

| Impervious Tabulation | |
|---|---------------------------------|
| EXISTIGN STRUCTURES: | TOTAL = 5,763 SQ. FT. |
| S.F.D. WITH GARAGE: | 3,163 SQ. FT. |
| AGG MOBILE HOME: | 1,000 SQ. FT. |
| METAL BUILDING: | 1,600 SQ. FT. |
| EXISTING PAVED DRIVEWAYS: | 29,885 SQ. FT. |
| TOTAL EXISTING IMPERVIOUS SURFACES: | 35,648 SQ. FT. |
| CREATED IMPERVIOUS SURFACES (NEW BUILDING): | 3,474 SQ. FT. (LESS THAN 5,000) |
| TOTAL REPLACED IMPERVIOUS SURFACES: | 200 SQ. FT. |

1" = 40'-0"

1" = 40'-0"

Owner Information

OWNER: KEENE BREWER
ADDRESS: 2505 WILT ROAD
FALBROOK, CA 92028
PHONE: (509)-969-9494

Development Summary

ADDRESS: 2505 WILT ROAD
FALBROOK, CA 92028
A.P.N.: 107-171-06-00
(E) TYPES OF CONSTRUCTION: VB & IIB NON-SPRINKLERED
PROPOSED TYPE OF CONSTRUCTION: IIB NON-SPRINKLERED
OCCUPANCY: R3 / U
ZONING: A70
GROSS SITE AREA: 8.82 ACRES
ORIGINAL YEAR DEVELOPED: 1966

Scope of Project

PROPOSED NEW PRE-ENGINEERED, PRECONSTRUCTED STEEL SHOP BUILDING, ATTACHED TO AN EXISTING BUILDING OF THE SAME CONST. TYPE AND USE.
PROPOSED ADDRESSING OF AN EXISTING AGG HOUSING MOBILE HOME.(E) STATE PERMIT IN PLACE
NEW ELECTRICAL METER AT AGG HOUSING.
EXISTING S.F.D. AND POOL TO REMAIN UNALTERED
EXISTING S.F.D.: 2,763 SQ. FT.
EXISTING S.F.D. ATTACHED GARAGE: 400 SQ. FT.
EXISTING AGG MOBILE HOME: 1,000 SQ. FT. (E) STATE PERMIT IN PLACE
EXISTING METAL BUILDING: 1,600 SQ. FT.
PROPOSED METAL BUILDING: 3,674 SQ. FT.

Notes

THESE PLANS AND ALL WORK SHALL COMPLY WITH THE CALIFORNIA BUILDING STANDARDS CODE FOUND IN THE STATE OF CALIFORNIA TITLE 24 CCR AS AMENDED AND ADOPTED BY THE COUNTY OF SAN DIEGO.
THE PROJECT SHALL COMPLY WITH THE FOLLOWING BUILDING CODES AND ASSOCIATED COUNTY OF SAN DIEGO AMMENDMENTS:
2022 CALIFORNIA RESIDENTIAL CODE (CRC) AND/OR CALIFORNIA BUILDING CODE (CBC) AS APPLICABLE
2022 CALIFORNIA GREEN BUILDING STANDARDS CODE (CALGREN)
2022 CALIFORNIA ELECATRICAL CODE (CEC)
2022 CALIFORNIA MECHANICAL CODE (CMC)
2022 CALIFORNIA PLUMBING CODE (CPC)
2022 CALIFORNIA FIRE CODE (CFC)
2022 CALIFORNIA BUILDING ENERGY EFFICIENCY STANDARDS (CBEEES)
WATER SHALL DRAIN AWAY FROM ALL BUILDINGS, THE GRADE SHALL FALL A MINIMUM OF 5% WITHIN THE FIRST 10 FEET AND (2% FOR IMPERFIOUS SURFACES).

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| SHEET | DESCRIPTION |
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| CS-1 | COUNTY OF SD STANDARD NOTES |
| A-1 | FLOOR PLAN |
| A-2 | ELEVATIONS |
| A-3 | ELEVATIONS |
| E-1 | ELECTRICAL PLAN |
| S001 | STRUCTURAL NOTES |
| S002 | STRUCTURAL STANDARD DETAILS |
| S101 | FOUNDATION PLAN |
| S201 | FOUNDATION DETAILS |
| **** | 21 PAGE EMPIRE STEEL MFG DRAWINGS |

Vicinity Map

MADESIGN & DRAFTING SERVICES

WWW.MADESIGNING.COM

12975 Brookprinter Place, Suite 270, Poway, CA 92064 (760) 390-0007

Brewer Metal Building

2505 Wilt Road
Fallbrook, CA 92028

Plot Plan

Sheet Title:

Plan Prepared By: Derek D. Berg

| Rev. | Date | By |
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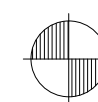
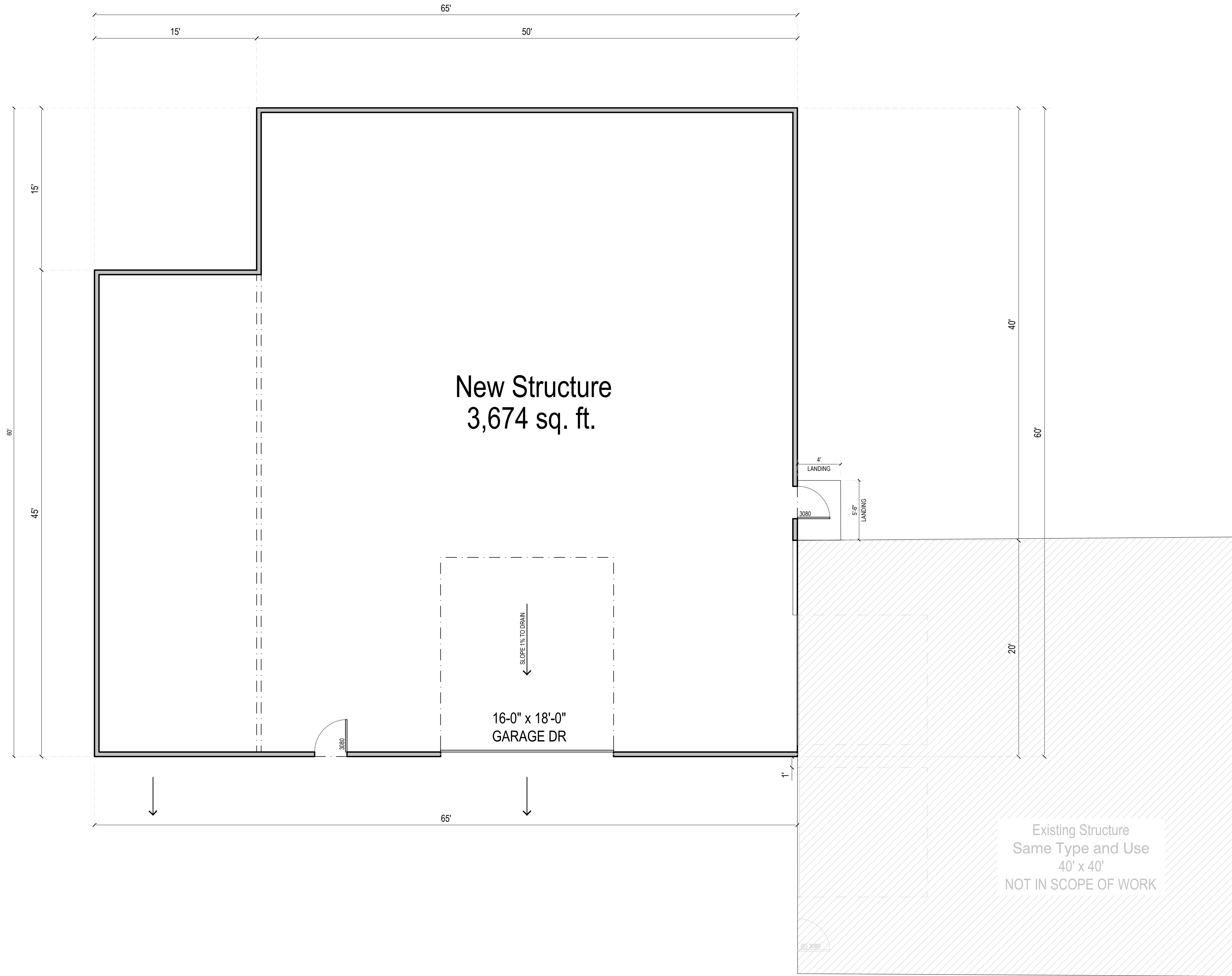
Date: 12/15/2025
Scale: 1"=40'-0"

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| General | Applicable codes. All projects will comply with the following building codes and associated County of San Diego amendment. 2022 California Building Code (CBC) and/or California Residential Code (CRC) 2022 California Green Building Standards Code (CalGreen) 2022 California Electrical Code (CEC) 2022 California Mechanical Code (CMC) 2022 California Plumbing Code (CPC) 2022 California Fire Code (CFC) 2022 California Building Energy Efficiency Standards (CEES) | |
| | B. Electrical, Plumbing, and Mechanical | |
| 1. Exterior lighting. | All projects shall comply with the County of San Diego lighting ordinance. | |
| 2. GFCI outlets. | Ground Fault Circuit Interrupter (GFCI) outlets are required in bathrooms, at kitchen countertops, at laundry and wet bar sinks, in garages, in crawlspaces, in unfinished basements, and outdoors. (CEC 210.8) | |
| 3. AFCI outlets. | Electrical circuits in bedrooms, living rooms, dining rooms, dens, closets, hallways, or similar rooms must be protected by Arc Fault Circuit Interrupters (AFCI). (CEC 210.12) | |
| 4. Luminaire requirements. | Installed luminaires shall meet the efficacy and fixture requirements of CEES 150.0(k). | |
| 5. Smoke detectors in building remodels. | Smoke detectors are required in each existing sleeping room, outside each separate sleeping area in the immediate vicinity of sleeping rooms, and on each story of a dwelling including basements. Battery-operated detectors are acceptable in existing areas with no construction taking place and in alterations not resulting in removal of interior wall or ceiling finishes and without access via an attic, crawl space, or basement. (CRC R314.3) | |
| 6. Carbon monoxide detectors in building remodels. | Carbon monoxide detectors are required outside each separate sleeping area in the immediate vicinity of sleeping rooms and on each story of a dwelling including basements. Battery-operated detectors are acceptable in existing areas with no construction taking place and in alterations not resulting in removal of interior wall or ceiling finishes and without access via an attic, crawl space, or basement. (CRC R315.3) | |
| 7. Water heater seismic strapping. | Minimum two 3/4-inch-by-24-gauge straps required around water heaters, with 1/4-inch-by-3-inch lag bolts attached directly to framing. Straps shall be at points within upper third and lower third of water heater vertical dimension. Lower connection shall occur minimum 4 inches above controls. (CPC 507.2) | |
| 8. Gas appliances in garages. | Water heaters and heating/cooling equipment capable of igniting flammable vapors shall be placed on minimum 18-inch-high platform unless listing report number provided showing ignition source protection. (CPC 507.13 and CMC 305.1) | |
| 9. Impact protection of appliances. | Water heaters and heating/cooling equipment subject to vehicular impact shall be protected by bollards or an equivalent measure. (CPC 507.13.1 and CMC 305.1.1) | |
| 10. Water closet clearance. | Minimum 30-inch-wide by 24-inch-deep clearance required at front of water closets. (CPC 402.5) | |
| 11. Shower size. | Shower compartments shall have minimum area of 1024 square inches and be able to encompass a 30-inch-diameter circle. Shower doors shall have a minimum 22-inch unobstructed width. (CPC 408.5 and CPC 408.6) | |
| 12. Fireplace appliances. | Fireplaces with gas appliances are required to have the fire damper permanently fixed in the open position and fireplaces with LPG appliances are to have no "pit" or "bump" configurations. (CMC 303.1.1) | |
| 13. Chimney clearance. | Minimum 2-foot chimney clearance required above building within 10-foot horizontally of chimney. The chimney shall extend minimum 3 feet above highest point where chimney passes through roof. (CRC R1003.9) | |
| C. Mechanical Ventilation and Indoor Air Quality (ASHRAE 62.2-2010) | | |
| 1. Transfer air. | Ventilation air shall be provided directly from the outdoors and not as transfer air from adjacent dwelling units or other spaces, such as garages, unconditioned crawlspaces, or unconditioned attics. (CEES 150.0(i)) | |
| 2. Instructions and labeling. | Ventilation system controls shall be labeled, and the homeowner shall be provided with instructions on how to operate the system. (CEES 150.0(i)) | |
| 3. Combustion and solid-fuel burning appliances. | Combustion appliances shall be properly vented and air systems shall be designed to prevent back drafting. (CEES 150.0(i)) | |
| 4. Garages. | The wall and openings between occupiable spaces and the garage shall be sealed. HVAC systems that include air handlers or return ducts located in garages shall have total air leakage of no more than 6% of total fan flow when measured at 0.1 in. w.c. using California Title 24 or equivalents. (CEES 150.0(i)) | |
| 5. Minimum filtration. | Mechanical systems supplying air to occupiable space through ductwork shall be provided with a filter having a minimum efficiency of MERV 6 or better. (CEES 150.0(i)) | |
| 6. Air inlets. | Air inlets (not exhaust) shall be located away from known contaminants. (CEES 150.0(i)) | |
| 7. Air moving equipment. | Air moving equipment used to meet either the whole-building ventilation requirement or the local ventilation exhaust requirement shall be rated in terms of airflow and sound. (CEES 150.0(i)) | |
| a. All continuously operating fans shall be rated at a maximum of 1.0 sone. | | |
| b. Intermittently operated whole-building ventilation fans shall be rated at a maximum of 1.0 sone. | | |
| c. Intermittently operated local exhaust fans shall be rated at maximum of 3.0 sone. | | |
| 8. Remotely located air-moving equipment (mounted outside of habitable spaces) need not meet sound requirements if at least 4 feet of ductwork between fan and intake grill. | | |
| D. Foundation and Underfloor | | |
| 1. Foundation reinforcement. | Continuous footings and stem walls shall be provided with a minimum two longitudinal No. 4 bars, one at the top and one at the bottom of the footing. (CRC R403.1.3.3) | |
| 2. Shear wall foundation support. | Shear walls shall be supported by continuous foundations. (CRC 403.1.2) | |
| 3. Concrete slabs-on-grade. | Slabs-on-grade shall be minimum 3-1/2-inches thick. (CRC R506.1) | |
| 4. Vapor retarder. | A 10-mil polyethylene or approved vapor retarder with joints lapped minimum 6 inches shall be placed between a concrete slab-on-grade and the base course or subgrade. (CRC 506.2.3) | |
| 5. Anchor bolts and sills. | Foundation plates or sills shall be bolted or anchored to the foundation or foundation wall per the following (CRC R403.1.6 and CRC R602.11.1): a. Minimum 1/2-inch-diameter steel bolts b. Bolts embedded at least 7 inches into concrete or masonry c. Bolts spaced maximum 6 feet on center d. Minimum two bolts per plate/sill piece with one bolt located maximum 12 inches and minimum 7 bolt diameters from each end of each sill plate/plate e. Minimum 3-inch by 3-inch by 1/299-inch steel plate washer between sill and nut on each bolt 6. Hold-downs. All hold-downs must be tied in place prior to foundation inspection. 7. Protection of wood against decay. Naturally durable or preservative-treated wood shall be provided in the following locations (CRC R517.1): a. All wood in contact with ground, embedded in concrete in direct contact with ground, or embedded in concrete exposed to weather b. Wood joists within 18 inches and wood girders within 12 inches of the exposed ground in crawl spaces shall be of naturally durable or preservative-treated wood c. Wood framing members that rest on concrete or masonry exterior foundation walls and are less than 8 inches from exposed earth shall be of naturally durable or preservative-treated wood d. Wood framing, sheathing, and siding on the exterior of the building and having clearance less than 6 inches from the exposed ground or less than 2 inches vertically from concrete steps, porch slabs, and similar horizontal surface exposed to weather e. Sills and sleepers on concrete or masonry slab in direct contact with ground unless separated from such slab by impervious moisture barrier f. Ends of wood girders entering masonry or concrete walls with clearances less than 1/2 inch on tops, sides, and ends g. Wood structural members supporting moisture-permeable floors or roofs exposed to weather, such as concrete or masonry slabs, unless separated from floors or roofs by an impervious moisture barrier 8. Underfloor ventilation. Underfloor areas shall have ventilation openings through foundation walls or exterior walls, with minimum net area of ventilation openings of 1 square foot for each 150 square feet of underfloor area. On such ventilating opening shall be within 3 feet of each corner of the building. (CRC R408.1) 9. Underfloor access. Underfloor areas shall be provided with a minimum 18-inch by 24-inch access opening. (CRC R408.4) | |
| E. Wood Framing | | |
| 1. Fastener requirements. | The number, size, and spacing of fasteners connecting wood members/elements shall not be less than that set forth in CRC Table R602.3(1), (CRC R502.9, CRC R602.3, and CRC R602.2) | |
| 2. Stud size, height, and spacing. | The size, height, and spacing of studs shall be in accordance with CRC Table R602.3(5), (CRC R602.3.1) | |
| E. Wood Framing (Continued) | | |
| 3. Sill plate. | Studs shall have full bearing on nominal 2-inch thick or larger sill plate with width at least equal to stud width. (CRC R602.3.4) | |
| 4. Bearing studs. | Where joists, trusses, or rafters are spaced more than 16 inches on center and the bearing studs beneath are spaced 24 inches on center, such members shall bear within 5 inches of the studs below. (CRC R602.3.3) | |
| 5. Drilling and notching of studs. | Any stud in an exterior wall or bearing partition may be cut or notched to a depth not exceeding 25% of its width. Studs in nonbearing partitions may be notched to a depth not to exceed 40% of a single stud width. Any stud may be bored or drilled, provided the diameter of the resulting hole is no more than 60% of the stud width, the edge of the hole is no more than 5/8 inch to the edge of the stud, and the hole is not located in the same section as a cut or notch. Studs located in exterior wall or bearing partitions drilled over 40% and up to 60% shall also be doubled with not more than two successive studs bored. (CRC R602.6) | |
| 6. Top plate. | Wood stud walls shall be capped with a double top plate installed to provide overlapping at corners and at intersections with other partitions. End joints in double top plates shall be offset at least 24 inches. Joints in plates need not occur over studs. Plates shall be minimum nominal 2 inches thick and have width at least equal to width of studs. (CRC R602.3.2) | |
| 7. Top plate splices. | Top plate lap splices shall be face-nailed with minimum 8 16d nails on each side of splice. (CRC R602.10.8.1) | |
| 8. Drilling and notching of top plate. | When piping or ductwork is placed in or partly in an exterior wall or interior load-bearing wall, necessitating cutting, drilling, or notching of the top plate by more than 50% of its width, a galvanized metal tie not less than 0.054-inch thick and 1-1/2-inches wide shall be fastened across and to the plate at each side of the opening with not less than 8 16d nails having a minimum length of 1-1/2 inches at each side or equivalent. The metal tie must extend minimum 6 inches past the opening. (CRC R602.6.1) | |
| 9. Cripple walls. | Foundation cripple walls shall be framed of studs not less in size than the stud(s) above. Cripple walls more than 4 feet in height shall have studs sized as required for an additional story. Cripple walls shall be no more than 14 inches above the foundation. At least one side with a wood structural panel fastened to both the top and bottom plates in accordance with Table R602.3(1), or the cripple walls shall be constructed of solid blocking. Cripple walls shall be supported on continuous foundations. (CRC R602.9) | |
| 10. Wall bracing. | Buildings shall be braced in accordance with the methods allowed per CRC R602.10.2, CRC R602.10.4, and/or CRC R602.10.5. | |
| 11. Braced wall line spacing. | Spacing between braced wall lines shall not exceed 20 feet or alternate provisions of CRC R602.10.3. | |
| 12. Shear wall cumulative length. | The cumulative length of shear walls within each braced wall line shall meet the provisions of CRC Table R602.10.3(1) for wind loads and CRC Table R602.10.3(2) for seismic loads. (CRC R602.10.1) | |
| 13. Shear wall spacing. | Shear walls shall be located not more than 25 feet on center. (CRC R602.10.2.2) | |
| 14. Shear wall offset. | Shear walls may be offset out-of-plan not more than 4 feet from the designated braced wall line and not more than 8 feet from any other offset wall considered part of the same braced wall line. (CRC R602.10.1.2) | |
| 15. Shear wall location. | Shear walls shall be located at the ends of each braced wall line or meet the alternate provisions of CRC R602.10.2.2. | |
| 16. Individual shear wall length. | Shear walls shall meet minimum length requirements of CRC R602.10.6.5.1. | |
| 17. Cripple wall bracing. | Cripple walls shall be braced per CRC R602.10.11. | |
| 18. Shear wall and diaphragm nailing. | All shear walls, roof diaphragms, and floor diaphragms shall be nailed to supporting construction per CRC Table R602.3(1), (CRC R604.3) | |
| 19. Shear wall joints. | All vertical joints in shear wall sheathing shall occur over, and be fastened to, common studs. Horizontal joints in sheathing shall occur over, and be fastened to, minimum 1-1/2-inch-thick blocking. (CRC R602.10.10) | |
| 20. Framing over openings. | Headers, double joists, or trusses of adequate size to transfer loads to vertical members shall be provided over window and door openings in load-bearing walls and partitions. (CRC 2304.3.2) | |
| 21. Joists under bearing partitions. | Joists under parallel bearing partitions shall be of adequate size to support the load. Double joists, sized to adequately support the load, that are spaced to permit the installation of piping or vents shall be full-depth solid-blocked with minimum 2-inch nominal lumber spaced at maximum 4 feet on center. Bearing partitions perpendicular to joists shall be offset from supporting girders, walls, or partitions more than 1/2 inch. Where such joists are of sufficient size to carry the additional load. (CRC R502.4) | |
| 22. Joists above or below shear walls. | Where joists are perpendicular to a shear wall above or below, a rim joint, band joint, or blocking shall be provided along the entire length of the shear wall. Where joists are parallel to a shear wall above or below, a rim joint, end joint, or parallel framing shall be provided directly above and/or below the shear wall. Where a parallel framing member cannot be located directly above and/or below the shear wall, full-depth blocking at 16-inch spacing shall be provided between the parallel framing members to each side of the shear wall. (CRC R502.4.1) | |
| 23. Floor member bearing. | The ends of each floor joist, beam, or girder shall have minimum 1-1/2 inches of bearing on wood or metal and minimum 3 inches of bearing on masonry or concrete except where supported on a 1-inch-by-4-inch ribbed strip and nailed to the adjoining stud or by the use of approved joist hangers. (CRC R502.6) | |
| 24. Floor joist lap. | Floor joists spanning opposite sides over a bearing support shall lap minimum 3 inches and shall be nailed together within minimum 3 10d face nails. A wood or metal splice with strength equal to or greater than that provided by the lap is permitted. (CRC R502.6.1) | |
| 25. Floor joist-to-girder support. | Floor joists framing into the side of a wood girder shall be supported by approved framing anchors or on ledger strips minimum 2 inches by 2 inches. (CRC R502.6.2) | |
| 26. Floor joist lateral restraint. | Floor joists shall be supported laterally at ends and each intermediate support by minimum 2-inch full-depth blocking, by attachment to full-depth header, band joint, or rim joint, or to an adjoining stud, or shall be otherwise provided with lateral support to prevent rotation. (CRC R502.7) | |
| 27. Floor joist bridging. | Floor joists exceeding nominal 2 inches by 12 inches shall be supported laterally by solid blocking, diagonal bridging (wood or metal), or a continuous 1-inch-by-3-inch strip nailed across the bottom of joists perpendicular to joists at maximum 8-feet intervals. (CRC R502.7.1) | |
| 28. Framing of floor openings. | Openings in floor framing shall be framed with a header and trimmer joists. When the header joist span does not exceed 4 feet, the header joist may be a single member the same size as the floor joist. Single trimmer joists may be used to carry a single header joist located within 3 feet of the trimmer joist bearing. When the header joist span exceeds 4 feet, the trimmer joists and header joist shall be doubled and of sufficient cross section to support the floor joists framing into the header. Approved hangers shall be used for the header-joist-to-trimmer-joist connections when the header joist span exceeds 8 feet. Tail joists over 12 feet long shall be supported at the header by framing anchors or on ledger strips minimum 2 inches by 2 inches. (CRC R502.10) | |
| 29. Girders. | Girders for single-story construction or girders supporting loads from a single floor shall not be less than 4 inches by 6 inches for spans 6 feet and less, provided that girders are spaced not more than 8 feet on center. Other girders shall be designed to support the loads specified in the CBC. Girder end joints shall occur over supports. When a girder is spliced over a support, an adequate tie shall be provided. The ends of beams or girders supported on masonry or concrete shall not have less than 3 inches of bearing. (CRC 2306.7) | |
| 30. Ridges, hips, and valleys. | Rafters shall be framed to a ridge board or to each other with a gusset plate as a tie. Ridge boards shall be minimum 1-inch nominal thickness and not less in thickness than the cut end of the rafter. At all valleys and hips, there shall be a valley or hip rafter not less than 2-inch nominal thickness and not less in depth than the cut end of the rafter. Valley and hip rafters shall be supported at the ridge by a brace to a bearing partition or be designed to carry and distribute the specific load at that point. Where the roof pitch is less than 3:12 slope (25% gradient), structural members that support rafters and ceilings joists, such as ridges, hips, and valleys, shall be designed as beams. (CRC R602.3) | |
| 31. Ceiling joist and rafter connections. | Ceiling joists and rafters shall be nailed to each other per CRC Table R602.5.1(9), and the rafter shall be nailed to the wall top plate per CRC Table R602.3(1). Ceiling joists shall be continuous or securely joined per CRC Table R602.5.1(9) where they meet over interior partitions and are nailed to adjacent rafters to provide a continuous tie across the building when such joists are parallel to rafters. Where ceiling joists are not connected to the rafters at the wall top plate, joists connected higher in the attic shall be installed as rafter ties, or rafter ties shall be installed to provide a continuous tie. Where ceiling joists are not parallel to rafters, rafter ties shall be installed. Rafter ties shall be minimum 2 inches by 4 inches nominal, installed per CRC Table R602.5.1(9), or connections of equivalent capacities shall be provided. Where ceilings joists or rafter ties are not provided, the ridge formed by these rafters shall be supported by a wall or engineer-designed girder. (CRC R602.3.1) | |
| 32. Ceiling joists lapped. | Ends of ceiling joists shall be lapped minimum 3 inches or butted overbearing partitions or beams and toenailed to the bearing element. Where ceiling joists provide resistance to rafter thrust, lapped joists shall be nailed together per CRC Table R602.3(1) and butted joists shall be tied together in a manner to resist such thrust. (CRC R602.3.2) | |
| 33. Collar ties. | Collar ties or ridge straps to resist wind uplift shall be connected in the upper third of the attic space. Collar ties shall be a minimum 1 inch by 4 inches nominal and spaced at maximum 4 feet on center. (CRC R602.3.1) | |
| 34. Purins. | Purins installed to reduce the span of rafters shall be sized not less than the required size of the rafters they support. Purins shall be continuous and shall be supported by 2-inch-by-4-inch nominal braces installed to bearing walls at a minimum 45-degree slope from horizontal. The braces shall be spaced maximum 4 feet on center with a maximum 8-foot unbraced length. (CRC R602.5.1) | |
| 35. Roof/ceiling member bearing. | The ends of each rafter or ceiling joist shall have not less than 1-1/2 inches of bearing on wood or metal and not less than 3 inches of bearing on masonry or concrete. (CRC R602.6) | |
| 36. Roof/ceiling member lateral support. | Roof framing members and ceiling joists with a nominal depth-to-thickness ratio exceeding 5:1 shall be provided with lateral support at points of bearing to prevent rotation. (CRC R602.8) | |
| 37. Roof/ceiling member blocking. | Rafters and ceiling joists with a nominal depth-to-thickness ratio exceeding 6:1 shall be supported laterally by solid blocking, diagonal bridging (wood or metal), or a continuous 1-inch-by-3-inch wood strip nailed across the rafters or ceiling joists at maximum 8-foot intervals. (CRC R602.8.1) | |
| F. Foundation and Underfloor | | |
| 1. Foundation reinforcement. | Continuous footings and stem walls shall be provided with a minimum two longitudinal No. 4 bars, one at the top and one at the bottom of the footing. (CRC R403.1.3.3) | |
| 2. Shear wall foundation support. | Shear walls shall be supported by continuous foundations. (CRC 403.1.2) | |
| 3. Concrete slabs-on-grade. | Slabs-on-grade shall be minimum 3-1/2-inches thick. (CRC R506.1) | |
| 4. Vapor retarder. | A 10-mil polyethylene or approved vapor retarder with joints lapped minimum 6 inches shall be placed between a concrete slab-on-grade and the base course or subgrade. (CRC 506.2.3) | |
| 5. Anchor bolts and sills. | Foundation plates or sills shall be bolted or anchored to the foundation or foundation wall per the following (CRC R403.1.6 and CRC R602.11.1): a. Minimum 1/2-inch-diameter steel bolts b. Bolts embedded at least 7 inches into concrete or masonry c. Bolts spaced maximum 6 feet on center d. Minimum two bolts per plate/sill piece with one bolt located maximum 12 inches and minimum 7 bolt diameters from each end of each sill plate/plate e. Minimum 3-inch by 3-inch by 1/299-inch steel plate washer between sill and nut on each bolt 6. Hold-downs. All hold-downs must be tied in place prior to foundation inspection. 7. Protection of wood against decay. Naturally durable or preservative-treated wood shall be provided in the following locations (CRC R517.1): a. All wood in contact with ground, embedded in concrete in direct contact with ground, or embedded in concrete exposed to weather b. Wood joists within 18 inches and wood girders within 12 inches of the exposed ground in crawl spaces shall be of naturally durable or preservative-treated wood c. Wood framing members that rest on concrete or masonry exterior foundation walls and are less than 8 inches from exposed earth shall be of naturally durable or preservative-treated wood d. Wood framing, sheathing, and siding on the exterior of the building and having clearance less than 6 inches from the exposed ground or less than 2 inches vertically from concrete steps, porch slabs, and similar horizontal surface exposed to weather e. Sills and sleepers on concrete or masonry slab in direct contact with ground unless separated from such slab by impervious moisture barrier f. Ends of wood girders entering masonry or concrete walls with clearances less than 1/2 inch on tops, sides, and ends g. Wood structural members supporting moisture-permeable floors or roofs exposed to weather, such as concrete or masonry slabs, unless separated from floors or roofs by an impervious moisture barrier 8. Underfloor ventilation. Underfloor areas shall have ventilation openings through foundation walls or exterior walls, with minimum net area of ventilation openings of 1 square foot for each 150 square feet of underfloor area. On such ventilating opening shall be within 3 feet of each corner of the building. (CRC R408.1) 9. Underfloor access. Underfloor areas shall be provided with a minimum 18-inch by 24-inch access opening. (CRC R408.4) | |
| G. Roofing and Weatherproofing (Continued) | | |
| 4. Water-resistive barrier. | A minimum of one layer of No. 15 asphalt felt shall be attached to studs or sheathing of all exterior walls. Such felt or material shall be applied horizontally, with the upper layer lapped over the lower layer minimum 2 inches. Where joints occur, felt shall be lapped minimum 6 inches. The felt shall be continuous to the top of walls and terminated at penetrations and building appendages in a manner to maintain a weather-resistant exterior wall envelope. (CRC R703.2) | |
| 5. Wall flashing. | Approved corrosion-resistant flashing shall be applied single flash at the following locations to prevent entry of water into the wall cavity or penetration of water to the building structural framing components (CRC R703.8): a. Exterior door and window openings, extending to the surface of the exterior wall finish or to the water-resistive barrier or to the exterior drainage. b. At the intersection of chimneys or other masonry construction with frame or stucco walls, with projecting joints on both sides under stucco cop | |

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PROPOSED FLOOR PLAN

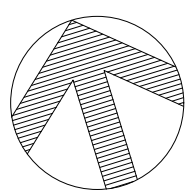
Scale: 3/16" = 1'-0"

Floor plan:

3,674 sq. ft.

