

ADDENDUM NO. 5

For: Elementary School # 38
522 Brookewater Boulevard
Rosenberg, TX 77471
for
LAMAR CISD
3911 Avenue I
Rosenberg, TX 77471



TO: DRAWINGS AND SPECIFICATIONS DATED: December 12, 2024

PREPARED BY: PFLUGER ARCHITECTS, L.P.

ADDENDUM DATE: January 17, 2025

DATE: 01/17/2025

PROJECT NO: 24-028

This addendum shall be considered part of the Bid Documents for the above named project as though it had been issued at the same time and shall be incorporated integrally therewith. Where provisions of the following supplementary data differ from those of the original Bid Documents, this Addendum shall govern and take precedence.

Bidders are hereby notified that they shall make any necessary adjustments in their estimates as a result of this Addendum. It will be construed that each bidder's proposal is submitted with full knowledge of all modifications and supplemental data specified herein.

Addendum No.5 consists of the following:

ADD. NO. 5 - Pfluger Narrative

ADD. NO. 5 - Specifications

GENERAL:

The Bid Documents are modified and clarified as follows:

Reference to Specification or Detail modifications in this Addendum are to attached documents. Including the following attached narratives

Addendum 5 Architectural Narrative - 1 page

Addendum 5 Specs - 54 pages

SPECIFICATIONS:

ITEM	SECTION	DESCRIPTION
S5-1	00 01 01	Table of Contents REVISED to reflect the sections being issued in this Addendum.
S5-2	00 01 10.1	Architect TOC seal page has been updated.
S5-3	00 11 00	The Request for Competitive Sealed Proposals form has been revised. Due to severe weather conditions, the due date for the competitive sealed proposals has been postponed to Friday, January 24, 2025.
S5-4	07 52 19	Modified Bitumen "COOL ROOF" Membrane Roofing System section as been modified.

END OF ADDENDUM 5

SECTION 00 01 01

TABLE OF CONTENTS

VOLUME 1 of 2

INFORMATION

Table of Contents [REVISED: ADDENDUM #5]

Design Team Seals Pages [REVISED: ADDENDUM #3]

DIVISION 00 00 00 - PROCUREMENT AND CONTRACTING REQUIREMENTS

00 11 00 - REQUEST FOR COMPETITIVE SEALED PROPOSALS [REVISED: ADDENDUM #5]

00 20 00 - INSTRUCTIONS TO OFFERORS [REVISED: ADDENDUM #3]

00 40 01 - PROPOSAL BOND

00 40 12 - LIST OF SUBCONTRACTORS

00 40 13 - AFFIDAVIT OF NON-DISCRIMINATORY EMPLOYMENT

00 40 14 - AFFIDAVIT OF NON-ASBESTOS, LEAD, AND PCB USE IN PROJECT

00 40 17 - CRIMINAL HISTORY RECORD INFORMATION

00 65 00 - EVALUATION CRITERIA

00 65 01 - PROPOSAL EVALUATION FORM

00 72 00 - CONTRACT DOCUMENTS

00 73 00 - A201 LCISD SUPPLEMENTARY CONDITIONS

00 73 19 - SAFETY REQUIREMENTS

00 73 50 - 2022 HOUSTON PREVAILING WAGE RATES

DIVISION 01 00 00 - GENERAL REQUIREMENTS

01 10 00 - MISCELLANEOUS REQUIREMENTS

01 21 00 - ALLOWANCES [REVISED: ADDENDUM #1]

01 22 00 - UNIT PRICES

01 23 00 - ALTERNATES [REVISED: ADDENDUM #1]

01 25 13 - PRODUCT SUBSTITUTION PROCEDURES

01 26 00 - CONTRACT MODIFICATION PROCEDURES

01 29 00 - SCHEDULE OF VALUES & PAYMENT PROCEDURES

01 31 00 - PROJECT MANAGEMENT AND COORDINATION

01 31 15 - PROJECT MANAGEMENT COMMUNICATIONS - CONTRACTOR

01 31 19 - PROJECT MEETINGS

01 32 00 - SCHEDULES, REPORTS AND PAYMENTS

01 32 16 - CONSTRUCTION SCHEDULE

01 33 01 - SUBMITTAL PROCEDURES

01 35 23 - OWNER SAFETY REQUIREMENTS

01 35 23.2 - BADGING - VERSION 6.0

01 35 23.2 - BADGING - VERSION 7.0

01 35 43 - ENVIRONMENTAL PROCEDURES

01 40 00 - QUALITY REQUIREMENTS

01 42 00 - OWNER REQUIREMENTS

01 42 01 - GUIDELINES FOR 4S SAFETY PLAN IMPLEMENTATION V4

01 42 19 - REFERENCE STANDARDS AND DEFINITIONS

01 45 29 - TESTING LABORATORY SERVICES

01 50 00 - TEMPORARY FACILITIES AND CONTROLS

01 57 13 - EROSION AND SEDIMENTATION CONTROL

01 60 00 - PRODUCT REQUIREMENTS

01 73 29 - CUTTING AND PATCHING

01 74 23 - FINAL CLEANING

01 77 00 - CLOSEOUT PROCEDURES

01 77 01 - CLOSEOUT FORMS A-D

01 77 02 - WAIVER AND RELEASE OF LIENS
01 78 36 - WARRANTIES AND GUARANTEES
01 78 39 - PROJECT RECORD DOCUMENTS
01 91 13 - GENERAL COMMISSIONING

DIVISION 02 00 00 - EXISTING CONDITIONS

02 32 00 - GEOTECHNICAL DATA
02 32 00.1 - GEOTECHNICAL REPORT
02 41 17 - DEMOLITION

DIVISION 03 00 00 – CONCRETE

03 05 16 - UNDERSLAB VAPOR BARRIER
03 10 00 - CONCRETE FORMING AND ACCESSORIES
03 21 00 - SITE CONCRETE REINFORCEMENT
03 30 00 - CAST-IN-PLACE CONCRETE
03 41 13 - PRECAST CONCRETE HOLLOW CORE PLANKS
03 52 16 - LIGHTWEIGHT INSULATING CONCRETE)

DIVISION 04 00 00 - MASONRY

04 20 00 - UNIT MASONRY

DIVISION 05 00 00 – METALS

05 12 00 - STRUCTURAL STEEL
05 21 00 - STEEL JOIST FRAMING
05 31 00 - STEEL DECKING
05 40 00 -COLD-FORMED METAL FRAMING
05 50 00 - METAL FABRICATIONS
05 52 13 - PIPE AND TUBE RAILINGS

DIVISION 06 00 00 - WOOD, PLASTICS & COMPOSITES

06 10 00 - ROUGH CARPENTRY
06 20 00 - MILLWORK AND FINISH CARPENTRY
06 61 16 - SOLID SURFACING FABRICATIONS

DIVISION 07 00 00 - THERMAL AND MOISTURE PROTECTION

07 11 13 - BITIMINOUS DAMPPROOFING
07 21 00 - BUILDING INSULATION
07 21 19 - FOAMED-IN-PLACE INSULATION
07 26 00 - FLUID APPLIED AIR BARRIER
07 42 13 - PREFORMED METAL WALL PANELS [REVISED: ADDENDUM #2]
07 42 13.1 - INSULATED METAL WALL PANELS
07 42 15 - PREFORMED METAL SOFFIT PANELS
07 52 19 - MOD BIT ROOFING SYSTEM [REVISED: ADDENDUM #5]
07 62 00 - ROOF RELATED SHEET METAL-ADD 2
07 65 00 - FLEXIBLE FLASHING
07 65 26 - MEMBRANE THROUGH-WALL FLASHING
07 72 00 - ROOF ACCESSORIES-ADD 3
07 72 33 - ROOF HATCH
07 84 00 - FIRESTOPPING
07 90 00 - JOINT PROTECTION
07 95 13 - EXPANSION JOINT COVER ASSEMBLIES

DIVISION 08 00 00 - OPENINGS

- 08 11 00 - HOLLOW METAL DOORS & FRAMES
- 08 15 13 - PLASTIC LAMINATE FACED WOOD DOORS
- 08 31 13 - ACCESS DOORS AND FRAMES
- 08 33 00 - ROLLING GRILLES
- 08 33 02 - ROLLING COUNTER SHUTTERS
- 08 41 13 - ALUMINUM ENTRANCES AND STOREFRONTS *[REVISED: ADDENDUM #2]*
- 08 44 13 - ALUMINUM CURTAIN WALL SYSTEM *[REVISED: ADDENDUM #2]*
- 08 71 00 – DOOR HARDWARE *[REVISED: ADDENDUM #2]*
- 08 80 00 - GLASS AND GLAZING
- 08-88-53 - SECURITY GLAZING

DIVISION 09 00 00 - FINISHES

- 09 21 16 - GYPSUM BOARD ASSEMBLIES
- 09 30 00 - TILING
- 09 51 00 - SUSPENDED ACOUSTICAL CEILINGS
- 09 54 23 - LINEAR METAL CEILINGS
- 09 64 55 - RESILIENT WOOD FLOOR-STAINED SURFACE
- 09 65 00 - RESILIENT FLOORING
- 09 65 13 - RESILIENT BASE
- 09 65 25 - VINYL TILE_PLANK FLOORING (LVT)
- 09 66 13 - PORTLAND CEMENT TERRAZZO FLOORING
- 09 67 23 - RESINOUS FLOORING
- 09 68 16 - CARPET
- 09 72 00 - PRESENTATON DRY-ERASE WALLCOVERING
- 09 72 00 - WALL COVERING
- 09 84 13 - FABRIC COVERED ACOUSTICAL PANELS *[REVISED: ADDENDUM #3]*
- 09 90 00 - PAINTING AND COATING

DIVISION 10 00 00 - SPECIALTIES

- 10 05 00 - MISCELLANEOUS SPECIALTIES
- 10 11 00 - VISUAL DISPLAY BOARDS
- 10 14 00 - ARCHITECTURAL SIGNAGE
- 10 14 64 - ELECTRONIC MESSAGE SIGNAGE *[ISSUED: ADDENDUM #2]*
- 10 21 16 - SOLID PLASTIC TOILET PARTITIONS
- 10 21 23 - CUBICLE CURTAINS AND TRACK
- 10 22 26 - OPERABLE PARTITIONS
- 10 26 13 - CORNER GUARDS
- 10 28 00 - TOILET AND BATH ACCESSORIES *[REVISED: ADDENDUM #2]*
- 10 44 13 - FIRE EXTINGUISHERS AND CABINETS
- 10 51 13 - WEAPONS RACK
- 10 56 13 - METAL STORAGE SHELVING
- 10 73 00 - PROTECTIVE COVERS
- 10 75 16 - FLAGPOLE

DIVISION 11 00 00 – EQUIPMENT

- 11 16 19 - RAPID ENTRY SYSTEM (FIREMAN LOCK BOX)
- 11 31 13 - RESIDENTIAL APPLIANCES
- 11 40 00 - FOOD SERVICE EQUIPMENT
- 11 52 13 - PROJECTION SCREENS
- 11 61 43 - STAGE CURTAINS
- 11 66 00 - ATHLETIC EQUIPMENT
- 11 72 00 - AUTOMATED EXTERNAL DEFIBRILLATORS

DIVISION 12 00 00 - FURNISHINGS

- 12 21 13 - METAL HORIZONTAL LOUVER BLINDS
- 12 24 13 - MOTORIZED ROLLER WINDOW SHADES
- 12 24 15 - MANUALLY OPERATED ROLLER WINDOW SHADES
- 12 32 16 - MANUFACTURED PLASTIC LAMINATE CLAD CASEWORK
- 12 56 00 - LIBRARY FURNITURE
- 12 93 13 - BICYCLE RACKS

DIVISION 13 00 00 THROUGH 20 00 00 – NOT USED

VOLUME 2 of 2

INFORMATION

- TABLE OF CONTENTS
- DESIGN TEAM SEALS PAGES

DIVISION 21 00 00 – FIRE SUPPRESSION

- 21 01 00 - FIRE PROTECTION OPERATING & MAINTENANCE MANUALS
- 21 05 00 - FIRE PROTECTION GENERAL PROVISIONS
- 21 05 10 - FIRE PROTECTION CONTRACT QUALITY CONTROL
- 21 05 12 - FIRE PROTECTION SHOP DRAWINGS, COORD DRAWINGS, PROD DATA
- 21 05 13 - ELECTRICAL PROVISIONS OF FIRE PROTECTION WORK
- 21 10 00 - FIRE SPRINKLER SYSTEM

DIVISION 22 – PLUMBING

- 22 01 00 - PLUMBING OPERATING & MAINTENANCE MANUALS
- 22 05 00 - PLUMBING GENERAL PROVISIONS
- 22 05 10 - PLUMBING CONTRACT QUALITY CONTROL
- 22 05 11 - UNDER SLAB PIPE VOID SYSTEM *[ISSUED: ADDENDUM #2]*
- 22 05 12 - SHOP DRAWINGS, COORD. DRAWINGS & PRODUCT DATA
- 22 05 13 - ELECTRICAL PROVISIONS OF PLUMBING WORK
- 22 05 15 - PLUMBING EARTHWORK
- 22 05 16 - EXC, BACKFILLING & COMPACT FOR UTILITIES
- 22 05 17 - PLUMBING ACCESS DOORS
- 22 05 19 - PRESS & TEMP INSTRU FOR PLUMBING PIPING
- 22 05 23 - VALVES, STRAINERS & VENTS
- 22 05 33 - PIPE HEAT TRACING
- 22 07 19 - PLUMBING PIPING INSULATION
- 22 08 00 - PLUMBING COMMISSIONING
- 22 11 16 - DOMESTIC WATER PIPING & APPURTENANCES
- 22 11 19 - PIPING & APPUR FOR COLD-WATER MAKE-UP
- 22 11 23 - DOMESTIC WATER PUMPS
- 22 11 25 - DOMESTIC WATER BOOSTER PUMP (IN-LINE VERTICAL)
- 22 13 16 - SOIL WASTE & SANITARY DRAIN PIPING
- 22 14 13 - ROOF DRAINAGE PIPING & APPURTENANCES *[ISSUED: ADDENDUM #2]*
- 22 20 00 - PLUMBING PIPE & FITTINGS - GENERAL
- 22 33 33 - ELECTRIC WATER HEATER (COMMER. ASME)
- 22 34 32 - GAS DOMESTIC WATER HEATER (CYCLONE)
- 22 40 00 - PLBG FIXTURES & FIXTURE CARRIERS
- 22 63 11 - GAS PIPING & APPURTENANCES

