

GENERAL NOTES INTENT OF DOCUMENTS

THESE DRAWINGS AND SPECIFICATIONS HAVE BEEN PREPARED IN A MANNER CONSISTENT WITH INDUSTRY STANDARDS OF QUALITY. THEY ARE DIAGRAMMATIC AND INTENDED TO SHOW DESIGN INTENT, TYPE OF CONSTRUCTION AND EXTENT OF WORK. THESE DOCUMENTS REFLECT THE OVERALL REQUIREMENTS OF THIS PROJECT NECESSARY TO COMPLY WITH ALL APPLICABLE REGULATIONS, LAWS AND CODES. SPECIFICATIONS AND FINISH DETAILS ARE NOT SHOWN. IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO FURNISH AND INSTALL ALL ITEMS AND TO DEVELOP OMITTED DETAILS REQUIRED TO MAKE THE SYSTEM COMPLETE. ALL SUB CONTRACTOR QUESTIONS SHALL BE DIRECTED TO THE GENERAL CONTRACTOR, AND NO WORK SHALL COMMENCE UNTIL QUESTIONS ARE ANSWERED BY THE ARCHITECT. IT IS THE INTENT OF THESE CONTRACT DOCUMENTS TO DEFINE A COMPLETE FINISHED FACILITY. ANY MATERIAL, SYSTEM, EQUIPMENT OR ASSEMBLY WHICH NORMALLY WOULD BE REQUIRED SHALL BE PROVIDED AS IF SPECIFICALLY NOTED. IT THE MISSING ITEM.

GENERAL REQUIREMENTS

THESE DRAWINGS HAVE BEEN PREPARED BASED ON INFORMATION PROVIDED BY OTHERS.

ON SITE VERIFICATION OF ALL DIMENSIONS AND CONDITIONS SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR. NOTED DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALE.

THE ARCHITECT SHALL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS THAT MAY BE INCORPORATED AS A RESULT OF ERRONEOUS INFORMATION PROVIDED BY OTHERS. THE WORK OF THIS PROJECT SHALL COMPLY IN ALL RESPECTS WITH APPLICABLE FEDERAL, COUNTY AND LOCAL REGULATIONS, LAWS AND CODES.

NO WORK SHALL COMMENCE UNTIL THE GENERAL CONTRACTOR HAS PROVIDED THE OWNER, AND LOCAL AUTHORITIES, AS REQUIRED, WITH A CERTIFICATE OF INSURANCE. IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO OBTAIN ALL REQUIREMENTS FOR INSURANCE.

ALL REQUIRED PERMITS AND LICENSES SHALL BE OBTAINED AND PAID FOR PRIOR TO BEGINNING CONSTRUCTION.

ALL CONTRACTORS SHALL COMPLY WITH THE "OCCUPATIONAL SAFETY AND HEALTH ACT" (OSHA) AND ALL OTHER LOCAL SAFETY AND HEALTH REGULATIONS FOR CONSTRUCTION.

THE GENERAL CONTRACTOR SHALL PROVIDE ON-SITE SUPERVISION WITH LAND PHONE AND FAX SERVICES FOR THE DURATION OF THIS PROJECT. IT SHALL BE THE RESPONSIBILITY OF EACH TRADE TO CLEAN UP THEIR MATERIAL DEBRIS AT THE END OF EACH DAY.

ON SITE VERIFICATION OF ALL DIMENSIONS AND CONDITIONS SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR. NOTE DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALE.

IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ALL EXISTING UTILITIES, AND TO PROTECT THEM FROM DAMAGE. THE CONTRACTOR SHALL BEAR ALL EXPENSE OF REPAIR OR REPLACEMENT IN CONJUNCTION WITH THE EXECUTION OF THIS WORK.

THE PROPERTY OWNER SHALL BE NOTIFIED IMMEDIATELY BY THE CONTRACTOR, SHOULD ANY DISCREPANCIES OR OTHER QUESTIONS ARISE PERTAINING TO THE WORKING DRAWINGS DURING CONSTRUCTION OR BIDDING.

CONTRACTOR SHALL VERIFY ALL SETBACKS PRIOR TO CONSTRUCTION. IF THERE IS A DISCREPANCY WITH THE SETBACKS, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE PROPERTY OWNER AND DESIGNER PRIOR TO CONSTRUCTION.

THE CONTRACTOR IS TO GRADE ANY AREAS WHERE THE ADDITION ALTERS THE DRAINAGE. SLOPE AWAY FROM STRUCTURES AND DRAIN TO STREET OR AN APPROVED STORM DRAIN.

IT SHALL BE THE GENERAL CONTRACTORS RESPONSIBILITY TO INSURE A CLEAN AND ORDERLY JOB SITE AT THE END OF EACH WORKDAY, AND ALSO INSURE A SAFE JOBSITE THROUGHOUT THE COURSE OF THE WORKDAY.

ALL MATERIAL SPECIFICATIONS AND SUPPLIES INDICATED HERE IN MAY BE SUBSTITUTED WITH AN APPROVED EQUAL UNLESS NOTED OTHERWISE AND ONLY AFTER THE APPROVAL OF THE ARCHITECT AND OWNER.

PRIOR TO CONSTRUCTION, GENERAL CONTRACTOR SHALL PROVIDE THE OWNER WITH A CONSTRUCTION SCHEDULE FOR THE DURATION OF THE PROJECT AND SHALL BE RESPONSIBLE FOR MAINTAINING SAID SCHEDULE UNLESS PRIOR NOTICE HAS BEEN GIVEN IN WRITING TO THE OWNER AND ARCHITECT.

ALL CONTRACTORS AND SUB-CONTRACTOR SHALL VERIFY PERTINENT DIMENSIONS, GRADES, AND ANY OTHER SITE CONDITIONS PRIOR TO COMMENCING WITH THE WORK. CONTRACTORS SHALL NOT SCALE DRAWINGS FOR MISSING DIMENSIONS. IF ANY DISCREPANCIES EXIST, THE ARCHITECT AND/OR OTHER CONSULTANTS THESE INSTRUMENTS OF SERVICE MUST BE NOTIFIED PRIOR TO COMMENCING THE WORK.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ACCURACY OF THE BUILDING LINES AND LEVELS. THE CONTRACTOR SHALL CAREFULLY COMPARE THE LINES AND LEVELS SHOWN ON THE INSTRUMENT OF SERVICES AND CONTRACT DOCUMENTS (E.G. DRAWINGS) WITH EXISTING CONDITIONS FOR CONSTRUCTION. THE CONTRACTOR SHALL CALL THE ARCHITECT AND SUBMIT TO THE ARCHITECT ANY FINDINGS OR DISCREPANCIES BEFORE PROCEEDING OF WORK.

CONSTRUCTION OBSERVATION: THE ARCHITECT MAY VISIT THE WORK OR SITE ANY TIME TO INSPECT THE WORK TO BE GENERALLY IN COMPLIANCE WITH THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL MAKE SUCH WORK AVAILABLE TO THE ARCHITECT TO COMPLETE INSPECTION. CONSTRUCTION OBSERVATION DOES NOT MEAN SUPERINTENDENCE, SITE CONDITIONS, OPERATIONS, EQUIPMENT, NOR PERSONNEL, NOR THE MAINTENANCE OF SAFE PLACE TO WORK NOR ANY SAFETY IN, ON, NOR ABOUT SITE. ARCHITECT IS NOT LIABLE TO WORK INSPECTED NOR GUARANTEE OR WARRANT INSPECTION TO BE CONCLUSIVE OF WORK IS DONE OR PRODUCED AS PER CONTRACT DOCUMENT. CONTRACTOR IS THE SOLELY RESPONSIBLE FOR ALL WORK TO BE PRODUCED AS PER CONTRACT DOCUMENTS. IF ARCHITECT DETERMINE THAT WORK OR PARTS OF WORK NEED TO BE UNCOVERED FOR INSPECTION, THEN CONTRACTOR MUST UNCOVER WORK FOR INSPECTION. IF THE CONTRACTOR OR SUB-CONTRACTORS FIND ANY DISCREPANCIES BETWEEN ANY OF THE INSTRUMENT OF SERVICE (DRAWING OR SPECIFICATIONS), THE CONTRACTOR MUST NOT INTERPRET THAT THE DRAWING WILL SUPERSEDE THE SPECIFICATION OR VISA VERSA. CONTRACTOR MUST SUBMIT A RFI (REQUEST FOR INFORMATION) TO THE ARCHITECT FOR INTERPRETATION OF THE INSTRUMENTS OF SERVICES.

THE GENERAL CONTRACTOR SHALL COORDINATE THE WORK OF ALL SUBCONTRACTORS, VENDORS, AND SUPPLIERS. IF THE TENANT IS SUPPLYING FIXTURES AND/OR MATERIALS TO THE PROJECT, IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO COORDINATE THEIR DELIVERY WITH THE PROJECT SCHEDULE AND SECURE THEM IN A MANNER TO PREVENT THEFT OR DAMAGE. IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO INSTALL AND/OR ASSEMBLE ALL OWNER-SUPPLIED MATERIALS UNLESS OTHERWISE NOTIFIED IN WRITING BY THE TENANT.

THE GENERAL CONTRACTOR SHALL SECURE AND PAY FOR GENERAL BUILDING PERMITS, SERVICES AND/OR LICENSES REQUIRED FOR THE WORK. ELECTRICAL, PLUMBING, AND MECHANICAL SUBCONTRACTORS SHALL SECURE AND PAY FOR PERMITS PERTAINING TO THEIR WORK.

THE GENERAL CONTRACTOR SHALL PROVIDE TEMPORARY SANITARY FACILITIES AS REQUIRED BY GOVERNING LAWS AND REGULATIONS.

THE GENERAL CONTRACTOR SHALL PROVIDE TEMPORARY POWER, HEATING AND LIGHTING SERVICES FOR THE DURATION OF CONSTRUCTION.

THE GENERAL CONTRACTOR SHALL PROVIDE PIPES, TAPS, AND HOSES TO DISTRIBUTE WATER FROM THE SERVICE ON THE SITE. ALL UTILITIES ARE TO BE BROUGHT TO THE SITE BY OTHERS, NOT A PART OF THIS CONTRACT, UNLESS OTHERWISE NOTED WITHIN.

