**HISTORIC AND DESIGN REVIEW COMMISSION**
**February 21, 2018**

| | |
|---|---|
| **HDRC CASE NO:** | **2018-074** |
| **ADDRESS:** | 502 E MULBERRY AVE |
| **LEGAL DESCRIPTION:** | NCB 3090 BLK 6 LOT D |
| **ZONING:** | MF-33, H |
| **CITY COUNCIL DIST.:** | 1 |
| **DISTRICT:** | Monte Vista Historic District |
| **APPLICANT:** | Bryan and Corey Wildman |
| **OWNER:** | Bryan Wildman |
| **TYPE OF WORK:** | Exterior Alterations |
| **APPLICATION RECEIVED:** | February 02, 2018 |
| **60-DAY REVIEW:** | April 3, 2018 |

**REQUEST:**

The applicant is requesting a Certificate of Appropriateness for approval to:
1. Repair existing windows as needed.
2. Construct a two story, rear accessory structure.
3. Perform site work including the installation of rear yard parking.
4. Demolish a rear accessory structure.
5. Receive Historic Tax Certification.

**APPLICABLE CITATIONS:**

*Historic Design Guidelines, Chapter 2, Guidelines for Exterior Maintenance and Alterations*

6. Architectural Features: Doors, Windows, and Screens

A. MAINTENANCE (PRESERVATION)
iii. *Windows*—Preserve historic windows. When glass is broken, the color and clarity of replacement glass should match the original historic glass.

9. Outbuildings, Including Garages

A. MAINTENANCE (PRESERVATION)
i. *Existing outbuildings*—Preserve existing historic outbuildings where they remain.
ii. *Materials*—Repair outbuildings and their distinctive features in-kind. When new materials are needed, they should match existing materials in color, durability, and texture. Refer to maintenance and alteration of applicable materials above, for additional guidelines.

*Historic Design Guidelines, Chapter 3, Guidelines for Additions*

1. Massing and Form of Residential Additions

A. GENERAL
i. Minimize visual impact—Site residential additions at the side or rear of the building whenever possible to minimize views of the addition from the public right-of-way. An addition to the front of a building would be inappropriate.
ii. Historic context—Design new residential additions to be in keeping with the existing, historic context of the block. For example, a large, two-story addition on a block comprised of single-story homes would not be appropriate.
iii. Similar roof form—Utilize a similar roof pitch, form, overhang, and orientation as the historic structure for additions.
iv. Transitions between old and new—Utilize a setback or recessed area and a small change in detailing at the seam of the historic structure and new addition to provide a clear visual distinction between old and new building forms.

B. SCALE, MASSING, AND FORM
i. Subordinate to principal facade—Design residential additions, including porches and balconies, to be subordinate to the principal façade of the original structure in terms of their scale and mass.
ii. Rooftop additions—Limit rooftop additions to rear facades to preserve the historic scale and form of the building from the street level and minimize visibility from the public right-of-way. Full-floor second story additions that obscure the form of the original structure are not appropriate.
iii. Dormers—Ensure dormers are compatible in size, scale, proportion, placement, and detail with the style of the house. Locate dormers only on non-primary facades (those not facing the public right-of-way) if not historically found within the district.
iv. Footprint—The building footprint should respond to the size of the lot. An appropriate yard to building ratio should be maintained for consistency within historic districts. Residential additions should not be so large as to double the existing building footprint, regardless of lot size.
v. Height—Generally, the height of new additions should be consistent with the height of the existing structure. The maximum height of new additions should be determined by examining the line-of-sight or visibility from the street. Addition height should never be so contrasting as to overwhelm or distract from the existing structure.

3. Materials and Textures

A. COMPLEMENTARY MATERIALS
i. Complementary materials—Use materials that match in type, color, and texture and include an offset or reveal to distinguish the addition from the historic structure whenever possible. Any new materials introduced to the site as a result of an addition must be compatible with the architectural style and materials of the original structure.
ii. Metal roofs—Construct new metal roofs in a similar fashion as historic metal roofs. Refer to the Guidelines for Alternations and Maintenance section for additional specifications regarding metal roofs.
iii. Other roofing materials—Match original roofs in terms of form and materials. For example, when adding on to a building with a clay tile roof, the addition should have a roof that is clay tile, synthetic clay tile, or a material that appears similar in color and dimension to the existing clay tile.

4. Architectural Details

A. GENERAL
i. Historic context—Design additions to reflect their time while respecting the historic context. Consider character-defining features and details of the original structure in the design of additions. These architectural details include roof form, porches, porticos, cornices, lintels, arches, quoins, chimneys, projecting bays, and the shapes of window and door openings.
ii. Architectural details—Incorporate architectural details that are in keeping with the architectural style of the original structure. Details should be simple in design and compliment the character of the original structure. Architectural details that are more ornate or elaborate than those found on the original structure should not be used to avoid drawing undue attention to the addition.
iii. Contemporary interpretations—Consider integrating contemporary interpretations of traditional designs and details for additions. Use of contemporary window moldings and door surroundings, for example, can provide visual interest while helping to convey the fact that the addition is new.

*Historic Design Guidelines, Chapter 5, Guidelines for Site Elements*

3. Landscape Design

B.. ROCKS OR HARDSCAPE
*i. Impervious surfaces* —Do not introduce large pavers, asphalt, or other impervious surfaces where they were not historically located.
*ii. Pervious and semi-pervious surfaces*—New pervious hardscapes should be limited to areas that are not highly visible, and should not be used as wholesale replacement for plantings. If used, small plantings should be incorporated into the design.

*iii. Rock mulch and gravel* - Do not use rock mulch or gravel as a wholesale replacement for lawn area. If used, plantings should be incorporated into the design.

5. Sidewalks, Walkways, Driveways and Curbing

B. DRIVEWAYS
*i. Driveway configuration*—Retain and repair in place historic driveway configurations, such as ribbon drives. Incorporate a similar driveway configuration—materials, width, and design—to that historically found on the site. Historic driveways are typically no wider than 10 feet. Pervious paving surfaces may be considered where replacement is necessary to increase stormwater infiltration.
*ii. Curb cuts and ramps*—Maintain the width and configuration of original curb cuts when replacing historic driveways. Avoid introducing new curb cuts where not historically found.

*UDC Section 35-614. – Demolition*

Demolition of a historic landmark constitutes an irreplaceable loss to the quality and character of the City of San Antonio. Accordingly, these procedures provide criteria to prevent unnecessary damage to the quality and character of the city's historic districts and character while, at the same time, balancing these interests against the property rights of landowners.

(a)Applicability. The provisions of this section apply to any application for demolition of a historic landmark (including those previously designated as historic exceptional or historic significant) or a historic district.

(3)Property Located in Historic District and Contributing to District Although Not Designated a Landmark. No certificate shall be issued for property located in a historic district and contributing to the district although not designated a landmark unless the applicant demonstrates clear and convincing evidence supporting an unreasonable economic hardship on the applicant if the application for a certificate is disapproved. When an applicant fails to prove unreasonable economic hardship in such cases, the applicant may provide additional information regarding loss of significance as provided is subsection (c)(3) in order to receive a certificate for demolition of the property.

(b)Unreasonable Economic Hardship.

(1)Generally. The historic and design review commission shall be guided in its decision by balancing the historic, architectural, cultural and/or archaeological value of the particular landmark or eligible landmark against the special merit of the proposed replacement project. The historic and design review commission shall not consider or be persuaded to find unreasonable economic hardship based on the presentation of circumstances or items that are not unique to the property in question (i.e. the current economic climate).

(2)Burden of Proof. The historic and design review commission shall not consider or be persuaded to find unreasonable economic hardship based on the presentation of circumstances or items that are not unique to the property in question (i.e. the current economic climate). When a claim of unreasonable economic hardship is made, the owner must prove by a preponderance of the evidence that:

A. The owner cannot make reasonable beneficial use of or realize a reasonable rate of return on a structure or site, regardless of whether that return represents the most profitable return possible, unless the highly significant endangered, historic and cultural landmark, historic and cultural landmarks district or demolition delay designation, as applicable, is removed or the proposed demolition or relocation is allowed;

B. The structure and property cannot be reasonably adapted for any other feasible use, whether by the current owner or by a purchaser, which would result in a reasonable rate of return; and

C. The owner has failed to find a purchaser or tenant for the property during the previous two (2) years, despite having made substantial ongoing efforts during that period to do so. The evidence of unreasonable economic hardship introduced by the owner may, where applicable, include proof that the owner's affirmative obligations to maintain the structure or property make it impossible for the owner to realize a reasonable rate of return on the structure or property.

(3)Criteria. The public benefits obtained from retaining the cultural resource must be analyzed and duly considered by the historic and design review commission.

As evidence that an unreasonable economic hardship exists, the owner may submit the following information to the historic and design review commission by affidavit:

A. For all structures and property:

i. The past and current use of the structures and property;

ii. The name and legal status (e.g., partnership, corporation) of the owners;

iii. The original purchase price of the structures and property;

iv. The assessed value of the structures and property according to the two (2) most recent tax assessments;
v. The amount of real estate taxes on the structures and property for the previous two (2) years;
vi. The date of purchase or other acquisition of the structures and property;
vii. Principal balance and interest rate on current mortgage and the annual debt service on the structures and property, if any, for the previous two (2) years;
viii. All appraisals obtained by the owner or applicant within the previous two (2) years in connection with the owner's purchase, financing or ownership of the structures and property;
ix. Any listing of the structures and property for sale or rent, price asked and offers received;
x. Any consideration given by the owner to profitable adaptive uses for the structures and property;
xi. Any replacement construction plans for proposed improvements on the site;
xii. Financial proof of the owner's ability to complete any replacement project on the site, which may include but not be limited to a performance bond, a letter of credit, a trust for completion of improvements, or a letter of commitment from a financial institution; and
xiii. The current fair market value of the structure and property as determined by a qualified appraiser.
xiv. Any property tax exemptions claimed in the past five (5) years.

B. For income producing structures and property:
i. Annual gross income from the structure and property for the previous two (2) years;
ii. Itemized operating and maintenance expenses for the previous two (2) years; and
iii. Annual cash flow, if any, for the previous two (2) years.

C. In the event that the historic and design review commission determines that any additional information described above is necessary in order to evaluate whether an unreasonable economic hardship exists, the historic and design review commission shall notify the owner. Failure by the owner to submit such information to the historic and design review commission within fifteen (15) days after receipt of such notice, which time may be extended by the historic and design review commission, may be grounds for denial of the owner's claim of unreasonable economic hardship.

When a low-income resident homeowner is unable to meet the requirements set forth in this section, then the historic and design review commission, at its own discretion, may waive some or all of the requested information and/or request substitute information that an indigent resident homeowner may obtain without incurring any costs. If the historic and design review commission cannot make a determination based on information submitted and an appraisal has not been provided, then the historic and design review commission may request that an appraisal be made by the city.

(d)Documentation and Strategy.

(1)Applicants that have received a recommendation for a certificate shall document buildings, objects, sites or structures which are intended to be demolished with 35mm slides or prints, preferably in black and white, and supply a set of slides or prints to the historic preservation officer.

(2)Applicants shall also prepare for the historic preservation officer a salvage strategy for reuse of building materials deemed valuable by the historic preservation officer for other preservation and restoration activities.

(3)Applicants that have received an approval of a certificate regarding demolition shall be permitted to receive a demolition permit without additional commission action on demolition, following the commission's recommendation of a certificate for new construction. Permits for demolition and construction shall be issued simultaneously if requirements of section 35-609, new construction, are met, and the property owner provides financial proof of his ability to complete the project.

(4)When the commission recommends approval of a certificate for buildings, objects, sites, structures designated as landmarks, or structures in historic districts, permits shall not be issued until all plans for the site have received approval from all appropriate city boards, commissions, departments and agencies. Permits for parking lots shall not be issued, nor shall an applicant be allowed to operate a parking lot on such property, unless such parking lot plan was approved as a replacement element for the demolished object or structure.

(e)Issuance of Permit. When the commission recommends approval of a certificate regarding demolition of buildings, objects, sites, or structures in historic districts or historic landmarks, permits shall not be issued until all plans for the site have received approval from all appropriate city boards, commissions, departments and agencies. Once the replacement plans are approved a fee shall be assessed for the demolition based on the approved replacement plan square footage. The fee must be paid in full prior to issuance of any permits and shall be deposited into an account as directed by the historic preservation officer for the benefit, rehabilitation or acquisition of local historic resources. Fees shall be as follows and are in addition to any fees charged by planning and development services:

0—2,500 square feet = $2,000.00
2,501—10,000 square feet = $5,000.00

10,001—25,000 square feet = $10,000.00
25,001—50,000 square feet = $20,000.00
Over 50,000 square feet = $30,000.00

*UDC Section 35-618. Tax Exemption Qualifications:*

(a) Assessed Valuation. In accordance with the provisions of this article, a building, site, or structure which meets the definition of a historically significant site in need of tax relief to encourage preservation and which is substantially rehabilitated and/or restored as certified by the historic and design review commission and approved by the city tax assessor-collector, shall have an assessed value for ad valorem taxation as follows regardless of ownership during the granted time period:
(1) A residential property shall have the assessed value for ad valorem taxation for a period of ten (10) tax years equal to the assessed value prior to preservation.
(b) Applicability. This exemption shall begin on the first day of the first tax year after verification of completion of the preservation required for certification; provided the building shall comply with the applicable zoning regulations for its use and location.
(c) Application. Application for a historic structure preservation tax exemption pursuant to this division is to be filed with the office of historic preservation. The historic preservation officer shall be the agent of the city for the purposes of administering this division provided that the historic preservation officer request a recommendation from the historic and design review commission. Each application shall be signed and sworn to by the owner of the property and shall:
(1) State the legal description of the property proposed for certification;
(2) Include an affidavit by the owner describing the historic significance of the structure in need of tax relief;
(3) Include a final complete set of plans for the historic structure's restoration or rehabilitation;
(4) Include a statement of costs for the restoration or rehabilitation work;
(5) Include a projection of the estimated construction, time and predicted completion date of the historic restoration or rehabilitation;
(6) Authorize the members of the historic and design review commission, the city tax assessor-collector and city officials to visit and inspect the property proposed for certification and the records and books of the owners as necessary to certify that the property in question is in substantial need of restoration or rehabilitation;
(7) Include a detailed statement of the proposed use for the property; and
(8) Provide any additional information to the historic and design review commission which the owner deems relevant or useful such as the history of the structure or access to the structure by the public.
Each application shall contain sufficient documentation confirming or supporting the information submitted therein.
(e) Verification of Completion. Upon completion of the restoration and rehabilitation, together with a fee as specified in Appendix "C" of this chapter, the owner, who may not be the same as at the time of application, shall submit a sworn statement of completion acknowledging that the historically significant site in need of tax relief to encourage preservation has been substantially rehabilitated or restored as certified by the historic and design review commission. The historic and design review commission, upon receipt of the sworn statement of completion, but no later than thirty (30) days thereafter, shall make an investigation of the property and shall recommend either approval or disapproval of the fact that the property has been substantially completed as required for certification. If the historic and design review commission recommends that it has not been substantially completed as so required, then the certified applicant may be required by the historic preservation officer to complete the restoration or rehabilitation in order to secure the tax exemption provided herein. If the verification of completion is favorable, the historic and design review commission shall recommend approval and the historic preservation office may notify the tax assessor-collector in writing of compliance. Thereafter, the tax assessor-collector shall provide the property with the historic tax exemption.
(f) Historic Preservation Tax Exemptions.
(1) Historic Preservation Tax Exemption for Residences in Need of Substantial Repair. In accordance with the provisions of this chapter, a historically significant residential building, which meets both the definitions of a historically significant site in need of tax relief to encourage preservation and of a residential property in Appendix "A" of this chapter, and is either individually designated or is located within the boundaries of a locally designated historic district which is substantially rehabilitated and is approved by the chief appraiser of the Bexar County Appraisal District, shall have an assessed value for ad valorem taxation as follows:
A. A residential property shall have no assessed value for ad valorem taxation for a period of five (5) tax years after verification, as defined in Appendix "A" to this chapter. Thereafter, the exempt property shall be reappraised at current

market value and assessed at a fifty (50) percent rate for an additional consecutive five-year period.
B. This exemption shall begin on the first day of the first tax year after verification of completion of the substantial rehabilitation by the historic and design review commission, provided compliance with subsection (b) of this section.
(g) Eligibility.
(1) The tax exemption options outlined in subsection (f), above, will remain in effect unless terminated by designation status being removed pursuant to subsection 35-606(g) of this article.

