

**CONTRACT DOCUMENTS, EXHIBITS  
AND  
SPECIFICATIONS**

**FOR**

**CITY OF CARROLLTON**

**ROSEMEADE AQUATICS CENTER DECK  
RESURFACING**

**2018**



**BID SET**  
January 2018

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**CITY OF CARROLLTON, TX  
ROSEMEADE AQUATICS CENTER DECK RESURFACING**

**CONTRACT DOCUMENTS  
AND  
SPECIFICATIONS**

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**END OF TOC**

## ADVERTISEMENT FOR PROPOSALS

Sealed proposals, addressed to the City of Carrollton, will be received at the offices of the Purchasing Manager, City Hall, 1945 E. Jackson Rd, Carrollton, Texas 75006, until 2:00 pm, on Wednesday, January 10, 2018 for the following work:

### **Requests for Competitive Sealed Proposals for the ROSEMEADE AQUATICS CENTER DECK RESURFACING**

The submitted proposals will be publicly opened on Wednesday, January 10, 2018 at 2:00 pm at the place designated for submission of proposals.

This project will generally include all construction, labor, materials, testing, and associated activities necessary to deliver a fully functional aquatics deck surface replacement using "Kool Deck Elite". The total surfacing is approximately 50,000 square feet, and will include full removal of existing surface treatment, replacement with specified product, and all associated activities necessary to ensure proper installation.

Project is known as the "City of Carrollton Rosemeade Aquatics Deck Resurfacing" located at 1334 Rosemeade Parkway, Carrollton, Texas, for the CITY.

Construction services for this project will be selected through competitive sealed proposals in accordance with Chapter 2267, Subchapter D of the Texas Government Code. The City will evaluate and rank the contractor based on the following selection criteria: 65% proposed price; and 35% contractor qualifications. The City shall select the contractor that offers the best value as determined by the selection criteria and ranking evaluation.

The estimated total budget for this project is \$157,000.

Instructions to Proposers, Proposal Forms, Specifications, and Contract Documents are available for download by written request only from the offices of the Director of Parks & Recreation via [Jason.Avara@cityofcarrollton.com](mailto:Jason.Avara@cityofcarrollton.com) . All documents are available for review in the Parks Dept.

There will be a highly recommended, but not mandatory, pre-proposal meeting held at the project site, 1334 Rosemeade Parkway, Carrollton, Texas, at 10:00 a.m. on Wednesday, January 3, 2018.

CITY OF CARROLLTON, TEXAS

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# CARROLLTON ROSEMEADE AQUATICS CENTER DECK RESURFACING

## INSTRUCTIONS TO PROPOSERS

### REQUIRED SUBMITTAL ITEMS

Prospective Proposers shall complete the following supplied documents in their entirety as minimal required submittal items:

- Proposal Form
- Contractor Qualifications Information Packet:
  - a) Qualification Statement of Proposer
  - b) Proposer's List of Proposed Sub-Contractors
  - c) Reference Statement of Proposer's Surety.
  - d) Insurance Requirement Affidavit
  - e) Proposer's Release of Qualification Information.
  - f) Current Financial Statement submitted by the sole proprietor, partnership, or corporation (Supplied by the Proposer).
- Conflict of Interest Questionnaire
- A cashier's or certified check or a Bid and Proposal Bond in the amount not to exceed five percent (5%) of the maximum contract amount as outlined in PROJECT BONDING below.

Failure to complete and submit all of these documents with the proposal shall be grounds for rejection.

All blanks on the Proposal Form must be completed and all subtotal and total prices must be stated in both script and figures where indicated. The City reserves the right to reject any or all proposals and to waive formalities. In case of ambiguity or lack of clearness in stating the price in the Proposals, the City reserves the right to consider the most advantageous construction thereof, or to reject the proposal. Unreasonable or unbalanced unit price will be considered sufficient cause of rejection of any Proposal.

Proposer shall have performed similar scope of work within the past three years. Proposers are expected to inspect the site of the work and to inform themselves regarding local conditions and conditions under which the work is to be done. Attention is called to all applicable laws concerning the wage scale and payment of prevailing wages specified. Prevailing wage rate will be established by the City of Carrollton for this project. All Proposers must comply with the rules and regulations for the Americans with Disabilities Act of 1990.

### PROJECT BONDING

Proposer must submit with their proposal, a cashier's or certified check in the amount not to exceed five percent (5%) of the maximum contract amount, payable without recourse to the City of Carrollton, Texas or a Bid and Proposal Bond **on the City's form** in the same amount from an approved Surety Company (according to the latest list of companies holding certificates of approval by the State Board of Insurance under 7.19-1

of the Texas Insurance Code) as guarantee that the Proposer will enter into a contract and execute bond and guarantee forms provided within ten (10) working days after award of contract to him.

The successful Proposer must furnish Performance, Payment and Maintenance Bonds each in the amount of 100% of the contract price from an approved Surety Company holding a permit from the State of Texas, to act a Surety and acceptable (according to the latest list of companies holding certificates of approval by the State Board of Insurance under 7.19-1 of the Texas Insurance Code) **on the City's attached forms.**

The successful Proposer must also be able to show evidence that it is authorized to do business in the State of Texas prior to executing the contract.

### **CONDITIONS OF SITE AND WORK**

Proposers should carefully examine the plans, specifications and all other information provided on this informational packet, visit the work site during the pre-submittal tour, and fully inform themselves as to all conditions and matters which can in any way affect the work or costs thereof. Should a Proposer find discrepancies in, or omissions from the provided information, or should Proposer be in doubt as to the meaning and intent, Proposer shall notify the City in writing at once and obtain clarification prior to submitting a Proposal. **The submission of a Proposal by Proposer shall be conclusive evidence that the Proposer is fully acquainted and satisfied as to the character, quality and quantity of work to be performed and materials to be furnished.**

A facility tour will be conducted at the time of the Pre-Submittal Conference. No facility tours or visits will be permitted at other times. Unattended visits or contact with any City personnel other than the City Representative shall be grounds for rejection.

### **LIABILITIES**

No costs associated with the presentation of this proposal, or incurred in any manner by the proposer, may be charged to the City of Carrollton.

All responses shall become property of the City of Carrollton and subject to disclosure under the Texas Open Records Law.

### **RESERVED RIGHTS**

City of Carrollton reserves the right to reject any and/or all proposals and to waive any and/or all technicalities and informalities received in response to this RFQ as allowed by law.

**PROPOSAL PACKET DELIVERY LOCATION**

It is the sole responsibility of the Proposer to deliver all required material to the PURCHASING DEPARTMENT by the specified time and date. U. S. Mail or commercial service (FedEx, UPS, courier, etc) delivery to mail room or any other location (City or otherwise) does NOT constitute delivery to the Purchasing Department.

**GUARANTEE OF FUNDING**

The City of Carrollton has funds available and authorized for the full contract amount for the construction of the improvements for all of its contracts approved in accordance with its policies.

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**CITY OF CARROLLTON, TX  
ROSEMEADE AQUATICS CENTER DECK RESURFACING**

**PROJECT SCHEDULE**

Advertisement for Proposal to Appear	Sunday, December 17, 2017 Sunday, December 24, 2017
Pre-Bid Meeting	Wednesday, January 3, 2018 @ 10:00 am
Open Proposals	Wednesday, January 10, 2018 @ 2:00 pm
Council Awards Contract*	Tuesday, January 23, 2018
Start Construction (no later than)*	Monday, February 5, 2018
Finish Construction (no later than)*	Friday, May 4, 2018

*\*Council award and resulting start date contingent on Council meeting. Actual completion date contingent upon construction time presented in proposal.*

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**BID PROPOSAL  
FOR  
CITY OF CARROLLTON**

**ROSEMEADE AQUATICS CENTER DECK RESURFACING**

January 10, 2018

TO:

The Honorable Mayor and City Council  
City of Carrollton  
City Hall  
Carrollton, Texas

Ladies and Gentlemen:

Pursuant to the foregoing Advertisement for Proposals and General Information, the undersigned Proposer having visited the site of the proposed construction, and having familiarized himself with the local conditions affecting the cost of the work and with all addenda to the said documents hereby proposes to do all the work and to furnish all necessary superintendence, labor, machinery, equipment, tools, materials, facilities, and incidentals, and to complete all the work upon which he bids, as provided by the attached specifications and shown on the plans and binds himself, on the acceptance of the proposal to execute a contract and bond, according to the accompanying forms, for performing and completing the said work within the required time and furnish all required guarantees, for the following prices to-wit:

TOTAL BASE PROPOSAL PRICE\*: \$ \_\_\_\_\_ Dollars

(\$ \_\_\_\_\_ )

Bidder commits to have 100% of the work which he has proposed complete within eighty-eight (88) consecutive calendar days

\*Total Proposal Price shall be stated in words and figures. In the event of discrepancy, the words shall control.

The undersigned Proposer hereby declares that he has visited the site of the work and has carefully examined the Contract Documents pertaining to the work covered by the above bid, and he further agrees to commence work within ten (10) days after the date of written notice to do so, and to have 100% of the work on which he has proposed complete within the time period stated herein.

Enclosed with this proposal is a Certified Check for \_\_\_\_\_ Dollars (\$\_\_\_\_\_) or a Bid/Proposal Bond in the sum of 5% of bid which it is agreed shall be collected and retained by the Owner as liquidated damages in the event this proposal is accepted by the Owner within ninety (90) days after the bids are received and the undersigned fails to execute the contract and the required bonds for the Owner within ten (10) days after the date said proposal is accepted, otherwise, said check or bond shall be returned to the undersigned upon request.

\_\_\_\_\_  
Bidder (Firm Name)

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

Title: \_\_\_\_\_  
(President/Vice-President)

\_\_\_\_\_  
Address

\_\_\_\_\_  
City State Zip

\_\_\_\_\_  
Phone Fax

RECEIPT IS HEREBY ACKNOWLEDGED OF THE FOLLOWING ADDENDA TO THE CONTRACT DOCUMENTS:

Addendum No. 1 dated \_\_\_\_\_ Received

Addendum No. 2 dated \_\_\_\_\_ Received

Addendum No. 3 dated \_\_\_\_\_ Received

## CONTRACTOR'S QUALIFICATION INFORMATION

1. All contractors shall complete and deliver to Purchasing Dept, the following documents:
  - a) Qualification Statement of CONTRACTOR
  - b) CONTRACTOR's List of Proposed Sub-Contractors
  - c) Reference Statement of CONTRACTOR's Surety.
  - d) Insurance Requirement Affidavit
  - e) CONTRACTOR's Release of Qualification Information.

All documents shall be delivered to the Purchasing Dept as a single complete package with the proposal, hereafter referred to as the Contractor's Qualification Information (CQI). No one form or statement of the CQI will be accepted individually. The Contractor's Qualification Information is due **NO LATER THAN** the proposal due date with all other required documents.

2. Qualification forms shall be completed as presented. Additional information may be included as attachments to the end of the questionnaire in your behalf. However, attachments are not accepted as substitutions to any qualification forms.
3. All prospective contractors shall submit evidence that they have a practical knowledge of the particular work in this project and that they have the financial resources to complete the proposed work.

In determining the contractor's qualifications, the following factors will be considered: Work previously completed by the contractor and proposed subs; qualified personnel and adequate resources to do the work properly and expeditiously; positive responses from previous clients; technical expertise and safety record and other appropriate factors submitted by the firm in response to the request.

4. In the event of incomplete, inaccurate or missing forms, the City has the right to declare the vendor non-responsible and award the contact the next responsible proposer meeting the qualifications.
5. SUBSTITUTION OF PROJECT MANAGER OR PROJECT SUPERINTENDENT LISTED HEREIN WITHOUT EXPRESSED PRIOR PERMISSION FROM THE CITY IS NOT PERMITTED AND MAY BE CONSIDERED GROUNDS FOR DISQUALIFICATION DURING SELECTION or BREACH ONCE THE CONTRACT IS EXECUTED.

**QUALIFICATION STATEMENT OF CONTRACTOR**

CONTRACTOR FIRM NAME: \_\_\_\_\_

Circle One: Sole Proprietor   Partnership\*   Corporation   Joint Venture\*

*\*If partnership or Joint Venture, complete this sheet for all partners*

Contact Person Name: \_\_\_\_\_

Title: \_\_\_\_\_

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

Local City, State Zip: \_\_\_\_\_

Phone (Office): \_\_\_\_\_

Phone (Mobile): \_\_\_\_\_

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

Principal Place of Business:

\_\_\_\_\_

State

County

If the CONTRACTOR is a corporation, fill out the additional following:

State and County of Incorporation: \_\_\_\_\_

Location of Principal Office: \_\_\_\_\_

Contact Person(s) at Office: \_\_\_\_\_ Phone: \_\_\_\_\_

List of Officers of the Corporation and person(s) authorized to execute Contracts on Behalf of the Corporation:

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

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

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

**Contractor's Company History**

How many years has your organization been in business as a General Contractor? \_\_\_\_\_

Greatest number of contracts in excess of \$100,000 under construction at one time in company's history: \_\_\_\_\_

Total approximate dollar value of incomplete work outstanding: \$ \_\_\_\_\_

Approximate percent of total contract work (excluding general conditions) to be self-performed by General Contractor's own forces on this project: \_\_\_\_\_

Approximate number of projects in the past five years in which the contractor has installed aquatics deck surfacing projects. \_\_\_\_\_

**Approximate number of projects in the past five years in which the contractor has installed Mortex Kool Deck specifically.** \_\_\_\_\_

Has your organization ever contracted (as prime or sub) with the City of Carrollton on any construction project? \_\_\_\_\_ (please list below or attach description)

Approximate number of projects and dollar amount of work completed for the City of Carrollton by General Contractor's current organization as prime within the past five years:

\_\_\_\_\_

In the past three years, has your organization been involved (directly or indirectly) in any project related litigation? \_\_\_\_\_ (If yes, please attach explanation)

**Has your organization ever been involved (directly or indirectly) in any litigation involving the City of Carrollton?** \_\_\_\_\_ (If yes, please attach explanation)

Have you or any present partner(s) or officer(s) failed to complete a contract for reasons related to performance? \_\_\_\_\_

If so, name of owner and/or surety:

Contact Person: \_\_\_\_\_

Phone: \_\_\_\_\_

**Project Management**

Proposed Project Manager: \_\_\_\_\_

Years total experience: \_\_\_\_\_ Years with the company: \_\_\_\_\_

Years managing this particular type of project: \_\_\_\_\_ How many projects? \_\_\_\_\_

Direct experience with Kool Deck (Y/N) \_\_\_\_\_

Proposed PM’s role/title in any complete or incomplete project listed in the following sections attach descriptions in appendix if projects are not included on CQI pages):

Project	Role/Title	Value of Work	Date

Will the PM manage other construction projects concurrently with this project? \_\_\_\_\_

Will the PM be on-site full time (If, No, complete the following)? \_\_\_\_\_

**Project Superintendent**

Proposed Project Superintendent: \_\_\_\_\_

Years total experience: \_\_\_\_\_ Years with the company: \_\_\_\_\_

Years managing this particular type of project: \_\_\_\_\_ How many projects? \_\_\_\_\_

Direct experience with Kool Deck (Y/N) \_\_\_\_\_

Proposed superintendent’s role/title in any complete or incomplete project listed in the following sections attach descriptions in appendix if projects are not included on CQI pages):

Project	Role/Title	Value of Work	Date

Will the PS manage other construction projects concurrently with this project? \_\_\_\_\_

Will the PS be on-site full time? \_\_\_\_\_

**Any references on the following pages that do not include current and complete contact information will be omitted from consideration for selection.**

Provide the following information for each relevant project CONTRACTOR has completed or currently under construction in the last five years:

Project: \_\_\_\_\_

Owner: \_\_\_\_\_

Owner Contact Person: \_\_\_\_\_ Phone: \_\_\_\_\_

Was this a deck surfacing project (Y/N): \_\_\_\_\_ Did it use Kool Deck(Y/N): \_\_\_\_\_

Project Manager: \_\_\_\_\_ Project Superintendent: \_\_\_\_\_

Contract Price: \_\_\_\_\_ Start Date: \_\_\_\_\_ Finish Date: \_\_\_\_\_

Description of Work: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Project: \_\_\_\_\_

Owner: \_\_\_\_\_

Owner Contact Person: \_\_\_\_\_ Phone: \_\_\_\_\_

Was this a deck surfacing project (Y/N): \_\_\_\_\_ Did it use Kool Deck(Y/N): \_\_\_\_\_

Project Manager: \_\_\_\_\_ Project Superintendent: \_\_\_\_\_

Contract Price: \_\_\_\_\_ Start Date: \_\_\_\_\_ Finish Date: \_\_\_\_\_

Description of Work: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Project: \_\_\_\_\_

Owner: \_\_\_\_\_

Owner Contact Person: \_\_\_\_\_ Phone: \_\_\_\_\_

Was this a deck surfacing project (Y/N): \_\_\_\_\_ Did it use Kool Deck(Y/N): \_\_\_\_\_

Project Manager: \_\_\_\_\_ Project Superintendent: \_\_\_\_\_

Contract Price: \_\_\_\_\_ Start Date: \_\_\_\_\_ Finish Date: \_\_\_\_\_

Description of Work: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

RELEVANT EXPERIENCE (cont)

Project: \_\_\_\_\_  
Owner: \_\_\_\_\_  
Owner Contact Person: \_\_\_\_\_ Phone: \_\_\_\_\_  
Was this a deck surfacing project (Y/N): \_\_\_\_\_ Did it use Kool Deck(Y/N): \_\_\_\_\_  
Project Manager: \_\_\_\_\_ Project Superintendent: \_\_\_\_\_  
Contract Price: \_\_\_\_\_ Start Date: \_\_\_\_\_ Finish Date: \_\_\_\_\_  
Description of Work: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Project: \_\_\_\_\_  
Owner: \_\_\_\_\_  
Owner Contact Person: \_\_\_\_\_ Phone: \_\_\_\_\_  
Was this a deck surfacing project (Y/N): \_\_\_\_\_ Did it use Kool Deck(Y/N): \_\_\_\_\_  
Project Manager: \_\_\_\_\_ Project Superintendent: \_\_\_\_\_  
Contract Price: \_\_\_\_\_ Start Date: \_\_\_\_\_ Finish Date: \_\_\_\_\_  
Description of Work: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Project: \_\_\_\_\_  
Owner: \_\_\_\_\_  
Owner Contact Person: \_\_\_\_\_ Phone: \_\_\_\_\_  
Was this a deck surfacing project (Y/N): \_\_\_\_\_ Did it use Kool Deck(Y/N): \_\_\_\_\_  
Project Manager: \_\_\_\_\_ Project Superintendent: \_\_\_\_\_  
Contract Price: \_\_\_\_\_ Start Date: \_\_\_\_\_ Finish Date: \_\_\_\_\_  
Description of Work: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

(Use Attachments at the end of the CQI If Necessary)

**Commercial (non-public) Reference:**

Company: \_\_\_\_\_

Contact Person: \_\_\_\_\_

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

Title: \_\_\_\_\_

Phone: \_\_\_\_\_

Company: \_\_\_\_\_

Contact Person: \_\_\_\_\_

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

Title: \_\_\_\_\_

Phone: \_\_\_\_\_

**Municipal Reference:**

City: \_\_\_\_\_

Contact Person: \_\_\_\_\_

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

Title: \_\_\_\_\_

Phone: \_\_\_\_\_

City: \_\_\_\_\_

Contact Person: \_\_\_\_\_

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

Title: \_\_\_\_\_

Phone: \_\_\_\_\_

**CONTRACTOR'S LIST OF PROPOSED SUB-CONTRACTORS**

Sub-Contractor's Name*	Type of Work to be Performed	Approx. % of total const. work	Teamed with before? (y/n)

\*Contractor shall notify the City in writing prior to any change in sub-contractor

**REFERENCE STATEMENT OF CONTRACTOR'S SURETY**  
**(To be completed and signed only by the Surety)**

CONTRACTOR: \_\_\_\_\_

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

1. For this CONTRACTOR, how many contracts **that are now complete** has this surety furnished contract bonds? \_\_\_\_\_
2. For this CONTRACTOR, how many **incomplete contracts** has this surety furnished contract bonds? \_\_\_\_\_
3. What is the maximum bonding capacity of this CONTRACTOR? \$ \_\_\_\_\_
4. Does the current financial information on this CONTRACTOR indicate solvency and a financial ability to complete this contract? \_\_\_\_\_  
\_\_\_\_\_
5. Does the information available to this surety indicate that the Contractor pays accounts when due? \_\_\_\_\_ If not, give details:  
\_\_\_\_\_  
\_\_\_\_\_
6. Is it the surety's opinion that the CONTRACTOR has sufficient experience and financial resources to satisfactorily perform the contract? \_\_\_\_\_
7. Provided this CONTRACTOR does not assume other commitments or that this surety does not acquire further information that in your opinion will materially affect the CONTRACTOR's capacity to perform this contract, will you furnish the bonds as specified? \_\_\_\_\_

**REMARKS:**

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

Surety: \_\_\_\_\_

Signed: \_\_\_\_\_ (Local office in Dallas County)

Title: \_\_\_\_\_

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

Phone:      City                      State                      Zip  
\_\_\_\_\_

**INSURANCE REQUIREMENT AFFIDAVIT**

**(To be completed and signed only by the Insurance Agent)**

I, the undersigned agent, certify that the insurance requirements contained in this contract document have been reviewed by me with the vendor identified below. If awarded the contract by the City of Carrollton, I will be able, within ten (10) working days after being notified of such award, to furnish a valid insurance certificate to the CITY meeting all of the contract requirements. There shall be no exclusions or exceptions which would not allow the City to recover on General Liability and automobile insurance as additional insured. Notice of Cancellation or Change shall be given thirty (30) days before cancellation regardless of reason, including failure to pay. There shall be no deductible applicable to the City.

\_\_\_\_\_  
Agent Signature

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

\_\_\_\_\_  
Name of Insurance Carrier

\_\_\_\_\_  
Address of Agency

\_\_\_\_\_  
City State Zip

\_\_\_\_\_  
Phone #

\_\_\_\_\_  
Email Address

\_\_\_\_\_  
Vendor / Contractor Name

**Acknowledgement**

Subscribed and Sworn before me by the above named \_\_\_\_\_

On this \_\_\_\_ day of \_\_\_\_\_.

(seal)

\_\_\_\_\_  
Notary Public in and for the State of Texas

**NOTICE TO THE AGENT**

If this requirement is not met, the City has the right to declare this vendor non-responsible and award the contract to a different party.

## CONTRACTOR'S RELEASE OF QUALIFICATION INFORMATION

For types of work outlined in Qualification Statement of CONTRACTOR, the undersigned is submitting information as required with the understanding that the purpose is for the City's confidential use, only to assist in determining the qualifications of CONTRACTOR's organization to perform the type and magnitude of work designated, and further, CONTRACTOR guarantees the truth and accuracy of all statements made, and will accept the City's determination of qualifications without prejudice. The surety herein names, any other bonding company(s), bank(s), subcontractor(s), supplier(s), or any other person(s), firm(s) or corporation(s) with whom CONTRACTOR has done business, or who have extended any credit to CONTRACTOR is (are) hereby authorized to furnish the City with any information the City may request concerning performance on previous work and CONTRACTOR's credit standing with any of them; and CONTRACTOR hereby releases any and all such parties from any legal responsibility whatsoever on account of having furnished such information to the City:

Signed: \_\_\_\_\_ Title: \_\_\_\_\_

CONTRACTOR: \_\_\_\_\_ Date: \_\_\_\_\_

# CONFLICT OF INTEREST QUESTIONNAIRE

**FORM CIQ**

For vendor or other person doing business with local governmental entity

This questionnaire is being filed in accordance with chapter 176 of the Local Government Code by a person doing business with the governmental entity.

By law this questionnaire must be filed with the records administrator of the local government not later than the 7th business day after the date the person becomes aware of facts that require the statement to be filed. See Section 176.006, Local Government Code.

A person commits an offense if the person violates Section 176.006, Local Government Code. An offense under this section is a Class C misdemeanor.

**OFFICE USE ONLY**

Date Received

**1** Name of person doing business with local governmental entity.

**2**

Check this box if you are filing an update to a previously filed questionnaire.

(The law requires that you file an updated completed questionnaire with the appropriate filing authority not later than September 1 of the year for which an activity described in Section 176.006(a), Local Government Code, is pending and not later than the 7th business day after the date the originally filed questionnaire becomes incomplete or inaccurate.)

**3** Describe each affiliation or business relationship with an employee or contractor of the local governmental entity who makes recommendations to a local government officer of the local governmental entity with respect to expenditure of money.

**4** Describe each affiliation or business relationship with a person who is a local government officer and who appoints or employs a local government officer of the local governmental entity that is the subject of this questionnaire.

# CONFLICT OF INTEREST QUESTIONNAIRE

For vendor or other person doing business with local governmental entity

**FORM CIQ**

Page 2

**5** Name of local government officer with whom filer has affiliation or business relationship. (Complete this section only if the answer to A, B, or C is YES.)

This section, item 5 including subparts A, B, C & D, must be completed for each officer with whom the filer has affiliation or business relationship. Attach additional pages to this Form CIQ as necessary.

A. Is the local government officer named in this section receiving or likely to receive taxable income from the filer of the questionnaire?

Yes       No

B. Is the filer of the questionnaire receiving or likely to receive taxable income from or at the direction of the local government officer named in this section AND the taxable income is not from the local governmental entity?

Yes       No

C. Is the filer of this questionnaire affiliated with a corporation or other business entity that the local government officer serves as an officer or director, or holds an ownership of 10 percent or more?

Yes       No

D. Describe each affiliation or business relationship.

**6** Describe any other affiliation or business relationship that might cause a conflict of interest.

**7**

\_\_\_\_\_  
Signature of person doing business with the governmental entity

\_\_\_\_\_  
Date



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**CITY OF CARROLLTON, TEXAS**

**CONTRACT AGREEMENT**

STATE OF TEXAS        )

COUNTY OF DALLAS     )

THIS AGREEMENT, made and entered into this \_\_\_\_\_ **day of \_\_\_\_\_ A.D.**, \_\_\_\_\_ by and between the City of Carrollton, a municipal corporation, located in the County of Dallas and State of Texas, acting through Chrystal Davis, its Assistant City Manager, thereunto authorized so to do hereafter termed OWNER, and \_\_\_\_\_, County of \_\_\_\_\_, and State of \_\_\_\_\_, hereinafter termed CONTRACTOR.

WITNESSETH, that for and in consideration of the payments and agreements hereinafter mentioned, to be made and performed by the OWNER, and under the conditions expressed in the bond bearing even date herewith, the said CONTRACTOR, hereby agrees with the OWNER to commence and complete the construction of certain improvements described as follows:

**CITY OF CARROLLTON  
ROSEMEADE AQUATICS CENTER DECK RESURFACING**

and all extra work in connection therewith, under the terms as stated in the General Conditions of the Agreement and at CONTRACTOR'S own proper cost and expense to furnish all the materials, supplies, machinery, equipment, tools, superintendence, labor, insurance, and other accessories and services necessary to complete the said construction, in accordance with the conditions and prices stated in the Proposal attached hereto, and in accordance with the Advertisement for Proposal, General and Special Conditions of Agreement, Plans, Specifications and other documents and printed or written explanatory matter thereof, and addenda thereof, together with the CONTRACTOR'S written proposal, the General Conditions of the Agreement, and the Performance and Payment Bonds hereto attached; all of which are made a part hereof and collectively evidence and constitute the entire contract.

The CONTRACTOR hereby agrees to commence work within ten calendar (10) days after the date of written notice to do so shall have been given him, and to be 100% complete within **Eighty-Eight (88)** calendar days after the date of the written Notice to Proceed work, subject to such extensions of time as are provided by the General and Special Conditions.

The OWNER agrees to pay the CONTRACTOR in current funds the price or prices shown in the proposal, which forms a part of this contract, such payments to be subject to the General and Special Conditions of the Contract.

IN WITNESS WHEREOF, the parties to these presents have executed this Agreement in the year and day above written.

The City of Carrollton  
Owner

\_\_\_\_\_  
Contractor

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

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

Chrystal Davis, Assistant City Manager  
Print Name & Title

\_\_\_\_\_  
Print Name & Title

**ATTEST:**

\_\_\_\_\_  
Laurie Garber, City Secretary

Date: \_\_\_\_\_  
By Authority of Council Action

**Approved as to Content:**

\_\_\_\_\_  
Scott Whitaker,  
Director of Parks & Recreation

**Approved as to Form:**

\_\_\_\_\_  
Meredith Ladd,  
City Attorney

**CONTRACTOR'S BID & PROPOSAL BOND**

KNOW ALL MEN BY THESE PRESENTS,

That we \_\_\_\_\_, Principal, and \_\_\_\_\_, a corporation duly organized under the laws of the State of Texas, and authorized to issue surety bonds in the State of Texas, Surety herein, are held and firmly bound unto the City of Carrollton, owner, in the sum of \_\_\_\_\_ dollars (\$\_\_\_\_\_) for the payment of which sum we will bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents.

WHEREAS, Principal has submitted or is about to submit a bid or proposal to Owner to enter a contract as defined by Ch 2267, Subchapter D of the Texas Government Code for:

**CITY OF CARROLLTON  
ROSEMEADE AQUATICS CENTER DECK RESURFACING**

NOW, THEREFORE, if the Owner shall accept the bond of the Principal and the Principal shall enter into a contract with the Owner in accordance with the terms of such bid or proposal, and give such bond or bonds as may be specified in the bidding or 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, then this obligation shall be null and void, otherwise to remain in full force and effect and the amount hereof shall be paid to and retained by Owner as liquidated damages for Principal's failure to do so.

IN WITNESS WHEREOF, this instrument has been executed by the duly authorized representatives of the Principal and the Surety.

Signed and sealed this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_.

\_\_\_\_\_  
Principal

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

(NAME OF SURETY)

By: \_\_\_\_\_  
Attorney-in-Fact

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**PERFORMANCE BOND**

**STATE OF TEXAS           §**  
**§**  
**COUNTY OF DALLAS       §**

KNOW ALL MEN BY THESE PRESENTS: That \_\_\_\_\_ of the City of \_\_\_\_\_, County of \_\_\_\_\_, and State of Texas, as principal, and \_\_\_\_\_ authorized under the laws of the State of Texas to act as surety on bonds for principals, are held and firmly bound unto the **City of Carrollton, Texas** (Owner), in the sum of \_\_\_\_\_ dollars (\$\_\_\_\_\_) as an appropriate measure of liquidated damages for the payment whereof, the said Principal and Surety bind themselves, and their heirs, administrators, executors, successors and assigns, jointly and severally, by these presents:

WHEREAS, the Principal has entered into a certain written contract with the Owner, dated the \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_, for the **ROSEMEADE AQUATICS CENTER DECK RESURFACING** which contract is hereby referred to and made a part hereof as fully and to the same extent as if copied at length herein.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION IS SUCH, that if the Principal shall faithfully perform the work in accordance with the plans, specifications, and contract documents and shall fully indemnify and save harmless Owner from all costs and damages which Owner may suffer by reason of Principals default, and reimburse and repay Owner all outlay and expense which Owner may incur in making good such default, then this obligation shall be void; otherwise to remain in full force and effect.

PROVIDED, HOWEVER, that this bond is executed pursuant to the provisions of Chapter 2253 of the Texas Government Code, as currently amended, and all liabilities on this bond shall be determined in accordance with the provisions of said statute to the same extent as if it were copied at length herein.

Surety, for value received, stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract, or to the work performed thereunder, or the plans, specification, or drawings accompanying the same, shall in any way affect its obligation on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the contract, or to the work to be performed thereunder.

IN WITNESS WHEREOF, the said Principal and Surety have signed and sealed this instrument this day of \_\_\_\_\_, \_\_\_\_\_.

\_\_\_\_\_  
Principal

\_\_\_\_\_  
Surety

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

By: \_\_\_\_\_  
Print or Type Name

Title: \_\_\_\_\_

Title: \_\_\_\_\_

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

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

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

The name, address and telephone number of the Resident Agent of Surety is: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**PAYMENT BOND**

**STATE OF TEXAS           §**  
**§**  
**COUNTY OF DALLAS       §**

KNOW ALL MEN BY THESE PRESENTS: That \_\_\_\_\_ of the City of \_\_\_\_\_, County of \_\_\_\_\_, and State of Texas, as principal, and \_\_\_\_\_ authorized under the laws of the State of Texas to act as surety on bonds for principals, are held and firmly bound unto the **City of Carrollton, Texas** (Owner), in the sum of \_\_\_\_\_ dollars (\$\_\_\_\_\_) for the payment whereof, the said Principal and Surety bind themselves and their heirs, administrators, executors, successors and assigns, jointly and severally, by these presents:

WHEREAS, the Principal has entered into a certain written contract with the Owner, dated the \_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_, for the **ROSEMEADE AQUATICS CENTER DECK RESURFACING** which contract is hereby referred to and made a part hereof as fully and to the same extent as if copied at length herein.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION IS SUCH, that if the said Principal and its subcontractors shall well and faithfully make payment to each and every claimant (as defined in Chapter 2253, Texas Government Code, as amended) supply labor or materials in the prosecution of the work under the contract, then this obligation shall be void; otherwise to remain in full force and effect.

PROVIDED, HOWEVER, that this bond is executed pursuant to the provisions of Chapter 2253 of the Texas Government Code, as currently amended, and all liabilities on this bond shall be determined in accordance with the provisions of said statute to the same extent as if it were copied at length herein.

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

IN WITNESS WHEREOF, the said Principal and Surety have signed and sealed this instrument this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_.

