

## HISTORIC AND DESIGN REVIEW COMMISSION

June 19, 2019

**HDRC CASE NO:** 2019-228  
**ADDRESS:** 218 PARKVIEW DR  
**LEGAL DESCRIPTION:** NCB 6918 BLK LOT 17 AND W IRR 25 FT OF 18  
**ZONING:** R-5, H  
**CITY COUNCIL DIST.:** 3  
**DISTRICT:** Mission Historic District  
**APPLICANT:** Abraham Diaz/City of San Antonio  
**OWNER:** Kenneth and Rebecca Minica/PALENCIA MINICA REBECCA  
**TYPE OF WORK:** Demolition with new construction  
**APPLICATION RECEIVED:** April 17, 2019  
**60-DAY REVIEW:** August 15, 2019 (60 day demolition hold)  
**CASE MANAGER:** Edward Hall  
**REQUEST:**

The applicant is requesting a Certificate of Appropriateness for approval to:

1. Demolish the existing, historic structure at 218 Parkview.
2. Construct a new, 1-story, single family residential structure.

### APPLICABLE CITATIONS:

#### *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 in 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

## *Historic Design Guidelines, Chapter 4, Guidelines for New Construction*

### 1. Building and Entrance Orientation

#### A. FAÇADE ORIENTATION

i. *Setbacks*—Align front facades of new buildings with front facades of adjacent buildings where a consistent setback has been established along the street frontage. Use the median setback of buildings along the street frontage where a variety of setbacks exist. Refer to UDC Article 3, Division 2. Base Zoning Districts for applicable setback requirements.

ii. *Orientation*—Orient the front façade of new buildings to be consistent with the predominant orientation of historic buildings along the street frontage.

#### B. ENTRANCES

i. *Orientation*—Orient primary building entrances, porches, and landings to be consistent with those historically found along the street frontage. Typically, historic building entrances are oriented towards the primary street.

### 2. Building Massing and Form

#### A. SCALE AND MASS

i. *Similar height and scale*—Design new construction so that its height and overall scale are consistent with nearby historic buildings. In residential districts, the height and scale of new construction should not exceed that of the majority of historic buildings by more than one-story. In commercial districts, building height shall conform to the established pattern. If there is no more than a 50% variation in the scale of buildings on the adjacent block faces, then the height of the new building shall not exceed the tallest building on the adjacent block face by more than 10%.

ii. *Transitions*—Utilize step-downs in building height, wall-plane offsets, and other variations in building massing to provide a visual transition when the height of new construction exceeds that of adjacent historic buildings by more than one-half story.

iii. *Foundation and floor heights*—Align foundation and floor-to-floor heights (including porches and balconies) within one foot of floor-to-floor heights on adjacent historic structures.

#### B. ROOF FORM

i. *Similar roof forms*—Incorporate roof forms—pitch, overhangs, and orientation—that are consistent with those predominantly found on the block. Roof forms on residential building types are typically sloped, while roof forms on nonresidential

building types are more typically flat and screened by an ornamental parapet wall.

ii. *Façade configuration*—The primary façade of new commercial buildings should be in keeping with established patterns. Maintaining horizontal elements within adjacent cap, middle, and base precedents will establish a consistent street wall through the alignment of horizontal parts. Avoid blank walls, particularly on elevations visible from the street. No new façade should exceed 40 linear feet without being penetrated by windows, entryways, or other defined bays.

### D. LOT COVERAGE

*i. Building to lot ratio*—New construction should be consistent with adjacent historic buildings in terms of the building to lot ratio. Limit the building footprint for new construction to no more than 50 percent of the total lot area, unless adjacent historic buildings establish a precedent with a greater building to lot ratio.

### 3. Materials and Textures

#### A. NEW MATERIALS

*i. Complementary materials*—Use materials that complement the type, color, and texture of materials traditionally found in the district. Materials should not be so dissimilar as to distract from the historic interpretation of the district. For example, corrugated metal siding would not be appropriate for a new structure in a district comprised of homes with wood siding.

*ii. Alternative use of traditional materials*—Consider using traditional materials, such as wood siding, in a new way to provide visual interest in new construction while still ensuring compatibility.

*iii. Roof materials*—Select roof materials that are similar in terms of form, color, and texture to traditionally used in the district.

*iv. Metal roofs*—Construct new metal roofs in a similar fashion as historic metal roofs. Refer to the Guidelines for Alterations and Maintenance section for additional specifications regarding metal roofs.

*v. Imitation or synthetic materials*—Do not use vinyl siding, plastic, or corrugated metal sheeting. Contemporary materials not traditionally used in the district, such as brick or simulated stone veneer and Hardie Board or other fiberboard siding, may be appropriate for new construction in some locations as long as new materials are visually similar to the traditional material in dimension, finish, and texture. EIFS is not recommended as a substitute for actual stucco.

### 4. Architectural Details

#### A. GENERAL

*i. Historic context*—Design new buildings to reflect their time while respecting the historic context. While new construction should not attempt to mirror or replicate historic features, new structures should not be so dissimilar as to distract from or diminish the historic interpretation of the district.

*ii. Architectural details*—Incorporate architectural details that are in keeping with the predominant architectural style along the block face or within the district when one exists. Details should be simple in design and should complement, but not visually compete with, the character of the adjacent historic structures or other historic structures within the district. Architectural details that are more ornate or elaborate than those found within the district are inappropriate.

*iii. Contemporary interpretations*—Consider integrating contemporary interpretations of traditional designs and details for new construction. Use of contemporary window moldings and door surroundings, for example, can provide visual interest while helping to convey the fact that the structure is new. Modern materials should be implemented in a way that does not distract from the historic structure.

### 5. Garages and Outbuildings

#### A. DESIGN AND CHARACTER

*v. Garage doors*—Incorporate garage doors with similar proportions and materials as those traditionally found in the district.

### 6. Mechanical Equipment and Roof Appurtenances

#### A. LOCATION AND SITING

*i. Visibility*—Do not locate utility boxes, air conditioners, rooftop mechanical equipment, skylights, satellite dishes, and other roof appurtenances on primary facades, front-facing roof slopes, in front yards, or in other locations that are clearly visible from the public right-of-way.

*ii. Service Areas*—Locate service areas towards the rear of the site to minimize visibility from the public right-of-way.

#### B. SCREENING

*i. Building-mounted equipment*—Paint devices mounted on secondary facades and other exposed hardware, frames, and piping to match the color scheme of the primary structure or screen them with landscaping.

- ii. Freestanding equipment*—Screen service areas, air conditioning units, and other mechanical equipment from public view using a fence, hedge, or other enclosure.
  - iii. Roof-mounted equipment*—Screen and set back devices mounted on the roof to avoid view from public right-of-way.
- Historic Design Guidelines, Chapter 5, Guidelines for Site Elements

## B. NEW FENCES AND WALLS

- i. Design*—New fences and walls should appear similar to those used historically within the district in terms of their scale, transparency, and character. Design of fence should respond to the design and materials of the house or main structure.
  - ii. Location*—Avoid installing a fence or wall in a location where one did not historically exist, particularly within the front yard. The appropriateness of a front yard fence or wall is dependent on conditions within a specific historic district. New front yard fences or wall should not be introduced within historic districts that have not historically had them.
  - iii. Height*—Limit the height of new fences and walls within the front yard to a maximum of four feet. The appropriateness of a front yard fence is dependent on conditions within a specific historic district. New front yard fences should not be introduced within historic districts that have not historically had them. If a taller fence or wall existed historically, additional height may be considered. The height of a new retaining wall should not exceed the height of the slope it retains.
  - iv. Prohibited materials*—Do not use exposed concrete masonry units (CMU), Keystone or similar interlocking retaining wall systems, concrete block, vinyl fencing, or chain link fencing.
  - v. Appropriate materials*—Construct new fences or walls of materials similar to fence materials historically used in the district. Select materials that are similar in scale, texture, color, and form as those historically used in the district, and that are compatible with the main structure.
- Screening incompatible uses—Review alternative fence heights and materials for appropriateness where residential properties are adjacent to commercial or other potentially incompatible uses.

## 3. Landscape Design

### A. PLANTINGS

- i. Historic Gardens*—Maintain front yard gardens when appropriate within a specific historic district.
- ii. Historic Lawns*—Do not fully remove and replace traditional lawn areas with impervious hardscape. Limit the removal of lawn areas to mulched planting beds or pervious hardscapes in locations where they would historically be found, such as along fences, walkways, or drives. Low-growing plantings should be used in historic lawn areas; invasive or large-scale species should be avoided. Historic lawn areas should never be reduced by more than 50%.
- iii. Native xeric plant materials*—Select native and/or xeric plants that thrive in local conditions and reduce watering usage. See UDC Appendix E: San Antonio Recommended Plant List—All Suited to Xeriscape Planting Methods, for a list of appropriate materials and planting methods. Select plant materials with a similar character, growth habit, and light requirements as those being replaced.
- iv. Plant palettes*—If a varied plant palette is used, incorporate species of taller heights, such informal elements should be restrained to small areas of the front yard or to the rear or side yard so as not to obstruct views of or otherwise distract from the historic structure.
- v. Maintenance*—Maintain existing landscape features. Do not introduce landscape elements that will obscure the historic structure or are located as to retain moisture on walls or foundations (e.g., dense foundation plantings or vines) or as to cause damage.

### 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.

### D. TREES

- i. Preservation*—Preserve and protect from damage existing mature trees and heritage trees. See UDC Section 35-523 (Tree Preservation) for specific requirements.

*ii. New Trees* – Select new trees based on site conditions. Avoid planting new trees in locations that could potentially cause damage to a historic structure or other historic elements. Species selection and planting procedure should be done in accordance with guidance from the City Arborist.

## 5. Sidewalks, Walkways, Driveways, and Curbing

### A. SIDEWALKS AND WALKWAYS

- i. Maintenance*—Repair minor cracking, settling, or jamming along sidewalks to prevent uneven surfaces. Retain and repair historic sidewalk and walkway paving materials—often brick or concrete—in place.
- ii. Replacement materials*—Replace those portions of sidewalks or walkways that are deteriorated beyond repair. Every effort should be made to match existing sidewalk color and material.
- iii. Width and alignment*—Follow the historic alignment, configuration, and width of sidewalks and walkways. Alter the historic width or alignment only where absolutely necessary to accommodate the preservation of a significant tree.
- iv. Stamped concrete*—Preserve stamped street names, business insignias, or other historic elements of sidewalks and walkways when replacement is necessary.
- v. ADA compliance*—Limit removal of historic sidewalk materials to the immediate intersection when ramps are added to address ADA requirements.

### 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.

## 7. Off-Street Parking

### A. LOCATION

- i. Preferred location*—Place parking areas for non-residential and mixed-use structures at the rear of the site, behind primary structures to hide them from the public right-of-way. On corner lots, place parking areas behind the primary structure and set them back as far as possible from the side streets. Parking areas to the side of the primary structure are acceptable when location behind the structure is not feasible. See UDC Section 35-310 for district-specific standards.
- ii. Front*—Do not add off-street parking areas within the front yard setback as to not disrupt the continuity of the streetscape.
- iii. Access*—Design off-street parking areas to be accessed from alleys or secondary streets rather than from principal streets whenever possible.

### B. DESIGN

- i. Screening*—Screen off-street parking areas with a landscape buffer, wall, or ornamental fence two to four feet high—or a combination of these methods. Landscape buffers are preferred due to their ability to absorb carbon dioxide. See UDC Section 35-510 for buffer requirements.
- ii. Materials*—Use permeable parking surfaces when possible to reduce run-off and flooding. See UDC Section 35-526(j) for specific standards.
- iii. Parking structures*—Design new parking structures to be similar in scale, materials, and rhythm of the surrounding historic district when new parking structures are necessary.

## FINDINGS:

### General findings:

- a. The applicant is requesting a Certificate of Appropriateness for approval to demolish the historic structure at 218 Parkview, located within the Mission Historic District, and construct a 1-story, single family residential structure. City of San Antonio staff from Neighborhood and Housing Services is the applicant.
- b. DESIGN REVIEW COMMITTEE – This request was reviewed by the Design Review Committee on May 22, 2019. At that meeting, the committee inspected the condition of the historic structure and voiced concerns regarding the details of the proposed new construction, including foundation heights and window materials.

- c. PUBLIC NOTICE – Demolition notice postcards were mailed to properties within a 200 foot radius of the property, as well as to the registered neighborhood association on May 13, 2019, as required by the Unified Development Code. At this time, Office of Historic Preservation staff has not received concerns from the public regarding the demolition of this structure.
- d. ARCHEOLOGY –

Findings related to request item #1:

- 1a. The historic structure at 218 Parkview was constructed circa 1930 and is contributing to the Mission Historic District. The structure features a front facing gabled roof, wood windows, and a tin roof. The structure currently features a rear addition that doubles its size and a non-original front porch canopy. Despite these modifications, staff finds the house to be a contributing resource within the Mission Historic District due to its construction date and architectural style.
- 1b. The loss of a contributing structure is an irreplaceable loss to the quality and character of San Antonio. Demolition of any contributing buildings should only occur after every attempt has been made, within reason, to successfully reuse the structure. Clear and convincing evidence supporting an unreasonable economic hardship on the applicant if the application for a certificate is disapproved must be presented by the applicant in order for demolition to be considered. The criteria for establishing unreasonable economic hardship are listed in UDC Section 35-614 (b)(3). The applicant 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;*

[The applicant has provided a detailed estimate of rehabilitative costs for the existing structure, which total \$117,597.05. Neither additional bids, nor a third party bid has been no obtained at this time. Per Bexar County Appraisal District records, the improvements value for this structure for 2019 was \$41,740.]

*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;*

[While a structural engineer's report has not been submitted, the applicant has noted that complete foundation repair is needed, as well as roof and sub-floor framing. On a site visit, staff observed that much of the existing structure featured inadequate structural elements.]

*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.*

[The property is not currently listed for sale.]

- 1c. Staff finds that the applicant has not demonstrated an unreasonable economic hardship in accordance with the UDC due to the lack of active marketing of the property; however, staff finds that a reasonable claim for an economic hardship has been made due to the estimated cost for rehabilitation in comparison to the value of the property. Additionally, staff finds that a loss of structural and architectural integrity may have occurred. When an applicant fails to prove unreasonable economic hardship, the applicant may provide to the Historic and Design Review Commission additional information which may show a loss of significance in regards to the subject of the application in order to receive Historic and Design Review Commission recommendation of approval of the demolition. If, based on the evidence presented, the Historic and Design Review Commission finds that the structure or property is no longer historically, culturally, architecturally or archeologically significant, it may make a recommendation for approval of the demolition. In making this determination, the historic and design review commission must find that the owner has provided sufficient evidence to support a finding by the commission that the structure or property has undergone significant and irreversible changes which have caused it

to lose the historic, cultural, architectural or archeological significance, qualities or features which qualified the structure or property for such designation. Additionally, the Historic and Design Review Commission must find that such changes were not caused either directly or indirectly by the owner, and were not due to intentional or negligent destruction or a lack of maintenance rising to the level of a demolition by neglect.

- 1d. In general, staff encourages the rehabilitation, and when necessary, reconstruction of historic structures. Such work is eligible for local tax incentives. The financial benefit of the incentives should be taken into account when weighing the costs of rehabilitation against the costs of demolition with new construction.

Findings related to request item #2:

- 2a. **SETBACKS & ORIENTATION** – According to the Guidelines for New Construction, the front facades of new buildings are to align with front facades of adjacent buildings where a consistent setback has been established along the street frontage. Additionally, the orientation of new construction should be consistent with the historic example found on the block. Per the application documents, the applicant has proposed to orient the structure toward Parkview, which is consistent with the Guidelines. The applicant has not noted a setback from the street at this time. Staff finds that the setback of the proposed new construction should be greater than those of the neighboring historic structures.
- 2b. **ENTRANCES** – According to the Guidelines for New Construction 1.B.i., primary building entrances should be oriented towards the primary street. Per the application documents, the applicant has proposed a primary entrance that faces Parkview. This is consistent with the Guidelines.
- 2c. **SCALE & MASSING** – Parkview features one story historic structures that are simple in massing and feature traditional architectural elements. The Guidelines for New Construction 2.A. notes that the height and scale of new construction should not exceed that of the majority of historic buildings by more than one-story. The proposed massing of one story is appropriate and consistent with the Guidelines. Additionally, the proposed footprint is comparable to those found on Parkview.
- 2d. **FOUNDATION & FLOOR HEIGHTS** – According to the Guidelines for New Construction 2.A.iii., foundation and floor height should be aligned within one (1) foot of neighboring structure's foundation and floor heights. The applicant is responsible for ensuring that a foundation height of at least one (1) foot is installed.
- 2e. **ROOF FORM** – The applicant has proposed for the new construction to feature both a front facing, gabled porch roof and a primary roof form that features a front facing gable and a rear hipped roof. Staff finds that a shed roof on the porch would be more consistent with the historic examples on the block.
- 2f. **ARCHITECTURAL DETAILS** – The applicant has proposed an overall form and massing that are comparable to those found on Parkview and predominantly throughout the Mission Historic District. Staff does find that additional fenestration should be added to the east façade to maintain a traditional window pattern.
- 2g. **MATERIALS** – The applicant has proposed materials that include fiber cement siding, a composition shingle roof, and vinyl windows with wood trim. Staff finds that the fiber cement siding should feature an exposure of four to five inches and a smooth finish. Staff does not find the use of vinyl windows to be appropriate. Windows should 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 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.
- 2h. **MECHANICAL EQUIPMENT** – Per the Guidelines for New Construction 6., all mechanical equipment should be screened from view at the public right of way. The applicant is responsible for screening all mechanical equipment where it cannot be viewed from the public right of way.
- 2i. **DRIVEWAY** – At this time the applicant has not proposed any modifications to the driveway.
- 2j. **SIDEWALK** – The applicant is to maintain and repair if necessary, the front sidewalk leading from the front porch to the sidewalk at the public right of way.



**RECOMMENDATION:**

Staff does not recommend approval of item #1, demolition, based on findings 1a through 1d, as an unreasonable economic hardship has not been fully substantiated per the UDC's requirements; however, staff believes that a loss of significance may exist.

If the HDRC finds that a loss of significance has occurred or finds that the criteria for establishing an unreasonable economic hardship have been met and approved the requested demolition, the staff makes the following recommendations regarding the requested new construction:

Staff recommends approval of item #2, the construction of a 1-story, single family residential structure based on findings 2a through 2j with the following stipulations:

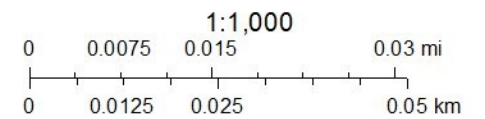
- i. That the proposed setback to greater than those of the neighboring historic structures.
- ii. That a foundation height of at least one (1) foot be incorporated.
- iii. That the proposed siding feature an exposure of four to five inches and a smooth finish.
- iv. That the proposed windows feature 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 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.
- v. That all mechanical equipment be screened from view at the public right of way.
- vi. That the existing front yard sidewalk be retained and repaired as needed.

# City of San Antonio One Stop



June 12, 2019

— User drawn lines







218 Parkview Dr

Oakleaf Ave

Parkview Dr

Theo Pkwy



# PROTOTYPE 1233-18

DEPARTMENT OF PLANNING AND COMMUNITY DEVELOPMENT  
CITY OF SAN ANTONIO, TEXAS

FOR  
CITY OF SAN ANTONIO

1400 S. FLORES STREET  
SAN ANTONIO, TEXAS 78204

## SQUARE FOOT INFORMATION

LIVING SPACE	1233 SQ. FT.
FRONT PORCH	80 SQ. FT.
STEP PORCH & W/H	30 SQ. FT.
TOTAL	1343 SQ. FT.

### SEC. 6-300. UNIVERSAL DESIGN AND CONSTRUCTION REQUIREMENTS.

IF A PERSON RECEIVES FINANCIAL ASSISTANCE FROM CITY, STATE, OR FEDERAL FUNDS ADMINISTERED BY THE CITY OF SAN ANTONIO FOR THE CONSTRUCTION OF NEW SINGLE FAMILY HOMES, DUPLEXES, OR TRIPLEXES, THAT PERSON SHALL CONSTRUCT THE UNITS IN ACCORDANCE WITH ALL OTHER CITY CODES AND THE FOLLOWING REQUIREMENTS.

- (a) AT LEAST ONE ENTRANCE SHALL HAVE A 36-INCH DOOR AND BE ON AN ACCESSIBLE ROUTE. (AN ACCESSIBLE ROUTE IS A CONTINUOUS, UNOBSTRUCTED PATH AT LEAST 36 INCHES WIDE CONNECTING ALL INTERIOR AND EXTERIOR ELEMENTS AND SPACES OF A HOUSE AND SITE INCLUDING CORRIDORS, PARKING, CURB RAMPS, CROSSWALKS AND SIDEWALKS AND SERVED BY A NO-STEP, FLAT ENTRANCE WITH A BEVELED THRESHOLD OF  $\frac{1}{2}$  INCH OR LESS).
- (b) ALL INTERIOR DOOR SHALL BE NO LESS THAN 32 INCHES WIDE, EXCEPT FOR A DOOR THAT PROVIDES ACCESS TO A CLOSET OF FEWER THAN 15 SQUARE FEET IN AREA.
- (c) EACH HALLWAY SHALL HAVE A WIDTH OF AT LEAST 36 INCHES AND SHALL BE LEVEL WITH RAMPED OR BEVELED CHANGES AT EACH DOOR THRESHOLD.
- (d) ALL BATHROOMS SHALL HAVE THE WALLS REINFORCED AROUND THE TOILET FOR POTENTIAL INSTALLATION OF GRAB BARS. WALLS AROUND THE SHOWER AND TUB SHALL BE REINFORCED FOR POTENTIAL INSTALLATION OF GRAB BARS OR A PRE-MANUFACTURED TUB AND SHOWER SURROUND MAY BE USED WHICH INCLUDES GRAB BAR(S) CERTIFIED TO MEET THE ADA REQUIREMENT TO BEAR A 250 POUND LOAD. WALL REINFORCEMENTS SHALL COMPLY WITH THE STANDARDS SET FORTH IN REQUIREMENT 6, REINFORCED WALLS FOR GRAB BARS OF THE FAIR HOUSING ACT DESIGN AND CONSTRUCTION GUIDELINES: FEDERAL REGISTER/VOLUME 56 NO. 44/WEDNESDAY, MARCH 6, 1991/RULES AND REGULATIONS, A COPY OF WHICH IS ATTACHED HERETO AN INCORPORATED HEREIN FOR ALL PURPOSED AS ATTACHMENT I.
- (e) EACH ELECTRICAL PANEL, LIGHT SWITCH OR THERMOSTAT SHALL BE MOUNTED NO HIGHER THAN 48 INCHES ABOVE THE FLOOR. EACH ELECTRICAL PLUG OR OTHER RECEPTACLE SHALL BE AT LEAST 15 INCHES FROM THE FLOOR.
- (f) AN ELECTRICAL PANEL LOCATED OUTSIDE THE DWELLING UNIT MUST BE BETWEEN 18 INCHES AND 42 INCHES ABOVE THE GROUND AND SERVED BY AN ACCESSIBLE ROUTE.
- (g) ALL HARDWARE INSTALLED TO OPEN/CLOSE DOORS AND OPERATE PLUMBING FIXTURES SHALL BE LEVER HANDLES.

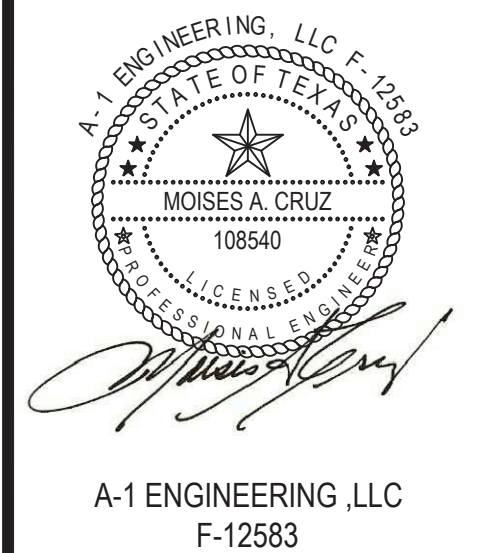
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NEW RESIDENTIAL BUILDING  
PROTOTYPE 1233-18  
CITY OF SAN ANTONIO  
DEPARTMENT OF PLANNING AND COMMUNITY DEVELOPMENT

BY	DATE	ISSUE	REMARKS



A-1 ENGINEERING, LLC  
F-12583

THESE PLANS COMPLY WITH  
THE UNIVERSAL DESIGN CODE  
AND 2018 IRC

SHEET SIZE: 24" x 36"

ISSUE DATE: 11.24.2018

SHEET:

1 OF 14

COVER

THE CONTRACTOR SHALL VERIFY ALL FIELD CONDITIONS WHICH WILL AFFECT THE FABRICATION AND CONSTRUCTING OF COMPONENTS FOR THE NEW CONSTRUCTION PRIOR TO THE START OF CONSTRUCTION. UNLESS OTHERWISE INDICATED, THE DOCUMENTS DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL TAKE ALL MEASURES NECESSARY TO PROTECT THE SAFETY OF THE PUBLIC ALONG WITH THE SAFETY OF THE STRUCTURE DURING CONSTRUCTION. SUCH MEANS SHALL INCLUDE BUT NOT BE LIMITED TO BRACING AND SHORING OF DEAD LOADS, CONSTRUCTION LOADS, AND WIND LOADS. THE CONTRACTOR WILL BE REQUIRED TO CORRECT AT HIS OWN EXPENSE ANY SUBSIDENCE, STRUCTURAL DAMAGE OR OTHER OBJECTIONAL CONDITIONS CAUSED BY HIS OPERATIONS

ISSUED FOR CONSTRUCTION



1) The Building Code Requirements for 2018 International Residential Code is the basic code document used in the preparation of these structural documents. Additional codes and references are as noted. All structural work shall be according to all local codes in addition to this basic code document.

