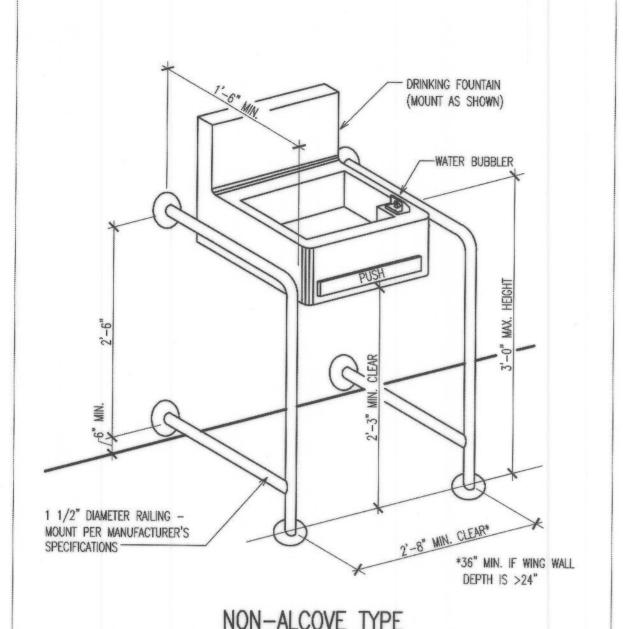
ADA Restroom Renovations at AB anchor bolt hose bibb south hollow core solid core AC asphaltic concrete heavy duty SCH schedule PROJECT OWNER **Paul Villasenor Library** A/C air conditioning HDR header storm drain HDW hardware ADD addendum SEC section AGG aggregate shelf, shelving CITY OF SAN BERNARDINO DEPARTMENT OF PUBLIC WORKS 525 N Mt Vernon Ave., San Bernardino, CA 92411 ALT alternate HM hollow metal sheet 300 N D STREET HOR horizontal ALUM aluminum similar APROX approximate SAN BERNARDINO, CA 92418 HTG heating SPEC specification(s) HVAC heating / ventilating air ARCH architect(ural speaker JACQUELINE FELIX AUTO automatic conditioning (909) 384-5087 square HWD hardwood stainless stee steel FELIX_JA@SBCITY.ORG **Howard Rowe Library** station BEL below ID inside diameter STD standard STO storage BET between INCL include(ing) STR structural 108 E Marshall Blvd., San Bernardino, CA 92404 BIT bituminous INSUL insulate(ion) BLDG building SUS suspended INT interior BLK block SYM symmetry(ical) INV invert BLKG blocking **ARCHITECT** joist SYS system BM bench mark joint TITLE / OWNER BOT bottom kitchen MILLER, ARCHITECTURE - INTERIORS - PLANNING TEL telephone KO knockout T&G tongue & groove 1177 IDAHO STREET, SUITE 200 BUR built up roofing THK thick(ness) **BUILDING DATA:** REDLANDS, CA 92374 **BUILDING DATA:** BW both ways TV television LAB laboratory SHEET NAME SHEET NUMBER TYP typical LAM laminate(d) TENANT IMPROVEMENT AREA: 343 SQ FT TENANT IMPROVEMENT AREA: 135 SQ FT 909-910-2437 909-335-7299 GENERAL INFORMATION CAB cabinet TOTAL BUILDING AREA: 8,273 SQ FT TOTAL BUILDING AREA: 8,567 SQ FT LBL label CAD cadmium UNO unless noted otherwise ACCESSIBILITY COMPLIANCE NOTES AND DETAILS E-MAIL: KOSWALT@MILLER-AIP.COM LH left hand CB catch basin live load UR urinal TYPE OF CONSTRUCTION: TYPE OF CONSTRUCTION: ACCESSIBILITY COMPLIANCE NOTES AND DETAILS CEM cement light OCCUPANCY CLASSIFICATION: CER ceramic OCCUPANCY CLASSIFICATION lintel CALGREEN REQUIREMENTS CFT cubic foot VERT vertical LW lightweight AUTOMATIC FIRE SPRINKLERS: AUTOMATIC FIRE SPRINKLERS: CALGREEN REQUIREMENTS ELECTRICAL AND PLUMBING cast iron NATURE OF BUSINESS: NATURE OF BUSINESS: circle CALGREEN REQUIREMENTS CIRC circumference MAS masonry ADE CONSULTING DEMOLITION AND FLOOR PLAN FOR ROWE LIBRAR' CODE DATA: W west maximum CODE DATA: 1177 IDAHO STREET, SUITE 200A CLL contract limit MB machine bolt W/ with DEMOLITION CEILING AND REFLECTED CEILIKNG FOR ROWE LIBRARY CLR clear(ance) MBR member ALL CONSTRUCTION SHALL MEET THE MINIMUM REQUIREMENTS OF THE W/O without REDLANDS, CA 92374 ALL CONSTRUCTION SHALL MEET THE MINIMUM REQUIREMENTS OF THE: CLS closure ENLARGEMENT PLANS AND INTERIOR ELEVATIONS FOR ROWE LIBRARY MC medicine cabinet WC water closet 2019 CALIFORNIA BUILDING CODE, VOLUMES 1 AND VINCENT MIRANDA 2019 CALIFORNIA BUILDING CODE, VOLUMES 1 AND 2 CM centimeter DEMOLITION AND FLOOR PLAN FOR VILLASENOR LIBRARY 909-884-9485 2019 CALIFORNIA PLUMBING CODE CMU concrete masonry unit 2019 CALIFORNIA PLUMBING CODE WH water heater DEMOLITION CEILING AND REFLECTED CEILIKNG FOR VILLASENOR LIBRARY metal 2019 CALIFORNIA MECHANICAL CODE wrought iron 2019 CALIFORNIA MECHANICAL CODE COMB combination adetitle24@gmail.com MFR manufacture(er window 2019 CALIFORNIA ELECTRICAL CODE ENLARGEMENT PLANS AND INTERIOR ELEVATIONS FOR VILLASENOR LIBRARY COMP composition 2019 CALIFORNIA ELECTRICAL CODE manhole WPT working point CONC concrete 2019 CALIFORNIA ENERGY CODE MIN minimum 2019 CALIFORNIA ENERGY CODE A-501 WR water repellant CONT continuous/ continue MIR mirror 2019 CALIFORNIA GREEN BUILDING CODE WWF welded wire fabric 2019 CALIFORNIA GREEN BUILDING CODI DOOR & FINISH SCHEDULES CONTR contract(or) MISC miscellaneous 2019 CALIFORNIA FIRE CODE 2019 CALIFORNIA FIRE CODE CONST construction MLD molding, moulding -SYMBOLS--ELECTRICAL GENERAL NOTES FOR ROWE LIBRARY 2019 CALIFORNIA REFERENCED STANDARDS CODE CORR corrugated 2019 CALIFORNIA REFERENCED STANDARDS CODE MM millimeter **ANGLE** ELECTRICAL POWER AND LIGHTING PLAN FOR ROWE LIBRARY CPR copper MT mount(ed, ing) CETER LINE CPT carpet(ed) MTL material(s) TITLE 24 FOR ROWE LIBRARY LEGAL DESCRIPTION: **LEGAL DESCRIPTION:** CYD cubic yard PERPENDICULAR ELECTRICAL GENERAL NOTES FOR VILLASENOR LIBRARY PROPERTY LINE APN: 0138-122-30 APN: 0153-071-01 N north DIAMETER ELECTRICAL POWER AND LIGHTING PLAN FOR VILLASENOR LIBRARY DEMO demolish, demolition PROJECT DESCRIPTION: PROJECT DESCRIPTION: NAT natural DEGREES (ANGLE) DH double hung TITLE 24 FOR VILLASENOR LIBRARY NIC not in contract ± PLUS OR MINUS DIAG diagonal 343 SQ FT INTERIOR TENANT IMPROVEMENT WITHIN AN EXISTING LIBRARY. IMPROVEMENTS INCLUDE NEW NOM nominal 135 SQ FT INTERIOR TENANT IMPROVEMENT WITHIN AN EXISTING LIBRARY. IMPROVEMENTS INCLUDE NEW MECHANICAL PLAN FOR ROWE LIBRARY DIAM diameter NTS not to scale INTERIOR NON-BEARING METAL STUD PARTITIONS AND MINOR ELECTRICAL, MECHANICAL AND PLUMBING INTERIOR NON-BEARING METAL STUD PARTITIONS AND MINOR ELECTRICAL, MECHANICAL AND PLUMBING DIM dimension MECHANICAL PLAN FOR VILLASENOR LIBRARY IMPROVEMENTS TO MAKE THE RESTROOMS COMPLIANT WITH ACCESSIBILITY REQUIREMENTS. THE MAIN IMPROVEMENTS TO MAKE THE RESTROOMS COMPLIANT WITH ACCESSIBILITY REQUIREMENTS. THE MAIN division PLUMBING GENERAL NOTES FOR ROWE LIBRARY OA overall ELECTRICAL SERVICE AND HVAC EQUIPMENT IS EXISTING TO REMAIN. IMPROVEMENTS ARE LIMITED TO door ELECTRICAL SERVICE AND HVAC EQUIPMENT IS EXISTING TO REMAIN. IMPROVEMENTS ARE LIMITED TO downspout OBSC obscure PLUMBING PLAN FOR ROWE LIBRARY INTERIOR WORK ONLY. INTERIOR WORK ONLY. OC on center PLUMBING GENERAL NOTES FOR VILLASENOR LIBRARY DWG drawing outside diameter **GENERAL NOTES:** P-202 PLUMBING PLAN FOR VILLASENOR LIBRARY overhead **GENERAL NOTES:** OPG opening 1. QUANTITIES LISTED IN THESE DOCUMENTS ARE FOR AGENCY APPROVAL ONLY. THE CONTRACTOR IS QUANTITIES LISTED IN THESE DOCUMENTS ARE FOR AGENCY APPROVAL ONLY. THE CONTRACTOR IS east RESPONSIBLE FOR VERIFYING ALL QUANTITIES FOR BIDDING PURPOSES. RESPONSIBLE FOR VERIFYING ALL QUANTITIES FOR BIDDING PURPOSES. each face **ELEV** elevation ELEC electric(al) panic bar EMER emergency PCF pounds per cubic foot electrical panelboard PED pedestal equal PERF perforate(d) EQUIP equipment pounds per linear foot EWC electric water coole poured in place EXIST existing EXHST exhaust PLAS plaster PLYWD plywood pounds per square foot floor drain pounds per square inch FE fire extinguisher FFE finished floor elevation FFL finished floor line VILLASENOR LIBRARY **ROWE LIBRARY** RA return air FLUOR fluorescent RAD radius FND foundation RCP reinforced concrete pipe PROJECT INFORMATION SHEET INDEX DIRECTORY RD roof drain REFR refrigerator REM remove RET return RFG roofing galvanized pipe right hand GYP.BD.gypsum board RM room GRD grade, grading RO rough opening GSS galvanized steel ROW right of way GV galvanized HEIGHT ABOVE FINISH FLOOR (U.N.O) SECTION SHEET NUMBER ROOM — ROOM NAME

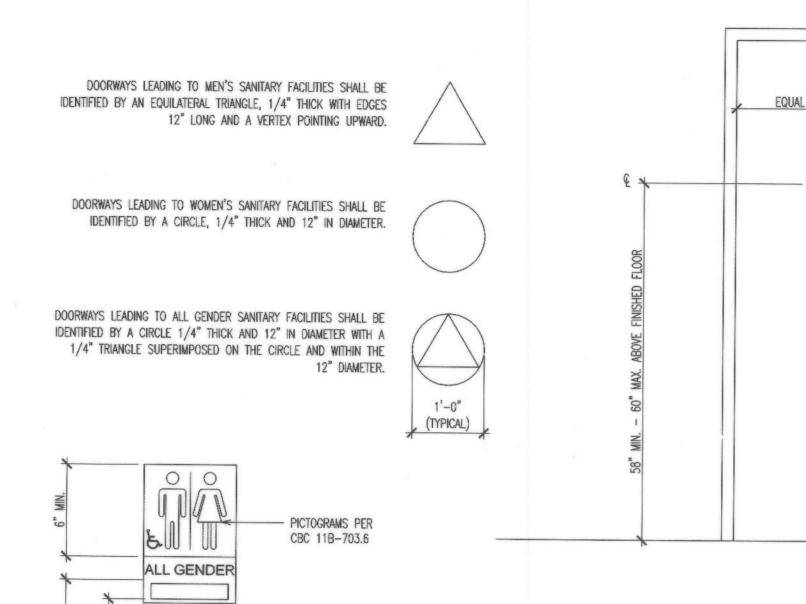
000 — ROOM NUMBER DETAIL NUMBER X KEYNOTE NUMBER EXTERIOR ELEVATION
SHEET NUMBER DOOR LETTER ROOM NUMBER ----- WALL LETTER X DOOR NUMBER (ALTERNATE SYMBOL) X B INTERIOR ELEVATION
A-2XX B SHEET NUMBER X—— WINDOW TYPE X DRAWING REVISION **ABBREVIATIONS VICINITY MAP LOCATION MAP** SYMBOLS STANDARD CITY NOTES Underground Service Alert CITY OF SAN BERNARDINO DRAWING HOWARD M ROWE BRANCH LIBRARY NO. DEPARTMENT OF PUBLIC WORKS 108 E MARSHALL BOULEVARD GARY W. 13476 Call: TOLL FREE SAN BERNARDINO, CA 92404 No. Q14635 MARK CITY ENGINEER: ____ALEX QISHTA BY APPR DATE 1177 Idaho Street, Suite 200 REVISIONS 1 - 800TITLE SHEET REGISTERED CIVIL ENGINEER NO. Redlands, CA 92374 PAUL VILLASENOR BRANCH LIBRARY BENCH MARK: G-001 422-4133 DRAWN BY: Phone: (909) 335-7400 525 N MT VERNON AVE ROWE LIBRARY AND O REN. 9-30-23 Fax: (909) 335-7299 26_SHEETS SAN BERNARDINO, CA 92411 CHECKED BY: VILLASENOR LIBRARY info@miller-aip.com RECOMMENDED BY: TWO WORKING DAYS BEFORE YOU DIG FOR CITY USE ONLY: FILE NO. C.I.P. NO. W.O. NO.



(REMODELS ONLY) 1. THE SPOUT SHALL PROVIDE A FLOW OF WATER A MINIMUM OF 4" HIGH 2. THE FORCE REQUIRED TO ACTIVATE CONTROLS SHALL BE NO GREATER THAN 5LBF. 3. DRINKING FOUNTAINS SHALL BE A MINIMUM OF 18" DEEP (FRONT TO BACK DIMENSION).

WARNING FOR THE VISION IMPARED AT A PROJECTED DRINKING FOUNTAIN CAN BE PROVIDED BY EITHER OF THE FOLLOWING MEANS (FOR REMODELS ONLY):

- A: THE SURFACE OF THE FLOOR OR GROUND AT THE DRINKING FOUNTAIN CAN BE OF CONTRASTING COLOR WITH A TEXTURE THAT DIFFERS IN RESILIENCY WITH THE ADJACENT FINISHED FLOOR MATERIAL. IT MUST BE DETECTABLE BY A CANE. THE DIFFERING TEXTURE SHALL EXTEND FROM THE WALL TO ONE FOOT BEYOND THE FRONT EDGE OF THE DRINKING FOUNTAIN AND ONE FOOT BEYOND EACH SIDE OF THE FOUNTAIN.
- B: INSTALL WING WALLS ON EACH SIDE OF TEH DRINKING FOUNTAIN. THESE SHALL PROJECT OUT FROM THE WALL A MINIMUM OF 18" (WING WALLS SHALL EXTEND AT LEAST 6" BEYOND THE FRONT EDGE OF THE FOUNTAIN). PROVIDE A 32" CLEAR SPACE BETWEEN THE WING WALLS.



- INTERNATIONAL SYMBOL OF ACCESSIBILITY

PER CBC 11B-703.7.2.1

VERBAL DESCRIPTION

PER CBC 11B-703.2

CONTRACTED GRADE 2 BRAILLE

PER CBC 1117B.5.6

WOMEN

1. THE COLOR OF THE GEOMETRIC IDENTIFICATION SYMBOLS SHALL CONTRAST WITH THE COLOR OF THE DOOR OR SURFACE ON WHICH THEY ARE MOUNTED, EITHER LIGHT ON A DARK BACKGROUND OR DARK ON A LIGHT BACKGROUND.

EQUAL

LATCH SIDE -

- 2. WHERE PERMANENT IDENTIFICATION SIGNS ARE PROVIDED FOR ROOMS AND SPACES, SIGNS SHALL BE INSTALLED ON THE WALL ADJACENT TO THE LATCH SIDE OF THE DOOR..
- 3. · WHERE THERE IS NO WALL SPACE ON THE LATCH SIDE, INCLUDING DOUBLE LEAF DOORS, SIGNS SHALL BE PLACED ON THE NEAREST ADJACENT WALL, PREFERABLY ON THE RIGHT. MOUNTING LOCATION SHALL BE DETERMINED SO THAT A PERSON MAY APPROACH WITHIN 3" OF SIGNAGE WITHOUT ENCOUNTERING PROTRUDING OBJECTS OR STANDING WITHIN THE SWING OF A DOOR.
- 4. REFER TO CBC CHAPTER 11B, DIVISION 7 FOR SPECIFIC REQUIREMENTS REGARDING PROPORTIONS FOR VISUAL AND RAISED CHARACTERS AND BRAILLE
- 5. THE COLOR OF THE TRIANGLE SYMBOL SHALL CONTRACT WITH THE COLOR OF THE CIRCLE SYMBOL, EITHER LIGHT ON A DARK BACKGROUND OR DARK ON A LIGHT BACKGROUND. THE COLOR OF THE CIRCLE SYMBOL SHALL CONTRAST WITH THE COLOR OF THE DOOR OR SURFACE ON WHICH THE COMBINED CIRCLE AND TRIANGLE SYMBOL IS MOUNTED, EITHER LIGHT ON A DARK BACKGROUND OR DARK ON A LIGHT BACKGROUND.

NOTES

- 1. SHARP OR ABRASIVE SURFACES ARE NOT PERMITTED UNDER LAVATORIES.
- 2. FAUCET CONTROLS AND OPERATING MECHANISMS ARE REQUIRED TO BE OPERABLE W/ ONE HAND AND CANNOT REQUIRE GRASPING, PINCHING OR TWISTING OF THE WRIST. 3. THE FORCE REQUIRED TO ACTIVATE THE CONTROLS SHALL NOT EXCEED 5 FT/LBS.. SELF
- CLOSING VALVES ARE ALLOWED BUT SHALL REMAIN OPEN FOR AT LEAST 10 SECONDS. 4. GRAB BARS SHALL BE 1 1/4" TO 1 1/2" IN DIAMETER W/ 1 1/2" CLEARANCE FROM
- 5. GRAB BAR FASTENERS AND MOUNTING SUPPORTS SHALL BE ABLE TO WITHSTAND 250
- FT/LBS. IN BENDING SHEAR AND TENSION. 6. CONTROLS FOR FLUSH VALVE SHALL BE MOUNTED ON THE WATER CLOSET W/ NO MORE

THAN 44" ABOVE FINISH FLOOR.

IN OTHER THAN DWELLING UNITS, TOILET ROOM FLOORS SHALL HAVE A SMOOTH HARD, NONABSORBENT SURFACE SUCH AS PORTLAND CEMENT, CONCRETE, CERAMIC TILE OR OTHER APPROVED MATERIAL WHICH EXTENDS UPWARD ONTO THE WALLS AT LEAST 5 INCHES. WALLS WITHIN WATER CLOSET COMPARTMENTS AND WALLS WITHIN 24 INCHES OF THE FRONT AND SIDES OF URINALS SHALL BE SIMILARLY FINISHED TO A HEIGHT OF 48 INCHES AND, EXCEPT FOR STRUCTURAL ELEMENTS, THE MATERIALS USED IN SUCH WALLS SHALL BE A TYPE WHICH IS NOT ADVERSELY AFFECTED BY MOISTURE.

GENERAL CONSIDERATIONS

ACCESSIBILITY STANDARDS

THE FOLLOWING STANDARDS FOR BARRIER FREE DESIGN SHALL BE INCORPORATED INTO THE PROJECT SITE AND BUILDING AS DESCRIBED BY THE 2016 CALIFORNIA BUILDING CODE (TITLE 24 & CALIFORNIA CODE OF REGULATION), AMERICANS WITH DISABILITIES ACT (ADA) WITH CABO/ANSI. SECTIONS AND DIAGRAMS ARE PROVIDED FOR QUICK REFERENCE INTERPRETATION OF THESE CODES AND REGULATIONS AND INTENDED ONLY AS AN AID FOR BUILDING DESIGN AND CONSTRUCTION.

ENTRANCE SIGNAGE

FINISH AND CONTRAST THE CHARACTERS SYMBOLS AND BACKGROUND OF SIGNS SHALL BE EGGSHELL, MATTE OR OTHER NON GLARE FINISH. CHARACTERS AND SYMBOLS SHALL CONTRAST WITH THEIR BACKGROUND WITH EITHER LIGHT CHARACTERS ON A DARK BACKGROUND OR DARK CHARACTERS ON A LIGHT BACKGROUND.

LOCATION OF SIGNAGE

TACTILE SIGNAGE SHALL BE LOCATED ALONGSIDE THE DOOR ON THE LATCH SIDE AND SHALL BE MOUNTED AT 60" ABOVE THE ADJACENT FINISHED FLOOR TO THE CENTERLINE OF THE SIGN. IN LOCATIONS HAVING DOUBLE DOORS, TACTILE SIGNS SHALL BE MOUNTED TO THE RIGHT OF THE RIGHT HAND DOOR. WHERE THERE IS NO WALL SPACE ON THE LATCH SIDE OF THE DOOR, INCLUDING DOUBLE LEAF DOORS, SIGNS SHALL BE PLACED ON THE NEAREST ADJACENT WALL.

- CHARACTER WIDTH TO HEIGHT RATIO BETWEEN 3:5 AND 1:1 WITH A 1:5 AND 1:10 STROKE WIDTH TO HEIGHT RATIO.
- CONTRASTING COLORED CHARACTER AND SYMBOLS ON A MATTE FINISHED BACKGROUND. LETTERS AND NUMBERS ON SIGNS SHALL BE RAISED 1/32 INCH MINIMUM AND SHALL BE
- SANS-SERIF UPPERCASE CHARACTER ACCOMPANIED BY GRADE 2 BRAILLE. 4. RAISED SYMBOLS OR CHARACTERS SHALL BE A MINIMUM OF 5/8" HIGH.

PLUMBING NOTES

MAXIMUM FLUSH VOLUMES AND FLOW RATED: FAUCET - 2.2 GPM (SINKS & LAVS), 1.6 GPF (WATER CLOSETS). FITTINGS MANUFACTURED ON OR AFTER MARCH 20, 1992 SHALL BE MARKED WITH THESE FLOW RATINGS AND CERTIFIED BY THE CALIFORNIA ENERGY COMMISSION

FAUCET CONTROLS SHALL BE OPERABLE WITH ONE HAND AND SHALL NOT REQUIRE TIGHT GRASPING, PINCHING, OR TWISTING OF THE WRIST. THE FORCE REQUIRED TO ACTIVATE THE CONTROLS SHALL NOT EXCEED 5 POUNDS. LEVER-OPERATED, PUSH- TYPE AND ELECTRONICALLY CONTROLLED MECHANISMS ARE ACCEPTABLE. HAND-OPERATEDMETERING FAUCETS SHALL REMAIN OPEN FOR 10 SECONDS MINIMUM

ELECTRICAL NOTES

CONTROLS AND SWITCHES SHALL NOT BE LOCATED MORE THAN 48 INCHES MEASURED FROM THE TOP OF THE OUTLET BOX, NOR LESS THAN 15 INCHES MEASURED BOTTOM OF THE OUTLET BOX, TO THE FINISH FLOOR LEVEL. CBC 11B-308.1.1.

ELECTRICAL RECEPTACLE OUTLETS (30 AMPS OR LESS) SHALL NOT BE LOCATED MORE THAN 48 INCHES MEASURED FROM THE TOP OF THE OUTLET BOX, NOR LESS THAN 15 INCHES MEASURED FROM THE BOTTOM OF THE OUTLET BOX, TO FINISH FLOOR LEVEL. CBC 11B-308.1.2.

WALKS AND SIDEWALKS

CONTINUOUS SURFACES

WALKS AND SIDEWALKS SHALL HAVE A CONTINUOUS COMMON SURFACE, NOT INTERRUPTED BY STEPS OR BY ABRUPT CHANGES IN LEVEL EXCEEDING 1/2 INCHES, AND SHALL BE A MINIMUM OF 48 INCHES IN WIDTH. SURFACES SHALL BE SLIP RESISTANT AS FOLLOWS:

SLOPES OF 6 PERCENT AND GREATER SURFACES WITH A SLOPE OF 6 PERCENT GRADIENT SHALL BE SHALL BE SLIP RESISTANT.

SLOPES LESS THAN 6 PERCENT SURFACES WITH A SLOPE OF LESS THAN 6 PERCENT GRADIENT SHALL BE AT LEAST AS SLIP RESISTANT AS THAT DESCRIBED AS A MEDIUM SALT FINISH.

SURFACE CROSS SLOPES

SURFACE CROSS SLOPES SHALL NOT EXCEED 1/4 INCH PER FOOT EXCEPT WHEN THE ENFORCING AGENCY FINDS THAT DUE TO LOCAL CONDITIONS IT CREATES AS UNREASONABLE HARDSHIP, THE CROSS SLOPE SHALL BE TO A MAXIMUM OF 1/2 INCH PER FOOT FOR DISTANCES NOT TO EXCEED 20 FOOT.

WALKS, SIDEWALKS AND PEDESTRIAN WAYS SHALL BE FREE FROM GRATINGS WHENEVER POSSIBLE. FOR GRATINGS LOCATED IN THE SURFACES OF THESE AREAS, GRID OPENINGS IN GRATINGS SHALL BE 1/2 INCHES IN THE DIRECTION OF TRAFFIC FLOW.

FIVE PERCENT GRADIENT

SLOPE IN THE DIRECTION OF TRAVEL OF ANY WALK SHALL BE 1 VERTICAL TO 20 HORIZONTAL (5% GRADIENT). IF WALK EXCEEDS THIS STANDARD IT SHALL COMPLY WITH PROVISIONS OF THE C.B.C., PEDESTRIAN RAMPS.

CHANGES IN LEVEL

ABRUPT CHANGES IN LEVEL ALONG ANY ACCESSIBLE ROUTE SHALL NOT EXCEED 1/2 INCH WHEN CHANGES IN LEVEL DO OCCUR LEVEL 2:1 EXCEPT EXCEPT THAT LEVEL CHANGES NOT EXCEEDING 1/4 INCH MAY BE VERTICAL

WALKS WITH CONTINUOUS GRADIENTS

ALL WALKS WITH CONTINUOUS GRADIENT SHALL HAVE LEVEL AREAS AT LEAST 5 FEET IN LENGTH AT INTERVALS OF AT LEAST EVERY 400 FEET.

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

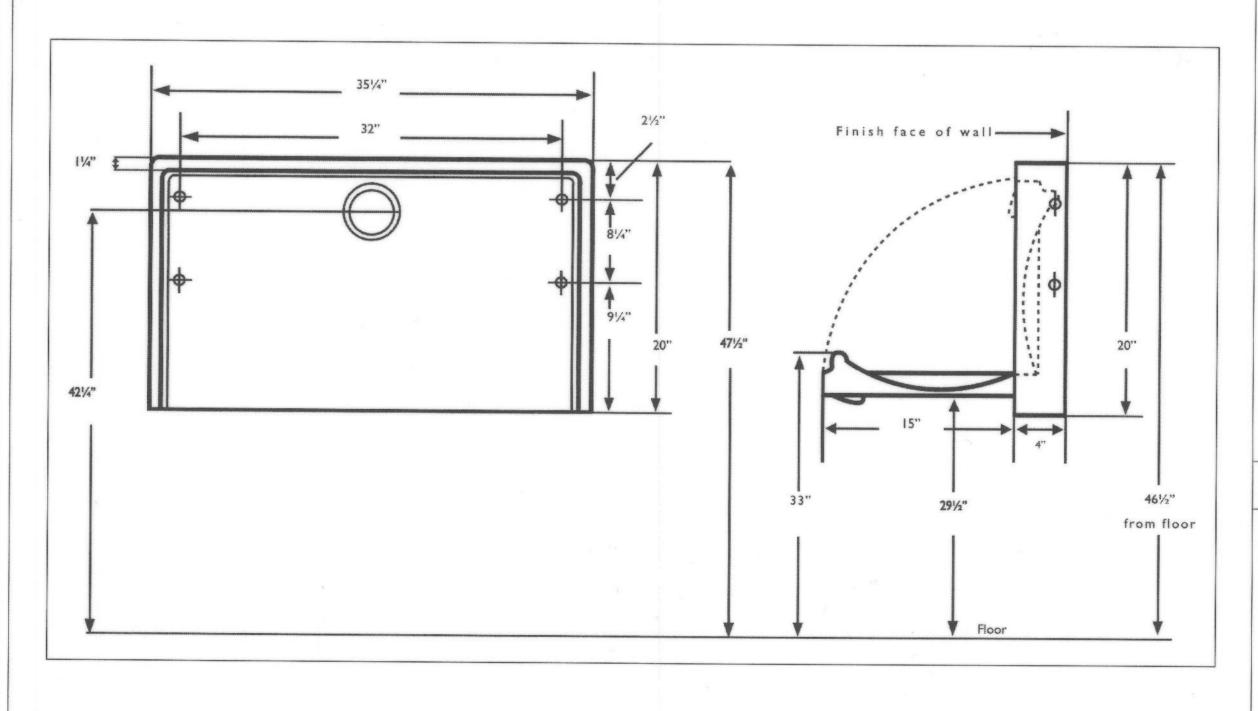
SHEET: A-101 & A-103

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

4 SHEET: A-101 & A-103

SCALE: 3/4" = 1'-0"

3 SHEET: A-101 & A-201



SHEET: A-103 & A-203

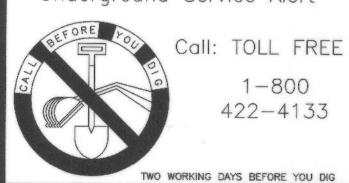
SCALE: 3/4" = 1'-0" 6

ADD 6" AT EXTERIOR SIDE OF EXTERIOR DOOR (B) PUSH SIDE (C) PUSH SIDE DOOR PROVIDED WITH LATCH AND CLOSER MANEUVERING CLEARANCES AT MANUAL SWING DOORS AND GATES

SHEET: A-101 & A-201

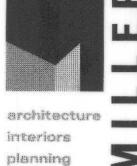
SCALE: 1" = 1'-0"

Underground Service Alert

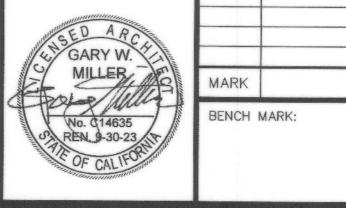


HOWARD M ROWE BRANCH LIBRARY 108 E MARSHALL BOULEVARD SAN BERNARDINO, CA 92404

PAUL VILLASENOR BRANCH LIBRARY 525 N MT VERNON AVE SAN BERNARDINO, CA 92411



1177 Idaho Street, Suite 200 Redlands, CA 92374 Phone: (909) 335-7400 Fax: (909) 335-7299



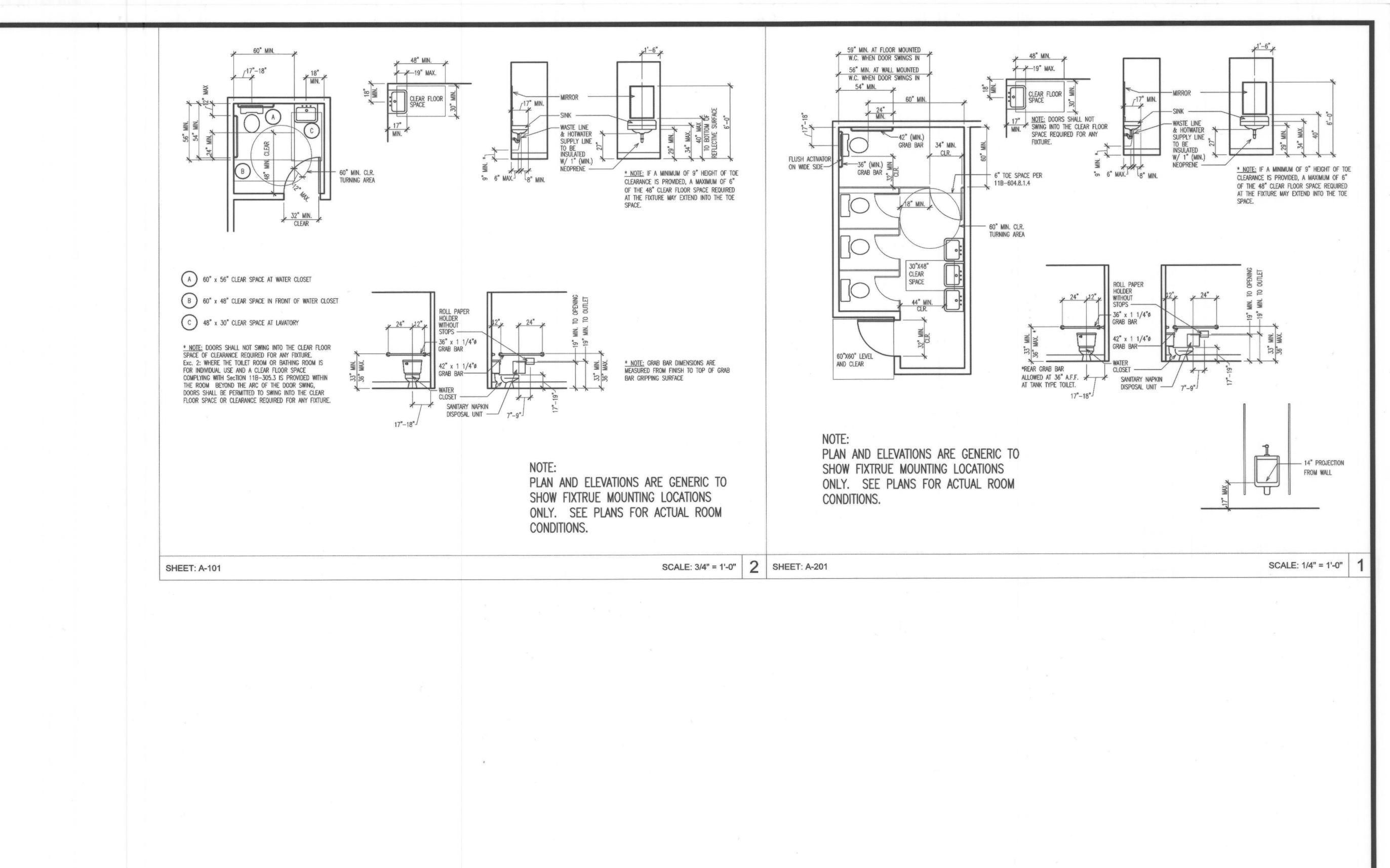
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APPROVED 9/22 2018 2022	CITY OF SAN
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CHECKED BY:	ROWE LIBRA VILLASENOR I
RECOMMENDED BY:	FOR CITY USE ONLY: FILE NO.

