CITY OF BRYAN
The Good Life, Texas Style.™

July 14, 2016

Lisa Harvell
Texas Historical Commission
108 West 16th Street
Austin, Texas 78701

Ms. Harvell,

Please find attached and enclosed the FY 2016 Texas Preservation Trust Fund project proposal documents for Temple Freda in Bryan. I trust you will find them complete. If you have questions please do not hesitate to call.

Sincerely,

Randy Haynes

Randy Haynes, AICP, LEED® GA
Senior Planner
Historic Preservation Officer
City of Bryan, Texas
979.209.5074
rhaynes@bryantx.gov

TEXAS HISTORICAL COMMISSION

TEXAS PRESERVATION TRUST FUND

FY 2016 PROJECT PROPOSAL SUBMITTAL FORM

Please type or print neatly in ink. **DUE July 15, 2016**

Project Name Temple Freda

Project County Brazos **Project Type** Architecture Development

Historic Designation(s): ☒ National Register ☐ National Register District ☐ Recorded Texas Historic Landmark ☐ State Archeological Landmark ☐ No Historic Designation

APPLICANT INFORMATION

	Property Owner (if applicable)	**Applicant** (if different than owner)
Name:	Bryan Commerce & Development	City of Bryan, Texas
Contact Person:	Lindsey Guindi, AICP	Randy Haynes, AICP
Address:	300 South Texas Avenue	300 South Texas Avenue
City / State / Zip:	Bryan / Texas / 77803	Bryan / Texas / 77803
Telephone / Fax:	979.209.5076	979.209.5074
E-mail:	lguindi@bryantx.gov	rhaynes@bryantx.gov

PROJECT OVERVIEW

A. Scope of Work for this Grant

The initial application contained basic information about the project and the work description was very general. Describe in detail the scope of work for which funding is requested providing any necessary revisions from the initial application. Describe why the resource is endangered or describe the urgency of the project and how this project will address or mitigate these issues. Identify the project personnel involved in the management of the project. Identify any project professionals who will be involved in the project and their respective duties. Describe any partner organizations and their role in the project. Provide information as an attachment; label **"Attachment Project Overview A. Scope of Work."**

B. Project Budget

- Architecture development project: provide a detailed budget itemized by major cost categories prepared by your project professional; label **"Attachment Project Overview B. Project Budget."**
- Archeology development, archeology curatorial, architecture or archeology planning, architecture or archeology acquisition, or education project: provide a budget on the appropriate form (see Attachment B in grant manual) or attach a comparable detailed budget prepared by your project professional; label **"Attachment Project Overview B. Project Budget Revised"**

B. Project Budget, continued

$50,000	**Amount** of grant funds requested
$50,000	**Applicant's Cash Match** (Except for in exceptional circumstances, the cash match must be available by project proposal deadline of July 15, 2016. (See below for additional information*.)
$100,000	**Total Project Cost** (the scope of work for **this grant**)

*The applicant's cash match should be at least equal to the grant funds requested and sufficient to complete the proposed scope of work. If the entire cash match is not currently available, identify specific plans to acquire additional matching funds. For example, are fundraising programs or other grant applications planned? How much do you expect to raise? Attach timeline; label **"Attachment Project Overview B2. Applicant's Cash Match."**

C. Project Professionals

Please list all project professionals involved in the project including architects, archeologists, engineers, historians, contractor, etc.

Name	Company
Eva Read-Warden, AIA	Arkitex Studio, Inc
Robert B. Warden	Center for Heritage Conservation, Texas A&M University
S. Patrick Sparks, P.E.	Sparks Engineering, Inc.
James Roppolo	ATC Contractors, Inc.
Lindsey Guindi, AICP	City of Bryan, Texas
Randy Haynes, AICP	City of Bryan, Texas

REQUIRED SIGNATURE(S): Application is incomplete if missing appropriate signatures.

Property owner's signature, if applicable:
I agree to follow all rules of the Texas Historical Commission relating to the Texas Preservation Trust Fund Grant Program if awarded a grant.

Lindsey Guindi 7.12.16

Property owner, legal representative, or potential purchaser of property signature — Date

Manager's signature, if applicable (the owner signature line must be signed as well):
As manager, lessee or maintainer of the property, I agree to follow all rules of the Texas Historical Commission relating to the TPTF Grant Program, if awarded a grant.

Manager, lessee or maintainer signature — Date

Primary contact/representative's signature, if applicable:
As primary contact or representative of the project proposed for grant funding, I agree to follow all rules of the Texas Historical Commission relating to the TPTF Grant Program, if awarded a grant.

Randy Haynes 12 July 2016

Project Contact/Representative — Date

Attachment Project Overview A. Scope of Work.

Based on the December 2015 findings outlined in the structural assessment by Sparks Engineering of San Antonio, Temple Freda is in imminent danger of irreversible harm. The assessment has identified and specifically described the areas of concern. The proposed project is the first phase (stabilization) of a multi-step plan intended to ensure the continued survival of the building and also contribute directly to the long term goal of restoration and reuse to commemorate the untold story of the Jewish Community in Bryan and venue available for special events. The applicant plans that the overall effort will be complete by 2020. Given the findings of the Sparks report, to avoid irreversible harm it is important that the project go forward as soon as possible.

Items addressed within the upcoming project will include: Masonry cleaning, testing and restoration; parapet and coping repair; site grading and installation of a vapor barrier under the building and a gutter/downspout system at the rear of the building; installation of a tie rod system to support the rear wall, and restoration of the Corinthian columns. All work will be performed in compliance with Secretary of Interior Standards.

Temple Freda, a 1912 classical revival-style Jewish synagogue is the oldest religious building in the region. Originally construction of Temple Freda was undertaken by the small Jewish congregation but subsequently became the focus of community wide support. This history of cooperation between divergent religious groups is even today cited as a source of civic pride. The building is nationally significant, it's largely untold history representing components of post-civil war reconstruction expansion and settlement of Jewish families in Texas and the establishment of what would become the largest on-campus Jewish student organization in the U.S.; the Hillel International. Temple Freda is almost unique in the world, being only one of four synagogues on earth named after a woman; the other three being in Shanghai, Hong Kong and Tripoli. Its architectural integrity intact, Temple Freda offers a rare glimpse into 1912.

Analogous to its original construction, the restoration and reuse of Temple Freda is a collective effort. The City of Bryan has agreed to facilitate the restoration process and is assisted by a grassroots group of community volunteers. The Brazos Heritage Society, a local preservation group with 501c3 status has established an account to bank tax-deductible donations to restoration effort. Although a fundraising effort has yet to begin, to date around $20,000 has been collected. In addition to community volunteers, professional services will be engaged. Members of the professional team include: Eva Read-Warden AIA; Robert B. Warden and S. Patrick Sparks, P.E.

The City of Bryan through its affiliate the Downtown Bryan Association currently operates a 400-seat performance venue two blocks from Temple Freda. It is expected that when complete, Temple Freda will also be operated by the DBA. In this manner the building will be financially self-sustaining in a way that will allow the public easy access.

Of particular consideration is the fact that when ultimately returned to public use Temple Freda will contribute to the synergy that has become Bryan's re-born Downtown. The temple is located within Bryan's 22-acre Downtown Historic Preservation Overlay District and 280-acre

Attachment Project Overview A. Scope of Work.

Downtown Tax Increment Re-investment Zone. Between 2001 and 2008 the central core of the area received $17.1 million in public infrastructure reinvestment. This public investment was intended to support the efforts of private property owners and business people and has resulted in an amazing rebirth of Bryan's historic downtown. In addition to being protected as a locally designated historic district, in 2014 the Texas Commission on the Arts named Downtown Bryan as one of only 28 designated Cultural Districts in 22 separate cities in Texas. Temple Freda is an important component of the cultural and historic districts and represents an important but under-told story of the fusion of the diverse cultures that have combined to shape Bryan during the first 75 years of the town's 150 year history.

Phase 1 – Scope of Work (to be funded by monies from the Texas Preservation Trust Fund Grant Program, if awarded)

Masonry Testing and Cleaning:
Prior to proceeding with masonry restoration, the walls will be cleaned of mold, mildew, and moss growth. All plant materials will be removed that is on the building or growing immediately adjacent to the walls. Cleaning will follow the Secretary of the Interior's standards, not allowing for use of chemical or acidic cleaners, either before or after restoration work.

Also prior to masonry restoration, existing mortar will be sampled and tested to determine materials, proportions, and strength. Both acid tests and petrography will be performed by an approved testing company, on several samples of mortar, to help determine the appropriate mortar mix for the rebuilding and repointing of the masonry walls.

Masonry Restoration:
The exterior clay masonry bearing walls of Temple Freda are the area most in need of attention. The masonry is suffering extensive mortar joint failure, primarily due to water infiltration and mortar joint degradation. Portions of walls are missing masonry units or are severely damaged. In addition to rehabilitation of selected portions of the walls and extensive repointing of mortar joints, the parapet coping needs to be repaired, not only to re-establish the proper appearance but also to establish a water-tight cap to stop the infiltration of water into the wall from the top.

Broken and missing brick will be replaced. Once the brick is reset, a cementitious coating will be applied to re-create the original appearance of the coping. New roofing membrane will be installed at the back side of the parapets and over the top of the parapet (not visible) to ensure the parapet is water tight. The masonry restoration work comprises the majority of the budget for this phase of the project.

Column repair:
One defining architectural feature of Temple Freda are the two Corinthian columns supporting the entry pediment. Both columns are significantly deteriorated and will be repaired during the first phase of building restoration. The column shafts, built from an assembly of tapered wooden staves, are cracking and warping. The bases have collapsed and the capitals of have generally

deteriorated with portions of one column capital missing. Once the pediment is properly supported one of the columns will be removed and replaced. On the remaining column the intact portions of the capital will be cleaned, sealed and refinished. As needed, sections of the intact elements will be used to produce a master mold to manufacture parts to replace the missing sections. Once the replica of the missing portion is attached, the entire capital will be repositioned so the repaired portion will face the interior of the porch and the street view will be of an original portion of the capital.

Installation of vapor barrier, gutter and downspout system, grading and drainage:
There are several low areas around the foundation and the general slope of the immediate perimeter is towards the building. Moreover, the site soil level is higher than the crawlspace soil level, with water accumulating under the building after rainfall; large volumes of uncontrolled water coming off the back of the roof exacerbate this condition. To correct the problem it will be necessary to regrade the site such that the finish ground elevation is lower than the soil in the crawl space and that there is positive flow away from the foundation. In addition a 12 mil reinforced vapor barrier will be installed in the crawlspace and a proper gutter and downspout system added along the rear (east) elevation.

Stainless steel structural tie rods:
The exterior walls are constructed of three-wythe load bearing brick masonry with no internal ties within the masonry system. There is a visible outward lean of the southeast upper corner of the south façade, the masonry having been displaced several inches. If this outward action is allowed to continue, the wall will become unstable and failure will occur. To permanently stabilize and strengthen the post-repair structure, the first in a system of stainless steel tie rods will be installed at the rear of the structure as shown on the plan drawings.

With the completion of the above stated repairs, water infiltration will cease and Temple Freda will be stabilized. Further restoration will need to occur and will be completed as funding is obtained.

Attachment Project Overview B. Project Budget

PROJECT BUDGET

PROJECT: 1410 PHASE 1 STABILIZATION OF TEMPLE FREDA

Tuesday, July 5, 2016

Based on estimates by Sparks Engineering, The Arkitex Studio, and contractors, we offer the following project budget:

Pre-construction mortar testing	$ 4,000
Masonry Cleaning, repointing, coping repair	$ 68,000
Rear arch repair	$ 4,000
Stainless steel tie rods	$ 3,000
Parapet /coping repair	$ 11,000
New wood stave column & capital repair	$ 5,000
Installation of vapor barrier	$ 2,000
Gutter and Downspouts, grading & drainage	$ 3,000
Total	**$100,000**

The Arkitex Studio, Inc.
308 N. Bryan Ave.
Bryan, TX 77803
P (979)821-2635
F (979)775-8224
www.arkitex.com

Attachment Project Overview B2. Applicant's Cash Match

The grassroots Friends of Temple Freda group, along with the support of the City of Bryan, has undertaken only limited, specifically targeted fundraising efforts in order to provide project planning seed money prior to a much larger fundraising effort. It is the stated goal of owner of the property (The City of Bryan) to use a minimum amount of general fund taxpayer dollars to restore the temple, and to receive funds through outside fundraising efforts and private donations.

The decision was made to postpone full-on fundraising efforts until an accurate scope of work and budget estimate for the first phase and reasonable estimates for future phases could be communicated to prospective donors. The Friends of Temple Freda report that there are a number of interested parties ready to offer help when called upon.

In April 2016 a member of the Friends group made a presentation to the Texas Jewish Historical Society annual gathering in Beaumont regarding the Temple Freda project. The Society sponsors a grant program to which the Friends plan to apply. On August 10th, 2016 Shalom Austin will host a meeting at the JCC Community Hall, 7300 Hart Lane in Austin to discuss the restoration of Temple Freda. Fundraising will be a primary topic during that event.

The multi-phase effort to preserve Temple Freda will require financial support until completion and the return of the building to self-sustaining use. An on-going fundraising effort to provide such support is expected.

City of Bryan Downtown Improvement Grant The source of funds is income from a tax increment reinvestment zone encompassing the area around Temple Freda.	$21,250.00
Cash-on-hand private donations, on deposit with the Brazos Heritage Society, a local preservation group with 501c3 status.	$16,091.00
In-kind donation from City of Bryan Public Works Department for engineering site survey, grading and installation of vapor barrier.	$13,500.00
In-kind donation from Arkitex Studio Inc. for contract facilitation, bid negotiation and construction administration.	$4,000
Total	$54,841.00

Phase 1 Stabilization work for

TEMPLE FREDA

205 Parker Street, Bryan TX | July 2016 | Project No. 1410

LICENSED ARCHITECT
EVA MARIE READ-WARDEN
15353
STATE OF TEXAS

07/07/2016

Project Manual

The Arkitex Studio, Inc.

308 N. Bryan Ave.
Bryan, Texas 77803
P (979)821-2635
F (979)775-8224
www.arkitex.com

SECTION 01100 - SUMMARY

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This Section includes the following:

1. Work covered by the Contract Documents.
2. Type of the Contract.
3. Work under other contracts.
4. Use of premises.
5. Work restrictions.
6. Specification formats and conventions.

B. Related Sections include the following:

1. Division 1 Section "Summary of Multiple Contracts" for division of responsibilities for the Work.
2. Division I Section "Temporary Facilities and Controls" for limitations and procedures governing temporary use of Owner's facilities.

1.3 WORK COVERED BY CONTRACT DOCUMENTS

A. Project Identification: Phase 1 Stabilization of Temple Freda
1. Project Location: 205 Parker Street, Bryan TX

B. Owner: The City of Bryan, Texas
1. Owner's Representative: Randy Haynes

C. Architect: The Arkitex Studio, Inc.
1. Architect's Representative: Eva Read-Warden, AIA, TX License #15353

D. The Work consists of the following:
1. The Work includes grading and drainage improvements, vapor barrier installation, clay masonry restoration and cleaning, wood stave column replacement, terra cotta column capital repairs, and parapet repairs.

1.4 USE OF PREMISES

A. General: Contractor shall have full use of premises for construction operations, including use of Project site, during construction period. Contractor's use of premises is limited only by Owner's right to perform work or to retain other contractors on portions of Project.

B. Use of Existing Building: Maintain existing building in a weathertight condition throughout construction period. Repair damage caused by construction operations. Protect building and its occupants during construction period.

1.5 SPECIFICATION FORMATS AND CONVENTIONS

A. Specification Format: The Specifications are organized into Divisions and Sections using the 16-division format and CSI/CSC's "MasterFormat" numbering system.

1. Section Identification: The Specifications use Section numbers and titles to help cross-referencing in the Contract Documents. Sections in the Project Manual are in numeric sequence; however, the sequence is incomplete because all available Section numbers are not used. Consult the table of contents at the beginning of the Project Manual to determine numbers and names of Sections in the Contract Documents.
2. Division 1: Sections in Division 1 govern the execution of the Work of all Sections in the Specifications.

B. Specification Content: The Specifications use certain conventions for the style of language and the intended meaning of certain terms, words, and phrases when used in particular situations. These conventions are as follows:

1. Abbreviated Language: Language used in the Specifications and other Contract Documents is abbreviated. Words and meanings shall be interpreted as appropriate. Words implied, but not stated, shall be inferred as the sense requires. Singular words shall be interpreted as plnral, and plural words shall be interpreted as singular where applicable as the context of the Contract Documents indicates.
2. Imperative mood and streamlined language are generally used in the Specifications. Requirements expressed in the imperative mood are to be performed by Contractor. Occasionally, the indicative or subjunctive mood may be used in the Section Text for clarity to describe responsibilities that must be fulfilled indirectly by Contractor or by others when so noted.

a. The words "shall," "shall be," or "shall comply with," depending on the context, are implied where a colon (:) is used within a sentence or phrase.

PART 2- PRODUCTS (Not Used)
PART 3- EXECUTION (Not Used)

END OF SECTION 01100

SECTION 04901 - CLAY MASONRY RESTORATION AND CLEANING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

A. Section includes maintenance of unit masonry consisting of brick clay masonry restoration and cleaning as follows:
   1. Repairing unit masonry, including replacing units.
   2. Rebuilding portions of masonry walls.
   3. Reparing parapet coping.
   4. Repairing damaged terra cotta column capital.
   5. Painting steel uncovered during the work.
   6. Repointing joints.
   7. Preliminary cleaning, including removing plant growth.
   8. Cleaning exposed unit masonry surfaces.

B. Related Sections:
   1. Section 07620 "Sheet Metal Flashing and Trim" for metal flashing installed in or on restored clay masonry.

1.3 ALLOWANCES

A. Provide preconstruction testing as part of testing and inspecting allowance.

1.4 DEFINITIONS

A. Very Low-Pressure Spray: Under 100 psi.

B. Low-Pressure Spray: 100 to 400 psi; 4 to 6 gpm.

C. Medium-Pressure Spray: 400 to 800 psi; 4 to 6 gpm.

D. High-Pressure Spray: 800 to 1200 psi; 4 to 6 gpm.

E. Saturation Coefficient: Ratio of the weight of water absorbed during immersion in cold water to weight absorbed during immersion in boiling water; used as an indication of resistance of masonry units to freezing and thawing.

1.5 PRECONSTRUCTION TESTING

A. Preconstruction Testing Service: Owner will engage a qualified testing agency to perform preconstruction testing on masonry units as follows.