THE GENERAL CONTRACTOR IS RESPONSIBLE FOR INSURING ALL GAPS, HOLES AND/OR OTHER PENETRATIONS IN DEMISING AND EXTERIOR WALLS ARE COMPLETELY CLOSED UP BY APPROPRIATE METHODS FOR LOCAL CODES AND FIRE PROTECTION STANDARDS PRIOR TO RECEIVING SPECIFIED FINISHES. ALL EXISTING UTILITIES TO BE ABANDONED; CONTRACTOR MUST DISCONNECT AND PLUG OR CAP AS REQUIRED BY BUILDING AND FIRE AND SAFETY CODE.

ALL MATERIALS AND WORKMANSHIP SHALL BE EQUAL TO THE INDUSTRY STANDARD OR BETTER, AND SHALL BE TO THE SATISFACTION OF THE OWNER. THEY SHALL ALSO BE IN ACCORDANCE WITH CURRENT STANDARDS OF THE AMERICAN SOCIETY OF MECHANICAL ENGINEERS, AMERICAN SOCIETY OF TESTING MATERIALS, AMERICAN WATER WORKS ASSOCIATION, AMERICAN INSTITUTE OF ELECTRICAL ENGINEERS, NATIONAL BOARD OF FIRE UNDERWRITERS, AMERICA SOCIETY OF HEATING AND VENTILATING ENGINEERS, JURISDICTIONAL BUILDING DEPARTMENT AND THE JURISDICTIONAL HISTORICAL LANDMARKS COMMISSION, AND AS DESCRIBED IN DRAWING AND/OR SPECIFICATION, AS PER THE CONTRACT DOCUMENTS AND/OR PROJECT MANUAL, AS THEY APPLY.

WHERE SPECIAL MAKES OR BRANDS ARE CALLED FOR, THEY ARE INTENDED TO REPRESENT THE STANDARD OF QUALITY REQUIRED. SUBSTITUTIONS OF EQUAL QUALITY MAY BE USED PROVIDED THAT APPROVAL FROM OWNER (OR THEIR DESIGNATED REPRESENTATIVE) AND THE ARCHITECT HAS BEEN OBTAINED IN WRITING. REQUESTS FOR SUBSTITUTIONS SHALL BE SUBMITTED PRIOR TO ALLOW TIME FOR REVIEW. CONTRACTOR PROPOSING SUBSTITUTIONS ASSUMES RESPONSIBILITY FOR PROVIDING FULL INFORMATION FOR REVIEW AND FOR THE SATISFACTORY OPERATION AND QUALITY OF THE SUBSTITUTED ITEM.

IT IS THE RESPONSIBILITY OF THE INSTALLING CONTRACTOR TO INSURE THAT ALL ITEMS SPECIFIED AND/OR PROVIDED BY OTHERS ARE INSTALLED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS AND/OR MANUFACTURER'S INSTALLATION INSTRUCTIONS FOR ALL SPECIFIED ITEMS AND/OR ITEMS PROVIDED BY OTHERS SHALL BE AVAILABLE FOR REVIEW OF APPROPRIATE INSPECTORS, AND SHALL BE GIVEN TO THE CONSTRUCTION MANAGER UPON COMPLETION OF THE PROJECT.

ANY DEFECTIVE MATERIALS SHALL BE REMOVED AND REPLACED BY THE INSTALLING CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.

IF ANY TRADE CAUSES DAMAGE TO ANOTHER TRADES WORK, IT IS THE RESPONSIBILITY OF THE TRADE WHO CAUSED THE DAMAGE TO REPAIR OR REPLACE THE DAMAGED WORK AND/OR MATERIALS AT THE DAMAGING TRADE'S SOLE EXPENSE. CONTRACTORS SHALL GUARANTEE MATERIALS, EQUIPMENT, AND WORKMANSHIP FOR PERIOD OF ONE YEAR FROM THE DATE OF OCCUPANCY.

GENERAL CONTRACTOR SHALL OBTAIN LIEN RELEASES FROM ALL SUBCONTRACTORS AND GIVE THEM TO THE CONSTRUCTION MANAGER FOR THE OWNER PRIOR TO RELEASE OF FINAL PAYMENT FOR ALL WORK COMPLETED.

ALL STRUCTURAL WORK SHALL BE IN STRICT ACCORDANCE WITH STRUCTURAL ENGINEER'S PLANS AND SPECIFICATIONS. ANY DISCREPANCIES SHALL BE REPORTED TO THE CONTRACTOR AND THE ENGINEER PRIOR TO PROCEEDING WITH THE WORK.

CONSTRUCTION MANAGER SHALL BE RESPONSIBLE FOR PROVIDING OWNER AND ARCHITECT WITH A BINDER OF ALL MANUALS, OPERATING INSTRUCTIONS, MANUAL WARRANTIES AND REPLACEMENT PARTS DIRECTORIES UPON COMPLETION OF THE PROJECT, AND PRIOR TO RELEASE OF THE 10% RETAINER.

UPON COMPLETION OF THE PROJECT, THE GENERAL CONTRACTOR SHALL HAVE THE PREMISES PROFESSIONALLY CLEANED PRIOR TO OCCUPANCY BY THE OWNER, INCLUDING BUT NOT LIMITED TO ALL INTERIOR EXTERIOR WALLS, DOORS AND HARDWARE, TOILET ROOMS, GLASS AND MIRRORS, FLOORS AND CEILINGS, LIGHT FIXTURES.

BIDDING GENERAL CONTRACTOR AND SUBCONTRACTORS MUST VISIT THE SITE PRIOR TO SUBMITTING BIDS. DEMOLITION AND MODIFICATIONS REQUIRED TO EXISTING SPACE TO COMPLY WITH THESE DOCUMENTS SHALL BE NOTED AND COMMUNICATED TO ARCHITECT AND INCLUDED IN BID PROPOSAL. DEMOLITION REQUIREMENTS SHALL INCLUDE BUT NOT BE LIMITED TO, PARTITIONS, DOORS, STOREFRONT, CEILING, MECHANICAL, PLUMBING, FIRE SPRINKLERS, AND ELECTRICAL. PROVIDE TEMPORARY ELECTRICAL WHEN REQUIRED.

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APPLICABLE CODES:

WORK PERFORMED SHALL COMPLY WITH THESE GENERAL NOTES UNLESS OTHERWISE NOTED ON THE PLAN.

ALL WORK SHALL BE DONE IN ACCORDANCE WITH:
2022 California Building Code (CBC),
2022 California Residential Code (CRC),
2022 California Mechanical Code (CMC),
2022 California Plumbing Code (CPC),
2022 California Electrical Code (CEC),
2022 California Green Building Standards Code (CGBS),
FIRE/LIFE SAFETY: 2022 CALIFORNIA FIRE CODE ENERGY: 2022 ENERGY CODE

ALL WORK TO COMPLY WITH ALL APPLICABLE LOCAL AND STATE CODES, ORDINANCES AND REGULATIONS.

CODE ANALYSIS

WORK UNDER THIS CONTRACT SHALL COMPLY WITH THE PROVISIONS OF THE SPECIFICATIONS & DRAWINGS, AND SHALL SATISFY APPLICABLE CODES, ORDINANCES, AND REGULATIONS OF GOVERNING BODIES INVOLVED. ANY MODIFICATION TO THE CONTRACT WORK REQUIRED BY SUCH AUTHORITIES SHALL BE AT THE EXPENSE OF GC, PERMITS AND LICENSES NECESSARY FOR THE PROPER EXECUTION OF THE WORK SHALL BE SECURED AND PAID FOR BY THE CONTRACTOR INVOLVED.

DEADLOAD USED IN STRUCT. CALC. U.N.O.

TYPICAL FRAME FLOORS 15PSF
i. FRAME FLOORS WITH HEAVY TILE OR STONE FLOORING 20 PSF
ii. ROOF WITH ARCHITECTURAL ASPHALTIC SHINGLES OR METAL 10 PSF
iii. ROOF WITH HEAVY DUTY COVERING (SEE ROOF PLAN)
iv. FRAME WALLS _EXTERIOR WITH SIDING 12 PSF
v. FRAME WALLS _EXTERIOR WITH BRICK 50 PSF
vi. FRAME WALLS _INTERIOR 8PSF

LIVE LOADS USED IN STRUCTURAL CALCULATION UNLESS OTHERWISE NOTED

EXTERIOR CANTILEVER BALCONIES 60 PSF
DECKS 40 PSF
PASSENGER VEHICLE GARAGES 50 PSF
ATTICS WITHOUT STORAGE (LOW SLOPE ROOF) 10PSF
ATTICS WITH STORAGE 20 PSF
ROOMS OTHER THAN SLEEPING ROOMS 40 PSF
SLEEPING ROOMS 30 PSF
STAIRS 50 PSF
GUARDRAILS & HANDRAILS 200# SINGLE POINT LOAD

DEFLECTION MAXIMUMS
i. RAFTERS (HIGH SLOPE AND UNFINISHED) L/180
ii. RAFTERS (LOW SLOPE OR FINISHED) L/240
iii. FLOORS L/360
iv. FLOORS WITH SPANS OVER 20' L/480
v. STRUCTURAL MEMBERS L/240
vi. MASONRY SUPPORT L/600
vii. EXTERIOR WITH BRITTLE FINISHES H/240
viii. WALLS -EXTERIOR WITH FLEXIBLE FINISHES H/180
ix. INTERIOR PARTITIONS H/180