I BERNARDINO DRAWING OF PUBLIC WORKS AILS SHEET $_2$ OF G-002 ARY AND 26_SHEETS LIBRARY

C.I.P. NO.

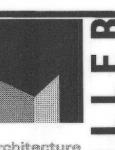
W.O. NO.



Underground Service Alert

Call: TOLL FREE 1 - 800422-4133 TWO WORKING DAYS BEFORE YOU DIG HOWARD M ROWE BRANCH LIBRARY 108 E MARSHALL BOULEVARD SAN BERNARDINO, CA 92404

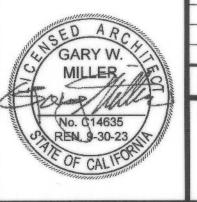
PAUL VILLASENOR BRANCH LIBRARY 525 N MT VERNON AVE SAN BERNARDINO, CA 92411



interiors

planning

1177 Idaho Street, Suite 200 Redlands, CA 92374 Phone: (909) 335-7400 Fax: (909) 335-7299



MARK	REVISIONS	BY	APPR	DATE
BENCH MARK:				-002

APPROVED_	9/22	2018 2022	(
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CHECKED BY:		Wilder Street Communication Co	

RECOMMENDED BY:

ITY OF SAN BERNARDINO DEPARTMENT OF PUBLIC WORKS

> **ADA DETAILS** ROWE LIBRARY AND

SHEET 3 OF G-003

DRAWING

13476

VILLASENOR LIBRARY FOR CITY USE ONLY: FILE NO. C.I.P. NO. W.O. NO. **SECTION 301 GENERAL**

301.1 SCOPE. Buildings shall be designed to include the green building measures specified as mandatory in the application checklists contained in this code. Voluntary green building measures are also included in the application checklists and may be included in the design and construction of structures covered by this code, but are not required unless adopted by a city, county, or city and county as specified in Section 101.7.

301.3 NONRESIDENTIAL ADDITIONS AND ALTERATIONS, [BSC-CG] he provisions of individual sections of Chapter 5 apply to newly constructed buildings, building additions of 1,000 square feet or greater, and/or building alterations with a permit valuation of \$200,000 or above (for occupancies within the authority of California Building Standards Commission). Code sections relevant to additions and alterations shall only apply to the portions of the building being added or altered within the scope of the permitted work. A code section will be designated by a banner to indicate where the code section only applies to newly constructed buildings [N] or to additions and/or alterations [A]. When the code section applies to both, no banner will be used.

301.3.1 Nonresidential additions and alterations that cause updates to plumbing fixtures only:

Note: On and after January 1, 2014, certain commercial real property, as defined in Civil Code Section 1101.3, shall have its noncompliant plumbing fixtures replaced with appropriate water-conserving plumbing fixtures under specific circumstances. See Civil Code Section 1101.1 et seq. for definitions, types of commercial real property affected, effective dates, circumstances necessitating replacement of noncompliant plumbing fixtures, and duties and responsibilities for ensuring compliance.

301.3.2 Waste Diversion. The requirements of Section 5.408 shall be required for additions and

301.4 PUBLIC SCHOOLS AND COMMUNITY COLLEGES. (see GBSC)

301.5 HEALTH FACILITIES. (see GBSC)

SECTION 302 MIXED OCCUPANCY BUILDINGS

302.1 MIXED OCCUPANCY BUILDINGS. In mixed occupancy buildings, each portion of a building shall comply with the specific green building measures applicable to each specific occupancy.

SECTION 303 PHASED PROJECTS

303.1 PHASED PROJECTS. For shell buildings and others constructed for future tenant improvements, only those code measures relevant to the building components and systems considered to be new construction (or newly constructed) shall apply.

303.1.1 Initial Tenant improvements. The provisions of this code shall apply only to the initial tenant improvements to a project. Subsequent tenant improvements shall comply with the scoping provisions in Section 301.3 non-residential additions and alterations. ABBREVIATION DEFINITIONS:

Department of Housing and Community Development California Building Standards Commission Division of the State Architect, Structural Safety Office of Statewide Health Planning and Development OSHPD

Low Rise High Rise Additions and Alterations

NONRESIDENTIAL MANDATORY MEASURES

DIVISION 5.1 PLANNING AND DESIGN

SECTION 5.101 GENERAL

The provisions of this chapter outline planning, design and development methods that include environmentally responsible site selection, building design, building siting and development to protect, restore and enhance the environmental quality of the site and respect the integrity of adjacent properties.

SECTION 5.102 DEFINITIONS

5.102.1 DEFINITIONS The following terms are defined in Chapter 2 (and are included here for reference)

CUTOFF LUMINAIRES. Luminaires whose light distribution is such that the candela per 1000 lamp lumens does not numerically exceed 25 (2.5 percent) at an angle of 90 degrees above nadir, and 100 (10 percent) at a vertical angle of 80 degrees above nadir. This applies to all lateral angles around the luminaire.

LOW-EMITTING AND FUEL EFFICIENT VEHICLES. Eligible vehicles are limited to the following:

1. Zero emission vehicle (ZEV), including neighborhood electric vehicles (NEV), partial zero emission vehicle (PZEV), advanced technology PZEV (AT ZEV) or CNG fueled (original equipment manufacturer only) regulated under Health and Safety Code section 43800 and CCR, Title 13, Sections 1961 and 1962. 2. High-efficiency vehicles, regulated by U.S. EPA, bearing High-Occupancy Vehicle (HOV) car pool lane stickers issued by the

NEIGHBORHOOD ELECTRIC VEHICLE (NEV). A motor vehicle that meets the definition of "low-speed vehicle" either in Section 385.5 of the Vehicle Code or in 49CFR571.500 (as it existed on July 1, 2000), and is certified to zero-emission vehicle standards.

TENANT-OCCUPANTS. Building occupants who inhabit a building during its normal hours of operation as permanent occupants, such as employees, as distinguished from customers and other transient visitors.

VANPOOL VEHICLE. Eligible vehicles are limited to any motor vehicle, other than a motortruck or truck tractor, designed for carrying more than 10 but not more than 15 persons including the driver, which is maintained and used primarily for the nonprofit work-related transportation of adults for the purpose of ridesharing.

Note: Source: Vehicle Code, Division 1, Section 668

ZEV. Any vehicle certified to zero-emission standards.

SECTION 5.106 SITE DEVELOPMENT 5.106.1 STORM WATER POLLUTION PREVENTION FOR PROJECTS THAT DISTURB LESS THAN ONE ACRE OF LAND. Newly constructed projects and additions which disturb less than one acre of land, and are not part of a larger common plan of development or sale, shall prevent the pollution of storm water runoff from the construction activities through one or more of the following measures:

5.106.1.1 Local ordinance. Comply with a lawfully enacted storm water management and/or erosion control ordinance.

5.106.1.2 Best Management Practices (BMPs). Prevent the loss of soil through wind or water erosion byimplementing an effective combination of erosion and sediment control and good housekeeping BMPs.

Soil loss BMPs that should be considered for implementation as appropriate for each project include, but are not limited

a. Scheduling construction activity during dry weather, when possible. b. Preservation of natural features, vegetation, soil, and buffers around surface waters.

c. Drainage swales or lined ditches to control stormwater flow.

d. Mulching or hydroseeding to stabilize disturbed soils. Erosion control to protect slopes.

Protection of storm drain inlets (gravel bags or catch basin inserts).

Perimeter sediment control (perimeter silt fence, fiber rolls). Sediment trap or sediment basin to retain sediment on site.

Stabilized construction exits.

Wind erosion control.

k. Other soil loss BMPs acceptable to the enforcing agency. Good housekeeping BMPs to manage construction equipment, materials, non-stormwater discharges and wastes that

should be considered for implementation as appropriate for each project include, but are not limited to, the following:

 Dewatering activities. b. Material handling and waste management.

Building materials stockpile management. d. Management of washout areas (concrete, paints, stucco, etc.).

e. Control of vehicle/equipment fueling to contractor's staging area. Vehicle and equipment cleaning performed off site.

Spill prevention and control. h. Other housekeeping BMPs acceptable to the enforcing agency. 5.106.2 STORMWATER POLLUTION PREVENTION FOR PROJECTS THAT DISTURB ONE OR MORE ACRES OF LAND. Comply with all lawfully enacted stormwater discharge regulations for projects that (1) disturb one acre or more of land, or (2) disturb less than one acre of land but are part of a larger common plan of development sale.

Note: Projects that (1) disturb one acre or more of land, or (2) disturb less than one acre of land but are part of the larger common plan of development or sale must comply with the post-construction requirements detailed in the applicable National Pollutant Discharge Elimination System (NPDES) General permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities issued by the State Water Resources Control Board or the Lahontan Regional Water Quality Control Board (for projects in the Lake Tahoe Hydrologic Unit).

The NPDES permits require postconstruction runoff (post-project hydrology) to match the preconstruction runoff (pre-project hydrology) with the installation of postconstruction stormwater management measures. The NPDES permits emphasize runoff reduction through on-site stormwater use, interception, evapotranspiration, and infiltration through nonstructural controls, such as Low Impact Development (LID) practices, and conversation design measures. Stormwater volume that cannot be addressed using nonstructural practices is required to be captured in structural practices and be approved by the enforcing agency.

Refer to the current applicable permits on the State Water Resources Control Board website at: www.waterboards.ca.gov/constructionstormwater. Consideration to the stormwater runoff management measures should be given during the initial design process for appropriate integration into site development.

5.106.4 BICYCLE PARKING. For buildings within the authority of California Building Standards Commission as specified in Section 103, comply with Section 5.106.4.1. For buildings within the authority of the Division of the State Architect pursuant to Section 105, comply with Section 5.106.4.2

5.106.4.1 Bicycle parking. [BSC-CG] Comply with Sections 5.106.4.1.1 and 5.106.4.1.2; or meet the

applicable local ordinance, whichever is stricter

5.106.4.1.1 Short-term bicycle parking. If the new project or an addition or alteration is anticipated to generate visitor traffic, provide permanently anchored bicycle racks within 200 feet of the visitors' entrance, readily visible to passers-by, for 5% of new visitor motorized vehicle parking spaces being added, with a minimum of one two-bike capacity rack. Exception: Additions or alterations which add nine or less visitor vehicular parking spaces.

5.106.4.1.2 Long-term bicycle parking. For new buildings with tenant spaces that have 10 or more tenant-occupants, provide secure bicycle parking for 5 percent of the tenant-occupant vehicular parking spaces with a minimum of

5.106.4.1.3 For additions or alterations that add 10 or more tenant-occupant vehicular parking spaces, provide secure bicycle parking for 5 percent of the tenant vehicular parking spaces being added, with a minimum of one bicycle parking facility.

anticipated tenant-occupant vehicular parking spaces with a minimum of one bicycle parking facility. 5.106.4.1.5 Acceptable bicycle parking facility for Sections 5.106.4.1.2, 5.106.4.1.3, and 5.106.4.1.4 shall

5.106.4.1.4 For new shell buildings in phased projects provide secure bicycle parking for 5 percent of the

be convenient from the street and shall meet one of the following:

 Covered, lockable enclosures with permanently anchored racks for bicycles; . Lockable bicycle rooms with permanently anchored racks; or Lockable, permanently anchored bicycle lockers.

Note: Additional information on recommended bicycle accommodations may be obtained from Sacramento Area Bicycle Advocates,

5.106.4.2 Bicycle parking. [DSA-SS] For public schools and community colleges, comply with Sections 5,106,4,2,1 and 5,106,4,2,2

5.106.4.2.1 Student bicycle parking. Provide permanently anchored bicycle racks conveniently accessed with a minimum of four two-bike capacity racks per new building. 5.106.4.2.2 Staff bicycle parking. Provide permanent, secure bicycle parking conveniently accessed with a minimum of two staff bicycle parking spaces per new building. Acceptable bicycle parking facilities shall be convenient from

. Covered, lockable enclosures with permanently anchored racks for bicycles;

2. Lockable bicycle rooms with permanently anchored racks; or Lockable, permanently anchored bicycle lockers.

the street or staff parking area and shall meet one of the following:

5.106.5.2 DESIGNATED PARKING FOR CLEAN AIR VEHICLES. In new projects or additions or alterations that add 10 or more vehicular parking spaces, provide designated parking for any combination of low-emitting, fuel-efficient and carpool/van pool

TOTAL NUMBER OF PARKING SPACES	NUMBER OF REQUIRED SPACES
0-9	0
10-25	1
25-50	3
51-75	6
76-100	8
101-150	11
151-200	16
201 AND OVER	AT LEAST 8% OF TOTAL

5.106.5.2.1 - Parking stall marking. Paint, in the paint used for stall striping, the following characters such that the lower edge of the last word aligns with the end of the stall striping and is vehicle: CLEAN AIR / VAN POOL / EV

Note: Vehicles bearing Clean Air Vehicle stickers from expired HOV lane programs may be considered eligible for designated parking spaces.

5.106.5.3 Electric vehicle (EV) charging. [N] Construction shall comply with Section 5.106.5.3.1 When FVSF(s) is/are 5.106.5.3.2 to facilitate future installation of electric vehicle supply equipment (EVSE). installed, it shall be in accordance with the California Building Code, the California Electrical Code and as

5.106.5.3.1 Single charging space requirements. [N] When only a single charging space is required per Table 5.106.5.3.3, a raceway is required to be installed at the time of construction installed in accordance with the California Electrical Code. Construction plans and but are not limited to, the following:

The type and location of the EVSE.

2. A listed raceway capable of accommodating a 208/240 -volt dedicated branch circuit. 3. The raceway shall not be less than trade size 1".

4. The raceway shall originate at a service panel or a subpanel serving the area, and shall terminate in

close proximity to the proposed location of the charging equipment and listed suitable cabinet, box, 5. The service panel or subpanel shall have sufficient capacity to accommodate a minimum 40-ampere

dedicated branch circuit for the future installation of the EVSE. 5.106.5.3.2 Multiple charging space requirements. [N] When multiple charging spaces are required per Table 5,106.5.3.3 raceway(s) is/are required to be installed at the time of construction and shall be

but are not limited to, the following:

installed in accordance with the California Electrical Code. Construction plans and

1. The type and location of the EVSE. 2. The raceway(s) shall originate at a service panel or a subpanel(s) serving the area, and shall terminate in close proximity to the proposed location of the charging equipment and into listed suitable

cabinet(s), box(es), enclosure(s) or equivalent. 3. Plan design shall be based upon 40-ampere minimum branch circuits. 4. Electrical calculations shall substantiate the design of the electrical system, to include the rating of

equipment and any on-site distribution transformers and have sufficient capacity to simultaneously charge all required EVs at its full rated amperage. 5. The service panel or subpanel(s) shall have sufficient capacity to accommodate the required number of dedicated branch circuit(s) for the future installation of the EVSE.

5,106,5,3,3 EV charging space calculations. [N] Table 5,106,5,3,3 shall be used to determine if single or multiple charging space requirements apply for the future installation of EVSE.

Exceptions: On a case-by-case basis where the local enforcing agency has determined EV charging and infrastructure is not feasible based upon one or more of the following conditions:

Where there is insufficient electrical supply.

Where there is evidence suitable to the local enforcing agency substantiating that additional local utility infrastructure design requirements, directly related to the implementation of Section 5.106.5.3, may adversely impact the construction cost of the project.

TABLE 5.106.5.3.3	
TOTAL NUMBER OF PARKING SPACES	NUMBER OF REQUIRED SPACES
0-9	0
10-25	1
26-50	2
51-75	4
76-100	5
101-150	7
151-200	10
201 AND OVER	6% of total ¹

 Calculation for spaces shall be rounded up to the nearest whole number. 5.106.5.3.4 [N] Identification. The service panel or subpanel(s) circuit directory shall identify the reserved overcurrent protective device space(s) for future EV charging as "EV CAPABLE". The raceway termination

location shall be permanently and visibly marked as "EV CAPABLE"

5.106.5.3.5 [N] Future charging spaces qualify as designated parking as described in Section 5.106.5.2 Designated parking for clean air vehicles.

5.106.8 LIGHT POLLUTION REDUCTION, [N].I Outdoor lighting systems shall be designed and installed to comply with the

1. The minimum requirements in the California Energy Code for Lighting Zones 0-4 as defined in Chapter 10, Section 10-114 of the California Administrative Code; and

Backlight (B) ratings as defined in IES TM-15-11 (shown in Table A-1 in Chapter 8): 3. Uplight and Glare ratings as defined in California Energy Code (shown in Tables 130.2-A and 130.2-B in Chapter 8) and

4. Allowable BUG ratings not exceeding those shown in Table 5.106.8, [N] or Comply with a local ordinance lawfully enacted pursuant to Section 101.7, whichever is more stringent.

Exceptions: [N]

Luminaires that qualify as exceptions in Section 140.7 of the California Energy Code.

Building facade meeting the requirements in Table 140.7-B of the California Energy Code, Part 6. Custom lighting features as allowed by the local enforcing agency, as permitted by Section 101.8 Alternate materials, designs and methods of construction.

1. See also California Building Code, Chapter 12, Section 1205.6 for college campus lighting

TABLE 5.106.8 [N] MAXIMUM ALLOWABLE BACKLIGHT, UPLIGHT

requirements for parking facilities and walkways.

2. Refer to Chapter 8 (Compliance Forms, Worksheets and Reference Material) for IES TM-15-11 Table A-1, California Energy Code Tables 130,2-A and 130,2-B. 3. Refer to the California Building Code for requirements for additions and alterations.

ALLOWABLE RATING	LIGHTING ZONE LZ0	LIGHTING ZONE LZ1	LIGHTING ZONE LZ2	LIGHTING ZONE LZ3	LIGHTING ZONE LZ4
MAXIMUM ALLOWABLE BACKLIGHT RATING 8					P
Luminaire greater than 2 mounting heights (MH) from property line	N/A	No Limit	No Limit	No Limit	No Limit
Luminaire back hemisphere is 1-2 MH from property line	N/A	B2	В3	B4	B4
Luminaire back hemisphere is 0.5-1 MH from property line	N/A	B1	B2	В3	В3
Luminaire back hemisphere is less than 0.5 MH from property line	N/A	В0	В0	B1	B2
MAXIMUM ALLOWABLE UPLIGHT RATING (U)	N/A				
For area lighting 4	N/A	U0	UO	U0	U0
For all other outdoor lighting,including decorative luminaires	N/A	U1	U2	U3	UR
MAXIMUM ALLOWABLE GLARE RATING 6 (G)	N/A				
Luminaire greater than 2 MH from property line	N/A	G1	G2	G3	G4
Luminaire front hemisphere is 1-2 MH from property line	N/A	G0	G1	G1	G2
Luminaire front hemisphere is 0.5-1 MH from property line	N/A	G0	G0	G1	G1
Luminaire back hemisphere is less than 0.5 MH from property line	N/A	G0	G0	G0	G1

1. IESNA Lighting Zones 0 and 5 are not applicable; refer to Lighting Zones as defined in the California Energy Code and Chapter 10 of the Callifornia Administrative Code.

2. For property lines that abut public walkways, bikeways, plazas and parking lots, the property line may be considered to be 5 feet beyond the actual property line for purpose of determining compliance with this section. For property lines that abut public roadways and public transit corridors, the property line may be considered to be the centerline of the public roadway or public transit corridor for the purpose of determining compliance with this section.

3. If the nearest property line is less than or equal to two mounting heights from the back hemisphere of the luminaire distribution, the applicable reduced Backlight rating shall be met.

4. General lighting luminaires in areas such as outdoor parking, sales or storage lots shall meet these reduced ratings. Decorative luminaires located in these areas shall meet U-value limits for "all other outdoor lighting".

5. If the nearest property line is less than or equal to two mounting heights from the front hemisphere of the luminaire distribution, the applicable reduced Glare rating shall be met.

5.106.10 GRADING AND PAVING. Construction plans shall indicate how site grading or a drainage system will manage all surface water flows to keep water from entering buildings. Examples of methods to manage surface water include, but are not

2. Water collection and disposal systems.

French drains.

Water retention gardens.

Other water measures which keep surface water away from buildings and aid in groundwater recharge. Exception: Additions and alterations not altering the drainage path.

5.106.12.1 Surface parking areas. Shade tree plantings, minimum #10 container size or equal, shall be installed to provide shade over 50 percent of the parking area within 15 years. Exceptions: The surface parking area covered by solar photovoltaic shade structures, or shade

5.106.12 SHADE TREES [DSA-SS]. Shade Trees shall be planted to comply with Sections 5.106.12.1, 5.106.12.2,

necessary to establish and maintain tree health shall comply with Section 5.304.6.

and 5.106.12.3. Percentages shown shall be measured at noon on the summer solstice. Landscape irrigation

structures, with roofing materials that comply with Table A5.106.11.2.2 in Appendix A5, are not included in the total area calculations.

5.106.12.2 Landscape areas. Shade tress plantings, minimum #10 container size or equal shall be installed to provide shade of 20% of the landscape area within 15 years.

Exceptions: Playfields for organized sport activity are not included in the total area calculation.

5.106.12.3. Hardscape areas. Shade tree plantings, minimum #10 container size or equal shall be installed to provide shade over 20 percent of the hardscape area within 15 years.

Exceptions: Walks, hardscape areas covered by solar photovoltaic shade structures, and hardscape areas covered by shade structures with roofing materials that comply with Table A5.106.11.2.2 in Appendix A5, are not included in the total area calculation.

DIVISION 5.2 ENERGY EFFICIENCY

5.201.1 Scope [BSC-CG]. California Energy Code [DSA-SS]. For the purposes of mandatory energy efficiency standards in this code, the California Energy Commission will continue to adopt mandatory building standards.

DIVISION 5.3 WATER EFFICIENCY AND CONSERVATION

SECTION 5.301 GENERAL 5.301.1 Scope. The provisions of this chapter shall establish the means of conserving water use indoors, outdoors

SECTION 5.302 DEFINITIONS 5.302.1 Definitions. The following terms are defined in Chapter 2 (and are included here for reference)

EVAPOTRANSPIRATION ADJUSTMENT FACTOR (ETAF) [DSA-SS]. An adjustment factor when applied to reference evapotranspiration that adjusts for plant factors and irrigation efficiency, which ae two major influences on the amount of water that needs to be applied to the landscape

FOOTPRINT AREA [DSA-SS]. The total area of the furthest exterior wall of the structure projected to natural grade, not including exterior areas such as stairs, covered walkways, patios and decks,

METERING FAUCET. A self-closing faucet that dispenses a specific volume of water for each actuation cycle. The volume or cycle duration can be fixed or adjustable.

GRAYWATER. Pursuant to Health and Safety Code Section 17922.12, "graywater" means untreated wastewater that has not been contaminated by any toilet discharge, has not been affected by infectious, contaminated, or unhealthy bodily wastes, and does not present a threat from contamination by unhealthful processing, manufacturing, or operating wastes. "Graywater" includes, but is not limited to wastewater from bathtubs, showers, bathroom washbasins, clothes washing machines and laundry tubs, but does not include waste water from kitchen sinks or dishwashers.

MODEL WATER EFFICIENT LANDSCAPE ORDINANCE (MWELO). The California ordinance regulating landscape design, installation and maintenance practices that will ensure commercial, multifamily and other developer installed landscapes greater

than 2500 square feet meet an irrigation water budget developed based on landscaped area and climatological parameters. MODEL WATER EFFICIENT LANDSCAPE ORDINANCE (MWELO). [HCD] The California model ordinance (California Code of Regulations, Title 23, Division 2, Chapter 2.7), regulating landscape design, installation and maintenance practices. Local agencies are required to adopt the updated MWELO, or adopt a local ordinance at least as effective as the MWELO.

POTABLE WATER. Water that is drinkable and meets the U.S. Environmental Protection Agency (EPA) Drinking Water Standards, See definition in the California Plumbing Code, Part 5.

POTABLE WATER, [HCD] Water that is satisfactory for drinking, culinary, and domestic puroses, and meets the U.S. Environmental Protection Agency (EPA) Drinking Water Standards and the requirements of the Health Authority Having

would not otherwise occur [Water Code Section 13050 (n)]. Simply put, recycled water is water treated to remove waste matter attaining a quality that is suitable to use the water again. SUBMETER. A meter installed subordinate to a site meter. Usually used to measure water intended for one purpose, such as

RECYCLED WATER. Water which, as a result of treatment of waste, is suitable for a direct beneficial use or a controlled use that

landscape irrigation. For the purposes of CALGreen, a dedicated meter may be considered a submeter. WATER BUDGET. Is the estimated total landscape irrigation water use which shall not exceed the maximum applied water

allowance calculated in accordance with the Department of Water Resources Model Efficient Landscape Ordinance (MWELO).

SECTION 5.303 INDOOR WATER USE

5.303.1 METERS. Separate submeters or metering devices shall be installed for the uses described in Sections

5.303.1.1 Buildings in excess of 50,000 square feet. Separate submeters shall be installed as follows:

1. For each individual leased, rented or other tenant space within the building projected to consume more than 100 gal/day (380 L/day), including, but not limited to, spaces used for laundry or cleaners, restaurant or food service, medical or dental office, laboratory, or beauty salon or barber shop.

2. Where separate submeters for individual building tenants are unfeasible, for water supplied to the following subsystems:

a. Makeup water for cooling towers where flow through is greater than 500 gpm (30 L/s). Makeup water for evaporative coolers greater than 6 gpm (0.04 L/s). c. Steam and hot water boilers with energy input more than 500,000 Btu/h (147 kW).

5.303.1.2 Excess consumption. A separate submeter or metering device shall be provided for any tenant

within a new building or within an addition that is projected to consume more than 1,000 gal/day. 5.303.3 WATER CONSERVING PLUMBING FIXTURES AND FITTINGS. Plumbing fixtures (water closets and urinals) and fittings (faucets and showerheads) shall comply with the following:

5.303.3.1 Water Closets. The effective flush volume of all water closets shall not exceed 1.28 gallons per flush. Tank-type water closets shall be certified to the performance criteria of the U.S. EPA WaterSense Specification for Tank-Type toilets. Note: The effective flush volume of dual flush toilets is defined as the composite, average flush volume of two reduced flushes

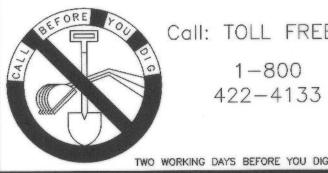
5.303.3.2.1 Wall-mounted Urinals. The effective flush volume of wall-mounted urinals shall not exceed 0.125 gallons

5.303.3.3 Showerheads, IBSC-CG1 5.303.3.3.1 Single showerhead. Showerheads shall have a maximum flow rate of not more than 1.8 gallons per minute at 80 psi. Showerheads shall be certified to the performance criteria of the U.S. EPA WaterSense Specification for Showerheads.

5.303.3.2.2 Floor-mounted Urinals. The effective flush volume of floor-mounted or other urinals shall not exceed 0.5

5.303.3.3.2 Multiple showerheads serving one shower. When a shower is served by more than one showerhead, the combined flow rate of all the showerheads and/or other shower outlets controlled by a single valve shall not exceed 1.8 gallons per minute at 80 psi, or the shower shall be designed to allow only one shower outlet to be in operation at a time. Note: A hand-held shower shall be considered a showerhead.

Underground Service Alert

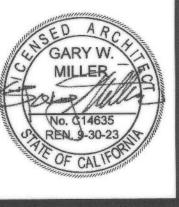


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2019 CALIFORNIA GREEN BUILDING STANDARDS CODE NONRESIDENTIAL MANDATORY MEASURES, SHEET 1 (January 2020, Includes August 2019 Supplement)

3.4 Faucets and fountains

5.303.3.4.1 Nonresidential Lavatory faucets. Lavatory faucets shall have a maximum flow rate of not more than 0.5 gallons per minute at 60 psi.

5.303.3.4.2 Kitchen faucets. Kitchen faucets shall have a maximum flow rate of not more than 1.8 gallons per minute at 60 psi. Kitchen faucets may temporarily increase the flow above the maximum rate, but not to exceed 2.2 gallons per minute at 60 psi, and must default to a maximum flow rate of 1.8 gallons

5,303,3,4,3 Wash fountains, Wash fountains shall have a maximum flow rate of not more than 1.8 gallons per minute/20 [rim space (inches) at 60 psi].

5.303.3.4.4 Metering faucets. Metering faucets shall not deliver more than 0.20 gallons per cycle.

5.303.3.4.5 Metering faucets for wash fountains. Metering faucets for wash fountains shall have a maximum flow rate of not more than 0.20 gallons per minute/20 [rim space (inches) at 60 psi].

Note: Where complying faucets are unavailable, aerators or other means may be used to achieve

MERCIAL KITCHEN EQUIPMENT.

4.1 Food Waste Disposers. Disposers shall either modulate the use of water to no more than 1 gpm the disposer is not in use (not actively grinding food waste/no-load) or shall automatically shut off after no han 10 minutes of inactivity. Disposers shall use no more than 8 gpm of water. This code section does not affect local jurisdiction authority to prohibit or require disposer

AS OF ADDITION OR ALTERATION. For those occupancies within the authority of the California idards Commission as specified in Section 103, the provisions of Section 5.303,3 and 5.303,4 shall apply es in additions or areas of alteration to the building.

NDARDS FOR PLUMBING FIXTURES AND FITTINGS. Plumbing fixtures and fittings shall be installed e with the California Plumbing Code, and shall meet the applicable standards referenced in Table 1701.1 mia Plumbing Code and in Chapter 6 of this code.

