Scheduled date for first submittal.
  - 2. Specification Section number and title.
  - 3. Submittal category (action or informational).
  - 4. Name of subcontractor.
  - 5. Description of the Work covered.
  - 6. Scheduled date for Engineer's final release or approval.
- C. Contractor's Construction Schedule: Submit three opaque copies of initial schedule, large enough to show schedule for entire construction period.
  - 1. Submit an electronic copy of schedule, using preapproved software, on CD-R, and labeled to comply with requirements for submittals. Include type of schedule (Initial or Updated) and date on label.

#### **1.5 QUALITY ASSURANCE**

- A. Scheduling Consultant Qualifications: An experienced specialist in CPM scheduling and reporting, with capability of producing CPM reports and diagrams within 24 hours of Engineer's request.



- B. Pre-scheduling Conference: Conduct conference at Project site to comply with requirements in Division 1 Section "Project Management and Coordination". Review methods and procedures related to the Preliminary Construction Schedule and Contractor's Construction Schedule, including, but not limited to the following:
1. Review software limitations, content, and format for reports.
  2. Verify availability of qualified personnel needed to develop and update schedule.
  3. Discuss constraints, including phasing, work stages, area separations, and interim milestones.
  4. Review delivery dates for Authority-furnished products.
  5. Review schedule of other concurrent projects for coordination and interface.
  6. Review time required for review of submittals and re-submittals.
  7. Review requirements for tests and inspections by independent testing and inspecting agencies.
  8. Review time required for completion and startup procedures.
  9. Review and finalize list of construction activities to be included in schedule.
  10. Review submittal requirements and procedures.
  11. Review procedures for updating schedule.

## **1.6 COORDINATION**

- A. Coordinate preparation and processing of schedules and reports with performance of construction activities and reporting of other concurrent projects.
- B. Coordinate Contractor's Construction Schedule with the Schedule of Values, list of subcontracts, Submittals Schedule, progress reports, payment requests, and other required schedules and reports.
1. Secure time commitments for performing critical elements of the Work from parties involved.
  2. Coordinate each construction activity in the network with other activities and schedule them in proper sequence.

## **PART 2 – PRODUCTS**

### **2.1 CONTRACTOR'S CONSTRUCTION SCHEDULE, GENERAL**

- A. Time Frame: Extend schedule from date established for the Notice to Proceed to date of Final Completion.
1. Contract completion date shall not change by submission of a schedule that shows an early completion date, unless specifically authorized by Change Order.
- B. Activities: Treat each story or separate area as a separate numbered activity for each principal element of the Work. Comply with the following:
1. Activity Duration: Define activities so no activity is longer than 20 calendar days, unless specifically allowed by Engineer.

2. Procurement activities: Include procurement process activities for major items and long lead items requiring a cycle of more than 60 calendar days as separate activities in schedule. Procurement cycle activities include, but are not limited to submittals, approvals, purchasing, fabrication, and delivery.
  3. Submittal Review Time: Include review and re-submittal times indicated in Division 1 Section "Submittal Procedures" in schedule. Coordinate submittal review times in Contractor's Construction Schedule with Submittals Schedule.
  4. Startup and Testing Time: Include not less than 14 calendar days for startup and testing.
  5. Substantial Completion: Indicate completion in advance of date established for Substantial Completion, and allow time for Engineer's administrative procedures necessary for certification of Substantial Completion.
- C. Milestones: Include milestones indicated in the Contract Documents in schedule, including, but not limited to, the Notice to Proceed, Substantial Completion, and Final Completion and other designated interim milestone dates.
- D. Contract Modifications: For each proposed contract modification and concurrent with its submission, prepare a time-impact analysis using fragnets to demonstrate the effect of the proposed change on the overall project schedule.
- E. Computer Software: Prepare schedules using a program specifically designed to manage construction schedules.
1. Specific software and version as approved by Engineer, compatible with latest versions of Windows PC operating systems.

## 2.2 PRELIMINARY CONSTRUCTION SCHEDULE

- A. Bar-Chart Schedule: Submit preliminary horizontal bar-chart type construction schedule within seven calendar days of the Notice to Proceed.
- B. Preparation: Indicate each significant construction activity separately. Identify first workday of each week with a continuous vertical line. Outline significant construction activities for the first 60 calendar days of construction. Include skeleton diagram for the remainder of the Work and a cash flow projection based on indicated activities.

## 2.3 CONTRACTOR'S CONSTRUCTION SCHEDULE (GANTT CHART)

- A. Gantt-Chart Schedule: Submit a comprehensive, fully developed, horizontal Gantt-chart-type, Contractor's Construction schedule within 30 calendar days of the Notice to Proceed. Base schedule on the Preliminary Construction Schedule and whatever updating and feedback received since the start of Project.
- B. Preparation: Indicate each significant construction activity separately. Identify first workday of each week with a continuous vertical line.
  1. For construction activities that require 3 months or longer for completing, indicate an estimated completion percentage in 10 percent increments within time bar.

## 2.4 REPORTS

- A. Daily Construction Reports: Prepare a daily construction report recording the following information concerning events at Project site:
1. List of subcontractors at Project site.
  2. List of separate contractors at Project site.
  3. Approximate count of personnel at Project site.
  4. Equipment at Project site.
  5. Material deliveries.
  6. High and low temperatures and general weather conditions.
  7. Accidents.
  8. Meetings and significant decisions.
  9. Unusual events (refer to special reports).
  10. Stoppages, delays, shortages, and losses.
  11. Meter readings and similar recordings.
  12. Emergency procedures.
  13. Orders and requests of authorities having jurisdiction.
  14. Change Orders received and implemented.
  15. Construction Change Directives received and implemented.
  16. Services connected and disconnected.
  17. Equipment or system tests and startups.
  18. Partial Completions and occupancies.
  19. Substantial Completions authorized.
- B. Material Location Reports: At monthly intervals, prepare and submit a comprehensive list of materials delivered to and stored at Project site. List shall be cumulative; showing materials previously reported and items recently delivered. Include with list a statement of progress of delivery dates for materials, items, or equipment fabricated or stored away from Project site.
- C. Field Condition Reports: Immediately on discovery of a difference between field conditions and the Contract Documents, prepare and submit a detailed report. Submit with a request for interpretation of form provided by Engineer. Include a detailed description of the differing condition, together with recommendations for changing the Contract Documents.

## 2.5 SPECIAL REPORTS

- A. General: Submit special reports directly to the Authority within one day(s) of an occurrence. Distribute copies of report to parties affected by the occurrence.
- B. Reporting Unusual Events: When an event of an unusual and significant nature occurs at Project site, whether or not related directly to the Work, prepare and submit a special report. List chain of events, persons participating, and response by

Contractor's personnel, evaluation of results or effects, and similar pertinent information. Notify the Authority in advance when these events are known or predictable.

**PART 3 – EXECUTION****PART 4 – MEASUREMENT AND PAYMENT****4.1 METHOD OF MEASUREMENT**

- A. There will be no separate measurement for work required under this section.

**4.2 BASIS OF PAYMENT**

- A. There will be no separate payment for work required under this section. All costs in connection therewith shall be incidental to the Work of this Contract and distributed over other appropriate pay item(s) by the Contractor.

END OF SECTION

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**PART 1 – GENERAL****1.1 RELATED DOCUMENTS**

- A. Drawings and general provisions of Contract, including the Agreement, General Conditions, and Supplementary Conditions if incorporated, specified Exhibits and References, other Division 1, and Technical Specification Sections, apply to this Section.
  - 1. Comply with the requirements of the various specifications and standards referred to in the contract Plans and Specifications, except where they conflict with the specific requirements of these contract Plans and Specifications. Such reference specifications and standards shall be the date of latest revision in effect at the time of receiving bids.

**1.2 SUMMARY**

- A. This Section includes administrative and procedural requirements for submitting Shop Drawings, Product Data, Samples, and other submittals.

**1.3 DEFINITIONS**

- A. Action Submittals: Written and graphic information that requires Engineer's responsive action.
- B. Informational Submittals: Written information that does not require Engineer's responsive action. Submittals are subject to rejection for not complying with requirements.

**1.4 SUBMITTAL PROCEDURES**

- A. Coordination: Coordinate preparation and processing of submittals with performance of construction activities.
  - 1. Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals, and related activities that require sequential activity.
  - 2. Coordinate transmittal of different types of submittals for related parts of the Work. Review delays will occur if prior coordination of submittals by Contractor is not accomplished.
    - a. Engineer reserves the right to withhold action on a submittal requiring coordination with other submittals until receiving related submittals.
      - 1) Engineer is obliged to notify Contractor of withholding action and to identify required related submittals.
- B. Submittals Schedule: Comply with requirements in Division 1 Section "Work Progress Documentation" for types of submittals and time requirements for scheduled performance of related construction activities.

- 
- C. Processing Time: Allow enough time for submittal review, including time for re-submittals. Time for review shall commence on Engineer's receipt of submittal. Failure to transmit submittals sufficient in advance of the Work to permit processing, including re-submittals does not warrant or authorize an extension of Contract time.
1. Initial Review: Allow 10 calendar days for initial review of each submittal. Allow additional time if coordination with subsequent submittals is required. Allow 10 calendar days after Engineer receives the last subsequent coordination submittal for review.
  2. Intermediate Review: if intermediate submittal is necessary, process it in same manner as initial submittal.
  3. Re-submittal Review: Allow 10 calendar days for review of each re-submittal.
- D. Identification: Utilize the Contractor Submittal Forms and Certifications contained herein.
1. All Contractor and Subcontractor submittals MUST be submitted utilizing the forms contained herein and shall be certified by the Prime Contractor.
  2. Indicate name of firm or entity that prepared each submittal on label or title block.
  3. Provide a space approximately 6 by 8 inches on label or beside title block to record Contractor's review and approval markings and action taken by Engineer.
  4. Include the following information on label for processing and recording action taken:
    - a. Project name.
    - b. Date.
    - c. Name and address of Engineer.
    - d. Name and address of Contractor.
    - e. Name and address of Subcontractor.
    - f. Name and address of Supplier.
    - g. Name of Manufacturer.
    - h. Submittal number or other unique identifier, including revision identifier.
      - 1) Submittal number shall use Specification Section number followed by a decimal point and then a sequential number (e.g., 061000.01). Re-submittals shall include an alphabetic suffix after another decimal point (e.g., 061000.01.A).
    - i. Number and title of appropriate Specification Section.
-

- 
- j. Drawing number and detail references, as appropriate.
  - k. Location(s) of product in the Work, as appropriate.
  - l. Other necessary identification.
- E. Deviations: Encircle or otherwise specifically identify deviations from the Contract Documents on submittals.
- F. Additional Copies: Unless additional copies are required for final submittal, and unless Engineer observes noncompliance with provisions in the Contract Documents, initial submittal may serve as final submittal.
- 1. Submit one copy of submittal to concurrent reviewer in addition to specified number of copies to Engineer.
  - 2. Additional copies submitted for maintenance manuals will not be marked with action taken and will be returned.
- G. Transmittal Form: Package each submittal individually and appropriately for transmittal and handling. Transmit each submittal using a transmittal form. Engineer will return submittals, without review, when received from sources other than Contractor.
- 1. Transmittal Form: Use AIA Document G810 or similar form as approved by the Engineer.
  - 2. Transmittal Form" Provide locations on form for the following information:
    - a. Project name.
    - b. Date.
    - c. Destination (To:).
    - d. Source (From:).
    - e. Names of subcontractor, manufacturer, and supplier.
    - f. Category and type of submittal.
    - g. Submittal purpose and description.
    - h. Specification Section number and title.
    - i. Drawing number and detail references, as appropriate.
    - j. Transmittal number, numbered consecutively.
    - k. Submittal and transmittal distribution record.
    - l. Remarks.



- 
- m. Signature of transmitter.
  - 3. On an attached separate sheet, prepared on Contractor's letterhead, record relevant information, requests for data, revisions other than those requested by Engineer on previous submittals, and deviations from requirements in the Contract Documents, including minor variations and limitations. Include same label information as related submittal.
- H. Re-submittals: Make re-submittals in same form and number of copies as initial submittal.
    - 1. Note date and content of previous submittal.
    - 2. Note date and content of revision in label or title block and clearly indicate extent of revision.
    - 3. Re-submit submittals until they are marked with approval notation from Engineer's action stamp.
  - I. Distribution: Furnish copies of final submittals to manufacturers, subcontractors, suppliers, fabricators, and installers, authorities having jurisdiction, and others as necessary for performance of construction activities. Show distribution on transmittal forms.
  - J. Use for Construction: Use only final submittals with mark indicating approval notation from Engineer's action stamp.

### 1.5 CONTRACTOR'S USE OF AUTHORITY'S CAD FILES

- A. General: At Contractor's written request, copies of CAD files will be available to Contractor for use in connection with Project.

## PART 2 – PRODUCTS

### 2.1 ACTION SUBMITTALS

- A. General: Prepare and submit Action Submittals required by individual Specification Sections.
- B. Product Data: Collect information into a single submittal for each element of Work and type of product or equipment.
  - 1. If information must be specially prepared for submittal because standard printed data are not suitable for use, submit as Shop drawings, not as Product Data.
- C. Application for Payment: Comply with requirements specified in Division 1 Section "Payment Procedures".
- D. Schedule of Values: Comply with requirements specified in Division 1 Section "Payment Procedures".

- 
- E. Subcontract List: Prepare a written summary identifying individuals or firms proposed for each portion of the Work, including those who are to furnish products or equipment fabricated to a special design. Use form as approved by the Authority. Include the following information in tabular form:
1. Name, address, and telephone number of entity performing subcontract or supplying products.
  2. Number and title of related Specification Section(s) covered by subcontract.
  3. Drawing number and detail references, as appropriate, covered by subcontract.
  4. Number of Copies: Submit five copies of subcontractor list, unless otherwise indicated. Engineer will return two copies.
    - a. Mark up and retain one returned copy as a Project Record Document.

## 2.2 INFORMATIONAL SUBMITTALS

- A. General: Prepare and submit Informational Submittals required by other Specification Sections.
1. Number of Copies: Submit three copies of each submittal, unless otherwise indicated. Engineer will not return copies.
  2. Certificates and Certifications: Provide a notarized statement that includes signature of entity responsible for preparing certification. An officer or other individual authorized to sign documents on behalf of that entity shall sign certificates and certifications.
  3. Test and Inspection Reports: Comply with requirements specified in Division 1 Section "Quality Requirements".
- B. Field Test Reports: Prepare reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of field tests performed during installation of product or after installing product in its final location, for compliance with requirements in the Contract Documents.
- C. Insurance Certificates and Bonds: Prepare written information indicating status of insurance or bonding coverage. Include name of entity covered by insurance or bond, limits of coverage, amounts of deductibles, if any, and term of the coverage.

## PART 3 – EXECUTION

### 3.1 CONTRACTOR'S RESPONSIBILITY

- A. Review each submittal and check for coordination with other Work of the Contract and for compliance with the Contract Documents. Note corrections and field dimensions. Mark with approval stamp before submitting to Engineer.

- B. Approval Stamp: Stamp each submittal with a uniform, approval stamp. The stamp shall include Project name and location, submittal number, Specification Section title and number, name of reviewer, date of Contractor's approval, and statement certification. Contractor shall certify reviewing, checking, and approving compliance with the Contract Documents.
- C. Engineer's review does not relieve Contractor's responsibility regarding errors and omissions in submittals.
- D. Engineer's review of submittals does not relieve Contractor's responsibility regarding deviations from requirements of Contract Documents, unless Engineer gives written acceptance of specific deviations as approved by the Authority.
- E. The submitting Contractor/Subcontractor shall coordinate shop drawings between trades of related Work prior to submission and transmit together under one cover.
- F. After submitting a shop drawing for review, the Contractor cannot make changes to that drawing other than changes resulting from review notes made by Engineer unless clearly identifying changes and circling before resubmitting. Any failure to comply with this requirement shall nullify and invalidate Engineer's review.
- G. Contractor is responsible for addressing first review comments in the second submittal. Thereafter the Contractor shall pay review costs beginning with Engineer's receipt of Revision #2. The Authority shall recover these costs from the Contractor through the Change Order process.

### 3.2 ENGINEER'S RESPONSIBILITY

- A. General: Engineer will not review submittals that do not bear Contractor's approval stamp and will return them without action. Engineer's responsibility includes:
  - 1. Review of submittals within 10 calendar days of receipt.
  - 2. Review for:
    - a. Design Concept of Project.
    - b. Information required by Contract Documents.
  - 3. Review of separate item(s) does not constitute review and/or acceptance of an assembly in which item(s) function.
  - 4. Affix stamp with reviewer's initials or signature with date certifying to review of submittal.
  - 5. Return of submittals to Contractor for distribution.
- B. Action Submittals: Engineer will review each submittal, make marks to indicate corrections or modifications required, and return it. Engineer will stamp each submittal with an action stamp and will mark stamp appropriately to indicate action taken, as follows:

1. Stamped "Reviewed and Approved". No corrections or resubmissions required. Work may proceed.
  2. Stamped "Approved Make Correction Noted".
    - a. If Contractor complies with noted corrections, work may proceed.
    - b. If for any reason Contractor cannot comply with the noted corrections, work shall not proceed and Contractor shall resubmit, following procedures outlined hereinbefore.
  3. Stamped "Revise and Resubmit". Contractor shall revise and resubmit for review and approval. Work shall not proceed.
- C. Informational Submittals: Engineer will review each submittal and will not return it, or will return it if it does not comply with requirements. Engineer will forward each submittal to appropriate party.
- D. Engineer will return partial submittals as not acceptable, nonresponsive, and without review.
- E. Engineer will not review submittals not required by the Contract Documents.