A. SUBSTRUCTURE

A10 FOUNDATIONS & SLAB ON GRADE
A1010 STANDARD FOUNDATIONS
1. EXPANDBLE SOIL-IF ENCOUNTERED, THE FOLLOWING MINIMUM REQUIREMENTS SHALL BE MET:
a) DEPTH OF FOOTING BELOW THE NATURAL AND FINISH GRADE SHALL NOT BE LESS THAN 24 INCHES FOR EXTERIOR AND 18 INCHES FOR INTERIOR FOOTINGS
b) EXTERIOR WALL AND INTERIOR BEARING WALLS SHALL BE SATURATED WITH CONCRETE AND/OR REBAR.
c) FOOTING SHALL BE ENFORCED WITH A MINIMUM OF (4) #4 REBAR. TO BE PLACED WITHIN 4 INCHES OFF THE BOTTOM AND 4 INCHES OFF THE TOP OF THE FOOTINGS
2. THE SOIL BELOW AN INTERIOR CONCRETE SLAB SHOULD BE SATURATED WITH MOISTURE TO A DEPTH OF 18 INCHES PRIOR TO PLACING CONCRETE (SOG)
3. GARAGE SLABS MUST BE PITCHED TOWARD DOOR@MIN 1/8" PER FT SLOPE
4. ALL FOUNDATION SHALL CONFIRM TO THE REQUIREMENTS OF THE SOILS REPORT
5. EXCAVATION FOR FOUNDATIONS TO THE DEPTHS SHOWN ON DRAWINGS BELOW UNDISTURBED SOIL OR COMPACTED EARTH 12 MIN UNLESS OTHERWISE NOTED. SEE SOIL REPORT FOR PAD AND FOOTING COMPACTION REQUIREMENTS.
6. CONTRACTOR IS RESPONSIBLE FOR ALL SHORING, ETC. NECESSARY TO SUPPORT FILL BANKS DURING EXCAVATIONS, AND FOR FORMING AND PLACEMENT OF CONCRETE. SEE SOIL REPORT IF APPLICABLE.
7. CARE SHALL BE TAKING NOT TO OVER EXCAVATE FOUNDATION@LOWER ELEVATION PREVENT DISTURBING SOIL AROUND FOOTING@HIGHER ELEVATION
8. WATER FILL BACKFILLING SHALL BE INSPECTED AND APPROVED BY THE PROJECT SOCIAL ENGINEER PRIOR TO FORMING
9. FILLING AND BACKFILL SHALL BE COMPACTED@A MINIMUM OF 90% OF MAXIMUM DENSITY IN ACCORDANCE WITH SOLAR REPORTS AND ASTM TEST METHODS D-1587-78. FLOODING OF BACKFILL IS NOT PERMITTED.
10. WATER SHALL BE REMOVED FROM FOUNDATION EXCAVATION PRIOR TO PLACING OF CONCRETE CARE SHALL BE TAKING SO AS NOT TO DRY OUT UNDERLYING NATURAL SOIL.
11. ALL EXISTING FILL SOIL AND DISTURBED NATURAL SOILS ARE TO BE EXCAVATED AND REPLACED WITH PROPERLY COMPACTED FILL ALL FILLING BACKFILLING RECOMPACTION ETC IS TO BE ACCOMPLISHED ONLY UNDER THE SUPERVISION OF A SOILS ENGINEER ALL EXCAVATIONS ARE TO BE INSPECTED AND APPROVED BY A SOILS ENGINEER PRIOR TO THE PLACEMENT OF AND FILL OR REINFORCING STEEL
12. STANDARDS:
a. FIRE: FIRE RECOMMENDATION OF ACI 301 SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS ACI 318 BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE , & CONCRETE REINFORCING STEEL INSTITUTE MANUAL OF STANDARDS PRACTICE
b. CONCRETE PLACEMENT SHALL COMPLY WITH ACI-614 w/ll
c. CONCRETE CURING SHALL COMPLY WITH ACI 308.1-10 & ASTM C-94
d. PROVIDE, INSTALL, AND REMOVE FORMS AND TEMPORARY BRACING IN ACCORDING WITH THE AFOREMENTIONED CODES.
e. REINFORCEMENT STEEL SHALL BE A-615 GRADE 60 (60 KSI) DEFORMED HI-BOND AND CONFORM TO THE LATEST ASTM SPEC.
f. WELDED WIRE FABRIC (WWF) ASTM A-185, 6X6-WL4XW1.4
g. ALL FIELD WELDED REINFORCING STEEL SHALL CONFIRM TO ASTM A-706 GRADE 60. WELDING USING E70XX ELECTRODES. ALL FIELD WELDING SHALL BE CONTINUOUSLY INSPECTED BY REG. DEPUTY INSPECTOR@THE EXPENSE OF THE GENERAL CONTRACTOR UNLESS CONTRACT DOCUMENTS STATES OTHERWISE.
h. CONCRETE MIX STANDARD SHALL REACH MAX. STRENGTHS@28 DAYS MINIMUM USE TYPE II OR V CEMENT,AIR ENTRAINMENT 4% TO 6% IN ALL EXPOSED CONCRETE WORK. LOW ALKALI. UNLESS OTHERWISE NOTED
i. UNLESS NOTED OTHERWISE; TYPICAL CONCRETE SLAB HAVE WWF WIRE REINFORCING OR #4 REBAR B/W, AND 4" GRAVEL BASE, @ ALL INTERIOR CONCRETE SLABS. CONCRETE SHALL INSTALL 5 MIL POLYETHYLENE VAPOR BARRIER OR STAGO 9 WATERPROOF BARRIER BETWEEN CONCRETE AND CRASHED STONE.
j. CONCRETE FLOOR SLABS ON GRADE SHALL BE 5" THICK UNLESS OTHERWISE NOTED. SLAB WHICH ARE TO RECEIVE RESILIENT FLOORS CARPETED OR POLISHED FLOORS SHALL BE AND TROWELED SMOOTH. CONTRACTOR SHALL PROVIDE CONTROL JOINTS WITH A MAXIMUM AREA BETWEEN JOINTS OF 225 FT. UNLESS OTHERWISE NOTED MAXIMUM RATIO OF FLOWING SIDE TO SHORT SIDE SHALL BE -1:12:1. DISTANCE BETWEEN CONTROL JOINTS MAY NOT EXCEED 20 FEET.
k. CONCRETE FOR ALL PARTS OF THE WORK SHALL BE THE SPECIFIED QUALITY CAPABLE OF BEING PLACED WITHOUT EXCESSIVE SEGREGATION; AND WHEN HARDENED; OF DEVELOPING ALL CHARACTERISTIC REQUIRED BY THESE SPECIFICATIONS AND THE CONTRACT DOCUMENTS.
l. THE SPECIFIED COMPRESSIVE STRENGTH OF THE CONCRETE (F_c) FOR EACH PORTION OF THE STRUCTURE SHALL BE AS DESIGNED BELOW OR 1, AS NOTED OTHERWISE ON STRUCTURAL PLANS AND SOIL REPORT), AND SPECIFICATIONS STRENGTH REQUIRED SHALL BE BASED ON 28 COMPRESSIVE STRENGTH UNLESS A DIFFERENT TEST IS SPECIFIED.
m. SOG 4500 PSI
n. FOUNDATION 4500 PSI
o. WALLS 4500 PSI
p. DRYPACK OR GROUT FOR BASE PLAT 4,000PSI
q. DRYPACK UNDER BASE PLATE, SILL PLATE, ETC. MUST HAVE 1600 APPROVED NUMBER
r. CEMENTAL FLOOR CONCRETE:
i. MATERIAL SHALL CONFORM TO THE APPROPRIATE SPECIFICATION AS LISTED:
1. PORTLAND CEMENT , SPECIFICATION FOR PORTLAND CEMENT , ASTM C-150
ii. PORTLAND BLAST-FURNACE SLUG CEMENT OR PORTLAND POZZOLAN CEMENT , SPECIFICATION FOR BLENDED HYDRAULIC CEMENTS (ASTM C-595)
iii. UNLESS OTHERWISE PERMITTED OR REQUIRED, CEMENT SHALL BE TYPE I OR TYPE II, ASTM C-150
iv. THE CEMENT USED IN THE WORK SHALL CORRESPOND TO THAT UPON WHICH TESTS HAVE BEEN REPORTED PROPORTION WAS BASED.
v. ADMIXTURE SHALL NOT BE USED, UNLESS OTHERWISE SPECIFIED ON STRUCTURAL PLANS AND SPEC.
c. WATER: MIXING WATER FOR CONCRETE SHALL CONFIRM WITH THE REQUIREMENT FOR WATER ARE SPECIFIED IN ASTM C-94
ii. AGGREGATES:
i. SPECIALLY GRADED 33-ORIMINAL WEIGHT CONCRETE SHALL CONFIRM TO SPECI@AGGREGATES FOR LIGHTWEIGHT CONCRETE SHALL CONFIRM TO SPECIFICATION FOR LIGHT WEIGHT AGGREGATES FOR STRUCTURAL CONCRETE ASTM C-330
ii. THE FINES AND COARSE AGGREGATE SHALL BE REGARDED AS SEPARATE INGREDIENTS. EACH SIZE OF COURSE AGGREGATES, AS WELL AS THE COMBINATIONS OF SIZES WHEN TWO OR MORE ARE USED, SHALL CONFIRM TO THE APPROPRIATE DEGRADING REQUIREMENTS OF THE APPLICABLE ASTM SPECIFICATIONS
iii. SLUMPS (UNLESS OTHERWISE PERMITTED OR SPECIFIED) THE CONCRETE SHALL BE PROPORTIONED AND PRODUCED TO HAVE A SLUMP OF 4 INCHES OR LESS IF CONSOLIDATION IS TO BE BY VIBRATION; 5 INCHES OR LESS IF CONSOLIDATION IS TO BE BY METHODS OTHER THAN VIBRATION.
v. PROVIDE A MINIMUM OF HALF INCH FOUNDATION BOLTS EMBEDDED 9 INCHES IN CONCRETE AND SPACED 4 FEET AND, SEE MAX AND WITHIN 12 OF CORNERS, OPENING FOR THE LIKES UNLESS OTHERWISE NOTED
6. CONDUIT OR PIPES (O,D) SHOULD NOT EXCEED 30% OF SLAB THICKNESS AND SHALL BE PLACED BETWEEN THE TOP AND THE BOTTOM REINFORCING UNLESS SPECIFICALLY DETAILED OTHERWISE CONCENTRATIONS OF CONDUITS OR PIPES SHOULD BE AVOIDED EXCEPT WHERE DETAIL OPENINGS ARE PROVIDED.
7. PROVIDE SLEEVES FOR PLUMBING AND ELECTRICAL OPENINGS IN CONCRETE BEFORE PLACING. DO NOT CUT ANY REINFORCING WHICH MAY CONFLICT, CORING IN CONCRETE IS NOT PERMITTED EXCEPT AS SHOWN NOTIFY STRUCTURAL ENGINEER IN ADVANCE OF CONDITION NOT SHOWN IN DRAWINGS.
8. CONCRETE MIX STANDARD 2500 PSI@28 DAYS MINIMUM USE TYPE V CEMENT UNLESS OTHERWISE NOTED
9. REINFORCING STEEL SHALL HAVE THE FOLLOWING MIN. COVERAGE:
a. CONCRETE CAST AGAINST EARTH 3 CENTER
b. SLAB ON GRADE (SOG) CENTER
c. CAST-IN-PL. PLACE (CIP) WALLS 1.5 CENTER
d. NO. 6 AND LARGER 2
e. PRECAST CONCRETE WALL PANALS 0.75
10. LAP ALL BARS A MINIMUM OF 40 BAR DIAMETERS (2' @ -) MINIMUM@ALL SPLICES. WIRE MESH SHALL LAP 12" MIN. UNLESS NOTED OTHERWISE.