15,304 OUTDOOR WATER USE

DOOR POTABLE WATER USE IN LANDSCAPE AREAS. Nonresidential developments shall comply vater efficient landscape ordinance or the current California Department of Water Resources' Model Water dscape Ordinance (MWELO), whichever is more stringent.

Model Water Efficient Landscape Ordinance (MWELO) is located in the California Code of Regulations, e 23, Chapter 2.7, Division 2. VELO and supporting documents, including a water budget calculator, are available at:

IDOOR POTABLE WATER USE IN LANDSCAPE AREAS. For public schools and community colleges, ojects as described in Sections 5.304.6.1 and 5.304.6.2 shall comply with the California Department of irces Model Water Efficient Landscape Ordinance (MWELO) commencing with Section 490 of Chapter 2, Title 23, California Code of Regulations, except that the evapotranspiration adjustment factor (ETAF) with an additional water allowance for special landscape areas (SLA) of 0.35.

tion: Any project with an aggregate landscape area of 2,500 square feet or less may comply with the prescriptive measures contained in Appendix D of the MWELO.

- 6.1 Newly constructed landscapes. New construction projects with an aggregate landscape area equal to or greater than 500 square feet.
- 6.2 Rehabilitated landscapes. Rehabilitated landscape projects with an aggregate landscape area equal to or greater than 1,200 square feet.

MATERIAL CONSERVATION AND RESOURCE ENCY

15.401 GENERAL

os://www.water.ca.gov/.

PE. The provisions of this chapter shall outline means of achieving material conservation and resource ough protection of buildings from exterior moisture, construction waste diversion, employment of o reduce pollution through recycling of materials, and building commissioning or testing and adjusting.

waste that is mixed in with food waste.

nichever is more stringent.

INITIONS. The following terms are defined in Chapter 2 (and are included here for reference)

o regulate fluid flow rate and air patterns at the terminal equipment, such as to reduce fan speed or adjust

To proportion flows within the distribution system, including sub-mains, branches and terminals,

:OMMISSIONING. A systematic quality assurance process that spans the entire design and construction uding verifying and documenting that building systems and components are planned, designed, installed, ated and maintained to meet the owner's project requirements.

/ASTE. Food waste, green waste, landscape and pruning wste, nonhazardous wood waste, and food

cedure to determine quantitative performance of a system or equipment

5.407 WATER RESISTANCE AND MOISTURE MANAGEMENT THER PROTECTION. Provide a weather-resistant exterior wall and foundation envelope as required by Iding Code Section 1402.2 (Weather Protection), manufacturer's installation instructions or local

ITURE CONTROL. Employ moisture control measures by the following methods.

2.1 Sprinklers. Design and maintain landscape irrigation systems to prevent spray on structures.

2.2 Entries and openings. Design exterior entries and/or openings subject to foot traffic or wind-driven prevent water intrusion into buildings as follows:

5.407.2.2.1 Exterior door protection. Primary exterior entries shall be covered to prevent water ntrusion by using nonabsorbent floor and wall finishes within at least 2 feet around and perpendicular to such openings plus at least one of the following:

- 1. An installed awning at least 4 feet in depth. 2. The door is protected by a roof overhang at least 4 feet in depth.
- The door is recessed at least 4 feet. 4. Other methods which provide equivalent protection.

5.407.2.2.2 Flashing. Install flashings integrated with a drainage plane.

SECTION 5.408 CONSTRUCTION WASTE REDUCTION, DISPOSAL AND

☐ CONTRACTOR 5.408.1 CONSTRUCTION WASTE MANAGEMENT. Recycle and/or salvage for reuse a minimum of 65% of the non-hazardous construction and demolition waste in accordance with Section 5.408.1.1, 5.408.1.2 or 5.408.1.3; or meet a local construction and demolition waste management ordinance, whichever is more stringent.

> 5.408.1.1 Construction waste management plan. Where a local jurisdiction does not have a construction and demolition waste management ordinance, submit a construction waste management plan that:

- 1. Identifies the construction and demolition waste materials to be diverted from disposal by efficient
- usage, recycling, reuse on the project or salvage for future use or sale. 2. Determines if construction and demolition waste materials will be sorted on-site (source-separated) or bulk mixed (single stream).
- 3. Identifies diversion facilities where construction and demolition waste material collected will be taken. 4. Specifies that the amount of construction and demolition waste materials diverted shall be calculated

5.408.1.2 Waste Management Company. Utilize a waste management company that can provide verifiable documentation that the percentage of construction and demolition waste material diverted from the landfill

Note: The owner or contractor shall make the determination if the construction and demolition waste material will be diverted by a waste management company.

Exceptions to Sections 5.408.1.1 and 5.408.1.2:

- Excavated soil and land-clearing debris.
- 2. Alternate waste reduction methods developed by working with local agencies if diversion or recycle facilities capable of compliance with this item do not exist.
- 3. Demolition waste meeting local ordinance or calculated in consideration of local recycling facilities

5.408.1.3 Waste stream reduction alternative. The combined weight of new construction disposal that does not exceed two pounds per square foot of building area may be deemed to meet the 65% minimum requirement as approved by the enforcing agency.

5.408.1.4 Documentation. Documentation shall be provided to the enforcing agency which demonstrates compliance with Sections 5.408.1.1, through 5.408.1.3. The waste management plan shall be updated as necessary and shall be accessible during construction for examination by the enforcing agency.

- 1. Sample forms found in "A Guide to the California Green Building Standards Code (Nonresidential)" located at www.bsc.ca.gov/Home/CALGreen.aspx may be used to assist in documenting compliance
- with the waste management plan 2. Mixed construction and demolition debris processors can be located at the California Department of Resources Recycling and Recovery (CalRecycle).

□ CONTRACTOR 5.408.2 UNIVERSAL WASTE. [A] Additions and alterations to a building or tenant space that meet the scoping provisions in Section 301.3 for nonresidential additions and alterations, shall require verification that Universal Waste items such as fluorescent lamps and ballast and mercury containing thermostats as well as other California prohibited Universal Waste materials are disposed of properly and are diverted from landfills. A list of prohibited Universal Waste materials shall be included in the construction documents.

> Note: Refer to the Universal Waste Rule link at: http://www.dtsc.ca.gov/LawsRegsPolicies/Regs/upload/OEAR-A_REGS_UWR_FinalText.pdf

5.408.3 EXCAVATED SOIL AND LAND CLEARING DEBRIS. 100 percent of trees, stumps, rocks and associated vegetation and soils resulting primarily from land clearing shall be reused or recycled. For a phased project, such material may be stockpiled on site until the storage site is developed.

Exception: Reuse, either on or off-site, of vegetation or soil contaminated by disease or pest infestation.

- 1. If contamination by disease or pest infestation is suspected, contact the County Agricultural Commissioner and follow its direction for recycling or disposal of the material.
- 2. For a map of know pest and/or disease guarantine zones, consult with the California Department of Food and Agriculture. (www.cdfa.ca.gov)

SECTION 5.410 BUILDING MAINTENANCE AND OPERATIONS

5.410.1 RECYCLING BY OCCUPANTS. Provide readily accessible areas that serve the entire building and are identified for the depositing, storage and collection of non-hazardous materials for recycling, including (at a minimum) paper, corrugated cardboard, glass, plastics, organic waste, and metals or meet a lawfully enacted local recycling ordinance, if more restrictive.

Exception: Rural jurisdictions that meet and apply for the exemption in Public Resources Code 42649.82 (a)(2)(A) et seq. shall also be exempt from the organic waste portion of this section.

5.410.1.1 Additions. All additions conducted within a 12-month period under single or multiple permits, resulting in an increase of 30% or more in floor area, shall provide recycling areas on site.

Exception: Additions within a tenant space resulting in less than a 30% increase in the tenant space

5.410.1.2 Sample ordinance. Space allocation for recycling areas shall comply with Chapter 18, Part 3, Division 30 of the Public Resources Code. Chapter 18 is known as the California Solid Waste Reuse and Recycling Access Act of 1991 (Act).

Note: A sample ordinance for use by local agencies may be found in Appendix A of the document at the

5.410.2 COMMISSIONING. [N] New buildings 10,000 square feet and over. For new buildings 10,000 square feet and over, building commissioning shall be included in the design and construction processes of the building project to verify that the building systems and components meet the owner's or owner representative's project requirements. Commissioning shall be performed in accordance with this section by trained personnel with experience on projects of comparable size and complexity. For I-occupancies that are not regulated by OSHPD or for I-occupancies and L-occupancies that are not regulated y the California Energy Code Section 100.0 Scope, all requirements in Sections 5.410.2 through 5.410.2.6 shall apply.

Note: For energy-related systems under the scope (Section 100) of the California Energy Code, including heating, ventilation, air conditioning (HVAC) systems and controls, indoor lighting systems and controls, as well as water heating systems and controls, refer to California Energy Code Section 120.8 for commissioning requirements

Commissioning requirements shall include:

- Owner's or Owner representative's project requirements.
- Commissioning measures shown in the construction documents. Commissioning plan.
- 5. Functional performance testing. Documentation and training.

Commissioning report. Exceptions:

- . Unconditioned warehouses of any size. 2. Areas less than 10,000 square feet used for offices or other conditioned accessory spaces within
- 3. Tenant improvements less than 10,000 square feet as described in Section 303.1.1.
- 4. Open parking garages of any size, or open parking garage areas, of any size, within a structure.

air conditioning.

 IAS AC 476 is an accreditation criteria for organizations providing training and/or certification of commissioning personnel. AC 476 is available to the Authority Having Jurisdiction as a reference for qualifications of commissioning personnel. AC 476 des not certify individuals to conduct functional performance tests or to adjust and balance systems.

Note: For the purposes of this section, unconditioned shall mean a building, area, or room which does not provide heating and or

2. Functional performance testing for heating, ventilation, air conditioning systems and lighting controls must be performed in compliance with the California Energy Code.

5.410.2.1 Owner's or Owner Representative's Project Requirements (OPR). [N] The expectations and requirements of the building appropriate to its phase shall be documented before the design phase of the project begins. This

- documentation shall include the following: Environmental and sustainability goals.
 - Building sustainable goals.
 - Indoor environmental quality requirements. Project program, including facility functions and hours of operation, and need for after hours operation.
 - Equipment and systems expectations Building occupant and operation and maintenance (O&M) personnel expectations.

5.410.2.2 Basis of Design (BOD). [N] A written explanation of how the design of the building systems meets the OPR shall be completed at the design phase of the building project. The Basis of Design document shall cover the following systems:

> Renewable energy systems Landscape irrigation systems.

Water reuse system.

5.410.2.3 Commissioning plan. [N] Prior to permit issuance a commissioning plan shall be completed to

- document how the project will be commissioned. The commissioning plan shall include the following:
 - Commissioning goals.
 - . Systems to be commissioned. Plans to test systems and components shall include:
 - a. An explanation of the original design intent. b. Equipment and systems to be tested, including the extent of tests.
 - c. Functions to be tested. d. Conditions under which the test shall be performed.
 - e. Measurable criteria for acceptable performance.
- Commissioning team information. 5. Commissioning process activities, schedules and responsibilities. Plans for the completion of commissioning shall be included.

5.410.2.4 Functional performance testing. [N] Functional performance tests shall demonstrate the correct installation and operation of each component, system and system-to-system interface in accordance with the approved plans and specifications. Functional performance testing reports shall contain information addressing each of the building components tested, the testing methods utilized, and include any readings and adjustments made

5.410.2.5 Documentation and training. [N] A Systems Manual and Systems Operations Training are required, including Occupational Safety and Health Act (OSHA) requirements in California Code of Regulations (CCR), Section 5142, and other related regulations.

- 5.410.2.5.1 Systems manual. [N] Documentation of the operational aspects of the building shall be completed within the systems manual and delivered to the building owner or representative. The
- manual shall include the following: . Site information, including facility description, history and current requirements.
 - Site contact information 3. Basic operations and maintenance, including general site operating procedures, basic
 - troubleshooting, recommended maintenance requirements, site events log.
 - 5. Site equipment inventory and maintenance notes.
 - 6. A copy of verifications required by the enforcing agency or this code. 7. Other resources and documentation, if applicable.

5.410.2.5.2 Systems operations training. [N] A program for training of the appropriate maintenance staff for each equipment type and/or system shall be developed and documented in the commissioning

- shall include the following: System/equipment overview (what it is, what it does and with what other systems and/or
 - 2. Review and demonstration of servicing/preventive maintenance.
 - Review of the information in the Systems Manual. Review of the record drawings on the system/equipment.
- 5.410.2.6 Commissioning report. [N] A report of commissioning process activities undertaken through the and construction phases of the building project shall be completed and provided to the owner or

5,410.4 TESTING AND ADJUSTING. New buildings less than 10,000 square feet. Testing and adjusting of systems shall be required for new buildings less than 10,000 square feet or new systems to serve an addition or alteration subject to Section 303.1.

Note: For energy-related systems under the scope (Section 100) of the California Energy Code, including ventilation, air conditioning (HVAC) systems and controls, indoor lighting system and controls, as well as water heating systems and controls, refer to California Energy Code Section 120.8 for commissioning 130.4, and 140.9(b)3 for additional testing requirements of specific

5.410.4.2 Systems. Develop a written plan of procedures for testing and adjusting systems. Systems to be

- included for testing and adjusting shall include at a minimum, as applicable to the project . Renewable energy systems.
 - Landscape irrigation systems. Water reuse systems.

5.410.4.3 Procedures. Perform testing and adjusting procedures in accordance with manufacturer's specifications and applicable standards on each system

5.410.4.3.1 HVAC balancing. In addition to testing and adjusting, before a new space-conditioning system serving a building or space is operated for normal use, the system shall be balanced in Standards: the National with the procedures defined by the Testing Adjusting and Balancing Bureau National Environmental Balancing Bureau Procedural Standards; Associated Air Balance Council National Standards or as approved by the enforcing agency.

5.410.4.4 Reporting. After completion of testing, adjusting and balancing, provide a final report of testing signed by the individual responsible for performing these services.

5.410.4.5 Operation and maintenance (O & M) manual. Provide the building owner or representative with detailed operating and maintenance instructions and copies of guaranties/warranties for each system. O & M instructions shall be consistent with OSHA requirements in CCR, Title 8, Section 5142, and other related

5,410.4.5.1 Inspections and reports. Include a copy of all inspection verifications and reports required

DIVISION 5.5 ENVIRONMENTAL QUALITY

SECTION 5.501 GENERAL

5.501.1 SCOPE. The provisions of this chapter shall outline means of reducing the quantity of air contaminants that are odorous, irritating, and/or harmful to the comfort and well-being of a building's installers, occupants and neighbors.

5.502.1 DEFINITIONS. The following terms are defined in Chapter 2 (and are included here for reference)

ARTERIAL HIGHWAY. A general term denoting a highway primarily for through traffic usually on a continuous route.

A-WEIGHTED SOUND LEVEL (dBA). The sound pressure level in decibels as measured on a sound level meter using the internationally standardized A-weighting filter or as computed from sound spectral data to which A-weighting adjustments have been

1 BTU/HOUR. British thermal units per hour, also referred to as Btu. The amount of heat required to raise one pound of water one degree Fahrenheit per hour, a common measure of heat transfer rate. A ton of refrigeration is 12,000 Btu, the amount of heat required to melt a ton (2,000 pounds) of ice at 320 Fahrenheit.

COMMUNITY NOISE EQUIVALENT LEVEL (CNEL). A metric similar to the day-night average sound level (Ldn), except that a 5 decibel adjustment is added to the equivalent continuous sound exposure level for evening hours (7pm to 10pm) in addition to the 10 dB nighttime adjustment used in the Ldn.

COMPOSITE WOOD PRODUCTS. Composite wood products include hardwood plywood, particleboard and medium density fiberboard. "Composite wood products" does not include hardboard, structural plywood, structural panels, structural composite lumber, oriented strand board, glued laminated timber, timber, prefabricated wood I-joists or finger-jointed lumber, all as specified in California Code of Regulations (CCR), Title 17, Section 93120.1(a).

Note: See CCR Title 17. Section 93120.1

DAY-NIGHT AVERAGE SOUND LEVEL (Ldn). The A-weighted equivalent continuous sound exposure level for a 24-hour period with a 10 dB adjustment added to sound levels occurring during nighttime hours (10p.m. to 7 a.m.).

DECIBEL (db). A measure on a logarithmic scale of the magnitude of a particular quantity (such as sound pressure, sound power, sound intensity) with respect to a reference quantity.

ELECTRIC VEHICLE (EV). An automotive-type vehicle for on-road use, such as passenger automobiles, buses, trucks, vans, neighborhood electric vehicles, electric motorcycles, and the like, primarily powered by an electric motor that draws current from a rechargeable storage battery, fuel cell, photovoltaic array, or other source of electric current. Plug-in hybrid electric vehicles (PHEV) are considered electric vehicles. For purposes of the California Electrical Code, off-road, self-propoelled electric vehicles, such as industrial trucks, hoists, lifts, transports, golf carts, airline ground support equipment, tractors, boats, and the like, are not included.

ELECTRIC VEHICLE CHARGING STATION(S) (EVCSj). One or more spaces intended for charging electric vehicles.

ELECTRIC VEHICLE SUPPLY EQUIPMENT (EVSE). The conductors, including the ungrounded, grounded, and equipment grounding conductors and the electric vehicle connectors, attachment plugs, and all other fittings, devices, power outlets, or apparatus installed specifically for the purpose of transferring energy between the premises wiring and the electric vehicle.

ENERGY EQUIVALENT (NOISE) LEVEL (Leq). The level of a steady noise which would have the same energy as the fluctuating noise level integrated over the time of period of interest

EXPRESSWAY. An arterial highway for through traffic which may have partial control of access, but which may or may not be divided or have grade separations at intersections.

FREEWAY. A divided arterial highway with full control of access and with grade separations at intersections. GLOBAL WARMING POTENTIAL (GWP). The radiative forcing impact of one mass-based unit of a given greenhouse gas relative

to an equivalent unit of carbon dioxide over a given period of time. Carbon dioxide is the reference compound with a GWP of one. GLOBAL WARMING POTENTIAL VALUE (GWP VALUE). A 100-year GWP value published by the Intergovernmental Panel on Climate Change (IPCC) in either its Second Assessment Report (SAR) (IPCC, 1995); or its Fourth Assessment A-3 Report (AR4) IPCC, 2007). The SAR GWP values are found in column "SAR (100-yr)" of Table 2.14.; the AR4 GWP values are found in column

HIGH-GWP REFRIGERANT. A compound used as a heat transfer fluid or gas that is: (a) a chlorofluorocarbon, a hdrochlorofluorocarbon, a hydrofluorocarbon, a perfluorocarbon, or any compound or blend of compounds, with a GWP value equal to or greater than 150, or (B) any ozone depleting substance as defined in Title 40 of the Code of Federal Regulations, Part 82,

LONG RADIUS ELBOW. Pipe fitting installed between two lengths of pipe or tubing to allow a change of direction, with a radius 1.5

LOW-GWP REFRIGERANT. A compound used as a heat transfer fluid or gas that: (A) has a GWP value less than 150, and (B) is not an ozone depleting substance as defined in Title 40 of the Code of Federal Regulations, Part 82, sec.82.3 (as amended March MERV. Filter minimum efficiency reporting value, based on ASHRAE 52.2-1999.

MAXIMUM INCREMENTAL REACTIVITY (MIR). The maximum change in weight of ozone formed by adding a compound to the "Base REactive Organic Gas (ROG) Mixture" per weight of compound added, expressed to hundreths of a gram (g O³/g ROC). PRODUCT-WEIGHTED MIR (PWMIR). The sum of all weighted-MIR for all ingredients in a product subject to this article. The PWMIR is the total product reactivity expressed to hundredths of a gram of ozone formed per gram of product (excluding container

PSIG. Pounds per square inch, guage.

REACTIVE ORGANIC COMPOUND (ROC). Any compound that has the potential, once emitted, to contribute to ozone formation in

SCHRADER ACCESS VALVES. Access fittings with a valve core installed.

oxygen, nitrogen and other elements. See CCR Title 17, Section 94508(a)

Woodstoves, pellet stoves and fireplaces shall comply with applicable local ordinances.

SHORT RADIUS ELBOW. Pipe fitting installed between two lengths of pipe or tubing to allow a change of direction, with a radius 1.0 SUPERMARKET. For the purposes of Section 5.508.2, a supermarket is any retail food facility with 8,000 square feet or more

conditioned area, and that utilizes either refrigerated display cases, or walk-in coolers or freezers connected to remote compressor VOC. A volatile organic compound broadly defined as a chemical compound based on carbon chains or rings with vapor pressures greater than 0.1 millimeters of mercury at room temperature. These compounds typically contain hydrogen and may contain

Note: Where specific regulations are cited from different agencies such as SCAQMD, ARB, etc., the VOC definition included in that specific regulation is the one that prevails for the specific measure in question. 5.503.1 FIREPLACES. Install only a direct-vent sealed-combustion gas or sealed wood-burning fireplace, or a sealed woodstove

or pellet stove, and refer to residential requirements in the California Energy Code, Title 24, Part 6, Subchapter 7, Section 150.

5.503.1.1 Woodstoves. Woodstoves and pellet stoves shall comply with U.S. EPA New Source Performance Standards (NSPS) emission limits as applicable, and shall have a permanent label indicating they are certified to meet the

SECTION 5.504 POLLUTANT CONTROL 5.504.1 TEMPORARY VENTILATION. The permanent HVAC system shall only be used during construction if necessary to condition the building or areas of addition or alteration within the required temperature range for material and equipment installation. If the HVAC system is used during construction, use return air filters with a Minimum Efficiency Reporting Value 30% based on ASHRAE 52.1-1992 Replace (MERV) of 8, based on ASHRAE 52.2-1999, or an average efficiency of occupied during alteration, at the conclusion of construction. all filters immediately prior to occupancy, or, if the building is

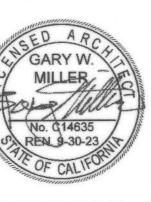
5.504.3 Covering of duct openings and protection of mechanical equipment during construction. At the time of rough 🗵 🖂 CONTRACTOR installation and during storage on the construction site until final startup of the heating, cooling and ventilation equipment, all duct and other related air distribution component openings shall be covered with tape, plastic, sheetmetal or other methods acceptable to the enforcing agency to reduce the amount of dust, water and debris which may enter the system.

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2019 CALIFORNIA GREEN BUILDING STANDARDS CODE

TABLE 5.504.4.3 - VOC CONTENT LIMITS FOR

NONRESIDENTIAL MANDATORY MEASURES, SHEET 1 (January 2020, Includes August 2019 Supplement)

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

aerosol products as specified in subsection 2, below.

5.504.4.1 Adhesives, sealants and caulks. Adhesives, sealants, and caulks used on the project shall meet the requirements of the following standards: 1. 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,

toxic compounds (chloroform, ethylene dichloride, methylene chloride, perchloroethylene and trichloroethylene), except for

2. 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.

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

TABLE 5.504.4.1 - ADHESIVE V	OC LIMITA	
Less Water and Less Exempt Compoun Liter	nds in Grams per	
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	550	
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 FDAMS	50	
POROUS MATERIAL (EXCEPT WOOD)	50	
VOOD	30	
FIBERGLASS	80	

IF AN ADHESIVE IS USED TO BOND DISSIMILAR SUBSTRATES

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/DRDB/SC/CURHTML/R1168.PDF

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TABLE 5.504.4.2 - SEALANT	VOC LIMIT
Less Water and Less Exempt Com Liter	pounds in Grams per
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

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.

COATING CATEGORY	CURRENT VOC LIMIT	
FLAT COATINGS	50	
NONFLAT COATINGS	100	
NONFLAT HIGH GLOSS COATINGS	150	
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:	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	1
ROOF COATINGS	50	
RUST PREVENTATIVE COATINGS	250	
SHELLACS:		
CLEAR	730	1
DPAQUE	550	
SPECIALTY PRIMERS, SEALERS & UNDERCOATERS	100	
STAINS	250	1
STONE CONSOLIDANTS	450	1
SWIMMING POOL COATINGS	340	1
TRAFFIC MARKING COATINGS	100	1
TUB & TILE REFINISH COATINGS	420	1
WATERPROOFING MEMBRANES	250	1
WOOD COATINGS	275	1

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

3. VALUES IN THIS TABLE ARE DERIVED FROM THOSE SPECIFIED BY THE CALIFORNIA AIR RESDURCES 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 2. Field verification of on-site product containers

350

340

5.504.4.4 Carpet Systems. All carpet installed in the building interior shall meet at least one of the testing and

 Carpet and Rug Institute's Green Label Plus Program. Compliant with the VOC-emission limits and testing requirements specified in 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 1.1, February 2010 (also known as CDPH Standard Method V1.1 or Specification 01350).

NSF/ANSI 140 at the Gold level or higher; Scientific Certifications Systems Sustainable Choice; or

5. Compliant with the Collaborative for High Performance Schools California (2014 CA-CHPS) Criteria listed in the CHPS High Performance Product Database. 5.504.4.4.1 Carpet cushion. All carpet cushion installed in the building interior shall meet the

requirements of the Carpet and Rug Institute Green Label program. 5.504.4.4.2 Carpet adhesive. All carpet adhesive shall meet the requirements of Table 5.504.4.1.

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 sed.). Those materials not exempted under the ATCM must meet the specified emission limits, as shown in

5.504.4.5 Composite wood products. Hardwood plywood, particleboard and medium density fiberboard

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.

3. Product labeled and invoiced as meeting the Composite Wood Products regulation (see CCR, Title 17, Section 93120, et seq.).

4. 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

5. Other methods acceptable to the enforcing agency.

TABLE 5.504.4.5 - FORMALDEHYDE LIMITS: MAXIMUM FORMALDEHYDE EMISSIONS IN PARTS PER MILLION **CURRENT LIMIT** HARDWOOD PLYWOOD VENEER CORE HARDWOOD PLYWOOD COMPOSITE CORE 0.05 PARTICLE BOARD 0.09 MEDIUM DENSITY FIBERBOARD 0.11 THIN MEDIUM DENSITY FIBERBOARDS 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).

5.504.4.6 Resilient flooring systems. For 80 percent of floor area receiving resilient flooring, installed resilient flooring shall meet at least one of the following:

1. Certified under the Resilient Floor Covering Institute (RFCI) FloorScore program; 2. Compliant with the VOC-emission limits and testing requirements specified in the California Department of Public Health's 2010 Standard Method for the Testing and Evaluation Chambers. Version 1.1. February 2010: Compliant with the Collaborative for High Performance Schools California (2014 CA-CHPS) Criteria

and listed in the CHPS High Performance Product Database; or 4. Products certified under UL GREENGUARD Gold (formerly the Greenguard Children's & Schools

5.504.4.6.1 Verification of compliance. Documentation shall be provided verifying that resilient flooring 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

CONTRACTOR 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.

CINITRACTOR 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).

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:

1. Within the 65 CNEL noise contour of an airport.

fixed-guideway source as determined by the Noise Element of the General Plan.

Len or CNEL for military airports shall be determined by the facility Air Installation Compatible 2. Lin 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 Ldn noise contour of a freeway or expressway, railroad, industrial source or

5.507.4.1.1. Noise exposure where noise contours are not readily available. Buildings exposed to a noise level of 65 dB Lea - 1-hr during any hour of operation shall have building, addition or alteration exterior wall 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

Note: Examples of assemblies and their various STC ratings may be found at the California Office of Noise Control:

www.toolbase.org/PDF/CaseStudies/stc_icc_ratings.pdf.

and public places shall have an STC of at least 40.

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

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

☑ ☐ ENGINEER 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

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

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-fouth-inch OD tubing shall be securely clamped to a rigid base to

1/4 inch, flared tubing connections and short radius elbows shall not be used in refrigerant systems except as noted below.

5.508.2.1.3 Flared tubing connections. Double-flared tubing connections may be used for pressure

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 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

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

5.508.2.2.2.1 Chain tethers. Chain tethers to fit ovr 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

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

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

5.508.2.4 Refrigerant receivers. Refrigerant receivers with capacities greater than 200 pounds shall be fitted with a device tha 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

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 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.

5.508.2.6.3 Third vacuum. Pull a third vacuum down to a minimum of 300 microns, and hold for 24 hours

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

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 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 publisher. 2. Certification by a statewide energy consulting or verification organization, such as HERS raters, building

performance contractors, and home energy auditors. 3. Successful completion of a third party apprentice training program in the appropriate trade.

4. Other programs acceptable to the enforcing agency.

1. Special inspectors shall be independent entities with no financial interest in the materials or the project they are inspecting for compliance with this code. 2. HERS raters are special inspectors certified by the California Energy Commission (CEC) to rate homes in California according to the Home Energy Rating System (HERS).

[BSC-CG] 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, the special inspector shall have a certification from a recognized state, national or international association, as determined by the local agency. The area of certification shall be closely related to the primary job function, as determined by the local agency.

Note: Special inspectors shall be independent entities with no financial interest in the materials or the project they are inspecting for compliance with this code.

703 VERIFICATIONS

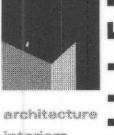
703.1 DOCUMENTATION. Documentation used to show compliance with this code shall include but is not limited to, construction documents, plans, specifications, builder or installer certification, inspection reports, or other methods acceptable to the enforcing agency which demonstrate substantial conformance. When specific documentation or special inspection is necessary to verify compliance, that method of compliance will be specified in the appropriate section or identified applicable

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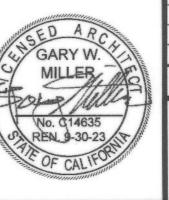
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WOOD PRESERVATIVES

ZINC-RICH PRIMERS

product requirements



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26_SHEETS

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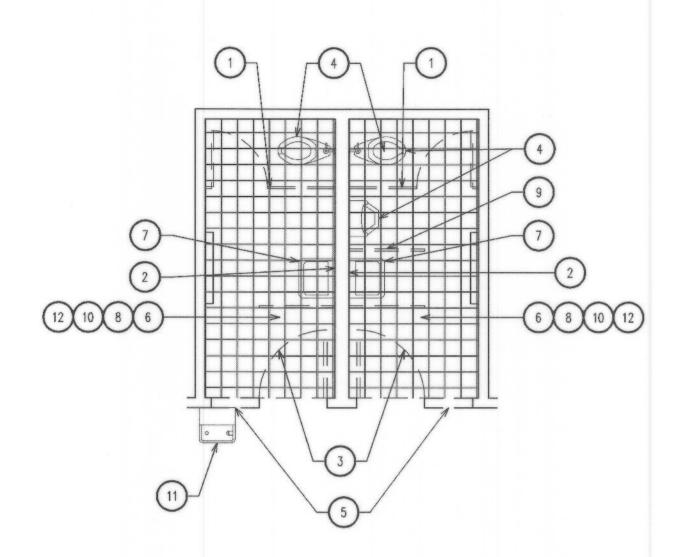
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W.O. NO.



DEMOLITION FLOOR PLAN

GENERAL NOTES:

- 1. PROTECT ALL AREAS FROM DAMAGE WHICH MAY OCCUR DURING CONSTRUCTION. ANY DAMAGE TO NEW AND EXISTING CONSTRUCTION, STRUCTURE OR EQUIPMENT SHALL BE REPAIRED OR REPLACED.
- 2. ALL EXISTING AREAS TO REMAIN THAT ARE DAMAGED BY DEMOLITION OR NEW CONSTRUCTION WORK SHALL BE PATCHED TO MATCH EXISTING ADJACENT AREA IN MATERIAL, FINISH AND
- 3. EXCESS DOORS, HARDWARE, LIGHTING FIXTURES, ELECTRICAL FITTINGS, CARPETS AND OTHER SALVAGEABLE MATERIAL TO BE STORED OR DISPOSED OF AS DIRECTED BY THE BUILDING
- 4. ANY PROJECTING OR SURFACE MOUNTED ITEMS BEING ABANDONED SHALL BE REMOVED, CAPPED AND CONCEALED BEHIND FINISHED SURFACES UNLESS OTHERWISE NOTED.
- 5. IN ALL AREAS WHERE DEMOLITION CAUSES UNEVENNESS OR VOIDS IN THE FLOOR, PATCH AND LEVEL THE FLOOR WITH THE EXISTING SLAB AND/OR ADJACENT SURFACE PRIOR TO INSTALLATION OF FINISH FLOOR.
- 6. BRACE AND SUPPORT EXISTING WORK PRIOR TO AND DURING DEMOLITION AND NEW CONSTRUCTION UNTIL IT IS SAFE TO REMOVE SUCH BRACING AND SUPPORT.
- 7. REMOVE DAMAGED PLASTER AND DRYWALL BEADS AND BEADS AT EXISTING CORNERS WHERE NEW PARTITIONS ALIGN WITH EXISTING FINISH.
- 8. UPON COMPLETION OF THE DEMOLITION WORK, ENSURE ALL AREAS ARE LEFT IN BROOM CLEAN CONDITION.

