GENERAL STRUCTURAL NOTES

I GENERAL

A. ALL CONSTRUCTION SHALL CONFORM TO THE CALIFORNIA BUILDING CODE 2019 EDITION w/ AMENDMENTS BY LOCAL JURISDICTIONS.
B. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AT JOB SITE BEFORE COMMENCING WORK AND SHALL REPORT ANY DISCREPANCIES TO THE ARCHITECT OR ENGINEER.
C. OMISSIONS OR CONFLICT BETWEEN VARIOUS ELEMENTS OF THE DRAWINGS, NOTES, AND DETAILS SHALL BE BROUGHT TO THE ATTENTION OF ARCHITECT AND RESOLVED BEFORE PROCEEDING WITH THE WORK.
D. DO NOT USE SCALED DIMENSIONS; USE WRITTEN DIMENSIONS OR WHERE NO DIMENSION IS PROVIDED, CONSULT THE ARCHITECT FOR CLARIFICATION BEFORE PROCEEDING WITH THE WORK.
E. DETAILS SHOWN SHALL BE INCORPORATED INTO THE PROJECT AT ALL APPROPRIATE LOCATIONS WHETHER SPECIFICALLY CALLED OUT OR NOT.
F. FOR WATERPROOFING, FIREPROOFING, ETC. REFER TO DRAWINGS OTHER THAN STRUCTURAL.
G. SEE DRAWINGS OTHER THAN STRUCTURAL FOR: KINDS OF FLOOR FINISH AND THEIR LOCATION, FOR DEPRESSIONS IN FLOOR SLABS, FOR OPENINGS IN WALLS AND FLOORS REQUIRED BY ARCHITECTURAL AND MECHANICAL FEATURES, FOR ROADWAY PAVING, WALKS, RAMPS, STAIRS, CURBS, ETC.
H. HOLES AND OPENINGS THROUGH WALLS AND FLOORS FOR DUCTS, PIPING AND VENTILATION SHALL BE CHECKED BY THE CONTRACTOR, WHO SHALL VERIFY SIZES AND LOCATION OF SUCH HOLES OR OPENINGS WITH THE PLUMBING HEATING, VENTILATING AND ELECTRICAL DRAWINGS AND THESE SUB-CONTRACTORS.
I. NO PIPES AND DUCTS SHALL BE PLACED IN SLABS OR WALLS UNLESS SPECIFICALLY DETAILED OR APPROVED BY THE ARCHITECT.
J. DRAWINGS AND SPECIFICATIONS REPRESENT FINISHED STRUCTURE. SUBCONTRACTOR SHALL BE RESPONSIBLE FOR MEANS AND METHODS OF CONSTRUCTION INCLUDING BUT NOT LIMITED TO SHORING AND TEMPORARY BRACING. THE SUBCONTRACTOR SHALL UNDERTAKE ALL NECESSARY MEASURES TO INSURE SAFETY OF ALL PERSONS AND STRUCTURES AT THE SITE AND ADJACENT TO THE SITE. OBSERVATION VISITS TO THE SITE BY THE ARCHITECT, ENGINEER SHALL NOT RELIEVE THE SUBCONTRACTOR OF SUCH RESPONSIBILITY.
K. NOTE THAT SHEET S1 IS A STANDARD COVER SHEET AND AS SUCH, NOT ALL TYP. DETAILS AND OR NOTES APPLY TO EVERY PROJECT.

II DESIGN CRITERIA

A. APPLICABLE CODE: CALIFORNIA BUILDING CODE 2019 & SFBC 2019.
B. VERTICAL LIVE LOADS: (REDUCIBLE). ROOF: 20 PSF. FLOOR: 40 PSF. HALLWAYS & CORRIDORS: 100 PSF.
C. LATERAL LOADS:
   1. WIND: 110 MPH. BASIC WIND SPEED, EXPOSURE: "B"
   2. SEISMIC: SITE CLASS 'D'
      MAPPED SPECTRAL ACCELERATIONS: S_S= S_1=
      Fa=1.0 Fv=1.5 S_{ds}= .xxx S_{d1}= .xxx
      BASE SHEAR 'V' = .xx W (ASD)
      SEISMIC DESIGN CATEGORY: D
      RESPONSE MODIFICATION FACTOR, R=6.5
      ANALYSIS PROCEDURE: EQUIVALENT LATERAL FORCE PROCEDURE
      IMPORTANCE FACTOR=1 OCCUPANCY CATEGORY=II

III MATERIALS

A. CONCRETE:
   1. REINFORCING STEEL: ASTM A615, GRADE 60, #4 AND SMALLER, GRADE 40.
   2. CONCRETE: NORMAL WEIGHT U.O.N. WITH COMPRESSIVE STRENGTH OF THE FOLLOWING AT 28 DAYS:
      FOOTINGS, ~~MAT SLAB~~ & DRILLED PIERS 2500 psi
      ~~WALLS, COLUMNS 5000 psi~~
      ~~STRUCTURAL SLAB (L.W. P.T. SEE S3.2) 5000 psi~~
   3. MINIMUM CONCRETE COVER FOR REINFORCING STEEL:
      a. SURFACE POURED AGAINST GROUND 3"
      b. FORMED SURFACES BELOW GRADE 2"
      c. SURFACES EXPOSED TO WEATHER 2"
      d. BEAM BARS (INCLUDING STIRRUPS) 1-1/2"
      e. ALL OTHER 1"
   4. ANCHOR BOLT EPOXY*: HILTI HIT-RE 500-SD. (ICC ESR-2322) OR SIMPSON SET-XP (ICC ESR-2508)
   5. SCREW ANCHORS*: SIMPSON TITEN HD (ICC ESR-2713)
      * USE COMPRESSED AIR TO BLOW THE DUST OUT OF ANCHOR BOLT HOLES.
   6. PNEUMATICALLY PLACED CONCRETE (SHOTCRETE) NOTES
      a. ALL CONCRETE WALLS MAY BE SHOTCRETED AT CONTRACTOR'S OPTION. VERIFY COMPATIBILITY OF SHOTCRETE WITH WATE PROOFINGCONTRACTOR.
      b. ALL SHOTCRETE SHALL CONFORM TO THE REQUIREMENTS OF ACI 506.2 AND CBC SECTION 1924.
      c. ALL SHOTCRETE SHALL TEST NOT LESS THAN 4000 PSI AT 28 DAYS.
      d. MAXIMUM AGGREGATE SIZE SHALL BE 3/8 INCH.
      e. LAP ALL REINFORCING BARS 40 DIAMETERS AT SPLICES. SPLICE BARS BY THE NON-CONTACT LAP SPLICE METHOD WITH 2 INCHES CLEAR BETWEEN BARS.
      f. ANY REBOUND SHALL BE REMOVED PRIOR TO PLACING OF CONCRETE.
      g. IN-PLACE SHOTCRETE WHICH SHOW SAGS OR SLOUGHS, SEGREGATION, HONEY COMBING, SAND POCKETS OR OTHER OBVIOUS DEFECTS SHALL BE REMOVED AND REPLACED.
      h. CURE SHOTCRETE BY KEEPING CONTINUOUSLY MOIST FOR A MINIMUM OF 7 DAYS UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE STRUCTURAL ENGINEER.
      i. TEST PANELS: SHOOT ONE TEST PANEL, 18 INCHES SQUARE ,FOR EACH 50 CUBIC YARDS OF SHOTCRETE PLACED, BUT NOT LESS THAN ONE PANEL PER SHIFT. CURE PANELS UNDER SAME CONDITIONS AS THE WORK. TESTING AGENCY SHALL TAKE A MINIMUM OF THREE 2" DIAMETER CORES FROM EACH PANEL. WATER SOAK SPECIMENS 24 HOURS BEFORE TESTING. TEST IN ACCORDANCE WITH UNIFORM BUILDING CODE STANDARD NO. 26-10.
      j. A MINIMUM OF THREE 3" DIAMETER CORES SHALL BE TAKEN FROM THE WORK AT LOCATIONS SPECIFIED BY THE STRUCTURAL ENGINEER. THE SPECIAL INSPECTOR SHALL VISUALLY EXAMINE CORES FOR STRUCTURAL SOUNDNESS AND SUBMIT A REPORT TO THE STRUCTURAL ENGINEER AND THE BUILDING INSPECTION DEPARTMENT.
      k. INSPECTION: PROVIDE CONTINUOUS SPECIAL INSPECTION OF SHOTCRETING OPERATION.

