

00 -INDEX

GENERAL INFORMATION

01-Inquiries.....X-1 - X-4

BIDDING REQUIREMENTS

02-Advertisement for Bids (AFB.....AFB-1 - AFB-2

03-Instructions to Bidders (ITB).....ITB-1 - ITB-18

04-Cover Sheet Instructions for Bid Form.....CSBF-1

05-Bid Form (BF).....BF-1

06-Non-Collusion Affidavit (NCA).....NCA - 1

07-Low Bidder Attestation Affidavit (AA).....AA-1 - AA-2

GENERAL CONDITIONS

08-Old General Conditions, AIA Document A201-2007.....GC-1 - GC-38

09-Supplementary Conditions To AIA Document A201-2007.....SC-1 - SC-30

SPECIFICATIONS

DIVISION 1 - GENERAL REQUIREMENTS

01040 Scheduling Library Work In Different Phases ... 01040-1 - 01040-5

01050 Project Coordination.....01050-1 - 01050-5

01055 Project Superintendent.....01055-1 - 01055-3

01200 Pre-Construction Conference & Project Meetings..01200-1 - 01200-2

01340 Contractor Shop Drawings, Product Data,  
& Samples.....01340-1 - 01340-5

01510 Temporary Requirements.....01510-1 - 01510-7

01700 Project Closeout and Substantial Completion.....01700-1 - 01700-7

01710 Cleaning.....01710-1 - 01710-3

01720 Project Record Documents.....01720-1 - 01720-2

01810 Technical Section Requirements.....01810-1 - 01810-10

DIVISION 2 - SITEWORK

02110 Demolition, Cutting & Patching.....02110-1 - 02110-6  
02200 Earthwork.....02200-1 - 02200-11  
02280 Termite Control.....02280-1 - 02280-2  
02830 Chain Link Fences.....02830-1 - 02830-3  
02832 Aluminum Fences and Gates.....02832-1 - 02832-6  
02910 Utility Protection and Perimeter Silt Fences....02910-1 - 02910-3

DIVISION 3 - CONCRETE

03300 Cast-In-Place Concrete.....03300-1 - 03300-3  
03350 Concrete Surfaces and Concrete Accessories.....03350-1 - 03350-12

DIVISION 4 - MASONRY

04210 Brick Masonry.....04210-1 - 04210-7

DIVISION 5 - METALS

05100 Structural Steel.....05100-1 - 05100-4  
05210 Steel Joists.....05210-1 - 05210-4  
05310 Structural Metal Decking.....05310-1 - 05310-3  
05400 Lightgauge Metal Framing.....05400-1 - 05400-7  
05500 Miscellaneous Metals.....05500-1 - 05500-5

DIVISION 6 - WOOD AND PLASTICS

06100 Rough Carpentry.....06100-1 - 06100-4  
06200 Finish Carpentry and Millwork.....06200-1 - 06200-8

DIVISION 7 - THERMAL AND MOISTURE PROTECTION

07200 Building Insulation.....07200-1 - 07200-7  
07211 Perforated Exterior Wall Radiant Barrier.....07211-1 - 07211-4  
07225 Laminated Roll Roof Insulation.....07225-1 - 07225-5  
07245 Existing Synthetic Plaster On Insulation.....07245-1 - 07245-7

07250 Fire-Stopping.....	07250-1	-	07250-4
07410 Metal Flush Wall Panels & Flashing.....	07410-1	-	07410-14
07500 Membrane Roofing & Accessories.....	07500-1	-	07500-22
07610 Metal Roof & Flashing.....	07610-1	-	07610-15
07650 Flexible Flashing.....	07650-1	-	07650-5
07900 Sealants.....	07900-1	-	07900-7

DIVISION 8 - DOORS AND WINDOWS

08100 Metal Doors and Metal Frames.....	08100-1	-	08100-7
08200 Wood Doors.....	08200-1	-	08200-4
08400 Sliding Entrance Doors.....	08400-1	-	08400-3
08520 Aluminum Windows.....	08520-1	-	08520-6
08720 Door Hardware.....	08720-1	-	08720-30
08770 Cabinet Hardware.....	08770-1	-	08770-6
08810 Glazing.....	08810-1	-	08810-6

DIVISION 9 - FINISHES

09100 Finish Floor Locations and Layout..... (with four (4) 8-1/2" x 11" Drawings, 09100-A, 09100-B, 09100-C, and 09100-D bound herein.)	09100-1	-	09100-2
09200 Plaster.....	09200-1	-	09200-10
09260 Gypsum Wallboard.....	09260-1	-	09260-8
09312 Porcelain Tile.....	09312-1	-	09312-8
09500 Suspended Ceilings.....	09500-1	-	09500-5
09650 Resilient Flooring.....	09650-1	-	09650-11
09685 Carpet.....	09685-1	-	09685-6
09900 Painting.....	09900-1	-	09900-9
09950 Wall Covering.....	09950-1	-	09950-4

DIVISION 10 - SPECIALTIES

10170 Toilet Partitions.....10170-1 - 10170-5  
10420 Signs and Plaques.....10420-1 - 10420-10  
10520 Fire Extinguishers.....10520-1 - 10520-5  
10800 Restroom Accessories and Specialties.....10800-1 - 10800-10  
10950 Miscellaneous Building Specialties .....10950-1 - 10950-3

DIVISION 11 - EQUIPMENT

DIVISION 12 - FURNISHINGS

DIVISION 13 - SPECIAL CONSTRUCTION

DIVISION 14 - CONVEYING SYSTEMS

DIVISION 15 - MECHANICAL

15010 Mechanical - General Conditions.....15010-1 - 15010-10  
15100 Mechanical - Plumbing.....15100-1 - 15100-7  
15200 Mechanical - Heating, Ventilation, and  
Air-Conditioning.....15200-1 - 15200-11  
15210 Mechanical - HVAC FVR ..... 15210-1 - 15210-34  
15220 Mechanical - HVAC FVR DOAS..... 15220-1 - 15210-8  
15300 Mechanical - Fire Protection.....15300-1 - 15300-10

DIVISION 16 - ELECTRICAL

16010 Electrical - General Provisions.....16010-1 - 16010-5  
16100 Electrical - Basic Materials & Methods.....16100-1 - 16100-8  
16400 Electrical - Distribution System.....16400-1 - 16400-3  
16500 Electrical - Lighting.....16500-1 - 16500-4  
16600 Electrical - Special Systems.....16600-1  
16700 Electrical - Fire Protection.....16700-1 - 16700-10  
16800 Electrical - Controls.....16800-1

---

DRAWINGS

## Architectural Drawings

A01 - Title Sheet, Abbreviations, & Project Map  
A02 - Demolition Site Plan  
A03 - New Site Plan & Details  
A04 - New Site Plan Elevations & Details, Existing Restroom Plans  
A04a - Paving Joints & Paving Section Details  
A05 - Existing Ceiling Plan, Rear Elevation, & Porch Slab Elevations  
A06 - Demolition Plan, Enlarged Restroom Plans, & Cabinet Details  
A07 - New Floor Plan  
A08 - Finish & Opening Schedules, HMF & Door Details  
A09 - Front & Side Elevations & Details  
A10 - Exterior Plaster Pilaster & Arch Details  
A11 - Plaster Pilaster Plan, Plaster Vents, & Aluminum Windows  
A12 - Roof Plan & Roof Details  
A13 - Interior Elevations, Tech Area Plan & Parapet Corner Details  
A14 - New Reflected Ceiling Plan & Porch Ceiling Framing  
A15 - Wall & Partition Types, Sections & Details & Fascia Details  
A16 - Metal Roof Details

## Owner's Property Survey

Owner's Surveyor's 10/24/2013 Improvement Survey Map by Earles & Associates, LLC; 1034 East Worthy Road, Suite B, Gonzales, LA 70737, Tel: (225) 647-9798; Fax: (225) 647-9700.

## Owner's Overall Perimeter Grading and Drainage Plan

C4.0 - Owner's Civil Engineer's Overall Perimeter Site Grading and Drainage Plan by GSA, P. O. Box 298, Gonzales, LA 70737-0298; Tel: (225) 644-5523; which is part of the Owner's GSA's formerly submitted and approved Ascension Parish Library Drainage Impact Study, (DPZ #15-015), showing new locations and new amounts of New Site Storm Water Outflow as required by Parish of Ascension's Engineering Department.

## Structural Drawings

S01 - Foundation Plan  
S02 - Foundation Details  
S03 - Roof Framing Plan  
S04 - Sections & Details

## Mechanical Drawings

M-1 -- Mechanical Site Plan  
AC-1 - HVAC Plan - Demolition  
AC-2 - HVAC Plan - New Work  
AC-3 - HVAC Schedules  
AC-4 - HVAC System Schematic  
AC-5 - HVAC Details  
P-1 -- Existing Plumbing Plan and Enlarged Mech. Equipment X122

P-2 -- Plumbing Plan - New Work  
P-3 -- Roof Drain Plan  
P-4 -- Plumbing Details and Riser Diagrams  
FP1 -- Fire Protection Floor Plan - New Work

Electrical Drawings

E-1 - Electrical Site Plan  
E-2 - Lighting Plan  
E-3 - Power Plan  
E-4 - Special Systems Plan  
E-5 - Schedules and Details

- END -

**INQUIRIES INFORMATION:**

Project Name: **Additions & Alterations To Ascension Parish Library-Galvez  
Prairieville, Louisiana**

Architect's Project Number: **1401**

Upon review of the Contract Documents for this Project, inquiries shall be directed as follows:

**1.01 ARCHITECTURAL:**

Contact: Henry L. Chauvin, Architect  
Address: Henry L. Chauvin, LLC  
9429 Highway 941  
Gonzales, Louisiana 70737

Phone: (225) 612-0707  
Fax: (225) 612-4565  
Email: [henry.chauvin@outlook.com](mailto:henry.chauvin@outlook.com)



Technical Specifications, including Division 1 through 14, (except for parts of the Divisions specified in paragraph 1.02 Structural below, page X-2), is prepared by or under the responsible supervision of:

Signature: Henry L. Chauvin

La. License Number: 1497

1.02 STRUCTURAL:

Contact: Jaque "Jack" Lasseigne, P.E.

Address: Wardlaw & Lasseigne, LLC  
Structural Engineers  
554 Colonial Drive  
Baton Rouge, Louisiana 70806

Phone: (225) 926-1432

Fax: (225) 926-1793

Email: [jacque@wl-structure.com](mailto:jacque@wl-structure.com)

Technical Specifications, including:

- A. Part of Division 2, Section 02200 Earthwork Including compacted earth fill under new buildings, and excluding Site Work and paving not under the New Addition Buildings.
- B. Part of Division 3, Section 03300, Cast-In-Place Concrete including Cast-In Place Concrete under New Addition Buildings; and excluding Cast-In-Place Concrete exterior paving not under New Addition Buildings.
- C. Section 05100 Structural Steel; Section 05210 Steel Joists; and Section 05310, Structural Metal Decking.

Signature

La. License Number: 26112

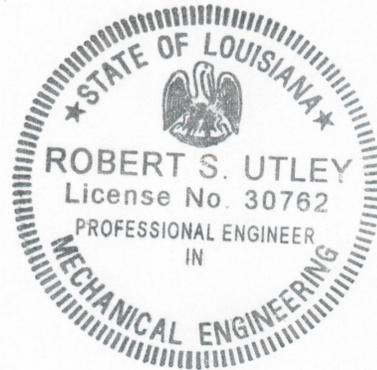


1.03 MECHANICAL:

Contact: Robert S. Utley, P.E.

Address: Robert S. Utley, P.E.  
Castagnos Goodwin Utley Engineers, LLC  
1211 Lafayette Street  
Houma, Louisiana 70346

Phone: (985) 876-4200  
Fax: (985) 876-4201  
Email: [robert@cguengineers.com](mailto:robert@cguengineers.com)



Technical Specifications, Division 15, is prepared  
by or under the responsible supervision of:

Signature: 

La. License No. 30762

1.04 ELECTRICAL:

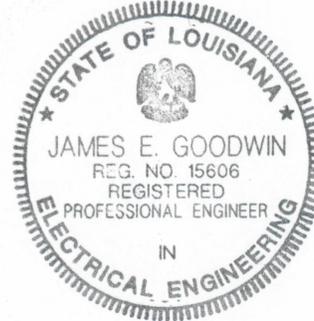
Contact: Jim Goodwin, P. E.

Address: James E. Goodwin, P. E.  
Castagnos Goodwin Utley Engineers, LLC  
1211 Lafayette Street  
Houma, Louisiana 70346

Phone: (985) 876-4200

Fax: (985) 876-4201

Email: [jim@cguengineers.com](mailto:jim@cguengineers.com)



Technical Specifications, Division 16, is prepared  
by or under the responsible supervision of:

Signature: James E. Goodwin

La. License No. 15606

- END -

**ADVERTISEMENT FOR BIDS**

Sealed Bids will be received by the Owner, **until 5:00 p.m., Wednesday, April 20, 2016**, at the **Ascension Parish Library - Gonzales, 708 Irma Boulevard, Gonzales, Louisiana 70737**, in the Gonzales Library Entrance Vestibule, for the following:

**ADDITIONS & ALTERATIONS TO ASCENSION PARISH LIBRARY - GALVEZ PRAIRIEVILLE, LOUISIANA**

No bids will be accepted after the above time and date. All Bids received after the above date and time will be returned unopened. After Bids are received, at the time and place indicated above, Bids will be publicly opened and read aloud upon completion of administrative tasks.

Printed copies of complete bidding documents may be obtained from Henry L. Chauvin, Architect, LLC, 9429 Highway 941, Gonzales, Louisiana 70737, (225) 612-0707, upon deposit of \$170.00 for all sets of documents. Add an additional \$20.00, non-refundable postage and handling, if mailed sets of bidding documents are requested. Deposits on the first set of documents, issued to prospective prime bidders, (Licensed General Contractors submitting bids on the specified bid form), will be fully refunded upon return of the complete bound documents, received in good condition, no later than ten (10) calendar days, after receipt of bids. On all other sets of documents, fifty percent (50%) of the deposit will be refunded upon return of the complete bound documents, received in good condition, no later than ten (10) calendar days after receipt of bids. Calendar days shall include Saturdays, Sundays, and all Holidays.

No deposits for bidding documents will be refunded after ten (10) calendar days after bid receipt. Refer to the Instructions to Bidders for additional required information. Bidding documents shall be available until twenty-four (24) hours prior to the bid opening time and date.

Prospective licensed bidder's requesting printed bidding Documents shall submit their License and all detailed contact information.

All Bids shall be accompanied by a specified certified check or bid bond in an amount equal to at least five percent (5%) of the amount of the Bid plus the amount of Additive Alternates, (if any), and made payable without condition to the Owner, as a guarantee that the Bidder, if awarded the Contract, will promptly execute the Contract Documents and bond(s). The bid security of the three lowest bidders will be retained until the Contract is awarded or other disposition is made thereof. The bid security of all bidders except the three (3) lowest, will be returned promptly by the Owners after the opening of bids. No Bids may be withdrawn after the scheduled closing time for receipt of bids for at least forty-five (45) days per La.R.S.38:2215.

The successful bidder shall be required to provide insurance specified herein and to provide performance and payment bond(s) specified herein, with all insurance and bonds meeting minimum requirements of La. R.S. 38:219, with minimum ratings specified, written by a company licensed to do business in Louisiana, in an amount equal to 100% of the Contract amount for performance and 100% of the Contract amount for labor and material payment.

The Owner reserves the right to reject any and all bids for just cause in accordance with the Louisiana Public Bid Laws, (La. R.S. 38:2211 through 2296).

A Mandatory Pre-Bid Conference will be conducted at 2:00 p.m., Tuesday, April 12, 2016, in the Ascension Parish Library Conference/Meeting Room, at the Ascension Parish - Galvez Project Site, at 40300 LA Highway 42, Prairieville, LA 70769. In strict accordance with La. R.S.38:2212, all prospective bidders shall be present at the beginning of the pre-bid conference at 2:00 p.m., and shall remain in attendance for the duration of the conference; and, any prospective bidder who fails to attend the conference or remain for the entire duration of the conference shall be prohibited from submitting a bid for the Project. Prospective bidders shall fill out contact information, and sign in and sign out on the Pre-Bid Conference Forms.

In addition to submitting required printed paper bids in sealed envelopes, electronic bids, electronic bid bonds, and electronic bid signature authority may be submitted and shall be submitted through [www.centralauctionhouse.com](http://www.centralauctionhouse.com) prior to the bid time and date and prior to the electronic bidding deadline. Bidding documents will be downloaded by the Ascension Parish Government and proposal information may be accessed via the internet at [www.centralauctionhouse.com](http://www.centralauctionhouse.com). Users must click on Login and create a New User Registration to view and download plans and specifications. Once logged in, users must click on Ascension Parish Government to view current advertisement listings. This listing is titled: **Additions & Alterations To Ascension Parish Library - Galvez Prairieville, La**

Insertion Dates:

ASCENSION PARISH GOVERNMENT

KENNY MATASSA, PARISH PRESIDENT

March 24, 2016

March 31, 2016

April 7, 2016

- End -

## INSTRUCTIONS TO BIDDERS

### SECTION 1: DEFINITIONS

1.1 The Bidding Documents in accordance with LA R.S. 38:2211, include the following:

Advertisement for Bids, (bid notice)  
Instructions to Bidders, (bidding instructions)  
Cover Sheet Instructions for Bid Form  
Louisiana Uniform Public Work Bid Form, (bid form)  
General Conditions of the Contract for Construction  
(AIA Document A 201, 2007 Edition)  
Supplementary Conditions To AIA Document A201-2007  
Contract Between Owner and Contractor  
(AIA Document A 101, Standard Form of Agreement Between Owner and Contractor where the basis of payment is a STIPULATED SUM, 2007 Edition)  
Bid Security or Bid Bond  
Performance and Payment Bond(s)  
Drawings, (Plans)  
Specifications, Divisions 1 through 16  
Addenda  
Non-Collusion Affidavit, (due within ten (10) days after bid opening).  
Attestation Affidavit, (due within ten (10) days after bid opening).

1.2 The Owner of the proposed Work is:

Ascension Parish Government  
c/o Ascension Parish Library  
708 South Irma Boulevard,  
Gonzales, Louisiana 70737

1.3 A Bidder, a prime bidder, or a prospective bidder is a person or entity, duly licensed, who submits a Bid for a prime Contract with the Owner for the Work described in the proposed Bidding Documents and Contract Documents.

1.4 Successful Bidder means the lowest qualified responsible and responsive Bidder submitting a Bid within the amount of funds available to finance the construction and to whom the Owner makes an award.

1.5 A Sub-bidder is a person or entity who submits a bid to a Bidder for materials, equipment, or labor for a portion of the Work.

1.6 A Bid is a complete and properly signed specified Bid Form to do the Work or designated portion thereof, described in the Bidding Documents, for the sum(s) stipulated on the Bid Form, and accompanied and supported by data and information, submitted in accordance with the Bidding Documents.

1.7 The Bid Form can be found immediately following these Instructions to Bidders, and subsequently following the Cover Sheet Instructions for the Louisiana Uniform Public Works Bid Form.

1.8 The Base Bid is the sum stated in the Bid for which the Bidder offers to perform the Work described in the Bidding Documents as the Base Bid, to which Work may be added for sums stated in Alternate Bids, if Alternate Bids are provided on the Bid Form.

1.9 An Alternate Bid (or Alternate), (if any), is an amount stated on the Bid Form, that may either increase or decrease the quantity of Work or change the type of Work within the scope of the Project, material, or equipment specified in the Bidding documents or both.

1.10 A unit price, (if any), is an amount stated in the Bid or with the Bid, as a price per unit of measurement for materials, equipment, or services or a portion of the Work as described in the Bidding Documents.

1.11 All definitions set forth in the General Conditions of the Contract for Construction, AIA Document A 201-2007 or in other Contract Documents are applicable to the Bidding Documents and Contract Documents.

1.12 Addenda are written or graphic instruments issued by the Architect prior to the opening of Bids which modify or interpret the Bidding Documents by additions, deletions, clarifications, corrections and prior approvals.

1.13 Licensed Design Professionals means the Architect, or Engineer, who shall have the primary responsibility for the total design services performed in connection with a Public Works Project. Such professional shall be licensed as appropriate and shall be registered under the Laws of the State of Louisiana. The Architect of record or his authorized representative, and the Consulting Engineer(s) whose seal(s) occur on the Contract Documents will administer the Construction Contract.

1.14 A Change Order means any contract modification that includes alteration, deviation, addition, or omission as to a preexisting Public Work Contract, which authorizes an adjustment to the Contract price, Contract time, or an addition, deletion, or revision of Work.

1.15 A Change Order within the scope of the Contract means a change order which does not alter the nature of the thing to be constructed and which is an integral part of the Project objective.

1.16 Probable construction cost means the estimate for the cost of the Project as designed that is determined by either the Public Entity or the designer or Design Professional. Probable construction cost does not mean the amount of the cost for the Project that has been budgeted by the Owner or Public Entity.

1.17 Contractor means any legal person or other legal entity who enters into a Public Contract. Contractors shall be properly licensed in accordance with requirements and laws promulgated by the Louisiana Secretary of State.

## Section 2: BIDDER'S REPRESENTATION

2.1 Each Bidder by making his Bid represents that:

2.1.1 The Bidder has read and understands all of the Bidding Documents and his Bid is made in accordance therewith.

2.1.2 The Bidder has examined and personally visited the site(s) and the location of the proposed Work and has familiarized himself with all of the local conditions under which the Work is to be performed to include correlation of the Bidder's personal observations with the requirements of the proposed Contract Documents and the Work to be done.

2.1.3 The Bidder's Bid is based upon the materials, systems, and equipment described in the Bidding Documents as advertised and as modified by Addenda, without exceptions.

2.1.4 The Bidder is fully qualified and licensed under Louisiana Revised Statutes all Louisiana State Laws, and all local licensing laws for Contractors in effect at the time and at the location(s) of the Work before submitting his Bid, and that all of his Sub-bidders or prospective Sub-contractors are duly licensed in accordance with all Louisiana laws and local laws, where required.

2.1.5 The Bidder is satisfied as to the conditions to be encountered; the character, quality, and scope of the proposed Work; the quality and quantity of the materials to be furnished; and the requirements of his Bid, the Drawings, Specifications, Addenda, and other Contract Documents.

2.1.6 The Bidder in submitting his bid acknowledges that Bidder's Bid is not based on any verbal instructions contrary to the Bidding Documents and Addenda.

## SECTION 3: BIDDING DOCUMENTS

### 3.1 COPIES

3.1.1 Prime Bidders who are properly licensed by the Louisiana State Licensing Board for Contractors may obtain from the Architect's office address below, at least one (1) set of complete, printed paper Bidding Documents from the Architect:

Henry L. Chauvin, Architect, L.L.C.  
9429 Highway 941  
Gonzales, Louisiana 70737

Phone: (225) 612-0707  
Fax: (225) 612-4595

for the deposit amount as specified in the Advertisement for Bids for each set of bidding documents. Electronic Bidding Documents will be downloaded on the website as listed in the Advertisement for Bids. Electronic Bidding Documents will not be issued to Bidders by the Architect. No partial incomplete sets of printed Drawings and no partial incomplete sets of Specifications will be issued by the Architect. Refer to the Advertisement for bids for Electronic Documents and submitting Electronic Bids.

3.1.2 Deposit amounts specified in the Advertisement for Bids for the first set of Bidding Documents issued to Licensed Prime Bidders, (Prospective Bidders submitting Bids for the entire Project on the specified Bid Form), will be fully refunded upon return of the undamaged, completely bound paper Documents, including Addenda, received by the Architect, in good condition, without marks, no later than ten calendar (10) calendar days, after the specified bid date after Bids are received. All other sets of Bidding Documents fifty percent (50%) of the deposit will be refunded, upon return of the undamaged, complete bound paper Documents, including Addenda, received by the Architect, in good condition, no later than ten calendar (10) days after the specified Bid date when Bids were received. No deposits will be refunded to Bidders or non-bidders on Documents returned after ten (10) days after the date for receipt of bids. Prospective licensed bidder's requesting printed bidding document for bidding on this Project shall submit evidence to the Architect that they have a State License of proper classification in full force and effect and shall submit their LA License number, and contact information such as name, address, phone number, fax number, and email address with payment when ordering Bidding Documents.

3.1.3 No deposits will be refunded to Bidders on Documents returned after ten (10) days after the Bid when Bids were received. No deposit will be refunded for returned torn, not bound, nor incomplete, partial sets of Bidding Documents which are not in good condition. The Architect will not call to warn Bidders about a date when returned Bidding Documents are due.

3.1.4 As specified in the Advertisement for bids, add a non-refundable shipping and handling advanced charge in the amount specified per set for mailed sets of Contract Documents. Cost of postage and handling paid by Bidders to receive plans by mail will not be refunded. All costs of postage or delivery to return sets of documents to the Architect shall be paid for by the company which procured said sets.

3.1.5 Bidders shall use complete sets of Bidding Documents in preparing Bids; neither the Owner nor the Architect assumes responsibility for errors, omissions, and misinterpretations resulting from the use of incomplete sets of Bidding Documents. Prior

to bidding, verify receipt of all Specification page numbers and all Drawing sheet numbers by comparing all pages and sheets with the specified index in the Specifications and on the Drawings, and any modifications modified by Addenda.

3.1.6 The Owner or Architect in making copies of the Bidding Documents available on the above terms, do so only for the purpose of obtaining Bids on the Work and do not confer a license or grant permission for any other use of the Bidding Documents.

3.1.7 Bidding Documents will be issued per Louisiana Laws and Act 759.

### 3.2 INTERPRETATION OR CORRECTION OF BIDDING DOCUMENTS

3.2.1 The Bidder shall carefully study and compare the Bidding Documents with each other, and with other Work of separate contractors to the extent that it relates to the Work for which the Bid is submitted, shall examine the site and all local conditions, and shall at once report to the Architect all ambiguities, inconsistencies, or errors discovered in the Bidding Documents or errors relating to the Project site.

3.2.2 Bidders and Sub-bidders requiring clarification or interpretation of the Bidding Documents shall make a written request to the Architect to reach the Architect at least seven (7) days prior to the date specified for receipt of Bids where appropriate Addenda may or may not be required.

3.2.3 Interpretations, corrections, or changes of the Bidding Documents will be made by written Addendum. Interpretations, corrections, or changes of the Bidding Documents made in any other manner will not be binding, and Bidders shall not rely upon such interpretations, corrections, or changes.

### 3.3 SUBSTITUTIONS/PRIOR REVIEW

3.3.1 The materials, products, and equipment described in the Bidding Documents establish a standard of required function, dimension, appearance, texture, color, and quality to be met by any proposed substitution.

3.3.2 No substitution will be considered prior to receipt of Bids unless a complete written request for review has been submitted by the Bidder, and has been received by the Architect, at least seven (7) working days prior to the date for receipt of Bids. Within three (3) days, exclusive of Holidays and weekends, after such submission, the prime design professional shall furnish to the Public Entity the written approval or denial of the product submitted by Addenda.

3.3.3 All such approval requests prior to receipt of Bids shall include the name of the manufacturer, distributor, and the name of

the material or equipment for which it is to be substituted, the physical location of same, and a complete description of the proposed substitute including model numbers, drawings, cuts, performance and test data, colors, textures, specifications, and all other detailed information necessary for an evaluation. A written statement setting forth all changes in other materials, equipment, or other portions of the Work including changes in the work of other contracts that incorporation of the proposed substitution would require shall be included.

3.3.4 The burden of proof of the merit of the proposed substitution is upon the proposer. Incomplete product submittals not indicating meeting all of the standards specified, colors, textures, actual Samples, sufficient dimensions, quality, and strength of materials, and other standards specified, will not be reviewed, and will not be added to the list of prior approvals by Addendum.

3.3.5 The Architect's decision of specifying materials and equipment in an Addenda, or disapproval of a reviewed proposed substitution shall be final. The Architect reserves the right to reject material and equipment for aesthetic values such as color, texture, and shape of material and equipment, and functional qualities of material and equipment.

3.3.6 The Architect reserves the right to reject products for which incomplete test data, Samples, telephone numbers of users of products and information has been submitted. All test data and information shall meet or exceed standards specified. Manufacturers are responsible for submitting all information and all additional information requested by the Architect prior to the date specified above. Substitutions which require substantial revision of the Contract Documents will not be considered. The Architect reserves the right to reject materials and equipment substitutions proposed for this Project.

3.3.7 The Contractor shall have the option to use prior reviewed substitutions. No extra payment by Change Order will be granted and approved for additional Work, materials, and equipment required to incorporate prior reviewed substitutions.

3.3.8 If the Architect reviews a proposed substitution, and in general, finds that the substitution may meet the requirements of the Contract Documents, prior to receipt of Bids, such No Exceptions Taken after review will be set forth in a written Addendum. Bidders shall not rely upon Architect review made in any other manner.

3.3.9 The Architect reserves the right to reject prior reviewed materials and equipment at a later date, after opening of Bids, if it is detected by the Architect that incomplete information was submitted, partial information, or false information was submitted to the Architect for review, prior to bidding.

3.3.10 In accordance with Louisiana Laws and Louisiana Senate Bill No. 468, Act No. 759, the following is hereby included on all sheets of Drawings, and in all Sections of Specifications and Addendum, (as though written out in full on every Drawing sheet, on every specification page, and on every page of issued Addendum), relating to material and equipment other than those specified:

"Wherever a public entity specifies the name of a certain brand, make, manufacturer, or uses a definite specification the Bidding Documents will clearly state that they are used only to denote the quality standard of product desired and that they do not restrict bidders to the specific brand, make, manufacturer, or specification named; that they are used only to set forth and convey to prospective bidders the general style, type, character, and quality of products desired; and that equivalent products may be acceptable. It shall be the responsibility of the professionally employed Design Professional, Architect, Engineer, or Interior Designer, to determine what is considered an equivalent product, meeting also Owner approval, on any and all Projects in which they have been legally employed to perform professional services."

3.3.11 Prior approval requests or prior review requests will be submitted by mail and request sent by emails or faxes will not be acceptable. Do not send prior approval requests or prior review requests by email or faxes.

3.3.12 Prior approval requests or prior review requests, including but not limited to general style, type, character, color, texture, and quality, for material and equipment may require final approval by Owners and the Owner's specified Interior Designer, (if the Owner hired an Interior Designer).

#### 3.4 ADDENDA

3.4.1 Addenda will be attempted to be mailed by the Architect to all who are known by the Architect to have received a complete set of Bidding Documents. Because of errors in addresses, mistakes by mail carriers, late delivered mail, and other human errors, all addenda are not always delivered to all Bidders on time, all of the time.

3.4.2 All Bidders who have received or who have reviewed Bidding Documents shall be responsible for verifying whether or not they have received all Addenda. Do not rely solely on mail delivery, email, faxes, printed journals, published reports, Electronic documents on the Public Entity's Website or other delivery systems to verify receiving all Addenda.

3.4.3 All Bidders shall be responsible for calling the Architect's Office within seventy-two (72) hours prior to the date and time of receipt of Bids to verify receipt of all Addenda issued by the Architect. All Bidders shall be responsible for picking up all Addenda not yet received from the Architect's office. The Architect

will be not be responsible for miscommunication of Addendum through mail delivery, faxes, published Public Entity Electronic Addenda, or e-mail.

3.4.4 Copies of Addenda will be attempted to be made available for inspection wherever Bidding Documents are on file for that purpose; however, call the Architect to verify that all Addenda has been received prior to bidding.

3.4.5 Addenda will normally not be issued within a period of seventy-two (72) hours prior to the advertised time for the opening Bids, excluding Saturdays, Sundays, and any other legal United States Postal Service Holidays, except an Addendum withdrawing the specified request for Bids, or one which includes postponement of the date for receipt of Bids. If it is necessary to issue an addendum within the seventy-two (72) hour period prior to receipt of Bids, the receipt of such Bids shall be extended a minimum of exactly seven (7) days, or more, up to twenty-one (21) working days without the requirement for re-advertising. An addendum will make reference to the revised date and time for opening of bids. The Owner shall be consulted prior to issuance of such an addendum, and shall approve such issuance.

3.4.6 All Bidders shall ascertain prior to submitting Bids that they have received all Addenda issued by the Architect, and all Bidders shall acknowledge receipt of Addenda in the blank space(s) indicated on the specified Bid Form.

3.4.7 Failure to acknowledge receipt of all Addenda issued for this Project, whether the Bidders received said Addenda or not, in the space(s) specified on the specified Bid Form will render the proposal informal and will cause its rejection.

3.4.8 All addenda shall become part of the Contract Documents. All Bidders shall be bound by all Addenda whether or not received by said Bidders.

#### SECTION 4: BIDDING PROCEDURE

##### 4.1 FORM AND STYLE OF BIDS

4.1.1 Printed paper Bids and electronic bids shall be submitted on required forms identical to the specified Bid Form included with the Bidding Documents, or as modified by Addenda. Legible paper copies of the Bid Form are acceptable.

4.1.2 All blanks the printed paper Bid Forms shall be legibly filled in by typewriter or manually in ink; and all blanks on the Electronic Bid Forms shall be submitted on the specified Bid Form in accordance with Electronic Bidding requirements of LAC 4:XV.70.

4.1.3 Where so indicated by the makeup of the Bid Form, amounts for Base Bid: Alternates, (if any); and Unit Prices. (if any), shall be expressed in both words and figures, and in case of discrepancy

between the two, the written words shall govern. If no Alternates or Unit Prices are requested, the word NONE will already be specified after each heading where specified on the Bid Form.

4.1.4 Interlineations, alterations, and erasures of the filled in Bid Form information shall be initialed by the signer of the Bid, or the Bidder's duly authorized representative.

4.1.5 If requested, Bidders are cautioned to complete all Alternates should such be required in the Bid Form. Failure to submit requested required Alternate and Unit Price amounts, (if required), may render the Proposal informal and may cause its rejection. If Alternates are specified and there is no change in price is required by the Alternate, enter "No Change" for the Alternate(s), (if any).

4.1.6 The Bidder shall make no additional stipulations on the Bid Form nor qualify his Bid in any other manner.

4.1.7 The Bid shall include the legal name of the Bidder and a statement that the Bidder is a sole proprietor, a partnership, a corporation, or other legal entity where indicated on the Bid Form. The Bid shall be signed by the person or persons legally authorized to bind the Bidder to the specified Contract. A Bid by a legal entity or corporation shall have filed with the Secretary of State's Office a resolution indicating the names of all parties authorized to submit public Bids for public contracts if required by State law, or a Bid by a corporation or legal entity shall have a corporate resolution attached to the Bid if required by State law, and shall give the state of incorporation. A Bid by a corporation submitting Bids for public Contracts shall have an authorized person signing the Bid. A Bid submitted by an agent shall have a current Power of Attorney attached certifying the agent's authority to bind the Bidder. Verify complying with all Louisiana Laws and all Louisiana bidding requirement laws prior to submitting Bids.

4.1.8 Only the following information and documentation is required to be submitted by a Bidder at the time and date designated in the Advertisement for the Bid opening:

- A. Bid Security or Bid bond.
- B. Bid Form with:

1. Acknowledgement of Addenda receipt, (Addenda Number and Addenda Date, (if any) written in ink or typed in the blank spaces on the Bid Form.
2. Base Bid, (written in ink or typed both in words and numerals.)
3. Alternates, (None for this Project.)
4. Unit Prices and Unit Price Forms, (None for this Project).
5. Legal Name of and Title of Bidder, Name of Firm or Joint Venture.
6. Address of Bidder.
7. Louisiana Contractor's License Number.
8. Name of Authorized Signatory of Bidder.

9. Title of Authorized Signatory of Bidder.
10. Signature of Authorized Signatory of Bidder, and Date.
11. Corporate Resolution/Power of Attorney, or written evidence of the authority of the person signing the Bid.

C. Written evidence of the authority of the person signing the Bid for public works shall be submitted at the time of bidding.

D. The authority of the signature of the person submitting the bid shall be deemed sufficient and acceptable if any of the following conditions are met:

1. The signature on the Bid is that of any corporate officer listed on the most current annual report on file with the Louisiana Secretary of State; or,

2. The signature on the Bid is that of any member of a partnership, limited liability company, limited liability partnership or other legal entity listed in the most current partnership business records on file with the Secretary of State; or,

3. The signature on the Bid is that of an authorized representative as documented by the legal entity certifying the authority of the person; or, The legal entity has filed in the appropriate records of the Secretary of State of this State an affidavit, resolution, or other acknowledged or authentic document indicating the names of all parties authorized to submit Bids for public Contracts. Such document on file shall remain on file with the Secretary of State shall remain in effect and shall be binding upon the principal until specifically rescinded and canceled from the records of the office.

4.1.9 Bidders shall include, attach, or enclose with the signed, filled out, and completed Bid Form all other required Documents such as the Bid Security or Bid bond; corporate resolution and Power of attorney where required.

4.1.10 On any Bid in excess of fifty thousand dollars (\$50,000.00), the Contractor shall certify that he is licensed under R. S. 37:2150-2163 and indicate his Louisiana Contractor's license number on the bid envelope and on the bid form.

4.1.11 If Bids are submitted Electronically, Electronic Bids shall be submitted on the specified completed Bid Form. Electronic Bids, accompanied by Electronic Bid Security, Electronic Bid Bonds, and evidence of authorized signatory of Bidder, shall be submitted Electronically through the Central Auction House as specified in the Advertisement for Bids. Electronic Bids and Electronic Bid Security shall be submitted in accordance with LAC 4:XV.70.

4.1.12 If Bids are submitted electronically, said bidders shall submit original printed paper Bid Security Documents, and original evidence of authorized signatory of Bidder to the Owner within twenty-four (24) hours after Bid Opening to Ascension Parish Library,

708 Irma Boulevard, Gonzales, Louisiana 70737, (Attention: Angelle Deshautelles, Library Director.)

4.1.13 If there is an Electric power failure, back-up battery failure, Electronic communication failure of any kind, Electronic delivery failure, electronic bidding failure, or any other Electronic failure where the specified Bid Form and documents are not received by the Owner on the specified date at the specified time, the Electronic Bid will be rejected.

#### 4.2 BID SECURITY

4.2.1 No Bid will be considered or accepted unless the Bid is accompanied by a bid security in an amount of not less than five percent (5%) of the Base Bid and all additive alternates, (if any). The bid security shall be in the form of a certified check, or cashier's check drawn on a bank insured by the Federal Deposit Insurance Corporation, or a Bid Bond on a Bid Bond Form written by a surety company licensed to do business in the State of Louisiana, and qualified in accordance with L.R.S.:38:2218. The Bid Bond shall be countersigned by a person who is under contract with the surety company or bond issuer as a licensed agent in Louisiana who is residing in Louisiana and accompanied by appropriate power of attorney and in favor of the Owner. The surety company shall be licensed to do business in the State of Louisiana listed in the U. S. Department of Treasury Financial Management Service, latest revision. The Surety Company shall have an A.M. Best's Key Rating Guide to write individual bonds up to ten percent (10%) of policy holder's surplus as shown in the A, B. Best's Key rating guide or by an insurance company in good standing licensed to write bid bonds which is either domiciled in Louisiana or owned by Louisiana residents. Companies that provide bid bonds shall meet requirements of La. R. S. 38:2219. No company or entity, regardless of size or financial rating, will be allowed to write its own bond.

4.2.2 Bid security furnished by the Contractor shall guarantee that the Contractor shall, if awarded the Work according to the terms of his proposal, enter into the Contract and furnish Performance and Payment Bond(s) and insurance as required by these Contract Documents, prior to the Owner signing the Contract after verbal or written notice has been issued that the instrument is ready for his signature.

4.2.3 Should the Bidder refuse to enter into such Contract or fail to furnish such bonds or insurance, the amount of the bid security shall be forfeited to the Owner as liquidated damages, not as penalty.

4.2.4 The Owner will have the right to retain the bid security of Bidders until either (a) the Contract has been executed and bonds and insurance have been furnished, or (b) the specified time has elapsed so that Bids may be withdrawn, or (c) Bids have been rejected.

4.2.5 If the bid security attached to the Bid Form is a Bid Bond, then said Bid Bond shall be prepared as specified herein.

#### 4.3 SUBMISSION OF BIDS

4.3.1 The completed and signed Bid Form with corporate resolution, if required; bid security, and all other additional required information, (if any, and if specified), shall be submitted electronically or in an enclosed and sealed opaque, bid envelope.

4.3.2 The bid envelope shall be addressed to the Owner, using the Owner's name and address, as indicated on the Bid Form, and shall be identified on the outside of the bid envelope with the name of the Project indicated on the Bidding Documents, the name and address of the Bidder, and Louisiana Contractor's license number of the Bidder.

4.3.3 Sealed Bids shall be deposited and will be received by the Owner until the time and date, and at the location specified in the Advertisement for Bids or as modified by Addenda.

4.3.4 Bidders submitting Bids to the Owner's bid receipt location shall assume full responsibility for the timely delivery and Owner's receipt of Bids at the specified location prior to the time and date specified for receipt of Bids.

4.3.5 If Bids are mailed and delivered by United States Mail, Express Mail, Priority Mail, UPS, Federal Express, and all other similar types of carrier delivery, Bids shall be sent in the specified addressed sealed bid envelope with Contractor's license number, (with all of the required Bid submittal information enclosed on the inside), enclosed in a separate outer mailing envelope with the notation: "SEALED BID ENCLOSED", and the "Project Name" on the face thereof, with the Owner's name and mailing address as specified on the Bid Form.

4.3.6 Owner's receipt of a Bid for any reason after the date and time stipulated in the Advertisement for Bids, including but not limited to late delivery by carrier service, late mail, late hand delivery by anyone, leaving Bid(s) with someone not specifically designated by the Owner to receive Bid(s) prior to bid receipt, incorrect addresses, misunderstood information, misunderstood directions, heavy traffic, or all other types of late delivery, and excuses shall disqualify the Bid.

4.3.7 Thoroughly review the Bid Form envelope and its contents early to insure having all of the required information on time.

4.3.8 Bids received by hand delivery or by any type of mail carrier after the time and date specified for the receipt of Bids will be returned unopened.

4.3.9 Oral, telephonic, telegraphic, e-mailed, or telefaxed Bids, or modifications to Bids as such, are invalid and will not receive consideration.

4.3.10 The Owner will not consider notations written on the outside of the bid envelope which have the effect of the Bidder trying to amend the enclosed Bid.

4.3.11 Bids will be accepted only from Contractors that attend the mandatory Pre-Bid Conference. Date, time and location of the Pre-Bid Conference is specified in the Advertisement for Bids.

4.2.12 Prospective bidders are cautioned that local Ascension Parish traffic is totally unpredictable and traffic jams occur often; hence, to avoid arriving late and not being able to submit bids, it is strongly suggested that prospective bidders arrive at the Pre-Bid Conference prior to the specified time. No excuses for arriving late will be accepted.

#### 4.4 MODIFICATION OR WITHDRAWAL OF BID

4.4.1 A Bid may not be modified, withdrawn or cancelled by the Bidder during the time stipulated in the Advertisement for Bids, for the period following the time and bid date designed for the receipt of Bids, and the Bidder so agrees in submitting his Bid, except in accordance with La. R.S. 38:2214 (C) which states, in part, "Bids containing patently obvious unintentional and substantial mechanical, clerical, or mathematical errors, or errors of unintentional omission of a substantial quantity of Work, labor, material, or services, made directly in the compilation of the bid, may be withdrawn by the Contractor if clear and convincing sworn, written evidence of such errors is furnished to the Public Entity or Owner within forty-eight (48) hours of the bid opening excluding Saturdays, Sundays and legal Holidays."

4.4.2 Prior to the time and date designated for receipt of Bids, Bids submitted early may be modified or withdrawn only by notice to the party receiving Bids at the place and prior to the time designated for receipt of Bids. A change shall be so worded as not to reveal the amount of the original Bid.

4.4.3 Withdrawn Bids may be changed, re-sealed, and resubmitted up to the time designated for the receipt of Bids provided that they are then fully resubmitted in conformance with these Instructions to Bidders and all of the Bidding Documents and Contract Documents.

4.4.4 Bid security shall be in an amount sufficient for the Bid as modified or resubmitted.

#### SECTION 5: CONSIDERATION OF BIDS

##### 5.1 RECEIPT OF BIDS

5.1.1 All properly identified Bids, as specified herein, received on time, will be opened publicly and will be read aloud as specified in the Advertisement for Bids.

5.1.2 Bids without Louisiana Contractor's license numbers on the bid envelopes may be opened and may be read aloud if it is thought that the proposed Project may be under \$50,000.00. Said Bids may be acceptable if the Bids are under \$50,000.00 and they meet all requirements of the Contract Documents. Bid envelopes for Bids thought to be over \$50,000.00 without the Louisiana's Contractor's number will be returned unopened.

## 5.2 REJECTION OF BIDS

5.2.1 The Owner will have the right to reject any or all Bids and in particular to reject a Bid not accompanied by a required bid security or data or information required by the Bidding Documents or reject a Bid which is in any way incomplete, irregular, or not in compliance with the Contract Documents.

## 5.3 ACCEPTANCE OF BID (AWARD)

5.3.1 Determination of the low Bidder will be on the basis of the sum of the Base Bid, and the Alternates accepted by the Owner, (if there are any Alternates).

5.3.2 The Owner reserves the right to accept or reject alternates which, in the Owners judgement, is in the Owner's own best interest.

5.3.3 If the Owner decides to accept one (1) or more Alternates, (if any), and if accepting certain Alternates determines a low Bidder, Alternate(s) will be accepted in the numerical order specified on the Bid Form.

5.3.4 If the Owner decides to accept one (1) or more Alternates, (if any), and if accepting certain Alternates does not determine a low Bidder, Alternate(s) may be accepted out of the numerical order specified on the Bid Form.

## ARTICLE 6: POST-BID INFORMATION

### 6.1 CONTRACTOR'S QUALIFICATION STATEMENT

6.1.1 Upon request by the Architect or the Owner, Bidders may or may not be required to submit properly executed AIA Document A 305, Contractor's Qualification Statements. In addition, any Bidder may be required, at the discretion of the Owner, to furnish evidence satisfactory to the Owner that his proposed subcontractors have sufficient means and experience in the types of Work called for to assure completion of the Contract in a satisfactory manner.

6.2 At the pre-Construction Conference, the Contractor shall submit the following to the Architect:

6.2.1 A designation of the Work to be performed by the Contractor with his own forces.

6.2.2 A breakdown of the Contract cost attributable to each item listed in the Schedule of Values Form. No payments will be made to the Contractor until this is received.

6.2.3 A list of names and business domiciles of all Subcontractors, manufacturers, suppliers, or other persons or organizations, (including those who are to furnish materials or equipment fabricated to a special design), proposed for the principal portions of the Work. It is the preference of the Owner that, to the greatest extent possible or practical, the Contractor utilize Louisiana and Ascension Parish Subcontractors, manufacturers, suppliers, and labor.

6.2.4. In accordance with R.S. 38:2211, on the date and at the time designated in the Advertisement for Bids opening, bidders are not required to submit with their bids the later required and specified apparent executed Low Bidder Attestation Affidavit, & Non-Collusion Affidavit, both of which shall be due within not later than ten (10) days after bid opening. In accordance with R.S. 38:38:2212, if the apparent low bidder does not submit the executed specified Low Bidder Attestation Affidavit, & Non-Collusion Affidavit within ten (10) days after bid opening, he shall be declared non-responsive.

## ARTICLE 7: PERFORMANCE AND PAYMENT BOND AND INSURANCE

### 7.1 BOND REQUIREMENTS

7.1.1 The Contractor shall furnish and pay for a performance and payment bond written by a company licensed to do business in Louisiana, and shall be countersigned by a person who is contracted with the surety company or bond issuer as an agent of the company or issuer, and who is licensed as an insurance agent in this State, and who is residing in Louisiana, in an amount equal to 100% of the Contract amount to guarantee delivery of completed Work under the Contract and payment of labor and materials. These bonds shall be written to comply with La. R.S. 38:2216 and La. R.S. 38:2219 with authority to issue bonds in accordance with La. R.S. 38:2219. No company or entity, regardless of size or financial rating will be allowed to write its own bonds. The surety company shall have an A. M. Best Company minimum rating with a minimum financial size in accordance with the General Conditions of the Contract and La. R.S. 38:2219. Bonds shall be accompanied by a letter stating bonding company's current rating for verification prior to acceptance by the Owner and execution of the formal specified Owner/Contractor Agreement.

### 7.2 TIME OF DELIVERY

7.2.1 The Bidder shall hand deliver the specified required bond(s) to the Owner prior to the Owner's signing of the Contract. The Bidder shall be responsible for picking up a copy of the Contract from the Architect and delivering same to the bonding agency, securing the required, signed bond(s) and delivering same to the Architect and the Owner in a very timely manner.

7.2.2 The bond(s) shall be dated on the date of commencement of Work indicated in the Contract.

7.2.3 The Bidder shall require the Attorney-in-Fact who executes the required bond(s) on behalf of the surety to affix thereto a certified and current copy of his power of attorney.

7.2.4 Original insurance certificates, signed in ink, indicating amounts of insurance required, Louisiana Workmen's Compensation, and all other specified insurance shall be presented to the Owner with the bond(s). Copies of originals and "faxed" copies of certificates of insurance are not acceptable.

7.2.5 No actual physical on site Work shall begin prior to securing specified insurance and bonds.

#### ARTICLE 8: FORM OF AGREEMENT BETWEEN OWNER AND CONTRACTOR

##### 8.1 FORM TO BE USED

8.1.1 Unless otherwise specified, the form of the Contract to be used shall be AIA Document A 101, Standard Form of Agreement between Owner and Contractor, 1997 Edition where the basis of payment is a Stipulated Sum. The Agreement will be prepared by the Architect for the Owner and issued to the Contractor for execution and returned to the Owner for signature. Executed bonds and insurance Certificate shall be submitted to the Owner by the Contractor within five (5) days of the date of the Notice of Award.

##### 8.2 AWARD of Contract

8.2.1 If awarded, the Contract will be let to the lowest responsible Bidder whose Base Bid is within the Project budget, and is able to furnish the Owner a certified copy of the minutes of the corporation or partnership meeting which authorized the party executing the Bid to sign on behalf of the Contractor. Should all Bids exceed the Project budget, award will be made at option of the Owner to the lowest responsible Bidder whose Base Bid is within funds available.

8.2.2 Because time is of the essence, if the Successful Bidder is notified of the acceptance of the Bid within **thirty (30) days**, after the Bid Opening, he fully agrees to execute the specified Contract, and to provide the specified bond(s), original insurance certificates, and specified roof certification letter(s) prior to the

Owner signing the Contract, and prior to beginning the Work. He fully agrees to begin Work within **ten (10) calendar days** after a written "Notice to Proceed" and/or written Notice of Award of the Contract. All documents shall be hand delivered and picked up by the Contractor; hence, do not depend on regular mail for delivery of Documents. Late receipt of bond(s), insurance certificates, roof certification letter(s), signed Contracts, and other Documents shall not delay the commencement date of the Contract and the Work. Once given a "Notice to Proceed" and/or written Notice of Award by the Owner or Architect, the Successful Bidder is on his own time for insuring attaining the Substantial Completion date specified for the Project.

#### ARTICLE 9: COMPLETION TIME AND LIQUIDATED DAMAGES

9.1 **COMPLETION TIME:** The Bidder, by signing the specified Bid Form fully agrees to commence the Work under the specified Owner Contractor Contract on a date specified by the Owner after Bid Opening, and to complete this Project within **Four Hundred Ninety-Five (495) calendar days** thereafter, subject to such extensions as may be granted as specified in the General Conditions and the Supplementary Conditions. No combinations of the Base Bid with or without Alternates, (if any), will add or deduct nor change the completion time herein.

9.2 **LIQUIDATED DAMAGES:** The bidder hereby further agrees to pay as Liquidated damages the sum of **Seven Hundred Fifty Dollars (\$750.00)** per day for each consecutive calendar day which the Work is not Substantially Complete beginning with the first day beyond the specified Completion time stated above. Time is of the essence and completion of the Work shall be within the specified Completion Time stated above. The Owner will suffer financial loss will and other losses if the Project is not Totally Substantially Complete within the time set forth herein. The Contractor and his surety shall be liable and shall pay to the Owner the sum specified herein as fixed, agreed, and liquidated damages for each consecutive calendar day, (including Saturdays, Sundays, and all Holidays), of delay until the Work is totally Substantially Completed in accordance with the definition specified in the General Conditions of the Contract for Construction.

#### ARTICLE 10: ENVIRONMENTAL CONSIDERATIONS

10.1 Inspection and Testing for Asbestos Content of Building Materials:

10.1.1 New building materials which are scheduled to be incorporated into the Work under this Agreement shall first either be certified by the manufacturer to be asbestos free, or be inspected and tested by accredited parties and certified to be free from asbestos content, in accordance with by EPA, and AHERA.

10.1.2 "Asbestos" means the Asbestiform varieties of: Chrysotile, (Serpentine), Crocidolite, (Riebecrite), Ammosite, (Cummingtonitegrunerite), Anthophyllite, Tremolite, and Actinolite.

10.1.3 Materials shall not be incorporated into the Work prior to receipt of either manufacturer certification or accredited laboratory test results indicating the building material is asbestos free.

10.1.4 The Owner reserves the right to inspect and take Samples at random at the job site. Materials containing asbestos shall be removed immediately at the Contractor's expense using current EPA protocol for the removal of asbestos containing materials.

#### ARTICLE 11: ROOF CERTIFICATION LETTERS

11.1 Prior to the Owner signing the Contract, the Contractor shall provide the required, specified certification letter from the proposed roof manufacturer, as specified in Section 07500, Membrane Roof and Accessories, and in Section 07610, Metal Roof & Flashing.

11.2 If the Contractor cannot provide the required, specified certification letter from the proposed roof manufacturer, as specified, the Owner may reject this Contractor's Bid because of failing to meet requirements of the Specifications.

#### ARTICLE 12: AN EQUAL OPPORTUNITY EMPLOYER

12.1 It is the policy of the Owner to provide equal opportunities without regard to race, color, national origin, sex, age, disabilities, or veteran status in its educational programs and activities.

#### ARTICLE 13: PERMITS AND MISCELLANEOUS WORK

13.1 The Bidder, by signing the specified Bid Form hereby proposes to provide all necessary Work, labor, materials, equipment, expenses, services, scaffolds, pumps, night lighting, barricades, security measures, safety measures, licenses, insurance, bond(s), taxes, building permits, zoning permits, Louisiana DEQ local required permits, fees, and to provide Louisiana Storm Water Discharge permits, and provide all permits and fees from other agencies, fees for fire Marshal review of the fire alarm system, sprinkler system, transportation, delivery, freight, shipping, tools, and appliances required to perform the Work and services for the construction and completion of this Project.

- End -

**Cover Sheet Instruction for**  
**LOUISIANA UNIFORM PUBLIC WORK BID FORM**

A. In accordance with Louisiana R.S. 38:2211, any public entity advertising for public work shall use only the enclosed specified LOUISIANA UNIFORM PUBLIC WORK BID FORM, (or a legible copy of same), as promulgated in accordance with the Administrative Procedure Act by the division of administration, office of facility planning and control.

B. In accordance with R.S. 38:2211, the bidding documents shall require only the following information and documentation to be submitted by a bidder at the time designated in the advertisement for bid opening:

1. BID SECURITY or BID BOND, completely executed and signed and;

2. LOUISIANA UNIFORM PUBLIC WORK BID FORM completely filled out and signed with required Acknowledgment of Addenda, , Base Bid, Alternates, (if any), Unit Prices, (if any), Signature of Bidder, Name, Title, and Address of Bidder, Name of Firm or Joint Venture, Corporate Resolution or written evidence of the authority of the person signing the bid, and Louisiana Contractors License Number; however, the authority of the signature of the person submitting the bid shall be deemed sufficient and acceptable if any of the following conditions are met according to La. R.S. 38: 2212t:

a. The signature on the bid is that of any corporate officer listed on the most current annual report on file with the secretary of state, or the signature on the bid is that of any member of a partnership limited liability company, limited liability partnership, or other legal entity listed in the most current business records on file with the secretary of state.

b. The signature on the bid is that of an authorized representative as documented by the legal entity certifying the authority of the person.

c. The legal entity has filed in the appropriate records of the secretary of state of this state an affidavit, resolution, or other acknowledged or authentic document indicating the names of all parties authorized to submit bids for public contracts. Such document on file with the secretary of state shall remain in effect and shall be binding upon the principal until specifically rescinded and canceled from the records of the office.

C. The specified Bid Form required shall be completely filled out by typing or hand writing in ink or electronically submitted in accordance with LAC 4:XV.701.

D. As noted on the Bid form, there are no ALTERNATES, and no UNIT PRICES required to be provided on the specified Bid Form.

E. In accordance with R.S. 38:2211, on the date and at the time designated in the Advertisement for Bids opening, bidders are not required to submit with their bids the later required and specified apparent executed Low Bidder Attestation Affidavit, & Non-Collusion Affidavit, both of which shall be due within not later than ten (10) days after bid opening. In accordance with R.S. 38:38:2212, if the apparent low bidder does not submit the executed specified Low Bidder Attestation Affidavit, & Non-Collusion Affidavit within ten (10) days after bid opening, he shall be declared non-responsive.

- End -

# LOUISIANA UNIFORM PUBLIC WORK BID FORM

**TO: Ascension Parish Government**  
c/o: Ascension Parish Library  
708 South Irma Boulevard,  
Gonzales, Louisiana 70737

*(Owner to provide name and address of owner)*

**Bid For: Additions & Alterations To  
Ascension Parish Library - Galvez  
Prairieville, LA**  
(Located at 40300 LA Hwy 42, Prairieville, LA 70769)  
*(Owner to provide name of project and other identifying inform*

The undersigned bidder hereby declares and represents that she/he; a) has carefully examined and understands the Bidding Documents, b) has not received, relied on, or based his bid on any verbal instructions contrary to the Bidding Documents or any addenda, c) has personally inspected and is familiar with the project site, and hereby proposes to provide all labor, materials, tools, appliances and facilities as required to perform, in a workmanlike manner, all work and services for the construction and completion of the referenced project, all in strict accordance with the Bidding Documents prepared by: Henry L. Chauvin, Architect, LLC, and dated: **March 1, 2016**.

*(Owner to provide name of entity preparing bidding documents.)*

Bidders must acknowledge all addenda. The Bidder acknowledges receipt of the following **ADDENDA**:

No. \_\_\_\_ Dated: \_\_\_\_\_ No. \_\_\_\_ Dated: \_\_\_\_\_ No. \_\_\_\_ Dated: \_\_\_\_\_

No. \_\_\_\_ Dated: \_\_\_\_\_ No. \_\_\_\_ Dated: \_\_\_\_\_ No. \_\_\_\_ Dated: \_\_\_\_\_

**TOTAL BASE BID:** For all Work required by the Bidding Documents (including any and all unit prices but not alternates) the sum of:

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

**ALTERNATES:** NONE and **UNIT PRICES:** NONE

**PROPRIETARY SPECIFICATIONS:** The Owner wishes to have the following construction materials, items and services that serve the building match the existing systems as follows:

- a. Section 08720 Door Hardware: Provide Yale Security Group cylinders and locks to match existing.
- b. Section 07410, Metal Flush Wall panels & Flashing; Section 07500, Membrane Roofing & Accessories; & Section 07610, Metal Roof & Flashing: The new metal roof panels, metal flush wall panels, perimeter gravel guards, wall cap flashing and all exposed miscellaneous metal roof & wall flashing shall be provided with the specified coatings in the color of Terra Cotta.

**NAME OF BIDDER:** \_\_\_\_\_

**ADDRESS OF BIDDER:** \_\_\_\_\_

**LOUISIANA CONTRACTOR'S LICENSE NUMBER:** \_\_\_\_\_

**NAME OF AUTHORIZED SIGNATORY OF BIDDER:** \_\_\_\_\_

**TITLE OF AUTHORIZED SIGNATORY OF BIDDER:** \_\_\_\_\_

**SIGNATURE OF AUTHORIZED SIGNATORY OF BIDDER \*\*:** \_\_\_\_\_

**DATE:** \_\_\_\_\_

\*\* If someone other than a corporate officer signs for the Bidder/Contractor, a copy of a corporate resolution or other signature authorization shall be required for submission of Bid. Failure to include a copy of the appropriate signature authorization, if required, may result in the rejection of the bid unless bidder has complied with La. R.S. 38:2212 (A) (1) (c) or RS 38:2212 (O) .

**BID SECURITY** in the form of a bid bond, certified check or cashier's check as prescribed by LA RS 38:2218.A is attached to and made a part of this bid.



To: Ascension Parish Government  
c/o Ascension Parish Library  
Gonzales, Louisiana 70737

For: Additions & Alterations To  
Ascension Parish Library - Galvez  
Prairieville, Louisiana

**NON-COLLUSION AFFIDAVIT**

STATE OF LOUISIANA

PARISH OF \_\_\_\_\_

Architect PROJECT NO. 1401

Project NAME: Ascension Parish Library – Galvez, Prairieville, Louisiana

LOCATION: 40300 LA Highway 42, Prairieville, LA 70769

Before me, the undersigned authority, duly commissioned and qualified within and for the state and parish aforesaid, personally came and appeared \_\_\_\_\_ representing \_\_\_\_\_ who, being by me first duly sworn deposed and said that he has read this affidavit and does hereby agree under oath to comply with all provisions herein as follows:

Section 2224 of Part II of Chapter 10 of Title 38 of the La. Revised Statutes of 1950 as amended.

- (1) That affiant and his firm employed no person, corporation, firm, association, or other organization, either directly or indirectly, to secure the public Contract for the above-referenced Project with the **Ascension Parish Government, c/o Ascension Parish Library, 708 Irma Boulevard, Gonzales, LA 70737**, under which he will, if awarded the Contract, receive or received payment, other than persons regularly employed by the affiant whose services in connection with the construction, alteration or demolition of the public building or project or in securing the public contract were in the regular course of their duties for affiant; and
- (2) That no part of the Contract price to be received or received by affiant or his firm was paid or will be paid to any person, corporation, firm, association, or other organization for soliciting the contract, other than the payment of their normal compensation to persons regularly employed by the affiant whose services in connection with the construction of the public building or project were in the regular course of their duties for affiant.

Offeror or representative to sign  
and type name below signature. \_\_\_\_\_  
(Affiant)

SWORN TO AND SUBSCRIBED BEFORE ME THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 20 \_\_\_\_.

\_\_\_\_\_  
**NOTARY PUBLIC**

- End -

**To: Ascension Parish Government**  
c/o Ascension Parish Library  
708 South Irma Boulevard  
Gonzales, Louisiana 70737

**For: Additions & Alterations To**  
Ascension Parish Library – Galvez  
Prairieville, La

**LOW BIDDER ATTESTATION AFFIDAVIT**

**CERTIFICATION REGARDING DEBARMENT, SUSPENSION, CONVICTIONS, PLEAS AND  
OTHER RESPONSIBILITY MATTERS**

**STATE OF LOUISIANA**

**PARISH OF \_\_\_\_\_**

**BEFORE ME**, the undersigned Notary Public duly commissioned in and for the Parish and State aforesaid personally came and appeared:

\_\_\_\_\_, the \_\_\_\_\_ of \_\_\_\_\_, duly authorized  
("Bidder"),

who after being duly sworn did depose, state and certify that:

1. Bidder is not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from transactions by any Federal, State or local public entity;

2. Neither Bidder nor any individual partner, incorporator, director, manager, officer, organizer, or member, who has a minimum of ten (10%) percent ownership in the Bidder, has been convicted of, or has entered a plea of guilty or nolo contendere to any of the following crimes or equivalent federal crimes or had a civil judgment rendered against them for any of the following:

Public Bribery	(LSA-R.S. 14:118)	Extortion	(LSA-R.S. 14:66)
Corrupt Influencing	(LSA-R.S. 14:120)	Money Laundering	(LSA-R.S. 14:230)

Bidder acknowledges that a conviction of or pleas of guilty or nolo contendere to state crimes or equivalent federal crimes listed in this Subsection 2 shall permanently bar any person or the Bidder from bidding on public projects.

3. Neither Bidder nor any individual partner, incorporator, director, manager, officer, organizer, or member, who has a minimum of ten (10%) percent ownership in the Bidder, has been convicted of, or has entered a plea of guilty or nolo contendere to any of the following crimes or equivalent federal crimes or had a civil judgment rendered against them for any of the following:

Theft	(LSA-R.S. 14:67)	False Accounting	(LSA-R.S. 14:70)
Identity Theft	(LSA-R.S. 14:67.16)	Issuing Worthless Checks	(LSA-R.S. 14:71)
Forgery	(LSA-R.S. 14:72)	Bank Fraud	(LSA-R.S. 14:71.1)
Theft of a Business Record			(LSA-R.S. 14:67.20)
Contractors; Misapplication of Payments			(LSA-R.S. 14:202)
Malfeasance in Office			(LSA-R.S. 14:134)

Bidder acknowledges that a conviction of or pleas of guilty or nolo contendere to the state crimes or equivalent federal crimes in this subsection 3 shall bar any person or the Bidder from bidding

**To: Ascension Parish Government**  
c/o Ascension Parish Library  
708 South Irma Boulevard  
Gonzales, Louisiana 70737

**For: Additions & Alterations To**  
Ascension Parish Library – Galvez  
Prairieville, La

on public projects for a period of five (5) years from the date of conviction or from the date of the entry of the plea of guilty or nolo contendere. The five (5) year bar provided herein shall apply only if the crime was committed during the solicitation or execution of a contract or bid awarded pursuant to the Louisiana Public Bid Law.

4. Bidder further acknowledges that if evidence is submitted substantiating that a false attestation has been made and the Project must be re-advertised or the Contract cancelled, Bidder shall be responsible for and shall indemnify the **Ascension Parish Government, c/o Ascension Parish Library** for the costs of rebidding, additional costs due to increased costs of bids and any and all delay costs due to the rebid or cancellation of this project.

5. In accordance with requirements of La. R.S. 38:2212.10:

A. The Bidder hereby acknowledges that at the time of bidding the Bidder is registered and participates in a status verification system that all new employees in the State of Louisiana are legal citizens of the United States, or are legal aliens according to requirements of La. R.S. 38:2212.10.

B. If awarded the Contract the Bidder acknowledges that he shall continue, during the term of the Contract, to utilize a status verification system to verify the legal status of all new employees in the State of Louisiana, according to requirements of La. R.S. 38:2212.10.

C. If awarded the Contract, the Bidder acknowledges that he shall require all subcontractors to submit a sworn affidavit verifying compliance with Paragraphs A. and B. above, , according to requirements of La. R.S. 38:2212.10.

D. In the event the status verification system expires and extensions are not approved by the federal government, the provisions of La. R.S. 38:2212.10 shall not apply. The executive director of the Louisiana Workforce Commission (LWC) shall provide written notification to the Louisiana State Law Institute if the status verification system expires in accordance with to requirements of La. R.S. 38:2212.10.

\_\_\_\_\_  
**NAME OF BIDDER**

\_\_\_\_\_  
**NAME OF AUTHORIZED SIGNATORY OF BIDDER**

\_\_\_\_\_  
**DATE SIGNED**

\_\_\_\_\_  
**TITLE OF AUTHORIZED SIGNATORY OF BIDDER**

\_\_\_\_\_  
**SIGNATURE OF AUTHORIZED SIGNATORY OF BIDDER**

**SWORN TO AND SUBSCRIBED BEFORE ME THIS \_\_\_\_\_ DAY OF**

\_\_\_\_\_, **20**\_\_\_\_\_.

\_\_\_\_\_  
**NOTARY PUBLIC**

**SUPPLEMENTARY CONDITIONS TO AIA Document A201-2007**

These Supplementary Conditions modify, amend, add to or delete from the "General Conditions of the Contract for Construction", AIA Document A 201-2007. Where any Article, Paragraph, Subparagraph, or Clause of the General Conditions is modified, amended, or deleted by these Supplementary Conditions, the unaltered provisions thereof shall remain in effect. Articles, Paragraphs, Subparagraphs, or Clauses modified or deleted have the same numerical designation as those occurring in the General Conditions.

**Table of Supplementary Conditions Sections**

- |  |   |
|--|---|
| 1. GENERAL PROVISIONS                              | 12. UNCOVERING AND CORRECTION OF WORK         |
| 2. OWNER   | 13. MISCELLANEOUS PROVISIONS                  |
| 3. CONTRACTOR                                      | 14. TERMINATION OR SUSPENSION OF THE CONTRACT |
| 4. ARCHITECT                                       | 15. CLAIMS AND DISPUTES                       |
| 5. SUBCONTRACTORS                                  | 16. EQUAL OPPORTUNITY                         |
| 6. CONSTRUCTION BY OWNER OR BY SEPARATE CONTRACTOR | 17. DELETE ARBITRATION                        |
| 7. CHANGES IN THE WORK                             | 18. ARCHITET AND OWNER CONTRACT               |
| 8. TIME  | 19. CLAIMS, DAMAGES, LOSSES AND EXPENSES      |
| 9. PAYMENTS AND COMPLETION                         | 20. SEVERABILITY                              |
| 10. PROTECTION OF PERSONS AND PROPERTY             |   |
| 11. INSURANCE AND BONDS                            |   |

**ARTICLE 1**

**GENERAL PROVISIONS**

1.1 BASIC DEFINITIONS

A. 1.1.1 THE CONTRACT DOCUMENTS

In Subparagraph 1.1.1 delete the third sentence and substitute the following:

"The Contract Documents shall include the Advertisement for Bids, Instructions to Bidders, Bid Form, and the Bidding Documents and Contract Documents as listed in Article 1 of the Instruction to Bidders, and all modifications made thereto by Addenda."

B. Add the following:

"1.1.9 PRODUCT

The term "product" includes materials, systems, and equipment.

1.1.10 PROVIDE

The term "provide" means the furnishing and installing a product, complete in place, operating, tested and approved; and includes paying for the cost of all labor, materials, equipment, tools, construction equipment and machinery, cranes, scaffolds, permits, water, heat, gas, electricity, utilities, shipping, testing, transportation, taxes, and all other facilities and services necessary for proper execution and completion of the Work, whether temporary or permanent and whether or not incorporated or to be incorporated in the Work.

#### 1.1.11 BUILDING CODE

The term "building code", and the term "code", refer to regulations of governmental agencies having jurisdiction. This includes but is not limited to all Federal regulations and Requirements; Life Safety Code, NFPA 101; International Building Code, (IBC); Americans with Disabilities, (ADA); and all Louisiana State, Ascension Parish, and City Ordinances.

#### 1.1.12 APPROVED, REQUIRED, and AS DIRECTED

The terms "approved", "required", and "as directed", refer to and indicate the Work or materials that may be approved, required, or directed by the Architect acting as agent of Owner.

#### 1.1.13 SHOWN, INDICATED, DETAILED, NOTED, and SCHEDULED

The terms "shown", "indicated", "detailed", "noted", "scheduled", and terms of similar import, refer to requirements contained in the Contract Documents.

#### 1.1.14 NIC and NOT IN CONTRACT

The terms "NIC", and "Not in Contract", indicate items which are shown or indicated for convenience but are not included as part of this Contract."

#### 1.1.15 OR EQUAL

The term "or equal", "or equivalent", or "approved equal", or when similar terms are used, it shall be understood that the Architect shall determine if an item is equal or equivalent to the original item specified or indicated.

#### 1.1.16 PRIOR APPROVAL

The term "prior approval" shall be understood that the approval or acceptance by the Architect is intended prior to the receipt of bids.

### 1.2 CORRELATION AND INTENT OF CONTRACT DOCUMENTS

A. Add the following to Subparagraph 1.2.3:

"Any reference to standards (such as ASTM - American Society for Testing and Materials), (ADA), shall mean the latest edition of such standards published prior to the date of the Contract Documents. Where such a reference is made, the applicable standard is hereby made a part of the Contract Documents which refers to it to the same extent as if written out in the Contract Documents in full."

#### 1.4 INTERPRETATION

A. Add the following:

"1.4.2. In any discrepancy between scale and dimensions, figured dimensions shall override. Unless otherwise noted, the Drawings are drawn to scale as indicated, and dimensions are given; however, the Contractor shall provide Work to measurements of existing construction.

1.4.3 In case of an inconsistency and/or discrepancy between the Drawings and the Specifications, or within either Documents, not clarified by Addendum, the Contractor shall provide the more expensive, better quality of Work, materials and equipment, unless otherwise decided differently by the interpretation of the Architect.

1.4.4 All Work required by the Drawings or specified in the Specifications shall be executed, whether covered in one only or in both. The Contractor shall do such Work as may not be expressly set forth in either the Drawings or the Specifications, but which, in the opinion of the Architect/Engineer, is reasonably necessary to properly complete the job in a manner conformable to the general requirements (style, design, etc.) as indicated by Drawings and Specifications.

1.4.5 Should the Contractor fail to request interpretations of questionable items in the Contract Documents prior to executing the Work, neither the Owner nor the Architect will thereafter entertain an excuse for failing to execute the Work in a satisfactory manner.

1.4.6 Where a given material is indicated on the Drawings, or specified in the Specifications, it shall be provided throughout the length and height of walls, partitions, spandrels, panels, windows, lights areas, etc., or in the assembly detail in which it occurs, for other similar locations throughout the building or Project, unless another material is indicated.

1.4.7 All manufactured articles, materials, and equipment shall be applied, installed, connected, erected, used, cleaned, prepared, and conditioned in strict accordance with the manufacturer's written or printed directions and instructions, unless specific exceptions or other requirements are indicated in the Contract Documents.

1.4.8 Even though all intricate, minute details and parts are not indicated on the Drawings and specified in the Specifications, all

materials, equipment, systems, and assemblies shall be provided in a complete, whole, and properly functioning manner in accordance with manufacturer's requirements. Provide all detailed Work required to complete all portions of the Work."

#### 1.5 OWNERSHIP AND USE OF DRAWINGS, SPECIFICATIONS AND OTHER INSTRUMENTS OF SERVICE

Add the following:

"1.5.3 The Owner owns the Drawings, Specifications, and all instruments of service."

### **ARTICLE 2**

#### **OWNER**

#### 2.2 INFORMATION AND SERVICES REQUIRED OF THE OWNER

Delete Subsection 2.2.5 and substitute the following:

"2.2.5 The Contractor will be furnished, free of charge, fifteen (15) copies of printed Drawings and printed Project Manuals used by bidders as opposed to electronic documents if requested by the Contractor. This amount is based on the number of sets that were printed for bidding purposes. Any additional sets requested which require printing and mailing after the bid date will be paid for by the Contractor.

### **ARTICLE 3**

#### **CONTRACTOR**

#### 3.2 REVIEW OF CONTRACT DOCUMENTS AND FIELD CONDITIONS BY CONTRACTOR

A. Add the following to Subparagraph 3.2.1:

"The Contractor represents and warrants that his investigation of the site was performed in sufficient detail to disclose the conditions and limitations under which the Work is to be performed, including, without limitation; (1) the location, condition, layout, and nature of the Project site and surrounding areas, (2) generally prevailing climatic conditions, (3) anticipated labor supply and cost, (4) availability and cost of materials, tools, and equipment, and (5) other similar issues. Except as set forth in Subparagraph 10.1, the Contractor shall be solely responsible for providing a safe place for the performance of the Work."

B. Add the following sentence to Subparagraph 3.2.2:

"After reporting to the Architect any error, inconsistency or omission discovered in the Contract Documents, the Contractor shall

not proceed with any Work so affected without the Architect's written approval."

C. Add the following Subparagraph 3.2.5 to 3.2:

"3.2.5 In case of inconsistencies in the Specifications or the Drawings, or between the Specifications and the Drawings, the Architect will determine which requirement will be the most consistent with design intent and this requirement shall be complied with by the Contractor. The difference in cost between interpretations shall be a factor in the Architect's decision and the Contractor shall benefit from any interpretation by the Architect that would decrease his cost and would likewise bear any cost increase by the Architect's interpretation."

D. Add the following Subparagraph 3.2.6 to 3.2:

"3.2.6 The Contractor, at his own expense, shall record a duplicate copy of the original Contract and the Performance and Labor and Material Bond(s) with the Clerk of Court in the Parish where the Work is to be performed before the Work commences. Submit to the Architect a copy of an official Certificate of Recordation indicating the date(s) the Contract and bond(s) were recorded."

### 3.3 SUPERVISION AND CONSTRUCTION PROCEDURES

A. Add the following to Subparagraph 3.3.1:

"The Contractor shall verify all existing site grades and coordinate same with new site grades to insure positive drainage of exterior paving areas and exterior grass areas to prevent ponding of rain water on paving or on the site."

B. Add the following:

"3.3.4 The Contractor shall take all precautions necessary to prevent loss or damage caused by vandalism, theft, burglary, pilferage, or any unexplained disappearance of property of the Owner. The Contractor shall have full responsibility for the security of such property of the Owner for any such loss, damage, or injury."

### 3.4 LABOR AND MATERIALS

Add the following:

3.4.4 The Contractor shall be responsible for assuring daily, that all of the Contractor's staff and employees, and any Subcontractor's staff and employees are legally documented to work in the United States of America and the State of Louisiana while working on this Project.

3.4.5 The Contractor shall insure that his staff and employees, and his Subcontractor's staff and employees adhere to a respectable dress code when working on site, and insure that there be no smoking in the existing building and in the enclosed new additions."

### 3.7 PERMITS, FEES, NOTICES, AND COMPLIANCE WITH LAWS

Add the following:

"3.7.6 The General Contractor and/or the Sub-Contractor shall secure and pay for the building permits, zoning permits, and all other permits and governmental fees, licenses, signs, and inspections necessary for the proper execution and completion of the Work.

3.7.7 The Contractor shall secure certificates of inspection, use, occupancy, permits, and licenses with all such certificates to be delivered to the Architect when the Contractor considers the Work to be Substantially Complete.

3.7.8 The Contractor, and his mechanical, electrical, and fire alarm/fire suppressive Subcontractors shall pay for all fire alarm and fire suppressive fees due the Louisiana State Fire Marshal, and shall attend all inspections and re-inspections for Substantial Completion, and inspections and re-inspections for occupancy conducted by the Louisiana State Fire Marshal, and other local officials."

3.7.9 The Contractor shall be fully qualified under any State or local licensing law for Contractor's in effect at the time and location of the Work before submitting his bid. If the Project is in the State of Louisiana, only the bids of Contractors and Subcontractors duly licensed under the Louisiana Revised Statutes 37:2151 et. seq. will be considered if licensing is required by that law. The Contractor shall be responsible for determining that all of his Subcontractors or perspective Subcontractors are duly licensed in accordance with the law.

3.7.10 The requirements of Subparagraph 3.7.2, 3.7.3, and 3.7.4 do not waive the Contractor's responsibility of complying with the requirements of the of the Contract Documents when such requirements exceed those of any laws, codes, ordinances, rules, regulations, and lawful orders of any public authority bearing on the Work."

3.7.11 If required, the Contractor shall be responsible for submitting copies of necessary Contract Documents and filling out forms for acquiring and paying for a Water Discharge Permit for Storm Water General Permit for Construction Activities issued by the Louisiana Department of Environmental Quality, (LDEQ); and if required, similar storm water permits if required by local governing authorities. If required, submit required forms and a Notice of Intent to discharge storm water associated with construction activity, prior to starting Work.

3.7.12 The Contractor shall hire a licensed surveyor to submit the building slab elevation verification to local building authorities if required.

### 3.8 ALLOWANCES

Entirely delete Subparagraph 3.8.1 and 3.8.2 and Subparagraphs 3.8.2.1, 3.8.2.2, and 3.8.2.3, and substitute the following new Subparagraph 3.8.1:

"3.8.1 Allowances shall not be made on any of the Work."

### 3.9 SUPERINTENDENT

Add the following:

"3.9.4 The Contractor shall provide a superintendent that can easily communicate with the Owner and Architect in English.

### 3.10 CONTRACTOR'S CONSTRUCTION SCHEDULES

Add the following:

"3.10.4 The Contractor shall submit a revised and updated Construction Schedule with every Application for Payment indicating any changes to the schedule submitted during the previous month."

### 3.12 SHOP DRAWINGS, PRODUCT DATA AND SAMPLES

Add the following:

"3.12.11 Review of Shop Drawings, Product Data, and Samples by the Architect is to review general design concepts with the Contract Documents. The Contractor is responsible for confirming Shop Drawing, Product Data, and Sample dimensions, quantities and details, and shall compare same with actual field verified dimensions on the Project site.

3.12.12 The Contractor shall thoroughly review Shop Drawings, Product Data and Samples prior to submitting same to the Architect. Having to resubmit Shop Drawings, Product Data or Samples because of one or more rejections, or requirements to revise and resubmit, shall not constitute an acceptable reason for granting the Contractor additional Contract Time to perform the Work.

3.12.13 After the Shop Drawings, Product Data, and Samples are reviewed by the Architect, the Contractor shall again thoroughly review and approve the Shop Drawings, Product Data, and Samples, in detail, prior to ordering materials and equipment to insure compliance with all of the Contract Documents, and to insure that all dimensions are verified, no errors and omissions occur, and that all materials and equipment are ordered properly for a complete, functional assembly. Costs for additional materials and equipment

required to complete the Project which were not ordered by the Contractor because of his final review errors and omissions in Shop Drawings, Product Data, and Samples shall be paid for by the Contractor."

3.12.14 The Contractor agrees that Shop Drawings, Products, and samples reviewed by the Architect are not Change Orders and the Contract Documents shall be interpreted by the Architect.

### 3.13 USE OF SITE

Add the following Subparagraph 3.13.2:

"3.13.2 Subject to the Contractor's concurrence, the Owner shall have the privilege to use any and all portions of the building that have reached such a stage of completion as to permit occupancy, provided that such occupancy does not hamper the Contractor or prevent completion of the Work. Terms of the partial occupancy shall be subject to the Contractor's approval. This occupancy shall not constitute final acceptance of any part or parts of the Work, nor shall such occupancy release the Contractor from his obligation under this Contract.

### 3.17 ROYALTIES, PATENTS, AND COPYRIGHTS

Add the following:

"The Contractor shall indemnify the Architect and Owner against any and all present and future royalties or Claims for infringement or damage of any nature whatsoever resulting from the installation or utilization by the Contractor during the course of this Work of any patent, articles, processes, and designs."

## **ARTICLE 4**

### **ARCHITECT**

#### 4.1 GENERAL

A. Add the following to 4.1.3:

"However, the Contractor shall have ten (10) days to object to the new Architect, which objection shall be by written affidavit containing specific factual basis and reasons supporting said objection."

#### 4.2 ADMINISTRATION OF THE CONTRACT

A. Add the following to subparagraph 4.2.2:

"The Architect's, Consulting Engineer's, or the Owner's Interior Designer's periodic on site visits and observations before, during,

and after construction of the Project shall not be construed as superintendence of actual construction. The liability of the Architect shall not extend to any person through provisions of this Subparagraph or the failure specifically to exclude this liability elsewhere in the Contract Documents. Neither the provisions of this Subparagraph nor their failure specifically to exclude other liability shall extend in any way the liability of the Architect, Consulting Engineers, or their Associates, or the Owner's Interior Designer's liability.

B. Delete Subparagraph 4.2.10 and substitute the following sentence:

"4.2.10 There will be no restriction on Owner having a Project Representative."

## **ARTICLE 5**

### **SUBCONTRACTORS**

#### **5.2 AWARD OF SUBCONTRACTS AND OTHER CONTRACTS FOR PORTIONS OF THE WORK**

A. Delete Subparagraph 5.2.1, and substitute the following:

"5.2.1 Unless otherwise required by the Contract Documents, or the Bidding Documents, the Contractor shall furnish at the Pre - Construction Conference, to the Owner and the Architect, in writing, the names of Subcontractors and other Persons, entities, or organizations (including those who are to furnish materials or equipment fabricated to a special design), proposed for each of the principal portions of the Work. No Contractor payments shall be made until this information is received in detail."

B. Delete the second sentence of Subparagraph 5.2.2 and add the following:

"5.2.2 The Contractor shall solely be responsible for selection and performance of all Subcontractors. The Contractor shall not be entitled to Claims for additional time and/or an increase in the Contract Sum due to a problem with the performance or non-performance of a Subcontractor. The Contractor shall notify the Owner through the Architect when a Subcontractor is to be changed and substituted with another Subcontractor."

C. Add the following Subparagraph 5.2.5:

"5.2.5 Whether or not the Architect or Owner has reasonable objection to any Subcontractor, person, or entity selected or rejected by the Contractor, the Contractor will not be relieved of his duties and responsibilities for the acceptable and safe performance of the Work."

## ARTICLE 7

### CHANGES IN THE WORK

#### 7.2 CHANGE ORDERS

A. Delete Paragraph 7.2.1, 7.2.1.1, 7.2.1.2, and 7.2.1.3 and substitute the following Subparagraph 7.2.1:

"7.2.1 A Change Order is a written instrument signed by the Owner, Architect, and Contractor issued after execution of the Contract, authorizing a change in the Work or an adjustment in the Contract Sum or the Contract Time. The Contract Sum and the Contract Time may only be changed only by Change Order. A Change Order signed by the Contractor indicates his final agreement therewith, including the adjustment in the Contract Sum or the Contact Time."

B. Add the following:

"7.2.2 The "Cost of the Work" for the purpose of Change Orders shall be costs actually required to be incurred in performance of the Work and paid by the Contractor and Subcontractors. Such "cost of the Work" shall be the sum of:

7.2.2.1 Wages paid for direct labor personnel, with mark up for applicable payroll taxes, worker's compensation insurance, unemployment compensation, and social security taxes;

7.2.2.2 Costs of direct materials and supplies, including the identification of each item and its cost;

7.2.2.3 Costs of necessary machinery and equipment required by the Change Order, including the identification of each and the allocation of its cost, and the basis therefore, to the change in the Work;

7.2.2.4 Other direct costs, properly itemized and documented;

7.2.2.5 Cost of premiums for bonds and insurance directly related to the change in the Work.

7.2.3 Overhead and Profit shall be computed by one of the following methods on separate portions of the Work:

.1 When all of the Work is General Contractor's Work, the General Contractor shall list his Work and add 15% to the cost of the Work as defined in this Subparagraph 7.2 for the General Contractor's Overhead and Profit.

.2 When all of the Work is all Subcontractor's Work, the Subcontractor shall list his Work and add 15% to the cost of the Work as defined herein for Subcontractor's overhead and profit; and the

General Contractor shall add 5% to the Subcontractors amount for the General Contractor's Overhead and Profit.

.3 When the Work is a combination of the General Contractor's Work and Subcontractor's Work, the Subcontractor shall list his Work separately, and shall add 15% to the cost of the Work as defined in this Subparagraph 7.2 for Subcontractor's overhead and profit; and to this Subcontractor's amount, the General Contractor shall add 5% for the General Contractor's overhead and profit; and for the Work provided separately by the General Contractor, the General Contractor shall list his Work separately, and shall add 15% to the cost of the General Contractor's Work as defined in Subparagraph 7.2 for General Contractor Overhead and Profit.

7.2.4 The cost or credit to the Owner resulting from a change in the Work shall be prepared and presented to the Architect and the Owner in a Change Order, for their review and approval, as the sum of the "Cost of the Work" (as defined in Subparagraph 7.2.2), and "Overhead and Profit" (as defined in Subparagraph 7.2.3). Where a change results in both credits to the Owner and extra costs to the Contract for related items, overhead and profit will only be computed on the extra cost to the Contractor. The amount of the Change Order so computed shall not be binding nor final until approved in writing by both the Architect and the Owner.

7.2.5 Before a Change Order is prepared the Contractor shall provide and deliver to the Architect and owner the following information concerning the cost of the Work. The provision of said information is not subject to waiver, and shall be provided by the Contractor within a reasonable time after being instructed to prepare said Change Order:

.1 A detailed itemized list of labor, material and equipment cost for the General Contractor's Work including quantities and unit costs for each item of labor, material, and equipment."

.2 A detailed itemized list of labor, material and equipment cost for each Subcontractor's and/or Sub-subcontractor's Work including quantities and unit costs for each item of labor, material, and equipment.

7.2.6 After a Change Order has been finalized and approved by the Owner, the Contractor, and the Architect, (as reflected by their signatures thereon), no future request for extensions of Contract Time or additional cost shall be considered for the change in the Work related to that particular Change Order.

7.2.7 The Contractor will be eligible for extended jobsite overhead for time delays only when complete stoppage of Work occurs causing an extension in time as determined by Subparagraph 7.2.11 and the stoppage of Work is because of acts or omissions solely attributable to the Owner.

7.2.8 "Cost of the Work" whether General Contractor cost or Subcontractor cost, or Sub-subcontractor cost shall not apply to the following:

.1 Salaries or other compensation of the Contractor's, Subcontractor's or Sub-subcontractor's personnel at their principal office and branch offices, or expenses of their principal office or branch office.

.2 Any part of the Contractor's, Subcontractor's or Sub-subcontractor's capital expenses, including interest on their capital employed for the Work.

.3 Overhead and general expenses of any kind or the cost of any items not specifically and expressly included above in the "Cost of the Work."

.4 Cost of supervision not specifically required by the Change Order.

.5 Cost due to negligence of the Contractor, any Subcontractor, or any Sub-subcontractor, or anyone directly or indirectly employed by any of them, or for whose acts any of them may be liable, including but not limited to the correction of defective or nonconforming Work, disposal of materials and equipment wrongly supplied, making good any damage to property, or delays caused by failure to provide adequate Change Order documentation.

.6 Cost not substantiated by detailed quantities, unit prices indicating labor, material, and equipment, and overhead and profit as specified above.

7.2.9 When applicable, as provided by the Contract Documents, the cost to the Owner for Change Orders shall be determined by quantities and unit prices. The quantity of any item shall be as submitted by the Contractor and approved by the Architect and the Owner. Unit prices shall cover cost of material, labor, equipment overhead and profit. When unit prices which include Overhead and Profit are used as the basis for the added Cost of the Work to the Owner resulting from the Change Order, Overhead and Profit shall not be duplicated by adding it again under Subparagraph 7.2.3.

7.2.10 Any and all changes and adjustments in the Work that are subject of a proposed Change Order shall be supported, in addition to the cost and schedule by detailed Specifications, plans, and/or Drawings that evidence the need for the change in the Work.

7.2.11 Any and all changes or adjustments to the Contract Time requested or claimed by the Contractor as a result of a Change Order shall require documentation and justification for the adjustment by an analysis of the Contractor's most recent Construction Schedule in use prior to the change.

7.2.12 A Change Order or Change Authorization, duly signed by the Owner, Architect, and Contractor constitutes an all inclusive settlement for all changes and any delay and costs, and the Contractor's signature represents a waiver of any and all rights to file a Claim on account of that Change Order or change authorization of the Work.

7.2.13 All single Change Orders in amounts exceeding ten percent (10%) of the total Contract Sum or \$10,000.00; and multiple Change Orders exceeding twenty percent (20%) of the total Contract Sum, or \$10,000.00; shall be recorded in the office of the recorder of mortgages in the Parish where the Project is located.

7.2.14 If Change Orders exceed ten percent (10%) of the total Contract sum, the Contractor shall obtain "Consent of surety" from the bond company that issued the Performance and Payment Bond to insure coverage of said additional Work.

### 7.3 CONSTRUCTION CHANGE DIRECTIVES

A. Amend Subparagraph 7.3.7 as follows:

In the first sentence, delete the words "an amount for overhead and profit as set forth in the Agreement, or if no such amount is set forth in the Agreement, a reasonable allowance for overhead and profit." and substitute "an allowance for overhead and profit calculated in accordance with clauses 7.2.3.1 through 7.2.3.3."

B. Add the following:

"7.3.11 Cost to which overhead and profit is to be applied shall be determined in accordance with Paragraph 7.3.7."

"7.3.12 In order to facilitate checking of quotations for extras or credits, all proposals shall be accompanied by a complete itemization of costs including labor, materials, and subcontracts. Labor and materials shall be itemized in the detailed manner specified above to the satisfaction of the Architect. Where major cost items are Subcontractors cost items, they shall be itemized in detail also."

## **ARTICLE 8**

### **TIME**

#### 8.1 DEFINITIONS

At the end of Paragraph 8.1.4, add the following:

"8.1.4.1 Calendar days includes Saturdays, Sundays, and all Holidays.

8.1.4.2 Contract Time is based on consecutive Calendar days.

8.1.4.3 A Calendar day is 24 hours and begins at 12:00 Midnight.

## 8.2 PROGRESS AND COMPLETION

A. Add the following:

"8.2.1.1 Time is of the essence and completion of the Work shall be within the Contract Time for completion stated in the Agreement, subject to such extensions as may be granted under Section 8.3. The Contractor agrees to commence Work not later than the date indicated in the Owner/Contractor Agreement and this specified date shall serve as the written "Notice to Proceed" and the beginning date of the Contract from the Owner whereby the Contractor agrees to Substantially Complete the Project within the time stated in the Contract. The Owner will suffer financial loss if the Project is not Substantially Complete the Project in the time set forth in the Contract. The Contractor and the Contractor's surety shall be liable for and shall pay to the Owner the sum stated in the Contract Documents as fixed, agreed and liquidated damages for each consecutive calendar day (Saturdays, Sundays and holidays included) of delay until the Work is Substantially Complete. The Owner shall be entitled to the sum stated in the Contract Documents. Such Liquidated Damages shall be withheld by the Owner from the amounts due the Contractor for progress payments and/or retainage payments. If there is no written "Notice to Proceed" by the Owner, it shall be the date of the Agreement or such date as may be established therein."

B. Add the following:

"8.2.4 If the Work is delayed for causes attributable to the Contractor or Sub-Contractor, the Contractor shall provide increased Work forces and overtime Work forces, (including weekdays and holidays), at no additional cost to the Owner until the Project is Substantially Completed."

## 8.3 DELAYS AND EXTENSIONS OF TIME

A. 8.3.1 In the first sentence, delete the word "arbitration" and substitute the word "litigation"; and at the end of the paragraph, after the word "may", delete the word "determine" and substitute the following:

"recommend, subject to Owner's approval of Change Order. Extension of time shall only be considered and granted if the claim is requested in writing and the claim is made within the fourteen (14) day time limits as specified paragraph 8.3.4 below. Request for extension in time not timely filed shall not be considered by the Owner."

B. Add the following:

"8.3.4 All requests for extensions in time for a particular month shall be in writing with documentation of reason for extension and delivered to the Architect for review not later than the second Tuesday the following month. The Owner or the Architect may reject any requests for extensions of Contract Time received untimely, (received after the second Tuesday of the following month as specified above), based solely on the fact that the requests were untimely. An untimely request is considered to be more than fourteen (14) days after the commencement of a delay."

C. Add the following:

"8.3.5 No payment or compensation for damages of any kind will be made by the Owner to the Contractor as a result of any hindrance or delay in the progress of the Work, if the hindrance or delay is partially or wholly attributable to the Contractor."

D. Add the following:

"8.3.6 If at any time the Work lags, sufficient increased Work forces and overtime hours, including weekends shall be provided by the Contractor to maintain the schedule to insure that the Project is completed in accordance with the time set forth by the Contract Documents. Said overtime and costs of additional Work forces shall be paid for by the Contractor."

E. Add the Following:

"8.4.1 LIQUIDATED DAMAGES

Time is of the essence in completing the Work, and, in the event of delay on the part of the Contractor in completing the Work as specified beyond the date set forth in the Contract Documents as adjusted by Change Orders, it is distinctly understood and agreed that a deduction shall be made from the Contract Sum at a rate as stated in the Contract Documents for each and every day of delay until the Work is Substantially Complete. This is not a penalty, but agreed upon liquidated damages for delay. In addition, the Contractor agrees to pay any compensation for the Architect's and his Consultant's services and expenses made necessary because of the delay. Said amounts for the liquidated damages and for the Architect's and his Consultant's compensation shall be deducted from the Contract Sum by Change Orders. The Contractor and its Surety agree that the above mentioned sums shall be deducted from the Contract Sum by means of a written adjustment executed by the Owner without the Contractor's signature.

## **ARTICLE 9**

### **PAYMENTS AND COMPLETION**

9.2 SCHEDULE OF VALUES

A. Delete Paragraph 9.2. and substitute the following paragraphs beginning with Subparagraph 9.2.1:

"9.2.1 Prior to start of construction, the Contractor shall prepare and submit to the Architect and the Owner a Schedule of Values allocated to the various portions of the Work, providing a detailed breakdown of the Contract Sum. The Contractor shall also submit such data to support and substantiate the accuracy of the schedule as the Architect and the Owner may require. The Index and contents of the Project Manual shall be used as a basis for format for listing costs of Work.

9.2.2 The schedule of values shall be submitted on AIA Document G702 and 703 - 1992, Continuation Sheet, submitted in detail.

9.2.2.1 Use the Index of the Project Manual, (Specifications), to list the Description of Work required under Column B of G703. List costs of Work for each Section of the Specifications for Division 1 through 16.

9.2.2.1.2 For Section 02200 Earthwork, and for Concrete Sections 03300 Cast-In-Place Concrete & 03350 Concrete Surfaces and Accessories, divide the cost for labor and material Work under separate headings; one (1) heading for cost of Earthwork required under exterior paving and for exterior Earthwork, and one (1) heading for Earthwork for under and around the buildings; and one (1) heading for Concrete Work required for exterior paving, and one (1) heading for concrete Work required for the building slabs and footings under roof.

9.2.2.2 Under the General Conditions and Division 1, costs of Work for General Conditions, Supplementary Conditions, Temporary Requirements, and Cleaning shall be listed separately with separate costs indicated for Insurance, Bonds, Temporary Requirements, and Cleaning, listed separately thereafter, and shall be paid for monthly, spread out during the entire period of the Contract. Large sums requested by the Contractor in an early part of the Contract, for items listed in this Paragraph, shall be submitted with invoices, marked paid, showing that these bills have been paid. Up-front, unidentified cost of Work shall not be arbitrarily lumped under the General Conditions and Division 1.

9.2.2.3 Round off cost figures of each heading to the nearest dollar. The total of all items shall equal the total Contract Sum.

9.2.2.4 This schedule, when approved by the Architect, shall be used as a basis for the Contractor's Applications for Payment."

### 9.3 APPLICATION FOR PAYMENT

A. Delete Subparagraph 9.3.1 and substitute the following Subparagraph 9.3.1:

"9.3.1. Payments will be made by the Owner from time to time during the progress of the Work, but no more frequently than once every thirty (30) days. The Contractor shall submit to the Architect an itemized Application for Payment that shall be notarized, supported by such data substantiating the Contractor's right to payment. Applications for Payment shall be submitted on or about the first day of each month for the value of labor and materials incorporated in the Work and of materials suitable stored on the site as of the twenty-fifth (25<sup>th</sup>) day of the preceding month, less normal pay retainage based on the total amounts of the Contract prices as follows:

(a) For Publicly funded Projects up to and including \$500,000.00, retainage shall be ten percent (10%) on all Applications for Payment.