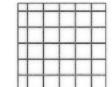
- REMOVE TOILET PARTITION
- REMOVE MIRROR REMOVE DOOR, DOOR FRAME AND HARDWARE
- REMOVE PLUMBING FIXTURE REMOVE PORTION OF WALL TO ACCOMMODATE NEW DOOR
- REMOVE TILE FLOORING AND BASE
- REMOVE SINK AND CAP WATER AND WASTE LINES 8. REMOVE ALL RESTROOM ACCESSORIES AND GRAB BARS
- REMOVE URINAL PARTITION
- 10. REMOVE ALL WALL TILE AND BACKER BOARD
- 11. REMOVE DRINKING FOUNTAIN AND CAP WATER AND WASTE LINE
- 12. SAWCUT AND REMOVE CONCRETE SLAB AS NECESSARY TO ACCOMMODATE INSTALLATION OF NEW WASTE LINE CONFIGURATION. REFER TO PLUMBING PLANS.

LEGEND:

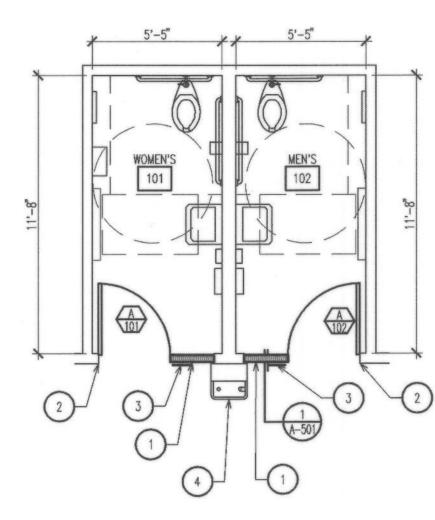
EXISTING WALL TO REMAIN

□ □ □ WALL TO BE REMOVED

REMOVE DOOR, FRAME AND HARDWARE



REMOVE CERAMIC TILE AND BASE. REMOVE ALL GROUT AND MASTIC RESIDUE AND CLEAN FLOOR SURFACE FOR INSTALLATION OF FLOORING.



DEMOLITION FLOOR PLAN SCALE: 1/4" = 1'-0"

GENERAL NOTES:

SEE DETAIL 10/A-501 FOR TYPICAL ACCESSORY MOUNTING BLOCKING.

VERIFY EXISTING CONSTRUCTION WITHIN SCOPE OF WORK TO ENSURE CONFORMANCE WITH NOTED RATINGS AND LOCAL CODES. RETROFIT NONCONFORMING CONSTRUCTION AS REQUIRED.

3. ALL NEW WORK SHALL CONFORM TO BUILDING STANDARD, UNLESS NOTED OTHERWISE.

PREPARE ALL SURFACES AS REQUIRED TO RECEIVE NEW FINISH. 5. FINISH: PREPARE SUB-FLOOR AND LEAVE IN BROOM CLEAN CONDITION IN ORDER TO RECEIVE CARPET OR OTHER FLOORING. FLOOR

SHALL BE LEVEL AND FREE OF DIPS, DIMPLES AND JOINTS THAT WOULD SHOW THROUGH FINISHED INSTALLATION. REFER TO SHEET A-501 FOR TYPICAL FRAMING DETAILS.

WALL INFILL, FINISH NEW SURFACE TO MATCH ADJACENT SURFACE.

PATCH AND REPAIR WALL AFTER REMOVAL OF DOOR FRAME. FINISH NEW SURFACE TO MATCH ADJACENT SURFACE.

3. RESTROOM SIGNAGE. SEE DETAIL 5/G-002

4. DRINKING FOUNTAIN/BOTTLE FILLER WITH METAL RAILING RETURNS. SEE DETAIL 4/G-002

LEGEND:

EXISTING WALL TO REMAIN

NEW METAL STUD WALL

WALL SCHEDULE:

W-1 3 5/8" METAL STUDS AT 16" O.C. W/ FIBERGLASS BATT SOUND INSULATION

(TYPICAL INTERIOR WALL UNLESS NOTÉD OTHERWISE)
5/8" TYPE "X" GYPSUM BOARD EACH SIDE. SEE DETAILS 1/A-501 FOR TYPICAL PARTITION SECTION

INTERIOR NON-BEARING STEEL STUD WALL SCHEDULE

	CTUD	CIZE		STUD :	SPACING	TOP AND BOTTOM TRAC	
STUD MEMBER	2100	SIZE	GAUGE	12°	16"		
MEMBER	DEPTH	WIDTH		ALLOWAB	LE HEIGHT	MEMBER	GAUGE
362S162-33	3 5/8"	1 5/8"	20	15'-0"	12'-6"	362T162-43	18
362S162-43	3 5/8"	1 5/8"	18	18'-2"	16'-5"	362T200-54	16
362S162-54	3 5/8"	1 5/8"	16	19'-5"	17'-7"	362T200-54	16
362S162-68	3 5/8"	1 5/8"	14	20'-9"	18'-10"	362T200-68	14
600S162-33	6"	1 5/8"	20	16'-0"	14'-6"	600T200-43	18
600S162-43	6"	1 5/8"	18	28'-4"	25'-10"	600T200-54	16
600S162-54	6"	1 5/8"	16	30'-4"	27'-8"	600T200-54	. 16
600S162-68	6"	1 5/8"	14	32'-8"	24'-8"	600T200-68	14

NOTE: WALL MUST BE FULLY SHEATHED (GYPSUM BOARD) BOTH SIDES OR BRIDGING IS REQUIRED. STUD DESIGN CONSIDERES 5psf INTERIOR WIND LOAD. ICC-ES REPORT ESR-3064 OR EQUAL.

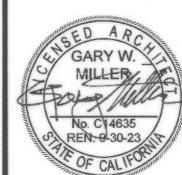
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CITY OF SAN BERNARDINO CITY ENGINEER: ALEX QISHTA
REGISTERED CIVIL ENGINEER NO. 66702

CHECKED BY:

DEPARTMENT OF PUBLIC WORKS **DEMOLITION PLAN AND FLOOR PLAN**

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A-101 SHEET _7_ OF

26_SHEETS W.O. NO.

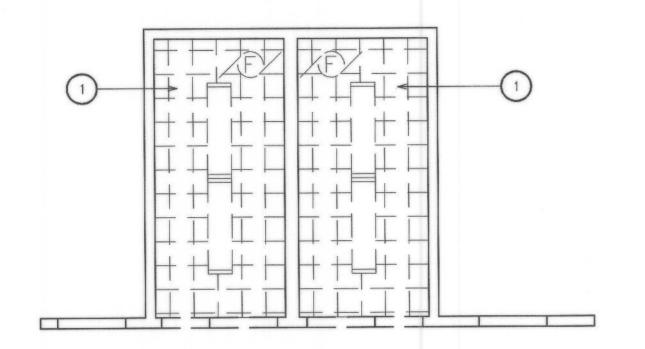
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- 1. PROTECT ALL AREAS FROM DAMAGE WHICH MAY OCCUR DURING CONSTRUCTION. ANY DAMAGE TO NEW AND EXISTING CONSTRUCTION, STRUCTURE OR EQUIPMENT SHALL BE REPAIRED OR REPLACED.
- 2. ALL EXISTING AREAS TO REMAIN THAT ARE DAMAGED BY DEMOLITION OR NEW CONSTRUCTION WORK SHALL BE PATCHED TO MATCH EXISTING ADJACENT AREA IN MATERIAL, FINISH AND
- 3. EXCESS DOORS, HARDWARE, LIGHTING FIXTURES, ELECTRICAL FITTINGS, CARPETS AND OTHER SALVAGEABLE MATERIAL TO BE STORED OR DISPOSED OF AS DIRECTED BY THE BUILDING
- 4. ANY PROJECTING OR SURFACE MOUNTED ITEMS BEING ABANDONED SHALL BE REMOVED, CAPPED AND CONCEALED BEHIND FINISHED SURFACES UNLESS OTHERWISE NOTED.
- 5. IN ALL AREAS WHERE DEMOLITION CAUSES UNEVENNESS OR VOIDS IN THE FLOOR, PATCH AND LEVEL THE FLOOR WITH THE EXISTING SLAB AND/OR ADJACENT SURFACE PRIOR TO INSTALLATION OF FINISH FLOOR.
- 6. REMOVE DAMAGED PLASTER AND DRYWALL BEADS AND BEADS AT EXISTING CORNERS WHERE NEW PARTITIONS ALIGN WITH EXISTING FINISH.
- 7. UPON COMPLETION OF THE DEMOLITION WORK, ENSURE ALL AREAS ARE LEFT IN BROOM CLEAN CONDITION.

KEY NOTES: (X

1. REMOVE GLUED ON CEILING TILE AND ALL RESIDUAL MASTIC FROM CEILING SUBSTRATE

LEGEND:

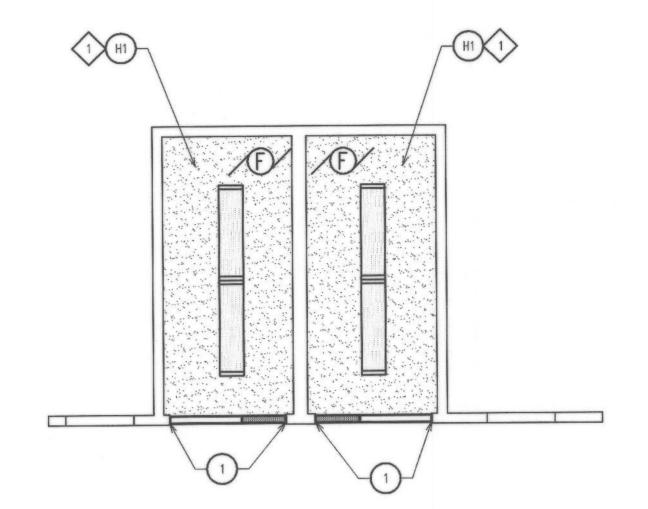
++ | ++ | REMOVE CEILING TILES

REMOVE 1x4 FIXTURE

REMOVE EXHAUST FAN

REFLECTED CEILING PLAN

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



GENERAL NOTES:

- 1. VERIFY EXISTING CONSTRUCTION WITHIN SCOPE OF WORK TO ENSURE CONFORMANCE WITH NOTED RATINGS AND LOCAL CODES. RETROFIT NONCONFORMING CONSTRUCTION AS REQUIRED.
- 2. ALL NEW WORK SHALL CONFORM TO BUILDING STANDARD, UNLESS NOTED OTHERWISE.
- 3. PREPARE ALL SURFACES AS REQUIRED TO RECEIVE NEW FINISH.

KEY NOTES: X

PATCH AND REPAIR CEILING AFTER REMOVAL OF DOOR AND FRAMING AND FINISH TO MATCH ADJACENT SURFACE

LEGEND:

GYPSUM BOARD - PAINTED

SURFACE MOUNTED FIXTURE

EXHAUST FAN

CEILING FINISH LEGEND:

GYPSUM BOARD- TEXTURED AND PAINTED

CEILING HEIGHT LEGEND:

H1 8'-0" (TYPICAL UNLESS NOTED OTHERWISE)

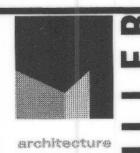
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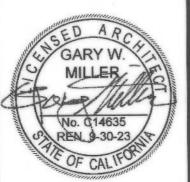
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DEMOLITION REFLECTED CEILING PLAN

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



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CITY OF SAN BERNARDINO DEPARTMENT OF PUBLIC WORKS CITY ENGINEER: ALEX QISHTA
REGISTERED CIVIL ENGINEER NO. 66702 DRAWN BY:

CHECKED BY:

RECOMMENDED BY:

DEMOLITION CEILING PLAN AND REFLECTED CEILING PLAN

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A-102

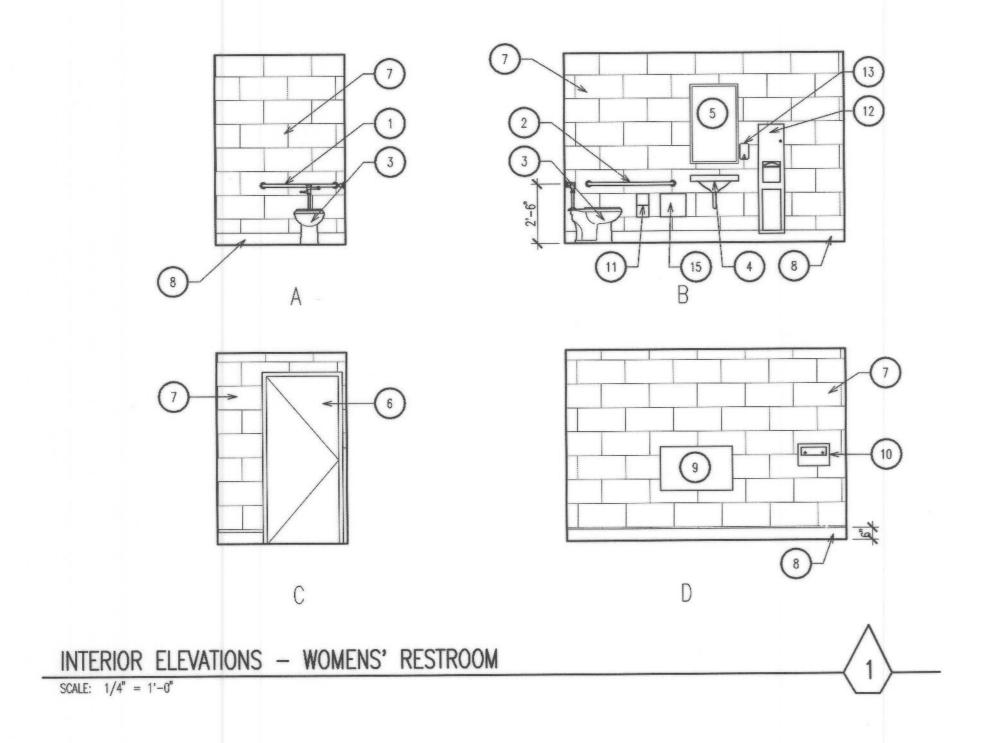
26_SHEETS W.O. NO.

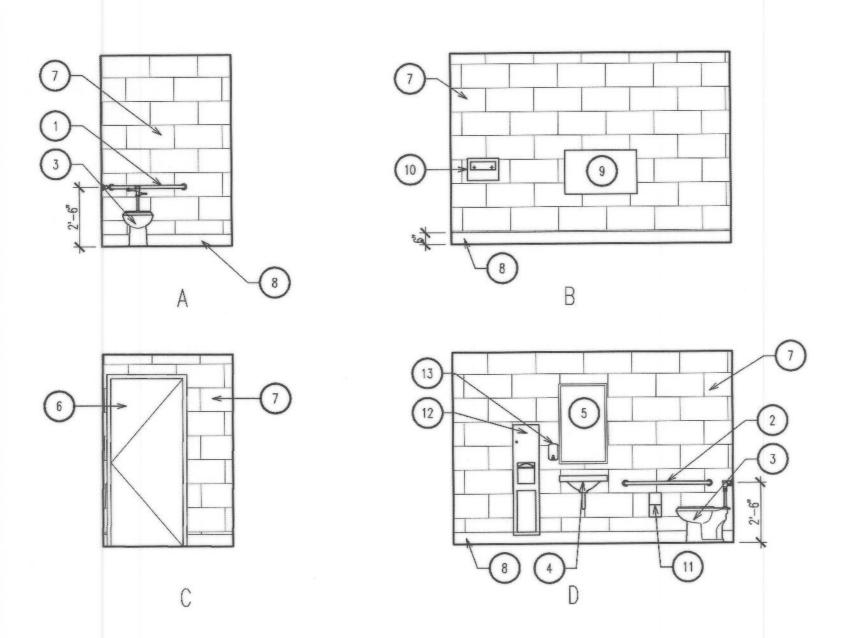
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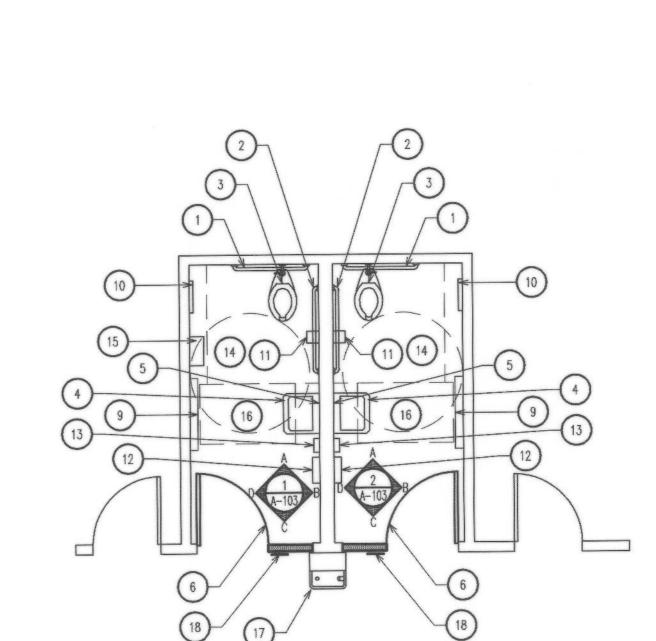
13476

SHEET 8 OF

FOR CITY USE ONLY: FILE NO. C.I.P. NO.







KEY NOTES: 🗴

1. 36" GRAB BAR

2. 42" GRAB BAR

MIRROR

6. DOOR

ADA ACCESSIBLE TOILET

4. ADA ACCESSIBLE SINK

7. 12x24 CERAMIC TILE.

8. CERAMIC TILE BASE.

16. 30x48 CLEAR SPACE

18. SIGNAGE. SEE DETAIL 4/G-002

9. BABY CHANGING STATION. SEE DETAIL 6/G-002

13. SURFACE MOUNTED SOAP DISPENSER

14. 60" DIAMETER CLEAR TURNING AREA

15. SURFACE MOUNTED SANITARY NAPKIN DISPOSAL

10. SURFACE MOUNTED TOILET SEAT COVER DISPENSER

11. SURFACE MOUNTED DOUBLE ROLL TOILET PAPER DISPENSER

12. SURFACE MOUNTED PAPER TOWEL DISPENSER AND WASTE RECEPTACLE

17. DRINKING FOUNTAIN/BOTTLE FILLER WITH METAL RAIL RETURNS. SEE DETAIL 4/G-002

1. REFER TO SPECIFICATIONS FOR COLORS AND MATERIALS

2. REFER TO SHEET A-601 FOR FLOOR, BASE, WALL FINISHES

 REFER TO DETAIL 2 SHEET G-003 FOR TYPICAL DIMENSIONS, NOTES AND MOUNTING HEIGHTS FOR ALL RESTROOMS.

4. COORDINATE BACKING FOR FUTURE WALL MOUNTED EQUIPMENT WITH OWNER.

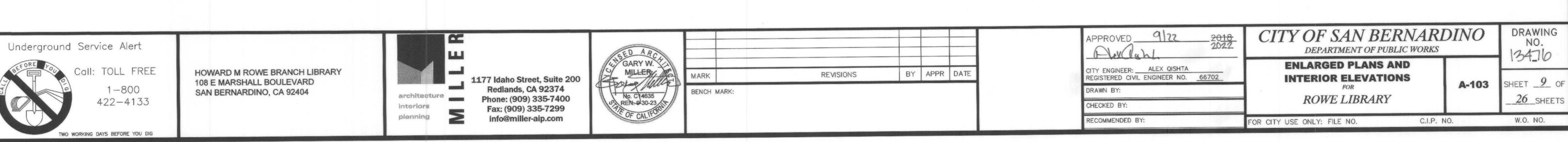
5. PROVIDE BACKING FOR ALL WALL MOUNTED EQUIPMENT - SEE DETAIL 10/A-501

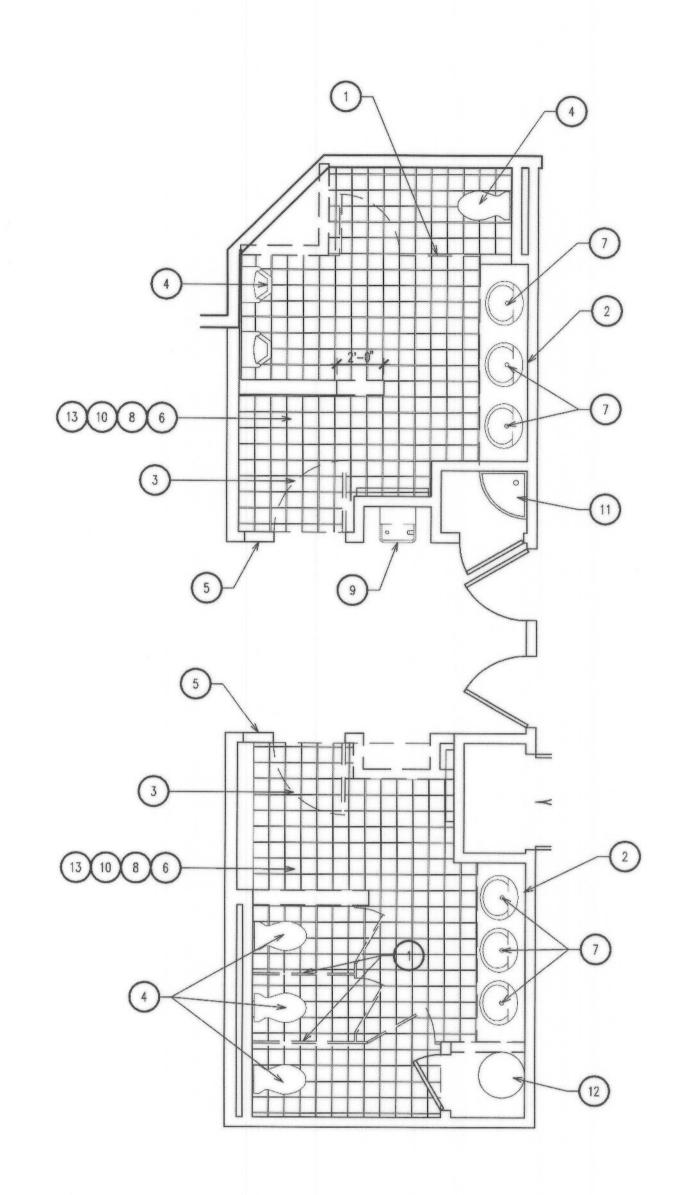
ENLARGED PLAN - MEN'S RESTROOM, WOMEN'S RESTROOM

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

INTERIOR ELEVATIONS - MENS' RESTROOM

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





DEMOLITION FLOOR PLAN

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

GENERAL NOTES:

- 1. PROTECT ALL AREAS FROM DAMAGE WHICH MAY OCCUR DURING CONSTRUCTION. ANY DAMAGE TO NEW AND EXISTING CONSTRUCTION, STRUCTURE OR EQUIPMENT SHALL BE REPAIRED OR REPLACED.
- 2. ALL EXISTING AREAS TO REMAIN THAT ARE DAMAGED BY DEMOLITION OR NEW CONSTRUCTION WORK SHALL BE PATCHED TO MATCH EXISTING ADJACENT AREA IN MATERIAL, FINISH AND
- 3. EXCESS DOORS, HARDWARE, LIGHTING FIXTURES, ELECTRICAL FITTINGS, CARPETS AND OTHER SALVAGEABLE MATERIAL TO BE STORED OR DISPOSED OF AS DIRECTED BY THE BUILDING
- 4. ANY PROJECTING OR SURFACE MOUNTED ITEMS BEING ABANDONED SHALL BE REMOVED, CAPPED AND CONCEALED BEHIND FINISHED SURFACES UNLESS OTHERWISE NOTED.
- 5. IN ALL AREAS WHERE DEMOLITION CAUSES UNEVENNESS OR VOIDS IN THE FLOOR, PATCH AND LEVEL THE FLOOR WITH THE EXISTING SLAB AND/OR ADJACENT SURFACE PRIOR TO INSTALLATION OF FINISH FLOOR.
- 6. BRACE AND SUPPORT EXISTING WORK PRIOR TO AND DURING DEMOLITION AND NEW CONSTRUCTION UNTIL IT IS SAFE TO REMOVE SUCH BRACING AND SUPPORT.
- 7. REMOVE DAMAGED PLASTER AND DRYWALL BEADS AND BEADS AT EXISTING CORNERS WHERE NEW PARTITIONS ALIGN WITH EXISTING FINISH.
- 8. UPON COMPLETION OF THE DEMOLITION WORK, ENSURE ALL AREAS ARE LEFT IN BROOM CLEAN CONDITION.

KEY NOTES: (X

- REMOVE TOILET PARTITION REMOVE MIRROR
- REMOVE DOOR, DOOR FRAME AND HARDWARE
- REMOVE PLUMBING FIXTURE REMOVE WALL TO ACCOMMODATE NEW DOOR
- REMOVE TILE FLOORING AND BASE
- REMOVE SINK AND CAP LINES REMOVE ALL RESTROOM ACCESSORIES AND GRAB BARS
- REMOVE DRINKING FOUNTAIN
- 10. REMOVE ALL WALL TILE AND BACKER BOARD
- 11. (E) MOP SINK 12. (E) WATER HEATER
- 13. SAWCUT AND REMOVE CONCRETE SLAB AS NECESSARY TO ACCOMMODATE INSTALLATION OF

NEW WASTE LINE CONFIGURATION. REFER TO PLUMBING PLANS.

LEGEND:

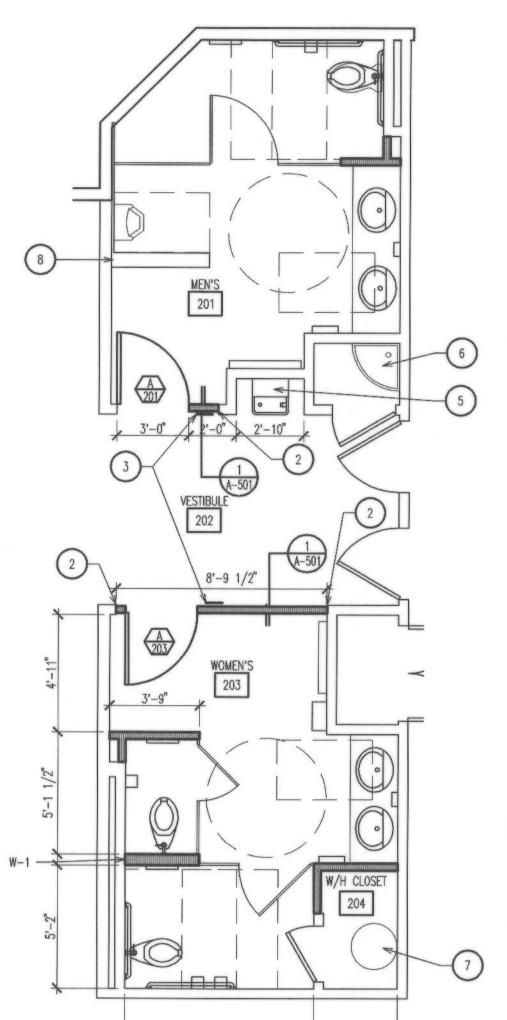
EXISTING WALL TO REMAIN

□ □ WALL TO BE REMOVED

REMOVE DOOR, FRAME AND HARDWARE

REMOVE ALL PLUMBING FIXTURES

REMOVE CERAMIC TILE AND BASE. REMOVE ALL GROUT AND MASTIC RESIDUE AND CLEAN FLOOR SURFACE FOR INSTALLATION OF FLOORING.



7'-10 1/2"

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

GENERAL NOTES:

- SEE DETAIL 10/A-501 FOR TYPICAL ACCESSORY MOUNTING BLOCKING. VERIFY EXISTING CONSTRUCTION WITHIN SCOPE OF WORK TO ENSURE CONFORMANCE WITH NOTED RATINGS AND LOCAL CODES. RETROFIT
- NONCONFORMING CONSTRUCTION AS REQUIRED.
- 3. ALL NEW WORK SHALL CONFORM TO BUILDING STANDARD, UNLESS NOTED OTHERWISE.
- PREPARE ALL SURFACES AS REQUIRED TO RECEIVE NEW FINISH. 5. FINISH: PREPARE SUB-FLOOR AND LEAVE IN BROOM CLEAN CONDITION IN ORDER TO RECEIVE CARPET OR OTHER FLOORING. FLOOR
- SHALL BE LEVEL AND FREE OF DIPS, DIMPLES AND JOINTS THAT WOULD SHOW THROUGH FINISHED INSTALLATION. 6. REFER TO SHEET A-501 FOR TYPICAL FRAMING DETAILS.

KEY NOTES: X

- WALL INFILL. FINISH NEW SURFACE TO MATCH ADJACENT SURFACE.
- PATCH AND REPAIR WALL AFTER REMOVAL OF DOOR FRAME. FINISH NEW SURFACE TO MATCH ADJACENT SURFACE.
- RESTROOM SIGNAGE. SEE DETAIL 5/G-002 PATCH AND REPAIR CARPET TILE WITH OWNER PROVIDED CARPET
- DRINKING FOUNTAIN/BOTTLE FILLER
- 6. (E) MOP SINK 7. (E) WATER HEATER
- 8. (E) WALL TO REMAIN

LEGEND:

EXISTING WALL TO REMAIN

NEW METAL STUD WALL

WALL SCHEDULE:

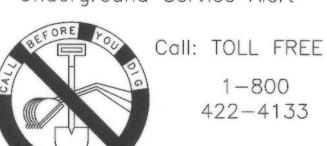
- W-1 6" METAL STUDS AT 16" O.C. W/ FIBERGLASS BATT SOUND INSULATION 5/8" TYPE "X" GYPSUM BOARD EACH SIDE. SEE DETAILS 1/A-501 FOR TYPICAL PARTITION SECTION
- W-2 3 5/8" METAL STUDS AT 16" O.C. W/ FIBERGLASS BATT SOUND INSULATION
- (TYPICAL INTERIOR WALL UNLESS NOTED OTHERWISE)
- 5/8" TYPE "X" GYPSUM BOARD EACH SIDE. SEE DETAILS 1/A-501 FOR TYPICAL PARTITION SECTION

	INTERIO	OR <u>NON</u>	I-BEARIN	G STEEL	STUD WAL	L SCHEDUL	E
	STUD SIZE			STUD SPACING		TOD AND DOTTOM TOLON	
STUD MEMBER	2100	SIZE	GAUGE	12"	16"	TOP AND BO	ITOM TRACK
MCMDEN	DEPTH	WIDTH		ALLOWAB	LE HEIGHT	MEMBER	GAUGE
362S162-33	3 5/8"	1 5/8"	20	15'-0"	12'-6"	362T162-43	18
362S162-43	3 5/8"	1 5/8"	18	18'-2"	16'-5"	362T200-54	16
362S162-54	3 5/8"	1 5/8"	16	19'-5"	17'-7"	362T200-54	16
362\$162-68	3 5/8"	1 5/8"	14	20'-9"	18'-10"	362T200-68	14
600S162-33	6"	1 5/8"	20	16'-0"	14'-6"	600T200-43	18
600S162-43	6"	1 5/8"	18	28'-4"	25'-10"	600T200-54	16
600S162-54	6"	1 5/8"	16	30'-4"	27'-8"	600T200-54	16
600S162-68	6"	1 5/8"	14	32'-8"	24'-8"	600T200-68	14

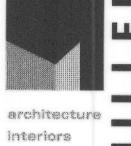
NOTE: WALL MUST BE FULLY SHEATHED (GYPSUM BOARD) BOTH SIDES OR BRIDGING IS REQUIRED. STUD DESIGN CONSIDERES 5psf INTERIOR WIND LOAD. ICC-ES REPORT ESR-3064 OR EQUAL.