~~B. CMU: UNITS 1500 PSI, MORTAR (TYPE 'S'), GROUT 2000 PSI~~

~~C. STEEL~~
   ~~1. SHAPES AND PLATES: ASTM A36; TUBES: ASTM A500, GRADE B.~~
   ~~2. MOMENT FRAMES (BEAMS, COLUMNS): ASTM A992 OR A913 (50 ksi) MOMENT FRAMES (PLATES): A572, GRADE 50.~~
   ~~3. METAL STUDS, SEE S1.4, NOTES~~
   ~~4. METAL JOISTS, 50 ksi~~
   ~~5. BOLTS: ASTM A307, U.O.N.~~
   ~~6. WELDING ELECTRODES: E-70 FOR FULL PEN WELDS USE CHARPY V-NOTCH WIRE, MIN. 20 ft # @ 0°F~~
   ~~7. METAL DECKING, SEE S1.5~~

D. WOOD
   1. FRAMING LUMBER - DOUGLAS FIR LARCH
      a. HEADERS, PLATES, JOISTS: NO.1
      b. STUDS, BLOCKING: NO.2
      c. ALL LUMBER IN CONTACT WITH CONCRETE: PRESERVATIVE TREATED DOUGLAS FIR. (NOT CCA-C)
      d. POSTS AND BEAMS: NO.1
   2. PLYWOOD SHEATHING
      a. SHEARWALL PLYWOOD : 1/2 INCH STRUCTURAL I, C-D EXTERIOR, APA RATED 32/16.
      b. ROOF SHEATHING: 5/8 INCH STRUCTURAL II, C-D EXTERIOR APA RATED 32/16
      c. FLOOR SHEATHING: 3/4 INCH STRUCTURAL II, C-D EXTERIOR APA RATED 48/24
   3. FRAMING HARDWARE AND JOIST HANGERS: AS MANUFACTURED BY SIMPSON STRONGTIE CO. OR APPROVED EQUAL. SIMPSON DESIGNATIONS USED. USE NAILS PER I.C.C. APPROVAL FOR EACH DEVICE.
   4. COMMON NAILS, UNLESS OTHERWISE NOTED. SHORT NAILS MAY BE USED PROVIDED THEY HAVE COMMON CODE SPECIFIED MINIMUM EMBEDMENT. ALL NAILING TO BE PER IBC TABLE NO. 2304.9.1 UNLESS NOTED OTHERWISE.
   5. GLU-LAM BEAMS: 24F-V4 (Fb=2400 PSI)
   6. PARALLAM & MICROLLAM BEAMS AND TJI's TO BE FABRICATED BY TRUS JOIST:
      PARALLAM BEAMS: 2.2E (Fb=2900PSI)
      MICROLLAM BEAMS: 2.0E (Fb=2600PSI)
   7. FOR MICROLLAMS SEE CODE EVALUATION: ICC-ES ESR-1387
   8. FOR TJI JOISTS SEE CODE EVALUATION: ICC-ES ESR-1153

IV EXPOSURE TO WEATHER:

A. STEEL:
   1. ALL EXPOSED MEMBERS SHALL BE COATED WITH A ZINC RICH PRIMER.
   2. BOLTS, NUTS AND MISCELLANEOUS HARDWARE SHALL BE GALVANIZED.

B. WOOD:
   1. ALL EXTERIOR TIMBER AND GLU-LAM BEAMS SHALL BE PRESSURE TREATED (BUT NOT CHROMATED COPPER ARSENATE) OR WOOD OF NATURAL RESISTANCE TO DECAY.
   2. ALL EXTERIOR HANGERS AND OTHER SIMPSON TYPE PRODUCTS SHALL BE GALVANIZED.
   3. ALL PLYWOOD SHALL BE OF AN EXTERIOR GRADE.
   4. METAL CONNECTORS IN CONTACT w/ PRESSURE TREATED WOOD SHALL BE HOT-DIPPED GALVANIZED w/ MIN. ZINC COATING OF G185.
   5. ALL NAILS & ANCHOR BOLTS IN CONTACT w/ PRESSURE TREATED WOOD SHALL BE HOT DIPPED GALVANIZED.

V ABBREVIATIONS

B.N. — BOUNDARY NAILING
DIA. — DIAMETER
E.N. — EDGE NAILING
H.P. — HIGH POINT
L.P. — LOW POINT
LVL — LAMINATED VENEER LUMBER
L.W. — LIGHT WEIGHT
M.L. — MICROLLAM
PLWD — PLYWOOD SHEATHING
PSL — PARALLEL STRAND LUMBER
P.T. — PRESSURE TREATED OR POST-TENSIONED
S.A.D. — SEE ARCHITECTURAL DRAWINGS
S.O.G. — SLAB-ON-GRADE
S.S. — STAINLESS STEEL
T.O. — TOP OF
TYP. — TYPICAL
U.O.N. — UNLESS OTHERWISE NOTED
V.I.F. — VERIFY IN FIELD
W.W.F. — WELDED WIRE FABRIC

SYMBOLS

(E) WALL BELOW
(E) WALL ABOVE
(N) CONC. WALL ABOVE
BRICK OR CMU WALL ABOVE
WOOD SHEARWALL (BELOW)
WOOD JOIST HANGER (HUS TYPE, U.O.N.)
WOOD POST BELOW
WOOD POST ABOVE (OR ABOVE & BELOW)
HOLDOWN @ WOOD POST
STEEL COLUMN ABOVE
STEEL COLUMN BELOW
MOMENT CONNECTION
CONCRETE TOPPING OVER PLYWOOD
CONCRETE TOPPING OVER CORRUGATED METAL DECK
CONCRETE COLUMN ABOVE
CONCRETE COLUMN BELOW w/ DROPCAP
DRILLED CONCRETE PIER
PRECAST, PRESTRESSED CONCRETE PILE
DIAGONAL ABOVE
DIAGONAL BELOW

PROJECT NAME: IMPROVEMENT
ADDRESS: 3117-3119 24TH STREET
BLOCK/LOT: ----
CITY: SAN FRANCISCO, CA

DRAWING INDEX:

City and County of San Francisco
Department of Building Inspection

London N. Breed, Mayor
Tom C. Hui, S.E., C.B.O., Director

Attachment A

SLOPE AND SEISMIC HAZARD ZONE PROTECTION CHECKLIST

A COPY OF THIS DOCUMENT SHALL BE SUBMITTED WITH THE PERMIT APPLICATION

JOB ADDRESS _____ APPLICATION NO. _____ ADDENDUM NO. ____
OWNER NAME _____ OWNER PHONE NO. (__)_____

1: PROPERTY LOCATION	YES	NO
EARTHQUAKE INDUCED LANDSLIDE AREA ON THE STATE OF CALIFORNIA DEPARTMENT OF CONSERVATION DIVISION OF MINES AND GEOLOGY (CDMG) SEISMIC HAZARD ZONES MAP FOR SAN FRANCISCO, RELEASED NOVEMBER 17, 2000.	☐	☒

2: AVERAGE SLOPE OF PROPERTY	YES	NO
PROPERTY EXCEEDING AN AVERAGE SLOPE OF 4H:1V (25%) GRADE *(APPLICANT WILL NEED TO INCLUDE PLANS ILLUSTRATING SLOPE OF THE PROPERTY AND/OR INCLUDE A SURVEY VERIFYING THE SLOPE OF THE PROPERTY)*	☐	☒

3: PROPOSED CONSTRUCTION	YES	NO
CONSTRUCTION OF NEW BUILDING OR STRUCTURE HAVING OVER 1000 SQFT OF NEW PROJECTED ROOF AREA	☐	☒
HORIZONTAL OR VERTICAL ADDITIONS HAVING OVER 500 SQFT OF NEW PROJECTED ROOF AREA	☐	☒
SHORING	☐	☒
UNDERPINNING	☐	☒
GRADING, INCLUDING EXCAVATION OR FILL, OF OVER 50 CUBIC YARDS OF EARTH MATERIAL	☐	☒
CONSTRUCTION ACTIVITY LISTED BELOW DETERMINED BY THE BUILDING OFFICIAL THAT MAY HAVE A SUBSTANTIAL IMPACT ON THE SLOPE STABILITY:		
RETAINING WALL:	☐	☒
OTHERS: _____	☐	☒

SECTION 4: LICENSED DESIGN PROFESSIONAL VERIFICATION AND SIGNATURES

Under penalty of perjury, I certify that the information provided on this form is based on my personal review of the building and its records, or review by others acting under my direct supervision, and is correct to the best of my knowledge.

Prepared by: Jefferson Chen
Engineer/Architect of Record

(415) 626 - 8300 Telephone
jefferson@enertiadesigns.net Email
Signature
Date

[Architect or Engineer] REGISTERED PROFESSIONAL ENGINEER JEFFERSON JIE CHEN C057898 Exp. _____ CIVIL STATE OF CALIFORNIA

Technical Services Division
1660 Mission Street- San Francisco CA 94103
Office (415) 558-6205 – FAX (415) 558-6401 – www.sfdbi.org

INFORMATION SHEET S-19 ATTACHMENT A

FOR DBI USE ONLY

ASSIGNMENT OF REVIEW TIER

EXEMPTED: Reports per Section E and Third Party Peer Review Not Required

☐ If the box in Section 1 "Property Location" **AND** the box in Section 2 "Average Slope of Property" are marked "No" **OR** if all the boxes in Section 3 "Proposed Construction" are marked "No", reports per Section E and Third Party Peer Review are exempted by the SSPA.

TIER I: Reports per Section E Required but Third Party Peer Review Not Required

☐ If the box in Section 2 "Average Slope of Property" **AND** any boxes in Section 3 "Proposed Construction" are marked "Yes" **AND** the property does not lie within any areas of potential landslide hazard, DBI shall require mandatory submittal of reports per Section E only.

TIER II: Reports per Section E and Third Party Peer Review Required

☐ If the box in Section 2 "Average Slope of Property" **AND** any boxes in Section 3 "Proposed Construction" are marked "Yes" **AND** the property lies within the areas of potential landslide hazard, DBI shall require mandatory submittal of reports per Section E and require the permit application be subject to a third party peer review. At the discretion of the SSPA Review Committee, the peer review may be followed by the establishment of a Structural Advisory Committee (SAC) with the project reassigned to Tier III.

If the DBI Plan Review Engineer (or the SSPA Review Committee, if established), in their discretion, determines from the submitted documents that the project has a substantial impact on the slope stability or the site or creates a potential for earthquake induced landslide hazards, DBI may require that the third party peer review be followed by the establishment of a Structural Advisory Committee (SAC) and re-assigned the project to Tier III.

TIER III: Structural Advisory Committee (SAC) Review

☐ If the box in Section 1 "Property Location" **AND** any boxes in Section 3 "Proposed Construction" are marked "Yes", DBI shall require mandatory submittal of reports per Section E and require the permit application be subject to review by a Structural Advisory Committee (SAC), as defined by SFBC Section 105A.6.

