



AIA® Document A133® – 2019 Exhibit A

Guaranteed Maximum Price Amendment

This Amendment dated the _____ day of _____ in the year two thousand twenty-four, is incorporated into the accompanying AIA Document A133™–2019, Standard Form of Agreement Between Owner and Construction Manager as Constructor where the basis of payment is the Cost of the Work Plus a Fee with a Guaranteed Maximum Price dated the day of _____ in the year two thousand twenty-four (the "Agreement")
(In words, indicate day, month, and year.)

for the following **PROJECT:**
(Name and address or location)

City of Mansfield's Fire Station 1
203 S Walnut Creek Dr.
Mansfield, TX 76063

THE OWNER:
(Name, legal status, and address)

City of Mansfield, Texas
1200 E. Broad St.
Mansfield, TX 76063

THE CONSTRUCTION MANAGER:
(Name, legal status, and address)

Crossland Construction Company, Inc.
13601 North Freeway,
Suite 130
Fort Worth, TX 76177

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ARTICLE A.1 GUARANTEED MAXIMUM PRICE

§ A.1.1 Guaranteed Maximum Price

Pursuant to Section 3.2.6 of the Agreement, the Owner and Construction Manager hereby amend the Agreement to establish a Guaranteed Maximum Price. As agreed by the Owner and Construction Manager, the Guaranteed Maximum Price is an amount that the Contract Sum shall not exceed. The Contract Sum consists of the Construction Manager's Fee plus the Cost of the Work, as that term is defined in Article 6 of the Agreement.

§ A.1.1.1 The Contract Sum for the Guaranteed Maximum Price is guaranteed by the Construction Manager not to exceed Twelve million one thousand one hundred ninety nine

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

AIA Document A201™–2017, General Conditions of the Contract for Construction, is adopted in this document by reference. Do not use with other general conditions unless this document is modified.

Init.

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dollars (\$ 12,001,199.00), subject to additions and deductions by Change Order as provided in the Contract Documents.

§ A.1.1.2 Itemized Statement of the Guaranteed Maximum Price. Provided below is an itemized statement of the Guaranteed Maximum Price organized by trade categories, including allowances; the Construction Manager's contingency; alternates; the Construction Manager's Fee; and other items that comprise the Guaranteed Maximum Price as defined in Section 3.2.1 of the Agreement.

(Provide itemized statement below or reference an attachment.)

See Exhibit "A.N" – Itemized Guaranteed Maximum Price.

The scope of Work for the GMP is defined by Exhibit "A.C" – Scope of Work.

§ A.1.1.3 The Construction Manager's Fee is set forth in Section 6.1.2 of the Agreement.

§ A.1.1.4 The method of adjustment of the Construction Manager's Fee for changes in the Work is set forth in Section 6.1.3 of the Agreement.

§ A.1.1.5 Alternates

§ A.1.1.5.1 Alternates, if any, included in the Guaranteed Maximum Price:

Item	Price
<u>City of Mansfield's Fire Station 1</u>	<u>See Exhibit "A.N" Itemized Guaranteed Maximum Price.</u>

§ A.1.1.5.2 Subject to the conditions noted below, the following alternates may be accepted by the Owner following execution of this Exhibit A. Upon acceptance, the Owner shall issue a Modification to the Agreement.

(Insert below each alternate and the conditions that must be met for the Owner to accept the alternate.)

Item	Price	Conditions for Acceptance
<u>See Exhibit "A.J" – Alternates with Costs and Expiration Dates.</u>		

§ A.1.1.6 Unit prices, if any:

(Identify the item and state the unit price and quantity limitations, if any, to which the unit price will be applicable.)

Item	Units and Limitations	Price per Unit (\$0.00)
<u>See Exhibit "A.K" – Unit Costs.</u>		

ARTICLE A.2 DATE OF COMMENCEMENT AND SUBSTANTIAL COMPLETION

§ A.2.1 The date of commencement of the Work shall be:

(Check one of the following boxes.)

☐ The date of execution of this Amendment.

☒ Established as follows:
(Insert a date or a means to determine the date of commencement of the Work.)

See Exhibit "A.D" – Construction Manager's Project Schedule.

If a date of commencement of the Work is not selected, then the date of commencement shall be the date of execution of this Amendment.

§ A.2.2 Unless otherwise provided, the Contract Time is the period of time, including authorized adjustments, allotted in the Contract Documents for Substantial Completion of the Work. The Contract Time shall be measured from the date of commencement of the Work.

§ A.2.3 Substantial Completion

§ A.2.3.1 Subject to adjustments of the Contract Time as provided in the Contract Documents, the Construction Manager shall achieve Substantial Completion of the entire Work:
(Check one of the following boxes and complete the necessary information.)

☐ Not later than () calendar days from the date of commencement of the Work.

☒ By the following date: **X** See Exhibit "A.D" – Construction Manager’s Project Schedule.

§ A.2.3.2 Subject to adjustments of the Contract Time as provided in the Contract Documents, if portions of the Work are to be completed prior to Substantial Completion of the entire Work, the Construction Manager shall achieve Substantial Completion of such portions by the following dates:

Portion of Work	Substantial Completion Date
Not applicable.	

§ A.2.3.3 If the Construction Manager fails to achieve Substantial Completion as provided in this Section A.2.3, liquidated damages, if any, shall be assessed as set forth in Section 6.1-6.8.6 of the Agreement.

ARTICLE A.3 INFORMATION UPON WHICH AMENDMENT IS BASED

§ A.3.1 The Guaranteed Maximum Price and Contract Time set forth in this Amendment are based on the Contract Documents and the following:

§ A.3.1.1 The following Supplementary and other Conditions of the Contract:

Document	Title	Date	Pages
See A201 General Conditions of the Contract for Construction.			

§ A.3.1.2 The following Specifications:
(Either list the Specifications here, or refer to an exhibit attached to this Amendment.)

See Exhibit "A.C" – Scope of Work.

Section	Title	Date	Pages
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§ A.3.1.3 The following Drawings:
(Either list the Drawings here, or refer to an exhibit attached to this Amendment.)

See Exhibit "A.C" – Scope of Work.

Number	Title	Date
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§ A.3.1.4 The Sustainability Plan, if any:
(If the Owner identified a Sustainable Objective in the Owner’s Criteria, identify the document or documents that comprise the Sustainability Plan by title, date and number of pages, and include other identifying information. The Sustainability Plan identifies and describes the Sustainable Objective; the targeted Sustainable Measures; implementation strategies selected to achieve the Sustainable Measures; the Owner’s and Construction Manager’s roles and responsibilities associated with achieving the Sustainable Measures; the specific details about design reviews, testing or metrics to verify achievement of each Sustainable Measure; and the Sustainability Documentation required for the Project, as those terms are defined in Exhibit C to the Agreement.)

Title
Not applicable.

Date

Pages

Other identifying information:

§ A.3.1.5 Allowances, if any, included in the Guaranteed Maximum Price:
(Identify each allowance.)

Item	Price
See Exhibit "A.L" - Allowances.	

§ A.3.1.6 Assumptions and clarifications, if any, upon which the Guaranteed Maximum Price is based:
(Identify each assumption and clarification.)

See Exhibit "A.N" - Itemized Guaranteed Maximum Price.

§ A.3.1.7 The Guaranteed Maximum Price is based upon the following other documents and information:
(List any other documents or information here, or refer to an exhibit attached to this Amendment.)

Exhibit "A" – Guaranteed Maximum Price Amendment
Exhibit "A.B" – Insurance, Performance, Payment, and Maintenance Bonds
Exhibit "A.C" – Scope of Work.
Exhibit "A.D" – Construction Manager's Project Schedule
Exhibit "A.E" – Construction Manager's Soft Costs and Fee
Exhibit "A.F" – Key Personnel
Exhibit "A.G" – Confidentiality of the Project
Exhibit "A.H" – Customary and Usual Labor Rates
Exhibit "A.I" – Rental Rates
Exhibit "A.J" – Alternates with Costs and Expiration Dates
Exhibit "A.K" – Unit Costs
Exhibit "A.L" – Allowances
Exhibit "A.M" – Schedule of Values
Exhibit "A.N" – Itemized Guaranteed Maximum Price
Exhibit "A.O" – Escrow and Financing Conditions
Exhibit "A.P" – Disputed Work Schedule
Exhibit "A.Z" – Schedule of Exhibits

ARTICLE A.4 CONSTRUCTION MANAGER'S CONSULTANTS, CONTRACTORS, DESIGN PROFESSIONALS, AND SUPPLIERS

§ A.4.1 The Construction Manager shall retain the consultants, contractors, design professionals, and suppliers, identified below:
(List name, discipline, address, and other information.)

See Exhibit "A.F" – Key Personnel.

This Amendment to the Agreement entered into as of the day and year first written above.

OWNER (Signature)

CONSTRUCTION MANAGER (Signature)

Matt Jones, Assistant City Manager
(Printed name and title)

ATTEST:

Susana Marin, City Secretary

Derek Kloer, Vice President - Fort Worth Div.
(Printed name and title)

APPROVED AS TO FORM:


Dean Roggia, City Attorney

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Certification of Document's Authenticity

AIA® Document D401™ – 2003

I, Chris Squadra, hereby certify, to the best of my knowledge, information and belief, that I created the attached final document simultaneously with this certification at 16:46:20 ET on 10/31/2024 under Order No. 2114576963 from AIA Contract Documents software and that in preparing the attached final document I made no changes to the original text of AIA® Document A133™ – 2019 Exhibit A, Guaranteed Maximum Price Amendment, other than changes shown in the attached final document by underscoring added text and striking over deleted text.



(Signed)

Principal

(Title)

October 31, 2024

(Dated)

EXHIBIT A.B

Insurance, Performance, Payment and **Maintenance Bonds**

Insurance (GL Policy) attached

Owner Bond Forms- Performance, Payment and Maintenance attached

Performance, Payment and Maintenance Bonds & Builders Risk COI's to be
provided one week after GMP is approved.



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

7/1/2024

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an **ADDITIONAL INSURED**, the policy(ies) must have **ADDITIONAL INSURED** provisions or be endorsed. If **SUBROGATION** IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER IMA, Inc. - Kansas City 11350 Switzer Rd Suite 200 Overland Park KS 66210	CONTACT NAME: IMA Wichita Team PHONE (A/C, No, Ext): 316-267-9221 E-MAIL ADDRESS: certs@imacorp.com	FAX (A/C, No):
INSURED Crossland Construction Company, Inc. PO Box 45 833 S. East Avenue Columbus KS 66725	License#: PC-1210733 CROSCON-03	
INSURER(S) AFFORDING COVERAGE		NAIC #
INSURER A: Zurich American Insurance Company		16535
INSURER B: American Guarantee and Liability Insurance		26247
INSURER C: Arch Insurance Company		11150
INSURER D: *Starr Indemnity & Liability Company		38318
INSURER E: Indian Harbor Insurance Company		36940
INSURER F:		

COVERAGES**CERTIFICATE NUMBER:** 902160239**REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PRO-JECT <input checked="" type="checkbox"/> LOC <input type="checkbox"/> OTHER:			GLO859600804	4/30/2024	4/30/2025	EACH OCCURRENCE \$ 5,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 2,000,000 MED EXP (Any one person) \$ 15,000 PERSONAL & ADV INJURY \$ 5,000,000 GENERAL AGGREGATE \$ 10,000,000 PRODUCTS - COMP/OP AGG \$ 10,000,000 \$
A	<input checked="" type="checkbox"/> AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO <input type="checkbox"/> OWNED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS <input checked="" type="checkbox"/> HIRED AUTOS ONLY <input checked="" type="checkbox"/> NON-OWNED AUTOS ONLY			BAP859615304	4/30/2024	4/30/2025	COMBINED SINGLE LIMIT (Ea accident) \$ 5,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$
B	<input checked="" type="checkbox"/> UMBRELLA LIAB <input checked="" type="checkbox"/> OCCUR <input type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE <input type="checkbox"/> DED <input checked="" type="checkbox"/> RETENTION \$ 0			AUC425515003	4/30/2024	4/30/2025	EACH OCCURRENCE \$ 10,000,000 AGGREGATE \$ 10,000,000 \$
A	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	Y/N <input checked="" type="checkbox"/> N	N/A	WC859615404	4/30/2024	4/30/2025	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTH-ER E.L. EACH ACCIDENT \$ 2,000,000 E.L. DISEASE - EA EMPLOYEE \$ 2,000,000 E.L. DISEASE - POLICY LIMIT \$ 2,000,000
C D E	2nd Layer Excess Liability 3rd Layer Excess Liability Professional & Pollution Liab.			UXP300009002 1000588349241 CEO744688608	4/30/2024 4/30/2024 4/30/2024	4/30/2025 4/30/2025 4/30/2025	Ea Occur \$15,000,000 Ea Occur \$15,000,000 See Below Agg \$15,000,000 Agg \$15,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

Professional Liability: \$5,000,000 Each Claim, \$10,000,000 Aggregate; Pollution Liability: \$10,000,000 Each Claim, \$10,000,000 Aggregate.

RE: Mansfield Fire Station 1.

City of Mansfield is included as Additional Insured on the General Liability and Automobile Liability Policy, if required by written contract or agreement, subject to the policy terms and conditions.

This Insurance is Primary & Non-Contributory on the General Liability, Automobile Liability and Umbrella Liability Policy, if required by written contract or agreement, subject to the policy terms and conditions.

A Waiver of Subrogation is provided in favor of City of Mansfield and all other parties required by the contract on the General Liability, Automobile Liability, See Attached...

CERTIFICATE HOLDER**CANCELLATION**

City of Mansfield 1200 E. Broadway Street Mansfield TX 76063	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. AUTHORIZED REPRESENTATIVE
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**ADDITIONAL REMARKS SCHEDULE**Page 1 of 1

AGENCY IMA, Inc. - Kansas City		NAMED INSURED Crossland Construction Company, Inc. PO Box 45 833 S. East Avenue Columbus KS 66725
POLICY NUMBER		
CARRIER	NAIC CODE	EFFECTIVE DATE:

ADDITIONAL REMARKS**THIS ADDITIONAL REMARKS FORM IS A SCHEDULE TO ACORD FORM,****FORM NUMBER:** 25 **FORM TITLE:** CERTIFICATE OF LIABILITY INSURANCE

Umbrella Liability, Professional Liability and Workers Compensation Policy, if required by written contract or agreement, subject to the policy terms and conditions.
General Liability, Automobile Liability, Umbrella Liability, Professional Liability and Workers Compensation Coverage includes 30 day notice of cancellation, subject to the terms and conditions of the policy.

EXHIBIT B – Bond Forms
Performance, Payment, and Maintenance Bonds
(Date of all Bonds must not be prior to date of the Contract)

PERFORMANCE BOND

BOND No. _____

STATE OF TEXAS
COUNTY OF TARRANT

§
§

KNOW ALL PERSONS BY THESE PRESENTS: That _____
(contractor's company) of the City of _____ County of _____, and the State of _____, as Principal, and _____ (surety company) authorized under the laws of the State of Texas to act as surety on bonds for principals, are held and firmly bond unto City of Mansfield (Owner), in the penal 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, for the _____ (name of project) which Contract is hereby referred to and made 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 shall faithfully perform the said Contract and shall in all respects duly and faithfully observe and perform all and singular the covenants, conditions, and agreements in and by said Contract agreed and covenanted by the Principal to be observed and performed, and according to the true intent and meaning of said Contract and the Plans and Specifications hereto annexed, 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 for Public Works, as amended, and all liabilities on this bond shall be determined in accordance with the provisions of said Chapter 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 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 _____, 20_____.

Principal
By _____
Title _____
Address _____

Surety
By _____
Title _____
Address _____

The name and address of the Resident Agent of Surety is:

PAYMENT BOND

BOND No. _____

STATE OF TEXAS
COUNTY OF TARRANT

§
§

KNOW ALL PERSONS BY THESE PRESENTS: That _____
(contractor's company) of the City of _____ County of _____, and the State of _____,
as Principal, and _____ (surety company)
authorized under the laws of the State of Texas to act as surety on bonds for principals, are held and firmly bond unto
the City of Mansfield (Owner), in the penal 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, for the
_____ (name of project) which
Contract is hereby referred to and made 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 shall pay
all claimants supplying labor and material to Principal, or a subcontractor, in the prosecution of the work provided for in
said Contract, then, this obligation shall be void; otherwise to remain in full force and effect:

"PROVIDED, HOWEVER, that this bond is executed pursuant to the provisions of Chapter 2253 of the Texas
Government Code for Public Works, as amended, and all liabilities on this bond shall be determined in accordance with
the provisions of said Chapter 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 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 _____ 20_____.

Principal

Surety

By _____

By _____

Title _____

Title _____

Address _____

Address _____

The name and address of the Resident Agent of Surety is: _____

MAINTENANCE BOND

BOND No. _____

STATE OF TEXAS
COUNTY OF TARRANT

§
§

KNOW ALL PERSONS BY THESE PRESENTS: That _____ (contractor's company) of the City of _____ County of _____, and the State of _____, as Principal, and _____ (surety company) authorized under the laws of the State of Texas to act as surety on bonds for principals, are held and firmly bond unto the City of Mansfield (Owner), in the penal 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, for the _____ (name of project) which Contract is hereby referred to and made part hereof as fully and to the same extent as if copied at length herein.

WHEREAS, under the plans, specifications, and Contract, it is provided that the Principal will, for a period of two (2) years from the date of the acceptance of said work by the Owner, do all necessary repairing and/or reconstructing in whole or in part of said improvements that should be occasioned by defective workmanship or materials furnished in the construction or any part thereof or any of the accessories thereto constructed by the Principal. It being understood that the purpose of this bond is to cover said defective work, material, and other conditions and charge the same against the said Principal, and Surety on this bond obligation. Now, therefore, if the said Principal shall keep and perform its obligation to correct said work for the period of two (2) years, as provided, then these presents shall be null and void, and have not further effect, but if default shall be made by the Principal in the performance of its Contract to so maintain and repair said work, then these presents shall have full force and effect, and the City of Mansfield shall have and recover from the Principal and Surety damages in the premises, as provided; and it is further agreed that this obligation shall be continuing one against the Principal and Surety, hereon, and that successive recoveries may be and had hereon for successive breaches until the full amount of this bond 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.

IN WITNESS WHEREOF, the said Principal and Surety have signed and sealed this instrument this _____ day of _____ 20____.

Principal

By _____
Title _____
Address _____

Surety

By _____
Title _____
Address _____

The name and address of the Resident Agent of Surety is: _____

EXHIBIT A.C

Scope of Work

Scope of work consists of the Construction of the New Fire Station in accordance with the Drawings and Specifications included in this exhibit.

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A-901	EXTERIOR RENDERINGS
A-902	INTERIOR RENDERINGS
AA-101	STATION ALERTING SYSTEM

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S-101	STRUCTURAL NOTES
S-102	STRUCTURAL NOTES
S-103	Unnamed
S-103	STRUCTURAL NOTES
S-104	SPECIAL INSPECTIONS
S-105	SPECIAL INSPECTIONS
S-106	STORM SHELTER NOTES AND INSPECTIONS
S-201	FOUNDATION PLAN
S-202	SECOND FLOOR FRAMING PLAN
S-203	ROOF FRAMING PLAN
S-204	Unnamed
S-205	Unnamed
S-210	STORM SHELTER FOUNDATION & ROOF PLAN
S-301	TYPICAL CONCRETE DETAILS
S-302	TYPICAL CONCRETE DETAILS
S-303	TYPICAL CONCRETE DETAILS
S-311	CONCRETE SECTIONS & DETAILS
S-312	STORM SHELTER SECTIONS & DETAILS
S-401	TYPICAL MASONRY SECTIONS & DETAILS
S-402	TYPICAL MASONRY SECTIONS & DETAILS
S-410	STORM SHELTER TYPICAL DETAILS
S-411	STORM SHELTER TYPICAL DETAILS
S-501	TYPICAL STEEL SECTIONS & DETAILS
S-502	TYPICAL STEEL SECTIONS & DETAILS
S-503	TYPICAL STEEL DETAILS
S-504	TYPICAL STEEL DETAILS
S-505	TYPICAL STEEL DETAILS
S-510	STEEL DETAILS
S-511	STEEL DETAILS
S-512	STEEL DETAILS
S-601	MASONRY WALL ELEVATIONS
S-602	MASONRY WALL ELEVATIONS
S-603	MASONRY WALL ELEVATIONS
S-604	STORM SHELTER WALL ELEVATIONS
S-610	MOMENT FRAME ELEVATIONS
S-611	MOMENT FRAME ELEVATIONS
S-612	FRAMING ELEVATION

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M-001	MECHANICAL GENERAL NOTES, ABBREVIATIONS AND SYMBOLS
M-200	MECHANICAL FLOOR PLAN - LEVEL 1
M-002	MECHANICAL COVER SHEET
M-201	MECHANICAL FLOOR PLAN - LEVEL 2
M-202	MECHANICAL ROOF PLAN
M-400	MECHANICAL DETAILS
M-401	MECHANICAL DETAILS
M-500	MECHANICAL SCHEDULES

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E-001	ELECTRICALL GENERAL NOTES, ABBREVIATIONS AND SYMBOLS
E-411	ELECTRICAL RISER AND DETAILS
E-303	ROOF PLAN - ELECTRICAL
E-101	SITE PLAN - PHOTOMETRICS
E-500	ELECTRICAL SCHEDULES
E-201	1ST FLOOR - LIGHTING
E-202	2ND FLOOR - LIGHTING
E-301	1ST FLOOR - POWER
E-412	LIGHTING CONTROL DETAILS
E-302	2ND FLOOR - POWER
E-100	ELECTRICAL SITE PLAN

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P-001	PLUMBING GENERAL NOTES, ABBREVIATIONS AND SYMBOLS
P-010	PLUMBING SITE PLAN
P-102	PLUMBING - LEVEL 1 FLOOR PLAN
P-101	PLUMBING - LEVEL 1 UNDERFLOOR
P-201	ENLARGED DOMESTIC PLANS
P-211	ENLARGED WASTE VENT AND STORM PLANS
P-501	RISER DIAGRAMS
P-401	SCHEDULES
P-701	SPECIALTY
P-301	DETAILS
P-112	PLUMBING - LEVEL 2 FLOOR PLAN
P-111	PLUMBING - LEVEL 2 UNDERFLOORPLAN

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T-101	1ST FLOOR - TECHNOLOGY
T-102	2ND FLOOR - TECHNOLOGY

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01 11 00	Summary of Work
01 16 00	Product Requirements
01 21 00	Allowances
01 23 00	Alternates
01 25 13	Product Substitution Procedures
01 25 13.1	Product Substitution Procedures Form
01 26 00	Contract Modification Procedures
01 26 13	Request for Interpretation
01 26 13.1	Request for Interpretation Form
01 29 00	Payment Procedures
01 31 00	Project Management and Coordination
01 31 06	Coordination Drawings
01 31 06.1	Electronic Transfer Document
01 31 19	Project Meetings
01 32 16	Construction Progress Schedule
01 32 23	Survey and Layout Data
01 33 00	Submittal Procedures
01 41 00	Regulatory Requirements
01 42 00	Definitions and Abbreviations
01 43 00	Inspection and Testing Laboratory Services
01 50 00	Temporary Facilities and Controls
01 55 13	Stabilized Construction Exit
01 55 26	Traffic Control
01 57 00	Source Controls
01 57 10	TPDES Requirements
01 57 13	Filter Fabric Fence
01 57 19	Ground Control and Surface Water
01 57 23	Temporary Storm Water Pollution Control
01 60 00	Materials and Equipment
01 72 00	Common Execution Requirements
01 73 29	Cutting and Patching
01 74 16	Site Maintenance
01 74 19	Construction Waste Management Disposal
01 77 00	Closeout Procedures
01 78 23	Operation and Maintenance Data
01 79 00	Demonstration and Training
01 91 13	General Commissioning Requirements

FACILITY CONSTRUCTION SUBGROUP**DIVISION 02 – EXISTING CONDITIONS (Not Used)****DIVISION 03 – CONCRETE**

03 30 00	Cast-In-Place Concrete
03 66 00	Special Concrete Floor Finishing

DIVISION 04 – MASONRY

04 20 00	Unit Masonry
04 22 00	Structural Concrete Masonry
04 72 00	Cast Stone Unit Masonry

DIVISION 05 – METALS

05 12 00	Structural Steel
05 21 00	Steel Joists
05 31 00	Steel Deck
05 40 00	Cold-Formed Metal Framing
05 50 00	Metal Fabrications
05 51 33	Metal Wall Ladders
05 73 00	Ornamental Handrails & Railings

DIVISION 06 – WOOD, PLASTICS, AND COMPOSITES

06 10 00	Rough Carpentry
06 16 00	Sheathing
06 40 10	Interior Architectural Millwork
06 82 00	Glass Fiber Reinforced Plastic

DIVISION 07 – THERMAL AND MOISTURE PROTECTION

07 11 13	Bituminous Dampproofing
07 18 20	Penetrating Floor Sealer
07 21 00	Thermal Insulation
07 26 00	Under Slab Vapor Barrier
07 27 27	Fluid-Applied Membrane Air & Moisture Barrier (Weather Barrier)
07 42 93	Soffit Panels
07 55 00	Torch Applied Modified Bitumen Roofing
07 62 00	Sheet Metal Flashing and Trim
07 71 23	Manufactured Gutter and Downspouts
07 72 00	Roof Accessories
07 76 00	Roof Pavers
07 84 13	Firestopping
07 92 00	Joint Sealants

DIVISION 08 – OPENINGS

08 11 13	Hollow Metal Doors and Frames
08 14 23	Plastic-Laminate-Faced Wood Doors
08 30 00	Specialty Steel Doors and Frames (ICC-500)
08 31 13	Access Doors
08 35 13	Four-Fold Doors
08 41 13	Aluminum Framed Entrances and Storefronts
08 43 33	Folding Glass Storefronts
08 71 00	Door Hardware
08 71 14	Pocket Doors
08 80 00	Glazed Systems
08 80 00.01.....	Translucent Glazing Units (TGU)
08 91 00	Metal Louvers

DIVISION 09 – FINISHES

09 22 16	Non-Structural Metal Framing
09 29 00	Gypsum Board
09 30 13	Ceramic Tile
09 51 00	Acoustical Ceiling
09 54 26	Suspended Wood Ceilings
09 65 13	Resilient Base and Accessories
09 65 19	Resilient Tile Flooring
09 65 66	Resilient Athletic Flooring
09 65 66.1	Athletic Turf Flooring
09 68 13	Tile Carpeting
09 91 00	Painting

DIVISION 10 – SPECIALTIES

10 11 00	Marker Boards
10 14 00	Signage & Graphics
10 26 00	Wall Door Protection
10 28 13	Toilet Accessories
10 28 19	Tub and Shower Enclosures
10 44 00	Fire Extinguishers and Cabinets
10 50 00.1	Wood Dorm Lockers
10 50 00.2	Custom Fire Station Beds
10 50 00.3	Custom Laminate Nightstands
10 50 30	Turnout Gear Lockers
10 73 16	Aluminum Canopies
10 75 00	Flagpoles
10 82 13	Roof Screens

DIVISION 11 – EQUIPMENT

11 23 00	Commercial Laundry Equipment
11 30 00	Residential Appliances

DIVISION 12 – FURNISHINGS

12 36 16	Metal Countertops
12 36 61.16.....	Solid Surface Countertops
12 36 61.19.....	Quartz Countertops
12 49 20	Manual Operated Roller Shades

DIVISION 13 (Not Used)**DIVISION 14 – CONVEYING EQUIPMENT**

14 24 00	Machine Room-Less Hydraulic Elevators
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DIVISION 15 – 20 (Not Used)**DIVISION 21 – FIRE SUPPRESSION**

21 05 17	Sleeves & Sleeve Seals for Fire-Suppression Piping
21 05 18	Escutcheons for Fire-Suppression Piping
21 05 23	General-Duty Valves for Water-Based Fire-Suppression Piping
21 05 29	Hangers and Supports for Fire-Suppression Piping & Equipment
21 05 53	Identification for Fire-Suppression Piping & Equipment
21 13 13	Wet-Pipe Sprinkler Systems

DIVISION 22 - PLUMBING

22 05 17	Sleeves & Sleeve Seals for Plumbing Piping
22 05 18	Escutcheons for Plumbing Piping
22 05 23.12.....	Ball Valves for Plumbing Piping
22 05 23.14.....	Check Valves for Plumbing Piping
22 05 23.15.....	Gate Valves for Plumbing Piping
22 05 29	Hangers & Supports for Plumbing Piping & Equipment
22 05 53	Identification for Plumbing Piping and Equipment
22 07 19	Plumbing Piping Insulation
22 11 13	Facility Water Distribution Piping
22 11 16	Domestic Water Piping
22 11 19	Domestic Water Piping Specialties
22 13 13	Facility Sanitary Sewers
22 13 16	Sanitary Waste & Vent Piping
22 13 19	Sanitary Waste Piping Specialties
22 34 00	Fuel-Fired, Domestic-Water Heaters

DIVISION 23 – HEATING, VENTILATING, AND AIR CONDITIONING (HVAC)

23 05 13	Common Motor Requirements for HVAC Equipment
23 05 18	Escutcheons for HVAC Piping
23 05 29	Hangers & Supports for HVAC Piping & Equipment

23 05 53	Identification for HVAC Piping & Equipment
23 05 93	Testing, Adjusting, and Balancing for HVAC
23 07 13	Duct Insulation
23 08 00	HVAC & Plumbing Commissioning Requirements
23 09 23	Direct Digital Control System for HVAC
23 11 23	Facility Natural-Gas Piping
23 23 00	Refrigerant Piping
23 31 13	Metal Ducts
23 33 00	Air Duct Accessories
23 33 46	Flexible Ducts
23 34 23	HVAC Power Ventilators
23 34 39	High-Volume, Low Speed Fans
23 35 33	Listed Kitchen Ventilation System Exhaust Ducts
23 37 13.13.....	Air Diffusers
23 37 13.23.....	Registers and Grilles
23 38 13	Commercial-Kitchen Hoods
23 51 23	Gas Vents
23 74 12	Packaged DX Rooftop Units
23 81 26	Split System Air Conditioners

DIVISION 26 - ELECTRICAL

26 05 19	Low-Voltage Electrical Power Conductors & Cables
26 05 26	Grounding & Bonding for Electrical Systems
26 05 29	Hangers & Supports for Electrical Systems
26 05 33	Raceway & Boxes for Electrical Systems
26 05 43	Underground Ducts & Raceways for Electrical Systems
26 05 44	Sleeves & Sleeve Seals for Electrical Raceways & Cabling
26 05 53	Identification for Electrical Systems
26 05 72	Over Current Protective Device Short-Circuit Studies
26 05 73	Over Current Protective Coordination Studies
26 05 73.19.....	Arc-Flash Hazard Analysis
26 09 23	Lighting Control Devices
26 24 16	Panelboards
26 27 26	Wiring Devices
26 28 13	Fuses
26 28 16	Enclosed Switches & Circuit Breakers
26 32 13.14.....	Diesel-Engine-Driven Generator Sets
26 33 23.11.....	Central Battery Equipment for Emergency Lighting
26 36 00	Transfer Switches
26 41 13	Lightning Protection for Structures
26 43 13	Surge Protection for Low-Voltage Electrical Power Circuits
26 51 15	Ceiling Fans
26 51 19	LED Interior Lighting
26 52 19	Emergency & Exit Lighting
26 56 13	Lighting Poles and Standards
26 56 19	LED Exterior Lighting

DIVISION 27 – COMMUNICATIONS

27 05 00	Common Work for Communication Systems
27 05 28	Pathways for Communication Systems
27 10 00	Structured Cabling Systems
27 15 01.11.....	Conductors & Cables for Electronic Safety
27 41 16	Integrated Audio-Video Systems & Equipment

DIVISION 28 – ELECTRONIC SAFETY AND SECURITY

28 05 00	Common Work for Electronic Safety & Security
28 08 00	Commissioning of Electronic Security
28 10 00	Access Control System
28 20 00	Video Surveillance System
28 46 21.11.....	Addressable Fire-Alarm Systems

DIVISION 31 – EARTHWORK

31 31 16	Termite Control
31 63 29	Drilled Piers

DIVISION 32 – EXTERIOR IMPROVEMENTS

32 13 73	Concrete Paving Joint Sealants
32 17 13	Concrete Wheel Stops
32 17 23	Pavement Markings
32 31 11	Slide Gate Operators
32 31 19	Ornamental Cantilever Gate System
32 31 21	Aluminum Louver Fences and Gates

DIVISION 33-49 (Not Used)

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END OF 00 01 10

October 3, 2024

Addendum No. 01

Project: Mansfield Fire Station 1

Address: 203 S Walnut Creek Dr.
Mansfield, TX 76063

Client: City of Mansfield

Architect: Martinez Architects



Justine Myers



This Addendum forms a part of the Contract Documents and modifies the original Bidding Documents and/or prior Addenda as noted below. All conditions, requirements, materials and workmanship shall be satisfied as described in the Contract Documents unless specifically stated otherwise. This Addendum consists of changes to the contract documents, specifications, and drawings as listed and described below.