DIVISION 23 00 00 – HEATING, VENTILATING AND AIR CONDITIONING

23 01 00 - HVAC O&M MANUALS
23 05 00 - MECH GENERAL PROVISIONS
23 05 10 - HVAC CONTRACT QUALITY CONTROL
23 05 12 - HVAC SHOP DRAWINGS
23 05 13 - ELECTRICAL PROVISIONS OF HVAC WORK
23 05 14 - HVAC CONDENSATE DRAIN PIPING
23 05 17 - MECH ACCESS DOORS
23 05 18 - VARIABLE FREQUENCY INVERTER
23 05 19 - PRESSURE & TEMPERATURE INSTRUMENTS
23 05 23 - HVAC VALVES STRAINERS & VENTS
23 05 33 - HVAC PIPE HEAT TRACING
23 05 48 - VIBRATION ISOLATION
23 05 93 - TAB
23 05 94 - COORDINATION OF TAB
23 07 13 - EXTERNAL DUCT INSULATION
23 07 16 - VESSEL INSULATION
23 07 19 - HVAC PIPING INSULATION
23 08 00 - MECHANICAL COMMISSIONING
23 09 33 - BMCS
23 09 34 - COORDINATION OF BMCS
23 20 00 - MECH PIPE & FITTINGS - GENERAL
23 21 13 - HW & CW PIPE VALVES & APPURTENANCES
23 21 23 - HVAC PUMPS
23 23 00 - REFRIGERANT PIPING & APPURTENANCES
23 25 13 - CIRCULATING WATER SYSTEM CHEMICAL TREATMENT
23 31 13 - DUCTWORK
23 34 16 - FANS
23 36 16 - VARIABLE VOLUME TERMINAL UNITS
23 36 17 - DUAL DUCT VARIABLE VOLUME TERMINAL UNITS
23 37 13 - AIR DEVICES
23 41 00 - AIR FILTRATION
23 52 35 - GAS MODULATING HOT WATER BOILER CONDENSING
23 63 00 - AIR COOLED CONDENSING UNIT
23 65 28 - AIR COOLED VARIABLE SPEED ROTARY SCREW CHILLER
23 73 13 - AIR HANDLING UNITS
23 82 16 - HEATING & COOLING COILS
23 82 18 - DUCTLESS MINI SPLITS
23 82 19 - FAN COIL UNITS
23 82 39 - ELECTRIC UNIT HEATERS
23 82 41 - ELECTRIC DUCT HEATERS

DIVISION 24 00 00 THROUGH 25 00 00 - NOT USED

DIVISION 26 00 00 – ELECTRICAL

26 01 05 - ELEC O&M MANUALS
26 05 00 - ELEC GENERAL PROVISIONS
26 05 08 - TELECOM CATV VOICE DATA VIDEO UTILITY COORD & SERVICE ENTRANCE
26 05 09 - ELEC UTILITY COORDINATION & SERVICE ENTRANCE
26 05 10 - CONTRACT QUALITY CONTROL
26 05 11 - UNDER SLAB PIPE VOID SYSTEM-ELECTRICAL [ISSUED: ADDENDUM #2]
26 05 12 - ELEC SHOP AND COORDINATION DRAWINGS
26 05 16 - EXCAV-COMPACTING-BACKFIL FOR ELECTRICAL
26 05 19 - CONDUCTORS AND CONNECTORS

26 05 26 - ELECTRICAL GROUNDING
26 05 33 - CONDUIT SYSTEMS
26 05 35 - ELECTRICAL CONNECTIONS FOR EQUIPMENT
26 05 37 - ELECTRICAL BOXES AND FITTINGS
26 05 38 - ELECTRICAL FLOOR BOXES AND FITTINGS.DOCX
26 05 40 - ELECTRICAL GUTTERS & WIREWAYS
26 05 50 - FIRESTOPS
26 08 00 - ELECTRICAL COMMISSIONING
26 09 25 - ELECTRICAL CONTACTORS
26 09 29 - DIGITAL LIGHTING CONTROL SYSTEM
26 12 16 - ENERGY EFF DRY-TYPE HARM MITIGATING TRANSFORMERS
26 19 13 - COMBINATION MOTOR CONTROLLERS
26 24 13 - SWITCHBOARDS
26 24 16 - PANELBOARDS ENCLOSURES
26 24 25 - ENCLOSED SWITCHES
26 24 30 - FUSES
26 27 73 - LINE VOLTAGE WIRING DEVICES
26 32 13 - NATURAL GAS STANDBY GEN SETS WITH TRANSFER SWITCH
26 32 16 - DUAL PURPOSE MANUAL TRANSFER SWITCH
26 43 00 - SURGE PROTECTION DEVICES
26 51 13 - LIGHTING FIXTURES
26 55 61 - ELEM THEATRICAL LIGHTING SYSTEM_NO DEALER
26 56 00 - SITE LIGHTING

DIVISION 27 00 00 – COMMUNICATIONS

27 01 00 - ELECTRONIC COMMUNICATIONS O&M MANUALS
27 05 00 - COMMUNICATIONS GENERAL PROVISIONS
27 05 07 - COMMUNICATIONS SHOP DRAWINGS
27 05 09 - CONTRACT QUALITY CONTROL
27 10 00 - STRUCTURED CABLING SYSTEMS
27 51 23 - SCHOOL COMMUNICATIONS SYSTEMS
27 51 24 - LOCAL SOUND DISTRIBUTION SYSTEM
27 61 00 - INTEGRATED AUDIO-VIDEO SYSTEMS AND EQUIPMENT FOR INSTRUCTIONAL SPACES -
FRONTROW TRIO
27 61 05 - AUDIO VIDEO SYSTEMS AND EQUIPMENT

DIVISION 28 00 00 – ELECTRONIC SAFETY AND SECURITY

28 01 00 - SAFETY & SECURITY O&M MANUALS
28 05 00 - SAFETY & SECURITY GENERAL PROVISIONS
28 05 07 - SAFETY & SECURITY SHOP DRAWINGS
28 05 10 - CONTRACT QUALITY CONTROL
28 10 00 - ACCESS CONTROL SYSTEM
28 15 00 - INTRUSION DETECTION
28 20 00 - VIDEO SURVEILLANCE
28 46 00 - FIRE DETECTION & ALARM SYSTEM
28 55 00 - RF SURVEY

Division 31 00 00 – Earthwork

31 00 00 - SITE EARTHWORK
31 11 00 - CLEARING AND GRUBBING
31 23 00 - GRADING EXCAVATION AND FILL
31 25 00 - EROSION AND SEDIMENTATION CONTROL
31 63 29 - DRILLED CONCRETE PIERS AND SHAFTS

DIVISION 32 00 00 – EXTERIOR IMPROVEMENTS

- 32 12 16 - ASPHALTIC CONCRETE PAVEMENT
- 32 13 13 - PORTLAND CEMENT CONCRETE PAVING
- 32 13 19 - CONCRETE PAVEMENT JOINTS
- 32 13 73.19 - SITEWORK CAST-IN-PLACE CONCRETE
- 32 16 13 - CONCRETE CURBS AND CURB AND GUTTER
- 32 31 15 - CHAIN LINK FENCING AND GATES
- 32 31 19 - ORNAMENTAL FENCE SYSTEM *[REPLACED: ADDENDUM #3]*
- 32 84 00 - LANDSCAPE IRRIGATION
- 32 90 00 - LANDSCAPE PLANTING
- 32 90 30 - EXTERIOR LANDSCAPE MAINTENANCE
- 32 91 00 - TOPSOIL, PLACEMENT AND GRADING
- 32 92 00 - LAWN SODDING & HYDROMULCH

DIVISION 33 00 00 – UTILITIES

- 33 05 16 - UTILITY STRUCTURES
- 33 05 28 - TRENCHING AND BACKFILL FOR UTILITIES
- 33 11 00 - WATER DISTRIBUTION SYSTEMS
- 33 16 53 - TRAFFIC PAINT STRIPING
- 33 31 00 - SANITARY UTILITY SEWERAGE PIPING
- 33 41 00 - STORM SEWAGE SYSTEMS

END OF TABLE OF CONTENTS

SECTION 00 01 01.1

TABLE OF CONTENTS: ARCHITECT

List of Specifications, As Prepared by:



2 Greenway Plaza, Suite 460
Houston, Texas 77046
P: 713.222.1141



01-17-2025
(ADDENDUM #5)

DIVISION 01 00 00 - GENERAL REQUIREMENTS

- 01 10 00 - MISCELLANEOUS REQUIREMENTS
- 01 21 00 - ALLOWANCES *[REVISED: ADDENDUM #1]*
- 01 22 00 - UNIT PRICES
- 01 23 00 - ALTERNATES *[REVISED: ADDENDUM #1]*
- 01 25 13 - PRODUCT SUBSTITUTION PROCEDURES
- 01 26 00 - CONTRACT MODIFICATION PROCEDURES
- 01 29 00 - SCHEDULE OF VALUES & PAYMENT PROCEDURES
- 01 31 00 - PROJECT MANAGEMENT AND COORDINATION
- 01 31 15 - PROJECT MANAGEMENT COMMUNICATIONS - CONTRACTOR
- 01 31 19 - PROJECT MEETINGS
- 01 32 00 - SCHEDULES, REPORTS AND PAYMENTS
- 01 32 16 - CONSTRUCTION SCHEDULE
- 01 33 01 - SUBMITTAL PROCEDURES
- 01 35 23 - OWNER SAFETY REQUIREMENTS
- 01 35 23.2 - BADGING - VERSION 6.0
- 01 35 43 - ENVIRONMENTAL PROCEDURES
- 01 40 00 - QUALITY REQUIREMENTS
- 01 42 00 - OWNER REQUIREMENTS
- 01 42 19 - REFERENCE STANDARDS AND DEFINITIONS
- 01 45 29 - TESTING LABORATORY SERVICES
- 01 50 00 - TEMPORARY FACILITIES AND CONTROLS
- 01 57 13 - EROSION AND SEDIMENTATION CONTROL
- 01 60 00 - PRODUCT REQUIREMENTS
- 01 73 29 - CUTTING AND PATCHING
- 01 74 23 - FINAL CLEANING
- 01 77 00 - CLOSEOUT PROCEDURES
- 01 77 01 - CLOSEOUT FORMS A-D
- 01 77 02 - WAIVER AND RELEASE OF LIENS
- 01 78 36 - WARRANTIES AND GUARANTEES
- 01 78 39 - PROJECT RECORD DOCUMENTS

~~**DIVISION 02 00 00 - EXISTING CONDITIONS** *[DELETED: ADDENDUM #2]*~~

~~02 32 00 - GEOTECHNICAL DATA *[DELETED: ADDENDUM #2]*~~

~~02 32 00.1 - GEOTECHNICAL REPORT *[DELETED: ADDENDUM #2]*~~

DIVISION 03 00 00 - CONCRETE

- 03 52 16 - LIGHTWEIGHT INSULATING CONCRETE

DIVISION 04 00 00 - MASONRY

04 20 00 - UNIT MASONRY

DIVISION 05 00 00 – METALS

05 50 00 - METAL FABRICATIONS

05 52 13 - PIPE AND TUBE RAILINGS

DIVISION 06 00 00 - WOOD, PLASTICS & COMPOSITES

06 10 00 - ROUGH CARPENTRY

06 20 00 - MILLWORK AND FINISH CARPENTRY

06 61 16 - SOLID SURFACING FABRICATIONS

DIVISION 07 00 00 - THERMAL AND MOISTURE PROTECTION

07 11 13 - BITUMINOUS DAMPPROOFING

07 21 00 - BUILDING INSULATION

07 21 19 - FOAMED-IN-PLACE INSULATION

07 26 00 - FLUID APPLIED AIR BARRIER

07 42 13 - PREFORMED METAL WALL PANELS *[REVISED: ADDENDUM #2]*

07 42 13.1 - INSULATED METAL WALL PANELS

07 42 15 - PREFORMED METAL SOFFIT PANELS

07 52 19 - MOD BIT ROOFING SYSTEM *[REVISED: ADDENDUM #5]*

07 62 00 - ROOF RELATED SHEET METAL-ADD 2

07 65 00 - FLEXIBLE FLASHING

07 65 26 - MEMBRANE THROUGH-WALL FLASHING

07 72 00 - ROOF ACCESSORIES-ADD 3

07 72 33 - ROOF HATCH

07 84 00 - FIRESTOPPING

07 90 00 - JOINT PROTECTION

07 95 13 - EXPANSION JOINT COVER ASSEMBLIES

DIVISION 08 00 00 - OPENINGS

08 11 00 - HOLLOW METAL DOORS & FRAMES

08 15 13 - PLASTIC LAMINATE FACED WOOD DOORS

08 31 13 - ACCESS DOORS AND FRAMES

08 33 00 - ROLLING GRILLES

08 33 02 - ROLLING COUNTER SHUTTERS

08 41 13 - ALUMINUM ENTRANCES AND STOREFRONTS *[REVISED: ADDENDUM #2]*

08 44 13 - ALUMINUM CURTAIN WALL SYSTEM *[REVISED: ADDENDUM #2]*

08 71 00 – DOOR HARDWARE *[REVISED: ADDENDUM #2]*

08 80 00 - GLASS AND GLAZING

08-88-53 - SECURITY GLAZING

DIVISION 09 00 00 - FINISHES

09 21 16 - GYPSUM BOARD ASSEMBLIES

09 30 00 - TILING

09 51 00 - SUSPENDED ACOUSTICAL CEILINGS

09 54 23 - LINEAR METAL CEILINGS

09 64 55 - RESILIENT WOOD FLOOR-STAINED SURFACE

09 65 00 - RESILIENT FLOORING

09 65 13 - RESILIENT BASE

09 65 25 - VINYL TILE_PLANK FLOORING (LVT)
09 66 13 - PORTLAND CEMENT TERRAZZO FLOORING
09 67 23 - RESINOUS FLOORING
09 68 16 - CARPET
09 72 00 - PRESENTATON DRY-ERASE WALLCOVERING
09 72 00 - WALL COVERING
09 84 13 - FABRIC COVERED ACOUSTICAL PANELS [REVISED: ADDENDUM #3]
09 90 00 - PAINTING AND COATING