**PART 4 – MEASUREMENT AND PAYMENT****4.1 METHOD OF MEASUREMENT**

- A. There will be no separate measurement for work required under this section.

**4.2 BASIS OF PAYMENT**

- A. There will be no separate payment for work required under this section. All costs in connection therewith shall be incidental to the Work of this Contract and distributed over other appropriate pay item(s) by the Contractor.

END OF SECTION

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Submittal Number: \_\_\_\_\_  
Revision Number: \_\_\_\_\_

**CONTRACTOR / SUBCONTRACTOR / SUPPLIER  
BUY AMERICAN CERTIFICATION SUBMITTAL FORM  
(Attach to all Shop Drawing Submittals)**

Job Name: \_\_\_\_\_

AIP No.: \_\_\_\_\_

Project No.: \_\_\_\_\_

Contractor / Subcontractor / Supplier: \_\_\_\_\_

Address: \_\_\_\_\_

Contractor's Contact: \_\_\_\_\_ Phone Number: \_\_\_\_\_

Reviewed By: \_\_\_\_\_ Date Submitted: \_\_\_\_\_

Reviewers Affiliation: \_\_\_\_\_ Phone Number: \_\_\_\_\_

Submittal from Subcontractor: YES \_\_\_ NO \_\_\_

Specification / Item No.: \_\_\_\_\_

Specification Section and Paragraph: \_\_\_\_\_

The undersigned certifies that (check the item that applies):

1. The above referenced products or materials are wholly produced in the United States of America (US) of US produced materials. YES \_\_\_ NO \_\_\_

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Submittal Number: \_\_\_\_\_

Revision Number: \_\_\_\_\_

**SUBCONTRACTOR SUBMITTAL FORM**

Job Name: \_\_\_\_\_

AIP No.: \_\_\_\_\_

Project No.: \_\_\_\_\_

Subcontractor: \_\_\_\_\_

Address: \_\_\_\_\_

Subcontractor's Contact: \_\_\_\_\_ Phone Number: \_\_\_\_\_

Reviewed By: \_\_\_\_\_ Date Submitted: \_\_\_\_\_

Reviewers Affiliation: \_\_\_\_\_ Phone Number: \_\_\_\_\_

Submittal from Subcontractor: YES \_\_\_ NO \_\_\_

Specification / Item No.: \_\_\_\_\_

Specification Section and Paragraph: \_\_\_\_\_

**CERTIFICATION**

**I HEREBY CERTIFY that the attached submittal has been reviewed under the terms of the Contract Documents and is in conformity with the requirements of the Plans and Specifications unless specifically noted otherwise. It is understood that the Contractor is responsible for dimensions and quantities to be confirmed and correlated at the site, for information that pertains solely to the fabrication process or to the means, methods, techniques, sequences and procedures of construction, and for coordination of the Work of all trades.**

- \_\_\_\_\_ 1. Submitted as specified
- \_\_\_\_\_ 2. Submitted "AS EQUAL" to the product specified
- \_\_\_\_\_ 3. Submitted "INSUBSTITUTION" to the product specified
- \_\_\_\_\_ 4. Subcontractor submittal form included
- \_\_\_\_\_ 5. Other

Description of Submittal Components: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Submittal will not be approved without a completed cover form and an acceptable "Contractor / Subcontractor / Supplier Buy American Certification."

(For Additional comments, attach and number additional pages)



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**PART 1 – GENERAL****1.1 RELATED DOCUMENTS**

- A. Drawings and general provisions of Contract, including the Agreement, General Conditions, and Supplementary Conditions if incorporated, specified Exhibits and References, other Division 1, and Technical Specification Sections, apply to this Section.
  - 1. Comply with the requirements of the various specifications and standards referred to in the contract Plans and Specifications, except where they conflict with the specific requirements of these contract Plans and Specifications. Such reference specifications and standards shall be the date of latest revision in effect at the time of receiving bids.

**1.2 SUMMARY**

- A. This Section includes administrative and procedural requirements for quality assurance and quality control.
- B. Testing and inspecting services are required to verify compliance with requirements specified or indicated. These services do not relieve Contractor of responsibility for compliance with Contract Document requirements.
  - 1. Specific quality-assurance and –control requirements for individual construction activities are in the Sections that specify those activities. Requirements in those Sections may also cover production of standard products.
  - 2. Specified tests, inspections, and related actions do not limit Contractor's other quality-assurance and –control procedures that facilitate compliance with the Contract Document requirements.
  - 3. Provisions of this Section do not limit requirements for Contractor to provide quality-assurance and –control services required by Engineer or authorities having jurisdiction.

**1.3 DEFINITIONS**

- A. Quality-Assurance Services: Activities, actions, and procedures performed before and during execution of the Work to guard against defects and deficiencies and substantiate that proposed construction will comply with requirements.
- B. Quality-Control Services: Tests, inspections, procedures, and related actions during and after execution of the Work to evaluate that actual products incorporated into the Work and completed construction comply with requirements. Services do not include Contract enforcement activities performed by Engineer.
- C. Mockups: Full-size, physical assemblies constructed on-site. Mockups verify selections made under sample submittals, demonstrate aesthetic effects and, where indicated, qualities of materials and execution, and provide a review of construction, coordination, testing, or operation; they are not Samples. Approved mockups establish the standard for judging the Work.
- D. Laboratory Mockups: Full-size, physical assemblies constructed at testing facility to verify performance characteristics.

- E. Preconstruction Testing: Tests and inspections performed specifically for the Project before incorporating products and materials into the Work to verify performance or compliance with specified criteria.
- F. Product Testing: Tests and inspections performed by a testing agency qualified to conduct product testing and acceptable to authorities having jurisdiction, and to establish product performance and compliance with industry standards.
- G. Source Quality-Control Testing: Tests and inspections performed at the source, i.e., plant, pit, mill, factory, or shop.
- H. Field Quality-Control Testing: Tests and inspections performed on-site for installation of the Work and for completed Work.
- I. Testing Agency: An entity engaged to perform specific tests, inspections, or both. Testing Laboratory shall mean the same as Testing Agency.
- J. Installer/Applicator/Erector: Contractor or another entity engaged by Contractor as an employee, Subcontractor, or Sub-subcontractor, to perform a particular construction operation, including installation, erection, application, and similar operations.
  - 1. Using a term such as "carpentry" does not imply that accredited or unionized individuals of a corresponding generic name, such as "carpenter" must perform certain construction activities. It also does not imply that requirements specified apply exclusively to trades people of the corresponding generic name.
- K. Experienced: When used with an entity, "experienced" means having successfully completed a number of previous projects similar in size and scope to this Project; being familiar with special requirements indicated; and having complied with requirements of authorities having jurisdiction.

#### 1.4 CONFLICTING REQUIREMENTS

- A. General: When specifications require compliance with two or more standards and the standards establish different or conflicting requirements for minimum quantities or quality levels, comply with the most stringent requirement. Refer uncertainties and requirements that are different, but apparently equal, to Engineer for a decision before proceeding.
- B. Minimum Quantity or Quality Levels: The quantity or quality level shown or specified shall be the minimum provided or performed. The actual installation may comply exactly with the minimum quantity or quality specified, or it may exceed the minimum within reasonable limits. To comply with these requirements, indicated numeric values are minimum or maximum, as appropriate, for the context of requirements. Refer uncertainties to Engineer for a decision before proceeding.

#### 1.5 SUBMITTALS

- A. Qualification Data: For Testing Agencies specified in "Quality Assurance" Article to demonstrate their capabilities and experience. Include proof qualifications in the form of a recent report on the inspection of the Testing Agency by a recognized authority.
- B. Schedule of Tests and Inspections: Prepare in tabular form and include the following:
  - 1. Specification Section number and title.

2. Description of test and inspection.
  3. Identification of applicable standards.
  4. Identification of test and inspection methods.
  5. Number of tests and inspections required.
  6. Time schedule or time span for tests and inspections.
  7. Entity responsible for performing tests and inspections.
  8. Requirements for obtaining samples.
  9. Unique characteristics of each quality-control service.
- C. Reports: Prepare and submit certified written reports that include the following.
1. Date of issue.
  2. Project title and number.
  3. Name, address, and telephone number of testing agency.
  4. Dates and locations of samples and tests or inspections.
  5. Names of individuals making tests and inspections.
  6. Description of the Work and test and inspection method.
  7. Identification of product and Specification Section.
  8. Complete test or inspection data.
  9. Test and inspection results and an interpretation of test results.
  10. Record of temperature and weather conditions at time of sample taking, testing, and inspecting.
  11. Comments or professional opinion on whether tested or inspected Work complies with the Contract Document requirements.
  12. Name and signature of laboratory inspector.
  13. Recommendations on retesting and re-inspecting.
- D. Permits, Licenses, and Certificates: For Authority's records, submit copies of permits, licenses, certifications, inspection reports, releases, jurisdictional settlements, notices, receipts for fee payments, judgments, correspondence, records, and similar documents, established for compliance with standards and regulations bearing on performance of the Work.

## 1.6 QUALITY ASSURANCE

- A. General: Qualifications paragraphs in this Article establish the minimum qualification levels required; individual Specification Sections specify additional requirements.
- B. Installer qualifications: A firm or individual experienced in installing, erecting, or assembling work similar in material, design, and extent to that indicated for this Project, whose work has resulted in construction with a record of successful in-service performance.

- C. Manufacturer Qualifications: A firm experienced in manufacturing products or systems similar to those indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to produce required units.
- D. Fabricator Qualifications: A firm experienced in producing products similar to those indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to produce required units.
- E. Professional Engineer Qualifications: A Professional Engineer who is legally qualified and licensed to practice in New York State and who is experienced in providing engineering services of the kind indicated. Engineering services are as those performed for installations of the system, assembly, or products that are similar to those indicated for this Project in material, design, and extent.
- F. Specialists: Certain sections of the Specifications require performing specific construction activities by entities who are recognized experts in those operations. Specialists shall satisfy qualification requirements for the activities indicated.
  - 1. Requirement for specialists shall not supersede building codes and regulations governing the Work.
- G. Testing Agency Qualifications: An NFTL, an NVLAP, or an independent agency with the experience and capability to conduct testing and inspecting indicated, as documented according to ASTM E 548; and with additional qualifications specified in individual Technical Specification Sections; and where required by authorities having jurisdiction, that is acceptable to authorities.
  - 1. NFTL: A nationally recognized testing laboratory according to 29 CFR 1910.7.
  - 2. NFLAP: A Testing Agency accredited according to NIST's National Voluntary Laboratory Accreditation Program.
- H. Factory-Authorized Service Representative Qualifications: An authorized representative trained and approved by Manufacturer to inspect installation of Manufacturer's products that are similar in material, design, and extent to those indicated for this Project.
- I. Preconstruction Testing: where Testing Agency is indicated to perform preconstruction testing for compliance with specified requirements for performance and test methods, comply with the following:
  - 1. Contractor responsibilities include the following:
    - a. Provide test specimens representative of proposed products and construction.
    - b. Submit specimens in a timely manner with sufficient time for testing and analyzing results to prevent delaying the Work.
    - c. Provide sizes and configurations of test assemblies, mockups, and laboratory mockups to demonstrate capability of products to comply with performance requirements.
    - d. Build site-assembled test assemblies and mockups using installers who will perform same tasks for Project.

- e. Build laboratory mockups at testing facility using personnel, products, and methods of construction indicated for the completed Work.
  - f. When testing is complete, remove test specimens, assemblies, mockups, and laboratory mockups; do not reuse products on Project.
2. Testing Agency Responsibilities: Submit a certified written report of each test, inspection, and similar quality-assurance service to Engineer, with copy to Contractor. Interpret tests and inspections and state in each report whether tested and inspected work complies with or deviates from the Contract Documents.
- J. Mockups: Before installing portions of the Work requiring mockups, build mockups for each form of construction and finish required to comply with the following requirements, using materials indicated for the completed Work:
- 1. Build mockups in location and of size indicated or, if not indicated, as directed by Engineer.
  - 2. Notify Engineer seven calendar days in advance of dates and times for constructing mockups.
  - 3. Demonstrate the proposed range of aesthetic effects and workmanship.
  - 4. Obtain Engineer's approval of mockups before starting work, fabrication, or construction.
    - a. Allow seven calendar days for initial review and each re-review of each mockup.
  - 5. Maintain mockups during construction in an undisturbed condition as a standard for judging the completed Work.
  - 6. Demolish and remove mockups when directed, unless otherwise indicated.
- K. Laboratory Mockups: Comply with requirements of preconstruction testing and those specified in individual Technical Specification Sections.

### 1.7 QUALITY CONTROL

- A. R. J. Corman Responsibilities: Where quality-control services are the Authority's responsibility, the Authority will engage a qualified testing agency to perform these services through the Engineer.
- 1. Engineer will furnish Contractor with names, addresses, and telephone numbers of testing agencies engaged and a description of types of testing and inspecting they are engaged to perform.
  - 2. The Contractor shall pay costs for retesting and reinspecting construction that replaces or is necessary by Work that failed to comply with the Contract Documents by adjusting the Contract Sum through a Change Order.



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- B. Tests and inspections not explicitly assigned to the Authority or Engineer are Contractor's responsibility. Unless otherwise indicated, provide quality-control services specified and those required by authorities having jurisdiction. Perform quality-control services required of Contractor by authorities having jurisdiction, whether specified or not.
1. Where services indicate the Contractor's responsibility, engage a qualified Testing Agency to perform these quality-control services.
    - a. Contractor shall not employ same entity engaged by Authority or Engineer, unless agreed to in writing by the Authority.
  2. Notify testing agencies at least 24 hours in advance of time when Work that requires testing or inspecting.
  3. Where Quality-control services indicate Contractor's responsibility, submit a certified written report, in duplicate, of each quality-control service.
  4. Testing and inspecting requested by Contractor and not required by the Contract Documents are Contractor's responsibility.
  5. Submit additional copies of each written report directly to authorities having jurisdiction, when they so direct.
- C. Manufacturer's Field Services: Where indicated, engage a factory-authorized service representative to inspect field-assembled components and equipment installation, including service connections. Report results in writing as specified in Division 1 Section "Submittal Procedures".
- D. Retesting/Reinspecting: Regardless of whether original tests or inspections were Contractor's responsibility, provide quality control services, including retesting and reinspecting, for construction that replaced Work that failed to comply with the Contract Documents.
- E. Testing Agency Responsibilities: Cooperate with Engineer and Contractor in performance of duties. Provide qualified personnel to perform required tests and inspections.
1. Notify Engineer and Contractor promptly of irregularities or deficiencies observed in the Work during performance of its services.
  2. Determine the location for conducting test samples and in-situ tests.
  3. Conduct and interpret tests, inspections, and state in each report whether tested and inspected work complies with or deviates from requirements.
  4. Submit a certified written report, in duplicate, of each test, inspection, and similar quality-control service through Contractor.
  5. Do not revoke, release, alter, or increase the Contract Document requirements or approve or accept any portion of the Work.
  6. Do not perform any duties of Contractor.

- F. Associated Services: Cooperate with agencies performing required tests, inspections, and similar quality-control services, and provide reasonable auxiliary services as requested. Notify agency sufficiently in advance of operations to permit assignment of personnel. Provide the following:
1. Access to the Work.
  2. Incidental labor and facilities necessary to facilitate tests and inspections.
  3. Adequate quantities of representative samples of materials that require testing and inspecting. Assist agency in obtaining samples.
  4. Facilities for storage and field curing of test samples.
  5. Delivery of samples to testing agencies.
  6. Preliminary design mix proposed for use for material mixes that require control by Testing Agency.
  7. Security and protection for samples and for testing and inspecting equipment at Project Site.
- G. Coordination: Coordinate sequence of activities to accommodate required quality-assurance and –control services with a minimum of delay and to avoid necessity of removing and replacing construction to accommodate testing and inspecting.
1. Schedule times for tests, inspections, obtaining samples, and similar activities.
- H. Schedule of tests and Inspections: Prepare a schedule of tests, inspections, and similar quality-control services required by the Contract Documents. Submit schedule within 30 calendar days of date established for the Notice to Proceed.
1. Distribution: Distribute schedule to the Authority, Engineer, testing agencies, and each party involved in performance of portions of the Work where tests and inspections are required.

## **PART 2 – PRODUCTS – NOT USED**

## **PART 3 – EXECUTION**

### **3.1 TEST AND INSPECTION LOG**

- A. Prepare a record of tests and inspections. Include the following:
1. Date of test or inspection.
  2. Description of the Work tested or inspected.
  3. Date of test or inspection results transmitted to Engineer.
  4. Identification of Testing Agency or special inspector conducting test or inspection.
- B. Maintain log at Project site. Post changes and modifications as they occur. Provide access to test and inspection log for Engineer's reference during normal working hours.

**3.2 REPAIR AND PROTECTION**

- A. General: On completion of testing, inspecting, sample taking, and similar services, repair damaged construction and restore substrates and finishes.
  - 1. Provide materials and comply with installation requirements specified in other Specification Sections. Restore patched areas and extend restoration into adjoining areas with durable seams that are as invisible as possible.
  - 2. Comply with the contract Document requirements for Division 1 Section "Cutting and Patching".
- B. Protect construction exposed by or for quality-control service activities.
- C. Repair and protection are Contractor's responsibility, regardless of the assignment of responsibility for quality-control services.

