

# Attachment F

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**Before the Planning Commission in and for the  
County of Monterey, State of California**

In the matter of the application of:

**NASE WERNER JR. TRUST (PLN150669)**

**RESOLUTION NO. 17 - 035**

Resolution by the Monterey County Planning  
Commission:

- 1) Adopting a Mitigated Negative Declaration;  
and
- 2) Approving a Combined Development Permit  
consisting of:
  - a. Coastal Administrative and Design  
Approval for the construction of a  
5,385 square foot one-story single  
family dwelling with an attached  
garage and covered porch;
  - b. Coastal Development Permit for the  
removal of 44 Monterey pine trees;
  - c. Coastal Development Permit for  
development within 100 feet of  
Environmentally Sensitive Habitat  
(ESHA- Yadon's Piperia and  
Monterey pine forest); and
- 3) Adopting a Mitigation Monitoring and  
Reporting Plan.

1412 Lisbon Lane, Pebble Beach, Del Monte Forest  
Land Use Plan (APN: 008-232-003-000)

**The Werner Nase Jr. Trust application (PLN150669) came on for public hearing before the Monterey County Planning Commission on August 30, 2017. Having considered all the written and documentary evidence, the administrative record, the staff report, oral testimony, and other evidence presented, the Planning Commission finds and decides as follows:**

**FINDINGS**

1. **FINDING:** **CONSISTENCY / NO VIOLATIONS** – The proposed project and/or use, as conditioned, is consistent with the 1982 Monterey County General Plan, the Del Monte Forest Land Use Plan, the Monterey County Coastal Implementation Plan (Part 5), and the requirements of the applicable zoning ordinance (Title 20), to include Monterey County Code (MCC) Chapter 20.14 (Low Density Residential Zoning District) and Chapter 20.44 (Design Control Zoning District), and other County ordinances related to land use development. No violations exist on the property.  
**EVIDENCE:** a) The proposed project involves the following: a Combined Development Permit consisting of: a) Coastal Administrative and Design Approval for the construction of a 5,385 square foot one-story single family dwelling

with an attached garage and covered porch; b) Coastal Development Permit for the removal of 44 Monterey pine trees; and c) Coastal Development Permit for development within 100 feet of Environmentally Sensitive Habitat (ESHA- Yadon's Piperia and Monterey pine forest.

- b) No conflicts were found to exist. No communications were received during review of the project indicating any inconsistencies with the text, policies, and regulations in the applicable plans and MCC.
- c) The property is located at 1412 Lisbon Lane, Pebble Beach (Assessor's Parcel Number 008-232-003-000), Del Monte Forest Land Use Plan, Coastal Zone. The parcel is zoned Low Density Residential, 1.5 acres per unit, with a Design Control Overlay (Coastal Zone) [LDR/1.5-D (CZ)], which allows single-family dwellings as a principal use, subject to granting of applicable coastal development permits. Therefore, the project is an allowed land use for this site.
- d) The project planner reviewed the project application materials and County records to verify that the proposed project on the subject parcel conforms to the plans listed above.
- e) Monterey County RMA-Planning and RMA-Building Services records were reviewed, and the County is not aware of any active violations existing on the subject property.
- f) ESHA. Development within 100 feet of mapped or field identified environmentally sensitive habitats is nonexempt development and requires a Coastal Development Permit (MCC, Section 20.14.030 of Title 20). Biological studies identified Yadon's piperia and Monterey pine forest as ESHA. (*See Finding 4*).
- g) Condition 5 has been incorporated as a condition of approval requiring a conservation and scenic easement conveyed to the Del Monte Forest Conservancy over the 21,600 square foot Enhancement/Restoration Area on the eastern side of the Nase Property in accordance with the procedures in Monterey County Code Section 20.64.280.A.
- h) Cultural Resources. County records identify the project site located within an area of moderate sensitivity for prehistoric cultural (archaeological) resources. A Phase 1 Inventory of Archaeological Resources was prepared (LIB160030), which included research of available historic resources through the Northwest Information Center of the California Historical Resources Information System (NWIC) and a pedestrian survey of the site. This resulted in negative findings of archaeologically and historically significant cultural resources. However, because the NWIC records confirmed the existence of multiple negative archaeological reports in the vicinity area, the archaeologist concluded the subject region is highly sensitive as per extant historic and cultural resources. The archaeologist recommends that the project proceeds with construction related excavation, contingent upon the need to assure that archaeological monitoring accompanies any and all excavation given the archeological sensitivity of the area. Pursuant to Assembly Bill 52, County staff consulted with the most likely descendant (MLD) of the Ohlone/Costanoan-Esselen Nation prior to conducting this Initial Study. The MLD expressed concerns with the proposed project because areas located close to water

were frequented by their people. Therefore, the MLD recommended that a tribal monitor be onsite during any earth disturbing activities, which includes the transplantation of the Yador's piperia from the site. Therefore, based on the recommendation of the archaeologist and the MLD, in order reduce potential impacts to archaeological resources such as artifacts, human remains, and/or a sacred site, the following mitigation measure has been recommended:

- Condition No. 3- Cultural Resources Negative Archaeological Report
- Condition No. 30; Mitigation Measure No. 3; Cultural Resources

Therefore, the potential for inadvertent impacts to cultural resources is limited and will be controlled by the use of a County standard project condition and Mitigation Measure No. 3 (Condition 30).

- i) Tree Removal. The Del Monte Forest Land Use Plan and Monterey County Zoning Ordinance identify Monterey pine and Coast live oak trees as native tree species requiring protection and special consideration for their management. Specifically, Section 20.147.050, Forest Resources, states that a Forest Management Plan shall be required for all projects located in a forested area that require a discretionary permit. The *Tree Resource Assessment Management Plan dated December 29, 2015*, prepared by Frank Ono, Urban Forestry, certified arborist, states that the proposed development is within an existing stand of Monterey pine and Coast live oak trees and the removal of 46 Monterey pine trees on this site is will be unavoidable due to the heavily wooded site. In addition, the arborist recommends that seven (7) trees located near the construction activities be monitored. The arborist describes the population of pines on this site as overstocked for a one acre lot with approximately 200 trees; Many in dead, falling and in poor condition. Several of the oak trees are suppressed and range from poor to fair condition. Prior to the applicant's submittal of current development plans, the applicant worked with staff to reduce the tree removal by twelve trees, saving groupings of healthy landmark trees. This resulted in the proposed removal of 44 Monterey pine of the following sizes: Four (4) landmark sized (24 inches or greater in diameter); 11 trees in the 13 to 23 inches in diameter; and 29 trees in the 12 inches or less in diameter. Landmark trees are trees measuring 24 inches or more in diameter; and significant trees are trees measuring greater than 12 inches in diameter. (*See Finding 4*).
- j) The project was referred to the Del Monte Forest Land Use Advisory Committee (LUAC) for review. The LUAC, at a duly-noticed public meeting on February 4, 2016, continued the item to February 18, 2016, pending revisions made by the applicant, which included reduction of tree removal by 10 Monterey pines. On February 18, 2016, the LUAC recommended approval of the proposed project by a unanimous vote of 4 – 0 (2 absent) and expressed no concerns for the project.
- k) The application, project plans, and related support materials submitted by the project applicant to the Monterey County RMA - Planning Department for the proposed development found in Project File PLN150669.

2. **FINDING:** **SITE SUITABILITY** – The site is physically suitable for the use proposed.
- EVIDENCE:**
- a) The project has been reviewed for site suitability by the following departments and agencies: RMA-Planning, Pebble Beach Community Services District (Fire Protection District), RMA-Public Works, RMA-Environmental Services, Environmental Health Bureau, and Water Resources Agency. There has been no indication from these departments/agencies that the site is not suitable for the proposed development. Conditions recommended have been incorporated.
  - b) The following reports were prepared for the proposed project:
    - Phase 1 Inventory of Archaeological Resources Report (LIB160030) prepared by Archives & Archaeology, Salinas, CA November 10, 2015.
    - Geotechnical Report (LIB160033) prepared by Grice Engineering, Inc., Salinas, CA, December 2015.
    - Tree Resource Assessment Management Plan (LIB160032) prepared by Frank Ono, Certified Arborist, Pacific Grove, CA, December 29, 2015.
    - Biological Survey (LIB160031), prepared by Regan Biological & Horticultural Consulting, Carmel Valley, CA, November 14, 2016.
    - Biological Update-Potential Yadon’s piperia habitat (LIB170242), prepared by Regan Biological & Horticultural Consulting, Carmel Valley, CA, March 14, 2016.
    - Biological Spring Survey (LIB170243), prepared by Regan Biological & Horticultural Consulting, Carmel Valley, CA, April 15, 2016.
    - Mitigation and Monitoring Plan (LIB170244), prepared by Regan Biological & Horticultural Consulting, Carmel Valley, CA, December 2016, Revised February 8, 2017.
  - c) County staff independently reviewed these reports and concurs with their conclusions. With the implementation of mitigation measures for biological and cultural resources, there are no physical or environmental constraints that would indicate that the site is not suitable for the use proposed.
  - d) The proposed residence is not located on a site that is mapped as visually sensitive or a visual resource; nor located on or near a scenic vista.
  - e) The application, project plans, and related support materials submitted by the project applicant to Monterey County RMA-Planning for the proposed development found in Project File PLN150669.
3. **FINDING:** **HEALTH AND SAFETY** - The establishment, maintenance, or operation of the project applied for will not under the circumstances of this particular case be detrimental to the health, safety, peace, morals, comfort, and general welfare of persons residing or working in the neighborhood of such proposed use, or be detrimental or injurious to property and improvements in the neighborhood or to the general welfare of the County.
- EVIDENCE:**
- a) The project was reviewed by RMA-Planning, Pebble Beach Community

Services District (Fire Protection District), RMA-Public Works, RMA-Environmental Services, Environmental Health Bureau, and Water Resources Agency. The respective agencies have recommended conditions, where appropriate, to ensure that the project will not have an adverse effect on the health, safety, and welfare of persons either residing or working in the neighborhood.

- b) Necessary public facilities are available. Public water and sewer connections will be provided by the California American Water Company and the Pebble Beach Community Services District (PBCSD)/Carmel Area Wastewater District (CAWD). The Environmental Health Bureau reviewed the project application, and did not require any conditions.
- c) See Finding Nos. 1 and 2, and associated evidence.
- d) The application, project plans, and related support materials submitted by the project applicant to Monterey County RMA-Planning for the proposed development found in Project File PLN150669.

4. **FINDING:** **CEQA (Mitigated Negative Declaration)** - On the basis of the whole record before the Monterey County Planning Commission, there is no substantial evidence that the proposed project as designed, conditioned and mitigated, will have a significant effect on the environment. The Mitigated Negative Declaration reflects the independent judgment and analysis of the County.

- EVIDENCE:**
- a) Public Resources Code Section 21080.d and California Environmental Quality Act (CEQA) Guidelines Section 15064.a.1 require environmental review if there is substantial evidence that the project may have a significant effect on the environment.
  - b) Monterey County RMA-Planning prepared an Initial Study pursuant to CEQA. The Initial Study is on file in the offices of RMA-Planning and is hereby incorporated by reference (PLN150669).
  - c) The Initial Study identified several potentially significant effects, but revisions have been made to the project and applicant has agreed to proposed mitigation measures that avoid the effects or mitigate the effects to a point where clearly no significant effects would occur.
  - d) All project changes required to avoid significant effects on the environment have been incorporated into the project and/or are made conditions of approval. A Condition Compliance and Mitigation Monitoring and/or Reporting Plan has been prepared in accordance with Monterey County regulations, is designed to ensure compliance during project implementation, and is hereby incorporated herein by reference. The applicant must enter into an “Agreement to Implement a Mitigation Monitoring and/or Reporting Plan” as a condition of project approval (Condition # 7).
  - e) A Draft Mitigated Negative Declaration (MND) was prepared in accordance with CEQA and circulated for public review from July 5, 2017 to August 4, 2017. (SCH#:2017071011).
  - f) Issues that were analyzed in the Mitigated Negative Declaration include: Biological Resources and Cultural Resources.
  - g) Pursuant to Section 20.147.040, Environmental Sensitive Habitat Areas or ESHA of the Del Monte Forest Land Use Plan Area, areas that

support plan species for which there is compelling evidence or rarity [e.g. those areas designated 1b (rare or endangered in California and elsewhere) or 2 (rare, threatened or endangered in California but common elsewhere) by the California Native Plant Society. Biological surveys confirmed that two sensitive species occurred on the Nase property. They are the Monterey pine woodland and the *Piperia yadonii* (common name: Yadon's piperia).

- h) *Monterey pine forest*: The project includes the removal of 44 Monterey pines. A Tree Resource Assessment Management Plan prepared for the project identifies the project site as having an overstock of Monterey pines; 200 trees on the parcel of under one acre. The arborist report states that tree removal is unavoidable since the trees are scattered throughout the property. The 44 Monterey pines to be removed are within the proposed house footprint and the trees are in the following health conditions: six (6) dead; fifteen (15) poor and twenty-three (23) fair. Additionally, seven (7) Monterey pines, not within the construction footprint, but near the construction and grading activities, require monitoring. For residential development to occur on this site, tree removal is unavoidable. The area chosen for the development footprint is the least impactful to the forest because the development is concentrated on the west side of the property, allowing for a proposed enhancement/restoration area of approximately 21,600 square feet on the eastern portion of the Nase property. Mitigation measures have been incorporated to address the tree removal impacts. These include a 1: 1 replacement ratio of forty-four (44) Monterey pines at five-gallon each, to be located on site and requiring monitoring to ensure successful growth. In addition, monitoring of the seven (7) Monterey pines located near the construction activities. See Condition 25; Mitigation Measure No. 1; Mitigation Action No. 1e.
- i) *Yadon's piperia*: This is an endangered orchid, federally listed Endangered species, State Rare plant rank 1B.1 (Rare, threatened, or endangered in California and elsewhere .1: Seriously endangered in California). This is a wildflower that may be dormant and not emerge above the soil surface until the spring, where it would leaf producing flowers on erect spikes. Within the Nase property and a section of Pebble Beach right-of-way along the southern side of Lisbon Lane are 5 individual separate areas of Yadon's piperia habitat containing a total of approximately 437 (at minimum) individual *Piperia* plants, fifty-nine (59) of which are located in the proposed house footprint area. The population of the *Piperia* is shaped like a capital T; with the top part to the T along the frontage part of the property on Lisbon Lane and the post of the T running south through the middle of the Nase property where the proposed south east corner of the residence would be located. The project involves the removal of approximately 437 individual Yadon's piperia from the Nase property and relocating these to a receiver site in Del Monte Forest. This mitigation was developed by the project's biologist in consultation with the United States Fish and Wildlife Service (USFWS), members of the Del Monte Forest Conservancy, the Del Monte Forest Open Space Advisory Committee and the Pebble Beach Company.



- j) Other alternatives were analyzed; these included: 1) Trying to avoid impacting the Piperia population by redesign of the proposed development footprint (driveway and house footprint); and 2) Large percentage of avoidance (by project's design) and partial mitigation off-site. Both alternative options failed because the long term indirect impacts of development and surrounding neighborhood would likely cause the decline of the Piperia population, especially if the Piperia remained in the Pebble Beach right-of-way. Proceeding with the proposed development plans and transplanting all of the known Piperia to the chosen receiver site, located in "Area H" of the Pebble Beach Company (a conservation site), is the best mitigation possible. The translocation of the Piperia can therefore be monitored for success, seedling recruitment and population size for five (5) years following transplanting. According to the biologist, five years should be sufficient to demonstrate survival of the transplants. See *Condition No. 27*; Mitigation Measure No. 2; Mitigation Action No. 2a; *Condition No. 28*; Mitigation Action No. 2b; and *Condition No. 29*, Mitigation Action No. 2c.
- k) See Finding 1, Evidence h (Cultural Resources).
- l) Evidence that has been received and considered includes: the application, technical studies/reports (see Finding 2/Site Suitability), staff reports that reflect the County's independent judgment, and information and testimony presented during public hearings. These documents are on file in RMA-Planning (PLN150669) and are hereby incorporated herein by reference.
- m) Staff analysis contained in the Initial Study and the record as a whole indicate the project could result in changes to the resources listed in Section 753.5(d) of the California Department of Fish and Game (CDFG) regulations. All land development projects that are subject to environmental review are subject to a State filing fee plus the County recording fee, unless the Department of Fish and Game determines that the project will have no effect on fish and wildlife resources. Condition No. 5.
- n) Staff received a comment letter from the Native American Heritage Commission (NAHC) during the public review period. The NAHC expressed concerns that although issues relating to tribal cultural resources were discussed in the IS/MND, the text was not contained within a distinct subsection of the Initial Study Checklist for Tribal Cultural Resources as found within the "Final Text for tribal cultural resources update to Appendix G: Environmental Checklist Form." Pursuant to Section 15063(f) of the CEQA Guidelines, use of this form is only a suggestion and public agencies are free to devise their own format. In terms on content, Section 15063(d)(3) of the CEQA Guidelines states that environmental effects identified shall be explained indicating that there is some evidence to support the entry. The content of the IS/MND meets the content requirements of CEQA since it was disclosed that potential impacts to sacred tribal cultural resources were identified and based on the recommendation of the OCEN Tribe, a mitigation measure has been incorporated to reduce that impact to less than significant. Condition No. 30, Mitigation Measure No.3.

- o) Monterey County RMA-Planning, located at 1441 Schilling Place, Salinas, California, 93901, is the custodian of documents and other materials that constitute the record of proceedings upon which the decision to adopt the mitigated negative declaration is based.

5. **FINDING:**

**DESIGN REVIEW**– The subject project is consistent with the regulations for Design Control Zoning District (pursuant to MCC Chapter 20.44), which regulates the location, size, configuration, materials, and colors of structures to assure protection of public viewshed, neighborhood character, and visual integrity of certain developments without imposing undue restrictions on private property.

**EVIDENCE:**

- a) The site is located in a Design Control Overlay Zoning District. The proposed residence is not located on a site that is mapped as visually sensitive or a visual resource; nor located on or near a scenic vista. The proposal is under the allowable lot coverage and floor area ratio limitations of the zoning district. Analysis of the project’s siting, bulk and mass, proposed site improvements such as tree removal and proposed landscaping has been done in order to evaluate impacts to the neighborhood. The proposed residence is an asymmetrical one-story Mediterranean Modern Farmhouse-style home with portico entrance, composition roof, cement plaster, wood trim and stone veneer. Being that the home is proposed as single-story and not a two-story home, this alone reduces the sense of bulk and mass. More contributing factors to a reduced bulk and mass is the U-shaped elevation proposal with varied roof forms and moderate roof pitches; the siting of the home is proposed approximately 45 feet from the edge of Lisbon Lane and 45 feet from the west side yard property line; with a much larger east side yard setback of 80 feet. This siting in addition to the proposed native planting landscaping, ensures separation between adjoining parcels and creates screening, buffers and privacy. The proposed native plant landscaping along the perimeter of the proposed parcel and along the proposed residence and driveway, which includes a restoration site on the east portion of the Nase property, contributes to the re-forestation of Del Monte Forest.
- d) Color and Material Finishes. Colors proposed are grey roof, beige body, brown trim and beige stone façade. The style, colors and materials are in keeping with the homes in this area of Pebble Beach.
- e) The proposed residence and site improvements are consistent with the Architectural Standards and Residential Guidelines for Del Monte Forest and proposed plans have been approved by the Del Monte Forest Architectural Review Board as well as receiving a recommendation of approval by the Del Monte Forest Land Use Advisory Committee.

6. **FINDING:**

**APPEALABILITY** - The decision on this project may be appealed to the Board of Supervisors and the California Coastal Commission.

**EVIDENCE:**

- a) Board of Supervisors: Pursuant to Section 20.86.030 of the Monterey County Zoning Ordinance (Title 20), an appeal may be made to the Board of Supervisors by any public agency or person aggrieved by a decision of an Appropriate Authority other than the Board of Supervisors.

- b) California Coastal Commission: Pursuant to Section 20.86.080.A of the Monterey County Zoning Ordinance (Title 20), the project is subject to appeal by/to the California Coastal Commission because it involves development between the sea and the first through public road paralleling the sea, development within 300 feet of the mean high tide line of the sea where there is no beach, development within 300 feet of the top of the seaward face of any coastal bluff, and development that is permitted in the underlying zone as a conditional use (i.e.; development within 100 feet of environmentally sensitive habitat; tree removal).

**DECISION**

**NOW, THEREFORE**, based on the above findings and evidence, the Planning Commission does hereby:

- 1) Adopt a Mitigated Negative Declaration; and
  - 2) Approve a Combined Development Permit consisting of:
    - a. Coastal Administrative and Design Approval for the construction of a 5,385 square foot one-story single family dwelling with an attached garage and covered porch;
    - b. Coastal Development Permit for the removal of 44 Monterey pine trees;
    - c. Coastal Development Permit for development within 100 feet of Environmentally Sensitive Habitat (ESHA- Yadon's Piperia and Monterey pine forest); and
  - 3) Adopt a Mitigation Monitoring and Reporting Plan.
- In general conformance with the attached plans and subject to 20 conditions of approval and 10 mitigation measures, all being attached hereto and incorporated by reference.

**PASSED AND ADOPTED** this 30th day of August, 2017, upon motion of Commissioner Diehl, seconded by Commissioner Getzelman, by the following vote:

AYES: Ambriz, Diehl, Duflock, Getzelman, Hert, Mendez, Roberts, Rochester  
NOES: Vandever  
ABSENT: Padilla  
ABSTAIN: None

  
\_\_\_\_\_  
Jacqueline R. Onciano, Planning Commission Secretary

COPY OF THIS DECISION MAILED TO APPLICANT ON SEP 07 2017.

THIS APPLICATION IS APPEALABLE TO THE BOARD OF SUPERVISORS.

IF ANYONE WISHES TO APPEAL THIS DECISION, AN APPEAL FORM MUST BE COMPLETED AND SUBMITTED TO THE CLERK TO THE BOARD ALONG WITH THE APPROPRIATE FILING FEE ON OR BEFORE SEP 18 2017

THIS PROJECT IS LOCATED IN THE COASTAL ZONE AND IS APPEALABLE TO THE COASTAL COMMISSION. UPON RECEIPT OF NOTIFICATION OF THE FINAL LOCAL ACTION NOTICE (FLAN) STATING THE DECISION BY THE FINAL DECISION MAKING BODY, THE

COMMISSION ESTABLISHES A 10 WORKING DAY APPEAL PERIOD. AN APPEAL FORM MUST BE FILED WITH THE COASTAL COMMISSION. FOR FURTHER INFORMATION, CONTACT THE COASTAL COMMISSION AT (831) 427-4863 OR AT 725 FRONT STREET, SUITE 300, SANTA CRUZ, CA.

This decision, if this is the final administrative decision, is subject to judicial review pursuant to California Code of Civil Procedure Sections 1094.5 and 1094.6. Any Petition for Writ of Mandate must be filed with the Court no later than the 90th day following the date on which this decision becomes final.

#### NOTES

1. You will need a building permit and must comply with the Monterey County Building Ordinance in every respect.

Additionally, the Zoning Ordinance provides that no building permit shall be issued, nor any use conducted, otherwise than in accordance with the conditions and terms of the permit granted or until ten days after the mailing of notice of the granting of the permit by the appropriate authority, or after granting of the permit by the Board of Supervisors in the event of appeal.

Do not start any construction or occupy any building until you have obtained the necessary permits and use clearances from Monterey County RMA-Planning and RMA-Building Services offices in Salinas.

2. This permit expires 3 years after the above date of granting thereof unless construction or use is started within this period.

# Monterey County RMA Planning

## Conditions of Approval/Implementation Plan/Mitigation Monitoring and Reporting Plan

PLN150669

### 1. PD001 - SPECIFIC USES ONLY

**Responsible Department:** RMA-Planning

**Condition/Mitigation Monitoring Measure:** This Combined Development Permit (PLN150669) allows for the following: 1) a Coastal Administrative and Design Approval for the construction of a 5,385 square foot one-story single family dwelling with an attached garage and covered porch; 2) Coastal Development Permit for the removal of 44 Monterey pine trees; 3) Coastal Development Permit for development within 100 feet of Environmental Sensitive Habitat (ESHA -Yadon's Piperia and Monterey Pine forest). The property is located at 1412 Lisbon Lane, Pebble Beach (Assessor's Parcel Number 008-232-008-000), Del Monte Forest Land Use Plan. This permit was approved in accordance with County ordinances and land use regulations subject to the terms and conditions described in the project file. Neither the uses nor the construction allowed by this permit shall commence unless and until all of the conditions of this permit are met to the satisfaction of the Director of RMA - Planning. Any use or construction not in substantial conformance with the terms and conditions of this permit is a violation of County regulations and may result in modification or revocation of this permit and subsequent legal action. No use or construction other than that specified by this permit is allowed unless additional permits are approved by the appropriate authorities. To the extent that the County has delegated any condition compliance or mitigation monitoring to the Monterey County Water Resources Agency, the Water Resources Agency shall provide all information requested by the County and the County shall bear ultimate responsibility to ensure that conditions and mitigation measures are properly fulfilled. (RMA - Planning)

**Compliance or Monitoring Action to be Performed:** The Owner/Applicant shall adhere to conditions and uses specified in the permit on an ongoing basis unless otherwise stated.

## 2. PD002 - NOTICE PERMIT APPROVAL

**Responsible Department:** RMA-Planning

**Condition/Mitigation** The applicant shall record a Permit Approval Notice. This notice shall state:

**Monitoring Measure:**

"A Combined Development Permit (Resolution Number 17-035) was approved by the Monterey County Planning Commission for Assessor's Parcel Number 008-232-003-000 on August 30, 2017. The permit was granted subject to 30 conditions of approval which run with the land. A copy of the permit is on file with Monterey County RMA - Planning."

Proof of recordation of this notice shall be furnished to the Director of RMA - Planning prior to issuance of grading and building permits, Certificates of Compliance, or commencement of use, whichever occurs first and as applicable. (RMA - Planning)

**Compliance or  
Monitoring  
Action to be Performed:**

Prior to the issuance of grading and building permits, certificates of compliance, or commencement of use, whichever occurs first and as applicable, the Owner/Applicant shall provide proof of recordation of this notice to the RMA - Planning.

## 3. PD003(A) - CULTURAL RESOURCES NEGATIVE ARCHAEOLOGICAL REPORT

**Responsible Department:** RMA-Planning

**Condition/Mitigation  
Monitoring Measure:**

If, during the course of construction, cultural, archaeological, historical or paleontological resources are uncovered at the site (surface or subsurface resources) work shall be halted immediately within 50 meters (165 feet) of the find until a qualified professional archaeologist can evaluate it. Monterey County RMA - Planning and a qualified archaeologist (i.e., an archaeologist registered with the Register of Professional Archaeologists) shall be immediately contacted by the responsible individual present on-site. When contacted, the project planner and the archaeologist shall immediately visit the site to determine the extent of the resources and to develop proper mitigation measures required for recovery.  
(RMA - Planning)

**Compliance or  
Monitoring  
Action to be Performed:**

The Owner/Applicant shall adhere to this condition on an on-going basis.

Prior to the issuance of grading or building permits and/or prior to the recordation of the final/parcel map, whichever occurs first, the Owner/Applicant shall include requirements of this condition as a note on all grading and building plans. The note shall state "Stop work within 50 meters (165 feet) of uncovered resource and contact Monterey County RMA - Planning and a qualified archaeologist immediately if cultural, archaeological, historical or paleontological resources are uncovered."

When contacted, the project planner and the archaeologist shall immediately visit the site to determine the extent of the resources and to develop proper mitigation measures required for the discovery.

#### 4. PD004 - INDEMNIFICATION AGREEMENT

**Responsible Department:** RMA-Planning

**Condition/Mitigation Monitoring Measure:** The property owner agrees as a condition and in consideration of approval of this discretionary development permit that it will, pursuant to agreement and/or statutory provisions as applicable, including but not limited to Government Code Section 66474.9, defend, indemnify and hold harmless the County of Monterey or its agents, officers and employees from any claim, action or proceeding against the County or its agents, officers or employees to attack, set aside, void or annul this approval, which action is brought within the time period provided for under law, including but not limited to, Government Code Section 66499.37, as applicable. The property owner will reimburse the County for any court costs and attorney's fees which the County may be required by a court to pay as a result of such action. The County may, at its sole discretion, participate in the defense of such action; but such participation shall not relieve applicant of his/her/its obligations under this condition. An agreement to this effect shall be recorded upon demand of County Counsel or concurrent with the issuance of building permits, use of property, filing of the final map, recordation of the certificates of compliance whichever occurs first and as applicable. The County shall promptly notify the property owner of any such claim, action or proceeding and the County shall cooperate fully in the defense thereof. If the County fails to promptly notify the property owner of any such claim, action or proceeding or fails to cooperate fully in the defense thereof, the property owner shall not thereafter be responsible to defend, indemnify or hold the County harmless. (RMA - Planning)

**Compliance or Monitoring Action to be Performed:** Upon demand of County Counsel or concurrent with the issuance of building permits, use of the property, recording of the final/parcel map, or recordation of Certificates of Compliance, whichever occurs first and as applicable, the Owner/Applicant shall submit a signed and notarized Indemnification Agreement to the Director of RMA-Planning for review and signature by the County.

Proof of recordation of the Indemnification Agreement, as outlined, shall be submitted to RMA-Planning .

**5. (PD-Non-standard) Conservation & Scenic Easement Over Enhancement/Restoration Area**

**Responsible Department:** RMA-Planning

**Condition/Mitigation Monitoring Measure:** A conservation and scenic easement shall be conveyed to the Del Monte Forest Conservancy over the 21,600 square foot Enhancement/Restoration Area of the Nase property in accordance with the procedures in Monterey County Code § 20.64.280.A. The easement conveyance shall include funding adequate to ensure the management and protection of the easement area over time. The easement shall be developed in consultation with a certified professional and the Del Monte Forest Conservancy Inc. A Subordination Agreement shall be required, where necessary. These instruments shall be subject to approval by the County as to form and content, shall provide for enforcement, if need be, by the County or other appropriate agency, and name the County as beneficiary in event the Conservancy is unable to adequately manage these easements for the intended purpose of scenic and visual resource protection. An easement deed shall be submitted to, reviewed, and approved by the Director of RMA - Planning and the Executive Director of the California Coastal Commission, and accepted by the Board of Supervisors prior to recording the parcel/final map or prior to issuance of grading and building permits. (RMA - Planning)

**Compliance or Monitoring Action to be Performed:** Prior to the issuance of grading and building permits, the Owner/Applicant/Certified Professional shall submit the conservation and scenic easement deed and corresponding map, showing the exact location of the easement on the property along with the metes and bound description developed in consultation with a certified professional, to the to the Del Monte Forest Conservancy for review and approval.

Prior to the issuance of grading and building permits, the Owner/Applicant/Certified Professional shall submit the conservation and scenic easement deed and corresponding map, showing the exact location of the easement on the property along with the metes and bound description developed in consultation with a certified professional, to RMA - Planning for review and approval.

Prior to the issuance of grading and building permits, the Owner/Applicant, shall submit a signed and notarized Subordination Agreement, if required, to RMA - Planning for review and approval.

Prior to the issuance of grading and building permits, or commencement of use, the Owner/Applicant shall record the deed and map showing the approved conservation and scenic easement. Submit a copy of the recorded deed and map to RMA-Planning



## 6. PD005 - FISH & GAME FEE NEG DEC/EIR

**Responsible Department:** RMA-Planning

**Condition/Mitigation Monitoring Measure:** Pursuant to the State Public Resources Code Section 753.5, State Fish and Game Code, and California Code of Regulations, the applicant shall pay a fee, to be collected by the County, within five (5) working days of project approval. This fee shall be paid before the Notice of Determination is filed. If the fee is not paid within five (5) working days, the project shall not be operative, vested or final until the filing fees are paid. (RMA - Planning)

**Compliance or Monitoring Action to be Performed:** Within five (5) working days of project approval, the Owner/Applicant shall submit a check, payable to the County of Monterey, to the Director of RMA - Planning.

If the fee is not paid within five (5) working days, the applicant shall submit a check, payable to the County of Monterey, to the Director of RMA - Planning prior to the recordation of the final/parcel map, the start of use, or the issuance of building permits or grading permits.

## 7. PD006 - CONDITION OF APPROVAL / MITIGATION MONITORING PLAN

**Responsible Department:** RMA-Planning

**Condition/Mitigation Monitoring Measure:** The applicant shall enter into an agreement with the County to implement a Condition of Approval/Mitigation Monitoring and/or Reporting Plan (Agreement) in accordance with Section 21081.6 of the California Public Resources Code and Section 15097 of Title 14, Chapter 3 of the California Code of Regulations. Compliance with the fee schedule adopted by the Board of Supervisors for mitigation monitoring shall be required and payment made to the County of Monterey at the time the property owner submits the signed Agreement. The agreement shall be recorded. (RMA - Planning)

**Compliance or Monitoring Action to be Performed:** Within sixty (60) days after project approval or prior to the issuance of building and grading permits, whichever occurs first, the Owner/Applicant shall:

- 1) Enter into an agreement with the County to implement a Condition of Approval/Mitigation Monitoring Plan.
- 2) Fees shall be submitted at the time the property owner submits the signed Agreement.
- 3) Proof of recordation of the Agreement shall be submitted to RMA-Planning.

## 8. PD011 - TREE AND ROOT PROTECTION

**Responsible Department:** RMA-Planning

**Condition/Mitigation Monitoring Measure:** Trees which are located close to construction site(s) shall be protected from inadvertent damage from construction equipment by fencing off the canopy driplines and/or critical root zones (whichever is greater) with protective materials, wrapping trunks with protective materials, avoiding fill of any type against the base of the trunks and avoiding an increase in soil depth at the feeding zone or drip-line of the retained trees. Said protection, approved by certified arborist, shall be demonstrated prior to issuance of building permits subject to the approval of RMA - Director of Planning. If there is any potential for damage, all work must stop in the area and a report, with mitigation measures, shall be submitted by certified arborist. Should any additional trees not included in this permit be harmed, during grading or construction activities, in such a way where removal is required, the owner/applicant shall obtain required permits. (RMA - Planning)

**Compliance or Monitoring Action to be Performed:** Prior to issuance of grading and/or building permits, the Owner/Applicant shall submit evidence of tree protection to RMA - Planning for review and approval.

During construction, the Owner/Applicant/Arborist shall submit on-going evidence that tree protection measures are in place through out grading and construction phases. If damage is possible, submit an interim report prepared by a certified arborist.

Prior to final inspection, the Owner/Applicant shall submit photos of the trees on the property to RMA-Planning after construction to document that tree protection has been successful or if follow-up remediation or additional permits are required.

**9. PD012(D) - LANDSCAPE PLAN & MAINTENANCE (MPWMD-SFD ONLY)**

**Responsible Department:** RMA-Planning

**Condition/Mitigation Monitoring Measure:** The site shall be landscaped. Prior to the issuance of building permits, three (3) copies of a landscaping plan shall be submitted to the Director of RMA - Planning . A landscape plan review fee is required for this project. Fees shall be paid at the time of landscape plan submittal. The landscaping plan shall be in sufficient detail to identify the location, species, and size of the proposed landscaping materials and shall include an irrigation plan. The plan shall be accompanied by a nursery or contractor's estimate of the cost of installation of the plan. Before occupancy, landscaping shall be either installed or a certificate of deposit or other form of surety made payable to Monterey County for that cost estimate shall be submitted to the Monterey County RMA - Planning. All landscaped areas and fences shall be continuously maintained by the applicant; all plant material shall be continuously maintained in a litter-free, weed-free, healthy, growing condition. (RMA - Planning)

**Compliance or Monitoring Action to be Performed:** Prior to issuance of building permits, the Owner/Applicant/Licensed Landscape Contractor/Licensed Landscape Architect shall submit landscape plans and contractor's estimate to RMA - Planning for review and approval. Landscaping plans shall include the recommendations from the Forest Management Plan or Biological Survey as applicable. All landscape plans shall be signed and stamped by licensed professional under the following statement, "I certify that this landscaping and irrigation plan complies with all Monterey County landscaping requirements including use of native, drought-tolerant, non-invasive species; limited turf; and low-flow, water conserving irrigation fixtures."

Prior to issuance of building permits, the Owner/Applicant/Licensed Landscape Contractor/Licensed Landscape Architect shall submit one (1) set landscape plans of approved by RMA-Planning, a Maximum Applied Water Allowance (MAWA) calculation, and a completed "Residential Water Release Form and Water Permit Application" to the Monterey Peninsula Water Management District for review and approval.

Prior to issuance of building permits, the Owner/Applicant/Licensed Landscape Contractor/ shall submit an approved water permit from the MPWMD to RMA-Building Services.

Prior to occupancy, the Owner/Applicant/Licensed Landscape Contractor/Licensed Landscape Architect shall ensure that the landscaping shall be either installed or a certificate of deposit or other form of surety made payable to Monterey County for that cost estimate shall be submitted to Monterey County RMA - Planning.

On an on-going basis, all landscaped areas and fences shall be continuously maintained by the Owner/Applicant; all plant material shall be continuously maintained in a litter-free, weed-free, healthy, growing condition.

## 10. PD014(A) - LIGHTING - EXTERIOR LIGHTING PLAN

**Responsible Department:** RMA-Planning

**Condition/Mitigation Monitoring Measure:** All exterior lighting shall be unobtrusive, down-lit, harmonious with the local area, and constructed or located so that only the intended area is illuminated and off-site glare is fully controlled. The lighting source shall be shielded and recessed into the fixture. The applicant shall submit three (3) copies of an exterior lighting plan which shall indicate the location, type, and wattage of all light fixtures and include catalog sheets for each fixture. The lighting shall comply with the requirements of the California Energy Code set forth in California Code of Regulations Title 24 Part 6. The exterior lighting plan shall be subject to approval by the Director of RMA - Planning, prior to the issuance of building permits.  
(RMA - Planning)

**Compliance or Monitoring Action to be Performed:** Prior to the issuance of building permits, the Owner/Applicant shall submit three copies of the lighting plans to RMA - Planning for review and approval. Approved lighting plans shall be incorporated into final building plans.

Prior to final/occupancy, the Owner/Applicant/Contractor shall submit written and photographic evidence demonstrating that the lighting has been installed according to the approved plan.

On an on-going basis, the Owner/Applicant shall ensure that the lighting is installed and maintained in accordance with the approved plan.

## 11. PD050 - RAPTOR/MIGRATORY BIRD NESTING

**Responsible Department:** RMA-Planning

**Condition/Mitigation Monitoring Measure:** Any tree removal activity that occurs during the typical bird nesting season (February 22-August 1), the County of Monterey shall require that the project applicant retain a County qualified biologist to perform a nest survey in order to determine if any active raptor or migratory bird nests occur within the project site or within 300 feet of proposed tree removal activity. During the typical nesting season, the survey shall be conducted no more than 30 days prior to ground disturbance or tree removal. If nesting birds are found on the project site, an appropriate buffer plan shall be established by the project biologist. (RMA - Planning)

**Compliance or Monitoring Action to be Performed:** No more than 30 days prior to ground disturbance or tree removal, the Owner/Applicant/Tree Removal Contractor shall submit to RMA-Planning a nest survey prepared by a County qualified biologist to determine if any active raptor or migratory bird nests occur within the project site or immediate vicinity.

## 12. PW0043 - REGIONAL DEVELOPMENT IMPACT FEE

**Responsible Department:** RMA-Public Works

**Condition/Mitigation Monitoring Measure:** Prior to issuance of building permits, applicant shall pay the Regional Development Impact Fee (RDIF) pursuant to Monterey Code Chapter 12.90. The fee amount shall be determined based on the parameters adopted in the current fee schedule.

**Compliance or Monitoring Action to be Performed:** Prior to issuance of Building Permits Owner/Applicant shall pay Monterey County Building Services Department the traffic mitigation fee. Owner/Applicant shall submit proof of payment to the DPW.

### 13. PW0045 – COUNTYWIDE TRAFFIC FEE

**Responsible Department:** RMA-Public Works

**Condition/Mitigation Monitoring Measure:** Prior to issuance of building permits, the Owner/Applicant shall pay the Countywide Traffic Fee or the ad hoc fee pursuant to General Plan policy C-1.8. The fee amount shall be determined based on the parameters in the current fee schedule.

**Compliance or Monitoring Action to be Performed:** Prior to issuance of Building Permits, the Owner/Applicant shall pay Monterey County Building Services Department the traffic mitigation fee. The Owner/Applicant shall submit proof of payment to the DPW.

### 14. WR003 - DRAINAGE PLAN - RETENTION

**Responsible Department:** Water Resources Agency

**Condition/Mitigation Monitoring Measure:** The applicant shall provide a drainage plan, prepared by a registered civil engineer or licensed architect, to mitigate on-site and off-site impacts. The plan shall include stormwater retention/percolation facilities. Drainage improvements shall be constructed in accordance with plans approved by the Water Resources Agency. (Water Resources Agency)

**Compliance or Monitoring Action to be Performed:** Prior to issuance of any construction permit, the owner/applicant shall submit a drainage plan with the construction permit application.

The Building Services Department will route a plan set to the Water Resources Agency for review and approval.

### 15. EROSION CONTROL PLAN

**Responsible Department:** Environmental Services

**Condition/Mitigation Monitoring Measure:** The applicant shall submit an erosion control plan in conformance with the requirements of Monterey County Code Chapter 16.12. The erosion control plan shall include a construction entrance, concrete washout, stockpile area(s), material storage area(s), portable sanitation facilities and waste collection area(s), as applicable. (RMA – Environmental Services)

**Compliance or Monitoring Action to be Performed:** Prior to issuance of any grading or building permits, the applicant shall submit an erosion control plan to RMA-Environmental Services for review and approval.

### 16. GEOTECHNICAL CERTIFICATION

**Responsible Department:** Environmental Services

**Condition/Mitigation Monitoring Measure:** The applicant shall provide certification from a licensed practitioner that all development has been constructed in accordance with the recommendations in the project Geotechnical Report. (RMA- Environmental Services)

**Compliance or Monitoring Action to be Performed:** Prior to final inspection, the owner/applicant shall provide RMA-Environmental Services a letter from a licensed practitioner.

## 17. GRADING PLAN

**Responsible Department:** Environmental Services

**Condition/Mitigation Monitoring Measure:** The applicant shall submit a grading plan incorporating the recommendations in the project Geotechnical Report prepared by Grice Engineering, Inc. The grading plan shall also address the requirements of Monterey County Code Chapter 16.08, and the geotechnical inspection schedule shall be included on the plan. The applicant shall provide certification from the licensed practitioner that the grading plan incorporates their geotechnical recommendations. (RMA-Environmental Services)

**Compliance or Monitoring Action to be Performed:** Prior to issuance of any grading or building permits, the applicant shall submit a grading plan to RMA-Environmental Services for review and approval.

Prior to issuance of any grading or building permits, the applicant shall submit certification from a licensed practitioner that they have reviewed the grading plan for conformance with the geotechnical recommendations.

## 18. INSPECTION-DURING ACTIVE CONSTRUCTION

**Responsible Department:** Environmental Services

**Condition/Mitigation Monitoring Measure:** The applicant shall schedule an inspection with RMA-Environmental Services to inspect drainage device installation, review the maintenance and effectiveness of BMPs installed, and to verify that pollutants of concern are not discharged from the site. At the time of the inspection, the applicant shall provide certification that all necessary geotechnical inspections have been completed to that point. This inspection requirement shall be noted on the Erosion Control Plan.(RMA – Environmental Services)

**Compliance or Monitoring Action to be Performed:** During construction, the applicant shall schedule an inspection with RMA-Environmental Services.

## 19. INSPECTION-FOLLOWING ACTIVE CONSTRUCTION

**Responsible Department:** Environmental Services

**Condition/Mitigation Monitoring Measure:** The applicant shall schedule an inspection with RMA-Environmental Services to ensure all disturbed areas have been stabilized and all temporary erosion and sediment control measures that are no longer needed have been removed. This inspection requirement shall be noted on the Erosion Control Plan. (RMA – Environmental Services)

**Compliance or Monitoring Action to be Performed:** Prior to final inspection, the owner/applicant shall schedule an inspection with RMA-Environmental Services.

## 20. INSPECTION-PRIOR TO LAND DISTURBANCE

**Responsible Department:** Environmental Services

**Condition/Mitigation Monitoring Measure:** The applicant shall schedule an inspection with RMA-Environmental Services to ensure all necessary sediment controls are in place and the project is compliant with Monterey County regulations. This inspection requirement shall be noted on the Erosion Control Plan. (RMA – Environmental Services)

**Compliance or Monitoring Action to be Performed:** Prior to commencement of any land disturbance, the owner/applicant shall schedule an inspection with RMA-Environmental Services.

## 21. MITIGATION MEASURE NO. 1; Action 1a- ENHANCEMENT/RESTORATION

**Responsible Department:** RMA-Planning

**Condition/Mitigation Monitoring Measure:** Mitigation Measure Action No. 1.a: Prior to issuance of construction permits for grading and/or building, the owner/applicant shall incorporate a note on all construction plans (for building and grading) that the project shall comply with the specifications contained in the Tree Resource Assessment Plan, dated December 29, 2015 prepared for the subject property by Frank Ono, Certified Arborist and with the Mitigation and Monitoring Plan for 1412 Lisbon Lane, Pebble Beach, CA (Revised 2/08/2017) prepared by Pat Regan of Regan Biological and Horticultural Consulting.

**Compliance or Monitoring Action to be Performed:** Mitigation Measure Action No. 1.a: Prior to issuance of construction permits for grading and/or building, the owner/applicant shall incorporate a note on all construction plans (for building and grading) that the project shall comply with the specifications contained in the Tree Resource Assessment Plan, dated December 29, 2015 prepared for the subject property by Frank Ono, Certified Arborist and with the Mitigation and Monitoring Plan for 1412 Lisbon Lane, Pebble Beach, CA (Revised 2/08/2017) prepared by Pat Regan of Regan Biological and Horticultural Consulting.

## 22. MITIGATION MEASURE NO. 1; Action 1b- ENHANCEMENT/RESTORATION

**Responsible Department:** RMA-Planning

**Condition/Mitigation Monitoring Measure:** Mitigation Measure No. 1: In order to mitigate for the loss of approximately 10,800 square feet of Monterey pine woodland on the project site and the loss of forty-four (44) Monterey pine trees, the following shall be required to occur on an area of 21,600 square feet (Enhancement/Restoration Area) of the Nase property:

- Eradicate majority of non-native grasses, weeds and introduced landscape plants, from eastern portion of the Nase property.
- Restore 19,000 square foot area on east portion on Nase property using the dominant native species present on project site.
- 1: 1 replacement ratio of forty-four (44), five-gallon Monterey pine trees to be located on one continuous strip of land running north to south along the east side of the Nase property and fronted on the North by the Pebble Beach right of way along Lisbon Lane and on the South by the Nase Property line and corresponding fence line with the neighboring property to the south. This strip of land is approximately 21,600 square feet running approximately 240 feet from North end to South end and 90 feet from east to west, between the proposed house and the eastern neighboring property. Monterey pine replacement is incorporated into the landscape planting plan (see Mitigation and Monitoring Plan for 1412 Lisbon Lane, Pebble Beach, CA prepared by Regan Biological and Horticultural Consulting, LLC (RBHC), revised on 2/08/2017 for the Hall Landscape Design Sheet L-5) throughout the approximately 1 acre project site. To the greatest degree feasible, all trees used for replacement trees will be grown from seed collected on the project site or within the Del Monte Forest.
- Prevent invasive non-native plant species from colonizing during construction.
- Maintain native plant habitat with less than 10% non-native species over the course of the monitoring period.

**Compliance or Monitoring Action to be Performed:** Mitigation Measure Action No. 1.b: Prior to issuance of construction permits for grading and/or building, the owner/applicant shall incorporate a tree removal plan within the construction plans showing the proposed tree removal as shown in the Tree Resource Assessment Plan, dated December 29, 2015 prepared for the subject property by Frank Ono, Certified Arborist. The tree removal plan shall include the tree number identification matrix showing the trees to be removed (44 Monterey pines) and the seven (7) proposed root-pruned Monterey pines to be monitored.



## 23. MITIGATION MEASURE NO. 1; Action 1c- ENHANCEMENT/RESTORATION

**Responsible Department:** RMA-Planning

**Condition/Mitigation Monitoring Measure:** Mitigation Measure No. 1: In order to mitigate for the loss of approximately 10,800 square feet of Monterey pine woodland on the project site and the loss of forty-four (44) Monterey pine trees, the following shall be required to occur on an area of 21,600 square feet (Enhancement/Restoration Area) of the Nase property:

- Eradicate majority of non-native grasses, weeds and introduced landscape plants, from eastern portion of the Nase property.
- Restore 19,000 square foot area on east portion on Nase property using the dominant native species present on project site.
- 1: 1 replacement ratio of forty-four (44), five-gallon Monterey pine trees to be located on one continuous strip of land running north to south along the east side of the Nase property and fronted on the North by the Pebble Beach right of way along Lisbon Lane and on the South by the Nase Property line and corresponding fence line with the neighboring property to the south. This strip of land is approximately 21,600 square feet running approximately 240 feet from North end to South end and 90 feet from east to west, between the proposed house and the eastern neighboring property. Monterey pine replacement is incorporated into the landscape planting plan (see Mitigation and Monitoring Plan for 1412 Lisbon Lane, Pebble Beach, CA prepared by Regan Biological and Horticultural Consulting, LLC (RBHC), revised on 2/08/2017 for the Hall Landscape Design Sheet L-5) throughout the approximately 1 acre project site. To the greatest degree feasible, all trees used for replacement trees will be grown from seed collected on the project site or within the Del Monte Forest.
- Prevent invasive non-native plant species from colonizing during construction.
- Maintain native plant habitat with less than 10% non-native species over the course of the monitoring period.

**Compliance or Monitoring Action to be Performed:** Mitigation Measure Action No. 1.c: Prior to issuance of construction permits for grading and/or building, the owner/applicant shall incorporate an Enhancement/Restoration Area Plan within the construction plans consistent with the recommendations in the Mitigation and Monitoring Plan for 1412 Lisbon Lane, Pebble Beach, CA (Revised 2/08/2017) prepared by Pat Regan of Regan Biological and Horticultural Consulting. This plan shall include the information listed in MM No. 1, planting stock information contained in Section 6.0 – Implementation Plan of the Mitigation and Monitoring Plan for 1412 Lisbon Lane, Pebble Beach, CA (Revised 2/08/2017) prepared by Pat Regan of Regan Biological and Horticultural Consulting, which describes the responsible parties, describes planting stock, the list of plants, quantities, sizes, planting schedules, site preparation, maintenance activities, maintenance schedule, performance standards, final success criterion, monitoring, annual reports and for the Restoration/Enhancement and Preservation Areas.

## 24. MITIGATION MEASURE NO. 1; Action 1d- ENHANCEMENT/RESTORATION

**Responsible Department:** RMA-Planning

**Condition/Mitigation Monitoring Measure:** Mitigation Measure No. 1: In order to mitigate for the loss of approximately 10,800 square feet of Monterey pine woodland on the project site and the loss of forty-four (44) Monterey pine trees, the following shall be required to occur on an area of 21,600 square feet (Enhancement/Restoration Area) of the Nase property:

- Eradicate majority of non-native grasses, weeds and introduced landscape plants, from eastern portion of the Nase property.
- Restore 19,000 square foot area on east portion on Nase property using the dominant native species present on project site.
- 1: 1 replacement ratio of forty-four (44), five-gallon Monterey pine trees to be located on one continuous strip of land running north to south along the east side of the Nase property and fronted on the North by the Pebble Beach right of way along Lisbon Lane and on the South by the Nase Property line and corresponding fence line with the neighboring property to the south. This strip of land is approximately 21,600 square feet running approximately 240 feet from North end to South end and 90 feet from east to west, between the proposed house and the eastern neighboring property. Monterey pine replacement is incorporated into the landscape planting plan (see Mitigation and Monitoring Plan for 1412 Lisbon Lane, Pebble Beach, CA prepared by Regan Biological and Horticultural Consulting, LLC (RBHC), revised on 2/08/2017 for the Hall Landscape Design Sheet L-5) throughout the approximately 1 acre project site. To the greatest degree feasible, all trees used for replacement trees will be grown from seed collected on the project site or within the Del Monte Forest.
- Prevent invasive non-native plant species from colonizing during construction.
- Maintain native plant habitat with less than 10% non-native species over the course of the monitoring period.

**Compliance or Monitoring Action to be Performed:** Mitigation Measure Action No. 1.d: Prior to the commencement of any grading or construction activities (except for the removal and transplantation of the Yadon's piperia), a pre-construction meeting shall be held on the site. The preconstruction meeting shall be facilitated by the agent of the project. The meeting shall include representatives of each of the selected contractors, any consultant who will conduct required monitoring (including the archaeological monitors, see mitigation measures for Cultural Resources), and the owner/applicant. The purpose of the meeting is to review the conditions of approval that are applicable to the grading and construction of the approved development. A report of this meeting including date of meeting, content reviewed and list of attendees, shall be submitted to RMA-Planning, within five (5) business days of the preconstruction meeting date.

**25. MITIGATION MEASURE NO. 1; Action 1e- ENHANCEMENT/RESTORATION**

**Responsible Department:** RMA-Planning

**Condition/Mitigation Monitoring Measure:** Mitigation Measure No. 1: In order to mitigate for the loss of approximately 10,800 square feet of Monterey pine woodland on the project site and the loss of forty-four (44) Monterey pine trees, the following shall be required to occur on an area of 21,600 square feet (Enhancement/Restoration Area) of the Nase property:

- Eradicate majority of non-native grasses, weeds and introduced landscape plants, from eastern portion of the Nase property.
- Restore 19,000 square foot area on east portion on Nase property using the dominant native species present on project site.
- 1: 1 replacement ratio of forty-four (44), five-gallon Monterey pine trees to be located on one continuous strip of land running north to south along the east side of the Nase property and fronted on the North by the Pebble Beach right of way along Lisbon Lane and on the South by the Nase Property line and corresponding fence line with the neighboring property to the south. This strip of land is approximately 21,600 square feet running approximately 240 feet from North end to South end and 90 feet from east to west, between the proposed house and the eastern neighboring property. Monterey pine replacement is incorporated into the landscape planting plan (see Mitigation and Monitoring Plan for 1412 Lisbon Lane, Pebble Beach, CA prepared by Regan Biological and Horticultural Consulting, LLC (RBHC), revised on 2/08/2017 for the Hall Landscape Design Sheet L-5) throughout the approximately 1 acre project site. To the greatest degree feasible, all trees used for replacement trees will be grown from seed collected on the project site or within the Del Monte Forest.
- Prevent invasive non-native plant species from colonizing during construction.
- Maintain native plant habitat with less than 10% non-native species over the course of the monitoring period.

**Compliance or Monitoring Action to be Performed:** Mitigation Measure Action No. 1.e: Prior to final inspection, the property owner/applicant shall restore as per the approved Enhancement/Restoration Area Plan (see MMA No. 1.c.) consistent with the recommendations in the Mitigation and Monitoring Plan for 1412 Lisbon Lane, Pebble Beach, CA (Revised 2/08/2017) prepared by Pat Regan of Regan Biological and Horticultural Consulting. This requires the replacement of Monterey pine trees at a ratio of 1:1 for a total replanting of 46 Monterey pine trees of a five-gallon size to be planted within the Enhancement/Restoration area. Furthermore, the seven (7) proposed root-pruned Monterey pines shall be pruned pursuant to the recommendations, including monitoring requirements of the Tree Resource Assessment Management Plan, prepared by Frank Ono dated December 29, 2015. In addition, the Enhancement/Restoration Area Plan requires the restoration of other planting stock described in Table 2: Plants for Restoration/Enhancement and Preservation Areas of the Mitigation and Monitoring Plan for 1412 Lisbon Lane, Pebble Beach, CA (Revised 2/08/2017) prepared by Pat Regan of Regan Biological and Horticultural Consulting. The Staff shall conduct a site visit to ensure vegetation of the site has been restored according to the approved Enhancement/Restoration Area Plan.

**26. MITIGATION MEASURE NO. 1; Action 1f- ENHANCEMENT/RESTORATION**

**Responsible Department:** RMA-Planning

**Condition/Mitigation Monitoring Measure:** Mitigation Measure No. 1: In order to mitigate for the loss of approximately 10,800 square feet of Monterey pine woodland on the project site and the loss of forty-four (44) Monterey pine trees, the following shall be required to occur on an area of 21,600 square feet (Enhancement/Restoration Area) of the Nase property:

- Eradicate majority of non-native grasses, weeds and introduced landscape plants, from eastern portion of the Nase property.
- Restore 19,000 square foot area on east portion on Nase property using the dominant native species present on project site.
- 1: 1 replacement ratio of forty-four (44), five-gallon Monterey pine trees to be located on one continuous strip of land running north to south along the east side of the Nase property and fronted on the North by the Pebble Beach right of way along Lisbon Lane and on the South by the Nase Property line and corresponding fence line with the neighboring property to the south. This strip of land is approximately 21,600 square feet running approximately 240 feet from North end to South end and 90 feet from east to west, between the proposed house and the eastern neighboring property. Monterey pine replacement is incorporated into the landscape planting plan (see Mitigation and Monitoring Plan for 1412 Lisbon Lane, Pebble Beach, CA prepared by Regan Biological and Horticultural Consulting, LLC (RBHC), revised on 2/08/2017 for the Hall Landscape Design Sheet L-5) throughout the approximately 1 acre project site. To the greatest degree feasible, all trees used for replacement trees will be grown from seed collected on the project site or within the Del Monte Forest.
- Prevent invasive non-native plant species from colonizing during construction.
- Maintain native plant habitat with less than 10% non-native species over the course of the monitoring period.