DIVISION 10 00 00 - SPECIALTIES

10 05 00 - MISCELLANEOUS SPECIALTIES
10 11 00 - VISUAL DISPLAY BOARDS
10 14 00 - ARCHITECTURAL SIGNAGE
10 14 64 - ELECTRONIC MESSAGE SIGNAGE [*ISSUED: ADDENDUM #2*]
10 21 16 - SOLID PLASTIC TOILET PARTITIONS
10 21 23 - CUBICLE CURTAINS AND TRACK
10 22 26 - OPERABLE PARTITIONS
10 26 13 - CORNER GUARDS
10 28 00 - TOILET AND BATH ACCESSORIES [*REVISED: ADDENDUM #2*]
10 44 13 - FIRE EXTINGUISHERS AND CABINETS
10 51 13 - WEAPONS RACK
10 56 13 - METAL STORAGE SHELVING
10 73 00 - PROTECTIVE COVERS
10 75 16 - FLAGPOLE

DIVISION 11 00 00 – EQUIPMENT

11 16 19 - RAPID ENTRY SYSTEM (FIREMAN LOCK BOX)
11 31 13 - RESIDENTIAL APPLIANCES
11 40 00 - FOOD SERVICE EQUIPMENT
11 52 13 - PROJECTION SCREENS
11 61 43 - STAGE CURTAINS
11 66 00 - ATHLETIC EQUIPMENT
11 72 00 -AUTOMATED EXTERNAL DEFIBRILLATORS

DIVISION 12 00 00 - FURNISHINGS

12 21 13 - METAL HORIZONTAL LOUVER BLINDS
12 24 13 - MOTORIZED ROLLER WINDOW SHADES
12 24 15 - MANUALLY OPERATED ROLLER WINDOW SHADES
12 32 16 - MANUFACTURED PLASTIC LAMINATE CLAD CASEWORK
12 56 00 - LIBRARY FURNITURE
12 93 13 - BICYCLE RACKS

DIVISION 32 00 00 – EXTERIOR IMPROVEMENTS

32 31 15 - CHAIN LINK FENCING AND GATES
32 31 19 - ORNAMENTAL FENCE SYSTEM [*REPLACED: ADDENDUM #3*]

END OF SECTION 00 01 10.1

**SECTION 00 11 00 –
REQUEST FOR COMPETITIVE SEALED PROPOSALS**

Competitive Sealed Proposals for the work identified below in accordance with Proposal Documents and addenda as may be issued prior to date of proposal opening will be received by the Board of Trustees, Lamar Consolidated Independent School District, until proposal closing date and time, as identified below. Proposals from Offerors will then be opened in public and read aloud.

OWNER: Lamar Consolidated Independent School District
3911 Avenue I
Rosenberg, Texas 77471
Phone: (832) 223 - 0250
Representative: Kevin McKeever

PROJECT: Prototype #2 - Elementary School #38
522 Brookewater Blvd
Rosenberg, TX 77471

EST. BUDGET: \$40,000,000.00

PREPROPOSAL CONFERENCE: December 20, 2024, at 10:00 AM

Location: Bond Program Office:
5015 Commodore Drive,
Rosenberg, Texas 77471

Representatives of the Architect, Owner will be present at this meeting. All proposers are encouraged to attend.

PROPOSAL DATE AND TIME: **January 24, 2025, at 2:00 PM –**
Base and Alternates Proposals

LOCATION OF PROPOSAL OPENING: LCISD Service Center
4901 Avenue I, Rosenberg, Texas 77471

ARCHITECT: Pfluger Architects
2 Greenway Plaza, Ste 460
Houston, Texas 77046
Phone: 713-222-1141

Complete Proposal Package (Drawings and Specifications) may be obtained from the Architect in electronic form via AutoDesk Docs by written/ email request to the following persons:

1. Diedra.Shaw@pflugerarchitects.com
2. Jazmin.Mendez@pflugerarchitects.com
3. Raleigh.Sullivan@pflugerarchitects.com

No hard copies will be provided, Offerors may print the proposal package at their own expense only for the purposes of preparing their respective proposals.

Office Hours are 8:00 AM to 5:00 PM

In addition, proposal documents can be reviewed at the following locations:

VirtualBuildersExchange
7035 W. Tidwell, Bldg J, Ste 112
Houston, Texas 77098
F: (832) 613-0344
www.virtualbx.com

ConstructConnect
(Formerly iSqFt & CMD)
Phone: (800) 364-2059

www.constructionconnect.com

Dodge Data & Analytics
4300 Beltway Pl, Suite 150, Arlington, TX 76018
(877) 784-9556
www.construction.com
<https://dfmgr.construction.com/dfmgr/login>

Submit Proposals to the Owner no later than the date and time specified. Submit proposals in duplicate in a sealed envelope in accordance with Section 0020 00 Instructions to Offerors with the following information on the face of the envelope.

Name of Offeror (General Contractor)
Prototype #2 - Elementary School #38
Lamar Consolidated Independent School District
CSP #: 03-2025

Attn: Ms. Brandi Pittman, Director of Purchasing & Materials Management

The Owner reserves the right to reject any and all proposals and to waive any irregularities in the Competitive Sealed Proposal process.

No proposal shall be withdrawn within 45 days after the proposal opening without the specific consent of the Owner.

PROPOSAL BOND: A Proposal Bond (Section 00 40 01 Proposal Bond), from a bonding company acceptable to the Owner or a certified check in an amount equal to 10% of the greatest amount proposal shall accompany each Offeror's proposal.

PAYMENT BOND AND PERFORMANCE BOND: A Payment Bond and Performance Bond, each in an amount equal to 100% of the Contract Sum conditioned upon the faithful performance of the Contract will be required. Please note that all bonding companies presented must be acceptable to the Owner.

The prevailing rates of wages are the minimums that must be paid in compliance with applicable laws of the State of Texas.

Offerors submitting a proposal are encouraged to visit the site. All Offerors submitting a proposal are encouraged to attend the proposal opening.

Subcontractors and Suppliers intending to submit proposals to General Construction Offerors are required to prepare proposals based on a complete set of proposal documents.

Successful Subcontractors and Supplier Offerors must retain their Proposal Documents until completion of the construction.

Lamar Consolidated Independent School District (LCISD) CSP #: 03-2025

RETURN THE FOLLOWING DOCUMENTS WITH BID/PROPOSAL PACKAGE:

From Section 00 11 00 Request for Competitive Sealed Proposals

1. Solicitation Cover Sheet
2. Response to Criteria Questions
3. Competitive Sealed Proposal Form
4. References (email to Architect, refer to Project Schedule for date)
5. Interested Party. Form 1295
6. Certificate of Residency
7. Felony Conviction Notification
8. Conflict of Interest Questionnaire
9. Certificate Regarding Lobbying
10. Vendor Debarment Statement
11. No Response Form – *(if choosing not to submit a response)*
12. Proposal Submission Form
13. Contractor Certification
14. Texas Statutory Performance Bond
15. Texas Statutory Payment Bond
16. Texas Government Code 2270 Verification Form

Refer to Section 00 20 00 Instructions to Offerors, for additional form requirements

Lamar Consolidated
 Independent School
 District (LCISD)
 Solicitation Cover Sheet

CSP #	03-2025
Due Date:	January 24, 2025
DUE NO LATER THAN 2:00 PM (CST) LATE PROPOSALS WILL NOT BE ACCEPTED	

**Competitive Sealed Proposal (CSP): 03-2025
 Prototype #2 - Elementary School #38**

Company Name		
Company Address		
City	State	Zip
Taxpayer I.D. #		
Telephone	Fax	E-mail
Billing Address if different from above		
Authorized Representative Name		
Authorized Representative Signature		

Your signature attests to your offer to provide the goods and/or services in this solicitation according to the published provisions of this solicitation. Contract is not valid until LCISD Board has approved the award.

RETURN THIS DOCUMENT IN BID/PROPOSAL PACKAGE

**Competitive Sealed Proposal (CSP):
Prototype #2 - Elementary School #38**

Purpose of Solicitation	The intention of this solicitation is to solicit proposals to establish a contract to provide: Prototype #2 - Elementary School #38 The estimated Project Budget for this project is \$40,000,000.00.
--------------------------------	--

Length of Solicitation	Single purchase instrument awarded with Lamar CISD Board approval.
-------------------------------	--

<u>Terms and Conditions</u>	<p>This solicitation shall be governed by the following documents which are incorporated herein.</p> <p>A copy may be obtained at http://www.lcisid.org/departments/business-office/purchasing/terms-and-conditions or by contacting the Lamar CISD Purchasing Dept. staff listed on the cover sheet. Any exception to the terms and conditions must be included in the Proposer's response.</p> <p>Texas Education Code 44.031 and Government Code 2269 Purchasing and Acquisition, LCISD Policy CH (Legal) Purchasing and Acquisition, LCISD Policy CH (Local)</p> <p>LCISD reserves the right to award this contract as best meets the district needs to waive informalities and to reject any or all proposals.</p>
------------------------------------	---

<u>Response Requirements</u>	<p>LCISD will accept competitive sealed proposals either by mail or hand delivery until January 24, 2025 at 2:00 PM (CST). Please make certain that the Solicitation number is written clearly on the front of your envelope. Proposals received after the opening date and time will not be accepted and will be returned unopened.</p> <p>Submission Package must include: Two (2) Originals</p> <p>Please use the address below:</p> <p style="text-align: center;">Lamar CISD Service Center 4901 Avenue I, Rosenberg, TX 77471</p> <p>For additional information contact Brandi Pittman 832-223-0166 or by email at brandi.pittman@lcisd.org</p> <p>A response is required to all forms, questions and price entry listed on the Proposal Form. Leaving a line blank will be considered a "no bid" and may result in disqualification for your submission.</p>
-------------------------------------	--

Prototype #2 - Elementary School #38

PROJECT SCHEDULE

Competitive Sealed Proposal (CSP): **CSP No.: 03-2025**

Release Construction Documents	December 16, 2024
Pre-Proposal Conference at 10:00 AM (CST) Location: Bond Program Office: 5015 Commodore Drive, Rosenberg, Texas 77471	December 20, 2024 10:00AM
Submit Contractor Qualifications (A305) and References to Architect via email	January 10, 2025 (by 2:00 PM)
Receive Proposals at 2:00 PM (CST) Location: Lamar CISD Service Center 4901 Avenue I, Rosenberg, TX 77471	January 24, 2025
Award Construction Contract at LCISD Board Meeting	February 20, 2025
Contractor Start Date: (upon issuance of Notice to Proceed)	February 21, 2025
Substantial Completion Dates:	May 6, 2026

PROPOSAL EVALUATION CRITERIA

This proposal shall be evaluated using the evaluation criteria listed below.

	Evaluation Criteria	Point System
1	Purchase price – Proposal should offer a fair and reasonable price for services to be procured by Lamar CISD. Pricing will be calculated using the Price Delivery Sheet in this document.	40
2	Reputation of the vendor and of the vendor’s goods or services – Proposer should have a solid reputation with other ISDs, government or collegiate entities that shows a high level of customer service and a high level of quality of goods or services. References will be contacted via e-mail.	10
3	Quality of the vendor’s goods or services – Overall assessment of vendor’s services. Vendor will be expected to meet schedules and operate with minimal disruption in accordance with the outlined specifications.	10
4	Extent to which the goods or services meet the district’s needs Assessment of Submitted Project Plan and Schedules	10
5	Vendor’s past relationship with the district 8-10: Good business with LCISD, staff recommends use again 5-7: Good business with no documented issues OR never performed business with LCISD but has experience with other school districts or government entities. 1-4: Past performance was documented as being poor.	10
6	Proposed team offers experience and knowledge base required for the project <ul style="list-style-type: none"> • Organizational chart of proposed project team • Resume of each proposed team member 	10
7	Ability to provide proper bonds and insurance requirements – Provide proof of proper insurance and bonding capacity.	5
8	Safety Record Vendor must submit copy of Experience Modifier Rate (EMR) for the last three years. The totals for the three years are calculated and averaged to receive the points below. 10 - EMR of .50 or less 8 - EMR 0.51-0.85 6 - EMR 0.86-0.99 4 - EMR greater than 1.0 2 - EMR not included	5
9	Total	100

PROPOSSAL EVALUATION CRITERIA NOTES:

Careful consideration should be given to all items of the above Evaluation Criteria table. The points awarded to each item will be based on **how well each submission:**

1. Provides thoroughly developed, competitive pricing using the tables in Pricing Delivery Information of this CSP.
2. Provides evidence of experience in general and the ability to perform services to a district similar to Lamar CISD and names & contact information for references.
3. Provides evidence related to the quality of services, as well as the results of references provided by each respondent.
4. Provides an effective plan and schedule that addresses the scope presented in the request for proposals.
5. Provide list of history of projects with Lamar CISD.
6. Provides information describing experience and qualifications of onsite leadership and key staff to be assigned to the contracted work.
7. Provides an adequate and current certificate of insurance coverage.
8. Provides evidence of participation in an OSHA compliant safety program and any other safety policies in place.