Underground Service Alert

TWO WORKING DAYS BEFORE YOU DIG

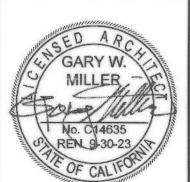


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planning

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ED ARCH					
MILLER -	MARK	REVISIONS	BY	APPR	DATE
No. C14635 REN. 9-30-23	BENCH MARK:				

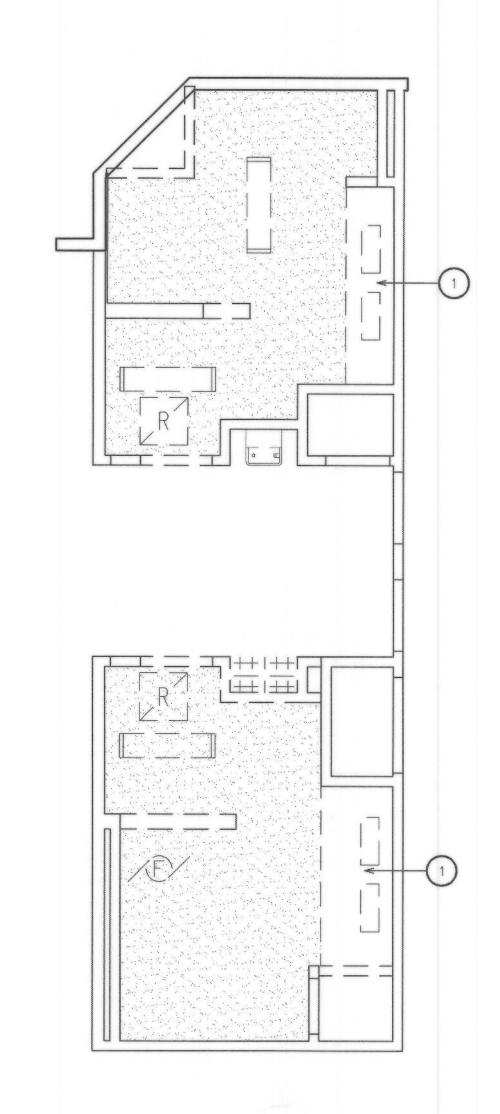
PROVED 9/22 2018 2022	CITY OF SAN BERNAR	DINO	DRAWING NO.
Y ENGINEER:ALEX_QISHTA	DEMOLITION PLAN		15410
GISTERED CIVIL ENGINEER NO. <u>66702</u> AWN BY:	AND FLOOR PLAN	A-201	SHEET <u>10</u> OF
ECKED BY:	VILLASENOR LIBRARY		

C.I.P. NO.

W.O. NO.

FOR CITY USE ONLY: FILE NO.

RECOMMENDED BY:



- 1. PROTECT ALL AREAS FROM DAMAGE WHICH MAY OCCUR DURING CONSTRUCTION. ANY DAMAGE TO NEW AND EXISTING CONSTRUCTION, STRUCTURE OR EQUIPMENT SHALL BE REPAIRED OR REPLACED.
- 2. ALL EXISTING AREAS TO REMAIN THAT ARE DAMAGED BY DEMOLITION OR NEW CONSTRUCTION WORK SHALL BE PATCHED TO MATCH EXISTING ADJACENT AREA IN MATERIAL, FINISH AND
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- 8. UPON COMPLETION OF THE DEMOLITION WORK, ENSURE ALL AREAS ARE LEFT IN BROOM CLEAN CONDITION.

KEY NOTES: (X)

1. REMOVE LIGHTING SOFFIT

LEGEND:

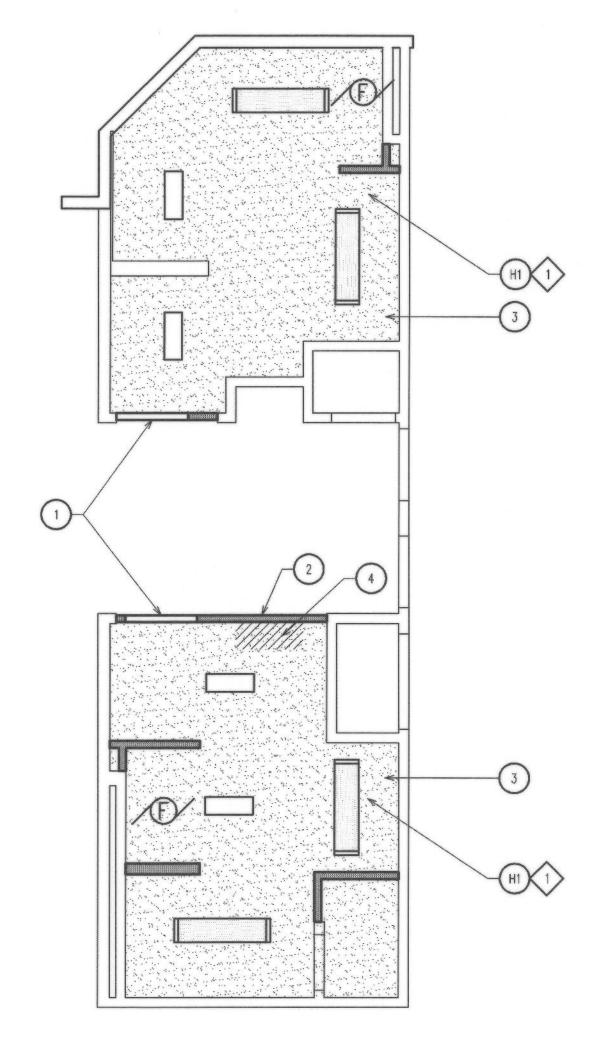
++ ++ ++ Acoustic ceiling tile to be removed

EXISTING GYPSUM BOARD

REMOVE 1x4 FIXTURE

/Ē/ REMOVE EXHAUST FAN

S R MECHANICAL REGISTERS TO BE REMOVED



REFLECTED CEILING PLAN

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



GENERAL NOTES:

- 1. VERIFY EXISTING CONSTRUCTION WITHIN SCOPE OF WORK TO ENSURE CONFORMANCE WITH NOTED RATINGS AND LOCAL CODES. RETROFIT NONCONFORMING CONSTRUCTION AS REQUIRED.
- 2. ALL NEW WORK SHALL CONFORM TO BUILDING STANDARD, UNLESS NOTED OTHERWISE.
- 3. PREPARE ALL SURFACES AS REQUIRED TO RECEIVE NEW FINISH.

KEY NOTES: (X)

- 1. PATCH AND REPAIR WALL/CEILING ABOVE THE DOOR AFTER RELOCATION OF CAMERA/EXIT SIGN
- 2. PATCH AND REPAIR ACOUSTIC GRID AS NECESSARY TO ACCOMMODATE NEW VESTIBULE
- 3. PATCH AND REPAIR EXISTING GYPSUM BOARD TO MATCH ADJACENT SURFACE
- 4. PATCH AND REPAIR EXISTING GYPSUM BOARD SURFACE AFTER REMOVAL OF CEILING TILE TO MATCH ADJACENT CEILING SURFACE

LEGEND:

(E) GYPSUM BOARD - PAINTED

GYPSUM BOARD - PAINTED

SURFACE MOUNTED FIXTURE

SURFACE MOUNTED FIXTURE

EXHAUST FAN

S R MECHANICAL REGISTERS

CEILING FINISH LEGEND:

GYPSUM BOARD- TEXTURED AND PAINTED

CEILING HEIGHT LEGEND: H1) 8'-0" (TYPICAL UNLESS NOTED OTHERWISE)

Underground Service Alert

Call: TOLL FREE 1 - 800422-4133

TWO WORKING DAYS BEFORE YOU DIG

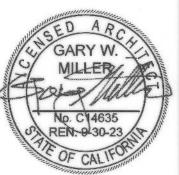
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DEMOLITION CEILING PLAN

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

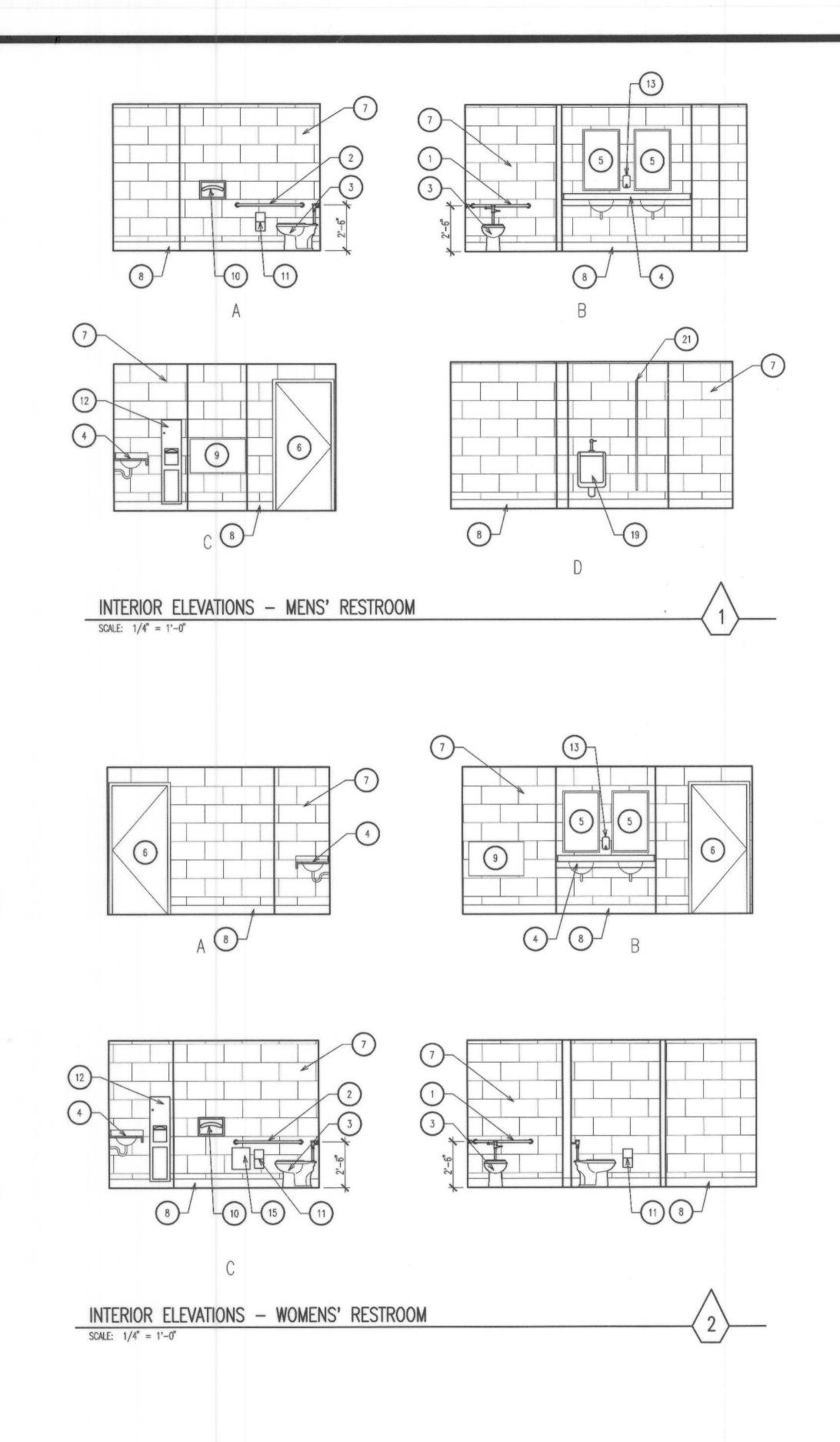


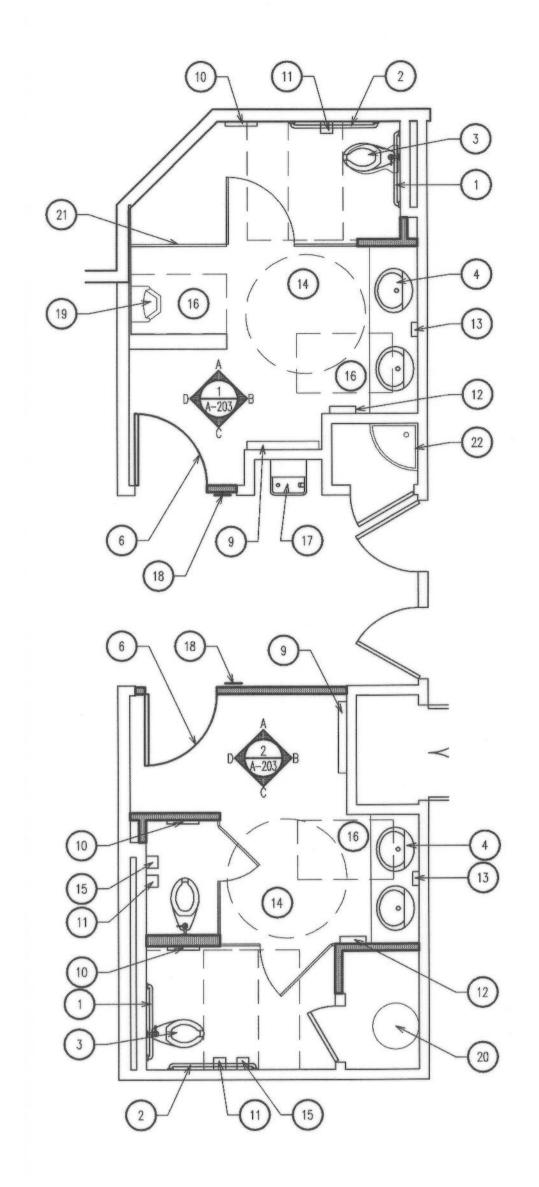
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D A RCA					
ILLER	MARK	REVISIONS	BY	APPR	DATE
C14635 N:9-30-23 F CALIFORNIA	BENCH MARK:				

APPROVED 9/27 2018 2022	CITY OF SAN BERNARI DEPARTMENT OF PUBLIC WORKS	DINO	DRAWING NO.
CITY ENGINEER: ALEX QISHTA REGISTERED CIVIL ENGINEER NO. 66702 DRAWN BY:	DEMOLITION CEILING PLAN AND REFLECTED CEILING PLAN FOR	A-202	SHEET _11 OF
CHECKED BY: RECOMMENDED BY:	FOR CITY USE ONLY: FILE NO. C.I.P.	3	





1. REFER TO SPECIFICATIONS FOR COLORS AND MATERIALS

2. REFER TO SHEET A-601 FOR FLOOR, BASE, WALL FINISHES

REFER TO DETAIL 4 SHEET G-002 FOR DIMENSIONS, NOTES AND MOUNTING HEIGHTS FOR ALL RESTROOMS.

4. COORDINATE BACKING FOR FUTURE WALL MOUNTED EQUIPMENT WITH OWNER.

5. PROVIDE BACKING FOR ALL WALL MOUNTED EQUIPMENT - SEE DETAIL 10/A-501

KEY NOTES: 🛚

1. 36" GRAB BAR

2. 42" GRAB BAR

3. ADA ACCESSIBLE TOILET

4. COUNTER TOP AND SINK. SEE DETAIL 6/A-501

MIRROR

6. DOOR

7. 12x24 CERAMIC TILE.

8. CERAMIC TILE BASE.

9. BABY CHANGING STATION. SEE DETAIL 6/G-002

10. SURFACE MOUNTED TOILET SEAT COVER DISPENSER

11. SURFACE MOUNTED DOUBLE ROLL TOILET PAPER DISPENSER

12. SURFACE MOUNTED PAPER TOWEL DISPENSER AND WASTE RECEPTACLE

13. SURFACE MOUNTED SOAP DISPENSER

14. 60" DIAMETER CLEAR TURNING AREA

15. SURFACE MOUNTED SANITARY NAPKIN DISPOSAL

16. 30x48 CLEAR SPACE

17. DRINKING FOUNTAIN/BOTTLE FILLER

18. SIGNAGE. SEE DETAIL 4/G-002

19. URINAL

20. (E) WATER HEATER. SEE PLUMBING PLANS FOR ADDITIONAL INFORMATION

21. TOILET PARTITION

22. (E) MOP SINK

ENLARGED PLAN - MEN'S RESTROOM, WOMEN'S RESTROOM

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

Underground Service Alert

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TWO WORKING DAYS BEFORE YOU DIG

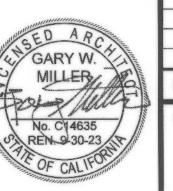
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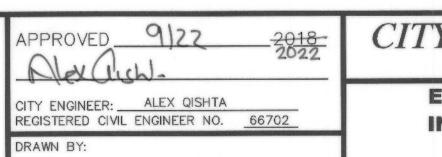


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CITY OF SAN BERNARDINO DEPARTMENT OF PUBLIC WORKS **ENLARGED PLANS AND**

INTERIOR ELEVATIONS VILLASENOR LIBRARY

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SHEET _12 OF A-203

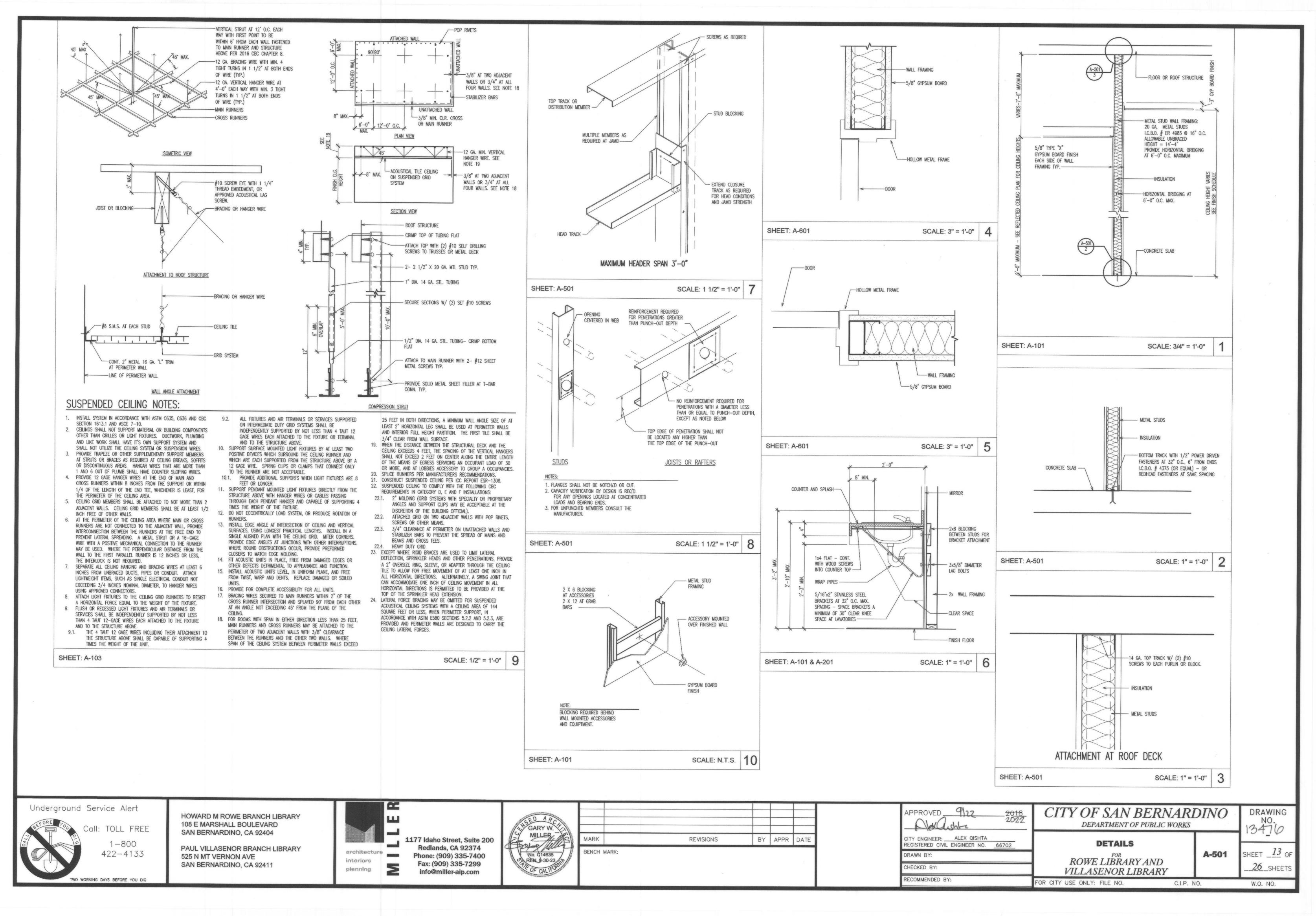
26_SHEETS W.O. NO.

DRAWING

NO.

13476

C.I.P. NO.



FLOOR MATERIAL:

12x12 CERAMIC TILE **EXISTING**

BASE MATERIAL:

6" COVED CERAMIC TILE **EXISTING**

WALL MATERIAL:

GYPSUM BOARD - TEXTURED AND PAINTED 12x24 CERAMIC TILE OVER NEW WATER RESISTANT GYPSUM BOARD

B 102 A - S S1 WD P 4/A-501 5/A-501 5/A-501

(E) GYPSUM BOARD - PAINTED

CEILING:

GYPSUM BOARD - TEXTURED AND PAINTED (E) GYPSUM BOARD - PAINTED

REMARKS:

SEE INTERIOR ELEVATIONS SHEET A-103 FOR WALL TILE LOCATION

GENERAL NOTES:

1. INTERIOR FINISH MATERIALS SHALL COMPLY WITH 2010 CBC CHAPTER 12.

2. WATER RESISTANT GYPSUM BOARD COMPLYING WITH 2010 CBC

SECTION 2509 TO BE USED IN TOILET ROOMS. 3. GYPSUM BOARD TO BE 5/8" TYPE "X" UNLESS NOTED OTHERWISE.

					DOC	R				FRAME					
						7			DETA	AILS			SIAL		
MARK O	ROOM	DOOR TYPE	P= PAIR	S =SINGLE	SIZE	DOOR MATERIAL	DOOR FINISH	HEAD	JAMB 1	JAMB 2	SILL	FRAME FINISH	FRAME MATERIAL	FIRE RATING (MINUTS)	REMARKS

DOOR: MATERIAL: WD SC WOOD AL/GL ALUMINUM/GLASS

V VINYL M METAL E EXISTING

FINISH:

SCF STAIN AND CLEAR FINISH PAINTED FACTORY APPLIED FINISH EXISTING FINISH

S1 3'-0" x 7'-0"x1 3/4"

REMARKS:

R1 CLOSER HANDCAP SIGN DOOR GRILLE METAL KICK PLATES R5 PANIC DEVICE

R6 SMOKE GASKETS

FRAME:

MATERIAL: AL ALUMINUM HM HOLLOW METAL METAL

EXISTING PFS TIMELY PRE-FINISHED METAL TO MATCH EXISTING

PAINTED FACTORY APPLIED FINISH E EXISTING FINISH

1. EXIT DOORS SHALL BE OPERABLE FROM THE INSIDE WITHOUT THE USE OF A KEY OR SPECIAL KNOWLEDGE OR EFFORT. 2. GLASS AND GLAZING SHALL COMPLY WITH CBC CHAPTER 24.

P M

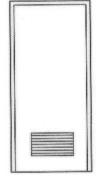
R1,R2,R3,R4

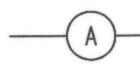
3. MAXIMUM EFFORT TO OPERATE DOORS: EXTERIOR - 5.0 LBS INTERIOR - 5.0 LBS

FIRE DOORS - 15.0 LBS 4. VERIFY ALL DOOR FRAME THROAT SIZES WITH FINISHED WALL THICKNESS PRIOR TO ORDERING FRAMES.

5. FIRE RATED DOORS AND FRAMES SHALL HAVE AN APPROVED LABEL. 6. ALL HAND ACTIVATED DOOR OPENING HARDWARE AT LATCHING OR LOCKING

DOORS ON THE ACCESSIBLE PATH OF TRAVEL SHALL BE OPERABLE WITH SINGLE EFFORT LEVER TYPE HARDWARE, PANIC BARS, PUSH/PULL ACTIVATING BARS OR OTHER HARDWARE DESIGNED TO PROVIDE PASSAGE WITHOUT REQUIRING THE ABILITY TO GRASP THE HARDWARE.





DOOR TYPES

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

VILLASENOR LIBRARY

	FINISH SC	HEI	DU	LE										
ROOM NUMBER	ROOM	FLOOR MATERIAL	BASE MATERIAL	WALLS	D ÅB B	С	D	WAINS	COT DEB	С	D	CEILING MATERIAL	CELING HEIGHT	REMARKS
201	MEN'S	F1	B1	W1	W1	W1	W1					C2	8,-0,	R1
202	VESTIBULE	F2	B2	W3	W3	W3	W3					C1	8'-0"	
203	WOMEN'S	F1	B1	W1	W1	W1	W1					C2	8'-0"	R1
204	W/H CLOSET	F2	B2	W3	W3	W3	W3					C2	8,-0,	

FLOOR MATERIAL:

12x12 CERAMIC TILE **EXISTING**

BASE MATERIAL:

WALL MATERIAL:

B1 6" COVED CERAMIC TILE

EXISTING

GYPSUM BOARD

C1 (E) ACOUSTIC CEILING TILE C2 (E) GYPSUM BOARD - PAINTED

CEILING:

R1 SEE INTERIOR ELEVATIONS SHEET A-203 FOR WALL TILE

LOCATION

GENERAL NOTES:

1. INTERIOR FINISH MATERIALS SHALL COMPLY WITH 2010 CBC

CHAPTER 12. 2. WATER RESISTANT GYPSUM BOARD COMPLYING WITH 2010 CBC

SECTION 2509 TO BE USED IN TOILET ROOMS.

3. GYPSUM BOARD TO BE 5/8" TYPE "X" UNLESS NOTED OTHERWISE.

(E) GYPSUM BOARD - PAINTED

GYPSUM BOARD - TEXTURED AND PAINTED

12x24 CERAMIC TILE OVER NEW WATER RESISTANT

	L	\mathcal{O}	U	K	50	JH	EDU	LE							
					DOC	R				FRAME					
						ڀ			DETA	AILS			IAL		
MARK 🔘	ROOM	DOOR TYPE	P= PAIR	S =SINGLE	SIZE	DOOR MATERIAL	DOOR FINISH	HEAD	JAMB 1	JAMB 2	SILL	FRAME FINISH	FRAME MATERIAL	FIRE RATING (MINUTS)	REMARKS
Α	201	A	-	S	S1	WD	SCF	4/A-501	5/A-501	5/A-501		Р	М	-	R1,R2,R4
В	203	A	_	S	S1	WD	SCF	4/A-501	5/A-501	5/A-501		Р	М	_	R1,R2,R4

DOOR:

MATERIAL: WD SC WOOD AL/GL ALUMINUM/GLASS

V VINYL METAL E EXISTING

SCF STAIN AND CLEAR FINISH TO MATCH EXISTING PAINTED

FACTORY APPLIED FINISH E EXISTING FINISH

S1 3'-0" x 7'-0"x1 3/4"

REMARKS: R1 CLOSER

R2 HANDCAP SIGN WEATHERSTRIP METAL KICK PLATES R5 PANIC DEVICE

R6 SMOKE GASKETS

FRAME:

MATERIAL: AL ALUMINUM HM HOLLOW METAL M METAL

EXISTING PFS TIMELY PRE-FINISHED METAL TO MATCH EXISTING

FINISH: PAINTED

FACTORY APPLIED FINISH E EXISTING FINISH

GENERAL NOTES:

1. EXIT DOORS SHALL BE OPERABLE FROM THE INSIDE WITHOUT THE USE OF A KEY OR SPECIAL KNOWLEDGE OR EFFORT. 2. GLASS AND GLAZING SHALL COMPLY WITH CBC CHAPTER 24.

3. MAXIMUM EFFORT TO OPERATE DOORS: EXTERIOR - 5.0 LBS INTERIOR - 5.0 LBS

ABILITY TO GRASP THE HARDWARE.

FIRE DOORS - 15.0 LBS 4. VERIFY ALL DOOR FRAME THROAT SIZES WITH FINISHED WALL THICKNESS PRIOR TO ORDERING FRAMES.

5. FIRE RATED DOORS AND FRAMES SHALL HAVE AN APPROVED LABEL. 6. ALL HAND ACTIVATED DOOR OPENING HARDWARE AT LATCHING OR LOCKING DOORS ON THE ACCESSIBLE PATH OF TRAVEL SHALL BE OPERABLE WITH SINGLE EFFORT LEVER TYPE HARDWARE, PANIC BARS, PUSH/PULL ACTIVATING BARS OR OTHER HARDWARE DESIGNED TO PROVIDE PASSAGE WITHOUT REQUIRING THE

DOOR TYPES

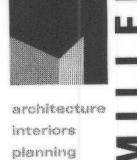
SCALE: 1/4" = 1'-0"

Underground Service Alert

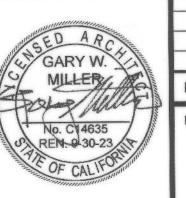


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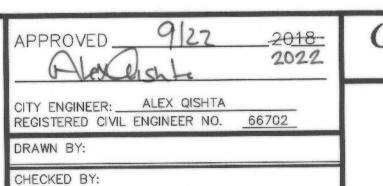
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	DATE	APPR	BY	REVISIONS	MARK
BENCH MARK:					BENCH MARK:



RECOMMENDED BY:

CITY OF SAN BERNARDINO DEPARTMENT OF PUBLIC WORKS

DOOR AND FINISH SCHEDULE

ROWE LIBRARY AND

VILLASENOR LIBRARY

FOR CITY USE ONLY: FILE NO.

A-601

SHEET _14 OF . 26_SHEETS

DRAWING

NO.

C.I.P. NO.

W.O. NO.