**Compliance or Monitoring Action to be Performed:** Mitigation Measure Action No. 1.f: Maintenance and monitoring of the Enhancement/Restoration Area on the Nase property shall occur as stipulated in the Mitigation and Monitoring Plan for 1412 Lisbon Lane, Pebble Beach, CA (Revised 2/08/2017) prepared by Pat Regan of Regan Biological and Horticultural Consulting. Monitoring and reporting shall occur four times a year for five full years after completion of the project (i.e. construction of the home). A qualified biologist, shall maintain, monitor and report to RMA-Planning, as stipulated in the Mitigation and Monitoring Plan. An intermediate performance standard shall be measured at 100 percent survival of the planted Monterey pines in the fall of year 1 and 2. The final success criterion is 100 percent survival on planted Monterey pines in year 5.

**27. MITIGATION MEASURE NO. 2; Action 2a- Yadon's Piperia**

**Responsible Department:** RMA-Planning

**Condition/Mitigation Monitoring Measure:** Mitigation Measure No. 2: In order to reduce the proposed construction impacts to the Yadon's piperia, an endangered orchid, federally listed Endangered species, State Rare plant rank 1B.1 (Rare, threatened, or endangered in California and elsewhere .1: Seriously endangered in California), to a less than significant level, removal of approximately 437 (or more if more are present) individual Yadon's piperia plants and transplanting these to a designated conservation site within Del Monte Forest, shall be required. The transplantation activities of the Yadon's piperia shall be conducted as stipulated in the Mitigation and Monitoring Plan for 1412 Lisbon Lane, Pebble Beach, CA (Revised 2/08/2017) prepared by Pat Regan of Regan Biological and Horticultural Consulting. This includes, but is not limited to the following:

- A memorandum of understanding and appropriate legal documentation of liability and shared responsibilities between Mr. Nase (property owner) and the Pebble Beach Company shall be prepared and signed before any of these activities take place:
- Transplantation of all known and live Yadon's piperia tubers from the project impact area (as shown in the Mitigation and Monitoring Plan) into a receiver site along Spruance Road in Area H of the Pebble Beach Company's preservation property. Transplantation activities shall at the times stipulated in the Mitigation and Monitoring Plan for 1412 Lisbon Lane, Pebble Beach (Revised 2/08/2017) prepared by Pat Regan of Regan Biological and Horticultural Consulting and in consultation with United States Fish and Wildlife Service (USFWS).
- Monitor for transplant success, seedling recruitment, and population size for five (5) years following transplantation.

**Compliance or Monitoring Action to be Performed:** Mitigation Measure Action No. 2a: Prior to the commencement of transplantation activities for the Yadon's piperia, a memorandum of understanding (MOU) and appropriate legal documentation of liability and shared responsibilities between Mr. Nase (property owner) and the Pebble Beach Company shall be prepared and signed by both parties. The document shall include a depiction of the receiver site, a 2,700 square foot area on the west side of Spruance Road (Area H) along with a reference that the work shall be performed in accordance to the Mitigation and Monitoring Plan for 1412 Lisbon Lane, Pebble Beach, CA (Revised 2/08/2017) prepared by Pat Regan of Regan Biological and Horticultural Consulting. A copy of the signed MOU and any other appropriate legal documentation shall be furnished to RMA- Planning for review and approval before the commencement of the transplantation activities.

**28. MITIGATION MEASURE NO. 2; Action 2b- Yadon's Piperia**

**Responsible Department:** RMA-Planning

**Condition/Mitigation Monitoring Measure:** Mitigation Measure No. 2: In order to reduce the proposed construction impacts to the Yadon's piperia, an endangered orchid, federally listed Endangered species, State Rare plant rank 1B.1 (Rare, threatened, or endangered in California and elsewhere .1: Seriously endangered in California), to a less than significant level, removal of approximately 437 (or more if more are present) individual Yadon's piperia plants and transplanting these to a designated conservation site within Del Monte Forest, shall be required. The transplantation activities of the Yadon's piperia shall be conducted as stipulated in the Mitigation and Monitoring Plan for 1412 Lisbon Lane, Pebble Beach, CA (Revised 2/08/2017) prepared by Pat Regan of Regan Biological and Horticultural Consulting. This includes, but is not limited to the following:

- A memorandum of understanding and appropriate legal documentation of liability and shared responsibilities between Mr. Nase (property owner) and the Pebble Beach Company shall be prepared and signed before any of these activities take place:
- Transplantation of all known and live Yadon's piperia tubers from the project impact area (as shown in the Mitigation and Monitoring Plan) into a receiver site along Spruance Road in Area H of the Pebble Beach Company's preservation property. Transplantation activities shall at the times stipulated in the Mitigation and Monitoring Plan for 1412 Lisbon Lane, Pebble Beach (Revised 2/08/2017) prepared by Pat Regan of Regan Biological and Horticultural Consulting and in consultation with United States Fish and Wildlife Service (USFWS).
- Monitor for transplant success, seedling recruitment, and population size for five (5) years following transplantation.

**Compliance or Monitoring Action to be Performed:** Mitigation Measure Action No. 2b: The 2,700 square foot receiver site where the Yadon's piperia will be transplanted from the Nase property, is located on the west side of Spruance Road, approximately 2/10ths of a mile north of the intersection with Spruance and Ronda Roads. Previous to translocating the Piperia tubers from the Nase property to this location it will be prepared by removing the entire Acacia plants as well the Genista and the fallen oak tree as recommended in the Mitigation and Monitoring Plan for 1412 Lisbon Lane, Pebble Beach, CA (Revised 2/08/2017) prepared by Pat Regan of Regan Biological and Horticultural Consulting. Just east of this location, on the other side of Spruance road is a population of the Yadon's piperia that will be used as a reference population to compare with the translocated plants to determine expected foliage emergence and flowering and reproduction in each year of the monitoring of the translocated plants. The preparation of the receiver site shall be monitored by the qualified biologist pursuant to the recommendations contained in the Mitigation and Monitoring Plan for 1412 Lisbon Lane, Pebble Beach, CA (Revised 2/08/2017) prepared by Pat Regan of Regan Biological and Horticultural Consulting.

## 29. MITIGATION MEASURE NO. 2; Action 2c- Yadon's Piperia

**Responsible Department:** RMA-Planning

**Condition/Mitigation Monitoring Measure:** Mitigation Measure No. 2: In order to reduce the proposed construction impacts to the Yadon's piperia, an endangered orchid, federally listed Endangered species, State Rare plant rank 1B.1 (Rare, threatened, or endangered in California and elsewhere .1: Seriously endangered in California), to a less than significant level, removal of approximately 437 (or more if more are present) individual Yadon's piperia plants and transplanting these to a designated conservation site within Del Monte Forest, shall be required. The transplantation activities of the Yadon's piperia shall be conducted as stipulated in the Mitigation and Monitoring Plan for 1412 Lisbon Lane, Pebble Beach, CA (Revised 2/08/2017) prepared by Pat Regan of Regan Biological and Horticultural Consulting. This includes, but is not limited to the following:

- A memorandum of understanding and appropriate legal documentation of liability and shared responsibilities between Mr. Nase (property owner) and the Pebble Beach Company shall be prepared and signed before any of these activities take place:
- Transplantation of all known and live Yadon's piperia tubers from the project impact area (as shown in the Mitigation and Monitoring Plan) into a receiver site along Spruance Road in Area H of the Pebble Beach Company's preservation property. Transplantation activities shall at the times stipulated in the Mitigation and Monitoring Plan for 1412 Lisbon Lane, Pebble Beach (Revised 2/08/2017) prepared by Pat Regan of Regan Biological and Horticultural Consulting and in consultation with United States Fish and Wildlife Service (USFWS).
- Monitor for transplant success, seedling recruitment, and population size for five (5) years following transplantation.

**Compliance or  
Monitoring  
Action to be Performed:**

Mitigation Measure Action No. 2c: Transplanting of Yadon's rein orchid from within the project impact area on Lisbon Lane into the preservation area receiver site on Spruance Road will take place between October 15 and March 15. This allows for transplant to occur while all tubers are dormant up to the point when the majority of tubers have sent up vegetative shoots but before flower stalks appear.

Even if permitting and construction schedules prevent implementation of the transplanting plan during the October to March period, to avoid disrupting seed production, the transplant process will be restricted to that period in which the plants are dormant, post flower and seed production up until the first flowering stalks are observed to be rising out of the foliage of known *Piperia* plants on the Lisbon Lane site. A qualified Biologist on the Monterey County list of approved consulting Biologists will monitor the population up until the date that the project is approved to proceed, then confer with USFWS and Pebble Beach company biologists to evaluate the status of the plants and whether it is feasible to commence transplantation efforts. During this monitoring period, all plants sending up new foliage will be documented and marked with flags other than the orange color used during the initial monitoring in Spring 2016. This will assist in determining the size of each patch for the tree spade operator and simplify the transplant process, if it becomes necessary to do it in the fall of 2017 by marking every foliage producing tuber even after all above ground growth has withered and senesced. Based on the monitoring, the project biologist will determine when the transplant will occur and how much area will be scooped out and transferred to the Spruance road receiver site. If, at the point the project is approved to proceed, plants in the Lisbon Lane property are observed to be sending up flowering stalks, the project will be delayed until plants have gone dormant in the fall of 2017. It may be possible to move some of the Lisbon Lane population even after some plants begin flowering, but this decision will be made in consultation with USFWS staff. In 2016, plants in the eastern portion had flowered and senesced by late July and some plants in the Western portion had not yet put up flowering stalks until September.

**30. MITIGATION MEASURE NO. 3; Action 3a and 3b- Cultural Resources**

**Responsible Department:** RMA-Planning

**Condition/Mitigation  
Monitoring Measure:** Mitigation Measure No. 3. In order to reduce potential impacts to cultural resources and sacred places, earth disturbance activities (including Yadon's *piperia* transplantation from the subject site and tree removal) shall be observed by a qualified archaeologist and by an Ohlone/Costanoan-Esselen Nation tribal monitor (MLD).

**Compliance or  
Monitoring  
Action to be Performed:** Mitigation Measure Action No. 3.a. Prior to the Yadon's *piperia* transplantation from the subject site, the owner/applicant shall submit a copy of the agreed upon contract to RMA-Planning, between the Ohlone/Costanoan-Esselen Nation and the owner of the subject project, outlining the logistics for monitoring during earth disturbance activities as well as how cultural resources will be handled if uncovered.

Mitigation Measure Action No. 3.b. During earth disturbance, which includes the Yadon's *piperia* transplantation, tree removal, and all other construction related activities, the Ohlone/Costanoan-Esselen Nation approved tribal monitor and the qualified archaeologist shall be onsite observing the work. The work shall be done consistent with the Ohlone/Costanoan-Esselen Nation approved contract discussed in Mitigation Measure Action No. 3a. Prior to final of construction permits for grading and/or building, the owner/applicant shall submit a letter from the tribal monitor verifying all work was done consistent with the contract to RMA-Planning for review and approval.



## GENERAL NOTES

- CONTRACTOR LICENSE: THE CONTRACTOR(S) PERFORMING THE WORK DESCRIBED BY THESE PLANS AND SPECIFICATIONS SHALL BE PROPERLY AND CURRENTLY LICENSED DURING THE EXECUTION OF THE PROJECT AND SHALL NOT PERFORM WORK OUTSIDE THE LEGAL SCOPE OF ANY LICENSE.
- SCOPE: THE CONTRACTOR SHALL PROVIDE AND PAY FOR ALL LABOR, MATERIALS, TOOLS, EQUIPMENT AND MACHINERY, TRANSPORTATION, WATER, HEAT, ELECTRICAL, TELEPHONE AND ANY OTHER RELATED ITEMS NECESSARY FOR THE PROPER EXECUTION AND TIMELY COMPLETION OF THE WORK.
- PERMITS: UNLESS OTHERWISE INSTRUCTED, THE OWNER SHALL PAY ALL PERMIT FEES INCLUDING UTILITIES. THE CONTRACTOR SHALL SECURE THE BUILDING PERMIT AND ANY OTHER PERMITS PRIOR TO STARTING THE WORK AND COMPLY WITH ALL INSPECTION REQUIREMENTS THROUGH FINAL SIGN-OFF.
- LEGAL NOTICE/CODE COMPLIANCE: THE CONTRACTOR SHALL GIVE ALL NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, BUILDING CODES, RULES, REGULATIONS AND OTHER LAWFUL ORDERS OF ANY PUBLIC AUTHORITY BEARING ON THE PERFORMANCE OF THE WORK. THE CONTRACTOR SHALL PROMPTLY NOTIFY THE DESIGNERS IN WRITING IF THE DRAWINGS AND/OR SPECIFICATIONS ARE AT VARIANCE WITH ANY SUCH REQUIREMENTS (2013 C.B.C.)
- RESPONSIBILITY: THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES SELECTED TO EXECUTE THE WORK. THE CONTRACTOR SHALL COORDINATE ALL PORTIONS OF WORK WITHIN THE SCOPE OF THE CONTRACT.
- SAFETY: THE CONTRACTOR SHALL BE RESPONSIBLE FOR INITIATING, MAINTAINING AND PROPERLY SUPERVISING ADEQUATE INDUSTRY STANDARD SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THIS WORK AND SHALL ADHERE TO ALL FEDERAL, STATE, LOCAL & O.S.H.A. SAFETY REGULATIONS.
- INSURANCE: LIABILITY INSURANCE SHALL BE MAINTAINED BY THE CONTRACTOR TO PROTECT AGAINST ALL CLAIMS UNDER THE WORKMAN'S COMPENSATION ACTS, DAMAGES DUE TO BODILY INJURY INCLUDING DEATH, AND FOR ANY PROPERTY DAMAGES ARISING OUT OF OR RESULTING FROM THE CONTRACTOR'S OPERATIONS UNDER THE CONTRACT. THIS INSURANCE SHALL BE FOR LIABILITY LIMITS SATISFACTORY TO THE OWNER. THE OWNER HAS THE RIGHT TO REQUIRE CONTRACTUAL LIABILITY INSURANCE APPLICABLE TO THE CONTRACTOR'S OBLIGATIONS. CERTIFICATES OF SUCH INSURANCE SHALL BE FILED WITH THE OWNER PRIOR TO THE COMMENCEMENT OF WORK.
- CLEANING UP: THE CONTRACTOR SHALL KEEP THE PREMISES AND SITE FREE FROM ACCUMULATION OF WASTE MATERIALS DURING CONSTRUCTION BY PERIODIC CLEAN UP AND OFF-SITE DEBRIS REMOVAL. FINAL CLEANUP AND DEBRIS DISPOSITION SHALL BE TO THE SATISFACTION OF THE OWNER.
- ALL NOTES, DIMENSIONS, ETC. INDICATE NEW MATERIALS OR CONSTRUCTION.
- SHOP DRAWINGS: PRIOR TO FABRICATION, THE CONTRACTOR SHALL SUBMIT FOR APPROVAL SHOP DRAWINGS FOR ALL STRUCTURAL STEEL, REINFORCING STEEL, GLUE LAMINATED BEAMS AND PREFABRICATED TRUSSES, WINDOWS & DOORS, FINISH CARPENTRY. SHOP DRAWINGS ARE NOT CHANGE ORDERS, BUT RATHER SERVE TO DEMONSTRATE TO THE ENGINEER THAT THE CONTRACTOR UNDERSTANDS THE REQUIREMENTS & DESIGN CONCEPTS OF THE PLAN, DETAILS & SPECIFICATIONS.
- CONSTRUCTION BRACING & SHORING: THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL BRACING AND SHORING REQUIRED DURING CONSTRUCTION UNTIL ALL CONSTRUCTION IS COMPLETE.
- TECHNICAL SPECIFICATIONS: ALL TECHNICAL SPECIFICATIONS REFERRED TO IN THESE DRAWINGS ARE BY THIS REFERENCE PART OF THE CONSTRUCTION DOCUMENTS.

## PROJECT NOTES

- BUILDING CODES: ALL CONSTRUCTION SHALL MEET THE REQUIREMENTS OF THE 2013 EDITION OF THE CALIFORNIA BUILDING, RESIDENTIAL, GREEN BUILDING, PLUMBING, MECHANICAL, ELECTRICAL, FIRE, CURRENT ENERGY CODES AND ANY AMENDMENTS OF THE PRESIDING CITY OR COUNTY.
- TREE PROTECTION SHALL BE ERECTED AND MAINTAINED THROUGHOUT PROJECT BY CITY FORESTER.
- PROTECT ALL TREES DURING CONSTRUCTION.
- MINIMUM CONCRETE COMPRESSIVE STRENGTH AT 28 DAYS SHALL BE 2,500 PSI.
- ALL REINFORCING STEEL SHALL CONFORM TO THE A.S.T.M. A-615 GRADE 60 UNLESS OTHERWISE NOTED ON PLANS. DEFORMATIONS SHALL BE IN ACCORDANCE WITH A.S.T.M. A-305. WELDED WIRE FABRIC: WELDED WIRE FABRIC SHALL CONFORM TO A.S.T.M. A-185.
- LUMBER SPECIES AND GRADES SHALL CONFORM TO THE FOLLOWING U.O.N.: MAXIMUM MOISTURE CONTENT OF LUMBER SHALL BE 19%. ALL DOUGLAS FIR LUMBER WHICH IS EXPOSED TO WEATHER SHALL BE PRESSURE TREATED. ALL GRADING SHALL CONFORM TO THE RULES AND REGULATIONS OF THE W.W.P., R.A. & A.P.A. PLYWOOD SHALL BE D.F. CONFORMING TO THE U.S. PRODUCT STANDARDS PS 1-74 WITH EXTERIOR GLUE, GRADE STAMPED A.P.A. SEE FRAMING PLANS FOR ADDITIONAL REQUIREMENTS.
- WALL CONSTRUCTION SHALL COMPLY WITH 2013 CALIFORNIA RESIDENTIAL CODE.
- NAILING TO BE IN COMPLIANCE WITH CBC TABLE 2304.9.1.
- ALL MANUFACTURER'S INSTALLATION GUIDES TO BE PROVIDED TO INSPECTOR AT TIME OF FIELD INSPECTION.

## PLUMBING AND ELECTRICAL NOTES

- ALL SHOWER HEADS SHALL HAVE A MAX. FLOW RATE OF 2.0 GPM.
- ALL BATHROOM FAUCETS SHALL HAVE MAXIMUM 1.5 GPM AND KITCHEN FAUCETS SHALL HAVE MAXIMUM 1.8 GPM FLOW RATE.
- ALL TOILETS SHALL BE HIGH EFFICIENCY TOILETS WITH A MAXIMUM FLUSH CAPACITY OF 1.28 GAL.
- ALL KITCHEN AND BATHROOM ELECTRICAL OUTLETS SHALL HAVE GFCI PROTECTION.
- PROVIDE TWO SMALL APPLIANCE BRANCH CIRCUITS FOR THE KITCHEN LIMITED TO SUPPLYING WALL AND COUNTER SPACE OUTLETS.
- PROVIDE SEPARATE BRANCH CIRCUITS AT EACH BEDROOM WITH THE REQUIRED ARC-FAULT CIRCUIT INTERRUPTERS.
- PROVIDE HARD WIRED SMOKE DETECTORS WITH BATTERY BACKUP IN EACH BEDROOM, HALLWAY & WHERE INDICATED.
- SMOKE DETECTORS SHALL BE INTER-CONNECTED TO SOUND AN ALARM AUDIBLE IN ALL BEDROOMS.
- USE FIBERGLASS OR CEMENT BASED BACKER BOARD AT SINK AND TILE LOCATIONS.
- INCANDESCENT LIGHTING FIXTURES RECESSED INTO INSULATED CEILINGS SHALL BE I.C. RATED BY UL OR OTHER APPROVED AGENCY.

## FIRE SAFETY REQUIREMENTS

- SMOKE ALARMS - (SINGLE FAMILY DWELLING) - WHERE A HOUSEHOLD FIRE WARNING SYSTEM OR COMBINATION FIRE/BURGLER ALARM SYSTEM IS INSTALLED IN LIEU OF SINGLE-STATION SMOKE ALARMS REQUIRED BY THE UBC - THE ALARM PANEL SHALL BE REQUIRED TO BE PLACARDED AS PERMANENT BUILDING EQUIPMENT.
- AN APPROVED CARBON MONOXIDE DETECTOR SHALL BE INSTALLED ON EACH LEVEL OF RESIDENTIAL OCCUPANCIES WITH A FOSSIL FUEL SOURCE AND IN EACH LEVEL OF A RESIDENTIAL UNIT WITH AN ATTACHED GARAGE.

## PROJECT DATA

**OWNER:** MR. WERNER NASE  
P.O. BOX 2138  
WINDSOR, CA 95492

**A.P.N.:** 008-232-003  
EL PESCADERO ROAD  
BLK. 153 A LOTS 1,2,3,5,13 to 20  
BLK. 153 B LOTS 1 to 5, 10 to 13 & BLK. 153 C LOT 1

**LOT AREA:** 43,456 SF. .998 AC.

**ZONING:** LDR/1.5D(CZ)  
DEL MONTE FOREST LAND USE PLAN

**OCCUPANCY/BUILDING TYPE:** R/3 U VB

**LOT COVERAGE:** ALLOWED 15% 6,518 SF.  
PROPOSED 13% 5,656 SF.

**F.A.R.:** ALLOWED 17.5% 7,605 SF.  
PROPOSED 13% 5,656 SF.

**IMPERMEABLE COVERAGE:** STRUCTURE 5,656 SF.  
SURFACE 3,793 SF.

**TREE REMOVAL:** 43 TREES

**GRADING:** CUT 460 CY.  
FILL 460 CY.

**OWNER:** WERNER NASE  
P.O. BOX 2138  
WINDSOR, CA 95492

**SITE ADDRESS:** 1412 LISBON LANE  
PEBBLE BEACH, CA 93953

**OWNER/BUILDER:** WERNER NASE, LIC. #258630  
P.O. BOX 2138  
WINDSOR, CA 95492  
P. 707.321.5013

**STRUCTURAL ENGINEER:** ALEX OTT ASSOCIATES  
603 PALM AVENUE  
SEASIDE, CA 93955

**TITLE 24 - ENERGY COMPLIANCE:** MONTEREY ENERGY GROUP  
26465 CARMEL RANCHO BLVD., SUITE 8  
CARMEL, CA 93923

**CIVIL ENGINEER:** C3 ENGINEERING  
126 BONIFACIO PLACE, SUITE C  
MONTEREY, CA 93940

**LANDSCAPE ARCHITECT:** HALL LANDSCAPE DESIGN  
582 LIGHTHOUSE AVENUE  
PACIFIC GROVE, CA 93950

## SCOPE OF WORK

NEW SINGLE FAMILY RESIDENCE, 4 BEDROOM, 4.5 BATHS, WITH AN ATTACHED 3 CAR GARAGE.

## SHEET INDEX

A0.1 COVER SHEET AND PROJECT DATA

C1 COVER SHEET AND GENERAL NOTES  
C2 EXISTING SITE PLAN  
C3 GRADING AND DRAINAGE  
C4 DETAILS  
C5 EROSION CONTROL PLAN

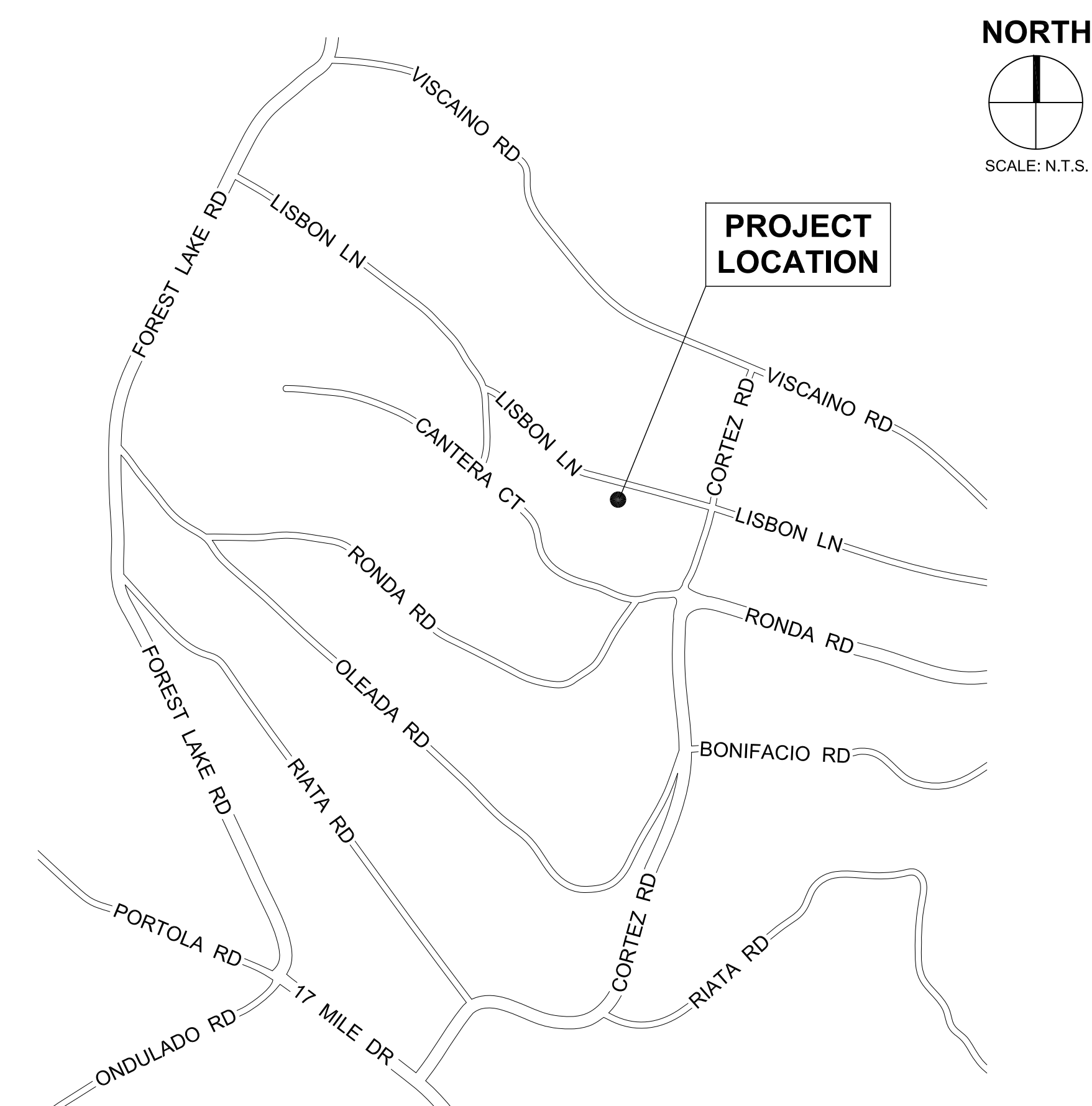
A1.1 SITE PLAN  
A2.1 FLOOR PLAN  
A2.2 WINDOW AND DOOR SCHEDULE  
A2.3 ROOF PLAN  
A3.1 EXTERIOR ELEVATIONS  
A4.1 SECTIONS AND DETAILS

M0.1 NOTES  
M0.2 NOTES  
M0.3 ENERGY COMPLIANCE  
M0.4 ENERGY COMPLIANCE  
M2.1 MAIN FLOOR RADIANT HEATING PLAN  
M2.2 VENTILATION PLAN  
M6.1 PIPING SCHEMATIC  
M6.2 CONTROL'S SCHEMATIC  
M6.3 DETAILS  
M6.4 HEAT SOURCE VENTING  
P2.1 GAS LINE POINT CONNECTIONS AND GAS LINE SCHEMATIC

S0.1 GENERAL NOTES  
S2.0 FOUNDATION PLAN  
S2.1 ROOF FRAMING PLAN  
S3.1 FOUNDATION DETAILS  
S4.1 ROOF FRAMING DETAILS

L-1 TITLE SHEET  
L-2 FIRE SAFETY PLAN  
L-3 ESTIMATED WATER USE  
L-4 IRRIGATION PLAN  
L-5 PLANTING PLAN

## VICINITY MAP



# COVER PAGE, PROJECT DATA

**Owner/Builder**  
**Werner Nase, Jr.**  
P. O. Box 1238  
Windsor, CA 95492  
Lic. #258630

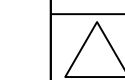
**NASE RESIDENCE**  
1412 LISBON LANE  
PEBBLE BEACH, CA 93953  
APN: 008-232-003-000

DATE: 12.21.16

SCALE:

DRAWN BY: RA

REVISION:



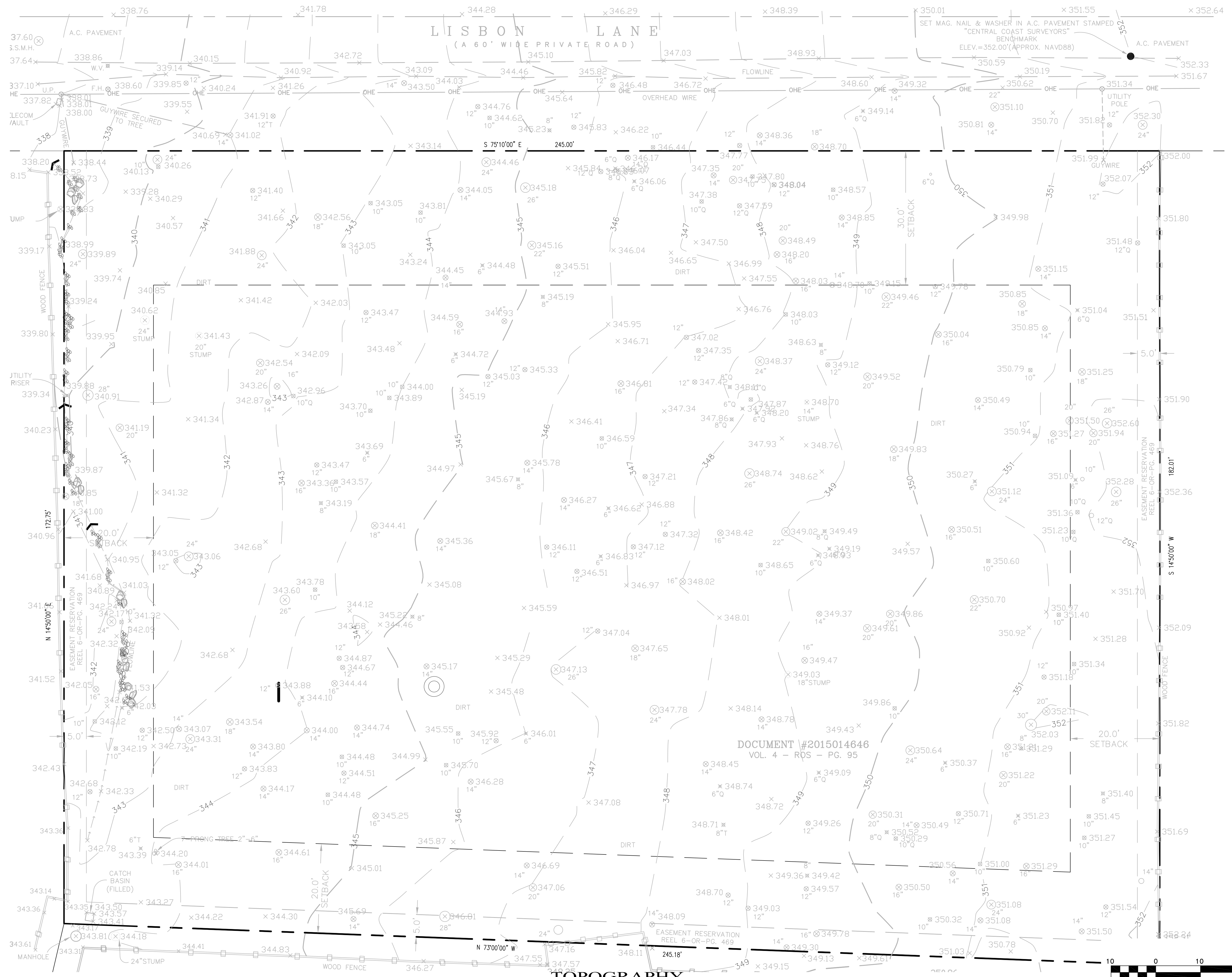
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**A0.1**



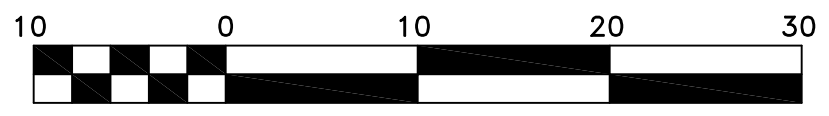
THE USE OF THESE DRAWINGS AND SPECIFICATIONS SHALL BE LIMITED TO THE PROJECT AND SITE DESCRIBED HEREON. ANY REUSE, REPRODUCTION, OR PUBLICATION, IN WHOLE OR IN PART, IS PROHIBITED WITHOUT THE WRITTEN CONSENT OF C2 ENGINEERING.

Drawing file: Z:\Projects\15162 Nase - 1412 Lisbon(Dwg)\15162 XBase.dwg  
 Plotted: Dec 06, 2016 - 8:28am



**TOPOGRAPHY**

1" = 10'



Scale 1" = 10'

DOCUMENT #2015014646  
 VOL. 4 - ROS - PG. 95

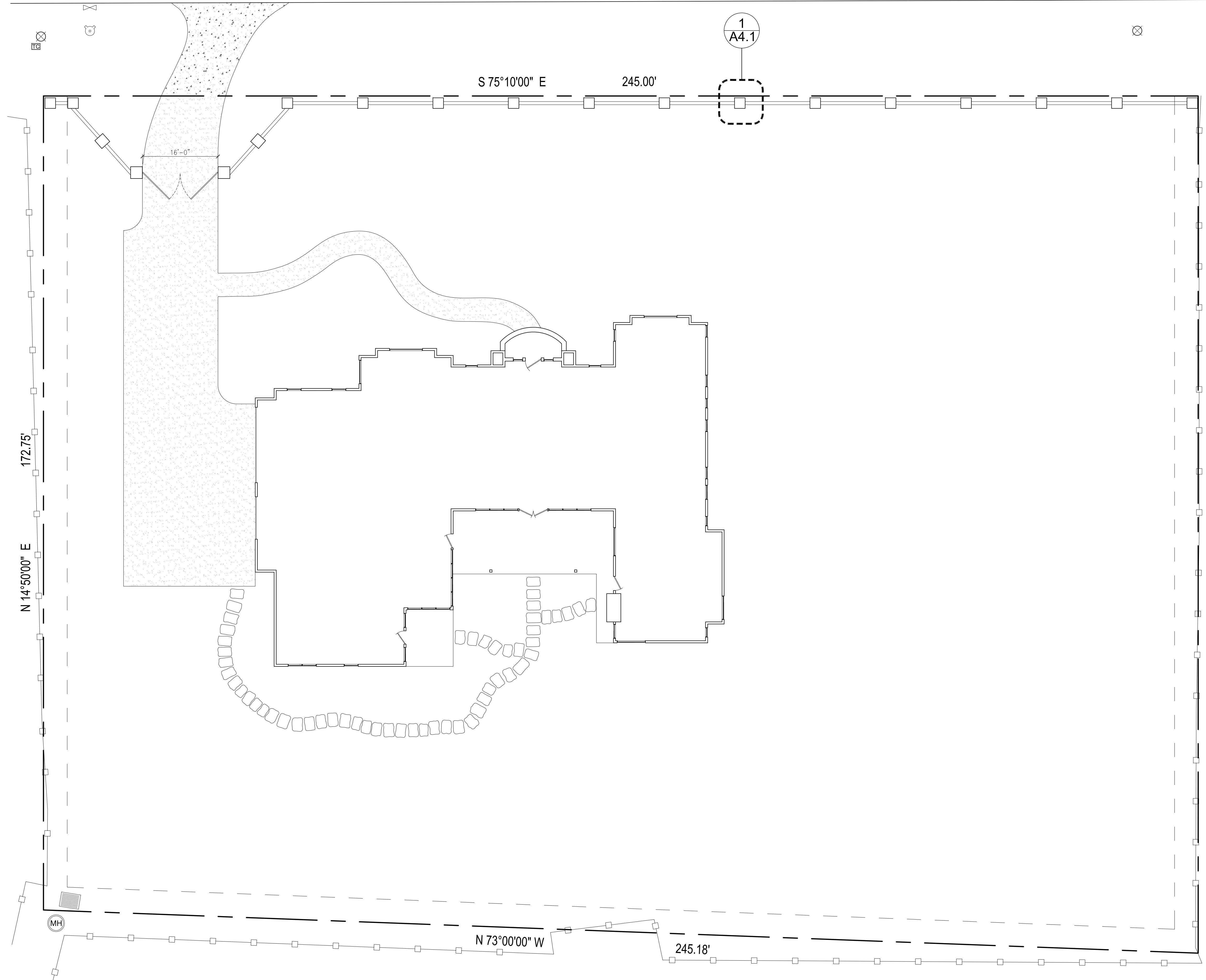
Civil Engineering Land Development Stormwater Control 126 Bonifacio Place, Suite C, Monterey, CA 93940 Phone: (931) 647-1192 Fax (931) 647-1194 mail@C2Engineering.net	
<b>EXISTING SITE PLAN</b> <b>NASE RESIDENCE</b>	
<b>APN# 008-232-003-000</b> PEBBLE BEACH, CA. 93953 PREPARED FOR: NASE, WERNER	
SCALE:	AS NOTED
DATE:	10/28/2015
DESIGN BY:	FJC
DRAWN BY:	ECH
CHECKED BY:	FJC
SHEET NUMBER:	
OF 5 SHEETS	PROJECT# 115-162







# LISBON LANE



- LEGEND**
- DECOMPOSED GRANITE
  - CONCRETE APRON
  - STEPPING STONES
  - PROPERTY LINE
  - EASEMENT
  - NEW FRONT WALL W/GATE
  - EXISTING WOOD FENCE
  - UTILITY POLE
  - TELCOM VAULT
  - CATCH BASIN (FILLED)
  - FIRE HYDRANT
  - WATER VALVE
  - MANHOLE

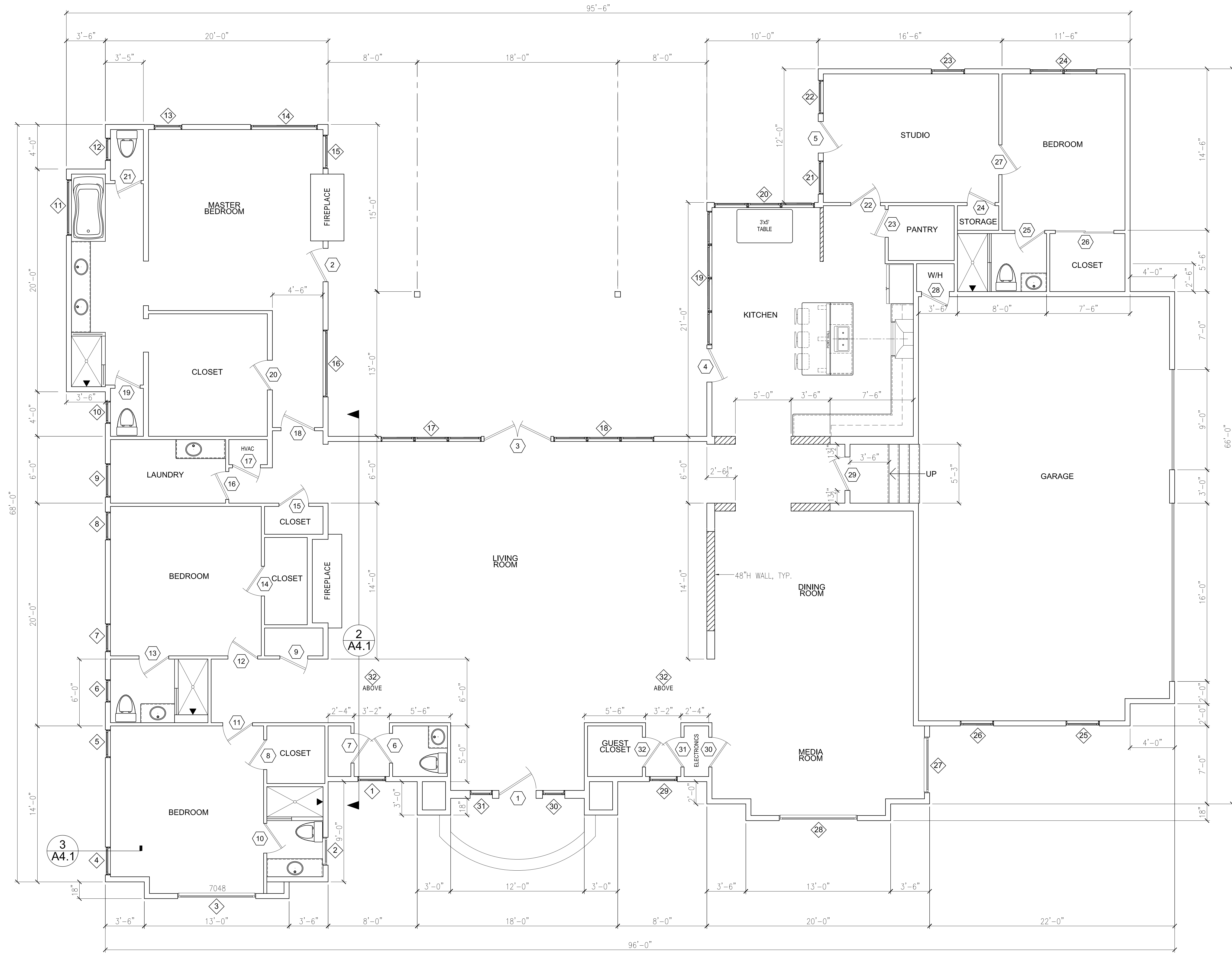
**1** **SITE PLAN**  
SCALE: 3/32"=1'-0"

**Owner/Builder**  
Werner Nase, Jr.  
P. O. Box 1238  
Windsor, CA 95492  
Lic. #2558630

**SITE PLAN**  
NASE RESIDENCE  
1412 LISBON LANE  
PEBBLE BEACH, CA 93953  
APN: 008-232-003-000

DATE:	12.21.16
SCALE:	3/32" = 1'-0"
DRAWN BY:	RA
REVISION:	

PAGE:  
**A1.1**



Owner/Builder  
 Werner Nase, Jr.  
 P. O. Box 1238  
 Windsor, CA 95492  
 Lic. #258630

**FLOOR PLAN**  
 NASE RESIDENCE  
 1412 LISBON LANE  
 PEBBLE BEACH, CA 93953  
 APN: 008-232-003-000

DATE: 12.21.16  
 SCALE: 1/4" = 1'-0"  
 DRAWN BY: RA  
 REVISION:

PAGE:  
**A2.1**



**DOOR SCHEDULE**

MARK	TYPE		NOMINAL DIMS (WIDTH x HEIGHT)	REMARKS
1	EXTERIOR	SC	40" x 96"	-
2	EXTERIOR	SC	38" x 84"	-
3	EXTERIOR	SC	36" x 96"	PAIR
4	EXTERIOR	SC	36" x 84"	-
5	EXTERIOR	SC	36" x 84"	-
6	INTERIOR	HC	32" x 84"	-
7	INTERIOR	HC	32" x 84"	-
8	INTERIOR	HC	32" x 84"	-
9	INTERIOR	HC	30" x 84"	-
10	INTERIOR	HC	32" x 84"	-
11	INTERIOR	HC	32" x 84"	-
12	INTERIOR	HC	30" x 84"	-
13	INTERIOR	HC	32" x 84"	-
14	INTERIOR	HC	30" x 84"	-
15	INTERIOR	HC	30" x 84"	-
16	INTERIOR	HC	30" x 84"	-
17	INTERIOR	HC	28" x 84"	-
18	INTERIOR	HC	36" x 96"	-
19	INTERIOR	HC	30" x 84"	-
20	INTERIOR	HC	32" x 84"	-
21	INTERIOR	SC	30" x 84"	-
22	INTERIOR	HC	32" x 96"	-
23	INTERIOR	HC	30" x 84"	-
24	INTERIOR	HC	30" x 84"	-
25	INTERIOR	HC	32" x 84"	-
26	INTERIOR	HC	60" x 72"	SLIDER
27	INTERIOR	HC	32" x 84"	-
28	INTERIOR	HC	32" x 84"	-
29	INTERIOR	HC	36" x 84"	-
30	INTERIOR	HC	32" x 84"	-
31	INTERIOR	HC	32" x 84"	-
32	INTERIOR	HC	32" x 84"	-

**WINDOW SCHEDULE**

MARK	TYPE	NOMINAL DIMS (WIDTH x HEIGHT)	HEAD HT. (ABOVE F.F.)	EXT. FINISH	INT. FINISH	REMARKS
1	CS/AW PICTURE	31" x 31"	-	TRUFFLE	SASH	OCTOGON
2	CASEMENT	28" x 36"	-	TRUFFLE	SASH	-
3	CASEMENT	84" x 54"	-	TRUFFLE	SASH	ARCH TOP
4	CASEMENT	30" x 48"	-	TRUFFLE	SASH	-
5	CASEMENT	30" x 48"	-	TRUFFLE	SASH	-
6	CASEMENT	28" x 36"	-	TRUFFLE	SASH	-
7	CASEMENT	30" x 48"	-	TRUFFLE	SASH	-
8	CASEMENT	30" x 48"	-	TRUFFLE	SASH	-
9	CASEMENT	30" x 42"	-	TRUFFLE	SASH	-
10	CASEMENT	28" x 36"	-	TRUFFLE	SASH	-
11	CASEMENT	60" x 48"	-	TRUFFLE	SASH	-
12	CASEMENT	28" x 36"	-	TRUFFLE	SASH	-
13	CASEMENT	30" x 48"	-	TRUFFLE	SASH	-
14	CS/AW PICTURE	72" x 54"	-	TRUFFLE	SASH	-
15	CASEMENT	36" x 54"	-	TRUFFLE	SASH	-
16	CS/AW PICTURE	72" x 54"	-	TRUFFLE	SASH	-
17	CASEMENT	36" x 96"	-	TRUFFLE	SASH	x3
18	CS/AW PICTURE	36" x 96"	-	TRUFFLE	SASH	x3
19	CASEMENT	144" x 54"	-	TRUFFLE	SASH	-
20	CASEMENT	108" x 54"	-	TRUFFLE	SASH	-
21	CASEMENT	36" x 48"	-	TRUFFLE	SASH	-
22	CASEMENT	36" x 48"	-	TRUFFLE	SASH	-
23	CASEMENT	36" x 48"	-	TRUFFLE	SASH	-
24	CASEMENT	60" x 48"	-	TRUFFLE	SASH	-
25	CASEMENT	36" x 54"	-	TRUFFLE	SASH	-
26	CASEMENT	36" x 54"	-	TRUFFLE	SASH	-
27	CASEMENT	60" x 48"	-	TRUFFLE	SASH	-
28	CS/AW PICTURE	72" x 54"	-	TRUFFLE	SASH	-
29	CS/AW PICTURE	31" x 31"	-	TRUFFLE	SASH	OCTOGON
30	CS/AW PICTURE	24" x 96"	-	TRUFFLE	SASH	-
31	CASEMENT	24" x 96"	-	TRUFFLE	SASH	-
32	CASEMENT	36" x 36"	-	TRUFFLE	SASH	ARCH TOP
33	CASEMENT	36" x 36"	-	TRUFFLE	SASH	ARCH TOP

**WINDOW NOTES**

1. ALL NEW WINDOWS TO BE KOLBE ULTRA SERIES.
2. ALL WINDOWS ARE TEMPERED IF LOCATED WITHIN 2 FEET OF A DOOR.
3. SEE SPECIFICATION SHEETS FOR TECHNICAL DATA, FINISHES, HARDWARE, WEATHERSTRIPPING, ETC.
4. ALL BEDROOM WINDOWS ARE EGRESS WINDOWS, A MINIMUM CLEAR OPENING OF 5.7 S.F., WITH A MAXIMUM SILL HEIGHT OF 3'-8" ABOVE FINISHED FLOOR.
5. WINDOWS IN THE SHOWER ENCLOSURE SHALL BE SAFETY GLAZING (TEMPERED) CONFORMING TO THE HUMAN IMPACT LOADS PER CRC SECTIONS R308.3 & R308.4.

**DOOR NOTES**

1. ALL NEW EXTERIOR DOORS TO BE KOLBE SERIES WITH TEMPERED GLAZING.
2. ALL EXTERIOR DOORS TO BE WEATHERSTRIPPED.
3. ALL DOORS TO HAVE HARDWARE MOUNTED 30" TO 44" ABOVE FINISHED FLOOR.
4. THRESHOLD SHALL HAVE A MAXIMUM HEIGHT OF 1/2" ABOVE FINISHED FLOOR.
5. ALL HARDWARE TO HAVE FINISH PER OWNER.

**EGRESS NOTES**

1. AT LEAST ONE EGRESS DOOR SHALL BE PROVIDED FOR EACH DWELLING UNIT.
2. EGRESS DOORS SHALL BE SIDE-HINGED AND SHALL PROVIDE A MINIMUM CLEAR WIDTH OF 32 INCHES WHEN MEASURED BETWEEN THE FACE OF THE DOOR AND THE STOP, WITH THE DOOR OPEN 90 DEGREES.
3. THE MINIMUM CLEAR HEIGHT OF THE EGRESS DOOR OPENING SHALL NOT BE LESS THAN 78 INCHES IN HEIGHT MEASURED FROM THE TOP OF THE THRESHOLD TO THE BOTTOM OF THE STOP.
4. EGRESS DOORS SHALL BE READILY OPENABLE FROM INSIDE THE DWELLING WITHOUT THE USE OF A KEY OR SPECIAL KNOWLEDGE OR EFFORT.