1. Provide test specimens as indicated and representative of proposed materials and construction.
2. Existing Brick: Test each type of existing masonry unit indicated for replacement, according to testing methods in ASTM C 67 for compressive strength, 24-hour cold-water absorption, 5-hour boil absorption, saturation coefficient, and initial rate of absorption (suction). Carefully remove five existing units from locations designated by Architect. Take testing samples from these units.
3. Existing Mortar: Test according to ASTM C 295, modified as agreed by testing service and Architect for Project requirements, to determine proportional composition of original ingredients, sizes and colors of aggregates, and approximate strength. Use X-ray diffraction, infrared spectroscopy, and differential thermal analysis as necessary to supplement microscopical methods. Carefully remove existing mortar from within joints at five locations designated by Architect or testing service.
4. Temporary Patch: As directed by Architect, provide temporary materials at locations from which existing samples were taken.
5. Replacement Brick: Test each proposed type of replacement masonry unit, according to sampling and testing methods in ASTM C 67 for compressive strength, 24-hour cold-water absorption, 5-hour boil absorption, saturation coefficient, and initial rate of absorption (suction).

1.6 ACTION SUBMITTALS

A. Product Data: For each type of product indicated. Include recommendations for application and use. Include test data substantiating that products comply with requirements.

B. Shop Drawings: For the following:

1. Full-size patterns with complete dimensions for new brick arches and their jointing, showing relation of existing to new units.
2. Provisions for expansion joints or other sealant joints.
3. Provisions for flashing and other items as required.
4. Replacement and repair anchors. Include details of anchors within individual masonry units, with locations of anchors and dimensions of holes and recesses in units required for anchors.

C. Samples for Initial Selection: For the following:

1. Pointing Mortar: Submit sets of mortar for pointing in the form of sample mortar strips, 6 inches long by 1/4 inch wide, set in aluminum or plastic channels.

a. Have each set contain a close color range of at least four samples of different mixes of colored sands and cements that produce a mortar matching the cleaned masonry when cured and dry.
b. Submit with precise measurements on ingredients, proportions, gradations, and sources of colored sands from which each Sample was made.

2. Patching Compound: Submit sets of patching compound Samples in the form of plugs (patches in drilled holes) in sample units of masonry representative of the range of masonry colors on the building.

    a. Have each set contain a close color range of at least four Samples of different mixes of patching compound that matches the variations in existing masonry when cured and dry.

3. Sealant Materials: See Section 07920 "Joint Sealants."
4. Include similar Samples of accessories involving color selection.

D. Samples for Verification: For the following:

1. Each type of masonry unit to be used for replacing existing units. Include sets of Samples as necessary to show the full range of shape, color, and texture to be expected.

    a. For each brick type, provide straps or panels containing at least four bricks. Include multiple straps for brick with a wide range.

2. Each type of sand used for pointing mortar; minimum 1 lb of each in plastic screw-top jars.

    a. For blended sands, provide Samples of each component and blend.
    b. Identify sources, both supplier and quarry, of each type of sand.

3. Each type, color, and texture of pointing mortar in the form of sample mortar strips, 6 inches long by 1/4 inch wide, set in aluminum or plastic channels.

    a. Include with each Sample a list of ingredients with proportions of each. Identify sources, both supplier and quarry, of each type of sand and brand names of cementitious materials and pigments if any.

4. Each type of masonry patching compound in the form of briquettes, at least 3 inches long by 1-1/2 inches wide. Document each Sample with manufacturer and stock number or other information necessary to order additional material.
5. Sealant Materials: See Section 07920 "Joint Sealants."
6. Accessories: Each type of anchor, accessory, and miscellaneous support.

1.7 INFORMATIONAL SUBMITTALS

A. Qualification Data: For restoration specialists including field supervisors and restoration workers and testing service.

B. Quality-Control Program.

C. Restoration Program.

D. Cleaning Program.

1.8 QUALITY ASSURANCE

A. Restoration Specialist Qualifications: Engage an experienced, preapproved masonry restoration and cleaning firm to perform work of this Section. Firm shall have completed work similar in material, design, and extent to that indicated for this Project with a record of successful in-service performance. Experience installing standard unit masonry is not sufficient experience for masonry restoration work.

1. At Contractor's option, work may be divided between two specialist firms: one for cleaning work and one for repair work.
2. Field Supervision: Restoration specialist firms shall maintain experienced full-time supervisors on Projeet site during times that clay masonry restoration and cleaning work is in progress. Supervisors shall not be changed during Project except for causes beyond the control of restoration specialist firm.
3. Restoration Worker Qualifications: Persons who are experienced and specialize in restoration work of types they will be performing.

B. Source Limitations: Obtain each type of material for masonry restoration (face brick, cement, sand, etc.) from one source with resources to provide materials of consistent quality in appearance and physical properties.

C. Quality-Control Program: Prepare a written quality-control program for this Project to systematically demonstrate the ability of personnel to properly follow methods and use materials and tools without damaging masonry. Include provisions for supervising performance and preventing damage due to worker fatigue.

D. Restoration Program: Prepare a written, detailed description of materials, methods, equipment, and sequence of operations to be used for each phase of restoration work including protection of surrounding materials and Project site.

1. Include methods for keeping pointing mortar damp during curing period.
2. If materials and methods other than those indicated are proposed for any phase of restoration work, add to the Quality-Control Program a written description of such materials and methods, including evidence of successful use on comparable projects, and demonstrations to show their effectiveness for this Project and worker's ability to use such materials and methods properly.

E. Cleaning Program: Prepare a written cleaning program that describes cleaning process in detail, including materials, methods, and equipment to be used, protection of surrounding materials, and control of runoff during operations.

1. If materials and methods other than those indicated are proposed for any phase of restoration work, add to the Quality-Control Program a written description of such materials and methods, including evidence of successful use on comparable projects, and demonstrations to show their effectiveness for this Project and worker's ability to use such materials and methods properly.

F. Cleaning and Repair Appearance Standard: Cleaned and repaired surfaces are to have a uniform appearance as viewed from 20 feet away by Architect. Perform additional paint and stain removal, general cleaning, and spot cleaning of small areas that are noticeably different, so that surface blends smoothly into surrounding areas.

G. Mockups: Prepare mockups of restoration and cleaning to demonstrate aesthetic effects and set quality standards for materials and execution and for fabrication and installation.

1. Masonry Repair: Prepare sample areas for each type of masonry material indicated to have repair work performed. If not otherwise indicated, size each mockup not smaller than 2 adjacent whole units or approximately 48 inches in least dimension. Erect sample areas in existing walls unless otherwise indicated, to demonstrate quality of materials, workmanship, and blending with existing work. Include the following as a minimum:

a. Replacement:

1) Four brick units replaced.

b. Reanchoring Veneers: Install three masonry repair anchors in mockup wall assembly of each anchor type required.

c. Patching: Three small holes as directed for each type of masonry material indicated to be patched, so as to leave no evidence of repair.

2. Repointing: Rake out joints in 2 separate areas, each approximately 24 inches high by 24 inches wide for each type of repointing required and repoint one of the areas.

3. Approval of mockups does not constitute approval of deviations from the Contract Documents contained in mockups unless Architect specifically approves such deviations in writing.

4. Approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.

H. Preinstallation Conference: Conduct conference at Project site.

1. Review methods and procedures related to masonry restoration and cleaning including, but not limited to, the following:

a. Construction schedule. Verify availability of materials, Restoration Specialist's personnel, equipment, and facilities needed to make progress and avoid delays.

b. Materials, material application, sequencing, tolerances, and required clearances.

1.9 DELIVERY, STORAGE, AND HANDLING

A. Deliver masonry units to Project site strapped together in suitable packs or pallets or in heavy-duty cartons.

B. Deliver other materials to Project site in manufacturer's original and unopened containers, labeled with manufacturer's name and type of products.

C. Store cementitious materials on elevated platforms, under cover, and in a dry location. Do not use cementitious materials that have become damp.

D. Store hydrated lime in manufacturer's original and unopened containers. Discard lime if containers have been damaged or have been opened for more than two days.

E. Store lime putty covered with water in sealed containers.

F. Store sand where grading and other required characteristics can be maintained and contamination avoided.

1.10 PROJECT CONDITIONS

A. Weather Limitations: Proceed with installation only when existing and forecasted weather conditions permit masonry restoration and cleaning work to be performed according to manufacturers' written instructions and specified requirements.

B. Repair masonry units and repoint mortar joints only when air temperature is between 40 and 90 deg F and is predicted to remain so for at least 7 days after completion of the Work unless otherwise indicated.

C. Hot-Weather Requirements: Protect masonry repair and mortar-joint pointing when temperature and humidity conditions produce excessive evaporation of water from mortar and repair materials. Provide artificial shade and wind breaks and use cooled materials as required to minimize evaporation. Do not apply mortar to substrates with temperatures of 90 deg F and above unless otherwise indicated.

D. For manufactured repair materials, perform work within the environmental limits set by each manufacturer.

E. Clean masonry surfaces only when air temperature is 40 deg F and above and is predicted to remain so for at least 7 days after completion of cleaning.

1.11 SEQUENCING AND SCHEDULING

A. Order replacement materials at earliest possible date to avoid delaying completion of the Work.

B. Order sand and gray portland cement (if applicable) for pointing mortar immediately after approval of Samples mockups. Take delivery of and store at Project site a sufficient quantity to complete Project.

C. Perform masonry restoration work in the following sequence:

1. Take measures to protect existing windows, wood trim, and metal cornices; cover open window openings prior to proceeding with the work.
2. Remove plant growth.
3. Inspect for open mortar joints and repair before cleaning to prevent the intrusion of water and other cleaning materials into the wall.
4. Remove paint.
5. Clean masonry surfaces.
6. Where water repellents, specified in Section 07190 "Water Repellents," are to be used on or near masonry work, delay application of these chemicals until after pointing.
7. Rake out mortar from joints surrounding masonry to be replaced and from joints adjacent to masonry repairs along joints.
8. Repair masonry, including replacing existing masonry with new masonry materials.
9. Rake out mortar from joints to be repointed.
10. Point mortar and sealant joints.
11. After repairs and repointing have been completed and cured, perform a final cleaning to remove residues from this work.

12. Inspect for open mortar joints and repair before cleaning to prevent the intrusion of water and other cleaning materials into the wall.
13. Remove paint.
14. Clean masonry surfaces.

D. As scaffolding is removed, patch anchor holes used to attach scaffolding. Patch holes in masonry units to comply with "Masonry Unit Patching" Article. Patch holes in mortar joints to comply with "Repointing Masonry" Article.

PART 2 - PRODUCTS

2.1 MASONRY MATERIALS

A. Face Brick: Provide face brick, including specially molded, ground, cut, or sawed shapes where required to complete masonry restoration work.

1. Provide units with colors, color variation within units, surface texture, size, and shape to match existing brickwork and with physical properties within 10 percent of those determined from preconstruction testing of selected existing units.

a. For existing brickwork that exhibits a range of colors or color variation within units, provide brick that proportionally matches that range and variation rather than brick that matches an individual color within that range.

B. Building Brick: Provide building brick complying with ASTM C 62, of same vertical dimension as face brick, for masonry work concealed from view.

1. Grade SW where in contact with earth.
2. Grade SW, MW, or NW for concealed backup.

2.2 MORTAR MATERIALS

A. Provide mortar materials as indicated from testing performed by Owner's engaged testing company, performed prior to proceeding with the masonry restoration.

B. Portland Cement: ASTM C 150, Type I or Type II, white or gray or both where required for color matching of exposed mortar.

1. Provide cement containing not more than 0.60 percent total alkali when tested according to ASTM C 114.

C. Hydrated Lime: ASTM C 207, Type S.

D. Factory-Prepared Lime Putty: ASTM C 1489.

E. Quicklime: ASTM C 5, pulverized lime.

F. Mortar Sand: ASTM C 144 unless otherwise indicated.

1. Color: Provide natural sand of color necessary to produce required mortar color.

2. For pointing mortar, provide sand with rounded edges.
3. Match size, texture, and gradation of existing mortar sand as closely as possible. Blend several sands if necessary to achieve suitable match.

G. Water: Potable.

2.3 MANUFACTURED REPAIR MATERIALS

A. Masonry Patching Compound: Factory-mixed cementitious product that is custom manufactured for patching masonry.

1. Products: Subject to compliance with requirements, provide one of the following:

   a. Cathedral Stone Products, Inc.; Jahn M100 Terra Cotta and Brick Repair Mortar.
   b. Edison Coatings, Inc.; Custom System 45.

2. Use formulation that is vapor- and water permeable (equal to or more than the masonry unit), exhibits low shrinkage, has lower modulus of elasticity than the masonry units being repaired, and develops high bond strength to all types of masonry.
3. Use formulation having working qualities and retardation control to permit forming and sculpturing where necessary.
4. Formulate patching compound used for patching brick in colors and textures to match each masonry unit being patched. Provide not less than three colors to enable matching the color, texture, and variation of each unit.

2.4 PAINT REMOVERS

A. Solvent-Type Paint Remover: Manufacturer's standard water-rinsable, solvent-type gel formulation for removing paint coatings from masonry.

1. Products: Subject to compliance with requirements, provide one of the following:

   a. ABR Products, Inc.; Super Bio Strip Gel.
   b. Diedrich Technologies Inc.; 505 Special Coatings Stripper.
   c. Dumond Chemicals, Inc.; Peel Away 2.
   d. Hydroclean, Hydrochemical Techniques, Inc.; Hydroclean HT-300 Solvent Paint Remover.
   e. PROSOCO; Sure Klean Fast Acting Stripper.

B. Low-Odor, Solvent-Type Paint Remover: Manufacturer's standard low-odor, water-rinsable solvent-type gel formulation, containing no methanol or methylene chloride, for removing paint coatings from masonry.

1. Products: Subject to compliance with requirements, provide one of the following:

   a. ABR Products, Inc.; Super Bio Strip Gel.
   b. Cathedral Stone Products, Inc.; S-301 S-303 or S-305.
   c. Dumond Chemicals, Inc.; Peel Away 7.
   d. PROSOCO; Enviro Klean Safety Peel 1.

2.5 CLEANING MATERIALS

A. Water: Potable.

B. Hot Water: Water heated to a temperature of 140 to 160 deg F.

C. Job-Mixed Detergent Solution: Solution prepared by mixing 2 cups of tetrasodium polyphosphate, 1/2 cup of laundry detergent, and 20 quarts of hot water for every 5 gal. of solution required.

D. Job-Mixed Mold, Mildew, and Algae Remover: Solution prepared by mixing 2 cups of tetrasodium polyphosphate, 5 quarts of 5 percent sodium hypochlorite (bleach), and 15 quarts of hot water for every 5 gal. of solution required.

2.6 ACCESSORY MATERIALS

A. Liquid Strippable Masking Agent: Manufacturer's standard liquid, film-forming, strippable masking material for protecting glass, metal, and polished stone surfaces from damaging effects of acidic and alkaline masonry cleaners.

1. Products: Subject to compliance with requirements, provide one of the following:

a. ABR Products, Inc.; Rubber Mask.
b. Price Research, Ltd.; Price Mask.
c. PROSOCO; Sure Klean Strippable Masking.

B. Sealant Materials:

1. Provide manufacturer's standard chemically curing, elastomeric sealant(s) of base polymer and characteristics indicated below that comply with applicable requirements in Section 07920 "Joint Sealants."

a. Single-component, nonsag urethane sealant.

2. Colors: Provide colors of exposed sealants to match colors of masonry adjoining installed sealant unless otherwise indicated.

C. Joint-Sealant Backing:

1. Cylindrical Sealant Backings: ASTM C 1330, Type C (closed-cell material with a surface skin), and of size and density to control sealant depth and otherwise contribute to producing optimum sealant performance.
2. Bond-Breaker Tape: Polyethylene tape or other plastic tape recommended by sealant manufacturer for preventing sealant from adhering to rigid, inflexible joint-filler materials or joint surfaces at back of joint where such adhesion would result in sealant failure. Provide self-adhesive tape where acceptable.

D. Setting Buttons: Resilient plastic buttons, nonstaining to masonry, sized to suit joint thicknesses and bed depths of masonry units without intruding into required depths of pointing materials.

E. Masking Tape: Nonstaining, nonabsorbent material, compatible with pointing mortar, joint primers, sealants, and surfaces adjacent to joints; that will easily come off entirely, including adhesive.

F. Antirust Coating: Fast-curing, lead- and chromate-free, self-curing, universal modified-alkyd primer complying with MPI #79, Alkyd Anticorrosive Metal Primer or SSPC-Paint 20 or SSPC-Paint 29 zinc-rich coating.

1. Use coating requiring no better than SSPC-SP 2, "Hand Tool Cleaning" surface preparation according to manufacturer's literature or certified statement.
2. Use coating with a VOC content of 420 g/L or less when calculated according to 40 CFR 59, Subpart D (EPA Method 24).

G. Miscellaneous Products: Select materials and methods of use based on the following, subject to approval of a mockup:

1. Previous effectiveness in performing the work involved.
2. Little possibility of damaging exposed surfaces.
3. Consistency of each application.
4. Uniformity of the resulting overall appearance.
5. Do not use products or tools that could do the following:

a. Remove, alter, or in any way harm the present condition or future preservation of existing surfaces, including surrounding surfaces not in contract.
b. Leave a residue on surfaces.

2.7 MORTAR MIXES

A. Preparing Lime Putty: Slake quicklime and prepare lime putty according to appendix to ASTM C 5 and manufacturer's written instructions.

B. Measurement and Mixing: Measure cementitious materials and sand in a dry condition by volume or equivalent weight. Do not measure by shovel; use known measure. Mix materials in a clean, mechanical batch mixer.

1. Mixing Pointing Mortar: Thoroughly mix cementitious materials and sand together before adding any water. Then mix again adding only enough water to produce a damp, unworkable mix that will retain its form when pressed into a ball. Maintain mortar in this dampened condition for 15 to 30 minutes. Add remaining water in small portions until mortar reaches desired consistency. Use mortar within one hour of final mixing; do not retemper or use partially hardened material.

C. Do not use admixtures in mortar unless otherwise indicated.

D. Mortar Proportions: Mix mortar materials in proportions to match proportions of existing mortar, as discovered during Owner-engaged testing.

1. Pointing Mortar for Brick: To be determined by testing.

2. Rebuilding (Setting) Mortar: Same as pointing mortar.

2.8 RUBBER MOLD MATERIALS

A. Provide rubber mold materials by Polytek Development Corporation or equal, including all components necessary to full develop a usable mold without damage to the existing architectural fabric. This includes but is not limited to release agents, sealing agents, liquid rubbers, and other accessories as required for the process.

PART 3 - EXECUTION

3.1 RESTORATION SPECIALISTS

A. Restoration Specialist Firms: Subject to compliance with requirements, firms that may provide masonry restoration and cleaning include, but are not limited to, the following:

1. A.T.C. Services, P.O. Box 932, Georgetown, TX 78627, telephone (512)-869-1189.
2. Other firms are eligible upon approval by Architect.

3.2 PROTECTION

A. Protect persons, motor vehicles, surrounding surfaces of building being restored, building site, plants, and surrounding buildings from harm resulting from masonry restoration work.