GENERAL NOTES **ABBREVIATIONS** POWER LEGEND AND SYMBOLS 1. ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE LATEST CALIFORNIA CODE OF REGULATIONS (CCR), 41. CONTRACTOR TO PROVIDE NEW FIRE ALARM SYSTEM TO CONFORM TO 2013 CFC. ELECTRICAL CONTRACTOR IS MEDIUM VOLTAGE SYMBOL DESCRIPTION NATIONAL ELECTRICAL CODE EDITION, CITY OF LOS ANGELES ELECTRICAL CODE, AND ALL APPLICABLE LOCAL CODES RESPONSIBLE FOR ALL REQUIRED CONDUIT AND BACK BOXES. SYMBOL DESCRIPTION AMPERE FRAME RATING 42. CONTRACTOR TO INCLUDE IN BASE BID FOR ELECTRICAL CONTRACTOR TO CONNECT WHIPS FOR PANEL NORMALLY CLOSED AND REGULATIONS. AFF ABOVE FINISHED FLOOR UTILITY COMPANY PULL SECTION LUGS NEC NATIONAL ELECTRICAL CODE 2. ALL PANELS, SWITCHES, ETC. SHALL HAVE SUFFICIENT GUTTER SPACE AND LUGS IN COMPLIANCE TO UL DUPLEX RECEPTACLE OUTLET, CONVENIENCE. (20 AMPS, 125 VOLTS) MOUNTED +15" \Rightarrow 43. CONTRACTOR TO COORDINATE EXACT LOCATION OF ELECTRICAL, VOICE/DATA OUTLETS, AND TV/AV OUTLETS AMPERE INTERRUPTING CAPACITY REQUIREMENTS TO ACCOMMODATE CONDUCTORS SHOWN. NEMA NATIONAL ELECTRICAL A.F.F. TO BOTTOM OF DEVICE U.O.N. SERVING TENANT'S FURNITURE AND EQUIPMENT WITH TENANT. AFG ABOVE FINISHED GRADE 3. WHERE WIRE SIZES ARE INDICATED ON PLANS, FOR INDIVIDUAL CIRCUITS, THE WIRE SIZE INDICATED SHALL 44. CONTRACTOR TO FIRE TAPE AND CAULK ALL PENETRATTONS OF 1-HOUR RATED WALLS, (IF APPLICABLE) MANUFACTURER'S ASSOCIATION GROUNDING CONNECTION TO MAIN BUILDING GROUND SYSTEM U.O.N. DOUBLE DUPLEX RECEPTACLE OUTLET, CONVENIENCE. (20 AMPS, 125 VOLTS) MOUNTED 45. PROVIDE FIRE PADS AROUND ALL NEW ELECTRICAL OUTLET BOXES AND DATA RECEPTACLES IN NEWFIRE-RATED AMPERE TRIP RATING APPLY TO THE COMPLETE CIRCUIT, UNLESS OTHERWISE NOTED. NEW (N) NEW, TO BE FURNISHED AND +15" A.F.F. TO BOTTOM OF DEVICE U.O.N. GROUNDING CONNECTION AT SWITCHGEAR/DISTRIBUTION BOARD WITH NEUTRAL BONDING. 4. CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF MECHANICAL, PLUMBING AND OTHER EQUIPMENT REQUIRING AMERICAN WIRE GAUGE INSTALLED BY CONTRACTOR 46. FOR EACH UNCONTROLLED OUTLET, PROVIDE A CONTROLLED OUTLET WITHIN 6' IN THE FOLLOWING AREAS: -DUPLEX RECEPTACLE OUTLET, CONVENIENCE. (20 AMPS, 125 VOLTS, GFCI TYPE) ELECTRICAL CONNECTION PRIOR TO ANY WORK. BACKBOARD NON-FUSED PRIVATE AND OPEN OFFICES, RECEPTION LOBBY, CONFERENCE ROOM, KITCHENETTE IN OFFICE SPACES, AND MOUNTED +15" A.F.F. TO _ COPY ROOMS. CONTROLLED RECEPTACLES SHALL BE AUTOMATICALLY SHUT OFF WITH THE LIGHTING. 5. CONTRACTOR SHALL EXTEND WIRING FROM ALL JUNCTION BOXES, SWITCHES, ETC. AND MAKE FINAL CONNECTION CONDUIT TURN DOWN BLDC BUILDING NOT IN CONTRACT 47. ELECTRICAL CONTRACTOR RESPONSIBLE FOR PROVIDING POWER AND FINAL CONNECTION TO SMOKE AS REQUIRED TO ALL BUILDING EQUIPMENT REQUIRING ELECTRICAL CONNECTIONS. DUPLEX RECEPTACLE OUTLET, CONVENIENCE. (20 AMPS, 125 VOLTS) WITH MOUNTING BKR BREAKER NIGHT LIGHT HEIGHT HORIZONTALLY ABOVE COUNTER TOP PER ARCHITECTURAL PLANS OR APPROVAL. CONDUIT TURN UP 48. FIRE ALARM SUBCONTRACTOR RESPONSIBLE FOR PROVIDING SMOKE DETECTORS AND CONNECTION OF SMOKE CONDUIT NUMBER, NORMALLY OPEN 6. LOCATION OF LOCAL WALL SWITCHES ARE SUBJECT TO MODIFICATIONS. AT OR NEAR DOORS, INSTALL SWITCHES NO CONDUIT STUBBED AND CAPPED DETECTORS TO FIRE ALARM PANEL. ON SIDE OPPOSITE TO DOOR HINGE, VERIFY FINAL HINGE LOCATION IN FIELD PRIOR TO ANY WORK. DUPLEX RECEPTACLE OUTLET, CONVENIENCE. (20 AMPS, 125 VOLTS, GFCI TYPE) WITH CB CIRCUIT BREAKER = NTS NOT TO SCALE 49. ALL LIGHTING CONTROLS SHALL BE ACCEPTANCE TESTED BY A CERTIFIED ACCEPTANCE TECHNICIAN. RACEWAY CONCEALED IN WALLS OR ABOVE CEILING MOUNTING HEIGHT HORIZONTALLY ABOVE COUNTER TOP PER ARCHITECTURAL PLANS OR CKT CIRCUIT 50. LIGHTING CONTROL ACCEPTANCE REQUIREMENTS PER 130.4 A CERTIFICATE OF ACCEPTANCE SHALL BE ON CENTER APPROVAL. 7. DRAWINGS ARE DIAGRAMMATIC AND INDICATE GENERAL ARRANGEMENT OF SYSTEMS AND WORK INCLUDED. FOLLOW SUBMITTED TO THE ENFORCEMENT AGENCY UNDER SECTION 10-103(a) OF PART 1 FOR: CONDUIT CONCEALED IN OR UNDER FLOOR, COORDINATE WITH G.C.: OR, BURIAL **CFSD** COMBINATION FIRE SMOKE DAMPER OD OUTSIDE DIAMETER _____ DRAWINGS IN LAYING OUT WORK AND CHECK DRAWINGS OR OTHER TRADES RELATING TO WORK TO VERIFY SPACE CONDUIT UNDERGROUND IN SCHEDULE - 40 PVC UNLESS NOTED OTHERWISE, VERIFY AUTOMATIC DAYLIGHT CONTROLS WEATHERPROOF DUPLEX RECEPTACLE OUTLET, CONVENIENCE. (20 AMPS, 125 VOLTS) CO CONDUIT ONLY POLE IN WHICH WORK WILL BE INSTALLED. MAINTAIN HEADROOM AND MINIMUM CODE REQUIRED WORKING CLEARANCES AT DEPTH AND TRENCHING WITH G.C. LIGHTING CONTROLS MOUNTED +15" A.F.F. TO BOTTOM OF DEVICE U.O.N. ALL TIMES. CONC CONCRETE PB PULL BOX DEMAND RESPONSIVE CONTROLS EXISTING CONDUIT AND WIRING TO REMAIN ——(E)—— 8. CONTRACTOR SHALL COORDINATE THE LOCATION OF ALL WALL OUTLET BOXES FOR SWITCHES, BELL/STROBES, CURRENT TRANSFORMER POWER FACTOR DUPLEX RECEPTACLE OUTLET ON DEDICATED CIRCUIT (20 AMPS, 125 VOLTS) MOUNTED FIRE ALARM PULL STATIONS. RECEPTACLES ETC. WITH CABINETS, FURNITURE, EQUIPMENT ETC., TO AVOID CONFLICT. PULL-OUT WIRES AND ABANDON CONDUIT. CUT AND CAPPED FLUSH WITH WALL OR ----(R)----COPPER PANEL PNL +15" A.F.F. TO BOTTOM OF DEVICE U.O.N. POC POINT OF CONNECTION CENTERLINE 9. WHERE ELECTRIC MOTORS OR HEATERS ARE INSTALLED IN HUNG CEILINGS, PROVIDE DISCONNECT SWITCH IN EXISTING CONDUIT TO REMAIN COLOR CODE FOR UNDERGROUND CONDUCTORS 250 VOLT RECEPTACLE OUTLET, NEMA 6-20R MOUNTED +15" A.F.F. TO BOTTOM OF —— E —— \Rightarrow POWER POLE DISC DISCONNECT HUNG CEILING WITHIN REACH FROM ACCESS POINT, PWR DSBN DISTRIBUTION SECTION EXISTING CONDUIT AND WIRE TO BE REMOVED FURNISH APPROVED EXPANSION FITTINGS WHERE RACEWAY CROSSES BUILDING EXPANSION JOINTS. PVC DUPLEX RECEPTACLE OUTLET, SINGLE SPLIT-CIRCUIT SWITCHED. (20 AMPS, 125 VOLTS) POLYVINYL CHLORIDE -DN. DOWN 120/240 1 PH 120/208 3 PH BLACK RED ELECTRICAL UTILITY PRIMARY WHITE ——PR —— MOUNTED +15"_ QUAD QUADRUPLEX BLACK RED BLUE DWG DRAWING 11. FURNISH PULL STRING IN EACH RACEWAY RUN OVER 10' IN LENGTH, IN WHICH PERMANENT WIRING IS NOT 120/240 3 PH BLACK ORANGE BLUE ELECTRICAL UTILITY SECONDARY WHITE QTY QUANTITY -----SC ----INSTALLED. **EACH** 277/480 3 PH BROWN ORANGE YELLOW GRAY SURFACE MOUNTED DUPLEX RECEPTACLE OUTLET, CONVENIENCE. (20 AMPS, 125 VOLTS) -12. NOT MORE THAN THREE LIGHTING OR CONVENIENCE OUTLET CIRCUITS ARE PERMITTED IN ONE CONDUIT, ELECTRICAL CONTRACTOR TELEPHONE UTILITY ____ T ____ MOUNTED +15" _ PROVIDE SEPARATE CONDUIT FOR EACH HOMERUN INDICATED ON THE DRAWING, UNLESS INDICATED OTHERWISE. REQD REQUIRED EM **EMERGENCY** TEMPORARY OVERHEAD CABLING ——DH —— REQMT REQUIREMENT EXIST, (E) EXISTING 0 RECESSED CEILING MOUNTED DUPLEX RECEPTACLE OUTLET, CONVENIENCE. (20 AMPS, 125 13. PROVIDE PULL BOXES WHEREVER NECESSARY TO FACILITATE PULLING OF CONDUCTORS. COORDINATE LOCATIONS RGS RIGID GALVANIZED STEEL (E) EXISTING DEVICE TO REMAIN EXTERNAL OPERABLE DISCONNECT OF BOXES WITH OTHER TRADES TO AVOID CONFLICT. PULL BOXES SHALL BE ACCESSIBLE. THE SIZE OF PULL BOX ROOM **FUSE** SHALL COMPLY WITH N.E.C. REQUIREMENTS. ABOVE CEILING, CONCEALED, JUNCTION BOX, WITH COVER, PER NATIONAL ELECTRICAL (R) REMOVE EXISTING DEVICE AND ASSOCIATED CONDUIT AND WIRE SHT SHEET FIRE ALARM CODE (NEC) TABLE _ (RL) SOLID NEUTRAL REMOVE EXISTING DEVICE AND RELOCATE AS SHOWN ON PLAN 14. OUTLET BOXES FOR FIXTURES RECESSED IN HUNG CEILING SHALL BE ACCESSIBLE THROUGH OPENING CREATED FIRE ALARM CONTROL PANEL SPEC SPECIFICATIONS RECESSED WALL MOUNTED, JUNCTION BOX, WITH COVER, PER NATIONAL ELECTRICAL CODE FINISHED FLOOR (NL) NEW LOCATION OF RELOCATED DEVICE (NEC) TABLE 370- b(a), 4" SQUARE DEEP, WITH PLASTER RING SPDT SINGLE POLE, DOUBLE THROW 15. SEE MECHANICAL AND PLUMBING DRAWINGS AND SPECIFICATION FOR ADDITIONAL CONNECTION REQUIREMENTS FINISHED GRADE TO CONTROL PANELS, CONTROL TRANSFORMERS, POWER FOR CONTROL SYSTEM EP AND PE SWITCHES, TIME SPST SINGLE POLE, SINGLE THROW HOMERUN TO CIRCUITS #1 AND #3 IN PANEL "A" FULL LOAD CURRENT CLOCKS, VALVES, STATS, RELAYS, DUCT SMOKE DETECTOR LOCATIONS, ETC. INDICATED ON CONTROL WIRING -1111 (DOT INDICATES EQUIPMENT GROUNDING CONDUCTOR, CROSSMARKS INDICATE NUMBER SWITCH DUPLEX RECEPTACLE FLUSH IN FLOOR, WATERTIGHT JUNCTION BOX, HINGED BRASS FLUORESCENT DIAGRAMS. ELECTRICAL CONTRACTOR SHALL VERIFY FINAL CONTROL WIRING REQUIREMENTS WITH MECHANICAL AND **FLUOR** OF HOT WIRES AND HALF CROSS MARK INDICATES NUETRAL CONDUCTOR.) COVER (20 AMPS, 125 VOLTS) U.O.N. PLUMBING CONTRACTORS PRIOR TO ANY WORK AND PROVIDE ALL NECESSARY DEVICES AND CONNECTIONS AS SWBD SWITCHBOARD GEN **GENERATOR** REQUIRED. TIME CLOCK DOUBLE DUPLEX RECEPTACLE, FLUSH IN FLOOR, WATERTIGHT JUNCTION BOX (20 AMP. GROUND FAULT CIRCUIT INTERRUPTER 120 VOLT, 2-POLE, 3- WIRE) U.O.N. IN-LINE UTILITY COMPANY METER GROUND FAULT PROTECTION 16. ALL EXTERIOR ELECTRICAL DEVICES AND EQUIPMENT INCLUDING THOSE THAT ARE EXPOSED TO OUTSIDE TERM **TERMINAL** JUNCTION BOX, FLUSH IN FLOOR, WATERTIGHT JUNCTION BOX (20 AMP, 120 VOLT, GROUND UTILITY METER WITH CURRENT TRANSFORMERS (CT'S) METER ENVIRONMENT (UP TO 16') SHALL BE WEATHERPROOF TYPE, NEMA 3R. 2-POLE, 3-WIRE) U.O.N. TEMPORARY POLE HAND-OFF-AUTOMATIC SPECIALTY OUTLET. VERIFY NEMA CONFIGURATION AS NOTED ON PLANS. HORSE POWER SOLID STATE DEVICE CONNECTED TO THE POWER DISTRIBUTION SYSTEM 17. NO CONDUIT RUNS SHALL BE ALLOWED IN CONCRETE SLABS. ALL CONDUITS WILL BE PLACED ABOVE UGPS UNDERGROUND PULL SECTION ACCESSIBLE CEILING SPACES UNLESS SPECIFICALLY INDICATED TO BE UNDERGROUND. HIGH VOLTAGE BRANCH PANELBOARD, WALL MOUNTED, SEE PLANS AND SCHEDULE. (RECESSED MOUNTED) UNDERWRITERS LABORATORY INTERMEDIATE DISTRIBUTION FRAME LIGHTING LEGEND AND SYMBOLS T DR TRANSFORMER WITH SECONDARY GROUND 18. LIGHTING, POWER, TELEPHONE AND COMMUNICATIONS OUTLETS SHALL NOT BE PLACED BACK-TO-BACK. UNINTERRUPTIBLE POWER SUPPLY ISOLATED/INSULATED GROUND BRANCH PANELBOARD, WALL MOUNTED, SEE PLANS AND SCHEDULE. (SURFACE MOUNTED) UNLESS OTHERWISE NOTED INCAND INCANDESCENT 19. WHERE MORE THAN ONE LIGHT SWITCH OCCURS AT SAME LOCATION, SWITCHES SHALL BE MOUNTED IN A VOLT, VOLTAGE ISC SHORT CIRCUIT CURRENT AVAILABLE SYMBOL MULTIPLE GANG BOX UNDER A SINGLE COVER PLATE. PLATES WITH MORE THAN (3) LIGHT SWITCHES SHALL BE DESCRIPTION ON-SITE GENERATOR SET MAIN SWITCHBOARD, POWER OR LIGHT, FLOOR STANDING ENCLOSURE, (SEE SINGLE LINE **VOLT-AMPERE** LABELED TO INDICATE THE LIGHT FIXTURES CONTROLLED. IN RMS SYMMETRICAL AMPERES DIAGRAM AND LOAD SUMMARY) VFC VARIABLE FREQUENCY CONTROLLER J-BOX JUNCTION BOX CONCRETE ELECTRICAL PULLBOX WITH LID APPROPRIATE FOR INSTALLATION LOCATION. 2'X4' LED LUMINAIRE. 'F' INDICATES LUMINAIRE TYPE - REFER TO LUMINAIRE SCHEDULF. 20. DISCONNECT SWITCHES SHALL BE MOUNTED ON INDIVIDUAL SUPPORTS, OR OTHERWISE DIRECTLY ON **VFD** VARIABLE FREQUENCY DRIVE KCMIL THOUSAND CIRCULAR MILS DISCONNECT SWITCH H.P. RATED 600 VOLTS. "F" INDICATES FUSE TYPE, FUSES PER EQUIPMENT, PROVIDED NO MODIFICATION TO EQUIPMENT IS NECESSARY. WATT SUBSCRIPT A-2 REFERS TO PANEL AND CIRCUIT, SUBSCRIPT N/L REFERS TO NIGHT KILOWATT APPROVED MANUFACTURERS SHOP DRAWINGS. 21. ALL ELECTRICAL POWER LIGHTING, TELEPHONE OR SIGNAL WIRING IN FIRE RATED WALL IS TO BE INSTALLED IN WATT-HOUR MAGNETIC MOTOR STARTER H.P. RATED (NUMBERS INDICATE NEMA SIZE) KILO VOLT ELECTRICAL OUTLET CONTROLLER X-#2 **WEATHERPROOF** 2'X4' RECESSED LED LUMINAIRE WITH 90 MIN. EMERGENCY BATTERY BACKUP KILO VOLT-AMPERE 22. ALL ELECTRIC MATERIAL SHALL BE LISTED BY "UL" FOR THE TYPE OF APPLICATION AND "UL" LABEL SHALL WEATHERTIGHT LIGHTING CONTROLLER LOCAL DISTRIBUTION CABINET +4'-6" AFF MOUNTING HEIGHT FROM FINISHED FLOOR TO CENTERLINE OF OUTLET OR EQUIPMENT APPEAR ON ALL ELECTRICAL EQUIPMENT. WIREWAY LOCAL DISTRIBUTION FRAME 23. CONTACT UTILITY COMPANIES FOR SCOPE OF WORK PRIOR TO SUBMITTING BID: INCLUDE UTILITY CHARGES IF EXPLOSION PROOF SURFACE MOUNTED DOUBLE FACE EXIT SIGN (UNIVERSAL ARROWS INDICATED AS NEEDED) (CZ) DETAIL N CEILING OCCUPANCY SENSOR PER TITLE 24 REQUIREMENTS LONG CONTINUOUS LOAD **IMPEDANCE** DETAIL REFERENCE LTG LIGHTING 24. ALL DISTRIBUTION AND CONTROL EQUIPMENT (SUCH AS CB's, SWITCHES, CONTACTORS, ETC.), TERMINATIONS SHEET NO FOUR-WIRE SHALL BE FULLY RATED PER UL AS FOLLOWS: LOW VOLTAGE SURFACE MOUNTED SINGLE FACE EXIT SIGN (UNIVERSAL ARROWS INDICATED AS NEEDED) THREE-WIRE a. 125A OR LESS: 60°C OR MORE; MANUFACTURER EQUIPMENT b. MORE THAN 125A: 75°C OR MORE. JUNCTION BOX EQUIPMENT REFERENCE MAXIMUM (4 11/16" SQUARED X2 1/8" DEEP) SWITCH, MOUNTED 48" A.F.F. TO TOP OF DEVICE. SUBSCRIPTS INDICATE MOTOR CONTROL CENTER 25. CONDUCTORS SHALL HAVE UNDERWRITER'S LABORATORIES, INC.(UL) LISTED, 600 VOLT INSULATION OF TYPE DIAMETER, PHASE SPECIFIED BELOW _ MINIMUM 0 GROUND WELL THE FOLLOWING: NUMBER MANHOLE / METAL HALIDE 1. BRANCH CIRCUITS - LIGHTING AND POWER. EXISTING (DASH INDICATES) ELECTRICAL EQUIPMENT DEGREE CELSIUS METER AND MAIN SECTION M — MOTOR RATED K – KEY OPERATED _____ a. #10 AWG AND SMALLER, SOLID WIRE TYPE THW OR THHN/THWN, THHW(THHN FOR DRY LOCATION ONLY). MULTI MULTI-METER SECTION 3 - THREE WAY D - DIMMER SWITCH b. #8 AWG TO #2 AWG, STRANDED TYPE THW OR THHN/THHW. 4 - FOUR WAY TELEPHONE BACKBOARD 2'X4'X3/4" PLYWOOD. PROVIDE 2" CONDUIT TO TELEPHONE POC. 1 c. #1 AWG AND LARGER, STRANDED TYPE XHHW. EXISTING DEVICE TO REMAIN MOTION SENSOR SWITCH REMOVE EXISTING DEVICE AND RELOCATE AS SHOWN ON PLAN MOLDED CASE CIRCUIT BREAKER REMOVE EXISTING DEVICE AND 2. FEEDERS: TYPE THW OR THHN/THWN, OR XHHW. ASSOCIATED CONDUIT AND WIRE (NL) NEW LOCATION OF RELOCATED DEVICE 26. PROVIDE GREEN INSULATED GROUNDING CONDUCTOR IN EACH RACEWAY INCLUDING CONDUITS, PLUG STRIPS, WIREMOLD. SIZE OF GROUNDING SHALL BE IN ACCORDANCE WITH NATIONAL ELECTRIC CODE ARTICLE 250. SWITCH AND FUSE ASSEMBLY 27. WIRING METHOD SHALL BE EMT ABOVE GROUND AND MOUNTED IN CONCEALED SPACES (UNLESS APPROVED OTHERWISE) AND SCHEDULE-40 PVC FOR UNDERGROUND INSTALLATION UNLESS NOTED OTHERWISE. LIGHTING SCHEDULE APPLICABLE CODES 28. PROVIDE 110V OUTLET, CFL LIGHT & SWITCH FOR LIGHT @ FAU IN ATTIC, WHERE APPLICABLE. 29. ALL ELECTRICAL DEVICES AND COVERPLATES SHALL BE STANDARD IVORY. ALL COVERPLATES SHALL MATCH IN 2019 CALIFORNIA ELECTRICAL CODE (CEC), PART 3, TITLE 24 C.C.R. (NEC WITH AMENDMENTS) APPEARANCE. REPLACE IF NEEDED. 30. NEW SWITCHES/ELECTRICAL BOXES SHALL BE VERTICALLY AND HORIZONTALLY ALIGNED WHERE INSTALLED ADJACENT TO EXISTING ELECTRICAL SWITCHES/OUTLETS/THERMOSTATS. NO EXCEPTIONS 31. REFER TO ELECTRICAL DESIGN BUILD ENGINEERING FOR CIRCUITING OF ALL NEW ELECTRICAL OUTLETS. 32. ALL OUTLETS WITHIN 6'-0" OF A WATER SOURCE SHALL BE GFI PROTECTED, CONTRACTOR TO COORDINATE LOCATIONS OF FLOOR DEVICES AND FIELD VERIFY ALL FLOOR BOX LOCATIONS PRIOR TO SAWCUT WITH 33. CONTRACTOR TO PROVIDE CUT SHEETS FOR FLOOR BOXES AND SPECIALTY DEVICES FOR REVIEW AND 34. ALL CONDUIT FOR REQUIRED COMMUNICATION CABLING SHALL BE PROVIDED BY THE ELECTRICAL CONTRACTOR, 35. ALL CONDUITS AND SLEEVES SHALL HAVE PROPER EDGE PROTECTION IN FORM OF BUSHINGS SUITABLE 'TO

PROTECT CABLE FROM CUTTING AND CHAFING. 36. CONTRACTOR SHALL REMOVE ALL ABANDONED EQUIPMENT, CONDUIT, AND CABLING.

37. ALL CONDUIT FOR REQUIRED COMMUNICATION CABLING SHALL BE PROVIDED BY THE ELECTRICAL CONTRACTOR 38. CONTRACTOR TO PROVIDE POWER TO ALL MECHANICAL EQUIPMENT.

39. WHERE OUTLETS ARE SHOWN BACK TO BACK ON THE SAME WALL, CONTRACTOR SHALL STAGGER BOX LOCATIONS MINIMALLY TO ACCOMMODATE EACH BOX.

40. ALL ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH JURISDICTION RATIFIED EDITION OF THE NATIONAL ELECTRIC CODE.

TYPE	VOLTS	WATTAGE	LAMPS	MOUNTING	FIXTURE DESCRIPTION	MFR.	CATALOG #	NOTES	SYMBOL
A	120 V	25 W	LED	SURFACE MOUNTED	LOW PROFILE LED WRAPAROUND	LITHONIA LIGHTING	BLWP4 30L ADP G210 LP840 25W	PROVIDE 0-10V DIMMING CONTROLS SWITCHES, OCCUPANCY SENSORS WHERE SHOWN ON PLANS	

NOTE TO CONTRACTOR

CONTRACTOR SHALL VERIFY PLANS AND EXISTING DIMENSIONS AND CONDITIONS ON THE JOB SITE AND SHALL IMMEDIATELY NOTIFY THE ARCHITECT IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR THE SAME

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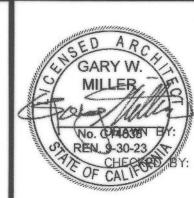
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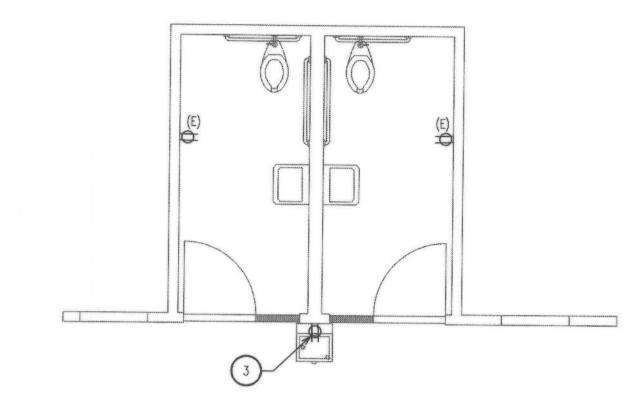
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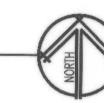


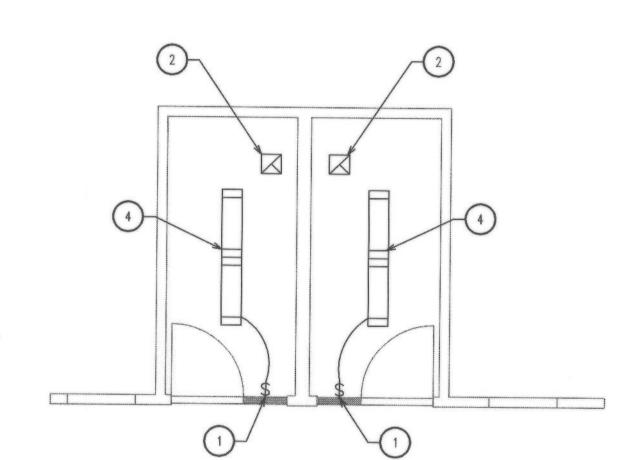
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APPROVED 9/22 2018 Alexachle 2022	CITY OF SAN BERNA DEPARTMENT OF PUBLIC W		DRAWING NO.
CITY ENGINEER: ALEX QISHTA REGISTERED CIVIL ENGINEER NO. 66702	ELECTRICAL GENERAL NOTES		134 10
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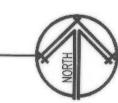


ELECTRICAL POWER PLAN SCALE: 1/4" = 1'-0"





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



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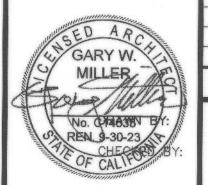


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MARK	REVISIONS	BY	APPR	DATE

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REGISTERED CIVIL ENGINEER NO. 66702

FOR CITY USE ONLY: FILE NO.

ELECTRICAL POWER & LIGHTING PLAN

GENERAL NOTES:

KEY NOTES: X

1. NEW LIGHT SWITCH PROVIDE NEW MOTION SENSOR LIGHT SWITCH.

4. NEW LIGHT. REFER TO FIXTURE SCHEDULE SHEET E101.

1. VERIFY EXISTING CONSTRUCTION WITHIN SCOPE OF WORK TO ENSURE CONFORMANCE WITH NOTED RATINGS AND LOCAL CODES. RETROFIT NONCONFORMING CONSTRUCTION AS REQUIRED.

REPLACED EXHAUST FAN. REFER TO MECHANICAL PLANS FOR SPECS. CONNECT EXHAUST FAN TO LIGHT SWITCH.

RELOCATED OUTLET FOR DRINKING FOUNTAIN. LOCATE OUTLET PER DRINKING FOUNTAIN MANUFACTURER SPECIFICATIONS.

RECEPTACLE BOXES MOUNTED AT +48" HEIGHT SHALL BE MOUNTED SO THAT TOP OF RECEPTACLE BOX IS NO MORE THAN +48".

ROWE LIBRARY

SHEET 16 OF E-102 26_SHEETS

DRAWING NO. 13476

W.O. NO.

C.I.P. NO.