Tier assigned by: _____ Phone: (415)
DBI Plan Review Engineer

Comment: _____

City and County of San Francisco
Department of Building Inspection

London N. Breed, Mayor
Tom C. Hui, S.E., C.B.O., Director

NOTICE

SPECIAL INSPECTION REQUIREMENTS

Please note that the Special Inspections shown on the approved plans and checked on the Special Inspections form issued with the permit are required for this project. The employment of special inspectors is the direct responsibility of the owner or the engineer/architect of record acting as the owner's representative.

These special inspections are required *in addition to* the called inspections performed by the Department of Building Inspection. The name of the special inspector shall be furnished to the district building inspector prior to start of work for which special inspection is required.

For questions regarding the details or extent of required inspection or tests, please call the Plan Checker assigned to this project or **415-558-6132**. If there are any field problems regarding special inspection, please call your District Building Inspector or 415-558-6570.

Before final building inspection is scheduled, documentation of special inspection compliance must be submitted to and approved by the Special Inspection Services staff. To avoid delays in this process, the project owner should request final compliance reports from the architect or engineer of record and/or special inspection agency soon after the conclusion of work requiring special inspection. ***The permit will not be finalized without compliance with the special inspection requirements.***

STRUCTURAL OBSERVATION REQUIREMENTS

Structural observation shall be provided as required per Section 1704.6. **The building permit will not be finalized without compliance with the structural observation requirements.**

Special Inspection Services Contact Information

1. **Telephone: (415) 558-6132**
2. **Fax: (415) 558-6474**
3. **Email: dbi.specialinspections@sfgov.org**
4. **In person: 3rd floor at 1660 Mission Street**

Note: We are moving towards a "paperless" mode of operation. All special inspection submittals, including final letters, may be emailed (preferred) or faxed. We will also be shifting to a paperless fax receipt mode.

Special Inspection Services
1660 Mission Street – San Francisco CA 94103
Office (415) 558-6132 – FAX (415) 558-6474 – www.sfdbi.org

Updated 11/01/2018

SPECIAL INSPECTION AND STRUCTURAL OBSERVATION

A COPY OF THIS DOCUMENT SHALL BE KEPT WITH THE APPROVED STRUCTURAL DRAWING SET

JOB ADDRESS_____ APPLICATION NO._____ ADDENDUM NO.___
OWNER NAME_____ OWNER PHONE NO. (_____)

Employment of Special Inspection is the direct responsibility of the OWNER, or the engineer/architect of record acting as the owner's representative. Special inspector shall be one of those as prescribed in Sec.1704. Name of special inspector shall be furnished to DBI District Inspector prior to start of the work for which the Special Inspection is required. Structural observation shall be performed as provided by Section 1704.6. A preconstruction conference is recommended for owner/builder or designer/builder projects, complex and highrise projects, and for projects utilizing new processes or materials.

In accordance with Chapter 17 (SFBC), Special Inspection and/or testing is required for the following work:

1. ☐ Concrete (Placement & sampling
2. ☒ Bolts installed in concrete
3. ☐ Special moment-Resisting concrete frame
4. ☒ Reinforcing steel and prestressing tendons
5. **Structural welding:**
   A. Periodic visual inspection
   ☐ Single pass fillet welds 5/16" or smaller
   ☐ Steel deck
   ☐ Welded studs
   ☐ Cold formed studs and joists
   ☐ Stair and railing systems
   ☐ Reinforcing steel
   B. Continuous visual inspection and NDT (Section 1704)
   ☐ All other welding (NDT exception: Fillet weld)
   ☐ Reinforcing steel, and [ ] NDT required
   ☐ Moment-resisting frames
   ☐ Others_____
6. ☐ High-strength bolting
7. ☐ Structural masonry
8. ☐ Reinforced gypsum concrete
9. ☐ Insulating concrete fill
10. ☐ Sprayed-on fireproofing
11. ☐ Piling, drilled piers and caissons
12. ☐ Shotcrete
13. ☐ Special grading, excavation ☐ And filling (Geo. Engineered)
14. ☐ Smoke-control system
15. ☐ Demolition
16. ☐ Exterior Facing
17. **Retrofit of unreinforced masonry buildings:**
    ☐ Testing of mortar quality and shear tests
    ☐ Inspection of repointing operations
    ☐ Installation inspection of new shear bolts
    ☐ Pre-installation inspection for embedded bolts
    ☐ Pull/torque tests per SFBC Sec.1607C & 1615C
18. **Bolts installed in existing concrete masonry:** ☐ Concrete ☐ Masonry
    ☐ Pull/torque tests
19. ☒ Shear walls and floor systems used as shear diaphragms
20. ☒ Holdowns
21. **Special cases:**
    ☐ Shoring
    ☐ Underpinning: ☐ Not affecting adjacent property
    ☐ Affecting adjacent property: PA_____
    ☐ Others
22. ☐ Crane safety (Apply to the operation of Tower cranes on highrise building) (Section 1705.21)
23. ☐ Others: "As recommended by professional of record" _____
24. **Structural observation per Sec. 1704.6 for the following:** ☒ Foundations ☐ Steel framing ☒ Concrete construction ☐ Masonry construction ☒ Wood framing ☐ Other:_____
25. Certification is required for: ☐ Glu-lam components
26. ☐ Firestops in high-rise building

Prepared by: JEFFERSON CHEN, P.E. Phone: (415) 626-3800
Engineer/Architect of Record

Required information:
FAX: (415) 701-0212 Email: jefferson@enertiadesigns.net

Review by: _____ Phone: (415) 558-
DBI Engineer or Plan Checker

****

APPROVAL (Based on submitted reports.)

_____
DATE DBI Engineer or Plan Checker / Special Inspection Services Staff

QUESTIONS ABOUT SPECIAL INSPECTION AND STRUCTURAL OBSERVATION SHOULD BE DIRECTED TO:
Special Inspection Services (415) 558-6132; or, dbi.specialinspections@sfgov.org ; or FAX (415) 558-6474

Revised 9-22-17

ENERTIA DESIGNS
ARCHITECTURAL ENGINEERING & INTERIOR
EMAIL: INFO@ENERTIADESIGNS.NET
OFFICE: 415.626.8300
FAX: 415.701.0212
1167 MISSION STREET, FL 1
SAN FRANCISCO, CA 94103

REGISTERED PROFESSIONAL ENGINEER JEFFERSON JIE CHEN C057898 Exp. 06/30/22 CIVIL STATE OF CALIFORNIA

	DATE	REVISIONS

GENERAL STRUCTURAL NOTES
DRAWING INDEX

IMPROVEMENT
3117-3119 24TH STREET
SAN FRANCISCO, CA

Date: 04/15/22
Scale: AS SHOWN
Drawn By: A.T
Job No: 22535
Sheet S1.0
Of 7 Sheets

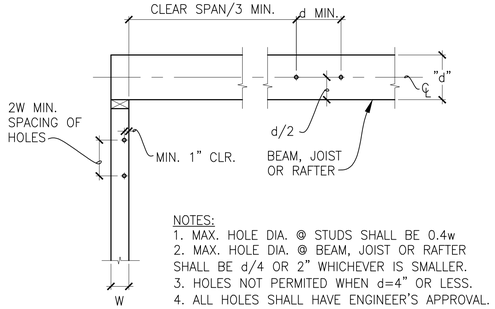
DRAWING NAME: Z:\Drawings\Projects 2020\3117-3119 24th Street\Drawings\Sheets\3117-3119 24th Street - S1.dwg
PLOT DATE: 04-16-22 PLOTTED BY: Jefferson

NAILING SCHEDULE (PER CBC 2016, TABLE NO. 2304.10.1)

CONNECTION	NAILING [1]
1. JOIST TO SILL OR GIRDER, TOENAIL	3–8d
2. BRIDGING TO JOIST, TOENAIL EACH END	2–8d
3. 1"X6" SUBFLOOR OR LESS TO EACH JOIST, FACE NAIL	2–8d
4. WIDER THAN 1" X 6" SUBFLOOR TO EACH JOIST, FACE NAIL	3–8d
5. 2" SUBFLOOR TO JOIST OR GIRDER, BLIND AND FACE NAIL	2–16d
6. SOLE PLATE TO JOIST OR BLOCKING, TYPICAL FACE NAIL	16d AT 16" O.C.
SOLE PLATE TO JOIST OR BLOCKING, AT BRACED WALL PANELS	3–16d PER 16"
7. TOP PLATE TO STUD, END NAIL	2–16d
8. STUD TO SOLE PLATE	4–8d, TOENAIL OR 2–16d, END NAIL
9. DOUBLE STUDS, FACE NAIL	16d AT 24" O.C.
10. DOUBLED TOP PLATES, TYPICAL FACE NAIL	16d AT 16" O.C.
DOUBLE TOP PLATES, LAP SPLICE	8–16d
11. BLOCKING BETWEEN JOISTS OR RAFTERS TO TOP PLATE, TOENAIL	3–8d
12. RIM JOIST TO TOP PLATE, TOINAIL	8d AT 6" O.C.
13. TOP PLATES, LAPS AND INTERSECTIONS, FACE NAIL	2–16d
14. CONTINUOUS HEADER, TWO PIECES	16d AT 16" O.C. ALONG EACH EDGE
15. CEILING JOISTS TO PLATE, TOENAIL	3–8d
16. CONTINUOUS HEADER TO STUD, TOINAIL	4–8d
17. CEILING JOISTS, LAPS OVER PARTITIONS, FACE NAIL	3–16d
18. CEILING JOISTS TO PARALLEL RAFTERS, FACE NAIL	3–16d
19. RAFTER TO PLATE, TOENAIL	3–8d
20. 1" BRACE TO EACH STUD AND PLATE, FACE NAIL	2–8d
21. 1" X 8" SHEATHING OR LESS TO EACH BEARING, FACE NAIL	2–8d
22. WIDER THAN 1" X 8" SHEATHING TO EACH BEARING, FACE NAIL	3–8d
23. BUILT–UP CORNER STUDS	16d AT 24" O.C.
24. BUILT–UP GIRDER AND BEAMS	20d AT 32" O.C. AT TOP AND BOTTOM AND STAGGERED 2–20d AT ENDS AND AT EACH SPLICE
25. 2" PLANKS	2–16d AT EACH BEARING
26. COLLAR TIE TO RAFTER	3–10d AT FACE NAIL
27. JACK RAFTER TO HIP	2–10d AT TOENAIL AND 2–16d AT FACE NAIL
28. ROOF RAFTER TO 2–BY RIDGE BEAM	2–16d AT TOENAIL AND 2–16d AT FACE NAIL
29. JOIST TO BAND JOIST	3–16d AT FACE NAIL
30. LEDGER STRIP	3–16d AT FACE NAIL AT EACH JOIST
31. WOOD STRUCTURAL PANELS AND PARTICLEBOARD [B] SUBFLOOR, ROOF AND WALL SHEATHING (TO FRAMING)	
1/2" AND LESS	6d[C,L]
19/32"–3/4"	8d[D] or 6d[E]
7/8"–1"	10d[D] or 8d[E]
1 1/8"–1 1/4"	10d[D] or 8d[E]
COMBINATION SUBFLOOR–UNDERLAYMENT (TO FRAMING):	
3/4" AND LESS	6d[E]
7/8"–1"	8d[E]
1 1/8"–1 1/4"	10d[D] or 8d[E]
32. PANEL SIDING (TO FRAMING):	
1/2" OR LESS	6d[F]
5/8"	8d[F]
33. FIBERBOARD SHEATHING: [G]	
1/2"	6d[D]
25/32"	8d[D]
34. INTERIOR PANELING	
1/4"	4d[J]
3/8"	6d[K]