**FINDINGS:**

a. The historic structure at 502 E Mulberry was constructed circa 1925, features traditional architectural elements and is located within the Monte Vista Historic District. The structure currently features an enclosed two story porch on its east façade, wrought iron front porch columns and non-original siding covering the original wood siding. At this time, the applicant has proposed the construction of a rear addition, the demolition of a rear accessory structure, site work, window repair and Historic Tax Certification.
b. WINDOW REPAIR – The historic structure currently features both wood and steel casement windows. The applicant has noted repair of the existing windows. This is consistent with the Guidelines for Exterior Maintenance and Alterations 6.A.iii.
c. REAR ADDITION – The Guidelines for Additions 1.A. states that additions should be sited to minimize visual impact from the public right of way, should be designed to be in keeping with the historic context of the block, should utilize a similar roof form and should feature a transition between the old and the new. Per the application documents, the applicant has proposed a rear addition that features a footprint of approximately 814 square feet, an overall height of 26' – 1". The applicant has proposed to locate the addition at the rear of the property, has proposed a rear facing gabled roof, similar to the historic structure's side facing gable and has been set back from the primary historic structure to minimize visual impact from the street. Staff finds this to be appropriate and consistent with the Guidelines.
d. SCALE, MASS & FORM – Regarding scale, mass and form, the applicant has proposed an addition that features a footprint of approximately 814 square feet and an overall height of 26' – 1". The Guidelines note that additions should be subordinate to the principal façade, should feature a footprint that responds to the size of the lot, should not double the existing building footprint on the lot and should be consistent with the height of the existing structure. The proposed footprint is approximately 300 square feet smaller than that of the historic structure and the proposed addition's ridge line is 4' – 4" shorter than that of the historic structure. Staff finds this appropriate. Additionally, the existing lot size features approximately 9,580 square feet. Staff finds the addition of a footprint of approximately 814 square feet appropriate and consistent with the Guidelines.
e. MATERIALS – The applicant has proposed materials for the addition that includes vertical and horizontally oriented Hardie siding, vinyl windows, an asphalt shingle roof and a wood staircase. Staff finds that all Hardie siding should feature a smooth finish. Horizontal siding used on the first floor should feature an exposure of four (4) inches. Vertical board and batten siding should feature boards that are twelve (12) inches wide with battens that are 1 – ½" wide. Staff finds wood stairs and the proposed asphalt shingle roofing appropriate and consistent with examples found in the district.
f. WINDOW MATERIALS – The applicant has proposed to install one over one, vinyl windows. Staff finds that wood or aluminum clad wood windows should be installed that feature meeting rails that are no taller than 1.25" and stiles no wider than 2.25". White manufacturer's color is not allowed, and color selection must be presented to staff. There should be a minimum of two inches in depth between the front face of the window trim and the front face of the top window sash. This must be accomplished by recessing the window sufficiently within the opening or with the installation of additional window trim to add thickness. Window trim must feature traditional dimensions and an architecturally appropriate sill detail. Window track components must be painted to match the window trim or concealed by a wood window screen set within the opening.
g. ARCHITECTURAL DETAILS – Generally, the proposed addition is appropriate for the style of the primary historic structure. Staff finds that the proposed fenestration patterns and trim details to be appropriate.
h. SITE WORK – The applicant has noted the installation of six rear yard parking locations. Per the site survey, the existing driveway width is 13' – 5", which connects to an existing concrete driveway in the rear yard. Staff finds the location of proposed parking to be appropriate and consistent with the Guidelines for Site Elements 7.A.i.While the proposed parking location is appropriate, the Guidelines for Site Elements 3.B.i. notes that large impervious surfaces should not be introduced where they do not historically exist. Staff finds the installation of gravel, decomposed granite or another pervious surface is appropriate. Concrete should not be installed to cover the majority of the rear yard.
i. SITE WORK MATERIALS – The applicant has noted landscaping installations on the north side of the property

include a gravel sidewalk and low growth plantings. Staff finds this appropriate.

j. ACCESSORY STRUCTURE DEMOLITION – The applicant is requesting approval for the demolition of the rear accessory structure only. The accessory structure would not be replaced with a new structure. The proposed rear addition does not encroach into the footprint of the existing addition; however, the proposed rear yard parking is partially in the location of the existing accessory structure.

k. CONTRIBUTING STATUS – The applicant submitted an application for non-contributing status on January 23, 2018. The structure was determined to be contributing. The structure appears on the 1951 Sanborn map, noted as an automobile garage. Staff performed a site visit on February 9, 2018, to evaluate the condition of the property. While the structure has fallen into disrepair, it is contributing to the district.

l. UNREASONABLE ECONOMIC HARDSHIP – In accordance with UDC Section 35-614, no certificate shall be issued for demolition of a historic landmark unless the applicant provides sufficient evidence to support a finding by the commission of unreasonable economic hardship on the applicant. In the case of a historic landmark, if an applicant fails to prove unreasonable economic hardship, the applicant may provide to the historic and design review commission additional information regarding loss of significance. In order for unreasonable economic hardship to be met, the owner must provide sufficient evidence for the HDRC to support a finding in favor of demolition. The applicant has provided a report from a structural engineer noting an inadequate structural design for the existing structure. The report notes the entire structure would need to be replaced to become structurally sound. Additionally, the applicant has submitted documentation noting that the reconstruction of this structure would cost approximately $24,000.

m. LOSS OF SIGNIFICANCE –In accordance with UDC Section 35-614(c), demolition may be recommended if the owner has provided sufficient evidence to support a finding that the structure has undergone significant and irreversible changes which have caused it to lose the historic, cultural, architectural or archaeological significance, qualities or features which qualified the structure or property for such designation.

n. HISTORIC TAX CERTIFICATION – The applicant is requesting Historic Tax Certification for repair work to the historic structure at 502 E Mulberry. Scopes of work include interior renovations; mechanical, electrical and plumbing upgrades; wood window repair and foundation repair. The requirements for Historic Tax Certification outlined in UDC Section 35-618 have been met and the applicant has provided evidence to that effect to the Historic Preservation Officer including photographs and an itemized list of costs.

**RECOMMENDATION:**

1. – 3. Staff recommends approval of items #1 through #3, wood window repair, the construction of an addition and site work with the following stipulations.

i. That all Hardie siding feature a smooth finish. Horizontal siding used on the first floor should feature an exposure of four (4) inches. Vertical board and batten siding should feature boards that are twelve (12) inches wide with battens that are 1 – ½" wide as noted in finding e.

ii. That wood or aluminum clad wood windows should be installed that feature meeting rails that are no taller than 1.25" and stiles no wider than 2.25". White manufacturer's color is not allowed, and color selection must be presented to staff. There should be a minimum of two inches in depth between the front face of the window trim and the front face of the top window sash. This must be accomplished by recessing the window sufficiently within the opening or with the installation of additional window trim to add thickness. Window trim must feature traditional dimensions and an architecturally appropriate sill detail. Window track components must be painted to match the window trim or concealed by a wood window screen set within the opening as noted in finding f.

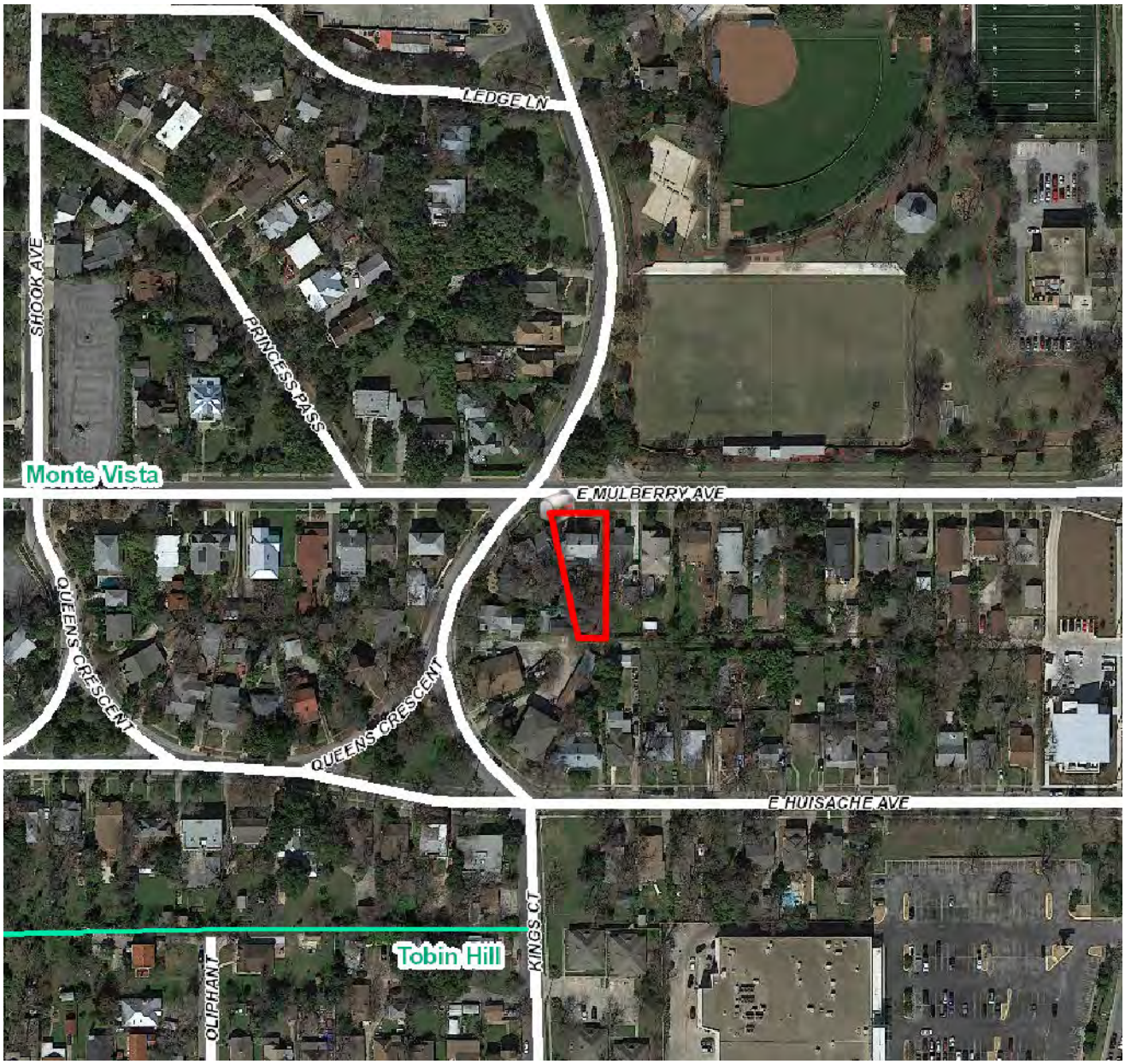
iii. That a pervious material be installed at the rear yard parking locations.

4. Staff recommends approval of item #4 with the stipulation that existing materials be salvaged for future use on site.

5. Staff recommends approval of Historic Tax Certification as submitted.

**CASE MANAGER:**

Edward Hall

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# Flex Viewer

Powered by ArcGIS Server

Printed:Feb 13, 2018

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Woody
Tucker Park
502 East
Mulberry Avenue
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Kings Ct
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Kings Ct
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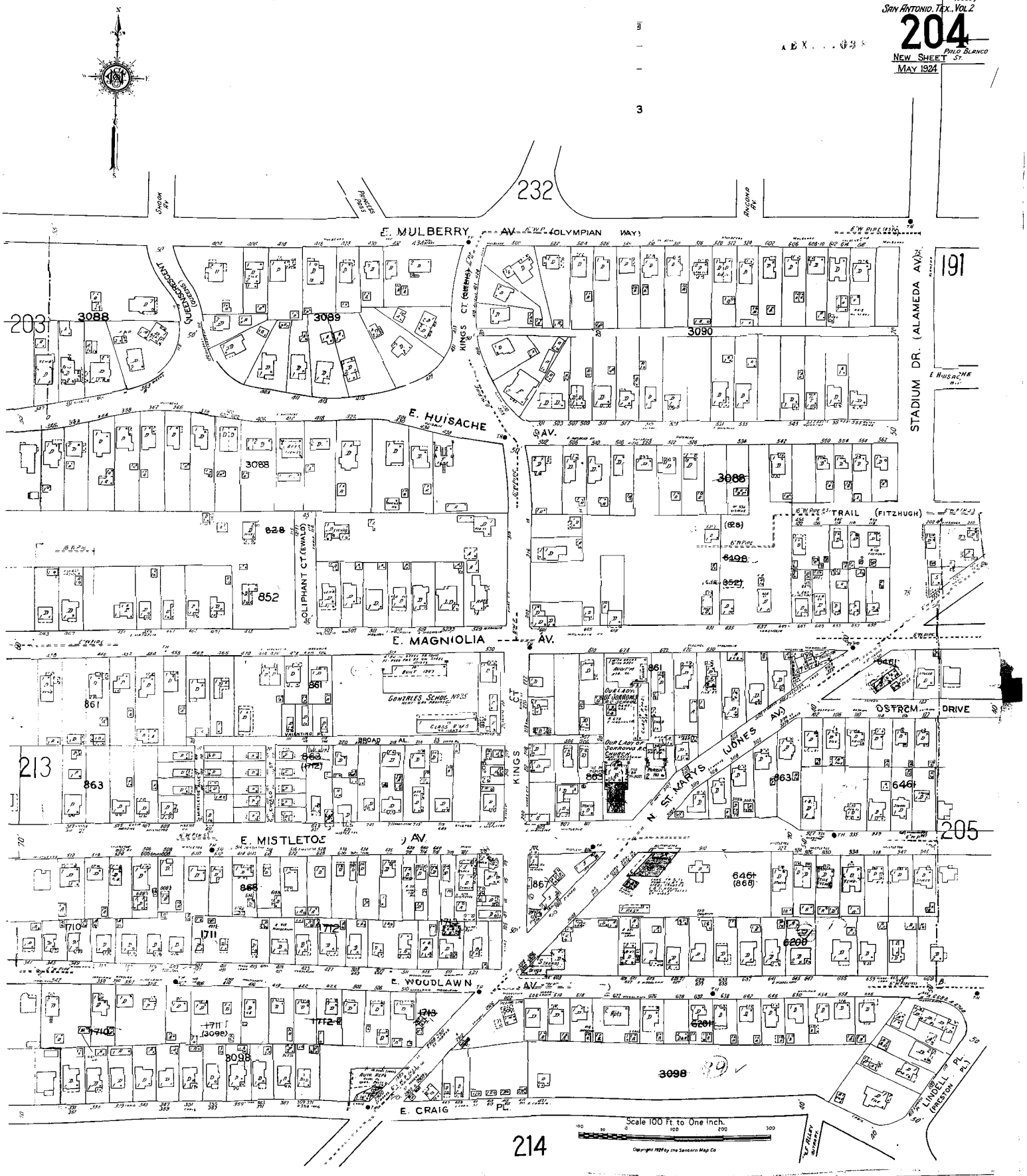
232
191
203
205
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E. MULBERRY AV. (OLYMPIAN WAY)
E. HUISACHE AV.
E. MAGNOLIA AV.
E. MISTLETOE AV.
E. WOODLAWN AV.
E. CRAIG PL.
STADIUM DR. (ALAMEDA AV.)
TRAIL (FITZHUGH)
OSTROM DRIVE
N. ST. MARYS (JONES AV.)
KINGS CT.
OLIPHANT CT. (EWALD)
BROAD AL.
LINDELL PL. (PRESTON PL.)
Scale 100 Ft. to One Inch.
Copyright 1924 by the Sanborn Map Co.

# BEICKER CONSULTANTS

Structural / Construction Engineers

February 12, 2018

Mr. Todd Wildman
**Pritchard Associates**
122 East Pecan
San Antonio, Texas 78205

Re: 502 E Mulberry #18141-1
San Antonio, Texas

Dear Mr. Wildman,

As you requested Beicker Consultants, LLC has performed an investigation of the garage building located at the rear of the above address. The structure is a wood framed structure supported by wood post. There is not floor framing in most of the building, only a dirt floor. The wall framing is a board and batten system. The roof framing is 2x4 rafters with a 1x4 ridge board. There are no ceiling joists which act as tension members. The roof covering is cedar shingles covered with metal decking. Some areas appear to have two layers of metal decking.

During our investigation we noted many wood members being rotten. Some areas of the walls appear to be bowed due to the weight of the roof. Some of the walls appear to be racked due to lateral loads.

In our opinion, the structure is not structural sound. We found no provisions in the Building Code for this type, load bearing board and batten construction. A floor system would have to be added and 2x studs would have to also be added to support the vertical and lateral loads.

Basically, the whole structure would need to be replaced to become structurally sound.

If you have any questions, please call.

Respectfully,

**BEICKER CONSULTANTS, LLC**

Michael J Zezula, PE
Texas Professional Engineer License Number 66581

STATE OF TEXAS
MICHAEL J. ZEZULA
66581
REGISTERED
PROFESSIONAL ENGINEER

Beicker Consultants, LLC investigated only the portion of the building described. Other buildings that are part of this complex were never considered as part of our investigation. Our investigation did not include discovery, testing, monitoring, cleanup or neutralization of pollutants, hazardous substances or asbestos. Our investigation also did not include reviewing mechanical, electrical or plumbing conditions. Our opinions and recommendations expressed are based on the condition of the structure, as we were able to visually see it during our investigation at the site. Means, methods, procedures, techniques, sequencing, completing construction and safety on the job site should remain the responsibility of the Contractor hired to carry out the repair work. No warranty of this structure for future use, operability or suitability is expressed or implied.

2702 N Loop 1604 E, Suite 201 • San Antonio, Texas 78232 • Phone (210) 824-2908 • Fax (210) 496-9330 F-17115

# *Historic & Design Review Commission*

## *Application Form*

*Property Address:*

502 E. Mulberry
San Antonio, Texas 78212

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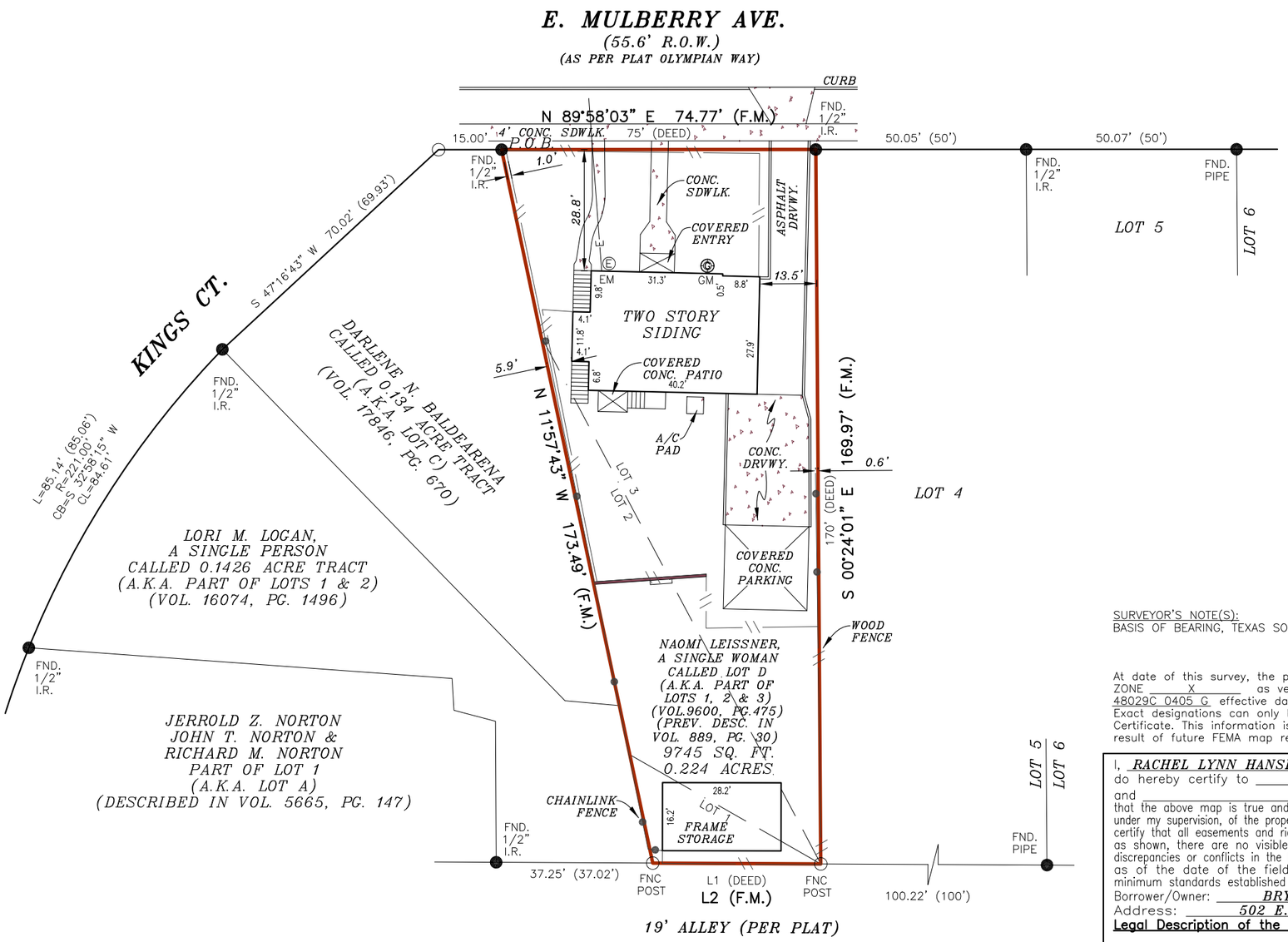
    d. Stairs
    e. Hardscaping & Landscaping

# 1. Application Form

# 2. Structure & Site Photos

| LINE | BEARING | DISTANCE |
|---|---|---|
| L1 | --- | 40' |
| L1 | N 89°42'43" W | 40.00' |




## LEGEND

These standard symbols will be found in the drawing.