11. PROVIDE SLEEVES FOR PLUMBING AND ELECTRICAL OPENINGS IN CONCRETE BEFORE PLACING. DO NOT CUT ANY REINFORCING WHICH MAY CONFLICT, CORING IN CONCRETE IS NOT PERMITTED EXCEPT AS SHOWN NOTIFY STRUCTURAL ENGINEER IN ADVANCE OF CONDITION NOT SHOWN IN DRAWINGS.
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a. CONCRETE CAST AGAINST EARTH 3 CENTER
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c. CAST-IN-PL. PLACE (CIP) WALLS 1.5 CENTER
d. NO. 6 AND LARGER 2
e. PRECAST CONCRETE WALL PANALS 0.75
10. LAP ALL BARS A MINIMUM OF 40 BAR DIAMETERS (2' @ -) MINIMUM@ALL SPLICES. WIRE MESH SHALL LAP 12" MIN. UNLESS NOTED OTHERWISE.

14. PROVIDE SLEEVES FOR PLUMBING AND ELECTRICAL OPENINGS IN CONCRETE BEFORE PLACING. DO NOT CUT ANY REINFORCING WHICH MAY CONFLICT, CORING IN CONCRETE IS NOT PERMITTED EXCEPT AS SHOWN NOTIFY STRUCTURAL ENGINEER IN ADVANCE OF CONDITION NOT SHOWN IN DRAWINGS.
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75. PROVIDE SLEEVES FOR PLUMBING AND ELECTRICAL OPENINGS IN CONCRETE BEFORE

2022 CALIFORNIA GREEN BUILDING STANDARDS CODE NONRESIDENTIAL MANDATORY MEASURES, SHEET 3 (January 2023)

Y N/A RESPON PARTY * YES RESPONSIBLE PARTY (i.e. ARCHITECT, ENGINEER, OWNER, CONTRACTOR, INSPECTOR, ETC.)



MUSTAFA B. DANWI, ARCHITECT
6/12/2023 8:46:24 PM

5.504.4 FINISH MATERIAL POLLUTANT CONTROL. Finish materials shall comply with Sections 5.504.4.1 through 5.504.4.6.

5.504.4.1 Adhesives, sealants and caulks. Adhesives, sealants, and caulks used on the project shall meet the requirements of the following standards:

- Adhesives, adhesive bonding primers, adhesive primers, sealants, sealant primers and caulks shall comply with local or regional air pollution control or air quality management district rules where applicable, or SCAQMD Rule 1168 VOC limits, as shown in Tables 5.504.4.1 and 5.504.4.2. Such products also shall comply with the Rule 1168 prohibition on the use of certain toxic compounds (chloroform, ethylene dichloride, methylene chloride, perchloroethylene and trichloroethylene), except for aerosol products as specified in subsection 2, below.
- Aerosol adhesives, and smaller unit sizes of adhesives, and sealant or caulking compounds (in units of product, less packaging, which do not weigh more than one pound and do not consist of more than 16 fluid ounces) shall comply with statewide VOC standards and other requirements, including prohibitions on use of certain toxic compounds, of California Code of Regulations, Title 17, commencing with Section 94507.

ARCHITECTURAL APPLICATIONS	CURRENT VOC LIMIT
INDOOR CARPET ADHESIVES	50
CARPET PAD ADHESIVES	50
OUTDOOR CARPET ADHESIVES	150
WOOD FLOORING ADHESIVES	100
RUBBER FLOOR ADHESIVES	60
SUBFLOOR ADHESIVES	50
CERAMIC TILE ADHESIVES	65
VCT & ASPHALT TILE ADHESIVES	50
DRYWALL & PANEL ADHESIVES	50
COVE BASE ADHESIVES	50
MULTIPURPOSE CONSTRUCTION ADHESIVES	70
STRUCTURAL GLAZING ADHESIVES	100
SINGLE-PLY ROOF MEMBRANE ADHESIVES	250
OTHER ADHESIVES NOT SPECIFICALLY LISTED	50
SPECIALTY APPLICATIONS	
PVC WELDING	510
CPVC WELDING	490
ABS WELDING	325
PLASTIC CEMENT WELDING	250
ADHESIVE PRIMER FOR PLASTIC	250
CONTACT ADHESIVE	80
SPECIAL PURPOSE CONTACT ADHESIVE	250
STRUCTURAL WOOD MEMBER ADHESIVE	140
TOP & TRIM ADHESIVE	250
SUBSTRATE SPECIFIC APPLICATIONS	
METAL TO METAL	30
PLASTIC FOAMS	50
POROUS MATERIAL (EXCEPT WOOD)	50
WOOD	30
FIBERGLASS	80

1. IF AN ADHESIVE IS USED TO BOND DISSIMILAR SUBSTRATES TOGETHER, THE ADHESIVE WITH THE HIGHEST VOC CONTENT SHALL BE ALLOWED.

2. FOR ADDITIONAL INFORMATION REGARDING METHODS TO MEASURE THE VOC CONTENT SPECIFIED IN THIS TABLE, SEE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT RULE 1168, www.arb.ca.gov/DRDS/SC/CR/HTML/R1168.PDF

SEALANTS	CURRENT VOC LIMIT
ARCHITECTURAL	250
MARINE DECK	760
NONMEMBRANE ROOF	300
ROADWAY	250
SINGLE-PLY ROOF MEMBRANE	450
OTHER	420
SEALANT PRIMERS	
ARCHITECTURAL	
NONPOROUS	250
POROUS	775
MODIFIED BITUMINOUS	500
MARINE DECK	760
OTHER	750

NOTE: FOR ADDITIONAL INFORMATION REGARDING METHODS TO MEASURE THE VOC CONTENT SPECIFIED IN THESE TABLES, SEE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT RULE 1168.

5.504.4.3 Paints and coatings. Architectural paints and coatings shall comply with VOC limits in Table 1 of the ARB Architectural Coatings Suggested Control Measure, as shown in Table 5.504.4.3, unless more stringent local limits apply. The VOC content limit for coatings that do not meet the definitions for the specialty coatings categories listed in Table 5.504.4.3 shall be determined by classifying the coating as a Flat, Nonflat or Nonflat-High Gloss coating, based on its gloss, as defined in Subsections 4.21, 4.36 and 4.37 of the 2007 California Air Resources Board Suggested Control Measure, and the corresponding Flat, Nonflat or Nonflat-High Gloss VOC limit in Table 5.504.4.3 shall apply.

5.504.4.3.1 Aerosol Paints and coatings. Aerosol paints and coatings shall meet the PWMIR Limits for ROC in Section 94522(a)(3) and other requirements, including prohibitions on use of certain toxic compounds and ozone depleting substances, in Sections 94522(c)(2) and (d)(2) of California Code of Regulations, Title 17, commencing with Section 94520; and in areas under the jurisdiction of the Bay Area Air Quality Management District additionally comply with the percent VOC by weight of product limits of Regulation 8 Rule 49.

PRODUCT	CURRENT LIMIT
HARDWOOD PLYWOOD VENEER CORE	0.05
HARDWOOD PLYWOOD COMPOSITE CORE	0.05
PARTICLE BOARD	0.09
MEDIUM DENSITY FIBERBOARD	0.11
THIN MEDIUM DENSITY FIBERBOARD ₁	0.13

1. VALUES IN THIS TABLE ARE DERIVED FROM THOSE SPECIFIED BY THE CALIFORNIA AIR RESOURCES BOARD, AIR TOXICS CONTROL MEASURE FOR COMPOSITE WOOD AS TESTED IN ACCORDANCE WITH ASTM E 1333. FOR ADDITIONAL INFORMATION, SEE CALIFORNIA CODE OF REGULATIONS, TITLE 17, SECTIONS 93120 THROUGH 93120.12.

2. THIN MEDIUM DENSITY FIBERBOARD HAS A MAXIMUM THICKNESS OF 5/16 INCHES (8 MM).

TABLE 5.504.4.3 - CONT.

COATING CATEGORY	CURRENT VOC LIMIT
SPECIALTY COATINGS	
ALUMINUM ROOF COATINGS	400
BASEMENT SPECIALTY COATINGS	400
BITUMINOUS ROOF COATINGS	50
BITUMINOUS ROOF PRIMERS	350
BOND BREAKERS	350
CONCRETE CURING COMPOUNDS	350
CONCRETE/MASONRY SEALERS	100
DRIVEWAY SEALERS	50
DRY FOG COATINGS	150
FAUX FINISHING COATINGS	350
FIRE RESISTIVE COATINGS	350
FLOOR COATINGS	100
FORM-RELEASE COMPOUNDS	250
GRAPHIC ARTS COATINGS (SIGN PAINTS)	500
HIGH-TEMPERATURE COATINGS	420
INDUSTRIAL MAINTENANCE COATINGS	250
LOW SOLIDS COATINGS ₁	120
MAGNESITE CEMENT COATINGS	450
MASTIC TEXTURE COATINGS	100
METALLIC PIGMENTED COATINGS	500
MULTICOLOR COATINGS	250
PRETREATMENT WASH PRIMERS	420
PRIMERS, SEALERS, & UNDERCOATERS	100
REACTIVE PENETRATING SEALERS	350
RECYCLED COATINGS	250
ROOF COATINGS	50
RUST PREVENTATIVE COATINGS	250
SHELLACS:	
CLEAR	730
OPAQUE	550
SPECIALTY PRIMERS, SEALERS & UNDERCOATERS	100
STAINS	250
STONE CONSOLIDANTS	450
SWIMMING POOL COATINGS	340
TRAFFIC MARKING COATINGS	100
TUB & TILE REFINISH COATINGS	420
WATERPROOFING MEMBRANES	250
WOOD COATINGS	275
WOOD PRESERVATIVES	350
ZINC-RICH PRIMERS	340

1. GRAMS OF VOC PER LITER OF COATING, INCLUDING WATER & EXEMPT COMPOUNDS

2. THE SPECIFIED LIMITS REMAIN IN EFFECT UNLESS REVISED LIMITS ARE LISTED IN SUBSEQUENT COLUMNS IN THE TABLE.

3. VALUES IN THIS TABLE ARE DERIVED FROM THOSE SPECIFIED BY THE CALIFORNIA AIR RESOURCES BOARD, ARCHITECTURAL COATINGS SUGGESTED CONTROL MEASURE, FEB. 1, 2008. MORE INFORMATION IS AVAILABLE FROM THE AIR RESOURCES BOARD.