B. Comply with chemical-cleaner manufacturer's written instructions for protecting building and other surfaces against damage from exposure to its products. Prevent chemical-cleaning solutions from coming into contact with people, motor vehicles, landscaping, buildings, and other surfaces that could be harmed by such contact.

1. Cover adjacent surfaces with materials that are proven to resist chemical cleaners used unless chemical cleaners being used will not damage adjacent surfaces. Use materials that contain only waterproof, UV-resistant adhesives. Apply masking agents to comply with manufacturer's written instructions. Do not apply liquid masking agent to painted or porous surfaces. When no longer needed, promptly remove masking to prevent adhesive staining.
2. Keep wall wet below area being cleaned to prevent streaking from runoff.
3. Do not clean masonry during winds of sufficient force to spread cleaning solutions to unprotected surfaces.
4. Neutralize and collect alkaline and acid wastes for disposal off Owner's property.
5. Dispose of runoff from cleaning operations by legal means and in a manner that prevents soil erosion, undermining of paving and foundations, damage to landscaping, and water penetration into building interiors.

C. Prevent mortar from staining face of surrounding masonry and other surfaces.

1. Cover sills, ledges, and projections to protect from mortar droppings.
2. Keep wall area wet below rebuilding and pointing work to discourage mortar from adhering.
3. Immediately remove mortar in contact with exposed masonry and other surfaces.
4. Clean mortar splatters from scaffolding at end of each day.

D. Remove downspouts adjacent to masonry and store in secure location during masomy restoration and cleaning. Reinstall when masonry restoration and cleaning are complete.

1. Provide temporary rain drainage during work to direct water away from building.

3.3 BRICK REMOVAL AND REPLACEMENT

A. At locations indicated, remove bricks that are damaged, spalled, or deteriorated or are to be reused. Carefully demolish or remove entire units from joint to joint, without damaging surrounding masonry, in a manner that permits replacement with full-size units.

1. When removing single bricks, remove material from center of brick and work toward outside edges.

B. Support and protect remaining masonry that surrounds removal area. Maintain flashing, reinforcement, lintels, and adjoining construction in an undamaged condition.

C. Notify Architect of unforeseen detrimental conditions including voids, cracks, bulges, and loose units in existing masonry backup, rotted wood, rusted metal, and other deteriorated items.

D. Remove in an undamaged condition as many whole bricks as possible.

1. Remove mortar, loose particles, and soil from brick by cleaning with hand chisels, brushes, and water.
2. Remove sealants by cutting close to brick with utility knife and cleaning with solvents.
3. Store brick for reuse. Store off ground, on skids, and protected from weather.
4. Deliver cleaned brick not required for reuse to Owner unless otherwise indicated.

E. Clean bricks surrounding removal areas by removing mortar, dust, and loose particles in preparation for replacement.

F. Replace removed damaged brick with other removed brick and salvaged brick, if available, in good quality, where possible, or with new brick matching existing brick, including size. Do not use broken units unless they can be cut to usable size.

G. Install replacement brick into bonding and coursing pattern of existing brick. If cutting is required, use a motor-driven saw designed to cut masonry with clean, sharp, unchipped edges.

1. Maintain joint width for replacement units to match existing joints.
2. Use setting buttons or shims to set units accurately spaced with uniform joints.

H. Lay replacement brick with completely filled bed, head, and collar joints. Butter ends with sufficient mortar to fill head joints and shove into place. Wet both replacement and surrounding bricks that have ASTM C 67 initial rates of absorption (suction) of more than 30 g/30 sq. in. per min.. Use wetting methods that ensure that units are nearly saturated but surface is dry when laid.

1. Tool exposed mortar joints in repaired areas to match joints of surrounding existing brickwork.
2. Rake out mortar used for laying brick before mortar sets and point new mortar joints in repaired area to comply with requirements for repointing existing masonry, and at same time as repointing of surrounding area.

3. When mortar is sufficiently hard to support units, remove shims and other devices interfering with pointing of joints.

3.4 PAINTING STEEL UNCOVERED DURING THE WORK

A. Inspect steel exposed during masonry removal. Where Architect determines that it is structural, or for other reasons cannot be totally removed, prepare and paint it as follows:

1. Remove paint, rust, and other contaminants according to SSPC-SP 2, "Hand Tool Cleaning", as applicable to meet paint manufacturer's recommended preparation.
2. Immediately paint exposed steel with two coats of antirust coating, following coating manufacturer's written instructions and without exceeding manufacturer's recommended rate of application (dry film thickness per coat).

B. If on inspection and rust removal, the cross section of a steel member is found to be reduced from rust by more than 1/16 inch, notify Architect before proceeding.

3.5 MASONRY UNIT PATCHING

A. Patch the following masonry units when not possible to replace the unit:

1. Units indicated to be patched.
2. Units with holes.
3. Units with chipped edges or corners.
4. Units with small areas of deep deterioration.

B. Remove and replace existing patches unless otherwise indicated or approved by Architect.

C. Patching Bricks:

1. Remove loose material from masonry surface. Carefully remove additional material so patch will not have feathered edges but will have square or slightly undercut edges on area to be patched and will be at least 1/4 inch thick, but not less than recommended by patching compound manufacturer.
2. Mask adjacent mortar joint or rake out for repointing if patch will extend to edge of masonry unit.
3. Mix patching compound in individual batches to match each unit being patched. Combine one or more colors of patching compound, as needed, to produce exact match.
4. Rinse surface to be patched and leave damp, but without standing water.
5. Brush-coat surfaces with slurry coat of patching compound according to manufacturer's written instructions.
6. Place patching compound in layers as recommended by patching compound manufacturer, but not less than 1/4 inch or more than 2 inches thick. Roughen surface of each layer to provide a key for next layer.
7. Trowel, scrape, or carve surface of patch to match texture and surrounding surface plane or contour of the masonry unit. Shape and finish surface before or after curing, as determined by testing, to best match existing masonry unit.
8. Keep each layer damp for 72 hours or until patching compound has set.

3.6 TERRA COTTA REPAIR

A. Proceed with repairs at the damaged colnmn capital in an orderly fashion after on-site meeting with the Architect. Review the scope of work and methodology for repairs prior to proceeding.

B. Remove any loose materials and clean the area affected.

C. Mold preparation: Prepare a cast of the equivalent area of the adjacent intact column capital area, matching the area to be repaired on the damaged column. Use rubber mold-making materials in a manner recommended and approved by the materials manufacturer for use on terra cotta with painted finish. Methology used must be approved by the Architect prior to proceeding.

D. Cast preparation: Once mold is prepared, create cast using materials identified in paragraph 2.3 above.

E. Cast installation: Install completed cast using materials and methods recommended by the cast material manufacturer.

3.7 CLEANING MASONRY, GENERAL

A. Proceed with cleaning in an orderly manner; work from top to bottom of each scaffold width and from one end of each elevation to the other. Ensure that dirty residues and rinse water will not wash over cleaned, dry surfaces.

B. Use only those cleaning methods indicated for each masonry material and location.
1. Use natural-bristle brushes that will not mar the materials being cleaned.
2. Use spray equipment that provides controlled application at volume and pressure indicated, measured at spray tip. Adjust pressure and volume to ensure that cleaning methods do not damage masonry.

    a. Equip units with pressure gages.
3. For water-spray application, use fan-shaped spray tip that disperses water at an angle of 25 to 50 degrees.
4. For heated water-spray application, use equipment capable of maintaining temperature between 140 and 160 deg F at flow rates indicated.

C. Perform each cleaning method indicated in a manner that results in uniform coverage of all surfaces, including corners, moldings, and interstices, and that produces an even effect without streaking or damaging masonry surfaces.

D. Water Application Methods:

1. Water-Soak Application: Soak masonry surfaces by applying water continuously and uniformly to limited area for time indicated. Apply water at low pressures and low volumes in multiple fine sprays using perforated hoses or multiple spray nozzles. Erect a protective enclosure constructed of polyethylene sheeting to cover area being sprayed.
2. Water-Spray Applications: Unless otherwise indicated, hold spray nozzle at least 6 inches from surface of masonry and apply water in horizontal back and forth sweeping motion, overlapping previous strokes to produce uniform coverage.

E. After cleaning is complete, remove protection no longer required. Remove tape and adhesive marks.

3.8 PRELIMINARY CLEANING

A. Removing Plant Growth: Completely remove visible plant, moss, and shrub growth from masonry surfaces. Carefully remove plants, creepers, and vegetation by cutting at roots and allowing to dry as long as possible before removal. Remove loose soil and debris from open masonry joints to whatever depth they occur.

B. Preliminary Cleaning: Before beginning general cleaning, remove extraneous substances that are resistant to cleaning methods being used. Extraneous substances include paint, calking, asphalt, and tar.

1. Carefully remove heavy accumulations of material from surface of masonry with a sharp chisel. Do not scratch or chip masonry surface.
2. Remove paint and calking with alkaline paint remover.
    a. Comply with requirements in "Paint Removal" Article.
    b. Repeat application up to two times if needed.
3. Remove asphalt and tar with solvent-type paint remover.
    a. Comply with requirements in "Paint Removal" Article.
    b. Apply paint remover only to asphalt and tar by brush without prewetting.
    c. Allow paint remover to remain on surface for 10 to 30 minutes.
    d. Repeat application if needed.

3.9 PAINT REMOVAL

A. Paint Removal with Solvent-Type Paint Remover:

1. Remove loose and peeling paint using low-pressure spray, scrapers, stiff brushes, or a combination of these. Let surface dry thoroughly.
2. Apply thick coating of paint remover to painted masonry with natural-fiber cleaning brush, deep-nap roller, or large paint brush.
3. Allow paint remover to remain on surface for period recommended by manufacturer.
4. Rinse with hot water applied by medium high-pressure spray to remove chemicals and paint residue.

3.10 CLEANING BRICKWORK

A. Cold-Water Soak:

1. Apply cold water by intermittent spraying to keep surface moist.
2. Use perforated hoses or other means that will apply a fine water mist to entire surface being cleaned.
3. Apply water in cycles with at least 30 minutes between cycles.
4. Continue spraying until surface encrustation has softened sufficiently to permit its removal by water wash, as indicated by cleaning tests.

5. Continue spraying for 72 hours.
6. Remove soil and softened surface encrustation from masonry with cold water applied by low-pressure spray.

B. Cold-Water Wash: Use cold water applied hy low-pressure spray.

C. Hot-Water Wash: Use hot water applied by low-pressure spray.

D. Detergent Cleaning:

1. Wet masonry with cold water applied by low-pressure spray.
2. Scrub masonry with detergent solution using medium-soft brushes until soil is thoroughly dislodged and can he removed by rinsing. Use small brushes to remove soil from mortar joints and crevices. Dip brush in solution often to ensure that adequate fresh detergent is used and that masonry surface remains wet.
3. Rinse with cold water applied by low-pressure spray to remove detergent solution and soil.
4. Repeat cleauing procedure above where required to produce cleaning effect established by mockup.

E. Mold, Mildew, and Algae Removal:

1. Wet masonry with cold water applied by low-pressure spray.
2. Apply mold, mildew, aud algae remover by brush or low-pressure spray.
3. Scrub masonry with medium-soft brushes until mold, mildew, and algae are thoroughly dislodged aud can be removed by rinsing. Use small brushes for mortar joints and crevices. Dip brush in mold, mildew, and algae remover often to ensure that adequate fresh cleauer is used and that masonry surface remains wet.
4. Rinse with cold water applied by low-pressure spray to remove mold, mildew, and algae remover and soil.
5. Repeat cleaning procedure above where required to produce cleaning effect established by mockup.

3.11 REPOINTING MASONRY

A. Rake out and repoint joints to the following extent:

1. All joints in areas indicated.
2. Joints where mortar is missing or where they contain holes.
3. Cracked joints where cracks can be penetrated at least 1/4 inch by a knife blade 0.027 inch thick.
4. Cracked joints where cracks are 1/16 inch or more in width and of any depth.
5. Joints where they sound hollow when tapped by metal object.
6. Joints where they are worn back 1/4 inch or more from surface.
7. Joints where they are deteriorated to point that mortar can be easily removed hy hand, without tools.
8. Joints where they have been filled with substances other than mortar.
9. Joints indicated as sealant-filled joiuts.

B. Do not rake out aud repoint joints where not required.

C. Rake out joints as follows, according to procedures demonstrated in approved mockup:

1. Remove mortar from joints to depth of 2 times joint width, but not less than 1/2 inch or not less than that required to expose sound, unweathered mortar.
2. Remove mortar from masonry surfaces within raked-out joints to provide reveals with square backs and to expose masonry for contact with pointing mortar. Brush, vacuum, or flush joints to remove dirt and loose debris.
3. Do not spall edges of masonry units or widen joints. Replace or patch damaged masonry units as directed by Architect.

    a. Cut out mortar **by hand** with chisel and resilient mallet. Do not use power-operated grinders without Architect's written approval based on approved quality-control program.

D. Notify Architect of unforeseen detrimental conditions including voids in mortar joints, cracks, loose masonry units, rotted wood, rusted metal, and other deteriorated items.

E. Pointing with Mortar:

1. Rinse joint surfaces with water to remove dust and mortar particles. Time rinsing application so, at time of pointing, joint surfaces are damp but free of standing water. If rinse water dries, dampen joint surfaces before pointing.
2. Apply pointing mortar first to areas where existing mortar was removed to depths greater than surrounding areas. Apply in layers not greater than 3/8 inch until a uniform depth is formed. Fully compact each layer thoroughly and allow it to become thumbprint hard before applying next layer.
3. After low areas have been filled to same depth as remaining joints, point all joints by placing mortar in layers not greater than 3/8 inch. Fully compact each layer and allow to become thumbprint hard before applying next layer. Where existing masonry units have worn or rounded edges, slightly recess finished mortar surface below face of masonry to avoid widened joint faces. Take care not to spread mortar beyond joint edges onto exposed masonry surfaces or to featheredge the mortar.
4. When mortar is thumbprint hard, tool joints to match original appearance of joints as demonstrated in approved mockup. Remove excess mortar from edge of joint by brushing.
5. Cure mortar by maintaining in thoroughly damp condition for at least 72 consecutive hours including weekends and holidays.

    a. Acceptable curing methods include covering with wet burlap and plastic sheeting, periodic hand misting, and periodic mist spraying using system of pipes, mist heads, and timers.
    b. Adjust curing methods to ensure that pointing mortar is damp throughout its depth without eroding surface mortar.

6. Hairline cracking within the mortar or mortar separation at edge of a joint is unacceptable. Completely remove such mortar and repoint.

F. Pointing with Sealant:

1. Use sealant only at joints indicated or where differential movement is obvious and expected. Review such conditions in the field with the Architect prior to application.

2. After raking out, keep joints dry and free of mortar and debris.

3. Clean and prepare joint surfaces according to Section 07920 "Joint Sealants." Prime joint surfaces unless sealant manufacturer recommends against priming. Do not allow primer to spill or migrate onto adjoining surfaces.
4. Fill sealant joints with specified joint sealant according to Section 07920 "Joint Sealants" and the following:

    a. Install cylindrical sealant backing beneath the sealant, except where space is insufficient. There, install bond-breaker tape.
    b. Install sealant using only proven installation techniques that will ensure that sealant will be deposited in a uniform, continuous ribbon, without gaps or air pockets, and with complete wetting of the joint bond surfaces equally on both sides. Fill joint flush with surrounding masonry and matching the contour of adjoining mortar joints.
    c. Install sealant as recommended by sealant manufacturer but within the following general limitations, measured at the center (thin) section of the bead:

        1) Fill joints to a depth equal to joint width, but not more than 1/2 inch deep or less than 1/4 inch deep.
    d. Do not allow sealant to overflow or spill onto adjoining surfaces, or to migrate into the voids of adjoining surfaces, particularly rough textures. Remove excess and spillage of sealant promptly as the work progresses. Clean adjoining surfaces by the means necessary to eliminate evidence of spillage, without damage to adjoining surfaces or finishes, as demonstrated in an approved mockup.

5. Cure sealant according to Section 07920 "Joint Sealants."

G. Where repointing work precedes cleaning of existing masonry, allow mortar to harden at least 30 days before beginning cleaning work.

3.12 FINAL CLEANING

A. After mortar has fully hardened, thoroughly clean exposed masonry surfaces of excess mortar and foreign matter; use wood scrapers, stiff-nylon or -fiber brushes, and clean water, spray applied at low pressure.

1. Do not use metal scrapers or brushes.
2. Do not use acidic or alkaline cleaners.

B. Wash adjacent woodwork and other nonmasonry surfaces. Use detergent and soft brushes or cloths.

C. Clean mortar and debris from roof; remove debris from gutters and downspouts. Rinse off roof and flush gutters and downspouts.

D. Sweep and rake adjacent pavement and grounds to remove mortar and debris. Where necessary, pressure wash pavement surfaces to remove mortar, dust, dirt, and stains.

3.13 FIELD QUALITY CONTROL

A. Inspectors: Owner will engage qualified independent inspectors to perform inspections and prepare test reports. Allow inspectors use of lift devices and scaffolding, as needed, to perform inspections.

B. Architect's Project Representatives: Architect will assign Project representatives to help carry out Architect's responsibilities at the site, including observing progress and quality of portion of the Work completed. Allow Architect's Project representatives use of lift devices and scaffolding, as needed, to observe progress and quality of portion of the Work completed.

C. Notify inspectors and Architect's Project representatives in advance of times when lift devices and scaffolding will be relocated. Do not relocate lift devices and scaffolding until inspectors and Architect's Project representatives have had reasonable opportunity to make inspections and observations of work areas at lift device or scaffold location.

END OF SECTION 04901

SECTION 07920 - JOINT SEALANTS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section Includes:

1. Silicone joint sealants.
2. Urethane joint sealants.
3. Latex joint sealants.
4. Acoustical joint sealants.

B. Related Sections:
1. Division 4 Section "Clay Masonry Restoration and Cleaning" for locations and installation of sealants in masonry.

1.3 ACTION SUBMITTALS

A. Product Data: For each joint-sealant product indicated.

B. Samples for Initial Selection: Manufacturer's color charts consisting of strips of cured sealants showing the full range of colors available for each product exposed to view.

C. Samples for Verification: For each kind and color of joint sealant required, provide Samples with joint sealants in 1/2-inch- wide joints formed between two 6-inch- long strips of material matching the appearance of exposed surfaces adjacent to joint sealants.

D. Joint-Sealant Schedule: Include the following information:

1. Joint-sealant application, joint location, and designation.
2. Joint-sealant manufacturer and product name.
3. Joint-sealant formulation.
4. Joint-sealant color.

1.4 INFORMATIONAL SUBMITTALS

A. Qualification Data: For qualified Installer and testing agency.

B. Product Certificates: For each kind of joint sealant and accessory, from manufacturer.

C. Product Test Reports: Based on evaluation of comprehensive tests performed by a qualified testing agency, indicating that sealants comply with requirements.