2) The structural engineer-of-record prepared specifications for structural related portions of the project and has included these specifications on the structural drawings. Architectural specifications for non-structural portions of the project are included in the project manual.

3) The Contractor shall familiarize himself with the site. Ignorance of conditions is not a basis for a claim for additional compensation. Layout the building by a licensed surveyor.

4) Drawings of specific details on the drawings indicate the intent of the structural design and in most cases, are typical conditions or very similar to other details. Consider typical conditions not necessarily noted as typical as typical for other conditions.

5) Understanding the requirements shown on the construction documents requires cooperation among all parties involved. Communication is necessary. Immediately report discrepancies for our interpretation. Consider unresolved discrepancies as the more costly interpretation of the discrepancy.

6) Combining all construction documents with the structural documents defines the total project. The structural documents represent the finished structure and do not indicate the means or methods of construction. Verify all field conditions that affect new construction before starting construction. Take all measures necessary to protect the safety of the public along with the safety of the structure during construction. Such measures shall include but not be limited to bracing and shoring of dead loads, construction loads and wind loads. Correct at own expense any subsidence structural damage or other objectionable conditions caused by your operations.

7) Structural design is based on the following:  
Floor live loads: 40 psf  
Floor live loads shall be posted for each floor or part thereof  
Roof live load = 12/20 psf, Tributary area considered, Ponding not considered  
Roof uplift = 5 psf  
Ground Snow Load = 5 psf, Importance Factor (I) = 1.0  
Design Load Combinations (Allowable Stress Design Method)  
D  
D + L  
D + L + (Lr or S or R)  
D + (W or 0.7E) + L + (Lr or S or R)  
0.6D + W  
0.6D + 0.7E

Wind Loads  
ASCE 7 Method 2 - Building and Other Structures <= 60'  
Basic wind speed (3 sec. gust) = 90 mph, Basic wind press = 12 psf.  
V Ulf at Exp. C = 115 mph  
Structure Type = Building  
Structure Classification Category II, Exposure Category B  
Topographic Effects (Kzt) = 1.0, Gust Effect Factor (G) = 0.85, Rigid Structure  
Enclosure Classification: Enclosed  
Importance Factor: 1.0 Category: II

**1.1 General Information**  
The following general information items are applicable to all residential construction projects.  
1) The Contractor shall obtain and display at the job site all permits and permit cards as required by the City.  
2) The Contractor shall use the site and its facilities only for the specified construction. The electrical, sanitary waste, water, and gas system shall be used only for construction purposes and during the construction phase only.  
3) Contractor shall be responsible to determine the need for adequate sanitary facilities and to provide those accommodations on site. Contractor shall be responsible for the safe operation of equipment at all times.  
4) All work shall be done with skilled and licensed craftsman and accomplished with care.  
5) All materials used shall be new (unless otherwise specified in the specifications manual) and of a good quality.  
6) This document is not intended to take the place of or duplicate the adopted codes by the City of San Antonio. It is intended to clearly define the various methods of construction and the specific materials to be used in the rehabilitation (construction) work outlined in the description of the work to be performed.  
7) This document is not a substitute for City of San Antonio building codes, which will typically apply to any substantial new work that is being done on existing structures, and, in some cases, will apply to existing conditions whether addressed in the course of rehabilitation, or not. In all cases, grantees are responsible for determining the applicability of local building codes. In all cases the more rigorous standard will apply.

**1.2 Project Submittals**  
1) Individual project specifications must provide specific scopes of work, locations, measurements, and other specifics, and include the Standard Specifications by reference as performance criteria.  
2) Contractor is responsible for assuring that the bid proposal includes all work and costs necessary to satisfy a building code inspection of the work specified and completed.  
3) Contractor is responsible for completing all such work whether specified or not and without additional cost to the Program.  
Repairs needed to correct basic safety, durability, mechanical and efficiency deficiencies, will take precedence over other repairs. The scope of repairs may be limited by budget.  
4) A thorough inspection of the property may result in a "walk away" if necessary repairs exceed the program's previously established budget.

**1.3 Discovery**  
Discovery of unforeseen conditions or change in scope of work by the Contractor or by the Owner or by the City acting on the Owner's behalf shall be made known to each of the other two in writing as soon as possible. Where additional work is necessary, the Contractor shall submit to the Owner and the City a written description of the work, cost of such work, and the time necessary for such work. Unless it is determined there exists an immediate health and safety danger, no work shall be authorized until agreed upon in writing by the Contractor and the Owner and approved by the City. Compensation for additional work will be negotiated between the Owner (or the City acting on the Owner's behalf) and the Contractor and must be approved in advance by the City.

**1.4 Inspections/ Permit**  
Inspection of work performed must be promptly secured by Contractor, and Contractor shall permit access and inspection required by any governmental agency with jurisdictional interest. Aside from the electrical, plumbing, shower pan, and HVAC inspections and finals, the following are also required:  
1) FOUNDATION  
a. Slab on Grade - The work requires engineering letter to clear foundation. Letter must specifically indicate that drainage meets the minimum requirements of the City's building codes. If drainage not addressed in letter, an inspection for drainage is required.  
b. City inspection of all concrete flat work and concrete porches to ascertain that steel is properly installed.  
2) WALLS  
a. City inspection of framing - City insulation inspection or letter from Insulation Company for proper amount and R-factor to City code.  
b. City code requires that insulation be installed, if sheathing and/or sheetrock is removed from an exterior wall. Inspection is required before sheathing, sheetrock and/or paneling is re-installed.  
3) ROOF  
a. City inspection of partial framing, if any rafters, collars and/or additional bracing are required. New sheathing installation and/or repairs can be inspected at this time.  
Do not leave roof open pending inspection.  
4) SHOWER PAN  
a. City inspection of shower pan is mandatory before covering shower pan.  
5) General - homeowner shall obtain all required building inspections to include:  
City of San Antonio - building (framing, UDS and insulation), HVAC, plumbing, electrical, public works-right of way division and work associated with CPS energy, SAWS and Bear Net Water District.  
Periodic inspections - The work shall be subject to periodic observation by the COSA-HNSD reconstruction program staff in an effort to verify that work conforms to contract requirements. Homebuilder is required to correct all discrepancies identified by homeowner, COSA-HNSD and COSA building inspectors, that are not in accordance with construction documents and any current applicable international, state and city building codes with local amendments and ordinances, common trade standards, manufacturers specifications, or any applicable federal or state of Texas regulations. Presence or absence of COSA-HNSD staff or performance or non-performance of the COSA-HNSD staff shall not relieve the homebuilder of any requirement of the contract.  
Final inspection - Once the reconstruction project is completed, COSA-HNSD reconstruction program staff and an independent home inspector, licensed with the Texas real estate commission (TREC) will perform the final inspection in consultation with the homebuilder and homeowner. COSA-HNSD expects all work specified in the construction documents (plans and specifications), to be complete at the final inspection without punch list. The homebuilder shall address and complete the TREC final inspection findings no later than 7 consecutive calendar days after receiving the TREC final inspection report.  
NOTE: When a final inspection reveals a major deficiency that is a matter of potential health and/ or safety hazard, the TREC inspector will conduct a follow-up inspection and the homebuilder may be subjected to pay for the follow-up inspection fee.

**1.5 Energy efficiency (energy star green build)**  
The homebuilder and associated sub-contractors shall comply with all standards and policies relating to energy efficiency, which are contained in the 2018 International Energy Conservation Code (IECC). As mentioned above, the energy star and green build strategy requirements shall prevail over other construction specifications that may conflict, with the exception of the building jurisdictions and authorities of the building codes.

2.2     Site Preparation General

1)     Site clearing: All trees and undergrowth located only within the perimeter of the house and in areas of driveways, walks, and outbuildings are to be removed.

2.3     Site Preparation For Building Pad  
          Earthwork Below Building (Building Pad Preparation):

Earthwork below the building shall consist of the construction of a building pad of select compacted fill material over moisture conditioned lower strength material. The contractor shall verify the grades adjacent to the foundation and at the site will allow for positive drainage of water away from the foundation. Ensure the finished floor elevation of the foundation is at least 6" above the adjacent soil grade.

Discussion of Pad Preparation: Per IBC 1805.2, Supporting Soils, shallow foundation shall be built on undisturbed soil, compacted fill material or controlled low strength material. Compacted fill material shall be placed in accordance with Section 1804.5. Deviation from this requirement and recommendation may result in excessive settlement, soil consolidation, or soil shrinkage.

Preparation of the Existing Subgrade Soils:

1)     Remove the top 8" of the existing soil to include any roots or organic material.

Preparation of the Select Structural Fill Material (Building Pad):

1)     Over the compacted existing soils:

        Option 1: Place select structural fill (base material) in 8" loose lifts, moisture condition and compact to at least 6" in thickness. Compaction of the fill material shall be completed with a pneumatic tamper.

        Option 2: Over the compact natural soil, bag fill the structural fill (base material) in 8" moisture conditioned and compacted lifts. Fill material shall not be bagged loose. Compact all fill material with a pneumatic tamper. Bag fill option is limited to 2'-0" max thickness. Refer to Option 1 if fill thickness will exceed 2'-0" thick.

1) Steps

2) General Specifications for steps shall be in accordance with City of San Antonio building code current at the time of construction.

3) All steps shall have treads a minimum of ten inches (exclusive of nosing) and maximum rise of seven and three-fourths inches. They shall be a minimum of three feet wide or they shall the full width of the door opening whichever is greater. They shall be a minimum of three feet wide at surface.

4) Tread steps shall be standard size with no defects. They shall be set level with concrete bases under each corner. When set, the rise from the top step to the wearing surface shall be the same as the rise for the steps or be in the wearing surface plane.

5) Hollow poured steps shall be formed and poured over 8 inch x 16-inch footer. Wall thickness shall be a minimum of 4 inches. The treads shall be broom finished. Steps shall have 3/8 inch steel rods 12 inches on center in both directions.

**3.2 Slab on grade (Foundation)**

1) General Specifications for concrete foundations shall be in accordance with City of San Antonio building code current at the time of construction.

2) Grades shall be established from existing concrete or masonry structures, when feasible. Bottom of sill shall maintain a minimum of 6" above existing grade at lowest point.

3) Leveling cannot be exact when any of the following conditions exist:

a) The framing is racked, out of plumb

b) The sill/floor joists are warped and crowned

c) The structure is multi-addition at multi-levels

d) The structure is/was a porch, slanted for drainage

4) All concrete slabs shall be poured monolithically and in accordance with City of San Antonio building code current at the time of construction, unless otherwise specified.

5) Top of slab poured on existing grade shall have ground slope away from wall. Ground slope shall provide for drainage of water away from the house. All slabs shall be termite treated.

6) Before concrete is poured, a slab inspection must be requested from the City's Building Inspection Department and then pass inspection. All slabs and driveways must meet City codes and pass City inspection prior pouring concrete.

7) Soil conditions will determine the length of time the concrete footings shall be allowed to set. When the bearing soil is dry, the concrete footing must set three (3) days before the weight of the house is placed on the foundation. When wet conditions exist, or occur, the soil shall be allowed to dry to accept the bearing load.

8) Entry ramps shall be poured at 1 1/2 feet slope with 1/4" x 1/4" tooled grooves at 6' O.C.

9) Footings shall comply with the City's Building Code requirements for size and reinforcement. When the surrounding soil is not sufficiently strong enough to hold the concrete until final set, forms shall be constructed instead.

**3.3 Concrete porches**

1) All porches shall be poured monolithically over select granular fill cushion.

2) Exterior beams must be the same as for the house.

3) Pour 1 inch below doorsill or as noted and slope 1/8 inch per foot to provide drain.

**3.4 Concrete Walkways**

1) Walks shall be poured monolithically to expansion joints. Reinforcing shall be 6" x 6" number 10 welded wire fabric.

2) Width shall be a minimum of 3 feet wide with a broom finish. Control joints shall be spaced the width of the walk. Expansion joints shall be spaced at all radius points, elevation changes, porches, and at back of curb. Expansion joint material shall be 1/2 inch redwood or other material that complies with the building code.

3) Slab thickness shall be a minimum of 4 inches.

4) Concrete will be deposited when temperature is at 40° F, or above and rising.

**3.5 Driveways**

1) Driveways shall be monolithic poured slab with a broom finish and a minimum thickness of 4 inches.

2) Reinforcing shall be 6" x 6" number 10 welded wire fabric.

3) The slab will be poured on 8 inch of crushed limestone base (fill).

4) Expansion joints will be spaced a maximum of 10 linear feet. Expansion joints will be used at all radius points, sidewalk intersections and house slab tie-ins.

5) Expansion joint materials shall be 1/2 inch redwood or other material that complies with the building code.

6) Concrete will be deposited when temperature is at 40° F, or above and rising.

**3.6 Hazardous/Substandard Conditions**

1) Hazardous conditions must include any condition that threatens the health and or safety of the occupants. Substandard conditions include any condition that threatens, defects or will lead to the lack of functional viability of a single feature of a home. These conditions must include but not be limited to:

a) Broken, fire damaged or otherwise compromised beams, joist or sills.

b) Water draining and/or pooling under foundation area.

c) In areas that have more than two annual days with temperatures below 30 degrees, a lack of underpinning, skirting, or other insulating feature to exposed plumbing.

d) Severe slab cracks that create or threaten structural or other systems such as plumbing.

2) Any other condition not mentioned that meets the definition of a hazardous or substandard condition should be repaired and/or rehabilitated to meet industry standards.

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Section 4 – Framing

- 4.1 General Specifications
- 1) General specifications shall be in accordance with City of San Antonio building code current at the time of construction.
- 4.2 Hazardous/Substandard Conditions
- 1) Hazardous conditions must include any condition that threatens the health and or safety of the occupants. Substandard conditions include any condition that threatens, defeats or will lead to the lack of functional viability of a single feature of a home. These conditions must include but not be limited to:
- a) Termite or other wood destroying insect damage to structural members;
- b) Water damage or dry rot to structural members;
- c) Broken, fire damaged or otherwise compromised beams, joist or sills;
- d) Unsupported beams, or sills or joints in same that have no support; inadequate support;
- e) Water draining and/or pooling under foundation areas;
- f) In areas that have more than two annual days with temperatures below 30 degrees, a lack of underpinning, skirting, or other insulating feature to exposed plumbing.
- g) Existing skirting or underpinning that is cracked, damaged or not properly vented.
- h) Ground contact of untreated wooden structure;
- i) Water incursion through wall structure resulting in drywall damage;
- j) Holes, cracks or gaps in interior or exterior wall structures;
- k) Exposed nails, popped seams or other defects not representative of normal wear and tear;
- l) Cracked, peeling, or chipped paint. Exposed unpainted or untreated wood, drywall or other wall surface;
- 2) Any other condition not mentioned that meets the definition of a hazardous or substandard condition should be repaired and/or rehabilitated to meet industry standards.

Wood Framing

- 1) All lumber shall be PS 20, new and undamaged graded lumber in accordance with NFPA Grading Rules. Lumber stresses specified do not include repetitive member use. Framing members shall be S4S unless noted otherwise. All wood bearing on concrete or masonry shall be wolmanized.
- a) Rough framing (2x4 - 2x12) shall consist of #2 southern yellow pine (SYP) with 19 percent maximum moisture content having no less than an allowable bending stress (Fb) of 1,500 psi (2x4), 1,250 psi (2x6), 1,200 psi (2x8), 1,050 psi (2x10) and 975 psi (2x12), a Modulus of Elasticity of 1,600,000 psi, and an allowable shear stress of 90 psi.
- g) Framing designated as VL (Vorse-lam), or ML (Micro-lam) or Gang-Lam S beams on the plans shall consist of solid plywood beams manufactured by the Boise-Cascade Trus-Joist Corporation or Louisiana Pacific and shall have no less than an allowable bending stress (Fb) of 2,800 psi, a Modulus of Elasticity of 1,800,000 psi, and an allowable shear stress of 185 psi (or larger), unless indicated otherwise.
- 2) Nails, spikes, and staples shall be galvanized for exterior locations, high humidity locations, and treated wood; plain finish for other interior locations; size and type to suit application. Typical nailing shall be with common wire nails. Exterior gypsum sheathing shall be nailed with #11 gage, 1 3/4" long, 7/16" head, diamond-point, galvanized cooler nails, or cadmium plated W-bugle head screws 1 1/4" long. Staples shall not be used instead of required nails.

Bolts, nuts, washers, lags and screws shall be medium carbon steel; size and type to suit application; galvanized for exterior locations, high humidity locations, and treated wood; plain finish for other interior locations.

Floor Truss Hangers shall be: Simpson Strong-Tie light double shear joist hangers Model LUS410, or equal having an allowable load capacity of at least 1875#.

Plywood sheathing clips shall be Simpson Strong-Tie 18 gage galvanized steel x plywood thickness.

Unless otherwise indicated, use type LUS joist hangers as manufactured by the Simpson Company for flush type joist connections to supporting beams. Column cap and base connections shall be as manufactured by The Simpson Company, type as recommended by the manufacturer for the size of joist or column and beams being connected.

- 3) Submit evidence of compliance with specified requirements showing design values for selected species and grades. Indicate sizes and spacing of prefabricated plywood web joists, loads and joist cambers, framed openings, bearing and anchor details, bridging and bracing.
- 4) Store framing material a minimum of 12" above the ground in a manner to allow for proper drainage, ventilation and protection from the weather.
- 5) The "Manual of House Framing" by National Lumber Manufacturer's Association shall set the minimum standard of workmanship. Install main framing miscellaneous blocking, furring, nailing strips, framing, and sheathing. Install members true, plumb, and level, install shimming where required to set framing in proper alignment. Secure framing in place. Space miscellaneous framing and furring no more than 24 inches on center. Construct members of continuous pieces of longest possible lengths. Framing member connections shall be nailed with no less than 2-16d nails, or as noted. Provide rough hardware as indicated. Comply with Fair Housing Act provisions. Install fire and draftstops according to code requirements.
- Make proper provisions for the Work of other trades. Refer to the Drawings for wood blocking and plywood required as back-up and framed openings for all other trades and their accessories. All bathrooms on all handicap accessible levels shall receive solid 2x6 wall blocking for grab bars at toilets and tub/shower surrounds.
- 6) At headers built-up with multiple SYP #1/#2 2x members, nail together with at least 16d nails at 16" on center along each edge and with at least 1-16d nail per 6" nominal depth of header. Provide plywood spacers between 2x members to widen header to the width of the stud wall.
- 7) Framing members shall be installed within 1/4" from true position. Square end cuts shall be within 1/16" per foot of depth and width. End surfaces shall be cut to provide contact over substantially the entire surface. Lengths of framing members shall be 1/16" + up to 20 feet in length, and 1/16" per 20 feet of specified length for members over 20 feet in length.
- 8) Maintain sheathing surface flatness of maximum 1/8 inch in 10 feet or more.
- 9) Install building paper on all exterior walls. Install horizontally and weather lap a minimum of 2" for horizontal joints and 6" for vertical joints. Stagger vertically. Staple securely with roof tin caps.
- 10) Coordinate structural engineer's review, and the building official inspection. The Building Official shall inspect the primary structural framing. The Building Official may accept a review by a licensed professional engineer in place of the Building Official conducting his inspection. (IBC Chapter 109.3.4)

TABLE #1

NAILING SCHEDULE		
CONNECTION		NAILING
JOIST OR TRUSS BEARING ON SILL OR GIRDER, TOENAIL	(3) 8d	
BRIDGING TO JOIST, TOENAIL EACH END	(2) 8d	
SOLE PLATE TO JOIST OR BLOCKING, FACE NAIL		16d AT 16"o.c.
TOP PLATE TO STUD, END NAIL TO EACH STUD		(2) 16d
STUD TO SOLE PLATE	(4) 8d TOENAIL OR (2) 16d END NAIL	
DOUBLE STUDS, FACE NAIL		16d AT 24"o.c.
DOUBLE TOP PLATES, FACE NAIL		16d AT 16"o.c.
TOP PLATES, LAPS AND INTERSECTIONS, FACE NAIL		2 - 16d
CONTINUOUS HEADER, TWO PIECES		16d AT 16"o.c. ALONG EACH EDGE
CEILING JOISTS TO PLATE, TOENAIL	(3) 8d	
CONTINUOUS HEADER TO STUD, TOENAIL	(4) 8d	
CEILING JOISTS, LAPS OVER PARTITIONS, FACE NAIL	(3) 16d	
CEILING JOISTS TO PARALLEL RAFTERS, FACE NAIL	(3) 16d	
RAFTER OR TRUSS TO PLATE, TOE NAIL	(3) 8d	
BUILT-UP CORNER STUDS		16d AT 24"o.c.

- NOTES:
1. MINIMUM NAILING SPECIFIED HEREIN SHALL BE PROVIDED UNLESS OTHERWISE NOTED ON DETAILS OR STRUCTURAL NOTES.
2. COMMON OR BOX NAILS MAY BE USED. 16d NAILS MAY BE EITHER COMMON OR SINKER.

TABLE #2

STRUCTURAL SHEATHING / DECKING						
STRUCTURAL SYSTEM	SHEATHING TYPE	EXPOSURE CATEGORY	THICKNESS (MIN.)	SPAN RATING	NAILING PATTERN	
					EDGE SUPPORT	INTERIOR SUPPORT
FLOOR DECKING	APA RATED STURD I-FLOOR	EXP. 1	3/4" / 1 1/8"	24 oc / 48 oc	10d @ 6" O.C.	10d @ 12" O.C.
WALL SHEATHING	APA RATED SHEATHING	EXP. 1	7/16"	24/16	10d @ 6" O.C.	10d @ 12" O.C.
ROOF DECKING	APA RATED SHEATHING	EXP. 1	7/16"	24/16	8d @ 6" O.C.	8d @ 12" O.C.

NOTES:

1. STRUCTURAL PANELS SHALL BE LABELED / STAMPED WITH APA APPROVED MARKINGS AND LABELS SHOWING CONFORMANCE WITH SPECIFICATIONS.
2. ALL PANELS SHALL BE LAID OUT / ORIENTATED TO BE PERPENDICULAR TO SUPPORTS.
3. STAPLES MAY NOT BE SUBSTITUTED FOR NAILS.
4. BLOCK EDGES OF ALL WALL, ROOF, AND FLOOR SHEATHING PANELS.