**DOOR & WINDOW SCHEDULE**

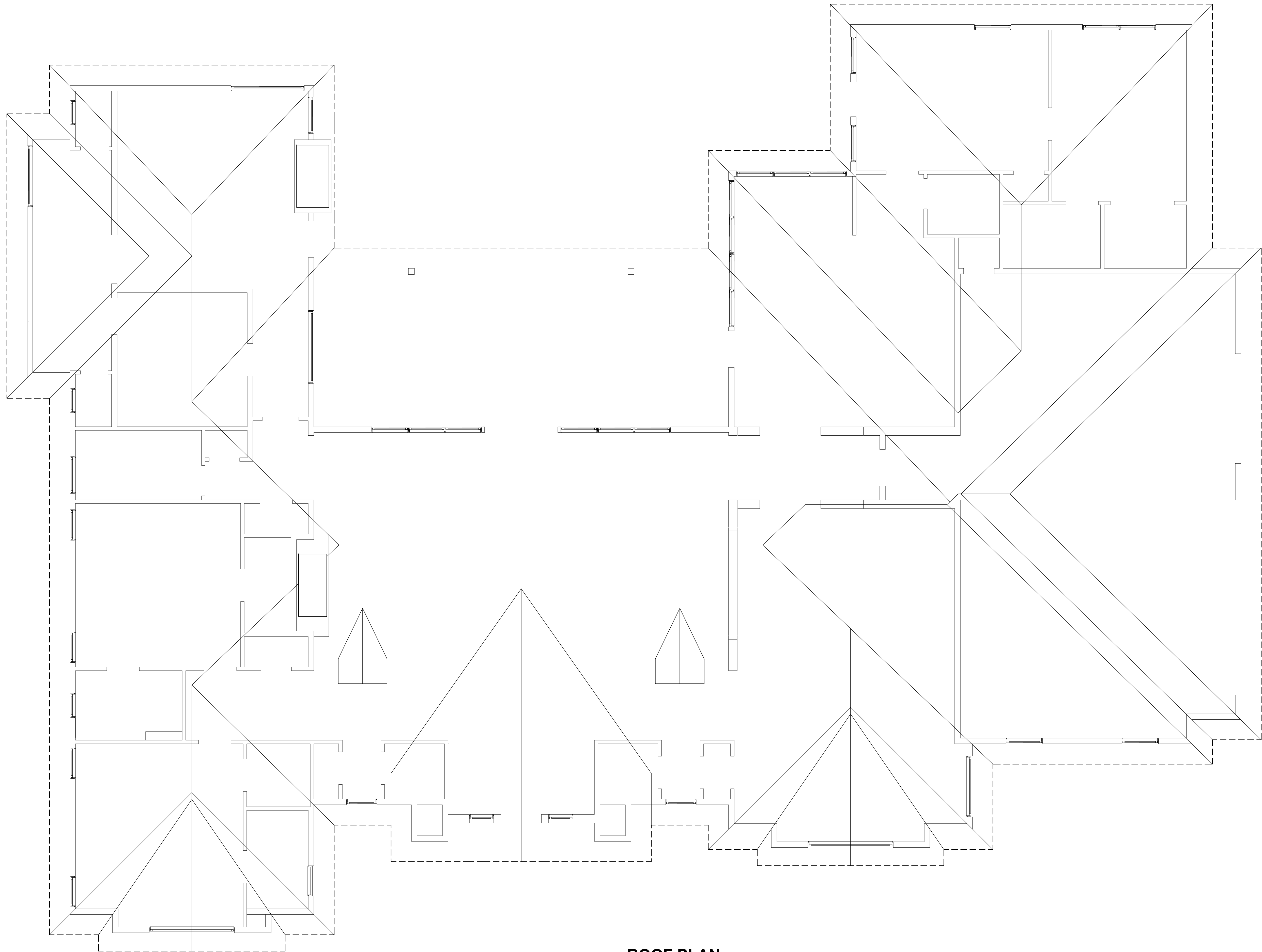
**Owner/Builder**  
**Werner Nase, Jr.**  
 P. O. Box 1238  
 Windsor, CA 95492  
 Lic. #2586630

**DATE RESIDENCE**  
 1412 LISBON LANE  
 PEBBLE BEACH, CA 93953  
 APN: 008-232-003-000

DATE: 12.21.16  
 SCALE: 1/4" = 1'-0"  
 DRAWN BY: RA  
 REVISION:



PAGE:



1 **ROOF PLAN**  
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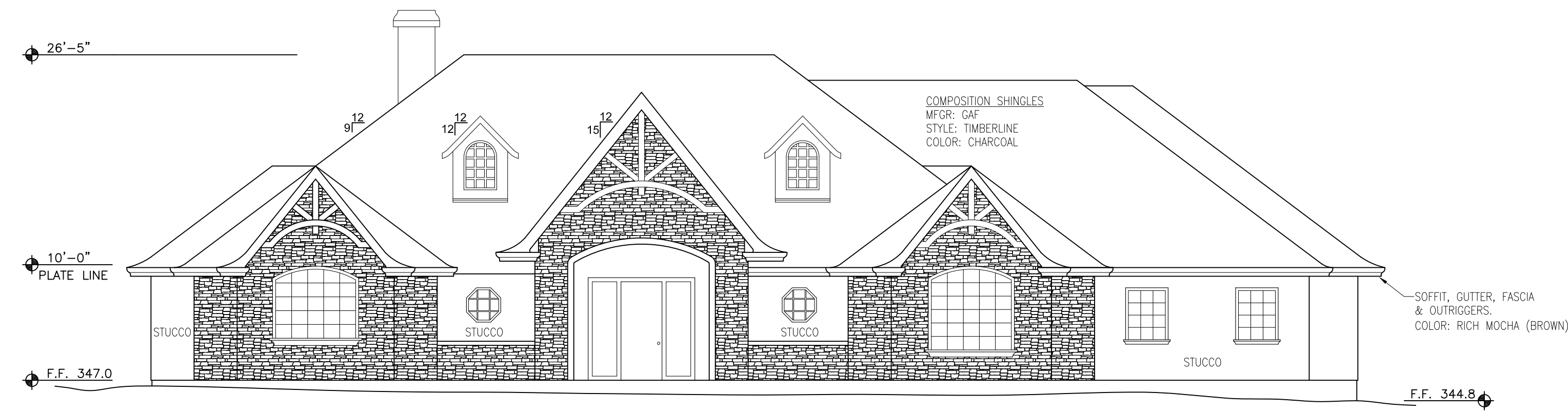
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**Werner Nase, Jr.**  
 P. O. Box 1238  
 Windsor, CA 95492  
 Lic. #258630

**ROOF PLAN**  
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 PEBBLE BEACH, CA 93953  
 APN: 008-232-003-000

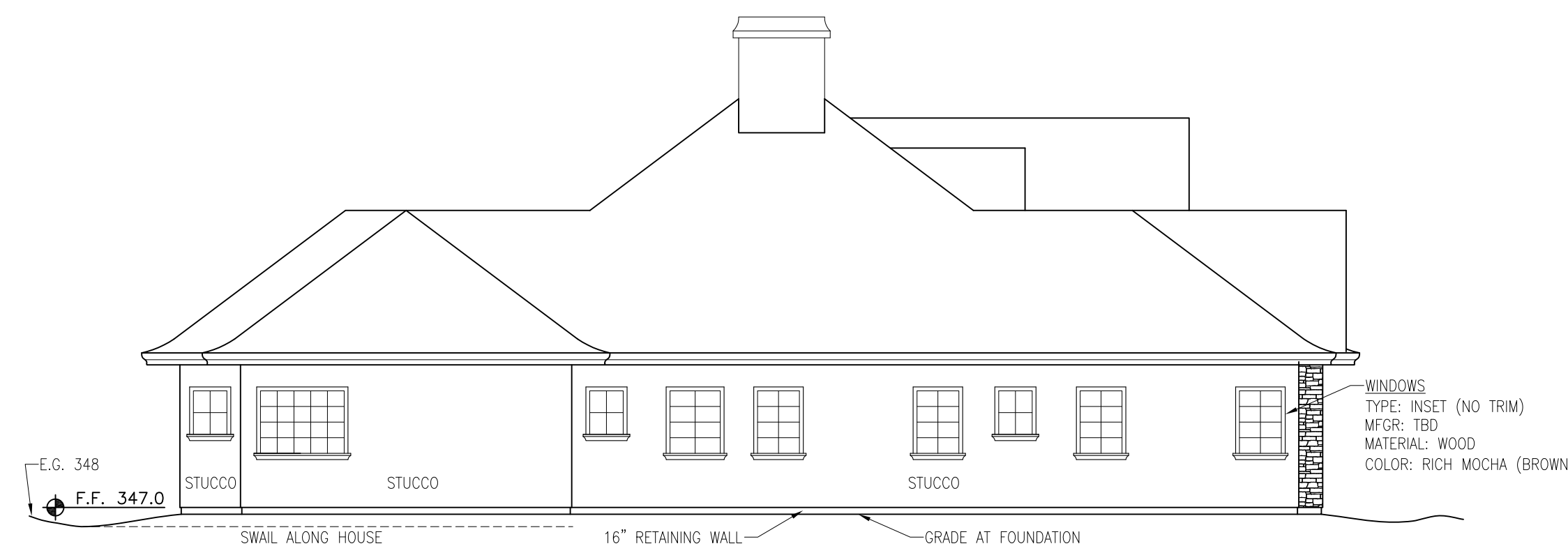
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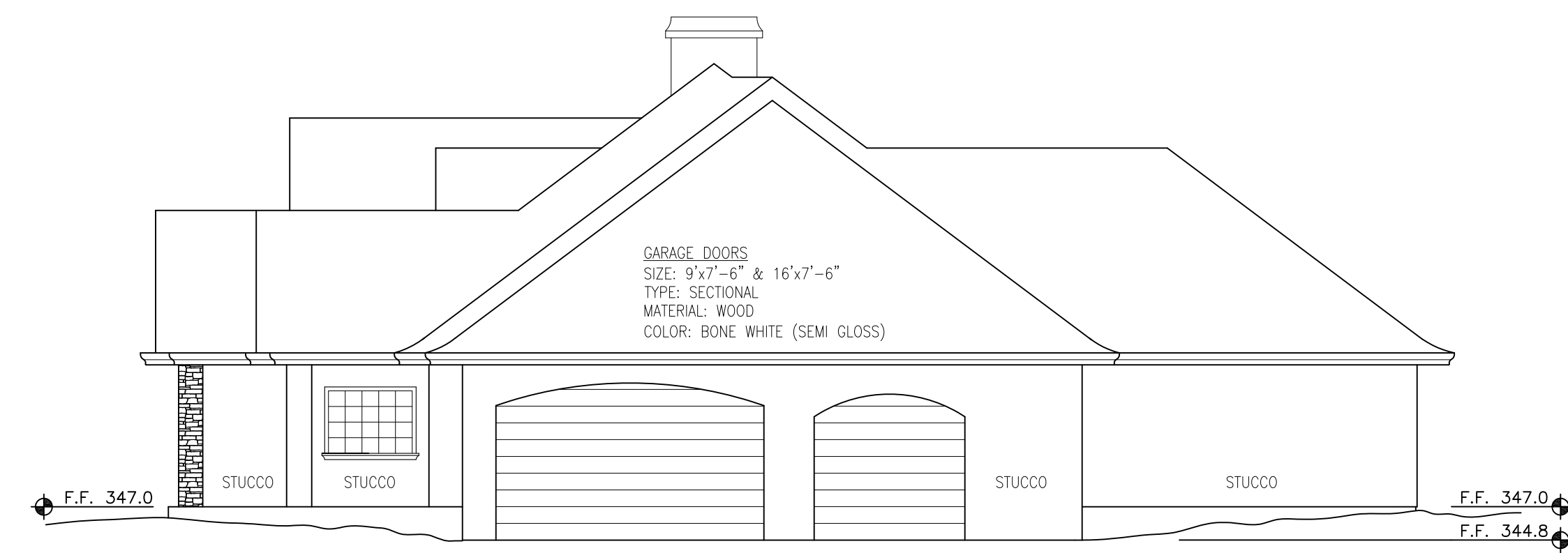
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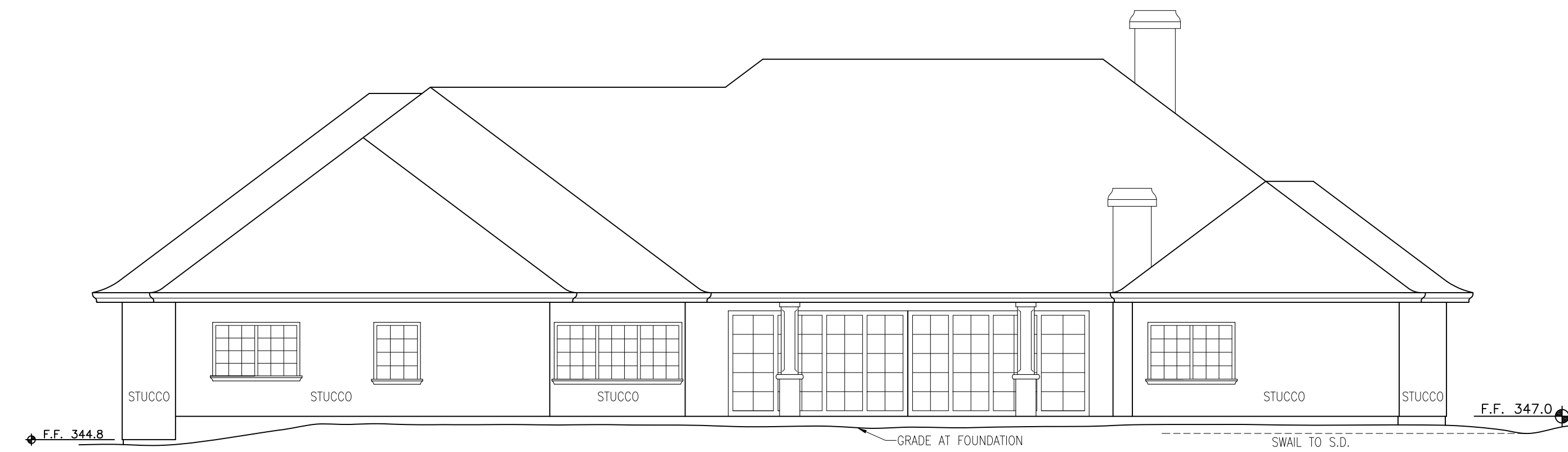
**1 NORTH ELEVATION**  
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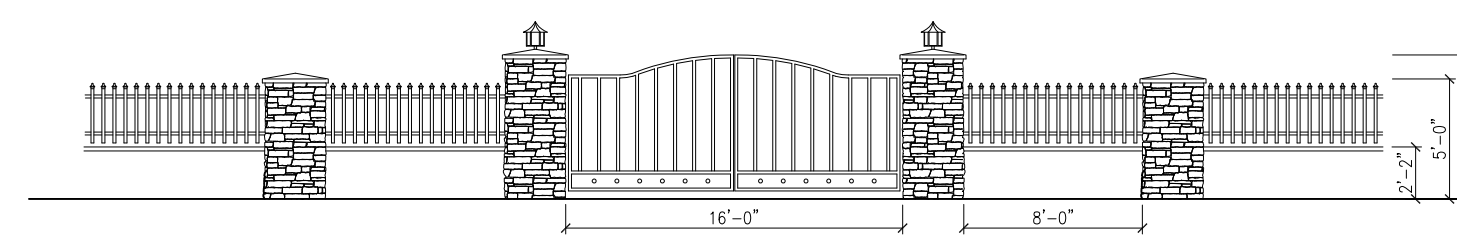
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**3 WEST ELEVATION**  
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**4 SOUTH ELEVATION**  
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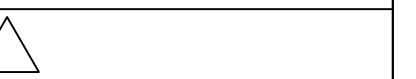


**5 ENTRY GATE ELEVATION**  
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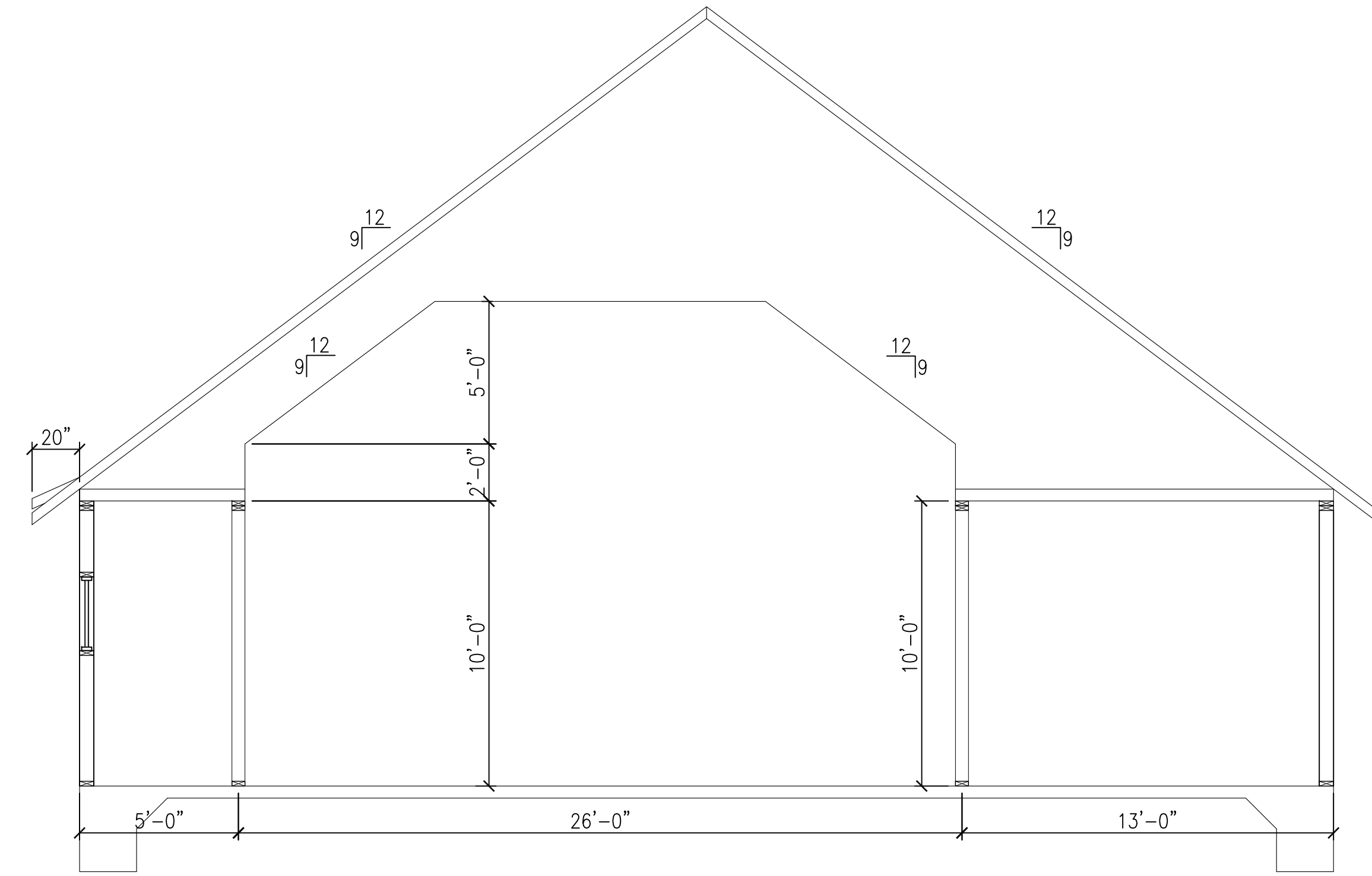
**Owner/Builder**  
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P. O. Box 1238  
Windsor, CA 95492  
Lic. #258630

**EXTERIOR ELEVATIONS**  
NASE RESIDENCE  
1412 LISBON LANE  
PEBBLE BEACH, CA 93953  
APN: 008-232-003-000

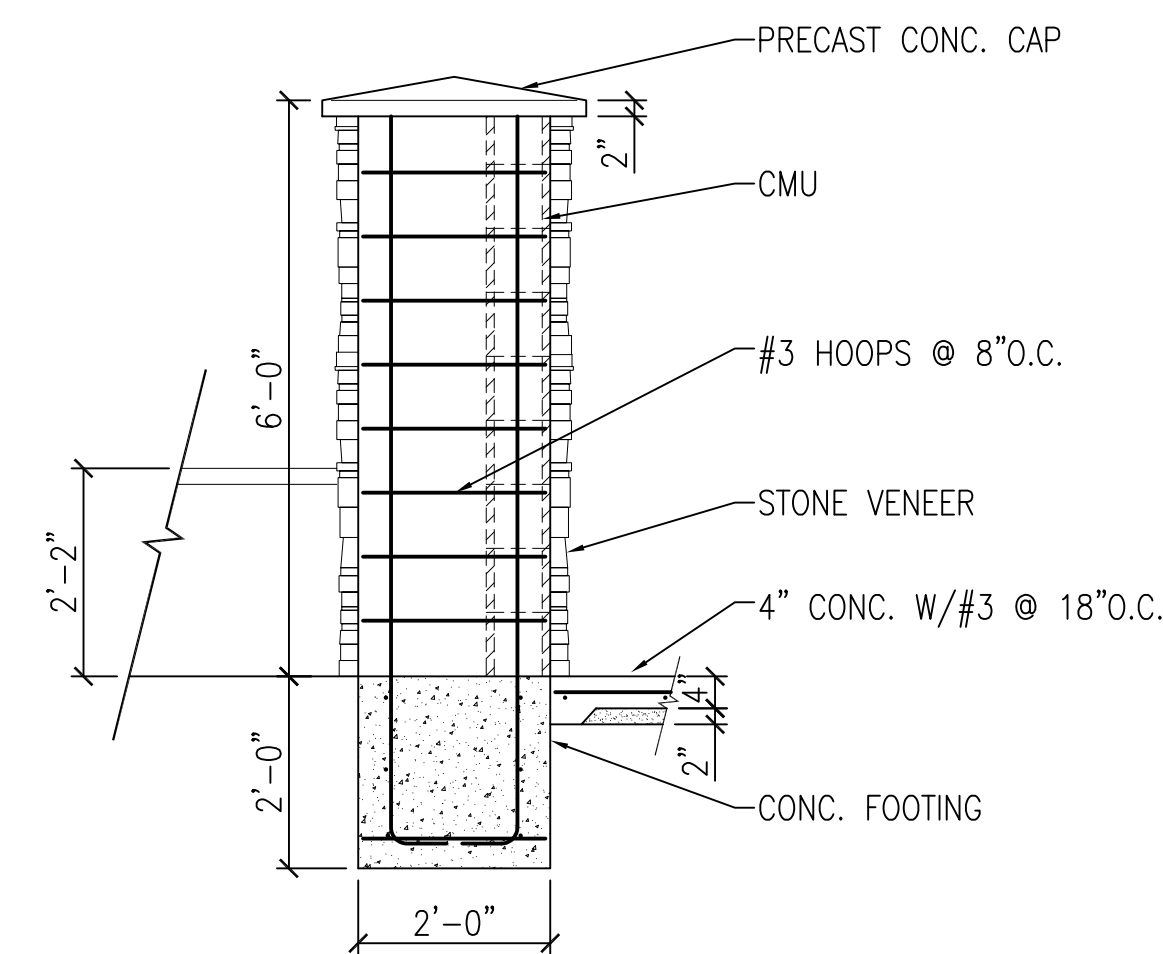
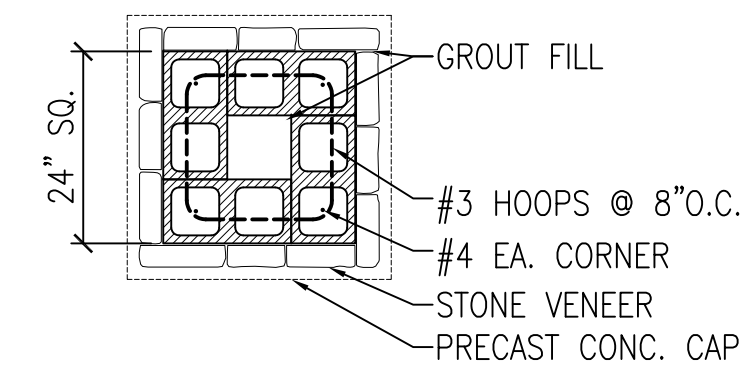
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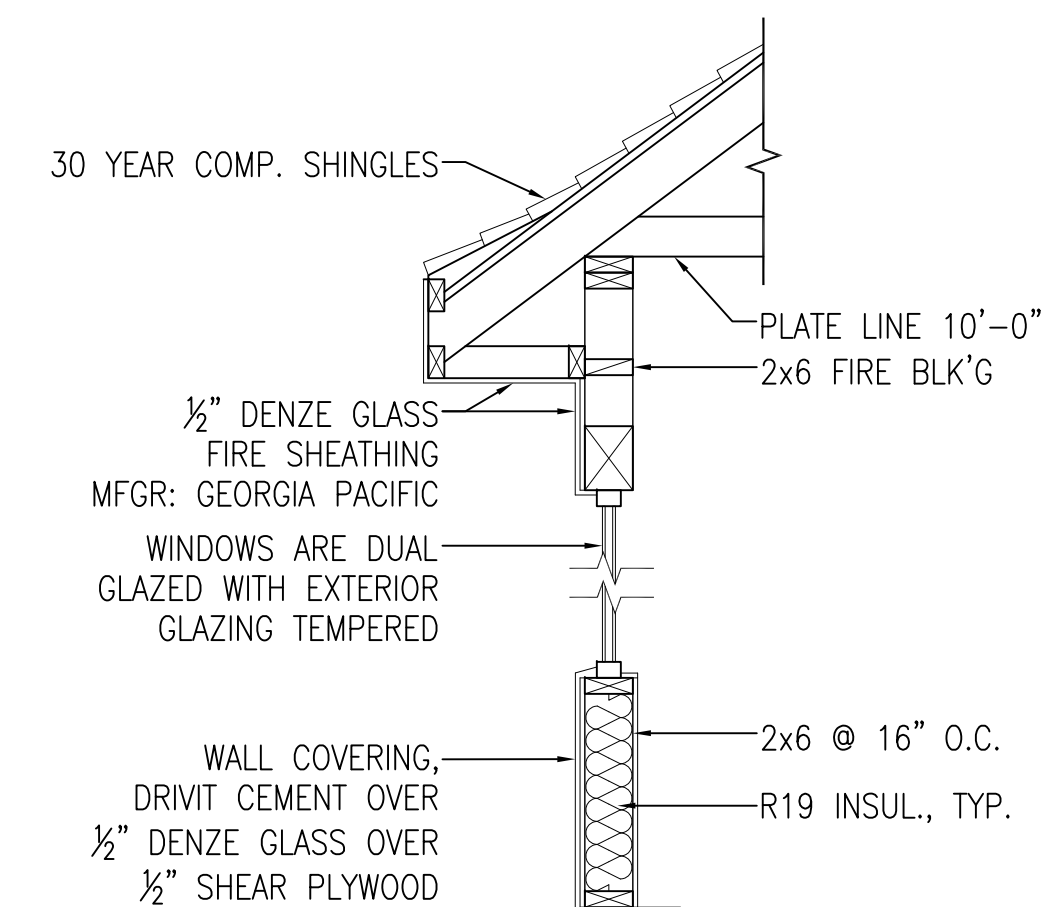
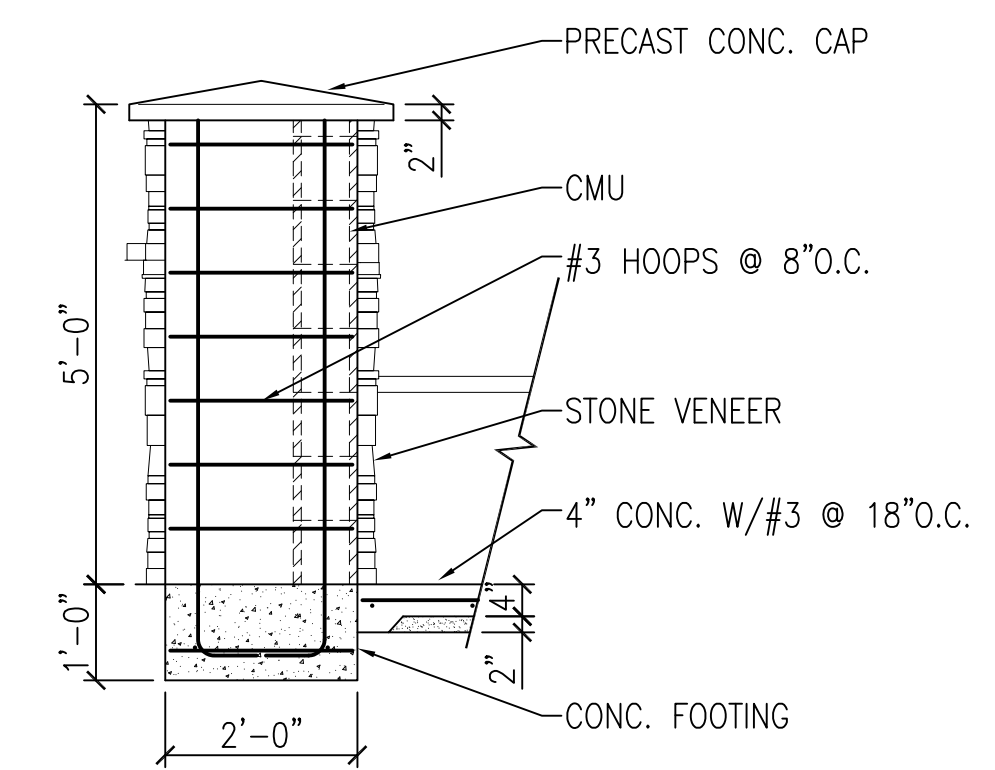
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2 SECTION  
 1/2"=1'-0"



1 COLUMN DETAILS  
 1/2"=1'-0"



3 EXTERIOR WALL SECTION  
 1/2"=1'-0"

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## VERSA HYDRO PRE-START-UP

Date \_\_\_\_\_  
 Job Name \_\_\_\_\_  
 Location \_\_\_\_\_  
 Model \_\_\_\_\_ SN \_\_\_\_\_

Prior to the arrival of the start-up technician the following requirements must be verified otherwise additional start-up charges could apply:

### Electrical Requirements (120 volt computer dedicated circuit):

- Is there 120 volts supplied to water heater, controls and circulators as necessary?
- Is there an independent circuit for the boiler (do not plug into a common outlet)?
- Does the line voltage have proper polarity?
- Is there proper ground back to electrical panel and grounding rod?
- Do you have a surge protector, battery back-up?
- Are sensors (if applicable) installed (DHW, Outdoor, System).

### Gas Requirements:

- A minimum of 3/2" gas line must be supplied to VERSA-HYDRO. If flex is used, it must be full 1/2" inside diameter.
- Is gas line properly sized given all gas appliances being served and distances?
- Is the boiler at least 10" from gas regulator?
- Do you have at least 3.5" water column gas pressure?
- Make sure the gas pressure is less than 14" water column. Exceeding 14" w.c. will damage the gas valve. An additional gas regulator may be required.

### Venting Requirements:

- All exhaust venting must be solid core PVC or ABS (not cellular or foam core).
- Is the total venting length within recommended parameters? Supply air and exhaust gas for water heaters less than 130M BTU must not exceed 85' equivalent feet for 2" or 125' for 3", 199M BTU must not exceed 85' equivalent feet for 3" or 125' for 4", consult factory for longer lengths.
- All exhaust venting must be pitched 1/4" per foot back toward water heater.
- Is concentric flue properly glued? Double check termination by tagging the termination shroud.
- Is all venting properly supported with no load bearing on water heater?
- Is venting exhausted in an open area away from obstructions, like bushes, fences, buildings, overhangs, decks?
- Make sure that you have taken all the precautions to prevent recirculation of the gases into combustion air, or exhaust gases from adjacent gas appliances.

### Condensate Requirements:

- Condensate must slope 1/4" per foot away from boiler.
- If condensate drain or termination is higher than the condensate boiler connection, then a condensate pump is required.
- If condensate is going down a drain that is not all plastic, then a condensate neutralizer must be used. Other local codes may also require the neutralizer.
- If the condensate line can possibly freeze, freeze protection such as heat tape must be utilized.
- Condensate must have an air relief to allow for drainage.
- For multiple boilers, condensate line must be increased.

### Plumbing Requirements:

- Is plumbing purged of air (especially critical for radiant jobs)?
- Is there a load that can be heated?
- Is there an expansion tank on the cold water inlet?
- Is Relief valve plumbed to a drain or the outside 1/2" per foot?

## RADIANT DESIGN SUMMARY

### Project Summary

<b>Project #:</b> 16-193	<b>Total Flowrate:</b> 9.8 USGPM
<b>Project Name:</b> Nase Residence	<b>Maximum Head Loss:</b> 7.2 ft(H2O)
<b>Total Loops:</b> 18	<b>Total Manifolds:</b> 4
<b>Total Zones:</b> 7	<b>Min. Tubing Required:</b> 4310 ft
<b>Total Panel Area:</b> 3,148 ft <sup>2</sup>	<b>Total Radiant Load:</b> 59,763 Btu/hr

### Radiant Design Data

<b>Manifold 1</b>		<b>Water Temperature:</b> 119.9 °F		<b>Flow Rate:</b> 1.8 USGPM												
<b>Head Loss:</b> 4.8 ft(H2O)																
Room	Zone	Attachment Method	Tube Type	Loop Number	Area	Unit Heat	Spacing	Loop Length	Flow Rate	Head Loss	Valve Turns	Cover R.V.	Surface Temp.	Water Temp.	Temp Drop	
Laundry	1	Concrete Overpour	PEX 1/2"	1	77.3	15.0	9	3	105	0.2	0.2	1.92	0.5	77.5	92.5	15
M. Bath	1	Concrete Overpour	PEX 1/2"	2	174	25.0	9	3	238	0.7	4.5	4.2	0.5	82.5	105.8	15
M. Bed	2	Concrete Overpour	PEX 1/2"	3	138	18.0	9	3	190	0.5	1.9	3.35	1.8	79	119.9	15
M. Bed	2	Concrete Overpour	PEX 1/2"	4	138	18.0	9	3	190	0.5	1.9	3.35	1.8	79	119.9	15
<b>Manifold 2</b>		<b>Water Temperature:</b> 119.9 °F		<b>Flow Rate:</b> 5.1 USGPM												
<b>Head Loss:</b> 7.2 ft(H2O)																
Room	Zone	Attachment Method	Tube Type	Loop Number	Area	Unit Heat	Spacing	Loop Length	Flow Rate	Head Loss	Valve Turns	Cover R.V.	Surface Temp.	Water Temp.	Temp Drop	
Living	3	Concrete Overpour	PEX 1/2"	1	180	18.0	9	3	246	0.5	2.8	3.35	0.5	79	96.5	15
Living	3	Concrete Overpour	PEX 1/2"	2	180	18.0	9	3	246	0.5	2.8	3.35	0.5	79	96.5	15
Living	3	Concrete Overpour	PEX 1/2"	3	180	18.0	9	3	246	0.5	2.8	3.35	0.5	79	96.5	15
Living	3	Concrete Overpour	PEX 1/2"	4	180	18.0	9	3	246	0.5	2.8	3.35	0.5	79	96.5	15
Living	3	Concrete Overpour	PEX 1/2"	5	180	18.0	9	3	246	0.5	2.8	3.35	0.5	79	96.5	15
Kitchen	4	Concrete Overpour	PEX 1/2"	6	203.3	24.0	9	3	277	0.8	6.4	3.78	0.5	82	104.5	15
Kitchen	4	Concrete Overpour	PEX 1/2"	7	203.3	24.0	9	3	277	0.8	6.4	3.78	0.5	82	104.5	15
Media	4	Concrete Overpour	PEX 1/2"	8	226.5	15.0	9	3	308	0.5	3.8	4.2	0.5	77.5	92.5	15
Media	4	Concrete Overpour	PEX 1/2"	9	226.5	15.0	9	3	308	0.5	3.8	4.2	0.5	77.5	92.5	15
<b>Manifold 3</b>		<b>Water Temperature:</b> 119.9 °F		<b>Flow Rate:</b> 1.3 USGPM												
<b>Head Loss:</b> 4.4 ft(H2O)																
Room	Zone	Attachment Method	Tube Type	Loop Number	Area	Unit Heat	Spacing	Loop Length	Flow Rate	Head Loss	Valve Turns	Cover R.V.	Surface Temp.	Water Temp.	Temp Drop	
Stuido	5	Concrete Overpour	PEX 1/2"	1	172.5	24.0	9	3	236	0.6	4.1	3.96	0.5	82	104.5	15
Bed	5	Concrete Overpour	PEX 1/2"	2	183	18.0	9	3	250	0.6	4	4.2	1.8	79	119.9	15
<b>Manifold 4</b>		<b>Water Temperature:</b> 119.9 °F		<b>Flow Rate:</b> 1.7 USGPM												
<b>Head Loss:</b> 6.4 ft(H2O)																
Room	Zone	Attachment Method	Tube Type	Loop Number	Area	Unit Heat	Spacing	Loop Length	Flow Rate	Head Loss	Valve Turns	Cover R.V.	Surface Temp.	Water Temp.	Temp Drop	
Bed 1	6	Concrete Overpour	PEX 1/2"	1	215.3	18.0	9	3	293	0.7	6.1	4.2	1.8	79	119.9	15
Bed 2	7	Concrete Overpour	PEX 1/2"	2	147	18.0	9	3	202	0.5	2.2	2.9	1.8	79	119.9	15
Bed 2	7	Concrete Overpour	PEX 1/2"	3	147	18.0	9	3	202	0.5	2.2	2.9	1.8	79	119.9	15

Units: Flowrate = USGPM; Head Loss = ft(H2O); Cover Rv = °F ft<sup>2</sup> hr/Btu; Length = ft; Area = ft<sup>2</sup>; Unit Heat = Btu/hr/ft<sup>2</sup>; Spacing = in; Temperature = °F

## RADIANT HEATING NOTES

### GENERAL INFORMATION

- The installer of this hydronic system shall be a licensed C-4 contractor. It is the installer's responsibility to assure the system functions properly, safely, and meets all local, state and regional codes.
- Installer to supply and install all materials shown on this plan and all others needed to complete this hydronic system. Also, provide any incidental work not shown or specified, which can be reasonably inferred as belonging to the work necessary to provide the complete system.
- This plan does not constitute a complete installation guide for a hydronic system. The installer shall be factory trained, properly licensed and reasonable experienced in the installation of hydronic heating systems. RPA and I=B=R installation procedures and recommendations shall be followed in effecting the installation.
- Coordinate with General Contractor and the work of all other trades.
- Work shall comply with requirements of building inspectors and all local, state and federal codes, including 2013 CBC, CMC, CPC, CFC, UL, NEC, and OSHA. Installation of equipment and materials shall comply with manufacturer's installation instructions and industry standards.
- The Monterey Energy Group Inc. makes no guarantee for any material or components to be installed in this hydronic system. If the current plans are dated over a year old, we recommend the installing contractor to check with Monterey Energy Group or the equipment manufacturers for any product updates.

### TUBING INSTALLATION

- Tube spacing shall not vary by more than 10% from that shown on plans.
- Tubing shall be pressure tested at 100 psi or to 50 psig greater than the operating pressure, which ever is greater, for 30 minutes prior to and during pouring of concrete. System to be tested with air to insure freeze protection. A 30-40 psi pressure test shall remain during phases of construction. Required test shall be conducted by the owner or contractor in the presence of an authorized inspector. The piping being tested shall remain exposed during the test.
- Installer is responsible for protecting tubing from freezing during construction and adding antifreeze and corrosion inhibiting fluids upon completion of work.
- Tubing to be tied or stapled every 3' in straight runs. At the 180-degree turns, staple the tubing at the top of the arc, and once on each side, 12 inches from the top of the arc.
- Installer to record length of every pipe and photograph completed installation (before concrete).
- Refer to manufacturer's guidelines for additional installation methods of their products.
- Tubing for radiant floor heating shall be 1/2" PEX with oxygen diffusion barrier meeting CSA B137-5 certification and listed by ICBO, to ASTM F-876-93 and F-877-93 and listed by NSF to NSF 61.

### PLUMBING BETWEEN MANIFOLD AND HEAT SOURCE

- Type M or L copper tube joined with 95-5 solder shall be used. Pipe in and out of conditioned space shall be insulated to R-4. All ends of pipe shall be reamed. All lines shall be run as direct as possible.
- Install expansion joints as needed and provide clearance around pipe passing through floors and walls.
- Cross-linked polyethylene with an integral oxygen diffusion barrier may be used only when specifically approved by the local building department. Pipe sizing on plans is based on I.D.'s of copper piping. The use of PEX tubing may require upsizing of nominal sizes and should be verified to match the equivalent pressure loss using copper piping.

### MANIFOLD INSTALLATION

- Manifolds to be plum, level and situated in their final position.
- Manifolds to be installed at least 18" above finished floor.
- Manifolds to be installed with air vents and flow balancing valves. Manifolds shall be equipped with a fully sealing ball or gate valve on the supply and return to allow service. Zone valves or Telestats (if used) shall be installed on return side of manifolds. Unless otherwise specified, manifolds shall be brass type.

### FLUIDS

- Hydronic radiant heating systems, open or closed, should be purged and charged with clean water measuring a minimum pH of 7.0.
- Fill water with high mineral content (hardness) over 8-9 grains (150 ppm) should be softened or replaced with de-ionized (D.I.) water.
- When applicable, antifreeze shall be of the propylene glycol type. Refer to "Design Summary" for concentrations.
- Where approved, combined, open systems shall utilize approved fixtures, fittings and pipe for both the heating system and the domestic potable water and pressure tested to regulatory limitations for each. A control device shall be installed on the radiant portion of the system to insure periodic circulation to avoid stagnation during the off season.
- No chemical additives shall be used in a combined open system.

### SLAB ON SLAB SYSTEM INSTALLATION

- No mechanical tubing joint shall be placed in slab.
- Tubing in the slab shall be 2" min. below surface.
- Where passing through slab expansion joints, control joints or cold joints, tubing shall be sleeved a min. of 4" on either side or routed below the expansion joint.
- Tubing shall not be installed closer than 6" from any wall plates, brackets, water closets, cabinets, or other fixtures which may be anchored to the floor with metal fasteners or driven by concrete nails.

### DESIGN ASSUMPTIONS

- 30 degrees F outside design temperatures.
- R-19 wall insulation.
- R-30 ceiling insulation.
- Double pane windows U=0.35.
- (7) Setback thermostats location per Architect or Owner. Installation per guidelines under the Controls section of the "Heat Source Schematic". Per ADA accessibility requirements all buildings with 3 or more apartments - Thermostats shall be located 48" above finished floor.
- R-value of tile floors not to exceed 0.5. R-value of carpeted floor areas not to exceed 1.8.
- R-5 between slab insulation.
- Air change rate = 0.4.

<b>REVISIONS:</b>	<b>BY:</b>
 <b>MONTEREY ENERGY GROUP</b> Consulting Mechanical Engineering 26465 Carmel Rancho Blvd. Suite 8, Carmel, CA 93923 831-372-8328 VOICE 831-359-4173 FAX cal@meg4.com	
<b>NASE RESIDENCE</b> 1412 LISBON LANE PEBBLE BEACH, CA. 93953	
<b>NOTES</b>	
DATE:	12/19/16
SCALE:	AS NOTED
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SHEET OF SHEETS	

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FANS														
MARK	LOCATION	CFM	ESP	CFM CONT.	ESP	SONES OR TIP SPEED	MOTOR HP	V/PH	FAN RPM	MAX AMPS	MAX WATTS	CFM/WATTS	MANUFACTURER MODEL	COMMENTS
EF-1	BATH	80	0.25"	30	0.25"	0.4	NA	120/1	1131	0.27	16.1	10.2	PANASONIC FV-05-11VK1	① ② ④
EF-2	POWDER	50	0.25"	--	0.25"	0.4	NA	120/1	1131	0.27	16.1	10.2	PANASONIC FV-05-11VK1	② ④
EF-3	BATH	80	0.25"	--	0.25"	0.4	NA	120/1	1131	0.27	16.1	10.2	PANASONIC FV-05-11VK1	② ③ ④
EF-4	MASTER WC	50	0.25"	--	0.25"	0.4	NA	120/1	1131	0.27	16.1	10.2	PANASONIC FV-05-11VK1	② ④
EF-5	MASTER BATH	130	0.25"	30	0.25"	0.5	NA	120/1	891	0.33	22.0	7.8	PANASONIC FV-11-15VK1	② ③ ④
EF-6	MASTER WC	50	0.25"	--	0.25"	0.4	NA	120/1	1131	0.27	16.1	10.2	PANASONIC FV-05-11VK1	② ④
EF-7	BATH	80	0.25"	30	0.25"	0.4	NA	120/1	1131	0.27	16.1	10.2	PANASONIC FV-05-11VK1	① ② ④

① CEC IAQ REQUIRED VENTILATION-DO NOT MODIFY. PROVIDE MULTI SPEED AND TIME DELAY MODULE  
 ② PROVIDE OPTIONAL LUTRON OCCUPANCY SENSOR MODEL # MS-OP55AM, OR EQUAL PER ARCH, AND LED NIGHT LIGHT & MOTION SENSOR MODULE  
 ③ PROVIDE CONDENSATION SENSOR MODULE TO SATISFY HUMIDISTAT CONTROL PER 2013 CAL GREEN CODE SECTION 4.506  
 ④ FAN SHALL BE ENERGY STAR RATED AND HAVE BUILT IN BACKDRAFT DAMPER

ABBREVIATIONS			
AC	AIR CONDITIONING UNIT	M	MOTOR
AD	ACCESS DOOR	MLWS	METAL LOUVER WITH WIRE MESH SCREEN
AFF	ABOVE FINISHED FLOOR	MO	MASONRY OR WALL OPENING
AHU	AIR HANDLING UNIT	NC	NORMALLY CLOSED
AL	ACOUSTICAL LINING	NIC	NOT IN CONTRACT
ALD	AUTOMATIC LOUVER DAMPER	NK	NECK SIZE
BDD	BACKDRAFT DAMPER	NO	NORMALLY OPEN
BI	BLACK IRON	NTS	NOT TO SCALE
BRD	BAROMETRIC RELIEF DAMPER (PRESSURE REGULATING DAMPER)	OAI	OUTSIDE AIR INTAKE
CAV	CONSTANT AIR VOLUME	OBD	OPPOSED BLADE DAMPER
CC	COOLING COIL	P	PUMP
CD	CEILING DIFFUSER	PC	PUMPED CONDENSATE
CHWR	CHILLED WATER RETURN	PHC	PRE HEAT COIL
CHWS	CHILLED WATER SUPPLY	PRV	PRESSURE REDUCING VALVE
CR(G)	CEILING REGISTER OR GRILLE	RA	RETURN AIR
CWR	CONDENSER WATER RETURN	RHC	REHEAT COIL
CWS	CONDENSER WATER SUPPLY	SA	SUPPLY AIR
DB	DRY BULB TEMPERATURE	SD	SMOKE DAMPER
EAT	ENTERING AIR TEMPERATURE	SF	SQUARE FEET
EJ	EXPANSION JOINT	ST	SOUND TRAP
EXH	EXHAUST	S/S	STAINLESS STEEL
EWT	ENTERING WATER TEMPERATURE	TF	TRANSFER FAN
FAI	FRESH AIR INTAKE	TR(G)	TOP REGISTER OR GRILLE
FC	FLEXIBLE CONNECTION	UC	UNDERCUT DOOR (1")
FCU	FAN COIL UNIT	UH	UNIT HEATER
FD	FIRE DAMPER	UON	UNLESS OTHERWISE NOTED
FPM	FEET PER MINUTE	V	VENTILATION
H	HUMIDIFIER	VAV	VARIABLE AIR VOLUME REGULATOR
HC	HEATING COIL	VD	VOLUME DAMPER
HRC	HEAT RECOVERY COIL	VFD	VARIABLE FREQUENCY DRIVE
HRV	HEATING RECOVERY AND VENTILATING UNIT	VI	VIBRATION ISOLATOR
HWR	HOT WATER RETURN	WB	WET BULB TEMPERATURE
HWS	HOT WATER SUPPLY	WMS	WIRE MESH SCREEN
HX	HEAT EXCHANGER	WP	WEATHER PROOF
KW	KILOWATTS	W/SQ.FT	WATTS PER SQUARE FOOT
LAT	LEAVING AIR TEMPERATURE		
LWT	LEAVING WATER TEMPERATURE		

DUCT SYSTEM INSTALLATION	
1.	Duct installation shall be in conformance with chapter 6 of the 2013 CM C or as recommended by ACCA manuals D, J, S, SMACNA manuals, and/or the ASHRAE handbook if approved by officials having jurisdiction. Care shall be exercised to seal all joints and seams to prevent air leakage.
2.	Where shown on the mechanical plan and if necessary for other locations, provide rectangular duct of equivalent cross sectional area to the round duct shown to clear obstructions. Provide smooth transitions when the duct shape changes.
3.	Flexible vibration isolation connectors shall be installed in sheet metal ductwork at the unit in both the supply and air intake; these shall not exceed 10.0 inches in length. Ductwork shall be properly aligned at these connectors without any offset.
4.	Sheet metal ductwork shall be installed in a workman-like manner in accordance with acceptable practice given in the ASHRAE handbook or the SMACNA "low pressure duct construction standards" manual. Rigid sheet metal ducts shall be at least the minimum thickness required for their largest dimension and/or the static pressure to which they shall be subjected; they shall be provided with turning vanes or long radius bends both to reduce the pressure loss and to provide a more uniform velocity distribution downstream from the bend. All duct seams and joints shall be airtight and smooth fitting. These shall be sealed with products such as mastic and/or foil-backed tape recommended by the manufacturer for the location where they will be used.
5.	Rigid ductwork exposed to view shall be installed in such a manner as to present a neat appearance. The ducts shall be parallel to adjacent architectural surfaces and have as few joints as possible.
6.	All metal ducts shall be securely supported, hung, or suspended by metal hangers, straps, or brackets and the support material in contact with the duct, or external insulation, shall not be less than 0.75 inches wide. The hanger spacing for metal duct shall not be more than 10 feet for rectangular duct or 12 feet for round duct. Hangers exposed to view shall be plumb and neat in appearance. All rectangular metal ducts 24 inches or wider and all exterior ducts shall be cross broken or beaded to provide additional support. Ducts shall be insulated with fiberglass duct insulation to provide a minimum duct insulation value of R-6. If ye branches and diffuser boots shall be insulated on their exterior surfaces unless they are exposed to the weather, are exposed to view, or could be damaged during occupancy of the building. Any insulating material used shall meet the appropriate specifications required by ASTM e-84, c-553, NEPA 90b; and UL 181. Such insulation shall have 100% coverage and be installed in accordance with the manufacturer's instructions.
7.	Flexible air duct shall be UL listed class 1 air duct made with a polyester interior, a moisture impervious sleeve and insulation having an overall R-value no less than 6. Foil covered duct shall be used in locations where high radiant heat loads may be expected. Performance and assembly shall be in strict accordance with details listed in the flexible ductwork manufacturer's applications manual or the SMACNA "flexible duct performance standards and flexible duct installation standards". Tight fitting mechanical clamps and mastic recommended for the location shall be used to seal all joints. Particular attention shall be taken to avoid kinks, sharp bends, or other such obstructions in the duct. Factory made flexible air ducts shall be installed according to their installation instructions and standards set by the code. Duct work shall use pressure-sensitive tapes, mastics, aerosol sealants or other closure systems meeting applicable UL 181A and B requirements. Drawbands used with flexible ducts shall be either stainless-steel, worm driven hose clamps or UV-resistant nylon duct ties. In addition, drawbands must have a minimum tensile strength rating of 150 pounds and be tightened as recommended by the manufacturer.
8.	Flexible air duct shall be supported at the manufacturer's recommended intervals but in no case shall the intervals between hangers exceed 4.0 ft. The hanger material shall be not less than 2.0 inch wide. The maximum permissible sag shall be 0.5 inch per foot of spacing between supports. Collars shall be used to attach flexible duct and shall be a minimum of 2.0 inches in length. Collars shall be inserted into the flexible duct a minimum of 1.0 inch before fastening.
9.	Readily accessible balancing or volume control dampers with outside locking devices shall be provided as shown on the mechanical plans and/or as needed to regulate the air flow to each register.
10.	Supply and return plenums shall be covered with insulation having a value of R-6 or greater on their internal surfaces. Any insulating material used shall meet the appropriate specifications required by ASTM e-84, c-553, NEPA 90b; and UL 181. Such insulation shall have 100% coverage and be installed in accordance with the manufacturer's instructions.
11.	Ductwork shall be installed so that it will not contact the ground.
12.	Return air grill may be substituted, as desired, based on equal face area.
13.	Boat area shall match grill area in all cases. If necessary, boots should be lined with acoustical lining to reduce noise transmission.
14.	Plenum shall be lined with acoustical lining.
15.	Flat ducts for wall registers shall be 3-1/4"x14" unless shown on the plans.
16.	Termination of all environmental air ducts including direct vent termination kits shall be a minimum of 3 feet from or any openings into the building (i.e., dryers, bath and utility fans, etc.,) must be 3 feet away from doors, windows, opening skylights or attic vents).
17.	Mechanical equipment and duct openings shall be protected during storage and rough installation per 2013 CAL Green section 4.504.1 to reduce the amount of dust or debris which may collect in the system.
18.	Heating, ventilating and air conditioning systems (including hydronic systems) shall be balanced in accordance 2013 CM C Section 317.1 using the ACCA Manual B method.

**Note: It is the intent of the Engineer of record to inspect all ductwork for compliance with SMACNA standards, i.e., throat radius, air foil turn vanes, transverse reinforcements, soundlines, etc., and to field verify air balance.**

**Air for combustion**  
 1. Air quantities shall be based on the 2013 California Mechanical Code. If located in a confined space, that space shall be provided with two permanent openings one within 12 inches of the top and one within 12 inches of the bottom of the enclosure. The openings shall communicate directly, or by ducts with the outdoors. When communication with the outdoors is through vertical ducts, each opening shall have a minimum free area of 1.0 square inch per 4000 btu per hour of total input rating of all equipment in the enclosure. When communication with the outdoors is through horizontal ducts, each opening shall have a minimum free area of 1.0 square inch per 2000 btu per hour of total input rating of all equipment in the enclosure. If approved by the administrative authority having jurisdiction, communication directly through an exterior wall may be considered as a vertical duct.  
 2. Duct openings shall be screened with metal mesh having openings of 1/4 inch. Provisions shall be made for the reduction in duct area due to the effects of screens, louvers, etc.

**Gas lines**  
 1. Piping shall be new, standard weight wrought iron or steel (exterior-only galvanized or black), with malleable iron fittings. Approved PE (poly-ethylene) pipe may be used in exterior buried piping systems.  
 2. Exterior piping shall be protected by approved, machine applied protective coating. Field wrapping shall be limited to sections at joints and shall provide equivalent protection to the machine applied coating.  
 3. Gas lines may not be installed on or under the ground under buildings; they must be at least 6 inches above the ground.  
 4. Gas lines shall be wrapped with insulation and sleeved where passing through concrete. Piping shall be protected where passing through framing using metal straps designed for the purpose.

**MAJOR EQUIPMENT INSTALLATION**  
 1. Installation shall meet all local and national codes pertaining to the installation and operation of plumbing equipment. Unless otherwise required by these standards, the equipment shall be installed in accordance with the equipment manufacturer's recommendations.  
 2. If "or equal" equipment is to be used, it must meet the performance specifications for the equipment listed, and shall receive prior approval from the mechanical engineer. All requests for substitution shall be furnished with sufficient engineering data to demonstrate that the proposed equipment fully meets all the performance levels of the equipment originally specified. The contractor shall be responsible for all costs associated with the engineering for structural, electrical duct sizing, etc. Caused by any substitution.  
 3. Units shall be installed to provide the clearance or clearances specified by the manufacturer or required by the authority having jurisdiction.  
 4. Units shall have suitable support to prevent transmission of objectionable noise or vibration generated by the equipment to the structure. Outdoor, ground mounted, units shall be located on a level, one piece, concrete pad.  
 5. Provide and install low voltage control wiring in conduit installed by the mechanical or plumbing contractor using methods contained in the electrical specifications. All wiring of line voltage controls to be accomplished by the electrical contractor.  
 6. Contractors shall co-ordinate with the electrical contractor to ensure that all electrical accessories such as motor starters, control relays, circuit breakers, etc. Required to make a fully functional systems are provided.

MECHANICAL LEGEND	
SYMBOL	DESCRIPTION
	DISTRIBUTION MANIFOLD
	HYDRONIC BASEBOARD (SEE HEAT SOURCE SCHEMATIC FOR LENGTH AND HEIGHT)
	AIR SUPPLY FLOOR/CEILING REGISTER (CFM AS SHOWN ON PLAN)
	AIR SUPPLY WALL REGISTER (CFM AS SHOWN ON PLAN)
	AIR SUPPLY TOE SPACE REGISTER (CFM AS SHOWN ON PLAN)
	AIR RETURN WALL GRILLE (CFM AS SHOWN ON PLAN)
	TOEKICK FAN COIL UNIT FOR # INDICATED, SEE HEATING EQUIPMENT LEGEND
	AIR EXHAUST IN-LINE FAN
	AIR EXHAUST FAN RECESSED FAN
	DOOR GRILLE OR TRANSFER GRILLE
	THERMOSTAT +60°F
	NEW DUCT ROUND (SUPPLY)
	NEW DUCT ROUND (RETURN)
	NEW DUCT SQUARE (SUPPLY)
	NEW DUCT SQUARE (RETURN)
	MITERED ELBOW WITH TURNING VANES
	DUCT TRANSITION (ROUND OR SQUARE)
	DUCT TRANSITION (RECTANGULAR TO ROUND)
	MANUAL AIR VOLUME DAMPER

REVISIONS:	BY:

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NOTES

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CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD

Project Name: Nase Residence Calculation Date/Time: 08:44, Mon, Dec 19, 2016 Input File Name: 16-601 Nase Residence.ridx Page 1 of 7

GENERAL INFORMATION table with columns 01-20 and rows for Project Name, Calculation Description, Project Location, City, Zip Code, Climate Zone, Building Type, Project Scope, Total Cond. Floor Area, Stab Area, Addition Cond. Floor Area, and Addition Stab Area.

COMPLIANCE RESULTS table with columns 01-03 and rows for Building Complies with Computer Performance, This building incorporates features that require field testing and/or verification by a certified HERS rater, and This building incorporates one or more Special Features shown below.

ENERGY USE SUMMARY table with columns 04-08 and rows for Energy Use (kTDWh/yr), Space Heating, Space Cooling, IAQ Ventilation, Water Heating, Photovoltaic Offset, and Compliance Energy Total.

Registration Number: 216-N0467181A-00000000-0000 Registration Date/Time: 2016-12-19 08:47:58 HERS Provider: CaCERTS inc. CA Building Energy Efficiency Standards - 2013 Residential Compliance Report Version - CF1R-03112016-433 Report Generated at: 2016-12-19 08:44:49

CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD

Project Name: Nase Residence Calculation Date/Time: 08:44, Mon, Dec 19, 2016 Input File Name: 16-601 Nase Residence.ridx Page 3 of 7

OPAQUE SURFACES table with columns 01-08 and rows for Name, Zone, Construction, Azimuth, Orientation, Gross Area, Window & Door Area, and Tilt.

OPAQUE SURFACES - Cathedral Ceilings table with columns 01-11 and rows for Name, Zone, Type, Orientation, Area, Skylight Area, Roof Rise, Roof Pitch, Roof Tilt, Roof Reflectance, Roof Emittance, and Framing Factor.

WINDOWS table with columns 01-10 and rows for Name, Type, Surface, Width, Height, Multiplier, Area, U-factor, SHGC, and Exterior Shading.

Registration Number: 216-N0467181A-00000000-0000 Registration Date/Time: 2016-12-19 08:47:58 HERS Provider: CaCERTS inc. CA Building Energy Efficiency Standards - 2013 Residential Compliance Report Version - CF1R-03112016-433 Report Generated at: 2016-12-19 08:44:49

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Project Name: Nase Residence Calculation Date/Time: 08:44, Mon, Dec 19, 2016 Input File Name: 16-601 Nase Residence.ridx Page 2 of 7

REQUIRED SPECIAL FEATURES: The following are features that must be installed as condition for meeting the modeled energy performance for this computer analysis. Window overhangs and/or fins.

HERS FEATURE SUMMARY: The following is a summary of the features that must be field-verified by a certified HERS Rater as a condition for meeting the modeled energy performance for this computer analysis. Additional detail is provided in the building components tables below.

Building-level Verifications: IAQ mechanical ventilation, Cooling System Verifications, HVAC Distribution System Verifications, Domestic Hot Water System Verifications.

ENERGY DESIGN RATING table with columns for Reference Energy Use, Energy Design Rating, Margin, and Percent Improvement.

BUILDING - FEATURES INFORMATION table with columns 01-07 and rows for Project Name, Conditioned Floor Area, Number of Dwelling Units, Number of Bedrooms, Number of Zones, Number of Ventilation Cooling Systems, and Number of Water Heating Systems.

ZONE INFORMATION table with columns 01-07 and rows for Zone Name, Zone Type, HVAC System Name, Zone Floor Area, Avg. Ceiling Height, Water Heating System 1, and Water Heating System 2.

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Project Name: Nase Residence Calculation Date/Time: 08:44, Mon, Dec 19, 2016 Input File Name: 16-601 Nase Residence.ridx Page 4 of 7

DOORS table with columns 01-04 and rows for Name, Side of Building, Area, and U-factor.

OVERHANGS AND FINS table with columns 01-14 and rows for Window, Depth, Dist Up, Left Extent, Right Extent, Flap Ht., Depth, Top Up, Dist L., Bot Up, Depth, Top Up, Dist R., Bot Up.

OPAQUE SURFACE CONSTRUCTIONS table with columns 01-07 and rows for Construction Name, Surface Type, Construction Type, Framing, Total Cavity R-value, Winter Design U-value, and Assembly Layers.

SLAB FLOORS table with columns 01-07 and rows for Name, Zone, Area, Perimeter, Edge Insul. R-value & Depth, Carpeted Fraction, and Heated.

Registration Number: 216-N0467181A-00000000-0000 Registration Date/Time: 2016-12-19 08:47:58 HERS Provider: CaCERTS inc. CA Building Energy Efficiency Standards - 2013 Residential Compliance Report Version - CF1R-03112016-433 Report Generated at: 2016-12-19 08:44:49

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ENERGY COMPLIANCE

DATE: 12/19/16 SCALE: AS NOTED DRAWN: MEG CHECKED: FILE NAME:

SHEET: MO.3 SHEET OF SHEETS

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**CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD** CF1R-PRF-01  
Page 5 of 7

Project Name: Nase Residence Calculation Date/Time: 08:44, Mon, Dec 19, 2016  
 Calculation Description: Title 24 Analysis Input File Name: 16-601 Nase Residence.rbdx

BUILDING ENVELOPE - HERS VERIFICATION					
01	02	03	04	05	06
Quality Insulation Installation (QII)	Quality Installation of Spray Foam Insulation	Building Envelope Air Leakage	CFM50		
Not Required	Not Required	Not Required	---		

WATER HEATING SYSTEMS					
01	02	03	04	05	06
Name	System Type	Distribution Type	Water Heater	Number of Heaters	Solar Fraction (%)
DHW Sys 1 - 1/1	DHW	Recirculation, Demand Control Push Button	DHW Heater 1	1	0%

WATER HEATERS							
01	02	03	04	05	06	07	08
Name	Heater Element Type	Tank Type	Tank Volume (gall)	Energy Factor or Efficiency	Input Rating	Tank Exterior Insulation R-value	Standby Loss (Fraction)
DHW Heater 1	Natural Gas	Large Storage	80	0.95	130000-Btu/hr	0	0.01

WATER HEATING - HERS VERIFICATION						
01	02	03	04	05	06	07
Name	Pipe Insulation	Parallel Piping	Compact Distribution	Point-of Use	Recirculation Control	Central DHW Distribution
DHW Sys 1 - 1/1	---	---	---	---	---	---

SPACE CONDITIONING SYSTEMS					
01	02	03	04	05	06
SC Sys Name	System Type	Heating Unit Name	Cooling Unit Name	Fan Name	Distribution Name
Radiant Floor Heating1	Other Heating and Cooling System	Heating Component 1	---	None	None
Radiant Floor Heating 1	Other Heating and Cooling System	---	Cooling Component 1	None	None

Registration Number: 216-N0467181A-000000000-0000 Registration Date/Time: 2016-12-19 08:47:58 HERS Provider: CalCERTS inc.  
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**CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD** CF1R-PRF-01  
Page 7 of 7

Project Name: Nase Residence Calculation Date/Time: 08:44, Mon, Dec 19, 2016  
 Calculation Description: Title 24 Analysis Input File Name: 16-601 Nase Residence.rbdx

**DOCUMENTATION AUTHOR'S DECLARATION STATEMENT**

I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name: David Knight Documentation Author Signature: *David Knight*

Company: Monterey Energy Group Signature Date: 2016-12-19 08:47:11

Address: 26465 Carmel Rancho Blvd. #8 CEA/HERS Certification Identification (if applicable): R13-13-10018

City/State/Zip: Carmel, CA 93923 Phone: 831-250-0323

**RESPONSIBLE PERSON'S DECLARATION STATEMENT**

I certify the following under penalty of perjury, under the laws of the State of California:

- I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design identified on this Certificate of Compliance.
- I certify that the energy features and performance specifications identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.
- The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.