Revisions to Drawings:

1. A-171 – ROOF PLAN
 - **UPDATE** roof plan to show correct locations of mechanical equipment.
 - **REMOVE** mechanical roof screen.
 - **MODIFY** parapet heights to be 2-feet higher.
2. A-201 – EXTERIOR ELEVATIONS
 - **MODIFY** parapet heights to be 2-feet higher.
3. A-301 – BUILDING SECTIONS
 - **MODIFY** parapet heights to be 2-feet higher.
4. A-302 – BUILDING SECTIONS
 - **MODIFY** parapet heights to be 2-feet higher.
5. A-303 – BUILDING SECTIONS
 - **MODIFY** parapet heights to be 2-feet higher.
6. A-311 – WALL SECTIONS
 - **MODIFY** parapet heights to be 2-feet higher.
7. A-312 – WALL SECTIONS
 - **MODIFY** parapet heights to be 2-feet higher.
8. A-313 – WALL SECTIONS
 - **MODIFY** parapet heights to be 2-feet higher.
9. A-314 – WALL SECTIONS
 - **MODIFY** parapet heights to be 2-feet higher.
10. A-315 – WALL SECTIONS
 - **MODIFY** parapet heights to be 2-feet higher.
11. A-511 – EXTERIOR DETAILS – SECTION DETAILS
 - **MODIFY** parapet heights to be 2-feet higher.
12. A-512 – EXTERIOR DETAILS – SECTION DETAILS
 - **MODIFY** parapet heights to be 2-feet higher.
13. A-511 – EXTERIOR DETAILS – SECTION DETAILS
 - **MODIFY** parapet heights to be 2-feet higher.
14. A-511 – EXTERIOR DETAILS – SECTION DETAILS
 - **MODIFY** parapet heights to be 2-feet higher.
15. S-101 – STRUCTURAL NOTES
 - **MODIFY** the design criteria for the drilled piers per the finalized geotechnical report.
16. S-102 – STRUCTURAL NOTES
 - **ADD** a note regarding the use of high strength anchors as a result of the increased wind load on the moment frames due to any parapet height changes.
17. S-106 – STORM SHELTER NOTES AND INSPECTION
 - **REMOVE** general notes regarding FEMA safe rooms for Tornadoes and Hurricanes as they are no longer applicable.
18. S-201 - FOUNDATION PLAN
 - **MODIFY** slab reinforcing for 5" and 10" slab.
 - **MODIFY** the pier sizes called out to make the project more cost effective
19. S-202 - SECOND FLOOR FRAMING PLAN
 - **MODIFY** beam sizes on the plan southeast corner of the building
20. S-203 - ROOF FRAMING PLAN
 - **MODIFY** grid A, C, and D steel sizes as required
21. S-301 - TYPICAL CONCRETE DETAILS
 - **MODIFY** detail 1 and 2 pier schedule and included notes providing additional information in one of the pier details.
22. S-501 - TYPICAL STEEL SECTIONS & DETAILS
 - **MODIFY** Detail 7 base plate sizes to account for increase in wind load and added details for an updated design.
23. S-504 - TYPICAL STEEL DETAILS
 - **MODIFY** Detail 8 to better support the cast stone exterior veneer and cast stone cap

24. S-512 - STEEL DETAILS
 - **MODIFY** Detail 3 to reflect needed beam framing updates
25. S-602 - MASONRY WALL ELEVATIONS
 - **MODIFY** Detail 8 to better support the cast stone exterior veneer and cast stone cap
26. S-603 - MASONRY WALL ELEVATIONS
 - **MODIFY** parapet heights around roof
27. S-610 - MOMENT FRAME ELEVATIONS
 - **MODIFY** steel beam framing from level 2 and roof
28. S-611 - MOMENT FRAME ELEVATIONS
 - **MODIFY** steel beam framing from level 2 and roof

Attachments:

1. A-171 – ROOF PLAN
2. A-201 – EXTERIOR ELEVATIONS
3. A-301 – BUILDING SECTIONS
4. A-302 – BUILDING SECTIONS
5. A-303 – BUILDING SECTIONS
6. A-311 – WALL SECTIONS
7. A-312 – WALL SECTIONS
8. A-313 – WALL SECTIONS
9. A-314 – WALL SECTIONS
10. A-315 – WALL SECTIONS
11. A-511 – EXTERIOR DETAILS – SECTION DETAILS
12. A-512 – EXTERIOR DETAILS – SECTION DETAILS
13. A-511 – EXTERIOR DETAILS – SECTION DETAILS
14. A-511 – EXTERIOR DETAILS – SECTION DETAILS
15. S-101 – STRUCTURAL NOTES
16. S-102 – STRUCTURAL NOTES
17. S-106 – STORM SHELTER NOTES AND INSPECTION
18. S-201 - FOUNDATION PLAN
19. S-202 - SECOND FLOOR FRAMING PLAN
20. S-203 - ROOF FRAMING PLAN
21. S-301 - TYPICAL CONCRETE DETAILS
22. S-501 - TYPICAL STEEL SECTIONS & DETAILS
23. S-504 - TYPICAL STEEL DETAILS
24. S-512 - STEEL DETAILS
25. S-602 - MASONRY WALL ELEVATIONS
26. S-603 - MASONRY WALL ELEVATIONS
27. S-610 - MOMENT FRAME ELEVATIONS
28. S-611 - MOMENT FRAME ELEVATIONS

-- End of Architectural/Structural/MEP/Civil Addendum Narrative --

October 8, 2024

Addendum No. 02

Project: Mansfield Fire Station 1

Address: 203 S Walnut Creek Dr.
Mansfield, TX 76063

Client: City of Mansfield

Architect: Martinez Architects



Justine Myers



This Addendum forms a part of the Contract Documents and modifies the original Bidding Documents and/or prior Addenda as noted below. All conditions, requirements, materials and workmanship shall be satisfied as described in the Contract Documents unless specifically stated otherwise. This Addendum consists of changes to the contract documents, specifications, and drawings as listed and described below.

Request for Information:

1. ELECTRICAL
 - See revised Electrical Sheets.
2. ELECTRICAL
 - See revised Electrical Sheets.
3. GLASS AND GLAZING
 - Specification 08 41 13: basis of design is Kawneer Trifab VG 451T for storefronts & aluminum doors.
4. TILE
 - Use Schluter DILEX-AHK for base edge trim.
5. FLOORING
 - Use LVT-1 for BC Office, Capt. Office, Storage 213, and Watch Office. Remove LVT-2 from scope.
6. FURNITURE
 - Dorm Beds, Dorm Lockers, and Nightstands are a custom design by Legacy Lockers.

Revisions to Drawings:

1. C1-1 – DEMOLITION PLAN
 - Revised plan per comments received.
2. C2-1 – PAVING PLAN
 - Revised sawcut hatch along street connection.
 - Heavy duty hatch extended to include dumpster pad.
 - Updated general note #7 to read Mansfield.
 - Updated paving sections to clarify subgrade.
3. C4-3 – STORMWATER MANAGEMENT PLAN
 - Updated Contech Cascade Standard Detail.
4. C5-1 – UTILITY PLAN
 - Revised Sanitary Sewer Connection per MEP coordination.
5. LP-1 – LANDSCAPING
 - Lighting conflicts were to be handled on the lighting page to avoid easement and tree conflicts.
 - Trees should be placed a minimum of 2.5' from the fence along the rear.
 - Irrigation controller is shown on LI-1 sheet.
 - Sod is used throughout the site.
 - Tree/Grease trap conflict is not an issue. Tree should be 5' from trap.
 - Remove mulch from plans.
6. LP-2 – LANDSCAPING
7. LI-1 – IRRIGATION PLANS
 - **ADD** irrigation plans to project scope.
8. LI-2 – IRRIGATION DETAILS
 - **ADD** irrigation plans to project scope.
9. LI-3 – IRRIGATION SPECS
 - **ADD** irrigation plans to project scope.
10. AS-100 – OVERALL SITE PLAN
 - **ADD** dimensional information to bollards.
 - **MODIFY** artificial turf detail and coordination.
11. AS-201 – SITE DETAILS
 - **MODIFY** details A1 & A4 to coordinate with Civil Paving information.
12. A-102 – OVERALL FLOOR PLAN – LEVEL 2
 - **ADD** keynote 406 to identify roof access hatch on floor plan.
 - **MODIFY** keynote 221 to correctly identify Outdoor Patio floor drains on floor plan.
13. A-111 – OVERALL EQUIPMENT FLOOR PLAN – LEVEL 1
 - **MODIFY** FF&E schedule to correctly show model numbers.
14. A-112 – OVERALL EQUIPMENT FLOOR PLAN – LEVEL 2

- **MODIFY** FF&E schedule to correctly show model numbers.
- 15. A-120 – FLOOR FINISH PLANS
 - **MODIFY** floor finish to LVT-1 in BC Office, Capt. Office, Storage 213 and Watch Office.
 - **MODIFY** floor finish to LVT-1 in Storage 112, Air Lock 102, Stair 103 and Entry 101.
 - **ADD** floor finish LVT-1 to stairs.
 - **REMOVE** LVT-2 from scope.
- 16. A-121 – SIGNAGE FLOOR PLANS
 - **MODIFY** Entry 101 with correct Sign Types (S4, S5, S6).
- 17. A-221 – INTERIOR ELEVATIONS
 - **ADD** keynote 264 to correctly identify Ice Machine.
 - **ADD** general note for window sills to receive SS-1.
 - **MODIFY** restroom tile height to extend to ceiling.
 - **UPDATE** PT-1 color selection.
- 18. A-222 – INTERIOR ELEVATIONS
 - **ADD** general note for window sills to receive SS-1.
 - **MODIFY** restroom tile height to extend to ceiling.
 - **MODIFY** PT-1 color selection.
- 19. A-223 – INTERIOR ELEVATIONS
 - **ADD** general note for window sills to receive SS-1.
 - **MODIFY** restroom tile height to extend to ceiling.
 - **MODIFY** PT-1 color selection.
- 20. A-301 – BUILDING SECTIONS
 - **ADD** spray foam insulation to underside of 2nd Floor Deck
 - **ADD** 2-hour rated floor assembly
- 21. A-302 – BUILDING SECTIONS
 - **MODIFY** storm shelter height
 - **ADD** spray foam insulation to underside of 2nd Floor Deck
 - **ADD** 2-hour rated floor assembly
- 22. A-303 – BUILDING SECTIONS
 - **ADD** spray foam insulation to underside of 2nd Floor Deck
 - **ADD** 2-hour rated floor assembly
- 23. A-313 – WALL SECTIONS
 - **MODIFY** storm shelter height
- 24. A-411—STAIR AND ELEVATOR PLANS AND SECTIONS
 - **ADD** note for railing color and finish.
- 25. A-514 – EXTERIOR DETAILS – SECTION DETAILS
 - **MODIFY** artificial turf details A4 & A5 with 1" recess and drainage.
- 26. A-562 – INTERIOR DETAILS – DOOR & WINDOW DETAILS
 - **ADD** solid surface window sills, See detail B2/A-562.
- 27. A-601 – DOOR, WINDOW, & LOUVER SCHEDULES
 - **MODIFY** Door Schedule to correctly identify glazing for Door Types: D3, D4 and D5.
- 28. S-101 STRUCTURAL NOTES
 - Added information for auger cast in place piles to better assist in the bid estimation of the project.
 - Added a structural note for building pad preparation.
 - Added note for pilaster clear cover
- 29. S-102 STRUCTURAL NOTES
 - Added information for auger cast in place piles to better assist in the bid estimation of the project.
 - Added delegated design item to list
- 30. S-107 SPECIAL JOIST LOADING PLAN
 - Added unique loading for joist.
- 31. S-201 FOUNDATION PLAN
 - Added slab information for the slab on grade at the artificial turf fitness area.
- 32. S-202 SECOND FLOOR FRAMING PLAN
 - Updated floor plan to call out beam reactions to assist in beam detailing.
- 33. S-203 ROOF PLAN
 - Updated roof plan to show RTU units and SP joists.

- Updated roof plan to call out beam reactions to assist in beam detailing.
- 34. S-210 STORM SHELTER FOUNDATION & ROOF PLAN
 - Added slab depression detail for separate trench.
 - Coordinated openings in storm shelter roof and updated the roof layout to support the openings.
- 35. S-211 ENLARGED FOUNDATION SITE PARTIAL PLANS
 - Included a sheet to provide information on the dumpster enclosure and generator pad.
- 36. S-301 TYPICAL CONCRETE DETAILS
 - Updated detail 5 and 6 to include embed plates to attach the bifold doors to.
 - Included a detail to show the schedule for auger cast piles.
- 37. S-303 TYPICAL CONCRETE DETAILS
 - Included a detail outlining the connection of the trash enclosure gate to the structure.
- 38. S-311 CONCRETE SECTIONS & DETAILS
 - Included details to show how the slab under the artificial turf is supported.
- 39. S-312 STORM SHELTER SECTIONS & DETAILS
 - Added detail for trench in shelter.
- 40. S-401 TYPICAL MASONRY SECTION & DETAILS
 - Clarified reinforcement for dumpster enclosure.
- 41. S-410 STORM SHELTER TYPICAL DETAILS
 - Added roof penetration detail
- 42. S-504 TYPICAL STEEL DETAILS
 - Added typical canopy connection detail
- 43. S-505 TYPICAL STEEL DETAIL
 - Added missing references and plate dimensions to typical detail
- 44. S-512 STEEL DETAILS
 - Added detail
- 45. S-604 STORM SHELTER WALL ELEVATIONS
 - Adjusted roof height of storm shelter in elevation
- 46. S-610 MOMENT FRAME ELEVATION
 - Adjusted detail reference
- 47. S-611 MOMENT FRAMING ELEVATIONS
 - Adjusted detail reference
- 48. MEP – SITE PLAN
 - MODIFY location of EV conduits on site plan.
 - ADD two additional SB fixtures under the parking canopy.
- 49. MEP – ROOF PLAN
 - ADD circuit information for EF-10
- 50. M-200 – MECHANICAL FLOOR PLAN – LEVEL 1
 - MODIFY storm shelter ductwork to accommodate lower rated lid.
- 51. M-201 – MECHANICAL FLOOR PLAN – LEVEL 2
 - ADD keynote 15 for fireplace flue.
- 52. E-201 – 1ST FLOOR – LIGHTING
 - Revised lighting fixture types at pole in Apparatus Bay.
 - Adjusted light fixture type and location in Entry 101
- 53. E-202 – 2ND FLOOR – LIGHTING
 - Revised graphics and circuits for façade lighting.
 - Added type SG lighting to façade.
- 54. E-501 – SCHEDULES – ELETRICAL
 - Revised Light fixture schedule descriptions.
 - Updated part numbers on new light fixtures.
 - Revised panel cirtry.
 - Added specific call out for AFCI circuit breakers in Panel P2
- 55. E-502 – DETAILS – ELETRICAL
 - Added lighting control diagrams and schedules.
- 56. P-100 – PLUMBING – LEVEL 1 UNDERFLOOR
 - Revised services to the building to coordinate with civil connections.
 - Added floor sink for ice maker in Shop 110
 - Revised forced main from elevator sump pump.

57. P-101 – PLUMBING – LEVEL 1 FLOOR PLAN
 - Added CW connection to Ice Maker in Shop 110
 - Added H/CW connections to washing machine.
 - Added CW connection to ice maker/coffee maker at drink station
 - Added gas connections to fire place, stove and patio grill
 - Revised CW piping to accommodate water service location.
58. P-102 – PLUMBING – LEVEL 2 FLOOR PLAN
 - Added floor sink for drink station.

Revisions to Specifications:

1. 05 73 00 – DECORATIVE METAL RAILING
 - **ADD** black coated cable railing to specification.
2. 10 50 30 – TURNOUT GEAR LOCKERS
 - **MODIFY** specification with new gear locker information.
3. 31 63 16 – AUGER PLACED PILES
 - **ADD** specification with Auger Placed Piles information.

Attachments:

1. C1-1 – DEMOLITION PLAN
2. C2-1 – PAVING PLAN
3. C4-3 – STORMWATER MANAGEMENT PLAN
4. C5-1 – UTILITY PLAN
5. LP-1 – LANDSCAPING
6. LP-2 – LANDSCAPING
7. LI-1 – IRRIGATION PLANS
8. LI-2 – IRRIGATION DETAILS
9. LI-3 – IRRIGATION SPECS
10. AS-100 – OVERALL SITE PLAN
11. AS-201 – SITE DETAILS
12. A-102 – OVERALL FLOOR PLAN – LEVEL 2
13. A-111 – OVERALL EQUIPMENT FLOOR PLAN – LEVEL 1
14. A-112 – OVERALL EQUIPMENT FLOOR PLAN – LEVEL 2
15. A-120 – FLOOR FINISH PLANS
16. A-121 – SIGNAGE FLOOR PLANS
17. A-221 – INTERIOR ELEVATIONS
18. A-222 – INTERIOR ELEVATIONS
19. A-223 – INTERIOR ELEVATIONS
20. A-301 – BUILDING SECTIONS
21. A-302 – BUILDING SECTIONS
22. A-303 – BUILDING SECTIONS
23. A-313 – WALL SECTIONS
24. A-411 – STAIR AND ELEVATOR PLANS AND SECTIONS
25. A-514 – EXTERIOR DETAILS – SECTION DETAILS
26. A-562 – INTERIOR DETAILS – DOOR & WINDOW DETAILS
27. A-601 – DOOR, WINDOW, & LOUVER SCHEDULES
28. S-101 STRUCTURAL NOTES
29. S-102 STRUCTURAL NOTES
30. S-107 SPECIAL JOIST LOADING PLAN
31. S-201 FOUNDATION PLAN
32. S-202 SECOND FLOOR FRAMING PLAN
33. S-203 ROOF PLAN
34. S-210 STORM SHELTER FOUNDATION & ROOF PLAN
35. S-211 ENLARGED FOUNDATION SITE PARTIAL PLANS
36. S-301 TYPICAL CONCRETE DETAILS











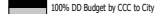
















37. S-303 TYPICAL CONCRETE DETAILS
38. S-311 CONCRETE SECTIONS & DETAILS
39. S-312 STORM SHELTER SECTIONS & DETAILS
40. S-401 TYPICAL MASONRY SECTION & DETAILS
41. S-410 STORM SHELTER TYPICAL DETAILS
42. S-504 TYPICAL STEEL DETAILS
43. S-505 TYPICAL STEEL DETAIL
44. S-512 STEEL DETAILS
45. S-604 STORM SHELTER WALL ELEVATIONS
46. S-610 MOMENT FRAME ELEVATION
47. S-611 MOMENT FRAMING ELEVATIONS
48. MEP – SITE PLAN
49. MEP – ROOF PLAN
50. M-200 – MECHANICAL FLOOR PLAN – LEVEL 1
51. M-201 – MECHANICAL FLOOR PLAN – LEVEL 2
52. E-201 – 1ST FLOOR – LIGHTING
53. E-202 – 2ND FLOOR – LIGHTING
54. E-501 – SCHEDULES – ELETRICAL
55. E-502 – DETAILS – ELETRICAL
56. P-100 – PLUMBING – LEVEL 1 UNDERFLOOR
57. P-101 – PLUMBING – LEVEL 1 FLOOR PLAN
58. P-102 – PLUMBING – LEVEL 2 FLOOR PLAN
59. 05 73 00 – DECORATIVE METAL RAILING
60. 10 50 30 – TURNOUT GEAR LOCKERS
61. 31 63 16 – AUGER PLACED PILES

-- End of Architectural/Structural/MEP/Civil Addendum Narrative --

EXHIBIT A.D

Construction Manager's Project Schedule

Contained within this Exhibit is the anticipated project schedule for the project, subject to permitting.

Line	Name	Duration	Start	Finish	2024																								2025																								2026																							
					June	July	August	September	October	November	December	January	February	March	April	May	June	July	August	September	October	November	December	January	February	March	April	May	June	July	August	September	October	November	December	January	February	March	April	May	June	July																																		
	MAJOR MILESTONES		11/12/2024	4/8/2026																																																																								
1	Formal Notice to Proceed		11/12/2024	11/12/2024	 Formal Notice to Proceed																																																																							
2	Ground Breaking Event- TBD		11/12/2024	11/12/2024	 Ground Breaking Event- TBD																																																																							
3	Building Pad		1/3/2025	1/3/2025	 Building Pad																																																																							
4	Building Dry in		9/29/2025	9/29/2025	 Building Dry in																																																																							
5	Permanent Power		10/14/2025	10/14/2025	 Permanent Power																																																																							
6	Condition Space		10/30/2025	10/30/2025	 Condition Space																																																																							
7	Substantial Completion		2/6/2026	2/6/2026	 Substantial Completion																																																																							
8	Final Construction Completion (CMAR Contract Complete)		3/6/2026	3/6/2026	 Final Construction Completion (CMAR Contract Complete)																																																																							
9	Fire Department Move In and Startup Complete		4/8/2026	4/8/2026	 Fire Department Move In and Startup Complete																																																																							
	PRECONSTRUCTION		6/21/2024	11/20/2024																																																																								
	DD BUDGETING		6/21/2024	7/16/2024																																																																								
10	Drawings Recieved from Architect		6/21/2024 A	6/21/2024 A	 Drawings Recieved from Architect																																																																							
11	100% DD Budget by CCC to City	16d	6/24/2024 A	7/16/2024 A	 100% DD Budget by CCC to City																																																																							
	GMP DEVELOPMENT		9/24/2024	11/20/2024																																																																								
12	100% CD Drawings from Architect	1d	9/24/2024 A	9/24/2024 A	 100% CD Drawings from Architect																																																																							
13	100% CD Specifications from Architect	1d	9/25/2024 A	9/25/2024 A	 100% CD Specifications from Architect																																																																							
14	ITB Issued to Subcontractors by CCC	13d	9/26/2024 A	10/14/2024	 ITB Issued to Subcontractors by CCC																																																																							
15	Subcontractor Bids Due		10/15/2024	10/15/2024	 Subcontractor Bids Due																																																																							
16	Draft GMP Due for review from CCC	6d	10/15/2024	10/22/2024	 Draft GMP Due for review from CCC																																																																							
17	Final GMP Due for Council Agenda	9d	10/23/2024	11/4/2024	 Final GMP Due for Council Agenda																																																																							
18	City Council GMP Approval	5d	11/5/2024	11/11/2024	 City Council GMP Approval																																																																							
19	Conditional Letter of Intent	5d	11/5/2024	11/11/2024	 Conditional Letter of Intent																																																																							
20	Anticipated NTP to CCC		11/12/2024	11/12/2024	 Anticipated NTP to CCC																																																																							
21	CCC Front End Contracts and Procurement with Subs	7d	11/12/2024	11/20/2024	 CCC Front End Contracts and Procurement with Subs																																																																							
	PERMITTING AND APPROVALS		9/25/2024	11/7/2024																																																																								
22	Permit Drawings Submitted to City of Mansfield	1d	9/25/2024 A	9/25/2024 A	 Permit Drawings Submitted to City of Mansfield																																																																							
23	Mansfield 1st Review	15d	9/25/2024 A	10/15/2024	 Mansfield 1st Review																																																																							
24	Architect Cleanup Comments	10d	10/16/2024	10/29/2024	 Architect Cleanup Comments																																																																							
25	Resubmit to City of Mansfield		10/30/2024	10/30/2024	 Resubmit to City of Mansfield																																																																							
26	Mansfield Review and Issue Permit	7d	10/30/2024	11/7/2024	 Mansfield Review and Issue Permit																																																																							
	SUBCONTRACTS/SUBMITTALS/PROCUREMENT		9/27/2024	11/19/2025																																																																								
	CONSTRUCTION		11/20/2024	1/29/2026																																																																								
	Sitework		11/20/2024	12/23/2025																																																																								
27	SWPPP In Place and Inspected	3d	11/20/2024	11/22/2024	 SWPPP In Place and Inspected																																																																							

Mansfield Fire Station#1

Start Date: 6/21/2024
Finish Date: 4/8/2026

[illegible]

[illegible]

Mansfield Fire Station#1

Start Date: 6/21/2024
Finish Date: 4/8/2026

View: 6. Print View

[illegible]

Mansfield Fire Station#1

Start Date: 6/21/2024
Finish Date: 4/8/2026

View: 6. Print View

CROSSLAND
CONSTRUCTION COMPANY, INC.

Page 5 of 6

EXHIBIT A.E

Construction Manager's Soft Costs and Fee

These clarifications are agreed by the Owner and Contractor to define the use of this Exhibit E under this Agreement:

1. This Exhibit E has two Sections:
 - A. The Contractor's Fee and Cost Proposal is included herein as a estimate by the Contractor of the costs predicted to be incurred during construction for the line items shown.
 - B. The General Conditions Responsibility Matrix is included herein to identify the allowable categories of verifiable, actual costs incurred by the Contractor that are billable to the Contractor's Fee and Cost Proposal's not-to-exceed estimate. In the event of a conflict between the General Conditions Responsibility Matrix and the Contractor's Fee and Cost Proposal (e.g. exclusions, inclusions, etc.), the General Conditions Responsibility Matrix shall control.
2. The unit costs in Contractor's Fee and Cost Proposal are estimates of labor, material or equipment costs and Contractor's billing rates. It is an estimate, to be validated by and billed by the Contractor as actual material and equipment costs are incurred under this Agreement. Costs for Contractors staff labor will be billed using the rates as shown in Exhibit H – Customary and Usual Labor Rates.
3. The Owner agrees the Contractor used the Owner's construction duration of twelve (12) months from Notice to Proceed to Substantial Completion as requested by the Owner's Request for Proposal in preparing the Contractor's Fee and Cost Proposal in this Exhibit for the Owner's purpose of comparing proposals during the selection process.
4. The Owner further acknowledges the Contractor's proposed construction duration of fourteen and a half (14.5) months from Notice to Proceed to Substantial Completion plus one month for Final Completion was submitted in the Contractor's proposed schedule, and these durations will be used in the Contractor's preparation of the GMP Amendment.
5. In the event of conflicts between the General Conditions Responsibility Matrix in this Exhibit and the Owner-Contractor Agreement, this Exhibit shall control.