TABLE #3

ROOF FRAMING SCHEDULE		
MEMBER	SIZE	GRADE
COMMON RAFTER	2 X 6 AT 2'-0" O.C.	SYP #2
HIP RIDGE	2 X 10	SYP #2
GABLE RIDGE	2 X 10	SYP #2
OUTRIGGERS	2 X 4 AT 2'-0" O.C.	SYP #2

TABLE #4

HEADER SCHEDULE			
SPAN	HEADER	SPECIES	JACK STUDS
3'-0" - 5'-0"	(2) 2 X 6	SYP #2	(1) SPF #2
6'-0" - 8'-0"	(2) 2 X 8	SYP #2	(1) SPF #2
9'-0" - 11'-0"	(2) 2 X 12	SYP #2	(1) SPF #2

TABLE #5

WALL FRAMING SCHEDULE		
1st FLOOR WALLS	2 X 4 AT 2'-0" O.C.	SPF #2
1st FLOOR BOTTOM PLATE	2 X 4 TREATED	SPF #2
1st FLOOR TOP PLATE	(2) 2 X 4	SPF #2
2nd FLOOR WALLS	2 X 4 AT 2'-0" O.C.	SPF #2
2nd FLOOR BOTTOM PLATE	2 X 4	SPF #2
2nd FLOOR TOP PLATE	(2) 2 X 4	SPF #2

TABLE #6

FLOOR JOIST SCHEDULE		
2nd FLOOR	2 X 12 AT 2'-0" O.C.	SPF #2

Section 5 – Roofing

- 5.1 General specifications
- 1) General specifications shall meet City of San Antonio building code current at the time of construction.
- 2) There shall not be any voids or obstructions in the sheathing, and knotholes shall be covered with sheet metal.
- 3) Sufficient bracing shall be installed to strengthen the roof and to bring the framing to code.
- 4) All roofing shall be done in accordance with the manufacturer's recommendations, and installed in such a manner to prevent any leaks.
- 5) Galvanized or aluminum attic vents shall be installed, minimum of two. One square foot of ventilation should be provided for every 300 square feet of attic area.
- 6) Eaves shall have galvanized drip edge.
- 5.2 Composition roofing
- 1) Install with simplex felt nails #30 felt paper-overlapping rows 4 inches.
- 2) Install minimum 220-pound equivalent fiberglass seal lab Class A fiberglass composition shingles (25 year warranty) according to manufacturer's directions.
- 3) Architectural shingles (25 year warranty) may be used in lieu of composition shingles.
- 5.3 New built-up roof
- 1) shall be installed as follows:
- a. Nail one (1) ply of 30# felt; mop two (2) plys of 15# felt.
- b. Apply hot mopped lar and gravel, properly spaced to create a uniform and durable roof.
- c. Aggregate shall be 1/4" crushed limestone.
- 5.4 Stoop roofs
- 1) To be constructed of such material as to conform to existing roof, and shall have all necessary structural members required to form a structurally sound unit.
- 5.5 Flashing
- 1) All flashing and valley material shall be 26 gauge galvanized iron.
- 2) Valley tin shall be a minimum of 20" wide, 10" each side centered.
- 3) Shingles shall be laced over flashing.
- 4) All flashing shall be installed only after all felt paper is in place.
- 5) All pipes projecting through the roof shall have metal stack flashing or neoprene rings.

Section 6 – Doors & Glazing

- 6.1 Windows
- 1) For historic properties, the city recommends identifying, retaining, and preserving windows--and their functional and decorative features--that are important in defining the overall historic character of the building. Such features can include frames, sills, heads, hoodmolds, paneled or decorated jambs and moldings, and interior and exterior shutters and blinds. For more detailed information see: [http://www.nps.gov/hps/ppts/standguide/rehab/rehab\\_windows.htm](http://www.nps.gov/hps/ppts/standguide/rehab/rehab_windows.htm)
- 2) General specifications shall be as follows:
- a) 3/4" insulated glass
- b) All interior and exterior gaps, joints, or mating surfaces shall be caulked to prevent air infiltration. Windows shall have air infiltration rates not exceeding 0.37 cubic feet per minute per square foot of operable sash crack.
- 3) Windows shall be installed plumb and level to ensure proper operation with no "sticking".
- 4) All windows shall be low "E" glass.
- 6.2 Doors
- 1) For historic properties, the city recommends identifying, retaining, and preserving doors--and their functional and decorative features--that are important in defining the overall historic character of the building. Such features can include frames, sills, heads, hoodmolds, paneled or decorated jambs and moldings, and interior and exterior shutters and blinds. For more detailed information see: [http://www.nps.gov/hps/ppts/standguide/rehab/rehab\\_entrances.htm](http://www.nps.gov/hps/ppts/standguide/rehab/rehab_entrances.htm)
- 2) General specifications for doors shall be as follows:
- a) All doors shall fit and work properly.
- b) All exterior doors shall be one and three-quarter inch, solid core, units. They shall be drilled for a lockset and deadbolt. Exterior doors shall have one and one-half pair of door butts, weather-strip threshold (made of rolled vinyl with aluminum channel backing). Doors shall have air infiltration rates not exceeding 0.5 cubic feet per minute per square foot of door area.
- c) All interior doors shall be hollow core six panel mahogany or pressboard with a minimum thickness of one and three-eighths inches and shall be bored for a lockset.
- d) Pre-hung units shall have a frame made of three-quarter inch material with a properly plowed jamb to receive one and three-quarter inch or one and three-eighth inch doors. A pre-hung unit shall be equipped with the door panel, jamb, and all trim. Pre-hung doors shall be installed plumb and level. Door panel shall not be trimmed or manipulated in any fashion and shall swing free and easy.
- e) All doors which come into contact with interior wall surfaces when opened are to have base board mounted, rubber tipped door stops installed.

6.3 Mirrors

- 1) Mirrors located above lavatories or countertops shall be installed with the bottom edge of the reflecting surface 40 inches (1015 mm) maximum above the finish floor or ground.
- 2) Mirror Specifications:
- a) ASTM C 1036, Type 1, Class 3, Quality Q3; with pyrolytic coating.
- b) Nominal Glass Thickness: 1/4 inch (6 mm).
- c) Performance Characteristics: coated surface to subject side:
- d) Visible Light Transmittance: 12 percent.
- e) Visible Light Reflectance: 60 percent.

- 3) Mirror installation:
- a) Coordinate with other trades to ensure that surfaces to receive mirrors are not painted, coated, or otherwise treated in a manner detrimental to mirror adhesion.
- b) Ensure walls are rigid, plumb, smooth, clean, dry, and free of foreign materials.
- c) Apply one coat moisture-resistant paint to back of mirror and allow to completely dry.
- d) Set mirrors with mechanical fasteners and adhesive applied in accordance with manufacturer's instructions.
- e) Apply adhesive to mirror back with 25 percent coverage. Set mirror in place and hold firmly until adhesive sets.
- f) Support bottom of mirror with L-shaped bar mechanically fastened to wall blocking.
- g) Provide 2 clips minimum at top and each side of mirror. Mirrors greater than 6 square feet shall have 3 clips minimum at top.
- h) Place plumb and level without visible distorton.

Section 7 – Interior Finishes

7.1 Walls & Ceilings

- General specifications for ceiling and walls shall be as follows:
- 1) Gypsum board must conform to "ASTM C1396 / C1396M - 11 Standard Specification for Gypsum Board". It shall be tapered joint gypsum board with a thickness of one-half inch on walls and 5/8" grade "X" on ceilings.
- 2) Moisture resistant gypsum board must conform to ASTM D-3273 and ASTM C-473. Standard "green board" does not meet these requirements and is not acceptable.
- 3) Paneling shall be smooth without blemish, one-fourth inch thick, and finished according to individual specifications.
- 4) Perforated tape mix installation shall comply with the recommendations of the manufacturer. Temperature shall be 55 degrees Fahrenheit or above in the area it is being applied until the cement is completely dry.

7.2 Gypsum board for ceiling

- 1) Fasteners shall be spaced in accordance with City of San Antonio building code current at the time of construction.
- 2) Nails shall be driven with their heads perpendicular to the face of the board and sealed below the surface of the board without breaking the paper (screws shall comply with the same above).
- 3) The board shall be cut to fit with tapered sides butting and ends butting. Where possible joints shall be staggered. The board shall be a minimum of one-half inch off finished floor.

7.3 Gypsum board for wall

- 1) Fasteners shall be spaced in accordance with City of San Antonio building code current at the time of construction. Nails shall be driven with their shanks perpendicular to the face of the board and sealed below the surface of the board without breaking the paper.
- 2) The board shall be cut to fit with tapered edges butting and ends butting. Where possible joints shall be staggered. The board shall be a minimum of one-half inch off finished floor.

7.4 Tape and float

- 1) Over joints, the tape shall be embedded in cement and covered with a thin layer of cement. A second and third coat shall be applied with each coat feathered and extended beyond the previous coat by two inches. The finish coat shall be sanded lightly and any imperfections filled prior to any painting or decorating.
- 2) Cover nails with three (3) applications of cement allowing time to dry between each coat. The final coat shall be sanded lightly before application of paint or other decoration.
- 3) Inside corners shall be reinforced with tape embedded in cement, finished as specified "over joints".
- 4) Outside corners shall be protected by wood molding, metal molding, or metal corner reinforcement. Metal corner reinforcement shall be finished as specified "over joints" with two coats of cement.
- 5) Texturing ceilings and walls shall be medium orange peel splatter.

Section 8 – Millwork and Trim

8.1

- General specifications
- 1) For existing millwork and trim install material that is a replacement in kind--or a compatible substitute material.
- 2) For historic properties, the City recommends identifying, retaining, and preserving interior features and finishes that are important in defining the overall historic character of the building, including columns, cornices, baseboards, fireplaces and mantels, paneling, light fixtures, hardware, and flooring; and wallpaper, plaster, paint, and finishes such as stenciling, marbling, graining, and other decorative materials that accent interior features and provide color, texture, and patterning to walls, floors, and ceilings. For more detailed information see: [http://www.nps.gov/hps/ppts/standguide/rehab/rehab\\_spacesandfinish.htm](http://www.nps.gov/hps/ppts/standguide/rehab/rehab_spacesandfinish.htm)
- 3) New trim materials shall be of select grade of white pine or equivalent. Cabinet plywood shall be of A grade or equivalent (paint or stain grade as per specifications. Pine or fir plywood not permitted for cabinets. MDF is not permitted in millwork.
- 4) Finger jointed material shall not be allowed on surfaces to be varnished but are allowed on surfaces to be painted.
- 5) Finish work shall be finished smooth, free from machine or tool marks, abrasions, raised grain, etc., on exposed surfaces, and shall be machine sanded and hand dressed to a smooth finish.
- 6) All milled members and trim shall be milled or coped at corners.
- 7) All measurements and dimensions shall be verified by the Contractor at the job.
- 8) Nails shall be countersunk.

8.2 Cabinets (Kitchen)

- 1) Cabinets shall be set level.
- 2) Cabinet face frames shall be made of 1/2 inch grade birch plywood. End panels and bottoms shall be 1/2" plywood. Cabinet backs and tops shall be 3/8" medium density particleboard with filled bul nosed edge.
- 3) Doors shall be 1/2" birch plywood, "A" grade, trimmed with lip mold.
- 4) Drawer fronts shall be the same as doors. Sides, panels, and bottoms of 3/8" plywood.
- 5) All joints shall have countersunk nailing and glue.

8.3 Countertops

Countertops shall be laminated counter top with matching backplash, approved by the Grants Management and Administration Department.

8.4 Interior trim

- 1) Door trim shall be H-trim with mitered corners and installed with a 1/8" inch reveal, or specified trim.
- 2) Window stools shall have a mitered, bull nosed front end. Window trim may also be gypsum board.
- 3) Ceiling trim, where needed, shall be 1 1/2" core mold with mitered joints and corners.
- 4) Baseboards shall be a base mold of at least 2 1/2".
- 5) Shoe mold shall be required in all rooms without carpet.

8.5 Shelves

- 1) Kitchen shelves shall be a minimum 11 1/2" deep by 1" lumber. Bedroom closet, bathroom closet, and garage shelves shall be a minimum of 12" deep by 1" thick lumber or other dimension as specified on the plans. They shall be adequately supported with wall brackets.

Section 9 – Flooring

9.1 General specifications

- 1) General specifications shall meet Texas Minimum Construction Standards, and City of San Antonio building code current at the time of construction.
- 2) All sub-floors should be solid and continuous, without liberal movement or bounce, free from rot and deterioration.
- 3) All flooring must be free from tripping hazards with a minimum of seams spaced at logical locations such as doorways and matched to the existing floor.
- 4) All flooring must be sealed and/or tight at the edges.
- 5) If concrete slab on grade is used, plywood underlayment is not required.
- 6) Underlayment for pier and beam construction:
- a) Bathroom underlayment must be 5/8" CDX exterior grade plywood over a 30 pound felt paper vapor barrier.
- b) All other floors must have 5/8" plywood installed with vapor barrier as in bathroom, floors must be smooth and even throughout structures.
- c) If hardwood flooring is to be installed, sub-flooring must be 5/8" CDX plywood.
- 7) Vinyl composition tile (VCT) must be 12"x12" square and 1/8" thickness homogenous type as approved by the Contract Administrator.
- 8) Sheet vinyl must be 12 mm. Floors at bath and kitchen must have waterproofed cover.
- 9) Carpeting must be durable quality nylon fabric with jute backing and meet or exceed FHA specifications. Must be a 24-28 oz. face weight carpet with continuous nylon filament.
- 10) Installation must be done with manufacturer's suggested adhesive.
- 11) The VCT must be fitted with no gaps showing at walls, door openings, or trim. Full cover must be achieved. At doors or other areas of joining, metal strips must be installed to protect floor covering.
- 12) Shoe mold is required.

Section 10 – Exterior Treatment

10.1 Brick

- 1) For existing masonry install masonry that is a replacement in kind--or a compatible substitute material.
- 2) For historic properties, the City recommends identifying, retaining, and preserving masonry features that are important in defining the overall historic character of the building such as walls, brackets, railings, cornices, window architraves, door pediments, steps, and columns; and details such as tooling and bonding patterns, coatings, and color.
- For more detailed information see: [http://www.nps.gov/hps/ppts/standguide/rehab/rehab\\_masonry.htm](http://www.nps.gov/hps/ppts/standguide/rehab/rehab_masonry.htm)
- 3) New building face brick must be of gas fired solid clay shale units. Structural clay tile, concrete masonry units, and stone must comply with FHA specifications, Section 703.
- 4) Do not install cracked, broken, or chipped masonry units.
- 5) Lay masonry units plumb, true to line and with level courses accurately spaced within allowable tolerances.
- 6) Adjust masonry units into final position while mortar is soft and plastic.
- 7) Lay masonry units with full mortar coverage on horizontal and vertical joints.
- 8) Provide weep holes in head joints in first course and immediately above all flashing. Maximum spacing 33 inches.
- 9) Attach masonry veneer to backing with metal veneer ties. Use at least one tie per 3.25 square feet of veneer.
- 10) Dry brush masonry surface after each day's work. Scrub with acceptable cleaning agent.

10.2 Exterior Trim

- 1) For existing exterior trim install material that is a replacement in kind--or a compatible substitute material.
- For historic properties, the City recommends identifying, retaining, and preserving wood features that are important in defining the overall historic character of the building such as siding, cornices, brackets, window architraves, and doorway pediments; and their paints, finishes, and colors. For more detailed information see: [http://www.nps.gov/hps/ppts/standguide/rehab/rehab\\_wood.htm](http://www.nps.gov/hps/ppts/standguide/rehab/rehab_wood.htm)
- 2) New fascia shall be Hardi Plank. Fascia shall be installed on wood band nailed to rafter tails and shall be 1/2 inch wider than the cut of the rafter and soffit.
- 3) New soffit shall be Hardi Vented soffit installed to rafter tails and shall be 1/2 inch wider than the cut of the rafter and soffit.
- 4) New posts and handrails:
- a) Columns shall be a turned post column and be pressure treated lumber or fiberglass equivalent designed for exterior use.
- b) Handrails shall be pressure treated lumber.
- 5) New exterior door and window trim shall be Hardi Trim. Gaps shall be only large enough so that caulking will be sufficient to fill.
- 6) All fasteners and fittings shall be non-corrosive materials.

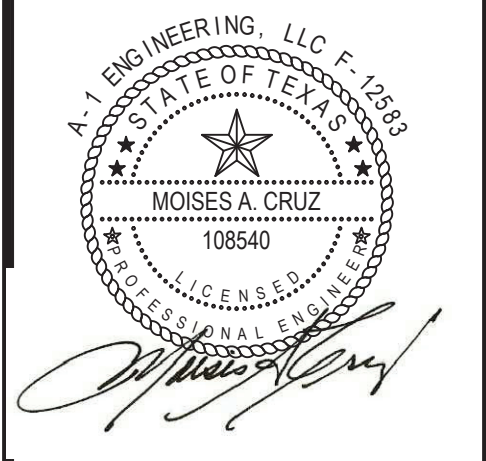
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ISSUED FOR CONSTRUCTION



NEW RESIDENTIAL BUILDING  
PROTOTYPE 1233-18  
CITY OF SAN ANTONIO  
DEPARTMENT OF PLANNING AND COMMUNITY DEVELOPMENT

BY									
REMARKS									
DATE									
ISSUE									



A-1 ENGINEERING, LLC  
F-12583

THESE PLANS COMPLY WITH  
THE UNIVERSAL DESIGN CODE  
AND 2018 IRC

SHEET SIZE: 24" x 36"

ISSUE DATE: 11.24.2018

SHEET:

3 OF 14

NOTES



- 2) All water heaters will have at least thirty gallons storage capacity. Will be able to supply a continuous flow of hot water at of at least 102 degrees F, and will be properly installed with gas and/or electric shut-off valves as well as cold water supply shut-off valves.
- 3) Each unit shall be equipped with a functioning pressure release valve (TPL) which must release pressure at 150 P.S.I. and/or 210 degrees F. Water released must be exhausted to the exterior of the building.
- 4) Each water heater must be enclosed (except where otherwise permitted by the SBCCI) in a sealed closet designed for this purpose with combustion air drawn from outside the living area. Any gas water heater installed in garage areas will be located at least 18" above the floor in order to prevent combustion of fuel vapors.
- 5) Energy Efficiency Requirements
  - a) Electric water heaters must meet the minimum energy efficiency requirements outlined in the following chart when acquiring residential electric resistance water heaters of the types and sizes described below.

Storage Volume	Energy Factor	Annual Energy Use
55 gallons or less	0.93 or greater	4.721 kWh or less
56 gallons or more	0.92 or greater	4.773 kWh or less
  - b) Where specified, residential electric resistance water heaters that meet or exceed the energy efficiency requirements outlined above are required.
  - c) Water heater pipe insulation must have a minimum thickness of 3/4". All hot and cold vertical lengths of pipe shall be insulated, plus the initial length of horizontal hot and cold water pipe until wall penetration.

a) Any other condition not mentioned which means the definition of a hazardous or substandard condition should be repaired and/or rehabilitated to meet industry standards or will lead to the lack of functional viability of a single feature of a home. These conditions must include but not be limited to:

- a) Equipment or wiring which is missing, broken, disconnected, loosely connected, burnt, unsupported, corroded, cracked, split, has evidence of overheating, physical damage, or misuse;
- b) Device or equipment is dirty, full of debris, infested etc.;
- c) Frayed wiring is present;
- d) Unshielded, knob and tube wiring is present;
- e) Circuit breaker, switch, receptacle, fixed equipment, wiring or cable is not compatible with the phase, voltage, amperage, or other characteristics of the electricity use;
- f) Intermittent operation of fixed equipment, switches, outlets or other devices;
- g) Flexible cord is used as a permanent wiring method;
- h) Interior wiring is surface mounted and not conduit. This excludes crawl spaces and other allowable installations where access to wiring is limited;
- i) Exterior wiring which is exposed to damp conditions, sunlight or potential damage is not conduit;
- j) Bathroom receptacle, kitchen receptacle located within six feet of a water source garage receptacle or other outdoor receptacle are not protected by a ground fault interrupting device;
- k) Polarity is reversed in connections or receptacles;
- l) Branch circuits, feeder lines, cable size, device rating, circuit breakers, sub-panels or service panels are inadequate for the load as calculated by the current NEC standard Section 110-14, CBO sections 4100-4500 or the SBCCI sections;
- m) Unlabeled circuit breakers;
- n) Circuits that have been expanded past their original design limits;
- o) Missing or dysfunctional overhead or other switch operated lighting in each interior room;
- p) Missing or dysfunctional lighting at each exterior door operated by an interior switch that is within reach of the door;

2) Any other condition not mentioned which meets the definition of a hazardous or substandard condition should be repaired and/or rehabilitated to meet industry standards

defects or will lead to the lack of functionality of a single feature of a home. These conditions must include but not be limited to:

- a) The lack of a steady and dependable source of heat which will supply heat to all living areas either directly or indirectly and be able to maintain this heat at least 70 degrees F. in all conditions;
- b) Open flame gas or propane heaters which exhaust fumes to the interior of the living area and are not equipped with an Oxygen Depletion System (ODS). If an open flame type heater equipped with ODS is used a carbon monoxide detector must be installed;
  - i. Leaking, damaged or inadequate heat exchange units or venting systems which create the danger of CO build up;
  - ii. Leaking, corroded or damaged gas supply lines;
  - iii. Texas-T type shut valves;
  - iv. The lack of a functioning supply shut off valve for each gas or propane device;
  - v. The lack of a functional pilot or electric start for each gas or propane device;
  - vi. Ambient heat which is not supplied from an adjoining room;
  - vii. Free standing electric heaters used for sole source of heat.

- 2) All entrance locksets must be keyed alike with deadbolts.
- 3) Schlage Acent Universal Residential Keyed Entry Door Lever shall be installed on all exterior entry doors. Any alternate brands must be approved by the Contract Administrator.
- 4) Schlage Residential Single-Cylinder Deadbolts (Security Grade 1) shall be installed on all exterior entry doors. Any alternate brands must be approved by the Contract Administrator.
- 5) Keyed Entry sets and Deadbolt locks for new construction are to be finished in satin nickel/chrome unless otherwise specified.
- 6) Keyed Entry sets and Deadbolt locks for rehabilitation projects are to match existing hardware as close as possible.
- 7) Interior Doors on new construction - All bathroom and bedroom doors shall have Schlage Privacy Acent Push-Button Lock Residential Privacy Door Lever.
- 8) All other interior doors on new construction shall have Schlage Acent Residential Passage Door Lever.
- 9) All door hardware on rehab projects shall match existing hardware as closely as possible.
- 10) All doors must have a wall mounted door stop, strike-plate, and lockset, with 1 1/2" pair of appropriate hinges.
- 11) Bathroom hardware must include the following unless otherwise specified:
  - a) Two chrome towel bars 18", long
  - b) Chrome toilet tissue holder.
  - c) Chrome toothbrush and tumbler holder.
  - d) Shower/hub panel kit must be ABS plastic unit sealed with matching color silicone caulk. Master bath unit must be ADA compliant.
  - e) Chrome shower curtain rod.

15.6	<u>Landscaping</u>	<p>1) Upon final cleanup and removal of all materials and debris, yard must be hydro- mulched, or sodded with a turf grass appropriate to the local climate, or as specified in individual work write-up.</p> <p>2) Replacement landscaping will be of native/adaptive and drought resistant species.</p> <p>3) Utilize low-water requirement turf. Long, narrow strips of turf should be eliminated.</p> <p>4) Low-water use, drought-tolerant, native and adaptive plants shall be utilized.</p> <p>5) Group plants according to water usage.</p> <p>6) Choose plants suitable to the South Central Texas climate. <a href="http://www.saws.org/conservation/outdoor/plants/index.cfm">http://www.saws.org/conservation/outdoor/plants/index.cfm</a></p>
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16.1	Cleaning	<ol style="list-style-type: none"> <li>1) Remove all construction debris from the site.</li> <li>2) Clean and mop all resilient floors.</li> <li>3) Clean all paint from other finished surfaces including window glass and mirrors.</li> </ol>
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16.2 Operating Items

- 1) Start all systems and leave all newly installed items in operating condition.
- 2) The Contractor shall be responsible for determining that all plumbing and electrical fixtures, switches and receptacles, which were part of the Scope of Work, are in proper working order upon completion of the rehabilitation.

16.3   Preparation of Structure  
1)   Prepare structure for Owner's occupancy

16.4 Hardware

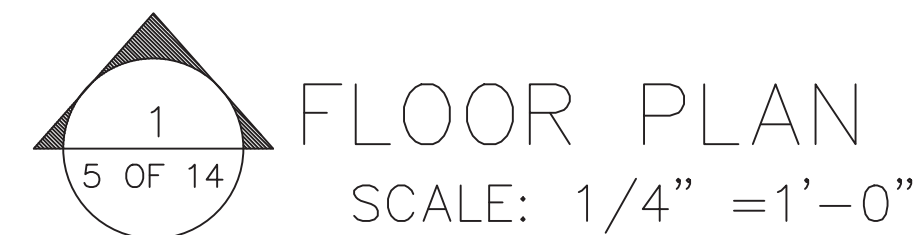
- 1) All hardware to be put in operating condition.
- 2) New keys must be turned over to Grants Administrator upon final completion.