**PROVIDE RESPONSE TO EACH OF THESE CRITERIA QUESTIONS IN YOUR
BID/ PROPOSAL PACKAGE.**

PRICE DELIVERY INFORMATION
COMPETITIVE SEALED
PROPOSAL FORM
Prototype #2 - Elementary
School #38 (CSP): 03-2025
LAMAR CONSOLIDATED INDEPENDENT SCHOOL DISTRICT

Submitted by: _____

Date: _____ Phone No.: _____

To: Board of Trustees
Lamar Consolidated Independent
School District 3911 Avenue I
Rosenberg, TX 77471

Having examined the Lamar CISD Purchasing Department's Proposal Documents, the Contract Documents prepared by Pfluger Architects, dated **December 12, 2024**, and having examined site conditions, the undersigned proposes to furnish all labor, equipment and materials and perform all work for the completion of the above- named project for the sum indicated below.

In submitting his Proposal, the undersigned agrees to the following:

1. Hold proposal open for acceptance 60 days.
2. Accept right of Owner to reject any or all proposals, to waive formalities and to accept proposal which Owner considers most advantageous.
3. Enter into and execute the contract, if awarded, for the Base Proposal.
4. Complete work in accordance with the Contract Documents within the stipulated contract time.
5. By submission of this Proposal, the undersigned affirms that, to the best of his knowledge, the Proposals have been arrived at independently and is submitted without collusion with anyone to obtain information or gain any favoritism that would in any way limit competition or give an unfair advantage over respondents in the award of this proposal.
6. By submission of this Proposal the undersigned agrees to all provisions summarized in the Lamar CISD Terms & Conditions and that his Proposal has been prepared in accordance with the Instructions given in this section.

I. BASE PROPOSAL

Prototype #2 - Elementary School #38

Undersigned agrees to complete the Work for the lump sum amount of:

_____ Dollars \$ _____
(Amount written in words governs) (Amount in figures)

II. ALTERNATES

1. **Alternate No 1:** If Brookewater Blvd. is not completed by the time the school's construction is finished, provide construction and future demolition of temporary connectors from Wallingford Park Drive. This shall include all necessary work to complete the final roads and surrounding landscape fully and any additional work required for complete finalization.

*[Add or Deduct] the sum of _____ and _____ /100 DOLLARS
(\$ _____) to the Base Proposal.*

2. **Alternate No 2: If Brookewater Boulevard is not completed by the time that the school construction is finished, please provide for the construction of the ultimate rainstorm outfall that will connect to the existing detention area across Brookewater Boulevard. This should include all necessary final connections to the permanent outfalls and any additional work required for complete finalization.**

[Add or Deduct] the sum of

_____ and _____ /100 DOLLARS
(\$ _____) to the Base Proposal.

III. ALLOWANCES

Undersigned certifies that the allowances listed below and specified in Section 01 21 00 are **included in the corresponding Base Proposal above** and agrees that the unexpended balance of allowance sums will revert to Owner in the final settlement of the contract.

- A. **Owner's Contingency Allowance – Prototype #2 - ES #38** \$350,000.00
- B. **Network Equipment & Phone Allowance – Prototype #2 - ES #38**
\$750,000.00
- C. **Cameras Only Allowance – Prototype #2 - ES #38**
\$200,000.00 Provide camera equipment, installation, and integration. Cabling is included in the project.
- D. **Access Control Allowance – Prototype #2 - ES #38**
\$100,000.00 Provide equipment, installation, and integration, for head-in equipment in IDF's.
Hardware is included in Division 8 of the project.
- E. **Utility Infrastructure Allowance – Prototype #2 - ES #38** \$30,000.00
- F. **Building Controls Allowance – Prototype #2 - ES #38** \$550,000.00
- G. **Supergraphics Allowance – Prototype #2 - ES #38** \$80,000.00
- H. **Static pressure pumps Allowance - Prototype #2 – ES #38** \$300,000.00

IV. UNIT PRICES

- A. Unit Price 1: Electrical Outlet

Dollars \$

(Amount written in words governs amount written in figures)

- B. Unit Price 2: Data Outlet

Dollars \$

(Amount written in words governs amount written in figures)

C. Unit Price 3: Cubic Yard of Concrete

Dollars \$

(Amount written in words governs amount written in figures)

D. Unit Price 4: Square Yard of Asphalt

Dollars \$

(Amount written in words governs amount written in figures)

E. Unit Price 5: Square Foot of Sidewalk (based on profile)

Dollars \$

(Amount written in words governs amount written in figures)

F. Unit Price 6: Chain Link Fencing

Dollars \$

(Amount written in words governs amount written in figures)

G. Unit Price 7: Ornamental Fencing

Dollars \$

(Amount written in words governs amount written in figures)

CONTRACT TIME

The undersigned agrees that he has included all labor and materials to be substantially complete with the work defined by these contract documents. The Offeror attests and affirms that his proposal includes all necessary costs associated with overtime to substantially complete the work by the following date. The number of days to be anticipated as delay days shall be included as specified in Document 00 73 00 – LCISD Supplementary Conditions to the Contract for Construction and managed by the Project Team in accordance with this section and as otherwise stated in the Project Manual.

Undersigned agrees to begin Work upon Notice to Proceed and be Substantially Complete by **the dates for each scope of work.**

V. ADDENDA

Undersigned acknowledges receipt of Addenda Nos. _____.

VI. CHANGES IN THE WORK

Undersigned understands that changes in the work shall be performed in accordance with the Supplementary Conditions.

VII. LIQUIDATED DAMAGES

Undersigned understands that liquidated damages as defined in the Supplementary Conditions will be included in the form of Agreement between Owner and Contractor and that the contractor will be bound thereto.

VIII. PROPOSED CONSTRUCTION SCHEDULE

Attach a preliminary construction schedule for use in evaluating the Offeror's proposal.

It is understood that the right is reserved by the Owner to reject any or all proposals or waive any informalities in the proposal process.

(Seal, if a Corporation)
State whether Corporation,
Partnership or Individual

Authorized Signature

Title

Name of Contracting Firm

Address

Telephone

Date

RETURN THIS DOCUMENT IN BID/PROPOSAL PACKAGE

REFERENCES

Please provide at least four (4) school district (campus) references that have used your company for the same goods Lamar CISD is requesting in this proposal. Please include contact name, school district, address, telephone number, and e-mail address.

A valid e-mail address is required. Please make sure the e-mail address is legible and current.

COMPANY NAME
ADDRESS
EMAIL
PHONE NO.

COMPANY NAME
ADDRESS
EMAIL
PHONE NO.

COMPANY NAME
ADDRESS
EMAIL
PHONE NO.

COMPANY NAME
ADDRESS
EMAIL
PHONE NO.

RETURN THIS DOCUMENT TO ARCHITECT VIA EMAIL

LAMAR CISD CERTIFICATE OF INTERESTED PARTIES – FORM 1295

Certificate of Interested Parties (Form 1295 – must be filled out electronically with the Texas Ethics Commission’s online filing application, printed out, signed, notarized, and submitted with proposals or qualifications to Lamar CISD.

Lamar CISD is required to comply with House Bill 1295, which amended the Texas Government Code by adding Section 2252.908, Disclosure of Interested Parties. Section 2252.908 prohibits Lamar CISD from entering into a contract resulting from this solicitation with a business entity unless the business entity submits a Disclosure of Interested Parties (Form 1295) to Lamar CISD at the time business entity submits the signed contract/proposal/qualifications. The Texas Ethics Commission has adopted rules requiring the business entity to file Form 1295 electronically with the Texas Ethics Commission.

“Interested Party” means a person:

- a) who has a controlling interest in a business entity with whom Lamar CISD contracts; or
- b) who actively participates in facilitating the contract or negotiating the terms of the contract, including a broker, intermediary, adviser, or attorney for the business entity.

“Business Entity” means an entity recognized by law through which business is conducted, including a sole proprietorship, partnership, or corporation.

As a “business entity,” all vendors must electronically complete, print, sign, notarize, and submit Form 1295 with their proposals even if no interested parties exist.

Proposers must file Form 1295 electronically with the Texas Ethics Commission using the online filing application, which can be found at https://www.ethics.state.tx.us/whatsnew/elf_info_form1295.htm. Proposers must use the filing application on the Texas Ethics Commission’s website to enter the required information on Form 1295. Proposers must print a copy of the completed form, which will include a certification of filing containing a unique certification number. The Form 1295 must be signed by an authorized agent of the business entity, and the form must be notarized.

The completed Form 1295 with the certification of filing must be filed with Lamar CISD by attaching the completed form to the vendor’s proposal.

Lamar CISD must acknowledge the receipt of the filed Form 1295 by notifying the Texas Ethics Commission of the receipt of the filed Form 1295 no later than the 30th day after the date the contract binds all parties to the contract. After Lamar CISD acknowledges the Form 1295, the Texas Ethics Commission will post the completed Form 1295 to its website with seven business days after receiving notice from Lamar CISD.

I have read and understand the above information regarding the Certificate of Interested Parties Form 1295. I understand the action needed on my part as an interested party. **I also understand that the 1295 filing form shall be returned with RFP response.**

Acknowledgement Signature: _____

Printed Name: _____

Date: _____

RETURN THIS DOCUMENT IN BID/PROPOSAL PACKAGE

CERTIFICATE OF RESIDENCY

The State of Texas has passed a law concerning non-resident contractors. This law can be found in Texas Education Code under Chapter 2252, Subchapter A. This law makes it necessary for LCISD to determine the residency of its proposers. In part, this law reads as follows:

“Section: 2252.001

- (3) ‘Non-resident bidder’ refers to a person who is not a resident.
- (4) ‘Resident bidder’ refers to a person whose principal place of business is in this state, including a contractor whose ultimate parent company or majority owner has its principal place of business in this state.

Section: 2252.002

A governmental entity may not award a governmental contract to a nonresident bidder unless the nonresident underbids the lowest bid submitted by a responsible resident bidder by an amount that is not less than the amount by which a resident bidder would be required to underbid the nonresident bidder to obtain a comparable contract in the state in which the nonresident’s principal place of business is located.”

I certify that _____
(Name of Company)

is, under Section: 2252.001 (3) and (4), a

Resident Bidder

Non-resident Bidder

My or Our principal place of business under Section: 2252.001 (3) and (4), is in the city of

_____ in the state of _____

Signature of Authorized Company Representative

Print Name

Title

Date

RETURN THIS DOCUMENT IN BID/PROPOSAL PACKAGE

FELONY CONVICTION NOTIFICATION

State of Texas Legislative Senate Bill No. 1, Section 44.034, Notification of Criminal History, Subsection (a), states "a person or business entity that enters into a contract with a school district must give advance notice to the district if the person or an owner or operator of the business entity has been convicted of a felony. The notice must include a general description of the conduct resulting in the conviction of a felony".

Subsection (b) states "a school district may terminate a contract with a person or business entity if the district determines that the person or business entity failed to give notice as required by Subsection (a) or misrepresented the conduct resulting in the conviction. The District must compensate the person or business entity for services performed before the termination of the contract".

This notice is not required of a Publicly-Held Corporation.

I, the undersigned agent for the firm named below, certify that the information concerning notification of felony convictions has been reviewed by me and the following information furnished is true to the best of my knowledge.

Vendor's Name: _____

Authorized Company Official's Name (Printed): _____

Check one of the following and sign as appropriate.

My firm is a publicly held corporation; therefore, this reporting requirement is not applicable.

Signature of Company Official: _____

My firm is not owned or operated by anyone who has been convicted of a felony.

Signature of Company Official: _____

My firm is owned or operated by the following individual(s) who has/have been convicted of a felony:

Name of Felon(s): _____

Details of Conviction(s): _____

Signature of Company Official: _____

RETURN THIS DOCUMENT IN BID/PROPOSAL PACKAGE

CONFLICT OF INTEREST QUESTIONNAIRE
PLEASE COMPLETE AND SIGN EVEN IF NO CONFLICT EXISTS
 For vendor or other person doing business with local governmental entity

This questionnaire reflects changes made to the law by H.B. 1491, 80th Leg., Regular Session.

This questionnaire is being filed in accordance with Chapter 176, Local Government Code by a person who has a business relationship as defined by Section 176.001(1-a) with a local governmental entity and the person meets requirements under Section 176.006(a).

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

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

OFFICE USE ONLY

Date Received

Name of person and company who has a business relationship with local governmental entity.

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

(The law requires that you file an updated completed questionnaire with the appropriate filing authority not later than the 7th business day after the date the originally filed questionnaire becomes incomplete or inaccurate.)

Please enter name of local government officer with whom filer has employment or business relationship.

This section (item 3 including subparts A, B, C & D) must be completed for each officer with whom the filer has an employment or other business relationship as defined by Section 176.001(1-a), Local Government Code. Attach additional pages to this Form CIQ as necessary.

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

Yes No

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

Yes No

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

Yes No

D. Describe each employment or business relationship with the local government officer named in this section.

 Signature of person doing business with the governmental entity

 Date

 Name of Business/Company

RETURN THIS DOCUMENT IN BID/PROPOSAL PACKAGE

**CERTIFICATION REGARDING LOBBYING
CERTIFICATION FOR CONTRACTS, GRANTS, LOANS, AND COOPERATIVE
AGREEMENTS**

The undersigned certifies, to the best of his or her knowledge and belief, that:

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

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

Company

Authorized Representative (Print)

Signature

Date

RETURN THIS DOCUMENT IN BID/PROPOSAL PACKAGE

VENDOR DEBARMENT STATEMENT

I have read the conditions and specifications provided in the bid document attached.