- BOUNDARY LINE
- CHAINLINK FENCE
- WOOD FENCE
- OVERHEAD ELECTRIC
- PLATTED LOT LINE
- CALCULATED POINT
- FOUND IRON ROD
- ELECTRIC METER
- GAS METER
- (DEED) RECORDED ON DEED
- (F.M.) FIELD MEASURED

SURVEYOR'S NOTE(S):
BASIS OF BEARING, TEXAS SOUTH CENTRAL NAD 83.

At date of this survey, the property is in FEMA designated ZONE X as verified by FEMA map Panel No: 48029C 0405 G effective date of SEPTEMBER 29, 2010 Exact designations can only be determined by a Elevation Certificate. This information is subject to change as a result of future FEMA map revisions and/or amendments.

The survey is hereby accepted with the discrepancies, conflicts, or shortages in area or boundary lines, encroachments, protrusions, or overlapping of Improvements shown.

X _____

X _____

**GRAPHIC SCALE**

0' 30' 60'

1 Inch = 30 Feet

I, RACHEL LYNN HANSEN, a Registered Professional Land Surveyor in the State of Texas, do hereby certify to PRESIDIO TITLE and ---
that the above map is true and correct according to an actual field survey, made by me on the ground or under my supervision, of the property shown hereon or described by field notes accompanying this drawing. I further certify that all easements and rights-of-way of which I have been advised are shown hereon and that, except as shown, there are no visible encroachments, no visible overlapping of improvements and no apparent discrepancies or conflicts in the boundary lines, and no visible physical evidence of easements or rights-of-way as of the date of the field survey. I further certify that this survey meets or exceeds the minimum standards established by the Texas Board of Professional Land Surveying (Section 663.18).

Borrower/Owner: BRYAN T. WILDMAN AND COREY K. WILDMAN

Address: 502 E. MULBERRY AVE. GF No. 1-173249

**Legal Description of the Land:**

**SEE ATTACHED EXHIBIT "A"**

## FINAL "AS-BUILT" SURVEY

| JOB NO.: | 1712050154 | NO. | REVISION | DATE |
|---|---|---|---|---|
| DATE: | 01/04/18 | | | |
| DRAWN BY: | MN/RM | | | |
| APPROVED BY: | RLH | | | |

SUBJECT TO RESTRICTIVE COVENANTS AND/OR EASEMENTS RECORDED IN: VOLUME 105, PAGES 170-171, DEED AND PLAT RECORDS, BEXAR COUNTY, TEXAS VOLUME 335, PAGE 75, DEED RECORDS, BEXAR COUNTY, TEXAS VOLUME 269, PAGE 448, DEED RECORDS, BEXAR COUNTY, TEXAS

PROPERTY PHOTOGRAPH:

STATE OF TEXAS REGISTERED RACHEL LYNN HANSEN 6358 PROFESSIONAL LAND SURVEYOR

RACHEL LYNN HANSEN, R.P.L.S.
Registered Professional Land Surveyor
Registration No. 6358

AMERISURVEYORS LLC
1100 NW Loop 410, Suite 546
San Antonio, Texas 78213
Phone: (210) 572-1995
Fax: (210) 572-1993

NOTE(S):
1.) SUBJECT TO THE CERTIFICATE IN VOL.16817, PG.1967, REAL PROPERTY RECORDS, BEXAR COUNTY, TEXAS.

Copyright © AmeriSurveyors LLC. FIRM REGISTRATION NUMBER 10146400. Improvements shown on this survey are for general illustration purposes only and may not portray exact shape and size. Survey is based on a Title report issued by the Title Company listed above issued under Commitment No./GF No. shown on this survey. email questions to: info@amerisurveyors.com

Streetscape Photo

Streetscape Photo

East side of house

Rear of existing house (from south)

West side of house

View of site (facing south from east side of house)

View of site (facing south from west side of house)

View of site (facing south from center of site)

View of site & rear of existing house (from south)

# 3. Project Narrative

# PROJECT NARRATIVE

## EXISTING TWO-STORY DUPLEX

- Interior renovations & upgrades
- Broken windows to be repaired as needed. Not to be replaced.
- Mechanical, electrical & plumbing (MEP) upgrades

## NEW CONSTRUCTION OF DUPLEX

- Two-story duplex to be constructed behind the existing duplex & will be connected to the existing duplex via covered breezeway
- New construction to match/complement existing duplex
- Specifications for exterior materials to be used are included with this submittal

## SITE-WORK

- Existing driveway to be extended (via concrete) through remainder of property for safer site entrance/exit & parking
- Gravel & concrete sidewalks to be built for walkways
- Grass/landscaping to surround gravel & concrete

# 4. Site Plan, Elevations, & Floorplans

# MECHANICAL & PLUMBING SYMBOLS

- RETURN AIR GRILLE
- WALL SUPPLY REGISTER
- SQUARE SUPPLY REGISTER
- VERTICAL AIR RETURN CHASE
- PULL DOWN ATTIC ACCES
- VERTICAL AIR SUPPLY CHASE
- HOSE BIB — HOSE BIB
- GAS — GAS SUPPLY
- GAS VALVE — GAS CONTROL VALVE
- WATER SOFTNER
- HOT WATER HEATER
- H2O — COLD WATER SUPPLY
- H C — WASHER WATER SUPPLY
- BATHTUB
- TOILET
- LAVATORY W/ FAUCETS

# ELECTRICAL SYMBOL

- 110/120v DUPLEX OUTLETS
- GFI — 110/120v GFI OUTLET
- "J" BOX — JUNCTION BOX
- 220 — 220/240v OUTLET
- TV — TELEVISION
- CABLE — CABLE TELEVISION
- W.P.G.F.I. — WEATHERPROOF GFI OUTLET
- $ — WALL SWITCH MOUNTED @39"AFF UNLESS NOTED
- $3 — 3-WAY WALL SWITCH
- $D — DIMMER SWITCH
- DATA — DATA LINE
- TEL — TELEPHONE OUTLET
- PUSH — PUSH FOR DISPOSAL
- P.B. — DOORBELL
- GDO — GARAGE DOOR OPENER
- H/V/L — HEAT/VENT/LITE
- VENT — EXHAUST FAN/VENT
- SD — SMOKE DETECTOR
- 6" RECESS LITES
- UCL — UNDER COUNTER LITE
- CEILING FAN
- MARKER — STEP/PATH MARKER
- FLOOD — FLOOD LITE
- 4" RECESS LITES
- WALL SCONCE — WALL SCONCES
- LITE
- 12"X48" FLOUR LT. — FLOURESCENT

# GENERAL NOTES:

1.) ALL CONSTRUCTION SHALL CONFORM TO ALL LOCAL BUILDING CODES.
2.) ALL DIMENSIONS SHOWN ON FLOOR PLAN ARE FROM FACE OF STUDS AND / OR STONE VENEER UNLESS OTHERWISE NOTED.
3.) CONTRACTOR SHALL NOTIFY ARCHITECT UPON DISCOVERY OF ANY ERRORS OR DISCREPENCY OF DIMENSIONS, CLEARANCES, OR OTHER ITEMS AS SHOWN OR NOTED IN THESE DRAWINGS.
4.) COORDINATE ALL WINDOW SIZES AND LOCATIONS AS NOTED ON FLOOR PLAN WITH SELECTED ELEVATION OPTIONS.
HVAC SYSTEMS
5.) HVAC SYSTEM SHALL BE DESIGNED BY MECHANICAL SUB-CONTRACTOR AND APPROVED BY ARCHITECT OR GENERAL CONTRACTOR. SYSTEM SHALL HAVE A S.E.E.R. RATING OF 14 0R AS REQUIRED BY LOCAL BUILDING CODES. UNITS SHALL BE DESIGNED WITH TWO ZONES AS DIRECTED BY CONTRACTOR. PROVIDE ALL SUCTION LINES FROM UNITS TO EXTERIOR CONDENSOR UNITS AS INDICATED ON SITE PLAN. PROVIDE 4" THICK CONCRETE PADS WITH 6X6X10 WWF REINFORCING. LOCATE AIR HANDLING UNITS IN ATTIC SPACE NEAR RETURN AIR CHASES AS INDICATED ON THE FLOOR PLAN.
6.) ALL SMOKE ALARMS TO BE HARD WIRED IN SERIES WITH BATTERY BACKUP POWER AS PER SEC. R317
7.) PROVIDE PRESSURE TREATED WOOD OR OTHER APPROVED DECAY-RESISTANT WOODS AT SILLS, SILLS & SLEEPERS OR BOTTOM PLATES THAT REST ON CONCRETE OR MASONRY WALLS, OR SLAB ON GRADE AS PER SEC. R323. PRESSURE TREATED WOOD FASTNERS SHALL BE HOT DIPPED GALVANIZED STEEL, STAINLESS STEEL, SILICONE BRONZE OR COPPER ONLY AS PER SEC. R323.3
8.) MAX. HEIGHT OF ALL GARAGE VENTS SHALL BE 18" A.F.F.AS PER IRC AMMENDMENT R309.6
9.) PROVIDE MASONRY VENNER ANCHORAGE AT A MAXIMUM SPACING OF 24"O.C. HORIZONTALLY OR 18" O.C. VERTICALLY AS PER SEC. R703.7.4.1. AND WEEPHOLES AT A MAXIMUM OF 33" AS PER SEC. R703.7.6
10.) PROVIDE HANDRAILS ON ALL STAIRS/ STEPS WITH A MINIMUM OF TWO (2) RISERS AS PER SEC. R315. (MINIMUM STAIR TREAD 10" MAX; MAXIMUM RISER 7 3/4" SEC.R314.2)
11.) PROVIDE THE REQUIRED LIGHTING AT EACH LANDING OF A STAIRWAY AS PER SEC.R303.4 WITH LIGHT ACTIVATION AT TOP AND BOTTOM LANDING AREA AS PER SEC. R303.4.1
12.) PROVIDE ALL FRAMING AND STRUCTURAL DESIGN TO 90 M.P.H. WIND CRITERIA AS REP SEC. R301.2.1 AND TABLE R301.2 (4)

# SHEET TITLES


## SHEET #1
-MEP SYMBOLS
-ELECTRICAL SYMBOLS
-SHEET NAMES
-GENERAL NOTES

## SHEET #2
-SITE PLAN

## SHEET #3
-"AS-BUILT"
-FLOOR PLAN-UNIT #1
-UPPER LEVEL-UNIT #2
-FRONT

## SHEET #4
FLOOR PLANS
-UNIT #1
-UNIT #2
-UNIT #3
-UNIT #4

## SHEET #5
FLOOR PLAN
-AREAS
EXTERIOR ELEVATIONS
-REAR
-ROOF
-WALL SECTION

## SHEET #6
EXTERIOR ELEVATIONS
-RIGHT
-LEFT

## SHEET #7
-INTERIORS ELEVATIONS

## SHEET #8
ELECTRICAL
-UNIT #1
-UNIT #2
-UNIT #3
-UNIT #4



CODY HOMES LLC
3126 KNIGHT ROBIN
SAN ANTONIO , TEXAS 78209
210.599-7679 FAX; 210.599-3406
E-MAIL: codyhomes463@yahoo.com


PROJECT ADDRESS:
502 E. MULBERRY
LOT: D
out of parts LOTS1,2 & 3
BLK: 6
NCB: 3090
MONTE VISTA

WILDMAN HOLDINGS LLC
4-PLEX
SAN ANTONIO
TEXAS
78212

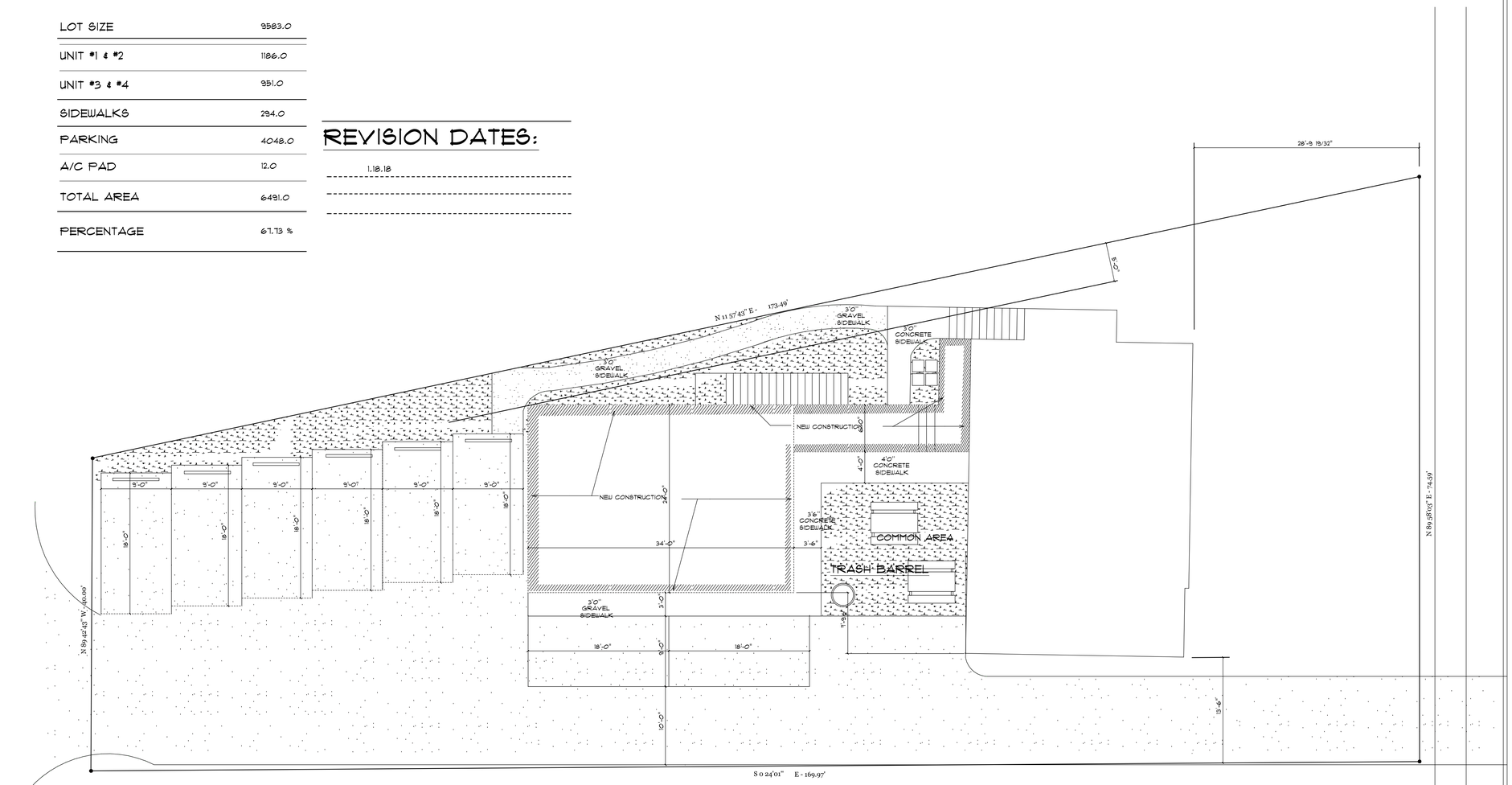
WALL SECTION
SECTION
EXTERIORS | DETAIL | AREA | INTERIORS
ROOF
FLOOR PLAN
ELECTRICAL


DESIGNS & ARCHITECTURE by:
J.ALLISON
jamesallisondesign.com
MEMBER
AIBD
AMERICAN INSTITUTE of BUILDING DESIGN

| | |
|---|---|
| LOT SIZE | 9583.0 |
| UNIT #1 & #2 | 1186.0 |
| UNIT #3 & #4 | 951.0 |
| SIDEWALKS | 284.0 |
| PARKING | 4048.0 |
| A/C PAD | 12.0 |
| TOTAL AREA | 6491.0 |
| PERCENTAGE | 67.73 % |

## REVISION DATES:

1.18.18




## SITE PLAN

SCALE : 1/8"=1'-0"