5.504.4.3.2 Verification. Verification of compliance with this section shall be provided at the request of the enforcing agency. Documentation may include, but is not limited to, the following:

- Manufacturer's product specification
- Field verification of on-site product containers

5.504.4.4 Carpet Systems. All carpet installed in the building interior shall meet the requirements of the California Department of Public Health, "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers," Version 1.2, January 2017 (Emission testing method for California Specifications 01350).

See California Department of Public Health's website for certification programs and testing labs. <https://www.cdph.ca.gov/Programs/CCDPHP/DEOD/CEHLB/IAQ/Pages/VOC.aspx#material>

5.504.4.4.1 Carpet cushion. All carpet cushion installed in the building interior shall meet the requirements of the California Department of Public Health, "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers," Version 1.2, January 2017 (Emission testing method for California Specifications 01350).

See California Department of Public Health's website for certification programs and testing labs. <https://www.cdph.ca.gov/Programs/CCDPHP/DEOD/CEHLB/IAQ/Pages/VOC.aspx#material>

5.504.4.4.2 Carpet adhesive. All carpet adhesive shall meet the requirements of Table 5.504.4.1.

5.504.4.5 Composite wood products. Hardwood plywood, particleboard and medium density fiberboard composite wood products used on the interior or exterior of the buildings shall meet the requirements for formaldehyde as specified in ARB's Air Toxics Control Measure (ATCM) for Composite Wood (17 CCR 93120 et seq.). Those materials not exempted under the ATCM must meet the specified emission limits, as shown in Table 5.504.4.5.

5.504.4.5.3 Documentation. Verification of compliance with this section shall be provided as requested by the enforcing agency. Documentation shall include at least one of the following:

- Product certifications and specifications.
- Chain of custody certifications.
- Product labels and invoices as meeting the Composite Wood Products regulation (see CCR, Title 17, Section 93120, et seq.).
- Exterior grade products marked as meeting the PS-1 or PS-2 standards of the Engineered Wood Association, the Australian AS/NZS 2269 or European 636 3S standards.
- Other methods acceptable to the enforcing agency.

PRODUCT	CURRENT LIMIT
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HARDWOOD PLYWOOD COMPOSITE CORE	0.05
PARTICLE BOARD	0.09
MEDIUM DENSITY FIBERBOARD	0.11
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2. THIN MEDIUM DENSITY FIBERBOARD HAS A MAXIMUM THICKNESS OF 5/16 INCHES (8 MM).

5.504.4.6 Resilient flooring systems.

Where resilient flooring is installed, at least 80 percent of floor area receiving resilient flooring shall meet the requirements of the California Department of Public Health, "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers," Version 1.2, January 2017 (Emission testing method for California Specifications 01350).

See California Department of Public Health's website for certification programs and testing labs. <https://www.cdph.ca.gov/Programs/CCDPHP/DEOD/CEHLB/IAQ/Pages/VOC.aspx#material>

5.504.4.6.1 Verification of compliance. Documentation shall be provided verifying that resilient flooring materials meet the pollutant emission limits.

5.504.4.7 Thermal insulation
Comply with the requirements of the California Department of Public Health, "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers," Version 1.2, January 1.2, January 2017 (Emission testing method for California Specification 01350). See California Department of Public Health's website for certification programs and testing labs. <https://www.cdph.ca.gov/Programs/CCDPHP/DEOD/CEHLB/IAQ/Pages/VOC.aspx#material>

5.504.4.7.1 Verification of compliance. Documentation shall be provided verifying that thermal insulation materials meet the pollutant emission limits.

5.504.4.8 Acoustical ceiling and wall panels.
Comply with the requirements of the California Department of Public Health, "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers," Version 1.2, January 2017 (Emission testing method for California Specification 01350). See California Department of Public Health's website for certification programs and testing labs.

5.504.4.8.1 Verification of compliance. Documentation shall be provided verifying that acoustical finish materials meet the pollutant emission limits.

5.504.5.3 Filters. In mechanically ventilated buildings, provide regularly occupied areas of the building with air filtration media for outside and return air that provides at least a Minimum Efficiency Reporting Value (MERV) of 13. MERV 13 filters shall be installed prior to occupancy, and recommendations for maintenance with filters of the same value shall be included in the operation and maintenance manual.

Exceptions: Existing mechanical equipment.

5.504.5.3.1 Labeling. Installed filters shall be clearly labeled by the manufacturer indicating the MERV rating.

5.504.7 ENVIRONMENTAL TOBACCO SMOKE (ETS) CONTROL. Where outdoor areas are provided for smoking, prohibit smoking within 25 feet of building entries, outdoor air intakes and operable windows and within the building as already prohibited by other laws or regulations; or as enforced by ordinances, regulations or policies of any city, county, city and county, California Community College, campus of the California State University, or campus of the University of California, whichever are more stringent. When ordinances, regulations or policies are not in place, post signage to inform building occupants of the prohibitions.

SECTION 5.505 INDOOR MOISTURE CONTROL

5.505.1 INDOOR MOISTURE CONTROL. Buildings shall meet or exceed the provisions of California Building Code, CCR, Title 24, Part 2, Sections 1202 (Ventilation) and Chapter 14 (Exterior Walls). For additional measures, see Section 5.407.2 of this code.

SECTION 5.506 INDOOR AIR QUALITY

5.506.1 OUTSIDE AIR DELIVERY. For mechanically or naturally ventilated spaces in buildings, meet the minimum requirements of Section 120.1 (Requirements for Ventilation) of the California Energy Code, or the applicable local code, whichever is more stringent, and Division 1, Chapter 4 of CCR, Title 8.

5.506.2 CARBON DIOXIDE (CO₂) MONITORING. For buildings or additions equipped with demand control ventilation, CO₂ sensors and ventilation controls shall be specified and installed in accordance with the requirements of the California Energy Code, Section 120(c)(4).

5.506.3 Carbon dioxide (CO₂) monitoring in classrooms. (DSA-SS) Each public K-12 school classroom, as listed in Table 120.1-A of the California Energy Code, shall be equipped with a carbon dioxide monitor or sensor that meets the following requirements:

- The monitor or sensor shall be permanently affixed in a lamp-proof manner in each classroom between 3 and 6 feet (914 mm and 1829 mm) above the floor and at least 5 feet (1524 mm) away from door and operable windows.
- When the monitor or sensor is not integral to an Energy Management Control System (EMCS), the monitor or sensor shall display the carbon dioxide readings on the device. When the sensor is integral to an EMCS, the carbon dioxide readings shall be available to and regularly monitored by facility personnel.
- A monitor shall provide notification through a visual indicator on the monitor when the carbon dioxide levels in the classroom have exceeded 1,100ppm. A sensor integral to an EMCS shall provide notification to facility personnel through a visual and/or audible indicator when the carbon dioxide levels in the classroom have exceeded 1,100ppm.
- The monitor or sensor shall measure carbon dioxide levels at minimum 15-minute intervals and shall maintain a record of previous carbon dioxide measurements of not less than 30 days duration.
- The monitor or sensor used to measure carbon dioxide levels shall have the capacity to measure carbon dioxide levels with a range of 400ppm to 2000ppm or greater.
- The monitor or sensor shall be certified by the manufacturer to be accurate within 75ppm at 1,000ppm carbon dioxide concentration and shall be certified by the manufacturer to require calibration no more frequently than once every 5 years.

SECTION 5.507 ENVIRONMENTAL COMFORT

5.507.4 ACOUSTICAL CONTROL. Employ building assemblies and components with Sound Transmission Class (STC) values determined in accordance with ASTM E 90 and ASTM E 413, or Outdoor-Indoor Sound Transmission Class (OITC) determined in accordance with ASTM E 1332, using either the prescriptive or performance method in Section 5.507.4.1 or 5.507.4.2.

Exception: Buildings with few or no occupants or where occupants are not likely to be affected by exterior noise, as determined by the enforcement authority, such as factories, stadiums, storage, enclosed parking structures and utility buildings.

Exception: [DSA-SS] For public schools and community colleges, the requirements of this section and all subsections apply only to new construction.

5.507.4.1 Exterior noise transmission, prescriptive method. Wall and roof-ceiling assemblies exposed to the noise source making up the building or addition envelope or altered envelope shall meet a composite STC rating of at least 50 or a composite OITC rating of no less than 40, with exterior windows of a minimum STC of 40 or OITC of 30 in the following locations:

- Within the 65 CNEL noise contour of an airport.
- Exceptions:**
- L_{eq} or CNEL for military airports shall be determined by the facility Air Installation Compatible Land Use Zone (AICLUZ) plan.
 - L_{eq} or CNEL for other airports and heliports for which a land use plan has not been developed shall be determined by the local general plan noise element.

2. Within the 65 CNEL or L_{eq} noise contour of a freeway or expressway, railroad, industrial source or fixed-guideway source as determined by the Noise Element of the General Plan.

5.507.4.1.1 Noise exposure where noise contours are not readily available. Buildings exposed to a noise level of 65 dB L_{eq} 1-hr during any hour of operation shall have building, addition or alteration exterior walls and roof-ceiling assemblies exposed to the noise source meeting a composite STC rating of at least 45 (or OITC 35), with exterior windows of a minimum STC of 40 (or OITC 30).

5.507.4.2 Performance Method. For buildings located as defined in Section 5.507.4.1 or 5.507.4.1.1, wall and roof-ceiling assemblies exposed to the noise source making up the building or addition envelope or altered envelope shall be constructed to provide an interior noise environment attributable to exterior sources that does not exceed an hourly equivalent noise level (Leq-1hr) of 50 dBA in occupied areas during any hour of operation.

5.507.4.2.1 Site Features. Exterior features such as sound walls or earth berms may be utilized as appropriate to the building, addition or alteration project to mitigate sound migration to the interior.