(b) For Publicly funded Projects exceeding \$500,000.00, retainage shall be five percent (5%) on all Applications for Payment.

(c) For all privately funded Projects, retainage shall be ten percent (10%) on all Applications for Payment.

(d) For all publicly funded Projects, the normal retainage shall not be due until expiration of the applicable forty-five (45) day Lien Period and submission to the Architect of a Clear Lien Certificate issued by the Recorder of Mortgages in the Parish where the Project is located.

(e) For all privately funded Projects, the normal retainage shall not be due until expiration of the applicable thirty (30) day Lien Period and submission to the Architect of a Clear Lien Certificate issued by the Recorder of Mortgages in the Parish where the Project is located.

B. Add the following paragraphs to Subparagraph 9.3.2:

"After Owner approval, and only if approved by the Owner, in order for the Contractor to be paid for equipment and materials stored off site, provide the following:

1. Invoice from the manufacturer showing an itemized list and cost of items stored.

2. Certificate of Insurance specifically showing and certifying that each item itemized in a. above is specifically insured for the amount shown."

3. Payment for storage of materials and equipment on or off site shall be made to compensate to the Contractor for value supplied to the Owner. Value to the Owner does not include Contractor's profit or markup on the materials and equipment, but can include delivery and unloading costs to the Contractor."

C. Add the following Paragraphs:

"9.3.5 The form of Application for Payment shall be AIA Document G 702, 1992 supported by AIA Document G 703, 1992, Continuation Sheet. The Contractor shall submit one (1) notarized original, (red copy), and four (4) additional copies of the original notarized copy, total of five (5) Applications for Payment, on or about the first of each month.

9.3.6 In accordance with the retainage specified in above paragraph 9.3.1, for Projects less than \$500,000.00 the amount of any payment shall not exceed 90% of the value of the Work completed since last payment; and the sum total of all payments at any date shall not exceed 90% of the value of all Work completed to that date. For Projects of \$500,000.00 or more, the percentage amount of any payment will be increased to 95% of the value of the Work completed since last payment.

9.3.7 Application for Payment shall indicate the value of labor and materials incorporated in the Work and of materials stored on the Project site to date.

9.3.8 The retainage shall not be due the Contractor until the expiration of the statutory lien period and submission to the Architect of a Clear Lien Certificate issued by the Clerk of Court of Ascension Parish.

9.3.9 AIA Documents G702 and G703, Application for Payment Forms, may be purchased by the Contractor on line, or from the American Institute of Architects, (AIA), Louisiana Chapter, 521 America Street, Baton Rouge, La. 70802, (225) 387-5579. After preparing each of the original "red" AIA forms, have it notarized, but do not sign same immediately. Prior to signing same, make a minimum of four (4) additional black and white copies of the original notarized "red" AIA form and sign all (5) copies in ink. The original "red" copy shall be notarized. Deliver a total minimum of five (5) Applications for Payment to the Architect, i.e., one (1) "red", and four (4) black and white copies of the original, all signed with the Contractor's original signature in ink. Do not "fax" Applications for Payment. Applications for Payment not submitted in accordance with the above instructions shall not be accepted, shall not be processed, and shall be delayed along with the delay of the Architect's inspection until correctly signed originals and correctly signed copies are submitted. If incorrect Application for Payment amounts are found by the Architect or Owner, the Contractor shall resubmit a corrected Application for Payment. Incorrect amounts requested, as determined by the Architect or Owner, may delay Applications for Payment."

9.4 CERTIFICATES FOR PAYMENT  
Add the following:

"9.4.3 The Contractor further expressly undertakes to defend the Owner and hold it harmless, at the Contractor's sole expense including attorney's fees, against any actions, lawsuits, or proceedings brought against the Owner as a result of any claim or lien filed against the Contract funds, the Work, the site or any of the Work, the Project site, and any improvements made thereon."

#### 9.6 PROGRESS PAYMENTS

A. Delete Subparagraph 9.6.1 and substitute the following:

"9.3.4 Payments to the Contractor from the Owner shall fall due approximately thirty (30) days after the Contractor submits an Application for Payment."

B. Add the following to paragraph 9.6.2:

"In accordance with Louisiana R.S. 9.2784(A) (B) (C), the Contractor is solely responsible for payment of any late payment and late payment penalties and attorney fees associated with the Contractor's late payments."

#### 9.7 FAILURE OF PAYMENT

Entirely delete Subparagraph 9.7.

#### 9.8 SUBSTANTIAL COMPLETION

A. 9.8.2, At the end of the first sentence, delete: "corrected prior to final payment."; and substitute "corrected."; and add the following:

"The Contractor shall proceed promptly to complete and correct items which are listed on his comprehensive which are later noted on the Architect's Punch list as incomplete and incorrect on said Punch List specified in Subparagraph 9.8.6 below. Failure to include items on the Punch List does not alter the responsibility of the Contractor to complete all Work in a timely manner, in accordance with the Contract Documents."

B. 9.8.4 Add the following:

"9.8.1 Substantial Completion or partial Substantial Completion of a portion of the building will not be granted until recommended to the Owner by the Architect and after the Contractor has provided all required licensing requirements, and written documents indicating that inspections have been conducted by authorities who have jurisdiction and who have issued written building use permits and building occupancy permits such as meeting all occupancy requirements of local City or Parish building officials, the Louisiana State Fire Marshal, and similar agencies. Prior to the Work being accepted as Substantially Complete, the Contractor shall provide the completed

specified Roofing Manufacturer's warranties, where roof Work is part of the Contract."

C. 9.8.5 Add the following:

"Upon the recommendation of the Architect, the Owner may issue a Notice of Acceptance or Substantial Completion Certificate of the Building Contract which the Contractor shall record with the Clerk of Court in the Parish in which the Work has been performed. If the Notice of Acceptance has not been recorded seven (7) days after issuance, the Owner may record the acceptance at the Contractor's expense and deduct same from the Contract Sum."

D. Add the following:

"9.8.6 As specified in 9.8.2 of the General Conditions and Supplementary Conditions, the Contractor shall prepare and submit to the Architect a comprehensive list of items to be corrected or completed. Upon receipt of the Contractor's list the Architect will conduct a Project review to determine whether or not the Project or a specified portion of the Project and Work is Substantially Complete. A "Punch List" of "exceptions" and the dollar value related thereto will be prepared by the Architect. A monetary value will be assigned to each item on this list. Cost of these items may be prepared in the same format as the schedule of values. None of these funds shall be due the Contractor until all "punch list" items are completed and are accepted by the Architect. If the dollar value of the "punch list" items exceeds the amount of funds, less the retainage amount in the remaining balance of the Contract, then the Project shall not be accepted as Substantially Complete. If the remaining funds are less than that required to complete the Work, the Contractor shall pay the difference within ten (10) calendar days of notice thereof. If delivery of materials or equipment are part of the "punch list" Work, that is beyond control of the Contractor, the Contractor's completion time shall be extended and his surety so notified. If all "punch list" items have not been completed by the end of the forty-five (45) day lien period, through no fault of the Architect or Owner, the Owner may hold the Contractor in default. If the Owner finds the Contractor in default, the surety shall be notified. The Owner reserves the right to contact the surety. If within thirty (30) days after notification, the surety has not taken reasonable steps to complete the "punch list", the Owner may at his option, contract to have the remainder of the Work completed, and pay for such Work with the unpaid funds remaining in the Contract Sum. Failure to complete the "punch list" items shall constitute a reason for disqualification of the Contractor on future Ascension Parish Government Projects and future Ascension Parish Library Projects. If the surety fails to complete the "punch list" within the stipulated time period, the Owner may not accept bonds submitted in the future, by surety."

9.8.3 At each place it appears, delete the words "or designated portion thereof".

9.8.4 Delete the words "or designated portion thereof".

F. Add the following:

"9.8.5.1 Upon Substantial Completion of the Work and on the recommendations of the Architect, the Owner shall accept the Work in accordance with the Certificate of Substantial Completion of the Work, and the Contractor shall cause the Certificate to be recorded with the Clerk of Court of the Parish in which the Work has been done. Issuance of the Certificate of Substantial Completion does not constitute final acceptance."

#### 9.10 FINAL COMPLETION AND FINAL PAYMENT

A. Delete Subparagraph 9.10.1 and substitute the following:

9.10.1 Upon receipt of the Contractor's written notice to the Architect that the Architect's Punch List items specified in Subparagraph 9.8 Substantial Completion have been corrected and completed, that the Work is ready for Final Inspection and final acceptance and upon receipt of the Contractor's Final Application for Payment, the Architect will make such inspection. Upon making the inspection, if the Architect finds any Work not complete, he will furnish the Contractor with a "punch list" of any items found incomplete or not in conformance with the Contract Documents. The Contractor shall remedy such defects within thirty (30) days of his receipt of the list, and the Architect will make one (1) subsequent inspection of the Work. Should additional inspections of the Work be required, due to the failure of the Contractor to remedy punch list defects listed, the Owner shall deduct the expense of any additional inspections from the Contract amount. The additional expenses shall be hourly rates and amounts paid to the Architect and Consultant as specified on the Architects' contract with the Owner. When the Architect finds the Work acceptable according to the Contract Documents, and the Contract fully performed, the Architect will review the Contractor's Certificate for Payment and issue a Certificate of Payment stating that to the best of the Architect's knowledge, information and belief, and on the basis of the Architect's observations, the Work has been completed in accordance with the terms and conditions of the Contract Documents and that the entire balance found to be due to the Contractor, and noted in said final Certificate, is due and payable. The Architect's final Certificate for Payment will constitute a further representation that the conditions listed in Subparagraph 9.10.2 as precedent to the Contractor's being entitled to final payment have been fulfilled."

B. Add the following:

"9.10.2.1 Neither the final payment nor any part of the retained percentage shall become due until the Contractor shall deliver to the Owner a Certificate by the Clerk of Court of the Parish, (Clear Lien

Certificate), that the Owner's Substantial Completion Certificate has been recorded, more than forty-five (45) days has elapsed since the recordation, and no liens have been recorded affecting this property, and all affidavits, consents and releases specified in these General Conditions and subparagraph 9.10.2 have been submitted to the Architect."

C. Add the following:

"9.10.11 Liquidated Damages

9.10.1 The Contractor and the Contractor's surety, if any, shall be liable for and shall pay to the Owner liquidated damages as stipulated and specified in the Contract Documents for each calendar day of delay until the Work is determined to be complete by the Architect and Owner. Further, the Contractor and the Contractor's Surety shall be liable for and shall pay to the Owner the compensation for the Architect and his Consultants specified in Subparagraph 8.4.1."

## **ARTICLE 10**

### **PROTECTION OF PERSONS AND PROPERTY**

#### 10.2 SAFETY OF PERSONS AND PROPERTY

A. Subparagraph 10.2.2, in line 2 between the words ", on" and "safety", add the words "health and,".

B. Add the following:

10.2.2.1 Any fines levied against the Owner because of the Contractor's, Subcontractor's, and sub-subcontractors, or anyone directly or indirectly employed by any of them for failure to comply with OSHA standards, or other Federal, State, or local regulations shall be paid for by the Contractor.

## **ARTICLE 11**

### **INSURANCE AND BONDS**

Add the following:

#### GENERAL REQUIREMENTS FOR ALL ARTICLE 11 INSURANCE AND BONDS

"A. Add the following requirements to apply to all insurance and bonds required under Article 11:

1. The Contractor shall choose and provide and maintain the specified Insurance and Bonds, until Final Payment and Final Completion of the Project, with a reliable surety or insurance company approved by the Owner, and authorized to do business in the

State where the Project is located, and with said insurance company currently on the U. S. Department of the Treasury Financial Management Service list of approved bonding companies which is published annually in the Federal Register, or by a Louisiana domiciled insurance company with at least an "A" Financial rating in the latest printing of the A. M. Best's Key Rating Guide. The "A" Financial rating or better shall also be maintained until Final Payment and Final Completion of the Project. The surety company shall provide to the Architect a letter on the surety's letterhead indicating that the surety company has an "A" financial rating or better according to the latest A. M. Best Report as required by LA R.S. 38:2219. This surety letter shall state a surety contact person with a phone number for the Architect's verification. The amount of each performance bond shall be equal to 100% of the Contract Sum.

2. The Contractor shall have the policies endorsed to reflect and insure any occupancy by the Owner at the time of such occupancy.

3. All liability policies referred to in this Article shall be maintained in the same company.

B. Owner will not execute the Contract until the Contractor has obtained all Insurance required under these Specifications and until such insurance has been approved by the Owner. Original Certificate(s) of Insurance shall be provided to the Ascension Parish Library Board within ten (10) working days of Notice of Award of Contract by the Owner, and after signing the Owner/Contractor Agreement or official Notice to Proceed. The Insurance Certificate shall identify the specific Project. All Insurances shall name the Architect and the Owner as additional insureds except as applied to Worker's Compensation Coverage. Binders of Insurance are not acceptable.

C. The Contractor shall have the policies endorsed to reflect and insure any occupancy by the owner at the time of such occupancy.

D. In compliance with Louisiana State Statutes, RS 38:2219, all performance and payment bonding companies shall be listed with the U.S. Treasury and shall be sold to the Contractor through an agency domiciled in Louisiana.

#### 11.1 CONTRACTOR'S LIABILITY INSURANCE

Add the following to Subparagraph 11.1.1.1

"11.1.1.1.10 General Liability Insurance shall include all major divisions of coverage and shall provide a Per Project Aggregate Limit, and shall be on a comprehensive basis including:

1. Premises Operations, (including X,C,U, and Broad form P.D. coverages as applicable).

2. Independent's Contractor's.

3. Products and Complete Operations.

4. Personal Injury Liability.

5. Contractual, including specified provision for Contractor's obligation under Paragraph 3.18 and including removal of Personal Injury Exclusion.

6. Auto Liability shall cover owned, non-owned, and hired, (Symbol 1 trigger for liability), motor vehicles.

11.2.1. Insurance Coverage required by Subparagraph 11.1.1 shall be written and provided by the Contractor in amounts not less than the following limits, or greater if required by law:

1. Worker's Compensation, including death benefits, in the statutory amount, (for State of Louisiana), and applicable Federal worker injury statutes, (e.g., Longshoremen, Statutory), including Waiver of Subrogation in favor of the Owner, its officers employees, Architect and Consultants. The Contractor shall require that all Subcontractors provide Worker's Compensation insurance for all of the latter's employees, unless such employees are covered by the protection afforded by the Contractor.

2. Commercial General Liability, (including Operations, Contractual, and Products/Completed Operations Liability): The General Liability coverage's shall be provided by a Commercial General Liability Policy on an occurrence basis, the Policy Date or Retroactive Date shall predate the Contract; the termination date of the policy or applicable extended reporting period shall be no earlier than the termination date of coverage's required to be maintained after final payment, certified in accordance with the Contract Documents. Minimum limit of liability shall be as follows:

(a) Bodily Injury and Property Damage: \$1,000,000.00 per Occurrence.  
Combined Single Limit of Liability: \$2,000,000 Annual Aggregate.

The Contractor shall hold harmless and indemnify the Owner, its officers, employees, Architect and Consultants in regard to claims, demands, expenses, and liabilities arising out of the injury or death to any person, or loss or destruction of property; which occurs or grows out of any act or omission of the Contractor, its agents, servants, and employees and reimburse the Owner for any such related expenses.

(b) Personal Injury, Advertising Liability: \$1,000,000 Per Occurrence.

3. Business Auto Liability (insuring owned, non-owned and hired vehicles):

(a) Bodily Injury and Property Damage Liability  
Combined Single Limit of Liability: \$1,000,000 Per Occurrence.

4. Owner's Protective Liability:

(a) Bodily Injury and Property Damage Liability  
Combined Single Limit of Liability: \$1,000,000 Per Occurrence.

5. "Umbrella Policy: The Contractor shall procure and maintain during the life of the Contract, in excess of all other insurance requirements, an Umbrella Policy:

(a) Bodily Injury and Property Damage Liability  
\$4,000,000 Per Occurrence; \$4,000,000 Per Aggregate

6. Builder's Risk: "All Risk" (Standard ISO form as approved by State of Louisiana) in an amount equal to 100% of the Value of the Contract Sum written in the name of the General Contractor and Owner as their interest may appear.

7. Liability insurance shall include all major divisions of coverage and be on a comprehensive basis including:

(a) Premises Operations (including X,C, and U Coverage as applicable.)

(b) Independent Contractor's Protective.

(c) Products and Completed Operations.

(d) Personal Injury Liability with Employment Exclusion deleted.

(e) Owner, non-owned, and hired motor vehicles.

(f) Broad Form Property Damage, including Completed Operations.

E. Further provisions to modify:

1. Delete Paragraph 11.3.3.

2. In 11.4, delete the word "shall" wherever it appears and substitute the word "may".

3. Delete 11.4.1.2, 11.4.1.3, 11.1.4.4, and 11.4.2.

4. in 11.4.3, delete the last sentence thereof.

5. Delete 11.4.5 and 11.4.7.

6. Delete 11.4.9.

7. Amend 11.4.10 by deleting the entire paragraph after the word "power" and inserting a period (.) after that word.

8. The Contractor shall provide all Insurance, Worker's Compensation and Bonds in accordance with all laws of the State of Louisiana.

**ARTICLE 12**

**UNCOVERING AND CORRECTION OF WORK**

12.2 CORRECTION OF WORK

Add the following:

"12.2.6 Substantial Completion Certificates, Final Acceptance, Final Payment, and not finding or uncovering nonconforming Work before, during, or after the expiration of the one (1) year period after Substantial Completion, shall not be construed as acceptance of nonconforming Work or acceptance of Work which was not performed in accordance with the Contract Documents."

**ARTICLE 13**

**MISCELLANEOUS PROVISIONS**

13.1 GOVERNING LAW

A. Entirely delete Subparagraph 13.1 and substitute the following:

"13.1 GOVERNING LAW

This Contract shall be governed by the law of the place where this Project is located. The Contractor, his Subcontractors, his sub-Subcontractors and material and equipment suppliers and the Contractor's Surety consent and yield to the jurisdiction of the Judicial District Court for the Parish of Ascension, where this Project is located, and no part of this Contract shall be subject to Arbitration."

B. Add the following:

"13.5.5.1 For inspections involving soil fill material analysis, soil compaction, cast-in-place concrete, steel, etc., the Contractor shall give the Architect, his Consulting Engineers, and the Owner's hired Testing Laboratory, (Terracon, Baton Rouge, LA, (225) 239-2642) a minimum of 48 hour notice followed by a subsequent 24 hour notice in advance.

C. 13.6 INTEREST

Entirely delete Paragraph 13.6.1.

**ARTICLE 14**

**TERMINATION OR SUSPENSION OF THE CONTRACT**

14.1 TERMINATION BY THE CONTRACTOR

Under 14.1.1, entirely delete Clause 14.1.1.4.

14.2 TERMINATION BY THE OWNER FOR CAUSE

A. Add the following Subparagraph:

"14.2.1.5 Failure to complete the "punch list" within the lien period as specified in Subparagraphs 9.9.4 and 9.8.6 of the Supplementary Conditions"

B. Subparagraph 14.2.3, after the word "finished", add the following sentence:

"Termination by the Owner shall not suspend assessment of liquidated damages against the Surety."

C. Add the following Subparagraph:

"14.2.5 If an agreed sum of liquidated damages has been established, termination by the Owner under this Article will not relieve the Contractor and/or surety of his obligations under the liquidated damages provisions and the Contractor and/or surety shall be liable to the Owner for liquidated damages."

**ARTICLE 15**

**CLAIMS AND DISPUTES**

15.1.5. CLAIMS FOR ADDITIONAL TIME

A. Delete Paragraph 15.1.5.2 and substitute the following Paragraph:

"15.1.5.2 If adverse weather conditions are the basis for a claim for additional Contract Time, the Contractor shall Document that the weather conditions had an adverse effect on the progress of the Work and on the construction schedule. Document the date of each rain day for the Project site. An increase in Contract Time due to adverse weather shall not be cause for an increase in Contract Sum."

B. Add the following:

"15.1.5.3 In planning the construction schedule within the agreed Contract Time, it shall be assumed that the Contractor has anticipated the amount of adverse weather conditions normal to the Project site of the Work for the season or seasons of the year involved. Only those weather delays attributable to other than normal weather conditions will be considered by the Architect and Owner."

15.1.5.4 For this Project, the following listed number of rain days for each month, based on average, general, local climatology data, shall be considered normal, reasonable, anticipated days of adverse rainfall on a monthly basis, and shall not be a cause for an extension of Contract time unless such extension is agreed to in writing by the Contractor and Owner:

January 11, February 10, March 8, April 7, May 5, June 6, July 6, August 5, September 4, October 3, November 5, December 8.

15.1.5.5 Normal anticipated adverse rainfall as indicated above for the area of the Project site shall not be cause for an extension of the Contract Time. The Contractor shall anticipate the numbers of days specified above as a minimum number of days of rain per month with additional muddy and wet adverse Work conditions following the above number of days of rainfall."

15.1.5.6 The Contract is based on a calendar day basis. Calendar days includes Saturdays, Sundays, and all Holidays.

15.1.5.7 The Owners have a policy for the monthly reporting of Claims for rain days. All Contractor requests and documentations for extensions in time for rain for a particular month shall be delivered to the Architect promptly prior to the 12th day of the following month. (For example, for a claim for rain days in July; hence, all Claims for rain days for July shall be delivered to the Architect prior to the 12th of August.)

15.1.5.8 Claims shall follow the requirements of Article 15 Claims and Disputes of the General Conditions of the Contract for Construction and the Supplementary Conditions."

C. 15.2.2 On the first line of the first sentence, after within, delete "ten days" and substitute, "a reasonable amount of time"; and add the following to Subparagraph 15.2.2:

"The Architect and Owner will endeavor to expedite any Request for Change that may occur with the Project. If a delay in the Request for Change process occurs that specifically causes a delay of construction, then the Architect and Owner will review any justified delay and may extend the Contract Time as the Architect and Owner may determine reasonable using the standard of care in the industry."

### 15.3 MEDIATION

A. In 15.3.1, in the third line of the sentence, after precedent to, delete: "binding dispute resolution", and substitute "litigation".

B. Entirely delete Subparagraph 15.3.2 and substitute the following subparagraph:

"15.3.2 The Owner recognizes the value of Mediation to resolve disputes and agrees to participate in same on a voluntary non-binding

basis prior to filing a demand for litigation. No form of Arbitrations will be allowed for this Project. Delete any references to "Arbitration" in this entire Section and in all of the Contract Documents."

#### 15.4 ARBITRATION

Entirely delete Article 15.4 ARBITRATION and all sub-parts thereof, and substitute the following:

"15.4 ARBITRATION

All references to arbitration requirements contained in any Documents pertaining to this Project, including but not limited to, AIA Document A201, General Conditions of the Contract for Construction, Supplementary Conditions, the Specifications, Drawings, Contract Documents, Shop Drawings, Product Data, the Contract Form of Agreement between Owner and Contractor, and material and equipment warranties proposed for this Project are hereby deleted. No form of arbitration is allowed for this Project. All claims and disputes shall be settled locally in the Ascension Parish Court System where the Project is located.

**Add the following Articles 16, Article 17, Article 18, Article 19, and Article 20:**

#### **ARTICLE 16**

##### **EQUAL OPPORTUNITY**

16.1 The Contractor and all Subcontractors shall not discriminate against any employee or applicant for employment because of race, religion, color, sex, or national origin. Such action shall include, but not be limited to the following:

Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places available to employees and applicants for employment, notices setting forth the policies of nondiscrimination.

16.2 The Contractor and all Subcontractors shall, in all solicitations or advertisements for employees placed by them or on their behalf, state that all qualified applicants will receive consideration for employment without regard to race, religion, color, sex, or national origin.

#### **ARTICLE 17**

##### **DELETE ARBITRATION**

17.1 The Contract for Construction, nor the performance of any part thereof, shall not be subject to arbitration. All references to arbitration contained in the Contract for Construction or in any other Contract Documents or all Documents pertaining to the Contract are hereby deleted, as if separately set forth and deleted herein. No material or equipment warranties and no membrane roof warranties and metal roof warranties shall be settled through or by arbitration.

#### **ARTICLE 18**

18.1 The Provisions of Article 4, entitled "Administration of the Contract", are expressly subject to, modified by, and controlled by the Agreement between the Architect and Owner, as amended. To the extent any provision in the Contract for Construction conflicts with the Agreement between Architect and Owner, that provision in the Contract for Construction is deleted. Particularly, the Owner, Architect, and Contractor expressly agree that the terms of the Agreement between the Architect and Owner are controlling on the Project.

#### **ARTICLE 19**

"Claims, damages, losses and expenses", as used in the Contract Documents include but are not limited to: (1) Injury or damage caused by or resulting from the failure of or use or misuse by Contractor, its Subcontractors, agents, servants, or employees, of any hoist, rigging, blocking, scaffolding, or any other kinds of items of materials or equipment, whether or not the same be owned, furnished, rented or loaned by Owner; and (2) All attorney fees, witness fees, and costs incurred in bringing an action to enforce the provisions of any indemnity agreement or any other indemnity contained in the General Conditions, as modified by the Supplementary Conditions.

#### **ARTICLE 20**

Severability: Invalidation, for any reason, of any sentence, section, paragraph, clause, or provision of the Contract Documents by judgment, decree, or order shall in no way affect any other terms or provisions hereof, each of which shall remain in full force and effect. The invalidated provision shall be severed from the Contract Documents."

- END -

## SECTION 01040

### SCHEDULING LIBRARY WORK IN DIFFERENT PHASES

#### PART 1 - GENERAL

##### 1.01 GENERAL REQUIREMENTS

A. The provisions of all of the Contract Documents are hereby made a part of this Section.

B. The provisions of Section 01810 and all of the Contract Documents are hereby made a part of this Section.

C. Insure that all Subcontractors and all material and equipment providers read and understand this Section 01040 for Scheduling Library Work in Different Phases, where the library will not be shut down and closed for the entire duration of this Project; Work for new East and West additions shall be provided in one time phase, and Work for the existing Library Building shall be provided within a different time phase while the Library remains open while serving customers.

D. During these different phases of Work, insure that all are familiar with project coordination requirements specified in Section 01050 Project Coordination.

E. At the beginning of this Project, provide a separate short form written schedule of specified different phases of Work to be provided at different times for Owner approval; and submit and maintain written monthly updates and changes in schedules for different phases of Work for Owner approval, as Work progresses.

##### 1.02 Scheduling New Building(s) Work And Scheduling Existing Building Work At Different Times

A. Prior to submitting his Bid, the Contractor shall be responsible for making sure that all of his selected Subcontractors, vendors, manufacturers, and material and equipment suppliers, and all others involved with providing material and labor are aware of the required coordinated different Work scheduling specified herein.

B. Insure that the Owner can maintain a functional, serviceable, ADA accessible public library operation, serving customers for the duration of this Contract as specified herein, and that the Owners and public customers shall be provided adequate parking facilities for library customers and library workers.

C. Also insure that the Owner can maintain a functional, serviceable library operation during the two (2) weeks scheduled time for the

Owner moving interior items, furniture, and equipment from the existing library into the newly Substantially Completed East and West additions, as specified below.

D. Allow the existing library building to remain open and fully functional while still providing Work on the new West addition and new East addition, and while later providing demolition and new Work on the existing library building and while providing Work on the existing library site.

E. The Contractor shall continue working and shall schedule continued Project Work before, during, and after the two (2) weeks while the Owner is moving above mentioned library items from the existing library into the new East and West additions.

F. Maintain adequate parking facilities for library customers and library workers at all times during all phases of Work.

G. Work requiring interruptions of utility services such as that of interruption of electricity, water, sewage, telephone service, internet service and similar required services and interruptions by the Contractor or utility companies, shall be scheduled to occur not during library working hours, but after normal library hours, either at night, on weekends, or on library holidays.

H. Throughout all phases of new East and West addition building Work, and existing building Work, the Contractor shall provide NFPA, IBC, and ADA approved and required entrances and exits to all portions of the building(s) in accordance with said building code requirements.

I. Maintain communications with the Owners, Architect, Architect's Structural, Mechanical, and Electrical Consultants, Owner's separate contractors, subcontractors, vendors, and building inspectors for the duration of this Project to insure smooth transitioning during scheduling Work and providing different scheduled phases of the Work.

J. Provide and maintain secure and sealed temporary plywood sheathing securely attached to wood studs for security type barrier partitions, dust infiltration prevention type barrier partitions, and weatherproof sealed foul weather protection partitions between demolition Work and construction Work.

K. Provide same types of partitions between inside demolition and construction Work and the out-of-doors.

L. Provide a minimum 36" wide hinged temporary hollow core wood door in a temporary wood door frame, with sealed thresholds and dust and weather perimeter seals, with operable secure keyed door locks, for access to both sides of these temporary partitions, where necessary to

gain access to Work, and where necessary to meet exit requirements for NFPA, IBC and ADA Code approval.

M. Review and coordinate the timing, scheduling, and providing of all structural, mechanical & electrical Work indicated and specified with the Structural, Mechanical, and Electrical Engineer Consultants.

#### 1.03 Scheduling Owner's Moving Into New East and West Additions

A. At least five (5) months in advance, and then again later, at four (4) months prior to Substantial Completion of the new East Addition and new West addition, the Contractor shall notify the Owners when these two (2) new building additions shall be ready for occupancy.

B. From Owner's past experiences on former Owner library projects, Owners found that they need this (4) month period in advance in order to schedule a special, experienced, nationwide library moving company to provide the moving of library furniture such as will be required for this Project.

C. Also, from past experiences on former Owner library projects, Owners found that it will require not more than two (2) weeks for the Owner's hired and Owner's paid for movers to remove items from the existing library facility into the adjacent new East and West library building addition facilities.

D. After the new East addition and West addition have been inspected and approved for occupancy by all required Code agencies, by inspectors and officials, and after these areas are found to be Substantially Completed as defined by the Contract Documents, during this Owner hired separate contractor scheduled (2) week period, the Owners will vacate the existing library building and pay for their library furniture and equipment to be moved into the newly completed East and West additions, and immediately begin to service library customers in the new East addition building after the owners move in.

E. A Certificate of Substantial Completion will be issued for those portions of these East and West additions which are either occupied by the owners, or found to be Substantially Complete.

F. The Owners will only open the new East addition building to the public and service daily library customers after vacating the existing library.

G. The new West addition, even though used by the Owners for their library furniture storage, will not initially be open to the general public and library customers, and will be only used for temporary library storage by the Owners.

#### 1.04 Specific Existing Building Work Scheduling and New Building Work Scheduling

A. Schedule and provide new building Work for the new East and West additions while the Owner is occupying the existing library building and serving library customers during normal library hours, and continue to provide Work during the two (2) weeks while the Owners are moving.

B. Schedule and provide portions of the existing building Work while the Owners are occupying same, to provide for the new future temporary entrance doors to the new East addition, (i.e., through temporary specified entrance double doors marked on the Floor Plan as T-137, (e.g., near the east side of the existing Covered Front Porch marked X128), while the Owner is occupying and serving library customers in the existing building.

C. When the new East addition is occupied by the Owners and opened for public use, and the existing library is vacated by the Owners for demolition/construction Work, doors marked T-137 will become the temporary entrance doors to the new East addition library facility.

D. This portion of the existing building Work involving providing temporary entrance doors, also involves including, but is not limited to providing a new concrete slab on Covered Porch X128, and providing the new 18'-0" wide front entrance sidewalk connecting the temporary entrance to available library customer parking.

E. While the new 18'-0" wide entrance sidewalk is being provided in front of the existing building, while it is still in use, and prior to major interior renovations, provide a temporary plywood entrance walk/ramp for customers to enter and exit the existing main entrance of the existing library.

F. Schedule Work for the new parking paving and new drive paving while the Owner's customers have access to the existing parking and existing drives.

G. After the Work in the existing building is Substantially Completed, and approved for occupancy by all required Code agencies, inspectors and officials, the Owners will continue to service customers in the East addition, move into the newly renovated existing building, and also occupy the West addition whereby subsequent similar inspections and Substantial completion shall be scheduled for a nearly completed Project.

H. After the Owner is occupying and serving customers in the newly renovated existing building and the new East and West additions, the Contractor shall remove temporary entrance doors marked T-137, provide

specified new doors marked X-137, and provide Work to complete new Storage Room X127.

I. If necessary, some time prior to the Owner moving out of the existing library area, the existing Former Kitchenette marked X108 indicated on the Demolition Floor Plan may be shut down from library Owner's staff use in order for the Contractor to provide Work required for the New Coffee Room X126.

- END -

## SECTION 01050

### PROJECT COORDINATION

#### PART 1 - GENERAL

##### 1.01 GENERAL REQUIREMENTS

A. The provisions of all of the Contract Documents are hereby made a part of this Section.

B. The provisions of Section 01810 and all of the Contract Documents are hereby made a part of this Section.

C. Insure that all subcontractors and all material and equipment providers read and understand this Section of the Specifications.

##### 1.02 DEFINITION: PROJECT COORDINATION

A. Project Coordination, as described herein, is defined as that Work and action the Contractor shall provide to insure that the Work of all Sub-Contractors, vendors, material suppliers, equipment suppliers, manufacturers, and all others involved with providing material and labor (including work under separate contracts) are fully aware of all of their assigned responsibilities in order to provide a complete, functional Project for the purpose for which it was designed; and that this action by the Contractor shall include Architectural, Structural, Mechanical and Electrical Work including all proper connections, ("hook-ups"), ("tying-in"), ("roughing-in") and all other Work incidental thereto.

B. Assume full responsibility for providing all coordination of all Work, (including separate contractor work, work by others, work by the Owner hired testing laboratories, and work provided by the Owner), for this Project at no extra cost to the Owner.

C. Insure that the plumbing, HVAC and air-conditioning, and electrical subcontractors provide all roughing-in materials and equipment, and all materials and equipment for all plumbing, HVAC and air-conditioning, and electrical materials and equipment indicated or specified in the Architectural Contract Documents, and indicated or not indicated in the Mechanical and Electrical Contract Documents.

D. Prior to bidding, insure that the plumbing, HVAC and air-conditioning, and electrical subcontractors receive, study, and read this Section 01050, Project Coordination along with all material and equipment suppliers.

##### 1.03 COORDINATION OF WORK

A. Duties of the Contractor in coordination of the Work includes, but is not limited to the following:

1. Coordinate Work of all Subcontractors, vendors, material and equipment suppliers, dealers and all others, (including work under Owner provided Separate contracts and testing laboratories), among themselves, and in conjunction with the Work of the Contractor; and coordinate every aspect of the Contract, and become fully acquainted with all requirements of all sections of the Specifications, Drawings and Contract Documents.
2. Establish on-site lines of authority and communication, and conduct Project meetings among:
  - a. Subcontractors, all trade forces, vendors, material and equipment suppliers, dealers, and all others (including those providing work under separate contracts).
  - b. Architect, Engineers, and Owner's Representative(s).
  - c. Testing Laboratory Companies.
3. Prepare and manage a detailed schedule of operations of all Work involved in the Project, and coordinate same.
4. Monitor schedules as Work progresses and document all changes in schedules.
5. Verify that labor, materials and fixtures and equipment are adequate for the Work and schedule and insure and verify that product deliveries are adequate to maintain schedules.
6. Request written review from the Architect and submit written reports for all non-compliance with the Contract Documents to the Architect.
7. Coordinate all Testing Laboratory Services.
8. Interpret Contract Documents by consulting with the Architect and assist in resolution of questions and problems that may arise.
9. Administer processing of all Shop Drawings, Product Data, and Samples and distribute all of same to all trades dependent upon others in conjunction with their Work.
10. Provide all necessary openings through the exterior and interior walls, roofs, floors, ceilings, furred spaces, and enclosed spaces for ingress and installation of all equipment, fixtures, assemblies and materials. The sizes and locations of necessary openings shall be coordinated prior to the "closing-in" of spaces. Provide patching of opening to match adjacent surfaces.
11. Provide complete access to all areas of the Site and Project for all Subcontractors, vendors, material suppliers, dealers, and all others including those providing Work under separate contract.
12. Provide all exterior and interior walls, roofs, floors, ceilings, finishes, and similar items in place to provide secure, damp-proof and

watertight areas where fixtures, assemblies, materials and equipment is stored and installed. Provide temporary dust-proof and watertight enclosures when permanent enclosures are not complete.

13. Provide clean areas (swept broom clean) dust free and void of debris for areas where fixtures, materials, assemblies and equipment is stored and installed.

14. Coordinate locking of secure areas where materials, assemblies, fixtures, and equipment is stored and installed.

15. Provide all temporary heat, light, ventilation, electricity, gas, water (hot and cold) drains, and steam for satisfactory testing, calibrating and performance of all fixtures, materials, assemblies, and equipment when permanent services are not ready.

16. Provide all anchors, anchor bolts, anchor plates, recesses, openings, holes and miscellaneous trim for all equipment, assemblies, materials and fixtures provided by others and not provided by the Contractor because of lack of coordination, all at no extra cost to the Owner.

17. Work in Sections shall include plumbing, electrical and exhaust "roughing-in" as well as final connection from rough-in point to a single point on each of the various pieces of equipment requiring such connections for each utility, (i.e., electricity, gas, steam, air, water, drain, etc.) unless shown otherwise on mechanical and electrical documents. Work shall include internal connections prior to installation and interconnection of items after installation as well as all Work to permit single point connection for each utility.

18. Should the requirements of a particular material or piece of equipment exceed the requirements of those specified or indicated in the Mechanical or Electrical documents, the Contractor shall provide the following:

a. Additional wiring, switches, disconnects, raceways, fittings, piping, stops, valves, traps, equipment and accessories to make a complete and operating system.

b. Arranging with those responsible for roughing- in under other sections and paying all costs to make the necessary changes.

19. Verify that all insurance requirements are complied with among Subcontractors and all parties involved.

20. Showing the Owner's selected Testing Lab Company:

a. Where the pit(s) are located for providing earth fill for this Project.

b. Showing the Testing Lab the exact location(s) in the pit where specified earth fill will be excavated.

c. Notifying the Testing Lab of the exact location of where earth fill is being excavated if there are any changes in the original location(s).

21. Coordinate all temporary utilities, facilities and requirements.

22. Coordinate all Work and all Work notices required by Government Plan Review Personnel, Government Permit and Zoning Departments, all Government Health Departments, and Government Project Inspectors for Ascension Parish, City Inspectors in which the Project is located, (if the Project is located within City Limits), the Louisiana State Fire Marshal, and other Federal, State, and local government agencies and inspectors.

23. Coordinate all cleaning-up and all Work.

#### 1.04 CORRECTION OF WORK

The Contractor shall correct all faulty Work because of lack of coordination.

#### 1.05 COORDINATION WITH TELEPHONE, COMPUTER, COMMUNICATIONS, AND ENERGY MANAGEMENT COMPANIES

A. At least 45 days prior to beginning to provide the ceiling suspension system and the wall studs, immediately notify the Architect and Owner to alert the Owner's separate contractors to begin installing their materials prior to the Contractor providing finish wall and ceiling materials.

B. Provide all specified and indicated conduits and pull wires in conduits for the Owner's selected separate contractors, including but not limited to telephone, computer, communications, and energy management companies.

C. Do not install finish wall and ceiling materials which limits access for the work provided by the Owners separate contractors.

D. After the Owner's separate contractor(s) have completed their work, coordinate providing the Contractor's finish walls and ceilings with the owner's separate contractors so as to avoid delays.

E. Coordinate all work with the Owner's separate contractors.

#### 1.06 Project DISPUTE, DISCUSSIONS AND ARGUMENTS

A. In this contract, the Contractor, (as opposed to the individual subcontractors, individual material and equipment suppliers, and vendors), are responsible for providing all Work, materials and equipment.

B. If during this Contract, disputes, discussions and arguments arise as far as who provides specific Work, materials, and equipment, these disputes, discussions, and arguments shall be resolved and settled by

the Contractor as to who provides what, at his own meetings, and not at regular meetings attended by the Architect.

#### 1.07 SPECIFIC REQUIREMENTS

Prior to submitting the Bid and prior to beginning Work, insure that all subcontractors, all material and equipment suppliers and all vendors are thoroughly familiar with all of the requirements of this Section, Section 01810, Technical Section Requirements, and all of the Contract Documents.

#### 1.08 PROJECT ADDENDA COORDINATION

A. Prior to beginning Work, set aside a minimum of two (2) sets of Contract Documents, (Drawings, Specifications, & Addendum), for marking and recording all items issued by Addenda.

B. Copy and cut individual item numbered paragraphs from separate, extra copies of every Addendum, and paste said paragraphs and parts of Addendum adjacent to referenced plans and details on the Drawings; and paste paragraphs and parts of Addendum adjacent to referenced paragraphs in the Specifications.

C. Note and high-light all parts of Drawings and Specifications which were changed by Addenda.

D. Maintain and secure a minimum of one (1) of these Project Addenda Coordination set of Contract Documents in the Superintendent's Temporary Field Office, and maintain and secure a minimum of one (1) of these Project Addenda Coordination set of Contract Documents in the Contractor's main office.

- END -

## SECTION 01055

### PROJECT SUPERINTENDENT

#### PART 1 - GENERAL

##### 1.01 GENERAL REQUIREMENTS

A. The provisions of all of the Contract Documents are hereby made a part of this Section.

B. The provisions of Section 01810 and all of the Contract Documents are hereby made a part of this Section.

##### 1.02 PROJECT SUPERINTENDENT

###### A. Project Superintendent Employment Requirements

1. The Project Superintendent for this Project shall be a full time employee, on this Project site every day during working hours, employed by the Contractor for this Project (as opposed to a hired subcontractor, acting as a superintendent), in accordance with the General Conditions.

2. The Project Superintendent shall be responsible for only this particular Project for the duration of this Project, and he shall not be absent from this Project to supervise other Projects, from this Project's beginning through Final Completion, until all of the "Punch List" items are completed.

3. The Project Superintendent shall be on the Project site at all times, and shall have assistant personnel to leave to order materials and equipment, and run errands off of the Project site

4. The Project Superintendent shall not be a subcontractor, or hired as an individual by separate contract.

5. Employ and pay for a very competent, well experienced, fully knowledgeable, full time General Contractor's Project Superintendent to supervise all of the Architectural, Structural, Mechanical, and Electrical Work for this Project.

6. This original, same, competent Project Superintendent that started this Project shall remain employed by the Contractor for this Project for the entire duration of this Project from the beginning, through Substantial Completion, and through Final Completion, after all of the "Punch List" items are completed.

7. The Project Superintendent shall not be employed on a separate different project during the length of this Contract

B. Project Superintendent Minimum Experience and Minimum Knowledge Requirements:

1. The Project Superintendent shall be well experienced, and fully knowledgeable about Contract requirements, including but not limited to:

- a. Louisiana public bids contracts.
- b. Specification prior approved substitution materials and equipment.
- c. Contractor and subcontractor safety rules and OSHA requirements.
- d. Submitting Contractor reviewed Shop Drawings, Product Data, and Samples.
- e. Verifying all existing actual dimensions on site and adding these actual, existing dimensions on the Shop Drawings, so that all materials and equipment fit the actual field dimensions on site.
- f. AIA Pay Requests, AIA General Conditions and Supplementary Conditions, and all of the Contract Documents.
- g. General requirements for the supervision and construction of commercial, public bid Work.

2. The Project Superintendent shall have a minimum of five (5) years construction experience and shall be at least twenty-four (24) years old.

3. The Project Superintendent shall be fully knowledgeable and capable of being able to competently read and understand Architectural, Structural, Mechanical and Electrical Contract Documents, Drawings, Specifications, Addenda, Change Orders, and Shop Drawings, Product Data, and Sample information.

4. The Project Superintendent shall be fully knowledgeable and capable of working with the Owner hired testing laboratory company to insure that soil compaction testing, concrete material testing, and other specified testing is provided in accordance with the Contract Documents.

5. The Project Superintendent shall be fully knowledgeable and capable of finding out required building inspection information and notifying inspectors from the Ascension Parish Building and Zoning Departments, and City and Local Inspectors when required inspections are ready to be reviewed.

C. Project Superintendent Representation

1. This experienced Project Superintendent shall fully represent the Contractor and shall be responsible for all of the Contractor's required Work.

2. Communications given to, and received by the Project Superintendent, shall be as binding as if communications were given to the Contractor, all in accordance with the General Conditions and Supplementary Conditions of the Contract for Construction.

3. Communications received from the Project Superintendent and given to the Architect and Owner shall be as binding as if it were given by the Contractor, all in accordance with the General Conditions and Supplementary Conditions of the Contract for Construction.

4. The Project Superintendent shall remain on the Project at all times during normal working hours to supervise all Work provided by subcontractors.

5. The Project Superintendent shall carry a working cell phone at all times during normal working hours to answer questions posed by the Owner, Architect, Contractor, Subcontractors, and material suppliers.

6. If at any time the Project Superintendent is found not to be thoroughly knowledgeable and capable, and found not to meet the requirements specified herein, he shall be replaced with another well experienced knowledgeable and competent Project Superintendent.

- END -

## SECTION 01200

### PRE-CONSTRUCTION CONFERENCE AND PROJECT MEETINGS

#### PART 1 - GENERAL

##### 1.01 GENERAL REQUIREMENTS

The provisions of Section 01810 and all of the Contract Documents are hereby made a part of this Section.

##### 1.02 PRE-CONSTRUCTION CONFERENCE

A. A time, place and date will be set for a pre-construction conference prior to beginning Work.

B The Contractor shall provide the following at the pre- construction conference prior to beginning Work:

1. A typewritten designation of the Work to be performed by the Contractor with his own forces.

2. A typewritten breakdown of the Contract Cost for each and every individual Section of the sixteen (16) Divisions of the Specifications.

a. Refer to Schedule of Values, in the Supplementary Conditions.

b. Provide a thorough breakdown for the cost for items specified under the Bidding Requirements, General and Supplementary Conditions, and all of Division 1, as specified in the Supplementary Conditions, and as specified herein.

c. Submit invoices, marked paid, for all items the Contractor paid for, 100%, prior to submitting application for payment no. 1.

d. Do not request 100% payment, up front, for large amounts for unknown items listed under arbitrary headings such as "General Requirements", or "General Conditions" which the Architect and Owner cannot verify.

3. A typewritten list of the proprietary names of, and suppliers of all of the principal items and systems of material and equipment proposed for the Work.

4. A typewritten list of names of all Subcontractors or other persons or organizations (including those who are to furnish materials and equipment fabricated to a special design) proposed for the principal portions of the Work.

C. Subcontractor

1. The Contractor shall be solely responsible for selection of his Subcontractors.
2. Poor performance of a Subcontractor shall not be an excuse for faulty Work.
3. The Contractor shall not be entitled to claims for additional Contract time or additional Contract amounts because of any problem with a Subcontractor.
4. Refer to the General Conditions and Supplementary Conditions for additional requirements.

#### 1.03 PROGRESS MEETINGS

- A. Progress meetings shall be conducted at a minimum of one progress meeting per month which shall be held on the jobsite throughout the construction period until Substantial Completion.
- B. Additional meetings shall be required on an "as needed" basis when called for by the Owner or Architect until the end of the Warranty Period, after Final Completion.
- C. Meetings shall be attended by the Contractor's job superintendent and authoritative home office personnel, including Major Subcontractors, only if required by the Owner or Architect.
- D. The Contractor shall deliver applications for payment to the Architect prior to monthly meetings.
- E. It shall be the principal purpose of this meeting or conference to assess realistically the current status and progress of the Work and to effect coordination, cooperation, and assistance in every practical way to the end of maintaining progress of the Project within Contract time.

#### 1.04 ADMINISTRATION OF THE CONTRACT

The Architect's or Engineer's or the Architect's associate's periodic site visits and observations before, during, and after construction of the Project shall not be construed as superintendence of actual construction.

- END -

## SECTION 01340

### CONTRACTOR SHOP DRAWINGS, PRODUCT DATA, & SAMPLES

#### Part 1 - General

##### 1.01 GENERAL REQUIREMENTS

The provisions of Section 01810 and all of the Contract Documents are hereby made a part of this Section.

##### 1.02 SPECIFIC REQUIREMENTS

A. In many cases incorrect Shop Drawings, Product Data, and Samples are submitted, sometimes intentionally and sometimes unintentionally, with incorrect, and usually always less expensive materials and equipment, less quantities of materials and equipment, or submitted with incorrect less expensive more readily available materials and equipment, or submitted with incorrect easier to install materials and equipment not indicated or not specified, or incorrect materials and equipment for other reasons, sometimes to see if the Architect may review same, and maybe not notice the inconsistencies in materials and equipment submitted so that it can be said later that the Shop Drawings, Product Data and Samples, even though incorrect, were "approved" by the Architect or his Consulting Engineers; hence, whatever is "reviewed" by the Architect as being acceptable is what shall be provided.

B. Whether paragraph A above is the case, or not the case, when incorrect Shop Drawings, Product Data or Samples occur, let it be widely known to everyone, that the Architect and his Consulting Engineers do not, and will not accept nor does the Architect and his Consulting Engineers ever intend to accept incorrect Shop Drawings, Product Data, and Samples.

C. The Architect and his Consulting Engineers only "review" Shop Drawings, Product Data, and Samples with the condition that the Contractor subsequently reviews and the Contractor "approves" Shop Drawings, Product Data, and Samples to insure that they meet the requirements of the Contract Documents.

D. Architect review of Shop Drawings, Product Data, and Samples is for reviewing general design compliance with the Contract Documents.

E. No responsibility is, and no responsibility ever will be assumed by the Architect, or his Consulting Engineers, for corrections of Shop Drawings, Product Data, and Sample dimensions, quantities, quality, or details.

F. Architect review without comments and Consulting Engineer review without comments of incorrect information indicated, with or without a Shop Drawing, Product Data, and Sample stamp, shall not be construed as evidence of an approved change in the Contract Documents.

G. Only the Owner can authorize a change in the Contract Documents with a written authorized Change Order, signed by the Owner.

H. Refer to the General Conditions and Supplementary Conditions for additional requirements on Shop Drawings, Product Data, and Samples.

I. In cases where there is a conflict between the materials and equipment shown in the Contract Documents and materials and equipment shown in Architect reviewed correct or incorrect Shop Drawings, Product Data, and Samples, the requirements for materials and equipment shown in the Contract Documents shall govern, even though the Architect reviewed the incorrect Shop Drawings, Product Data, and Samples, and did or did not place a review stamp or comment on same.

J. The Contractor shall be responsible for and shall be required to remove and replace all materials and equipment which are not indicated and specified in the Contract Documents, even though the materials and equipment were observed or not observed by the Architect, reviewed or not reviewed, and stamped reviewed or not stamped reviewed by the Architect or his Consulting Engineers as Shop Drawings, Product Data, and Samples.

K. Correct materials and equipment shall be provided as specified and as indicated, at no additional cost to the owner, regardless of what is specified or indicated on incorrect Shop Drawings, Product Data or Samples.

L. The Architect reserves the right to obtain Shop Drawings, Product Data, and Samples on all materials and equipment indicated or specified in the Contract Documents.

M. Refer to specific Sections of the Specifications for specific requirements.

N. The Architect reserves the right to request and receive additional more detailed information on Shop Drawings, Product Data, and Samples in cases where the Architect determines that submittals are incomplete, or more information is required.

O. Reproducible tracings made from Contract Documents will not be accepted as Shop Drawings.

P. In many cases color Samples are submitted on printed paper which is inadequate and does not show the actual color of the Sample. The Architect reserves the right to get real actual Samples, minimum 12" x 12", of all material indicated or specified herein.

### 1.03 DELIVERY

A. All Shop Drawings, Product Data and Samples of material and equipment which do not require Architect selection and Owner approval of colors, textures, patterns, and finishes are required to be

delivered to the Architect by the Contractor not later than sixty (60) days prior to dates that final reviewed submittals will be needed.

B. All Shop Drawings, Product Data and Samples of interior and exterior material and equipment which do require Architect selection and Owner approval of colors, textures, patterns, and finishes shall all (not one or two), be submitted sixty (60) days prior to the date that a single, specific, final color, texture, pattern, or finish selection or approval is required by the Contractor.

C. Neither the Architect nor the Owner will review, select, nor approve single or only a few of the submittals of colors, textures, patterns, and finishes of interior or exterior materials and equipment.

D. Timely deliveries for first submittals and re-submissions shall be the responsibility of the Contractor, including distribution of Shop Drawings, Product Data and Samples to all parties.

#### 1.04 CONTRACTOR REVIEW

Prior to submitting Shop Drawings, Product Data and Samples the Contractor shall do the following:

A. Insure that all material and equipment suppliers are thoroughly familiar with this Section and have a copy of this Section of Specifications.

B. Thoroughly review all submittals in detail and approve Shop Drawings, Product Data and Samples prior to and subsequent to submitting same to the Architect.

C. Verify all actual dimensions, thicknesses, quantities, qualities, and measurements to insure proper fitting and installation of same.

D. Verify all model names, model numbers, catalog numbers and similar data to insure that they meet the requirements of the Contract Documents.

E. Coordinate all submittals with all related trades, requirements of Work and requirements of all of the Contract Documents.

F. Refer to Section 01050 entitled Project Coordination.

G. Notify the Architect in writing at the time of Contractor submission and also after receiving Architect stamped, reviewed submittals, of deviations in submittals from requirements of Contract Documents and from actual conditions at the site.

H. Begin no Work which requires submittals of Shop Drawings, Product Data, and Samples until receipt of final returned submittals with Architect's stamp indicating "NO EXCEPTIONS TAKEN" or "MAKE CORRECTIONS NOTED, RESUBMITTALS NOT REQUIRED".

I. After receiving stamped, reviewed Shop Drawings, Product Data, and Samples from the Architect or the Architects Consulting Engineers, the Contractor shall again thoroughly review, verify and approve all printed and actual on site field dimensions, quantities, and details, and thoroughly review, verify, and approve all Shop Drawings, Product Data and Samples prior to ordering materials and equipment.

J. All errors and omissions in Shop Drawings, Product Data and Samples shall be paid for by the Contractor.

#### 1.05 NUMBERS OF SUBMITTALS

A. Submittals for Shop Drawings and Product Data shall be as follows:

1. Shop Drawings: First and subsequent submittals until stamped as specified above: One (1) sepia or transparent copy, and three (3) opaque prints.

2. Product Data: First and subsequent submittals until stamped as specified above, submit as many copies as required by the Contractor plus a minimum of three (3) copies of each to be retained by the Architect.

B. Samples

1. The Contractor shall furnish and deliver for the Architect's selection such Samples as specified herein or in addition as the Architect may direct.

2. All Samples shall be accompanied by a transmittal letter from the Contractor.

3. All Samples shall be the manufacturer's full range of sizes, colors, and textures.

4. Furnish actual materials, or actual finish on specified material in lieu of manufacturer's printed colors and textures, in sizes directed by the Architect.

5. First submittals shall be two (2) Samples of each.

#### 1.06 DETAILED INFORMATION

A. Shop Drawings and Product Data shall show everything for the finished installed performance of all items including all grounds, anchors, anchor bolts, anchor plates, recesses, slopes, openings, roughing-in, connections, assemblies, tying-in and all other details incident thereto to render the item submitted completely functional for the purpose for which it was designed. Note everything that would affect progress of Work.

B. All Shop Drawings, Product Data, and Samples shall have the Architects "Mark", (in the case of openings), item number as

identified in the Contract Documents with room names and numbers for each item and specification Section numbers.

C. In cases where there is more than one building, include building names and numbers.

#### 1.07 JOB-SITE INFORMATION

A. The Contractor shall maintain one copy of all Shop Drawings and Product Data at the job-site for review by the Owner and Architect.

B. The Contractor shall maintain one Sample of the Architect reviewed Samples of each material reviewed by the Architect and written description of same.

C. Job-site information regarding Shop Drawings, Product Data and Samples shall be kept in an orderly manner with references indexed for easy reference and shall be secured with lock and key.

- END -

## SECTION 01510

### TEMPORARY REQUIREMENTS

#### PART 1 - GENERAL

##### 1.01 GENERAL REQUIREMENTS

The provisions of Section 01810 and all Contract Documents are hereby made a part of this Section.

##### 1.02 COMPLYING

- A. Temporary materials and equipment used shall meet or exceed all standards specified in the Contract Documents.
- B. Comply with all laws for safety in executing the Work.
- C. All safety shall be the responsibility of the Contractor at all times including the supervision of Project Safety.
- D. The Owner and Architect will not supervise or review any safety procedures or OSHA requirements for this Project.
- E. Comply with all local ordinances of local City and Ascension Parish Government, Louisiana Department of Highways, Louisiana DEQ, Louisiana EPA, OSHA, NFPA, and all Federal Rules and Laws.
- F. The Contractor shall be solely responsible for maintaining his own life safety, fire safety, and fire protection of persons and property for the duration of the Project.
- G. The Contractor shall provide all temporary security measures, materials, and equipment, and shall be solely responsible for maintaining security of his own Work for the duration of this Project.

##### 1.03 TEMPORARY STORAGE SPACES

- A. Provide suitable and sufficient secure, enclosed, and covered spaces, with raised flooring to protect materials and equipment subject to damage by weather, condensation, dampness, vandalism, or Work.
- B. Storage shall be confined within the property lines of the Project, and within the immediate area of the construction site.
- C. Coordinate locations of storage spaces with the Owner.

##### 1.04 TEMPORARY ACCESS ROADS, CULVERTS, AND PARKING

- A. Provide all temporary access drives, temporary culverts & temporary culvert permits, temporary roads, and temporary parking required for execution of the Work.

B. Do not allow heavy equipment to cross new culverts or heavy equipment to cross new concrete paving.

C. Remove and replace all cracked or damaged new concrete paving or culverts prior to Substantial Completion.

D. Remove and replace all damaged materials or equipment on the site caused by temporary access roads, parking, construction of the Project, and the use of the site.

E. All temporary drives and culverts shall comply with the Louisiana Department of Transportation, local ordinances, and the Ascension Parish Government.

#### 1.05 TEMPORARY UTILITIES

A. Provide all utilities including temporary water, gas, heat, air-conditioning, and electricity required for construction in sufficient and adequate amounts for all purposes until Substantial Completion.

B. Refer to Mechanical and Electrical Contract Documents for additional information, if any.

C. Comply with all applicable requirements of standards specified herein and the National Electric Code, the National Electrical Safety Code of National Bureau of Standards, the National Fire Protection Association and Underwriters' Laboratories.

D. Comply with requirements of all local public and private utility companies and comply with all local ordinances.

E. All temporary water shall be potable.

F. All temporary gas shall meet requirements of the National Fire Prevention Association, the American Society of Mechanical Engineers, the American Gas Association, the National Bureau of Fire Underwriters and the Louisiana Fire Marshal Act.

G. Provide temporary heat and air-conditioning for materials and equipment which require special temperatures and relative humidity to avoid damage to same.

#### 1.06 TEMPORARY LIGHTING

A. Provide temporary lighting for all Work, and for all Work initiated under this Contract and under separate contracts.

B. Temporary lighting shall be equal to final lighting and shall be of sufficient foot-candles to execute detailed and finished Work.

C. Provide temporary lighting for security lights at night.

D. After final electrical lights are installed and in operation, all faulty Work noted by the Architect shall be replaced by the Contractor.

E. Poor temporary lighting will not be an excuse for the Contractor's faulty Work.

#### 1.07 TEMPORARY ADDRESS AND TELEPHONES

A. The construction address for this Project has already been assigned by the Parish of Ascension as: 40300 LA Highway 42, Prairieville, LA 70769.

B. The Contractor may use this address for 911 calls, and delivery of materials.

C. Prior to beginning Work through Final Completion, provide a minimum of one (1) temporary Project telephone, installed in the temporary field office, with an audible exterior bell; or a cell phone.

D. The Contractor will not be allowed to use the Owner's phones unless it is an emergency.

E. If a temporary phone is installed, pay for all deposits and fees to obtain said address and telephone.

F. Provide the Superintendent's telephone numbers to both the Owner and Architect.

#### 1.08 TEMPORARY SANITARY FACILITIES

A. While the Owner is occupying parts of the building, the Contractor will not be allowed to use the Owner's restroom facilities.

B. Provide temporary sanitary facilities of the chemical type, with natural light and ventilation, maintained in a sanitary condition, and approved by the Louisiana Board of Health, in the following number to employee ratio: 1/20 < 200 employees; 1/50 > 200 employees.

#### 1.09 Not Used.

#### 1.10 TEMPORARY PROJECT SIGNS

A. Main Project Sign:

1. Near the front public highway, where directed by the Architect and Owner, near the entrance to the Project site, provide and maintain one (1) sign not less than 8 feet wide by 12 feet high, with bottom edge 24" to 48" above ground, of minimum 3/4" thick A-C EXT-APA, or APA - EXT MDO plywood, exterior grade plywood, with minimum two (2) treated 4 x 4 posts, braced with 2 x 4's and designed to withstand 75 mph winds, with all edges, back of sign and sign supports painted.

2. Letters, colors of letters, colors of backgrounds shall be selected by the Architect. Secure written approval of lettering and location on site prior to beginning sign Work.

3. Sign shall have the name of the Project, the Owners, the Architect, the Consulting Engineers, the Interior Designer, (all similar to that of the title sheet on the Drawings and Specifications), and the shall have the name of Contractor.

4. Layout of titles, names, and border shall be requested by the Contractor from the Architect at the beginning of the Project.

B. Not used.

C. Subcontractor Signs:

1. As required by local codes, provide temporary job signs, for electricians, plumbers, and HVAC contractors, etc., in accordance with local ordinances, codes and requirements, if required at all sites.

2. Do not attach subcontractor signs to the specified Main Project Sign.

3. Because of color and letter coordination, neatly provide Subcontractor signs with neat supports, a minimum of seventy-five (75) feet to the rear and away from the specified Main Project Sign.

D. Signs, other than those required by local ordinances, specified, or indicated, will not be permitted on the site without written approval from the Owner and Architect.

#### 1.11 TEMPORARY FIELD OFFICE

A. Provide a minimum of one (1) temporary field office, with field desk, shelves, and lock on door, at the site, for the use of the Architect and Superintendent.

B. Size of field office shall be not less than 8 feet by 8 feet.

#### 1.12 TEMPORARY FENCING AND BARRICADES

A. Provide temporary safety fencing and barricades around all Work where required by OSHA or the Life Safety Code.

B. Provide and maintain barricades sufficient to prevent injury to persons and damage to property in accordance with all safety laws and requirements, and cover all trenches and holes when not in use.

C. Provide facilities to exclude unauthorized visitors from the site and provide personal safety equipment such as hard hats to authorized visitors and Owners.

D. Provide and maintain warning lights and signs as necessary to prevent damage or injury, and keep warning lights burning from dusk to dawn.

E. Provide barricades and other protective measures, material and equipment required by OSHA and other governmental agencies.

F. Provide edge of roof rails as required by OSHA.

G. Temporary fences shall be minimum, bright orange mesh, minimum 36" high, with line post spaced on 10 feet centers provided where indicated; and where necessary to keep non-construction workers away from the Work areas; and under perimeters of outer limits of tree branches to protect tree roots of existing trees not indicated to be removed.

H. Provide both vehicular and pedestrian gates where required.

I. Provide level means of egress from the building at all times, and numbers of means of egress as required by the National Fire Protection Agency (NFPA) "Life Safety Code" and the Louisiana State Fire Marshall.

#### 1.13 TEMPORARY PROTECTION

A. Provide temporary protective coverings on new and existing materials and equipment in place to avoid soiling, spilling of materials, scratching, and damage to same.

B. Remove and replace all damaged materials and equipment.

C. Provide temporary roof coverings to protect existing and new parts of the building.

#### 1.14 BUILDING PERMITS, PLAN REVIEW AND UTILITY DEPOSITS

A. The Contractor shall secure and pay for all Building Permits, zoning review permits, utility connections for gas, water, electricity, and telephone connections, EPA permits, waste water permits, miscellaneous permits, and all deposits, licenses, and permits required by local EPA, City, Parish, and State Governments.

B. The Contractor shall secure and pay for all Louisiana State Fire Marshal permits required for sprinklers systems and sprinkler exemptions, fire alarms, and kitchen hoods, (if any).

C. Refer to other parts of the Contract Documents for Mechanical, Plumbing, Electrical, Utility and connection permits, if any.

D. The Contractor shall secure and provide to the Owner a copy of the LA Storm water Discharge Permit and shall maintain all necessary requirements specified therein.

#### 1.15 TEMPORARY DRAINAGE

- A. Before beginning Work, and as Work progresses, provide all temporary drainage and swales required to quickly drain rain water.
- B. Maintain very good drainage in all areas during progress of Work.
- C. Provide temporary culverts where required to keep the soil dry.
- D. Provide pumps to remove rain water where rain water is not draining by gravity flow.
- E. Remove all temporary drainage materials and equipment after use is no longer needed.
- F. The Contractor shall be responsible for providing all erosion and sediment control.
- G. Maintain existing drainage of property on the existing site, and maintain existing drainage of adjacent properties.

#### 1.16 TEMPORARY HEATING, AIR CONDITIONING, AND FILTERS

- A. When certain materials and equipment such as ceiling tiles, floor tile, computers, and all other materials and equipment which are sensitive to temperature and humidity are provided, maintain proper temporary heat and air conditioning before, during, and after said materials and equipment are installed.
- B. If the heating and air conditioning manufacturer or the mechanical subcontractor objects to allowing the Contractor to use the permanent heating and air conditioning, or if using same adversely affects the Owner's warranties and beginning of warranties at time of Substantial completion, provide required separate temporary heat and air conditioning, as opposed to using the Owner's proposed permanent heat and air conditioning.
- C. Provide temporary air conditioner filters in all air conditioners for testing and limited use prior to Substantial Completion.
- D. Minimize air conditioner run time, especially during Work that causes excess dust.
- E. Change temporary air conditioner filters at regular intervals prior to Substantial Completion.
- F. Immediately after testing and temporary use, provide all new filters immediately prior to Substantial completion.
- G. Pay all cost for securing, maintaining, and renting temporary heat and air conditioning.

#### 1.17 TEMPORARY PARTITIONS

A. At all times during demolition and construction, provide temporary dust proof protective partitions between Owner occupied parts of the building and Owner non-occupied parts of the building; and provide secure weatherproof temporary partitions between interior parts of the building and the exterior.

B. Thoroughly seal temporary partitions to prevent dust from penetrating said partitions.

C. Provide temporary egress entrance and egress exit doors with secure locking hardware in temporary partitions to comply with NFPA 101 and the Louisiana State Fire Marshall, including providing substantial temporary ramps with handrails on both sides of ramps where necessary.

#### 1.18 CLEANING AND RESTORING

A. Remove all temporary materials and equipment when need for its use has passed.

B. Repair damages, or remove and replace materials and equipment damaged by installation and use of all temporary facilities, materials and equipment, and access roads, and parking.

C. Clean all areas occupied by temporary Work and remove debris, rubbish, and excess materials from site.

- END -

## SECTION 01700

### PROJECT CLOSEOUT AND SUBSTANTIAL COMPLETION

#### PART 1 - GENERAL

##### 1.01 GENERAL REQUIREMENTS

A. The provisions of all of the Contract Documents are hereby made a Part of this Section.

B. The requirements of Section 01810 entitled Technical Section Requirements apply to this Section the same as though herein written out in full.

C. After signing the Contract, begin planning for Substantial Completion and Final Completion.

D. Do not wait until the last few months of the Project to prepare for Substantial Completion.

E. Gather required Substantial Completion manuals, warranties, materials, equipment, and items early as Shop drawings, Product Data and Samples are submitted for review.

##### 1.02 PREPARING FOR SUBSTANTIAL COMPLETION

A. Begin preparing and planning for Substantial Completion with Sub-Contractors, material suppliers, and others when submitting Shop Drawings, Product Data, and Samples.

B. Read Specifications thoroughly and make a list of all requirements by Sections of the Specifications.

C. Gather information, warranties, and manuals and create Substantial Completion files as Work progresses.

D. Maintain files for the duration of the Project.

E. Alert Subcontractors providing fire alarm, fire suppression, sprinklers, and hood suppression materials and equipment, (if any), to submit plans early and complete Work early.

##### 1.03 NOT USED

##### 1.04 LOUISIANA STATE FIRE MARSHAL REQUIREMENTS

A. Refer to Section 07250 Fire-Stopping for notifying the Louisiana State Fire Marshal to inspect installing, patching, and sealing of fire walls, fire rated assemblies and construction before any construction is installed that would conceal such construction and

prevent a proper Fire Marshal inspection.

B. Provide access to random selected areas that may be required by the Fire Marshal inspector at the time of the Fire Marshal final inspection.

C. Entirely remove and properly replace all required indicated and specified fire rated construction that does not meet the Fire Marshal's requirements.

D. At the time of Fire Marshal inspection, provide the Fire Marshal Inspector with detailed instructive cut sheets and Product Data of the Fire-stopping and fire penetration sealing system used.

E. Provide random selective sampling of fire rated construction for the Inspector to observe, review, and approve.

F. Provide all Work in accordance with the Fire Marshal Inspector's requirements.

G. It shall be the Contractor's responsibility to have the building completed with all fire extinguishers, exit signs, emergency lighting, fire alarms, and all safety and handicapped material and equipment functioning to pass the occupancy inspection of the Fire Marshal.

H. Notify the Architect in writing a minimum of twenty- one (21) days in advance of the anticipated date of Substantial Completion inspection to allow time for the Architect to schedule a Fire Marshal inspection prior to or concurrently with the beginning of the Substantial Completion inspection.

I. If the Louisiana State Fire Marshal does not approve the building as being acceptable for occupancy because of defective or missing materials or equipment specified herein, Substantial Completion will not be recommended by the Architect or granted by the Owner.

J. Malfunctioning or missing fire alarms, fire suppression and hood suppression systems, (if any), and all other systems and items not passing the Fire Marshal inspection shall not be "punch list" items to be completed at a later date after Substantial Completion.

K. The Contractor, electrical Subcontractor, mechanical Subcontractor, (including the fire alarm, fire suppression, sprinkler, and hood suppression Subcontractors), shall attend the scheduled inspection conducted by the Fire Marshal and shall assist in answering questions, demonstrating and testing specified safety devices, materials and equipment, and respond to all other requirements asked by the Fire Marshal.

L. Provide all written documentation, in original form, signed in ink, requested by the Fire Marshal.

M. Be prepared to re-schedule the Fire Marshal Inspection meeting if any of the Fire Marshal stamped plans and specifications were lost.

N. The Fire Marshal will not approve occupancy without original Fire Marshal stamped plans and specifications on the Project site for both the building and the fire alarm and fire suppression materials and equipment.

O. The Fire Marshal stamped Drawings and Specifications for the building, the alarm, fire suppression, sprinkler, hood suppression system, with all accompanying applications, letters, and correspondence shall be on the Project site when the Fire Marshal arrives.

P. If any of the Fire Marshal stamped Drawings and Specifications or other required information were lost at any time, the Contractor shall call the Fire Marshal and shall prepare a letter to the Fire Marshal stating how they were lost in detail, and shall hand carry said letter with new sets of Drawings and Specifications and correspondence to get stamped.

Q. The Contractor shall pay for all additional printing, Fire Marshal fees, and all other additional costs involved to procure new, required Fire Marshal stamped correspondence and Documents.

#### 1.05 SCHEDULING SUBSTANTIAL COMPLETION

A. Do not call the Architect for a Substantial Completion inspection until the following items have been 100% completed and are displayed at the Project Site in the Contractor's Temporary Field Office, in an organized manner:

1. Manuals, Instructions, and Parts List: Provide and display complete, bound, maintenance manuals, equipment operating instructions, and parts list for all new equipment and materials identified by model name, number, and capacities, in triplicate as a minimum, or as specified in other specific Sections of the Specifications, all listed in an accompanying letter of transmittal.

2. Keys:

a. Refer to Section 08720, Finish Hardware for specific requirements for the Owner's keys.

b. Comply with all keying requirements of Section 08720.

c. Provide all hardware list, manuals, and receipts specified in section 08720, Finish Hardware.

d. Conduct instructional finish hardware tours throughout the facility.

3. Warranties and Bonds:

a. Provide warranties and bonds for periods specified.

(1). All refrigeration units shall have an extended (4) year written warranty on the hermetic (sealed) motor-compressor in addition to the standard on (1) year Warranty.

(2). All hermetic motor-compressors which are defective during this extended period shall be replaced by the manufacturer at no cost to the Owner including labor to replace same.

b. Dates of Warranties and Bonds shall begin on the date of Substantial Completion or the date the Owner occupies the building, whichever date occurs first, regardless of standard procedures and all other policies, rules, and regulations of companies providing Work, materials, and equipment for this Project.

c. Date of warranties shall not begin prior to the date of Substantial Completion.

d. The remainder of payment due will be withheld until warranties dated before the above specified Substantial Completion dates are corrected.

e. Provide all specified written warranties and bonds, executed in the Owner's name, on the standard manufacturer's form, accompanied by a letter of transmittal.

f. When roof Work is provided, provide all specified metal and/or membrane roof warranties.

g. Provide Record Drawings for review by Architect, Consultants, and Owner's maintenance personnel.

h. Refer to the General Conditions and Supplementary Conditions for other requirements.

4. Electrical Panel Labeling Information:

a. Prepare a list of correct equipment and correct areas and rooms serviced by all electrical panel circuits.

b. Securely attach and list all of said information in all electrical panels for each circuit provided.

c. Refer also to electrical Contract Documents.

d. Submit a written list to the Architect in duplicate.

5. Compliance Certificates:

Provide all required compliance certificates affirming that all of the required inspections were conducted by all authorities and agencies having jurisdiction including the various State, Parish, and all local agencies for all Architectural, Structural, Mechanical and Electrical Work.

6. Contractor's Punch List:

a. Provide a list of items to be completed or corrected as specified in the General Conditions and Supplementary Conditions.

b. Provide a Final Punch List prior to Final Payment.

c. These Punch Lists shall be presented to the Architect for his review, verification, and for amendments, and to assist in finalizing Substantial Completion and Final Payment.

d. Assign a dollar value to each item listed on the Contractor's Punch Lists so dollar amounts of Punch Lists items it can be deducted from the Contractor's Application for Payment.

e. If the Contractor does not provide Contractor's Punch Lists with assigned dollar values, the Architect has to conduct surveys, coordinate with engineers and material suppliers to prepare estimates for Punch List items, and in turn definitely delay processing of the Contractor's Application for Payment beyond the specified time for processing pay requests.

f. The Contractor hereby agrees that his failure to provide a well prepared Contractor's Punch List, with assigned dollar amounts, will definitely delay his receiving pay from the Owner as specified in his Contract.

7. Instructional Tours

a. Conduct with a duly authorized manufacturer's representative, instructional tours of all mechanical and electrical Work and all operating materials and equipment, demonstrated in the form of complete cycles, to acquaint all persons occupying the building and all janitors and maintenance and operating personnel with the operation and maintenance of the various materials and equipment.

b. Instructions shall be given a minimum of three (3) times and possibly more, as determined by the Owner and architect, to insure that all operation personnel have complete knowledge of all phases of operation and maintenance.

c. Individual instructional tours shall be given on separate days, if so required by the Architect or Owner. For example, fire alarms one day, electrical one day, mechanical one day, mechanical timing and controls one day, as scheduled by the Architect and Owner.

d. During all of the instructional tours, the Owners shall be given ample time to video tape and record all information provided by the Contractor and his technicians.

B. If all of the above information is not completed prior to the date that the Owner, Architect, and his Consultants, arrives on site, the Substantial Completion meeting will be cancelled.

C. No additional Contract Time extensions will be granted for the Contractor's failure to get organized and to coordinate and provide the above requirements prior to Substantial Completion.

#### 1.06 SUBSTANTIAL COMPLETION

A. The Architect and Consultants will not make several trial inspections to see if the Project is Substantially Complete.

B. If Substantial Completion is not granted, be prepared to pay liquidated damages if the Project is not Substantially Complete within the Contract time.

C. Record and pay for recording the Substantial Completion Certificate with the Clerk of Court or Recorder of Mortgages in the Parish where the Project is located, and pay for all other costs incidental thereto.

D. Forty-five (45) days after recording said Substantial Completion, submit a Clear Lien Certificate to the Architect prior to Final Inspection, Final Acceptance and Final Payment.

E. Refer to Section 08720 Finish Hardware for identifying each and every key. If the hardware supplier refuses to neatly label each key, label the index of keys, walk through the Project with the Owner and Architect and provide all requirements specified in Section 08720, hire and pay for a finish hardware specialist to completely comply, (100%), with Section 08720, Finish Hardware.

#### 1.07 FINAL INSPECTION

A. Final Inspection and all subsequent inspections shall be conducted with the Contractor, after the contractor has personally inspected the Project, and after he has personally verified that the Project is 100% complete.

B. Final Inspection, Final Application for Payment, and Final Certificate for Payment shall be executed in accordance with the General Conditions, the Contract Documents, and only after all requirements of the Contract Documents have been met.

C. Final payment shall not be processed until all deficiencies have been corrected including items required by the Fire Marshall or other local government inspectors.

D. The Contractor shall not rely on Subcontractor's notification that "punch list" items are complete.

E. Prior to notifying the Architect or his Consultants, the Contractor shall personally visit the Project site to verify that each and every "punch list" item is complete.

- END -

## SECTION 01710

### CLEANING

#### PART 1 - GENERAL

##### 1.01 GENERAL REQUIREMENTS

The provisions of Section 01810 and all of the Contract Documents are hereby made a part of this Section.

##### 1.02 DETAILED REQUIREMENTS

A. Complying: Conduct cleaning and disposal operations to comply with local ordinances, anti-pollution laws, State of Louisiana Department of Environmental Quality (DEQ), and OSHA, Asbestos Hazard Emergency Response Act, (AHERA).

1. Do not burn or bury rubbish and waste materials on the Project site.
2. Do not dispose of volatile wastes such as mineral spirits, oil, or paint thinner in storm or sanitary drains nor dispose of wastes in gutters, ditches and other unauthorized areas.
3. Maintain premises free from accumulation of wastes, debris and rubbish.

##### B. Hazards Control:

1. Store volatile wastes in covered metal containers, remove from premises daily, and prevent accumulation of wastes which create hazardous conditions.
2. Provide adequate ventilation during use of volatile or noxious substances.

#### PART 2 - PRODUCTS

##### 2.01 MATERIALS

A. Use only cleaning materials recommended by the manufacturer of the surface to be cleaned, and use cleaning materials only on surfaces recommended by the cleaning material manufacturer.

B. Do not use cleaning materials containing acid without written approval from the Architect.

#### PART 3 - EXECUTION

##### 3.01 DURING CONSTRUCTION

A. Supervise all cleaning to insure that buildings, site, and public properties are maintained free from accumulation of waste materials, debris, and rubbish.

B. Sprinkle dusty waste materials with water to prevent dust.

C. At reasonable intervals, (minimum weekly), during progress of Work, clean site, access to site, public properties, and dispose of waste materials, debris, and rubbish.

D. Lower waste materials in a controlled manner with as few handlings as possible; do not drop or throw materials from heights.

E. Provide adequate numbers of waste containers of sufficient size and locate on site for disposing of waste materials, rubbish and debris.

F. Remove waste materials, rubbish, and debris from the site and legally dispose of same off of the Owner's property.

G. Vacuum clean interior building areas when ready to receive finish painting or other materials and equipment adversely affected by dust, and continue vacuum cleaning on an as-needed basis until building is ready for Substantial Completion or occupancy.

H. Schedule cleaning operations so that dust and other contaminants resulting from cleaning process will not fall on wet, newly painted surfaces.

I. Sand curing compounds from concrete slabs prior to providing latex leveling materials in accordance with manufacturer's recommendations.

### 3.02 FINAL CLEANING

A. Use only experienced workmen, or professional cleaners for final cleaning.

B. At completion of construction and just prior to Substantial Completion and acceptance or occupancy, conduct a final inspection of exposed interior and exterior surfaces.

C. Remove grease, dust, dirt, stains, labels, fingerprints, excess glue, and other foreign materials, from interior and exterior sight exposed surfaces.

D. Replace, repair, patch, paint and touch-up marred surfaces to match adjacent finishes.

E. Replace all broken, scratched, or damaged glass.

F. Vacuum clean, mop, and buff all resilient floors.

- G. Broom clean paved surfaces; rake clean other surfaces of grounds.
- H. Maintain cleaning until the building, or portion thereof, is occupied by the Owner.
- I. Replace all air conditioning filters if units were operated during construction or if dirty.
- J. Clean ducts, blowers, and coils if units were operated without filters or are dirty.
- K. Level and fill all holes and ruts caused by storage of materials, operation of equipment, and Work forces on site.
- L. Remove all temporary facilities, job shacks, temporary roads, dunnage; spilled concrete, sand and gravel.
- M. Provide top soil fill for lawn grass areas.
- N. Remove all soil ruined during construction by items which prevent the growth of healthy grass.
- O. If masonry mortar or concrete cementitious materials are provided, entirely remove all bricks, masonry, doors and door frames, store front materials, windows and window frames, and other materials and equipment soiled and damaged with cementitious materials which cannot be cleaned to the satisfaction of the Owner and Architect.
- P. During final grading of the site, remove all pieces of concrete, gravel, construction debris, and tree roots as final grading Work progresses.
- Q. After Substantial Completion, after one (1) or several rain storms, when some of the soil is washed away from construction debris which was left behind, (such as gravel, rocks, pieces of concrete, tree roots, and other construction materials, which can become dangerous missiles around children when hit with the Owner's lawn mower), entirely remove all of the exposed construction debris.

- END -

## SECTION 01720

### PROJECT RECORD DOCUMENTS

#### PART 1 - GENERAL

##### 1.01 GENERAL REQUIREMENTS

The provisions of Section 01810 and all of the Contract Documents are hereby made a part of this Section.

##### 1.02 RECORD DRAWINGS AND SPECIFICATIONS

A. Immediately after signing the Contract and before any Work is executed, the Contractor shall set aside one complete, bound, unmarked set of prints of Drawings and Specifications for the sole purpose of gathering information for Project Record Documents.

B. Mark these documents with the title "PROJECT RECORD DOCUMENTS" on both the sets of Drawings and Specifications.

C. This set of documents shall be secured under lock and key at the jobsite and shall be available for review by the Architect and Owner at all times.

D. Record Documents shall not be used for construction purposes, nor allowed to get torn, nor faded in the sun.

E. Marking devices for Record Documents shall be ball point pen, felt marking pen or other instruments each of a different color for architectural, structural, mechanical and electrical portions of Work.

F. Record, ("Mark-up"), all Addenda items on pages of the Specifications and on sheets of Drawings, all Change Orders, (if any), and all minor changes, (if any), which deviate from the original Architectural, Structural, Mechanical and Electrical Documents.

G. Prior to Substantial Completion Inspection, provide said completed set of Project Record Documents for the Architect to give to the Owner.

H. Provide Record Documents submitted to the Architect with a dated letter or dated letter of transmittal for same.

I. If absolutely no changes occurred during the Project, deliver the Record Documents with the letter of transmittal indicating "No Changes", and signed by the Contractor.

J. If the Project Record Documents were lost, borrowed, stolen, damaged, faded, soiled, or not in good, bound condition, pay for a new copy of the original Drawings and Specification, plus postage and handling, and pay for the services of a draftsman to record all changes on the Project

Record Documents and deliver same to the Architect with the above specified transmittal letter.

- END -

## SECTION 01810

### TECHNICAL SECTION REQUIREMENTS

#### PART 1 - GENERAL

##### 1.01 GENERAL REQUIREMENTS

A. The provisions of all of the Contract Documents are hereby made a part of this Section.

B. No asbestos containing materials shall be allowed to be provided for this Project, and no asbestos containing materials shall be allowed to be delivered to this Project.

C. If at any time, any asbestos containing materials or equipment is detected on the Project site, which has been brought on site by the Contractor or his Subcontractors, it shall be removed by Louisiana EPA certified asbestos removers at the Contractor's expense.

##### 1.02 SCOPE

A. This Section includes Technical Section Requirements, complete.

B. All portions of this Section apply to all Sections of the Specifications, Division 1 through 16, Drawings, Addenda, Change Orders, and all Contract Documents the same as though written out in full in each and all Sections of the Contract Documents.

##### 1.03 SPECIFIC DETAILED REQUIREMENTS

A. All references to standards (such as ASTM - American Society for Testing and Materials and all other standards specified), where the date is or is not specified, shall mean the latest edition of such standards published prior to the date of the specifications, in accordance with the abbreviation referred to in the Technical Sections.

B. Where such a reference is made, the applicable standard is hereby made a part of the Specification which refers to it to the same extent as if written out in that Section in full.

##### C. Coordination of Work

1. Work, materials, and equipment in each and all Sections of the Specifications shall be coordinated with Work in each and all other Sections of the Contract Documents.

2. Refer also to Section 01050 Project Coordination for coordination of Work.

3. Insure that Mechanical and Electrical subcontractors receive copies, study, and adhere to all requirements of Section 01050 Project Coordination.
4. Provide all Work, materials, and equipment to provide a complete, functional Project.
5. Insure that electrical rough-in conductors with circuit protection are provided to match voltage and amp ratings of material and equipment provided.
6. Insure that gas, water, and other utilities are provided in properly sized supply and drain pipes with properly sized fittings to match materials and equipment provided.

#### D. Delivering and Storing

1. All packaged materials and equipment shall be delivered to the site in the manufacturer's or suppliers' original, unopened, tagged and labeled containers.
2. Unlabeled, damaged or partially opened containers shall be rejected and removed from the job site.
3. All materials and equipment shall be stored and handled to prevent damage to same and to Work in place.
4. All surfaces of all materials and equipment shall be protected during storing and handling.
5. Provide elevated temporary skids to store and handle materials and equipment which would be adversely affected by dirt, dust, and moisture.
6. Provide watertight and dust-proof covers to protect materials and equipment which would be adversely affected by dirt, dust, and moisture.
7. Delivering and storage of materials and equipment shall be the responsibility of the Contractor.
8. Handle and store all materials and equipment in strict accordance with the manufacturer's instructions and recommendations to prevent damage to same.
9. Provide space for storage of materials and equipment to insure that floors on which same is stored are not overloaded.
10. All materials and material shall be delivered, unloaded, protected, covered, and stored in strict accordance with material and equipment manufacturer's instructions and recommendations.

11. All materials and equipment damaged in any way during delivery, unloading, and storage of same shall be replaced by the Contractor.

#### E. Environmental Requirements

1. Maintain all temperatures and moisture conditions at the temperature and humidity instructed and recommended by the manufacturers before, during and after installing materials and equipment.

2. Provide all temporary heat, air conditioning, ventilation, and humidity controls to meet all environmental requirements for all materials and equipment.

#### F. Submittals

1. Submit Shop Drawings, Product Data, and Samples of materials and equipment in accordance with Section 01340, Contractor Shop drawings, Product Data, and Samples.

2. Refer also to other individual Sections of the Specifications for requirements for submitting Shop Drawings, Product Data, and Samples.

3. The Architect reserves the right to request and receive Shop Drawings, Product Data and Samples of all materials and equipment specified and indicated on the Drawings.

#### G. Record Documents:

1. Provide Record Drawings and Specifications by marking up a set of the Contract Documents, indicating locations of all minor and major changes in the Work, and specific re-routing of Work, and submit same to the Architect prior to Substantial Completion.

2. Refer also to Section 01720, Project Record Documents and as specified in other Sections of the Specifications.

#### H. General Conditions:

Refer to the General Conditions of the Contract for Construction, AIA Document A 201-1997 and the Supplementary Conditions for additional general and specific requirements.

#### I. Bidding:

Refer to the Advertisement for Bids, Instructions to Bidders, and the Bid Form for general and specific requirements.

#### J. Compliance:

1. All Work shall be provided in strict accordance with ADAAG, NFPA 101, NFPA 70, OSHA, DEQ, EPA, and all Federal, State, Parish, City, and local codes, laws, and ordinances.

2. All Work shall be provided in strict accordance with the 2006 International Building Code already adopted by the Parish of Ascension, and the Latest NFPA 101 and all other NFPA manuals adopted by the Louisiana State Fire Marshal.

3. Disposal of all materials and equipment shall be provided in strict accordance with OSHA, DEQ, EPA, and all Federal, State, Parish, City, and all local laws and ordinances.

#### K. Warranties

1. All warranties shall begin on the date of Substantial Completion, or Owner occupancy of a portion of the building, as opposed to when materials and equipment is delivered on site.

2. If material and equipment manufacturers and suppliers do not begin their warranties on the specified date of Substantial Completion, and will only begin their warranties on a date prior to Substantial Completion, remove their materials and equipment from the Project and provide new other materials and equipment with warranties beginning on the date of Substantial Completion as specified.

3. If only portions of the Project are occupied by the Owner, warranties on only those portions of the occupied building shall begin on that date of occupancy; however, the remainder of the Project warranties for the remaining portion of the building not occupied by the Owner shall begin on the date of Substantial Completion of the remaining portion of the Project, or Owner occupancy of the remaining portion of the building.

4. Manufacturer's warranties and Contractor warranties for all materials and for all labor for this Project shall not include mandatory arbitration. Refer to the Supplementary Conditions whereby arbitration is not to be included for this Project.

5. Settlements of claims through any type of arbitration is not allowed by the Owners in any way for this Project and the Membrane Roof and Metal Roof Manufacturer's Twenty (20) Year NDL Warranty shall not have a binding clause stating all claims shall be settled in a location and in a court outside of Ascension Parish.

6. If any claim(s) are made by the Owner, by any material installers, the materials manufacturers, or by any other party, associated or not associated with this Project, any and all such claims shall be settled through the Ascension Parish Judicial System, in Ascension Parish, where this Project is located.

## PART 2 - PRODUCTS

### 2.01 MANUFACTURERS

#### A. Manufacturers:

1. In every Section of the Specifications where manufacturers are specified, items shall be provided by said manufacturers or from a prior approved substitute specified by Addendum.
2. Items specified herein, and in every Section of the Specifications, by specific manufacturers are used only to denote the quality standard of product desired and that they do not restrict bidders to the specific brand, make, manufacturer, or specification named; and that they are used only to set forth and convey to prospective bidders the general style, type, character, and quality of products desired; and that equivalent products may be acceptable.
3. It shall be the responsibility of the professionally employed Architect or Engineer, or Interior Designer, to determine what is considered an equivalent product, meeting also Owner approval, on any and all Projects in which they have been legally employed to perform professional services.
4. Other manufactures specified in said Sections of Specifications, or other prior approved substitutes may be provided if they meet all requirements specified herein and requirements in all Sections of the Specifications and are approved substitutes by the Architect, Engineer, or Interior Designer.

### 2.02 MATERIAL AND EQUIPMENT REQUIREMENTS

- A. All materials and equipment specified and indicated on the Drawings, unless specifically excluded herein, shall be new materials bearing manufacturers, suppliers, or vendors brands and trade names.
- B. Miscellaneous associated materials, equipment and accessories, adhesives and fasteners used in conjunction with specified materials and equipment shall be of highest quality as recommended by the manufacturers of materials and equipment specified.
- C. Miscellaneous associated materials, equipment and accessories, adhesives and fasteners used in conjunction with specified materials and equipment shall all be manufactured by the same specified manufacturer, or shall be approved in writing by the specified material and equipment manufacturer.
- D. All materials and equipment provided, shall meet or exceed all requirements specified.
- E. Refer to the Instructions to Bidders for the Architect's prior review required for substitutions of manufacturers, materials and equipment, prior to the bid opening.

F. Do not provide materials and equipment which are not indicated or specified, or materials and equipment which were not indicated or specified by written Addendum, prior to the bid opening date.

G. Entirely remove all materials and equipment from this Project which were not indicated on the Drawings or specified in the Specifications; or, which were not indicated or specified by written Addendum; or, which were not previously reviewed by the Owner and Architect.

### PART 3 - EXECUTION

#### 3.01 EXAMINING

A. Before materials and equipment specified are installed, all surfaces that are to receive materials and equipment shall be thoroughly inspected prior to installation.

B. Check moisture conditions of materials to be installed and moisture contents of surface on which materials are to be placed.

C. Correct all unfavorable conditions.

D. Prior to beginning Work, check all field dimensions and "roughing-in".

E. Do not begin installation of materials and equipment until all unsatisfactory conditions have been corrected.

F. Proceeding with installation will be construed as evidence of acceptance of conditions under which Work will be done.

G. Materials installed on surfaces which were not properly prepared or corrected prior to installation shall be removed and reinstalled at no additional cost to the Owner.

#### 3.02 PROTECTING

A. Handle all materials and equipment to avoid damage of same and to avoid damage to Work in place.

B. Protect adjacent surfaces from damage and soiling.

C. Protect materials and equipment during painting, calking, and other Work which could adversely damage same.

D. Provide dust-proof and moisture proof protection for materials and equipment stored and installed in strict accordance with manufacturer's instructions and recommendations.

E. Provide barricades to avoid traffic on newly installed materials and equipment for the amount of time required by manufacturer's instructions and recommendations.

F. Do not remove manufacturer's protective coatings on surfaces of materials and equipment until immediately prior to final inspection.

G. Provide protective coatings on materials which may get damaged prior to final inspection.

### 3.03 EXACT DIMENSIONS

A. Secure Shop Drawings and Product Data and Samples of all materials and equipment which affect exact dimensions of related materials and equipment prior to ordering and fitting related materials and equipment.

B. All dimensions indicated on Shop Drawings and manufacturer's literature shall be verified by the Contractor as actual field dimensions prior to ordering and fitting materials and equipment.

C. Errors or misunderstood information on Shop Drawings, Product Data, not detected by the Architect, or his consulting Engineers, shall not change the requirements of providing Work as specified and as indicated on the Contract Documents.

### 3.04 INSTALLING

A. Install all materials and equipment indicated on the Drawings and specified in strict accordance with the written manufacturers' instructions and recommendations.

B. Installation of materials and equipment shall meet requirements of all standards specified.

C. Surfaces which require preparation shall be prepared in strict accordance with manufacturer's instructions and recommendations.

D. Unless otherwise indicated on the Drawings of specified, all materials shall be installed level, plumb, straight, and true to line.

E. Install all materials specified at locations and in quantities indicated on the Drawings and as specified or in cases where exact locations are not indicated, install as directed by the Architect.

F. Where equipment and operable assemblies are specified, installing shall include assembling, setting in place, leveling, calibration, testing and adjusting in addition to all requirements specified.

G. Provide experienced, skilled craftsmen, to neatly and correctly provide all Work.

H. Remove and replace all materials and equipment not provided in a manner to the satisfaction of the Owner, Consulting Engineers, and Architect.

### 3.05 TESTING, ADJUSTING AND DEMONSTRATION

A. All moving parts of materials and equipment shall be properly lubricated in strict accordance with manufacturer's instructions and recommendations to insure smooth, quiet operation.

B. Test all materials and equipment for proper movement and operation prior to demonstrations.

C. Correct all deficiencies and adjust all materials and equipment to insure proper movement and operation for the purpose for which same was designed in strict accordance with manufacturer's instructions and recommendations.

D. Prior to receiving Substantial Completion, on the date and time designated, have manufacturer's representatives demonstrate maintenance and operation of equipment and materials to the Owner's operating personnel.

### 3.06 PENETRATIONS

A. In all locations where Architectural, Structural, Mechanical and Electrical materials and equipment penetrate other materials, the Contractor shall cut and tightly fit these other materials around said penetrations and shall caulk same.

B. In areas where water-tightness is required, all penetrations shall be tested with full water nozzle pressure of hoses.

C. Correct all leaks.

D. In areas where Architectural, Structural, Mechanical and Electrical materials and equipment penetrate the roof and the roofing systems, said penetrations shall be prepared flashed, counter-flashed and provided in strict accordance with the National Roofing Associations Roofing Manual and details and the Architectural Sheet Metal Manual of Sheet Metal and Air Conditioning Contractors National Association.

E. In fire rated walls, ceilings, and assemblies, (If any are indicated or specified), all patching around penetrations shall be neatly and tightly fitted with U. L. and Louisiana Fire Marshal approved Fire-stopping materials and finished on the exposed surfaces to match adjacent finishes.

### 3.07 TOUCH-UP PAINTING AND RESTORING

- A. All touch up painting and preparation of surfaces shall meet or exceed all requirements of the Painting and Finishing Section.
- B. All restoring of finishes shall not be obvious as patch Work.
- C. All materials and equipment which are shipped with a prime coat or finish coat of paint and have been damaged shall be touched up with the same paint material as the original coat.
- D. Touch up paint shall not be obvious.
- E. All touch-up painting and restoring of scratched, marred and abraded finishes shall match adjacent finishes.
- F. Remove and replace materials and equipment which cannot be restored to match adjacent surfaces.

### 3.08 CLEANING

- A. Remove all soil, stain, adhesive materials, and extraneous materials caused by handling, storing, and installing materials and equipment.
- B. Remove all crating and packaging materials as Work progresses, and keep all working areas and site free from excess materials and debris.
- C. Remove all manufacturers' labels, protective coating, and adhesive materials for labels immediately prior to Final Inspection.
- D. Remove and replace items which have been damaged, discolored or defective and cannot be cleaned, and remove and replace items which have been damaged while cleaning same.
- E. Comply also with Section 01710, Cleaning, and cleaning requirements specified elsewhere.

### 3.09 CORRECTIVE WORK

- A. Remove and replace all materials, equipment, items, and accessories which have been chipped, scratched, bent, warped, cut, nicked, dented, burnt, stained, allowed to rust, or which have been damaged in any way.
- B. Remove and replace all materials, equipment, items, and accessories which do not fit properly, or have been repaired, and it is obvious that they have been repaired, and the final product looks like patch Work.
- C. Remove and replace all materials, equipment, items, and accessories which were incorrectly prepared, incorrectly provided,

and incorrectly installed, and later found not to be in accordance with the Contract Documents.

D. Remove and replace all materials, equipment, items, and accessories which were not provided and installed in strict accordance with the Contract Documents.

E. At any time during the progress of the Work, or after all the Work or a part of the Work is completed, if the manufacturer refuses to provide the warranties specified, remove and replace all materials, equipment, items, and accessories and replace same with new materials.

F. If a manufacturer cannot provide the specified and indicated materials, equipment, and warranties in accordance with the Contract Documents, select another manufacturer that can provide materials, equipment, and warranties in accordance with the Contract Documents at no additional cost to the Owner.

- END -

## SECTION 02110

### DEMOLITION, CUTTING & PATCHING

#### PART 1 - GENERAL

##### 1.01 GENERAL REQUIREMENTS

A. The provisions of all of the Contract Documents are hereby made a part of this Section.

B. The requirements of Section 01810 entitled Technical Section Requirements apply to this Section the same as though herein written out in full.

C. Provide temporary substantial barricades and protective barriers to provide safety for the public, library customers, Owner's, and the Contractor's working forces during demolition, cutting, and patching Work.