**PART 4 – MEASUREMENT AND PAYMENT****4.1 METHOD OF MEASUREMENT**

- A. There will be no separate measurement for work required under this section.

**4.2 BASIS OF PAYMENT**

- A. There will be no separate payment for work required under this section. All costs in connection therewith shall be incidental to the Work of this Contract and distributed over other appropriate pay item(s) by the Contractor.

END OF SECTION

**PART 1 – GENERAL****1.1 RELATED DOCUMENTS**

- A. Drawings and general provisions of Contract, including the Agreement, General Conditions, and Supplementary Conditions if incorporated, specified Exhibits and References, other Division 1, and Technical Specification Sections, apply to this Section.
  - 1. Comply with the requirements of the various specifications and standards referred to in the contract Plans and Specifications, except where they conflict with the specific requirements of these contract Plans and Specifications. Such reference specifications and standards shall be the date of latest revision in effect at the time of receiving bids.

**1.2 SUMMARY**

- A. No temporary facilities are required for this contract.
- B. This Section includes requirements for temporary utilities, support facilities, and security and protection facilities.

**1.3 DEFINITIONS**

- A. Permanent Enclosure: As determined by Engineer, permanent or temporary roofing is complete, insulated, and weather tight; exterior walls insulated and weather tight; and all openings closed with permanent construction or substantial temporary closures.

**1.4 USE CHARGES**

- A. General: Cost or use charges for temporary facilities shall be included in the Contract Sum. Allow other entities to use temporary services and facilities without cost, including, but not limited to R. J. Corman's staff, Engineer, occupants of Project, Testing Agencies, and authorities having jurisdiction.
- B. Sewer Service: Pay sewer service charges for sewer usage and/or portable chemical toilet facilities by all entities for construction operations.
  - 1. Provide related supplies and removal.
- C. Water Service: Pay water service charges for water used by all entities for construction operations.
- D. Electric Power Service: Pay electric power service charges for electricity used for construction operations at no additional payment to the Contract Sum.
- E. Telecommunications Service: Pay telecommunications service use charges for telecommunications used for construction operations at no additional payment to the Contract Sum.

**1.5 SUBMITTALS**

- A. Site Plan: Show temporary facilities, utility hookups, staging areas, and parking areas for construction personnel.

**1.6 QUALITY ASSURANCE**

- A. Electric Service: Comply with NECA, NEMA, and UL standards and regulations for temporary electric service. Install service to comply with NFPA 70.
- B. Tests and Inspections: Arrange for authorities having jurisdiction to test and inspect each temporary utility before use. Obtain required certifications and permits.

### 1.7 PROJECT CONDITIONS

- A. Temporary Use of Permanent Facilities: Contractor shall assume responsibility for operation, maintenance, and protection of each permanent service during its use as a construction facility before the R. J. Corman's acceptance, regardless of previously assigned responsibilities.

## PART 2 – PRODUCTS

### 2.1 MATERIALS

- A. General: Comply with applicable Technical Specification Sections.
- B. Temporary Fence: Comply with Contract Documents and as approved by Engineer.
  - 1. 4'-0" Height.
    - a. Orange construction fencing mounted on metal posts, with gates where indicated or required.
    - b. Minimum height of fence shall be 4'-0", unless otherwise approved by Engineer.
    - c. Materials may be new or used, but shall comply with all pertinent Codes and Regulations, be adequate for required purpose, and approved by the Engineer.
  - 2. 8'-0" Height
    - a. Chain-Link Fencing: Minimum 2", 0.148-inch thick, galvanized steel, chain-link fabric fencing; minimum 8'-0" high with galvanized steel pipe posts; minimum 2-7/8" OD line posts and 3-3/8" OD corner and pull posts, with 1-5/8" OD top rails, with galvanized barbed-wire top strand.
    - b. Gates and Accessories: Provide comparable gates and accessories, compatible with chain-link fencing materials, and as approved by Engineer.

### 2.1 TEMPORARY FACILITIES

- A. Field Offices, General: Prefabricated or mobile units with serviceable finishes, temperature controls, and foundations adequate for normal loading.
- B. Common-Use Field Office: Of sufficient size to accommodate needs of construction personnel. Keep office clean and orderly. Furnish and equip offices as follows:
  - 1. Furniture required for Project-site documents including file cabinets, plan tables, plan racks, and bookcases.
  - 2. Conference room of sufficient size to accommodate meetings of 10 individuals. Provide electrical power service and 120-volt ac duplex receptacles, with not less

- than one receptacle on each wall. Furnish room with conference table, chairs, and 4-foot square tack board.
3. Drinking water and private toilet.
  4. Coffee machine and supplies.
  5. Heating and cooling equipment necessary to maintain a uniform indoor temperature of 68 to 72° F.
  6. Lighting fixtures capable of maintaining average illumination of 20-foot candles at desk height.
- C. Storage and Fabrication Sheds: Provide sheds sized, furnished, and equipped to accommodate materials and equipment for construction operations.
1. Store combustible materials apart from building.
- D. Materials may be new or used, but shall be adequate for required purpose and shall not create unsafe conditions.

## 2.2 EQUIPMENT

- A. Fire Extinguishers: Portable, UL rated, with class and extinguishing agent as required by locations and classes of fire exposures.
- B. HVAC Equipment: Unless R. J. Corman authorizes use of permanent HVAC system, provide vented, self-contained, liquid-propane-gas or fuel oil heaters with individual space thermostatic control.
1. Heating Units: Listed and labeled for type of fuel consumed, by a Testing Agency acceptable to authorities having jurisdiction, and marked for intended use.
  2. Permanent HVAC System: If R. J. Corman authorizes use of permanent HVAC system for temporary use during construction, provide filter with MERV of eight at each return air grille in system and remove at end of construction.
    - a. In addition, if work site is part of an existing occupied facility provide the following temporary filtration and pressure systems:
      - i. Maintain work site under negative pressure at all times. Test pressure differential at beginning of construction each day with manometer, vinometer, or other such device. Do not proceed with work until negative pressure relationship is accomplished.
      - ii. Exhaust air directly to the exterior or into an existing return air system through portable HEPA filters.

## PART 3 – EXECUTION

### 3.1 INSTALLATION, GENERAL

- A. Locate facilities where they will serve Project adequately and result in minimum interference with performance of the Work. Relocate and modify facilities as required by progress of the Work. Obtain R. J. Corman approval for location and relocation of facilities.

- B. Provide each facility ready for use when needed to avoid delay. Do not remove until facilities are not necessary or are replaced by authorized use of completed permanent facilities.

**3.2 TEMPORARY UTILITY INSTALLATION**

- A. General: Install temporary service or connect to existing service.
  - 1. Arrange with utility company, R. J. Corman, Engineer, and existing users for time to disrupt service, if necessary, to make connections for temporary services.
- B. Sewer Service: Provide temporary utilities to remove effluent lawfully.
  - 1. Connect temporary sewers to municipal system as directed by authorities having jurisdiction.
- C. Water Service: Install temporary water service and distribution piping in sizes and pressures adequate for construction from designated hydrants.

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- D. Sanitary Facilities: Provide temporary toilets, wash facilities, and drinking water for use by construction personnel. Comply with authorities having jurisdiction for type, number, location, operation, and maintenance of fixtures and facilities.
1. Maintain service and clean facilities.
- E. Heating and Cooling: Provide temporary heating and cooling required by construction activities for curing or drying of completed installations or for protecting installed construction from adverse effects of low temperatures or high humidity. Select equipment that will not have a harmful effect on completed installations or elements installed.
- F. Ventilation and Humidity Control: Provide temporary ventilation required by construction activities for curing or drying of completed installations or for protecting installed construction from adverse effects of high humidity. Select equipment that will not have a harmful effect on completed installations or elements installed. Coordinate ventilation requirement to produce ambient conditions required and minimize energy consumption.
- G. Gas Service: Install temporary gas service and distribution piping in sizes and pressures adequate for construction.
- H. Electric Power Service: Provide electric power service and distribution system of sufficient size, capacity, and power characteristics required for construction operations.
1. Use of R. J. Corman's existing electric power service is limited to that which is available. Maintain equipment in a condition acceptable to the R. J. Corman.
  2. Additional power requirements are responsibility of Contractor.
- I. Lighting: Provide temporary lighting with local switching that provides adequate illumination for construction operations, observations, inspections, traffic conditions, the public, and others.
1. Install and operate temporary lighting that fulfills security and protection requirements without operating entire system.
  2. Provide the following minimum lighting levels:
    - a. Corridor and Stairhalls: 1-foot candle.
    - b. Unoccupied Work Spaces: 1-foot candle.
    - c. Occupied Work Spaces and Storage Spaces: 5 to 10 foot candles.
    - d. Work Areas: 30-foot candles.
- J. Telephone Service: Provide temporary telephone service in common-use facilities for use by all construction personnel. Install a minimum of one telephone for each field office.
1. Provide additional telephone lines for the following:
    - a. Provide a dedicated telephone line for each facsimile machine and computer in each field office.
    - b. Provide two telephone lines for R. J. Corman's use.



2. At each telephone, post a list of important telephone numbers:
  - a. Police and fire departments.
  - b. Ambulance service.
  - c. Contractor's home office.
  - d. Engineer's offices.
  - e. R. J. Corman's office.
  - f. Principal subcontractors' field and home offices.
3. Provide superintendent with cellular telephone for use when away from field office.
- K. Electronic Communication Service: Provide temporary electronic communication service, including electronic mail, in common-use facilities.
  1. Provide T-1 line in primary field office.
- L. Temporary Fence: Comply with Contract Documents and as approved by Engineer.
  1. Locate fencing to accommodate construction operations and security.
  2. Fencing shall prevent people, dogs, and other animals from entering the construction site.
  3. Install temporary fence prior to starting any work and establishment of staging area and maintain throughout the construction period, or until directed by Engineer to be removed.
  4. Maintain temporary fencing throughout period of use. Inspect security fencing regularly and repair or replace disturbed or non-complying materials.
  5. Completely remove temporary fence when directed by the Engineer.
  6. Repair damage caused by installation, and restore to specified, or better than original condition.

### 3.3 SUPPORT FACILITIES INSTALLATION

- A. General: Comply with the following:
  1. Provide incombustible construction for offices, shops, and sheds located within construction area or within 30 feet of building lines. Comply with NFPA 241.
  2. Provide temporary wash down areas for construction vehicles to avoid tracking mud/debris off work site.
  3. Provide means to control and remove F.O.D. (Foreign Object Debris), as approved by the Engineer, in work and haul areas of the airside.
  4. Maintain support facilities until near Substantial Completion. Remove before Substantial Completion. It is permissible for personnel remaining after Substantial Completion to use permanent facilities, under conditions acceptable to the R. J. Corman.

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- B. Temporary Roads and Paved Areas: Construct and maintain temporary roads and paved areas adequate for construction operations. Locate temporary roads and paved areas within construction limits indicated on Drawings.
    - 1. Provide dust-control treatment that is nonpolluting, nontracking, and as approved by the Engineer. Reapply treatment as required to minimize dust.
    - 2. Recondition after temporary use, including removing contaminated material, regarding, proof rolling, compacting, patching, paving, and testing to the approval of the Engineer.
  - C. Traffic Controls: Comply with requirements of authorities having jurisdiction.
    - 1. Protect existing site improvements to remain including curbs, pavement, sidewalks, grass areas, utilities, etc.
    - 2. Maintain access for fire-fighting equipment and access to fire hydrants.
  - D. Parking: Use designated areas of R. J. Corman's existing parking areas for construction personnel.
    - 1. Provide additional parking requirements for construction personnel off-site and at Contractor's expense.
  - E. Dewatering Facilities and Drains: Comply with requirements of authorities having jurisdiction. Maintain Project site, excavations, and construction free of water.
    - 1. Dispose of rainwater in a lawful manner that will not result in flooding Project or adjoining properties nor endanger permanent Work or temporary facilities.
    - 2. Remove snow and ice as required to minimize accumulations.
  - F. Temporary Signs: Provide signs where indicated on drawings and as approved by Engineer to inform public and others seeking direction in and around the Project area.
    - 1. Text and Graphics required shall be coordinated with Engineer.
    - 2. Maintain and touchup signs so they are legible at all times.
    - 3. The R. J. Corman does not permit unauthorized signs.
    - 4. Project Identification Sign(s) is (are) not part of the contract.
  - G. Waste Disposal Facilities: Provide waste-collection containers in size and form adequate to handle waste from construction operations. Comply with requirements of authorities having jurisdiction.
  - H. Lifts and Hoists: Provide facilities necessary for hoisting materials and personnel.
    - 1. Truck cranes and similar devices used for hoisting materials are considered "tools and equipment" and not temporary facilities.
    - 2. Refer to Division 14 Sections for temporary use of new elevators.
  - I. Temporary Stair Use: The R. J. Corman permits use of existing designated stairs at selected times for different uses; clean and maintain existing stairs in a condition acceptable to the R. J. Corman. At Substantial Completion, restore stairs to condition existing before initial use.

1. Provide protective coverings, barriers, devices, signs, or other procedures to protect stairs and to maintain means of egress. If, despite such protection, damages occur to stairs, restore damaged areas so no evidence remains of correction work.
  2. Until permanent stairs are available, provide temporary stairs where ladders are not adequate.
  3. Cover finished permanent stairs with protective covering of plywood or similar material so finishes will be undamaged at time of final acceptance.
- J. Existing Structures: Provide and maintain shoring, bracing, and structural supports as required to preserve stability and prevent movement, settlement or collapse of construction and finishes to remain.

### **3.4 SECURITY AND PROTECTION FACILITIES INSTALLATION**

- A. Environmental Protection: Provide protection, operate temporary facilities, and conduct construction in ways and by methods that comply with environmental regulations and that minimize possible air, waterway, and subsoil contamination or pollution or other undesirable effects.
- B. Temporary Erosion and Sedimentation Control: Provide measures to prevent soil erosion and discharge of soil-bearing water runoff and airborne dust to adjacent properties and walkways, according to requirements of authorities having jurisdiction.
1. Inspect, repair, and maintain erosion- and sedimentation-control measures during construction while permanent vegetation is establishing.
- C. Stormwater Control: Comply with authorities having jurisdiction. Provide barriers in and around excavations and subgrade construction to prevent flooding by runoff of storm water from heavy rains.

- D. Tree and Plant Protection: Install temporary fencing located as indicated or outside the drip line of trees to protect vegetation from damage from construction operations. Protect tree root systems from damage, flooding, and erosion. Prohibit traffic from landscaped areas.
- E. Pest Control: Engage pest-control service to recommend practices to minimize attraction and harboring of rodents, roaches, and other pests and to perform extermination and control procedures at regular intervals so Project will be free of pests and their residues at Substantial Completion. Perform control operations lawfully, using environmentally safe materials.
- F. Site Enclosure Fence: Before construction operations begin, furnish and install site enclosure fence in accordance with the Contract Documents and as approved by Engineer.
- G. Security Enclosure and Lockup: Install substantial temporary enclosure around partially completed areas of construction. Provide lockable entrances to prevent unauthorized entrance, vandalism, theft, and similar violations of security.
- H. Barricades, Warning Signs, and Lights: Comply with requirements of authorities having jurisdiction for erecting structurally adequate barricades, including warning signs and lighting.
- I. Covered Walkway: Erect structurally adequate, protective, covered walkway for passage of individuals through or around the Work area and along adjacent public street(s) where applicable and as directed by Engineer. Coordinate with entrance gates, other facilities, and obstructions. Comply with regulations of authorities having jurisdiction.
  - 1. Construct covered walkways using scaffold or shoring framing.
  - 2. Provide wood-plank overhead decking, protective plywood enclosure walls, handrails, barricades, warning signs, lights, safe and well-drained walkways, and similar provisions for protection and safe passage.
  - 3. Extend back wall beyond the structure to complete enclosure fence.
  - 4. Paint and maintain in a manner approved by Engineer and R. J. Corman.
- J. Temporary Enclosures: Provide temporary enclosures for protection of construction, in progress and completed, from exposure, foul weather, other construction operations, and similar activities. Provide temporary weathertight enclosure for building exterior where applicable.
  - 1. Insulate temporary enclosures when heating or cooling is necessary and permanent enclosure is not weathertight.

- K. Temporary Partitions: Provide floor-to-ceiling dustproof partitions, where applicable, to limit dust and dirt migration and to separate areas occupied by R. J. Corman, Tenants, and Public from fumes and noise.
  - 1. Construct dustproof partitions with two layers of 3-mil polyethylene sheet on each side. Cover floor with two layers of 3-mil polyethylene sheet, extending sheets 18 inches up the sidewalls. Overlap and tape full length of joints. Cover floor with fire-retardant plywood.
    - a. Construct temporary partition vestibule and airlock at each entrance when more than 48 inches are between doors. Maintain water-dampened foot mats in vestibule.
  - 2. Insulate partitions to provide noise protection to occupied areas.
  - 3. Seal joints and perimeter. Equip partitions with dustproof doors and security locks.
  - 4. Protect air-handling equipment.
  - 5. Weather strip openings.
  - 6. Provide walk-off mats at each entrance through temporary partition.
- L. Temporary Fire Protection: Install and maintain temporary fire-protection facilities of types needed to protect against reasonably predictable and controllable fire losses. Comply with NFPA 241.
  - 1. Prohibit smoking in hazardous fire-exposure and construction areas.
  - 2. Supervise welding operations, combustion-type temporary heating units, and similar sources of fire ignition according to requirements of authorities having jurisdiction.
  - 3. Develop and supervise an overall fire-prevention and –protection program for personnel at Project site. Review needs with applicable fire department and establish procedures to follow. Instruct personnel in methods and procedures. Post warnings and information.
  - 4. Provide temporary standpipes and hoses for fire protection. Hang hoses with a warning sign stating that hoses are for fire-protection. Match hose size with outlet size and equip with suitable nozzles.