**City of Mansfield's
Fire Station No. 1 CMAR RFP
CMAR's Fee Proposal Detail**

UPDATED ON 10.31.24

Item #	Description	Quantity	Unit	Unit Cost	Total Cost
1.000	CMAR's Fee				
1.A	CMAR's Preconstruction Fee				
1.A.1	Construction Cost Estimating & Value Analysis\VE	1	LS	5000	5000
1.A.2	Scheduling, Phasing & Logistics Planning	1	LS	5000	5000
1.A.3	Constructability Reviews	1	LS	2000	2000
1.A.4	Subcontractor Procurement & Scope Validation	1	LS	5000	5000
1.A.5	Meetings, Conference Calls\Video & Travel Time	1	LS	2000	2000
1.A.6	Other Preconstruction Services	1	LS	1000	1000
1.A	CMAR's Preconstruction Fee- Subtotal				20000
1.B	CMAR's Construction Fee				
1.B.1	Home Office Overhead	1	LS	108582	108582
1.B.2	Home Office Profit	1	LS	228594	228594
1.B.3	Other Construction Fees		LS		N/A
1.B	CMAR's Construction Fee- Subtotal				337177
1.A + 1.B	CMAR's Total Fee Assumes Fee on Total GMP without Owner's Contingency				357177
Percentage of Cost Proposed for CMAR's Fee on Change Orders				2.95%	

**City of Mansfield's
Fire Station No. 1 CMAR RFP
CMAR's Fee & Cost Proposal Summary**

UPDATED ON 10.31.24

Item #	Description	Total
1.000	CMAR's Fee Summary	
1.A	Construction Team's Preconstruction Fee	20,000
1.B	Construction Team's Construction Fee	337,177
1.000	CMAR's Total Fee Proposal	357,177
2.000	CMAR's Cost Proposal Summary	
2.A	Insurance	197,734
2.B	Onsite Staff	458,431
2.C	Onsite Reimbursable Expenses	192,137
2.000	CMAR's Total Cost Proposal	848,302
CMAR's FEE + COST PROPOSAL - Base Contract		1,205,478

City of Mansfield's
Fire Station No. 1

UPDATED ON 10.31.24

CMAR RFP - CMAR's Cost Proposal Detail

Item #	Description	Quantity	Unit	Unit Cost	Total Cost
2.000 CMAR's Proposal of Costs to Be Reimbursed (Not to Exceed Topset)					
2.A Insurance					
2.001	Performance & Payment Bonds	1	LS	93724	93,724
2.002	Maintenance Bond	1	LS	6858	6,858
2.003	Builder's Risk Insurance	1	LS	17145	17,145
2.004	General Liability Insurance	1	LS	57149	57,149
2.005	Professional Liability Insurance	1	LS	5715	5,715
2.006	Pollution Liability Insurance	1	LS	5715	5,715
2.007	Excess\Umbrella Liability Insurance	1	LS	11430	11,430
2.008	Other Insurance Requirements	1	LS	0	N/A
2.009	Subcontractor Default Insurance	1	LS	0	By Sub
Note: Assumes Bonds & Insurances on Total GMP without Owner's Contingency					
2.A	CMAR's Estimated Cost of Insurance - Subtotal				197,734
Percentage of Cost Proposed for CMAR's Insurance on Change Orders				1.73%	

**City of Mansfield's
Fire Station No. 1
CMAR RFP - CMAR's Cost Proposal Detail**

Updated on 07 JUN 2024

Item #	Description	Quantity	Unit	Unit Cost	Total Cost
2.B	CMAR's Onsite Staff				
2.009	Project Manager	7.75	MO	11333	87,831
2.010	Project Superintendent	15.5	MO	14167	219,589
2.011	Assistant Superintendent		MO		0
2.012	Mechanical/Electrical Coordinator		MO		N/A
2.013	Working Foreman		MO		N/A
2.014	Project Engineer	7.75	MO	9066	70,262
2.015	Office Engineer		MO		N/A
2.016	Field Engineer	9.5	MO	8500	80,750
2.017	Field Estimator		MO		0
2.018	General Laborer		MO		0
2.019	Timekeeper		MO		N/A
2.020	Field Office Manager		MO		N/A
2.021	Warehouse Manager		MO		N/A
2.022	Field Secretary		MO		N/A
2.023	Other On-site Contractor Staff		LS		N/A
2.024	Project Accountant		MO		N/A
2.025	Project Coordinator		MO		N/A
2.026	Safety Manager		MO		N/A
2.027	QA/QC Manager		MO		N/A
2.B	CMAR's Estimated Cost of Onsite Staff - Subtotal				458,431

**City of Mansfield's
Fire Station No. 1
CMAR RFP - CMAR's Cost Proposal Detail**

Updated on 07 JUN 2024

Item #	Description	Quantity	Unit	Unit Cost	Total Cost
2.C CMAR's Onsite Reimbursable Expenses					
Mobilization					
2.024	Field Engineering Equipment		LS		N/A
2.025	Site Survey		LS		By City
2.026	Layout Within Site	1	LS	10000	10,000
2.027	Office Trailer	14.5	MO	1250	18,125
2.028	Office Supplies & Equipment	14.5	MO	400	5,800
2.029	Storage Trailer	14.5	MO	150	2,175
2.030	Warehouse		MO		N/A
2.031	Set Up Onsite Office	1	LS	5000	5,000
2.032	Set Up Onsite Storage\Laydown Areas		LS		w/Gen Rqmts
2.033	Set Up Onsite Parking Area(s)		LS		w/Gen Rqmts
2.034	Temporary Roadways		LS		w/Gen Rqmts
2.035	Temporary Fencing		LF		w/Gen Rqmts
2.036	Temporary Toilets	14.5	MO	1400	20,300
2.037	Project Sign	1	EA	2500	2,500
2.038	All Other Temporary Project Site Signage	4	EA	500	2,000
Safety					
2.038	Safety Equipment	1	LS	2000	2,000
2.039	First Aid Supplies	14.5	MO	50	725
2.040	Fire Protection		LS		By Sub
2.041	Fire Extinguishers	6	EA	150	900
2.042	Fall Protection		LS		w/Gen Rqmts/Sub
2.043	Third Party Safety Inspections		MO		Excluded
2.044	Temporary Walkways		LS		By Sub
2.045	Barricades		LS		By Sub

**City of Mansfield's
Fire Station No. 1
CMAR RFP - CMAR's Cost Proposal Detail**

Updated on 07 JUN 2024

Item #	Description	Quantity	Unit	Unit Cost	Total Cost
2.046	Traffic Control		LS		By Sub
2.047	Security\Watchman Services		MO		w/Gen Rqmts
2.048	Temp Walls and Enclosures		MO		w/Gen Rqmts
Utilities					
2.048	Install Temporary Electric Service at Site Office		LS		w/Gen Rqmts
2.049	Install Temporary Teledata Service at Site Office		LS		w/Gen Rqmts
2.050	Install Temporary Water & Sewer Service at Site		LS		w/Gen Rqmts
2.051	Install Temporary Gas Service at Site		LS		w/Gen Rqmts
2.052	Ongoing Electric Charges for the Site Office	14.5	MO	365	5,293
2.053	Ongoing Teledata Charges for the Site Office	14.5	MO	150	2,175
2.054	Ongoing Water & Sanitary District Charges	14.5	MO	100	1,450
2.055	Ongoing Gas Utility Charges (exluding Temp Heat)		MO		N/A
Ongoing Expenses					
2.056	Jobsite Cell Phone(s) for Site Staff	15.5	MO	400	6,200
2.057	IT Expenses for Staff		MO		Excluded
2.058	Project Schedule Setup & Maintenance		LS		Excluded
2.059	BIM Model Setup & Maintenance		LS		w/Gen Rqmts
2.060	Project Extranet Setup & Maintenance		LS		Excluded
2.061	Project Photo Documentation	15.5	MO	200	3,100
2.062	Video\Webcam Documentation		MO		N/A
2.063	Employee Parking		MO		Onsite
2.064	Home Office Travel Costs		LS		Excluded
2.065	Moving & Subsistence		LS		N/A
2.066	Additional Plans & Specs during Construction	1	LS	2000	2,000
2.067	Shipping, Couriers, & Postage	15.5	MO	50	775

**City of Mansfield's
Fire Station No. 1
CMAR RFP - CMAR's Cost Proposal Detail**

Updated on 07 JUN 2024

Item #	Description	Quantity	Unit	Unit Cost	Total Cost
2.068	Project-specific Delivery & Hauling to\from Site		LS		w/Gen Rqmts
2.069	Temporary Radios		LS		Excluded
2.070	Temporary Wiring & Lights		MO		By Sub
2.071	Water, Ice & Cups	15.5	MO	50	775
2.072	Ladders & Stairs		LS		w/Gen Rqmts/Sub
2.073	Erosion Control Maintenance		LS		w/Gen Rqmts
2.074	Shoring		LS		w/Gen Rqmts/Sub
2.075	Weekly Clean-up	67.115	WK	500	33,558
2.076	Final Clean-up	17860	LS	0.45	8,037
2.077	Dumpster Rental		MO		0
2.078	Dumpster Pulls	33	EA	650	21,450
2.079	Temporary Generator	2	MO	1500	3,000
2.080	Misc. Power Equipment		LS		0
2.081	Equipment Repairs & Maintenance		LS		0
2.082	Temporary Partitions		SF		N/A
2.083	Pick-Up Rental	15.5	MO	1100	17,050
2.084	Automobile Rental		MO		N/A
2.085	Pick-Up Fuel & Maintenance	15.5	MO	500	7,750
2.086	Automobile Fuel & Maintenance		MO		N/A
2.087	Water Truck		MO		w/Gen Rqmts/Sub
Hoisting & Material Management					
2.088	Forklift Rental		LS		w/Gen Rqmts/Sub
2.089	Tower Crane Rental/Mobilization/Demobilization		LS		N/A
2.090	Hydro-Crane Rental		WK		By Sub
2.091	Other Crane Costs		LS		By Sub

**City of Mansfield's
Fire Station No. 1
CMAR RFP - CMAR's Cost Proposal Detail**

Updated on 07 JUN 2024

Item #	Description	Quantity	Unit	Unit Cost	Total Cost
2.092	Material Hoist		WK		N/A
2.093	Personnel Hoist		LS		N/A
2.094	Erect Hoists		LS		N/A
2.095	Hoist Landings		LS		N/A
2.096	Temporary Hoist Operation		MO		N/A
2.097	Hoisting for Subs		LS		By Sub
2.098	Scaffolding		LS		w/Gen Rqmts/Sub
2.099	Other Hoisting & Materials Management Costs		LS		By Sub
Temporary Protection of the Work					
2.100	Temporary Site Protection not w/Erosion Control		LS		w/Gen Rqmts
2.101	Temporary Building Protection		LS		Excluded
2.102	Temporary Building Heat not w/Gas Charges		WK		Excluded
2.103	Dewatering System & Other Water Removal	1	LS	10000	10,000
2.104	Snow Removal		LS		N/A
2.105	Other Protection of Work Items		WK		By Sub
Testing					
2.106	Soil Testing		LS		By Owner
2.107	Concrete Testing		LS		By Owner
2.108	Masonry Testing		LS		By Owner
2.109	Weld Testing		LS		By Owner
2.110	Other Materials Testing		LS		By Owner
Permits & Fees					
2.111	Building Permit		LS		By Owner
2.112	Plan Check Fee		LS		By Owner
2.113	Water Tap Fees		LS		By Owner
2.114	Sanitary Sewer Tap Fees		LS		By Owner

City of Mansfield's
Fire Station No. 1

Updated on 07 JUN 2024

CMAR RFP - CMAR's Cost Proposal Detail

Item #	Description	Quantity	Unit	Unit Cost	Total Cost
2.115	Elevator Permit & Inspections		LS		w/Gen Rqmts
2.116	Mechanical & Electrical Permits & Inspections		LS		w/Gen Rqmts
2.117	Health Department Permits & Inspections		LS		By City
2.118	Other Government Fees\Permits Required for FCO		LS		Excluded
Other CMAR Onsite Reimbursable Costs					
2.119	Other CMAR's Onsite Costs Needed for the Work		LS		N/A
2.C	CMAR's Estimated Onsite Reimbursable Expenses - Subtotal				192,137
2.000	CMAR's Total Proposed Costs to Be Reimbursed				848,302

City of Mansfield's CMAR RFP - Attachment 3
General Conditions Responsibility Matrix

Updated on 07 JUN 2024
Printed on 6/7/2024 at 5:25 PM

Item #	DESCRIPTION	PRE-CONST SERVICES FEE	CONST SERVICES FEE	GC REIMB GEN COND COST	DIRECT COST OF SUB'S WORK	COMMENTS	REQUIRED OF OWNER AND/OR DESIGN TEAM
1.0	PRECONSTRUCTION SERVICES						
1.01	ARCHITECTURAL SELECTION						X
1.02	STRUCTURAL, MECHANICAL, ELECTRICAL AND OTHER DESIGN CONSULTANTS						X
1.03	SPECIAL CONSULTANT SELECTION						X
1.04	SURVEYOR SELECTION						X
1.05	SITE SELECTION RECOMMENDATIONS						X
1.06	REVIEW DESIGN CONCEPTS						X
1.07	DEVELOP BID PACKAGES AND PROCUREMENT STRATEGY	X					
1.08	SITE USE RECOMMENDATIONS						X
1.09	MATERIAL SELECTION RECOMMENDATIONS						X
1.10	BUILDINGS SYSTEMS RECOMMENDATIONS						X
1.11	BUILDING EQUIPMENT RECOMMENDATIONS (MOVEABLE)						X
1.12	BUILDING EQUIPMENT RECOMMENDATIONS (FIXED)						X
1.13	CONSTRUCTION FEASIBILITY RECOMMENDATIONS	X					
1.14	PROJECT MASTER SCHEDULING	X					
1.15	LIFE CYCLE COST ANALYSIS	X					
1.16	INFORMAL AND FORMAL VALUE ENGINEERING	X					

City of Mansfield's CMAR RFP - Attachment 3
General Conditions Responsibility Matrix

Updated on 07 JUN 2024
Printed on 6/7/2024 at 5:25 PM

Item #	DESCRIPTION	PRE-CONST SERVICES FEE	CONST SERVICES FEE	GC REIMB GEN COND COST	DIRECT COST OF SUB'S WORK	COMMENTS	REQUIRED OF OWNER AND/OR DESIGN TEAM
1.17	ENERGY USE ANALYSIS AND RECOMMENDATIONS						X
1.18	INITIAL PROJECT PRO FORMA AND FEASIBILITY REVIEW/APPROVAL						X
1.19	SUBCONTRACTORS' LABOR AVAILABILITY REVIEW	X					
1.20	MATERIAL, EQUIPMENT AND SUBCONTRACTOR AVAILABILITY	X					
2.0	PROJECT BUDGETING AND COST CONTROL						
2.01	TOTAL PROJECT COST BUDGET						X
2.02	CONSTRUCTION COST BUDGET	X					
2.03	CONSTRUCTION COST BUDGET ESTIMATES	X					
2.04	PRELIMINARY COST MODEL						X
2.05	CONCEPTUAL DESIGN ESTIMATE						X
2.06	50% SCHEMATIC DESIGN ESTIMATE	X					
2.07	100% SCHEMATIC DESIGN ESTIMATE	X					
2.08	50% DESIGN DEVELOPMENT ESTIMATE	X					
2.09	100% DESIGN DEVELOPMENT ESTIMATE	X					
2.10	50% CONSTRUCTION DOCS ESTIMATE	X					
2.11	BID PACKAGE/ SUBCONTRACT ESTIMATES	X					
2.12	CASH FLOW PROJECTIONS	X					

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2.13	FUNDING MODEL & REVENUE PHASING						X
2.14	MATERIAL QUANTITY SURVEYS	X					
2.15	TRADE, VENDOR & SUB ESTIMATES	X					
2.16	CHANGE ORDER ESTIMATES		X				
2.17	COST ACCOUNTING SET-UP		X				
2.18	REPORTING METHODS SET-UP		X				
2.19	PAYMENT PROCEDURES SET-UP		X				
2.20	CHANGE ORDER PROCEDURES SET-UP		X				
2.21	PROJECT COST MONITORING		X				
3.0	SUBCONTRACTOR SOLICITATION, SELECTION, PURCHASING, & SCOPE MANAGEMENT						
3.01	SET SUB PRE-QUALIFICATION CRITERIA	X					
3.02	RECOMMEND SUBCONTRACTOR PREQUAL & SELECTION METHODS	X					
3.03	RECOMMEND SUBCONTRACTOR BIDDING & AWARD METHODS	X					
3.04	DEVELOP SUBCONTRACTOR INTEREST	X					
3.05	PREPARE BIDDING SCHEDULES	X					
3.06	ISSUE PLANS, SPECS & BIDDING DOCS	X					
3.07	CONDUCT PRE-BID CONFERENCE	X					

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3.08	RECEIVE BIDS	X					
3.09	ANALYZE BIDS	X					
3.10	RECOMMEND AWARD	X					
3.11	VERIFY UNIT COSTS	X					
3.12	NEGOTIATE UNION RATES & LABOR COSTS (AS REQUIRED)		X				
3.13	CONDUCT PRE-AWARD CONFERENCE			X			
3.14	PREPARE CONTRACTS	X					
3.15	SUPPLIER AND SUBCONTRACTOR REVIEW	X					
3.16	ORIGINATE RFI'S AFTER SCREENING			X			
3.17	REVIEW OF DESIGN TEAM'S PROPOSAL REQUESTS and ASIs			X			
3.18	SUBCONTRACTOR CHANGE REQUEST MANAGEMENT			X			
3.19	VALIDATE of SUBCONTRACTORS' SCHEDULE EXTENSION REQUESTs			X			
3.20	VALIDATE QUANTITIES, UNIT COSTs & MARKUPs of SUBCONTRACTORS' PROPOSED CHANGES			X			
3.21	VALIDATE & PREPARE CHANGE ORDERS			X			
3.22	COORDINATE OWNER-SUPPLIED FIXED EQUIPMENT			X			
4.0	CONTRACT DOCUMENTS COORDINATION						

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4.01	DRAWING, SPEC & DOCUMENT REVIEW & COORDINATION RECOMMENDATIONS	X					
4.02	CONSTRUCTIBILITY REVIEW AND RECOMMENDATIONS	X					
4.03	SUBCONTRACTOR WORK PACKAGE SCOPE COORDINATION	X					
4.04	RESPONSIBILITY FOR: SAFETY PRECAUTIONS			X			
4.05	SAFETY PROGRAMS			X			
4.06	COMMON USE EQUIPMENT			X			
4.07	COMMON USE SERVICES			X			
4.08	REVIEW FOR: JURISDICTIONAL OVERLAP	X					
4.09	INCLUSION OF ALL WORK	X					
4.10	CONSTRUCTION PHASING SCOPE & SCHEDULE COORDINATION	X					
4.11	IDENTIFY LONG LEAD ITEMS	X					
4.12	OBTAIN APPROVALS OF AGENCIES HAVING JURISDICTION (AHJ)						X
4.13	ASSIST IN OBTAINING PERMITS & APPROVALS (AS NEEDED)	X		X			
5.0	CONSTRUCTION PHASE STAFF						
5.01	PROJECT MANAGER (AS NEEDED)			X		PM MAY ALSO BE WITH FEE	
5.02	PROJECT SUPERINTENDENT			X			

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5.03	ASSISTANT PROJECT SUPERINTENDENT (IF REQUIRED)			X		STAFFING DESCRIPTIONS SHOWN HERE, & THOSE SHOWN IN THE CONTRACTOR'S STAFFING PLAN AND/OR FEE & COST PROPOSAL MAY VARY FROM WHAT IS SHOWN HERE. PROJECT COST ALLOCATIONS, HOWEVER, WILL BE CONSISTENT WITH THIS MATRIX.	
5.04	MECHANICAL COORDINATOR (IF REQUIRED)			X			
5.05	ELECTRICAL COORDINATOR (IF REQUIRED)			X			
5.06	OFFICE ENGINEER (AS REQUIRED)			X			
5.07	FIELD ENGINEER AND SURVEY CREW: SITE/BUILDING LAYOUT (IF REQUIRED)			X			
5.08	FIELD ENGINEER AND SURVEY CREW: LINE AND GRADE (IF REQUIRED)			X			
5.09	RODMAN AND ASSISTANT (IF REQUIRED)			X			
5.10	TIME KEEPER/CHECKER (IF REQUIRED)			X			
5.11	SCHEDULING ENGINEER (IF REQUIRED)			X			
5.12	PROJECT COORDINATOR (IF REQUIRED)			X			
5.13	COST ENGINEER (IF REQUIRED)			X			
5.14	ADMIN ASSISTANT(s) or SITE SECRETARY (IF REQUIRED)			X			
5.15	SAFETY ENGINEER & SAFETY INSPECTOR(S)			X			
5.16	GENERAL LABORER (IF REQUIRED)			X			
5.17	OTHER ON SITE PROJECT STAFF SUPPORT			X			
6.0	TRAVEL AND LODGING						
6.01	STAFF's "OUT of TOWN" TRAVEL COSTs		X			"OUT of TOWN" COSTS ARE AIRFARE, TRAIN, BUS & RENTAL CAR EXPENSES	

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6.02	PROJECT STAFF TOLLS & RIDE APs (UBER, LYFT, etc.)		X				
6.03	OTHER STAFF TRANSPORTATION		X			INCLUDES MILEAGE, FUEL & OTHER AUTO EXPENSES for PERSONAL VEHICLES	
6.04	PROJECT STAFF MOVING EXPENSES		X				
6.05	PROJECT STAFF SUBSISTENCE COSTS		X				
7.0	TEMPORARY FACILITIES						
7.01	SAFETY EQUIPMENT AND FIRST AID SUPPLIES			X			
7.02	HANDRAILS AND TOE BOARDS			X			
7.03	OPENING PROTECTION			X			
7.04	FIRE EXTINGUISHERS			X			
7.05	WATCHMAN SERVICE (IF NEEDED)			X			
7.06	OFFICE OR TRAILER RENTAL			X			
7.07	WATER, ICE AND CUPS			X			
7.08	TEMPORARY STAIRS/RAMPS			X			
7.09	PROJECT SIGNS			X			
7.10	BULLETIN BOARDS			X			
7.11	CONSTRUCTION FENCING			X			
7.12	BARRICADES AND COVERED WALKWAYS (AS NEEDED)			X			
7.13	SAFETY NETS (AS NEEDED)			X			

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7.14	ARCHITECT'S/ ENGINEER'S/ OWNER'S TEMPORARY ONSITE OFFICE						X
7.15	TEMPORARY TOILETS			X			
7.16	TRAILER SECURITY & SITE SECURITY MONITORING			X			
7.17	TEMPORARY PROTECTIVE WALKWAYS & WALLS			X			
8.0	ON SITE UTILITIES AND SERVICES						
8.01	TEMPORARY TELEPHONE INSTALLATION AND EXPENSE			X			
8.02	TEMPORARY POWER SERVICE & DISTRIBUTION ON SITE			X			
8.03	PERMANENT POWER SERVICE			X			POWER TO ONE POINT on SITE
8.04	TEMPORARY WATER AND HEATING SERVICE			X		INCLUDING ALL TEMPORARY HEAT FOR SUBS	
8.05	HEATING ENERGY CHARGES			X			
8.06	TEMPORARY WIRING			X			
8.07	LIGHT BULBS FOR TEMP LIGHTING			X			
8.08	DAILY CLEAN-UP			X			
8.09	WEEKLY TRASH REMOVAL			X			

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8.09	ONSITE WEEKLY CLEANING CREW (SITE OFFICE)			X			
8.10	ONSITE WEEKLY CLEANING CREW (BUILDING)			X			
8.11	ONSITE DAILY CLEANING CREW (SITE)			X			
8.11	FINAL PROJECT "DEEP" CLEANING				X		
8.12	DUMP PERMITS AND FEES			X			
8.13	DEBRIS HAULING/REMOVAL			X			
8.14	FLAGMAN/TRAFFIC CONTROL (AS NEEDED)				X		
8.15	FUELS FOR INITIAL TANK FILLING				X		
8.16	TEMPORARY ROADS				X		
8.17	TEMPORARY ROADWAY MAINTENANCE				X		
8.18	DUST CONTROLS				X		
8.19	TEMPORARY EROSION CONTROL				X		
8.20	TEMP. WATER/SEWER EXPENSE & WATER EXPENSES - SITE GRADING & COMPACTION				X		
8.21	TEMPORARY WATER & SEWER EXPENSES for OFFICE TRAILER			X			
8.22	TWO-WAY RADIO EQUIPMENT & CELL PHONES (AS NEEDED)			X			
8.23	TRASH CHUTE AND HOPPERS (AS NEEDED)			X			
8.23	SOFTWARE LICENSES for ON SITE PROJECT FIELD STAFF		X				

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8.24	PROJECT FIELD OFFICE INTERNET & WAPS			X			
9.0	ON-SITE EQUIPMENT						
9.01	CONTRACTOR OWNED AUTOS & FUEL (AS NEEDED)			X			
9.02	CONTRACTOR OWNED PICKUP TRUCK(s) & FUEL (AS NEEDED)			X			
9.03	FLATBED TRUCK AND FUEL (AS NEEDED)			X			
9.04	WATER TRUCK (AS NEEDED)				X		
9.05	AIR COMPRESSOR AND FUEL (AS NEEDED)				X		
9.06	DEWATERING EQUIPMENT AND FUEL (AS NEEDED)				X		
9.07	TEMPORARY GENERATOR AND FUEL (AS NEEDED)			X			
9.08	EQUIPMENT for DEBRIS REMOVAL & HAULING (AS NEEDED)			X			
9.09	TIRES & MAINT COSTS for ON SITE EQUIPMT(AS NEEDED)			X			
9.10	FORKLIFT OPERATOR			X			
9.11	MATERIAL HOIST OPERATOR (AS REQ'D)			X			
9.12	PERSONNEL HOIST OPERATOR (AS REQ'D)			X			
9.13	FIXED CRANE OPERATOR				X		
9.14	TRAVEL CRANE OPERATOR				X		
9.15	PROJECT IDENTIFICATION			X			

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9.16	TEMPORARY INTERIOR SIGNAGE			X			
9.17	TOTAL STATION RENTAL			X			
10.0	TEMPORARY PROJECT PROTECTION						
10.01	REMOVE SNOW AND ICE (AS NEEDED)			X			
10.02	TEMPORARY ENCLOSURES (AS NEEDED)			X			
10.03	TEMP BUILDING PIPING (AS NEEDED)			X			
10.04	FUEL COST FOR HEATING (AS NEEDED)			X			
10.05	POWER COST FOR HEATING (AS NEEDED)			X			
10.06	TEMP FURNACE RENTAL (AS NEEDED)			X			
10.07	TEMP HEATER RENTAL (AS NEEDED)			X			
10.08	TEMP BOILER RENTAL (AS NEEDED)			X			
10.09	OPERATOR - TEMPORARY SYSTEMS (AS NEEDED)			X			
10.10	OPERATION FIRE WATCH (AS NEEDED)			X			
10.11	MAINTENANCE COST (AS NEEDED)			X			
10.12	EXTENDED WARRANTY COST IN ADDTION TO STD ONE YR WARRANTY (IF REQUIRED)				X		
10.13	FILTER CHANGE (AS NEEDED)				X		
10.14	TEMPORARY OFFICE HEATING (AS NEEDED)			X			

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10.15	TEMP WEATHER PROECTION & HEATING FOR ALL SUBCONTRACTORS (AS MAY BE REQ'D)			X			
10.16	TEMP ELEVATOR USAGE/PROTECTION			X			
11.0	REPRODUCTION/PRINTING AND IT/DATA PROCESSING COSTS						
11.01	COST ESTIMATING DOCUMENTS	X					
11.02	SYSTEMS STUDY DOCUMENTS	X					
11.03	BID PACKAGE SETS						X
11.04	BIDDING INSTRUCTIONS	X					
11.05	CONSTRUCTION DOCUMENTS ORIGINAL						X
11.06	POSTAGE AND EXPRESS COSTS (CONTRACTOR-ISSUED PLANS)			X			
11.07	AS-BUILT SUB-DOCUMENTS				X		
11.08	AS-BUILT DOCUMENTS			X			
11.09	ACCOUNTING FORMS		X				
11.10	FIELD REPORTING FORMS			X			
11.11	SUBCONTRACT AGREEMENT FORMS	X					
11.12	SCHEDULE REPORT FORMS			X			
11.13	ESTIMATING FORMS	X					

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11.14	COST REPORTING FORMS	X					
11.15	VALUE ANALYSIS STUDIES						X
11.16	IT INFRASTRUTURE & DATA PROCESSING (HOME OFFICE)	X	X				
11.17	REFERENCE MATERIALS			X			
11.18	SHOP DRAWING PRINTING			X			
11.19	ON-SITE FAX, SCANNER AND COPIER			X			
11.20	LAPTOPS, IT & DATA PROCESSING (ON-SITE)		X				
11.21	SOFTWARE LICENSES & IT SUPPORT SERVICES (HOME OFFICE & FIELD)	X	X				
11.22	MAINTENANCE MANUALS (FROM SUBS) AND OPERATIONS MANUALS (FROM SUBS)				X		
11.23	SUBMITTAL REPRODUCTION COSTS			X			
12.0	QUALITY CONTROL AND TRAINING						
12.01	GC'S FIELD QC/QA/QM INSPECTOR (IF NEEDED)			X			
12.02	GC'S FIELD QC/QA/QM FIELD OFFICE (IF NEEDED)			X			
12.03	GC'S QC/QA/QM INSPECTORS' TRANSPORTATION			X			
12.04	GC'S QC/QA/QM INSPECTORS' EQUIPMNT (IF NEEDED)			X			
12.05	SPECIAL INSPECTION CONSULTANTS						X
12.06	SPECIAL TESTING CONSULTANTS						X

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12.07	CONCRETE SUBSTRUCTURE-OBSERVATIONS						X
12.08	CONCRETE TESTING						X
12.09	MASONRY TESTING						X
12.10	COMPACTION TESTING						X
12.11	WELDING TESTING						X
12.12	PIER INSPECTION/TESTING						X
12.13	SOILS INVESTIGATION						X
12.14	SPECIAL TESTING SERVICES (EXCEPT AS NOTED)						X
12.15	PROJECT PHOTOGRAPHS			X			
12.16	WARRANTY INSPECTIONS		X				
12.17	AIR AND WATER BALANCING				X		
12.18	ON-SITE TRAINING OF OWNER'S FACILITY STAFF & OPERATORS (BY GC)			X			
12.19	ON-SITE TRAINING OF OWNER'S FACILITY STAFF & OPERATORS (SUBCONTRACTORS)				X		
12.20	COLLATE & PRESENT OPERATION/ MAINTENANCE MANUALS			X			
12.21	PREPARE SUBCONTRACTOR'S OPERATION/ MAINTENANCE MANUALS				X		
12.22	GC DAILY REPORTS AND PHOTO DOCUMENTATION			X			