##### 1.02 SPECIFIC REQUIREMENTS

A. Prior to digging on site, call proper authorities to mark all underground utilities on site.

B. Refer also to Mechanical and Electrical Documents for areas where demolition Work, cutting, and patching, of materials and equipment is required; where removal and replacing of existing materials and equipment is required; and where replacing damaged existing materials and equipment with new materials and equipment shall be required, all of which shall include but shall not be limited to:

1. Providing below grade trenches, back-filling, compacting, and re-surfacing; and,

2. Neatly cutting and providing openings in existing interior partitions and existing exterior masonry walls, (including but not limited to providing new steel lintels indicated in the structural documents), and patching openings in existing interior partitions and existing exterior walls with new materials matching adjacent materials.

##### 1.03 STANDARDS

Meet requirements and recommendations of the applicable portions of the latest editions of Standards listed below:

1. National Fire Protection Association (NFPA 101)
2. International Building Code, (IBC)
3. Louisiana Department of Environmental Quality (LA - DEQ)
4. Asbestos Hazard Emergency Response Act (AHERA)

5. National Electrical Code (NEC-NFPA 70)
6. International Building Code (IBC)
7. National Electrical Code (NEC)
8. Standard for Installation of Sprinkler Systems (NFPA 13)
9. Local Codes and Ordinances
10. ADA, Latest Revisions

#### 1.04 COORDINATING DEMOLITION WORK, CUTTING AND PATCHING

A. The Owner will occupy the existing library building until the newly added east wing of the library and the newly added west wing of the library is Substantially Completed, and has passed the State Fire Marshal's Inspection for occupancy.

B. Cooperate providing demolition Work, cutting and patching with the Owner's schedule so as not to interrupt the operating function of the Owner's library.

C. Be prepared to provide some interior and exterior Work either before or after normal library hours to avoid closing or shutting down the Owner's library, including but not limited to maintaining the parking lot and drives accessible to the public.

D. Disconnecting existing and new utilities, shutting down existing and new utilities, and temporary existing and new utility interruptions shall be performed after library hours of operation, where this library normal working hours are 8:30 a.m. until 5:30 p.m. on Mondays, Wednesdays and Fridays; 8:30 a.m. until 8:00 p.m. on Tuesdays and Thursdays; and 8:30 a.m. until 12:30 p.m. on Saturdays.

E. Disconnecting existing and new utilities, shutting down existing and new utilities, and temporary existing and new utility interruptions shall be coordinated with the Owner such that electricity, water, gas, telephone, internet, and heat and air-conditioning shall remain functional and operational for the remaining parts of the library building during the Owner's above specified normal working hours.

F. The Contractor's Bid shall include providing overtime labor to provide said utility Work on Saturdays, Sundays, and Holidays, if necessary, to coordinate Work and to avoid shutting off the Owner's utilities as specified herein.

G. Insure that all Subcontractors read and study Specification Section 01050, Project Coordination, and coordinate all Demolition Work, cutting and patching Work as specified in Section 01050, Project Coordination.

H. Provide temporary leak proof roof coverings and temporary leak proof wall coverings required to repel rain water leaks during demolition, cutting & patching and during providing new construction Work.

#### 1.05 TEMPORARY SUPPORTS

A. During required removal of existing materials and equipment, provide temporary structural supports to avoid damage to existing roofs, ceilings, walls, partitions, masonry, and all existing materials and equipment where necessary and where required.

B. At different phases of demolition and construction, carefully remove parts of the existing roof, ceilings, walls, partitions, masonry, and all existing materials and equipment where necessary and where required, in small individual pieces as opposed to knocking down entire large areas of materials and equipment in one large piece.

C. During demolition, cutting, and patching, and construction Work, protect all existing material and equipment not required to be demolished, removed, or relocated; and replace all existing damaged material and equipment with new materials and equipment which were damaged during demolition, cutting and patching, and construction Work.

#### 1.06 DEMOLITION CUTTING AND PATCHING PROCEDURES

A. Refer to Drawings, Specifications and all Contract Documents for determining which interior and exterior existing materials and equipment are indicated and specified to be demolished, cut, patched, and removed from the site.

B. Prior to beginning demolition Work, cutting and patching, provide protective materials to protect all existing doors, windows, opening frames and casings, blinds, glass, hardware, finished ceilings, trim, walls, wainscot, bases, floors, and other similar existing finish materials and equipment prior to, during, and after demolition and construction; and patch, repair, and remove and replace all damaged materials and equipment with new matching materials and equipment.

C. Provide temporary dust partitions specified herein prior to beginning demolition Work, cutting and patching, or construction Work, where said Work may deposit dust in any parts of the Owner occupied portion of the building or in any area(s) of the existing building where no Work is scheduled.

D. During demolition Work, cutting and patching, all cutting shall be neatly executed with power saws as opposed to using axes, mauls, hatchets, large hammers, & other rough demolition tools which may damage adjacent materials, equipment and areas.

E. In all existing areas where parts of the existing building have to be demolished or removed, neatly clean, sweep, and vacuum these areas daily to avoid build-up of debris, thrash, demolished materials, and dust.

F. Refer also to Section 01510, Temporary Requirements

G. Refer to Section 01710, Cleaning for additional requirements.

## PART 2 - MATERIALS

### 2.01 EXISTING MATERIAL AND EQUIPMENT OWNERSHIP

A. All existing materials and equipment on the Project site are the property of the Owner as opposed to the property of the Contractor.

B. All existing materials and equipment indicated or specified to be relocated, moved, or removed from the Project site, or demolished on the Project site, are the property of the Owner.

C. Prior to removing existing materials and equipment from the Project site, verify first with the Owner:

1. Which existing materials and equipment the Owner decides to keep; hence, store same for the Owner on the Owner's property in the general vicinity of the Project site; and,

2. Which existing materials and equipment the Owner decides not to keep; hence, remove same from the site and transport and dispose of same at a legal, DEQ approved dump site location.

### 2.02 PATCHING EXISTING MATERIALS AND EQUIPMENT

A. Where existing materials and equipment were removed, carefully and neatly patch adjacent surfaces of material and equipment in a neat workmanlike manner.

B. Where existing materials and equipment are specified or indicated to be demolished, removed, or relocated, after removal, provide new patching materials on adjacent existing surfaces and areas to match existing, adjacent materials and equipment.

C. All voids between new materials and equipment and existing materials and equipment shall be filled with patching materials and shall be sanded, finished, and painted with stained and varnish or opaque paint to match existing adjacent materials and equipment.

D. Neatly patch all surfaces in a workmanlike manner with skilled craftsmen of that particular trade, with matching colors, textures, and profiles such that new patches blend in with adjacent existing materials and equipment, and do not appear as obvious patch Work.

E. After providing patch Work, neatly seal all joints between new and existing materials and between new and existing equipment with sealant specified in Section 07900, Sealants, and with fireproofing

sealant where fire wall and ceilings were penetrated in accordance with Section 07250, Fire-stopping.

F. In accordance with requirements specified in Section 09900, Painting, provide touch-up painting on all existing surfaces where walls, ceilings, or other surfaces were damaged during demolition, cutting, patching, and new construction Work.

G. Provide new interior and new exterior finished materials for this Project where existing interior and exterior finish surfaces were damaged during demolition, cutting, patching, and new construction Work.

### PART 3 - EXECUTION

#### 3.01 REMOVING MATERIALS AND EQUIPMENT, DEMOLITION, CUTTING AND PATCHING

A. Neatly cut existing concrete paving in straight lines, with a diamond blade saw, where paving materials are indicated to be removed.

B. Refer to all Architectural, Structural, HVAC, Mechanical and Electrical Drawings and Specifications and Contract Documents for demolition and removal of materials and equipment.

C. Carefully and neatly patch all areas and finish surfaces after materials and equipment has been cut, demolished, and removed.

D. Where existing materials and equipment are removed, neatly patch all surfaces after renovation.

E. If any existing materials and equipment are damaged, remove and replace all damaged existing materials and equipment and replace with new matching materials and equipment.

#### 3.02 DUST AND DEBRIS CONTROL

A. In the areas and adjacent to the areas where demolition Work cutting and patching is being performed, sweep, vacuum, and clean said areas a minimum of once a day, or more often, (if required), to avoid excessive dusty conditions.

B. Provide canvas protective floor covering or other floor coverings in demolition cutting and patching areas.

#### 3.03 DUST AND SECURITY PARTITIONS

A. Provide full height, full width, dust partitions, with minimum 36" wide x 6'- 8" hinged, pre-hung hollow core doors in wood frames, with closers or spring hinges, between areas where demolition Work is being provided and areas where demolition Work is not being provided.

B. Thoroughly seal all joints and penetrations in dust partitions, and provide weather-stripping on all doors to prevent dust from getting into existing adjacent areas.

C. Provide sealed, hinged doors through dust partitions, to comply with NFPA-101, Life Safety Code, i.e., opening in the direction of travel, and with latch sets where occupants can exit without the use of a key.

D. Maintain all dust partitions for the duration of the Work in particular sections of the Project.

- End -

## SECTION 02200

### EARTHWORK

#### PART 1 - GENERAL

##### 1.01 GENERAL REQUIREMENTS

A. The provisions of all of the Contract Documents are hereby made a part of this Section.

B. The requirements of Section 01810 entitled Technical Section Requirements apply to this Section the same as though herein written out in full.

##### 1.02 WORK INCLUDED

A. Removal of existing trees, stumps, grass, shrubs, drainage pipes and structures, etc. within the limits of the Work, or designated.

B. Excavation, filling, and backfilling. Refer to the Drawings for Earthwork construction and additional requirements.

C. Preparation of subgrades for new building slabs, concrete walks, and pavements.

D. Installation of compacted fill as required at buildings, concrete walkways, pavements, and at site grades.

E. Installation of limestone under vehicular concrete drives, parking areas, and pavement, (if any limestone is indicated to be provided on the Drawings); and installation of sand cushion under pedestrian concrete walkways, sidewalks, and pavements.

F. Installation of polyethylene barrier (visqueen), under building slabs, vehicular concrete drives, parking areas, pavements; and installation of polyethylene barrier (visqueen) under pedestrian concrete walkways, sidewalks, and pavements.

G. Installation of specified Capillary Barrier Fill course under building slabs.

H. Backfilling of trenches for Sitework storm drainage systems. Electrical and mechanical trenching and structural backfilling shall also be the responsibility of the Contractor.

I. Provide rough and finish grading of the site to the grades indicated by the Sitework Drawings.

##### 1.03 QUALITY ASSURANCE:

A. Codes and Standards: Perform earthwork Work in compliance with applicable requirements of governing authorities having jurisdiction and the International Building Code, (IBC).

B. Testing & Inspection Service: An independent testing laboratory approved by the Architect and Owner shall be retained and paid by the Owner to perform soil testing and inspection services for quality control testing during earthwork operations. The Contractor shall give full cooperation to the Owner's testing laboratory personnel in the performance of their Work, and shall notify them sufficiently in advance of need to allow them to man the job when required.

#### 1.04 SUBMITTALS:

A. Test Reports - Earthwork: Submit the following reports directly to Architect from the testing services, with copy to Contractor, Owner, Architect, and Structural Engineer:

1. Test reports on borrow material, comparing it with Specification requirements, and specifically reporting whether it meets or does not meet those specific requirements.
2. Optimum moisture-maximum density curves for borrow fill and existing subgrade material.
3. Field density test reports, comparing results with Specification requirements and specifically reporting whether it or does not meet those specific requirements.
4. Field soil classification (ASTM D2487) and Atterberg Limits test reports, comparing results with Specification requirements and specifically reporting whether it meets or does not meet those specific requirements.

#### 1.05 JOB CONDITIONS:

A. Site Information: "Geotechnical Report, Galvez Branch Library Additions, 40300 Highway 42, Prairieville, Louisiana," (38 pages), was prepared for this Project by C. H. Fenstermaker & Associates, LLC, 455 North Boulevard, Suite 601, Baton Rouge, Louisiana 70802, dated May 2014, with an Appendix which includes a former 1989 soil report. The report of that investigation is available for inspection by interested parties at the offices of the Architect and the Owner. Data on subsurface conditions is not intended as representation or warranty of accuracy or continuity between soil borings. It is expressly understood that Owner will not be responsible for interpretations or conclusions drawn therefrom by the Contractor. The data is made available for convenience of the Contractor.

B. Existing Utilities: Locate existing underground utilities in area of Work. If utilities are to remain in place, provide adequate means of protection during earthwork. Should uncharted, or incorrectly charted, piping or other utilities be encountered during excavation, consult Architect immediately for directions. Cooperate with the Owner and utility companies in keeping respective services and facilities in operation. Repair damaged utilities to satisfaction of the utility owner and Owner. Do not interrupt existing utilities serving facilities occupied and used

by Owner or by others, except when permitted in writing by Architect and then only after acceptable temporary utility services have been provided. Demolish and completely remove from site existing underground utilities indicated to be removed. Coordinate with utility companies for services shut-off if active.

C. Protection of Persons & Property: Barricade open excavations occurring as part of this Work and post with warning lights. Operate warning lights as recommended by authorities having jurisdiction. Protect structures, utilities, sidewalks, pavements, and other facilities from damage caused by settlement, lateral movement, undermining, washout and other hazards created by earthwork operations.

## PART 2 - PRODUCTS

### 2.01 MATERIALS:

A. Clay Borrow Fill: (For exterior site fill, pavement and walkway subgrade fill, and fill beneath the building up to the level of the top of grade beams): A clean, select, low plasticity, clay (CL), or clayey sand (SC); non-expansive; free of clay balls, rock or gravel larger than 2" in any dimension, debris, waste, frozen materials, vegetable and other deleterious matter. It shall have a Plasticity Index between 8 and 25, and a Liquid Limit less than 45. It shall meet the requirements of ASTM D2487 for classification as CL Material. All fill materials brought to the Project shall be approved by a representative of the Owner's approved independent testing laboratory as meeting the requirements of this specification.

B. Capillary Barrier Fill: (For 4 inch thick final layer of building slab fill over compacted earth subgrades): It shall be a clean, pit run pea gravel aggregate, containing no organic materials, generally conforming to ASTM C33, Size 7 (1/2 to No. 4, with less than 5% passing the No. 100 sieve).

C. Sand Borrow Fill: (For use as sand cushion fill beneath pedestrian exterior concrete walkways, sidewalks, and pavement in thicknesses indicated. The sand cushion shall be thoroughly moistened by spraying immediately prior to pavement slab placement): It shall be a clean, pit run sand, containing no organic materials, having less than 10% passing the No. 200 Sieve.

D. Limestone: (If any indicated on the Drawings, for use under exterior vehicular concrete drives, parking areas, and pavement slabs): Limestone shall be No. 610 limestone.

E. Dusting Limestone: For "dusting" above No. 610 limestone, (if any indicated on the Drawings, shall be fine powdered limestone material passing through the No. 40 sieve, placed and compacted such that the top of the above specified No. 610 limestone resembles cast-in-place concrete.

F. Thickness of Limestone, (If any indicated on the Drawings, for use under exterior vehicular concrete drives, parking areas, and pavement):

1. Under concrete paving and parking slabs indicated less than 6" thick, designated to be used as vehicular parking, and not drives, provide polyethylene (visqueen), on a minimum of 4" of compacted limestone, prior to placing concrete. Prior to placing polyethylene barrier (visqueen), provide the specified compacted Dusting Limestone, minimum 1" thick layer, on the top of the specified No. 610 limestone and roll until the top of the above specified No. 610 limestone has all open voids filled and resembles cast-in-place concrete, and the total thickness of limestone is 4" thick.

2. Under concrete paving and parking slabs indicated greater than 6" thick, designated to be used as vehicular drives, provide polyethylene (visqueen), on a minimum of 6" of compacted limestone, prior to placing concrete. Prior to placing polyethylene barrier (visqueen), provide the specified compacted Dusting Limestone, minimum 1" thick layer, on the top of the specified No. 610 limestone and roll until the top of the above specified No. 610 limestone has all open voids filled and resembles cast-in-place concrete, and the total thickness of limestone is 6" thick.

3. Thickness of Dusting Limestone and No. 610 limestone shall be rolled and shall be measured 4" and 6" after compaction.

G. Thickness of Sand Base, (For use under concrete pedestrian walkways, sidewalks, and pavement):

1. Under indicated concrete pedestrian walkways, sidewalks, and pavement, not designated to be used as vehicular parking and drives, provide polyethylene (visqueen), on a minimum of 1" wet specified sand prior to placing concrete.

2. Thickness of sand shall be measured after wetting and compaction.

H. Polyethylene Vapor Barrier, (Visqueen): Minimum six (6) mils thick.

I. Erosion Control Fabric: (If any indicated on the Drawings):

1. Erosion control fabric shall be undyed and unbleached woven jute yarn fiber as manufactured by Belton Industries, Belton, South Carolina, 1-800-845-8753, and (318) 938-7411; Dayton Burlap and Bag Company, or a prior approved substitution.

2. Fabric shall be Belton's "Geojute/Antiwash", minimum shear test of 0.45 pounds per square foot, minimum 14.7 ounces per square yard, in minimum fabric widths of 48", biodegradable to last approximately 1 to 2 years exposed to weather.

3. Fabric shall be capable of accepting grass seeding before or after installation of fabric, with 60% to 65% openings.

4. Pins for erosion control shall be steel pins provided by the fabric manufacturer.

5. Grass seeding, if installed, shall be furnished and installed by the Owner under a separate contract by others.

J. Erosion Control Hay: Regular, square edge, bales of hay used for winter animal feed.

### PART 3 - EXECUTION

#### 3.01 CLEARING AND STRIPPING:

A. Remove vegetation, debris, unsatisfactory soil materials, obstructions; existing pavements indicated to be removed, piping, drainage structures, slabs, and existing exterior pavements as shown on the Site Demolition Plans; and deleterious materials from ground surface prior to placement of fills. Stripping and removal shall be to a minimum depth of 3". Plow, strip, or break up sloped surfaces steeper than 1 vertical to 4 horizontal so that fill material will bond with existing surface. After stripping, proof roll the entire area beneath buildings and pavements with a sheepsfoot roller to detect soft spots in the subgrade. Do not proof roll nor attempt compaction during extended periods of inclement weather. Remove all soft and unsatisfactory material and fill the resulting excavations with borrow fill materials of the specified use purpose. When existing ground surface has a density less than that specified under "Compaction" for particular area classification, break up ground surface, pulverize, moisture condition to optimum moisture content, and compact to required depth and percentage of maximum density. Stripped materials shall be placed and graded to drain in areas of the site designated by the Architect. These areas will be outside the area of new building and pavement construction.

#### 3.02 FILL AND BACKFILL:

A. Fill - General: Place new fill materials only after stripping, proof-rolling, and elimination of soft spots in the subgrade as specified above. Place new fill materials at building pads and a minimum of 10 feet beyond the building perimeters prior to excavating grade beams and drilling foundation shafts, (if any indicated on the Drawings). Place specified soil material in layers to required subgrade elevations, compacted as specified, for each of the area classifications listed below:

1. Building slabs - Use Clay Borrow Fill material to within 4" of the bottom of slab elevation. Place in 9 inch maximum loose thickness layers. Compact each layer to 95% Standard Proctor Density and test for approval prior to proceeding with the subsequent layers. As the final 4 inch layer of fill immediately prior to the placement concrete slabs, use the specified Capillary Barrier Fill material and compact by the use of mechanical tamping equipment.

2. Concrete Pavements - Use Clay Borrow Fill material if and as required to achieve specified slab sand cushion and limestone subgrades. Compact the sand cushion by mechanical tamping and by thoroughly wetting by spraying with water immediately prior to placing the polyethylene vapor barrier and immediately prior to placing the concrete paving. The top layer of drive and parking pavement subgrades immediately below the polyethylene vapor barrier, (visqueen), shall be "dusted" limestone, (if indicated on the Drawings), in specified thicknesses. The top layer of soil subgrades under the specified sand cushion for pedestrian concrete walkways, sidewalks, and pavement and under the specified limestone vehicular concrete drives,

parking areas, and pavement, whether in fill or existing soil materials, shall be compacted to 95% Standard Proctor Density, (ASTM D698).

3. Sidewalks - Use Clay Borrow Fill material to bottom of specified sand cushion under pedestrian concrete walkways, sidewalks and pavement, compacted to 95% Standard Proctor Density. Compact the sand cushion by mechanical tamping and by thoroughly wetting by spraying with water immediately prior to placing the polyethylene vapor barrier (visqueen) and immediately prior to placing the concrete slabs.

4. General site fill outside of buildings - Use Clay Borrow Fill material to finish grades, compacted to 90% Standard Proctor Density.

B. Backfill - General: Backfill excavations with the same fill materials specified for the surrounding areas fills. Backfill in 9 inch maximum loose layers and compact to the density specified for the surrounding area fills or subgrade. Backfill excavations as promptly as work permits, but not until completion of the following:

1. Acceptance of construction below finish grade including, where applicable, dampproofing, waterproofing, and perimeter insulation.

2. Inspection, testing, approval, and recording locations of underground utilities.

3. Removal of concrete formwork.

### 3.03 COMPACTION:

A. General: Control soil compaction during construction to provide the specified percentages of maximum density as determined by ASTM D 698 (Standard Proctor Test). Compact the top 6" of existing sub-grades and each layer of backfill or fill material.

B. Moisture Control: Control soil moisture during compaction operations to within 3% of optimum moisture content for compaction. Where sub-grade or layer of soil material must be moisture conditioned before compaction, uniformly apply water to surface of sub-grade, or layer of soil material, to prevent free water appearing on surface during or subsequent to compaction operations. Remove and replace, or scarify and air dry, soil material that is too wet to permit compaction to specified density. Soil material that has been removed because it is too wet to permit compaction may be stockpiled or spread and allowed to dry.

C. Do not place backfill or fill material on surfaces that are muddy, frozen, or contain frost or ice. Place backfill and fill materials evenly adjacent to structures, to required elevations. Take care to prevent wedging action of backfill against structures by carrying material uniformly around structure to approximately same elevation in each lift.

D. The Contractor is cautioned that some of the existing near surface materials are silts and silty clays which may "pump" if worked by heavy equipment in wet conditions. If pumping of the subgrade occurs the contractor shall attempt to eliminate the condition by the addition of 5

to 8% lime or fly ash by weight to the existing materials; drying, mixing, and re-compacting. Optionally, the Contractor may bridge over the pumping materials by the placement of 12 inches of compacted sand over the subgrade.

### 3.04 EXCAVATION

A. Excavation consists of removal and disposal of material encountered when establishing required finish grade elevations.

B. Earth excavation includes removal and disposal of pavements and other obstructions visible on ground surface, underground structures and utilities indicated on the demolition plan or in data on subsurface conditions, and other materials encountered that are not classified as unauthorized excavation.

C. Unauthorized excavation consists of removal of materials beyond indicated subgrade elevations or dimensions without specific direction of Architect. Unauthorized excavation, as well as remedial work directed by Architect, shall be at Contractor's expense. Under footings, foundation bases, or retaining walls, fill unauthorized excavation by extending indicated bottom elevation of footing or base to excavation bottom, without altering required top elevation. Lean concrete fill may be used to bring elevations to proper position, when acceptable to Architect. Elsewhere, backfill and compact unauthorized excavations as specified for authorized excavations of same classification, unless otherwise directed by Architect.

D. Stability of Excavations: Slope sides of excavations to comply with local codes and ordinances having jurisdiction. Shore and brace where sloping is not possible because of space restrictions or stability of material excavated.

E. Shoring and Bracing: Provide materials for shoring and bracing, such as sheet piling, uprights, stringers and cross-braces, in good serviceable condition. Establish requirements for trench shoring and bracing to comply with local codes and authorities having jurisdiction. Maintain shoring and bracing in excavation regardless of time period excavations will be open. Carry down shoring and bracing as excavation progresses.

F. Dewatering: Prevent surface water and subsurface or ground water from flowing into excavations and from flooding project site and surrounding area. Do not allow water to accumulate in excavations. Remove water to prevent softening of foundation bottoms, undercutting footings, and soil changes detrimental to stability of subgrades and foundations. Provide and maintain pumps, well points, sumps, suction and discharge lines, and other dewatering system components necessary to convey water away from excavations. Convey water removed from excavations and rain water to collecting or run-off areas. Establish and maintain temporary drainage ditches and other diversions outside excavation limits for each structure. Do not use trench or grade beam excavations as temporary drainage ditches. If grade beam excavations fill with water, immediately dig drainage sumps as often as necessary and pump water out of the excavations.

G. Material Storage: Stockpile satisfactory excavated materials where directed, until required for backfill or fill. Place, grade, and shape

stockpiles for proper drainage. Locate and retain soil materials away from edge of excavations. Soils excavated from footing shafts and grade beams shall be removed to areas designated on site by the Architect. These materials shall be disced, pulverized, dried, and spread as directed by the Architect for general site fill. Dispose of excess unacceptable soil material and waste material as herein specified.

H. Excavation for Structures: Conform to elevations and dimensions shown within a tolerance of plus or minus 0.10', and extending a sufficient distance from footings and foundations to permit placing and removal of formwork, installation of services, other construction, and for inspection. In excavating for footings and foundations, take care not to disturb bottom of excavation. Excavate by hand to final grade just before concrete reinforcement is placed. Trim bottoms to required lines and grades to leave solid base to receive other work.

I. Excavation for Trenches: Dig trenches to the uniform width required for particular item to be installed, sufficiently wide to provide ample working room. Excavate trenches to depth indicated or required. Carry depth of trenches for piping to establish indicated flow lines and invert elevations. Beyond building perimeter, keep bottoms of trenches sufficiently below finish grade to avoid freeze-ups. Grade bottoms of trenches as indicated, notching under pipe bells to provide solid bearing for entire body of pipe. Do not backfill trenches until tests and inspections have been made and backfilling is authorized by Architect. Use mechanical tamping equipment to compact soil backfill, with special compactive effort on backfill up to the middle height of the pipe. Use care in backfilling to avoid damage or displacement of pipe systems.

### 3.05 SAND CUSHION COURSE FOR PAVEMENTS:

A. General: Upon completion of preparing the specified sub-bases in specified thicknesses, provide a sand cushion course of 1" thickness wetted and compacted under pedestrian concrete sidewalks, walkways, and pavement. It shall be fine graded and thoroughly moistened just prior to placing the polyethylene (visqueen) vapor barrier and just prior to placing the indicated and specified overlying reinforced concrete pavement slabs.

### 3.06 GRADING:

A. General: Uniformly grade areas within limits of grading under this section, including adjacent transition areas. Smooth finished surface within specified tolerances, compact with uniform levels or slopes between points where elevations are shown, or between such points and existing grades.

B. Grading Outside Building Lines: Fill and grade to the finished site elevations indicated. Grade areas adjacent to building lines to drain away from structures and to prevent ponding. Unless otherwise indicated, provide maximum slopes of 2" per foot and minimum slopes of 1/2" per foot when tapering filled areas down to existing earth grades.

C. Drainage Slopes: Slope all new finish grading to drain water toward drainage ditches, swales, and/or catch basins. Provide surfaces free from

irregular surface changes.

D. Additional Swales: Provide additional swale ditches to achieve drainage as necessary. Site areas which pond water to any degree will not be acceptable.

E. Grades at Edges of Concrete Sidewalks, Walkways, Drives, Parking Areas, and Pavement: Unless otherwise indicated, on edges of all concrete sidewalks, walkways, drives, parking areas and pavement, curbs, concrete pads, and other outdoor paving, provide compacted finish grading with the tops of all compacted finish grading 2" below the top edges of the adjacent concrete.

F. Grading Surface of Fill Under Building Slabs: Grade smooth and even, free of voids, compacted as specified, and to required elevation. Provide final grades within a tolerance of 1/2" when tested with a 10' straightedge.

G. Compaction: After grading, compact subgrade surfaces to the depth and percentage of maximum density for each area classification.

### 3.07 FIELD QUALITY CONTROL:

A. Earth Fill Materials Provided On Site: Prior to submitting Bids, it shall be the Contractor's responsibility to locate and approve earth fill material pits with sufficient quantities of specified earth fill material required for this Project. It shall be the Contractor's responsibility to insure that the Contractor's located and approved specified earth fill material is provided on the Project site.

B. General Quality Control Testing During Construction: Selection and retainage of the Owner's testing lab shall in no way relieve the Contractor of his responsibility to provide specified earth fill materials on site. The Contractor shall allow the Owner's testing lab personnel to inspect and approve sub-grades and fill layers on site before further construction Work is performed. The Owner's testing lab personnel will perform on site field density tests and on site soil classification tests in accordance with applicable ASTM testing methods.

C. Specific Field Density Tests: The Owner's testing lab personnel will make at least one (1) on site field density test of sub grade for every 2000 square feet of building slab; but in no case less than four (4) tests per area. In each compacted fill layer, make one (1) field density test for every 2000 square feet of overlaying slab; but in no case less than three (3) tests per area. If in opinion of Architect, based on Owner's testing laboratory reports, sub-grade or fills which have been placed are below specified density, provide additional compaction and testing at no additional expense to the Owner.

D. Specific Soil Classification Tests: The Owner's testing lab personnel shall make at least one (1) on site soil classification (ASTM D2487) and Atterberg Limits test for every 500 cubic yards of specified earth fill material brought on site, but in no case less than one (1) classification/test per lift.

E. Providing Unsuitable Earth Fill Material: If at any time, the Owner's testing lab personnel find any quantity of earth fill materials on the Project site which does not meet minimum Specification requirements, the Contractor:

1. Shall remove said unsuitable earth fill material from the Project site at no additional cost to the Owner; and/or,

2. The Contractor, only if allowed and approved by the Owner's testing lab, may provide, pay for, and add lab approved sufficient quantities of lime to the unsuitable earth materials to make it suitable, at no cost to the Owner; and,

3. The Contractor shall pay for all tests for determining the extent of the unsuitable earth fill material, and shall pay for all additional testing required to correct the unsuitable fill material.

### 3.08 MAINTENANCE:

A. Protection of Graded Areas: Protect newly graded areas from traffic and erosion. Keep free of trash and debris. Repair and reestablish grades in settled, eroded, and rutted areas to specified tolerances.

B. Reconditioning Compacted Areas: Where completed compacted areas are disturbed by subsequent construction operations or adverse weather, scarify surface, reshape, and compact to required density prior to further construction.

C. Neatly cut the grass on the entire site for the duration of the project, a minimum of 3 times monthly.

### 3.09 EROSION CONTROL FABRIC (If any indicated to be provided on the Drawings)

#### A. Locations:

1. Provide fabric 15 feet wide by 30 feet long in the two (2) areas at the discharge of both storm drain culverts to prevent erosion.

2. Provide a piece of fabric 36" wide by 48" long at the discharge of all steel covered concrete trench drains at sidewalks, and at all splash blocks at discharge of all down spouts and rain conductors to prevent erosion.

3. Provide an additional 100 square yards, (one roll), of fabric to be used for erosion control for other areas on the site where necessary.

#### B. Installing Fabric:

1. Prepare compacted finish grading by raking the areas free of clods and debris.

2. Provide and unroll rolls of fabric in the downhill direction and in the direction of water flow.

3. Install fabric by allowing fabric to lie naturally without wrinkles, and do not over-stretch fabric. Install in accordance with manufacturers' recommendations.

4. At tops of slopes, secure fabric at tops of slopes by toeing fabric under the soil a minimum of 6" deep and secure tops of fabric with staples 12" apart and cover with soil.

5. At bottoms of slopes, secure fabric at bottoms of slopes by toeing fabric under the soil a minimum of 6" deep where toe of slopes begins to get level and secure bottoms of fabric with staples 12" apart and cover with soil.

6. For side joints of two (2) pieces of fabric, neatly fold fabric back 4" forming a neat 4" hem. Begin adjacent roll of fabric sandwiched within the 4" hem, and provide staples 12" apart through the three (3) layers of fabric. Hem side ends of fabric, to in 6" and provide fabric pins in a similar manner.

7. Place all staples flush with the top of the ground. In the centers of fabric, provide staples 18" to 24" apart, to securely fasten fabric to ground, providing approximately 220 staples per 100 square yards.

#### 3.10 ADDITIONAL EROSION CONTROL

A. After finish grading site to elevations indicated, until grass grows, provide approximately 15 bales of hay, (divided if necessary), to control rapidly flowing water causing erosion in swales as additional erosion control.

B. Fill eroded ruts with additional compacted fill to maintain smooth earth surfaces.

#### 3.11 DISPOSAL OF EXCESS AND WASTE MATERIALS:

A. Remove waste materials, including unacceptable excavated material, trash and debris, and dispose of it legally off Owner's property.

-END-

## SECTION 02280

### TERMITE CONTROL

#### PART 1 - GENERAL

##### 1.01 GENERAL REQUIREMENTS

A. The provisions of all of the Contract Documents are hereby made a part of this Section.

B. The requirements of Section 01810 entitled Technical Section Requirements apply to this Section the same as though herein written out in full.

C. The Pest Control Company currently hired by the Owners to treat this Existing Library Building will provide all Termite Control treatment installation and materials for this Project, all paid for by separate contract with the Owner.

D. The Pest Control Company currently providing termite treatment for the Owners, at this existing Galvez Library Building, on this proposed Project construction site, is: Steve's Pest Management, Louisiana Department of Agriculture License Number 00010087 who can be reached at 1-800-224-1586; cell phone no.:(225) 235-5734 with email address: [stevespest@cox.net](mailto:stevespest@cox.net)

E. The Contractor shall be responsible for contacting the Owner's Pest Control Company and coordinate with him the providing of Termite Control Treatment prior to placing concrete as specified below.

#### PART 2 - PRODUCTS

2.01 MATERIALS: All Termite Control Materials and the equipment to provide same will be provided by the Owner's Termite Treatment Company.

#### PART 3 - EXECUTION

##### 3.01 Coordinating Termite Treatment As Work Progresses

A. Termite treatment provided by the Owner's termite treatment company shall be coordinated to be provided on the Project Site when and where necessary:

1. Prior to installing any "Visqueen" vapor barrier over any new gravel provided under the new building slabs.

2. Prior to installing any "Visqueen" vapor barrier over the sand beds under new exterior concrete pavement on the perimeter of the new and existing building slabs, including, but not limited to new

exterior perimeter concrete sidewalks and new exterior perimeter concrete Mechanical Compressor Pads.

3. Prior to placing new concrete for interior and exterior concrete column support footings.

4. Prior to placing new concrete continuous grade beams.

5. Prior to placing any new concrete and prior to installing any "Visqueen" vapor barriers either over gravel or over sand beds under exterior pavement.

B. In order to be prepared with sufficient termite treatment materials and in order to be prepared with providing sufficient termite treatment equipment and personnel, when calling the Owner's termite treatment company, notify them with:

1. The number of square feet of under floor surface area to be treated; and,

2. The number of linear feet and square feet of under grade beam area to be treated.

C. The Contractor shall first call the Owner's Termite Treatment Company, (with an approximate number of square feet to be treated), a minimum of seven (7) days in advance of an anticipated, preliminary approximate date for scheduled termite treatment prior to placement of new concrete materials both inside and around the perimeter of the new and existing buildings.

D. Because of weather delays, construction delays, concrete delivery delays, and similar circumstances involving placement of concrete, the Contractor shall again coordinate and call the Owner's Termite Treatment Company, (with an approximate number of square feet to be treated), a minimum of twenty-four (24) hours in advance of his providing Termite Materials, prior to placement of new concrete or installing new "Visqueen" vapor barriers.

- END -

## SECTION 02830

### CHAIN LINK FENCES

#### PART 1 - GENERAL

##### 1.01 GENERAL REQUIREMENTS

A. The provisions of all of the Contract Documents are hereby made a part of this Section.

B. The requirements of Section 01810 entitled Technical Section Requirements apply to this Section the same as though herein written out in full.

##### 1.02 SCOPE OF WORK

A. Provide a level, finish graded earth surface for the proposed chain link fence where indicated on the Drawings and specified herein, whereby there shall be no finish grading depressions allowing ponding of rain water.

B. Remove plants, clear underbrush, scrape down high earth areas and compact same, provide compacted earth fill in low areas, and provide a smooth, level, straight, compacted earth path for the new & existing chain link fence specified herein.

##### 1.03 STANDARDS

Meet requirements and recommendations of the applicable portions of the latest editions of Standards listed below:

- A. American Society for Testing and Materials (ASTM)
- B. American Hot Dip Galvanizer's Association (AHDGA)
- C. Chain Link Fence Manufacturers Institute (CLFMI)
- D. American Fence Association (AFA)
- E. International Building Code (IBC)
- F. Ascension Parish and Local City Zoning Ordinances

##### 1.04 SUBMITTALS

A. Submit manufacturer's Product Data on all materials specified herein.

B. Submit Shop Drawings for all materials specified herein showing layout of fence.

##### 1.05 GENERAL CHAIN LINK FENCE REQUIREMENTS

A. Made in USA: All fence materials including but not limited to fabric, posts, rails, gates, wire, hardware, and fences accessories shall be manufactured in the United States of America, and shall meet

ASTM and CLFMI requirements, and shall match existing fence materials.

B. Remove, re-install, and provide new continuous chain link fence materials where indicated to provide a continuous chain link fence on the Owner's north, (rear) property line, and east property line.

C. If damaged during removal, existing chain link fabric materials and top rails shall not be re-installed; and shall however, be replaced with new matching chain link fabric and top rail materials.

D. For all relocated chain link fences, provide new fence posts in sizes to match existing posts.

D. Unless otherwise indicated or specified, heights of chain link fences shall match existing where indicated.

E. All new chain link fence, posts, and accessory materials shall meet ASTM requirements and CLFMI Standard Guide requirements.

## PART 2 - PRODUCTS

### 2.01 MATERIALS:

A. The Contractor has the option to very carefully trim and delicately remove plants and bushes where same are indicated to be removed from the existing chain link fence area and maintain the existing chain link fence, if it is not damaged during plant removal; or, roughly remove plants and just provide new matching chain link fence materials.

B. The Contractor has the option to very carefully and delicately remove and relocate the part of the existing chain link fence where indicated on the north, (rear) side of the Owner's property, if it is not damaged during removing and relocating of same; or, roughly remove part of the existing north chain link fence, where indicated to be removed, and just provide new matching chain link fence materials on that particular part of the north property line.

C. All posts for relocated chain link fabric shall be new matching posts, and all concrete for new fence posts shall meet or exceed all requirements of Section 03300 Cast-In-Place Concrete.

D. Concrete Filled Fence Post Holes:

1. Post Holes for Line Posts: Minimum 12" diameter holes and minimum 40" deep, maximum spacing 10' - 0" O. C.

2. Post Holes for All Other Posts: Minimum 16" diameter holes and minimum 50" deep for all for all corner, end, and pull posts.

3. Provide all new steel posts in concrete filled post holes allowing for 4" thick concrete at bottoms of post holes, below all steel posts. Tops of all posts shall be level and true to line.

4. Provide a 1" crown on tops of all concrete fill for posts to deflect rain water. Neatly tool 1" crown on tops of all concrete.

5. Provide round or square forms around perimeters of all posts holes, minimum of 3-1/2" deep to provide neat tops of concrete.

### PART 3 - EXECUTION

#### 3.01 INSTALLING

##### A. Leveling and Grading

1. Provide nylon string grade lines over areas where fences shall be provided, extending grade lines from all ends, all corners, and all changes in direction of fences.

2. Grade line string shall be level or uniformly sloping.

3. Provide finish grading to conform to string lines.

4. Remove existing high spots and provide compacted fill under string grade lines to insure that the bottom of the fence fabric is uniform in height, 3 - 1/2" maximum above uniformly sloping finish grade.

##### B. New Post Setting:

1. Prepare all relocated posts and post holes at depths indicated and specified to allow for the top of the perimeter of the concrete provided for posts to be 2" above the adjacent finish grading.

2. Set all new matching posts in concrete, as specified, with forms specified for top exposed portions of concrete.

3. Set all posts plumb, with tops true to line; space line posts a maximum of 10'- 0" O. C; provide corner posts at all inside and outside corners; and provide caps on all pipe posts.

4. Remove and replace all fence materials which do not meet requirements specified herein, or which are damaged in any way.

- END -

## SECTION 02832

### ALUMINUM FENCES AND GATES

#### PART 1 - GENERAL

##### 1.01 GENERAL REQUIREMENTS

A. The provisions of all of the Contract Documents are hereby made a part of this Section.

B. The requirements of Section 01810 entitled Technical Section Requirements apply to this Section the same as though herein written out in full.

##### 1.02 STANDARDS

Meet requirements and recommendations of the applicable portions of the latest editions of Standards listed below:

1. American Society for Testing and Materials (ASTM)
2. Architectural Aluminum Manufacturers Association (AAMA)
3. American Fence Association (AFA)

##### 1.03 COMPLIANCE

Aluminum fences and gates and finishes for same shall be provided in compliance with the following specific AAMA voluntary specifications and ASTM standards specified below:

- A. AAMA 2604 - Voluntary Specification, Performance Requirements and Test Procedures for High Performance Organic Coatings on Aluminum Extrusions and Panels.
- B. AAMA 2603 - Voluntary Specification, Performance Requirements and Test Procedures for Pigmented Organic Coatings on Aluminum Extrusions and Panels.
- C. ASTM B117 - Practice for Operating Salt Spray (Fog) Apparatus.
- D. ASTM D2247 - Standard Practice for Testing Water Resistance of Coatings in 100% Relative Humidity.
- E. ASTM B221 - Specification for Aluminum Alloy Extruded Bars, Shapes, and Tubes
- F. ASTM B85 - Standard Specification for Aluminum-Alloy Die Castings.

#### PART 2 - PRODUCTS

##### 2.01 MANUFACTURERS

A. Aluminum Fences and Gate Manufacturers:

1. Aluminum fences and gates shall be as manufactured by Delgard; Jerith; Boundary; or a prior approved substitute.

2. Items specified herein are by Jerith Manufacturing Co., Inc., 14400 McNulty Road, Philadelphia, PA 19154 (800) 344-2242, email: [sales@jerith.com](mailto:sales@jerith.com) , and are used only to denote the quality standard of product desired and that they do not restrict bidders to the specific brand, make, manufacturer, or specification named; and that they are used only to set forth and convey to prospective bidders the general style, type, character, and quality of products desired; and that equivalent products may be acceptable.

3. It shall be the responsibility of the professionally employed Architect or Engineer, or Interior Designer, to determine what is considered an equivalent product, meeting also Owner approval, on any and all Projects in which they have been legally employed to perform professional services.

4. Other manufactures specified above or below, or other prior approved substitutes may be provided if they meet all requirements specified herein and are substitutes approved by the Architect, Engineer, or Interior Designer.

2.02 MATERIALS

A. Types: All metal fences and gates shall be Heavy Duty Grade Types fences and gates, (as opposed to commercial or residential grade), Jerith Style #100 with staggered pickets, (Jerith design EP-2), with a fence height of five (5) feet above the concrete paving, in the color of dark bronze or black as selected by Owners and Architect.

B. Aluminum Extrusions, Fasteners, and Accessories:

1. All posts and rails used in the fence system shall be extruded from HS-35™ aluminum alloy having a minimum yield strength of 35,000 psi.

2. All pickets shall have a minimum yield strength of 25,000 psi, 6063-T5 and 6063-T52 Alloys. Pickets tested in accordance with ASTM B221 are not acceptable for any components.

3. All fasteners shall be stainless steel. Square drive screws shall be used to connect the pickets to the horizontal rails. Rail to post connections shall be made using self-drilling hex-head screws.

4. Aluminum sand and die castings shall be used for all non-removable, post caps, finials, and miscellaneous hardware. Die castings shall be made from Alloy A360.0 as per ASTM B85 for superior corrosion resistance. Alloy A380.0 is not acceptable.

5. Fence and Gate Minimum Member Sizes:

a. Pickets shall be minimum 1" square, minimum .062" thick, provided at 4" centers or 4" apart, and with staggered picket heights, with Jerith Design EP-2, to match existing aluminum fence on site, with all tops of pickets factory fabricated with gentle curves leading to rounded points, (as opposed to sharp spikes), and factory shaped to form metal arrow heads.

b. All three (3) horizontal rails shall be 1-5/8" square, in a modified "U" shape, minimum top wall .070" thick with side walls minimum 0.100" thick, with bottom rail 7-3/4" above bottoms of pickets, and two (2) top rails provided at 8" apart, with top of top rail provided at 8-3/4" below the tops of posts; bottoms of pickets shall be provided at approximately 2-1/2" above concrete slabs.

c. Standard line posts shall be 2-1/2" square, minimum 0.075" square, provided with maximum center spacing of 71-1/2", measured along the sloping grades of concrete paving, all provided with die cast aluminum non-removable post caps.

d. All corner posts and gate post shall be minimum 4" square, minimum 0.125" thick, (6" square if required to support 300 pounds on latch end of gates as specified below), all provided with die cast aluminum non-removable post caps.

e. Gates shall be braced with 45 degree aluminum rail bracing to support a minimum of 300 pounds on the latch side of the gate; gates shall be provided to allow for an actual 48" wide clear opening width between the opened gate and the gate post; and gates shall be provided with one (1) heavy duty industrial latch with eye for padlock per each gate leaf.

f. Below slabs, provide minimum 16" diameter gate post holes, minimum 32" deep, filled with minimum 3,000 psi concrete specified in Section 03300, Cast-In-Place Concrete.

2.03 Finish:

A. First provide an applied three (3) stage non-chrome pretreatment shall be applied where the first step shall be a chemical cleaning, followed by a water rinse; and the final stage shall be a dry-in-place activator which produces a uniform chemical conversion coating for superior adhesion.

B. Fence materials shall next be coated with FencCoat™, a Super-Durable TGIC polyester powder-coat finish system applied by Jerith Manufacturing Company, where the FencCoat finish shall have a cured film thickness of at least 2.0 mils; and any screw heads shall be

painted to match the color of the fence. (Note: Epoxy powder coatings, baked enamel or acrylic paint finishes are not acceptable.)

C. The final cured FencCoat finish shall meet or exceed AAMA 2604, which includes the following requirements:

1. Humidity resistance of 3,000 hours using ASTM D2247.
2. Salt-spray resistance of 3,000 hours using ASTM B117.
3. Outdoor weathering shall show no adhesion loss, checking or crazing, with only slight fade and chalk when exposed for 5 years in Florida facing south at a 45 degree angle.

D. Provide finishes which only meet AAMA 2603. Only meeting the previous version of AAMA 603 is not acceptable.

#### 2.04 FABRICATION

A. Provide a minimum of (3) specified horizontal rails, with pickets passing through holes punched in the top of the rails.

B. Provide specified pickets fastened to the rails using painted stainless steel screws, with screws provided on only the in-side of the fence, gate and rail, leaving the other side with a clean appearance. (Welding the pickets to the rails shall not be permitted.)

C. Provide specified square post extrusions with die cast non-removable post caps on all posts, spaced as specified, with pre-punched holes which allow the fence section rails to slide in.

D. Assembled aluminum fence sections shall be engineered and tested to support a 1,000 lb. vertical load at the midpoint of any horizontal rail.

E. Provide gates with minimum three (3) horizontal rails and a minimum of one (1) diagonal brace rail, with the three (3) horizontal gate rails at the same levels as that of the fence panels and with the diagonal brace rail extending at an angle between the top rail at the hinge stile to the bottom rail at the latch stile.

#### 2.05 WARRANTY

A. Provide a manufacturer's written Limited Lifetime Warranty against rust and defects in workmanship and materials, for the entire fence system with gates.

B. Provide separate or combined manufacturer's written Limited Lifetime Warranty on the manufacturer's FencCoat finish warranted not

to crack, chip, peel, or blister for the same Lifetime Warranty period.

### Part 3- Execution

#### 3.01 Fence

A. Verify that concrete compressor pad paved areas to receive fencing are completed to final grades and elevations.

B. Layout and install aluminum fence and gates in strict accordance with the manufacturer's instructions.

C. Provide post holes, fence line posts and gate posts in specified concrete footings at specified line post and gate post spacings.

D. Excavate post holes to specified and proper depth to suit local conditions for stability and support of the fence system without disturbing the underlying materials and excavate deeper as required for adequate support if encountering soft and loose soils.

E. Place concrete around posts and tamp concrete for consolidation while checking both horizontal and vertical alignment of posts, and making necessary alignment corrections before the concrete hardens.

F. Provide and insert specified notched horizontal rails in pre-punched holes in post and fasten in place.

#### 3.02 GATE INSTALLATION

A. Install gates to allow full opening without interference after concrete has hardened around gate posts.

B. Adjust hardware for smooth operation.

#### 3.03 ACCESSORIES

A. Provide and install post caps on all line posts, corner posts, and gate posts.

B. Provide gate hinges, specified pad lock type gate latches, and all other manufacturer's standard accessories for a complete aluminum fence and gate installation.

#### 3.04 PROTECTION AND CLEANING

A. Very carefully provide protection materials to protect all aluminum fence materials from acquiring splashes and drips of wet concrete.

B. Immediately wipe off and clean wet concrete from fence materials if necessary.

C. If the fence system was soiled with concrete and the fence material finish was damaged by trying to remove splashed on concrete materials, entirely remove the damaged fences and gates with damaged finishes and provide all new fences and gates.

D. Clean excess spilled concrete and concrete drippings immediately from slabs before concrete dries; or neatly grind off same with a side grinder afterwards if necessary.

E. Prior to substantial completion, clean the entire fence system with mild manufacturer's recommended household detergent and clean water.

- END -

## SECTION 02910

### UTILITY PROTECTION AND PERIMETER SILT FENCES

#### PART 1 - GENERAL

##### 1.01 GENERAL REQUIREMENTS

A. The provisions of all of the Contract Documents are hereby made a part of this Section.

B. The requirements of Section 01810 entitled Technical Section Requirements apply to this Section the same as though herein written out in full.

##### 1.02 UTILITY PROTECTION AND CAUTION

A. The Owner's survey and the Contract Documents do not indicate all underground utilities, or exact locations of underground utilities.

B. Some utilities were removed and relocated after preparation of the Owner's survey, and some new utilities were provided after preparation of the Owner's survey in preparation for the State's widening of LA Highway 42.

C. Call proper authorities to mark actual existing utilities on and off site, and protect all existing utilities from damage while providing demolition Work and construction Work.

D. Note that the Owners original electrical sign has been removed; some existing perimeter outdoor lighting has been removed; some existing exterior outdoor lighting is indicated to be removed; hence, there may be buried electrical power and lighting lines which are still dangerous and still connected to a power source which are required to be disconnected.

##### 1.03 SILT FENCES

A. Prior to providing silt fences, verify with the Louisiana Highway Department and the Parish of Ascension exactly where silt fences are required to be provided, especially in conjunction with coordinating Work with the widening of LA Highway 42.

B. For the required duration, when silt fences are required for this Project, provide and maintain all required silt fences.

#### PART 2 - PRODUCTS

##### 2.01 MATERIALS:

A. Black or Green Silt Fences: Provide minimum 30" high, UV stabilized geotextile fabric, meeting LADOTD, DEQ, and Corps of

Engineers requirements and specifications, and provided complete with silt fence manufacturer's wood or metal stakes and fasteners, and embedded in the soil below in a trench to meet LDOTD, DEQ, and Corps of Engineers and Ascension Parish requirements.

### PART 3 - EXECUTION

#### 3.01 SILT FENCE PERIMETER LOCATIONS

A. Provide approximately 1,341 linear feet of new perimeter silt fences between the proposed Project construction area and:

1. LA Highway 42, on the front side, (south side), approximately 358 linear feet; and,
2. The rear property side, (north side), approximately 443 linear feet; and,
3. The Autumn Leaves Drive property side, (west side), approximately 200 linear feet; and,
4. The east property side, approximately 340 linear feet.

B. Properly maintain all on site silt fences for the duration of the Project.

#### 3.02 INSTALLING SILT FENCES

A. Provide fences with the bottoms of the fencing materials following the contours of the site as opposed to leveling the ground directly under said fences.

B. Bury bottoms of silt fences and maintain silt fences per requirements of regulating authorities.

C. Provide fence posts spaced as recommended by the particular fence manufacturer, and at spacing strong enough to maintain fences in a vertical position with tops of fences free from sagging.

D. Securely and neatly fasten fences to fencing manufacturer's recommended posts, and in strict accordance with fence manufacturer's instructions and recommendations.

E. Set all posts plumb, and true to line in a neat workmanlike manner.

F. Provide all materials in strict accordance with manufacturers written instructions and standards specified herein.

#### 3.03 CORRECTING AND REPAIRING

A. Remove and re-install all fencing materials which have been damaged or knocked down, or are sagging and do not present a neat appearance.

B. Immediately prior to Substantial Completion of the entire Project, neatly remove all fence materials, equipment, and silt fence posts.

C. Neatly level and fill post holes and trenches where fence posts were removed.

D. Cut grass, rake, and remove debris from both sides of removed fencing materials.

- END-

## SECTION 03300

### CAST-IN-PLACE CONCRETE

#### PART 1 - GENERAL

##### 1.01 GENERAL REQUIREMENTS

A. The provisions of all of the Contract Documents are hereby made a part of this Section.

B. The requirements of Section 01810 entitled Technical Section Requirements apply to this Section the same as though herein written out in full.

C. The requirements of Section 03350 entitled Concrete Surfaces and Concrete Accessories apply to this section the same as though herein written out in full. In the event of conflicts of Section 03350 with this Section, the requirements of Section 03350 shall govern.

D. Refer to Section 02280, Termite Control for coordinating work by provided by the termite treatment installer for providing termite treatment prior to providing the specified vapor barrier under concrete slabs and cast-in-place concrete.

##### 1.02 WORK INCLUDED

A. The extent of concrete Work is shown on Drawings, and includes the following:

1. Caissons, (if any); Grade Beams; Floor Slabs
2. Pavements, walks, miscellaneous concrete site work.

##### 1.03 QUALITY ASSURANCE

A. Codes and Standards: In addition to complying with all pertinent codes and regulations, comply with all requirements of "Specifications for Structural Concrete for Buildings, ACI 301-05." That Specification together with all related technical references contained therein shall govern the concrete work for this project.

B. Job Site Reference: A copy of ACI Field Reference Manual, SP15(05), "Specifications for Structural Concrete for Buildings ACI 301-05 with Selected ACI and ASTM References" shall be furnished by the Contractor and kept at the jobsite at all times for the duration of the Project. A copy of this publication may be ordered directly from the American Concrete Institute, P.O. Box 19150, Detroit, MI 48219-0150, Phone (313)532-2600, FAX (313)533-4747. NO CONCRETE WORK SHALL PROCEED until the Jobsite superintendent has this publication in his possession for reference.

##### 1.04 SUBMITTALS

A. Product Data: Submit manufacturer's Product Data with application and installation instructions for proprietary materials and items, including reinforcement and forming accessories, admixtures, patching compounds, water-stops, joint systems, curing compounds, dry-shake finish materials, and others as requested by Architect.

B. Shop Drawings - Reinforcement: Submit shop Drawings for fabrication, bending, and placement of concrete reinforcement. Comply with ACI 315 "Manual of Standard

Practice for Detailing Reinforced Concrete Structures" showing bar schedules, stirrup spacing, diagrams of bent bars, arrangement of concrete reinforcement. Shop Drawings shall include as a minimum, elevations of all grade beams to a sufficient scale to convey placement information, and all sections shown by the structural Drawings redrawn and included in the Shop Drawings so that the bar placement may be determined clearly and plainly from the Shop Drawings. Include complete list of support bars and accessories with clear instructions regarding their location and placement. Cooperate with the Contractor in providing all necessary slab support chairs for the structural slabs on grade.

C. Samples: Submit samples of materials as specified and as otherwise requested by Architect, including names, sources, and descriptions.

D. Laboratory Test Reports: Submit laboratory test reports for concrete materials and mix design test as specified.

E. Material Certificates: Provide materials certificates in lieu of materials laboratory test reports when permitted by Architect. The Contractor shall certify that each material item complies or exceeds specified requirements.

#### 1.05 SUPPLEMENTAL REQUIREMENTS TO ACI 301-05

A. All concrete for the Project (except concrete pavements and CMU concrete grout fill) shall be a normal weight mix (150 pcf) and shall attain 3000 psi compressive strength at 28 days. It shall have a minimum cement content of 500 pounds per cubic yard and a maximum water/cement ratio of 0.52 by weight. Concrete for exterior pavements and walks shall have 5% +/-1.5% air entrainment.

B. All concrete for pavements (where indicated on the Architectural Drawings) shall be a normal weight mix (150 pcf) and shall attain the 3,000 & 4,000 psi compressive strength where indicated on the Drawings at 28 days. It shall have a minimum cement content of 500 pounds per cubic yard and a maximum water/cement ratio of 0.48 by weight. Concrete for exterior pavements shall have 5% +/-1.5% air entrainment.

C. Concrete grout for CMU bond beams, (if any are indicated on the Drawings), shall be a volumetric mixture consisting of 1 part portland cement : 2-1/2 parts sand : 1-1/2 parts pea gravel and shall meet ASTM C476 standard specifications. It shall attain 2500 psi compressive strength at 28 days when mixed with sufficient water to have 9" slump. Pea gravel shall have 3/8" maximum size.

D. A water reducing admixture shall be used in all concrete mixes.

E. Reinforcing steel for this project shall ASTM A 615, Grade 60.

F. Proportioning of concrete shall be based on previous field experience for the mixtures proposed for use on the Project. Copies of those histories shall be submitted with the proposed design mixes for approval. If test histories of the proposed design mixes are unavailable, submit current laboratory tests for the mix designs prior to their use.

G. Exposed surfaces of grade beams shall be formed. The remainder of grade beams may be earth formed provided the earth conditions allow earth forming without sloughing and caving. Where earth cannot be used for forms, provide wood side forms as necessary.

H. Coarse aggregate shall conform to ASTM C33, Size 57 or 67 (1.5" max. size).

I. All testing and inspection of concrete required by ACI 301-05 shall be done by an independent testing laboratory retained and paid by the Owner except those herein deleted. Test reports shall be sent directly to the Architect. Additional Services listed shall not be performed unless specifically requested by the Owner. Responsibilities and duties of the Contractor listed in the Specification shall be paid for by the Contractor.

1.06 ARCHITECT REVIEW & TERMITE CONTROL APPLICATOR

A. Do not place any concrete until the entire preparations for placement have been reviewed and by a representative of the Architect.

B. The Contractor shall notify the Architect at least 24 hours in advance of any planned concrete placement to allow time for the required review.

C. Refer also to Section 02280 Termite Control for requirements to notify the Owner's hired termite treatment company prior to providing capillary barriers, polyethylene films under concrete, and prior to placing concrete.

-END-

## SECTION 03350

### CONCRETE SURFACES AND CONCRETE ACCESSORIES

#### PART 1 - GENERAL

##### 1.01 GENERAL REQUIREMENTS

A. The provisions of all of the Contract Documents are hereby made a part of this Section.

B. The requirements of Section 01810 entitled Technical Section Requirements apply to this Section the same as though herein written out in full.

C. All of the requirements of Section 03300 Cast-In-Place Concrete apply to this Section the same as though herein written out in full, except that the concrete provided for vehicular traffic paving for drives and parking is required to have higher strengths than that specified for building slabs and sidewalks, i.e., 4,000 psi, where indicated on the Drawings.

D. Provide flat sheets of wire mesh as opposed to rolls of wire mesh.

E. Fully support wire mesh on specified wire mesh supports as specified below, as opposed to making an attempt to pull up and lift wire mesh as Work progresses, (which never ever is properly lifted).

F. Provide a polyethylene vapor barrier, (visqueen), and wetted sand cushions under all pedestrian concrete walkways, all sidewalks, and all vehicular drives, parking, mechanical compressor concrete pads, and all outdoor pavements.

G. Refer to Section 02280, Termite Treatment for coordinating work provided by the Owner's termite treatment installer for providing termite treatment prior to providing the specified vapor barrier under concrete slabs and cast-in-place concrete.

##### 1.02 STANDARDS

Meet requirements and recommendations of the applicable portions of the latest editions of Standards listed below:

- A. American Concrete Institute (ACI) Specifications for Structural Concrete for Buildings (Latest Edition).
- B. American Society for Testing and Materials. ASTM
- C. Federal Public Law, 101 - 336, Title III, Americans with Disabilities Act (ADA) Latest Edition
- D. Louisiana State Fire Marshal's Accessibility Guidelines (ADAAG)
- E. Occupational Safety and Health Administration Act (OSHA)
- F. International Building Code, (IBC)

### 1.03 ADAAG MAXIMUM EXTERIOR PAVING SLOPES, MINIMUM DIMENSIONS, AND CURB RAMP REQUIREMENTS

In accordance with ADAAG handicapped requirements, maximum slopes provided for exterior paving shall be as follows:

A. Provide slopes on concrete paving not to exceed 1:50 slope or 1" in 50" in the following areas:

1. In handicapped vehicle parking spaces, and in adjacent handicapped marked pedestrian access aisles and areas.

2. At all exterior exit doors:

a. Minimum 5' x 5' square at out-sides of all single doors.

b. Provide the 1:50 slope away from building, with one corner of the 5' x 5' square located under the hinge of the exterior door.

c. Minimum 5' x 6' wide at outsides of all 6' wide double doors.

d. Exterior paving shall be level with the interior floor for the full width of the door opening at the threshold, and shall be sloping away from this door opening.

3. At all cross slopes, (slopes perpendicular to travel), on all covered and uncovered concrete walks, sidewalks, porches, pads, and all concrete paving in path of handicapped pedestrians.

B. Provide slopes on concrete paving, in direction of travel, (parallel to direction of travel), not to exceed 1:20 slope, or 1" in 20", on all covered and uncovered concrete walks, sidewalks, porches, pads, and all concrete paving in paths of handicapped pedestrians.

C. Unless otherwise indicated, provide curb ramps without detectable warnings as follows:

1. Concrete curb ramps shall be minimum 36" wide with maximum slope of 1:12.

2. Provide curb ramps with 1:10 slopes on flared sides where indicated, or where no side handrails, walls or other obstructions occur, and where pedestrians must walk across curb ramps.

3. Provide curb ramps with return curbs where indicated, or only where pedestrians would not normally walk across curb ramps, such as adjacent to unpaved grass areas, or planted areas.

4. Contrasting color of concrete and detectable warnings such as truncated domes, or horizontal "dummy" tooled joints are no longer required by ADA or the Louisiana State Fire Marshall on curb ramps or on any sidewalks.

D. If concrete paving surfaces are provided with a slope greater than 1:50 in parking or parking access areas, on cross slopes, or at exits adjacent to exterior exit doors, entirely remove paving and provide paving with maximum slopes as specified herein to meet latest ADA requirements.

E. If concrete paving is provided with a slope greater than 1:20 in the direction of travel, either entirely remove paving or provide additional handrails on both sides of ramps complying with ADA at no additional cost to the Owner.

F. If curb ramps and sidewalks are not provided with dimensions and details specified herein, or not provided to meet ADA requirements, entirely remove curb ramps and sidewalks and provide curb ramps sidewalks with slopes, dimensions, and details as specified to meet ADA requirements.

G. Notify the Architect 24 hours in advance of providing concrete for Architect to review sub-base, reinforcing, paving formwork, and proposed ADA paving slopes.

## PART 2 - MATERIALS

### 2.01 MANUFACTURERS

#### A. Concrete Accessory Material Manufacturers:

1. Manufacturers are as specified above or below, or a prior approved substitute.

2. Items specified herein by specific manufacturers are used only to denote the quality standard of product desired and that they do not restrict bidders to the specific brand, make, manufacturer, or specification named; and that they are used only to set forth and convey to prospective bidders the general style, type, character, and quality of products desired; and that equivalent products may be acceptable.

3. It shall be the responsibility of the professionally employed Architect or Engineer, or Interior Designer, to determine what is considered an equivalent product, meeting also Owner approval, on any and all Projects in which they have been legally employed to perform professional services.

4. Other manufactures specified above or below, or other prior approved substitutes may be provided if they meet all requirements specified herein and are approved substitutes by the Architect, Engineer, or Interior Designer.

### 2.02 CONCRETE ACCESSORY MATERIALS

#### A. Concrete Materials, Mix, Forms, and Reinforcing:

Refer to Section 03300 Cast-In-Place Concrete.

B. Form Oil: "L & M's E Z STRIP", "Euclid Eucoslip", "W. R. Meadows Duogard", or a prior approved substitute non-staining non-toxic, bond breaker, leaving a surface suitable for meeting requirements for painting same.

C. High Solids Concrete Curing and Sealing Compounds: Euclid Chemical's Super Floor Coat; L & M Dress & Seal 30; BASF/Sonneborn's Kure-N-Seal 30; or a prior approved substitute with minimum 30% acrylic solids by volume, meeting ASTM-C 309, Type 1, Class A & B; and ASTM C 1315, Type 1, Class C; and ASTM-C-156.

D. Traffic Marking Paint: Provide Devoe, Benjamin Moore, ICI or a prior approved substitute traffic marking paint, as specified in Section 09900, Painting.

E. Concrete Paving Joint Materials:

1. Longitudinal, Transverse, and Transition Keyed Joints: Minimum 26 gage galvanized steel tongue and groove construction joints, 10 foot lengths, provided with minimum 18 gage steel stake pins. Provide same with continuous Quick Key removable joint caps #2,000, and seal after caps are removed.

2. Expansion Joints: Pre-molded non-extruding bituminous impregnated fiber conforming to ASTM D 1751, full depth of slab in thicknesses indicated, as manufactured by Spec-Chem, Masco, W. R. Meadows, or a prior approved substitute. Provide same with continuous Southern Metal and Plastic removable joint caps No. 275EJ, and seal after caps are removed.

3. Self-Leveling Expansion Joint Sealant: Sika Sika-Flex Self Leveling Sealant; BASF/Sonneborn's "SONOLASTIC SL-1"; W. R. Meadows "Gardox"; or a prior approved substitute with minimum movement capability of  $\pm 25\%$ .

F. Vapor Barrier Under all Concrete Slabs and Concrete Paving: Commercial Standard CS 238, minimum 6 - mil polyethylene film.

G. PVC Pipe Sleeves and Casings in Building Slabs and Pavement:

1. Where pipes for plumbing and mechanical equipment, and conduits for electrical materials and equipment penetrate concrete slabs or paving, provide Schedule 40 PVC pipe sleeves, one size larger, full depth of concrete.

2. Encase all mechanical refrigerant lines in and under concrete slabs and paving in Schedule 40 PVC Pipe, in diameters such that refrigerant lines can be removed and replaced.

H. Interior Concrete Leveling Toppings: Ardex; Thoro; W. R. Meadows Floor-Top-STG; or a prior approved substitute. (Refer to Specification Section 09650, Resilient Flooring for resilient

flooring manufacturer's recommended leveling underlayment special requirements for obtaining warranties).

I. Concrete Interior and Exterior Crack Filler and Patching Material: Fie Star E-Z Cure; Sika-Dur Crack Fix; Simpson Crack-Pac Injection Epoxy; or a prior approved substitute.

J. New Sloping Top for Existing Exterior Grade Beam: (Refer to Notes on 1A15, note 65). Provide a polymer modified one component Portland cement based reinforced raised surface where indicated with a 28 day, compressive strength of 5,100 psi, flexural strength of 1,400 psi, and a bond strength of 1,300 psi, in color of light gray. Provide Pave-Crete Plus, as manufactured by Lyons Manufacturing, (214) 381-8100; Dayton Superior Thin Resurfacer, 888-977-9600; or a prior approved substitute.

#### 2.03 PAINTED CONCRETE PARKING CURBS AND Bumpers

A. If indicated, provide precast concrete curbs, minimum size, 5-1/2" high X 9" wide X 72" long, with full length 3" wide 45 or 60 degree chamfer on both top sides of all curbs, painted; and provide a minimum of two (2) 7/8" diameter vertical holes, centered, and 12" from both ends, painted,

B. Secure all said curbs with two 3/4" x 12" smooth steel dowels grouted into curb holes and grouted into 7/8" holes drilled into paving slab below; provide tops of dowels 1/2" below tops of curbs; and provide grout over rods.

C. Paint all cast-in-place and precast parking bumpers, (if any), and paint parking curbs and edges of different stepped levels in concrete with traffic marking paint as specified herein below.

#### 2.04 WELDED WIRE MESH

A. All specified and indicated welded wire mesh shall be new wire mesh, fabricated in flat sheets as opposed to rolls of wire mesh.

B. Do not bring any rolls of welded wire mesh, parts of rolls of wire mesh, or rolled up former flat sheets of welded wire mesh to the Project site.

C. All wire mesh shall be uniformly and securely supported with specified plastic or metal wire mesh supports, or concrete bricks specified herein.

#### 2.05 WELDED WIRE MESH SUPPORTS

A. Welded wire mesh supports shall be as manufactured by Dayton Superior Co., Meadow Steel, MedCo; or a prior approved substitute; or shall be full size concrete bricks. Do not provide half bricks or brick batts wire supports.

B. Provide welded wire mesh supports in varying heights to insure that the welded wire mesh is supported and positioned level, and at mid-height of the thickness of the concrete slabs and paving.

C. Refer below for placing and providing welded wire mesh supports.

### PART 3 - EXECUTION

#### 3.01 PLACING CONCRETE ACCESSORIES

A. Refer to Section 03300, Cast-In-Place Concrete for placing concrete.

B. Under building slabs, after obtaining testing laboratory approved compaction reports specified in Section 02200 Earthwork, provide capillary barrier fill, (gravel), provide termite treatment specified, under building, areas, and provide vapor barrier where indicated.

C. Lap vapor barrier a minimum of 12", seal or tape edges and protect same during construction.

D. Refer to Section 01050, Project Coordination for coordination with all trades prior to placement of concrete.

E. Provide all inserts, sleeves, conduits, anchors, bolts, and all architectural, structural, mechanical, and electrical materials and equipment prior to placement of concrete.

F. If items were omitted or forgotten, remove concrete and place said items, and provide new concrete.

G. Provide all contraction joints, expansion joints, and other details where as indicated and as specified herein.

H. Provide concrete curing material specified herein on all surfaces of new concrete paving, at application rates recommended by the manufacturer.

I. Provide all concrete accessory materials in strict accordance with manufacturer's direction.

J. Provide specified vapor barrier (visqueen), under building slab, under all concrete driveways, parking, sidewalks, walkways, ramps and all concrete paving.

K. Refer to Section 02200, Earthwork for specified soil materials and specified compaction required.

#### 3.02 CONCRETE SURFACES

A. Verify that level forms and accessories are provided where indicated for floor slabs, with no high spots and no low spots or depressions.

B. Verify that uniformly sloping forms and accessories are provided where indicated for floor drains in slabs, and for sloping pavement with no high spots and no low spots or depressions.

C. All high spots in floor slabs shall be cut down with chipping hammers if required, and finished with terrazzo floor grinders, or cut down with terrazzo floor grinders.

D. Fill all floor slab low spots with leveling topping materials specified herein.

E. On exterior covered and uncovered concrete walks, porches, pads, drives, parking surfaces, and other paving surfaces, provide concrete without depressions, ("bird baths"), holding no water, and sloping to drain all surface rain water.

F. If depressions in concrete which holds water occur, neatly cut depressed surface of concrete with power saws and remove concrete, and replace with new sloping concrete.

G. Immediately after placing concrete, round all edges of concrete paving with a 1/4" radius metal edging tool on all edges of:

1. Concrete driveways, concrete parking areas, sidewalks, walkways, ramps, curbs, headwalls, and all exposed outer edges and corners of all concrete.

2. Both sides of expansion joints, construction joints, contraction joints, control joints, and all other exposed joints.

H. Neatly grind down sharp edges of concrete where concrete was not tooled as specified above, or remove and replace concrete which cannot be ground down with a grinder.

I. After form removal, if voids or honeycombs are exposed, provide a bonding agent and rub all exposed concrete voids with fresh concrete where all depressions, honeycombs, and other irregularities occur to insure a neat, uniform appearance of all exposed concrete.

J. Grind down all fins caused by forms.

K. All concrete which cannot be finished or re-finished to provide a neat appearance shall be removed and replaced.

L. Provide formed block outs around all plumbing floor drains with continuous no. 5 reinforcing rod on perimeter of opening.

M. Carefully slope concrete finished floors uniformly to all floor drain block outs at a maximum slope of 1/4" per foot.

N. Carefully adjust floor drains to drain water from sloped concrete floors.

### 3.03 TRAFFIC MARKING

A. Thoroughly clean all concrete surfaces prior to painting, and grind off concrete and mortar droppings.

B. Provide painted traffic marking paint on the following surfaces:

1. Where indicated on the Drawings and where specified herein.
2. On divider lines between all parked cars on concrete paving; and on concrete paving at the handicapped parking spaces.
3. On line markings on pedestrian access aisles, adjacent to handicapped parking spaces.
4. At all changes in level on new covered and uncovered concrete pedestrian walkways, sidewalks, pavement, porches, concrete pads, and paving, full width or full length, between two or more levels of concrete, provided on a minimum of two (2) painted continuous surfaces as follows:

(1) Provide continuous painted lines on the vertical part of the concrete curb surfaces, full height and full length; and,

(2) Provide minimum of six inch (6") wide continuous painted lines on all higher, horizontal walking concrete surfaces of the concrete curb immediately adjacent to the painted vertical concrete part of the curb.

5. On all new cast-in-place and on all pre-cast concrete parking curbs, (if any).

6. On all cast-in-place concrete curbs between sidewalks and parking paving, where indicated; provide continuous 6" wide marking stripes described in paragraph 4. above.

7. On all painted arrows and continuous line where indicated on paved drives.

C. All traffic marking lines between parking spaces shall be a minimum of 4" wide.

D. Neatly provide traffic markings with sharp edges and straight lines.

E. Color of traffic marking paint shall be as follows:

1. Paint all ADA accessible parking spaces, ADA accessible aisles, adjacent precast bumpers and curbs, (if any); and cast-in-place bumpers and curbs, and accessible symbols with blue traffic marking paint.

2. Paint all non ADA accessible parking space dividing stripes, traffic lines, adjacent precast bumpers and curbs, (if any); and cast-in-place bumpers, curbs, edges of different stepped levels, and directional drive arrows with yellow traffic marking paint.

F. Do not provide traffic markings until concrete has cured sufficiently for a minimum of 30 days. Traffic marking paint will easily rub off of uncured green concrete.

G. Prior to Final Acceptance, re-paint lines which have been slightly damaged, peeled, or faded and are slightly difficult to see.

### 3.04 PAVING EXPANSION JOINTS FOR COVERED AND UNCOVERED CONCRETE SIDEWALKS, DRIVES, PARKING AREAS, PADS AND PAVEMENT

A. As a minimum provide continuous paving expansion joints at the following locations:

1. Between all horizontal or sloped concrete surfaces and all vertical concrete surfaces such as curbs, grade beams, foundations, raised aprons, columns, stairs, loading docks, raised concrete islands, and all other similar locations where vertical surfaces are adjacent to horizontal paving.

2. Between all new concrete drives provided in this Contract, and all concrete and asphalt paving provided by others such as drives and highways.

3. Unless otherwise indicated, at a minimum of ninety (90) linear feet of paving in all directions, provide concrete expansion joints.

B. Expansion joints shall extend from a grass area to a grass area, a transverse, (or near perpendicular), expansion joint to another expansion joint, or from a transverse expansion joint to a grass area.

C. Do not allow expansion joints to terminate in concrete where no expansion joint occurs.

### 3.05 PAVING CONTROL JOINTS FOR COVERED AND UNCOVERED CONCRETE SIDEWALKS, WALKWAYS, DRIVEWAYS, PARKING AREAS, PADS AND PAVEMENT

1. As a minimum provide continuous control joints, (contraction joints), or construction joints where indicated.

2. Refer to site plans for paving joints and referenced details.

3. Where concrete drive and concrete parking area control joints occur, extend control joints upward through cast-in-place concrete curbs or adjacent concrete sidewalks.

4. As a minimum, provide joints at distances whereby a concrete surface panel's length exceeds two (2) times the dimension of its width.

### 3.06 PAVING LONGITUDINAL JOINTS FOR CONCRETE SIDEWALKS, WALKWAYS, DRIVEWAYS, PARKING AREAS, PADS AND PAVEMENT

As a minimum, provide continuous paving longitudinal joints at the following locations:

A. Unless otherwise indicated, down the centers of all concrete driveways indicated to be thicker than 5".

B. Unless otherwise indicated, between all thicker concrete driveways and thinner concrete parking areas or sidewalks.

### 3.07 PAVING THICKNESS

A. Provide actual dimensions indicated for concrete paving.

B. Do not provide form lumber with less height sized 3- 1/2", 5-1/2", and 7-1/4" for 4", 6", and 8" thick concrete; e.g., provide concrete in full thicknesses indicated on the Drawings.

C. Provide continuous, thicker perimeter concrete paving grade beams at:

1. All perimeter edges of concrete paving.

2. All tongue and groove concrete paving construction joints.

3. All concrete paving joints between adjacent thicker and thinner concrete paving.

4. All expansion joints in concrete paving.

D. Thicker concrete paving perimeter grade beams shall be as indicated.

### 3.08 CONCRETE FLOOR SEALERS AND CONCRETE CURING COMPOUNDS

A. Provide concrete floor sealers and concrete curing compounds at rates recommended by the manufacturer.

B. Provide concrete floor sealers in all rooms not covered by a finished floor such as paint, resilient floors, or carpet.

### 3.09 CURING COMPOUND REMOVAL

A. Grind off and sand off all concrete curing compounds on all interior floor slabs prior to providing latex leveling underlayment compounds under resilient finish floors and carpet, and prior to providing all finish floors.

B. Thoroughly clean all slabs prior to providing all finish floor underlayment compounds, adhesives, and finish floor materials.

### 3.10 CONCRETE CRACK FILLER

After concrete floor slabs, exposed exterior concrete grade beams, exterior concrete paving, concrete curbs, and all other exposed concrete have cracked, inject concrete epoxy crack filler in all new concrete cracks greater than 1/16" wide in accordance with the epoxy material manufacturer's recommendations.

### 3.11 WELDED WIRE MESH

A. Provide specified flat wire mesh as opposed to wire mesh off of rolls.

B. After unloading wire mesh from trucks, and after setting wire mesh in place, remove all bent wire mesh from Project which is not flat, and replace damaged wire mesh with new flat wire mesh.

C. To avoid side movement of wire mesh and to prevent overturning of wire mesh supports:

1. Cut wire mesh to fit 1/2" shorter than the inside perimeter of concrete forms.

2. Securely fasten all pieces of wire mesh as specified to form a continuous structural grid within each concrete form.

### 3.12 WELDED WIRE MESH SUPPORTS

A. All specified and indicated wire mesh shall be uniformly and securely supported with specified wire mesh supports of varying heights to insure that wire mesh is provided and supported at the center of the depth of the concrete slab.

B. Do not rely on anyone saying they will pull up the wire as work progresses.

C. At perimeters and outer edges of wire mesh adjacent to concrete forms and concrete joint materials, provide wire mesh supports spaced on maximum 36" centers at a maximum distance of 12" inside and away from the outside wire mesh perimeter and concrete form perimeter.

D. On the interior of proposed concrete paving panels, provide interior wire mesh supports spaced on maximum 36" centers both ways.

E. Overlap specified wire mesh a minimum of one (1) full square size, (e.g., full double 6" square overlap for 6" x 6" mesh), and tie squares in two (2) places at 18" centers, at both edges of welded wire mesh sheets.

F. Prior to calling the Architect or his consultants to review the proposed area where concrete will be placed:

1. Provide all wire mesh supports, centered on the intersections of the meshed wires.

2. Provide all wire mesh supports spaced as specified herein.

3. Adjust all wire mesh supports such that wire mesh is located in the center of the vertical depth of the paving.

G. Notify Architect 24 hours in advance to review formwork and wire mesh supports prior to placing concrete.

H. Concrete placement will not occur until wire mesh is provided as specified herein.

I. If the Architect or his consultants observe concrete being placed on wire mesh that is not securely fastened or provided in the center of the depth of paving as specified herein, this unacceptable slab or paving will be entirely removed and provided with new wire mesh, reinforcing, and concrete as specified herein.

- END -

## **SECTION 04210**

### **BRICK MASONRY**

#### PART 1 - GENERAL

##### 1.01 GENERAL REQUIREMENTS

A. The provisions of all of the Contract Documents are hereby made a part of this Section.

B. The requirements of Section 01810 entitled Technical Section Requirements apply to this Section the same as though herein written out in full.

##### 1.02 STANDARDS

Meet requirements and recommendations of the applicable portions of the latest editions of Standards listed below:

- A. American Society for Testing Materials (ASTM)
- B. Federal Housing Association (FHA)
- C. Brick Institute of America (BIA)
- D. American Concrete Institute (ACI)
- E. International Building Code (IBC)

##### 1.03 SUBMITTALS

A. Submit Product Data on all materials specified herein indicating meeting all standards on all materials specified herein.

B. Provide Samples of all mortar colors specified herein for color selection by the Owner and Architect.

C. Early during the Contract, initially, provide one (1) or more brick Sample mock up panels, 4'- 0" long by 4'- 0" tall.

D. Sample brick panels shall be made with bricks specified herein, or prior approved manufacturers, selected by the Owner and Architect, with specified mortar color (if needed) to try to match as closely as possible the mortar color and brick color and texture on the existing Library Building.

E. Bricks will be selected by the Owner and Architect for color and texture in order to try the match as closely as possible the existing bricks and mortar already provided on the existing Library building.

##### 1.04 COMPLIANCE

A. Do not lay masonry units when temperature is below forty (40) degrees Fahrenheit.

- B. Discard all chipped, cracked, or broken masonry units.
- C. All brick masonry details shall comply with BIA standards.
- D. Corrugated metal brick ties attached to metal studs are no longer permitted by the Brick Institute of America.

## PART 2 - PRODUCTS

### 2.01 MANUFACTURERS

#### A. Brick Manufacturers and Masonry Accessory Manufacturers:

1. Manufacturers are as specified above or below, or a prior approved substitute.
2. Items specified herein by specific manufacturers are used only to denote the quality standard of product desired and that they do not restrict bidders to the specific brand, make, manufacturer, or specification named; and that they are used only to set forth and convey to prospective bidders the general style, type, character, and quality of products desired; and that equivalent products may be acceptable.
3. It shall be the responsibility of the professionally employed Architect or Engineer, or Interior Designer, to determine what is considered an equivalent product, meeting also Owner approval, on any and all Projects in which they have been legally employed to perform professional services.
4. Other manufactures specified below or above, or other prior approved substitutes may be provided if they meet all requirements specified herein and are substitutes approved by the Architect, Engineer, or Interior Designer.

### 2.02 BRICK MANUFACTURERS

#### A. Brick Veneer: Brick veneer shall be selected by the Owner and Architect to match existing Library Building bricks from the following brick manufacturers:

1. Henry Brick; Jenkins Brick, or; Tri-State, or; Columbus Brick, or; Cherokee; or a prior approved substitute.
2. Provide matching brick veneer bricks from one (1) of the specified brick manufacturers as selected by the Owner and Architect.
3. In trying to achieve a masonry color and texture appearance, the Owners will have the option to select different brick colors from the above specified brick manufacturers.

### 2.03 MASONRY ACCESSORY MANUFACTURERS

Masonry accessories shall be as manufactured by AA Wire Products; Blok-Lok; Dur-O-Wal; Heckman; Hohman and Bernard, Wire Bond; National Wire; or a prior approved substitute.

## 2.04 MATERIALS

### A. General Brick Masonry:

1. All bricks specified herein shall be modular bricks, meeting ASTM 216, Type FBS, Grade SW.

2. All bricks specified herein shall be nominal 4" x 2-2/3" x 8", in minimum actual sizes of 3-5/8" x 2-1/4" x 7-5/8", to course with three (3) bricks to a nominal 8" high concrete masonry unit.

3. All bricks specified herein shall be compatible in sizes and in shapes to match existing brick veneer on the existing Library Building.

4. Brick veneer colors and mortar colors shall be selected by the Owner and Architect from the full range of mortar colors and brick colors and textures specified herein to try to match as closely as possible the existing brick veneer on the existing Library Building.

B. Brick Veneer: Provide brick veneer in standard running bond on the major portions of the exterior walls where indicated.

C. Mortar: ASTM C 270, Type N, BIA Type N.

#### 1. Basic Materials:

a. Portland Cement: ASTM, C 150, Type I.

b. Masonry Cement: ASTM, C 91, Type II.

c. Hydrated Lime: ASTM, C 207, Type N.

d. Sand: ASTM 144 Natural.

e. Paver Joint Sand, (if any): ASTM C 144, 100% passing No. 30 screen for pointing tops of floor paver joints.

f. Water: Use only potable water.

#### 2. Mortar:

a. One (1) part Portland cement, one (1) part hydrated lime, and six (6) parts sand, or;

b. One (1) part masonry cement and three (3) parts sand.

D. Mortar Color: For all specified brick veneer, provide mortar color, only if needed to match the existing Library Building brick veneer mortar color.

E. Cleaning Agents: Commercial Cleaning Agents containing no acid: Sonneborn "Sonoclean 88", ProSoCo "Sure Klean", L & M, or a prior approved substitute.

F. Weep Hole Material: Weep-hole cover as manufactured by Tamlyn Masonry Products, in color of gray, or a prior approved substitute.

G. Brick Veneer Anchors Attached To Metal Studs:

1. To establish minimum standards in accordance with required IBC Code Standards for this area, and BIA Standards, the following brick veneer anchors are based on Hohmann and Barnard, Inc. Veneer Anchor Plates, Model No. HB-213-2X, Adjustable Veneer Anchors; and Wire Bond's #2401 RJ-711 Adjustable Veneer Anchors, which shall be provided at 16" centers vertically and 16" centers horizontally, and provided within 12" of all openings.

2. In order to meet BIA minimum standards, the bricks are specified to be 3-5/8" thick and the air space between the back side of the bricks to the 1/2" exterior gypsum sheathing attached to metal studs is 1-1/2", with no insulation in the air space, (except for the specified aluminum radiant barrier); hence, 3-5/8" + 1-1/2" = 5-1/8" from outside face of brick to the metal anchor plate. Wires shall extend outwards a minimum of 4" with (#HB-231-4" Hook, or Wire Bond #2402 Hook, 4"), to meet BIA requirements of the wire being embedded a minimum of 1-1/2" into brick veneer with a minimum of 5/8" mortar cover towards the outside face of the wall, taking into consideration recessed tooled mortar joints.

3. Brick veneer anchors on metal studs shall be wire and plate type, adjustable metal anchors, with horizontal "U" shaped wires with hooks bent downwards on the stud side of the wall, hooking into and attaching into metal plates which shall be securely screwed directly through the exterior gypsum sheathing with minimum #10 corrosion resistant, self-tapping screws, into the metal studs with a minimum of two (2) vertically arranged screws per plate, with one screw positioned over the other.

4. Wire for brick veneer anchors shall be minimum 3/16" outside diameter, protruding outwards and towards the bricks a minimum of four inches, (4"), provided in either:

a. Carbon Steel, Cold Drawn Wire: ASTM A 1064/A 1064M, with a minimum tensile strength of minimum 80,000 psi, and a yield point of minimum 70,000 psi, with a hot dipped galvanized zinc coating meeting ASTM A 153/A 153M - B2, with a minimum 1.5 ounces per square foot uniform coating after fabrication; or,

b. Stainless Steel: ASTM A 580/A 580M - ANSI Type 304 Stainless Steel.

5. Sheet metal for brick veneer anchors, (HB-213 or WB 2401), shall be minimum 12 gage provided in either:

a. Carbon Steel Sheet Metal: ASTM A 1008/A 1008M, with a hot dipped galvanized zinc coating meeting ASTM A 153/A 153M -B2, with minimum 1.5 ounces per square foot uniform coating after fabrication; or,

b. Stainless Steel Sheet Metal: ASTM A 666, ASTM A 480, ASTM A 240/A 240M, and ASTM A167 - AIAI Type 304 stainless steel.

6. Brick veneer anchors on metal studs shall have written test reports indicating where they have been designed and tested:

a. In accordance with (ACI 530 6.2.2.5.5.4), to withstand over 200-lbf in tension and also in compression at maximum allowed offsets; and,

b. To exceed BIA recommendations and requirements by over 100% for the load capabilities of standard "round wire" hooks/pintles.

7. Brick anchors on metal stud walls shall be securely screwed into metal studs with minimum two (2) #10 hot dipped galvanized screws per anchor plate, provided at 16" centers vertically and 16" horizontally.

H. Brick Masonry Control Joints: Neoprene filler strips without adhesive, minimum 3/8" thick, minimum 3" deep, (Refer to Drawings and provide brick masonry control joints from slab, upwards to sills of windows, or tops of brick veneer walls where indicated.

### PART 3 - EXECUTION

#### 3.01 MIXING MORTAR

A. Measure materials by volume or equivalent weight method. Do not measure by shovel method.

B. Mix in a mechanical mixer three (3) to five (5) minutes until mortar is of uniform consistency and color.

C. Use maximum amount of water to produce a workable consistency.

D. Do not re-temper stiffened mortar after two (2) hours after initial mixing.

#### 3.02 LAYING MASONRY UNITS:

A. Lay masonry units which are free of surface water.

- B. Dampen mortar faces of units (exposed to direct sun and wind during hot weather), which are too dry.
- C. Cut masonry units neatly with masonry saws.
- D. Lay masonry units in standard running bond for brick veneer, with three-eighths (3/8") inch joints (plus or minus one sixteenth (1/16") inch); provide brick soldiers where specified and indicated, (if any), or when required over steel lintels for brick coursing.
- E. Exposed brick shall have standard concaved joints.
- F. Tool all joints when thumb-print hard.
- G. Align all vertical and horizontal joints plumb and level respectively.
- H. Lay all units in full bed of mortar.
- I. Provide weep holes in brick work, minimum twenty-four (24") inches apart above all heads of all window head flashing, door head flashing, and all opening flashing, above all flashing at all opening sills, and at all bases of all exterior walls.
- J. Keep weep holes, air spaces, and areas above flashing free from mortar drippings.
- K. Unless otherwise specified or indicated, provide brick masonry control and expansion joints at maximum spacing of thirty (30) feet apart, and where indicated on the Drawings.
- L. Align brick masonry wall control joints and expansion joints.
- M. Align brick masonry wall expansion joints with expansion joints in structural concrete slabs.
- N. Cover tops of all brick walls with waterproof coverings at the end of each days Work until the roof is provided to prevent moisture build up in masonry walls.

### 3.03 ANCHORING:

- A. Anchor brick veneer to metal studs with specified corrugated brick veneer ties at 16" centers vertically and 16" centers horizontally.
- B. Embed all metal stud brick veneer ties a minimum of 2-1/4" in brick joints.
- C. Unless otherwise indicated or specified, embed all metal reinforcing anchors in a full bed of mortar.

D. Refer to Drawings for details on providing "Z" re-bar ties in masonry cavity walls.

E. Refer to Drawings for providing miscellaneous metal steel for anchoring the new steel framing channels on tops of new upward extended parapet walls at the four (4) existing masonry cavity wall corners of the existing Library Building.

#### 3.04 RELATED WORK

A. Build-in reinforcing, flashing, sleeves, frames, anchors, clips, electrical items, plumbing items, mechanical items, equipment items and miscellaneous accessories as Work progresses.

B. Seal around all openings with Sealant specified in Section 07900, Sealants.

C. Install all items specified in other Sections for installation in masonry and provide said items level and plumb.

D. Embed all mechanical, plumbing, and electrical items in solid mortar.

#### 3.05 REPAIRING, REPLACING, AND CLEANING BRICK MASONRY

A. Clean all existing exposed brick veneer and clean all new brick veneer.

B. Repair and tuck-point all of loose and cracked joints in the existing brick veneer, and remove and replace all broken bricks in the existing brick veneer.

C. Replace all chipped, cracked, and damaged existing and new bricks with undamaged new bricks; or replace same with the Owner's few existing matching bricks stored in the existing Library Mechanical Equipment Room.

D. Repair all chipped, cracked, and damaged existing and new mortar joints.

E. Clean all new bricks and existing bricks as Work progresses with masonry cleaners specified herein.

F. Provide final cleaning to provide a neat uniform appearance of both new and existing bricks.

- END -

## SECTION 05100

### STRUCTURAL STEEL

#### PART 1 - GENERAL

##### 1.01 GENERAL REQUIREMENTS:

A. The provisions of all of the Contract Documents are hereby made a part of this Section.

B. The requirements of Section 01810 entitled Technical Section Requirements apply to this Section the same as though herein written out in full.

##### 1.02 WORK INCLUDED:

A. The extent of structural steel Work is shown on the Drawings and shall include all labor, materials, plant equipment, tools, and services necessary or reasonably incidental to the complete fabrication, transportation, and erection of all components of steel. In addition to the steel indicated by the structural Drawings, all lintels and miscellaneous steel items indicated on the Architectural Drawings, (if any) are to be included under this Section.

##### 1.03 CODES AND STANDARDS:

A. General: All Work done under this Section shall conform to the governing local codes and regulations and the applicable provisions of the following Specifications and Codes:

1. "Specification for the Design, Fabrication, and Erection of Structural Steel for Buildings" published by the American Institute of Steel Construction and adopted June 1, 1989.

2. "Code of Standard Practice for Steel Buildings and Bridges" published by the AISC and adopted effective September 1, 1986.

3. "Code for Welding in Building Construction" of the American Welding Society AWS D1.1-94.

4. "Specification for Structural Joints using ASTM A325 or A490 Bolts" as endorsed by the American Institute of Steel Construction, dated November 13, 1985. Bolts shall be of American manufacture.

##### 1.04 SUBMITTALS:

A. Shop Drawings showing complete erection plans, erection details, and fabrication details for all Work shall be submitted to the Architect for review. Extent and location of all shop and field welding shall be clearly shown.

#### PART 2 - PRODUCTS

##### 2.01 MATERIALS:

A. Rolled structural shapes (except W-shapes) and plates shall conform to ASTM A36.

- B. W-shapes shall conform to ASTM A992 (Fy = 50 ksi).
- C. Steel tubing shall conform to ASTM A500, Grade B, (Fy = 46 ksi).
- D. Steel Pipe shall conform to ASTM A53, Grade B.
- E. Anchor Bolts shall conform to ASTM A36.
- F. Erection Bolts - ASTM A325 in bearing with threads excluded from shear planes and with washer under each nut or bolt head, whichever is turned.
- G. Electrodes for hand welding in shop or field, E70XX series.
- H. Electrodes for Submerged Arc Welding - Bare wire, Grade SA-1.
- I. Shop Primer - Standard shop primer, 2.0 dry mil thickness, non-asphaltic.
- J. Grout for base plates shall be non-shrink, non-metallic grout.

### PART 3 - EXECUTION

#### 3.01 FABRICATION:

- A. Technique and workmanship shall be equal to the standard of the best practice in modern steel shops.
- B. Product of the fabricating shop shall be new, clean and true. If straightening Work is necessary, it shall be done in a manner that will not impair its structural quality.
- C. General and special connection details are shown on the Drawings. Where V reactions are not shown, the vertical shear capacity of the web connection shall be equal to  $120\% W_c/2L$  as given in the tables of Uniform Load Constants in the 9th Edition of the AISC Manual of Steel Construction.  $W_c$  is the uniform load constant for the specific beam section and  $L$  is the span length in feet. Provide a minimum of 2 bolt rows for 8 and 10 inch deep beams, 3 bolt rows for 12 to 16 inch deep beams, 4 bolt rows for 18 to 21 inch deep beams, and 5 bolt rows for 24 to 30 inch deep beams (3/4 inch bolts at 3 inch spacing).
- D. Erection marks shall be painted on all structural members.
- E. Provide all necessary erection clips, angles, seats, etc., to properly erect structural steel.
- F. Welding shall be in accordance with requirements of the American Welding Society with all possible welding performed in the shop.
- G. Provide holes or welded studs required for securing other Work to structural steel framing. Refer also to Architectural details.

#### 3.02 PAINTING:

- A. Shop Coat before leaving shop. All structural steel shall be thoroughly cleaned of loose mill scale, rust, oil, spatter and dirt. All steel shall be given one shop coat of standard shop primer applied evenly to clean, dry surfaces. Cleaning

procedures shall conform to SSPC-SP1, SSPC-SP2, and SSPC-SP3.

B. Provide touch up of welds and abrasions after erection, using same paint as shop touch up coat.

C. All exterior steel lintels used for masonry shall be hot dip galvanized, 1.25 oz. per square foot class, in the shop, then field painted as specified in (D.) following.

D. Field Coat - After installing lintels, paint same in accordance with Specification 09900 Painting.

### 3.03 ERECTION:

A. Contractor shall provide the false-work, temporary bracing, and all tools, machinery and appliances, including drift pins and fitting up bolts necessary for the expeditious handling of the work. False-work and temporary bracing shall be properly designed and substantially constructed and maintained for the loads which will come upon it and shall remain in place until all permanent bracing or masonry shear walls are in place, all connections bolted and/or welded and all floor and roof decks installed.

B. The structural system and the individual structural members are designed to be self-supporting only after structural members are connected in place and the floor slabs are poured and poured roof decks, (if any), are provided.

C. The correction of minor misfits involving non-harmful amount of reaming, cutting and chipping will be considered a legitimate part of the erection. However, any error in the shop fabrication or deformation resulting from handling and transportation which prevents the proper assembling and fitting up of parts by more than a minor amount of field corrective work shall be reported immediately to the Architect and his review of the method of correction obtained. The Contractor shall be responsible for all misfits, errors, and injuries and shall make the necessary corrections and replacements.

D. Erection and handling of all steel shall be performed under the supervision of an experienced foreman.

E. Individual pieces of structural steel shall be positioned plumbed and leveled so as not to have an error exceeding 1/4" and the overall structure shall be within the tolerance allowed by the A.I.S.C. Specification. Particular attention shall be given to columns and framing around stairs, (if any), and around elevator shafts, (if any), so as to maintain the required vertical alignment and insure the necessary clearances.

F. Finished members shall be true to line and free from twists, bends and open joints.

G. Base plates shall be set in accordance with the details indicated on the Drawings and shall be grouted with pre-mixed, non-shrink, non-metallic, grout. In no case shall wedges other than steel be used.

H. Bolted connections, unless otherwise indicated, specified and noted, shall be made with 3/4" high strength bolts. Beveled washers shall be employed when the surfaces in contact with the bolt head or nut exceed a 1:20 slope. Tightening of the bolts shall be done using load indicating washers as per manufacturer's

recommendations. All connections not employing L.I.W. shall be done by the turn-of-nut method or by using calibrated impact wrenches. High strength bolted connections shall conform to the "Specification for Structural Joints using ASTM A-325 or A-490 bolts, dated November 13, 1985."

I. Welding shall be done only by welders qualified by tests as prescribed in AWS D1.1-84 "Structural Welding Code". Each welder shall have in his possession, a card issued by an approved testing laboratory, attesting to his certification before beginning work on this project. Such certification shall have been issued within the past six months.

J. Field welding shall not be permitted when the air temperature is below thirty-two (32) degrees F., unless preheating in accordance with the A.I.S.C. Code is done and reviewed by the Architect. All material over 1" thick shall be preheated as specified by the Code before welding.