CBC TABLE 2304.10.1 FASTENING SCHEDULE NOTES

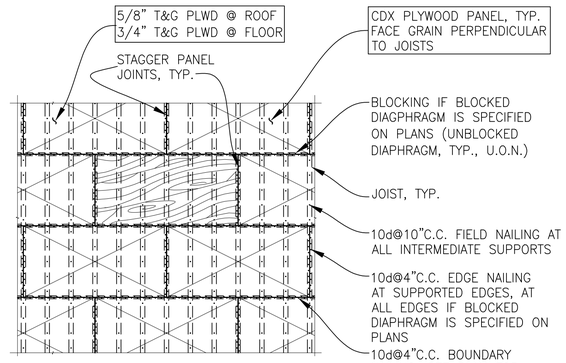
A. COMMON OR BOX NAILS ARE PERMITTED TO BE USED EXCEPT WHERE OTHERWISE STATED.
B. NAILS SPACED AT 6 INCHES ON CENTER AT EDGES, 12 INCHES AT INTERMEDIATE SUPPORTS EXCEPT 6 INCHES AT SUPPORTS WHERE SPANS ARE 48 INCHES OR MORE. FOR NAILING OF WOOD STRUCTURAL PANEL AND PARTICLE BOARD DIAPHRAGMS AND SHEAR WALLS, REFER TO SECTION 2305. NAILS FOR WALL SHEATHING ARE PERMITTED TO BE COMMON, BOX OR CASING.
C. COMMON OR DEFORMED SHANK (6D – 2" X 0.113"; 8D – 2½" X 0.131"; 10D – 3" X 0.148").
D. COMMON (6D – 2" X 0.113"; 8D – 2½" X 0.131"; 10D – 3" X 0.148").
E. DEFORMED SHANK (6D – 2" X 0.113"; 8D – 2½" X 0.131"; 10D – 3" X 0.148").
F. CORROSION–RESISTANT SIDING (6D – 1⅞" X 0.106"; 8D – 2⅜" X 0.128") OR CASING (6D – 2" X 0.099"; 8D – 2½" X 0.113") NAIL.
G. FASTENERS SPACED 3 INCHES ON CENTER AT EXTERIOR EDGES AND 6 INCHES ON CENTER AT INTERMEDIATE SUPPORTS, WHEN USED AS STRUCTURAL SHEATHING. SPACING SHALL BE 6 INCHES ON CENTER ON THE EDGES AND 12 INCHES ON CENTER AT INTERMEDIATE SUPPORTS FOR NONSTRUCTURAL APPLICATIONS.
H. CORROSION–RESISTANT ROOFING NAILS WITH 7/16–INCH–DIAMETER HEAD AND 1½–INCH LENGTH FOR ½–INCH SHEATHING AND 1¾–INCH LENGTH FOR 25/32–INCH SHEATHING.
I. CORROSION–RESISTANT STAPLES WITH NOMINAL 7/16–INCH CROWN AND 1⅛–INCH LENGTH FOR ½–INCH SHEATHING AND 1½–INCH LENGTH FOR 25/32–INCH SHEATHING. PANEL SUPPORTS AT 16 INCHES (20 INCHES IF STRENGTH AXIS IN THE LONG DIRECTION OF THE PANEL, UNLESS OTHERWISE MARKED).
J. CASING (1½" X 0.080") OR FINISH (1½" X 0.072") NAILS SPACED 6 INCHES ON PANEL EDGES, 12 INCHES AT INTERMEDIATE SUPPORTS.
K. PANEL SUPPORTS AT 24 INCHES. CASING OR FINISH NAILS SPACED 6 INCHES ON PANEL EDGES, 12 INCHES AT INTERMEDIATE SUPPORTS.
L. FOR ROOF SHEATHING APPLICATIONS, 8D NAILS (2½" X 0.113") ARE THE MINIMUM REQUIRED FOR WOOD STRUCTURAL PANELS.
M. STAPLES SHALL HAVE A MINIMUM CROWN WIDTH OF 7/16 INCH.
N. FOR ROOF SHEATHING APPLICATIONS, FASTENERS SPACED 4 INCHES ON CENTER AT EDGES, 8 INCHES AT INTERMEDIATE SUPPORTS.
O. FASTENERS SPACED 4 INCHES ON CENTER AT EDGES, 8 INCHES AT INTERMEDIATE SUPPORTS SUB FLOOR AND WALL SHEATHING AND 3 INCHES ON CENTER AT EDGES, 6 INCHES AT INTERMEDIATE SUPPORTS FOR ROOF SHEATHING.
P. FASTENERS SPACED 4 INCHES ON CENTER AT EDGES, 8 INCHES AT INTERMEDIATE SUPPORTS.



NOTES:
1. MAX. HOLE DIA. @ STUDS SHALL BE 0.4w
2. MAX. HOLE DIA. @ BEAM, JOIST OR RAFTER SHALL BE d/4 OR 2" WHICHEVER IS SMALLER.
3. HOLES NOT PERMITTED WHEN d=4" OR LESS.
4. ALL HOLES SHALL HAVE ENGINEER'S APPROVAL.

1 TYPICAL HOLES IN BEAMS, JOISTS, RAFTERS AND STUDS

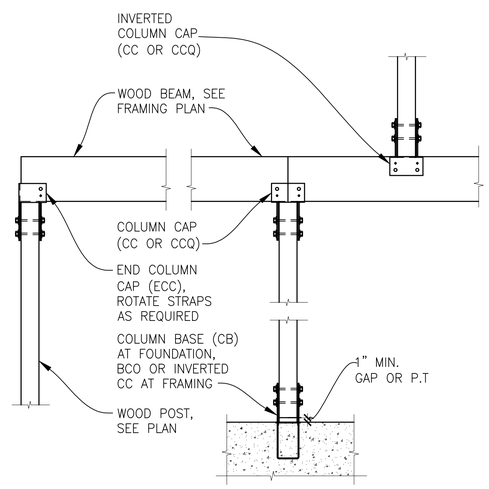
SCALE: 3/4" = 1'–0"



NOTES:
1. SEE PLANS FOR MORE INFORMATION
2. PLYWOOD = WOOD STRUCTURAL PANEL

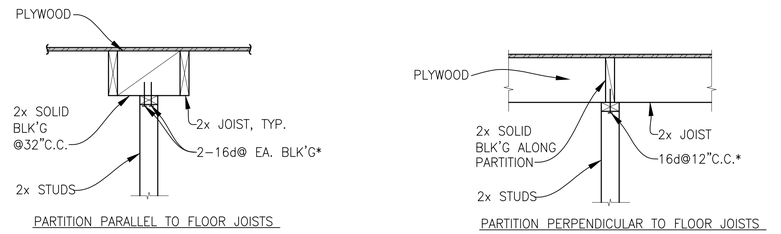
2 TYPICAL PLYWOOD DIAPHRAGM SHEATHING (PLAN VIEW)

SCALE: 3/4" = 1'–0"



3 TYPICAL BEAM TO POST CONNECTION

SCALE: 3/4" = 1'–0"



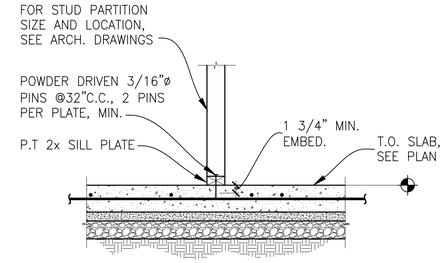
PARTITION PARALLEL TO FLOOR JOISTS

PARTITION PERPENDICULAR TO FLOOR JOISTS

*OPTION: PROVIDE STC CLIP TO ROOF TRUSS OR BEAM

4 TYPICAL NON–BEARING / NON–SHEARWALL SUPPORT @ ROOF

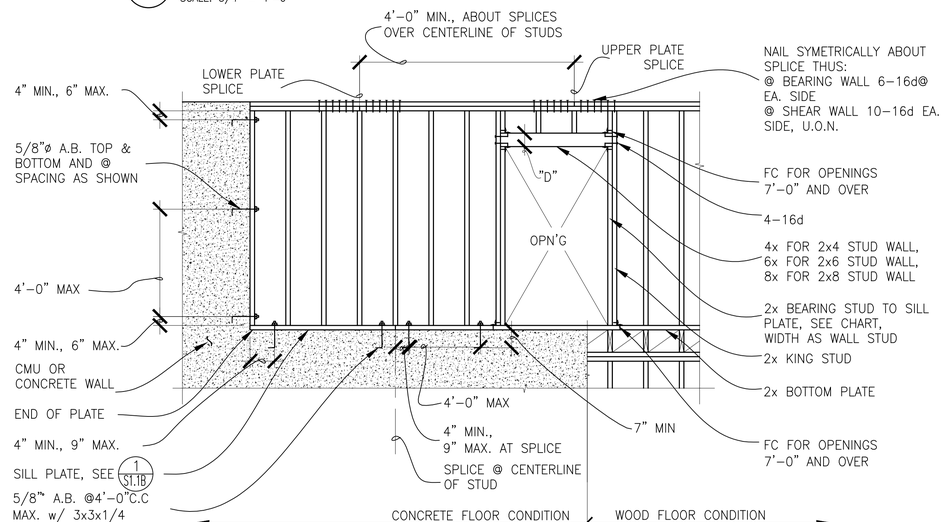
SCALE: 3/4" = 1'–0"



NOTES:
1. FOR SLAB THICKNESS, REINFORCEMENT AND BASE MATERIALS SEE PLAN.
2. AT P.T. SLAB PROVIDE MAX. 3/4" EMBEDMENT.