D. Preconstruction Field-Adhesion Test Reports: Indicate which sealants and joint preparation methods resulted in optimum adhesion to joint substrates based on testing specified in "Preconstruction Testing" Article.

E. Field-Adhesion Test Reports: For each sealant application tested.

F. Warranties: Sample of special warranties.

1.5 QUALITY ASSURANCE

A. Installer Qualifications: Manufacturer's authorized representative who is trained and approved for installation of units required for this Project.

B. Source Limitations: Obtain each kind of joint sealant from single source from single manufacturer.

C. Product Testing: Test joint sealants using a qualified testing agency.

1. Testing Agency Qualifications: An independent testing agency qualified according to ASTM C 1021 to conduct the testing indicated.

D. Mockups: Install sealant in mockups of assemblies specified in other Sections that are indicated to receive joint sealants specified in this Section. Use materials and installation methods specified in this Section.

E. Preinstallation Conference: Conduct conference at Project site.

1.6 PROJECT CONDITIONS

A. Do not proceed with installation of joint sealants under the following conditions:

1. When ambient and substrate temperature conditions are outside limits permitted by joint-sealant manufacturer or are below 40 deg F.
2. When joint substrates are wet.
3. Where joint widths are less than those allowed by joint-sealant manufacturer for applications indicated.
4. Where contaminants capable of interfering with adhesion have not yet been removed from joint substrates.

1.7 WARRANTY

A. Special Installer's Warranty: Manufacturer's standard form in which Installer agrees to repair or replace joint sealants that do not comply with performance and other requirements specified in this Section within specified warranty period.

1. Warranty Period: Two years from date of Substantial Completion.

B. Special Manufacturer's Warranty: Manufacturer's standard form in which joint-sealant manufacturer agrees to furnish joint sealants to repair or replace those that do not comply with performance and other requirements specified in this Section within specified warranty period.

1. Warranty Period: Five years from date of Substantial Completion.

C. Special warranties specified in this article exclude deterioration or failure of joint sealants from the following:

1. Movement of the structure caused by structural settlement or errors attributable to design or construction resulting in stresses on the sealant exceeding sealant manufacturer's written specifications for sealant elongation and compression.
2. Disintegration of joint substrates from natural causes exceeding design specifications.
3. Mechanical damage caused by individuals, tools, or other outside agents.
4. Changes in sealant appearance caused by accumulation of dirt or other atmospheric contaminants.

PART 2 - PRODUCTS

2.1 MATERIALS, GENERAL

A. Compatibility: Provide joint sealants, backings, and other related materials that are compatible with one another and with joint substrates under conditions of service and application, as demonstrated by joint-sealant manufacturer, based on testing and field experience.

B. Liquid-Applied Joint Sealants: Comply with ASTM C 920 and other requirements indicated for each liquid-applied joint sealant specified, including those referencing ASTM C 920 classifications for type, grade, class, and uses related to exposure and joint substrates.

C. Stain-Test-Response Characteristics: Where sealants are specified to be nonstaining to porous substrates, provide products that have undergone testing according to ASTM C 1248 and have not stained porous joint substrates indicated for Project.

D. Colors of Exposed Joint Sealants: As selected by Architect from manufacturer's full range.

2.2 URETHANE JOINT SEALANTS

A. Multicomponent, Nonsag, Urethane Joint Sealant: ASTM C 920, Type M, Grade NS, Class 50, for Use NT.

1. Products: Subject to compliance with requirements, provide one of the following:

a. Pecora Corporation; Dynatrol II.
b. Polymeric Systems, Inc.; PSI-270.
c. Tremco Incorporated; Dymeric 240 or Dymeric 240 FC.

2.3 JOINT SEALANT BACKING

A. General: Provide sealant backings of material that are nonstaining; are compatible with joint substrates, sealants, primers, and other joint fillers; and are approved for applications indicated by sealant manufacturer based on field experience and laboratory testing.

B. Cylindrical Sealant Backings: ASTM C 1330, Type C (closed-cell material with a surface skin), and of size and density to control sealant depth and otherwise contribute to producing optimum sealant performance.

C. Bond-Breaker Tape: Polyethylene tape or other plastic tape recommended by sealant manufacturer for preventing sealant from adhering to rigid, inflexible joint-filler materials or joint surfaces at hack of joint. Provide self-adhesive tape where applicable.

2.4 MISCELLANEOUS MATERIALS

A. Primer: Material recommended by joint-sealant manufacturer where required for adhesion of sealant to joint substrates indicated, as determined from preconstruction joint-sealant-substrate tests and field tests.

B. Cleaners for Nonporous Surfaces: Chemical cleaners acceptable to manufacturers of sealants and sealant backing materials, free of oily residues or other substances capable of staining or harming joint substrates and adjacent nonporous surfaces in any way, and formulated to promote optimum adhesion of sealants to joint substrates.

C. Masking Tape: Nonstaining, nonabsorbent material compatible with joint sealants and surfaces adjacent to joints.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine joints indicated to receive joint sealants, with Installer present, for compliance with requirements for joint configuration, installation tolerances, and other conditions affecting joint-sealant performance.

B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

A. Surface Cleaning of Joints: Clean out joints immediately before installing joint sealants to comply with joint-sealant manufacturer's written instructions and the following requirements:

1. Remove all foreign material from joint substrates that could interfere with adhesion of joint sealant, including dust, paints (except for permanent, protective coatings tested and approved for sealant adhesion and compatibility by sealant manufacturer), old joiut sealants, oil, grease, waterproofing, water repellents, water, surface dirt, and frost.

2. Clean porous joint substrate surfaces by brushing, grinding, mechanical abrading, or a combination of these methods to produce a clean, sound substrate capable of developing optimum bond with joint sealants. Remove loose particles remaining after cleaning operations above by vacuuming or blowing out joints with oil-free compressed air. Porous joint substrates include the following:

    a. Concrete.
    b. Masonry.
    c. Wood.

3. Remove laitance and form-release agents from concrete.
4. Clean nonporous joint substrate surfaces with chemical cleaners or other means that do not stain, harm substrates, or leave residues capable of interfering with adhesion of joint sealants. Nonporous joint substrates include the following:

    a. Metal.
    b. Glass.

B. Joint Priming: Prime joint substrates where recommended by joint-sealant manufacturer or as indicated by preconstruction joint-sealant-substrate tests or prior experience. Apply primer to comply with joint-sealant manufacturer's written instructions. Confine primers to areas of joint-sealant bond; do not allow spillage or migration onto adjoining surfaces.

C. Masking Tape: Use masking tape where required to prevent contact of sealant or primer with adjoining surfaces that otherwise would be permanently stained or damaged by such contact or by cleaning methods required to remove sealant smears. Remove tape immediately after tooling without disturbing joint seal.

3.3 INSTALLATION OF JOINT SEALANTS

A. General: Comply with joint-sealant manufacturer's written installation instructions for products and applications indicated, unless more stringent requirements apply.

B. Sealant Installation Standard: Comply with recommendations in ASTM C 1193 for use of joint sealants as applicable to materials, applications, and conditions indicated.

C. Install sealant backings of kind indicated to support sealants during application and at position required to produce cross-sectional shapes and depths of installed sealants relative to joint widths that allow optimum sealant movement capability.

1. Do not leave gaps between ends of sealant backings.
2. Do not stretch, twist, puncture, or tear sealant backings.
3. Remove absorbent sealant backings that have become wet before sealant application and replace them with dry materials.

D. Install bond-breaker tape behind sealants where sealant backings are not used between sealants and backs of joints.

E. Install sealants using proven techniques that comply with the following and at the same time backings are installed:

1. Place sealants so they directly contact and fully wet joint substrates.
2. Completely fill recesses in each joint configuration.
3. Produce uniform, cross-sectional shapes and depths relative to joint widths that allow optimum sealant movement capability.

F. Tooling of Nonsag Sealants: Immediately after sealant application and before skinning or curing begins, tool sealants according to requirements specified in subparagraphs below to form smooth, uniform beads of configuration indicated; to eliminate air pockets; and to ensure contact and adhesion of sealant with sides of joint.

1. Remove excess sealant from surfaces adjacent to joints.
2. Use tooling agents that are approved in writing by sealant manufacturer and that do not discolor sealants or adjacent surfaces.
3. Provide concave joint profile per Figure 8A in ASTM C 1193, unless otherwise indicated.
4. Provide flush joint profile where indicated per Figure 8B in ASTM C 1193.
5. Provide recessed joint configuration of recess depth and at locations indicated per Figure 8C in ASTM C 1193.

    a. Use masking tape to protect surfaces adjacent to recessed tooled joints.

3.4 FIELD QUALITY CONTROL

A. Field-Adhesion Testing: Field test joint-sealant adhesion to joint substrates as follows:

1. Extent of Testing: Test completed and cured sealant joints as follows:
    a. Perform 1 test for each 1000 feet of joint length thereafter or 1 test per each floor per elevation.

2. Test Method: Test joint sealants according to Method A, Field-Applied Sealant Joint Hand Pull Tab, in Appendix X1 in ASTM C 1193 or Method A, Tail Procedure, in ASTM C 1521.

    a. For joints with dissimilar substrates, verify adhesion to each substrate separately; extend cut along one side, verifying adhesion to opposite side. Repeat procedure for opposite side.

3. Inspect tested joints and report on the following:

    a. Whether sealants filled joint cavities and are free of voids.
    b. Whether sealant dimensions and configurations eomply with specified requirements.
    c. Whether sealants in joints connected to pulled-out portion failed to adhere to joint substrates or tore cohesively. Include data on pull distance used to test each kind of product and joint substrate. Compare these results to determine if adhesion passes sealant manufacturer's field-adhesion hand-pull test criteria.

4. Record test results in a field-adhesion-test log. Include dates when sealants were installed, names of persons who installed sealants, test dates, test locations, whether joints were primed, adhesion results and percent elongations, sealant fill, sealant configuration, and sealant dimensions.

5. Repair sealants pulled from test area by applying new sealants following same procedures used originally to seal joints. Ensure that original sealant surfaces are clean and that new sealant contacts original sealant.

B. Evaluation of Field-Adhesion Test Results: Sealants not evidencing adhesive failure from testing or noncompliance with other indicated requirements will be considered satisfactory. Remove sealants that fail to adhere to joint substrates during testing or to comply with other requirements. Retest failed applications until test results prove sealants comply with indicated requirements.

3.5 CLEANING

A. Clean off excess sealant or sealant smears adjacent to joints as the Work progresses by methods and with cleaning materials approved in writing by manufacturers of joint sealants and of products in which joints occur.

3.6 PROTECTION

A. Protect joint sealants during and after curing period from contact with contaminating substances and from damage resulting from construction operations or other causes so sealants are without deterioration or damage at time of Substantial Completion. If, despite such protection, damage or deterioration occurs, cut out and remove damaged or deteriorated joint sealants immediately so installations with repaired areas are indistinguishable from original work.

3.7 JOINT-SEALANT SCHEDULE

A. Joint-Sealant Application: Exterior joints in vertical surfaces and horizontal nontraffic surfaces.

1. Joint Locations:

    a. Construction joints in cast-in-place concrete.
    b. Control and expansion joints in unit masonry.
    c. Joints between different materials listed above.
    d. Perimeter joints between materials listed above and frames of doors windows and louvers.
    e. Other joints as indicated.
2. Urethane Joint Sealant: Multicomponent, nonsag, Class 50.
3. Joint-Sealant Color: As selected by Architect from manufacturer's full range of colors.

END OF SECTION 07920

SECTION 09911 - PAINTING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This Section includes surface preparation and the application of paint systems on the following exterior substrates:
   1. Steel.
   2. Galvanized metal.
   3. Wood.

1.3 SUBMITTALS

A. Product Data: For each type of product indicated.

B. Samples for Initial Selection: For each type of topcoat product indicated.

C. Samples for Verification: For each type of paint system and each color and gloss of topcoat indicated.

   1. Submit Samples on rigid backing, 8 inches (200 mm) square.
   2. Step coats on Samples to show each coat required for system.
   3. Label each coat of each Sample.
   4. Label each Sample for location and application area.

D. Product List: For each product indicated, include the following:

   1. Cross-reference to paint system and locations of application areas. Use same designations indicated on Drawings and in schedules.
   2. Printout of current "MPI Approved Products List" for each product category specified in Part 2, with the proposed product highlighted.

1.4 QUALITY ASSURANCE

A. Mockups: Apply benchmark samples of each paint system indicated and each color and finish selected to verify preliminary selections made under sample submittals and to demonstrate aesthetic effects and set quality standards for materials and execution.

   1. Architect will select one surface to represent surfaces and conditions for application of each paint system specified in Part 3.

a. Vertical and Horizontal Surfaces: Provide samples of at least 100 sq. ft. (9 sq. m).
b. Other Items: Architect will designate items or areas required.

2. Final approval of color selections will be hased on benchmark samples.

a. If preliminary color selections are not approved, apply additional benchmark samples of additional colors selected by Architect at no added cost to Owner.

1.5 DELIVERY, STORAGE, AND HANDLING

A. Store materials not in use in tightly covered containers in well-ventilated areas with ambient temperatures continuously maintained at not less than 45 deg F (7 deg C).

1. Maintain containers in clean condition, free of foreign materials and residue.
2. Remove rags and waste from storage areas daily.

1.6 PROJECT CONDITIONS

A. Apply paints only when temperature of surfaces to be painted and ambient air temperatures are between 50 and 95 deg F (10 and 35 deg C).

B. Do not apply paints in snow, rain, fog, or mist; when relative humidity exceeds 85 percent; at temperatures less than 5 deg F (3 deg C) above the dew point; or to damp or wet surfaces.

1.7 EXTRA MATERIALS

A. Furnish extra materials described below that are from same production run (batch mix) as materials applied and that are packaged for storage and identified with labels describing contents.

1. Quantity: Furnish an additional 5 percent, but not less than 1 gal. (3.8 L) of each material and color applied.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

1. Benjamin Moore & Co.
2. ICI Paints.
3. PPG Architectural Finishes, Inc.
4. Sherwin-Williams Company (The).

2.2 PAINT, GENERAL

A. Material Compatibility:

1. Provide materials for use within each paint system that are compatible with one another and substrates indicated, under conditions of service and application as demonstrated by manufacturer, based on testing and field experience.
2. For each coat in a paint system, provide products recommended in writing by manufacturers of topcoat for use in paint system and on substrate indicated.

B. Colors: As selected by Architect from manufacturer's full range.

2.3 METAL PRIMERS

A. Exterior Ferrous Metal (Anti-Corrosive coating) Primer: Factory-formulated rust-inhibitive metal primer for exterior application.

1. Benjamin Moore; Super Spec Alkyd HP Metal Primer P06
2. Pittsburgh Paints; Pitt Tech Acrylic Metal Primer 90-912 (90 g/L) Water Based option
3. Sherwin-Williams; Pro-Cryl Universal Water Based Primer (<100g/l)

B. Exterior Galvanized Metal Primer: Factory-formulated galvanized metal primer for exterior application.

1. Benjamin Moore; Super Spec Acrylic HP Metal Primer P04 (LEED Qualifying)
2. Pittsburgh Paints; Pitt Tech Acrylic Metal Primer 90-912 (90 g/L)
3. Sherwin-Williams; Pro-Cryl Universal metal primer

4. Exterior Aluminum Primer under Acrylic Finishes: Factory-formulated acrylic-based metal

C. Quick-Drying Alkyd Metal Primer:

1. Benjamin Moore; Super Spec HP Universal Metal Primer P07
2. Pittsburgh Paints; MultiPrime fast Dry Alkyd Primer 94-258 (331 g/L)
3. Sherwin-Williams; Kem Kromik Metal Primer (<420g/l)

K. Zinc-Coated Metal Primer:

4. Benjamin Moore; Super Spec Acrylic HP Metal Primer P04 (LEED Qualifying)
5. Pittsburgh Paints; Pitt Tech Acrylic Metal Primer 90-912 (90 g/L)
6. Sherwin-Williams; Pr-Cryl Universal Metal Primer

2.4 INTERIOR PRIMERS

A. Interior Wood Primer for Acrylic-Enamel and Semigloss Alkyd-Enamel Finishes: Factory-formulated alkyd- or acrylic-latex-based interior wood primer.

1. Benjamin Moore; Fresh Start All-Purpose Alkyd Primer 024
2. Pittsburgh Paints; Seal Grip Acrylic Enamel Undercoater 17-955 (92 g/L)
3. Sherwin-Williams; ProGreen 200 Acrylic Primer.

B. Interior Ferrous-Metal Primer: Factory-formulated quick-drying rust-inhibitive alkyd-based metal primer.

1. Benjamin Moore; Super Spec HP Universal Metal Primer P07
2. Pittsburgh Paints; Pitt Tech Acrylic Metal Primer 90-912 (90 g/L) Water Based option
3. Sherwin-Williams; ProCryl Universal Primer.

2.5 EXTERIOR WOOD PRIMERS

A. Exterior Alkyd Wood Primer:

1. Benjamin Moore; Fresh Start Fast-Dry Exterior Primer 094
2. Pittsburgh Paints; Speedhide Alkyd Wood Primer 6-9 (336 g/L)
3. Sherwin-Williams; A-100 Alkyd Wood Primer.

2.6 EXTERIOR LATEX PAINTS

A. Exterior Latex (Semigloss)
1. Benjamin Moore; Moorglo N096 100% Acrylic House and Trim Paint
2. Pittsurgh Paints; Speedhide Exterior Latex Semi-Gloss 6-900 (131 g/L)
3. Sherwin-Williams; A-100 Satin Latex House Paint.

B. Exterior Latex (Gloss):

1. Benjamin Moore; Impervex Latex High Gloss Metal and Wood Enamel 309
2. Pittsburgh Paints; PPG: Manor Hall Exterior Acrylic Gloss 52-110 (137g/L)
3. Sherwin-Williams; A-100 Gloss Latex House Gloss

2.14 INTERIOR FINISH COATS

C. Interior Semigloss Acrylic Enamel: Factory-formulated semigloss acrylic-latex enamel for interior application.

1. Benjamin Moore; Eco Spec Latex Semi Gloss Enamel 376/224 (LEED Qualifying)
2. Pittsburgh Paints; Speedhide Interior Latex Semi-Gloss 6-500 (90 g/L)
3. Sherwin-Williams; ProGreen200 Latex Semigloss.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine substrates and conditions, with Applicator present, for compliance with requirements for maximum moisture content and other conditions affecting performance of work.

B. Maximum Moisture Content of Substrates: When measured with an electronic moisture meter as follows:

1. Concrete: 12 percent.

2. Masonry (Clay and CMU): 12 percent.
3. Wood: 15 percent.
4. Plaster: 12 percent.
5. Gypsum Board: 12 percent.

C. Verify suitability of substrates, including surface conditions and compatibility with existing finishes and primers.

D. Begin coating application only after unsatisfactory conditions have been corrected and surfaces are dry.

1. Beginning coating application constitutes Contractor's acceptance of substrates and conditions.

3.2 PREPARATION

A. Comply with manufacturer's written instructions and recommendations in "MPI Architectural Painting Specification Manual" applicable to substrates and paint systems indicated.