-END-

## SECTION 05210

### STEEL JOISTS

#### PART 1 - GENERAL

##### 1.01 GENERAL REQUIREMENTS:

A. The provisions of all of the Contract Documents are hereby made a part of this Section.

B. The requirements of Section 01810 entitled Technical Section Requirements apply to this Section the same as though herein written out in full.

##### 1.02 WORK INCLUDED:

A. The extent of steel joist Work is indicated on the Drawings and shall include all labor, materials, plant equipment, tools, and services necessary or reasonably incidental to the complete design, fabrication, transportation, and erection of all steel joists for all roof areas of the Project.

B. Refer also to notes on Drawings.

##### 1.03 CODES AND STANDARDS:

A. General: All Work done under this Section shall conform to the governing local codes and regulations and the applicable provisions of the following specifications and codes:

1. "Standard Specifications for Open Web Steel Joists, K-Series", as adopted by the Steel Joist Institute, Latest Edition.

2. "Standard Specifications for Long-span Steel Joists, LH-Series, and Deep Long-span Steel Joists, DLH-Series", as adopted by the Steel Joist Institute, Latest Edition.

3. "Code for Welding in Building Construction" of the American Welding Society AWS D1.1, Latest Edition.

B. The manufacturer of steel joists furnished for this Project shall currently be a member of the Steel Joist Institute.

##### 1.04 SUBMITTALS:

A. Product Data: Submit manufacturer's specifications and installation instructions for each type of joist and accessories. Include manufacturer's certification that the joists comply with the applicable SJI specifications.

B. Shop drawings: Submit detailed Shop Drawings showing layout and spacing of all joists and bridging. Include mark, number, type, location, and spacing of joists and bridging. Show all bearing details, connection details, and bridging details at side beams or walls. Show all field welding requirements.

1.05 DELIVERY, STORAGE, AND HANDLING:

A. Deliver, store, and handle steel joists as recommended in the SJI specifications.

B. Handle and store joists in a manner to avoid deforming members and to avoid excessive stresses.

PART 2 - PRODUCTS

2.01 MATERIALS:

A. Comply with the referenced SJI specifications.

B. Shop Primer - Standard shop primer, non-asphaltic.

C. Use only angles or tees for top and bottom chord members.

PART 3 - EXECUTION

3.01 FABRICATION:

A. Technique and workmanship shall be equal to the standard of the best practice in modern joist fabrication shops.

B. Fabricate joists in accordance with SJI specifications.

C. Provide extended ends on joists where shown complying with SJI standard load capacities for the extension types shown.

D. Extensions exceeding 12" shall be carried to the first interior top chord panel point as a minimum.

E. Where loads are indicated on the Drawings, design extensions to support that loading.

F. Provide ceiling extensions in areas having ceilings attached directly to the bottom chord. Extend ends to within 1/2 inch of the finished wall surfaces.

G. Provide horizontal or diagonal type bridging, complying with the SJI specifications, unless other requirements are indicated on the Drawings.

H. Provide bridging anchors for ends of bridging lines terminating at walls or beams. Add welded "X-braces" in bridging lines where indicated on the Drawings.

I. Remove loose scale, heavy rust, and other foreign materials from fabricated joists and accessories before shop painting. Apply one shop coat of primer paint to all steel joists and accessories by spray, dipping or other method to provide a uniform dry paint film thickness not less than 1.0 mil.

J. Provide camber for joists in accordance with the standard specifications (non-optional) or as indicated on the Design Drawings.

K. Provide header units designed to support tail joists at all openings in the floor or roof system not framed otherwise.

### 3.02 INSPECTION:

A. The erector shall examine and inspect the areas and conditions under which steel joists are to be installed and notify the Contractor in writing of conditions detrimental to proper and timely completion of the Work.

B. Do not proceed with the Work until unsatisfactory conditions have been corrected.

### 3.03 ERECTION:

A. Place and secure steel joists in accordance with SJI specifications, the final shop drawings, and as herein specified or detailed on the Design Drawings.

B. Furnish anchor bolts or other devices as indicated to be built into concrete and masonry construction.

C. Do not start placing joists until supporting Work is in place and secured. Place joists on supporting Work, adjust and align in accurate position before making permanent attachment.

D. Provide temporary bridging, bracing, and anchorage to ensure lateral stability during construction.

E. Carefully observe standard specification requirements with regard to erection stability and bridging installation.

F. Where joists are 40 feet or longer, install bridging before slackening hoist lines.

G. Install bridging simultaneously with joist erection, and before construction loads are applied.

H. Anchor bridging lines at top and bottom chords where terminating at walls or beams.

I. Field weld or bolt joists to the supporting steel framework in accordance with the SJI specifications for the type of joists used. Coordinate fastening sequence and procedure with the placement of the joists. Secure joists bearing on concrete masonry unit bearing walls by welding to the steel bearing plates set in the concrete masonry unit U-block set on the top of the wall.

J. Touch-up all bolted connections, field welds, abraded spots, and rust spots on joists and supporting steel members upon completion of erection. Wire brush and clean surfaces before painting. Use similar rust inhibitive paint to touch-up the shop prime coat.

K. In the event of damage to joists during shipment and erection, replace the damaged joist with a new joist, or repair the damaged joist as directed, to the satisfaction of the Architect.

- END -

## SECTION 05310

### STRUCTURAL METAL DECKING

#### PART 1 - GENERAL

##### 1.01 GENERAL REQUIREMENTS:

A. The provisions of all of the Contract Documents are hereby made a part of this Section.

B. The requirements of Section 01810 entitled Technical Section Requirements apply to this Section the same as though herein written out in full.

##### 1.02 WORK INCLUDED:

A. The extent of metal decking required for this Work is indicated on the Drawings and includes metal deck over steel joists and beams at the roof of the new structure.

B. Fabrication, transportation and erection of metal decking and providing related structural metal decking accessories.

##### 1.03 CODES AND STANDARDS:

A. General: All Work done under this Section shall conform to the governing local codes and regulations and the applicable provisions of the following specifications and codes:

1. "Specifications for the Design of Cold Formed Structural Members" as published by the American Iron and Steel Institute, Latest Edition.

2. "Code for Welding in Building Construction" of the American Welding Society.

3. "Design Manual for Floor Decks and Roof Decks" of the Steel Deck Institute.

##### 1.04 SUBMITTALS:

A. Submit Product Data, Shop Drawings, brochures, etc., showing complete information and details for the proposed metal deck.

B. Show deck layouts, end laps, side laps, welding details, type, gauge, etc.

C. Submit all information for approval prior to any fabrication.

#### 1.05 DESIGN:

- A. Metal deck shall be capable of supporting safely construction loads and personnel, a minimum uniform load of 50 PSF, and a concentrated load of 200 pounds at any location.
- B. Design stress shall not exceed 20 ksi. Deflection under 20 pounds PSF uniformly distributed live load shall not exceed 1/240 of the span.
- C. Sectional properties shall be computed in strict accordance with the referenced standard specification of AISI.
- D. Metal deck shall be continuous for at least 3 spans.
- E. Furnish, as minimum, the depth, pitch, gauge, and structural properties specified or indicated on the Drawings.

#### PART 2 - PRODUCTS

##### 2.01 MATERIALS:

- A. Metal deck shall be fabricated from a tough-temper high tensile strength steel with minimum yield strength of 33,000 psi.
- B. All metal decking shall be hot dip galvanized conforming to ASTM A 446, G 60 coating class.
- C. Refer to Drawings for sizes and types of metal decking.

#### PART 3 - EXECUTION

- 3.01 FABRICATION: Fabricate all metal decking in strict accordance with the Drawings, the referenced standards, the reviewed Shop Drawings, and the reviewed Product Data.
- 3.02 SITE STORAGE: Metal decking shall be stored off the ground with one end elevated to provide drainage, and shall be protected from the elements with a waterproof covering, ventilated to avoid condensation.
- 3.03 ERECTION:
  - A. General: Erect all metal decking in strict accordance with the Drawings and the reviewed Shop Drawings, aligning straight, plumb, and level with a tolerance of one in 200.
  - B. Placement: Metal decking shall be continuous for a minimum of 3 spans. It shall bear a minimum of 2" onto supports and shall have end laps of 2" minimum. As rapidly as sheets are placed and aligned, they shall be welded to the supports.

C. Fastening: Metal decking attached to steel joists supports by providing No. 12 TEKS screws at 12 inch OC maximum spacing at each support. Side laps shall be stitched together using No. 12 TEKS screws at 36" centers or by mechanical crimping with appropriate tools at the same spacing.

- END -

## SECTION 05400

### LIGHTGAGE METAL FRAMING

#### PART 1 - GENERAL

##### 1.01 GENERAL REQUIREMENTS

A. The provisions of all of the Contract Documents are hereby made a part of this Section.

B. The requirements of Section 01810 entitled Technical Section Requirements apply to this Section the same as though herein written out in full.

C. Lightgage metal framing, as indicated and specified shall be provided with indicated maximum thickness of twelve (12) gage for exterior wall studs behind new brick veneer, and minimum thickness of twenty (20) gage) for interior wall studs and other interior cold formed metal members.

D. Lightgage metal framing where specified and indicated, includes but is not limited to all interior and exterior cold formed galvanized steel sheets complying with ASTM A 1003 and ASTM A1003 M, provided where indicated under new metal roof panels, and metal stud support rafters for supporting galvanized steel sheets under the new metal roof.

E. Prior to bidding, coordinate the providing of solid steel galvanized sheets and galvanized metal supports under the new metal roof with materials specified in Section 07610, Metal Roof & Flashing.

F. Lightgage metal framing where specified and indicated, includes but is not limited to all cold formed lightgage interior and exterior metal studs, metal stud and metal joist bridging, metal top and bottom metal track runners, metal joists, metal joist headers, metal channels, metal jack rafters & metal valley rafters under new metal roof, metal furring, metal furring channels, metal suspension channels, metal suspension support members, metal furring hat channels, metal angles, metal zee's, special members of all types indicated with custom shapes, metal straps, metal braces, metal flat strap bracing, metal clips, metal end clips, and all miscellaneous lightgage metal framing indicated or specified, including fasteners, and all metal accessories used in conjunction with lightgage metal framing.

G. Refer to Drawings for various sizes and thicknesses of lightgage framing described with SSMA four (4) part identification code which identifies web depth, flange width, style, and yield strength.

H. For example, for a designated metal section such as 600S162-54 (50 ksi), the SSMA identification code is read as follows:

1. Web Depth: The first SSMA number designation denotes the metal member's web depth in inches, e.g.: 125 = 1-1/4"; 137 = 1-3/8"; 162 = 1-5/8"; 250 = 2-1/2"; 350 = 3-1/2"; 362 = 3-5/8"; 400 = 4"; 550 = 5-1/2"; 600 = 6"; etc.

2. Profile: The second SSMA letter designation denotes the metal member's profile, e.g.: S = Stud or Joist Section; T = Track Sections; U = Channel Sections; F = Furring Channel Sections.

3. Flange Width: The third SSMA number designation denotes the metal member's flange width in inches, e.g.: 125 = 1-1/4" through 350 = 3-1/2", etc., similar to dimensional designations for web depth.

4. Thickness: The fourth SSMA number designation denotes the metal member's mil thicknesses which can be converted into gages, e.g.: -16 mils = 26 gage; -18 mils = 25 gage; -27 mils = 22 gage; -33 = 20 gage; -43 = 18 gage; -54 = 16 gage; -68 = 14 gage; -97 = 12 gage; etc.

5. Yield Point: The fifth SSMA number designation denotes the metal member's yield value or yield point in ksi according to ASTM C 645 and ASTM C 955, e.g.: 33 ksi = 33,000 pounds per square inch.

6. Example: Hence, the above noted SSMA metal member, 600S162-54 (50 ksi), is a 6" deep stud with a 1-5/8" flange width, provided 16 gage, with a 50 ksi yield point.

## 1.02 STANDARDS

Meet requirements and recommendations of the applicable portions of the latest editions of Standards listed below:

### A. ASTM International (ASTM):

1. ASTM A 653 - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.

2. ASTM A 780 - Standard Practice for Repair of Damaged and Uncoated Areas of Hot-Dip Galvanized Coatings.

3. ASTM A 1003 - Standard Specification for Steel Sheet, Carbon, Metallic- and Nonmetallic-Coated for Cold-Formed Framing Members.

4. ASTM B 633 - Standard Specification for Electrodeposited Coatings of Zinc on Iron and Steel.

5. ASTM C 954 - Standard Specification for Steel Drill Screws for the Application of Gypsum Panel Products or Metal Plaster Bases to Steel Studs from 0.033 inches to 0.112 inches in thickness.

6. ASTM C 955 - Standard Specification for Load-Bearing (Transverse and Axial) Steel Studs, Runners (Tracks), and Bracing or Bridging for Screw Application of Gypsum Panel Products and Metal Plaster Bases.

7. ASTM C 1513 - Standard Specification for Steel Tapping Screws for Cold-Formed Steel Framing Connections.

8. ASTM C 1007 - Standard Specification for Installation of Load Bearing (Transverse and Axial) Steel Studs and Related Accessories.

B. Federal Specifications (FS)

C. Specifications for the Design of Cold-Formed Steel Structural Members

D. American Iron and Steel Institute, AISI - Standard for Cold-Formed Steel Framing General provisions; and, North American Specification for the Design of Cold formed Steel Structural Members

E. American Hot Dipped Galvanizers Association (AHDGA)

F. American Welding Society, AWS D.1.3 - Structural Welding Code - Sheet Steel

G. International Building Code (IBC)

H. Steel Stud Manufacturers Association, (SSMA)

### 1.03 SUBMITTALS

A. Submit complete manufacturer's Product Data on all materials specified herein.

B. Submit actual samples of materials if requested.

C. Submit manufacturers engineer analysis with wind load tables indicating deflection and height limitations for wind loads for various spacing of structural members and allowable axial loads for various heights.

D. Submit manufacturer's standard and special details.

### 1.04 COMPLIANCE

A. Verify that all lightgauge metal framing materials proposed are designed to meet all standards specified herein and are capable of carrying all loads required by minimum design loads recommended by the International Building Code.

B. Provide minimum twenty (20) gage, minimum 3-5/8" deep studs, (provided heavier and in greater depths if required), where required to brace the tops of all interior top tracks and tops of all metal stud walls and partitions from tops of interior walls and partitions to structural steel beams and structural steel purlins above, as specified herein.

C. Provide minimum twenty (20) gage, minimum 3-5/8" deep studs, securely fastened at a 45 degree angle to tops of all interior partitions at all 90 degree interior corners and all exterior 90 degree corners.

## PART 2 - PRODUCTS

### 2.01 MANUFACTURERS

A. Lightgauge Metal Framing and Stainless Steel Fasteners:

1. Lightgauge Metal Framing: Clark, Dale, Dietrich, Unimast Incorporated, or prior approved substitute; and Stainless Steel Fasteners: Atlas Bolt and Screw Co., Rawl Plug Company, Hilti, or a prior approved substitute.

2. Items specified herein are by specific manufacturers and are used only to denote the quality standard of product desired and that they do not restrict bidders to the specific brand, make, manufacturer, or specification named; and that they are used only to set forth and convey to prospective bidders the general style, type, character, and quality of products desired; and that equivalent products may be acceptable.

3. It shall be the responsibility of the professionally employed Architect or Engineer, or Interior Designer, to determine what is considered an equivalent product, meeting also Owner approval, on any and all Projects in which they have been legally employed to perform professional services.

4. Other manufactures specified below or above, or other prior approved substitutes may be provided if they meet all requirements specified herein and are substitutes approved by the Architect, Engineer, or Interior Designer.

### 2.02 MATERIALS

A. Lightgauge Metal Framing:

1. All lightgauge metal framing shall be:

a. Designed in accordance with the AISI "Specifications for the Design of Cold-Formed Steel Structural Members and all Standards specified above and shall meet requirements of ASTM A 653, A 1003.

b. Formed from corrosion resistant steel corresponding to the requirements of above Standards, with a minimum yield strength indicated on the Drawings.

c. Provided with a zinc coating installed by the hot dipped process meeting ASTM A 525 and ASTM C 955, G - 60 standards.

d. Provided in with flange widths, depths and gages as indicated on the Drawings, with standard SSMA designations described hereinabove.

2. Unless otherwise indicated or specified, all top and bottom metal track runners for all interior and exterior metal studs shall be the same gage as the metal studs, and all metal runners for all metal joists shall be the same gage as metal joists.

3. Unless otherwise indicated or specified, all metal studs shall have 3/4" or 1-1/2" x 4" slotted holes punched in centers of webs for installing of cold-rolled channel bracing and to facilitate plumbing and electrical installations, and all metal joists and metal runners shall be solid.

4. Unless otherwise indicated or specified, all suspended gypsum board ceilings specified in Section 09260, Gypsum Board, shall be securely attached to and suspended on minimum 7/8" deep SSMA 20 gage metal furring channel F Sections, provided and securely fastened on 16" centers.

5. Unless otherwise indicated or specified, all suspension systems specified in Section 09500, Suspended Ceilings, and all 7/8" metal furring channel F Sections specified herein above for suspended gypsum boards ceilings shall be securely attached to minimum 1-1/2" deep lightgage channels, minimum 20 gage, spaced on 48" centers, securely fastened to minimum nine (9) gage suspension wires provided at 48" centers and securely attached to the steel structure above.

B. Fasteners: All lightgage metal framing and accessory screws shall self-tapping be hot dipped galvanized fasteners complying with ASTM C 1513 and provided as recommended by the steel stud manufacturer.

C. Metal Stud And Joist Web Reinforcement:

Provide metal pipe opening web reinforcement on metal studs and joists where metal studs and joists have to be cut for providing plumbing and electrical materials and equipment.

D. Suspension Wire: Suspension wire provided to support suspended lightgage metal framing and 1-1/2" lightgage channels specified herein above, shall be minimum 9 gage, securely attached to 20 gage,

minimum 1-1/2" lightgauge channels spanning between structural purlins, or securely attached to structural purlins and beams above at maximum spacing of 48" centers both ways.

### PART 3 - EXECUTION

#### 3.01 INSTALLING

##### A. Erecting Lightgauge Framing:

1. Unless otherwise indicated or specified, as a minimum, for installing all lightgauge metal framing, follow the details and recommendations of the manufacturer and all Standards specified herein, complying with all details to meet minimum design loads and install cold formed fraing in accordance with requirements of ASTM C 1007.
2. Unless otherwise indicated or specified, provide all metal studs and framing plumb, level, and spaced at 16" O. C. maximum spacing and fastened and screwed in accordance with manufacturer's details and recommendations.
3. Unless otherwise indicated or specified, provide all metal joists level and spaced at 16" O. C. maximum spacing and fastened and screwed in accordance with manufacturer's details and recommendations.
4. Provide continuous, metal horizontal bridging and bracing between all metal studs which are over 48" long, and spaced at maximum spacing of 48" apart for studs over 8'- 0" long.
5. Provide continuous, metal horizontal bridging and bracing between all metal joists which are over 8'- 0" long, and spaced at maximum spacing of 8' - 0" apart for joists over 16'- 0" long.
6. Secure all lightgauge metal framing and accessories with screws and fasteners in sizes as recommended by the lightgauge metal framing manufacturer in accordance with ASTM C 1513.
7. Securely attach and securely brace all lightgauge metal framing.
8. Splices in lightgauge metal materials, other than metal running tracks, metal joist end channels, furring channels, and bridging shall not be permitted.
9. Unless otherwise indicated or specified, provide suspension wire spaced at minimum 4 foot centers both ways to support lightgauge framing and provide other sway bracing where required to avoid swaying.
10. Provide additional suspension wires and straps for suspension of electrical, mechanical, and special materials and equipment.

11. Unless otherwise indicated or specified, provide minimum twenty (20) gage, minimum 3-5/8" deep studs, heavier if required, to brace the tops of all interior top tracks and tops of all metal stud walls from tops of interior walls and partitions to structural steel beams and steel purlins above at 72" centers.

12. Where tops of interior walls and partitions cannot be braced to overhead structural steel beams and steel purlins above, provide minimum 6 feet long horizontal 45 degree angle stud braces, placed flat, and securely fastened to top tracks of the interior walls and partitions, at all 90 degree partition interior and exterior corners, and all similar angled corners.

13. Provide additional interior wall bracing above latch side of interior doors to prevent wall movement when door slams shut.

14. At in-sides of metal stud chase walls, provide a pair of horizontal, continuous 3-5/8" 20 gage channel tracks facing each other, (at heights of 36" and 72" above the finished floor), and provide 3-5/8" 20 gage stud "X" braces securely fastened to continuous tracks at 24" maximum from ends of chase, and at 36" OC maximum spacing.

15. Where opposite chase wall metal studs align with one another at 16" centers, the horizontal tracks may be omitted; hence, provide the 3-1/2" 20 gage "X" braces securely fastened directly to both studs, (at heights of 36" and 72" above finished floor), at 24" maximum from ends of chase, and at 36" OC maximum spacing.

- End -

## SECTION 05500

### MISCELLANEOUS METALS

#### PART 1 - GENERAL

##### 1.01 GENERAL REQUIREMENTS

A. The provisions of all of the Contract Documents are hereby made a part of this Section.

B. The requirements of Section 01810 entitled Technical Section Requirements apply to this Section the same as though herein written out in full.

##### 1.02 STANDARDS

Meet requirements and recommendations of the applicable portions of the latest editions of Standards listed below:

- A. Architectural Aluminum Manufacturers Association (AAMA)
- B. American Hot Dip Galvanizers Association (AHDGA)
- C. American Institute of Steel Construction (AISC)
- D. American Society for Testing and Materials (ASTM)
- E. American Welding Society (AWS)
- F. National Association of Architectural Metal Mfrs. (NAAMM)
- G. American National Standards Institute (ANSI)
- H. Federal Specifications (FS)
- I. Americans with Disabilities Act (ADA)
- J. American National Standards Institute (ANSI)
- K. International Building Code (IBC)

##### 1.03 SUBMITTALS

A. Submit complete Shop Drawings on all shop fabricated miscellaneous metals indicated on the Drawings and specified herein.

B. Submit Product Data on all manufactured miscellaneous metals with samples of special finishes.

##### 1.04 COMPLIANCE

A. Welding shall be provided in accordance with the requirements of the "Code for Arc and Gas Welding in Building Construction" as adopted by the American Welding Society.

B. Fabrication and erection of all steel shall be done in compliance with AISC standard specifications.

## PART 2 - PRODUCTS

### 2.01 MANUFACTURERS

#### A. Miscellaneous Metals Paint and Grout Manufacturers:

1. Paint: Rustoleum, Devcon, Tnemec, Southern Coating or a prior approved substitute; and Grout: Sonneborne, W. R. Grace, Hallemite Co., Five Star by U. S. Grout or a prior approved substitute.

2. Items specified herein are by specific manufacturers are used only to denote the quality standard of product desired and that they do not restrict bidders to the specific brand, make, manufacturer, or specification named; and that they are used only to set forth and convey to prospective bidders the general style, type, character, and quality of products desired; and that equivalent products may be acceptable.

3. It shall be the responsibility of the professionally employed Architect or Engineer, or Interior Designer, to determine what is considered an equivalent product, meeting also Owner approval, on any and all Projects in which they have been legally employed to perform professional services.

4. Other manufactures specified below or above, or other prior approved substitutes may be provided if they meet all requirements specified herein and are substitutes approved by the Architect, Engineer, or Interior Designer.

### 2.02 MATERIALS

#### A. General Requirements

1. All exposed steel members, including but not limited to pipes, pipe bollards, steel plates, steel angles, steel brick veneer angle lintels, nuts, bolts and washers, and all other steel, either exposed to the weather or embedded in concrete shall be Hot Dipped Galvanized in accordance with ASTM A 123 and ASTM A 386.

2. All exposed galvanized steel and steel specifically indicated or specified not to be galvanized, shall be painted.

3. Paint primer for all steel shall be of a red base for interior Work and zinc rich for exterior galvanized Work.

4. Field welding electrodes shall conform to ASTM E 70 series.

5. All exposed welding shall be ground smooth.

6. Grout for miscellaneous metals shall be non- shrink, water and oil resistant, non-metallic non- corrosive and non-staining. Grout shall have 12,000 PSI compressive strength with a vertical expansion of

+0.004 inches at flow of 100 when measured in accordance with CRD-C-227.

7. Sizes of all miscellaneous metals shall meet or exceed AISC design requirements and shall be of sizes and shapes indicated on Drawings.

8. All miscellaneous metals shall meet all requirements of all standards specified herein.

#### B. Specific Requirements

1. Pipes and tubing, (if any), shall be standard weight, ASTM A 53, and ASTM A 120, galvanized as specified above for exterior use.

2. Bolts shall be ASTM A 307 and ASTM A 325.

3. Steel angle lintels, angles, miscellaneous plates, support plates, structural steel, and other miscellaneous steel shall be ASTM A 36.

4. Refer to Structural documents for steel lintels over openings.

5. All aluminum except cast aluminum shall be alloy 6063-T5, and 6063-T6, suitable for anodizing.

6. Cast aluminum shall be alloy 214 for color match with 6063.

7. All stainless steel, unless otherwise specified, shall be Type 302 or Type 304.

### PART 3 - EXECUTION

#### 3.01 SHOP FABRICATING

A. Form materials to shapes indicated with straight lines, sharp angles and smooth curves.

B. Drill or punch holes and finish edges smooth.

C. Weld permanent shop connection, conforming to ASTM E 70 electrodes.

D. Grind smooth, welds that will remain exposed.

E. Conceal fastenings where possible.

F. For bolted connections that will remain exposed, provide flat head bolts and countersink holes for heads of bolts.

G. Fabricate parts in shop in as large assemblies as practical. Assemble in shop to eliminate unnecessary field connecting.

H. Comply with requirements specified for fabricating structural steel for metal work of a structural nature or use.

I. All miscellaneous metals shall be fabricated and installed with dimensions to meet or exceed ADA and ANSI requirements for the handicapped.

### 3.02 GENERAL INSTALLATION

A. Securely fasten all materials and equipment specified herein.

### 3.03 SHOP PAINTING

A. Clean ferrous metal of scale, rust, oil, moisture, and dirt before applying paint.

B. Apply one shop coat of rust inhibiting primer to all ferrous metals and one shop coat of zinc rich galvanized primer to all galvanized steel after fabricating.

C. Provide an additional coat of asphalt paint to galvanized steel that will be encased in concrete or placed under ground.

D. Provide asphalt paint on ferrous metals in contact with nonferrous metals, and where two dissimilar metals occur.

E. Painting specified herein does not count as a coat for finish painting.

F. Apply two shop coats to metal that will be inaccessible after installing.

### 3.04 ERECTION

A. Miscellaneous metals shall be installed true to line, plumb and anchored into masonry with embedded anchors as specified and detailed.

B. Bolts exposed shall be cut flush with nuts after tightening and ground smooth.

C. Manufactured Items shall be installed according to manufacturer's recommendations and instructions. Comply with details and Shop Drawings.

D. All erection shall comply with all of the above Standards specified herein.

### 3.05 PRIME COAT TOUCH-UP

A. Immediately after erection, areas where prime coat has been damaged shall be ground smooth and touched up with same primer used in shop.

B. Touch up damaged galvanized surfaces with zinc rich paint specified herein.

C. Remove all rust and dirt before above touch-up is applied.

D. Touch-up shall not be obvious.

- END -

## SECTION 06100

### ROUGH CARPENTRY

#### PART 1 - GENERAL

##### 1.01 GENERAL REQUIREMENTS

A. The provisions of all of the Contract Documents are hereby made a part of this Section.

B. The requirements of Section 01810 entitled Technical Section Requirements apply to this Section the same as though herein written out in full.

C. Rough Carpentry includes treated lumber, treated blocking, framing and treated plywood sheathing not exposed and covered with finish materials other than paint.

D. All rough carpentry lumber and plywood shall be treated.

E. Refer also to Section 06200 Finish Carpentry and Millwork.

##### 1.02 STANDARDS

Meet requirements and recommendations of the applicable portions of the latest editions of Standards listed below:

- A. American Wood Preserves Institute (AWPI)
- B. National Forest Products Association (NFPA)
- C. Federal Specifications (FS)
- D. American Plywood Association (APA)
- E. Southern Pine Inspection Bureau (SPIB)
- F. Southern Forest Products Association (SFPA)
- G. Environmental Protection Agency (EPA)
- H. Great Southern Wood Preserving (GS)
- I. American Society for Testing And Materials (ASTM)
- J. International Building Code (IBC)

##### 1.03 COMPLIANCE

A. All treated lumber shall meet or exceed grading rules and Wood Species: AWPI, APA, FS, ALSC, NFPA, CS & PS, NELMA, SPIB, WCLIB, WWP, RIS, NHPMA, and AWP. All treated lumber and treated plywood shall bear an official grade mark.

B. Fasteners Used with Treated Lumber and Plywood: All bolts, nails and screws used with treated lumber, shall meet or exceed Federal Specifications and shall be Type 304 stainless steel, with minimum sizes in accordance with the International Building Code.

C. Width and depth dimensions are given in nominal dimensions. Actual dimensions (smaller) shall be in accordance with the American Lumber Standards Committee and the Southern Pine Inspection Bureau.

D. Moisture content of all treated lumber specified herein, after treatment, shall be kiln dried, KD, maximum of 19% moisture content.

E. Surfacing of all treated lumber specified herein shall be surfaced four sides, S4S, unless indicated otherwise.

F. All treated lumber shall be vacuum-pressure process treated and kiln dried after treatment.

G. All treated lumber shall be stamped with appropriate grade, quality and treatment brand, mark, stamp or label.

## PART 2 - PRODUCTS

### 2.01 MATERIALS

#### A. Miscellaneous Treated Lumber:

1. All lumber provided on the interior or exterior of the building, or on the Project site for this Project, shall be No. 2 Southern Pine, treated as specified herein, and kiln dried to a maximum of 19% moisture content after treatment.

2. Lumber shall include, but shall not be limited to framing lumber provided at perimeters of the membrane roof & blocking and wood framing provided under the metal cap on the parapet walls, miscellaneous wood blocking, membrane roof edge blocking, membrane roof wood cants, or any other rough carpentry wood.

#### B. Treated Plywood Sheathing, (if any):

1. All Plywood Sheathing (Rough Carpentry not Exposed), shall be treated.

2. All treated plywood shall bear the APA grade trademark.

3. All treated plywood sheathing not exposed, and all other sheathing indicated shall be special ordered in advance as: Treated APA RATED STURD-I-FLOOR, Exterior; treated C-C Plugged, Underlayment C-C Plugged, all pressure treated with ACA or CA preservative in accordance with AWPA Standard C9.

#### C. Lumber and Plywood Treatment:

1. Copper Azole, (CA), by Treatment Technologies, Wolmanized, for above grade or ground contact, or a prior approved substitute; or,

2. Alkaline Copper Quat, (ACQ), by Chemical Specialties, by Wolmanized, Osmose, for above grade or ground contact, or a prior approved substitute.
3. Micronized Copper Quaternary, (MCQ), by Osmose, YellaWood (MCQ), or a prior approved substitute.
4. All lumber and plywood exposed to weather shall have an additional water repellent treatment such as Wolmanized water repellent, or Thompsonized water repellent treatment.
5. All rough carpentry and treated lumber shall be provided without finger joints.
6. Refer to also to Drawings and other Specification Sections for sizes and locations of treated lumber and plywood used for miscellaneous blocking.

D. Finish Plywood and Finish Lumber:

Refer to Section 06200 Finish Carpentry and Millwork for exposed and non-exposed finished plywood, wood trim, and lumber.

E. Fasteners: All fasteners used on conjunction with treated lumber shall be Type 304 Stainless steel nails and fasteners.

F. Building Felt, (if any): Miscellaneous building felt shall be minimum 30 pound building felt.

PART 3 - EXECUTION

3.01 INSTALLATION

A. INSTALLING TREATED LUMBER

1. Fasteners and Connectors: Securely fasten all treated lumber, wood blocking, and plywood with Type 304 stainless steel fasteners.
2. Cut members square to fit closely and set members plumb and level unless otherwise indicated.
3. Cut all angles and miters to fit tightly.
4. Refer to Contract Documents for locations of items to be securely fastened to surfaces.
5. Provide securely fastened treated blocking behind items and insure that fasteners are secured in treated blocking.
6. Unless otherwise indicated or specified elsewhere to exceed these requirements, minimum numbers and sizes of nails and fasteners for wood framing, sheathing, and wood connections shall be in accordance

with FASTENING SCHEDULE TABLE of the latest Edition of the International Building Code, (IBC), and APA minimum requirements.

7. Where continuous structural treated wood grounds, members and 2 x's are indicated to be adjacent to steel angles, beams and other steel members, unless otherwise indicated, drill steel and wood members to securely fasten same with a minimum of 3/8" counter-sunken stainless steel bolts spaced 12" from ends and 36" O. C.

8. Provide larger and more bolts at special conditions as directed and determined by the Architect.

9. Provide treated lumber metal connectors specified supporting all wood members not bearing and resting on solid sills.

10. Provide treated lumber metal connectors in strict accordance with manufacturer's recommendations using the numbers of fasteners recommended.

- END -

## SECTION 06200

### FINISH CARPENTRY AND MILLWORK

#### PART 1 - GENERAL

##### 1.01 GENERAL REQUIREMENTS

A. The provisions of all of the Contract Documents are hereby made a part of this Section.

B. The requirements of Section 01810 entitled Technical Section Requirements apply to this Section the same as though herein written out in full.

C. Refer to Section 08770 for Cabinet Hardware.

##### 1.02 STANDARDS

Meet requirements and recommendations of the applicable portions of the latest editions of Standards listed below:

- A. National Woodwork Manufacture's Association (NWMA)
- B. American Plywood Association (APA)
- C. National Forest Products Association (NFPA)
- D. Architectural Woodwork Institute (AWI)
- E. American Plywood Association (APA)
- F. Redwood Inspection Service (RIS)
- G. Hardwood Plywood and Veneer Association (HPVA)
- H. International Building Code (IBC)
- I. ADA

##### 1.03 SUBMITTALS

A. Submit complete Shop Drawings showing sizes, quantities, dimensions, and hardware locations.

B. Indicate methods of connecting, anchoring and fastening.

C. Draw profiles, sections and views at a large enough scale to permit checking design conformity.

D. Submit Product Data and Samples for plastic laminate color and texture selection by Architect.

##### 1.04 COMPLIANCE

A. All lumber shall meet or exceed grading rules and Wood Species: AWPI, APA, FS, ALSC, NFPA, CS & PS, NELMA, SPIB, WCLIB, WWPA, RIS, NHPMA, and AWPA. All plywood shall bear an official grade mark.

- B. All bolts, nails and screws shall meet or exceed Federal Specifications FF-B-100, -300, -500, and -800 series. All bolts, nails, and screws provided in treated lumber shall be stainless steel.
- C. Moisture content of all lumber specified herein shall be kiln dried, KD, maximum of 15% moisture content, or S-Dry, 19% moisture content.
- D. Surfacing of all lumber specified herein shall be surfaces four sides, S4S, unless indicated otherwise.
- E. All softwood plywood shall be stamped with APA grade trademarks.
- F. All hardwood plywood shall be as specified below.
- G. All lumber shall be clear, free from knots and checks.
- H. All exposed edges of hardwood and softwood plywood shall be edge banded with veneer applied with hot melt glue as opposed to veneer tape, as specified herein, meeting AWI Custom Grade Standards, Section 400.
- I. All hardwoods shall meet AWI Grade One (1) Standards.
- J. All softwoods shall meet AWI Grade Two (2) Standards.
- K. Glued pieces of lumber for hardwoods and softwoods shall have matching grain and color according to AWI Grade One (1) Standards.
- L. All standing and running trim and rails (interior and exterior), shall meet AWI Custom Grade Standards.
- M. All cabinets, shelving, opening frames, paneling, top rails, desks, stands, and miscellaneous millwork shall meet or exceed AWI Custom Grade Standards.
- N. Provide all finish lumber, finish carpentry, and millwork without exposed finger jointed joints.
- O. All materials specified herein shall meet all requirements specified under the paragraph entitled Standards, above.
- P. All millwork cabinet grounds such as lumber provided to attach millwork & cabinets to concrete, & brick or concrete block masonry, shall be treated lumber.

## PART 2 - PRODUCTS

### 2.01 MANUFACTURERS

A. Plastic Laminate: Nevamar, Formica, Wilson Art or a prior approved substitute.

## 2.02 INTERIOR FINISH CARPENTRY AND MILLWORK:

A. Interior Lumber: All interior finish carpentry and millwork lumber materials, (other than finish plywood), shall be either interior hardwood lumber specified herein or interior softwood lumber specified herein.

### 1. Interior Hardwood Lumber:

a. All interior finish carpentry and millwork lumber indicated or specified as interior hardwood, or hardwood, shall be red oak, either AWI Quarter Sawn Red Oak, or AWI Rift Sawn Red Oak.

b. All interior finish carpentry and millwork lumber indicated or specified shall be "Well Matched" according to the AWI Standards definition such that wood members are selected so that the color and grain of adjacent wood members are similar and uniform in appearance.

c. All interior finish carpentry and millwork lumber indicated or specified shall be sanded and finished with stain and varnish as specified in Section 09900, Painting.

d. Unless otherwise indicated or specified, provide above specified interior hardwood lumber for edge banding finish hardwood plywood, and for all trim adjacent to finish hardwood plywood, for exposed trim, molding, turned spindles, top rails, shelf supports, shelves, cleats, and other exposed miscellaneous finish carpentry, millwork and trim.

### 2. Interior Softwood Lumber:

a. All interior finish carpentry and millwork indicated or specified as interior softwood, or softwood shall be plain "C and Better" poplar, white pine, northern pine, or Douglas fir, finished with opaque paint as specified in Section 09900, Painting, or stained and varnished as directed by the Architect.

b. Unless otherwise indicated or specified, provide interior hardwood lumber as opposed to softwood lumber for edge banding finish softwood plywood.

c. Provide softwood bases & shoe molding, painted with opaque paint, in the existing library building, (after removal of existing rubber bases), and in the new east & west additions, where and as indicated on Detail 1, Room Finish Schedule, Sheet A08, New Base Note E. 40, with reference Specific Note a. below describing where to provide shoe molding & where to omit said softwood bases and shoe moldings adjacent to book shelves in contact with interior walls.

Provide interior softwood lumber, painted with opaque paint, for all trim for new aluminum window sills and trim.

d. Provide stained & clear finished hardwood millwork trim where indicated on Detail 1, Room Finish Schedule, New Base Note 43 and Specific Note g. below, Sheet A08, and where indicated on:

(1) Wall Type H, Detail 9 and 9a on Sheet A15.

(2) Wall Type K, Detail 12, Sheet A15.

(3) Crown molding at ceilings, exposed beams, and column caps at tops of (5) interior columns where indicated on Detail 1, Reflected Ceiling Plan, Sheet A14.

(4) Detail 12a, Sheet A15, and Details 2A15, 3A15, 4A15, 5A15, and 7A15, and where indicated elsewhere on the Drawings.

(5) Stain color for new hardwood trim shall match color of existing stained hardwood trim above existing library Room X102.

#### B. Interior Finish Plywood:

All interior finish plywood materials, (other than finish carpentry and millwork interior lumber materials), shall be either interior hardwood plywood or interior softwood plywood as specified herein.

##### 1. Interior Hardwood Plywood:

a. All hardwood plywood veneer shall be either AWI Quartered American Red Oak Veneer; or, all hardwood plywood veneer shall be AWI Rift Sliced American Red Oak Veneer. Do not mix the two; provide one or the other.

b. All hardwood plywood veneer shall be either AWI Book Matched; or all hardwood plywood veneer shall be AWI Slip Matched. Do not mix the two; provide one or the other.

c. All hardwood plywood shall have an AWI and HPVA veneer face grade of Grade A.

d. Interior hardwood plywood panel assembly adhesives shall be Type I, waterproof; or, Type II, moisture resistant.

e. All hardwood plywood shall be stained and varnished as specified in Section 09900, Painting.

f. Unless otherwise indicated or specified, provide interior hardwood plywood for all exposed plywood adjacent to finish hardwood lumber trim; for exposed panels, shelves, desks, desk and cabinet doors and drawer faces, exposed sides and backs of cabinets and vanities, and other exposed miscellaneous finish plywood not concealed in Closets,

not concealed in Janitor Rooms and other Storage Rooms, and not concealed behind cabinet and vanity doors.

## 2. Interior Finish Softwood Plywood:

a. All concealed interior finish softwood plywood shall be interior APA A-A, or B-B fir plywood. All said plywood shall be painted as specified in Section 09900, Painting.

b. Unless otherwise indicated or specified, provide interior softwood plywood for all plywood on backs of cabinets concealed with closed cabinet doors.

## 2.03 EXTERIOR FINISH CARPENTRY AND MILLWORK

### A. Exterior Exposed Lumber, (If Any)

Unless otherwise indicated or specified, all exterior finish carpentry lumber and millwork materials, (other than exterior finish plywood), shall be all clear redwood, free from knots, checks, splits, bark, rough sawn spots, white or blonde sapwood, and provided without finger joints.

### B. Exterior Exposed Finish Plywood, (If Any)

Unless otherwise indicated or specified, all exterior finish plywood materials, (other than exterior finish carpentry and millwork lumber materials), shall be EXT - APA softwood plywood, minimum APA EXT A-C.

## 2.04 FINISH CARPENTRY AND MILLWORK MINIMUM THICKNESS

Unless otherwise indicated, minimum thickness of finish carpentry and millwork shall be as follows:

### A. Hardwood and Softwood Lumber:

1. Wall cleats, shelves, and miscellaneous trim: minimum 1" nominal.

2. Where thicknesses, sizes, and dimensions are not indicated or specified, APA & AWI standards shall govern.

### B. Finish Plywood:

1. Hardwood Finish Plywood: Cabinet plywood doors, tops, rails, stiles, drawer front faces, splashes, exposed cabinet sides, exposed cabinet backs, and all shelves: minimum 3/4", unless otherwise indicated or specified.

2. Softwood Finish Plywood: Cabinet plywood backs and sides adjacent to walls: minimum 1/4", unless otherwise indicated or specified.

3. Where thicknesses, sizes, and dimensions are not indicated or specified, APA & AWI standards shall govern.

#### 2.05 Miscellaneous Materials

##### A. Edge Banding:

All plywood, both hardwood and softwood, shall be edge banded with glued solid hardwood, Red Oak.

##### B. Exterior Fasteners:

1. All fasteners for exterior plywood and exterior wood and trim shall be stainless steel.

##### C. Wood Grounds:

Refer to Section 06100, Rough Carpentry, wood blocking, all treated when in contact with concrete, and brick and concrete block masonry.

#### 2.06 PLASTIC LAMINATE COVERED COUNTER TOPS AND SPLASHES

A. High pressure decorative laminate, (HPDL), HGS, minimum 0.048 inch thick, complying with NEMA, LD3, Class I, Type I, adhesively applied counter tops.

B. Counter tops and splash substrates shall be MDF, (except at all sinks, where an 8 feet long 3/4" thick, APA A-B softwood interior plywood will be provided, centered on sinks), all provided doubled to 1-1/2" thick at the counter top forward edge, meeting AWI 400 Standards.

C. Provide HPDL backer sheets on undersides of all counter tops.

##### D. Glue and Contact Cement:

Moisture resistant, CS 35, Type II.

2.07 CABINET CONSTRUCTION: AWI REVEAL OVERLAY, IN ACCORDANCE WITH AWI SECTION 400.

### PART 3 - EXECUTION

#### 3.01 COORDINATING

A. Secure cabinet hardware manufacturer's dimensions and Product Data prior to constructing cabinets to insure proper functioning of cabinet hardware specified in Section 08770, Cabinet Hardware.

B. Refer to Electrical and Mechanical Documents for locations of mechanical and electrical materials and equipment.

C. Refer to Section 01050, Project Coordination for coordinating Work specified herein with all Work in other Sections of the Specifications.

### 3.02 TEMPLATES

A. Secure templates for all cut outs including door and cabinet hardware for materials and equipment to be set in materials specified herein.

B. Provide additional hardwood stops at tops and bottoms of the Storage Closet No. 14 where required to accommodate overlay and pivot hinges for 1-3/8" hollow core doors.

C. Provide frame construction for the Storage Closet No. 14 where required to accommodate overlay and pivot hinges for 1-3/8" hollow core doors.

D. Provide manufacture's recommended bored holes with recommended dimensions for European hardware specified for 3/4" cabinet doors.

E. Provide extra hardwood blocking for mounting hook & eye latches, magnetic catches, barrel bolts, and all miscellaneous cabinet hardware specified in Section 08770, Cabinet hardware.

### 3.03 INSTALLING

A. Install all work level, true and plumb.

B. Sand all exposed surfaces of wood and prepare for painting with opaque paint or with stain and varnish.

C. Countersink and fill all exposed fasteners to conceal same.

D. All millwork and finish carpentry Work shall meet or exceed AWI quality standards, custom grade.

E. Adhesively apply plastic laminate to counter tops and splashes.

F. Install all cabinet hardware specified in Section 08770, Cabinet Hardware prior to delivery of cabinets.

G. All cabinet hardware including finishes shall be approved by the Architect prior to ordering same.

H. Sizes and grades of all components of cabinets such as drawer bottoms, drawer sides and backs, rails, stiles, backs, doors, and shelves shall meet or exceed AWI standards for Custom Grade standards.

I. Provide all exterior plywood and exterior wood trim with Type 304 or Type 316 stainless steel nails.

J. Provide plywood specified in Section 10420, Signs and Plaques behind building plaque.

K. Provide minimum four inch (4") high x 3/4' thick plastic laminate covered splashes at all rears of cabinet plastic laminate counter tops; and at all ends of cabinet plastic laminate counter tops, where counter tops abut walls, with cabinet end splashes the same height as cabinet back splashes.

L. Provide hardwood veneer edge-banding on all edges of cabinet doors and drawer fronts, and on all exposed edges of all softwood and hardwood shelves, and on all exposed edges of all hardwood and softwood plywood.

M. Provide vertical hardwood cabinet filler strips at ends of cabinets at adjacent 90 degree adjoining walls, wide enough to insure that cabinet doors, and Closet and Storage Cabinet doors can open a minimum of 90 degrees, and drawers can clear wood and hollow metal frames and other obstructions.

- END -

## SECTION 07200

### BUILDING INSULATION

#### PART 1 - GENERAL

##### 1.01 GENERAL REQUIREMENTS

A. The provisions of all of the Contract Documents are hereby made a part of this Section.

B. The requirements of Section 01810 entitled Technical Section Requirements apply to this Section the same as though herein written out in full.

C. Refer also to Section 07500, Membrane Roof for rigid insulation which is specified to be provided above the new metal deck and under all of the new membranes roofs.

D. Refer also to Section 07225, Laminated Roll Roof Insulation, for roll roof insulation and vapor barrier which is specified to be provided as the upper layer of roof insulation directly under all of the new metal roof on the existing building, and directly over the new lower layer of un-faced building thermal insulation specified herein which shall be supported on new poultry wire.

E. Building Insulation specified herein is specified as:

1. Building Thermal Insulation with minimum specified thicknesses and minimum R-values; and,

2. Building Sound Attenuation Batt Insulation with minimum specified thicknesses and minimum STC ratings.

##### 1.02 STANDARDS

Meet requirements and recommendations of the applicable portions of the latest editions of Standards listed below:

A. American Society for Testing Materials (ASTM)

B. International Building Code (IBC)

C. North American Insulation Manufacturers Association - (NAIMA)

##### 1.03 SUBMITTALS

Submit complete manufacturer's Product Data on all materials specified herein.

##### 1.04 COMPLIANCE

A. Insulate Interior Air-Conditioned Areas: Maintain the integrity of the insulated building's interior envelope by providing continuous

uninterrupted building insulation to insulate all of the enclosed interior air-conditioned rooms, spaces, and areas in from the exterior.

B. Insulate Interior Non-Air-Conditioned Attic Areas: Maintain the integrity of the insulated building envelope by also providing continuous uninterrupted roof and exterior wall insulation to insulate all of the enclosed, interior non-air-conditioned attic area from the exterior by providing:

1. Rigid roof insulation specified under Section 07500, Membrane Roof; and,
2. Laminated Roll roof insulation with a vapor barrier below same, (upper layer of metal roof insulation), specified under Section 07225, Laminated Roll Roof Insulation; and,
3. Building thermal insulation, (un-faced fiberglass insulation batts), specified herein, provided in exterior walls, above some ceilings where indicated, and under all of the new metal roof, as the lower layer of metal roof insulation supported on poultry wire.

C. Interior Sound Rated Rooms and Areas:

1. Provide un-faced sound attenuation acoustical batt insulation where indicated and specified herein, between all studs in all plumbing chase sound walls marked D; and in all staggered stud sound walls marked E.
2. Provide un-faced sound attenuation acoustical batt insulation where indicated and specified herein, between all studs in all sound walls marked B and K.

D. Minimum Compliance Requirements:

1. Prior to submitting bids, verify whether or not the below specified manufacturers, or prior approved manufacturers can provide building thermal insulation and building sound batt insulation meeting all ASTM performance tests specified herein with the following specified minimum thicknesses and specified minimum R values and STC values.
2. If insulation manufacturers specified or prior approved insulation manufacturers cannot provide materials meeting specified minimum requirements and standards specified herein, these manufacturers will be rejected after bidding.

## PART 2 - PRODUCTS

### 2.01 MANUFACTURERS

A. Building Insulation Manufacturers:

1. Building Insulation: CertainTeed, Guardian, Johns Manville, Knauff, Owens/Corning, or a prior approved substitute.

2. Items specified herein by specific manufacturers are used only to denote the quality standard of product desired and that they do not restrict bidders to the specific brand, make, manufacturer, or specification named; and that they are used only to set forth and convey to prospective bidders the general style, type, character, and quality of products desired; and that equivalent products may be acceptable.

3. It shall be the responsibility of the professionally employed Architect or Engineer, or Interior Designer, to determine what is considered an equivalent product, meeting also Owner approval, on any and all Projects in which they have been legally employed to perform professional services.

4. Other manufactures specified below or above, or other prior approved substitutes may be provided if they meet all requirements specified herein and are substitutes approved by the Architect, Engineer, or Interior Designer.

## 2.02 MATERIALS

A. General Building Thermal Batt and Roll Insulation and Sound Attenuation Batt and Roll Insulation Material Requirements:

1. Building thermal batt and roll insulation materials and building sound attenuation batt and roll insulation materials shall be:

a. Un-faced fiberglass thermal batt and roll rigid fit insulation, meeting ASTM C 665, Type I; and,

b. Rated noncombustible and passing ASTM E 136; and,

c. Provided in accordance with ASTM E84, having a flame resistant rating with a with a Flame Spread/Smoke developed rating of (25/50), or less per ASTM E 84; and,

d. Provided with a water vapor absorption of less than or equal to than (5%) in accordance with ASTM C 1104; and,

e. Provided with minimum thermal performance R-Values for building thermal insulation only, in accordance with ASTM C 518; and provided with STC ratings for sound batt insulation in accordance with ASTM E 413 or NAIMA tests.

B. Building Thermal Insulation Minimum Thicknesses and Minimum R-Values:

1. Un-faced specified fiberglass building insulation shall have the following minimum thicknesses and the following minimum R-Values:

a. Nominal 3-1/2" thick: Minimum 3-1/2" or maximum 3-5/8" actual thickness, High Density, (HD), minimum R-Value = 15, (if any indicated or specified).

b. Nominal 6" thick: Minimum 6-1/4" - 6-1/2" actual thickness, minimum R-Value = 19.

c. Nominal 8" thick: Minimum 8-1/4" actual thickness, High Density, (HD), minimum R-value = 30.

C. Building Sound Attenuation Batt Insulation:

1. All building sound attenuation batt insulation shall be un-faced batts, minimum 3-1/2" thick, provided by one of the above specified manufacturers and shall be:

a. STC Rated Certainteed Noise Reducer Sound Attenuation Batts; or,

b. STC Rated Owens Corning Quiet Zone Sound Attenuation Batts; or,

c. STC Rated Knauff Eco-Batt Quiet-Therm Insulation; or a prior approved substitute.

d. STC rated Johns Manville Formaldehyde Free Building Insulation.

e. STC rated Guardian Fiber glass Insulation.

2. Sound attenuation batt insulation shall have a minimum STC ratings of 50 when tested in accordance with ASTM E 413 or NAIMA, fitted between 3-5/8" metal studs with a single layer of 5/8" gypsum board on each side, with 3-1/2" of specified sound attenuation batt insulation filling all voids between studs.

D. Poultry Wire Insulation Support and Fasteners:

1. Provide standard galvanized poultry wire with maximum 1" hexagons formed with standard twisted galvanized poultry wire.

2. Provide tie wire for tying and fastening poultry wire to steel purlins, studs, joists, and other framing members, and for fastening joints of adjacent rolls of poultry wire shall be standard, annealed, exterior, galvanized electric fence wire.

3. Provide galvanized clips for supporting and attaching poultry wire to steel purlins.

2.03 LOCATIONS OF BUILDING THERMAL INSULATION SPECIFIED HEREIN

A. Provide continuous 6" nominal, un-faced fiberglass building thermal wall insulation with minimum R-Value = 19 in a monolithic plane between all perimeter new exterior 6" metal wall studs and where indicated.

B. Provide continuous vertical poultry wire supported 6" nominal, un-faced fiberglass building thermal partition insulation with minimum R-Value = 19 in a monolithic plane between metal studs extending upwards over Walls Type P, up to the un-faced building thermal insulation under the metal roof, at the east and west ends of Covered Porch X128 and where indicated.

C. Provide continuous 6" nominal, un-faced fiberglass building thermal insulation with minimum R-Value = 19 in a monolithic plane on both sides of the new top steel beam supporting the bar joists on the exterior perimeter wall supported vertically with poultry wire specified herein, and extending upwards up to the metal deck and where indicated.

D. Provide continuous 6" nominal, un-faced fiberglass building thermal insulation with minimum R-Value = 19 in a monolithic plane over New Coffee Room X126 and over New Storage Room X127, supported on continuous poultry wire over specified and indicated metal joists indicated above the ceiling.

E. Provide continuous 8" nominal, un-faced (HD) fiberglass building thermal lower layer roof insulation with minimum R-Value = 30 in a monolithic plane and fully supported on specified galvanized poultry wire under and in contact with the vapor barrier of the Laminated Roll Roof Insulation under the entire area of the new metal roof where indicated.

F. Provide all mechanical insulation fasteners and vertical and horizontal insulation supports for each different type of application where and as recommended by insulation manufacturers.

#### 2.04 LOCATIONS OF BUILDING SOUND ATTENUATION BATT AND ROLL INSULATION SPECIFIED HEREIN

A. Provide continuous 3-1/2" nominal, un-faced fiberglass building sound attenuation batt insulation, from floor slab up to 6" above the tallest adjacent finish ceiling, with minimum specified STC rating, in a monolithic plane, as indicated, between all metal studs in all metal stud sound walls marked B and K.

B. Provide continuous 3-1/2" nominal, un-faced fiberglass building sound attenuation batt insulation, from floor slab up to 6" above the tallest adjacent finish ceiling, with minimum specified STC rating, in a monolithic plane, as indicated, weaving between all metal studs in all sound walls marked E.

C. Provide continuous 3-1/2" nominal, un-faced fiberglass building sound attenuation batt insulation, from floor slab up to 6" above the tallest adjacent finish ceiling, with minimum specified STC rating, in a monolithic plane, as indicated, between both rows of 3-1/2" metal wall studs in all new plumbing chase sound walls marked D.

## PART 3 - EXECUTION

### 3.01 BUILDING INSULATION CUTTING, FITTING AND INSTALLATION

- A. Provide standard widths designed for framing spacing in maximum lengths available.
- B. Cut fiberglass insulation to fit snugly and tightly between framing members of non-standard widths a minimum of three-quarters inch (3/4") wider and longer than the measured space.
- C. Fit all insulation neatly and tightly in all openings, crevices, and corners between framing members and between framing members and opening frames.
- D. Fit insulation neatly and tightly around all architectural, structural, mechanical, and electrical materials and equipment which penetrate or obstruct the monolithic planes of insulation.
- E. Neatly fit all vertical, horizontal, and sloping specified fiberglass building insulation in spaces and voids where indicated and specified.
- F. Neatly fit all building insulation on the outsides of all architectural, structural, mechanical and plumbing, and electrical materials and equipment.
- G. Where horizontal, vertical, and sloping specified and indicated building insulation is compressed between outside materials and sheathing and interior materials and equipment, provide additional insulation in the in-side and out-side voids and spaces to maintain the monolithic, minimum specified uniform insulation thickness.
- H. Where metal framing members are very closely spaced with voids in the "C" sections of metal framing members, neatly fill these small voids with building insulation.
- I. Securely support and fasten all wall, ceiling, and roof building insulation as recommended by the insulation manufacturers

### 3.02 POULTRY WIRE INSTALLATION AND LOCATIONS

- A. To support the lower layer of un-faced 8" (HD) fiberglass insulation specified herein, between the structural steel purlins, securely fasten all continuous poultry wire to the bottoms of all steel purlins, under all areas under the metal roof.
- B. After the lower layer of fiberglass insulation is tightly compressed against the upper layer of laminated roll roof insulation vapor barrier above, pull poultry wire tautly.

C. Do not allow the insulation specified herein, between the structural steel purlins, to sag.

D. Provide a uniform, tight, continuous mat of poultry wire supporting compressed non-sagging lower layer insulation above.

E. Sew adjacent pieces of poultry wire together with tie wire specified herein and pull tautly in both directions.

F. Remove all poultry wire and the lower layer of fiberglass insulation that is sagging or is not tightly compressed against the upper layer of laminated roll roof vapor barrier and reinstall same and re-tighten poultry wire.

G. Adjacent to structural perimeter steel beams, and on vertical lightgauge metal stud framing in attics above ceilings, provide continuous, securely fastened vertical poultry wire insulation supports, extending up to the nominal 8" un-faced fiberglass roof insulation, and membrane roof metal deck where indicated.

- END -

## SECTION 07211

### PERFORATED EXTERIOR WALL RADIANT BARRIER

#### PART 1 - GENERAL

##### 1.01 GENERAL REQUIREMENTS

A. The provisions of all of the Contract Documents are hereby made a part of this Section.

B. The requirements of Section 01810 entitled Technical Section Requirements apply to this Section the same as though herein written out in full.

C. Prior to ordering materials, make sure that the radiant material specified herein is perforated and that it meets the minimum tear resistant properties and other minimum material properties specified herein.

##### 1.02 STANDARDS

Meet requirements and recommendations of the applicable portions of the latest editions of Standards listed below:

- A. American Society for Testing and Materials (ASTM)
- B. Federal Standards (FS)
- C. Underwriters Laboratory (UL)
- D. Thermal Insulation Manufacturers Association (TIMA)
- E. International Building Code (IBC)

##### 1.03 SUBMITTALS

A. Submit complete Product Data on all materials specified herein, indicating minimum performance requirements specified herein.

B. Submit samples of perforated materials specified herein.

#### PART 2 - PRODUCTS

##### 2.01 MANUFACTURERS

A. Perforated Radiant Wall Barrier Manufacturers:

1. Perforated Radiant Wall Barrier: Fi-Foil Radiant Shield, Auburndale, FL, 1-800-448-3401; Radiant Guard, Frisco, TX, 1-866-528-8412; Ra-flect Radiant Barrier, Lafayette, LA, 1-800-991-3261; or a prior approved substitute.

2. Items specified herein are by specific manufacturers and are used only to denote the quality standard of product desired and that they do not restrict bidders to the specific brand, make, manufacturer, or specification named; and that they are used only to set forth and convey to prospective bidders the general style, type, character, and quality of products desired; and that equivalent products may be acceptable.

3. It shall be the responsibility of the professionally employed Architect or Engineer, or Interior Designer, to determine what is considered an equivalent product, meeting also Owner approval, on any and all Projects in which they have been legally employed to perform professional services.

4. Other manufactures specified below or above, or other prior approved substitutes may be provided if they meet all requirements specified herein and are substitutes approved by the Architect, Engineer, or Interior Designer.

## 2.02 MATERIALS

A. All perforated radiant barrier materials shall be Perforated Aluminum Double Sided Radiant Barrier Material, (aluminum facing on both sides), with a woven polypropylene reinforcing fabric core, meeting minimum tensile strength, minimum tear resistance, and minimum ASTM and other performance tests requirements specified below.

### 1. Thermal Performance:

a. Minimum 97% reflectivity meeting ASTM E 408; or, 95% reflectivity meeting ASTM C 1371.

b. Maximum emissivity 0.05 meeting ASTM C 1371.

2. Minimum Weight: 18.74 pounds per 1,000 square feet meeting ASTM D 3776.

3. Minimum caliper thickness: 0.004 inches, (4 mils).

### 4. Minimum New IBC Fire Rating:

a. Meet requirements of new IBC 2015, Section 2614, for Reflective Plastic Core Insulation, and meet requirements of Section 2614.3, and later IBC editions, where maximum Flame Spread shall not exceed 25 and maximum Smoke Developed shall not exceed 50 where the reflective plastic core insulation test specimen preparation and mounting shall be in accordance with ASTM E 2599; and,

b. Meet NFPA Class A/Class 1 requirements; and meet ASTM E 84 or UL 723 requirements for Flame Spread/Smoke Developed of less than 25/50.

5. Water Vapor Permeability: Minimum 6.9 perms and maximum 14 perms meeting ASTM E 96.

6. Tensile Strength/Tear Resistance: minimum 10.47 pounds per inch width in machine direction, (MD), meeting ASTM D 3776; and minimum 17.84 pounds per inch in the cross direction, (CD), meeting ASTM D 2261.

7. Oxidation/Corrosivity: Passes the bleeding and delamination ASTM D 3310 test.

### PART 3 - EXECUTION

#### 3.01 INSTALLING

A. After installing exterior gypsum sheathing specified in Section 09260 Gypsum Wallboard, and after taping and sealing all exterior gypsum wallboard joints with specified manufacturer's tape, begin providing the radiant barrier specified herein a little at a time, starting from the bottom working upwards, coordinating same while providing and laying bricks to avoid tears and wind storm damage to same.

B. Temporarily securely fasten and install the radiant barrier with minimum 9/16" long stainless steel staples, a little at a time as brick work progresses.

C. Securely overlap, a minimum of six inches (6"), all vertical joints, all horizontal joints, all inside corners, all outside corners, and all radiant barrier ends at exterior wall opening jambs, heads, and sills and provide multiple staples to secure laps and ends of materials.

D. With a damp cloth or other means, carefully clean and carefully wipe off harmful masonry mortar from the radiant barrier as masonry Work progresses.

E. Final fasteners for the radiant barrier shall be provided 16" OC horizontally and 16" OC vertically with the galvanized steel plates screw to the exterior metal wall studs provided in conjunction with the required special masonry ties specified in Section 04210 Brick Masonry.

F. If the previously installed radiant barrier is torn by wind or by any other accident, rather than trying to repair and patch same with tape, entirely remove the damaged materials and provide new overlapping radiant barrier materials.

### 3.02 LOCATIONS

A. Provide and securely fasten all specified radiant barrier material over all vertical exterior gypsum sheathing which is indicated and specified to be securely fastened to vertical exterior metal wall studs, provided behind indicated brick veneer and provided behind the metal framing indicated to support exterior cement plaster arches and fasciae.

B. Without having an immediate adjacent out-side open air space, radiant barrier material is totally ineffective; hence,

1. Radiant barrier material is not required to be provided directly under, and directly contacting the paper backed metal lath beneath cement plaster where there is no immediate adjacent air space; and,

2. Radiant barrier material is not required to be provided over exterior gypsum sheathing directly under the cement plaster on protruding cement plaster pilasters, and radiant barrier material is not required to be provided over exterior gypsum sheathing directly under the cement plaster provided on cement plaster arches, beams fasciae.

- END -

## SECTION 07225

### LAMINATED ROLL ROOF INSULATION

#### PART 1 - GENERAL

##### 1.01 GENERAL REQUIREMENTS

A. The provisions of all of the Contract Documents are hereby made a part of this Section.

B. The requirements of Section 01810 entitled Technical Section Requirements apply to this Section the same as though herein written out in full.

C. Refer to Section 07200, Building Insulation, for other insulation provided directly under the laminated roll roof insulation specified herein which shall be supported on poultry wire.

D. Refer to Drawings where the existing metal roof, existing plywood sheathing with wood framing at valleys and existing metal flashing are indicated to be entirely removed; and the existing roll roof insulation shall also be removed.

##### 1.02 STANDARDS

Meet requirements and recommendations of the applicable portions of the latest editions of Standards listed below:

- A. American Society for Testing and Materials (ASTM)
- B. Federal Standards (FS)
- C. Underwriters Laboratory (UL)
- D. Thermal Insulation Manufacturers Association (TIMA)
- E. International Building Code (IBC)
- F. North American Insulation Manufacturers Association (NAIMA)

##### 1.03 SUBMITTALS

Submit Samples & complete Product Data on all materials specified herein, indicating minimum requirements specified herein.

##### 1.04 Compliance

A. Laminated roll roof insulation shall comply with NAIMA 202-96, (Revised 2000) and later revised NAIMA editions, and shall be certified as metal building insulation capable of withstanding ASTM tensile strengths; have the structural integrity to recover its thickness after being compressed in shipment; and meet UL requirements.

B. Laminated roll roof insulation shall comply with ASTM C 991,

Standard specifications for Flexible Fibrous Glass Insulation for Metal Buildings.

PART 2 - PRODUCTS

2.01 MANUFACTURERS

A. Laminated Roll Roof Insulation Manufacturers:

1. Insulation for Laminated Roll Roof Insulation: Certaineed, Guardian, John Manville, Knauf, Owens- Corning, or a prior approved substitute; Vapor Retarder Facing for Laminated Roll Roof Insulation: Alfa, Lamtec, or a prior approved substitute.

2. Items specified herein are by specific manufacturers and are used only to denote the quality standard of product desired and that they do not restrict bidders to the specific brand, make, manufacturer, or specification named; and that they are used only to set forth and convey to prospective bidders the general style, type, character, and quality of products desired; and that equivalent products may be acceptable.

3. It shall be the responsibility of the professionally employed Architect or Engineer, or Interior Designer, to determine what is considered an equivalent product, meeting also Owner approval, on any and all Projects in which they have been legally employed to perform professional services.

4. Other manufactures specified below or above, or other prior approved substitutes may be provided if they meet all requirements specified herein and are substitutes approved by the Architect, Engineer, or Interior Designer.

2.02 MATERIALS

A. Insulation for Laminated Roll Roof Insulation shall be:

1. Un-faced fiberglass metal building thermal insulation, meeting ASTM C 665, Type I; and,

2. Rated noncombustible and passing ASTM E 136; and,

3. Provided in accordance with ASTM E84, having a flame resistant rating with a with a Flame Spread/Smoke developed rating of (25/50), or less per ASTM E 84 and passing UL723; and,

4. Provided with a water vapor absorption of less than or equal to than (5%) in accordance with ASTM C 1104; and,

5. Provided with minimum thermal performance R-Values for building thermal insulation only, in accordance with ASTM C177 and ASTM C 518; and,

6. Fungi resistant meeting ASTM C 1338; corrosiveness resistant meeting ASTM C 665; and have odor emission ratings meeting ASTM C 1304; and,

7. Provided with a minimum R value of 11, and with a minimum thickness of 3.3 inches to a maximum thickness of 3.75 inches.

B. Vapor Retarder Facing for Laminated Roll Roof Insulation shall have the following minimum properties:

1. Vapor Retarder Facing Composition:

a. Provide Lamtec's WMP-50 polypropylene white film, minimum 0.0015 inch thick, with flame resistant adhesive, and tri-directional fiberglass/polyester reinforcing, minimum 5/inch (MD), and 5/inch, (XD), with a propriety core of thirty (30) pounds per 3,000 square feet, and with a 0.0005 inch metalized polyester film backing, meeting ASTM C 1136, Type I, II, III, and IV; or

b. Provide Alpha's Style VRP-3 triple ply laminate with a vinyl white face with a metalized polyester film backing 0.0005" thick, and a fiberglass scrim tear stopper; with components adhered with a flame retardant adhesive; with construction of 4 x 3 fiberglass scrim 75G, white PVC film 0.003" thick with a tear strength per ASTM D1424 of warp 56.44 ounces and fill of 56.44 ounces; or

c. Provide a prior approved substitute meeting above minimum requirements.

2. Vapor Retarder Facing Property Data and Facing Physical Properties shall have a:

a. Minimum basic scale weight of 30 pounds per 1,000 square feet, per ASTM D 3776.

b. Permeance, (WVTR) or (MVTR) of 0.02 perm, ASTM E 96, Procedure A.

c. Bursting strength of 120 psi per ASTM D 774; or 85 per ASTM D 3786.

d. Beach Puncture Resistance of 125 to 150 beach units, ASTM C 1136.

e. Tensile strength of 65 pounds per inch width (MD), 60 pounds per inch width (XD) per ASTM C 1136; or per ASTM D 5035, Warp 40 pounds per inch and Fill 30 pounds per inch.

f. Micrometer Caliper/Thickness of 0.010 inch; or measured per ASTM D 1777, 0.008" thick.

g. Dimensional Stability of 0.25%, ASTM D 1204; or per ASTM D 1204, 5% maximum loss.

h. UL classified flame spread/smoke developed of maximum 5 to 15 flame spread and maximum 30 to 50 smoke developed per ASTM E 84/25.

i. Water immersion resistance after one hour water soak with no delamination at 23 degrees C.

j. Low temperature resistance per ASTM D 1790, remains flexible, no delamination.

k. Light reflectance, per ASTM C 523, 85% to 90%.

3. Vapor Retarder Facing Joints: Seal all vapor retarder joints and ends of material with staples and white vinyl repair adhesive tape, as directed and approved by vapor retarder facing manufacturer.

### PART 3 - EXECUTION

#### 3.01 INSTALLING

A. Provide laminated roll roof insulation with factory laminated reinforced vapor retarder in strict accordance with the roll roof insulation manufacturers recommendations and instructions.

B. Seal all facing seams in strict accordance with the roll roof insulation manufacturer's recommendations.

C. Tightly seal all edges of facing adjacent to roof penetrations and at ends of rows.

D. Prior to beginning Work, verify with the metal roof manufacturer all special installation details required to obtain the metal roof warranty.

#### 3.02 LOCATIONS

A. Provide specified reinforced facing laminated roll roof insulation over all structural steel purlin supports everywhere, under all metal roof panels, and under all sheet metal indicated at metal roof valleys, eaves, ridges, and at parapets, and at all locations under the entire metal roof.

B. Provide all roll roof insulation with the specified reinforced vapor retarder on the in-side of all roll roof insulation.

C. Neatly provide laps in reinforced vapor retarder.

#### 3.03 REMOVE AND REPAIR AND REPLACE

A. Remove and provide new roll roof insulation and new vapor barrier retarder which is loose, sagging, torn, or damaged in any way.

B. Remove and provide new roll roof insulation and new vapor barrier retarder which cannot be neatly and satisfactorily repaired such that it is obvious that it is not patch work.

C. Remove damaged or unacceptable roll roof insulation and vapor barrier retarder, and provide new roll roof insulation and new vapor barrier retarder, which in the opinion of the metal roof manufacturer, (or his inspector), that these incorrectly installed insulation materials may void the Owner's specified metal roof warranty.

- END -

## SECTION 07245

### EXISTING SYNTHETIC PLASTER ON INSULATION

#### PART 1 - GENERAL

##### 1.01 GENERAL REQUIREMENTS

A. The provisions of all of the Contract Documents are hereby made a part of this Section.

B. The requirements of Section 01810 entitled Technical Section Requirements apply to this Section the same as though herein written out in full.

C. Refer to Drawings for synthetic plaster Work required only on the existing building, including but not limited to:

1. Patching all existing exposed synthetic plaster; &
2. Providing a new synthetic plaster base at the base of the existing front (south) wall on the existing Library's Front Porch X128; &
3. Cleaning, preparing, & providing a new final synthetic plaster finish coat on top of all exposed existing surfaces of synthetic plaster on the existing Library Building, (excluding the in-sides of the existing parapet walls), located above the existing sloping metal roof, which shall be removed as noted on the Drawing and shall be replaced with specified metal wall panels.
4. Sealing all joints & perimeters of exposed synthetic plaster in a water-tight manner.
5. Provide the finish synthetic plaster coat on all exposed surfaces of the existing synthetic plaster in no more than two (2) finish colors as selected by the Owner and Architect.

##### 1.02 STANDARDS

Meet requirements and recommendations of the applicable portions of the latest editions of Standards listed below:

- A. American Society for Testing and Materials (ASTM)
- B. Military Standard Testing
- C. Federal Specifications (FS)

##### 1.03 QUALITY ASSURANCE

A. All materials specified herein shall be installed and provided by the manufacturer's approved and manufacturer's trained technicians having a current manufacturer's training certificate.

B. All materials specified herein shall be approved and provided by the exterior wall insulation and finish system manufacturer.

C. All materials shall meet or exceed the minimum physical properties specified in the next paragraph.

D. All horizontal, vertical, and all other edges of insulation board shall be provided with rigid PVC as specified herein as opposed to the traditional back wrapping procedure.

#### 1.04 MINIMUM PHYSICAL PROPERTIES OF SYSTEM

A. Moisture Resistance: Federal Test Standard 141 A, Method 6201 (ASTM D - 2247), no deleterious effects after 14 days; and MIL standard E - 5272, 0.0 lb., weight gain at 72 hours; and ASTM E - 547 with no water infiltration.

B. Absorption Freeze: 60 cycles of soak at 68 degrees F for 4 days, 14 degrees F for 2 hours, 68 degrees F for 2 hours with no checking, cracking or splitting.

C. Accelerated Weathering: FTS 141 A, Method 6151 (ASTM G - 23) 2,000 hours.

D. Mildew Resistance: MIL standard 810 B, no growth.

E. Chemical Resistance: 3 separate test of 3 separate drops of turpentine, mineral spirits, and muriatic acid for 24 hours, causing slight softening, however, recovery upon drying.

F. Abrasion Resistance: FTS 141 A, Method 6191 (ASTM D - 968), no deleterious effects after 114 gallons.

G. Structural Tests: ASTM 72 (ASTM E - 695), no cracks up to 6'; and ASTM E - 330, 8' panels, studs 24" O. C., 1/2" thick sheathing, minimum failure load under suction of 90 PSF because of sheathing pulling through fastener heads.

H. Fire Test: Modified ASTM E - 108, ASTM E - 119, Factory Mutual Cover Test (Full Scale, End Use Configuration).

#### 1.05 SUBMITTALS

A. Submit manufacturer's certified test data specified in the above paragraph, entitled Minimum Physical Properties.

B. Submit Shop Drawings, Product Data and Samples of all materials specified herein, and samples of standard colors. A custom made color will be selected by the Owner's and Architect.

C. Submit 2' x 4' samples of actual materials in custom colors selected for approval by the Owner & Architect.

D. Submit Manufacturer's five (5) year warranty (minimum) on final synthetic plaster finish coating.

E. Submit manufacturer's certification letter, certifying that the applicator is trained and approved by the manufacturer.

## PART 2 - PRODUCTS

### 2.01 MANUFACTURERS

A. Existing Synthetic Plaster on Insulation Manufacturers:

1. Existing Synthetic Plaster on Insulation: Parex's "Premium Full Synthetic System 3, Type PB", with double base coat application, and double reinforced fabric below 7 feet high; Dryvit; or a prior approved substitute.

2. Items specified herein are by specific manufacturers and are used only to denote the quality standard of product desired and that they do not restrict bidders to the specific brand, make, manufacturer, or specification named; and that they are used only to set forth and convey to prospective bidders the general style, type, character, and quality of products desired; and that equivalent products may be acceptable.

3. It shall be the responsibility of the professionally employed Architect or Engineer, or Interior Designer, to determine what is considered an equivalent product, meeting also Owner approval, on any and all Projects in which they have been legally employed to perform professional services.

4. Other manufactures specified below or above, or other prior approved substitutes may be provided if they meet all requirements specified herein and are substitutes approved by the Architect, Engineer, or Interior Designer.

### 2.02 MATERIALS

A. Primers: As recommended by the system manufacturer.

B. Adhesives: Factory mixed, 100% copolymer emulsion based synthetic product approved by the system manufacturer.

C. Base Coat: Ready mixed 100% copolymer emulsion based synthetic product approved by the systems manufacturer.

D. New Insulation Base Board on Existing Front Wall & Patching Boards: Molded expanded polystyrene insulation board, ASTM C 578 Type 1, approved by the system manufacturer, minimum 1.0 pounds per cubic foot, aged 6 weeks at 68 degrees F minimum and 5 days at 140 degrees F, with the following minimum properties:

1. Maximum flame spread/smoke developed: 25/450, ASTM E 84.
2. Thermal K value, 1": .23 BTU/degrees F per square foot per hour.
3. Maximum board size: 2' x 4'.
4. Minimum board thickness: 1".

E. Reinforced Patching Fabric: Open weave, glass fiber yarn type as follows:

1. Heavy Duty Fabric: On all surfaces from ground level up to 7'- 0" high, provide heavy duty fabric, minimum 20.5 ounce per square yard fabric, with pre-formed corners. Next provide standard duty fabric on top of heavy duty fabric as specified herein.

2. Standard Duty Fabric: On all surfaces above 7'- 0" high, provide standard duty fabric, minimum 5.0 ounce per square yard fabric, with pre-formed corners.

F. Finish Material: Factory blended copolymer emulsion based synthetic finish approved by the manufacturer, integrally colored, with finish and color as selected by the Architect.

G. Portland Cement: Type I, I - II, ASTM C - 150, fresh and free of lumps.

H. Water: Potable.

I. Sheathing: Refer to Section 09260 Gypsum Wallboard for specified exterior gypsum board sheathing provided on metal studs.

J. Sealant: As specified in Section 07900 Sealants, in colors selected by the Architect.

K. Custom Colors Of Synthetic Plaster Finish Coat Provided Over All Exposed Surfaces of Existing Synthetic Plaster:

1. Provide materials in custom colors as opposed to manufacturer's standard colors.

2. Obtain samples 60 days earlier to insure getting colors requested by the Architect.

3. Colors shall be custom colors matching the full range of colors as printed by the Devoe Paint Co. or other paint manufacturer.

4. Colors selected shall be light in color and shall have a minimum light reflectance of 30% or better.

L. Seal Tape: Pre-compressed self-adhesive expanding foam sealant tape composed of an open cell, high quality polyester-polyurethane foam, impregnated with neoprene rubber, minimum density 8 pounds per cubic foot, and tensile strength of 21.8 PSI, ASTM D 2406.

M. Square Edge Tracks and Drip Edge Tracks: Parex, Fry, or a prior approved substitute 1", 1-1/2", and 2" white rigid PVC tracks, ultraviolet resistant, meeting ASTM 1784 cell classification 13244 C, ASTM D 1063, with a Class A fire rating.

N. Corner Reinforcing: Factory pre-bent reinforcement mesh, minimum 0.026 inches thick, minimum 7.2 ounces per square yard, with factory trimmed edges.

### PART 3 - EXECUTION

#### 3.01 INSTALLATION OF INSULATION

A. Provide and securely fasten square edge or drip edge PVC track on all perimeters of insulation board on the new base in accordance with manufacturer's instructions. Do not provide the traditional back wrapping procedure.

B. Start from the bottom PVC track with long edge of insulation horizontal, staggering joints of sheathing and insulation, using a running bond pattern and tightly interlock same at all inside and outside corners.

C. Pre-cut insulation boards to fit openings, corners, and projections prior to applying adhesives.

D. Apply adhesives to the entire surface of the insulation board with a minimum 5/16" notched trowel, with adhesive applied horizontally at rates recommended by the system manufacturer, using the maximum strength methods recommended by the system manufacturer. Allow 24 hours minimum adhesive curing time prior to rasping or working.

E. Sand flush all surfaces and all edges which are out of plane. Looking sideways, light should not be seen through a 6 foot straight edge. Fill all gaps and openings greater than 3/32" with insulation board.

F. Shaped or grooved insulation boards shall not be cut to less than 3/4" thickness.

G. Provide seal tape specified herein at all terminations and joints of synthetic plaster materials and other different materials.

H. Unless otherwise specified or indicated, provide all materials in strict accordance with manufacturer's details.

I. Provide PVC edge tracks, seal tape, and sealant at bases of new bases.

#### 3.02 TROWELED BASE COAT INSTALLATION ON NEW BASE

A. First Base Coat:

1. For both heavy duty and standard duty fabric, apply a 3/32" minimum thickness of the first base coat, with a stainless steel trowel. Do not spray first base coat.

2. Immediately embed the above specified thickness and weight of reinforcing fabric in the first base coat and smooth out fabric until the entire fabric is fully embedded in the first base coat. Provide additional base coat material until the fabric is not visible. Provide heavy duty and standard duty fabric where specified above.

3. Heavy duty fabric shall be neatly and tightly abutted at all edges where heavy duty fabric adjoins heavy duty fabric. Do not lap heavy duty fabric. Smooth out all wrinkles.

4. Standard duty fabric shall be neatly lapped one over the other, a minimum of 2 - 1/2". Smooth out all wrinkles. Provide continuous standard duty fabric at all outside and inside corners. Provide double fabric at all outside and inside corners with corner reinforcement specified herein where standard duty fabric occurs.

5. Allow a minimum of 24 hours, or longer, as required by field conditions, for the first base coat to cure prior to beginning further Work.

6. After curing, trim and remove all loose strands. Correct all surfaces to insure flatness.

#### B. Second Base Coats, With and Without Additional Fabrics:

1. Over First Base Coat with Heavy Duty Fabric, Up to 7 Feet High: Apply a second coat of base coat material minimum 3/32" thick and immediately embed a layer of standard duty fabric in second base coat. Provide additional base coat material until the standard duty fabric is not visible. Neatly lap fabric 2 - 1/2" minimum, and provide continuously at all outside and inside corners. Provide double standard duty fabric at all outside and inside corners. Provide a neat smooth transition between the thicker second base coats below 7 feet and the thinner second base coats above 7 feet where standard duty fabrics and heavy duty fabrics plus standard duty fabrics join one another.

2. Over First Base Coat with Standard Duty Fabric, Over 7 Feet High: Apply a second coat of base coat material with stainless steel trowels until the total base coat thickness is a minimum of 1/8" thick. Do not spray second base coat.

#### 3.03 INSTALLING FINISH COAT

A. Provide finish coat using only stainless steel trowels. Do not spray finish coat.

B. After the second base coats have thoroughly cured, apply finish coat continuously, in one operation, to an entire uninterrupted surface, maintaining a wet edge at all times, and not allowing a surface to set up.

C. Provide a uniform appearance, working towards joints and corners. Provide inverted vee drips under all horizontal projections, 3" maximum from outer edges.

D. Protect wet, un-cured materials from dust, rain, and other damage.

E. Provide a fine sand texture on the finish coat, approved by the Architect from submitted samples.

### 3.04 INSPECTION

A. The final installation shall be inspected by the system manufacturer's authorized representative.

B. Repair or entirely remove and replace all materials damaged or not meeting the standards of the system manufacturer's authorized representative.

C. Remove and replace all materials not meeting the above double base coat application synthetic plaster system as specified.

- END -

## **SECTION 07250**

### **FIRE-STOPPING**

#### PART 1 - GENERAL

##### 1.01 GENERAL REQUIREMENTS

A. The provisions of all of the Contract Documents are hereby made a part of this Section.

B. The requirements of Section 01810 entitled Technical Section Requirements apply to this Section the same as though herein written out in full.

C. In & around the existing wall between the existing Mechanical Room X122 & other areas of the existing Library Building, provide new fire-stopping materials to repair existing damaged or missing fire-stopping, & provide new fire-stopping materials around all newly provided penetrations.

##### 1.02 STANDARDS

Meet requirements and recommendations of the applicable portions of the latest editions of Standards listed below:

- A. Federal Specifications (FS)
- B. American Society for Testing Materials (ASTM)
- C. Underwriters Laboratories (UL)
- D. National Fire Protection Association (NFPA)
- E. Life Safety Code (NFPA 101)
- F. International Building Code (IBC)

##### 1.03 SUBMITTALS

A. Submit manufacturer's Product Data indicating their meeting or exceeding all standards specified herein.

B. Submit manufacturers' standard design charts and manuals for fire-stopping, if requested by the Architect.

C. Submit notarized, certified test for materials specified herein if requested by the Louisiana State Fire Marshal or Local Code Officials.

##### 1.04 COMPLIANCE

A. Prior to bidding, and prior to beginning fire-stopping Work, hire and pay (if required), for a manufacturer's fire-stopping consultant to recommend materials for joining fire walls to adjacent materials and to recommend materials for penetrating specified and indicated fire walls with pipes, conduits, and other materials.

B. Prior to beginning Work and prior to ordering materials, obtain a manufacturer's fire-stopping installation manual, and study the manufacturer's instructions on how to provide fire stopping materials to insure meeting NFPA and IBC fire-stopping requirements.

C. Provide fire-stopping materials in areas and locations to obtain fire ratings of walls, ceilings, and fire rated assemblies indicated and specified.

D. Provide fire-stopping materials to meet Through- Penetration Fire-stop Systems listed in Volume II, Underwriters Laboratory Inc. Directory, latest Edition.

#### 1.05 FIRE MARSHAL REQUIREMENTS

A. If required by the Fire Marshall in his review letter for this Project, the Contractor shall call the Louisiana State Fire Marshal Inspection Division, (during construction, and prior to concealing fire rated details), to inspect fire walls, fire and smoke barriers, fire rated ceilings, and fire rated construction, assemblies, and perimeters and penetrations through fire rated construction.

B. Seal penetrations through fire rated construction, (indicated and specified fire walls and ceilings), with a fire-stopping material capable of preventing the passage of flames and hot gases when tested in accordance with ASTM E 814 to comply with NFPA and NFPA 101 and Louisiana State Fire Marshal requirements.

C. Notify the Louisiana State Fire Marshal's District office at:

Louisiana Department of Safety & Corrections  
Office of State Fire Marshal  
8181 Independence Boulevard  
Baton Rouge, Louisiana 70806  
(225) 925-3650

for Fire Marshal inspection of all completed fire and/or smoke barrier walls before any construction is installed that would conceal such construction and prevent a proper inspection.

D. Access to random selected areas may be required by the Fire Marshal Inspector at time of the Fire Marshal final inspection if the above notification is not given.

E. All indicated and specified fire rated and smoke barrier construction that does not meet with the Fire Marshal's approval and requirements shall be entirely remove and properly replace to meet Fire Marshal requirements.

F. At Substantial completion, at the time of the Final Fire Marshal inspection, provide the Fire Marshal Inspector with detailed

instructive cut sheets and Product Data of the fire penetration sealing system and fire-stopping materials provided.

G. Provide random selective sampling of fire rated construction for the Inspector to observe, review, and approve.

H. In accordance with NFPA 101, penetrations through rated construction shall be sealed by approved fire-stop systems or devices tested in accordance with ASTM E-814 or ANSI/UL 1479 or by assemblies of fire-stopping materials capable of preventing the passage of flames and hot gases when tested and rated in accordance with NFPA 251. Provide manufacturer's Product Data cut sheets indicating tested materials.

I. Provide all Work in accordance with the Fire Marshal Inspector's requirements.

J. When a Fire Marshal's letter is specified in an Addendum, comply with all of the requirements written in the Fire Marshal's letter.

## PART 2 - PRODUCTS

### 2.01 MANUFACTURERS

A. Fire-Stopping Manufacturers:

1. Fire-Stopping Sealant: Pecora; Hilti; or a prior approved substitute.

2. Items specified herein are by specific manufacturers and are used only to denote the quality standard of product desired and that they do not restrict bidders to the specific brand, make, manufacturer, or specification named; and that they are used only to set forth and convey to prospective bidders the general style, type, character, and quality of products desired; and that equivalent products may be acceptable.

3. It shall be the responsibility of the professionally employed Architect or Engineer, or Interior Designer, to determine what is considered an equivalent product, meeting also Owner approval, on any and all Projects in which they have been legally employed to perform professional services.

4. Other manufactures specified below or above, or other prior approved substitutes may be provided if they meet all requirements specified herein and are substitutes approved by the Architect, Engineer, or Interior Designer.

### 2.02 MATERIALS

A. Fire-stop Sealant: Pecora AC-20 FTR Fire and Temperature Sealant; or Hilti CP 601S Fire-stop Sealant; meeting ASTM E-814, (UL 1479 & UL

2079) for 1, 2, 3, and 4 hour ratings; or a prior approved substitute.

B. Fire-stop Backer Rod: Hilti CS 240 Foam or manufacturer's approved mineral wool, minimum 4 pound per cubic foot density, meeting UL Design 827U, and other rated applications.

C. Other similar fire-stopping materials shall meet UL requirements for fire-stopping fire walls and fire rated construction.

### PART 3 - EXECUTION

#### 3.01 INSTALLING

A. Provide continuous fire-stop sealant in all openings and crevices in rated fire walls in thicknesses and with backer rod details to meet hourly ratings in strict accordance with the manufacturer's recommendations.

B. Provide continuous fire-stop sealant in all open joints such as rated wall and rated ceiling perimeter joints, and rated wall and roof perimeter joints.

C. Provide continuous fire-stop sealant in all open joints through rated walls and rated ceilings around all architectural, structural, mechanical and electrical material and equipment cut outs and penetrations.

D. Provide continuous fire-stop sealant at all perimeters and around all openings around all penetrations through all one (1) hour rated walls and ceilings, and all two (2) hour rated fire walls indicated.

E. Regulate joint depth of fire-stop materials to meet UL requirements and manufacturers recommendations.

F. Provide masking tape on both sides of all exposed sealed joints and all exposed finishes and remove all masking tape after fire-stop materials have thoroughly cured.

#### G. Fire Walls

1. Refer to Drawings for locations of the one (1), one hour fire rated walls.

2. Refer also to Mechanical and Electrical Documents, Drawings and Specifications, for specific materials and equipment required for penetrating rated fire walls and fire rated ceilings.

- END -

## SECTION 07410

### METAL FLUSH WALL PANELS & FLASHING

#### PART 1 - GENERAL

##### 1.01 GENERAL REQUIREMENTS

A. The provisions of all of the Contract Documents are hereby made a part of this Section.

B. The requirements of Section 01810 entitled Technical Section Requirements apply to this Section the same as though herein written out in full.

C. Refer to Section 07610 Metal Roof & Flashing, for the adjacent new metal roof and flashing on the existing library building.

D. Wall panels for this Section 07410, Metal Wall Flush Wall Panels and Flashing; perimeter gravel guards and exposed metal flashing for Section 07500, Membrane Roof and Flashing; and metal roof panels and exposed flashing for Section 07610, Metal Roof and Flashing, shall all be provided by the same manufacturer in the same exact color.

E. Prior to bidding, and prior to submitting a Bid, insure that the Metal Flush Wall Panel Manufacturer selected by the Contractor for this Project is aware that said Manufacturer shall be required to:

1. Provide the specified 20 year material finish warranty, and the specified (2) year water-tightness warranty, both signed and warranted only by said Manufacturer, as opposed to any part of said warranties being provided and warranted by anyone other than the Metal Flush Wall Panel Manufacturer.

2. Provide the specified Certification Letter stating that the installer of materials specified herein is capable, certified, and approved by the Metal Flush Wall Panel Manufacturer.

3. Provide the manufacturer's specified Technical Inspector to monitor and supervise Work provided for this Project as specified herein.

##### 1.02 STANDARDS

Meet requirements and recommendations of the applicable portions of the latest editions of Standards listed below:

A. American Society for Testing Materials (ASTM)

B. Architectural Sheet Metal Manual; Sheet Metal and Air Conditioning Contractor's National Association, Inc. (SMACCNA)

C. American Iron and Steel Institute; "Cold Form Steel Design Manual" (AISI)

- D. International Building Code; 2015 (IBC)
- E. Underwriters Laboratory (UL)
- F. Factory Mutual (FM)
- G. American Institute of Steel Construction; "Steel Construction Manual" (AISC)
- H. Metal Construction Association (MCA)

### 1.03 COORDINATION REQUIREMENTS

A. In addition to requirements specified in Section 01050, Project Coordination, coordinate all Work required specifically for providing the specified metal flush wall panels and all sheet metal accessories specified herein, and coordinate same with Section 07610, Metal Roof and Flashing.

B. Prior to bidding, the Contractor shall verify which manufacturer or Subcontractor is providing roof flashing at the base of metal flush wall panels, parapet wall cap flashing, and all other required items and inspections specified herein.

C. Prior to submitting bids, verify that the metal flush wall panel manufacturer and metal flush wall panel Subcontractors can meet all requirements specified herein and verify which items they are providing and which items they are not providing, and which materials are, or are not factory formed at the factory.

### 1.04 SUBMITTALS

A. Submit metal flush wall panel manufacturer's Product Data and Installation Details, accompanied by detailed dimensioned drawings showing profile and gauge of exterior panels, locations and types of fasteners and types of sealants proposed and provided for all materials indicated specified herein.

B. Submit Shop Drawings and Product Data on all metal flush wall panel manufacturer's approved materials indicated and specified herein, and required by said manufacturer, including but not limited to fabrication and layout of metal flush wall panels and panel profiles, anchorage, screws, fasteners, trim, flashing, closures, side seam joints, accessories, and special required details; details of all edge conditions, corners, and metal flush wall panel flashing into masonry parapet walls and details; details distinguishing between factory assembled Work and field assembled Work; and dimensioned panel widths to acquire a complete watertight metal flush wall panel design where indicated and specified herein.

C. Submit as a minimum, two (2) 12" x 12" factory finished metal samples in the color of Terra Cotta in addition to the metal flush wall panel manufacturer's color chart for Architect's preliminary selection of metal flush wall panel colors, exposed flashing, parapet caps, and associated metal trim. Any manufacturer who cannot provide a Terra Cotta specified finish may be rejected by the Owners.

D. Submit a copy of the metal flush wall panel's manufacturer's Certified Subcontractor's Certificate.

E. Submit a copy of the metal flush wall panel manufacturer's Twenty (20) year (NDL) Single Source Warranty on the metal flush wall panel's finish.

F. Submit a copy of the metal flush wall panel manufacturer's two (2) year water-tightness (NDL) warranty signed by the metal flush wall panel manufacturer; and not signed by the metal wall panel Subcontractor, applicator, or installer.

#### 1.05 METAL FLUSH WALL PANEL MANUFACTURER'S CERTIFICATION LETTER

A. Prior to the Bid date, and prior to submitting a Bid, verify with the proposed metal flush wall panel manufacturer(s) that said manufacturer(s) shall provide, prior to signing the Contract, Subcontractor(s) duly certified, and approved by the metal flush wall manufacturer.

B. Prior to signing the Contract, submit a minimum of one (1) Certification Letter from the specified or prior approved metal flush wall panel manufacturer(s), certifying that the proposed metal flush wall panel Certified Subcontractor is approved by said manufacturer.

C. More than one Certification Letter, from more than one metal flush wall panel manufacturer, may be obtained prior to submitting bids and prior to signing the Contract.

D. The Certification Letter shall include the following minimum information:

1. A specified metal flush wall panel's manufacturer's company name printed on the letterhead including the name, address, telephone number and fax number of said manufacturer and the date of the letter; and,

2. The name of the Project, as it appears in the Specifications; and,

3. The name, address, and telephone number of the metal flush wall panel manufacturer's approved, Certified Subcontractor proposed to install the metal flush wall panels.

4. A statement from the metal flush wall panel manufacturer certifying that the proposed Certified Subcontractor, who is to provide and install the metal flush wall panels, is approved, certified, and authorized to install said manufacturer's materials.

5. The metal flush wall panel manufacturer's authorized representative's signature.

E. If the Contractor cannot provide the required, specified Certification Letter from the proposed metal flush wall panel manufacturer, as specified in this Section, prior to signing the Contract, the Owner may reject the Contractor's Bid because of failure to meet requirements of the Specifications.

#### 1.06 TECHNICAL INSPECTOR AND QUALITY ASSURANCE

A. These specified and indicated metal flush wall panels have special design requirements whereby the Contractor shall contact a full service metal flush wall panel manufacturer who is capable of providing names of certified installers.

#### B. Metal Flush Wall Panel Manufacturer and Technical Inspector

1. Provide metal flush wall panels from an experienced metal flush wall panel manufacturer, with a fully staffed engineering department, who can insure that said panels are designed to comply with ASTM E 330, meeting the applicable load tables published from this Air Bag testing for negative load; and can insure compliance with the 2015 International Building Code, (IBC), for this area, and can provide fastener sizes and minimum numbers of fasteners for the entire flush wall panel system.

2. Verify that the metal panel Certified Subcontractor measures the existing structure, distance between supports, inventories all materials and fasteners specified herein, and inspects the sub-framing prior to beginning installation of materials.

3. As a minimum, verify that the metal flush wall panel manufacturer hires and provides a qualified Technical Inspector who coordinates with and calls the Contractor's Superintendent and the manufacturer's Certified Subcontractor, 72 hours in advance, to schedule and attend a meeting at the Project site to:

a) Inspect the very beginning of the metal flush wall panel installation; and,

b) Inspect the metal flush wall panels after approximately 25 percent of the metal flush wall panels have been installed; and

c) Inspect the metal flush wall panels after approximately 75% of the metal flush wall panel materials have been installed; and,

d) Inspect the metal flush wall panels at Substantial Completion, for a minimum of four (4) inspections during flush wall installation; and,

e) Inspect the metal flush wall panels after completion, to determine if any problems develop, all at no additional cost to the Owner.

4. The Contractor shall provide all correctional Work required by the manufacturer's Technical Inspector.

C. Materials for Metal Flush Wall Panels, Flashing, and Accessories

1. All metal provided for metal flush wall panels, flashing, parapet wall caps, metal trim, and accessories, shall be made in the USA as opposed to foreign made.

2. The metal flush wall panels, flashing, and accessories shall be formed inside the manufacturer's enclosed factory environment, with fixed base roll forming equipment mounted on a concrete surface with precise in-line leveling, in the metal flush wall panel manufacturer's fabrication shop or fabrication plant, as opposed to metal flush wall panels being formed with portable equipment in an open field, or any other Project site.

3. The metal flush wall panel flashing, and accessories shall all be provided with minimum number of joints in twenty feet (20'-0") long lengths as opposed to all being provided in ten feet (10'- 0") long lengths.

4. Job site portable roll forming equipment for providing metal flush wall panels will not be allowed; and job site portable equipment for forming flashing, and accessories will not be allowed.

5. Metal flush wall panels shall be provided in full length vertical metal sheets as opposed to being spliced between flush wall base flashing and top cap flashing and other upper terminations.

1.07 FLUSH WALL PANEL PERFORMANCE TESTING AND DESIGN CRITERIA

A. General: Metal flush wall panels shall comply with performance requirements without failure because of defective manufacture, fabrication, installation, or other defects in construction Work; and all Work and materials shall comply with requirements and recommendations of referenced standards and design requirements specified herein; and flush wall panels shall meet or exceed Water Penetration Tests when tested in accordance with ASTM E 283/1680 and ASTM E 331/1646, where there shall be no uncontrolled water penetration or air infiltration through the wall panel joints or any other metal joints.