5.507.4.2.2 Documentation of Compliance. An acoustical analysis documenting complying interior sound levels shall be prepared by personnel approved by the architect or engineer of record.

5.507.4.3 Interior sound transmission. Wall and floor-ceiling assemblies separating tenant spaces and tenant spaces and public places shall have an STC of at least 40.

Note: Examples of assemblies and their various STC ratings may be found at the California Office of Noise Control: www.toobase.org/PDF/CaseStudies/stc_lcc_ratings.pdf.

SECTION 5.508 OUTDOOR AIR QUALITY

5.508.1 Ozone depletion and greenhouse gas reductions. Installations of HVAC, refrigeration and fire suppression equipment shall comply with Sections 5.508.1.1 and 5.508.1.2.

5.508.1.1 Chlorofluorocarbons (CFCs). Install HVAC, refrigeration and fire suppression equipment that do not contain CFCs.

5.508.1.2 Halons. Install HVAC, refrigeration and fire suppression equipment that do not contain Halons.

5.508.2 Supermarket refrigerant leak reduction.

New commercial refrigeration systems shall comply with the provisions of this section when installed in retail food stores 8,000 square feet or more conditioned area, and that utilize either refrigerated display cases, or walk-in coolers or freezers connected to remote compressor units or condensing units. The leak reduction measures apply to refrigeration systems containing high-global-warming potential (high-GWP) refrigerants with a GWP of 150 or greater. New refrigeration systems include both new facilities and the replacement of existing refrigeration systems in existing facilities.

Exception: Refrigeration systems containing low-global warming potential (low-GWP) refrigerant with a GWP value less than 150 are not subject to this section. Low-GWP refrigerants are nonozone-depleting refrigerants that include ammonia, carbon dioxide (CO₂), and potentially other refrigerants.

5.508.2.1 Refrigerant piping. Piping compliant with the California Mechanical Code shall be installed to be accessible for leak protection and repairs. Piping runs using threaded pipe, copper tubing with an outside diameter (OD) less than 1/4 inch, flared tubing connections and short radius elbows shall not be used in refrigerant systems except as noted below.

5.508.2.1.1 Threaded pipe. Threaded connections are permitted at the compressor rack.

5.508.2.1.2 Copper pipe. Copper tubing with an OD less than 1/4 inch may be used in systems with a refrigerant charge of 5 pounds or less.

5.508.2.1.2.1 Anchorage. One-fourth-inch OD tubing shall be securely clamped to a rigid base to keep vibration levels below 8 mils.

5.508.2.1.3 Flared tubing connections. Double-flared tubing connections may be used for pressure controls, valve pilot lines and oil.

Exception: Single-flared tubing connections may be used with a multiring seal coated with industrial sealant suitable for use with refrigerants and tightened in accordance with manufacturer's recommendations.

5.508.2.1.4 Elbows. Short radius elbows are only permitted where space limitations prohibit use of long radius elbows.

5.508.2.2 Valves. Valves and fittings shall comply with the California Mechanical Code and as follows.

5.508.2.2.1 Pressure relief valves. For vessels containing high-GWP refrigerant, a rupture disc shall be installed between the outlet of the vessel and the inlet of the pressure relief valve.

5.508.2.2.1.1 Pressure detection. A pressure gauge, pressure transducer or other device shall be installed in the space between the rupture disc and the relief valve inlet to indicate a disc rupture or discharge of the relief valve.

5.508.2.2.2 Access valves. Only Schrader access valves with a brass or steel body are permitted for use.

5.508.2.2.2.1 Valve caps. For systems with a refrigerant charge of 5 pounds or more, valve caps shall be brass or steel and not plastic.

5.508.2.2.2.2 Seal caps. If designed for it, the cap shall have a neoprene O-ring in place.

5.508.2.2.2.2.1 Chain ladders. Chain ladders to fit over the stem are required for valves designed to have seal caps.

Exception: Valves with seal caps that are not removed from the valve during stem operation.

5.508.2.3 Refrigerated service cases. Refrigerated service cases holding food products containing vinegar and salt shall have evaporator coils of corrosion-resistant material, such as stainless steel, or be coated to prevent corrosion from these substances.

5.508.2.3.1 Coil coating. Consideration shall be given to the heat transfer efficiency of coil coating to maximize energy efficiency.

5.508.2.4 Refrigerant receivers. Refrigerant receivers with capacities greater than 200 pounds shall be fitted with a device that indicates the level of refrigerant in the receiver.

5.508.2.5 Pressure testing. The system shall be pressure tested during installation prior to evacuation and charging.

5.508.2.5.1 Minimum pressure. The system shall be charged with regulated dry nitrogen and appropriate tracer gas to bring system pressure up to 300 psig minimum.

5.508.2.5.2 Leaks. Check the system for leaks, repair any leaks, and retest for pressure using the same gauge.

5.508.2.5.3 Allowable pressure change. The system shall stand, unaltered, for 24 hours with no more than a +/- one pound pressure change from 300 psig, measured with the same gauge.

5.508.2.6 Evacuation. The system shall be evacuated after pressure testing and prior to charging.

5.508.2.6.1 First vacuum. Pull a system vacuum down to at least 1000 microns (+/- 50 microns), and hold for 30 minutes.

5.508.2.6.2 Second vacuum. Pull a second system vacuum to a minimum of 500 microns and hold for 30 minutes.

5.508.2.6.3 Third vacuum. Pull a third vacuum down to a minimum of 300 microns, and hold for 24 hours with a maximum drift of 100 microns over a 24-hour period.

CHAPTER 7 INSTALLER & SPECIAL INSPECTOR QUALIFICATIONS

702 QUALIFICATIONS

702.1 INSTALLER TRAINING. HVAC system installers shall be trained and certified in the proper installation of HVAC systems including ducts and equipment by a nationally or regionally recognized training or certification program. Uncertified persons may perform HVAC installations when under the direct supervision and responsibility of a person trained and certified to install HVAC systems or contractor licensed to install HVAC systems. Examples of acceptable HVAC training and certification programs include but are not limited to the following:

- State certified apprenticeship programs.
- Public utility training programs.
- Training programs sponsored by trade, labor or statewide energy consulting or verification organizations.
- Programs sponsored by manufacturing or other organizations.
- Other programs acceptable to the enforcing agency.

702.2 SPECIAL INSPECTION [HCD]. When required by the enforcing agency, the owner or the responsible entity acting as the owner's agent shall employ one or more special inspectors to provide inspection or other duties necessary to substantiate compliance with this code. Special inspectors shall demonstrate competence to the satisfaction of the enforcing agency for the particular type of inspection or task to be performed. In addition to other certifications or qualifications acceptable to the enforcing agency, the following certifications or education may be considered by the enforcing agency when evaluating the qualifications of a special inspector:

- Certification by a national or regional green building program or standard inspector.
- Certification by a statewide energy consulting or verification organization, such as HERS raters, building performance contractors, and home energy auditors.
- Successful completion of a third party apprentice training program in the appropriate trade.
- Other programs acceptable to the enforcing agency.

CITY REQUIRED NOTES:

DOOR:
 -Latching and locking doors that are hand activated and which are in a path of travel shall be operable with a single effort by lever type hardware, by panic bars, push-pull activating bars, or other hardware designed to provide passage without requiring the ability to grasp the opening hardware. (1133B.2.5.2)
 -When installed, exit doors shall be capable of opening so that the clear width of the exit is not less than 32". (1133B.1.1.1, Fig 11B-5B & 11B-33)
 -Maximum effort to operate exterior or interior doors with closers shall not exceed five pounds. This may be increased to 15 pounds for fire-rated doors.

SIGNS & IDENTIFICATION
 -All building entrances that are accessible to and usable by persons with disabilities and at every major junction along or leading to an accessible route of travel shall be identified with a sign displaying the International Symbol of Accessibility, and with additional directional signs, as required, to be visible to persons along approaching pedestrian ways. (1117B.5.8.1.2 & 1127B.3)

SANITARY FACILITIES
 -Doorways leading to men's sanitary facilities shall be identified by an equilateral triangle 1/2" thick with edges 12" long and a vertex pointing upward. Women's sanitary facilities shall be identified by a circle 1/4" thick and 12" in diameter. (1115B.6)
 -Unisex sanitary facilities shall be identified by a circle 1/2" thick, 12" in diameter, with a 1/2" thick triangle superimposed on the circle and within the 12" diameter. (1115B.6)
 -Geometric (circle & triangle) symbols on sanitary facility doors shall be centered on the door at a height of 60" and their color and contrast shall be distinctly different from the color and contrast of the door. (1115B.6)

WATER CLOSET AND TOILET COMPARTMENTS (11B-213.2) (11B-604.2 through 11B-604.8)
 -The clear width for accessible routes to accessible toilet compartments shall be 44" except for door-opening width and floor swigs. (11B-403.5.1, exception # 5)
 -Centerline of water closet shall be 17"-18" from side wall. Ambulatory accessible toilet compartment specified in Section 11B-604.8.2 shall have water closet center line 17"-19" from side wall. (11B-604.2)
 -Clearance around water closet shall be 60" measured perpendicular from side wall and 56" from rear wall. A 60" wide by 48" deep maneuvering space shall be provided in front of the water closet. 11B-604.3.1 & figure 11B-604.3.1.
 -Wheelchair accessible compartment shall 60" wide measured perpendicular to the side and 56" deep for wall hung closets and 59" deep for floor mounted closets.
 -Wheelchair accessible compartment with an in-swinging door, 60" wide by 36" deep maneuvering space shall be provided in front of the clearance required in Section 11B604.8.1.1.1. See figures 11B-604.8.1.1.2(b) and 11B-604.8.1.1.3(b).
 -Wheelchair accessible compartment with a side-opening door, either in-swinging or out-swinging, 60" wide by 60" deep maneuvering space shall be provided in front of the water closet. See figure 11B-604.8.1.1.2.
 -Wheelchair accessible compartment with an end opening door, either in-swinging or out-swinging, 60" wide by 48" deep maneuvering space shall be provided in front of the water closet. See figure 11B-604.8.1.1.3. Entrances to men's toilet and bathing facilities, complying with Section 11B-603, shall be identified by an equilateral triangle 1/2" thick with edges 12" long and a vertex pointing upward. The triangle symbol shall contrast with the door, either light on a dark background or dark on a light background. (11B-703.7.2.6.1)
 -Entrances to women's toilet and bathing facilities, complying with Section 11B-603, shall be identified by a circle 1/2" thick and 12" in diameter. The circle symbol shall contrast with the door, either light on a dark background or dark on a light background. (11B-703.7.2.6.2)
 -Entrances to unisex toilet and bathing facilities shall be identified by a circle 1/2" thick, 12" in diameter, with a 1/2" thick triangle with a vertex pointing upward superimposed on and geometrically inscribed within the circle and within the 12" diameter. The triangle symbol shall contrast with the circle symbol, either light on a dark background or dark on a light background. The circle symbol shall contrast with the door, either light on a dark background or dark on a light background. (11B-703.7.2.6.3)