B. Remove plates, machined surfaces, and similar items already in place that are not to be painted. If removal is impractical or impossible because of size or weight of item, provide surface-applied protection before surface preparation and painting.

1. After completing painting operations, use workers skilled in the trades involved to reinstall items that were removed. Remove surface-applied protection if any.
2. Do not paint over labels of independent testing agencies or equipment name, identification, performance rating, or nomenclature plates.

C. Clean substrates of substances that could impair bond of paints, including dirt, oil, grease, and incompatible paints and encapsulants.

1. Remove incompatible primers and reprime substrate with compatible primers as required to produce paint systems indicated.

D. Steel Substrates: Remove rust and loose mill scale. Clean using methods recommended in writing by paint manufacturer.

E. Galvanized-Metal Substrates: Remove grease and oil residue from galvanized sheet metal fabricated from coil stock by mechanical methods to produce clean, lightly etched surfaces that promote adhesion of subsequently applied paints.

F. Wood Substrates:

1. Scrape and clean knots, and apply coat of knot sealer before applying primer.
2. Sand surfaces that will be exposed to view, and dust off.
3. Prime edges, ends, faces, undersides, and backsides of wood.
4. After priming, fill holes and imperfections in the finish surfaces with putty or plastic wood filler. Sand smooth when dried.

3.3 APPLICATION

A. Apply paints according to manufacturer's written instructions.

1. Use applicators and techniques suited for paint and substrate indicated.
2. Paint surfaces behind movable items same as similar exposed surfaces. Before final installation, paint surfaces behind permanently fixed items with prime coat only.

B. Tint each undercoat a lighter shade to facilitate identification of each coat if multiple coats of same material are to be applied. Tint undercoats to match color of topcoat, but provide sufficient difference in shade of undercoats to distinguish each separate coat.

C. If undercoats or other conditions show through topcoat, apply additional coats until cured film has a uniform paint finish, color, and appearance.

D. Apply paints to produce surface films without cloudiness, spotting, holidays, laps, brush marks, roller tracking, runs, sags, ropiness, or other surface imperfections. Cut in sharp lines and color breaks.

3.4 FIELD QUALITY CONTROL

A. Testing of Paint Materials: Owner reserves the right to invoke the following procedure at any time and as often as Owner deems necessary during the period when paints are being applied:

1. Owner will engage the services of a qualified testing agency to sample paint materials being used. Samples of material delivered to Project site will be taken, identified, sealed, and certified in presence of Contractor.
2. Testing agency will perform tests for compliance of paint materials with product requirements.
3. Owner may direct Contractor to stop applying paints if test results show materials being used do not comply with product requirements. Contractor shall remove noncomplying-paint materials from Project site, pay for testing, and repaint surfaces painted with rejected materials. Contractor will be required to remove rejected materials from previously painted surfaces if, on repainting with complying materials, the two paints are incompatible.

3.5 CLEANING AND PROTECTION

A. At end of each workday, remove rubbish, empty cans, rags, and other discarded materials from Project site.

B. After completing paint application, clean spattered surfaces. Remove spattered paints by washing, scraping, or other methods. Do not scratch or damage adjacent finished surfaces.

C. Protect work of other trades against damage from paint application. Correct damage to work of other trades by cleaning, repairing, replacing, and refinishing, as approved by Architect, and leave in an undamaged condition.

D. At completion of construction activities of other trades, touch up and restore damaged or defaced painted surfaces.

END OF SECTION 09911

SECTION 09981 - CEMENTITIOUS COATINGS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

A. Section includes surface preparation and application of cementitious coating systems on the following substrates:
   1. Exterior brick.

1.3 ACTION SUBMITTALS

A. Product Data: For each type of product indicated.

B. Samples for Initial Selection: For each finish coat indicated.

C. Samples for Verification: In each color and gloss of finish coat indicated.

   1. Submit Samples on rigid backing, not less than 4 by 8 inches.
   2. Step coats on Samples to show each coat required for system.
   3. Label each coat of each Sample.

1.4 INFORMATIONAL SUBMITTALS

A. Material Certificates: For each cementitious coating, from manufacturer.

B. Product Test Reports: Based on evaluation of comprehensive tests performed by manufacturer and witnessed by a qualified testing agency or by a qualified testing agency, for each product formulation.

1.5 MAINTENANCE MATERIAL SUBMITTALS

A. Furnish extra materials that are from same production run (batch mix) as materials applied and that are packaged with protective covering for storage and identified with labels describing contents.

   1. Quantity: Furnish an additional 5 percent of each color applied.

1.6 QUALITY ASSURANCE

A. Source Limitations: Obtain cementitious coating materials from single source from single manufacturer.

B. Mockups: Apply benchmark samples of coating system indicated and each color and finish selected to verify preliminary selections made under sample submittals and to demonstrate aesthetic effects and set quality standards for materials and execution.

1. Architect will select one actual substrate of each type to represent surfaces and conditions for application of coating.

2. Apply benchmark samples after permanent lighting and other environmental services have been activated.
3. Final approval of color selections will be based on benchmark samples.

a. If preliminary color selections are not approved, apply additional benchmark samples of additional colors selected by Architect at no added cost to Owner.

1.7 DELIVERY, STORAGE, AND HANDLING

A. Deliver materials to Project site in manufacturer's original, new, unopened packages and containers bearing manufacturer's name and label, and the following information:

1. Product name or title of material.
2. Manufacturer's stock number and date of manufacture.
3. Contents by volume, for pigment and vehicle constituents.
4. Application instructions.
5. Color name and number.
6. Handling instructions and precautions.

B. Store materials not in use in tightly covered containers in a well-ventilated area at a minimum ambient temperature of 45 deg F. Maintain containers used in storage of coatings in a clean condition, free of foreign materials and residue.

1. Protect cementitious coating materials from freezing. Keep materials dry and storage area neat and orderly. Remove waste daily. Take necessary measures to ensure that workers and work areas are protected from health hazards resulting from handling, mixing, and applying the coating.

1.8 PROJECT CONDITIONS

A. Apply coatings only when temperature of surfaces to be painted and ambient air temperatures are between 50 and 95 deg F.

B. Do not apply coatings when relative humidity exceeds 85 percent; at temperatures less than 5 deg F above the dew point; or to damp or wet surfaces.

PART 2 - PRODUCTS

2.1 CEMENTITIOUS COATINGS

A. Cement-based Decorative and Damproofing Coating: Containing portland cement, stabilizer, and hydrated lime or aggregates.

1. Products: Subject to compliance with requirements, provide the following:

a. Euclid Chemical Company, Tamms Industries; Concrete Finisher.
b. Subject to compliance with project requirements, equal products by the following will be considered:
1) CMCSheplers
2) Silpro Corporation
3) BASF Building Systems

B. Performance Requirements: Comply with the following:

1. Compressive Strength: Not less than 3500 psi at 28 days according to ASTM C 109/C 109M.

C. Other Materials: Provide crack fillers, block fillers, and related materials that are compatible with cementitious finish-coat materials and substrates indicated, under conditions of service and application as demonstrated by manufacturer, based on testing and field experience.

D. Colors: As selected by Architect from manufacturer's full range.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine substrates and conditions, with Applicator present, for compliance with requirements and other conditions affecting performance of the Work.

B. Verify suitability of substrates, including surface conditions and compatibility.

C. Begin coating application only after unsatisfactory conditions have been corrected and surfaces are dry.

1. Beginning coating application constitutes Contractor's acceptance of substrates and conditions.

3.2 PREPARATION

A. Comply with manufacturer's written instructions for mixing and preparing materials and as applicable to substrates indicated.

B. Remove plates, machined surfaces, and similar items already in place that are not to be coated. If removal is impractical or impossible because of size or weight of item, provide surface-applied protection before surface preparation and coating.

1. After completing coating operations, use workers skilled in the trades involved to reinstall items that were removed. Remove surface-applied protection if any.

C. Clean substrates of substances that could impair bond of coatings, including dirt, oil, grease, incompatible coatings, and loose substrate materials.

D. Cementitious and Masonry Surfaces: Remove release agents, curing compounds, efflorescence, and chalk. Do not paint surfaces if moisture content or alkalinity of surfaces to be painted exceeds that permitted in manufacturer's written instructions.

E. Crack Repair: Fill cracks according to manufacturer's written instructions before coating surfaces.

1. Cracks Larger Than 1/32 Inch: Cut out static cracks, voids, or honeycombing larger than 1/32 inch and patch with materials recommended in writing by coating manufacturer. Identify dynamic cracks and treat according to manufacturer's written instructions before beginning application.

3.3 APPLICATION

A. Apply coatings according to manufacturer's written instructions. Use applicators and techniques suited for coating and substrate indicated.

1. Dampen substrate of surfaces to receive cementitious coatings one hour before beginning application to prevent surface drag. Immediately before applying coatings, redampen substrate. Substrates shall be saturated surface dry at time of application.
2. Brushes: Use tampico or masonry brushes best suited for material being applied.
3. Spray Equipment: Use spray equipment recommended in writing by manufacturer for material and texture required.

B. Apply each material at not less than manufacturer's recommended spreading rate. Provide total cured material thickness indicated or as recommended in writing by manufacturer.

C. Brush Application: Brush-out and work brush coats into surfaces in an even film, filling all pores and voids at rate recommended in writing by manufacturer to achieve cured material thickness indicated. Finish coat with smooth, horizontal strokes.

D. Spray Application: Apply each coat according to manufacturer's written instructions to provide the equivalent hiding of brush-applied coats. Follow spray application with a general light brooming of coated surface to impart a slight texture.

3.4 FIELD QUALITY CONTROL

A. Testing of Coating Materials: Owner reserves the right to invoke the following procedure at any time and as often as Owner deems necessary during the period when coating operations are being conducted:

1. Owner will engage the services of a qualified testing agency to sample coating materials being used. Samples of material delivered to Project site will be taken, identified, sealed, and certified in presence of Contractor.
2. Testing agency will perform tests for compliance with the following product requirements.

    a. Quantitative material analysis.
    b. Compressive strength.
    c. Tensile strength.
    d. Flexural strength.
    e. Permeance.
    f. Accelerated weathering.

3. Owner may direct Contractor to stop coating application if test results show materials being used do not comply with requirements. Contractor shall remove noncomplying materials from Project site, pay for testing, and recoat surfaces coated with rejected materials. Contractor will be required to remove rejected materials from previously coated surfaces if, on recoating with complying materials, the two coatings are incompatible.

3.5 CLEANING AND PROTECTION

A. At end of each workday, remove rubbish, empty cans, rags, and other discarded materials from Project site.

B. After completing coating application, clean spattered surfaces. Remove spattered coatings by washing, scraping, or other methods. Do not scratch or damage adjacent finished surfaces.

C. Protect work of other trades against damage from coating application. Correct damage to work of other trades by cleaning, repairing, replacing, and refinishing, as approved by Architect, and leave in an undamaged condition.

D. At completion of construction activities of other trades, touch up and restore damaged or defaced coated surfaces.

3.6 COATING SCHEDULE

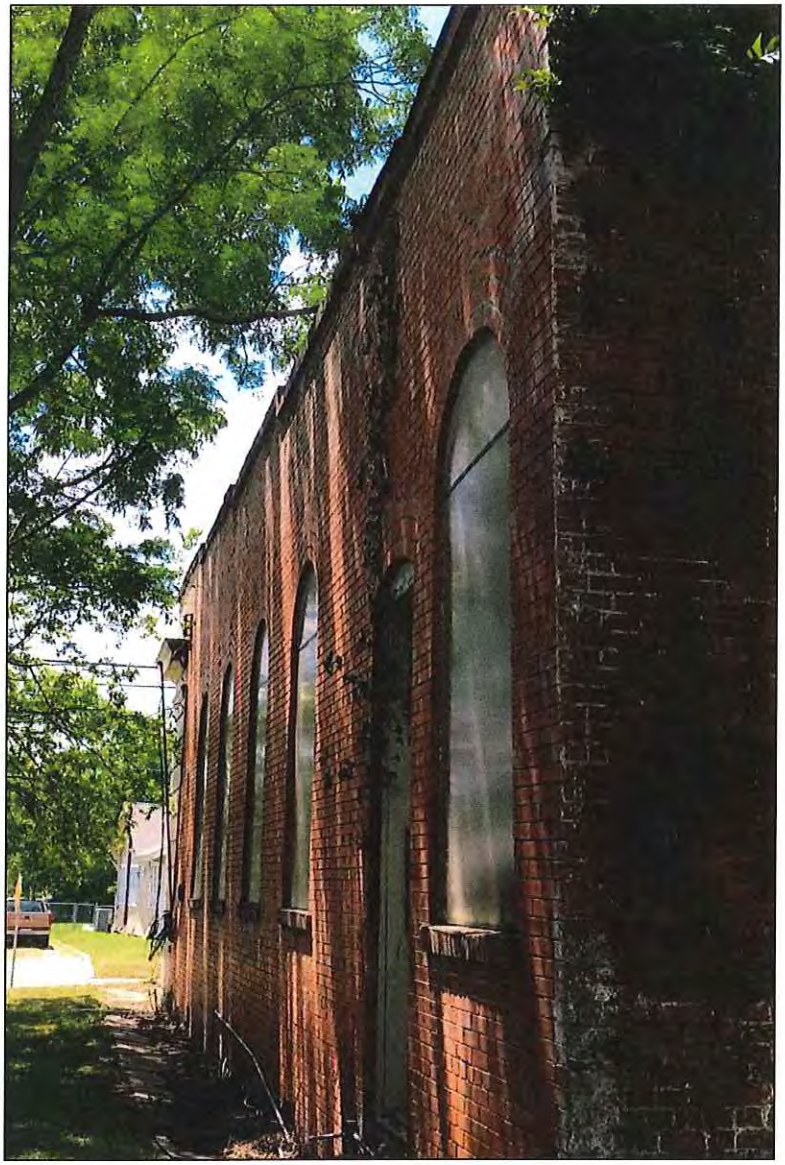
A. General: Apply additional coats when undercoats or other conditions show through final coat until cured film is of uniform coating finish, color, and appearance.

B. Above-Grade Concrete and Masonry: Two finish coats with total cured thickness not less than 40 mils.

1. First Coat: Apply cementitious coating material at the rate to achieve a total cured thickness of 1/4 to 3/8 inch.
2. Second Coat: Apply cementitious coating material at the rate to achieve a total cured thickness of 1/4 to 3/8 inch.

END OF SECTION 09981

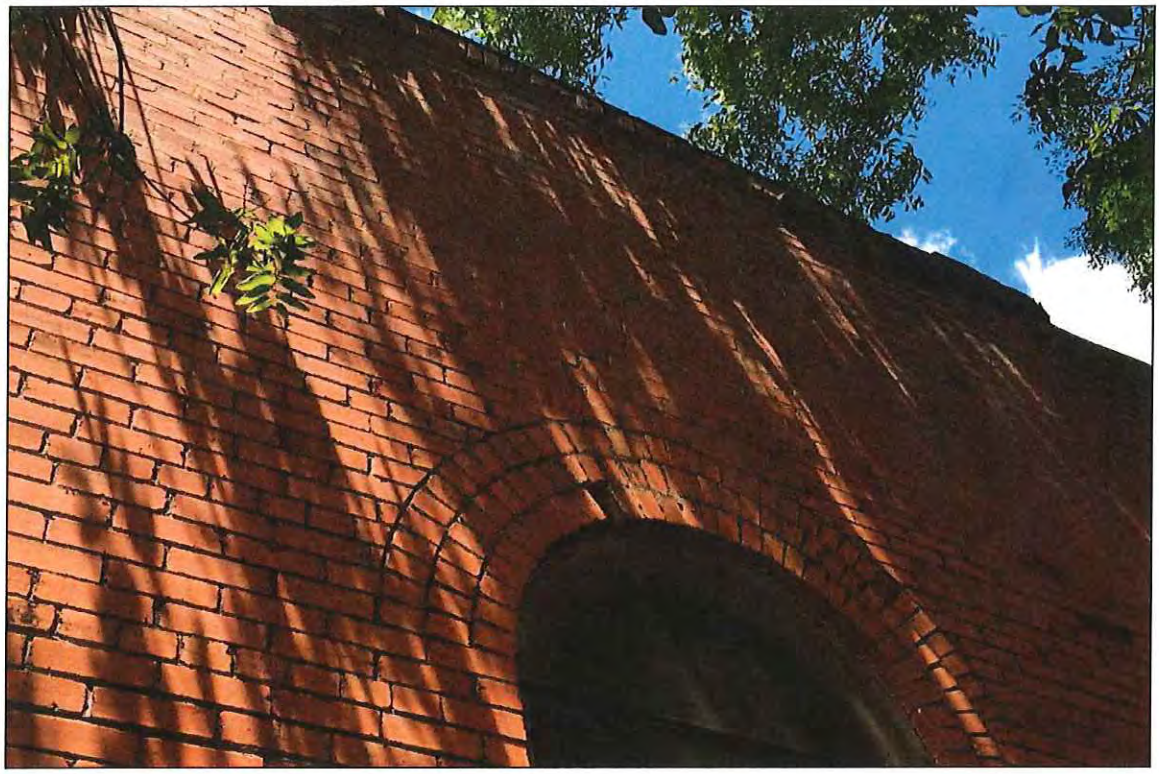
Front (west) Elevation



View along south wall facing west

Lower portion Rear (east) wall, view facing northwest

Detail - rear wall, view facing southwest



Detail - south wall, view facing northeast

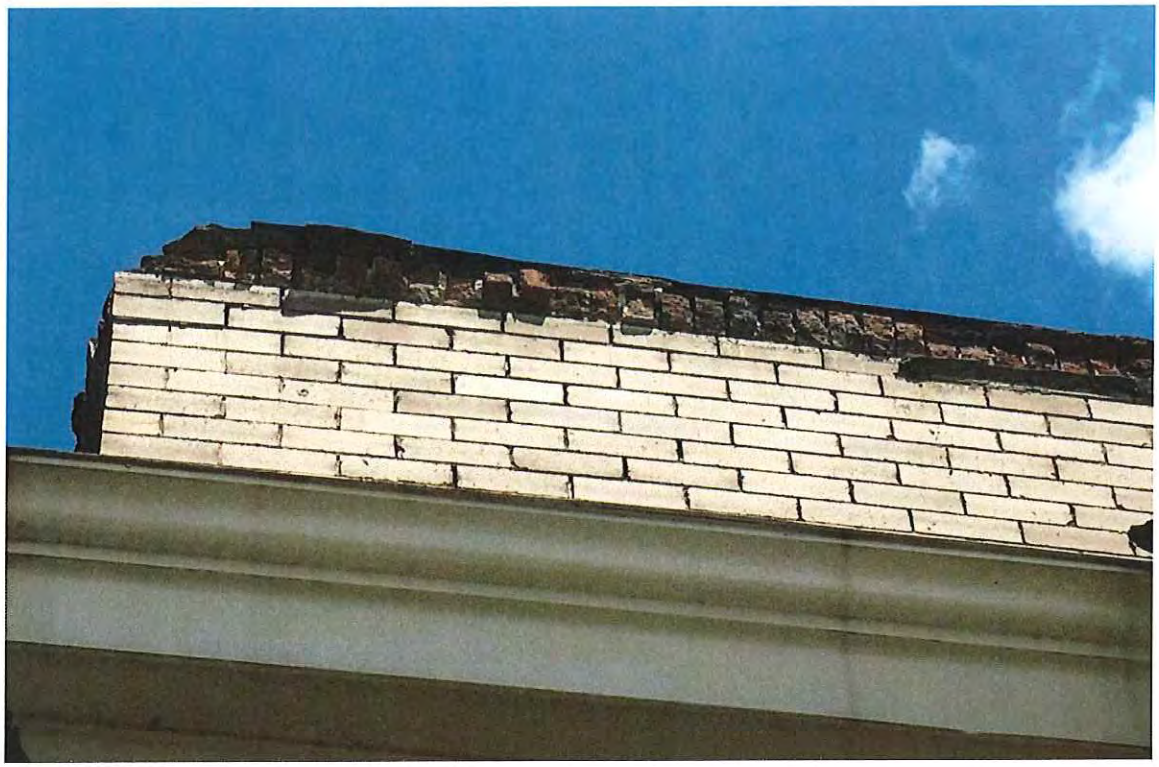
Detail – north wall parapet coping failure, view facing south