### 3.5 OPERATION, TEMINATION, AND REMOVAL

- A. Maintenance: Maintain facilities in good operating condition until removal.
  - 1. Maintain operation of temporary enclosures, heating, cooling, humidity control, ventilation, and similar facilities on a 24-hour basis where required to achieve indicated results and to avoid possibility of damage.
- B. Temporary Facility Changeover: Do not change over from using temporary security and protection facilities to permanent facilities until Substantial Completion.
- C. Termination and Removal: Remove each temporary facility when need for its service has ended, when replaced by authorized use of a permanent facility, or no later than Substantial Completion. Complete or, if necessary, restore permanent construction

delayed because of interference with temporary facility. Repair damaged Work, clean exposed surfaces, or replace construction as necessary.

1. Materials and facilities that constitute temporary facilities are property of Contractor, unless noted otherwise.
2. Remove temporary paving not intended for or acceptable for integration into permanent paving. Where area is for landscape development, remove soil and aggregate fill that do not comply with requirements for fill or subsoil. Remove materials contaminated with road oil, asphalt and other petrochemical compounds, and other substances that might impair growth of plant materials or lawns. Repair or replace street paving, curbs, and sidewalks at temporary entrances, as required by authorities having jurisdiction.
3. At Substantial Completion, clean and renovate permanent facilities used during construction period.

#### **PART 4 – MEASUREMENT AND PAYMENT**

##### **4.1 METHOD OF MEASUREMENT**

- A. There will be no separate measurement for work required under this section.

##### **4.2 BASIS OF PAYMENT**

- A. There will be no separate payment for work required under this section. All costs in connection therewith shall be incidental to the Work of this Contract and distributed over other appropriate pay item(s) by the Contractor.

END OF SECTION

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**PART 1 – GENERAL****1.1 RELATED DOCUMENTS**

- A. Drawings and general provisions of Contract, including the Agreement, General Conditions, and Supplementary Conditions if incorporated, specified Exhibits and References, other Division 1, and Technical Specification Sections, apply to this Section.
  - 1. Comply with the requirements of the various specifications and standards referred to in the contract Plans and Specifications, except where they conflict with the specific requirements of these contract Plans and Specifications. Such reference specifications and standards shall be the date of latest revision in effect at the time of receiving bids.

**1.2 SUMMARY**

- A. This Section includes administrative and procedural requirements for selection of products for use in Project; product delivery, storage, and handling; manufacturers' standard warranties on products; special warranties; product substitutions; and comparable products.

**1.3 DEFINITIONS**

- A. Products: Items purchased for incorporating into the Work, whether specifically for Project or taken from previously purchased stock. The term "product" includes the terms "material", "equipment", "system", and terms of similar intent.
  - 1. Named Products: Items identified by manufacturer's product name, including make or model number or other designation shown or listed in manufacturer's published product literature that is current as of date of the Contract Documents bid date.
  - 2. New Products: Items never incorporated into another project or facility, except products consisting of recycled-content materials is acceptable, unless explicitly stated otherwise. Products salvaged or recycled from other projects are not new products.
  - 3. Comparable Product: Product that is demonstrated and approved through submittal process, or where indicated as a product substitution, to have the indicated qualities related to type, function, dimension, in-service performance, physical properties, appearance, and other characteristics that equal or exceed those of specified product.
- B. Substitutions: Changes in products, materials, equipment, and methods of construction from those required by the Contract Documents and proposed by Contractor.
- C. Basis-of-Design Product Specification: Where a specific manufacturer's product is named and accompanied by the words "basis of design", including make or model number or other designation, to establish the significant qualities related to type, function, dimension, in-service performance, physical properties, appearance, and other characteristics for purposes of evaluating comparable products of other named manufacturers.



**1.4 SUBMITTALS**

- A. Product List: Submit a list, in tabular form, showing specified products. Include generic names of products required. Include manufacturer's name and proprietary product names for each product.
1. Coordinate product list with Construction Schedule and the Submittals Schedule.
  2. Form: Tabulate information for each product under the following column headings:
    - a. Specification Section number and title.
    - b. Generic name used in the Contract Documents.
    - c. Proprietary name, model number, and similar designations.
    - d. Manufacturer's name and address.
    - e. Supplier's name and address.
    - f. Installer's name and address.
    - g. Projected delivery date or time span of delivery period.
    - h. Identification of items that require early submittal approval for scheduled delivery date.
  3. Initial Submittal: Within 30 calendar days after Notice to Proceed, submit three copies of initial product list. Include a written explanation for omissions of data and for variations from Contract requirements.
    - a. Initial submittal may be limited to product selections and designations that are required early in Contract period.
  4. Completed List: Within 60 calendar days after Notice to Proceed, submit three copies of completed product list. Include a written explanation for omissions of data and for variations from Contract requirements.
  5. Engineer's Action: Engineer will respond in writing to Contractor within 15 calendar days of receipt of completed product list. Engineer's response will include a list of unacceptable product selections and a brief explanation of reasons for this action. Engineer's response, or lack of response, does not constitute a waiver of requirement to comply with the Contract Documents.
- B. Substitution Requests: Submit three copies of each request for consideration. Identify product or fabrication or installation method for replacement. Include Specification Section number, title, and Drawing numbers and titles.
1. Substitution Request Form: Contractor shall propose a "standard" form for review and approval by Engineer. "Request For Substitution Form" shall include, but not limited to:
    - a. Request No.
    - b. Date.
    - c. Project Title and Location.
    - d. Name of material, product, or equipment item submitted as substitution.

- e. Name of material, product, or equipment item specified.
  - f. Applicable Specification Section, Article, and Paragraph.
  - g. Qualities that differ from specified product or system.
  - h. Name, Address, and Telephone Number of Manufacturer/Fabricator.
  - i. Name, Address, and Telephone Number of Vendor/Supplier.
  - j. Reason for requesting substitution.
  - k. Address what affects the substitution has on other materials or systems.
  - l. Savings or credit to Contract Sum for accepting the substitution.
  - m. Attach data to support substitution for evaluation, review, and approval by Engineer.
  - n. Authorized signature of Contractor certifying to the following:
    - i. The proposed substitution after investigation is equal or superior to specified product.
    - ii. The proposed substitution for specified material, product, or equipment has the same or better warranty.
    - iii. All changes in the Work resulting from the use of this substitution, if approved, will be coordinated and completed in all respects and all costs, including, but not limited to, those for additional services rendered by Engineer are the responsibility of Contractor at no additional cost to the Contract.
2. Documentation: Show compliance with requirements for substitutions and the following, as applicable:
- a. Statement indicating why Contractor cannot provide the specified material or product.
  - b. Coordination information, including a list of changes or modifications needed to other parts of the Work and to construction performed by the Authority and separate Contractors that will be necessary to accommodate proposed substitution.
  - c. Detailed comparison of significant qualities of proposed substitution with those of the Work specified. Significant qualities may include attributes such as performance, weight, size, durability, visual effect, and specific features and requirements indicated.
  - d. Product Data, including drawings and descriptions of products and fabrication and installation procedures.
  - e. Samples, where applicable or requested.
  - f. List of similar installations for completed projects with project names and addresses and names and addresses of Consultants and Owners.
  - g. Material test reports from a qualified testing agency indicating and interpreting test results for compliance with requirements indicated.

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- h. Research/evaluation reports evidencing compliance with building code in effect for Project, from a model code organization acceptable to authorities having jurisdiction.
  - i. Detailed comparison of Contractor's Construction schedule using proposed substitution with products specified for the Work, including effect on the overall Contract Time. If Contractor cannot provide specified product or method of construction within the Contract Time, include letter from manufacturer, on manufacturer's letterhead, stating lack of availability or delays in delivery.
  - j. Cost information, including a proposal of change, if any, in the Contract Sum.
  - k. Contractor's certification that proposed substitution complies with requirements in the contract Documents and is appropriate for applications indicated.
  - l. Contractor's waiver of rights to additional payment or time that may subsequently become necessary because of failure of proposed substitution to produce indicated results.
3. Engineer's Action: If necessary, Engineer will request additional information or documentation for evaluation within seven calendar days of receipt of a request for substitution. Engineer will notify Contractor of acceptance or rejection. The response time shall be either 15-calendar days of receiving the request; or seven calendar days of receipt of additional information or documentation, whichever is later.
- a. Form of Acceptance: Change Order.
  - b. Use product specified if Engineer is not able to make a decision on the proposed substitution within time allocated.
- C. Comparable Product Requests: Submit three copies of each request for consideration. Identify product or fabrication or installation method for replacement. Include Specification Section number, title, and Drawing numbers and titles.
1. Engineer's Action: If necessary, Engineer will request additional information or documentation for evaluation within seven calendar days of receipt of a comparable product request. Engineer will notify Contractor of approval or rejection of proposed comparable product request with 15 calendar days of receipt of request, or 7 calendar days of receipt of additional information or documentation, whichever is later.
- a. Form of Approval: As specified in Division 1 Section "Submittal Procedures".
  - b. Use product specified if Engineer is not able to make a decision of a comparable product request within time allocated.
- D. Basis-of-Design Product Specification Submittal: Comply with requirements on Division 1 Section "Submittal Procedures". Show compliance with requirements.

**1.5 QUALITY ASSURANCE**

- A. Compatibility of Options: If Contractor has option of selecting between two or more products for use on Project, product selected shall be compatible with products previously selected, even if previously selected products were also options.
  - 1. Contractor is responsible for providing products and construction methods compatible with products and construction methods of other contractors.
  - 2. If a dispute arises between contractors over concurrently selectable but incompatible products, Engineer will determine which products to use.
- B. All products furnished and/or installed for this Project must be 100 percent free of asbestos containing materials.
- C. All electrical products and materials furnished and/or installed for this Project must bear the Underwriter's Laboratories (U.L.), or other accepted agencies listing label. Any Project-related modification to these products must be compliant with the National Electrical Code requirements and listed by U.L.

**1.6 APPROVAL OF MATERIAL SOURCES**

- A. The Engineer shall approve the sources of each material required, before delivery. The Contractor, producer or owner of the supply for inspection or tests may submit representative, preliminary samples. The results obtained from testing such samples may be for preliminary approval, but not for final acceptance of the materials. All materials proposed, are subject to testing at any time during their preparation and use. If, after approval, sources of supply do not furnish a product of uniform quality, or if the product from any source proves unacceptable at any time, the Contractor shall furnish approved material from another source, at no additional cost to the Authority.

**1.7 APPROVAL AND ACCEPTANCE OF MATERIALS**

- A. Unless otherwise stated, the Engineer shall provide direction to the Contractor or his duly authorized representative as to the disposition of all tested material samples. Materials may be sampled either prior to shipment, or after received at the place of construction. All sampling, inspection and testing shall be in accordance with the methods herein prescribed. The Engineer's testing personnel procures and maintains possession of all test samples for Quality Assurance.
- B. The Contractor shall provide such facilities as the Engineer, or his representative, may require for conducting field tests and for collecting and forwarding samples.
- C. The Contractor shall not use or incorporate into the work, any materials represented by the samples, until tests have been made and the materials found to be acceptable. Only materials conforming to the requirements of these Specifications and which the Engineer approves shall be used in the work. Do not incorporate material, which after approval has become unfit for use into the Work.

**1.8 PRODUCT DELIVERY, STORAGE, AND HANDLING**

- A. Deliver, store and handle products using means and methods that will prevent damage, deterioration, and loss, including theft. Comply with manufacturer's written instructions.

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- B. Coordinate deliveries to the site with Authority and Engineer to allow for inspection by these parties prior to incorporation in the Work.
  - C. Any materials that the Authority determines cannot be on site will be stored off-site in a secure location, at no additional cost to the Contract Sum, until they can be at the site. Contractor must insure off-site storage against damage or loss and provide record of material insurance to the Authority.
  - D. Be prepared to provide signed material receipts to the Authority upon request.
  - E. Delivery and Handling:
    - 1. Schedule delivery to minimize long-term storage at Project site and to prevent overcrowding of construction spaces.
    - 2. Coordinate delivery with installation to ensure minimum holding time for items that are flammable, hazardous, easily damaged, or sensitive to deterioration, theft, and other losses.
    - 3. Deliver products to Project site in an undamaged condition in manufacturer's original sealed container or other packaging system, complete with labels and instructions for handling, storing, unpacking, protecting, and installing.
      - a. When applicable, labels shall identify shelf life expiration date.
    - 4. Inspect products on delivery to ensure compliance with the Contract Documents and to ensure that products are undamaged and properly protected.
  - F. Storage:
    - 1. Except as otherwise specified, Contractor is responsible for its tool, equipment, materials, and supplies on the Site whether just stored or incorporated into the Work until facility is accepted by the Authority.
    - 2. Store products to allow for inspection and measurement of quantity or counting of units.
    - 3. Store materials in a manner that will not endanger Project structure.
    - 4. Store products that are subject to damage by the elements, under cover in a weathertight enclosure above ground, with ventilation adequate to prevent condensation.
    - 5. Store cementitious products and materials on elevated platforms.
    - 6. Store foam plastic from exposure to sunlight, except to extent necessary for period of installation and concealment.
    - 7. Comply with product manufacturer's written instructions for temperature, humidity, ventilation, and weather-protection requirements for storage.
    - 8. Protect stored products from damage and liquids from freezing.
    - 9. Provide a secure location and enclosure at Project site for storage of materials and equipment by Authority's construction forces. Coordinate location with Authority.
    - 10. The Contractor without additional compensation will promptly accomplish any relocation of stored materials necessitated by progress of the work.

**1.9 PRODUCT WARRANTIES**

- A. Warranties specified in other Sections shall be in addition to, and run concurrent with, other warranties required by the Contract Documents. Manufacturer's disclaimers and limitations on product warranties do not relieve Contractor of obligations under requirements of the Contract Documents.
  - 1. Manufacturer's Warranty: Preprinted written warranty published by individual manufacturer for a particular product and specifically endorsed by manufacturer to Authority.
  - 2. Special Warranty: Written warranty required by or incorporated into the Contract Documents, to extend time limit provided by manufacturer's warranty or to provide more rights for the Authority.
- B. Special Warranties: Prepare a written document that contains appropriate terms and identification, ready for execution. Submit a draft for approval before final execution.
  - 1. Manufacturer's Standard Form: Modify to include Project-specific information and properly executed.
  - 2. Specified Form: When specified forms are included with the Specifications, prepare a written document using the appropriate form properly executed.
  - 3. Refer to Divisions 2 through 16 Sections for specific content requirements and particular requirements for submitting special warranties.
- C. Submittal Time: Comply with requirements in Division 1 Section "Closeout Procedures".

**PART 2 – PRODUCTS****2.1 PRODUCT SELECTION PROCEDURES**

- A. General Product Requirements: Provide products that comply with the Contract Documents, that are undamaged and, unless otherwise indicated, that are new at time of installation.
  - 1. Provide products complete with accessories, trim, finish, fasteners, and other items needed for a complete installation and indicated use and effect.
  - 2. Standard Products: If available, and unless Contract requires custom products or nonstandard options, provide standard products of types previously produced and used successfully in similar situations on other projects.
  - 3. Authority reserves the right to limit selection to products with warranties not in conflict with requirements of the Contract Documents.
  - 4. Where products are accompanied by the term "as selected", Engineer will make selection.
  - 5. Where products specify, "match sample", sample to be matched is Engineer's.
  - 6. Descriptive, performance, and reference standard requirements in the Specifications establish "salient characteristics" of products.

7. Or Equal: Where products are specified by name and accompanied by the term "or equal" or "or approved equal" or "or approved", comply with provisions in Part 2 "Comparable Products" Article to obtain approval for use of an unnamed product.
  8. Standardization: When materials, products or equipment items are specific without reference to potential substitutions, then no substitutions are acceptable. This inclusion is not to advocate or prescribe the use of a particular brand, item or product, it is solely for providing a seamless design, operation, and maintenance to use the same brands, products, or items installed on previous Authority projects.
- B. Product Selection Procedures:
1. Products: Where Specifications include a list of at least three names of both products and manufacturers, provide one of the products listed that comply with requirements. No other substitutions are acceptable.
  2. Manufacturers: Where Specifications include a list of at least three manufacturers' names, provide a product by one of the manufacturers listed that comply with requirements. No other substitutions are acceptable.
  3. Product Options: Where Specifications and Drawings indicate that sizes, profiles, and dimensional requirements of a specific product or system, provide the specified product or system. Comply with provisions in Part 2 "Product Substitutions" Article for consideration of an unnamed product or system.
  4. Basis-of-Design Product: Where Specifications name a product and include a list of manufacturers, provide the specified product or a comparable product by one of the other named manufacturers. Specifications and Drawings indicate sizes, profiles, dimensions, and other characteristics based on the product named. Comply with provisions in Part 2 "Comparable Products" Article for consideration of an unnamed product by the other named manufacturers.
  5. Visual Matching Specification: Where Specifications require matching an established Sample, select a product that complies with requirements and matches Engineer's sample. Engineer's decision will be final on whether a proposed product matches.
    - a. If no product available within specified category matches and complies with other specified requirements, comply with provisions in Part 2 "Product Substitutions" Article for proposal of product.
  6. Visual Selection Specification: Where Specifications include the phrase "as selected from manufacturer's colors, patterns, and textures" or a similar phrase, select a product that complies with other specified requirements.
    - a. Standard Range: Where Specifications include the phrase "standard range of colors, patterns, and textures" or similar phrase, Engineer will select color, pattern, density, or texture from manufacturer's product line that does not include premium items.
    - b. Full Range: Where Specifications include the phrase "full range of colors, patterns, and textures" or similar phrase, Engineer will select color,

pattern, density, or texture from manufacturer's product line that includes both standard and premium items.