Wall Legend

— New Steel Walls



NORTH

Sheet Title:

Proposed Floor Plan

Plan Prepared by:

Fernando Martinez

Fernando Martinez

Brewer Detached Structure

2505 Wilt Rd.
FallBrook, CA 92028



12975 Brookprinter Place, Suite 270, Poway, CA 92064
www.madesigning.com

(760) 390-0007

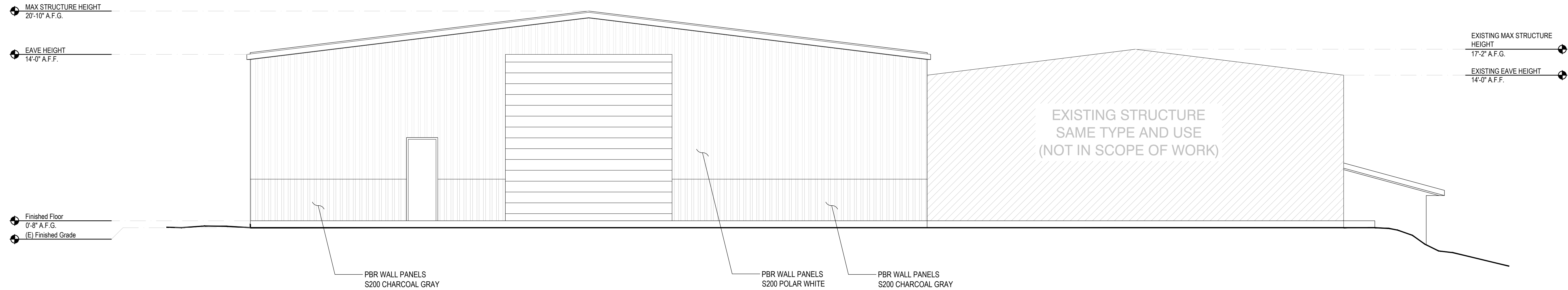
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Date: 12/15/25
Scale: 3/16" = 1'-0"

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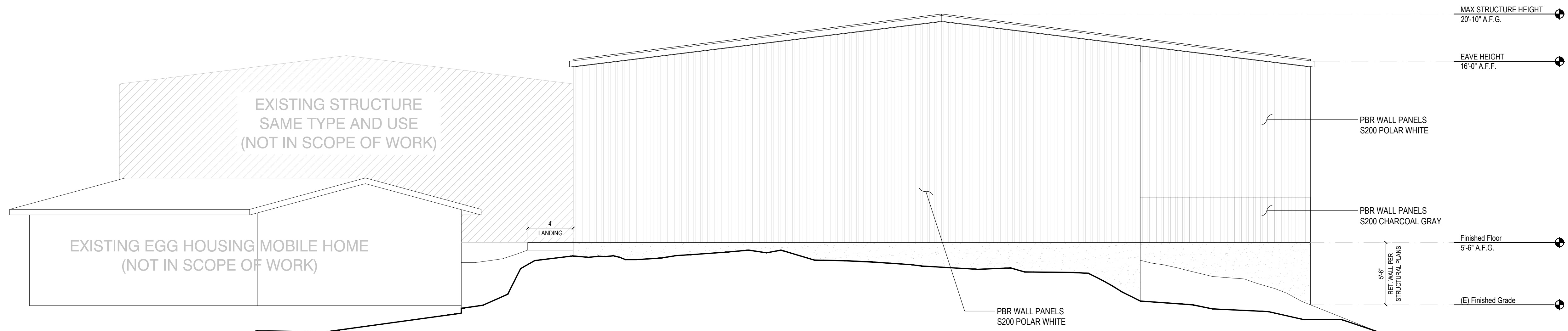
A-1

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North Elevation

Scale: $\frac{3}{16}" = 1'-0"$



South Elevation

Scale: $\frac{3}{16}" = 1'-0"$



Brewer Detached Structure

2505 Wilt Rd.
Fallbrook, CA 92028

Elevations

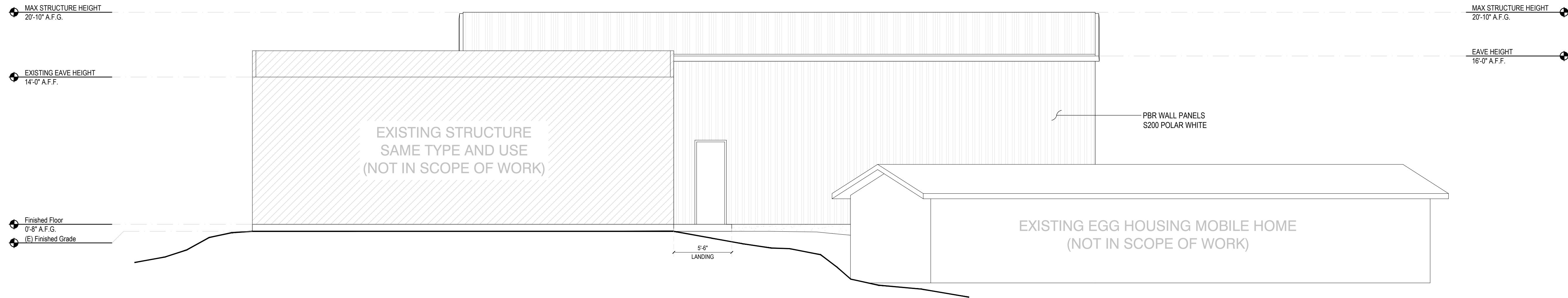
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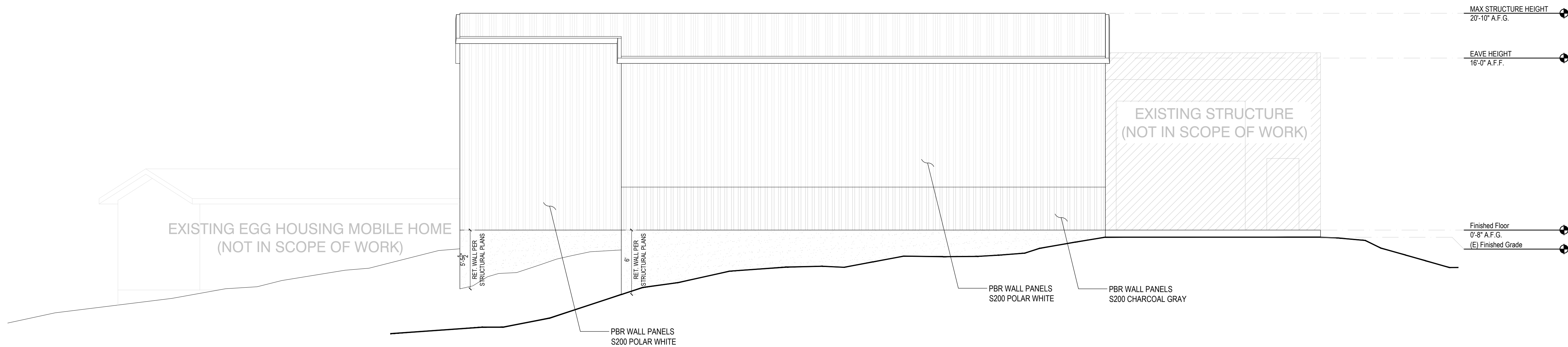
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East Elevation

Scale: $\frac{3}{16}$ " = 1'-0"



West Elevation

Scale: $\frac{3}{16}$ " = 1'-0"



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Elevations

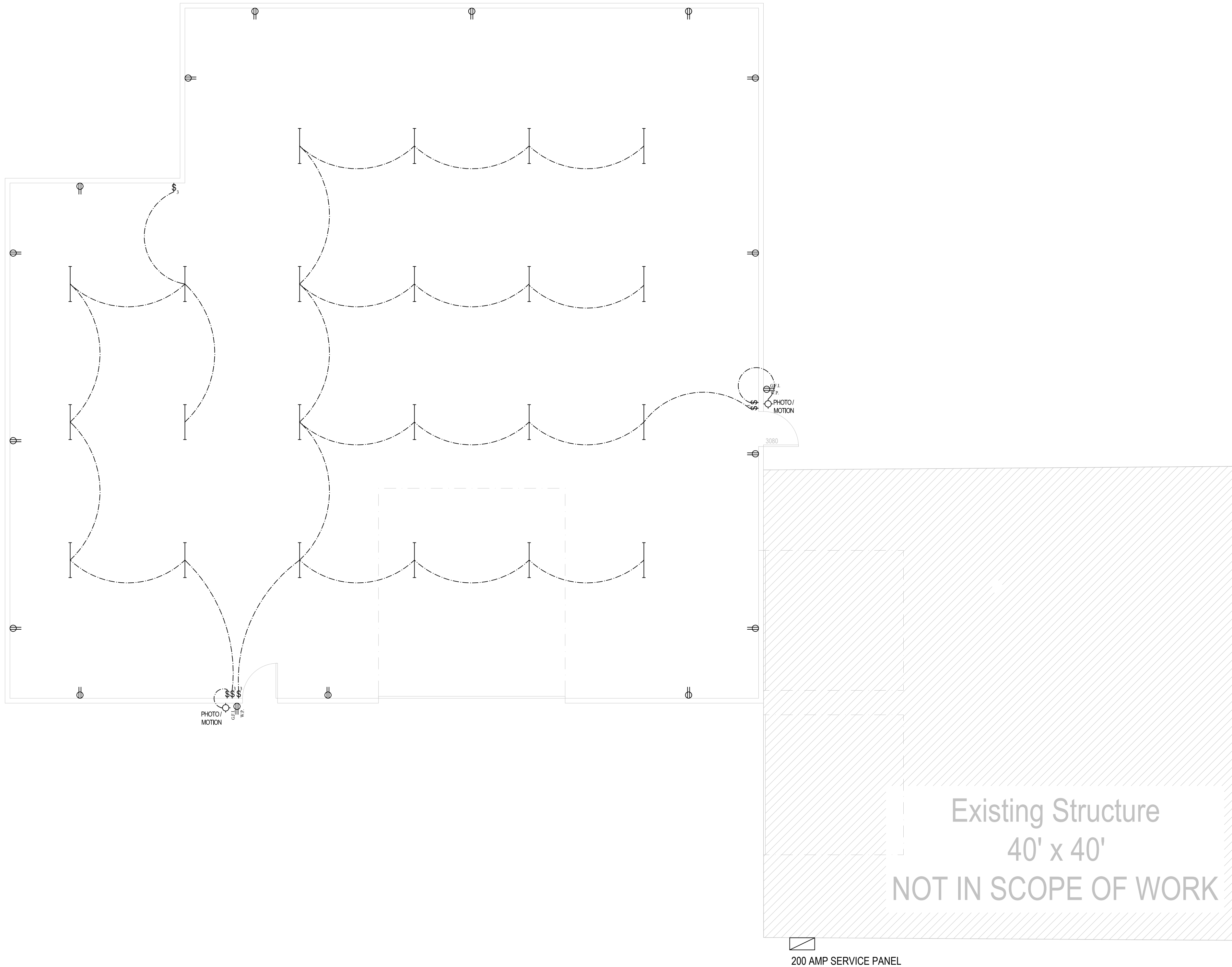
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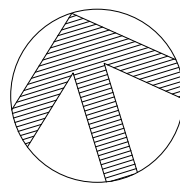
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ELECTRICAL PLAN

Scale: $\frac{3}{16}'' = 1'-0''$



NORTH

ELECTRICAL PLAN NOTES:

- ELECTRICAL SYSTEM GROUND TO BE PROVIDED PER NEC ARTICLE 250-80(s), 81(c).
- ELECTRICAL OUTLETS SHALL BE INSTALLED IN ACCORDANCE WITH NEC ARTICLE 210-52(a).
- LIGHT FIXTURES INSTALLED IN CLOTHES CLOSETS SHALL COMPLY WITH NEC ARTICLE 410-8.
- LIGHTING OUTLETS CONTROLLED BY A SWITCH SHALL BE PROVIDED IN ACCORDANCE WITH NEC ARTICLE 210-8.
- BATHROOM RECEPTACLE OUTLETS SHALL BE SUPPLIED BY A MINIMUM OF ONE 20 AMPERE BRANCH CIRCUIT. SUCH CIRCUITS SHALL HAVE NO OTHER DEVICES. THIS CIRCUIT MAY SERVE MORE THAN ONE BATHROOM OR, EACH BATHROOM IS TO BE ON ITS OWN DEDICATED 20 AMPERE CIRCUIT WITH ONLY THAT BATHROOMS' DEVICES ON THAT CIRCUIT.
- CONVENIENCE OUTLETS IN BATHROOMS, KITCHENS COUNTERTOPS WITHIN 6' OF THE OUTDOORS, GARAGES, AND BASEMENTS (OTHER THAN FOR LAUNDRY OR SIMILAR EQUIPMENT) SHALL BE G.F.C.I. PROTECTED. ALL KITCHEN COUNTERTOP OUTLETS SHALL BE G.F.C.I. PROTECTED. NEC ARTICLE 210-8.
- BEDROOM BRANCH CIRCUITS TO BE ARC FAULT CIRCUIT PROTECTED.
- ALL SMOKE DETECTORS ARE TO BE PERMANENTLY WIRED WHICH WILL SOUND AN ALARM WHEN ACTUATED. SEE LEGEND, ALARM IS TO BE AUDIBLE IN ALL SLEEPING AREAS OF THE UNIT. SMOKE DETECTORS ARE REQUIRED TO BE INTERCONNECTED IN SUCH A MANNER THAT THE ACTIVATION OF ONE ALARM WILL ACTIVATE ALL OF THE ALARMS. IN NEW CONSTRUCTION SMOKE ALARMS SHALL RECEIVE THEIR PRIMARY SOURCE FROM THE BUILDING WIRING AND SHALL BE EQUIPPED WITH BATTERY BACKUPS AND LOW BATTERY SIGNAL.
- THE INSTALLATION OF SMOKE ALARMS AND SMOKE DETECTORS SHALL COMPLY WITH THE SPECIFIC LOCATION REQUIREMENTS OF CRC R314.3.4.
- SMOKE ALARMS AND SMOKE DETECTORS SHALL BE INSTALLED A MINIMUM 20 FEET HORIZONTAL DISTANCE FROM A PERMANENTLY INSTALLED COOKING APPLIANCE.
- SMOKE ALARMS SHALL BE INSTALLED NOT LESS THAN A 3-FOOT HORIZONTAL DISTANCE FROM THE DOOR OR OPENING OF A BATHROOM THAT CONTAINS A BATHTUB OR SHOWER UNLESS THIS WOULD PREVENT PLACEMENT OF A SMOKE ALARM REQUIRED BY OTHER SECTIONS OF THE CRC.
- SMOKE ALARMS AND SMOKE DETECTORS SHALL NOT BE INSTALLED WITHIN A 36-INCH HORIZONTAL PATH FROM THE SUPPLY REGISTERS OF A FORCED AIR HEATING OR COOKING SYSTEM AND SHALL BE INSTALLED OUTSIDE OF THE DIRECT AIRFLOW OF THOSE REGISTERS.
- SMOKE ALARMS SHALL COMPLY WITH NFPA 72 AND SHALL BE LISTED IN ACCORDANCE WITH UL 217.
- COMBINATION SMOKE AND CARBON MONOXIDE ALARMS SHALL BE LISTED IN ACCORDANCE WITH UL 217 AND UL 2034.
- SMOKE ALARM SYSTEMS AND COMPONENTS SHALL BE CALIFORNIA STATE FIRE MARSHALL LISTED AND APPROVED IN ACCORDANCE WITH CALIFORNIA CODE OF REGULATIONS, TITLE 19, DIVISION 1 FOR THE PURPOSE FOR WHICH THEY ARE INSTALLED.
- FOR WATER HEATER AND F.A.U. (IF OCCURS) MINIMUM SPECIFICATIONS, SEE TITLE-24 AND ENERGY SPECIFICATIONS OF THIS SET.
- WATER HEATER AND F.A.U. (IF FLOOR MOUNT OCCURS) TO BE ON 18" HIGH PLATFORM.
- LIGHTING IN BATHROOMS SHALL HAVE ALL HIGH EFFICACY LUMINARIES AND AT LEAST ONE LUMINARIES MUST BE CONTROLLED BY A VACANCY SENSOR.
- OTHER ROOMS: ALL LUMINARIES SHALL BE HIGH-EFFICACY AND HAVE A MANUAL ON/OFF IN ADDITION TO A VACANCY SENSOR OR DIMMER.
- KITCHENS: ALL THE INSTALLED WATTAGE OF LUMINARIES IN KITCHENS SHALL BE HIGH EFFICACY AND SHALL HAVE A MANUAL ON/OFF IN ADDITION TO A VACANCY SENSOR OR DIMMER. UNDER CABINET LIGHTING SHALL BE SWITCHED SEPARATELY.
- OUTDOOR LIGHTING: ALL LUMINARIES MOUNTED TO THE BUILDING OR TO OTHER BUILDINGS ON THE SAME LOT SHALL BE HIGH EFFICACY LUMINARIES AND MUST BE CONTROLLED BY MANUAL ON AND OFF SWITCH, AND USE ONE OF THESE AUTOMATIC CONTROL TYPES:
 - PHOTO CONTROL AND MOTION SENSOR
 - PHOTO CONTROL AND AUTOMATIC TIME SWITCH CONTROL
 - ASTRONOMICAL TIME CLOCK
 - ENERGY MANAGEMENT CONTROL SYSTEM PER CBEES 150.0(k)3a(iii)c.
- GARAGES, LAUNDRY ROOMS AND UTILITY ROOMS: ALL LUMINARIES SHALL BE HIGH EFFICACY AND AT LEAST ONE LIGHTNING FIXTURE IN EACH OF THESE SPACES SHALL BE CONTROLLED BY A VACANCY SENSOR.
- RECESSED DOWN-LIGHT LUMINARIES IN CEILINGS SHALL NOT BE SCREW BASED.
- ALL LUMINARIES REQUIRING "JA8-2016" OR "JA8-2016-E" MARKING SHALL BE CONTROLLED BY A DIMMER OR VACANCY SENSOR.
- ALL LED LUMINARIES AND LAMPS SHALL BE MARKED "JA8-2016" AND LISTED IN THE CALIFORNIA ENERGY COMMISSION DATABASE AT [HTTPS://CACERTAPPLIANCES.ENERGY.CA.GOV/PAGES/APPLIANCESEARCH.ASPX](https://cacertappliances.energy.ca.gov/pages/appliancesearch.aspx)
- ALL RECESSED DOWNLIGHT AND ENCLOSED LUMINAIRES SHALL BE MARKED "JA8-2016" AND LISTED IN THE CALIFORNIA ENERGY COMMISSION DATABASE AT [HTTPS://CACERTAPPLIANCES.ENERGY.CA.GOV/PAGES/APPLIANCESEARCH.ASPX](https://cacertappliances.energy.ca.gov/pages/appliancesearch.aspx)
- A MECHANICAL EXHAUST SYSTEM, SUPPLY SYSTEM, OR COMBINATION THEREOF SHALL BE INSTALLED FOR EACH DWELLING UNIT TO PROVIDE WHOLE-BUILDING VENTILATION WITH OUTDOOR AIR COMPLYING WITH ASHRAE STANDARD 62.2 AS ADOPTED BY THE CALIFORNIA ENERGY COMMISSION. HERS VERIFICATION REQUIRED TO CONFIRM WHOLE-BUILDING VENT AIRFLOW.
- AN INTERMITTENTLY OR CONTINUOUSLY OPERATING LOCAL MECHANICAL EXHAUST SYSTEM (WITH OUTDOOR AIR) SHALL BE INSTALLED IN EACH KITCHEN AND BATHROOM COMPLYING WITH ASHRAE STANDARD 62.2-2007 AS ADOPTED BY THE CALIFORNIA ENERGY COMMISSION. INTERMITTENT LOCAL VENTILATION EXHAUST AIRFLOW RATES SHALL BE 50 CFM IN BATHROOMS, AND 5 ACH (AIR CHANGES/ HOUR) IN KITCHENS BASED ON KITCHEN VOLUME.
- GAS-FIRED WATER HEATERS AND FURNACES LOCATED IN BEDROOMS OR BATHROOMS SHALL COMPLY WITH ONE OF THE FOLLOWING (CPC 505.1, CMC 904.1): INSTALLED IN DEDICATED CLOSET WITH LISTED, GASKETED, SELF-CLOSING DOOR WITH ALL COMBUSTION AIR FROM THE OUTDOORS, OR WATER HEATER OR FURNACE SHALL BE A DIRECT-VENT APPLIANCE.
- DRYER VENTS SHALL BE PER THE FOLLOWING (CMC 504.3.2):
- MINIMUM 4-INCH DIAMETER, MAXIMUM 14-FOOT COMBINED HORIZONTAL AND VERTICAL LENGTH WITH TWO 90-DEGREE ELBOWS, AND TWO FEET DUCTED FROM MAXIMUM LENGTH FOR EACH ELBOW IN EXCESS OF TWO.
- EXHAUST DUCTS AND DRYER VENTS SHALL BE EQUIPPED WITH BACK-DRAFT DAMPERS.
- ENVIRONMENTAL AIR DUCTS AND EXHAUST TERMINATIONS SHALL TERMINATE NOT LESS THAN 3 FEET FROM A PROPERTY LINE AND 3 FEET FROM OPENINGS INTO THE BUILDING.
- ATTIC INSTALLATION MUST COMPLY WITH SECTIONS 904, 908, AND 909 OF THE CALIFORNIA MECHANICAL CODE (CMC).
- A LISTED RACEWAY SHALL BE PROVIDED TO FACILITATE FUTURE INSTALLATION OF ELECTRIC VEHICLE CHARGER IN NEW ONE- AND TWO-FAMILY DWELLINGS AND TOWNHOUSES WITH ATTACHED PRIVATE GARAGES.
- RACEWAY SHALL BE NOT LESS THAN TRAD SIZE 1 (NOMINAL 1-IN. INSIDE DIAMETER) TO ACCOMMODATE A DEDICATED 208/240-VOLT BRANCH CIRCUIT.
- THE EVCS RACEWAY SHALL ORIGINATE A THE MAIN SERVICE OR SUBPANEL AND TERMINATE INTO A LISTED CABINET, BOX OR OTHER ENCLOSURE IN CLOSE PROXIMITY TO THE PROPOSED LOCATION OF THE EV SPACE.
- THE EVCS RACEWAY SHALL BE CONTINUOUS AT ENCLOSED, INACCESSIBLE OR CONCEALED AREAS AND SPACES.
- THE EVCS SERVICE PANEL OR SUBPANEL SHALL PROVIDE CAPACITY TO INSTALL A 40-AMPERE MINIMUM DEDICATED BRANCH CIRCUIT AND SPACE(S) RESERVED TO PERMIT INSTALLATION OF A BRANCH CIRCUIT OVERCURRENT PROTECTIVE DEVICE.
- THE EVCS SERVICE PANEL OR SUBPANEL CIRCUIT DIRECTORY SHALL IDENTIFY:
 - THE OVERCURRENT PROTECTIVE DEVICE SPACE(S) FOR FUTURE EV CHARGING PURPOSES AS "EV CAPABLE"
 - THE RACEWAY TERMINATION LOCATION IN AS "EV CAPABLE"

Electrical Legend

| | | | |
|--|--|--|--|
| | DUPLEX OUTLET | | HIGH EFFICACY RECESSED LIGHTING |
| | EXTERIOR WALL SCONCE LIGHT 6" TAL LED | | HIGH EFFICACY LIGHT FIXTURE |
| | 220 OUTLET | | FAN AND LIGHT COMBINATION (50CFM) |
| | WATER PROOF DUPLEX OUTLET W/ G.F.I. | | EXHAUST FAN (50CFM) |
| | DUPLEX OUTLET W/ GROUND FAULT INT. | | IBC APPROVED SMOKE DETECTOR, PERMANENTLY WIRED W/ BATTERY BACKUP |
| | EXTERIOR FLOOD LIGHT W/ MOTION SENSORS | | CARBON MONOXIDE DETECTOR |
| | ELECTRICAL SUB-PANEL | | FLUORESCENT LIGHTING W/ FLUORESCENT BULB |
| | FLOOR OR CEILING DUPLEX OUTLET | | FORCED GAS OUTLET |
| | SWITCH | | HOSE BIB |
| | THREE WAY SWITCH | | |
| | DIMMER SWITCH | | |
| | AIR SWITCH | | |
| | GARBAGE DISPOSAL | | FLUORESCENT TUBE LIGHT |



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Date: 12/15/25

Scale: 3/16" = 1'-0"

Sheet:

E-1

| ABBREVIATIONS | |
|---------------|------------------------|
| AB | ANCHOR BOLT |
| ABV | ABOVE |
| ADJ | ADJACENT |
| ALT | ALTERNATE |
| ARCH'L | ARCHITECTURAL |
| BLDG | BUILDING |
| BLK | BLOCK |
| BLKG | BLOCKING |
| BLH | BELON |
| BM | BEAM |
| BN | BOUNDARY NAIL |
| BOTT | BOTTOM |
| BRG | BEARING |
| BTWN | BETWEEN |
| BS | BOTH SIDES |
| CAMB | CAMBER |
| CANTL | CANTILEVER |
| C.I.P | CAST IN PLACE |
| C.J. | CEILING JOIST |
| C.L | CENTER LINE |
| CLG | CEILING |
| CLR | CLEAR |
| CMU | CONCRETE MASONRY |
| COL | COLUMN |
| CON | CONNECTION |
| CONT | CONTINUOUS |
| CTR | CENTERED) |
| d | PENNY HEIGHT |
| D.F. | DOUGLAS FIR |
| DIA | DIAMETER |
| DIAPH. | DIAPHRAGM |
| DM | DIMENSION |
| DP | DITTO |
| EA | EACH |
| EN | EDGE NAIL |
| EQ | EQUAL |
| E.S. | EACH SIDE |
| EXIST | EXISTING |
| FDN | FOUNDATION |
| F.J. | FLOOR JOIST |
| FN | FIELD NAIL |
| FT (') | FOOT (FEET) |
| FTG | FOOTING |
| GA | GAUGE |
| G.E. | GABLE END |
| GB | GRADE BEAM |
| GLB | GLU-LAMINATED BEAM |
| G.T. | GIRDER TRUSS |
| H | HOLDOWN |
| HDR | HEADER |
| HGR | HANGER |
| (H) | HORIZONTAL |
| HT | HEIGHT |
| N (') | INCHES) |
| JST | JOIST |
| K | KIPS |
| KS | KING STUD |
| LB (') | POUNDS |
| LONG | LONGITUDINAL |
| LSL | TIMBERSTRAND BEAM |
| LVL | MICROLAM |
| MAX | MAXIMUM |
| MB | MACHINE BOLT |
| MANUF. | MANUFACTURER |
| MISC | MISCELLANEOUS |
| MIN | MINIMUM |
| (N) | NEH |
| NTS | NOT TO SCALE |
| O.C. | ON CENTER |
| PCF | POUNDS PER CUBIC FT |
| PERP | PERPENDICULAR |
| PL | PLATE |
| PLY | PLYWOOD |
| PBL | PARALLAM BEAM |
| P.T. | PRESSURE TREATED |
| REF | REFERENCE |
| REIN | REINFORCING |
| REQD | REQUIRED |
| R.J. | ROOF JOIST |
| R.R. | ROOF RAFTER |
| SCHED | SCHEDULE |
| SIM | SIMILAR |
| SPLC | SPLICE |
| SP. INSP. | SPECIAL INSPECTION |
| STRUC | STRUCTURAL |
| T&B | TOP AND BOTTOM |
| T&G | TONGUE AND GROOVE |
| T. PL | TOP PLATE |
| TR | TRUSS |
| TYP | TYPICAL |
| UCN | UNLESS OTHERWISE NOTED |
| (V) | VERTICAL |
| V.I.F | VERIFY IN FIELD |
| W/ | WITH |
| WT | WEIGHT |

GENERAL NOTES

- THE CONTRACTOR SHALL VERIFY DIMENSIONS AND SITE CONDITIONS PRIOR TO STARTING WORK AND SHALL CONTACT THE ENGINEER OF RECORD IMMEDIATELY OF ANY DISCREPANCIES.
- USE PROVIDED DIMENSIONS FOR CONSTRUCTION. DIMENSIONS SHALL NOT BE SCALED FROM STRUCTURAL PLANS OR DETAILS. CONTACT ENGINEER OF RECORD OR ARCHITECT FOR ANY MISSING DIMENSIONS.
- ALL OMISSIONS AND CONFLICTS BETWEEN THE WORKING DRAWINGS OR SPECIFACATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER OF RECORD PRIOR TO PROCEEDING WITH ANY AFFECTED WORK.
- THE CONTRACTOR SHALL LOCATE ALL EXISTING UTILITIES PRIOR TO BEGINNING EXCAVATIONS.
- ALL MATERIALS AND CONSTRUCTION SHALL COMPLY WITH THE APPLICABLE BUILDING CODE LISTED IN THE DESIGN NOTES.
- CONTRACTOR SHALL SUBMIT ALL SHOP DRAWINGS TO THE ENGINEER OF RECORD PRIOR TO FABRICATION AND INSTALLATION.
- THESE DRAWINGS REPRESENT THE FINISHED STRUCTURE AND DO NOT INDICATE THE MEANS OR METHOD OF CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR ALL TEMPORARY BRACING, SHORING AND SUPPORT NECESSARY TO ACHIEVE THE FINISHED STRUCTURE.

FOUNDATION NOTES

- SOILS REPORT BY: **ENGINEERING DESIGN GROUP**
SOILS REPORT NUMBER: **25182-1-1** **APPENDUM 1** **APPENDUM 2**
DATE OF REPORT: **JUNE 19, 2025** **NOVEMBER 21, 2025** **DECEMBER 4, 2025**
- DESIGN SOIL PRESSURE: **2000 PSF, INCREASE UP TO 3200 PSF FOR WIDTH/DEPTH**
- FOOTING DEPTH: **18"**
BELOW BUILDING PAD: **18"**
BELOW EXTERIOR GRADE: **18"**
- SUBGRADE PREPARATION AND COMPACTION SHALL BE IN ACCORDANCE WITH THE SOILS REPORT UNDER THE SUPERVISION OF THE GEOTECHNICAL ENGINEER.
- FOOTING EXCAVATIONS SHALL BE KEPT FREE FROM LOOSE MATERIAL AND STANDING WATER. EXCAVATIONS SHALL BE CHECKED AND APPROVED BY THE GEOTECHNICAL ENGINEER PRIOR TO PLACING CONCRETE TO ASSURE COMPLIANCE WITH THE SOILS' REPORT.
- FOUNDATIONS MAY BE POURED AGAINST STABLE SOIL.
- METHOD OF SUPPORTING REINFORCING PIPE SLEEVES MUST BE APPROVED BY THE STRUCTURAL ENGINEER.
- CONTRACTOR SHALL PROTECT ALL UTILITIES ENCOUNTERED DURING EXCAVATION AND BACKFILLING.
- CONTRACTOR SHALL BRACE OR PROTECT FROM LATERAL LOADS ALL RETAINING WALLS UNTIL RESTRAINING FLOORS OR SLABS ARE IN PLACE AND HAVE ATTAINED FULL STRENGTH.
- ALL HOLDOWNS SHALL BE TIED IN PLACE PRIOR TO FOUNDATION INSPECTION.
- ANCHOR BOLTS SHALL BE ¾" W/ 1" MINIMUM EMBEDMENT INTO CONCRETE W/ ¼"x3"x3" PLATE WASHERS.
- MINIMUM ATTACHMENT FOR EXTERIOR WALLS SHALL BE ¾" ANCHOR BOLTS @ 60" O.C. UCN ON PLANS. MINIMUM ATTACHMENT FOR INTERIOR WALLS SHALL BE ¾" 1" IN RANSET/HEADHEAD SHOTPIN (ICC-ESR 2630) @ 32" O.C. OR .31" PDPA SIMPSON SHOT PINS (ICC-ESR 238) UCN ON PLANS.

CONCRETE NOTES (CBC CHAPTER 19)

- ALL CONCRETE WORK SHALL CONFORM TO THE REQUIREMENTS OF ACI 301, EXCEPT AS MODIFIED BY THESE NOTES.
- CONCRETE SHALL BE STANDARD WEIGHT CONCRETE (145 PCF) AND HAVE THE FOLLOWING ULTIMATE COMPRESSIVE STRENGTH AT 28 DAYS:
A. FOOTINGS: **4500 PSI ±**
B. SLAB ON GRADE: **4500 PSI ±**
C. GRADE BEAMS: **4500 PSI ±**

± WATER TO CEMENT RATIO NOT TO EXCEED 0.45

- CEMENT SHALL CONFORM TO ASTM C-150, TYPE I OR TYPE II.
- AGGREGATES SHALL CONFORM TO ASTM C-33 FOR NORMAL WEIGHT CONCRETE AND ASTM C-330 FOR LIGHTWEIGHT CONCRETE.
- READY MIX CONCRETE SHALL CONFORM TO ASTM C94.
- AD MIXTURES SHALL COMPLY WITH ASTM A494 AND SHALL NOT BE CONSIDERED TO REDUCE THE CEMENT CONTENT. (CALCIUM CHLORIDE SHALL NOT BE USED)
- STRUCTURAL LIGHTWEIGHT CONCRETE SHALL BE SAND LIGHTWEIGHT AND HAVE A DRY DENSITY RANGE OF 110 PCF TO 115 PCF.
- WATER SHALL BE CLEAN AND FREE OF ACID, ALKALIS AND ORGANIC MATERIALS.
- CONCRETE SLEEVES SHALL CONFORM TO ASTM C-143 AND SHALL NOT EXCEED THE FOLLOWING:
A. FOOTINGS: **4"**
B. SLAB ON GRADE: **4"**
C. IF TEMP IS ABOVE 80°: **6"** (PROVIDE REVISED MIX DESIGN)
- CONCRETE SHALL BE PROPORTIONED SUCH THAT THE 1 DAY STRENGTHS ARE A MINIMUM OF SEVENTY PERCENT OF THE SPECIFIED 28 DAY STRENGTH FOR ANY CONCRETE CONSTRUCTION REQUIRING SHORING, BRACING OR TO RECEIVE CONSTRUCTION LOADS.
- REFER TO ARCHITECTURAL DRAWINGS FOR CURBS, DEPRESSIONS, SLOPES, GROOVES AND GROUNDS REQUIRED TO BE CAST INTO CONCRETE.
- SLEEVE PLUMBING OPENINGS IN CONCRETE SLABS BEFORE PLACING CONCRETE.
- NO SLEEVES OR CHASES SHALL BE PLACED IN FOOTINGS UNLESS SPECIFICALLY NOTED BY THE STRUCTURAL PLANS.
- PROJECTION CORNERS OF SLABS, WALLS, COLUMNS, ETC SHALL BE FORMED WITH A ¾" CHAMFER.
- MIX DESIGNS SHALL BE SUBMITTED TO THE ENGINEER OF RECORD FOR REVIEW PRIOR TO POURING CONCRETE.
- COMPRESSIVE STRENGTH TEST REPORTS SHALL BE SUBMITTED TO THE ENGINEER OF RECORD WHEN CONCRETE REQUIRES SPECIAL INSPECTION.
- REFER TO SECTION 1.1 OF ACI 318 FOR CONCRETE COVER NOT NOTED IN THE PLANS OR DETAILS.
- DO NOT DISPLACE REBAR FROM THEIR INTENDED POSITIONS DURING PLACEMENT OF CONCRETE.
- CLEAN AND ROUGHEN THE SURFACES OF ANY COLD JOINTS. USE A BONDING AGENT THAT EXCEEDS THE COMPRESSIVE STRENGTH OF THE CONCRETE BY 25%.

REINFORCING STEEL

- REBAR GRADES SHALL BE: ASTM A615
A. #5 AND SMALLER: **GRADE 40**
B. #4 AND LARGER: **GRADE 60**
- CONCRETE COVER FOR REBAR SHALL BE:
A. CONCRETE POURED AGAINST EARTH: **3"**
B. CONCRETE EXPOSED TO WEATHER:
#5 AND SMALLER: **1½"**
#6 AND LARGER: **2"**
C. CONCRETE NOT EXPOSED TO WEATHER:
#4 AND SMALLER: **¾"**
#4 AND LARGER: **1½"**
- REBAR DETAILING AND PLACEMENT SHALL BE IN ACCORDANCE WITH THE "MANUAL OF STANDARD PRACTICE" BY THE REINFORCING STEEL INSTITUTE.
- VERTICAL BARS SHALL BE TIED IN PLACE AT THE TOP, BOTTOM AND INTERMEDIATE POINTS PER CBC CHAPTERS 19 AND 21.
- ALL REBAR, ANCHOR BOLTS, DONELS AND INSERTS SHALL BE WELL SECURED IN POSITION PRIOR TO PLACING CONCRETE.
- CONTRACTOR SHALL SUBMIT REINFORCING STEEL SHOP DRAWINGS FOR REVIEW BEFORE FABRICATION AND INSTALLATION.
- WELDING OF REINFORCING BARS SHALL CONFORM TO AWS D14.05. E60XX ELECTRODES SHALL BE USED FOR BAR TO BAR & 170XX ELECTRODES SHALL BE USED FOR REINFORCING TO STRUCTURAL STEEL.

SPECIAL INSPECTION NOTES (CBC CHAPTER 17)

- THE OWNER OR OWNER'S AGENT SHALL EMPLOY ONE OR MORE SPECIAL INSPECTORS TO PROVIDE INSPECTION DURING CONSTRUCTION ON THE WORK LISTED IN THE STATEMENT OF SPECIAL INSPECTIONS. THE SPECIAL INSPECTOR SHALL BE A QUALIFIED PERSON WHO SHALL DEMONSTRATE COMPETENCE TO THE SATISFACTION OF THE BUILDING OFFICIAL FOR THE INSPECTION OF THE WORK REQUIRING SPECIAL INSPECTION.
- THE CONSTRUCTION INSPECTIONS LISTED ARE IN ADDITION TO THE INSPECTIONS REQUIRED BY CBC CHAPTER 17. SPECIAL INSPECTION IS IN ADDITION TO, NOT A SUBSTITUTE FOR THE INSPECTION REQUIRED BY THE BUILDING DEPARTMENT.
- IT SHALL BE THE AGENCY'S RESPONSIBILITY TO PROVIDE A SUFFICIENT NUMBER OF INSPECTORS FOR MULTIPLE TYPES OF WORK THAT OCCUR SIMULTANEOUSLY.
- THE SPECIAL INSPECTOR MUST BE CERTIFIED BY THE LOCAL JURISDICTION IN THE CATEGORY OF WORK REQUIRED TO HAVE SPECIAL INSPECTION EXCEPT:
A. SOILS INSPECTION SHALL BE PROVIDED BY THE GEOTECHNICAL ENGINEER OF RECORD.
B. SMOKE CONTROL SYSTEM INSPECTIONS SHALL BE PERFORMED BY THE MECHANICAL ENGINEER OF RECORD.
C. WHEN THIS REQUIREMENT IS WAIVED BY THE BUILDING OFFICIAL.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE SPECIAL INSPECTOR AT LEAST ONE WORKING DAY PRIOR TO PERFORMIN ANY WORK THAT REQUIRES SPECIAL INSPECTION.
- A PROPERTY OWNER'S FINAL REPORT FORM FOR WORK REQUIRED TO HAVE SPECIAL INSPECTIONS AND STRUCTURAL OBSERVATION MUST BE COMPLETED BY THE OWNER, THE OWNER'S AGENT, THE ARCHITECT OF RECORD OR THE ENGINEER OF RECORD AND SUBMITTED TO THE INSPECTION SERVICES DIVISION.
- THE CONSTRUCTION MATERIALS TESTING LABORATORY MUST BE APPROVED BY THE LOCAL JURISDICTION FOR TESTING MATERIALS, SYSTEMS, COMPONENTS AND EQUIPMENT.
- FABRICATOR MUST BE REGISTERED AND APPROVED BY THE LOCAL JURISDICTION FOR THE FABRICATION OF MEMBERS AND ASSEMBLIES AT THE SHOP. THE FABRICATOR SHALL SUBMIT AN AFFILIATION TO PERFORM OFF-SITE FABRICATION TO THE INSPECTION SERVICES DIVISION PRIOR TO COMMENCEMENT OF FABRICATION. THE FABRICATOR SHALL SUBMIT A CERTIFICATE OF COMPLIANCE TO THE INSPECTION SERVICES DIVISION PRIOR TO THE ERECTION OF FABRICATED ITEMS.
- A CERTIFICATE OF SATISFACTORY COMPLETION OF WORK REQUIRING SPECIAL INSPECTION MUST BE COMPLETED AND SUBMITTED TO THE FIELD INSPECTION DIVISION OF THE APPROVING MUNICIPALITY.

STATEMENT OF SPECIAL INSPECTIONS

| MATERIAL, SYSTEM, COMPONENT AND WORK REQUIRED TO HAVE SPEC. INSP. | TYPE OF SPEC. INSP. CONTINUOUS / PERIODIC | INSPECTION NOTES |
|--|---|--|
| SOILS: | | |
| VERIFY MATERIAL BELOW FOOTINGS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY | × | |
| VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL | × | |
| PERFORM CLASSIFICATION AND TESTING OF CONTROLLED FILL MATERIALS | × | |
| VERIFY USE OF PROPER MATERIALS, DENSITIES AND LIFT THICKNESSES DURING PLACEMENT AND COMPACTION OF CONTROLLED FILL | × | |
| PRIOR TO PLACEMENT OF CONTROLLED FILL, OBSERVE SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY | × | |
| CONCRETE: | | |
| FOUNDATIONS WITH $f_c \leq 2500$ PSI | NOT REQUIRED | |
| INSPECTION OF REINF. STEEL, INCLUDING PRESTRESSING TENDONS, AND PLACEMENT | × | ACI 318: CH. 20, 25.2, 25.3, 26.5.1 - 26.5.3 |
| VERIFYING USE OF REQUIRED DESIGN MIX | × | ACI 318: CH. 19, 26.4.3, 26.4.4 |
| TAKING TEST SAMPLES | × | ACI 318: CH. 26.4.5, 26.4.2 |
| INSPECTION OF CONCRETE AND SHOTCRETE PLACEMENT | × | ACI 318: CH. 26.4.5 |
| INSPECTION FOR MAINTENANCE OF SPECIFIED CURING TEMP. AND TECHNIQUE | × | ACI 318: CH. 26.4.1 - 26.4.3 |
| VERIFICATION OF IN-SITU CONCRETE STRENGTH PRIOR TO STRENGTHENING OF TENDONS IN POST-TENSIONED CONCRETE AND PRIOR TO REMOVAL OF SHORES AND FORMS FROM BEAMS AND STRUCTURAL SLABS. | × | |
| INSPECT FORMWORK FOR SHAPE, LOCATION AND DIMENSIONS OF THE CONCRETE MEMBERS BEING FORMED. | × | ACI 318: CH. 26.10.1(b) |

DESIGN NOTES:

DESIGN CODE: 2022 CBC

WIND

ULTIMATE DESIGN WIND SPEED: 110 MPH
NOMINAL DESIGN WIND SPEED: 85 MPH
RISK CATEGORY: II
INTERNAL PRESSURE COEFFICIENT: ±0.18
WIND EXPOSURE: C
COMPONENTS AND CLADDING PRESSURE: 24 PSF
DESIGN LOADS

-REACTIONS PER STEEL BUILDING MANUFACTURER
-125 PSF WAREHOUSE LIVE LOAD

SEISMIC

RISK CATEGORY: II
SEISMIC IMPORTANCE FACTOR: 1.0
S_s: 1.071 S_{DS}: 0.862
DESIGN BASE SHEAR: 9.95K
SITE CLASS: D
SEISMIC DESIGN CATEGORY: D
BASIC FORCE RESISTING SYSTEM:
ORDINARY STEEL MOMENT FRAME (R=3.25)
ORDINARY STEEL CENTRICALLY BRACED FRAME (R=3.25)
☐ SIMPLIFIED ANALYSIS PROCEDURE (ASCE 7-16 12.14)
☒ EQUIVALENT LATERAL FORCE PROC. (ASCE 7-16 12.8)

NOTICE TO THE APPLICANT/ OWNER/ OWNER'S AGENT/ ARCHITECT OR ENGINEER OF RECORD: BY USING THIS PERMITTED CONSTRUCTION DRAWINGS FOR CONSTRUCTION/INSTALLATION OF THE WORK SPECIFIED HEREIN, YOU AGREE TO COMPLY WITH THE REQUIREMENTS OF CITY OF CARLSBAD FOR SPECIAL INSPECTION, STRUCTURAL OBSERVATIONS, CONSTRUCTION MATERIAL TESTING AND OFF SITE FABRICATION OF BUILDING COMPONENTS, CONTAINED IN THE STATEMENT OF SPECIAL INSPECTION AND, AS REQUIRED BY THE CALIFORNIA CONSTRUCTION CODES.

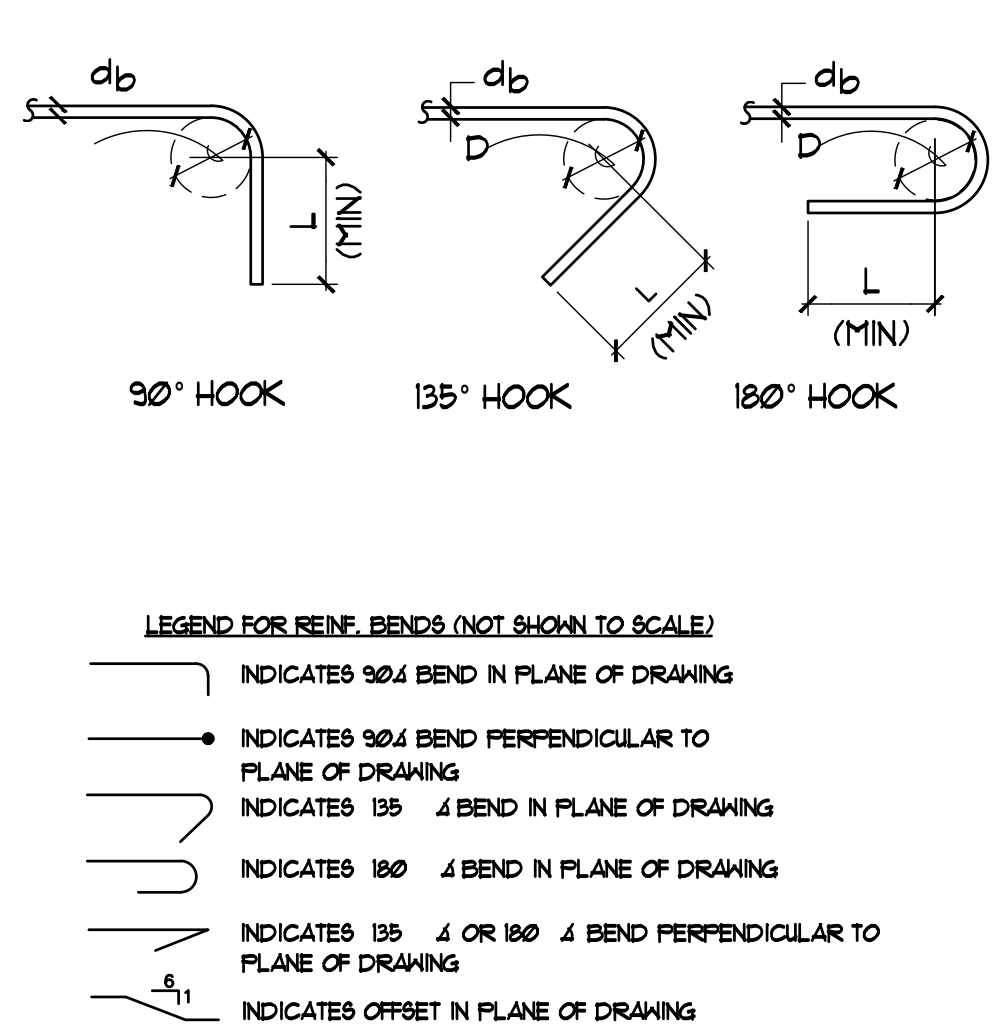
NOTICE TO THE CONTRACTOR/ BUILDER/ INSTALLER/ SUB-CONTRACTOR/ OWNER-BUILDER: BY USING THIS PERMITTED CONSTRUCTION DRAWINGS FOR CONSTRUCTION/INSTALLATION OF THE WORK SPECIFIED HEREIN, YOU YOU ACKNOWLEDGE AND ARE AWARE OF THE REQUIREMENTS CONTAINED IN THE STATEMENT OF SPECIAL INSPECTIONS. YOU AGREE TO COMPLY WITH THE REQUIREMENTS OF CITY OF CARLSBAD FOR SPECIAL INSPECTIONS, STRUCTURAL OBSERVATIONS, CONSTRUCTION MATERIAL TESTING AND OFF SITE FABRICATION OF BUILDING COMPONENTS, CONTAINED IN THE STATEMENT OF SPECIAL INSPECTION AND, AS REQUIRED BY THE CALIFORNIA CONSTRUCTION CODES.

| BARS OTHER THAN STIRRUPS, TIES, HOOPS & CROSS-TIES | | | | | |
|--|------|------|------|------|--|
| BAR SIZE | D' | 180° | 135° | 90° | |
| #3 | 2 ¼ | 2 ½ | - | 4 ½ | |
| #4 | 3 | 2 ½ | - | 6 | |
| #5 | 3 ¾ | 2 ½ | - | 7 ½ | |
| #6 | 4 ½ | 3 | - | 9 | |
| #7 | 5 ¼ | 3 ½ | - | 10 ½ | |
| #8 | 6 | 4 | - | 12 | |
| #9 | 6 ¾ | 4 ½ | - | 13 ½ | |
| #10 | 10 ¼ | 5 ½ | - | 15 ½ | |
| #11 | 11 ½ | 5 ¾ | - | 17 | |
| #14 | 18 ¼ | 7 | - | 20 ½ | |
| #18 | 22 ¾ | 9 | - | 27 | |

STIRRUPS, TIES, HOOPS & CROSS-TIES

| BAR SIZE | D' | 180° | 135° | 90° | |
|----------|---------|------|------|------|--|
| #3 | 1 ½ (3) | 2 ½ | 3 | 3 | |
| #4 | 2 (2) | 2 ½ | 3 | 3 | |
| #5 | 2 ½ (3) | 2 ½ | 3 ½ | 3 ½ | |
| #6 | 4 ½ | 3 | 4 ½ | 3 | |
| #7 | 5 ¼ | 3 ½ | 5 ¼ | 10 ½ | |
| #8 | 6 | 4 | 6 | 12 | |

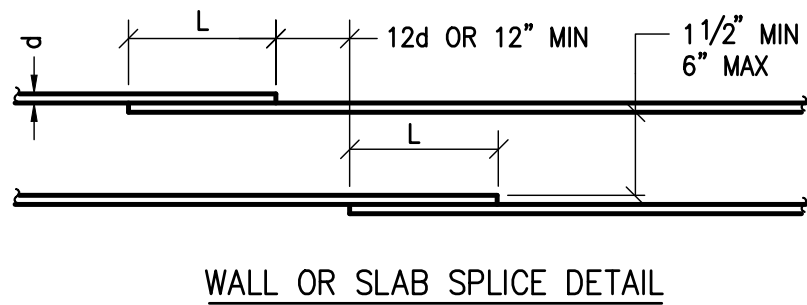
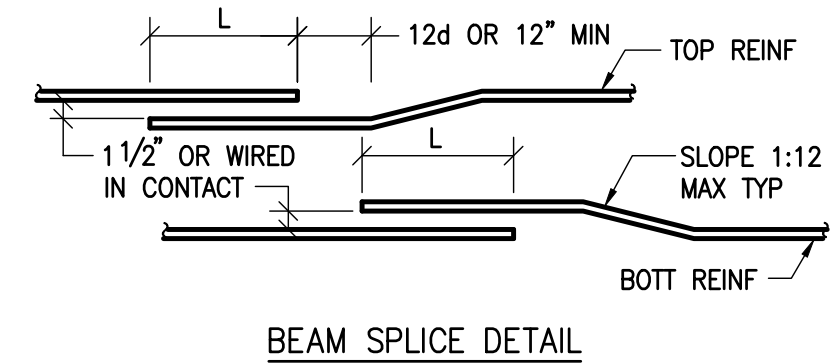
(1) USE 3 ¾" IN CONC. BLK. CONSTRUCTION
(2) USE 3" IN CONC. BLK. CONSTRUCTION
(3) USE 2 ¼" IN CONC. BLK. CONSTRUCTION
NOTE : ALL DIMENSIONS GIVEN ARE IN INCHES.