\_\_\_\_\_  
Principal

\_\_\_\_\_  
Surety

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

By: \_\_\_\_\_  
Print or Type Name

Title: \_\_\_\_\_

Title: \_\_\_\_\_

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

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

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

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

The name, address and telephone number of the Resident Agent of Surety is: \_\_\_\_\_

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

**MAINTENANCE BOND**

**STATE OF TEXAS           §**  
**§**  
**COUNTY OF DALLAS       §**

KNOW ALL MEN BY THESE PRESENTS: That \_\_\_\_\_ of the City of \_\_\_\_\_, County of \_\_\_\_\_, and State of Texas, as PRINCIPAL, and \_\_\_\_\_ fully authorized to transact business in the State of Texas, as Sureties, do hereby expressly acknowledge ourselves to be held and bound to pay unto the City of Carrollton, Texas, hereinafter called CITY, a municipal corporation organized and existing under the laws of Texas, at Carrollton, Dallas County, Texas, the sum of \_\_\_\_\_ (**\$ \_\_\_\_\_**) in lawful money of the United States, for the payment of which sum will and truly to be made unto said City of Carrollton, and its successors, said PRINCIPAL AND SURETIES do hereby bind ourselves, our heirs, executors, administrators, their assigns and successors, jointly and severally, firmly by these presents. This bond shall automatically be increased by the amount of any Change Order or Supplemental Agreement which increases the Contract price, but in no event shall a Change Order or Supplemental Agreement which reduces the Contract price decreases the sum of this Bond.

THIS obligation is conditioned, however, that whereas said \_\_\_\_\_ has this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_, entered into a written Contract with the said CITY to build and construct **ROSEMEADE AQUATICS CENTER DECK RESURFACING**, located in the City of Carrollton, Texas, which Contract and the Plans and Specifications therein mentioned adopted by the CITY, are hereby expressly made a part thereof as though the same were written and embodied herein.

WHEREAS, said Contract was entered into pursuant to the requirements of the CITY, and

WHEREAS, in said Contract, PRINCIPAL binds itself to use of materials and methods of construction such that all improvements including but not limited to **ROSEMEADE AQUATICS CENTER DECK RESURFACING** will be initially completed free of perceptible defects and will remain in good repair and condition and free of perceptible defects for and during the period of two (2) years after the date of acceptance of the completed improvements by the CITY, and

WHEREAS, said PRINCIPAL binds itself to construct said improvements in such a manner and obtain inspection approvals in proper sequence as are required to obtain acceptance by the CITY and to repair or reconstruct the said improvements in whole or in part at any time within said two (2) years period to such an extent as the CITY deems necessary to properly correct all defects except those which have been caused by circumstances and conditions occurring after the time of construction over which the PRINCIPAL had no control and which are other than those arising from defect of construction by the PRINCIPAL; and,

WHEREAS, after the acceptance of the improvements by the CITY, said PRINCIPAL binds itself, upon receiving notice from the CITY of the need thereof to repair or reconstruct said improvements and if the PRINCIPAL fails to make the necessary corrections, within ten (10) days after being notified, the CITY may do or have done all said corrective work and shall have recovery hereon for all expenses thereby incurred.

WHEREAS, under the Plans and Specifications, and Contract, it is provided that the PRINCIPAL will maintain and keep in good repair the work herein contracted to be done and performed for a period of two (2) years from the date of acceptance; it being understood that the purpose of this section is to cover all defective conditions arising by reason of defective material, work, or labor performed by said PRINCIPAL; and in case the said PRINCIPAL shall fail to do so, within ten (10) days after being notified, it is agreed that the CITY may do said work and supply such materials, and charge to same against the said PRINCIPAL AND SURETIES, on this obligation, and said PRINCIPAL AND SURETIES hereon shall be subject to the liquidated damages mentioned in said contract.

NOW THEREFORE, if the said PRINCIPAL, shall keep and perform its said agreement to maintain said work and keep the same in repair for the said maintenance period of two (2) years, as provided, then these presents shall be null and void, and have no further effect, but if default shall be made by the said PRINCIPAL in the performance of his contract to so maintain and repair said work, then these presents shall have full force and effect, and said CITY shall have and recover from said PRINCIPAL and SURETIES damages in the premises, as provided, and it is further agreed that this obligation shall be a continuing one against the PRINCIPAL and SURETIES hereon, and that successive recoveries may be had thereon for successive breaches until the full amount shall have been exhausted; and it is further understood that the obligation herein to maintain said work shall continue throughout said maintenance period, and the same shall not be changed, diminished, or in any manner affected from any cause during said time.

PROVIDED FURTHER, that if any legal action be filed upon this Bond, exclusive venue shall lie in Dallas County, State of Texas.

AND PROVIDED FURTHER, that the said Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract or to the Work to be performed thereunder or the specifications accompanying the same shall in anyway affect its obligation on this Bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the Contract or to the Work or to the Specifications.

This Bond complies with the provisions of Chapter 2253, Texas Government Code, and any other applicable statutes of the State of Texas.

The undersigned and designated agent is hereby designated by the Surety herein as the Resident agent in Dallas County to whom any requisite notices may be delivered and on whom service of process may be had in matters arising out of such suretyship, as provided by Article 7.19-1 of the Insurance Code, Vernon's Annotated Civil Statutes of the State of Texas.

IN WITNESS WHEREOF, the said \_\_\_\_\_ has caused these presents to be executed by them; and the said \_\_\_\_\_ has caused these presents to be executed by its ATTORNEY-IN-FACT \_\_\_\_\_ and the said ATTORNEY-IN-FACT \_\_\_\_\_ has hereunto set his hand this the \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_.

\_\_\_\_\_  
Principal

\_\_\_\_\_  
Surety

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

By: \_\_\_\_\_  
Print or Type Name

Title: \_\_\_\_\_

Title: \_\_\_\_\_

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

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

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

The name, address and telephone number of the Resident Agent of Surety is: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

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**GENERAL CONDITIONS FOR  
CONSTRUCTION CONTRACT**

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**CITY OF CARROLLTON**

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## GENERAL CONDITIONS

### 1. CONTRACT DOCUMENTS

It is understood and agreed that the Advertisement for Bids, Instructions to Bidders, Proposal, Proposal Data, Contract Agreement, Owner's Purchase Order, Owner's Resolution, Performance Bond, Payment Bond, General Conditions, Special Conditions, Specifications, Council of Governments Standard Specifications for Public Works, (current edition), Drawings, Addenda, and Change Orders issued by the Owner, specifications, and engineering data furnished by the Contractor and accepted by the Owner, are contract documents. Additionally, any other written instruments, correspondence, etc., bound in the volume of the contract documents at the time of execution by the Owner and Contractor shall be "contract documents" whether specifically designated as such or otherwise.

It is the intent of the contract documents that they be read as a whole and that all portions of the contract be interpreted so as to give meaning to their terms. In the event of any conflict in the contract documents, handwritten provisions shall prevail over typewritten and typewritten provisions shall prevail over preprinted matter. Additionally, the following order of precedence shall govern among the various contract documents, with the first listed having precedence over any documents listed thereafter.

- Scope of Work
- Contract Agreement
- Owners Resolution
- Addenda to Contract Conditions and Specifications "and Plans"
- Special Conditions
- General Conditions
- Technical Specifications
- Contract Conditions
- Contract Drawings
- All other Contract Documents
- General Design Standards
- Facility Services General Building Standards
- North Central Texas Council of Governments Standard Specifications for Public Works

The City reserves the right to let other contracts in connection with this work. The Contractor shall afford other contractors reasonable opportunity for the introduction and storage of their materials and execution of their work, and where required, shall properly connect and coordinate his work with theirs.

#### 1.1 **NO PREJUDICE AGAINST OWNER**

It is understood and agreed by Contractor that Owner has independently prepared most of the Contract Documents and Contractor agrees that, notwithstanding any doctrine of law to the contrary, no presumption and/or prejudice against Owner shall be presumed against Owner (nor construed in favor of Contractor) by any court of competent jurisdiction in its interpretation of the Contract Documents.

## 2. DEFINITIONS

Words, phrases, or other expressions used in these contract documents shall have meanings as follows:

- a. "Contract", "contract", or "contract documents" shall include the items enumerated above under CONTRACT DOCUMENTS.
- b. "Owner", "Agency", or "Inspector" shall mean the City of Carrollton, named and designated in the Contract Agreement. All notices, letters, and other communication directed to the Owner shall be addressed and delivered to:

City of Carrollton  
P.O. Box 110535  
Carrollton, Texas 75011-0535

Attn: Parks & Recreation Department

- c. "Contractor" shall mean the corporation, company, partnership, firm, or individual named and designated in the Contract Agreement, who has entered into this contract for the performance of the work covered thereby, and its, his, or their duly authorized representatives or its successors to the contract.
- d. "Subcontractor" shall mean and refer only to a corporation, partnership, or individual having a direct contract with the Contractor for performing work covered by these contract documents, or its successors to the contract.
- e. "Date of contract", or equivalent words, shall mean the date written on the Owner's Resolution, or the Owner's Purchase Order if a Resolution is not required, which shall also be the date written in the first paragraph of the Contract Agreement.
- f. "Day" or "days", unless herein otherwise expressly defined, shall mean a calendar day or days of 24 hours each.
- g. "The work" shall mean the equipment, supplies, materials, labor, and services to be furnished under the contract and the carrying out of all obligations imposed by the contract documents.
- h. "Drawings" or "plans" shall mean all (a) drawings furnished by the Owner or Engineer as a basis for proposals, (b) supplementary drawings furnished by the Owner to clarify and to define in greater detail the intent of the contract drawings and specifications, (c) drawings submitted by the successful bidder with his proposal, provided such drawings are acceptable to the Owner, (d) drawings furnished by the Owner to the Contractor during the progress of the work, and (e) engineering data and drawings submitted by the Contractor during the progress of work.
- i. Whenever in these contract documents the words "as ordered", "as directed", "as required", "as permitted", "as allowed", or words or phrases of like import are used, it shall be understood that the order, direction, requirements, permission,

or allowance of the Owner is intended only to the extent of judging compliance with the terms of the contract; none of these terms shall imply that the Owner has any authority or responsibility for supervision of the Contractor's forces or construction operations, such supervision and the sole responsibility therefor being strictly reserved for the Contractor.

- j. Similarly the words "approved", "reasonable", "suitable", "acceptable", "proper", "satisfactory", or words of like effect and import, unless otherwise particularly specified herein, shall mean approved, reasonable, suitable, acceptable, proper, or satisfactory in the judgement of the Owner, to the extent provided in "i" above.
- k. Whenever in these contract documents the expression "it is understood and agreed" or an expression of like import is used, such expression shall mean the mutual understanding and agreement of the parties executing the Contract Agreement.
- l. "Official Acceptance" shall mean the Owner's written acceptance of all work performed under this Contract.

### **3. CONTRACTOR'S PRELIMINARY OBLIGATION**

It is the responsibility of the bidder to deliver his proposal at the proper time and to the proper place. The proposal shall be delivered in a manila envelope with the appropriate job name on the outside. The mere fact that a proposal was dispatched by mail, express, or otherwise, will not be considered. The bidder must have his proposal in the hands of the proper official before closing time. Bids received after the advertised closing time will not be considered and will be returned unopened.

The Contractor, as successful bidder, shall furnish the required payment, performance and maintenance bond each in the amount of 100% of the contract price, a valid power-of-attorney proving the agent has the authority to execute the bonds for the surety, and certificates of insurance and an executed contract, within (10) days of notice of award. A certified copy of the Board Resolution authorizing said persons to sign and bind the firm must be included with each copy of the Contract. If such Contractor fails to enter into a contract or execute bonds as herein provided, the City may annul the award and award the contract to the bidder whose proposal was next most acceptable and the Contractor shall execute contract and bond as herein provided. The bidder to whom the first award was made shall then forfeit the bid security submitted with his proposal.

The official form of contract will be executed in seven copies. Two executed copies of the official contract documents and specifications (project manual) will be returned to the Contractor after the contracts and bonds have been approved and executed by the Owner. In addition to the two executed copies of the project manual, the Contractor will be furnished without charge two "field copies" of the plans. Additional sets may be obtained from the engineer at the cost of reproduction.

These additional plans are to be stamped approved by the Owner before they can be used on the project.

**4. LEGAL ADDRESSES**

All notices, letters, and other communications to the Contractor will be mailed or delivered to either the contractor's business address listed in the Proposal or the contractor's office in the vicinity of the work, with delivery to either of these addresses being deemed as delivery to the Contractor. The addresses of the Owner appearing on page 2 are hereby designated as the place to which all notices, letters, and other communication to the Owner shall be mailed or delivered. Either party may change his address at any time by an instrument in writing delivered to the Owner and to the other party.

**5. SCOPE AND INTENT OF CONTRACT DOCUMENTS**

It is the intent of the construction documents to achieve a satisfactorily sound and quality finished product. The specifications and drawings are intended to supplement but not necessarily duplicate each other. Any work exhibited in the one and not the other shall be executed as if it had been set forth in both, so that the work will be constructed according to the complete design as determined by the Owner.

Should anything necessary for a clear understanding of the work be omitted from the specifications and/or drawings, or should the requirements appear to be in conflict, the Contractor shall secure written instructions from the Owner before proceeding with the work affected thereby. It is understood and agreed that the work shall be performed accordingly to the true intent of the contract documents.

Owner disclaims to Contractor any express or implied warranties that the specifications and/or drawings included in the Contract Documents are accurate and sufficient for purpose of completing the work according to the terms of this Agreement.

**6. INDEPENDENT CONTRACTOR**

The relationship of the Contractor to the Owner shall be that of an independent Contractor. Owner and Contractor agree that the negotiation, preparation and execution of the Contract Documents were negotiated, prepared, and executed as part of an arms-length transaction, and that no duty of good faith and fair dealing exists between Owner and Contractor, now, in the future, nor at any time in the past. The Owner shall not have the right to control the day to day activities of how the Contractor performs the work, being interested only in the results to be achieved.

**7. ASSIGNMENT AND SUBCONTRACTING**

The Contractor shall not assign or subcontract the work or any part thereof, without the previous written consent of the Owner, nor shall he assign, by power of attorney or otherwise, any of the money payable under this contract unless written consent of the Owner has been obtained. No right under this contract, nor claim for any money due or to become due hereunder shall be asserted against the Owner, or person acting for the Owner, by reason of any so called assignment of this contract or any part thereof, unless such assignment has been authorized by the written consent of the Owner. In case the Contractor is permitted to assign moneys due or to become due under this contract, the instrument of assignment shall contain a clause subordinating the claim of the assignee

to all prior liens for services rendered or materials supplied for the performance of the work.

Should any subcontractor fail to perform in a satisfactory manner the work undertaken by him, his subcontract shall be immediately terminated by the Contractor upon notice from the Owner. The Contractor shall be as of his subcontractors, and of persons either directly or indirectly employed by them, as he is for the acts and omissions of persons directly employed by him. Nothing contained in this contract shall create any contractual relationship between any subcontractor and the Owner.

It is the intent of these specifications that the Contractor shall perform the majority of the work with his own forces and under the management of his own organization. Only subcontractors who have been listed in the proposal and who are accepted by the Owner as provided in the General Conditions may subcontract specific portions of the work. All subcontractors shall be directly responsible to the Contractor and shall be under his general supervision. All work performed under subcontracts shall be subject to the same contract provisions as the work performed by the contractor's own forces.

This Contract is considered personal between the Contractor and Owner therefore, any sale of more than 50% ownership of Contractor shall be considered as an assignment.

#### **8. ORAL STATEMENTS**

It is understood and agreed that the written terms and provisions of this agreement shall supersede all oral statements of representatives of the Owner, and oral statements shall not be effective or be construed as being a part of the contract.

#### **9. REFERENCE STANDARDS AND LAWS AND REGULATIONS**

Reference to the standards of any technical society, organization, or association, or to codes of local or state authorities, shall mean the latest standard, code, specification, or tentative standard adopted and published at the date of taking bids, unless specifically stated otherwise.

The Contractor shall keep itself fully informed of, and shall observe and comply with, all laws, ordinances, and regulations which, in any manner, affect those engaged or employed on any work, or the materials and equipment used in any work or in any way affect the performance of any work, and of all orders and decrees of bodies or tribunals having jurisdiction or authority over work performed under the contract. If any discrepancy or inconsistency should be discovered between the contract and any such law, ordinance, regulation, order or decree, the Contractor shall immediately report the same in writing to the Owner. The Contractor shall be responsible for the compliance with the above provisions by subcontractors of all tiers.

Except as otherwise specified, the Contractor shall procure any pay for all permits and inspections and shall furnish any bonds, security or deposits required to permit performance of its work hereunder.

- (a) OSHA: all work and job site conditions shall, at all times, adhere to the requirements of the latest provisions of the Occupational Safety and Health Act.

- (b) **REQUIREMENTS AND CODES:** Wherever references are made in the contract to requirements or codes in accordance with which work is to be performed or tested, the addition or revision of the requirements or codes current on the date of this contract shall apply, unless otherwise expressly set forth. Unless otherwise specified, reference to such requirements or codes is solely for technical information.

This contract shall be governed by the laws of the State of Texas and by such federal laws as may be applicable.

The parties agree that all claims, disputes, and other matters in question between the Contractor and the Owner arising out of or pertaining to the contract documents or the breach thereof, shall, except as otherwise expressly provided, be decided solely in the Courts of the State of Texas, in the County of Dallas.

Interest, if any, allowable on the claims of either party shall be at the current rate for judgments in the Courts of the State of Texas.

**10. CONTRACTOR TO CHECK DRAWINGS AND SCHEDULES**

The Contractor shall check all dimensions, elevations, and quantities indicated on the drawings and schedules furnished to him by the Owner. The Contractor shall notify the Owner of any discrepancy between the drawings and the conditions at the site, or any error or omission in drawings, or in the layout as given by stakes points, or instructions, which he may discover in the course of work. The Contractor will not be allowed to take advantage of any error or omission in the drawings or contract documents. Full instructions will be furnished by the Owner should such error or omission be discovered, and the Contractor shall carry out such instructions as if originally specified.

**11. FIGURED DIMENSIONS TO GOVERN**

Dimensions and elevations indicated on the drawings shall be accurately followed even though different from scaled measurements. No work indicated on the drawings, the dimensions of which are not indicated, shall be executed until necessary dimensions have been obtained from the Owner.

**12. NO WAIVER OF RIGHTS**

Neither the inspection by the Owner or any of their officials, employees, or agents, nor any order by the Owner for payment of money, or any payment for, or acceptance of, the whole or any part of the work by the Owner, nor any extension of time, nor any possession taken by the Owner or its employees, nor any action of the Owner shall operate as a waiver of any provision of this contract, or of any power herein reserved to the Owner, or of any right to damages herein, provided nor shall any waiver of any breach in this contract be held to be a waiver of any other or subsequent breach.

**13. CONTRACTOR'S SUPERINTENDENT AND EMPLOYEES**

The Contractor represents that it is fully experienced and properly qualified to perform the class of work provided for herein, and that it is properly licensed, equipped, organized, and financed to perform such work.

The Contractor shall act as an independent contractor maintaining complete control over its employees and all of its subcontractors. The Contractor shall perform all work in an orderly and workmanlike manner, enforce strict discipline and order among its employees and assure strict discipline and order by its subcontractors.

Before starting work, the Contractor shall designate a competent, authorized representative to represent and act with full authority for the contract and shall inform the Owner in writing of the name, address, telephone number (day and night) of such representative, and of any change in such designation. This representative shall have authority to make binding and enforceable decisions in the name of the Contractor and to accept service of all notices which the Owner desires to serve or which are required by this contract to be served on the Contractor. As an alternate, such written notices may be mailed directly to the address of that party shown on the face of the Contract Agreement form. Such representative shall be present or be duly represented at the site of work at all times when work is actually in progress and, during period when work is suspended, arrangements acceptable to the Owner shall be made for any emergency work which may be required. The Contractor's authorized representative shall be supported by competent assistants, as necessary, and the authorized representative and its assistants shall be satisfactory to the Owner. All requirements, instructions, and other communications given to the Contractor's authorized representative by the Owner shall be as binding as if given to the Contractor.

The Contractor shall employ only fully experienced and properly qualified persons to perform any work. The Contractor shall be responsible for maintaining satisfactory conduct of its employees. The Contractor's site representative shall stay on the project until final completion of the work in accordance with the contract documents.

**14. ENGINEERING INSPECTION**

The Owner may appoint such inspectors, as the Owner deems proper to inspect the materials furnished and the work performed for compliance with the drawings and specifications. The Contractor shall furnish all reasonable assistance required by the Owner, or inspectors, for the proper inspection of the work. Should the Contractor object to any interpretation of the contract by any inspector, the Contractor may make written appeal to the Owner for a decision, but the Owner's decision shall be final.

Inspectors shall have the authority to reject work, which is unsatisfactory, faulty, or defective or does not conform to the requirements of the drawings and specifications. Inspection shall not relieve the Contractor from any obligation to construct the work strictly in accordance with the drawings and specifications. Work not so constructed shall be removed and replaced by the Contractor at his own expense.

## 15. RIGHT OF OWNER TO TERMINATE CONTRACT

If the work to be done under this contract is abandoned by the Contractor; or if this contract is assigned by him without the written consent of the Owner; or if the Contractor is adjudged bankrupt, or files for voluntary bankruptcy; or if a general assignment of his assets is made for the benefit of his creditors; or if a receiver is appointed for the Contractor of any of his property or if at any time in writing to the Owner determines that the performance of the work under this contract is being unnecessarily delayed, that the Contractor is violating any of the conditions of this contract, or that he is executing the same in bad faith or otherwise not in accordance with the terms of said contract; or if the work is not substantially completed within the time named for its completion or within the time to which such completion date may be extended; then the Owner may serve written notice upon the Contractor and his surety of the Owner's intention to terminate this contract. Unless within five (5) days after the serving of such notice, a satisfactory arrangement is made for continuance, this contract shall terminate. In the event of such termination, the surety shall have the right to take over and complete the work, provided that if the surety does not commence performance within 30 days, the Owner may take over and prosecute the work to completion, by contract or otherwise. The Contractor and his surety shall be liable to the Owner for all excess cost sustained by the Owner by reason of such prosecution and completion. The Owner may take possession of, and utilize in completing the work, all materials, equipment, tools, and plant on the site of the work, including such materials, etc., as may have been placed on the site by or at the direction of the Contractor.

The Owner may, at its option, terminate the performance of the work in accordance with this section, in whole, or from time to time in part, at any time by written notice thereof the Contractor, whether or not the Contractor is in default. Upon any such termination, Contractor shall waive any claims for damages, including loss of anticipated profits, on account thereof, but as the sole right and remedy of the Contractor, the Owner shall pay Contractor in accordance with subparagraph (b) below, provided, however, that those provisions of the contract documents which by their very nature survive final acceptance under the contract documents shall remain in full force and effect after such termination.

- (a) Upon receipt of any such notice, the Contractor shall, unless the notice requires otherwise:
- (1) Immediately discontinue work on the date and to the extent specified in the notice;
  - (2) Place no further order or subcontracts for materials, services, or facilities, other than as may be necessary or required for completion of work under the contract that is not terminated;
  - (3) Promptly make every reasonable effort to obtain cancellation upon terms satisfactory to the Owner of all order and subcontracts to the extent they relate to the performance of work terminated, or assign to the Owner those orders and subcontracts, and revoke agreements specified in such notice; and

- (4) Assist the Owner, as specifically requested in writing, in the maintenance, protection and disposition of property acquired by the Owner under the contract.
- (b) Upon any such termination, the Owner will pay the Contractor an amount determined in accordance with the following (without duplication of any item):
  - (1) All amounts due and not previously paid to the Contractor for work completed in accordance with the contract prior to such notice, and for work thereafter completed as specified in such notice;
  - (2) The cost of settling and paying claims arising out of the termination of work under subcontracts or orders as provided in subparagraph (a) (3) above;
  - (3) The reasonable cost incurred pursuant to subparagraph (a) (4) above;
  - (4) Any other reasonable costs incidental to such termination of work.

The foregoing amounts will include a reasonable sum, under all of the circumstances, as profit for all work satisfactorily performed by the Contractor.

#### **15.1 TERMINATION FOR CONVENIENCE**

Owner hereby reserves the right to terminate this Agreement without regard to fault or breach upon written notice to Contractor, effective immediately unless otherwise provided in said notice to Contractor, effective immediately unless otherwise provided in said notice. In the event of such termination, Owner shall pay as the sole amount due to Contractor in connection with the work (i) all sums due for Work performed to date including allowing profit and overhead (except retainage sums shall not be paid prior to thirty (30) days following the date of termination); and (ii) reasonable cost of termination. Such sums will be due and payable on the same conditions as set forth in this Agreement for final payment to the extent applicable. Upon receipt of such payment, the parties hereto shall have no further obligations to each other except for Contractor's obligations to perform corrective and/or warranty work and to indemnify Owner as provided for in this Agreement. It is understood and agreed that no profit, fee or other compensation shall be due or payable for unperformed work. Contractor agrees that each subcontract and purchase order issued by it will reserve for Contractor the same right of termination provided by this Section 15.1 and Contractor further agrees to require that comparable provisions be included in all lower tier subcontracts and purchase orders.

Upon a determination by any court or body that termination of Contractor, or its successor in interest, was wrongful, such termination will be deemed converted to a termination for convenience and Contractor's remedy for wrongful termination is limited to the recovery of the payments permitted for termination for convenience as set forth above.

The rights and remedies of Owner and Contractor under this Agreement shall be non-exclusive, and shall be in addition to all the other remedies available to such parties at law or in equity, subject, however, in the case of Contractor, to the limitation contained above and other pertinent provisions of this Agreement.

**16. EQUAL OPPORTUNITY**

The Contractor is aware of, and is fully informed of, the Contractor's obligations under Executive Order 11246, and, where applicable, shall comply with the requirements of such order and all orders, rules and regulations promulgated thereunder unless exempted therefrom.

Without limitation of the foregoing, the Contractor's attention is directed to 41 CFR Section 60-1.4, and the clause therein entitled "Equal Opportunity Clause" which, by this reference, is incorporated herein.

The Contractor is aware of, and is fully informed of, the Contractor's responsibilities under Executive Order No. 11701, "List of Job Openings for Veterans" and, where applicable, shall comply with the requirements of such order, and all orders, rules and regulations promulgated thereunder unless exempted therefrom.

Without limitation of the foregoing, the Contractor's attention is directed to 41 CFR 60-250 et seq. and the clause therein entitled "Affirmative Action Obligations of the Contractors and Subcontractors for Disabled Veterans and Veterans of the Vietnam Era" which, by this reference is incorporated herein.

The Contractor certifies those segregated facilities, including, but not limited to, washrooms, work areas, locker rooms, are not, and will not, be maintained or provided for the Contractor's employees. Where applicable, the Contractor shall obtain similar certification from any of its subcontractors, vendors, or suppliers performing work under this contract.

The Contractor is aware of, and is fully informed of, the Contractor's responsibilities under the Rehabilitation Act of 1973, and, where applicable, shall comply with the provisions of the Act, and the regulations promulgated thereunder unless exempted therefrom.

Without limitation of the foregoing, the Contractor's attention is directed to 41 CFR Section 60-741 and the clause entitled "Affirmative Action Obligations of the Contractors and Subcontractors for Handicapped Workers" which, by this reference, is incorporated herein. Contractor must also comply with the rules and regulations as established by the Americans with Disabilities Act of 1990.

**17. BEGINNING, PROGRESS, AND COMPLETION OF THE WORK; LIQUIDATED DAMAGES**

The time of completion is of the essence of this contract. Unless otherwise specified in these contract documents or advised by written order of the Owner, the Contractor shall begin work within 10 days after the date of contract. The work shall be prosecuted to completion in accordance with the schedule provided for below and shall be 100% completed within time period stated in the Proposal.

The Owner and Contractor, recognizing that calculation of damages caused by Contractor's failure to complete within the contract time are difficult to assess, hereby

agree that liquidated damages shall be assessed Contractor at the rate of \$1,000.00 per calendar day for each day Contractor is late in completing.

It is understood that the foregoing constitutes an agreement as to minimum amount of damages only for failure to complete the work within the specified time. Should the Owner suffer damages over and above the amount specified above for any failure or negligence on the Contractor's part, other than failure to complete the work within the specified time, the Owner may recover such additional amount.

A detailed construction schedule and monthly payment schedule shall be prepared by the Contractor and submitted to the Owner for review within ten (10) days of the effective beginning date of the Contract, or prior to the commencement of construction, whichever occurs first. The schedule shall contain the various activities required to perform the work and the dates the activities will be started and completed in order to complete the work in accordance with the specified schedule requirements. The Contractor is responsible for determining the sequence and time estimates of the detailed construction activities. However, the Owner reserves the right to require the Contractor to modify any portion of the schedule the Owner determines to be impractical or unreasonable; as required to coordinate the Contractor's activities with those of other Contractors, if any, engaged in work for the Owner on the site; to avoid undue interference with the Owner's operations; and to assure completion of the work by the date or dates stipulated. Upon acceptance by the Owner of the Contractor's detailed construction schedule, the Contractor will be responsible for maintaining such schedule.

If at any time the Contractor's work is behind schedule, he shall immediately put into effect definite procedures for getting the work back on schedule. The procedures shall be subject to review and modification by the Owner. The Contractor will not be allowed extra compensation for costs (whether for costs for materials used and/or labor to be paid) incurred by him because of Contractor's accelerated operations required to maintain the schedule.

#### **17.1 EXTENSION OF TIME FOR DELAY**

In the event the progress of the work is delayed or interrupted by occurrences or events which entitle Contractor to an extension of time pursuant to the terms of this Agreement, then the work completion date shall be extended for a period equal to the length of such delay if within seven (7) days after the commencement of any such delay, contractor delivers to Owner a written notice of such delay stating the nature thereof and within seven (7) days following the expiration of any such delay provides a written request for extension of the work completion date by reason of such delay and such request is approved by Owner, which approval shall not be unreasonably withheld. Failure to deliver any such notice or request within the required period shall constitute an irrevocable waiver of any extension of the previously scheduled work completion date by reason of the cause in respect of which such notice and request were required to make only one such request with respect thereto. No extension of the previously scheduled work completion date (or right on the part of Contractor to secure any such extension) pursuant to this Section shall prejudice any right Owner may have under this Agreement, or otherwise, to terminate this Agreement.

Extension of time shall be Contractor's sole remedy for any such delay (except for Contractor's right to terminate this Agreement pursuant to the terms and provisions hereinafter set forth), unless the same shall have been caused by acts constituting

intentional interference by Owner with Contractor's performance of the work and where to the extent that such acts continue after Contractor's notice to Owner of such interference. Owner's exercise of any of its rights to order changes in the work pursuant to this contract, regardless of the extent of number of such changes, or Owner's exercise of any of its remedies of suspension of the work, or requirement or correction or re-execution of any defective work, shall not under any circumstances be construed as intentional interference with Contractor's performance of the work.

## **18. HINDRANCES AND DELAYS**

The Contractor expressly agrees that the period of time named in the Proposal to complete all work includes allowance for all hindrances and delays incident to the work. The Contractor further agrees that no claims shall be made for hindrances and delays from any cause during the performance of the work, except as specifically provided for in the articles SUSPENSION OF WORK and EXTENSIONS OF TIME in these General Conditions.

### **18.1 RESEQUENCING OR ACCELERATION**

In the event Contractor shall fall behind schedule at any time, for any reason, Owner shall be entitled to direct acceleration or resequencing of the work to bring the work back on schedule. In the event Contractor determines that the previously scheduled work completion date cannot be met by resequencing the work, then Contractor shall immediately provide to Owner, and in any event within seven (7) days after the date of receipt of any request by Owner for resequencing or acceleration, a plan to complete the work in the shortest possible time. No approval by the Owner of any plan for resequencing or acceleration of the work submitted by Contractor pursuant to this paragraph shall constitute a waiver by Owner of any damages or losses which Owner may suffer by reason of such resequencing or the failure of Contractor to meet the declared new scheduled completion date.

Owner shall additionally be entitled to direct the acceleration or resequencing of the work in order to achieve completion prior to the declared new scheduled completion date and Contractor shall be reimbursed by Owner for the amount of labor overtime actually incurred in respect thereto and shall be entitled to an increase adjustment the contract price to the extent of the labor portion of overtime so incurred.

## **19. SUSPENSION OF WORK**

The Owner reserves the right to suspend and reinstate execution of the whole or any part of the work without invalidating the provisions of the contract. Orders for suspension or reinstatement of work will be issued by the Owner to the Contractor in writing. The time for completion of the work will be extended for a period equal to the time lost by reason of the suspension.

The Owner will pay extra costs and expenses, which are caused by work suspensions ordered by the Owner, to the Contractor.

**20. EXTENSIONS OF TIME**

Should the Contractor be delayed in the final completion of the work by any act or neglect of the Owner, or of any employee of either, or by any other Contractor employed by the Owner, or by strike, fire, regulatory agencies or other cause outside of the control of the Contractor and which, in the opinion of the Owner, could have been neither anticipated nor avoided, then an extension of time sufficient to compensate for the delay, as determined by the Owner, will be granted by the Owner; provided that the Contractor gives the Owner notice in writing within 10 days of the cause of delay in each case and demonstrates that he has used all reasonable means to minimize the delay.

Extensions of time will not be granted for delays caused by unfavorable weather, unsuitable ground conditions, inadequate construction force, or the failure of the Contractor to place orders for equipment or materials sufficiently in advance to insure delivery when needed.

Failure of Owner furnished equipment and materials to arrive as scheduled, or failure of other construction Contractors to meet their schedule, shall not be justification for an extension of time, except where such failure causes, in the opinion of the Owner, an actual delay in the Contractor's work.

**21. EXTRA OR CHANGE ORDER WORK**

If a modification increases the amount of the work, and the added work or any part thereof is a type and character which can properly and fairly be classified under one or more unit price items of the Proposal listed in the Scope of Work section of this contract, then the added work or part thereof shall be paid for according to the amount actually done and at the applicable unit price. Otherwise, such work shall be paid for as hereinafter provided.