## NOTES



SHEET

## FLOOR PLAN



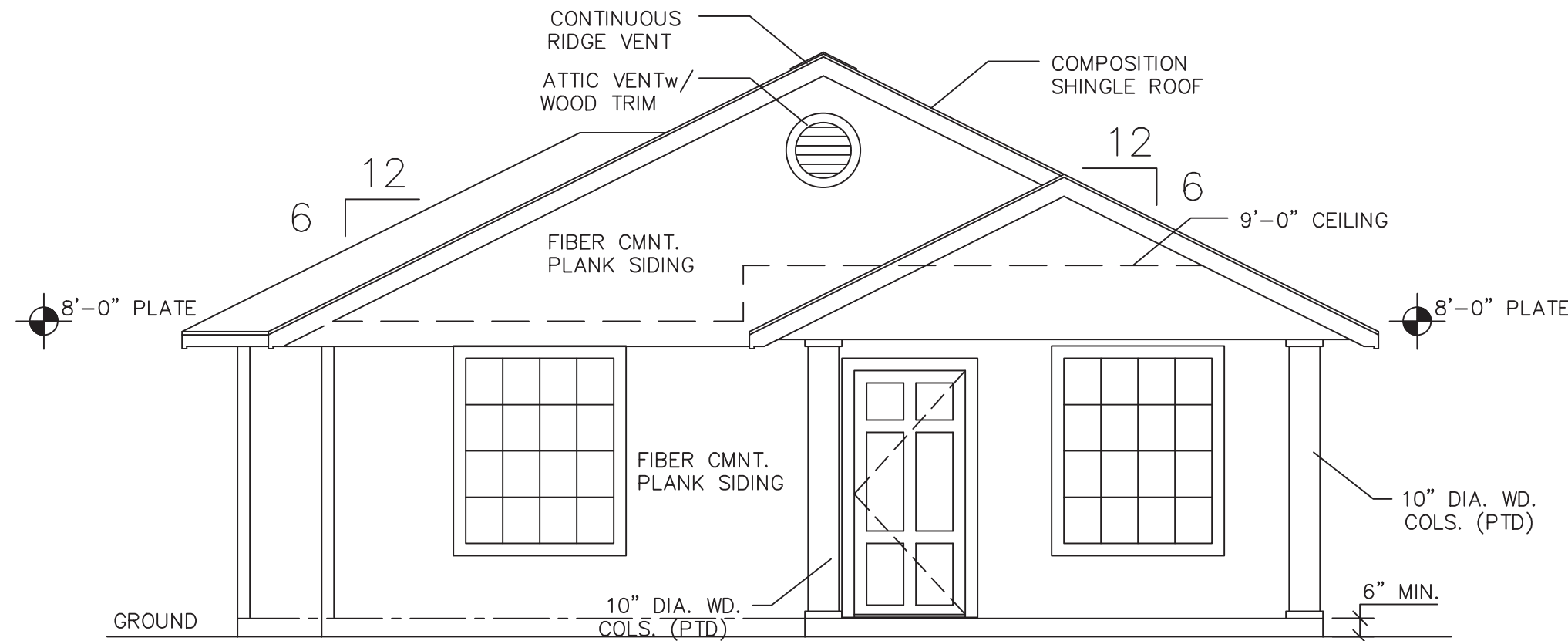
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	HORIZONTAL SLIDER
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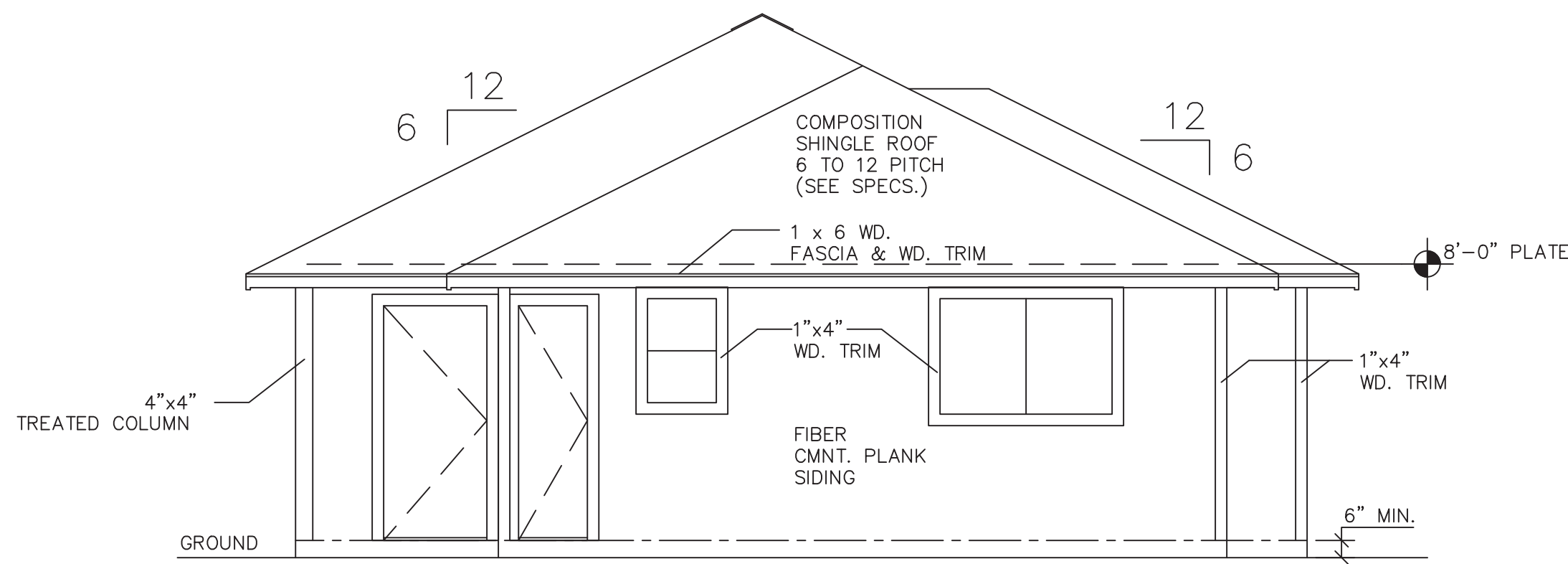
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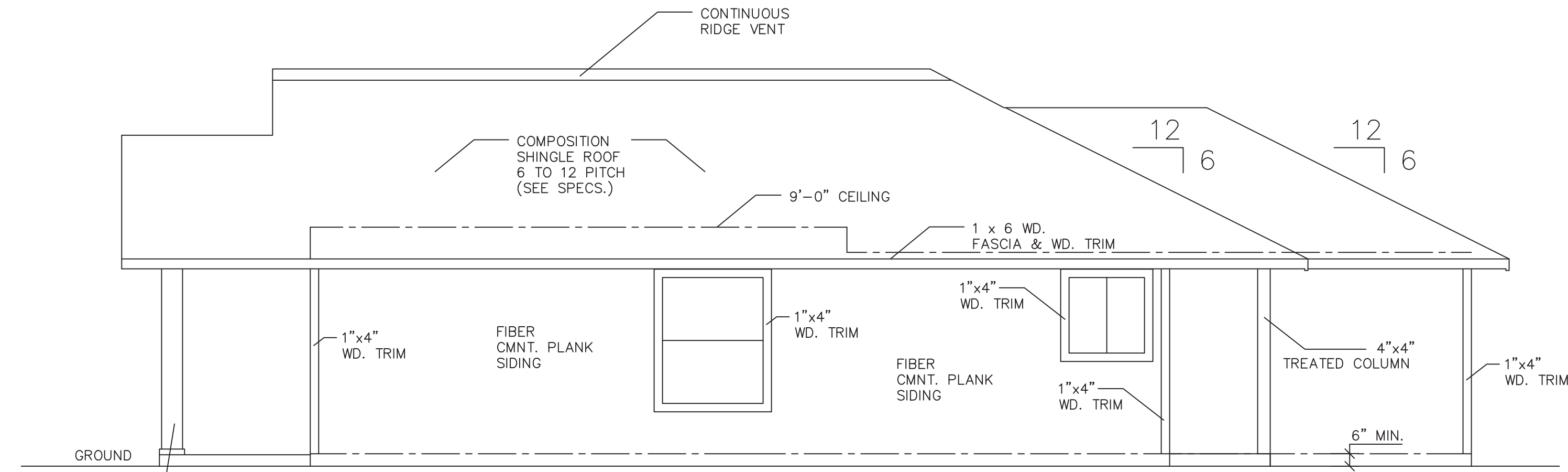
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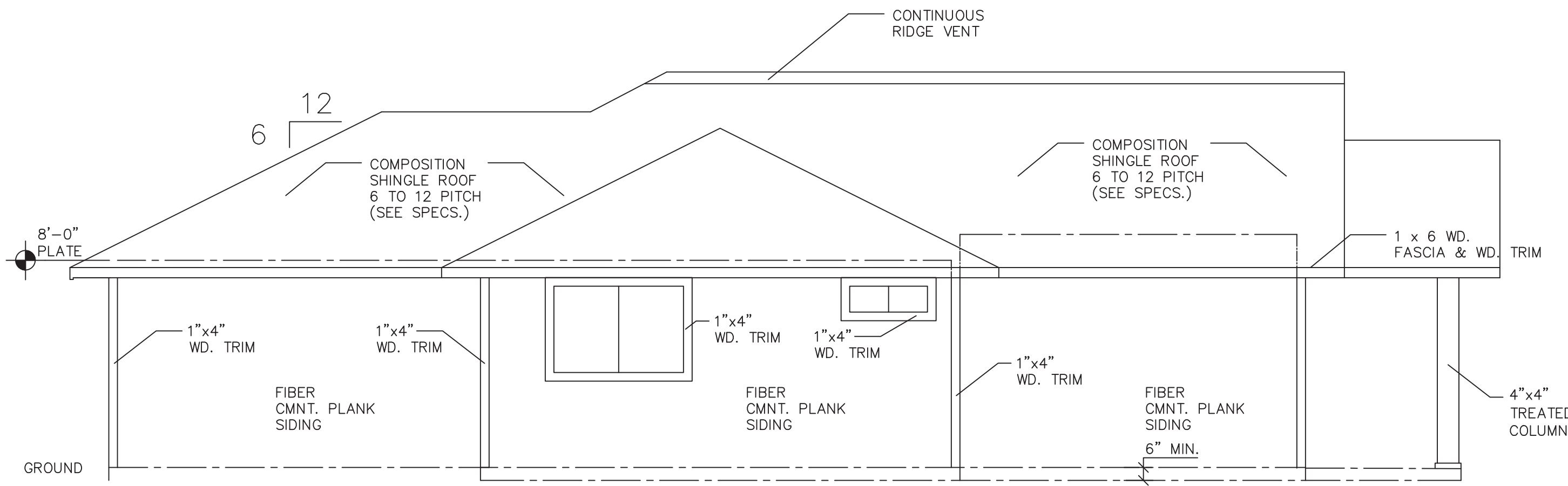
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6 OF 14  
FRONT ELEVATION  
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2  
6 OF 14  
REAR ELEVATION  
SCALE: 1/4" = 1'-0"



3  
6 OF 14  
RIGHT SIDE ELEVATION  
SCALE: 1/4" = 1'-0"



4  
6 OF 14  
LEFT SIDE ELEVATION  
SCALE: 1/4" = 1'-0"



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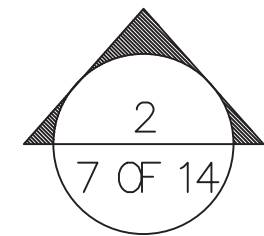
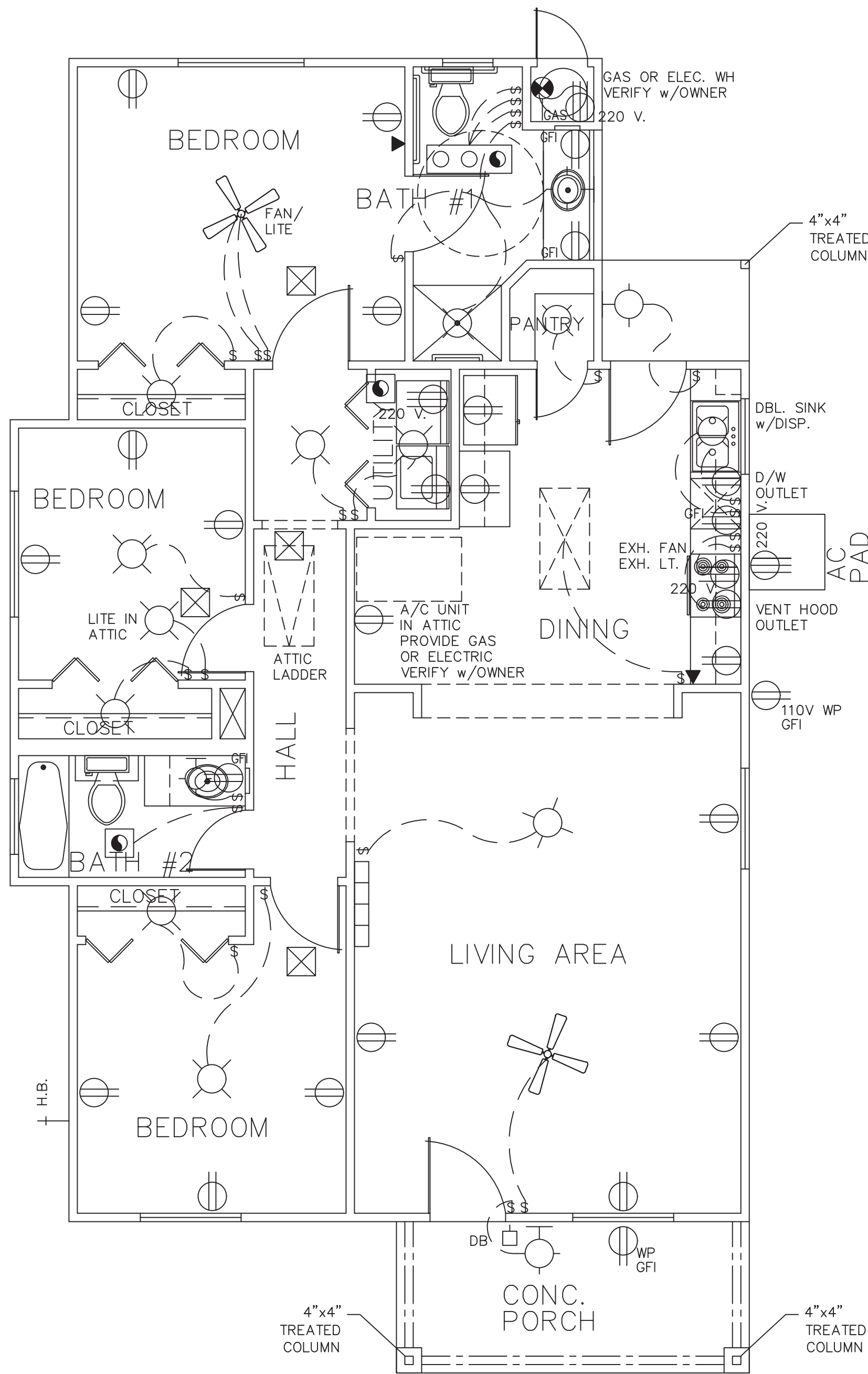
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ELEVATIONS

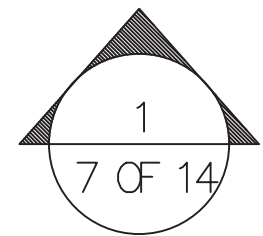
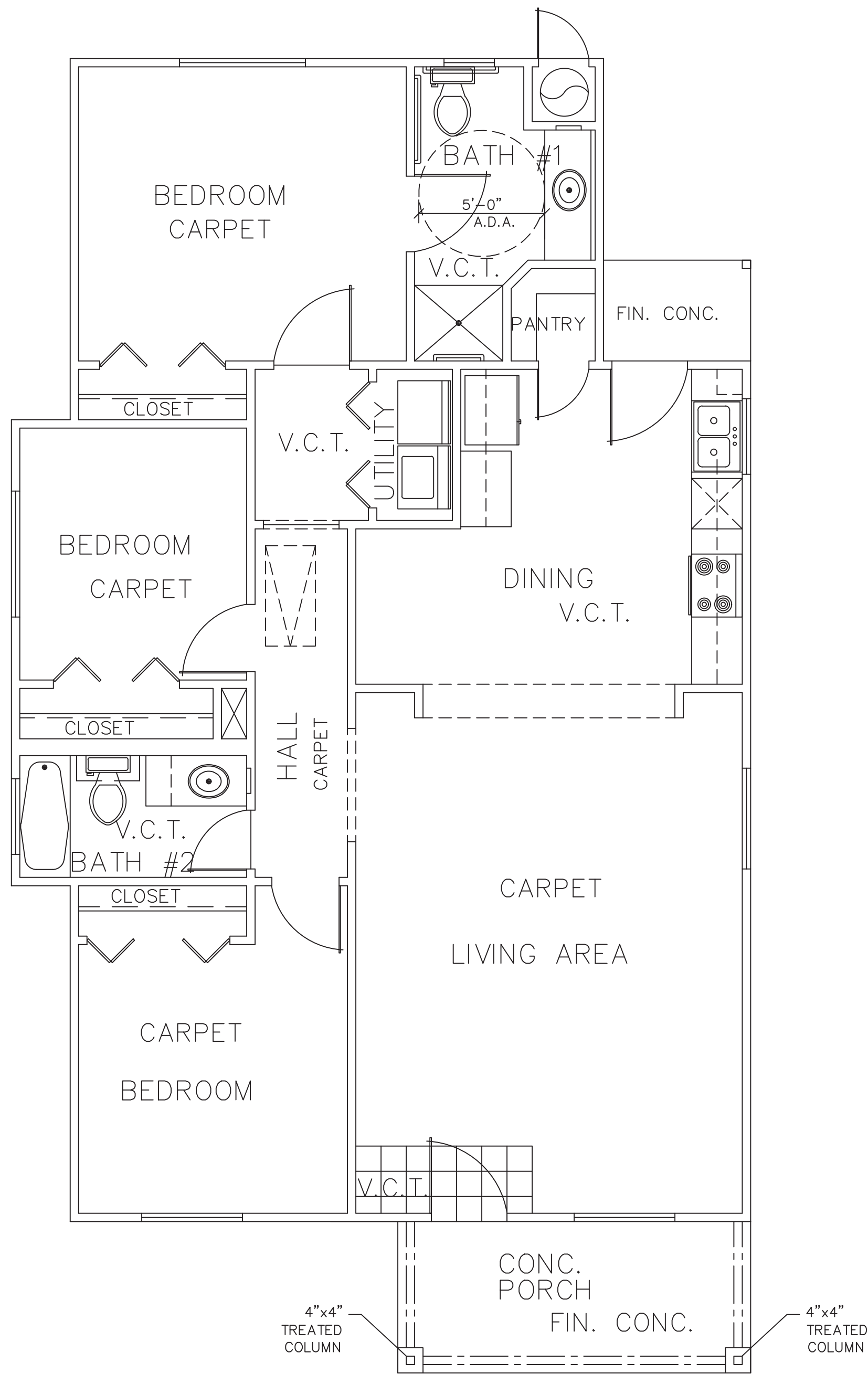
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P:\Project Files\Austin, & San Antonio\17-00017-464-6.4 CC&A Residential Bldgs San Antonio Texas\Structural\Drawings\CC&A Plan 1233.dwg 11/02/2018 11:33:28 AM DWG To PDF.plt



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



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

## LEGEND

SD	SMOKE DETECTOR
\$	SINGLE POLE LIGHT SWITCH
	WALL MOUNTED LIGHT FIXTURE
	CEILING MOUNTED LIGHT FIXTURE
	DUPLEX ELECTRICAL OUTLET
	G.F.I. OUTLET
	D/W OUTLET
	220 V. OUTLET
	INTERNET DATA LINE
	VENT
	HEATER/LIGHT/VENT
	HOSE BIB
	CEILING FAN w/LIGHT FIXTURE
(B.O.)	BY OWNER
	TELEPHONE JACK OUTLET
	CABLE CONNECTION
	GAS CONNECTION
	CHIMES
(SIZE) HS	HORIZONTAL SLIDER
(SIZE) SH	SINGLE HUNG (SLIDES UP)
	2'x4' LED FIXTURE
VCT	VINYL COMPOSITION TILE
DB	DOOR BELL

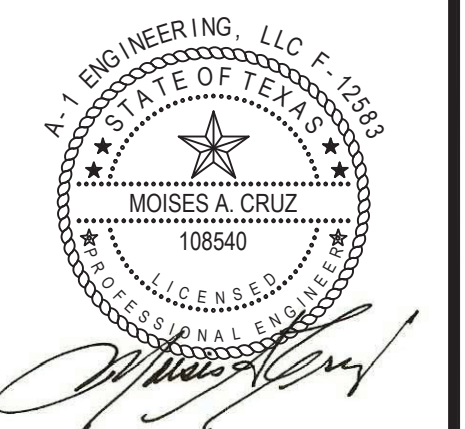
## GENERAL NOTES:

- SMOKE ALARMS SHALL BE HARDWIRED IN SERIES WITH BATTERY BACKUP POWER AS PER (sec. R317).



NEW RESIDENTIAL BUILDING  
PROTOTYPE 1233-18  
CITY OF SAN ANTONIO  
DEPARTMENT OF PLANNING AND COMMUNITY DEVELOPMENT

BY	DATE	ISSUE	REMARKS



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F-12583

THESE PLANS COMPLY WITH  
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AND 2018 IRC

SHEET SIZE: 24" x 36"

ISSUE DATE: 11.24.2018

SHEET:

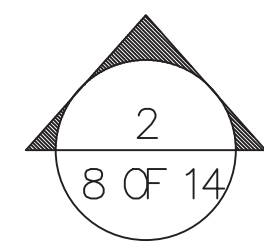
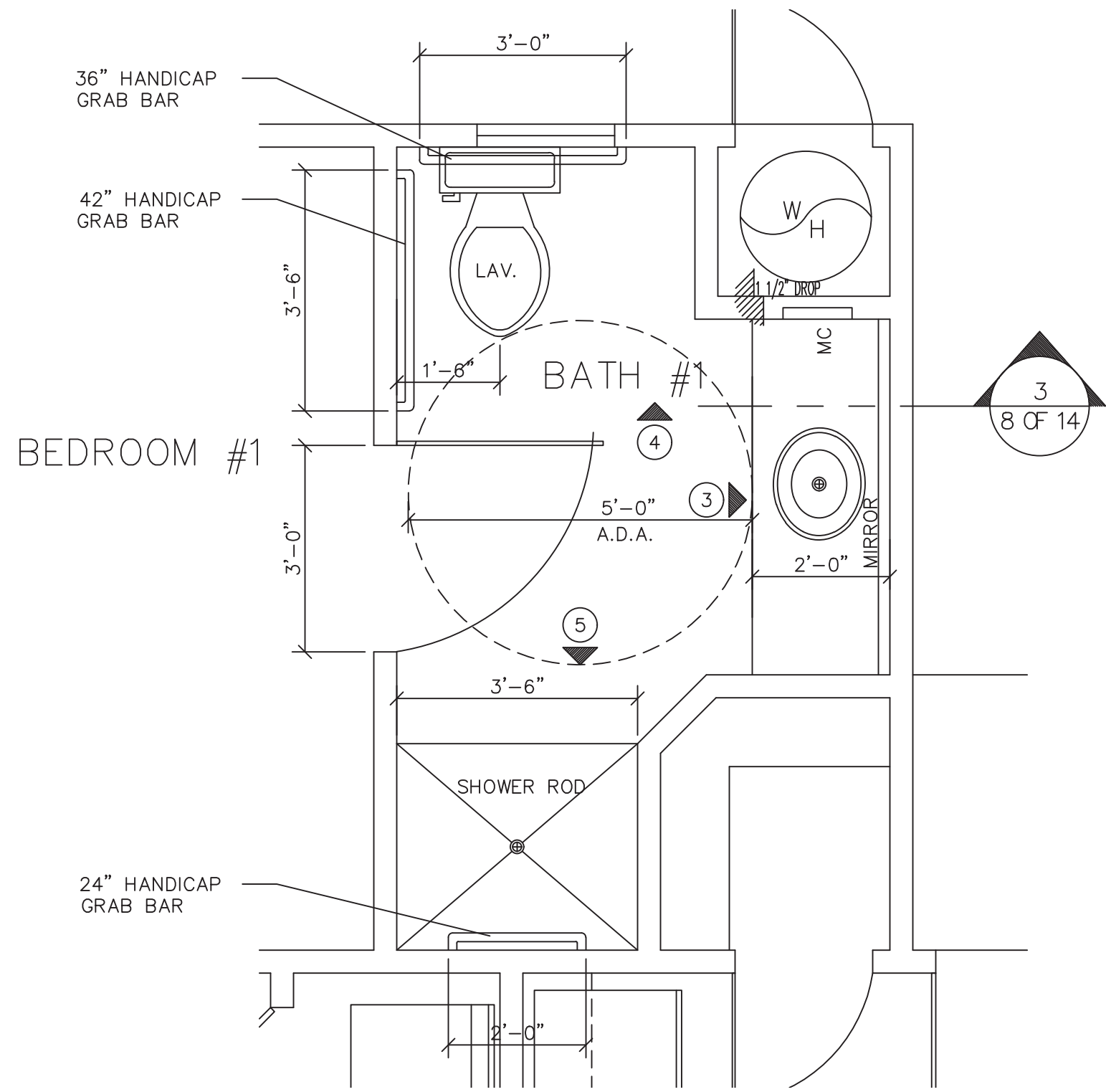
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ELECTRICAL