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12.23	VIDEO MONITORING & DOCUMENTATION			X			
12.24	ENVELOPE & AIR BARRIER TESTING PER SPECIFICATIONS				X		
13.0	STORAGE, PARKING, PERMITS, LICENSING AND SPECIAL FEES						
13.01	STORAGE YARD RENTAL			X			
13.02	PARKING LOT RENTALS AND SHUTTLE EXPENSES (AS NEEDED)			X			
13.03	FIELD OFFICE STAFF PARKING FEES			X			
13.04	SIGN PERMITS			X			
13.05	STREET/CURB PERMIT				X		
13.06	BUILDING PERMITS						X
13.07	PLAN CHECK FEES						X
13.08	WATER SYSTEM DEVELOPMENT FEE						X
13.09	SEWER USE & DRAINAGE PERMIT/DEV. FEE						X
13.10	PLUMBING & ELECTRICAL PERMITS				X		
13.11	ELEVATOR PERMIT FEE				X		
13.12	STORM CONNECTION FEE						X
13.13	GAS AND POWER SERVICE CHARGE (PERMANENT)						X

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13.14	GAS AND POWER SERVICE CHARGE (TEMPORARY)			X			
13.15	STEAM SERVICE CHARGE (IF ANY)						X
13.16	CHILLER WATER SERVICE CHARGE (IF ANY)						X
13.17	SPECIAL TAP FEES						X
13.18	SOFTWARE LICENSES (ALL PROGRAMS/APPS)		X				
13.19	CONTRACTORS LICENSES		X				
13.20	CONSTRUCTION EQUIPMENT LICENSES		X				
13.21	CONSTRUCTION EQUIPMENT PERMITS				X		
14.0	INSURANCE AND BONDS						
14.01	BUILDERS RISK INSURANCE			X			
14.02	GENERAL LIABILITY, INCLUDING AUTOMOBILE			X			
14.03	POLLUTION INSURANCE			X			
14.04	PROFESSIONAL LIABILITY			X			
14.05	PRODUCT LIABILITY			X			
14.06	EXCESS LIABILITY COVERAGE			X			
14.07	WORKERS COMPENSATION (FIELD OFFICE STAFF)			X			
14.08	FICA INSURANCE (FIELD OFFICE STAFF)			X			
14.09	FEDERAL UNEMPLOYMENT (FIELD OFFICE STAFF)			X			

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14.10	STATE UNEMPLOYMENT (FIELD OFFICE STAFF)			X			
14.11	CONTRACTOR'S PAYMENT BOND (IF REQUIRED)			X			
14.12	CONTRACTOR'S PERFORMANCE BOND (IF REQUIRED)			X			
14.13	CONTRACTOR'S MAINTENANCE BOND (IF REQUIRED)			X			
14.14	* SUBCONTRACTOR BONDS				X		
14.15	STATE/LOCAL BONDS				X		
14.16	* ONLY AS MUTUALLY AGREED UPON IN ADVANCE IN WRITING BETWEEN THE OWNER AND THE CONTRACTOR.						
15.0	OTHER COSTS (IF NOT WITH ABOVE)						
15.01	CONSTRUCTION EQUIPMENT				X		
15.02	CONTRACTOR's LABOR COSTS DURING CONSTRUCTION			X			
15.03	SUBCONTRACTOR's LABOR COSTS DURING CONSTRUCTION				X		
15.04	CONSTRUCTION MATERIALS				X		
15.05	COST OF DESIGN AND ENGINEERING						X
15.06	A/E FAST TRACK COST IMPACTS						X
15.07	PRELIMINARY SOILS INVESTIGATION						X
15.08	TITLE/DEVELOPMENT COST						X
15.09	BUILDING OPERATION AFTER MOVE-IN						X
15.10	BUILDING MAINTENANCE AFTER MOVE-IN						X

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15.11	MOVING COORDINATION						X
15.12	MOVING COSTS						X
15.13	COSTS OF EMERGENCY WORK				X		
15.14	GC'S GENERAL & HOME OFFICE OVERHEAD		X				
15.15	GC'S PROFIT MARGIN		X				
15.16	GMP FINANCIAL RESPONSIBILITIES		X				
15.17	INSPECTIONS REQUIRED BY AHJ						X
16.0	CONSTRUCTION PHASE: OFF-SITE SERVICES						
16.01	CORPORATE EXECUTIVES (AS REQUIRED)	X	X				
16.02	PRINCIPAL IN CHARGE (AS REQUIRED)	X	X				
16.03	PROJECT EXECUTIVE (AS REQUIRED)	X	X				
16.04	LEGAL - BASIC SERVICES (AS REQUIRED)	X	X				
16.05	ACCOUNTING (AS REQUIRED)	X	X				
16.06	PURCHASING (AS REQUIRED)	X					
16.07	SAFETY OFFICER (AS REQUIRED)		X				
16.08	EEO OFFICER (AS REQUIRED)	X	X				
16.09	SECRETARIAL AND CLERK-TYPIST (AS REQUIRED)	X	X				
16.10	BENEFITS, BONUSES AND VACATIONS FOR ABOVE	X	X				

EXHIBIT A.F

Key Personnel & Staffing Plan

Contained within is our staffing plan for the project

Project Staffing Matrix

Mansfield Fire Station #1



Name of Individual Team Members	On site or off site location	Staff Assignments as identified below are Owner's minimum CM Base Staff Requirement	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Month 13	Month 14	Month 15	Month 15.5
Preconstruction Services																		
Eric Bunner	As Needed	Director of Precon	AS	AS	AS	AS	AS	AS	AS	AS	AS	AS	AS	AS	AS	AS	AS	AS
Derek Kloer	As Needed	Division Manager	AS	AS	AS	AS	AS	AS	AS	AS	AS	AS	AS	AS	AS	AS	AS	AS
Construction Services																		
Brian Rose	As Needed	Project Executive	AS	AS	AS	AS	AS	AS	AS	AS	AS	AS	AS	AS	AS	AS	AS	AS
Ben Harris	As Needed	General Superintendent	AS	AS	AS	AS	AS	AS	AS	AS	AS	AS	AS	AS	AS	AS	AS	AS
Kyle Roberts	As Needed	Project Specialist	AS	AS	AS	AS	AS	AS	AS	AS	AS	AS	AS	AS	AS	AS	AS	AS
Phil Garcia	50%	Project Manager	87	87	87	87	87	87	87	87	87	87	87	87	87	87	87	43
Zach Murphy	50%	Proeject Engineer	87	87	87	87	87	87	87	87	87	87	87	87	87	87	87	43
Dwayne Felker	100%	Superintendent	173	173	173	173	173	173	173	173	173	173	173	173	173	173	173	87
To be determined	100%	Field Engineer	-	-	-	-	-	-	173	173	173	173	173	173	173	173	173	87
Total Base Staff Hours by Month			346	346	346	346	346	346	519	519	519	519	519	519	519	519	519	260

Notes
All above referenced positions are required by the project as a minimum project staffing requirement.

EXHIBIT A.G

Confidentiality of the Project

To be provided within one month of approval of Exhibit A - GMP Amendment as mutually agreed in writing by Owner and Contractor.

EXHIBIT A.H

Customary and Usual Labor Rates

To be provided within one month of approval of Exhibit A - GMP Amendment as mutually agreed in writing by Owner and Contractor.

EXHIBIT A.I

Rental Rates

To be provided within one month of approval of Exhibit A - GMP Amendment as mutually agreed in writing by Owner and Contractor.

EXHIBIT A.J

Alternates with Costs and Expiration Dates

Contained within this Exhibit are the Alternates.

Project: Mansfield Fire Station #1
Date: October 29, 2024

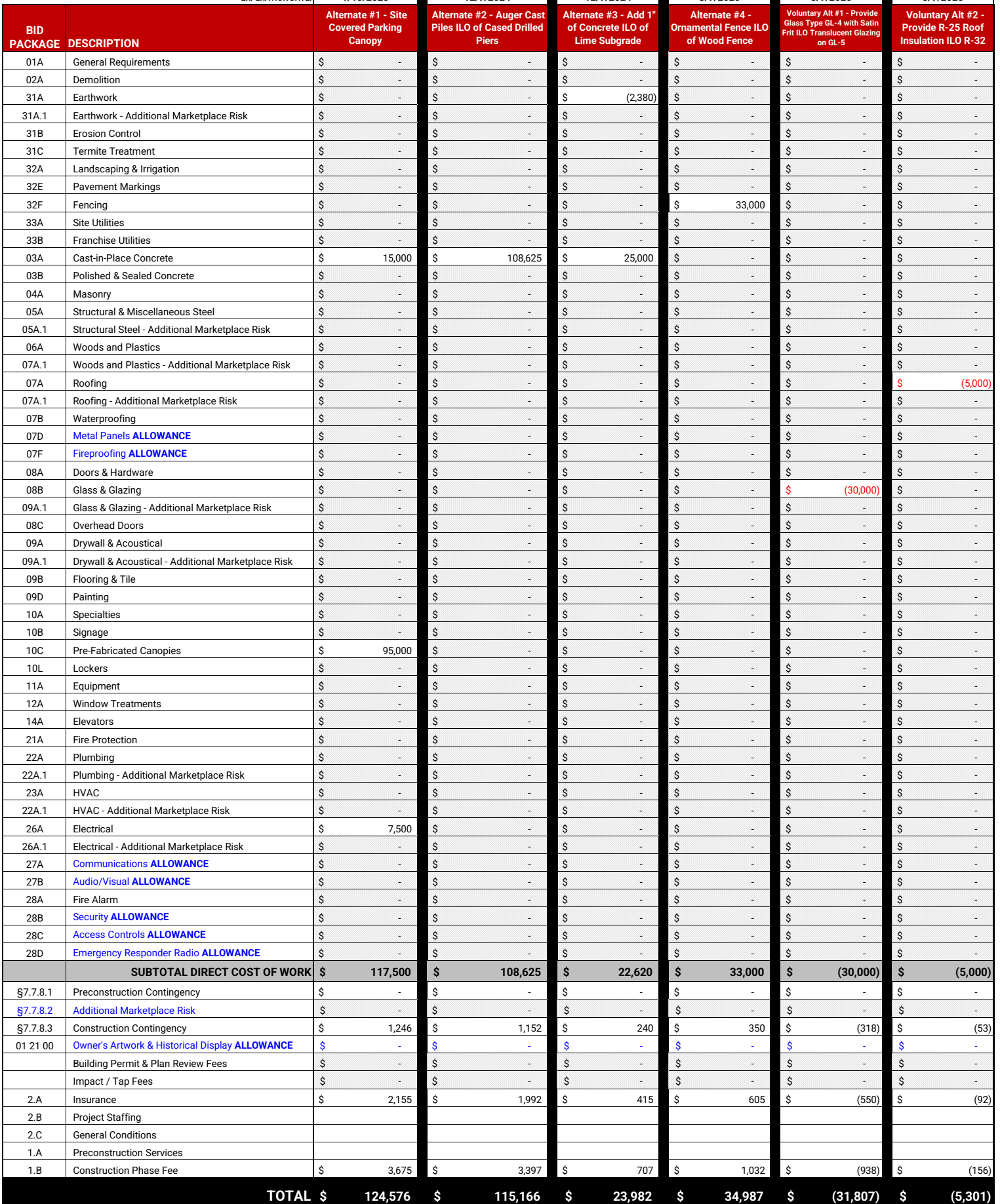


EXHIBIT A.K

Unit Costs

Contained within this Exhibit is the Unit Costs.

Exhibit A.K - Unit Prices

The following Unit Prices represent the direct cost only:

Haul-off Excess	ADD	\$25.00/CY
Import Topsoil	ADD	\$36.00/CY
Rock Excavation	ADD	\$8.00/CY
Light Pole Bases	ADD	\$2,500.00/EA
Pipe Bollards	ADD	\$1,250.00/EA
Sod, Bermuda	ADD	\$0.75/SF
Hydromulch, Bermuda	ADD	\$0.50/SF
Temporary Irrigation	ADD	\$1.25/SF
24" Drilled Straight Shaft Pier	ADD \$75.00/LF	DEDUCT (\$35.00/LF)
30" Drilled Straight Shaft Pier	ADD \$125.00/LF	DEDUCT (\$35.00/LF)
24" Temporary Casing	ADD	\$75.00/LF
30" Temporary Casing	ADD	\$100.00/LF

EXHIBIT A.L

Allowances

Contained within this Exhibit are the Allowances.

Exhibit A.L - Allowances

The following Allowances are included in GMP in accordance with the Contract Documents. These Allowances are intended to provide for all direct and indirect construction costs associated with each of these items.

Upon final determination of the actual cost, the GMP Allowance shall be revised by replacing the Allowance amount with the actual cost of the item or scope. In the event the actual cost is less than the specified Allowance, the cost savings shall be reallocated to the Construction Contingency. In the event the actual cost exceeds that of the Allowance, such overrun shall be funded using the Contingency.

Lump Sum Allowances

1. Owners' Artwork and Historical Displays.....	\$15,000
2. Metal Panels	\$15,000
3. Spray Insulation	\$25,000
4. Equipment – Station Alerting System	\$150,000
5. Equipment – Firefighters Slide pole and Hatch.....	\$150,000
6. Communications	\$50,000
7. Audio Visual	\$100,000
8. Security.....	\$50,000
9. Access Controls.....	\$50,000
10. Emergency Responder Radio.....	\$40,000

EXHIBIT A.M

Schedule of Values

To be provided within one month of approval of Exhibit A - GMP Amendment as mutually agreed in writing by Owner and Contractor.

EXHIBIT A.N

Itemized Statement of the GMP and **Clarifications**

Contained within is and itemized statement of the GMP and Clarifications.

October 30, 2024

Mr. Andy Hale
City of Mansfield
1200 E Broad St.
Mansfield, TX 76063

RE: Mansfield Fire Station No. 1
Exhibit A.N - Itemized Guaranteed Maximum Price

Dear Mr. Hale:

Crossland Construction Company, Inc. ("CROSSLAND") is pleased to submit our Guaranteed Maximum Price ("GMP") Proposal for Mansfield Fire Station No. 1 ("Project") located in Mansfield, TX.

This proposal is based on the Construction Manager at Risk Contract between the City of Mansfield ("Owner") and CROSSLAND ("CMAR") and the Construction Documents issued by Martinez and their Consultants ("Architect").

We appreciate being part of your project team and helping make your project successful. If you have any questions regarding our proposal or need additional information, please do not hesitate to call.

Best regards,

Derek Kloer
Division Manager
dkloer@crossland.com

TABLE OF CONTENTS

- **Executive Summary**
- **Basis of Proposal**
- **GMP Cost Summary**
- **Clarifications, Assumptions and Exclusions**

Exhibit A.N - GUARANTEED MAXIMUM PRICE PROPOSAL



Project: Mansfield Fire Station #1
Date: October 29, 2024

BID PACKAGE	DESCRIPTION	SUBCONTRACTOR/ SUPPLIER	# BIDS	SITE	1.475 \$/Acre	BUILDING	17,860 \$/SF	TOTAL	17,860 \$/SF	%
01A	General Requirements	CROSSLAND		\$ 65,454	\$ 44,375	\$ 121,557	\$ 6.81	\$ 187,010	\$ 10.47	1.64%
02A	Demolition	BP31a	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0.00%
31A	Earthwork	TBD	14	\$ 182,657	\$ 123,835	\$ 44,644	\$ 2.50	\$ 227,301	\$ 12.73	1.99%
31A.1	Earthwork - Additional Marketplace Risk	RPMX				\$ 20,000	\$ 1.12	\$ 20,000	\$ 1.12	0.17%
31B	Erosion Control	Pro SWPPP	2	\$ 10,897	\$ 7,388	\$ -	\$ -	\$ 10,897	\$ 0.61	0.10%
31C	Termite Treatment	Buckaroo	3	\$ -	\$ -	\$ 900	\$ 0.05	\$ 900	\$ 0.05	0.01%
32A	Landscaping & Irrigation	Superscapes	14	\$ 82,028	\$ 55,612	\$ -	\$ -	\$ 82,028	\$ 4.59	0.72%
32E	Pavement Markings	CCC	1	\$ 7,912	\$ 5,364	\$ -	\$ -	\$ 7,912	\$ 0.44	0.07%
32F	Fencing	Triple C	5	\$ 77,730	\$ 52,698	\$ -	\$ -	\$ 77,730	\$ 4.35	0.68%
33A	Site Utilities	Subterra	8	\$ 312,579	\$ 211,918	\$ -	\$ -	\$ 312,579	\$ 17.50	2.73%
33B	Franchise Utilities	BY OWNER		BY OWNER	\$ -	\$ -	\$ -	BY OWNER	\$ -	0.00%
03A	Cast-in-Place Concrete	Sivelove	11	\$ 257,000	\$ 174,237	\$ 729,605	\$ 40.85	\$ 986,605	\$ 55.24	8.63%
03B	Polished & Sealed Concrete	Cherry	12	\$ -	\$ -	\$ 29,096	\$ 1.63	\$ 29,096	\$ 1.63	0.25%
04A	Masonry	GG&S	6	\$ 65,660	\$ 44,515	\$ 1,218,520	\$ 68.23	\$ 1,284,180	\$ 71.90	11.24%
05A	Structural & Miscellaneous Steel	TBD	15	\$ 20,000	\$ 13,559	\$ 618,401	\$ 34.62	\$ 638,401	\$ 35.74	5.59%
05A.1	Structural Steel - Additional Marketplace Risk	Eldorado				\$ 100,000	\$ 5.60	\$ 100,000	\$ 5.60	0.87%
06A	Woods and Plastics	#N/A	12	\$ -	\$ -	\$ 119,144	\$ 6.67	\$ 119,144	\$ 6.67	1.04%
07A.1	Woods and Plastics - Additional Marketplace Risk	Anton				\$ 29,000	\$ 1.62	\$ 29,000	\$ 1.62	0.25%
07A	Roofing	TBD	8	\$ -	\$ -	\$ 294,700	\$ 16.50	\$ 294,700	\$ 16.50	2.58%
07A.1	Roofing - Additional Marketplace Risk	Heritage One (Garland)				\$ 65,000	\$ 3.64	\$ 65,000	\$ 3.64	0.57%
07B	Waterproofing	SCS - Sikaflex	4	\$ 8,700	\$ 5,898	\$ 105,948	\$ 5.93	\$ 114,648	\$ 6.42	1.00%
07D	Metal Panels ALLOWANCE	CCC Allowance	1	\$ -	\$ -	\$ 15,000	\$ 0.84	\$ 15,000	\$ 0.84	0.13%
07F	Fireproofing ALLOWANCE	CCC Allowance	1	\$ -	\$ -	\$ 25,000	\$ 1.40	\$ 25,000	\$ 1.40	0.22%
08A	Doors & Hardware	Texoma	5	\$ 6,000	\$ 4,068	\$ 156,546	\$ 8.77	\$ 162,546	\$ 9.10	1.42%
08B	Glass & Glazing	#N/A	7	\$ -	\$ -	\$ 245,728	\$ 13.76	\$ 245,728	\$ 13.76	2.15%
09A.1	Glass & Glazing - Additional Marketplace Risk	Kellys				\$ 40,000	\$ 2.24	\$ 40,000	\$ 2.24	0.35%
08C	Overhead Doors	Johnson Equipment	4	\$ -	\$ -	\$ 388,518	\$ 21.75	\$ 388,518	\$ 21.75	3.40%
09A	Drywall & Acoustical	TBD	8	\$ -	\$ -	\$ 288,564	\$ 16.16	\$ 288,564	\$ 16.16	2.52%
09A.1	Drywall & Acoustical - Additional Marketplace Risk	GMI				\$ 69,000	\$ 3.86	\$ 69,000	\$ 3.86	0.60%
09B	Flooring & Tile	PDL	7	\$ -	\$ -	\$ 160,740	\$ 9.00	\$ 160,740	\$ 9.00	1.41%
09D	Painting	Royal	10	\$ 5,000	\$ 3,390	\$ 81,477	\$ 4.56	\$ 86,477	\$ 4.84	0.76%
10A	Specialties	Southern Specialties	5	\$ -	\$ -	\$ 55,301	\$ 3.10	\$ 55,301	\$ 3.10	0.48%
10B	Signage	Hardman	6	\$ 1,500	\$ 1,017	\$ 37,905	\$ 2.12	\$ 39,405	\$ 2.21	0.34%
10C	Pre-Fabricated Canopies	AVADECK	3	RE: Alternate No. 1	\$ -	\$ 181,560	\$ 10.17	\$ 181,560	\$ 10.17	1.59%
10L	Lockers	Southwest Solutions	4	\$ -	\$ -	\$ 116,076	\$ 6.50	\$ 116,076	\$ 6.50	1.02%
11A	Equipment	#N/A	7	\$ -	\$ -	\$ 529,311	\$ 29.64	\$ 529,311	\$ 29.64	4.63%
12A	Window Treatments	m4	4	\$ -	\$ -	\$ 10,185	\$ 0.57	\$ 10,185	\$ 0.57	0.09%
14A	Elevators	TKE	2	\$ -	\$ -	\$ 122,400	\$ 6.85	\$ 122,400	\$ 6.85	1.07%
21A	Fire Protection	Southwest	8	\$ -	\$ -	\$ 71,415	\$ 4.00	\$ 71,415	\$ 4.00	0.62%
22A	Plumbing	TBD	4	\$ -	\$ -	\$ 424,220	\$ 23.75	\$ 424,220	\$ 23.75	3.71%
22A.1	Plumbing - Additional Marketplace Risk	JL Paker				\$ 40,000	\$ 2.24	\$ 40,000	\$ 2.24	0.35%
23A	HVAC	TBD	8	\$ -	\$ -	\$ 874,136	\$ 48.94	\$ 874,136	\$ 48.94	7.65%
22A.1	HVAC - Additional Marketplace Risk	Richardson				\$ 40,000	\$ 2.24	\$ 40,000	\$ 2.24	0.35%
26A	Electrical	TBD	4	\$ 62,350	\$ 42,271	\$ 1,004,724	\$ 56.26	\$ 1,067,074	\$ 59.75	9.34%
26A.1	Electrical - Additional Marketplace Risk	Hargrove				\$ 170,000	\$ 9.52	\$ 170,000	\$ 9.52	1.49%
27A	Communications ALLOWANCE	CCC Allowance	10	\$ -	\$ -	\$ 50,000	\$ 2.80	\$ 50,000	\$ 2.80	0.44%
27B	Audio/Visual ALLOWANCE	CCC Allowance	0	\$ -	\$ -	\$ 100,000	\$ 5.60	\$ 100,000	\$ 5.60	0.87%
28A	Fire Alarm	Southwest Fire	5	\$ -	\$ -	\$ 35,150	\$ 1.97	\$ 35,150	\$ 1.97	0.31%
28B	Security ALLOWANCE	CCC Allowance	1	\$ -	\$ -	\$ 50,000	\$ 2.80	\$ 50,000	\$ 2.80	0.44%
28C	Access Controls ALLOWANCE	CCC Allowance	2	\$ -	\$ -	\$ 50,000	\$ 2.80	\$ 50,000	\$ 2.80	0.44%
28D	Emergency Responder Radio ALLOWANCE	CCC Allowance	1	\$ -	\$ -	\$ 40,000	\$ 2.24	\$ 40,000	\$ 2.24	0.35%
	SUBTOTAL DIRECT COST OF WORK	TOTAL BIDS	231	\$ 1,165,467	\$ 790,147	\$ 8,929,471	\$ 499.97	\$ 10,094,937	\$ 565.23	88.32%
\$7.7.8.1	Preconstruction Contingency	CROSSLAND		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0.00%
\$7.7.8.2	Additional Marketplace Risk	CROSSLAND		\$ -	\$ -	\$ -	\$ -	With Above	\$ -	0.00%
\$7.7.8.3	Construction Contingency	CROSSLAND		\$ 14,134	\$ 9,582	\$ 100,163	\$ 5.61	\$ 114,297	\$ 6.40	1.00%
01 21 00	Owner's Artwork & Historical Display ALLOWANCE			\$ -	\$ -	\$ 15,000	\$ 0.84	\$ 15,000	\$ 0.84	0.13%
	Building Permit & Plan Review Fees			\$ -	\$ -	\$ -	\$ -	BY OWNER	\$ -	0.00%
	Impact / Tap Fees			\$ -	\$ -	\$ -	\$ -	BY OWNER	\$ -	0.00%
2.A	Insurance	CROSSLAND		\$ 24,452	\$ 16,577	\$ 173,282	\$ 9.70	\$ 197,734	\$ 11.07	1.73%
2.B	Project Staffing	CROSSLAND		\$ 114,608	\$ 77,700	\$ 343,823	\$ 19.25	\$ 458,431	\$ 25.67	4.01%
2.C	General Conditions	CROSSLAND		\$ 48,034	\$ 32,566	\$ 144,103	\$ 8.07	\$ 192,137	\$ 10.76	1.68%
1.A	Preconstruction Services	CROSSLAND		\$ 5,000	\$ 3,390	\$ 15,000	\$ 0.84	\$ 20,000	\$ 1.12	0.17%
1.B	Construction Phase Fee	CROSSLAND		\$ 41,695	\$ 28,268	\$ 295,482	\$ 16.54	\$ 337,177	\$ 18.88	2.95%
TOTAL				\$ 1,413,389	\$ 958,230	\$ 10,016,324	\$ 560.82	\$ 11,429,713	\$ 639.96 /SF	
\$7.7.8.4	Owner's Contingency Does not include CMAR insurances or Fee			\$ 70,669	\$ 47,911	\$ 500,816	\$ 28.04	\$ 571,486	\$ 32.00	5.00%
TOTAL GMP								\$ 12,001,199		

General Requirements Detail Sheet

Project: Mansfield Fire Station No. 1

Date: October 29, 2024

CROSSLAND
CONSTRUCTION COMPANY, INC.

Estimate Detail		Quantity	Unit	Unit Cost	Amount
Item	Description				
01A GENERAL REQUIREMENTS					
1	Misc Tools and Equipment	14	MO	\$ 200.00	\$ 2,800
2.C	CMAR's Onsite Reimbursable Expenses				\$ -
Mobilization					
2.032	Set Up Onsite Storage/Laydown Areas	1	LS	\$ 4,000.00	\$ 4,000
2.033	Set Up Onsite Parking Area(s)	1	LS	\$ 8,000.00	\$ 8,000
2.034	Temporary Roadways	1	LS	\$ 12,000.00	\$ 12,000
2.035	Temporary Fencing	1,040	LF	\$ 9.00	\$ 9,360
Safety					
2.042	Fall Protection	1	LS	\$ 5,000.00	\$ 5,000
2.047	Security\Watchman Services	13	MO	\$ 1,050.00	\$ 13,650
2.048	Temp Walls and Enclosures	1	LS	\$ 5,000.00	\$ 5,000
Utilities					
2.048	Install Temporary Electric Service at Site Office	1	LS	\$ 15,000.00	\$ 15,000
2.049	Install Temporary Teledata Service at Site Office	1	LS	\$ 1,500.00	\$ 1,500
2.050	Install Temporary Water & Sewer Service at Site	1	LS	\$ 7,500.00	\$ 7,500
2.051	Install Temporary Gas Service at Site	1	LS	\$ 4,500.00	\$ 4,500
Ongoing Expenses					
2.059	BIM Model Setup & Maintenance	1	LS	\$ 8,500.00	\$ 8,500
2.068	Project-specific Delivery & Hauling to/from Site	1	LS	\$ 2,500.00	\$ 2,500
2.072	Ladders & Stairs	1	LS	\$ 8,500.00	\$ 8,500
2.073	Erosion Control	1	LS	\$ 14,200.00	\$ 14,200
2.074	Shoring	1	LS	\$ 7,500.00	\$ 7,500
2.087	Water Truck	1	LS	\$ 5,000.00	\$ 5,000
Hoisting & Material Management					
2.088	Forklift Rental	1	LS	\$ 18,000.00	\$ 18,000
2.098	Scaffolding	1	LS	\$ 7,500.00	\$ 7,500
Temporary Protection of the Work					
2.100	Temporary Site Protection not w/ Erosion Control	1	LS	\$ 12,000.00	\$ 12,000
Permits & Fees					
2.115	Elevator Permit & Inspections	1	LS	\$ 12,500.00	\$ 12,500
2.116	Mechanical & Electrical Permits & Inspections	1	LS	\$ 2,500.00	\$ 2,500
01A GENERAL REQUIREMENTS					187,010

Executive Summary

This Guaranteed Maximum Price ("GMP") Proposal is based upon the Early Release Package and Design Development documents prepared by Martinez and their Consultants as detailed in the Exhibit A.C-Scope of Work.

Further project scope definition has been developed by **CROSSLAND**, and various qualifications that are included in this proposal.

From this data, we hereby propose a Guaranteed Maximum Price of **TWELVE MILLION ONE THOUSAND ONE-HUNDRED NINETY-NINE DOLLARS (\$12,001,199.00)**. See enclosed Guaranteed Maximum Price Summary for a detailed cost breakdown of which the GMP amount is based.

We have developed and enclosed a Project Schedule, which indicates the agreed upon schedule objectives for the project.

▪ Submit GMP	October 31, 2024
▪ Council Approval of GMP	November 11, 2024
▪ Notice to Proceed ("NTP")	November 12, 2024
▪ Substantial Completion	February 6, 2026
▪ Final Construction Completion	March 6, 2026
▪ Fire Department Move In and Startup	April 8, 2026

CROSSLAND recommends that the attached documents be carefully reviewed; questions and comments be referred back to us for resolution; and the overall project be approved for further progress.

2 Basis of Proposal

Introduction

This section of Guaranteed Maximum Price (GMP) Proposal describes clarifications, qualifications, assumptions, and exclusions from which our proposal is based.

For those items that are identified as **excluded**, no cost or time has been accounted for in the GMP Proposal to address the issue. For those items that are **clarified, qualified** or based on an **assumption**, the GMP proposal reflects only the cost and time of the element as assumed or clarified.

Any modifications to the following clarifications, qualifications, assumptions, and exclusions may result in a change to GMP and/or the Project Schedule.