Claims for extra work will not be paid unless the work covered by such claims was authorized in writing by the Owner. The Contractor shall not have the right to prosecute or maintain an action in court to recover for extra work unless the claim is based upon a written order from the Owner. Payments for extra work will be based on agreed lump sums or on agreed unit prices as listed in the Scope of Work section of the contract whenever the Owner and the Contractor agree upon such prices before the extra work is started; otherwise, payments for extra work will be based on actual field cost plus the specified percentage allowance.

For the purpose of determining whether proposed extra work will be authorized, or for determining the payment method for extra work, the Contractor shall submit to the Owner, upon request, detailed cost estimate for proposed extra work. The Change Order Request shall indicate itemized quantities and charges for all elements of direct cost. Charges for the Contractor's subcontractor's extra profit, extra general superintendence, extra field office expense, and extra overheads shall be indicated as a percentage addition to the total estimated net cost. Unless otherwise agreed upon by the Contractor and the Owner, such percentage additions shall be 15 percent for the extra work performed by the Contractor's own forces or 20 percent for extra work performed by a subcontractor.

Further, the Change Order Request shall also include a suitable breakdown by trades and work classifications, Contractor's estimate of the changes in the cost of the work attributable to the changes set forth in such Change Order Request, a proposed adjustment to the scheduled completion date resulting from such Change Order Request, and any proposed adjustments of time and costs related to unchanged work resulting from such Change Order Request. If Owner approves in writing such estimate by Contractor, such Change Order Request and such estimate shall constitute a Change Order, and the cost of the contract price and previously scheduled work completion date shall be adjusted as set forth in such estimate. Change Orders shall not cause any modification to Contractor's fee except as specifically set forth herein, it being understood and agreed that Contractor will receive no fee based on the increased cost of the work resulting from Change Orders unless the new work requested is beyond the scope of the work, and then only to the extent thereof pursuant to the terms of this contract. Contractor shall include in each subcontract a limitation on the amount of profit and overhead, which subcontractors can include in Change Orders, which limitation will be subject to the approval of Owner. Agreement on any Change Order shall constitute a final settlement on all items covered therein, subject to performance thereof and payment therefore pursuant to the terms of this Agreement.

When payment for extra work is based on actual field cost, the Contractor will be paid the actual field cost plus an allowance of 15 percent if the extra work is performed by the Contractor's own forces or 20 percent if the extra work is performed by a subcontractor. The allowance will be paid as full compensation for the Contractor's and subcontractors extra profit, extra general superintendence, extra field office expense, extra overheads, and all other elements of extra cost not defined herein as actual field cost.

The actual field cost shall include only those extra costs for labor and materials expended in direct performance of the extra work. The form in which actual field cost records are kept, the construction methods, and the type and quantity of equipment used shall be acceptable to the Owner.

Construction equipment which the Contractor has on the job site and which is of a type and size suitable for use in performing the extra work shall be used. The hourly rental charges for equipment shall not exceed one-half of one percent of the latest applicable Associated Equipment Distributors published monthly rental rates and shall apply to only the actual time the equipment is used in performing the extra work.

When extra work requires the use of equipment, which the Contractor does not have on the job site, the Contractor shall obtain the occurrence of the Owner before renting or otherwise acquiring additional equipment. The rental charges for the additional equipment shall not exceed the latest applicable Associated Equipment Distributors published rental rates.

#### **21.1 DECREASED WORK**

If a modification decreases the amount of work to be done, such decrease shall not constitute the basis for a claim for damages or anticipated profits on work affected by such decrease. Where the value of omitted work is not covered by applicable unit prices, the Owner shall determine on an equitable basis the amount of (a) credit due the Owner for contract work not done as a result of an authorized change, (b) allowance to the Contractor for any actual loss incurred in connection with the purchase, delivery, and subsequent disposal of materials or equipment required for use on the work as planned

and which could not be used in any part of the work as actually built, and (c) any other adjustment of the contract amount where the method to be used in making such adjustment is not clearly defined in the contract documents.

Unless otherwise agreed upon by the Owner and the Contractor, the credit due the Owner for reductions in the amount of work to be done shall be the estimated field cost of the deleted work plus an overhead allowance of:

Ten percent of the estimated field cost if the work was to have been done by the Contractor's own forces, or;

Fifteen percent of the estimated field cost if the work was to be done by a subcontractor.

Field cost referred to above shall include the category of costs listed as actual field costs, items (a) to (f) inclusive of the article entitled EXTRA WORK.

## **22. PROTECTION OF WORK AND PROPERTY**

The Contractor shall be responsible for and shall bear any and all risk of loss of, or damage to work in progress, all materials delivered to the site, and all materials, tools, and equipment until completion and final acceptance of the work to be performed under this contract.

The Contractor shall promptly take all precautions which are necessary and adequate against any conditions created during the progress of the Contractor's activities hereunder which involve a risk of bodily harm to persons or a risk of damage to any property. Contractor shall continuously inspect all work, materials and equipment to discover and determine, and shall be solely responsible for discovery, determination and correction of any conditions which involve a risk of bodily harm to persons or damage to property.

The Contractor shall comply with all applicable safety laws, standards, codes and regulations in the jurisdiction where the work is being performed specifically but without limiting the generality of the foregoing and regardless of any exemptions provided by law, with all rules, regulations and standards adopted pursuant to the Occupational Safety and Health Act of 1970.

The Contractor will preserve and protect all existing vegetation such as trees, shrubs, and grass on or adjacent to the site of work which is not to be removed and which does not unreasonably interface with the construction work. Care will be taken in removing trees authorized for removal to avoid damage to vegetation to remain in place. The Contractor will protect from damage all existing improvements, utilities, roads, and bridges at or near the site of work and will repair or restore any damage to such facilities resulting from failure to comply with the requirements of this contract or the failure to exercise reasonable care in the performance of the work. Under no circumstances will county or township roads and bridges be subject to greater than normal highway truck loadings.

The Contractor shall provide and maintain such temporary work as is required for the protection of the public and those employed in or about the work site, including all signs,

guards, barricades, night lights and any other temporary protection as may be necessary. Contractor shall provide and maintain such temporary work as is required for protection of finished work, including building paper, boxing, planking, protective coating, and such other protection as may be deemed necessary by the Owner. All such work shall be returned to original condition by the Contractor on completion of the contract.

Whenever necessary to maintain proper temperatures for performance of work, or to protect or to close in work in place, Contractor shall provide and maintain temporary enclosures as directed by the Owner for all openings or exterior surfaces that are not enclosed with finishing materials.

The Contractor shall protect all the work including buildings, structures, equipment, excavations, trenches, etc. from water damage including damage by rainwater, ground water, backing-up of drains, downspouts of sewers and shall construct and maintain all necessary drainage and do all pumping required to protect or to perform the work. Contractor shall provide protection to any equipment in place, as required to prevent damage by moisture. Contractor, in general, shall at all times carefully protect the work, materials, and equipment against damage from the weather, and comply with the directions of the Owner in order to avoid any adverse effect on the project from weather conditions.

The Contractor assumes all liability for its failure to comply with the provisions of this Article. The Contractor shall include this Article in its entirety in all subcontracts for any work at the project site.

Upon the failure of the Contractor or its subcontractors to comply with any of the requirements of the Article, the Owner shall have the authority to stop any operations of the Contractor or its subcontractors affected by such failure until such failure is remedied. No part of the time lost due to any such stop orders shall be made the subject of a claim for extension of time or for increased costs or damages by the Contractor or its subcontractors.

### **23. SAFETY**

The Contractor shall at all times conduct all operations under the Contractor in a manner to avoid the risk of bodily harm to persons or risk of damage to any property. The Contractor shall promptly take all precautions, which are necessary and adequate against any conditions, which involve a risk of bodily harm to persons or a risk of damage to any property. The Contractor shall continuously inspect all work, materials and equipment to discover and determine any such conditions and shall be solely responsible for discovery, determination and correction of any such conditions. The Contractor shall designate an employee as safety supervisor who is acceptable to the Owner.

The Contractor shall comply with all applicable laws, regulations and standards. The Contractor shall coordinate with other Contractors and subcontractors on safety matters and shall promptly comply with any specific safety directions given to the Contractor by the Owner.

The Contractor shall erect and maintain, as required by existing conditions and progress of the work, all reasonable safeguards for safety and protection, including posting

danger signs and other warnings against hazard, promulgating safety regulations and notifying the Owner and users of adjacent properties and utilities.

The Contractor shall maintain a Safety Program with detail commensurate with the work to be performed. Such review shall not relieve the Contractor of its responsibility for safety, nor shall it be construed as limiting in any manner the Contractor's obligation to undertake any action which may be necessary or required to establish and maintain safe working conditions at the site.

The Contractor shall maintain accurate accident and injury reports.

The Contractor shall hold regular scheduled meetings to instruct its personnel on safety practices. The Contractor shall furnish safety equipment and enforce the use of such equipment by its employees.

All equipment furnished and installed on this project shall be manufactured and installed in accordance with the applicable parts of the Williams-Steiger Occupational Safety and Health Act of 1970, and its subsequent amendments and revisions. All work shall be performed in accordance with the regulations and requirements of the above noted Act, revisions and amendments.

### **EXCAVATION SAFETY PROCEDURE**

In a municipality or in the extraterritorial jurisdiction of a municipality as provided by the Municipal Annexation (Chapter 43) Texas Local Government Code, on construction projects in which excavation will exceed a depth of five feet, the bid document and the contract must include detailed plans and specifications for excavation safety systems.

Prior to execution of a contract the Contractor will be required to submit an excavation safety plan for the project. This excavation safety plan must be designed and sealed by a professional engineer registered in the State of Texas with professional experience in soil mechanics. The Contractor is responsible for obtaining borings and soil analysis as required for plan design. The excavation safety plan shall be designed in conformance with Occupational Safety and Health Administration (OSHA) Standards and Regulations.

After review of the excavation safety plan, the City Engineer will forward the reviewed plan to the appropriate city construction division for use in inspection. Plans for construction will not be released by the City Engineer until this plan is reviewed. Changes in the excavation safety plan after initiation of construction may not be cause for extension of time or change order, and will require the same review process. Contractor accepts sole responsibility for compliance with all applicable safety requirements. The review is only for general conformance with OSHA Safety Standards. Release of the excavation safety plan by the City Engineer does not relieve Contractor from any property damage or bodily injury (including death) that arises from use of the excavation safety plan, from Contractor's negligence in performance of contract work, or from city's failure to note exceptions to the excavation plan. The safety plan shall remain the sole responsibility and liability of the Contractor. A separate pay item for an excavation and support system shall be included in the bid documents.

Contractors have three ways to meet OSHA standards for excavation safety. They are as follows:

1. Minimum angle of repose for sloping of the sides of excavations.
2. Utilization of trench box.
3. Shoring, sheeting and bracing methods.

Contractors electing to utilize the minimum angle of repose must submit:

1. Soil classification according to the unified soil classification system including water content and plasticity indexes, and a minimum angle of slope excavation.
2. A detailed plan of the excavation area and the impact on existing right-of-way and infrastructure.
3. Waiver of claim for delay of cost.

Contractors electing to utilize a trench box must submit:

1. Physical dimensions, materials, position in the trench, expected loads, and the strength of the box.
2. Waiver of claim for delay cost.

Contractors electing to utilize shoring, sheeting and bracing must submit:

1. Dimensions and materials of all uprights, stringers, crossbracing and spacing required to meet OSHA requirements.
2. Waiver of claim for delay cost.

#### **24. TAXES, PERMITS AND LICENSES**

The Contractor shall obtain and pay for all licenses, permits, and inspections required for the work.

The Contractor shall pay all appropriate sales taxes, excluding materials permanently retained by the City of Carrollton franchise taxes, income taxes, gross receipts taxes, and other business or occupation taxes imposed upon the Contractor.

#### **25. PATENTS**

Royalties and fees for patents covering materials, articles, apparatus, devices, equipment, or processes used in the work, shall be included in the contract amount. The Contractor shall satisfy all demands that may be made at any time for such royalties or fees and he shall be liable for any damages or claims for patent infringements. The Contractor shall, at his own cost and expense, defend all suits or proceedings that may be instituted against the Owner for alleged infringement of any patents involved in the work and, in case of an award of damages, the Contractor shall pay such award. Final payment to the Contractor by the Owner will not be made while any such suit or claim remains unsettled.

In the event the Contractor is found to have infringed a patent, the Contractor shall either replace the part or process with a noninfringing part or process approved by the Owner, or secure the right to use the infringing part or process. Either choice shall be at the Contractor's expense.

## **26. MATERIALS AND EQUIPMENT**

Unless specifically provided otherwise in each case, all materials and equipment furnished for permanent installation in the work shall conform to applicable standard specifications and shall be new, unused, and undamaged when installed or otherwise incorporated in the work. No such material or equipment shall be used by the Contractor for any purpose other than that intended or specified, unless such use is specifically authorized by the Owner in each case.

All required tests in connection with acceptance of source of materials shall be made at the Contractor's expense by a properly equipped laboratory of established reputation whose work and testing facilities are acceptable to the Owner. Any change in origin or method of repair or manufacture of a material be routinely tested will require new tests. Reports of all tests shall be furnished to the Owner in as many copies as required.

## **27. GUARANTEE**

Contractor shall guarantee that all products are in accordance with the manufacturer's guarantees, warranties, or Policies. Any replacement of defective material or materials will be made in accordance with such guarantee or warranty policies but, in any case, responsibility ends with the replacement of the defective part or parts, and no responsibility will be assumed for unauthorized repair or replacement of said equipment. Nor any expense will be incurred due to failure of said equipment excepting replacement of its defective part or parts by the manufacturer and in accordance with said manufacturer's policies.

Contractor's warranty against defects in material and workmanship shall extend two years from the date of final payment.

## **28. INSURANCE**

The Contractor shall secure and maintain throughout the duration of this contract insurance of such types and in such amount as may be necessary to protect himself and the interest of the Owner against all hazards or risks of loss as hereinafter specified. The form and limits of such insurance, together with the underwriter thereof in each case, shall be acceptable to the Owner but regardless of such acceptance it shall be the responsibility of the Contractor to maintain adequate insurance coverage at all times. Failure of the Contractor to maintain adequate coverage shall not relieve him of any contractual responsibility or obligation.

Satisfactory certificates of insurance shall be filed with the Owner prior to starting any construction work on this contract. The certificates shall state that 30 days advance written notice will be given to the Owner before any policy covered thereby is changed or canceled. No deductibles shall be shown on the certificate.

The Contractor shall comply with all Federal, State and local laws and ordinances relating to Social Security, Unemployment Insurance, Pensions, etc.

### **28.1 WORKERS COMPENSATION INSURANCE COVERAGE**

(A) Definitions:

**Certificate of coverage ("certificate")** - copy of a certificate of insurance, a certificate of authority to self-insure issued by the commission, or a coverage agreement (TWCC-81, TWCC-82, TWCC-83, or TWCC-84), showing statutory workers' compensation insurance coverage for the person's or entity's employees providing services on a project, for the duration of the project.

**Duration of the project** - includes the time from the beginning of the work on the project until the contractor's/person's work on the project has been completed and accepted by the governmental entity. **Persons providing services on the project ("subcontractor" in §406.096)** - includes all persons or entities performing all or part of the services the contractor has undertaken to perform on the project, regardless of whether that person contracted directly with the contractor and regardless of whether that person has employees. This includes, without limitation, independent contractors, subcontractors, leasing companies, motor carriers, owner-operators, employees of any such entity, or employees of any entity which furnishes persons to provide services on the project. "Services" include, without limitation, providing, hauling, or delivering equipment or materials, or providing labor, transportation, or other service related to a project. "Services" does not include activities unrelated to the project, such as food/beverage vendors, office supply deliveries, and delivery of portable toilets.

- (B) The contractor shall provide coverage, based on proper reporting of classification codes and payroll amounts and filing of any coverage agreements, which meets the statutory requirements of Texas Labor Code, Section 401.011(44) for all employees of the contractor providing services on the project, for the duration of the project.
- (C) **The Contractor must provide a certificate of coverage to the governmental entity prior to being awarded the contract.**
- (D) If the coverage period shown on the contractor's current certificate of coverage ends during the duration of the project, the contractor must, prior to the end of the coverage period, file a new certificate of coverage with the governmental entity showing that coverage has been extended.
- (E) The contractor shall obtain from each person providing services on a project, and provide to the governmental entity:
  - (1) a certificate of coverage, prior to that person beginning work on the project, so the governmental entity will have on file certificates of coverage showing coverage for all persons providing services on the project; and
  - (2) no later than seven days after receipt by the contractor, a new certificate of coverage showing extension of coverage, if the coverage period shown on the current certificate of coverage ends during the duration of the project.
- (F) The contractor shall retain all required certificates of coverage for the duration of the project and for one year thereafter.
- (G) The contractor shall notify the governmental entity in writing by certified mail or personal delivery, within ten days after the contractor knew or should have

known, of any change that materially affects the provision of coverage of any person providing services on the project.

- (H) The contractor shall post on each project site a notice, in the text, form and manner prescribed by the Texas Workers' Compensation Commission, informing all persons providing services on the project that they are required to be covered, and stating how a person may verify coverage and report lack of coverage.
- (I) The contractor shall contractually require each person with whom it contracts to provide services on a project, to:
  - (1) provide coverage, based on proper reporting of classification codes and payroll amounts and filing of any coverage agreements, which meets the statutory requirements of Texas Labor Code, §401.011(44) for all of its employees providing services on the project, for the duration of the project;
  - (2) provide to the contractor, prior to that person beginning work on the project, a certificate of coverage showing that coverage is being provided for all employees of the person providing services on the project, for the duration of the project;
  - (3) provide the contractor, prior to the end of the coverage period, a new certificate of coverage showing extension of coverage, if the coverage period shown on the current certificate of certificate of coverage ends during the duration of the project;
  - (4) obtain from each other person with whom it contracts, and provide to the contractor:
    - (a) a certificate of coverage, prior to the other person beginning work on the project; and
    - (b) a new certificate of coverage showing extension of coverage, prior to the end of the coverage period, if the coverage period shown on the current certificate of coverage ends during the duration of the project;
  - (5) retain all required certificates of coverage on file for the duration of the project and for one year thereafter;
  - (6) notify the governmental entity in writing by certified mail or personal delivery, within 10 days after the person knew or should have known, of any change that materially affects the provision of coverage of any person providing services on the project; and
  - (7) contractually require each person with whom it contracts, to perform as required by paragraphs (1) - (7), with the certificates of coverage to be provided to the person for whom they are providing services.
- (J) By signing this contract or providing or causing to be provided a certificate of coverage, the Contractor is representing to the governmental entity that all employees of the Contractor who will provide services on the project will be covered by workers' compensation coverage for duration of the project, that the coverage will be based on proper reporting of classification codes and payroll amounts, and that all coverage agreements will be filed with the appropriate insurance carrier or, in the case of a self-insured, with the commission's Division of Self-Insurance Regulation. Providing false or misleading information may subject the contractor to administrative penalties, criminal penalties, civil penalties, or other civil actions.

- (K) The Contractor's failure to comply with any of these provisions is a breach of contract by the Contractor which entitles the governmental entity to declare the contract void if the Contractor does not remedy the breach within ten days after receipt of notice of breach from the governmental entity.

### **28.2 COMPREHENSIVE AUTOMOBILE LIABILITY**

This insurance shall be written in comprehensive form and shall protect the Contractor against all claims for injuries to members of the public and damage to property of others arising from the use of motor vehicles licensed for highway use, whether they are owned, non-owned, or hired.

The liability limits shall not be less than:

Bodily injury	.....\$250,000/person
	.....\$500,000/occurrence
Property Damage	....\$100,000/occurrence

The insurance shall be of the occurrence type and name the Owner as additional insured.

### **28.3 COMPREHENSIVE GENERAL LIABILITY**

This insurance shall be written in comprehensive form and shall protect the Contractor against all claims arising from injuries to members of the public or damage to property of others arising out of any act of omission of the Contractor or his agents, employees, or subcontractors. In addition, this policy shall specifically insure the contractual liability assumed by the Contractor under the article entitled DEFENSE OF SUITS.

To the extent that the Contractor's work, or work under his direction, may require blasting, explosive conditions, or underground operations, the comprehensive general liability coverage shall contain no exclusion relative to blasting, explosion, collapse of buildings, or damage to underground property. The liability limits shall not be less than:

Bodily Injury	.....\$250,000/person
	.....\$500,000/occurrence
Property Damage	...\$500,000/occurrence
	...\$500,000/aggregate

The insurance shall be of the occurrence type and name the Owner as additional insured.

### **28.4 BUILDER 'S RISK**

This insurance shall be written in completed value form and shall protect the Contractor and the Owner against risks of damage to buildings, structures, and materials and equipment not otherwise covered under installation floater insurance, from the perils of fire and lightning, the perils included in the standard extended coverage endorsement, and the perils of vandalism and malicious mischief. The amount of such insurance shall not be less than the insurable value of the work at completion less the value of the materials and equipment insured under installation floater insurance.

Equipment installed under this contract shall be insured under installation floater insurance when the aggregate value of the equipment exceeds \$10,000.00.

If the work does not include the construction of building structures, builder's risk insurance may be omitted providing the installation floater insurance fully covers all work.

Builder's risk insurance shall provide for losses to be payable to the Contractor and the Owner as their interests may appear and shall contain a waiver of subrogation rights against the insured parties.

#### **28.5 INSTALLATION FLOATER**

This insurance shall protect the Contractor and the Owner from all insurable risks of physical loss or damage to materials and equipment not otherwise covered under builder's risk insurance, while in warehouse or storage areas, during installation, during testing, and after the work is completed. Installation floater insurance shall be of the "all risks" type, with coverages designed for the circumstances which may occur in the particular work included in this contract. The coverage shall be for an amount not less than the insurable value of the work at completion, less the value of the materials and equipment insured under builder's risk insurance. The value shall include the aggregate value of the Owner furnished equipment and materials to be erected or installed by the Contractor not otherwise insured under builder's risk insurance.

#### **29. DEFENSE OF SUITS**

In case any action in court is brought against the Owner, or any officer or agent of the Owner, for the failure, omission, or neglect of the Contractor to perform any of the covenants, acts, matters, or things by this contract undertaken; or for injury or damage caused by the alleged negligence of the Contractor or his subcontractors or his or their agents, or in connection with any claim based on lawful demands of subcontractors, workmen, materialmen, or suppliers the Contractor shall indemnify and save harmless the Owner and his officers and agents, from all losses, damages, costs, expenses, judgements, or decrees arising out of such action.

#### **30. PATENT INDEMNITY**

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

#### **31. INDEMNITY AND RELEASE**

The Contractor is solely responsible for and shall defend, indemnify, and hold Owner (or any of Owner's representatives or employees), free and harmless from and against any and all claims, liabilities, demands, losses, damages, costs or expense to all persons

(including but not limited to reasonable attorneys' fees) arising out of or resulting from or occurring in connection with the performance of the work that is (i) attributable to any bodily or personal injury, sickness, diseases or death of any person or any damage or injury to or destruction of real or personal property (other than the work itself) including the loss of use thereof, and (ii) caused in whole or in part by any negligent, strict liability or other act or omission of contractor, any subcontractor or supplier, their respective agents or employees or any other party for whom any of them may be liable regardless of whether such is caused in part by the negligent, strict liability or other act or omission of a party or parties indemnified hereunder.

Said indemnity and hold harmless agreement shall also apply to claims arising from accidents to contractor, its agents or employees, whether occasioned by contractor or its employees, the owner or his employees, or by any other person or persons.

The foregoing indemnification obligation shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable under workers' or workmen's compensation acts, disability benefit acts or other employee benefit acts.

### **32. FINAL PAYMENT AND RELEASE**

Acceptance by the Contractor of last payment shall be a release to the Owner and every officer and agent thereof, from all claims and liability hereunder for anything done or furnished for, or relating to the work, or for any act or neglect of the Owner or of any person relating to or affecting the work.

### **33. INSPECTION**

The Owner shall have the right, without extra charge therefore; to inspect all materials and equipment supplied under this contract at any time, including the place of manufacture, either during performance of the work, on final inspection, or during any applicable warranty period. The Owner or its designated representative shall have the right to reject equipment, materials and work not complying with the requirements of this contract. The Owner shall notify the Contractor in writing that such equipment, material or work is rejected. Thereupon, rejected work shall be satisfactorily corrected, rejected equipment shall be satisfactorily repaired or replaced with satisfactory equipment, and rejected material shall be satisfactorily replaced with satisfactory material, all in accordance with the contract, and the Contractor shall promptly segregate and remove rejected materials and equipment from the premises. All such correcting, repairing, replacing, and removing shall be by and at the expense of the Contractor.

The Owner will perform inspections in such a manner so as not to delay the work unreasonably, and the Contractor shall perform its work in such a manner as not to delay inspection unreasonably.

### **34. FINAL INSPECTION**

When the work has been completed and at a time mutually agreeable to the Owner and Contractor, the Owner will make a final inspection of the work as to the acceptability and completeness of the work.

**35. CLAIMS FOR LABOR AND MATERIALS**

The Contractor shall pay all subcontractors and other persons furnishing labor or materials for the work from the contract amount. The Contractor is aware of, and is fully informed of the Contractor's responsibility under article 601f V.T.C.S. pertaining to payments for goods and services contracted for by State agencies or political subdivisions, applies to construction contracts. The Contractor shall be responsible for payment to vendors and subcontractors in accordance with Chapter 2251, Texas Government Code. No third party shall have any contractual privity with the Owner. The Contractor shall indemnify and save harmless the Owner from all claims for labor and materials furnished under this contract. When requested by the Owner, the Contractor shall submit satisfactory evidence that all persons, firms, or corporations who have done work or furnished materials under this contract, for which the Owner may become legally liable, have been fully paid or satisfactorily secured. In case such evidence is not furnished or is not satisfactory, an amount will be retained money due the Contractor which in addition to any other sums that may be retained will be sufficient, in the opinion of the Owner, to liquidate all such claims. Such sum will be retained until the claims as aforesaid are fully settled or satisfactorily secured.

Before final acceptance of the work by the Owner, the Contractor shall submit to the Owner in duplicate a notarized affidavit stating that all subcontractors, vendors, persons, or firms who have furnished labor or materials for the work have been fully paid and that all taxes have been paid. A statement from the surety shall also be submitted consenting to the making of the final payment.

**36. ESTIMATES AND PAYMENTS**

On or about the first day of each month the Contractor shall make an estimate of the value of the work completed. The Contractor and the Owner shall review the estimate prior to submitting the formal invoice to the Owner. The estimated cost of repairing, replacing, or rebuilding any part of the work or replacing materials which do not conform to the drawings and specifications will be deducted from the estimated value by the Owner.

The Contractor shall furnish to the Owner such detailed information as he may request to aid in the preparation of monthly estimates. After each estimate has been found acceptable, the Owner will pay to the Contractor on or about the 25th day of the month 90% of the estimated value less any previous payments. The Contractor shall be responsible for payment to vendors and subcontractors in accordance with article Chapter 2251, Texas Government Code.

There will be no payments for materials stored on the site.

After official acceptance of the work, the Owner will prepare a final estimate of the work done under this contract. Preparation of the final estimate will not be made until the affidavit and statement required in the article entitled CLAIMS FOR LABOR AND MATERIALS have been received. The Owner will, within 30 days thereafter, pay the entire balance due after deducting all amounts to be retained under any provision of this contract.

**36.1 PAYMENTS**

Payments may be withheld by Owner for (1) defective work not remedied, (2) claims filed by third parties, (3) failure of the Contractor to make payments properly to subcontractors or for labor, materials or equipment, (4) reasonable evidence that the work cannot be completed for the unpaid balance of the contract price, (5) damage to the Owner or another contractor, (6) reasonable evidence that the work will not be completed by the scheduled work completion date and that the unpaid balance of the contract price would not be adequate to cover actual or liquidated damages for the anticipated delay, (7) persistent failure to carry out the work in accordance with the Contract Documents or (8) statutory retainage as described in Chapter 53 of the Texas Property Code.

**37. LIENS**

Neither the Contractor, nor any of his subcontractors, workers or suppliers shall have the right of lien against the work performed under this contract, or any property of the Owner to secure payment for labor and materials.

**38. STATE LAW**

This contract is performable in the State of Texas and shall be governed by the laws of the State of Texas. Venue on any suit hereunder shall be in Dallas County, Texas.

**CITY OF CARROLLTON, TX**

**ROSEMEADE AQUATICS CENTER DECK RESURFACING**

**SPECIAL CONDITIONS**

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### **SC.1. OWNER'S REPRESENTATIVE**

For the purposes of this contract, the Owner's Representative is:

**Jason Avara**  
**Athletics Supervisor**  
**City of Carrollton, PARD**  
**Phone:972-466-3083**  
**Fax:972-466-9892**  
[Jason.Avara@cityofcarrollton.com](mailto:Jason.Avara@cityofcarrollton.com)

All questions, correspondence, change order requests and other communication related to the project shall be directed to and by the Owner's Representative. This includes all approvals, acceptances and field directives regardless of statements in any other section of the construction documents or by other City personnel unless authorized otherwise in writing by the Owner's Representative.

References to "Architect", "designer", and/or "Engineer" in these documents shall be interpreted as the Owner's Representative.

### **SC.2. PROPOSAL**

For the purpose of this proposal and contract, the term "bidder" shall be synonymous with "Proposer".

Bidders shall fill out the proposal completely, stating all prices in both script and figures.

The prices bid in the proposal shall be full compensation for all material, labor, equipment, general conditions, and incidental items required to complete the project ready for use. The cost of all material, labor, equipment, general conditions, and incidental work required to complete the project ready for use must also be included in the unit or lump sum prices for the bid items provided in the proposal, and no direct compensation will be made for any other work. In case of error, ambiguity, or lack of clearness the Owner reserves the right to consider the bid in the manner that is most advantageous to the Owner.

The proposal shall be based on all specified products contained in these documents with no assumption of substitution. Substitution requests shall be made in accordance with the specifications. Prospective substitution shall not be considered valid until it is formally accepted or rejected by written addendum. Lack of response to the substitution request by the city does NOT constitute acceptance.

Other than completing requested information, the proposal form shall not be modified in any fashion, including but not limited to unapproved product substitutions, construction time, or any other limiting condition by the contractor. Modification of proposal form shall be grounds for rejection.

### **SC.3. AWARD AND EXECUTION OF CONTRACT**

For the purpose of award, each proposal submitted shall consist of two parts whereby:

**Total Base Proposal Price** The total proposed dollar amount for performing, completing and delivering all work in accordance with the Contract with no adjustments (additions or deductions) for any potential alternates.

**Contractor Qualifications** Demonstration that the proposer offers the best value to the City as determined by the selection criteria and ranking evaluation.

#### **SC.4. CONSTRUCTION OBSERVATION BY CONSULTANTS**

The City will observe the construction and reserves the right to assign an independent consultant(s) to observe all or portions of the construction on the City's behalf, generally in accordance with industry standards. Should the City exercise such right, the consultant will observe the construction periodically, within the obligations for site visits in their agreement with the City, in an effort to determine that the work is proceeding in general accordance with the contract documents, but will not be a guarantor of the Contractor's performance.

No independent consultant assigned by the City shall be considered as the Owner's Representative nor have the authority to direct work.

#### **SC.5. SUPERINTENDENT AND EMPLOYEES**

In addition to provisions of the General Conditions entitled "Contractor's Superintendent and Employees", it is a requirement that the OWNER be notified in writing any time that the authorized superintendent will not be on site while work is in progress, and provide all contact information of the duly appointed representative serving as a temporary superintendent. The temporary superintendent shall assume the role as such, and be in full charge and observation of all work without other distractions or tasks. A temporary superintendent may not be used for more than eight working hours without the written approval of the OWNER. In the event that a temporary superintendent is not available, all work shall be halted until the authorized superintendent returns.

The superintendent and staff shall be satisfactory to the OWNER. The superintendent shall not be changed during this Contract except with the written consent of the OWNER, which will not be reasonably withheld, or unless the superintendent proves unsatisfactory to the CONTRACTOR and ceases to be in its employ. In the event that the authorized superintendent leaves the CONTRACTOR's employment, such authorized superintendent shall be subject to the Owner's reasonable approval.

If the superintendent or any staff should be or become unsatisfactory to the OWNER, he/she shall be removed by the CONTRACTOR upon written direction of the OWNER, and in such event, the CONTRACTOR shall not be entitled to file a claim for any additional working time or money from the OWNER.

Whenever the OWNER shall inform the CONTRACTOR in writing that, in its opinion, any employee is unfit, unskilled, disobedient or is disrupting the orderly progress of the work, such employee shall be removed from the work and shall not again be employed on it. Under urgent circumstances, the OWNER may orally require immediate removal of an employee for cause, to be followed by written confirmation.

## **SC.6. SPECIFICATIONS**

All construction must conform to the technical specifications contained in this document, the current edition of the North Central Texas Council of Government (NCTCOG) Standard Specifications for Public Works Construction and the City of Carrollton General Design Standards.

**CONTRACTOR MUST OBTAIN COPIES OF THE LATEST CITY OF CARROLLTON GENERAL DESIGN STANDARDS, CARROLLTON FACILITY SERVICES GENERAL BUILDING STANDARDS, AND THE NCTCOG SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION. CONTRACTOR SHALL HAVE ONE COPY OF EACH AT THE PROJECT AT ALL TIMES.**

Titles to divisions and paragraphs in these Contract Documents are introduced merely for convenience and are not to be taken as part of the Specifications and are, furthermore, not to be taken as a correct and complete segregation of the several units of material and labor. No responsibility, either direct or implied, is assumed by the Engineer/Owner for omissions or duplications by the Contractor or his Sub-Contractor, due to real or alleged error in arrangement of matter in these Contract Documents.

In the event of conflicts between methods of measurement and payments for the various items of work between the Proposal and the Specifications, the Proposal shall prevail.