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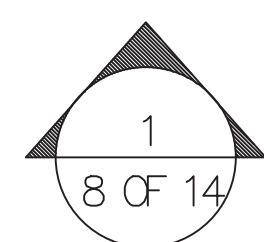
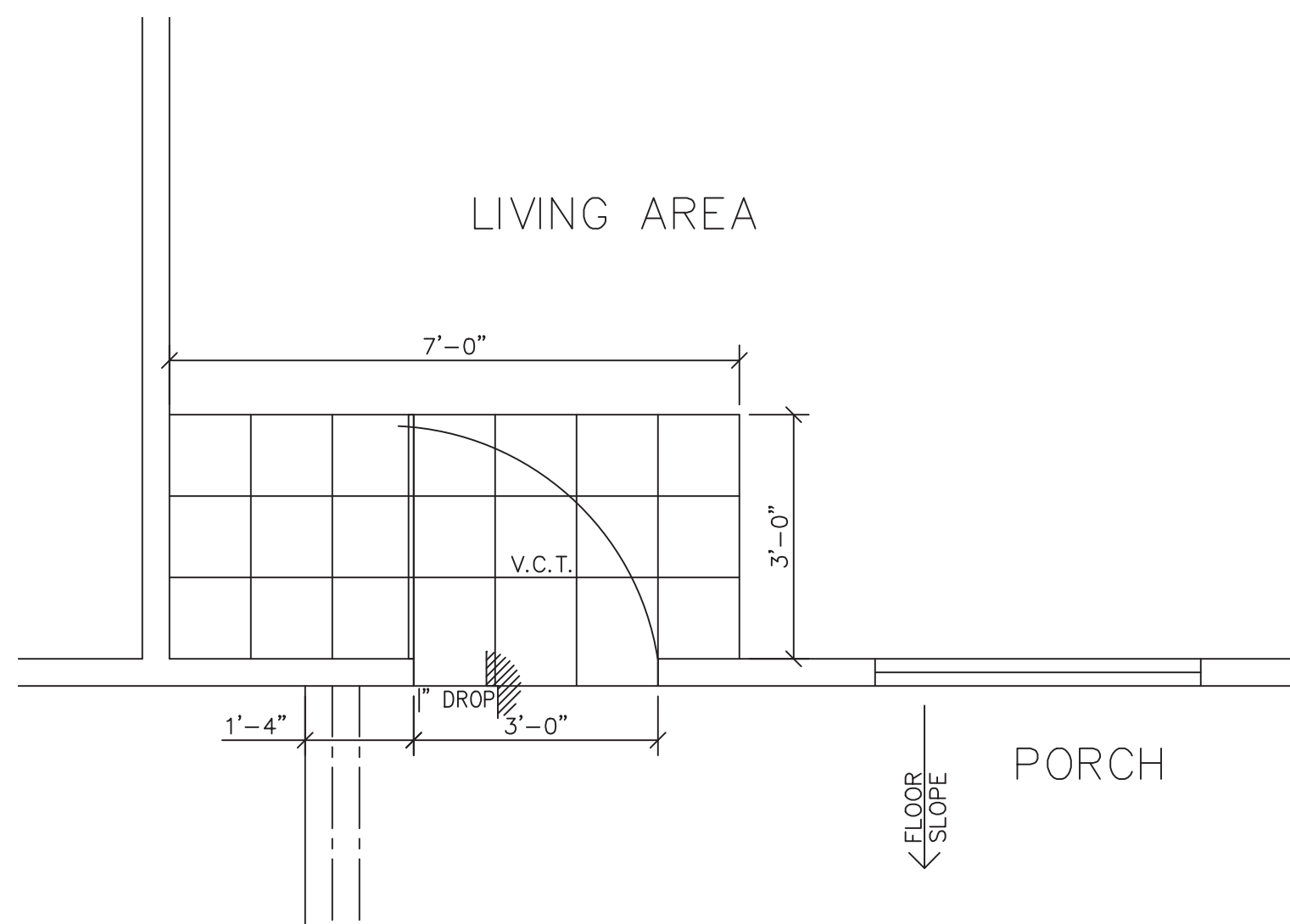
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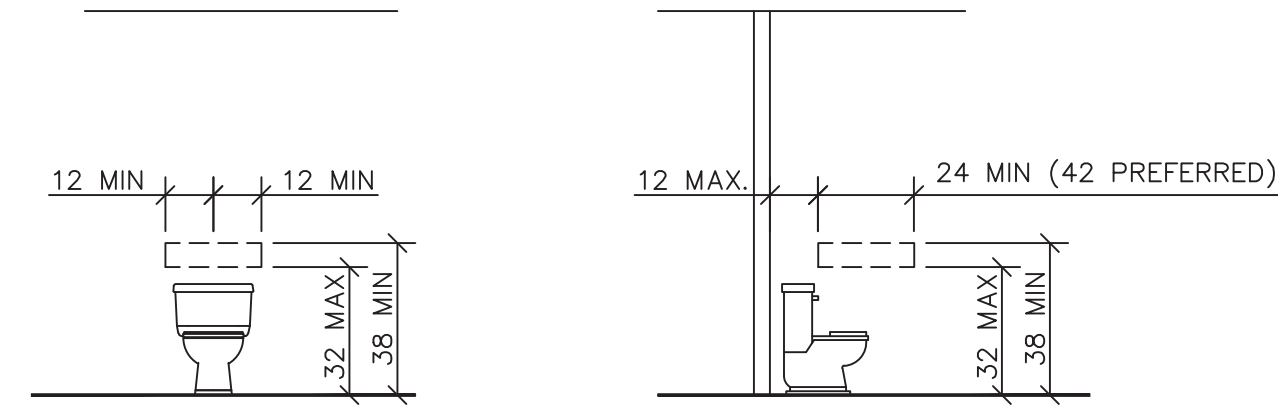
ENLARGED BATH #1  
FLOOR PLAN

SCALE: 1/2" = 1'-0"

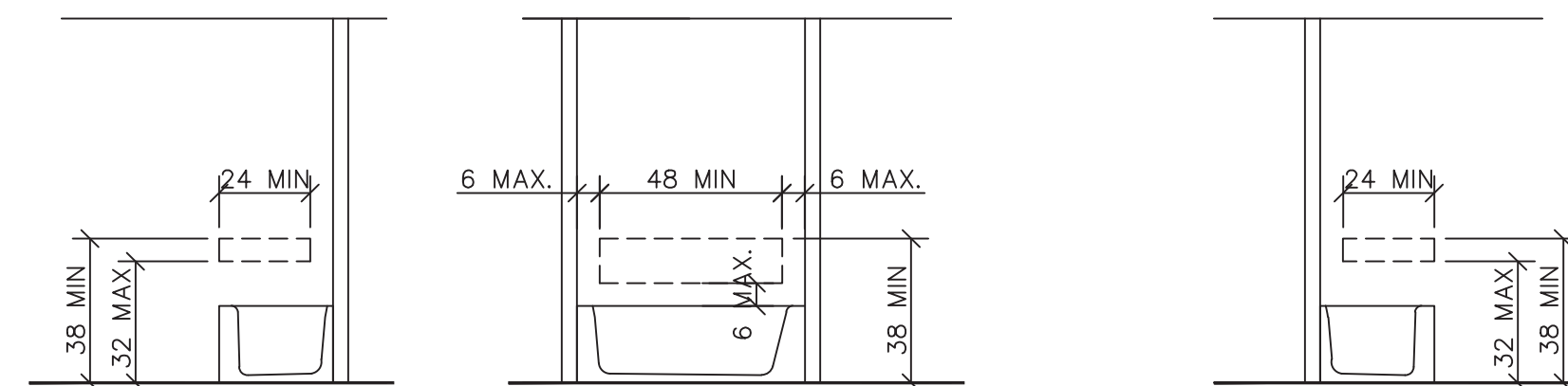


ENLARGED ENTRY  
FLOOR PLAN

SCALE: 1/2" = 1'-0"



LOCATION OF GRAB BAR REINFORCEMENTS FOR ADAPTABLE BATHROOMS  
NOTE: THE AREAS OUTLINED IN DASHED LINES REPRESENT LOCATIONS FOR FUTURE  
INSTALLATION OF GRAB BARS FOR TYPICAL FIXTURE CONFIGURATIONS.



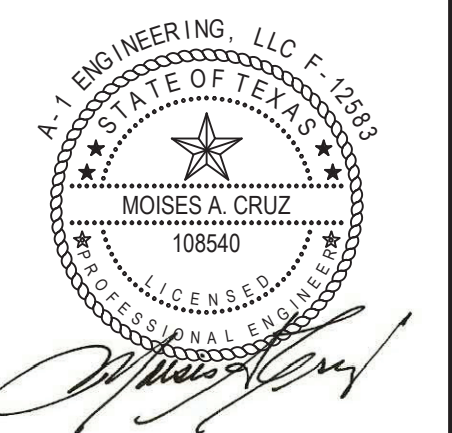
LOCATION OF GRAB BAR REINFORCEMENTS FOR ADAPTABLE SHOWERS  
NOTE: THE AREAS OUTLINED IN DASHED LINES REPRESENT LOCATIONS FOR FUTURE  
INSTALLATION OF GRAB BARS FOR TYPICAL FIXTURE CONFIGURATIONS.

GRAB BAR SCHEMATIC



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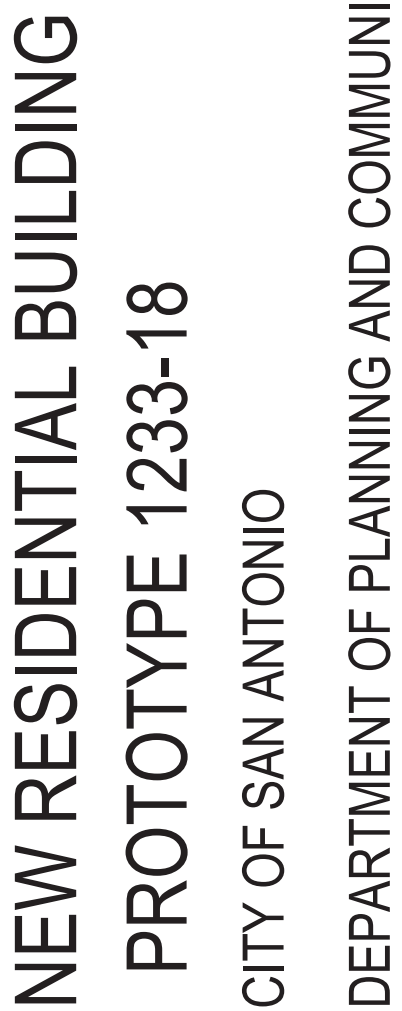
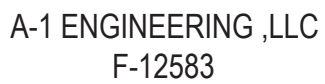
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BATHROOM

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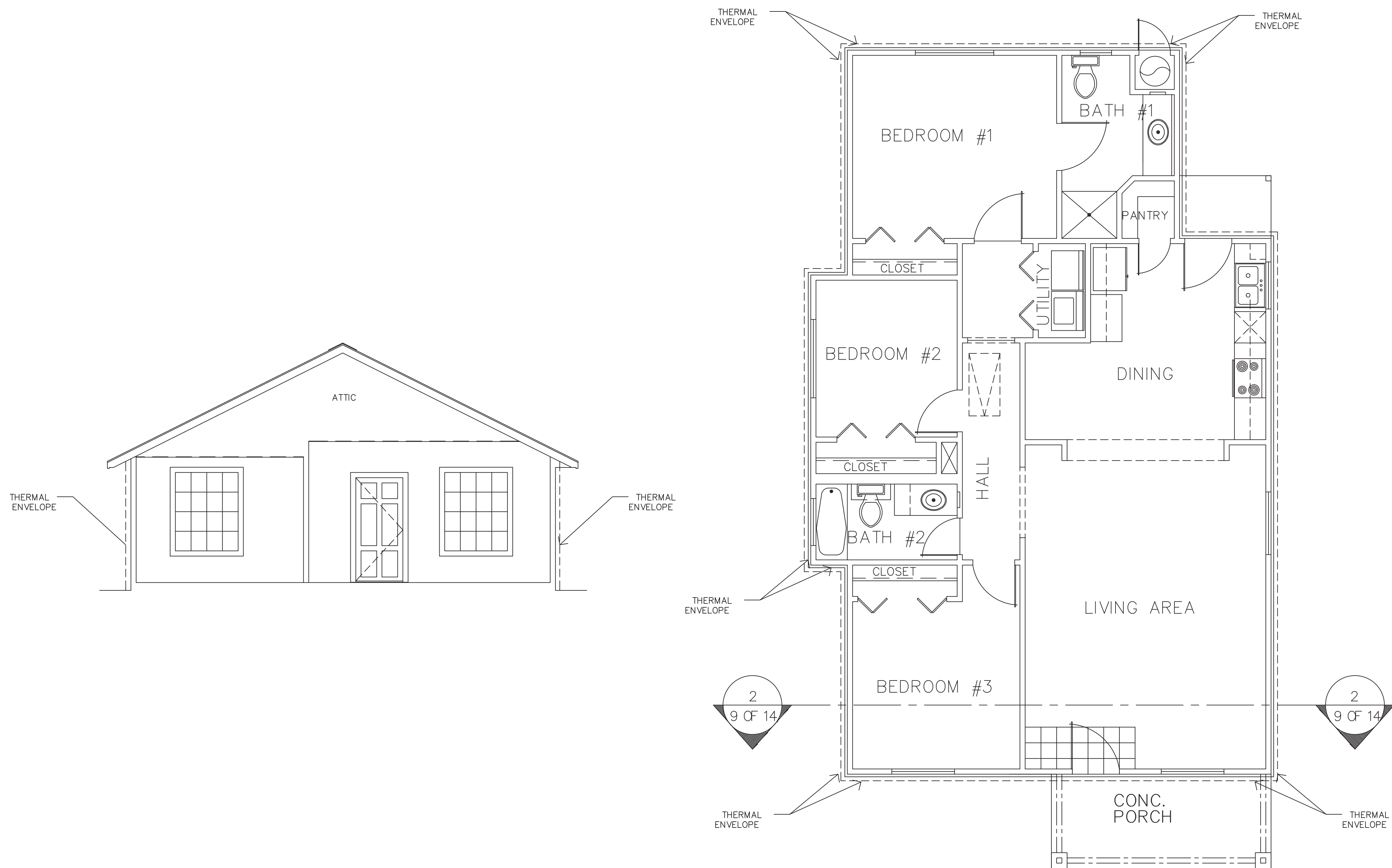
SHEET:

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## THERMAL

## AIR BARRIER

COMPONENT	AIR BARRIER CRITERIA
General requirements	A continuous air barrier shall be installed in the building envelope. The exterior thermal envelope contains a continuous air barrier. Breaks or joints in the air barrier shall be sealed.
Ceiling/Attic	The air barrier in any dropped ceiling/ soffit shall be aligned with the insulation and any gaps in the air barrier shall be sealed.
Walls	The junction of the foundation and seal plate shall be sealed. The junction of the top plate and the top of exterior walls shall be sealed. Knee walls shall be sealed.
Windows, skylights and doors	The space between window/ door jambs and framing, and skylights and framing shall be sealed.
Rim joists	Rim joists shall include the air barrier.
Floors (including above garage and cantilevered floors)	The air barrier shall be installed at any exposed edge of insulation.
Crawl space	Exposed earth in unvented crawl spaces shall be covered with a Class I vapor retarder with overlapping joints taped.
Shafts, penetrations	Duct shafts, utility penetrations, and flue shafts opening to exterior or unconditioned space shall be sealed.
Narrow cavities	
Garage separation	Air sealing shall be provided between the garage and conditioned spaces.
Recessed lighting	Recessed light fixtures installed in the building thermal envelope shall be sealed to the drywall.
Plumbing and wiring	
Shower / tub on exterior wall	The air barrier installed at exterior walls adjacent to showers and tubs shall separate them from the showers and tubs.
Electrical/ phone box on exterior wall	The air barrier shall be installed behind electrical or communication boxes or air-sealed boxes shall be installed.
HVAC register boots	HVAC register boots that penetrate building thermal envelope shall be sealed to the subfloor or drywall.
Concealed sprinklers	When required to be sealed, concealed fire sprinklers shall only be sealed in a manner that is recommended by the manufacturer. Caulking or other adhesive sealants shall not be used to fill voids between fire sprinkler cover plates and walls or ceilings.



THERMAL ENVELOPE  
BUILDING SECTION

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

NOTE:  
WRAP THE ENTIRE EXTERIOR OF BUILDING WITH TYVEK  
THERMA WRAP R5.0, AS MANUFACTURED BY DUPONT. REFER  
TO MANUFACTURER FOR HANDLING, STORAGE, AND  
INSTALLATION TO ACHIEVE MAXIMUM PERFORMANCE.

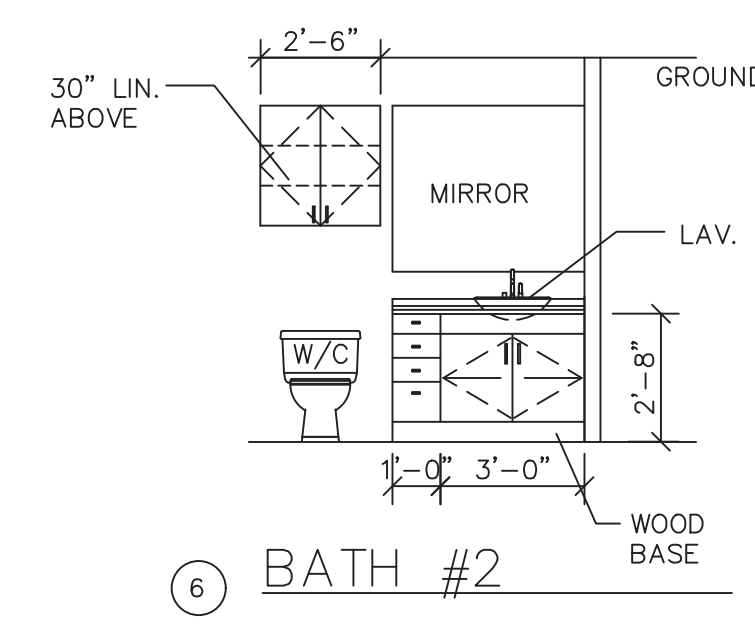
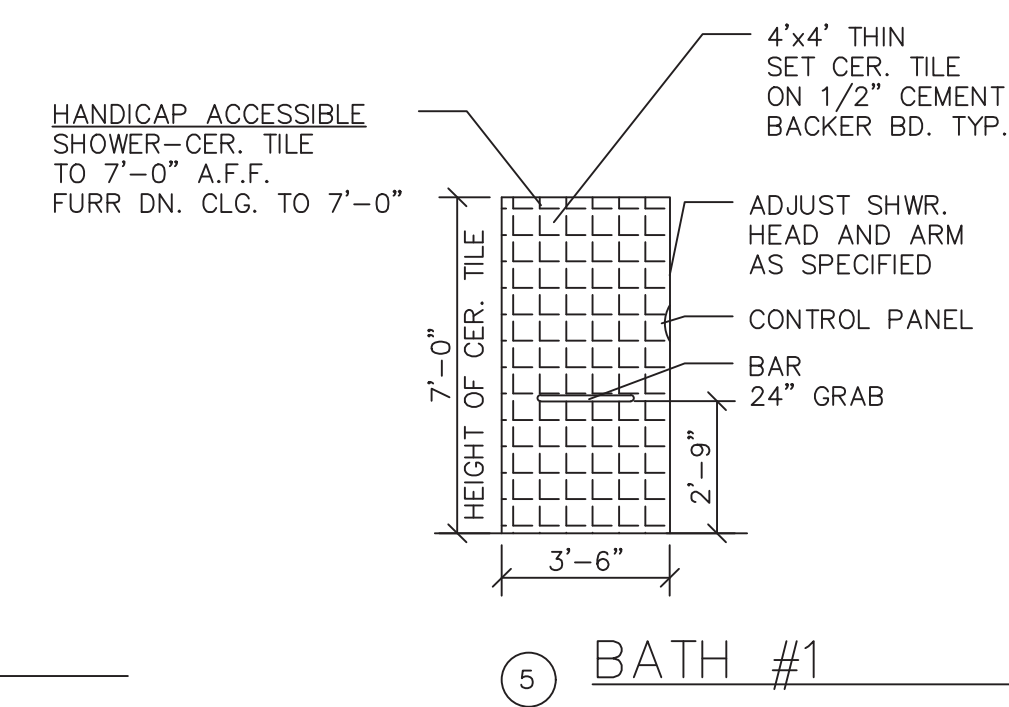
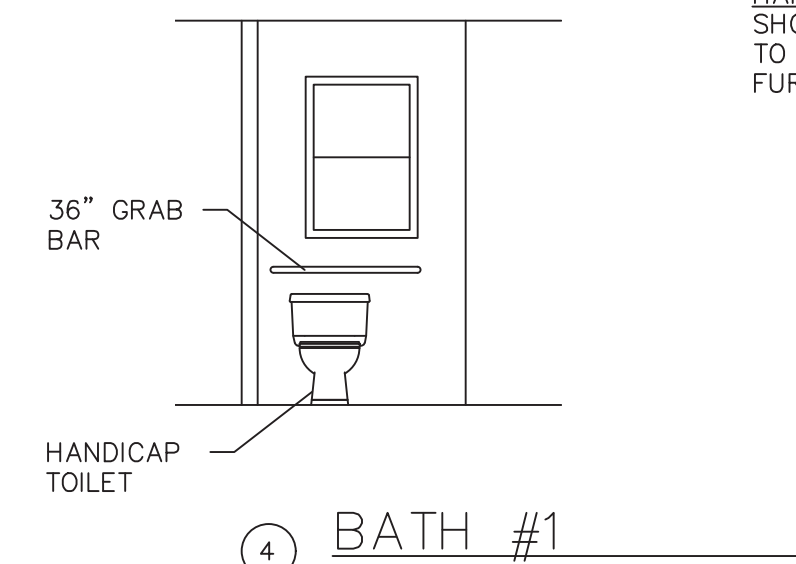
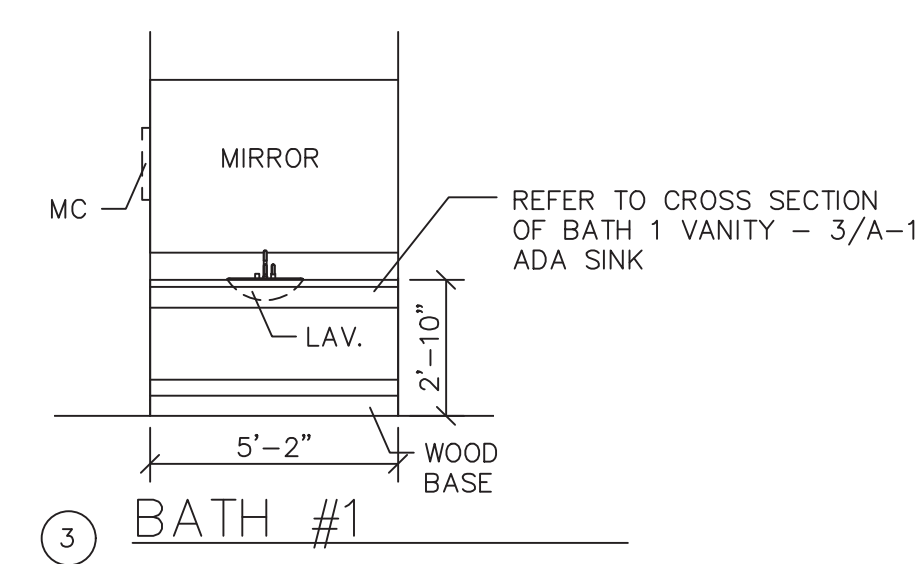
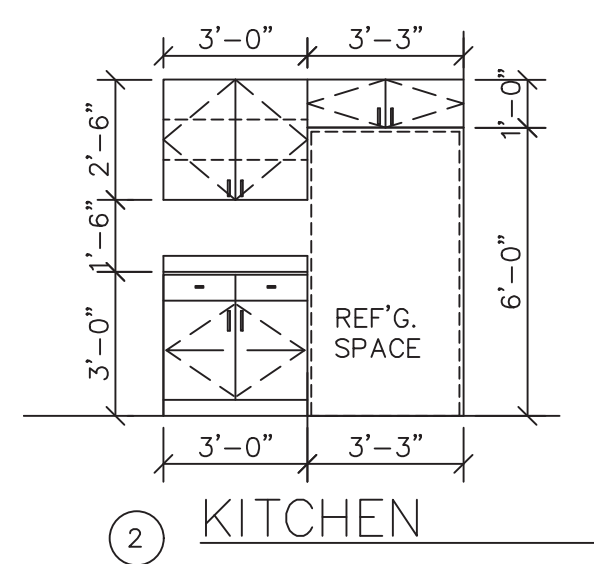
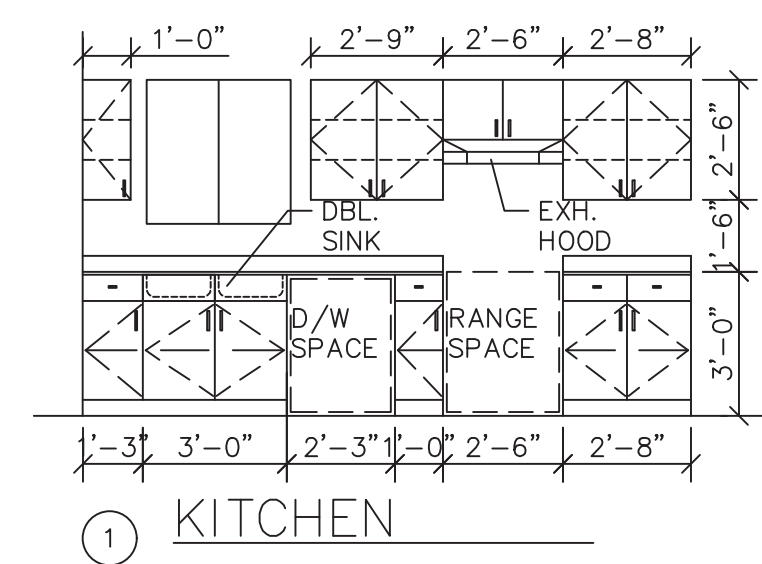
THERMAL ENVELOPE  
FLOOR PLAN