TYPICAL BAR BENDS & HOOKS

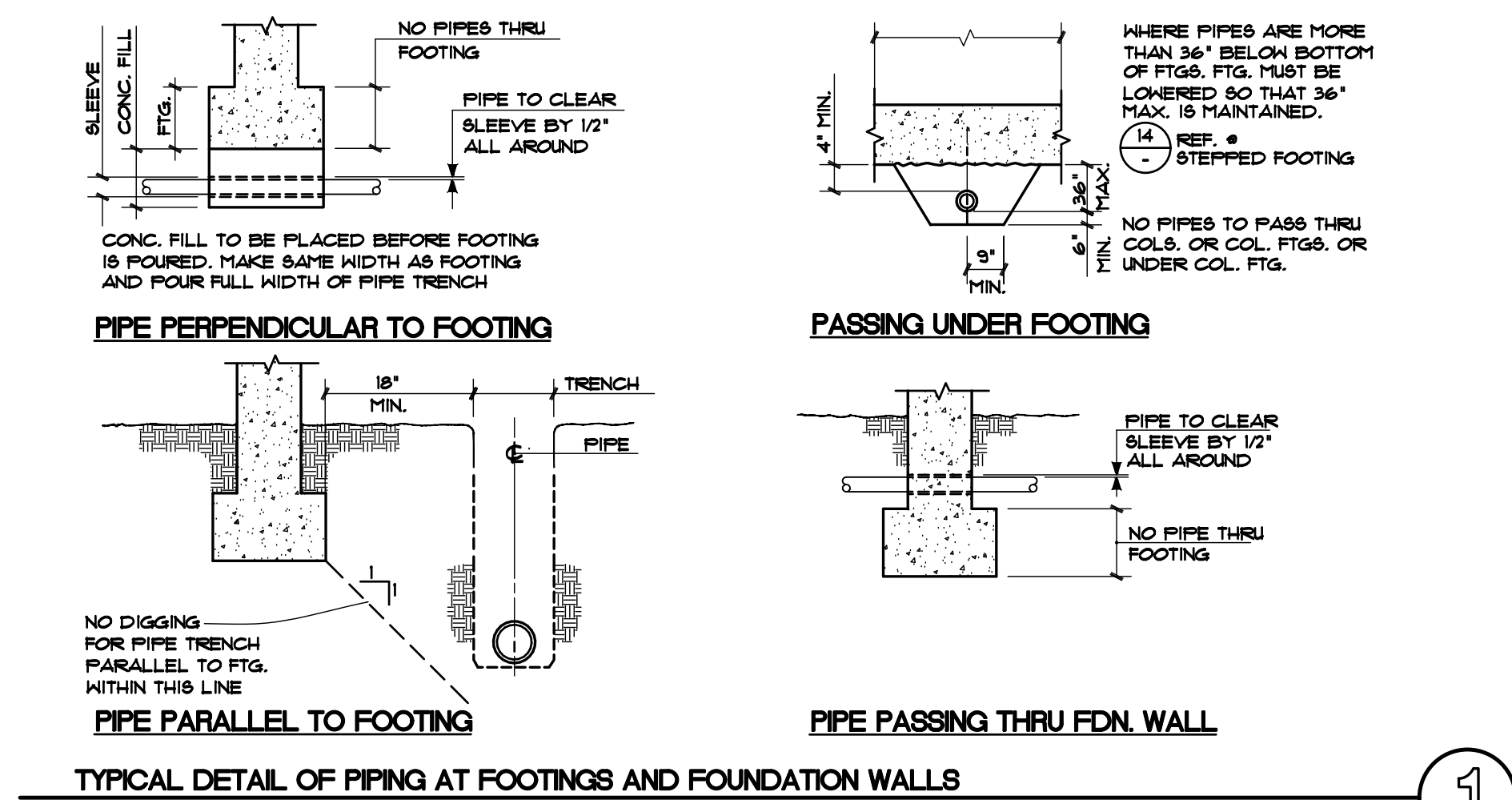
| SCHEDULE I | | | | | | | | | | | | | |
|--|---------------|-----------------|----------|----|----|----|----|----|----|----|-----|------------------------|--|
| LOCATION IN STRUCTURE | CONC. F'c PSI | STEEL GRADE KSI | BAR SIZE | | | | | | | | | | |
| | | | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | L= LAP SPICE IN INCHES | |
| BOTTOM BARS OF BEAMS, JOISTS, SLABS & SPANDRELS (SEE NOTE 7) | 2500 | 60 | 18 | 24 | 30 | 36 | 41 | 50 | 63 | 80 | 98 | | |
| | 3000 | 60 | 22 | 29 | 36 | 43 | 63 | 72 | 81 | 91 | 101 | | |
| | 4000 | 60 | 19 | 25 | 31 | 37 | 54 | 62 | 70 | 79 | 87 | | |
| | 5000 | 60 | 13 | 17 | 21 | 25 | 29 | 35 | 45 | 56 | 69 | | |
| | 6000 | 60 | 12 | 16 | 19 | 23 | 27 | 32 | 41 | 52 | 63 | | |
| | 7000 | 60 | 12 | 14 | 18 | 21 | 25 | 30 | 38 | 48 | 59 | | |
| | 3000 | 60 | 21 | 28 | 35 | 42 | 48 | 55 | 62 | 73 | 89 | | |
| VERTICAL WALL STEEL | 4000 | 60 | 18 | 24 | 30 | 36 | 42 | 48 | 54 | 63 | 77 | | |
| | 5000 | 60 | 16 | 22 | 27 | 32 | 38 | 43 | 48 | 56 | 69 | | |
| | 6000 | 60 | 15 | 20 | 25 | 30 | 34 | 39 | 44 | 52 | 63 | | |
| | 7000 | 60 | 14 | 18 | 23 | 27 | 32 | 36 | 41 | 48 | 59 | | |

| SCHEDULE II | | | | | | | | | | | | | |
|---|---------------|-----------------|----------|----|----|----|----|----|----|-----|-----|------------------------|--|
| LOCATION IN STRUCTURE | CONC. F'c PSI | STEEL GRADE KSI | BAR SIZE | | | | | | | | | | |
| | | | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | L= LAP SPICE IN INCHES | |
| TOP BARS* OF BEAMS, JOISTS AND SPANDRELS (SEE NOTE 7) | 2500 | 60 | 24 | 32 | 39 | 47 | 54 | 69 | 88 | 112 | 137 | | |
| | 3000 | 60 | 21 | 29 | 36 | 42 | 50 | 63 | 80 | 101 | 124 | | |
| | 4000 | 60 | 19 | 25 | 32 | 37 | 43 | 55 | 69 | 88 | 108 | | |
| | 5000 | 60 | 17 | 23 | 28 | 33 | 38 | 49 | 62 | 77 | 96 | | |
| | 6000 | 60 | 16 | 21 | 25 | 30 | 36 | 45 | 56 | 72 | 88 | | |
| | 7000 | 60 | 14 | 19 | 24 | 28 | 33 | 39 | 53 | 67 | 83 | | |
| | 3000 | 60 | 29 | 39 | 48 | 58 | 68 | 77 | 87 | 101 | 124 | | |
| HORIZONTAL WALL STEEL | 4000 | 60 | 25 | 34 | 42 | 50 | 59 | 67 | 75 | 88 | 108 | | |
| | 5000 | 60 | 23 | 30 | 38 | 45 | 52 | 60 | 67 | 77 | 96 | | |
| | 6000 | 60 | 21 | 28 | 34 | 41 | 48 | 55 | 62 | 72 | 88 | | |
| | 7000 | 60 | 19 | 26 | 32 | 38 | 44 | 51 | 57 | 67 | 83 | | |

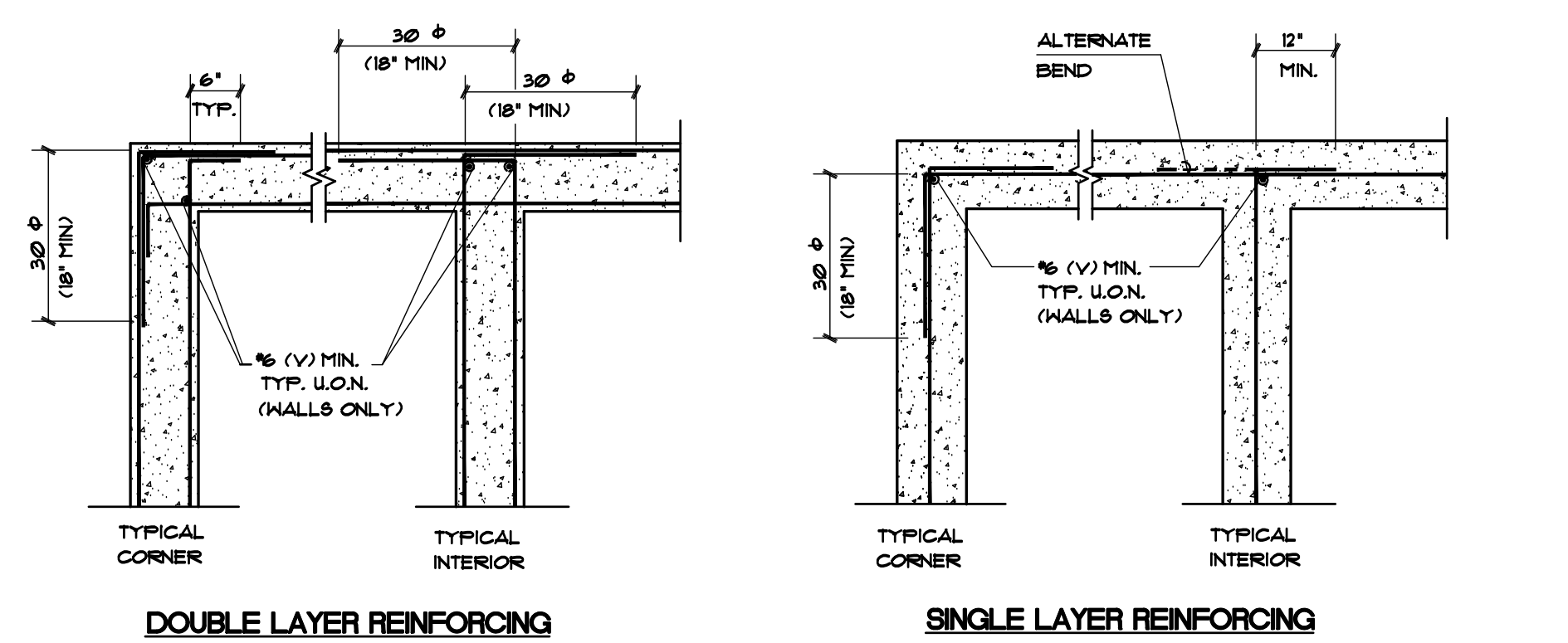


REGULAR WEIGHT CONCRETE REINFORCING LAP SPLICE SCHEDULE

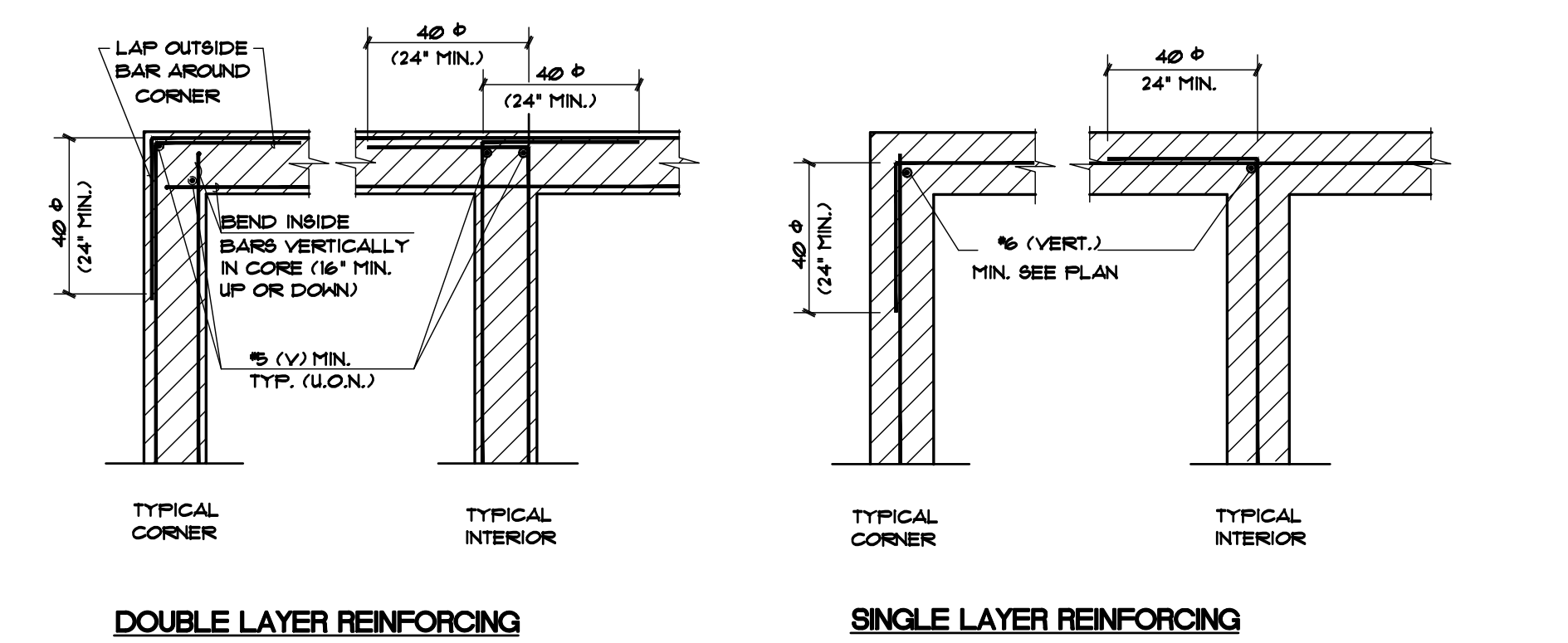
- NOTES:
- THE SCHEDULES SHOWN ON THIS DETAIL APPLY TO REGULAR WEIGHT CONCRETE @ 145 TO 150 PCF.
 - ALL HORIZONTAL SPLICES SHALL BE STAGGERED AS SHOWN. IF MORE THAN 50% OF VERTICAL REINFORCING IS LAP SPICED WITHIN THE REQUIRED LAP SPLICE LENGTH, THE LAP SPLICE LENGTH SHALL BE INCREASED 33%.
 - LAP SPLICES LISTED IN THE SCHEDULE ARE CLASS B LAPS FOR CLASS A LAPS, REDUCE LENGTH BY 25%.
 - THE SMALLER BAR LAP LENGTH SHALL BE USED WHEN SPLICING DIFFERENT SIZE BARS.
 - LAP LENGTHS SPECIFICALLY DETAILED ON DRAWINGS SHALL GOVERN IN LIEU OF THE LAP LENGTHS SCHEDULED.
 -



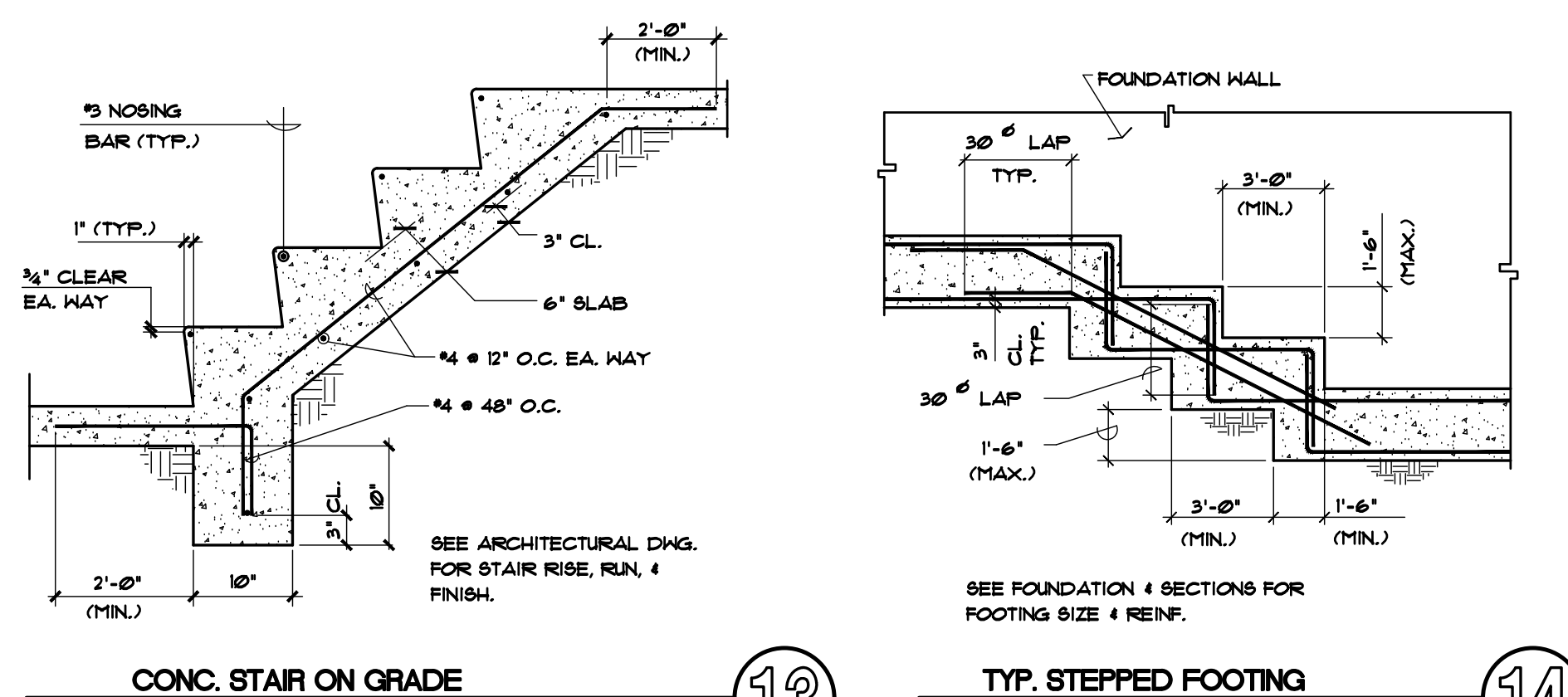
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6

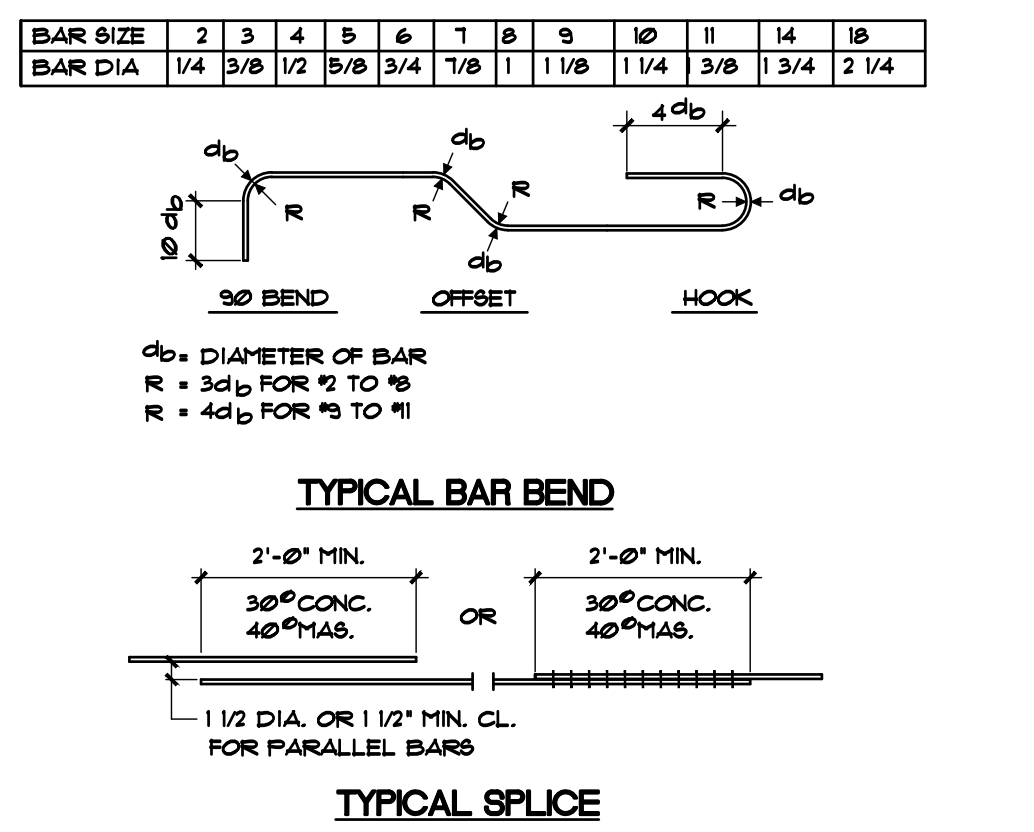


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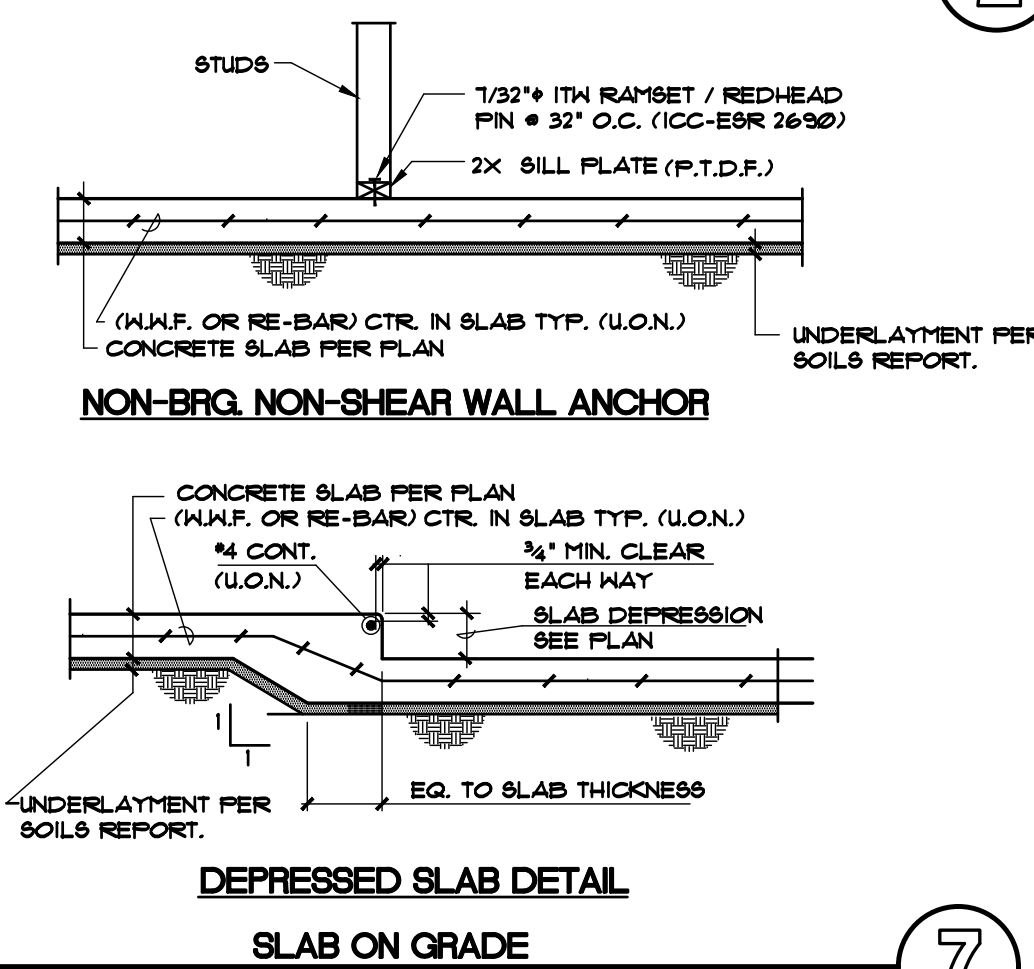


13

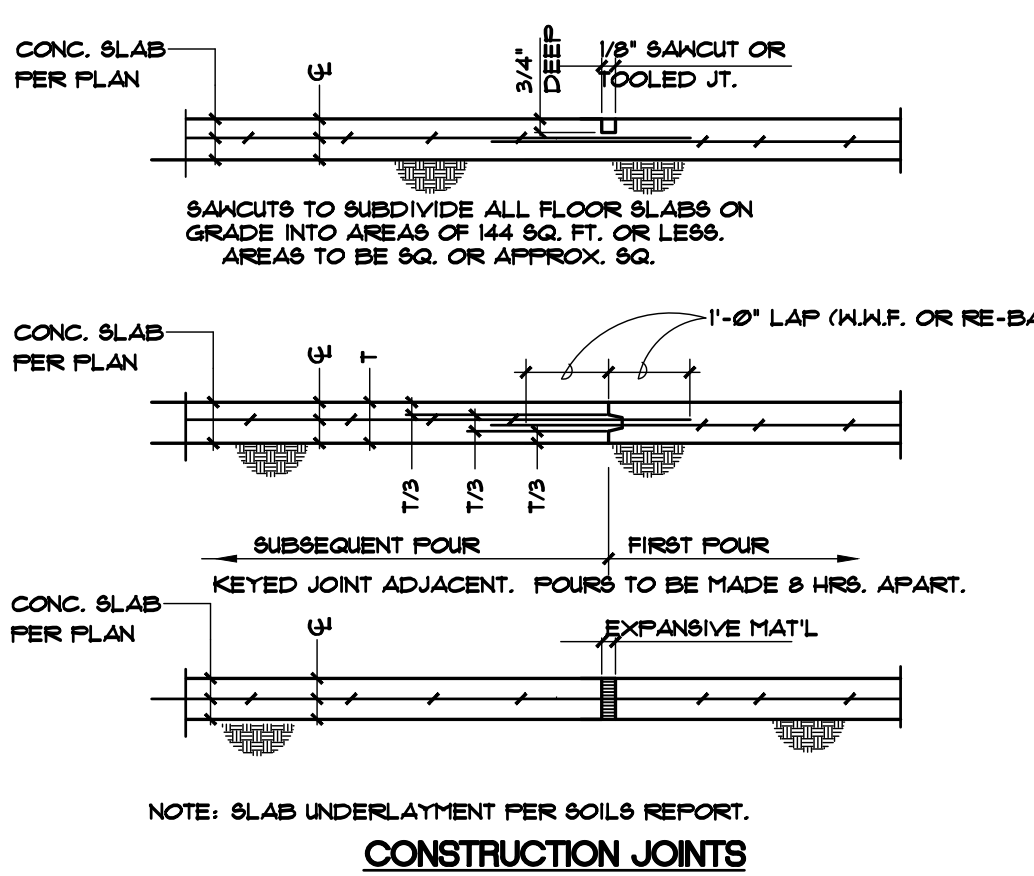
14



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7



11

CONVENTIONAL FOUNDATION DRAWING NOTES:

1. ALL FOOTING BOLTS TO BE TIED IN PLACE PRIOR TO FOUNDATION INSPECTION.
2. A.B. + H.D. BOLDS PER PLAN
3. FOR ALL DIMENSIONS, SEE ARCH'L DRAWINGS
4. FOR ALL SLAB SLOPES + FLOOR DRAINS, SEE ARCH'L DRAWINGS
5. PRIOR TO CONTRACTOR BEGINNING SOIL DEEP FOUNDATION EXCAVATIONS, THE SOILS ENGINEER SHALL ADVISE BUILDING OFFICIAL IN WRITING THAT:
 - A.) THE BLDG PAD WAS PREPARED IN ACCORDANCE WITH THE SOILS REPORT
 - B.) THE UTILITY TRENCHES HAVE BEEN PROPERLY BACKFILLED + COMPACTED
 - C.) THE FDN EXCAVATIONS, SOILS EXPANSIVE CHARACTERISTICS + BEARING CAPACITY, CONFORM TO THE SOILS REPORT.

LEGEND:

6——6 INDICATES STEP FOOTING, SEE DETAIL 14/S002.