E. MULBERRY AVE.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TEXAS
78212

WALL SECTION

EXTERIORS AREA INTERIORS

FLOOR PLAN

ELECTRICAL

DESIGNS & ARCHITECTURE by:
J.ALLISON
jamesallisondesign.com

MEMBER
AIBD
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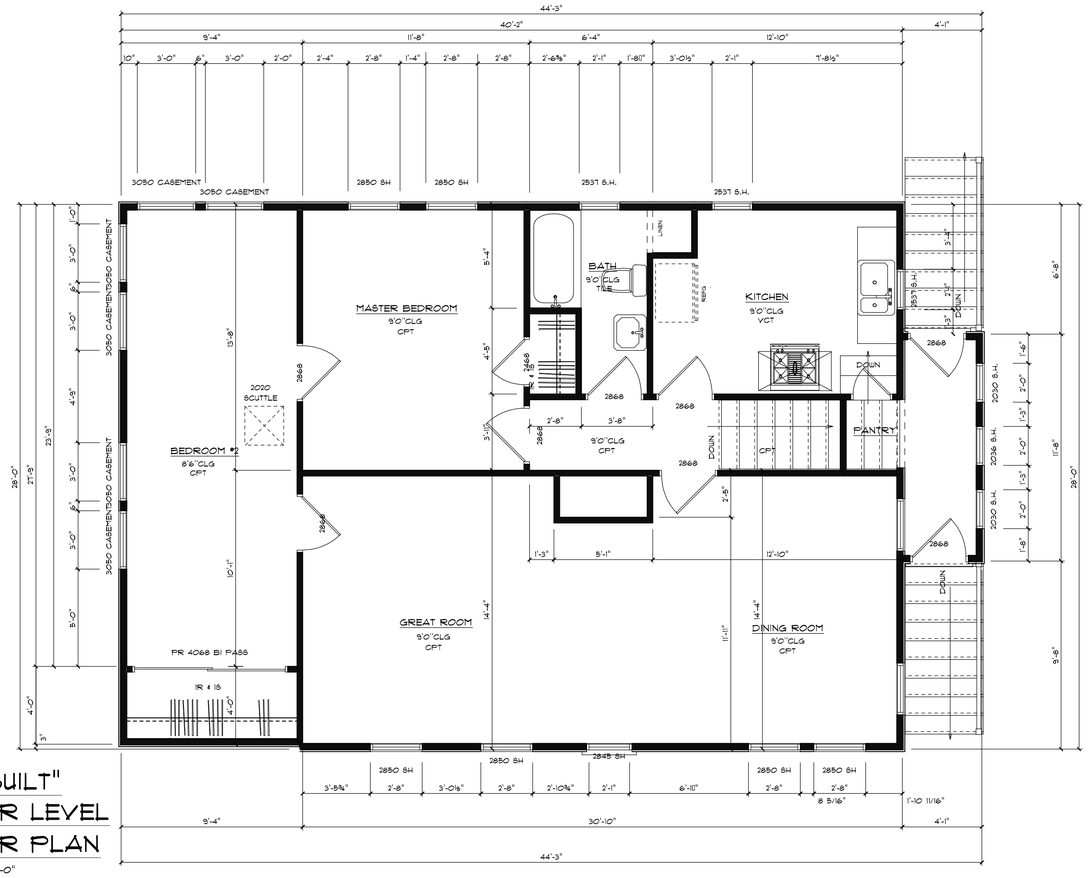
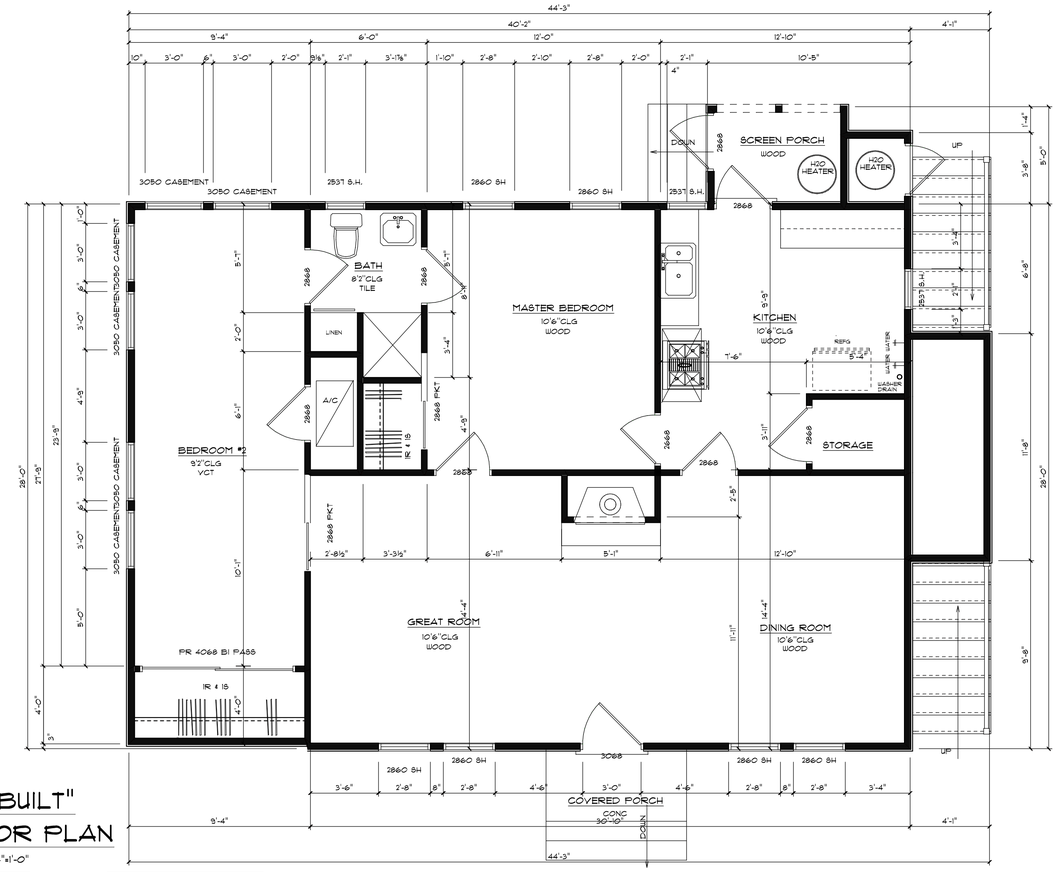



"AS-BUILT"
UPPER LEVEL
FLOOR PLAN

SCALE : 1/4"=1'-0"

0 1 2 4 8 16 FEET




"AS-BUILT"
FLOOR PLAN

SCALE : 1/4"=1'-0"

0 1 2 4 8 16 FEET

"AS-BUILT"
FRONT ELEVATION

SCALE : 1/4"=1'-0"

0 1 2 4 8 16 FEET

"AS-BUILT"
AREA TABULATION

| | TOTALS |
|---|---|
| FIRST FLOOR | 1188.0 |
| SECOND FLOOR | 1139.0 |
| TOTAL | 2327.0 |
| COVERED ENTRY PORCH | 80.0 |
| SCREEN PORCH | 48.0 |
| COVERED PATIO | |
| COURTYARD | |
| TOTAL AREA | 2455.0 |

REVISION DATES:

1.7.2018

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WALL SECTION

EXTERIORS AREA INTERIORS

FLOOR PLAN

ELECTRICAL

DESIGNS & ARCHITECTURE by:
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jamesallisondesign.com

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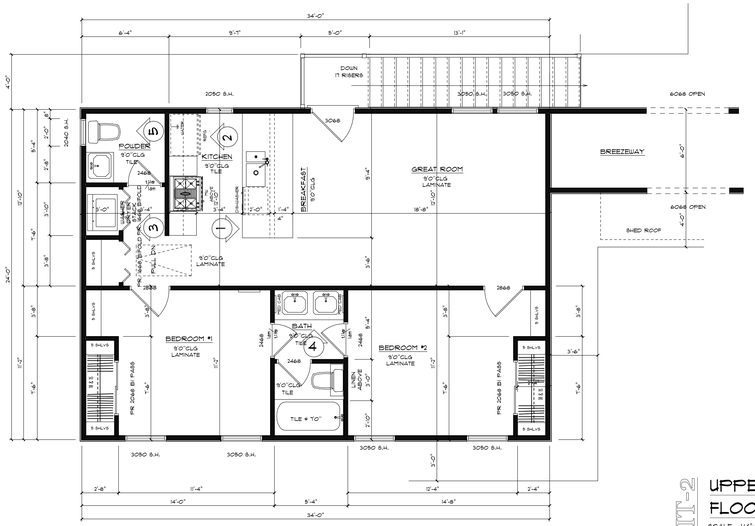
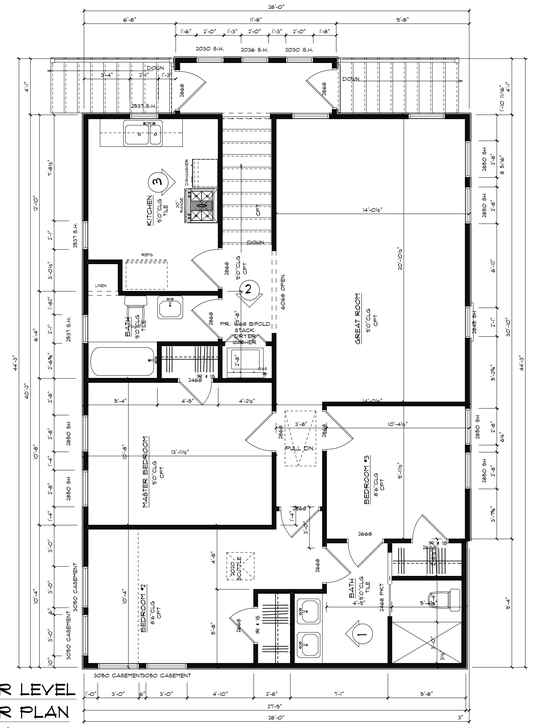
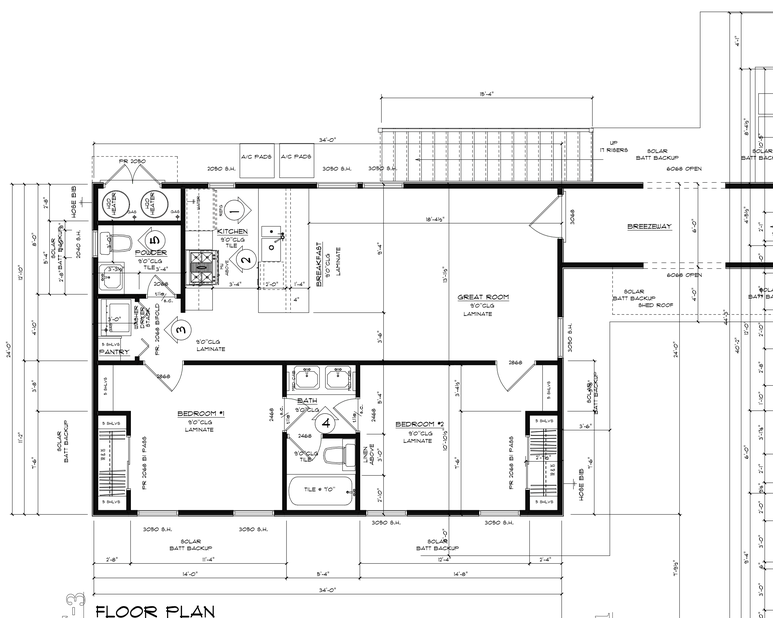
3 OF: EIGHT



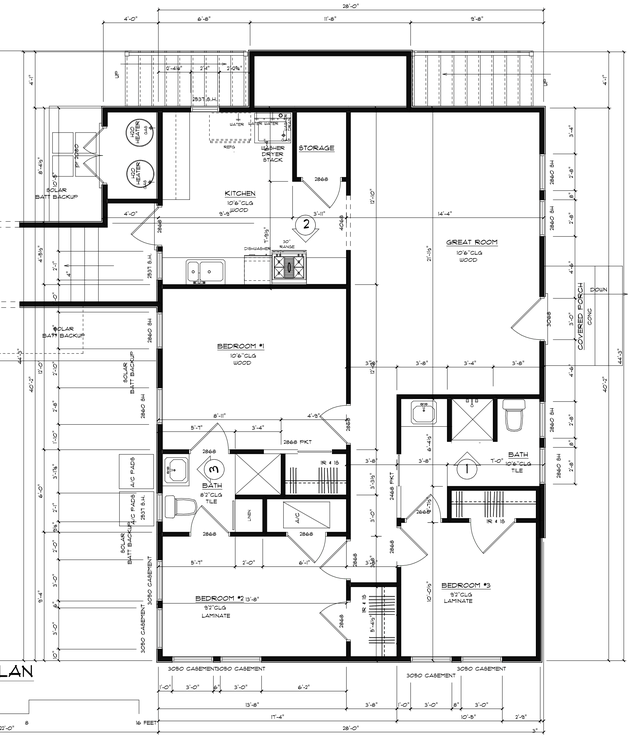

UNIT-4
UPPER LEVEL
FLOOR PLAN
SCALE : 1/4"=1'-0"




UNIT-2
UPPER LEVEL
FLOOR PLAN
SCALE : 1/4"=1'-0"




UNIT-3
FLOOR PLAN
SCALE : 1/4"=1'-0"




UNIT-1
FLOOR PLAN
SCALE : 1/4"=1'-0"

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MONTE VISTA

WILDMAN HOLDINGS LLC
4-PLEX
SAN ANTONIO
TEXAS
78212

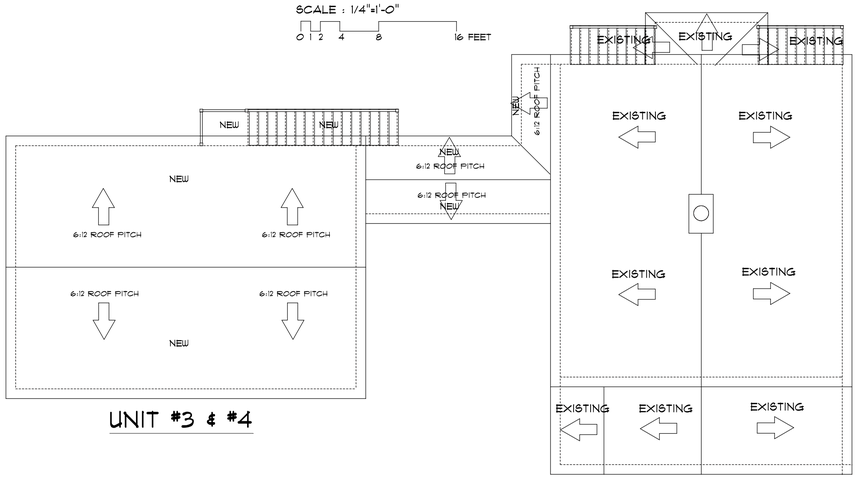
WALL SECTION
EXTERIORS AREA INTERIORS
FLOOR PLAN
ELECTRICAL

DESIGNS & ARCHITECTURE by:
J.ALLISON
jamesallisondesign.com
MEMBER
AID
AMERICAN INSTITUTE of BUILDING DESIGN

## ROOF PLAN

SCALE : 1/4"=1'-0"

0 1 2 4 8 16 FEET




UNIT #3 & #4

UNIT #1 & #2

## AREA TABULATION

| | TOTALS |
|---|---|
| FIRST FLOOR (includes, staircase, breezeway) | 1095.0 |
| SECOND FLOOR | 816.0 |
| TOTAL | 1911.0 |
| GARAGE | |
| COVERED PATIO | |
| COURTYARD | |
| TOTAL AREA | 1911.0 |

## REVISION DATES:

1.9.2018
1.11.2018
1.14.2018
1.31.2018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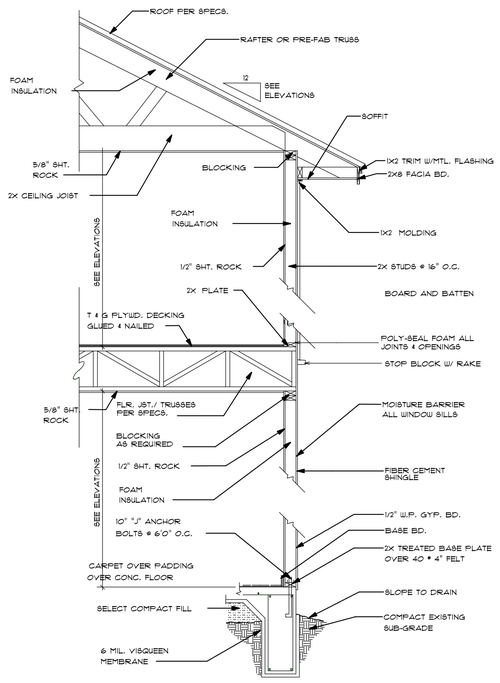
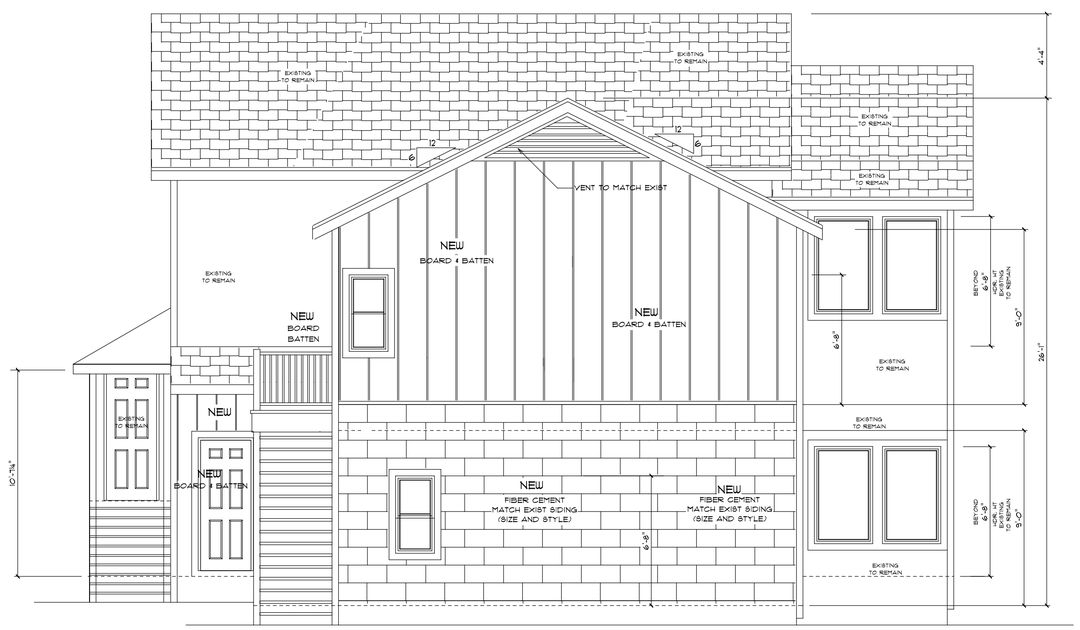



SEE ENGINEER SPECS
FOR FOUNDATION DETAILS

## "NEW"
## TWO STORY WALL SECTION

NO SCALE




## REAR ELEVATION

SCALE : 1/4"=1'-0"

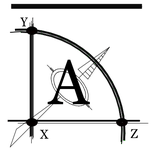
0 1 2 4 8 16 FEET

EXTERIORS | INTERIORS

## AREA

FLOOR PLAN

ELECTRICAL




DESIGNS & ARCHITECTURE by:

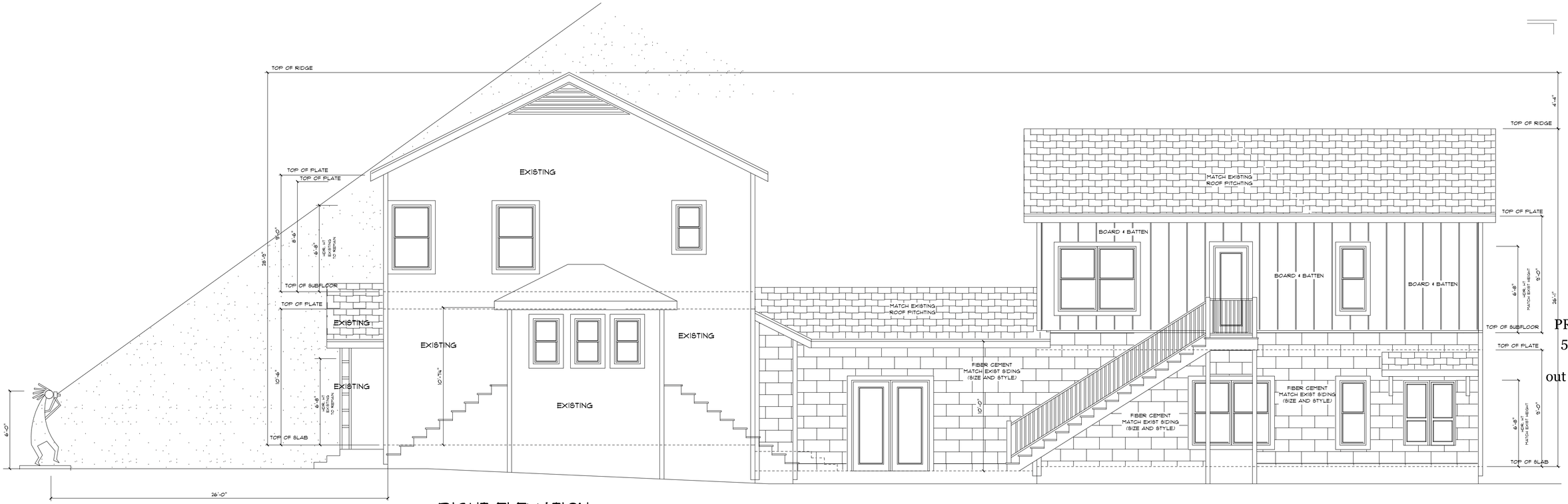
J.ALLISON

jamesallisondesign.com

MEMBER

A I B D

AMERICAN INSTITUTE of BUILDING DESIGN




## RIGHT ELEVATION

SCALE : 1/4"=1'-0"