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

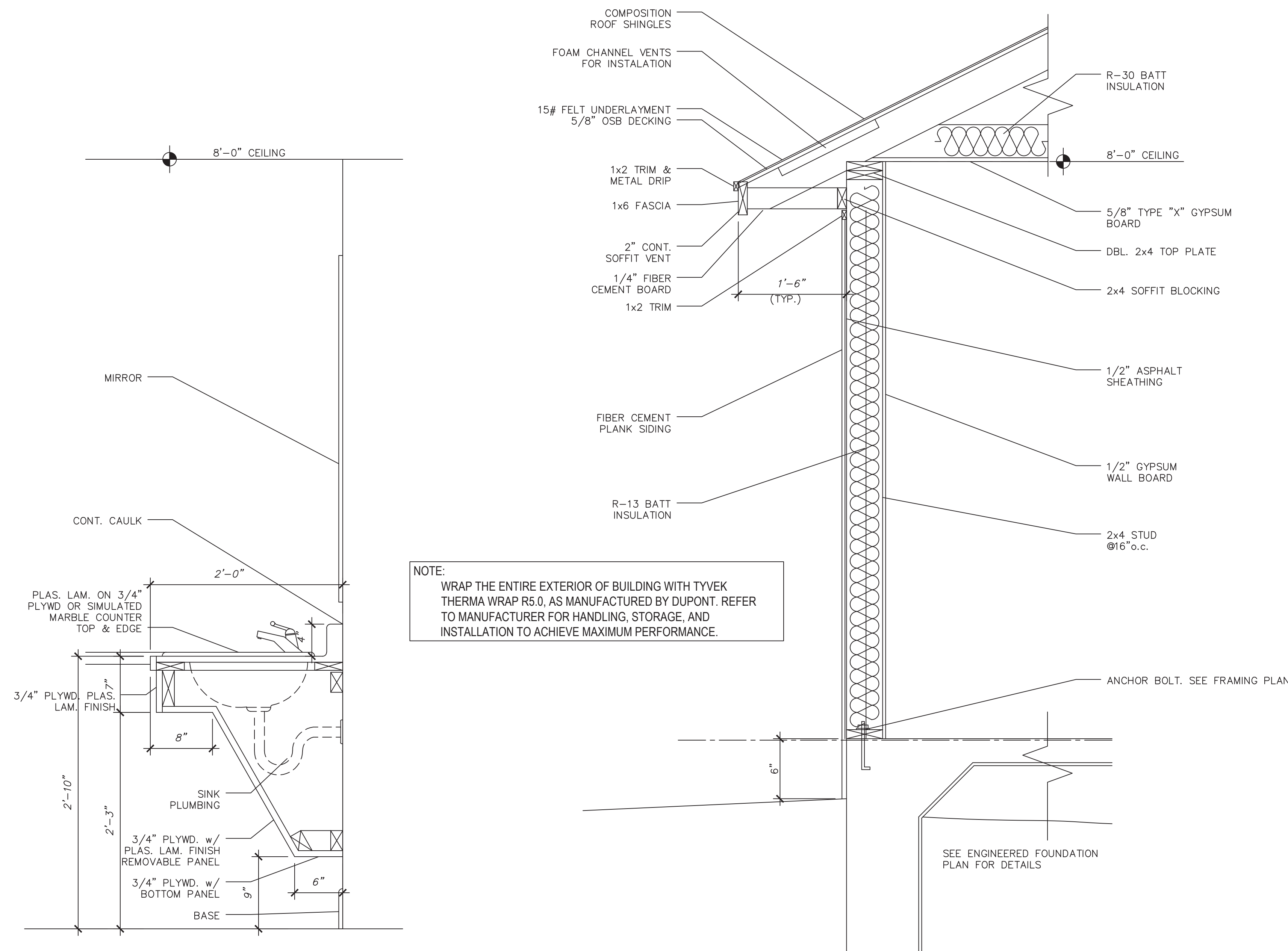
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CABINET ELEVATIONS  
SCALE: 1/4" = 1'-0"



DOOR SCHEDULE															
DR. NM.	DOOR SIZE							DOOR MATERIAL			FRAME MATERIAL			REMARKS	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	3'-0"x6'8"	2'-8"x6'8"	5'-0"x6'8"	2'-4"x6'8"	3'-0"x7'0"	2'-0"x6'8"	10'-0"x8'0"	4'-0"x7'0"	WOOD	METAL	GLASS		WOOD	METAL	FIBERGLASS
1	X									X				X	
2		X							X				X		
3			X						X				X		BI-FOLD
4				X					X				X		
5		X							X				X		
6			X						X				X		BI-FOLD
7					X										GWB OPENING
8			X						X				X		BI-FOLD
9	X								X				X		
10			X						X				X		BI-FOLD
11	X								X				X		
12	X									X				X	
13						X			X				X		
14							X								GWB OPENING
15								X							GWB OPENING
16						X			X				X		

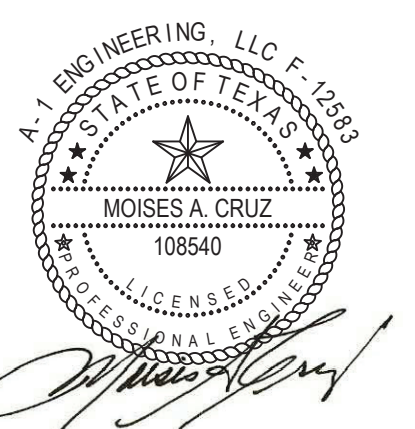
1. All Final Selections will be made by owners.
2. . . .

[illegible]

1. All windows 7'-0" HEADER.



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## DETAILS

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6.0) 2x wolmanized sill plate  
6.1) Wood stud walls. 2X see table

Provide 2x solid blocking at mid-height of all wood stud bearing walls located on the first floor of buildings three floors in height.

Provide a continuous sole plate at the bottom of all stud walls. Load bearing wall sole plates adjacent to masonry/concrete and those walls identified as shear walls shall be womanized and shall be bolted to the foundation as noted. Place anchors at a maximum of 32" on center spacing unless otherwise noted and within 12" from ends of discontinuous plates. Interior non-load bearing walls can be bolted or shot to foundation.

Provide a continuous double plate at the top of all wall studs. End joints in double top plates shall be offset at least 48 inches. Corner joints in double top plates shall be lapped and face nailed with at least 2- 16d nails. End nail top plate to each stud with at least 2- 16d nails. Face nail top plates with 16d nails at least at 16" on center.

6.3) Plywood wall sheathing refer to Table 2  
All exterior walls and main cross stud partitions indicated on the drawings shall be effectively and thoroughly sheathed.

15/16" plywood sheathing. Attachment shall be with 10d nails spaced at 6 inches on center at edges and 6 inches on center at intermediate supports. Provide solid blocking at all joints. Plywood sheathing shall be placed at building corners for a horizontal distance of at least 48 inches. Staples shall not be used in place of nails.

Headers made up of 2 members shall be nailed to each other with 2 rows of 12d nails at 12" on center. Headers made up of 3 members shall be nailed to each other with 3 rows of 12d nails at each side at 12" on center.

At headers less than 4 feet wide, provide a single cripple stud below each end of header nailed to a single full height stud. Toenail header at each end on each side to studs with 1- 16d nail per 2" nominal depth of header.

At headers 4 feet wide and wider, provide double cripple studs below each end of header nailed to double full height studs. Toenail header at each end on each side to studs with 1- 16d nail per 2" nominal depth of header.

6.5) 2x wood joist - see table

Joists shall be installed upright (crowns up) and held in a straight line. Joists shall be full bearing over entire plate width. Toenail joist to each support with at least 3-8d nails. Provide solid full depth blocking in all conventionally framed spans over 8'-0". Maximum distance between blocking and bearing shall be 8'-0". Provide solid blocking at all supports.

Bored holes required in joists shall be limited to 1/5 the joist depth and shall be no closer than 2" from the top or bottom of the joist or no closer than 24" from a support.

Provide metal joist hangers at 4x2 trusses framed into wood beams. Nail as per manufacturers recommendations.

6.6) Provide 2x full depth solid blocking between framing members. End nail blocking to each truss and rafter with at least 2- 8d nails and toenail to top plate with at least 4 8d nails.

6.7) Conventional framing forming roof valleys. See table

Rafters shall be framed directly opposite each other at the ridge. End nail each rafter to ridge with at least 2- 16d nails.

Place plywood roof sheathing with required joint spaces between sheets and with end joints staggered. Plywood grain shall be perpendicular to framing. Secure sheets over firm bearing. Provide solid blocking at all plywood edges. Provide plywood sheathing clips (referred to as H clips or PSC clips) at unsupported plywood roof edges, spaced one between each support. Provide edge blocking at all roof openings. Nail to framing members at plywood edges at 6" on center and at intermediate supports at 6" on center. Nail with at least 8d common nails.

### 6.9) Joist hangers. Simpson Strong Tie

2x4 to Intersecting Beam: LUS24  
2x6 to Intersecting Beam: LUS26  
2x8 to Intersecting Beam: LUS28  
2x10 to Intersecting Beam: LUS210  
2x12 to Intersecting Beam: LUS212  
LVL to LVL:

6.10) 2x rafter. Refer to Table 3 Add 2x8 purlin at mid-span of rafter. Support purlin line with 2x4 stud at 4-ft on center along centerline of purlin.

6.11) 2x4 collar tie at 4'-0" on center. Position collar tie no closer than 3-ft from bottom of the ridge board.

6.12) 2x ridge board. Add 2x stud at each ridge board splice and at the ends of the ridge board.

6.14) Double rafters at opening.

6.15) 2x outriggers at 2'-0" on center. Span outrigger 2'-0" across the top plate into the intersecting cross rafter.

6.16) 2x facia.  
6.17) Wood beam. Refer to framing plan



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KEY NOTES

- 6.1) SOLE (BOTTOM) PLATE: 2x SYP #2 OR BETTER. ANCHOR SOLE PLATE TO CONCRETE WITH 1/2" Ø A307 1" BOLTS AT 32" O.C. MAX. ENSURE BOLT IS EMBEDDED 7" INTO CONCRETE.
- 6.2) WOOD STUD WALLS SHALL BE FRAMED PER THE BRACED WALL PLAN.

INSTALL DOUBLE AND/OR TRIPLE STUDS AT ALL BEAM BEARING POINTS AND AT THE ENDS OF ALL DIAGONAL LET-IN BRACING. IN ADDITION, STUDS SHALL BE DOUBLED AT ALL ANGLES, CORNERS, AND AROUND ALL OPENINGS. NOT LESS THAN 3 STUDS SHALL BE INSTALLED AT EACH WALL CORNER. BLOCK BETWEEN CORNER STUDS AND NAIL ALONG FULL HEIGHT OF STUD WITH 16d NAILS AT LEAST AT 24" O.C.

PROVIDE A CONTINUOUS SOLE PLATE AT THE BOTTOM OF ALL STUD WALLS. LOAD BEARING WALL SOLE PLATES ADJACENT TO MASONRY AND THOSE WALLS IDENTIFIED AS SHEAR WALLS SHALL BE WOLMANIZED AND SHALL BE BOLTED TO THE FOUNDATION AS NOTED. PLACE ANCHORS AT A MAX. OF 32" O.C. SPACING UNLESS OTHERWISE NOTED AND WITHIN 12" FROM ENDS OF DISCONTINUOUS PLATES. INTERIOR NON-LOAD BEARING WALLS CAN BE BOLTED OR SHOT TO FOUNDATION. TOENAIL EACH STUD TO SOLE PLATE WITH AT LEAST (4) 8d NAILS OR END NAIL WITH AT LEAST (2) 16d NAILS. FACE NAIL SOLE PLATES IN UPPER LEVEL WALLS WITH 16d NAILS AT LEAST AT 16" O.C.

AT FRAMING AROUND OPENINGS, TRIMMER AND HEADER JOISTS SHALL BE DOUBLE FOR SPANS GREATER THAN 4'-0", UNLESS NOTED OTHERWISE.

PROVIDE A CONTINUOUS DOUBLE PLATE AT THE TOP OF ALL WALL STUDS. END JOINTS IN DOUBLE TOP PLATES SHALL BE OFFSET AT LEAST 48". CORNER JOINTS IN DOUBLE TOP PLATES SHALL BE LAPPED AND FACE NAILED WITH AT LEAST (2) 16d NAILS. END NAIL TOP PLATE TO EACH STUD WITH AT LEAST (2) 16d NAILS. FACE NAIL TOP PLATES WITH 16d NAILS AT LEAST AT 16" O.C.

- 6.3) PLYWOOD WALL SHEATHING SEE TABLE

ALL EXTERIOR WALLS AND MAIN CROSS STUD PARTITIONS INDICATED ON THE DRAWINGS SHALL BE EFFECTIVELY AND THOROUGHLY SHEATHED.

BLOCK ALL EDGES. STAPLES SHALL NOT BE USED IN PLACE OF NAILS.

- 6.5) 2X ROOF JOIST - REFER TO ROOF FRAMING PLAN.

LUMBER TO BE SYP #2 OR BETTER.

JOISTS SHALL BE INSTALLED UPRIGHT (CROWNS UP) AND HELD IN A STRAIGHT LINE. JOISTS SHALL BE FULL BEARING OVER ENTIRE PLATE WIDTH. TOENAIL JOIST TO EACH SUPPORT WITH AT LEAST (3) 8d NAILS.

PROVIDE SOLID FULL DEPTH BLOCKING IN ALL CONVENTIONALLY FRAMED SPANS OVER

8'-0", MAXIMUM DISTANCE BETWEEN BLOCKING AND BEARING SHALL BE 8'-0". PROVIDE SOLID BLOCKING AT ALL SUPPORTS.

BORED HOLES REQUIRED IN JOISTS SHALL BE LIMITED TO 1/5 THE JOIST DEPTH AND SHALL BE NO CLOSER THAN 2" FROM THE TOP OR BOTTOM OF THE JOIST OR NO CLOSER THAN 24" FROM A SUPPORT.

- 6.10) PLYWOOD FLOORING, SEE SEE TABLE

- 6.11) PLYWOOD ROOF DECK SEE TABLE

PLACE PLYWOOD ROOF SHEATHING WITH REQUIRED JOINT SPACES BETWEEN SHEETS AND WITH END JOINTS STAGGERED. PLYWOOD GRAIN SHALL BE PERPENDICULAR TO FRAMING. SECURE SHEETS OVER FIRM BEARING. PROVIDE SOLID BLOCKING AT ALL PLYWOOD EDGES. PROVIDE PLYWOOD SHEATHING CLIPS (REFERRED TO AS H CLIPS OR PSC CLIPS) AT UNSUPPORTED PLYWOOD ROOF EDGES, SPACED ONE BETWEEN EACH SUPPORT. PROVIDE EDGE BLOCKING AT ALL ROOF OPENINGS. NAIL TO FRAMING MEMBERS AT PLYWOOD EDGES AT 6" O.C. AND AT INTERMEDIATE SUPPORTS AT 6" O.C. NAIL WITH AT LEAST 8d COMMON NAILS.

- 6.12) 2X BLOCKING BETWEEN TRUSSES NAILED TO TRUSSES AND TO TOP PLATE.

- 6.13) 2x CEILING JOISTS ALIGNED WITH RAFTERS TO FACE NAIL CEILING JOIST TO RAFTERS WITH (3) 10d NAILS.

- 6.15) PREFABRICATE 4X FLOOR FRAMING - REFER TO FLOOR FRAMING PLAN.

- 6.20) CONTINUOUS 1X FASCIA BOARD.

- 6.23) GABLE END WALL. STUD SIZE AND SPACING TO MATCH BELOW.

- 6.30) 2x4 CONTINUOUS RIBBON BLOCKING FACE NAILED TO EACH TRUSS AND WITH AT LEAST (2) 16d NAILS.

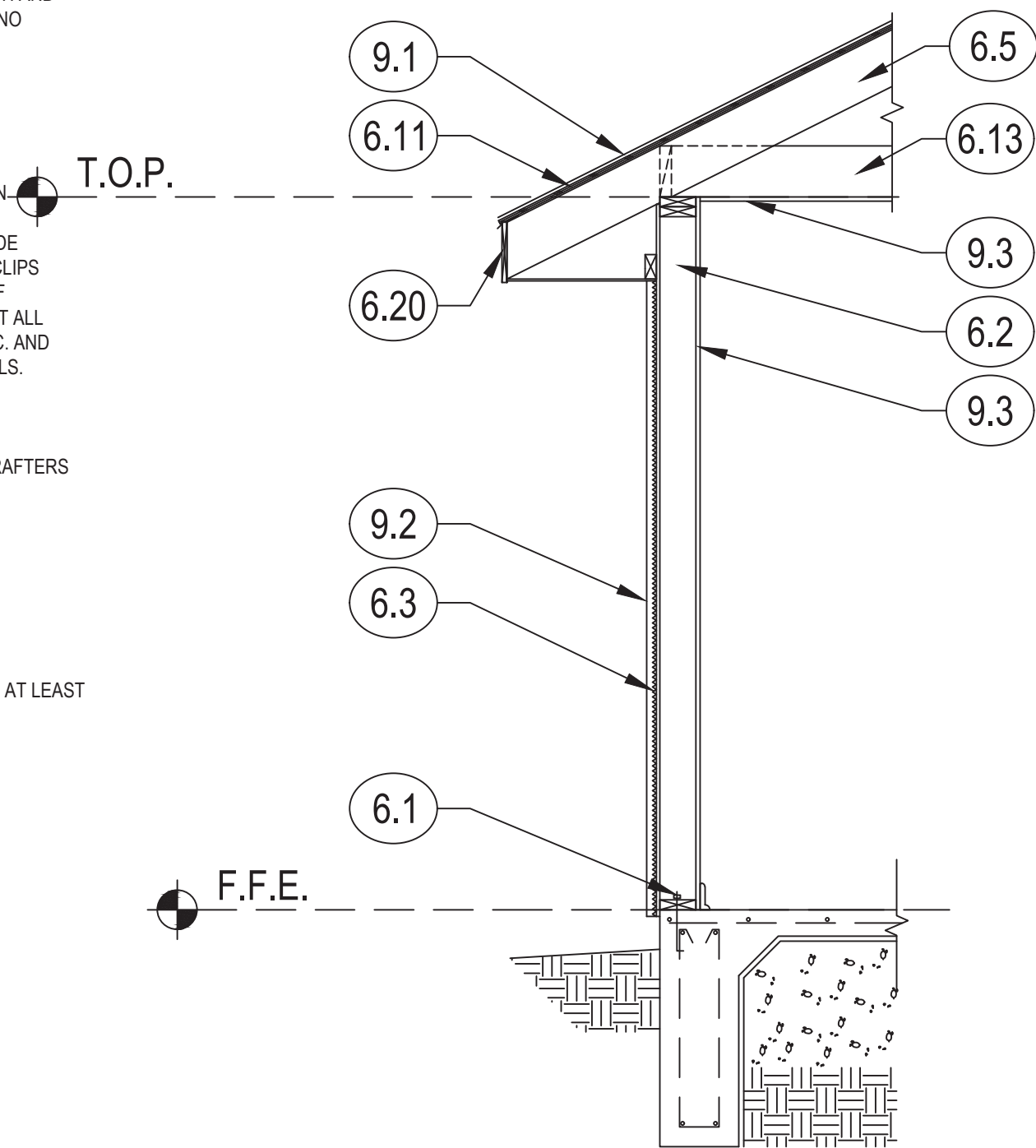
- 6.34) 2X BLOCKING.

- 6.35) 2 X 8 LEDGER FASTENED TO FRAMING WITH 3 #10 SCREWS AT 16" O.C.

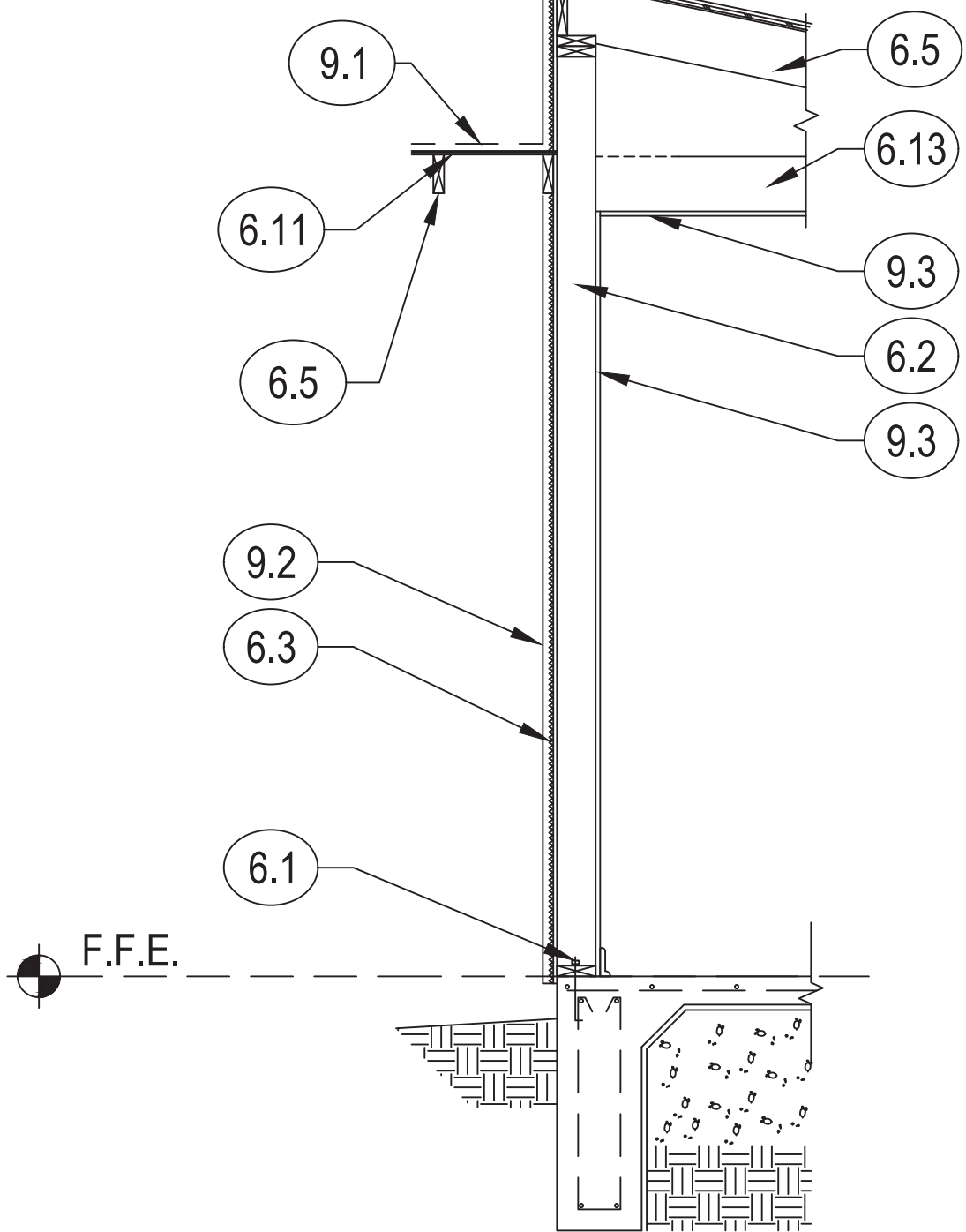
- 9.1) ROOFING MATERIAL - REFER TO DESIGNER/OWNER.