INDICATES WALL

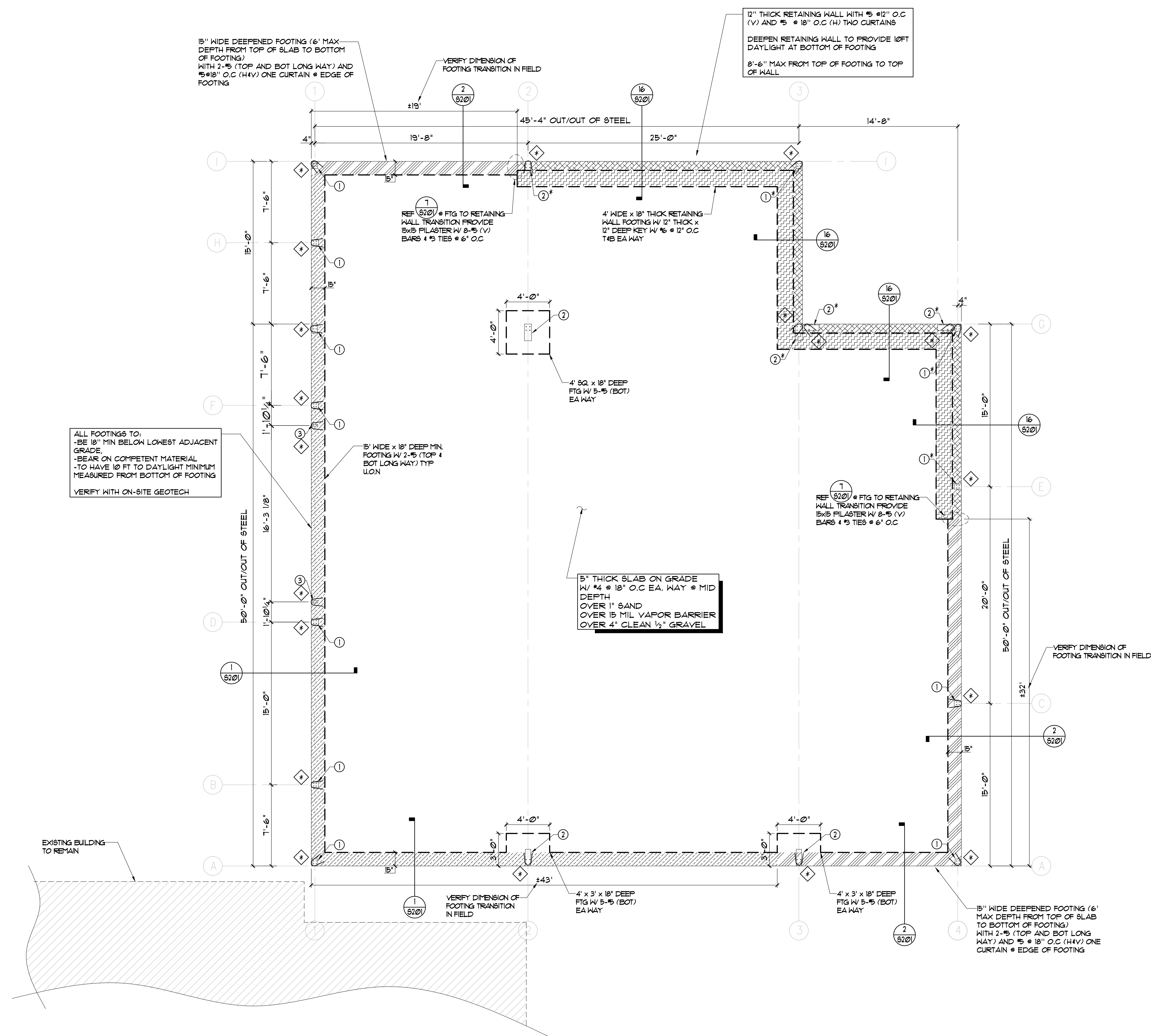
INDICATES AREA OF ETG

INDICATES TOP OF FTG. AND/OR SLAB STEP.
VERIFY DIM W/ ARCH'L.

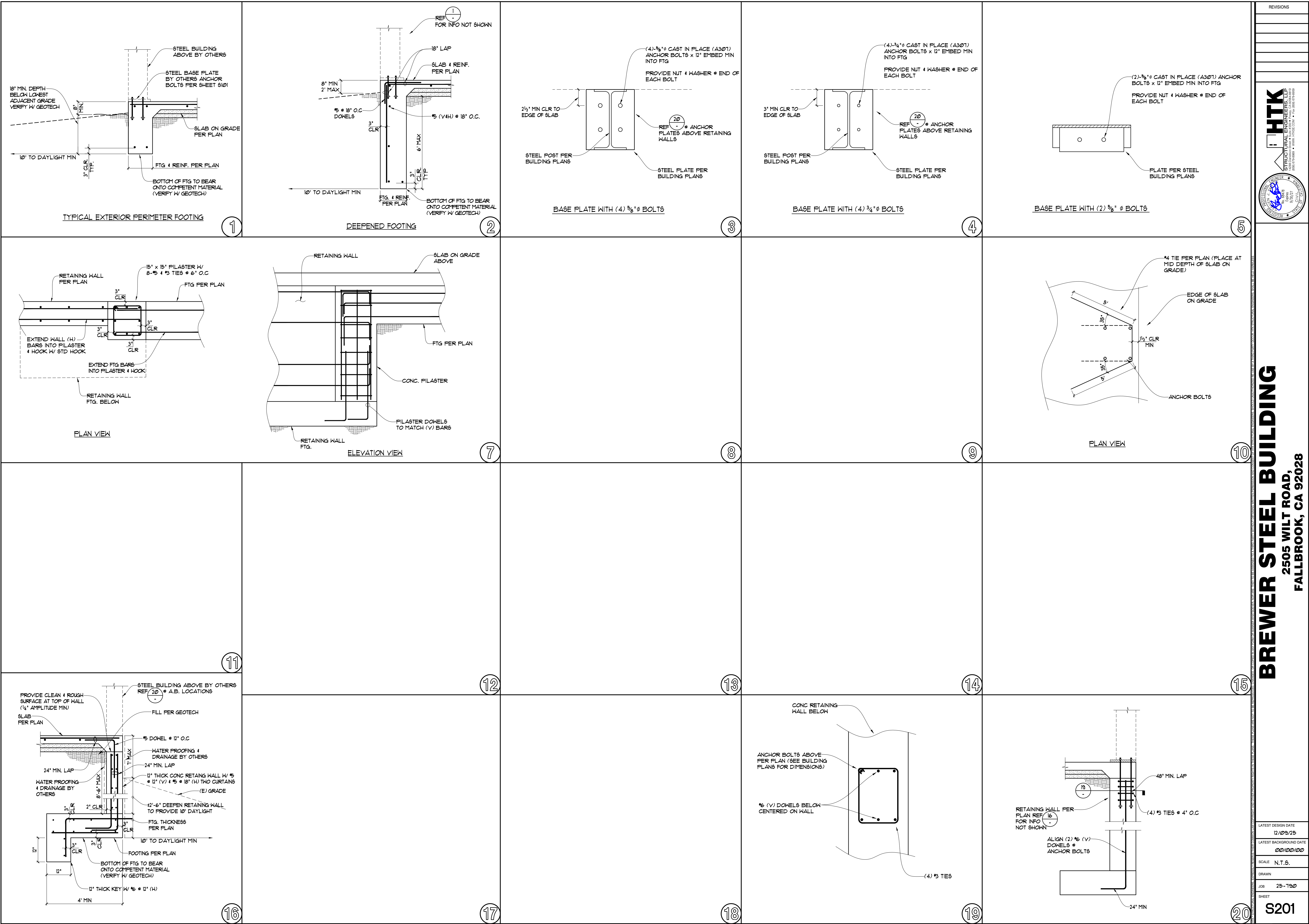
 12" THICK CONCRETE RETAINING WALL

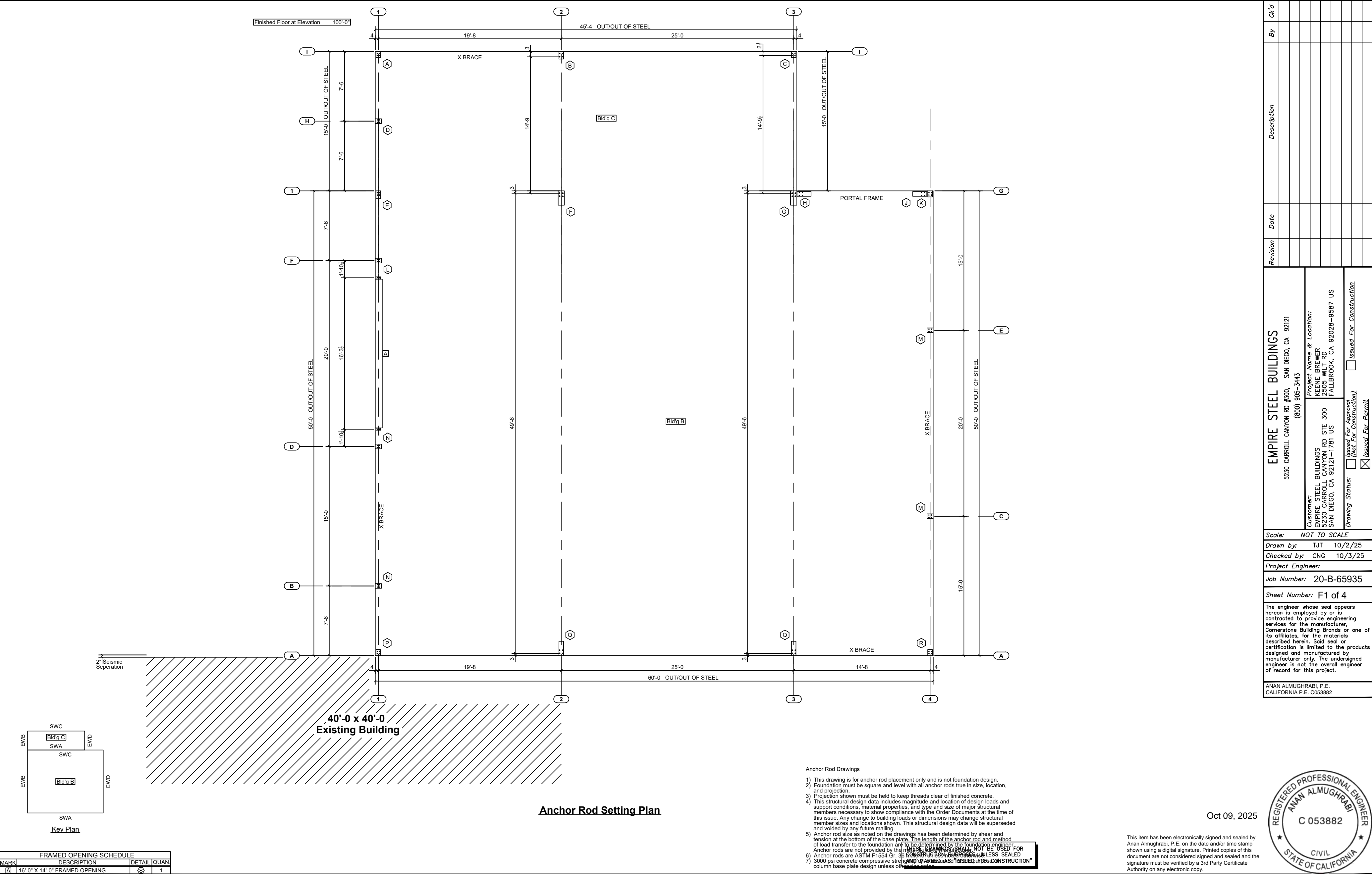
INDICATES RETAINING WALL FOOTING (12" THICK MIN.)

- ① PLATE WITH (4) $\frac{3}{8}$ " x 12" EMBED CAST IN PLACE A307 BOLTS REF. (3)
S2(0)
- ② PLATE WITH (4) $\frac{3}{8}$ " x 12" EMBED CAST IN PLACE A307 BOLTS REF. (4)
S2(0)
- ③ DOOR PLATE WITH (2) $\frac{3}{8}$ " x 12" EMBED CAST IN PLACE A307 BOLTS REF. (5)
S2(0)
- * INDICATES EMBED PLATE ON TOP OF CONC. RETAINING WALL EXTEND ANCHOR BOLTS MIN. 48" INTO CONCRETE WALL BELOW, ALIGN 2" (V) DONKLS INSIDE WALL REF. (2)
S2(0)
- ◆ INDICATES TO ALIGN 10" BENT BAR AT SLAB ON GRADE AT ANCHOR BOLTS REF. (1)
S2(0)



FOUNDATION PLAN





| Revision | Date | Description | By | Ch'd |
|----------|------|-------------|----|------|
| | | | | |
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| | |
|---|--|
| EMPIRE STEEL BUILDINGS 5230 CARROLL CANYON RD #300, SAN DIEGO, CA 92121 (800) 905-3443 | |
| Customer: EMPIRE STEEL BUILDINGS 5230 CARROLL CANYON RD STE 300 SAN DIEGO, CA 92121-1781 US | Project Name & Location: KEENE BREWER 2505 MILT RD FALLBROOK, CA 92028-9587 US |
| Drawing Status: <input type="checkbox"/> Issued For Approval <input checked="" type="checkbox"/> Issued For Permit | |

Scale: NOT TO SCALE

Drawn by: TJT 10/2/25

Checked by: CNG 10/3/25

Project Engineer:

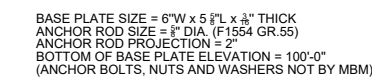
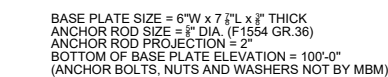
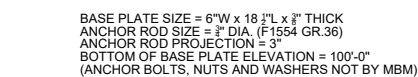
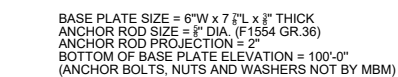
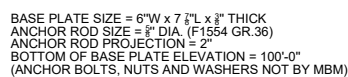
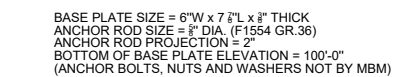
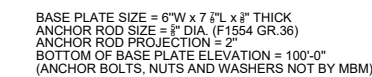
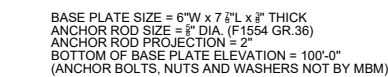
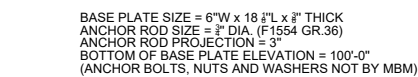
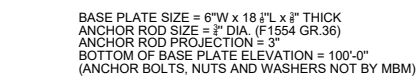
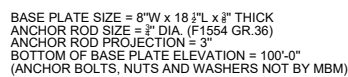
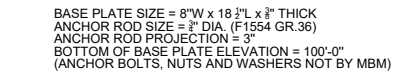
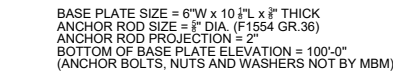
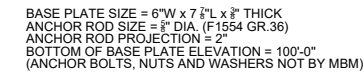
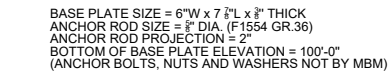
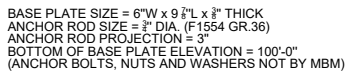
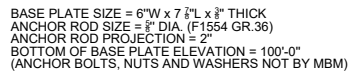
Job Number: 20-B-65935

Sheet Number: F1 of 4

The engineer whose seal appears hereon is employed by or is contracted to provide engineering services for the manufacturer, Cornerstone Building Brands or one of its affiliates, for the materials described herein. Said seal or certification is limited to the products designed and manufactured by manufacturer only. The undersigned engineer is not the overall engineer of record for this project.

ANAN ALMUGHRAHI, P.E.
CALIFORNIA P.E. C053882





This item has been electronically signed and sealed by Anan Almughrabi, P.E. on the date and/or time stamp shown using a digital signature. Printed copies of this document are not considered signed and sealed and the signature must be verified by a 3rd Party Certificate Authority on any electronic copy.

| Revision | Date | Description | By | Ck'd |
|----------|------|-------------|----|------|
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|--|--|--|--|
| EMPIRE STEEL BUILDINGS 5230 CARROLL CANYON RD #300, SAN DIEGO, CA 92121 (800) 905-3443 | | Project Name & Location: EMPIRE STEEL BUILDINGS 5230 CARROLL CANYON RD STE 300 SAN DIEGO, CA 92121-1781 US | |
| Customer: EMPIRE STEEL BUILDINGS 5230 CARROLL CANYON RD STE 300 SAN DIEGO, CA 92121-1781 US | | Project Name & Location: KEENE BREWER 2305 ROCKY HILL FALLBROOK, CA. 92028-9587 US | |
| Scale: NOT TO SCALE | | Drawing Status: <input type="checkbox"/> Issued For Approval <input checked="" type="checkbox"/> Issued For Construction | |
| Drawn by: TJT | | 10/2/25 | |
| Checked by: CNG | | 10/3/25 | |
| Project Engineer: | | | |
| Job Number: 20-B-65935 | | | |
| Sheet Number: F2 of 4 | | | |
| <p>The engineer whose seal appears herein is employed by or is contracted to provide engineering services for the manufacturer, Cornerstone Building Brands or one of its affiliates, for the materials described herein. Said seal or certification is limited to the products designed and manufactured by manufacturer only. The undersigned engineer is not the overall engineer of record for this project.</p> | | | |
| ANAN ALMUGHRABI, P.E. CALIFORNIA P.E. C053882 | | | |



FRAME DESCRIPTION:
Endwall EWB

USER NAME:Rafael.a

DATE:09/25/25

PAGE:EW-1

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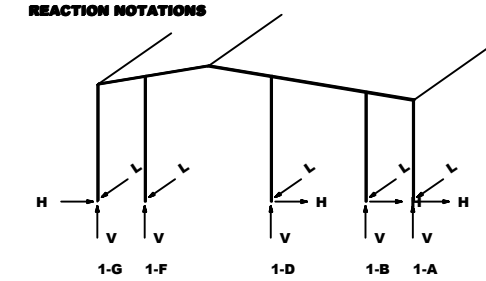
JOB NAME:65935B

FILE:REWSBLD01

SUPPORT REACTIONS FOR EACH LOAD GROUP

NOTE: All reactions are in kips and kip-ft.

TIME:16:47:51



| LOAD GROUP REACTION TABLE | | | | | | | | | | | | | | | |
|---------------------------|-----|------|------|-----|------|------|------|-------|------|-----|------|------|-----|------|------|
| COLUMN | 1-G | | | 1-F | | | 1-D | | | 1-B | | | 1-A | | |
| LOAD GROUP | H | V | L | H | V | L | H | V | L | H | V | L | H | V | L |
| D | 0.0 | 0.4 | 0. | 0. | 0.8 | 0. | 0. | 0.8 | 0. | 0. | 0.5 | 0. | 0.0 | 0.2 | 0. |
| C | 0.0 | 0.2 | 0. | 0. | 1.1 | 0. | 0. | 1.2 | 0. | 0. | 0.7 | 0. | 0.0 | 0.2 | 0. |
| L | 0.0 | 0.6 | 0. | 0. | 3.5 | 0.0 | 0. | 3.8 | 0.0 | 0. | 2.3 | 0.0 | 0.0 | 0.5 | 0. |
| W+ | 0.0 | -1.1 | 1.3 | 0. | -6.4 | 2.5 | 0. | -6.1 | 3.1 | 0. | -2.7 | 1.8 | 0.0 | -1.1 | 0.6 |
| W- | 0.0 | -1.1 | -1.5 | 0. | -6.4 | -2.7 | 0. | -6.1 | -3.4 | 0. | -2.7 | -2.0 | 0.0 | -1.1 | -0.7 |
| WR | 0.0 | -1.1 | 0. | 0. | -6.4 | 0.0 | 0. | -1.6 | 0.0 | 3.6 | -7.2 | 0.0 | 0.0 | -1.1 | 0. |
| WL | 0.0 | -1.1 | 0. | 0. | -6.4 | 0.0 | -3.9 | -10.3 | 0.0 | 0. | 1.5 | 0.0 | 0.0 | -1.1 | 0. |
| E+ | 0. | 0. | 0.1 | 0. | 0. | 0.1 | 0. | 0. | 0.2 | 0. | 0. | 0.1 | 0. | 0. | 0.0 |
| E- | 0. | 0. | -0.1 | 0. | 0. | -0.1 | 0. | 0. | -0.2 | 0. | 0. | -0.1 | 0. | 0. | 0.0 |
| ER | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 1.9 | 0. | 1.5 | -1.9 | 0. | 0. | 0. | 0. |
| EL | 0. | 0. | 0. | 0. | 0. | 0. | 0. | -1.5 | -1.7 | 0. | 0. | 1.7 | 0. | 0. | 0. |

- LOAD GROUP DESCRIPTION
- D : Dead load
 - C : Collateral load
 - L : Live load
 - W+ : Wind load as an inward acting pressure
 - W- : Wind load as an outward acting suction
 - WR : Wind force from the right
 - WL : Wind force from the left
 - E+ : Seismic force acting inward
 - E- : Seismic force acting outward
 - ER : Seismic force from right
 - EL : Seismic force from left

FRAME ID #2
pf 14.667/18.5 main building

USER NAME:Rafael.arcerabad

DATE:10/01/25

PAGE:B-2

PATH: R:\jobs\Active\Eng\20-B-65935\ver01-rafael.arcerabadan\BLDG-Brn01

JOB NAME:65935B

FILE:pf.frame_grid.bay1.fra

SUPPORT REACTIONS FOR EACH LOAD GROUP

LOCATION: Gridlines 1-(Gridline 0)

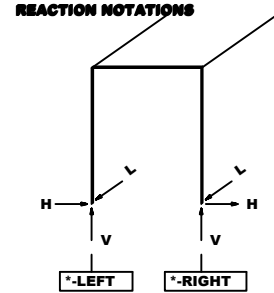
NOTE: (1) All reactions are in kips and kip-ft.

NOTE: (2) The seismic overstrength factor (Omega) is not included in the "RBDWEG" and "RBUPEQ" Load Group reactions.

NOTE: (3) Primary wind load cases are not concurrent.

NOTE: (4) X-bracing reactions (RBPULW and RBUPEQ) are combined with LWL and LEQ groups only.

TIME:13:30:49



| LOAD GROUP REACTION TABLE GRIDLINES " = G | | | | | | |
|---|--------|------|------|---------|------|------|
| LOAD GROUP | 1-LEFT | | | 1-RIGHT | | |
| | H | V | L | H | V | L |
| DL | 0.0 | 0.5 | -0.0 | -0.0 | 0.5 | -0.0 |
| LEQ | -2.8 | -8.2 | -0.0 | -3.0 | 8.2 | -0.0 |
| LWL1 | -2.4 | -7.0 | -1.3 | -2.6 | 7.0 | -1.3 |
| LWL2 | 2.6 | 7.0 | 1.6 | 2.4 | -7.0 | 1.6 |

- LOAD GROUP DESCRIPTION
- DL : Dead load
 - LEQ : Longitudinal Seismic Load
 - LWL1 : Wind from Left to Right with +GCpi
 - LWL2 : Wind from Right to Left with -GCpi

FRAME ID #2
cs 10.18.822.333 20-110

USER NAME:Rafael.arcerabad

DATE:09/30/25

PAGE:2-3

PATH: R:\jobs\Active\Eng\20-B-65935\ver01-rafael.arcerabadan\BLDG-Brn01

JOB NAME:65935B

FILE:frame 2.fra

SUPPORT REACTIONS FOR EACH LOAD GROUP

LOCATION: Gridlines 2

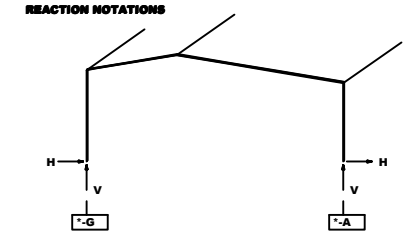
NOTE: (1) All reactions are in kips and kip-ft.

NOTE: (2) The seismic overstrength factor (Omega) is not included in the "RBDWEG" and "RBUPEQ" Load Group reactions.

NOTE: (3) Primary wind load cases are not concurrent.

NOTE: (4) X-bracing reactions (RBPULW and RBUPEQ) are combined with LWL and LEQ groups only.

TIME:13:53:33



| LOAD GROUP REACTION TABLE GRIDLINES " = 2 | | | | | | | | | | | | |
|---|------|-------|------|------|-------|------|---|---|---|---|---|---|
| LOAD GROUP | 1-G | | | 1-A | | | | | | | | |
| | H | V | L | H | V | L | H | V | L | H | V | L |
| DL | 0.7 | 2.6 | -0.0 | -0.7 | 2.0 | -0.0 | | | | | | |
| COLL | 1.3 | 4.5 | -0.0 | -1.3 | 3.3 | -0.0 | | | | | | |
| PLLL1 | -0.1 | 3.1 | -0.0 | 0.0 | -0.0 | -0.0 | | | | | | |
| PLL1 | 2.6 | 6.7 | -0.0 | -2.6 | 6.7 | -0.0 | | | | | | |
| LL | 2.6 | 9.8 | -0.0 | -2.6 | 6.7 | -0.0 | | | | | | |
| RBDWEG | 0.0 | 0.0 | -0.0 | 0.0 | -0.0 | -0.0 | | | | | | |
| EQ | -1.8 | -1.4 | -0.0 | -2.2 | 1.3 | -0.0 | | | | | | |
| RBUPEQ | -0.0 | -0.0 | -0.0 | 0.0 | 0.0 | -0.0 | | | | | | |
| WL1 | -4.6 | -14.3 | -0.0 | -0.3 | -6.9 | -0.0 | | | | | | |
| WL2 | -3.8 | -8.7 | -0.0 | -0.9 | -2.0 | -0.0 | | | | | | |
| WL3 | -1.4 | -9.8 | -0.0 | 6.6 | -11.8 | -0.0 | | | | | | |
| WL4 | -0.6 | -4.3 | -0.0 | 6.0 | -6.9 | -0.0 | | | | | | |
| LWL1 | -0.9 | -11.7 | -0.0 | 1.7 | -8.3 | -0.0 | | | | | | |
| RBPULW | -0.0 | -0.0 | -0.0 | -0.0 | 0.0 | -0.0 | | | | | | |
| LWL2 | -2.5 | -10.3 | -0.0 | 1.3 | -10.8 | -0.0 | | | | | | |
| LWL3 | -0.2 | -8.2 | -0.0 | 1.0 | -3.9 | -0.0 | | | | | | |
| LWL4 | -1.7 | -4.8 | -0.0 | 0.7 | -5.9 | -0.0 | | | | | | |
| RBDWLW | 0.0 | 0.0 | -0.0 | 0.0 | -0.0 | -0.0 | | | | | | |

- LOAD GROUP DESCRIPTION
- DL : Roof Dead Load
 - COLL : Roof Collateral Load
 - PLLL1 : Pattern Live Load Left Leanto/Canopy (PLLLxx)
 - PLL1 : Pattern Live Load (PLLxx)
 - LL : Roof Live Load
 - RBDWEG : Downward Acting Rod Brace Load from Long. Seismic
 - EQ : Lateral Seismic Load (parallel to plane of frame)
 - RBUPEQ : Upward Acting Rod Brace Load from Long. Seismic
 - WL1 : Wind from Left to Right with +GCpi
 - WL2 : Wind from Left to Right with -GCpi
 - WL3 : Wind from Right to Left with +GCpi
 - WL4 : Wind from Right to Left with -GCpi
 - LWL1 : Windward Corner Left with +GCpi
 - RBPULW : Upward Acting Rod Brace Load from Long. Wind
 - LWL2 : Windward Corner Right with +GCpi
 - LWL3 : Windward Corner Left with -GCpi
 - LWL4 : Windward Corner Right with -GCpi
 - RBDWLW : Downward Acting Rod Brace Load from Long. Wind

ADDITIONAL NOTES:

(1) Pattern live or snow load cases are not concurrent with any other live or snow load cases.

FRAME DESCRIPTION:
Endwall EWB

USER NAME:Rafael.a

DATE:10/01/25

PAGE:EW-2

PATH: R:\jobs\Active\Eng\20-B-65935\ver01-rafael.arcerabadan\BLDG-Brn01

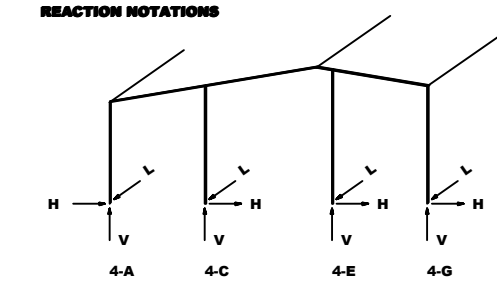
JOB NAME:65935B

FILE:REV4BLD01

SUPPORT REACTIONS FOR EACH LOAD GROUP

NOTE: All reactions are in kips and kip-ft.