Cost Basis of GMP

Changes or revisions that may result in a modification to the Contract Sum and/or Contract Time will be processed as defined in the Owner-CMAR Agreement. As such, the Owner must carefully review all the criteria used to develop this GMP Proposal and request any revisions to the same, so that a modified GMP Proposal can be prepared.

Bonds and Insurance

1. See Exhibit A.B – *Insurance, Performance, Payment & Maintenance Bonds*

Permits and Fees

1. GMP **excludes** Plan Review and Permit Fees.
2. Impact and/or Tap Fees for water and sanitary sewer are **excluded**.
3. GMP **excludes** any and all costs and/or Fees for Franchise Utilities (ie. Atmos, Oncor, AT&T, etc...)

Contingency

GMP includes the following Contingencies:

A. Construction Contingency	\$114,470
B. Owner's Contingency	\$571,486
C. Escalation Contingency	EXCLUDED
D. Design/Estimating Contingency	EXCLUDED

- A. The **Construction Contingency** shall be available as defined in the Owner-CMAR Agreement
- B. **Owner Contingency** will be used by the Owner as defined in the Owner-CMAR Agreement.

3

Clarifications, Assumptions and Exclusions

General Clarifications

1. The only price two (2) guarantees within this GMP are those of the proposed Exhibit A.E -Fee & Cost Proposal and the Total GMP amount. There are no individual line item guarantees within the GMP. Individual line-item savings within the GMP shall be reallocated as defined in the Owner-CMAR Agreement.
2. GMP **excludes** Sales Tax on materials incorporated into the real property in accordance with the Agreement.
3. GMP includes the **Construction Manager's Fee** at a rate of 2.95%.
4. Any and all percentages, rates, multipliers, etc...included in the GMP shall be auditable for their proper allocation but not composition.

Package Specific Clarifications, Qualifications, Assumptions & Exclusions

The following definition represents the basis of our estimate and serves as the Proposal for the project. The estimated costs were developed based upon the project documents listed in the appendices and schedule data described elsewhere in this report, and the assumptions, clarifications and design criteria presented under this section. The following clarifications, qualifications, assumptions, and exclusions represent the basis of our Proposal.

01A – General Requirements

1. GMP **excludes** Construction Materials Testing
2. GMP **excludes** Cost and/or Resource Loading of the Construction Schedule
3. In establishing the price for the Proposal, **CROSSLAND** understands that reasonable substitutions may be made to specified materials except where otherwise noted. Substitution Requests shall be submitted and approved in accordance with the Contract Documents.

02A – Demolition

1. No Comments.

31A – Earthwork

1. GMP includes Lime Stabilization 6" deep at 7% at all paving depths.
2. GMP includes Building Pad prep as 10' of Moisture Conditioning with a 2' Select Fill Cap.

31B – Erosion Control

1. No Comments.

31C – Termite Treatment

1. No Comments.

32A – Landscaping & Irrigation

1. GMP **excludes** importing Topsoil
2. GMP **excludes** any offsite landscape improvements and/or streetscaping.
3. GMP **excludes** landscape maintenance.

32E – Pavement Markings

1. No Comments.

32F – Fencing

1. GMP includes an 8' wood fence with 4 wood rails and steel galvanized posts.
2. GMP **excludes** a mow strip at the fence.

33A – Site Utilities

1. No Comments.

03A – Cast-In-Place Concrete

1. GMP includes 100% Temporary pier casings.
2. GMP includes piers and casing at a depth of 30' plus penetration depth as provided on S-301 Detail 1.
3. GMP **excludes** any 85' pier as noted in the below section from 6.2 Drilled, Straight-Shaft Piers of the UES Geotechnical Report W241573-Rev1 dated August 20, 2024.

At least two (2) pier shaft diameters should remain between the bottom of the pier and the termination depth of our deepest boring (about 85 ft below existing grade) to use the allowable end bearing parameters. If the minimum clearance between the bottom of the pier and the deepest boring is not provided, piers should be designed as friction piers, neglecting end bearing. In no case should piers bear deeper than the deepest boring (about 85 ft below the existing ground surface). Deeper borings will be required to verify the bearing stratum below 85 ft if deeper piers are planned.

03B – Polished & Sealed Concrete

1. No Comments.

04A – Masonry

1. 4,500 psi CMU is not available, Texas Building Products can provide 3,250 psi only. Crossland, the structural engineer, and CMU manufacturer to confirm materials available prior to starting CMU scope. – **See Exhibit A.N. - Exhibit 1**

05A – Structural & Miscellaneous Steel

1. No Comments.

06A – Woods and Plastics

1. No Comments.

07A – Roofing

1. GMP Roofing System with an average R-Value of R-32 (not minimum R-32) with a ½" coverboard, mechanically fastened.
2. GMP includes a three-ply Garland Co. torch applied Modified Bitumen Roof System.
3. GMP includes 24"x24"x2" Wausau Tile, Quattro Series concrete roof pavers with adjustable pedestals.

07B – Waterproofing

1. No Comments.

07D – Metal Panels

1. GMP includes an **Allowance of \$15,000** for the dumpster gate metal panels.

07F – Spray Insulation

1. GMP includes an **Allowance of \$25,000** for the spray applied insulation.

08A – Doors & Hardware

1. GMP includes Plastic Laminate Faced, Particleboard Core, Premachined. Wilsonart 7985-38 "Morelia Mango.

08B – Glass & Glazing

1. GMP includes Window 04 will be 2.5"x6" Curtain wall, due to the over-all height of 17' 3".
2. Aluminum Entrance doors to be 3.5" Medium Stile with 10" Bottom Rail per 08 41 13.2.04 ILO Wide Stile doors as noted in 08 80 00.2.03.G
3. GMP includes shower doors by Trulite, the specified Kohler shower door has been discontinued.

08C – Overhead Doors

1. No Comments.

09A – Drywall & Acoustical

1. No Comments.

09B – Flooring & Tile

1. GMP includes a **Material Allowance only of \$15/SF** for WT-3.
2. GMP **excludes** any epoxy grout.

09D – Painting

1. No Comments.

10A – Miscellaneous Specialties

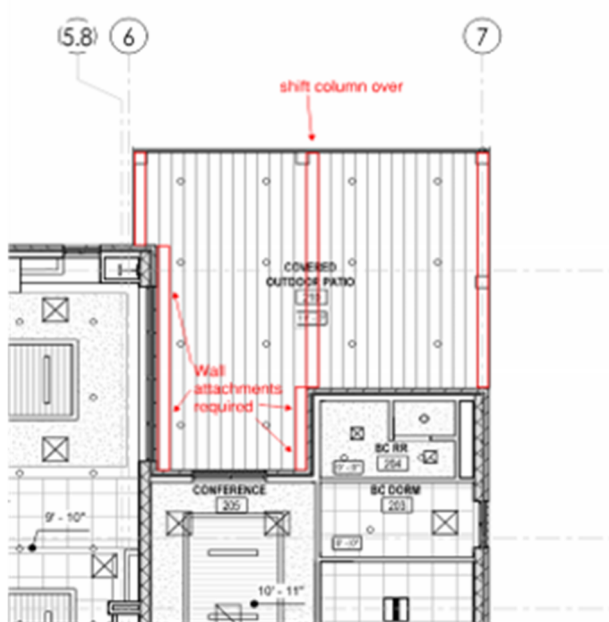
1. No Comments.

10B – Signage

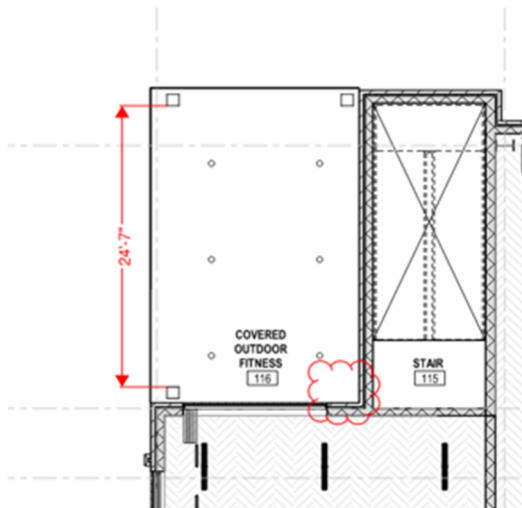
1. No Comments.

10C – Prefabricated Canopies

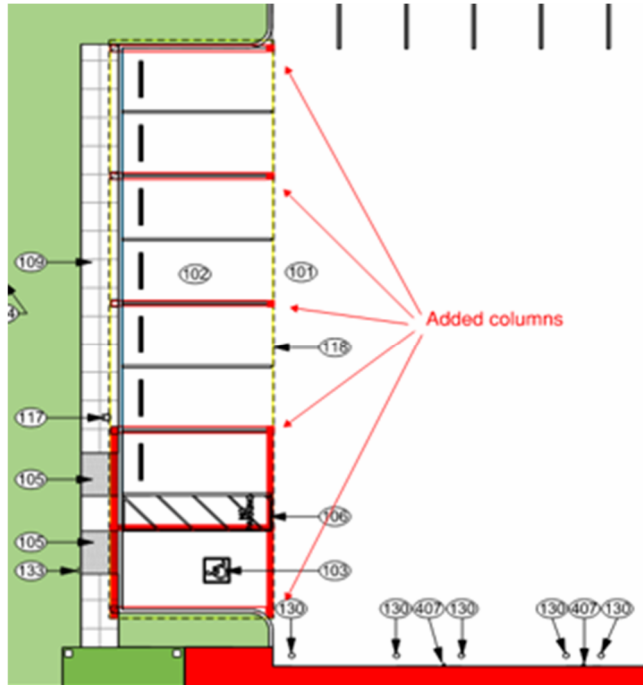
1. Second Floor Outdoor Patio Canopy will need to shift the column the below:



2. Outdoor covered fitness Canopy will require a 4th column where clouded below:



3. Alternate Exterior Canopy will require columns on both sides to work structurally.



10L – Lockers

1. No Comments.

11A – Equipment

1. GMP includes Gear Extractor and Gear Drying Cabinet from AAdvantage.
2. GMP includes an Allowance of \$150,000 for the Station Alerting System.
3. GMP includes an Allowance of \$75,000 / EA for the Firefighters Slide Pole and Airlock.

12A – Window Treatments

1. GMP includes surface mounted Hunter Douglas Manual roller shades with Glacier Screen 3% and Glacier Screen RD 0% - in manufacturer standard colors.

13A – Special Construction

1. Not Applicable.

14A – Elevators

1. GMP is set up on a TKE Endura MRL Elevator with 2500Lbs.capacity at 110 feet per minute.
2. GMP includes the Front Return, Transom, and Ceiling as Brushed Aluminum and the interior wall panels are Plastic Laminate.

21A – Fire Protection

1. GMP includes a Dry System at second floor Outdoor Patio.
2. GMP includes side wall heads at the Outdoor Exercise area.

22A – Plumbing

1. No Comments.

23A – HVAC

1. GMP includes Tridium Niagara controls.

26A – Electrical

1. GMP includes a 250kw Diesel Generator with Belly Tank.

27A – Communications

1. GMP includes an Allowance of \$50,000 for the Data & Telecommunications.

27B – Audio-Visual

1. GMP includes an Allowance of \$100,000 for the Audio-Visual System

28A – Fire Alarm

1. No Comments.

28B – Security & Access Controls

1. GMP includes an Allowance of \$50,000 for the Security System

28C – Access Controls

1. GMP includes an Allowance of \$50,000 for the Access Controls

28D – Emergency Radio Communication System

1. GMP includes an Allowance of \$40,000 for the Emergency Responder Radio.

SUBMITTAL REVIEW

DATE: 7/16/2024

TRANSMITTED TO: **KOBY KETCHER**
CROSSLAND CONSTRUCTION COMPANY

PROJECT: LITTLE ELM PUBLIC SAFETY ANNEX

BRW PROJECT NO.: 223057.00

SPECIFICATION DIVISION: 04 – MASONRY

SPECIFICATION SECTION: 04 22 00 - STRUCTURAL CONCRETE MASONRY

SUBMITTAL: **04 22 00-02 CMU STORM SHELTER PD**

REVIEWED BY: **MASON GUILLAMUN, AIA**

SUBMITTAL REVIEW IS ONLY FOR GENERAL CONFORMANCE WITH INFORMATION GIVEN AND THE DESIGN CONCEPT EXPRESSED IN THE CONTRACT DOCUMENTS. ANY ACTION SHOWN IS SUBJECT TO THE REQUIREMENTS OF THE PLANS AND SPECIFICATIONS. THE CONTRACTOR IS RESPONSIBLE FOR COMPLIANCE WITH THE CONTRACT DOCUMENTS, COORDINATION OF THE WORK INCLUDING AMONG TRADES, CONFIRMING AND CORRELATING QUANTITIES AND DIMENSIONS, MEANS AND METHODS, SAFETY, AND CONSTRUCTION SCHEDULING AND SEQUENCING. SHOP DRAWINGS SHALL NOT BE USED FOR FABRICATION UNTIL THE CONTRACTOR HAS ACKNOWLEDGED CONCURRENCE BY REVIEWING AND STAMPING WITH APPROVAL PER AIA GENERAL CONDITIONS.

- ☐ **NO EXCEPTIONS TAKEN**
- ☒ **MAKE CORRECTIONS NOTED**
- ☐ **REVISE AND RESUBMIT**
- ☐ **REJECTED**
- ☐ **OTHER: SEE COMMENTS BELOW**

COMMENTS:

1. Refer to the comments marked by JQ herein.

RECEIVED

Little Elm Public Safety Annex -
24TX09KRZA

Jul 08, 2024

24TX09KRZA

107 Ryan Spiritas Parkway
Little Elm, TX 76227

JQ

Date: 7/8/2024

Status: In Review

Official Reviewer:

Mason Guillamun - Brown Reynolds Watford Architects, Inc
3535 Travis Street Suite 250
Dallas, TX 75204

Submittal Coordinator:

Koby Ketcher - Crossland Construction Company, Inc.
731 Industry Way
Prosper, TX 75078

Submitting Sub/Supplier: Josh Gray - GG&S Construction Co.

Package Number	Rev	CSI Code	Subject	Due Date	Response
04 22 00-02	0	04 22 00 Concrete unit masonry	CMU Storm Shelter PD	7/22/2024	

Submittal Items

Mason,

Instructions to Official Reviewer:

Please see the following CMU Storm Shelter product data and testing for your review and approval. Let us know if you have any questions or concerns.

Thank you,
Koby Ketcher

Approval Stamps

SUBMITTAL/PKG# 04 22 00-02

STATUS REVIEWED

This submittal/drawing has been reviewed for General Arrangement and coordination of this work with all other trades.

This review does not relieve the subcontractor of the responsibility for all dimensions, correct fabrication and conformity with the requirements of the contract or relieve the architect of his approval for design.

DATE 7/8/2024

SIGNED Koby Ketcher

SHOP DRAWING REVIEW

ENGINEER'S REVIEW

RESPONSE REQUIRED OF
CONTRACTOR

- ☐ No exceptions taken
☒ Note Markings
☐ Rejected

- ☒ Comments Attached
☐ Resubmit
☐ Confirm

Submittal No. 04 22 00-02

Engineer's review is for general conformance with the design concept and contract documents. Markings or comments shall not be construed as relieving the contractor from compliance with the project plans and specifications nor departures therefrom. The Contractor remains responsible for details and accuracy, for confirming and correlating all quantities and dimensions for selecting fabrication processes, for techniques of assembly and for performing his work in a safe manner.

By Sheyenne Davis Date 7/15/2024
JQ ENGINEERING, LLP

JQ recommends using the stronger block in addition to the 5000 psi grout strength in order to achieve a f'm of 3500 psi. However, if the assembly meets the f'm of 3500 psi with the 2000 psi block, this is structurally acceptable. Assembly shall be tested prior to commencement of shelter construction as per the special inspection requirements, and testing results shall be submitted to JQ.

Contractor to submit contractor statement of responsibility letters for themselves and subs whom will be working on the shelter as required by code.

Contributor	Date (CST)

Submittals

Concrete Masonry Units - Storm Shelter

Submitted by:

Blake Smith

Submittal Date:

7/3/2024

Project Information:

Little Elm Public Safety Annex
107 Ryan Spiritas Parkway
Little Elm, TX 76227

Contractor:

Crossland Construction Company
833 S. East Avenue
Columbus, KS 66725

Submittal Order:

Product Description

Manufacturer

Supplier

	Concrete Masonry Units - Storm Shelter		
1	CMU Block - 12" Normal Weight Standard Gray	Texas Building Products	Builders Equipment & Supply Co.
2	Amerimix Corefill Grout - AMX 600	Amerimix	Jewell Concrete Products/Oldcastle
3	Amerimix Portland Lime & Sand Mortar - AMX 400 - Type S	Amerimix	Jewell Concrete Products/Oldcastle
4	RB Rebar Positioners	Hohmann & Barnard	Builders Equipment & Supply Co.
5	Double Rebar Positioners	Wire-Bond	Builders Equipment & Supply Co.
6	220 Ladder Mesh Reinforcement	Hohmann & Barnard	Builders Equipment & Supply Co.



TEXAS BUILDING PRODUCTS – BLOCK CERTIFICATION

Date: 5/23/2024

Reference Job Site: Little Elm Public Safety Annex
107 Ryan Spiritas Parkway
Little Elm, TX 76227

Masonry Contractor: GG&S Construction Company

General Contractor: Crossland Construction Company
833 S. East Avenue
Columbus, KS 66725

Texas Building Products, Inc. hereby certifies that all Concrete Masonry Units (CMU) comply with one or more of the following ASTM or Federal designations:

ASTM C-90-96A – Load Bearing CMU, Type I

Products: Normal Weight, Medium Weight, Solid, Split Face, Burnished.
Standard size and Oversized units.

ASTM C-55-96a – Concrete Brick and Similar Solid Units, Grade S II

Products: Burnished, Split Face, Solid CMU, Concrete Brick,
Standard size and Oversized units.

ASTM E-514-90 (Reapproved 1996) and ASTM C-1072-94 (Integral water repellent in CMU and Mortar)

Products: Lightweight, Normal Weight, Medium Weight, Split Face, Burnished.

Lightweight Concrete Masonry Units are made from expanded shale aggregates that have been tested and comply with **ASTM C-331**. Normal Weight CMUs are made from crushed limestone aggregates that comply with **ASTM C-33**. Split Face, Solid CMU, and Burnished units comply with **ASTM C-33, ASTM C-331, or both**. All Split Face and Burnished units are manufactured with Integral Water Repellent.

Craig R. Raupe

Texas Building Products, Inc.

3521 Hemphill St. Fort Worth, TX. 76110 (Office) 817-332-2373 (Fax) 817-332-2379



Project No.: **TXBPX23001**

Report Date: **November 1, 2023**

Client: **Texas Building Products**
 Address: **Christopher Washington**
3261 Texas Highway 108
Strawn, TX 76475

Project Name: **Texas Building Products Lab Tests**

Date Received: **October 4, 2023**

Date of Compression Testing: **October 24, 2023**

Date of Absorption Testing: **October 25, 2023**

Testing Technician: **Mwhelan**

Laboratory Number: **10- 205293**

Unit Specification: **ASTM C90**

Unit Designation and
 Description: **Concrete Masonry Unit**
8x16 Hollow Units

Summary of Test Results

Physical Property	Specification Values	Average Test Results
Net Compressive Strength (min.)	2000	2143 <i>psi</i>
Density		115.8 <i>pcf</i>
Absorption (max.)	15	13.4 <i>pcf</i>
Percent Solid		49.5 %

Physical Property	Specification Values	Average Test Results
Min. Faceshell Thickness (FST)	1.25	1.28 <i>in.</i>
Min. Web Thickness (WT)	0.750	1.11 <i>in.</i>
Equivalent Web Thickness		2.53 <i>in.</i>
Equivalent Thickness		3.77 <i>in.</i>
Normalized Web Area		30.4 <i>in.²/ft.²</i>

Individual Unit Test Results

	Specimen No.	Received Wt, W _R <i>lb.</i>	Cross-Sectional Area		Max. Load <i>lb</i>	Compressive Strength Net <i>psi</i>
			Gross <i>in.²</i>	Net* <i>in.²</i>		
<i>Compression Units</i>	4	31.18	119.20	59.33	114320	1930
	5	30.29	120.39	59.13	139320	2360
	6	30.65	120.77	59.42	127295	2140
	Average	30.70	120.12	59.29	126980	2143

* Net area determined from absorption specimens unless solid units are used.

	Specimen No.	Average Width <i>in.</i>	Average Height <i>in.</i>	Average Length <i>in.</i>	Average Min. FST <i>in.</i>	Average Min. WT <i>in.</i>	Normalized Web Area <i>in.²/ft.²</i>
<i>Absorption Units</i>	1	7.63	7.56	15.78	1.28	1.14	31.2
	2	7.62	7.65	15.66	1.29	1.06	29.3
	3	7.62	7.60	15.80	1.28	1.12	30.7
	Average	7.63	7.60	15.75	1.28	1.11	30.4

Specimen No.	Received Wt, W _R ** <i>lb</i>	Immersed Wt, W _I <i>lb</i>	Saturated Wt, W _S <i>lb</i>	Oven-Dry Wt, W _D <i>lb</i>	Absorption		Density	Net Volume	Net Area	Percent Solid
	<i>lb</i>	<i>lb</i>	<i>lb</i>	<i>lb</i>	<i>pcf</i>	%	<i>pcf</i>	<i>ft.³</i>	<i>in.²</i>	%
1	31.18	17.82	34.14	30.71	13.1	11.2	117.5	0.2614	59.79	49.6
2	30.29	17.25	33.39	29.92	13.4	11.6	115.7	0.2585	59.06	48.9
3	30.65	17.32	33.83	30.24	13.6	11.9	114.3	0.2645	59.45	50.0
Average	30.70	17.46	33.78	30.29	13.4	11.5	115.8	0.2614	59.43	49.5

**Received weight determined at the time of unit delivery to the job site or from units sampled at that time and delivered to the laboratory in sealed containers for moisture content determination.

Remarks: The units were tested according to ASTM C140. This set meets the absorption and compressive strength requirements of ASTM C90

This report shall not be reproduced, except in full, without prior written approval from Pennoni. The above results relate only to the items tested. Samples were obtained and delivered to the lab by the client.

Joseph Ridgway, PE
 Laboratory Manager



Preblended Core Fill Grout - Coarse AMX 600 CG

Product # AMX 600 CG



1. PRODUCT NAME

Amerimix Preblended Core Fill Grout - Coarse AMX 600 CG

2. PRODUCT DESCRIPTION

Amerimix Preblended Core Fill Grout - Coarse AMX 600 CG is a factory blend of cementitious materials and dried aggregates. As a liquid cementitious material it is formulated for superior flow to fill masonry voids and to bond together adjacent masonry units and steel reinforcement in the cores of the masonry units to the masonry assembly.

Features & Benefits

- Factory blended under controlled conditions for mix consistency
- Superior flow
- Reduced segregation
- Pumpable
- Available in various compressive strengths

Uses

- Load bearing concrete masonry units
- Structural hollow clay units
- Multi-wythe masonry structures
- Vertical reinforcing
- Bond beams
- Horizontal reinforcing

Packaging

Available in 80 lb (36.3 kg) bags and bulk bags.

Coverage

One 80 lb (36.3 kg) bag yields approximately 0.7 ft³ (0.02 m³) .

Limitations

1. AMX 600 CG Preblended Core Fill Coarse Grout should be applied in accordance with local building codes and traditional industry best practices appropriate for the application and weather conditions.

2. Application outside is possible when appropriate precautions for cold or hot weather construction are implemented in compliance with ACI, ASTM, IMIAC, or Masonry Institute standards.
3. Cavities to be filled should be free from any materials that may decompose over time, such as wood, foam, paper, or organic material. Areas of contact with grout should be free from loose debris, oil, and paint.
4. Protect uncoated aluminum from direct contact with portland cement based materials.
5. Grout should be applied quickly and continuously into the area to be filled. Rodding will help consolidate grout and eliminate air pockets.
6. When filling masonry units, do not allow walls to reach a height that grout will not be able to completely fill the lower units.
7. Shelf life not to exceed one year from date of manufacture.

NOTE:

Amerimix Preblended Core Fill Grout - Coarse AMX 600 CG should be installed in accordance with the provisions of applicable ASTM standards and the local building code. Always follow traditional industry best practices appropriate for the application and weather conditions. Good workmanship in conjunction with proper design and detailing assures durable, efficient, watertight construction.

Safety

READ THE SAFETY DATA SHEET (SDS) BEFORE USING THIS PRODUCT. MSDS Sheets are available on our website Amerimix.com or contact CHEMTREC (24 hours availability) 800-424-9300 for International inquiries +01-703-527-3887, or contact Amerimix Technical Services at 888-313-0755.

3. TECHNICAL DATA

Amerimix AMX 600 CG Preblended Core Fill Course Grout is available in various compressive strengths and meets or exceeds ASTM C476 Standard Specification for grout for masonry with a slump ranging from 8 - 11" (302 - 379 mm).

Applicable Standards

American Concrete Institute (ACI)

- ACI 530.1 Specification for Masonry Structures

ASTM International (ASTM)

- ASTM C143 / C143M Test Method for Slump of Hydraulic Cement Concrete
- ASTM C150 Standard Specification for Portland Cement
- ASTM C260 Specification for Air-Entraining Admixture for Concrete
- ASTM C404 Specification for Aggregates for Masonry Grout
- ASTM C476 Standard Specification for Grout for Masonry

- ASTM C595 Standard Specification for Blended Hydraulic Cements
- ASTM C618 Specification for Coal Fly Ash and Raw or Calcined Natural Pozzolan for use as a Mineral Admixture in Concrete
- ASTM C989 Standard Specification for Ground Granulated Blast Furnace Slag for use in Concrete and Mortars
- ASTM C1019 Standard Test Method for Sampling and Testing Grout
- ASTM C1093 Standard Practice for Accreditation of Testing Agencies for Unit Masonry
- ASTM C1157 Standard Performance Specification For Hydraulic Cement
- ASTM C1314 Standard Test Method for Compressive Strength of Masonry Prisms

International Masonry Industry All-Weather Council (IMIAC)

- Recommended Practices and Guide Specifications for Cold Weather Masonry Construction
- Recommended Practices and Guide Specifications for Hot Weather Masonry Construction

Sustainability

Amerimix products generally qualify for LEED Materials and Resources credits for Recycled Materials and Regional Materials. Visit amerimix.com or contact Technical Services for additional information regarding LEED qualifications for your specific product application and project location.

4. INSTALLATION

Preparation

The cavities to be filled should be free of any matter that is deleterious to portland cement product or any materials that may decompose over time such as wood, foam, paper, or organic materials.

Job Mock Ups

Amerimix requires that when Amerimix Preblended Core Fill Grout - Coarse AMX 600 CG is used in any application or as part of any system that includes other manufacturers' products, the contractor and/or design professional shall test all the system components collectively for compatibility, performance and long-term intended use in accordance with pertinent and accepted industry standards prior to any construction. Written documentation of the test performed shall be satisfactory to the design professional and contractor. Test results must include the means and methods of application, products used, project-specific conditions being addressed, and standardized tests performed for each proposed system or variation. Approved mock ups or sample panels should be retained until completion of the project.

Mixing

1. Use of a mechanical mixer will help ensure a better uniform mix.
2. Using clean potable water, approximately 5 - 6 qt (4.7 - 5.7 L) per 80 lb (36.3 kg) bag or enough water to produce a slump of 8 - 11" (302 - 379 mm). Pour approximately 3/4 of the required amount into the mixer. For mixing from a silo, use the same approximate water ratio and follow the same procedures.
3. With the mixer running, add bags of dry grout or dispense from silo and mix thoroughly.

Curing

No special curing required. Protect from freezing for 24 hours.

Cleaning

Use water to clean all tools immediately after use. Dried material must be mechanically removed.

5. AVAILABILITY

Amerimix products are available throughout the U.S. and Canada.

For information please contact Amerimix at

Toll Free: 888-313-0755

Website: Amerimix.com

6. TECHNICAL SUPPORT

For technical assistance please contact us

Toll Free: 888-313-0755

7. WARRANTY

LIMITED WARRANTY

What Does This Warranty Cover? Amerimix warrants that this product will (a) be free from defects in material and workmanship, and (b) conform to specifications set forth in Bonsal American's product literature at the time of manufacturer.

How Long Does Coverage Last? This warranty lasts for a period of one (1) year from the date of purchase. ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE IS LIMITED TO THE DURATION OF THIS EXPRESS WARRANTY. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

What Will Amerimix Do to Address Problems? Amerimix will replace the defective product or refund the purchase price, at its option.

What Does This Warranty Not Cover? Amerimix will not be liable for damage or loss resulting from a failure to store, use, install or maintain the product in strict accordance with Amerimix's specifications and instructions. In no event will Amerimix be liable for damages in excess of the purchase price for the product. CONSEQUENTIAL, SPECIAL AND INCIDENTAL DAMAGES ARE NOT RECOVERABLE UNDER THIS WARRANTY. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

How Do I Get Warranty Service? Within thirty (30) days after discovering a defect in the product, contact Amerimix in writing at the following address:

Amerimix
Technical Support Group
Charlotte, NC 28217

Include with your letter a brief description of the problem and any sales receipt, invoice or other proof of the date of purchase. To obtain Amerimix's technical or sales literature, please call (888)313-0755 or visit our web site at amerimix.com.

How Does State Law Relate to This Warranty? This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

WARNING - INJURIOUS TO EYES. CAUSES SKIN IRRITATION.

This product contains portland cement and silica sand. Avoid contact with eyes and skin. Do not take internally. Crystalline silica sand may cause serious lung problems. Avoid breathing dust and wear a respirator in dusty areas. Contact with wet unhardened concrete, mortar, cement or cement mixtures can cause skin irritation, severe chemical burns or serious eye damage. Wear waterproof gloves, a fully buttoned long-sleeved shirt, full-length trousers and tight fitting safety goggles. If you have to stand in wet product, wear waterproof boots high enough to keep product from getting inside. If working on hands and knees, wear kneepads. Indirect contact through clothing can be as serious as direct contact. Promptly, rinse out wet product from clothing.