5 TYPICAL NON–BEARING / NON–SHEARWALL CONNECTION AT CONCRETE SLAB

SCALE: 3/4" = 1'–0"



HEADER SPANS "S"	"D" MIN.	ADDN'L BEARING STUDS
S ⩽ 4'–0"	5 1/2"	0
4'–0" < S ⩽ 8'–0"	7 1/4"	1
8'–0" < S ⩽ 10'–0"	9 1/4"	2
S > 10'–0"	SEE PLAN	3

NOTE:
THIS DETAIL IS NOT FOR SHEARWALLS, SEE 1 S1.1B

6 TYPICAL FRAMING @ OPENINGS, TOP PLATE SPLICES, ETC.

SCALE: 3/4" = 1'–0"

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REGISTERED PROFESSIONAL ENGINEER JEFFERSON JICHEN C057898 Exp. 06/30/22 CIVIL STATE OF CALIFORNIA

	DATE	REVISIONS

TYPICAL WOOD DETAILS

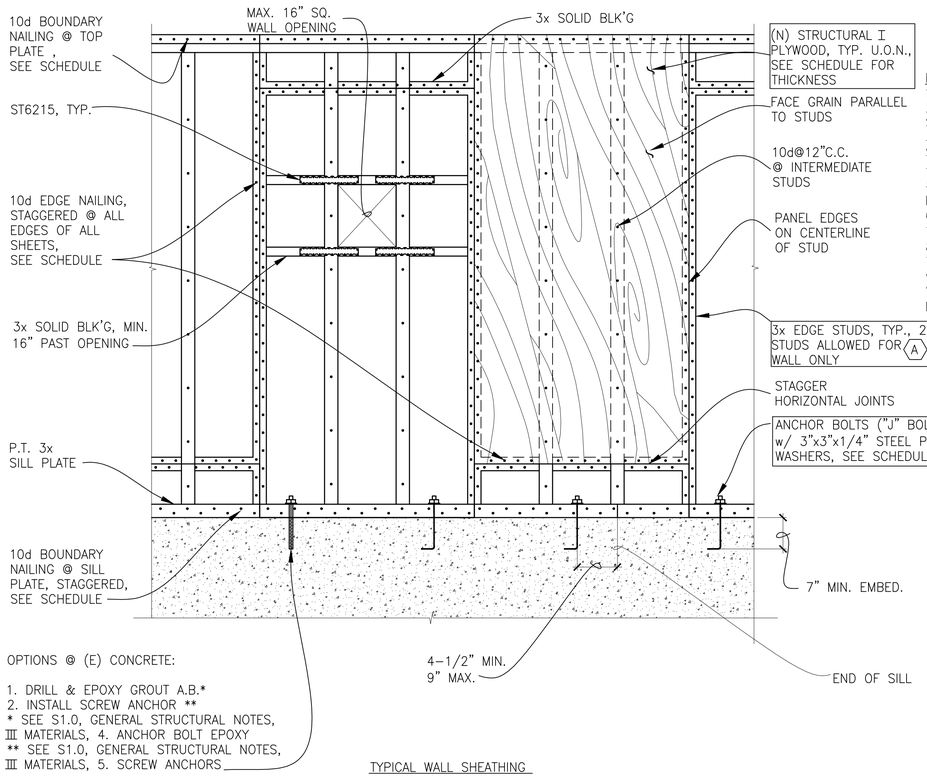
IMPROVEMENT

3117-3119 24TH STREET
SAN FRANCISCO, CA

Date:	04/15/22
Scale:	AS SHOWN
Drawn By:	A.T
Job No:	22535
Sheet	S1.1A
Of	7 Sheets

SHEARWALL SCHEDULE

SYMBOL	PLWD GRADE	PLWD THICKNESS	PLWD ONE SIDE	PLWD TWO SIDES	PLWD EDGE & BOUNDARY NAILING	CONT. JOIST OR SOLID BLK'G	CLIP SPACING	PLATE NAIL SPACING	SDS 1/4x4 1/2" WOOD SCREW SPACING	A.B. SPACING	CAPACITY (PLF)
(A)	STRUC I	15/32"	X		10d @ 6"C.C.	2x OR 1 3/4" LVL	A35 OR LTP4 @ 16"C.C.	16d @ 4"C.C.	–	5/8"ø @ 32"C.C.	340
(B)	STRUC I	15/32"	X		10d @ 4"C.C.	2x OR 1 3/4" LVL	A35 OR LTP4 @ 12"C.C.	16d @ 3"C.C.	–	5/8"ø @ 24"C.C.	510
(C)	STRUC I	15/32"	X		10d @ 3"C.C.	2x OR 1 3/4" LVL	A35 OR LTP4 @ 9"C.C.	–	6"C.C.	5/8"ø @ 16"C.C.	665
(D)	STRUC I	15/32"	X		10d @ 2"C.C.	2x OR 1 3/4" LVL	A35 OR LTP4 @ 7"C.C.	–	4"C.C.	5/8"ø @ 16"C.C.	870
(E)	STRUC I	15/32"		X	10d @ 3"C.C.	2–2x's OR 4x OR 3 1/2" PSL	A35 OR LTP4 @ 8"C.C. + (LTP4 @ 8"C.C. OR CONTINUE WALL PLWD UP)	–	3"C.C. STAGGERED	7/8"ø @ 16"C.C.	1330
(F)	STRUC I	15/32"		X	10d @ 2"C.C.	2–2x's OR 4x OR 3 1/2" PSL	A35 OR LTP4 @ 8"C.C. + (LTP4 @ 8"C.C. OR CONTINUE WALL PLWD UP)	–	2"C.C. STAGGERED	7/8"ø @ 16"C.C.	1740



OPTIONS @ (E) CONCRETE:

1. DRILL & EPOXY GROUT A.B.*
2. INSTALL SCREW ANCHOR **

* SEE S1.0, GENERAL STRUCTURAL NOTES, III MATERIALS, 4. ANCHOR BOLT EPOXY
** SEE S1.0, GENERAL STRUCTURAL NOTES, III MATERIALS, 5. SCREW ANCHORS

TYPICAL WALL SHEATHING

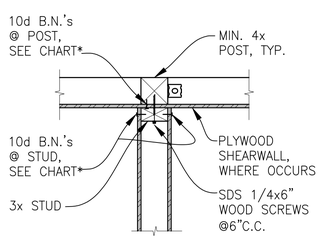
NOTES:
1. PLYWOOD SHALL BE NAILED DIRECTLY TO FRAMING.
2. WHEN PLYWOOD APPLIED TO BOTH FACES, STAGGER SHEETS SO THAT EDGES OCCUR AT DIFFERENT STUDS.
3. DO NOT OVER SHOOT NAILS THROUGH OUTER LAYER OF SHEARWALL PLYWOOD.
4. PLYWOOD = WOOD STRUCTURAL PANEL.
5. ORIENTED STRAND BOARD (OSB) MAY BE USED IN LIEU OF PLYWOOD AT CONTRACTOR'S OPTION.
6. FOR TYPICAL PLYWOOD SHEARWALL INTERSECTION, SEE (3/—)
7. USE 3" LONG 10d NAILS.
8. CDX PLYWOOD EXPOSED TO EXTERIOR SHALL BE PRESSURE TREATED.
9. FOR STEEL PLATES, BOLTS, NAILS, SCREWS, ETC. IN CONTACT WITH P.T WOOD, SEE SHEET S1.0, GENERAL STRUCTURAL NOTES, IV EXPOSURE TO WEATHER, B. WOOD

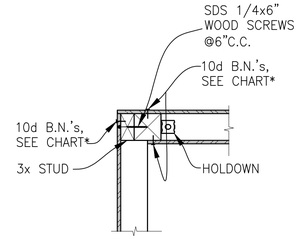
PULL OUT TEST ON HDU HOLDOWNS	
HOLDOWN	PULL OUT VALUE
HDU2	7688 LBS
HDU4	11413 LBS
HDU5	14113 LBS
HDU8	19675 LBS
HDU11	23338 LBS
HDU14	36113 LBS
HD12	28440 LBS
HD19	38140 LBS

STRAP OPTION	
HOLDOWN	EQUIVALENT STRAP
HDU2	MST60
HDU4	MST60 OR 2–MST37's
HDU5, PHD5 OR HD5A	MST60 OR 2–MST48's
~~PHD6~~ OR ~~HD6A~~	2–MST48's
HDU8, HDQ8	2–MST60's