Detail – north wall parapet coping failure, view facing south

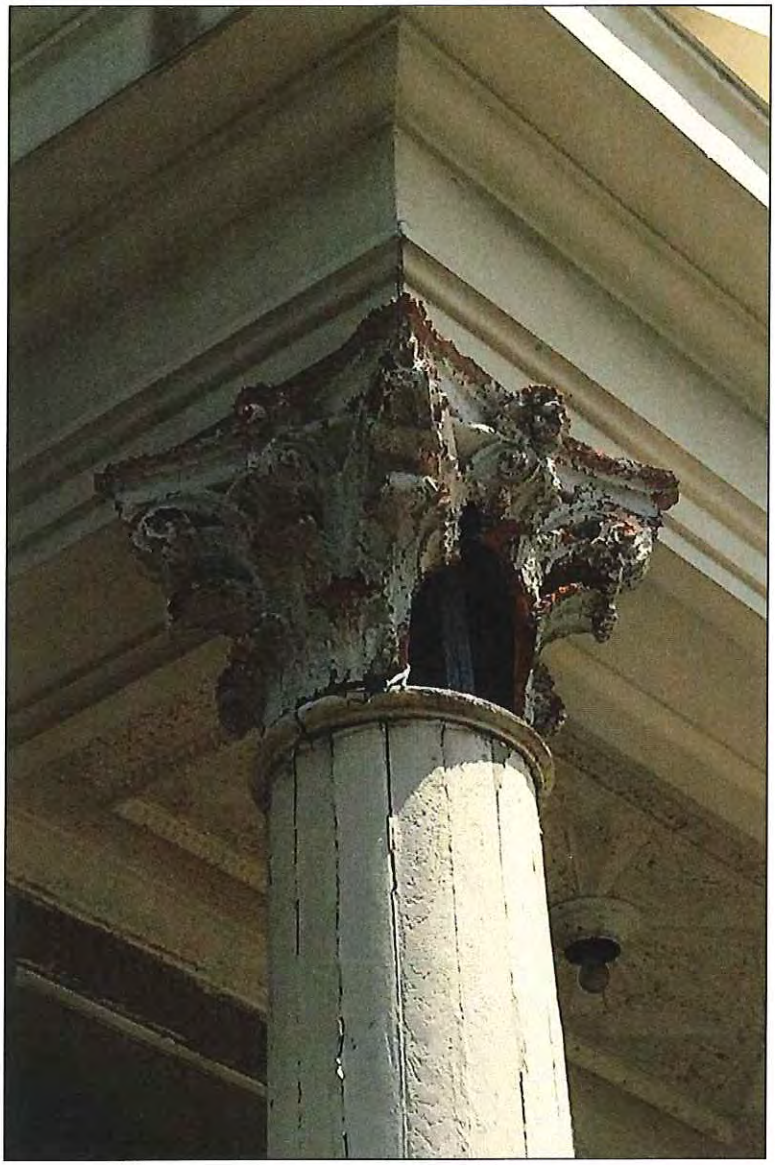
North wall, view facing southeast

Detail – west wall, left of entry

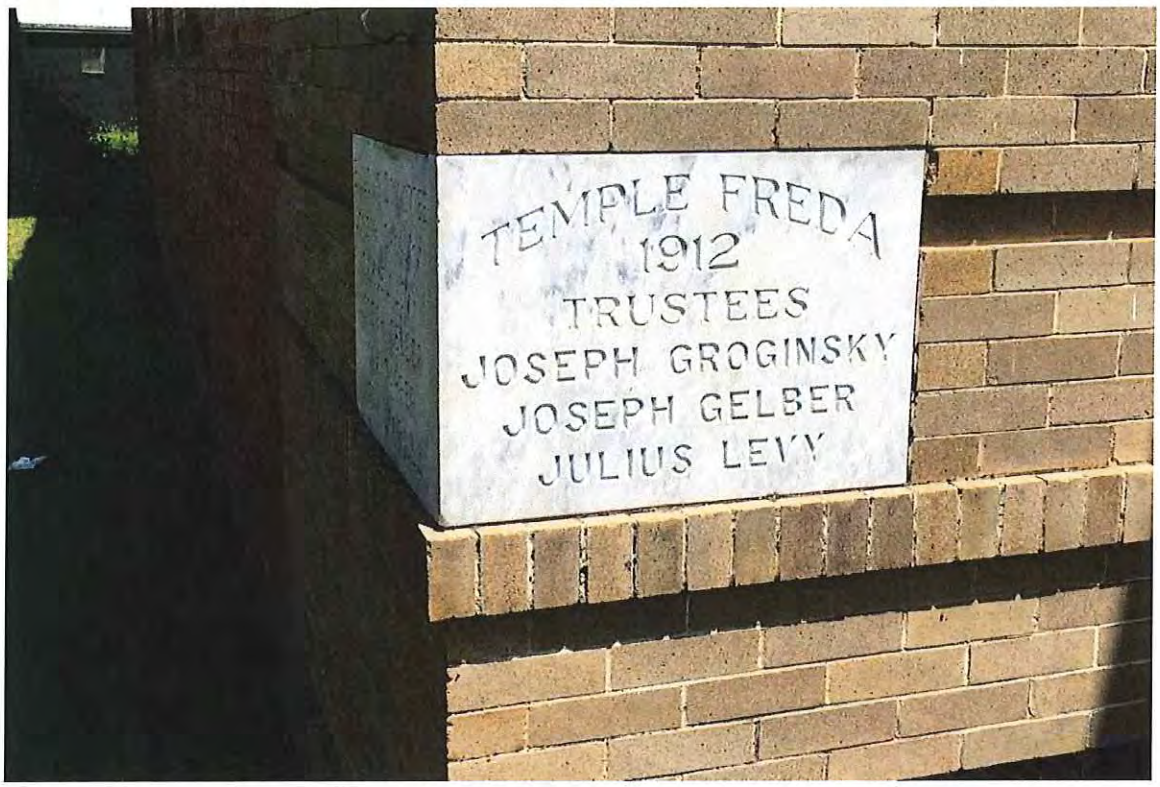
Detail - west wall parapet coping failure



Detail - west wall parapet coping failure

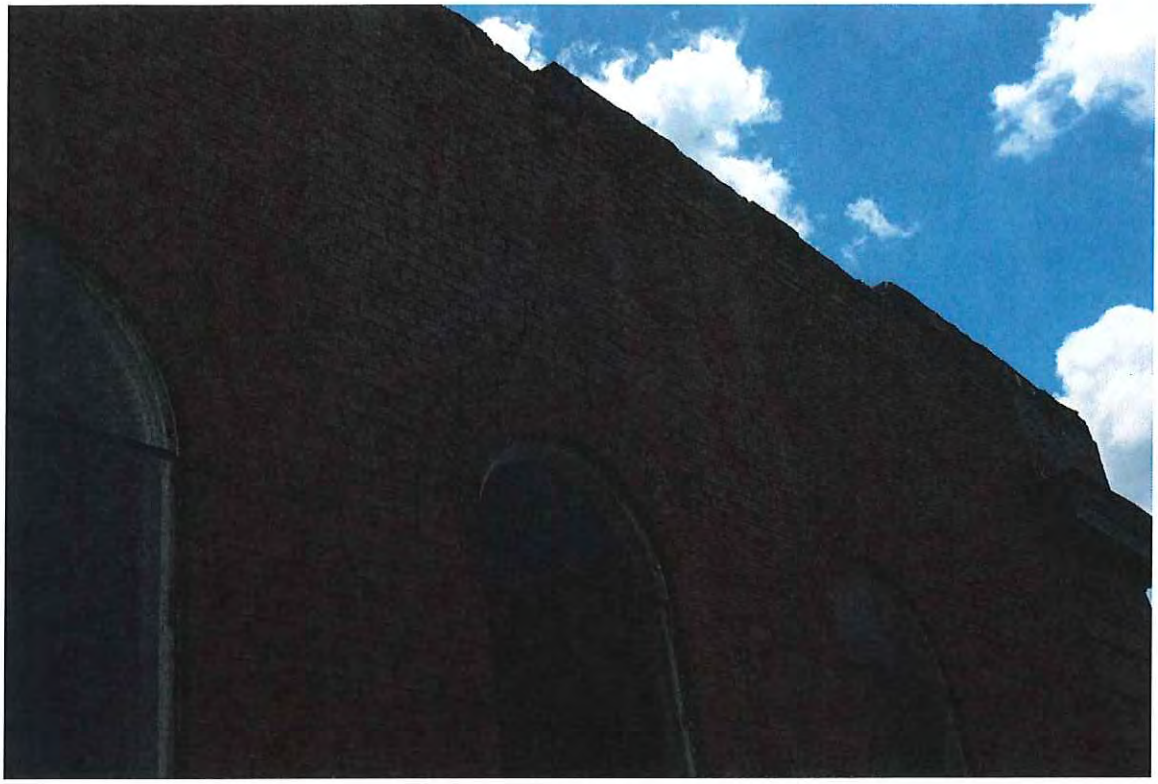


Detail - column capital



Detail – Cornerstone, northwest corner

Detail – crawlspace vent, north wall



Detail - north wall, view facing south west

Detail – east wall, previous repair attempt

Detail – south wall, view towards west, ground slopes toward building

Preservation and Renovation Projects by

The Arkitex Studio, Inc.

July 2016

The
Arkitex
Studio, Inc.

308 N. Bryan Ave.
Bryan, Texas 77803
P (979)821-2635
F (979)775-8224
www.arkitex.com

Statement of Qualifications

The Arkitex Studio, Inc.

308 N. Bryan Ave.
Bryan, Texas 77803
www.arkitex.com
(979)821-2635
(979)775-8224 fax

Services

The combined experience represented in our professional team includes proven capabilities in the following areas:

- master planning
- architectural programming
- architectural design
- site and facilities planning
- interior space planning
- energy conservation and analysis
- furnishing and equipment
- visualization and presentation for development
- information technology systems and design

History

The Arkitex Studio is an alliance that combines the personal experience and project experience of Charlie Burris, AIA, Mike Record, AIA, and Eva Read-Warden, AIA. The Arkitex Studio Team has the staffing depth to provide timely design solutions for a wide variety of project types and sizes.

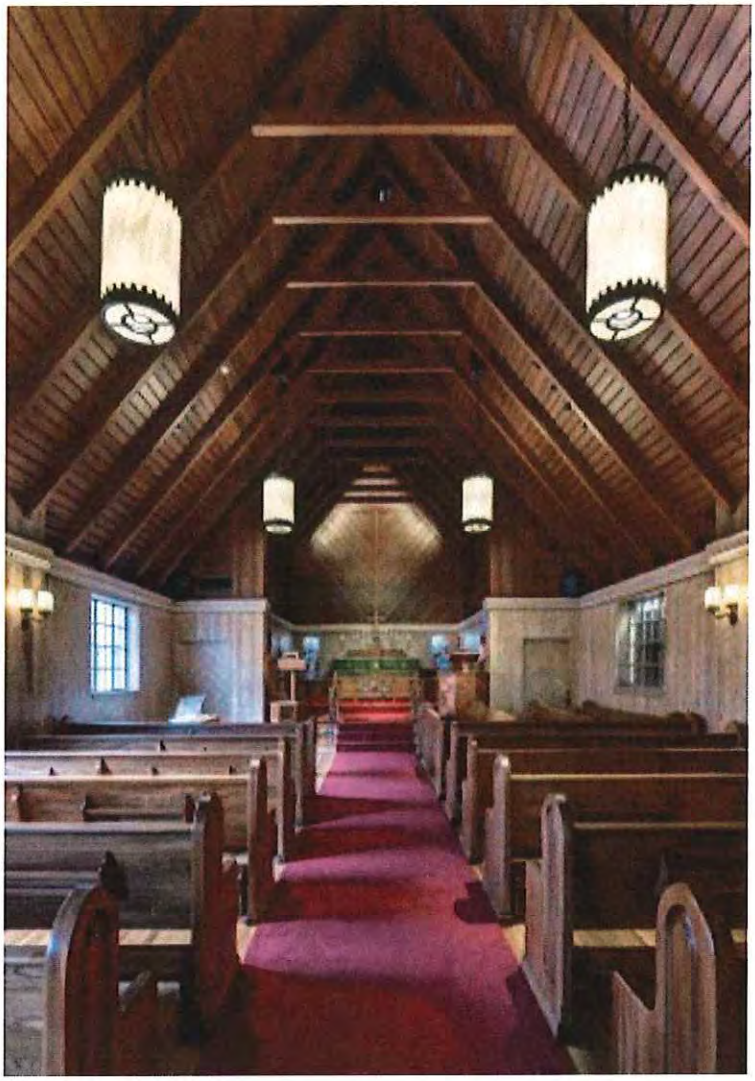
Goals

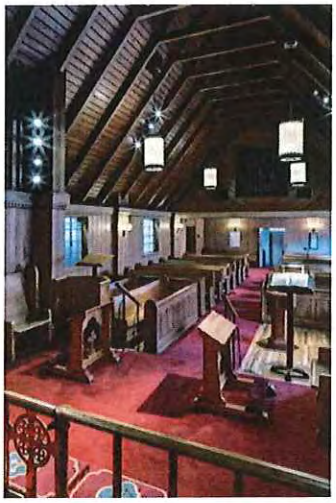
Quality architecture and enduring personal relationships are the foundation of our practice. Balancing the desire for quality with the critical elements of program scope, budget parameters, and time constraints is the challenge we face with every project. We seek commissions that will challenge us to go beyond our previous efforts to better ourselves, our accomplishments, and the environment of our community. We sincerely desire the opportunity to prove the value of our services to you.

The
Arkitex
Studio, Inc.

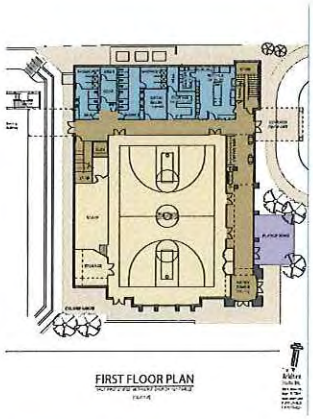
Eva Read-Warden, AIA

Title	Principal
Experience	1988-1991 MGA Partners, Philadelphia, PA 1992-1993 Barker Macfarlane , Albuquerque NM 1993-1994 Flato Moore Shafer McCabe, Albuquerque, NM 1994-1997 Studio 719 Architects, Bryan TX 1997-Present The Arkitex Studio, Bryan, TX
Education	Bachelor of Architecture, Mississippi State University, 1988; Cum Laude Honor Graduate; Tau Sigma Delta Honor Society; Henry Adams Gold Medal Recipient
Registration	Licensed Architect, Texas, Registration number 15353; NCARB Certificate Holder
Background	Eva came to Bryan/College Station in 1994 after working for architectural firms in Pennsylvania and New Mexico. Though locations and projects have been diverse, the challenge of turning ideas into real buildings has been a common thread. Eva relishes this challenge and enjoys helping clients through the process of seeing a vision realized. During her time in Philadelphia Eva worked for the renowned Mitchell/Giurgola Architects, primarily on large public projects. After leaving Philadelphia, she moved to New Mexico, where her project experience included health care, commercial, and numerous educational projects. Since joining The Arkitex Studio, Eva has designed and managed commercial, institutional, and residential projects. During her time in Bryan, Eva has had the opportunity to indulge her passion for historic architecture by working on numerous preservation-related projects, a number of which are listed below. The Arkitex Studio Inc has participated in the revitalization of downtown Bryan by serving as architect for a number of restoration and renovation projects. Eva served as Chair of the Historic Resources Committee for the Texas Society of Architects from 2012 through 2015, where she had the privilege of working with numerous like-minded preservation architects to focus attention on historic architecture in both the professional and the public realm. A member of the Texas Society of Architects, Eva has served as President of the Brazos Chapter of the American Institute of Architects in 2000 and 2011.
Past Projects	• Restoration of 1938 Chapel for St. Thomas Episcopal Church, College Station • Assessment Report for Independence Hall, Washington-on-the-Brazos State Park • Renovations for 1927 Tremont Building, 308 N. Bryan Ave, Bryan, Texas • Renovation of mid-century modern building for The Bank & Trust, Bryan • Restoration documentation for Temple Freda Synagogue, Bryan, TX • Multiple renovation projects for A&M United Methodist Church, College Station • Renovation of WPA-era band hall to Community Recreation Center, Navasota, TX • New Family Life Center for First United Methodist Church, Huntsville, TX • Central Texas Sports Medicine Orthopedic & Sports Training Facility, Bryan, TX • Blinn College Central Administration Relocation • Blinn College 2015 Renovations for the Bryan Campus • Additions and Renovations to Snook ISD, Snook TX • Brazos Christian School, Master Plan, Gymnasium, and Sports Field, Bryan TX • Family Life Center for Central Baptist Church, College Station TX • Bryan ISD, Crockett Elementary Addition & Renovation

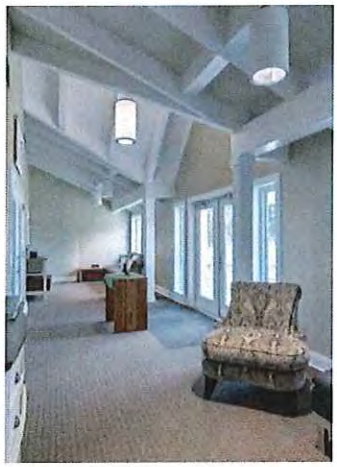




St. Thomas Episcopal Chapel Renovation
College Station, Texas
1938 Chapel designed by Ernest Langford

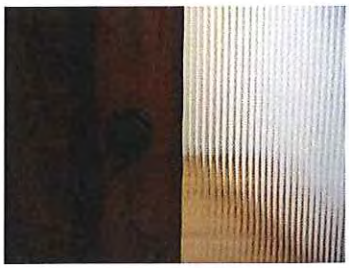


First United Methodist Church
Huntsville, Texas
A new community life center in the context of an historic 1912 Neo-Gothic sanctuary



Friends Congregational Church
College Station, Texas
Renovation and additions

308 N. Bryan Ave.
Downtown Bryan, Texas
A seventy-year-old dry goods store turned into offices for a cutting-edge architecture firm.