## **SC.7. COORDINATION OF SPECIFICATIONS, PROPOSAL AND SPECIAL PROVISIONS**

The Contractor shall not take advantage of any apparent error or omission and the Owner shall be permitted to make such corrections or interpretations as may be deemed necessary for the fulfillment of the intent of the contract documents without additional cost. In the event the Contractor discovers an apparent error or discrepancy, he shall immediately call this to the attention of the Owner. Notification should be in writing and should take place before any material is ordered or any portion of the item in question is constructed. Full instructions will be furnished by the Owner should an error or omission be discovered and the Contractor shall carry out such instructions as if originally specified.

## **SC.8. CONFLICTS BETWEEN SPECIFICATIONS AND PLANS**

In the event of conflicts, ambiguity or lack of clearness between the Specifications and Plans, the most stringent or advantageous condition to the City shall prevail.

## **SC.9. ADDENDA**

Bidders desiring further information, or interpretation of the specifications, must make request for such information in writing to the Owner Representative, no less than 48 hours before the bid opening. Answers to all such Addenda will be bound with and made a part of the Contract Documents. No other explanation or interpretation will be considered official or binding. Should a bidder find discrepancies in or omissions from the plans, specifications, or other contract documents, or should he be in doubt as to their meaning, he should at once notify the Owner Representative in order that a Written Addendum may be sent to all bidders. Any Addenda issued prior to 24 hours of the opening of bids will be emailed to each Contractor on planholder list. The proposal as submitted by the Contractor is to include any Addenda if such are issued by the

Engineer prior to 24 hours of the opening of bids. Verbal changes in the work, made prior to submission of bids will not be binding.

#### **SC.10. SITE INVESTIGATION & EXISTING UTILITIES**

The information contained on the drawings in regard to the location of underground utilities is furnished solely for the convenience of the CONTRACTOR as the best information available at this time. The accuracy of this information is not guaranteed and its use in no way relieves the CONTRACTOR of any responsibility for any losses due to inaccuracies or deviations therefrom, which may be encountered. **CONTRACTOR MUST VIDEO THE PROJECT AREA AND VERIFY THE SIZE AND LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION.** A copy of the video shall be submitted to the Owner prior to Contractor mobilization and occupation of the site.

The Contractor shall be responsible for the protection of all existing utilities or service lines crossed or exposed by his construction operations. Where existing utilities or service lines are cut, broken, or damaged, the Contractor shall replace the utilities or service lines with the same type of original construction, or better, at his own cost and expense. Existing landscaping and irrigation shall be protected at all times.

The CONTRACTOR shall carefully examine the site and satisfy himself about all conditions, which can in any way affect the work or the cost thereof.

#### **SC.11. PAYMENT FOR OVERTIME CHARGES**

The Contractor will be responsible for payment of overtime charges for the Construction Inspector before 7:30 a.m. and after 4:30 p.m. (Monday through Friday) and on Saturdays. The charges will be at a rate of \$50.00 per hour (minimum two (2) hours). This will be paid in full before final acceptance of the project.

The Contractor will also be responsible for payment of overtime charges for Public Works staff for water or sanitary sewer services (valve shut downs, emergency repairs, etc.) before 7:30 a.m. and after 4:30 p.m. (Monday through Friday) and on Saturdays. The charges will be at a rate of \$50.00 per hour (minimum two (2) hours) plus equipment with a \$25.00 administrative fee, and shall paid in full before final project acceptance.

#### **SC.12. LABOR CLASSIFICATION AND MINIMUM WAGE SCALE**

The Contractor may bring his superintendent, foreman, sub-foreman, machine operators and sufficient key men to round his organization. All other skilled and unskilled labor used on the work, when qualified, fit and available, shall be obtained from residents within the City of Carrollton, Texas.

Attention is called to the fact that the inclusion of minimum scale of wages to be paid to employees engaged in the work under this contract does not release the Contractor from compliance with the State Wage and Hour laws of the State and must not pay less than the rates legally prescribed as set forth herein.

#### **SC.13. PROJECT COMPLETION VS SUBSTANTIAL COMPLETION**

The City of Carrollton does not recognize substantial completion. Any reference to "Substantial Completion" throughout the construction documents should be interpreted as "Full Project Completion".

**SC.14. PROJECT TESTING AND INSPECTION**

Contractor responsible for all costs associated with inspection, testing, adjusting, startup and any other related activities for any materials and work associated with this project. Any reference to Owner supplied or paid inspections throughout the construction documents should be interpreted as paid for by the Contractor.

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## **PREVAILING WAGE RATES FOR BUILDING CONSTRUCTION CITY OF CARROLLTON**

If this construction project involves the expenditure of federal funds in excess of \$2,000.00, and requires that the minimum wages to be paid various classes of laborers and mechanics be based upon the wages that are determined by the Secretary of Labor to be prevailing for the corresponding classes of laborers and mechanics employed on a project of a character similar to the contract work in the City of Carrollton.

**Prevailing wage rates are determined by Davis-Bacon and other related Acts and may be found in the Code of Federal Regulations 29 CFR 1.5 and are published in the Federal Register. It is the responsibility of the contractor to ensure items bid (wages) in this contract are current to the published rates.**

Except for work on legal holidays, the "general prevailing rate of per diem wage" for the various crafts of type of workers of mechanics is the product of (a) the number of hours worked per day, except for overtime hours, times (b) the above respective Rate Per Hour.

For legal holidays, the "general prevailing rate of per diem wage" for the various crafts or type of mechanics is the product of (a) one and one-half times the above respective Rate Per Hour times (b) the number of hours worked on the legal holiday.

The "general prevailing rate for overtime work" for the crafts or type of workers or mechanics is one and one-half times the above the respective Rate Per Hour.

Under the provisions of Chapter 2258 Texas Government Code, the Contractor shall forfeit as a penalty to the entity on whose behalf the contract is made or awarded. Ten Dollars (\$10.00) for each laborer, worker or mechanic employed, for each calendar day, or portion thereof, such laborer, worker or mechanic is paid less than the said stipulated rates for any work under the contract, by him, or by any subcontractor under him.

Under the provisions of Chapter 61 (Payment of Wages) Texas Labor Code, the Contractor shall forfeit as a penalty to the entity on whose behalf the contract is made or awarded, Ten Dollars (\$10.00) for each laborer, worker or mechanic employed, for each calendar day, or portion thereof, such laborer, worker or mechanic is paid less than the said stipulated rates for any work under the contract, by him, or by any subcontractor under him.

The contractor shall be required to provide necessary documentation ensuring compliance with these regulations as part of this contract.

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## SECTION 011000 - SUMMARY

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Provisions established in General and Special Conditions of the Contract, Carrollton General Design Standards, Drawings, and all other contract documents are collectively applicable to this Section.

#### 1.2 SUMMARY

- A. Section Includes:
  - 1. Project information.
  - 2. Work covered by Contract Documents.
  - 3. Work by Owner.
  - 4. Owner-furnished products.
  - 5. Access to site.
  - 6. Work restrictions.
  - 7. Specification and drawing conventions.

#### 1.3 PROJECT INFORMATION

- A. Project Identification: Rosemeade Aquatics Deck Resurfacing.
  - 1. Project Location: 1334 Rosemeade Parkway, Carrollton, Texas.
- B. Owner: City of Carrollton, Texas.
- C. Project Physical Attributes: Intent of this section is to provide the contractor with very general understanding of the project site. Quantities expressed are approximate, for contractor's information only, and NOT TO BE USED FOR BIDDING PURPOSES.
  - 1. Approximate total deck area to be replaced: 50,000 square feet
  - 2. Substrate comprised of approximately 50% fiber reinforced concrete, 20% exposed aggregate concrete, and 30% plain concrete.
  - 3. Deck float/leveling is not anticipated to exceed 500 square feet.
  - 4. Permanent deck obstructions are typical of any aquatics facility and include shade structures, deck drains, fencing, stairs, etc.
  - 5. Overall work site boundary is accessible to large trucks. Interior work site is accessible to smaller equipment such as bobcats and concrete buggies.

#### 1.4 WORK COVERED BY CONTRACT DOCUMENTS

- A. The Work of Project is defined by the Contract Documents and consists of the following:
  - 1. Removal of all existing aquatics deck surface treatment and installation of new Mortex Kool Deck Elite surface treatment in all identified areas of the complex in accordance with manufacturer's requirements.
  - 2. Work will include removal, cleaning, pressure washing, substrate preparation using Mortex PTA Bonding Agent, proper product application, application of Mortex Protect-A-Deck, and final cleanup along with associated subsidiary tasks.
  - 3. Mask/protection of all adjacent structures, posts, fencing, etc, and removal of such after completion of construction activities
  - 4. Route, fill and seal existing cracks
  - 5. Removal and replacement of existing deck joints.
  - 6. Limited float/leveling of existing deck to eliminate minor ponding.

- B. Type of Contract:
  - 1. Project will be constructed under a single prime contract.
  
- 1.5 WORK BY OWNER
  - A. General: Cooperate fully with Owner so work may be carried out smoothly, without interfering with or delaying work under this Contract or work by Owner. Coordinate the Work of this Contract with work performed by Owner.
  - B. Owner will remove all non-fixed aquatics related equipment from deck.
  
- 1.6 OWNER-FURNISHED PRODUCTS
  - A. No Owner-furnished products are anticipated for this project.
  
- 1.7 ACCESS TO SITE
  - A. General: Contractor shall have limited but reasonable use of Project site for construction operations during construction period as owner will maintain occupancy of those portions of the facility that are not affected by the work.
  - B. Condition of Existing Building: Maintain portions of existing facility affected by construction operations in a weather-tight condition as appropriate throughout construction period. Repair damage caused by construction operations.
  
- 1.8 COORDINATION WITH OCCUPANTS
  - A. Full Owner Occupancy: Owner will occupy site and existing building during entire construction period. Cooperate with Owner during construction operations to minimize conflicts and facilitate Owner usage. Perform the Work so as not to interfere with Owner's day-to-day operations. Maintain existing exits unless otherwise indicated.
    - 1. Maintain access to existing walkways, corridors, and other adjacent occupied or used facilities. Do not close or obstruct walkways, corridors, or other occupied or used facilities without written permission from Owner and approval of authorities having jurisdiction.
    - 2. Notify the Owner not less than 72 hours in advance of activities that will affect Owner's operations.
    - 3. Install secured weather barriers where required or indicated in the drawings to facilitate Owner's use of the facility.
    - 4. Contractor shall cover and protect all items to prevent damage or accumulation of dust.
  
- 1.9 WORK RESTRICTIONS
  - A. Work Restrictions, General: Comply with restrictions on construction operations.
    - 1. Comply with limitations on use of public streets and with other requirements of authorities having jurisdiction.
  - B. Nonsmoking Facility: **Smoking is not permitted** on the project site.

- 1.10 SPECIFICATION AND DRAWING CONVENTIONS
- A. Specification Content: The Specifications use certain conventions for the style of language and the intended meaning of certain terms, words, and phrases when used in particular situations. These conventions are as follows:
    - 1. Imperative mood and streamlined language are generally used in the Specifications. The words "shall," "shall be," or "shall comply with," depending on the context, are implied where a colon (:) is used within a sentence or phrase.
    - 2. Specification requirements are to be performed by Contractor unless specifically stated otherwise.
  - B. Division 01 General Requirements: Requirements of Sections in Division 01 apply to the Work of all Sections in the Specifications.
  - C. Drawing Coordination: Requirements for materials and products identified on Drawings are described in detail in the Specifications. One or more of the following are used on Drawings to identify materials and products:
    - 1. Terminology: Materials and products are identified by the typical generic terms used in the individual Specifications Sections.
    - 2. Abbreviations: Materials and products are identified by abbreviations published as part of the U.S. National CAD Standard and scheduled on Drawings.
    - 3. Keynoting: Materials and products are identified by reference keynotes referencing Specification Section numbers found in this Project Manual.

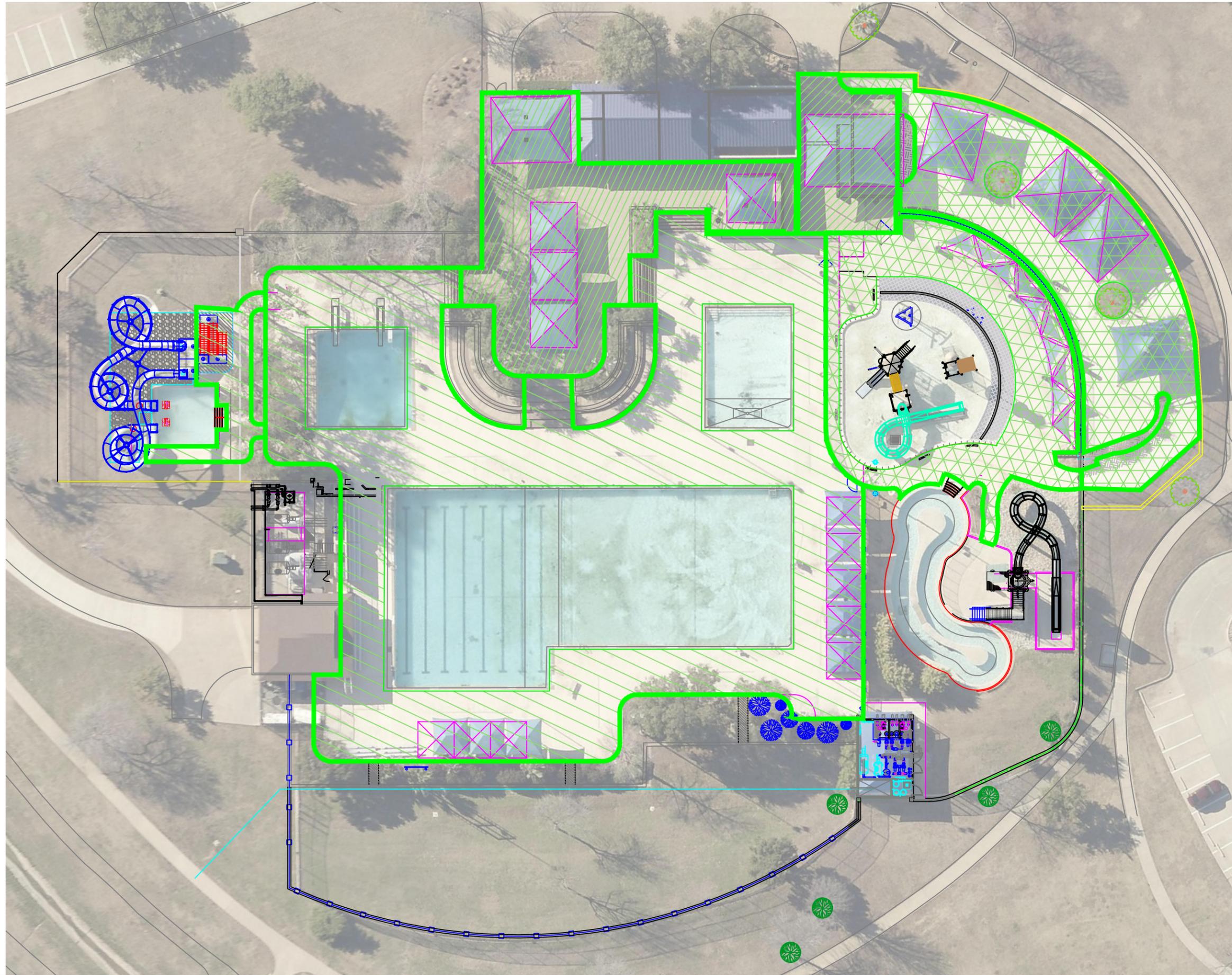
## **PART 2 - PRODUCTS**

- 2.1 BASIS FOR DESIGN AND PROPOSAL
- A. The primary products used as basis for design and proposals is Mortex Kool Deck Elite, Mortex PTA Bonding Agent, and Mortex Protect-A-Deck as further described in these documents.
  - B. No substitution shall be permitted or implied without prior written approval of the City. Substitution requests shall be made in accordance with Section 016000.
  - C. UNDER NO CIRCUMSTANCES SHALL APPROVAL BE MADE VERBALLY NOR INTERPRETED AS APPROVED UNTIL AUTHORIZED IN WRITING BY THE CITY.

## **PART 3 - EXECUTION (Not Used)**

**END OF SECTION**

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SCALE: 1"=40'

- Exposed aggregate concrete
- Fiber Reinforced concrete
- Plain concrete

ROSEMADE AQUATICS  
DECK RESURFACING



DRAWN BY	DESIGN BY	SCALE	DATE	SHEET:
		1"=40'	JAN. 2018	1 OF 1

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## **SECTION 012000**

### **PRICE AND PAYMENT PROCEDURES**

#### **PART 1 GENERAL**

##### **1.01 SECTION INCLUDES**

- A. Procedures for preparation and submittal of applications for progress payments.
- B. Documentation of changes in Contract Price and Contract Time.
- C. Change procedures.
- D. Correlation of Contractor submittals based on changes.
- E. Procedures for preparation and submittal of application for final payment.

##### **1.02 RELATED REQUIREMENTS**

- A. Document - All Contract Documents as described in General Conditions.

##### **1.03 SCHEDULE OF VALUES FOR CONSTRUCTION PHASE**

- A. Electronic media printout including equivalent information will be considered in lieu of standard form specified; submit sample to City for approval.
- B. Forms filled out by hand will not be accepted.
- C. Submit Schedule of Values in duplicate within 15 days after Notice to Proceed in both MS Excel electronic file and hard copy.
- D. Format: Utilize the Table of Contents of Project Manual. Identify each line item with number and title of the specification Section. Identify site mobilization.
- E. Include separately from each line item, a direct proportional amount of Contractor's overhead and profit.
- F. Revise schedule to list approved Change Orders, with each Application For Payment.

##### **1.04 APPLICATIONS FOR PROGRESS PAYMENTS**

- A. Payment Period: Submit at intervals stipulated in the Agreement.
- B. Electronic media printout including equivalent information will be considered in lieu of standard form specified; submit sample to City for approval.
- C. Forms filled out by hand will not be accepted.
- D. For each item, provide a column for listing each of the following:
  - 1. Item Number.
  - 2. Description of work.
  - 3. Scheduled Values.
  - 4. Previous Applications.
  - 5. Work in Place under this Application.
  - 6. Authorized Change Orders.
  - 7. Total Completed to Date of Application.
  - 8. Percentage of Completion.
  - 9. Balance to Finish.
  - 10. Retainage.

- E. Execute certification by signature of authorized officer.
- F. List each authorized Change Order as a separate line item, listing Change Order number and dollar amount as for an original item of Work.
- G. Submit three copies of each Application for Payment.
- H. Include the following with the application:
  - 1. Construction progress schedule, revised and current as specified in Section 01300.
  - 2. Current construction photographs specified in Section 013000.
  - 3. Conditional Waiver and Release on Progress Payment from each Subcontractor that performed work in the current Progress Payment in the form prescribed by Chapter 53 of the Texas Property Code
  - 4. Unconditional Waiver and Release on Progress Payment for each Subcontractor that performed work included in the immediately prior Progress Payment in the form prescribed by Chapter 53 of the Texas Property Code
  - 5. Monthly report as required in Section 013000.
  - 6. SWPPP inspection reports
- I. When City requires substantiating information, submit data justifying dollar amounts in question. Provide one copy of data with cover letter for each copy of submittal. Show application number and date, and line item by number and description.

#### **1.05 MODIFICATION PROCEDURES**

- A. Submit name of the individual authorized to receive change documents and who will be responsible for informing others in Contractor's employ or subcontractors of changes to the Contract Documents.
- B. For minor changes not involving an adjustment to the Contract Price or Contract Time, City Representative will issue instructions directly to Contractor.
- C. For other required changes, City Representative will issue formal directive instructing Contractor to proceed with the change, for subsequent inclusion in a Change Order.
  - 1. The document will describe the required changes and will designate method of determining any change in Contract Price or Contract Time.
  - 2. Promptly execute the change.
- D. For changes for which advance pricing is desired, City Representative will issue a document that includes a detailed description of a proposed change with supplementary or revised drawings and specifications, a change in Contract Time for executing the change with a stipulation of any overtime work required and the period of time during which the requested price will be considered valid. Contractor shall prepare and submit a fixed price quotation within seven (7) calendar days.
- E. Contractor may propose a change by submitting a request for change to City Representative, describing the proposed change and its full effect on the Work, with a statement describing the reason for the change, and the effect on the Contract Price and Contract Time with full documentation and a statement describing the effect on Work by separate or other contractors. Document any requested substitutions in accordance with Section 016000.
- F. Substantiation of Costs: Provide full information required for evaluation.
  - 1. On request, provide following data:
    - a. Quantities of products, labor, and equipment.

- b. Taxes, insurance, and bonds.
- c. Overhead and profit.
- d. Justification for any change in Contract Time.
- e. Credit for deletions from Contract, similarly documented.
- 2. Support each claim for additional costs with additional information:
  - a. Origin and date of claim.
  - b. Dates and times work was performed, and by whom.
  - c. Time records and wage rates paid.
  - d. Invoices and receipts for products, equipment, and subcontracts, similarly documented.
- 3. For Time and Material work, submit itemized account and supporting data after completion of change, within time limits indicated in the Conditions of the Contract.
- G. Execution of Change Orders: City Representative will issue Change Orders for signatures of parties as provided in the General Conditions of the Contract.
- H. After execution of Change Order, promptly revise Schedule of Values and Application for Payment forms to record each authorized Change Order as a separate line item and adjust the Contract Price.
- I. Promptly revise progress schedules to reflect any change in Contract Time, revise sub-schedules to adjust times for other items of work affected by the change, and resubmit.
- J. Promptly enter changes in Project Record Documents.
- K. Claims for extra work will not be paid unless the work covered by such claims was authorized in writing by the owner.
- L. No change orders will be issued for extra work, materials, correction of deficiencies or any other activity related in whole or part to errors and/or omissions in plans or specifications generated by Contractor or their agents.

**1.06 APPLICATION FOR FINAL PAYMENT**

- A. Prepare Application for Final Payment as specified for progress payments, identifying total adjusted Contract Price, previous payments, and sum remaining due.
- B. Application for Final Payment will not be considered until the following have been accomplished:
  - 1. All closeout procedures specified in Section 017700.

**PART 2 PRODUCTS (NOT USED)**

**PART 3 EXECUTION (NOT USED)**

**END OF SECTION**

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## **SECTION 013000**

### **ADMINISTRATIVE REQUIREMENTS**

#### **PART 1 GENERAL**

##### **1.01 SECTION INCLUDES**

- A. Preconstruction meeting.
- B. Progress meetings.

##### **1.02 RELATED REQUIREMENTS**

- A. Section 013200 - Construction Progress Documentation: Progress schedules and construction photography.
- B. Section 013300 - Shop Drawings and Submittal Procedures.
- C. Section 017000 - Execution Requirements
- D. Section 017700 - Closeout Procedures

##### **1.03 PROJECT COORDINATION**

- A. Project Coordinator: City of Carrollton Representative.
- B. Cooperate with the Project Coordinator in allocation of mobilization areas of site; for field offices and sheds, for contractor access, traffic, and parking facilities.
- C. During construction, coordinate use of site and facilities through the Project Coordinator.
- D. Comply with Project Coordinator's procedures for intra-project communications; submittals, reports and records, schedules, coordination drawings, and recommendations; and resolution of ambiguities and conflicts.
- E. Comply with instructions of the Project Coordinator for use of temporary utilities and construction facilities.
- F. Coordinate field engineering and layout work under instructions of the Project Coordinator.
- G. Make the following types of submittals to City of Carrollton:
  - 1. Copies of requests for interpretation made to the Architect.
  - 2. Field reports.
  - 3. Change Order Requests.
  - 4. Progress schedules.
  - 5. Progress photographs.
  - 6. Requests for Substitution.
  - 7. Shop Drawings, product data, and samples.
  - 8. Applications for Payment.
  - 9. Closeout Submittals.

#### **PART 2 PRODUCTS (NOT USED)**

## **PART 3 EXECUTION**

### **3.01 PRECONSTRUCTION MEETING**

- A. City of Carrollton will schedule a meeting prior to Contractor mobilization.
- B. Attendance Required:
  - 1. City of Carrollton.
  - 2. Contractor
  - 3. Architect.
  - 4. Contractor's Sub-contractors.
- C. Agenda:
  - 1. Final distribution of Contract Documents.
  - 4. Submission of list of Subcontractors, list of Products, schedule of values, and progress schedule.
  - 6. Procedures and processing of field decisions, submittals, substitutions, applications for payments, proposal request, Change Orders, and Contract closeout procedures.
  - 7. Scheduling.
- D. All public utility companies, contractors and sub-contractors, along with any and all Municipal Departments will be in attendance so that work coordination will occur. Contractor will submit sequence of work for the project at this time.
- E. A separate pre-construction meeting may be required and coordinated by the City of Carrollton Building Inspection Dept as part of the building permit. **The Contractor shall strictly comply with the Building Inspection Dept's requirements related to such.**
- F. For all meetings, the Contractor is responsible for recordation of minutes and distribution of copies within two days after meeting to City of Carrollton, Architect, participants, and those affected by decisions made.

### **3.02 PROGRESS MEETINGS**

- A. Schedule and administer meetings throughout progress of the Work at maximum weekly intervals.
- B. Make arrangements for meetings, prepare agenda with copies for participants, preside at meetings.
- C. Attendance Required: Job superintendent, major Subcontractors and suppliers, City of Carrollton, Architect, as appropriate to agenda topics for each meeting.

- D. Agenda:
1. Review minutes of previous meetings.
  2. Review of Work progress.
  3. Field observations, problems, and decisions.
  4. Identification of problems that impede, or will impede, planned progress.
  5. Review of submittals schedule and status of submittals.
  6. Maintenance of progress schedule.
  7. Corrective measures to regain projected schedules.
  8. Planned progress during succeeding work period.
  9. Maintenance of quality and work standards.
  10. Effect of proposed changes on progress schedule and coordination.
  11. Other business relating to Work.
- E. Record minutes and distribute copies within two days after meeting to participants, with one copy to Architect, City of Carrollton, participants, and those affected by decisions made.

**END OF SECTION**

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## SECTION 013200

### CONSTRUCTION PROGRESS DOCUMENTATION

#### PART 1 GENERAL

##### 1.1 SUMMARY

- A. Related Documents: Provisions established in General Conditions of the Contract, Scope & Compensation, Carrollton General Design Standards, Division 1 General Requirements, and all other contract documents are collectively applicable to this Section.
- B. Section Includes:
  - 1. Procedures for preparation and submittal of construction Progress Schedules and periodical updating.
  - 2. Construction photography.

##### 1.2 PROGRESS SCHEDULES

- A. Format:
  - 1. Submit a computer generated horizontal bar chart with separate line for each section of Work, identifying first work day of each week in both hard copy and electronic format directly compatible with Microsoft Project.
- B. Sequence of Listings: The chronological order of the start of each item of Work.
- C. Scale and Spacing: To provide space for notations and revisions.
- D. Sheet Size: 11 by 17 inches.
- E. Content:
  - 1. Show complete sequence of construction by activity, with dates for beginning and completion of each element of construction.
  - 2. Identify each item by major Specification section number.
  - 3. Indicate the early and late start, early and late finish, float dates, and duration.
  - 4. Identify work of separate stages, if applicable, and other logically grouped activities.
  - 5. Provide sub-schedules for each stage of Work.
  - 6. Provide sub-schedules to define critical portions of entire Schedule.
  - 7. Show accumulated percentage of completion of each item, and total percentage of Work completed, as of the first day of each month.
  - 8. Indicate submittal dates required for shop drawings, product data, samples, and product delivery dates, including those furnished by CITY and under Allowances. Show decision dates for selection of finishes.
  - 9. Show delivery dates for CITY furnished products and products specified under Allowances, if applicable.
- F. Revisions to Schedules:

1. Schedule updates shall be submitted with each application for payment. Payment applications will not be processed until update is received.
  2. Indicate progress of each activity to date of submittal, and projected completion date of each activity.
  3. Identify activities modified since previous submittal, major changes in scope, and other identifiable changes.
  4. Provide narrative report to define problem areas, anticipated delays, and impact on Schedule. Report corrective action taken, or proposed, and its effect.
- G. Distribution:
1. Distribute copies of Schedules reviewed by CITY to job site file, subcontractors, suppliers, and other concerned entities.
  2. Instruct recipients to promptly report, in writing, problems anticipated by projections shown in Schedules.

### 1.3 MONTHLY REPORTS BY THE CONTRACTOR

- A. Report Format:
1. Contractor shall submit a monthly report to the City Representative. Report shall include an overview of the project to date, documenting current status of work, construction trades at site and future work scheduled over the next 2-3 months. Included shall be the construction photos documenting project status.
  2. Report shall also include project logs, RFI's, submittals, updated construction schedule with projected changes and other documents as appropriate.
- B. Delivery: Reports shall be sent via email in PDF format to the City Representative for review prior to submittal with monthly application for payment. Hard copies of the report including the photographs shall be included with the monthly application for payment.

### 1.4 WEEKLY UPDATES BY THE CONTRACTOR

- A. Update Format:
1. On a weekly basis, the Contractor shall email the City Representative an update of the project for the current week. The updates shall include a detailed project status, work accomplished during the week, work planned over the next 2-3 weeks as well as any notifications of special coordination issues (power interruptions, project delays), etc. The Contractor shall notify the Owner of any possible delays (per GC 20), as unfavorable weather is not an allowable delay and should not be included.
  2. The update shall identify any outstanding submittals or RFI's and status of completion or resolution.
  3. Identify in the report any actions items that are required from the City.
- B. Weekly reports are to be received by the City Representative by 5:00pm on each Friday for the duration of the construction phase of the contract.
- C. The City will charge the Contractor an Administrative Fee of \$500 per occurrence for failure to provide weekly report without approval from the City Representative.

## 1.5 CONSTRUCTION PHOTOGRAPHS

- A. Provide digital photographs of site and construction throughout progress of Work.
- B. Take photographs on cutoff date for each Application for Payment, and delivery electronically to CITY via email, CD-ROM or USB flash drive.
- C. Take a minimum of 20 photographs at maximum 2 week intervals throughout the progress of the work, and shall contain, as a minimum, the following elements.
  - 1. Site clearing.
  - 2. Excavations & demolition
  - 3. Interior & exterior construction.
  - 4. Planting.
  - 5. Formwork.
  - 6. Concrete placement.
  - 7. Final completion.
- D. Medium:
  - 1. Full color, digital format at a density of four (4) megapixel or greater.
  - 2. Identify each photo electronically by listing name of project, phase, orientation of view, and date and time of view.
  - 3. Digital video will also be accepted but cannot be substituted for photographs.
- E. Technique:
  - 1. Provide factual presentation.
  - 2. Provide correct exposure and focus, high resolution and sharpness, maximum depth of field, and minimum distortion.
- F. Views:
  - 1. Provide non-aerial photographs from a sufficient number of views at each specified time in order to sufficiently document the progress of the work, until Date of Completion.
  - 2. Consult with CITY for instructions on views required.

## 1.6 SUBMITTALS

- A. Progress Schedule:
  - 1. Submit initial Schedules within 10 days from Notice to Proceed on Construction Phase. After review, resubmit required revised data within 10 days.
  - 2. Submit revised Progress Schedules with each Application for Payment. Payment applications will not be processed until update is received.
- B. Construction Photographs:
  - 1. Deliver electronic files with application for payment.

**PART 2 PRODUCTS (NOT USED)**

**PART 3 EXECUTION (NOT USED)**

**END OF SECTION**

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CONTRACTOR'S NAME  
 ADDRESS  
 TELEPHONE & FAX

LOGO

JOB SITE  
 ADDRESS OR LOCATION  
 TELEPHONE & FAX

CONTACT & EMAIL

**SUBMITTAL NO. 000**

Contract No:	Subcontractor (or provider) Name:
Project Name:	Subcontractor Address:
Date Submitted:	Specification Section Ref:
Trade or Discipline:	Drawing Sheet Ref:
Contractor's Job No:	Contractor's Transmittal No:
Transmittal From:	Product Data
Transmittal To:	Shop Drawing
	Samples
Digital or Hard Copy:	Certifications
Copies Sent:	Miscellaneous
	Coordination Information
Reviewed By:	Date:

Contractor Certification:

The General Contractor and his Subcontractors certify that they have reviewed and coordinated the information presented in this submittal with the requirements of the contract documents and with all site conditions.

The General Contractor is responsible for complying with the Contract Documents, including verifying dimensions & quantities, layout, coordination between trades, construction means, methods, techniques, sequences and safety. All deviations or changes shall be identified and presented to the Owner and Architect before any changes are incorporated into the constructed project.

CONTRACTOR'S SUBMITTAL & APPROVAL BLOCKS  
 ACTIONS AND RESPONSES

CONTRACTOR'S ARCHITECT SUBMITTAL & APPROVAL BLOCKS  
 ACTIONS AND RESPONSES

CITY OF CARROLLTON'S SUBMITTAL & APPROVAL BLOCKS  
 ACTIONS AND RESPONSES

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## SECTION 013300

### SUBMITTAL PROCEDURES

#### PART 1 GENERAL

##### 1.1 SUMMARY

- A. Related Documents: Provisions established in General Conditions of the Contract, Scope and Compensation, Carrollton General Design Standards, Division 1 General Requirements, and all other City contract documents are collectively applicable to this Section.
- B. Section Includes:
  - 1. Submittal procedures.
  - 2. Proposed products list.
  - 3. Shop drawings.
  - 4. Product data.
  - 5. Samples.
  - 6. Manufacturers' instructions.
  - 7. Manufacturers' certificates.
  - 8. Schedule of submittals.
- C. **Substitutions and/or deviations shall not be made in product submittals under this section. Architect's and/or Owner's review and approval of submittals does not relieve Contractor of responsibility for deviations from or substitutions of Contract Document requirements, unless Owner is specifically and separately informed in writing of substitutions and/or deviations in accordance with these specifications, and prior approval obtained by same.**
- D. All submittals must include CD ROM w/PDF files also CAD files (when appropriate).
- E. Delays resulting from incomplete or rejected submittals, or failure of Contractor to make submittal in advanced time sufficient for review and/or ordering of product are not responsibility of CITY, and do not warrant extension of contract time.