## 2.2 PRODUCT SUBSTITUTIONS

- A. Timing: Engineer will consider requests for substitution approval after the Notice to Proceed. Engineer will not consider requests received prior to Notice to Proceed.
1. Additional substitution requests will be considered only if a specified material, product, or equipment item is subsequently removed from or is unavailable in the market place or in accordance with "Value Engineering" as specified in the 'General Conditions' of the Contract Documents.
  2. The Engineer's decision of approval or disapproval of a proposed substitution shall be final and will be set forth in writing within 10 calendar days after receipt of an acceptable substitution request package.
- B. Conditions: Engineer will consider Contractor's request for substitution only in accordance with the following conditions. If the conditions are not satisfied, Engineer will return requests without action, except to record noncompliance with these requirements:
1. When less than three (3) manufacturer's materials, products, or equipment items are specified and the phrase "or equal" or "or approved equal" or "or approved" is stated, requests for substitutions are permitted and will be considered.
  2. Substitution requested must meet or exceed specified material, product, or equipment items appearance, function, and quality level as determined by the Engineer and Authority.
  3. Requested substitution offers the Authority a substantial advantage in cost, time, energy conservation, or other considerations, after deducting additional responsibilities Authority must assume. Authority's additional responsibilities may include compensation to Engineer for redesign and evaluation services, increased cost of other construction by Authority, and similar considerations.
  4. Requests for substitution must include clear identification of the material, product, or equipment item with complete description including drawings, cuts, performance, and test data, along with any other information necessary for a complete evaluation.
  5. Requested substitution shall not require extensive revisions to the Contract Documents or changes to any other materials, products, or equipment items.
  6. Requested substitution is consistent with the Contract Documents and will produce indicated results.
  7. Substitution request is fully documented and properly submitted.
  8. Requested substitution will not adversely affect Contractor's Construction Schedule.
  9. Requested substitution has received necessary approvals of authorities having jurisdiction.
  10. Requested substitution is compatible with other portions of the Work.



11. Requested substitution provides specified warranty.
12. Requested substitution will not delay the Work.
13. If requested substitution involves more than one contractor, requested substitution is coordinated with other portions of the Work, is uniform and consistent, is compatible with other products, and is acceptable to all contractors involved.
14. The Engineer/Authority's decision to accept or reject the proposed substitution shall be final and will be set forth in writing.

### **2.3 COMPARABLE PRODUCTS**

- A. Conditions: Engineer will consider Contractor's request for comparable product when the following conditions are satisfied. If the following conditions are not satisfied, Engineer will return requests without action, except to record noncompliance with these requirements:
  1. Evidence that the proposed product does not require extensive revisions to the Contract Documents that it is consistent with the Contract Documents and will produce the indicated results, and that it is compatible with other portions of the Work.
  2. Detailed comparison of significant qualities of proposed product with those named in the Specifications. Significant qualities include attributes such as performance, weight, size, durability, visual effect, and specific features and requirements indicated.
  3. Evidence that proposed product provides specified warranty.
  4. List of similar installations for completed projects with project names and addresses and names and addresses of Consultants and Owners, if requested.
  5. Samples, if requested.

### **PART 3 – EXECUTION – NOT USED**

### **PART 4 – MEASUREMENT AND PAYMENT**

#### **4.1 METHOD OF MEASUREMENT**

- A. There will be no separate measurement for work required under this section.

#### **4.2 BASIS OF PAYMENT**

- A. There will be no separate payment for work required under this section. All costs in connection therewith shall be incidental to the Work of this Contract and distributed over other appropriate pay item(s) by the Contractor.

END OF SECTION

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**PART 1 – GENERAL****1.1 RELATED DOCUMENTS**

- A. Drawings and general provisions of Contract, including the Agreement, General Conditions, and Supplementary Conditions if incorporated, specified Exhibits and References, other Division 1, and Technical Specification Sections, apply to this Section.
  - 1. Comply with the requirements of the various specifications and standards referred to in the contract Plans and Specifications, except where they conflict with the specific requirements of these contract Plans and Specifications. Such reference specifications and standards shall be the date of latest revision in effect at the time of receiving bids.

**1.2 SUMMARY**

- A. This Section includes general procedural requirements governing execution of the Work including, but not limited to, the following.
  - 1. General installation of products.
  - 2. Coordination of R. J. Corman-installed (or furnished) products.
  - 3. Progress cleaning.
  - 4. Starting and adjusting.
  - 5. Protection of installed construction.
  - 6. Correction of the Work.

**PART 2 – PRODUCTS – NOT USED****PART 3 – EXECUTION****3.1 EXAMINATION**

- A. Existing Conditions: The R. J. Corman does not guarantee the existence and location of underground and other utilities and construction indicated as existing. Before beginning Work, investigate and verify the existence, location, size, capacity, and other pertinent information of applicable existing underground utilities, plumbing, storm, sanitary, architectural, mechanical, electrical, structural, and other construction systems pertaining to the Work.
  - 1. Furnish pertinent data for Work to public utilities serving the Project site.
- B. Acceptance of Conditions: Examine substrates, areas, and conditions, with Installer or Applicator present where indicated in Contract Documents, for compliance with requirements for installation tolerances and other conditions affecting performance. Contractor shall record and report observations to Engineer.
  - 1. Written Report: Provide a written report listing conditions detrimental to performance of the Work required by other Sections. Include the following:
    - a. Description of the Work.

- b. List of detrimental conditions, including substrates.
  - c. List of unacceptable installation tolerances.
  - d. Recommended corrections.
2. Verify compatibility with and suitability of applicable substrates, including compatibility with existing finishes.
  3. Examine roughing-in for applicable mechanical and electrical systems to verify actual locations of connections before relevant equipment and fixture installation.
  4. Examine applicable existing walls, floors, and roofs for suitable installation conditions of Contract products and systems.
  5. Verify field dimensions.
  6. Test surfaces where the surface dryness is in question with a current moisture-indicating device.
  7. Contractor shall proceed with installation only after correction of unsatisfactory conditions. Proceeding with the Work indicates acceptance of surfaces and conditions and the responsibility for any corrective work required due to faulty base surfaces or improper conditions.

### 3.2 PREPARATION

- A. Existing Utility Information: Furnish information to local utility that it is necessary to adjust, move, or relocate existing utility structures, utility poles, lines, services, or other utility appurtenances located in or affected by construction. Coordinate with authorities having jurisdiction.
- B. Field Measurements: Take field measurements as required to fit the Work properly. Recheck measurements before installing each product. Verify dimensions of other construction by field measurements before fabrication of Work interfacing with other construction. Coordinate fabrication schedule with construction progress to avoid delaying the Work.
- C. Space Requirements: Verify space requirements and dimensions of items shown diagrammatically on Drawings.
- D. Review of Contract Documents and Field Conditions: Submit a request for interpretation to Engineer upon discovery of the need for clarification of the Contract Documents. Include a detailed description of problem encountered, together with recommendations for changing the Contract Documents. Submit requests to Engineer on "Request for Interpretation" form.

### 3.3 INSTALLATION

- A. General: Locate the Work and components of the Work accurately, in correct alignment and elevation, as indicated.
  1. Make vertical work plumb and make horizontal work level.
  2. Where space is limited, install components to maximize space available for maintenance and ease of removal for replacement.

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3. Install materials, products, and equipment so they are readily accessible for operation, maintenance, and repair. Minor deviations from Drawings are acceptable to accomplish requiring accessibility, but changes involving extra cost shall have prior written approval before deviating from the Drawings.
- B. Comply with manufacturer's written instructions and recommendations for installing products in applications indicated.
  - C. Install products at the time and under conditions that will ensure the best possible results. Maintain conditions required for product performance until Substantial Completion.
  - D. Conduct construction operations so no part of the Work is damaging to operations or loading in excess of that expected during normal conditions of occupancy.
  - E. Tools and Equipment: Do not use tools or equipment that produces harmful noise levels.
  - F. Templates: Obtain and distribute to the parties involved templates for work specified to be factory prepared and field installed. Check Shop Drawings of other work to confirm adequate provisions for locating and installing products to comply with indicated requirements.
  - G. Anchors and Fasteners: Provide anchors and fasteners as required to anchor each component securely in place, accurately located and aligned with other portions of the Work.

**3.4 OWNER-INSTALLED PRODUCTS**

- A. R. J. Corman shall furnish and/or install products indicated as "R. J. Corman Furnished" or "R. J. Corman Installed" during the course of the Contract time.
- B. Site Access: When applicable provide access to Project site for R. J. Corman's construction forces.
- C. Coordination: When applicable coordinate construction and operations of the Work with work performed by the R. J. Corman's construction forces.
  - 1. Construction Schedule: Inform R. J. Corman of Contractor's preferred construction schedule for R. J. Corman's portion of the Work. Adjust construction schedule based on a mutually agreeable timetable. Notify R. J. Corman if changes to schedule are required due to differences in actual construction progress.
  - 2. Pre-installation Conferences: Include R. J. Corman's construction forces at pre-installation conferences covering portions of the Work that are to receive Authority's work. Attend pre-installation conferences conducted by R. J. Corman's construction forces if portions of the Work depend on R. J. Corman's construction.

**3.5 PROGRESS CLEANING**

- A. General: Clean Project site and work areas daily, including common areas. Coordinate progress cleaning for joint-use areas where more than one installer has worked. Enforce requirements strictly. Dispose of materials lawfully.
  - 1. Do not hold materials more than 7 calendar days during normal weather or 3 calendar days if the temperature anticipates rising above 80°F.
  - 2. Place waste materials in containers provided for this purpose.
  - 3. Containerize hazardous and unsanitary waste material separately from other waste. Mark containers appropriately and dispose of legally, according to regulations.
  - 4. Containerize undercover all recyclable materials and hold until individual containers are full.
  - 5. Provide sufficient quantity of waste containers on Site and on each floor of facility and in each work area for collection of waste materials, rubbish, and debris.
  - 6. Lower waste materials from building in a controlled manner; do not drop or throw materials from heights.
- B. Site: Maintain Project site free of waste materials and debris.
- C. Work Areas: Clean areas where work is in progress to the level of cleanliness necessary for proper execution of the Work.
  - 1. Remove liquid spills promptly.
- D. damage and deterioration at time of Substantial Completion.
- E. Waste Disposal:
  - 1. Contractor shall remove his own waste and surplus materials without interference with others and as often as necessary so as not to interfere with the work of others or present a fire or safety hazard.

2. Do not bury or burn waste materials on-site. Do not wash waste materials down sewers or into waterways.
- F. During handling and installation, clean and protect construction in progress and adjoining materials already in place. Apply protective covering where required to ensure protection from damage or deterioration at Substantial Completion.
- G. Clean and provide maintenance on completed construction as frequently as necessary through the remainder of the construction period. Adjust and lubricate operable components to ensure operability without damaging effects.
- H. Limiting Exposures: Supervise construction operations to assure that no part of the construction completed or in progress, is subject to harmful, dangerous, damaging, or otherwise deleterious exposure during the construction period.
- I. Cost of Progress Cleaning:
  1. Cost of providing containers and disposing of waste in containers is the responsibility of the Contractor.
  2. Cost of placing waste materials in containers is the responsibility of Contractor creating the waste materials.

### **3.6 STARTING AND ADJUSTING**

- A. Start equipment and operating components to confirm proper operation of components and systems. Remove malfunctioning units, replace with new units, and retest.
- B. Adjust operating components for proper operation without binding. Adjust equipment for proper operation.
- C. Test each piece of equipment to verify proper operation. Test and adjust controls and safeties. Replace damaged and malfunctioning controls and equipment.
- D. Manufacturer's Field Service: if a factory-authorized service representative is required to inspect field-assembled components and equipment installation, comply with qualification requirements in Division 1 Section "Quality Requirements".

### **3.7 PROTECTION OF INSTALLED CONSTRUCTION**

- A. Contractor is responsible for protection and safekeeping of his materials, products, and equipment stored on the premises or incorporated into the construction until his contract is complete and accepted by the R. J. Corman.
- B. Provide final protection and maintain conditions that ensure installed Work is without damage or deterioration at time of Substantial Completion.
- C. Comply with manufacturer's written instructions for temperature and relative humidity.

### **3.8 CORRECTION OF THE WORK**

- A. Repair or remove and replace defective construction. Restore damaged substrates and finishes.
  1. Repairing includes replacing defective parts, refinishing damaged surfaces, touching up with matching materials, and properly adjusting operating equipment.

- B. Restore permanent facilities used during construction to their specified condition.
- C. Remove and replace damaged surfaces that are exposed to view of surfaces cannot be repaired without visible evidence of repair.
- D. Repair components that do not operate properly. Remove and replace non-reparable operating components.
- E. Remove and replace chipped, scratched, and broken glass or reflective surfaces.

**PART 4 – MEASUREMENT AND PAYMENT****4.1 METHOD OF MEASUREMENT**

- A. There will be no separate measurement for work required under this section.

**4.2 BASIS OF PAYMENT**

- A. There will be no separate payment for work required under this section. All costs in connection therewith shall be incidental to the Work of this Contract and distributed over other appropriate pay item(s) by the Contractor.

END OF SECTION

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**PART 1 – GENERAL****1.1 RELATED DOCUMENTS**

- A. Drawings and general provisions of Contract, including the Agreement, General Conditions, and Supplementary Conditions if incorporated, specified Exhibits and References, other Division 1, and Technical Specification Sections, apply to this Section.
  - 1. Comply with the requirements of the various specifications and standards referred to in the contract Plans and Specifications, except where they conflict with the specific requirements of these contract Plans and Specifications. Such reference specifications and standards shall be the date of latest revision in effect at the time of receiving bids.

**1.2 SUMMARY**

- A. This Section includes administrative and procedural requirements for the following:
  - 1. Recycling nonhazardous construction waste.
  - 2. Disposing of nonhazardous construction waste.

**1.3 DEFINITIONS**

- A. Construction Waste: Building and site improvement materials and other solid waste resulting from construction, remodeling, renovation, or repair operations. Construction waste includes packaging.
- B. Demolition Waste: Building and site improvement materials resulting from demolition or selective demolition operations.
- C. Disposal: Removal of off-site demolition and construction waste and subsequent sale, recycling, reuse, or deposit in landfill or incinerator acceptable to authorities having jurisdiction.
- D. Recycle: Recovery of demolition or construction waste for subsequent processing in preparation for reuse.

**1.4 PERFORMANCE GOALS**

- A. Salvage/Recycle Goals: The Authority's goal is to salvage and recycle as much nonhazardous construction waste as possible including the following materials:
  - 1. Construction Waste:
    - a. Site-clearing waste.
    - b. Wood sheet materials.
    - c. Metals.
    - d. Packaging: Regardless of salvage/recycle goal indicated above, salvage or recycle 100 percent of the following uncontaminated packaging materials:
      - i. Paper.
      - ii. Cardboard.
      - iii. Boxes.



- iv. Plastic sheet and film.
- v. Polystyrene packaging.
- vi. Wood crates.
- vii. Plastic pails.

### 1.5 QUALITY ASSURANCE

- A. Regulatory Requirements: Comply with hauling and disposal regulations of authorities having jurisdiction.

## PART 2 – PRODUCTS – NOT USED

## PART 3 – EXECUTION

### 3.1 PLAN IMPLEMENTATION

- A. General: Provide handling, containers, storage, signage, transportation, and other items as required to implement waste management plan during the entire duration of the Contract.
- B. Training: Train workers, subcontractors, and suppliers on proper waste management procedures, as appropriate for the Work occurring at Project site.
  - 1. Distribute waste management plan to entities when they first begin work on-site. Review plan procedures and locations established for salvage, recycling, and disposal.
- C. Site Access and Temporary Controls: Conduct waste management operations to ensure minimum interference with roads, streets, walks, walkways, and other adjacent occupied and used facilities.
  - 1. Designate and label specific areas on Project site necessary for separating salvaged, recycled, reused, donated, and sold materials.
  - 2. Control dust and dirt, and provide environmental protection, and noise control.
  - 3. Remove waste materials from on-site containers and legally dispose of off site, at least once a week and more often if same interferes with the Work under any contract or presents a fire or safety hazard.
  - 4. Lower waste materials from building in a controlled manner. Do not drop or throw materials from heights.
  - 5. Clean all debris from closed in spaces.
  - 6. Keep dirt, mud, stone and other construction debris off site access roadways.

Contractor to maintain roadways daily, throughout construction period.

### 3.2 RECYCLING CONSTRUCTION WASTE, GENERAL

- A. General: Recycle paper and beverage containers used by on-site workers.
- B. Recycling Incentives: Revenues, savings, rebates, and other incentives received for recycling waste materials shall accrue to Contractor.

- C. Procedures: Separate recyclable waste from other waste materials, trash, and debris. Separate recyclable waste by type at Project site to the maximum extent practical.
1. Provide appropriately marked containers or bins for controlling recyclable waste until removal from the Project site. Include list of acceptable and unacceptable materials at each container and bin.
    - a. Inspect containers and bins for contamination and remove contaminated materials if found.
  2. Stockpile processed materials on-site without intermixing with other materials. Place, grade, and shape stockpiles to drain surface water. Cover to prevent windblown dust.
  3. Stockpile materials away from construction area. Do not store within drip line of remaining trees.
  4. Store components off the ground and protect from the weather.
  5. Remove recyclable waste off Authority's property and transport to recycling receiver or processor.