Responsible Designer Name: David Knight Responsible Designer Signature: *David Knight*

Company: Monterey Energy Group Date Signed: 2016-12-19 08:47:58

Address: 26465 Carmel Rancho Blvd. #8 License: R13-13-10018

City/State/Zip: Carmel, CA 93923 Phone: 831-250-0323

Registration Number: 216-N0467181A-000000000-0000 Registration Date/Time: 2016-12-19 08:47:58 HERS Provider: CalCERTS inc.  
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Page 6 of 7

Project Name: Nase Residence Calculation Date/Time: 08:44, Mon, Dec 19, 2016  
 Calculation Description: Title 24 Analysis Input File Name: 16-601 Nase Residence.rbdx

HVAC - HEATING UNIT TYPES		
01	02	03
Name	Type	Efficiency
Heating Component 1	CombHydro - Combined hydronic space and water heating	95 AFUE

HVAC - COOLING UNIT TYPES						
01	02	03	04	05	06	07
Name	System Type	EER	SEER	Zonally Controlled	Multi-speed Compressor	HERS Verification
Cooling Component 1	NoCooling	---	---	---	---	---

IAQ (Indoor Air Quality) FANS					
01	02	03	04	05	06
Dwelling Unit	IAQ CFM	IAQ Watts/CFM	IAQ Fan Type	IAQ Recovery Effectiveness(%)	HERS Verification
SFam IAQVentRpt	74.085	0.25	Default	0	Required

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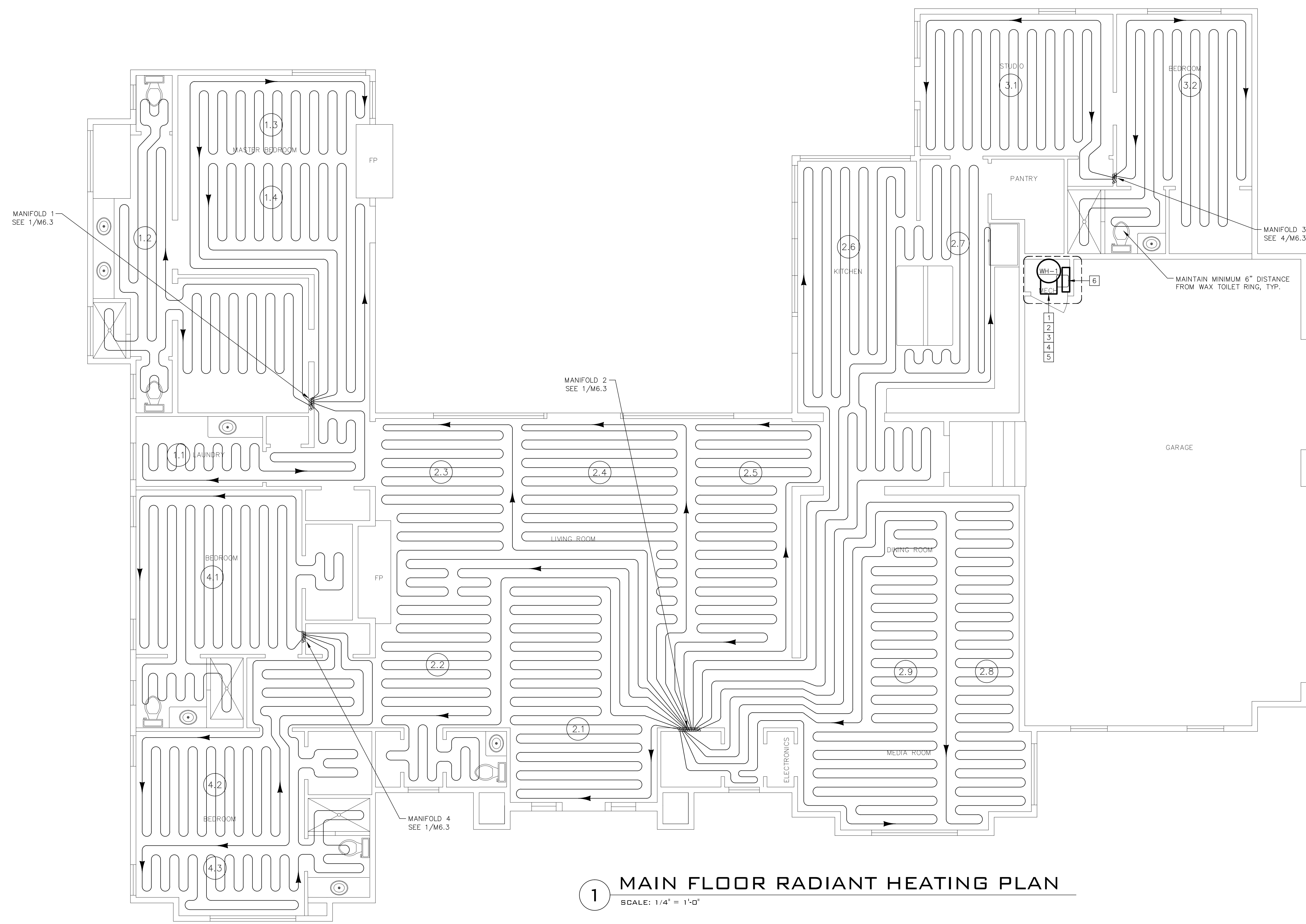
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### SHEET NOTES

- 1 HEAT SOURCE AND CONTROLS COORD EXACT LOCATION OF EQUIPMENT WITH ARCHITECT AND ALL TRADES BEFORE INSTALLATION OR ORDERING EQUIPMENT.
- 2 PROVIDE A MEANS OF DISCONNECT ADJACENT TO AND WITHIN SITE OF THE EQUIPMENT PER 2013 CMC 309.0 AND A 120V RECEPTACLE WITHIN 25' OF EQUIPMENT, NOT CONNECTED TO THE DISCONNECT.
- 3 NOTE: PROVIDE MANUFACTURER'S INSTALLATION SPECIFICATIONS AND REQUIREMENTS ON SITE FOR FIELD INSPECTION
- 4 PRESSURE RELIEF AND BACKFLOW PREVENTER FOR WATER HEATER PER 2013 CPC 608.5
- 5 HEAT SOURCE VENT PIPING AND TERMINATION TO BE DETERMINED PER OPTIONS ON HEAT SOURCE VENTING SHEET. COORD WITH GENERAL AND PROPOSE OPTIONS TO BE APPROVED BY OWNER AND ARCHITECT.
- 6 PROVIDE WALL OR FLOOR SINK (INDIRECT WASTE) FOR WATER HEATER CONDENSATE REMOVAL AND PRESSURE RELIEF



**1 MAIN FLOOR RADIANT HEATING PLAN**  
SCALE: 1/4" = 1'-0"

REVISIONS:	BY:

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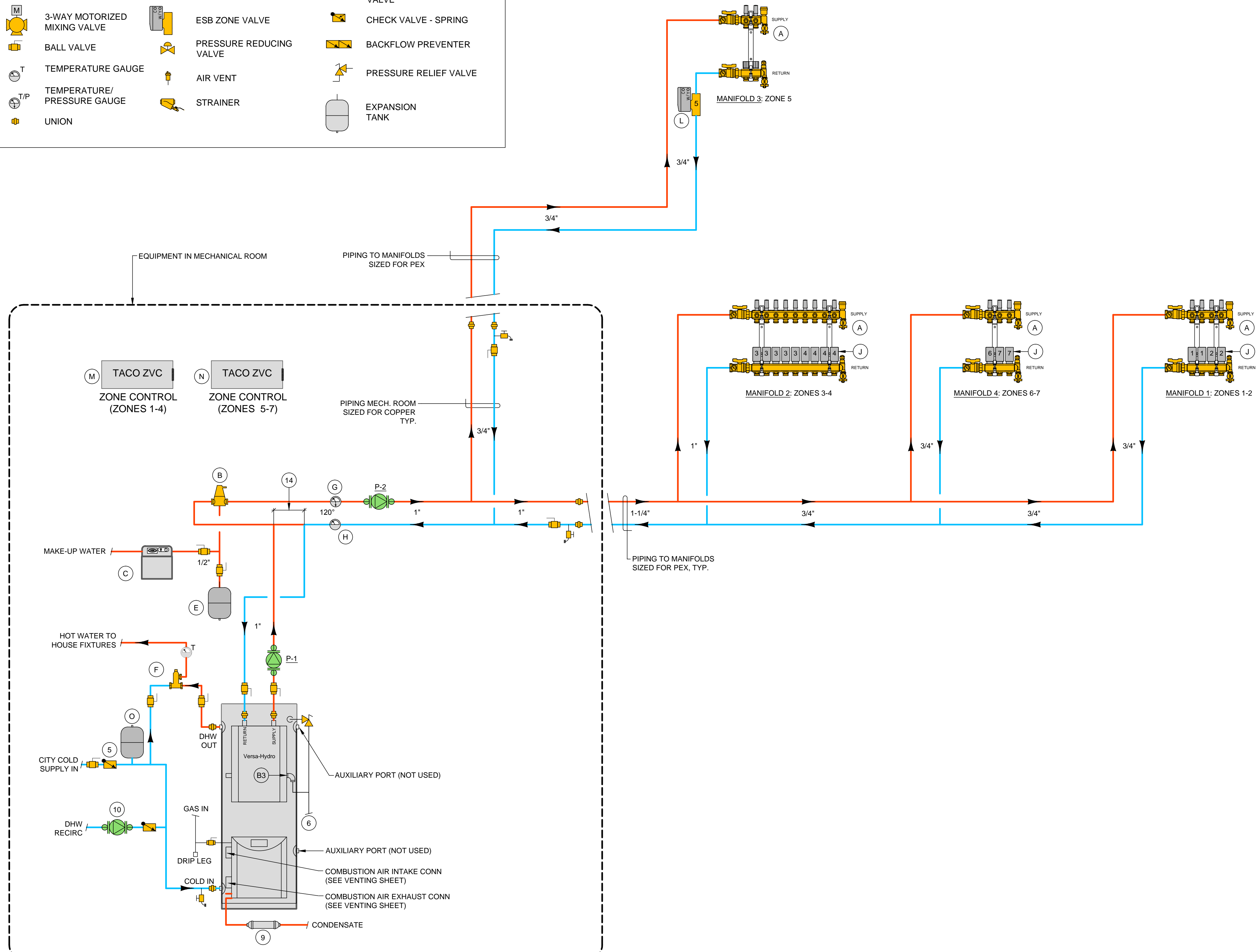
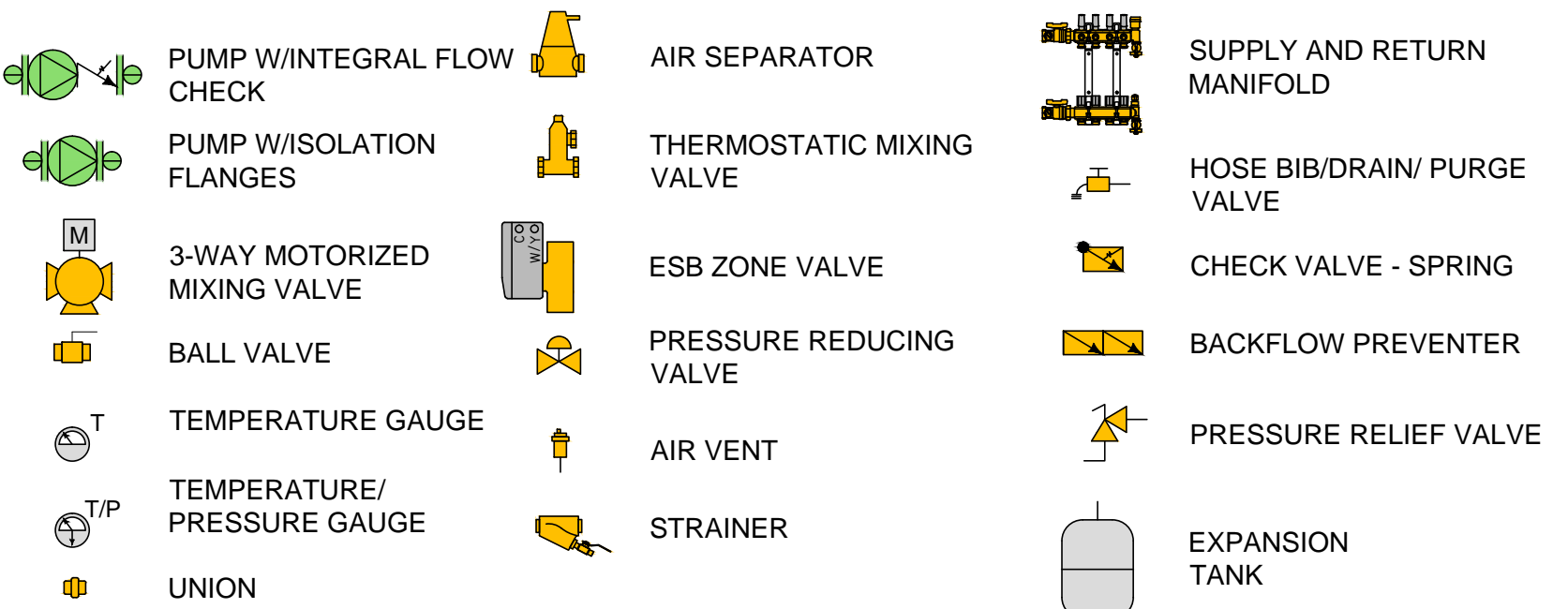
**MAIN FLOOR RADIANT HEATING PLAN**

DATE:	12/19/16
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DRAWN:	MEG
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**LEGEND**



**WATER HEATING DEVICES**

MARK	KBTUH		FAN		GAS CON.	HW/CW CON.	WT LBS	AFUE	MANUFACTURER AND MODEL	NOTES
	IN	OUT	V/PH	AMPS						
WH-1	130.0	120.0	120/1	6.3	3/4"	1"	933.0	95.0	HEAT TRANSFER PHE 130-80	B1-B4

**HEAT SOURCE NOTES**  
 B1. Versa-Hydro Combined Hydronic unit is a sealed combustion direct vent unit. See venting sheet for venting options.  
 B2. Attached space heating module includes a flat plate heat exchanger to separate the heating fluid from the domestic source.  
 B3. An internal pressure relief valve within the heating module is provided for the closed loop hydronic side pressure relief.  
 B4. Versa-Hydro shall be mounted min. 18" above finished floor in a garage. Provide protective damage barriers from Autos.

**PUMPS**

MARK	GPM	FT HD	MANUF.	MODEL	MOTOR				NOTES
					HP	V/PH	AMPS	EFF. (%)	
P-1	10	7	TACO	008-F6	1/25	115/1	0.79	NA	P1-P2
P-2	18	22	TACO	VT2218F	NA	110/1	0.67	NA	P1-P2

**PUMP NOTES**  
 P1. Provide minimum 12 pipe diameters upstream of pump inlet. Provide full port isolation shutoff ball valves or iso-flanges at all pumps.  
 P2. A spring or flow check valve shall be installed in place of a pump integral check valve.

**SYSTEM COMPONENTS**

MARK	COMPONENT	MANUF.	MODEL	NOTES
(A)	SUPPLY & RETURN MANIFOLD	WATTS	STAINLESS STEEL	
(B)	AIR ELIMINATOR	TACO	4900 SERIES 49-100	
(C)	MINI SYSTEM FEEDER	AXIOM	MF200	
(E)	EXPANSION TANK	ELBI	XT-30	
(F)	MIXING VALVE	WATTS	N170	(12)
(G)	TEMP/PRESSURE GAUGE	MILJOCO	PB300804	
(H)	TEMPERATURE GAUGE	MILJOCO	B259951-2W	
(J)	TELESTAT	WATTS	-	
(L)	ZONE VALVE	TACO	ZONE SENTRY 2075T2	
(M)	ZONE VALVE CONTROLLER	TACO	ZVC-404-EXP (MASTER)	
(N)	ZONE VALVE CONTROLLER	TACO	ZVC-404-EXP (SLAVE)	
(O)	DHW EXPANSION TANK	ELBI	DXT-18	(11)

**NOTES**

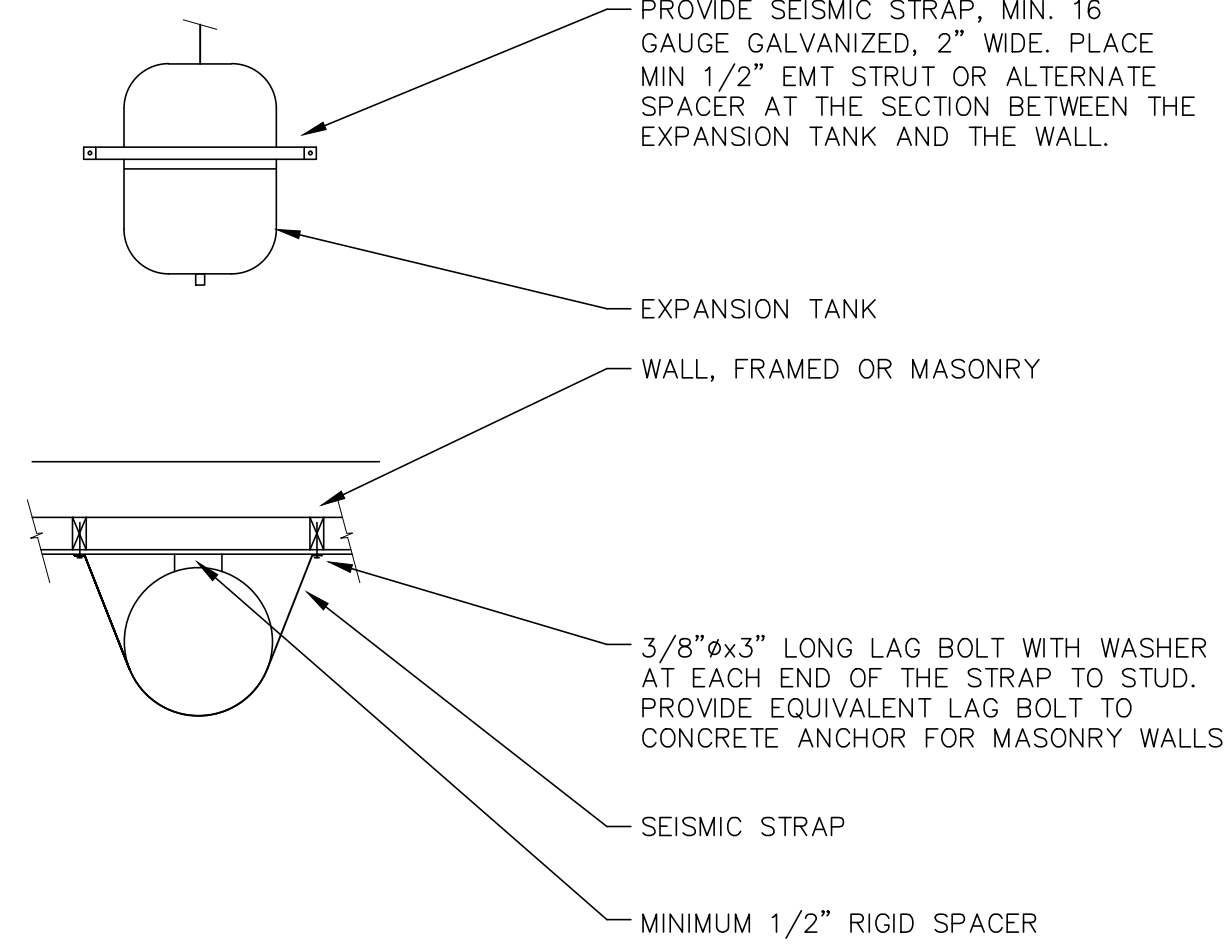
- GENERAL**
- This drawing is conceptual and diagrammatic and does not constitute a complete plan. Installer to supply and install all materials shown on this plan and all others needed to complete this hydronic system. Also, provide any incidental work not shown or specified, which can be reasonable inferred as belonging to the work necessary to provide the complete system.
  - Only qualified Plumbing or Heating technician shall install the heating system.
  - Refer to all manufacturers guidelines pertaining to the installation, protection and maintenance of the hot water source.
- COMPONENTS**
- System shall be tested for 30 min. At 100 psi
  - Verify with local authority having jurisdiction for backflow prevention requirements.
  - Provide pressure relief with direct piping to approved location.
  - Where applicable, swing check valves shall be mounted in an upright position.
  - Where applicable, provide a minimum of 8 pipe diameters of straight pipe upstream of all spring check valves.
  - Condensate removal per UIC and local codes. Optional pH neutralizer or if required by local authorities can be made up of lime crystals, marble or phosphate chips that will neutralize the condensate. Never drain condensate that has not been neutralized to cast iron waste piping. Florida condensate pump kit PIN 554200 available from Heat Transfer Products where condensate cannot be drained by gravity with proper slope.
  - Recommend optional TACO On Command System circulation pump with remote sensor capability. Coordinate with plumbing contractor and size based on plumbing design.
  - Verify tank size per plumbing design. WH-18 sized for 8.5 acceptance gallons at 140 gallons of system volume (including tank), 150F max temperature and max 20ft system piping above inlet to tank. See flexcon.com for sizing different than these parameters.
  - Anti-scaid thermostatic mixing valve set to 115F shall be used. Mount mixing valve no higher than 8" above hot water outlet.
- PRIMARY/SECONDARY PIPING**
- See tubing layout for manifold locations. Unless noted, all branches to manifolds shall be 3/4".
  - Secondary piping in a primary/secondary system shall have been plumbed 4 pipe diameters center to center, and shall have a minimum of 8 pipe diameters of straight pipe upstream of first tee.
  - Where not shown, provide ball valves and hose bibs for isolation and purging of primary and/or secondary piping. A purging valve may be used as a substitute for a ball valve/hose bib combination.
  - Unless practicality does not permit, all secondary piping shall be plumbed such that the risers go down from an overhead primary circuit.
- SUBSTITUTIONS**
- Installer shall obtain authorization from the owner and design team for "Or Equal" substitutions on heating system components "Or equal" substitutions constitute components that are of equal quality and workmanship to those specified. Where possible components shall be of a single manufacturer and shall have approved ratings of all applicable agencies (UL, IAPMO, ASME, etc.). Boiler substitutions shall be of the modulating condensing type with direct vent combustion and minimum efficiencies and outputs of that specified.
- Approved Manufacturer Substitutions:  
 Manifolds - Shall be compatible with approved PEX and/or PEX-AL-PEX Systems.  
 Pumps - Grundfos, B&G, Laing, Wilo  
 Expansion Tanks - Amtrol, Ebi, Flexcon  
 Components (Valves, etc.) - Watts, Niloco, Caleffi
- AIR FOR COMBUSTION AND GAS LINES**
- See venting sheet for venting requirements.
  - All routing of gas line piping shall be based on the Chapter 7 of the 2013 California Plumbing Code and Chapter 13 of the 2013 California Mechanical Code. Piping shall be new, standard weight wrought iron or steel (exterior only galvanized or black), with malleable iron fittings. Approved PE (Polyethylene) pipe may be used in exterior buried piping systems.

**1 HEATING SYSTEM PIPING SCHEMATIC-VERSA-HYDRO COMBINATION HEATING AND DHW**  
 NOT TO SCALE

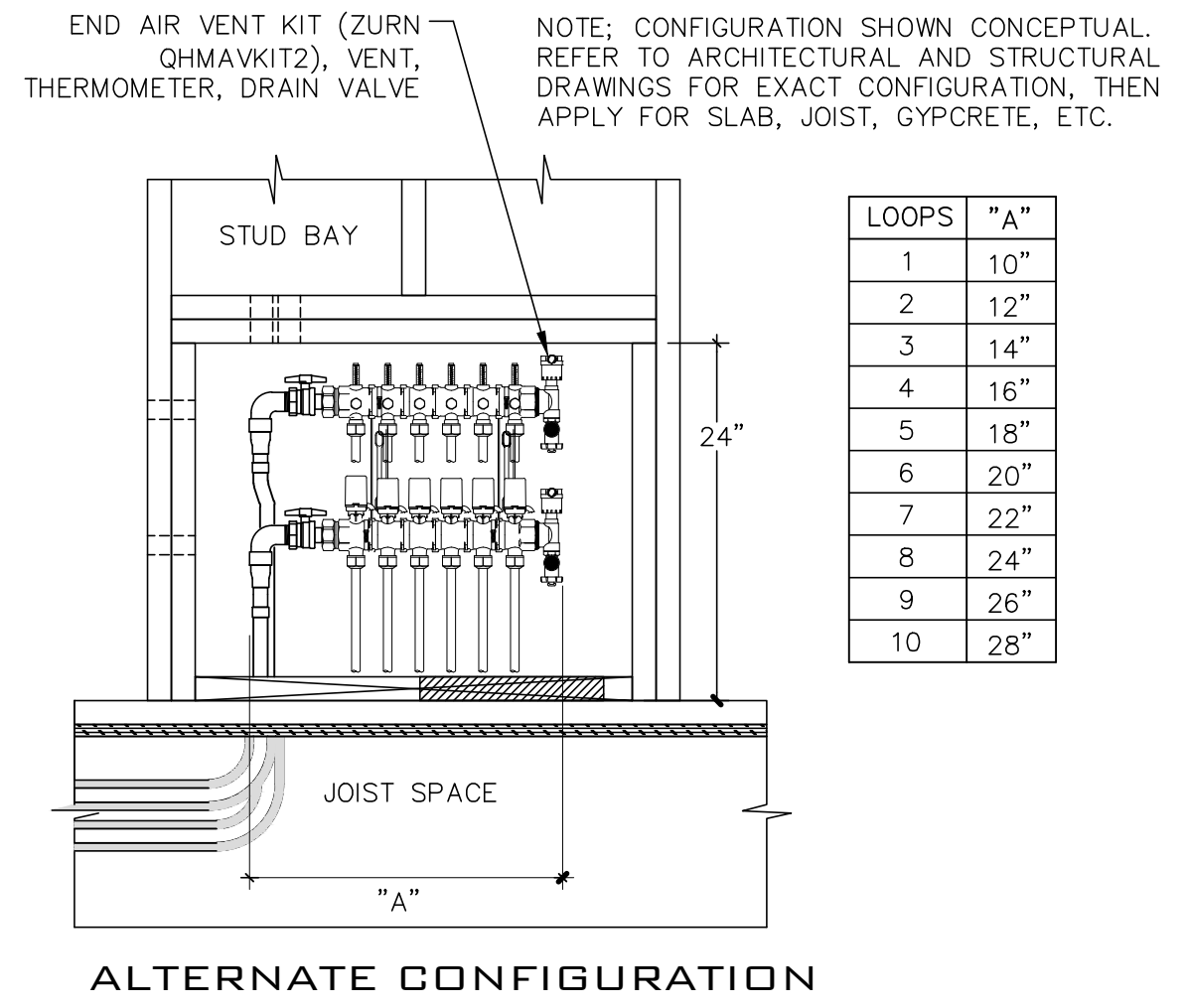
REVISIONS:	BY:
<b>MONTEREY ENERGY GROUP</b> Consulting Mechanical Engineering 26465 Carmel Rancho Blvd, Suite 8, Carmel, CA 93923 www.montereyenergygroup.com 831-372-8328 VOICE 831-359-4173 FAX	
<b>NASE RESIDENCE</b> 1412 LISBON LANE PEBBLE BEACH, CA. 93953	
PIPING SCHEMATIC	
DATE:	12/19/16
SCALE:	AS NOTED
DRAWN:	MEG
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FILE NAME:	
SHEET:	M6.1
SHEET OF SHEETS	



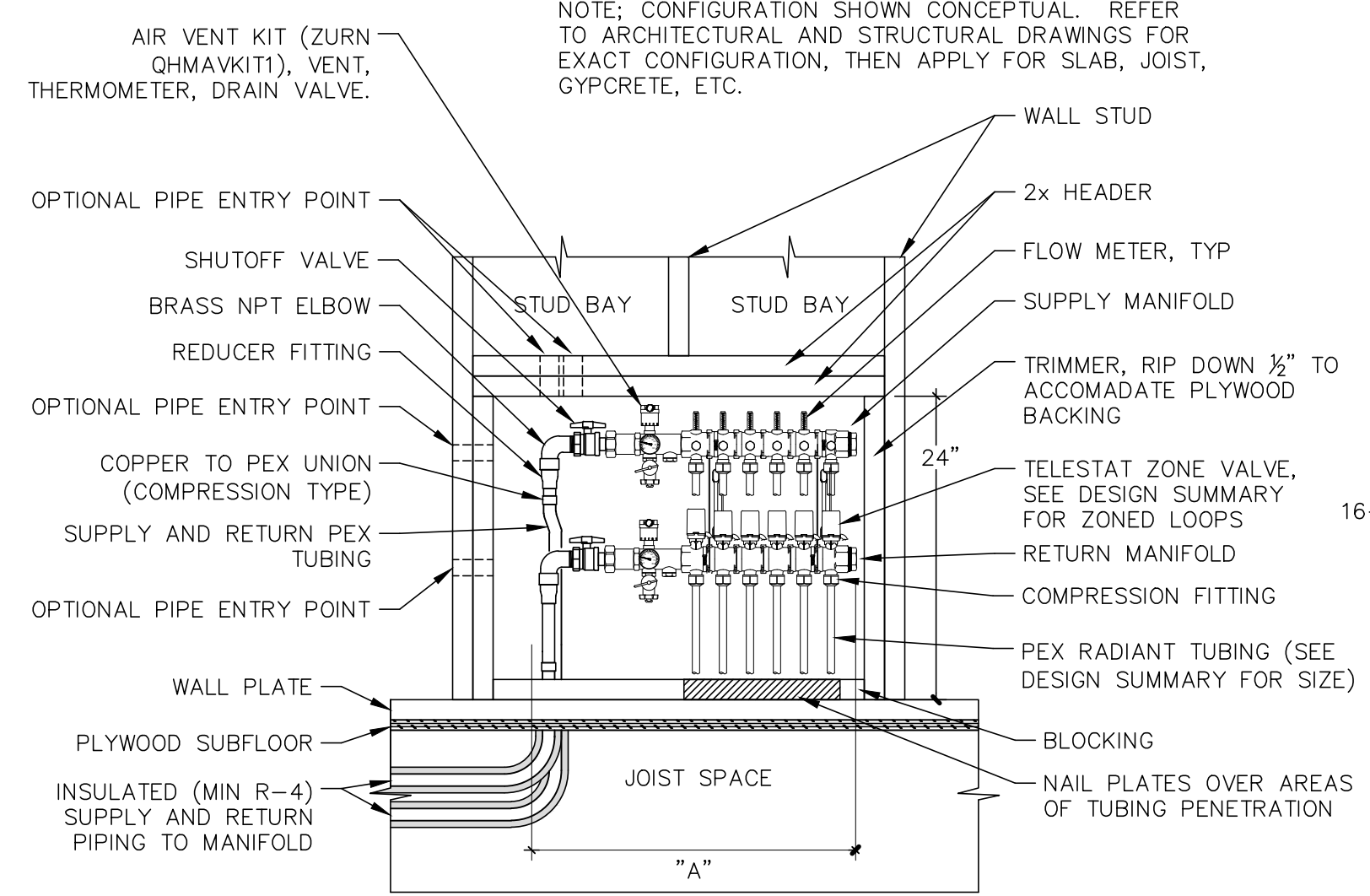
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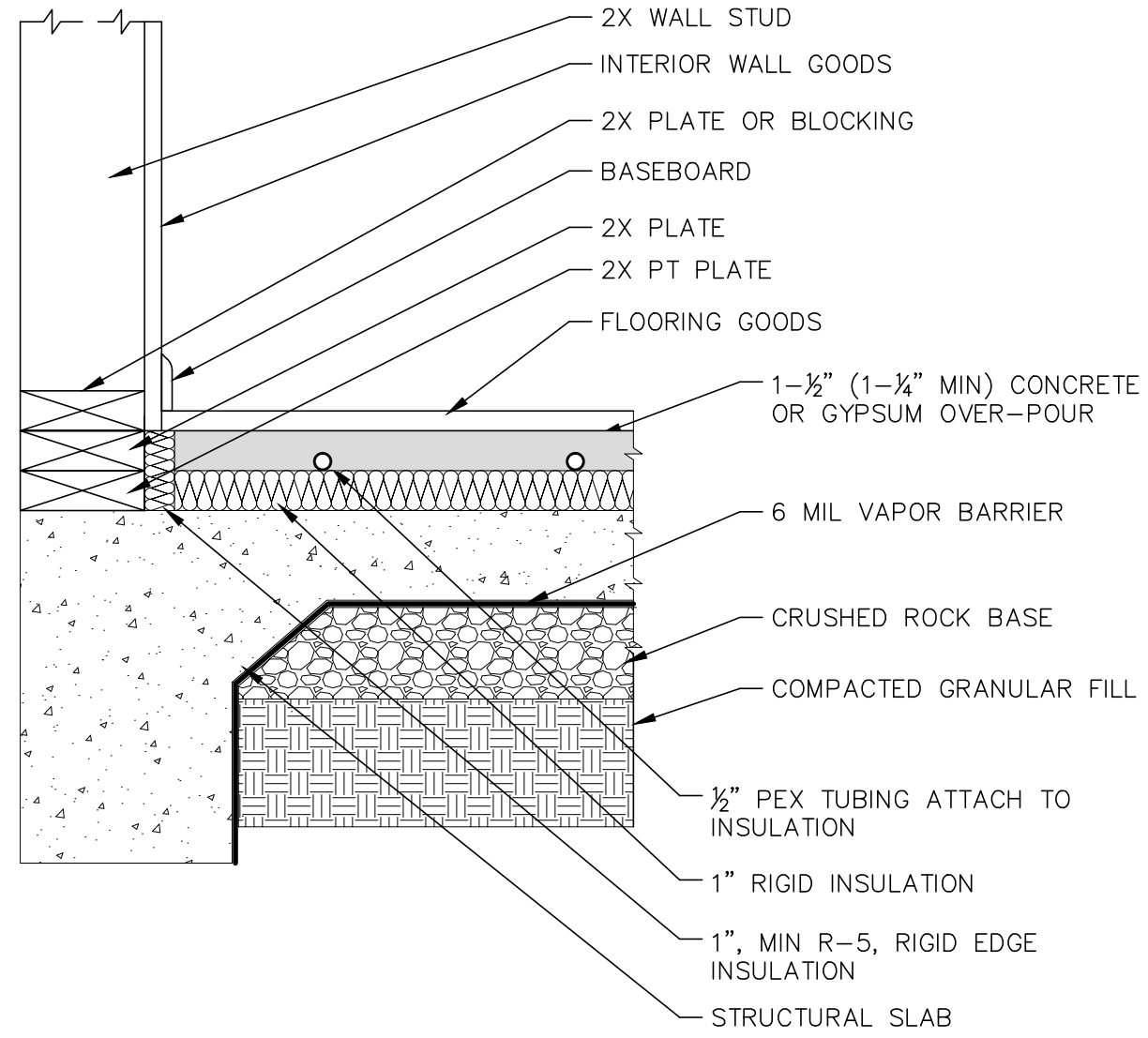
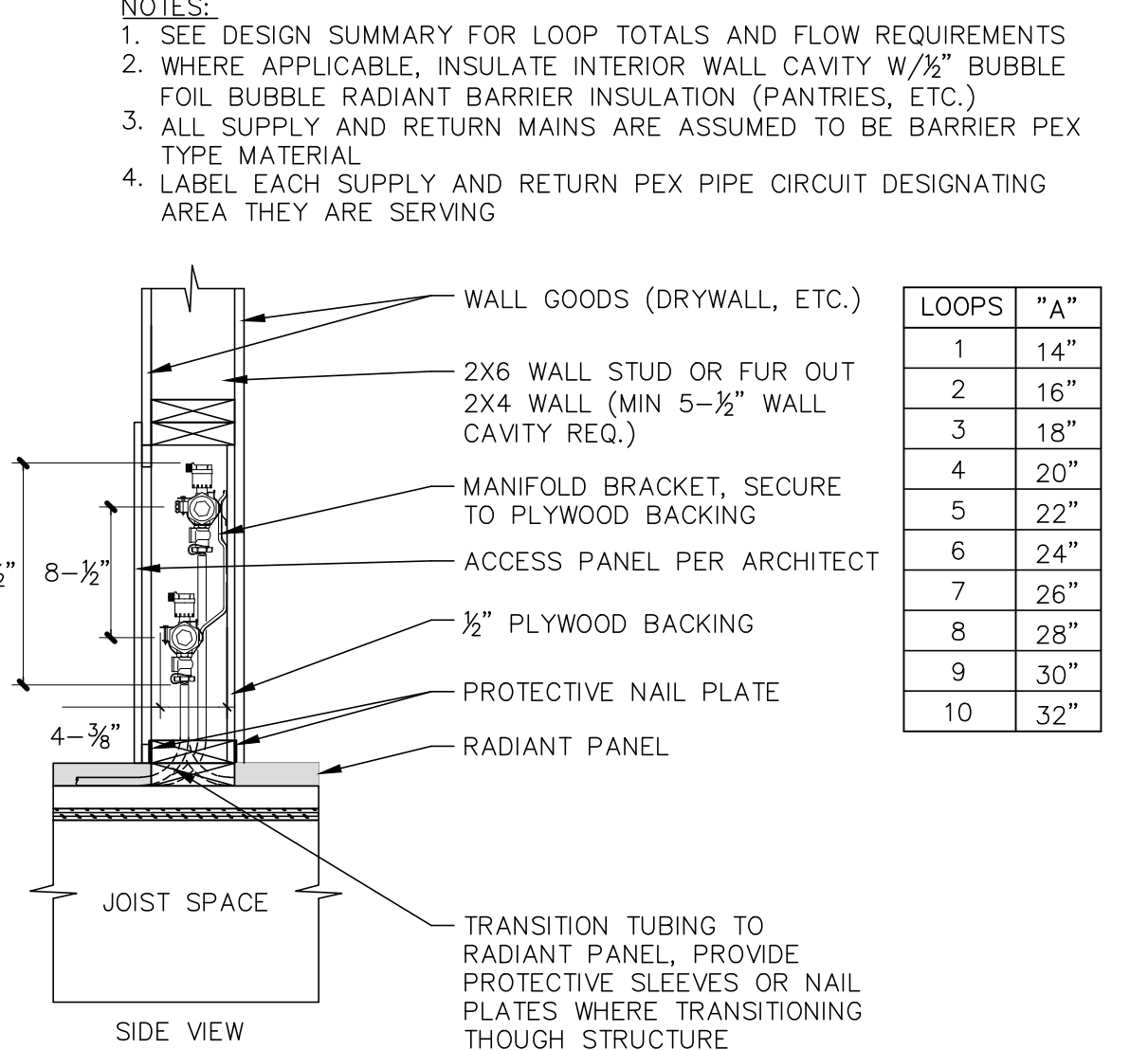
**3 EXPANSION TANK BRACING**  
SCALE: NONE



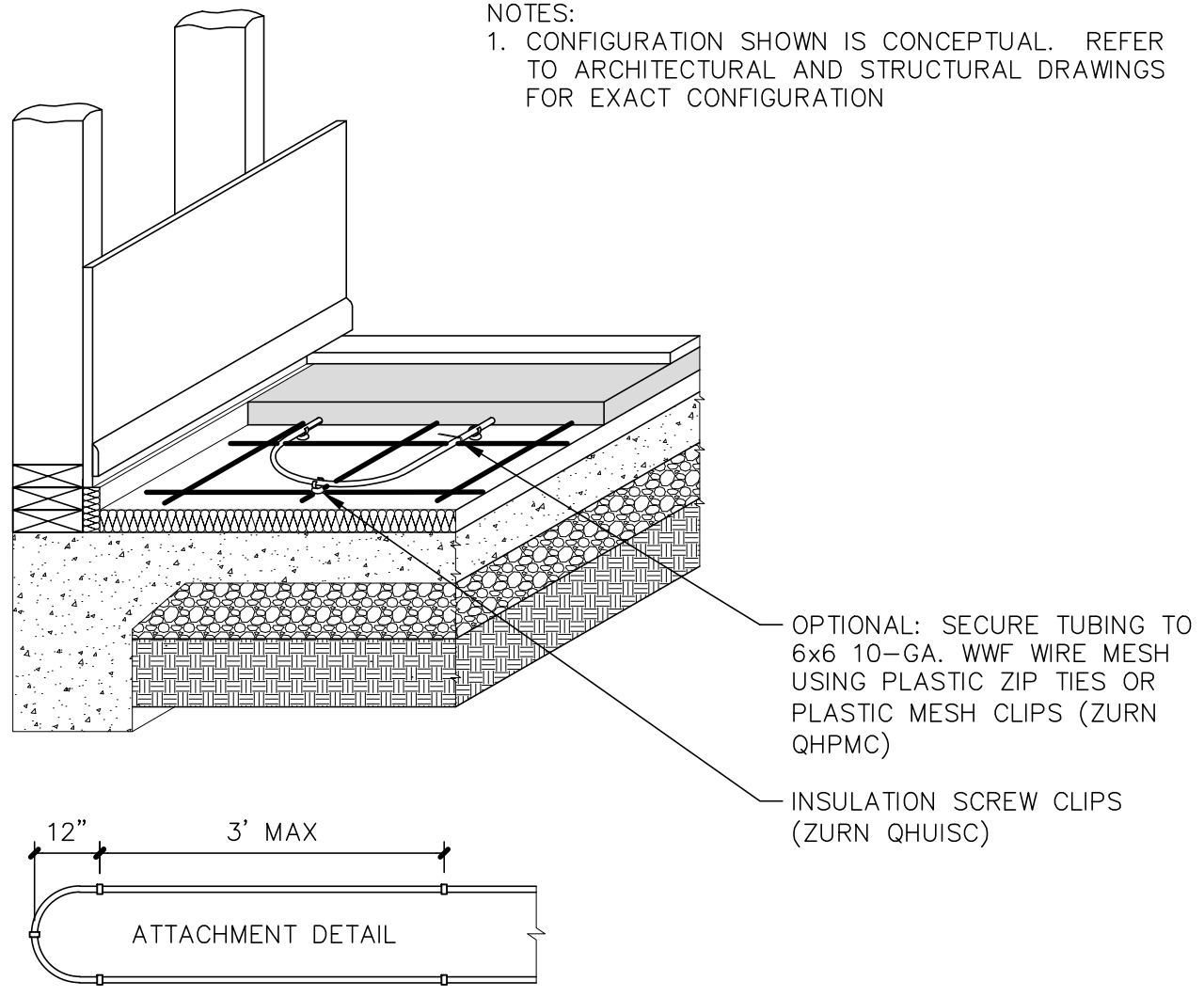
**2 ALTERNATE CONFIGURATION MANIFOLD INSTALLATION**  
SCALE: NONE



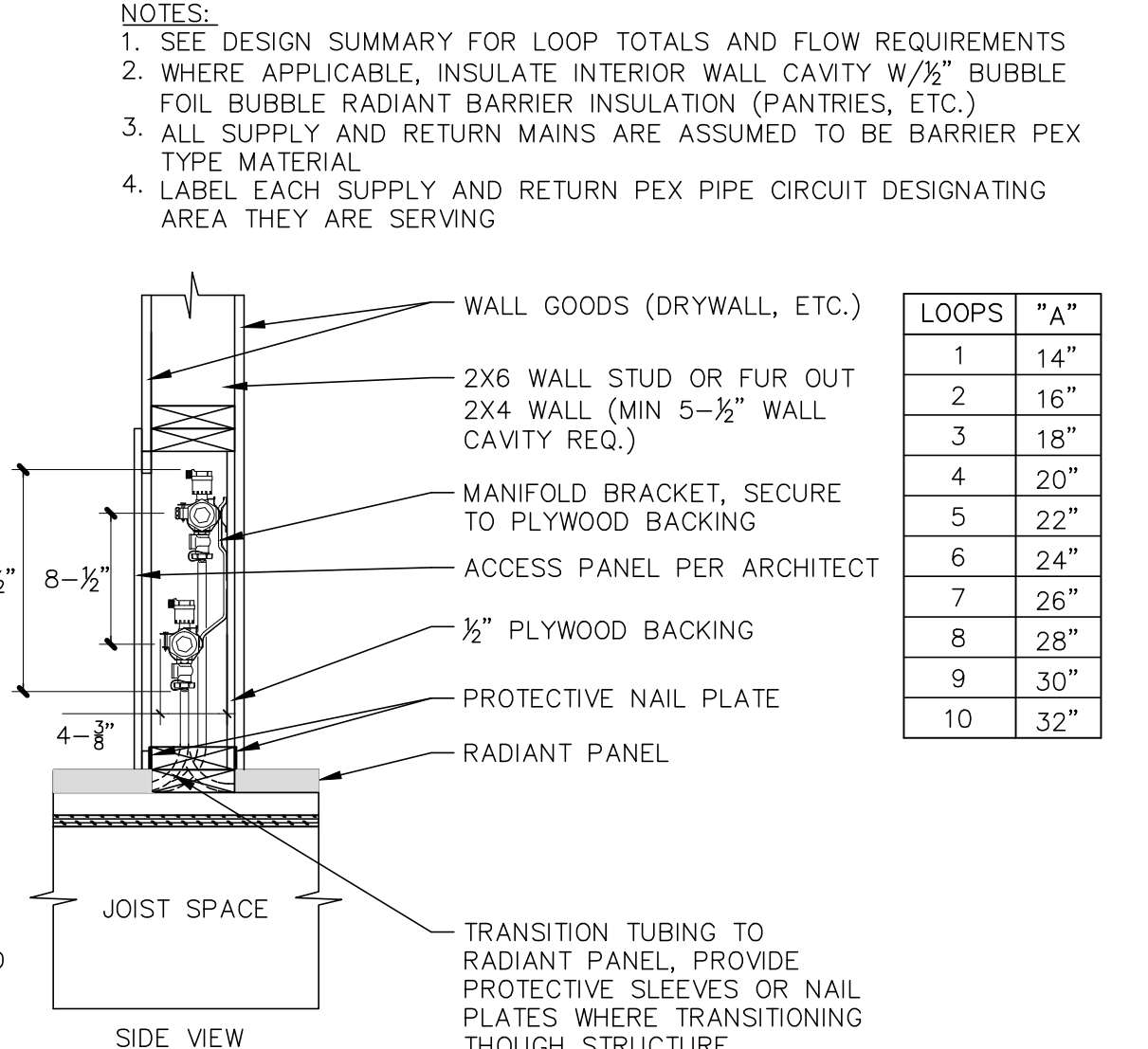
**1 MANIFOLD INSTALLATION - MULTI ZONE MANIFOLD**  
SCALE: NONE



**5 RADIANT APPLICATION - GYPSUM/THIN SLAB OVER STRUCTURAL SLAB**  
SCALE: NONE



**4 MANIFOLD INSTALLATION - SINGLE ZONE MANIFOLD**  
SCALE: NONE



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DETAILS

DATE:	12/19/16
SCALE:	AS NOTED
DRAWN:	MEG
CHECKED:	
FILE NAME:	
SHEET:	M6.3
SHEET OF SHEETS	

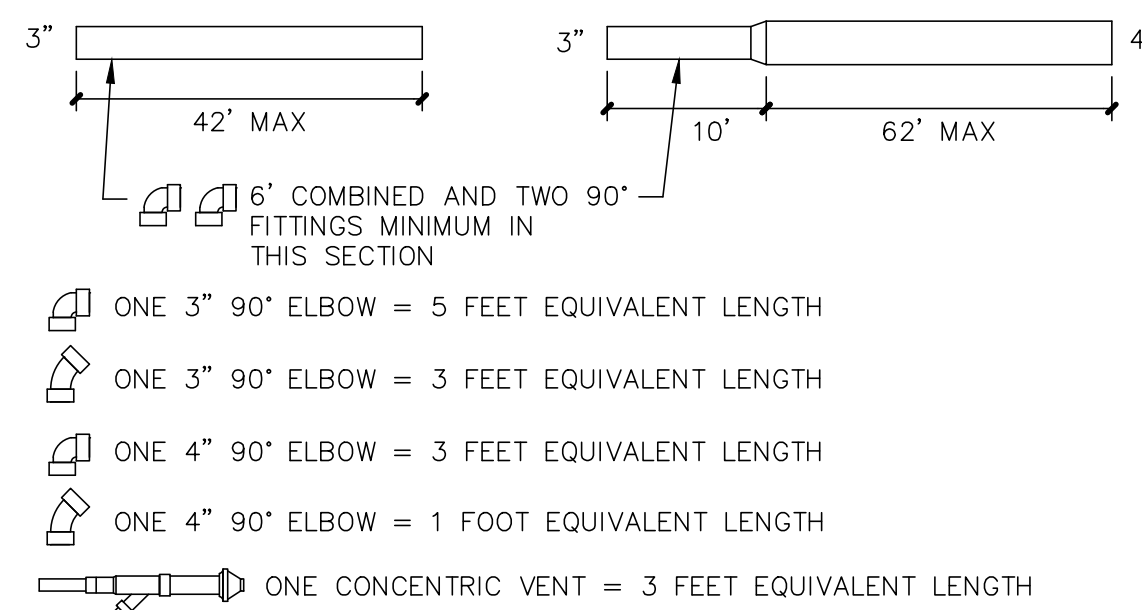
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## COMPUTING TOTAL COMBINED VENT LENGTH

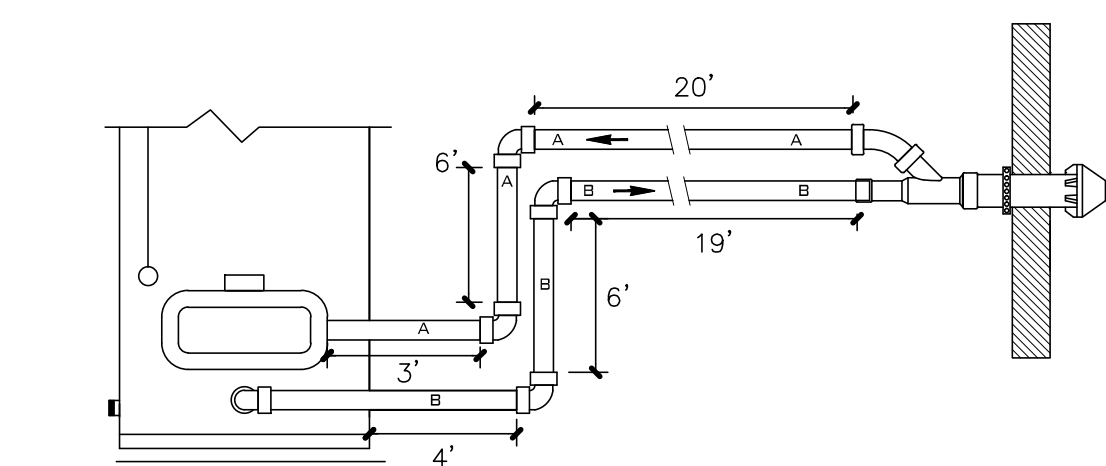
### NOTES:

- ALL MAXIMUM VENTING LENGTHS INCLUDE INTAKE PIPE, EXHAUST PIPE, AND FITTINGS ADDED TOGETHER. MINIMUM COMBINED OPERATION VENT LENGTH REQUIREMENT FOR ANY VERSA-HYDRO IS THE EQUIVALENT OF 6' OF PIPING AND TWO 90° ELBOWS ON INLET AND EXHAUST EACH WAY.
- WHEN INCREASING VENT RUN FROM 3" TO 4", AVOID THE TRANSITION ON A HORIZONTAL RUN TO AVOID CONDENSATE BUILD UP. MAXIMUM ALLOWABLE FITTINGS IN FIRST 10 FEET OF PIPE RUN ON BOTH INTAKE AND EXHAUST FOR 3" SECTIONS IS ONE 90° OR TWO 45° FITTINGS BEFORE ANY INCREASE IN PIPE SIZE. NEVER USE DIFFERENT SIZES FOR INTAKE AND EXHAUST. THE VENT SYSTEM MUST BE BALANCED TO OPERATE PROPERLY.