I affirm, to the best of my knowledge, the company I represent has not been debarred or suspended from conducting business with school districts in the State of Texas. This certification is required by the regulations implementing Executive Order 12549, Debarment and Suspension, 7 CFR Part 3017, Section 3017.510, Participants' responsibilities. The regulations were published as Part IV of the January 30, 1989, Federal Register (pages 4722-4733). Copies of the regulation may be obtained by contacting the Department of Agriculture Agency with which this transaction originated.

NAME OF COMPANY (Please Type)

MAILING ADDRESS CITY STATE ZIP

PREPARED BY (Please Type)

SIGNATURE

TITLE

TELEPHONE NUMBER

FAX NUMBER

DATE

RETURN THIS DOCUMENT IN BID/PROPOSAL PACKAGE

NO RESPONSE FORM

RETURN ONLY IF YOU CHOOSE NOT TO SUBMIT A RESPONSE TO THIS SOLICITATION
YOU MAY EMAIL THIS FORM TO ARCHITECT

Competitive Sealed Proposal CSP: 03-2025
Prototype #2 - Elementary School #38

Whereas on the _____ day of _____, 2022.

Name of company

has reviewed LCISD's CSP # **03-2025** and elects not to submit a bid:

State Reason for no bid:

Street Address

City	State	Zip
------	-------	-----

Telephone/Fax Number

Name of Authorized Individual

Signature of Authorized Individual

PROPOSAL SUBMISSION FORM

Competitive Sealed Proposal CSP: 03-2025
Prototype #2 - Elementary School #38

Please Print

Whereas on the _____ day of _____, 20____ (print name of company) _____ has reviewed Solicitation No. CSP 03-2025 and has responded in accordance with the terms and conditions which are incorporated herein. A copy may be obtained at http://www.lcisd.org/departments/business-office/purchasing/terms-and-conditions or by contacting the LCISD Purchasing staff person listed on the cover sheet. Any exception to the terms and conditions must be included in the Proposer's response. Texas Education Code 44.031 and Government Code 2269 <i>Purchasing and Acquisition, LCISD Policy CH (Legal)</i> <i>Purchasing and Acquisition, LCISD Policy CH (Local)</i>	
_____	_____
Street Address	City, State, Zip Code
_____	_____
Telephone Number	Fax Number
_____	_____
Name of Authorized Individual	Signature of Authorized Individual

RETURN THIS DOCUMENT IN BID/PROPOSAL PACKAGE

Contractor Certification

Introduction: Texas Education Code Chapter 22 requires entities that contract with school districts to obtain criminal history records on covered employees. Covered employees with disqualifying criminal histories are prohibited from serving at a school district. Contractors must certify to the district that they have complied and must obtain similar certifications from their subcontractors.

Definitions:

Covered individuals: Individual who have or will have continuing duties related to the service to be performed and have or will have direct contact with students. The District will be the final arbiter of what constitutes direct contact with students.

Disqualifying criminal history: (1) a conviction or other criminal history information designated by the District; (2) a felony or misdemeanor offense that would prevent a person from obtaining certification as an educator under Texas Education Code § 21.060, including 19 Tex. Admin. Code §249.16; or (3) one of the following offenses, if at the time of the offense, the victim was under 18 or enrolled in a public school: (a) a felony offense under Title 5, Texas Penal Code; (b) an offense for which a defendant is required to register as a sex offender under Chapter 62, Texas Code of Criminal Procedure; or (c) an equivalent offense under federal law or the laws of another state.

On behalf of _____ (“Contractor”), I certify that
check one:

None of Contractor’s employees are *covered individuals*, as defined above. If this box is checked, I further certify that Contractor has taken precautions or imposed conditions to ensure that Contractor’s employees will not become *covered individuals*. Contractor will maintain these precautions or conditions throughout the time the contracted services are provided.

Or

Some or all of Contractor’s employees are *covered individuals*. If this box is checked, I further certify that:

1. Contractor has obtained all required criminal history record information regarding its covered individuals. None of the covered individuals has a disqualifying criminal history.
2. If Contractor receives information that a covered individual subsequently has a reported criminal history, Contractor will immediately remove the covered individual from contract duties and notify the District in writing within three business days.
3. Upon request, Contractor will provide the District with the name and any other requested information of covered individuals so that the District may obtain criminal history record information on the covered individuals.
4. If the District objects to the assignment of a covered individual on the basis of the covered individual’s criminal history record information, Contractor agrees to discontinue using the covered individual to provide services at the District.

Noncompliance or misrepresentation regarding this certification may be grounds for contract termination.

Signature

Date

RETURN THIS DOCUMENT IN BID/PROPOSAL PACKAGE

LAMAR CISD INSURANCE REQUIREMENTS

Contractor shall maintain insurance coverage in the amounts specified in Section 00 73 00 A201 LCISD Supplementary Conditions. and furnish to District. If any work provided for or to be performed under any Specifications is sub-let (as otherwise permitted by the terms of such Specifications), the contractor shall require the subcontractor to maintain and furnish him with satisfactory evidence of *Workers Compensation*, Employer's Liability and such other forms and amounts of insurance which the contractor deems reasonably adequate. Certificates of Insurance on the current ACORD form shall be issued to District showing all required insurance coverage.

Insurance Conditions

All insurance coverage shall be issued on an Occurrence basis (except Professional Liability) by companies acceptable to District and licensed to do business in the State of Texas by the Texas Department of Insurance. Such companies shall have a Best's Key rating of at least "A- X".

All certificates must include:

1. The location or description and the bid number, CSP number or Purchase Order number
2. A 60-day notice of cancellation of any non-renewal, cancellation or material change to any of the policies
3. "Additional Insured" on the Property, General Liability, Automobile Liability and Umbrella (Excess) Liability policies naming the District.
4. A "Waiver of Subrogation" clause in favor of the District will be attached to the Workers Compensation, General Liability, Automobile Liability, Umbrella Liability and the Property insurance policies.
5. In addition to certificates of insurance, copies of policy endorsements must be provided (a) listing the District as Additional Insured, and (b) showing waivers of subrogation in favor of the District: CG2010, CG2037, CG2404, CA0070, CA0032, WC0003 or their equivalents.

All insurance must be maintained for one year following substantial completion with Certificates of Insurance provided.

Contractor shall be responsible for payment of all deductibles; the District shall approve the deductibles selected.

If any policy has aggregate limits, a statement of claims against the aggregate limits is required.

The District reserves the right to review the insurance requirements during the effective period of any contract to make reasonable adjustments to insurance coverage and limits when deemed reasonably prudent by District based upon changes in statutory laws, court decisions or potential increase in exposure to loss.

Lamar CISD – Purchasing Dept.
4911 Avenue I,
Rosenberg, TX 77471

TEXAS STATUTORY PERFORMANCE BOND

Bond No.: _____

(Penalty of this bond must be 100% of contract amount)

KNOW ALL MEN BY THESE PRESENTS, that: _____
(hereinafter called the Principal), as principal, and _____
a corporation organized and existing under the laws of the State of _____
authorized and admitted to do business in the State of Texas and licensed by the State of Texas to execute
bonds as Surety (hereinafter called the Surety), as Surety, are held and firmly bound unto

_____ (hereinafter called the Obligee) in the amount of _____

_____ Dollars(\$ _____) for the payment whereof, the said Principal and Surety bind themselves, and their heirs, administrators, executors, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has entered into a certain written contract with the Obligee, dated the _____ day of _____, 20_, for

**Prototype #2 - Elementary School #38
LAMAR CONSOLIDATED INDEPENDENT SCHOOL DISTRICT**

which contract is hereby referred to and made a part hereof as fully and 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 work in accordance with the plans, specifications and contract documents, 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 22.53 of the Texas Government Code 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.

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

Principal (Seal)

Surety Address

By: _____ (Seal)

Surety

Surety Telephone Number

By: _____
Attorney-in-Fact

RETURN THIS DOCUMENT IN BID/PROPOSAL PACKAGE

TEXAS STATUTORY PAYMENT BOND

Bond No.: _____

(Penalty of this bond must be 100% of contract amount)

KNOW ALL MEN BY THESE PRESENTS, that:

(hereinafter called the Principal), as principal, and _____
a corporation organized and existing under the laws of the State of _____
authorized and admitted to do business in the State of Texas and licensed by the State of Texas to execute
bonds as Surety (hereinafter called the Surety), as Surety, are held and firmly bound unto

(hereinafter called the Obligee) in the amount of _____

Dollars(\$ _____) for the payment whereof, the said Principal and Surety bind
themselves, and their heirs, administrators, executors, successors and assigns, jointly and severally, firmly
by these presents.

WHEREAS, the Principal has entered into a certain written contract with the Obligee, dated the _____
day of _____, 20_, for

**Prototype #2 - Elementary School #38
LAMAR CONSOLIDATED INDEPENDENT SCHOOL DISTRICT**

which contract is hereby referred to and made a part hereof as fully and 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 work in accordance with the plans, specifications and contract documents, 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 22.53 of the
Texas Government Code 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.

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

Witness: _____ (Seal)
Principal

_____ By: _____ (Seal)

Witness: _____ (Seal)
Surety

_____ By: _____
Attorney-in-Fact

_____ Surety Address

_____ Surety Telephone Number

RETURN THIS DOCUMENT IN BID/PROPOSAL PACKAGE

Certification Regarding Terrorist Organizations and Boycott of Israel

Contractor hereby certifies that it is not a company identified on the Texas Comptroller's list of companies known to have contracts with, or provide supplies or services to, a foreign organization designated as a Foreign Terrorist Organization by the U.S. Secretary of State under federal law.

Contractor hereby certifies and verifies that neither Contractor, nor any affiliate, subsidiary, or parent company of Contractor, if any (the "Contractor Companies"), boycotts Israel, and contractor agrees that Contractor and Contractor Companies will not boycott Israel during the term of this Agreement. For purposes of this Agreement, the term "boycott" shall mean and include terminating business activities or otherwise taking any action that is intended to penalize, inflict economic harm on, or limit commercial relations with Israel, or with a person or entity doing business in Israel or in an Israeli-controlled territory.

(Continued next page)

Texas Government Code 2270 Verification Form

Texas 2017 House Bill 89 has been signed into law by the governor and as of September 1, 2017 will become law codified as Texas Government Code § 2270 and 808 et seq.

The relevant section addressed by this form reads as follows:

Texas Government Code Sec. 2270.002. PROVISION REQUIRED IN CONTRACT. A governmental entity may not enter into a contract with a company for goods or services unless the contract contains a written verification from the company that it: (1) does not boycott Israel; and (2) will not boycott Israel during the term of the contract.

I, _____ as an authorized
representative of

_____, a contractor engaged by
Insert Name of Company

Insert Name of Texas Governmental Entity

,
Address of Texas Governmental Entity

verify by this writing that the above-named company affirms that it (1) does not boycott Israel; and (2) will not boycott Israel during the term of this contract, or any contract with the above-named Texas governmental entity in the future. I further affirm that if our company's position on this issue is reversed and this affirmation is no longer valid, that the above-named Texas governmental entity will be notified in writing within one (1) business day and we understand that our company's failure to affirm and comply with the requirements of Texas Government Code 2270 et seq. shall be grounds for immediate contract termination without penalty to the above-named Texas governmental entity.

I swear and affirm that the above is true and correct.

Signature of Named Authorized Company Representative

Date

RETURN THIS DOCUMENT IN BID/PROPOSAL PACKAGE

END OF SECTION 00 11 00

SECTION 07 52 19 MODIFIED BITUMEN "COOL ROOF" MEMBRANE ROOFING SYSTEM

PART 1 – GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SECTION INCLUDES

- A. The installer shall coordinate the work of the entire roofing assembly, including, but not limited to:
1. Tapered edge strips, cant strips, and wood nailers. (Refer to this Section and Section 06 10 00)
 2. Curbs, (Refer to Section 07 72 00)
 3. Modified bitumen membrane roofing
 4. Flashings, including sheet metal perimeter edge (fascia) (Refer this Section and Section 07 62 00)
 5. Walkway pads, expansion joints, and other work incidental to, the complete and proper installation of a watertight modified bitumen membrane roofing system as shown on the drawings or specified herein, and in accordance with all applicable requirements of the Contract Documents.
- B. It is the intent of this Section that the Work shall:
1. provide a watertight facility;
 2. conform to all applicable building code requirements and of authorities having jurisdiction;
 3. include Section 07 62 00, Sheet Metal Flashing, Downspouts, Gutters and Trim, and Section 07 72 00, Roof Accessories as part of the Work of this Section; and
 4. Provide Owner with a single source full system warranty as specified.

1.3 RELATED WORK

- A. All Sections of Work relating to the roofing system, including mechanical, plumbing and electrical items penetrating the roof system.