TIME:13:14:28



| LOAD GROUP REACTION TABLE | | | | | | | | | | | | |
|---------------------------|-----|------|-----|------|------|------|-----|------|------|-----|------|------|
| COLUMN | 4-A | | | 4-C | | | 4-E | | | 4-G | | |
| LOAD GROUP | H | V | L | H | V | L | H | V | L | H | V | L |
| D | 0.0 | 0.3 | 0. | 0. | 0.7 | 0. | 0. | 0.7 | 0. | 0.0 | 0.3 | 0. |
| C | 0.0 | 0.3 | 0. | 0. | 0.9 | 0. | 0. | 0.9 | 0. | 0.0 | 0.3 | 0. |
| L | 0.0 | 0.9 | 0. | 0. | 3.0 | 0.0 | 0. | 3.0 | 0.0 | 0.0 | 0.9 | 0. |
| W+ | 0.0 | -5.3 | 3.7 | 0. | -4.5 | 2.9 | 0. | -5.9 | 3.3 | 0.0 | -1.2 | 1.3 |
| W- | 0.0 | 2.8 | 0. | 0. | -4.5 | -3.2 | 0. | -5.9 | -3.6 | 0.0 | -1.2 | -1.6 |
| WR | 0.0 | -1.2 | 0. | 0. | -2.9 | 0.0 | 1.7 | -7.4 | 0.0 | 0.0 | -1.2 | 0. |
| WL | 0.0 | -1.2 | 0. | -1.0 | -5.5 | 0.0 | 0. | -4.9 | 0.0 | 0.0 | -1.2 | 0. |
| E+ | 0. | -4.9 | 4.4 | 0. | 0. | 0.2 | 0. | 0. | 0.2 | 0. | 0. | 0.1 |
| E- | 0. | 4.9 | 0. | 0. | 0. | -0.2 | 0. | 0. | -0.2 | 0. | 0. | -0.1 |
| ER | 0. | 0. | 0. | 0. | 0.8 | 0. | 0.9 | -0.8 | 0. | 0. | 0. | 0. |
| EL | 0. | 0. | 0. | -0.9 | -0.9 | 0. | 0. | 0.9 | 0. | 0. | 0. | 0. |

- LOAD GROUP DESCRIPTION
- D : Dead load
 - C : Collateral load
 - L : Live load
 - W+ : Wind load as an inward acting pressure
 - W- : Wind load as an outward acting suction
 - WR : Wind force from the right
 - WL : Wind force from the left
 - E+ : Seismic force acting inward
 - E- : Seismic force acting outward
 - ER : Seismic force from right
 - EL : Seismic force from left

FRAME ID #3
cs 10.18.822.333 20-110

USER NAME:Rafael.arcerabad

DATE:10/01/25

PAGE:3-3

PATH: R:\jobs\Active\Eng\20-B-65935\ver01-rafael.arcerabadan\BLDG-Brn01

JOB NAME:65935B

FILE:frame 3.fra

SUPPORT REACTIONS FOR EACH LOAD GROUP

LOCATION: Gridlines 3

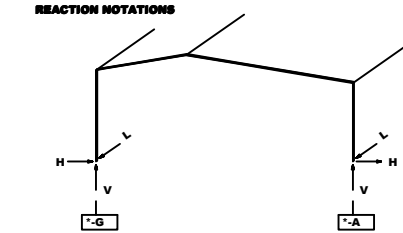
NOTE: (1) All reactions are in kips and kip-ft.

NOTE: (2) The seismic overstrength factor (Omega) is not included in the "RBDWEG" and "RBUPEQ" Load Group reactions.

NOTE: (3) Primary wind load cases are not concurrent.

NOTE: (4) X-bracing reactions (RBPULW and RBUPEQ) are combined with LWL and LEQ groups only.

TIME:13:41:16



| LOAD GROUP REACTION TABLE GRIDLINES " = 3 | | | | | | | | | | | |
|---|------------|-------|------|------------|-------|------|------------|---|---|------------|---|
| COLUMN | 1-G | | | | | | 1-A | | | | |
| | LOAD GROUP | | | LOAD GROUP | | | LOAD GROUP | | | LOAD GROUP | |
| | H | V | L | H | V | L | H | V | L | H | V |
| DL | 0.6 | 2.3 | -0.0 | -0.6 | 1.8 | -0.0 | | | | | |
| COLL | 1.1 | 3.5 | -0.0 | -1.2 | 3.0 | -0.0 | | | | | |
| PLL1 | -0.1 | 1.5 | -0.0 | 0.0 | -0.0 | -0.0 | | | | | |
| PLL1 | 2.3 | 5.9 | -0.0 | -2.3 | 5.9 | -0.0 | | | | | |
| LL | 2.3 | 7.8 | -0.0 | -2.3 | 5.9 | -0.0 | | | | | |
| RBDWEG | -0.1 | -0.1 | -0.0 | 0.1 | 4.9 | -0.0 | | | | | |
| EQ | -1.4 | -1.1 | -0.0 | -1.8 | 1.1 | -0.0 | | | | | |
| RBUPEQ | 0.1 | 0.1 | -0.0 | 0.1 | 4.9 | -0.0 | | | | | |
| WL1 | -4.4 | -12.0 | -0.0 | -0.5 | -5.9 | -0.0 | | | | | |
| WL2 | -3.4 | -7.5 | -0.0 | -0.7 | -1.9 | -0.0 | | | | | |
| WL3 | -1.4 | -8.2 | -0.0 | 5.7 | -10.3 | -0.0 | | | | | |
| WL4 | -0.4 | -3.6 | -0.0 | 5.5 | -6.2 | -0.0 | | | | | |
| LWL1 | -1.2 | -10.0 | -1.4 | 1.0 | -7.1 | -0.0 | | | | | |
| RBPULW | 0.1 | 0.0 | -0.0 | -0.1 | -4.1 | -3.7 | | | | | |
| LWL2 | -2.6 | -8.9 | -1.5 | 0.7 | -9.3 | -0.0 | | | | | |
| LWL3 | -0.3 | -5.9 | -0.0 | 0.8 | -3.0 | -0.0 | | | | | |
| LWL4 | -1.6 | -4.4 | -0.0 | 0.5 | -5.2 | -0.0 | | | | | |
| RBDWLW | -0.0 | -0.0 | -0.0 | 0.0 | 4.1 | -0.0 | | | | | |

- LOAD GROUP DESCRIPTION
- DL : Roof Dead Load
 - COLL : Roof Collateral Load
 - PLLL1 : Pattern Live Load Left Leanto/Canopy (PLLLxx)
 - PLL1 : Pattern Live Load (PLLxx)
 - LL : Roof Live Load
 - RBDWEG : Downward Acting Rod Brace Load from Long. Seismic
 - EQ : Lateral Seismic Load (parallel to plane of frame)
 - RBUPEQ : Upward Acting Rod Brace Load from Long. Seismic
 - WL1 : Wind from Left to Right with +GCpi
 - WL2 : Wind from Left to Right with -GCpi
 - WL3 : Wind from Right to Left with +GCpi
 - WL4 : Wind from Right to Left with -GCpi
 - LWL1 : Windward Corner Left with +GCpi
 - RBPULW : Upward Acting Rod Brace Load from Long. Wind
 - LWL2 : Windward Corner Right with +GCpi
 - LWL3 : Windward Corner Left with -GCpi
 - LWL4 : Windward Corner Right with -GCpi
 - RBDWLW : Downward Acting Rod Brace Load from Long. Wind

ADDITIONAL NOTES:

(1) Pattern live or snow load cases are not concurrent with any other live or snow load cases.

NOTES

1) THE REACTIONS PROVIDED ARE BASED ON THE ORDER DOCUMENTS AT THE TIME OF MAILING. ANY CHANGES TO BUILDING LOADS OR DIMENSIONS MAY CHANGE THE REACTIONS. THE REACTIONS WILL BE SUPERSEDED AND VOIDED BY ANY FUTURE MAILING.

2) THE REACTIONS PROVIDED HAVE BEEN CREATED WITH THE FOLLOWING LAYOUT (UNLESS NOTED OTHERWISE).

a) A REACTION TABLE IS PROVIDED WITH THE REACTIONS FOR EACH LOAD GROUP.

b) RIGID FRAMES

(1) GABLED BUILDINGS

(a) LEFT AND RIGHT COLUMNS ARE DETERMINED AS IF VIEWING THE LEFT SIDE OF THE BUILDING, AS SHOWN ON THE ANCHOR ROD DRAWING, FROM THE OUTSIDE OF THE BUILDING.

(b) INTERIOR COLUMNS ARE SPACED FROM LEFT SIDE TO RIGHT SIDE.

(2) SINGLE SLOPE BUILDINGS

(a) LEFT COLUMN IS THE LOW SIDE COLUMN.

(b) RIGHT COLUMN IS THE HIGH SIDE COLUMN.

(c) INTERIOR COLUMNS ARE SPACED FROM LOW SIDE TO HIGH SIDE.

c) ENDWALLS

(1) LEFT AND RIGHT COLUMNS ARE DETERMINED AS IF VIEWING THE WALL FROM THE OUTSIDE.

(2) INTERIOR COLUMNS ARE SPACED FROM LEFT TO RIGHT.

d) ANCHOR ROD SIZE IS DETERMINED BY SHEAR AND TENSION AT THE BOTTOM OF THE BASE PLATE. THE LENGTH OF THE ANCHOR ROD AND METHOD OF LOAD TRANSFER TO THE FOUNDATION ARE TO BE DETERMINED BY THE FOUNDATION ENGINEER.

e) ANCHOR RODS ARE ASTM F1554 Gr. 36 MATERIAL UNLESS NOTED OTHERWISE ON THE ANCHOR ROD LAYOUT DRAWING.

f) X-BRACING

(1) ROD BRACING REACTIONS HAVE BEEN INCLUDED IN VALUES SHOWN IN THE REACTION TABLES.

(2) FOR IBC AND UBC BASED BUILDING CODES, WHEN X-BRACING IS PRESENT IN THE SIDEWALL, INDIVIDUAL LONGITUDINAL SEISMIC LOADS (RBUPEQ AND RBDWEG) DO NOT INCLUDE THE AMPLIFICATION FACTOR, α_0 .

(3) FOR CANADA BUILDING CODE (NBC), WHEN X-BRACING IS PRESENT IN THE SIDEWALL OR ENDWALL, INDIVIDUAL LONGITUDINAL SEISMIC LOADS (RBUPEQ & RBDWEG) ARE MULTIPLIED BY FORCE REDUCTION FACTOR, R_d , WHEN SPECIFIED SHORT-PERIOD SPECTRAL ACCELERATION RATIO ($f_s \leq 0.2$) IS GREATER THAN 0.45.

3) REACTIONS ARE PROVIDED AS UN-FACTORED FOR EACH LOAD GROUP APPLIED TO THE COLUMN. THE FOUNDATION ENGINEER WILL APPLY THE APPROPRIATE LOAD FACTORS AND COMBINE THE REACTIONS IN ACCORDANCE WITH THE BUILDING CODE AND DESIGN SPECIFICATIONS TO DETERMINE BEARING AND PRESSURES AND CONCRETE DESIGN. THE FACTORS APPLIED TO LOAD GROUPS FOR THE STEEL COLUMN DESIGN MAY BE DIFFERENT THAN THE FACTORS USED IN THE FOUNDATION DESIGN.

a) FOR PROJECTS USING ULTIMATE DESIGN WIND SPEEDS SUCH AS 2012 IBC, 2015 IBC, OR FLORIDA BUILDING CODE, THE WIND LOAD REACTIONS ARE AT A STRENGTH VALUE WITH A LOAD FACTOR OF 1.0.

b) FOR IBC CODES, THE SEISMIC REACTIONS PROVIDED ARE AT A STRENGTH LEVEL AND DO NOT CONTAIN THE RHO FACTOR.

c) FOR NBCC CODES, THE SEISMIC REACTIONS PROVIDED DO NOT CONTAIN THE R_d FACTOR.

THE MANUFACTURER DOES NOT PROVIDE "MAXIMUM" LOAD COMBINATION REACTIONS. HOWEVER, THE INDIVIDUAL LOAD REACTIONS PROVIDED MAY BE USED BY THE FOUNDATION ENGINEER TO DETERMINE THE APPLICABLE LOAD COMBINATIONS FOR HIS/HER DESIGN PROCEDURES AND ALLOW FOR AN ECONOMICAL FOUNDATION DESIGN.

THESE DRAWINGS SHALL NOT BE USED FOR CONSTRUCTION PURPOSES UNLESS SEALED AND MARKED AS "ISSUED FOR CONSTRUCTION"

THESE DRAWINGS SHALL NOT BE USED FOR CONSTRUCTION PURPOSES UNLESS SEALED AND MARKED AS "ISSUED FOR CONSTRUCTION"

By

Check

Description

Date

Revision

EMPIRE STEEL BUILDINGS

5230 CARROLL CANYON RD #300, SAN DIEGO, CA 92121

(800) 905-3443

Project Name & Location:
KEENE BREWER
5230 CARROLL CANYON RD STE 300
FALLBROOK, CA 92028-9587 US

Customer:
EMPIRE STEEL BUILDINGS
5230 CARROLL CANYON RD STE 300
SAN DIEGO, CA 92121-1781 US

Drawing Status:
☐ Issued For Approval
☒ Issued For Construction
☐ Issued For Permit

Scale: NOT TO SCALE

Drawn by: TJT 10/2/25

Checked by: CNG 10/3/25

Project Engineer:

Job Number: 20-B-65935

Sheet Number: F3 of 4

The engineer whose seal appears hereon is employed by or is contracted to provide engineering services for the manufacturer, Cornerstone Building Brands or one of its affiliates, for the materials described herein. Said seal or certification is limited to the products designed and manufactured by manufacturer only. The undersigned engineer is not the overall engineer of record for this project.

ANAN ALMUGHARABI, P.E.
CALIFORNIA P.E. C053882

Oct 09, 2025

This item has been electronically signed and sealed by Anan Almugharabi, P.E. on the date and/or time stamp shown using a digital signature. Printed copies of this document are not considered signed and sealed and the signature must be verified by a 3rd Party Certificate Authority on any electronic copy.

FRAME DESCRIPTION:
Endwall EWB

USER NAME:Rafael.a
JOB NAME:659358

DATE:09/25/25
FILE:REWSBLDG2

PAGE:EW-3

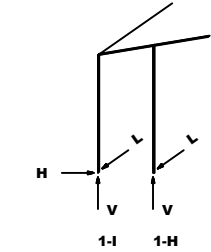
PATH: R:\jobs\Active\Eng\20-B-65935\ver01-rafael.larcerabadan\BLDG-Brun01\

SUPPORT REACTIONS FOR EACH LOAD GROUP

NOTE: All reactions are in kips and kip-ft.

TIME:16:47:51

REACTION NOTATIONS



| LOAD GROUP REACTION TABLE | | | | | | |
|---------------------------|-----|------|-----|-----|------|------|
| COLUMN | 1-1 | | | 1-H | | |
| LOAD GROUP | H | V | L | H | V | L |
| D | 0.0 | 0.3 | 0. | 0. | 0.5 | 0. |
| C | 0.0 | 0.2 | 0. | 0. | 0.6 | 0. |
| L | 0.0 | 0.6 | 0. | 0. | 1.8 | 0.0 |
| W+ | 0.0 | -1.7 | 1.0 | 0. | -3.4 | 1.2 |
| W- | 0.0 | -0.1 | 0. | 0. | -3.4 | -1.4 |
| WR | 0.0 | -0.9 | 0. | 0. | -3.4 | 0.0 |
| WL | 0.0 | -0.9 | 0. | 0. | -3.4 | 0.0 |
| E+ | 0. | -0.8 | 1.0 | 0. | 0. | 0.1 |
| E- | 0. | 0.8 | 0. | 0. | 0. | -0.1 |

- LOAD GROUP DESCRIPTION**
- D : Dead load
 - C : Collateral load
 - L : Live load
 - W+ : Wind load as an inward acting pressure
 - W- : Wind load as an outward acting suction
 - WR : Wind force from the right
 - WL : Wind force from the left
 - E+ : Seismic force acting inward
 - E- : Seismic force acting outward

FRAME ID #1
15-12-27-217 20-110-1

USER NAME:Rafael.larcerabad
JOB NAME:659358

DATE:09/30/25
FILE:Rtrftrf.2.fra

PAGE:1-2

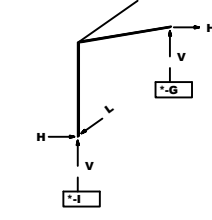
SUPPORT REACTIONS FOR EACH LOAD GROUP

LOCATION: 04lines 2

NOTE: (1) All reactions are in kips and kip-ft.
(2) The seismic overstrength factor (Omega) is not included in the "RBDWEQ" and "RBUPEQ" Load Group reactions.
Seismic "BASE-ON-1" combination reactions include an overstrength factor of: 2.000
(3) Primary wind load cases are not concurrent.
(4) Bracing reactions (RBUPLW and RBDWLW) are combined with LWL and LEQ groups only.

TIME:13:53:24

REACTION NOTATIONS



| LOAD GROUP REACTION TABLE GRIDLINES 1 = 2 | | | | | | |
|---|------|------|------|-------------|------|------|
| COLUMN | 1-1 | | | SUPPORT(-6) | | |
| LOAD GROUP | H | V | L | H | V | L |
| DL | 0.0 | 0.8 | -0.0 | -0.0 | 0.5 | -0.0 |
| COLL | 0.0 | 1.3 | -0.0 | -0.0 | 1.2 | -0.0 |
| PLLL1 | 0.1 | 3.5 | -0.0 | -0.1 | 3.1 | -0.0 |
| LL | 0.1 | 3.5 | -0.0 | -0.1 | 3.1 | -0.0 |
| RBDWEQ | -0.0 | 0.8 | -0.0 | 0.0 | 0.0 | -0.0 |
| EQ | 0.0 | 0.1 | -0.0 | -0.7 | -0.1 | -0.0 |
| RBUPEQ | 0.0 | 0.8 | -1.0 | -0.0 | -0.0 | -0.0 |
| WL1 | -1.1 | -4.3 | -0.0 | 0.4 | -3.9 | -0.0 |
| WL2 | -2.4 | -2.5 | -0.0 | -1.8 | -2.6 | -0.0 |
| LWL1 | 2.3 | -4.9 | -0.0 | 4.2 | -3.3 | -0.0 |
| RBUPLW | 0.0 | -0.8 | -1.0 | -0.0 | -0.0 | -0.0 |
| LWL2 | 2.3 | -3.3 | -0.0 | 3.6 | -1.9 | -0.0 |
| LWL3 | 1.0 | -2.8 | -0.0 | 2.0 | -2.0 | -0.0 |
| LWL4 | 1.0 | -1.2 | -0.0 | 1.5 | -0.6 | -0.0 |
| WL3 | 1.9 | -3.4 | -0.0 | 3.2 | -2.1 | -0.0 |
| WL4 | 0.5 | -1.2 | -0.0 | 1.0 | -0.6 | -0.0 |
| RBDWLW | -0.0 | 0.8 | -0.0 | 0.0 | 0.0 | -0.0 |

- LOAD GROUP DESCRIPTION**
- DL : Roof Dead Load
 - COLL : Roof Collateral Load
 - PLLL1 : Pattern Live Load Left Leanto/Canopy (PLLLxx)
 - LL : Roof Live Load
 - RBDWEQ : Downward Acting Rod Brace Load from Long. Seismic
 - EQ : Lateral Seismic Load (parallel to plane of frame)
 - RBUPEQ : Upward Acting Rod Brace Load from Long. Seismic
 - WL1 : Wind from Left to Right with +GCpl
 - WL2 : Wind from Left to Right with -GCpl
 - LWL1 : Windward Corner Left with +GCpl
 - RBUPLW : Upward Acting Rod Brace Load from Long. Wind
 - LWL2 : Windward Corner Right with +GCpl
 - LWL3 : Windward Corner Left with -GCpl
 - LWL4 : Windward Corner Right with -GCpl
 - WL3 : Wind from Right to Left with +GCpl
 - WL4 : Wind from Right to Left with -GCpl
 - RBDWLW : Downward Acting Rod Brace Load from Long. Wind

ADDITIONAL NOTES:
(1) Pattern live or snow load cases are not concurrent with any other live or snow load cases.

FRAME DESCRIPTION:
Endwall EWD

USER NAME:Rafael.a
JOB NAME:659358

DATE:09/25/25
FILE:REW4BLDG2

PAGE:EW-4

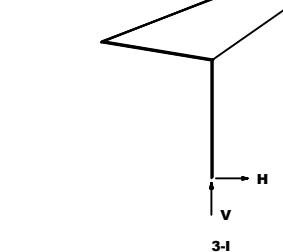
PATH: R:\jobs\Active\Eng\20-B-65935\ver01-rafael.larcerabadan\BLDG-Brun01\

SUPPORT REACTIONS FOR EACH LOAD GROUP

NOTE: All reactions are in kips and kip-ft.

TIME:16:47:51

REACTION NOTATIONS



| LOAD GROUP REACTION TABLE | | | |
|---------------------------|-----|------|----|
| COLUMN | 3-1 | | |
| LOAD GROUP | H | V | L |
| D | 0.0 | 0.5 | 0. |
| C | 0.0 | 0.6 | 0. |
| L | 0.0 | 2.0 | 0. |
| W+ | 0.1 | -2.4 | 0. |
| W- | 0.1 | -2.4 | 0. |
| WR | 0.1 | -2.4 | 0. |
| WL | 0.1 | -2.4 | 0. |

- LOAD GROUP DESCRIPTION**
- D : Dead load
 - C : Collateral load
 - L : Live load
 - W+ : Wind load as an inward acting pressure
 - W- : Wind load as an outward acting suction
 - WR : Wind force from the right
 - WL : Wind force from the left

NOTES

- THE REACTIONS PROVIDED ARE BASED ON THE ORDER DOCUMENTS AT THE TIME OF MAILING. ANY CHANGES TO BUILDING LOADS OR DIMENSIONS MAY CHANGE THE REACTIONS. THE REACTIONS WILL BE SUPERSEDED AND VOIDED BY ANY FUTURE MAILING.
- THE REACTIONS PROVIDED HAVE BEEN CREATED WITH THE FOLLOWING LAYOUT (UNLESS NOTED OTHERWISE).
 - A REACTION TABLE IS PROVIDED WITH THE REACTIONS FOR EACH LOAD GROUP.
 - RIGID FRAMES
 - GABLED BUILDINGS
 - LEFT AND RIGHT COLUMNS ARE DETERMINED AS IF VIEWING THE LEFT SIDE OF THE BUILDING, AS SHOWN ON THE ANCHOR ROD DRAWING FROM THE OUTSIDE OF THE BUILDING.
 - INTERIOR COLUMNS ARE SPACED FROM LEFT SIDE TO RIGHT SIDE.
 - SINGLE SLOPE BUILDINGS
 - LEFT COLUMN IS THE LOW SIDE COLUMN.
 - RIGHT COLUMN IS THE HIGH SIDE COLUMN.
 - INTERIOR COLUMNS ARE SPACED FROM LOW SIDE TO HIGH SIDE.
 - ENDWALLS
 - LEFT AND RIGHT COLUMNS ARE DETERMINED AS IF VIEWING THE WALL FROM THE OUTSIDE.
 - INTERIOR COLUMNS ARE SPACED FROM LEFT TO RIGHT.
 - ANCHOR ROD SIZE IS DETERMINED BY SHEAR AND TENSION AT THE BOTTOM OF THE BASE PLATE. THE LENGTH OF THE ANCHOR ROD AND METHOD OF LOAD TRANSFER TO THE FOUNDATION ARE TO BE DETERMINED BY THE FOUNDATION ENGINEER.
 - ANCHOR RODS ARE ASTM F1554 Gr. 36 MATERIAL UNLESS NOTED OTHERWISE ON THE ANCHOR ROD LAYOUT DRAWING.
 - X-BRACING
 - ROD BRACING REACTIONS HAVE BEEN INCLUDED IN VALUES SHOWN IN THE REACTION TABLES.
 - FOR IBC AND UBC BASED BUILDING CODES, WHEN X-BRACING IS PRESENT IN THE SIDEWALL, INDIVIDUAL LONGITUDINAL SEISMIC LOADS (RBUPEQ AND RBDWEQ) DO NOT INCLUDE THE AMPLIFICATION FACTOR, ϕ_p .
 - FOR CANADA BUILDING CODE (NBC), WHEN X-BRACING IS PRESENT IN THE SIDEWALL OR ENDWALL, INDIVIDUAL LONGITUDINAL SEISMIC LOADS (RBUPEQ & RBDWEQ) ARE MULTIPLIED BY FORCE REDUCTION FACTOR, R_d , WHEN SPECIFIED SHORT-PERIOD SPECTRAL ACCELERATION RATIO ($f_s \leq 0.2$) IS GREATER THAN 0.45.
 - REACTIONS ARE PROVIDED AS UN-FACTORED FOR EACH LOAD GROUP APPLIED TO THE COLUMN. THE FOUNDATION ENGINEER WILL APPLY THE APPROPRIATE LOAD FACTORS AND COMBINE THE REACTIONS IN ACCORDANCE WITH THE BUILDING CODE AND DESIGN SPECIFICATIONS TO DETERMINE BEARING PRESSURES AND CONCRETE DESIGN. THE FACTORS APPLIED TO LOAD GROUPS FOR THE STEEL COLUMN DESIGN MAY BE DIFFERENT THAN THE FACTORS USED IN THE FOUNDATION DESIGN.
 - FOR PROJECTS USING ULTIMATE DESIGN WIND SPEEDS SUCH AS 2012 IBC, 2015 IBC, OR FLORIDA BUILDING CODE, THE WIND LOAD REACTIONS ARE AT A STRENGTH VALUE WITH A LOAD FACTOR OF 1.0.
 - FOR IBC CODES, THE SEISMIC REACTIONS PROVIDED ARE AT A STRENGTH LEVEL AND DO NOT CONTAIN THE ϕ FACTOR.
 - FOR NBCC CODES, THE SEISMIC REACTIONS PROVIDED DO NOT CONTAIN THE R_d FACTOR.

THE MANUFACTURER DOES NOT PROVIDE "MAXIMUM" LOAD COMBINATION REACTIONS. HOWEVER, THE INDIVIDUAL LOAD REACTIONS PROVIDED MAY BE USED BY THE FOUNDATION ENGINEER TO DETERMINE THE APPLICABLE LOAD COMBINATIONS FOR HIS/HER DESIGN PROCEDURES AND ALLOW FOR AN ECONOMICAL FOUNDATION DESIGN.

THESE DRAWINGS SHALL NOT BE USED FOR CONSTRUCTION PURPOSES UNLESS SEALED AND MARKED AS "ISSUED FOR CONSTRUCTION"

This item has been electronically signed and sealed by Anan Almughrab, P.E. on the date and/or time stamp shown using a digital signature. Printed copies of this document are not considered signed and sealed and the signature must be verified by a 3rd Party Certificate Authority on any electronic copy.

By

Ch'd

Description

Date

Revision

EMPIRE STEEL BUILDINGS

5230 CARROLL CANYON RD #300, SAN DIEGO, CA 92121

(800) 905-3443

Project Name & Location:
KEENE BREWER
5230 CARROLL CANYON RD STE 300
SAN DIEGO, CA 92121-1781 US

Customer:
EMPIRE STEEL BUILDINGS
5230 CARROLL CANYON RD STE 300
SAN DIEGO, CA 92121-1781 US

Drawing Status:
☐ Issued For Approval
☐ Issued For Construction
☒ Issued For Permit

Scale: NOT TO SCALE

Drawn by: TJT 10/2/25

Checked by: CNG 10/3/25

Project Engineer:

Job Number: 20-B-65935

Sheet Number: F4 of 4

The engineer whose seal appears hereon is employed by or is contracted to provide engineering services for the manufacturer, Cornerstone Building Brands or one of its affiliates, for the materials described herein. Said seal or certification is limited to the products designed and manufactured by manufacturer only. The undersigned engineer is not the overall engineer of record for this project.

ANAN ALMUGHRAHI, P.E.
CALIFORNIA P.E. C053882

Oct 09, 2025



Builder/Contractor Responsibilities

Drawing Validity- These drawings, supporting structural calculations and design certification are based on the order documents as of the date of these drawings. These documents describe the material supplied by the manufacturer as of the date of these drawings. Any changes to the order documents after the date on these drawings may void these drawings, supporting structural calculations and design certification. The Builder/Contractor is responsible for notifying the building authority of all changes to the order documents which result in changes to the drawings, supporting structural calculations and design certification.

Builder Acceptance of Drawings Approval of the manufacturer's drawings and design data affirms that the manufacturer has correctly interpreted and applied the requirements of the order documents and constitutes Builder/Contractor acceptance of the manufacturer's interpretations of the order documents and standard product specifications, including its design, fabrication and quality criteria standards and tolerances. (AISC COSP June 2016 Section 4.4.1)

Code Official Approval - It is the responsibility of the Builder/Contractor to ensure that all project plans and specifications comply with the applicable requirements of any governing building authority. The Builder/Contractor is responsible for securing all required approvals and permits from the appropriate agency as required.

Building Erection - The Builder/Contractor is responsible for all erection of the steel and associated work in compliance with the Metal Building Manufacturers drawings. Temporary supports, such as temporary guys, braces, false work or other elements required for erection will be determined, furnished and installed by the erector (AISC COSP June 2016 Section 7.10.3).