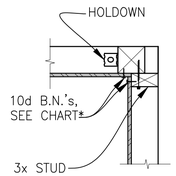
POST SIZE	LARGEST HOLDDOWN FOR A SINGLE HOLDOWN APPLICATION
4X4 OR (2)2X4	HDU2 TO HDU4
4x6	HDU5 TO HDU8 – HDQ8
6x6	HDU11 TO HDU14 HHDQ11 TO HHDQ14

1 TYPICAL PLYWOOD SHEARWALL
SCALE: 3/4" = 1'–0"



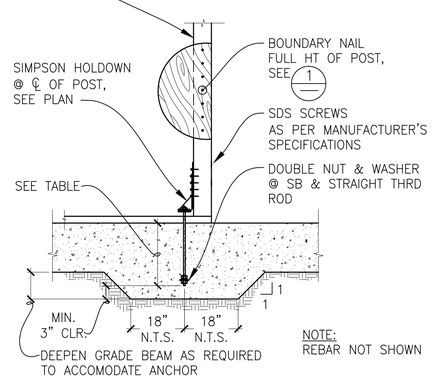


EXTERIOR PLYWOOD (PLAN)



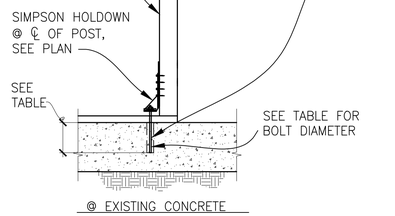
INTERIOR PLYWOOD (PLAN)

3 TYPICAL PLYWOOD SHEARWALL INTERSECTION DETAILS
SCALE: 3/4" = 1'–0"



NOTE:
REBAR NOT SHOWN

@ NEW CONCRETE GRADE BEAM



@ EXISTING CONCRETE

HOLDOWN	ANCHOR DIAMETER	ANCHOR INTO (N) CONC.	MIN. EMBED. INTO (E) CONC.	PLATE @ P.T. SLAB
HDU2 OR HD3B	5/8"	SSTB16	10"	2"x2"x3/8"
HDU4	5/8"	SSTB20	12"	2"x2"x1/2"
HDU5 OR HD5B	5/8"	SSTB24	14"	2"x2"x1/2"
HD7	7/8"	SB 7/8x24	16"	3"x3"x5/8"
HDU8, HDQ8	7/8"	SB 7/8x24	18"	3"x3"x5/8"
HD9B	7/8"	SB 7/8x24	20"	4"x4"x3/4"
HDU11, HHDQ11 OR HD12	1"	SB 1x30	22"	4"x4"x3/4"
HDU14, HHDQ14	1"*	SB 1x30	24"	4"x4"x3/4"
HD19	1 1/4"*	1 1/4"dx30"**	26"	4"x4"x3/4"

* PROVIDE HEAVY HEX ANCHOR NUT
** STRAIGHT THREADED ROD w/ DOUBLE NUT AND WASHER

5 TYPICAL HOLDOWN DETAIL @ CONCRETE FOUNDATION
SCALE: 3/4" = 1'–0"

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PROFESSIONAL ENGINEER – JEFFERSON JIE CHEN – C057898 Exp. 08/31/22 – CIVIL – STATE OF CALIFORNIA

	DATE	REVISIONS

TYPICAL WOOD DETAILS

IMPROVEMENT

3117-3119 24TH STREET
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Date: 04/15/22
Scale: AS SHOWN
Drawn By: A.T
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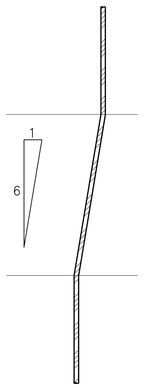
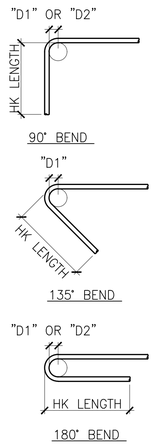
Sheet S1.1B
Of 7 Sheets



CLASS "B" LAP SPLICES					
Fy	BAR SIZE	SPECIFIED CONCRETE STRENGTH, f'c			
		2500	3000	4000	5000
40	#3	1'-4"	1'-3"	1'-1"	11"
40	#4	1'-9"	1'-7"	1'-5"	1'-3"
60	#5	3'-3"	3'-0"	2'-7"	2'-4"
60	#6	3'-11"	3'-7"	3'-1"	2'-9"
60	#7	5'-9"	5'-3"	4'-6"	4'-1"
60	#8	6'-6"	6'-0"	5'-2"	4'-8"
60	#9	7'-4"	6'-9"	5'-10"	5'-3"
60	#10	8'-3"	7'-7"	6'-7"	5'-10"
60	#11	9'-2"	8'-5"	7'-3"	6'-6"
60	#14	11'-1"	10'-1"	8'-9"	7'-10"

THE ABOVE REQUIREMENTS APPLY TO CONFIGURATIONS WHERE:
1. THE BARS IN QUESTION ARE TOP BARS OR BARS IN LIGHTWEIGHT CONCRETE.
2. BARS ARE UNCOATED
3. CONCRETE IS NORMAL WEIGHT
4. CLEAR SPACING > 2db
   AND CLEAR COVER > db
   OR CLEAR SPACING > db
   AND CLEAR COVER > db
   AND MIN. STIRRUPS OR TIES ARE PROVIDED

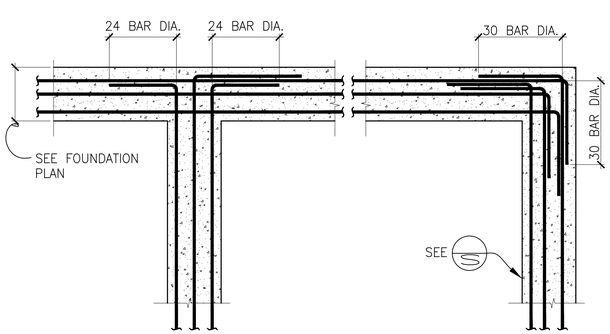
FOR OTHER CONFIGURATIONS CONTACT ENGINEER.



DIAMETER OF BENDS	
"D1"	1 1/2" FOR #3 BARS
	2" FOR #4 BARS
	2 1/2" FOR #5 BARS
"D2"	6d FOR #3 THRU #8 BARS
	8d FOR #9 THRU #11 BARS
	10d FOR #4 AND #10 BARS

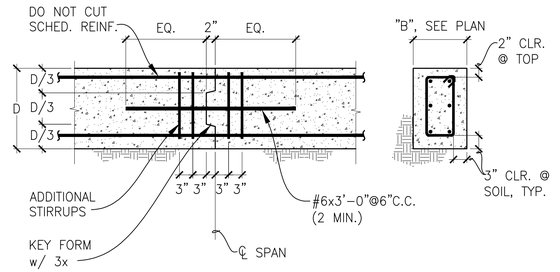
STANDARD HOOK LENGTH				
BAR SIZE	MAIN REINFORCEMENT		STIRRUPS AND TIE HOOKS	
	90°	180°	90°	180°
#3	6"	4"	3	4 1/2"
#4	8"	4"	4"	6"
#5	9 1/2"	4 1/2"	5"	7 1/2"
#6	11 1/2"	5 1/2"	11 1/2"	10"
#7	13 1/2"	6 1/2"	13 1/2"	11 1/2"
#8	15"	7"	15"	13"
#9	18"	9"	–	–
#10	20"	10"	–	–
#11	22"	11"	–	–

NOTES:
"D1" TO BE USED FOR STIRRUPS, TIES & WALLS REINFOCING AT OPENINGS.
"D2" FOR ALL OTHERS

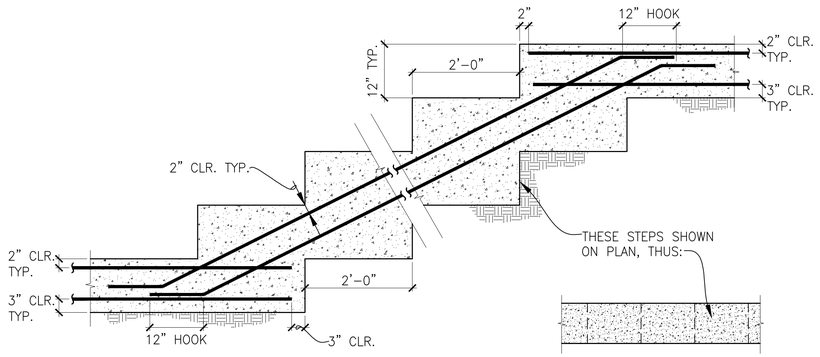


PLAN VIEW

NOTE: STIRRUPS NOT SHOWN

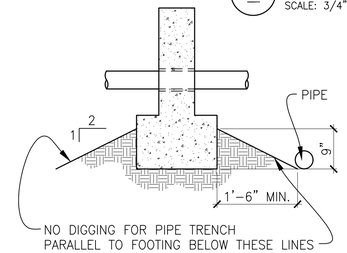


1 TYPICAL OFFSET AND TYPICAL LAP SPLICE
SCALE: 1 1/2" = 1'-0"

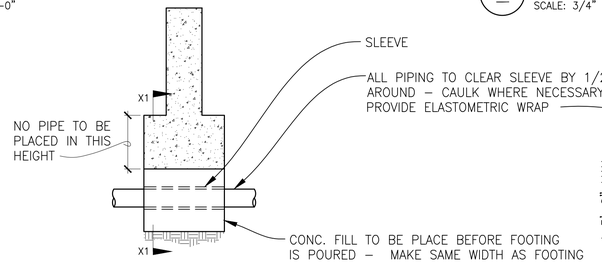


NOTES:
1. DO NOT SLOPE GRADE BEAMS > 1 VERT TO 10 HORIZ.
2. DIMENSIONS AS SHOWN UNLESS OTHERWISE SHOWN ON DRAWINGS

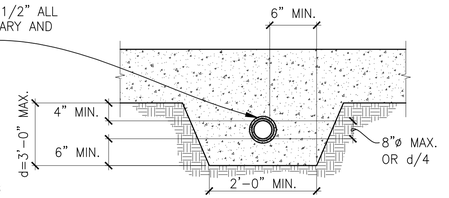
2 STANDARD HOOKS
SCALE: 1 1/2" = 1'-0"