B. Design Loads:

1. For the metal flush wall panel system, the design live loads, wind loads, and dead loads shall meet or exceed requirements of the International Building Code, (IBC) 2015 Edition; the load requirements indicated on the Structural Drawings and Specifications.

2. Wind loads shall be determined in accordance with requirements of the 2015 IBC and ASTM 1592.

#### 1.08 GENERAL DESCRIPTION OF WORK

A. Provide all labor, materials, tools, equipment, protective coverings, lifting equipment, and services, for a complete metal flush wall panel system as specified and indicated, complete with base flashing, parapet cap flashing, corner flashing, and other specified and indicated sheet metal materials.

B. Provide all supplementary and miscellaneous sheet metal materials, equipment, items, appurtenances, and devices incidental to and necessary for a sound, secure and complete watertight installation.

#### 1.09 METAL FLUSH WALL PANEL MANUFACTURER'S TWO (2) YEAR SINGLE SOURCE WATER-TIGHTNESS (NDL) WARRANTY

A. Provide a Metal Flush Wall Panel Two (2) Year Water-tightness (NDL) Warranty, prepared and signed by the metal flush wall panel manufacturer.

B. The Metal Flush Wall Panel Two (2) Year Water-tightness (NDL) Warranty shall be a Single Source Warranty with absolutely no part of this warranty provided or warranted by the metal flush wall panel manufacturer's Subcontractor, Applicator, and/or Installer. If the Flush Wall Panel Manufacturer's Subcontractor, Applicator or Installer dies, goes out of business, refuses to return to this site, moves out of the United States, does not respond to phone calls, does not show up, or defaults in any way, the Flush Wall Panel Manufacturer shall hire and pay for an authorized wall panel installer to repair or replace the flush wall panels and base flashing and parapet flashing during this Single Source Two (2) Year Warranty Period with no dollar limit and no additional expense to the Owner.

C. The Metal Flush Wall Panel Two (2) Year Water-tightness (NDL) Warranty shall be a Single Source Warranty, for a period of two (2) years from the date of Substantial Completion, indicating that said manufacturer warrants to the Owner to furnish to the Owner metal flush wall panels, flashing, and related items used to fasten the metal wall panels and flashing, including sealant, which will not allow the intrusion of water from the exterior of the manufacturer's flush wall panel system, into the building envelope when exposed to ordinary Louisiana weather conditions and ordinary wear and usage.

D. The date of Substantial Completion is the date that is certified in writing by the Architect and Owner when the entire existing library building below the new metal roof, below the new metal cap parapet wall flashing, and below the Flush Wall Panel System is accepted by the Owner in accordance with the AIA General conditions of the Contract.

E. The metal flush wall panel manufacturer shall have the sole and exclusive obligation for all warranty Work commencing on the date of Substantial Completion, and under all circumstances terminates (2) years later on the second anniversary year of the certified date of Substantial Completion of said manufacturer's Metal Flush Wall Panel System.

F. During the warranty period in which said manufacturer has any warranty obligation, said manufacturer shall take appropriate actions necessary to cause the non-performing portions of the Flush Wall Panel System to perform their proper functions in a water-tight manner.

G. The total liability of the metal flush wall panel manufacturer under this Single Source Warranty is a no dollar limit (NDL) of said manufacturer's Flush Wall Panel System as provided for said manufacturer's customer.

H. The Metal Flush Wall Panel Two (2) Year Water-tightness (NDL) Warranty shall include the Project name, the building Owner, the flush wall panel manufacturer's invoice numbers accompanied by the actual invoices, the flush wall panel manufacturer's liability of "No Dollar Limit", the metal flush wall panel profile, the date of Substantial Completion, and the address of the Owner's facility.

I. The Metal Flush Wall Panel manufacturer's Two (2) Year Water-tightness (NDL) Warranty shall not include or have binding clauses stating that all flush wall panel claims against the Flush Wall Panel Applicator and the Flush Wall Panel Manufacturer or any other parties shall be settled through arbitration.

J. Settlements of claims through any type of arbitration is not allowed by the Owners in any way for this Project and the Metal Flush Wall Panel Manufacturer's Two (2) Year NDL Warranty shall not have a binding clause stating all claims shall be settled in a location and in a court outside of Ascension Parish.

K. If any flush wall panel claim(s) are made by the Owner, by the metal flush wall panel installer, the flush wall panel manufacturer, or by any other party, associated or not associated with this Project, any and all such claims shall be settled through the Ascension Parish Judicial System, in Ascension Parish, where this Project is located.

L. If the Contractor cannot provide the specified Metal Flush Wall Panel Two (2) Year Water-tightness (NDL) Warranty, for any reason, the Contractor shall either provide all corrective metal flush wall panel Work to obtain the specified Metal Flush Wall Panel Two (2) Year Water-tightness (NDL) Warranty from the metal flush wall panel manufacturer, or entirely remove all flush wall panels and provide all new flush wall panels with the specified Metal Flush Wall Panel Two (2) Year Water-tightness (NDL) Warranty.

M. If the specified Metal Flush Wall Panel Two (2) Year Water-tightness (NDL) Warranty cannot be provided because the flush wall panel manufacturer claims that the flush wall panel manufacturer's Certified Subcontractor was not present at all times when the metal flush wall panels were installed, or for any other reason, entirely remove the metal flush wall panels and replace them with new metal flush wall panels with a new specified Metal Flush Wall Panel Two (2) Year Water-tightness (NDL) Warranty.

#### 1.10 METAL FLUSH WALL PANEL MANUFACTURER'S TWENTY (20) YEAR SINGLE SOURCE METAL FINISH (NDL) WARRANTY

A. Provide a Metal Flush Wall Panel Manufacturer's Twenty (20) Year Single Source Metal Finish (NDL) Warranty, prepared and signed by the metal flush wall panel manufacturer whereby the flush wall panel manufacturer agrees to repair, finish or entirely replace metal flush wall panels, metal flashing, metal parapet caps, and all miscellaneous factory finished sheet metal that shows evidence of deterioration of the specified factory applied finish within the twenty (20) year warranty period.

B. Exposed flush wall panel and flashing finish deterioration includes but is not limited to:

1. Color fading more than 5 hunter units when tested according to ASTM D 2244.
2. Chalking in excess of a No. 8 rating when tested according to ASTM D 4214.
3. Cracking, checking, peeling or failure of a paint to adhere to bare metal.

C. The finish warranty shall not exclude rusting and deterioration caused by metal filings not swept off of the metal flush wall panels, or scratches, or other damage that was not caused by the Owner.

#### 1.11 PRODUCT DELIVERY, STORAGE, AND HANDLING

A. Comply with manufacturer's ordering instructions and required lead time to avoid delays while insuring that the manufacturer is properly packaging metal flush wall panels and all metal materials prior to delivery, and during transportation delivery to the Project site.

B. Exercise extreme care in loading, unloading, handling, storing, and erecting all materials and equipment indicated and specified herein to prevent bending, warping, twisting, scratching, and surface damage.

C. Properly protect metal flush wall panels and flashing during storage, and provide metal flush wall panels under waterproof

protective tarpaulin coverings, elevated above ground with one end slightly elevated to drain standing water, and stored high enough above ground so rising water cannot enter metal flush wall panel and flashing packaging.

D. Stack and store all materials on skidded and closely spaced platforms or pallets, which are well ventilated to prevent condensation and away from other stored materials.

E. Protect finished metal strippable protective coatings on all metal coated products from exposure to direct sunlight and high humidity, and remove protective coating immediately prior to installing in accordance with manufacturer's instructions.

F. Remove and do not install any metal materials which are bent, warped, twisted, scratched, and have surface discoloration or any other type of damage and replace them with new specified materials.

## PART 2 - PRODUCTS

### 2.01 MANUFACTURERS

#### A. Metal Flush Wall Panel and Flashing System Manufacturers:

1. Manufacturers are as specified above or below, or a prior approved substitute.
2. Items specified herein by specific manufacturers are used only to denote the quality standard of product desired and that they do not restrict bidders to the specific brand, make, manufacturer, or specification named; and that they are used only to set forth and convey to prospective bidders the general style, type, character, and quality of products desired; and that equivalent products may be acceptable.
3. It shall be the responsibility of the professionally employed Architect or Engineer, or Interior Designer, to determine what is considered an equivalent product, meeting also Owner approval, on any and all Projects in which they have been legally employed to perform professional services.
4. Other manufactures specified above or below, or other prior approved substitutes may be provided if they meet all requirements specified herein and are approved substitutes by the Architect, Engineer, or Interior Designer.

#### B. Metal Flush Wall Panel and Flashing System: Petersen Aluminum Corporation, Tyler Texas 800-441-8661; Fabral, McElroy, or a prior approved substitute.

1. Wall panels indicated and specified are 12" wide by 1" deep with (2) stiffening beads by Petersen Aluminum Corporation only for the purpose of establishing minimum quality standards, minimum design standards, and minimum types of warranties and acceptable function.

2. Other manufactures specified below or above, or prior approved substitutes may be provided if approved by the Architect.

3. All metal flush wall panels, sheet metal, flush wall flashing, parapet cap flashing, and miscellaneous metal trim and flashing shall be provided by one (1) manufacturer.

4. Metal flush wall panel manufacturers, whether specified herein, or listed by written Addenda as approved substitute manufacturers, that cannot provide the specified full length vertical metal flush wall panels without joints, and cannot provide the specified Metal Flush Wall Panel Two (2) Year Water-tightness (NDL) Single Source Warranty, and (20) year finish warranty, and cannot provide a metal flush wall panel system which meets all requirements specified herein will not be accepted and shall be rejected.

C. Metal Flush Wall Panel "Peel & Stick" Membrane Ice & Water-shield Leak Barrier Underlayment: "Peel" & "Stick" membrane shall be as manufactured by: W. R. Grace, "Ice & Water Shield"; Ceco "Strongseal"; Carlisle "CCW WIP 300HT"; Interwrap "Titanium PSU"; MFM Corp "Wind & Water Shield"; Polyguard Deck Guard "HT of Polyglas HT"; Tamko "TW Tile and Metal Underlayment"; or a prior approved substitute.

D. Sealants: Refer to Section 07900 Sealants.

## 2.02 MATERIALS

### A. Preformed Metal Flush Wall Panels, Flashing Materials, and Trim

1. All preformed metal flush wall panels, flush wall flashing, parapet cap flashing, and miscellaneous metal trim and flashing shall be:

a. Minimum twenty-four (24) gage steel, provided with removable vinyl masking, complying with an ASTM A 653, Standard Specification for Steel Sheet, Zinc-Coated, (Galvanized), by Hot dipped Process; or complying with an ASTM A 792, Steel Sheet, Aluminum-Zinc Alloy Coated by Hot dipped Process, with vertical metal flush wall panels previously tested and complying with ASTM E 330 load tables for negative loads.

b. Provided with a Kynar 500 or Hylar 5,000 Fluorocarbon coating with a top side thickness of minimum 0.070 mil to 0.90 mil over a minimum 0.25 mil to 0.3 mil prime coat to provide a total dry film thickness of 0.95 mil to 1.25 mi, to meet AAAMA 621; and with a bottom side coated with a primer with a dry film thickness of minimum 0.25 mil, where said finish shall conform to all tests for adhesions, flexibility, and longevity as specified, by Kynar 500 or the Hylar 5,000 finish supplier.

c. Provided with the specified metal flush wall panel manufacturer's Metal Flush Wall Panel Two (2) Year Single Source Water-tightness (NDL) Warranty, and a metal flush wall panel manufacturer's twenty (20) year warranty on the Kynar 500 or Hylar 5,000 finish.

#### B. Metal Flush Wall Panels Shapes

1. General: Provide factory-formed metal flush wall panels with a round interlock leg, minimum of two (2) vertical continuous stiffening beads, and provided with a concealed secure, fastening system specially designed for vertical flush walls to provide and improve a flush and flat flush wall appearance.

2. Vertically installed metal flush wall panels shall be installed flush with one another, in twelve inch (12") widths by one inch (1"), with two (2) vertical continuous stiffening beads, vertically securely fastened where indicated and specified, and shall be Herr-Voss corrective leveled for flat appearance.

3. Metal flush wall panels shall be factory manufactured, with a continuous end rolling method with no end laps on panels.

4. Metal flush wall panels shall be designed for attachment with concealed fasteners spaced as required by the manufacturer to provide for both positive and negative design loads, while allowing for the expansion and contraction of the entire metal flush wall system resulting from variations in temperature and minimum UL 90 rated after installation meeting 2015 IBC design requirements and wind loads as specified herein.

#### C. Metal Flush Wall Panel Screws & Fasteners

1. Screws & fasteners shall be concealed and shall be designed, sized, spaced, and provided, and securely fastened to meet as a minimum, FM or UL 90 rated, and shall meet the 2015 IBC wind load requirements specified herein and shall be designed to allow for thermal expansion and contraction.

2. Concealed screws & fasteners shall be approved in writing by the metal flush wall panel manufacturer prior to providing and installing same.

#### D. Stainless Steel Pop Rivets

1. Pop rivets for joining miscellaneous flashing and trim shall be stainless steel.

2. All exposed stainless steel pop rivets shall be painted.

E. Tape Sealer: Provide tape sealer where recommended by the metal flush wall panel manufacturer to achieve the specified Metal Flush Wall Panel Two (2) Year Water-tightness (NDL) Warranty.

F. Sealants: Provide sealants where recommended by the metal flush wall panel manufacturer and sealant manufacturer: (a) Provide two (2) part polysulfide Class B Non-sag type sealant for vertical and horizontal joints; or, (b) One (1) part polysulfide not containing pitch or phenolic extender; or, (c) Exterior grade silicone sealant; or, (d) One (1) part non-sag, gun grade exterior type polyurethane in accordance with Section 07900 Sealants.

G. Inside Closures: EPDM rubber covered with metal.

H. Solid Exterior Gypsum Sheathing Backing

Under metal flush wall panels, provide specified solid gypsum sheathing where indicated, securely fastened to metal framing, and covered with the adhesively applied solid layer of the specified "Peel & Stick" Membrane Ice & Water-shield underlayment.

I. Metal Flush Wall Panel "Peel & Stick" Membrane Ice & Water-shield Leak Barrier Underlayment

1. On top of the indicated solid exterior gypsum sheathing, and on top of the solid wood above metal parapet walls, provide and install a minimum 40 mil "Peel & Stick Membrane", required as outlined by the metal flush wall panel manufacturer.

2. This membrane underlayment shall be a minimum of 40 mil thickness, smooth, and non-granular, with an adhesive backing, installed where and how specified herein.

J. Metal Flush Wall Panel System Fasteners

All different fasteners for the entire metal flush wall system shall be corrosion resistant fasteners of the type, size, material, holding power, and other properties required to fasten panels to miscellaneous framing members and to substrates as required and recommended by the metal flush wall manufacturer to meet minimum 2015 IBC wind load and ASTM E 330 requirements.

### PART 3 - EXECUTION

#### 3.01 METAL FLUSH WALL PANEL INSTALLATION

A. Prior to beginning metal flush wall panel fabrication and installation, insure that the metal flush wall panel manufacturer's Technical Inspector has visited the site and gone over all parapet wall framing and details, adjacent metal roof details, parapet wall cap flashing details, and end wall details with the Certified Subcontractor as specified; and that actual on site field

measurements have been verified; and that all discrepancies have been reported in writing to the wall panel installer and to the wall flush panel manufacturer; and proceed with Work later only after visually verifying that all discrepancies have been resolved and all unsatisfactory conditions have been corrected.

B. Install metal flush wall panels over solid continuous exterior gypsum sheathing which has been verified and solidly covered with the continuous specified "Peel & Stick" Membrane Ice & Water-shield Leak Barrier.

C. Coordinate all metal flush wall panel Work and flashing with metal roof panel Work and flashing specified in Section 07610, Metal Roof & Flashing.

D. Verify alignment of support members below prior to providing exterior gypsum sheathing, and install panels plumb and true to line with uniform neat seams, and in strict accordance with Contractor approved and metal flush wall panel manufacturer approved installation and Shop Drawings for a totally water-tight system.

E. Provide all fasteners 90 degrees to the metal framing below, securely fastening same to obtain FM or UL 90 ratings, meet requirements of ASTM E 330 loads, and to comply with specified 2015 IBC wind load requirements, and installed to meet the metal flush wall panel manufacturer's requirements.

F. Provide and install all materials specified herein in strict accordance with manufacturer's instructions, NRCA, SMACCNA, UL, MBCA, and all Standards specified herein.

G. Securely fasten parapet wall metal cap flashing with fasteners recommended by the metal flush wall panel manufacturer.

H. Remove and replace metal flush wall panels and flashing which leak because of rain water leaks.

### 3.02 FLASHING AND TRIM INSTALLATION

A. Hem all exposed edges of flashing and sheet metal.

B. Angle bottoms of exposed vertical surfaces to form drips.

C. Provide all flashing indicated and required, complying with metal flush wall panel manufacturer's instructions and all standards specified herein, to insure material installation provided in a watertight manner.

D. Remove and replace panels, flashing, and trim which leak water or have condensate leaks.

3.03 Metal Flush Wall Panel "Peel & Stick" Membrane Ice & Water-  
Shield Leak Barrier Underlayment

A. Where Ice & Water-shield Leak Barrier underlayment is specified and indicated, it shall be adhesively applied and laid in horizontal layers with joints lapped a minimum of 6", and well secured along laps and at ends as necessary to properly hold this material in place.

B. All underlayment shall be preserved unbroken and whole.

C. Ice and Water Shield shall lap at all overlapping joints to form double thicknesses and shall be lapped a minimum of 6" over flashing metal and shall be installed as required by the Metal Flush Wall Panel Manufacturer to attain the specified Metal Flush Wall Panel Two (2) Year Weather-tightness Warranty.

- END -

## SECTION 07500

### MEMBRANE ROOFING AND ACCESSORIES

#### PART 1 - GENERAL

##### 1.01 GENERAL REQUIREMENTS

A. The provisions of all of the Contract Documents are hereby made a part of this Section.

B. The requirements of Section 01810 entitled Technical Section Requirements apply to this Section the same as though herein written out in full.

C. Provide the specified whole new membrane roof system with new insulation, perimeter gravel guards, flashing, masonry wall flashing, mechanical penetrations, & roof drains on the new membrane roof indicated on the Drawings & specified herein.

D. Refer also to Architectural Drawings and Details, and also Structural & Mechanical Documents for other requirements.

E. Wall panels for Section 07410, Metal Flush Wall Panels and Flashing; perimeter gravel guards and exposed metal flashing for this Section 07500, Membrane Roof and Flashing; and metal roof panels and exposed flashing for Section 07610, Metal Roof and Flashing, shall all be provided by the same manufacturer in the same exact color.

F. Prior to bidding, and prior to submitting a Bid, insure that the Membrane Roof Manufacturer selected by the Contractor is aware that said Manufacturer shall be required to:

1. Provide the specified (20) year single source (NDL) water-tightness membrane roof warranty, signed and warrantied by said Membrane Roof Manufacturer, as opposed to any part of said warranty being provided or warrantied by anyone other than the Membrane Manufacturer.

2. Provide the specified 20 year Sheet Metal Material Finish Warranty, signed and warrantied by said Sheet Metal Manufacturer, as opposed to any part of said warranty being provided or warrantied by anyone other than the Sheet Metal Manufacturer.

3. Provide the specified Certification Letter stating that the installer of membrane roof materials specified in this letter is capable, certified, and approved by the Membrane Roof Manufacturer.

4. Provide the Membrane Roof Manufacturer's Technical Inspector to monitor and supervise Work provided for this Project as specified herein.

## 1.02 STANDARDS

Meet requirements and recommendations of the applicable portions of the latest editions of Standards listed below:

- A. National Roofing Contractors Association (NRCA) Roofing Manual and Specifications
- B. Sheet Metal and Air Conditioning Contractors National Association, Inc. (SMACCNA)
- C. American Society for Testing and Materials (ASTM)
- D. Federal Specifications (FS)
- E. Factory Mutual (FM)
- F. Underwriter's Laboratories (UL)
- G. Steel Deck Institute (SDI)
- H. International Building Code (IBC)

## 1.03 COORDINATION REQUIREMENTS

A. In addition to requirements specified in Section 01050, Project Coordination, coordinate all Work required specifically for providing the specified membrane roof and all sheet metal and accessories specified herein.

B. Prior to bidding, the Contractor shall verify which manufacturer or Subcontractor is providing the roof penetrations and roof penetration materials and all other required items and inspections specified herein.

## 1.04 SUBMITTALS

A. Prior to beginning Work:

1. Submit Product Data on all membrane roof materials and all rigid insulation materials specified herein; and submit Membrane Roof Manufacturer's installation instructions with current Membrane Roof Manufacturer's specifications applicable to this Project; submit rigid roof insulation installation instructions with current rigid roof specifications applicable to this Project, including Shop Drawings showing a detailed layout of tapered insulation.

2. Submit Product Data on Factory Mutual approved and IBC approved insulation fasteners in duplicate; and a schedule of fastener layout indicating minimum numbers of fasteners in sufficient quantity and quality for attaching rigid insulation to the metal deck below, to meet UL and IBC wind load requirements for this area, in accordance with the 2015 International Building Code, (IBC) and the wind loads indicated on the Structural Drawings.

3. Submit a detailed list of materials with Product Data proposed for use on this Project including but not limited to:

- a. All membrane roofing materials and all rigid roof insulation materials, including cants, tapered boards, expansion joints, and accessories.
  - b. All miscellaneous metal flashing materials and gravel guards and a sheet metal color chart to match the new metal roof specified in Section 07610, Metal Roof and Flashing.
  - c. All roof drains and sump materials.
  - d. All factory prefabricated curb materials and especially sizes of same.
  - e. All mechanical sheet metal vents, (if any).
4. A Sample copy of the Single Source No Dollar Limit, (NDL), 20 year Membrane Roofing System Warranty specified herein.
  5. A sample copy of the tapered ISO board manufacturer's standard warranty; and a sample copy of the Perlite board manufacturer's standard warranty; and a sample copy of the sheet metal 20 year finish warranty..

B. Prior to Substantial Completion submit:

1. Two (2) copies of the Membrane Roof Manufacturer's Twenty (20) Year NDL Warranty, (unlimited liability), Roofing System Warranty specified herein.
2. Two (2) copies of the Membrane Roofing Sheet Metal 20 Year Finish Warranty for gravel guards and all other associated metal flashing.
3. Two (2) copies of the tapered ISO board manufacturer's standard warranty; and a two (2) copies of the Perlite board manufacturer's standard warranty.

1.05 MEMBRANE ROOF CERTIFICATION LETTER REQUIRED PRIOR TO SIGNING CONTRACT

A. Prior to the Owner signing the Contract, submit a minimum of one (1) specified certification letter from the specified or prior approved Membrane Roof Manufacturer(s), certifying that the Membrane Roof Applicator/Installer Subcontractor they propose is selected, approved and authorized by the Membrane Roof Manufacturer and that his roof installation company is fully qualified and fully capable of meeting all Membrane Roof Manufacturers requirements for obtaining the specified Membrane Roof Manufacturer's Twenty (20) Year Unlimited Liability Roofing System Warranty with No Dollar Limit, (NDL).

B. More than one certification letter from more than one Membrane Roof Manufacturer may be submitted.

C. This certification letter, as a minimum, shall include:

1. A printed letterhead on the letter including the name, address, and telephone number of the Membrane Roof Manufacturer, addressed as specified, to the Owner, with the date of said letter.
2. The name of the Project as it appears in the title of Contract Documents, and the physical address & location of this Project.
3. The name, address, and telephone number of the certified Membrane Roof Applicator/Installer Subcontractor installing the roof.
4. A statement from the Membrane Roof Manufacturer certifying that the above mentioned membrane roof applicator/installer's company is certified, approved, and authorized to install the Membrane Roof Manufacturer's membrane roof in order to obtain the Membrane Roof Manufacturer's Twenty (20) Year NDL (No Dollar Limit) unlimited liability Roofing System Warranty.
5. Membrane Roof Manufacturer's authorized representative's signature.

D. Refer to the end of this Section 07500 for a sample copy of this required certification letter.

#### 1.06 SPECIFIC ROOFING DEFINITIONS SPECIFIED HEREIN

A. Roofing System: The Roofing System shall include all specified gravel, the membrane roof, coal tar, base sheet, tapered insulation, Perlite/Fesco board insulation, all rigid roof insulation, all metal decks, Roofing System flashing, and all the materials and equipment associated with the membrane roof including, but not limited to, roof drains, sumps, perimeter gravel guards, flashing, cants, all roof penetrations, and sealants.

B. Coal Tar Membrane Roof Manufacturer: The Membrane Roof Manufacturer shall be a Coal Tar Membrane Roof Manufacturer selected from the list of specified Membrane Roof Manufacturers, specified herein, or a Coal Tar Membrane Roof Manufacturer selected from a list of prior approved Membrane Roof Manufacturers specified by written Addendum, who provides the primary specified Roofing System, and who also provides the specified Membrane Roof Manufacturer's Twenty (20) Year NDL Warranty with unlimited liability as specified herein.

C. ISO Board: Tapered, rigid cellular polyisocyanurate roof insulation board, provided and securely screwed and adhesively applied to the metal roof deck below.

D. Perlite Board: Three-quarters inch (3/4") uniform thickness rigid insulation board adhesively applied to the tapered ISO board below, meeting ASTM C 728.

## 1.07 TECHNICAL INSPECTOR AND QUALITY ASSURANCE

A. All primary membrane roofing materials and products provided shall be approved and provided by a single Membrane Roof Manufacturer; and all ISO board materials and products provided by a single manufacturer; and all Perlite board materials and products provided by a single manufacturer.

B. All secondary materials, adhesives, ISO board screw fasteners, and products manufactured by other secondary manufacturers shall be approved and provided by the Membrane Roof Manufacturer and the specified rigid roof insulation manufacturers.

C. Membrane roofs and accessories shall be installed only by the Membrane Roof Manufacturer's certified applicators and installers approved and accepted by the specified or prior approved Membrane Roof Manufacturer.

### D. Membrane Roofing Manufacturer and Technical Inspector

1. Provide a membrane roof from an experienced membrane roofing manufacturer, who can provide, detail, and design membrane roof details to comply with the 2015 International Building Code, (IBC), for this area, (minimum UL 90 rated), and can provide, detail, and design materials to meet requirements and recommendations of referenced standards and all applicable codes and regulations.

2. Verify that the membrane roofing Certified Subcontractor measures the new structure, required distances to and between roof drains to maintain uniform floor slopes without ponding of water, inventories proposed membrane roof materials, accessories, and fasteners, and inspects the membrane roof structure and perimeter plaster fasciae details again, prior to beginning installation of the membrane roof and report all unfavorable conditions to the membrane roof manufacturer.

3. As a minimum, verify that the membrane roofing manufacturer hires and provides a qualified membrane roof Technical Inspector who coordinates with and calls the Contractor's Superintendent and the membrane roof manufacturer's Certified Subcontractor, 72 hours in advance, to schedule and attend a meeting at the Project site to:

a. Inspect the very beginning of the membrane roof installation; and,

b. Inspect the membrane roof after approximately 10 squares of membrane roofing has been installed; and

c. Inspect the membrane roof after approximately 50% of the membrane roof has been installed; and,

d. Inspect the membrane roof at Substantial Completion, for a minimum of four (4) inspections during membrane roof installation; and,

e. Inspect the metal roof again, after after final completion, to determine if any problems develop, all provided at no additional cost to the Owner.

4. The Contractor shall provide all correctional Work required by the metal roofing manufacturer's Technical Inspector.

#### 1.08 COMPLIANCE

A. All membrane roof details, including but not limited to roof penetrations, roof edges, envelopes for roof edges and roof drains, roof expansion joints, control joints, wall joints, roof sumps, roof drains, cants, tapered ISO boards, Perlite boards, adhesives, wood blocking and supports, roofing system flashing and counter flashing, all roof vents and accessories, methods of installing, and equipment and materials for the entire roofing system shall meet or exceed all requirements of the NRCA Roofing Manual (latest edition), SMACCNA (latest edition) and the Membrane Roof Manufacturer's recommended specifications and details (latest editions).

B. Membrane roof details indicated are based on Durapax details to establish minimum performance standards required for this Project; however, if another specified or prior approved Membrane Roof Manufacturer's Roofing System, other than Durapax, is providing materials for this Project, and said Membrane Roof Manufacturer's roofing system requires more costly materials, equipment and details other than that specified, indicated or detailed, and requires thicker materials, more quantity of materials, better quality of materials, control joints, expansion joints, and more expensive materials, equipment, and details to meet all requirements for obtaining the Membrane Roof Manufacturer's Twenty (20) Year NDL Warranty specified herein, then all of the above mentioned additional materials and equipment required shall be provided at no additional cost to the Owner.

C. Prior to bidding on the Roofing System, provide a duly authorized representative of the Membrane Roof Manufacturer to thoroughly study, review, and inspect the Contract Documents and the Roofing System to verify that this roof can be provided with the 20 year single source (NDL) warranty specified herein.

D. Prior to bidding, estimate Work based on the details and requirements indicated and specified herein, and add all additional more costly materials, equipment, and details required by the bidder and by the Membrane Roof Manufacturer's Roofing System special details and specifications.

E. If the Membrane Roof Manufacturer's specifications, or the Membrane Roof Manufacturer's representative requires providing additional expansion joints, construction joints, or additional more costly materials and details, include all of these additional costs in the Base Bid and provide this Work.

- F. Insure that all penetrations through the roof, including penetrations indicated and not indicated on the architectural roof plan are provided; including but not limited to penetrations indicated on the Mechanical and Electrical Documents.
- G. Provide roofing materials only in dry weather, when the temperature is above forty (40) degrees F; and do not store liquids where temperatures are expected to be below forty (40) degrees F.
- H. Install only as much roofing materials as can be completed each day. Protect Work from traffic when the temperature is above eighty (80) degrees F.
- I. Protect building walls, fasciae, and paving adjacent to the kettle and hoist prior to beginning roofing Work.
- J. Remove and replace all new and existing fasciae, bricks, concrete, outside paving below, and all other materials which cannot be cleaned of tar and other bituminous materials.
- K. Store all roll goods on ends and protect ends of rolls from becoming damaged.
- L. Provide protective weather coverings on all materials which may get damaged when wet. (Thin polyethylene film or thin plastic is not an approved weather covering).
- M. Entirely remove all damaged wet materials from this Project.
- N. Comply with all fire and safety regulations and Membrane Roof Manufacturer's recommendations in storing and in providing materials and equipment specified herein.
- O. The membrane roof shall meet all minimum requirements of U. L. Class A built up roof coverings, and all minimum wind load requirements indicated on the Structural Drawings and required by the 2015 International Building Code, (latest edition), as required for this particular Project site location.
- P. Prior to beginning Work under this Section of the Specifications, provide and maintain an accurate temperature gauge on the coal tar kettle for measuring exact kettle temperatures. Coal tar kettle should never be smoking.
- Q. Follow temperature guidelines for Coal Tar Pitch, in accordance with ASTM D 450, Type I, where the maximum kettle temperature shall never exceed 400 degrees and the point of application shall not exceed 360 degrees, (± 25 degrees).
- R. All membrane roof rigid insulation, (tapered ISO and Perlite boards), shall be approved in writing by the Membrane Roof Manufacturer.

1.09 MEMBRANE ROOF SINGLE SOURCE (NDL) 20 YEAR WARRANTY

A. Provide a Membrane Roof Manufacturer's Single Source, Twenty (20) Year No Dollar Limit (NDL), Coal Tar Membrane Roofing System Warranty covering all materials and Workmanship for a period of twenty (20) years with NDL provisions.

B. The Membrane Roof Manufacturer's Twenty (20) Year NDL Warranty shall have an unlimited liability limit per roofing square, (without a pro-rated limit per square), and shall cover repairing and replacing all roofing materials and products, and roofing insulation, installed above the metal deck.

C. The Membrane Roof Manufacturer's Twenty (20) Year NDL Warranty shall not exclude:

1. Replacing the roof insulation products.
2. Ponding water on the membrane roof.
3. Bitumen dripping over the gravel guard, or under the gravel guard, or bitumen dripping at roof drains, or bitumen dripping into gutters, or bitumen dripping where bitumen control double envelopes are specified to be properly installed at edges of bitumen roof plies and at roof drains.

D. The Membrane Roof Manufacturer's Single Source Twenty (20) Year NDL Warranty shall not have a clause whereby the Membrane Roof Manufacturer's applicator/installer's company is solely responsible for repairs or roof replacement at any time during this Roof Manufacturer's Warranty; and if the Roof Manufacturer's applicator/installer dies, goes out of business, refuses to return to this site, does not respond to phone calls, does not show up, or defaults in any way, the Membrane Roof Manufacturer shall hire and pay for an authorized membrane roof installer to repair or replace the roof during the Single Source Warranty Period.

E. The Membrane Roof Manufacturer shall monitor each step of the roof materials being purchased, and each step of the progress of the Work to insure that the roof is being provided and installed in strict accordance with the Membrane Roof Manufacturer's requirements, and to insure that the Membrane Roof Manufacturer's Twenty (20) Year NDL Warranty can be provided.

F. The Membrane Roof Manufacturer's Twenty (20) Year NDL Warranty shall not have a binding clause stating in part that the Membrane Roof Warranty becomes effective only when all bills for installation and supplies have been paid in full to the Membrane Roof Manufacturer, Membrane Roof Applicator Subcontractor, Contractor, and material suppliers, or a similar clause; and no membrane roof warranty shall incorporate any type of language requiring the Owner's

final payment in full prior to providing the Owner or Architect with the specified final warranty.

G. The Membrane Roof Manufacturer's Twenty (20) Year NDL Warranty shall not have a binding clause stating that all roofing claims against the Membrane Roof Applicator and the Membrane Roof Manufacturer shall be settled through arbitration.

H. Settlements of claims through any type of arbitration is not allowed by the Owners in any way for this Project.

I. The Membrane Roof Manufacturer's Twenty (20) Year NDL Warranty shall not have a binding clause stating all claims shall be settled in a location and in a court outside of Ascension Parish.

J. If any membrane roofing claim(s) are made by the Owner, by the membrane roof installer, the membrane roof manufacturer, or by any other party, associated or not associated with this Project, any and all such claims shall be settled through the Ascension Parish Judicial System, in Ascension Parish, where this Project is located.

K. All Membrane Roof Warranties shall begin on the Certified Date of Substantial Completion as opposed to any other date.

L. As Work progresses, and prior to the Certified Date of Substantial Completion, and after Final Completion, the specified Membrane Roof Manufacturer's Technical Inspector shall inspect the membrane roof in the presence of the Contractor to determine if any roof repairs or roof replacing is required under the Membrane Roof Manufacturer's Warranty.

#### 1.10 SHEET METAL MANUFACTURER'S 20 YEAR SINGLE SOURCE METAL FINISH (NDL) WARRANTY

A. Provide a Sheet Metal Manufacturer's 20 Year Single Source Metal Finish (NDL) Warranty, prepared and signed by the sheet metal manufacturer whereby the manufacturer agrees to repair, finish or replace perimeter gravel guards, metal flashing, and all miscellaneous factory finished sheet metal that shows evidence of deterioration of the specified factory applied finish within the 20 year warranty period.

B. Exposed panel finish deterioration includes but is not limited to:

1. Color fading more than 5 hunter units when tested according to ASTM D 2244.

2. Chalking in excess of a No. 8 rating when tested according to ASTM D 4214.

3. Cracking, checking, peeling or failure of a paint to adhere to bare metal.

C. The finish warranty shall not exclude rusting and deterioration caused by metal filings not swept off of the metal roof, or scratches, or other damage that was not caused by the Owner.

#### 1.11 GENERAL ROOFING REQUIREMENTS

A. Prior to bidding, thoroughly review the Contract Documents.

B. Provide extended electrical wires, conduits, and connections for extending, routing, and connecting all electrical materials and equipment on the roof, if any.

C. Provide extended sheet metal Work materials and equipment for extending, routing, and connecting all required mechanical vents.

D. Provide and extend double wall heater flue vents where and if required. Refer to Mechanical Documents.

E. With canvas or other protective coverings, protect all fasciae, walls, doors, windows, concrete driveways, concrete sidewalks, and all other existing and new materials and equipment on site.

F. Remove and replace all materials and equipment which have been damaged or cannot be cleaned of bituminous roof materials.

G. Provide the Roofing System, membrane roof, rigid roof insulation, flashing, roof drain pipe insulation, and roof details as indicated on the Drawings and as further required by the Membrane Roof Manufacture's details, the rigid roof insulation details, and NRCA and SMACCNA details, meeting minimum UL 90 requirements.

#### 1.12 SPECIAL ROOFING REQUIREMENTS

A. Maintain and patch the entire new Membrane Roof, during construction as Work progresses if any leaks occur.

B. Provide watertight protective coverings on the existing library masonry parapet walls and maintain same during membrane roofing Work.

C. If leaks occur in the immediate membrane roof Work areas of the existing masonry walls, repair all of these leaks to avoid damage to the interior of the building.

D. If materials and equipment are damaged on the interior of the building during membrane roof Work, repair and replace all damaged materials and equipment.

E. Provide water pumps, brooms, forced air blowers, and other equipment if necessary to remove water rapidly from the roof after every rain to insure that the roof will dry quickly.

F. Provide extra labor and materials to get roof dry immediately after rain so as not to slow the progress of the Work.

G. Remove and replace wet roof materials which got wet during construction and cannot be dried out prior to placing the membrane roof on same.

H. Do not allow any harmful traffic; and do not allow materials to be stored on either the existing roof or new membrane roof.

I. In accordance with NRCA recommendations, to avoid blistering problems with rigid insulation, allow rigid board insulation to have NRCA recommended "open time" prior to applying hot bitumen products to allow for top side moisture venting.

## PART 2 - PRODUCTS

### 2.01 MANUFACTURERS

#### A. Membrane Roofing & Accessories Manufacturers:

1. Manufacturers are as specified above and below, or a prior approved substitute.

2. Items specified herein by specific manufacturers are used only to denote the quality standard of product desired and that they do not restrict bidders to the specific brand, make, manufacturer, or specification named; and that they are used only to set forth and convey to prospective bidders the general style, type, character, and quality of products desired; and that equivalent products may be acceptable.

3. It shall be the responsibility of the professionally employed Architect or Engineer, or Interior Designer, to determine what is considered an equivalent product, meeting also Owner approval, on any and all Projects in which they have been legally employed to perform professional services.

4. Other manufactures specified above or below, or other prior approved substitutes may be provided if they meet all requirements specified herein and are approved substitutes by the Architect, Engineer, or Interior Designer.

B. Membrane Roof Materials: Durapax, Pottstown, PA, 1-610-579-9075; The Garland Co., Cleveland Ohio; Honeywell; or a prior approved substitute.

C. Rigid Roof Tapered Insulation Boards, (ISO): Atlas, 1-800-766-1476; Firestone; R-Max; or a prior approved substitute.

D. Fiber-boards/Perlite-boards: Three-quarters inch (3/4") thick Perlite boards, other similar insulation Fiber-boards, Edge Strips, and Cants: Permalite, GAF, Manville Corporation, or a prior approved substitute.

E. Drain Couplings, Pipe Seals, Pipe Boots, Pre-molded Corners, (if any): Fernco, Manville, or a prior approved substitute.

F. Pre-fabricated Roofing Curbs, (if any): Custom Curbs, Inc., The Pate Company, Prefab Curbs, RPS, ThyCurb, Durapax, GAF, or a prior approved substitute.

G. Color Matching Roofing Sheet Metal, Gravel Guards, Flashing, and Miscellaneous Sheet Metal: Petersen Chemical "Pac-Clad"; Copper Sales "Una Clad"; Vincent Metals "Color Klad", or a prior approved substitute, in minimum 24 gage, with a factory baked enamel finish to "exactly" match the color of the new library metal roof, new metal parapet wall cap flashing, and miscellaneous flashing.

H. Expansion Joint Vapor Stop: Fortifiber, Nervastral, or a prior approved substitute.

## 2.02 MEMBRANE ROOF TYPES AND SYSTEMS

### A. Roof Membranes, (5-Plys):

1. Roofing type shall be minimum twenty (20) year life, NDL (no dollar limit), bondable, gravel surfaced coal tar membrane roof, with a minimum four (4) ply coal tar bitumen membrane Roofing System, provided on top of a non-perforated specified asphalt base sheet embedded in steep asphalt, (on top of specified and indicated rigid insulation boards below), for a total of five (5) plies; i.e., 4 plies embedded in cold tar + 1 embedded in asphalt = 5 actual plies provided above the specified and indicated staggered layers of sloping rigid insulation below, securely fastened to the metal deck below.

2. The base sheet shall be adhesively mopped in asphalt bitumen on top of the specified sloping three-quarters inch (3/4") uniform thickness of Perlite board below and the 4 ply membranes shall be mopped in coal tar on top of the specified base sheet.

3. The four (4) coal tar plies above the specified base sheet, shall be provided with a coal Tar System similar to Durapax No. RP-51 TC-4, with Coal Tar Coated "TC" Glass Fiber Felts, with specified gravel above.

### B. Membrane Roof Insulation Layers:

1. Bottom ISO Board Layers: Provide over all of the membrane roof metal deck, the specified and indicated and specified continuous minimum 3" thick bottom ISO board layer, (Bottom Layer), (provided in a single ISO layer or multiple ISO layers), of specified rigid ISO insulation boards, mechanically screwed and fastened directly to the specified metal deck below, with fasteners spaced to meet specified required wind loads and uplift loads; hence, with a minimum R value

of 5.8 per inch x 3" = minimum of R = **17.4** for the Bottom Layer of ISO board.

2. Middle Tapered ISO Board Layers: Provide over all of the 3" bottom layer and all of the metal deck below, the indicated and specified tapered ISO board layer, (Middle Layer), with staggered joints, beginning at the roof's lowest points near the centered roof drains, and extending horizontally approximately 17'- 7-3/4" from roof drains to east and west perimeter gravel guards, sloping upwards at a slope of 3/16" per foot, to said east and west perimeters, for an additional 3-1/2" thick Middle Layer of rigid ISO board at east and west perimeters of the membrane roof; hence, with a minimum R value of 5.8 per inch x 3-1/2" = minimum of R = **20.3** for the Middle Layer of ISO board at east and west perimeters of the membrane roof.

3. Top Perlite Board Layers: Provide over all of the tapered rigid insulation ISO Middle Layer and the rigid insulation ISO Bottom Layer, and over the entire metal deck below, the specified 3/4" uniform thickness Perlite board, (Top Layer), beginning at the roof's lowest points at perimeter of the centered roof drains, and sloping upwards with a uniform 3/4" thickness to the perimeters of the membrane roofs, away from the roof drains, and adhesively mopped on top of the above specified middle tapered layers; hence, with a minimum R value of 2.7 per inch x 3/4" = minimum of R = **2.025** for the top layer.

#### 4. Minimum R Values at Roof Drains and Roof Perimeters

(a) At Roof Drains: Minimum rigid insulation R values shall be **17.4** for the 3" ISO Bottom Layer; plus **2.025** for the 3/4" Top layer = **2.025**; hence, total required minimum R value at roof drains shall be **19.425**.

(b) At East and West Perimeter Gravel Guards: Minimum rigid insulation R values shall be **17.4** for the 3" ISO Bottom Layer; plus **20.3** for the tapered 3-1/2" Middle Layer; plus **2.025** for the 3/4" Top Layer; hence, total required minimum R value at the membrane roof east and west perimeter gravel guards shall be **39.725**.

5. Roof Slopes: Refer to the roof plan(s) and details for locations of membrane roof slopes with low points at centered drains; and high points at roof gravel guard perimeters, at higher roof ridges between roof drains, and at roof wall flashing along the existing library masonry walls, with arrows indicating the directions of the 3/16" per foot slopes provided by sloping layers of ISO boards below, with uniform thicknesses of Perlite boards on top.

6. In order to insure that the membrane roof perimeters at the metal perimeter gravel guards are level and at the same height on all perimeters the Contractor shall coordinate locations and the exact dimensions and exact placement of the indicated approximately

centered mechanical roof drains with the sloping rigid insulation Shop Drawings.

7. Tapered Edge Strips: Provide specified tapered Perlite edge strips on top of the specified sloping Perlite layer where required by the membrane roof manufacturer; however, insure that no part of the coal tar membrane roof slopes more than 1/4" per foot.

8. Insulation Fasteners: All membrane roof insulation shall be mechanically fastened with minimum UL 90 rated non-corrosive fasteners approved by the insulation manufacturers.

C. Roofing System: The entire Roofing System shall meet or exceed:

1. Minimum requirements of Underwriter's Laboratories, Class A built-up roof covering, and Factory Mutual requirements for this site; and,

2. Minimum recommendations of NRCA.

3. Minimum 2015 IBC wind load requirements.

#### 2.03 MEMBRANE ROOF MATERIAL COMPONENTS

A. Coal Tar Pitch: Provide Type I coal tar pitch in accordance with 2015 IBC Section 1507.10, and ASTM D 450, Type I Pitch.

B. Felts:

1. Organic Base Sheet: Provide base sheet in accordance with 2015 IBC Section 1507.10, minimum 43 pound asphalt base sheet meeting ASTM D 2626.

2. Coal Tar Saturated Organic Felts: Provide coal tar organic felts in accordance with 2015 IBC Section 1507.10, minimum ASTM D 227, Coal Tar saturated organic, coated "TC" Glass Fiber Felts, with a minimum roll weight of 60 pounds per 180 square foot roll, as recommended by NRCA and the Membrane Roof Manufacturer.

3. Flashing Felts: Provide flashing felts in accordance with 2015 IBC Section 1507.10, asphalt Type IV impregnated glass fiber ply sheets for flashing felts, ASTM D 2178, Type IV.

4. Envelopes and Pitch Dams: Provide a minimum of two (2) plies, (more if required by the manufacturer), of non-perforated organic felts, or polyester reinforced membrane suitable for membrane edge envelopes, minimum 18" wide, (and wider if necessary), provided in solid troweling of asphalt mastic or a solid mopping of steep asphalt, as specifically reviewed and approved by the Membrane Roofing Manufacturer. Refer also to envelope and pitch dam notes on Drawings.

5. On the Drawings, refer to the detail indicating the perimeter metal gravel guard with the 1-1/8" elevated top of the metal perimeter gravel guard, elevated 1-1/8" above the membrane roof's gravel. If coal pitch drips over or under this metal perimeter gravel guard or drips around roof drains, during the specified warranty period, be prepared to remove the metal gravel guard and rework the specified and indicated membrane envelopes at roof edges and roof drains.

C. Built-Up Flashing Roofing System:

Provide Duraplex Flashing Specification No. B-I-400-A, or a specified Membrane Roof Manufacturer's and Architect's approved substitute flashing Roofing System recommended by NRCA and the Membrane Roof Manufacturer to obtain the Membrane Roof Manufacturer's Twenty (20) Year NDL Warranty consisting of:

1. Minimum one (1) ply of Durapax FL-0020 smooth Polyester SBS flashing; or flashing as recommended by NRCA and a prior approved Membrane Roof Manufacturer.
2. Minimum one (1) ply of Durapax FL-0030 Granulated Polyester SBS flashing; or flashing as recommended by NRCA and a Membrane Roof Manufacturer and Architect prior approved substitute.
3. Duraplex PG-0016 Asphalt Primer Steep Asphalt; or asphalt materials recommended by NRCA and a Membrane Roof Manufacturer and Architect prior approved substitute.

D. Fiberboard / Perlite Edge Strips and Cants:

1. Tapered Edge Strips: Provide tapered edge strips as required by the roofing manufacturer, tapered from minimum three-quarter inch (3/4") higher at gravel guards, back to zero inches (0") in minimum eighteen inches (18") horizontally, on all membrane roof perimeters at gravel guards, to prevent tar and gravel from sliding off of the edge.
2. Cants: Provide forty-five degree perimeter treated wood at all vertical arises, provided with a maximum vertical height above roof plane of four inches (4").

E. Roof Surfacing Aggregate:

1. Washed, round gravel graded according to ASTM D 1863, with sieve 6 or 7, approved by the Membrane Roof Manufacturer.
2. Gravel shall be free of clay, sand, loam, and other foreign deleterious materials.

F. Roofing Sheet Metal: (For Membrane Roof Perimeter Gravel Guards, Continuous Cleats, Metal Expansion Joint Covers, Flashing and Counter

Flashing, Miscellaneous Flashing, and Custom Fabricated Flashing): Minimum 24 gage factory baked enamel, with a the specified 20 year finish warranty, provided in the exact same color as the metal roof, from the list of specified manufacturers listed herein. (Refer to Drawings for details and types and match profiles of adjacent materials.

G. Metal Plumbing Vent Roof Jacks: Minimum 2.5 pound per square foot lead flashing. (Refer also to Mechanical Documents).

H. Metal Pitch Pockets: Minimum 16 ounce copper.

I. Pitch Pocket Seal: Asphalt flashing cement.

J. Miscellaneous Treated Wood Grounds, Lumber, Blocking and Plywood: Minimum 0.40 pounds per cubic foot, kiln dried after treatment, S4S, treated lumber and treated plywood securely fastened with stainless steel fasteners.

K. Miscellaneous Metal Flashing: Metal flashing for all other miscellaneous metal flashing shall be the same factory finished baked enamel materials as that specified for the minimum 24 gage Roof Sheet Metal specified above.

L. Miscellaneous Materials and Accessories: As strictly recommended by NRCA and the Membrane Roof Manufacturer.

M. Rigid Roof Insulation Materials:

1. ISO Board:

a. ISO board shall meet all requirements of Atlas Tapered ACFoam-II Specifications, closed cell, HCFC Free, integrally laminated to heavy non-asphaltic fiber-reinforced felt facers with FM and IBC recommended wind uplift classification; with a minimum compressive strength of 20 psi; meeting FM Standard 4450/4470 approval, Class I; UL 1256 Classification; UL 790 (ASTM E 108) Classification; and UL Standard Fire resistance Classification (ASTM E 119).

b. ISO board shall meet minimum requirements of ASTM C 1289, Standard Specification for Faced Cellular Polyisocyanurate Insulation Board; Type II, Class 1, Grade 2, (minimum 20 psi rated); minimum R value with the new 2014 LTTR 5.8 per inch per ASTM C 1303 over 15 years; maximum size boards of 4' x 8', provided with staggered edge joints.

c. Securely screw ISO boards to the metal deck with Factory Mutual approved non-corrosive screw fasteners with a fastener spacing pattern approved by NFPA 276, Section 1508 of the International Building Code, NRCA, International Building Code, and Membrane Roof Manufacturer's approved fasteners meeting specified minimum UL, FM, and 2015 IBC wind requirements, minimum UL 90.

2. Perlite Board: Over the entire above specified tapered ISO board rigid insulation, provide a continuous, uniform three-quarters inch (3/4") thick standard wood fiber, Perlite board, or Fesco board, minimum R value of 2.14 per inch thickness, meeting ASTM C 728.

3. Rigid Roof Insulation Adhesive: Asphalt adhesive meeting ASTM D 312, Type III, (steep), or Type IV specifically approved by the rigid insulation manufacturers and the Membrane Roof Manufacturer.

N. Rigid Roof Insulation Board Fasteners: Provide Membrane Roof Manufacturer's, NRCA approved and rigid roof insulation board manufacturers' approved and recommended screw fasteners with discs, meeting specified UL, FM, and IBC wind requirements, provide in patterns to meet said wind requirements, minimum UL 90 rated.

O. Spacing of Rigid Roof Insulation Board Fasteners: For four (4) feet x eight (8) feet insulation boards, provide a minimum of eighteen (18) fasteners per board for interior boards and a minimum of twenty-four (24) fasteners per board for exterior boards and corner boards.

P. Expansion Joints, (if any required by the Membrane Roof Manufacturer): Custom fabricated treated wood covered with specified 24 gage factory finished Roofing Sheet Metal, or Membrane Roof Manufacturer's approved flexible bellows type expansion joints.

Q. Roof Caps and Vents: Refer to Mechanical Documents for providing roof caps and roof vents.

### PART 3 - EXECUTION

#### 3.01 INSPECTION

A. Verify exact heights and elevations of the new proposed membrane roof at roof drains; verify the uniform 3/16" per foot membrane roof slopes away from roof drains; and verify the exact heights and elevations of the membrane roof at the perimeter gravel guards, at internal roof ridges between roof drains, and at the wall flashing provided at the existing masonry wall.

B. Provide all new gravel guards with a raised height a minimum of 1-1/8" above the top of the highest gravel on the membrane roof to prevent coal tar and wind blown water from dripping over the perimeter gravel guards. Refer to Drawing Notes on Detail 4A12, note 032, and Detail 6A12.

C. If coal tar slides over and drips down over the new perimeter metal gravel guards at the new roof perimeters; or, if coal tar slides under and drips down under the new perimeter metal gravel guards at the new roof perimeters, entirely remove gravel guards and entirely remove perimeter envelopes and replace roof perimeters with

new gravel guards and properly provided specified double bitumen control envelopes.

D. If coal tar slides over or under and drips down inside or outside of roof drains, entirely remove roof drains, roof drain conductor pipes, and roof drain envelopes and clean same, and re-install roof drains and pipes and provide properly provided specified double bitumen control roof drain envelopes, or envelopes around similar roof penetrations.

E. Verify that all Work which involves providing openings in the roof deck is completed prior to beginning membrane roofing Work.

F. Verify anchorage of all wood blocking, supporting continuous steel angles, and cants and securely fasten same.

G. Verify anchorage of all materials and equipment in contact with the Roofing System.

H. Inspect all surfaces that are to receive roofing materials. Report all unfavorable conditions.

I. Do not proceed with application of roofing until all defects are corrected.

### 3.02 INSTALLING ROOF INSULATION

A. Bottom Layer: After providing the specified and indicated metal deck, securely fasten the first layer, (bottom layer) of ISO board insulation over the entire exposed deck with FM approved and Membrane Roof Manufacturer's approved mechanical fasteners through discs.

B. Middle Tapered Layer: Provide, and adhesively apply the next specified tapered ISO layer, on top of the bottom ISO layer.

C. Top Sloping Layer: Provide and adhesively apply the specified top layer Perlite board layer, sloping where indicated and specified toward the roof drains.

D. Neatly cut and fit all insulation with tight fitting joints; stagger joints between each of the succeeding rigid insulation layers of insulation to avoid having insulation joints provided over insulation joints below; temporarily seal edges of rigid insulation at the end of each day.

E. Stagger joints between tapered edge strips and joints of insulation directly below.

F. Provide the minimum numbers of non-corrosive rigid board insulation fasteners per board as specified hereinabove.

### 3.03 MEMBRANE ROOF (5 Ply)

A. Over all of the specified top sloping Perlite board, provide the specified non perforated asphalt base sheet in a solid mopping of specified steep asphalt.

B. Over all of the specified base sheet, provide a minimum of four (4) plies, (shingle fashion), with a minimum of four (4) mopped layers of coal tar bitumen, with each mopping provided at a rate of not less than twenty (20) pounds each per square, for a minimum total weight of eighty (80) pounds per square between plies, excluding the minimum seventy (70) pounds per square under gravel top coat(s).

C. Install all coal tar impregnated roofing felt materials overlapping 27-1/2" with 8-1/2" exposure to achieve four (4) plies on top of the specified base sheet in accordance with the specified Membrane Roof Manufacturer's specifications, all provided in solid mopped layers of the specified coal tar, for a total of five (5) plies.

D. All plies of the built-up roofing shall be securely attached in hot bitumen where in no place shall one ply of felt touch another.

E. Provide minimum end laps of 10" staggered between plies.

F. Provide the specified double envelope strips at perimeters of roof and at all roof penetrations and openings.

G. Provide Membrane Roof Manufacturer's additional required materials and details to obtain the Membrane Roof Manufacturer's Twenty (20) Year NDL Warranty.

### 3.04 BUILT-UP BASE FLASHING:

A. Install built-up base flashing and cants in accordance with all requirements of the specified Membrane Roof Manufacturer, and as detailed.

B. Install built-up base flashing and cants at all areas where Roofing System abuts all vertical surfaces and roof penetrations as detailed.

C. Securely adhesively attach base sheet on insulation prior to mopping on base flashing.

D. Seal top edge of base flashing with a coating of flashing cement followed by another coating of flashing cement.

E. Provide and install counter flashing after sealing top edge of base flashing.

### 3.05 METAL PLUMBING VENT ROOF JACKS

A. Provide a specified metal bitumen dam, minimum 6" high, set in Membrane Roof Manufacturer's and NRCA recommended mastic.

B. Set lead flange in mastic. Strip in with three (3) plies of felt and hot bitumen. Prime flange before stripping.

C. Provide a metal plumbing vent roof jack over all plumbing vents penetrating the membrane roof.

D. Roll lead flashing 1" down into all pipes.

E. Refer also to Mechanical Documents.

### 3.06 INSTALLING PITCH POCKETS WITH CAPS

A. Provide pitch pockets around all roof penetrations where recommended by NRCA and the Membrane Roof Manufacturer and where indicated and specified, fabricated of sixteen (16) ounce copper as follows:

1. Pour a minimum of two (2) inches of cement mortar in bottoms of pitch pockets.

2. After mortar has set, provide and top off pitch pocket with asphalt flashing cement.

3. Cap pitch pockets with a sixteen (16) ounce copper cap per NRCA details.

B. Provide welded cap flashing above all pitch pockets, (painted after welding).

### 3.07 INSTALLING PERIMETER GRAVEL GUARDS:

A. Provide treated wood nailers indicated, securely fastened, under all metal perimeter gravel guards.

B. Securely fasten wood nailers to achieve UL, FM, and 2015 IBC windload classification.

C. Provide and secure metal gravel guards as recommended by NRCA the Membrane Roof Manufacturer, as detailed, and in compliance with NRCA, latest edition to also meet latest 2015 editions of the International Building Code.

D. Prior to providing metal gravel guards in place, provide two (2) plies of polyester fabric set in place with flashing cement over envelope and provide same over and down the front face of the fascia of the building such that it is entirely covering the wood nailers. Nail in place on the face, into the fascia.

E. Providing the tops of the perimeter gravel guards at an elevation above the top of the gravel on the membrane roof to prevent gravel and tar from sliding over the gravel guard.

### 3.08 FINAL SURFACING

A. Provide top coat of hot bitumen by pour method over roofing felts following the Membrane Roof Manufacturer's recommendations.

B. Provide top coat in an even layer of a minimum of not less than seventy (70) pounds per square.

C. Provide aggregate into bitumen while bitumen is hot at the rate of not less than four hundred (400) pounds per square.

D. Provide aggregate uniformly and with complete coverage.

### 3.09 CLEANING

A. Clean bitumen materials from all surfaces other than those requiring bituminous roof coatings.

B. Remove and replace all materials which cannot be cleaned.

C. Clean site of all debris and gravel.

### 3.10 PAINTING

Touch up paint all damaged surfaces.

### 3.11 CORRECTING AND REPAIRING ROOF LEAKS

A. At end of Project, after first rain, inspect roof for leaks and repair all leaks, if any.

B. Provide all membrane roofing materials, flashing, and miscellaneous materials and equipment to repair leaks.

C. Report all leaks to the Membrane Roof Manufacturer, Owner, and Architect.

### 3.12 SAMPLE CERTIFICATION LETTER

X,Y,Z Co. Inc.  
1221 Oak Drive,  
Penville, LA 70986  
(225) 737-0000

November XX, 2015

Re: Additions & Alterations To Ascension Parish Library - Galvez,  
Prairieville, Louisiana.

Location: Ascension Parish Library, 40300 LA Hwy 42, Prairieville, LA.

To: Ascension Parish Library, 708 South Irma Boulevard, Gonzales, LA 70737.

Ladies and Gentlemen:

This is to certify that John Doe Construction, 7486 Wand Ave., Worther, La., 78433, (225) 922-0000, submitting the Membrane Roof Applicator/Installer Subcontractor's bid for this specified membrane roof, as the membrane roofing applicator/installing company, is certified, approved, and authorized to install the Membrane Roof Manufacturer's membrane roof in order to obtain the Membrane Roof Manufacturer's Twenty (20) Year NDL (No Dollar Limit) unlimited liability Roofing System Warranty.

Very truly yours,

Ben W. Smith,  
Vice - President

- END -

## SECTION 07610

### METAL ROOF & FLASHING

#### PART 1 - GENERAL

##### 1.01 GENERAL REQUIREMENTS

A. The provisions of all of the Contract Documents are hereby made a part of this Section.

B. The requirements of Section 01810 entitled Technical Section Requirements apply to this Section the same as though herein written out in full.

C. Refer to Section 07410 Metal Wall Panels, for new vertical metal wall panels on in-sides of existing parapet walls, parapet cap flashing, and new flashing into the new metal roof system on the existing library building.

D. Wall panels for Section 07410, Metal Wall Flush Wall Panels and Flashing; perimeter gravel guards and exposed metal flashing for Section 07500, Membrane Roof and Flashing; and metal roof panels and exposed flashing for this Section 07610, Metal Roof and Flashing, shall all be provided by the same manufacturer in the same exact color.

E. Prior to bidding, and prior to submitting a Bid, insure that the Metal Roof Manufacturer selected by the Contractor is aware that said Manufacturer shall be required to:

1. Provide the specified 20 year material finish warranty, and the specified (20) year single source (NDL) water-tightness warranty, both signed and warrantied by said Manufacturer, as opposed to any part of said warranties being provided or warrantied by anyone other than the Metal Roof Manufacturer.

2. Provide the specified Certification Letter stating that the installer of materials specified in this letter is capable, certified, and approved by the Metal Roof Manufacturer.

3. Provide the specified Professional Louisiana Licensed Engineer to verify, report, and indicate that the metal roof panel design and fastening meets or exceeds wind load requirements required by the 2015 IBC code for the Project's physical address and location.

4. Provide the manufacturer's Technical Inspector to monitor and supervise Work provided for this Project as specified herein.

## 1.02 STANDARDS

Meet requirements and recommendations of the applicable portions of the latest editions of Standards listed below:

- A. American Society for Testing Materials (ASTM)
- B. Architectural Sheet Metal Manual; Sheet Metal and Air Conditioning Contractor's National Association, Inc. (SMACCNA)
- C. American Iron and Steel Institute; "Cold Form Steel Design Manual" (AISI)
- D. International Building Code (IBC)
- E. Underwriters Laboratory (UL)
- F. Factory Mutual (FM)
- G. American Institute of Steel Construction; "Steel Construction Manual" (AISC)

## 1.03 COORDINATION REQUIREMENTS

A. In addition to requirements specified in Section 01050, Project Coordination, coordinate all Work required specifically for providing the specified metal roof and all sheet metal accessories specified herein, and coordinate same with Section 07410, Metal Flush Wall Panels and Flashing.

B. Prior to bidding, the Contractor shall verify which manufacturer or Subcontractor is providing the roof penetration materials and all other required items and inspections specified herein.

C. Prior to submitting bids, verify that the metal roofing manufacturer and metal roof Subcontractors can meet all requirements specified herein and verify which items they are providing and which items they are not providing, and which materials are or are not factory formed at the factory.

## 1.04 SUBMITTALS

A. Submit metal roofing manufacturer's Product Data and Installation Details, accompanied by detailed dimensioned drawings showing profile and gauge of exterior sheets, locations and types of fasteners and types of sealants proposed and provided for all materials indicated specified herein.

B. Submit Shop Drawings and Product Data on all metal roof manufacturer's approved materials indicated and specified herein, and required by the roof manufacturer, including but not limited to fabrication and layout of metal roof panels and panel profiles, anchorage, screws, clips, trim, flashing, closures, side seam joints, accessories, and special required details; details of all edge conditions at eaves, ridges, valleys, clerestory windows, and metal roof flashing into masonry parapet wall; gutters, downspouts, roof curbs for mechanical equipment, (if any), vent, details; details distinguishing between factory assembled Work and field assembled

Work; and dimensioned panel widths to acquire a complete watertight metal roof design where indicated and specified herein.

C. Submit a minimum of two (2) 12" x 12" factory finished metal samples in the color of Terra Cotta in addition to the metal roofing manufacturer's color chart for Architect's preliminary selection of metal roof colors, exposed flashing, parapet caps, metal trim, gutters and downspouts. Any Metal Roof manufacturer who cannot provide a Terra Cotta specified metal finish will be rejected by the Owners.

D. Submit a copy of the metal roofing manufacturer's written Roof Design Certification, prepared, stamped, and signed by a Louisiana Licensed Professional Engineer; currently registered to practice in the State of Louisiana, verifying that the metal roof design meets as a minimum UL 90 uplift requirements and 2015 IBC wind loading requirements indicated and/or specified in the structural documents.

E. Secure all mechanical equipment details indicated and specified in Mechanical Documents and provide mechanical equipment Shop Drawings and Product Data to the metal roofing manufacturer and the metal roofing Certified Subcontractor for their review of the required, indicated and specified roof curbs, (if any), to fit mechanical equipment and structural details.

F. Submit a copy of the proposed metal roofing manufacturer's specified metal finish 20 year warranty prior to ordering materials.

G. Submit a copy of the metal roofing manufacturer's Certified Subcontractor's Certificate.

H. Submit a copy of the metal roofing manufacturer's Twenty (20) year (NDL) Single Source Water-tightness Warranty on the metal roof panel's finish.

#### 1.05 METAL ROOFING MANUFACTURER'S CERTIFICATION LETTER

A. Prior to the Bid date, and prior to submitting a Bid, verify with the proposed metal roofing manufacturer(s) that the proposed metal roofing manufacturer(s) shall provide, prior to signing the Contract, Subcontractor(s) duly certified, and approved by the metal roofing manufacturer, to insure the issuance of the specified Metal Roof 20 Year Water-tightness (NDL) Warranty.

B. Prior to signing the Contract, submit a minimum of one (1) Certification Letter from the specified or prior approved metal roofing manufacturer(s), certifying that the proposed metal roofing Certified Subcontractor is approved to obtain the specified Metal Roof 20 Year Water-tightness (NDL) Warranty.

C. More than one Certification Letter, from more than one metal roofing manufacturer, may be obtained prior to submitting bids and prior to signing the Contract.

D. The Certification Letter shall include the following minimum information:

1. A specified metal roofing manufacturer's company name printed on the letterhead including the name, address, telephone number and fax number of the metal roofing manufacturer and the date of the letter; and,
2. The name of the Project, as it appears in the Specifications; and,
3. The name, address, and telephone number of the metal roofing manufacturer's approved, Certified Subcontractor proposed to install the metal roof.
4. A statement from the metal roofing manufacturer certifying that the proposed Certified Subcontractor, who is to provide and install the metal roof, is approved, certified, and authorized to install the specified metal roofing manufacturer's materials, and is approved to insure the manufacturer's issuance of the metal roofing manufacturer's specified Metal Roof 20 Year Water-tightness (NDL) Warranty.
5. The metal roofing manufacturer's authorized representative's signature.

E. If the Contractor cannot provide the required, specified Certification Letter from the proposed metal roofing manufacturer, as specified in this Section, prior to signing the Contract, the Owner may reject the Contractor's Bid because of failure to meet requirements of the Specifications.

#### 1.06 TECHNICAL INSPECTOR AND QUALITY ASSURANCE

A. This specified and indicated metal roof has special design requirements whereby the Contractor shall contact a full service metal roofing manufacturer who is capable of providing and manufacturing special details and is capable of providing the specified Licensed Engineering Design calculation specified herein.

B. If the proposed metal roofing manufacturer requires that additional purlins, or thicker purlins, are required to obtain the specified UL 90 uplift rating, and the specified wind load design required by 2015 IBC, provide additional purlins or thicker purlins to meet the metal roofing manufacturer's requirements.

C. Metal Roofing Manufacturer and Technical Inspector

1. Provide a metal roof from an experienced metal roofing manufacturer, with a fully staffed engineering department, who can provide, detail, and design metal roof details to comply with the 2015 International Building Code, (IBC), for this area, and can provide, detail, and design materials to meet requirements and recommendations of referenced standards and all applicable codes and regulations.

2. Verify that the metal roofing Certified Subcontractor measures the existing structure, distance between purlins, inventories proposed metal roof materials, clips, and fasteners, and inspects the metal roof framing again prior to beginning installation of the metal roof and report all unfavorable conditions to the metal roof manufacturer.

3. As a minimum, verify that the metal roofing manufacturer hires and provides a qualified metal roof Technical Inspector who coordinates with and calls the Contractor's Superintendent and the metal roof manufacturer's Certified Subcontractor, 72 hours in advance, to schedule and attend a meeting at the Project site to:

a) Inspect the very beginning of the metal roof installation; and,

b) Inspect the metal roof after approximately 10 squares of metal roofing has been installed; and

c) Inspect the metal roof after approximately 50% of the metal roof has been installed; and,

d) Inspect the metal roof at Substantial Completion, for a minimum of four (4) inspections during roof installation; and,

e) Inspect the metal roof again, after final completion, to determine if any problems develop, all provided at no additional cost to the Owner.

4. The Contractor shall provide all correctional Work required by the metal roofing manufacturer's Technical Inspector.

#### D. Materials for Metal Roof Panels, Flashing, and Accessories

1. All metal provided for metal roof panels, flashing, gutters, downspouts, metal trim, and accessories, shall be made in the USA as opposed to foreign made.

2. The metal roof panels shall be formed inside an enclosed factory environment, with fixed base roll forming equipment mounted on a concrete surface with precise in-line leveling, in the metal roofing manufacturer's fabrication shop or fabrication plant, as opposed to roof panels being formed with portable equipment in an open field, or any other Project site.

3. The metal roof flashing, gutter, downspouts and accessories shall be formed in the metal roofing manufacturer's fabrication shop or fabrication plant, as opposed to being formed in the field, or at the Project site, and shall all be provided with minimum number of joints in twenty feet (20'-0") long lengths as opposed to all being provided in ten feet (10'- 0") long lengths.

4. Job site portable roll forming equipment for providing metal roof panels will not be allowed; and job site equipment for forming flashing, gutters, downspouts, and accessories will not be allowed.

5. To insure strict, precise, quality control, and to abide by these Specifications, all metal roof materials shall be manufactured in the roof manufacture's facility or plant.

6. Metal roof panels shall be provided in full length metal sheets as opposed to being spliced between eaves and upper ridges or eaves and other upper terminations.

#### 1.07 ROOF SYSTEM PERFORMANCE TESTING AND DESIGN CRITERIA

A. General: Metal roof panels shall comply with performance requirements without failure because of defective manufacture, fabrication, installation, or other defects in construction Work; and all Work and materials shall comply with requirements and recommendations of referenced standards and design requirements specified herein; and roof panels shall meet or exceed Water Penetration Tests when tested in accordance with ASTM E 283/1680 and ASTM E 331/1646, where there shall be no uncontrolled water penetration or air infiltration through the panel joints or flashing joints.

#### B. Design Loads:

1. For the metal roof system, the design live loads, wind loads, and dead loads shall meet or exceed requirements of the International Building Code, (IBC) 2015 Edition; the load requirements indicated on the Structural Drawings and Specifications; and shall be designed to meet as a minimum, UL Class 90 wind uplift in accordance with UL Standard 580, Tests for Uplift Resistance of Roof Assemblies; and shall be ASTM 1592 Tested and Approved; and shall meet or exceed UL 2218 Impact Resistance Rating.

2. Wind loads shall be determined in accordance with requirements of the 2015 IBC and ASTM 1592.

C. Prior to ordering materials, submit written Certification prepared, stamped, and signed by a Professional Engineer, currently registered to practice in the State of Louisiana, verifying that the metal roofing system and metal panel design, including clips and attachments, and spacing of clips and attachments meet all specified loading requirements and IBC code requirements specified herein.

#### 1.08 GENERAL DESCRIPTION OF WORK

A. Provide all labor, materials, tools, equipment, protective coverings, lifting equipment, and services, for a complete metal roof system as specified and indicated, complete with eave gutters and gutter supports, downspouts and downspouts support straps, and custom designed and custom roof curbs, (if any), and other specified and indicated trim and indicated sheet metal materials.

B. Provide all supplementary and miscellaneous sheet metal materials, equipment, items, appurtenances, roof jacks, and devices incidental to and necessary for a sound, secure and complete watertight installation.

#### 1.09 METAL ROOF MANUFACTURER'S 20 YEAR SINGLE SOURCE WATER-TIGHTNESS (NDL) WARRANTY

A. Provide a Metal Roof 20 Year Water-tightness (NDL) Warranty, prepared and signed by the metal roof manufacturer.

B. The Metal Roof 20 Year Water-tightness (NDL) Warranty shall be a Single Source Warranty with absolutely no part of this warranty provided or warrantied by the roof manufacturer's Subcontractor, Applicator, and/or Installer. If the Roof Manufacturer's Subcontractor, Applicator or Installer dies, goes out of business, refuses to return to this site, does not respond to phone calls, does not show up, or defaults in any way, the Metal Roof Manufacturer shall hire and pay for an authorized metal roof installer to repair or replace the roof during the Roof Manufacturer's Single Source 20 year Warranty Period with no dollar limit and no additional expense to the Owner.

C. The Metal Roof 20 Year Water-tightness (NDL) Warranty shall be a Single Source Warranty, for a period of twenty (20) years from the date of Substantial Completion, indicating that the metal roofing manufacturer warrants to the Owner to furnish to the Owner roof panels, flashing, and related items used to fasten the roof panels and flashing including roof jack and curb attachments to the roof structure, will not allow the intrusion of water from the exterior of the roofing manufacturer's Roof System into the building envelope when exposed to ordinary Louisiana weather conditions and ordinary wear and usage.

D. The date of Substantial Completion is the date that is certified in writing by the Architect and Owner when the entire existing library building below the new metal roof, below the new metal flush wall panels, and below the new parapet wall metal caps, and the entire Metal Roofing System is accepted by the Owner in accordance with the AIA General conditions of the Contract.

E. The metal roofing manufacturer shall have the sole and exclusive obligation for all warranty Work commencing on the date of Substantial Completion, and under all circumstances terminates on the twentieth (20th) year anniversary, (20) years after the certified date of Substantial Completion of the roofing manufacturer's Roof System.

F. During the warranty period in which the metal roofing manufacturer has any warranty obligation, the metal roofing manufacturer shall take appropriate actions necessary to cause the non-performing portions of the Roof System to perform their proper functions in a water-tight manner.

G. The total liability of the metal roofing manufacturer under this Single Source Warranty is a no dollar limit (NDL) of the roofing manufacturer's Roof System as provided for the roofing manufacturer's customer.

H. The Metal Roof 20 Year Water-tightness (NDL) Warranty shall include the Project name, the building Owner, the roof manufacturer's invoice numbers accompanied by the actual invoices, the roofing manufacturer's liability of "No Dollar Limit", the metal roof panel profile, the date of Substantial Completion, and the address of the Owner's facility.

I. The Metal Roof 20 Year Water-tightness (NDL) Warranty shall not include or have binding clauses stating that all roofing claims against the Metal Roof Applicator and the Metal Roof Manufacturer or any other parties shall be settled through arbitration.

J. Settlements of claims through any type of arbitration is not allowed by the Owners in any way for this Project and the Metal Roof Manufacturer's Twenty (20) Year NDL Warranty shall not have a binding clause stating all claims shall be settled in a location and in a court outside of Ascension Parish.

K. If any membrane roofing claim(s) are made by the Owner, by the membrane roof installer, the membrane roof manufacturer, or by any other party, associated or not associated with this Project, any and all such claims shall be settled through the Ascension Parish Judicial System, in Ascension Parish, where this Project is located.

L. If the Contractor cannot provide the specified Metal Roof 20 Year Water-tightness (NDL) Warranty, for any reason, the Contractor shall either provide corrective roof Work to obtain the specified Metal Roof 20 Year Water-tightness (NDL) Warranty, or entirely remove the entire roof and provide a new roof with the specified Metal Roof 20 Year Water-tightness (NDL) Warranty.

M. If the specified Metal Roof 20 Year Water-tightness (NDL) Warranty cannot be provided because the roofing manufacturer claims that the roofing manufacturer's Certified Subcontractor was not present at all

times when the metal roof was installed, entirely remove the metal roof and replace it with a new metal roof with the specified Metal Roof 20 Year Water-tightness (NDL) Warranty.

#### 1.10 METAL ROOF MANUFACTURER'S 20 YEAR SINGLE SOURCE METAL FINISH (NDL) WARRANTY

A. Provide a Metal Roof Manufacturer's 20 Year Single Source Metal Finish (NDL) Warranty, prepared and signed by the metal roof manufacturer whereby the manufacturer agrees to repair, finish or replace standing seam metal roof panels, metal flashing, metal parapet caps, gutters, downspouts, and all miscellaneous factory finished sheet metal that shows evidence of deterioration of the specified factory applied finish within the 20 year warranty period.

B. Exposed panel finish deterioration includes but is not limited to:

1. Color fading more than 5 hunter units when tested according to ASTM D 2244.

2. Chalking in excess of a No. 8 rating when tested according to ASTM D 4214.

3. Cracking, checking, peeling or failure of a paint to adhere to bare metal.

C. The finish warranty shall not exclude rusting and deterioration caused by metal filings not swept off of the metal roof, or scratches, or other damage that was not caused by the Owner.

#### 1.11 PRODUCT DELIVERY, STORAGE, AND HANDLING

A. Comply with manufacturer's ordering instructions and required lead time to avoid delays while insuring that the manufacturer is properly packaging metal roof panels and all metal materials prior to delivery, and during transportation delivery to the Project site.

B. Exercise extreme care in loading, unloading, handling, storing, and erecting all materials and equipment indicated and specified herein to prevent bending, warping, twisting, scratching, and surface damage.

C. Properly protect metal roof panels and flashing during storage, and provide metal roof panels under waterproof protective tarpaulin coverings, elevated above ground with one end slightly elevated to drain standing water, and stored high enough above ground so rising water cannot enter metal roof panel and metal flashing packaging.

D. Stack and store all materials on skidded and closely spaced platforms or pallets, which are well ventilated to prevent condensation and away from other stored materials.

E. Protect finished metal strippable protective coatings on all metal coated products from exposure to direct sunlight and high humidity, and remove protective coating immediately prior to installing in accordance with manufacturer's instructions.

F. Remove and do not install any metal materials which are bent, warped, twisted, scratched, and have surface discoloration or any other type of damage and replace them with new specified materials.

## PART 2 - PRODUCTS

### 2.01 MANUFACTURERS

#### A. Metal Roof and Flashing System Manufacturer:

1. Manufacturers are as specified above & below, or a prior approved substitute.

2. Items specified herein by specific manufacturers are used only to denote the quality standard of product desired and that they do not restrict bidders to the specific brand, make, manufacturer, or specification named; and that they are used only to set forth and convey to prospective bidders the general style, type, character, and quality of products desired; and that equivalent products may be acceptable.

3. It shall be the responsibility of the professionally employed Architect or Engineer, or Interior Designer, to determine what is considered an equivalent product, meeting also Owner approval, on any and all Projects in which they have been legally employed to perform professional services.

4. Other manufactures specified above or below, or other prior approved substitutes may be provided if they meet all requirements specified herein and are approved substitutes by the Architect, Engineer, or Interior Designer.

#### B. Specific Metal Roof & Flashing Manufacturer:

1. Metal Roof & Flashing: Petersen Aluminum Corporation, Tyler Texas 800-441-8661; Fabral, McElroy, or a prior approved substitute.

2. All roof panels, roof sheet metal, roof flashing, ridge caps, valleys, parapet cap flashing, clerestory window flashing, gutters, gutter straps, downspouts, and miscellaneous metal trim and flashing shall be provided by one (1) manufacturer.

3. Metal roof manufacturers, whether specified herein, or listed by written Addenda as approved substitute manufacturers, that cannot provide the specified full length metal roof panels without joints, and cannot provide the specified Metal Roof 20 Year Water-tightness (NDL) Single Source Warranty, and cannot provide a metal roof which

meets all requirements specified herein will not be accepted and shall be rejected.

C. Roofing "Peel & Stick" Membrane Ice & Water-shield Leak Barrier: "Peel" & "Stick" membrane shall be as manufactured by: W. R. Grace, "Ice & Water Shield"; Ceco "Strongseal"; Carlisle "CCW WIP 300HT"; Interwrap "Titanium PSU"; MFM Corp "Wind & Water Shield"; Polyguard Deck Guard "HT of Polyglas HT"; Tamko "TW Tile and Metal Underlayment"; or a prior approved substitute.

E. Sealants: Refer to Section 07900 Sealants.

## 2.02 MATERIALS

### A. Preformed Roof Panels, Flashing Materials, and Trim

1. All preformed roof panels, roof sheet metal, roof flashing, ridge caps, valleys, metal roof panel closures, parapet cap flashing, clerestory window flashing, gutters, gutter straps, downspouts, and miscellaneous metal trim and flashing shall be:

a. Minimum twenty-four (24) gage steel, complying with an ASTM A 653, Standard Specification for Steel Sheet, Zinc-Coated, (Galvanized), by Hot dipped Process; or complying with an ASTM A 792, Steel Sheet, Aluminum-Zinc Alloy Coated by Hot dipped Process.

b. Provided with a Kynar 500 or Hylar 5,000 Fluorocarbon coating with a top side thickness of minimum 0.070 mil to 0.90 mil over a minimum 0.25 mil to 0.3 mil prime coat to provide a total dry film thickness of 0.95 mil to 1.25 mi, to meet AAAMA 621; and with a bottom side coated with a primer with a dry film thickness of minimum 0.25 mil, where said finish shall conform to all tests for adhesions, flexibility, and longevity as specified, by Kynar 500 or the Hylar 5,000 finish supplier.

c. Provided with the specified metal roofing manufacturer's Metal Roof 20 Year Single Source Water-tightness (NDL) Warranty, and a metal roofing manufacturer's twenty (20) year warranty on the Kynar 500 or Hylar 5,000 finish.

### B. Metal Roof Panels Shapes

1. General: Provide factory-formed metal roof panels designed to be installed by lapping and interconnecting raised side edges of adjacent panels with joint type indicated and mechanically attaching panels to supports using concealed clips in side laps; and include clips, cleats, pressure plates and accessories required for a weather-tight installation.

2. Roof panels shall be standing seam Petersen Aluminum Pac-Clad Tite-Loc Plus in maximum 16" widths with minimum 2" high seams that are mechanically seamed together @ 180 degrees.

3. Roof panels shall be produced with Manufacturer's Factory Supplied hot melt mastic in the seams and shall be continuously locked together by an electrically powered mechanical seaming device during installation.

4. Roof panels to be produced "With Striations" to minimize oil-canning.

5. Roof panels shall be designed for attachment with concealed fastener clips, spaced as required by the manufacturer to provide for both positive and negative design loads, while allowing for the expansion and contraction of the entire roof system resulting from variations in temperature and minimum UL 90 rated after installation meeting 2015 IBC design requirements as specified herein.

#### C. Metal Roof Clips and Fasteners

1. Clips and articulation clips shall be concealed and shall be designed and securely fastened to be FM or UL 90 rated, and shall meet the 2015 IBC wind load requirements specified herein.

2. Clips and articulation clips shall be designed to allow for thermal expansion and contraction, and for correcting out-of-plane sub-framing alignment of a maximum of seven (7) degrees.

3. Clip screws and fasteners shall be sized, spaced, and provided in numbers to meet UL 90 or FM rating and specified IBC wind load requirements.

4. Metal roof floating clips shall be provided as specified by the metal roof manufacturer, and where required by the metal roof manufacturer.

5. Exposed roof panel screws, (if any), allowed only at the eaves, shall have non-ferrous mushroom type heads covering ultraviolet resistant washers, and shall be approved in writing by the metal roofing manufacturer prior to providing and installing same.

6. Concealed fasteners shall be approved in writing by the metal roofing manufacturer prior to providing and installing same.

#### D. Stainless Steel Pop Rivets

1. Pop rivets for joining miscellaneous flashing and trim shall be stainless steel.

2. All exposed stainless steel pop rivets shall be painted.

#### E. Tape Sealer

Provide tape sealer where recommended by the metal roofing manufacturer to achieve the specified Metal Roof 20 Year Water-tightness (NDL) Warranty.

#### F. Metal Standing Seam Panel Outside-Closer

1. Factory made, die-formed, minimum 24 Gage, with same specified finish as that of roof panels.

2. No hand cut "Z" or other shape closures shall be allowed to be provided.

#### G. Sealants

Where recommended by the roofing manufacturer and sealant manufacturer: (a) Provide two (2) part polysulfide Class B Non-sag type sealant for vertical and horizontal joints; or, (b) One (1) part polysulfide not containing pitch or phenolic extender; or, (c) Exterior grade silicone sealant; or, (d) One (1) part non-sag, gun grade exterior type polyurethane in accordance with Section 07900 Sealants.

I. Inside Closures: EPDM rubber covered with metal.

#### J. Concealed Roofing Sheet Metal

Concealed roofing sheet metal provided on indicated metal studs at eaves, ridges, valleys, at clerestory windows, and at parapet walls shall be minimum 16 gauge "Galvalume" metal securely fastened to metal studs below and covered with the adhesively applied solid layer of the specified roofing "Peel & Stick" Membrane Ice & Water-shield underlayment.

#### K. Roofing "Peel & Stick" Membrane Ice & Water-shield Leak Barrier

1. On top of the indicated concealed 16 gage "Galvalume" sheet metal, where specified, indicated on the Drawings and required by the roofing system manufacturer, provide and install a minimum 40 mil "Peel & Stick Membrane", required as outlined by the metal panel manufacturer.

2. Membrane shall be a minimum of 40 mil thickness, smooth, and non-granular, with an adhesive backing, installed where and how specified herein.

#### L. Roofing System Fasteners

All different fasteners for the entire roofing system shall be corrosion resistant fasteners of the type, size, material, holding

power, and other properties required to fasten roof panels to miscellaneous framing members and to substrates as required and recommended by the roofing manufacturer.

### PART 3 - EXECUTION

#### 3.01 METAL ROOFING INSTALLATION

A. Prior to beginning metal roof fabrication and installation, insure that the metal roofing manufacturer's Technical Inspector has visited the site and gone over all roof details with the Certified Subcontractor as specified; and that actual on site field measurements have been verified; and that all discrepancies have been reported in writing to the roof installer and to the roof manufacturer; and proceed with Work later only after visually verifying that all discrepancies have been resolved and all unsatisfactory conditions have been corrected.

B. Install metal roof panels over roll roof insulation specified in Section 07225, and as approved by the metal roofing manufacturer.

C. Coordinate all metal roof Work with additional fiberglass insulation to be provided under roll roof insulation and supported on poultry wire attached to the underside of purlins.

D. Turn up flat metal between roof panel standing seams where and as indicated on the Drawings at tops of all panels; hem bottoms of all roof panels at eaves; install Work watertight, without waves, warps, buckles, fastening stresses or distortion allowing for expansion and contraction all in accordance with the roof manufacturers recommendations and instructions.

E. Provide all clip fasteners 90 degrees to the metal roof clips, securely fastened to obtain FM or UL 90 rating and specified 2015 IBC wind load requirements, and installed to meet the metal roofing manufacturer's requirements.

F. Provide and install all materials specified herein in strict accordance with manufacturer's instructions, NRCA, SMACCNA, UL, MBCA, and all Standards specified herein.

G. Securely fasten metal ridge capping as detailed with fasteners recommended by the roof manufacturer.

H. Provide metal roof outside closures screwed with roof panel screws, and set in sealing tape at tops of all standing seam panels under ridge flashing.

I. Provide metal roofing manufacturer's EPDM rubber inside closures with metal caps to fill all voids of standing seams at eaves.

J. Provide metal roofing materials and fasteners required to satisfy structurally engineered metal roof details, especially at the ridges, eaves, rakes, and corners to meet IBC wind load and other uplift requirements specified herein.

K. Remove and replace metal roof panels and flashing which leak because of rain water leaks.

### 3.02 FLASHING AND TRIM INSTALLATION

A. Provide 24 gage steel, with factory painted Kynar 500 or Hylar 5,000 paint, for eave gutters, rake gutters, rake trim, downspouts, downspout straps, flashing and miscellaneous trim in profiles indicated in minimum twenty feet (20'- 0") lengths as opposed to ten feet (10'- 0") lengths to minimize lap joints.

B. Minimum sizes and profiles of new eave gutters and downspouts are indicated on the Drawings to match existing sizes, all with all metal provided in 20'- 0" lengths with lap joints to minimize lap joints.

C. Hem all exposed edges of flashing and sheet metal.

D. Angle bottoms of exposed vertical surfaces to form drips.

E. Provide all flashing indicated and required, complying with roof manufacturer's instructions and all standards specified herein, to insure material installation provided in a watertight manner.

F. Remove and replace metal roof flashing and trim which leak water or have condensate leaks.

### 3.03 Roofing "Peel & Stick" Membrane Ice & Water-shield Leak Barrier

A. Where Ice & Water-shield Leak Barrier underlayment is indicated, it shall be adhesively applied and laid in horizontal layers with joints lapped toward the eaves a minimum of 6", and well secured along laps and at ends as necessary to properly hold this material in place.

B. All underlayment shall be preserved unbroken and whole.

C. Ice and Water Shield shall lap all ridges at least 12" to form double thicknesses and shall be lapped a minimum of 6" over the metal of any valley and shall be installed as required by the Standing Seam Panel Manufacturer to attain the desired 20 Year Weather-tightness Warranty.

- END -

## SECTION 07650

### FLEXIBLE FLASHING

#### PART 1 - GENERAL

##### 1.01 GENERAL REQUIREMENTS

A. The provisions of all of the Contract Documents are hereby made a part of this Section.

B. The requirements of Section 01810 entitled Technical Section Requirements apply to this Section the same as though herein written out in full.

##### 1.02 STANDARDS

Meet requirements and recommendations of the applicable portions of the latest editions of Standards listed below:

- A. American Society for Testing Materials (ASTM)
- B. Federal Specifications (FS)

##### 1.03 SUBMITTALS

Submit manufacturer's Product Data on all materials specified herein.

#### PART 2 - PRODUCTS

##### 2.01 MANUFACTURERS

A. Flexible Flashing Manufacturers: (Also referred to as Spandrel Flashing and Through-Wall Flashing).

1. Manufacturers are as specified above or below, or a prior approved substitute.

2. Items specified herein by specific manufacturers are used only to denote the quality standard of product desired and that they do not restrict bidders to the specific brand, make, manufacturer, or specification named; and that they are used only to set forth and convey to prospective bidders the general style, type, character, and quality of products desired; and that equivalent products may be acceptable.

3. It shall be the responsibility of the professionally employed Architect or Engineer, or Interior Designer, to determine what is considered an equivalent product, meeting also Owner approval, on any and all Projects in which they have been legally employed to perform professional services.

4. Other manufactures specified above or below, or other prior approved substitutes may be provided if they meet all requirements specified

herein and are approved substitutes by the Architect, Engineer, or Interior Designer.

B. Specific Flexible Flashing Manufacturers: W. R. Grace; Nervastrol; or a prior approved substitute who can provide a minimum five (5) year warranty on their products, and can provide technical services and support by manufacturers' representatives. The technical service and support line for W. R. Grace is Mr. Craig Boucher at (617)-885-2468.

## 2.02 MATERIALS

A. Flexible Flashing: (Also referred to as Spandrel Flashing and Through-Wall Flashing):

1. W. R. Grace "Perma-A-Barrier Wall Flashing; a self-adhesive, rubberized asphalt/polyethylene through-wall flashing designed to be provided for cavity wall applications, which is waterproof and impermeable to moisture, liquid water, and water vapor and can provide 100% watertight laps.
2. Flexible flashing shall have a factory made sheet of a cross laminated film to provide constant non-variable dimensional stability, high tear strength, and puncture and impact resistance.
3. Flexible flashing shall be cold applied with no flames, and applied in self-adhesive overlaps to ensure impermeable continuity.
4. Flexible flashing shall be resilient enough to accommodate minor settlement and minor shrinkage movement.
5. Flexible flashing has a unique Green Color with a repeated Logo print to help identify and differentiate from other flashings, and enable easy identification of damages.
6. Flexible flashing total thickness per ASTM D 3767, method A, shall be minimum (40) mil in thickness, (1 mm), consisting of (32) mils, (0.8 mm) of rubberized asphalt integrally bonded to an (8) mil, (0.2 mm), high density, cross laminated polyethylene film with rolls of Flexible Flashing inter-wound with disposable silicone-coated release sheets.
7. Flexible flashing shall have an ASTM D 1970 tested Low Temperature Flexibility value of -45 degrees F; an ASTM D 412 tested Die C modified membrane minimum Tensile Strength of 1,200 psi; an ASTM D 412 tested rubberized asphalt Ultimate Elongation Failure of 200%; an ASTM 1876 modified tested Lap Adhesion of (60) pounds per foot width at minimum application temperature; an ASTM D 903 Adhesion to Concrete of (60) pounds per foot width at minimum application temperature; a Puncture Resistance of minimum (40) pounds per ASTM 781 and (80) pounds per ASTM E154, respectively; an ASTM tested Tear Resistance of minimum (13) pounds Initiation per ASTM D 1004 and

minimum (90) pounds Propagation per ASTM ASTM D 1938 respectively; an ASTM E 96, tested method B Maximum Permeability Rating of 0.05 perms; and an ASTM D 570 tested maximum Water Absorption of 0.1%.

B. Flexible Flashing Primer:

1. Provide Perm-A-Barrier primer over all substrates and surfaces prior to providing Flexible flashing.
2. Always consult with the Flexible Flashing Manufacturer's Technicians, specified herein, prior to providing different types of different Flexible Flashing primers.
3. Types of Flexible Flashing primers and rate applications for Flexible Flashing primers vary considerably from substrate to substrate.
4. Primer applications types and primer application rates for Exterior Glass Mat Exterior Type Wall Sheathing, (where Glass Mat Exterior Sheathing is used extensively for this Project), vary considerably depending on the porosity of the particular Glass Mat Material provided.
5. Provide Perm-A-Barrier Primer Plus water based vapor permeable primer used to facilitate adhesion of Flexible Flashing membranes to substrate materials where and as directed by the Flexible Flashing manufacturer.
6. Provide Perm-A-Barrier WB Primer water based primer for use with Perm-A-Barrier Wall flashing on cementitious materials and treated paper exterior gypsum sheathing, (if any), where and as directed by the Flexible Flashing manufacturer.
7. Provide Perm-A-Barrier WB Primer with a roller to prime specified and indicated Glass Mat Exterior Gypsum Sheathing where and as directed by the Flexible Flashing manufacturer.
8. Provide Bituthene Adhesive Primer B2 LVC low VOC primer to prime green damp concrete or other damp surfaces.
9. Provide compatible W. R. Grace S100 Sealant in conjunction with providing Flexible Flashing and primers to seal tops, overlaps, edges, and penetrations in Flexible Flashing.
10. Provide W. R. Grace Bituthene Mastic for sealing around penetrations, Flexible Flashing terminations and other terminations and around brick ties, etc. where directed by W. R. Grace Technicians.

PART 3 - EXECUTION

3.01 PREPARING AND PRIMING SURFACES FOR FLEXIBLE FLASHING

A. Insure that surfaces to which Flexible Flashing shall be provided are smooth, clean, dry and free of holes and voids.

B. Remove loose dust, sharp protrusion, burrs, and prepare surfaces such that Flexible Flashing can evenly adhere to said smooth clean surfaces.

C. Provide manufacturer recommended primers on all surfaces prior to providing Flexible Flashing and allow the recommended primer to dry prior to providing the Flexible Flashing which will mainly depend on temperature and humidity conditions on the Project site.

### 3.02 INSTALLATION OF FLEXIBLE FLASHING:

A. After priming, pre-cut Flexible Flashing to easily handled lengths; peel release paper from roll to expose the rubberized asphalt surface; and carefully position Flexible Flashing on substrates where indicated on Drawings and as specified herein, including but not limited to:

1. The bases of all exterior brick veneer walls and exterior plaster pilasters which are backed with metal studs.

2. Above heads of all exterior wall openings, on exterior gypsum sheathing and on steel lintels, such as for windows, exterior doors, exterior louvers, and also below brick sills of all exterior wall openings such as windows, exterior louvers, all exterior wall openings and where indicted, and allowing Flexible flashing to extend a minimum of (6") beyond widths of openings.

B. Prime and provide Flexible Flashing from a minimum 10" high above the finished floor, on exterior wall gypsum sheathing, behind the continuous perforated Aluminum Radiant Wall Barrier specified in Section 07211, and behind brick veneer and behind plaster paper backed lath, extending downwards and 90 degrees outwards across the 5-1/2" wide brick shelf, minus 1/2", so flashing is not exposed on the exterior of the brick veneer, & approximately only 1" outward at plaster pilasters.

C. Press Flexible Flashing into place on top of primed surfaces and substrates with a steel hand roller or the back of a utility knife, as soon as possible, thus fully adhering the Flexible Flashing to the primed substrate to prevent water entry.

D. Form end dams at horizontal flashing terminations to prevent water entry and overlap end pieces a minimum of (2") and roll end laps with a steel roller.

E. Apply a bead of W.R. Grace S100 sealant along all Flexible Flashing top edges, laps, seams, cuts, and penetrations and trowel into place to seal same.

F. Press Flexible Flashing down on brick shelves and on plaster pilaster shelves and trim Flexible Flashing back 1/2" from out-sides of masonry mortar joints and plaster joints so Flexible Flashing cannot be seen from the exterior.

- END -

## SECTION 07900

### SEALANTS

#### PART 1 - GENERAL

##### 1.01 GENERAL REQUIREMENTS

A. The provisions of all of the Contract Documents are hereby made a part of this Section.

B. The requirements of Section 01810 entitled Technical Section Requirements apply to this Section the same as though herein written out in full.

C. UL and FM approved fire calking sealants for sealing penetrations through assemblies and fire calking sealants for sealing perimeters of fire rated walls, ceilings, and fire rated assemblies, (if any), is specified in Section 07250, Fire-stopping.

##### 1.02 STANDARDS

Meet requirements and recommendations of the applicable portions of the latest editions of Standards listed below:

- A. American Architectural Manufacturer's Association (AAMA)
- B. American concrete institute (ACI)
- C. American Society for Testing and Materials (ASTM)
- D. Federal Specifications (FS)
- E. Sealant, Waterproofing, and Restoration Institute (SWRI)
- F. International Building Code (IBC)

##### 1.03 SUBMITTALS

A. Submit manufacturer's product data indicating their meeting or exceeding all standards specified herein.

B. Submit manufacturer's standard color ranges for exterior sealants for selection by Architect.

#### PART 2 - PRODUCTS

##### 2.01 MANUFACTURERS

A. Sealants Manufacturers:

1. Manufacturers are as specified above or below, or a prior approved substitute.

2. Items specified herein by specific manufacturers are used only to denote the quality standard of product desired and that they do not

restrict bidders to the specific brand, make, manufacturer, or specification named; and that they are used only to set forth and convey to prospective bidders the general style, type, character, and quality of products desired; and that equivalent products may be acceptable.