MAXIMUM VENTING LENGTHS ONE WAY, ON EITHER INTAKE OR EXHAUST



EXAMPLE: COMPUTING TOTAL COMBINED VENT LENGTH - 3"



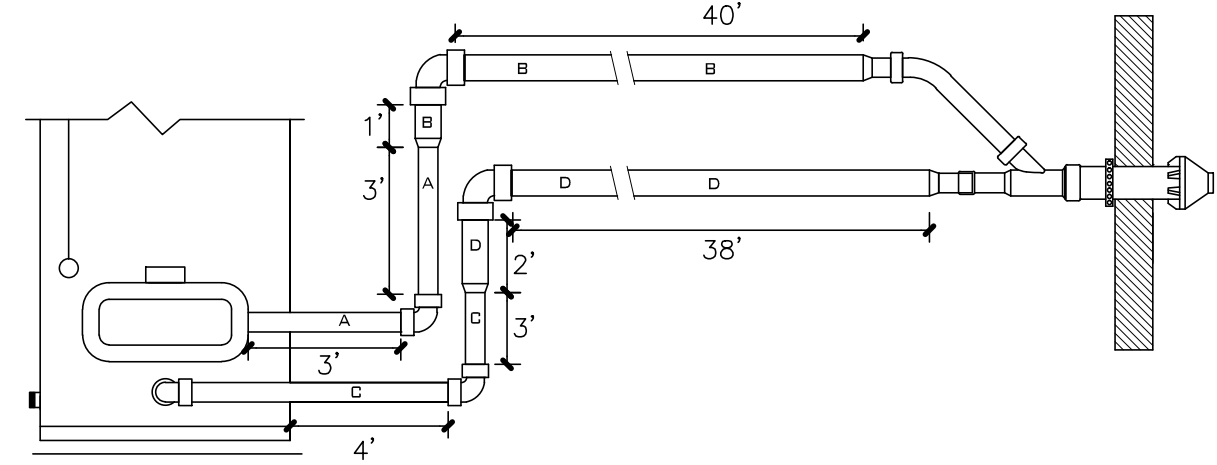
SECTION A  
3'+6'+20'(3" PIPE) + 2X5'(TWO 90°ELBOWS) = 39 EQUIVALENT FEET TOTAL

SECTION B  
4'+6'+19'(3" PIPE) + 2X5'(TWO 90°ELBOWS) = 39 EQUIVALENT FEET TOTAL

ONE 3" V1000 VENT KIT = 3 EQUIVALENT FEET TOTAL

TOTAL EQUIVALENT LENGTH = 81 EQUIVALENT FEET TOTAL

EXAMPLE: COMPUTING TOTAL COMBINED VENT LENGTH - 4"



SECTION A - 3" PIPE  
3'+3' + 1X5'(90°ELBOW) = 11 EQUIVALENT FEET TOTAL

SECTION B - 4" PIPE  
1'+40' + 1X3'(90°ELBOW) = 44 EQUIVALENT FEET TOTAL

SECTION C - 3" PIPE  
4'+3' + 1X5'(90°ELBOW) = 12 EQUIVALENT FEET TOTAL

SECTION D - 4" PIPE  
2'+38' + 1X3'(90°ELBOW) = 43 EQUIVALENT FEET TOTAL

ONE 3" V1000 VENT KIT = 3 EQUIVALENT FEET TOTAL

TOTAL EQUIVALENT LENGTH = 93 EQUIVALENT FEET TOTAL

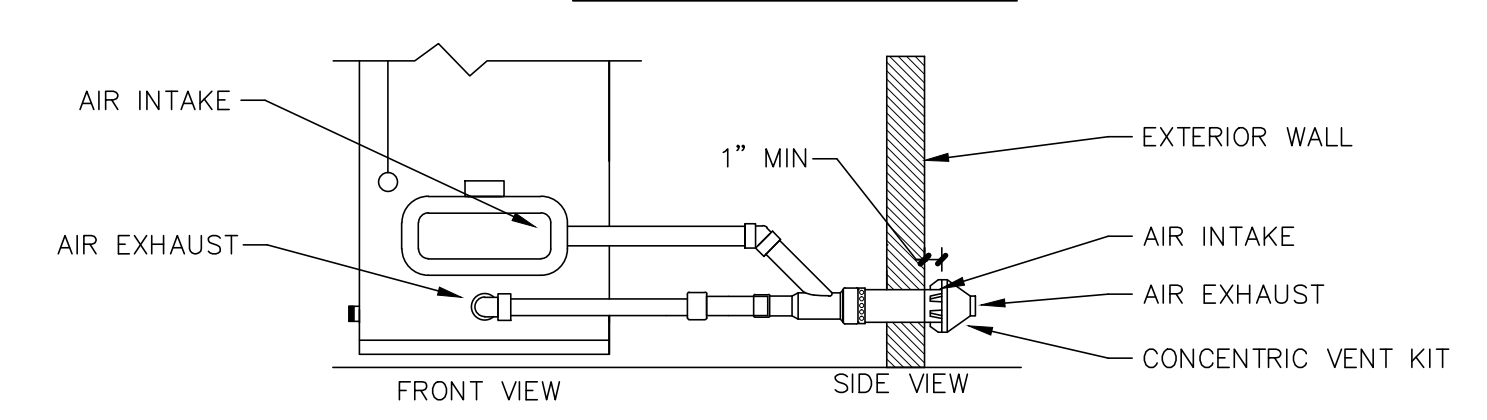
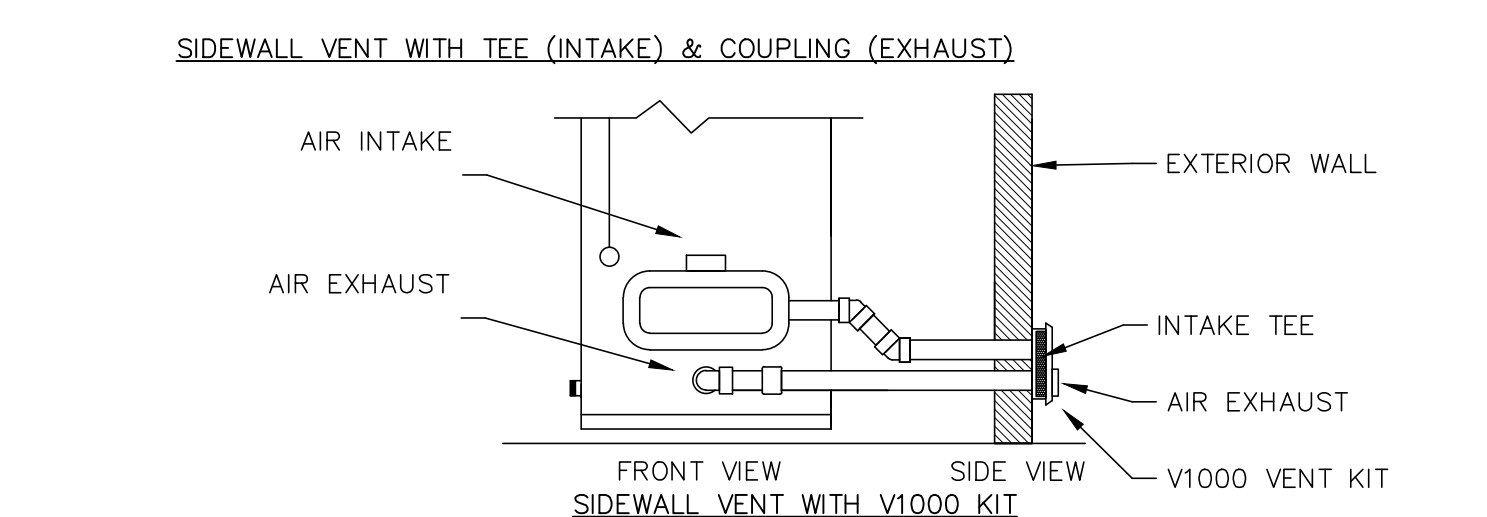
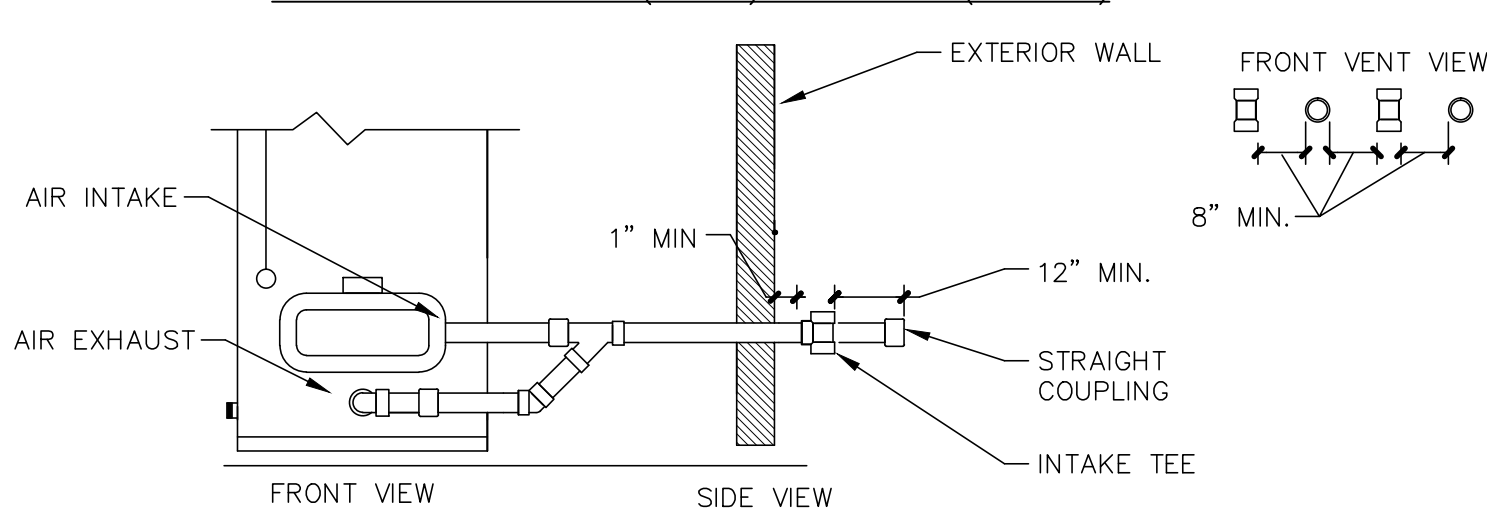
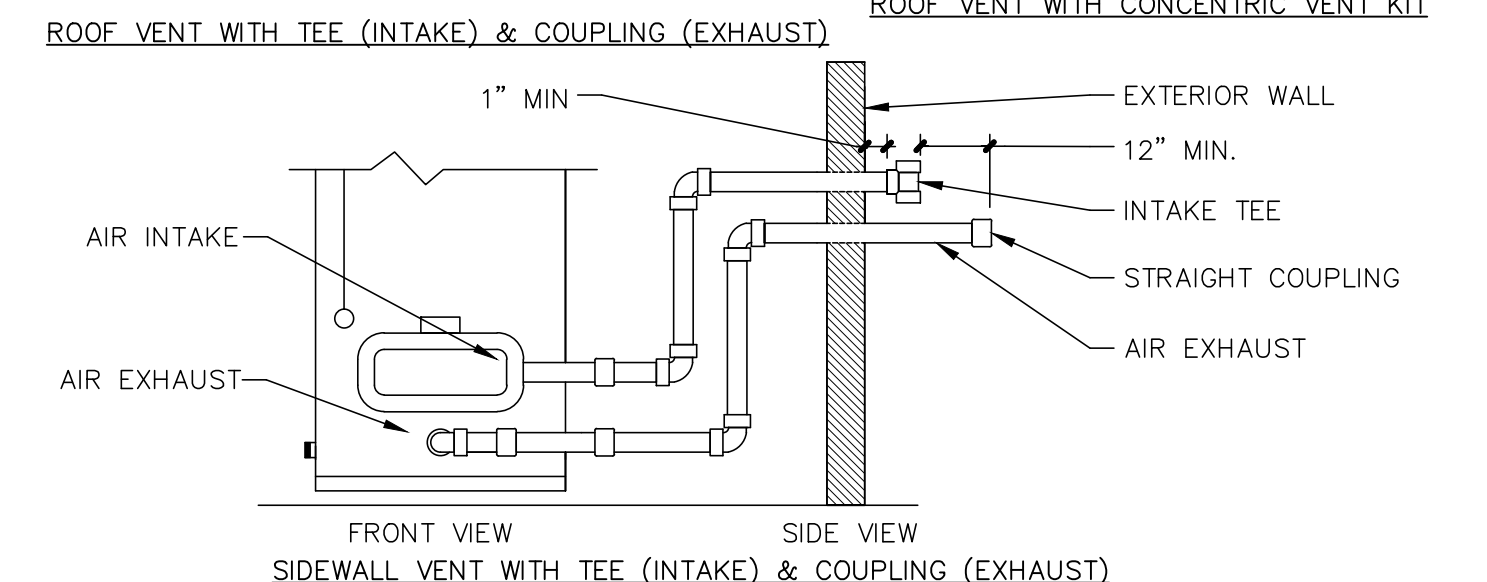
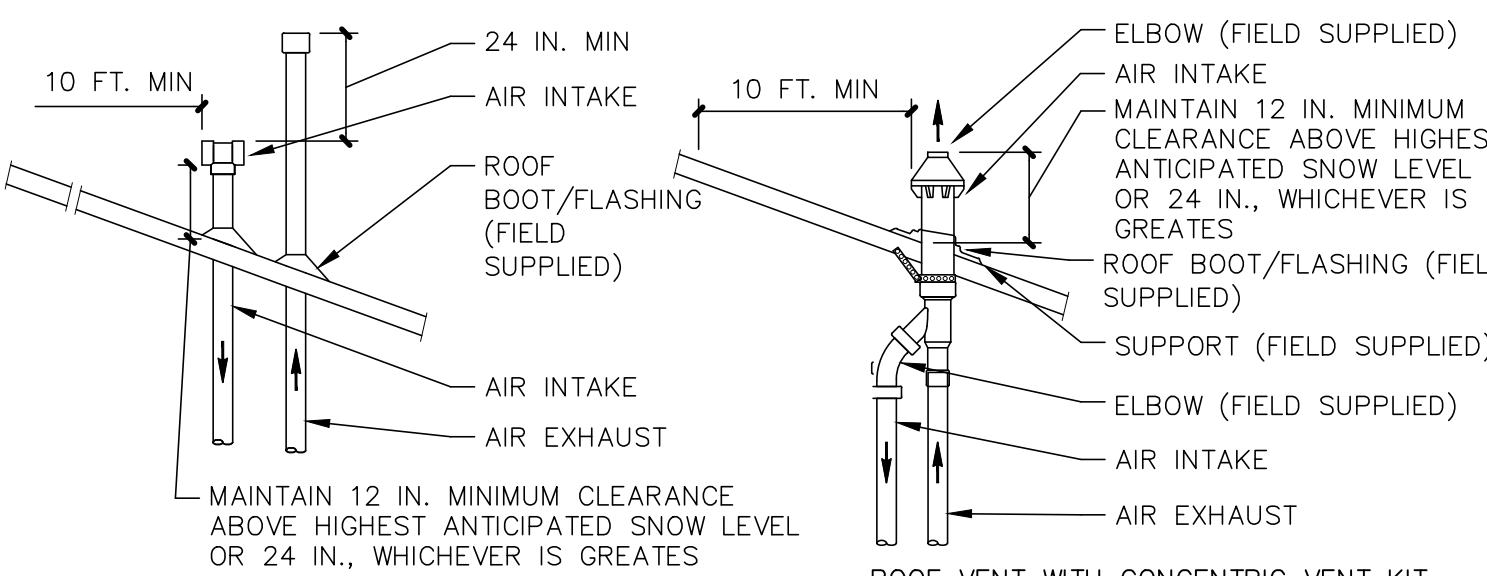
## VENT TERMINATION

### 802.8 Through-the-Wall Vent Termination.

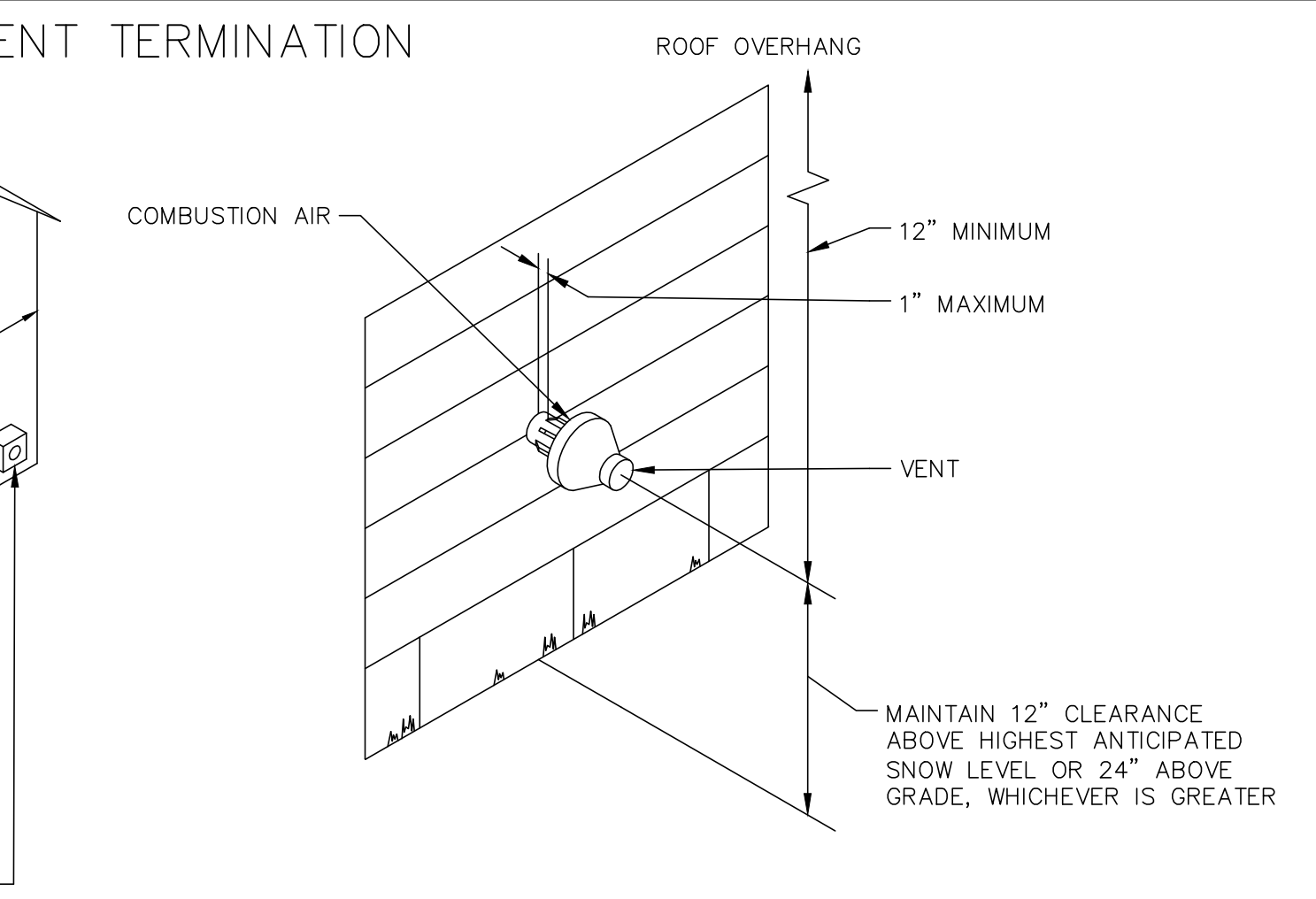
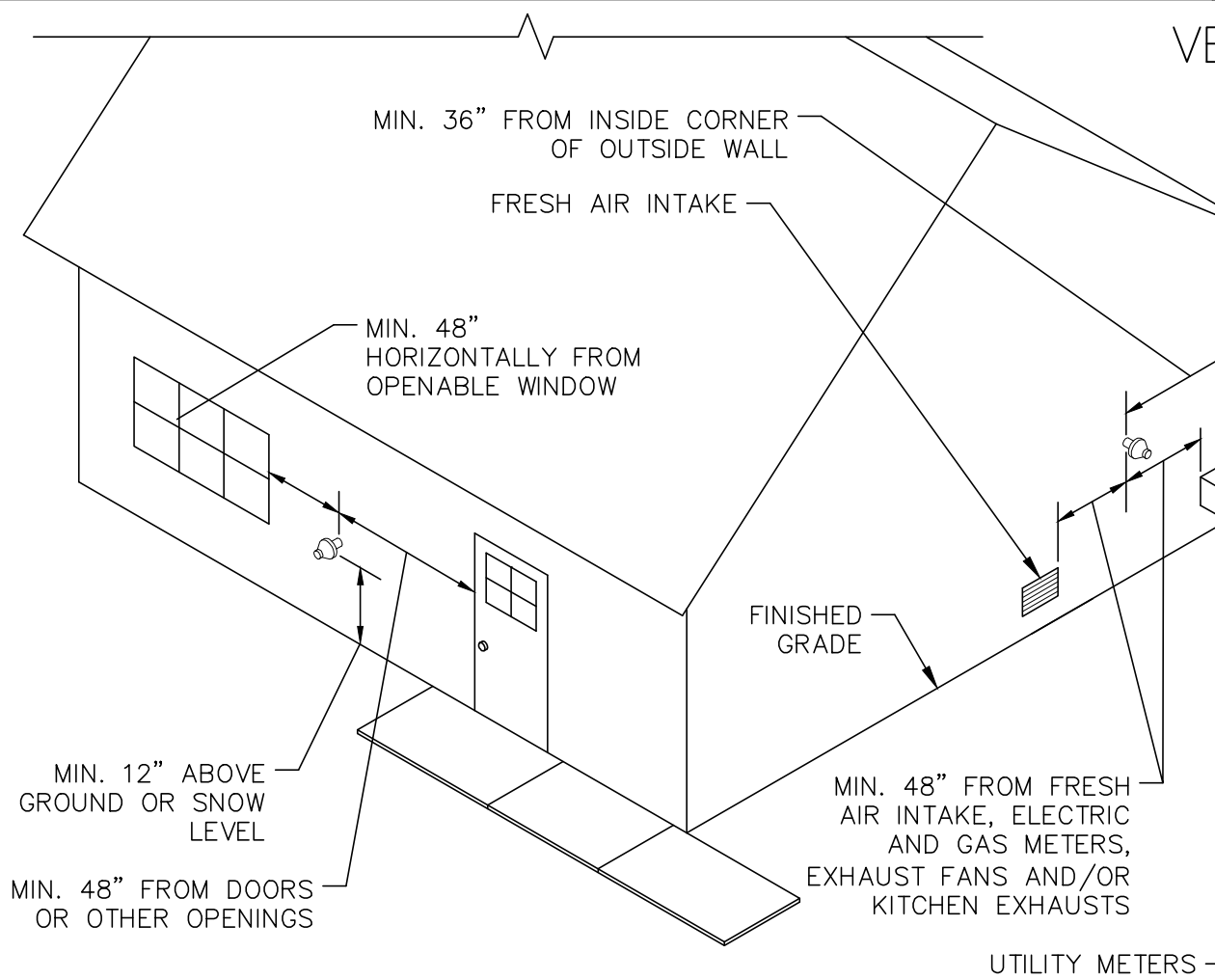
802.8.1 A mechanical draft venting system shall terminate at least three (3) feet (.9 m) above any forced air inlet located within ten (10) feet (3.1 m).

Exception: This provision shall not apply to the combustion-air intake of a direct-vent appliance.

802.8.3 The vent terminal of a direct-vent appliance with an input of 10,000 Btu/h (3 kw) or less shall be located at least six (6) inches (150 mm) from any air opening into a building, and such an appliance with an input over 10,000 Btu/hr (3kw) but not over 50,000 Btu/h (14.7 kw) shall be installed with nine (9) inches (230 mm) vent termination clearance, and an appliance with an input over 50,000 Btu/hr (14.7 kw) shall have at least twelve (12) inches (300 mm) vent termination clearance. The bottom of the vent terminal and the air intake shall be located at least twelve (12) inches (300 mm) above grade.



## VENT TERMINATION



## VERSA-HYDRO NOTES

### GENERAL NOTE

This sheet is provided as a venting guideline supplement only, to the installation methods of the VERSA-HYDRO product and does not constitute a complete installation guide. Please refer to the "installing, operating and maintaining VERSA-HYDRO high efficiency heater" manual for complete installation guidelines.

### LOCATION

Choose a location for your water heater centralized to the piping system, along with consideration to vent pipe length. As the length of vent pipe increases the firing rate of the appliance decreases. You must also locate the VERSA-HYDRO. Additionally, you will need to place the water heater so that the controls, inlet/outlet, and gas valves are easily accessed. This appliance must not be installed outdoors, as it is certified as an indoor appliance, and must be kept vertical and on a level surface. Also care must be exercised when choosing the location of this appliance, where leakage from the relief valve, leakage from related piping, or leakage from the tank or connections, will not result in damage to the surrounding areas, or to the lower floors to the building. A water heater should always be located in an area with a floor drain or installed in a drain pan suitable for water heaters. Under no circumstances, shall Monterey Energy Group, Inc. be held liable for any such water damage whatsoever.

### INSTALLATION REQUIREMENTS

- Unit must be installed indoors where it will not be exposed to freezing temperatures, along with consideration for electrical, gas connection and venting.
- Support pipe runs per local codes.
- Provide pressure relief valve and condensate removal.
- 120 VAC, 60 Hz, 10 amps electrical connection per manual. #14 AWG with maximum 15 amp breaker. Appliance must be grounded. Check polarity with green LED on main board. A dedicated line on a breaker is strongly recommended.

### GAS SUPPLY

- Verify correct type of gas input on the rating plate.
- Gas supply shall be minimum 7" w.c. and maximum 14" w.c..
- Provide minimum 3/4" diameter gas supply size.
- Provide fabricated drip leg.
- Do not use flex tubing on gas lines.

### VENTING

A. Approved Venting Materials:  
Exhaust Vent in Plastic 3" Pipe Schedule 40 or 80.

- Non Foam Core PVC Pipe
- Non Foam Core CPVC Pipe
- Non Foam Core ABS Pipe

Extending Exhaust Vent in Plastic 4" Pipe Schedule 40 or 80.

- Non Foam Core PVC Pipe
- Non Foam Core CPVC Pipe
- Non Foam Core ABS Pipe

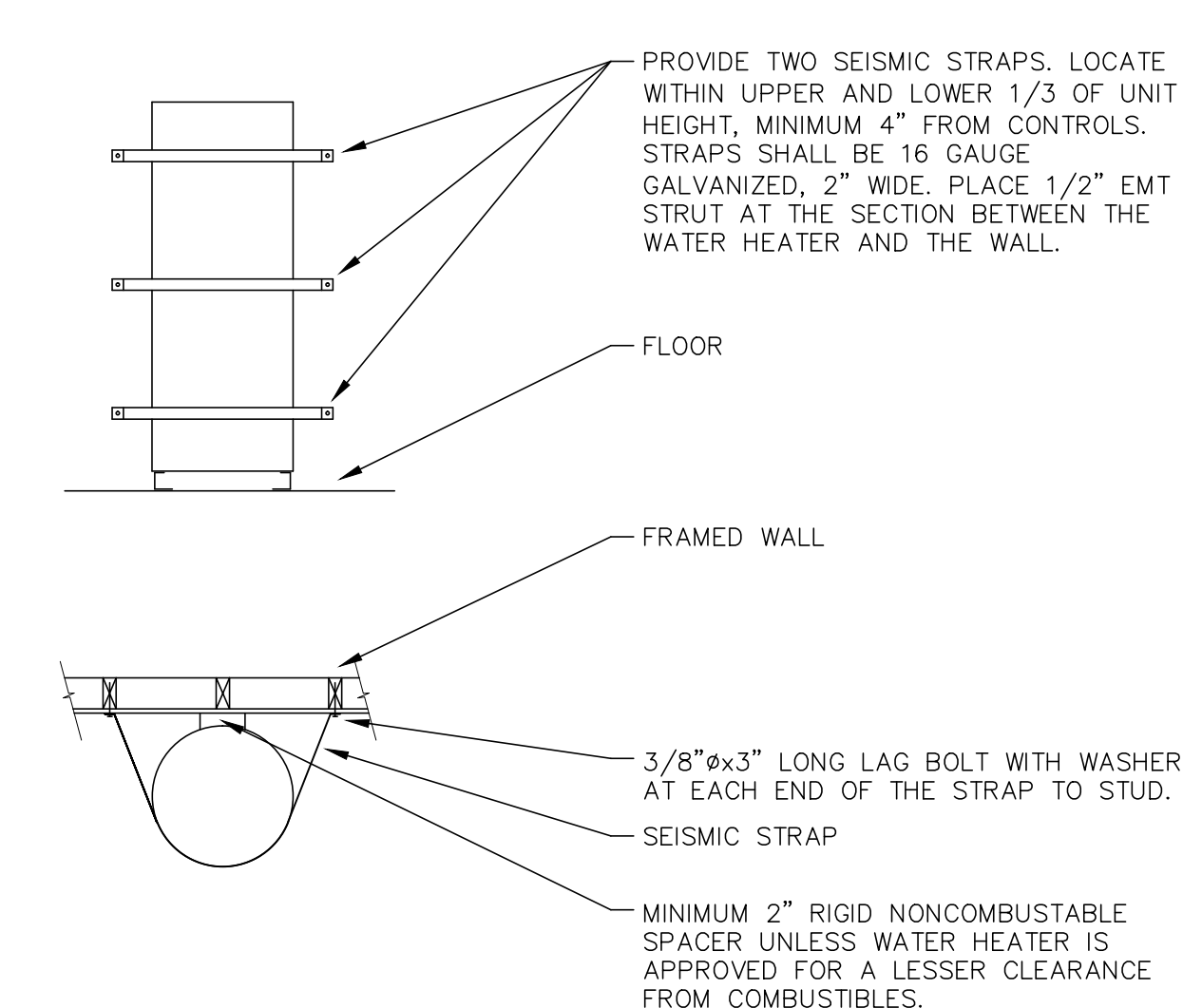
Vent Piping must conform to following:

- PVC Non Foam Core Pipe (Polyvinyl Chloride) to ASTM D-1784 Class 12454-B, Formerly designated Type 1, Grade 1
- CPVC (Chlorinated Polyvinyl Chloride) Class 23447-B, Formerly designated Type IV, Grade 1 conforming to ASTM D-1784
- ABS (AcrylonitrileButadiene-Styrene) Class 3-2-2-2-2 conforming to ASTM D3965

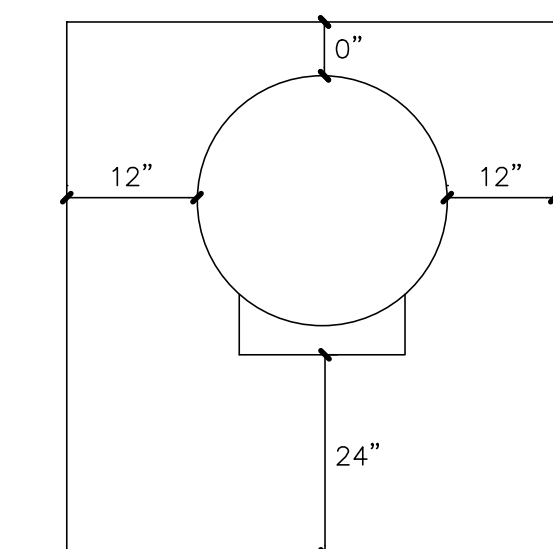
B. Venting the VERSA-HYDRO in 3" Plastic Pipe:

- For inlet air supply, top pipe on the back of the cabinet, use 3" PVC schedule 40. It is very important that you plan the location properly, to eliminate long pipe runs and excessive fittings. Inlet pipe size must not be reduced. Do not combine the inlet air with any other inlet pipe including an inlet to an additional appliance. The joints must be properly cleaned, primed, and cemented. The piping must also be properly supported as per local and national standard plumbing codes. It is important that the piping must be clean and free from burrs, debris, ragged ends, and particles of PVC.

## SEISMIC ANCHORING

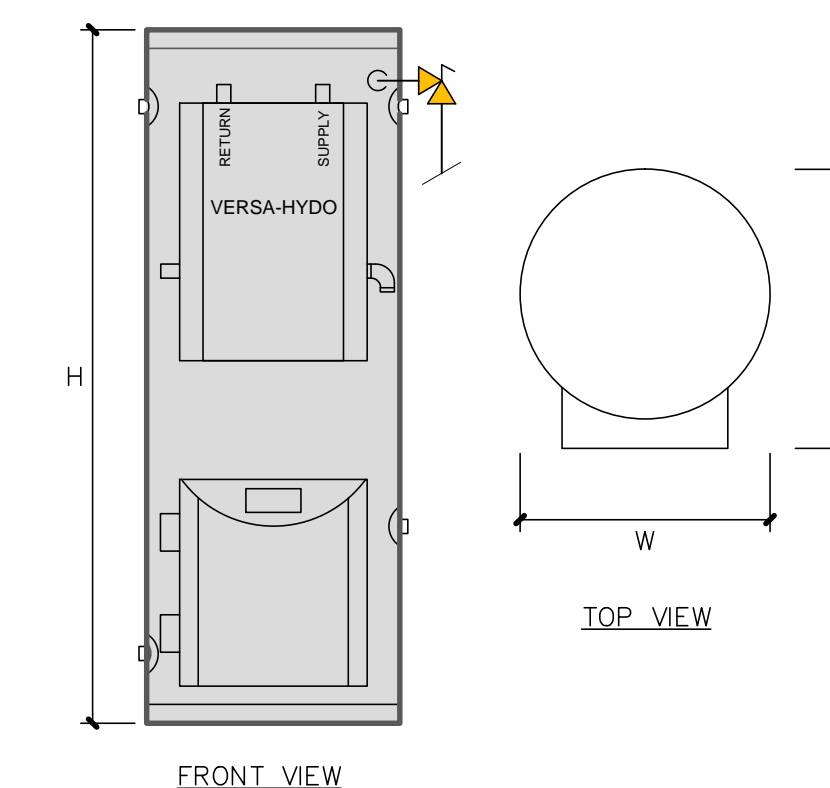


## DIMENSIONS AND SERVICE CLEARANCE



RECOMMENDED SERVICE CLEARANCES

VERSA-HYDRO DIMENSIONS (IN.)			
MODEL	H	W	D
PHE130-55	53"	23"	34"
PHE199-55	53"	23"	34"
PHE130-80	72"	23"	34"
PHE199-80	72"	23"	34"
PHE130-119	74"	27"	37"
PHE199-119	74"	27"	37"



FRONT VIEW

TOP VIEW

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 cmef@meeg.com

**NASE**  
**RESIDENCE**  
 1412 LISBON LANE  
 PEBBLE BEACH, CA. 93953

**HEAT SOURCE VENTING**

DATE: 12/19/16  
 SCALE: AS NOTED  
 DRAWN: MEG  
 CHECKED:  
 FILE NAME:

SHEET:  
**M6.4**  
 SHEET OF SHEETS

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**SHEET NOTES**

- PER T-24 SECTION 150.0(N)1D WH LOCATION SIZED AT 200K BTU/HR.

**PLUMBING SPECIFICATIONS**

**A. General Conditions**

- Work Included:  
Fuel gas piping.
- It shall be the contractors responsibility to visit the project site and acquaint himself with all existing conditions, as well as ascertain the extent of the work involved. By submitting a bid, the contractor shall be deemed to have made such an examination, to have accepted such conditions and to have made all necessary allowances in preparing his proposal.
- All work and materials shall comply with governing codes, safety orders and regulations.
- Plumbing contractor shall deliver to the architect a written one year guarantee on all workmanship, equipment and materials; repair or replace any such defective items during this period.

**B. Utilities and Site Work:**


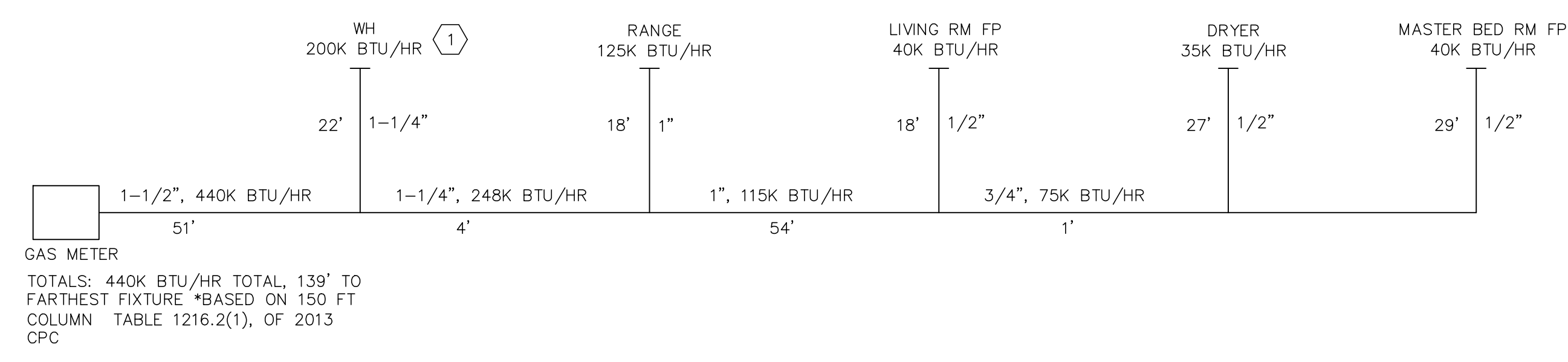
- Prior to commencing work, plumbing contractor shall consult representatives of local utilities concerning locations and availability of utilities. Plumbing contractor shall be responsible for any damage to existing utility lines.
- Plumbing contractor shall reroute any existing utility lines in conflict with new construction.
- Plumbing contractor shall confirm locations and elevations of all existing new and rerouted mains and meters on job record drawings.

**C. Gas Piping:**

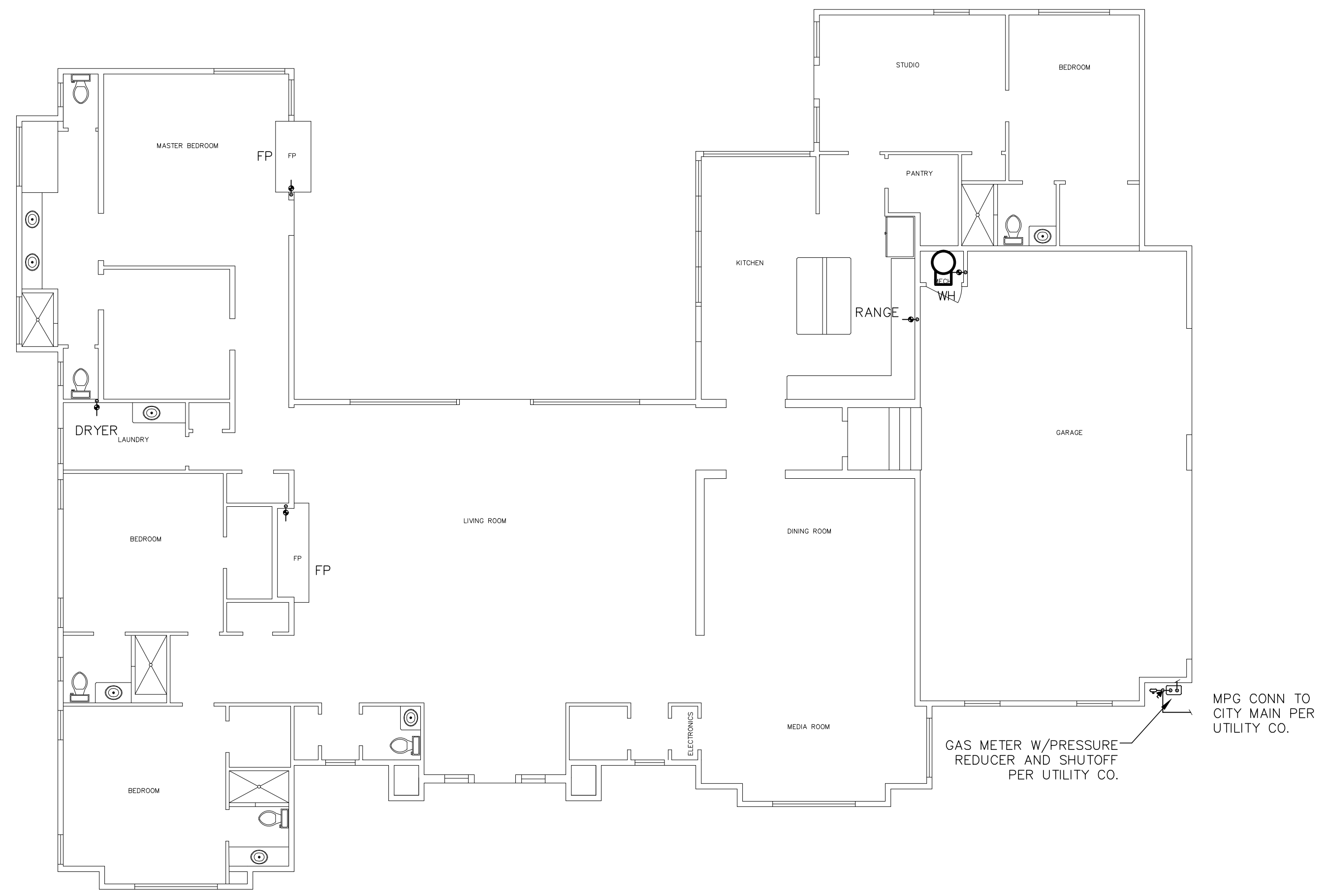
- Underground natural gas piping from meter shall be run in polyethylene pipe with tracer wire.
- Gas piping within house shall be run in black iron pipe with galvanized fittings.
- Threaded joints shall be made up with teflon paste, rector seal #1, teflon tape or other approved joint compound material (Note: no pipe dope shall be applied to female threads).
- All gas piping shall be fully reamed as per UPC.

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 831-359-4173 FAX  
 cad@meg4.com

**2 GAS LINE SCHEMATIC**  
SCALE: NONE

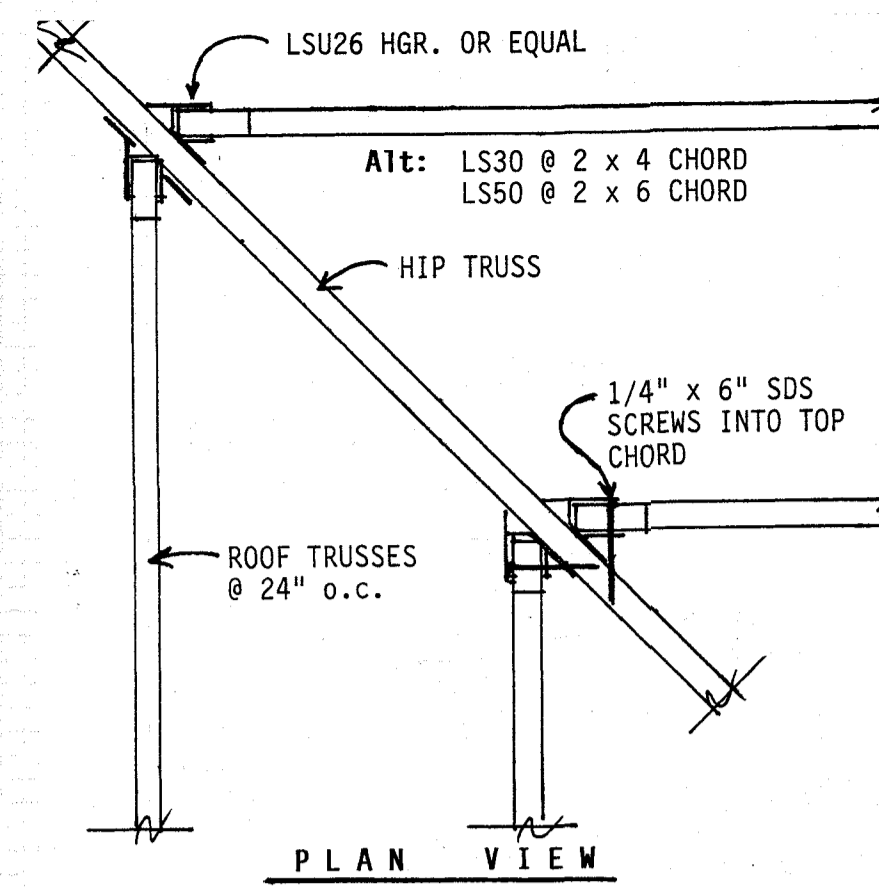


**1 GAS LINE POINT OF CONNECTIONS**  
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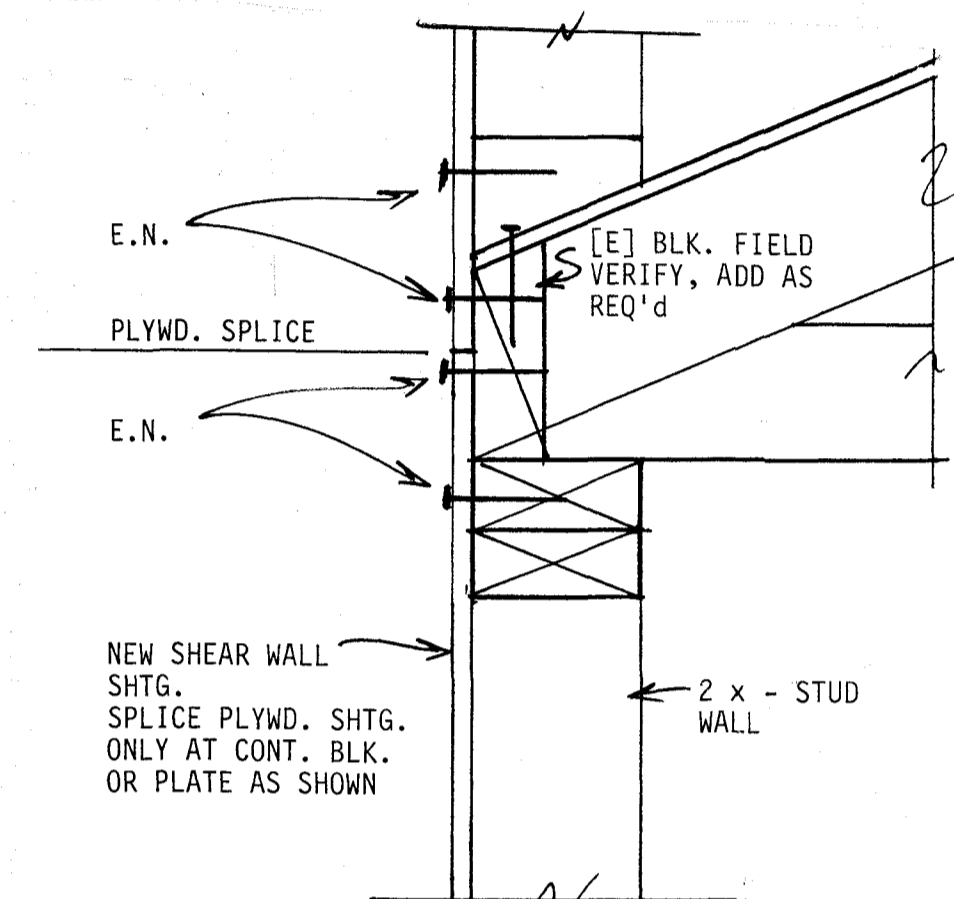
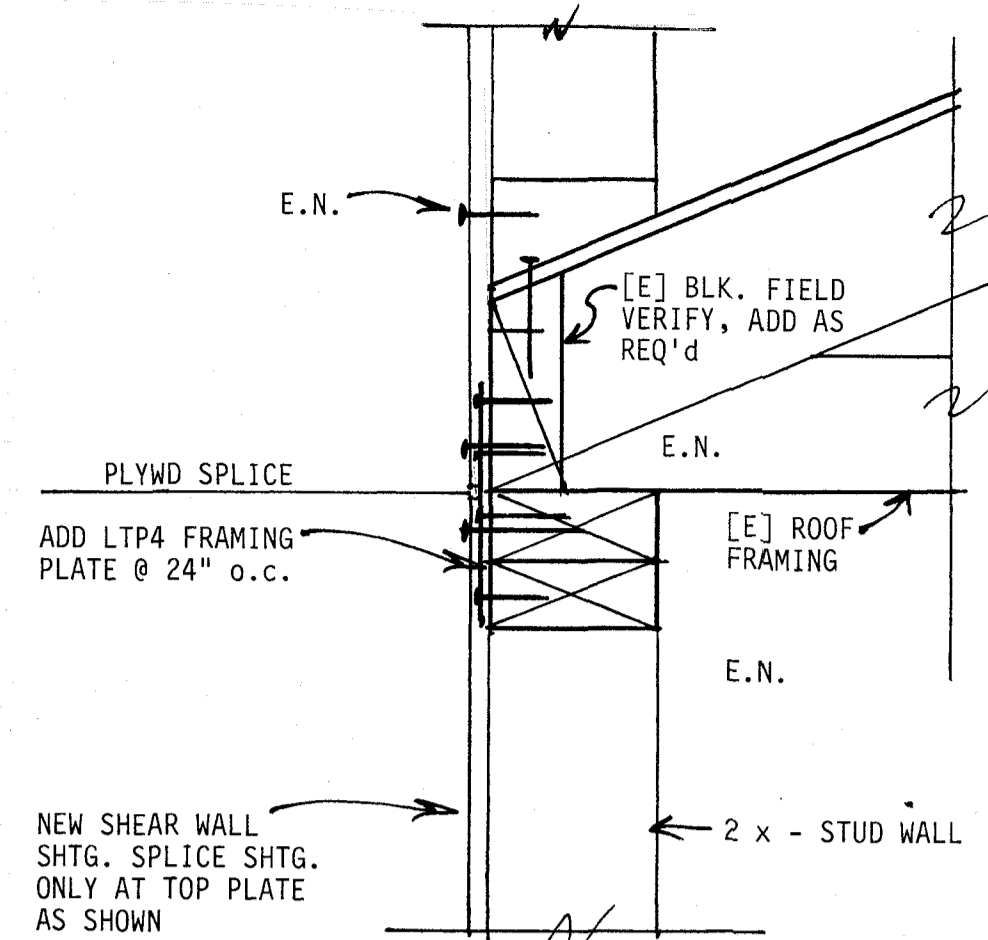
**NASE RESIDENCE**  
 1412 LISBON LANE  
 PEBBLE BEACH, CA. 93959

**GAS LINE POINT OF CONNECTIONS & GAS LINE SCHEMATIC**

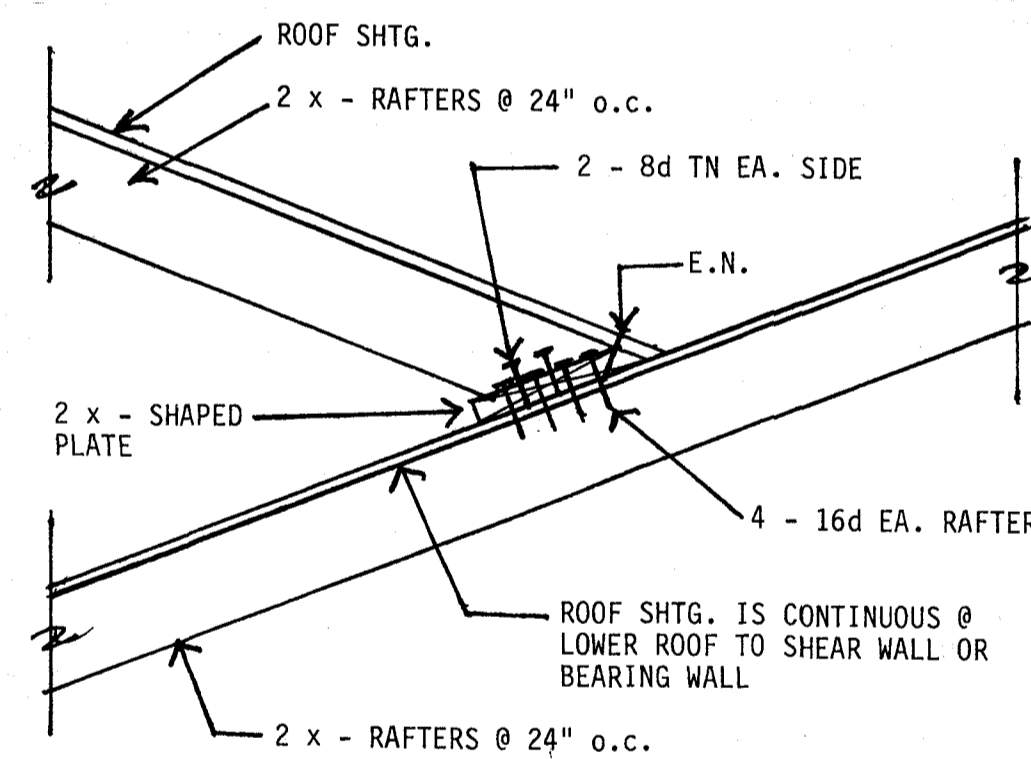
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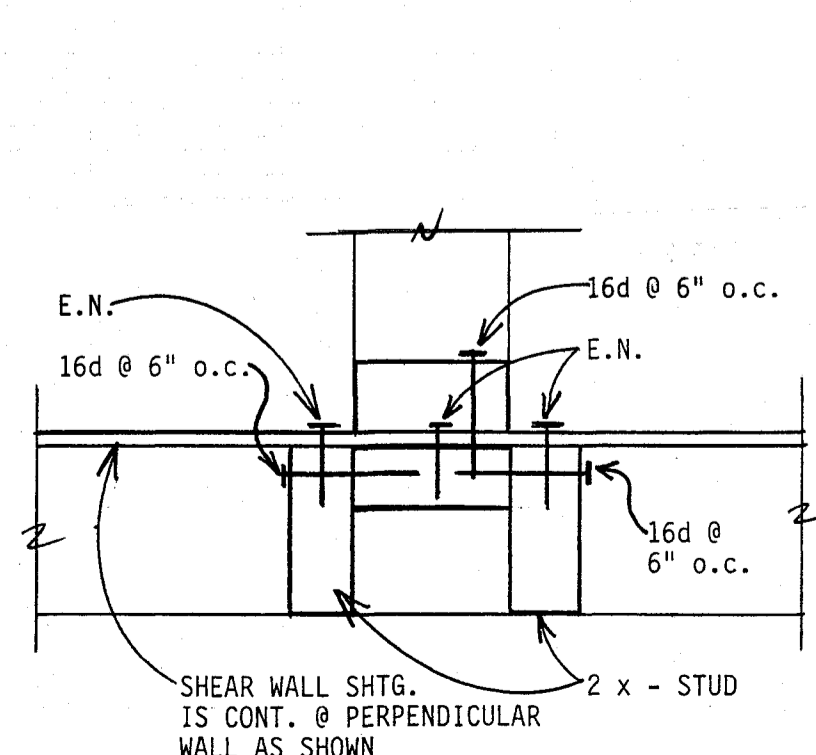
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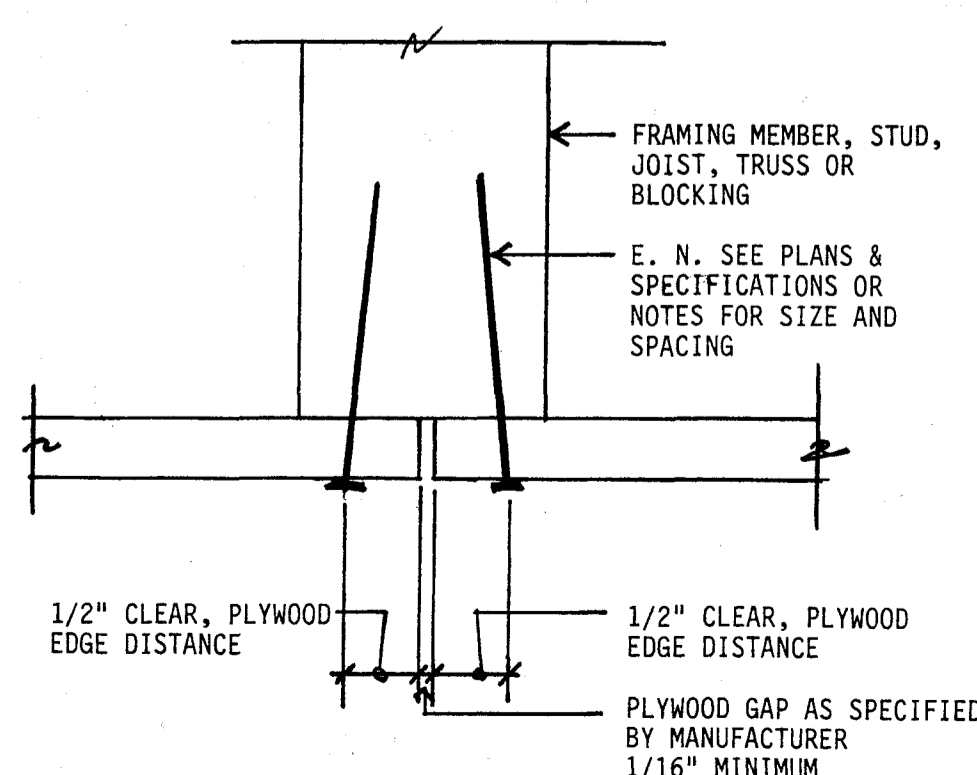
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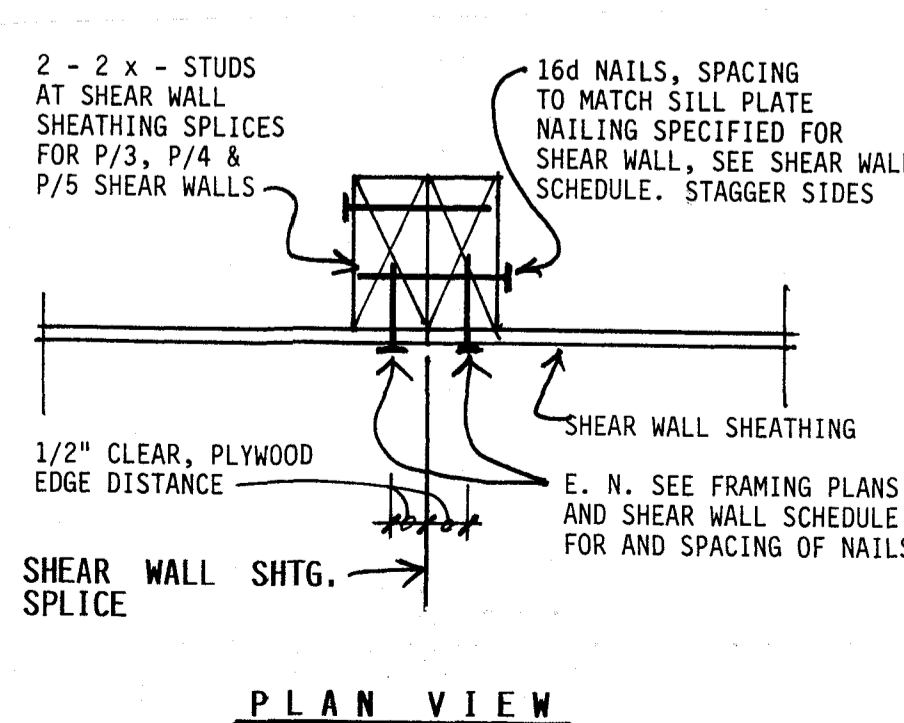
11



SHEAR WALL SHEATHING AT WALL INTERSECTION 16



PLYWOOD SHEATHING SPLICE 12



SHEAR WALL SHEATHING SPLICE 13

ROOF FRAMING NOTES

- ROOF SHEATHING:** Roof sheathing shall be min. 1/2" CDX plywood or OSB sheathing. Use minimum CCX or Exposure 1 plywood at all exposed overhangs U.O.N. on plans. Nail all sheathing with 8d at 6" o.c. all supported edges and 8d at 12" o.c. intermediate bearing. Lay panels with facegrain perpendicular to supports. P.I. 32/16. Keep minimum 1/16" clear between all panel edges. At all shear walls nail roof sheathing to all blocking or rim joist with 8d @ 4" o.c. Provide 1/2" edge distance nailing for all plywood boundary nailing.
- ROOF TRUSSES:** Roof trusses shall be designed for the following loads
 

	D.L.	L.L.
Top Chord	12.0 psf	20.0 psf
Bottom Chord	8.0 psf	10.0 psf

 Truss manufacture shall provide shop drawings and calculations for approval prior to manufacturing trusses. CONTRACTOR shall install and brace trusses as recommended by manufacturer.
- WALLS:** All exterior walls shall be 2 x 6 studs @ 16" o.c. and all interior walls shall be 2 x 4 studs @ 16" o.c. U.O.N. on plans. Studs at exterior and bearing walls shall be D.F. No. 2 or better. Balloon-frame all walls and block all studs at maximum 10' o.c. All plumbing walls that are shear walls or bearing walls shall be 2 x 6 walls. CONTRACTOR shall coordinate plumbing layout with plumbing subcontractor prior to start of framing. Wall framing shall comply with Table 2308.9.1. CONTRACTOR shall obtain permission for drilling or notching studs or double top plates of any shear or bearing wall more than 1/2" of width of wall.
- HEADERS:** All headers shall be 6 x 6 at 2 x 6 walls and 4 x 10 at 2 x 4 walls U.O.N. on plans. Provide 1 - 2 x - trimmer and 1 - 2 x - king stud at all bearing and shear walls U.O.N. on plans.
- POSTS:** All beams shall bear on posts, width, and depth of post to width and depth of beam and wall U.O.N. on plans. Use PC postcaps to connect beams to posts U.O.N. on details or plans. Use EPC postcaps at ends of beams. Posts shall be continuous to foundation.
- DOUBLE TOP PLATES:** CONTRACTOR shall splice double top plates with 20 - 16d U.O.N. on plans. Plates shall be D.F. Larch No. 2 or better.
- NAILING:** All nailing shall comply with Table 2304.9.1 of the 2003 C.B.C. All nails shall be common nails, 8d (0.131d), 10d (0.148d), 16d (0.162d), 16d sinkers (0.135D).
- SHEAR WALLS:** All exterior walls shall be sheathed with TYPE P/1 shear wall U.O.N. on plans. All shear wall sheathing shall be continuous to roof sheathing U.O.N. on plans or details. Provide minimum 4 x ~ post or 2 - 2 x ~ studs at ends of all shear walls for holdowns U.O.N. on plans. At all shear walls, nail roof sheathing to blocking, double top plate, or rim joist with 8d @ 4" o.c.
- LUMBER:** All lumber shall conform to the rules of a recognized grading agency and Tables 4D through 4F of the N.D.S. All Framing Lumber shall be D.F. Larch No. 2 or better U.O.N. on plans. Beams shall be D.F. Larch No. 1 or better. GLB's shall have a combination symbol of 24F-V4 DF/DF. Parallam beams shall be 2.2E Parallam PSL. Microlam beams shall be 1.9E Microlam LVL. Headers and posts shall be D.F. Larch No. 2 or better. For studs see Note 3. All lumber exposed to the weather shall be pressure-treated. All framing shall have a MAXIMUM MOISTURE CONTENT OF 19% at time of installation or incorporating the lumber into the structure.
- ROOF FRAMING:** Roof framing and plywood sheathing shall be continuous to all shear or bearing walls at all lower roofs.
- SKYLIGHTS:** Provide 2 - 2 x 6 blocks on each side of all skylights. Nail continuous CS18 straps to blocks with 5 - 8d nails into each block. Keep nails minimum 4" clear from the ends of blocks to avoid splitting.
- SHORING:** All required shoring shall be the sole responsibility of the CONTRACTOR. The CONTRACTOR shall provide all necessary bracing as required until all work is complete.