3 TYPICAL GRADE BEAM INTERSECTIONS
SCALE: 3/4" = 1'-0"

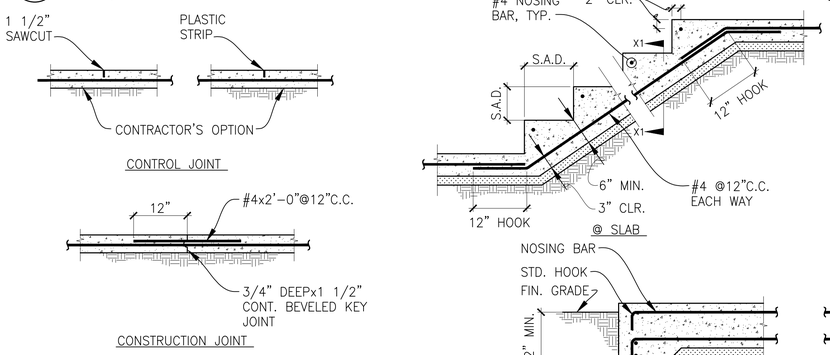


4 TYPICAL GRADE BEAM CONSTRUCTION JOINT
SCALE: 3/4" = 1'-0"

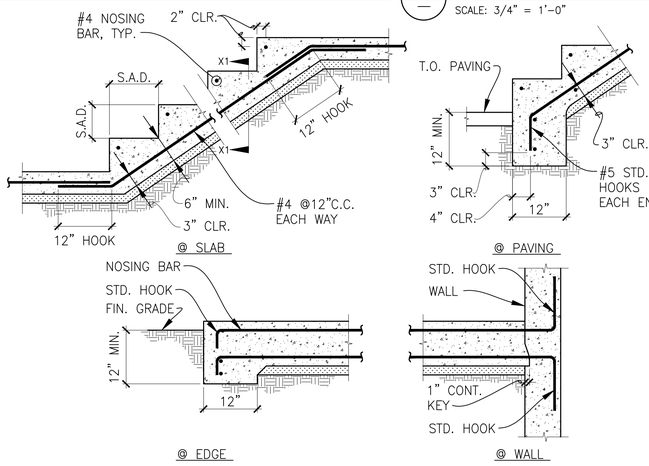


SECTION X1–X1

5 TYPICAL STEPS IN GRADE BEAMS AND WALL FOOTING
SCALE: 3/4" = 1'-0"

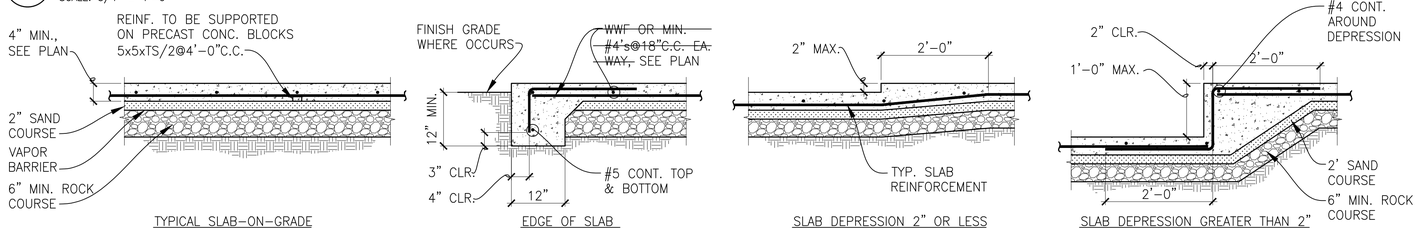


NOTE:
1. LOCATE TO ENCLOSE APPROX. SQUARE AREAS NOT EXCEEDING 400 Q. FT. SUNMIT LAYOUT FOR APPROVAL. LOCATE JOINT UNDER PARTITIONS WHENEVER POSSIBLE

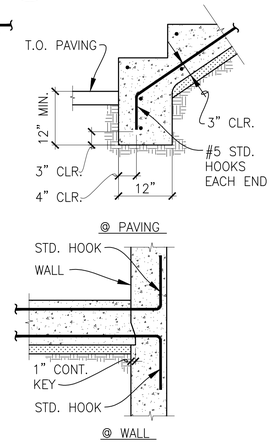


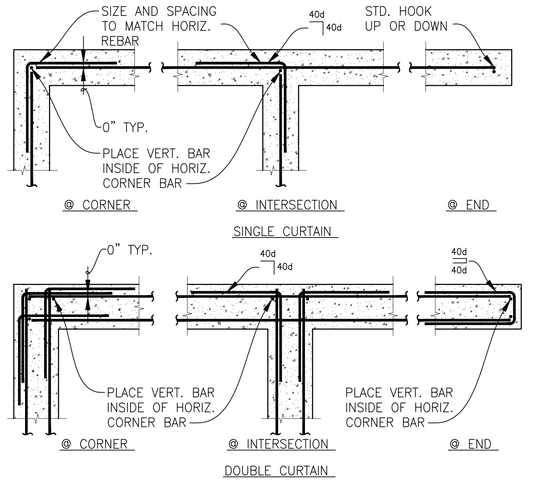
SECTION X1–X1

6 PIPE CLEARANCE AND DETAILS @ FOOTING
SCALE: 3/4" = 1'-0"

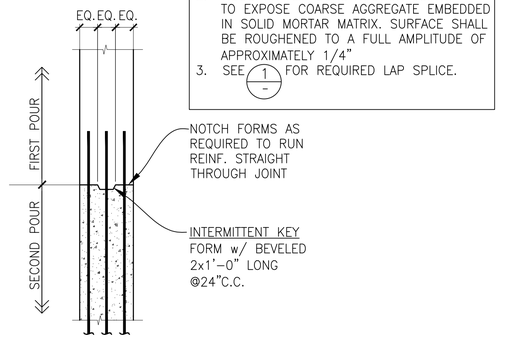


7 TYPICAL SLAB–ON–GRADE DETAILS
SCALE: 3/4" = 1'-0"





NOTES:
1. PROVIDE LEVEL AND NEAT CONSTRUCTION JOINT.
2. ROUGHEN ALL CONSTRUCTION JOINTS TO EXPOSE COARSE AGGREGATE EMBEDDED IN SOLID MORTAR MATRIX. SURFACE SHALL BE ROUGHENED TO A FULL AMPLITUDE OF APPROXIMATELY 1/4"
3. SEE (1) FOR REQUIRED LAP SPLICE.



TYPICAL CONSTRUCTION JOINT DETAILS @ SLAB–ON–GRADE
SCALE: 3/4" = 1'-0"

9 TYPICAL CONCRETE STAIRS ON GRADE
SCALE: 3/4" = 1'-0"

10 TYPICAL CONCRETE WALL INTERSECTION
SCALE: 3/4" = 1'-0"

11 TYPICAL CONCRETE WALL CONSTRUCTION JOINT
SCALE: 3/4" = 1'-0"

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	DATE	REVISIONS
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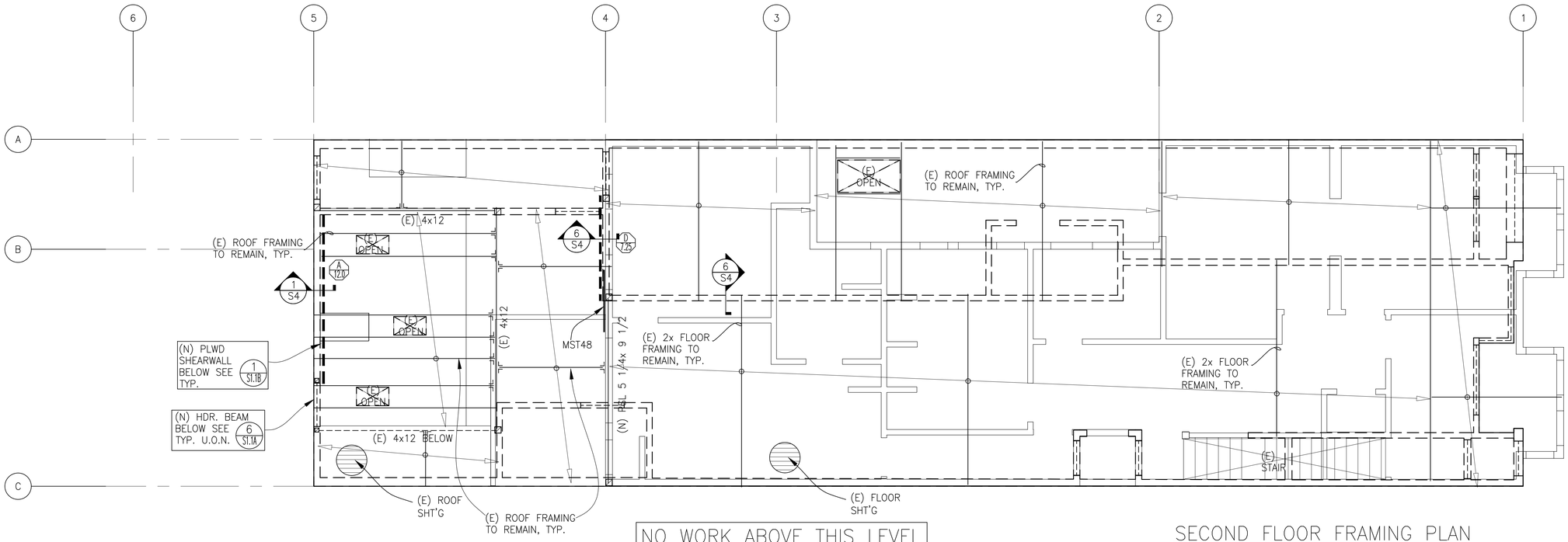
2		
3		
4		