3. It shall be the responsibility of the professionally employed Architect or Engineer, or Interior Designer, to determine what is considered an equivalent product, meeting also Owner approval, on any and all Projects in which they have been legally employed to perform professional services.

4. Other manufactures specified above or below, or other prior approved substitutes may be provided if they meet all requirements specified herein and are approved substitutes by the Architect, Engineer, or Interior Designer.

B. Specific Sealant Manufacturers: Pecora, Sonneborn, Tremco, or a prior approved substitute.

1. Obtain sealants from one manufacturer to ensure primer materials and sealant materials are compatibility, and different sealants are compatible with each other.

2. Obtain sealants from a manufacturer with a Technical Service phone number to provide on-site technical application instructions and to answer specific application questions. Pecora phone number is: 1-800-523-6688.

## 2.02 EXTERIOR SEALANT MATERIALS

A. Exterior Type A Masonry and Plaster Sealant:

1. Exterior Sealant Type A shall be provided for exterior brick veneer and cement plaster expansion and control joints and provided for perimeter brick veneer and cement plaster joints abutting dissimilar materials such as hollow metal frames, aluminum windows, cement pilaster joints at masonry, etc., in custom colors as selected by the Owner and Architect.

2. Exterior Type A Sealant shall be Pecora 890 NST ultra violet resistant, non-staining ultra-low modulus one part neutral curing silicone sealant with a service temperature range of between minus 60 degrees F to +300 degrees F.

3. Exterior Type A Sealant, in accordance with ASTM D 412 tests, shall have an elongation value of 1,000%; a modulus at 100% elongation value of 30 psi; and an ultimate tensile strength of 120 psi.

4. Exterior Type A Sealant shall have an ASTM C 661 tested Shore A hardness value of 20; an ASTM D 624 tested tear strength of 30 ppi; an ASTM C 794 tested peel strength, (on aluminum, glass or concrete),

of 25 pli; an ASTM C 719 tested dynamic movement capability percentage of +100-50; and pass the ASTM C 1248 test for staining of porous substrates such as marble.

5. Exterior Type A Sealant shall meet requirements of FS TT-S-230C, ASTM C-290, Class 100, Type S, Grade NS, Use G, A, M, O, and CGSB-19GP-9, ASTM C 1248, CAN/CGSB-19.13-M87.

B. Exterior Type B Sheet Metal and Glazing Sealant:

1. Exterior Type B Sealant shall be provided for sealing exterior sheet metal such as metal gutters joints, downspout joints, wall panels, metal coping, metal flashing, metal louvers, and similar exterior sheet metal; and also for sealing glass in channel glazing and sealing glass in metal frames.

2. Exterior Type B Sealant shall be Pecora BC-158 one part butyl rubber sealant formulated from virgin butyl rubber for sealing joints of both similar and dissimilar materials with an application temperature of 40 degrees F to +120 degrees F, and an ASTM D 3359 service temperature of minus 20 degrees F to +200 degrees F.

3. Exterior Type B Sealant shall have an ASTM D 1475 tested specific gravity of 1.32 and weigh 11 pounds per gallon; with an ASTM tested shrinkage value of maximum 20%; with an ASTM C 681 tested percent solids value of 80%; with an ASTM D 2203 stain index of #3.

4. Exterior Type B Sealant shall meet requirements of (FS) AAMA 808.3-05, ASTM C 1311 (+/- 7.5% joint movement), TTS-S-001657, Type 1 and TT-C-1796A.

C. Exterior Type C, Two (2) Part Exterior Paving Sealant:

1. Exterior Type C Sealant shall be provided to seal exterior horizontal expansion joints and perimeter joints in concrete paving provided for pedestrian sidewalks, drives, parking areas, mechanical equipment slabs, and similar horizontal concrete paving.

2. Exterior Type C Sealant shall be Pecora Urexspan NR-200, a Two (2) Part Self-Leveling, Traffic Grade, Traffic Bearing, Polyurethane Sealant, used in conjunction with required Pecora Primers such as Pecora P-150, P-75, or P-200 primers for use on masonry and P-100 primers shall be used on metal; with a service temperature range of minus 40 degrees F to +180 degrees F.

3. Exterior Type C Sealant shall have an ASTM C 794 tested adhesion to concrete of 25 pli; with an ASTM C 661 tested hardness, Shore A, after heat aging of 25-35 tested, with a minimum of 25 when tested in accordance with ASTM C 920; with an ASTM D 412 elongation of 600%; with an ASTM tested tensile strength of 150 psi; with an ASTM C 719 maximum movement capability of 25% in extension and 25% in compression.

## 2.03 INTERIOR SEALANT MATERIALS

### A. Interior Type D General Sealant:

1. Interior Sealant Type D shall be provided for interior gypsum board expansion and control joints and provided for perimeter joints abutting dissimilar materials such as hollow metal frames, aluminum windows, bases, etc., and shall be paintable and compatible to receive premium grade latex and oil based paint materials specified in Section 09900 Painting, provided in different colors to match adjacent wall and ceiling colors.

2. Interior Type D Sealant shall be Pecora AC-20+ Silicone, Non-Flammable, Non-Toxic, Non-Irrating, Non-sag, Acrylic Latex Caulking Compound, ultra violet resistant, non-staining one part sealant with an application temperature of above 60 degrees F.

3. Interior Type D Sealant shall have an ASTM C 736 tested adhesion loss of 5%, and a recovery of 90%; with an artificial weathering ASTM C 732 tested adhesion loss of 1.0, with absolutely no cracking, no discoloration, no slump and no wash out; with an ASTM D 412 tested ultimate elongation of 200%, a 1005 modulus of 60-65 psi, and an ultimate tensile strength of 80 to 90 psi; with an ASTM C 731 extrude-ability test of 9.8 g/sec; shall pass an ASTM C 734 low-temperature flexibility test; and an ASTM C 733 volume shrinkage of 25- 28%.

4. Interior Type D Sealant shall meet requirements of ASTM C 834 Specifications for Latex Sealants with a movement capability of 7-1/2% in extension and 7-1/2% in compression, i.e., 15% within its range of thermal movement.

### B. Interior Type E Wet Area Sealant:

1. Interior Sealant Type E shall be provided in wet areas such as around Restroom lavatories and water closets, counter top sinks, around drinking fountains and other similar interior wet areas.

2. Interior Type E Sealant shall be Pecora 898 NST Sanitary Mildew Resistant Silicone Sealant; with single component, neutral curing, non-staining properties that are both mold and mildew resistant with sag-free and slump free properties to endure the hottest of warm weather with a service temperature range of minus 60 degrees F to +300 degrees F; which shall remain permanently flexible in all temperatures to prevent shrinking, cracking, and crumbling; provided in colors of almond, black, Tru-White, and translucent as selected by the Architect.

3. Interior Type E Sealant shall have an ASTM C 679 tested cyclic movement of  $\pm$  50%; with an ASTM D 412 tested ultimate elongation of 450%; with an ASTM C 661 Shore A hardness of 25 to 35; With an ASTM C

1135 tensile strength of 45 to 55 for 100% elongation, and an ultimate tensile strength of 165 psi; and passing the ASTM G 21 Fungi Resistance Test showing no growth.

4. Interior Type E sealant shall meet (FS) TT-S-001543A, TT-S-00230C, class A, and ASTM C920, Class 50.

C. Sealant Backer Rods:

1. Sealant backer rods shall be a resilient, non-gassing, and non-absorbing polyethylene or polyurethane backer rods as recommended and where recommended by the sealant manufacturer.

2. Provide a diameter backer rod that will compress approximately 25% when installed.

3. Do not over-compress or puncture backer rods during installation because blistering could occur on the sealants surface.

4. In joints too shallow to receive backer rods, provide a sealant manufacturer recommended bond breaker tape to prevent three (3) sided adhesions.

D. Sealant Primers: Sealant primers and sealant bond breakers shall be provided as recommended and where recommended by the sealant manufacturer.

PART 3 - EXECUTION

3.01 INSTALLING

A. On all joints exposed to direct and indirect sun light and exterior weather conditions, provide only the specific Exterior Sealants specified herein for different exterior materials.

B. On all interior joints in wet areas, provide Interior Wet Area Sealants specified herein.

C. On interior joints such as wall and partition perimeters, architectural, structural, mechanical and electrical cut outs in walls, ceilings and floors which are not wet areas as specified above, provide only Interior General Sealants specified herein.

D. Provide interior sealants manufactured to receive paint where sealant shall be painted such as on interior walls and other surfaces.

E. Provide exterior sealants in custom colors where sealant shall match exterior cement plaster colors and shall match masonry mortar joint colors.

F. Sealant joints widths should be approximately equal to (12) times the anticipated movement, with joint widths designed within the range of ¼" to ¾"; and joint depth should be ¼" minimum and 3/8" maximum.

G. Provide masking tape on both sides of all exposed joints, or all exposed finishes, and mask all exposed joints prior to priming and sealing.

H. Tool sealants smooth and neatly within ten (10) minutes after application.

I. In general, interior sealants may be painted after 45 minutes to an hour with latex or oil based paints in humid areas; however, depending on relative humidity and job conditions, do not disturb or apply any paint coating until sealant has thoroughly cured.

J. Remove all masking tape after sealant has cured.

K. Also refer to Drawings and other Sections of the Specifications for locations of sealants.

L. All sealants specified herein shall be provided only on clean, dry, joints, free from all foreign matter including but not limited to curing agents in concrete joints and protective coatings on aluminum or on pre-finished metal.

### 3.02 LOCATIONS

Provide sealant specified herein, in types specified herein, including but not limited to the following areas:

A. On perimeters of all exterior and interior openings, including but not limited to all metal door frames, thresholds, metal windows, louvers, and openings.

B. Where concrete unit masonry and brick masonry units adjoin different materials and equipment on walls, ceilings, soffits, and other areas.

C. Where all finish carpentry and millwork adjoins different materials and equipment.

D. Where all synthetic plaster adjoins adjacent different materials and equipment.

E. Where all metal soffit panels and metal soffit panel trim adjoins adjacent different materials and equipment.

F. Where all roof accessories and metal roof flashing adjoins adjacent different materials and equipment.

G. Where all metal flashing adjoins adjacent different materials and equipment to provide water-tight joints.

H. Where all gypsum wall board and gypsum wall board metal trim adjoins adjacent different materials and equipment.

I. Where all ceramic tile and porcelain tile adjoins adjacent different materials and equipment.

J. Where all finishes adjoin adjacent different materials and equipment.

K. Where voids and crevices are present prior to providing painting of various different materials where said materials and equipment adjoin adjacent different materials and equipment.

L. Where all miscellaneous building specialties adjoin adjacent different materials and equipment.

M. Where voids and crevices are present around all restroom accessories and specialties, and around all mechanical, plumbing, and electrical materials and equipment.

N. At all metal gutter and downspout joints.

- END -

## SECTION 08100

### METAL DOORS AND METAL FRAMES

#### PART 1 - GENERAL

##### 1.01 GENERAL REQUIREMENTS

A. The provisions of all of the Contract Documents are hereby made a part of this Section.

B. The requirements of Section 01810 entitled Technical Section Requirements apply to this Section the same as though herein written out in full.

C. Shop Drawings not prepared in the format specified in paragraph 1.03 below shall be rejected and resubmitted until Shop Drawings are prepared as specified in paragraph 1.03.

##### 1.02 STANDARDS

Meet requirements and recommendations of the applicable portions of the latest editions of Standards listed below:

- A. Underwriters Laboratories (UL)
- B. Louisiana Revised Statutes "Fire Marshal Act"
- C. National Fire Protection Association (NFPA)
- D. Hollow Metal Manufacturer's Association (HMMA)
- E. National Association of Architectural Metal Manufacturers Association (NAAMM)
- F. International Building Code (IBC)
- G. ADA Standards

##### 1.03 SUBMITTALS

A. Provide and prepare the Contractor's Shop Drawings in a similar format as that of the Opening Schedule, indicated on Detail 2, Sheet A08, as follows:

1. Opening Numbers: Contractor's Shop Drawing opening numbers shall be the same as the Contract Drawing's opening numbers, such as: X39, W04, E14, followed by opening marks for opening elevations such as "D", "Pr D", "C/O", etc.; subsequently later followed on detail elevation drawings indicating dimensions of doors and glass, etc.

2. Frame Elevation Designation: Contractor's Shop Drawing frame elevation designations shall be the same as the Contract Drawing's frame elevation letters listed adjacent to door opening numbers such as: "HMF-2, HMF-3, etc.; subsequently later followed on detail elevation drawings indicating dimensions and thicknesses of frames, etc.

3. Specific Notes: Provide specific notes next to door & frame elevations

4. Frame Head and Jamb Profile Designation: Contractor's Shop Drawing frame profile designations for heads and jambs shall be the same as the Contract Drawing's frame profile designations such as: Head & jamb profile "C", etc.

5. Frame Depth, Wall Type, and Wall Depth: Contractor's Shop Drawing's frame depth, wall type, and wall depth shall be indicated.

6. Opening Swing: For Shop Drawing's "To" and "From" door designation, and specific hand of doors, (i.e., LH, RH, LHR, etc.), provide the same "Room To" or "Room From" Room Number, (such as Room Number W153), as that indicated on the Contract Drawing's Floor Plan 1A07.

7. All new and existing actual wall depths & actual thicknesses and dimensions shall be verified on site by the Contractor prior to frame fabrication.

B. Submit detailed Shop Drawings & manufacturer's Product Data on all materials specified herein.

## PART 2 - PRODUCTS

### 2.01 MANUFACTURERS

#### A. Metal Doors and Metal Frames Manufacturers:

1. Manufacturers are as specified above or below, or a prior approved substitute.

2. Items specified herein by specific manufacturers are used only to denote the quality standard of product desired and that they do not restrict bidders to the specific brand, make, manufacturer, or specification named; and that they are used only to set forth and convey to prospective bidders the general style, type, character, and quality of products desired; and that equivalent products may be acceptable.

3. It shall be the responsibility of the professionally employed Architect or Engineer, or Interior Designer, to determine what is considered an equivalent product, meeting also Owner approval, on any and all Projects in which they have been legally employed to perform professional services.

4. Other manufactures specified above or below, or other prior approved substitutes may be provided if they meet all requirements specified herein and are approved substitutes by the Architect, Engineer, or Interior Designer.

B. Specific Metal Doors and Metal Frames Manufacturers: Amertex; Amweld; Ceco; Deansteel; Karpen; Mesker; Republic Builders; Southern Door; Security Metal Products; Steel Craft; Windsor Republic, or a prior approved substitute.

## 2.02 MATERIALS

### A. General Hollow Metal Materials:

1. All hollow metal doors, door frames, sidelight frames, borrowed light frames, components, and accessories shall meet or exceed HMMA 861, Commercial Hollow Metal Doors and Frames.

2. All steel for hollow metal doors, door frames, sidelight frames, borrowed light frames, components, and accessories shall be commercial quality level, cold rolled steel conforming to ASTM A 366.

3. All exterior doors, door frames, sidelight frames, and glazed frames shall be hot dipped galvanized on both insides and outsides, conforming to ASTM A 653 (A 60 or G 60), with a total coating weight of not less than 0.60 ounces per square foot, with a minimum of 0.30 ounces per square foot per side.

4. Provide fire rated doors, fire rated frames, components, and accessories where indicated and where required, (if any), with minimum thicknesses required to obtain required fire rating in accordance with NFPA 80.

5. Where indicated or required, vision panels for fire rated doors, (if any), shall meet NFPA 80 and UL requirements for rated doors.

### B. Welded Steel Frames, (Knockdown types not acceptable):

1. Frames shall be constructed of minimum 16 gage cold rolled steel for interior frames.

2. Frames shall be constructed of minimum 14 gage for all exterior frames exposed to the weather.

3. Frames shall be constructed of minimum 14 gage for interior openings over 4' - 0" in width, and 14 gage where indicated.

4. All frames shall meet minimum requirements of ASTM A 366.

5. All frames shall be prepared from hardware templates for mortised type hardware and other hardware specified under Section 08720, Door Hardware.

6. Provisions for frames and doors receiving hardware shall be in accordance with the hardware specified.

7. Hardware reinforcement for frames shall be of the minimum following sizes:

a. For hinges at doors 3' or less in width: 9 gage, and for hinges at doors greater than 3' in width: 3/16".

b. For Strikes: 9 gage, and for closers: 12 gage

8. Provide plaster guards at mortises. Miter and reinforce corners. Provide not less than three (3) anchors at each jamb plus one floor anchor at each side.

9. Drill stops to receive three (3) rubber bumper mutes for single-swing doors. Mutes are required for interior doors only.

10. All mitered corners shall be welded and ground smooth so that miter is not visible.

11. For hollow metal frames on gypsum board walls, provide a minimum of 1/2" metal return on all metal frames; i.e., a minimum of 1/2" of flat metal shall contact the gypsum board on both sides of all hollow metal frames.

12. Throat width of all frames shall be 1/8" wider than the thickness of the wall, i.e., 1/16" clearance on both sides.

#### C. Hollow Metal Doors

1. Unless otherwise indicated, fabricate doors from not less than 16 gauge steel sheets specified above for all interior doors.

2. Fabricate doors from not less than 14 gauge steel sheets specified above for all exterior doors.

3. Provide thicker gage metal doors where indicated on Drawings.

4. Provide thicker gage metal doors where required by NFPA 80 for fire rated doors, (if any), and if required by the metal door manufacturer.

5. Doors shall be fully welded seamless construction, with no visible seams on vertical edges or face sheets.

6. Properly prepare doors to receive hardware and weather-stripping.

7. Secure hardware templates as necessary and provide weather-stripping on all four sides of all exterior doors.

8. Reinforce for surface applied hardware with not less than 12 gage metal.

9. Reinforce for hinges with not less than seven (7) gage metal.

10. Reinforce insides of all doors with continuous vertical stiffeners six (6) inches apart, minimum 22 gage, spot-welded through-out interiors of all hollow metal doors on both faces a minimum of 5" apart.

11. Provide all steel doors with standard inverted channels at all tops and bottoms of doors.

12. Fill all interiors of all doors with sound- deadening, moisture resistant, material, and fill all interiors of all fire rated doors with U. L. required fire rated material.

D. Shop Painting Metal Doors and Frames:

1. Level and grind smooth, clean and scrape off all rust and mill scale.

2. Apply mineral filler to eliminate weld scars and other blemishes.

3. Primer shall consist of not less than one (1) coat of a rust inhibitive paint: Tnemec 99, Southern Coating RIP 476, Rustoleum M 70-7615 Guardsman Red Flo-Coat #366-700017 or a prior approved substitute.

4. Painting primer specified here does not count as a primer coat for finish painting.

E. Frame Anchors

1. Provide anchors of types indicated on drawings and as required to hold frames rigidly in place, complying with the following:

a. Jamb anchors: "U" shaped and as indicated fabricated from not less than 16 gage galvanized steel meeting ASTM A 153-73, Class B.

b. Bolts, nuts and sleeves and related fasteners: Manufacturer's standard units, or where specifically indicated provide as shown; galvanized meeting ASTM A 153 73, Class C.

F. Where indicated, refer to Electrical Documents and Door Hardware Specifications for coordinating and electrically wiring electrically operated doors and doors connected to security alarms, fire alarms and smoke detectors.

PART 3 - EXECUTION

3.01 FABRICATION

A. Do not begin fabrication of materials specified until all actual field width, height, and slope dimensions have been verified by the Contractor on the Project site.

B. Materials specified herein have to fit the actual building dimensions, and not the nominal dimensions indicated on the Architect's Drawings, and not the nominal dimensions the Architect may indicate on the Shop Drawings during review.

C. After Architect review of Shop Drawings, the Contractor shall indicate actual, exact, "as is" dimensions on the Shop Drawings, which can only be verified by the Contractor on the Project site.

D. Refer also to Section 01340 entitled Contractor Shop Drawings, Product Data, and Samples for Contractor verified dimensions.

### 3.02 ERECTING FRAMES

A. Exercise care in setting of frames to maintain scheduled dimensions, holding head level and maintaining jambs plumb and true.

B. Verify exact dimensions from door and door frame manufacture, (and Finish Hardware weather-stripping and threshold manufacture), and coordinate exact dimensions of the finish floor materials prior to installing frames so doors operate properly.

C. Anchor frames to walls with not less than three (3) metal anchors set at 24" O. C. or less. Cover frame reinforcing.

D. Provide adjustable floor clip angles and removable spreaders at bottoms of frame jambs.

E. Secure anchorages and connections to adjacent construction and attach same or embed same securely.

F. Whenever possible, leave frame spreader bars intact until frames are set perfectly square and plumb, and anchors securely attached.

G. Grout frames solid in all walls. Use 1:5 cement to sand grout, or Type N mortar, ASTM C 270.

H. Provide sealant, specified in Section 07900 Sealants, around all frames and finish walls where openings exist between frames and finish walls.

I. Coordinate installation and wiring of doors and frames which shall be electrically wired, (as opposed to battery operated), to designated Library exit alarm devices, and/or connected to any types of fire alarms, door exit alarms, door operators, and smoke detectors.

### 3.03 INSTALLING DOORS

A. Apply hardware in accordance with hardware manufacturer's templates and instructions.

- B. Install doors to open and close easily and completely.
- C. Adjust locks and hardware to function properly.
- D. Provide removable metal stops around perimeters of all glass.
- E. Remove hardware, with the exception of prime coated hardware items to be painted; tag, box and reinstall hardware after finish paint Work is completed.

#### 3.04 PRIME COAT TOUCH-UP

- A. Immediately after installation, areas where prime coat has been damaged shall be sanded smooth and touched up with same primer applied at shop.
- B. Remove all rust before above specified touch-up is applied.
- C. Touch-up painting shall not be obvious.

#### 3.05 FINAL ADJUSTMENTS

- A. Adjust all hardware, doors, and frames to insure that doors open and close smoothly without dragging on the floor or on the frames.
- B. On doors which cannot be adjusted, repair by removing and replacing doors, frames, and hardware.
- C. Remove and replace all warped, dented, rusted, or damaged doors and frames.

#### 3.06 UL LABELED DOORS AND FRAMES (IF ANY)

Where UL labeled doors or fire rated doors are indicated, doors and frames shall bear Underwriter's Laboratories label for the fire rating indicated or required by the International Building Code and the Life Safety Code, NFPA 101, and NFPA 80.

- END -

## SECTION 08200

### WOOD DOORS

#### PART 1 - GENERAL

##### 1.01 GENERAL REQUIREMENTS

A. The provisions of all of the Contract Documents are hereby made a part of this Section.

B. The requirements of Section 01810 entitled Technical Section Requirements apply to this Section the same as though herein written out in full.

##### 1.02 STANDARDS

Meet requirements and recommendations of the applicable portions of the latest editions of Standards listed below:

- A. National Wood Window and Door Association (NWWDA)
- B. Commercial Standards Institute (CSI)
- C. Underwriters Laboratories (UL)
- D. Architectural Woodwork Institute (AWI)
- E. Warnock Hersey International (WHI)
- F. National Fire Protection Association (NFPA)
- G. International Building Code (IBC)
- H. Wood Door Manufacturers Association (WDMA)
- I. Latest ADA Standards

##### 1.03 SUBMITTALS

A. Submit manufacturer's Product Data on all materials specified herein.

B. Submit Shop Drawings on all materials specified herein.

C. Submit manufacturers Life of the Building warranties for all flush, solid core interior doors.

#### PART 2 - PRODUCTS

##### 2.01 MANUFACTURERS

A. Wood Door Manufacturers:

1. Manufacturers are as specified above or below, or a prior approved substitute.

2. Items specified herein by specific manufacturers are used only to denote the quality standard of product desired and that they do not restrict bidders to the specific brand, make, manufacturer, or

specification named; and that they are used only to set forth and convey to prospective bidders the general style, type, character, and quality of products desired; and that equivalent products may be acceptable.

3. It shall be the responsibility of the professionally employed Architect or Engineer, or Interior Designer, to determine what is considered an equivalent product, meeting also Owner approval, on any and all Projects in which they have been legally employed to perform professional services.

4. Other manufactures specified above or below, or other prior approved substitutes may be provided if they meet all requirements specified herein and are approved substitutes by the Architect, Engineer, or Interior Designer.

**B. Specific Flush Wood Doors Manufacturers:** Algoma Hardwoods Inc.; Buell; Eggers Industries; IPIK; Marshfield Door Systems Co.; Mohawk; or a prior approved substitute.

## 2.02 MATERIALS

### A. Interior Exit Access Wood Doors Provided in Hollow Metal Frames:

Solid Core 5 -Ply Wood Flush Doors, or solid 7 - ply wood doors, conforming to NWWDA I.S. - 1-A, and AWI Section 1300, latest editions, either staved lumber core, or particle board cores with stiles and rails bonded to core, meeting security ratings of Class 40, ASTM F 476 and UBC 41-1, minimum 1-3/4" thick.

1. Staved lumber core, one species per core, kiln dried, glued, wood blocks bonded together, butt or finger jointed at mill option, AWI Section 1300 and meeting AWI SCLC-5.

2. Particleboard Core, (option for interior doors only), mat-formed conforming to ANSI A 208.1, 1- LD-2 grade, meeting AWI PC-5.

3. Face Veneer - Hardwood, plain sliced red oak, uniform in color, book matched, prepared, finished and sanded to receive stain and varnish as specified in Section 09900 Painting; or prepared for factory finish prior to shipping to the Project jobsite.

4. Cross-bands: Minimum 1/16" low density hardwood or high-density hardboard.

5. Stiles: Hardwood, laminated, to match face veneer, minimum 5/8" thick for stave core and minimum 1-3/8" thick for particle board core, with no finger joints, and with hardwood stiles glued and bonded to all cores. Exposed softwood stiles are not acceptable.

6. Top and Bottom Rails: Minimum 1-1/8" mill option; 5", 8", and 12" acceptable.

7. Fire Rated Doors: Where indicated, (if any), same as above except with mineral core, UL or WHI approved, rated as indicated, meeting NFPA 257 and NFPA 80, and IBC requirements; with each and every specified rated door bearing the fire rated label.

8. Light Openings, Vision Panels, and Grille Openings: Minimum 5" margins between edges of doors and cut outs. Maximum openings shall be 40% of door area or 50% of door height to maintain door warranty specified herein.

9. Wood for wood door louvers and wood louver frames shall be hardwood to match face veneers of doors.

B. Vision Panel Frames: Select, clear, hardwood to match face veneer on doors where doors are not labeled, and UL or WHI rated metal frames, meeting NFPA 257 and NFPA 80, and IBC, painted, on doors required to be labeled.

C. Door Adhesive: Type II water resistant for core assembly adhesive, and Type I waterproof for face veneer assembly.

D. Warranty: Door manufacturer shall provide "Life of the Building" warranties for all solid core interior doors specified herein.

## 2.03 DOOR FINISH

A. The Contractor has the option to prepare, seal and varnish interior solid core doors as specified in Section 09900, Finish Painting, or to provide doors factory finished prior to delivery to the Project jobsite.

B. If factory finished doors are provided the finish shall meet AWI TR-6, as a minimum, commercial grade heavy duty catalyzed polyurethane finish.

C. Doors shall be finished, shipped with protective wrapping and stored inside as recommended by the door manufacturer.

D. Remove and replace all doors with scratched or damaged finishes, or doors which are warped beyond AWI Standards.

## PART 3 - EXECUTION

### 3.01 GENERAL

A. Prepare doors to receive finish hardware using factory machining at the factory using templates provided by the hardware manufacturer.

B. Prepare doors for installation of glass vision panels.

C. Bevel edge of doors on lock side one-eighth (1/8") inch in two (2") inches for wood frames. Bevel both edges for hollow metal frames.

### 3.02 INSTALLATION

#### A. Fitting and Machining On Job:

1. Pre-fit doors in width by 1/4".
2. Fit and trim doors for height by sawing.
  - a. One-half (1/2") inch from bottom.
  - b. One-eighth (1/8") inch from top and vertical stiles.

#### B. Installing

1. Install doors to swing freely and to stand, without holding, at any angle.
2. Set hinges and strikes flush with surfaces of door and frame. Allow adequate clearances for joints, heads, thresholds, and floor material.
3. Refer to Mechanical Documents and consult with Mechanical Engineer for possible required undercutting of doors for air return, and for proper air free-flow sizes of door grilles.
4. Provide cut outs for grilles indicated.
5. Refer to Section 08810 Glazing for door glass.
6. Provide cut outs doors for sizes of glass indicated.
7. Test for warping in accordance with NWWDA Standards. Maximum warp or twist shall not exceed one-quarter (1/4") inch between face of door and a straight edge laid diagonally from top to bottom in both directions.
8. Remove and replace warped or damaged doors.

- END -

## SECTION 08400

### SLIDING ENTRANCE DOORS

#### PART 1 - GENERAL

##### 1.01 GENERAL REQUIREMENTS

A. The provisions of all of the Contract Documents are hereby made a part of this Section.

B. The requirements of Section 01050 entitled Project Coordination apply to this Section the same as though herein written out in full.

C. The requirements of Section 01810 entitled Technical Section Requirements apply to this Section the same as though herein written out in full.

##### 1.02 Scope

A. In reference to the two (2) existing sliding main entrance door openings marked A on the Opening Schedule on Sheet A08, these two (2) existing Vestibule openings marked X01 and X02, (indicated on the Sheet A07 Floor Plan), shall be protected by the Contractor during Demolition Work and during Construction Work.

B. Sliding door X01, the outer door, shall not be removed or relocated, and shall be protected; it shall remain operable and in place all during Demolition Work and all during Construction Work; and it shall remain operable and in place as the primary entrance door after this Project is completed.

C. Sliding door X02, the inner door, shall be removed, stored, and reinstalled by others, i.e., by the Owner's selected sliding door remover and installer who shall be Mr. Tim Borgardt, with Door Controls, Inc., 130 Veterans Boulevard, Kenner LA 70062; Phone: 1-(800) 838-8062 or (504)468-8337, Fax:(504)467-8480; or email at: [timb@doorsincontrol.com](mailto:timb@doorsincontrol.com)

D. Removal of door X02 shall be scheduled to occur in advance of when the Contractor is ready to remove the existing in-side vestibule wall; and the re-installing of door marked X02 shall be scheduled to occur when the Contractor is ready to provide the new, relocated in-side Vestibule wall in the Enlarged Entrance Vestibule X101, indicated on the Floor Plan on Sheet A07.

E. Reference also Drawing Sheet A06, Detail 1, Existing Building Demolition Floor Plan, and Detail 2, Note **05**.

F. Refer to Electrical Documents for providing and coordinating electrical requirements for existing sliding entrance doors, and for

coordinating and electrically providing roughing-in wiring for the relocated X02 electrically operated sliding door.

G. Refer to Section 08720, Door Hardware for door hardware specified, (if any).

H. The existing and new sliding doors may or may not need new types of sensors & other accessories to meet current revised ANSI Standards, all of which shall be provided by the Owner's door remover/installer.

I. Door X02 may be installed on the Owner's site if there is room for same, or may be stored at Door controls, Inc., which shall be determined later.

## PART 2 - PRODUCTS

### 2.01 MATERIALS

#### A. Contractor Provided Materials

1. Refer to Electrical Documents for electrical materials required.
2. Refer to the Finish Schedule and Specifications for new floors, base, wall, and ceiling materials to be neatly provided near this relocated door X02 and also for new materials provided near the existing door X01 which shall remain in place.

### 2.02 Owner's Sliding Door Installer Provided Materials and Work

#### A. Sliding Door:

1. The Owner's sliding door installer shall neatly remove the existing door X02.
2. The Owner's sliding door installer shall furnish and re-install the existing aluminum glazed sliding door and sidelights with the manufacturer's recommended operator, header and track, jambs, sliding door panels, and side lights, where indicated on the Drawings as well as all new code required sliding door accessories including the supply ON/OFF switch.
3. When switched "Off", the unit reverts to manual operation in accordance with NFPA 101, and also during electrical power failure.
4. The Owner's sliding door installer shall re-install the existing threshold or shall provide a new aluminum 1/2" high x 7" wide threshold, (if required), meeting ADA latest standards, and shall provide anchoring of threshold, anchoring of the sliding door parts into the floor, adjacent new walls, and the opening perimeter.

5. All items and materials damaged by the Owner's sliding door installer and remover during removal and re-installing sliding door X02, not caused by the Contractor, shall be satisfactorily repaired or replaced by the Owner's sliding door installer.

### PART 3 - EXECUTION

#### 3.01 COORDINATING SLIDING DOOR WORK

A. Coordinate in advance the scheduling of sliding door removal dates and times.

B. Coordinate in advance the scheduling of sliding door re-installing dates and times.

C. Coordinate the installation of electrical materials and electrical Work for final wiring of doors and frames and providing electrical roughing-in wiring for same.

D. Provide sealant, specified in Section 07900 Sealants, around all frames and finish walls where openings exist between sliding door frames and finish walls.

#### 3.02 FINAL ADJUSTMENTS

A. The Owner's sliding door installer will provide an AAADM certified technician to inspect and adjust installation of sliding doors to assure compliance with ANSI A156.10.

B. The Owner's sliding door installer will adjust all hardware, doors, and frames to insure proper operation of sliding doors.

- END -

## SECTION 08520

### ALUMINUM WINDOWS

#### Part 1 GENERAL

##### 1.01 GENERAL REQUIREMENTS

A. The provisions of all of the Contract Documents are hereby made a part of this Section.

B. The requirements of Section 01810 entitled Technical Section Requirements apply to this Section the same as though herein written out in full.

C. All Aluminum windows shall be factory glazed.

##### 1.02 STANDARDS

Meet requirements and recommendations of the applicable portions of the latest editions of Standards listed below:

- A. American Society for Testing and Materials (ASTM)
- B. Architectural Aluminum Manufacturers Association (AAMA)
- C. American National Standards Institute (ANSI)
- D. Aluminum Association (AA)
- E. National Fire Protection Association (NFPA 101)
- F. International Building Code (IBC)

##### 1.03 SUBMITTALS

A. Submit complete Product Data, Shop Drawings, Installation Details, Types of Glazing, all window Compliance and Test Data, and full range of window unit finish samples for color selection by the Architect on all materials specified herein.

B. Submit actual Sample of window and parts of window units if requested by Architect.

C. Submit manufacturer' warranties specified herein.

##### 1.04 COMPLIANCE FOR ALUMINUM WINDOWS

A. All window units shall be fabricated to comply with air, water, and structural requirements as specified in AAMA/WDMA/CSA 101/1.S.2/A440-05 for type and classification of units required. 101, latest edition, for types and classifications of windows specified.

B. Provide test reports and window manufacturer letter of certification showing compliance with above AAMA/WDMA/CSA

101/1.S.2/A440-05 air, water, and structural requirements, with submitted test reports dates no older than four (4) years old.

C. All window units shall meet Performance Requirements for:

1. ASTM E 283 tested Air Infiltration Test at a static air pressure difference of 6.24 pounds per square foot, where air infiltration shall not exceed 0.1 cubic foot per minute per square foot of crack.

2. ASTM E 331 and ASTM E547 tested Water Resistance Test at a static pressure of (15) pounds per square foot where there shall be no uncontrolled water leakage.

3. ASTM E 330 tested Uniform Load Structural Test at a positive and negative static air pressure difference of 105 pounds per square foot where there shall be no glass breakage or permanent damage.

4. ASTM E 2190-02 tested Insulated Glass indicating it passed this pass/fail test.

5. Provide test reports from an independent certified laboratory verifying that all four (4) above ASTM Tested Performance Tests for specified and indicated window units met specified ASTM requirements.

D. Provide a current AAMA label on each window, indicating that all windows specified herein are certified as specified.

E. All windows found on the Project without an AAMA label shall be rejected and shall be replaced with a window with an AAMA label as recognized by the AAMA Certification Program.

#### 1.05 MANUFACTURERS WARRANTIES

A. Windows shall be certified and warrantied against any defects in material or workmanship under normal use and service for a period of one (1) year from fabrication; however, aluminum windows shall also be warranted by the Contractor for a period one year in accordance with Louisiana Laws.

B. All of pigmented organic finish on aluminum windows and component parts shall be certified as complying fully with the requirements of the AAMA 2605 specification and fully warranted against chipping, peeling, cracking, blistering, for a period of ten (10) years from date of installation.

C. The insulating glass units shall be warranted from visual obstruction because of internal moisture for a period of ten (10) years.

D. Provide a window manufacturer's ten (10) year warranty against window seal failure.

PART 2 - MATERIALS

2.01 MANUFACTURERS

A. Aluminum Windows Manufacturers:

1. Manufacturers are as specified above or below, or a prior approved substitute.
2. Items specified herein by specific manufacturers are used only to denote the quality standard of product desired and that they do not restrict bidders to the specific brand, make, manufacturer, or specification named; and that they are used only to set forth and convey to prospective bidders the general style, type, character, and quality of products desired; and that equivalent products may be acceptable.
3. It shall be the responsibility of the professionally employed Architect or Engineer, or Interior Designer, to determine what is considered an equivalent product, meeting also Owner approval, on any and all Projects in which they have been legally employed to perform professional services.
4. Other manufactures specified above or below, or other prior approved substitutes may be provided if they meet all requirements specified herein and are approved substitutes by the Architect, Engineer, or Interior Designer.

B. Specific Aluminum Windows Manufacturers: Peerless, Kawneer, or a prior approved substitute.

1. Obtain factory glazed window units from one manufacturer to ensure a uniform appearance.
2. Obtain window units from a manufacturer with a Technical Service phone number to provide on-site technical application instructions and to answer specific application questions. Peerless Products, Inc. phone number is: (405) 872-9447.

2.02 EXTERIOR ALUMINUM MATERIALS AND FRAMES

A. Exterior Aluminum windows shall be Peerless Products 4160 Thermal F-AW70 Fixed Windows, with factory glazed exterior window units and sub-sills made with extruded aluminum components of 6063-T5 or T6 tempered alloy with minimum thickness of 0.062".

B. Aluminum units shall be a minimum of 3-1/4" in depth and all aluminum windows shall be capable of being re-glazed without dismantling the master frame.

C. All windows shall have frame sills which shall provide free drainage of rain water to the outside by means of a tapered sill surface.

D. Provide aluminum extenders, aluminum sub-sills, aluminum closures, and extra accessories required for a complete weather-tight installation.

E. All exterior aluminum materials shall be separated a minimum of 3/16" from the interior aluminum by an integrally concealed, low conductance structural barrier in a manner that eliminates metal-to-metal contact.

F. The thermal barrier shall be a poured-in-place two (2) part polyurethane materials that has been tested in similar units for a period of not less than two (2) years to demonstrate:

1. Resistance to thermal conductance and condensation.
2. Adequate strength and security of glass retention.

G. All windows shall be provided without screens.

#### 2.03 ALUMINUM WINDOW FASTENERS

All aluminum window frame components shall be mechanically fastened and all fasteners for windows shall be concealed fasteners recommended by the window manufacturer in either aluminum, non-magnetic stainless steel, or similar non-ferrous, non-corrosive fasteners compatible with aluminum window components.

#### 2.04 EXTERIOR WINDOW GLAZING AND SEALANTS

A. Exterior window glazing is specified under Section 08810; however, glass shall be installed in aluminum windows prior to shipping to the Project site.

B. Exterior glass shall be insulated glass, minimum 1" total thickness, with 1/4" exterior glass, 1/4" interior glass, provided with a 1/2" air space.

C. Insulated glass shall be certified by the window manufacturer's independent testing laboratory as passing the ASTM E 2190-02 test, with test reports and certification sent to the Architect.

D. Sealants shall be non-shrinking, non-migrating elastomeric type conforming to AAMA 803 and AAMA 808.

E. Hot Melt Silicone shall conform to AAMA 800 specifications, and glazing beads shall be extruded aluminum and shall be of sufficient strength to retain the glass.

F. Verify required locations for Safety Glazing in windows in accordance with the U. S. Consumer Products Safety Commission's

requirements, NFPA/ 101, and requirements of the International Building Code, (IBC).

G. Provide Safety Glazing in windows where required.

#### 2.05 Aluminum Window Finish

A. Finish exposed areas of exterior aluminum windows with an electrolytically deposited color, (Kynar or Hylar), in strict accordance with The Aluminum Association Designation AA-M10-C22, provide the colors of Bronze as indicated on the Drawings, or in a custom color as selected by the Architect.

B. Provide a final clear coat to obtain a manufacturer's minimum 20 year warranty on the finish on all windows.

### Part 3 EXECUTION

#### 3.01 INSTALLATION

A. Comply with manufacturer's instructions for installing windows and install windows complete with all concealed non-ferrous window anchors and components.

B. Check and verify all rough-in dimensions for units for heights, widths, clearances, and sill clearance.

C. Secure exact dimensions from the manufacturer prior to providing rough openings in surrounding walls and prior to providing adjacent construction materials.

D. Set window units plumb, level, true to line, and without warp or rack of frames or sash.

E. Anchor frames solidly to surrounding construction in accordance with manufacturer's instructions and with sufficient anchoring to meet local IBC wind load requirements.

F. Provide thru - wall - flashing at all heads and sills where indicated and as specified in Section 07650, Flexible Flashing.

G. Provide a continuous full bead of sealant around all perimeters of all windows with materials specified in Section 07900, Sealants.

H. Adjust operable windows, (if any), for proper operation after installation.

#### 3.02 WINDOW REPAIR AND REPLACEMENT

A. Touch-up finish all stained, scratched, and damaged parts of windows with touch up finish recommended by the window manufacturer.

B. Remove and replace all windows, sashes, glass, balances, weatherstripping, and hardware which are not level, not functioning properly, dented, bent, or which are damaged in any way.

C. Remove and replace all windows which do not fit as specified and indicated and which do not fit as recommended by the window manufacturer.

D. Remove and replace all windows which do not meet all requirements of these specifications.

E. Remove and replace all chipped, cracked, and damaged glass.

### 3.03 CLEANING AND PROTECTING

A. Remove all labels and all label adhesive materials from all windows and glazing materials.

B. Remove all excess glazing sealants and thoroughly clean windows in accordance with Section 01710 Cleaning.

C. Provide temporary protection for all installed glazed window units.

- END -

## SECTION 08720

### DOOR HARDWARE

#### PART 1 - GENERAL

##### 1.01 GENERAL REQUIREMENTS

A. The provisions of all of the Contract Documents are hereby made a part of this Section.

B. The requirements of Section 01810 entitled Technical Section Requirements apply to this Section the same as though herein written out in full.

C. Cabinet Hardware is not provided in this Section. Refer to Section 08770 for Cabinet Hardware.

D. Refer to Part 4 - HARDWARE SCHEDULE below for individual specified door hardware sets.

##### 1.02 STANDARDS

Meet requirements and recommendations of the applicable portions of the latest editions of Standards listed below:

- A. American Society of Architectural Hardware Consultants (ASAHC)
- B. American Society for Testing and Materials (ASTM)
- C. Commercial Standards (CS)
- D. Federal Standards (FS)
- E. National Fire Protection Association (NFPA)
- F. Louisiana Revised Statutes "Fire Marshal Act"
- G. Americans With Disabilities Act, Latest Standards (ADA)
- H. Door and Hardware Institute (DHI)
- I. Louisiana State Fire Marshal Adopted ADAAG
- J. International Building Code (IBC)
- K. American National Standards Institute, Standards for Finish Hardware (ANSI)
- L. Miami-Dade County Building Code, (as adopted by FBC, SFBC, IBC, SBCCI, ASTM 1886, ASTM 1996, and ASCE 7, as related to products approved for use in High-Velocity Hurricane Zone of the Florida Building Code.

##### 1.03 DOOR HARDWARE GENERAL REQUIREMENTS

A. For any door indicated on the Drawings which is not specifically referenced in the hardware schedule's hardware sets, provide the same hardware as that specified on other similar openings.

B. Provide fire rated hardware for fire rated doors, (if any, to comply with all Standards specified in above Paragraph 1.02.

C. Early during bidding, and no less than five (5) days prior to the Bid date, notify the Architect in writing of any door hardware discrepancies, any non-functional door hardware, any door hardware that will not meet specified standards and codes, and any door for which there is no door hardware specified herein.

D. Provide power supplies for electrified hardware if any specified in this Section's hardware schedule and also refer to Electrical Documents.

#### 1.04 GENERAL DOOR HARDWARE SCOPE AND SUMMARY

A. This Section includes, but is not limited to:

1. Providing commercial door hardware for swinging doors and other doors to the extent indicated and specified.

2. Providing temporary construction cylinders, and final cylinders for the (2) existing main entrance aluminum sliding doors, (X01 and X02), specified in Section 08400 Sliding Entrance Doors, where door X01 door will be removed and reinstalled by the Owner's sliding door installer, i.e., Mr. Tim Borgardt, with Door Controls, Inc., 130 Veterans Boulevard, Kenner LA 70062; Phone: 1-(800) 838-8062 or (504)468-8337, Fax:(504)467-8480; or email at: [timb@doorsincontrol.com](mailto:timb@doorsincontrol.com)

3. Electrified hardware, (if any scheduled in the Hardware Schedule in PART - 4 HARDWARE SCHEDULE)

B. For specified door hardware, including but not limited to cylinder cores, not installed under this contract, but to be installed by Owner, provide said door hardware which shall include coordinating purchasing, delivering, and scheduling same.

#### 1.05 DOOR HARDWARE SUBMITTALS

A. Product Data: Provide installation details, material descriptions, dimensions of individual components and profiles, and finishes.

B. Shop Drawings: Provide details of electrified and access control hardware, indicating the following:

1. Provide System Block Wiring Diagrams: Detail wiring for power, signal, and control systems and differentiate between manufacturer-installed and field-installed wiring.

2. Provide the following for each unique electrified opening:

a. Point-to-point system wiring and riser diagrams.

b. Elevation diagram of each door.

c. Operational description.

C. Door Hardware Schedule:

1. Provide a door hardware schedule prepared by or under the supervision of a qualified hardware supplier, detailing fabrication and assembly of door hardware, as well as procedures and diagrams.
2. Coordinate providing the final door hardware schedule with doors, frames, and related Work to ensure proper size, thickness, hand, function, and finish of door hardware.
3. Comply with scheduling sequence and vertical format in DHI's "Sequence and Format for the Hardware Schedule."
4. Organize the Door Hardware Schedule into door hardware sets indicating complete designations of every item required for each door or opening.
5. Organize door hardware sets in same order as in PART - 4 HARDWARE SCHEDULE, specified herein.
6. Submittals forwarded that do not follow the same format and order as the door hardware schedule and numbered hardware sets specified herein, will be rejected and resubmitted.
7. Provide the following minimum door hardware schedule information:
  - a. Type, style, function, size, label, hand, and finish of each door hardware item.
  - b. Manufacturer of each item.
  - c. Fastenings and other pertinent information.
  - d. Location of door hardware set, cross-referenced to Drawings, both on floor plans and in door and frame schedule.
  - e. Explanation of abbreviations, symbols, and codes contained in schedule.
  - f. Mounting locations for door hardware.
  - g. Door and frame sizes and materials.
  - h. Description of each electrified door hardware function, including location, sequence of operation, and interface with other building control systems.
8. Provide description of component functions including, but not limited to, the following conditions:

- a. Normal secured/unsecured state of door.
  - b. Authorized access; authorized egress; unauthorized access; and unauthorized egress
  - c. Fire alarm and loss of power conditions.
9. Submit the final door hardware schedule at the earliest possible date, particularly where Owner approval and Architect review of the door hardware schedule shall precede fabrication of other Work that is critical in the Project's construction schedule.
10. Provide Product Data, Samples, and Shop Drawings of other Work affected by door hardware, and other information essential to the coordinated review of the door hardware schedule.

D. Keying Schedule:

- 1. Prepare the keying schedule under the supervision of and with approval of the Owner, with a separate schedule, detailing final keying instructions for locksets and cylinders in writing.
- 2. Provide keying system explanation, door numbers, key set symbols, hardware set numbers and special instructions.
- 3. Secure Owner approval of the submitted keying schedule prior to the ordering of permanent cylinders.

E. Maintenance Data:

- 1. Provide maintenance data for each type of door hardware to include in maintenance manuals specified in Division 1.
- 2. Upon completion of construction and building turnover, provide two (2) complete maintenance manuals to the Owner whereby maintenance manuals shall include but shall not be limited to the following minimum items:
  - a. Approved hardware schedule, catalog cuts and keying schedule.
  - b. Provide keying bitting list in paper and electronic format by registered mail directly to Owner.
  - c. Hardware installation and adjustment instructions.
  - d. Manufacturer's written warranty information.
  - e. Wiring diagrams, elevation drawings and operational descriptions for all electronic openings.

1.06 DOOR HARDWARE MATERIAL AND INSTALLATION QUALITY ASSURANCE

A. Provide a Louisiana Licensed door hardware supplier and door hardware installer in accordance with LRS 40:1646 and 40:16164, where both the door hardware supplier and door hardware installer shall have a license when required by the Louisiana State Fire Marshall's Office.

B. Provide an experienced and factory trained door hardware installer who has completed both standard and electrified builder's hardware and integrated access control installations similar in material, design, and extent to that indicated and specified for this Project and whose Work has resulted in construction with a record of successful in-service performance.

C. Provide a door hardware supplier as follows:

1. A door hardware supplier that has warehousing facilities in the Project's vicinity which is not more than a half-day of travel from the jobsite and who employs a qualified Architectural Hardware Consultant or equivalent experience available during the course of the Work to consult with the Contractor, Architect, and Owner about door hardware and keying.

2. A door hardware supplier who is recognized by specified door hardware manufacturers, and who shall be a direct factory-authorized distributor of the scheduled specified hardware products.

3. A door hardware supplier who shall be available for onsite meetings within a one (1) day notice, regarding issues that arise with opening functions, installation, keying, on-site warehousing, trouble shooting of products, final punch list related issues, and specified Code and NFPA 101 Life Safety issues.

4. A responsible door hardware supplier who can properly prepare door hardware schedules and door keying schedules meeting all requirement specified herein.

D. Provide an architectural hardware consultant for this Project who is currently certified by the Door and Hardware Institute as an Architectural Hardware Consultant (AHC), and who is experienced in providing consulting services for door hardware installations that are comparable in material, design, and extent to that indicated and specified for this Project.

#### 1.07 DOOR HARDWARE SINGLE SOURCE REQUIREMENTS AND LIMITATIONS.

A. Provide and obtain each type and variety of aluminum, steel and wood door hardware from the same single source manufacturer and supplier, unless otherwise indicated or specified, and:

1. Provide electrified door hardware from the same manufacturer as mechanical door hardware, unless otherwise indicated or specified.

2. Providing electrified modifications or enhancements made to a source manufacturer's product line by a secondary or third party source will not be accepted.

3. Provide standard door hardware, electrified door hardware and access control door hardware as a single sourced package from the same qualified supplier.

4. Provide exterior door hardware from the same manufactures as the interior door hardware, with no deviations from this particular single source requirement.

#### 1.08 DOOR HARDWARE REGULATORY REQUIREMENTS

A. Comply with accessibility requirements; "Americans with Disabilities Act" (ADA), "Accessibility Guidelines for Buildings and Facilities (ADAAG)," ANSI A117.1, ADA Latest Editions, NFPA and IBC as follows:

1. Provide handles, pulls, latches, locks, and other operating devices with a shape that is easy to grasp with one hand and does not require tight grasping, tight pinching, or twisting of the wrist.

2. Provide door closers complying with the following maximum opening force requirements indicated and specified:

a. Interior Hinged Doors: Maximum (5) foot pounds (lbf) applied perpendicular to door.

b. Fire Doors: Minimum opening force allowable by authorities having jurisdiction.

3. Provide thresholds with the maximum ADA allowed height of 1/2" with the lower vertical arises not more than 1/4 inch high, and the top 1/4" beveled, with a slope of not more than 1:2.

B. Provide Means of Egress Doors to comply with:

1. The latest NFPA 101 requirements where latches, locks, and exit devices shall not require more than 15 foot pounds (lbf) to release the latch; and said locks in a means of egress shall not require the use of a key, tool, or special knowledge for operation.

2. The International Building Code (IBC) Latest Edition.

C. Provide fire-rated door assemblies and provide door hardware for assemblies, complying with NFPA 80 that are listed and labeled by a testing and inspecting agency acceptable to authorities having jurisdiction, for fire ratings indicated and specified, based on testing according to NFPA 252 (neutral pressure at 40" above sill) or UL-10C, tested by providing positive pressure labeling for test pressure.

## 1.09 SPECIAL DOOR HARDWARE DELIVERY, STORAGE, AND HANDLING

A. Inventory all door hardware upon delivery on site and store same in a secure area under lock and key.

B. To avoid voiding electronic warranties, do not store electronic access control hardware, software or accessories at the Project site without prior authorization, and without having access to a climate controlled facility.

C. Tag each item or package separately with identification related to the final door hardware schedule, and include basic installation instructions with each item or package.

D. Deliver permanent keys, cylinders, cores, access control credentials, electronic key software with loaded bitting and key records per cylinder, and related accessories directly to the Owner via registered mail or overnight package service.

E. Instructions for delivery to the Owner shall be established at the "Keying Conference".

F. Provide a hardware supplier who is a regional supplier to address Owner, Contractor, or Architect questions and concerns relating to keying issues that arise during construction, at Substantial Completion and at Final Project close-out.

## 1.10 DOOR HARDWARE COORDINATION

A. Templates: Provide and distribute hardware templates to the parties involved for doors, frames, and other Work specified all of which shall be factory prepared for installing standard, electrified, and access control door hardware; and check Shop Drawings of other Work to confirm that adequate provisions are made for locating and installing hardware to comply with all requirements indicated and specified.

B. Access Control and Electrical Connections: Provide coordination between the door hardware supplier and the door and frame supplier to insure providing proper layout and installation of scheduled electrified door hardware, (if any scheduled in the Hardware Schedule in PART - 4 HARDWARE SCHEDULE), combined with required connections to the source power junction boxes, power supplies and security products.

C. Keying Conference: Provide and conduct a keying conference with the qualified door hardware supplier and the Owner, to incorporate the following criteria into the final keying schedule document prior to ordering any Door Hardware material:

1. Function of building, purpose of each area and degree of security required.

2. Plans for existing and future key system expansion.
3. Review all lock and exit device functions when reviewing keying requirements.
4. Requirements for key control system.
5. Installation of permanent keys and cylinder cores.
6. Address the requirements for delivery of keys.
7. Address keying and cylinder stamping (identification) as required by Owner or Owner representative.
8. Establish method of submitting electronic format of keying systems and diagram and shall be produced and provided by the Hardware Supplier.

D. Pre-Installation Conference:

1. Provide, conduct, and attend a conference at the Project site, attended by the qualified hardware supplier, representatives of the door hardware manufacturers, hardware installers, and the Owner to review proper hardware installation methods and the procedures for receiving and handling hardware.
2. Provide on-site-training that should not be less than four (4) hours of on-site training by the qualified hardware supplier and manufactures.
3. At completion of installation and final walk through, provide written certification that all hardware items were applied according to the scheduled conference recommendations and according to the door hardware specifications.

E. Existing Conditions:

1. Thoroughly review existing door and door hardware conditions and coordinate providing all door hardware with existing door and door hardware conditions and coordinate providing new hardware specified in Hardware Sets.
2. The hardware specified in each of the hardware schedule's hardware sets shall be considered the intent of applicable products for a complete opening solution as required by the use and functions of the opening meeting all standards specified herein.
3. The hardware sets specified for new and existing openings shall be reviewed closely with the existing hardware, existing doors and frames, and existing conditions; and where items specified in the hardware sets do not comply with new and existing doors, frames, and

conditions, address the concerns and propose solutions to the Owner and Architect in writing.

4. Provide field verification of existing conditions prior to submitting Shop Drawings with recommendations included in the Shop Drawings.

5. Door hardware deviations will not be acceptable for unforeseen conditions unless reviewed by the Owner and Architect.

#### 1.11 DOOR HARDWARE WARRANTY

A. General Warranty: Special Door Hardware warranties specified herein shall not deprive Owner of other rights Owner may have under other provisions of the Contract Documents and shall be in addition to, and run concurrent with, other required Contractor warranties under requirements of the Contract Documents.

B. Special Warranty: Provide a special door hardware written warranty, executed by the door hardware manufacturer agreeing to repair or replace components of standard, electrified hardware and access control hardware that fails in materials or workmanship within below specified warranty periods where failures include, but are not limited to the following:

1. Structural failures including excessive deflection, cracking, or breakage.
2. Faulty operation of the hardware.
3. Deterioration of metals, metal finishes, and other materials beyond normal weathering.

C. Warranty Period: Provide a two (2) year door hardware warranty from the Project's date of Substantial Completion.

D. Provide Special Warranty Periods as Follows:

1. Five years for mortise locksets.
2. Five years for exit devices.
3. Ten years for manual door closers.
4. Two years for electromechanical door hardware.
5. Five years for Thresholds, Door Sweeps, Door Hardware Gaskets, and Perimeter Weather-stripping.

E. Extended Warranty: As requested by either the Owner or Architect provide a separate optional extended warranty and maintenance contract for access control system and power assist operated openings

where version upgrades and "fix" releases to the software, beyond the general warranty time period, are available at no extra charge only if the end user is under a valid extended warranty and maintenance contract.

#### 1.12 DOOR HARDWARE MAINTENANCE SERVICE

A. Maintenance Tools and Instructions: Provide a complete set of specialized tools and maintenance instructions as needed for Owner's continued adjustment, maintenance, and removal and replacement of door hardware.

B. Maintenance Service: Beginning at Substantial Completion, provide six (6) months of full maintenance by skilled employees of door hardware and integrated access control systems suppliers and installers; include quarterly preventive maintenance, repair or replacement of worn or defective components, lubrication, cleaning, and adjusting as required for proper door opening operation; and provide parts and supplies as used in the manufacture and installation of original products.

### PART 2 - PRODUCTS

#### 2.01 MANUFACTURERS

##### A. Door Hardware Manufacturers:

1. Manufacturers are as specified above and below, or a prior approved substitute.

2. Items specified herein by specific manufacturers are used only to denote the quality standard of product desired and that they do not restrict bidders to the specific brand, make, manufacturer, or specification named; and that they are used only to set forth and convey to prospective bidders the general style, type, character, and quality of products desired; and that equivalent products may be acceptable.

3. It shall be the responsibility of the professionally employed Architect or Engineer, or Interior Designer, to determine what is considered an equivalent product, meeting also Owner approval, on any and all Projects in which they have been legally employed to perform professional services.

4. Other manufactures specified above or below, or other prior approved substitutes may be provided if they meet all requirements specified herein and are approved substitutes by the Architect, Engineer, or Interior Designer.

#### 2.02 GENERAL DOOR HARDWARE MATERIAL REQUIREMENTS

A. Provide door hardware for each door to comply with requirements and standards specified herein, and to comply with the door hardware schedule below.

1. Provide quantity, item, size, finish, or color indicated and specified for named products listed in specified hardware sets.
2. Provide electrified and access control hardware function, sequence of operation, and interface with other building control systems indicated and specified.

B. Door hardware designations are specified in the door hardware schedule below for specific requirements for design, grade, function, finish, size, and other distinctive qualities of each type of door hardware.

## 2.03 HINGES AND PIVOTS

A. Manufacturers: Subject to compliance with requirements and standards specified herein, provide products by one of the following:

### 1. Hinges:

- a. Hager Companies (HA).
- b. McKinney Products (MC).
- c. Stanley Hardware (ST).
- d. Ives (IV).

B. Standards: BHMA Certified products complying with the following:

1. Butts and Hinges: BHMA A156.1.
2. Continuous Geared Hinges: BHMA A156.26.
3. Pivots: BHMA A156.4.
4. Template Hinge Dimensions: BHMA A156.7.
5. Self-Closing Hinges: BHMA A156.17.
6. Floor Hinges: BHMA A156.4.

C. Quantity: Provide the following, unless otherwise indicated or specified:

1. Two Hinges: For doors with heights up to (60) inches.
2. Three Hinges: For doors with heights (61) to (90) inches.
3. Four Hinges: For doors with heights (91) to (120\_ inches.
4. For doors with heights more than (120) inches, provide (4) hinges,

plus (1) hinge for every (30) inches of door height greater than (120) inches.

D. Hinge Size: Provide the following, unless otherwise indicated or specified, with hinge widths sized for door thickness and clearances required:

Maximum Door Size (inches)	Hinge Height (inches)	Metal Thickness - (inches) Standard Weight	Heavy Weight
36" x 86" x 1-3/4"	4-1/2"	0.134	0.180
<36" x 120" x 1-3/4"	5"	0.146	0.190

E. Hinge Weight and Base Material: Unless otherwise indicated or specified, provide the following:

1. Exterior Doors: Heavy weight, non-ferrous, ball bearing hinges.
2. Interior Doors: Heavy weight, ball bearing hinges unless Hardware Sets indicate standard weight.

a. Standard weight hinges may be used at Mechanical, Electrical, IDF, Data, and Offices without closers openings, regardless of specified hinge weight in hardware sets.

F. Hinge Height Clarifications: Where uneven door leafs occur, the widest door leaf in the pair determines the height and weight of the hinges on the inactive and active door leafs; to ensure equal size hinges on opening.

G. Hinge Weight Clarification: If heavy weight hinges are specified in hardware sets for interior aluminum frames, then standard weight hinges can be used. If aluminum frame openings have a door over 42 inches or greater, then provide an additional hinge in lieu of heavy weight or 5 inch hinges.

H. Hinge Options: Comply with the following where indicated or specified in the door hardware schedule or on the Drawings:

1. Non-removable Pins: Provide set screw in hinge barrel that, when tightened into a groove in hinge pin, prevents removal of pin while door is closed; for the following applications:

- a. Out-swinging exterior doors.
- b. Out-swinging access controlled doors.

2. Electric Hinges: If specified or indicated in the hardware schedule, provide electric transfer hinges with standardized plug connectors to accommodate up to twelve (12) wires. Connectors plug directly to through-door wiring harnesses for connection to electric locking devices and power supplies, (if any specified). Provide

sufficient number of concealed wires to accommodate electric function of specified hardware. Wire nut connections are not acceptable.

I. Mortar Guard Enclosures: Provide mortar guard enclosures on frames at each electrical hinge location specified.

#### 2.04 DOOR BOLTS

A. Manufacturers: Subject to compliance with requirements and standards, provide products by one of the following manufacturers for surface bolts, flush bolts, and coordinators:

1. Rockwood Manufacturing (RO).
2. Trimco Manufacturing (TR).
3. Ives (IV).

B. Standards: Comply with the following:

1. Surface Bolts: BHMA A156.16.
2. Automatic and Self-Latching Flush Bolts: BHMA A156.3.
3. Manual Flush Bolts: BHMA A156.16.

C. Surface Bolts and Flush Bolts: BHMA Certified Grade 1.

D. Provide bolts with top rod of sufficient length to allow bolt location approximately six feet from the floor regardless if detailed as such in hardware sets. Provide dust proof strikes for bottom bolts. Surface bolts shall be 8" in length, unless otherwise noted and U.L. listed for labeled fire doors.

E. Provide self-latching flush bolts as follows:

1. Access control inactive door leaf.
2. Uneven inactive door leaf.

F. Bolt Throw: Comply with testing requirements for length of bolts to comply with labeled fire door requirements, and as follows:

1. Mortise Flush Bolts: Minimum 3/4-inch throw.

#### 2.05 LOCKS AND LATCHES

A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

1. Mechanical Mortise Locks and Latches:

- a. Yale Security Group (YA) - 8800FL Series.
- b. NO SUBSTITUTION
- B. Standards: Comply with the following:
  - 1. Mortise Locks and Latches: BHMA A156.13.
  - 2. Bored Locks and Latches: BHMA A156.2.
  - 3. Interconnected Locks and Latches: BHMA A156.12.
  - 4. Auxiliary Locks: BHMA A156.5.
- C. Mortise Locks: BHMA Certified Grade 1, Series 1000.
- D. Lock Trim: Lock trim shall be lever style meeting ADA as specified in the door hardware schedule.
- E. Lock Functions: Function numbers and descriptions specified in the door hardware schedule shall comply with the following:
  - 1. Mortise Locks: BHMA A156.13.
  - 2. Bored Locks: BHMA A156.2.
  - 3. Interconnected Locks: BHMA A156.12.
- F. Lock Throw: Comply with testing requirements for length of bolts to comply with labeled fire door requirements, and as follows:
  - 1. Mortise Locks: Minimum 3/4-inch latch-bolt throw, with stainless steel bolt.
  - 2. Bored Locks: Minimum 1/2-inch latch-bolt throw, 3/4" latch-bolt throw at fire rated pairs.
  - 3. Deadbolts: Minimum 1-inch bolt throw.
- G. All mortise locks shall have stainless steel latch-bolts and deadbolts. Brass bolts are not considered heavy duty and will not be accepted.
- H. For ease of maintenance, all mortise locks shall be easily field reversible without the need to open the lock case.
- I. Office function mortise locks shall have inside thumb-turn.
- J. Backset: 2-3/4 inches unless otherwise indicated or specified.

2.06 CYLINDERS AND KEYING:

A. Match existing key system, and follow the Owner directions for proper keying requirements to meet Owner needs.

B. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

- a. New and existing security key system - NO SUBSTITUTION
- b. Yale Security Group (YA) - Restricted - match existing

C. Standards: Comply with the following:

1. Cylinders: BHMA A156.5.
2. Key Control System: BHMA A156.5.

D. Cylinder Grade: BHMA Certified Grade 1.

E. Permanent Cores: Manufacturer's standard; finish face to match lockset; complying with the following:

1. Removable Cores: Core insert, removable by use of a special key, and for use with only the core manufacturer's cylinder and door hardware.

F. Comply with the following Construction Master Keying:

1. Provide temporary construction master keyed cores that are replaceable by permanent cores.
2. Provide construction master keys in quantity as required by the Contractor.

G. Keying System: Unless otherwise indicated or specified, provide a keying system complying with the following requirements:

1. Provide a New Grand Master Key System in which cylinders are factory keyed operated by a change key, master key, and a grand master key.
2. Conduct keying meeting with Owners to define and document keying system instructions and requirements prior to ordering any material on this Project.

H. Keys: Provide nickel-silver keys complying with the following:

1. Stamping: Permanently inscribe each key with a visual key control number and as directed by Owner.
2. Quantity: Provide the following:

- a. Cylinder Change Keys (Per Key Set): Four.
- b. Master Keys (Per Level): Five.
- c. Grand Master Keys: Two.
- d. Construction Control Keys: Two.
- e. Permanent Control Keys: Two.
- f. Extra Keyed Permanent Cores: Ten.
- g. Extra Blank Keys: Fifty.
- I. Key Registration List: Provide keying transcript list to Owner's representative for lock cylinders.
- J. Key Control System: Provide one lockable cabinet for key control and storage for up to 150 percent capacity, type and model shall be determined in the keying meeting with the Owner; and provide the Owner with one copy of "Key Wizard" key management software program.

#### 2.07 STRIKES

A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

B. Standards: Comply with the following:

- 1. Strikes for Bored Locks and Latches: BHMA A156.2.
- 2. Strikes for Mortise Locks and Latches: BHMA A156.13.
- 3. Strikes for Interconnected Locks and Latches: BHMA A156.12.
- 4. Strikes for Auxiliary Deadlocks: BHMA A156.5.
- 5. Dustproof Strikes: BHMA A156.16.
- 6. Electric Strikes: BHMA A156.5.

C. Strikes: Provide manufacturer's standard strike with strike box for each latch or lock bolt, with curved lip extended to protect frame, finished to match door hardware set, unless otherwise indicated or specified, and as follows:

- 1. Flat-Lip Strikes: For locks with three-piece antifriction latch-bolts, as recommended by manufacturer.
- 2. Extra-Long-Lip Strikes: For locks used on frames with applied wood casing trim.

3. Aluminum-Frame Strike Box: Provide manufacturer's special strike box fabricated for aluminum framing.

## 2.08 EXIT DEVICES

A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

### 1. Exit Devices:

a. Yale Security Group (YA) - 7000 Series with Square-bolt.

b. NO SUBSTITUTION

2. Electrified Options: Where scheduled in PART-4 HARDWARE SCHEDULE, & indicated on Drawing Detail 2A08, Opening Schedule:

a. Where indicated on Drawings or specified in the hardware schedule, provide electrified exit device options including: electric latch retraction, electric dogging, outside door trim control, exit alarm, delayed egress, latch-bolt monitoring, lock/unlock status monitoring, touch-bar monitoring and request-to-exit signaling.

b. Unless otherwise indicated or specified, provide electrified exit devices standard as fail secure on lever or trim side, always free egress on push side or fail safe.

c. If exit device requires over 1 amp of in-rush then provide manufactures power supply to comply with warranty requirements, one power supply per two door leaves.

d. Provide power supply with applicable relay and control boards for complete operation and integration of associated hardware with opening which may require: auto operator, card access, fire alarm, delayed egress and alarmed control boards devices.

e. If exit devices requires over 1 amp of in-rush then provide Electric Power Transfer (EPT), coordinate preps of door, frame and continuous hinges; unless exit device manufacture has approved listed through wire products with standardized connectors.

B. Standard: BHMA A156.3.

C. Exit Devices: BHMA Certified Grade 1.

D. Latchbolt: High-grade, heat-treated, corrosion-resistant nickel steel alloy. Slide-action deadbolt with positive deadlocking by auxiliary bolt.

E. Panic Exit Devices: Listed and labeled by a testing and inspecting agency acceptable to authorities having jurisdiction, for

panic protection, based on testing according to UL 305.

F. Fire Exit Devices: Complying with NFPA 80 that are listed and labeled by a testing and inspecting agency acceptable to authorities having jurisdiction, for fire and panic protection, based on testing according to UL 305 and NFPA 252.

G. Electric Access, (if any scheduled in the Hardware Schedule in PART - 4 HARDWARE SCHEDULE):

Coordinate with aluminum frame and glass door supplier applicable brackets and mounting accessories for electric strikes by CR Laurence ESK w/ 310 Series if required by the aluminum frame and glass door supplier provided by Owner.

## 2.09 ACCESSORIES FOR PAIRS OF DOORS

A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

1. Coordinators:

a. Ives (IV).

b. Rockwood Manufacturing (RO).

c. Trimco Manufacturing (TR).

2. Keyed Removable Mullions: Yale Security Group (YA).

B. Standards: Comply with the following:

1. Coordinators: BHMA A156.3.

2. Removable Mullions: BHMA A156.3.

C. Fire-Exit Removable Mullions:

1. Provide keyed removable mullions for use with fire exit devices complying with NFPA 80 that are listed and labeled by a testing and inspecting agency acceptable to authorities having jurisdiction, for fire and panic protection, based on testing according to UL 305 and NFPA 252.

2. Mullions shall be used only with exit devices for which they have been tested.

## 2.10 CLOSERS AND POWER OPERATORS

A. Manufacturers: Subject to compliance with requirements, provide products by one the following:

1. Surface-Mounted Closers (Heavy Duty): BHMA Certified Grade 1 (shall be used at exterior, cross corridor and high frequency use openings):

a. Yale Door Controls (YA) - 4400.

b. NO SUBSTITUTION

B. Standards: Comply with the following:

1. Closers: BHMA A156.4.

2. Power Operators: BHMA A156.19.

C. Size of Units:

1. Unless otherwise indicated or specified, comply with manufacturer's written recommendations for sizing of door closers depending on size of door, exposure to weather, and anticipated frequency of use.

2. Provide non-handed, factory-sized closers adjustable to meet field conditions and requirements for opening force.

D. Closer Options:

1. As indicated and specified in hardware sets, provide door closer options including: delayed action, hold open arms, extra duty cast or forged parallel arms, positive stop/hold open arms, compression stop/hold open arms, special mounting brackets, spacers and drop plates.

2. Through bolt type mounting is required as indicated and specified in the door hardware sets.

3. Where through bolts are provided, coordinate the color of bolt on opposite of device with BHMA finish color similar to the color of door finish surface.

4. Bent steel or threaded rod arms are not acceptable unless clearly specified in the Hardware Sets.

5. Provide Delayed Action (DA) feature in closers at Laboratories, Shipping and Receiving doors and where cart traffic is active.

6. Provide shock absorbing arm such as spring or rubber cushion at exterior outswing openings.

#### 2.11 OPERATING and PROTECTIVE TRIM UNITS

A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

1. Metal Protective Trim Units:

a. Ives (IV).

b. Rockwood Manufacturing (RO).

c. Trimco Manufacturing (TR).

B. Standard: Comply with BHMA A156.6.

C. Materials: Protection plates shall be manufactured from either Brass/Bronze or Stainless Steel, minimum .050 thick, beveled on four sides, (B4E), with countersunk screw holes.

D. Push-Pull Design: Provide 1" Round with 10" Centers; and provide 90 degree offset pulls at exterior openings.

E. Fasteners: Provide manufacturer's designated fastener type as indicated and specified in door hardware sets.

F. Provide protection plates sized 2 inches less than door width (LDW) on push side and 1 inch less door width on pull side by height specified in door hardware sets.

G. Coordinate stainless steel hinges, door edges, kick-plates and armor plates with less than .09375 inches between meeting edges, regardless of specified sizes in hardware sets.

## 2.12 STOPS AND HOLDERS

A. Manufacturers: Subject to compliance with requirements and standards, provide stops and holders by one of the following:

1. Ives (IV).

2. Rockwood Manufacturing (RO).

3. Trimco Manufacturing (TR).

B. Standards: Comply with the following:

1. Stops and Bumpers: BHMA A156.16.

2. Electromagnetic Door Holders: BHMA A156.15.

3. Combination Overhead Holders and Stops: BHMA A156.8.

4. Door Silencers: BHMA A156.16.

C. Stops and Bumpers: BHMA Certified Grade 1.

D. Electromagnetic Door Holders for Labeled Fire Door Assemblies: (if any scheduled in the Hardware Schedule in PART - 4 HARDWARE SCHEDULE):

1. Coordinate with fire detectors and interface with fire alarm system.
2. Magnetic door holders shall meet or exceed ANSI A156.15 and be UL listed 228 for Door Closer and Holders, with or without integral smoke detectors.
3. Holding force shall be 25 to 40 pounds and shall be fail-safe.
4. Pushpin release that eliminates residual magnetism shall be standard.
5. Provide magnetic hold-opens with triple-voltage coil that can receive 12 VDC, 24 VAC/DC, or 120VAC; or coordinate required voltage with electrical.
6. Subject to compliance with requirements, provide products by one of the following:
  - a. Rixson Hardware (RX) - 980 Series.
  - b. Sargent Manufacturing (SA) - 1560 Series.
  - c. LCN (LC) - SEM7800 Series.
- E. Combination Overhead Stops and Holders: (if any scheduled in the Hardware Schedule in PART - 4 HARDWARE SCHEDULE): Certified BHMA Grade 1.
  1. Glynn-Johnson (GJ) - 100 Concealed and 90 Surface Series
  2. Rixson Hardware (RX) - 1 Concealed and 9 Surface Series.
  3. Sargent Hardware (SA) - 600 Concealed and 500 Surface Series.
- F. Provide overhead concealed stops at public spaces such as conference, corridors, and office spaces where wall or floor stops are not applicable condition.
- G. Provide overhead surface stops at non-public spaces such as mechanical, electrical, storage spaces.
- H. Floor Stops: Provide floor stops for doors, unless wall or other type stops are scheduled, indicated or specified, insuring that floor stops are not mounted where they will impede traffic, or will be a tripping hazard.
- I. Where floor or wall stops are not appropriate, provide overhead stops.
- J. Silencers for Metal Door Frames:

1. BHMA Grade 1; neoprene or rubber, minimum diameter 1/2 inch fabricated for drilled-in application to frame.

2. Provide (3) per single door and (2) per paired door frame if applied gasketing is not specified in Hardware Sets.

#### 2.13 DOOR THRESHOLDS, WEATHERSTRIPPING AND GASKETING

A. Manufacturers: Subject to compliance with requirements, provide door thresholds, weather-stripping, and gasketing by one of the following:

1. Zero International. (ZE)

2. NGP Manufacturing (NG)

3. Pemko Manufacturing (PE).

B. Standard: Comply with BHMA A156.22.

C. General:

1. Provide continuous weather-strip seal on exterior doors and smoke, light, or sound gasketing on interior doors where specified.

2. Provide non-corrosive fasteners for exterior applications.

3. Provide perimeter gasketing at heads and jambs, forming seals between doors and frames.

4. Provide and install header seal before mounting door closer arms.

5. Fasten meeting stile astragals to meeting stiles, forming seal when doors are closed.

6. Fasten door sweeps to bottoms of doors forming a seal with the threshold when the doors are closed.

D. Provide thresholds to meet ADA compliance height, coordinate threshold height with floor pivots, finish floor thickness and door undercut; and provide extended spindles on pivots which may be required due to construction details and final installation; hence, coordination requirements by door and hardware supplier is required prior to ordering material.

E. Basic Sound Seal Requirement: Whether indicated on the Drawings and specified in the Specifications or not, provide gasketing MCKS88BL at sound rated wall types and at the following areas for limiting of sound transmission: private offices, exams, conference, private toilets, corridor openings, Study Rooms and similar sound sensitive area.

F. Smoke Labeled Gasketing:

1. Provide assemblies complying with NFPA 105 that are listed and labeled by a testing and inspecting agency acceptable to authorities having jurisdiction, for smoke control ratings indicated and specified, based on testing according to UL 1784.
2. Provide smoke labeled perimeter gasketing at all smoke labeled openings.

G. Fire Labeled Gasketing:

1. Provide assemblies complying with NFPA 80 that are listed and labeled by a testing and inspecting agency acceptable to authorities having jurisdiction, for fire ratings indicated and specified, based on testing according to UL-10C.
2. Provide concealed intumescent seals and gasketing, Category A type gasketing systems on assemblies where an intumescent seal is required to meet IBC and UL-10C positive pressure labeling.

H. Provide Perimeter Weatherstripping at Exterior Hollow Metal Frames, Install prior to templating and installing exit devices and closers.

2.14 FABRICATION

A. Fasteners:

1. Provide door hardware manufactured to comply with published templates generally prepared for machine, wood, and sheet metal screws.
2. Provide screws according to manufacturers recognized installation standards for application intended.
3. Provide manufactures templated and approved stainless steel screws and fasteners for stainless steel hardware specified in the hardware sets.

B. Mounting Accessories: Provide drop plates, filler brackets, extended length screws, through bolts, and accessories for complete mounting with door, frame, light kits, applied molding and special applications as part of the Base Bid with complete installation per manufactures recommendations.

C. In Special Occupancy Facilities, and if specified herein, provide surface mount magnetic locks on the pull side of the doors when specified in hardware sets, located on openings in corridors; and provide all mounting brackets with finish and beauty covers.

2.15 FINISHES

A. Standard: Comply with BHMA A156.18.

B. Provide quality of finish, including thickness of plating or coating (if any), composition, hardness, and other qualities complying with manufacturer's standards, but in no case less than specified by referenced standards for the applicable units of hardware.

C. Protect mechanical finishes on exposed surfaces from damage by applying a strippable and temporary protective covering before shipping to jobsite.

D. Finishes on locksets, latchsets and exit devices shall be provided with an FDA recognized antimicrobial coating (MicroShield™) listed for use on medical and food preparation equipment that will suppress the growth and spread of a broad range of bacteria, algae, fungus, mold and mildew.

E. Provide clear powder coat finish at exit devices located on exterior openings such as locks on exterior gates if indicated and specified.

F. BHMA Designations: Comply with base material and finish requirements indicated and specified by the following:

1. BHMA 600: Primed for painting, over steel base metal.
2. BHMA 626: Satin chromium plated over nickel, over brass or bronze base metal.
3. BHMA 630: Satin stainless steel, over stainless-steel base metal.
4. BHMA 652: Satin chromium plated over nickel, over steel base metal.
5. BHMA 689: Aluminum painted, over any base metal.

### PART - 3 EXECUTION

#### 3.01 EXAMINATION

A. Examine doors and frames, with door installer present, for compliance with requirements for installation tolerances, labeled fire door assembly construction, wall and floor construction, and other conditions affecting performance.

B. Examine roughing-in for electrical source power to verify actual locations of wiring connections before electrified door hardware installation.

C. Proceed with installation only after unsatisfactory conditions have been corrected.

D. Notify Architect and Owner of any discrepancies or conflicts

between the door schedule, door types, Drawings, Specifications, and Scheduled Hardware; and proceed only after such discrepancies or conflicts have been resolved in writing.

### 3.02 PREPARATION

A. Steel Doors and Frames: Comply with ANSI/DHI A115 series.

B. Wood Doors: Comply with ANSI/DHI A115-W series.

C. Electrified Openings: Provide steel doors and frames and wood doors prepared to receive electrified hardware connections specified in Door Hardware Sets without additional modification.

### 3.03 INSTALLATION

A. Mounting Heights: Provide and mount door hardware units at heights indicated and specified in following applicable publications, unless specifically indicated, specified, or required to comply with other governing regulations, standards, or other requirements:

1. Standard Steel Doors and Frames: DHI's "Recommended Locations for Architectural Hardware for Standard Steel Doors and Frames."

2. Custom Steel Doors and Frames: DHI's "Recommended Locations for Builders' Hardware for Custom Steel Doors and Frames."

3. Wood Doors: DHI WDHS.3, "Recommended Locations for Architectural Hardware for Wood Flush Doors."

B. Install each door hardware item as follows:

1. To comply with manufacturer's written instructions.

2. Where cutting and fitting are required to install door hardware onto or into surfaces that are later shall be painted or finished in another way, coordinate removal, storage, and reinstallation of surface protective trim units with finishing Work specified in Division 9 Sections.

3. Do not install surface-mounted items until finishes have been completed on substrates involved.

C. Provide and coordinate concealed wood blocking for wall mount stops as detailed in Door Hardware Schedule.

D. Thresholds: Set thresholds for exterior and acoustical doors in full bed of sealant with sealants specified in Division 7.

### 3.04 FIELD QUALITY CONTROL

A. The Contractor shall be solely responsible for and have control over construction means, construction safety, installation safety,

methods, techniques, sequences and procedures and for coordinating all portions of the Work under the Contract, unless the Contract Documents give other specific instructions concerning these matters.

B. Field Inspection: The Contractor shall insure that his hardware supplier and his door hardware manufacturer perform a final inspection of installed door hardware and state in said report whether Work complies with or deviates from requirements, including whether door hardware is properly installed, operating and adjusted.

C. The Contractor shall insure that his Access Control System Consultant inspects integrated electronic and access control hardware and state in said report whether installed Work complies with or deviates from requirements, including whether electronic and access control hardware is properly installed and performing according to system operational descriptions as follows:

1. Inspection: Verify that units and controls are properly installed, connected, and labeled and that interconnecting wires and terminals are identified.

2. Pre-testing: Program and adjust the system and pretest all components, wiring, and functions to verify they conform to specified requirements; and replace malfunctioning or damaged items with new items.

3. Acceptance Test Schedule: Schedule tests after pre-testing has been successfully completed and system has been in normal functional operation for at least 2 weeks.

4. Retest: Correct deficiencies identified by tests and observations and retest until specified requirements are met.

### 3.05 ADJUSTING

A. Initial Adjustment: Adjust and check each operating item of door hardware and each door to ensure proper operation or function of every unit.

B. Replace units that cannot be adjusted to operate as intended.

C. Adjust door control devices to compensate for final operation of heating and ventilating equipment and to comply with referenced accessibility requirements.

D. Door Closers: Adjust sweep period so that, from an open position of 70 degrees, the door will take at least 3 seconds to move to a point 3 inches from the latch, measured to the leading edge of the door.

E. Six-Month Adjustment: Approximately six (6) months after date of Substantial Completion, Installer shall perform the following:

1. Examine and readjust each item of door hardware as necessary to ensure function of doors, door hardware, and electrified door hardware.
2. Consult with and instruct Owner's personnel on recommended maintenance procedures.
3. Replace door hardware items that have deteriorated or failed due to faulty design, materials, or installation of door hardware units.

#### 3.06 CLEANING AND PROTECTION

- A. Clean adjacent surfaces soiled by door hardware installation.
- B. Clean operating items as necessary to restore proper finish.
- C. Provide final protection and maintain conditions that insure door hardware is without damage or deterioration at time of Owner occupancy.

#### 3.07 DEMONSTRATION

Provide a factory-authorized service representative to train Owner's maintenance personnel to adjust, operate, and maintain door hardware and door hardware finishes.

#### 3.08 DOOR HARDWARE SETS

- A. The hardware sets listed below represent the design intent and general direction of the Owner and Architect.
- B. They are a guideline only and should not be considered a detailed hardware schedule.
- C. Discrepancies, conflicting hardware and missing items not specified above should be brought to the attention of the Architect with corrections at least five (5) days prior to the Bid Date.
- D. Some of the abbreviations below are as follows:

1. MK - McKinney
2. RO - Rockwood
3. YA - Yale
4. RF - Rixson
5. PE - Pemko

#### PART - 4 DOOR HARDWARE SCHEDULE

Hardware SETS:

**Set: 1.0**

Doors: E09, E10, W06, W07, W12, X31

Description: EXT - Provide Electrical EXIT ALARMS

3 Hinge	TA2314 NRP 4-1/2"x4-1/2"	US32D	MK
1 Exit Device (rim, classroom)	7150 A CR626F	630	YA
2 Restricted Cylinder	2197	626	YA
1 Surface Closer	4420	689	YA
1 Kick Plate	K1050 8"X2" LDW BE CSK	US32D	RO
1 Threshold	171AK		PE
1 Gasketing	S88BL		PE
1 Rain Guard	346C		PE
1 Sweep	57AV		PE

Notes: LOCAL ALARM Sets 1.0 and 2.0

**Set: 2.0**

Doors: E05

Description: EXT - ACTIVITY - Provide Electrical EXIT ALARM

3 Hinge	TA2314 NRP 4-1/2"x4-1/2"	US32D	MK
1 Exit Device (rim, classroom)	7150 A CR626F	630	YA
1 Restricted Cylinder	2197	626	YA
1 Surface Closer	4420	689	YA
1 Kick Plate	K1050 8" X 2" LDW BE CSK	US32D	RO
1 Threshold	171AK		PE
1 Gasketing	S88BL		PE
1 Rain Guard	346C		PE
1 Sweep	57AV		PE

**Set: 3.0**

Doors: E04

Description: EXT - MECH

3 Hinge	TA2314 NRP 4-1/2"x4-1/2"	US32D	MK
1 Mortise Lock (Storeroom)	CRCN 8805FL	626	YA
1 Restricted Cylinder	2197	626	YA
1 Surface Closer	4420	689	YA
1 Threshold	171AK		PE
1 Gasketing	S88BL		PE
1 Rain Guard	346C		PE
1 Sweep	57AV		PE

**Set: 4.0**

Doors: E01, E02

Description: RESTROOM

3 Hinge	TA2714 4-1/2"x4-1/2"	US26D	MK
1 Pull Plate	BF 110x70C	US32D	RO
1 Push Plate	70C	US32D	RO
1 Surface Closer	4400	689	YA
1 Mop Plate	K1050 4"X1" LDW BE CSK	US32D	RO
1 Kick Plate	K1050 8"X2" LDW BE CSK	US32D	RO
1 Wall Stop	409	US32D	RO

1 Gasketing S88BL PE

**Set: 5.0**

Doors: E06, W09, X37

Description: STOR PR

6 Hinge	TA2714 4-1/2"x4-1/2"	US26D	MK
2 Flush Bolt	555	US26D	RO
1 Dust Proof Strike	570	US26D	RO
1 Mortise Lock (Storeroom)	CRCN 8805FL	626	YA
1 Restricted Cylinder	2197	626	YA
2 Wall Stop	409	US32D	RO
1 Threshold	19125A Drill [offset as req]		PE
2 Silencer	608		RO

Notes: Expansion joint cover @ X37

**Set: 6.0**

Doors: E08, W10

Description: ACTIVITY PR

6 Hinge	TA2714 4-1/2"x4-1/2"	US26D	MK
2 Flush Bolt	555	US26D	RO
1 Dust Proof Strike	570	US26D	RO
1 Mortise Lock (classroom security)	CRCN 8818-2FL	626	YA
1 Restricted Cylinder	2197	626	YA
2 Wall Stop	409	US32D	RO
2 Silencer	608		RO

**Set: 7.0**

Doors: T37

Description: CORR - TEMP OPENING

6 Hinge	TA2714 4-1/2"x4-1/2"	US26D	MK
2 Flush Bolt	555	US26D	RO
1 Dust Proof Strike	570	US26D	RO
1 Mortise Lock (storeroom)	CRCN 8805FL	626	YA
1 Restricted Cylinder	2197	626	YA
2 Surface Closer	4400	689	YA
2 Wall Stop	409	US32D	RO
1 Threshold	171AK		PE
1 Gasketing	S88BL		PE
2 Sweep	315CN		PE
1 Astragal	357SP		PE

**Set: 8.0**

Doors: W03, W04

Description: TOILET

3 Hinge	TA2714 4-1/2"x4-1/2"	US26D	MK
1 Mortise Lock (privacy)	CRCN 8802FL	626	YA
1 Mop Plate	K1050 4" X 1" LDW BE CSK	US32D	RO
1 Wall Stop	409	US32D	RO

1 Gasketing S88BL PE

**Set: 9.0**

Doors: E11, E12, E13, W02

Description: LOUNGE / STUDY

3 Hinge	TA2714 4-1/2"x4-1/2"	US26D	MK
1 Mortise Lock (passage)	CRCN 8801FL	626	YA
1 Wall Stop	409	US32D	RO
1 Gasketing	S88BL		PE

**Set: 10.0**

Doors: X29

Description: MEETING PR

6 Hinge	TA2714 4-1/2" x 4-1/2"	US26D	MK
1 Removable Mullion	KRM200	600	YA
1 Exit Device (rim, classroom)	7150 CR626F	630	YA
1 Exit Device (rim, dummy trim)	7150 CR629F	630	YA
1 Restricted Cylinder	2197	626	YA
1 Surface Closer	4420	689	YA
1 Surface Closer	4400	689	YA
2 Kick Plate	K1050 8"X2" LDW BE CSK	US32D	RO
1 Wall Stop	409	US32D	RO
1 Threshold	19125A Drill [offset as req]		PE
1 Gasketing	S88BL		PE
1 Astragal	S772BL (mtg on ast/mull)		PE

**Set: 11.0**

Doors: X28, X33, X34, X35, X36

Description: EXANSION JOINT

1 Threshold	19125A Drill [offset as req]		PE
-------------	------------------------------	--	----

- END -

## SECTION 08770

### CABINET HARDWARE

#### PART 1 - GENERAL

##### 1.01 GENERAL REQUIREMENTS

A. The provisions of all of the Contract Documents are hereby made a part of this Section.

B. The requirements of Section 01810 entitled Technical Section Requirements apply to this Section the same as though herein written out in full.

C. Provide cabinet hardware specified herein, and prior to bidding, verify whether or not cabinet hardware is provided under this Section, or is provided in conjunction with under other Sections of the Specifications.

D. Provide hardwood blocks and blocking specified in Section 06200 Finish Carpentry and Millwork, to receive cabinet hardware specified herein.

E. Order cabinet hardware early because of 30 additional days or more lead time for special manufacturing for some cabinet hardware items specified herein.

F. Provide key tags on all keys specified herein, with final designated Room numbers, as opposed to the Room numbers indicated on the Drawings.

##### 1.02 STANDARDS

A. American Society of Architectural Hardware Consultants (ASAHC)

B. American Society for Testing and Materials (ASTM)

C. Commercial Standards (CS)

D. Federal Standards (FS)

E. National Fire Protection Association (NFPA)

F. Louisiana Revised Statutes "Fire Marshal Act"

G. Americans With Disabilities Act (ADA)

H. Door and Hardware Institute (DHI)

I. American National Standards Institute (ANSI)

J. Louisiana State Fire Marshal Adopted ADAAG

K. International Building Code (IBC)

### 1.03 SCOPE

A. Provide all finishing cabinet hardware as hereinafter specified, and provide all finishing cabinet hardware as obviously required to complete the Project.

B. Provide cabinet hardware items and hardwood blocking not specifically indicated, specified, or detailed, but necessary to complete the Work in matching quality and finish.

C. Provide cabinet hardware fasteners of sufficient sizes and lengths to securely fasten all cabinet hardware.

D. In accordance with AWI Section 400, when fully concealed European hinges are installed, provide plastic insertion dowels to receive hinge screws or provide other similar screw insertion solutions to insure long-term European hinge function.

## PART 2 - PRODUCTS

### 2.01 MANUFACTURERS

A. Cabinet Hardware Manufacturers:

1. Manufacturers are as specified above or below, or a prior approved substitute.

2. Items specified herein by specific manufacturers are used only to denote the quality standard of product desired and that they do not restrict bidders to the specific brand, make, manufacturer, or specification named; and that they are used only to set forth and convey to prospective bidders the general style, type, character, and quality of products desired; and that equivalent products may be acceptable.

3. It shall be the responsibility of the professionally employed Architect or Engineer, or Interior Designer, to determine what is considered an equivalent product, meeting also Owner approval, on any and all Projects in which they have been legally employed to perform professional services.

4. Other manufactures specified above or below, or other prior approved substitutes may be provided if they meet all requirements specified herein and are approved substitutes by the Architect, Engineer, or Interior Designer.

B. Specific Cabinet Hardware Manufacturers: Blum; CompX; Epco; H.B. Ives; Grant; Kenstan; Knappe & Vogt; J.F.H.; National Cabinet Lock

Co.; RPC; Stanley; Widget Manufacturing Co.; or a prior approved substitute.

2.02 Cabinet Hardware Finish: Cabinet hardware finish shall be dull chrome, (US26D), or a finish to match finish of finish hardware, (specified in Section 08720, Door Hardware), in certain same areas.

2.03 Cabinet Hardware Materials and Products:

A. Cabinet Pulls for Cabinet Doors, Storage Cabinet Doors, Miscellaneous Millwork Doors, and Drawer Pulls: Minimum 5/16" diameter solid wire pulls with screw hole spacing 4 inches apart, Stanley No. 4484, aluminum pulls; or a prior approved substitute.

B. Storage Cabinet Doors, and Cabinet Door and Drawer Locks: Five (5) pin tumbler drawer locks and cam locks with two (2) keys per lock, keyed according to Owner's directions, as manufactured by CompX; Kenstan, National; or a prior approved substitute.

C. Cabinet Door Overlay Hinges, (3/4" Doors):

1. American Style Overlay Hinges: Heavy duty hinges, Grade 1, meeting ANSI/BHMA 156.9: Stanley 1592-4, 26D; RPC 370 Series, 2-3/4" five (5) knuckle hinge, 0 .095" steel; or a prior approved substitute; or,

2. European Style Overlay Hinges: Grade 2, meeting ANSI/BHMA 156.9: Salice, 110 degree hinge, Series 200, No. C2R6A99 hinge accompanied with clip-on base plate No. BAR3R09; Blum, 120 degree, Series 71T5550 with Series 75L6600.22 base; or a prior approved substitute.

D. Storage Cabinet/Closet Door Hardware:

1. For types of cabinet/closet doors provided in metal frames, refer to the Door Opening Schedule for 1-3/8" Hollow Core, and/or 1-3/4" Solid Core Doors, and refer also to Section 08200, Wood Doors.

2. For specified door hardware sets for these cabinet/closet doors provided in metal frames, refer to Section 08720, Door Hardware.

E. Adjustable Aluminum Cabinet Door Magnetic Catches:

1. Stanley Series SP 45, and SP 46, provided with steel screws, or a prior approved substitute.

2. Provide magnetic catches on all 3/4" cabinet doors which do not have self-closing hinges to maintain cabinet doors in a fully closed position.

F. Cabinet Drawer Slides and Desk Drawer Slides, (if any):

1. Accuride 7400 Series, 100 pound rating, with full extension slide for drawer slides; Knape & Vogt No. 8400 Series, 100 pound rating, with full extension slide for drawer slides; Accuride or K & V minimum 180 pound rating for file drawers, (if any); or a prior approved substitute.

2. Provide 100 pound rated drawer slides on all Kitchen/Coffee Room/Staff Lounge cabinet drawers, and 180 pound rated drawer slides on all desk file drawers (if any).

G. Adjustable Wood Shelf Support Metal Pins:

1. Five millimeter, (5 mm) diameter steel pins provided in a transparent high impact injected molded plastic; or solid nickel finished 5 mm solid metal pins as manufactured by Widget Manufacturing Co.; J.F.H. Corporation; or a prior approved substitute. (Solid plastic, synthetic material, or any kind of solid, non-metal pins shall not be acceptable).

2. Provide shelf pins under shelves, inserted in pre-drilled accurately aligned shelf pin holes, minimum four (4) per adjustable shelf.

H. Inactive Leaf Base and Wall Cabinet Latching Device:

1. Stanley CD5339 Solid Brass Hook and Staples; or Stanley CD 1076 Barrel Bolts, or a prior approved substitute.

2. Provide cabinet latching devices on all inactive leaves of pairs of cabinet doors where the adjacent active leaf has a tumbler lock.

3. Where inactive leaf base and wall cabinet latching devices cannot be provided, or are not provided, provide 5 pin tumbler locks on both the active leaf and inactive leaf of pairs of base and wall cabinet doors.

I. Hollow Core, (if any), or Solid Core Storage Cabinet/Closet Door Roller Catches:

1. Stanley No. SP 23, SP26, or a prior approved substitute.

2. Provide roller catches on all active leaves of all Storage Cabinet Doors.

PART 3 - EXECUTION

3.01 COORDINATION

A. Carefully review Shop Drawing measurements for all moving parts and movable parts of cabinets such as doors, drawers, and adjustable shelves to insure that cabinet hardware functions properly for the

proposed cabinets specified under Section 06200, Finish Carpentry and Millwork.

B. Verify exact positions and working of hinges, locks, latches, sliding bolts and miscellaneous cabinet hardware specified herein and add securely fastened cabinet hardware blocking where required as specified in Section 06200, Finish Carpentry and Millwork.

### 3.02 KEYING CABINET HARDWARE

A. Each Room shall have locks with separate keys, or all alike keys as decided by Owners.

B. Provide a minimum of two (2) keys for each lock specified herein.

C. Provide key tags for all keys with the Room number indicated on the key tags.

### 3.03 TUMBLER LOCK LOCATIONS FOR 91 TUMBLER LOCKS

A. Locks for Hollow Core or Solid Doors shall be Tumbler Locks, (1-3/8" or 1-3/4" Storage Cabinet/Closet Doors): Provide locks on all Storage Cabinet/Closet doors.

B. Base Cabinet Door and Wall Cabinet Door and Drawer Tumbler Locks, (3/4" Nominal Thickness):

1. Provide a total of 14 cabinet door locks where directed by Owners. Provide cabinet door locks on single leaf doors and on the active leaf, (right leaf), of pairs of base cabinet doors and wall cabinet doors, where indicated later on Millwork Shop Drawings and where directed by Owners.

2. Provide interior cabinet door latching hardware devices on the inactive leaves of base and wall cabinet doors where pairs of cabinet doors occur with cabinet door locks.