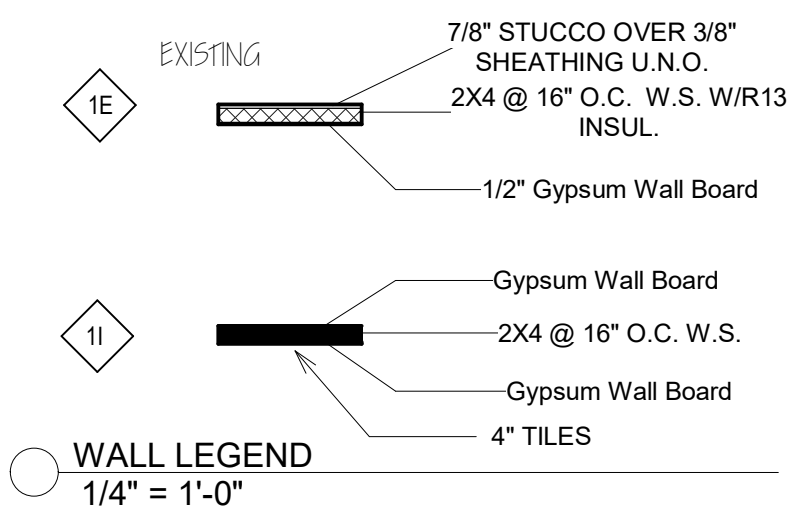
TOILET AND BATHING ROOMS
 -Toilet rooms shall comply with Section 11B-603. (11B-213.2). Turning space of 60" min shall be provided within the room (11B-603.2.1). Turning space shall be permitted to include knee & toe clearance complying with Section 11B-306. Door shall not swing into the 30"x48" clear floor space or clearance required for any fixture. A door in any position shall be permitted to encroach into the turning space by 12" maximum.
 -Unisex (single-user or family) toilet rooms shall contain not more than one lavatory, and not more than two water closets without urinals or one water closet and one urinal. Doors shall have privacy latches. (11B-213.2.1)

NOTIFICATION APPLIANCES FOR THE HEARING IMPAIRED
 -Where fire alarm systems provide audible alarm coverage, alarms shall comply with Section 11B215. Visual warning devices for the hearing impaired are required to be installed (added) within the suite under one of the following conditions: (907.5.2.3.1 and 11B-215.1)
 a. Building is equipped with visual warning devices.
 b. Existing fire alarm panel can support visual warning devices for the entire building.
 c. The fire alarm panel is being upgraded to support visual warning devices for the entire building.
 d. The occupancy group is changing.
 -Approved notification appliances for the hearing impaired shall be installed in accordance with the provisions of NFPA 72 in the following areas: (11B-215.12 and 907.5.2.3.1)
 a. Public and common use areas such as sanitary facilities, corridors and lobbies per Section 907.5.2.3.1.
 b. Where employee work areas have audible alarm coverage, the wiring system shall be designed so that visible alarms complying with Section 907.5.2.3.2 can be integrated into the alarm system. (11B-215.3)

SIGNS & IDENTIFICATION
 -The International Symbol of Accessibility (ISA) shall comply with Figure 11B-703.7.2.1. The symbol shall consist of a white figure on a blue background. The color blue shall approximate FS 15090 in Federal Standard 595C. (11B-216.5, 6, 7, 8; 11B-703.7.2.1).
 -Where both visual and tactile characters are required, either one sign with both visual and tactile characters, or two separate signs, one with visual, and one with tactile characters, shall be provided. (11B-703.1).
 -Where a tactile sign is provided at a door, the sign shall be located along the door at the latch side. Tactile characters on signs shall be located 48" minimum above finish floor, measured from the baseline of the lowest Braille cells and 60" maximum above finish floor, measured from the base line of the raised characters. (11B-703.4.1) Figure 11B-703.4.1.
 -When signs identify permanent rooms and spaces of a building or site, they shall comply with CBC 11B-703.1; 11B-703.2; 11B-703.3 and 11B-703.5. Where pictograms are provided, it shall comply with Section 11B-703.6 and shall have text descriptions complying with Sections 11B703.2 & 11B-703.5. (11B-216.2).
 -In existing buildings where not all entrances comply with Section 11B-404, building entrances that are accessible to and usable by persons with disabilities and at every major junction along or leading to an accessible route of travel shall be identified with a sign displaying the International Symbol of Accessibility complying with Section 11B-703.2.1, and with additional directional signs complying with Section 11B-703.5, as required, at junction when the accessible route diverges from the regular circulation path. (11B-216.3).
 -Provide tactile exit signage and identify locations on floor plan. Include sign elevation and typical signage text per CBC 1013.4 at doors to exit passageways, exit discharge and exit stairways shall comply with Sections 11B-703.1; 11B-703.2; 11B-703.3 and 11B-703.5. (11B-216.4.1). Tactile characters on signs shall be located 48", measured to the base line of the lowest Braille cells, above finish floor and 60" measured to the base line of the highest line of raised characters.
 -Signage indicating special accessibility provisions required by Section 1009.9 and signs to provide directions to accessible means of egress, per Section 1009.10, shall comply with Section 11B-703.5. (11B-216.4.3)



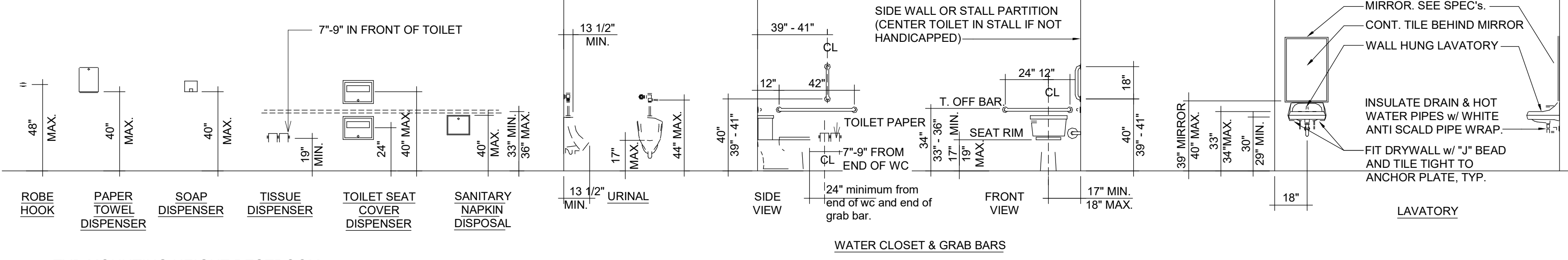
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Window Schedule 1ST LEVEL									
Type Mark	Count	Construction Type	Sill Height	Height	Width	AREA	Family and Type	U-FACTOR	SHGC
9	1	TEMP GLASS	0' - 0"	6' - 8"	6' - 0"	40 SF	Fixed: 72" x 80"	0.3	0.25
117	1	TEMP GLASS	0' - 0"	6' - 8"	4' - 0"	27 SF	Fixed: 4' x 80" 2	0.3	0.25

New Door Schedule 1ST Level							
Mark	Width	Height	Construction Type	Frame Material	Fire Rating	Description	CLOSURE
78	3' - 0"	6' - 8"	VINYL/TEMP GLASS	ALUM	NONE	TEMP GLASS	No
79	3' - 0"	6' - 8"	Wood H.C.	WOOD	NONE	HC	No
80	2' - 6"	6' - 8"	Wood H.C.	WOOD	NONE	HC	No
81	3' - 0"	6' - 8"	Wood H.C.	WOOD	NONE	HC	No
82	3' - 0"	6' - 8"	Wood H.C.	WOOD	NONE	HC	No

NOTE: CONTRACTOR TO PROVIDE APPROPRIATE BLOCKING IN WALL FOR ANCHORAGE OF GRAB BARS AS REQUIRED.