FOUNDATION NOTES

- FOUNDATION:** Foundation design is based on recommendations of Soils Report by:
 

Grice Engineering, Inc.  
561 A Brunken Avenue  
Salinas, CA. 93940  
Tel. (831) 375 - 1198 Fax (831) 422 - 1896

 Soils Report shall become part of specifications and CONTRACTOR shall adhere to all requirements of Soils Report. See specifications in "Soils Report" for site preparations, grading and compactions at all building pads and paved areas. CONTRACTOR shall not lay any reinforcing or pour any concrete until all grading, site preparations and footing excavations have been inspected and approved by the "Soils Engineer". All footings shall bear on engineered compacted fill as specified in Soils Report.
- CONCRETE STRENGTH:** All concrete shall develop an ultimate compressive strength at age 28 days as follows:
 

FOOTINGS	2500 psi
SLAB ON GRADE	2500 psi
- REINFORCING:** All reinforcing shall conform to A.S.T.M. Grade 40.
- BOLTS:** All bolts shall conform to A.S.T.M. A307. The threaded portion of the bolt bearing on wood shall be kept to a minimum. Do not use All-Thread rods for bolts which bear on wood. All fasteners embedded in concrete shall be attached to or hooked around reinforcing steel.
- SILL PLATES:** All sill plates shall be bolted to foundation with 5/8" o x 10" A.B.'s at 48" o.c. Embed bolts minimum of 7" into concrete or grout. This spacing is typical U.O.N. on Foundation Plan or details. Provide 3" x 3" x 0.229" washers at all A.B.'s. Install washers parallel and perpendicular to sill plates. Provide minimum of two bolts per plate and one bolt within 4" to 12" from the end of all plates. All sill plates shall be 2 x ~ P.T. D.F. No. 2 or better U.O.N. or detailed on plans. All steel as A.B.'s washers and nails and framing hardware such as hangers, post caps and post bases, in contact with pressure-treated lumber shall be stainless steel or HOT DIP GALVANIZED with minimum coating of G90, 0.90 oz. per sq. ft.
- HOLDOWNS:** Location of holdowns shown is approximate. See plans and details to determine exact location of holddown anchor bolt. Provide minimum 2 - 2 x ~ studs or 4 x ~ post at the end of each shear wall for bolting holddown to shear wall unless otherwise specified on plans. Provide shear wall edge nailing into each stud bolted to holddown and two rows edge nailing into 4 x ~ posts. Holddown devices shall be secured in place prior to foundation inspection. Holddown devices shall be re-tightened just prior to covering the wall framing.
- CONCRETE SLAB ON GRADE:** Concrete slab on grade shall be minimum 4" thick, over 2" sand, over vapor barrier, over 4" gravel base. Slope to drains. See plans where occurs. Vapor barrier shall be minimum 15 mil Moistop by "Fortifiber Corporation" or equal. Reinforce slab with #4 bars at 24" o.c. each way placed at center of slab.

SHEAR WALL SCHEDULE

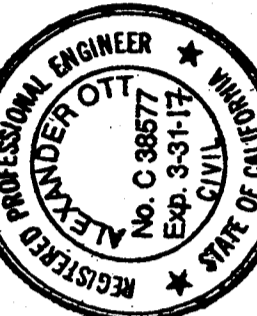
MARK	SHEAR WALL SHEATHING PANEL GRADE OR TYPE	SHEAR WALL NAILING	SILL PLATE NAILING	ALLOW. SHEAR, LBS/FT
P 1	1/2" CDX Plywood or OSB Sheathing Block all edges	8d @ 6" o.c. E.N. (0.131 DIA) 8d @ 12" o.c. F.N.	16d @ 6" o.c.	260 lbs/ft
P 2	1/2" CDX Plywood or OSB Sheathing Block all edges Note 7	8d @ 4" o.c. E.N. (0.131 DIA) 8d @ 12" o.c. F.N.	16d @ 4" o.c.	380 lbs/ft
P 3	1/2" CDX Plywood or OSB Sheathing Block all edges Note 7	8d @ 3" o.c. E.N. (0.131 DIA) 8d @ 12" o.c. F.N.	16d @ 3" o.c.	490 lbs/ft
P 4	1/2" CDX Plywood or OSB Sheathing Block all edges Note 7	8d @ 2" o.c. E.N. (0.131 DIA) 8d @ 12" o.c. F.N.	16d @ 2" o.c.	640 lbs/ft

NOTES:

- See Framing Plans for size and location of hold downs.
- See Foundation Plan for size and spacing of anchor bolts.
- Keep minimum 1/16" clear between all plywood panel edges.
- Use one-piece plywood sheets at shear walls - which are 48" or less in width.
- All plywood panels shall have a minimum dimension of 24".
- All nails shall be common nails. Notify ENGINEER for alternate spacing for box nails.
- Use 3 x ~ studs and 3 x ~ blocking at all plywood joints.
- All nailing shall be staggered.
- Min. 1/2" Plywood edge distance.

REVISIONS BY

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GENERAL NOTES & DETAILS

NASE RESIDENCE  
1412 LISBON LANE  
PEBBLE BEACH, CA 93953  
APN: 010-156-021

Date: DEC 21 2016

Scale

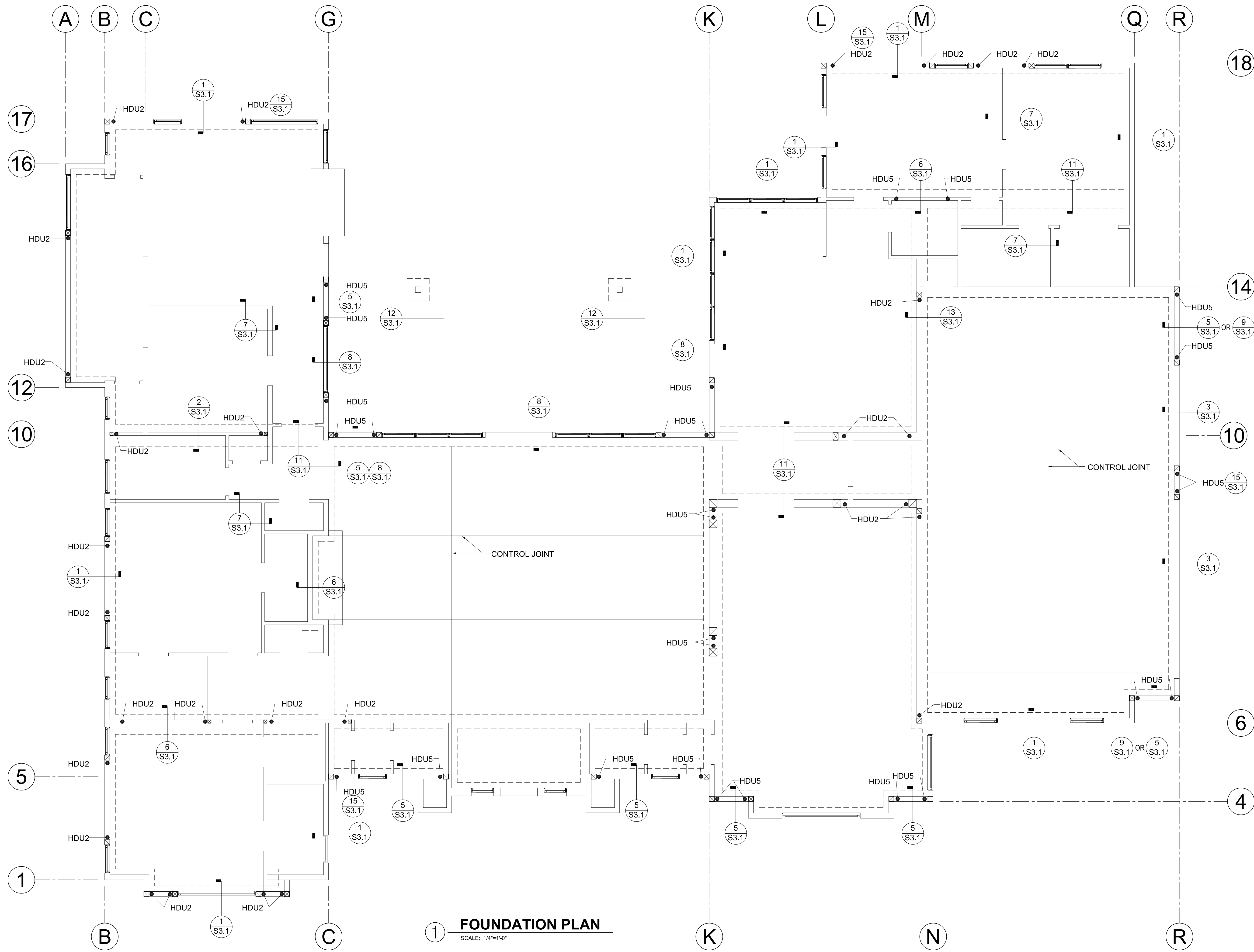
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Job

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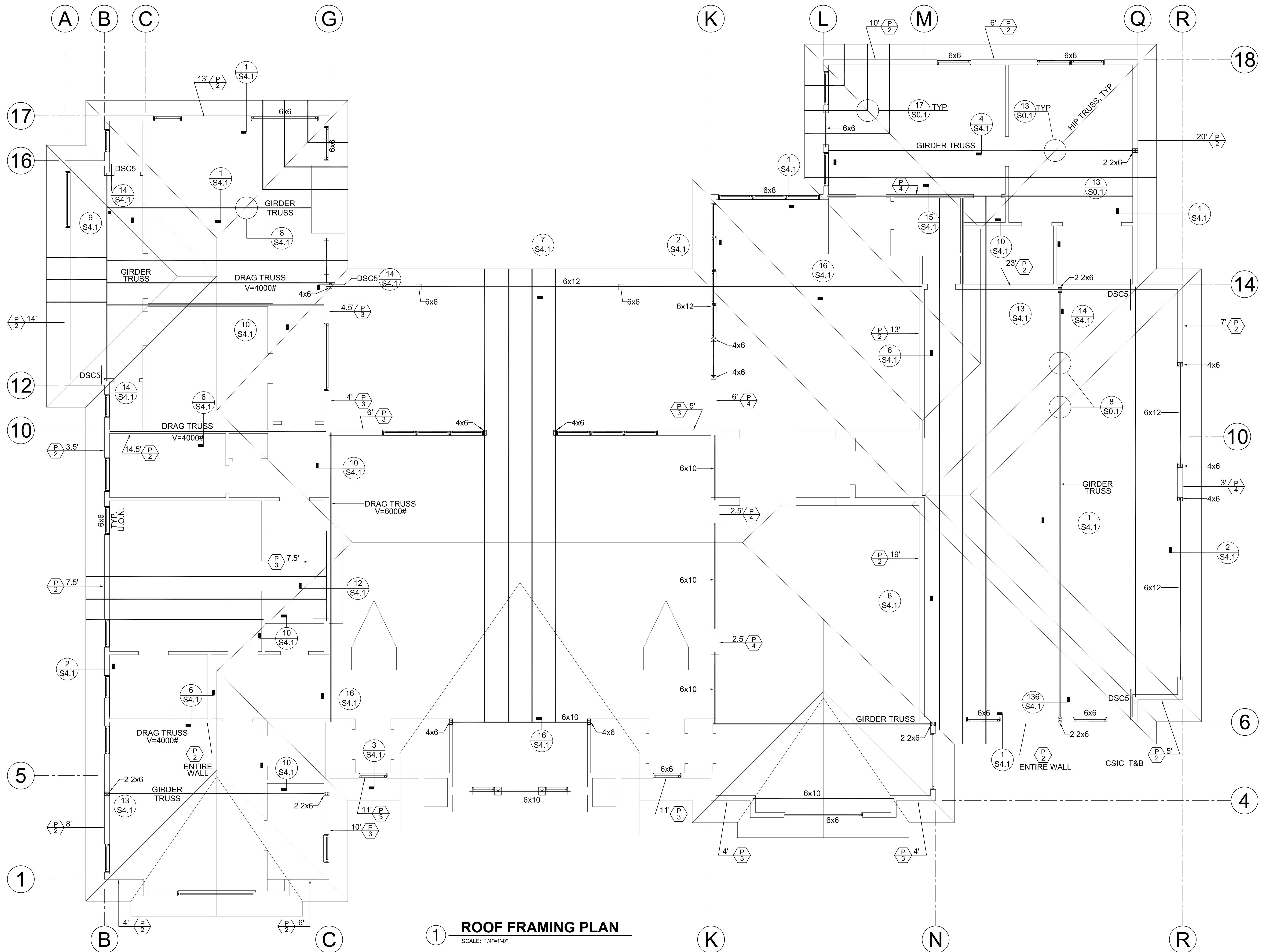


**FOUNDATION PLAN**  
SCALE: 1/4"=1'-0"

**FOUNDATION PLAN**

NASE RESIDENCE  
1412 LISBON LANE  
PEBBLE BEACH, CA 93953  
APN: 008-232-003-000

DATE:	12.21.16
SCALE:	1/4" = 1'-0"
DRAWN BY:	RA
REVISION:	



**1 ROOF FRAMING PLAN**  
SCALE: 1/4"=1'-0"

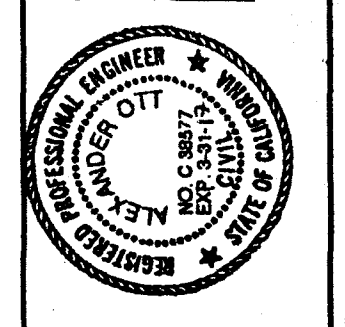
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PEBBLE BEACH, CA 93953  
APN: 008-232-003-000

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SCALE:	1/4" = 1'-0"
DRAWN BY:	RA
REVISION:	

REVISIONS	BY

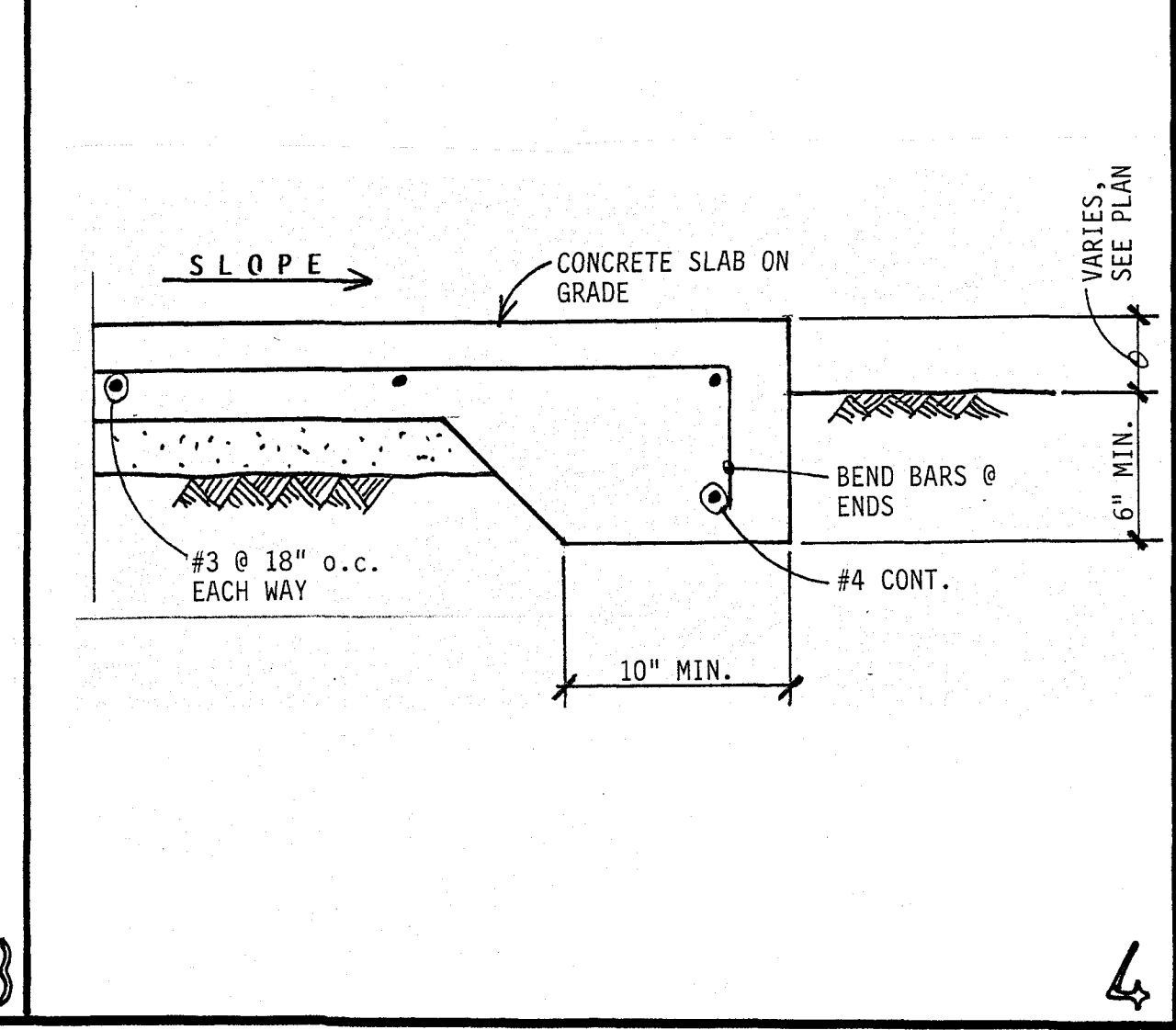
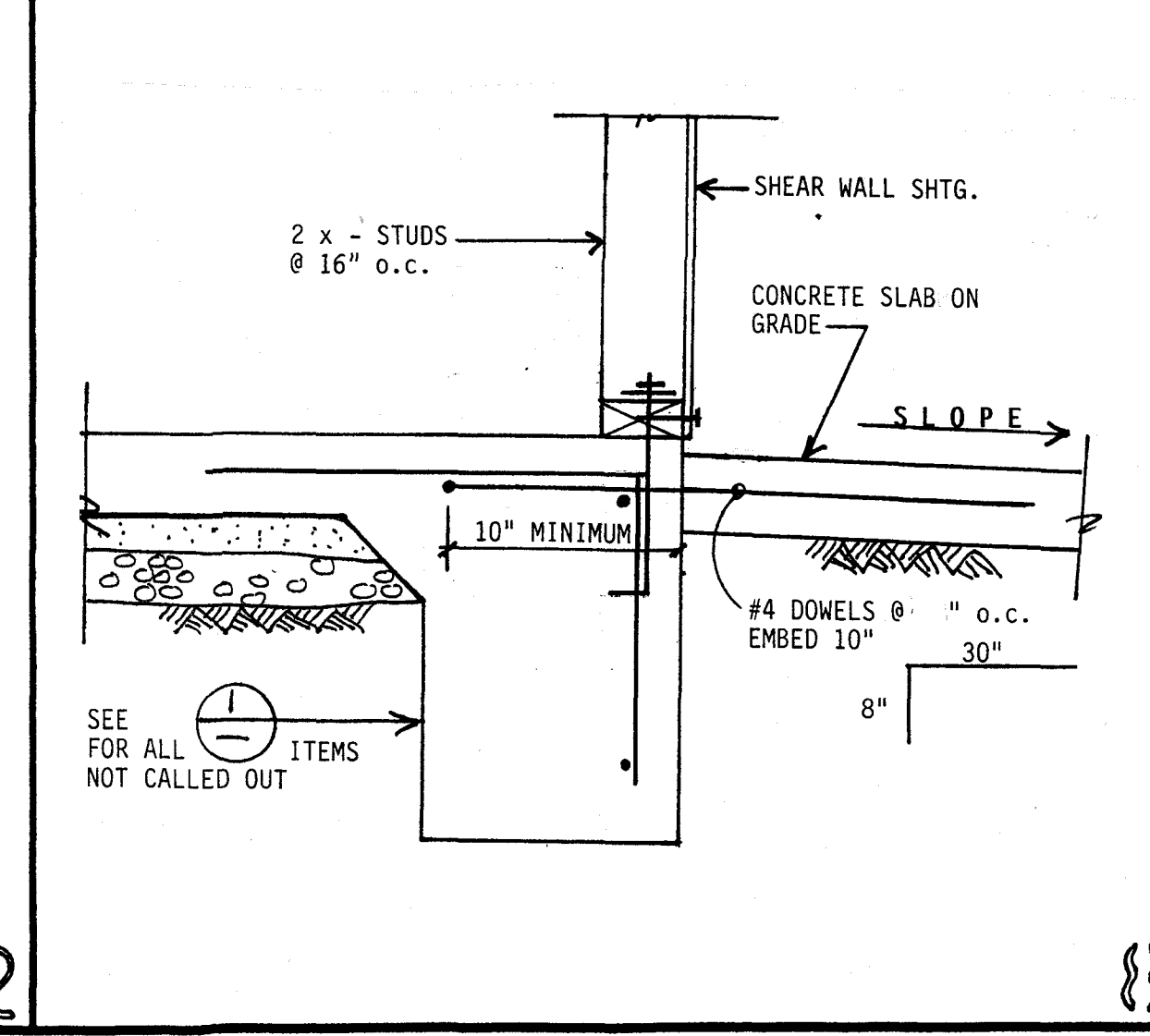
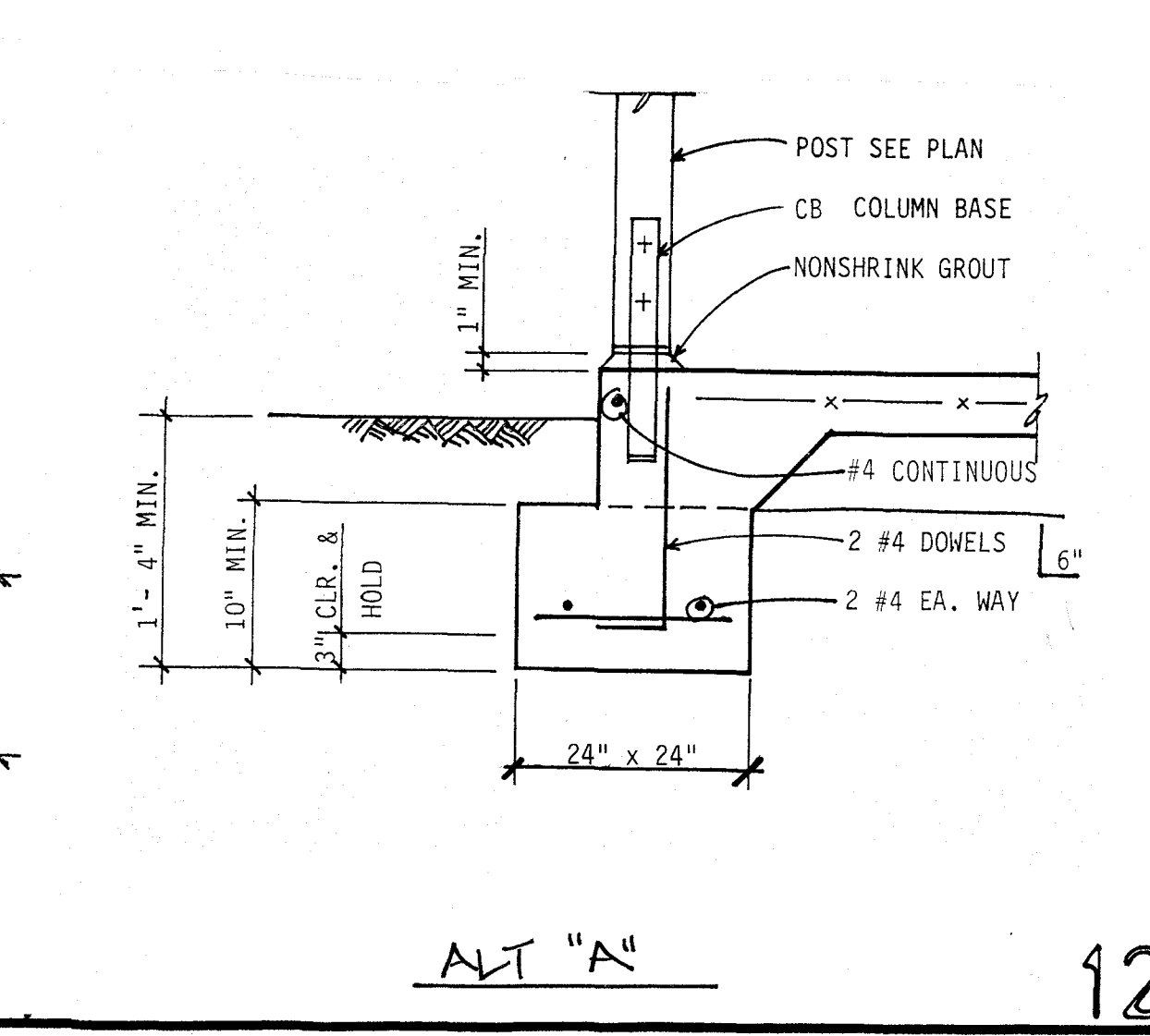
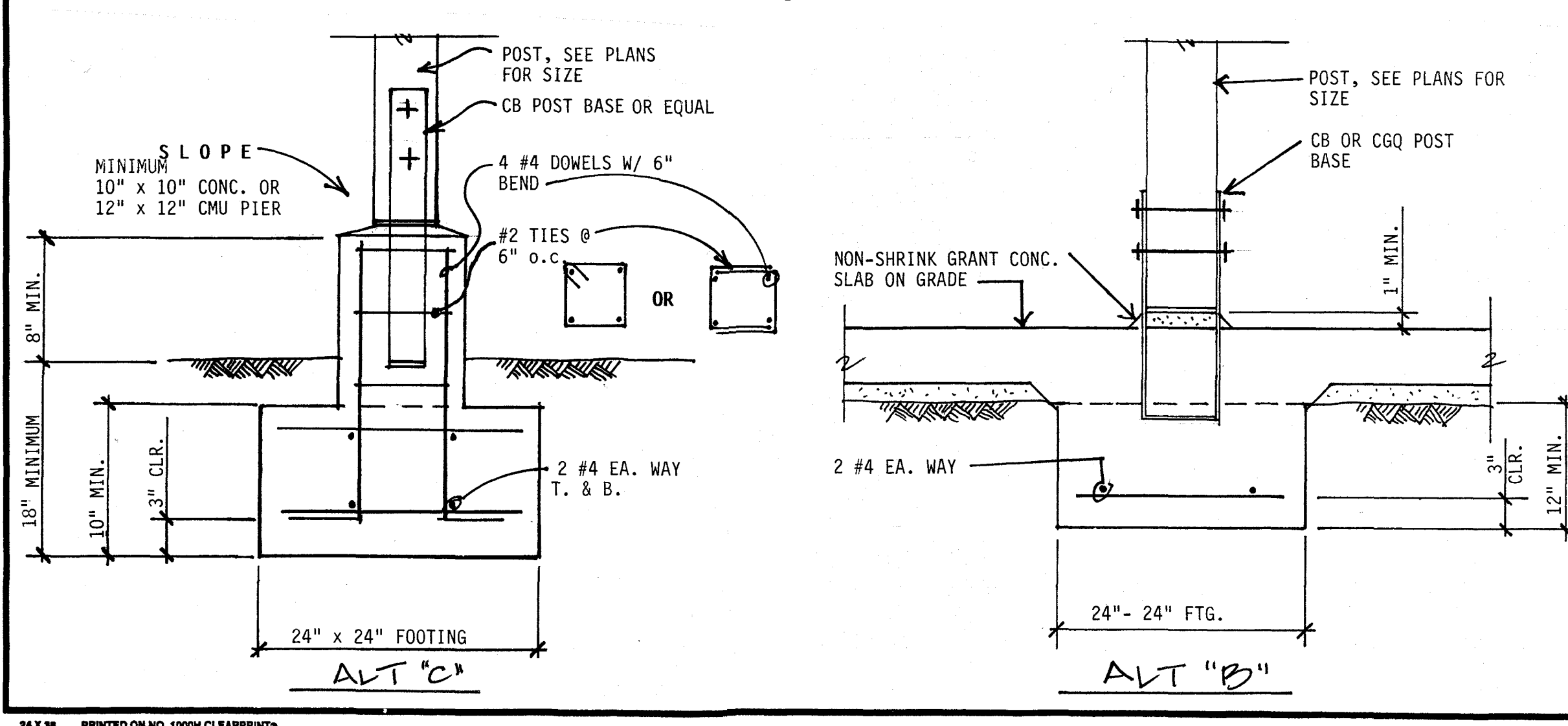
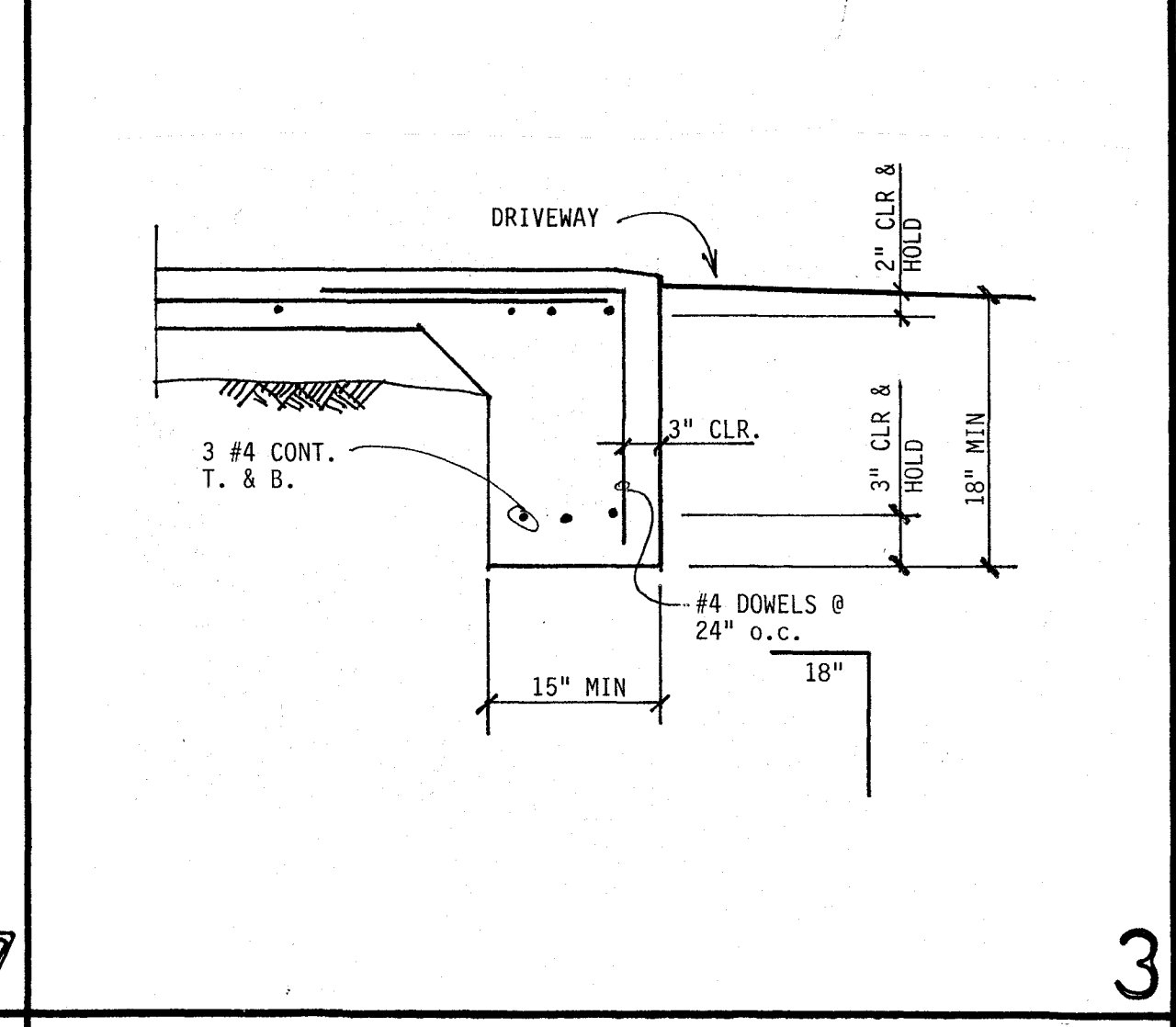
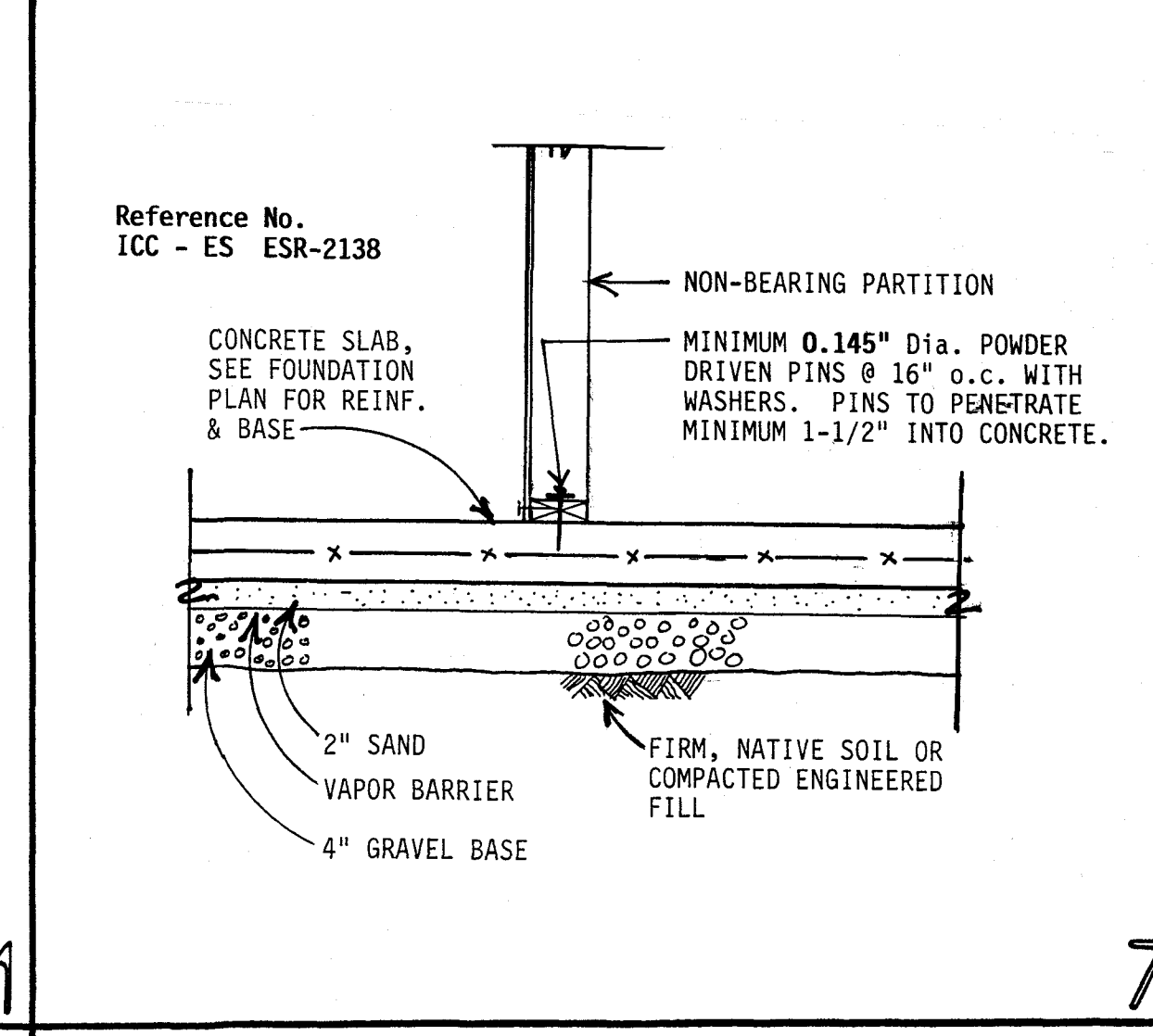
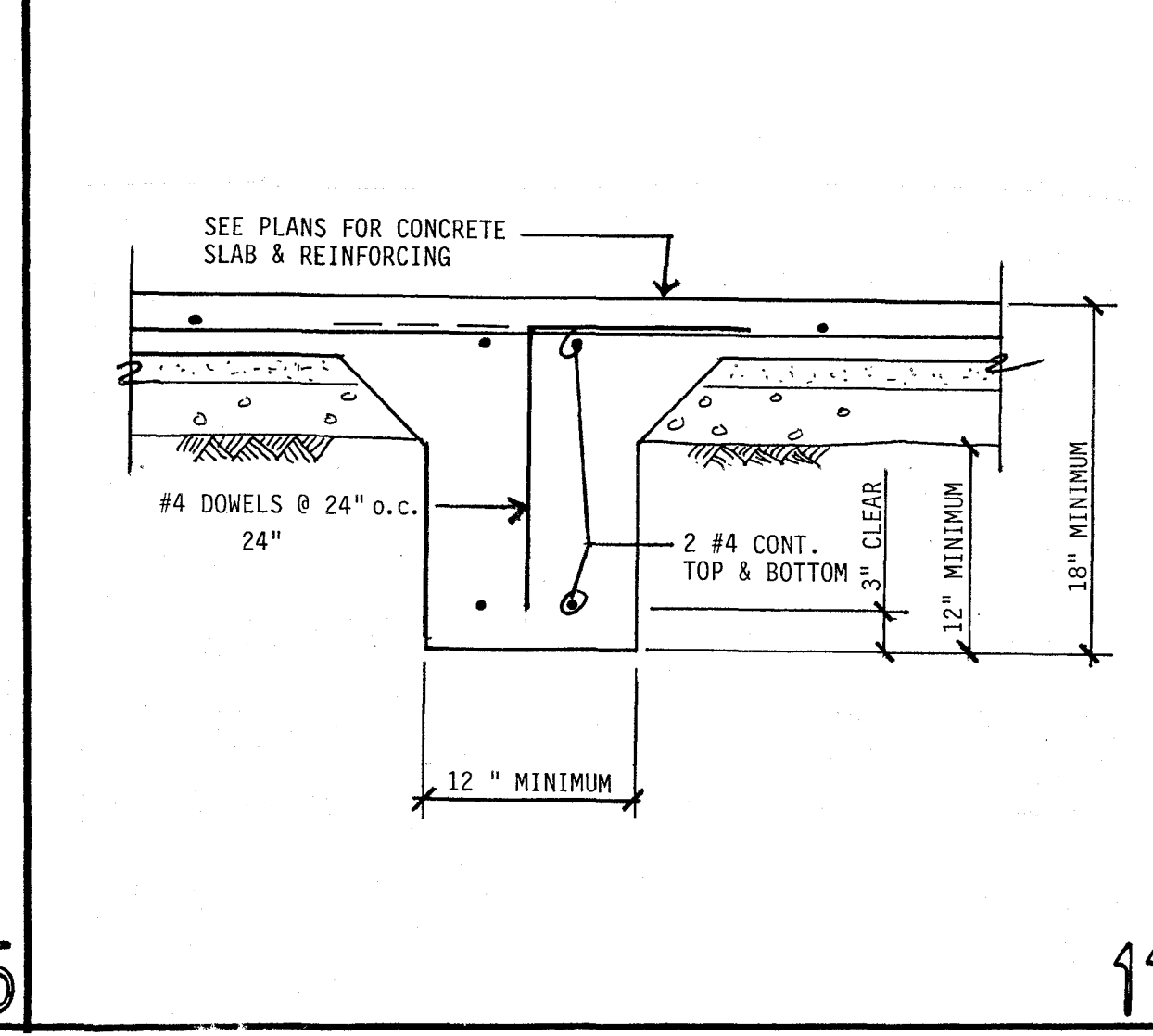
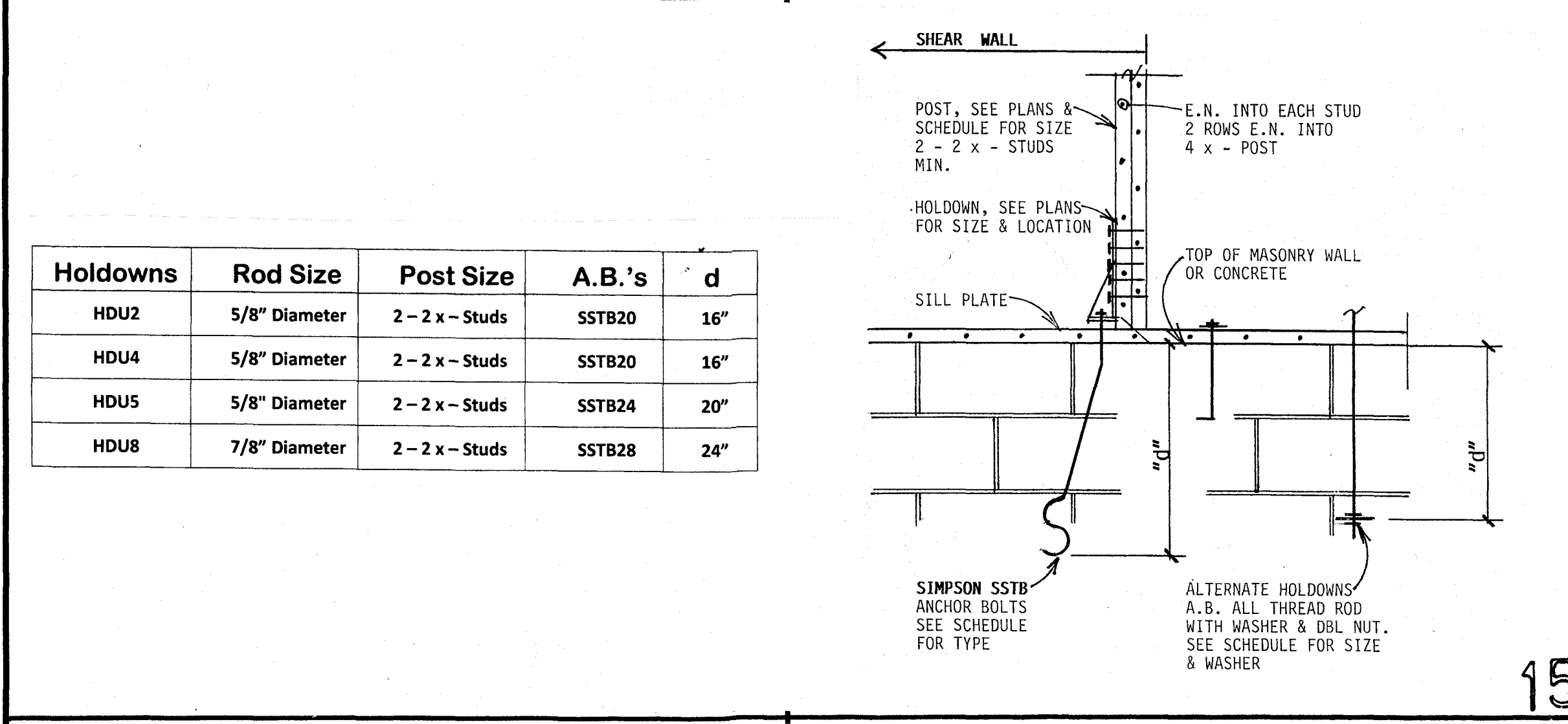
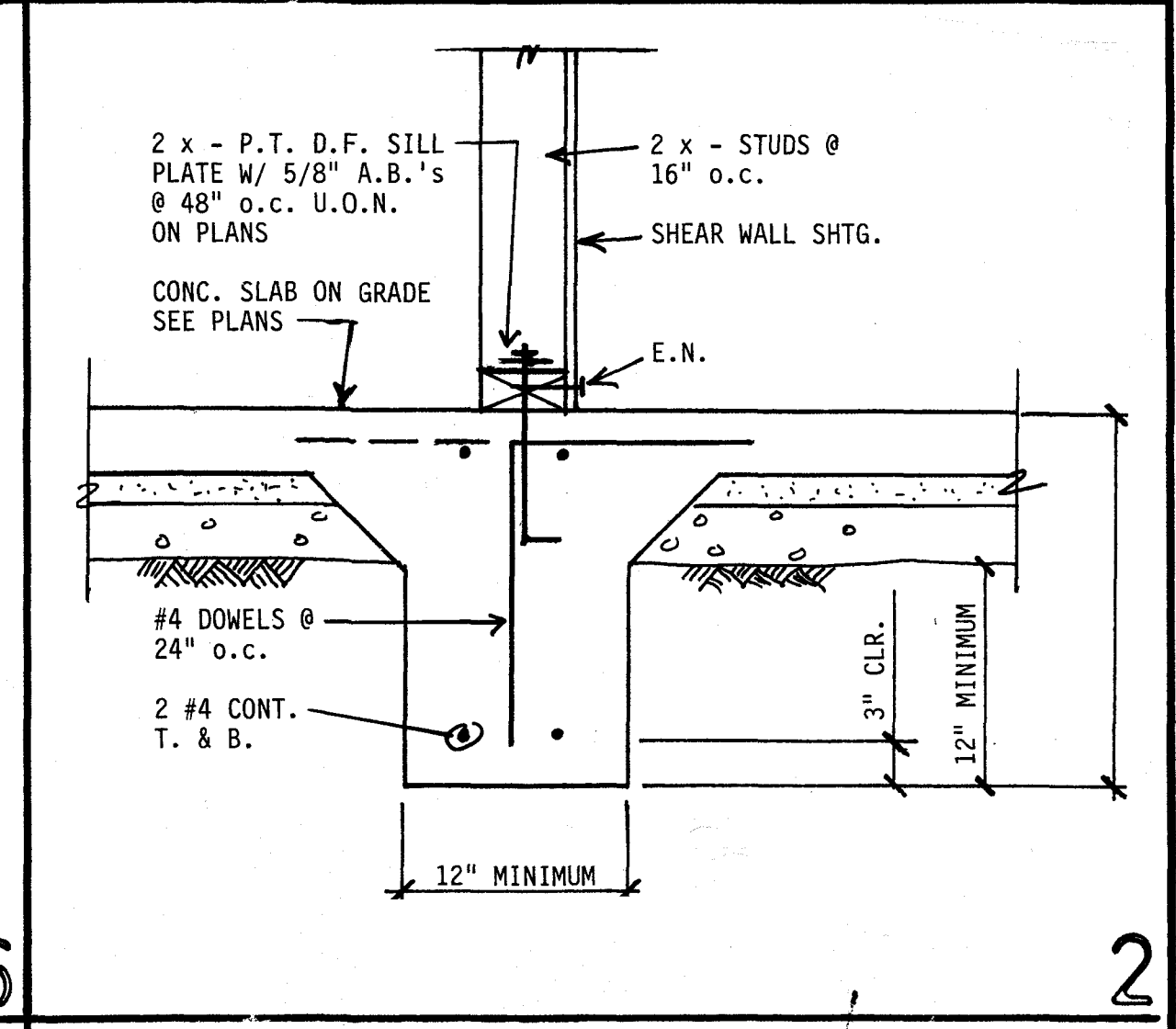
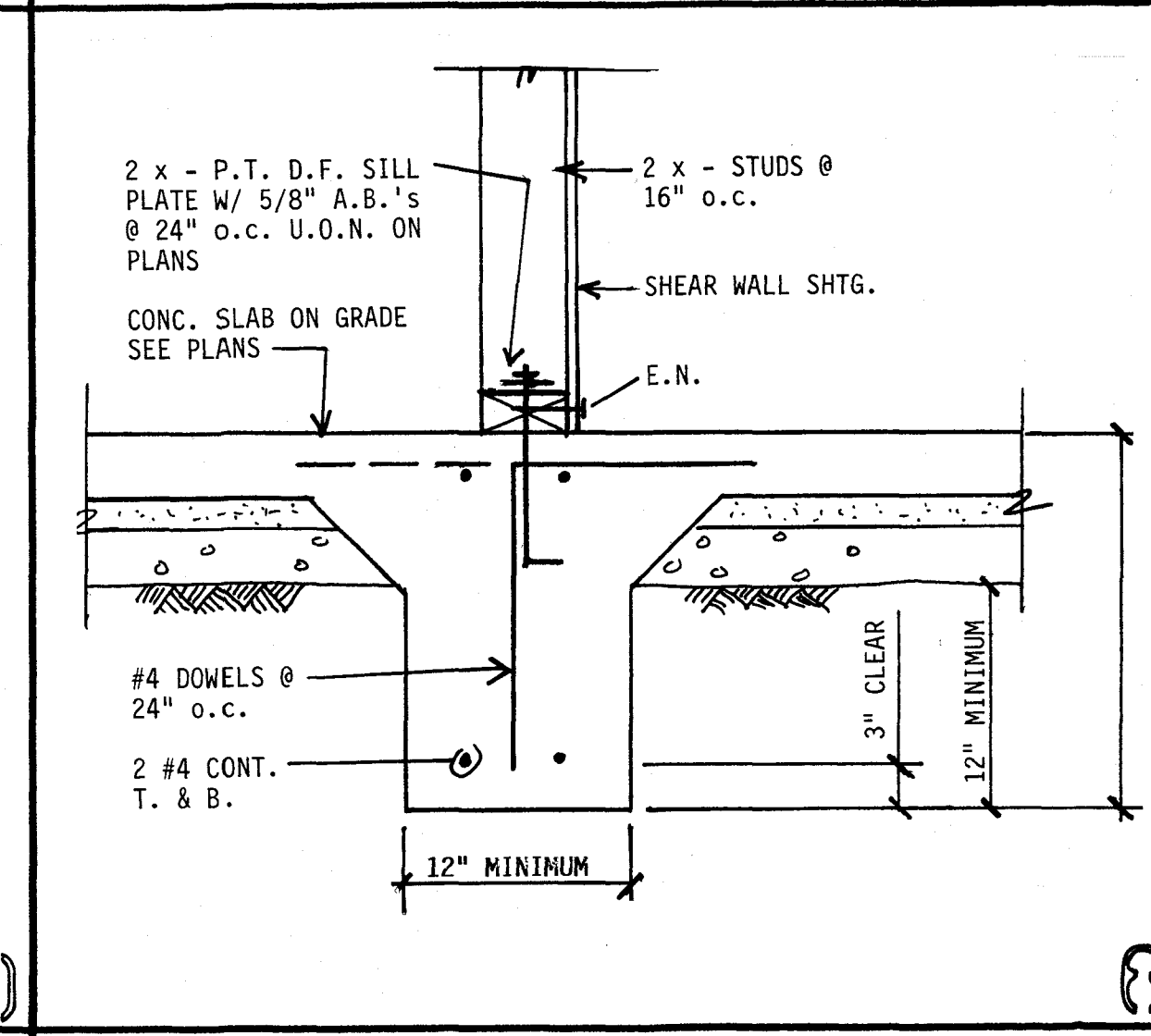
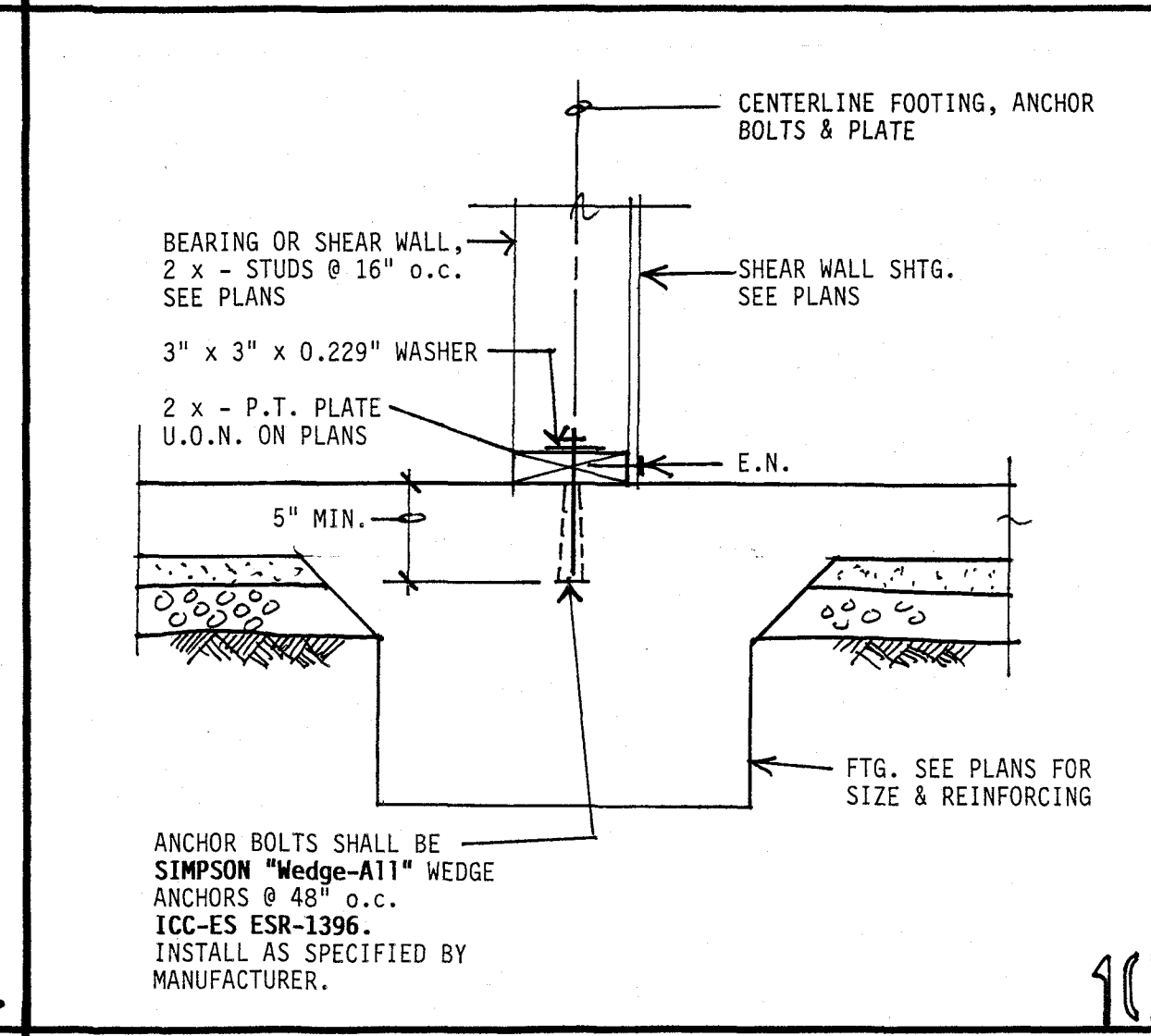
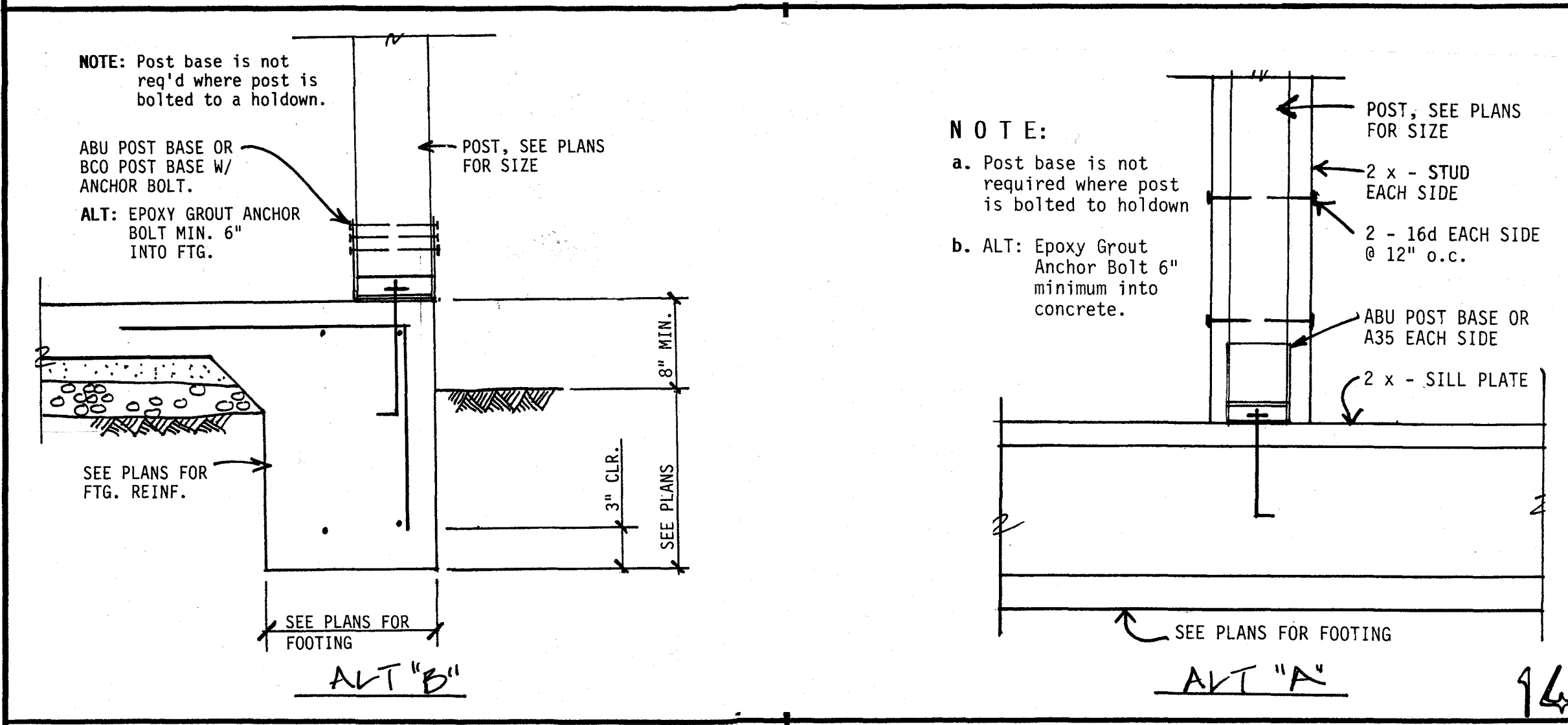
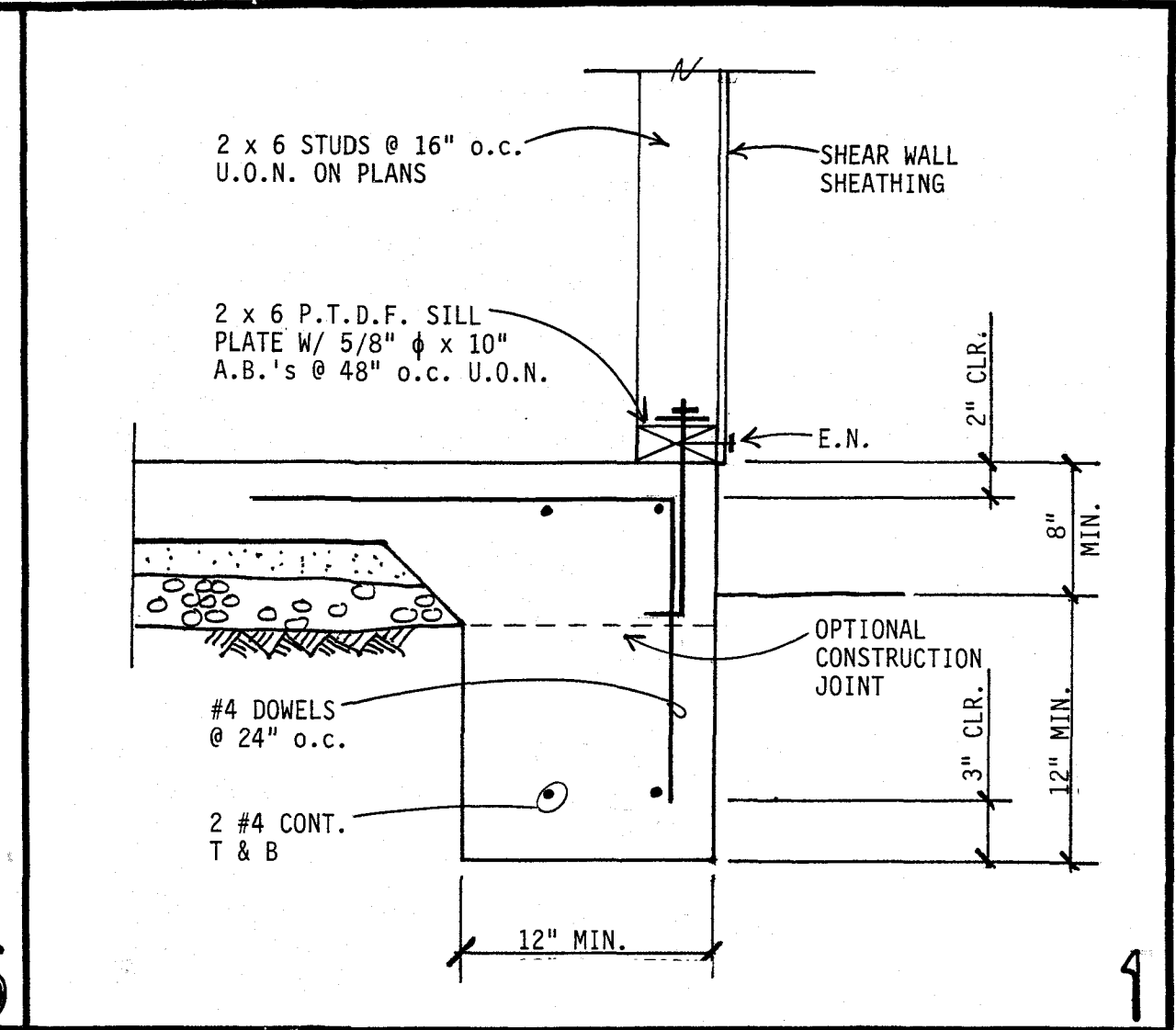
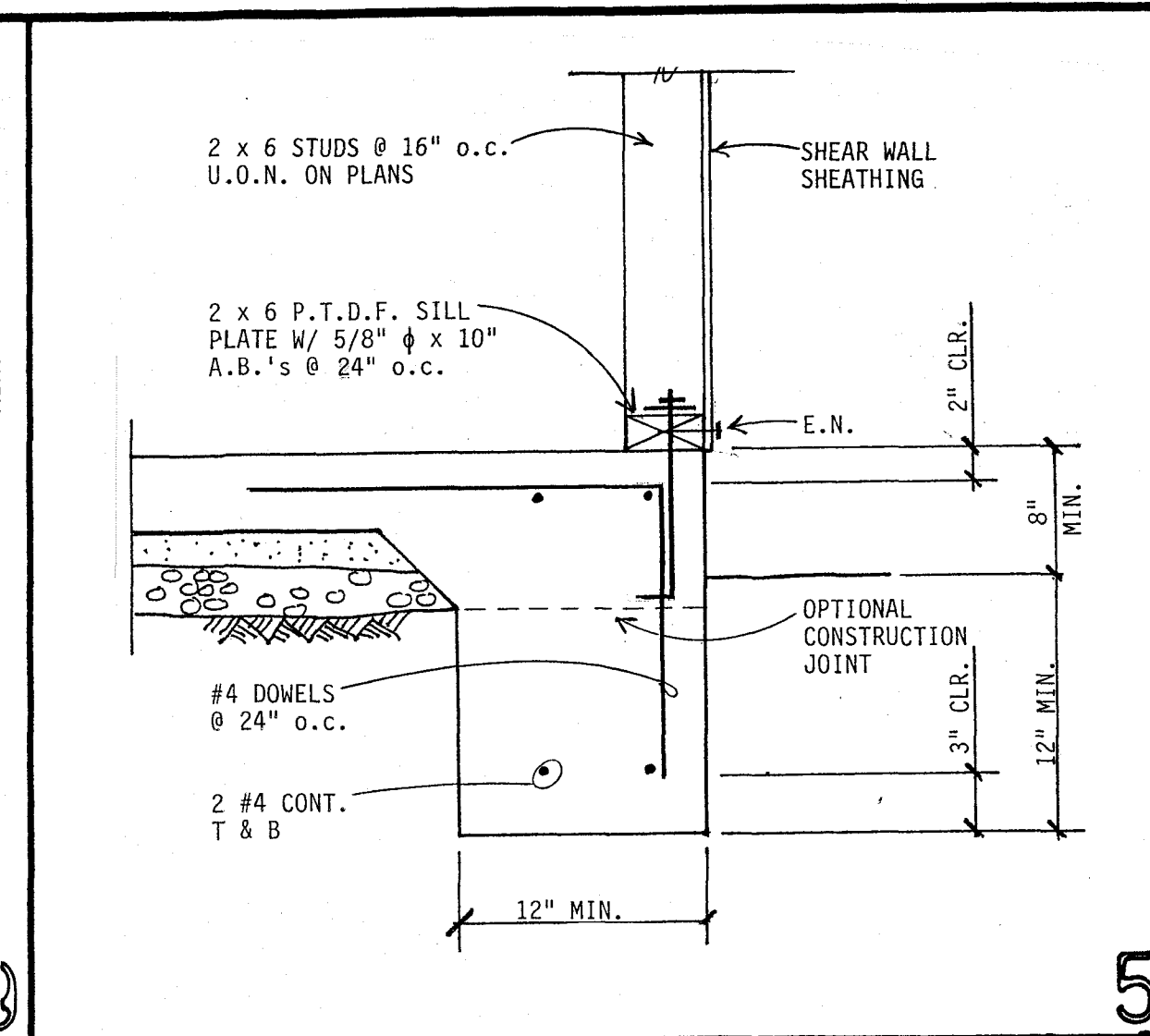
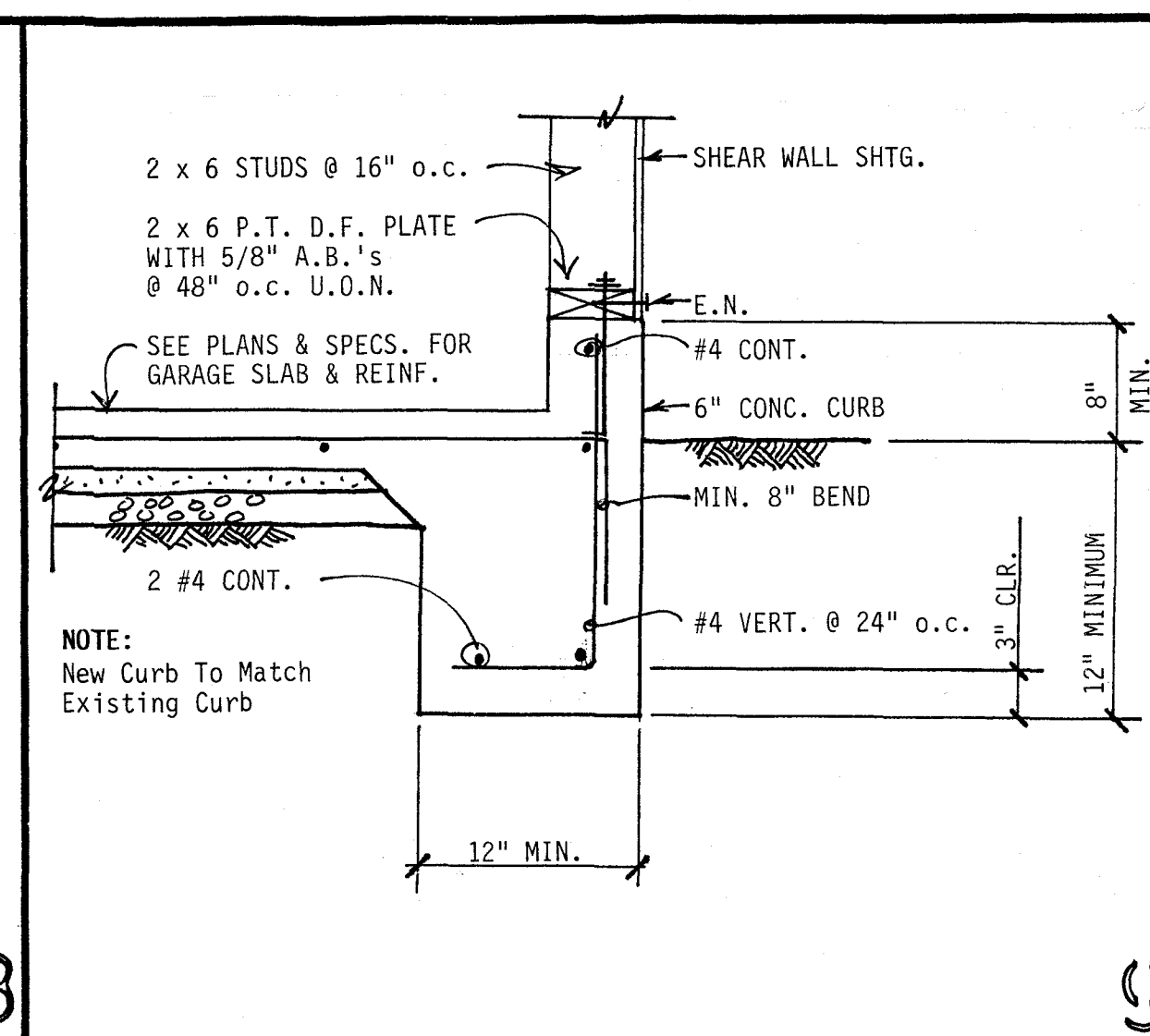
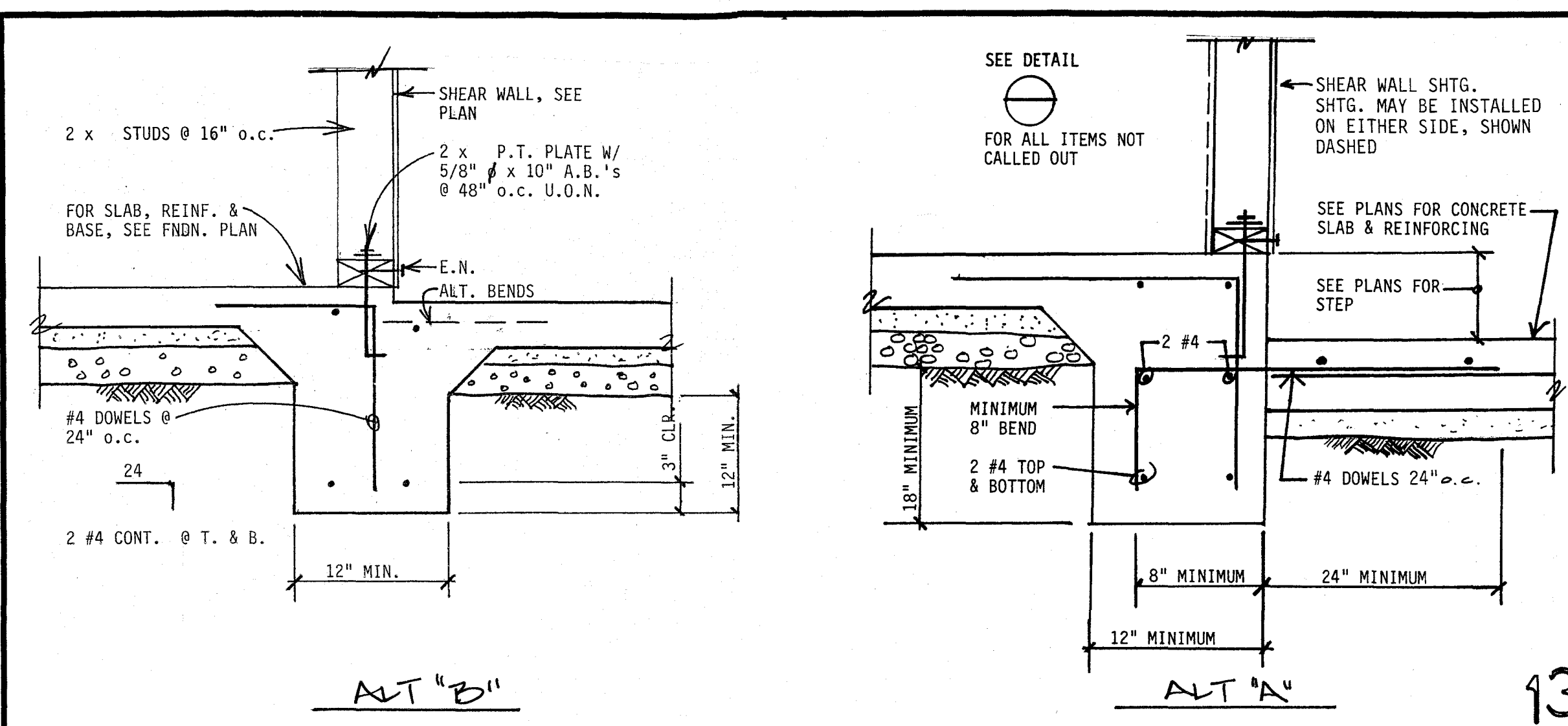
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951-366-6666 PHONE 1-818-366-7700 FAX