##### 1.2 DEFINITIONS

- A. Shop Drawings: Include drawings, diagrams, schedules and other data specially prepared for the Work by Contractor or a subcontractor, sub-subcontractor, manufacturer, supplier or distributor to illustrate some portion of the Work.
- B. Product Data: Include illustrations, standard schedules, performance charts, instructions, brochures, diagrams, test data and other information furnished by Contractor to illustrate material, product or system for some portion of the Work.
- C. Samples: Physical examples illustrating materials, equipment or workmanship and establish standards by which the Work will be judged. Samples include field samples.
- D. Quality Control Submittals: Pertain to quality control and CITY information which do not require review and approval by the Architect or City Representative and are to be retained for project file only. If reviewed, project information will be reviewed for compliance with the Contract Documents only. The review will not constitute a detailed review of adequacy of submitted design calculations. The appropriateness and accuracy of calculations is the responsibility of the submitting Contractor (and Contractor's professional architect/engineer when such calculations are required to be professionally sealed). Examples of quality control submittals:
  - 1. Design data and calculations.
  - 2. Test reports.
  - 3. Certifications.
  - 4. Manufacturer's installation instructions.
  - 5. Manufacturer's field reports.
- E. Contract Closeout Submittals: Pertain to contract closeout related information which do not require review and approval by the City Representative and are to be retained for project file only. Examples of contract closeout submittals:

1. Project record information.
  2. Warranties.
  3. Operation and maintenance data.
  4. CITY instruction reports.
- F. Administrative Submittals: Refer to General and Supplementary Conditions for requirements for administrative submittals. Such submittals include, but are not limited to:
1. Permits.
  2. Applications for payment.
  3. Performance and payment bonds.
  4. Insurance certificates.
  5. List of Subcontractors.
  6. Project Cost Estimate.

### 1.3 GENERAL REQUIREMENTS

- A. Original drawings prepared by Contractor, Contractor's design professional, Subcontractor, Supplier, or Distributor, which illustrate some portion of the work, showing fabrication, layout, setting or erection details, prepared by a qualified detailer. PDF files and when appropriate AutoCAD files, shall be submitted for all shop drawing submittals. Sheet sizes within files shall be of original size and at a density that is fully legible.
- B. Submit each individual submittal as a single PDF file and when appropriate AutoCAD files shall be submitted for all shop drawing submittals. If file size allows, submittal may be transmitted by email. For large submittals, file should be transmitted via CD-ROM or USB flash drive (transmittal media will not be returned). Fax copies are not considered an acceptable electronic delivery.
- C. Product submittals shall be accompanied with a hard copy of formal cover letter in correct format. Cover letter shall also be transmitted electronically.
- D. Drawings shall be dated and marked to show the name of the Project, Architect, Contractor, originating Sub-contractor, Manufacturer or supplier, pertinent Drawing sheets, detail numbers, Specification section number, and separate details as pertinent.
- E. Prepare and submit, with construction schedule, a separate schedule listing dates for submission and lead dates for reviewed shop drawings, product data and samples for each item. Schedule submissions at least 30 days before date reviewed submittals will be needed, in accordance with approved submittal schedule.
- F. Schedule submittals to expedite Project in accordance with approved Construction Progress Schedules and in such sequence as to cause no delay in the Work or in the activities of CITY or of separate contractors.
- G. Deliver submittals to the Architect's and City Representative's offices at business address during City Hall business hours. Submittals physically delivered or electronically transmitted during non-City Hall business hours will be considered received the next business day. Submittals accepted only from Contractor.
- H. Initial submittal shall be made to Architect via email or other electronic transfer with the City Rep copied. Architect will review and forward to City for approval. City will make final distribution.
- I. Submit product data, shop drawings, samples, calculations, certificates, manufacturer's instructions, and other items requested within each specification section. Present in a clear and thorough manner original drawings which illustrate the portion of the work showing fabrication, layout, setting, or erection details, prepared by a qualified detailer.
- J. All submittals shall be presented in a manner to allow reproduction on a black & white copier and convey all submittal data. DO NOT "HIGHLIGHT" product information with shaded markers.
- K. Number submittals sequentially (001, 002, 003...) in a large font in the upper right corner as the submittal number. It is permissible to add another line just above the "contract" line that is labeled "Extended Submittal No.:" (ie Extended Submittal No: 1-032000-1) that includes referenced specification section.
- L. Designate resubmittals with an "R" (001-R1) and supplemental with an "S" (001-S1). Resubmittals are a full reissuance and void the previous submittals (used in a case of a

rejection or revise & resubmit). Supplements are attachments to the previous submittal (used when minor additional information is required).

- M. Apply Contractor's stamp, sign or initial and date certifying that review, verification of products, field dimensions, adjacent construction Work, and coordination of information, is in accordance with requirements of Work and Contract Documents.
- N. Clearly identify on submittal cover pages in writing at time of submission, deviations in submittals from requirements of Contract Documents. Deviations from Contract Documents that are not identified in this manner are automatically considered rejected and subject to replacement at no additional cost to the Owner regardless of any approval stamps on returned submittals.
- O. Do not perform Work on any element requiring submittal and review of shop drawings, product data, samples, or other similar submittals until respective submittal has been approved by CITY.
- P. Maintain in field office a copy of submittal schedule and log of submittals indicating current status of each item.
- Q. Prepare submittals using English units of measurement unless specified otherwise in the plan set.
- R. Coordinate submittals into logical groupings to facilitate interrelation of the several items.
  - 1. Finishes which involve City Representative's selection of colors, textures, or patterns.
  - 2. Associated items which require correlation for efficient function or for installation.
- S. Do not make "Mass" submittals (6 or more submittals) at one time. If Mass submittals are received, CITY's review time stated above will be extended as necessary to perform proper review. City Engineer will review Mass submittals based upon priority determined by CITY after consultation with Contractor.
- T. Provide adequate blank space on each submittal for Architect, Engineer and CITY's stamps as applicable.

#### 1.4 PROPOSED PRODUCTS LIST

- A. Refer to appropriate sections of plans and specifications.

#### 1.5 SHOP DRAWINGS

- A. Check and coordinate shop drawings of any section or trade with requirements of other sections or trades and as necessary for proper coordination and complete installation of Work. This includes but is not limited to full verification of all existing structures, equipment or any other component which may be affected by new work.
- B. Do not use Contract Drawings for shop drawings. Provide original shop drawings with changes from Contract Drawings clearly indicated.
- C. Show layout, details, materials, dimensions, thicknesses, methods of assembly, attachments, relation to adjoining Work, and other pertinent data and information. Submit detail drawings of special accessory components not included in manufacturer's product data.
- D. Identify field dimensions; show relation to adjacent or critical features of Work or products.
- E. Identify variations from Contract Documents and Product or system limitations which may be detrimental to successful performance of the completed Work.
- F. Existing Conditions:
  - 1. Show locations of existing conditions which affect installation of new Work.
  - 2. Show details of existing conditions and proposed modifications as requested by City Engineer.
- G. Revise and resubmit submittals as required, identify all changes made since previous submittal.
- H. Distribute copies of reviewed submittals to concerned parties. Instruct parties to promptly report any inability to comply with provisions.

#### 1.6 CHANGED CONDITION DRAWINGS

- A. When specified in individual Sections, submit changed condition drawings in same quantities as for shop drawings.

- B. Where conditions differ from Contract Documents or shop drawings and remedial work is necessary, submit drawing showing changes.
- C. Submit drawing bearing seal and signature of professional engineer responsible for design.
- D. Indicate differing condition and required work caused by differing condition.

#### 1.7 CALCULATIONS

- A. When specified in individual Sections, submit calculations.
- B. Submit engineering calculations for component sizes, deflections, and connections.
- C. Submit calculations bearing seal and signature of professional engineer licensed in Texas responsible for design.
- D. Where existing conditions deviate from Contract Documents or shop drawings, submit calculations for existing condition, including calculations for anticipated corrective action required, and changes to loads transferred to "base building" structure.

#### 1.8 PRODUCT DATA

- A. Transmittal:
  - 1. Submit under accepted form transmittal letter in both hard copy and electronic format. Identify Project by title and number. Identify Work and product by Specification section and Article number.
  - 2. Submit the number of copies which the Contractor requires, plus 2 copies which will be retained by the CITY. Minimum of two samples are required if not otherwise specified
- B. Submit only pages which are pertinent.
  - 1. Mark each copy of standard printed data to identify pertinent products, models, options, and other data referenced to Specification Section and Article number.
  - 2. Show reference standards, performance characteristics, and capacities; wiring and piping diagrams and controls; component parts; finishes; dimensions; and required clearances.
  - 3. Modify manufacturer's standard data, schematic drawings, and diagrams to supplement standard information and to provide information specifically applicable to the Work. Delete information not applicable.
- C. After review, distribute copies of reviewed product data to concerned parties. Instruct parties to promptly report any inability to comply with provisions.

#### 1.9 SAMPLES

- A. Transmittal:
  - 1. Label each sample with identification required for transmittal letter with full Project information.
  - 2. Submit the number of samples specified in individual specification Sections; one of which will be retained by CITY.
  - 3. Submit samples simultaneously to the Architect's office and to the City's office.
  - 4. Submit number of samples specified in individual Specifications sections. Minimum of two samples are required if not otherwise specified.
- B. Submit samples to illustrate functional and aesthetic characteristics of the Product, with integral parts and attachment devices. Coordinate sample submittals for interfacing work.
- C. Submit samples of finishes from the full range of manufacturers' standard colors, textures, and patterns for CITY selection.
- D. Submit samples to illustrate functional characteristics of products, including parts and attachments.
- E. Provide field samples of finishes at Project, at location acceptable to CITY, as required by individual Specifications section and in accordance with Section 014500. Install each sample complete and finished.
- F. Approved samples which may be used in the Work are indicated in individual specification Sections.

#### 1.10 REVIEW FOR COLOR COORDINATION

- A. General: All Color Selections must be reviewed by the City for coordination with USERS, CITY STAFF and coordinated with color selections determined during the design phase of this project. Colors will NOT be reviewed and released individually without coordination with other color selections. Final selection and approval of finishes and colors WILL BE reviewed in related group and selections determined at that time.
- B. Contractor's Responsibility: The Contractor shall procure and produce product and system submittals with color critical selections at the beginning of the project. The Contractor shall notify the City Representative of time sensitive or critical path material & color selections no later than 30 days after the Notice to Proceed on Construction Phase. These and other critical submittals shall be expedited so that the City Representative has time to schedule and coordinate the City's internal review process.
- C. Submittals Requiring Color Coordination Review – General Listing: Note that other systems and components may need to be included.
  - 1. Exterior Components: All exterior finish materials such as Brick, BUR Roofing, Prefinished Metal Roofing & Trim, Colored Tile, Pavers, Plaster Color & Finish, Masonry Veneers, Exterior Glazing, Prefinished Fencing, etc.
  - 2. Interior Components: Color Masonry, Ceramic Tile, Plastic Laminate, Solid Surfacing, Cabinets & Millwork Finishes, Stained & Transparent Wood (veneer selection & finish), Wood Doors, Aluminum Framing & Entrances, all Flooring, Lockers, Manufactured Components (corner guards, benches, etc.), Toilet Compartments, Resilient Base, any materials listed on the Interior Color Selections OR, any other items that could potentially impact the project schedule. Additionally, any long lead time systems and some MEP systems may require critical color selections.
- D. Submittals requiring product data & sample review and selection WILL NOT BE REVIEWED until both components are received for review.

#### 1.11 INFORMATIONAL SUBMITTALS

- A. Informational submittals upon which CITY is not expected to take responsive action may be so identified in Contract Documents. When professional certification of performance criteria of materials, systems, or equipment is required by Contract Documents, CITY shall be entitled to rely upon accuracy and completeness of such certifications.
- B. Types of Informational Submittals:
  - 1. Design data: Submit with shop drawings.
  - 2. Test reports: Submit within 2 weeks of testing.
  - 3. Certifications:
    - a. Submit certifications when specified in individual Specification sections.
    - b. Indicate material or product conforms to or exceeds specified requirements. Submit supporting reference data, affidavits, and certifications as appropriate.
    - c. Certifications may be recent or previous test results on material or product, but must be acceptable to CITY.
    - d. Submit manufacturer or fabricator certifications with product data.
    - e. Submit certificates of compliance within 2 weeks following approval or acceptance by authority having jurisdiction.
    - f. Submit installation certifications within 2 weeks following completion of product installation.
  - 4. Engineering Certifications:
    - a. Submit certificated statement, signed and sealed by professional engineer responsible for design attesting to the following:
      - 1) Conformity to applicable governing codes.
      - 2) Conformity to criteria in Contract Documents.
      - 3) Component parts were designed or selected for locale and application intended.
    - b. Submit with shop drawings. Submit prior to fabrication if shop drawings are not required by individual specification sections.

5. Qualification Data:
    - a. When specified in individual Sections, submit manufacturer's, fabricator's, and installer's qualifications verifying years of experience.
    - b. Include list of completed projects having similar scope of Work identified by name, location, date, reference names, and phone numbers.
    - c. Submit manufacturer qualification data with proposed products list.
  6. Manufacturer's Instructions:
    - a. Refer to Section 0145000 for requirements.
    - b. When specified in individual Specification sections, submit manufacturer's printed instructions for delivery, storage, assembly, installation, adjusting, finishing, and other pertinent data.
    - c. Identify conflicts between manufacturer's instructions and Contract Documents.
    - d. Submit with product data.
  7. Manufacturer's Certificates:
    - a. When specified in individual specification Sections, submit manufacturers' certificate to CITY for review, in quantities specified for Product Data.
    - b. Indicate material or product conforms to or exceeds specified requirements. Submit supporting reference date, affidavits, and certifications as appropriate.
    - c. Certificates may be recent or previous test results on material or Product, but must be acceptable to CITY.
  8. Manufacturer's Field Reports:
    - a. Refer to Section 014500 for requirements.
    - b. When specified in individual Specification sections, submit written results and findings of manufacturer's field services specified as part of Field Quality Control.
    - c. Submit within 2 weeks following completion of field services covered in individual reports.
- C. Quantity: Submit in quantities specified for product data.

#### 1.12 COORDINATION DRAWINGS

- A. Provide information required by Project Coordinator for preparation of coordination drawings.
- B. Review drawings prior to submission to Architect and City.

#### 1.13 INCOMPLETE, PARTIAL AND REJECTED SUBMITTALS

- A. Incomplete Submittal: Submittal not complying with specified submittal requirements.
- B. Partial Submittal: Submittal subdivided into components as indicated in submittal schedule and each component submitted separately.
- C. CITY will not review incomplete submittals. Complete submittals for each item are required. Submittal will not be considered official until it is complete in every respect including electronic file delivery.
- D. Submittals will be returned without processing if they have not been reviewed and stamped by Contractor AND Contractor's Architect for coordination of work and conformance with the Drawings and Specifications prior to submission to CITY, if they are not initialed or signed by authorized person, if they are not dated, or if it becomes evident that they have not been properly reviewed.
- E. Make re-submittal under procedures specified for initial submittals; identify changes made since previous submittal.
- F. Delays resulting from incomplete or rejected submittals are not responsibility of CITY, and do not warrant extension of contract time..

#### 1.14 PROGRESS SCHEDULES

- A. Refer to Section 013200.

#### 1.15 CONSTRUCTION PHOTOGRAPHS

- A. Refer to Section 013200.

#### 1.16 CONTRACTOR REVIEW

- A. Contractor's delivery of a submittal is his acknowledgement that all review, verification and coordination required by these specifications has been made, and any potential conflicts resolved. Contractor shall be responsible for all costs to remedy any conflicts resulting from lack of Contractor verification or coordination, or proper prior notification in accordance with these construction documents of such to the City.
- B. All Shop Drawings required by these Construction Documents are considered as "tools" of construction and not "tools" of design. By submitting Shop Drawings the Contractor acknowledges his understanding and acceptance of this principle. Shop Drawings stamped, signed and dated as approved by the General Contractor but showing evidence that they have not been carefully checked by the Contractor will be returned to the Contractor, rechecked by the Contractor and resubmitted to the CITY.
- C. Review submittal prior to transmittal; determine and verify field measurements, field construction criteria, quantities and details, manufacturer's catalog numbers, and conformance of submittal with requirements of Contract Documents.
- D. Coordinate submittal with requirements of Work and of Contract Documents.
- E. Sign or initial in a rubber-stamped review block format, each sheet of shop drawings and product data, and each sample label to certify compliance with requirements of Contract Documents. Notify CITY in writing separately prior to time of submittal of any deviations from or substitutions of requirements of Contract Documents.
- F. Do not fabricate products or begin work which requires submittal until return of submittal with CITY acceptance.
- G. Contractor's responsibility for errors and omissions in submittal is not relieved by CITY's, review of submittal.
- H. Responsibility for deviations in submittal from requirements of Contract Documents is not relieved by CITY's review of submittal, unless CITY gives specific written acceptance of deviations. CITY will review submittal for general conformance to design intent only.

#### 1.17 CITY REVIEW

- A. CITY will review construction progress schedules, and submittal schedules. City Representative will review product lists, shop drawings, product data, and samples and return within 15 working days of receipt excepting conditions previously noted.
- B. Informational submittals and other similar data are for CITY's information and do not require CITY's responsive action.
- C. CITY's and Architect's review of submittals is for limited purpose of checking for conformance with information given and design concept expressed in Contract Documents. CITY's and Architect's review is not conducted for purpose of determining accuracy and completeness of items such as dimensions and quantities, which remain responsibility of Contractor.
- D. CITY's review and approval of submittals does not relieve Contractor of responsibility for deviations from Contract Document requirements, unless CITY is specifically informed in writing of deviations and specific approval is received in writing from CITY for such deviation.
- E. CITY's review and acceptance of submittals does not indicate acceptance of changes in Contract time or cost.
- F. Submittals made by Contractor which are not required by Contract Documents may be returned without action.

#### **PART 2 PRODUCTS (NOT USED)**

#### **PART 3 EXECUTION (NOT USED)**

**END OF SECTION**

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**SECTION 014500**  
**QUALITY CONTROL**

**PART 1            GENERAL**

**1.1    SUMMARY**

- A.    Related Documents: Provisions established in General Conditions of the Contract, Scope & Compensation, Carrollton General Design Standards, Division 1 General Requirements, and other City contract documents are collectively applicable to this Section.
  
- B.    Section Includes:
  - 1.    Quality control of products and workmanship.
  - 2.    Manufacturer's instructions.
  - 3.    Manufacturer's certificates and field services.
  - 4.    Mockups.
  - 5.    Field samples.
  - 6.    Owner provided testing laboratory services.
  - 7.    Selection and payment.
  - 8.    Laboratory responsibilities.
  - 9.    Laboratory reports.
  - 10.  Limits on testing laboratory authority.
  - 11.  Contractor's responsibilities.
  - 12.  Schedule of inspections and tests.

**1.2    DESCRIPTION**

- A.    Maintain quality control over supervision, subcontractors, suppliers, manufacturers, products, services, workmanship, and site conditions, to produce Work in accordance with Contract Documents.

**1.3    DEFINITIONS**

- A.    Field Samples: Partial installation of selected materials installed at Project site for CITY's review and approval of visual features and workmanship.
  
- B.    Mock-ups: Full size assemblies that incorporate several materials or elements of construction erected for CITY's review and approval of visual features and workmanship. Mock-ups represent quality of materials and workmanship required for Work.

**1.4    PERFORMANCE REQUIREMENTS**

- A.    Workmanship:
  - 1.    Comply with industry standards of the region except when more restrictive tolerances or specified requirements indicate more rigid standards or more precise workmanship.
  - 2.    Provide suitably qualified personnel to produce Work of specified quality.

3. Secure products in place with positive anchorage devices designed and sized to withstand stresses, vibration, and racking.
  4. Provide finishes to match approved samples.
- B. Manufacturer's Instructions:
1. Prepare instructions and data by personnel experienced in maintenance and operation of described products.
  2. Require compliance with instructions in full detail, including each step in sequence. Do not omit preparatory steps or installation procedures unless specifically modified or exempted by Contract Documents.
  3. Maintain one complete set of instructions at Project Site during installation and until completion.
  4. Should instruction conflict with Contract Documents, request clarification from City Representative before proceeding.
- C. Manufacturer's Certificates:
1. When required in individual Specifications section, submit manufacturer's certificate, in duplicate, certifying that products meet or exceed specified requirements, executed by responsible officer.
- D. Manufacturer's Field Services and Reports:
1. Submit reports in accordance in accordance with Section 013300.
  2. Report observations and site decisions or instructions given to applicators or installers that are supplemental or contrary to manufacturer's written instructions.

#### 1.5 QUALITY ASSURANCE

- A. Supervise performance of Work in such manner and by such means to ensure that Work, whether completed or in progress, will not be subjected to harmful, dangerous, damaging, or otherwise deleterious exposure during construction period.
- B. Ensure that persons performing Work are qualified to produce workmanship of specified quality.
- C. Monitor quality control over products, suppliers, manufacturers, services, site conditions, and workmanship to ensure Work complies with Contract Documents.
- D. Comply with specified reference standards as minimum quality for the Work except when more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.

#### 1.6 EXAMINATION OF CONDITIONS

- A. Examine substrates and conditions under which Work is to be performed. Do not commence work over unsatisfactory conditions detrimental to proper and timely execution of Work.
- B. Do not proceed with Work until unsatisfactory conditions have been corrected.
- C. Commencement of installation constitutes acceptance of conditions and cost of any corrective measures are responsibility of Contractor.

## 1.7 MOCKUPS

### A. General:

1. Use materials, fabrication and installation methods identical with those indicated for Work. Simulate actual construction conditions as accurately as possible.
2. Provide mock-ups required by individual Specification sections.
3. Approval:
  - a. Obtain CITY's written approval for each mock-up.
  - b. Do not start production of materials for final Project site erection until City Representative's approval of mock-ups has been obtained.
  - c. Approved mock-ups will serve as standard of quality and workmanship of Work; maintain mock-ups until completion of relevant Work.
4. Upon completion of relevant Work or when directed by CITY, demolish and remove mock-ups.

### B. Visual Mock-up

1. Provide full scale mock-up for review of CITY.
2. Unless specified or directed otherwise, erect visual mock-ups at Project site at location acceptable to CITY.
3. Obtain CITY approval of visual mock-up prior to fabrication and construction of test mock-up.

## 1.8 FIELD SAMPLES

### A. General:

1. Provide field samples at site required by individual Specification sections.
2. Erect at location acceptable to CITY; perform Work in accordance with applicable Specification sections.
3. Construct complete, including Work of related trades required in finished Work.
4. Make adjustments necessary to obtain approval from CITY. Do not proceed with further work until sample installation has been approved by CITY.
5. Approved samples will serve as standard of quality and workmanship of Work; maintain samples until completion of relevant Work.
6. Upon completion of Work or when directed by CITY, demolish field samples and remove from site, unless accepted by CITY as part of completed Work.

## **PART 2 PRODUCTS (NOT USED)**

## **PART 3 EXECUTION (NOT USED)**

**END OF SECTION**

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## SECTION 015000

### TEMPORARY FACILITIES AND CONTROLS

#### PART 1 GENERAL

##### 1.01 SECTION INCLUDES

- A. Temporary utilities.
- B. Temporary telecommunications services.
- C. Temporary sanitary facilities.
- D. Temporary Controls: Barriers, enclosures, and fencing.
- E. Security requirements.
- F. Vehicular access and parking.
- G. Waste removal facilities and services.
- H. Project identification sign.
- I. Field offices.

##### 1.02 TEMPORARY UTILITIES

- A. The City agrees to provide available and reasonable electrical power required for construction purposes. Contractor shall verify that existing available power will meet project requirements.
- B. The City agrees to allow use of water for construction provided use remains reasonable and contractor does not exhibit waste. If in the opinion of the City Representative, use is excessive or wasteful, contractor must obtain a temporary meter as outlined in subparagraph 1.05.B of this section.
- C. Contractor shall be responsible for any temporary utilities beyond those currently available at the site.

##### 1.03 TELECOMMUNICATIONS SERVICES

- A. Provide, maintain, and pay for telecommunications services in the field at time of project mobilization.
- B. Telecommunications services shall include:
  - 1. Microsoft Windows based personal computer dedicated to project telecommunications, with necessary software and laser printer.
  - 2. Telephone Land Lines: One line, minimum; one handset per line.
  - 3. Email: Account/address reserved for project use.
  - 4. Facsimile Service: Minimum of one dedicated fax machine/printer, with dedicated phone line.
    - a. Fax-to-email software is acceptable alternative.

##### 1.04 TEMPORARY SANITARY FACILITIES

- A. **Use of existing facilities or newly constructed facilities by construction personnel is strictly prohibited.**
- B. Provide and maintain required facilities and enclosures at a location satisfactory to the Owner, for use by the employees of the CONTRACTOR and by the Engineer. Provide at time of project mobilization.
- C. All such facilities shall conform to the requirements of State and local health authorities,

ordinances and laws.

- D. Maintain daily in clean, well ventilated and sanitary condition.
- E. At end of construction, return facilities to same or better condition as originally found.

#### **1.05 CONSTRUCTION WATER**

- A. Should the City Representative require such, procurement and cost of a temporary water meter is the Contractor's responsibility and considered subsidiary to the General Conditions of the contract. Prevailing water rates are available by contacting the City's Utilities Department at 972-466-3120.
- B. Use trigger-operated nozzles for water hoses, to avoid waste of water.
- C. The Contractor shall not operate any fire hydrants without the knowledge and permission of the City or their representative. The CONTRACTOR will not operate any existing valves in the City of Carrollton.

#### **1.06 BARRIERS**

- A. Provide barriers to prevent unauthorized entry to construction areas, to prevent access to areas that could be hazardous to workers or the public, to allow for owner's use of site and to protect existing facilities and adjacent properties from damage from construction operations and demolition.
- B. Provide barricades and covered walkways required by governing authorities for public rights-of-way.
- C. Provide protection for plants designated to remain. Replace damaged plants.
- D. Protect non-owned vehicular traffic, stored materials, site, and structures from damage.
- E. Maintain required egress from existing occupied building during construction work; comply with all directives from fire marshal.

#### **1.07 SECURITY**

- A. Provide security and facilities to protect Work, and City of Carrollton's operations from unauthorized entry, vandalism, or theft.

#### **1.08 VEHICULAR ACCESS AND PARKING**

- A. Coordinate access and haul routes with governing authorities and City of Carrollton.
- B. Provide and maintain access to fire hydrants, free of obstructions.
- C. Provide means of removing mud from vehicle wheels before entering streets.
- D. Provide temporary parking areas to accommodate construction personnel. When site space is not adequate, provide additional off-site parking.

#### **1.09 PROJECT IDENTIFICATION**

- A. Provide up to two 4' x 4' project identification signs per City of Carrollton's General Design Standards for Capital Improvements Project Sign.
- B. Erect on site at locations established by Owner.
- C. No other signs are allowed without City of Carrollton permission except those required by law.

#### **1.10 FIELD OFFICES**

- A. Contractor is expected to maintain ability to conduct business and accept deliveries during the

project, but is not required to provide a temporary field office.

- B. Contractor shall not occupy any existing onsite structure for a temporary office.

**1.11 REMOVAL OF UTILITIES, FACILITIES, AND CONTROLS**

- A. Remove temporary utilities, equipment, facilities, materials, prior to Substantial Completion inspection.
- B. Remove underground installations to a minimum depth of 2 feet. Grade site as indicated.
- C. Clean and repair damage caused by installation or use of temporary work.
- D. Restore existing facilities used during construction to original condition.
- E. Restore new permanent facilities used during construction to specified condition.

**PART 2 PRODUCTS (NOT USED)**

**PART 3 EXECUTION (NOT USED)**

**END OF SECTION**

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## **SECTION 016000**

### **PRODUCT REQUIREMENTS**

#### **PART 1 GENERAL**

##### **1.01 SECTION INCLUDES**

- A. General product requirements.
- B. Transportation, handling, storage and protection.
- C. Product option requirements.
- D. Substitution limitations and procedures.
- E. Procedures for City of Carrollton-supplied products.
- F. Maintenance materials, including extra materials, spare parts, tools, and software.

##### **1.02 RELATED REQUIREMENTS**

- A. Section 013300 - Shop Drawing and Submittal Procedures.
- B. Section 014500 - Quality Control: Product quality monitoring.

##### **1.03 SUBMITTALS**

- A. Product Data Submittals: See requirements of Section 013300. Submit manufacturer's standard published data. Mark each copy to identify applicable products, models, options, and other data. Supplement manufacturers' standard data to provide information specific to this Project.
- B. Shop Drawing Submittals: See requirements of Section 013300. Prepared specifically for this Project; indicate utility and electrical characteristics, utility connection requirements, and location of utility outlets for service for functional equipment and appliances.
- C. Sample Submittals: See requirements of Section 013300. Illustrate functional and aesthetic characteristics of the product, with integral parts and attachment devices. Coordinate sample submittals for interfacing work.
  - 1. For selection from standard finishes, submit samples of the full range of the manufacturer's standard colors, textures, and patterns.
  - 2. Unless specifically noted otherwise, assume that one sample of each item will not be returned.

#### **PART 2 PRODUCTS**

##### **2.01 NEW PRODUCTS**

- A. Provide new products unless specifically required or permitted by the Contract Documents.
- B. Do not use products having any of the following characteristics:
  - 1. Made using or containing CFC's or HCFC's.
  - 2. Made of wood from newly cut old growth timber.

## **2.02 PRODUCT OPTIONS**

- A. Products Specified by Reference Standards or by Description Only: Use any product meeting those standards or description.
- B. Products Specified by Naming One or More Manufacturers: Use a product of one of the manufacturers named and meeting specifications, no options or substitutions allowed.
- C. Products Specified by Naming One or More Manufacturers with a Provision for Substitutions: Submit a request for substitution for any manufacturer not named.
- D. All products shall comply with City of Carrollton Facility Services Department General Building Standards and City of Carrollton General Design Standards.

## **2.03 MAINTENANCE MATERIALS**

- A. Furnish extra materials, spare parts, tools, and software of types and in quantities specified in individual specification sections.
- B. Deliver and place in location as directed; obtain receipt prior to final payment.

## **PART 3 EXECUTION**

### **3.01 SUBSTITUTION PROCEDURES**

- A. Substitutions may be considered when a product becomes unavailable through no fault of the Contractor PROVIDED the Contractor specifically requests such in writing in accordance with these specifications. Unauthorized substitutions or deviations from the Contract Documents is subject to rejection, removal and replacement with a product suitable to the Owner at Contractor's expense.
- B. Document each request with complete data substantiating compliance of proposed substitution with Contract Documents.
- C. A request for substitution constitutes a representation that the submitter:
  - 1. Has investigated proposed product and determined that it meets or exceeds the quality level of the specified product.
  - 2. Will provide the same warranty for the substitution as for the specified product.
  - 3. Will coordinate installation and make changes to other Work that may be required for the Work to be complete with no additional cost to City of Carrollton.
  - 4. Waives claims for additional costs or time extension that may subsequently become apparent.
- D. Substitutions will not be considered when they are indicated or implied on shop drawing or product data submittals, without separate written request, or when acceptance will require revision to the Contract Documents.
- E. Substitution Submittal Procedure:
  - 1. Submit three copies of request for substitution for consideration. Limit each request to one proposed substitution.
  - 2. Submit shop drawings, product data, and certified test results attesting to the proposed product equivalence. Burden of proof is on proposer.
  - 3. The City Representative will notify Contractor in writing of decision to accept or reject request.

- F. Additional Substitution Submittal Procedures PRIOR TO PROPOSAL:
1. All substitution requests shall be submitted in writing NOT LESS THAN TEN DAYS PRIOR TO PROPOSAL DUE DATE.
  2. Prospective substitution shall not be considered valid until it is formally accepted or rejected by written addendum.
  3. Lack of response to the substitution request by the city does NOT constitute acceptance.
  4. Proposals submitted in the absence of an approved substitution will be obligated to original specified products.
  5. Follow substitution procedures A-E above.

### **3.02 TRANSPORTATION AND HANDLING**

- A. Coordinate schedule of product delivery to designated prepared areas in order to minimize site storage time and potential damage to stored materials.
- B. Transport and handle products in accordance with manufacturer's instructions.
- C. Transport materials in covered trucks to prevent contamination of product and littering of surrounding areas.
- D. Promptly inspect shipments to ensure that products comply with requirements, quantities are correct, and products are undamaged.
- E. Provide equipment and personnel to handle products by methods to prevent soiling, disfigurement, or damage.
- F. Arrange for the return of packing materials, such as wood pallets, where economically feasible.
- G. Jobsite Deliveries: The Contractor shall have ALL deliveries (construction materials, supplies, documents, samples or other items) directed to their home office, local office or the jobsite for signature ONLY BY the Contractor themselves or their assigns. In no case shall deliveries for this Contract be addressed to, dropped-off, sent, left, transferred or received by an ANY CITY OF CARROLLTON ENTITY OR LOCATION. The Contractor shall direct their personnel, subcontractors, suppliers, material men or delivery companies to comply with these policies. The City of Carrollton accepts NO RESPONSIBILITY for any item that is received by someone other than the Contractor or their assigns; and, the Contractor is notified that they can make no claim of any kind due to mis-delivery or delays.

### **3.04 STORAGE AND PROTECTION**

- A. Designate receiving/storage areas for incoming products so that they are delivered according to installation schedule and placed convenient to work area in order to minimize waste due to excessive materials handling and misapplication.
- B. Store and protect products in accordance with manufacturers' instructions.
- C. Store with seals and labels intact and legible.
- D. Store sensitive products in weather tight, climate controlled, enclosures in an environment favorable to product.
- E. For exterior storage of fabricated products, place on sloped supports above ground.