C. Drawer Tumbler Locks: Provide a total of 14 drawer locks where indicated later on Millwork Shop Drawings and where directed by Owners.

### 3.04 INSTALLING

A. Install cabinet hinges, catches, and locks, and drill holes for cabinet shelf supports under Section 06200, Finish Carpentry and Millwork, prior to delivery to the jobsite, all in strict accordance with manufacturer's instructions.

B. Provide all cutting to manufacturer's template using boring jigs, strike locations, marking chisels, routers, and other standard installation tools.

C. Install and securely fasten all cabinet hardware with screws of matching finish.

D. Adjust all cabinet hardware to operate properly in the cabinet shop and field re-adjust all cabinet hardware on the Project site to provide doors level and plumb with smooth operation & no jamming.

E. Remove all cabinet hardware during finishing of doors and reinstall only after all finishing is completed.

F. Refer to Drawings for locations of drawers, and cabinets/closets.

G. Where pairs of doors occur with a lock on one leaf, secure the adjoining inactive leave with barrel bolts or hook and staples specified herein.

H. Remove and replace cabinet hardware which does not function properly.

- END -

## SECTION 08810

### GLAZING

#### PART 1 - GENERAL

##### 1.01 GENERAL REQUIREMENTS

A. The provisions of all of the Contract Documents are hereby made a part of this Section.

B. The requirements of Section 01810 entitled Technical Section Requirements apply to this Section the same as though herein written out in full.

C. Refer also to Drawings for different types of glass at different locations.

D. Refer to Section 08520, Aluminum Windows where aluminum windows shall be glazed by the aluminum window manufacturer, tested as specified for manufacturer's specified and required certification, and shipped to the Project site as complete glazed units.

##### 1.02 SAFETY GLASS REQUIREMENTS

All new glass specified herein and indicated on the Drawings, whether or not required by US Federal CPSC 16 CFR, Part 1201, shall be Safety Glass, meeting the requirements of the Safety Glass definition specified herein.

##### 1.03 STANDARDS

Meet requirements and recommendations of the applicable portions of the latest editions of Standards listed below:

- A. National Fire Protection Association (NFPA)
- B. Underwriters' Laboratories (UL)
- C. U.S. Consumer Product Safety Commission, Part 1201 (CPSC)
- D. American Society for Testing and Materials (ASTM); ASTM C162, C724, C1036, C1048, C1171, C1376, E1300, E2188, E2189, and E2190.
- E. Safety Glazing Certification Council (SGCC)
- F. Glass Tempering Association (GTA)
- G. International Standard Building Code, (IBC)
- H. Underwriters Laboratories (UL)
- I. Warnock Hersey, (WH)
- J. Flat Glass Marketing Association (FGMA)
- K. American National Standards Institute (ANSI); ANSI Z97.1
- L. Laminators Safety Glass Association (LSGA)
- M. International Building Code (IBC)
- N. Code of Federal Regulations, Safety Standards for Architectural Glazing Materials (CPSC 16 CFR 1201)
- O. Glass Association of North America (GANA)

P. Insulated Glass Manufacturers Alliance (IGMAC, Glazing Guidelines)

Q. National Fenestration Rating Council (NFRC)

#### 1.04 SUBMITTALS

A. Submit manufacturer's Product Data on all materials specified herein.

B. Submit Samples of all materials specified herein.

C. Submit Shop Drawings indicating exact locations of all different types of glazing materials to be provided as indicated on the Drawings and specified herein.

#### 1.05 COMPLIANCE

A. Safety Glass Definition: Safety Glass as specified herein is defined as glass meeting requirements of all of the following:

1. US Federal CPSC 16 CFR, Part 1201, Criteria for Category I or Category II.

2. ANSI Z 97.1, Safety Glazing Materials Used in Buildings-Safety Performance Specifications and Methods of Test.

3. Safety Glass may be Tempered Safety Glass, or laminated Safety Glass, or fire rated ceramic Safety Glass, (all three (3) types of glass polished, without an impact film applied to the outside), meeting the requirements of the Safety Glass definition specified herein.

B. Interior and Exterior Glass:

1. Interior and exterior glass provided in shall be float glass, meeting ASTM C 1036, latest edition as specified herein.

2. Interior and exterior Safety Glass provided in operable doors openings shall be float glass, meeting ASTM C 1036, latest edition as specified herein, and meeting the requirements of the "Safety Glass" definition specified herein.

C. Heat Strengthened Glass: Provide heat strengthened glass where specified, when recommended by the manufacturer's design engineers, to comply with the ASTM E 1300, and the International Building Code for wind loads for the geographical area of this Project, and general safety, when recommended by their glass manufacturer and as specified herein.

D. Minimum Single Glass Thickness:

1. Unless otherwise indicated or specified, all single glass shall be minimum 1/4" thick.

2. Unless otherwise indicated or specified, all double glass shall be minimum 1" thick with minimum 1/4" thick specified glass on the outside and minimum 1/4" thick specified glass on the in-side, with a 1/2" specified air/90% Argon gas fill in between.

3. Verify that all glazing materials provided meet ASTM E 1300, Standard Specification for Determining Minimum Thickness of Annealed Glass Required to Resist a Specific Load.

E. Glass Identification: Permanently identify all Safety Glass in accordance with the latest International Building Code, and the latest NFPA requirements.

## PART 2 - PRODUCTS

### 2.01 MANUFACTURERS

#### A. Glazing Material Manufacturers:

1. Manufacturers are as specified above and below, or a prior approved substitute.

2. Items specified herein by specific manufacturers are used only to denote the quality standard of product desired and that they do not restrict bidders to the specific brand, make, manufacturer, or specification named; and that they are used only to set forth and convey to prospective bidders the general style, type, character, and quality of products desired; and that equivalent products may be acceptable.

3. It shall be the responsibility of the professionally employed Architect or Engineer, or Interior Designer, to determine what is considered an equivalent product, meeting also Owner approval, on any and all Projects in which they have been legally employed to perform professional services.

4. Other manufactures specified above or below, or other prior approved substitutes may be provided if they meet all requirements specified herein and are approved substitutes by the Architect, Engineer, or Interior Designer.

B. Specific Glazing Manufacturers: Ford Glass; Guardian; LOF; Old Castle; PPG; Tru-Lite; Viracon; Visteon Versalux; or a prior approved substitute.

2.02 MATERIALS AND GLASS TYPES: Protect all existing glass, and replace same if damaged; and provide different new glass types as specified herein and as indicated on the Drawings as follows:

#### A. Existing Glass:

1. (ESWG): Existing single 1/4" thick wire glass shall be protected and shall remain in place as is.

2. (ESCSG): Existing single 1/4" thick clear safety glass shall be protected and shall remain in place as is.

3. (EG): Existing glass in the two (2) existing aluminum sliding glass entrance doors, transoms, and sidelights shall be protected and shall remain in place as is. The interior vestibule sliding glass doors marked X02 will be removed and re-installed by the Owner as specified in Section 08400, Sliding Entrance Doors.

B. New Glass:

1. (SCSG): Provide 1/4" thick specified single clear safety glass where indicated.

2. (SBSG): Provide 1/4" thick specified single bronze-tinted safety glass where indicated.

3. (DCSG): Provide 1" thick specified double clear safety glass with 1/2" specified air space between two (2) layers of specified 1/4" thick clear safety glass.

4. (DBSG): Provide 1" thick specified double bronze-tinted safety glass with 1/2" specified air space between with one (1) layer of specified 1/4" thick exterior bronze-tinted safety glass on the outside, and one (1) layer of specified 1/4" thick Low-E safety glass on the in-side.

## 2.03 SINGLE SHEET GLAZING MATERIALS

A. Interior, Single Sheet, Clear Safety Glass, (SCSG), shall be:

Clear Safety Float Glass: PPG 1/4" thick, with Transmittance Values of: Ultraviolet, 65%; Visible, 89%; Total Solar Energy of 77%; Reflectance Values of: Total Solar Energy, 7; Visible Light, 9; U - Value of 1.09 -1.03; Shading Coefficient Value of: 0.94; Solar Heat Gain Value of: 0.81; provided in safety glass.

B. Exterior, Single Sheet, Clear Safety Glass, (SBSG), shall be:

Single, minimum 1/4" thick, heat strengthen tinted bronze float glass, PPG "Solarbronze", with Transmittance Values of: Ultraviolet, 25%; Visible, 53%; Total Solar Energy of 50%; Reflectance Values of: Total Solar energy, 6%; Visible Light, 6%; U -Value of 1.09 -1.10; Shading Coefficient Value of: 0.72; Solar Heat Gain Value of: 0.62; provided in safety glass.

## 2.04 DOUBLE GLASS SAFETY GLAZING MATERIALS

A. Exterior Double Bronze-Tinted Safety Glass, (DBSG) shall be:

1. All double glass provided on the exterior of the building in aluminum fixed windows and in hollow metal transoms over exterior doors shall be exterior insulating double bronze-tinted safety glass.

2. All exterior insulating double bronze-tinted safety glass indicated or specified, shall be minimum one (1) inch nominal thickness, with minimum 1/4" specified exterior glass, one-half inch (1/2") specified air space between, and minimum 1/4" thick specified glass on the interior.

3. Outside Glass of Insulating Double Glass: Single, minimum 1/4" thick, heat strengthen tinted bronze float glass, PPG "Solarbronze", with Transmittance Values of: Ultraviolet, 25%; Visible, 53%; Total Solar Energy of 50%; Reflectance Values of: Total Solar energy, 6%; Visible Light, 6%; U -Value of 1.09 -1.10; Shading Coefficient Value of: 0.72; Solar Heat Gain Value of: 0.62; provided in safety glass.

4. Inside Glass of Insulating Double Glass: Single, minimum 1/4" thick, "Solarban 60 (3)", Solar Control Low-E Glass, clear glass with "Solar Ban Bronze" low E coating on side (3), with Transmittance Values of: Ultraviolet, 7%; Visible, 41%; Total Solar Energy of 20%; Reflectance Values of: Total Solar energy, 17%; Visible Light, 8%; U - Value of .29 -.30; Shading Coefficient Value of: 0.36; Solar Heat Gain Value of: 0.31; provided in safety glass.

5. Air Space: Nominal 1/2" filled, (air/90% Argon) air space, for nominal 1" thick double glass.

6. Glazing sealants and accessories for exterior insulating glass shall be as recommended by the glazing material manufacturer, meeting ASTM C1281, ASTM C864, ASTM C509, ASTM C1115, and AAMA 800 requirements.

B. Interior Double Clear Safety Glass, (DCSG) shall be:

1. All double glass provided on the interior of the building in hollow metal borrowed lights shall be interior insulating double clear safety glass.

2. All interior insulating double clear safety glass indicated or specified, shall be minimum one (1) inch nominal thickness, with minimum 1/4" specified interior glass on the out-side, one-half inch (1/2") specified air space between, and minimum 1/4" thick specified glass on the in-side.

3. In-side and out-side glass for double clear safety glass shall be:

Clear Safety Float Glass: PPG 1/4" thick, with Transmittance Values of: Ultraviolet, 65%; Visible, 89%; Total Solar Energy of 77%; Reflectance Values of: Total Solar Energy, 7; Visible Light, 9; U -

Value of 1.09 -1.03; Shading Coefficient Value of: 0.94; Solar Heat Gain Value of: 0.81; provided in safety glass.

PART 3 - EXECUTION

3.01 GENERAL INSTALLATION OF GLAZING MATERIALS

A. Installation of all glazing materials shall be in strict accordance with the standards of the FGMA "Glazing Manual", AAMA, and SIGMA, latest editions.

B. Comply with manufacturers' recommendations for use of glazing compounds.

C. Refer to Section 08520, Aluminum Windows where aluminum windows shall be glazed by the aluminum window manufacturer, tested as specified for manufacturer's certification and shipped to the Project site as complete glazed units.

D. Do not dilute glazing compounds or putty and do not install glazing compounds or putty when temperature is below 40 degrees F. or when excessive dampness or dust is present.

E. Secure all glazing materials with points, clips, or beads, according to manufacturer's instructions.

F. Set all glazing materials in bed of putty or compound, so that putty or compound completely surrounds glazing materials.

G. Set all glazing materials without forcing or springing.

H. Provide adequate clearances at glass edges by providing spacer blocks, setting blocks, and shims as recommended by the glazing material manufacturer.

I. Refer to Drawings for locations of different types of glazing materials.

J. Refer to Drawings for all locations of glazed openings.

K. Clean all glazing materials as Work progresses and provide glazing manufacturer's literature on cleaning glazing materials.

L. Remove and replace all glass which cannot be cleaned.

M. Remove and replace glass which is cracked, chipped, scratched, or damaged in any way.

- END -

## SECTION 09100

### FINISH FLOOR LOCATIONS AND LAYOUT

#### PART 1 - GENERAL

##### 1.01 GENERAL REQUIREMENTS

A. The provisions of all of the Contract Documents are hereby made a part of this Section.

B. The requirements of Section 01810 entitled Technical Section Requirements apply to this Section the same as though herein written out in full.

#### PART 2 - PRODUCTS

##### 2.01 MATERIALS

A. General Floor Material: Refer to the Finish Schedule, Detail 1, Drawing Sheet A08, for existing floor finishes to be removed, existing floor finishes to remain in place, & in general, new different finish floors to be provided, with room number locations for the different indicated floor materials such as:

Vinyl composition tile, solid vinyl tile, porcelain tile, chord tile, epoxy painted floors, and carpet, etc., etc.

B. Specific Floor Materials and Floor Patterns: Also refer to the four (4) Page, (8-1/2" x 11"), 1/16" scale Floor Plan Drawings Specified and bound herein, e.g., Pages 09100-A, 09100-B, 09100-C, and 09100-D, for:

1. The specific plan locations of specified vinyl composition tile and specified vinyl composition tile with accents; and solid vinyl tile required for each room or area whereby some rooms and areas are designated to receive accent vinyl composition tiles with later selections as determined by the Owner's Interior Designer.
2. The specific plan locations of the different types of carpet squares and rectangles specified for each room or area, and the orientation of the joints in specified carpet such as 0 degrees and 90 degrees to adjacent walls, and 45 degrees to adjacent walls, and directions for providing the long sides of rectangular carpet tiles and locations of specified and indicated accent carpet tiles which will be later selected and detailed by the Owner's Interior Designer.
3. The specific plan locations of the specified chord tiles, epoxy painted floors with grit, other finish floor materials indicated on the Sheet A08 Finish Schedule and also the Drawings bound herein whereby colors for same will be selected later by the Owner's Interior Designer.

C. Refer to specific individual Sections of the Specifications for various specified floor materials indicated on the Sheet A08 Drawing Finish Schedule and indicated on the finish floor location and layout 8-1/2" x 11" Drawings bound herein.

D. Refer to Details 18, 19 and 20, Sheet A08, for the various floor sills, thresholds, and finish floor reducers required where two (2) unlike finish floor materials are adjacent to each other.

2.02 DRAWING LAYOUT FLOOR PLAN KEY: The Owner's Interior Designer will later select different colors and different patterns for the Owner for the Specified & indicated floor materials according to the Sheet A08 Finish Schedule, the four (4) 1/16" Plans bound herein, and the Floor Key symbols indicated on Page 09100D bound herein.

2.03 INTERIOR DESIGNER MEETINGS: The Contractor shall coordinate all Work with the Owner's Interior Designer and shall provide unglued Sample floor materials at the job site for the Interior Designer's final selection of colors and final selection of different floor patterns.

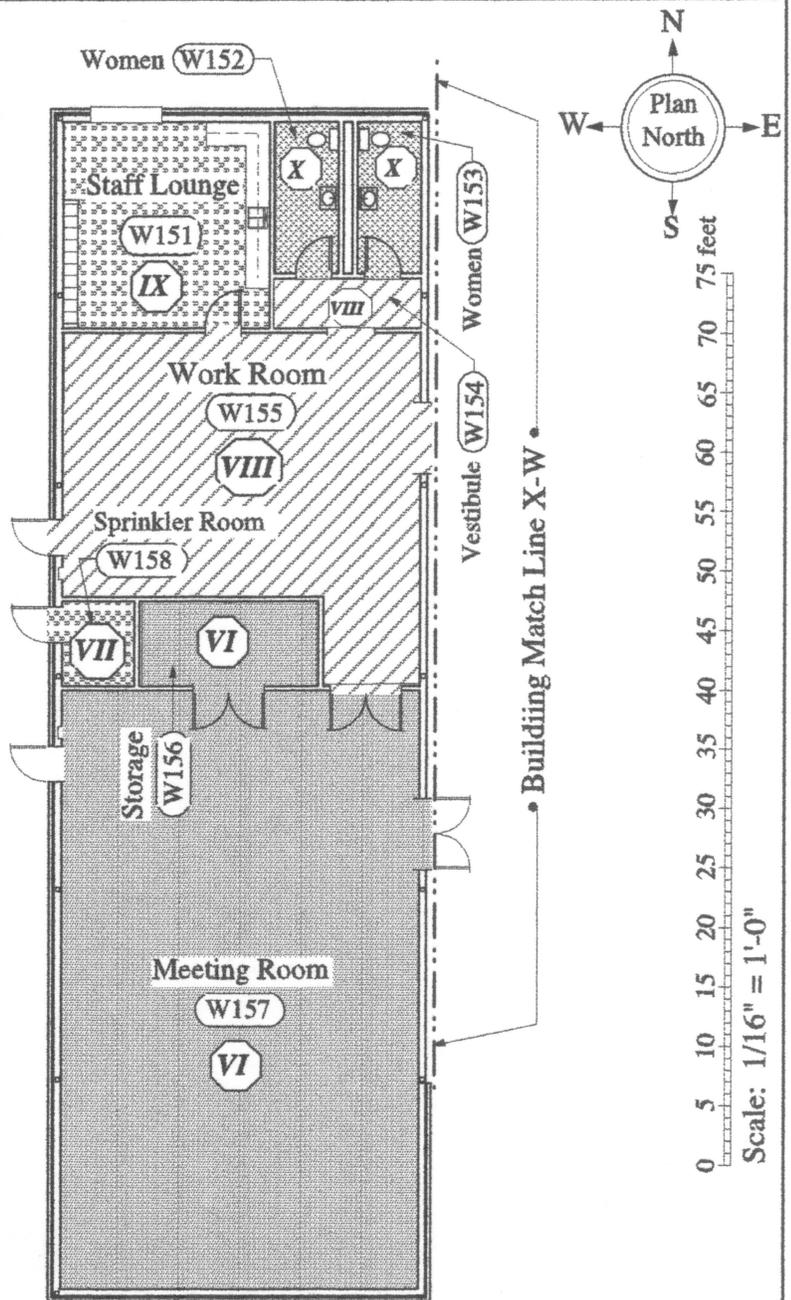
### PART 3 - EXECUTION

#### 3.01 PROVIDING FINISH FLOORS

A. Refer to the four (4) 8-1/2" x 11" Finish Floor Location and Layout Drawing Pages bound herein below and provide these specified finish floors where indicated on Page 09100-A, Page 09100-B, Page 09100-C, and Page 09100-D.

# General Finish Floor Layout Plan Notes:

- 1 • Refer to page 09100-A for new floor layouts for the new West Wing Addition •
- 2 • For the Existing Library, refer to Page 09100-B which indicates where certain existing floors shall be removed and shall be provided with new floors with indicated new floor layouts; and also indicates areas where existing floors shall be protected and shall remain in place •
- 3 • Refer to page 09100-C for new floor layouts of the new East Wing Addition •
- 4 • Refer to Page 09100-D for the Key with individual Roman Numerals and shading & cross hatching describing different types of floor finish materials for the different floor layout plans indicated herein •
- 5 • In the Key, on page 09100-D, after each Roman Numeral floor type designation, refer to the Specification Sections listed pertaining to each individual type of floor finish •
- 6 • Refer to Detail 2, Finish Schedule on Sheet A08 for additional notes on floor finishes and other finishes for each room and area •

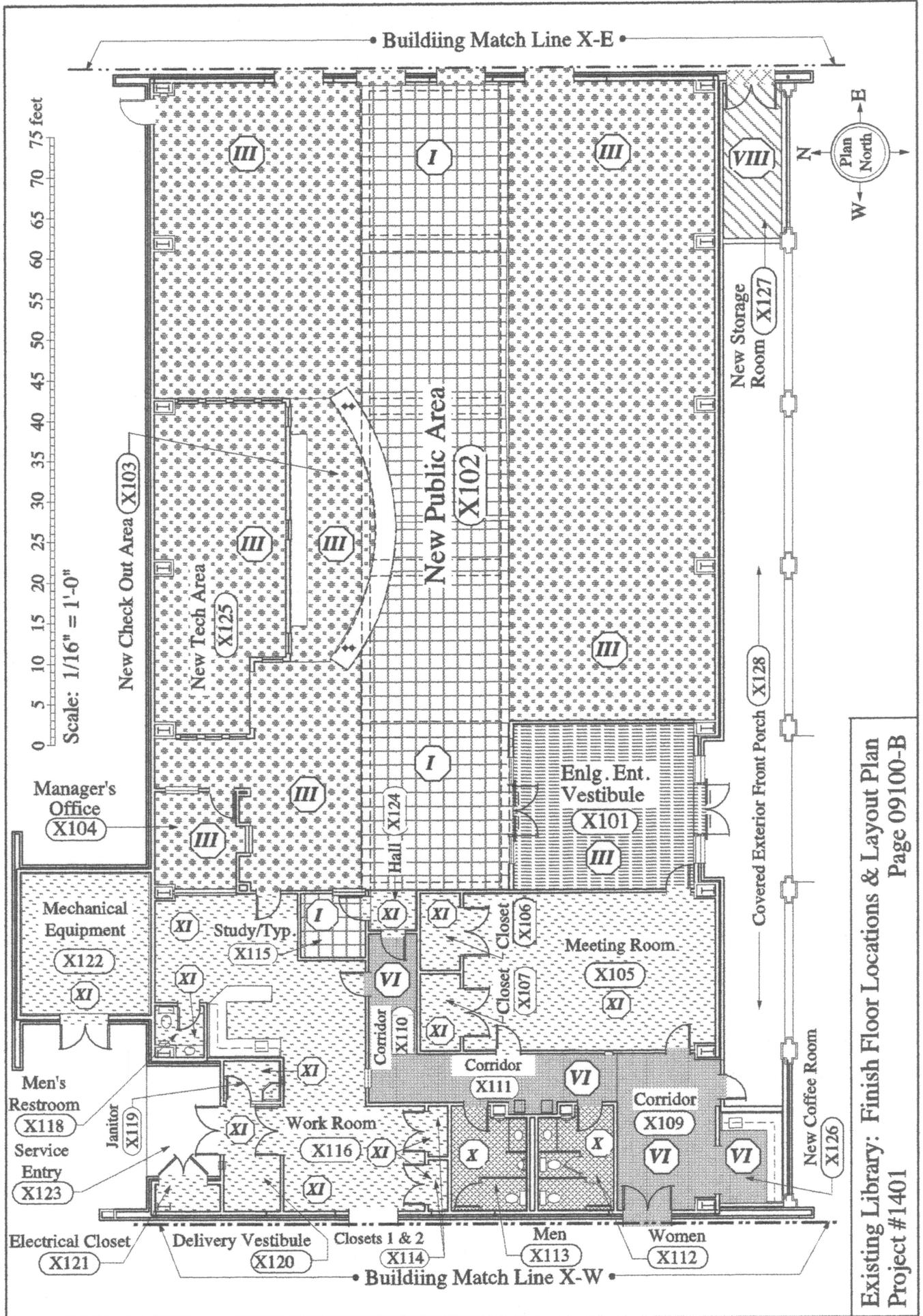


## Finish Floor Locations & Layout Plans for Additions & Alterations To Ascension Parish Library - Galvez Prairieville, LA

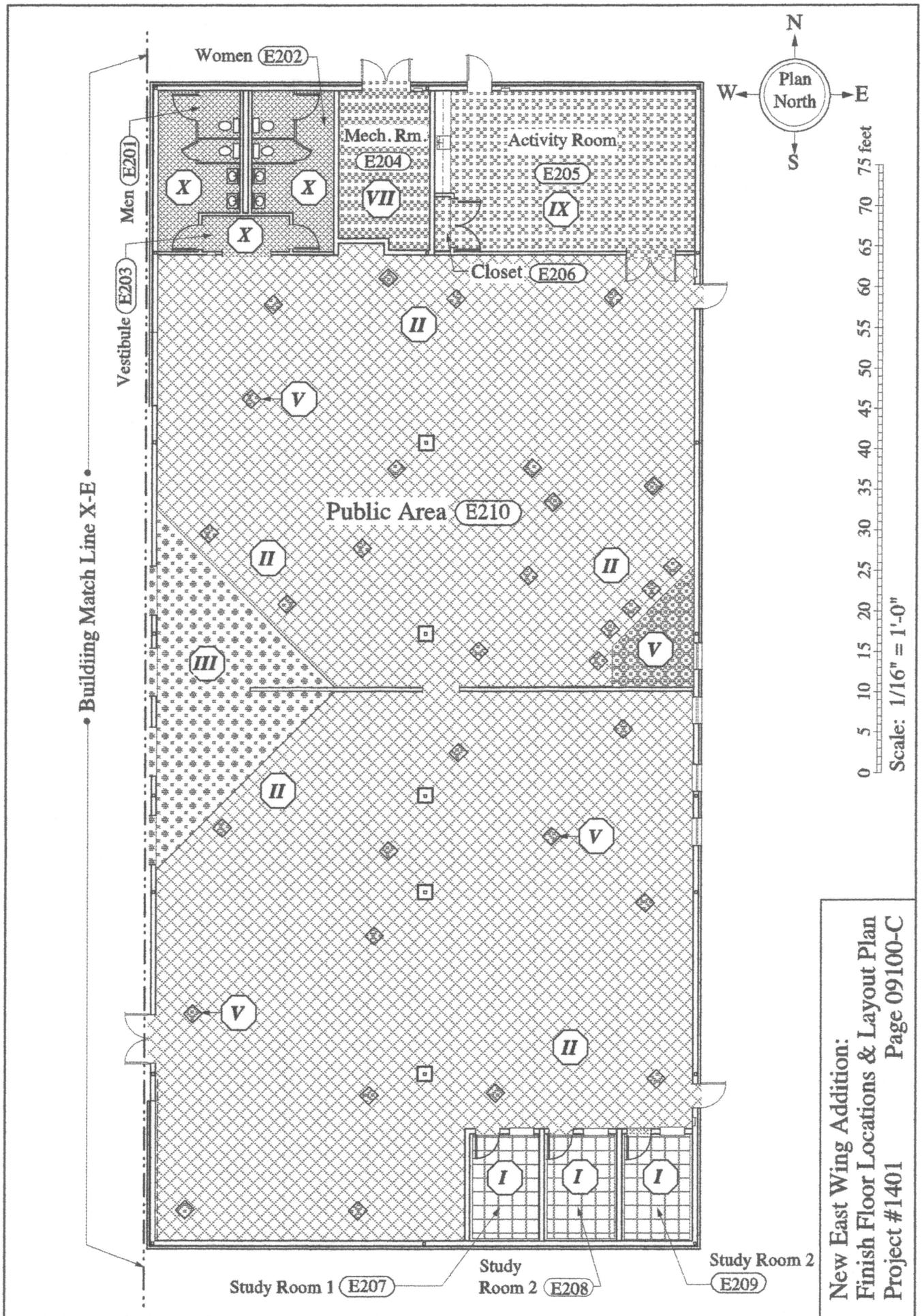
**LaMoyne Design**

7025 Jefferson Highway  
 Baton Rouge, LA 70806  
 (225) 924-1271

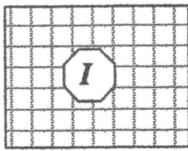
New West Wing Addition:  
 Finish Floor Locations & Layout Plan  
 Project #1401  
 Page 09100-A



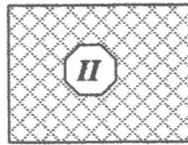
Existing Library: Finish Floor Locations & Layout Plan  
 Page 09100-B  
 Project #1401



New East Wing Addition:  
 Finish Floor Locations & Layout Plan  
 Project #1401 Page 09100-C



• Indicates CPT-1 Carpet installed with carpet joints at 0° & 90° to adjacent walls with long carpet joints running East & West. Re: Specification Section 09685 Carpet •



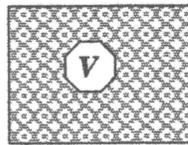
• Indicates CPT-1 Carpet installed with carpet joints at 45° to adjacent walls with long carpet joints running North-East & South-West. Re: Specification Section 09685 Carpet •



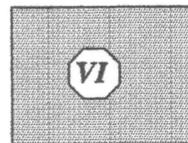
• Indicates CPT-1 Carpet installed with carpet joints at 0° & 90° to adjacent walls with long carpet joints running North & South. Re: Specification Section 09685 Carpet •



• Indicates CPT-8 Chord Tile Carpet installed with joints at 0° & 90° to adjacent walls. Re: Specification Section 09685 Carpet •



• Indicates CPT-3 Carpet through CPT-7 Carpet with approximate random layouts in Public Area E210 and an additional approximately (32) Carpet Squares and/or rectangles of CPT - 2 Carpet with random layouts in Public Area E210 provided as directed later by the Owner's Interior Designer. Re: Specification Section 09685 Carpet •



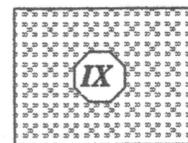
• Indicates LVP-1 solid vinyl Floor. Re: Specification Section 09650 Resilient Floors •



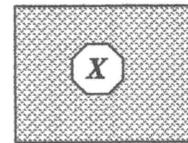
• Specified epoxy painted concrete floors with added grit. Re: Specification Section 09900 Painting •



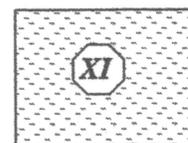
• VCT-1 Floor Tile. Re: Specification Section 09650 Resilient Floors •



• VCT-1 Floor Tile with random, different color accents, patterns, and border Floor Tiles provided from Interior Designer chosen from VCT -2 through VCT-5. Re: Specification Section 09650 Resilient Floors •



• T-1 PoreclainTile. Re: Specification Section 09312 Porcelain Tile •



• Indicates existing floors in the the Existing Library which shall remain and shall be protected; and shall be replaced with new floors if damaged. Re: Detail 1, Sheet A08, Finish Schedule •

# Key

Key For Finish Floor Locations & Layout Plan  
Project #1401  
Page 09100-D

## SECTION 09200

### PLASTER

#### PART 1 - GENERAL

##### 1.01 GENERAL REQUIREMENTS

A. The provisions of all of the Contract Documents are hereby made a part of this Section.

B. The requirements of Section 01810 entitled Technical Section Requirements apply to this Section the same as though herein written out in full.

C. The exterior fiber reinforced plaster as specified herein, and as indicated on the Drawings, is a combination of two (2) conventional cement plaster coats, on self-furring paper-back metal lath, provided over specified exterior gypsum sheathing board, on light-gage metal framing, finished with a specified synthetic finish plaster coat as specified herein.

##### 1.02 STANDARDS

Meet requirements and recommendations of the applicable portions of the latest editions of Standards listed below:

- A. American Society for Testing Materials (ASTM)
- B. Federal Specifications (FS)
- C. American National Standards Institute (ANSI)
- D. Underwriter Laboratories (UL)
- E. Metal Lath Association (MLA)
- F. International Institute for Lath and Plaster (IILP)
- G. Southeast Lathing and Plastering Bureau, Inc. (SEB)
- H. International Building Code (IBC)

##### 1.03 COMPLIANCE

A. Comply with ANSI A 42.2 and ANSI A 42.3.

B. Comply with all Standards specified above.

C. Comply with all specified, manufacturer's recommendations.

D. Plaster and all materials specified herein shall be provided by well experienced personnel who have references of past projects to satisfy the Contractor that they are well qualified before they begin Work specified herein.

E. All exterior metal plaster accessories such as corner beads, control joints, expansion joints, J-beads, shall be zinc alloy as

opposed to galvanized metal which is not acceptable because it will rust. Easy to verify soaking same in salt water or with a magnet.

F. All cement plaster fasciae soffit vents and drips, and cement plaster pilaster base weeps shall be aluminum as specified herein.

G. All round cement plaster pilaster vents shall be polypropylene as specified herein set in PVC pipe cylinders as detailed.

#### 1.04 SUBMITTALS

A. Submit Product Data on all materials and fasteners specified herein.

B. Submit Samples of all zinc alloy metal accessories including but not limited to zinc alloy metal control joints, interior and exterior corner joints, expansion joints, casing beads, and self-furring paperbacked metal lath.

C. If separate cement plaster paper backing will be provided, submit Samples and Product Data for same.

D. Provide Product Data and Samples of synthetic plaster finish coats, in different colors.

E. Provide custom synthetic plaster finish colors to match any and all paint colors offered by Devoe, ICI, and Benjamin Moore Paint Company, if so selected by Architect or Owner.

### PART 2 - PRODUCTS

#### 2.01 MANUFACTURERS

A. Plaster Material Manufacturers:

1. Manufacturers are as specified above or below, or a prior approved substitute.

2. Items specified herein by specific manufacturers are used only to denote the quality standard of product desired and that they do not restrict bidders to the specific brand, make, manufacturer, or specification named; and that they are used only to set forth and convey to prospective bidders the general style, type, character, and quality of products desired; and that equivalent products may be acceptable.

3. It shall be the responsibility of the professionally employed Architect or Engineer, or Interior Designer, to determine what is considered an equivalent product, meeting also Owner approval, on any and all Projects in which they have been legally employed to perform professional services.

4. Other manufactures specified above or below, or other prior approved substitutes may be provided if they meet all requirements specified

herein and are approved substitutes by the Architect, Engineer, or Interior Designer.

B. Specific Plaster Material Manufacturers:

1. Synthetic Plaster Finish: Parex Inc., Sto Inc., (Not "Sto R-Wall"), or a prior approved substitute.

2. Exterior Metal Plaster Accessories: Metal Plaster Lath; and Metal Control Joints, Casing Beads, Interior and Exterior Joints, J-Trim, Drip Screeds, and Weep Screeds, and other Metal Accessories: Alabama Metal Industrial Corp., (AMICO); Niles Building Products; Gold Bond; Keene Products; Unimast; USG, or a prior approved substitute.

3. Exterior Gypsum Sheathing Board: Refer to Section 09260, Gypsum Wallboard.

4. Masonry Cement: Blue Circle, LeFarge, or a prior approved substitute.

5. Exterior Cement Plaster Perimeter Sealant: Refer to Section 07900, Sealants.

6. Aluminum Fasciae Vented Plaster Soffit Vents, Aluminum Fasciae Vented Plaster Drip Screeds, and Aluminum Weeps at Bases of New Cement Plaster Pilasters: Flannery Inc., San Fernando, CA, (818)837-7585; Stockton, or a prior approved substitute.

7. Round Polypropylene Cement Plaster Pilaster Vents: Maurice Franklin, Georgetown, SC, (843) 527-4545; or a prior approved substitute.

8. PVC Pipe for Round Polypropylene Cement Plaster Pilaster Vents: Charlotte PVC Pipe Co.; 800-438-6091, or a prior approved substitute.

2.02 SYNTHETIC PLASTER MATERIALS

A. Synthetic Plaster Finish:

1. Plaster finish shall be synthetic plaster finish coat, minimum 1/8" thick, provided on a synthetic plaster primer, on conventional cement plaster specified herein.

2. Plaster finish primer shall be the synthetic plaster finish primer manufactured by the plaster finish manufacturer.

3. Plaster finish shall be composed of a factory blended copolymer emulsion based synthetic finish approved by the specified manufacturers, integrally colored, with finish and color, as selected by the Architect.

4. Plaster finish shall have marble aggregate as opposed to sand aggregate, and plaster finish primer shall have marble dust aggregate as opposed to sand aggregate.

5. Plaster finish and plaster finish primer shall not contain sand, silica sand, or special processed sand aggregate because sand may have iron particles which will rust after exposure to humid areas.

6. Plaster finish shall be a smooth sand finish.

#### 2.03 METAL PLASTER LATH

##### A. Exterior Expanded Paper-Backed Metal Lath:

1. Galvanized steel, self-furring lath, minimum 3.4 pounds per square yard, asphalt paper-backed, meeting ASTM D-779, ASTM D-828, and Federal Specifications UU-B-790a, Grade D.

2. Contractor has option to first provide separate asphalt coated weather resistive barrier, (meeting ASTM D- 779, ASTM D-828, and Federal Specifications UU-B-790a, Grade D), directly under 3.4 pounds per square yard expanded galvanized steel diamond mesh as manufactured by Fortifiber Building systems Group, or a prior approved substitute.

3. Do not provide building paper or roofing paper behind metal lath. If paper will be provided, submit Product Data to the Architect prior to providing paper to insure that it is specified Grade D paper.

B. Interior Expanded Metal Lath: Galvanized steel, diamond mesh minimum 3.4 pounds per square yard, (if any).

#### 2.04 METAL PLASTER ACCESSORIES

A. Exterior Corners: No. 1A Corner Bead, 26 gage, Zinc Alloy.

B. Interior Corners: Joint No. 30, Interior Corner, 26 gage, Zinc Alloy.

C. Control Joints: Control Joint No. 15, 26 gage, Zinc Alloy.

D. Casing Bead: Casing Beads #66, 24 gage, Zinc Alloy.

E. Miscellaneous Grillage: Galvanized metal.

#### 2.05 CEMENT PLASTER

A. Portland Cement: ASTM C 150 & ANSI A 42.2, Type 1.

B. Special Finishing Hydrated Lime: ASTM C 206, Type "S".

C. Masonry Cement: ASTM C 91

D. Sand: ASTM C 144

E. Water: Potable, free of materials that may be deleterious to the plaster or any metal it may come in contact with.

F. Fiber Reinforcement: 1/2" to 2" in length, free from grease, oil, or other impurities, synthetic fibers, pure manila fibers, or goat, cattle, or deer hair.

## 2.06 CEMENT PLASTER MIX

### A. Scratch (First) Coat:

1. Two (2) parts Portland Cement, one (1) part lime, seven and one-half (7 1/2) parts sand, and three (3) pounds of specified fiber reinforcement or;

2. Two (2) parts Portland Cement, three (3) parts specified masonry cement, twelve and one-half (12 1/2) parts sand, and three (3) pounds of specified fiber reinforcement.

#### 3. Minimum Thickness:

a. Minimum three-eighth (3/8") inch thick for exterior walls and other exterior vertical or near vertical surfaces, measured from top of metal lath.

b. Minimum one-quarter inch (1/4") thick for exterior ceilings, exterior soffits and other exterior horizontal surfaces, measured from top of metal lath.

B. Dash Bond Coat: One (1) part cement to one (1) part sand by volume, mixed to slurry consistency.

### C. Brown (Second) Coat:

1. Two (2) parts Portland cement, one (1) part lime, and nine (9) parts sand, or;

2. Two (2) parts Portland cement, three (3) parts masonry cement and fifteen (15) parts sand.

#### 3. Minimum Thickness:

a. Minimum three-eighth (3/8") inch thick for exterior walls and other exterior vertical or near vertical surfaces.

b. Minimum one-quarter inch (1/4") thick for exterior ceilings, exterior soffits and other exterior horizontal surfaces.

### D. Finish (Third) Coat:

1. Prime with synthetic plaster finish primer specified herein.

2. Finish with synthetic plaster finish specified herein.

3. Minimum Thickness: Minimum one-eighth inch (1/8") thick for vertical, horizontal, and all surfaces.

E. Total Thickness of Exterior Cement Plaster System, (Synthetic Plaster and Cement Plaster):

1. Minimum one inch, (1") thick for exterior walls and other exterior vertical or near vertical surfaces and fasciae.

2. Minimum 3/4" - 7/8" thick for exterior ceilings, exterior soffits and other exterior horizontal surfaces.

#### 2.07 CEMENT PLASTER VENTED SOFFIT VENTS AND VENTED DRIP SCREEDS ON FASCIAE AND ALUMINUM WEEPS AT BASES OF NEW CEMENT PLASTER PILASTERS

A. Provide continuous aluminum cement plaster vented soffit vents and provide continuous aluminum cement plaster vented drip screeds where detailed on the entire perimeter of the new cement plaster fasciae.

B. Provide specified and indicated continuous aluminum weeps with welded corners at bases of all new cement plaster pilasters.

C. Cement plaster vented aluminum soffit vents; cement plaster vented aluminum drip screeds; and cement plaster aluminum pilaster base weeps shall be manufactured from clear anodized extruded aluminum alloy, 6063-T5, in minimum thicknesses of 0.050".

D. Continuous Aluminum Vented Fasciae Soffit Vents: Flannery Plaster F Mold, Model No. FPM 75-100 with vent slots, provided with manufacturer's charcoal fiber glass bug screen backing on top of the vent slots, or a prior approved substitute.

E. Continuous Aluminum Vented Fasciae Drip Screeds: Flannery Plaster Drip Screed, Model No. DS-875, with vent slots, provided with manufacturer's charcoal fiber glass bug screen backing on top of the vent slots, or a prior approved substitute.

F. Continuous Aluminum Pilaster Weeps:

1. Provide custom fabricated Flannery aluminum weeps, protruding outwards 7/8" and with fastener flange extending 3-1/2" above the inverted vee, at bases of all new cement plaster pilasters with Flannery custom welded 90 degree inside corners and Flannery custom welded 90 degree outside corners.

2. Flannery welded aluminum 90 degree corners have 6" leg extension on both sides which may also be custom cut in the field to neatly fit pilaster bases, and may be custom spliced with Flannery vinyl splices which can be sealed with specified sealant.

#### 2.08 CEMENT PLASTER ROUND POLYPROPYLENE PILASTER VENTS

A. Provide two (2) cement plaster pilaster vents on all new cement pilasters where indicated and detailed.

B. Cement plaster pilaster vents shall be minimum two (2) inch round x 1/2" deep white polypropylene cement pilaster louvers with a built-in polypropylene screen, Model/Item No. PLW-200, as manufactured by Maurice Franklin, or a prior approved substitute and shall be inserted in in 2" PVC pipes as detailed.

C. PVC pipes shall be Schedule 40, Type 1, meeting requirements of ASTM D 2665, ASTM D 1785. (Charlotte manufactured pipes usually can be obtained at Lowes or Home Depot.)

D. Stainless Steel wire shall be minimum 11 gage Type 316 stainless steel wire to secure pilaster vent and PVC pipe in plaster.

### PART 3 - EXECUTION

#### 3.01 INSTALLING METAL LATH

A. Apply metal lath with long dimensions perpendicular to supports.

B. Stagger horizontal laps of lath and Grade D paper.

C. Securely fasten all lath through paper-back vapor barrier and through exterior sheathing board to metal studs with hot dipped galvanized screws.

D. Securely fasten lath to lath and lath to metal accessories with minimum no. 18 gage galvanized annealed wire, at maximum distances of 6" apart.

E. Provide securely attached, specified casing beads where vertical and horizontal plaster panels abut other dissimilar materials or equipment.

F. Provide securely attached, specified control joints where indicated on Drawings.

G. Provide metal flashing where necessary to provide watertight conditions at openings, control joints and corners.

H. Securely fasten and provide specified metal interior and exterior corners at all corners of all plaster panels.

I. Securely fasten, provide and space control joints not to exceed the maximum distances recommended and indicated.

J. Maintain continuous paper-backed lath moisture protection at all joints, corners, and accessories with overlaps of asphalt paper joints.

### 3.02 MIXING CEMENT PLASTER

- A. Mixing shall be done in a mechanical mixer with a minimum amount of water needed to produce a plaster of workable consistency.
- B. Do not mix plaster by hand in a wheel barrow or mortar box.
- C. Measure plaster ingredients accurately.
- D. Do not roughly measure plaster ingredients by the shovel method.
- E. Mix plaster a minimum of three (3) minutes in a mechanical mixer, or longer, until all ingredients are uniform in color.
- F. Provide fiber reinforcement specified in the scratch (first) coat.
- G. Gage the water content by providing plaster with a maximum slump of 2-1/2" in a 2" x 4" x 6" high standard slump cone.

### 3.03 INSTALLING PLASTER

#### A. General Requirements:

- 1. Maintain a wet edge on all three (3) coats of plaster, not allowing an edge to set up between metal control joints and other joints.
- 2. Provide three (3) coat system in thicknesses specified on all areas.
- 3. A dash bond coat shall not replace one of the specified coats.
- 4. Curing cement plaster is very important.
- 5. Cure cement plaster periodically for a minimum of the times specified herein.
- 6. Use only potable water for curing, applied in very fine fog spray from a nozzle.
- 7. Apply as much water as is readily absorbed by the cement plaster.
- 8. Frequency of water application shall be controlled by the Contractor, according to relative humidity, winds, direct sun, and other weather conditions to avoid cracking and checking.
- 9. Do not over saturate plaster, thereby causing surface water to remain on finish constantly.
- 10. Extended periods for curing, up to four (4) days, may be required to prevent cracking.
- 11. Entirely remove all cracked cement plaster and provide new cement plaster and new metal lath where plaster has cracked.

B. Scratch (First) Coat:

1. Provide and apply with sufficient material and pressure to form good full keys on metal lath.
2. Rake horizontally only.
3. Wet cure scratch (first) coat for a minimum of 48 hours.

C. Brown (Second) Coat:

1. Provide dash bond coat specified.
2. Provide and apply after scratch (first) coat has set firm and hard for a minimum of 48 hours.
3. Provide and bring out to metal grounds and straighten to a true surface with rod and darby without use of additional water.
4. Wet cure brown (second) coat for a minimum of 72 hours.

D. Finish Synthetic Plaster Primer: Provide and apply synthetic plaster primer after brown (second) coat has set firm and hard for a minimum of 72 hours.

E. Synthetic Finish Plaster:

1. Provide recommended primer and apply synthetic plaster using stainless steel trowels.
2. Do not use regular steel trowels which can cause rust.
3. Provide proposed, new synthetic finish plaster with a smooth sand finish in color selected by Architect.
4. Clean all plaster from screeds, metal base, and trim.
5. Seal exposed joints with sealant and tool level as specified in Section 07900 entitled Sealants.
6. Provide colored sealant adjacent to metal opening frames to match finish on metal frames.

3.04 INSTALLING CEMENT PLASTER ALUMINUM VENTED FASCIAE SOFFIT VENTS AND VENTED FASCIAE DRIP SCREEDS AND CEMENT PLASTER ALUMINUM PILASTER WEEPS

A. Provide detailed continuous cement plaster vented soffit vents and cement plaster vented drip screeds on the entire perimeter of the new cement plaster fasciae in strict accordance with the manufacturer's instructions.

B. For soffit vents, provide manufacturer's standard prefabricated 90 degree factory welded corners at all corners and install manufacturer's soffit vent alignment splicing materials all provided in strict accordance with the manufacturer's instructions.

C. For drip screed, provide sealed mitered corners at all corners and install manufacturer's drip screed alignment splicing materials all in strict accordance with the manufacturer's instructions.

D. For welded aluminum cement plaster pilaster weeps:

1. Provide factory welded aluminum inside corners and factory welded outside corners, all in strict accordance with manufacturer's instructions.

2. To assure proper fitting, measure each individual structural concrete pilaster foundation base for each individual cement plaster pilaster prior to ordering welded aluminum weeps.

3. Weeps at the base of each pilaster may be provided in one (1) piece, or may be provided with a custom cut of the 6" leg on both sides of the 90 degree welded corner and spliced with the manufacturer's vinyl splices which shall be sealed with manufacturer's specified sealant.

### 3.05 INSTALLING CEMENT PLASTER ROUND POLYPROPYLENE PILASTER VENTS

A. Provide two (2) round pilaster vents as detailed on each cement plaster pilaster, complete with indicated PVC pipe securely fastened with the stainless steel wire.

B. Obtain a few extra feet of PVC pipe for cutting and fitting the indicated short lengths of PVC pipe. The interior diameter of the PVC pipe can vary slightly when trying to obtain a snug fit when trying to snugly fit the polypropylene vents.

- END-

## SECTION 09260

### GYPSUM WALLBOARD

#### PART 1 - GENERAL

##### 1.01 GENERAL REQUIREMENTS

A. The provisions of all of the Contract Documents are hereby made a part of this Section.

B. The requirements of Section 01810 entitled Technical Section Requirements apply to this Section the same as though herein written out in full.

C. Refer to Drawings and details for locations of interior gypsum wallboard, interior gypsum ceilings, and exterior gypsum sheathing.

##### 1.02 STANDARDS

Meet requirements and recommendations of the applicable portions of the latest editions of Standards listed below:

- A. American Society for Testing Materials (ASTM)
- B. Federal Specifications (FS)
- C. Specifications for the Design of Cold-Formed Steel Structural Members
- D. American Iron and Steel Institute (AISI)
- E. American Hot Dipped Galvanizers Association (AHDGA)
- F. Underwriters Laboratories (UL)
- G. International Building Code (IBC).

#### PART 2 - PRODUCTS

##### 2.01 MANUFACTURERS

A. Gypsum Wallboard Material Manufacturers:

1. Manufacturers are as specified above and below, or a prior approved substitute.

2. Items specified herein by specific manufacturers are used only to denote the quality standard of product desired and that they do not restrict bidders to the specific brand, make, manufacturer, or specification named; and that they are used only to set forth and convey to prospective bidders the general style, type, character, and quality of products desired; and that equivalent products may be acceptable.

3. It shall be the responsibility of the professionally employed Architect or Engineer, or Interior Designer, to determine what is considered an equivalent product, meeting also Owner approval, on any and

all Projects in which they have been legally employed to perform professional services.

4. Other manufactures specified above or below, or other prior approved substitutes may be provided if they meet all requirements specified herein and are approved substitutes by the Architect, Engineer, or Interior Designer.

B. Specific Gypsum Wallboard Manufacturers:

1. Gypsum Wallboard: U. S. Gypsum; Georgia Pacific; National Gypsum Gold Bond; or a prior approved substitute.

C. Other manufactures specified above or below, or a prior approved substitute may be provided if found to meet all of the minimum U. S. Gypsum Standards specified herein, including a 5 year and 12 month warranty for exterior sheathing, and are found acceptable by the Owner and Architect.

2.02 GYPSUM BOARD TYPES:

A. There are two (2) different types of gypsum board panels indicated on the Drawings and specified herein:

1. Interior (Type "I") gypsum board panels shall be provided on all interior partitions and all interior ceilings, and on the in-sides of all exterior metal wall studs; and,

2. Exterior (Type "E") gypsum board sheathing panels shall be provided on out-sides of all exterior metal wall studs, behind brick veneer, behind vertical, sloping and horizontal cement plaster, and behind vertical metal wall panels on exterior parapet walls.

B. Type "I" Interior Gypsum Board Panels:

1. Type "I" Interior gypsum board panels shall be U. S. G. Sheetrock Brand Gypsum Panels Mold Tough AR Fire Code Core Panels provided with a noncombustible moisture resistant core encased in moisture and mold resistant papers with paper wrapped tapered long edges, provided in minimum Thicknesses of 5/8".

2. Type "I" Interior gypsum board panels, per ASTM C 1629, shall have a minimum of Abuse Resistance of Level 2 for soft body impact and abrasion, and Level 1 abuse resistance for indentation performance.

3. Type "I" Interior gypsum board panels shall have a Fire Code Core meeting UL requirements of Type X gypsum board; and per IBC Section 8, provided with a Flame Spread of 15 or less, and Smoke Developed of 5 or less per ASTM E 84, meet Code requirements for noncombustible construction complying with ASTM C 1396.

4. Type "I" Interior gypsum board panels shall have an average water absorption rate of not greater than 5% by weight after 2 hour immersion in water per ASTM D 3273 and per ASTM D3273, shall have a panel score of 10, for the Standard Test Method for Resistance to Growth of Mold on the Surface.

C. Type "E" Exterior Gypsum Board Sheathing Panels, (Exterior Gypsum board Sheathing):

1. Type "E" Exterior gypsum board sheathing panels shall be U. S. G. Securock Brand Glass-Mat Sheathing which shall be noncombustible, moisture and mold resistant square edge panels, with a treated gypsum board noncombustible core meeting ASTM E 136, with a water repellent fiberglass face and a water repellent fiberglass back, meeting or exceeding requirements of ASTM C 1177, provided in minimum Thicknesses of 1/2".

2. Type "E" Exterior gypsum board panels shall be provided with a manufacturer's Warranty for 5 years against manufacturing defects, and for 12 months of weather exposure.

3. Type "E" Exterior gypsum board panels shall have a surface burning Flame Spread rating of 0 and a Smoke Developed rating of 0 when tested in accordance with ASTM E 84.

4. Type "E" Exterior gypsum board panels shall have a Perm Rating of 25 and a R Factor of .4 per ASTM C 518.

## 2.03 INTERIOR GYPSUM BOARD ACCESSORY MATERIALS

A. Interior Gypsum Board Fasteners:

1. Self-drilling corrosion resistant bugle head pointed screws, meeting requirements of ASTM C 1002 and ASTM C 954, 1-1/4" minimum length for single layers provided on wood studs, wood framing, and blocking, (if any); and,

2. Self-drilling corrosion resistant bugle head self-tapping screws, meeting requirements of ASTM C 1002 and ASTM C 954, 1" minimum length for single layers provided on metal studs, metal framing, and miscellaneous metal supports.

3. Provide longer fasteners for multiple layers of gypsum board, (if any), special fire walls, or gypsum board and other materials to securely fasten same into structure.

B. Interior Gypsum Board Joint Treatment Materials:

1. Joint Tape: Reinforcing paper joint tape meeting ASTM C 475.

2. Joint Compound: Non asbestos containing, either ready mixed or powdered joint taping compound, meeting ASTM C 475.

### 3. Topping Compound:

- a. Taping and topping compound or "All purpose" compound as recommended by manufacturer, meeting ASTM C 475.
- b. After taping and finishing, provide a rolled uniform "orange peel" skim coat of topping compound over all exposed interior gypsum board surfaces prior to priming and painting.

### C. Metal Corners, Casing Beads, and Control Joints:

1. All corner beads, casing beads, and control joints shall be galvanized steel.
2. Corner beads shall be minimum one (1") inch by one (1") inch angles with perforated flanges.
3. On long gypsum board walls, provide full height vertical gypsum board galvanized control joints spaced not to exceed 25'- 0" and provided on two (2) studs.

### 2.04 MISCELLANEOUS MATERIALS

A. Sealants: Refer to Section 07900, Sealants.

#### B. Metal Studs:

1. Refer to Section 05400, Light-gage Metal Framing.
2. Refer to Drawings for details.
3. Refer to Section 07200, Building Insulation.

#### C. Metal Gypsum Board Supports:

1. Refer to Section 05400, Light-gage Metal Framing.
2. Refer to Drawings for interior and exterior metal studs, metal furring, metal suspension system, and miscellaneous metal supports.

### 2.05 EXTERIOR GYPSUM SHEATHING ACCESSORY MATERIALS

A. Cover all exterior gypsum sheathing joints with continuous sheathing tape recommended by the manufacturer.

B. Exterior gypsum sheathing fasteners shall be hot dipped galvanized #6 bugle head screws with a 0.325" minimum diameter head, (i.e., between +5/16" and 3/8" diameter), and spaced not to exceed an on center spacing of six inches, (6"), per IBC wind-load criteria for this area.

C. Refer to Drawings for details.

### PART 3 - EXECUTION

#### 3.01 LOCATIONS

A. Provide interior gypsum board materials on the interior of the building and gypsum provide exterior sheathing materials on the exterior of the building where indicated on the Drawings and where specified herein.

B. Refer to Drawings for locations and heights of interior gypsum board materials and for locations of exterior gypsum sheathing materials specified herein.

C. Refer to Section 07650, Flexible Flashing for providing exterior flexible flashing at bases of exterior walls, and at heads and sills of penetrations and wall openings in exterior walls.

D. Refer to Section 07211 Exterior Wall Radiant Barrier for the continuous perforated exterior wall radiant barrier which shall be provided and securely attached to all of the exterior gypsum sheathing behind all new brick veneer and behind all new cement plaster above brick veneer.

#### 3.02 PREPARING

A. Prior to beginning installation of gypsum wall board, stretch string lines on all metal stud walls at tops and bottoms to insure that studs are true to line.

B. If studs are not true to line, adjust studs until they are true to line.

C. Insure that all metal bottom plates and studs are securely fastened.

D. Securely brace tops of all metal stud walls as specified in Section 05400, Light-gage Metal Framing.

E. After gypsum wall board is provided, remove and replace all walls which are not true to line.

#### 3.03 INSTALLING INTERIOR GYPSUM BOARD AND EXTERIOR GYPSUM SHEATHING

##### A. Application of Gypsum Board and Gypsum Sheathing

1. Provide Type "I" interior gypsum wall board with 48" widths staggered on both sides of studs, installed as recommended by the panel manufacturer.

2. Provide all Type "E" exterior gypsum sheathing per manufacturer's instructions and seal all panel joints with manufacturer's recommended sealing tape prior to providing the perforated radiant barrier.

3. Provide all gypsum board panels in maximum lengths to minimize joints and provide stagger square edge joints as opposed to aligned square edge joints.

#### B. Cutting and Fastening Interior Gypsum Board and Exterior Gypsum Sheathing

1. Cut gypsum wallboard by scoring and breaking or by sawing, working from face side.

2. Cut neatly around all penetrations.

3. Securely fasten all Type "I" interior gypsum board panels, and Type "E" sheathing panels with specified fasteners provided with screws with maximum spacing per manufacturer's instructions and to meet IBC wind loads for this area.

4. Provide and install all gypsum board panels in strict accordance with the manufacturer's recommendations.

#### C. Interior Metal Casing Beads:

1. Provide metal casing beads with sealed (calked) joints where wallboard abuts different, adjacent materials on walls ceilings, and other areas.

2. Provide metal casing beads on all exposed edges of interior gypsum board.

#### D. Joint and Corner Finishing

1. Provide metal corners at all exterior corners, both vertical and horizontal gypsum board corner joints.

2. Secure metal corners at maximum 9" apart and staggered, or 6" apart if special corner bead clinching tool is provided.

3. Spread a uniform, thin layer of joint compound over joints, approximately 2" each side, total 4" wide.

4. Embed tape immediately in center leaving 1/64" to 1/32" of compound for proper bond, and seat firmly.

5. Reinforce all corners and flat joints.

6. Cover tape and fill penetrations with topping compound a minimum of 3" on both sides of 2" tape, (total width of 8"), and feather out at edges.
7. Apply a second coat of topping compound with a slight uniform crown over center of joint.
8. Smooth out and feather at edges 3" beyond preceding coat.
9. All dimples at fasteners and corner beads shall receive the same three applications at the same time as joints.
10. Sand all high spots and burrs.
11. Fill all concave spots and all depressions. Inspect surface to insure smooth, level surface prior to priming for paint or wall covering.
12. Provide specified sealant around all penetrations, miscellaneous joints, control joints, and cut outs and tool smooth.
13. Provide metal control joints directly above all door opening jambs as detailed and where detailed on Drawings.
14. Provide indicated vertical metal control interior wall joints from finish floor to above ceilings, spaced at maximum spacing of 25'-0" apart.
15. Provide specified paintable sealant at all control and expansion joints and provide metal casing beads specified herein where gypsum board joins other different adjacent materials.
16. Provide all joint and corner finishing in strict accordance with the manufacturer's recommendations.

E. Finishing Touch:

1. Prior to beginning application of any material specified in other Sections, inspect all gypsum board joints, edges, accessories, and covered fasteners to insure that a flat, level surface is provided.
2. Additional compound feather edging, sanding, and finishing shall be provided to secure a true plane, free from bumps, indentations, and burrs when viewed from any angle almost parallel to surface and when viewed 90 degrees from surfaces while projecting a light beam almost parallel to the finished surface.
3. Repair, or remove and replace all Work which is not smooth, flat, level, plumb, and true to line.

4. Provide a rolled "orange peel" skim coat of topping compound over all exposed interior gypsum board surfaces prior to priming and painting.

F. Exterior Gypsum Board Sheathing:

1. Provide exterior gypsum board behind all new brick veneer, and behind all new cement plaster fasciae, soffits, on outsides of exterior metal wall studs, and on exterior ceilings - (if any), and where indicated on the Drawings.

2. Refer to Section 09200, Plaster and Drawings for details for exterior gypsum sheathing.

3. Follow all details and recommendations of the gypsum sheathing and plaster manufacturer.

G. Gypsum Board Interior Horizontal Ceilings:

1. Provide suspended light-gage metal framing specified in Section 05400 and as detailed on Drawings.

2. Tape, float, finish and paint ceilings with same finish as walls in colors selected by the Owner's Interior Designer.

H. Levels of Finish

1. Levels of finish shall be in accordance with Gypsum Association GA-214-96, Recommended Levels of Gypsum Board Finish.

2. All interior room and area walls and interior corridor walls, shall have a Level Four (4) finish, with a thin skim coat in accordance with the Gypsum Association GA-214-96.

- END-

## SECTION 09312

### PORCELAIN TILE

#### PART 1 - GENERAL

##### 1.01 GENERAL REQUIREMENTS

A. The provisions of all of the Contract Documents are hereby made a part of this Section.

B. The requirements of Section 01810 entitled Technical Section Requirements apply to this Section the same as though herein written out in full.

C. Refer to Detail 1, Sheet A08 Finish Schedule; and refer to Specification Section 09100 Finish Floor Locations and Layout Plan with Drawings bound therein for porcelain tile locations with Roman Numeral (X), (T-1); and Details 3A06 and 4A06, indicated as (MT), for locations of marble thresholds.

##### 1.02 STANDARDS

Meet requirements and recommendations of the applicable portions of the latest editions of Standards listed below:

- A. Tile Council of North America (TCA)
- B. American National Standards Institute (ANSI)
- C. American Society for Testing Materials (ASTM)
- D. Americans with Disabilities Act (ADA), Latest Edition
- E. International Building Code (IBC)

##### 1.03 SUBMITTALS

A. Submit manufacturer's Product Data on all materials specified herein.

B. Submit porcelain tile manufacturers written recommended and approved setting materials, cleavage membranes, grout, sealers, and all recommended accessories.

C. Submit full range of actual tile Samples for all materials specified herein with manufacturer's full range of textures and colors in duplicate.

D. Submit Samples of marble thresholds for selection by Owner's Interior Designer and Architect.

E. Submit Shop Drawing of section through marble threshold indicating the maximum  $\frac{1}{2}$ " height in compliance with the latest ADA Standards.

F. Submit manufactures color samples for grout colors.

G. Submit Product Data for Stainless steel porcelain tile cap J-Trim.

#### 1.04 COMPLYING

A. Comply with the latest "Tile Council of North America" Handbook. Keep a copy on site at all times.

B. Comply with ANSI-A 108.01 through ANSI - A 108.17, latest edition, Installation Standards for installing all materials specified herein.

C. Comply with ANSI-A 118.1 through 118.15, and A 136.1 and A 137.1 and 137.2, latest edition.

D. Do not permit light traffic on materials specified herein until thirty-six (36) hours after installation and heavy traffic until seven (7) days thereafter.

E. Comply with latest ADA requirements with respect to slopes to floor drains and other slopes where porcelain tile floors slope no more than 1/4" per foot.

F. Provide marble thresholds at all openings where porcelain tile is adjacent to other different floor materials with threshold heights meeting latest ADA requirements.

G. Porcelain tile shall have:

1. A coefficient of friction greater than 0.6 for level and flat surfaces, and 0.8 for sloping surfaces per ASTM C 1028, ANSI Standards and latest ADA Standards; and shall have a Dynamic Coefficient of Friction of greater than 0.42 when tested in accordance with ANSI A 137.1.

2. A water absorption rate of less than 5% per ASTM C373, and ANSI Standards.

H. Porcelain tile shall be:

1. Chemical resistant when tested in accordance with ASTM C 650.

2. Frost resistant when tested in accordance with ASTM C 1026.

3. Shock resistant when tested in accordance with ASTM C 484.

4. Stain resistant when tested in accordance with ASTM C 1378.

5. Provided with the conventional Portland cement mortar method, one coat method, and thick bed method, providing steel mortar bed reinforcing, and a cleavage membrane, complying with ANSI A 108.1A, as specified herein.

I. Verify that manufacturers of porcelain tile setting materials, cleavage membranes, grout, sealers, and accessories are recommended and approved by the porcelain tile manufacturer prior to providing same, and submit copies of same to the Architect.

J. If any porcelain tile problems develop, and porcelain tile setting materials were not approved by the porcelain tile manufacturer, remove all porcelain tile and tile setting materials and provide all new materials in accordance with the porcelain tile manufacturer's recommendation.

## PART 2 - PRODUCTS

### 2.01 MANUFACTURERS

#### A. Tile Material Manufacturers:

1. Manufacturers are as specified above or below, or a prior approved substitute.

2. Items specified herein by specific manufacturers are used only to denote the quality standard of product desired and that they do not restrict bidders to the specific brand, make, manufacturer, or specification named; and that they are used only to set forth and convey to prospective bidders the general style, type, character, and quality of products desired; and that equivalent products may be acceptable.

3. It shall be the responsibility of the professionally employed Architect or Engineer, or Interior Designer, to determine what is considered an equivalent product, meeting also Owner approval, on any and all Projects in which they have been legally employed to perform professional services.

4. Other manufactures specified above or below, or other prior approved substitutes may be provided if they meet all requirements specified herein and are approved substitutes by the Architect, Engineer, or Interior Designer.

#### B. Specific Tile Material Manufacturers:

1. Porcelain Tile: Emil; Interceramics; or a prior approved substitute.

2. Tile Sealers: Hillyard, or a prior approved substitute also approved by the porcelain tile manufacturer.

3. Porcelain Tile Base Cap & Wainscot Cap J-Trim, and Vertical Edge Trim at Hollow Metal Door Frames: Schluter, Metal Tile co., or a prior approved substitute.

### 2.02 MATERIALS

A. Floor Tile and Wainscoting Tile

1. Size: Nominal twelve (12) inch x twenty-four (24) inch rectangular, porcelain tile.

2. Porcelain floor tile and porcelain wainscoting tile shall be based on a tile similar to Emil Ceramica Block, with nominal dimensions 12" x 24"; in a color selected by the Owner's Interior Designer from the manufacturer's full range of color selections, complete with all matching trim.

3. Provide continuous brushed stainless steel custom formed J-Trim at tops of all porcelain tile bases and at tops of all wainscot on walls and where porcelain tiles meet hollow metal door frames.

B. Portland Cement: ASTM C - 150, Type I.

C. Sand: ASTM C - 144; 100% passing No. 30 screen for pointing and 100% passing No. 4 screen for other Work.

D. Hydrated Lime: ASTM C - 206 and 207, Type S.

E. Water: Potable

F. Mortar for Floors: Conventional Portland Cement floor mortar bed, one coat method, thick bed method consisting of 1 part specified Portland Cement, 4 to 5 parts specified damp sand by volume provided in strict accordance with ANSI A 108.1A.

G. Base and Wainscoting Mortar: As recommended by the Tile Council of North America, (TCA), and ANSI.

H. Joint Grout: Latex - Portland Cement Grout, maximum 1/8" wide; one (1) part specified Portland Cement, one (1) part specified fine graded sand, with special latex additives, complying with ANSI A 118.4

I. Color of Grout: Medium gray or other dark color for floors and white or other light color for walls, wainscoting, and bases, all as selected by the Owner's Interior Designer.

J. Sealants: Sealants and primers for sealants shall comply with tile and sealant manufacturer's recommendations for vertical and horizontal surfaces, and shore hardness for traffic surfaces. Also refer to Section 07900 entitled Sealants.

K. Marble Thresholds:

1. Comply with ASTM C 503 with a minimum abrasive hardness of 10 per ASTM C 241 and provide marbles such as White Cherokee, Ozark Gray, Travernelle, White Alabama, or other color selected by the Owner's Interior Designer, or a prior approved substitute.

L. Floor Tile Reinforcing: 2" x 2" x (16/16) gage welded wire mesh ASTM A 82 and ASTM A 185.

M. Porcelain Tile Base: Minimum six inch (6") high porcelain tile bases with continuous brushed stainless steel cap J-Trim and vertical J-Ttrim where bases meet hollow metal door frames.

N. Cleavage Membrane: Provide a continuous crack isolation cleavage membrane, recommended by the porcelain tile manufacturer, under all floor tile.

O. Expansion Joints: Vertical and horizontal expansion joints shall comply with the American Tile Council Installation Method "EJ 171", latest edition.

P. Porcelain Tile Sealers: Provide Hillyard "Strong Guard", and "Seal 341", (or a prior approved substitute approved by the porcelain tile manufacturer), on all floor tile in all areas.

2.03 ADDITIONAL STORED PROCELAIN TILE MATERIALS: Provide the Owners with properly packaged, new, porcelain floor tiles and wainscot tiles equal to an additional square feet amount of three (3) percent of the square feet amount of porcelain floor tiles and wainscot tiles provided and installed for this Project. Said materials shall be stored on the Project Site for the Owner's future use. For example: If 2,500 square feet of porcelain tiles were provided and installed on this Project, provide the Owners with an additional  $2,500 \times .03 = 75$  square feet of additional porcelain tiles.

### PART 3 - EXECUTION

#### 3.01 PREPARING CONCRETE SLAB FOR FLOORS

A. Prepare concrete floor slab and grind down all sharp concrete fins and protruding aggregate.

B. Fill all holes in concrete slab, and provide a level and smooth surface for the cleavage membrane specified herein.

C. Verify heights of floor drains and provide positive slopes to all drains.

D. Report all unfavorable conditions prior to beginning Work.

#### 3.02 INSTALLING FLOOR TILE

A. Method for installing tile floors shall be the Tile Council of North America Installation Method "F 111", (un-bonded mortar bed), latest edition, cement mortar, cleavage membrane with reinforcing, minimum 1-1/4" to maximum 2" mortar bed, bond coat and porcelain floor tile specified.

B. Provide all tile, grout, reinforcing, cleavage membrane, and related materials in accordance ASTM A 108.01.3.3/A108.1A and with all Standards specified herein.

C. Provide tile uniformly sloped to all floor drains and true to line. Align all joints.

D. Minimum thickness of tile setting bed shall not be less than 1" thick.

E. Provide cleavage membrane and reinforcing specified herein in all floor tile thick-set applications. Provide cleavage membrane in accordance with ASTM A 108.1A.5, and according to tile manufacturer's instructions.

F. Refer to Structural Drawings for locations of recessed slab areas for thick-set tile setting beds; refer to Finish Schedules and Floor Plans for locations of porcelain tile; and refer to Specification Section 09100 with plan Drawings bound therein.

### 3.03 INSTALLING BASES AND WAINSCOTTING

A. Clean and grind down all protruding materials on gypsum board walls.

B. Provide leveling coat on walls where walls are not level and true to line.

### 3.04 GROUTING, SEALING AND CURING

A. Grout all tile Work on both floors, bases, and wainscotings with materials specified herein and in colors specified herein.

B. Grout shall be provided to comply with ANSI 108.5, 108.10, and ANSI 118.6.

C. Seal around all fixtures, penetrations and crevices with specified sealant.

D. Damp cure all tile Work and comply with all standards specified above in the paragraph entitled "complying".

### 3.05 INSTALLING EXPANSION JOINTS

A. Provide tile expansion joints same width as grout joints, but not less than 1/4" in widths and at locations recommended by the American Tile Council.

B. Provide tile expansion joints at minimum 24'- 0" spacing in both directions of tile floors, minimum 24'- 0" spacing for tile bases, with base expansion joints provided directly over and connected to the tile floor expansion joints.

C. Provide tile floor and tile base expansion joints directly over concrete slab structural expansion joints indicated in structural slabs, and at cold construction joints formed when placing the concrete slab. Minimum widths of structural expansion joints shall be minimum 3/4" wide, full length of expansion joints.

D. Provide tile base expansion joints directly over gypsum board control joints indicated.

E. Provide flexible compressible back-up strips in thick-bed mortar, full depth of mortar, prior to providing round back-up rods under sealants at all floor expansion joints.

### 3.06 INSTALLING MARBLE THRESHOLDS

A. Refer to Drawings for locations of openings, (framed doors and framed cased openings), and provide new marble thresholds at all openings on perimeters of rooms and areas scheduled to receive porcelain tile.

B. Provide all indicated and specified marble thresholds level, and securely set in grout.

C. Provide marble thresholds with tops not to exceed 1/2" above adjacent floor tile and above adjacent finish floors in accordance with ADA 303.3, latest ADA Standards. Provide the bottom 1/4" of the threshold vertically in accordance with ADA 303.2, and provide the top remaining 1/4" with a 1:2 slope in accordance with ADA 303.3.

D. Remove and replace all materials specified herein which are not level, uniformly sloped, plumb on walls, not laying true to line, are crooked, are not uniformly spaced, not meeting ADA requirements, and are not meeting all requirements specified herein.

### 3.07 SEALING JOINTS IN TILE

A. Clean all dirt, mortar, and other materials from tile.

B. Mop and clean with commercial cleaners prior to sealing.

C. Provide two (2) coats of Hillyard "Strong Guard" in accordance with the sealer manufacturer.

D. Provide one (1) coat of Hillyard "Seal 341" in accordance with the sealer manufacturer.

### 3.08 SLOPING FLOOR TILE

A. Do not provide tile level on large areas with slopes provided for short distances at floor drains, a few feet from floor drains.

B. Do not try to provide slope on porcelain tile just by human eye.

C. With an accurate leveling instrument, such as a surveyors laser level, accurately record and set tops of all floor drains in all Toilet Rooms lower than tops of all surrounding areas of porcelain tile floors.

D. In corners of toilet compartments and in corners of Toilet Rooms, provide tile mud bed higher than the adjacent regular vinyl composition tile floor levels located on other sides of walls, to insure that all porcelain floor tile surfaces drain to floor drains.

E. Remove and replace all porcelain tile floors in all of the Toilet Rooms where porcelain tile does not drain to the floor drains.

### 3.09 REPAIR WORK

A. Remove and replace all materials specified herein which are not level, uniformly sloped, plumb on walls, not laying true to line, are crooked, are not uniformly spaced, not meeting ADA requirements, and are not meeting all requirements specified herein.

B. Remove and replace tiles floors where some of the tile floor slopes immediately around the floor drains and some of the tile floor holds water.

C. Remove and replace all floor tile which hold water and reinstall tile with uniform slopes to floor drains.

D. Remove and replace all cracked, discolored, or damaged tile Work.

- END -

## SECTION 09500

### SUSPENDED CEILINGS

#### PART 1 - GENERAL

##### 1.01 GENERAL REQUIREMENTS

A. The provisions of all of the Contract Documents are hereby made a part of this Section.

B. The requirements of Section 01810 entitled Technical Section Requirements apply to this Section the same as though herein written out in full.

C. Refer to Section 01050, Project Coordination for coordination of all materials and equipment to be provided above finish ceilings.

D. Refer to other parts of the Contract Documents for notifying the Owner to contact their separate contractors for providing their materials and equipment including, but not limited to telephone, computer, and communication wiring, above the ceiling grid, prior to the Contractor installing finish ceilings.

E. In Public Area E210, provide wall covering on gypsum board columns, extending approximately 6" above ceiling grid, prior to attaching ceiling pre-finished metal grid angles to columns to avoid wall covering glue from later adhering to the ceiling grid. Chemicals used to remove wall covering glue causes the ceiling grid to rust; hence, later requires replacement.

F. A Thirty (30) year Warranty is required: In order to qualify for the manufacturer's required thirty (30) year warranty, verify that the ceiling grid manufacturer is the same company as the ceiling tile manufacturer or that if different, confirmation in writing has been verified prior to ordering materials.

G. Refer to Detail 1, Sheet A08, Finish Schedule, for removing all of the existing ceiling tiles and existing ceiling grid system in the existing Library Building, and replacing same with a new ceiling grid system and new ceiling tiles where indicated in the existing Library Building.

##### 1.02 STANDARDS

Meet requirements and recommendations of the applicable portions of the latest editions of Standards listed below:

- A. American Society for Testing Materials (ASTM)
- B. Underwriter's Laboratories (UL)
- C. International Building Code (ICB)
- F. Gypsum Association GA-600 Fire Resistance manual

### 1.03 SUBMITTALS

- A. Submit manufacturer's Product Data on all lay-in materials specified herein.
- B. Submit a 12 x 12 inch samples of each type of lay-in acoustical tile for review, and submit one (1) sample of the lay-in suspension system showing joining of main runners to cross member.
- C. Submit Sample of manufacturer's thirty (30) year warranty specified herein when submitting Product Data and submit actual manufacturer's warranty prior to Substantial Completion.

### 1.04 GENERAL CEILING TYPES

- A. Refer to the reflected ceiling plans, notes, and ceiling details for various details of different types of interior and exterior ceilings and soffits.
- B. Refer to Specification Section 05400 Lightgauge Metal Framing, and the Drawing details for:
  - 1. Providing light-gage metal furring channels, cold rolled channels, suspension wires and other light-gage metal framing required by the manufacturer of the suspended ceilings specified herein.
  - 2. Providing various sized and depths of light-gage metal ceiling joists and perimeter metal tracks for gypsum board ceilings fastened directly to ceiling joists.
- C. Refer to Specification Section 09260, Gypsum Wallboard, and the Drawing details for gypsum board materials for ceilings.

## PART 2 - PRODUCTS

### 2.01 MANUFACTURERS

- A. Suspended Ceiling Material Manufacturers:
  - 1. Manufacturers are as specified above or below, or a prior approved substitute.
  - 2. Items specified herein by specific manufacturers are used only to denote the quality standard of product desired and that they do not restrict bidders to the specific brand, make, manufacturer, or specification named; and that they are used only to set forth and convey to prospective bidders the general style, type, character, and quality of products desired; and that equivalent products may be acceptable.
  - 3. It shall be the responsibility of the professionally employed Architect or Engineer, or Interior Designer, to determine what is considered an equivalent product, meeting also Owner approval, on any and

all Projects in which they have been legally employed to perform professional services.

4. Other manufactures specified above or below, or other prior approved substitutes may be provided if they meet all requirements specified herein and are approved substitutes by the Architect, Engineer, or Interior Designer.

B. Specific Ceiling Tile Material Manufacturers:

1. Lay-in Ceiling Tile: Donn; USG; or a prior approved substitute.

2. Lay-in Ceiling Tile Grid Suspension System: Donn/USG; Armstrong; or a prior approved substitute.

3. Both acoustical lay-in ceiling tiles and acoustical lay-in ceiling tile grid suspension systems shall be manufactured by the same manufacturing company, as required by the manufacturers to obtain the specified (30) year warranty; however, if a ceiling tile manufacturer offers to provide a (30) year warranty with a different grid system manufacturer, this shall be confirmed in writing prior to ordering materials.

2.02 CEILING MATERIALS

A. Type 1 Lay-In Acoustical Ceiling System:

1. Type 1 Suspension Grid System: USG/Donn "DX" interior, medium duty, 15/16" wide face/white color; or Armstrong Prelude XL grid, 15/16" wide face/white color.

2. Type 1 Lay-In Acoustical Ceiling Tiles, 24" x 24" x 5/8", square cut lay-in units:

USG Radar Climaplust Item No. 2210; or Armstrong No. 1728, "Fine Fissured RH 90; or a prior approved substitute.

3. Ceiling tile shall have a factory applied vinyl latex paint finish, color of white on wet-formed mineral fiber, light reflectance 0.80 - 0.84; ASTM E 1264 minimum NRC = 0.50 - 0.60, minimum CAC = 35-39, maximum flame spread = 25; Class A rating, average R value = 1.5 - 1.85 at 75 degrees F;

4. Special Cut Suspended Ceiling Tiles:

Provide pieces of suspended acoustical ceiling tile larger than 24" x 24", cut from 24" x 48" acoustical ceiling tile, to avoid providing suspended acoustical ceiling tile with a dimension smaller than 5" x 24" on perimeters of all suspended acoustical ceilings.

5. Provide the manufacturer's 15 year warranty for no visible sag at 104 degrees F, 90% relative humidity.

B. Type 2 Painted Gypsum Board Ceiling:

Materials: Suspended single layer of 5/8" Type X fire rated gypsum board, taped, floated, and painted, as specified in Section 09260, Gypsum Wallboard; with 18 gage metal framing on 16" centers on 1-1/2" cold rolled channels on 48" centers as specified in Section 05400, Lightgage Metal Framing, and as detailed on the Drawings, suspended with eight (8) gage wire, minimum 48" both ways.

C. Exterior Exposed Plaster Ceiling Beams and Soffits:

Materials: Exterior plaster ceiling beams and plaster soffits shall be as specified in Section 09200, Plaster, and as detailed on the Drawings.

D. Refer to Drawings for exact locations of different types of ceilings specified.

E. Refer to Section 09900, Painting, for painting gypsum board ceilings specified above.

2.03 ADDITIONAL REQUIRED STORED SUSPENDED CEILING MATERIALS:

Provide the Owners with properly packaged, new, suspended ceiling tile and grid materials equal to an additional square feet amount of three (3) percent of the square feet amount of suspended ceiling materials provided and installed for this Project. Said materials shall be stored on the Project Site for the Owner's future use. For example: If 20,000 square feet of suspended ceiling materials were provided and installed on this Project, provide the Owners with an additional  $20,000 \times .03 = 600$  square feet of suspended ceiling materials.

PART 3 - EXECUTION

3.01 INSTALLATION

A. Lay-In Suspension Systems:

1. Metal Hanger Inserts and Metal Suspension Component Materials:

Provide and install as recommended by the lay-in suspension system manufacturer and "Recommended Practice for Installation of Metal Ceiling Suspension Systems for Acoustical Tile and Lay-in Panels" to meet ASTM C 635, L/360 classification, and ASTM E 1264.

2. Hanger Wire Spacing:

a. Minimum four (4) feet centers in both directions, minimum eight (8) gage.

b. Install additional hangers at ends of each suspension member, and at all light fixtures, and minimum six (6") inches from vertical surfaces.

3. Tees and Wall Angles: Install metal main tees and cross tees, and matching metal wall angle molding level, straight, and in line, according to manufacturers' recommendations, and square to adjacent walls.

4. Provide 1-1/2" cold roll channels specified in Section 05400, Light-gage Metal Framing where required.

#### B. Special Cut Size Suspended Acoustical Ceiling Units

1. Provide pieces of suspended acoustical ceiling tile larger than 24" x 24", cut from 24" x 48" acoustical ceiling tile, to avoid providing suspended acoustical ceiling tile with a dimension smaller than 6" x 24" on perimeters of all suspended acoustical ceilings as specified herein.

2. Layout of ceiling tiles indicated were designed in most areas to provide centered light fixtures.

3. In providing centered light fixtures, and where tiles larger than 24" x 24" have to be provided on the four (4) perimeters, corner tiles would have to be larger than 24" in both directions. Where conditions like this occurs, or where other similar conditions occur, consult with the Architect prior to providing the suspension system and the suspended acoustical units.

#### C. Suspended Acoustical Ceiling Units

1. Install lay-in suspension systems and lay-in units in level plane, in straight line courses, with materials bearing all around on suspension members.

2. Provide ceiling tiles in a snug fitting manner, fully supported by a minimum of 3/8" of the metal lay-in suspension system.

3. Refer to other Sections and Mechanical and Electrical Documents for materials and equipment to be provided within the ceiling grids.

4. Remove and replace suspension systems which allow ceiling tile to be exposed on edges, or which allows ceiling tiles to have one side of a tile fall down slightly below the lay-in suspension system.

5. Remove and replace all damaged materials specified herein.

- END -

## SECTION 09650

### RESILIENT FLOORING

#### PART 1 - GENERAL

##### 1.01 GENERAL REQUIREMENTS

A. The provisions of all of the Contract Documents are hereby made a part of this Section.

B. The requirements of Section 01810 entitled Technical Section Requirements apply to this Section the same as though herein written out in full.

C. Obtain confirmation from all manufacturers of all materials specified herein that all materials and also material adhesives are non-asbestos containing.

D. Provide a resilient floor manufacturer's trained and authorized representative to conduct all test specified herein, to supervise all Work specified herein, and to verify that all materials are provided and professionally installed in strict accordance with the resilient floor material manufacturer's recommendations.

E. Refer to Specification Section 09100, Finish Floor Locations and Layout, with accompanying drawings bound therein, with a Key indicating locations of different resilient flooring types in different rooms and areas, such as vinyl composition tile VCT-1 Floor Tile; and VCT-1 Floor Tile with random accent vinyl composition Floor Tiles chosen from different color tiles chosen from VCT-2 through VCT-5 colors; and LVP-1 solid vinyl flooring.

F. The Owner's Interior Designer will subsequently provide a more detailed layout of patterns, borders, accent tiles, etc. for different colors of vinyl composition tile for rooms and areas where designated with the Roman Numeral (IX) in Specification Section 09100, Finish Floor Locations and Layout.

##### 1.02 STANDARDS

Meet requirements and recommendations of the applicable portions of the latest editions of Standards listed below:

A. American Society for Testing Materials (ASTM)

B. Federal Specifications (FS)

C. Federal Public Law 101-336, Title III, Americans with Disabilities Act (ADA); and latest ADA Standards.

D. International Building Code (IBC)

##### 1.03 SUBMITTALS

A. Submit manufacturer's Product Data on all materials specified herein including but not limited to their recommended floor underlayment and their recommended adhesives required to obtain the resilient floor manufacturer's five (5) year warranty specified herein.

B. Submit manufacturer's full range of samples in duplicate for texture and color selection of all materials specified herein.

C. Submit manufacturer's cleaning and maintenance instruction in duplicate.

D. Submit manufacturer's warranty specified herein in duplicate.

#### 1.04 ENVIRONMENTAL REQUIREMENTS

A. Maintain temperatures in spaces to receive resilient floor materials between 70 and 90 degrees Fahrenheit for not less than 48 hours before, during and after installation.

B. Maintain temperature above 55 degrees Fahrenheit after forty-eight (48) hour period specified above.

#### 1.05 COMPLIANCE

A. Adhesives and latex underlayment provided shall be manufactured by the same manufacturer as the resilient materials manufacturer, or shall be of brand names recommended, in writing, by the resilient material manufacturer to insure securing the minimum five (5) year warranty specified herein.

B. Manufacturer's resilient floor materials warranty are never honored unless the resilient floor materials manufacture approves the specific underlayment materials and approves the specific adhesive materials provided; hence, if not approved, the Contractor will have to pay for total resilient floor replacement if any materials or labor are found to be defective.

C. Materials specified herein shall be provided only by highly trained and skilled installers recommended and approved by the specified material manufacturers.

D. If any floor material problem, or any installation problem occurs because of the Contractor's failure to use trained and skilled installers, the Contractor shall remove, replace, and re-install all new resilient floor materials at no additional cost to the Owner.

E. If any floor material problem, or any installation problem occurs because of the Contractor's failure follow all requirements specified herein, the Contractor shall remove, replace, and re-install all new resilient floor materials at no additional cost to the Owner.

F. If any floor material problem, or any material installation problem occurs because of the Contractor's failure to use adhesives and underlayment recommended, in writing, by the resilient floor material's manufacturer, the Contractor shall remove, replace, and re-install all new resilient floor materials at no additional cost to the Owner.

G. All adhesive and underlayment materials provided by the Contractor shall be recommended, in writing, by the floor material manufacturer, and shall be installed in strict accordance with the manufacturer's recommendations, after the manufacturer's representative tests and approves the concrete slab preparation and all concrete slab conditions.

H. All materials specified herein shall be "first quality" as specified by the manufacturer to qualify for the minimum 5 year warranty specified herein, as opposed to "irregulars", "remnants", or standards sold "as is".

I. As a general rule, a 4" thick slab will require a minimum of 3 months drying time after placement, prior to performing moisture tests specified herein and providing resilient floors specified herein.

J. Gypsum type or gypsum containing floor patching products and underlayment products shall not be provided under resilient floors specified herein.

#### 1.06 WARRANTY

A. Vinyl composition tile (VCT): Provide manufacturer's minimum five (5) year commercial flooring products standard limited warranty in duplicate, covering all resilient vinyl composition tile (VCT) floors specified herein.

B. Solid Vinyl Resilient Floor Materials: Provide manufacturer's minimum ten (10) year, (or with some manufacturers, Standard 20 year), commercial flooring products standard limited warranty in duplicate, covering all resilient solid vinyl resilient floor materials specified herein.

C. Warranty shall cover manufacturing defects in material and workmanship, replacement, and repairs.

#### 1.07 FINISH FLOOR MOCK UP PANELS

A. After reviewing approved color Samples, and after inspecting, preparing, sanding, and testing a part of the concrete slab, provide latex underlayment and mock up resilient floor materials on a minimum 10 feet square section of floor for review by the Owner, Architect, and the Owner's Interior Designer.

B. Review all concrete slab test results and finish floor installation with the Owner and Architect.

C. The purpose of the finish floor mock up panels is to establish minimum standards for a level floor, to establish minimum standards for finish floor workmanship, and to review color and design requirements of patterns for laying resilient floor materials, resilient floor materials joint laying methods, prior to providing large quantities of finish floors.

D. Remove and reinstall finish floor mock up panels if panels have been determined to be unsatisfactory to the Owner, Architect, and the Owner's Interior Designer and provide subsequent approved finish floor mock up panels.

## PART 2 - PRODUCTS

### 2.01 MANUFACTURERS

#### A. Resilient Flooring Manufacturers:

1. Manufacturers are as specified above and below, or a prior approved substitute.

2. Items specified herein by specific manufacturers are used only to denote the quality standard of product desired and that they do not restrict bidders to the specific brand, make, manufacturer, or specification named; and that they are used only to set forth and convey to prospective bidders the general style, type, character, and quality of products desired; and that equivalent products may be acceptable.

3. It shall be the responsibility of the professionally employed Architect or Engineer, or Interior Designer, to determine what is considered an equivalent product, meeting also Owner approval, on any and all Projects in which they have been legally employed to perform professional services.

4. Other manufactures specified above or below, or other prior approved substitutes may be provided if they meet all requirements specified herein and are approved substitutes by the Architect, Engineer, or Interior Designer.

#### B. Specific Resilient Flooring Manufacturers:

1. Vinyl Composition Tile: Armstrong; Mannington; or a prior approved substitute manufacturer offering a minimum of 32 different color selections for various color designs and patterns specified herein.

2. Solid Vinyl Resilient Floor: Armstrong; Mannington; or a prior approved substitute.

3. New Resilient Rubber Base: None.

- a. Refer to drawings for removal of existing rubber bases.
- b. Refer to Finish Schedule on Sheet A08 & Section 06200 for painted softwood wood bases with shoe molding, or taller wood bases around exposed columns, out-side of Tech Area, X125, & on both sides of short wall Type H in Public Area E210, indicated and detailed on Drawing Sheet A15.

4. Resilient Floor Edge Treatment: Armstrong, Burke, Flexco, Johnsonite, Mercer, Roppe, or a prior approved substitute.

5. Underlayment and Resilient Floor Adhesives: As recommended by the resilient floor manufacturer. Do not provide underlayment and adhesives under resilient floors that are not approved by the manufacturers because it will void their manufacturer's warranty.

## 2.02 MATERIALS

### A. Vinyl Composition Tile:

1. Non-asbestos containing, twelve inch square vinyl composition tile; as manufactured by Armstrong "Chromaspin", 12" x 12",; Mannington "Touchstone", 12" x 12"; or a prior approved substitute, with a minimum average weight of 1.4 pounds per square foot; minimum 1/8" gauge thickness; minimum recommended load limit of 50 PSI.

2. All vinyl composition tile shall meet or exceed tests for: Coefficient of Friction to comply with minimum ADA Standards, Latest Edition; Flammability Rating of Class 1 > 0.45CRF, and Smoke Developed of less than 450 per ASTM E-662, and a Class 1 ASTM E-648/NFPA 253 Radiant Flux; and a minimum Static load limit of 125 PSI, ASTM F970;

3. Vinyl composition tile shall have be provided in both Class 1 Solids, and also Class 2 patterns, both with an actual through-chip and through-color/through "pattern" construction per ASTM F1066.

4. Through color as specified herein shall mean that the durable tile color and tile pattern on the front of the tile shall match the more porous tile color and the tile pattern on the back.

5. Vinyl composition tile shall be provided in floor patterns indicated on the Drawings from a selection of a maximum of four (4) different colors of tile.

### B. Solid Vinyl Luxury Vinyl Plank (LVP) Resilient Floor Material:

1. Non-asbestos containing Armstrong Natural Creations Luxury Solid Vinyl Flooring, 48" x 6", similar to Fruitwood Buckwheat #TP072, with a 10 year warranty; Mannington Amtico Collection, 36" x 6", with a 20 year warranty; or a prior approved substitute.

2. All solid vinyl resilient floor materials shall be meet the following minimum performance tests:

a. Residual Indentation of less than 8% per ASTM F1914; Flexibility of <1.0", no cracks or breaks per ASTM F 137; Dimensional Stability of less than 0.024" per linear foot; per ASTM F 2199; Chemical & Stain Resistance of ASTM F 925; Resistance to Heat of <8 per ASTM F 1514; Resistance to Light of less than 8 per ASTM F1515; Static Load Limit of minimum 250 pounds with no visual indentation per ASTM F 970; and Flammability Fire Test Flame Spread/Smoke Developed of Class 1/<450 per ASTM E 648 and ASTM E 662.

b. All solid vinyl resilient floor materials shall have a minimum wear layer thickness of 0.020, (0.5 mm) and a minimum overall thickness of 0.125", (3.2 mm), with a ten (10) year manufacturer's warranty; or a minimum wear layer thickness of 40 mils, (1.0 mm) and a minimum overall thickness of 0.096", (2.5 mm), with a twenty (20) year manufacturer's warranty, and with strips being provided without beveled edges.

C. Troweled Underlayment: Resilient floor non-asbestos containing latex cement based underlayment approved and recommended in writing by the resilient finish floor manufacturer.

D. Adhesives: Resilient floor non-asbestos containing adhesive approved and recommended in writing by the finish floor manufacturer for heavy duty commercial installations where indicated.

E. Resilient Floor Edge Treatment:

1. Carpet to VCT or Solid Vinyl: Mercer 705 Super Imperial Reducer, cut to fit flush with 1/8" resilient floor materials.

2. VCT or Solid Vinyl to Concrete: Mercer 633 tile and resilient floor materials Reducer.

3. Carpet to Concrete: Mercer 705 Super Imperial Reducer, not cut.

4. Chord Floor Mat, (if any), to VCT or Solid Vinyl: Mercer 705 Super Imperial Reducer, cut to fit flush with 1/8" resilient floor materials.

5. Carpet to Carpet: Mercer 970 Single Flange Track with Mercer Snap-Down T recommended by Mercer for carpet height.

6. Provide resilient floor edge treatment materials everywhere where two (2) dissimilar floor materials occur and where indicated, detailed and specified.

F. Resilient Feature Resilient Floor Materials Strips: Same material as above resilient floor materials, except in a solid accent color, minimum 1/8" thick x minimum 1" wide x minimum 24" long, provided

full width directly beneath all interior doors, between interior metal door frames where directed by the Owner's Interior Designer.

G. Special Different Color Resilient Floor vinyl composition tile Patterns, Borders, and Designs:

1. Refer to Section 09100, Finish Floor Locations and Layout, with accompanying drawings bound therein, with a Key indicating locations of resilient flooring types in different rooms and areas, such as VCT-1 Floor Tile; and VCT-1 Floor Tile with random accent Floor Tiles chosen from VCT-2 through VCT-5 colors; for example VCT-1 tile mixed with four different other VCT tile colors.

2. Special different color resilient floor patterns, borders, accents and designs shall be a provided using all of the different 32 resilient tile colors specified above.

3. Special different colors and accent colors for VCT-1 and VCT-2 through VCT-5 shall be selected by the Owners Interior Designer.

### PART 3 - EXECUTION

#### 3.01 INSPECTING SURFACES FOR FINISH FLOORS

A. Early during construction, after concrete slabs are in place, begin to inspect all concrete floor slab areas to insure that the slab surfaces shall be provided level, smooth, and true to line prior to providing finish floors specified herein.

B. Maintain a floor plan print, marked up with a pencil, indicating the concrete slab low spots and low areas observed.

C. Record areas on the print where standing water occurs after rain falls on the concrete slabs.

D. Keep and maintain this floor plan print in the temporary Project office until prior to Substantial Completion and submit same to the Architect.

#### 3.02 PREPARING FLOORS

A. Provide a Terrazzo grinder to grind down all high spots on both new and existing concrete slabs.

B. Remove all protruding coarse, concrete aggregate, concrete fins, trowel marks, and other protruding slab imperfections.

C. Entirely remove and grind down all mortar and concrete droppings, and all other materials which could adversely affect the finish floor specified.

D. Scrape off, scrub, wash down, and thoroughly clean off all mud and all other adverse materials.

### 3.03 SANDING FLOORS

A. Prior to providing any materials specified herein, machine sand the entire concrete slab where all resilient floor materials are proposed to be provided.

B. Provide a special low speed electric buffer with a sanding disc attachment, with sanding discs, or similar electrically operated machine to sand the entire concrete floor slab surfaces and to remove all minor imperfections concrete slab curing compounds.

C. After providing final layer of latex materials specified herein, machine sand latex surfaces where resilient floor materials are proposed to be provided.

D. Feather edge all perimeters of latex underlayment.

### 3.04 TESTING CONCRETE FLOORS

A. After sanding concrete slab, test slab bonding compatibility with specified latex underlayment materials and with specified resilient floor adhesive materials in accordance with manufacturer's recommendations.

B. If bonding compatibility test are not acceptable by the floor manufacturer's authorized representative, grind all non-acceptable areas of the concrete slab with a Terrazzo grinder in accordance with the material manufacturer's recommendations.

C. Provide manufacturer's required moisture tests on all areas of concrete slabs in accordance with manufacturer's recommendations prior to providing latex underlayment, adhesives, and resilient floor materials specified herein. (Moisture vapor transmission shall not exceed 5 pounds per 1,000 square feet per 24 hours, tested in accordance with ASTM F 1969).

D. Provide anhydrous calcium chloride quantitative tests on all areas of concrete slabs for pH readings in accordance with manufacturer's recommendations, prior to providing latex underlayment and resilient floor materials. (Surface pH shall not exceed 9).

E. Comply with all material manufacturer's test procedures, instructions, and recommendations.

### 3.05 INSTALLING LATEX UNDERLAYMENT

A. Using the floor plan print specified above, fill all recorded holes and recorded low spots with the specified troweled cement latex underlayment.

B. Also check for concrete slab low spots and depressions with a six (6) foot metal straight edge and record same on the floor plan print.

C. Apply latex underlayment with a trowel in strict accordance with the approved specified latex manufacturer's recommendations, over all recorded concrete slab low spots and depressions.

D. Level latex underlayment with a metal straight edge, minimum 6 feet long, longer if necessary, depending on the irregularities of the un-level concrete slab.

E. Rotate metal straight edge in all directions on all floor areas to insure that the latex underlayment is provided flat and true to line on all surfaces and in all areas.

F. In smaller rooms and areas, where a 6 foot straight edge cannot be used to level latex underlayment, provide maximum lengths of metal straight edges possible.