0 1 2 4 8 16 FEET

## LEFT ELEVATION

SCALE : 1/4"=1'-0"

0 1 2 4 8 16 FEET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WALL SECTION

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ELECTRICAL

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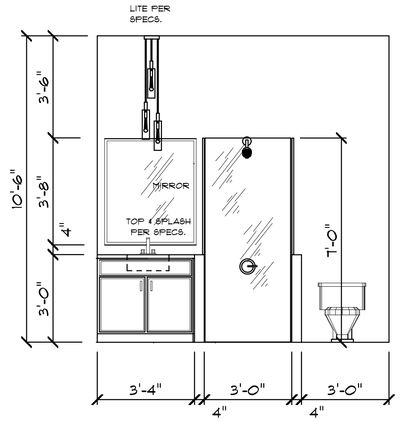
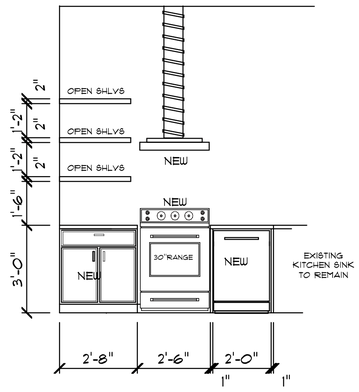
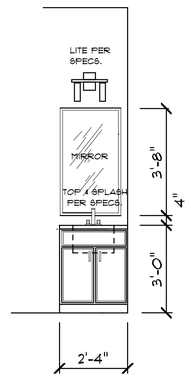
# UNIT #1




1 BATH #2
SCALE : 3/8"=1-0"

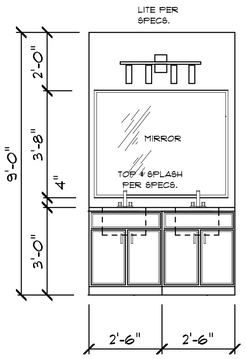



2 KITCHEN
SCALE : 1/4"=1-0"

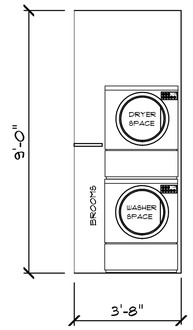



3 BATH
SCALE : 1/4"=1-0"

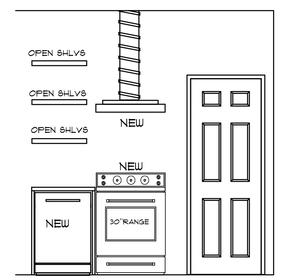
# UNIT #2




1 BATH
SCALE : 3/8"=1-0"

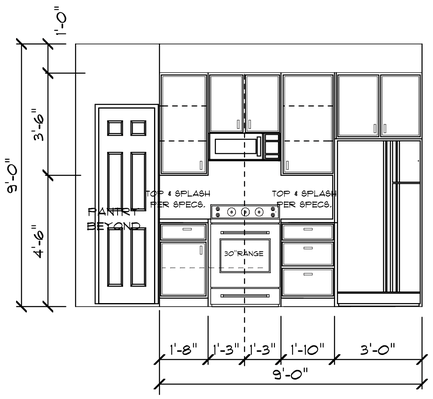



2 LAUNDRY
SCALE : 3/8"=1-0"

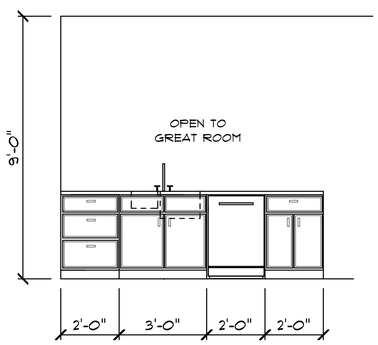



3 KITCHEN
SCALE : 1/4"=1-0"

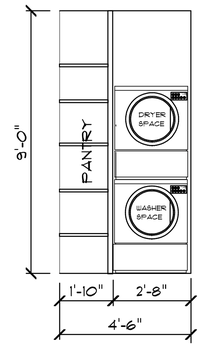
# UNIT #3



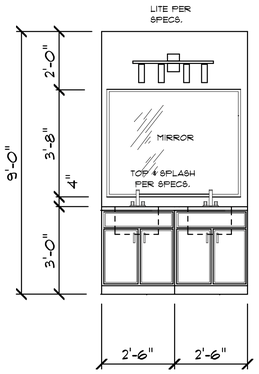

1 KITCHEN
SCALE : 1/4"=1-0"



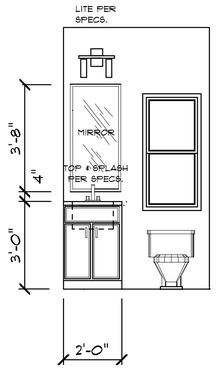

2 KITCHEN
SCALE : 1/4"=1-0"




3 LAUNDRY
SCALE : 1/4"=1-0"

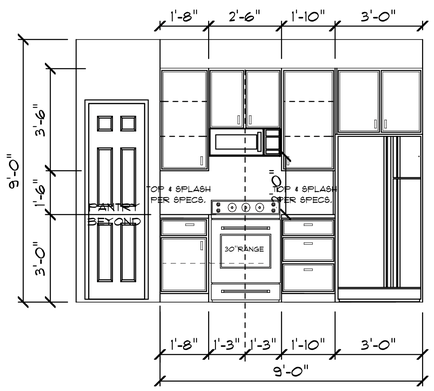



4 BATH
SCALE : 1/4"=1-0"

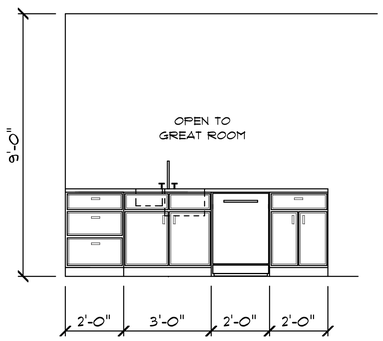



5 POWDER
SCALE : 1/4"=1-0"

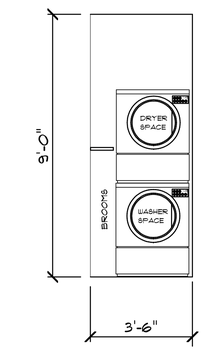
# UNIT #4



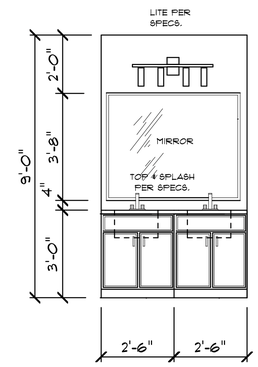

1 KITCHEN
SCALE : 1/4"=1-0"



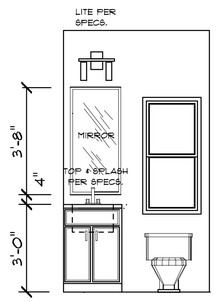

2 KITCHEN
SCALE : 1/4"=1-0"




3 LAUNDRY
SCALE : 1/4"=1-0"




4 BATH
SCALE : 1/4"=1-0"




5 POWDER
SCALE : 1/4"=1-0"


CODY HOMES LLC
3126 KNIGHT ROBIN
SAN ANTONIO , TEXAS 78209
210.599-7679 FAX: 210.599-3406
E-MAIL: codyhomes463@yahoo.com


PROJECT ADDRESS:
502 E. MULBERRY
LOT: D
out of parts LOTS1,2 & 3
BLK: 6
NCB: 3090
MONTE VISTA

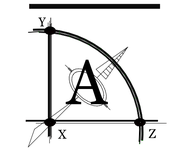
WILDMAN HOLDINGS LLC
4-PLEX
SAN ANTONIO
TEXAS
78212

WALL SECTION

EXTERIORS AREA INTERIORS

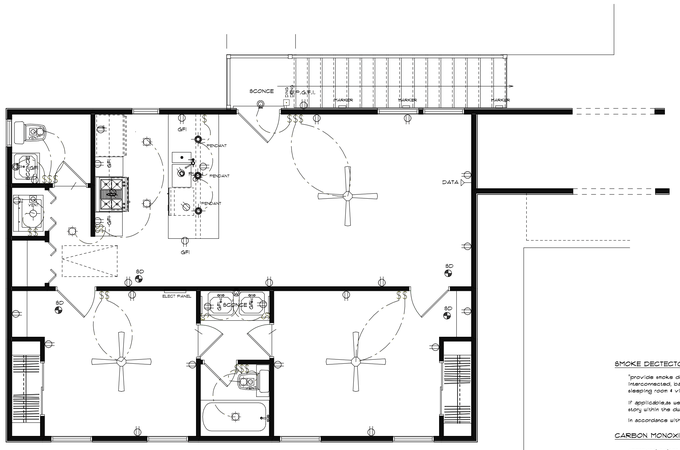
FLOOR PLAN

ELECTRICAL




DESIGNS & ARCHITECTURE by:
J.ALLISON
jamesallisondesign.com

MEMBER
AID
AMERICAN INSTITUTE of BUILDING DESIGN




UNIT-4

ELECTRICAL

SCALE : 1/4"=1'-0"

0 1 2 4 8 16 FEET

NOTES

SMOKE DECTECTOR

"provide smoke dector system-hard wired, interconnected, battery back-up, at each sleeping room & vicinity

if applicable,as well on each additional story within the dwelling including basement."

In accordance with 2012 IRC section R314

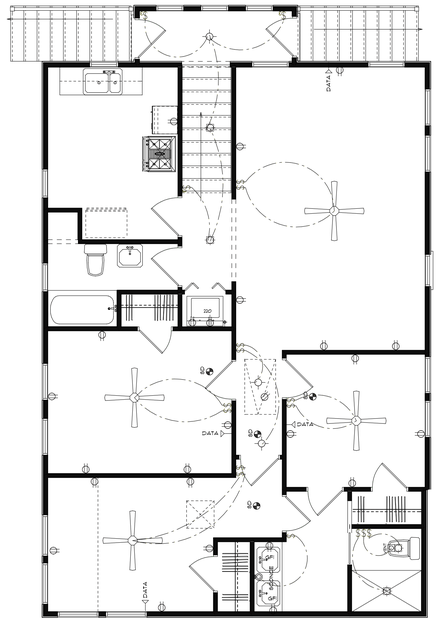
CARBON MONOXIDE ALARM

approved carbon monoxide alarm shall be installed outside of each separate sleeping area in the immediate vicinity of the bedrooms in dwelling units within which fuel-fired appliances are installed and in dwelling units that have attached garages.

In accordance with 2012 IRC section R315.1

GENERAL CONTRACTOR

shall verify for smoke detectors to be located as least 36" away from horizontal path of mechanical air flow, per, 2001 NFPA 72 chapter 11

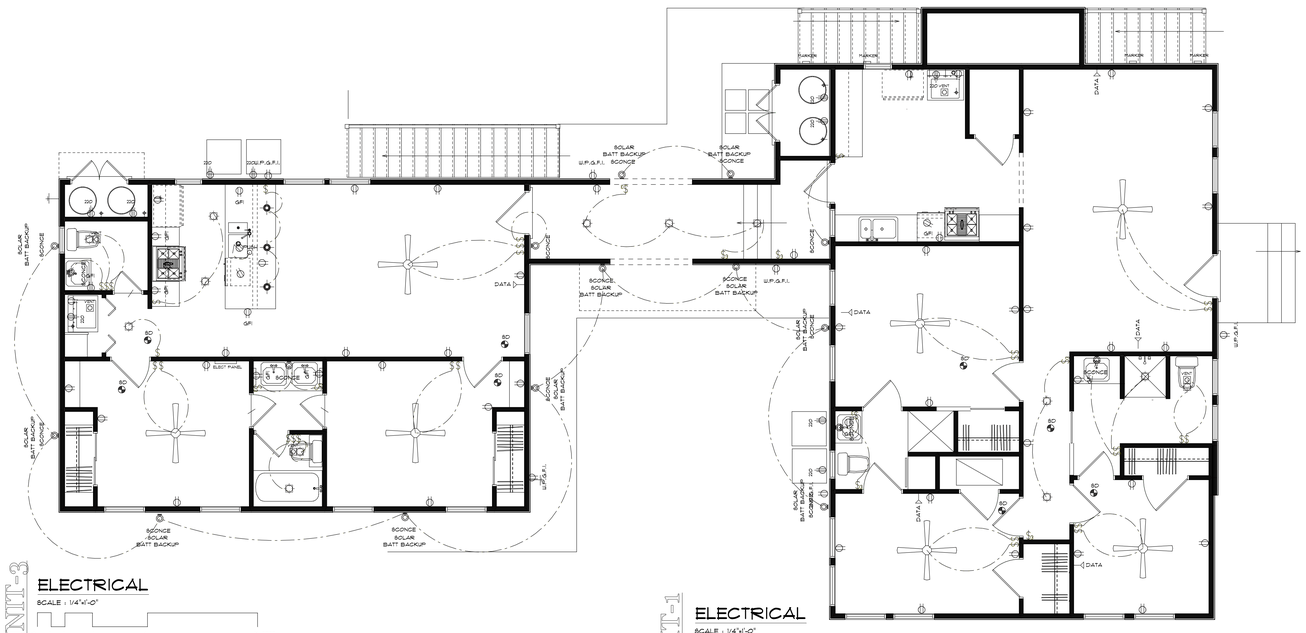



UNIT-2

ELECTRICAL

SCALE : 1/4"=1'-0"

0 1 2 4 8 16 FEET




UNIT-3

ELECTRICAL

SCALE : 1/4"=1'-0"

0 1 2 4 8 16 FEET

UNIT-1

ELECTRICAL

SCALE : 1/4"=1'-0"

0 1 2 4 8 16 FEET

CODY HOMES LLC
3126 KNIGHT ROBIN
SAN ANTONIO , TEXAS 78209
210.599-7679 FAX: 210.599-3406
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out of parts LOTS1,2 & 3
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WALL SECTION

EXTERIORS AREA INTERIORS

FLOOR PLAN

ELECTRICAL

DESIGNS & ARCHITECTURE by:

J.ALLISON

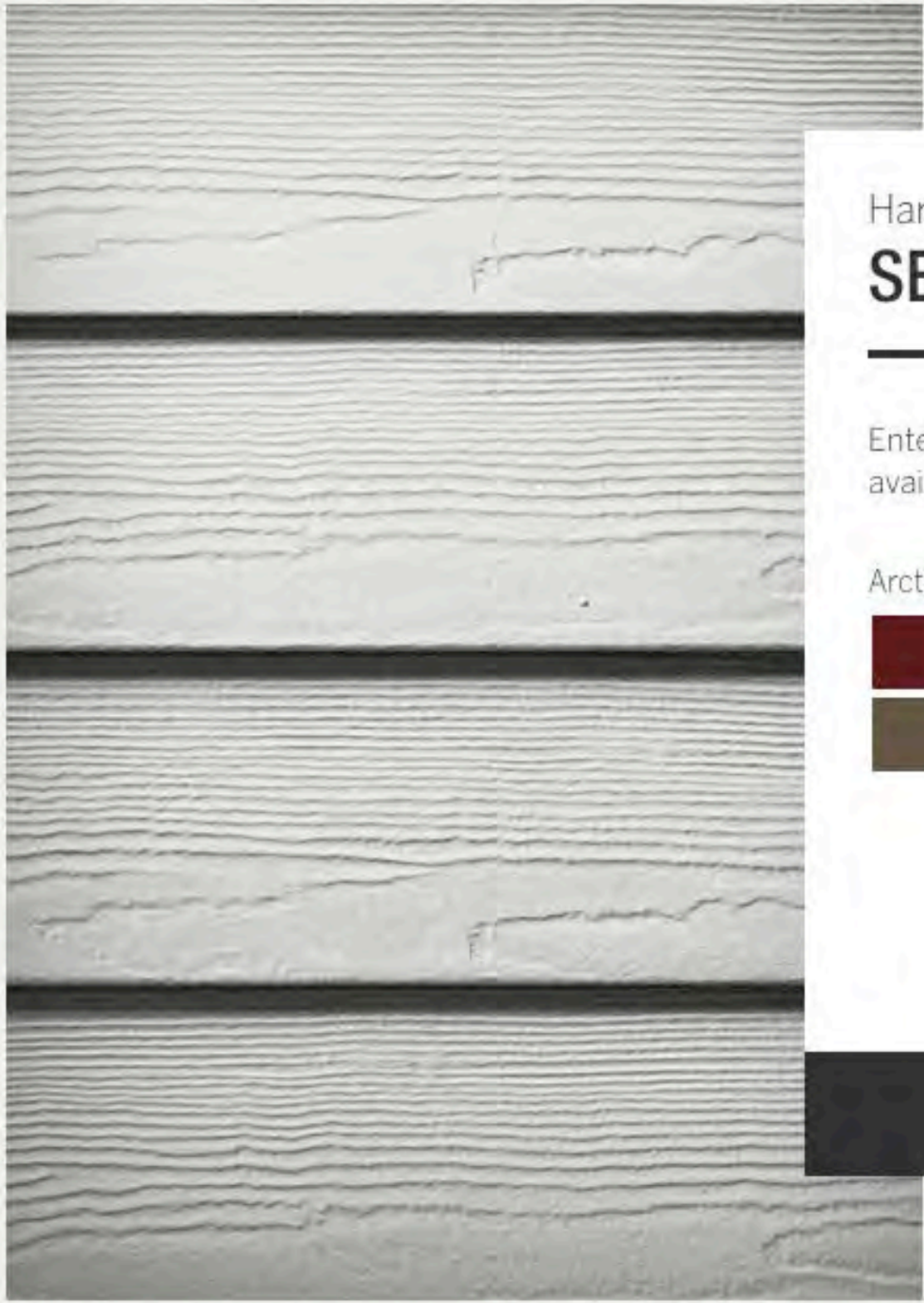
jamesallisondesign.com

MEMBER
AID
AMERICAN INSTITUTE of BUILDING DESIGN

# 5. Specifications of Materials

# 5a. Specifications - Siding

# 1st Floor Siding - HardiePlank, Select CedarMill Finish, 6" Reveal



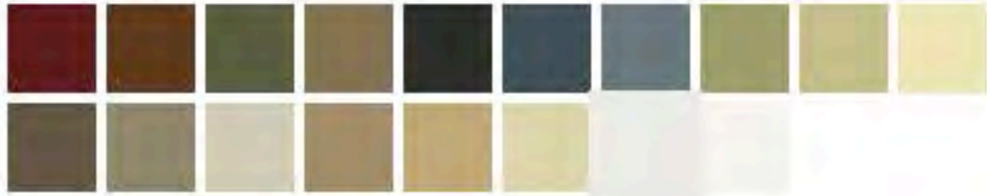
HardiePlank® Lap Siding

2/3

## SELECT CEDARMILL

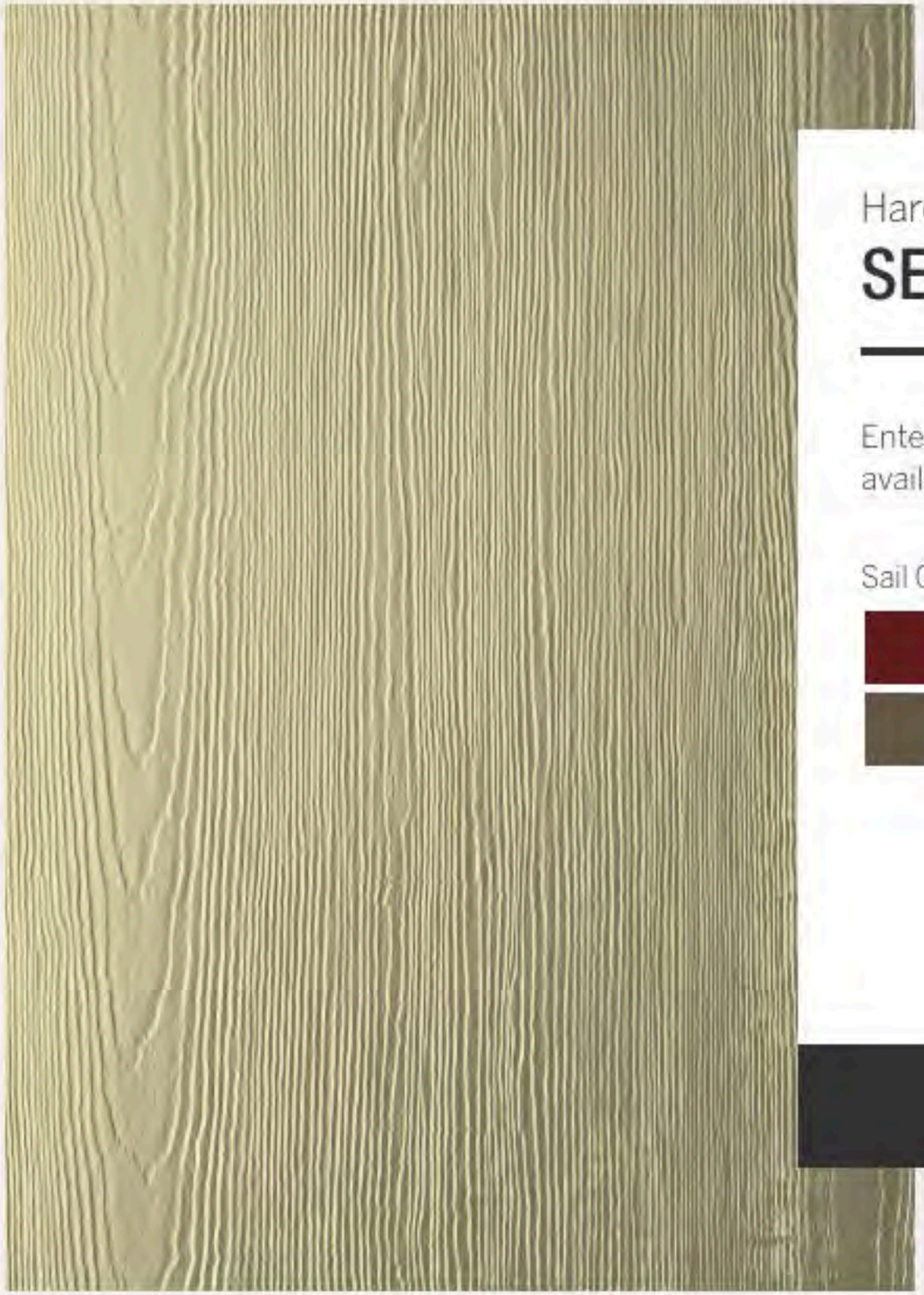
Enter your zip for the specific ColorPlus® Technology colors available *near you...*

Arctic White



Download Product Catalog

2nd Floor Siding - HardiePanel, Select CedarMill Finish, 16" on Center



HardiePanel® Vertical Siding

2/3

## SELECT CEDARMILL

Enter your zip for the specific ColorPlus® Technology colors available *near you...*

Sail Cloth

*Download Product Catalog*

# HardiePlank®

Sleek and strong, HardiePlank® lap siding is not just our best-selling product – it's the most popular brand of siding in America.

With a full spectrum of colors and textures, homeowners can enjoy protection from the elements and the versatility to make their dream home a reality. From Victorians to Colonials, HardiePlank lap siding sets the standard in exterior cladding.

A classic look for
**THE HOME OF THEIR DREAMS.**

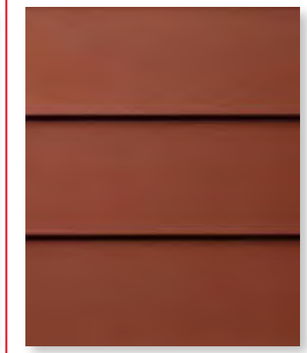


### SELECT CEDARMILL©*

*Woodstock Brown*

### SMOOTH*

*Countrylane Red*



| | | | | | | |
|---|---|---|---|---|---|---|
| Thickness | 5/16 in. | | | | | |
| Length | 12 ft. planks | | | | | |
| Width | 5.25 in. | 6.25 in. | 7.25 in. | 8.25 in. | 9.25 in. | 12 in. |
| Exposure | 4 in. | 5 in. | 6 in. | 7 in. | 8 in. | 10.75 in. |
| ColorPlus Pcs./Pallet | 324 | 280 | 252 | 210 | | |
| Prime Pcs./Pallet | 360 | 308 | 252 | 230 | 190 | 152 |
| Pcs./Sq. | 25.0 | 20.0 | 16.7 | 14.3 | 12.5 | 9.3 |

### CUSTOM BEADED CEDARMILL©

*Light Mist*

### CUSTOM BEADED SMOOTH

*Heathered Moss*

| | |
|---|---|
| Thickness | 5/16 in. |
| Length | 12 ft. planks |
| Width | 8.25 in. |
| Exposure | 7 in. |
| ColorPlus Pcs./Pallet | 210 |
| Prime Pcs./Pallet | 240 |
| Pcs./Sq. | 14.3 |

### CUSTOM COLONIAL™ ROUGHSAWN

*Mountain Sage*

### CUSTOM COLONIAL™ SMOOTH

*Timber Bark*

| | |
|---|---|
| Thickness | 5/16 in. |
| Length | 12 ft. planks |
| Width | 8 in. |
| Exposure | 6.75 in. |
| ColorPlus Pcs./Pallet | 216 |
| Prime Pcs./Pallet | 240 |
| Pcs./Sq. | 14.9 |

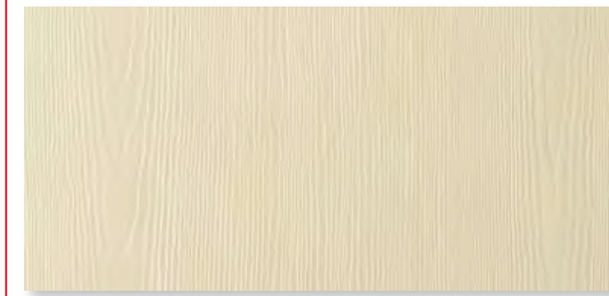
*6.25 in. and 8.25 in. also available in coastal colors. 9.25 in. and 12 in. only available primed.

Products are available primed or with ColorPlus Technology finishes. For more details, visit **jameshardie.com**

# HardiePanel®

HardiePanel® vertical siding delivers style and substance. When combined with HardieTrim® boards, it achieves the rustic board-and-batten look that defines cottage charm. The covered seams contribute to a well-insulated home.

Its crisp, clean lines make HardiePanel vertical siding a smart choice for strong, contemporary designs.



### SELECT CEDARMILL®

*Navajo Beige*

| | | | |
|---|---|---|---|
| Thickness | 5/16 in. | | |
| Size | 4 ft. x 8 ft. | 4 ft. x 9 ft.* | 4 ft. x 10 ft. |
| Pcs./Pallet | 50 | 50 | 50 |
| Pcs./Sq. | 3.2 | 2.8 | 2.5 |

### SMOOTH

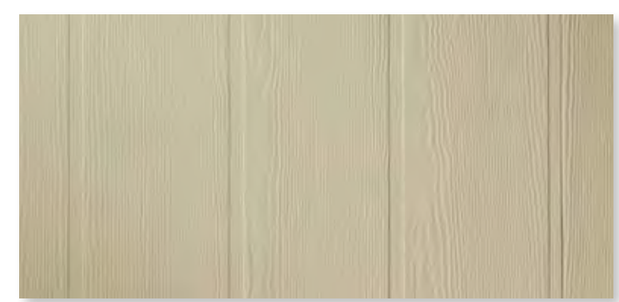
*Evening Blue*

| | | | |
|---|---|---|---|
| Thickness | 5/16 in. | | |
| Size | 4 ft. x 8 ft. | 4 ft. x 9 ft.* | 4 ft. x 10 ft. |
| Pcs./Pallet | 50 | 50 | 50 |
| Pcs./Sq. | 3.2 | 2.8 | 2.5 |

### STUCCO

*Navajo Beige*

| | | | |
|---|---|---|---|
| Thickness | 5/16 in. | | |
| Size | 4 ft. x 8 ft. | 4 ft. x 9 ft.* | 4 ft. x 10 ft. |
| Pcs./Pallet | 50 | 50 | 50 |
| Pcs./Sq. | 3.2 | 2.8 | 2.5 |



### SIERRA 8

*Not available with ColorPlus Technology*

| | | | |
|---|---|---|---|
| Thickness | 5/16 in. | | |
| Size | 4 ft. x 8 ft. | 4 ft. x 9 ft.* | 4 ft. x 10 ft. |
| Pcs./Pallet | 50 | 50 | 50 |
| Pcs./Sq. | 3.2 | 2.8 | 2.5 |

*4 ft. x 9 ft. HardiePanel vertical siding only available primed.

Products are available primed or with ColorPlus Technology finishes. For more details, visit **jameshardie.com**

# HardieSoffit®

A home is only as strong as its weakest point. HardieSoffit® panels reinforce your work by protecting the vulnerable gap between eaves and exterior walls.

Available in vented, non-vented and a range of pre-cut sizes, these panels complete your design and protect it from moisture and pests.

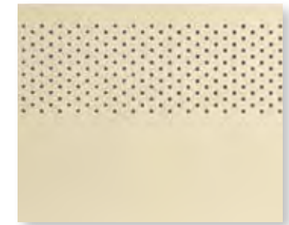
## VENTILATION BENEFITS

Using vented soffit improves ventilation in the attic space and reduces the chance of water vapor condensation that can lead to issues such as mold and mildew growth, stained ceilings and damage to the framing of the house.

In warm climates, HardieSoffit panels allow hot, humid air to escape, which not only helps prevent condensation in the attic, but can also help reduce air conditioning costs.

In cool climates, HardieSoffit panels help prevent condensation from forming on the interior side of the roof sheathing and reduce the chances of roof-damaging ice dams.





### VENTED SMOOTH & CEDARMILL®

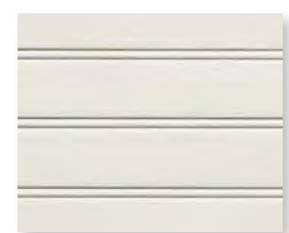
*Sail Cloth*

| | | | |
|---|---|---|---|
| Thickness | 1/4 in. | | |
| Length | 12 ft. | 12 ft. | 8 ft. |
| Width | 12 in. | 16 in. | 24 in. |
| ColorPlus Pcs./Pallet | 216 | 156 | 108 |
| Prime Pcs./Pallet | 200 | 150 | 100 |

### NON-VENTED SMOOTH & CEDARMILL®

*Sail Cloth*

| | | | | |
|---|---|---|---|---|
| Thickness | 1/4 in. | | | |
| Length | 12 ft. | 12 ft. | 8 ft. | 8 ft.* |
| Width | 12 in. | 16 in. | 24 in. | 48 in. |
| ColorPlus Pcs./Pallet | 216 | 156 | 108 | |
| Prime Pcs./Pallet | 200 | 150 | 100 | 50 |



### BEADED PORCH PANEL**

*Arctic White*

| | |
|---|---|
| Thickness | 1/4 in. |
| Length | 8 ft. |
| Width | 48 in. |
| Pcs./Pallet | 50 |

Using the proper amount of vented HardieSoffit panels is crucial to a building's ventilation performance. James Hardie has taken the guess work out of soffit ventilation by providing the table below illustrating the minimum amount of vented HardieSoffit panels recommended for your attic space.***

| ATTIC SQ. FT. | LINEAR FT. OF VENTED SOFFIT |
|---|---|
| 200 | 10 |
| 300 | 14 |
| 400 | 19 |
| 500 | 24 |
| 600 | 29 |
| 700 | 34 |
| 800 | 38 |
| 900 | 43 |
| 1000 | 48 |
| 1100 | 53 |
| 1200 | 58 |
| 1300 | 62 |
| 1400 | 67 |
| 1500 | 72 |
| 1600 | 77 |
| 1700 | 82 |
| 1800 | 86 |
| 1900 | 91 |
| 2000 | 96 |
| 2100 | 101 |
| 2200 | 106 |
| 2300 | 110 |
| 2400 | 115 |
| 2500 | 120 |
| 2600 | 125 |
| 2700 | 130 |
| 2800 | 134 |
| 2900 | 139 |
| 3000 | 144 |
| 3100 | 149 |

*These 48 in. x 8 ft. panels only available primed.
**Beaded Porch Panel is available in all 10 standard soffit colors, as well as Cool Breeze.
***Linear Feet of Vented Soffit calculation is based on 2012 International Residential Code (IRC) Section 806.2, Exception 2, with a 50% upper attic and 50% lower attic split of required ventilation, using soffit with a net free ventilation of 5 square inches per linear foot. This Exception is also approved in 2015 IRC Section 806.2. Always consult a building design professional to confirm attic ventilation meets local building code requirements.

Products are available primed or with ColorPlus Technology finishes. For more details, visit **jameshardie.com**

As unforgettable
**AS IT IS UNCOMPROMISING.**

## See the James Hardie Difference

JAMES HARDIE • PROTECT & BEAUTIFY •
5.5 MILLION HOMES AND COUNTING

James Hardie invented fiber cement. Over 5.5 million installations later, we continue to set the standard in premium, high-performance exterior cladding. Our products deliver uncompromising durability and finish quality for a beautiful, lower maintenance exterior.

Our unrivaled investment in R&D and constant innovations in product design, manufacturing and distribution allow us to remain steps ahead of the competition. With the support of our people, partners and exceptional warranties, we're committed to protecting your customers' homes while helping your business grow.

**1.888.542.7343** | **jameshardie.com**

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JamesHardie

Siding | Trim

# Complete Exterior™

Top to bottom, our exterior product line is defined by excellent performance, aesthetics and design options.

Provide protection from the elements, showcase a homeowner's individual style and install peace of mind with exceptional warranties through a single, trusted manufacturer.

## Experience a consistent maintenance cycle ***WITH A COMPLETE EXTERIOR***

# 5b. Specifications - Windows

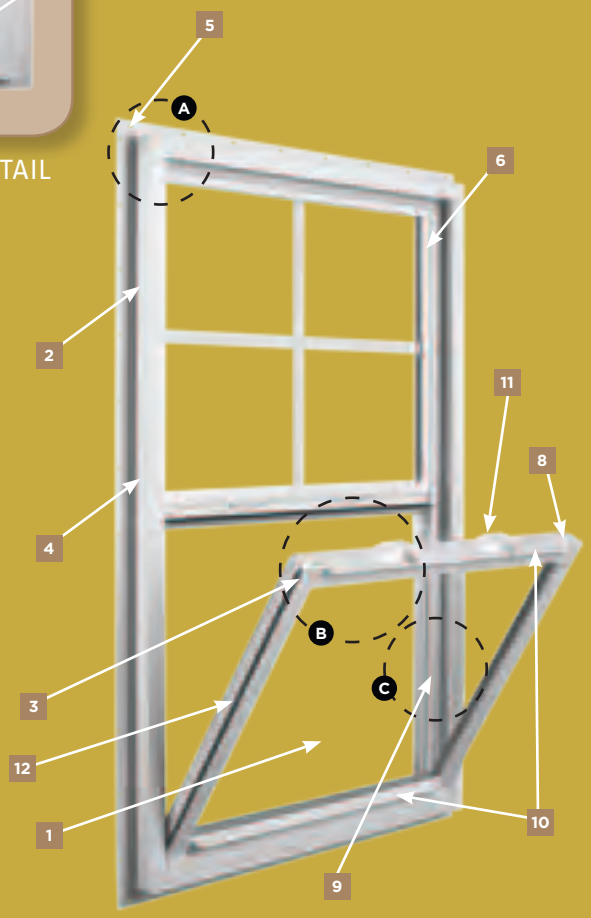
# PlyGem 1110 Series Single Hung Windows - One over One Grille Pattern

## 1110 SERIES SINGLE HUNG

**BUILDER SERIES 1110 SERIES SINGLE HUNG** vinyl windows are available in singles, twins, triples, combinations, fixed and a wide selection of architectural shapes.

# 1110 SERIES SINGLE HUNG

EXTERIOR DETAIL




## FEATURES

1. Energy-efficient Warm Edge insulating glass
2. Maintenance-free multi-chamber PVC construction
3. Fully fusion-welded corners on sash and frame for superior structural strength
4. $2\frac{3}{4}$" frame depth
5. Integral nail fin (shown) with 1" or $1\frac{3}{8}$" setback or flange for simple installation
6. Interior glazed top sash
7. Exterior glazed bottom sash
8. Flush mounted tilt latches
9. Block and tackle balances
10. Dual lift rails on bottom sash for easy operation
11. Cam and keeper locks
12. Bottom sash tilts in and is removable for easy cleaning

1110 series single hung vinyl windows feature a traditional brick mould appearance. They come with simple tilting sash system, allowing homeowners to tilt in bottom sash for safe cleaning of exterior glass.