Discrepancies - Where discrepancies exist between the Metal Building plans and plans for other trades, the Metal Building plans will govern. (AISC COSP June 2016 Section 3.3)

Materials by Others - All interface and compatibility of any materials not furnished by the manufacturer are the responsibility of and to be coordinated by the Builder/Contractor or A/E firm. Unless specific design criteria concerning any interface between materials if furnished as a part of the order documents, the manufacturers assumptions will govern.

Modification of the Metal Building from Plans - The Metal Building supplied by the manufacturer has been designed according to the Building Code and specifications and the loads shown on this drawing. Modification of the building configuration, such as removing wall panels or braces, from that shown on these plans could affect the structural integrity of the building. The Metal Building Manufacturer or a Licensed Structural Engineer should be consulted prior to making any changes to the building configuration shown on these drawings. The Metal Building Manufacturer will assume no responsibility for any loads applied to the building not indicated on these drawings.

Foundation Design- The Metal Building Manufacturer is not responsible for the design, materials and workmanship of the foundation. Anchor rod plans prepared by the manufacturer are intended to show only location, diameter and projection of the anchor rods required to attach the Metal Building System to the foundation. It is the responsibility of the end customer to ensure that adequate provisions are made for specifying rod embedment, bearing values, tie rods and or other associated items embedded in the concrete foundation, as well as foundation design for the loads imposed by the Metal Building System, other imposed loads, and the bearing capacity of the soil and other conditions of the building site. (MBMA 06 Sections 3.2.2 and A3)

Shimming - In accordance with Section 6.10 of Chapter 4 Common Industry Practices in the Metal Building Systems Manual, shimming is a normal part of erection and is not subject to claim.

| Building Descriptions | | | |
|-----------------------|-------|--------|--------|
| Building ID | Width | Length | Height |
| Building B | 50'-0 | 60'-0 | 16'-0 |
| Building C | 15'-0 | 45'-4 | 16'-0 |



Download panel installation manuals from:
www.CBManuals.com

Descargue los manuales de instalación del panel desde:
www.CBManuals.com

DESIGN CRITERIA

Building Code: 2022 CALIFORNIA BUILDING CODE
Building Risk Category: Normal (Risk Category II)
Roof Dead Load
Superimposed: 2.27 psf (Bldg B)
Collateral: 2.19 psf (Bldg C)
(6.00 psf Other)
Roof Live Load: 20.00 psf reduction allowed
Wind
Ultimate Wind Speed (Vult) ..: 110 mph
Nominal Wind Speed (Vasd) ...: 85 mph (IBC section 1609.3.1)
Serviceability Wind Speed ...: 67 mph
Ground Elevation Factor: 0.97 (854 ft ASL)
Wind Exposure Category: C
Exposure Coefficient (MWPRS): 0.887
Enclosure Classification ...: Enclosed Building
Internal Pressure Coef (GCpi): 0.18/-0.18
Unfactored Wall Loads for components not provided by building manufacturer
Zone 5 Areas (within 6.00' of corner) : 23.72 psf pressure -31.63 psf suction
Zone 4 Areas (away from corners) : 23.72 psf pressure -25.70 psf suction
These values are the maximum values required based on a 10 sq ft area.
Components with larger areas may have lower wind loads.
Seismic
Seismic Importance Factor (Ie): 1.00
Seismic Design Category: D
Soil Site Class: D Stiff Soil (Default)
Ss: 1.077 g Sds: 0.862 g
SI: 0.390 g Sdi: 0.497 g
Analysis Procedure: Equivalent Lateral Force
Column Line (Bldg B) 1 & 4 2-3 SWA & SWC
Basic Force Resisting System B3 C4 B3 & C4
Response Modification Coefficient (R) 3.25 3.50 3.25
Seismic Response Coefficient (Cs) 0.265 0.246 0.265
Design Base Shear in kips (V) 2.47 6.13 9.95
Column Line (Bldg C) SWC
Basic Force Resisting System B3
Response Modification Coefficient (R) 3.25
Seismic Response Coefficient (Cs) 0.265
Design Base Shear in kips (V) 1.01
Basic Structural System (from ASCE 7-16 Table 12.2-1)
B3 - Ordinary Steel Concentrically Braced Frame
C4 - Ordinary Steel Moment Frame

DEFLECTION CRITERIA

The material supplied by the manufacturer has been designed with the following minimum deflection criteria. The actual deflection may be less depending on actual load and actual member length.

| BUILDING DEFLECTION LIMITS: BLDG-B-C | | | |
|--|--------------|--------------|---------|
| Roof Limits | Rafters | Purlins | Panels |
| Serviceability Wind: L/ | Live: L/ 180 | 150 | 60 |
| Total Gravity: L/ | 120 | 120 | 60 |
| Total Uplift: L/ | N/A | N/A | 60 |
| Frame Limits | Sideway | Portal Frame | Sideway |
| Live: H/ | 60 | | |
| Serviceability Wind: H/ | 60 | | |
| Seismic Drift: H/ | 40 | 40 | |
| Portal Serviceability Wind: H/ | N/A | 60 | |
| Total Gravity: H/ | 60 | | |
| Service Seismic: H/ | 40 | 40 | |
| Wall Limits | Limit | | |
| Total Wind Panels: L/ | 60 | | |
| Total Wind Girts: L/ | 90 | | |
| Total Wind EW Columns: L/ | 120 | | |

The Service Seismic limit as shown here is at service level loads.

PROJECT NOTES

Material properties of steel bar, plate, and sheet used in the fabrication of built-up structural framing members conform to ASTM A529, ASTM A572, or ASTM A1011 with 55 ksi min. yield, except flanges wider than 12" and thicker than 3/8", all flanges thicker than 1", and all webs thicker than 3/8" are 50 ksi min. yield. Rod X-bracing conforms to ASTM A529 or ASTM A572 with 50 ksi min. yield. Cable X-bracing conforms to ASTM A475 7 Strand Extra High-Strength grade. Hot rolled structural shapes conform to ASTM A992, ASTM A529, or ASTM A572 with 50 ksi min. yield. Hot rolled angles, other than flange braces, conform to ASTM A36 minimum. Round and rectangular HSS conforms to ASTM A500 Grade B. Cold-formed steel secondary framing Members conform to ASTM A1011 or ASTM A653 Grade 55 with 55 ksi min. yield. For Canada, material properties conform to CAN/CSA G40.20/G40.21 or equivalent.

Unless otherwise noted, special inspection of fabricated items is not required. Per IBC section 1704.2.5.1, fabricator is approved to perform such work without special inspection through maintenance of IAS AC 472 certification MB-136.

Bolted joints with A325 Type 1 bolts greater than 1/2" diameter are specified as pre-tensioned joints in accordance with the most recent edition of the RCSC Specification for Structural Joints Using ASTM A325 or A490 Bolts. Pre Tensioning can be accomplished by using the turn-of-nut method of tightening, calibrated wrench, twist-off-type tension-control bolts or direct-tension indicator as acceptable to the Inspecting Agency and Building Official. Installation inspection requirements for pre-tensioned joints (Specification for Structural Joints Section 9.2) using turn-of-nut method is suggested. The connections on this project are not slip critical.

Design criteria as noted is as given within order documents and is applied in general accordance with the applicable provisions of the model code and/or specification indicated. Neither the metal building manufacturer nor the certifying engineer declares or attests that the loads as designated are proper for local provisions that may apply or for site specific parameters. The design criteria is supplied by the builder, project owner, or an Architect and/or Engineer of Record for the overall construction project.

This metal building system is designed as an Enclosed Building or Enclosed Building. Exterior and/or operable components including, but not limited to, doors, windows, vents, etc. ("Components") must be designed to withstand the required component and cladding wind pressures specified by the building code. In order to maintain the metal building system's Enclosed Building or Enclosed Building condition, all Components shall be closed when wind velocities reach half the designed wind load for the metal building system as shown on the drawings and design criteria documentation. Failure to maintain the metal building system's Enclosed Building or Enclosed Building condition will violate and void all warranties and certifications applicable to the material supplied by the metal building manufacturer.

The materials by the manufacturer will be fabricated in a facility that has received Certification of Accreditation for the Manufacture of Metal Building Systems (AC472) from International Accreditation Service (IAS). This certification is recognized under Section 1704 of the IBC for approved fabricator.

Framed openings, walk doors, and open areas shall be located in the bay and elevation as shown in the erection drawings. The cutting or removal of girts shown on the erection drawings due to the addition of framed openings, walk doors, or open areas not shown may void the design certifications supplied by the metal building manufacturer.

The common wall at the existing building is to remain sheeted.

Using 6.9 in X 6.375 in eave gutter with 4 x 5 downspouts, the roof drainage system has been designed using the method outlined in the MBMA Metal Building Systems Manual. Downspout locations have not been located on these drawings. The downspouts are to be placed on the building sidewalls at a spacing not to exceed 60 feet with the first downspout from both ends of the gutter run within 30 feet of the end. Downspout spacing that does not exceed the maximum spacing will be in compliance with the building code. The gutter and downspout system as provided by the manufacturer is designed to accommodate 2.98 in/hr rainfall intensity.

Investigation of the existing structure for possible detrimental effects due to the metal building addition is not within the metal building manufacturer's scope of work. It is strongly recommended that the original designer or other responsible professional be retained to analyze the existing structure, recommending any reinforcement that may be needed. The metal building manufacturer and its certifying engineer expressly exclude the existing structure for any warranty or certification whether written, verbal or implied.

The framing at Bldg B, EWB and EWD is NOT designed to receive a future bay addition. Corresponding frame reactions are calculated based upon actual tributary area. This frame is designed to span clear between exterior columns, as such, the rafter is expected to deflect downward and upward due to vertical loads (i.e. gravity, wind, etc.). When an endwall column is present under the non-expandable frame, the standard top-of-column connection to the rafter will not allow for vertical movement. Hence, the endwall column is adequately designed as load bearing. Reactions for the endwall column will reflect vertical loads. Removal of the endwall column under the non-expandable frame is allowed as the frame is adequately designed to span clear between exterior columns under specified vertical deflection limits.

| Drawing Index | | Ck'd | By | Date | Revision | Description |
|---------------|--|------|----|------|----------|-------------|
| Page | Description | | | | | |
| F1 | Anchor Rod Setting Plan | | | | | |
| F2 | Anchor Rod Details | | | | | |
| F3-F4 | Reactions | | | | | |
| E1 | Cover Sheet | | | | | |
| E2 | Primary Steel | | | | | |
| E3 | Roof Framing | | | | | |
| E4 | Roof Sheeting Building B RPA & Building B RPC & Building C RPC | | | | | |
| E5 | Sidewall Framing Sheeting Bldg B SWA | | | | | |
| E6 | Sidewall Framing Sheeting Bldg B SWC | | | | | |
| E7 | Sidewall Framing Sheeting Bldg C SWA | | | | | |
| E8 | Sidewall Framing Sheeting Bldg C SWC | | | | | |
| E9 | Endwall Framing Sheeting Bldg B EWB | | | | | |
| E10 | Endwall Framing Sheeting Bldg B EWD | | | | | |
| E11 | Endwall Framing Sheeting Bldg B EWB | | | | | |
| E12 | Endwall Framing Sheeting Bldg C EWD | | | | | |
| E13 | Cross Section Bldg B at Frame Line 2 | | | | | |
| E14 | Cross Section Bldg B at Frame Line 3 | | | | | |
| E15 | Cross Section Bldg C at Frame Line 2 | | | | | |
| E16 | Portal Frame Cross Section Bldg B SWC | | | | | |
| E17 | Connection Detail | | | | | |

| | | | | | |
|--------------------------------|--|--|--|-------------------------|--|
| EMPIRE STEEL BUILDINGS | | 5230 CARROLL CANYON RD #300, SAN DIEGO, CA 92121 | | (800) 905-3443 | |
| Customer: | | Project Name & Location: | | Issued For Approval | |
| EMPIRE STEEL BUILDINGS | | KEENE BREWER | | Issued For Construction | |
| 5230 CARROLL CANYON RD STE 300 | | 2505 MLT RD | | Issued For Permit | |
| SAN DIEGO, CA 92121-1781 | | FALLBROOK, CA 92028-9587 US | | | |

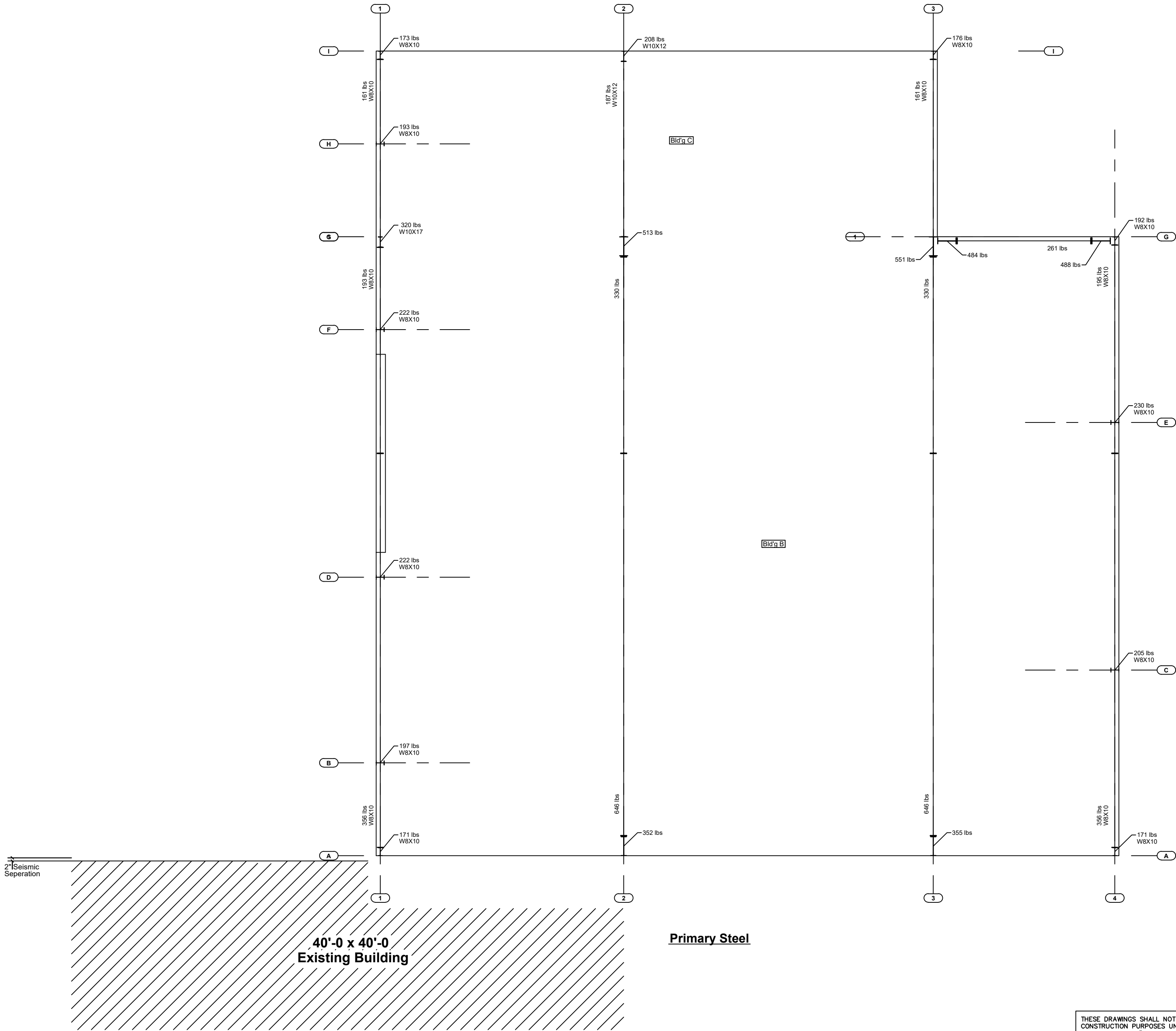
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| Scale: | NOT TO SCALE |
| Drawn by: | TJT 10/2/25 |
| Checked by: | CNG 10/3/25 |
| Project Engineer: | |
| Job Number: | 20-B-65935 |
| Sheet Number: | E1 of 17 |
| The engineer whose seal appears hereon is employed by or is contracted to provide engineering services for the manufacturer, Cornerstone Building Brands or one of its affiliates, for the materials described herein. Said seal or certification is limited to the products designed and manufactured by manufacturer only. The undersigned engineer is not the overall engineer of record for this project. | |
| ANAN ALMUGHRAHI, P.E. CALIFORNIA P.E. C053882 | |

Oct 09, 2025

THESE DRAWINGS SHALL NOT BE USED FOR CONSTRUCTION PURPOSES UNLESS SEALED AND MARKED AS "ISSUED FOR CONSTRUCTION"

This item has been electronically signed and sealed by Anan Almughrahi, P.E. on the date and/or time stamp shown using a digital signature. Printed copies of this document are not considered signed and sealed and the signature must be verified by a 3rd Party Certificate Authority on any electronic copy.

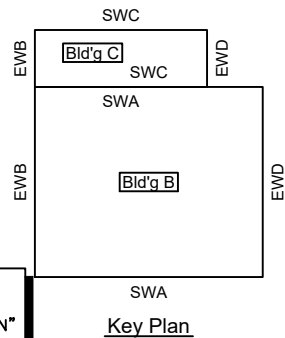




Primary Steel

40'-0" x 40'-0"
Existing Building

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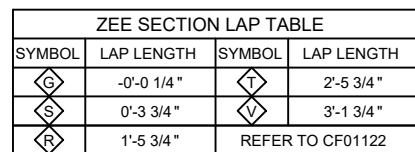
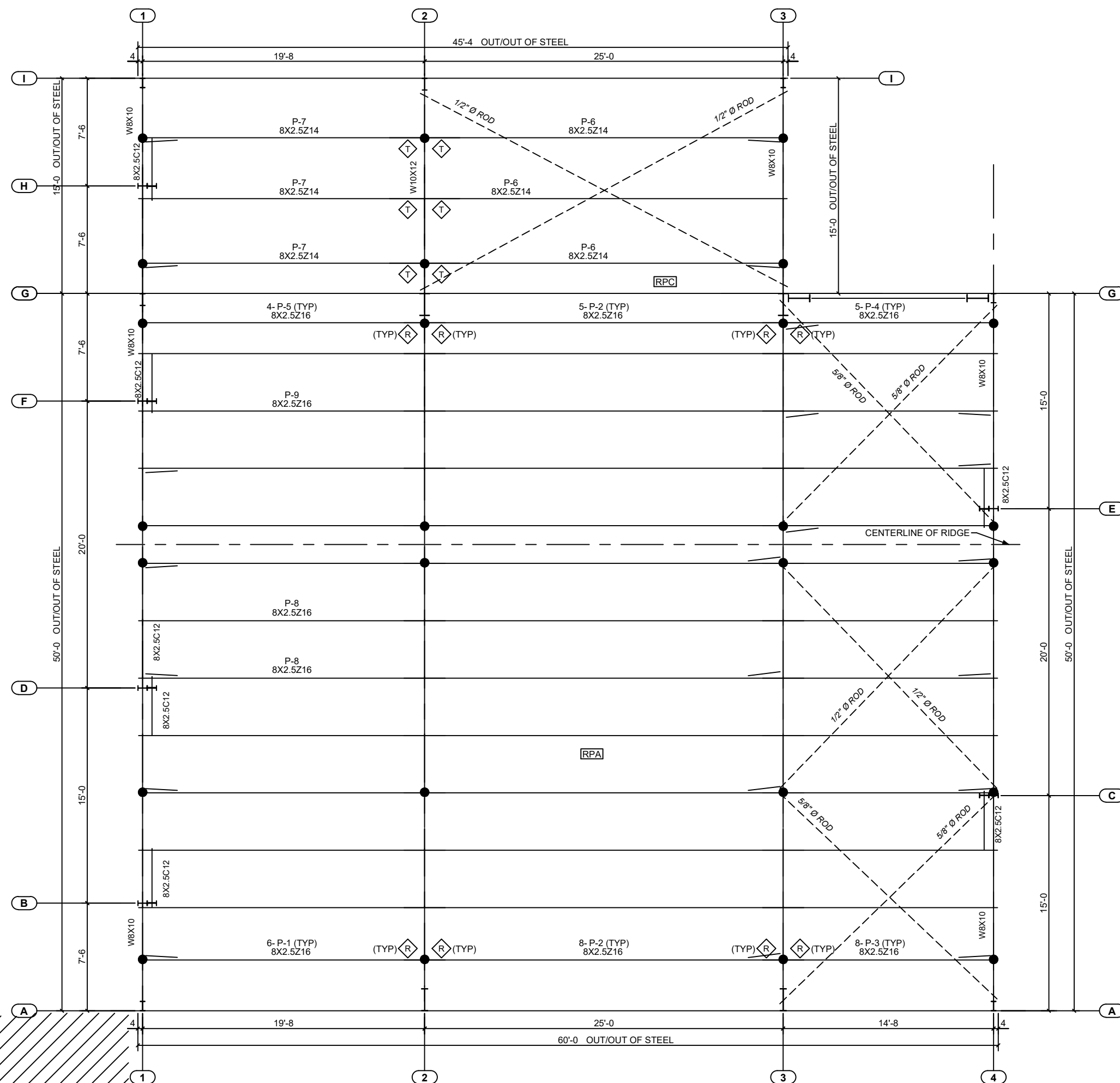


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Anan Almughrabli
Oct 09, 2025

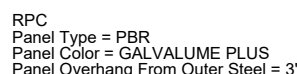


| | | | |
|---|--|--|--|
| EMPIRE STEEL BUILDINGS | | 5230 CARROLL CANYON RD #300, SAN DIEGO, CA 92121 (800) 905-3443 | |
| Customer: | | Customer: | |
| EMPIRE STEEL BUILDINGS | | EMPIRE STEEL BUILDINGS | |
| 5230 CARROLL CANYON RD STE 300 | | 5230 CARROLL CANYON RD STE 300 | |
| SAN DIEGO, CA 92121-1781 | | SAN DIEGO, CA 92121-1781 | |
| Drawing Status: | | Drawing Status: | |
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| <input checked="" type="checkbox"/> Issued For Construction | | <input checked="" type="checkbox"/> Issued For Construction | |
| Project Name & Location: | | Project Name & Location: | |
| KEENE BREWER | | KEENE BREWER | |
| 2505 MILT RD | | 2505 MILT RD | |
| FALLBROOK, CA 92028-9587 US | | FALLBROOK, CA 92028-9587 US | |
| Revision | | Revision | |
| Date | | Date | |
| Description | | Description | |
| By | | By | |
| Ck'd | | Ck'd | |



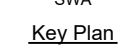
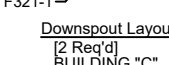
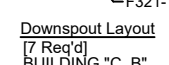
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AND MARKED AS "ISSUED FOR CONSTRUCTION"

| <i>Description</i> | <i>Date</i> | <i>Revision</i> | <i>By</i> | <i>Ck'd</i> |
|--|-------------|---|-----------|-------------|
| <div style="text-align: center;"> <h2>EMPIRE STEEL BUILDINGS</h2> <p>5230 CARROLL CANYON RD #300, SAN DIEGO, CA 92121 (800) 905-3443</p> </div> | | | | |
| Customer: EMPIRE STEEL BUILDINGS 5230 CARROLL CANYON RD STE 300 SAN DIEGO, CA 92121-1781 | | Project Name & Location: KEENE BREWER 2505 WILDT RD FALLBROOK, CA 92028-9587 US | | |
| Drawing Status: <input type="checkbox"/> Issued For Approval <input checked="" type="checkbox"/> Not For Construction <input checked="" type="checkbox"/> Issued For Permit | | <input type="checkbox"/> Issued For Construction | | |
| Scale: NOT TO SCALE | | | | |
| Drawn by: TJT | | 10/2/25 | | |
| Checked by: CNG | | 10/3/25 | | |
| Project Engineer: | | | | |
| Job Number: 20-B-65935 | | | | |
| Sheet Number: E3 of 17 | | | | |
| <p>The engineer whose seal appears hereon is employed by or is contracted to provide engineering services for the manufacturer, Cornerstone Building Brands or one of its affiliates, for the materials described herein. Said seal or certification is limited to the products designed and manufactured by manufacturer only. The undersigned engineer is not the overall engineer of record for this project.</p> | | | | |
| ANAN ALMUGHARABI, P.E. CALIFORNIA P.E. C053882 | | | | |

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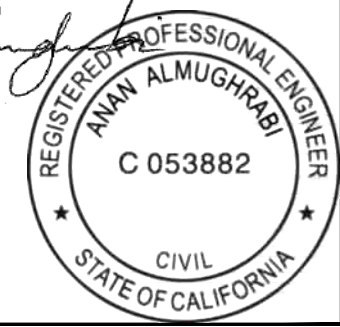
40'-0 x 40'-0
Existing Building

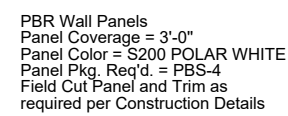
40'-0" x 40'-0"
Existing Building



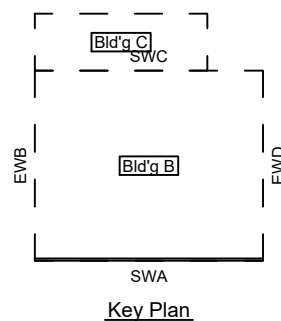
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Sam Alghamdi