1.4 REFERENCES

- A. ASTM International (ASTM)
1. C728, Standard Specification for Perlite Thermal Insulation Board
 2. C920, Standard Specification for Elastomeric Joint Sealants
 3. C1289, Standard Specification for Faced Rigid Cellular Polyisocyanurate Thermal Insulation Board
 4. D41, Standard Specification for Asphalt Primer Used in Roofing, Dampproofing, and Waterproofing
 5. D312, Standard Specification for Asphalt Used in Roofing
 6. D4479, Standard Specification for Asphalt Roof Coatings - Asbestos-Free
 7. D4586, Standard Specification for Asphalt Roof Cement, Asbestos-Free
 8. D4897, Standard Specification for Specification for Asphalt-Coated Glass-Fiber Venting Base Sheet Used in Roofing
 9. D5147, Standard Specification for Standard Test Methods for Sampling and Testing Modified Bituminous Sheet Material
 10. D6163, (D5147 & D146) Standard Specification for Styrene Butadiene Styrene

(SBS) Modified Bituminous Sheet Materials Using Glass Fiber Reinforcements

- B. ASCE-7 Wind uplifts requirements for geographical area.
- C. Federal Specifications (FS)
 - 1. TT-S-00230C
- D. National Roofing Installers Association (NRCA)
 - 1. Roofing and Waterproofing Manual - Latest Edition
- E. Sheet Metal and Air Conditioning Installers National Association, Inc. (SMACNA)
 - 1. Architectural Sheet Metal Manual - Latest Edition
- F. Underwriters' Laboratories (UL)
 - 2. Fire Hazard Classifications
- G. International Building Code

1.5 SUBMITTALS

- A. Product Data: Manufacturer's printed instructions, schedules, charts, literature, and illustrations to indicate the performance, fabrication procedures, product variations, fastener pattern layout, and accessories to be used in the Work.
- B. Certifications:
 - 1. Manufacturer's written certification that installer is approved and licensed to install specified roofing system. **(Submit a copy with Proposal Form).**
 - 2. Manufacturer's affidavit that materials used in Project contain no asbestos.
 - 3. Installer shall submit resume and project experience list for proposed system for Project Manager and job site superintendent.
 - 4. Installer shall submit written certification that there are no undocumented workers being employed by them or by any subinstaller on this project and that all workers on this project are covered by workmen's compensation.
 - 5. Installer shall submit list of all subinstallers with evidence of subinstaller's insurance coverage in compliance with contract requirements.
 - 6. Manufacturer's written certification of approval / acceptance of these specifications and details.
- C. Referenced Standards: Two (2) copies of each referenced standard and retain approved copies at site.
- D. Project Registration "Pin" proving the project has been registered with Manufacturer.
- E. Shop Drawings: Furnish from copies of the manufacturer's literature or from copies of NRCA "Roofing and Waterproofing Manual", Latest Edition.
 - 1. Furnish for approval any proposed details which differ from those included with this proposal package. All proposed details shall first be approved in writing by roofing manufacturers prior to submitting to Architect for approval.
 - 2. Furnish detail project sequencing, staging, material loading, manpower plans, and project construction schedule for approval.
- F. Samples:
 - 1. Furnish copy of sample warranty that is to be issued upon project completion.
- G. Temperature Charts: Bitumen heating devices 24 hour temperature charts.

- H. Test Reports: Bitumen manufacturer's test reports relative to the following for each batch of bitumen furnished:
 - 1. Softening Point: ASTM D312.
 - 2. Flashpoint: ASTM D92.
 - 3. Acceptable Bitumen Temperature: As recommended by the bitumen manufacturer and EVT label on containers.
 - 4. Thermometers: Two (2) hand held, "8F" thermometers complying with ASTM E1 to Architect for his checking kettle temperature.

- I. Upon Substantial Completion of Work, submit the following to Architect for his submission to Owner:
 - 1. Manufacturer's Warranty: Manufacturer's written warranty as specified.
 - 2. Maintenance Procedures: Three (3) copies of Manufacturer's printed instructions for Owner's use regarding care and maintenance of roof.

- J. Certificate of Analysis: Provide manufacturer's printed certificate of analysis for all materials used. Attach copy with final warranty.

1.6 INSPECTIONS / TESTS

- A. The Owner's, Architect's, and Manufacturer's representative shall at all times have access to the job site and work areas. The installer will provide proper and safe facilities for such access and inspection.
 - 1. Architect Inspections:
 - a. The Architect will be providing periodic inspections throughout the duration of the project. Architect's Representative shall be required to inspect after completion of each major phase of construction for approval.
 - 2. Manufacturer Inspections:
 - a. An inspection shall be made by a representative of the material manufacturer at appropriate intervals during performance of Work to ensure that said project is installed in accordance with the manufacturer's specifications and illustrated details. Written reports by the manufacturer shall be turned over to the Architect, on each Monday following the prior week.
 - b. The authorized material Manufacturer's field representative shall be responsible for:
 - 1) Keeping the Architect's representative informed after periodic inspections as to the progress and quality of the work observed.
 - 2) Calling to the attention of the installer those matters observed which are considered to be in violation of the contract requirements.
 - 3) Reporting to the Architect's representative, in writing, any failure or refusal of the installer to correct unacceptable practices called to his attention.
 - 4) Confirming, after completion of the work and based on his observation and test, that he has observed no application procedures in conflict with these specifications. Final payment will not be released until the Architect has received all specified warranties.

- B. Any failure by the Owner's, Architect's or Manufacturer's Representative to detect, pinpoint, or object to any defect or noncompliance of these specifications of work in progress or completed work shall not relieve the installer, or reduce, or in any way limit, his responsibility of full performance of work required of him under these specifications.

- C. Architect may require tests and inspections as necessary to verify quality of roofing materials and workmanship. Laboratory tests will be performed in accordance with ASTM standard procedures.
1. Owner will select testing laboratory and will pay for Work required by testing laboratory.
 2. Retests for work which fail initial tests or inspections shall be paid by installer.

1.7 QUALITY ASSURANCE

A. Installer:

1. Installer shall have approval by manufacturer of accepted roofing system for application and issuance of specified warranty for a minimum of three (3) years. Proof of license agreement dated at least three years prior to date of bid opening.
2. Installer shall be an experienced single firm specializing in the type of roofing and sheet metal work specified, with a minimum of five (5) years of previous successful experience on projects similar in size and scope.
3. Installer shall be certified and approved by manufacturer and licensed to install specified roofing system.
4. No subcontracting of sheet metal fabrication or installation will be accepted. Installer must have a sheet metal shop on the company premises.
5. Installers shall have a competent Superintendent, who is not actually performing roofing work, on site at all time while work is in progress, with full authority to act on behalf of the Installer as his agent.
6. All workmen shall be covered by Workmen's Compensation insurance (verify upon request) and thoroughly experienced in the particular class of work upon which employed. Use of undocumented workers will not be tolerated - No Exceptions.
7. Installer shall ensure that base fastener pull out resistance tests on existing decks were performed and approved by Architect and coordinated with Roofing Consultant prior to starting roofing application.
8. Roofing installer must have reached the highest level of qualifications from the Manufacturer they are providing material for (i.e. Master Select installer).

B. Regulatory Requirements:

1. Classification by Underwriters' Laboratories, Inc. as a Class A roofcovering.
2. Roofing system shall be installed in accordance with ASCE-7-10 wind uplift requirements for geographical location exposure B, 110 MPH 3-second gust wind speed zone and risk category III based on IBC building code requirements. Wind-resistance loads listed below have a safety factor of 2.0 incorporated into the calculation.
 - a. Zone 1 Field -100.5 psf or as otherwise indicated by Structural
 - b. Zone 2 Perimeter -132.5 psf or as otherwise indicated by Structural
 - c. Zone 3 Corner -180.6 psf or as otherwise indicated by Structural
3. Follow local, state, and federal regulations of safety standards and codes. Refer to applicable building code or International Building Code for roofing system installation requirements and limitations.

C. Laboratory Testing and Samples:

1. Architect may require tests and inspections as necessary to verify quality of roofing materials and workmanship. Laboratory tests will be performed in accordance with ASTM procedures.
2. Owner will select testing laboratory and will pay for Work required by testing laboratory. Installer shall assume all costs for extraction and patch of all samples.
3. Re-tests for work which fail initial tests or installer shall pay inspections.

4. Installer shall correct all deficiencies in accordance with manufacturers recommended procedures at no cost to Owner.

D. Installation:

1. Unless otherwise indicated, the materials to be used in this specification are those specified and denote the type, quality, performance, etc. required. All proposals shall be based upon the use of the specified material.
2. Install materials in accordance with the manufacturer's current published application procedures and the general recommendations of the National Roofing Installer's Association.
3. It will be the installer's responsibility to obtain and/or verify any necessary dimensions by visiting the job site, and the installer shall be responsible for the correctness of it. Any drawings supplied are for reference only.
4. Installer shall plan and conduct the operations of the work so that each section started on one day is complete, details installed and thoroughly protected and in watertight condition before the close of work for that day.
5. Materials will be securely fastened in place in a watertight, neat and workmanlike manner. All workmen shall be thoroughly experienced in the particular class of work upon which employed. Work shall be performed in accordance with these specifications and shall meet the approval in the field of the Architect.
6. All waste materials, rubbish, etc., shall be removed from the Owner's premises as accumulated. Rubbish shall be carefully handled to reduce the spread of dust, and shall be deposited at an approved disposal site. At completion, all work areas shall be left broom clean and all installers' equipment and materials removed from the site.

1.8 PERFORMANCE REQUIREMENTS

- A. Fire Resistance: Meet Underwriter's Laboratory Class "A" fire rating.
- B. Installer shall ensure that base fastener pull out resistance tests on new lightweight insulating concrete fill were performed and approved by Architect and coordinated with Roofing Consultant prior to starting roofing application.

1.9 PRE-INSTALLATION CONFERENCE

- A. Refer to Section 01 31 13 – Project Coordination.

1.10 DELIVERY, STORAGE, AND HANDLING

- A. Deliver materials in manufacturer's original unopened packaging with all tags and labels intact and legible. Carton and can labels shall indicate appropriate warnings, storage conditions, lot numbers, and usage instructions. Handle and store materials and equipment in such a manner as to avoid damage. The proper storage of materials is the sole responsibility of the installer. Materials damaged in shipping or storage shall not be used. Wet or damaged roofing materials shall be discarded, removed from job site, and replaced with new materials prior to application.
- B. Manufacturer's packaging and/or roll plastic is not acceptable for exterior storage. Tarpaulin with grommets shall be accepted minimum for exterior coverings. All stored materials, as mentioned above, shall be minimum of four (4) inches off the substrate and the tarpaulin tied off with rope.
- C. Products liable to degrade as a result of being frozen shall be maintained above 40° F in heated storage.

- D. Moisture sensitive products shall be maintained in dry storage areas or properly covered. Roofing insulation and felts must always be covered or stored in a dry area when not being used.
- E. No storage of materials shall be permitted on roof areas other than those materials that are to be installed the same day. Any exception must be in written form. Do not place materials or equipment in such a manner as to overload structure.

1.11 WARRANTY / GUARANTEE

- A. Roofing Manufacturer: Warrant the roofing and associated Work for 20 (30) years from date of Substantial Completion as follows:
 - 1. The warranty shall be a NDL "No Dollar Limit" / no penal sum type, with total replacement cost.
 - 2. The warranty shall guarantee the entire roof system and associated work against defective materials and workmanship of installation, with NO exclusion for ponding water.
 - 3. The roof system including roofing insulation, flashing, penetrations, wall flashings, metal work, labor, and material shall be guaranteed against failure of workmanship and materials. Repair of the system, including materials and labor, shall be done at no cost to the Owner.
 - 4. Submit four (4) original executed copies of the Warranty / Guarantee.
- B. Roofing Installer: Jointly with any subinstallers employed by him, shall guarantee the work required and performed under this contract will be free from defects in workmanship and materials, and that the building will be and remain waterproof for a five (5) year warranty period, after the Architect accepts the work as substantially complete. The warranty shall be in approved notarized written form, to obligate the Installer, and subinstallers, to make good the requirements of the warranty. The warranty will be held jointly with the Bonding Company for the first two (2) years and the manufacturer for the remaining three (3) years.
- C. Make arrangements with the materials manufacturer to provide the required warranty. Final warranty shall be submitted to Owner at time of Substantial Completion.
- D. Submit attached Installer's Warranty and Subinstaller's Guarantee forms at Project Closeout.

PART 2 - PRODUCTS

2.1 APPROVED PRODUCTS/MANUFACTURERS

- A. Unless noted otherwise, specifications are based on products of named manufacturers but should not preclude the Installer from using other manufacturers who produce products that meet or exceed the specifications. Manufacturers whose products meet or exceed the specifications, who have manufactured and installed roof materials and systems of the type specified for a minimum of ten (10) years, and who maintains a single source responsibility for the total roofing system, as described herein, may apply for approval as a substitution in accordance with Division 1 requirements regarding substitutions.
 - 1. All materials shall be manufactured, specified, or accepted in writing by membrane manufacturer issuing the warranty. Proposed materials shall ensure full system warranty from said manufacturer. Installer shall be an installer licensed by the manufacturer.

2. Samples of all materials used on the project, which are not supplied by the membrane manufacturer, shall be submitted to the membrane manufacturer for written approval prior to starting work.
3. All materials used on the project shall be asbestos free.

B. Approved Manufactures:

1. Siplast, Inc., Irving, Texas; (972) 869-0070
2. Soprema, Wadsworth, OH; (800) 356-3521
3. Elevate Holcim (Formerly Firestone), Nashville TN; (800) 428-4442
4. Johns Manville, Denver, CO; (800) 654-3103

2.2 ROOFING SYSTEM ASSEMBLY/PRODUCTS

A. Modified Base Sheet: A fiberglass reinforced, Styrene-Butadiene-Styrene (SBS) modified asphalt coated sheet, having an average weight of 28 pounds persquare.

1. Approved Product:
 - a. Siplast Product: Para Base, base sheet
 - b. Soprema Product: Sopra-G, base sheet
 - c. JM Product: Perma Ply 28, basesheet
 - d. Elevate Product: MB Base, base sheet

B. Dry Sheathing Paper: (For use as a slip sheet) Rosin coated, 5 lbs. per 100 sq. ft.

2.3 ROOF MEMBRANE ASSEMBLY

A. System Description: A roof membrane assembly consisting of two (2) plies of a prefabricated, reinforced, homogeneous polymer modified asphalt membrane, secured to specified insulation or substrate. The assembly shall possess waterproofing capability, such that a phased roof application, with only the modified bitumen base ply in place, can be achieved for prolonged periods of time without detriment to the watertight integrity of the entire roof system. Installer option to install using hot asphalt "mopped", cold adhesive, torched, or any combination – confirm special membrane types with manufacturer. Provide components of the roof membrane assembly meeting the following physical and mechanical requirements.