### 3.3 RECYCLING CONSTRUCTION WASTE

- A. Packaging:
1. Cardboard and Boxes: Break down packaging into flat sheets. Bundle and store in a dry location.
  2. Polystyrene Packaging: Separate and bag materials.
  3. Pallets: As much as possible, require deliveries using pallets to remove pallets from Project site. For pallets that remain on-site, break down pallets into component wood pieces and comply with requirements for recycling wood.
  4. Crates: Break down crates into component wood pieces and comply with requirements for recycling wood.
- B. Site-Clearing Wastes: Chip brush, branches, and trees at landfill facility.
- C. Gypsum Board: Stack large clean pieces on wood pallets and store in a dry location.
1. Clean Gypsum Board: Grind scraps of clean gypsum board using small mobile chipper or hammer mill. Screen out paper after grinding.

### 3.4 DISPOSAL OF WASTE

- A. General: Except for items or materials salvaged, recycled, or otherwise reused, remove waste materials from Project site and legally dispose of them in a landfill or incinerator acceptable to authorities having jurisdiction.
1. Except as otherwise specified, do not allow waste materials that are to be disposed of accumulate on-site.
  2. Burning: Do not burn waste materials.
  3. Disposal: Transport waste materials off Authority's property and legally dispose of them.

### 3.5 FINAL CLEANING

- A. Period of Cleaning: At completion of construction just prior to acceptance or occupancy.

**PART 4 – MEASUREMENT AND PAYMENT**

**4.1 METHOD OF MEASUREMENT**

- A. There will be no separate measurement for work required under this Section.

**4.2 BASIS OF PAYMENT**

- A. There will be no separate payment for work required under this section. All costs in connection therewith shall be incidental to the Work of this Contract and distributed over other appropriate pay item(s) by the Contractor.

END OF SECTION

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**PART 1 – GENERAL****1.1 RELATED DOCUMENTS**

- A. Drawings and general provisions of Contract, including the Agreement, General Conditions, and Supplementary Conditions if incorporated, specified Exhibits and References, other Division 1, and Technical Specification Sections, apply to this Section.
  - 1. Comply with the requirements of the various specifications and standards referred to in the contract Plans and Specifications, except where they conflict with the specific requirements of these contract Plans and Specifications. Such reference specifications and standards shall be the date of latest revision in effect at the time of receiving bids.

**1.2 SUMMARY**

- A. This Section includes administrative and procedural requirements for contract closeout, including, but not limited to, the following:
  - 1. Inspection procedures.
  - 2. Warranties.
  - 3. Final cleaning.

**1.3 SUBSTANTIAL COMPLETION**

- A. Preliminary Procedures: Complete the following before requesting inspection for determining date of Substantial Completion. List items below that are incomplete in request.
  - 1. Prepare a list of items to be completed and corrected (punch list), the value of items on the list, and reasons why the Work is not complete.
  - 2. Advise R. J. Corman of pending insurance changeover requirements.
  - 3. Submit specific warranties, workmanship bonds, maintenance service agreements, final certifications, and similar documents.
  - 4. Obtain and submit releases permitting the R. J. Corman unrestricted use of the Work and access to services and utilities. Include occupancy permits, operating certificates, and similar releases.
  - 5. Prepare and submit Project Record Documents, operation and maintenance manuals, Final Completion construction photographs, damage or settlement surveys, property surveys, certificates of inspection, and similar final record information. Pending R. J. Corman's direction, this final record information might be acceptable for delay until Final Acceptance.
  - 6. Deliver tools, spare parts, extra materials, and similar items to location designated by the R. J. Corman. Label with manufacturer's name and model number where applicable.
  - 7. Make final changeover of permanent locks and deliver keys to the R. J. Corman. Advise R. J. Corman's personnel of changeover in security provisions.

8. Complete startup testing of systems.
  9. Submit test/adjust/balance records.
  10. Terminate and remove temporary facilities from Project site, along with mockups, construction tools, and similar elements.
  11. Advise R. J. Corman of changeover in heat and other utilities.
  12. Submit changeover information related to R. J. Corman's occupancy, use, operation, and maintenance.
  13. Touch up and otherwise repair and restore marred exposed finishes to eliminate visual defects.
  14. Complete final cleaning requirements, including touchup painting. Pending R. J. Corman's direction, this final cleaning might be acceptable for delay until Final Acceptance.
- B. Inspection: Submit a written request for inspection for Substantial Completion. On receipt of request, Engineer and R. J. Corman will within seven calendar days either proceed with inspection or notify Contractor of unfulfilled requirements. Engineer will prepare the Certificate of Substantial Completion after inspection or will notify Contractor of items, on Contractor's list or on additional items identified by Engineer that must be completed or corrected before issuing certificate.
1. Re-inspection: Request re-inspection when the Work identified in previous inspections as incomplete is completed or corrected.
  2. Results of completed inspection will form the basis of requirements for Final Acceptance.

#### 1.4 BENEFICIAL OCCUPANCY

- A. The R. J. Corman may take possession, Beneficial Occupancy, of portions of the project that are not totally completed and/or accepted, for its use and operations as indicated in the contract-phasing schedule or as determined by the R. J. Corman during construction of the Project.
- B. Taking possession of or placing into operation and use any portion of the project by the R. J. Corman, prior to final completion and acceptance of the Work, shall in no way relieve the Contractor of responsibility for completion of all Work required by the contract.
- C. The R. J. Corman shall reserve the right to turn over to its tenants, for the purpose of use and operations, any area of the project for which it takes possession in accordance with these specifications.
- D. For any area or portion of Work identified in the Contract Documents as being required to be turned over to the R. J. Corman prior to Final Acceptance, the Contractor shall, prior to surrendering possession to the R. J. Corman, complete all necessary Work.
- The Work includes start-up of equipment, and cleaning of the area and removing all materials, tools and storage that could affect the R. J. Corman's operations and use of the area. This shall include removal of any equipment or materials that may prevent normal access to the area. In addition, all HVAC, plumbing, piping, lighting, electrical, communications, and other systems that are required for operations and

use of the area or portion of work shall be in adequate condition and operation to prevent impact to the occupancy and intended use and operation of the area. It may be necessary to place systems into temporary or partial operation in order to accommodate the operation and use of the area by the R. J. Corman or its tenants and to prevent unscheduled shutdowns or interruptions.

- E. Compliance with these conditions for Beneficial Occupancy is required to satisfy milestone dates specified in the Contract. If any of these conditions are outstanding by the specified date(s) set forth in the Contract, the Contractor shall be in default of the contract requirements.
- F. For any areas not specified for Beneficial Occupancy, but which the R. J. Corman takes beneficial occupancy of, excepting any area or portion of the Work which the R. J. Corman takes possession of because of the Contractor's failure to meet schedules or complete work within the terms of the Contract, the requirements above, shall be negotiated and agreed to prior to Beneficial Occupancy.
- G. During the period of Beneficial Occupancy, the Contractor shall be responsible for all maintenance, preventative, preemptive, and failure/repair, of all electrical, mechanical, communications, and control systems. The R. J. Corman shall be responsible for normal cleaning and replacement of consumable materials during this period. Replacement of lights/lamps shall be the responsibility of the Contractor. The Contractor shall assign contact person(s) who shall have the responsibility for responding to notification of failures or problems with any of the building equipment and systems during Beneficial Occupancy. This contact person(s) shall be available, by phone, during all periods of operations and use of the area and shall respond to all notifications within two hours. Failure to respond with appropriate maintenance personnel and equipment to commence repair of the equipment/system within the required time, or to complete the repairs within a reasonable time thereafter, shall result in the R. J. Corman accomplishing the necessary repairs, and deduct the cost from the Contractor's payment. The Contractor's responsibility for maintenance shall conclude upon Final Acceptance.
- H. The warranty period for each item of equipment necessary and placed into operation to accommodate the R. J. Corman's Beneficial Occupancy shall commence on the date of Beneficial Occupancy. The Contractor shall prepare, and submit for approval, a complete listing of such equipment. The listing shall identify the equipment by type, location, identification, serial number, period of warranty, and manufacturer. The start of warranty for Beneficial Occupancy shall be limited to electrical, mechanical, communications, and control equipment only and shall not include any building materials, finishes, or structural components. The warranty period shall re-start for a particular piece of equipment at the time of completion of any replacement or major repair of the equipment and shall extend there from for the full warrantee period.

### 1.5 FINAL ACCEPTANCE

- A. Preliminary Procedures: Before requesting final inspection for determining date of Final Acceptance, complete the following:
  - 1. Submit a final Application for Payment according to Division 1 Section "Payment Procedures".

2. Submit certified copy of Engineer's Substantial Completion inspection list of items to be completed or corrected (punch list), endorsed and dated by Engineer. The certified copy of the list shall state that each item has been completed or otherwise resolved for acceptance.
  3. Submit evidence of final, continuing insurance coverage complying with insurance requirements.
  4. Instruct R. J. Corman's personnel in operation, adjustment, and maintenance of products, equipment, and systems. Submit demonstration and training videotapes.
- B. Inspection: Submit a written request for Final Acceptance. On receipt of request, Engineer and R. J. Corman will within seven calendar days either proceed with inspection or notify Contractor of unfulfilled requirements. Engineer will prepare a final Certificate for Payment after inspection or will notify Contractor of construction that must be completed or corrected before issuing the certificate.
1. Contractor shall take immediate action to complete all remaining work deemed necessary by Engineer.
  2. Re-inspection: Contractor shall request re-inspection when the Work identified in previous inspections as incomplete is completed or corrected.
  3. Should Engineer be required to perform second inspection because of failure of Work to comply with original notification of Contractor, the R. J. Corman will compensate Engineer for additional services, and deduct amount paid from final payment to Contractor.

#### 1.6 LIST OF INCOMPLETE ITEMS (PUNCH LIST)

- A. Submit one copy of list. Include name and identification of each space and area affected by construction operations for incomplete items and items needing correction including, if necessary, areas disturbed by Contractor that are outside the limits of construction.
1. Organize list of spaces in sequential order, starting with exterior areas first and proceeding from lowest floor to highest floor.
  2. Organize items applying to each space by major element, including categories for ceiling, individual walls, floors, equipment, and building systems.
  3. Include the following information at the top of each page:
    - a. Project name.
    - b. Date.
    - c. Name of Consultant.
    - d. Name of Contractor.
    - e. Page number.

**1.7 WARRANTIES**

- A. Submittal Time: Submit written warranties on request of Engineer for designated portions of the Work where commencement of warranties is other than date of Substantial Completion.
- B. Beneficial Occupancy: Submit properly executed warranties within 15 calendar days of completion of designated portions of the Work that are completed and occupied or used by the R. J. Corman during construction period by separate agreement with Contractor.
- C. Provide additional copies of each warranty to include in operation and maintenance manuals.

**1.8 EVIDENCE OF PAYMENT AND RELEASE OF LIENS**

- A. Contractor's affidavit of payment of debts and claims: AIA G706 or approved equal.
- B. Contractor's affidavit of release of liens: AIA G706A or approved equal, with:
  - 1. Consent of Surety to Final Payment: AIA G707 or approved equal.
  - 2. Contractor's Release or Waiver of Liens.
  - 3. Separate releases of waivers of liens for subcontractors, suppliers, and others with lien rights against property of R. J. Corman, together with list of those parties.
- C. Execute all submittals before delivery to Engineer.

**1.9 FINAL ADJUSTMENT OF ACCOUNTS**

- A. Submit final statement of accounting to Engineer.
- B. Statement shall reflect all adjustments, including:
  - 1. Original Sum.



2. Additions and deductions resulting from (as applicable, but not limited to):
    - a. Previous change orders.
    - b. Other adjustments.
    - c. Deductions for uncorrected work.
    - d. Penalties.
    - e. Deductions for liquidated damages.
    - f. Deductions for re-inspection payments.
  3. Total Contract Sum, as adjusted.
  4. Previous Payments.
  5. Sum remaining due.
- C. Engineer will prepare final change order, reflecting approved adjustments to Contract Sum not previously made by change orders.

#### **1.10 FINAL APPLICATION FOR PAYMENTS**

- A. Contractor shall submit final application in accordance with requirements of General Conditions.

### **PART 2 – PRODUCTS**

#### **2.1 MATERIALS**

- A. Cleaning Agents: Use cleaning materials and agents recommended by manufacturer or fabricator for cleaning the surfaces. Do not use cleaning agents that are potentially hazardous to health or property or that might damage finished surfaces.

### **PART 3 – EXECUTION**

#### **3.1 FINAL CLEANING**

- A. General: Provide final cleaning. Conduct cleaning and waste-removal operations to comply with local laws and ordinances and Federal and local environmental and antipollution regulations.
- B. Cleaning: Employ experienced workers or professional cleaners for final cleaning. Clean each surface or unit to condition expected in an average commercial building cleaning and maintenance program. Comply with manufacturer's written instructions.
  1. Pending R. J. Corman's direction, this final cleaning might be acceptable for delay until Final Acceptance. Otherwise, complete the following cleaning operations before requesting inspection for certification of Substantial Completion for entire Project or for a portion of Project:
    - a. Clean Project site, yard, and grounds, in areas disturbed by construction activities, including landscape development areas, of rubbish, waste material, litter, and other foreign substances.

- b. Remove tools, construction equipment, machinery, and surplus material from Project site.
- c. Remove labels that are not permanent.
- d. Wipe surfaces of mechanical and electrical equipment, elevator equipment, and similar equipment. Remove excess lubrication, paint and mortar droppings, and other foreign substances.
- e. Replace parts subject to unusual operating conditions.

- C. Comply with safety standards for cleaning. Do not burn waste materials. Do not bury debris or excess materials on R. J. Corman's property. Do not discharge volatile, harmful, or dangerous materials into drainage systems. Remove waste materials from Project site and dispose of lawfully.
- D. Contractor shall identify closeout procedure tasks in overall project schedule.

**PART 4 – MEASUREMENT AND PAYMENT****4.1 METHOD OF MEASUREMENT**

- A. There will be no separate measurement for work required under this section.

**4.2 BASIS OF PAYMENT**

- A. There will be no separate payment for work required under this section. All costs in connection therewith shall be incidental to the Work of this Contract and distributed over other appropriate pay item(s) by the Contractor.

END OF SECTION

1. MOBILIZATION-DEMobilIZATION

1.1 Description. Under this work the Contractor shall provide necessary bonds, insurance, and financing and shall set up his necessary general plant, including shops, storage areas, office and such sanitary and other facilities as are required by local or state law or regulation and removal of same after completion of work.

1.2 Materials. Such materials as required for mobilization and that are not to be part of the completed contract shall be as determined by the Contractor, except that they shall conform to any pertinent local or State Law, regulation, or code.

1.3 Construction Details. The work required to provide the above facilities and service for mobilization shall be done in a safe and workmanlike manner and shall conform with any pertinent local or State Law, regulation, or code. Good housekeeping consistent with safety shall be maintained.

1.4 Basis of Payment.

1.4.1 Units. Payment for mobilization will be made on a lump sum basis. (lump sum)

1.4.2 Included Costs. The amount bid shall include the furnishing and maintaining of services and facilities noted under above, to the extent and at the time the Contractor deems them necessary for his operations, consistent with the requirements of this work and the respective contract. The amount bid shall be payable to the Contractor with the first contract payment made for other contract work.

END OF SECTION

## 2 INSTALL BALLAST AND SURFACE

2.1 Description. The work shall consist of raising, aligning and surfacing track and turn-outs at the locations indicated in the Contract Documents, or as ordered by the Engineer.

2.2 Materials. Ballast used for this work shall be furnished by the Railroad, conform to A.R.E.M.A. Portfolio of Plans and Specifications, and be approved by the Engineer prior to use. Any material distributed by the Contractor which is lost, stolen or damaged will be replaced by the Contractor at its cost and expense.

2.2.1 Ownership of Material - Materials furnished by the Railroad will remain the property of the Railroad.

2.2.2 Storage Areas - Certain areas within Railroad owned right-of-way may be made available to the Contractor. These areas, if available, will be defined and located at the pre-bid conference. Security of the storage areas shall be the Contractor's responsibility. Material storage locations and method of storage must in no way interfere with traffic and must be designated or approved. The Railroad shall have the right to move or have the Contractor move material from storage locations. The Railroad shall bear the actual cost of such moving from storage locations which were specifically designated by the Engineer. Moving stored materials from other locations shall be at Contractor's expense.

2.2.3 Record Keeping. The Contractor shall provide to the Railroad, or their representative, a record of all materials that are installed for this project. A weekly inventory shall be kept by the Contractor showing materials on hand, material that has been installed, material that has been salvaged, and material that has been stored for the Railroad. This inventory will be made available to the Railroad at any time they request this information.

### 2.3 Construction Details.

2.3.1 Track Alignment. The track section, when completed shall be in conformance with the track alignment and elevation as indicated in the Contract Documents, and the limits specified herein, or as ordered by the Engineer. Track alignment shall be in conformance with FRA Track Safety Standards Subpart C-Track Geometry-Subsection 213.55, Alignment plus the requirements in this specification. The class of track for surfacing shall be FRA Class 5. The requirements of subsection 213.57, Curves; Elevations and Speed Limitations, and 213.59, Elevations of Curved track; Runoff, of FRA Track Safety Standards shall apply unless otherwise specified by the Engineer.