TYPICAL CONCRETE DETAILS

IMPROVEMENT

3117-3119 24TH STREET
SAN FRANCISCO, CA

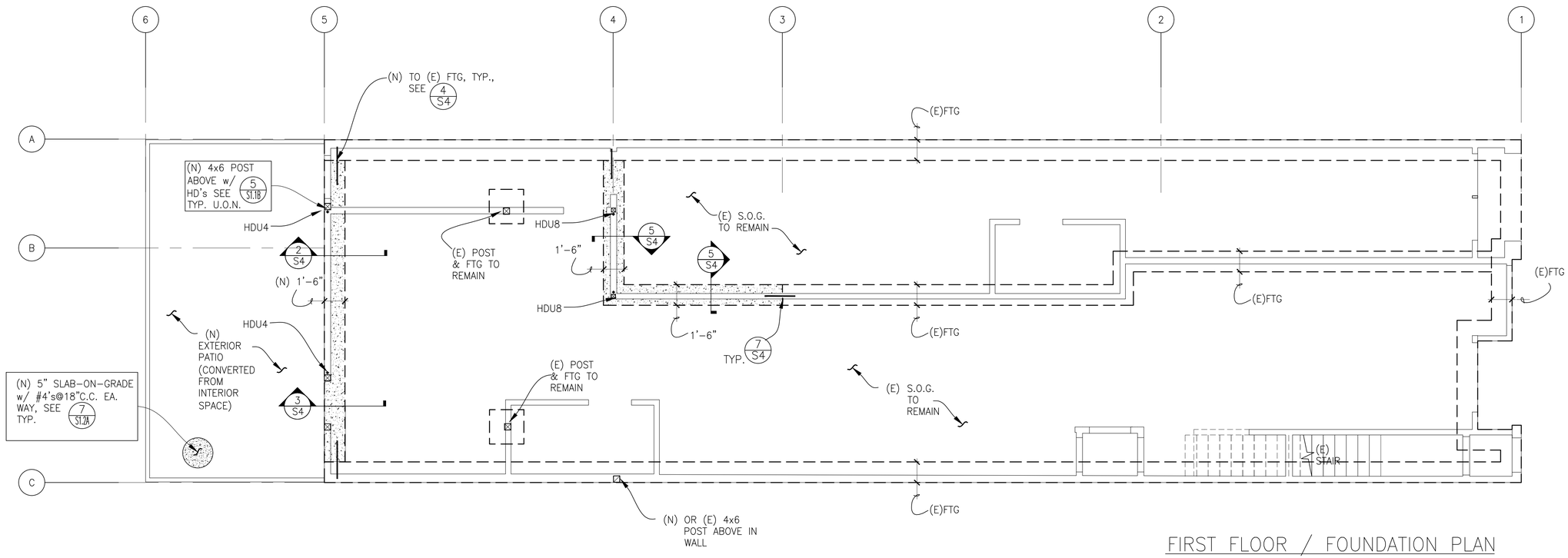
Date:	04/15/22
Scale:	AS SHOWN
Drawn By:	A.T
Job No:	22535
Sheet	S1.2A
Of	7 Sheets



NO WORK ABOVE THIS LEVEL

SECOND FLOOR FRAMING PLAN

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



FIRST FLOOR / FOUNDATION PLAN

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

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1ST FLOOR
FOUNDATION PLAN

SECOND FLOOR
LOWER ROOF FRAMING

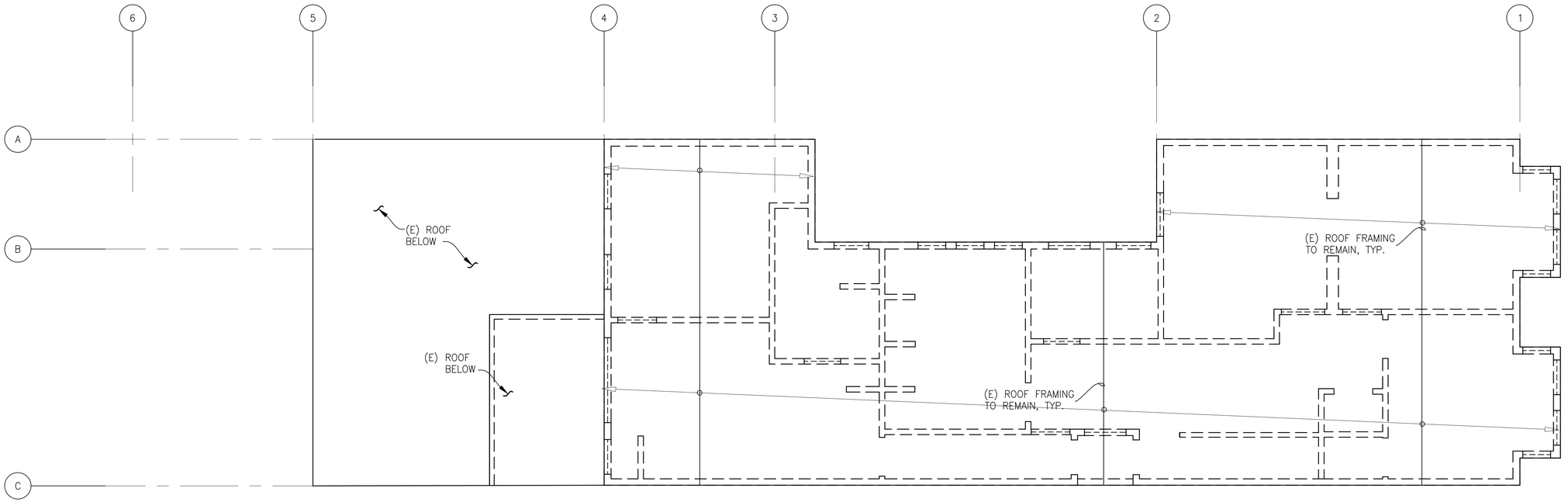
IMPROVEMENT

3117-3119 24TH STREET
SAN FRANCISCO, CA 94110

Date:	04/15/22
Scale:	AS SHOWN
Drawn By:	A,T
Job No:	22535
Sheet	S2
Of	7 Sheets

DRAWING NAME: Z:\Drawings\Projects 2022\3117-3119 24th Street\Drawings\Sheet\3117-3119 24th Street - PS.dwg

PLOT DATE: 04-16-22 PLOTTED BY: Jefferson



ROOF FRAMING PLAN

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

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ROOF FRAMING PLAN

IMPROVEMENT

3117-3119 24TH STREET
SAN FRANCISCO, CA 94110

Date:	04/15/22
Scale:	AS SHOWN
Drawn By:	A,T
Job No:	22535
Sheet	S3
Of	7 Sheets

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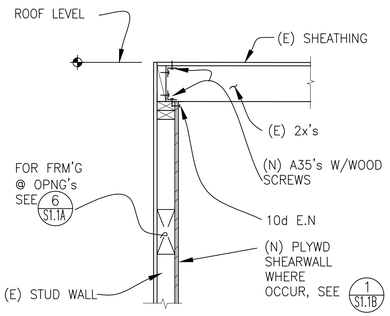
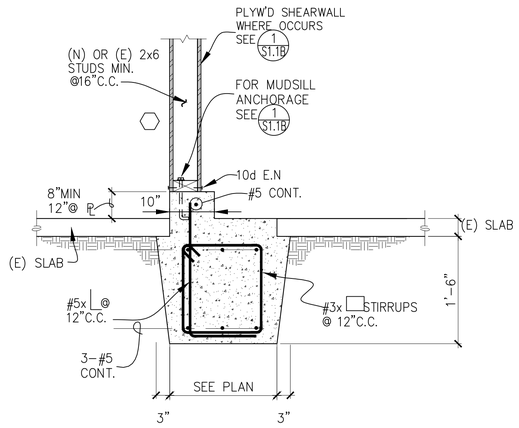
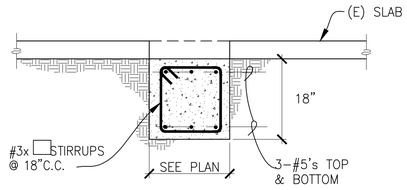
PLOT DATE: 04-16-22 PLOTTED BY: Jefferson



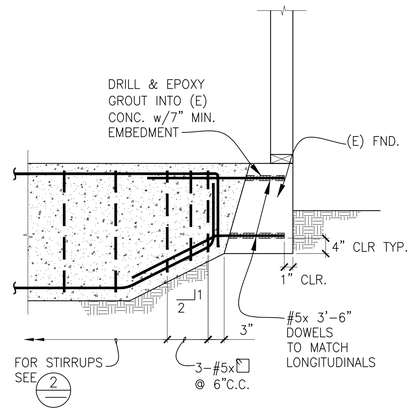
1 — SCALE: 3/4" = 1'-0"



2 — SCALE: 3/4" = 1'-0"



3 — SCALE: 3/4" = 1'-0"



4 — SCALE: 3/4" = 1'-0"

5 — SCALE: 3/4" = 1'-0"

6 — SCALE: 3/4" = 1'-0"

7 — SCALE: 3/4" = 1'-0"

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STRUCTURAL DETAILS

IMPROVEMENT

3117-3119 24TH STREET
SAN FRANCISCO, CA

Date:	04/15/22
Scale:	AS SHOWN
Drawn By:	A.T
Job No:	22535
Sheet	S4
Of	7 Sheets