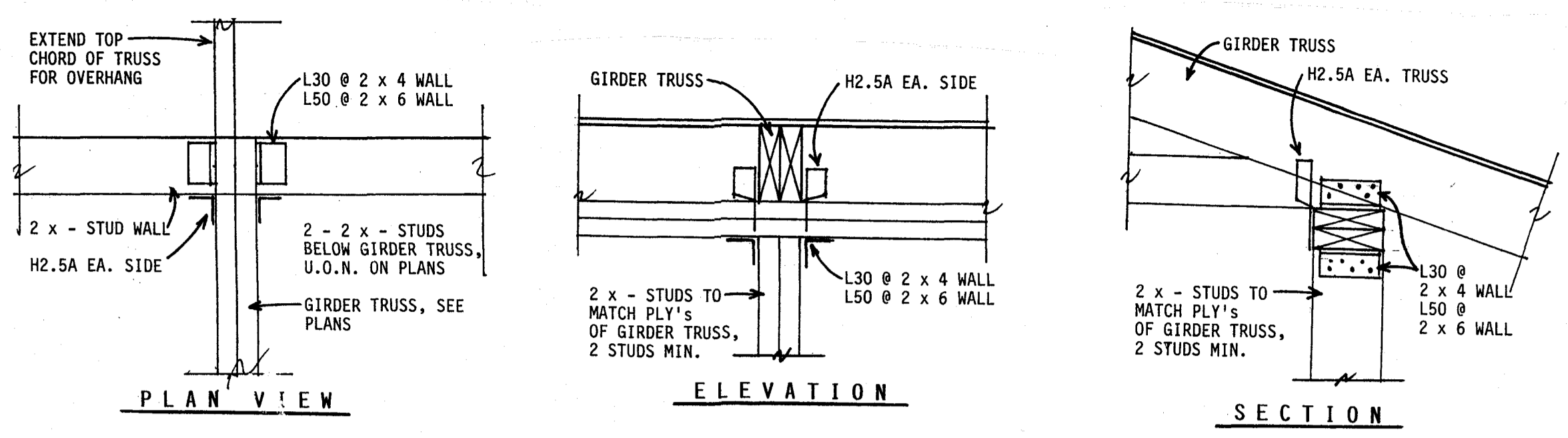


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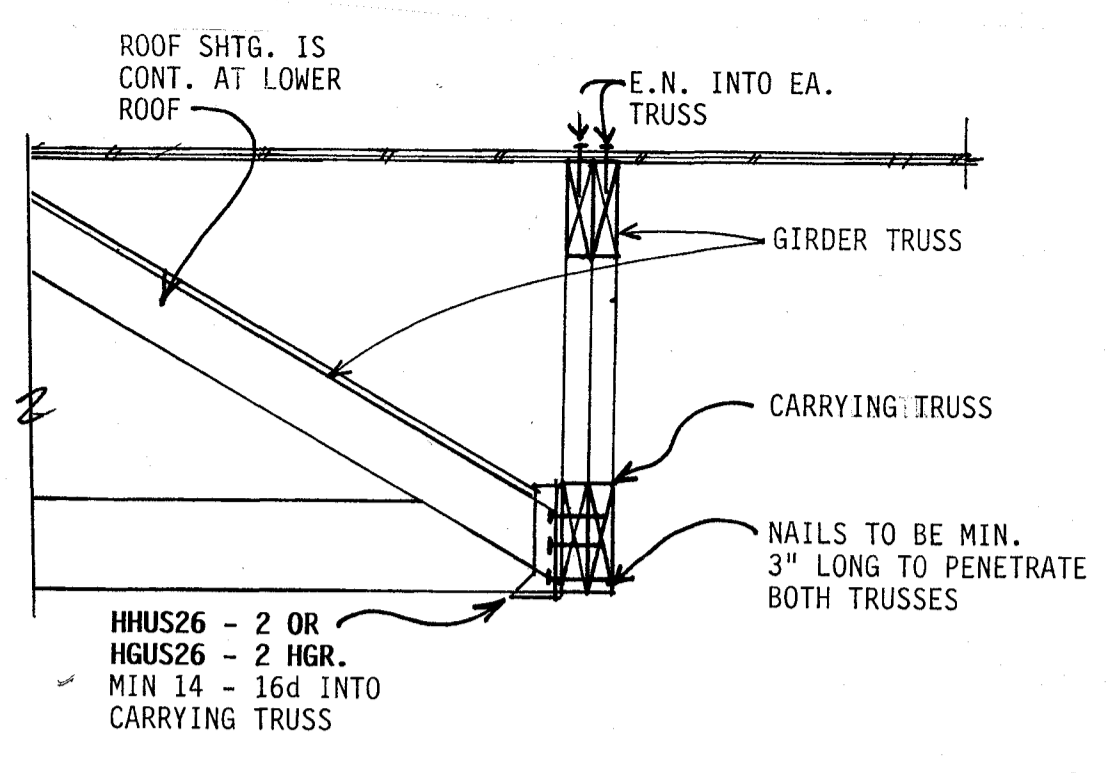
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1412 LISBON LANE  
PEBBLE BEACH, CA 93953  
APN: 010-156-021

Date	DEC 21 2016
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Drawn	
Job	
Sheet	S3.1
Of	Sheets

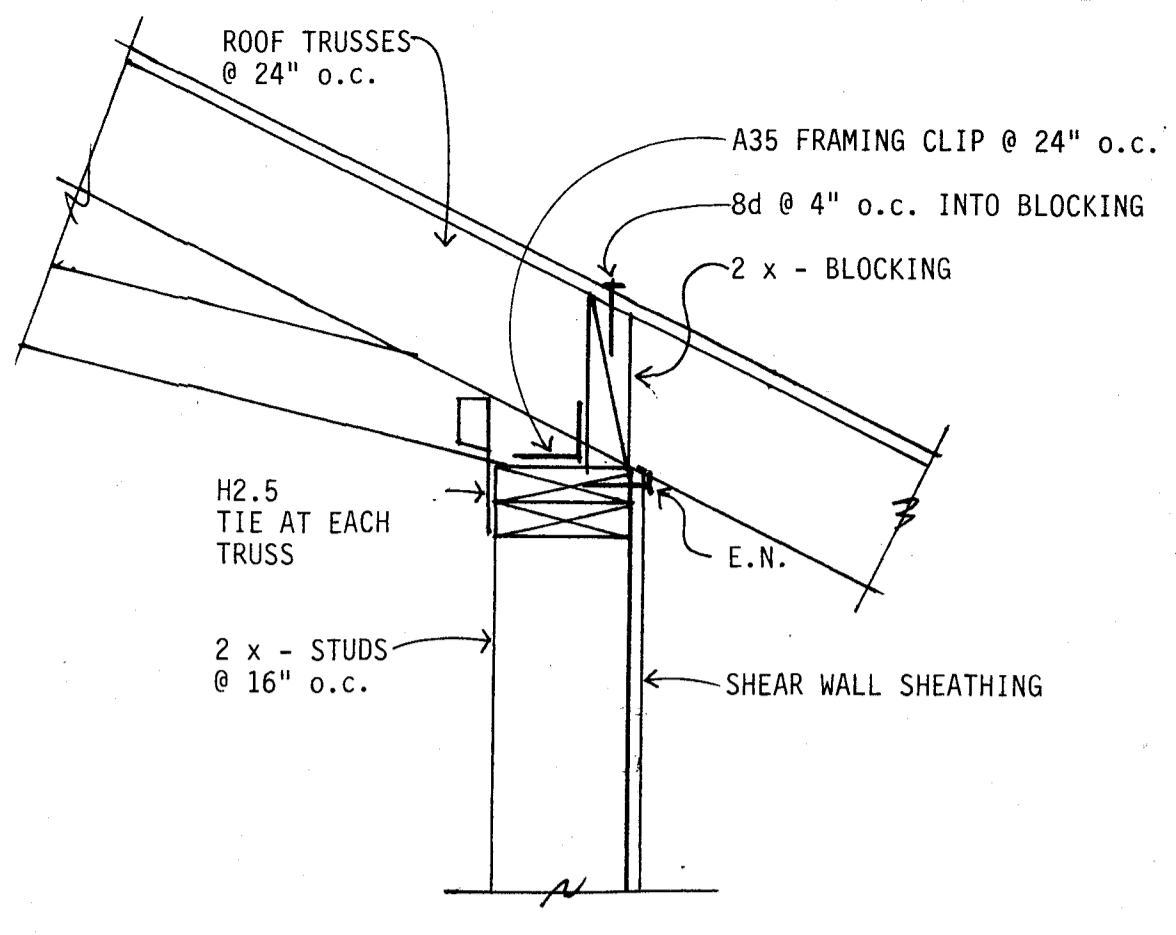




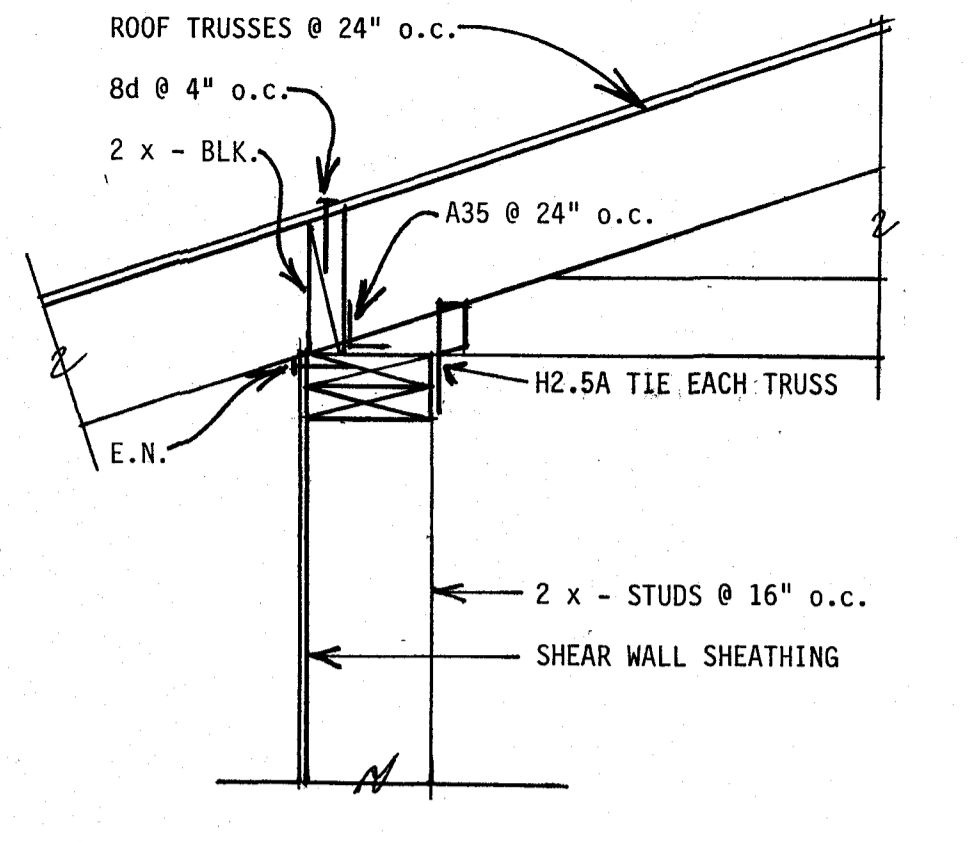
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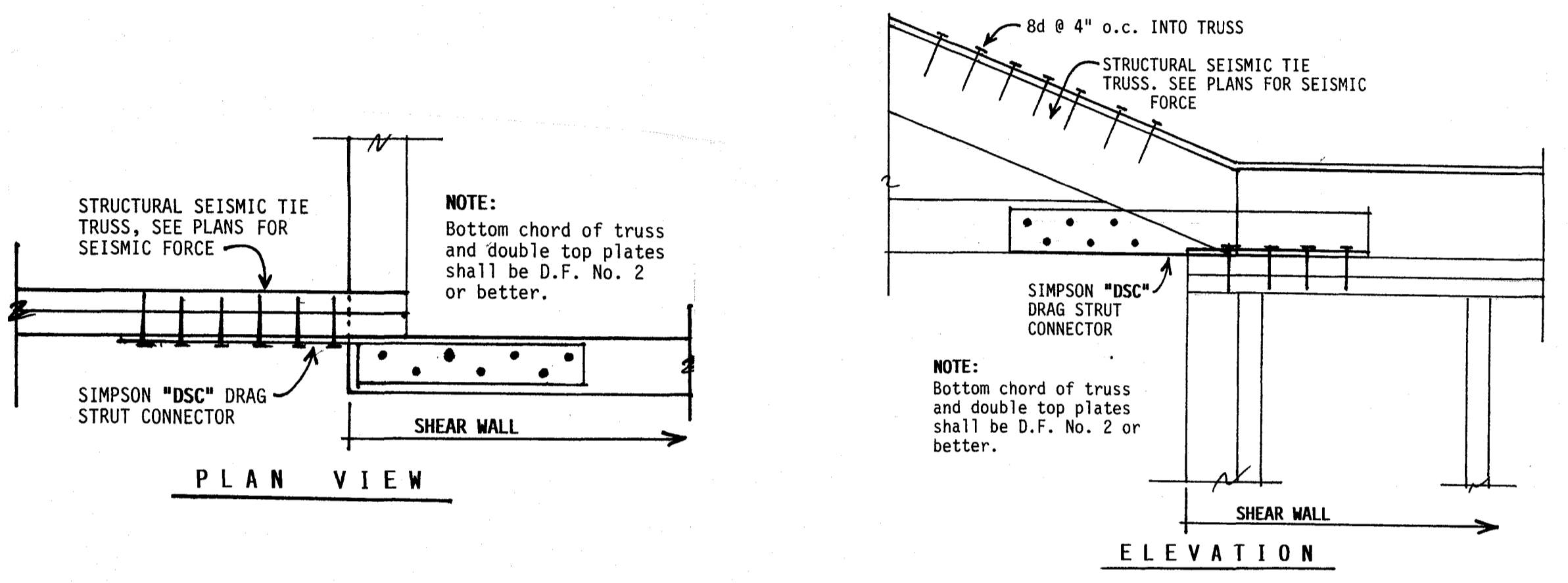
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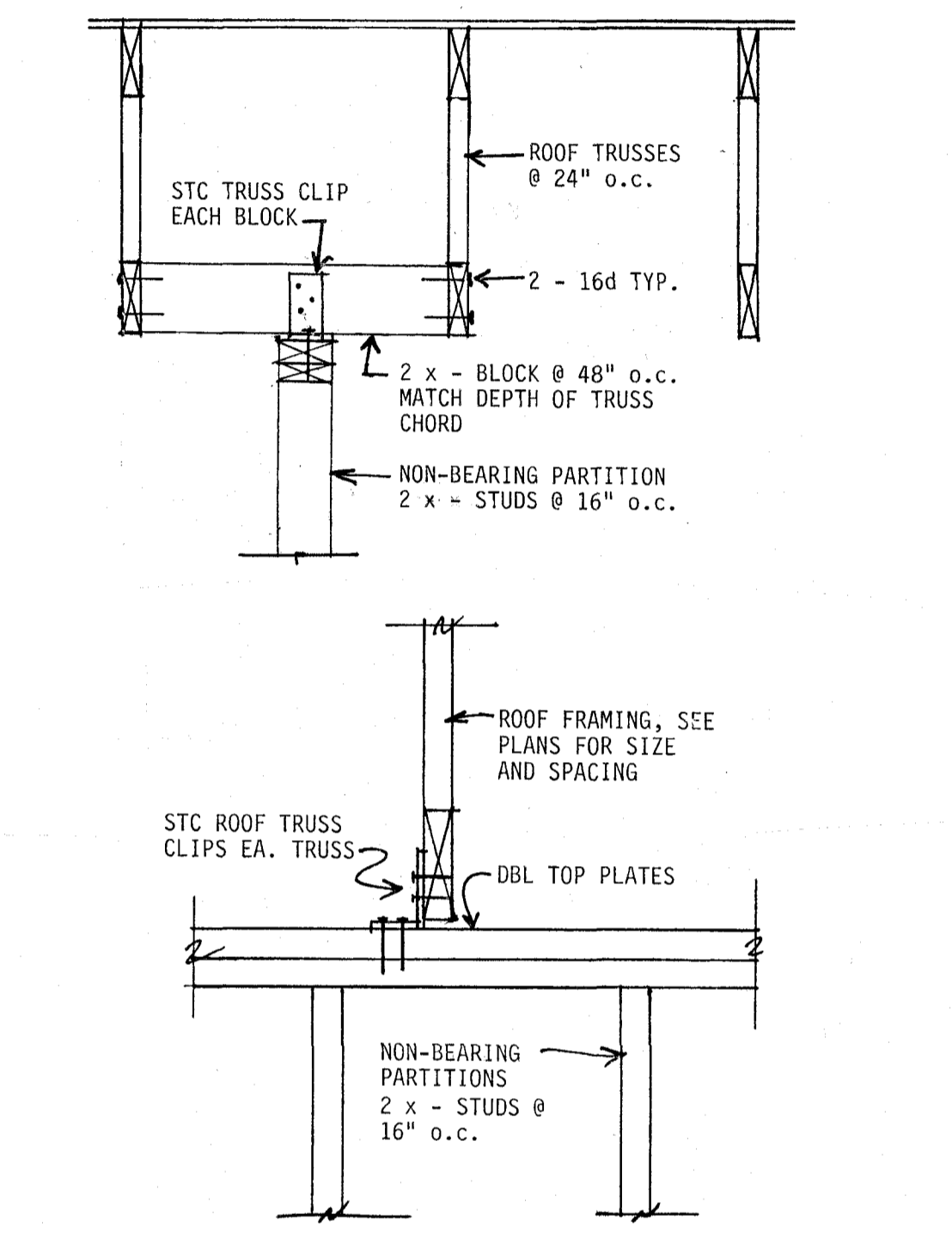
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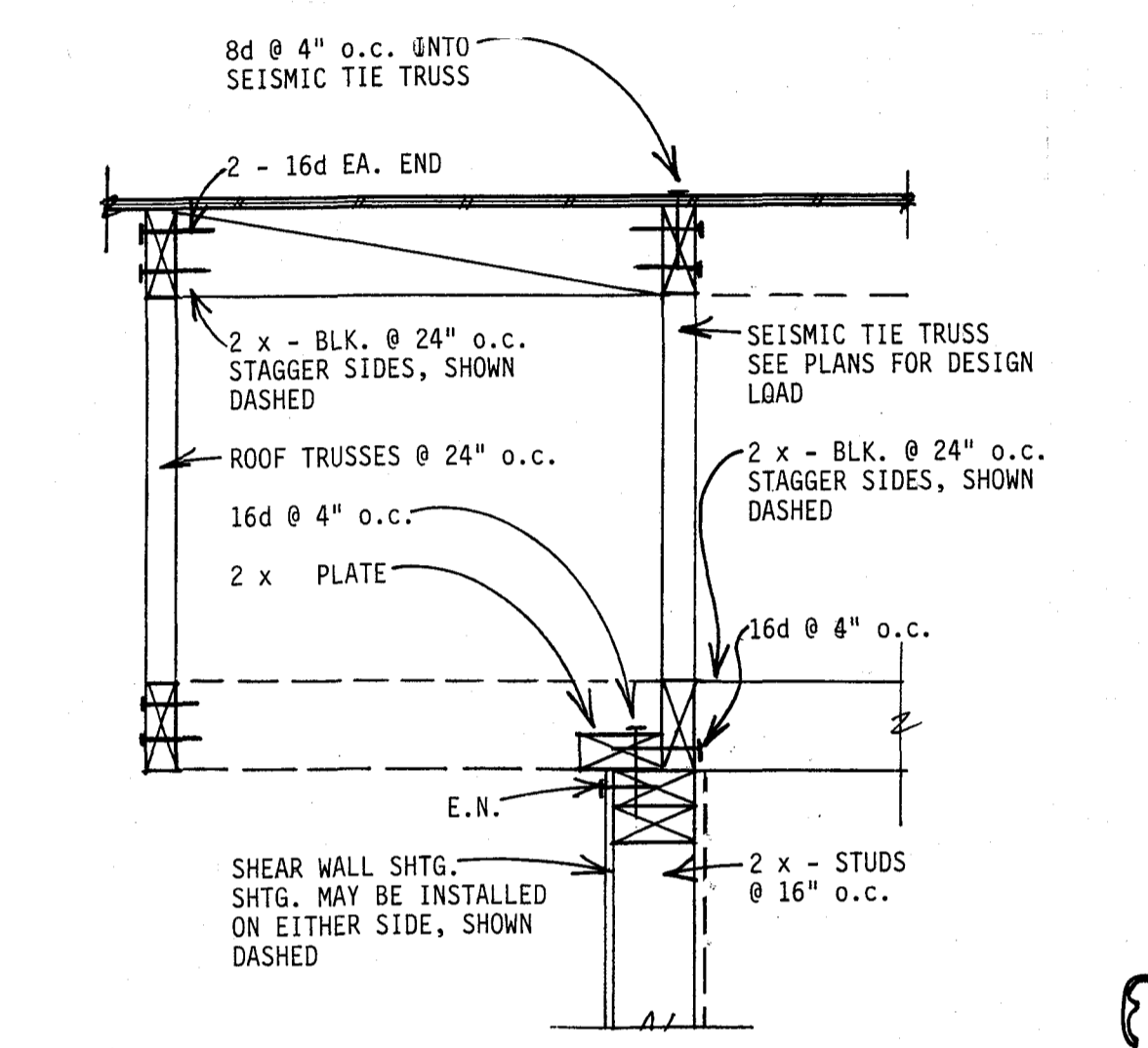
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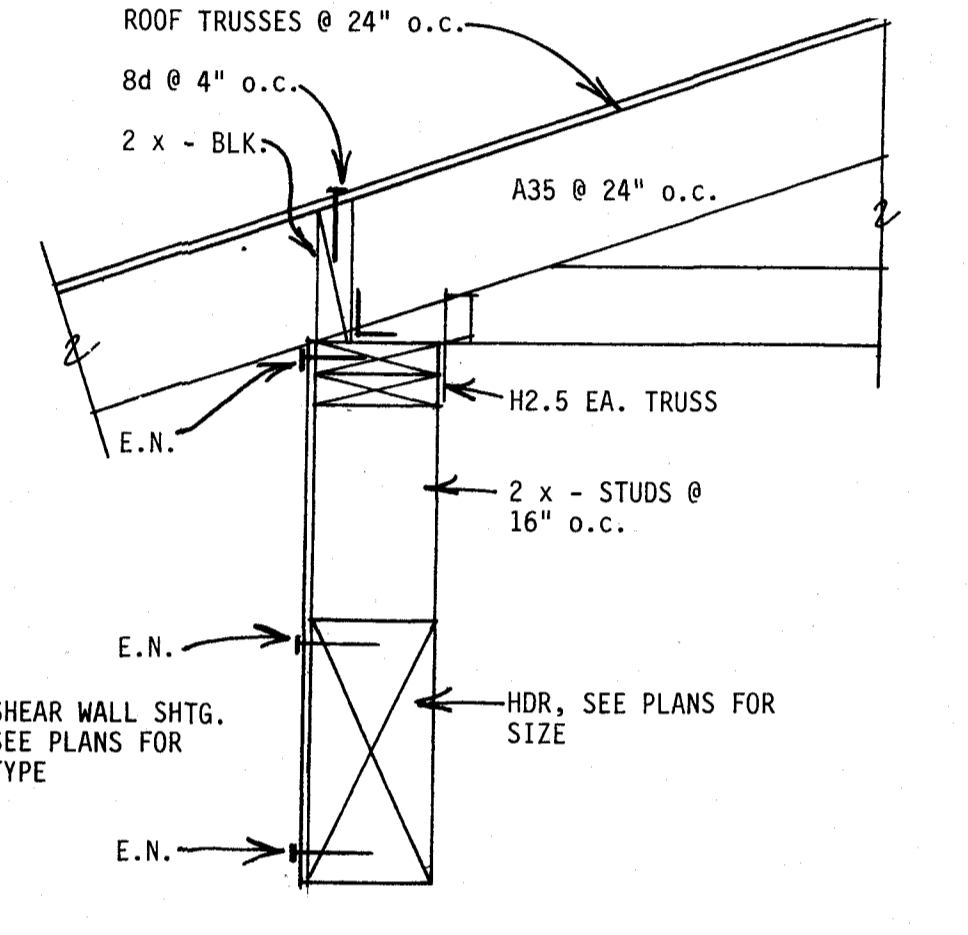
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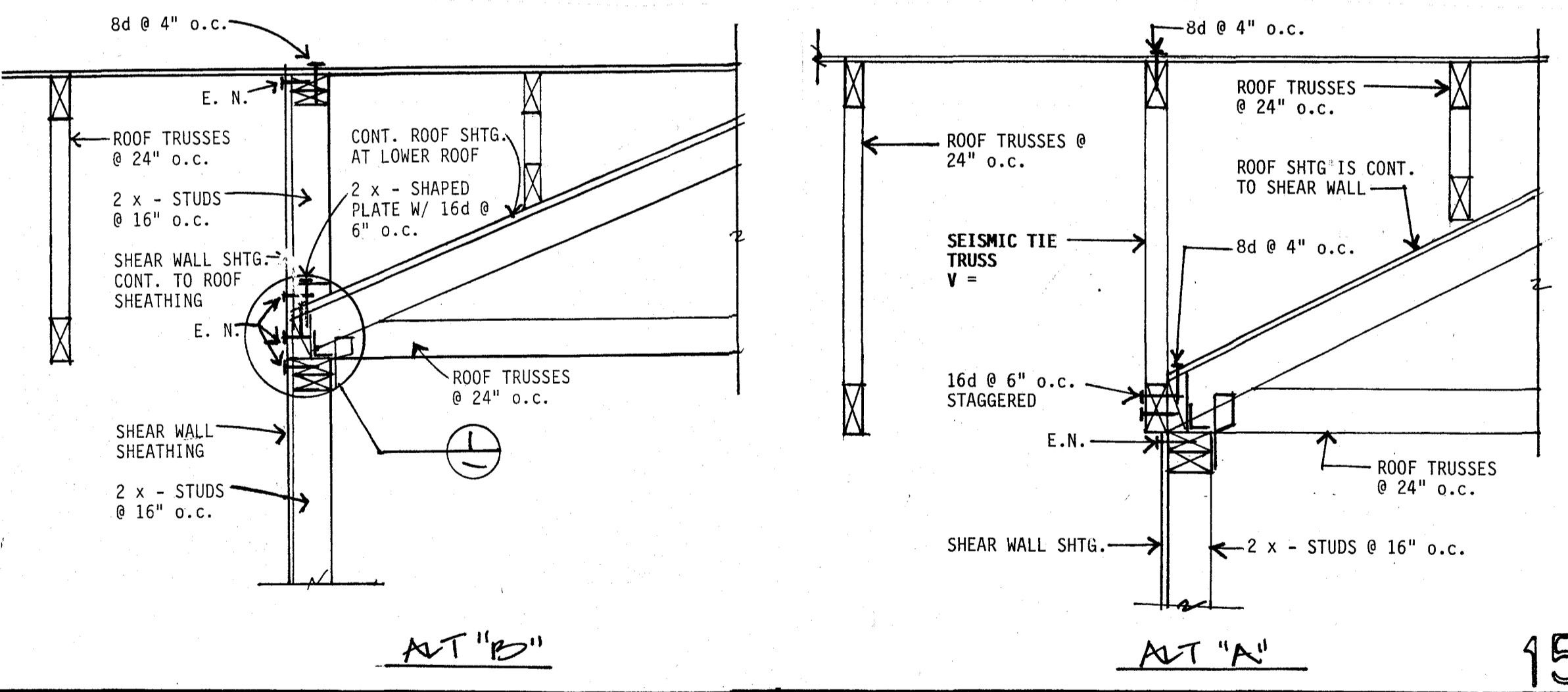
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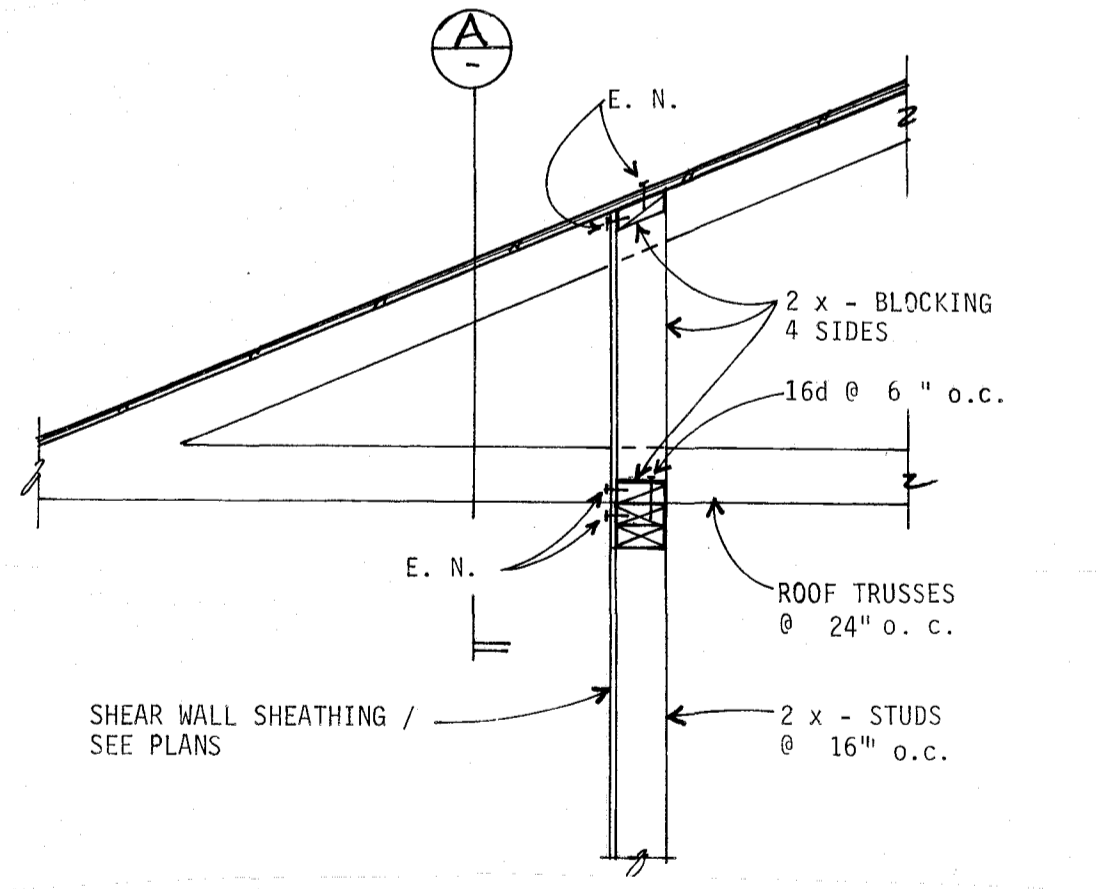
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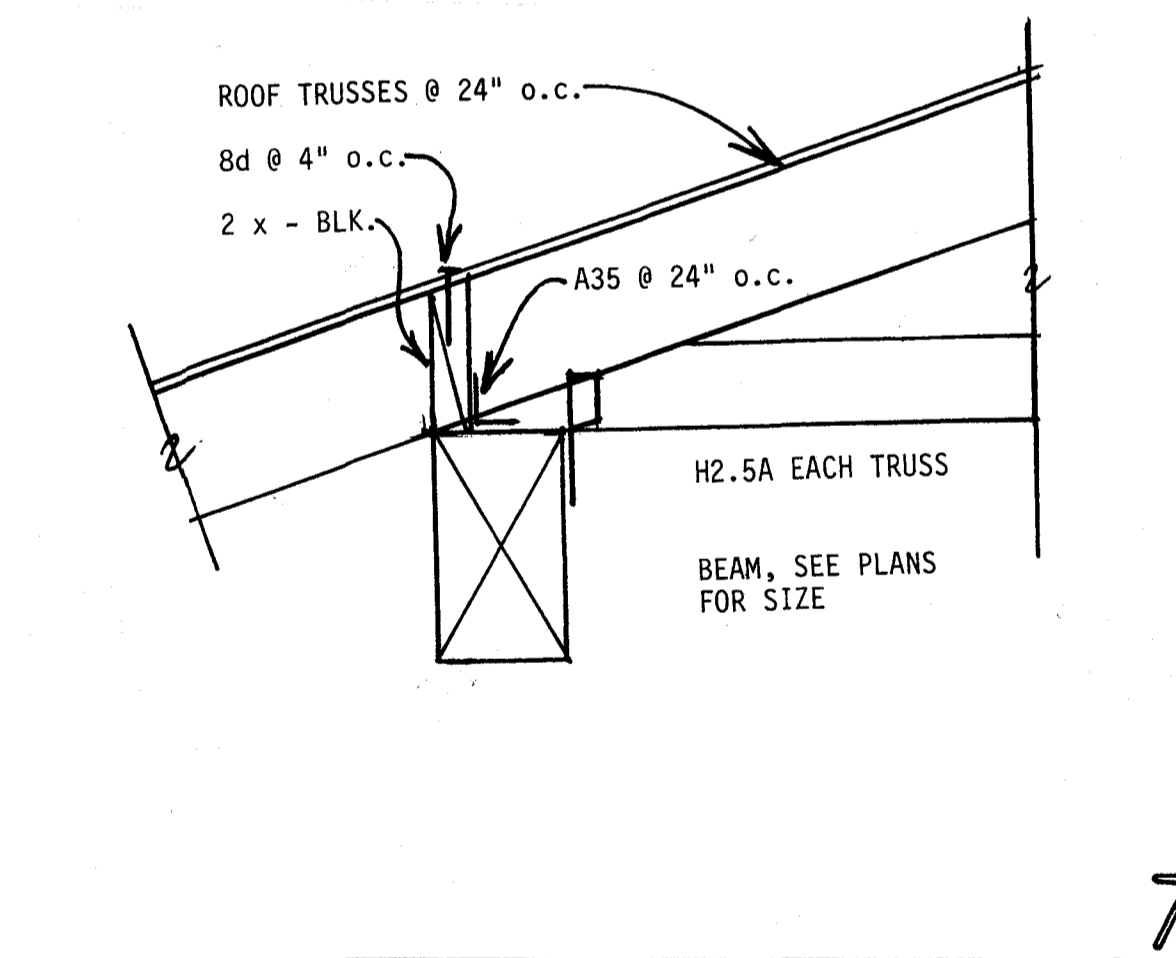
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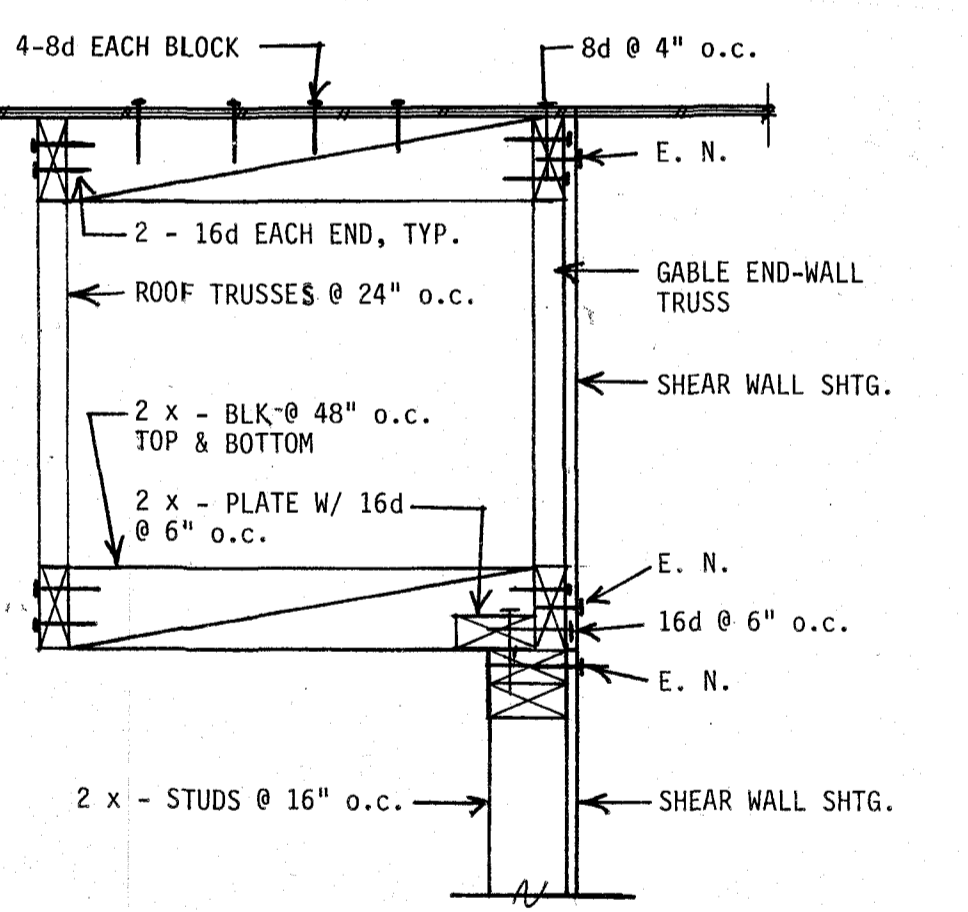
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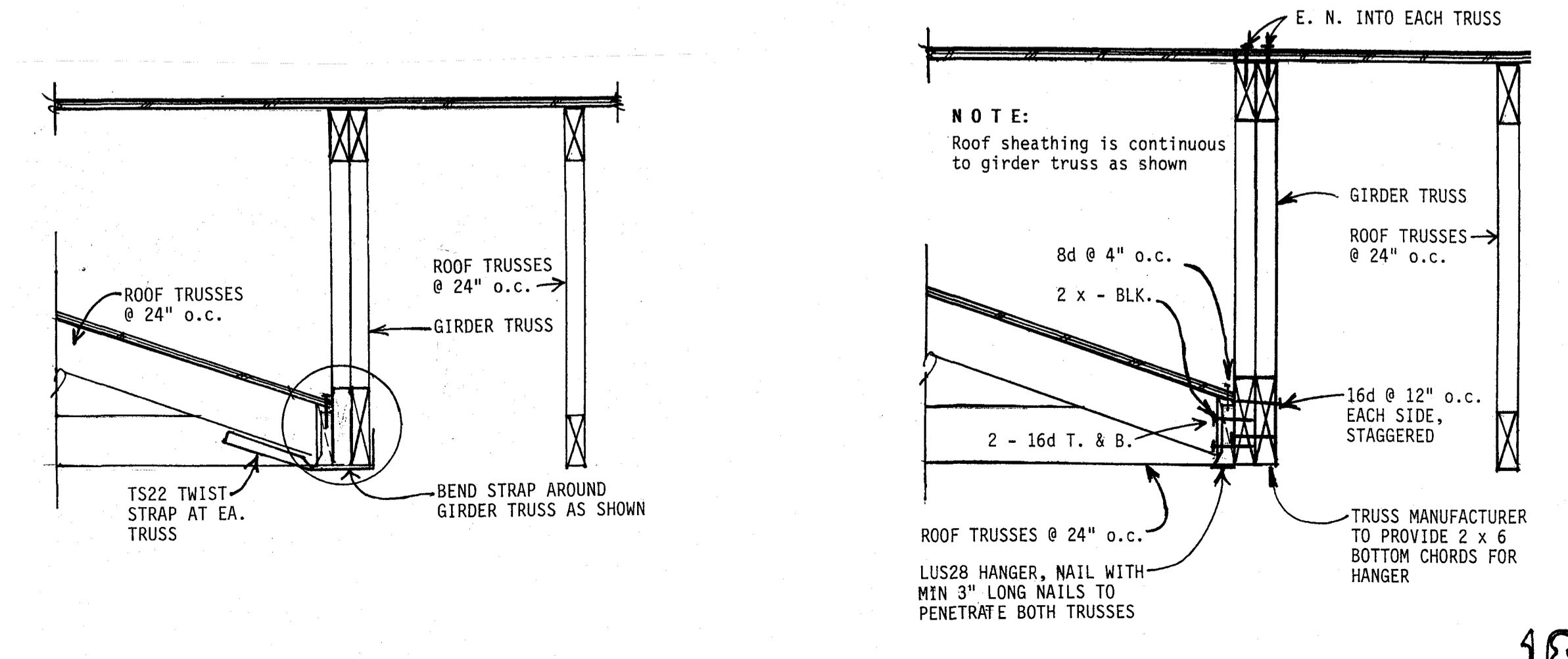
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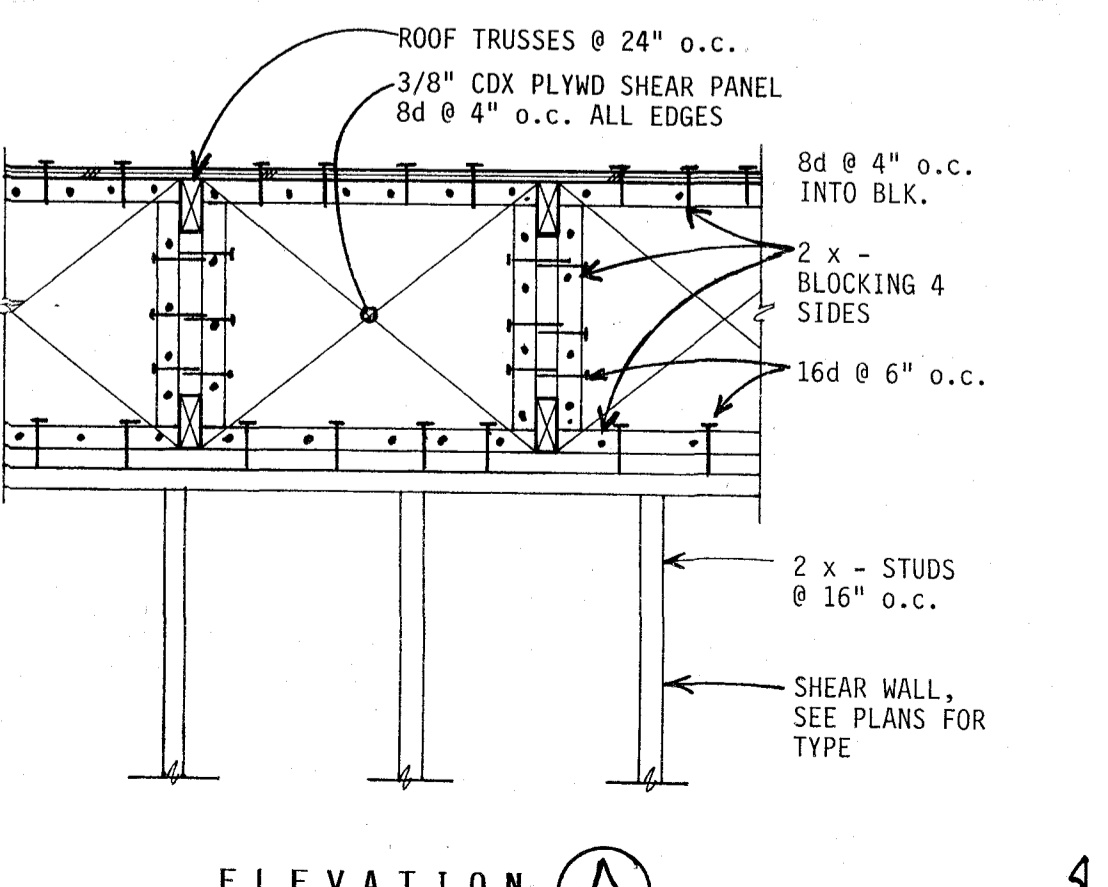
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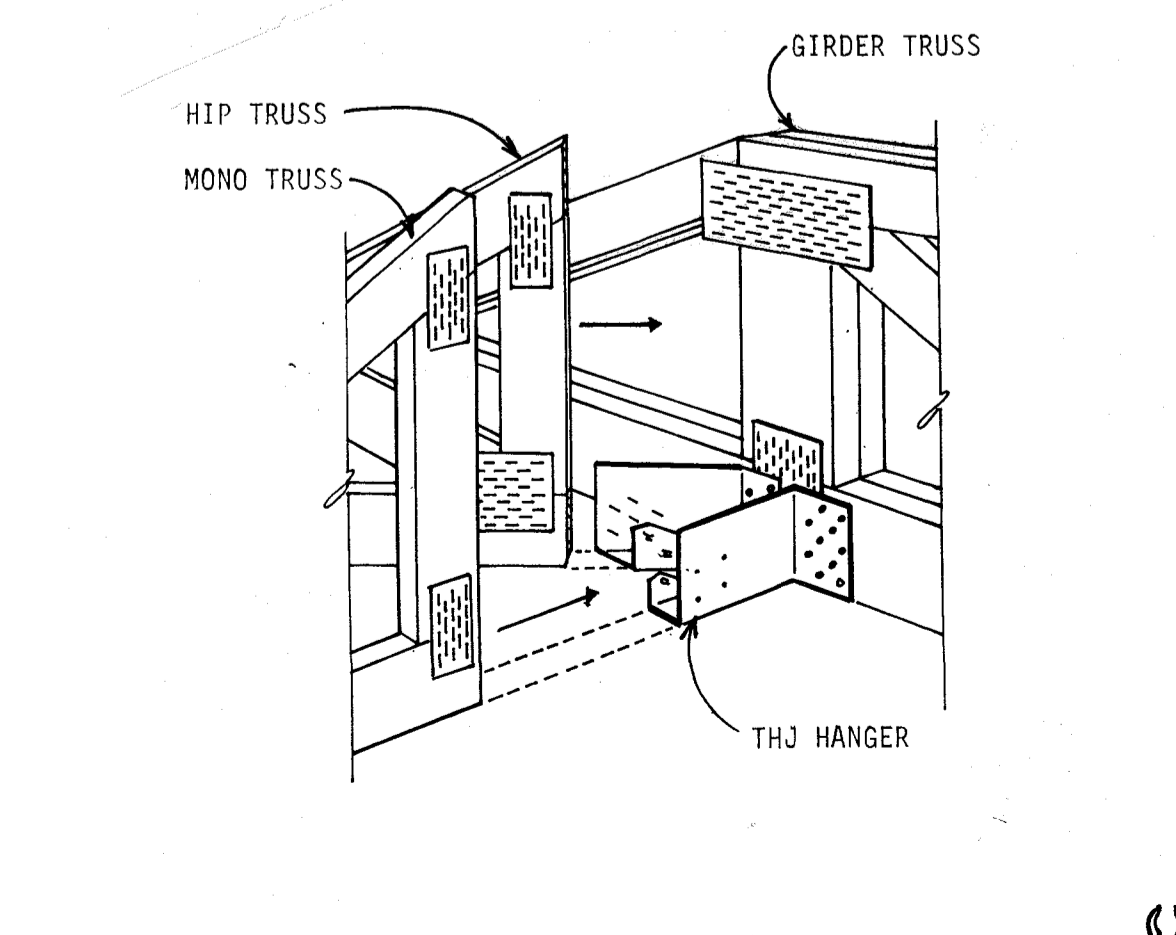
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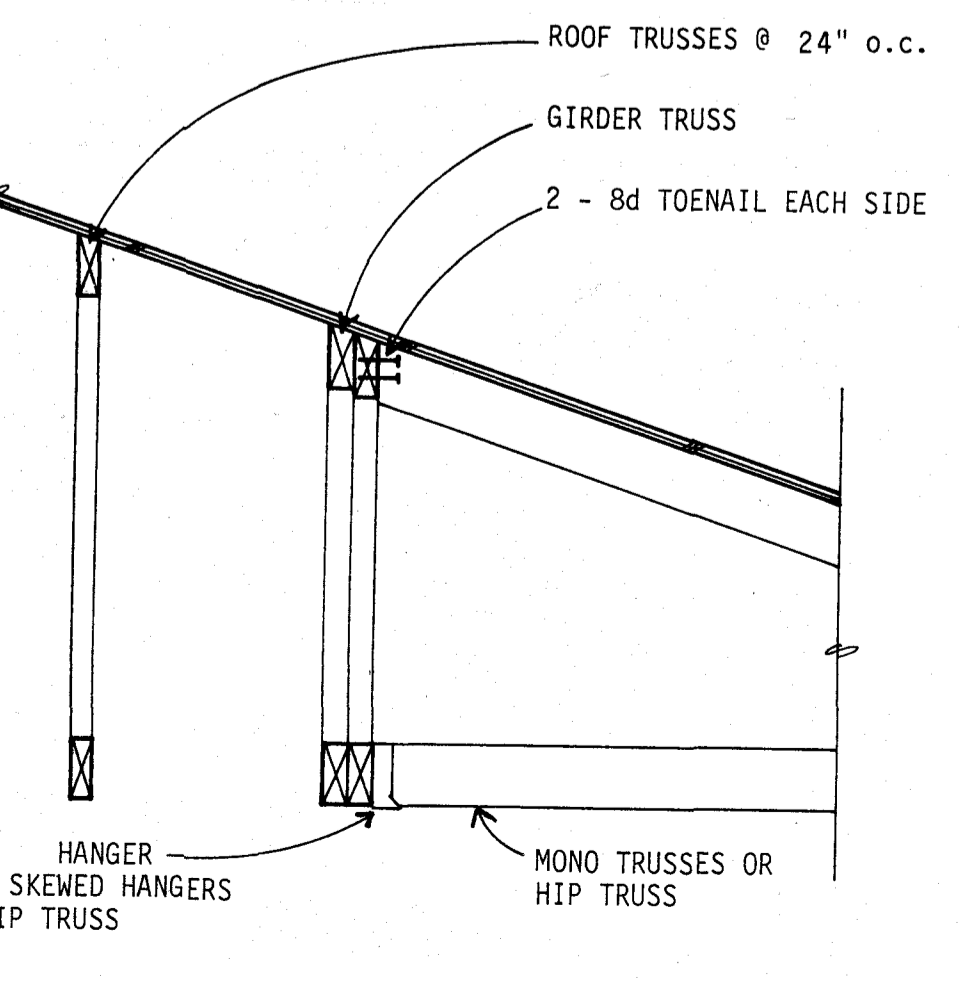
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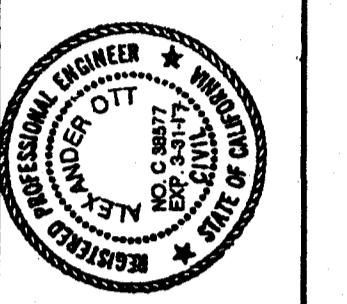
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28