- F. Provide bonded off-site storage and protection when site does not permit on-site storage or protection.
- G. Cover products subject to deterioration with impervious sheet covering. Provide ventilation to prevent condensation and degradation of products.
- H. Prevent contact with material that may cause corrosion, discoloration, or staining.
- I. Provide equipment and personnel to store products by methods to prevent soiling, disfigurement, or damage.
- J. Arrange storage of products to permit access for inspection. Periodically inspect to verify products are undamaged and are maintained in acceptable condition.

**END OF SECTION**

## SECTION 017000

### EXECUTION REQUIREMENTS

#### PART 1 GENERAL

##### 1.01 SECTION INCLUDES

- A. Examination, preparation, and general installation procedures.
- B. Requirements for alterations work, including selective demolition, except removal, disposal, and/or remediation of hazardous materials and toxic substances.
- C. Pre-installation meetings.
- D. Cutting and patching.
- E. Surveying for laying out the work.
- F. Cleaning and protection.
- G. Demonstration and instruction of City of Carrollton personnel.
- H. General requirements for maintenance service.

##### 1.02 RELATED REQUIREMENTS

- A. Section 013000 - Administrative Requirements: Submittals procedures.
- B. Section 015000- Temporary Facilities and Controls: Temporary exterior enclosures.

##### 1.03 SUBMITTALS (as applicable to project)

- A. See Section 013000 and Section 013300, for submittal procedures.
- B. Survey work: Submit name, address, and telephone number of Surveyor before starting survey work.
  - 1. On request, submit documentation verifying accuracy of survey work.
  - 2. Submit a copy of site drawing signed by the Land Surveyor, that the elevations and locations of the work are in conformance with Contract Documents.
  - 3. Submit surveys and survey logs for the project record.
- C. Storm Water and Erosion Protection: Implement storm water and erosion protection procedures as required by Federal, State and local jurisdictions. Provide documentation as required by all agencies.
- D. Cutting and Patching: CONTRACTOR shall perform all cutting, patching, or fitting of his work that may be required to make its several parts come together properly and fit it to existing facilities or the work of others as shown or reasonably implied by the drawings and/or specifications for the completed project. The CONTRACTOR shall not endanger existing facilities or the work of others by cutting, digging, or otherwise, and shall not cut existing work or the work of others unless specifically noted on the drawing and specifications or permitted by the Owner.
  - 1. Submit written request in advance of cutting or alteration that affects:
  - 2. Structural integrity of any element of Project.
  - 3. Integrity of weather exposed or moisture resistant element.
  - 4. Efficiency, maintenance, or safety of any operational element.
  - 5. Visual qualities of sight exposed elements.

6. Work of City of Carrollton or separate Contractor.
7. Include in request:
  - a. Identification of Project.
  - b. Location and description of affected work.
  - c. Necessity for cutting or alteration.
  - d. Description of proposed work and products to be used.
  - e. Scope of cutting, fitting, patching, or alteration.
  - f. Listing of applicable trades.
  - g. Proposed products and materials.
  - h. Extent of refinishing.
  - i. Effect on work of City of Carrollton or separate Contractor.
  - j. Written permission of affected separate Contractor.
  - k. Date and time work will be executed.

E. Should conditions or schedule require change of products or methods different than original installation, submit written recommendation to CITY explaining conditions necessitating change and requirements of alternative materials or methods.

F. Approval by CITY to proceed with cutting and patching does not waive CITY's right to later require complete removal and replacement of unsatisfactory work.

G. Project Record Documents: Accurately record actual locations of capped and active utilities.

#### **1.04 PAYMENT FOR COSTS**

A. Costs resulting from ill-timed or defective work, or work not conforming to Contract Documents, including costs for additional services to CITY, or other consultants shall be borne by the CONTRACTOR.

#### **1.05 QUALIFICATIONS**

A. For demolition work, employ a firm specializing in the type of work required.

B. For survey work, employ a land surveyor registered in Texas and acceptable to City. Submit evidence of Surveyor's Errors and Omissions insurance coverage in the form of an Insurance Certificate.

C. For field engineering, employ a Professional Engineer of the discipline required for specific service on Project, licensed in Texas.

#### **1.06 PROJECT CONDITIONS**

A. Grade site to drain. Maintain excavations free of water. Provide, operate, and maintain pumping equipment.

B. Protect site from puddling or running water. Provide water barriers as required to protect site from soil erosion.

C. Ventilate enclosed areas to assist cure of materials, to dissipate humidity, and to prevent accumulation of dust, fumes, vapors, or gases.

D. Dust Control: Execute work by methods to minimize raising dust from construction operations. Provide positive means to prevent air-borne dust from dispersing into atmosphere and over adjacent property.

- E. Erosion and Sediment Control: Plan and execute work by methods to control surface drainage from cuts and fills, from borrow and waste disposal areas. Prevent erosion and sedimentation.
  1. Minimize amount of bare soil exposed at one time.
  2. Provide temporary measures such as berms, dikes, and drains, to prevent water flow.
  3. Construct fill and waste areas by selective placement to avoid erosive surface silts or clays.
  4. Periodically inspect earthwork to detect evidence of erosion and sedimentation; promptly apply corrective measures.
- F. Noise Control: Provide methods, means, and facilities to minimize noise produced by construction operations.
- G. Pest and Rodent Control: Provide methods, means, and facilities to prevent pests and insects from damaging the work.
- H. Rodent Control: Provide methods, means, and facilities to prevent rodents from accessing or invading premises.
- I. Pollution Control: Provide methods, means, and facilities to prevent contamination of soil, water, and atmosphere from discharge of noxious, toxic substances, and pollutants produced by construction operations. Comply with federal, state, and local regulations.
- J. Smoke-Free Facility: There shall be no smoking in the building(s) once exterior walls are constructed whether or not windows are installed or any gypsum board has been installed or stored in the space. There shall be no smoking at any time when any City employee or representative is present.

### **1.07 COORDINATION**

- A. Coordinate scheduling, submittals, and work of the various sections of the Project Manual to ensure efficient and orderly sequence of installation of interdependent construction elements, with provisions for accommodating items installed later.
- B. CONTRACTOR shall coordinate working hours and any no-activity dates with the Owner.
- C. Notify affected utility companies and comply with their requirements.
- D. Verify that utility requirements and characteristics of new operating equipment are compatible with building utilities. Coordinate work of various sections having interdependent responsibilities for installing, connecting to, and placing in service, such equipment.
- E. Coordinate space requirements, supports, and installation of mechanical and electrical work that are indicated diagrammatically on Drawings. Follow routing shown for pipes, ducts, and conduit, as closely as practicable; place runs parallel with lines of building. Utilize spaces efficiently to maximize accessibility for other installations, for maintenance, and for repairs.
- F. In finished areas except as otherwise indicated, conceal pipes, ducts, and wiring within the construction. Coordinate locations of fixtures and outlets with finish elements.
- G. Coordinate completion and clean-up of work of separate sections.

- H. After City of Carrollton occupancy of premises, coordinate access to site for correction of defective work and work not in accordance with Contract Documents, to minimize disruption of City of Carrollton's activities.
- I. Any new utility service required by the project shall be initially paid and activated by and in the CONTRACTOR's name. Transfer of the account to the City's name shall occur at the conclusion of the contract. It is the responsibility of the CONTRACTOR to coordinate account changes.
- J. Coordinate all access, storage and restoration with Owner.

## **PART 2 PRODUCTS**

### **2.01 PATCHING MATERIALS**

- A. New Materials: As specified in product sections; match existing products and work for patching and extending work.
- B. Type and Quality of Existing Products: Determine by inspecting and testing products where necessary, referring to existing work as a standard.
- C. Product Substitution: For any proposed change in materials, submit request for substitution described in Section 016000.

## **PART 3 EXECUTION**

### **3.01 EXAMINATION**

- A. Verify that existing site conditions and substrate surfaces are acceptable for subsequent work. Start of work means acceptance of existing conditions.
- B. Verify that existing substrate is capable of structural support or attachment of new work being applied or attached.
- C. Examine and verify specific conditions described in individual specification sections.
- D. Take field measurements before confirming product orders or beginning fabrication, to minimize waste due to over-ordering or misfabrication.
- E. Verify that utility services are available, of the correct characteristics, and in the correct locations.
- F. Prior to Cutting: Examine existing conditions prior to commencing work, including elements subject to damage or movement during cutting and patching. After uncovering existing work, assess conditions affecting performance of work. Beginning of cutting or patching means acceptance of existing conditions.

### **3.02 PREPARATION**

- A. Clean substrate surfaces prior to applying next material or substance.
- B. Seal cracks or openings of substrate prior to applying next material or substance.
- C. Apply manufacturer required or recommended substrate primer, sealer, or conditioner prior to applying any new material or substance in contact or bond.

### **3.03 PREINSTALLATION MEETINGS**

- A. When required in individual specification sections, convene a preinstallation meeting at the site prior to commencing work of the section.
- B. Require attendance of parties directly affecting, or affected by, work of the specific section.
- C. Notify City ten days in advance of meeting date.
- D. Prepare agenda and preside at meeting:
  - 1. Review conditions of examination, preparation and installation procedures.
  - 2. Review coordination with related work.
- E. Record minutes and distribute copies within two days after meeting to City of Carrollton, participants, and those affected by decisions made.

### **3.04 LAYING OUT THE WORK**

- A. It shall be the responsibility of the CONTRACTOR to stake and construct the work to the position and elevations as set out on the plans.
- B. The CONTRACTOR shall be responsible for all surveying on this project beyond that provided by the Owner. During the progress of the work, the CONTRACTOR will furnish construction stakes as required.
- C. The CONTRACTOR shall keep the Owner's Representative informed, at least 48 hours in advance, of the time and places at which the CONTRACTOR wishes to do verification of horizontal and vertical control points with minimum inconvenience to the Owner's Representative and minimum delay to the CONTRACTOR.
- D. Verify locations of survey control points prior to starting work.
- E. Promptly notify City of any discrepancies discovered.
- F. CONTRACTOR shall locate and protect survey control and reference points.
- G. Control datum for survey is that established by City of Carrollton Benchmarks.
- H. Protect survey control points prior to starting site work; preserve permanent reference points during construction.
- I. Promptly report to City the loss or destruction of any reference point or relocation required because of changes in grades or other reasons.
- J. Replace dislocated survey control points based on original survey control. Make no changes without prior written notice to City.
- K. The CONTRACTOR will be held responsible for the preservation of all control points established by the Owner and, if any of the points have been carelessly or willfully destroyed or disturbed by the CONTRACTOR they shall be replaced by the CONTRACTOR or the cost of replacing them will be charged against the CONTRACTOR and deducted from the payment of the work.
- L. Utilize recognized engineering survey practices.
- M. Establish a minimum of two permanent bench marks on site, referenced to established control points. Record locations, with horizontal and vertical data, on project record documents.

- N. Establish elevations, lines and levels. Locate and lay out by instrumentation and similar appropriate means:
  - 1. Site improvements including pavements; stakes for grading, fill and topsoil placement; utility locations, slopes, and invert elevations; and final elevations.
  - 2. Grid or axis for structures.
  - 3. Building foundation, column locations, ground floor elevations, and structural bench marks.
- O. Periodically verify layouts by same means.
- P. Maintain a complete and accurate log of control and survey work as it progresses.
- Q. On completion of foundation walls and major site improvements, prepare a certified survey illustrating dimensions, locations, angles, and elevations of construction and site work.

### **3.05 GENERAL INSTALLATION REQUIREMENTS**

- A. Install products as specified in individual sections, in accordance with manufacturer's instructions and recommendations, and so as to avoid waste due to necessity for replacement.
- B. Make vertical elements plumb and horizontal elements level, unless otherwise indicated.
- C. Install equipment and fittings plumb and level, neatly aligned with adjacent vertical and horizontal lines, unless otherwise indicated.
- D. Make consistent texture on surfaces, with seamless transitions, unless otherwise indicated.
- E. Make neat transitions between different surfaces, maintaining texture and appearance.

### **3.06 CONSTRUCTION IN RIGHT-OF-WAY**

- A. For the purposes of this Contract, "Right-of-Way" shall include all property owned by, controlled by or the responsibility of the City of Carrollton including but not limited to the project site, and all provisions of this section applied unless clearly specified otherwise.
- B. Prepare Right-of-Way
  - 1. Removal and legally dispose of all obstructions from the right-of-way and from designated easements. Such obstructions shall be considered to include remains of houses not completely removed by others, foundations, floor slabs, concrete brick, lumber, plaster, septic tanks, basements, abandoned utility pipes or conduits, underground service station tanks, equipment or other foundations, fences, retaining walls, vegetation, and other debris.
  - 2. It is the intent of this specification to provide for the removal and disposal of all obstructions and objectionable materials not specifically provided for elsewhere in the plans and specifications.
- C. Stockpiling of Material within the Right-of-Way
  - 1. The stockpiling of construction materials such as backfill and embedment within the right-of-way shall be limited to that required for one day's work and shall not be left out overnight. Stockpiling of pipe and other construction materials within the right-of-way shall be limited to one truckload. Exceptions will be considered on a case-by-case basis during construction.
  - 2. CONTRACTOR shall acquire the City's permission for any material storage on City property prior to placement.

#### D. Excavation

1. No classification will be made for any materials to be excavated under this contract, regardless of the type of material encountered or the methods and equipment required to complete the excavation. No extra compensation will be allowed for encountering different types of material on this project.
2. The estimated quantities of excavation and fill shown on the drawing and/or the proposal are for CONTRACTOR information only. Payment for excavation, loading, hauling, sprinkling, manipulation, and compacting this material will be bid in accordance with the proposal.
3. Compaction and consolidation of the backfill materials shall conform to geotechnical report recommendations. Unless stated otherwise, trenches shall be backfilled using the native material and compacted to 95 percent of maximum density as determined by ASTM D698 in six (6) inch lifts at optimum moisture content (to plus 4 percent above optimum moisture content) in areas influenced by vehicular traffic and in ten (10) inch lifts in areas not subjected to or influenced by vehicular traffic.
4. The excess excavation material resulting in this project shall be legally disposed of by the CONTRACTOR (at his expense) at sites approved by the Owner.

#### E. Removal Existing Pipe & Drainage Structures

1. Existing storm drainage pipe removed but not relayed shall become the property of the CONTRACTOR and removed from the site by the CONTRACTOR unless otherwise shown on the plans. There shall be no separate pay item for removal of any drainage structure or pipe.

#### F. Disposal of Surplus Materials

1. Surplus material not required for other parts of the work and not otherwise specifically covered by the drawings or specifications shall become the property of the CONTRACTOR for legal disposal by him unless otherwise directed by the City. The cost of disposal of surplus material is not a pay item, and shall be subsidiary to all other contract conditions.

#### G. Repair of Utility Cuts

1. All taps and connections to sanitary sewer, storm sewer and water mains, and pavement removal/replacement for such shall conform to the specifications and the City of Carrollton's General Design Standards in materials and construction methods. This Scope of Services shall include all labor, equipment and materials necessary to complete the work including bypass pumping, excavation, embedment, concrete encasement, backfill, cement stabilized backfill, hauling, plugging of existing lines, proper disposal and any testing necessary.

#### H. Water Jetting Backfill

1. All trench backfill that does not require density control shall be water jetted until settlement ceases. Water jetting IS NOT a separate pay item and cost thereof shall be included in the price bid for pipe complete in place.
2. The water shall be applied under pressure when jetting backfill. The tank truck hauling the water shall be equipped with a pressure pump capable of delivering water through a two (2") inch pipe at a minimum of thirty (30 psi) pounds per square inch pressure. All water jetting of backfill will be to the satisfaction of the Director of Engineering or his representative.

- I. Clearance from Other Pipes
  - 1. The location of water and wastewater mains shall conform to the separation distances prescribed by the Texas Commission on Environmental Quality (TCEQ), 30TAC290.44, or by superceding provisions of state regulations.
- J. Relocation of Fire Hydrants
  - 1. All fire hydrants (whether shown on the plans as new, to be relocated, or reset) shall be new fire hydrants. Existing fire hydrants labeled to be relocated or reset shall be salvaged and delivered to the City Service Center at 2711 Nimitz.
  - 2. Relocated fire hydrants are to be paid for per each hydrant to include all incidental items required by the specifications, the relocation on the companion valve, excavation, backfill, thrust blocking, additional pipe and fitting, as required.
- K. Construction in Roads and Driveways
  - 1. No public road shall be entirely closed overnight, unless otherwise shown and approved on the Plans. It shall be the responsibility of the CONTRACTOR to build and maintain all weather bypasses and detours, if necessary, and to properly light, barricade and mark all bypasses and detours that might be required on and across the roads involved in the work included in this contract.
  - 2. The CONTRACTOR shall make every effort to complete construction and allow immediate access to adjacent property at driveway entrances located along the roadways. Owners or tenants of improvements where access and/or entrance drives are located shall be notified at forty-eight (48) hours and at twenty-four (24) hours prior to the time the construction will be started at their driveways or entrances and informed as to the length of time driveways will be closed.
  - 3. The CONTRACTOR shall be responsible for all road and entrance reconstruction and repairs and maintenance of same during the defined in the Maintenance Bond. In the event the repairs and maintenance are not made immediately to the satisfaction of the Engineer, and it becomes necessary for the City to make such repairs, the CONTRACTOR shall reimburse the City for the cost of such repairs. Such cost shall be deducted from the CONTRACTOR's pay request.
  - 4. The CONTRACTOR shall, at all times, keep a sufficient width of the roadway clear of dirt and other material to allow the free flow of traffic. The CONTRACTOR shall assume any and all responsibility for damage, personal or otherwise, that may be caused by the construction along roads and private drives..
- L. Barricades, Warnings & Detour Signs
  - 1. The CONTRACTOR shall not close a street or site to traffic or interfere with traffic movement without first notifying the City Inspector and securing permission to do so. When any street or site or any section of such is closed, or traffic flow is restricted, the CONTRACTOR shall furnish and maintain barricades, warning and directing signs, lights and red flags within the entire limits of the project in accordance with the Texas Manual of Uniform Traffic Control Devices. All lights shall be kept burning between the hours of sunset and sunrise.
  - 2. All expense incurred for furnishing and maintaining flagmen, barricades, warning and directing signs, flags and lights and any incidentals necessary for the proper direction, safety and convenience of traffic during the contract period shall be borne by the CONTRACTOR.
  - 3. Flagmen shall be provided when deemed necessary by the Director of Engineering or his representative.

#### M. Traffic Control and Road Closures

1. If the CONTRACTOR desires to close a public street, the CONTRACTOR must provide to the office of the Director of Engineering, a traffic control plan complying with the Texas Manual of Uniform Traffic Control Devices, signed and sealed by a Texas Registered Professional Engineer.
2. The traffic control plan must be submitted and approved a minimum of five working days prior to CONTRACTOR starting work.
3. The traffic control devices must be installed in conformance with the submitted traffic control plan before the CONTRACTOR will be allowed to begin work within City right-of-way.
4. Traffic control and public safety extends to parking lots and general circulation paths within the project property. The CONTRACTOR shall coordinate the City Representative to ensure access is maintained for facility patrons and activities.

#### N. Protection of Trees, Plants and Soil

1. Any trees or other landscape features scarred or damaged by the CONTRACTOR's operations shall be restored or replaced at the CONTRACTOR's expense. Trimming or pruning to facilitate the work will be permitted only by experienced workmen in an approved manner. Pruned limbs of one (1") inch diameter or larger, shall be thoroughly treated as soon as possible with a tree wound dressing. CONTRACTOR is to notify property Owner before pruning begins.
2. The CONTRACTOR shall take all precautions required to prevent soil erosion during the construction. If not included in the plans, the CONTRACTOR shall submit an erosion control plan signed and sealed by a professional engineer licensed to practice in Texas. When the area of construction exceeds one acre the plan must be submitted and approved prior to CONTRACTOR starting work. If excessive erosion occurs, the CONTRACTOR shall take immediate steps to prevent further erosion and restore the disturbed surface with topsoil and vegetation at completion of the work.
3. Unless specifically provided otherwise, all areas disturbed during construction, whether defined as a work area or not, shall be sodded. Any of these areas will be sodded with the same type of grass that was existing before construction began. Sodding and fertilizing shall be done in accordance with the North Central Texas Council of Governments Standard Specifications for Public Works Construction.
4. Sodded areas shall be fertilized with a 16-8-8 (N-P-K) meeting the requirements of the NCTCOG specifications. Application rate of fertilizer shall be as recommended by manufacturer of fertilizer.
5. The CONTRACTOR shall maintain sodded and seeded areas for a six (6) week period following planting or until the grass has an established minimum height of two inches.
6. Repair of damaged vegetative material not specifically itemized otherwise is considered subsidiary to the General Conditions of this contract.

### 3.07 ALTERATIONS

#### A. Drawings showing existing construction and utilities are based on casual field observation and existing record documents only.

1. Verify that construction and utility arrangements are as shown.
2. Report discrepancies to City before disturbing existing installation.
3. Beginning of alterations work constitutes acceptance of existing conditions.

- B. Keep areas in which alterations are being conducted separated from other areas that are still occupied.
  - 1. Provide, erect, and maintain temporary dustproof partitions of construction specified in Section 015000 in locations indicated on drawings.
- C. Maintain weatherproof exterior building enclosure except for interruptions required for replacement or modifications; take care to prevent water and humidity damage.
  - 1. Where openings in exterior enclosure exist, provide construction to make exterior enclosure weatherproof.
  - 2. Insulate existing ducts or pipes that are exposed to outdoor ambient temperatures by alterations work.
- D. Remove existing work as indicated and as required to accomplish new work.
  - 1. Remove rotted wood, corroded metals, and deteriorated masonry and concrete; replace with new construction specified.
  - 2. Remove items indicated on drawings.
  - 3. Relocate items indicated on drawings.
  - 4. Where new surface finishes are to be applied to existing work, perform removals, patch, and prepare existing surfaces as required to receive new finish; remove existing finish if necessary for successful application of new finish.
  - 5. Where new surface finishes are not specified or indicated, patch holes and damaged surfaces to match adjacent finished surfaces as closely as possible.
- E. Services (Including but not limited to HVAC, Plumbing, Fire Protection, Electrical, and Telecommunications): Remove, relocate, and extend existing systems to accommodate new construction.
  - 1. Maintain existing active systems that are to remain in operation; maintain access to equipment and operational components; if necessary, modify installation to allow access or provide access panel.
  - 2. Where existing systems or equipment are not active and Contract Documents require reactivation, put back into operational condition; repair supply, distribution, and equipment as required.
  - 3. Where existing active systems serve occupied facilities but are to be replaced with new services, maintain existing systems in service until new systems are complete and ready for service.
    - a. Disable existing systems only to make switchovers and connections; minimize duration of outages.
    - b. Provide temporary connections as required to maintain existing systems in service.
  - 2. Verify that abandoned services serve only abandoned facilities.
  - 3. Remove abandoned pipe, ducts, conduits, and equipment, including those above accessible ceilings; remove back to source of supply where possible, otherwise cap stub and tag with identification; patch holes left by removal using materials specified for new construction.
- F. Protect existing work to remain.
  - 1. Prevent movement of structure; provide shoring and bracing if necessary.
  - 2. Perform cutting to accomplish removals neatly and as specified for cutting new work.
  - 3. Repair adjacent construction and finishes damaged during removal work.

- G. Adapt existing work to fit new work: Make as neat and smooth transition as possible.
  - 1. When existing finished surfaces are cut so that a smooth transition with new work is not possible, terminate existing surface along a straight line at a natural line of division and make recommendation to Architect.
  - 2. Where removal of partitions or walls results in adjacent spaces becoming one, rework floors, walls, and ceilings to a smooth plane without breaks, steps, or bulkheads.
  - 3. Where a change of plane of 1/4 inch or more occurs in existing work, submit recommendation for providing a smooth transition for Architect review and request instructions.
- H. Patching: Where the existing surface is not indicated to be refinished, patch to match the surface finish that existed prior to cutting. Where the surface is indicated to be refinished, patch so that the substrate is ready for the new finish.
- I. Refinish existing surfaces as indicated:
  - 1. Where rooms or spaces are indicated to be refinished, refinish all visible existing surfaces to remain to the specified condition for each material, with a neat transition to adjacent finishes.
  - 2. If mechanical or electrical work is exposed accidentally during the work, re-cover and refinish to match.
- J. Clean existing systems and equipment.
- K. Remove demolition debris and abandoned items from alterations areas and dispose of off-site; do not burn or bury.
- L. Do not begin new construction in alterations areas before demolition is complete.
- M. Comply with all other applicable requirements of this section.

### **3.08 CUTTING AND PATCHING**

- A. Whenever possible, execute the work by methods that avoid cutting or patching.
- B. See Alterations article above for additional requirements.
- C. Perform whatever cutting and patching is necessary to:
  - 1. Complete the work.
  - 2. Fit products together to integrate with other work.
  - 3. Provide openings for penetration of mechanical, electrical, and other services.
  - 4. Match work that has been cut to adjacent work.
  - 5. Repair areas adjacent to cuts to required condition.
  - 6. Repair new work damaged by subsequent work.
  - 7. Remove samples of installed work for testing when requested.
  - 8. Remove and replace defective and non-conforming work.
- D. Execute work by methods that avoid damage to other work and that will provide appropriate surfaces to receive patching and finishing. In existing work, minimize damage and restore to original condition.
- E. Employ skilled and experienced installer to perform cutting for weather exposed and moisture resistant elements, and sight exposed surfaces.
- F. Cut rigid materials using masonry saw or core drill. Pneumatic tools not allowed without prior approval.

- G. Restore work with new products in accordance with requirements of Contract Documents.
- H. Fit work air tight to pipes, sleeves, ducts, conduit, and other penetrations through surfaces.
- I. At penetrations of fire rated walls, partitions, ceiling, or floor construction, completely seal voids with fire rated material in accordance with IBC and IFC, to full thickness of the penetrated element.
- J. Patching:
  1. Finish patched surfaces to match finish that existed prior to patching. On continuous surfaces, refinish to nearest intersection or natural break. For an assembly, refinish entire unit.
  2. Match color, texture, and appearance.
  3. Repair patched surfaces that are damaged, lifted, discolored, or showing other imperfections due to patching work. If defects are due to condition of substrate, repair substrate prior to repairing finish.

### **3.09 PROGRESS CLEANING**

- A. The CONTRACTOR shall, at all times, keep the site and adjacent right-of-way free from accumulation of waste material, debris, or rubbish caused by his employees or work. Contractor shall sprinkle dusty debris with water as necessary. On-site vegetation shall be mowed as necessary. Waste materials, rubbish and debris shall be removed from site, and legally disposed of at public or private dumping areas off Owner's property. At the completion of the work, he shall remove from the site all his tools, surplus materials, debris, and shall leave the site and his work "broom clean", or its equivalent at his expense, unless otherwise noted on the drawings or specified herein.
- B. Maintain areas free of waste materials, debris, and rubbish. Maintain site in a clean and orderly condition.
- C. Remove debris and rubbish from pipe chases, plenums, attics, crawl spaces, and other closed or remote spaces, prior to enclosing the space.
- D. Broom and vacuum clean interior areas prior to start of surface finishing, and continue cleaning to eliminate dust.
- E. Collect and remove waste materials, debris, and trash/rubbish from site periodically and dispose off-site; do not burn or bury.
- F. The City may initiate any and all activities in this section if the CONTRACTOR fails to satisfactorily or promptly perform such. CONTRACTOR remains responsible for all expenses associated with cleaning regardless of whether they are performed by the CONTRACTOR or the CITY. The CONTRACTOR shall reimburse the CITY for all expenses incurred by the CITY plus an administrative charge of \$500 PER OCCURANCE associated with this section prior to CONTRACTOR's submittal of any payment application immediately following any CITY initiated cleaning activity.

### **3.10 PROTECTION OF INSTALLED WORK**

- A. Protect installed work from damage by construction operations. Final delivery of all work to the City shall be in new condition. Damage occurring prior to final acceptance shall be replaced or repaired by CONTRACTOR at no additional expense to the City.
- B. Provide special protection where specified in individual specification sections.

- C. Provide temporary and removable protection for installed products. Control activity in immediate work area to prevent damage.
- D. Provide protective coverings at walls, projections, jambs, sills, and soffits of openings.
- E. Protect finished floors, stairs, and other surfaces from traffic, dirt, wear, damage, or movement of heavy objects, by protecting with durable sheet materials.
- F. Prohibit traffic or storage upon waterproofed or roofed surfaces. If traffic or activity is necessary, obtain recommendations for protection from waterproofing or roofing material manufacturer.
- G. Remove protective coverings when no longer needed; reuse or recycle plastic coverings if possible.
- H. During unfavorable weather, wet ground, or other unsuitable construction conditions, the CONTRACTOR shall confine his operations to work which will not be affected adversely thereby. No portion of the work shall be constructed under conditions which would affect adversely the quality or efficiency thereof, unless special means or precautions are taken by the CONTRACTOR to perform the work in a proper and satisfactory manner.

### **3.11 DEMONSTRATION AND INSTRUCTION**

- A. Demonstrate operation and maintenance of products to City of Carrollton's personnel two weeks prior to date of Substantial Completion.
- B. Demonstrate start-up, operation, control, adjustment, trouble-shooting, servicing, maintenance, and shutdown of each item of equipment at scheduled time, at equipment location.
- C. For equipment or systems requiring seasonal operation, perform demonstration for other season within six months.
- D. Provide a qualified person who is knowledgeable about the Project to perform demonstration and instruction of owner personnel.
- E. Utilize operation and maintenance manuals as basis for instruction. Review contents of manual with City of Carrollton's personnel in detail to explain all aspects of operation and maintenance.
- F. Prepare and insert additional data in operations and maintenance manuals when need for additional data becomes apparent during instruction.

### **3.12 ADJUSTING**

- A. Adjust operating products and equipment to ensure smooth and unhindered operation.

### **3.13 FINAL CLEANING**

- A. Use cleaning materials that are nonhazardous.
- B. Clean interior and exterior glass, surfaces exposed to view; remove temporary labels, stains and foreign substances, polish transparent and glossy surfaces, vacuum carpeted and soft surfaces.
- C. Clean equipment and fixtures to a sanitary condition with cleaning materials appropriate to the surface and material being cleaned.
- D. Clean filters of operating equipment.

- E. Clean debris from roofs, gutters, downspouts, and drainage systems.
- F. Clean site; sweep paved areas, rake clean landscaped surfaces.
- G. Remove waste, surplus materials, trash/rubbish, and construction facilities from the site; dispose of in legal manner; do not burn or bury.

### **3.14 MAINTENANCE**

- A. Provide service and maintenance of components indicated in specification sections.
- B. Maintenance Period: As indicated in specification sections or, if not indicated, not less than two years from the Date of final acceptance or the length of the specified warranty, whichever is longer.
- C. Examine system components at a frequency consistent with reliable operation. Clean, adjust, and lubricate as required.
- D. Include systematic examination, adjustment, and lubrication of components. Repair or replace parts whenever required. Use parts produced by the manufacturer of the original component.
- E. Maintenance service shall not be assigned or transferred to any agent or subcontractor without prior written consent of the City of Carrollton.

**END OF SECTION**

## SECTION 017700

### CLOSEOUT PROCEDURES

#### PART 1 GENERAL

##### 1.1 SUMMARY

- A. Related Documents: Provisions established in General Conditions of the Contract, Scope and Compensation, Carrollton General Design Standards, Division 1 General Requirements, and other City contract documents are collectively applicable to this Section.
- B. Section Includes:
  - 1. Administrative provisions for Final Completion and for final acceptance.
- C. "Completion" shall be the date on which the Work is complete and accepted by the OWNER and includes all close-out documentation.
- D. Neither the final certificate of payment nor any provision in the contract documents nor partial or entire occupancy of the project by the Owner shall constitute an acceptance of work not done in accordance with the contract documents or relieve the Contractor of liability in respect of any express warranties or responsibility for faulty materials or workmanship. The Contractor shall remedy all defects in the work and pay for damage to other work resulting therefrom, which shall appear within a period of two (2) years from the date of final written acceptance of the work under the Contract, unless a longer period is specified. The Owner will give notice of observed defects with reasonable promptness. The Contractor shall, in case of work performed by his Subcontractors, secure warranties from said Subcontractors and deliver copies of same to the Engineer upon completion of the work.

##### 1.2 PREREQUISITES FOR FINAL COMPLETION

- A. Complete items in following paragraphs before requesting final acceptance and final payment. List known exceptions, if any, in request.
- B. Conduct inspection to substantiate basis for request that Work is complete. Create comprehensive list (initial punch list) indicating items to be completed or corrected, value of incomplete or non-conforming work, reason for being incomplete, and date of anticipated completion for each item. Include copy of list with request for Certificate of Completion.
- C. Submit statement showing accounting of changes to Contract Sum.
- D. Advise CITY of pending insurance change-over requirements at final payment.
- E. Obtain and submit releases enabling CITY's full, unrestricted use of Project and access to services and utilities. Include certificate of occupancy, operating certificates, and similar releases from authorities having jurisdiction and utility companies.

- F. Submit project record documents in compliance with Section 017800, maintenance manuals, electronic copies of all project documents, and other similar final record data.
- G. Deliver tools, spare parts, extra stocks of material, and similar physical items to CITY Engineer.
- H. Comply with requirements of contract documents for restoring permanent systems operated prior to Completion.
- I. Discontinue or change over and remove temporary facilities and services from Project site, along with construction tools, mock-ups, and similar elements.
- J. Perform final cleaning in accordance with Contract Documents.
- K. Touch-up and otherwise repair and restore marred exposed finishes.
- L. Submit final punch list indicating all items have been completed or corrected.
- M. Submit final payment request with final releases and supporting documentation not previously submitted and accepted. Include certificates of insurance for products and completed operations where required.
- N. Submit specified warranties, workmanship/maintenance bonds, maintenance agreements, and other similar documents.
- O. Submit updated accounting statement for final changes to Contract Sum.
- P. Submit consent of surety to final payment.