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STATE OF CALIFORNIA Indoor Lighting	STATE OF CALIFORNIA	STATE OF CALIFORNIA
NRCC-LTI-E CALIFORNIA ENERGY COMMISSION	Indoor Lighting NRCC-LTI-E CALIFORNIA ENERGY COMMISSION	Indoor Lighting NRCC-LTI-E CALIFORNIA ENERGY COMMISSION
CERTIFICATE OF COMPLIANCE Project Name: Rowe Library TI Report Page: (Page 3 of 6)	CERTIFICATE OF COMPLIANCE NRCC-LTI-E	CERTIFICATE OF COMPLIANCE NRCC-LTI-E
Project Address: 108 E. Marshall Boulevard Date Prepared: 2/15/2022	Project Name: Rowe Library Till Report Page: (Page 2 of 6) Project Address: 108 E. Marshall Boulevard Date Prepared: 2/15/2022	This document is used to demonstrate compliance with requirements in §110.9, §110.12(c), §130.0, §130.1, §140.6 and §141.0(b)2 for indoor lighting scopes using the prescriptive path.
F. INDOOR LIGHTING FIXTURE SCHEDULE		Project Name: Rowe Library TI Report Page: (Page 1 of 6) Project Address: 108 E. Marshall Boulevard Date Prepared: 2/15/2022
¹ FOOTNOTE: Design Watts for small aperture and color changing luminaires which qualify per §140.6(a)4B is adjusted to be 75% of their rated wattage. Table F automatically makes	C. COMPLIANCE RESULTS If any cell on this table says "DOES NOT COMPLY" or "COMPLIES with Exceptional Conditions" refer to Table D. for guidance.	
this adjustment, the permit applicant should enter full rated wattage in column 05.	Allowed Lighting Power per §140.6(b) (Watts) Adjusted Lighting Power per §140.6(a) (Watts) Compliance Results	A. GENERAL INFORMATION 01 Project Location (city) San Bernardino 04 Total Conditioned Floor Area (ft²) 153
² Authority Having Jurisdiction may ask for Luminaire cut sheets to confirm wattage used for compliance per §130.0(c) Wattage used must be the maximum rated for the luminaire, not the lamp.	Lighting in Ø1 02 03 04 05 06 07 08 09	01 Project Location (city) San Bernardino 04 Total Conditioned Floor Area (ft²) 153 02 Climate Zone 10 05 Total Unconditioned Floor Area (ft²) 0
G. MODULAR LIGHTING SYSTEMS	unconditioned spaces must not be Complete Area Category Tailored Spaces must not be Building Category Additional 5140 5(c) Ca	O3 Occupancy Types Within Project (select all that apply): 1
This section does not apply to this project.	combined for compliance per Building Side (Control Credits) Category Side (Control Credits) Additional Side (Control Credits) Side (Control Credits) Designed (Control Credits) Control Credits Control Credits Control Credits Control Credits Control Credits Side (Control Credits) Side (Control Credits) Side (Control Credits) Control Credits Control	Support Areas
H. INDOOR LIGHTING CONTROLS (Not including PAFs)	(+) (Watts) (Adjustments (See Table I) (See Table I) (See Table I) (See Table I) (See Table II) (See Table II) (See Table II) (See Table III) (See Table IIII) (See Table IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	B. PROJECT SCOPE
This table includes lighting controls for conditioned and unconditioned spaces. When a control having a * is shown, the notes section of this table provides more detail on how compliance is achieved. The lighting controls section of the Compliance Summery Table on the first page will show "POSS NOT COMPLY" if the provides more detail on how	Conditioned 99.4 0 = 99 ≥ 68 COMPLIES	This table includes any lighting systems that are within the scope of the permit application and are demonstrating compliance using the prescriptive path outlined in §140.6 or §141.0(b)2 for alterations.
compliance is achieved. The lighting controls section of the Compliance Summary Table on the first page will show "DOES NOT COMPLY" if the notes are left blank. Building Level Controls	Unconditioned = 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Scope of Work
01 02	Compliance (See Table H for Details) Rated Power Reduction Compliance (See Table Q for Details) COMPLIES	01 02 03 04 05 My Project Consists of (check all that apply): Calculation Method Area (ft²) Calculation Method Area (ft²)
Mandatory Demand Response §110.12(c) Shut-off controls §130.1(c) Pass Fail	D. EXCEPTIONAL CONDITIONS	□ New Lighting System
Not Required <= 10,000 SF Whole Building Auto Time Switch	This table is auto-filled with uneditable comments because of selections made or data entered in tables throughout the form.	□ New Lighting System - Parking Garage ☑ Altered Lighting System Area Category Method 153 Area Category Method 0
04 05 06 07 08 09 10 11 12	E. ADDITIONAL REMARKS	Altered Lighting System Area Category Method Total Area of Work (ft²) Area Category Method 153 Area Category Method 0
Complete Building or Area And Control Multi-Level Control Secondary Interlocked Control Contr	This table includes remarks made by the permit applicant to the Authority Having Jurisdiction.	
Area Description Category Primary Function 6130.1(a) Controls Shut-Off Controls Daylighting Systems Field Inspector	F. INDOOR LIGHTING FIXTURE SCHEDULE	
Area <u>\$130.1(b)</u> <u>\$130.1(d)</u> <u>\$140.6(d)</u> <u>\$140.6(a)1</u> Pass Fail	This table includes all permanent designed lighting and all portable lighting in offices.	
Restroom Zone Restrooms Manual Exempt* Occupancy Sensor N/A N/A No 🗆	Designed Wattage: Conditioned Spaces 01	
*NOTES: Controls with a * require a note in the space below explaining how compliance is achieved. 13	Name or Item Complete Luminaire Modular Small Watts per How is Wattage Total Number Evaluded per	
EX: Conference 1: Primary/Skylight Daylighting: Exempt because less than 120 watts of general lighting; EXCEPTION 1 to §130.1(d)2 Plan Sheet Showing Daylit Zones:	Tag Description (Track) Fixture Color Change 1 Description (Track) Fixture Color Change 1 Color Change	
Restroom Zone Exception 2 to section 130.1(b)	A LED 17w No No 17 Mfr. Spec 4 No 68 🗆 🗆	
Registration Number: Registration Date/Time: Registration Date/Time: Registration Provider: Energysoft	Total Designed Watts: CONDITIONED SPACES 68	
negistration Provider, Energysoft	Registration Number: Registration Date/Time: Registration Provider: Energysoft	Registration Number: Registration Date/Time: Registration Provider: Energysoft
CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance Report Version: 2019.1.003 Report Generated: 2022-02-15 15:52:22 Schema Version: rev 20200601	CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance Report Version: 2019.1.003 Report Generated: 2022-02-15 15:52:22 Schema Version: rev 20200601	CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance Report Version: 2019.1.003 Report Generated: 2022-02-15 15:52:22 Schema Version: rev 20200601
STATE OF CALIFORNIA		
Indoor Lighting	Indoor Lighting	Indoor Lighting
NRCC-LTI-E CALIFORNIA ENERGY COMMISSION CERTIFICATE OF COMPLIANCE NRCC-LTI-E	NRCC-LTI-E CALIFORNIA ENERGY COMMISSION CERTIFICATE OF COMPLIANCE NRCC-LTI-E	NRCC-LTI-E CALIFORNIA ENERGY COMMISSION
Project Name: Rowe Library TI Report Page: (Page 6 of 6)	Project Name: Rowe Library TI Report Page: (Page 5 of 6)	Project Name: Rowe Library Ti Report Page: (Page 4 of 6)
Project Address: 108 E. Marshall Boulevard Date Prepared: 2/15/2022	Project Address: 108 E. Marshall Boulevard Date Prepared: 2/15/2022	Project Address: 108 E. Marshall Boulevard Date Prepared: 2/15/2022
DOCUMENTATION AUTHOR'S DECLARATION STATEMENT	Q. RATED POWER REDUCTION COMPLIANCE FOR ALTERATIONS	
I certify that this Certificate of Compliance documentation is accurate and complete.	Q. RATED POWER REDUCTION COMPLIANCE FOR ALTERATIONS This section does not apply to this project.	I. LIGHTING POWER ALLOWANCE: COMPLETE BUILDING OR AREA CATEGORY METHODS Each area complying using the Complete Building or Area Category Methods per §140.6(b) are included in this table. Column 06 indicates if additional lighting power allowances per
I certify that this Certificate of Compliance documentation is accurate and complete. Documentation Author Name: Ryan Miranda Documentation Author Signature: Ryan Wiranda		I. LIGHTING POWER ALLOWANCE: COMPLETE BUILDING OR AREA CATEGORY METHODS
I certify that this Certificate of Compliance documentation is accurate and complete. Documentation Author Name: Ryan Miranda Company: A.D.E. Consulting Documentation Author Signature: Ryan Wiranda Signature Date: 2022-02-15	This section does not apply to this project.	I. LIGHTING POWER ALLOWANCE: COMPLETE BUILDING OR AREA CATEGORY METHODS Each area complying using the Complete Building or Area Category Methods per §140.6(b) are included in this table. Column 06 indicates if additional lighting power allowances per §140.6(c) or adjustments per §140.6(a) are being used. Conditioned Spaces 01 02 03 04 05
I certify that this Certificate of Compliance documentation is accurate and complete. Documentation Author Name: Ryan Miranda Company: Documentation Author Signature: Ryan Miranda Signature Date:	This section does not apply to this project. R. 80% LIGHTING POWER FOR ALL ALTERATIONS - CONTROLS EXCEPTIONS	I. LIGHTING POWER ALLOWANCE: COMPLETE BUILDING OR AREA CATEGORY METHODS Each area complying using the Complete Building or Area Category Methods per §140.6(b) are included in this table. Column 06 indicates if additional lighting power allowances per §140.6(c) or adjustments per §140.6(a) are being used. Conditioned Spaces
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I certify that this Certificate of Compliance documentation is accurate and complete. Documentation Author Name: Ryan Miranda Company: A.D.E. Consulting Address: 1177 Idaho St. Suite 200A City/State/Zip: Redlands California 92374 RESPONSIBLE PERSON'S DECLARATION STATEMENT	This section does not apply to this project. R. 80% LIGHTING POWER FOR ALL ALTERATIONS - CONTROLS EXCEPTIONS This section does not apply to this project. S. DAYLIGHT DESIGN POWER ADJUSTMENT FACTOR (PAF) This section does not apply to this project. T. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION	I. LIGHTING POWER ALLOWANCE: COMPLETE BUILDING OR AREA CATEGORY METHODS Each area complying using the Complete Building or Area Category Methods per \$140.6(b) are included in this table. Column 06 indicates if additional lighting power allowances per \$140.6(c) or adjustments per \$140.6(a) are being used. Conditioned Spaces
I certify that this Certificate of Compliance documentation is accurate and complete. Documentation Author Name: Ryan Miranda Company: A.D.E. Consulting Address: 1177 Idaho St. Suite 200A City/State/Zip: Redlands California 92374 RESPONSIBLE PERSON'S DECLARATION STATEMENT I certify the following under penalty of perjury, under the laws of the State of California: 1. The information provided on this Certificate of Compliance is true and correct.	This section does not apply to this project. R. 80% LIGHTING POWER FOR ALL ALTERATIONS - CONTROLS EXCEPTIONS This section does not apply to this project. S. DAYLIGHT DESIGN POWER ADJUSTMENT FACTOR (PAF) This section does not apply to this project. T. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION Selections have been made based on information provided in this document. If any selection have been changed by permit applicant, an explanation should be included in Table E. Additional Remarks. These documents must be provided to the building inspector during construction and can be found online at	I. LIGHTING POWER ALLOWANCE: COMPLETE BUILDING OR AREA CATEGORY METHODS Each area complying using the Complete Building or Area Category Methods per \$140.6(b) are included in this table. Column 06 indicates if additional lighting power allowances per \$140.6(c) or adjustments per \$140.6(a) are being used. Conditioned Spaces
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I certify that this Certificate of Compliance documentation is accurate and complete. Documentation Author Name: Ryan Miranda Company: A.D.E. Consulting Address: 1177 Idaho St. Suite 200A City/State/Zip: Redlands California 92374 RESPONSIBLE PERSON'S DECLARATION STATEMENT I certify the following under penalty of perjury, under the laws of the State of California: 1. The information provided on this Certificate of Compliance is true and correct. 2. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer) 3. The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations. 4. The building design features or system design features identified on this Certificate of Compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application. 5. I will ensure that a completed signed copy of this Certificate of Compliance shall be made available with the building permit (s) issued for the building, and made available to the enforcement agency for all applicable	This section does not apply to this project. R. 80% LIGHTING POWER FOR ALL ALTERATIONS - CONTROLS EXCEPTIONS This section does not apply to this project. S. DAYLIGHT DESIGN POWER ADJUSTMENT FACTOR (PAF) This section does not apply to this project. T. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION Selections have been made based on information provided in this document. If any selection have been changed by permit applicant, an explanation should be included in Table E. Additional Remarks. These documents must be provided to the building inspector during construction and can be found online at https://www.energy.ca.gov/title24/2019standards/2019_compliance_documents/Nonresidential_Documents/NRCI/ Form/Title Pass Fail NRCI-LTI-01-E - Must be submitted for all buildings	L. LIGHTING POWER ALLOWANCE: COMPLETE BUILDING OR AREA CATEGORY METHODS Each area complying using the Complete Building or Area Category Methods per §140.6(b) are included in this table. Column 06 indicates if additional lighting power allowances per §140.6(c) or adjustments per §140.6(a) are being used. Conditioned Spaces O1
Certify that this Certificate of Compliance documentation is accurate and complete. Documentation Author Name: Ryan Miranda Documentation Author Signature: Ryan Wiranda Company: A.D.E. Consulting Signature Date: 2022-02-15 Address: 1177 Idaho St. Suite 200A City/State/Zip: Phone: (909) 884-9484 RESPONSIBLE PERSON'S DECLARATION STATEMENT Certify the following under penalty of perjury, under the laws of the State of California: 1. The information provided on this Certificate of Compliance is true and correct. 2. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer) The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations. A. In the building design features identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations. A. In the building design features identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations. A. In the building design features identified on this Certificate of Compliance or one of the publications submitted to the enforcement agency for approval with this building permit application. I will ensure that a completed signed copy of this Certificate of Compliance is required to be included with the documentation the furfilely provides to the building owner at occupancy. Responsible Designer Signature: R	This section does not apply to this project. R. 80% LIGHTING POWER FOR ALL ALTERATIONS - CONTROLS EXCEPTIONS This section does not apply to this project. S. DAYLIGHT DESIGN POWER ADJUSTMENT FACTOR (PAF) This section does not apply to this project. T. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION Selections have been made based on information provided in this document. If any selection have been changed by permit applicant, an explanation should be included in Table E. Additional Remarks. These documents must be provided to the building inspector during construction and can be found online at https://www.energy.ca.gov/title24/2019standards/2019_compliance_documents/Nonresidential_Documents/NRCI/ Field Inspector Form/Title Pass Fail NRCI-LTI-01-E - Must be submitted for all buildings	I. LIGHTING POWER ALLOWANCE: COMPLETE BUILDING OR AREA CATEGORY METHODS Each area complying using the Complete Building or Area Category Methods per §140.6(b) are included in this table. Column 06 indicates if additional lighting power allowances per §140.6(c) or adjustments per §140.6(d) are being used. Conditioned Spaces O1
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I certify that this Certificate of Compliance documentation is accurate and complete. Documentation Author Signature: Ryan Mirranda Company: A.D.E. Consulting Address: 1.177 Idaho St. Suite 200A City/State/Tip: Reclands California 92374 RESPONSIBLE PERSON'S DECLARATION STATEMENT certify the following under penalty of popiny, under the laws of the State of California: In Information provided on this Certificate of Compliance is one and correct. I. In meligration under the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance conform to the requirements of This 2-8, Part 1 and Part 6 of the California Code of Regulations, naterials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of This 2-8, Part 1 and Part 6 of the California Code of Regulations, plans and specifications submitted to the enforcement agency for approval with this building permit papication. I. In the Building design of the California code of Regulations, plans and specifications submitted to the enforcement agency for approval with this building permit application. I. Building design or system design identified on this Certificate of Compliance conform to the requirements of This 2-8, Part 1 and Part 6 of the California Code of Regulations, plans and specifications submitted to the enforcement agency for approval with this building permit application. I. Building design or system design identified on this Certificate of Compliance is negative to be inspections. Linderstand that a completed signed copy of this Certificate of Compliance is negative to be lauded with the documentation the building permit papication. Responsible Designer Signature: Responsible Designation Address: Respo	This section does not apply to this project. R. 80% LIGHTING POWER FOR ALL ALTERATIONS - CONTROLS EXCEPTIONS This section does not apply to this project. S. DAYLIGHT DESIGN POWER ADJUSTMENT FACTOR (PAF) This section does not apply to this project. T. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION Selections have been made based on information provided in this document. If any selection have been changed by permit applicant, an explanation should be included in Table E. Additional Remarks. These documents must be provided to the building inspector during construction and can be found online at https://www.energy.ca.gov/title24/2019standards/2019_compliance_documents/Nonresidential_Documents/NRCI/ Form/Title Pass Fail NRCI-LTI-01-E - Must be submitted for all buildings	LIGHTING POWER ALLOWANCE: COMPLETE BUILDING OR AREA CATEGORY METHODS Each area complying using the Complete Building or Area Category Methods per \$140.6(b) are included in this table. Column 06 indicates if additional lighting power allowances per \$140.6(b) or adjustments per \$140.6(a) are being used. Conditioned Spaces G1 G2 D3 D3 D4 Area (ft²) (W/ft²) Allowed Wattage (Watts) Area Category PAF Restroom Zone Restrooms D. 65 153 99.4 No No TOTALS: 153 99.4 See Tables J, or P for detail J. ADDITIONAL ALLOWANCE: AREA CATEGORY METHOD QUALIFYING LIGHTING SYSTEM This section does not apply to this project. K. TAILORED METHOD GENERAL LIGHTING POWER ALLOWANCE This section does not apply to this project. M. ADDITIONAL LIGHTING ALLOWANCE: TAILORED WALL DISPLAY This section does not apply to this project. N. ADDITIONAL LIGHTING ALLOWANCE: TAILORED ORNAMENTAL/SPECIAL EFFECTS This section does not apply to this project. O. ADDITIONAL LIGHTING ALLOWANCE: TAILORED VERY VALUABLE MERCHANDISE This section does not apply to this project. O. ADDITIONAL LIGHTING ALLOWANCE: TAILORED VERY VALUABLE MERCHANDISE This section does not apply to this project.
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Underground Service Alert

1-800 422-4133

TWO WORKING DAYS BEFORE YOU DIG

HOWARD M ROWE BRANCH LIBRARY 108 E MARSHALL BOULEVARD SAN BERNARDINO, CA 92404

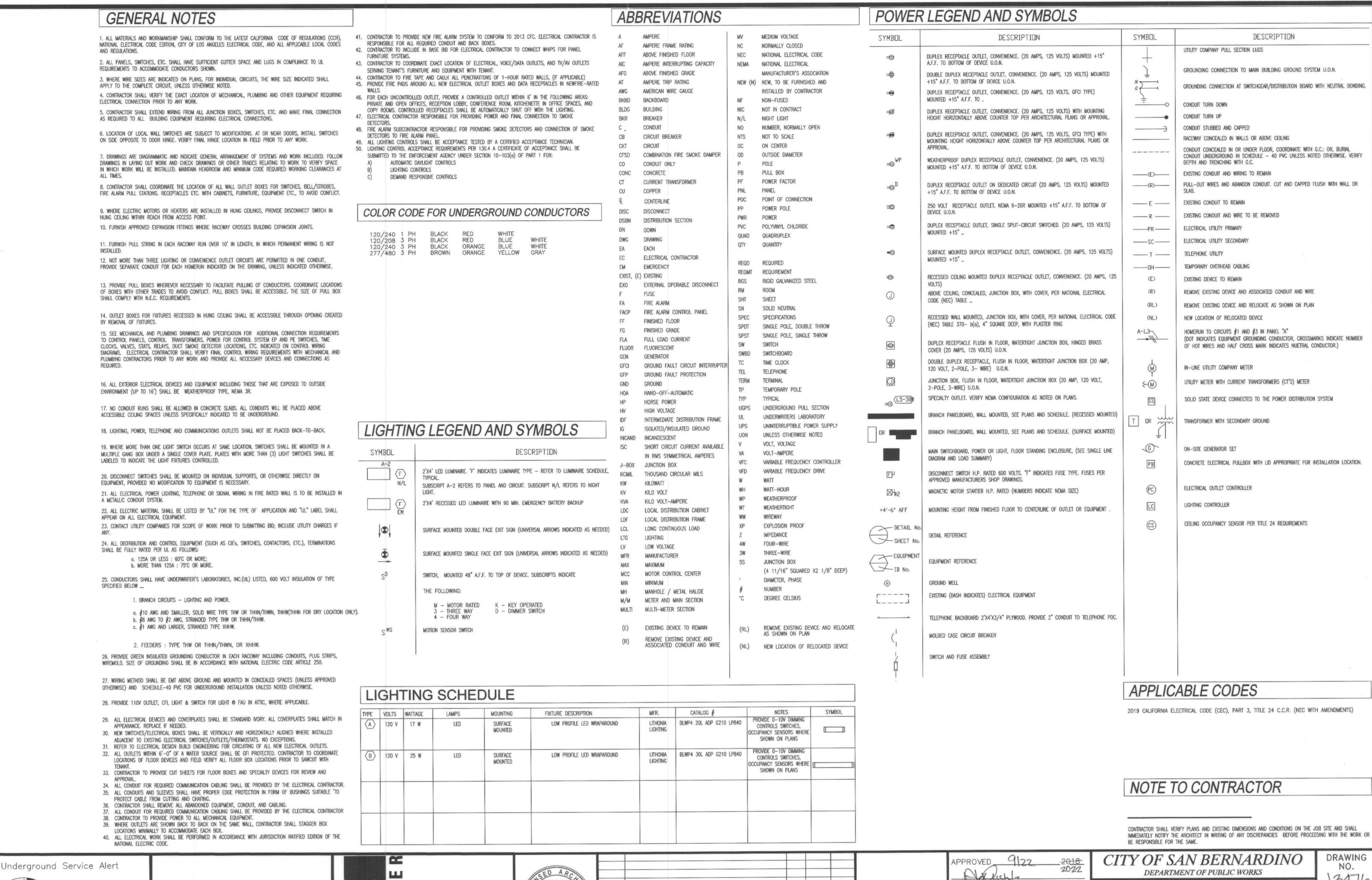


planning

1177 Idaho Street, Suite 200 Redlands, CA 92374 Phone: (909) 335-7400 Fax: (909) 335-7299 info@miller-aip.com

MARK	REVISIONS	BY	APPR	DATE
BENCH MARK:				

APPROVED 9/22 2018 2022	CITY OF SAN BERNARI DEPARTMENT OF PUBLIC WORKS	DINO	DRAWING NO.
CITY ENGINEER: ALEX QISHTA REGISTERED CIVIL ENGINEER NO. 66702	ENERGY COMPLIANCE FORMS		154 16
DRAWN BY: LS/VM	FOR	E-103	SHEET 17 OF
CHECKED BY: VM	ROWE LIBRARY		26_SHEETS
RECOMMENDED BY:	FOR CITY USE ONLY: FILE NO. C.I.P. N	NO.	W.O. NO



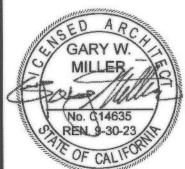
Call: TOLL FREE 1 - 800422-4133

PAUL VILLASENOR BRANCH LIBRARY 525 N MT VERNON AVE SAN BERNARDINO, CA 92411

interiors

planning

1177 Idaho Street, Suite 200 Redlands, CA 92374 architecture Phone: (909) 335-7400 Fax: (909) 335-7299 info@miller-aip.com



MARK	REVISIONS	BY	APPR	DA
BENCH MARK:				

ELECTRICAL CITY ENGINEER: ____ALEX QISHTA GENERAL NOTES REGISTERED CIVIL ENGINEER NO. 66702 SHEET <u>18</u> OF DRAWN BY: LS/VM CHECKED BY: VM

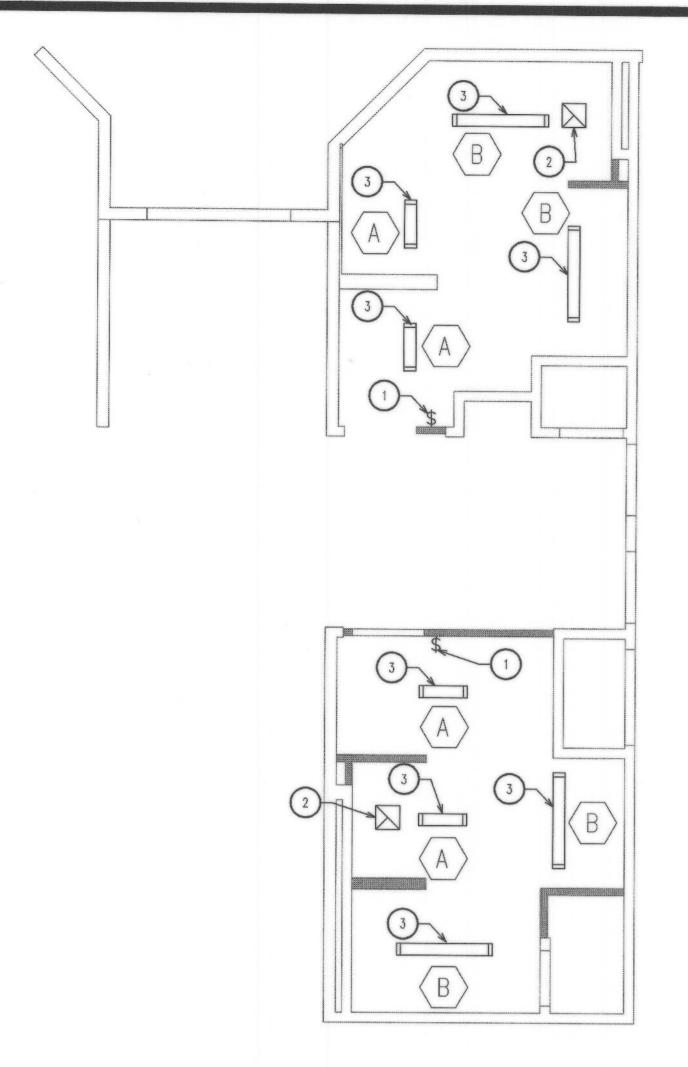
FOR CITY USE ONLY: FILE NO.

RECOMMENDED BY:

VILLASENOR LIBRARY

26 SHEETS W.O. NO.

C.I.P. NO.



VERIFY EXISTING CONSTRUCTION WITHIN SCOPE OF WORK TO ENSURE CONFORMANCE WITH NOTED RATINGS AND LOCAL CODES. RETROFIT NONCONFORMING CONSTRUCTION AS REQUIRED.
 RECEPTACLE BOXES MOUNTED AT +48" HEIGHT SHALL BE MOUNTED SO THAT TOP OF RECEPTACLE BOX IS NO MORE THAN +48".

KEY NOTES: (X)

1. NEW LIGHT SWITCH PROVIDE NEW MOTION SENSOR LIGHT SWITCH.

REPLACED EXHAUST FAN. REFER TO MECHANICAL PLANS FOR SPECS. CONNECT EXHAUST FAN TO LIGHT SWITCH.

3. NEW LIGHT. REFER TO FIXTURE SCHEDULE SHEET E201.

ELECTRICAL LIGHTING PLAN

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



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

DRAWN BY: LS/VM

CHECKED BY: VM

Underground Service Alert

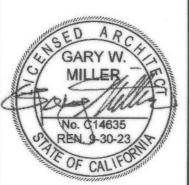
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ED ARCH					
MILLER	MARK	REVISIONS	BY	APPR	DATE
No. 014635 REN. 9-30-23 OF CALIFORNIA	BENCH MARK:				

APPROVED 9/22
Alexach CITY OF SAN BERNARDINO _2018 **2022** DEPARTMENT OF PUBLIC WORKS CITY ENGINEER: ALEX QISHTA
REGISTERED CIVIL ENGINEER NO. 66702

ELECTRICAL POWER & LIGHTING PLAN VILLASENOR LIBRARY

SHEET _19_ OF E-20226 SHEETS

DRAWING

13476

W.O. NO.

FOR CITY USE ONLY: FILE NO. C.I.P. NO.

planning RECOMMENDED BY:

			1					
STATE OF CALIFORNIA			STATE OF CALIFORNIA			STATE OF CALIFORNIA		
Indoor Lighting NRCC-LTI-E	CAL	LIFORNIA ENERGY COMMISSION	Indoor Lighting NRCC-LTI-E		CALIFORNIA ENERGY COMMISSION	Indoor Lighting NRCC-LTI-E		CALIFORNIA ENERGY COMMISSION
CERTIFICATE OF COMPLIANCE		NRCC-LTI-E	CERTIFICATE OF COMPLIANCE		NRCC-LTI-E	CERTIFICATE OF COMPLIANCE		NRCC-LTI-E
	r Branch Library TI Report Page:	(Page 3 of 6)		ranch Library TI Report Page:	(Page 2 of 6) 2/15/2022	This document is used to demonstrate compliance with requirements in §	<u>i110.9, §110.12(c), §130.0, §130.1, §140.6</u> and <u>§141.0(b)2</u>	for indoor lighting scopes using the prescriptive
Project Address: 525 N	N. Mt. Vernon Ave. Date Prepared:	2/15/2022	Project Address: 525 N. N	It. Vernon Ave. Date Prepared:	2/13/2022		nor Branch Library TI Report Page:	(Page 1 of 6)
F. INDOOR LIGHTING FIXTURE SCHEDULE			C. COMPLIANCE RESULTS			Project Address: 52	5 N. Mt. Vernon Ave. Date Prepared:	2/15/2022
B LED 25w No No	25 Mfr. Spec 4 No 100	0 0 0	If any cell on this table says "DOES NOT COMPLY" or "COMPLIES with Exception			A. GENERAL INFORMATION		
	Total Designed Watts: CONDITIONED SPACES 168		Allowed Lighting Power per §140.6(b) (M	Adjusted Lighting Power per		01 Project Location (city) San Bernardino	04 Total Conditioned Floor Area	
¹ FOOTNOTE: Design Watts for small aperture and color changing luminaires this adjustment, the permit applicant should enter full rated wattage in colu	which qualify per <u>§140.6(a)48</u> is adjusted to be 75% of their rated wattage. Imm 05.	Table F automatically makes	conditioned and	Adjustments	08 09	02 Climate Zone 10 03 Occupancy Types Within Project (select all that apply):	05 Total Unconditioned Floor Are 06 # of Stories (Habitable Above	
² Authority Having Jurisdiction may ask for Luminaire cut sheets to confirm v	vattage used for compliance per §130.0(c) Wattage used must be the maximu	um rated for the luminaire, not	spaces must not be Complete Area Category Tailored	Total ≥ Total PAF Lighting	Total Adjusted	Support Areas	Market in the state of the stat	industrial (All IIIIIII)
the lamp.			combined for compliance per Building Suiding S	Allowed (Watts) Control Credits (Watts) \$140.6(a)2	= (Watts) 05 must be >= 08 *Includes <u>§140.6</u>	- Support Aircus		
G. MODULAR LIGHTING SYSTEMS			\$140.6(b) (+)		Adjustments	B. PROJECT SCOPE		
This section does not apply to this project.			(See Table I) (See Table I) (See Table II) (See Table IX) Conditioned 249.6 0		= 168 COMPLIES	This table includes any lighting systems that are within the scope of the p §141.0(b)2 for alterations.	ermit application and are demonstrating compliance using	the prescriptive path outlined in <u>§140.6</u> or
H. INDOOR LIGHTING CONTROLS (Not including PAFs)			Unconditioned	2	=	Scope of Work	Conditioned Spaces	Unconditioned Spaces
	es. When a control having a * is shown, the notes section of this table provide nmary Table on the first page will show "DOES NOT COMPLY" if the notes are l			Controls Compliance (See Rated Power Reduction Compliance (See		01	02 03 Calculation Method Area (ft ²	04 05 Calculation Method Area (ft ²)
Building Level Controls	nady labe on the just page will show bots not connect if the naces are n	c) Contins		Missionid Missio		My Project Consists of (check all that apply): New Lighting System	Calculation Metripo	
01	02	03	D. EXCEPTIONAL CONDITIONS			☐ New Lighting System - Parking Garage		
Mandatory Demand Response §110.12(c)	Shut-off controls §130.1(c)	Field Inspector Pass Fail	This table is auto-filled with uneditable comments because of selections made	or data entered in tables throughout the form.		☑ Altered Lighting System	Area Category Method 384 384	Area Category Method 0
Not Required <= 10,000 SF	Whole Building Auto Time Switch		E. ADDITIONAL REMARKS			Total Area of Work (ft²)	304	
Area Level Controls	1 07 00 100 10	30	This table includes remarks made by the permit applicant to the Authority Hav	ing Jurisdiction.				
04 (05)			F. INDOOR LIGHTING FIXTURE SCHEDULE					
Complete Building or Area Area Con	trols Multi-Level Shut-Off Controls lit Daylighting Syst	ocked Field Inspector	This table includes all permanent designed lighting and all portable lighting in	offices.				
Area Description Category Primary Function 6130.1	(a) Controls §130.1(c) Daylighting Syst §130.1(d) §140.6(d) §140.6	enos	Designed Wattage: Conditioned Spaces 01 02 03 04	05 06 07	08 09 10			Y
		Pass Fal	Small	Watts per How is Wattage Total Number Exclud	ded per Field inspector			
Restroom Zone Restrooms Manu ON/OI	al Exempt* Occupancy Sensor N/A N/A N	10 0	Name or item Complete Luminaire Modular Aperture &	luminaire ² determined of Luminaires §140	ded per Design Watts			
			A LED 17w No No	17 Mfr. Spec 4 !	No 68 🗆 🗆			
Registration Number:	Registration Date/Time:	Registration Provider: Energysoft	Registration Number:	Registration Date/Time:	Registration Provider: Energysoft	Registration Number:	Registration Date/Time:	Registration Provider: Energysoft
CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance	Report Version: 2019.1.003	rt Generated: 2022-02-15 15:29:04	CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance	Report Version: 2019.1.003	Report Generated: 2022-02-15 15:29:04	CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance	Report Version: 2019.1.003	Report Generated: 2022-02-15 15:29:04
3.23.33.3	Schema Version: rev 20200601			Schema Version: rev 20200601			Schema Version: rev 20200601	
CTATE OF CALIFORNIA			STATE OF CALIFORNIA			STATE OF CALIFORNIA		- 4
Indoor Lighting			Indoor Lighting		CALIFORNIA ENERGY COMMISSION	Indoor Lighting NRCC-LTI-E		CALIFORNIA ENERGY COMMISSION
NRCC-LTI-E CERTIFICATE OF COMPLIANCE	CA	ALIFORNIA ENERGY COMMISSION NRCC-LTI-E	NRCC-LTI-E CERTIFICATE OF COMPLIANCE		NRCC-LTI-E	CERTIFICATE OF COMPLIANCE		NRCC-LTI-E
Project Name: Villasen	or Branch Library TI Report Page:	(Page 6 of 6)	Project Name: Villasenor E	ranch Library TI Report Page:	(Page 5 of 6) 2/15/2022		enor Branch Library TI Report Page: 25 N. Mt. Vernon Ave. Date Prepared:	(Page 4 of 6) 2/15/2022
Project Address: 525	N. Mt. Vernon Ave. Date Prepared:	2/15/2022	Project Address: 525 N.	Vit. Vernon Ave. Date Prepared:	2, 13, 2022	Troject radies.	•	
DOCUMENTATION AUTHOR'S DECLARATION STATEMENT		1	N. ADDITIONAL LIGHTING ALLOWANCE: TAILORED ORNAMENTAL/SP	CIAL EFFECTS		H. INDOOR LIGHTING CONTROLS (Not including PAFs)		
I certify that this Certificate of Compliance documentation is accur	ate and complete.		This section does not apply to this project.			*NOTES: Controls with a * require a note in the space below explaining		13
Documentation Author Name:	Documentation Author Signature: Ryan Miranda		O. ADDITIONAL LIGHTING ALLOWANCE: TAILORED VERY VALUABLE IV	ERCHANDISE		EX: Conference 1: Primary/Skylight Daylighting: Exempt because less that to §130.1(d)2	n 120 watts of general lighting, EXCEPTION 1	Plan Sheet Showing Daylit Zones:
Ryan Miranda Company:	Signature Date:		This section does not apply to this project.			Restroom Zone Exception 2 to Section 130.1(b)		
A.D.E. Consulting	2022-02-15 CEA/ HERS Certification Identification (if applicable):		P. POWER ADJUSTMENT: LIGHTING CONTROL CREDIT (POWER ADJUST	TMENT FACTOR (PAE)				
1177 Idaho St. Suite 200A			This section does not apply to this project.			I. LIGHTING POWER ALLOWANCE: COMPLETE BUILDING OR ARE.		district if additional linking power allowers as not
City/State/Zip: Redlands California 92374	Phone: (909) 884-9484			THE STATE OF THE S	the production of the strain o	Each area complying using the Complete Building or Area Category Met §140.6(c) or adjustments per §140.6(a) are being used .	hoas per <u>9.140.6(b)</u> are included in this table. Column 06 in	dicates y daditional ngriting power unowances per
RESPONSIBLE PERSON'S DECLARATION STATEMENT I certify the following under penalty of perjury, under the laws of the State of California:			Q. RATED POWER REDUCTION COMPLIANCE FOR ALTERATIONS This section does not apply to this project.			Conditioned Spaces		
 The information provided on this Certificate of Compliance is true and correct. 	ponsibility for the building design or system design identified on this Certificate of Compliance (re	espansible designer)				01 G2 Complete Building or Area Cate	egory Primary Allowed Density Allow	wed Wattage Additional Allowance / Adjustment
 The energy features and performance specifications, materials, components, and of Title 24. Part 1 and Part 6 of the California Code of Regulations. 	d manufactured devices for the building design or system design identified on this Certificate of C	Compliance conform to the requirements	R. 80% LIGHTING POWER FOR ALL ALTERATIONS - CONTROLS EXCEPT	ONS .		Area Description Function Area	(W/ft²) Area (ft²)	(Watts) Area Category PAF
	ite of Compliance are consistent with the information provided on other applicable compliance d	documents, worksheets, calculations,	This section does not apply to this project.			Restroom Zone Restrooms	0.65 384	249.6 No No 249.6 See Tables J, or P for detail
5. I will ensure that a completed signed copy of this Certificate of Compliance shall	be made available with the building permit(s) issued for the building, and made available to the option is required to be included with the documentation the builder provides to the building or	enforcement agency for all applicable owner at occupancy.	S. DAYLIGHT DESIGN POWER ADJUSTMENT FACTOR (PAF)				TOTALS: 384	2-5.0 See Tables 3, or Pilot detail
Responsible Designer Name:	Responsible Designer Signature:		This section does not apply to this project.			J. ADDITIONAL ALLOWANCE: AREA CATEGORY METHOD QUALIF	ING LIGHTING SYSTEM	
Steve Murray Company:	Date Signed: 2022-02-15		T. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION		to an explanation about the instant of the first of the f	This section does not apply to this project.		
SPM Architect & Associates	2022-02-15 License:		Selections have been made based on information provided in this document. Additional Remarks. These documents must be provided to the building inspe	ctor during construction and can be found online at	t, an explanation snoula be included in Table E.	K. TAILORED METHOD GENERAL LIGHTING POWER ALLOWANCE		
1177 Idaho Street, Suite 200A	C-11170		https://www.energy.ca.gov/title24/2019standards/2019_compliance_docum		Field Inspector	This section does not apply to this project.		
City/State/Zip: Redlands California 92374	Phone: (909) 307-0146		Form/Tit	e managaran kananan ka	Pass Fall	L. ADDITIONAL LIGHTING ALLOWANCE: TAILORED WALL DISPLA		
			NRCI-LTI-01-E - Must be submitted for all buildings			This section does not apply to this project.		
			U. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE			M. ADDITIONAL LIGHTING ALLOWANCE: TAILORED FLOOR AND	TASKLIGHTING	
			There are no NRCA forms required for this project.			This section does not apply to this project.		
Registration Number:	Registration Date/Time:	Registration Provider: Energysoft	Registration Number:	Registration Date/Time:	Registration Provider: Energysoft	Registration Number:	Registration Date/Time:	Registration Provider: Energysoft
CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance	Report Version: 2019.1.003	ort Generated: 2022-02-15 15:29:04	CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance	Report Version: 2019.1.003	Report Generated: 2022-02-15 15:29:04	CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance	Report Version: 2019.1.003 Schema Version: rev 20200601	Report Generated: 2022-02-15 15:29:04
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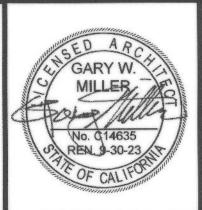
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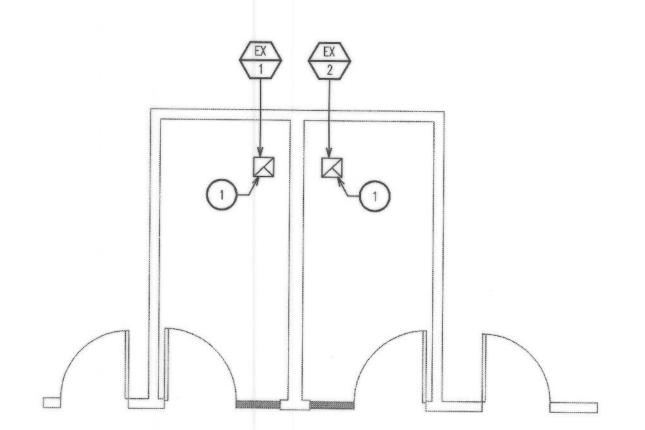
MARK	REVISIONS	BY	APPR	DATE
BENCH MARK:				