Sidewall Sheeting Building B SWA

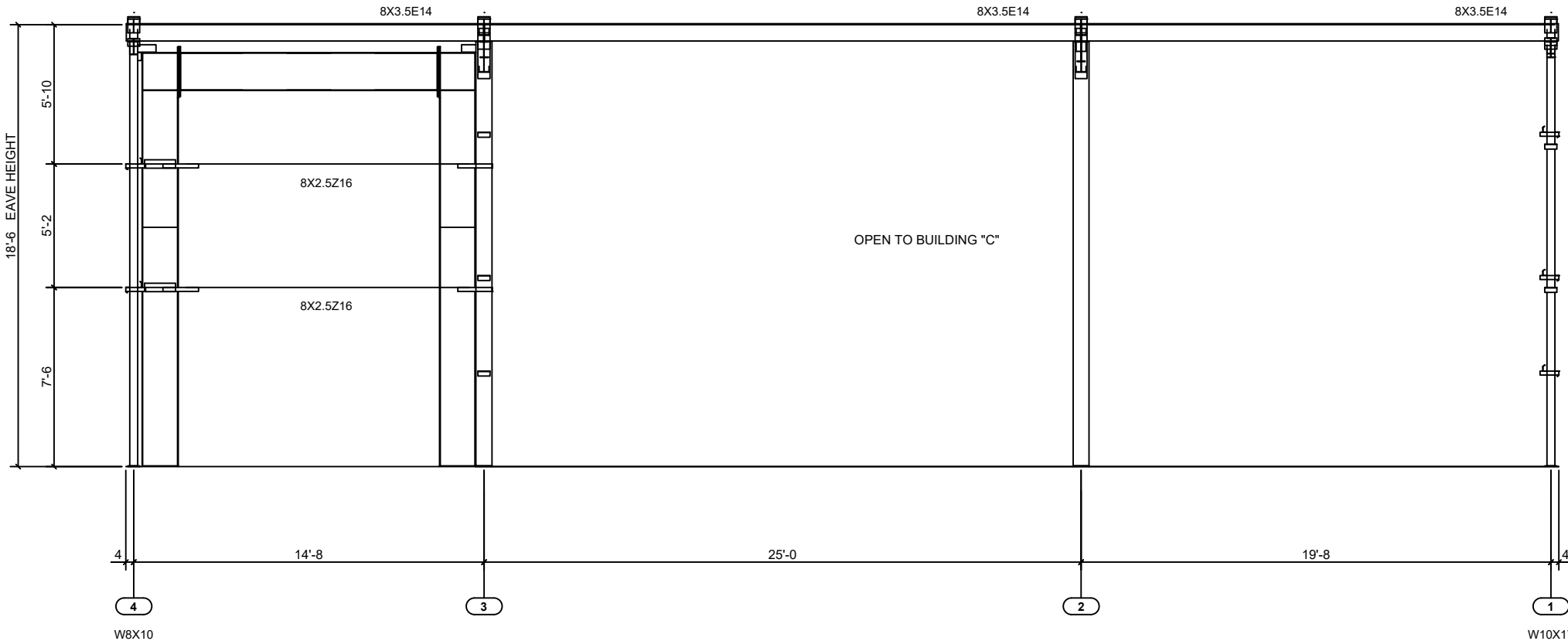


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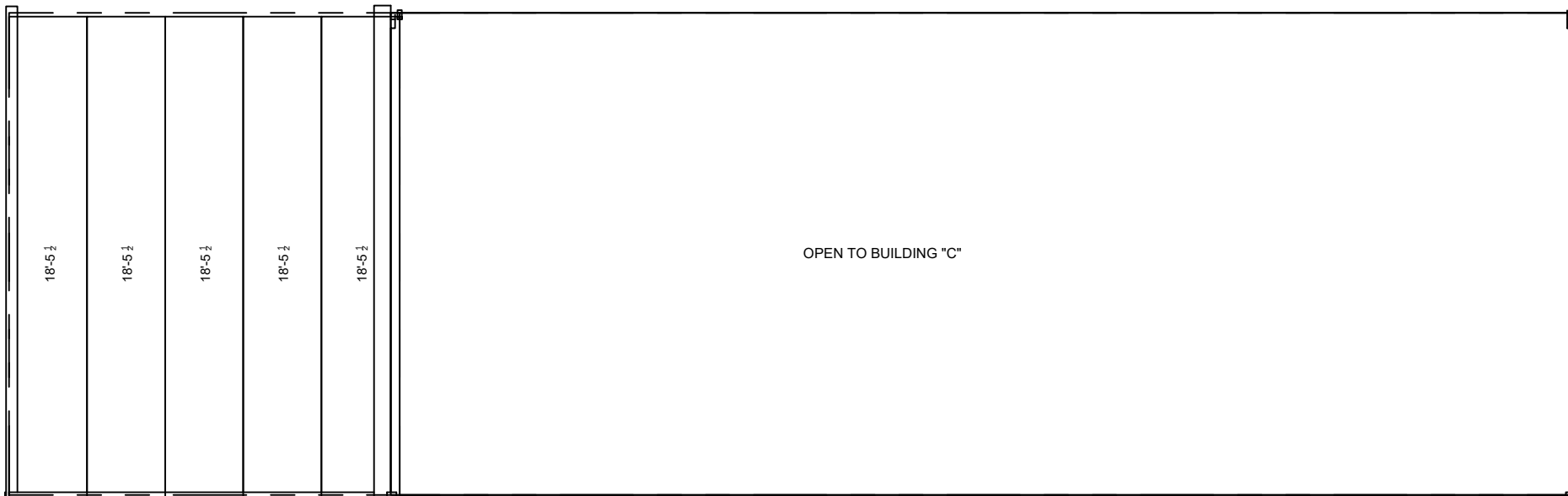
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| Description | | Date | Revision | By | Ck'd |
|--|--|--------------|----------|---------|------|
| <div><div><div><div><div>EMPIRE STEEL BUILDINGS</div><div>5230 CARROLL CANYON RD #300, SAN DIEGO, CA 92121</div><div>(800) 905-3443</div></div><div><div>Customer:</div><div>EMPIRE STEEL BUILDINGS</div><div>5230 CARROLL CANYON RD STE 300</div><div>SAN DIEGO, CA 92121-1781</div></div><div><div>Project Name & Location:</div><div>KEENE BREWER</div><div>2505 WILLY RD</div><div>FALLBROOK, CA 92028-9587 US</div></div></div><div><div><div><div><div><div><div></div><div>Issued For Approval</div></div><div><div></div><div>Not For Construction</div></div></div><div><div></div><div>Issued For Construction</div></div></div><div><div><div></div><div>Issued For Permit</div></div></div></div></div></div></div></div> | | | | | |
| Scale: | | NOT TO SCALE | | | |
| Drawn by: | | TJT | | 10/2/25 | |
| Checked by: | | CNG | | 10/3/25 | |
| Project Engineer: | | | | | |
| Job Number: | | 20-B-65935 | | | |
| Sheet Number: | | E5 of 17 | | | |
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| ANAN ALMUGHARBI, P.E. CALIFORNIA P.E. C053882 | | | | | |

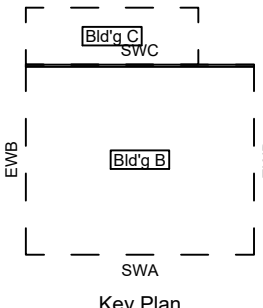


Sidewall Framing SWC at Grid Line C



PBR Wall Panels
Panel Coverage = 3'-0"
Panel Color = S200 POLAR WHITE
Field Cut Panel and Trim as
required per Construction Details

Sidewall Sheeting Building B SWC



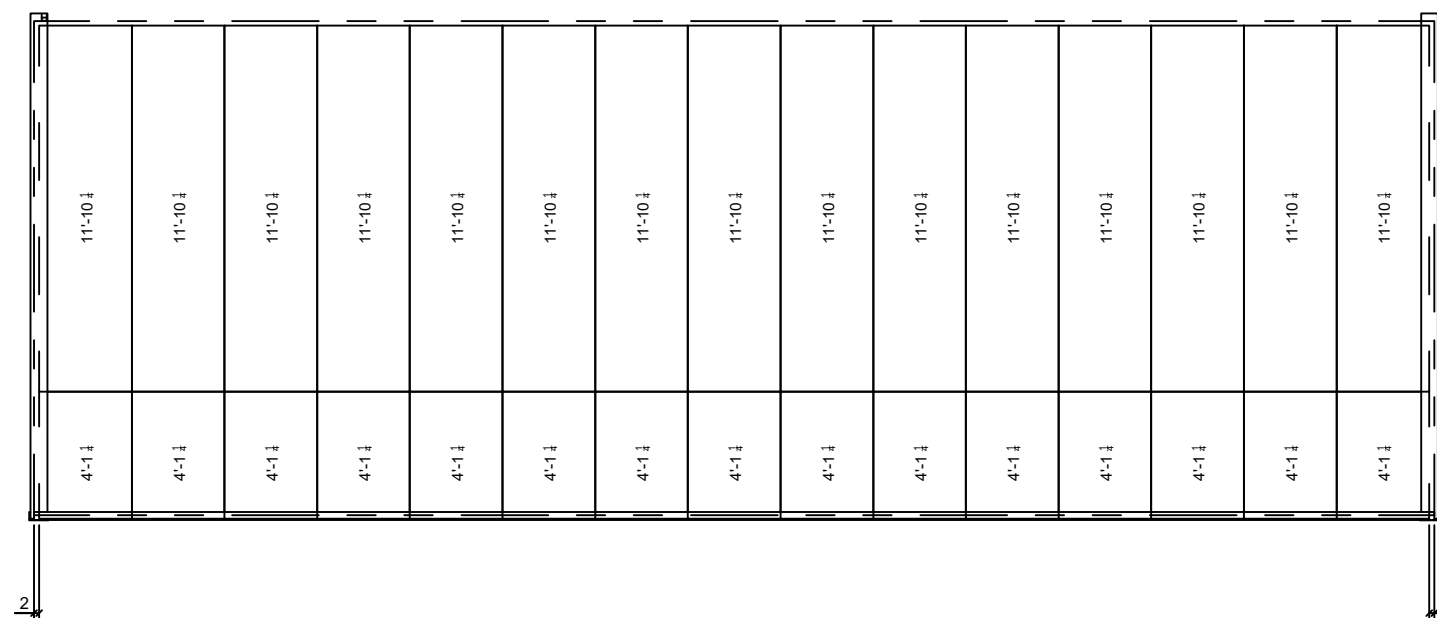
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Oct 09, 2025



| Scale: | NOT TO SCALE |
|--|--------------|
| Drawn by: | TJT 10/2/25 |
| Checked by: | CNG 10/3/25 |
| Project Engineer: | |
| Job Number: | 20-B-65935 |
| Sheet Number: | E6 of 17 |
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| ANAN ALMUGHRABI, P.E. CALIFORNIA P.E. C053882 | |



PBR Wainscot Wall Panels
Panel Coverage = 3'-0"
Panel Color = S200 CHARCOAL GRAY
Panel Pkg. Req'd. = PBS-5
Field Cut Panel and Trim as
required per Construction Details

Sidewall Sheeting Building C SWC



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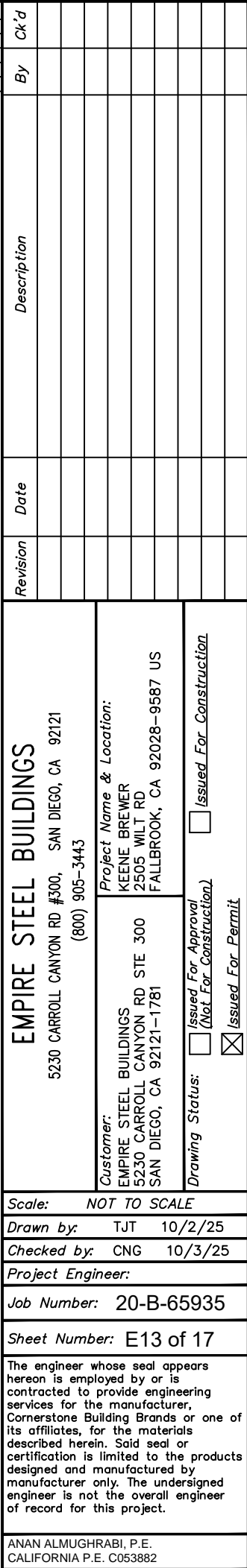
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| Description | | Date | Revision | By | Ck'd |
|---|--|--------------|----------|---------|------|
| <div><div><div><div><div>EMPIRE STEEL BUILDINGS</div><div>5230 CARROLL CANYON RD #300, SAN DIEGO, CA 92121</div><div>(800) 905-3443</div></div><div><div>Customer:</div><div>EMPIRE STEEL BUILDINGS</div><div>5230 CARROLL CANYON RD STE 300</div><div>SAN DIEGO, CA 92121-1781</div></div><div><div>Project Name & Location:</div><div>KEENE BREWER</div><div>2505 WILLY RD</div><div>FALLBROOK, CA 92028-9587 US</div></div></div><div><div><div><div><input type="checkbox"/> Issued For Approval</div><div><input type="checkbox"/> Issued For Construction</div></div><div><div><input checked="" type="checkbox"/> Not For Construction</div><div><input checked="" type="checkbox"/> Issued For Permit</div></div></div><div><div>Drawing Status:</div><div><div><input type="checkbox"/> Issued For Approval</div><div><input checked="" type="checkbox"/> Issued For Construction</div></div></div></div></div></div> | | | | | |
| Scale: | | NOT TO SCALE | | | |
| Drawn by: | | TJT | | 10/2/25 | |
| Checked by: | | CNG | | 10/3/25 | |
| Project Engineer: | | | | | |
| Job Number: | | 20-B-65935 | | | |
| Sheet Number: | | E8 of 17 | | | |
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| ANAN ALMUGHRABI, P.E. CALIFORNIA P.E. C053882 | | | | | |

20-B-65935\ver01-rafael.arcerabadan\BLDG-B\Drftg\x02R (09/30/25 13:53:33)

| PART MARK | WEIGHT |
|-----------|--------|
| R1A | 328 |
| R3B | 644 |
| CF1A | 513 |
| CF3B | 352 |



Cross Section at Frame Line 2

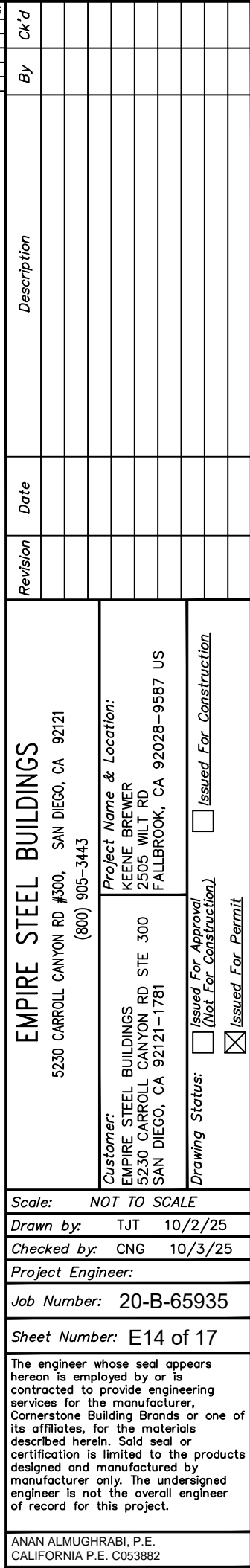
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Oct 09, 2025

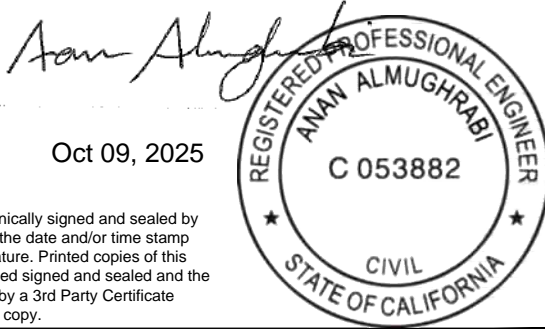


20-B-65935\ver01-rafael.arcerabadan\BLDG-B\Drftg\lx03L (10/01/25 13:41:16)

| PART MARK | WEIGHT |
|-----------|--------|
| R2C | 328 |
| R4B | 644 |
| CF2C | 551 |
| CF4B | 355 |



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GENERAL NOTES
FRAME CLEARANCES SHOWN ARE APPROXIMATE AND
MAY VARY DUE TO CONDITIONS (DEFLECTION).
VERTICAL CLEARANCE DIMENSIONS ARE FROM
FINISHED FLOOR REFERENCE ELEVATION.



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| APPROXIMATE MEMBER WEIGHTS | |
|----------------------------|--------|
| PART MARK | WEIGHT |
| RY1E | 185 |
| CZ1E | 208 |


[illegible]

| | | |
|--|---|--|
| EMPIRE STEEL BUILDINGS 5230 CARROLL CANYON RD #300, SAN DIEGO, CA 92121 (800) 905-3443 | | Project Name & Location: KEENE BREWER 2305 MILT RD FALLBROOK, CA 92028-9587 US |
| Customer: EMPIRE STEEL BUILDINGS 5230 CARROLL CANYON RD STE 300 SAN DIEGO, CA 92121-1781 | Drawing Status: <input type="checkbox"/> Issued For Approval <input checked="" type="checkbox"/> Issued For Construction <input checked="" type="checkbox"/> Issued For Permit | |

| | | |
|-------------------|--------------|---------|
| Scale: | NOT TO SCALE | |
| Drawn by: | TJT | 10/2/25 |
| Checked by: | CNG | 10/3/25 |
| Project Engineer: | | |
| Job Number: | 20-B-65935 | |
| Sheet Number: | E15 of 17 | |

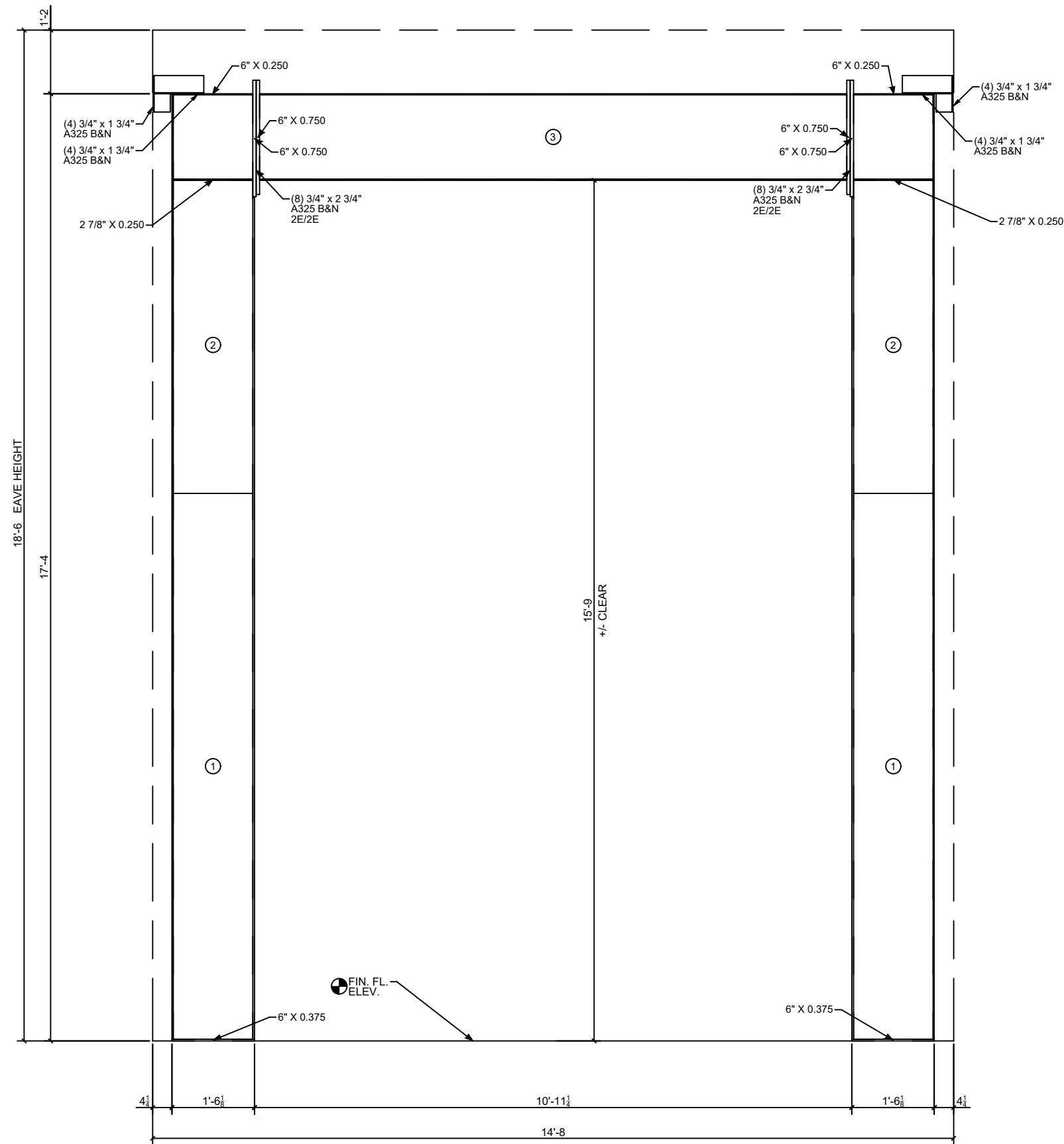
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CALIFORNIA P.E. C053882



| |
|---|
| <p>GENERAL NOTES</p> <p>FRAME CLEARANCES SHOWN ARE APPROXIMATE AND MAY VARY DUE TO CONDITIONS (DEFLECTION).</p> <p>VERTICAL CLEARANCE DIMENSIONS ARE FROM FINISHED FLOOR REFERENCE ELEVATION.</p> |
|---|

| PART MARK | WEIGHT |
|-----------|--------|
| RKW1F | 260 |
| CKW1F | 488 |
| CKW2F | 484 |



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CONNECTION CODES
(FOR TOP AND BOTTOM BOLT PATTERN)

CONNECTION 1B, 1I OR 1P

CONNECTION 1F

CONNECTION 1E

CONNECTION 2B, 2I OR 2P

CONNECTION 2F

CONNECTION 2E

CONNECTION 3B, 3I OR 3P

CONNECTION 3F

CONNECTION 3E

CONNECTION 4B, 4I OR 4P

CONNECTION 4F

CONNECTION 4E

CONNECTION 4X

CONNECTION DESIGNATION
BLANK = STANDARD CONNECTION
H = HEAVY CONNECTION
BOTTOM CONNECTION CODE
BOTTOM QUANTITY OF BOLT ROWS
CONNECTION DESIGNATION
BLANK = STANDARD CONNECTION
H = HEAVY CONNECTION
TOP CONNECTION CODE
TOP QUANTITY OF BOLT ROWS
CONNECTION CODE FORMAT

4 E / 2 E H

CONNECTION CODE DESCRIPTION

B = THIS DESCRIPTION CODE IS USED TO DEFINE SHEAR CONNECTIONS. BOLTS ARE LOCATED INSIDE THE TOP FLANGE AND CONNECTION PLATE IS RECESSED 1/8" BELOW THE TOP FLANGE. CONNECTION PLATE LENGTH MUST BE A MINIMUM OF HALF THE RAFTER WEB DEPTH AND SHALL NOT EXCEED THE RAFTER TOTAL DEPTH.

E = THIS DESCRIPTION CODE IS USED TO DEFINE MOMENT CONNECTIONS. BOLTS ARE LOCATED WITH ONE SET OUTSIDE THE TOP OR BOTTOM FLANGE AND THE REMAINING SETS ARE LOCATED INSIDE THE TOP OR BOTTOM FLANGE.

F = THIS DESCRIPTION CODE IS USED TO DEFINE MOMENT CONNECTIONS. BOLTS ARE LOCATED INSIDE THE TOP OR BOTTOM FLANGE AND CONNECTION PLATE PROJECTS 1/2" BEYOND THE TOP OR BOTTOM FLANGE.

I = THIS DESCRIPTION CODE IS USED TO DEFINE MOMENT CONNECTIONS. BOLTS ARE LOCATED INSIDE THE TOP OR BOTTOM FLANGE AND CONNECTION PLATE IS RECESSED 1/8" BELOW THE TOP OR BOTTOM FLANGE.

P = THIS DESCRIPTION CODE IS USED TO DEFINE SHEAR CONNECTIONS. BOLTS ARE LOCATED INSIDE THE TOP FLANGE AND CONNECTION PLATE IS RECESSED 1/8" BELOW THE TOP FLANGE. CONNECTION PLATE LENGTH MUST BE A MINIMUM OF HALF THE RAFTER WEB DEPTH AND SHALL NOT EXCEED THE RAFTER TOTAL DEPTH.

4X = THIS DESCRIPTION CODE IS USED TO DEFINE MOMENT CONNECTIONS. BOLTS ARE LOCATED WITH TWO SETS EACH SIDE OF THE TOP OR BOTTOM FLANGE WITH A GUSSET PLATE OUTSIDE THE TOP AND BOTTOM FLANGE OR COLUMN CAP PLATE.

CONNECTION BOLT DATA

| NAME | DESCRIPTION FOR A325 BOLT DIMENSIONS | A325 CONNECTION BOLT DIMENSIONS | | | | | |
|--------|--|--|------------------------------|--------------|--------------|--------------|--------------|
| D | DIAMETER OF THE BOLT | 1/2" | 3/4" | 7/8" | 1" | 1 1/4" | 1 1/2" |
| HD | BOLT HOLE DIAMETER | 9/16" | 13/16" | 15/16" | 1 1/16" | 1 5/16" | 1 9/16" |
| G | BOLT GAUGE | 2 1/2" | 3" | 4" | 3 1/2" | 4" | 5 1/2" |
| | MAX. WEB THICKNESS (Max. 5/16" Fillet Weld) WITHOUT WASHER | 1" | 1 1/8" | 1 7/8" | 1 1/4" | 1 3/8" | 2 1/8" |
| | MAX. WEB THICKNESS (Max. 5/16" Fillet Weld) WITH WASHER | 3/4" | 7/8" | 1 5/8" | 7/8" | 7/8" | 1 7/8" |
| HG | HEAVY CONN. BOLT GAUGE | N/A | 2 1/4" | 2 5/8" | 3" | 3 3/4" | 4" |
| S | NORMAL BOLT SPACING | 2 1/2" | 3" | 3 1/4" | 3 1/2" | 4" | 4 1/2" |
| BSMIN | MINIMUM SPACING BETWEEN TOP & BOTTOM SETS OF BOLTS | 1 1/2" | 2 1/4" | 2 5/8" | 3" | 3 3/4" | 4" |
| BSMAX | MAXIMUM BOLT SPACING BETWEEN TOP AND BOTTOM SETS OF BOLTS ON CONNECTION PLATES | SPlice BOLT SPACING (NOT TO EXCEED 2'-0") 1/2 BSMAX (±1/16") WHEN BSMAX = 2'-0 1/16" TO 4'-0 1/3 BSMAX (±1/16") WHEN BSMAX = 4'-0 1/16" TO 6'-0 1/4 BSMAX (±1/16") WHEN BSMAX = 6'-0 1/16" TO 8'-0 | | | | | |
| BFGD | MINIMUM BOLT-TO-FLANGE CLEARANCE AT OUT OF NUT SEE BOLT AT FLANGE DETAIL | 1 1/2" | 1 3/4" | 1 7/8" | 2 1/4" | 2 1/2" | 2 3/4" |
| PF | MINIMUM BOLT-TO-FLANGE CLEARANCE AT CONNECTION PLATE SEE BOLT AT FLANGE DETAIL | (BFGD + RNWT) PF INSIDE OF FLANGE IS INCREASED BASED ON THE YT & YB VALUE. PF FOR CONNECTION B, F, I AND P ARE THE SAME AS USED ON CONNECTION E | | | | | |
| NWT | NUT AND WASHER THICKNESS | SEE BOLT AT FLANGE DETAIL. NUT THICKNESS IS EQUAL TO THE BOLT DIAMETER AND .15625" WASHER THICKNESS IS USED EVEN IF A WASHER IS NOT REQUIRED. | | | | | |
| RNWT | RISE ON NUT AND WASHER THICKNESS | | | | | | |
| TT | THICKNESS TOP FLANGE | REFER TO FRAME CROSS SECTION DRAWING FOR LARGEST FLANGE THICKNESS EITHER SIDE OF THE CONNECTION. | | | | | |
| TB | THICKNESS BOTTOM FLANGE | | | | | | |
| YT | BOLT SPACING TOP (ROUND UP TO NEXT 1/2", MIN = S) | 3" + TT | 3 1/2" + TT | 3 3/4" + TT | 4 1/2" + TT | 5" + TT | 5 1/2" + TT |
| YB | BOLT SPACING BOTTOM (ROUND UP TO NEXT 1/2", MIN = S) | or TB Sloped | or TB Sloped | or TB Sloped | or TB Sloped | or TB Sloped | or TB Sloped |
| EED(E) | MINIMUM END EDGE DIMENSION | 1 1/4" | 1 1/4" | 1 1/2" | 1 3/4" | 2 1/4" | 2 5/8" |
| EED(S) | MINIMUM SIDE EDGE DIMENSION | 3/4" | 1" | 1 1/8" | 1 1/4" | 1 5/8" | 2 1/4" |
| EEDK | END EDGE DIMENSION AT KNEE CONNECTION | 1 3/8" | 1 3/8" | 1 5/8" | 1 7/8" | 2 3/8" | 2 3/4" |
| BCWM | MINIMUM BOLT CLEARANCE FROM A FLANGE OR WEB WELD | WITHOUT WASHER 7/16" | WITH HARDENED WASHER 5/8" | 3/4" | 13/16" | 1" | 1 3/8" |
| WCWM | MINIMUM WIDTH OF CONNECTION PLATE (Standard Connection) | 5" | 6" | 8" | 8" | 10" | 12" |
| WCHM | MINIMUM WIDTH OF CONNECTION PLATE (Heavy Connection) | N/A | 10" | 12" | 12" | 16" | 18" |
| TCMIN | MINIMUM THICKNESS OF CONNECTION PLATE | 1/4" | 3/8" | 7/16" | 1/2" | 5/8" | 1" |

STANDARD CONNECTION DESIGNATION
(CODE 4E/2E SHOWN)

HEAVY CONNECTION DESIGNATION
(CODE 4EH/2EH SHOWN)

4X CONNECTION DESIGNATION
(CODE 4X/4X SHOWN)

CONNECTION B & P
(Low Side Shown, High Side Similar)

BOLT AT FLANGE DETAIL
(Top Flange Shown, Bottom Flange Similar)

Frame Documentation
A325 Connection Bolt Details

05-12-10
Mar '24

06

B 4E/2EH

Connection Code
(See "Connection Code Format"
on this drawing)

Connection Location

CROSS SECTION CONNECTION CODE KEY
(AS SHOWN AT CONNECTIONS ON FRAME CROSS SECTION DRAWINGS)

| Part Mark | Material |
|-----------|---------------------------|
| FB4_ | L 2" x 2" x 14 Ga. |
| FB5_ | L 2" x 2" x 14 Ga. |
| FB6_ | L 2" x 2" x 8" |
| FB7_ | L 2 1/2" x 2 1/2" x 3/16" |

Gusset Plate
(At Rafter Outer Flange shown)

Gusset Plate
(At Rafter Inner Flange shown)

Scale: NOT TO SCALE

Drawn by: TJT 10/2/25

Checked by: CNG 10/3/25

Project Engineer:

Job Number: 20-B-65935

Sheet Number: E17 of 17

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ANAN ALMUGHARABI, P.E.
CALIFORNIA P.E. C053882

ANAN ALMUGHARABI, P.E.
C 053882
CIVIL
STATE OF CALIFORNIA

Oct 09, 2025

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