- 9.2) EXTERIOR FINISH - REFER TO DESIGNER/OWNER.

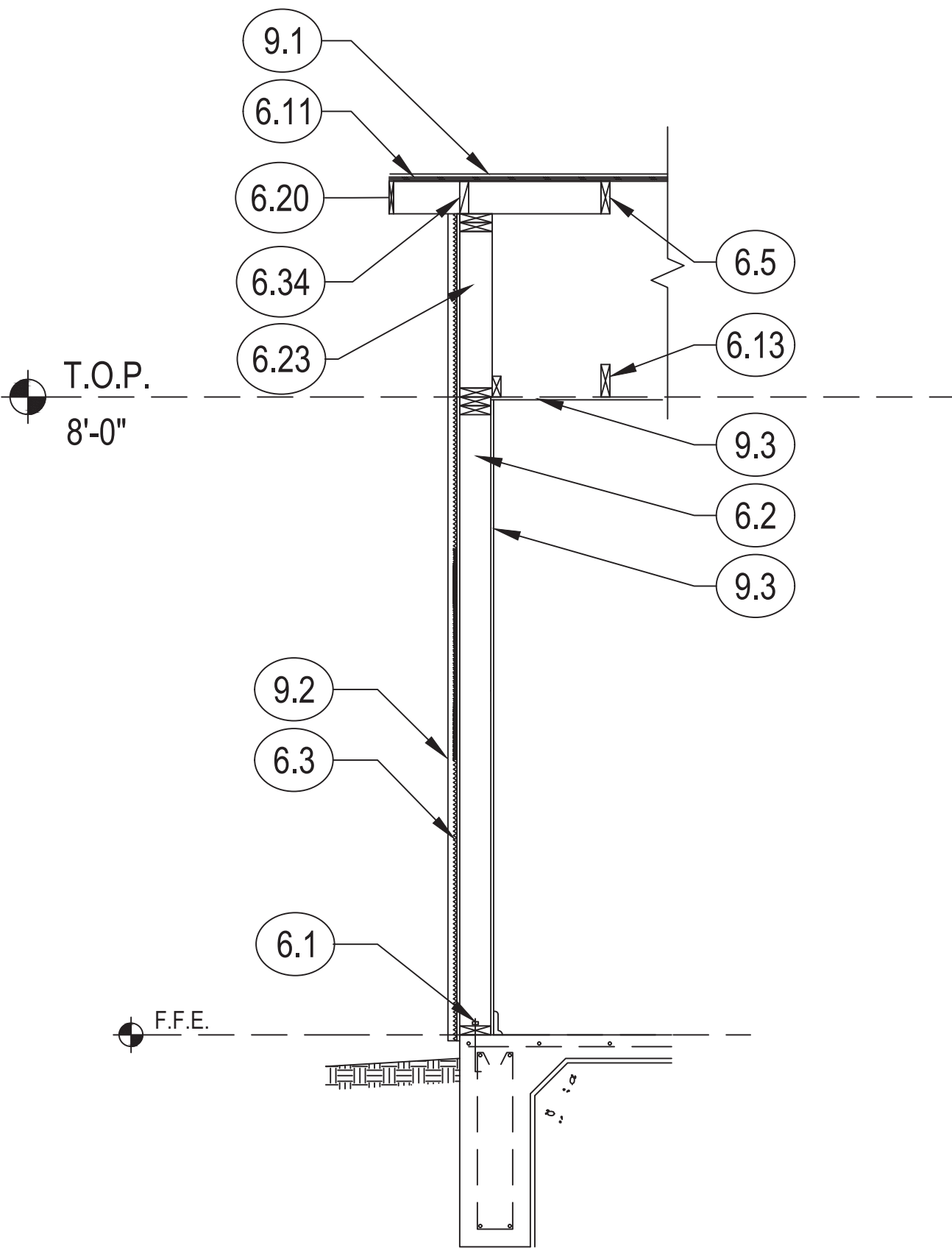
- 9.3) INTERIOR FINISH - REFER TO DESIGNER/OWNER.



1 TYPICAL EXTERIOR BRACED WALL



2 TYPICAL EXTERIOR BRACED WALL



3 TYPICAL EXTERIOR BRACED WALL

TABLE 1

NAILING SCHEDULE	
CONNECTION	NAILING
JOIST OR TRUSS BEARING ON SILL OR GIRDER, TOENAIL	(3) 8d
BRIDGING TO JOIST, TOENAIL EACH END	(2) 8d
SOLE PLATE TO JOIST OR BLOCKING, FACE NAIL	16d AT 16" o.c.
TOP PLATE TO STUD, END NAIL TO EACH STUD	(2) 16d
STUD TO SOLE PLATE	(4) 8d TOENAIL OR (2) 16d END NAIL
DOUBLE STUDS, FACE NAIL	16d AT 24" o.c.
DOUBLE TOP PLATES, FACE NAIL	16d AT 16" o.c.
TOP PLATES, LAPS AND INTERSECTIONS, FACE NAIL	2 - 16d
CONTINUOUS HEADER, TWO PIECES	16d AT 16" o.c. ALONG EACH EDGE
CEILING JOISTS TO PLATE, TOENAIL	(3) 8d
CONTINUOUS HEADER TO STUD, TOENAIL	(4) 8d
CEILING JOISTS, LAPS OVER PARTITIONS, FACE NAIL	(3) 16d
CEILING JOISTS TO PARALLEL RAFTERS, FACE NAIL	(3) 16d
RAFTER OR TRUSS TO PLATE, TOE NAIL	(3) 8d
BUILT-UP CORNER STUDS	16d AT 24" o.c.

NOTES:

1. MINIMUM NAILING SPECIFIED HEREIN SHALL BE PROVIDED UNLESS OTHERWISE NOTED ON DETAILS OR STRUCTURAL NOTES.

2. COMMON OR BOX NAILS MAY BE USED. 16d NAILS MAY BE EITHER COMMON OR SINKER.

TABLE 2

STRUCTURAL SHEATHING / DECKING						
STRUCTURAL SYSTEM	SHEATHING TYPE	EXPOSURE CATEGORY	THICKNESS (MIN.)	SPAN RATING	NAILING PATTERN	
					EDGE SUPPORT	INTERIOR SUPPORT
FLOOR DECKING	APA RATED STURD I-FLOOR	EXP. 1	3/4" / 1 1/8"	24 oc / 48 oc	10d @ 6" O.C.	10d @ 12" O.C.
WALL SHEATHING	APA RATED SHEATHING	EXP. 1	7/16"	24/16	10d @ 6" O.C.	10d @ 12" O.C.
ROOF DECKING	APA RATED SHEATHING	EXP. 1	7/16"	24/16	8d @ 6" O.C.	8d @ 12" O.C.

NOTES:

1. STRUCTURAL PANELS SHALL BE LABELED / STAMPED WITH APA APPROVED MARKINGS AND LABELS SHOWING CONFORMANCE WITH SPECIFICATIONS.

2. ALL PANELS SHALL BE LAID OUT / ORIENTATED TO BE PERPENDICULAR TO SUPPORTS.

3. STAPLES MAY NOT BE SUBSTITUTED FOR NAILS.

4. BLOCK EDGES OF ALL WALL, ROOF, AND FLOOR SHEATHING PANELS.

TABLE #3

ROOF FRAMING SCHEDULE		
MEMBER	SIZE	GRADE
COMMON RAFTER	2 X 6 AT 2'-0" O.C.	SYP #2
HIP RIDGE	2 X 10	SYP #2
GABLE RIDGE	2 X 10	SYP #2
OUTRIGGERS	2 X 4 AT 2'-0" O.C.	SYP #2

TABLE #4

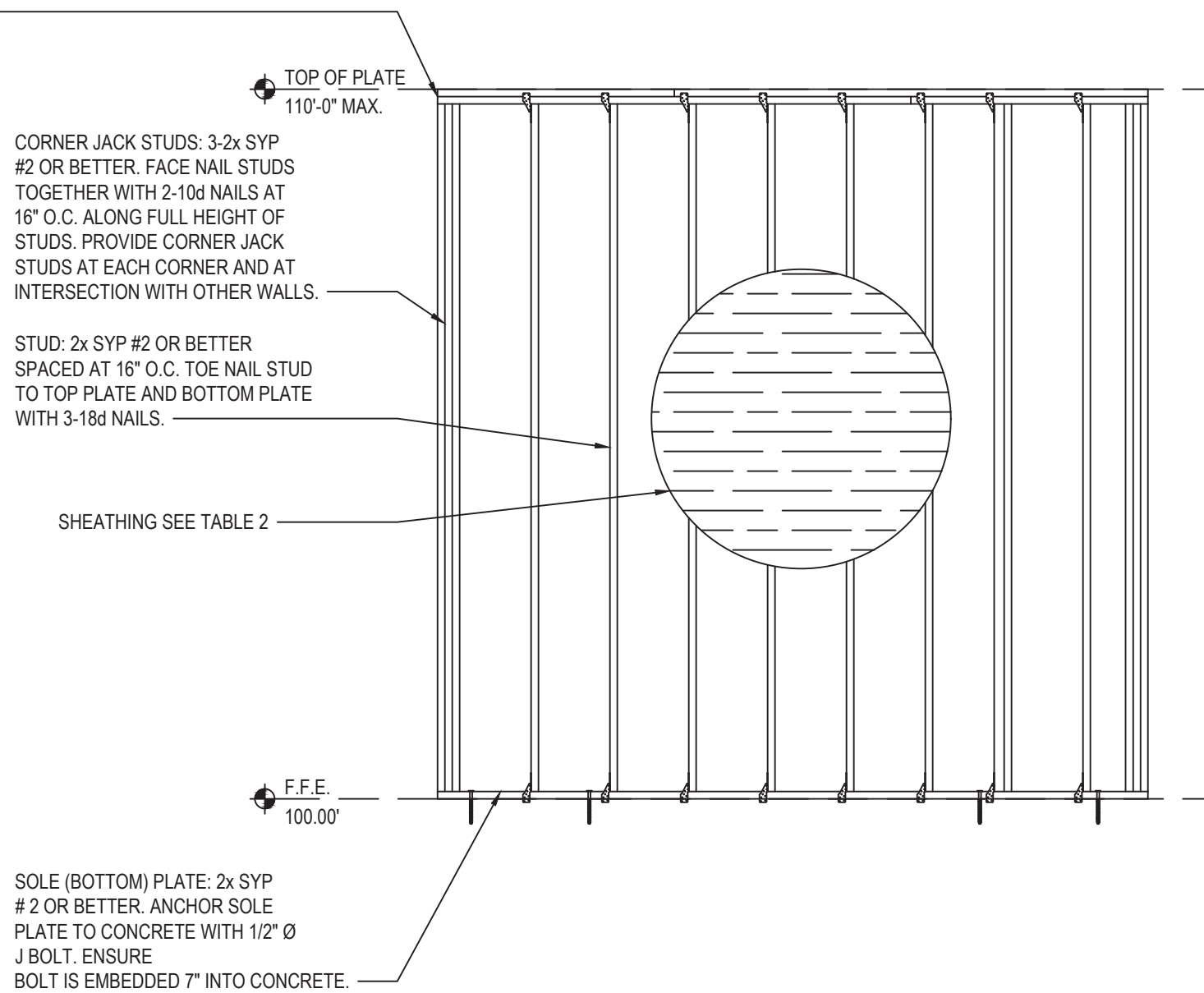
HEADER SCHEDULE			
SPAN	HEADER	SPECIES	JACK STUDS
3'-0" - 5'-0"	(2) 2 X 6	SYP #2	(1) SPF #2
6'-0" - 8'-0"	(2) 2 X 8	SYP #2	(1) SPF #2
9'-0" - 11'-0"	(2) 2 X 12	SYP #2	(1) SPF #2

TABLE #5

WALL FRAMING SCHEDULE		
1st FLOOR WALLS	2 X 4 AT 2'-0" O.C.	SPF #2
1st FLOOR BOTTOM PLATE	2 X 4 TREATED	SPF #2
1st FLOOR TOP PLATE	(2) 2 X 4	SPF #2
2nd FLOOR WALLS	2 X 4 AT 2'-0" O.C.	SPF #2
2nd FLOOR BOTTOM PLATE	2 X 4	SPF #2
2nd FLOOR TOP PLATE	(2) 2 X 4	SPF #2

TOP PLATE: 2- 2x SYP #2 OR BETTER. OVERLAP TOP PLATES AT CORNERS AND INTERSECTIONS WITH OTHER WALLS. END JOINTS IN TOP PLATE SHALL BE OFFSET AT LEAST 24". JOINTS IN PLATES NEED NOT OCCUR OVER STUDS.

FASTEN TOP PLATES TOGETHER WITH 2-10d COMMON WIRE NAILS (FACE NAIL) AT 18" O.C. ALONG LENGTH OF PLATE.



A - TYPICAL SCHEMATIC OF ENGINEERED BRACED WALL PANEL.

THE CONTRACTOR SHALL VERIFY ALL FIELD CONDITIONS WHICH WILL AFFECT THE FABRICATION AND CONSTRUCTING OF COMPONENTS FOR THE NEW CONSTRUCTION PRIOR TO THE START OF CONSTRUCTION. UNLESS OTHERWISE INDICATED, THE DOCUMENTS DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL TAKE ALL MEASURES NECESSARY TO PROTECT THE SAFETY OF THE PUBLIC ALONG WITH THE SAFETY OF THE STRUCTURE DURING CONSTRUCTION. SUCH MEANS SHALL INCLUDE BUT NOT BE LIMITED TO BRACING AND SHORING OF DEAD LOADS, CONSTRUCTION LOADS, AND WIND LOADS. THE CONTRACTOR WILL BE REQUIRED TO CORRECT AT HIS OWN EXPENSE ANY SUBSIDENCE, STRUCTURAL DAMAGE OR OTHER OBJECTIONAL CONDITIONS CAUSED BY HIS OPERATIONS

ISSUED FOR CONSTRUCTION



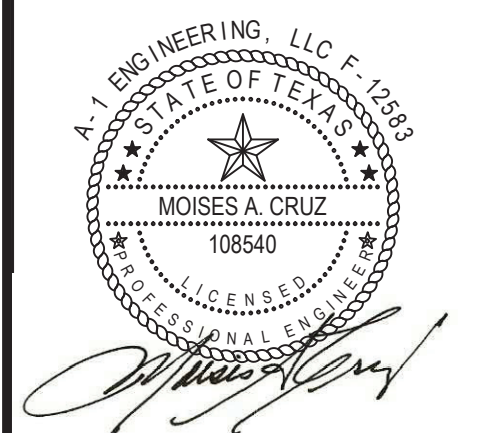
NEW RESIDENTIAL BUILDING

PROTOTYPE 1233-18

CITY OF SAN ANTONIO

DEPARTMENT OF PLANNING AND COMMUNITY DEVELOPMENT

BY	DATE	ISSUE	REMARKS



A-1 ENGINEERING, LLC  
F-12583

THESE PLANS COMPLY WITH  
THE UNIVERSAL DESIGN CODE  
AND 2018 IRC

SHEET SIZE: 24" x 36"

ISSUE DATE: 11.24.2018

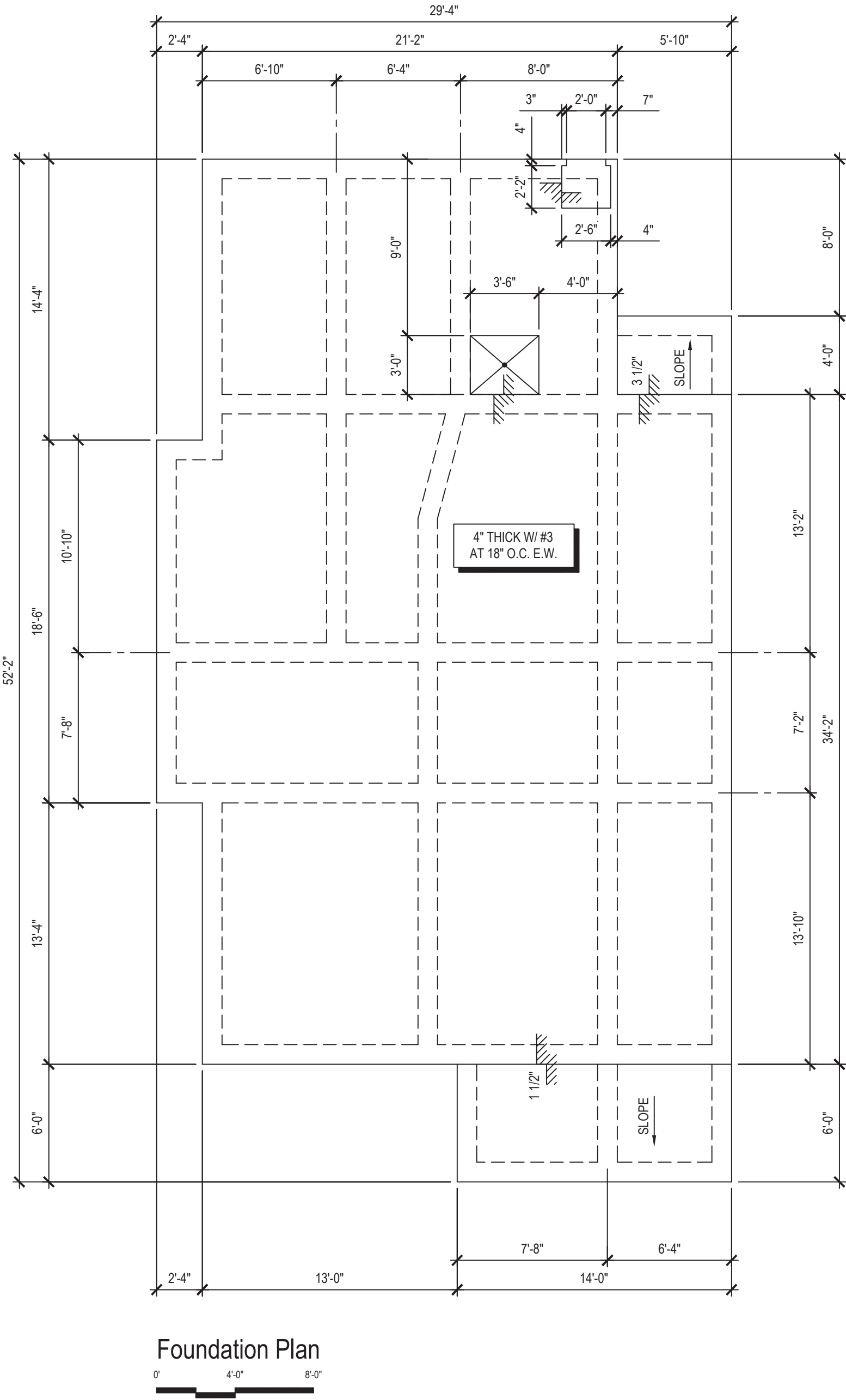
SHEET:

13 OF 14

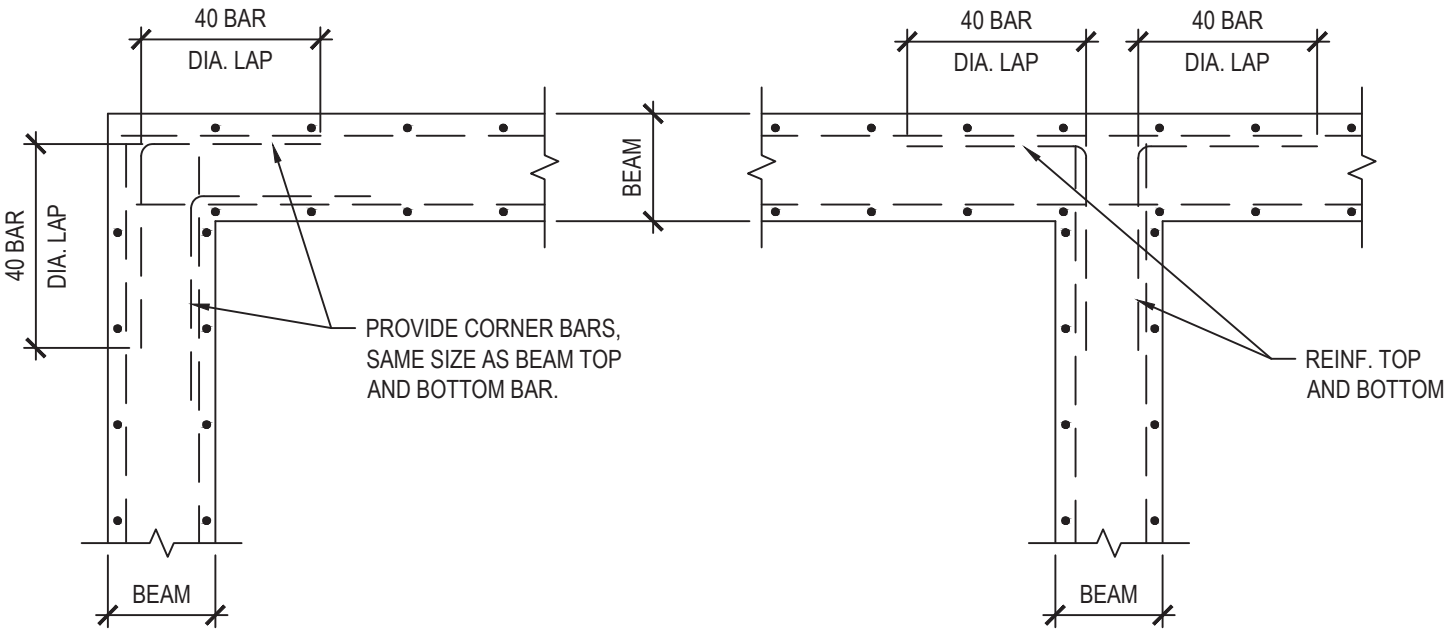
DETAILS



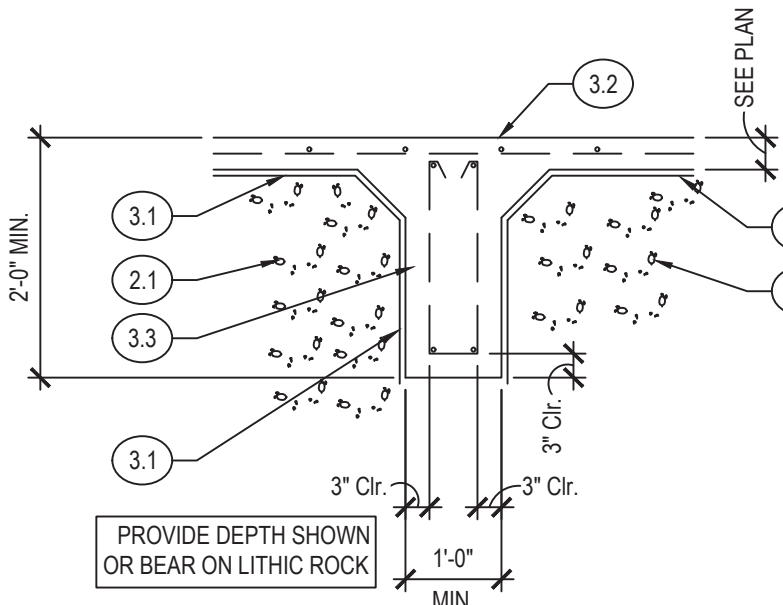
NOT FOR CONSTRUCTION



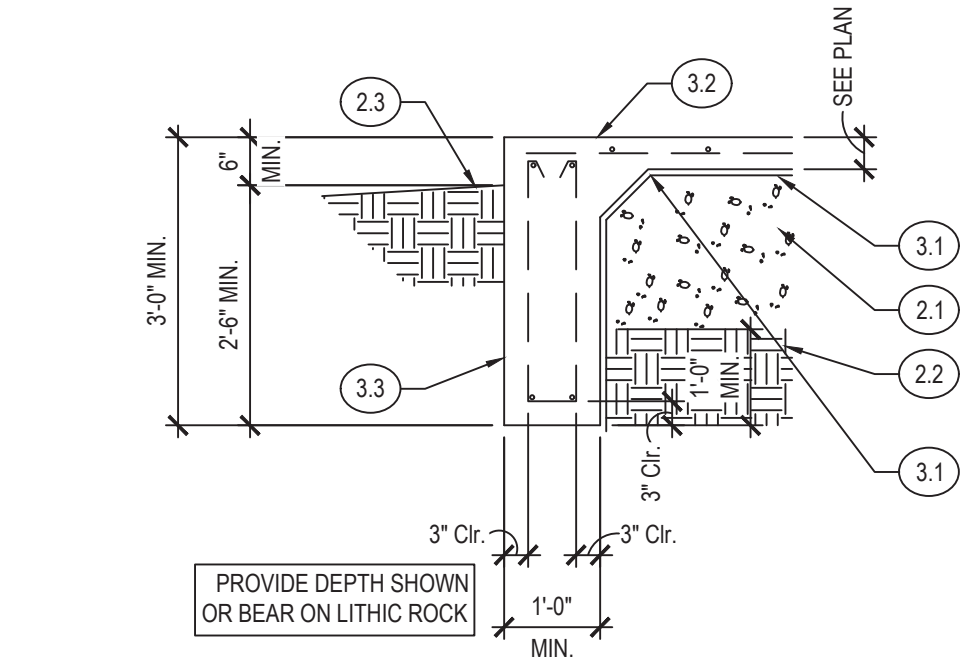
NOT FOR CONSTRUCTION



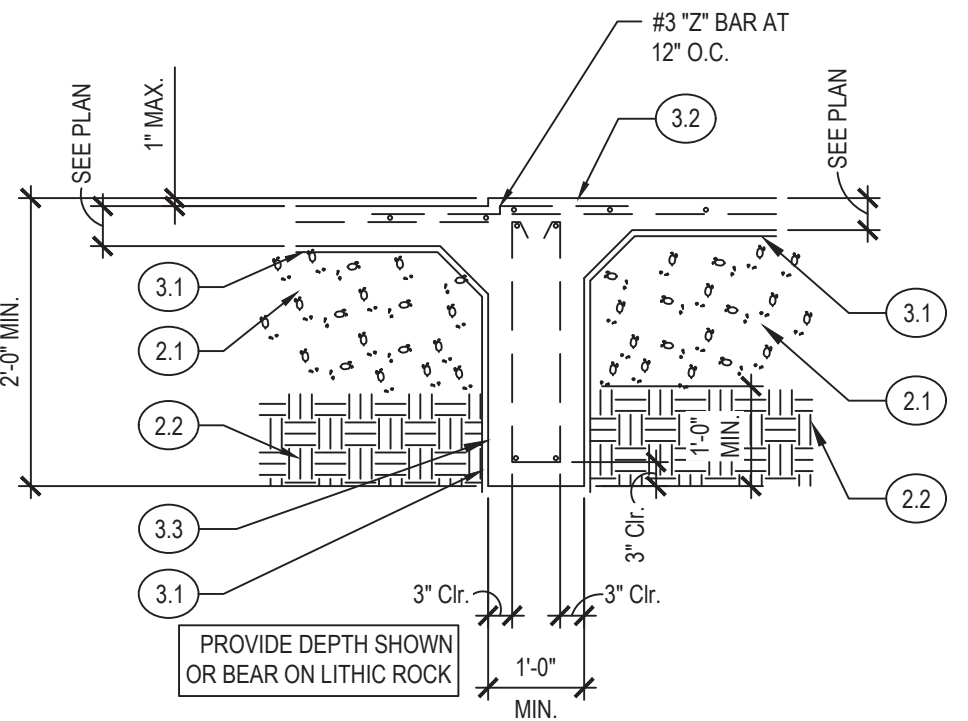
A - TYPICAL CORNER REINFORCING AT GRADE BEAM INTERSECTION



C - INTERIOR GRADE BEAM



B - EXTERIOR GRADE BEA



D - DROP AT INTERIOR BE

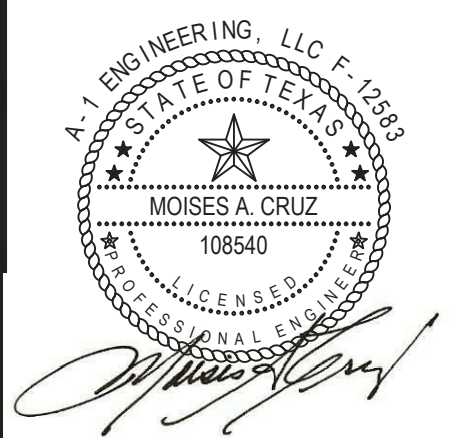
## KEY NOTE

- 2.1) SELECT STRUCTURAL COMPACTED FILL.
- 2.2) FINISH SOIL.
- 2.3) EXISTING GRADE ALONG THE PERIMETER OF THE BUILDING SHALL BE AT LEAST 5% SLOPE FOR A DISTANCE OF 10 FT OUTWARD FROM THE EDGE OF THE BUILDING. ADD SOD ALONG THE FULL PERIMETER OR 5'-0" WIDE CONTINUOUS CONCRETE APRON (SIDEWALK).
- 3.1) 6 MIL THICK PLASTIC VAPOR RETARDER, TYPE RECOMMENDED TO BE IN CONTACT WITH THE SOIL OR FILL UNDER A CONCRETE SLAB, LISTED IN ASTM 1745 CLASS A WITH A PERMEANCE LESS THAN 0.036 AS DETERMINED BY ASTM E96. POLYETHYLENE IS NOT ACCEPTABLE. INSTALL VAPOR RETARDER SOLIDLY WITHIN AND BELOW SLAB SURFACE WITH JOINTS LAPPED AT LEAST 6 INCHES AND TAPED CONTINUOUSLY WITH RECOMMENDED PRESSURE-SENSITIVE TAPE. EXTEND VAPOR RETARDER DOWN THE SIDES OF THE BEAM TRENCHES AND TERMINATE SO THAT IT DOES NOT EXTEND ACROSS THE TRENCH BOTTOM. CONTRACTOR AND ARCHITECT (NOT STRUCTURAL ENGINEER) SHALL VERIFY THAT VAPOR RETARDER SELECTED IS COMPATIBLE WITH PROPOSED FLOOR FINISHES.
- 3.2) SLAB: 83 ± 18" O.C. EACH WAY CENTERED IN CONCRETE SLAB THICKNESS. EXTEND SLAB REINFORCING TO TOP OUTSIDE PERIMETER BEAM BAR. START SLAB STEEL SPACING NOT MORE THAN 6" FROM THE EDGE OF THE SLAB.
- 3.3) GRADE BEAM: 2-6" CONTINUOUS BEAM REINFORCING BARS TOP AND BOTTOM WITH 33" STIRRUPS AT 18" O.C. START STIRRUP SPACING AT ENDS OF HORIZONTAL BEAM BARS. LAP 2" BZ BARS TO HORIZONTAL BARS WHERE BEAM STEPS DOWN GREATER THAN 3". LAP 2" BZ CORNER BARS TOP AND 2-6" CORNER BARS BOTTOM TO HORIZONTAL BEAM BARS AT ALL BEAM CORNERS AND DEAD END BEAM INTERSECTIONS. FOR BEAMS WITH DEPTH EXCEEDING 3'-0". ADD 4" CONTINUOUS MID-HEIGHT HORIZONTAL BARS AT EACH BEAM FACE AT 12" O.C.

NOT FOR CONSTRUCTION



NEW RESIDENTIAL BUILDING  
PROTOTYPE 1233-18  
CITY OF SAN ANTONIO  
DEPARTMENT OF PLANNING AND COMMUNITY DEVELOPMENT

[illegible]

A-1 ENGINEERING ,LLC  
F-12583

THESE PLANS COMPLY WITH  
THE UNIVERSAL DESIGN CODE  
AND 2018 IRC

SHEET SIZE: 24" x 36"

ISSUE DATE: 11/24/2018

SHEET:

14 OF 14

## FOUNDATION

NOT FOR CONSTRUCTION

ISSUED FOR PRICING ONLY

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TEXAS  
JPZ-1542











## Cost Estimate Report

Rebecca Minica

Date: 04/19/2019

218 Parkview  
San Antonio, TX, 78210

### 218 Parkview

Prepared By: ABRAHAM DIAZ CITY OF SAN ANTONIO

### Unit Detail Report

Year 2019

Unit Line Number	Description	Quantity	Unit	Total Incl. O&P	Ext. Total Incl. O&P
<b>Division 00</b>					
000000000001	Roof demolition	26.00	Sq.	\$75.00	\$1,950.00
000000000002	Subfloor Demolition	1,068.00	S.F.	\$1.23	\$1,313.64
000000000003	Kitchen Sink; 7" deep, 33" x 22" stainless steal medium grade double bowl.	1.00	Total	\$600.18	\$600.18
000000000004	HVAC System; Gas heat, Electric A/C Est. 3.0 Tons, SEER Rating per City Code & IECC	1.00	Total	\$8,125.00	\$8,125.00
000000000005	Security Light	1.00	Total	\$150.00	\$150.00
000000000006	Porch Light: Exterior	2.00	Ea.	\$131.25	\$262.50
000000000007	Plumbing	1.00	Total	\$7,500.00	\$7,500.00
000000000008	Reflective roof underlayment	1.00	Total	\$1,071.50	\$1,071.50
000000000009	Roof Sheathing: 5/8" OSB	1,157.00	S.F.	\$1.34	\$1,550.38
000000000010	Vinyl Plank Flooring	1,068.00	S.F.	\$3.31	\$3,535.08
000000000013	Water Heater Exterior Enclosure	1.00	Total	\$437.50	\$437.50
000000000016	Foundation Repair	1.00	Total	\$18,400.00	\$18,400.00
000000000018	Demolition: Kitchen & bathroom	1.00	Total	\$437.50	\$437.50
000000000019	Above-Appliance Cabinet	2.00	Total	\$387.50	\$775.00
000000000020	Paint: Interior, Semi-Gloss Latex Paint, 1 Coat Primer, 2 Coats Paint	3,417.00	S.F.	\$1.66	\$5,672.22
000000000021	Smoke & Carbon Monoxide Alarm	1.00	Ea.	\$95.13	\$95.13
000000000112	Shower stall- tile-Handicap 3' x 5' ceramic Shower stall.	1.00	Ea.	\$1,760.00	\$1,760.00

000000000120	Foundation Skirting; Cement Board, Incls vents & metal flashing	338.00	S.F.	\$5.00	\$1,690.00
000000000127	One Time Inspection and Treatment	500.00	S.F.	\$0.88	\$440.00
000000000129	Paints & Coatings: Exterior, Semi-Gloss Latex, 1 coat primer, 2 coats paint	1,690.00	S.F.	\$3.25	\$5,492.50
000000000131	Storage Unit: Steel; 10' H X 10' W X 20' L (Cost is for 90 days)	2.00	Month	\$660.00	\$1,320.00
<b>Division 00</b>	<b>Subtotal</b>				<b>\$62,578.13</b>

**Division 02 Existing Conditions**

022203107310	Selective demolition, cutout, wood frame, roofs, sheathing, to 1" thick, openings to 5 S.F., excludes re-framing, roofing, loading and disposal	14.00	Ea.	\$56.57	\$791.98
024119190725	Selective demolition, rubbish handling, dumpster, 20 C.Y., 5 ton capacity, weekly rental, includes one dump per week, cost to be added to demolition cost	4.00	Week	\$565.00	\$2,260.00
<b>Division 02</b>	<b>Existing Conditions Subtotal</b>				<b>\$3,051.98</b>

**Division 06 Wood, Plastics, and Composites**

060505105682	Selective demolition, wood framing, rafters, 6/12 - 8/12 pitch, 2" x 4", 16" OC	1,157.00	S.F.	\$0.44	\$509.08
061623100207	Subfloors, plywood, CDX, 3/4" thick, pneumatic nailed	1,068.00	SF Flr.	\$1.54	\$1,644.72
062213155155	Moldings, base, modern profile, 5/8" x 3-1/2", poplar	340.00	L.F.	\$2.11	\$717.40
062213400760	Exterior trim and moldings, corner board, pine, #2, 1" x 4"	128.00	L.F.	\$1.80	\$230.40
062213402570	Exterior trim and moldings, door and window casing, pine, #2, 1" x 4"	228.00	L.F.	\$1.56	\$355.68
062213406220	Exterior trim and moldings, fascia, pine, #2, 1" x 6"	169.00	L.F.	\$1.84	\$310.96
<b>Division 06</b>	<b>Wood, Plastics, and Composites Subtotal</b>				<b>\$3,768.24</b>

**Division 07 Thermal and Moisture Protection**

070505105120	Selective demolition, thermal and moisture protection, siding, tempered hardboard sheet	1,690.00	S.F.	\$0.85	\$1,436.50
072113100600	Wall insulation, rigid, fiberglass, foil faced, 3" thick, R13, 3#/CF	1,521.00	S.F.	\$2.42	\$3,680.82
072126100100	Blown-in insulation, ceilings, with open access, cellulose, 8-11/16" thick, R30	1,068.00	S.F.	\$0.99	\$1,057.32
072510100480	Weather barriers, building paper, housewrap, exterior, spun bonded polypropylene, large roll	1,690.00	S.F.	\$0.21	\$354.90
073113100155	Asphalt shingles, standard strip, inorganic, class A, 25 year, pneumatic nailed	26.00	Sq.	\$114.57	\$2,978.82
074646100040	Fiber cement siding, lap siding, smooth texture, 5/16" thick x 8" wide, 6-3/4" exposure	1,690.00	S.F.	\$2.70	\$4,563.00



077143100020	Aluminum drip edge, mill finish, .016" thick, 5" wide	169.00	L.F.	\$1.35	\$228.15
077226100430	Ridge vents, molded polyethylene, excl. shingles	25.00	L.F.	\$4.53	\$113.25
<b>Division 07 Thermal and Moisture Protection Subtotal</b>					<b>\$14,412.76</b>
<b>Division 08 Openings</b>					
080505100210	Door demolition, exterior door, single, 1-3/4" thick, 3'-0" x 8'-0", remove	2.00	Ea.	\$18.46	\$36.92
080505100500	Door demolition, interior door, single, 3' x 7' high, 1-3/8" thick, remove	6.00	Ea.	\$9.23	\$55.38
080505200240	Window demolition, aluminum, to 25 S.F.	13.00	Ea.	\$16.90	\$219.70
081163230440	Doors, storm, aluminum, residential, combination storm and screen, clear anodic coating, 6'-8" x 3'-0" wide, incl. frame	2.00	Ea.	\$248.88	\$497.76
081313200240	Doors, residential, steel, prehung, insulated, exterior, embossed, half glass, 3'-0" x 6'-8"	2.00	Ea.	\$403.09	\$806.18
081416090202	Door, wood, architectural, flush, interior, hollow core, 7 ply, birch face, 2'-0" x 6'-8" x 1-3/4" thick	6.00	Ea.	\$92.86	\$557.16
081723104600	Doors, prehung, interior, passage, luan, flush, hollow core, 4-5/8" solid jamb, 1-3/8" x 6'-8" x 2'-6" wide	6.00	Ea.	\$181.35	\$1,088.10
083213100450	Doors, glass, sliding, aluminum, economy, 5/8" tempered insulated glass, 6'-0" x 6'-8"	1.00	Ea.	\$1,095.60	\$1,095.60
085113201040	Windows, aluminum, commercial grade, stock units, casement, insulating glass, 3'-1" x 3'-2" opening, incl. frame and glazing	2.00	Ea.	\$640.88	\$1,281.76
085113203100	Windows, aluminum, commercial grade, stock units, single-hung, insulating glass, 2'-0" x 3'-0" opening, incl. frame and glazing	1.00	Ea.	\$346.74	\$346.74
085113204400	Windows, aluminum, commercial grade, stock units, sliding, insulating glass, 5'-0" x 3'-0" opening, incl. frame and glazing	10.00	Ea.	\$503.76	\$5,037.60
<b>Division 08 Openings Subtotal</b>					<b>\$11,022.90</b>
<b>Division 09 Finishes</b>					
090505100200	Ceiling demolition, gypsum wall board, furred and nailed, remove	1,068.00	S.F.	\$0.50	\$534.00
090505301000	Walls and partitions demolition, gypsum wallboard, per s.f., nailed or screwed	2,720.00	S.F.	\$0.20	\$544.00
092910300390	Gypsum wallboard, on walls, standard, w/compound skim coat (level 5 finish), 1/2" thick	2,349.00	S.F.	\$1.15	\$2,701.35
092910300590	Gypsum wallboard, on walls, water resistant, w/compound skim coat (level 5 finish), 1/2" thick	50.00	S.F.	\$1.24	\$62.00
092910301090	Gypsum wallboard, on ceilings, w/compound skim coat (level 5 finish), 1/2" thick	1,068.00	S.F.	\$1.32	\$1,409.76
092910301290	Gypsum wallboard, on ceilings, water resistant, w/compound skim coat (level 5 finish), 1/2" thick	25.00	S.F.	\$1.41	\$35.25
092910305270	Gypsum wallboard, for textured spray, add	3,417.00	S.F.	\$0.34	\$1,161.78

092910305350	Gypsum wallboard, for finishing corners, inside, add	150.00	L.F.	\$0.64	\$96.00
092910305355	Gypsum wallboard, for finishing outer corners, add	150.00	L.F.	\$0.66	\$99.00
<b>Division 09 Finishes Subtotal</b>					<b>\$6,643.14</b>
<b>Division 10 Specialties</b>					
102813130800	Toilet accessories, grab bars, straight, stainless steel, 1-1/4" diameter x 18" long	1.00	Ea.	\$50.79	\$50.79
102813131100	Toilet accessories, grab bars, straight, stainless steel, 36" long	1.00	Ea.	\$59.60	\$59.60
102816200100	Medicine cabinets, with mirror, wood frame	1.00	Ea.	\$186.25	\$186.25
<b>Division 10 Specialties Subtotal</b>					<b>\$296.64</b>
<b>Division 11 Equipment</b>					
113013183300	Garbage disposal, residential appliances, sink type, minimum	1.00	Ea.	\$176.49	\$176.49
113013194150	Range hood, residential appliances, vented, min, 2 speed, 30" wide, minimum	1.00	Ea.	\$206.12	\$206.12
<b>Division 11 Equipment Subtotal</b>					<b>\$382.61</b>
<b>Division 12 Furnishings</b>					
123223100880	Custom cabinets, kitchen base cabinets, hardwood, prefinished, 1 top drawer, 1 door below, 24" deep, 35" high, 24" wide, excl. countertops	1.00	Ea.	\$517.37	\$517.37
123223101220	Custom cabinets, kitchen base cabinets, hardwood, prefinished, 2 top drawers, 2 doors below, 24" deep, 35" high, 30" wide, excl. countertops	3.00	Ea.	\$604.03	\$1,812.09
123223101540	Custom cabinets, kitchen base cabinets, hardwood, prefinished, range or sink base, 2 doors below, 24" deep, 35" high, 36" wide, excl. countertops	1.00	Ea.	\$568.85	\$568.85
123223105060	Custom cabinets, kitchen wall cabinets, hardwood, prefinished, 1 door, 12" deep, 30" high, 24" wide	1.00	Ea.	\$446.61	\$446.61
123223105320	Custom cabinets, kitchen wall cabinets, hardwood, prefinished, 2 doors, 12" deep, 30" high, 30" wide	3.00	Ea.	\$517.33	\$1,551.99
123223107000	Custom cabinets, kitchen wall cabinets, hardwood, prefinished, broom cabinet, 84" high x 24" deep x 18" wide	1.00	Ea.	\$947.18	\$947.18
123623130020	Countertops, stock, plastic laminate, 24" wide, includes backsplash, minimum	20.00	L.F.	\$32.78	\$655.60
<b>Division 12 Furnishings Subtotal</b>					<b>\$6,499.69</b>
<b>Division 22 Plumbing</b>					

224113131140	Water closet, tank type, vitreous china, floor mounted, close coupled, ADA, two piece, 1.28 gpf, includes seat, supply pipe with stop	1.00	Ea.	\$515.14	\$515.14
224116130600	Lavatory, vanity top, porcelain enamel on cast iron, white, 20" x 18", includes trim	1.00	Ea.	\$483.99	\$483.99
<b>Division 22 Plumbing Subtotal</b>					<b>\$999.13</b>
<b>Division 23 Heating, Ventilating, and Air Conditioning (HVAC)</b>					
233423106660	Fans, residential, bath exhaust, grille, back draft damper, 50 CFM	1.00	Ea.	\$87.26	\$87.26
<b>Division 23 Heating, Ventilating, and Air Conditioning (HVAC) Subtot</b>					<b>\$87.26</b>
<b>Division 26 Electrical</b>					
260505100370	Non metallic sheathed cable, (Romex), #14, 3 wire, electrical demolition, remove	330.00	L.F.	\$0.50	\$165.00
260505101230	Panelboards, 3 wire, 120/240 V, 100 amp, to 20 circuits, electrical demolition, remove, including removal of all breakers, conduit terminations & wire connections	1.00	Ea.	\$127.46	\$127.46
260505101760	Switch boxes, electrical demolition, remove, including removal of supports and terminations	23.00	Ea.	\$3.10	\$71.30
260505101780	Receptacle & switch plates, electrical demolition, remove	40.00	Ea.	\$1.29	\$51.60
260505102480	Incandescent fixtures, interior, metal cylinder type, 75 watt, electrical demolition, remove, surface, ceiling, or wall mount, to 12' high	9.00	Ea.	\$10.70	\$96.30
260505102620	Incandescent fixtures, exterior, 100 Watt, electrical demolition, remove, wall mount	2.00	Ea.	\$13.25	\$26.50
260519550301	Non-metallic sheathed cable, copper with ground wire, 600 V, 3 wire, #12, (Romex)	250.00	L.F.	\$2.11	\$527.50
260519550801	Service entrance cable, aluminum, 3 RHW and 1 bare neutral, 600 V, 3 #1/0 & 1 #2, type SER	40.00	L.F.	\$5.74	\$229.60
260590101200	Service & panel, residential, w/18 branch breakers, 200 amp, incl 24' SE-AL cable, service eye, meter socket	1.00	Ea.	\$1,487.84	\$1,487.84
260590102110	Switch devices, residential, single pole, ivory, type NM (Romex) cable, 20', 15 amp, incl box & cover plate	23.00	Ea.	\$36.59	\$841.57
260590104050	Receptacle devices, residential, duplex outlet, ivory, w/#12/2, type NM cable, 20', 15 amp, incl box & cover plate	32.00	Ea.	\$37.45	\$1,198.40
260590104300	Receptacle devices, residential, decorator style, GFI, type NM cable, 15 amp, incl box & cover plate	9.00	Ea.	\$50.21	\$451.89
260590104570	Air conditioner outlet, residential, 30' of #12/2, 2 pole circuit breaker, type NM cable, 20 amp, 240 V, incl box & exterior cover plate	1.00	Ea.	\$98.22	\$98.22
260590106310	Light fixtures, residential, kitchen fixture (fluorescent), economy grade	1.00	Ea.	\$91.39	\$91.39

260590107050	Smoke detectors, residential, box, #14/3, type NM cable, 20'	4.00	Ea.	\$60.35	\$241.40
260590108362	Paddle fan, residential, variable speed (w/lights), economy model (AC motor)	7.00	Ea.	\$199.92	\$1,399.44
262416100600	Load centers, 1 phase, 3 wire, main lugs, indoor, 120/240 V, 200 amp, 16 circuits, incl 20 A 1 pole plug-in breakers	1.00	Ea.	\$560.10	\$560.10
262726202490	Receptacle, dryer, 30 Amp	1.00	Ea.	\$27.05	\$27.05
262773101020	Doorbell system, door chime, 2 note, with ambient light	1.00	Ea.	\$162.01	\$162.01
<b>Division 26 Electrical Subtotal</b>					<b>\$7,854.57</b>
<b>Subtotal</b>					<b>\$117,597.05</b>
<b>General Contractor's Markup on Subs</b>				<b>0.00%</b>	<b>\$0.00</b>
<b>Subtotal</b>					<b>\$117,597.05</b>
<b>General Conditions</b>				<b>0.00%</b>	<b>\$0.00</b>
<b>Subtotal</b>					<b>\$117,597.05</b>
<b>General Contractor's Overhead and Profit</b>				<b>0.00%</b>	<b>\$0.00</b>
<b>Unit Cost Total</b>					<b>\$117,597.05</b>

Assembly Detail Report

Year 2019

Assembly Number	Description	Quantity	Unit	Total Incl. O&P	Ext. Total Incl.O&P
03	Concrete				
0308026	Exterior wall framing systems, 2" x 4", 16" OC	1,108.00	S.F.	\$3.74	\$4,143.92
0312034	Gable end roof framing systems, 2" x 6" rafters, 16" OC, 4/12 pitch	1,157.00	S.F.	\$6.09	\$7,046.13
0348026	Partition framing systems, 2" x 4", 16" OC	600.00	S.F.	\$1.61	\$966.00
03	Concrete Subtotal				\$12,156.05
Subtotal					\$12,156.05
General Contractor's Markup on Subs			0.00%		\$0.00
Subtotal					\$12,156.05
General Conditions			0.00%		\$0.00
Subtotal					\$12,156.05
General Contractor's Overhead and Profit			0.00%		\$0.00
Assembly Cost Total					\$12,156.05
Grand Total					\$129,753.10