2.3.2 Track Surface. Track surface shall be in conformance with FRA Track Safety Standards Subpart C-Track Geometry-Subsection 213.63, Track Surface plus the requirements in this specification. The class of track for surfacing shall be FRA Class 5.

2.3.3 Cross Level Deviation. The deviation from zero cross level at any point on tangent or from designated elevation on curves between spirals shall not be more than

1/4". The difference in cross level between any two points less than 39 ft. apart on tangents and curves between spirals shall not be more than 1/4".

2.3.4 Super Elevation and Grade. Track Elevation shall conform to Contract Documents.

2.3.5 Equipment. The equipment to be used in the alignment and surfacing operation shall be a Tamper Model Mark IV or an approved equal and MUST be approved by the Engineer prior to use.

2.3.6 Maintain Work. Work shall be performed so that track will maintain the alignment, surface, and elevation after tamping.

2.3.7 Bearing Surface. The track section, when completed, shall have the tie plate bear fully on the ties and the rail base bear fully on the tie plate. No portion of the tie plate shoulder, or stone or any foreign material, shall be permitted under the base of the rail.

2.3.8 Tamper Insertions. All ties shall receive not less than two (2) separate insertions of the squeeze type vibratory tamper.

2.3.9 Damaged Spikes. All track spikes damaged and not functioning as intended during the raising, aligning, and surfacing operation shall be repaired. The bent spikes shall be removed, and the resulting hole shall be plugged with a treated tie plug of a size sufficient to completely and tightly fill the hole, then a new spike shall be driven. Spikes that are raised shall be re-driven unless they are loose in their hole. If they are loose, the hole shall be plugged with a tie plug and the spike re-driven.

2.3.10 Ballast. Existing ballast shall be re-used. New ballast shall be used as required. New ballast shall be used as required. All cribs shall be full of ballast and track will be broomed with a ballast regulator so that ballast is level with the top of the tie. No ballast shall remain on the top of the tie. Shoulders shall conform to the Railroad standard cross-section.

2.3.10.1 Placement. The ballast required for raising and surfacing track shall be distributed from hopper bottom or special ballast railroad cars, or alternate method of distribution approved by the Engineer, in the quantities as shown in the Contract Documents or ordered by the Engineer as necessary for the raise. Immediately after distributing the ballast, the track shall be dressed as necessary to permit continued operation of normal train service including proper operation of switches, frogs, guard rails, and flange areas.

2.10.2 Transport Equipment. The rail cars or other equipment used to transport the ballast shall be in good condition, so that leakage of ballast does not occur, and so that the spreading operation can be controlled. The rail cars or

other equipment shall be free of any debris or foreign material that might contaminate the ballast.

2.3.11 Track Circuit. Care shall be taken to insure that track circuit or relay wires are not damaged (if applicable). If the Contractor damages the circuit wires or bonds, they will be responsible to reimburse the Railroad for their repair.

2.3.12 Rise. The amount of standard raise shall not exceed three (3) inches.

2.3.13 Lifting Tangent Track. When lifting tangent track both rails shall be raised at the same time to the same level.

2.3.14 Simultaneous Tamping. Both ends of the ties shall be tamped simultaneously and tamping inside and outside of the rail shall be done at the same time.

2.3.15 Proper Tooling. Worn or broken tamping tools shall be replaced at the request of the Railroad. Track tamped with broken or worn tamping tools shall not be considered acceptable until tamped with proper tooling in a manner acceptable to the Railroad. Worn regulator or broom elements shall be replaced or repaired at the request of the Railroad.

2.3.16 Equipment Selection Approval. Equipment proposed to accomplish this item is subject to written approval of the Railroad.

2.3.17 Cribs and Shoulders. Cribs and shoulders shall be regulated and dressed to the specified section and profile.

2.3.18 Approaches. All newly installed turnout approaches should be surfaced in accordance with this section no less than 100 track feet, unless approved by the Engineer.

## 2.4 Basis of Payment.

2.4.1 Units. Payment for this item shall be per track foot. (TF)

2.4.2 Included Costs. The unit price bid to install ballast and surface shall include the cost of all the labor, equipment, and tools necessary to distribute ballast, raise, line, and surface track section specified in contract documents.

END OF SECTION

### 3 CROSSTIE REPLACEMENT

3.1 Description. The work shall consist of the removal of the existing crossties, installation of new cross ties including, handling, staging, installation, tamping, and related work at all locations designated in the contract documents or as directed by the Engineer. Removed ties shall become the property of the Contractor. The timber/ties shall be removed from the right-of-way and disposed of by the Contractor within 30 days of completion of the project. The Contractor shall certify that the timbers were disposed of in accordance with all environmental regulations.

3.2 Material. All material used for this work shall be furnished by the Railroad, conform to A.R.E.M.A. Portfolio of Plans and Specifications, and be approved by the Engineer prior to use. Any material distributed by the Contractor which is lost, stolen or damaged will be replaced by the Contractor at its cost and expense.

3.2.1 Ownership of Material - Materials furnished by the Railroad will remain the property of the Railroad. The Contractor shall dispose of specific Railroad-owned salvaged materials of which the Railroad does not desire to retain ownership. The Railroad reserves the right to specify such materials at any time during the contract period. Disposal of these materials shall be as approved by the Engineer. Non-specified material shall become the property of the Contractor and shall be removed from the right-of-way and disposed of by the Contractor within 30 days of completion of the project. As specified in Section 5.

3.2.2 Storage Areas - Certain areas within Railroad owned right-of-way may be made available to the Contractor. These areas, if available, will be defined and located at the pre-bid conference. Security of the storage areas shall be the Contractor's responsibility. Material storage locations and method of storage must in no way interfere with traffic and must be designated or approved. The Railroad shall have the right to move or have the Contractor move material from storage locations. The Railroad shall bear the actual cost of such moving from storage locations which were specifically designated by the Engineer. Moving stored materials from other locations shall be at Contractor's expense.

3.2.3 Record Keeping. The Contractor shall provide to the Railroad, or their representative, a record of all materials that are installed for this project. A weekly inventory shall be kept by the Contractor showing materials on hand, material that has been installed, material that has been salvaged, and material that has been stored for the Railroad. This inventory will be made available to the Railroad at any time they request this information.

3.3 Construction Details.

3.3.1 Staging. Ties shall be stockpiled at staging locations shown in the Plans. The Contractor shall submit locations of additional proposed track side stockpile/distribution points to the Engineer for review and approval prior to stockpiling. Restoration of stockpile, loading or staging areas shall be included in Tie Replacement items. This



Work shall include restoring the ground surface back to the original condition and seeding, fertilizing and mulching of dirt or grassed areas.

3.3.2 Timber and Debris Removal. All timber and debris removed from the site shall become the property of the Contractor. It shall be removed from Railroad property within thirty days from the completion of the work. All material shall be disposed of in a lawful manner as required. As specified in Section 5.

3.3.3 Train Traffic. The Contractor shall perform all work in manner that will allow train traffic as required by the Railroad.

3.3.4 Drawings and Specifications. All work shall be installed in accordance with the contract drawings and specifications.

3.3.5 Marking. Ties to be replaced will be indicated by a paint marking on the defective tie in the quantity and general location shown in the project documents.

3.3.6 Tie Handling. All ties shall be handled, transported, and stored in accordance with current AREMA standards. New ties shall be handled and placed with either mechanical tie insertion device or tie tongs. Only approved lifting devices that do not damage the tie should be used; the use of picks will not be permitted. Tie removal, handling, and placement equipment is subject to the approval of the Engineer prior to use. Ties that are damaged by mishandling will be replaced by the Contractor at his expense.

3.3.7 Tie Placement. Ties will be placed in the track, square to the centerline of the track with the wider heartwood face down. To the extent practicable, the end of the ties shall be a uniform line.

3.3.8 Tie Spacing. Ties should be spaced uniformly, replaced at existing locations. Existing spacing is approximately 20”.

3.3.9 Gage. During the tie installation process, the track shall be regaged to 4' 8 1/2" when the track gage exceeds ( -1/2" or +1/2"). Changes in gage shall be made in uniform increments of not more than 1/4" in 20 feet. All timber that has had a spike removed shall receive a treated tie plug or tie plugging compound.

3.3.10 Spike Pattern. The Contractor shall match existing spiking pattern. Tangent – Two (2) rail holding spikes per plate. Curves Two (2) rail holding and One (1) field side plate holding. All spikes that are removed shall be gathered and stock piled at a location designated by the Railroad.

3.3.11 Spike Depth. All ties shall have rail holding spikes installed before prior to train movement. Rail holding spikes shall be driven so as to allow a one-eighth inch (1/8”) space between the underside of the spike head and the top of the base of the rail. The spikes shall not be over driven. Spikes shall not be bent against the rail.

3.3.12 Bent Spikes. Any bent spikes shall be removed. If a spike is removed, the resulting hole shall be plugged with a treated tie plug of a size sufficient to completely and tightly fill the hole.

3.3.13 Additional Spikes. Additional spikes may be used when required by local conditions or as ordered by the Engineer.

3.3.14 Tie Plates. The tie plates from the existing tie shall be re-used unless they are broken or nonfunctional (As specified in paragraph 4.3.15). Tie plates shall be used on all ties and shall be free of any dirt or foreign matter when being installed. They shall be installed centered about the width of the tie, with full bearing on the crosstie and the rail in full contact with the rail seat of the tie plate. Under no circumstances shall a shoulder be under the rail base. With a double shoulder canted plate, the cant (slope) of the plate shall be downward to the gage (inside) of the rail.

3.3.15 Defective Tie Plates. The tie plates from the existing tie shall be re-used unless they are broken or nonfunctional. The railroad will provide extra tie plates only if the plate was defective prior to this project. Tie plates will be judged defective due to any of the following reasons:

1. Rounded or worn shoulders.
2. Rounded or otherwise excessively worn spike holes.
3. A crack, bend, or other flaw in the plate.
4. Excessive deterioration from the rust, scale or brine.

3.3.16 Rail anchors. Rail anchors removed during the tie installation process shall be replaced with full contact with the new tie. Rail anchors shall be applied from the gage side of the rail whenever possible. Rail anchors must be installed so that they bear firmly against the tie. The Driving of anchors longitudinally along rails to obtain contact will not be permitted. No rail anchor shall be applied so as to be within 6" of the end of a joint bar.

3.3.17 Ballast. Ballast disturbed during the removal of the defective tie and placement of the new tie shall be restored to the track structure. Existing ballast shall be re-used. New ballast shall be used as required. All cribs shall be full of ballast and track will be broomed with a ballast regulator so that ballast is level with the top of the tie. No ballast shall remain on the top of the tie. Shoulders shall conform to the Railroad standard cross section. Ballast Shall be placed and transported as specified in 2.3.10.

3.3.18 Surfacing. Ties shall be replaced prior to tamping. If during the passes with the tamper there are ties that do not come up with the rail, the Contractor shall raise them by other means so that the rail has full bearing on the plate. Contractor will surface the track to exceed FRA Class III Safety Standards unless rail condition does not allow it. The crosstie shall be tamped to provide a full bearing of the rail, tie plate, and tie within the track structure. Equipment and procedures shall comply with those stated in Section 2, INSTALL BALLAST AND SURFACE.

3.4.19 ~~CWR territory~~. If in CWR territory, the railroad's CWR plan shall be complied with fully.

3.3.20 ~~Transition Plan~~. Contractor shall submit to the Railroad, for approval, the plan to transition the new work into the existing track as to allow train movements.

3.4 Basis of Payment.

3.4.1 ~~Units~~. Payment for remove and install crossties shall be per tie installed. (EACH)

3.4.2 ~~Included Cost~~. The unit price bid to remove and install crossties shall include the cost of all the labor, equipment, and tools necessary to remove and install crossties. The cost shall include distribution of ties. The cost of dumping of ballast and surfacing of the tie rehabilitation limits will be paid for under a separate item. The cost for installation of switch ties and disposing of all timbers, will be paid for under a separate item.

END OF SECTION

## SWITCH REPLACEMENT

4.1 Description. The work shall consist of the removal of the existing switch ties, installation of new switch ties including, handling, staging, installation, tamping, and related work at all locations designated in the contract documents or as directed by the Engineer. Removed ties shall become the property of the Contractor. The timber/ties shall be removed from the right-of-way and disposed of by the Contractor within 30 days of completion of the project. The Contractor shall certify that the timbers were disposed of in accordance with all environmental regulations.

4.2 Material. All material used for this work shall be furnished by the Railroad, conform to A.R.E.M.A. Portfolio of Plans and Specifications, and be approved by the Engineer prior to use. Any material distributed by the Contractor which is lost, stolen or damaged will be replaced by the Contractor at its cost and expense.

4.2.1 Ownership of Material - Materials furnished by the Railroad will remain the property of the Railroad. The Contractor shall dispose of specific Railroad-owned salvaged materials of which the Railroad does not desire to retain ownership. The Railroad reserves the right to specify such materials at any time during the contract period. Disposal of these materials shall be as approved by the Engineer. Non-specified material shall become the property of the Contractor and shall be removed from the right-of-way and disposed of by the Contractor within 30 days of completion of the project. As specified in Section 5.

4.2.2 Storage Areas - Certain areas within Railroad owned right-of-way may be made available to the Contractor. These areas, if available, will be defined and located at the pre-bid conference. Security of the storage areas shall be the Contractor's responsibility. Material storage locations and method of storage must in no way interfere with traffic and must be designated or approved. The Railroad shall have the right to move or have the Contractor move material from storage locations. The Railroad shall bear the actual cost of such moving from storage locations which were specifically designated by the Engineer. Moving stored materials from other locations shall be at Contractor's expense.

4.2.3 Record Keeping. The Contractor shall provide to the Railroad, or their representative, a record of all materials that are installed for this project. A weekly inventory shall be kept by the Contractor showing materials on hand, material that has been installed, material that has been salvaged, and material that has been stored for the Railroad. This inventory will be made available to the Railroad at any time they request this information.

4.3 Construction Details.

4.3.1 Staging. Ties shall be stockpiled at staging locations shown in the Plans. The Contractor shall submit locations of additional proposed track side stockpile/distribution points to the Engineer for review and approval prior to stockpiling. Restoration of stockpile, loading or staging areas shall be included in Tie Replacement items. This

Work shall include restoring the ground surface back to the original condition and seeding, fertilizing and mulching of dirt or grassed areas.

4.3.2 Timber and Debris Removal. All timber and debris removed from the site shall become the property of the Contractor. It shall be removed from Railroad property within thirty days from the completion of the work. All material shall be disposed of in a lawful manner as required. As specified in Section 5.

4.3.3 Train Traffic. The Contractor shall perform all work in manner that will allow train traffic as required by the Railroad.

4.3.4 Drawings and Specifications. All work shall be installed in accordance with the contract drawings and specifications.

4.3.5 Marking. Ties to be replaced will be indicated by a paint marking on the defective tie in the quantity and general location shown in the project documents.

4.3.6 Tie Handling. All ties shall be handled, transported, and stored in accordance with current AREMA standards. New ties shall be handled and placed with either mechanical tie insertion device or tie tongs. Only approved lifting devices that do not damage the tie should be used; the use of picks will not be permitted. Tie removal, handling, and placement equipment is subject to the approval of the Engineer prior to use. Ties that are damaged by mishandling will be replaced by the Contractor at his expense.

4.3.7 Tie Placement. Ties will be placed in the track, square to the centerline of the track with the wider heartwood face down. To the extent practicable, the end of the ties shall be a uniform line.

4.3.8 Tie Spacing. Ties should be spaced uniformly, replaced at existing locations. Existing spacing is approximately 20".

4.3.9 Gage. During the tie installation process, the track shall be regaged to 4' 8 1/2" when the track gage exceeds ( -1/2" or +1/2"). Changes in gage shall be made in uniform increments of not more than 1/4" in 20 feet. All timber that has had a spike removed shall receive a treated tie plug or tie plugging compound.

4.3.10 Spike Pattern. The Contractor shall match existing spiking pattern. Tangent – Two (2) rail holding spikes per plate. Curves Two (2) rail holding and One (1) field side plate holding. All spikes that are removed shall be gathered and stock piled at a location designated by the Railroad.

4.3.11 Spike Depth. All ties shall have rail holding spikes installed before prior to train movement. Rail holding spikes shall be driven so as to allow a one-eighth inch (1/8") space between the underside of the spike head and the top of the base of the rail. The spikes shall not be over driven. Spikes shall not be bent against the rail.

4.3.12 Bent Spikes. Any bent spikes shall be removed. If a spike is removed, the resulting hole shall be plugged with a treated tie plug of a size sufficient to completely and tightly fill the hole.

4.3.13 Additional Spikes. Additional spikes may be used when required by local conditions or as ordered by the Engineer.

4.3.14 Tie Plates. The tie plates from the existing tie shall be re-used unless they are broken or nonfunctional (As specified in paragraph 4.3.15). Tie plates shall be used on all ties and shall be free of any dirt or foreign matter when being installed. They shall be installed centered about the width of the tie, with full bearing on the crosstie and the rail in full contact with the rail seat of the tie plate. Under no circumstances shall a shoulder be under the rail base. With a double shoulder canted plate, the cant (slope) of the plate shall be downward to the gage (inside) of the rail.

4.3.15 Defective Tie Plates. The tie plates from the existing tie shall be re-used unless they are broken or nonfunctional. The railroad will provide extra tie plates only if the plate was defective prior to this project. Tie plates will be judged defective due to any of the following reasons:

1. Rounded or worn shoulders.
2. Rounded or otherwise excessively worn spike holes.
3. A crack, bend, or other flaw in the plate.
4. Excessive deterioration from the rust, scale or brine.