## SINGLE HUNG SELECTION GUIDE

| SERIES | NAIL FIN SETBACK | TOP SASH REMOVABLE | HIGH WIND ZONE | FLORIDA APPROVED | CONSTRUCTION TYPE: WOOD SIDING | BRICK | 3 COAT STUCCO | BLOCK | EIFIS |
|---|---|---|---|---|---|---|---|---|---|
| 1110 | 1" | | | | ● | ● | ● | | |
| 1110N | $1\frac{3}{8}$" | | | | ● | ● | | | ● |
| 1111 | 1" | | ● | ● | ● | ● | ● | | |
| 1111FL | FLANGE | | ● | ● | | | | ● | |
| 1111N | $1\frac{3}{8}$" | | ● | ● | ● | ● | | | ● |
| 1115 | 1" | ● | | | ● | ● | ● | | |
| 1115N | $1\frac{3}{8}$" | ● | | | ● | ● | | | ● |

**PLY GEM BUILDER SERIES 1110 WINDOWS HAVE BEEN GREEN APPROVED BY THE NAHB RESEARCH CENTER.**

This means you can be assured that Ply Gem Builder Series 1110 windows comply with specific green practice criteria in the National Green Building Standard. Visit www.GreenApprovedProducts.com for more details.

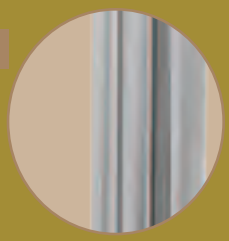
A

Maintenance-free multi-chamber PVC construction with fully fusion-welded corners on sash and frame for superior structural strength

B

Flush mounted tilt latches, dual lift rails and cam and keeper locks

C



Block and tackle balances

1. Optional Low-E upgrade for better performance. 2. Optional Low-E$^{SC}$ (solar cooling optimized) upgrade for increased performance. 3. Optional HP Glass upgrade combines Low-E with argon gas fill for high performance. 4. Optional HP$^{SC}$ Glass upgrade combines solar cooling optimized Low-E with argon gas fill for high performance. 5. Warm Edge+ spacer system for enhanced performance.

## BUIILDER SERIES VINYL PRODUCTS

### 1110 SERIES SINGLE HUNG

| | | NFRC CERTIFIED | | |
|---|---|---|---|---|
| | R Value | U Factor | SHGC | VT |
| WITH WARM EDGE | | | | |
| 3/4" Clear | 2.04 | 0.49 | 0.62 | 0.65 |
| 3/4" Low-E | 2.86 | 0.35 | 0.29 | 0.55 |
| 3/4" Low-E$^{SC}$ | 2.86 | 0.35 | 0.23 | 0.43 |
| WITH WARM EDGE+ | | | | |
| 3/4" HP Glass | 3.23 | 0.31 | 0.29 | 0.55 |
| 3/4" HP$^{SC}$ Glass | 3.33 | 0.30 | 0.22 | 0.43 |

### 1150 DOUBLE HUNG

| 3mm Glass | | NFRC CERTIFIED | | |
|---|---|---|---|---|
| | R Value | U Factor | SHGC | VT |
| WITH WARM EDGE | | | | |
| 3/4" Clear | 2.04 | 0.49 | 0.61 | 0.64 |
| 3/4" Low-E | 2.78 | 0.36 | 0.29 | 0.54 |
| 3/4" Low-E$^{SC}$ | 2.86 | 0.35 | 0.22 | 0.43 |
| WITH WARM EDGE+ | | | | |
| 3/4" HP Glass | 3.33 | 0.30 | 0.29 | 0.54 |
| 3/4" HP$^{SC}$ Glass | 3.33 | 0.30 | 0.22 | 0.43 |

### 1120/30 SERIES SLIDING WINDOW

| 3mm Glass | | NFRC CERTIFIED | | |
|---|---|---|---|---|
| | R Value | U Factor | SHGC | VT |
| WITH WARM EDGE | | | | |
| 3/4" Clear | 2.04 | 0.49 | 0.63 | 0.65 |
| 3/4" Low-E | 2.86 | 0.35 | 0.30 | 0.55 |
| 3/4" Low-E$^{SC}$ | 2.86 | 0.35 | 0.23 | 0.43 |
| WITH WARM EDGE+ | | | | |
| 3/4" HP Glass | 3.33 | 0.30 | 0.30 | 0.55 |
| 3/4" HP$^{SC}$ Glass | 3.33 | 0.30 | 0.23 | 0.43 |

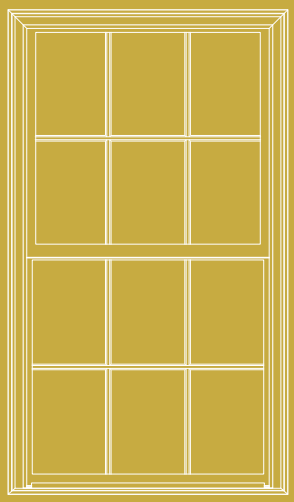
### 1140 CASEMENT & 1160 AWNING

| 3mm Glass | | NFRC CERTIFIED | | |
|---|---|---|---|---|
| | R Value | U Factor | SHGC | VT |
| WITH WARM EDGE | | | | |
| 3/4" Clear | 2.17 | 0.46 | 0.50 | 0.52 |
| 3/4"Low-E | 2.86 | 0.35 | 0.24 | 0.44 |
| 3/4" Low-E$^{SC}$ | 2.86 | 0.35 | 0.18 | 0.34 |
| WITH WARM EDGE+ | | | | |
| 3/4" HP Glass | 3.33 | 0.30 | 0.24 | 0.44 |
| 3/4" HP$^{SC}$ Glass | 3.33 | 0.30 | 0.18 | 0.34 |

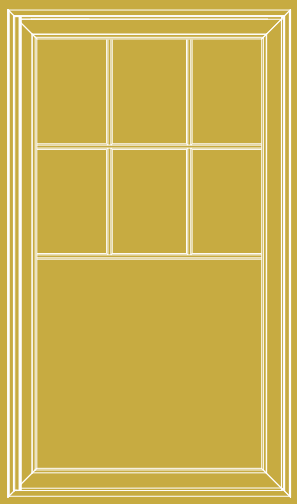
### 1180 SLIDING PATIO DOOR

| 4mm Glass | | NFRC CERTIFIED | | |
|---|---|---|---|---|
| | R Value | U Factor | SHGC | VT |
| WITH WARM EDGE | | | | |
| 3/4" Clear | 2.08 | 0.48 | 0.65 | 0.68 |
| 3/4" Low-E | 2.94 | 0.34 | 0.30 | 0.57 |
| 3/4" Low-E$^{SC}$ | 2.94 | 0.34 | 0.23 | 0.45 |
| WITH WARM EDGE+ | | | | |
| 3/4" HP Glass | 3.57 | 0.28 | 0.30 | 0.57 |
| 3/4" HP$^{SC}$ Glass | 3.57 | 0.28 | 0.23 | 0.45 |

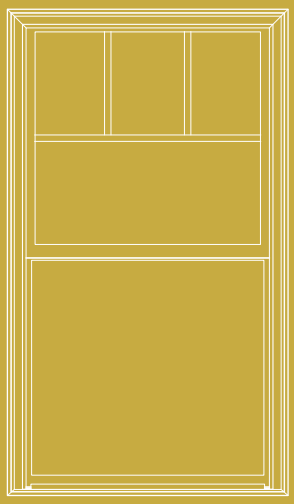
# STANDARD GRILLE PATTERNS



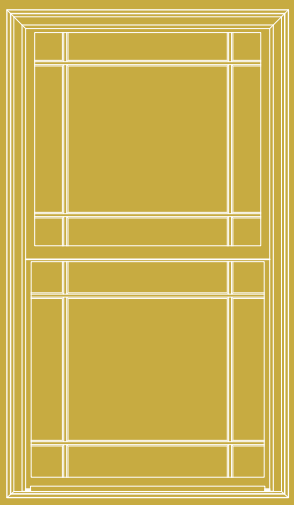
Colonial



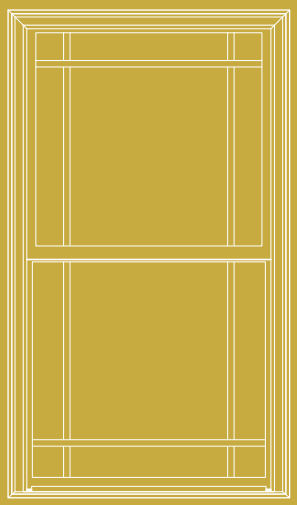
Half Colonial
(shown on Casement)



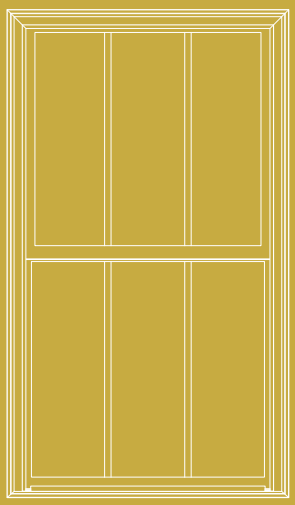
Plaza



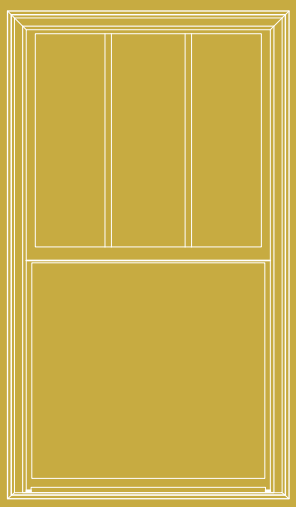
Prairie



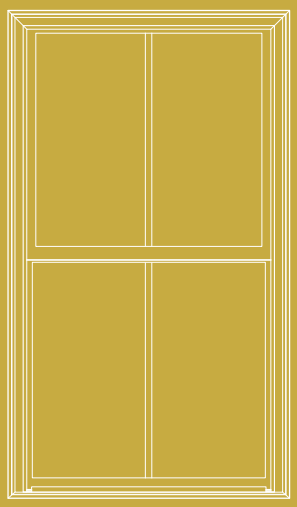
Perimeter Prairie



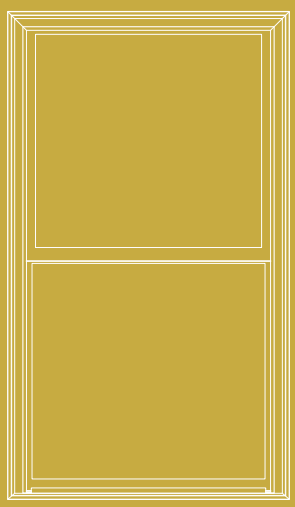
Three over Three



Three over One



Two over Two



One Over One

Call customer service for optional grille patterns (800.999.8400).

# 5c. Specifications - Roofing

# Owens Corning 3-Tab Roof Shingles

**SUPREME®**
Shingles

Desert Tan†

## Supreme® Shingles

Supreme® three-tab shingles—a smart choice when you need to balance curb appeal, weather resistance and value. *Supreme* shingles come with a 25-Year Limited Warranty*, 60-MPH Wind Resistance Limited Warranty*, and Class A UL Fire Resistance Rating—the industry's highest. StreakGuard™ Protection with a 10-year Algae Resistance Limited Warranty is also available on a regional basis. Visit roofing.owenscorning.com to learn more.

## ENERGY STAR® is for roofs too

Similar to the energy-efficient appliances in your home, roofing products can help provide energy-saving qualities. Owens Corning® *Supreme* roofing shingles in Shasta White can help reduce your heating and cooling bills when installed properly. These shingles reflect solar energy, helping to decrease the amount of heat transferred to a home's interior—and the amount of air conditioning needed to keep it comfortable. Actual savings will vary based on geographic location and individual building characteristics. Call 1-800-GET-PINK® or 1-888-STAR-YES for more information.

### Product Attributes

| | |
|---|---|
| Warranty Length* | 25-Year Limited |
| Wind Resistance Limited Warranty* | 60 MPH |
| Algae Resistance Limited Warranty*/** | 10 Years |
| TRU PROtection® Non-Prorated Limited Warranty* Period | 5 Years |

### Product Specifications

| | |
|---|---|
| Nominal Size | 12" x 36" |
| Exposure | 5" |
| Shingles per Square | 80 |
| Bundles per Square | 3 |
| Coverage per Square | 100 sq. ft. |

### Applicable Standards and Codes

- ASTM D228
- ASTM D3018 (Type 1)
- ASTM D3161 (Class F Wind Resistance)
- ASTM D3462
- ASTM D7158 (Class H Wind Resistance)
- ASTM E108/UL 790 (Class A Fire Resistance)
- Florida Product Approval‡
- ICC-ES AC438#
- Miami-Dade County Product Approval††
- UL ER2453-01##
- UL ER2453-02##

Shasta White color meets ENERGY STAR® requirements for initial solar reflectance of 0.25 and 3-year aged solar reflectance of 0.15; 2013 California Building Energy Efficiency Standards; Title 24, Part 6 requirements; Rated by the Cool Roof Rating Council (CRRC).

## COLORS AVAILABLE IN ALL AREAS

Autumn Brown†

Driftwood†

Desert Tan†

Brownwood†

Shasta White†

Aspen Gray†

Onyx Black†

Estate Gray†

# 5d. Specifications - Stairs

# Exterior Staircase Example - 100% Wood

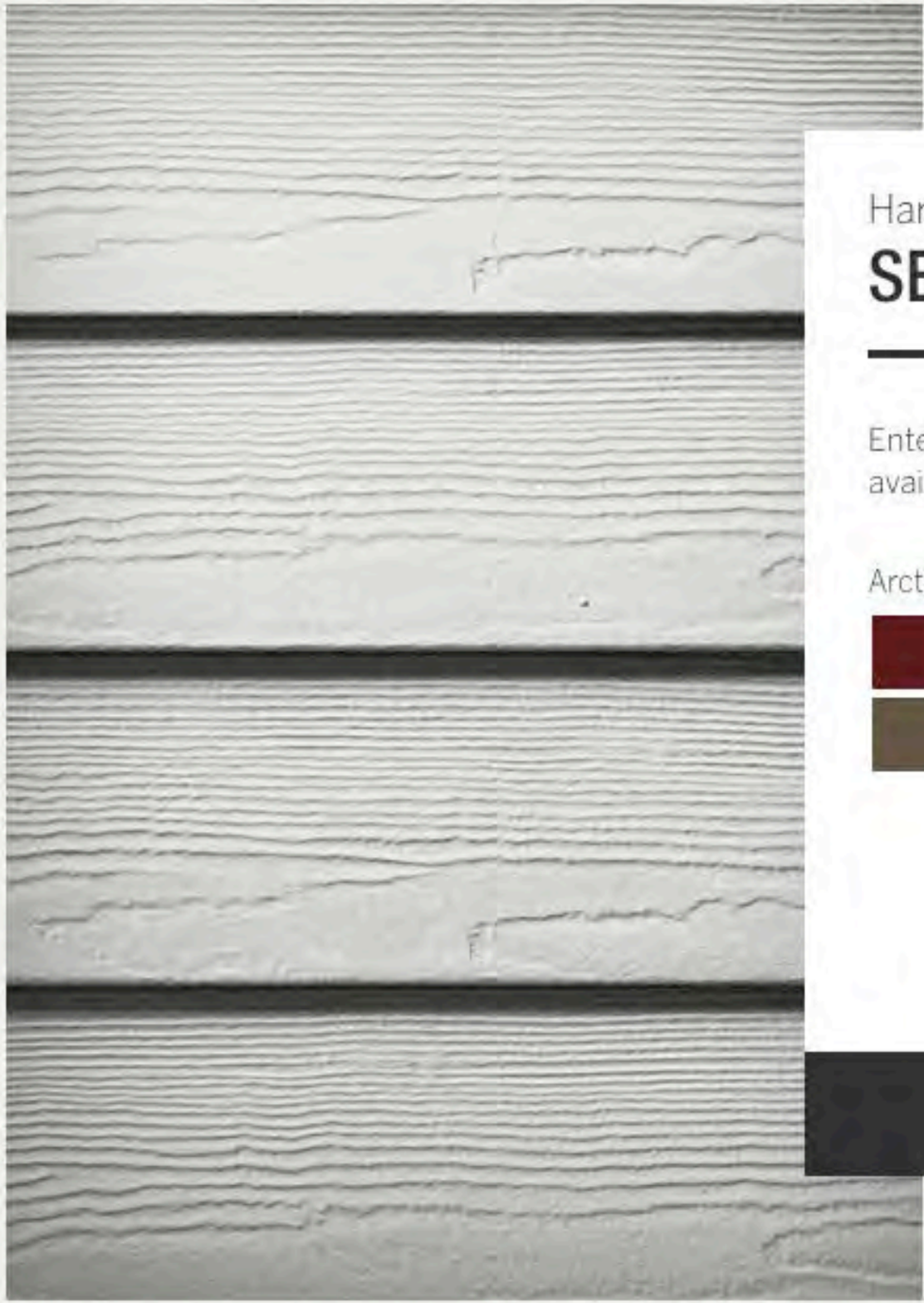
# 5a. Specifications - Hardscaping & Landscaping