Servare Building
College Station, Texas
A 1930s-era building sees new life as a law office.

120 Main Street
Bryan, Texas
The renovation of a historic downtown bank.

Astin Building
Downtown Bryan, Texas
A landmark building with an ultra-modern interior.

Other Renovations and Additions

Wimberley Building, Bryan, Texas

Wimberley Building

Downtown Bryan, Texas

Located in downtown Bryan, the Wimberely Building started its life in 1965 as the Woolworth department store. The three-story, 50,000-square-foot building has been transformed into a state-of-the-art data center. To accomplish this, two back-up generators and two air conditioning cooling towers were installed on the roof, with plans for a future generator and cooling tower. This required extensive structural work to transfer these large loads to the foundation. Security and back-up power were the top priorities for the owner and their clients. Bullet-resistant materials, biometric access and 24-hour security guards are all incorporated into the building's design. The building's high security and emergency power capability attracted the Brazos Valley Community Emergency Operations Center (CEOC), set up in the aftermath of Hurricanes Katrina and Rita. The CEOC coordinates emergency response for the cities of Bryan and College Station, Texas A&M University, and Brazos County. The Arkitex Studio worked hand-in-hand with these four civic entities to design their space. By the time hurricane Ike hit Texas in 2008, the CEOC was operational and ready to respond.

Astin Building

Downtown Bryan, Texas

A landmark in downtown Bryan, the Astin Building is a four-story, 12,500-square-foot, five-level bank building built in 1915. In 2006, historical research was conducted to determine the original exterior character. The exterior underwent a full restoration, while the interior was completely renovated. The building now houses office space and a sandwich shop. As the client's needs changed, the scope of the project increased substantially; the building's interior now blends historic and modern finishes, and the addition of a back-up power generator safeguards tenants' high-tech work. The Arkitex Studio worked closely with the City of Bryan fire and code officials to successfully resolve several challenging life-safety issues.

Renovation of Crockett Elementary School

Bryan Independent School District, Bryan, Texas

$4.2 million renovation and expansion of existing school, including additions for library, cafeteria, administration and various improvements and upgrades. This renovation (53,480 square feet) and addition (9,500 square feet) project was challenging to all involved, due to a tight time line for both documentation and construction and due to a tight budget. Work included extensive renovation to portions of the existing school, complete refinishing throughout, and additions of both classroom and support space. As the designers we worked closely with the school district and school users to determine the needs as could be accomplished with the available funds.

308 N. Bryan Ave, Downtown Bryan, Texas

308 N. Bryan Ave.

Downtown Bryan, Texas

In 2007, the Arkitex Studio rehabilitated a 4,500-square-foot, dry goods store (originally built in 1929) in downtown Bryan for our offices. The building features load-bearing masonry walls and three open-span steel bow trusses. The exterior of the building has been partially remodeled (the brick has been cleaned and a storefront windows have been rebuilt). Brick restoration and the addition of street-front awnings are slated for a future phase. The interior of the building was completely remodeled and required a portion of the wood roof deck to be replaced and the plaster veneer to be removed. The steel trusses, wood roof deck and brick walls were exposed providing a varied and interesting textural palette. A skylight was added with translucent panels to provide a soft light into the space. Existing metal ceiling panels were salvaged and reused to provide references to the history of the building. The overall result is a warm, inviting and invigorating work space.

Servare Building

Downtown Bryan, Texas

The revitalization of downtown Bryan is a theme that runs through the work of the Arkitex Studio, and a passion of the architects that work here. Formerly the location of Charlie's Furniture, this 3000-square-foot structural brick building needed help desperately. Behind the original brick facade was an empty husk: no floors, no windows, no roof. With the assistance of a Facade Improvement Grant from the city of Bryan, our client was able to restore this 1930s-era building and bring it into daily use. The stained wood finishes and fluted glass interior windows recall a period bank, illuminated by a newly installed skylight (a classic solution to on-going environmental concerns). Custom storefront windows and a deep awning respond to building fabric in the rest of north downtown. What was old is new again

Tejas Center

Bryan, Texas

Tejas Center was the revitalization of the existing Manor East Mall originally built in 1965. The project required a large project team, including the City of Bryan and the local utility companies. The existing building was an enclosed mall. Our task was to turn this into a facility that did not have any interior common areas. Approximately two-thirds of the existing buildings were renovated. We were later retained to design three pad site buildings for the project. There is currently 360,000 square-feet of lease area. At the corner of Villa Maria and Texas Avenue, the Tejas Center continues to grow. 2006 marked the completion of Carter's Burger, Kolache Rolf's, Chef Cao's, Los Molcajetes, Hastings, Subway and Libations Liquor. The most recent additions include First Victoria Bank, Starbucks and Kool Smiles.

120 Main Street

Downtown Bryan, Texas

This project is an adaptive reuse of a bank and a shoe store, originally built in 1919. The First National Bank of Bryan was the first in the nation to have a night deposit vault. The buildings were combined and renovated following a 1960 fire. The exterior was restored to its original prominence; the interior was designed for a data communications company. Plaster walls and ceilings requiring extensive repair were removed, exposing the masonry walls and wood roof framing. The existing terrazzo floors remain. The structure of the mezzanine (added in 1960) was exposed to clearly indicate that is was

120 Main Street, Downtown Bryan, Texas

not original. The project included a state-of-the-art computer data center, which required a roof-mounted generator, extensive air conditioning, electrical and security updates. To add a sense of mystery and drama, a series of transparent, translucent and opaque elements separates the secure data center from the more-public gallery.

Additions and Renovations for the Texas 4-H Foundation - State Headquarters Complex
College Station, Texas
Conversion of an existing fire station into statewide offices for sister organizations.

Texas A&M University Choral Activities Relocation
College Station, Texas
Temporary facilities for the Texas A&M choral activities group.

City of College Station City Hall renovations
College Station, Texas
A major, multi-phased renovation project to decompress and consolidate city government services.

City Hall Annex
City of Bryan, Texas
The conversion of an erstwhile bank building (then police station) into an annex to consolidate four city departments.

City of Bryan Information Technology Center renovations
Bryan, Texas
Renovation of an existing unemployment office for the new Information Technology Center and secure storage for the City Secretary.

Baptist Student Ministries, Stephen F. Austin State University
Nacogdoches, Texas
Once a strip center, now a beautified, expanded student ministries facility.

Brazos Valley Teachers Credit Union
College Station, Texas
Renovations to the lobby and offices spaces of the is organization to give a more contemporary appearance.

AgniTek
Downtown Bryan, Texas
Renovations of a 1960s-era Health For All clinic into offices for an internet technology services firm.

Varisco Building
Downtown Bryan, Texas
A landmark building in downtown Bryan is being restored (following the federal Secretary of Interior's Standards for Rehabilitating Historic Buildings) to house high-tech offices and disaster recovery facilities.

Varisco Building, Downtown Bryan, Texas

St. Joseph Elementary School
Bryan, Texas
Interior renovations to the historic (1929) Travis School.

Rockdale Independent School District
Rockdale, Texas
Design and documentation for various architectural, mechanical and electrical upgrades a the Rockdale Elementary, Middle and High Schools (2006).

Grace Bible Church
College Station, Texas
Renovations to update an existing church facility to accommodate an expanding congregation in a branch facility.

New Entrances to the College of Veterinary Medicine
Texas A&M University
Renovation of the existing building to provide new contemporary entrances.

Music Lab, Academic Building
Texas A&M University
Conversion of existing space into studio and lab facilities for the Department of Performance Studies.

CS Science Park
College Station, Texas
Conversion of an existing 168,000-square-foot electronics assembly plant into a new science research and development park.

References

Randall Spradley, EVP Development
Astin Partners L.P.
100 North Main, Suite 100
Bryan, Texas 77803
(979) 393-9100

David Woodcock, FAIA, FSA, FAPT
Professor Emeritus of Architecture, Texas A&M University
Director Emeritus, Center for Heritage Conservation, Texas A&M University
Member and Building Committee Chairman, St. Thomas Episcopal Church
979-218-5950

VITA

ROBERT B. WARDEN, Professor
Director, Center for Heritage Conservation
Department of Architecture
Texas A&M University
Phone: (979) 845-7061
email:r-warden@tamu.edu

EDUCATION

University of New Mexico	M.A. Philosophy	1994
Texas A&M University	M.Arch. Architecture	1986
University of Houston	Texas Cert. Secondary Ed.	1979
Purdue University	B.S. Electrical Engineering	1974

ARCHITECTURE PROFESSIONAL LICENSURE Pennsylvania No. RA-011884-X 1990

ACADEMIC POSITIONS

Texas A&M University, Dept. of Architecture	1994-Present
Drexel University, Dept. of Architectural Engineering	1989-1991

PROFESSIONAL PRACTICE ARCHITECTURE

Mitchell Giurgola Architects, Philadelphia	1989-1990
Jordan-Mitchell, Inc., Philadlephia	1987-1989
Ballinger Architects, Philadelphia	1986

ADMNISTRATIVE SERVICE

Director, Center for Heritage Conservation	2007-Present
Associate Director, Center for Heritage Conservation	2004- 2007
Coordinator, M.S. Arch Program	2002- 2004
Interim Associate Department Head, Architecture	2001- 2002

RESEARCH / CREATIVE ACTIVITIES

Journal Publications

Warden, R., "Towards and New Era of Cultural Heritage Recording and Documentation", APT Bulletin 40,No. 3-4,October, 2009

Warden, R. and Woodcock, D. "Historic Documentation: A Model of Project Based Learning for Architecture." *Journal of Landscape and Urban Planning* 73 (2005): 110-119

Everett, M., Pierce, C., Save, N., Warden, R., Dickson, D., Burt, R., and Bradford, J. "Geophysical investigation of the June 6, 1944 D-Day invasion site at Pointe du Hoc, Normandy, France.", *Near-Surface Geophysics* 3 (2005)

Burt, R., Woods, P., and Warden, R. "Three-Dimensional Modeling of Erosion to Historic Adobe Wall Ruins at Fort Davis Texas" *Association of Preservation Technology Bulletin* 24 no. 2 (1998): 35-38

Warden, R. and Vazquez, G. "Telematics in Historical Survey and Documentation Projects." *arq: Architectural Research Quarterly* 8 (1997): 80-88

Published Documents in Library of Congress (Juried)

Fort Pulaski National Monument, *Library of Congress* (2003) HABS GA,26-SAV.V, 2
Montezuma Castle National Monument, *Library of Congress* (2005) HABS AZ, (submitted, not yet catalogued)

Book Chapters

Burt, R., Bradford, J., Dickson, B., Everett, M., Warden, R., and Woodcock, D. "The survey and Documentation of Pointe du Hoc Historic Site.", In *Fields of Conflict: Battlefield Archaeology from Sparta to the Korean War*, edited by D. Scott, L. Babits, C. Haecker, Greenwood Publishing Group. 2006

Grants - External

Warden, R. (PI), St. Andrews Episcopal Church Documentation, St. Andrews Episcopal Church, $10,000,(2009)
Warden, R. (PI), Historic Kinsgville High School, City of Kingsville, $2,000, (2009)
Warden, R. (PI), Bastrop Cabin Scan, TPWD, $1,500, (2009)
Warden, R. (PI), Ninth Annual CHC Symposium, "Conserving Modernism", Feb29-March1, Glasscock Center for Humanities, TAMU, (2008) $500
Warden, R. (PI), Ninth Annual CHC Symposium, "Conserving Modernism", Feb29-March1, National Center for Preservation Technology and Training, (2008) $2,500
Warden, R., (PI), Burt, R., Everett, M., and Briaud, J. "Pointe du Hoc Stabilization and Historical Study Phase 2" American Battle Monuments Commission (2007) $361,000
Woodcock, D. Warden, R. , Niblo Farms Documentation, City of Dallas (2007) $35,149
Warden, R., (PI), Burt, R., Everett, M., and Briaud, J. "Pointe du Hoc Stabilization and Historical Study" American Battle Monuments Commission (2006) $434,000
Warden, R. (PI) and Woodcock, D. "Will Rogers Memorial Complex Documentation" The Projects Group (2004) $18,700
Burt, R. (PI), Warden, R., Dickson, B., Everett, M., Bradford, J., and Woodcock, D. "Survey and Documentation of Pointe du Hoc Historic Site Normandy France" National Center for Preservation Technology and Training (2004) $40,000
Warden, R. (PI) and Woodcock, D. "Montezuma Castle National Monument" National Park Service (2002) $77,000
Warden, R. (CO-PI) and Woodcock, D. (CO-PI) "Fort Pulaski" National Park Service Phase 3 (2001) $30,000
Warden, R., (CO-PI), Woodcock, D., (CO-PI) "Fort Pulaski" National Park Service Phase 2 (2000) $35,000
Woodcock, D. (PI) and Warden, R. "Fort Pulaski" National Park Service, Phase 1 (1999) $25,000
Woodcock, D. (PI) and Warden, R. "Pueblitos of Dinetah" National Park Service (1999) $29,000
Warden, R. (PI) "Development of Non-linear Documentation Strategies for Incorporating Computerized Solid Modeling in Historical Building Survey" National Center for Preservation Technology and Training (1997) $15,000
Woodcock, D. (PI) and Warden, R., "Pueblitos of Dinetah" National Park Service (1996) $20,000

Lindsey Guindi, AICP
3605 Dorchester Court, Bryan, Texas 77802
979.574.4424
family@guindi.net

Summary

An accomplished professional with a unique combination of energy and efficiency. Business strengths include strong customer service and attention to detail along with an ability to quickly identify a client's needs and goals. Management skills show a proficiency in directing, coordinating, and motivating fellow team members to successful completion of the organization's defined goals and objectives.

Profile

- Nearly 7 years of experience as a professional planner and 5 years as a manager.
- Ability to direct complex projects from concept to fully operational status.
- Goal-oriented individual with strong leadership capabilities.
- Organized, highly motivated, and creative problem solver.
- Proven ability to build rapport and work in unison with staff, appointed and elected officials, and citizens.

Education

Bachelor of Environmental Design
Texas A&M University

Relevant Experience & Accomplishments

- Successfully managed numerous plan implementation projects.
- Prepared and administered a $1.8 million department budget.
- Managed an award winning $250,000 Comprehensive Plan Update project.
- Reorganized several internal processes and departmental divisions to facilitate a more efficient use of time and resources through cross-training of staff.
- Tracked performance measures, goals and accomplishments for the department.
- Researched, composed, and implemented several major ordinance initiatives and updates.
- Trained, supervised, directed and evaluated professional, technical and administrative staff.
- Counseled staff on defining career and work related goals and objectives which resulted in multilateral staff achievement of work objectives.
- Coordinated more than twelve city departments and private utilities during the site development review process.
- Facilitated and cultivated positive working relationships between the staff and the local development community.

Employment

Director of Strategic Projects, City of Bryan, Texas *May 2013-present*

- Prepared and managed Request for Proposal's and associated agreements for a variety of development opportunities on land owned by the economic development arm of the city.
- Managed and administered the City's five Tax Increment Reinvestment Zones.
- Directed and managed strategic projects such as the creation of a medical district, an update to the Comprehensive Plan and a major update to the Subdivision Regulations.
- Served as a Project Manager for contracts associated with the City's development partner in a golf course community/mixed-use development.
- Acted as the staff liaison for a joint city-county economic development board that oversees the development of an industrial park.
- Administered a 1.5 million Economic Development Administration grant for the construction of a new rail spur.
- Participated in various committees and organizations involved in the planning process.
- Assisted citizens with a variety of matters, including information on city-owned properties and the development process in general.

Interim Director of Development Services, City of Bryan, Texas *Sept 2012-May 2013*

- Oversaw and managed a department of 24 staff members in the fields of Planning, Administration, Inspections, Plan Review, Development Coordination and Code Enforcement.
- Prepared and managed the Planning and Development Services Department's budget.
- Oversaw the daily tasks of the administrative staff and customer service representatives.
- Provided general direction and guidance on planning, building and code enforcement issues.
- Acted as the Chair of the Site Development Review Committee, the group responsible for the technical review of all site development submittals.
- Participated in various committees and organizations involved in the planning process.
- Made presentations to the Planning and Zoning Commission and the City Council on cases and projects originating in the Planning and Development Services Department.
- Initiated and implemented changes to the Zoning, Subdivision, and Site Development Review ordinances.
- Assisted citizens with a variety of matters, including the interpretation and application of city ordinances.

Assistant Director of Development Services, City of Bryan, Texas *August 2008-Sept 2012*

- Assisted citizens with a variety of matters, including the interpretation and application of city ordinances.
- Reviewed submittals to the Site Development Review Committee to ensure compliance with various city ordinances.
- Made presentations to the Planning and Zoning Commission, Zoning Board of Adjustments, and the City Council on planning cases, including rezonings, conditional use permits, variances, and text amendments.
- Participated in various committees and organizations involved in the planning process.
- Reviewed proposals for a matching grant program to assist neighborhoods in minor beautification projects.
- Initiated and implemented changes to the Zoning, Subdivision, and Site Development Review ordinances.

Planning Manager, City of Bryan, Texas *July 2005-August 2008*

- Directly supervised up to four professional planners, one Development Coordinator and one support position.
- Prepared and managed the Planning Department's budget.
- Oversaw the daily tasks of the Planning Department.
- Acted as the staff liaison for the Planning and Zoning Commission and the Zoning Board of Adjustments.
- Acted as the Chair of the Site Development Review Committee, the group responsible for the technical review of all site development submittals.
- Participated in various committees and organizations involved in the planning process.
- Made presentations to the Planning and Zoning Commission, Zoning Board of Adjustments, and the City Council on planning cases, including rezonings, conditional use permits, variances, and text amendments.
- Initiated and implemented changes to the Zoning, Subdivision, and Site Development Review ordinances.
- Assisted citizens with a variety of matters, including the interpretation and application of city ordinances.