4.3.16 Rail anchors. Rail anchors removed during the tie installation process shall be replaced with full contact with the new tie. Rail anchors shall be applied from the gage side of the rail whenever possible. Rail anchors must be installed so that they bear firmly against the tie. The Driving of anchors longitudinally along rails to obtain contact will not be permitted. No rail anchor shall be applied so as to be within 6" of the end of a joint bar.

4.3.17 Ballast. Ballast disturbed during the removal of the defective tie and placement of the new tie shall be restored to the track structure. Existing ballast shall be re-used. New ballast shall be used as required. All cribs shall be full of ballast and track will be broomed with a ballast regulator so that ballast is level with the top of the tie. No ballast shall remain on the top of the tie. Shoulders shall conform to the Railroad standard cross section. Ballast Shall be placed and transported as specified in 2.3.10.

4.3.18 Surfacing. Ties shall be replaced prior to tamping. If during the passes with the tamper there are ties that do not come up with the rail, the Contractor shall raise them by other means so that the rail has full bearing on the plate. Contractor will surface the track to exceed FRA Class III Safety Standards unless rail condition does not allow it. The crosstie shall be tamped to provide a full bearing of the rail, tie plate, and tie within the track structure. Equipment and procedures shall comply with those stated in Section 2, INSTALL BALLAST AND SURFACE.

4.4.19 CWR territory. If in CWR territory, the railroad's CWR plan shall be complied with fully.

4.4.20 Transition Plan. Contractor shall submit to the Railroad, for approval, the plan to transition the new work into the existing track as to allow train movements.

4.4 Basis of Payment.

4.4.1 Units. Payment for remove and install crossties shall be per tie installed. (EACH)

4.4.2 Included Cost. The unit price bid to remove and install switch ties shall include the cost of all the labor, equipment, and tools necessary to remove and install crossties. The cost shall include distribution of ties. The cost of dumping of ballast and surfacing of the tie rehabilitation limits will be paid for under a separate item. The cost for installation of crossties and disposing of all timbers, will be paid for under a separate item.

5 TIE DISPOSAL

5.1 Description. The work shall consist of the removal and disposal of all cross ties replaced. Removed ties shall become the property of the Contractor. The timber/ties shall be removed from the right-of-way and disposed of by the Contractor within 30 days of completion of the project. The Contractor shall certify that the timbers were disposed of in accordance with all environmental regulations.

5.2 Materials. Such materials as required for tie disposal and that are not to be part of the completed contract shall be as determined by the Contractor, except that they shall conform to any pertinent local or State Law, regulation, or code.

5.3 Construction Details. The work required to provide the above facilities and service for tie disposal shall be done in a safe and workmanlike manner and shall conform with any pertinent local or State Law, regulation, or code.

5.3.1 Housekeeping. Good housekeeping consistent with safety shall be maintained. Old ties shall be removed and stacked neatly along the ROW in groups of 10 or more. All old OTM is to be cleaned up and hauled off site by the Contractor.

5.3.2 Landfill. All arrangements for proper disposal at a certified landfill will be the responsibility of the selected Contractor.

5.3.3 Documentation. Weigh ticket and/or disposal ticket documentation must be provided as validation to invoices.

5.4 Basis of Payment.

5.4.1 Unit. Payment for tie disposal shall be per tie disposed.(EACH)

5.4.2 Included Cost. The unit price bid of tie disposal shall include the cost of all the labor, equipment, and tools necessary to dispose of ties, including, haul and landfill rate.

END OF SECTION



## 6 CROSSING REPLACEMENT – Rubber Rail Seal

### 6.1 ~~Description~~

This Work consists of removal of existing grade crossing, pavement approaches, and track; grading and preparing crossing support surface; excavation of the grade crossing roadbed, crosstie installation, track installation, installing concrete / timber panels in accordance with the Plans and these Specifications. Removed crossing material shall become the property of the Contractor. The removed cross ties shall be removed from the right-of-way and disposed of by the Contractor within 30 days of completion of the project. As specified in section 5 TIE DISPOSAL.

6.2 Materials. All material used for this work shall be furnished by the Railroad, be new, conform to A.R.E.M.A. Portfolio of Plans and Specifications, and be approved by the Engineer prior to use. Any material distributed by the Contractor, which is lost, stolen or damaged will be replace by the Contractor at its cost and expense.

6.2.1 Ownership of Material - Materials furnished by the Railroad will remain the property of the Railroad. Removed Turnout Steel and OTM shall remain property of the railroad and neatly stockpiled. The Railroad reserves the right to specify such materials at any time during the contract period. Disposal of these materials shall be as approved by the Engineer. Non-specified material shall become the property of the Contractor and shall be removed from the right-of-way and disposed of by the Contractor within 30 days of completion of the project.

6.2.2 Storage Areas - Certain areas within Railroad owned right-of-way may be made available to the Contractor. These areas, if available, will be defined and located at the pre-bid conference. Security of the storage areas shall be the Contractor's responsibility. Material storage locations and method of storage must in no way interfere with traffic and must be designated or approved. The Railroad shall have the right to move or have the Contractor move material from storage locations. The Railroad shall bear the actual cost of such moving from storage locations which were specifically designated by the Engineer. Moving stored materials from other locations shall be at Contractor's expense. Stored Materials shall be neatly arranged and blocked up off the ground and protected from mud and flood.

6.2.3 Record Keeping. The Contractor shall provide to the Railroad, or their representative, a record of all materials that are installed for this project. A weekly inventory shall be kept by the Contractor showing materials on hand, material that has been installed, material that has been salvaged, and material that has been stored for the Railroad. This inventory will be made available to the Railroad at any time they request this information.

### 6.3 Construction Details.

6.3.1 Removal Preparation. Before the crossing planks / panels are removed, the contractor shall saw cut the roadway surface a minimum of 5 feet from the nearest rail and the full depth of the current road surface. The joint cut is to be transverse to the

ties at a minimum set back distance shown in the Plans or that allowing the contractor to complete all Work within the limits of the crossing. The width shall accommodate the Contractors compaction equipment width. Asphalt shall be removed down to the aggregate base and all roadway aggregate or roadway subgrade that lies between the sawn joint and the crossing surface shall be removed to a minimum depth of 6 inches below bottom of ties or a depth necessary to complete the work.

6.3.2 Rail Cuts. Use only approved rail saw and abrasive cutting wheel for cutting rail. Cuts shall be square and clean. Rail shall be cut with Nominal Rail stagger of no less than 3 feet. Rail shall be cut so the minimum distance between cuts on the same rail is no less than 19 ½ feet. When given the option of cutting existing rail or cutting the rail being installed, cut the existing rail. Do not use cutting torches on rail; rail cut with torches will be rejected.

6.3.3 Removal of Existing Track Structure. The Contractor shall remove and disassemble the existing crossing surface, rails, plates and other track materials including track spikes, anchors, joint bars, and hardware as shown in the Plans. The removed track material and asphalt shall become property of the Contractor.

6.3.4 Layout of Grade Crossing. The Contractor shall be responsible to provide all survey and measurements required to layout the grade crossing and associated work in accordance with these specifications and the crossing manufacturer's requirements. Railroad panel may be built outside of installation location and placed whole or built within the area of excavation.

6.3.5 Trackbed Preparation. Existing ballast and other base material shall be excavated as shown in the Plans. All existing drainage ditches and channels adjacent to the grade crossing shall be cleaned and sloped to provide drainage away from the grade crossing.

6.3.6 Tie Handling. All ties shall be handled, transported, and stored in accordance with current AREMA standards. New ties shall be handled and placed with either mechanical tie insertion device or tie tongs. Only approved lifting devices that do not damage the tie should be used; the use of picks will not be permitted. Tie removal, handling, and placement equipment is subject to the approval of the Engineer prior to use. Ties that are damaged by mishandling will be replaced by the Contractor at his expense. Ties with minor scrapes shall be treated with field preservative in accordance with the manufacturer's recommendations.

6.3.7 Tie Placement. Ties will be placed in the track, square to the centerline of the track with the wider heartwood face down. To the extent practicable, the end of the ties shall be a uniform line.

6.3.8 Tie Spacing. Ties should be spaced uniformly, replaced at existing locations. Existing spacing is approximately 20".

6.3.9 Rail Placement. Nominal rail stagger shall be a minimum of 3 feet. On curves, stagger will be re-established when stagger exceeds 1.5 feet from nominal. Minimum rail stagger at “tie- ins” for track shall be 12 feet. Rails shall be placed base down, parallel with track, avoiding excessive bending or damage, using suitable mechanical equipment. Care shall be taken to avoid placing rails on signal equipment, manhole covers, electrical connections, or near any other Installation that could be susceptible to damage.

6.3.10 Plates. New properly sized plates (switch, hook, flat, ridged and tie) shall be used on all timbers, and shall be free of any dirt or foreign matter when being installed, plates shall be centered about the width of the timber. The plate shoulder, ridges or hooks shall be properly set so as to bear firmly against the rail, frog or other turnout assemblies as required.

6.3.11 Spiking. All rail holding spikes shall be started with the head pointed toward the rail and driven vertically and square with the rail and so driven as to allow 1/8" to 3/16" in the space between the under side of the head of the spike and the top of the base of the rail. In no case shall the spikes be over-driven. Rail holding spiking arrangement shall be in accordance with the Contract Documents. Plate holding spikes shall be started with the head pointed toward the rail and driven vertically so head has full bearing against the tie plate. Plate holding spiking arrangement shall be in accordance with the Contract Documents. No spikes shall be driven against the ends of joint bars. Care shall be taken not to strike rail or fastenings when driving spikes. Spikes which are bent while being installed, and do not meet proper alignment, or designated head contact, will be removed. The hole shall be plugged properly with a treated tie plug, and a new spike installed. Timber spiking for standard tie plates shall conform to the following criteria:

Degree of Curve	Spike Pattern
0-00 to 3-00	2 rail holding
3-01' to 8-00'	2 rail holding and 1 plate holding – field side
8-01' to 12-30'	2 rail holding and 2 plate holding – 1 field side and 1 gauge side
12-31' to 16-00'	3 rail holding and 2 plate holding – 1 field side and 1 gauge side
16-01' to 18-00'	3 rail holding and 3 plate holding – 2 field side and 1 gauge side
18-01' to 20-00'	4 rail holding and 4 plate holding – 2 field side and 2 gauge side
Note: Timber spiking for hook plates and twin tie plates (hook, flat or ridged) shall require only one spike at the ends of plate so as not to spike kill timber.	

6.3.12 Gauging. Track gage shall be set at the time of spiking for the entire work limits for this item. The gage shall be set at 56-½ inches, with an allowable tolerance of plus or minus 1/8 inch

6.3.13 Anchoring. Anchors shall be installed for all ties, if panel is built outside of final installation location to prevent ties from skewing. All anchors shall be removed prior to surfacing. Outside of asphalt surface ties shall be installed using the box anchor method on the same side of the tie on both rails and in the accordance to the existing anchor pattern. Rail anchors shall be applied from the gauge side of the rail whenever possible. Rail anchors must be installed so that they bear firmly against the tie race. The driving of anchors longitudinally along rails to obtain this contact will not be permitted. No rail anchor shall be applied so as to be within 6" of the end of a joint bar.

6.3.14 Rail Joints. Rail joints shall be spaced as required for rail, size and if insulated or non-insulated, as indicated in the Contract Documents or A.R.E.M.A. Manual- Current Edition for the rail furnished. Contractor shall determine the proper rail dimensions for the crossing prior to work commencement.

6.3.15 Bolt Holes. If not immediately welding, New rail bolt holes shall be drilled only with a rail drill. No other method is permissible. Rail shall be drilled before joint bars are applied. Drilling shall be performed by either, center punching hole location and drilling or by using a proper template. Holes are to be of the size prescribed for rail section and joint bar type. If crossing joints are intended to be welded, then a whole must note be drilled within 4.5 inches of the rail end.

6.3.16 Joint Bars. Joint Bars must be properly applied to meet FRA class of track standards with full number and correct size of bolts, nuts and spring washers. Joint bolts must be properly tightened before spiking rail. Bolts shall be placed with the nuts alternatively on the inside and outside of the rail. Bolts will be torqued to AREMA Volume 1, Section 5.5, starting from the center working out. Fishing surfaces of rails at joint bars shall be swabbed with grease. Use outer four bolt holes only when installing bolted joints that will be eliminated by field welding. Do not drill inside holes at future field weld locations. All joints that will remain bolted shall use all bolts. Before bolted joints are considered final, they will be retightened, to specified torque, with a power wrench after final surfacing and regulating. The non-defective joint bars shall become the property of railroad and stockpiled at the designated location.

6.3.17 Comp Bars. When joining rails of differing sizes with a compromise joint, it shall be fitted so that the top of the rail surface and the gauge face of the rails to be connected are held in alignment. Bars must be installed, as markings indicate, GAUGE SIDE/FIELD SIDE. When joining rails with a difference of 25 lbs or greater, a step down rail between 16.5 to 19.5 feet in length, with the appropriate OTM, shall be installed between welds or compromise joint bars.

6.3.18 Surfacing. Following jointing of crossing panel to track, ballast shall be added in sufficient amount to allow mechanical tamper to lift and align panel. Ballast shall be mechanically tamped and dressed. Ballast regulating equipment shall be configured to avoid damage to track components. Excavator or other machinery may be used in case of excessive negative profile. A minimum of 2 passes by the tamper, plus a minimum of 1 pass by the tamper placing stone under center of tie. Final surface should place top of rail 1" above road surface along center line of road. Ballast in the crib area shall not reside above the top of the adjacent ties. Debris or stones shall be removed from the top of the ties. Excess ballast shall be removed and be placed as directed by the Engineer. Ballast damaged by overwork and/or excessive tamping or fouled by dirt or other deleterious material shall be removed and replaced at the Contractor's expense.

6.3.19 Rail Seal Application. Rail Seal and rail seal clamps to be installed per manufacturer's specifications. Rail seal must extend a minimum of 4 feet beyond the roadway travelled way. The rail seal must bear firmly against the rail and be free of any dirt or foreign matter when installed. Rail Seal clamps must be installed within in each crib and at the ends of the rubber rail seal to ensure the rubber rail seal is secured to the rail. Heavy Tape (such as duct or Gorilla) should be placed on the seam between top of rail and rail seal to cover existing gap prior to paving.

6.3.20 Asphalt. All old road material shall be removed. Area between surface cut and rail shall be leveled and free of all foreign material (mud, dirt, trash, etc.). Existing road surface should be milled to eliminate poor existing conditions. Asphalt base material should be placed in at least 2 equal lifts and compacted. Asphalt surface material may be placed in 1 lift and compacted to height of top of rail. A key edge shall be made and tack applied to existing road surface. A minimum of 20' runoff should be included for all traffic directions. Final roadway surface shall not allow standing water, seams must be thoroughly rolled, and edges compacted tight. Asphalt to extend and wrap around outer edges of rail seal. All excessive or extra asphalt must be properly disposed of by contractor.

6.3.21 Roadway Signage. Crossbucks and other signage to be installed to manufacturers specification and in accordance with FRA and MUTCD guidelines. Required signage, if applicable, will be defined at the pre-bid conference.

6.3.22 CWR territory. If in CWR territory, the railroad's CWR plan shall be complied with fully.

#### 6.4 Basis of Payment.

6.4.1. Units. Payment for crossing replacement shall be per track foot installed. (TF)

6.4.2. Included Cost. The unit price bid to replace crossing shall include the cost of all the labor, equipment, and tools necessary to remove existing crossing and roadway surfaces, build and install a complete crossing panel including completion of necessary

welds / tie ins. Cost shall include traffic control, road closure, and asphalt installation.  
The cost of removing, disposal, and paving road surface will be paid for under this item.  
The cost of timber disposal will be paid for under a separate item.

END OF SECTION

# Material List

All material used for this work shall be furnished by the Railroad, conform to A.R.E.M.A. Portfolio of Plans and Specifications, and be approved by the Engineer prior to use. Any material distributed by the Contractor which is lost, stolen or damaged will be replaced by the Contractor at its cost and expense. Materials furnished by the Railroad will remain the property of the Railroad. Non-specified material shall become the property of the Contractor and shall be removed from the right-of-way and disposed of by the Contractor within 30 days of completion of the project. The Contractor shall provide to the Railroad, or their representative, a record of all materials that are installed for this project. A weekly inventory shall be kept by the Contractor showing materials on hand, material that has been installed, material that has been salvaged, and material that has been stored for the Railroad. This inventory will be made available to the Railroad at any time they request this information.

Material/Item	Unit	Quantity	Description
Track Ties	Each	2251	7" IG 8'6"
9' Switch Tie	Each	36	
10' Switch Tie	Each	43	
11' Switch Tie	Each	30	
12' Switch Tie	Each	25	
13' Switch Tie	Each	17	
14' Switch Tie	Each	21	
15' Switch Tie	Each	32	
16' Switch Tie	Each	27	
17' Switch Tie	Each	9	
Rail	LF	540	115RE (60' Pieces Blank Ends)
Track Bolts	Each	20	1"x6"
Spikes	50# Keg	263	5/8 X 6"
Anchors	Each	640	115RE Knock-on; New
Welds	Each	16	115RE
Rubber Rail Seal/ Clips	TF	136	115RE (Clips 100)
Plates	Each	320	115 RE New
Ballast	Ton	1080	#4 Arema Standard
Cross Buck Assembly	Each	2	Post, Crossbucks, Reflective Strips

# Drawings

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