### 1.3 FINAL COMPLETION

- A. When Contractor considers Work is complete, Contractor shall submit written certification of the following:
  - 1. Contract Documents have been reviewed.
  - 2. Work has been inspected for compliance with Contract Documents.
  - 3. Work has been completed in accordance with Contract Documents, and deficiencies listed with punch list have been corrected.
  - 4. Operation of systems has been demonstrated to Owner's personnel.
  - 5. Work is complete and ready for final inspection.
- B. Should CITY inspection find Work incomplete, they will promptly notify Contractor in writing listing observed deficiencies. Such notification will simply notate observed incomplete items, deficiencies and other unfinished contract requirements. Neither the inspection by the Owner or any of their officials, employees, or agents, nor any order by the Owner for payment of money, or any payment for, or acceptance of, the whole or any part of the work by the Owner, nor any extension of time, nor any possession taken by the Owner or its employees, nor any action of the Owner shall operate as a waiver of any provision of the contract. The contractor remains responsible for satisfactory completion of all work whether noted on this list or not.

- C. Contractor shall promptly remedy deficiencies and send a second certification of final completion.
- D. If project is subject to a post construction accessibility inspection, the Contractor is responsible for scheduling and coordinating a post construction inspection for compliance with the Texas Accessibility Standards and include all inspection fees of a Registered Accessibility Specialist. The contractor shall be held responsible for repair, removal, replacement and/or all other activities and costs necessary to address violations in the inspection report for items that were not constructed according to plans and accessible elements that may be damaged during construction in accordance with the Texas Accessibility Standards. Inspection shall be coordinated with the City and performed by a Texas Registered Accessibility Specialist. The City shall be notified as soon as the inspection is scheduled but not less than 48 hours before the inspection. The post construction accessibility inspection shall be conducted prior to the final project walk-thru and all comments incorporated in the "punch list".
- E. When CITY finds work is complete, CITY will consider closeout submittals.
- F. Project is not considered complete and final payment will not be made until the CITY has made full written acceptance.

#### 1.4 CLOSEOUT SUBMITTALS

- A. Evidence of Compliance with Requirements of Governing Authorities
  - 1. Certificate of Occupancy.
  - 2. Certificates of Inspection required for plumbing, mechanical and electrical systems.
- B. Project Record Documents: Under provisions of Section 017800.
- C. Operation and Maintenance Data: Under provisions of Section 017800.
- D. Warranties and Bonds: Under provisions of Section 017800.
- E. Spare Parts and Maintenance Materials: Under provisions of Section 017800.
- F. Evidence of Payment and Release of Liens: In accordance with Conditions of the Contract.
- G. Consent of Surety to Final Payment.
- H. Certificates of Insurance for Products and Completed Operations: In accordance with Supplementary Conditions.
- I. Texas Department of Licensing and Regulation Architectural Barriers Post Construction Accessibility Inspection report with full acceptance of all elements.

#### 1.5 APPLICATION FOR FINAL PAYMENT

- A. Submit application for final payment in accordance with provisions of Conditions of the Contract.

**PART 2        PRODUCTS (NOT USED)**

**PART 3        EXECUTION (NOT USED)**

**END OF SECTION**

## SECTION 017800

### CLOSEOUT SUBMITTALS

#### PART 1 GENERAL

##### 1.1 SUMMARY

- A. Related Documents: Provisions established in General Conditions of the Contract, Scope & Compensation, Carrollton General Design Standards, Division 1 General Requirements, and other City contract documents are collectively applicable to this Section.
- B. Section Includes:
  - 1. Maintenance of Record Documents and Samples.
  - 2. Submittal of Record Documents and Samples.
  - 3. Format and content of operation and maintenance manuals.
  - 4. Instruction of Owner's personnel.
  - 5. Preparation and submittal of warranties and bonds.
  - 6. Spare parts, overages, and maintenance materials.
  - 7. Schedule of submittals.
- C. The project will not be considered complete nor accepted until all close-out documents are received and approved as acceptable by the City. The contract finish date shall include all work AND delivery, receipt and approval of all close-out documents.

##### 1.2 PROJECT RECORD DOCUMENTS

- A. Maintenance of Documents and Samples:
  - 1. In addition to requirements in Contract Documents, maintain at the site for Owner one record copy of:
    - a. Contract Drawings.
    - b. Specifications.
    - c. Addenda.
    - d. Change Orders and other modifications to the Contract.
    - e. Reviewed shop drawings, product data, and samples.
    - f. Field test records.
    - g. Inspection certificates.
    - h. Manufacturer's certificates.
    - i. TDLR Post Construction Accessibility Inspection with all violations resolved
  - 2. Record Documents and samples will be stored in the Contractor's Field Office apart from documents used for construction. It is the responsibility of each sub-contractor to update these documents contemporaneously for locations of concealed and buried piping, utilities, wiring, etc.
  - 3. Label and file Record Documents and samples in accordance with Section number listings in Table of Contents of this Project Manual. Label each document "PROJECT RECORD" in neat, large, printed letters.

4. Maintain Record Documents in a clean, dry and legible condition. Do not use Record Documents for construction purposes.
  5. Keep Record Documents and samples available for inspection by CITY.
- B. Recording:
1. The Contractor shall indicate all changes made during construction on a single copy of approved construction drawings. All notes and comments necessary to give a clear conception of exactly how all items were constructed including location shall be shown.
  2. The Contractor shall maintain and be held responsible for all plan revisions as they occur during the course of construction.
  3. Record information on a set of blue line or bond opaque drawings, and in a copy of a Project Manual.
  4. Provide felt tip marking pens, maintaining separate colors for each major system, for recording information.
  5. Record information concurrently with construction progress. Do not conceal any work until required information is recorded.
  6. Contract Drawings and Shop Drawings: Legibly mark each item to record actual construction, including:
    - a. Measured depths of elements of foundation in relation to finish first floor datum.
    - b. Measured horizontal and vertical locations of underground utilities and appurtenances, referenced to permanent surface improvements.
    - c. Measured locations of internal utilities and appurtenances concealed in construction, referenced to visible and accessible features of construction.
    - d. Field changes of dimension and detail.
    - e. Changes made by Modifications.
    - f. Details not on original Contract Drawings.
    - g. References to related shop drawings and Modifications.
  7. Specifications: Legibly mark each item to record actual construction, including:
    - a. Manufacturer, trade name, and catalog number of each product actually installed, particularly optional items and substitute items.
    - b. Changes made by Addenda and Modifications.
  8. Other Documents: Maintain manufacturer's certifications, inspection certifications, field test records, and other documents required by individual Specifications sections.

### 1.3 OPERATION AND MAINTENANCE MANUALS

- A. Contents, Each Volume
1. Table of Contents: Provide title of Project; names, addresses, and telephone numbers of CITY and Contractor with name of responsible parties; schedule of products and systems, indexed to content of the volume.
  2. For Each Product or System: List names, addresses and telephone numbers of subcontractors and suppliers, including local source of supplies and replacement parts.
  3. Product Data: Mark each sheet to clearly identify specific products and component parts, and data applicable to installation; delete inapplicable information.

4. Drawings: Supplement product data to illustrate relations of component parts of equipment and systems, to show control and flow diagrams. Do not use Project Record Documents as maintenance drawings.
  5. Typed Text: As required to supplement product data. Provide logical sequence of instructions for each procedure, incorporating manufacturer's instructions specified in Section 014500.
- B. Manual for Materials and Finishes:
1. Building Products, Applied Materials, and Finishes: Include product data, with catalog number, size, composition, and color and texture designations. Provide information for re-ordering custom manufactured products.
  2. Tabular summary of all final finishes by room that includes but not limited to wall, floor, ceiling, base, and other related products. This should reflect all final selections that are in the finished facility.
  3. Instructions for Care and Maintenance: Include manufacturer's recommendations for cleaning agents and methods, precautions against detrimental agents and methods, and recommended schedule for cleaning and maintenance.
  4. Moisture-protection and Weather-exposed Products: Include product data listing applicable reference standards, chemical composition, and details of installation. Provide recommendations for inspections, maintenance, and repair.
  5. Additional Requirements: As Specified in individual Specifications sections.
  6. Provide a listing in Table of Contents for design data, with tabbed fly sheet and space for insertion of data.
- C. Manual for Equipment and Systems:
1. Each Item of Equipment and Each System: Include description of unit or system, and component parts. Give function, normal operating characteristics, and limiting conditions. Include performance curves, with engineering data and tests, and complete nomenclature and commercial number of replaceable parts.
  2. Panelboard Circuit Directories: Provide electrical service characteristics, controls, and communications.
  3. Include as-installed color coded wiring diagrams.
  4. Operating Procedures: Include start-up, break-in, and routine normal operating instructions and sequences. Include regulation, control, stopping, shut-down, and emergency instructions. Include summer, winter, and any special operating instructions.
  5. Maintenance Requirements: Include routine procedures and guide for trouble-shooting; disassembly, repair, and reassembly instructions; and alignment, adjusting, balancing, and checking instructions.
  6. Provide servicing and lubrication schedule, and list of lubricants required.
  7. Include manufacturer's printed operation and maintenance instructions.
  8. Include sequence of operation by controls manufacturer.
  9. Provide original manufacturer's parts list, illustrations, assembly drawings, and diagrams required for maintenance.
  10. Provide as-installed control diagrams by controls manufacturer.
  11. Provide Contractor's coordination drawings, with as- installed color coded piping diagrams.
  12. Provide charts of valve tag numbers, with location and function of each valve, keyed to flow and control diagrams.

13. Provide list of original manufacturer's spare parts, current prices, and recommended quantities to be maintained in storage.
  14. Include test and balancing reports as specified in individual specification sections.
  15. Additional Requirements: As specified in individual Specifications sections.
  16. Provide a listing in Table of Contents for design data, with tabbed fly sheet and space for insertion of data.
- D. Submittals:
1. Copies of all final submittals showing approval stamps of Contractor, Architect and City.
- E. Instruction of Owner Personnel:
1. Before final inspection, instruct Owner's designated personnel in operation, adjustment, and maintenance of products, equipment, and systems, at agreed upon times. For equipment requiring seasonal operation, perform instructions for other seasons within 6 months.

#### 1.4 WARRANTIES AND BONDS

- A. Preparation
1. Obtain warranties and bonds, executed in duplicate by responsible subcontractors, suppliers, and manufacturers, within 10 days after completion of the applicable item of work. Except for items put into use with Owner's permission, leave date of beginning of time of warranty until the Date of completion is determined.
  2. Verify that documents are in proper form, contain full information, and are notarized.
  3. Co-execute submittals when required.
  4. Retain warranties and bonds until time specified for submittal.

#### 1.5 SPARE PARTS, OVERAGES, AND MAINTENANCE MATERIALS

- A. Products Required:
1. Provide a minimum of 5% attic stock of each finish product (including but not limited to: flooring materials, ceiling tile, paint, etc.). Full 5% attic stock of brick or stone mason materials may not be required. Coordinate with owner for acceptable amount of such materials. Contractor to remove any attic stock not desired by Owner.
  2. Provide quantities of products, spare parts, special equipment keys (one for each installed unit plus two), maintenance tools, and maintenance materials specified in individual sections to be provided to Owner, in addition to that required for completion of Work but not less than 5%.
  3. Products: Identical to those installed in the Work. Include quantities in original purchase from manufacturer to avoid variations in manufacture.
- B. Storage, Maintenance:
1. Contractor responsible for storage and safeguard of all products until delivery and acceptance by the Owner.
  2. Maintain spare products in original containers with labels intact and legible, until delivery to Owner.

3. Unless approved otherwise by the Owner, Contractor shall store all products until project completion.
- C. Delivery:
1. Coordinate with Owner: Deliver and unload spare products to Owner at location specified by the Owner and obtain receipt prior to final payment.
  2. For portions of Project accepted and occupied by Owner prior to Completion, deliver a proportional part of spare products to Owner; obtain receipt.

## 1.6 SUBMITTALS

- A. At Contract closeout, deliver Record Documents including samples, Operation and Maintenance Manuals, and Warranties and Bonds under provisions of Section 017700.
- B. Format for both Operation & Maintenance and Warranty & Bonds Manuals:
1. Binders: Commercial quality, 8-1/2 by 11 inch three-ring binders with hardback, cleanable, plastic covers; 3 inch maximum ring size. When multiple binders are used, correlate data into related consistent groupings.
  2. Table of Contents: Neatly typed, in the sequence of the Table of Contents of the Project Manual, with each item identified with the number and title of the specification section in which specified, and the name of Product or work item
  3. Drawings: Provide with reinforced punched binder tab. Bind in with text; fold larger drawings to size of text pages.
  4. Text and spreadsheet related documents shall be submitted in hard copy, and electronic format compatible with Microsoft Word and/or Excel, AND electronic files of each sheet in Adobe Acrobat (PDF) format.
  5. Arrange and name electronic files in a logical manner identical to hard copies, and include appropriate bookmarks corresponding to binder tabs.
- C. Format Specific to Operation & Maintenance Manuals:
1. Prepare data in the form of an instructional manual.
  2. Cover: Identify each binder with typed or printed title OPERATION AND MAINTENANCE INSTRUCTIONS; list with title of Project; name, address and telephone number of Contractor, and identify subject matter of contents.
  3. Arrange content by systems, under section numbers and sequence of Table of Contents of this Project Manual.
  4. Separate each product and system with index tab sheets keyed to the Table of Contents listing, and typed description of product and major component parts of equipment.
  5. Text: Manufacturer's printed data, or typewritten data on 20 pound paper.
- D. Format Specific to Warranty & Bonds Manual:
1. Cover: Identify each binder with typed or printed title WARRANTIES AND BONDS, with title of Project; name, address and telephone number of Contractor; and name of responsible principal.
  2. Separate each warranty or bond with index tab sheets keyed to the Table of Contents listing. Provide full information, using separate typed sheets as necessary. List subcontractor, supplier, and manufacturer, with name, address, and telephone number of responsible principal.
- E. Record Drawings:

1. The Contractor shall submit one bond hand-marked (stamped Record Drawing) set of plans to the Owner's representative for review at the completion of the project.
2. Upon Owner approval of the hand-marked bond copy, all plan revisions shall be reflected electronically in the AutoCAD design files (or other native design format). Contractor shall enlist the designer to have all revisions incorporated in the appropriate electronic files and re-issue of the plans. Costs associated with file revisions including expenses associated with designers' revisions are considered subsidiary to the construction contract and the full responsibility of the Contractor.
3. Contractor shall receive revised files from the designer AND CONFIRM ALL revisions have been properly incorporated in the CAD files.
4. All Contract closeout documents plan sheets shall be submitted in reproducible hard copy AND electronic format compatible with AutoCAD 2000 or later, AND electronic files of each sheet in Adobe Acrobat (PDF) format.
5. Contractor shall submit one (1) full size bond set, and two (2) half-size bond sets of stamped Record Drawing plans along with one (1) CD or other acceptable form of mobile media containing the electronic versions of the as-built plans to the Owner.

F. Operations and Maintenance & Warranty/Bond Manuals:

1. Submit 1 copy of preliminary draft or proposed formats and outlines of contents before start of Work. CITY will review draft and return one copy with comments.
2. For equipment, or component parts of equipment put into service during construction and operated by Owner, submit documents within 10 days after acceptance.
3. Submit one copy each (hard and electronic) of completed volumes in final form 15 days prior to final inspection. Copy will be returned after final inspection, with CITY comments, and Engineer's comments where applicable. Revise content of documents as required prior to final submittal.
4. Submit 2 copies each (hard and electronic) of revised volumes of data in final form within 10 days after final inspection.

G. All Contract closeout documents shall be submitted in one complete package.

H. Transmit with cover letter in duplicate, listing:

1. Date.
2. Project title and number.
3. Contractor's name, address, and telephone number.
4. Number and title of each Record Document.
5. Signature of Contractor or authorized representative.

**PART 2 PRODUCTS (NOT USED)**

**PART 3 EXECUTION (NOT USED)**

**END OF SECTION**

**SECTION 03 15 16  
CONCRETE CONSTRUCTION JOINTS**

**PART 1 - GENERAL**

- 1.1 This section shall govern the furnishing of all labor, materials, tools, and performing all operations required to install and seal construction joints in all cast-in-place concrete including water containment vessels, decks, walks, drives, foundations and structural concrete shown on the Plans and its placement in the work.
- 1.2 Definitions:
- A. Construction Joint: An intentional intersection of two concrete structures or parts of structures placed at different times.
  - B. Control Joint: A joint in concrete structures to limit shrinkage crack size and location; formed or tooled. Also referred to as a contraction joint
  - C. Expansion Joint: A frequently used term for an isolation joint whereby two structures or parts of the same structure are separated by a joint which allows some movement on each side but which may limit movement in one or more planes.
  - D. Isolation Joint: See 'expansion joint.'
  - E. Water stop: A preformed or a caulk material as shown on the plans that prevents water leakage through a construction joint.

**PART 2 – PRODUCTS**

- 2.0 BACKING RODS - Closed cell foam, polyurethane or polyethylene compatible with caulk materials being used.
- 2.1 CAULKING SEALANTS
- A. **Primer** - as recommended by caulking compound manufacturer.
  - B. **Polysulfide Polymer Sealant** – Deck-O-Seal two part elastomeric polysulfide-based joint sealant for underwater use in swimming pools and fountains. Thiokol 2235M non-sag industrial polysulfide joint sealant.
  - C. **Sealant Tape** - "Weatherban Sealant Tape 5354" by 3M Co.
  - D. **Polyurethane Joint Sealant** - Tremco Vulkem 116 or self leveling HS-1SL one-part hybrid polymer Deck-O-Seal. For pavements, walks or deck service but not for underwater use in swimming pools, wastewater or chlorinated water.
  - E. **Expanding Urethane Caulk** – SikaSwell S-2 one part extrudable swelling waterstop.
- 2.2. SUBMITTALS: Equal products to those listed above as manufactured by 3M Co., G.E. Thiokol Co., DeWitt, Pecora, Tremco, Sika, or Sonneborne are acceptable. Submit products in writing including data sheets for approval before installing. Colors to be selected by Owner.

**PART 3 – EXECUTION**

- 3.0 Adhere to manufacturer's instructions regarding installation conditions, recommended uses, primers, thickness and width limitations for caulks and sealants.
- 3.1 Some caulks can be placed on green concrete while others require up to 28-days curing time before installation. Read and comply with manufacturer's written instructions..
- 3.2 Saw joints: Contraction joints shall be sawed as soon after initial concrete set as possible without raveling the concrete with the saw blade. Saw joints shall be 1/8-inch thick and a minimum of 1/5 the slab thickness in depth. Joints shall be sawn straight unless specifically

shown on the plans otherwise. Unless shown otherwise on the plans, planar concrete (decks, walks, drives and large foundation slabs) shall be sawn on a 10'-0" x 10'-0" grid.

3.2 Expansion (Isolation) Joints: Do not install expansion joints in shotcrete shell pools or vessels without approval of the engineer.

3.3 Water tight joints:

- A. Expanding urethane caulk: Where permitted on the plans. The default for all watertight joints where a PVC waterstop is not specifically shown. Use primer where directed by manufacturer. Install on clean and dry surfaces only.
- B. Waterstop: Continuous PVC 3/8 inch x 9 inch ribbed waterstop installed in the middle of the intersecting wall and supported by tie wires or other devices to insure correct placement within the concrete structure.

3.4 CAULKING

- A. All joints shall be carefully cleaned of all dust, oil, grease, water frost, or other materials which would impair or prevent sealing.
- B. Prime joints using primer recommended by sealant manufacturer.
- C. Sub-caulk back sealant with oakum or yarn (except for fillet joints) for general use. Back control joints, expansion joints and joints requiring sealant with foam plastic.
- D. Weather - Do not caulk during damp or inclement weather. Temperature of air and materials shall be above 40 degrees F.
- E. **FILLER:** Joints and spaces deeper than 3/4" shall be filled with back up material to within 3/4" of surface before caulking.
- F. **BACK-UP:** Back up material shall be compressed to 50% of its original volume at time of installation to provide a positive contact between all surfaces. Thicknesses of back up material shall be adjusted with size of joint.
- G. **APPLICATION:** Apply caulking compound with pressure gun having correct size nozzle to fit into joint. Fill solidly and smooth without voids and thin edges, and in a manner to prevent air entrapment. Finish joint shall show a neat clean bead. Do not overfill or crown joints.
- H. **TIMING:** All caulking shall be done a minimum of 3 weeks in advance of painting.
- I. **WORKMANSHIP:** Use proper size nozzle on caulking gun. Force joint full, and neatly point surface with beading tool and leave smooth and water tight. Remove excess materials and clean adjacent surfaces immediately. Strictly follow printed directions of sealant manufacturer. In general, the depth of sealant joint shall be one-half its width. Carefully control depth with foam plastic and prevent bond with back of joint.
- J. **TYPE OF CAULKING OR SEALANT TO USE:** Use Thiokol or Tremco urethane where joint is exposed directly to water with no or little protection and where "sealant" is noted on the Drawings. Use butyl for general use where joint is well protected from elements or appreciable quantities of moisture.
- K. **FIELD CONTROL:** Cure as recommended by the manufacturer. Protect from foot traffic or rolling equipment.
  - 1. Visually inspect joints after 30 days.
  - 2. Replace joints with evidence of bonding failure, excessive shrinkage, cracking, pitting or improper cutting.
- L. **CLEAN UP:** Upon completion of the work, all caulking and sealing compounds shall be removed from surrounding areas and all joints checked for water tightness and touched up as required.

#### PART 4 – PAYMENT/CLOSE OUT

4.1 WARRANTY: The manufacturer shall provide an unconditional warranty against all defects in

workmanship and materials for a minimum period of two years from shipment in the manufacture of these components. This warranty is in addition to the Contractor's warranty provided under this contract.

- 4.2 WARRANTY: The surface shall not delaminate or significantly or unevenly fade or discolor. The finish shall be subject to the project warranty against defects in labor and materials for a period of two (2) year from date of final acceptance of the total project by the owner. Should re-finishing be required within the warranty period due to defects in the original installation, the warranty shall be extended a minimum of one (1) year from the date of completion of the repair work
- 4.3 PAYMENT: The installation of concrete joint sealing activities shall be considered subsidiary to other pay items.

Payment under this section shall include protection of other work, clean up, and protection of the work when completed.

This item also includes all surface preparation necessary for installation of the system in accordance with the written instructions of the system manufacturer.

**END OF SECTION 03 15 16**

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## SECTION 03 53 00

### CONCRETE TOPPING

#### PART 1 GENERAL

##### 1.1 SECTION INCLUDES

- A. This section shall govern the furnishing of all labor, materials, tools, plant, performing all operations required to install all concrete topping for swimming pool decks as indicated on the Plans and its placement in the work.

##### 1.2 RELATED SECTIONS

- A. Mortex PTA Concrete Renovation
- B. Mortex Application Instructions for Kool Deck Elite on Existing Concrete.
- C. Mortex Instructions for Kool Deck® Elite™ Application
- D. Mortex Protect-A-Deck Instructions
- E. Mortex Kool Deck Color Chart
- F. Section 03 51 16 Concrete Construction Joints

##### 1.3 REFERENCES

- A. ASTM C 109/C 109M – Standard Test Method for Compressive Strength of Hydraulic Cement Mortars (Using 2-in. or [50-mm] Cube Specimens).
- B. ASTM C 666/C 666M – Standard Test Method for Resistance of Concrete to Rapid Freezing and Thawing.
- C. ASTM C 944 – Standard Test Method for Abrasion Resistance of Concrete or Mortar Surfaces by the Rotating-Cutter Method.
- D. ASTM E 303 – Standard Test Method for Measuring Surface Frictional Properties Using the British Pendulum Tester.

##### 1.4 SUBMITTALS

- A. Comply with Section 01330 (01 33 00) – Submittal Procedures.
- B. Product Data: Submit manufacturer's product data, including preparation, mixing, and installation instructions.
- C. Samples: Submit manufacturer's standard color chart for selection of color. Product chips or mockups may be requested for up to 4 colors.
- D. Certificate of Compliance: Submit manufacturer's certificate of compliance indicating materials comply with specified requirements.
- E. Installer's Project References: Submit list of successfully completed concrete topping projects, including project name and location, name of architect, and type and quantity of concrete toppings installed.

- F. Maintenance Instructions: Submit manufacturer's maintenance and cleaning instructions.
- G. Warranty: Submit manufacturer's standard warranty.

## **1.5 QUALITY ASSURANCE**

- A. Manufacturer's Qualifications: Manufacturer engaged, for preceding 5 years, in manufacture of concrete toppings of similar type to that specified.
- B. Installer's Qualifications: Employ persons trained for installation of Kool Deck concrete topping. Contractor representative with direct experience in installation of Kool Deck is required to be ON-SITE during all preparations and installation.
- C. Pre-installation Meeting:
  - 1. Convene pre-installation meeting before start of installation of concrete topping.
  - 2. Require attendance of parties directly affecting work of this section, including Contractor, Architect, installer, and manufacturer's representative.
  - 3. Review preparation, mixing, installation, protection, and coordination with other work.

## **1.6 DELIVERY, STORAGE, AND HANDLING**

- A. Delivery: Deliver materials to site in manufacturer's original, unopened containers and packaging, with labels clearly identifying product name and manufacturer.
- B. Storage:
  - 1. Store materials in clean, dry area indoors in accordance with manufacturer's instructions.
  - 2. Keep containers sealed until ready for use.
- C. Handling: Protect materials during handling and mixing to prevent contamination or damage.

## **1.7 ENVIRONMENTAL REQUIREMENTS**

- A. Placing Base Slab Concrete in Hot or Cold Weather. As specified in Section 03300 (03 30 00) and in accordance with concrete topping manufacturer's instructions.

## **PART 2 PRODUCTS**

### **2.1 MANUFACTURER**

- A. Mortex Manufacturing Company, Inc., 1818 West Price Street, Tucson, Arizona 85705. Toll Free (800) 338-3225. Phone (520) 887-2631. Fax (520) 293-8884. Website [www.mortex.com](http://www.mortex.com). E-mail [office@mortex.com](mailto:office@mortex.com).

### **2.2 CONCRETE TOPPING**

- A. CEMENTITIOUS FLOOR AND DECK COATING: Cementitious topping to concrete surfaces to provide skid resistance, aesthetic finish, color, and lower surface temperatures in hot sun. The topping slurry shall be created using a proprietary mixture of powdered organics and iron oxide concentrate which, when mixed with white cement, marble sand and water forms a cementitious topping for concrete

- B. Concrete Topping: "Kool Deck Elite".
  - 1. Description: Powered concentrate that when mixed properly with water and a Color-Unit pack forms a non-skid, weather-resistant, colored, cementitious concrete topping.
  
- B. Test Results:
  - 1. Compressive Strength, ASTM C 109:
    - a. 7-Day Curing: 1,300 psi.
    - b. 14-Day Curing: 1,800 psi.
    - c. 28-Day Curing: 2,800 psi.
  - 2. Rapid Freezing and Thawing, ASTM C 666: Beginning of failure of flat areas after 70 cycles.
  - 3. Abrasion Resistance, ASTM C 944:
    - a. Maximum Loss, 2-gram load, with 50 percent flat texture: 1 gram.
    - b. Maximum Loss, 6-gram load, with 50 percent flat texture: 3 grams.
  - 4. Surface Friction, ASTM E 303: 69 average.
  
- C. Color: Color will be selected from standard Kool Deck® Colors and will not include anything from the Designer Color Collection or custom colors.
  
- D. Equivalent systems will be considered if submitted in accordance with the provisions of these specifications governing substitutions. The system provided by the manufacturer includes sand, cement, and bonding agent. If not so shown, there shall be no pattern required and the surface shall be evenly colored (mottling acceptable) and slip resistant. Unless formally approved prior to receipt of proposals in accordance with these documents, proposal shall reflect specified product.

## **2.3 ACCESSORIES**

- A. 1 Color-Unit Pack per bag of Kool Deck Elite
- B. Water: Potable.
- C. Bonding Agent: Mortex "PTA" bonding agent.
- D. Weatherproofing Protection: Mortex Protect-A-Deck

## **PART 3 EXECUTION**

### **3.1 EXAMINATION**

- A. Examine areas to receive base slab concrete and concrete topping.
- B. Notify Architect of conditions that would adversely affect installation or subsequent use.
- C. Do not begin preparation or installation until unacceptable conditions are corrected.

### **3.2 PREPARATION**

- A. Protection: Protect adjacent surfaces from contact with base slab concrete and concrete topping.

- B. Base Slab Concrete: Place base slab concrete shall be cleared of all existing surface treatment, and prepared in accordance with manufacturer's requirements to ensure proper bonding of Kool Deck topping.
  - 1. Admixtures:
    - a. Use only admixtures approved by concrete topping manufacturer.
    - b. Do not use calcium chloride or admixtures containing chloride ions.
    - c. Do not use fibers containing iron.
  - 2. Do not begin finishing of base slab concrete until bleed water has left surface.
  - 3. Scarify surface of base slab concrete with one pass of broom behind finish troweling.
  - 4. Ensure finished of base slab concrete surface is in accordance with manufacturer's instructions for bonding to concrete topping.

### **3.3 MIXING**

- A. Mix materials for concrete topping in accordance with manufacturer's instructions.
- B. Concrete Topping Materials:
  - 1. Proportion the following materials in accordance with manufacturer's instructions:
    - a. "Kool Deck Elite".
    - b. Color Unit.
    - c. Water.
  - 2. Do not add other materials to mixture.
- C. Mix materials to ensure a uniform color blend.
- D. Test for correct consistency of concrete topping mixture with Mortex Viscosity Cup in accordance with manufacturer's instructions.

### **3.4 DECK PREPARATION**

- A. The installer shall not install the system over an improperly prepared or insufficiently cured surface and a decision by the installer to begin installation shall be tantamount to acceptance of the concrete substrate. Any saw joints required in new concrete shall be sawed prior to the coating installation.
- B. The substrate shall be prepared in accordance with topping manufacturer's requirements to ensuring proper bonding.
- C. At minimum and in addition to manufacturer's requirements (unless in conflict with), the concrete shall be high pressure water- or sand-blasted to remove all impurities, paints, old coating systems, oils or dirt that may inhibit bonding of the surface. Remove all spalling concrete. Spalling shall be repaired with thin-overlay products specified elsewhere in these plans and specifications. All repairs shall be allowed to cure before coating.
- C. All expansion joints shall be cleaned and a specified joint sealer installed as prescribed in Section 03 15 16. Cracks shall be repaired with either non-shrink grout or epoxy joint sealing compounds as provided elsewhere in the plans or specifications. The coating system is not intended to bridge large cracks.

### **3.5 INSTALLATION**

- A. Mask all existing structures. Protect from overspray. Install concrete topping to base slab concrete in accordance with manufacturer's instructions at locations indicated on the Drawings.
- B. Bond concrete topping to base slab concrete with PTA bonding agent applied in accordance with manufacturer's instructions. Secure with plastic for 48 hours.
- C. Concrete Topping Thickness: The completed system shall be no less than 3/16-inch in total coating thickness uniformly over the entire surface.
- D. Trowel concrete topping in accordance with manufacturer's instructions.
- E. Ensure uniform color and texture of concrete topping.
- F. Do not apply curing compounds to concrete topping.

### **3.6 PROTECTION**

- A. Keep all traffic and equipment off of colored and textured surfaces until properly dried. Walking on finished surfaces before final acceptance of the project is prohibited without soft-soled shoes or barefoot. Marred surfaces will have to be re-coated by the contractor prior to final acceptance.
- B. Protect completed concrete topping from any contact for 48 hours after installation.
- C. Allow only light pedestrian traffic on completed concrete topping:
  - 1. Starting 48 hours after installation.
  - 2. Ending 14 days after installation.
- D. Protect completed concrete topping from damage during construction.

**END OF SECTION**

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## PTA Concrete Renovation

PTA® is a revolutionary systematic method for the remodeling and renovation of concrete. It is the Mortex™ recommended system for applying Keystone Kool Deck® topping or Marquee® topping to existing concrete. The following are instructions for using PTA using the 4 C's of Concrete Renovation ...**Clean, Coat, Cover, and Cure.**

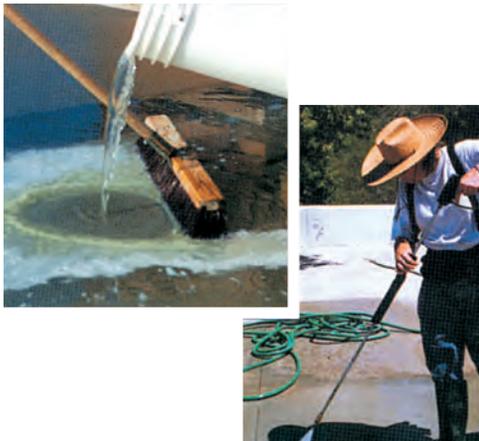
### 1 Clean & Prepare Concrete

#### Deck Preparation

A clean, sound concrete surface is required. Oil and grease stains must be removed. You must remove all loose and deteriorated concrete, plastic coatings, paints, adhesives and polymer toppings.

Note: When evaluating the amount of deck preparation work necessary, and the question comes up of weather or not you have done enough the answer is the More you do, the better the job.

Mask exposed aluminum surfaces and all areas you wish to protect from over-splash.



#### Acid Wash

All decks (even new) must be acid washed with a strong solution of muriatic acid to etch the surface.

Acid Solution: 1 part acid to 1 part water for older concrete. 1 part acid to 4 parts water for newer concrete.

Wet the surface thoroughly with water. Never put acid on dry concrete. Brush acid solution on surface - it should boil vigorously. If it doesn't, there is something on the concrete that must be removed.

**Note:** Acid destroys cement. Therefore, never let any portion of the deck dry with acid on it. Do Not use anything to "neutralize" the acid. Most importantly, cement residue caused by acid washing must be thoroughly removed by either rinsing the surface with water while scrubbing with a wire brush or rinsing with a high pressure washer (1500 psi or greater).