California Proposition 65: This product contains Crystalline Silica, Quartz and may also contain trace amounts of other chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

KEEP OUT OF THE REACH OF CHILDREN AND ANIMALS.

FIRST AID: Eye Contact: Flood eyes with water for at least 15 minutes and consult a physician immediately. DO NOT RUB EYES. Skin Contact: Wash exposed skin area with soap and water. Consult a physician if irritation persists. Inhalation: Remove to fresh air. Ingestion: Immediately consult a physician.

For additional information, call Amerimix at 888-313-0755 or CHEMTREC at 800-424-9300 or 703-527-3887 outside of the USA. Refer to Safety Data Sheet (SDS) for further information.

ENVIRONMENTAL ADVISORY: Uncured or crushed cured cement is an environmental hazard, which may adversely affect fish and wildlife. Dispose of construction debris containing cement, including empty bags, at a permitted municipal disposal firm. Do not use crushed concrete as a fill near an aquatic habitat.



July 3, 2024

Project: Little Elm Public Safety Annex
107 Ryan Spiritas Parkway – Little Elm, TX 76227
Product: Amerimix AMX 600 Coarse Grout 5,000 psi
Plant: Hurst (Fort Worth), Texas 76053
Mason: GG&S Construction
GC: Crossland Construction – 833 E. Ave. Columbus, KS

CERTIFICATION

Division 4 – Section 040516 Masonry Grouting

Amerimix AMX 600 Coarse Grout 5,000 psi has been tested by Nelson Testing Laboratories and meets the performance requirements of ASTM C476 *Standard Specification for Grout for Masonry* when tested in accordance with ASTM C1019 *Standard Test Method for Sampling and Testing Grout*.

Slump of 8" – 11" in accordance with ASTM C 143

AMX 600 Coarse Grout 5,000 psi:	Harvested
Sand –	Forth Worth, TX
Aggregate-	Dallas, TX
Cement –	Dallas, TX
Fly Ash –	Vernon, TX

Yours,

Michael J Boenisch
Senior Technical Service Manager
Amerimix /Jewell -

Copy: Jacob Mulhern

SECTION 1: Identification

1.1. Identification

Product form : Mixture
Product name : Amerimix 600CG – Core Fill Grout Coarse
Product code : Not available

1.2. Recommended use and restrictions on use

Use of the substance/mixture : Various.

1.3. Supplier

Manufacturer

Oldcastle Architectural Inc.
400 Perimeter Center Terrace
Suite 1000
Atlanta, GA, 30346
T 800-334-0784 Tech Service: Monday - Friday; 8:00am - 5:00pm EST

1.4. Emergency telephone number

Emergency number : CHEMTREC (800) 424-9300

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Skin Irrit. 2	Causes skin irritation
Eye Dam. 1	Causes serious eye damage
Skin Sens. 1	May cause an allergic skin reaction
Carc. 1A	May cause cancer
STOT SE 3	May cause respiratory irritation
STOT RE 1	Causes damage to organs (lungs) through prolonged or repeated exposure

2.2. GHS Label elements, including precautionary statements

GHS US labeling

Hazard pictograms (GHS US)



Signal word (GHS US)

: Danger

Hazard statements (GHS US)

: Causes skin irritation
May cause an allergic skin reaction
Causes serious eye damage
May cause respiratory irritation
May cause cancer
Causes damage to organs (lungs) through prolonged or repeated exposure
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Do not breathe dust.
Wash hands, forearms and face thoroughly after handling.
Do not eat, drink or smoke when using this product.

Precautionary statements (GHS US)

Amerimix 600CG – Core Fill Grout Coarse

Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

Use only outdoors or in a well-ventilated area. If not in a well-ventilated area, wear a NIOSH-approved respirator or other dust mask when using the product to avoid or minimize exposure to dust.

Contaminated work clothing must not be allowed out of the workplace.

Wear eye protection, face protection, protective clothing, protective gloves.

If exposed or concerned: Get medical advice/attention.

If on skin: Wash with plenty of water.

If skin irritation or rash occurs: Get medical advice/attention.

Take off contaminated clothing and wash it before reuse.

If inhaled: Remove person to fresh air and keep comfortable for breathing.

Call a poison center or doctor if you feel unwell.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Immediately call a poison center or doctor.

Store in a well-ventilated place. Keep container tightly closed.

Store locked up.

Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other hazards which do not result in classification

Other hazards which do not result in classification : Not applicable.

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%
Quartz	CAS-No.: 14808-60-7	60 – 100
Cement, portland, chemicals	CAS-No.: 65997-15-1	10 – 35
Calcium magnesium hydroxide (CaMg(OH)4)	CAS-No.: 39445-23-3	2.5 – 7
Calcium magnesium hydroxide oxide (CaMg(OH)2O)	CAS-No.: 58398-71-3	2.5 – 7
Calcium hydroxide	CAS-No.: 1305-62-0	1 – 5
Limestone	CAS-No.: 1317-65-3	0.5 – 2
Calcium oxide	CAS-No.: 1305-78-8	0.5 – 2
Sulfuric acid, calcium salt (1:1)	CAS-No.: 7778-18-9	0.5 – 2
Gypsum (Ca(SO4).2H2O)	CAS-No.: 13397-24-5	0.5 - 2

*Chemical name, CAS number and/or exact concentration have been withheld as a trade secret

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures after inhalation : If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

Amerimix 600CG – Core Fill Grout Coarse

Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

First-aid measures after skin contact	: IF ON SKIN: Brush off loose particles from skin. Immerse in cool water. Take off contaminated clothing and wash it before reuse. If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact	: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center or doctor/physician.
First-aid measures after ingestion	: Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Get medical advice/attention if you feel unwell.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects after inhalation	: Dust may cause respiratory tract irritation. Respirable crystalline silica (quartz) can cause silicosis, a fibrosis (scarring) of the lungs.
Symptoms/effects after skin contact	: Causes skin irritation. May cause burns in the presence of moisture. Skin contact during hydration may slowly develop sufficient heat that may cause severe burns possibly resulting in permanent injury. Do not allow product to harden around any body part or allow continuous, prolonged contact with skin. Handling can cause dry skin. May cause an allergic skin reaction.
Symptoms/effects after eye contact	: Causes serious eye damage. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva. May cause burns.
Symptoms/effects after ingestion	: May be harmful if swallowed. May cause gastrointestinal irritation, nausea, vomiting and diarrhea.
Chronic symptoms	: May cause cancer through inhalation of dust. Causes damage to organs through prolonged or repeated exposure.

4.3. Immediate medical attention and special treatment, if necessary

Symptoms may not appear immediately. In case of accident or if you feel unwell, seek medical advice immediately (show the label or SDS where possible).

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media	: Use extinguishing media appropriate for surrounding fire.
Unsuitable extinguishing media	: Do not use water jet.

5.2. Specific hazards arising from the chemical

Fire hazard	: Products of combustion may include, and are not limited to: oxides of carbon. irritating vapors.
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5.3. Special protective equipment and precautions for fire-fighters

Protection during firefighting	: Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA).
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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	: Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel.
------------------	--

6.1.1. For non-emergency personnel

No additional information available

6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

Prevent entry to sewers and public waters.

Amerimix 600CG – Core Fill Grout Coarse

Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

6.3. Methods and material for containment and cleaning up

- For containment : Contain spill, then place in a suitable container. Minimize dust generation. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).
- Methods for cleaning up : Vacuum or sweep material and place in a disposal container. Provide ventilation.

6.4. Reference to other sections

See section 8 for further information on protective clothing and equipment and section 13 for advice on waste disposal.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not swallow. Do not get in eyes, on skin, or on clothing. Do not breathe dust/fume/gas/mist/vapors/spray. Wear appropriate PPE (see Section 8). Handle and open container with care. When using do not eat, drink or smoke. Use only outdoors or in a well-ventilated area. Avoid generating dust. Good housekeeping is important to prevent accumulation of dust. The use of compressed air for cleaning clothing, equipment, etc, is not recommended.
- Hygiene measures : Take off contaminated clothing and wash it before reuse. Contaminated work clothing should not be allowed out of the workplace. Wash hands, forearms and face thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Keep out of the reach of children. Store locked up. Keep away from food, drink and animal feedingstuffs. Store in dust-tight, dry, labelled containers. Avoid any dust buildup by frequent cleaning and suitable construction of the storage area. Do not store in an area equipped with emergency water sprinklers. Keep container tightly closed when not in use. Store in a cool, well-ventilated place.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Amerimix 600CG – Core Fill Grout Coarse	
No additional information available	
Cement, portland, chemicals (65997-15-1)	
USA - ACGIH - Occupational Exposure Limits	
Local name	Portland cement
ACGIH OEL TWA	1 mg/m ³ (particulate matter containing no asbestos and <1% crystalline silica, respirable particulate matter)
Remark (ACGIH)	TLV® Basis: Pulm func; resp symptoms; asthma. Notations: A4 (Not classifiable as a Human Carcinogen)
ACGIH chemical category	Not Classifiable as a Human Carcinogen
Regulatory reference	ACGIH 2020
USA - OSHA - Occupational Exposure Limits	
OSHA PEL (TWA) [1]	15 mg/m ³ (total dust) 5 mg/m ³ (respirable fraction)
USA - IDLH - Occupational Exposure Limits	
IDLH	5000 mg/m ³

Amerimix 600CG – Core Fill Grout Coarse

Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

Cement, portland, chemicals (65997-15-1)	
USA - NIOSH - Occupational Exposure Limits	
NIOSH REL (TWA)	10 mg/m ³ (total dust) 5 mg/m ³ (respirable dust)
Calcium oxide (1305-78-8)	
USA - ACGIH - Occupational Exposure Limits	
ACGIH OEL TWA	2 mg/m ³
USA - OSHA - Occupational Exposure Limits	
OSHA PEL (TWA) [1]	5 mg/m ³
USA - IDLH - Occupational Exposure Limits	
IDLH	25 mg/m ³
USA - NIOSH - Occupational Exposure Limits	
NIOSH REL (TWA)	2 mg/m ³
Calcium magnesium hydroxide (CaMg(OH)₄) (39445-23-3)	
No additional information available	
Calcium magnesium hydroxide oxide (CaMg(OH)₂O) (58398-71-3)	
No additional information available	
Calcium hydroxide (1305-62-0)	
USA - ACGIH - Occupational Exposure Limits	
ACGIH OEL TWA	5 mg/m ³
USA - OSHA - Occupational Exposure Limits	
OSHA PEL (TWA) [1]	15 mg/m ³ (total dust) 5 mg/m ³ (respirable fraction)
USA - NIOSH - Occupational Exposure Limits	
NIOSH REL (TWA)	5 mg/m ³
Sulfuric acid, calcium salt (1:1) (7778-18-9)	
USA - ACGIH - Occupational Exposure Limits	
ACGIH OEL TWA	10 mg/m ³ (inhalable particulate matter)
USA - OSHA - Occupational Exposure Limits	
OSHA PEL (TWA) [1]	15 mg/m ³ (total dust) 5 mg/m ³ (respirable fraction)
USA - NIOSH - Occupational Exposure Limits	
NIOSH REL (TWA)	10 mg/m ³ (total dust) 5 mg/m ³ (respirable dust)
Limestone (1317-65-3)	
USA - OSHA - Occupational Exposure Limits	
OSHA PEL (TWA) [1]	15 mg/m ³ (total dust) 5 mg/m ³ (respirable fraction)

Amerimix 600CG – Core Fill Grout Coarse

Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

Limestone (1317-65-3)	
USA - NIOSH - Occupational Exposure Limits	
NIOSH REL (TWA)	10 mg/m ³ (total dust) 5 mg/m ³ (respirable dust)
Gypsum (Ca(SO₄).2H₂O) (13397-24-5)	
USA - ACGIH - Occupational Exposure Limits	
ACGIH OEL TWA	10 mg/m ³ (inhalable particulate matter (Calcium sulfate))
USA - OSHA - Occupational Exposure Limits	
OSHA PEL (TWA) [1]	15 mg/m ³ (total dust) 5 mg/m ³ (respirable fraction)
USA - NIOSH - Occupational Exposure Limits	
NIOSH REL (TWA)	10 mg/m ³ (total dust) 5 mg/m ³ (respirable dust)
Quartz (14808-60-7)	
USA - ACGIH - Occupational Exposure Limits	
Local name	Silica crystalline - quartz
ACGIH OEL TWA	0.025 mg/m ³ (respirable particulate matter)
Remark (ACGIH)	TLV® Basis: Pulm fibrosis; lung cancer. Notations: A2 (Suspected Human Carcinogen)
ACGIH chemical category	Suspected Human Carcinogen
Regulatory reference	ACGIH 2023
USA - OSHA - Occupational Exposure Limits	
Local name	Quartz (Total Dust) (Silica: Crystalline)
OSHA PEL (TWA) [1]	50 µg/m ³ (Respirable crystalline silica)
Remark (OSHA)	Table Z-3. For OSHA PEL (TWA) use formula: (30 mg/m ³ / (%SiO ₂ +2)) for mg/m ³ . CAS No. source: eCFR Table Z-1.
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-3 Mineral Dusts
USA - IDLH - Occupational Exposure Limits	
IDLH	50 mg/m ³ (respirable dust)
USA - NIOSH - Occupational Exposure Limits	
NIOSH REL (TWA)	0.05 mg/m ³ (respirable dust)

8.2. Appropriate engineering controls

Appropriate engineering controls	: Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, etc.) below recommended exposure limits.
Environmental exposure controls	: Maintain levels below Community environmental protection thresholds. Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Hand protection:
Wear suitable waterproof gloves. Consult glove manufacturer's product information on material suitability and material thickness.

Amerimix 600CG – Core Fill Grout Coarse

Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

Eye protection:

Wear approved eye (properly fitted dust- or splash-proof chemical safety goggles) / face (face shield) protection.

Skin and body protection:

Wear suitable waterproof protective clothing

Respiratory protection:

A NIOSH approved dust mask or filtering facepiece is recommended in poorly ventilated areas or when permissible exposure limits may be exceeded. Respirators should be selected by and used under the direction of a trained health and safety professional following requirements found in OSHA's respirator standard (29 CFR 1910.134) and ANSI's standard for respiratory protection (Z88.2).

Other information:

Handle according to established industrial hygiene and safety practices. Do not eat, smoke or drink where material is handled, processed or stored.

Wash hands carefully before eating or smoking.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Solid
Appearance	: Powder.
Color	: Various colors
Odor	: Characteristic
Odor threshold	: No data available
pH	: 12 – 13
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: Not flammable.
Vapor pressure	: No data available
Relative vapor density at 20°C	: No data available
Relative density	: No data available
Solubility	: No data available
Partition coefficient n-octanol/water	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available

9.2. Other information

VOC content : 0%, Not applicable; 0 wt, Not applicable.

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reaction known under conditions of normal use.

Amerimix 600CG – Core Fill Grout Coarse

Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

10.2. Chemical stability

Stable under normal storage conditions. Keep dry in storage.

10.3. Possibility of hazardous reactions

No dangerous reaction known under conditions of normal use.

10.4. Conditions to avoid

Incompatible materials. Moisture.

10.5. Incompatible materials

Wet cement is alkaline and incompatible with acid, ammonium salts and aluminum metal.

10.6. Hazardous decomposition products

May include, and are not limited to: oxides of carbon. calcium hydroxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified.
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

Calcium oxide (1305-78-8)

LD50 oral rat	500 mg/kg
LC50 inhalation rat	> 6.04 mg/l/4h
ATE US (oral)	500 mg/kg body weight

Calcium magnesium hydroxide oxide (CaMg(OH)2O) (58398-71-3)

LD50 oral rat	> 2000 mg/kg body weight Animal: rat, Animal sex: female, Guideline: OECD Guideline 425 (Acute Oral Toxicity: Up-and-Down Procedure)
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Calcium hydroxide (1305-62-0)

LD50 oral rat	7340 mg/kg
LD50 dermal rat	> 2500 mg/kg
LC50 inhalation rat	> 6.04 mg/l/4h
ATE US (oral)	7340 mg/kg body weight

Sulfuric acid, calcium salt (1:1) (7778-18-9)

LD50 oral rat	> 3000 mg/kg
LC50 inhalation rat	> 3.26 mg/l air Animal: rat, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity)

Skin corrosion/irritation : Causes skin irritation.
pH: 12 – 13

Calcium oxide (1305-78-8)

pH	12.5 (saturated solution)
----	---------------------------

Calcium hydroxide (1305-62-0)

pH	12.4 (at 25 °C (saturated solution))
----	--------------------------------------

Amerimix 600CG – Core Fill Grout Coarse

Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

Sulfuric acid, calcium salt (1:1) (7778-18-9)	
pH	6 – 7.6 (conc: 20 % (aqueous solution))
Serious eye damage/irritation	: Causes serious eye damage. pH: 12 – 13
Calcium oxide (1305-78-8)	
pH	12.5 (saturated solution)
Calcium hydroxide (1305-62-0)	
pH	12.4 (at 25 °C (saturated solution))
Sulfuric acid, calcium salt (1:1) (7778-18-9)	
pH	6 – 7.6 (conc: 20 % (aqueous solution))
Respiratory or skin sensitization	: May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified
Carcinogenicity	: May cause cancer.
Sulfuric acid, calcium salt (1:1) (7778-18-9)	
NOAEL (chronic,oral,animal/male,2 years)	256 mg/kg body weight Animal: rat, Animal sex: male, Guideline: other:No data, Remarks on results: other:Effect type: carcinogenicity (migrated information)
NOAEL (chronic,oral,animal/female,2 years)	284 mg/kg body weight Animal: rat, Animal sex: female, Guideline: other:No data, Remarks on results: other:Effect type: carcinogenicity (migrated information)
Quartz (14808-60-7)	
IARC group	1 - Carcinogenic to humans
National Toxicology Program (NTP) Status	Known Human Carcinogens
In OSHA Hazard Communication Carcinogen list	Yes
Reproductive toxicity	: Not classified
STOT-single exposure	: May cause respiratory irritation.
Cement, portland, chemicals (65997-15-1)	
STOT-single exposure	May cause respiratory irritation.
Calcium oxide (1305-78-8)	
STOT-single exposure	May cause respiratory irritation.
Calcium magnesium hydroxide (CaMg(OH)4) (39445-23-3)	
STOT-single exposure	May cause respiratory irritation.
Calcium magnesium hydroxide oxide (CaMg(OH)2O) (58398-71-3)	
STOT-single exposure	May cause respiratory irritation.
Calcium hydroxide (1305-62-0)	
STOT-single exposure	May cause respiratory irritation.
STOT-repeated exposure	: Causes damage to organs through prolonged or repeated exposure. (Respirable crystalline silica in the form of quartz or cristobalite from occupational sources is listed by the International Agency for Research on Cancer (IARC) and National Toxicology Program (NTP) as a lung carcinogen. Prolonged exposure to respirable crystalline silica has been known to cause silicosis, a lung disease, which may be disabling. While there may be a factor of individual susceptibility to a given exposure to respirable silica dust, the risk of contracting silicosis and the severity of the disease is clearly related to the amount of dust exposure and the length of time (usually years) of exposure.)

Amerimix 600CG – Core Fill Grout Coarse

Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

Sulfuric acid, calcium salt (1:1) (7778-18-9)	
LOAEL (oral,rat,90 days)	237 mg/kg body weight Animal: rat, Animal sex: male, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
NOAEL (oral,rat,90 days)	79 mg/kg body weight Animal: rat, Animal sex: male, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
Limestone (1317-65-3)	
STOT-repeated exposure	Causes damage to organs through prolonged or repeated exposure.
Quartz (14808-60-7)	
STOT-repeated exposure	Causes damage to organs through prolonged or repeated exposure.
Aspiration hazard	: Not classified
Viscosity, kinematic	: No data available
Potential Adverse human health effects and symptoms	: No data available.
Symptoms/effects after inhalation	: Dust may cause respiratory tract irritation. Respirable crystalline silica (quartz) can cause silicosis, a fibrosis (scarring) of the lungs.
Symptoms/effects after skin contact	: Causes skin irritation. May cause burns in the presence of moisture. Skin contact during hydration may slowly develop sufficient heat that may cause severe burns possibly resulting in permanent injury. Do not allow product to harden around any body part or allow continuous, prolonged contact with skin. Handling can cause dry skin. May cause an allergic skin reaction.
Symptoms/effects after eye contact	: Causes serious eye damage. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva. May cause burns.
Symptoms/effects after ingestion	: May be harmful if swallowed. May cause gastrointestinal irritation, nausea, vomiting and diarrhea.
Chronic symptoms	: May cause cancer through inhalation of dust. Causes damage to organs through prolonged or repeated exposure.
Other information	: Likely routes of exposure: ingestion, inhalation, skin and eye.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : No ecological consideration when used according to directions. Normal dilution of this product to drains, sewers, septic systems and treatment plants is not considered environmentally harmful.

Calcium oxide (1305-78-8)	
LC50 - Fish [1]	1070 mg/l (Exposure time: 96 h - Species: Cyprinus carpio [static])
Calcium magnesium hydroxide oxide (CaMg(OH)2O) (58398-71-3)	
LC50 - Fish [1]	50.6 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri)
EC50 - Crustacea [1]	49.1 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	184.57 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
NOEC (chronic)	32 mg/l Test organisms (species): Crangon septemspinosa Duration: '14 d'
Sulfuric acid, calcium salt (1:1) (7778-18-9)	
LC50 - Fish [1]	2980 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])
LC50 - Fish [2]	> 1970 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])

Amerimix 600CG – Core Fill Grout Coarse

Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

Sulfuric acid, calcium salt (1:1) (7778-18-9)

EC50 72h - Algae [1]	> 79 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
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12.2. Persistence and degradability

Amerimix 600CG – Core Fill Grout Coarse

Persistence and degradability	No data available.
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12.3. Bioaccumulative potential

Amerimix 600CG – Core Fill Grout Coarse

Bioaccumulative potential	No data available.
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Calcium oxide (1305-78-8)

BCF - Fish [1]	(no bioaccumulation)
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Calcium hydroxide (1305-62-0)

BCF - Fish [1]	(no bioaccumulation)
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12.4. Mobility in soil

Amerimix 600CG – Core Fill Grout Coarse

Ecology - soil	No data available.
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12.5. Other adverse effects

Other adverse effects : No data available.

SECTION 13: Disposal considerations

13.1. Disposal methods

Product/Packaging disposal recommendations : Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

SECTION 14: Transport information

In accordance with DOT

14.1. UN number

Not regulated for transport

14.2. UN proper shipping name

Proper Shipping Name (DOT) : Not applicable

14.3. Transport hazard class(es)

DOT

Transport hazard class(es) (DOT) : Not applicable

14.4. Packing group

Packing group (DOT) : Not applicable

Amerimix 600CG – Core Fill Grout Coarse

Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

14.5. Environmental hazards

Other information : No supplementary information available.

14.6. Special precautions for user

Special transport precautions : Do not handle until all safety precautions have been read and understood.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information


15.1. US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory.

15.2. International regulations

No additional information available

15.3. US State regulations

 **WARNING:** This product can expose you to Silica, respirable crystalline, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

SECTION 16: Other information

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

Issue date : 01/16/2016
Revision date : 06/26/2023
Other information : None.
Prepared by : Nexreg Compliance Inc.
www.Nexreg.com



Full text of H-phrases

Carc. 1A	Carcinogenicity Category 1A
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Skin Irrit. 2	Skin corrosion/irritation Category 2
Skin Sens. 1	Skin sensitization, Category 1
STOT RE 1	Specific target organ toxicity (repeated exposure) Category 1
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation

Indication of changes:

SDS update.

Safety Data Sheet (SDS), USA

Amerimix 600CG – Core Fill Grout Coarse

Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

Disclaimer: We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind. The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. It is the user's responsibility to satisfy oneself as to the suitability and completeness of this information for the user's own particular use.



Date: July 3, 2024

RE: LEED Materials and Resources Credits

Project Name: Little Elm Public Safety Annex
Project Location: 107 Ryan Spiritas Parkway – Little Elm, TX 76227
Manufacturer: Amerimix/Jewell
Manufacturing Location: Fort Worth (Hurst), Texas 76053

To Whom It May Concern:

This is to certify that the following information regarding Amerimix products are prepared in accordance with current interpretation of LEED Reference Guide for Green Building Design and Construction, 2016 v4 Edition.

Recycled Materials: **LEED Materials and Resources Credits MR4**
Post Consumer Plus ½ Pre-Consumer

Recycled Content:

<u>Product Name/Type</u>	<u>Post-Consumer</u>	<u>Pre-Consumer (Post-Industrial)</u>
Amerimix AMX 600 Coarse Grout 5,000 psi	0.0%	4.25%

Regional Materials: **LEED Materials and Resources Credits MR 5**
Extracted, Recovered and Manufactured within a 100 mile radius of zip code: 76227

Components Extracted, Recovered and Manufactured Within 100 Miles:

<u>Product Name/ Type</u>	<u>Percentage Within 100 miles of Zip Code:</u>
Amerimix AMX 600 Coarse Grout 5,000 psi	<u>76227</u> 95.7%

Indoor Environmental Air Quality: **LEED Low-Emitting Materials Credit QE 4.1**
Volatile Organic Compounds Content

<u>Product Name/Type</u>	<u>VOC Content</u>
Amerimix AMX 600 Coarse Grout 5000 psi	<10 g/L

Yours,
Michael J. Boenisch
Senior Technical Service Manager
Amerimix/Jewell

Copy: Jacob Mulhern



EXPERIENCED | INNOVATIVE | AUTHENTIC

**ASTM C476/ASTM C1019
Masonry Grout Evaluation**

for

Jewell - Hurst

AMX 600 CG – Coarse (Hurst)

**Jewell
9201 Trinity Boulevard
Hurst, Texas 76053**

August 8, 2023

August 8, 2023

Jewell
9201 Trinity Boulevard
Hurst, Texas 76053

REPORT OF TESTS

SUBJECT: **Physical Analysis of Masonry Grout**

PROJECT: **Jewell – AMX 600 CG – Coarse (Hurst)**

SPECIFICATION: ASTM C476-23, “Standard Specification for Grout for Masonry”

TEST METHODS: ASTM C143, “Standard Test Method for Slump of Hydraulic-Cement Concrete”
ASTM C1019, “Standard Test Method for Sampling and Testing Grout”
ASTM C1064, “Standard Test Method for Temperature of Freshly Mixed Hydraulic-Cement Concrete”

NTL PROJECT #: 23-1218(I)

MATERIAL: Received by NTL from Jewell on June 20, 2023

PAGE: 1 of 3

TEST DATA

Test Material: **AMX 600 CG - Coarse**

Plant Location: Hurst, TX

Batch Date: July 2023

Sample Size: 0.5 ft³

August 8, 2023
Jewell – AMX 600 CG - Coarse (Hurst)
NTL Project #23-1218(I)
Page 2 of 3

TEST RESULTS

ASTM C476/ASTM C1019 – Masonry Grout Analysis

Batch Date: July 2023
Water Added: 11.5%

	<u>Jewell (Hurst)</u> <u>AMX 600 CG - Coarse</u>	<u>ASTM C476-23</u> <u>Masonry Grout</u>
<u>ASTM C143 – Slump</u>	9.75-in	8-11-in
<u>ASTM C1064 – Grout Temperature</u>	72°F	----
<u>ASTM C1019 - Compressive Strength</u>		
Average of three 3.5 x 3.5 x 7.0-in prisms		
7 days	4,220 psi	----
28 days	6,880 psi	2,000 psi, min.

SUMMARY

The test results listed in this report have met or exceeded the requirements as set forth in ASTM C476-23, Section 4.2.1.2.

August 8, 2023
Jewell – AMX 600 CG - Coarse (Hurst)
NTL Project #23-1218(I)
Page 3 of 3

Respectfully submitted,

NELSON TESTING LABORATORIES



Mark R. Nelson
President

Notes: The results listed within this report relate only to the materials submitted for testing. This report shall not be reproduced, except in full, without written approval of this laboratory. The test materials not consumed in this testing will be discarded 14 days from the date of this report unless we receive written notification requesting otherwise. When applicable, Nelson Testing Laboratories uses the simple acceptance/simple rejection decision rule to determine in-tolerance and out-of-tolerance conditions and no measurement uncertainty was applied in that determination.

Accreditation and Certification listings for Nelson Testing Laboratories are located at www.nelsontesting.com.



Portland Cement, Lime & Sand Mortar

AMX 400 Type M, S, N

Product # AMX 400 M, S, N



1. PRODUCT NAME

Amerimix Portland Cement, Lime & Sand Mortar - AMX 400 Type M
Amerimix Portland Cement, Lime & Sand Mortar - AMX 400 Type S
Amerimix Portland Cement, Lime & Sand Mortar - AMX 400 Type N

2. PRODUCT DESCRIPTION

Amerimix Portland Cement, Lime and Sand Mortar - AMX 400 is a factory blend of portland cement, hydrated lime and dried sand. It is specially formulated to provide high water retention, exceptional workability and superior bond strength.

Uses

- Interior or exterior applications
- Above or below grade (*Type N - Above grade only*)
- Laying or resetting brick, block and stone
- For load and non-load bearing construction

Packaging

Available in 80 lb (36.3 kg) bags and bulk bags.

Coverage

One 80 lb (36.3 kg) bag yields approximately .78 ft³ (0.02 m³) and will lay up to 12 concrete blocks or 40 - 50 standard bricks with 3/8" (9.5 mm) mortar joints, or 17 ft² (1.6 m²) of manufactured stone. One 3,000 lb (1,361 kg) bulk bag will lay up to 450 concrete blocks or 1350 standard bricks.

Limitations

1. The type of mortar selected should be coordinated with the type of application, type of masonry units and intended use. Mortars with lesser compressive strength should be used with softer masonry units or tuck pointing applications.
2. The optimal temperature range for mortar application is between 40°F and 90°F (4°C and 32°C). Application outside of this range is possible when appropriate precautions for cold or hot weather construction are implemented in compliance with ACI, PCA, ASTM, IMIAC, or Masonry Institute standards.