Development Coordinator, City of Bryan, Texas — *Nov 2004-July 2005*

- Assisted citizens with a variety of matters, including the interpretation and application of city ordinances.
- Reviewed submittals to the Site Development Review Committee to ensure compliance with various city ordinances.
- Made presentations to the Planning and Zoning Commission, Zoning Board of Adjustments, and the City Council on planning cases, including rezonings, conditional use permits, variances, and text amendments.
- Participated in various committees and organizations involved in the planning process.
- Reviewed proposals for a matching grant program to assist neighborhoods in minor beautification projects.
- Initiated and implemented changes to the Zoning, Subdivision, and Site Development Review ordinances.

Development Project Planner, City of Bryan, Texas — *Nov 2001-Nov 2004*

- Assisted citizens with a variety of matters, including the interpretation and application of city ordinances.
- Reviewed submittals to the Site Development Review Committee to ensure compliance with various city ordinances.
- Made presentations to the Planning and Zoning Commission, Zoning Board of Adjustments, and the City Council on planning cases, including rezonings, conditional use permits, variances, and text amendments.
- Participated in various committees and organizations involved in the planning process.
- Reviewed proposals for a matching grant program to assist neighborhoods in minor beautification projects.
- Initiated and implemented changes to the Zoning, Subdivision, and Site Development Review ordinances.

Memberships

American Institute of Certified Planners (2008 – Present)
American Planning Association (2001 – Present)

Recognitions & Professional Activities

Central Texas American Planning Association's Development Review Planner of the Year (2003)
Central Texas American Planning Association's Section Director's Award Recipient (2010)
Texas American Planning Association's Chapter President's Award Recipient (2011)
Treasurer of the American Planning Association – Texas Chapter (2009 – Present)
Director, Director-Elect and Treasurer of the American Planning Association – Central Texas Section (2002 – 2009)

304 Crescent Drive
Bryan, Texas 77801
979.450.3424
randallhaynes@suddenlink.net

Randall M. Haynes

Experience

City of Bryan, Texas - Department of Development Services — *Bryan, Texas*

Senior Planner, Historic Preservation Officer December 2013

- Liason to City of Bryan's Historic Landmark Commission.
- Utilize a broad knowledge of local, state and federal laws as they pertain to planning and development, historic preservation, and economic development to independently make decisions that are in line with and support the mission of the Development Services Department.
- Assist citizens, developers and businesses, elected and appointed officials in all aspects relating to planning and implementing Bryan's development ordinances and comprehensive plan.
- Collaborate with fellow professional planners on code interpretations and formulation of case recommendations.

City of Bryan, Texas - Department of Development Services — *Bryan, Texas*

Project Planner December 2009 to December 2013

- Liason to City of Bryan's Zoning Board of Adjustment.
- Department project manager, City of Bryan sustainability program.
- LEED Green Associate.
- Designed and implemented a multi-departmental solution to improve regulation and living conditions in Bryan's manufactured home land lease communities.
- Authored internal reports and analysis papers relating to a number of issues supporting the process of making public policy decisions.

City of Bryan, Texas - Department of Development Services — *Bryan, Texas*

Staff Planner September 2006 to December 2009

- Assist citizens, developers, businesses, elected and appointed officials in all aspects relating to planning and implementing Bryan's development ordinances and comprehensive plan.
- Serve as a contact point and public spokesman for the Department of Development Services.

Garlyn Shelton BMW-Hyundai-Mazda-Volkswagen — *Bryan, Texas*

Service Director June 2001 to July 2006

- Marketed service products that have provided the dealership with steady growth of sales and profits.
- Assisted in design, and move to a new service and parts facility. Provided seamless flow of quality service product during a year long transition period.

- Recruited, managed and implemented training for a stable staff of skilled professionals. Turnover lower than 5% over six years.
- Developed and maintained dealership policy regarding safety and environmental compliance.
- Monitored relationships with vendors to ensure quality services at most efficient expense.
- Managed staff to maximize quality and accuracy of warranty claims. Measure of effectiveness: Less than five day submission of claims and a less than 1% by dollar volume invalid claims.
- Studied, proposed and promoted use of new dealership systems:

  Service loaner car management, Remstar high density storage, Mike Nichols Inventory Management, Air conditioned workshop, Full coverage workshop IT systems, etc.

Fred Brown Mazda-BMW-Volkswagen — *Bryan, Texas*

Service Department Manager July 1988 to June 2001

- BMW of North America Center of Excellence Award 1999, 2000, 2001
- Awarded 1997 Better Business Bureau's Torch Award for Business Ethics.
- Added Volkswagen products to service and sales operations. 1997
- Added Hyundai and Kia products to service and sales operations. 1999
- Successfully managed service and warranty operations for four different auto manufacturers

Service Advisor / Service Department Manager January 1986 to July 1988

- Consistently superior Customer Satisfaction Index ranking from Mazda and BMW. Top 20% of dealers in the United States.
- Concurrently handled all customer contact duties and management tasks for the dealership service department.
- Recognized as the best BMW service department in the United States by J.D. Power company 1987-88

Service Advisor December 1984 to January 1986

- Performed liaison duties between service customers and dealership.
- Converted dealership filing system to VIN sort technique.

Village Toyota-BMW — *Austin, Texas*

Service Advisor April 1984 to November 1984

- Performed liaison duties between service customers and dealership.

Austin National Bank / Interfirst — *Austin, Texas*

Special Project Coordinator November 1983 to April 1984

- Studied and purchased mail handling equipment for sorting, delivery and statement processing. $40,000.00 monthly postal budget.

Credit Card Marketing Representative July 1982 to October 1983

- Sold and maintained credit card services to bank commercial customers.

Assistant Manager Proof/Transit May 1981 to July 1982

- Primary responsibility re-organizing check handling during implementation of IBM 3890 processing system. Operational responsibility for up to 100 million dollars daily during period of 17% interest rates.

Education

University of Texas at Austin — *Austin, Texas*

- Bachelor of Science, Radio-Television-Film 1981

Affiliations

Brazos County Historical Commission 1987 – 1992 and 2011 to Present

American Planning Association

United States Green Building Council, LEED Green Associate

City of Bryan Historic Landmark Commission 1989 - 1993

City of Bryan Planning and Zoning Commission 2000 - 2006

President, Brazos Heritage Society 2002 – 2006

Volunteer, Habitat for Humanity

FUNDING AGREEMENT & EASEMENT ACKNOWLEDGEMENT

Project Information:

Project Name: Temple Freda

Address: 205 Parker Street

City/County/State/Zip: Bryan, Texas 77805

Legal Applicant/Recipient

Name: Randy Haynes, AICP, Senior Planner, Historic Preservation Officer

Organization: City of Bryan

Address: P.O. Box 1000

City/County/State/Zip: Bryan, Texas 77805

Contact Person: Randy Haynes

Contact's Telephone Number: 979-209-5074

Acknowledgement

If the project is awarded a grant, a funding agreement is required between the grant applicant and Texas Historical Commission. A sample funding agreement is provided behind Tab 9, Attachments and Forms C for review by the applicant and their counsel, if applicable. By signing this form the representative acknowledges that they have read, understand and will agree to the items set forth in the sample funding agreement if a grant is awarded.

This type of grant requires the owner to enter into a preservation easement with the Texas Historical Commission. The easement requires that the grantor maintain insurance coverage on the property for the duration of the easement. A sample easement is provided behind Tab 9, Attachments and Forms D for review by the applicant and their counsel, if applicable. The term of the easement is determined by the grant amount; please see Tab 3, Funding Agreement and Easement. By signing this form the owner acknowledges that they have read, understand and will agree to the items set forth in the sample easement if a grant is awarded. Final documents for signature will be provided after the grant award.

Lindsey Guindi
Signature of Owner

Lindsey Guindi, Director of Strategic Projects
Typed or Printed Name and Title

979-209-5100
Telephone Number

7.12.16
Date

Randy Haynes
Signature of Applicant

Randy Haynes - Historic Preservation Officer
Typed or Printed Name and Title

979-209-5074
Telephone Number

12 July 2016
Date

TEXAS HISTORICAL COMMISSION

real places telling real stories

TEXAS PRESERVATION TRUST FUND

PLAN NOW TO PRESERVE THE PAST FOR THE FUTURE

APPLICATION FOR APPROVAL OF AN IN-KIND MATCH

Texas Preservation Trust Fund (TPTF) Rules [TAC, Title 13, Part 2, Rule §17.1(d)] state that the Texas Historical Commission (THC) may approve up to 50 percent in-kind match (of the total match required) for projects involving highly significant and endangered properties.

Although in-kind match requests are not approved as a matter of course, an applicant may use this form as a written request for up to one-half of their total required match to be provided in-kind by donated materials and labor.

This completed form must be included with the project proposal.

The THC will notify the applicant regarding which of their in-kind requests are eligible or ineligible in the THC's project proposal approval letter.

CONDITIONS FOR CONSIDERATION OF AN IN-KIND MATCH PROPOSAL

The purpose of matching funds is to augment the amount of resources available to the project from TPTF grant funds and to foster the dedication of local and community resources to the purposes of the project.

Materials and labor proposed for use as in-kind match must be:

- Directly related to the project goals and objectives;
- Endorsed by the project professional; and
- Meet the Secretary of the Interior's "Standards and Guidelines for the Treatment of Historic Properties or for Archeology and Historic Preservation," as appropriate to the project type.

In addition, project completion must still be feasible with partial in-kind donations substituted for the full cash match generally required.

A proposed in-kind match may include:

- Donations of appropriate materials for the project; and/or
- The monetary value of time contributed by professional or technical personnel, or other skilled or unskilled labor;

Provided that the donation is an integral and necessary part of the funded project.

The following conditions must also be met for consideration of a proposed in-kind match:

- The value for donated materials must be reasonable and not exceed fair market value at the time of the donation;
- The value placed on donated professional and technical services must be consistent with the rate of compensation paid for similar work in the labor market;
- Volunteer services must be supported by an appropriate valuation method; and
- The basis for determining the value of all services and materials must be documented in writing for review by the THC.

All requested information must be provided for consideration of the in-kind match application.

Name of property: Temple Freda, Bryan, Texas

Name of grant project manager: Randy Haynes

Texas Preservation Trust Fund grant amount: $50,000

Total project cost: $100,000

Value of total proposed in-kind match: $13,500.00

☐ **MATERIALS** (attach required documentation for each proposed in-kind material match):

1. Identify the donor and source (if different from donor) of proposed material donation;
2. Attach a description, photograph, cut sheet, etc., as appropriate, of the proposed in-kind donation for each material; and
3. Attach documentation (written statement, invoice, etc.) of the fair market value of the proposed material to be donated.

☐ **LABOR** (attach required documentation for each proposed in-kind source of labor match):

1. Attach a description of the proposed labor to be donated.
2. For professional or technical labor donation, attach a resume or other verification of experience in the work to be donated.
3. Estimated number of hours to be donated: See attached engineer's estimate
4. Cost per hour of the proposed labor donation: See attached engineer's estimate
5. For volunteer labor also attach the following:
   a. A list that identifies each proposed volunteer;
   b. A statement of each volunteer's experience in the work to be donated; and
   c. Documentation supporting the appropriateness of the proposed valuation method for donated volunteer labor.

CERTIFICATION

The undersigned certify that the proposed in-kind match is necessary and appropriate for this project.

Randy Haynes
Project Grant Manager

July 14, 2016
Date

Project Professional (Architect, Archeologist, etc.)

July 14, 2016
Date

Texas Historical Commission
P.O. Box 12276
Austin, TX 78711-2276
512.463.6100
fax 512.475.4872
thc@thc.state.tx.us

CITY OF BRYAN
The Good Life, Texas Style.

July 14, 2016

Lisa Harvell
Texas Historical Commission
108 West 16th Street
Austin, Texas 78701

RE: Statement of Fair Market Value for in-kind contribution from City of Bryan Engineering and Public Works Department

Ms. Harvell,

Please find attached a sealed engineer's estimate of costs to accomplish the site development portion of the Temple Freda stabilization project. The format used by our Engineering Department utilizes estimating methods that do not directly translate into hour units or dollars per hour. It has been explained to me that the attached estimate has been prepared based on the department's normal cost estimating format. I hope this provides a clear enough picture to support our proposal.

Pleas call if you have questions.

Sincerely

Randy Haynes

Randy Haynes, AICP, LEED® GA
Senior Planner
Historic Preservation Officer
City of Bryan, Texas
979.209.5074
rhaynes@bryantx.gov

Engineer's Estimate for
Temple Freda
In-Kind Site Work Design and Construction
July 14, 2016

Item	Description	Qty	Unit	Estimated Cost	
				Unit Price	Total Amount
Design					
1	Site Survey				$ 1,500.00
2	Engineering Design				$ 5,000.00
				Subtotal Design	**$ 6,500.00**
Construction					
3	Demolish and dispose of 4' wide concrete sidewalk	50	SY	$ 10.00	$ 500.00
4	Excavation and embankment (site grading)	100	CY	$ 35.00	$ 3,500.00
5	Sodding of disturbed areas	375	SY	$ 8.00	$ 3,000.00
				Subtotal Construction	**$ 7,000.00**
				Total	**$ 13,500.00**

TEXAS HISTORICAL COMMISSION

real places telling real stories

TEXAS PRESERVATION TRUST FUND

PLAN NOW TO PRESERVE THE PAST FOR THE FUTURE

APPLICATION FOR APPROVAL OF AN IN-KIND MATCH

Texas Preservation Trust Fund (TPTF) Rules [TAC, Title 13, Part 2, Rule §17.1(d)] state that the Texas Historical Commission (THC) may approve up to 50 percent in-kind match (of the total match required) for projects involving highly significant and endangered properties.

Although in-kind match requests are not approved as a matter of course, an applicant may use this form as a written request for up to one-half of their total required match to be provided in-kind by donated materials and labor.

This completed form must be included with the project proposal.

The THC will notify the applicant regarding which of their in-kind requests are eligible or ineligible in the THC's project proposal approval letter.

CONDITIONS FOR CONSIDERATION OF AN IN-KIND MATCH PROPOSAL

The purpose of matching funds is to augment the amount of resources available to the project from TPTF grant funds and to foster the dedication of local and community resources to the purposes of the project.

Materials and labor proposed for use as in-kind match must be:

- Directly related to the project goals and objectives;
- Endorsed by the project professional; and
- Meet the Secretary of the Interior's "Standards and Guidelines for the Treatment of Historic Properties or for Archeology and Historic Preservation," as appropriate to the project type.

In addition, project completion must still be feasible with partial in-kind donations substituted for the full cash match generally required.

A proposed in-kind match may include:

- Donations of appropriate materials for the project; and/or
- The monetary value of time contributed by professional or technical personnel, or other skilled or unskilled labor;

Provided that the donation is an integral and necessary part of the funded project.

The following conditions must also be met for consideration of a proposed in-kind match:

- The value for donated materials must be reasonable and not exceed fair market value at the time of the donation;
- The value placed on donated professional and technical services must be consistent with the rate of compensation paid for similar work in the labor market;
- Volunteer services must be supported by an appropriate valuation method; and
- The basis for determining the value of all services and materials must be documented in writing for review by the THC.

All requested information must be provided for consideration of the in-kind match application.

Name of property: Temple Freda

Name of grant project manager: Randy Haynes

Texas Preservation Trust Fund grant amount: $50,000

Total project cost: $100,000

Value of total proposed in-kind match: $4,000

☐ **MATERIALS** (attach required documentation for each proposed in-kind material match):

1. Identify the donor and source (if different from donor) of proposed material donation;
2. Attach a description, photograph, cut sheet, etc., as appropriate, of the proposed in-kind donation for each material; and
3. Attach documentation (written statement, invoice, etc.) of the fair market value of the proposed material to be donated.

☐ **LABOR** (attach required documentation for each proposed in-kind source of labor match):

1. Attach a description of the proposed labor to be donated.
2. For professional or technical labor donation, attach a resume or other verification of experience in the work to be donated.
3. Estimated number of hours to be donated: 30
4. Cost per hour of the proposed labor donation: $135
5. For volunteer labor also attach the following:
   a. A list that identifies each proposed volunteer;
   b. A statement of each volunteer's experience in the work to be donated; and
   c. Documentation supporting the appropriateness of the proposed valuation method for donated volunteer labor.

CERTIFICATION

The undersigned certify that the proposed in-kind match is necessary and appropriate for this project.

Randy Haynes,
Project Grant Manager

July 14, 2016
Date

Eva M. Read-Warden, AIA
Project Professional (Architect, Archeologist, etc.)

July 14, 2016
Date

Texas Historical Commission
P.O. Box 12276
Austin, TX 78711-2276
512.463.6100
fax 512.475.4872
thc@thc.state.tx.us

PROPOSAL FOR IN-KIND SERVICES

July 2016

Temple Freda, Bryan, Texas
Phase 1 Stabilization Work and Phase 2 Renovation Design for Temple Freda

The Arkitex Studio, Inc. is pleased to provide architectural services on the above-referenced project. The following information is offered for your review:

PROJECT DESCRIPTION

Phase 1 Stabilization Work includes the scope of work described in the plans and specifications dated July 2016. Design and construction documents have been provided by previous donations of services. Future professional services required from this point forward to achieve this scope of work include bidding and negotiation phase services and construction administration services.

The Arkitex Studio, Inc.
308 N. Bryan Ave.
Bryan, TX 77803
P (979)821-2635
F (979)775-8224
www.arkitex.com

SCOPE OF SERVICES

The Arkitex Studio proposes to provide the following services:

1. Bidding & Negotiation Services:
   - -Distribute plans and specifications for pricing
   - -Pre-qualify general contractors
   - -Submit plans and specifications for plan review and permit
   - -Answer questions from bidders during pricing
   - -Hold a pre-bid meeting on site
   - -Receive proposals
   - -Review proposals and make a recommendation to the City and Friends of Temple Freda
   - -Assist in contract negotiations and prepare the Owner/Contractor Agreement for signature
2. Construction Administration Services
   - -Hold a Pre-Construction Meeting
   - -Receive, review, and return product data and shop drawings submitted by the contractor
   - -Answer questions that arise during construction
   - -Assist in arranging for mortar testing of both existing and proposed mortar
   - -Provide daily construction observation visits during the primary time of masonry repairs
   - -Provide construction observation visits as needed during other phases of the work

FEE PROPOSAL

We propose to provide these services for a fee of $4,000. This fee is based on the hourly rate of $135 for Eva Read-Warden, AIA, Principal Architect. This fee is derived by using the hours of work needed for the scope of services above, estimated to be 30 hours.

Respectfully offered,

Eva Read-Warden, AIA
Principal
The Arkitex Studio Inc.

The Texas Board of Architectural Examiners has jurisdiction over individuals licensed under the Architect's Registration Law, Texas Civil Statutes, Article 249A. The Texas Board of Architectural Examiners may be contacted using the following information: P.O. Box 12337, Austin, TX 78711-7337, or 333 Guadalupe, Suite 2-350, Austin TX 78701-3942, phone 512-305-9000 or on the web at www.tbae.state.tx.us.