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ROOF FRAMING DETAILS

NASE RESIDENCE  
1412 LISBON LANE  
PEBBLE BEACH, CA 93953  
APN: 010-156-021

Date	DEC 21 2016
Scale	
Drawn	
Job	
Sheet	S4.1
Of	Sheets

**LANDSCAPE SCOPE FOR DESIGN:**

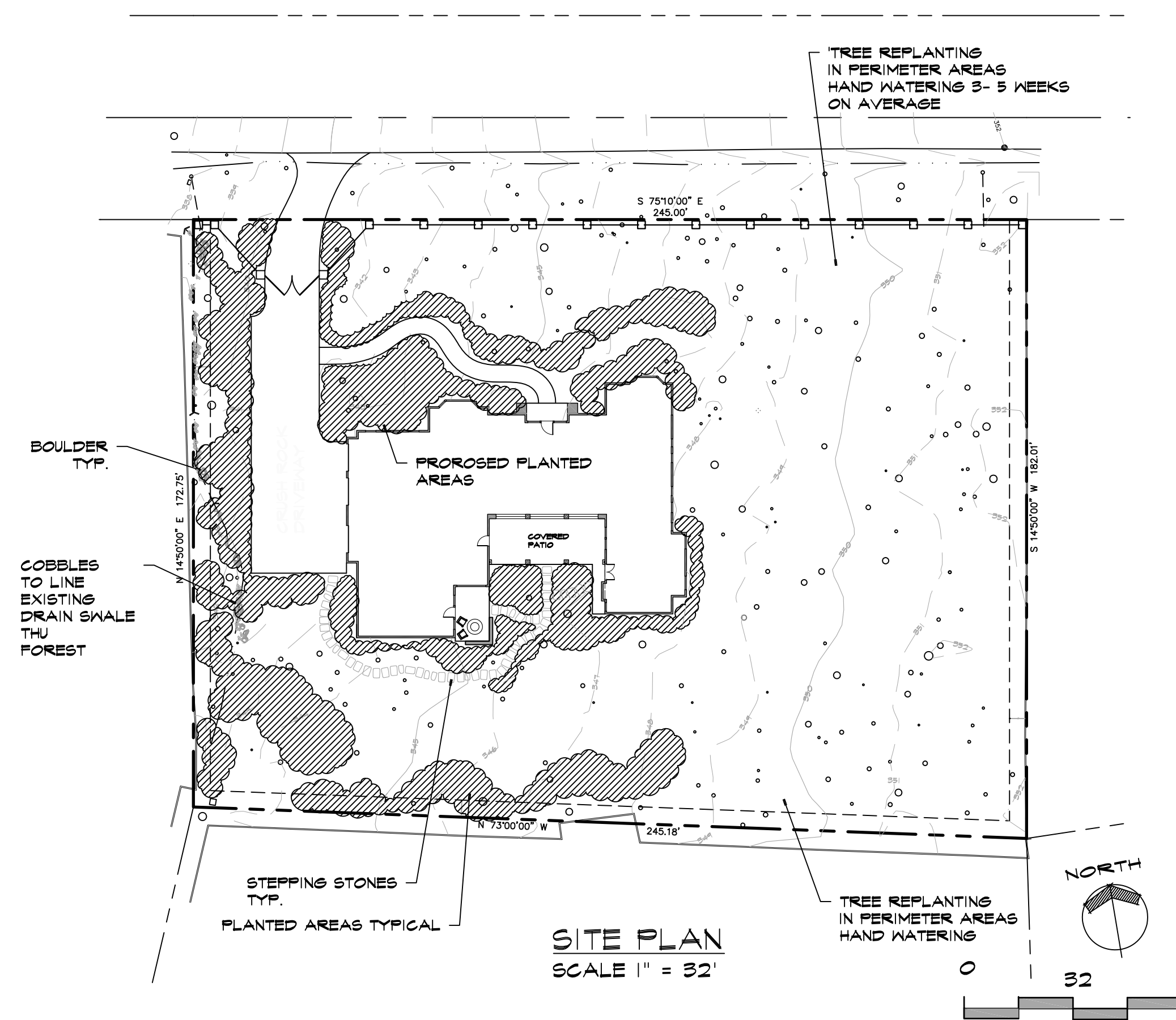
- THESE PLANS HAVE BEEN PREPARED IN CONJUNCTION WITH ARCHITECTURAL PLANS FOR THIS PROPERTY TO REVIEW THE LANDSCAPE LAYOUT, DWELLING FIRE PROTECTION, LANDSCAPE PROPOSED MONTHLY AND YEARLY WATER USE. AS WELL THE WATER DELIVERY ZONES IN THE GARDEN HAVE BEEN DELINEATED AS WELL AS SUGGESTED PLANT SPECIES FOR THE OVERALL PLANT PALETTE. PLANTING LAYOUT FOR THE SITE AND AROUND THE BUILDING, IRRIGATION AND LANDSCAPE COMPLETES THE PROPERTY LANDSCAPE PLANS
- LANDSCAPE IRRIGATION PLAN. EFFICIENT DELIVERY ZONES ESSENTIALLY THE WATER ADAGE NEEDS TO BE AWARE OF WATERING FREQUENCY:
  - REGULAR WATERING = WEEKLY OR EVERY 3-4 DAYS IN VERY HOT OR WINDY CONATIONS
  - MODERATE WATERING = 10-14 DAYS DEPENDING ON CLIMATE CONDITIONS
  - OCCASIONAL WATERING = EVERY 3-4 WEEKS
  - INFREQUENT WATER = DEEP WATER EVERY 4-6 WEEKS IN SUMMER / DRY PERIODS
- OF COURSE WATERING SCHEDULES THROUGH THE YEAR ARE DEPENDENT UPON A RANGE OF FACTORS INCLUDING AGE OF PLANTING, SOIL TYPE, MICROCLIMATE, EXPOSURE AND OF COURSE WEATHER. NEW PLANTINGS REQUIRE THE OBVIOUS - MORE WATER EARLY ON THAN WHEN THESE PLANTS ARE ESTABLISHED IN THE PLANTING BED.
- LANDSCAPE PLANTING FOR THE PROPERTY. PLANT SPECIES, SIZE CONTAINERS AND MASSING LOCATIONS. ALL PLANTS ARE TO SUGGESTED FOR THE APPROPRIATE LOCATION, USE AND WATER NEEDS. ADDITIONALLY TOPSOIL SPECIFICATIONS AND ETC.
- PLANTINGS HAVE BEEN IDENTIFIED AS TO THEIR HYDROZONE. THE SENSIBLE BUT MORE WATER ALLOCATIONS ARE CLOSER TO THE BUILDING & 'PEOPLE SPACES.'

ZONE PLANTING: ALSO REFERRED TO AS HYDRO-ZONE; A CORRELATION TO THE AMOUNT OF POTENTIAL WATER USED. THIS IS EXPANDED IN THE MAWA CALCULATIONS ON SHEET L-3.

**ZONE #1:** THIS ZONE OCCUPIES AND IS CONFINED TO THE OUTDOOR LIVING AREA NEAREST THE HOUSE STRUCTURE. PLANTING IN THESE AREA ARE CLIMATE SENSITIVE TO A MEDITERRANEAN LATITUDES AND INCORPORATES MANY NATIVE PLANTS DRAWN FROM A CALIFORNIA FLORA. PERMANENT BOUNDARIES SUCH AS WALKWAYS, LOW STONE WALLS & ROCKS DEFINE THESE PLANTINGS FROM THE TRANSITION ZONE AND NATIVE HABITAT ZONE. THE MOST ORNAMENTAL PLANTS ARE CONTROLLED IN RAISED & ENCLOSED PLANTERS CLOSEST TO THE HOUSE. NO EXOTIC SPECIES CAPABLE OF NATURALIZING INTO THE SURROUNDING AREA ARE ON THIS PLANTING PALETTE.

**ZONE #2:** PLANTING IN THIS ZONE IS MADE-UP OF HORTICULTURAL COMPATIBLE LATITUDES AND NATIVE CALIFORNIA FLORA. WATER SAVING (DROUGHT RESISTANT) PLANTS ARE USED.

**ZONE #3:** NATIVE HABITAT AND PLANTINGS. SEVENTY (70 FEET) FROM THE STRUCTURE IS BORDERED BY THE PERIMETER FENCES AT THE PROPERTY EDGE ON THIS (2) TWO ACRE SITE. TO ASSURE THE BEST OUTCOME A TWO-YEAR OVERSIGHT MAINTENANCE PLANT PROGRAM IS PROPOSED. PROCEDURAL METHODOLOGY AND TIMING WILL BE SPELLED OUT IN THE WORKING DOCUMENT LANDSCAPE DESIGN SET.



**Landscape Design Statement:**

I Scott Hall, a registered California Landscape Architect (#3405), certify that these landscape Planting and Irrigation Plans comply with all Monterey County and Local Coastal Plan conditions for approval and intent thereof.

The Planting Plans include the use of Native California Water Saving ("drought tolerant") plant species and do not include non-native or invasive plant species. No Lawn is used on the property.

The responsible and appropriate Water Saving plant species selected here is reflected in the Irrigation use of a LOW FLOW water saving Irrigation delivery system. The water conserving system is primarily Drip type irrigation. No Irrigation is designed around the existing Oak & Pine Trees.

Scott Hall, registered California Landscape Architect #3405

**SHEET INDEX:**

- 1 PROJECT TITLE SHEET
- 2 FIRE SAFETY
- 3 WATER USE INFORMATION SHEET
- 4 LANDSCAPE IRRIGATION
- 5 PLANTING PLAN SITE

# NASE GARDEN

## LANDSCAPE PLANS FOR PLANNING APPROVAL

PLN 150 669

Revisions BLD. & DW MOVED 10-23-2015 DW Reduced / E Path removed walk front entry reconfigured 03-29-2016 Remove backyard pergola / add Mt. Sitting Area 11-29-2016	
Hall Landscape Design Landscape Architects #3405 582 Lighthouse Avenue Pacific Grove, Ca 93950 (831) 655-3808 fax 655-3854 e-mail scotthalllandscape.com	
Werner Nase 1412 Lisbon Lane Pebble Beach, CA APN 008-232-003	
Title Sheet	
Page Title:	
Job #	1515
Date	11-29-2016
Revision	#3
Drawn By	MASH
Sheet	
L-1 of: 5 Sheets	

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## FUEL MANAGEMENT Proposed Management Plan

This Fire / Fuel Management Plan shows how the defensible space has been thought out against spread of fire from the Dwelling. Existing Landscape & the proposed Landscape Planting points up how vegetation around proposed structures, driveway, paths and open space will be maintained to reduce fire fuel loads.

1. Roofing material is the single most important item in fire safety. Landscaping is second. Any plant and any building can burn given the conditions. However a properly designed and maintained landscape will reduce the hazard of fire. Landscape items which are reviewed here and exemplified in the planting plan are:

- Minimize or eliminate highly flammable plants
- Reduce chances for a "Fire Ladder"
- Create a fuel break around your home
- Space new trees and prune and thin old wood on existing trees
- Consider slope, aspect and typical wind direction

2. Existing Natural vegetation shows the methodology for retaining and reducing fuel loads for existing tall grass areas to be converted to low stature Meadow grasses and herbaceous plants & maintained at 18" tall and less that 12".

3. 30 FOOT ZONE AROUND THE HOUSE:

- This Landscape Zone includes Plantings around the Building, Foundation Plantings. The zone contains trees, shrubs and groundcover's. Plants in this zone shall be the slowest to ignite & should produce the least amount of heat if burned. This Zone shall not include any plants high in oils & resins such as Pines. Thick leathery and succulent leaves are best to consider and have been because of difficulty to ignite. Maintainable in thinning and dead wooding debris is always s an important key to the process.

- Greatest 'Hydro-Zone or Water use around the Building is encouraged. Moisture content in the plant makes it harder to burn

- Walkways using crushed rock and Stepping stones are also used because they are used as a fire break.

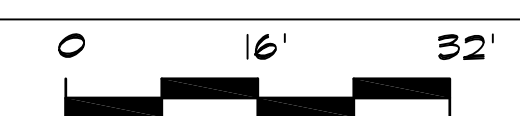
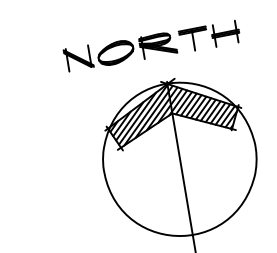
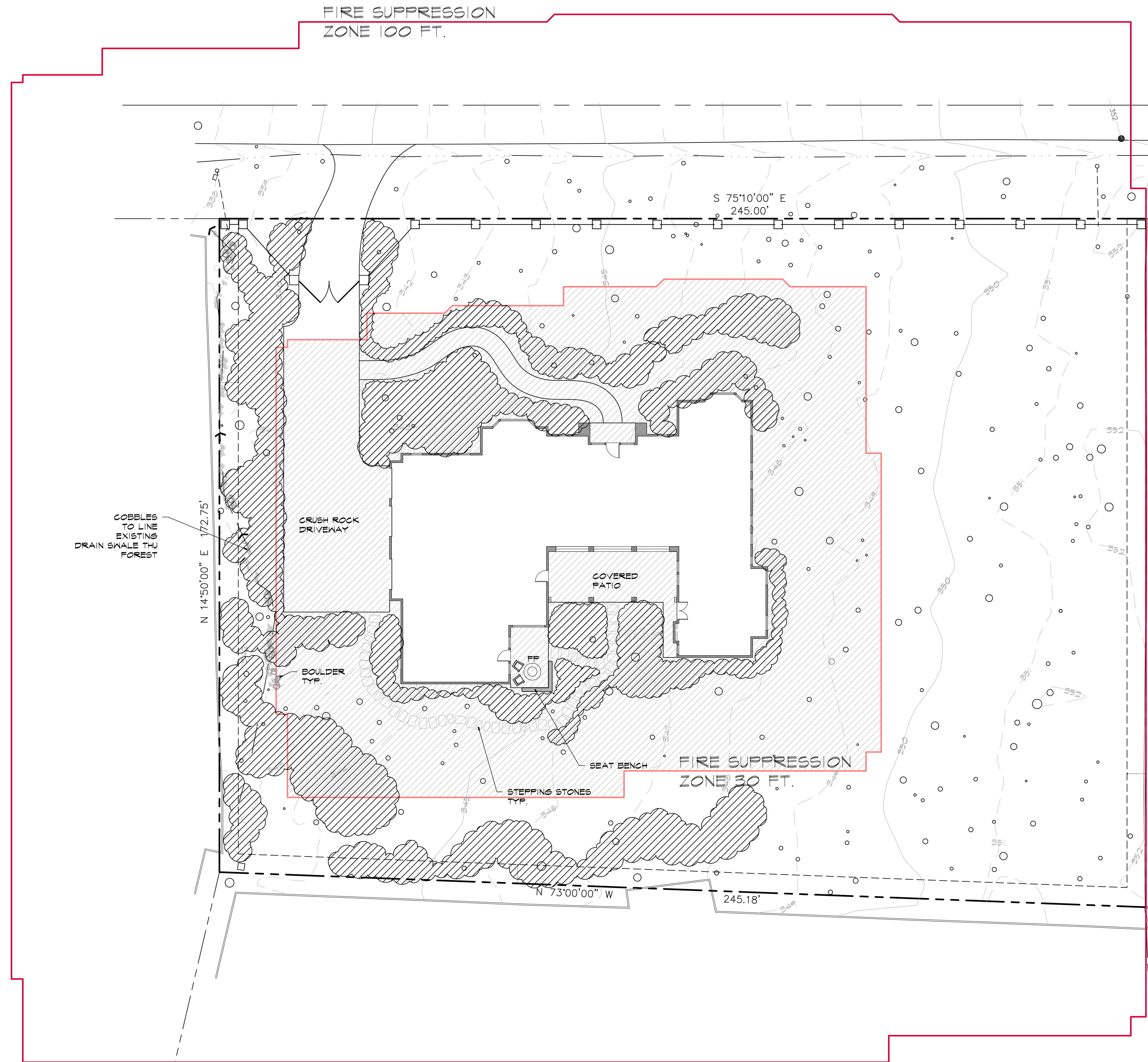
4. MIDDLE HOUSE ZONES 30-70FEET FROM THE HOUSE:

This Landscape Middle Zone transitions between the planted garden and the Open Space of the landscape on the property. Plants in this Mid-Zone will be trimmed and thinned to create well spaced groups within and adjacent to the planted garden to help prevent fire in the outer area or more Wild area. Thinning in this area further reduces any fire approaching a crown type fire. The landscape plan incorporates open spaces with seasonal low growing herbaceous annuals and low stature grasses and bare ground.

5. OUTER ZONE 70-FEET TO 100 FEET FROM THE HOUSE:

This Zone is defined as the edge of the road open space. The fringes of this zone need to be trimmed and thinned to create fuel mosaic made up of well spaced plant groupings. Reduction of the existing perimeter Acacia, a flammable species along with maintaining and cleaning neglected punning will add to the safety of this gently south -southwest sloping property.

The outer zone is made up of existing Pine & Oak trees bordered by public & private roads.



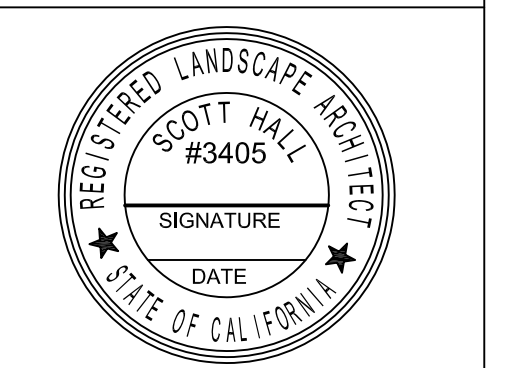
SCALE 1/16" = 1'-0"

### FIRE SAFETY PLAN IN THE LANDSCAPE

PLN 150 669

Revisions	
△	BLD. & DW MOVED 10-23-2015
△	Remove backyard pergola / add
△	Mst. Sitting Area 11-29-2016

**Hall Landscape Design**  
 Landscape Architects #3405  
 582 Lighthouse Avenue  
 Pacific Grove, Ca 93950  
 (831) 655-3808 fax 655-3854  
 e-mail scot@halllandscape.com



**Werner Nase**  
 1412 Lisbon Lane  
 Pebble Beach, CA APN 008-232-003

## Fire Safety Plan

Page Title:	
Job #	1515
Date	11-29-2016
Revision	
Drawn By	MASH
Sheet	

**L-2**  
 of: 5 Sheets

# WATER USE NOTES Proposed Planted Areas

**MAWA (Maximum Allowable Water Allocation)**  
 These calculations have been prepared by Scott Hall, Landscape Architect (State License #3405). Of this total landscape Maximum estimated use is 96,158.23 gallons yearly. This is worst case MAWA scenario based upon a high evapotranspiration rate. Total Planted Area Equals 5,185 s.f.

The Total Landscape Water Gallons per year based upon MAWA gallons used per year follows California State Assembly bill AB 1881. This MAWA (Maximum Applied Water Allowance) is the upper limit of the annual established landscape area. It is calculated as a surface number derived upon the size of the Landscape and evapotranspiration (ET<sub>0</sub>). The following mathematical proofs are completed for monthly and yearly total projected water use.

The ET<sub>0</sub> was derived from the CIMIS (California Irrigation Management Information System) located at the east end of Rancho Canada Golf Course Weather Station.

That value is an ET<sub>0</sub> yearly rate of 37.21 Station #193 Pacific Grove Pt. Pinos MAWA = 37.21 x 0.80 x 5,185 sq. ft. x 0.623 = 96,158.23 (gallons / year)

**FORMULAS AND DATA: Definitions:**  
 MAWA - Maximum Applied Water Allowance (Gallons / Year)  
 Acre-Feet / Year =  $ET_0 \times ET_{adj} \times LA \times 0.623$   
 325851

ET<sub>0</sub> = Reference Evapotranspiration (measured inches per year)  
 ET adj = ET Adjustment Factor =  $K_L / IE = 0.50 / 0.625 = 0.80$

MAWA =  $37.21 \times 0.80 \times 5,185 \text{ sq. ft.} \times 0.623 = 96,158.23 \text{ Gallons/Year}$   
 (E<sub>to</sub>) (E<sub>ta</sub>) (square feet) (Adjusted Factor)

**Monthly Totals:**  
 MAWA / Month =  $ET_0 \text{ for Month} \times \text{Annual MAWA} / \text{Annual } ET_0$

LA = Landscape Area of Site (Square Feet) = 5,185 s.f.  
 0.623 = Conversion Factor for Gallons

KL = Average Landscape Coefficient = 0.50  
 IE = Target Irrigation Efficiency of 62.5% (0.623)

ET<sub>0</sub> (Point Pinos, Pacific Grove Weather station CIMIS #193 Reference : Evapotranspiration  
 (ET<sub>0</sub> per Year) = 37.21 (Zone 1 Coastal CA) = Gallons - Per - Acre - Feet

Area Total Irrigated low volume spray & drip maximum = 5,185 square feet  
 \*Note: Plants do not occupy every square inch.

MAWA =  $37.21 \times 0.80 \times 5,185 \text{ s.f.} \times 0.623 = 29.51 / 100 \text{ or } 0.2951 \text{ (Acre Feet Per Year)}$   
 325,851

Gallons - Per - Year = 96,158.23 (MAWA)

**ETWU (Estimated Total Water Use)**  
 These calculations use plant type as a Method as comparison to the overall area figures above for the MAWA. Total Planted Area Equals 5,185 s.f. same and the Point Pinos Weather Station #193 is also used in these Calculations.

The Total Landscape Water Gallons per year based upon AREA FACTOR IS THE MAWA is 96,158. gallons. Using the ETWU Method individual plants are given a factor plus each irrigation zone is evaluated for its distributions uniformity efficiency. Plant factors of .4 and .6 were used. All Irrigated Zones are Drip supplied.

## ESTIMATED TOTAL WATER USE / ETWU

Hydrozone #	Annual ET <sub>0</sub>	Effective rainfall x	plant factor x (sq. ft.)	landscape area	DUXME x	gal conversion =	total gallons
1	37.21	4.92	0.50	1,174.00	0.85	0.623	13,892.34
2	37.21	4.92	0.40	884.00	0.85	0.623	8,368.53
3	37.21	4.92	0.50	555.00	0.85	0.623	6,567.50
4	37.21	4.92	0.40	1,473.00	0.85	0.623	13,944.40
5	37.21	4.92	0.60	1,099.00	0.85	0.623	15,605.80
				5,185.00	TOTAL		58,378.58

Annual estimated applied water = (ET<sub>0</sub>-ER) x Pf x LA x .623/ DU x ME  
 ET<sub>0</sub>=reference ET; ER=Effective rainfall (Eto for Dec-Feb); Pf=Plant factor;  
 LA= Landscape area by hydrozone; .623= conversion factor to gallons; DU=Distribution Uniformity  
 ME= Management Efficiency

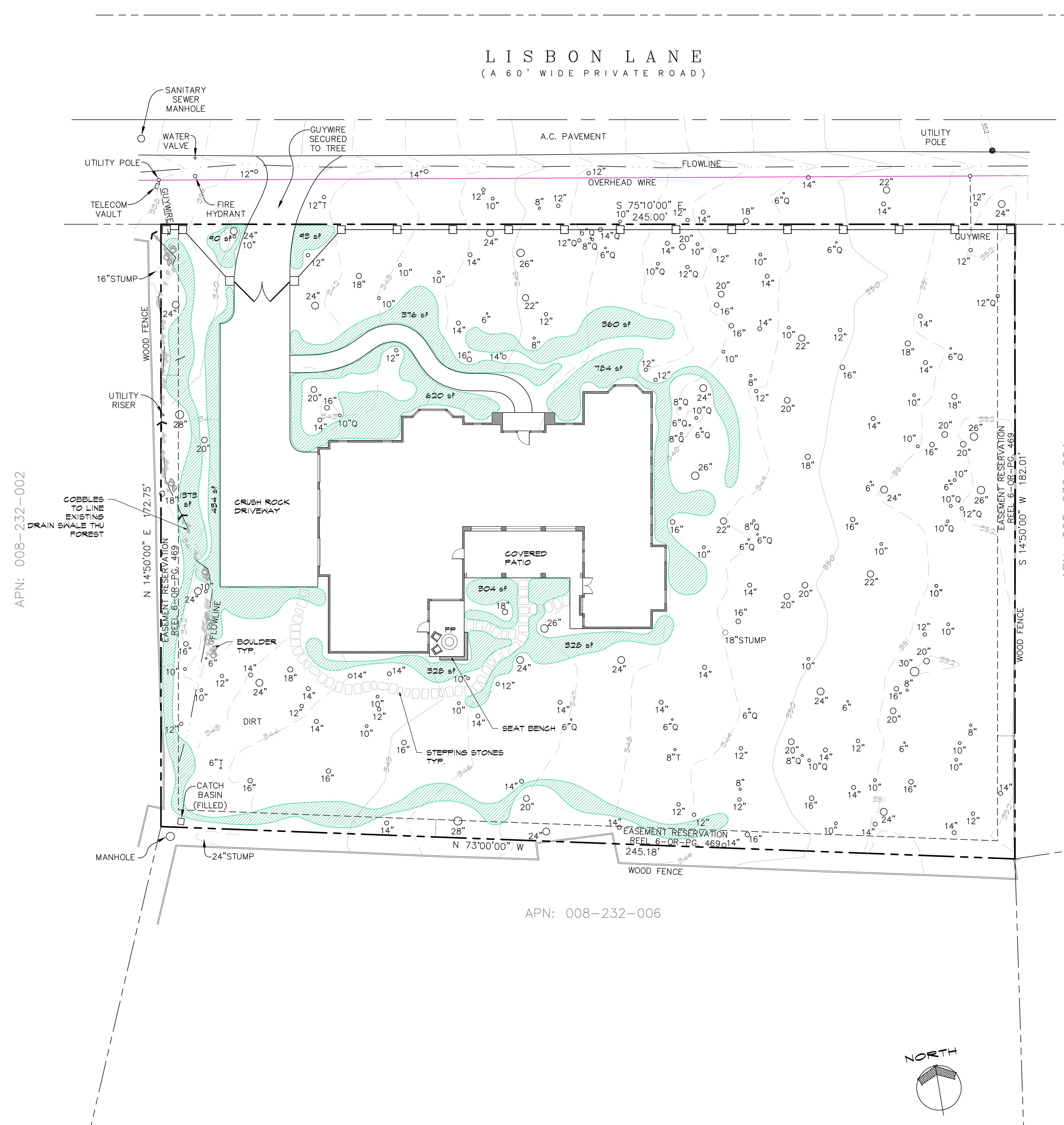
Annual estimated applied water = total sum of gallons from Hydrozones (IRRIGATION VALVES 1-5)  
 Annual estimated Total Water use (ETWU) = 58,378.58 gallons  
 MAWA = 96,158.00 gallons/year  
 0.18 acrefeet/year  
 0.30 acrefeet/year

CIMIS based Pacific Grove Weather Station #193  
 Eto Values by 37.21(in)

**Definitions:**  
 Acre/FT = 325,732.900  
 KL = 0.500  
 IE = 0.623  
 Et adj = 0.803  
 Annual ET<sub>0</sub> = 37.210  
 Duxme = 0.620  
 Gallon Conversion = 0.623

## Water use by month MAWA

MAWA MONTH	FACTOR	GALLONS MONTH
January	1.47	3,798.77
February	1.90	4,909.98
March	3.11	8,036.86
April	4.20	10,853.63
May	4.77	12,326.62
June	4.82	12,453.83
July	4.05	10,466.00
August	3.61	9,328.95
September	3.15	8,140.22
October	2.85	7,364.56
November	1.81	4,677.40
December	1.47	3,798.77
Total Year Budget		96,158.00



APN: 008-232-002

APN: 008-232-006

APN: 008-232-004

PLN 150 669

Revisions

- Remove backyard pergola / add Mst. Sitting Area 11-29-2016

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**Werner Nase**  
 1412 Lisbon Lane  
 Pebble Beach, CA APN 008-232-003

**Estimated Water Use**

Page Title:

Job # 1515

Date 11-29-2016

Revision

Drawn By MASH

Sheet

APN: 008-232-004

PLN 150 669

**L-3**

of: 5 Sheets

MAXIMUM WATER WATER ALLOCATION (MAWA) & ESTIMATED TOTAL WATER USE (ETWU) CALCULATIONS

SCALE: 1" = 16'-0"

**PROPOSED IRRIGATION NOTES:**

IRRIGATION ZONES ARE DEFINED AS TO DELIVERY TYPE WHICH UNIFORMLY APPLIES IRRIGATION WATER TO EACH PLANT WITH EFFICIENT AND MATCHED PRECIPITATION INDIVIDUAL NOZZLES AND DRIP EMITTERS. THE ZONES HAVE BEEN CALIBRATED FOR ONE INCH (1") AUTOMATIC VALVES TIED BACK TO A TIME CLOCK. ADDITIONALLY A RAIN SENSOR IS LOCATED AND CONNECTED TO THE AUTOMATIC TIME CLOCK.

CONSTRUCTION DRAWINGS WILL SHOW DIAGRAMMATIC INDIVIDUAL NOZZLE LOCATIONS WITHIN EACH ZONE. THE FOLLOWING MATERIALS LIST IS A SUGGESTED PRODUCT TYPE FOR THE INSTALLATION DRAWING SET.

**IRRIGATION MATERIALS LIST**

**RAIN SENSOR / Weathermatic RF55**  
Attach rain sensor to Utility Area Fence and interface with Irrigation Controller.

**IRRIGATION CONTROLLER:**  
WEATHERMATIC Smart Line 1600 locate in Utility Area. Outdoor GFI plug installed by project licensed Electrician.

**Drip Emitters:**  
Emitter Model Agrafirm PC Plus pressure-compensating Emitters. See schedule 1/2" Tubing mfg. Argifirm Company.

PVC 3/4" Pipe to designated areas. Fit polyethylene pipe and drip fittings to PVC and connect drip emitters. Distribute emitters around perimeter of plants. For specimen trees use concentric circle pipe layout. Install in line Pressure regulator by Netafim @ mid point on each drip run to be used as maintenance for Drip zones.

**POC Point of Connection**  
1. Verify existing connection as provided adjacent to Water Meter at street edge.

**Remote Valve:**  
1" Valve Weathermatic 21000 Series Valves to be placed into 10" Round Carson or Equal Irrigation Boxes (9"). Provide Dip filter at each valve location. Each valve install 3/4" Netafim Arkal Seninger 30 psi pre-set

**Emitter Schedule:**  
Box Trees 5 / 1 gallon per hour emitters  
15 gallon Shrubs & Trees 4 / 1 gallon per hour  
5 gallon Shrubs & Trees 1 / 2 gallon per hour  
1 gallon Shrubs & Trees 1 / 1 gallon per hour

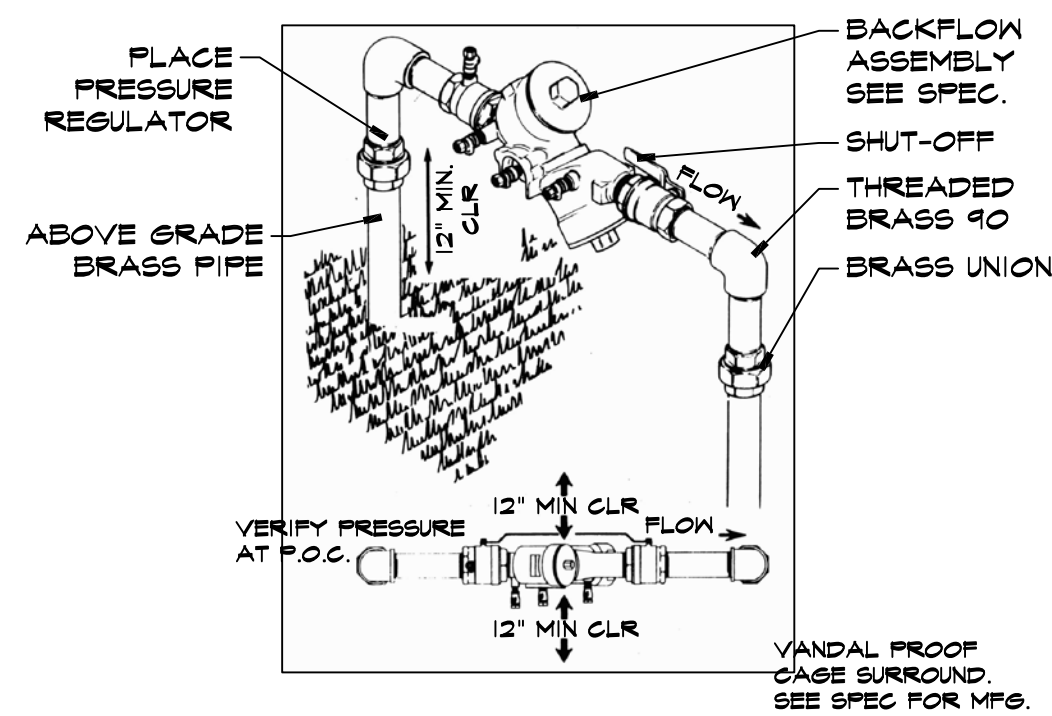
**Subsurface Drip Tubing (Netafim Techline)**  
Emitter spacing 6" on center in tube

**Mainline:**  
SCH 40 PVC Pipe (Mfg. Crestline or PWP)  
**Lateral Pipe:**  
SCH 40 PVC Pipe (Mfg. Crestline or PWP)

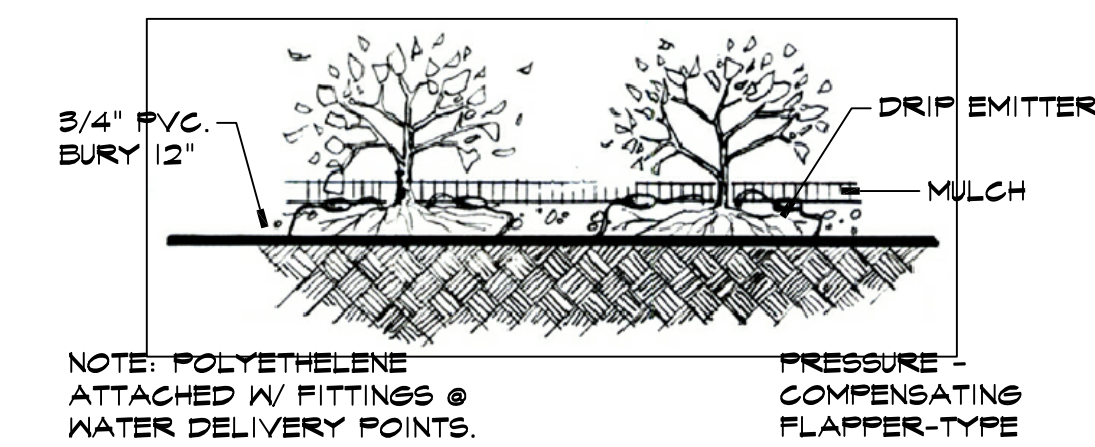
**Sleeve:**  
Use minimum pipe 2 sizes larger than pipe where it is necessary under walks  
Sleeves installed under motor court by building contractor

**Hose Bib:**  
• Champion 1" Garden Valve Inlet  
• Quick Coupler Valves in locations

**Note:**  
Substitution of Materials shall be approved in writing by Project Landscape Architect prior to delivery to the site.

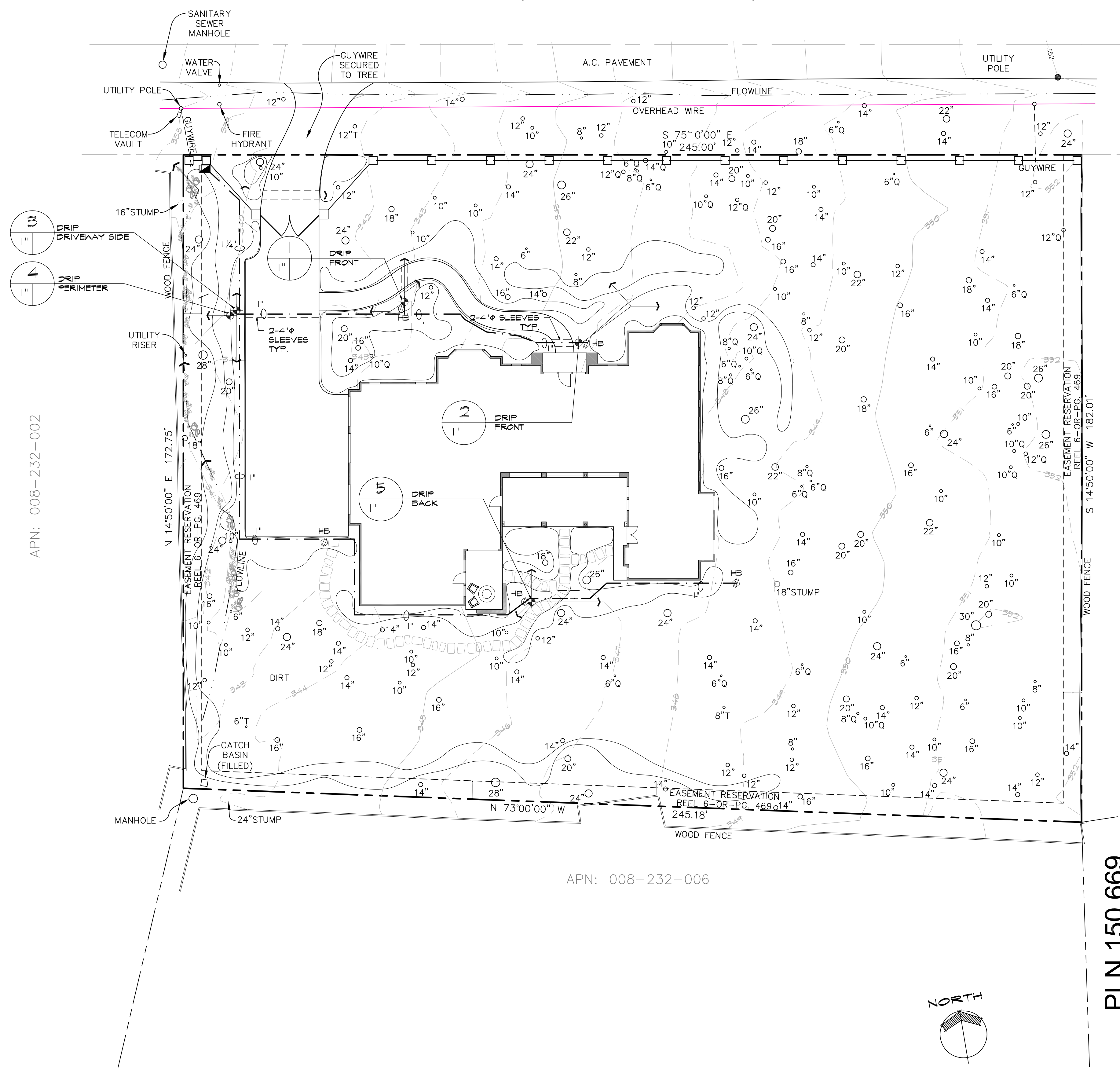


**BACKFLOW ASSEMBLY**  
NTS



NOTE: POLYETHYLENE ATTACHED W/ FITTINGS @ WATER DELIVERY POINTS. PRESSURE-COMPENSATING FLAPPER-TYPE

**DRIP IRRIGATION DISPERSAL**  
NTS



APN: 008-232-002

APN: 008-232-006

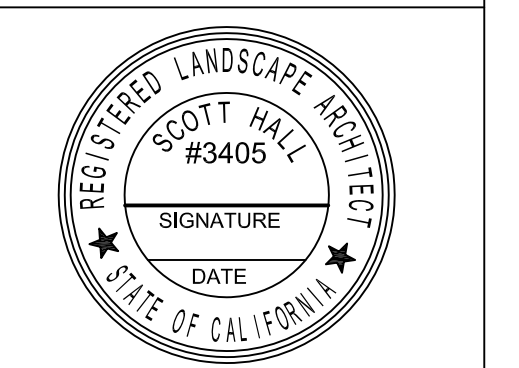
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**PRELIMINARY IRRIGATION PLAN**

SCALE 1" = 16'-0"

Revisions  
 BLD. & DW MOVED 10-23-2015  
 Remove backyard pergola / add Mst. Sitting Area 11-29-2016

**Hall Landscape Design**  
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 e-mail scott@halllandscape.com



**Werner Nase**  
 1412 Lisbon Lane  
 Pebble Beach, CA APN 008-232-003

**Irrigation Plan**

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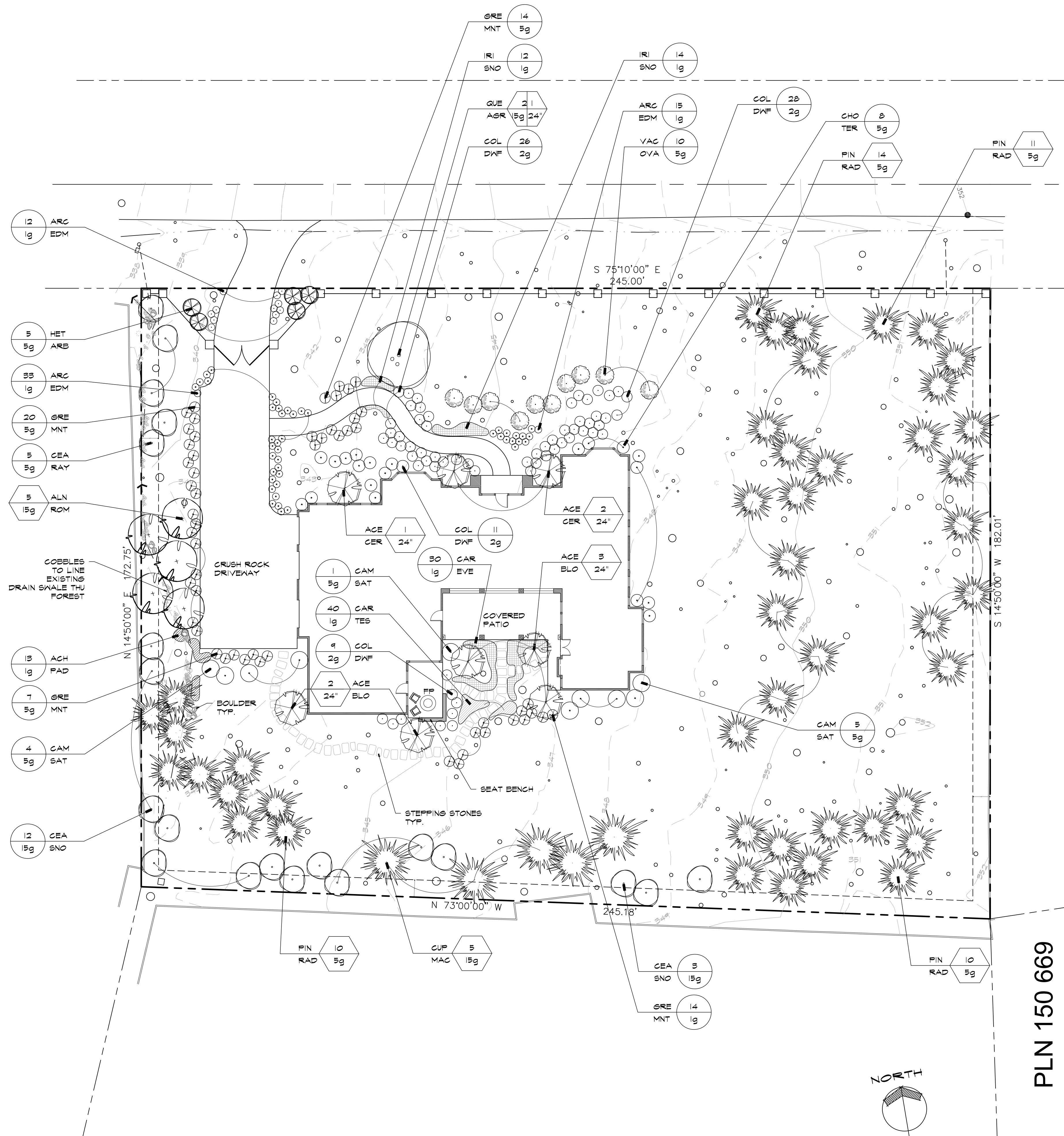
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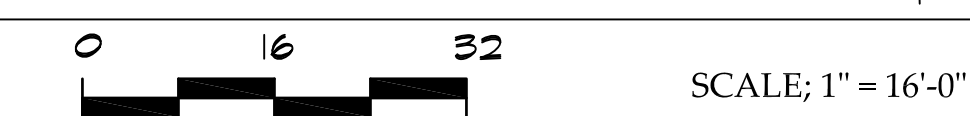
PLANT LIST:						
Symbol	Botanical Name	Common Name	TYPE CA Native DT Drought	Size	QTY.	
<b>TREES:</b>						
ACE CER	<i>Acer circinatum</i>	Vine Maple	Tree / Shrub *CN	24" Box	3	
ACH PAD	<i>Achillea millefolium</i> 'Moonshine'	Yarrow	Perennial	1 gallon	13	
ACE BLO	<i>Acer palmatum</i> 'Bloodgood'	Japanese Maple	Tree	24" Box	5	
ALN ROM	<i>Alnus rostrata</i>	Alder	Tree	15 gallon	5	
ARC EDM	<i>Arctostaphylos edmundsii</i>	Manzanita	Ground Cover *CN	1 gallon	60	
CAM SAT	<i>Camellia</i> 'Setsugekka'	Sasanqua	Low Shrub	5 gallon	10	
CAR EVE	<i>Carex oshimensis</i> 'Everest'	Variegated Carex	Grass	1 gallon	50	
CAR TES	<i>Carex testacea</i> 'Prairie Fire'	Drought NZ wind grass	Grass	1 gallon	40	
CEA RAY	<i>Ceanothus</i> g. 'Ray Hartman'	Tree form Coast Lilac	Shrub * CN	5 gallon	5	
CEA THY	<i>Ceanothus thyrsiflorus</i> 'Snow Flurry'	White Flowering Ceanothus	Shrub * CN	5 gallon	15	
CHO TER	<i>Choylia ternata</i>	Mock Orange	Shrub	5 gallon	2	
COL DWF	<i>Coleanema pulchrum</i> 'Dwarf Form'	Breath of Heaven Dwarf	Shrub / **DT	2 gallon	74	
CUP MAC	<i>Cupressus macrocarpa</i>	Monterey Cypress	Tree / *CN	15 gallon	5	
GRE MNT	<i>Grevillea lanigera</i> Mt. Tamabortha'	Grevillea low form	SC / **DT	5 gallon	55	
HET ARB	<i>Heteromeles arbutifolia</i>	Toyon	Shrub *CN	5 gallon	5	
IRI SNO	<i>Iris douglasiana</i> spp.	Douglas Iris species	Perennial ** DT	1 gallon	26	
PAN LAD	<i>Pandorea jasminoides</i> 'Lady D'	White Pandorea	Vine	5 gallon	0	
PIN RAD	<i>Pinus radiata</i>	Monterey Pine	Tree ** DT	5 gallon	45	
QUE AGR	<i>Quercus agrifolia</i>	Coastal Live Oak	Tree **DT	15g	2	
QUE AGR	<i>Quercus agrifolia</i>	Coastal Live Oak	Tree **DT	24"	1	
TRA JAS	<i>Trachelospermum jasminoides</i>	Star Jasmine ground cover	SC	1 gallon	10	
VAC OVA	<i>Vaccinium ovatum</i>	Monterey Huckleberry	Shrub ** DT	5 gallon	10	
Seed	Disturbed areas. Seeding to be made in late fall rate per 1,000 square feet / lbs. Seed specifics to be covered in Construction document Plan set	Seeds California Flora: <i>Deschampsia holiformis</i> (5lb) <i>Festuca Rubra</i> (10 lbs.) <i>Nosella cernua</i> (4lbs.) Annuals & Perennials: <i>Eschscholtzia californica</i> <i>Achillea millefolium</i>				
Mulch	Fir-Bark / Medium size Mulch Spread 2" Cover					
**DT	Water Saving Plants					
*CN	California Native Plant					

**NOTES:**

- PINE TREE REPLACEMENT:**
- REPLACEMENT FOLLOWS ARBORIST FRANK ONO'S NOVEMBER 2015 FOREST MANAGEMENT REPORT OUT LINES A 1:1 REPLACEMENT FACTOR. SOME 40 PINUS RADIATA FIVE GALLON TREES & THE BALANCE IN NATIVE CYPRESS TREES COMPLY WITH THE 1:1 REPLACEMENT REQUIREMENT. CYPRESS TO BE PLANTED ARE LARGER THAN OVER STORY CANOPY TREE REQUIREMENTS.
- IN ADDITION NATIVE CALIFORNIA OAK TREES AND MANY NATIVE AND ENDEMIC MONTEREY PENINSULA SHRUBS HAVE BEEN ADDED TO THE PLANT PALETTE.
- THE LOCAL COASTAL PLAN CONCERN FOR PROTECTION OF IDENTIFIED FOREST RESOURCES IN THE DEVELOPED DEL MONTE FOREST AREA FOR PROTECTION ATTRIBUTES WITH THE ABUNDANCE OF NOT ONLY NATIVE CALIFORNIA PLANT SPECIES BUT ADDITIONALLY PLANTS PARTICULAR AND ENDEMIC TO THIS REGION OF THE DEL MONTE FOREST.
- TREES USED IN THIS LANDSCAPE / PINUS RADIATA & CUPRESSUS MACROCARPA ARE TO BE SELECTED FROM THE PEBBLE BEACH / DEL MONTE FOREST SEED STOCK.



**PRELIMINARY LANDSCAPE PLANTING PLAN**



Revisions

- △ BLD. & DW MOVED 10-23-2015
- △ DW Reduced / E Path removed walk front entry reconfigured 03-29-2016
- △ Remove backyard pergola / add Mt. Sitting Area 11-29-2016

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REGISTERED LANDSCAPE ARCHITECT  
SCOTT HALL #3405  
SIGNATURE  
DATE  
STATE OF CALIFORNIA

**Werner Nase**  
1412 Lisbon Lane  
Pebble Beach, CA APN 008-232-003

**Planting Plan**

Page Title:

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PLN 150 669



**Nase Property- 1412 Lisbon Lane, Pebble Beach**



**Staking and Flagging**