3. Agitate material as necessary within its working time to maintain workability.
4. Do not add materials other than clean potable water.
5. Water with a high mineral salt content can cause efflorescence. Efflorescence occurs naturally and is beyond the control of Amerimix.
6. Do not overwater. Avoid adding excessive amounts of water that promote segregation or bleeding of the mortar, and loss of strength and durability.
7. Protect uncoated aluminum from direct contact with portland cement-based materials.
8. Shelf life not to exceed one year from date of manufacture.
9. Not to be used as grout for traffic bearing surfaces.
10. Type N to be used for above grade applications.

NOTE:

Amerimix AMX Portland Cement, Lime and Sand Mortar - AMX 400 should be installed in accordance with the provisions of applicable ASTM standards and the local building code. Always follow traditional industry best practices appropriate for the application and weather conditions. Good workmanship in conjunction with proper design and detailing assures durable, efficient, watertight construction.

Safety

READ THE SAFETY DATA SHEET (SDS) BEFORE USING THIS PRODUCT. MSDS Sheets are available on our website Amerimix.com or contact CHEMTREC (24 hours availability) 800-424-9300 for International inquiries +01-703-527-3887, or contact Amerimix Technical Services at 888-313-0755.

3. TECHNICAL DATA

Meets or exceeds the following:

ASTM C270 Property Specification Requirements

Mortar	Average Compressive Strength Minimum psi (MPa)	Water Retention Minimum %	Air Content Maximum %
Type M	28 Days 2500 (17.2)	75	12
Type S	28 Days 1800 (12.4)	75	12
Type N	28 Days 750 (5.2)	75	12

NOTES:

- Mortar is designed to meet the requirements of ASTM C270 Standard Specification for Mortar for Unit Masonry. This is a laboratory test procedure.
- Mortar should be tested in the field by ASTM C780 Standard Test Method for Preconstruction and Construction Evaluation of Mortar for Plain and Reinforced Unit Masonry.
- Due to the procedural differences between ASTM C270 and C780,

the compressive strength values resulting from field sampled mortars are not required nor expected to meet the compressive strength of the property specification requirements of C270 as tested under laboratory conditions, nor do they represent the compressive strength of the mortar in the wall.

Applicable Standards

American Concrete Institute (ACI)

- ACI 530.1 Specification for Masonry Structures

ASTM International (ASTM)

- ASTM C91 Standard Specification for Masonry Cement
- ASTM C150 Standard Specification for Portland Cement
- ASTM C207 Standard Specification for Hydrated Lime for Masonry Purposes
- ASTM C270 Standard Specification for Mortar for Unit Masonry
- ASTM C387 Standard Specification for Packaged, Dry, Combined Materials for Mortar and Concrete
- ASTM C595 Standard Specification for Blended Hydraulic Cements
- ASTM C780 Standard Test Method for Preconstruction and Construction Evaluation of Mortars for Plain and Reinforced Unit Masonry
- ASTM C979 Standard Specification for Pigments for Integrally Colored Concrete
- ASTM C1093 Standard Practice for Accreditation of Testing Agencies for Unit Masonry
- ASTM C1157 Standard Performance Specification For Hydraulic Cements
- ASTM C1314 Standard Test Method for Compressive Strength of Masonry Prisms
- ASTM C1384 Standard Specification for Admixtures for Masonry
- ASTM C1586 Standard Guide for Quality Assurance of Mortar

International Masonry Industry All-Weather Council (IMIAC)

- Recommended Practices and Guide Specifications for Cold Weather Masonry Construction
- Recommended Practices and Guide Specifications for Hot Weather Masonry Construction

National Concrete Masonry Association (NCMA)

- NCMA TEK Bulletin #8-2A Removal of Stains from Concrete Masonry
- NCMA TEK Bulletin #8-3A Control and Removal of Efflorescence

Sustainability

Amerimix products generally qualify for LEED Materials and Resources credits for Recycled Materials and Regional Materials. Visit amerimix.com or contact Technical Services for additional information regarding LEED qualifications for your specific product application and project location.

4. INSTALLATION Preparation

1. Remove all loose particles, dirt, dust, or any foreign materials that would inhibit proper bond to brick, block, stone or masonry substrate.
2. Certain conditions may require the substrate to be SSD (saturated surface dry) conditioned such as dry windy climates, porous substrates, or high temperatures.

Job Mock Ups

Amerimix requires that when Amerimix Portland Cement, Lime and Sand Mortar - AMX 400 is used in any application or as part of any system that includes other manufacturers' products, the contractor and/or design professional shall test all the system components collectively for compatibility, performance and long-term intended use in accordance with pertinent and accepted industry standards prior to any construction. Written documentation of the test performed shall be satisfactory to the design professional and contractor. Test results must include the means and methods of application, products used, project-specific conditions being addressed, and standardized tests performed for each proposed system or variation. Approved mock ups or sample panels should be retained until completion of the project.

Mixing

1. Use of a mechanical mixer will help ensure a more uniform mix.
2. Use approximately 1.5 gal (5.7 L) of clean potable water per 80 lb (36.3 kg) bag. Pour approximately 3/4 of the required amount into the mixer.
3. With the mixer running, add bags of dry mortar and mix thoroughly.
4. Add additional water in small amounts as necessary to achieve optimum consistency and workability. Mix for a minimum of 5 minutes, adding enough of the remaining water to achieve a fluid workable consistency. Caution: Adding too much water will reduce strength.
5. Let mix stand for 2 minutes to enable the absorption of water and re-mix.
6. Mortar should always be mixed to a firm, moist consistency. A mix that is too dry and crumbly will not provide the proper bond. AVOID A SOUPY MIX. Mortar that is too wet will be weak and will not provide an adequate bond to the substrate.
7. Addition of cold water at high temperatures or warm water at low temperatures will aid in adjusting the set time.

Performance Recommendations

1. Only water lost to evaporation should be replaced by re-tempering, not water lost to hydration. The re-tempering of mortar will alter color and appearance of the mortar joint and may also reduce bond and compressive strength.
2. Concave tooling of joints should be performed when mortar joint is thumbprint hard. For consistency of finish and color, joints should be struck with consistent timing, avoiding early or late tooling.

Curing

Loss of surface water may occur quickly due to higher ambient air temperatures and windy conditions. Fog spray as needed. Protect from rain and freezing for 24 hours.

Cleaning

Use water to clean all tools immediately after use. Dried material must be mechanically removed. For cleaning mortar joints, use the least aggressive solvent required to accomplish the task. Only clean potable water should be used in the cleaning process.

5. AVAILABILITY

Amerimix products are available throughout the U.S. and Canada.

For information please contact Amerimix at

Toll Free: 888-313-0755

Website: Amerimix.com

6. TECHNICAL SUPPORT

For technical assistance please contact us

Toll Free: 888-313-0755

7. WARRANTY

LIMITED WARRANTY

What Does This Warranty Cover? Amerimix warrants that this product will (a) be free from defects in material and workmanship, and (b) conform to specifications set forth in Bonsal American's product literature at the time of manufacturer.

How Long Does Coverage Last? This warranty lasts for a period of one (1) year from the date of purchase. ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE IS LIMITED TO THE DURATION OF THIS EXPRESS WARRANTY. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

What Will Amerimix Do to Address Problems? Amerimix will replace the defective product or refund the purchase price, at its option.

What Does This Warranty Not Cover? Amerimix will not be liable for damage or loss resulting from a failure to store, use, install or maintain the product in strict accordance with Amerimix's specifications and instructions. In no event will Amerimix be liable for damages in excess of the purchase price for the product. CONSEQUENTIAL, SPECIAL AND INCIDENTAL DAMAGES ARE NOT RECOVERABLE UNDER THIS WARRANTY. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

How Do I Get Warranty Service? Within thirty (30) days after discovering a defect in the product, contact Amerimix in writing at the following address:

Amerimix
Technical Support Group
Charlotte, NC 28217

Include with your letter a brief description of the problem and any sales receipt, invoice or other proof of the date of purchase. To obtain Amerimix's technical or sales literature, please call (888)313-0755 or visit our web site at amerimix.com.

How Does State Law Relate to This Warranty? This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

WARNING - INJURIOUS TO EYES. CAUSES SKIN IRRITATION.

This product contains portland cement and silica sand. Avoid contact with eyes and skin. Do not take internally. Crystalline silica sand may cause serious lung problems. Avoid breathing dust and wear a respirator in dusty areas. Contact with wet unhardened concrete, mortar, cement or cement mixtures can cause skin irritation, severe chemical burns or serious eye damage. Wear waterproof gloves, a fully buttoned long-sleeved shirt, full-length trousers and tight fitting safety goggles. If you have to stand in wet product, wear waterproof boots high enough to keep product from getting inside. If working on hands and knees, wear kneepads. Indirect contact through clothing can be as serious as direct contact. Promptly, rinse out wet product from clothing.

California Proposition 65: This product contains Crystalline Silica, Quartz and may also contain trace amounts of other chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

KEEP OUT OF THE REACH OF CHILDREN AND ANIMALS.

FIRST AID: Eye Contact: Flood eyes with water for at least 15 minutes and consult a physician immediately. DO NOT RUB EYES. Skin Contact: Wash exposed skin area with soap and water. Consult a physician if irritation persists. Inhalation: Remove to fresh air. Ingestion: Immediately consult a physician.

For additional information, call Amerimix at 888-313-0755 or CHEMTREC at 800-424-9300 or 703-527-3887 outside of the USA. Refer to Safety Data Sheet (SDS) for further information.

ENVIRONMENTAL ADVISORY: Uncured or crushed cured cement is an environmental hazard, which may adversely affect fish and wildlife. Dispose of construction debris containing cement, including empty bags, at a permitted municipal disposal firm. Do not use crushed concrete as a fill near an aquatic habitat.

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Mixture

Product name / Product code :

- Amerimix Mortar Type M, S & N Portland Cement Lime Sand (AMX 400)
- Amerimix Mortar Type S Fast Set Portland Cement Lime Sand (AMX 400-S FS)
- Amerimix Water Repellent Mortar Type N & S Portland Cement Lime Sand (AMX 410)
- Amerimix Pointing Mortar (AMX 420)
- Amerimix Stone Veneer Mortar - Buff (AMX 470)
- Amerimix Polymer Modified Stone Veneer Mortar (AMX 475)
- Amerimix Mortar Type M, S & N Masonry Cement & Sand (AMX 500)
- Amerimix Water Repellent Mortar Type M, N & S Masonry Cement & Sand (AMX 510)
- Amerimix Core Fill Grout - Coarse I (AMX 600 CG)
- Amerimix Core Fill Grout - Fine (AMX 600 FG)
- Amerimix Self Consolidating Coarse Grout (AMX 610 CG)
- Amerimix Scratch Brown & Finish Stucco (AMX 700 SBF)
- Amerimix Water Mold Mildew Resistant Stucco (AMX 710 WMMR)
- Amerimix Premium Plus Stucco (AMX 715 Prem+ Stuc With & Without Fiber)
- Amerimix 2:1 Scratch Brown & Finish Stucco (AMX 760 2:1 SBF)

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Various.

1.3. Details of the supplier of the safety data sheet

Oldcastle Architectural Inc.
 Three Glenlake Parkway, Floor 12
 30328 Atlanta, GA - USA
 T 800-334-0784 Tech Service: Monday - Friday; 8:00am - 5:00pm EST

1.4. Emergency telephone number

Emergency number : CHEMTREC
 1-800-424-9300 [USA] / +1 703-527-3887 [CAN]

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS-US classification

Acute toxicity 4 (Oral)
 Skin Irritation 2
 Serious Eye Damage 1
 Skin Sensitization 1
 Carcinogenicity 1A
 Specific Target Organ Toxicity After Single Exposure 3
 Specific Target Organ Toxicity After Repeated Exposure 1

2.2. Label elements

GHS-US labelling

Hazard pictograms (GHS-US) :



Signal word (GHS-US) : Danger

Hazard statements (GHS-US) : Harmful if swallowed. Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. May cause cancer. May cause respiratory irritation. Causes damage to lungs through prolonged or repeated exposure.

Precautionary statements (GHS-US) : Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. Contaminated work clothing must not be allowed out of the workplace. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves/protective clothing/eye protection/face protection. Use only outdoors or in a well-ventilated area. Do not breathe dust. If exposed or concerned: Get medical advice/attention. If swallowed: Immediately call a poison center/doctor. Rinse mouth. If on skin: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center/doctor. If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a poison center/doctor if you feel unwell. Store locked up. Store in a well ventilated place. Keep container tightly closed. Dispose of contents and container in accordance with all local, regional, national and international regulations.

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according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

2.3. Other hazards

Other hazards not contributing to the classification : Not applicable.

2.4. Unknown acute toxicity (GHS-US)

Amerimix 2:1 Scratch Brown & Finish Stucco (AMX 760 2:1 SBF): 20% of the mixture consists of ingredient(s) of unknown acute toxicity.
Amerimix Polymer Modified Stone Veneer Mortar (AMX 475): 19% of the mixture consists of ingredient(s) of unknown acute toxicity.
Amerimix Stone Veneer Mortar - Buff (AMX 470): 18% of the mixture consists of ingredient(s) of unknown acute toxicity.
Amerimix Scratch Brown & Finish Stucco (AMX 700 SBF): 17% of the mixture consists of ingredient(s) of unknown acute toxicity.
Amerimix Water Mold Mildew Resistant Stucco (AMX 710 WMMR); Amerimix Premium Plus Stucco (AMX 715 Prem+Stuc W & WO Fiber); Amerimix Fine Grout - Core Fill (AMX 600 FG); Amerimix Water Repellent Mortar Type M, N & S Masonry Cement & Sand (AMX 510); Amerimix Mortar Type M, S & N Masonry Cement & Sand (AMX 500): 16% of the mixture consists of ingredient(s) of unknown acute toxicity.
Amerimix Water Repellent Mortar Type N & S Portland Cement Lime Sand (AMX 410): 14% of the mixture consists of ingredient(s) of unknown acute toxicity.
Amerimix Mortar Type M, S & N Portland Cement Lime Sand (AMX 400): 13% of the mixture consists of ingredient(s) of unknown acute toxicity.
Amerimix Coarse Grout - Core Fill (AMX 600 CG); Amerimix Self Consolidating Coarse Grout (AMX 610 CG); Amerimix Mortar Type S Fast Set Portland Cement Cement Lime Sand (AMX 400-S FS): 12% of the mixture consists of ingredient(s) of unknown acute toxicity.
Amerimix Pointing Mortar (AMX 420): 10% of the mixture consists of ingredient(s) of unknown acute toxicity.

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable.

3.2. Mixture

Name	Product identifier	%	GHS-US classification
Quartz	(CAS No) 14808-60-7	60 - 100	Acute Tox. 4 (Oral), H302 Carc. 1A, H350 STOT RE 1, H372
Cement, portland, chemicals	(CAS No) 65997-15-1	10 - 35	Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 STOT SE 3, H335
Calcium magnesium hydroxide (CaMg(OH)4)	(CAS No) 39445-23-3	2.5 - 7	Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335
Calcium magnesium hydroxide oxide (CaMg(OH)2O)	(CAS No) 58398-71-3	2.5 - 7	Not classified
Calcium hydroxide	(CAS No) 1305-62-0	1 - 5	Skin Corr. 1B, H314 Eye Dam. 1, H318
Limestone	(CAS No) 1317-65-3	0.5 - 2	Not classified
Calcium oxide	(CAS No) 1305-78-8	0.5 - 2	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335
Calcium sulfate	(CAS No) 7778-18-9	0.5 - 2	Not classified
Gypsum (Ca(SO4).2H2O)	(CAS No) 13397-24-5	0.5 - 2	Not classified

The exact percentage (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of §1910.1200.

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation : If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.

First-aid measures after skin contact : In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Call a physician if irritation develops and persists.

First-aid measures after eye contact : In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. If easy to do, remove contact lenses, if worn. Get medical attention immediately.

First-aid measures after ingestion : If swallowed, do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Immediately call a POISON CENTER or doctor/physician.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries after inhalation : May cause respiratory tract irritation.

Symptoms/injuries after skin contact : Causes skin irritation. May cause burns in the presence of moisture. Skin contact during hydration may slowly develop sufficient heat that may cause severe burns possibly resulting in permanent injury. Do not allow product to harden around any body part or allow continuous, prolonged contact with skin. Handling can cause dry skin. May cause sensitisation by skin contact.

Symptoms/injuries after eye contact : Causes serious eye damage. May cause burns in the presence of moisture. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling.

Symptoms/injuries after ingestion : Harmful if swallowed. May cause stomach distress, nausea or vomiting.

4.3. Indication of any immediate medical attention and special treatment needed

Symptoms may not appear immediately. In case of accident or if you feel unwell, seek medical advice immediately (show the label or SDS where possible).

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according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Treat for surrounding material.
Unsuitable extinguishing media : Not available.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Products of combustion may include, and are not limited to: oxides of carbon.

5.3. Advice for firefighters

Firefighting instructions : Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA).

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel.

6.2. Methods and material for containment and cleaning up

For containment : Contain spill, then place in a suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).
Methods for cleaning up : Vacuum or sweep material and place in a disposal container.

6.3. Reference to other sections

No additional information available.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Avoid contact with skin and eyes. Avoid generating and breathing dust. Do not swallow. Good housekeeping is important to prevent accumulation of dust. The use of compressed air for cleaning clothing, equipment, etc, is not recommended. Handle and open container with care. When using do not eat, drink or smoke.
Hygiene measures : Launder contaminated clothing before reuse. Wash hands before eating, drinking, or smoking.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep out of the reach of children. Store in dust-tight, dry, labelled containers. Keep container tightly closed when not in use. Avoid any dust buildup by frequent cleaning and suitable construction of the storage area. Do not store in an area equipped with emergency water sprinklers.

7.3. Specific end use(s)

No additional information available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Quartz (14808-60-7)		
USA ACGIH	ACGIH TWA (mg/m ³)	0.025 mg/m ³
USA OSHA	OSHA PEL (TWA) (mg/m ³)	(30)/(%SiO ₂ + 2) mg/m ³ TWA, total dust (250)/(%SiO ₂ + 5) mppcf TWA, respirable fraction (10)/(%SiO ₂ + 2) mg/m ³ TWA, respirable fraction
Cement, portland, chemicals (65997-15-1)		
USA ACGIH	ACGIH TWA (mg/m ³)	1 mg/m ³
USA OSHA	OSHA PEL (TWA) (mg/m ³)	5 mg/m ³
Calcium oxide (1305-78-8)		
USA ACGIH	ACGIH TWA (mg/m ³)	2 mg/m ³
USA OSHA	OSHA PEL (TWA) (mg/m ³)	5 mg/m ³
Calcium hydroxide (1305-62-0)		
USA ACGIH	ACGIH TWA (mg/m ³)	5 mg/m ³
USA OSHA	OSHA PEL (TWA) (mg/m ³)	5 mg/m ³
Calcium sulfate (7778-18-9)		
USA ACGIH	ACGIH TWA (mg/m ³)	10 mg/m ³
USA OSHA	OSHA PEL (TWA) (mg/m ³)	5 mg/m ³

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Limestone (1317-65-3)		
USA ACGIH	ACGIH TWA (mg/m ³)	10 mg/m ³
USA OSHA	OSHA PEL (TWA) (mg/m ³)	5 mg/m ³

Gypsum (Ca(SO ₄).2H ₂ O) (13397-24-5)		
USA ACGIH	ACGIH TWA (mg/m ³)	10 mg/m ³
USA OSHA	OSHA PEL (TWA) (mg/m ³)	5 mg/m ³

8.2. Exposure controls

Appropriate engineering controls	: Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, etc.) below recommended exposure limits.
Hand protection	: Wear suitable waterproof gloves.
Eye protection	: Wear approved eye protection (properly fitted dust- or splash-proof chemical safety goggles) and face protection (face shield).
Skin and body protection	: Wear suitable waterproof protective clothing.
Respiratory protection	: A NIOSH approved dust mask or filtering facepiece is recommended in poorly ventilated areas or when permissible exposure limits may be exceeded. Respirators should be selected by and used under the direction of a trained health and safety professional following requirements found in OSHA's respirator standard (29 CFR 1910.134) and ANSI's standard for respiratory protection (Z88.2).
Other information	: Handle according to established industrial hygiene and safety practices. Do not eat, smoke or drink where material is handled, processed or stored. Wash hands carefully before eating or smoking.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Solid.
Appearance	: Powder.
Colour	: Various.
Odour	: Characteristic.
Odour threshold	: No data available.
pH	: 12 - 13
Relative evaporation rate (butylacetate=1)	: No data available.
Melting point	: No data available.
Freezing point	: No data available.
Boiling point	: No data available.
Flash point	: No data available.
Self ignition temperature	: No data available.
Decomposition temperature	: No data available.
Flammability (solid, gas)	: Not Flammable.
Vapour pressure	: No data available.
Relative vapour density at 20 °C	: No data available.
Relative density	: No data available.
Solubility	: No data available.
Log Pow	: No data available.
Log Kow	: No data available.
Viscosity, kinematic	: No data available.
Viscosity, dynamic	: No data available.
Explosive properties	: No data available.
Oxidising properties	: No data available.
Explosive limits	: No data available.

9.2. Other information

VOC content	: 0%, Not applicable; 0 wt, Not applicable.
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SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reaction known under conditions of normal use.

10.2. Chemical stability

Stable under normal storage conditions. Keep dry in storage.

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according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

10.3. Possibility of hazardous reactions

No dangerous reaction known under conditions of normal use.

10.4. Conditions to avoid

Incompatible materials. Moisture.

10.5. Incompatible materials

Wet cement is alkaline and incompatible with acid, ammonium salts and aluminum metal.

10.6. Hazardous decomposition products

May include, and are not limited to: oxides of carbon.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Harmful if swallowed.

Quartz (14808-60-7)	
LD50 oral rat	500 mg/kg
Calcium oxide (1305-78-8)	
LD50 oral rat	500 mg/kg
Calcium hydroxide (1305-62-0)	
LD50 oral rat	7340 mg/kg
Calcium sulfate (7778-18-9)	
LD50 oral rat	> 3000 mg/kg

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ATE (oral)	530.2 mg/kg - 653.8 mg/kg, rat
ATE (dermal)	No data available.
ATE (inhalation)	No data available.

Skin corrosion/irritation : Causes skin irritation.
Serious eye damage/irritation : Causes serious eye damage.
Respiratory or skin sensitisation : May cause an allergic skin reaction.
Germ cell mutagenicity : Based on available data, the classification criteria are not met.
Carcinogenicity : May cause cancer.

Quartz (14808-60-7)	
IARC group	1
National Toxicity Program (NTP) Status	2

Reproductive toxicity : Based on available data, the classification criteria are not met.
Specific target organ toxicity (single exposure) : May cause respiratory irritation.
Specific target organ toxicity (repeated exposure) : Causes damage to organs through prolonged or repeated exposure. (Respirable crystalline silica in the form of quartz or cristobalite from occupational sources is listed by the International Agency for Research on Cancer (IARC) and National Toxicology Program (NTP) as a lung carcinogen. Prolonged exposure to respirable crystalline silica has been known to cause silicosis, a lung disease, which may be disabling. While there may be a factor of individual susceptibility to a given exposure to respirable silica dust, the risk of contracting silicosis and the severity of the disease is clearly related to the amount of dust exposure and the length of time (usually years) of exposure.)
Aspiration hazard : Based on available data, the classification criteria are not met.
Symptoms/injuries after inhalation : May cause respiratory tract irritation.
Symptoms/injuries after skin contact : Causes skin irritation. May cause burns in the presence of moisture. Skin contact during hydration may slowly develop sufficient heat that may cause severe burns possibly resulting in permanent injury. Do not allow product to harden around any body part or allow continuous, prolonged contact with skin. Handling can cause dry skin. May cause sensitisation by skin contact.
Symptoms/injuries after eye contact : Causes serious eye damage. May cause burns in the presence of moisture. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling.
Symptoms/injuries after ingestion : Harmful if swallowed. May cause stomach distress, nausea or vomiting.
Other information : Likely routes of exposure: ingestion, inhalation, skin and eye.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : No ecological consideration when used according to directions. Normal dilution of this product to drains, sewers, septic systems and treatment plants is not considered environmentally harmful.

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according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

12.2. Persistence and degradability

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Persistence and degradability	No data available.
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12.3. Bioaccumulative potential

AMX Series 400, 500, 600, 700

Bioaccumulative potential	No data available.
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12.4. Mobility in soil

AMX Series 400, 500, 600, 700

Ecology - soil	No data available.
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12.5. Other adverse effects

Other adverse effects : No data available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations : This material must be disposed of in accordance with all local, state, provincial, and federal regulations.

SECTION 14: Transport information

In accordance with DOT:

14.1. UN number

Not applicable.

14.2. UN proper shipping name

Not applicable.

14.3. Additional information

Other information : No supplementary information available.

SECTION 15: Regulatory information

15.1. US Federal regulations

Quartz (14808-60-7)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Cement, portland, chemicals (65997-15-1)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Calcium oxide (1305-78-8)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Calcium magnesium hydroxide (CaMg(OH)₄) (39445-23-3)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Calcium magnesium hydroxide oxide (CaMg(OH)₂O) (58398-71-3)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Calcium hydroxide (1305-62-0)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Calcium sulfate (7778-18-9)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Limestone (1317-65-3)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. US State regulations

AMX Series 400, 500, 600, 700

State or local regulations	This product contains Crystalline Silica, Quartz and may also contain other chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.
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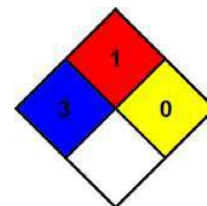
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according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

SECTION 16: Other information

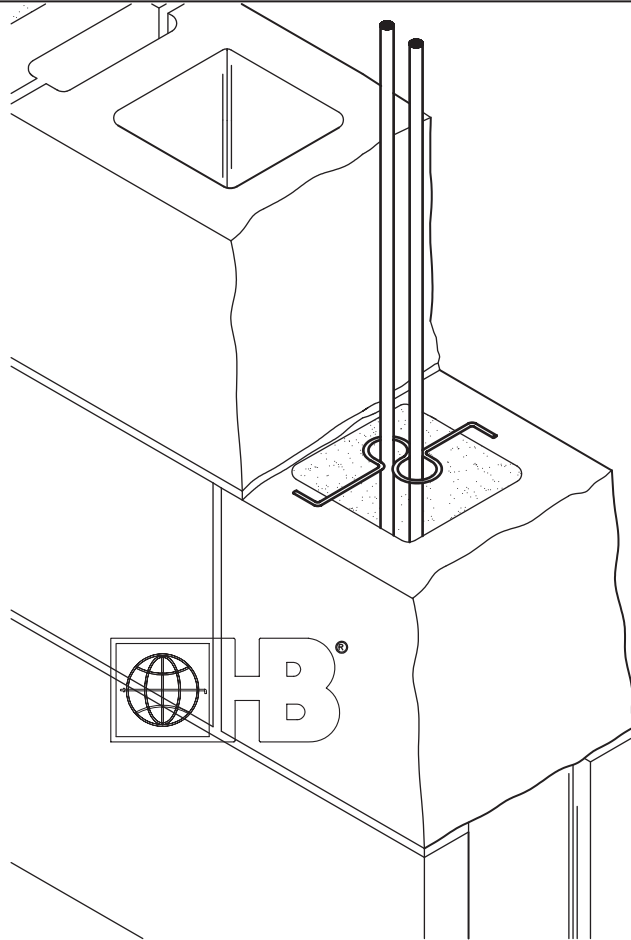
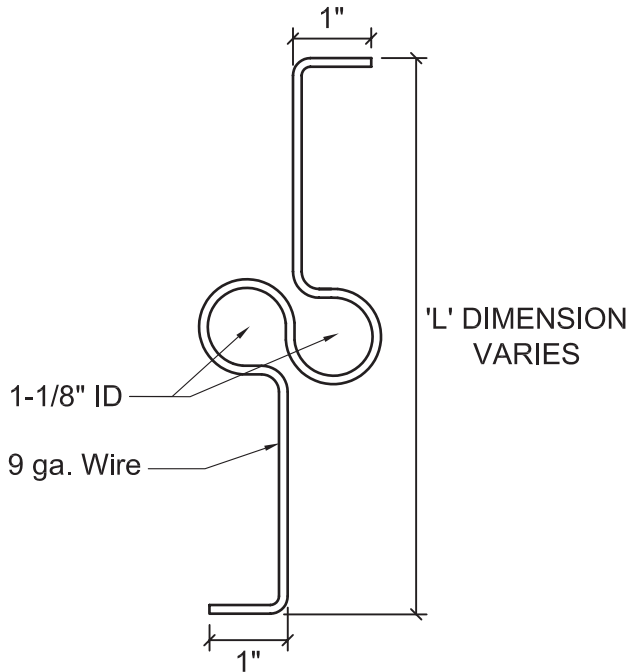
Data sources	:	SDS prepared pursuant to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.
NFPA health hazard	:	3 - Short exposure could cause serious temporary or residual injury even though prompt medical attention was given.
NFPA fire hazard	:	1 - Must be preheated before ignition can occur.
NFPA reactivity	:	0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product

Rebar Positioners

RB Rebar Positioner



DRAWINGS FOR ILLUSTRATIVE PURPOSES ONLY

RB Rebar Positioner

For positioning rebar in center of block. The Z-shaped wire bridges cell of block while bends rest on shell.

Material Conformances:

Wire (Carbon Steel): Cold-drawn steel wire conforming to ASTM A1064/A1064M:

Tensile Strength - 80,000 p.s.i.

Yield Point - 70,000 p.s.i. minimum

Zinc coating:

Mill Galvanized: ASTM A641/A641M (0.1 oz/ft²)

Hot-Dip Galvanized after fabrication:

ASTM A153/A153M-B2 (1.5 oz/ft)

Wire (Stainless Steel): ASTM A580/A580M - AISI Type 304
(Type 316 available on special order)

Wire Diameter:

9 gauge (.148" or W1.7)

Finishes:

- ☐ Mill Galvanized
- ☒ Hot-Dip Galvanized
- ☐ Stainless Steel

Note: H&B recommends Stainless Steel for maximum protection against corrosion.