1. **Hot Asphalt Applied Modified Bitumen Base Ply:** Approximately 90 mil high performance modified bitumen base ply consisting of a lightweight random fibrous glass mat impregnated and coated with high quality modified bitumen and having the following properties:
 - a. Approved Product:
 - 1) Siplast Product: Paradiene 20
 - 2) Soprema Product: Elastophene Sanded 2.2
 - 3) Elevate Product: SBS Base
 - 4) JM Product: DynaBase
2. **Torch Applied Modified Bitumen Base Ply:** Approximately 120 mil high performance modified bitumen base ply consisting of a lightweight random fibrous glass mat impregnated and coated with high quality modified bitumen and having the following properties:
 - a. Approved Product:
 - 1) Siplast Product: **Paratech Glass Base 3.0 TG (ADDENDUM #5)**
 - 2) Soprema Product: Elastophene Flam
 - 3) Elevate Product: SBS Glass Torch Base
 - 4) JM Product: DynaWeld Base

3. **Hot Asphalt Applied Modified Bitumen Finish Ply:** Approximately 130 mil or better high performance modified bitumen "cool roof" reflective white finish ply consisting of a lightweight random fibrous glass mat impregnated and coated with high quality Styrene-Butadiene-Styrene (SBS) modified bitumen, and having the following properties:
 - a. Approvals: UL Approved, FM Approved (products shall bear seals of approval)
 - b. Surfacing: White ceramic chips
 - c. Solar Reflectance (avg.): greater than 3 year aged .75
 - d. Thermal Emittance (avg.): greater than 3 year aged .75
 - e. Solar Reflectance Index (avg.): greater than 3 year aged 64
 - f. Approved Product:
 - g. 1) Siplast Product: Paradiene 30 FR BW
 - h. 2) Soprema Product: Elastophene LS FR GR SG
 - i. 3) Elevate Product: SBS Glass FR Ultrawhite
 - j. 4) JM Product: DynaGlas FR CR G

4. **Torch Applied Modified Bitumen Finish Ply:** Approximately 140 mil or better high performance modified bitumen "cool roof" reflective white finish ply consisting of a lightweight random fibrous glass mat impregnated and coated with high quality Styrene-Butadiene-Styrene (SBS) modified bitumen, and having the following properties:
 - a. Approvals: UL Approved, FM Approved (products shall bear seals of approval)
 - b. Surfacing: White ceramic chips
 - c. Solar Reflectance (avg.): greater than 3 year aged .75
 - d. Thermal Emittance (avg.): greater than 3 year aged .75
 - e. Solar Reflectance Index (avg.): greater than 3 year aged 64
 - f. Approved Product:
 - 1) **Siplast Product: Paratech Glass Cap FR TG BW (ADDENDUM #5)**
 - 2) Soprema Product: Elastophene Flam LS FR GR SG
 - 3) Elevate Product: SBS Glass FR Torch Ultrawhite
 - 4) JM Product: Dynaweld Cap FR CR

5. Stripping Ply: Same as roof system base ply.

2.4 FLASHING MEMBRANE ASSEMBLY

- A. A flashing membrane assembly consisting of two (2) plies of reinforced, polymer modified asphalt membrane (foil face flashing membrane can be used as substitute):
 6. Modified Bitumen Flashing Sheet: Same as roof system finish ply.

 7. Modified Bitumen Foil Faced Flashing Sheet (Substitute):
 - a. Siplast Product: "Aluminum" Veral
 - b. Soprema Product: Sopralast 50 TV "Alu"
 - c. Elevate Product: SBS Metal Flash AL
 - d. JM Product: DynaClad AL

 8. Reinforcing Ply: Same as roof system base ply.

2.5 ROUGH CARPENTRY

- A. All nailers, cants and wooden curbs shall be No. 2 or better treated lumber selected to meet design details and field dimensions and requirements of Section 06 10 00, Rough Carpentry. MCQ and MCA only.

2.6 ROOFING SHEET METAL

- A. Refer to Section 07 62 00, Sheet Metal Flashing, Gutters, Downspouts and Trim.

2.7 ROOF INSULATION

- A. Roofing Insulation:
 - 9. All insulation shall be approved in writing by the membrane manufacturer as to thickness, type, and manufacturer. All insulation must be approved for the specific application with UL and FM Global approval. Refer to Div. 3 for insulation in lightweight concrete.

2.8 ROOFING ACCESSORIES

- A. Roofing Adhesives:
 - 10. Mopping Asphalt: Asphalt that has been certified for full compliance with the requirements for Low Fume Type IV asphalt listed in Table I, ASTM D312. Each container or bulk shipping ticket shall indicate the equiviscous temperature EVT, the finished blowing temperature, FBT, and the flash point, FP.
 - a. Approved Product: Trumbull Low Fume asphalt or as required by membrane.
 - 11. Cold Adhesive (if applicable): An asphalt based adhesive formulated especially for adhering polymer modified asphalt roofing membranes and base plies. Adhere shall be UL & FM listed and approved.
 - a. Soprema Product: FMA
 - b. Siplast Product: PA-311 Adhesive
 - c. Elevate Product: MB Cold Adhesive
 - d. JM Product: MBR Cold Application Adhesive
- B. Bituminous Cutback Materials:
 - 12. Primer: A high flash, quick drying, asphalt solvent blend which meets or exceeds ASTM D41 requirements.
 - a. Approved Product: PA-1125 Asphalt Primer manufactured by Siplast.
 - 13. Mastics: An asphalt cutback mastic, reinforced with non-asbestos fibers, used as a base for setting metal flanges and conforming to ASTM D4586 Type II requirements.
 - a. Approved Product: PA-1021 Plastic Cement manufactured by Siplast.
- C. Caulking and Sealants:
 - 1. VOC Content: Provide sealants and sealant primers for use inside the weatherproofing system that comply with the following limits for VOC content when calculated according to 40 CFR 59, Subpart D (EPA Method 24):
 - a. Nonmembrane Roof Sealants: 300 g/L; single component, high performance, elastomeric sealants conforming to ASTM C920 requirements.
 - b. Modified Bituminous Sealants: 500 g/L
 - c. Other sealants: 420 g/L
- D. Ceramic Granules: No. 11 Grade Specification Ceramic granules of color scheme matching the granule surfacing of the finish ply.

- E. Metallic Dust: A finely graded metal dust as supplied or approved by the membrane manufacturer, used for covering of bitumen overruns over the foil surfaced membrane.
- F. Fasteners:
1. Shall be Factory Mutual approved and as recommended by the manufacturer for the specific application.
 2. Fastener for Brick: Shall be 1/4 inch x 2 inches, stainless steel nail, one piece unit, flat head, as manufactured by Rawl Zamac Nailin, or approved equal.
 3. Fastener for Wood: Shall be a #14 Factory Mutual approved fastener, fluorocarbon coated, with CR-10 coating. A minimum 0.200 inch diameter shank and 0.250 inch diameter thread. To be used with Factory Mutual approved, round pressure plates or bar, and having a fluorocarbon CR-10 coating, when subjected to 30 Kesternich cycles (DIN 50018) shows less than ten percent (10%) red rust which surpasses Factory Mutual Approval Standard 4470 as manufactured by Olympic Manufacturing Group, Inc., or pre-approved equal.
 4. Lightweight Insulating Concrete Base Sheet Fasteners: Shall be approved by the fastener manufacturer, membrane manufacturer and FM for use with lightweight insulating concrete as follows:
 - a. Fastener shall be a single unit, precision formed, of electro zinc coated steel having a 2.7 inch diameter rib reinforced cap and 1.7 inch long rectangular legs, designed to expand when fully driven into the lightweight insulating concrete. Fasteners for lightweight insulating concrete shall meet FM Standard 4470 requirements for corrosion resistance.
 - 1) Approved Product: "Zono-tite" Base Sheet Fasteners.
 5. Roofing Nails: Stainless steel, 316, type, size as required to suite application, minimum 11 gauge with 3/8 inch diameter head, minimum 1-1/2 inches in length.
 6. Dual Prong Fastener: Coated Steel tube with stainless steel Locking Staple.
- G. Walkway Pads: A prefabricated, puncture resistant polyester core reinforced, polymer modified bitumen sheet material topped with a ceramic-coated granule wearing surface meeting the following physical and mechanical requirements:
1. Thickness: 0.217 inch
 2. Weight: 1.8 lb./ft²
 3. Width: 30 inches
 4. Approved Product: Paratread Roof Protection Material
- H. Liquid Flashings: One-Part Liquid Flashing is a one-component polyurethane / bitumen resin that provides a liquid flashing solution for asphaltic roofing systems. Utilize fabric in three part system at all penetrations.

2.9 MISCELLANEOUS MATERIALS AND ACCESSORIES

- A. Other materials shall be as shown, specified or required and be of the best grade for the proposed use as recommended by the manufacturer.
1. Expansion Joint: As detailed on drawings and outlined in NRCA and SMACNA manuals.
 2. Low Level expansion joints, as noted on the drawings, to be fabricated similar to Situra Inc. "Red Line" Low level expansion joint details. Install as per manufactures recommendations and included in system warranty.
 - a. Approved Substitute Soprema's "Sopra Joint". Install as per manufacturer's recommendations.

3. Sealant Backer Rod: Provide compressible rod stock of polyethylene foam, polyurethane foam, polyethylene jacketed polyurethane foam, butyl rubber foam, neoprene foam or other flexible, permanent, durable, non-absorptive material as recommended by sealant manufacturer for back-up of and compatibility with sealant. Where used with hot-applied sealant, provide heat-resistant type which will not be deteriorated by sealant application temperature as indicated.
4. Pipe Hangers and Supports: Provide and install all necessary supports for gas lines, conduit, chilled water lines, duct work, condensate lines, etc. Refer to Section 07 72 00, Roof Accessories.
5. Relief vents, lead and other sheet metal materials shall be as specified in Section 07 62 00, Sheet Metal Flashing, Gutters, Downspouts and Trim.
6. Cant Strips: Shall be wood fiber where used for non-structural purposes. Shall be treated solid wood where used for structural purposes meeting NRCA, Factory Mutual and Underwriters Laboratory guidelines. If solid wood cant is used where insulation exists, cant is to be toe nailed into treated solid wood nailer the same height as insulation.

PART 3 - EXECUTION

3.1 SITE CONDITIONS

- A. Environmental Requirements:
 1. Apply roofing in dry weather.
 2. Do not apply roofing when ambient temperature is below 45 degrees F.
 3. Refer to manufacturers recommendations.
- B. Field Tests:
 1. Deck Dryness Test: Test for dryness before applying roofing. Should rain occur during application, retest for dryness before continuing application.
 2. Foaming: Heat one Pt. of specified bitumen to 350 degrees F; pour on surface to receive roofing felts. If bitumen foams, deck is dry enough to roof.
 3. Stripability: Cool bitumen poured on deck to ambient temperature and strip from surface. If any portion strips clean from deck, surface is not dry enough to roof.

3.2 ROOFING AND FLASHING - GENERAL

- A. Membrane Application: Install roofing in accordance with roofing system manufacturer's current published instructions and the following requirements. Application of roofing membrane components shall immediately follow application of base sheet as a continuous operation.
- B. Aesthetic Considerations: An aesthetically pleasing overall appearance of the finished roof application is a standard requirement for this Project. Make necessary preparations, utilize recommended application techniques, apply the specified materials (i.e. granules, metallic powder, etc.) and exercise care in ensuring that the finished application is acceptable to the Owner.
- C. General Installation:
 1. Protect adjacent areas with tarpaulin or other durable materials.
 2. Installer shall prevent overspray, and be responsible for parking lot areas and/or adjoining areas not part of this contract.
 3. Installer shall provide three (3) hour firewatch after use of torch. A fire extinguisher shall be present on roof at all times during use of a torch.

4. Installer shall be responsible for sealing, as required, all openings that may allow bitumen migration or drippage, i.e. pitch dams, envelopes, and fillerstrips.
5. Prepare surfaces according to manufacturer's or installer's published instructions. All metal that is to receive bitumen, or come in contact with bitumen or adhesive, shall be first primed with appropriate primer. Use cleaning materials or primers necessary to render a clean and dry surface/substrate.
6. Prior to application of felts and membrane, all foreign matter, gravel, etc., shall be removed from the substrate. Gravel or debris between the substrate and plies is not acceptable.
7. Bitumen kettles or tankers shall have a visible thermometer and thermostatic control to provide positive monitoring of the bitumen temperature when it is heated in accordance with manufacturer's instructions. Circulate bituminous materials; do not allow bituminous materials to stand in luggers for long periods. Use insulated hot transport lines and luggers. Kettle shall be kept a minimum of 30 feet away from building, placed so that fumes, odors, and smoke, do not enter building through windows, doors, fresh air vents or similar entrances; are not directed towards freshly painted or anodized surfaces, glass or other glazing materials. Do not place kettle under trees or near vegetation. The assigned kettle man shall remain in close attendance, within 25 feet of ground level, while burners are lit. Kettle lids are to remain closed except for loading. Level of bitumen shall be kept within eight (8) inches from top of kettle.
8. Asphalt Bitumen Heating: Heat and apply bitumen in accordance with equiviscous temperature method ("EVT Method") as recommended by the manufacturer. Discard bitumen that has been held at temperature, exceeding finished blowing temperature (FBT) for a period exceeding three hours. Do NOT heat bitumen to a temperature higher than 25 degrees F (14 degrees C) below flash point.
9. Asphalt Temperatures: If the EVT information is not provided, the following asphalt temperature shall be observed. Maximum heating temperature shall be 525 degrees F. Minimum application temperature shall be 400 degrees F.
10. Asphalt Moppings: Ensure that all moppings do not exceed a maximum of 25 pounds per square. Mopping shall be total in coverage, leaving no breaks or voids.
11. Membrane Adhesive Application (If applicable): Apply cold adhesive in a smooth, even, continuous layer without breaks or voids at the rate of 1-1/2 gallons per square per ply. (The porosity of some substrates may require a heavier application to ensure full adhesion.) Refer to manufacturer's requirements.
12. Bitumen Consistency: Cutting or alterations of bitumen, primer, and sealants will not be permitted.
13. Wrinkles, buckles, kinks, fishmouths, and dry voids of felt on felt are not acceptable when laying felt and membrane.
14. Primed cant strips shall be installed at the intersection of the deck and the vertical surfaces.
15. All flashings shall be mechanically top-fastened with a termination bar a minimum of six (6) inches on center at the top leading edge, and be a minimum of eight (8) inches in height from finished membrane.
16. On slopes greater than one (1) inch in 12 inches, refer to NRCA and/or manufacturer's guidelines for backnailing procedures and follow the more stringent guidelines for all specified materials.
17. Correct all errors in application the same work day they occur, including voids, fishmouths, dry laps or spots, wrinkles, ridges, blisters, bare spots, improper application, physical damage and all work not meeting specifications.