# Gravel Walkway & Surrounding Landscaping Example

Gravel Walkway & Surrounding Landscaping Example

Concrete Driveway Example
3126

HardiePlank, Select CedarMill Finish, 6" Reveal



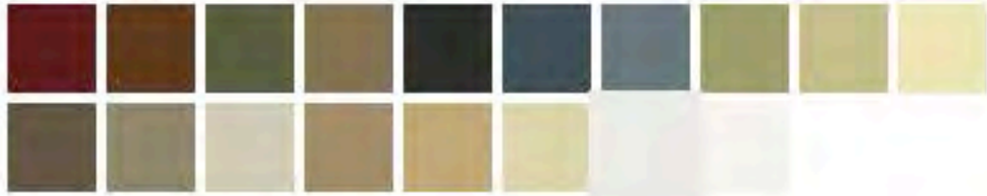
HardiePlank® Lap Siding

2/3

# SELECT CEDARMILL

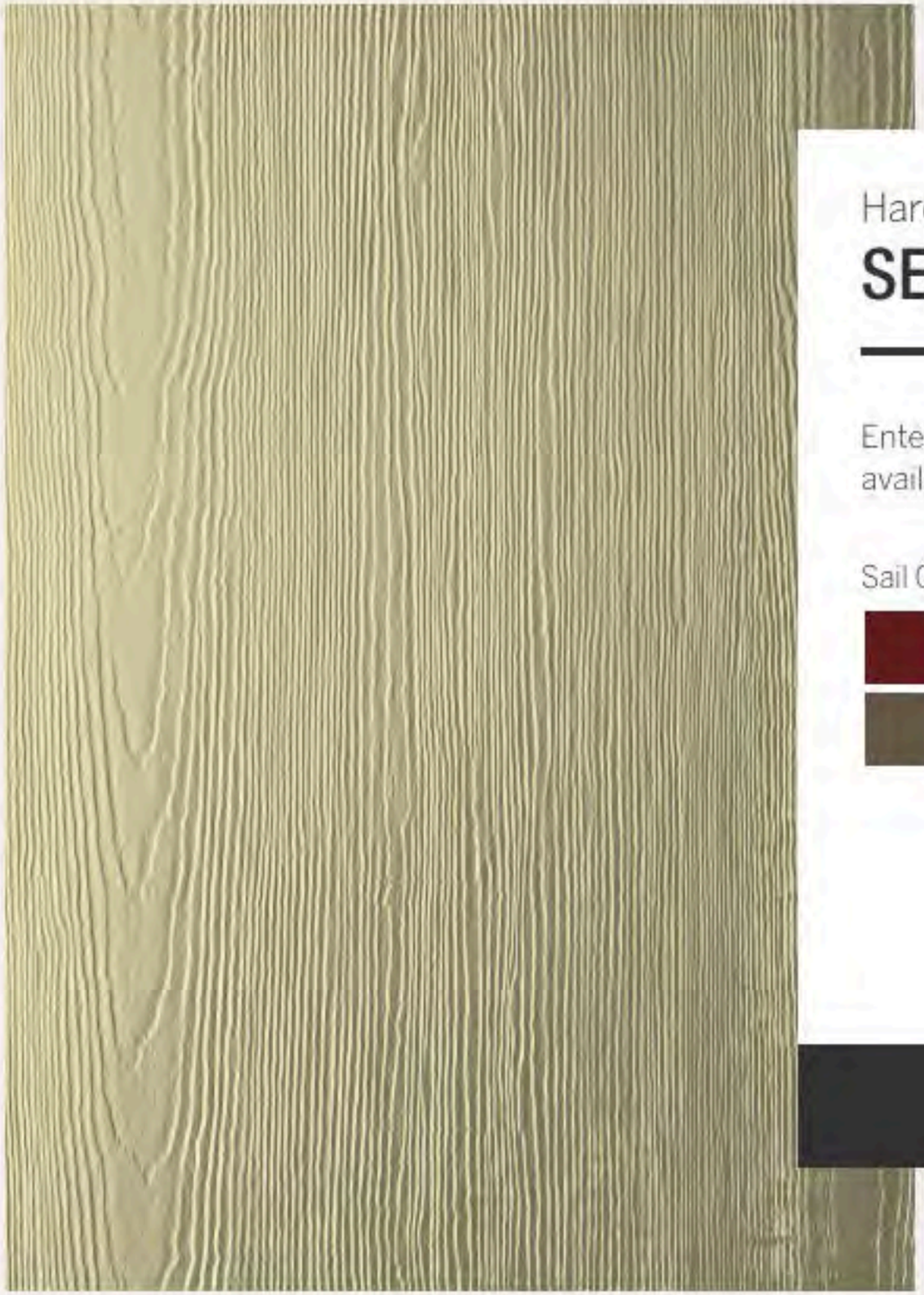
Enter your zip for the specific ColorPlus® Technology colors available *near you...*

Arctic White



Download Product Catalog

HardiePanel, Select CedarMill Finish, 16" on Center



HardiePanel® Vertical Siding

2/3

## SELECT CEDARMILL

Enter your zip for the specific ColorPlus® Technology colors available *near you...*

Sail Cloth

*Download Product Catalog*

# HardiePlank®

Sleek and strong, HardiePlank® lap siding is not just our best-selling product – it's the most popular brand of siding in America.

With a full spectrum of colors and textures, homeowners can enjoy protection from the elements and the versatility to make their dream home a reality. From Victorians to Colonials, HardiePlank lap siding sets the standard in exterior cladding.

A classic look for
**THE HOME OF THEIR DREAMS.**

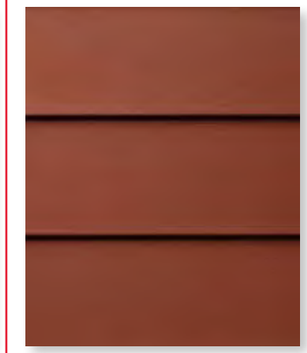


### SELECT CEDARMILL©*

*Woodstock Brown*

### SMOOTH*

*Countrylane Red*



| | | | | | | |
|---|---|---|---|---|---|---|
| Thickness | 5/16 in. | | | | | |
| Length | 12 ft. planks | | | | | |
| Width | 5.25 in. | 6.25 in. | 7.25 in. | 8.25 in. | 9.25 in. | 12 in. |
| Exposure | 4 in. | 5 in. | 6 in. | 7 in. | 8 in. | 10.75 in. |
| ColorPlus Pcs./Pallet | 324 | 280 | 252 | 210 | | |
| Prime Pcs./Pallet | 360 | 308 | 252 | 230 | 190 | 152 |
| Pcs./Sq. | 25.0 | 20.0 | 16.7 | 14.3 | 12.5 | 9.3 |

### CUSTOM BEADED CEDARMILL©

*Light Mist*

### CUSTOM BEADED SMOOTH

*Heathered Moss*

| | |
|---|---|
| Thickness | 5/16 in. |
| Length | 12 ft. planks |
| Width | 8.25 in. |
| Exposure | 7 in. |
| ColorPlus Pcs./Pallet | 210 |
| Prime Pcs./Pallet | 240 |
| Pcs./Sq. | 14.3 |

### CUSTOM COLONIAL™ ROUGHSAWN

*Mountain Sage*

### CUSTOM COLONIAL™ SMOOTH

*Timber Bark*

| | |
|---|---|
| Thickness | 5/16 in. |
| Length | 12 ft. planks |
| Width | 8 in. |
| Exposure | 6.75 in. |
| ColorPlus Pcs./Pallet | 216 |
| Prime Pcs./Pallet | 240 |
| Pcs./Sq. | 14.9 |

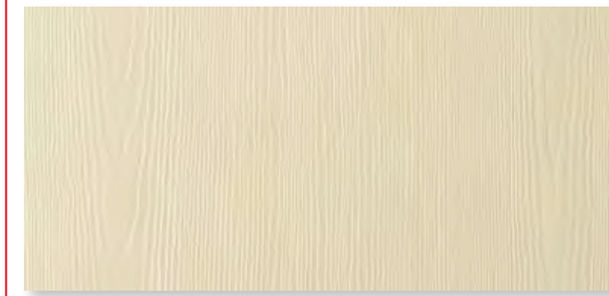
*6.25 in. and 8.25 in. also available in coastal colors. 9.25 in. and 12 in. only available primed.

Products are available primed or with ColorPlus Technology finishes. For more details, visit **jameshardie.com**

# HardiePanel®

HardiePanel® vertical siding delivers style and substance. When combined with HardieTrim® boards, it achieves the rustic board-and-batten look that defines cottage charm. The covered seams contribute to a well-insulated home.

Its crisp, clean lines make HardiePanel vertical siding a smart choice for strong, contemporary designs.



### SELECT CEDARMILL®

*Navajo Beige*

| | | | |
|---|---|---|---|
| Thickness | 5/16 in. | | |
| Size | 4 ft. x 8 ft. | 4 ft. x 9 ft.* | 4 ft. x 10 ft. |
| Pcs./Pallet | 50 | 50 | 50 |
| Pcs./Sq. | 3.2 | 2.8 | 2.5 |

### SMOOTH

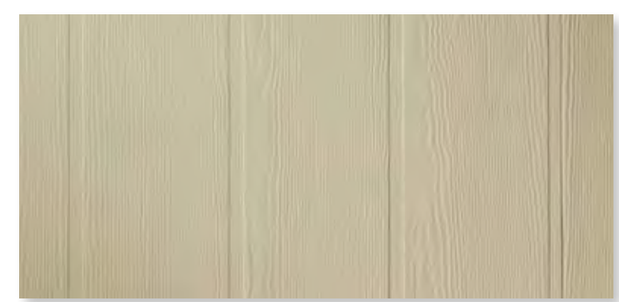
*Evening Blue*

| | | | |
|---|---|---|---|
| Thickness | 5/16 in. | | |
| Size | 4 ft. x 8 ft. | 4 ft. x 9 ft.* | 4 ft. x 10 ft. |
| Pcs./Pallet | 50 | 50 | 50 |
| Pcs./Sq. | 3.2 | 2.8 | 2.5 |

### STUCCO

*Navajo Beige*

| | | | |
|---|---|---|---|
| Thickness | 5/16 in. | | |
| Size | 4 ft. x 8 ft. | 4 ft. x 9 ft.* | 4 ft. x 10 ft. |
| Pcs./Pallet | 50 | 50 | 50 |
| Pcs./Sq. | 3.2 | 2.8 | 2.5 |



### SIERRA 8

*Not available with ColorPlus Technology*

| | | | |
|---|---|---|---|
| Thickness | 5/16 in. | | |
| Size | 4 ft. x 8 ft. | 4 ft. x 9 ft.* | 4 ft. x 10 ft. |
| Pcs./Pallet | 50 | 50 | 50 |
| Pcs./Sq. | 3.2 | 2.8 | 2.5 |

*4 ft. x 9 ft. HardiePanel vertical siding only available primed.

Products are available primed or with ColorPlus Technology finishes. For more details, visit **jameshardie.com**

# HardieSoffit®

A home is only as strong as its weakest point. HardieSoffit® panels reinforce your work by protecting the vulnerable gap between eaves and exterior walls.

Available in vented, non-vented and a range of pre-cut sizes, these panels complete your design and protect it from moisture and pests.

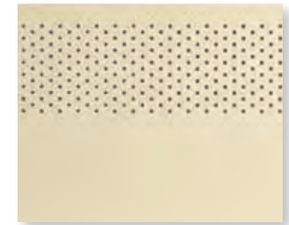
## VENTILATION BENEFITS

Using vented soffit improves ventilation in the attic space and reduces the chance of water vapor condensation that can lead to issues such as mold and mildew growth, stained ceilings and damage to the framing of the house.

In warm climates, HardieSoffit panels allow hot, humid air to escape, which not only helps prevent condensation in the attic, but can also help reduce air conditioning costs.

In cool climates, HardieSoffit panels help prevent condensation from forming on the interior side of the roof sheathing and reduce the chances of roof-damaging ice dams.





### VENTED SMOOTH & CEDARMILL®

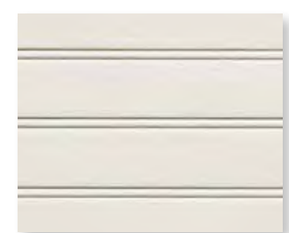
*Sail Cloth*

| | | | |
|---|---|---|---|
| Thickness | 1/4 in. | | |
| Length | 12 ft. | 12 ft. | 8 ft. |
| Width | 12 in. | 16 in. | 24 in. |
| ColorPlus Pcs./Pallet | 216 | 156 | 108 |
| Prime Pcs./Pallet | 200 | 150 | 100 |

### NON-VENTED SMOOTH & CEDARMILL®

*Sail Cloth*

| | | | | |
|---|---|---|---|---|
| Thickness | 1/4 in. | | | |
| Length | 12 ft. | 12 ft. | 8 ft. | 8 ft.* |
| Width | 12 in. | 16 in. | 24 in. | 48 in. |
| ColorPlus Pcs./Pallet | 216 | 156 | 108 | |
| Prime Pcs./Pallet | 200 | 150 | 100 | 50 |



### BEADED PORCH PANEL**

*Arctic White*

| | |
|---|---|
| Thickness | 1/4 in. |
| Length | 8 ft. |
| Width | 48 in. |
| Pcs./Pallet | 50 |

Using the proper amount of vented HardieSoffit panels is crucial to a building's ventilation performance. James Hardie has taken the guess work out of soffit ventilation by providing the table below illustrating the minimum amount of vented HardieSoffit panels recommended for your attic space.***

| ATTIC SQ. FT. | LINEAR FT. OF VENTED SOFFIT |
|---|---|
| 200 | 10 |
| 300 | 14 |
| 400 | 19 |
| 500 | 24 |
| 600 | 29 |
| 700 | 34 |
| 800 | 38 |
| 900 | 43 |
| 1000 | 48 |
| 1100 | 53 |
| 1200 | 58 |
| 1300 | 62 |
| 1400 | 67 |
| 1500 | 72 |
| 1600 | 77 |
| 1700 | 82 |
| 1800 | 86 |
| 1900 | 91 |
| 2000 | 96 |
| 2100 | 101 |
| 2200 | 106 |
| 2300 | 110 |
| 2400 | 115 |
| 2500 | 120 |
| 2600 | 125 |
| 2700 | 130 |
| 2800 | 134 |
| 2900 | 139 |
| 3000 | 144 |
| 3100 | 149 |

*These 48 in. x 8 ft. panels only available primed.
**Beaded Porch Panel is available in all 10 standard soffit colors, as well as Cool Breeze.
***Linear Feet of Vented Soffit calculation is based on 2012 International Residential Code (IRC) Section 806.2, Exception 2, with a 50% upper attic and 50% lower attic split of required ventilation, using soffit with a net free ventilation of 5 square inches per linear foot. This Exception is also approved in 2015 IRC Section 806.2. Always consult a building design professional to confirm attic ventilation meets local building code requirements.

Products are available primed or with ColorPlus Technology finishes. For more details, visit **jameshardie.com**

# Owens Corning 3-Tab Roof Shingles

**SUPREME®**
Shingles

Desert Tan†

## Supreme® Shingles

Supreme® three-tab shingles—a smart choice when you need to balance curb appeal, weather resistance and value. *Supreme* shingles come with a 25-Year Limited Warranty*, 60-MPH Wind Resistance Limited Warranty*, and Class A UL Fire Resistance Rating—the industry's highest. StreakGuard™ Protection with a 10-year Algae Resistance Limited Warranty is also available on a regional basis. Visit roofing.owenscorning.com to learn more.

## ENERGY STAR® is for roofs too

Similar to the energy-efficient appliances in your home, roofing products can help provide energy-saving qualities. Owens Corning® *Supreme* roofing shingles in Shasta White can help reduce your heating and cooling bills when installed properly. These shingles reflect solar energy, helping to decrease the amount of heat transferred to a home's interior—and the amount of air conditioning needed to keep it comfortable. Actual savings will vary based on geographic location and individual building characteristics. Call 1-800-GET-PINK® or 1-888-STAR-YES for more information.

### Product Attributes

| | |
|---|---|
| Warranty Length* | 25-Year Limited |
| Wind Resistance Limited Warranty* | 60 MPH |
| Algae Resistance Limited Warranty*/** | 10 Years |
| TRU PROtection® Non-Prorated Limited Warranty* Period | 5 Years |

### Product Specifications

| | |
|---|---|
| Nominal Size | 12" x 36" |
| Exposure | 5" |
| Shingles per Square | 80 |
| Bundles per Square | 3 |
| Coverage per Square | 100 sq. ft. |

### Applicable Standards and Codes

- ASTM D228
- ASTM D3018 (Type 1)
- ASTM D3161 (Class F Wind Resistance)
- ASTM D3462
- ASTM D7158 (Class H Wind Resistance)
- ASTM E108/UL 790 (Class A Fire Resistance)
- Florida Product Approval‡
- ICC-ES AC438#
- Miami-Dade County Product Approval††
- UL ER2453-01##
- UL ER2453-02##

Shasta White color meets ENERGY STAR® requirements for initial solar reflectance of 0.25 and 3-year aged solar reflectance of 0.15; 2013 California Building Energy Efficiency Standards; Title 24, Part 6 requirements; Rated by the Cool Roof Rating Council (CRRC).

## COLORS AVAILABLE IN ALL AREAS

Autumn Brown†

Driftwood†

Desert Tan†

Brownwood†

Shasta White†

Aspen Gray†

Onyx Black†

Estate Gray†

Example of concrete steps

# 502 E. Mulberry (78212) - Master Budget

| | SF |
|---|---|
| Existing Building (Renovations) - Units 1 & 2 | 2,327 |
| *New Construction - Units 3 & 4* | *1,911* |
| **TOTAL (Gross)** | **4,238** |

| Projected Construction Timeline |
|---|
| ***5 Months (Completion August 2018)*** |

| Tab | Item | Budget | $/SF | | Comments & Assumptions |
|---|---|---|---|---|---|
| 1.00 | Design & Construction Documents | | | | |
| 1.01 | Architectural | $ 6,300 | $ 1.49 | | J.Allison Designs |
| 1.02 | Structural Engineering | | $ - | | Included in David Cody pricing |
| 1.03 | Civil Engineering | | $ - | | Included in David Cody pricing |
| 1.04 | MEP Engineering | | $ - | | Included in David Cody pricing |
| | Sub-total | $ 6,300 | $ 1.49 | | |
| 2.00 | Construction | | | | |
| 2.01 | Foundation Repair | $ 14,400 | $ 3.40 | | Vantage Foundation Repair |
| 2.02 | Existing Building (Renovations) - Units 1 & 2 | $ 104,950 | $ 24.76 | | David Cody |
| 2.03 | New Construction - Units 3 & 4 | $ 282,000 | $ 66.54 | | David Cody |
| 2.04 | Landscaping | | $ - | | Included in David Cody pricing |
| 2.05 | Site prep & lot clear | | $ - | | Included in David Cody pricing |
| 2.06 | Permits | | $ - | | Included in David Cody pricing |
| 2.07 | Impact Fees - Water | | $ - | | Included in David Cody pricing |
| 2.08 | Impact Fees - Electrical | | $ - | | Included in David Cody pricing |
| | Sub-total | $ 401,350 | $ 94.70 | | |
| 3.00 | Furniture Fixtures & Equipment (FF&E) | | | | |
| 3.01 | Plumbing Fixtures (New Construction) | | $ - | | Included in David Cody pricing |
| 3.02 | Electrical Fixtures (New Construction) | | $ - | | Included in David Cody pricing |
| 3.03 | Appliances (New Construction) | | $ - | | Included in David Cody pricing |
| 3.04 | Plumbing Fixtures (Renovation) | | $ - | | Included in David Cody pricing |
| 3.05 | Electrical Fixtures (Renovation) | | $ - | | Included in David Cody pricing |
| 3.06 | Appliances (Renovation) | | $ - | | Included in David Cody pricing |
| | Sub-total | $ - | $ - | | |
| 4.00 | IT / Low Voltage | | | | |
| 4.01 | Low Voltage Consultant, IT/Network/WiFi | | $ - | | |
| 4.02 | Security System | | $ - | | |
| 4.03 | Audio Visual | | $ - | | |
| | Sub-total | $ - | $ - | | |
| 5.00 | Contingency | | | | |
| 5.01 | Contingency - New Construction | | $ - | | Included in David Cody pricing |
| 5.02 | Contingency - Renovations | | $ - | | Included in David Cody pricing |
| | Sub-total | $ - | $ - | | |
| **6.00** | **Total Project Costs** | **$ 407,650** | **$ 96.19** | | |