#### Repairs

Minor repairs, such as damaged edges and/or depressions and holes, should be made just ahead of surface application. Make sure the repair area is damp but without standing water. Brush PTA only into the area to be repaired. Using a rubber float as an applicator, pack holes and depressions with the topping mixture in a thick enough consistency to avoid craze cracking.

**Note:** Major repairs of structural damage or cracks should be repaired well in advance of the day of topping application.



#### Wet Surface

Thoroughly saturate the base concrete with water. The more saturated the base concrete, the better the topping will cure. Keep the entire surface wet for a period of at least one (1) hour prior to placing topping. If the base dries unevenly, the coating will set unevenly.

## 2 Coat Concrete with PTA



### Apply PTA

Mix PTA® as per instructions and pour onto the thoroughly damp, not wet concrete. Use a stiff bristled nylon floor broom to scour PTA into the surface. Pay special attention to blemishes and joints. Coat an area thoroughly but do not out distance splasher. PTA should never be allowed to dry. Brush excess PTA, especially from joints and blemishes, to the next area to be coated and repeat the process.

**Note:** Consistency of PTA when mixed should be that of thin milk. A coating of PTA thicker than a few mils actually makes for a weaker bond than a thin coat.

## 3 Cover with Keystone Kool Deck or Marquee

### Splashing and Troweling

Splash or spray Mortex® Keystone Kool Deck® or Marquee® toppings directly on the PTA while it is wet. DO NOT allow PTA to dry before applying the topping.

**Note:** Never allow PTA to dry before the topping is applied, use a small amount of PTA by brushing it across the surface to keep the area wet.

Existing concrete applications dry quicker and at times more unevenly than fresh concrete. It is therefore essential to set a pattern as soon as possible. All areas should receive an equal amount of troweling.

**Note:** Areas that do not get troweled on the final pass usually end up lighter in color.



## 4 Cure with Plastic



### Covering for Curing

Immediately after troweling, cover area with visqueen (2mil clear). Weight the plastic down with sand so air cannot circulate under the plastic and dry out the deck. Leave covered for **exactly 2 days**, do not leave covered for more than two days.

### Remove Plastic

After two days remove plastic. The deck will exhibit white growths on the surface, wash the surface immediately with clean water using a stiff nylon bristle brush to prevent discoloration of the surface.

**Note:** The deck should be washed frequently during the first 6 weeks.



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# Application Instructions for Kool Deck Elite on Existing Concrete



## REQUIRED MATERIALS

- Kool Deck® Elite™
- Color-Unit™ pack(s)
- PTA Bonding Agent
- Water

## OPTIONAL TOOLS

- Paddle Type Mixer
- Mortex Pattern Blade

## NECESSARY TOOLS

- Mortex Dash Brush
- Clean, 5/6.5 gallon Bucket (for mixing Kool Deck Elite)
- Clean, 5 gallon Bucket (for mixing PTA)
- 1 Gallon container (for measuring water)
- Heavy-Duty 3/4" Power Drill (300 rpm max)
- Rectangular Blade Mixing Paddle
- Steel Finishing trowels
- Mortex Viscosity Cup
- Nylon Bristle Broom
- Concrete finishing tools

Kool Deck® Elite™ can easily be applied to concrete on the very first day of the concrete pour (fresh concrete) or to existing concrete the next day of the concrete pour as seen here.

## COVERAGE

- 1 50 bag of Kool Deck Elite will cover approximately 65 ft<sup>2</sup>.
- 1 Color-Unit pack is required for every bag of Kool Deck Elite.
- 1 carton of PTA when mixed with water according to instructions will cover approx. 350 ft<sup>2</sup>.

Kool Deck® Elite™ can easily be applied to concrete on the very first day of the concrete pour (fresh concrete) or to existing concrete the next day of the concrete pour as seen here.

Kool Deck® Elite™ is a colorless (white) product. Use of an entire Mortex Color-Unit™ pack is required to achieve desired color.

**IMPORTANT:** Mortex Manufacturing highly recommends a trained crew of 4 – 5 people apply Kool Deck Elite.

## BASIC STEPS

1. Remove any existing toppings or foreign matter from the deck.
2. Wash the deck with a water & muratic acid solution followed by a high pressure wash.
3. Apply PTA Bonding Agent.
4. Apply Kool Deck Elite material.
5. Trowel.
6. Cover with plastic for two days.
7. Remove plastic and clean up site.
8. Enjoy.



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## **DETAILED INSTRUCTIONS**

**SAFETY:** Proper safety considerations should be followed during the application of Mortex products and any product should be used in accordance with the SDS (Safety Data Sheets) and all recommendations followed.

**TEMPERATURE CONSIDERATIONS:** For best results, ambient temperature during the application should be 50 degrees and rising and should not be over 95 degrees.

**NOTE:** In warm climates, extreme care should be taken if installation is to take place when temperatures are expected to exceed 95°F (35°C.) This is due to the necessity of the topping to cure after application. In freeze-thaw climates, the finished application should be protected against frost and other severe conditions, for a period of 28 days.

If rain or frost is predicted then.....do not apply the products.

## **CLEAN AND PREPARE CONCRETE**

Preparation of the concrete surface is one of the most important factors in the successful use of the PTA Bonding Agent followed by the application of a Kool Deck surface (PTA System). The performances of our products are directly related to how well the surface has been prepared.

The PTA System will only adhere to solid concrete surfaces. Mortex does not recommend that our topping be applied to brick, wood, tile, natural stone, clay or any other surface that is not cementitious as proper adhesion will not occur.

The PTA System will also not adhere to any concrete substrate that is not completely free of dirt, grime, oil, wax, grease, paints, stains, loose toppings, deteriorated concrete, curing compounds or any other foreign matter.

Note: When evaluating the amount of deck preparation work necessary and the question comes up of whether or not you have done enough, the answer is "The More You Do, The Better the Job."

## **SURFACE PREPARATION**

1. Application of PTA System should only be to clean, sound concrete surfaces that are preferably 28 days old.
2. Mask off all areas that are not being coated to protect them from damage. Mask exposed aluminum surfaces and all areas that you wish to protect from over splash. (Cement will corrode and blacken aluminum.) Cover joints and drains with protective tape.
3. Remove deteriorated concrete or other toppings using a scarifier first, then a power washer to remove debris. A 3000 psi pressure washer can be used to remove any paints, plastic coatings, adhesives or polymer toppings.
4. Repair any major cracks or deteriorated areas in the concrete well in advance. Any major repairs of structural damage in the deck or cracks should be done well in advance of the PTA and topping application. Any minor repairs such as damaged edges and/or depressions and holes should be made just ahead of surface application.
5. Wet the deck with water in preparation of the muriatic acid wash. All concrete (even 1 day old, green concrete) must be acid washed with a strong solution of muriatic acid to etch the surface. Never put acid on dry concrete.
6. Mix and apply muriatic acid solution: For older concrete, use an acid solution: 1 part acid to 1 part water. For new concrete, use a 1 part acid to 4 parts water. It is NOT necessary to neutralize the acid with products such as Trisodium phosphate (TSP). It is important to understand that neutralizers like TSP will leave a film on the deck and will break the bond between the concrete deck and the deck topping.
7. Use a nylon bristle broom to scrub the surface.

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**NOTE:** When the acid is applied, if the acid does not boil and bubble then there is still something on the deck.

8. After one person starts applying the acid mixture and scrubbing the deck another person should follow them using a 3000 psi pressure washer with the nozzle 3-4 inches off the deck to wash the acid off.
9. After the acid is washed off the deck, an additional pressure wash should be given. This time hold the pressure washer nozzle 1 foot from the deck surface.

**REMEMBER:** Do not neutralize the deck with neutralizers such as TSP as the Kool Deck material will not bond to them.

10. Before the application of the PTA Bonding Agent the deck must be kept wet for a period of at least one (1) hour prior to using PTA.
11. Minor repairs such as damaged edges and/or depressions and holes, should be made at this time. Repair should be damp but without standing water. Brush PTA only into the area to be repaired. Using a rubber float as an applicator, pack holes and depressions with the topping mixture in a thick enough consistency to avoid craze cracking.

## **MIX & COAT THE SURFACE WITH THE PTA BONDING AGENT**

**REMEMBER:** Before the application of the PTA Bonding Agent the deck must be kept wet for a period of at least one (1) hour prior to using PTA.

Mixing Formula – Follow carefully

1 Carton of PTA  
1.3 Gallons (5 L) water

1. Place 0.5 gallon (2 L) of water in a 5 gallon bucket and add PTA; mix for two minutes with a drill and a rectangular mixing blade. Let mixture rest for three minutes.
2. Add remaining 0.8 gallon (3 L) of water and blend for three additional minutes until proper consistency is obtained.
3. When mixed with water, PTA should have the consistency of milk. Additional water can be added to maintain consistency.

## **APPLICATION OF PTA INSTRUCTIONS**

1. Pour PTA onto deck and use a broom to scrub PTA onto the entire surface (including the repair area). Be sure to cover surface completely.

**VERY IMPORTANT:** DO NOT ALLOW PTA TO DRY BEFORE THE KOOL DECK ELITE MATERIAL IS APPLIED.

2. Brush away all excess PTA. Base concrete should be visible through the PTA (thin coat is best).

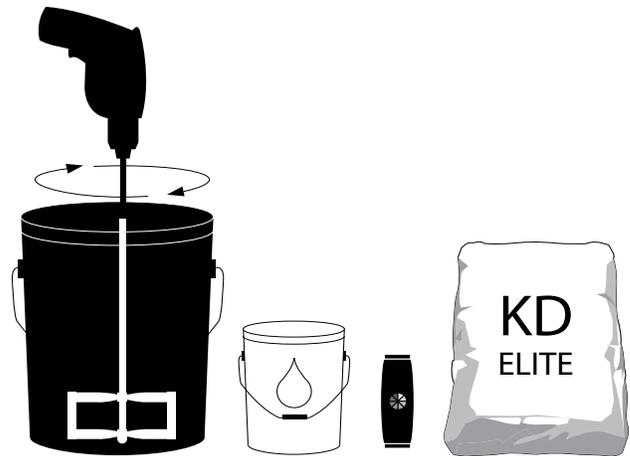
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## **MIXING OPTIONS FOR KOOL DECK ELITE:**

### **MIXING OPTION 1: KOOL DECK® ELITE™ IN A 5/6.5 GALLON BUCKET**

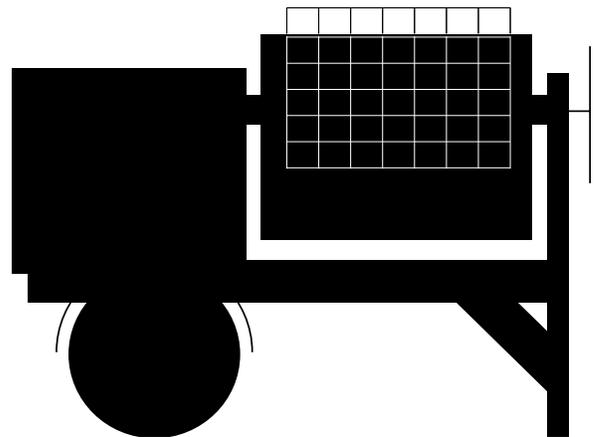
1. Pour 1 gallon (3.79 L) of Water into Mixing Bucket.
2. Mix one (1) entire Color-Unit pack into Mixing water, using the heavy-duty drill with paddle blade.
3. Gradually dump entire 50 lb bag of Kool Deck Elite into colored water while mixing.
4. Mix for two (2) minutes into an even colored, thick paste. Allow the mix to stand for one (1) minute.
5. Restart mixing. Slowly add an additional 2 gallons (7.57 L) of Water to the mix.
6. Use a Mortex Viscosity Cup as a final guide on proper consistency. Mix should empty a full Viscosity Cup in 17 seconds for flat surfaces and 20 seconds for colder weather.



### **MIXING OPTION 2: MIXING KOOL DECK ELITE IN A PADDLE TYPE MIXER**

Note: A minimum of 3 bags of Kool Deck Elite is necessary per batch.

1. Start mixer and add 3 gallons (11.36 L) of water into the mixer.
2. Add 3 entire Color-Unit packs into the mixer.
3. Add 3 entire 50 lb bags of Kool Deck Elite into the mixer.
4. Mix for three (3) minutes into an even colored, thick paste.
5. Slowly add up to an additional 6 gallons (22.7 L) of Water to the mix.
6. Use a Mortex Viscosity Cup as a final guide on proper consistency. Mix should empty a full Viscosity Cup in 17 seconds for flat surfaces and 20 seconds for colder weather.



**WARNING:** Idle the mixer before checking the consistency of the mix with your Viscosity Cup. Never reach into a mixer with your body.

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## **APPLICATION KOOL DECK ELITE:**

### **SPLASHING THE KOOL DECK ELITE MIXTURE**

1. Pour the mix from the mixing bucket or paddle mixer into a clean five gallon bucket.
2. Begin applying. Dip the brush into the mix covering the full length of the bristles and start splashing the mixture. If necessary, additional water should be added to the Kool Deck Elite mixture so the material will rain from the brush and have a creamy appearance when splashed. Use a Viscosity Cup according to instructions for best consistency.
4. Splash on the mixture in even, straight, side by side rows, being sure to overlap so as not to leave any holdays (unintentional gaps). The first splashing should be used to cover the deck.

Suggestion: The best texture is achieved by raising the brush high and moving the hand forward, snapping back with the wrist. This motion causes the mix to rain from the brush and gives an even, uniform texture.



5. Resplash the deck just before the first application has lost its water glaze. When applying a light second splash, allow the Kool Deck Elite mixture to rain down from the Dash Brush. The second splashing will drive the Kool Deck Elite surface into high peaks for good texture. The high texture produced by the second splash is necessary to allow trowelling time and to give a better pattern. Final material should be 1/8" total thickness.

**Note: Kool Deck Elite CANNOT be applied with Hopper Gun. A hopper will separate the sand and cement and the Kool Deck material will not adhere properly.**

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## **TROWELLING KOOL DECK® ELITE™**

1. Begin to trowel as the water glaze leaves the deck. The pattern is set with the first trowel pass. The trowel must be held perfectly flat with a light hand. (The ideal tool is a Mortex Pattern Blade or a worn, cupped trowel.)
2. The second trowelling must follow immediately behind the first. With the trowel held flat, feel for un-even surface, leveling it as you go.
3. The second pass is necessary to bring the deck into a uniformly dense and colorfast deck surface. The finished deck should reveal approximately a 40% smooth and a 60% void surface. This prevents craze cracking since the knolls may expand and contract from the voids.

## **CURE WITH PLASTIC**

VERY IMPORTANT: Immediately after final trowelling, cover area with Visqueen (aka Polyethylene Plastic) 2 mil. clear in color and leave covered for precisely two (2) days. Cover the areas immediately with plastic after trowelling. Do not wait until you have completed the entire job before covering with plastic. Weight the plastic down with sand so that air cannot circulate under the plastic and dry out the deck. Do not leave covered for more than two (2) days. If the deck surface exhibits white growths when the plastic is removed, wash the surface with water immediately. Use a stiff bristle nylon brush to scrub the surface. During the next 28 days, the deck surface should be washed frequently.

## **COMPLETION OF WORK**

Remove tape masking from surrounds, joints and drains, clean up around the job site and you are finished.

## **AFTER INSTALLATION**

Kool Deck® surfaces need sufficient time to cure. The owner should avoid contact with the deck for 48 hours, light walking traffic after 3 days; normal walking traffic after 14 days; heavy patio furniture after 28 days.

## **POINTS TO REMEMBER**

- Do not allow the PTA Bonding Agent to dry before applying the Kool Deck ELITE mixture.
- After trowelling the Kool Deck material cover the areas with plastic immediately and leave covered for exactly 2 days.
- Make sure the Kool Deck Elite mixture is thin enough. A mixture that is too thick will result in low square foot coverage, poor finished pattern, an accelerated setting time, and more craze cracking. The Kool Deck Elite surface should be 1/8" thick.
- Splash twice. The first splashing should be used to cover the deck. The second splashing will drive the Kool Deck surface into high peaks for good texture.

## **IN CASE OF RAIN OR OTHER UNFORESEEN DIFFICULTIES**

Should it be necessary to cover the deck with plastic, be sure the plastic is removed as soon as possible.

Failure to do so may result in a whitish film on the deck surface.

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# KOOL DECK® E L I T E™

## Contractor Brochure

Instructions for application on fresh concrete (first day of the concrete pour).

## Kool Deck just got better.

Kool Deck® Elite™ is the newest addition to the concrete topping line from Mortex. This Elite product shares all the benefits you have come to expect from a genuine Kool Deck surface, like significantly lowering the surface temperature of concrete and being environmentally safe, but with an enhanced formula and the ease of a pre-mixed package that is bucket mixable.

Kool Deck Elite helps you create a better surface while eliminating time and money spent sourcing proper size marble sand and white cement.

- **Unparalleled value on per square foot basis**
- **Performance, versatility and convenience for large and small decks**
- **Now mixable in a 5 gallon bucket**
- **Basic 50 lb pre-mixed bag - Just add water and a Color-Unit pack**
- **Consistent color proportioning with Color-Unit pack**
- **Enhanced formula for resistance to modern chemical attacks, craze cracking, etc.**
- **Pre-mixed simplicity translates into better decks, time after time**

Coverage
A properly mixed unit should cover 65 to 70 ft <sup>2</sup> per 50 lb bag (6 to 6.5 M <sup>2</sup> per 22.68 kg)
Measurements
Bag measures 14" x 19" x 4" (35.6 cm x 48.2 cm x 10 cm)
Weight
Total approximate bag weight 50 lbs. (22.7 kg)
Shipping Info
UPS, FedEx, freight truck, ocean or air

### Color-Unit System

Color-Unit packs are the solution to consistent color proportioning. Kool Deck Elite has been specifically made to be free from color (white), so you can add the color you want, when you want it. These small 1 to 1.5 pound bags come in all Kool Deck and Designer Color Palettes, and are easily added on a simple one Color-Unit pack to one 50 pound Elite bag. Our separation of the color from the pre-mix saves you extra freight cost, time & storage space by having a truly versatile product.



# Instructions for Kool Deck® Elite™ Application

## Necessary Tools

- Mortex Dash Brush
- Clean, 5 gallon Bucket (for mixing)
- 1 Gallon container (for measuring water)
- Heavy-Duty 3/4" Power Drill
- Rectangular Blade Mixing Paddle
- Steel Finishing trowels
- Mortex Viscosity Cup

## Required Materials

- 1 Color-Unit™ pack
- 1 Bag of Kool Deck Elite

## Optional Tools

- Paddle type plaster mixer
- Mortex Pattern Blade

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**Coverage:** 65 to 70 ft<sup>2</sup> per 50 lb bag (6 to 6.5 M<sup>2</sup> per 22.68 kg)

Kool Deck® Elite™ is a colorless (white) product. Use of a Mortex Color-Unit™ pack is required to achieve desired color.

Note: Kool Deck Elite can easily be applied to existing concrete surfaces properly prepared with our PTA Bonding Agent or to green concrete, as described below.

## Instructions for Kool Deck® Elite – Fresh Concrete Application

### Surface Requirements

- Be sure to grade so the deck will be uniform in thickness.
- Wet down the sub soil thoroughly just before the pour.
- Cover all walls and aluminum with plastic or paper. (Cement will corrode and blacken aluminum.)

### Pouring The Slab

1. Order a five-bag mix, a little on the rocky side. A faster cure and higher strength may be achieved with a six bag mix.
2. When ordering concrete, stipulate that no additives are to be included in your concrete. Serious problems can result from the use of additives in conjunction with our product. When air-entrainment is necessary, consult with Mortex on the appropriate type to use.
3. After placing the concrete, tamping, and floating, continue to work with the concrete. The finished deck will only be as level as the base concrete.
4. Broom to scarify the entire slab. Use a nylon bristled push broom right behind the troweling. Make only one pass. (Do not sweep loose sand to the surface, as this can cause a barrier between the concrete and the Kool Deck Elite.) Leave the mass concrete with open pores for bonding purposes, but not coarse enough that the roughness is revealed through the finished deck surface.

### Mixing Kool Deck® Elite™ in a 5 Gallon Bucket (Follow Carefully)

1. Pour 1 gallon (3.79 L) of Water into Mixing Bucket.
2. Mix one (1) entire Color-Unit pack into Mixing water, using the heavy-duty drill with paddle blade. Dump entire 50 lb bag of Kool Deck Elite into colored water while mixing.
3. Mix for two (2) minutes into an even colored, thick paste. Allow the mix to stand for one (1) minute.
4. Restart mixing. Slowly add an additional 2 gallons (7.57 L) of Water to the mix.
5. Use a Mortex Viscosity Cup as a final guide on proper consistency. Mix should empty a full Viscosity Cup in 17 seconds for flat surfaces and 20 seconds for colder weather.
6. When using a Paddle-Type Plaster Mixer, it is necessary to use a MINIMUM of 3 bags of Kool Deck Elite per batch. Simply multiply the above referenced mixing times and amounts by the number of bags used. For example, a 3 bag mix would require an initial 3 gallons of water, followed by 3 Color-Unit packs, and then 3 bags of Kool Deck Elite material, etc.

## Mixing Kool Deck Elite in a Paddle Type Mixer

Note: A minimum of 3 bags of Kool Deck Elite is necessary per batch.

1. Start mixer and add 3 gallons (11.36 L) of water into the mixer.
2. Add 3 Color-Unit packs into the mixer.
3. Add 3 – 50 lb bags of Kool Deck Elite into the mixer.
4. Mix for three (3) minutes into an even colored, thick paste.
5. Slowly add an additional 6 gallons (22.7 L) of Water to the mix.
6. Use a Mortex Viscosity Cup as a final guide on proper consistency. Mix should empty a full Viscosity Cup in 17 seconds for flat surfaces and 20 seconds for colder weather.

**WARNING:** Idle the mixer before checking the consistency of the mix with your Viscosity Cup. Never reach into a mixer with your body.

## Splashing The Kool Deck Elite Mixture

1. Test the base concrete slab. The concrete base is ready for the surfacing to be applied when it can be walked on without leaving deep depressions, but still shows a water rise in foot impression.
2. Pour the mix from the mixing bucket or paddle mixer into a five gallon bucket.
3. Begin applying. Dip the brush into the mix covering the full length of the bristles and start splashing the mixture. If necessary, additional water should be added to the Kool Deck Elite mixture so the material will rain from the brush and have a creamy appearance when splashed. Use Viscosity Cup according to instructions for best consistency.

Suggestion: The best texture is achieved by raising the brush high and moving the hand forward, snapping back with the wrist. This motion causes the mix to rain from the brush and gives an even, uniform texture.

4. Splash on the mixture in even, straight, side by side rows, being sure to overlap so as not to leave any holidays. The first splashing should be used to cover the deck.
5. Resplash the deck just before the first application has lost its water glaze. When applying a light second splash, allow the Kool Deck Elite mixture to rain down from the Dash Brush. The second splashing will drive the Kool Deck Elite surface into high peaks for good texture. The high texture produced by the second splash is necessary to allow troweling time and to give a better pattern.

## Troweling Kool Deck Elite

1. Begin to trowel as the water glaze leaves the deck. The pattern is set with the first trowel pass. The trowel must be held perfectly flat with a light hand. (The ideal tool is a Mortex Pattern Blade or a worn, cupped trowel.)
2. The second troweling must follow immediately behind the first. With the trowel held flat, feel for uneven surface, leveling it as you go.
3. The second pass is necessary to bring the deck into a uniformly dense and colorfast deck surface. The finished deck should reveal approximately a 40% smooth and a 60% void surface. This prevents craze cracking since the knolls may expand and contract from the voids.

## Completion Of Work

1. Remove tape masking from joints and drains, clean up around the job site and you are finished.
2. A Kool Deck Elite surface contains its own sealer and curing agents, so no further work on the deck surface is required.

## After Installation

Kool Deck® surfaces need sufficient time to cure. The owner should avoid contact with the deck for 48 hours, light walking traffic after 3 days; normal walking traffic after 14 days; heavy patio furniture after 28 days.

## Points To Remember

- Be sure to work the base concrete sufficiently. Areas left unworked are detrimental to a permanent bond.
- Make sure the Kool Deck Elite mixture is thin enough. A mixture that is too thick will result in low square foot coverage, poor finished pattern, an accelerated setting time, and more craze cracking. The best Kool Deck Elite surface is not more than 5/32 inch thick.
- Apply the Kool Deck Elite mixture while there is still enough moisture in the base concrete to facilitate the curing of the Kool Deck Elite topping.
- Splash twice. The first splashing should be used to cover the deck. The second splashing will drive the Kool Deck surface into high peaks for good texture.

## In Case Of Rain Or Other Unforeseen Difficulties

Should it be necessary to cover the deck with plastic, be sure the plastic is removed as soon as possible. Failure to do so may result in a whitish film on the deck surface.

*The manufacturer offers this product and Information in good faith, but without guarantee either expressed or implied, as conditions and methods of use of our product are beyond our control.*

## Kool Deck® Elite™

- 1. Comfort** - Even during the hottest summer days, you can walk, sit, sunbathe or play on your Kool Deck Elite surface. It's more comfortable because it stays cooler than plain concrete or other decking surfaces.
- 2. Durability** - Kool Deck Elite concrete topping is specifically formulated to be far stronger, more durable, and more stain-resistant than other surfaces. It will stand up against even the roughest, most demanding environments such as 100°+ days to freezing nights.
- 3. Safety** - Kool Deck Elite topping creates a non-skid, textured surface that is designed to help reduce the risk of accidents, even when wet, to give you peace of mind.
- 4. Beauty** - A Kool Deck Elite surface is a beautiful addition to your pool, walkway, patio or entire landscape package. The rich, consistent color and texture make it much more attractive than plain concrete. Its beauty compliments the natural environment and other landscaping techniques.
- 5. Cost** - This is the best - even with its far superior quality, a Kool Deck Elite surface is less expensive than other deck surfacing products. The quality of a Kool Deck Elite surface adds distinction and lasting value to your property.
- 6. Variety** - Kool Deck Elite toppings offer you a striking choice of luxurious, pastel colors...one which is perfect for the environment you want to create.

### Kool Deck Elite Color-Unit™ Colors



Sedona Tan



Adobe Buff



Aztec Gold



Sand Buff



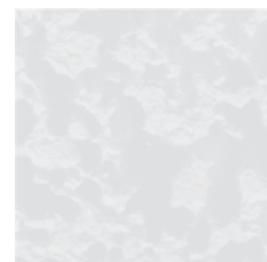
Rose Pink



Coral Peach



Aqua



Birch Grey



Mauve



T5



Terra Cotta

All colors shown are approximate

By the nature of their pigment, darker colors are warmer than lighter Kool Deck Elite colors.

**Mortex Manufacturing Co., Inc.**  
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Since 1962 Mortex™ has been the contractor's choice for innovative and superior quality products. In 1962, Mortex revolutionized the swimming pool industry with the introduction of our Keystone Kool Deck product, that literally changed the face of swimming pool decks forever. Since then, Mortex has continued to set the industry standards for product innovation, quality and customer service.

Mortex, Kool Deck, Keystone Kool Deck, Kool Deck Elite and Designer Color Collection are trademarks or registered trademarks of Mortex Manufacturing Co., Inc.

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# Protect-A-Deck Instructions



## Necessary Tools

- Construction Sprayer
- Measuring Cup
- Stirring Paddle
- Goggles
- Rubber Gloves
- 5 Gallon Bucket

## Coverage

1600-2400 ft<sup>2</sup> (148-223 m<sup>2</sup>) per gal.

- Highly recommended on Kool Deck, Kool Deck Elite or Marquee
- Does not affect color of sprayed surface
- Will not change surface texture
- Durable water repellency (5 to 10 yrs.)
- Solvent-Free Silicone Siloxane
- Highly concentrated
- Combats deteriorating effect of water and salts on concrete
- Reduces efflorescence
- Chemically attaches to any mineral surface
- Bridges hairline cracks
- Mix with ordinary tap water
- Apply with a construction sprayer
- Not intended for use on Systex or Systex Stamp

## Surface Requirements

- Concrete surface (or Mortex topping) must be a minimum of 28 days old before applying PAD
- Clean, dry and free from stains
- Temperature at time of application should be between 40° and 95°F (4° and 35°C)
- Temperature for the next 24 hours should also remain within the range of 40° to 95°F

## Mixing

Mix only what you need, mix 1 part PAD to 15 parts water by volume. The mixed solution will have a usable life span of 3 hours.

*Note:* Always keep the original container closed, as exposure to moisture starts a chemical reaction much like the hydration of cement. Once PAD hydrates, it will not bond to cement.

## Application

Coverage varies depending on number of coats, porosity of surface and temperature of surface at the time of application. The warmer the temperature, the more material you will use. A one gallon (4L) container of PAD mixture will cover approximately 1600-2400 ft<sup>2</sup> (148-223 m<sup>2</sup>) of surface. Use a sprayer to apply the solution. Apply 2 to 3 coats to the surface. Wet surface thoroughly with solution but do not create puddles. Allow time between coats so that the solution can penetrate the surface, but do not allow the surface to dry between coats.

*Caution:* Wear goggles and rubber gloves when handling. For cleanup, wash skin and equipment with soapy water.

*Note:* For maximum repellency, a three (3) day cure period, void of rain, is essential.

# Protect - A - Deck™

Mortex Protect-A-Deck™ is the product you need to shield mineral surfaces against the harmful effects of moisture and extreme temperature change. Protect-A-Deck can be used on Kool Deck Elite, Keystone Kool Deck, Designer Colors, Marquee, Gypsum, Stucco or Brick.

- Curbs deteriorating effect of water and salts on concrete with durable water repellency ( 5 to 10 yrs.)
- Reduces efflorescence
- Chemically attaches to any mineral surface and bridges hairline cracks.
- Apply with a construction sprayer.
- Does not affect color of sprayed surface and will not change surface texture.
- Solvent-Free Silicone Siloxane.
- Not intended for use on Systex or Systex Stamp



Product Detail	Description
Coverage	1600 - 2400 ft <sup>2</sup> per gallon (148-223 m <sup>2</sup> )
Contents	1 gallon (3.79 L)
Ctn Measurements	12.75" x 12.75" x 12.65" (32.4 cm x 32.4 cm x 31.7 cm)
Weight	10 lbs (4.5 kg)
Shipping Information	UPS, FedEx, Freight Truck, Ocean, Air

Catalog Item #	Description
KPAD	Protect-A-Deck

## INSTRUCTIONS

### SURFACE REQUIREMENTS

- Concrete surface (or Mortex topping) must be a minimum of 28 days old before applying Protect-A-Deck
- Clean, dry and free from stains
- Temperature at time of application should be between 40° and 95°F (4° and 35°C)
- Temperature for the next 24 hours should also remain within the range of 40° to 95°F

### MIXING

Mix only what you need. Mix 1 part Protect-A-Deck to 15 parts water by volume. The mixed solution will have a usable life span of 3 hours.

**Note:** Always keep the original container closed, as exposure to moisture starts a chemical reaction much like the hydration of cement. Once Protect-A-Deck hydrates, it will not bond to cement.

### APPLICATION

Use a construction sprayer to apply the solution. Apply 2 to 3 coats to the surface. Wet surface thoroughly with solution but do not create puddles. Allow time between coats so that the solution can penetrate the surface, but do not allow the surface to dry between coats. Coverage varies depending on number of coats, porosity of surface and temperature of surface at the time of application. The warmer the temperature, the more material you will use.

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# KOOL DECK<sup>®</sup> E L I T E<sup>TM</sup>

## Kool Deck just got better.

Kool Deck® Elite™ is the newest addition to the concrete topping line from Mortex. This Elite product shares all the benefits you have come to expect from a genuine Kool Deck surface, like significantly lowering the surface temperature of concrete and being environmentally safe, but with an enhanced formula and the ease of a pre-mixed package that is bucket mixable.

Kool Deck Elite helps you create a better surface while eliminating time and money spent sourcing proper size marble sand and white cement.

- Unparalleled value on per square foot basis
- Performance, versatility and convenience for large and small decks
- Now mixable in a 5 gallon bucket
- Basic 50 lb pre-mixed bag - Just add water and a Color-Unit pack
- Consistent color proportioning with Color-Unit pack
- Enhanced formula for resistance to modern chemical attacks, craze cracking, etc.
- Pre-mixed simplicity translates into better decks, time after time

<b>Coverage</b>
A properly mixed unit should cover 65 to 70 ft <sup>2</sup> per 50 lb bag (6 to 6.5 M <sup>2</sup> per 22.68 kg)
<b>Measurements</b>
Bag measures 14" x 19" x 4" (35.6 cm x 48.2 cm x 10 cm)
<b>Weight</b>
Total approximate bag weight 50 lbs. (22.7 kg)
<b>Shipping Info</b>
UPS, FedEx, freight truck, ocean or air

### Color-Unit System

Color-Unit packs are the solution to consistent color proportioning. Kool Deck Elite has been specifically made to be free from color (white), so you can add the color you want, when you want it. These small 1 to 1.5 pound bags come in all Kool Deck and Designer Color Palettes, and are easily added on a simple one Color-Unit pack to one 50 pound Elite bag. Our separation of the color from the pre-mix saves you extra freight cost, time & storage space by having a truly versatile product.



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### Kool Deck Elite Color-Unit™ Colors



**Sedona Tan**



**Adobe Buff**



**Aztec Gold**



**Sand Buff**



**Rose Pink**



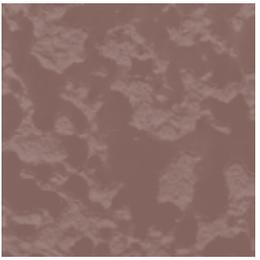
**Coral Peach**



**Aqua**



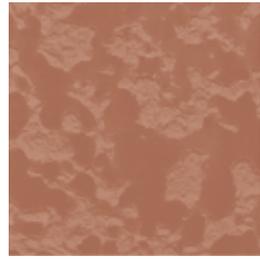
**Birch Grey**



**Mauve**



**T5**



**Terra Cotta**

All colors shown are approximate

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