3.3 NAILERS

- A. Wooden nailers shall be installed at perimeter edges or drip edges on outside perimeter of building.
- B. All Construction: Nailers shall be the same height as the new lightweight insulating concrete deck or insulation being installed. Nailers shall be anchored to resist a pull-out force of 175 pounds per foot. Fasteners shall be no less than two (2) per nailer and be spaced at two (2) feet on center maximum. Provide nailers at all penetrations. Raise all curbs, flashing, etc, a minimum of ten (10) inches above the deck.
- C. Provide additional nailer at all curbs to provide positive drainage away from curb.

3.4 SUBSTRATE PREPARATION

- A. Lightweight Insulating Concrete Deck Systems: Nailable fills shall receive base sheet properly fastened with suitable FM approved fasteners and installed in accordance with ASCE 7 wind uplift pressure calculations.
 - 1. Damaged lightweight fill decks shall be removed back to solid material. Fill holes, bird baths, etc., in deck using Zonopatch as manufactured by Siplast; or equal by approved manufacturer.

3.5 APPLICATION OF BASE SHEET

- A. Lightweight concrete deck shall be covered with a base sheet, mechanically fastened as follows:
 - 1. Install in accordance with manufacturer's current published application instructions and to meet ASCE-7 wind uplift requirements. Fasteners and fastening patterns shall be determined by building height, pull out values from lightweight insulating concrete decks (more stringent applies), location and geographical area of the United States. It is the installer's responsibility to consult current ASCE-7 publications, literature, and bulletins that are in effect at the time of this project. Submit perimeter, field and corner fastening patterns and cite all ASCE-7 data pertaining to the fastening pattern to the Architect for review.

3.6 ROOF ASSEMBLY INSTALLATION

- A. Membrane Application: Install roofing in accordance with roofing system manufacturer's current published instructions and the following requirements. Application of roofing membrane components shall immediately follow application of insulation as a continuous operation.
- B. Aesthetic Considerations: An aesthetically pleasing overall appearance of the finished roof application is a standard requirement for this Project. Make necessary preparations, utilize recommended application techniques, apply the specified materials (i.e. granules, metallic powder, etc.) and exercise care in ensuring that the finished application is acceptable to the Owner.
- C. Adhesive Application: Apply cold adhesive with a spray equipment or squeegee in a smooth even, continuous layer without breaks or voids at the rate of 1 ½ to 2 gallons per square per ply. (The porosity of some substrates may require a heavier application to ensure full adhesion. Refer to manufacturer's requirements.)
- D. Bitumen Consistency: Cutting or alterations of bitumen, primer, and sealants will not be permitted.

- E. Roofing Application:
1. Apply all layers of roofing free of wrinkles, creases or fishmouths. Exert sufficient pressure on the roll during application to ensure prevention of air pockets. Lap seams between the base ply layer and the finish ply layer shall not coincide. Stagger the courses to ensure this.
 - a. Apply all layers of roofing perpendicular to the slope of the deck so that water flows over or along lap seams, but never against laps.
 - b. Fully bond the base ply to the base sheet or recover board with cold adhesive, torch, hot asphalt or mechanically attached-(Installer's option). Each sheet shall have minimum three (3) inch side laps and six (6) inch end laps. Each sheet shall be applied directly behind the adhesive installer. Stagger end laps a minimum of three (3) feet.
 - c. Fully bond the finish ply to the base ply (Installer's option). Each sheet shall have a minimum of three (3) inch side and end laps. Each sheet shall be applied directly behind the asphalt installer. Stagger end laps of the finish ply a minimum of three (3) feet. Stagger side laps of the finish ply a minimum of 12 inches from side laps in the underlying base ply. Stagger end laps of the finish ply a minimum of three (3) feet from end laps in the underlying base ply.
 - d. Maximum sheet lengths and special fastening of the specified roof membrane system may be required at various slope increments where the roof deck slope exceeds 1/2 inch per foot. The manufacturer shall provide acceptable sheet lengths and the required fastening schedule for all roofing sheet applications to applicable roof slopes. Cold process adhesives shall be used on slopes over 1/2 inch per foot up to and including six (6) inches per foot.
 - e. Lap Treatment: A 20-pound roller shall be used on all side and end laps, following immediately behind application, apply uniform pressure across lap area to achieve a continuous visible bleed out. Strictly follow manufacturers guidelines on bleedout.
- F. Granule Embedment: Broadcast mineral granules over all bitumen overruns on the finish ply surface, while the bitumen is still hot, to ensure a monolithic color.

3.7 ROOF ASSEMBLY FLASHING INSTALLATION

- A. Flashing - General:
1. Flashings shall be installed using the manufacturer's Veral flashing membrane, with length of run not to exceed manufacturer's recommendations.
 2. Wooden nailers or curbs shall be installed at all edges and openings in the roof, mechanically fastened to the deck. The nailers should be of exterior grade treated timber, and of the same thickness as any insulation to be used on the roof.
 3. Cant strips shall be installed at the intersection of the deck and / or all vertical surfaces. Prime all cants.
 4. The roofing field membrane shall extend up over and to the top of cant strips at all vertical intersections or out to the roof's edge.
 5. All substrates receiving flashing membrane shall be clean and primed with asphalt primer, prior to application.
 6. All flashings shall be mechanically fastened with a termination bar a maximum of six (6) inches on center, be a minimum of eight (8) inches above finished roof height, extend a minimum of nine (9) inches onto the field of horizontal roof membrane, and not exceed ten (10) linear feet of run in length.
 7. Install flashing membrane in accordance with drawings and / or material manufacturer's guarantee requirements, whichever is the most stringent.

- B. Flashing Application - Masonry Surfaces: Flash masonry parapet walls and curbs using the reinforcing sheet and the metal foil flashing membrane. After the base ply has been applied to the top of the cant, fully adhere the reinforcing sheet, utilizing minimum three (3) inch side laps and extend a minimum of three (3) inches onto the base ply surface and three (3) inches up the parapet wall above the cant. After the final roofing ply has been applied to the top of the cant, prepare the surface area that is to receive flashing coverage by torch heating granular surfaces or by application of asphalt primer; allowing primer to dry thoroughly. Torch apply the metal foil-faced flashing into place using three (3) foot widths (cut off the end of roll) always lapping the factory selvage edge. Stagger the laps of the metal foil flashing layer from lap seams in the reinforcing layer. Extend the flashing sheet a minimum of four (4) inches beyond the toe of the cant onto the prepared surface of the finished roof and up the wall to the desired flashing height. Exert pressure on the flashing sheet during application to ensure complete contact with the wall / roof surfaces, preventing air pockets; this can be accomplished by using a damp sponge or shop rag. Check and seal all loose laps and edges. Nail the top edge of the flashing on nine (9) inch centers. (See Manufacturer's schematic for visual interpretation.)
- C. Flashing Application - Wood Surfaces: Flash wood or plywood parapet walls and curbs using the reinforcing sheet and metal foil flashing membrane. The reinforcing sheet shall have minimum three (3) inch side laps and extend a minimum of three (3) inches onto the base ply surface and to the top of the parapet wall, curb, etc. Nail the reinforcing sheet through the field of the sheet to the vertical wood surface on 12 inch centers from the top of the cant to top of wall curb, etc. Fully adhere the remainder of flashing reinforcing sheet that extends over the cant and roof level. After the finish ply has been applied to the top of the cant, prepare the surface area that is to receive flashing coverage by torch heating granular surfaces or application of asphalt primer; allowing primer to dry thoroughly. Torch apply the metal foil-faced flashing into place using three (3) foot widths (cut off the end of roll) always lapping the factory selvage edge. Extend the flashing sheet a minimum of four (4) inches beyond the toe of the cant onto the prepared surface of the finished roof and up the wall to the desired flashing height. Exert pressure on the flashing sheet during application to ensure complete contact with the wall / roof surfaces, preventing air pockets; this can be accomplished by using a damp sponge or shop rag. Check and seal all loose laps and edges. Nail the top edge of the flashing on nine (9) inch centers. (See manufacturer's schematic for visual interpretation.)
- D. Projection Flashings:
1. Plumbing Vents: Soil vent stack pipes shall receive lead flashings installed in accordance with practices set forth in the NRCA Roofing Manual. The lead shall be carried up and over the top of the stack, and crimped down into the pipe to form a watertight seal. Projections shall be flashed as recommended by the roof membrane Manufacturer. Provide tapered edge strips around base. Strip-in flange with specified stripping ply.
 2. Square Projections: Strip in all flanges on square projections with specified stripping ply. Prime all flanges prior to setting in a bed of mastic. Install to Manufacturer's specifications. Provide tapered edge strips around base. Cricket up-side slope.
 3. Round Projections: Strip in all flanges on round projections with specified stripping ply. Prime all metal prior to setting in mastic. Install to Manufacturer's specifications. Provide tapered edge strips around base.
 4. Liquid Flashings: One-Part Liquid Flashing is a one-component polyurethane / bitumen resin that provides a liquid flashing solution for asphaltic roofing systems. Utilize fabric in three part system at all penetrations.

- E. Wall and Curb Flashings:
1. The flashing substrate shall be free of all dirt and loose material.
 2. $\frac{3}{4}$ " plywood is to be used at all parapets that receive wall flashings.
 3. The underlayment ply or plies shall be brought to the top of the cant strip and adhered.
 4. Starting on the roof at least six (6) inches from the roofside edge of the cant strip, adhere two (2) plies of flashing extending over the cant and up the vertical a minimum of eight (8) inches. Each lap of the ply sheet shall be a minimum of three (3) inches.
 5. Starting two (2) inches past the flashing plies, install one (1) ply of SBS flashing membrane in hot asphalt. Laps shall not coincide with previously installed plies. The top of the SBS flashing shall be one (1) inch past the previously installed plies above the cant strip.
 6. Fasten the top edge of the flashings on six (6) inch centers using approved termination bar and fasteners.
 7. An NRCA-approved metal counterflashing shall extend down over the flashing a minimum of four (4) inches.
 8. Cricket the up-side slope at all curb projections.
- F. Use of Metallic Powder: Broadcast metallic powder over all bitumen overruns on the metal foil membrane surface while the bitumen is still hot to ensure a monolithic surface color.
- G. Overnight Seal / Water Cut-Off:
1. Over Night Seal: Shall be performed according to accepted roofing practice as outlined in the NRCA Roofing Manual.
 2. Water Cut-Off: At the end of day's work or when precipitation is imminent, construct a water cut-off at all open edges. Cut-offs can be built using asphalt or plastic cement and roofing felts, constructed to withstand protracted periods of service. Cut-offs must be completely removed prior to resumption of roofing.

3.8 ROOF SYSTEM INTERFACE WITH RELATED COMPONENTS

- A. The following is a list of descriptions for correct installation of components integrated into the roof membrane assembly. In all cases, unless otherwise approved, incorporate flanged components into the system between the application of the base ply and finish ply. The flange must be primed with a uniform coating of approved ASTM D41 asphalt primer and allowed to dry thoroughly; all flanges must be set in approved mastic.
- B. Walkway Pads:
1. Provide around all roof hatches, A/C units (if applicable) and at top and bottom of all roof access ladders.
 2. Cut the material into maximum five (5) foot lengths and allow to relax until flat.
 3. Adhere the sheet using the specified plastic cement. Apply the specified cement in a $\frac{3}{8}$ inch thickness to the back of the product in five (5) inch by five (5) inch spots in accordance with the pattern as supplied by the material Manufacturer.
 4. Install the walkway pad. Use a minimum spacing of two (2) inches between sheets to allow for proper drainage.
 5. Walk-in each sheet after application to ensure proper adhesion.
- C. Sealant: Seal all exposed finish ply edges at gravel stops, waste stacks, pitch pans, vent stacks, etc., with a smooth continuous bead of Manufacturer's approved sealant.
- D. Piping / Conduit: Provide hangers and supports as specified in Section 07 72 00, Roof Accessories. Coordinate locations with Architect.

- E. Sheet Metal: Refer to Section 07 62 00, Sheet Metal Flashing, Gutters, Downspouts and Trim.

3.9 FIELD QUALITY CONTROL AND INSPECTIONS

- A. Roof cuts shall be performed and repaired at installer's expense. Cuts shall be made in the areas as indicated by the Architect's representative. Send required roof cuts to roof membrane Manufacturer for laboratory examination. Roof cuts required by the Architect's representative shall be furnished to the Architect's representative for testing.
- B. Remove not more than one (1) 12 inch by 12 inch cut per 5,000 square feet of roof area or fraction thereof.
- C. Field audit will follow criteria outlined in current roof membrane Manufacturer's Reference Manual.
- D. Repair sampled areas with "feathered in" patch consisting of same number of plies as in the roof specification.
- E. Correct deficiencies in roof as prescribed in current roof membrane Manufacturer's Reference Manual and as approved by Architect's Representative.

3.10 CLEANING AND PROTECTION

- A. Leave all areas around job site free of trash, debris, roofing materials, equipment, and related items after completion of job.
- B. Remove bitumen stains from walls, walkways and driveways.
- C. Finished roof areas shall be protected from damage by the installer during construction.

END OF SECTION