G. Insure that latex underlayment is thoroughly dried and cured prior to applying successive layers, in thicknesses in strict accordance with manufacturer's instructions.

H. Allow all layers and final layer of latex underlayment to cure in accordance with manufacturer's recommendations prior to beginning resilient floor materials Work.

I. Provide extreme care to insure that resilient floors are level and true to line adjacent to walls because this is where a level, finish base will have gaps between the bottom of the base and top of finish floor.

J. If after resilient floor materials are in place, if the floor is found not to be level, remove all resilient floor materials, resilient floor adhesive, latex underlayment, and start over.

K. Refer to Section 09100, Finish Floor Locations and Layout for special conditions to possibly provide a thicker underlayment ramp up to the thicker chord tile.

### 3.06 INSTALLING RESILIENT FLOORS AND EDGE TREATMENT

A. Apply all adhesives with notched trowels at the adhesive manufacturer's recommended rate.

B. Do not allow build-up of adhesive which may later squeeze through joints.

C. Lay resilient floor materials to center of room or space and Work to perimeter, laying resilient floor materials not less than six (6") inches wide at perimeters if possible.

D. Fit all resilient floor materials neatly and tightly into breaks, recesses, around penetrating items, and under saddles, thresholds and trim.

E. Provide specified solid accent color resilient feature tile strips directly beneath all interior doors, full width, between all interior metal door frames and all metal cased opening frames. Colors of feature tile strips shall be as directed by the Owner's Interior Designer and Architect.

F. Provide special different color VCT resilient floor accents, patterns, borders, and designs specified herein.

G. Provided additional latex underlayment under joints between resilient flooring and other floor materials; and under joints between resilient flooring and marble thresholds, metal thresholds, and resilient floor edge treatment, to insure a smooth transition and tight fitting joints between resilient floors and all other materials.

H. Clean completed Work and protect same from traffic until Substantial Completion.

I. Remove floor materials, provide new additional latex underlayment, and replace with new materials where resilient finished floor is not level and true to line.

J. Remove and replace all resilient floor materials which are scratched, marred, dented, cracked or broken, not aligned, fitted with non-uniform joints, placed over protruding aggregate or debris, spaced too far from similar and dissimilar materials, and stained with materials which cannot be removed.

K. Provide resilient edge treatment on all edges of all resilient floor materials where resilient floors adjoin other different floor materials, as detailed on the Drawings, as specified herein, and as recommended by the edge treatment manufacturer, and as directed by the Owner's Interior Designer and Architect.

### 3.07 REQUIRED RESILIENT FLOOR MATERIAL REVIEW AND FLOOR FINISH REPLACEMENT AFTER OCCUPANCY

A. Resilient floors are usually installed after the Project is very near completion; hence, because of very light occupant traffic, the resilient floors usually appear to be acceptable immediately after installation whereby the Contractor receives payment from the Owner for same.

B. However, after Owner occupancy, with foot traffic when occupants begin walking on the floor, (and after the Contractor has been paid, and has paid his subcontractor), sometimes, small pebbles are protruding upwards, and small resilient floor indentations are found,

thus causing small resilient floor materials cracks, which get progressively worse, and which are definitely, most unacceptable for this Project.

C. These imperfections are clearly observed after occupancy, and especially after the floor has been waxed.

D. The resilient floor material failure is usually caused solely by failure of the Contractor to properly level, sand, clean, and prepare the concrete floor slab as specified herein.

E. If defective concrete surface preparation is detected by resilient floor material failure after Owner occupancy, and after the Contractor has been paid, the Contractor or his bonding company shall remove all damaged resilient floor material and replace same with resilient floor material from the same lot color number, so as to match color and pattern of adjacent resilient floor materials.

F. If replaced individual resilient floor materials do not match color and pattern of adjacent resilient floor materials, all resilient floor materials in the entire room or areas shall be removed and provided with new resilient floor materials.

G. It has been observed often in the past, where after Owner occupancy, that sometimes entire resilient floors in the entire building had to be replaced because of Contractor failure to properly prepare and clean the concrete slab.

H. An acceptable resilient floor installation is a floor installation where the Contractor provided the concrete slab level, clean, and properly prepared, and after Owner occupancy, foot traffic on a poorly provided concrete slab does not cause resilient floor materials failure.

I. The Contractor is cautioned to thoroughly review every floor in every room and every area prior to providing resilient floor adhesives and resilient floor materials to avoid having to replace resilient floor materials.

- END -

## SECTION 09685

### CARPET

#### PART 1 - GENERAL

##### 1.01 GENERAL REQUIREMENTS

A. The provisions of all of the Contract Documents are hereby made a part of this Section.

B. The requirements of Section 01810 entitled Technical Section Requirements apply to this Section the same as though herein written out in full.

C. Refer to Section 09100, Finish Floor Locations and Layout Plan with Drawings bound therein for different specific carpet locations designated with Roman Numerals and other designations such as CPT-1, CPT-2, etc., and refer to Detail 1, Sheet A08 Finish Schedule.

##### 1.02 STANDARDS

Meet requirements and recommendations of the applicable portions of the latest editions of Standards listed below:

- A. American Society for Testing Materials (ASTM)
- B. National Fire Protection Association (NFPA)
- C. International Building Code (IBC)
- D. Latest Revisions to ADA.

##### 1.03 SUBMITTALS

A. Submit manufacturer's Product Data on all materials specified herein with actual Samples of different carpets specified.

B. Submit copy of manufacturer's fifteen (15) year Warranty specified herein for Carpet CPT-1, CPT-2, and CPT-3 through CPT-7.

C. Submit manufacturer's Product Data & color samples for all carpet accessories.

#### PART 2 - PRODUCTS

##### 2.01 MANUFACTURERS

A. Carpet & Material Manufacturers:

1. Manufacturers are as specified above or below, or a prior approved substitute.

2. Items specified herein by specific manufacturers are used only to denote the quality standard of product desired and that they do not

restrict bidders to the specific brand, make, manufacturer, or specification named; and that they are used only to set forth and convey to prospective bidders the general style, type, character, and quality of products desired; and that equivalent products may be acceptable.

3. It shall be the responsibility of the professionally employed Architect or Engineer, or Interior Designer, to determine what is considered an equivalent product, meeting also Owner approval, on any and all Projects in which they have been legally employed to perform professional services.

4. Other manufactures specified above or below, or other prior approved substitutes may be provided if they meet all requirements specified herein and are approved substitutes by the Architect, Engineer, or Interior Designer.

B. Specific Carpet, Yarn, Accessories, & Chord Tile Manufacturers:

1. Carpet: Interface; Lees; Bentley Mills; or a prior approved substitute.

2. Yarn Manufacturers: Aquafil; Universal; or a prior approved substitute.

3. Carpet Accessories: Mercer, Flexco, Johnsonite, Roppe or a prior approved substitute.

4. Chord Tile Carpet CPT-8: Musson Rubber Co.; Flexco's Flexco-Tuf; or a prior approved substitute.

2.02 MATERIALS

A. Carpet Types: Provide carpet in three (3) different types where noted on the 8-1/2" x 11" Plans in Specification Section 09100 Finish Floor Locations and Layout Plan, for CPT-1, CPT-2, CPT-3 through CPT-7; and provide further below specified Chord Tile for CPT-8.

1. CPT-1: Size: 9.845" x 39.38" / (25 cm x 1m), manufactured by Aquafil Yarn Manufacturer; with a Yarn System of 100% Recycled Content Type 6 Nylon; with Tufted Textured Loop Product Construction; with Mergeable Dye Lots; with 15 ounces per square yard / 509 grams per square meter Tufted Yarn Weight; with 1/12" Machine Gauge / 47.2 ends / 10 cm; with a Pile Height of 0.18" / 4.6 mm; with a Pile Thickness of 0.12" / 3 mm; with (9) Stiches Per Inch, 35.4 ends / 10cm; with a Pile Density of 4,500 ounces per cubic yard / 169.6 grams per cubic meter; and with a Fiber Modification Ratio of 1.9 to 2.2.

2. CPT-2: Size: 19.69" x 19.69" / (50 cm x 50 cm), manufactured by Aquafil Yarn Manufacturer, with a Yarn System of 100% Recycled Content Type 6 Nylon; with Tufted Pattern Loop Product Construction; with Non-Mergeable Dye Lots; with 5 ounces per square yard / 848

grams per square meter Tufted Yarn Weight; with 1/10" Machine Gauge / 39.4 ends / 10 cm; with a Pile Height of 0.21" / 5.3 mm; with a Pile Thickness of 0.127" / 3.2 mm; with (13) Stiches Per Inch, 51.2 ends / 10cm; with a Pile Density of 7,087 ounces per cubic yard / 264.9 grams per cubic meter; and with a Fiber Modification Ratio of 1.7 to 1.9,

3. CPT-3 through CPT-7: Size: 19.69" x 19.69" / (50 cm x 50 cm), manufactured by Universal Yarn Manufacturer, with a Yarn System of Post-Consumer Content 6.6 Nylon; with Tufted Textured Loop Product Construction; with Non-Mergeable Dye Lots; with 18 ounces per square yard / 610 grams per square meter Tufted Yarn Weight; with 1/12" Machine Gauge / 47.2 ends / 10 cm; with a Pile Height of 0.15" / 3.8 mm; with a Pile Thickness of 0.101" / 2.6 mm; with (12) and (10) Stiches Per Inch, 39.4 and 47.2 ends / 10cm; with a Pile Density of 6,416 ounces per cubic yard / 234.7 grams per cubic meter; and with a Fiber Modification Ratio of 1.7 to 1.9.

4. CPT-8: Chord Tile, 12" x 12" in "Parquet" or strip pattern, by Musson Rubber Co. Designer Tile, No. TT-12D; Flexco's Flexco-Tuff; or a prior approved substitute.

B. Carpet General Performance Requirements: All three (3) types of above specified carpet, CPT-1, CPT-2 and CPT-3 through CPT-7 shall meet the following minimum performance requirements:

1. Floor Radiant Panel: (ASTM E-648) Class 1.
2. Smoke Density: (ASTM E-662)  $\leq$  450.
3. Light-fastness: (AATCC 16-E)  $\geq$  4.0 @ 60 AFU's.
4. Static: (AATCC-134) < 3.0 KV
5. Dimensional Stability: AACHEN Din 54318 < .10%
6. Standard Backing & Options: GlasBac R; GlasBac RE; or NexStep R
7. Dye Method: 100% Solution Dyed
8. Soil Stain Protection: Proteki 2 R
9. Preservative Protection: Intercept R
10. Traffic Classification: Heavy
11. Preservative Efficacy: (AATC 174 Parts 2&3) 99% Reduction/No Mold 7 Days (ASTM E 2471) Complete Inhibition

12. Indoor Air Quality: Green label Plus #GLP0820

13. Environmental Properties: Environmental Product Declaration; 3<sup>rd</sup> Party Verified Climate Neutral NSF/ANSI - 140 Gold - Sustainable Carpet Assessment Standard; Carpet to Carpet End of Life Recycling.

14. Reclamation: Recyclable through Re-Entry R 2.0 - Call 1-800-733-6873.

15. Recycle Content: CPT-1: (PI 57% & PC 4%); CPT-2: (PI 45% & PC 35%); and CPT-3 through CPT-7: (PI 35% & PC 34%); (TC = PI + PC).

16. Warranty: CPT-1, CPT-2 and CPT-3 through CPT-7 shall have manufacturer's 15 Year Standard Non-Prorated Warranty

C. Chord Tile: Musson's "Designer Tile" pattern, or Flexco's Flexco-Tuff in various colors, 12" x 12" square, with a close nap carpet like surface of specially processed rubber fabric made from recycled heavy duty truck tires.

D. Latex Underlayment: A latex underlayment recommended in writing by the carpet manufacturer.

E. Carpet Adhesive: Multipurpose latex base waterproofing adhesive recommended in writing and approved in writing by the carpet manufacturer.

F. Carpet Accessories: Vinyl carpet reducers, carpet transition reducers, tile and carpet joiners, carpet edging and edge guard and standard miscellaneous vinyl accessories manufactured by the specified manufacturers in Section 09650, Resilient Flooring.

#### 2.03 ADDITIONAL STORED CARPET MATERIALS:

A. Provide the Owners with properly packaged, new, carpet materials equal to an additional square feet amount of three (3) percent of each of the carpet types, (i.e., each of CPT-1, CPT-2, CPT-3 through CPT-7 and CPT-8), provided and installed for this Project.

B. Said materials shall be stored on the Project Site for the Owner's future use.

C. For example: If 15,500 square feet of carpet type CPT-1 were provided and installed on this Project, provide the Owners with an additional  $15,500 \times .03 = 465$  square feet of additional CPT-1; and if 440 square feet of CPT-8 was installed, provide the Owners with an additional  $440 \times .03 = 14$  square feet of additional CPT-8 .

### PART 3 - EXECUTION

#### 3.01 PREPARATION

- A. Prepare floor areas to insure that the slab surfaces are level, smooth, and true to line.
- B. Grind down all high spots with a Terrazzo grinder, and remove all protruding coarse, concrete aggregate, fins, and trowel marks.
- C. Remove all mortar and concrete droppings.
- D. Scrape and wash off all mud and other deleterious materials.
- E. Sand entire slab to remove curing compounds and concrete slab imperfections.
- F. Fill all cracks, holes, depressions, and low spots with latex underlayment.
- G. Apply latex underlayment with a trowel at rates recommended by the underlayment manufacturer.
- H. Level latex underlayment with a metal straight edge, minimum 6 feet long.
- I. Rotate metal straight edge in all directions on all areas to insure that the latex underlayment is provided true to line on all surfaces and in all areas.
- J. In smaller rooms where a 6 foot straight edge cannot be used, provide maximum lengths of metal straight edges possible.
- K. Insure that latex underlayment is thoroughly dried and cured prior to applying successive layers in strict accordance with manufacturer's instructions.

### 3.02 INSTALLATION CARPET

- A. Lay out each room or area by squaring the room and line up the location for the first seam.
- B. Cut and trim all carpet before applying carpet adhesive to the floor.
- C. Check for pattern, color matching and shading that may be in the carpet and match same.
- D. Position the carpet along the location of the seams. Trim and fit all side seams and cross seams.
- E. Install carpet such that the pile lay is in the same direction.
- F. Adhesively apply all carpet and glue same.
- G. Apply adhesives at rates recommended by the manufacturer.

H. Remove and replace all carpet which:

1. Has glue stains or any other stains.
  2. Has minor or major edge or seam raveling.
  3. Has poorly fitted joints where one can see the slab or carpet backing at carpet edges or where one can see the slab or carpet backing between joints.
  4. Has pile lay that does not match and seams are obvious or has damaged areas.
  5. Has been pieced together in small pieces with seams less than 12 feet apart.
  6. Is not level or has become un-glued.
- I. Use only full width by full length carpet as opposed to piecing together small scraps; and, do not piece patches of carpet together which looks like patch work.

### 3.03 INSTALLING CARPET ACCESSORIES

- A. Provide vinyl carpet accessories between carpet and other floor materials in colors approved by the Architect.
- B. Refer also to Section 09650 Resilient Flooring for additional vinyl and rubber carpet accessory requirements.
- C. Provide the strongest glues and adhesives recommended by the accessories manufacturers to install all vinyl accessories.
- D. Remove and replace accessories which are peeling and are not securely glued.

### 3.04 INSTALLING CHORD TILE

Provide chord tile in strict accordance with manufacturer's written instructions.

### 3.05 CLEANING AND REPAIR

- A. Vacuum clean all carpet.
- B. Remove and replace carpet which is damaged in any way or is not acceptable by the Interior Designer, Architect or Owner.

- END -

## SECTION 09900

### PAINTING

#### PART 1 - GENERAL

##### 1.01 GENERAL REQUIREMENTS

A. The provisions of all of the Contract Documents are hereby made a part of this Section.

B. The requirements of Section 01810 entitled Technical Section Requirements apply to this Section the same as though herein written out in full.

##### 1.02 STANDARDS

Meet requirements and recommendations of the applicable portions of the latest editions of Standards listed below:

- A. Structural Steel Painting Councils Surface Preparation (SSPCSP)
- B. Federal Specifications (FS)
- C. All manufacturer's shall conform to ISO 9001 standards and shall have a total quality program.
- D. International Building Code (IBC)

##### 1.03 DEFINITION

A. "Painted", "Paint", as defined herein, and as specified in various Sections of the Specifications, and as indicated on the Drawings, shall mean, that as directed by the Architect:

1. That these surfaces shall be prepared and painted with stain and varnish or other clear coatings; or,
2. That these surfaces shall be prepared and painted with transparent stain or semi-opaque stain; or
3. That these surfaces shall be prepared and painted with opaque paint, as directed by the Architect.

##### 1.04 SUBMITTALS

- A. Submit manufacturer's Product Data on all materials specified herein.
- B. Submit manufacturer's full range of color and stain charts.
- C. Submit actual painted Samples, of colors on minimum of two (2') feet square materials, as directed by the Architect.

##### 1.05 COMPLIANCE

A. Comply with manufacturer's instructions for surface preparation, sanding, caulking, puttying; removal of all dirt, rust, grease, and mildew; washing, tinting, thinning, mixing, priming, and application.

B. Do not apply paint when temperature is or is expected to drop below fifty (50) degrees Fahrenheit within 24 hours after application.

C. Do not apply materials specified herein on damp surfaces caused by condensation, dew, or rain.

D. Provide temporary closures and mechanical de- humidifiers to dry surfaces if same are too damp for painting during construction.

E. Do not apply exterior paint on damp or rainy days or when adverse cold or rainy days are expected prior to the drying of materials specified herein.

F. All coats of material specified herein shall be applied at the rates of gallons per square foot recommended by the manufacturer.

G. All paint shall be lead free paint.

H. Comply with Louisiana State and Federal VOC regulations of less than 3.5 pounds per gallon.

## PART 2 - PRODUCTS

### 2.01 MANUFACTURERS

#### A. Paint Manufacturers:

1. Manufacturers are as specified above and below, or a prior approved substitute.

2. Items specified herein by specific manufacturers are used only to denote the quality standard of product desired and that they do not restrict bidders to the specific brand, make, manufacturer, or specification named; and that they are used only to set forth and convey to prospective bidders the general style, type, character, and quality of products desired; and that equivalent products may be acceptable.

3. It shall be the responsibility of the professionally employed Architect or Engineer, or Interior Designer, to determine what is considered an equivalent product, meeting also Owner approval, on any and all Projects in which they have been legally employed to perform professional services.

4. Other manufactures specified above or below, or other prior approved substitutes may be provided if they meet all requirements specified herein and are approved substitutes by the Architect, Engineer, or Interior Designer.

#### B. Specific Paint Manufacturers:

1. Paint Manufacturers: Materials specified herein are based on Devoe Paint, ICI Paint, & PPG, or a prior approved substitute.

2. Manufacturers specified above or below, or a prior approved substitute manufacturer may be substituted using the same number of coats; however, substituting paint manufacturers shall not alter the required number of coats specified, even if fewer required coats are printed on manufacturer's labels or printed in the manufacturer's instructions.

3. All manufacturer's materials specified herein and provided shall be manufacturer's top grade, top of the line, top quality paint and materials.

4. Other paint manufacturer's materials submitted for Product Data review and prior approved substitutes which have less percentages of solids by volume, less percentages of solids by weight, or less weight per gallon, or other material discrepancies will be rejected.

5. Numbers of coats of paint specified are the minimum number of coats; however, where certain colors require additional numbers of coats of paint than that specified herein, to hide paint holidays and to hide painted surfaces and materials, provide additional coats of paint at no additional cost to the Owner.

## 2.02 MATERIALS

### A. Exterior Surfaces:

#### 1. All Exterior Metal Surfaces, (Not Galvanized):

a. First Coat: Devoe Mirrolac Rust Penetrating Primer No. DP 13101; or ICI Devguard 4160.

b. Second Coat: Devoe Interior/Exterior Alkyd Gloss Enamel No. DP 70XX Mirrolac; or ICI Devshield 4328 - 0100.

c. Third Coat: Same as second coat.

#### 2. All Exterior Metal Surfaces, (Galvanized):

a. First Coat: Devoe Mirrolac Galvanized Metal Primer No. DP 13201; or ICI Devguard 4160.

b. Second Coat: Devoe Interior/Exterior Alkyd Gloss Enamel No. DP 70XX Mirrolac; or ICI Devshield 4328 - 0100.

c. Third Coat: Same as second coat.

#### 3. All Exterior Wood Surfaces:

a. First Coat: Devoe Wonder-shield Exterior Acrylic Latex Primer DP 1502; or ICI Dulux Professional 2000 - 1200.

b. Second Coat: Devoe Wonder-shield Exterior Acrylic Latex Satin House and Trim Paint DR 16XX; or ICI Dulux Professional 2402 - XXXX.

c. Third Coat: Same as second coat.

4. All Exterior, Exposed Concrete Grade Beam Surfaces and Exposed Concrete Grade Beam Chamfer Surfaces:

a. First Coat: Devoe Bloxfil Interior/Exterior Acrylic Latex Block Filler DP 4000-1000; or ICI Bloxfil 4000 - 1000.

b. Second Coat: Wonder-shield Exterior Acrylic Latex Satin House and Trim Paint No. DR 16XX; or ICI Dulux Professional 2402 - XXXX.

c. Third Coat: Same as second coat.

5. All Exterior Galvanized, Finished Surfaces: Touch-up with Devoe's or ICI's zinc rich paint.

6. All Exterior Factory Baked Enamel Finish Surfaces: Touch up with Factory touch up paint.

B. Interior Surfaces:

1. Interior Metal Surfaces, Not Galvanized:

a. First Coat: Devoe Mirrolac Rust Penetrating Primer No. DP 13101; or ICI Devshield 4130 - 6130.

b. Second Coat: Devoe Velour Interior Alkyd Semi-Gloss Enamel No. DR 26XX; or ICI Dulux 1507 - XXXX.

c. Third Coat: Same as second coat.

2. Interior Metal Surfaces, Galvanized:

a. First Coat: Devoe Mirrolac Galvanized Metal Primer No. DP 13201; or ICI Devguard 4120 -1000.

b. Second Coat: Devoe Velour Interior Alkyd Semi-Gloss Enamel No. DR 26XX; or ICI Dulux 1507 - XXXX.

c. Third Coat: Same as second coat.

3. Interior Wood Surfaces:

a. All interior wood including all millwork, wood bases, chair rails, column capitals & bases, exposed carpentry, shelves, cabinets, casework, plywood, wood doors, wood frames and all other interior

wood inside or outside of cabinets & closets shall be painted with stain and varnish or painted with opaque paint, as directed by the Architect.

b. All unexposed wood on all pieces of immovable and movable items which are movable (or removable) such as undersides of cabinet tops, insides and outsides of drawers, shelves, doors, and similar items shall be finished on tops, bottoms, sides, backs, inside, and outside with a minimum of two coats of Sanding Sealer, or a primer and two (2) finish coats of paint as listed below and as per Architect's instructions.

c. Interior Wood Surfaces Painted with Varnish:

(1) First Coat: Minwax Stain/Devoe DF 200 Series; ICI 1700

(2) Second Coat: Devoe Penchrome Interior Polyurethane Clear, Satin No. DF 500; or ICI Wood Pride 1902 - XXXX.

(3) Third Coat: Same as second coat.

(4) Fourth Coat: Same as third coat.

d. Interior Wood Surfaces Painted with Opaque Paint:

(1) First Coat: Devoe Velour Interior Alkyd Enamel Undercoat No. DR 8801; or ICI Ultra Hide Alkyd Primer 1120 - 1200.

(2) Second Coat: Devoe Velour Interior Alkyd Semi-Gloss Enamel No. DR 26XX; or ICI Dulux 1507 - XXXX.

(3) Third Coat: Same as second coat.

4. Interior Gypsum Board Painted Surfaces:

a. First Coat: Devoe Wonder-Hide Production, Interior Latex PVA Primer Sealer, No. DR 53360. (Minimum, 10.5 pounds per gallon, minimum 26% solids by volume; minimum 41% solids by weight); or ICI Ultra Hide PVA Primer 1030 -1200, or ICI Prep & Prime Hi-Hide 1000-1200.

b. Second Coat: Devoe Wonder Tones, Semi-Gloss Interior Latex Enamel No. DR 39XX; or ICI Ultra- Hide Latex Semi-Gloss 1416 -XXXX.

c. Third Coat: Same as second coat.

5. Epoxy-Painted Concrete Floors:

a. First Preparation Coat: Verify that floors are evenly sloped to the floor drains. Sand concrete floor and acid etch concrete floor with acid in strict accordance with manufacturer's recommendations.

Fill all cracks in concrete in accordance with Section 03350, Concrete Surfaces and Concrete Accessories.

b. Second Coat: Devoe 4508 XXX Epoxy Gloss Coating; or ICI Tru-Glaze 4508, or PPG Pitt Guard; Chemical Resistant Epoxy Coating reduced as recommended by the paint manufacturer.

c. Third Coat: Same as Second Coat.

d. Fourth Coat: Same as Third Coat and mixed and applied with "Skid-Tex", by Gamma Laboratories, (mixed 16 ounces per gallon of paint), to produce a non-skid and non-slip floor surface.

C. Exterior Traffic Marking Arrows, Marking & Parking Stripes, Fire Lanes, Cast-In- Place Concrete Curbs, and Pre-cast Concrete Curbs: Devoe Interior/Exterior Alkyd Traffic Marking Paint, in Devoe colors: No. 22694, White; No. 20086, Yellow; No. 43613, Red; No. 20089, Blue; or ICI Dulux 4900 Alkyd Striping Paint, in same four (4) colors.

D. Other Exposed Visible Surfaces: All other exterior or interior visible surfaces not specifically listed above shall be prepared, primed painted, and finish painted with a primer and 2 coats of finish paint per the paint manufacturer's recommendations.

### PART 3 - EXECUTION

#### 3.01 SURFACE PREPARATION

##### A. Wood:

1. Wood shall be sandpapered to a smooth and even surface and then thoroughly dusted or wiped with a tack rag.

2. After prime coat has been applied, all nail holes and other holes and cracks shall be flush filled with putty in a neat and workmanlike manner.

3. Putty shall be colored to match that of the finish, or very slightly darker.

##### B. Iron, Steel, and Other Metal:

1. Iron and Steel shall have all scale and rust removed to produce a satisfactory surface for painting.

2. Chipped or abraded spots on items that have been shop coated shall be touched up with a suitable primer before proceeding.

3. Galvanized Metal: Galvanized metal shall be thoroughly cleaned with solvent or zinc phosphate pre-treatment solution to remove all factory and mill compounds and de-greased per SSPC-SP1. Galvanized

metal shall be primed with the primer specified herein before finish painting.

4. Factory painted metals shall have the gloss removed before priming and finish painting.

C. New & Existing Gypsum Board:

1. For new gypsum board, & existing formerly painted gypsum board, & existing gypsum board where wall covering was removed, remove all new & existing burrs and sand all new & existing high spots; fill all new & existing holes, depressions and crevices; and feather edge all joints.

2. Apply successive coats of compound only on dry preceding coats.

3. Sand all gypsum board joint and fastener compound to provide a level smooth surface.

4. Existing gypsum board which was formerly painted or was formerly covered with wall covering shall be thoroughly cleaned & patched. Heavily damaged existing gypsum board areas shall be provided with new, taped & floated gypsum board patching where required, & shall be prepared, sanded, & primed & painted in strict accordance with paint manufacturer's recommendations.

D. Concrete:

1. Fill all concrete holes and irregular surfaces with mortar and rub with burlap to achieve finish to match adjacent finish.

2. Grind down all concrete fins and excess spills of mortar and concrete on all surfaces.

3. Wash and clean all surfaces prior to preparing for painting.

4. Apply First, Second, and Third Coat specified with a brush, working into all pores, thoroughly, and subsequently roll with a long napped roller.

3.02 SURFACES REQUIRING PAINTING

A. Paint all surfaces on the interior and exterior of the buildings and all surfaces of the Work executed in the Contract which is visible, exposed, and not exposed to weather, unless specifically excluded herein.

B. Paint all miscellaneous architectural, structural, mechanical, plumbing, and electrical materials and equipment such as all exposed ductwork, access panels, flashing, calking, conduits, pipes, exposed sprinkler system plumbing, (if any), exposed tubes, pipe insulation, pipe hangers, pipe supports, brackets, sleeves, wires, supports,

anchors, fasteners, straps, galvanized metal and metal not galvanized, steel members, "Uni-struts", "U" - bolts, clamps, and similar items which are exposed to the eye (not totally concealed from human eye) and exposed, and not exposed to the weather, including items above the roof.

C. Paint all items including prime coated and factory finish painted electrical, plumbing and air- conditioning materials and equipment on all portions of the Work executed in this Contract unless specifically excluded herein.

D. Paint and provide touching-up of all primed coats and factory finished painted materials and equipment which have been damaged, unless specifically excluded herein.

E. Paint hardware which is not pre-finished and is primed or prepared to receive paint or un-primed.

F. Paint aluminum materials prepared for paint, and touch-up paint factory painted aluminum materials and equipment.

G. Paint all interior and exterior exposed pipes and conduits for gas plumbing, water plumbing, plumbing for sprinkler systems, (if any), and conduits for electrical services.

H. Paint all interior and exterior service materials and equipment such as electrical panels, gas meters, alarm systems, mechanical louvers, plumbing and heating wall and roof vents, to match adjacent wall and roof colors, as directed by Architect.

I. Paint all exposed parts of new & existing metal fire extinguisher cabinets.

J. Refer also to the Finish Schedule for surfaces to be painted.

### 3.03 EXCLUDED SURFACES NOT REQUIRING PAINTING

A. Protect, provide drop cloths and masking, and clean surfaces not requiring painting such as surfaces of all brick, concrete sidewalks & drives, factory finished roofing and flashing, carpet, tile, resilient finish floors, wall covering, glass, synthetic plaster, finish hardware, cabinet hardware, aluminum window frames, sliding door frames, toilet partitions, toilet partition hardware, restroom accessories, factory finished signs, and other items not requiring painting.

B. Remove and replace materials and equipment which are not required to be painted, that have paint on them, and the paint cannot be satisfactorily removed.

### 3.04 PAINTING

- A. Samples: Do not proceed with Work until all color chips and stains are reviewed by the Architect and Owner.
- B. Match approved color chips, stains, and samples, and provide additional samples as requested by Architect.
- C. Provide specified paint in number of coats specified.
- D. Provide paint free from sags, runs, crawls, brush marks, skips, holidays and other defects.
- E. Paint both tops and bottoms of all doors after trimming same.
- F. Paint interiors of all cabinets, drawers, and closets as specified herein.
- G. Paint tops, bottoms, and edges of all shelves and shelf supports.
- H. Refer to the Finish Schedule for different types of painted finishes in different rooms and areas.
- I. Refer to the Room Finish Schedule for all painted wall materials and painted ceiling materials.

### 3.05 TRAFFIC MARKING PAINT

- A. Provide painted parking and pedestrian stripes, and driveway markings where indicated and as specified in Section 03350, Concrete Surfaces and Concrete Accessories.
- B. Paint all tops and sides of all pre-cast concrete bumpers at fronts of all parking spaces; and paint continuous vertical surfaces of all cast-in-place concrete curbs adjacent to concrete sidewalks; & paint continuous six inch (6") wide horizontal top surfaces of pedestrian sidewalks adjacent to vertical arises in concrete & adjacent to cast-in-place concrete curbs; and paint concrete curbs similarly, (vertical & horizontal), where designated as Fire Lanes, (if any).

- END -

## **SECTION 09950**

### **WALL COVERING**

#### PART 1 - GENERAL

##### 1.01 GENERAL REQUIREMENTS

A. The provisions of all of the Contract Documents are hereby made a part of this Section.

B. The requirements of Section 01810 entitled Technical Section Requirements apply to this Section the same as though herein written out in full.

C. In reference to Detail 1, Sheet A08, Finish Schedule, wall covering shall only be provided on the indicated five (5) interior gypsum board covered columns located in Public Room E210.

##### 1.02 STANDARDS

Meet requirements and recommendations of the applicable portions of the latest editions of Standards listed below:

- A. Federal Specifications (FS)
- B. American Society for Testing and Materials (ASTM)
- C. Vinyl Fabrics Institute (VFI)
- D. Life Safety Code, NFPA 101

##### 1.03 SUBMITTALS

A. Submit manufacturer's Product Data indicating their meeting or exceeding all standards specified herein.

B. Submit manufacturers' full color and texture range samples for selection by Owner's Interior Designer.

C. Provide additional twenty-four inches (24") square pieces of all wall covering selected by the Owner's Interior Designer for final selection of color and texture.

#### PART 2 - PRODUCTS

##### 2.01 MANUFACTURERS

A. Wall Covering Manufacturers:

1. Manufacturers are as specified above or below, or a prior approved substitute.

2. Items specified herein by specific manufacturers are used only to denote the quality standard of product desired and that they do not

restrict bidders to the specific brand, make, manufacturer, or specification named; and that they are used only to set forth and convey to prospective bidders the general style, type, character, and quality of products desired; and that equivalent products may be acceptable.

3. It shall be the responsibility of the professionally employed Architect or Engineer, or Interior Designer, to determine what is considered an equivalent product, meeting also Owner approval, on any and all Projects in which they have been legally employed to perform professional services.

4. Other manufactures specified above or below, or other prior approved substitutes may be provided if they meet all requirements specified herein and are approved substitutes by the Architect, Engineer, or Interior Designer.

B. Specific Wall covering Manufacturers: Vinyl wall covering shall be as manufactured by Eykon, Maharam; Wallcovering, or a prior approved substitute.

## 2.02 MATERIALS

### A. Vinyl Wall Covering:

1. All wall covering indicated and specified shall be high durability rated minimum Type II, with stain and mildew resistance zero (0) rating per GSA Federal Specification CCC-W-408A/D, with a 100% Polyester Osnaburg or non-woven backing.

2. All wall covering indicated and specified shall have the following minimum properties:

- a) Total Weight: Minimum 20.3 oz./lin. yd.; minimum 13.3 oz./sq. yd.
- b) Vinyl Weight: 10.9 oz. per sq./yd.
- c) Backing Weight: 2.40 oz. / sq. yd.
- d) Breaking Strength: (W x F) 124 x 150
- e) Tear Strength: (W x F) 70 x 72
- f) Vinyl Fabric Adhesion: lbs./1" 3.0

3. Wall covering shall have a minimum Class A flame spread 15/smoke developed 30, per ASTM E 84 Tunnel Test.

4. Provide wall covering colors and patterns similar to Eykon Lanark Tailored silk, L2-TS-04; or in similar colors and patterns as selected by the Owner's Interior Designer.

### B. Wall Covering Sizing:

1. Provide sizing materials on all gypsum board materials.
  2. Sizing materials shall be provided under all wall covering to prevent the gypsum board's outer face paper from tearing when removing any applied vinyl wall covering.
  3. All sizing materials shall be as recommended by the wall covering manufacturer for applying to gypsum board.
- C. Wall Covering Adhesives: Provide heavily bodied water soluble adhesives containing mildewcide for mildew resistance, as recommended by the manufacturer.

#### 2.03 ADDITIONAL WALL COVERING MATERIALS:

Provide the Owners with properly packaged, minimum 100 square feet of new, matching wall covering material. Said material shall be stored on the Project Site for the Owner's future use.

### PART 3 - EXECUTION

#### 3.01 PREPARING

- A. Verify smoothness of surfaces upon which wall covering will be applied and sand all burrs, fill all holes, and prepare substrate to insure a very smooth, flat, level, and even surface.
- B. Provide sizing or primers on all walls prior to providing wall covering.

#### 3.02 INSTALLATION

- A. Apply adhesives per manufacturer's instructions.
- B. Do not use wheat paste.
- C. Do not join materials at exterior and interior corners.
- D. Wrap fabric a minimum of six inches (6") beyond inside and outside corners except where patterns and colors for adjacent walls are different.
- E. Provide full lengths of wall covering from tops of finish bases up to 4" above finish ceilings.
- F. To insure that no wallcovering glue gets on the metal suspension system, and no cleaner is used on the metal suspension system which always causes the metal suspension system to rust, carefully provide specified ceiling suspension system and ceiling suspension wall angles, (if any), only after wall covering Work is completed.

- G. If ceiling suspension system, finish ceiling, and wall angles are provided prior to providing wall covering, remove finish ceiling, remove ceiling suspension system wall angles, and provide wall covering 4" above finish ceiling height, and re-install finish ceiling with new ceiling suspension wall angles.
- H. No horizontal joints or seams shall be permitted in wall covering.
- I. Eliminate all air pockets and secure to substrate.
- J. Remove and replace wall covering which has very small or large air pockets.
- K. Remove and replace wall covering provided over burrs, bumps, or holes in substrate or provided on sloppy corners.
- L. Remove and replace wall covering not neatly fitting at joints or at tops and bottoms, or not neatly cut at wall outlets, switches, and other architectural, structural, mechanical, and electrical materials and equipment.
- M. Remove and replace wall covering cut too short above finish bases, splashes of counter tops, and cut too short below finish ceilings, thus exposing gypsum board.
- N. Immediately wipe excess adhesives with damp sponge and dry with towel.
- O. Install in a smooth, clean plane free of wrinkles, gaps, overlaps, and blemishes.
- P. Cut neatly around all penetrations of materials and equipment.
- Q. Follow manufacturer's instruction for following sequence of rolls, reversing patterns, matching patterns, and insuring that patterns are aligned.
- R. Remove and replace wall covering where patterns, colors, and textures do not match.
- S. Remove and replace all wall covering which is damaged in any way.

- END -

## SECTION 10170

### TOILET PARTITIONS

#### PART 1 - GENERAL

##### 1.01 GENERAL REQUIREMENTS

A. The provisions of all of the Contract Documents are hereby made a part of this Section.

B. The requirements of Section 01810 entitled Technical Section Requirements apply to this Section the same as though herein written out in full.

C. Entirely remove existing toilet partitions in existing Restroom X112 and existing Restroom X113 and provide new toilet partitions specified herein.

D. Provide only Bobrick .67 option institutional heavy duty stamped stainless steel hardware specified herein; stamped aluminum, cast non-ferrous metal such as cast stainless steel, cast "Zamac", and cast aluminum toilet partition hardware shall not be acceptable and shall be rejected.

##### 1.02 TOILET PARTITIONS

A. Solid Phenolic Toilet Partitions:

1. Materials: Partitions, pilasters, special hardware, and doors are specified herein.

2. Locations: Toilet partitions shall be provided where indicated in new multiple occupancy Restrooms E201 and E202 and in existing multiple occupancy Restrooms X112 and X113.

B. Refer to Drawings for various locations of different types of toilet partitions.

C. Note that some new and existing Toilet Rooms indicated are single occupancy Toilet Rooms; hence, they do not require toilet partitions.

##### 1.03 STANDARDS

Meet requirements and recommendations of the applicable portions of the latest editions of Standards listed below:

A. Federal Specifications (FS)

B. Commercial Standards (CS)

C. American Society for Testing and Materials (ASTM)

D. Federal Public Law 101-336, Title III, American with Disabilities Act (ADA) & latest ADA Standards

- E. National Fire Protection Association (NFPA)
- F. International Building Code (IBC)

#### 1.04 SUBMITTALS

- A. Submit manufacturer's Product Data on all materials specified herein indicating meeting standards specified herein, including Product Data on special hardware specified.
- B. Submit Product Data with manufacturer's specifications, certifying type phenolic core provided for this Project.
- C. Submit Samples of all stainless steel hardware.
- D. Submit colors for Architect color selection.
- E. Submit Shop Drawings for review by Architect.
- F. Submit and provide 25 year warranty against delamination, corrosion, or breakage of Solid Phenolic toilet partition doors, stiles, and Solid Phenolic toilet partitions.

#### 1.05 ADA AND ANSI COMPLIANCE

- A. Comply with latest ADA Standards and ANSI requirements for minimum ADA toilet compartment sizes, minimum clearances, minimum widths of doors, heights of hardware, and heights of toilet accessories required to be provided in conjunction with toilet compartments.
- B. All ADA toilet compartment door openings, in accordance with Ada 404.2.3 shall be a minimum of 32" clear, excluding the thickness of the door, the door frame, the door hardware, and the door latch.

### PART 2 - PRODUCTS

#### 2.01 MANUFACTURERS

##### A. Solid Phenolic Toilet Partition and Door Manufacturers:

1. Manufacturers are as specified above and below, or a prior approved substitute.
2. Items specified herein by specific manufacturers are used only to denote the quality standard of product desired and that they do not restrict bidders to the specific brand, make, manufacturer, or specification named; and that they are used only to set forth and convey to prospective bidders the general style, type, character, and quality of products desired; and that equivalent products may be acceptable.
3. It shall be the responsibility of the professionally employed Architect or Engineer, or Interior Designer, to determine what is considered an equivalent product, meeting also Owner approval, on any and

all Projects in which they have been legally employed to perform professional services.

4. Other manufactures specified above or below, or other prior approved substitutes may be provided if they meet all requirements specified herein and are approved substitutes by the Architect, Engineer, or Interior Designer.

B. Specific Solid Phenolic Toilet Partitions and Doors Manufacturers: Accurate; Global; Bobrick; provided with a minimum 10 year warranty against delamination, corrosion, or breakage; or a prior approved substitute equal to "Bobrick Solid Phenolic 1082.67 Class B Series", doors and toilet partitions, with a minimum NFPA Class B rating.

## 2.02 MATERIALS FOR SOLID PHENOLIC TOILET PARTITION DIVIDERS AND DOORS:

A. Solid phenolic toilet partitions and doors shall have water resistant solid cores, solidly fused plastic laminate with matte-finish melamine surfaces, colored face sheets, and black phenolic core integrally bonded.

B. All doors shall be minimum 3/4" thick, panels minimum 1/2" thick, and stiles minimum 3/4" thick.

C. All cores shall meet NFPA Class B; Uniform Building Code Class II standards of ASTM E - 84 fire resistance standards, flame spread/smoke density of 20/95 or 69/93.

D. All pilasters shall have leveling devices attached at the floor, covered by a 4" minimum height Type 304 stainless steel satin finished plinth.

E. Compartment assemblies shall be floor mounted and continuously overhead braced across front and sides of compartments with a continuous overhead "anti-grip design" head rail securely fastened to the exterior wall indicated and the interior plumbing chase wall indicated

F. Top of overhead "anti-grip" compartment top rail shall be installed 85" above finish floor; bottoms of wall panels and door panels shall be provided 12" above finish floor; wall panels and door panels shall be 58" from tops to bottoms.

G. All hardware for solid phenolic doors and partitions shall be Bobrick's .67 option, double angle fastening Heavy Duty Institutional Hardware as opposed to commercial hardware, all provided with institutional threaded fasteners:

1. Metal: Stainless Steel, ASTM A 167, Type 302/304.

2. Finish: Stainless Steel, Satin or Bright Finish.

- a. Hinges: Self-lubricating, inward swing, and outward swing as indicated, cut out insert type, gravity return movement, adjustable to hold-open at any angle up to ninety (90) degrees.
  - b. Latch: Combination rubber faced door strike and keeper, equipped for emergency access.
  - c. Provide new partition cut-outs, and provide heavy duty stamped stainless steel hardware specified above at no additional cost to the Owner.
  - d. Door Stops: Bobrick vinyl coated door stops, one (1) per each leaf of all doors.
- 3. Refer to Section 10800 Restroom Accessories and Specialties for specified required toilet stall door bumpers for adjacent walls.
  - 4. All hardware shall meet ADA requirements in ADA stalls.

H. Treated Wood Blocking:

- 1. Refer to Section 06100, Rough Carpentry for treated wood blocking.
- 2. Provide treated wood blocking securely fastened to adjacent metal studs behind gypsum board where toilet partitions and overhead bracing materials are secured to gypsum board walls.

I. Fasteners for Partitions and Doors: Exposed bolts and screws shall be theft resistant, stainless steel, with threaded inserts, finished to match hardware.

PART 3 - EXECUTION

3.01 INSPECTION AND STORAGE OF PANELS, STILES AND DOORS

A. Immediately upon receipt of all toilet partition panels, stiles, and doors specified herein, and prior to storing same on site, thoroughly inspect all solid phenolic materials for flatness and damage.

B. Toilet partitions usually are poorly placed in weak shipping crates, are handled roughly in shipment, and usually arrive damaged and have to be replaced by re-ordering.

C. Reject all panels, stiles and doors, which are warped and cannot be straightened.

D. Reject all panels, stiles and doors, which are chipped, scratched, broken, or damaged in any way.

E. If materials are accepted, and have been determined to be straight, lay materials same on a flat surface over flat, minimum 3/4" thick plywood supported by a minimum of full width 2 x 4's, spaced 12" O. C., or build a frame to support them in a 90 degree vertical position to be held upright at all times.

F. Do not lean toilet partition materials against a wall or other object even for a short period of time because the manufacturer's definitely guarantee them to warp if stored improperly.

G. After installing, remove and replace all warped panels, stiles and doors which cannot be straightened; and remove and replace all chipped, scratched, broken, and/or damaged panels, stiles and doors.

### 3.02 INSTALLING

A. Pilasters shall be securely anchored with manufacturer's stainless steel bolts and lock washers set into the floor supports.

B. Leveling and anchoring device shall be concealed with the plinth.

C. Cutouts required in partitions for restroom accessories and specialties shall have been made by the partition manufacturer prior to shipping.

D. Shop Drawings shall reflect actual field verified wall dimensions, and toilet accessory dimensions.

E. Meet all ADA requirements and provide correct ADA approved dimensions for ADA toilet partitions.

F. Install all toilet partitions and doors according to approved Shop Drawings and to comply with manufacturer's recommendations and the latest ADA standards.

G. Adjust all hardware to proper working order without binding, & remove and replace hardware which does not operate properly.

H. Provide continuous overhead braces over all partitions, full length, wall to wall, securely fastened to treated wood blocking specified herein.

I. Provide pre-drilled holes in doors, panels, and stiles for mounting hardware.

J. For urinal compartment in Men's Room X113, provide stile cutouts for urinal door hinges and door latch. Provide urinal un-installed urinal door and un-installed hardware for same, and store on site for possible Owner's future installation at a later date.

- END -

## SECTION 10420

### SIGNS AND PLAQUES

#### PART 1 - GENERAL

##### 1.01 GENERAL REQUIREMENTS

A. The provisions of all of the Contract Documents are hereby made a part of this Section.

B. The requirements of Section 01810 entitled Technical Section Requirements apply to this Section the same as though herein written out in full.

C. Provide additional interior signs specified herein, ordered at a later date, after Substantial Completion, and after the Fire Marshal inspection, as requested by the Fire Marshal and the Owner, at no additional cost to the Owner.

##### 1.02 STANDARDS

Meet requirements and recommendations of the applicable portions of the latest editions of Standards listed below:

- A. American Society for Testing and Materials (ASTM)
- B. National Association of Architectural Metal Manufacturers (NAAMM)
- C. Architectural Aluminum Manufacturers Association (AAMA)
- D. Federal Public Law 101-336, Title III, Americans with Disabilities Act (ADA)
- E. American National Standards Institute (ANSI)
- F. National Fire Protection Association (NFPA)
- G. International Building Code (IBC)

##### 1.03 SUBMITTALS

A. Submit Product Data on all materials specified herein.

B. Submit Samples of all sign and letter materials specified herein.

C. Submit a scaled, graphic layout of all interior and exterior signs specified herein, indicating scaled sizes of pictograms, letters, numbers, and overall sizes of signs.

D. Submit Shop Drawings for plaques indicating sizes of letters, sizes of plaques and layout of letters, attaching devices, borders, design graphics, lettering styles, and layout.

E. Submit full range of manufacturer's standard colors on all materials as specified herein.

##### 1.04 ADA GENERAL SIGN COMPLIANCE REQUIREMENTS

A. Provide a sign manufacturer's consultant, fully familiar with the latest ADA requirements to interpret the ADA requirements required by the Department of Justice's Office of the Attorney General and the Specification requirements.

B. All signs shall be provided in proper sizes, sufficient numbers, proper locations, and proper types, and provided by a competent knowledgeable manufacturer's representative fully familiar with all of the latest ADA requirements.

C. All signs required to be ADA compliant shall comply with all ADA requirements.

#### 1.05 ADA SIGNAGE COMPLIANCE

A. In accordance with ADA 703, Signs, interior Permanent Room and Area Signs, shall comply with these latest ADA Standards having sans serif, contrasting uppercase letters, (or combination of both), non-italic letter and numeral types, with heights and sizes in accordance with ADA 703.5.5 with a minimum 5/8" letter/numeral height, maximum 3" letter/numeral height, and with letter/numeral thicknesses as specified by latest ADA Standards. In accordance with 703.2.1, provide minimum 1/32" Grade 2 Braille type height; minimum 6" high pictogram provided with accompanying verbal description.

B. Provide signs only from manufacturers who can provide signs meeting ADA 703 requirements.

#### 1.06 ADA SYMBOLS

A. Facilities and elements required to be identified as accessible by ADA shall use the international symbol of accessibility, proportioned as indicated in ADA Standard's, paragraph 703.7.2.1.

B. The symbol shall be displayed where required and as required by ADA.

#### 1.07 ADA EXTERIOR PARKING SIGNS

A. Where van accessible spaces of 96" or more is provided adjacent to a 96" van parking space, provide the wording "Van Accessible" on the accessible parking sign.

B. Provide ADA parking signs in front of each accessible parking space where indicated.

C. All accessible parking signs shall be mounted with the bottom sign edge 62" minimum above adjacent concrete paving.

### PART 2 - PRODUCTS

2.01 MANUFACTURERS OF SIGNS, PLAQUES, SIGN LETTERS, DIRECTORY, AND ALL MATERIALS SPECIFIED HEREIN

A. Sign, Plaques, Letter, Directory, and Material Manufacturers:

1. Manufacturers are as specified above and below, or a prior approved substitute.

2. Items specified herein by specific manufacturers are used only to denote the quality standard of product desired and that they do not restrict bidders to the specific brand, make, manufacturer, or specification named; and that they are used only to set forth and convey to prospective bidders the general style, type, character, and quality of products desired; and that equivalent products may be acceptable.

3. It shall be the responsibility of the professionally employed Architect or Engineer, or Interior Designer, to determine what is considered an equivalent product, meeting also Owner approval, on any and all Projects in which they have been legally employed to perform professional services.

4. Other manufactures specified above or below, or other prior approved substitutes may be provided if they meet all requirements specified herein and are approved substitutes by the Architect, Engineer, or Interior Designer.

B. Specific Sign and Plaque Material Manufacturers: ABC Architectural Signing System Division; Advanced Corporation; Andco; ARK -Ramos; AC Davenport; ASI; Best Manufacturing Co.; Best-Rite; Design-A-Sign Co.; Gemini; Inpro Signscape; LAI; Leeds; Matthews; Metal Arts; Mohawk; Mils Manufacturing Co.; Precision Graphics; Southwell Co.; or a prior approved substitute.

2.02 PLASTIC INTERIOR SIGNS

A. Plastic Interior Sign Materials:

1. Interior sign background material shall be minimum 1/8", 0.125"), thick plastic. (Smaller thickness interior signs found on Project shall be removed and replaced with above specified minimum thickness).

2. Provide specified interior sign characters, letters, and numbers, in raised upper case only, accompanied by Grade 2 Braille, only for the signs for interior permanent rooms and permanent areas as specified herein.

3. Interior sign characters, letters, and numbers may be recessed or indented, with lower case letters for the directional signs specified herein.

4. All interior signs, unless otherwise indicated or specified, shall be provided with minimum 5/8" high letters, in the style of "Helvetica Medium".

5. Only manufacturers providing interior signs in a minimum of 30 matte finished plastic colors will be considered.

6. Colors for all interior plastic sign backgrounds and contrasting colors for letters and symbols shall be provided in colors as selected by the Architect.

7. All corners of interior plastic signs shall be rounded, (minimum 1/8" radius), as opposed to sharp, square corners.

8. All interior signs shall be mounted with full tape mounting with tape extending out to all perimeters. (Pieces of tape for mounting shall be removed and replaced with full tape mounting).

9. Remove loose, falling, or peeling interior signs and mount in full bed of GE or Dow silicone caulking.

10. On all Male Restroom Signs, and on all Female Restroom signs, minimum overall size of 8" x 8", (larger if required), in addition to providing specified upper case raised wording, Grade 2 braille, and the symbol specified, provide a silhouette symbol of a standing male on male signs, and a standing female on all female signs.

11. On all Unisex Restroom signs, (Male/ Female Restroom signs), minimum overall size of 8" x 8", (larger if required), in addition to providing specified upper case raised wording, Grade 2 braille, and accessible symbol specified, provide silhouette symbols of a standing male and a standing female.

12. On signs for permanent rooms or permanent areas, and on signs for directional signs with lengthy wording, provide signs with more than one (1) line.

13. Minimum sizes for all interior permanent room and permanent area signs shall be provided with minimum dimensions specified below, as follows: (larger dimensions may be required to meet latest ADA Standards)

a. Minimum interior sign height of 2-3/4" with a minimum background space between tops of sign letters or numbers to tops of signs: 5/8".

b. Minimum distance between right and left side of background of sign and first and last character on the sign of 7/8", and minimum spacing between lines of characters on signs with more than one line of 1/2".

14. Provide signs which are professionally designed with sign width proportional to the wording; do not provide all interior signs with

the same width such that there is excess blank spaces on both sides of wording.

15. All interior signs shall be waterproof and shall be capable of being placed under water for seventy-two (72) hours with no apparent damage to the sign, letters, markings, or finish.

#### 2.03 INTERIOR PERMANENT ROOM SIGN NUMBERS, LETTERS, AND SIGN NAMES

A. Interior permanent room signs provided adjacent to interior entrance doors for rooms, shall have the room names specified herein as opposed to room numbers.

B. All of the following interior permanent room signs shall have all upper case raised letters, accompanied with Grade 2 Braille, shall be provided with minimum sign dimensions specified herein, and shall be mounted at heights to meet ADA requirements.

C. Provide signs as small as possible where wall space adjacent to openings is limited.

D. Prior to ordering signs, verify actual dimensions of all small width wall spaces between metal door frames and wall corners and adjust Shop Drawing sign width to fit same.

E. All new interior signs shall match existing interior library signs in letter type, letter shapes, letter color, & background color with similar sign shapes & similar mounting attachment to walls & attachment other similar surfaces.

F. Remove and replace signs which do not fit in tight spaces adjacent to doors.

#### 2.04 TYPES AND NUMBERS OF PLASTIC INTERIOR SIGNS

A. Restrooms: Provide the minimum following specified Restroom signs adjacent to the interior openings specified, for the following marked openings: (For example, opening numbers are marked thus: "<B81>".

1. Provide one (1) specified Men's Restroom sign, with braille, pictogram, silhouette, and raised upper case wording: "MEN", next to the existing opening marked <X25>.

2. Provide one (1) specified Women's Restroom sign, with braille, pictogram, silhouette, and raised upper case wording: "WOMEN", next to opening marked <W03>.

3. Provide one (1) specified Men's Restroom sign, with braille, pictogram, silhouette, and raised upper case wording: "MEN", next to opening marked <W04>.

4. Provide one (1) specified Restroom sign, with braille, pictogram, silhouette, and raised upper case wording: "RESTROOMS", next to opening marked <W05>, on the east side of opening W05.

5. Provide one (1) specified Women's Restroom sign, with braille, pictogram, silhouette, and raised upper case wording: "WOMEN" next to opening marked: <E01>.

6. Provide one (1) specified Men's Restroom sign, with braille, pictogram, silhouette, and raised upper case wording: "MEN", next to opening marked <E02>.

7. Provide one (1) specified Restroom sign, with braille, pictogram, silhouette, and raised upper case wording: "RESTROOMS", next to opening marked <E03>, on the west side of opening E03.

8. Provide one (1) exit sign with braille with raised upper case wording "EXIT" next to openings marked:

<W06>, <W12>, <X28>, <W10>, <X29>, <X31>, <X02>, <E10>, <E09>, <E08>, <E05>, <E04>, and four (4) extra "EXIT" signs.

B. Single Line Signs: Provide one (1) specified single line permanent room sign with braille and raised upper case wording, adjacent to the interior openings specified, for the following marked openings: (For example, opening numbers are marked thus: "<B81>".

1. "STAFF ONLY": <W10>

2. "SUPPLIES": <W09>

3. "MEETING ROOM": <X29>

4. "COFFEE ROOM": <X30>

5. "STAFF LOUNGE": <W02>

6. "WORK ROOM": <X28>

7. "ACTIVITY ROOM": <E08>.

8. "STUDY 1": <E11>.

9. "STUDY 2": <E12>.

10. "STUDY 3": <E13>.

11. "TECH AREA": <X32>

12. "NO SMOKING": Provide twelve (12) of these signs, located where directed by Owner.

13. On the out-side of the curved check-out desk in X102, near the lower ADA desk top, (if any), provide a sign with the ADA International Symbol.

14. Provide seven (7) extra similar permanent room signs with braille and raised upper case wording, with wording as directed by the Fire Marshall or Owner, located where directed by the Owner.

## 2.05 EXTERIOR ALUMINUM SIGNS:

### A. Exterior Aluminum Sign Materials:

1. Exterior aluminum signs shall be provided on an aluminum panel background, minimum 0.080 thick, with a factory baked enamel on the aluminum, in different color selections meeting Department of Transportation Specifications.

2. Letters, symbols, numbers, and characters shall be machine cut vinyl, adhesively applied to the baked on enamel aluminum background.

3. All exterior aluminum signs shall be provided with minimum 2" high letters, all upper case, in the style of "HELVETICA MEDIUM."

4. Only manufacturers providing exterior signs in a minimum of 20 finished baked enamel background colors, and a minimum of 20 vinyl letter and character colors will be considered.

5. Colors for exterior aluminum sign backgrounds and contrasting colors for letters and symbols shall be provided in colors as selected by the Architect.

6. All corners of exterior aluminum signs shall be rounded, (minimum 1/4" radius), as opposed to sharp corners.

7. All exterior rectangular signs shall be minimum 18" wide by 24" tall; all exterior octagonal "STOP" signs shall be minimum 24" wide by 24" tall; and all exterior signs shall be ADA approved.

8. Exterior aluminum signs shall be minimum 18" wide x 24" high, (larger if required), with a minimum 9" x 9" accessible symbol set 1" above center of sign with no wording.

9. Provide hot dipped galvanized standard steel "U" picket posts for all exterior posts for exterior aluminum signs, painted with paint specified under Section 09900, Painting.

10. Provide stainless steel bolts, painted on fronts, to securely fasten all exterior aluminum signs to painted specified sign posts.

11. Provide all specified sign posts set in minimum 12" diameter concrete, minimum 24" below grade, with minimum 24" square, minimum

4-1/2" thick concrete post base, crowned, and provided with rounded, tooled concrete edges, with tops 2" above adjacent finish grade.

## 2.06 TYPES AND NUMBERS OF EXTERIOR ALUMINUM SIGNS

A. Provide numbers and sizes of exterior aluminum signs as follows:

1. In front of the four (4) van accessible parking spaces indicated, provide (1) minimum 18" x 9" exterior aluminum van accessible parking sign, (total of (4) van accessible signs, with bottoms of signs provided 62" above the adjacent paving), and provided with the ADA accessible symbol with wording: VAN ACCESSIBLE.

2. Provide a total of four (4) standard, regular, 30" x 30" octagonal exterior aluminum "STOP" signs:

a. Two (2), where indicated, with one (1) on each side of the south driveway exit drive near LA Highway 42.

b. Two (2), where indicated, with one (1) on each side of the west driveway exit drive near Autumn Leaves Drive.

3. Provide a total of four (4) minimum 18" x 24" "One Way" signs with directional arrows, three (3) with arrows pointing to the right, & one (1) with an arrow pointing to the left:

a. Two (2) where indicated near the entrance to the east side parking area.

b. One (1) where indicated at the east drive left turn at the north-east corner of the east parking area.

c. One (1) where indicated above the drive near the northwest corner of the property, on the east side of the new concrete Dumpster Pad.

4. Provide a total of two (2) 30" x 30" "DO NOT ENTER" signs with Universal do not enter symbol where indicated, one (1) on each side of the one way drive near the north concrete dumpster pad.

5. On the exterior building wall, on the latch side of Sprinkler Room door marked <W07>, provide one (1) wall mounted 14" x 6" exterior sign with wording: "Sprinkler Room", on two (2) lines.

6. On the grass area, near the Highway 42 entrance drive, provide one (1) 27" x 20" directional sign with wording: "LIBRARY ENTRANCE" with an arrow pointing to the left.

## 2.07 METAL PLAQUE

A. Base Metal: Metal for base and letters shall be cast bronze from virgin ingots 85-5-5-5 standard bronze alloy, with cast free from pits and gas holes.

B. Background Finish: Oxidized bronze finish with pebble, matte, leatherette, or stipple finish as selected by Architect. Plaque shall be chemically and sprayed with two (2) coats of acrylic lacquer.

C. Finish of Letters and Borders: Letters and borders shall be sharp and hand tooled with satin finish on faces and borders, covered with a factory, clear lacquer finish.

D. Border: Border shall be single line edge, double line edge, plain bevel edge, single line/bevel edge, projected line-beveled edge, flat band bevel, recessed bevel, raised edge, raised double edge, raised bevel, raised double bevel, or plain straight edge, (edgeless), as selected by the Architect.

E. Lettering Styles: Helvetica Condensed, Medium or Regular; Seneca, Cayuga, Modern Gothic, News Gothic, News Gothic Condensed, Univers, Kable, Marcin as selected by the Architect and sizes of letters as selected by the Architect.

F. Plaque Number of Letters or Characters: Approximately 1150, more or less, similar to the Title Sheet of this Specification plus the addition of the Contractor's name and address, the date of completion of the Project in a larger size, with the Library Addition's title, with either all upper case letters, or upper case and lower case letters as selected by Owner and Architect.

G. Plaque Mounting:

1. On top of the gypsum board wall, where indicated by the Owners, first provide a piece of edge banded B-C underlayment,  $\frac{3}{4}$ " thick plywood, with edges painted black, securely fastened to metal studs behind the finished gypsum board, with the size of this plywood measuring 1-1/2" less in height and in width than that of the metal plaque.

2. For the plaque, provide a minimum of four (4) plaque manufacturer's recommended stainless steel fasteners, with manufacturer's decorative rosettes, for securely installing the metal plaque on the plywood, where directed by the Owner.

### PART 3 - EXECUTION

#### 3.01 INSTALLING INTERIOR SIGNS

A. Provide signs level and plumb, mounted as specified herein, meeting specified ADA requirements.

B. In accordance with ADA 703.4.2,

1. Provide and securely mount signs for permanent rooms or areas such that the base, (bottom) of lowest tactile characters are located 48" minimum above the finished floor; and the base, (bottom) of highest

tactile characters are located (60") above the finish floor; hence, check all signs for the individual Braille heights provided on signs and try to maintain approximately the same height for all interior signs at approximately 54" to the bottom of the lowest Braille.

2. Provide and securely mount interior signs for permanent rooms or areas on:

a. The latch side of single doors.

b. The in-active leaf of double doors that have one (1) active leaf; and on the right leaf of double doors that have two (2) active leaves.

c. The nearest adjacent wall where there is no wall space at the latch side of single doors, or no wall space at the right side of double doors.

d. A clear wall space that has an 18" square clear space in front of signs with no doors swinging into this clear floor space.

### 3.02 INSTALLING EXTERIOR ALUMINUM SIGNS

Provide signs level and plumb, mounted as specified herein, meeting specified ADA requirements.

### 3.03 INSTALLING PLAQUES

A. Install plaques level and plumb with manufacturer's bolts at a location as directed by the Owner.

B. Heads for screws and bolts shall be theft proof type, matching finish of plaque adjacent to screws and bolts with rosettes.

### 3.04 CORRECTING

A. Entirely remove and replace all signs, directories, plaques, and letters which have numbers, letters, and characters which are not level or correctly spaced, or signs, plaques, and letters which are damaged in any manner, which do not meet all requirements of these Specifications.

B. Entirely remove and replace interior and exterior signs and materials specified herein which do not comply with the ADA requirements.

- END -

## SECTION 10520

### FIRE EXTINGUISHERS

#### PART 1 - GENERAL

##### 1.01 GENERAL REQUIREMENTS

A. The provisions of all of the Contract Documents are hereby made a part of this Section.

B. The requirements of Section 01810 entitled Technical Section Requirements apply to this Section the same as though herein written out in full.

##### 1.02 STANDARDS

Meet requirements and recommendations of the applicable portions of the latest editions of Standards listed below:

- A. Underwriters' Laboratories (UL)
- B. American National Standard Institute (ANSI)
- C. American Society for Testing and Materials (ASTM)
- D. National Life Protection Association (NFPA 101 and NFPA 10)
- E. Louisiana Revised Statutes R. S. 1590 (LRS)
- F. Americans with Disabilities Act, Latest ADA Standards (ADA)
- G. International Building Code (UBC)
- H. Warnock Hersey (WH)

##### 1.03 SUBMITTALS

A. Submit manufacturer's Product Data on all materials specified herein.

B. Submit manufacturer's full range of standard and special colors for all items specified herein.

C. Submit fire extinguisher receipt specified herein.

##### 1.04 COMPLIANCE

A. All hand operated fire extinguishers shall meet the minimum requirements of NFPA 10, latest ADA Standards, shall be UL listed, and shall bear a UL "Listing Mark" for type, rating, and classification required.

B. All fire extinguishers shall be fully charged to capacity, and shall have a minimum rating of 2 A - 10 BC, minimum 5 pound capacity, in accordance with NFPA 10, UL requirements, and local ordinance requirements.

C. Maximum travel distance from anywhere in the building to a hand

operated fire extinguisher shall be 100 feet maximum.

D. Provide a minimum of one (1) hand operated fire extinguisher for every 2,500 square feet of floor area.

E. Provide temporary, construction fire extinguishers on the Project, to protect lives and property during construction for the duration of the Project Contract.

#### 1.05 FIRE EXTINGUISHER RECEIPT AND SECURITY

A. Provide specified fire extinguishers on the Project site under lock and key prior to Substantial Completion.

B. For security purposes, provide specified fire extinguishers in specified fire extinguisher cabinets, immediately prior to Owners occupancy of the Project, or immediately prior to the State Fire Marshall inspection, at time of Substantial Completion.

C. Prepare a minimum of three (3) copies of a receipt for the number of fire extinguishers provided for this Project and have the Owner sign the receipt in the presence of the Architect.

D. Submit one (1) copy of the signed receipt to the Owner and Architect.

E. Replace all fire extinguishers stolen, emptied, or damaged prior to submitting a copy of the Owner's signed receipt to the Architect.

### PART 2 - PRODUCTS

#### 2.01 MANUFACTURERS:

##### A. Fire Extinguisher Manufacturers:

1. Manufacturers are as specified below, or a prior approved substitute.

2. Items specified herein by specific manufacturers are used only to denote the quality standard of product desired and that they do not restrict bidders to the specific brand, make, manufacturer, or specification named; and that they are used only to set forth and convey to prospective bidders the general style, type, character, and quality of products desired; and that equivalent products may be acceptable.

3. It shall be the responsibility of the professionally employed Architect or Engineer, or Interior Designer, to determine what is considered an equivalent product, meeting also Owner approval, on any and all Projects in which they have been legally employed to perform professional services.

4. Other manufactures specified above or below, or other prior approved substitutes may be provided if they meet all requirements specified

herein and are approved substitutes by the Architect, Engineer, or Interior Designer.

B. Specific Fire Extinguisher Manufacturers: J. L. Industries; Larsen; Potter Roemer; or a prior approved substitute.

## 2.02 MATERIALS

### A. Fire Extinguishers:

1. To establish minimum standards, fire extinguishers shall be:

- a. J. L.'s Model Cosmic 5 E;
- b. Larsen's Model MP 5;
- c. Potter Roemer's Model 3005

2. Fire extinguisher specified above shall meet all requirements of NFPA 10, and shall be rated at a minimum of 2 A -10 BC, with minimum 5 pound capacity, multi-purpose dry chemical.

### B. Fire Extinguisher Cabinets:

1. Fire extinguisher cabinets shall be prime painted steel, or factory finish painted steel, provided by the same company as the manufacturer of the fire extinguishers.

2. Fire extinguishers cabinets shall additionally be finish painted under Section 09900, Painting, after installation, in colors selected by the Architect.

3. All fire extinguisher cabinets shall meet latest ADA Standards; shall be semi-recessed and in accordance with ADA 307, not have a door, door handle or other items than project more than 4" from the adjacent wall; shall be custom designed specifically for fitting the above specified fire extinguishers therein; and shall have:

a. Rolled radius, rolled edge door trim on a semi-recessed cabinet, with a maximum required rough opening wall recess depth of 3 - 1/2".

b. Cabinet doors without exposed, sharp 90 degree corners on tops, bottoms, sides; and cabinet doors and door handles that do not project more than

c. Doors with full, tempered safety glass, with no writing or words on metal door or glass, provided with a door handle, door latch, and provided without a door lock and key.

d. Provide metal fire extinguisher brackets securely fastened to the fire extinguisher cabinets, with fire extinguishers properly supported by the provided fire extinguisher brackets.

e. Provide all printed fire extinguisher tags and certificates required by the Louisiana State Fire Marshal and NFPA 10.

### PART 3 - EXECUTION

#### 3.01 LOCATING FIRE EXTINGUISHERS

A. Verify exact locations of all existing & new fire extinguishers.

B. Verify 100 feet maximum travel distances from interiors of any room or area to fire extinguishers prior to providing wall openings for fire extinguishers.

C. Provide new fire extinguishers and new fire extinguisher cabinets where indicated on Detail 1, Floor Plan, Sheet A07, Notes 02.

D. Where indicated on Detail 1, Sheet A06, note 04, remove one (1) fire extinguisher & cabinet on the opposite side of the wall near existing Vestibule X101 & store same in the Owner's existing Mechanical Room X122.

#### 3.02 INSTALLING FIRE EXTINGUISHER CABINETS

A. All fire extinguisher cabinets shall be securely fastened and shall be provided plumb and level in different wall construction in strict accordance with manufacturer's instructions.

B. Securely fasten fire extinguisher mounting brackets inside of cabinets in accordance with manufacturer's instructions, provide fire extinguishers on mounting brackets as opposed to allowing fire extinguishers rest on bottoms of cabinets without brackets.

C. Seal perimeters of fire extinguisher cabinets with sealant specified in Section 07900, Sealant.

D. Heights of fire extinguishers, mounting brackets, and fire extinguisher cabinets vary from manufacturer to manufacturer; hence, verify exact heights for providing fire extinguishers on mounting brackets in fire extinguisher cabinets.

E. First install fire extinguisher brackets in fire extinguisher cabinets. Second, install fire extinguisher on cabinet brackets. Third, prepare fire extinguisher cabinet roughing-in such that when finally installed, the specified fire extinguishers will be provided with tops of fire extinguishers at a maximum height of forty-eight inches (48") above the finished floor, in accordance with NFPA and latest ADA 308 Standards and requirements.

### 3.03 PAINTING FIRE EXTINGUISHER CABINETS

A. In addition to the manufacturer's paint provided on fire extinguisher cabinets, paint all exposed outside metal surfaces of fire extinguisher cabinets and doors, (except for door handle, depending on door handle finish), with Paint specified in Section 09900, Painting.

B. Provide extinguisher paint colors to match adjacent walls or paint extinguishers in different colors as selected by the Architect.

C. Fire extinguisher cabinet color may be selected by the Architect or Owner to be a different color than the adjacent walls.

### 3.04 CORRECTIONS AND REPAIR

A. Repair or remove and replace all fire extinguishers and fire extinguisher cabinets which are dented, scratched, or damaged in any way.

B. Repair or remove and replace all fire extinguishers and fire extinguisher cabinets which do not operate properly.

- END -

## SECTION 10800

### RESTROOM ACCESSORIES AND SPECIALTIES

#### PART 1 - GENERAL

##### 1.01 GENERAL REQUIREMENTS

A. The provisions of all of the Contract Documents are hereby made a part of this Section.

B. The requirements of Section 01810 entitled Technical Section Requirements apply to this Section the same as though herein written out in full.

C. Refer to Mechanical Documents and verify with Mechanical Engineer for mounting heights of plumbing fixtures and drinking fountains.

D. Entirely remove existing restroom accessories and specialties currently located in Existing Restrooms X112 and X113 and in Existing Men's Restroom X118 and provide new Restroom Accessories and Specialties specified herein in these three (3) existing restrooms.

E. Provide specified restroom accessories and specialties in new Restrooms W152, W153, E201, E202; new Staff Lounge W151 and new Activity Room E205, and Coffee Room X126.

F. Prior to providing roughing-in for restroom accessories and specialties, refer to the Finish Schedule to verify thicker walls which have porcelain tile wainscoting on top of interior gypsum board.

##### 1.02 STANDARDS

Meet requirements and recommendations of the applicable portions of the latest editions of Standards listed below:

- A. American Society for Testing and Materials (ASTM)
- B. Federal Specifications (FS)
- C. Latest Edition of ADA Standards, American with Disabilities Act, (ADA)
- D. American National Standards Institute (ANSI)
- E. Louisiana State Fire Marshal's ADAAG
- F. International Building Code (IBC)

##### 1.03 SUBMITTALS

A. Submit manufacturer's Product Data on all materials specified herein indicating minimum sizes, minimum gages, types of stainless steel, and basic construction types and materials.

B. Submit Samples of manufacturer's products upon Architect's request.

C. Submit keys to the Owner, tagged, and in duplicate for each item provided with a lock, with all locks all keyed alike.

D. Submit minimum 10 year warranty on all restroom electric hand driers, and minimum 15 year warranty on all restroom mirrors.

#### 1.04 COMPLIANCE

A. Unless otherwise indicated on Drawings or unless otherwise specified in the Project Specifications, all Restrooms Accessories and Specialties shall meet the latest ADA Standards; and all ADA type Restroom Accessories and Specialties shall be ADA approved and installed at ADA recommended heights and locations.

B. Prior to roughing-in materials specified herein, verify all dimensions of plumbing fixtures, mounting heights of plumbing fixtures, electric roughing-in for electric hand driers, and proposed locations for same in the Mechanical and electrical Documents.

C. Refer to the Drawings for specific layouts of existing and new Toilet Rooms, Staff Lounge W151, Activity Room E205,, Coffee Room X126, and other areas where Restroom Accessories and Specialties are required to be provided.

D. Refer also to Part 3 of this Section for some of the required ADA Standard mounting heights and dimensions of some accessories.

### PART 2 - PRODUCTS

#### 2.01 MANUFACTURERS

A. Restroom Accessories Manufacturers:

1. (ASI); Bobrick; Bradley; or a prior approved substitute.

2. Items specified herein are by Bobrick, Ives, and Rockwood and are used only to denote the quality standard of product desired and that they do not restrict bidders to the specific brand, make, manufacturer, or specification named; and that they are used only to set forth and convey to prospective bidders the general style, type, character, and quality of products desired; and that equivalent products may be acceptable.

3. It shall be the responsibility of the professionally employed Architect or Engineer, or Interior Designer, to determine what is considered an equivalent product, meeting also Owner approval, on any and all Projects in which they have been legally employed to perform professional services.

4. Other manufactures specified below or above, or other prior approved substitutions may be provided if they meet all requirements specified herein and are substitutions approved by the Architect, Engineer, or Interior Designer.

#### 2.02 MATERIAL REQUIREMENTS

A. Stainless steel; type 302/304, ASTM A 167.

B. Steel cold rolled sheet, ASTM A 366.

1. Zinc coated; ASTM B 123.

2. Chrome Plating; ASTM B 456, type SC - 2.

C. Brass: Cast or forged quality alloy FS W-P-541.

D. Galvanized Steel: ASTM A 386.

E. All screws and bolts on mirrors shall be stainless steel and theft proof type.

## 2.03 MATERIALS

A. Grab Bars: In accordance with ADA 609.2.1, provide minimum 1-1/4" diameter circular grab bars as follows:

1. B-5806 Series Grab Bars: Provide 1-1/4" diameter x 18 gage, type 304 1.2 mm thick stainless steel, satin finish grab bars where indicated with 13 gage concealed mounting plate with 4 type 304 stainless steel set screws, three (3) 1/4" x 20 x 2" machine screws, screwed into 2x12 treated wood blocking provided behind gypsum board, securely fastened between metal studs, where porcelain tile on gypsum board occurs.

2. Provide specified grab bars where indicated in Restrooms X112, X113, W152, W153, E201, and E202.

3. Where indicated in the larger toilet compartments, provide one (1) rear B -5806 x 36" grab bar behind water closets and provide one (1) side B -5806 x 42" on the sides of water closets.

4. Where indicated in the narrower toilet compartments in Restrooms X112, E201 and E202, provide one (1) pair of B -5806 x 42" grab bars, one on each side of the water closets.

5. In the above four (4) indicated and specified Toilet Rooms X112, X113, W152, W153, E201 and E202, provide a total of six (6), 24" rear grab bars, and a total of twelve (12), 42" side grab bars.

B. Toilet Tissue Dispensers; Surface Mounted: In accordance with ADA 309.4, (limited to 5 pounds maximum force to operate), provide B-4288 Contura Series surface mounted toilet tissue dispensers as follows:

1. Surface mounted multi-roll toilet tissue dispensers, in accordance with 604.7, shall not be of a type that controls delivery or that does not allow continuous paper flow; and shall hold two (2) standard core toilet tissue rolls up to 5 -1/4" diameter where the extra roll automatically drops in place when bottom roll is depleted; and provided with theft-resistant, heavy duty spindles; 6 -1/16" wide x 11" high, x 5-15/16" deep.

2. Door and cabinet, 22 gage, 18 gage door frames, welded cabinet construction, all exposed surfaces satin finished, Type 304 stainless

steel; dispensing mechanism 16 gage stainless steel, welded construction, all locks keyed alike.

3. Provide one (1) surface mounted toilet tissue dispenser where indicated adjacent to each of the water closets indicated in Restrooms X112, X113, X118, W152, W153, E201 and E203, mounted either on porcelain tile on gypsum board walls or mounted on toilet partitions where indicated, for a total of nine (9) B-4288's surface mounted toilet tissue dispensers required.

C. Restroom Mirrors: In accordance with ADA 603.3, provide surface mounted B-290 Series surface mounted mirrors over all restroom lavatories as follows:

1. Frames: Minimum one (1) piece, roll formed, 3/4" x 3/4", type 304, satin finished stainless steel; continuous stiffener, welded corners, ground and polished smooth.

2. Glass Mirror Material: Provided with minimum 15 year warranty, No. 1 quality, minimum 1/4" thick float glass, guaranteed against silver spoilage for a minimum of 15 years, with minimum 20 gage galvanized steel back attached to frame with concealed screws, installed and secured on a steel wall hanger with two (2) theft resistant locking screws.

3. Provide one (1) B-290 - 1836, (18" wide x 36" high mirrors), over all restroom lavatories in X112, X113, X118, W152, W153, E201 and E202, all mounted on porcelain tile on interior type gypsum board walls, for a total of nine (9) specified mirrors required.

D. Restroom and Other Sink Counter Soap Dispensers: In accordance with ADA 309, provide B-2112 horizontal surface mounted soap dispensers as follows:

1. Provide all satin stainless steel horizontal tank soap dispensers, capable of holding a minimum of 40 fluid ounces, with unbreakable refill windows and with corrosion resistant valves capable of dispensing liquid and lotion soaps, and synthetic detergents. Valve shall operate with less than 5 pounds of force. Provided said soap dispensers with concealed vandal resistant wall fastening.

2. Provide soap dispensers with locked hinged filler top that requires a special key to open it; vandal resistant, 8-3/8" wide, x 4-3/4" high, wall to push button, 3-1/2", all minimum 22 gage Type 304 stainless steel.

3. Provide one (1) B-2112 horizontal surface mounted soap dispenser adjacent to the single lavatories indicated in Restrooms X112, X113, X118, W152 and W153 and provide one (1) B-211 horizontal surface mounted soap dispenser between the double lavatories in Restrooms E201 and E202 all securely mounted over porcelain tile.

4. Provide one (1) B-2112 horizontal surface mounted soap dispenser adjacent to each of the sinks in Staff Lounge W151, New Coffee Room X126,

and Activity Room E205, all securely mounted on painted interior type gypsum board.

5. Provide a total of ten (10) specified soap dispensers required.

E. Restroom Recessed Paper Towel Dispensers/Waste Receptacles: Provide B-4369 Contura Series paper towel dispenser/waste receptacles recessed porcelain tiled walls as follows:

1. ADA approved, minimum 22 gage door, minimum 22 gage cabinet and flange, type 304 stainless steel, satin finish, radius return on door for rigidity, all welded cabinet construction, full length stainless steel piano hinge, secured with tumbler lock; dispenses minimum 350 "C" fold or 475 "multi-fold" paper towels, 12-3/4" wide x 28" high x 2 -1/2" maximum deep, with a minimum (3) gallon waste receptacle.

2. Provide one (1) B-4369 recessed paper towel dispenser in Restrooms W152, and and one (1) in Restroom W153, all securely mounted on porcelain tile over interior type gypsum board walls, for a total of two (2) specified Recessed Paper Towel Dispensers/Waste Receptacles required.

F. Surface Mounted Roll Type Paper Towel Dispensers: Provide B-253 Heavy duty cast aluminum bracket paper towel dispensers with satin finish, with controlled delivery for rolls of 6" diameter paper towels as follows:

1. Provide one (1) B-253, 12-1/2" wide x 4-7/8" deep paper towel dispenser adjacent to each cabinet sink in Staff Lounge W151, New Coffee Room X126, and Activity Room E205, all mounted on interior type gypsum board walls for a total of three (3) specified surface mounted roll type paper towel dispensers required.

G. Double Robe/Coat Hooks: In accordance with 604.8.3, provide B-76727 double robe hooks as follows:

1. Minimum 11 gage, all type 304 satin finished stainless steel, all welded construction, 3-15/16" wide x 1 -7/8" overall depth.

2. Provide one (1) B -76727 robe hook, (with special threaded fasteners specified in Section 10170, Toilet Partitions), on the in-sides of all toilet partition doors indicated in Restrooms X112, X113, E201 and E202, all mounted on toilet partition doors.

3. Provide one (1) B-76727 on the in-sides of wood Restroom entrance doors to Restrooms X118, W152 and W153.

4. Provide a total of eleven (11) specified robe hooks required.

H. Recessed Electric Hand Driers: Provide B-750-115V Auto Pilot Operation Recessed Electric Hand Driers, where indicated, with no timers, with a 10 year manufacturer's warranty as follows:

1. Provide electric hand driers in color of white or gray as selected by Owners, 1/10 horse power, 115 volts, 20 amps, 6,200 rpm's, 150 cfm, 2,300 watts, equipped with a thermal overload switch.

2. Hand drier shall be 15-1/4" wide x 11-7/8" tall, and in accordance with ADA latest requirements, shall have a maximum of 4" of the hand drier protruding outwards from the finished porcelain tile on gypsum board wall.

3. Refer to Electrical documents for exact electrical requirements, electrical roughing-in requirements and coordinate exact locations with Architect.

4. Provide one (1) each hand drier in Restroom X112, X113, X118, W152, W153, E201, and E202, for a total of seven (7) electric hand driers required.

I. Stainless Steel Corner Guards:

1. Bobrick's Gamco CG-4 Stainless Steel Corner Guards:

a. Minimum 18 gage, type 304 stainless steel, satin finish with no sharp edges, minimum forty-eight inches (48") tall by 3 -1/2" x 3 -1/2", adhesively mounted and screwed into metal corner studs with pan head stainless steel screws.

b. If the manufacturers submitting Product Data do not make 48" high corner guards, the Contractor shall obtain 48" high corner guards from another different manufacturer which makes 48" high corner guards.

c. Provide corner guards on the new gypsum board wall exterior corners of Storage Room W156, Wing wall near lockers in W151; Study Room E207; Closet E206; Vestibule X101; in Mechanical Room E204 near & opposite EWC's recess; on both corners of the EWC recess in E210, and on new exposed corner of wall Type M near Door X31; for a total of nine (9) corner guards required where indicated on Sheet A07, note **18** in 3A08.

J. Wall/Toilet Partition Door Bumpers:

1. Provide Ives No. 408 stainless steel or Rockwood No. 406 stainless steel, (2-7/16" - 2-1/2" diameter with half-sphere rubber bumper), toilet compartment door wall/door bumpers.

2. Securely fastened bumpers to porcelain tile on walls to protect walls in Restrooms X112, X113, E201 and E202, adjacent to toilet partition doors, for a total of four (4) door bumpers required.

2.04 MINIMUM NUMBER OF ACCESSORIES REQUIRED

Even though some Room Numbers may not be specified herein, and some typographical errors may occur herein, refer to the Drawings and count and verify the number of all of the water closets, lavatories, sinks on counters, service sinks (if any), and all plumbing fixtures, toilet

stalls, toilet stall doors and provide the following minimum number of restroom accessories and specialties:

A. At ADA type water closets in all multiple occupancy restrooms and all single occupancy restrooms, in larger ADA type water closet stalls, provide one (1) specified rear grab bar and one (1) specified side grab bar; and in narrow approximately (3) feet wide Ambulatory ADA type water closet stalls, provide a pair of specified side grab bars.

B. Adjacent to all water closets provide one (1) specified ADA type toilet tissue dispenser.

C. On the in-side of all doors of toilet partitions, and wood entrance doors to single occupancy Restrooms which do not have toilet partitions, provide a minimum of one (1) specified coat hook.

D. Where all toilet partition doors contact adjacent porcelain tile on gypsum board walls, provide one (1) specified toilet stall door bumper.

E. Above all restroom lavatories, provide one (1) specified mirror.

F. Adjacent to all single lavatories, and between all double lavatories, provide one (1) specified ADA type soap dispenser.

G. In all new and existing Restrooms, provide one (1) ADA type electric hand drier.

H. In specified and indicated certain single occupancy restrooms W152 & W153, provide one (1) specified recessed ADA type paper towel dispenser/waste receptacle.

I. Above all base cabinets, (other than Restrooms), with counter top sinks, provide one (1) specified ADA type soap dispenser and one (1) specified paper towel roll dispenser.

### PART 3 - EXECUTION

#### 3.01 GENERAL INSTALLING REQUIREMENTS

A. Verify locations of attaching fasteners for toilet accessories as Work progresses.

B. Provide select, straight, treated 2 x 12 wood blocking behind all ADA type grab bars, toilet accessories and specialties specified herein, in all porcelain tile on gypsum board walls. Refer to Finish Schedule & Wall Types for gypsum board walls that will be provided with porcelain tile wainscoting.

C. Provide minimum 1/4"-20" x length recommended, type 304 stainless steel machine screws with heavy gage steel backing plates in gypsum board walls and through toilet partitions for securely fastening all ADA type grab bars where said grab bars shall be capable of supporting nine hundred (900) pounds.

D. Verify locations and manufacturers' specified rough opening sizes prior to cutting openings for same.

E. Securely fasten all accessories with stainless steel screws.

F. Provide all items plumb and level where indicated and specified.

G. Bolted accessories shall be bolted with stainless steel bolts.

H. Repair, or remove and replace accessories and anchors which have become loose or are sagging.

I. Repair or remove and replace all accessories which are scratched, bent, dented, broken, damaged, or not functioning properly.

J. Install all ADA type toilet accessories in strict accordance with the latest ADA Standards, requirements, heights, and measurements.

K. All heights specified below shall be measured from above the finished floor.

### 3.02 GENERAL ADA ACCESSORY LOCATIONS AND ADA ACCESSIBLE DIMENSIONS

#### A. Grab Bars:

1. When tank type water closets, or flush valve type water closets are specified in the mechanical documents, and grab bars are indicated over water closet tanks or flush valves, provide all grab bars high enough to insure that the tank covers for the water closet tanks can be easily removed to service same, and provide flush valves at heights that do not interfere with grab bars location requirements.

2. In accordance with ADA 604.5.1 and 604.5.2, unless otherwise specified herein, rear grab bars shall be 36" long minimum from center to center of wall supports, and shall extend from the centerline of the water closet 12" minimum on the side near the side grab bar, and 24" minimum from the water closet centerline on the other side, away from the side grab bar; and side wall grab bars shall be 42" long minimum, provided 12" maximum from the rear wall, and shall extend 54" minimum from the rear wall.

3. In accordance with ADA 609.4, all grab bars shall be level with one another and provided between 33" minimum and 36" maximum above the finished floor; to insure clearance of toilet tissue dispensers below, provide all grab bars with tops of gripping surfaces at a height of 35-3/4" above finish floor.

4. In accordance with 609.3, provide a clear space of 1-1/2" between all grab bars and the finish walls; provide a clear space of 1-1/2" between all grab bars and protruding objects and toilet accessories below grab bars; and provide a clear space of 12" between all grab bars and protruding objects and accessories above grab bars. Non-protruding recessed toilet accessories, specialties, and other items may be provided adjacent to grab bars if the grab bars do not obstruct use of and access to said accessories.

5. In accordance with 609.8 all grab bars shall be capable of resisting 250 pounds of force in the horizontal & vertical direction.

B. Toilet Tissue Dispensers:

1. In accordance with 609.3, any protruding part a toilet tissue dispenser, or similar accessory, shall be provided such that there is a minimum of 1-1/2" clearance below the grab bar, and 12" minimum clearance above the grab bar. Verify and insure that grab bars clearances do not interfere with any other toilet accessories and any other materials and equipment. Verify and insure that all ADA type toilet tissue dispensers, (especially those with concealed spare rolls on top), are fully usable and serviceable in conjunction with the position of the grab bars.

2. In accordance with 309, 309.4 and 604.7, for horizontal dispenser locations, provide centerlines of toilet tissue dispensers a minimum of 7" and a maximum of 9" in front of the forward bowl lip of water closets; and for vertical heights, provide toilet tissue dispensers with the outlet at 15" minimum and 48" maximum above the finished floor; hence, depending on the actual height of the toilet tissue dispenser, provide centerline of toilet tissue dispenser approximately 8" in front of toilet bowl lip, with the center of the bottom tissue roll at approximately 22" above finished floor, if there is at least 2" or more clear space between the top of the dispenser and the bottom of the grab bar.

C. Mirrors: In accordance with 603.3, provide ADA type mirrors as closely as possible to the top of the lavatory and centered on lavatories when installing mirrors above the lavatory, with bottom of reflecting surfaces a maximum of 40" above the finished floor, and not interfering with the operation of water controls or the operation other restroom accessories.

D. Soap Dispensers: In accordance with ADA 308, 309, and the ADA Checklist, pages 11 and 12, Toilet Rooms, provide the top of the operable part of soap dispensers at 44" maximum height above the finish floor, when located above lavatories or counters which are between 20" and 25" in depth; hence, near and on sides of restroom lavatories and near and on sides of sinks in cabinets, provide the top of the operable part of the soap dispensers at 43" maximum height above the finish floor.

E. Paper Towel Dispensers; Recessed In Walls: In accordance with ADA 308, 309, and the ADA Checklist, pages 11,12 and 13, Toilet Rooms, provide the top of the operable part of paper towel dispensers at 44" maximum height above the finish floor, when located above lavatories or counters which are between 20" and 25" in depth; and provide the top of the operable part of paper towel dispensers at 48" maximum height above the finish floor, when not located above lavatories or counters which are between 20" and 25" in depth, and have no obstruction out front; hence, provide the operable part of paper towel dispensers 1" lower than those listed above; i.e., respectively, 43" and 47" above finish floor.

F. Paper Towel Dispensers, Roll Type; Surface Mounted: In accordance with ADA 308 and 309, provide surface mounted roll type paper towel dispensers near and on sides of sinks in cabinets at 43" to center of roll.

G. Double Robe/Coat Hooks: In accordance with ADA 604.8.3, provide double robe hooks on backs of designated door, (and provide specified shelves, if any), at ADA 308 heights of between 40" and 48" above the finish floor; hence, provide double robe hooks at 47-1/2" from finish floor to top of robe hooks.

H. Electric Hand Driers: In accordance with ADA 308 and 309, and the ADA checklist page 13, Toilet Rooms, when not obstructed by lavatories or cabinets, provide the top part of the operable part of the electric hand drier at 48" maximum above the finish floor; hence provide same at 47" above finish floor.

I. Stainless Steel Corner Guards: Provide and securely fasten corner guards such that bottoms of corner guards abut tops of finish bases. Where interior wall corners are less than 90 degrees or more than 90 degrees, shop bend metal corner guards to neatly fit corners which are not 90 degrees.

J. Wall/Door Bumpers: Provide bumpers where parts of toilet compartment doors hit walls to avoid damage to walls or toilet partitions.

### 3.03 ADA PLUMBING FIXTURE AND INDOOR DRINKING FOUNTAIN DIMENSIONS

A. Refer to Mechanical Documents for ADA type plumbing fixtures specified and verify location and height dimensions with Mechanical Engineer.

1. In accordance with ADA 606.3, the front rim height or vanity height for ADA type lavatories shall not exceed 34" in height.

2. In accordance with ADA 306.2, provide a lavatory/vanity toe clearance of minimum 9" in height, and provided with a 17" minimum depth clearance and a 25" maximum depth clearance.

3. In accordance with ADA 306.3, provide a lavatory/vanity knee clearance of 27" minimum in height, provided with an 11" minimum depth clearance at 9" in height, and an 8" minimum depth clearance at 27" in height above the finish floor.

4. Exposed pipes under ADA lavatories shall be protected in an enclosure or insulated.

B. Provide plumbing fixtures and drinking fountains at heights measured from above the finished floor, (AFF), as indicated and as specified in the Mechanical Documents.

C. In accordance with ADA 307.2, depending on the exact sizes and depths of drinking fountains provided, measure same and coordinate sizes of same with dimensions of the gypsum board wall recess provided for drinking fountains such that the drinking fountains do not project outward from the main perimeter room or area wall more than 4" into the adjacent room or area.

- END -

**SECTION 10950**

**MISCELLANEOUS BUILDING SPECIALTIES**

PART 1 - GENERAL

1.01 GENERAL REQUIREMENTS

A. The provisions of all of the Contract Documents are hereby made a part of this Section.

B. The requirements of Section 01810 entitled Technical Section Requirements apply to this Section the same as though herein written out in full.

1.02 STANDARDS

Meet requirements and recommendations of the applicable portions of the latest editions of Standards listed below:

- A. Underwriters' Laboratories (UL)
- B. Federal Specifications (FS)
- C. Americans with Disabilities Act, Latest Standards (ADA)
- D. American National Standard Institute (ANSI)
- E. American Society for Testing and Materials (ASTM)
- F. State of Louisiana Department of Transportation and Development (LADOTD)
- G. National Fire Protection Association (NFPA)
- H. International Building Code (IBC)
- I. Ascension Parish Government

1.03 SUBMITTALS

A. Submit manufacturer's Product Data on all materials specified herein.

B. Submit manufacturer's full range of standard and special colors for all items specified herein.

C. Submit Shop Drawings indicating fastening and anchoring of materials specified herein.

D. Submit Samples of materials and equipment specified if requested.

PART 2 - PRODUCTS

2.01 MANUFACTURERS

A. Miscellaneous Building Specialties Manufacturers:

1. Manufacturers are as specified below, or a prior approved substitute.

2. Items specified herein by specific manufacturers are used only to denote the quality standard of product desired and that they do not restrict bidders to the specific brand, make, manufacturer, or

specification named; and that they are used only to set forth and convey to prospective bidders the general style, type, character, and quality of products desired; and that equivalent products may be acceptable.

3. It shall be the responsibility of the professionally employed Architect or Engineer, or Interior Designer, to determine what is considered an equivalent product, meeting also Owner approval, on any and all Projects in which they have been legally employed to perform professional services.

4. Other manufactures specified above or below, or other prior approved substitutes may be provided if they meet all requirements specified herein and are approved substitutes by the Architect, Engineer, or Interior Designer.

## 2.02 MATERIALS

A. Lockers: Lockers in Staff Lounge W151 shall be provided by separate contract with the Owner's Interior Designer and installed by the Contractor. Re: Note 05, Detail 3A07. Provide boxing above lockers as indicated on Detail 6aA06. Re: 6hA06 for elevation of lockers. Coordinate exact sizes of lockers and provide matching plastic filler strips on both sides of lockers and above lockers.

B. Outside Treated Wood Storage Platform, 8 Feet x 20 feet:

1. On the immediate north, (rear), side of the existing library building, adjacent to the existing building's air-conditioning compressor fence, provide four (4) sheets of minimum 3/4" thick APA treated plywood, with all eight (8), eight (8) foot plywood sides securely joined and screwed to five (5) treated 2x6's, cut approximately 7'-0-1/2" long; and with both four (4) foot edges of all five (5) sheets of plywood securely fastened to two (2) treated 2x6's, twenty feet long, thus providing a treated plywood platform 8 feet deep and 20 feet wide for storage of the Owner's existing concrete benches and stepping stones.

C. Exterior Metal Bike Rack:

1. Exterior Bike Rack shall be as manufactured by Columbia Cascade, Portland, Oregon; Jaypro, Waterford, CT; FS Industries, Providence RI; or a prior approved substitute.

2. Exterior bike rack shall be minimum approximately 5'-2" wide x minimum 36" tall above finished concrete slab, provided with a powder coated finish in manufacturer's standard colors as selected by Architect, manufactured from minimum 2-3/8" OD Schedule 40 steel pipe, and designed to hold seven (7) bikes on said bike rack, with in-ground concrete slab mounting.

3. Refer to Drawings for location and details.

D. Pre-Cast Concrete Splash Blocks for Roof Drains:

1. Precast building perimeter precast concrete splash blocks shall be as manufactured by All Star Concrete, (817) 909-5975; Precast Concrete Step Co., (504) 488-2639; Stimco, (480) 8988-8132; or a prior approved substitute.
2. Splash blocks shall be made with 5,000 psi concrete, with a smooth finish, with an open front, raised lip on both sides and back, and shall be provided where indicated on concrete surfaces and on compacted finish grading.
3. Provide indicated and specified splash blocks at bases of all mechanical roof drains and all metal gutter downspouts.
4. Refer to Sheet A07 for splash block locations. These indicated splash blocks are marked with numbers and symbols; however, splash blocks are not drawn to scale.
5. Provide fifteen (15) 12" x 24" splash blocks below metal roof metal downspouts; and provide three (3) custom made 20" wide x 48" long splash blocks below the three (3) Mechanical Plumbing membrane roof drains.
6. Refer to the note on Sheet A07, (near the East side, under the South new metal gutter on the existing library), to manufacturer and provide this one (1) downspout with the water out flow towards the West as opposed to towards the South. Provide this 12" x 24" splash block allowing water to also flow West.
7. Refer to Drawings & roof details and Specifications for the new metal splash block below the new downspout on the existing membrane roof over the existing Mechanical Room.

### PART 3 - EXECUTION

#### 3.01 INSTALLING

##### A. General Installation:

1. Install all materials and equipment where indicated and specified and in strict accordance with manufacturer's instructions.

- END -