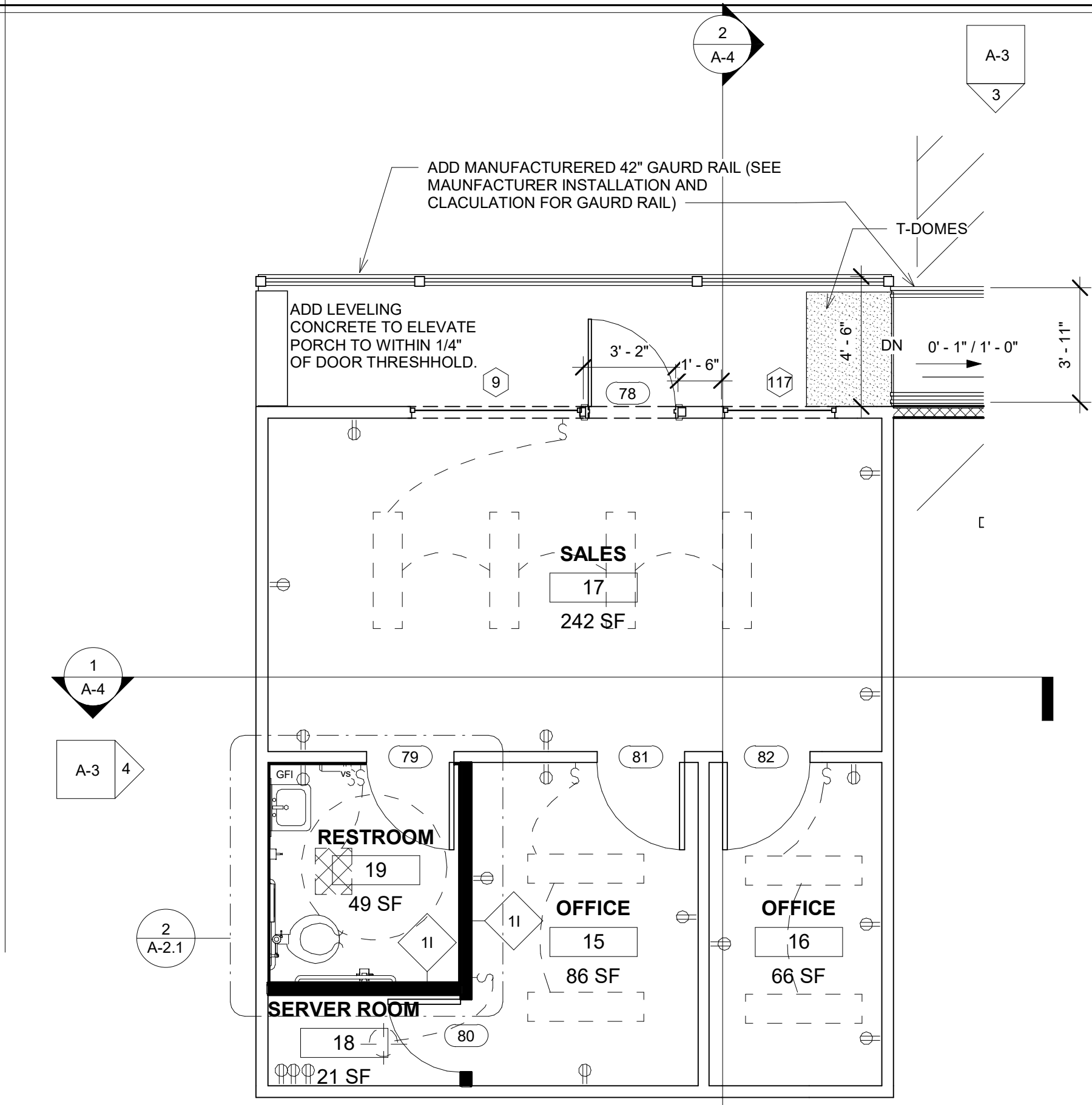
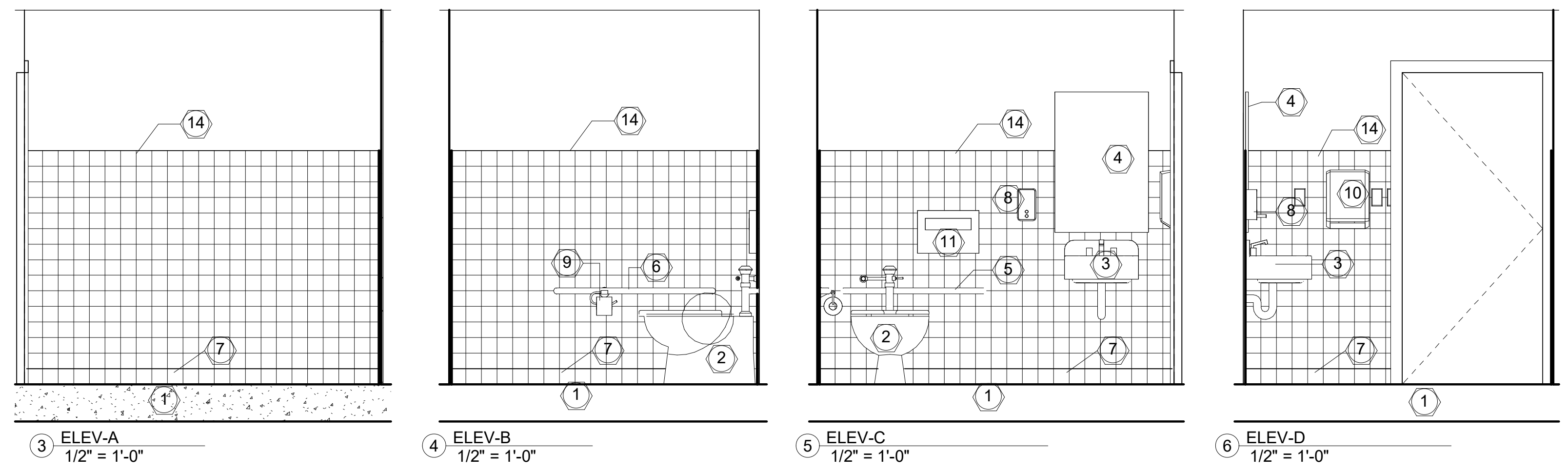


TYP MOUNTING HEIGHT RESTROOM ACCESSORIES AND FIXTURES N.T.S.

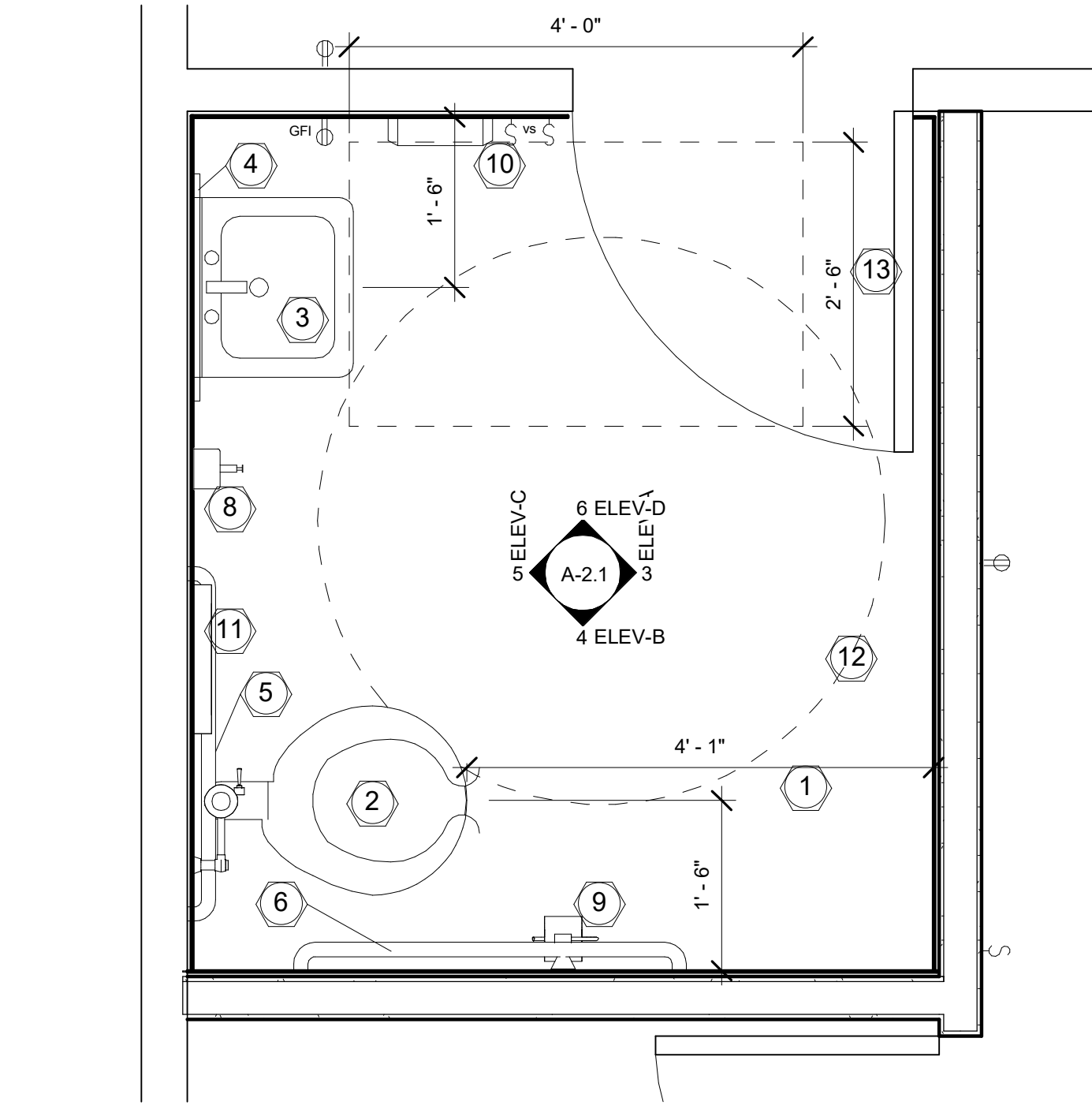
RESTROOM KEY NOTE	
Label	COMMENT
1	SKRAFFINO DESIGNER GRADE CONCRETE MICRO-TOPPING BY DURAAEMEN, SLOPED 1/8" PER FOOT TO DRAIN, O/ 1" GYPCRETE, O/1/4" ACoustI-MAT
2	WATER CLOSET, ACCESSIBLE.
3	LAVATORY, ACCESSIBLE
4	GLASS MIRROR W/ SS FRAME.
5	36" GRAB BAR.
6	48" GRAB BAR.
7	6" PORCELAIN TILE COVE BASE.
8	SOAP DISPENSER.
9	TOILET TISSUE DISPENSER (ACCESSIBLE)
10	PAPER TOWEL DISPENSER WITH TRASH RECEPTACLE.
11	TOILET SEAT COVER DISPENSER - WALL MOUNTED.
12	ACCESSIBLE TURNING SPACE.
13	ACCESSIBLE DOOR WITH ACCESSIBLE HARDWARE.
14	PORCELAIN TILE ON WALLS UP TO A HEIGHT OF 60"

SEE A-5 FOR ACCESSIBILITY NOTES

NEW PLUMBING NOTE:
 MAX. WATER USAGE OF WATER USAGE OF EFFICIENT FIXTURE:
 A- KITCHEN FAUCETS 1.8 GPM @ 60 PSI
 B- WATER CLOSET 1.28 GPM
 C- SHOWERHEAD 2.0 GMP @ 80 PSI
 D- LAVATORY FAUCET 1.2 GPM @ 60 PSI



1 PROPOSED FIRST LEVEL PLAN 1/4" = 1'-0"



2 ACCESSIBLE RESTROOM PLAN 3/4" = 1'-0"

Project number
 Date
 Drawn by
 Checked by
 Author
 Checker

No. Description Date

Dapper Car Sales Inc. Rep./ Dmitri Stepanov
 Dapper Car Sales
 2601 West Whittier Boulevard
 La Habra Ca
 NEW 1ST FLOOR PLANS
 Scale As indicated

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