Product# (size):

- ☐ RB-6 (L=4" for 6" block)
- ☒ RB-8 (L=6" for 8" block)
- ☐ RB-10 (L=8" for 10" block)
- ☒ RB-12 (L=10" for 12" block)

H&B manufactures steel wire products from a minimum of 95% recycled material.

IMPORTANT: Since each construction project is unique, the appropriate selection and use of any product contained herein must be determined by competent architects, engineers and other appropriate professionals who are familiar with the specific requirements of the project in question.

1. Identification

Product Identifier: **Zinc Metal: Special High Grade**

Manufacturer:

Hohmann & Barnard, Inc.
30 Rasons Court
Hauppauge, NY 11788
(631) 234-0600
www.h-b.com

Telephone Numbers

During normal business hours call: (800) 645-0616

24-hour emergency call Chemtrec: (800) 255-3924

2. Hazards Identification

EMERGENCY OVERVIEW:

Short Term Overexposure: ZINC: Inhalation of high levels of zinc vapor (zinc oxide fumes) may result in tightness of chest, metallic taste, cough, dizziness, fever, chills, headache, nausea, and dry throat. Overexposure may produce symptoms known as metal fume fever or "zinc shakes"; an acute, self-limiting condition without recognized complications. Symptoms of metal fume fever include: chills, fever, muscular pain, nausea and vomiting.

Long Term Overexposure: ZINC: Chronic exposure to zinc may cause respiratory tract irritation with nasopharyngitis and laryngitis

Medical Conditions Generally Aggravated By Exposure: Inhalation of dust may be an irritant to pre-existing respiratory conditions

Prevention: Avoid contact with acids and alkalis..

Route of Exposure: PRIMARY: Inhalation, if material has been heated above the boiling point, driving off zinc fume.

SECONDARY: Ingestion of dusts..

GHS Ratings:

Inhalation Toxicity: Acute 4

GHS Hazards

H332 May be harmful if inhaled

GHS Precautions

P261 Avoid breathing dust/fume/gas/mist/vapours/spray

P271 Use only outdoors or in a well-ventilated area

P312 Call a POISON CENTER or doctor/physician if you feel unwell

P304+P340

IF INHALED: Remove victim to fresh air and Keep at rest in a position comfortable for breathing

Signal Word: Warning



POTENTIAL HEALTH EFFECTS:

Inhalation: Inhaling dust may be an irritant to pre-existing respiratory conditions.

Skin: No data found.

Ingestion: No data found.

Eyes: No data found.

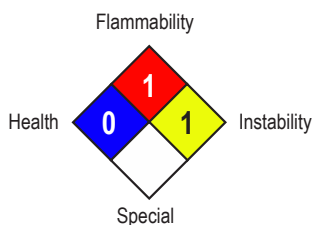
Carcinogenicity: N/A.

3. Composition/Information on Ingredients

Component	CAS No.	%
ZINC	7440-66-6	99.9

Hazardous Material
Information System (HMIS)National Fire Protection
Association (NFPA)

Health	1
Flammability	1
Physical Hazard	1
Personal Protection	

**HMIS & NFPA Hazard Rating Legend**

* = CHRONIC HEALTH HAZARD
 0 = INSIGNIFICANT
 1 = SLIGHT
 2 = MODERATE
 3 = HIGH

4. First-Aid Measures

Symptoms resulting from inhalation overexposure usually disappear within 24 hours. Symptomatic treatment, such as bed rest and possibly aspirin is recommended to provide relief from fever and chills. In all cases, consult physician for medical attention.

5. Fire-fighting measures**FLASH POINT:** N/A

EXTINGUISHING MEDIA: Smother and cool with a suitable dry extinguishing agent (class D fires) such as dry powder (Ansul Met-L-X), zinc oxide or dry sand. Water should not be used; however wherever it is necessary to cool exposures, extreme caution should be taken to prevent contact with molten zinc or burning zinc products.

HAZARDOUS COMBUSTION PRODUCTS: No data found.

FIRE FIGHTING PROCEDURES: No Data Found.

FIRE FIGHTER PROTECTION: Use NIOSH/MSHA approved self-contained breathing apparatus.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Heating of metal beyond boiling point results in evolution of zinc vapors, which immediately reacts with air to form zinc oxide fume. Slabs must be completely dry before charging into molten metal to prevent a steam explosion.

6. Accidental release measures

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Material should be contained for recycling.

WASTE DISPOSAL METHODS: Material may be recycled or disposed of in accordance with Federal, State, and Local Environmental Regulations. This material may be regulated under CERCLA, TSCA, SARA, and/or RCRA Regulations.

CLEAN WATER ACT REQUIREMENTS: No data found

RESOURCE CONSERVATION AND RECOVERY ACT (RCRA) REQUIREMENTS: No data found

7. Handling and storage

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: Store in a dry location, separate from acids and alkalis. Keep metal dry so it does not contain any moisture when ready for use.

OTHER PRECAUTIONS: Damp slabs placed in molten metal may result in a steam explosion. Always practice good personal hygiene when working in areas where this material exists.

REGISTRATIONS/CERTIFICATIONS: No data found.

8. Exposure controls/personal protection

ENGINEERING CONTROLS: No data found

ADMINISTRATIVE CONTROLS: No data found

VENTILATION: Local exhaust or other ventilation that will reduce dust concentrations to less than permissible exposure limits

PROTECTIVE GLOVES: Recommended to prevent skin irritation in hypersensitive individuals

EYE PROTECTION: Use safety eyewear for protection against airborne particulate matter.

RESPIRATORY PROTECTION (SPECIFIC TYPE): Use NIOSH/MSHA approved type respirator for protection against dust and metal fume.

OTHER: To prevent burns from contact with molten metal, appropriate protective garments should be worn. Such garments may include aprons, face shields, leggings, etc., depending on conditions of use.

LOCAL EXHAUST: N/A.

MECHANICAL (GENERAL): N/A

SPECIAL: N/A

OTHER: N/A.

9. Physical and chemical properties

Physical Form: Solid	Taste: No data found
Appearance: Silver-white, or Bluish-white metal	Odor: None
Color: No data found	Odor Threshold: No data found
Boiling Point: 1665°F	Vapor Pressure: 0.13kPa @ 909°F
Melting Point: 788°F	Vapor Density: N/A
Freezing Point: No data found	Evaporation Rate: N/A
Specific Gravity: 7.12	VOC (Weight): No data found
Density: No data found	VOC (Volume): No data found
Bulk Density: No data found	Volatiles (Weight): No data found
Viscosity: No data found	Volatiles (Volume): No data found
pH: No data found	Flash Point: N/A
Water Solubility: Negligible	Upper Explosion Limit: N/A
Partition Coefficient-Octanol / Water: No data found	Lower Explosion Limit: N/A
Molecular Weight: No data found	Auto Ignition: No data found
Decomposition Temp.: No data found	Flammability (Solid, Gas): No data found

10. Stability and reactivity

STABILITY: Stable.

HAZARDOUS DECOMPOSITION: Zinc boils off as vapor at elevated temperatures.

HAZARDOUS POLYMERIZATION: Will not occur.

CONDITIONS TO AVOID: None.

INCOMPATIBLE MATERIALS: Avoid contact with acids and alkalis.

11. Toxicological information

ROUTES OF ENTRY: PRIMARY: Inhalation, if material has been heated above the boiling point, driving off zinc fume.

SECONDARY: Ingestion of dusts.

TARGET ORGANS: No data found.

EFFECTS OF OVEREXPOSURE:

Short Term Overexposure: ZINC: Inhalation of high levels of zinc vapor (zinc oxide fumes) may result in tightness of chest, metallic taste, cough, dizziness, fever, chills, headache, nausea, and dry throat. Overexposure may produce symptoms known as metal fume fever or "zinc shakes"; an acute, self-limiting condition without recognized complications. Symptoms of metal fume fever include: chills, fever, muscular pain, nausea and vomiting.

Long Term Overexposure: ZINC: Chronic exposure to zinc may cause respiratory tract irritation with nasopharyngitis and laryngitis.

CARCENOGENICTY: None.

12. Ecological Information

No data available for this product.

13. Disposal Considerations

Material may be recycled or disposed of in accordance with Federal, State, and Local Environmental Regulations. This material may be regulated under CERCLA, TSCA, SARA, and/or RCRA Regulations.

14. Transport information

D.O.T. Shipping Information: Not data found.

I.M.O. Shipping Information: Not data found.

15. Regulatory Information

No data found.

16. Other information

Issue Date: May 31, 2015

Revision Date: May 31, 2015

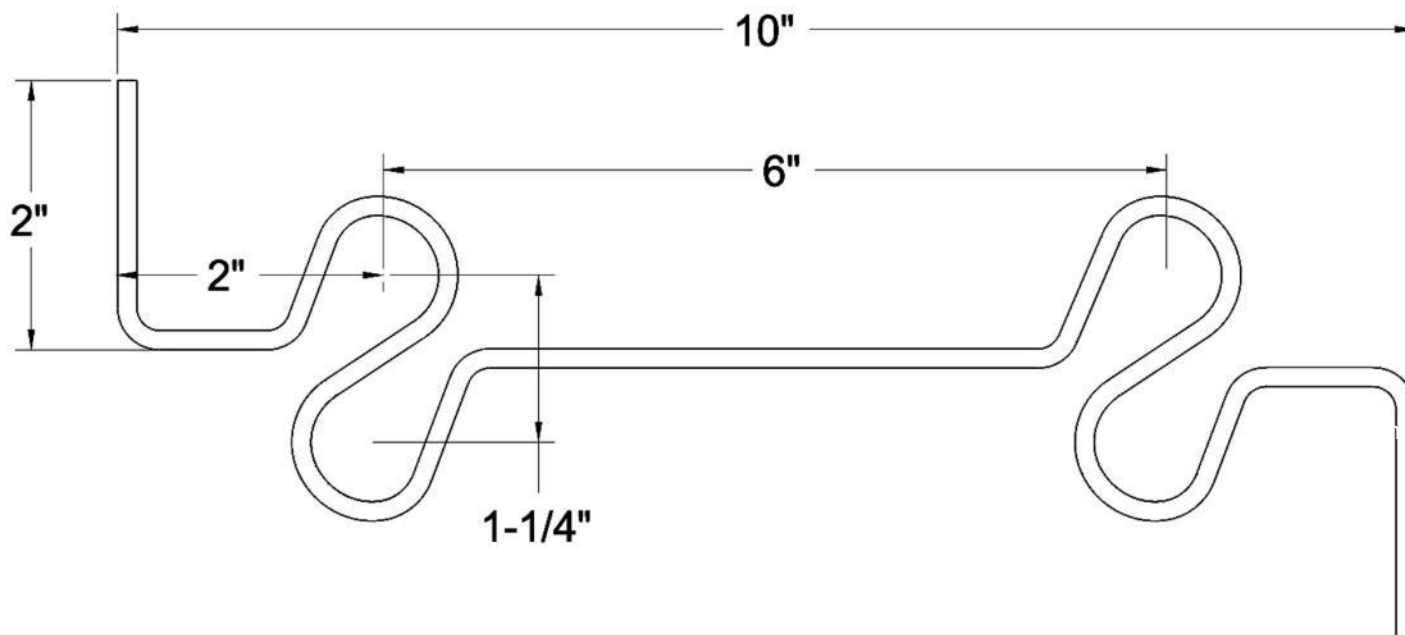
The data in this Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process. This information is taken from sources or based upon data believed to be reliable; however, Hohmann & Barnard, Inc. disclaims any warranty, express or implied, as to the absolute correctness or sufficiency of any of the foregoing or that additional or other measures may be required under particular conditions.

The information contained herein is based on current knowledge and experience; no responsibility is accepted and that the information is sufficient or correct in all cases. Users should consider this data only as a supplement to other information. Users should make independent determinations of suitability and completeness of information from all sources to assure proper use and disposal of these materials, the safety and health of employees and customer, and the protection of the environment.


PRODUCT SUBMITTAL

WIRE-BOND

3404 Figure 8 Double Rebar Positioner For 12 inch CMU



Loops hold up to 1" diameter Rebar

MATERIAL CONFORMANCE	SIZES / FINISHES
<p>Wire (Carbon Steel): Prefabricated from cold-drawn steel wire conforming to ASTM A1064/A1064M, ASTM A82 / A82M Tensile Strength - 80,000 psi Yield Point - 70,000 psi</p> <p>Mill Galvanized / Zinc Coating: ASTM A641 / A641M (0.10 Oz per sq ft)</p> <p>Hot Dip Galvanized after fabrication / Zinc Coating ASTM A153 / A153M-B2 (1.50 oz per sq ft)</p> <p>Stainless Steel (WIRE) ASTM A580 / ASTM A580M Stainless Steel (SHEET METAL) ASTM A167 Type 304 (Type 316 available on special order)</p> <p> Recycled Content: Mill Galvanized & Hot Dipped, 82.8% Post-Consumer 17% Post Industrial / Pre-Consumer,</p> <p>Stainless Steel, 60% Post Consumer V O C Content - 0%</p>	<p># 3404 :</p> <p>9 gauge dia. 10 inch for 12 inch CMU</p> <p>FINISH:</p> <p><input type="checkbox"/> Mill Galvanized <input type="checkbox"/> Hot Dip Galvanized <input type="checkbox"/> Stainless Steel</p>

Corporate Office: 400 Rountree Rd Charlotte, NC 28217
TEL: (800) 849-6722 FAX: (704) 525-3761

Mailing Address: P.O. Box 240988 Charlotte, NC 28224

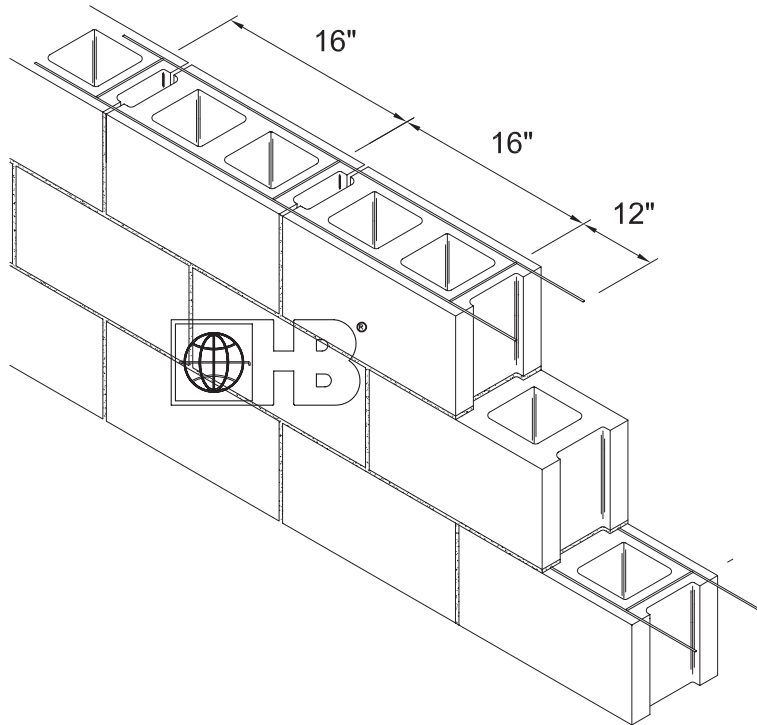
WIRE-BOND

www.wirebond.com

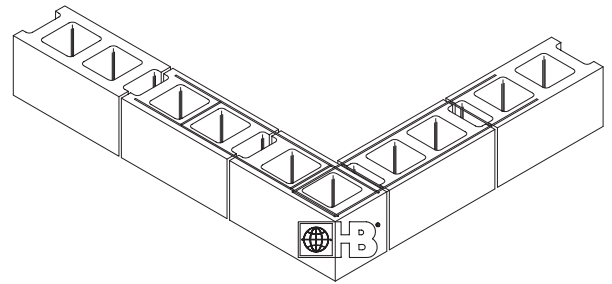
Memphis Plant: 2365 Harbor Ave. Memphis, TN 38113
TEL: (800) 441-8359 FAX: (901) 775-9449

Mailing Address: P.O. Box 13124 Memphis, TN 38113

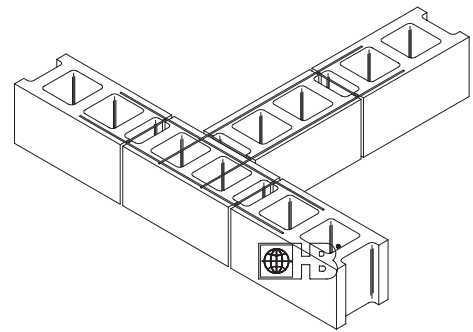
Lox♦All® Ladder Joint Reinforcement 220 Ladder-Mesh



DRAWINGS FOR ILLUSTRATIVE PURPOSES ONLY



PREFABRICATED CORNER



PREFABRICATED TEE

MATERIAL CONFORMANCE

Hohmann & Barnard joint reinforcement products conform to:
ASTM A951/A951M (Standard Specification for Steel Wire for Masonry Joint Reinforcement)
ACI / ASCE 530 (Building Code Requirements for Masonry Structures)

Wire (Carbon Steel): Prefabricated from cold-drawn steel wire conforming to **ASTM A1064/A1064M**

Tensile Strength - 80,000 p.s.i. | Yield Point - 70,000 p.s.i. minimum
Zinc Coating:

Mill Galvanized coating: **ASTM A641/A641M** (0.1 oz/ft²)

Hot-Dip Galvanized after fabrication: **ASTM A153/A153M-B2** (1.5 oz/ft²)

Wire (Stainless Steel): **ASTM A580/ASTM 580M** - AISI Type 304 or Type 316

Wire Diameter:

9 gauge (.148" or W1.7) or 3/16"Ø (.187" or W2.8)

Side Rods and Cross Rods available in any combination of the above.
Cross welded 16" O.C.

First Cross Rods welded 12" in from each end to allow lap splices per code requirements.

H&B manufactures steel wire products from a minimum of 95% recycled material.

Finishes:

- ☐ Mill Galvanized Coating
- ☐ Hot-Dip Galvanized
- ☐ Stainless Steel - Type 304
- ☐ Stainless Steel - Type 316

Note: H&B recommends Stainless Steel for maximum protection against corrosion.

Wire Size (10' length standard, custom length available special order):

- ☐ (S) Standard Weight:
9 Gauge Side Rods x 9 Gauge Cross Rods
- ☐ (EH) Extra Heavy:
3/16" Side Rods x 9 Gauge Cross Rods
- ☐ (SHD) Super Heavy Duty:
3/16" Side Rods x 3/16" Cross Rods

Block Size:

- | | | | |
|---|------------------------------|--|------------------------------|
| <input type="checkbox"/> 4" | <input type="checkbox"/> 6" | <input checked="" type="checkbox"/> 8" | <input type="checkbox"/> 10" |
| <input checked="" type="checkbox"/> 12" | <input type="checkbox"/> 14" | <input type="checkbox"/> 16" | |

Note: For Corner or Tee, state width of block walls.

IMPORTANT: Since each construction project is unique, the appropriate selection and use of any product contained herein must be determined by competent architects, engineers and other appropriate professionals who are familiar with the specific requirements of the project in question.

1. Identification

Product Identifier: **Zinc Metal: Special High Grade**

Manufacturer:

Hohmann & Barnard, Inc.
30 Rasons Court
Hauppauge, NY 11788
(631) 234-0600
www.h-b.com

Telephone Numbers

During normal business hours call: (800) 645-0616

24-hour emergency call Chemtrec: (800) 255-3924

2. Hazards Identification

EMERGENCY OVERVIEW:

Short Term Overexposure: ZINC: Inhalation of high levels of zinc vapor (zinc oxide fumes) may result in tightness of chest, metallic taste, cough, dizziness, fever, chills, headache, nausea, and dry throat. Overexposure may produce symptoms known as metal fume fever or "zinc shakes"; an acute, self-limiting condition without recognized complications. Symptoms of metal fume fever include: chills, fever, muscular pain, nausea and vomiting.

Long Term Overexposure: ZINC: Chronic exposure to zinc may cause respiratory tract irritation with nasopharyngitis and laryngitis

Medical Conditions Generally Aggravated By Exposure: Inhalation of dust may be an irritant to pre-existing respiratory conditions

Prevention: Avoid contact with acids and alkalis..

Route of Exposure: PRIMARY: Inhalation, if material has been heated above the boiling point, driving off zinc fume.

SECONDARY: Ingestion of dusts..

GHS Ratings:

Inhalation Toxicity: Acute 4

GHS Hazards

H332 May be harmful if inhaled

GHS Precautions

P261 Avoid breathing dust/fume/gas/mist/vapours/spray

P271 Use only outdoors or in a well-ventilated area

P312 Call a POISON CENTER or doctor/physician if you feel unwell

P304+P340

IF INHALED: Remove victim to fresh air and Keep at rest in a position comfortable for breathing

Signal Word: Warning



POTENTIAL HEALTH EFFECTS:

Inhalation: Inhaling dust may be an irritant to pre-existing respiratory conditions.

Skin: No data found.

Ingestion: No data found.

Eyes: No data found.

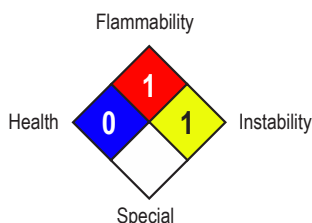
Carcinogenicity: N/A.

3. Composition/Information on Ingredients

Component	CAS No.	%
ZINC	7440-66-6	99.9

Hazardous Material
Information System (HMIS)National Fire Protection
Association (NFPA)

Health	1
Flammability	1
Physical Hazard	1
Personal Protection	

**HMIS & NFPA Hazard Rating Legend**

* = CHRONIC HEALTH HAZARD
 0 = INSIGNIFICANT
 1 = SLIGHT
 2 = MODERATE
 3 = HIGH

4. First-Aid Measures

Symptoms resulting from inhalation overexposure usually disappear within 24 hours. Symptomatic treatment, such as bed rest and possibly aspirin is recommended to provide relief from fever and chills. In all cases, consult physician for medical attention.

5. Fire-fighting measures**FLASH POINT:** N/A

EXTINGUISHING MEDIA: Smother and cool with a suitable dry extinguishing agent (class D fires) such as dry powder (Ansul Met-L-X), zinc oxide or dry sand. Water should not be used; however wherever it is necessary to cool exposures, extreme caution should be taken to prevent contact with molten zinc or burning zinc products.

HAZARDOUS COMBUSTION PRODUCTS: No data found.

FIRE FIGHTING PROCEDURES: No Data Found.

FIRE FIGHTER PROTECTION: Use NIOSH/MSHA approved self-contained breathing apparatus.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Heating of metal beyond boiling point results in evolution of zinc vapors, which immediately reacts with air to form zinc oxide fume. Slabs must be completely dry before charging into molten metal to prevent a steam explosion.

6. Accidental release measures

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Material should be contained for recycling.

WASTE DISPOSAL METHODS: Material may be recycled or disposed of in accordance with Federal, State, and Local Environmental Regulations. This material may be regulated under CERCLA, TSCA, SARA, and/or RCRA Regulations.

CLEAN WATER ACT REQUIREMENTS: No data found

RESOURCE CONSERVATION AND RECOVERY ACT (RCRA) REQUIREMENTS: No data found

7. Handling and storage

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: Store in a dry location, separate from acids and alkalis. Keep metal dry so it does not contain any moisture when ready for use.

OTHER PRECAUTIONS: Damp slabs placed in molten metal may result in a steam explosion. Always practice good personal hygiene when working in areas where this material exists.

REGISTRATIONS/CERTIFICATIONS: No data found.

8. Exposure controls/personal protection

ENGINEERING CONTROLS: No data found

ADMINISTRATIVE CONTROLS: No data found

VENTILATION: Local exhaust or other ventilation that will reduce dust concentrations to less than permissible exposure limits

PROTECTIVE GLOVES: Recommended to prevent skin irritation in hypersensitive individuals

EYE PROTECTION: Use safety eyewear for protection against airborne particulate matter.

RESPIRATORY PROTECTION (SPECIFIC TYPE): Use NIOSH/MSHA approved type respirator for protection against dust and metal fume.

OTHER: To prevent burns from contact with molten metal, appropriate protective garments should be worn. Such garments may include aprons, face shields, leggings, etc., depending on conditions of use.

LOCAL EXHAUST: N/A.

MECHANICAL (GENERAL): N/A

SPECIAL: N/A

OTHER: N/A.

9. Physical and chemical properties

Physical Form: Solid	Taste: No data found
Appearance: Silver-white, or Bluish-white metal	Odor: None
Color: No data found	Odor Threshold: No data found
Boiling Point: 1665°F	Vapor Pressure: 0.13kPa @ 909°F
Melting Point: 788°F	Vapor Density: N/A
Freezing Point: No data found	Evaporation Rate: N/A
Specific Gravity: 7.12	VOC (Weight): No data found
Density: No data found	VOC (Volume): No data found
Bulk Density: No data found	Volatiles (Weight): No data found
Viscosity: No data found	Volatiles (Volume): No data found
pH: No data found	Flash Point: N/A
Water Solubility: Negligible	Upper Explosion Limit: N/A
Partition Coefficient-Octanol / Water: No data found	Lower Explosion Limit: N/A
Molecular Weight: No data found	Auto Ignition: No data found
Decomposition Temp.: No data found	Flammability (Solid, Gas): No data found

10. Stability and reactivity

STABILITY: Stable.

HAZARDOUS DECOMPOSITION: Zinc boils off as vapor at elevated temperatures.

HAZARDOUS POLYMERIZATION: Will not occur.

CONDITIONS TO AVOID: None.

INCOMPATIBLE MATERIALS: Avoid contact with acids and alkalis.

11. Toxicological information

ROUTES OF ENTRY: PRIMARY: Inhalation, if material has been heated above the boiling point, driving off zinc fume.

SECONDARY: Ingestion of dusts.

TARGET ORGANS: No data found.

EFFECTS OF OVEREXPOSURE:

Short Term Overexposure: ZINC: Inhalation of high levels of zinc vapor (zinc oxide fumes) may result in tightness of chest, metallic taste, cough, dizziness, fever, chills, headache, nausea, and dry throat. Overexposure may produce symptoms known as metal fume fever or "zinc shakes"; an acute, self-limiting condition without recognized complications. Symptoms of metal fume fever include: chills, fever, muscular pain, nausea and vomiting.

Long Term Overexposure: ZINC: Chronic exposure to zinc may cause respiratory tract irritation with nasopharyngitis and laryngitis.

CARCENOGENICTY: None.

12. Ecological Information

No data available for this product.

13. Disposal Considerations

Material may be recycled or disposed of in accordance with Federal, State, and Local Environmental Regulations. This material may be regulated under CERCLA, TSCA, SARA, and/or RCRA Regulations.

14. Transport information

D.O.T. Shipping Information: Not data found.

I.M.O. Shipping Information: Not data found.

15. Regulatory Information

No data found.

16. Other information

Issue Date: May 31, 2015

Revision Date: May 31, 2015

The data in this Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process. This information is taken from sources or based upon data believed to be reliable; however, Hohmann & Barnard, Inc. disclaims any warranty, express or implied, as to the absolute correctness or sufficiency of any of the foregoing or that additional or other measures may be required under particular conditions.

The information contained herein is based on current knowledge and experience; no responsibility is accepted and that the information is sufficient or correct in all cases. Users should consider this data only as a supplement to other information. Users should make independent determinations of suitability and completeness of information from all sources to assure proper use and disposal of these materials, the safety and health of employees and customer, and the protection of the environment.

EXHIBIT A.O

Escrow and Financing Conditions

To be provided as Needed and Mutually Agreed.

EXHIBIT A.P

Disputed Work Schedule

To be provided as Needed and Mutually Agreed.

City of Mansfield's Fire Station No. One
AIA A133 Owner-CMAR Agreement - Exhibit Z - Schedule of Exhibts

Updated 17 OCT 2024
Printed: 10/17/2024 @ 4:04 PM

Description (Note: GMP Amendment Exhibits will start with a "A.X" prefix.)	Prepared by	With Original A133?	Updated with GMP?
A201 General Conditions for the Contract for Construction	Owner	Yes - Attached	No
Exhibit "A" - Guaranteed Maximum Price Amendment	CMAR	Draft Attached	Yes
Exhibit "B" - Insurance, Performance, Payment & Maintenance Bonds			
Insurance (General Liability, PL, Pollution, & Other Ongoing Policies)	CMAR	Yes - Attached	No
Performance, Payment & Maintenance Bond Forms	Owner	Yes - Attached	No
Performance, Payment & Maintenance Bonds & Builder's Risk COIs	CMAR	Not Provided	One Week After GMP is Approved
Exhibit "C" - Scope of Work	CMAR	Initial Attached	Yes
Exhibit "D" - Construction Manager's Project Schedule	CMAR	Initial Attached	Yes
Exhibit "E" - Construction Manager's Soft Costs and Fee	CMAR	Yes - Attached	Yes
Exhibit "F" - Key Personnel & Staffing Plan	CMAR	Initial Submittal is Attached	Yes
Exhibit "G" - Confidentiality of the Project	Owner (w/Consultant Assistance)	No	One Month After GMP is Approved
Exhibit "H" - Customary and Usual Labor Rates	CMAR	No	One Month After GMP is Approved
Exhibit "I" - Rental Rates	CMAR	No	One Month After GMP is Approved
Exhibit "J" - Alternates with Costs and Expiration Dates	CMAR	No	with GMP Amendment
Exhibit "K" - Unit Costs	CMAR	No	with GMP Amendment
Exhibit "L" - Allowances	CMAR	No	with GMP Amendment
Exhibit "M" - Schedule of Values	CMAR	No	One Month After GMP is Approved
Exhibit "N" - Initial Control Estimate #01 Exhibit "A.N" - Itemized Statement of the GMP and Clarifications	CMAR	Exhibit N	Exhibit A.N
Exhibit "O" - Escrow and Financing Conditions	Owner (w/Consultant Assistance)	If Necessary	If Necessary
Exhibit "P" - Disputed Work Schedule	CMAR	If Necessary	If Necessary
Exhibit "Z" - Schedule of Exhibits	Owner's Consultant	Yes - Attached	Yes