APPROVED 9/22 Alexaulv. CITY OF SAN BERNARDINO **DRAWING** DEPARTMENT OF PUBLIC WORKS 13476 ENERGY COMPLIANCE FORMS CITY ENGINEER: ALEX QISHTA
REGISTERED CIVIL ENGINEER NO. 66702 E-203 SHEET 20 OF DRAWN BY: LS/VM VILLASENOR LIBRARY CHECKED BY: VM RECOMMENDED BY: FOR CITY USE ONLY: FILE NO. C.I.P. NO.

NO.

26_SHEETS

W.O. NO.



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



		MECHANICAL			EL	ECTRICA	L
).	MFG./MDL	VOLUME	STATIC PRESS.	MOTOR	VOLT	PHASE	REMARKS
x 1	COOK GEMINI MODEL 144	124 CFM	.25	98W	120	1	RDA-6 ADAPTER, CUT & PATCH AS REQUIRED
<u>x</u>	COOK GEMINI MODEL 144	124 CFM	.25	98W	120	1	RDA-6 ADAPTER, CUT & PATCH AS REQUIRED.

GENERAL MECHANICAL NOTES

- 1. PENETRATIONS IN WALLS REQUIRING PROTECTED OPENINGS MUST BE FIRESTOPPED WITH AN APPROVED 3M FIRE BARRIER SEALANT ICC AND UL APPROVED PER 713.3. A. COPPER OR FERROUS PIPES OR CONDUITS MAY PENETRATE THE WALLS OR PARTITIONS, PROVIDED THEY ARE FIRESTOPPED.
- B. OPENINGS FOR STEEL ELECTRICAL OUTLET BOXES NOT EXCEEDING 16 SQUARE INCHES ARE PERMITTED, PROVIDED OPENINGS DO NOT EXCEED AN AGGREGATE AREA OF MORE THAN 100 SQUARE INCHESFOR ANY 100 SQUARE FEET OF WALL OR PARTITIONS. OUTLET BOXES ON OPPOSITE SIDES OF WALLS OR PARTITIONS MUST BE SEPARATED BY A HORIZONTAL DISTANCE OF 24 INCHES. C. WHERE WALLS ARE PENETRATED BY OTHER MATERIALS OR WHERE LARGER OPENINGS ARE REQUIRED THAN

PERMITTED IN (B) ABOVE, THEY MUST BE QUALIFIED BY TESTS CONDUCTED IN ACCORDANCE WITH SECTION 703.

- 2. CONSTRUCTION OR WORK FOR WHICH A PERMIT IS REQUIRED SHALL BE SUBJECT TO INSPECTION BY THE BUILDING OFFICIAL AND SUCH CONSTRUCTION OR WORK SHALL REMAIN ACCESSIBLE AND EXPOSED FOR INSPECTION PURPOSES UNTIL APPROVED. INSPECTIONS CAN BE REQUESTED BY CALLING THE INSPECTION LINE.
- 3. HEATING, VENTILATION AND AIR-CONDITIONING SYSTEMS OF ALL STRUCTURES SHALL BE DESIGNED AND INSTALLED FOR EFFICIENT UTILIZATION OF ENERGY IN ACCORDANCE WITH THE CALIFORNIA ENERGY CODE.
- 4. APPLIANCES, APPURTENANCES AND EQUIPMENT REQUIRED BY THE CMC SHALL BE LISTED AND LABELED FOR THE APPLICATION IN WHICH THEY ARE INSTALLED AND USED (CMC SECTIONS 301.2, 302.1, AND 303.1)
- 5. LABELING SHALL BE IN ACCORDANCE WITH THE PROCEDURES SET FORTH IN CMC 307.0.
- 6. THE VENTILATION AIR DISTRIBUTION SYSTEM SHALL BE PROVIDED WITH MEANS TO ADJUST THE SYSTEM TO ACHIEVE AT LEAST THE MINIMUM VENTILATION AIRFLOW RATE AS REQUIRED BY THE CMC SECTION 403. VENTILATION SYSTEMS SHALL BE BALANCED BY AN APPROVED METHOD. SUCH BALANCING SHALL VERIFY THAT THE VENTILATION SYSTEM IS CAPABLE OF SUPPLYING AND EXHAUSTING THE AIRFLOW RATES REQUIRED BY CMC SECTIONS 403.2. SUCH AIR BALANCE REPORTS SHALL BE PROVIDED TO THE INSPECTOR AT TIME OF INSPECTION. AIR BALANCE REPORTS MAY BE REQUESTED BY THE INSPECTION DURING ANNUAL INSPECTIONS TO ENSURE ONGOING COMPLIANCE WITH CITY REQUIREMENTS, AND WHEN ISSUES OR CONCERNS REGARDING ODORS ARE BROUGHT TO THE ATTENTION OF THE CITY.
- 7. ALL MECHANICAL EQUIPMENT AND SYSTEMS INSTALLED AS PART OF PROJECT SHALL COMPLY WITH ALL REQUIREMENTS OF THE 2016 CMC AND THE 2016 CBC, 2016 CALIFORNIA GREEN BUILDING STANDARDS CODE AND 2016 CALIFORNIA BUILDING ENERGY EFFICIENCY STANDARDS.
- 8. PROVIDE 120 VOLT ELECTRICAL OUTLETS WITHIN 25' OF ALL ROOF MOUNTED AND OUTDOOR MECHANICAL EQUIPMENT. (CMC 309) ALL MECH EQUIP. (CMC 309)
- 9. ALL DUCTWORK FOR HEATING AND COOLING SYSTEM OR EVAPORATE COOLING SYSTEM SHALL BE CONDUCTED THROUGH DUCT SYSTEMS CONSTRUCTED OF METAL AS SET FORTH IN SMACNA HVAC DUCT CONSTRUCTION STANDARD - METAL AND FLEXIBLE. FACTORY MADE AIR DUCTS SHALL BE APPROVED FOR THE USE INTENDED OR SHALL COMPLY WITH THE 2016 CMC REFERENCED STANDARDS CHAPTER 17 (CMC 602.1).
- 10. ALL DUCT SMOKE DETECTORS INSTALLED, AS PART OF THIS PROJECT SHALL BE SUPERVISED BY THE BUILDING FIRE DETECTION OR ALARM SYSTEM WHEN THE BUILDING IS EQUIPPED WITH SUCH SYSTEM. LOS ANGELES FIRE DEPARTMENT PREVENTION BUREAU PLAN CHECK APPROVAL AND PERMIT ARE REQUIRED FOR CONNECTION OF DUCT SMOKE DETECTORS TO THE FIRE DETECTION OR ALARM SYSTEM.
- 11. THE REQUIRED SERVICE DISTANCE FROM THE MECHANICAL EQUIPMENT TO SCREENING, PARAPETS, WALLS AND OTHER EQUIPMENT SHALL BE A MINIMUM OF 30"x30" ON THE SERVICE SIDE OF THE EQUIPMENT, OR AS REQUIRED BY THE MANUFACTURER'S INSTALLATION INSTRUCTIONS, IF THE INSTRUCTIONS REQUIRE A GREATER CLEARANCE. (CMC SECTION
- 12. EQUIPMENT AND APPLIANCES SHALL BE ACCESSIBLE FOR SERVICE, INSPECTION REPAIR AND REPLACEMENT WITHOUT REMOVING PERMANENT CONSTRUCTION. SUFFICIENT CLEARANCE SHALL BE MAINTAINED TO PERMIT CLEANING, REPLACEMENT OF FILTERS, BLOWERS, MOTOR CONTROLS AND LUBRICATION OF MOVING PARTS. 30" OF CLEARANCE IN DEPTH, WIDTH, AND HEIGHT SHALL BE PROVIDED TO SERVE THE APPLIANCE OR EQUIPMENT. (CMC 304.1)
- 13. OUTSIDE AIR FOR HEATING OR COOLING SYSTEM SHALL NOT BE TAKEN FROM CLOSER THAN 10'-0" FROM AN APPLIANCE VENT OUTLET, VENT OPENING OF A PLUMBING SYSTEM, OR THE DISCHARGE OUTLET OF EXHAUST FAN, UNLESS THE OUTLET IS 3'-0" ABOVE THE OUTSIDE AIR INLET. (CMC 314.3)
- 14. REFRIGERANT CONTAINING PORTIONS OF A SYSTEM THAT ARE FIELD ERECTED SHALL BE TESTED AND PROVED TIGHT TO THE AUTHORITY HAVING JURISDICTION AFTER COMPLETE INSTALLATION AND BEFORE OPERATION. THE HIGH LOW SIDES OF EACH SYSTEM SHALL BE TESTED AND PROVED TIGHT AT NOT LESS THAN THE LOWER OF THE PRESSURE IN CMC TABLE 1124.2 OR THE SETTING THE PRESSURE RELIEF DEVICE. (CMC 1124.2)

KEY NOTES: X

1. REMOVE EXISTING EXHAUST FAN & REPLACE W/ NEW PER SCHEDULE, THIS SHEET. RECONNECT EXISTING DUCT WORK TO EXHAUST FAN, VERIFY EXISTING DUCT SIZE MIN. 6".

- 15. ONE OF THE FOLLOWING METHODS IS REQUIRED TO COMPLY WITH MECH-3 VENTILATION REQUIREMENTS
- A. AIR BALANCING: ALL SPACE CONDITIONING AND VENTILATION SYSTEMS SHALL BE BALANCED TO THE QUANTITIES SPECIFIED IN THESE PLANS, IN ACCORDANCE THE THE NATIONAL ENVIRONMENTAL BALANCING BUREAU, (NEBB), PROCEDURAL STANDARDS (1983), OR ASSOCIATED AIR BALANCE COUNCIL, (AABC, NATIONAL STANDARDS (1986)
- B. OUTSIDE AIR CERTIFICATION: THE SYSTEM SHALL PROVIDE THE MINIMUM OUTSIDE AIR AS SHOWN ON THE MECHANICAL DRAWINGS, AND SHALL BE MEASURED AND CERTIFIED BY THE INSTALLING LICENSED C-20 MECHANICAL CONTRACTOR. (AIR BALANCING SHALL COMPLY TO CGBSC 5.410.1)
- 16. ALL INSTALLED REFRIGERATION PIPING SHALL BE PHOSPHORIC ACID DEOXIDIZED SEAMLESS COPPER. PRESSURE-LIMITING DEVICES SHALL BE CONNECTED BETWEEN THE PRESSURE-IMPOSING ELEMENT AND THE STOP VALVE ON THE DISCHARGE SIDE PER 2016 CMC SECTION 1111.3.
- 17. ALL FIRE AND SMOKE DAMPES ARE TO BE INSTALLLED IN ACCORDANCE WITH THE MAUFACTURER'S LISTING AND INSTALLATION INSTRUCTIONS. FIRE DAMPERS SHALL BE DYNAMIC TYPE. (CBC 716.3.1,
- 18. WHEN THE AUTOMATIC ACTIVATION OF A SMOKE DAMPER OCCURS, THE HVAC SYSTEMS SERVING SUCH DAMPERS SHALL IMMEDIATELY SHUTDOWN. (CMC 606.8)
- 19. FIRE AND SMOKE DAMPER SHALL BE LISTED AND BEAR THE LABEL OF AN APPROVED TESTING AGENCY.
- 20. FIRE DAMPERS SHALL COMPLY WITH THE REQUIREMENTS OF UL 555. ONLY FIRE DAMPERS LABELED FOR USE IN DYNAMIC SYSTEMS SHALL BE INSTALLED IN HEATING, VENTILATION AND AIR CONDITIONING SYSTEMS DESIGNED TO OPERATE WITH FANS ON DURING A FIRE. SMOKE DAMPERS SHALL COMPLY WITH THE REQUIREMENTS OF UL 555S. COMBINATION FIRE AND SMOKE DAMPERS SHALL COMPLY WITH BOTH UL 555 AND UL 555S. CEILING RADIATION DAMPERS SHALL COMPLY WITH REQUIREMENTS OF UL 555C.
- 21. FIRE DAMPERS SHALL HAVE A MINIMUM DAMPER RATING OF 1.5 HOURS WHEN INSTALLED IN LESS THAN 3-HOUR FIRE-RESISTANCE RATED ASSEMBLIES. RATINGS FOR DAMPERS INSTALLED IN WALLS RATED AT 3 HOURS OR MORE SHALL HAVE MINIMUM FIRE RATING OF 3 HOURS. (CBC 716.3.2)
- 22. FIRE AND SMOKE DAMPERS SHALL BE PROVIDED WITH APPROVED MEANS OF ACCESS, WHICH IS LARGE ENOUGH TO PERMIT INSPECTION AND MAINTENANCE OF THE DAMPER AND ITS OPERATING PARTS. THE ACCESS OPENING SHALL NOT REDUCE THE FIRE RESISTANCE RATING OF THE ASSEMBLY. FIRE AND SMOKE DAMPER ACCESSS POINTS SHALL BE PERMANENTLY IDENTIFIED ON THE EXTERIOR HAVING LETTERS NOT LESS THAN 1 INCH HIGH READING "FIRE DAMPER" OR "FIRE/SMOKE DAMPER" (CBC 716.4)
- 23. WHERE A SMOKE DAMPER IS INSTALLED WITHIN A DUCT, A SMOKE DETECTOR SHALL BE INSTALLED IN THE DUCT WITHIN 5 FEET OF THE DAMPER WITH NO AIR INLETS OR OUTLETS BETWEEN THE DETECTOR AND TH DAMPER. THE DETECTOR SHALL BE LISTED FOR THE AIR VELOCITY, TEMPERATURE AND HUMIDITY ANTICIPATED AT THE POINT WHERE IT IS INSTALLED. OTHER THEN IN MECHANICAL SMOKE CONTROL SYSTEMS, DAMPERS SHALL BE CLOSED UPON FAN SHUTDOWN WHERE THE LOCAL SMOKE DETECTOR REQUIRES A MINIMU VELOCITY TO OPERATE.
- 24. FUEL GAS APPLIANCES AND EQUIPMENT. THE APPROVAL AND INSTALLATION OF FUEL GAS DISTRIBUTION PIPING AND EQUIPMENT, FUEL GAS-FIRED APPLIANCES AND FUEL GAS-FIRED APPLIANCE VENTING SYSTEMS SHALL BE IN ACCORDANCE WITH THE CPC AND CMC.
- 25. LISTED AND LABEL. APPLIANCES, APPURTENANCES AND EQUIPMENT REGULATED BY THE CMC SHALL BE LISTED LABELED FOR THE APPLICATION IN WHICH THEY ARE INSTALLED AND USED (CMC SECTIONS 301.2, 302.1, AND 303.1).
- 26. LABELING. LABELING SHALL BE IN ACCORDANCE WITH THE PROCEDURES SET FORTH IN CMC 307.0.
- 27. LABEL INFORMATION. A PERMANENT FACTORY-APPLIED NAMEPLATE SHALL BE AFFIXED TO APPLIANCES ON WHICH SHALL APPEAR IN LEGIBLE LETTERING, THE MANUFACTURER'S NAME OR TRADEMARK, THE MODEL NUMBER, SERIAL NUMBER AND THE SEAL OR MARK OF THE APPROVED AGENCY. A LABEL SHALL ALSO INCLUDE THE FOLLOWING: (CMC SECTION 307)
- FUEL-BURNING UNITS: HOURLY RATING IN BTU/H (W); TYPE OF FUEL APPROVED FOR USE WITH THE APPLIANCE; AND REQUIRED CLEARANCES.
- 28. FUEL TYPES. FUEL-FIRED APPLIANCES SHALL BE DESIGNED FOR USE WITH THE TYPE OF FUEL TO WHICH THEY WILL BE CONNECTED AND THE ALTITUDE AT WHICH THEY ARE INSTALLED. APPLIANCES THAT COMPRISE PARTS OF THE BUILDING MECHANICAL SYSTEM SHALL NOT BE CONVERTED FOR THE USAGE OF A DIFFERENT FUEL, EXCEPT WHERE APPROVED AND CONVERTED IN ACCORDANCE WITH THE MANUFACTURE'S INSTRUCTIONS. THE FUEL INPUT RATE SHALL NOT BE INCREASED OR DECREASED BEYOND THE LIMIT RATING FOR THE ALTITUDE AT WHICH THE APPLIANCE IS INSTALLED.

MECHANIC	AL LEGEND	
SYMBOL	DESCRIPTION	ABBREV.
\bowtie	SUPPLY DUCT	S.
	RETURN AIR DUCT	R.
	EXHAUST AIR DUCT	E.
\leftarrow	CEILING DIFFUSER 1-2-3 OR 4 WAY THROW	C.D.
\rightarrow	CEILING REGISTER	C.R.
	ACCESS PANEL	A.P.
	FIRE DAMPER	F.D.
Ū	THERMOSTAT	
S	SENSOR	
SD	SMOKE DETECTOR	
C02	CO2 SENSOR	
	GENERAL CONTRACTOR	G.C.
•	POINT OF CONNECTION TO EXISTING	POC
	CUBIC FEET PER MINUTE	CFM

DRAWING

SHEET 27 OF

W.O. NO.

26_SHEETS

GENERAL BUILDING REQUIREMENTS

- 1. ALL CONSTRUCTION AND REMODELING WORK MUST BE PERFORMED BY CA LICENSED CLASS A OR CLASS B CONTRACTORS. ALL BUILDING TRADES WORK MUST BE PERFORMED BY A STATE OF CALIFORNIA LICENSED CONTRACTOR(S).
- 2. BUILDING CODES AND STANDARDS ARE AS FOLLOWS: 2019 CALIFORNIA MECHANICAL CODE (CMC)

Underground Service Alert

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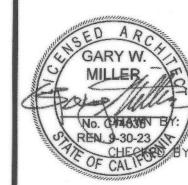
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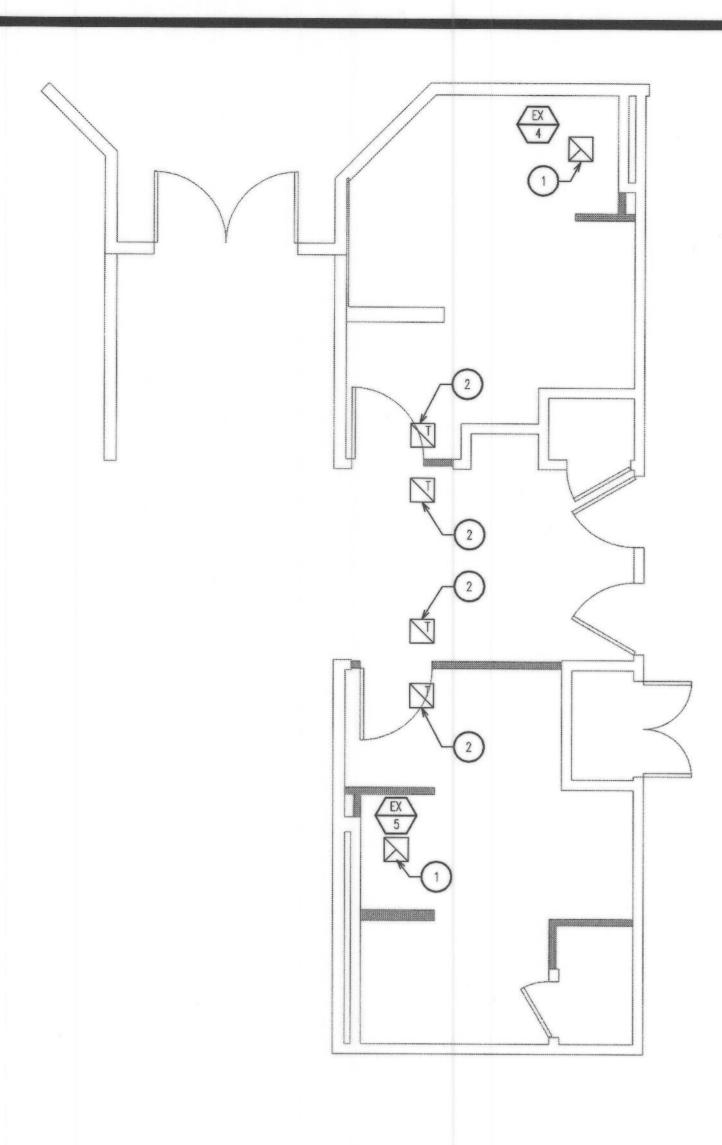
1177 Idaho Street, Suite 200 Redlands, CA 92374 Phone: (909) 335-7400 Fax: (909) 335-7299 info@miller-aip.com



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APPROVED 9/22 2018 2022	CITY OF SAN BERNARDING DEPARTMENT OF PUBLIC WORKS				
CITY ENGINEER: ALEX QISHTA REGISTERED CIVIL ENGINEER NO. 66702	MECHANICAL PLAN	1,,,			
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RECOMMENDED BY:	FOR CITY USE ONLY: FILE NO. C.I.P.	. NO.			



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



EXHAUST FAN SCHEDULE MECHANICAL ELECTRICAL VOLUME STATIC PRESS. MOTOR VOLT PHASE REMARKS MFG./MDL 318 CFM .315 170W 120 RDA-6 ADAPTER, 6"ø, 5.1 SONES GEMINI 520 / EX \ .315 170W 120 RDA-6 ADAPTER, 6"ø, 5.1 SONES 318 CFM GEMINI 520

GENERAL MECHANICAL NOTES

- 1. PENETRATIONS IN WALLS REQUIRING PROTECTED OPENINGS MUST BE FIRESTOPPED WITH AN APPROVED 3M FIRE BARRIER SEALANT ICC AND UL APPROVED PER 713.3. A. COPPER OR FERROUS PIPES OR CONDUITS MAY PENETRATE THE WALLS OR PARTITIONS, PROVIDED THEY ARE
- FIRESTOPPED. B. OPENINGS FOR STEEL ELECTRICAL OUTLET BOXES NOT EXCEEDING 16 SQUARE INCHES ARE PERMITTED, PROVIDED OPENINGS DO NOT EXCEED AN AGGREGATE AREA OF MORE THAN 100 SQUARE INCHESFOR ANY 100 SQUARE FEET OF WALL OR PARTITIONS, OUTLET BOXES ON OPPOSITE SIDES OF WALLS OR PARTITIONS MUST BE SEPARATED BY A HORIZONTAL DISTANCE OF 24 INCHES.
- C. WHERE WALLS ARE PENETRATED BY OTHER MATERIALS OR WHERE LARGER OPENINGS ARE REQUIRED THAN PERMITTED IN (B) ABOVE, THEY MUST BE QUALIFIED BY TESTS CONDUCTED IN ACCORDANCE WITH SECTION 703.
- 2. CONSTRUCTION OR WORK FOR WHICH A PERMIT IS REQUIRED SHALL BE SUBJECT TO INSPECTION BY THE BUILDING OFFICIAL AND SUCH CONSTRUCTION OR WORK SHALL REMAIN ACCESSIBLE AND EXPOSED FOR INSPECTION PURPOSES UNTIL APPROVED. INSPECTIONS CAN BE REQUESTED BY CALLING THE INSPECTION LINE.
- 3. HEATING, VENTILATION AND AIR-CONDITIONING SYSTEMS OF ALL STRUCTURES SHALL BE DESIGNED AND INSTALLED FOR EFFICIENT UTILIZATION OF ENERGY IN ACCORDANCE WITH THE CALIFORNIA ENERGY CODE.
- 4. APPLIANCES, APPURTENANCES AND EQUIPMENT REQUIRED BY THE CMC SHALL BE LISTED AND LABELED FOR THE APPLICATION IN WHICH THEY ARE INSTALLED AND USED (CMC SECTIONS 301.2, 302.1, AND 303.1)
- 5. LABELING SHALL BE IN ACCORDANCE WITH THE PROCEDURES SET FORTH IN CMC 307.0.
- 6. THE VENTILATION AIR DISTRIBUTION SYSTEM SHALL BE PROVIDED WITH MEANS TO ADJUST THE SYSTEM TO ACHIEVE AT LEAST THE MINIMUM VENTILATION AIRFLOW RATE AS REQUIRED BY THE CMC SECTION 403. VENTILATION SYSTEMS SHALL BE BALANCED BY AN APPROVED METHOD. SUCH BALANCING SHALL VERIFY THAT THE VENTILATION SYSTEM IS CAPABLE OF SUPPLYING AND EXHAUSTING THE AIRFLOW RATES REQUIRED BY CMC SECTIONS 403.2. SUCH AIR BALANCE REPORTS SHALL BE PROVIDED TO THE INSPECTOR AT TIME OF INSPECTION. AIR BALANCE REPORTS MAY BE REQUESTED BY THE INSPECTION DURING ANNUAL INSPECTIONS TO ENSURE ONGOING COMPLIANCE WITH CITY REQUIREMENTS, AND WHEN ISSUES OR CONCERNS REGARDING ODORS ARE BROUGHT TO THE ATTENTION OF THE CITY.
- 7. ALL MECHANICAL EQUIPMENT AND SYSTEMS INSTALLED AS PART OF PROJECT SHALL COMPLY WITH ALL REQUIREMENTS OF THE 2016 CMC AND THE 2016 CBC, 2016 CALIFORNIA GREEN BUILDING STANDARDS CODE AND 2016 CALIFORNIA BUILDING ENERGY EFFICIENCY STANDARDS.
- 8. PROVIDE 120 VOLT ELECTRICAL OUTLETS WITHIN 25' OF ALL ROOF MOUNTED AND OUTDOOR MECHANICAL EQUIPMENT. (CMC 309) ALL MECH EQUIP. (CMC 309)
- 9. ALL DUCTWORK FOR HEATING AND COOLING SYSTEM OR EVAPORATE COOLING SYSTEM SHALL BE CONDUCTED THROUGH DUCT SYSTEMS CONSTRUCTED OF METAL AS SET FORTH IN SMACNA HVAC DUCT CONSTRUCTION STANDARD - METAL AND FLEXIBLE. FACTORY MADE AIR DUCTS SHALL BE APPROVED FOR THE USE INTENDED OR SHALL COMPLY WITH THE 2016 CMC REFERENCED STANDARDS CHAPTER 17 (CMC 602.1).
- 10. ALL DUCT SMOKE DETECTORS INSTALLED, AS PART OF THIS PROJECT SHALL BE SUPERVISED BY THE BUILDING FIRE DETECTION OR ALARM SYSTEM WHEN THE BUILDING IS EQUIPPED WITH SUCH SYSTEM. LOS ANGELES FIRE DEPARTMENT PREVENTION BUREAU PLAN CHECK APPROVAL AND PERMIT ARE REQUIRED FOR CONNECTION OF DUCT SMOKE DETECTORS TO THE FIRE DETECTION OR ALARM SYSTEM.
- 11. THE REQUIRED SERVICE DISTANCE FROM THE MECHANICAL EQUIPMENT TO SCREENING, PARAPETS, WALLS AND OTHER EQUIPMENT SHALL BE A MINIMUM OF 30"x30" ON THE SERVICE SIDE OF THE EQUIPMENT, OR AS REQUIRED BY THE MANUFACTURER'S INSTALLATION INSTRUCTIONS, IF THE INSTRUCTIONS REQUIRE A GREATER CLEARANCE. (CMC SECTION 304.1)
- 12. EQUIPMENT AND APPLIANCES SHALL BE ACCESSIBLE FOR SERVICE, INSPECTION REPAIR AND REPLACEMENT WITHOUT REMOVING PERMANENT CONSTRUCTION. SUFFICIENT CLEARANCE SHALL BE MAINTAINED TO PERMIT CLEANING, REPLACEMENT OF FILTERS, BLOWERS, MOTOR CONTROLS AND LUBRICATION OF MOVING PARTS. 30" OF CLEARANCE IN DEPTH, WIDTH, AND HEIGHT SHALL BE PROVIDED TO SERVE THE APPLIANCE OR EQUIPMENT. (CMC 304.1)
- 13. OUTSIDE AIR FOR HEATING OR COOLING SYSTEM SHALL NOT BE TAKEN FROM CLOSER THAN 10'-0" FROM AN APPLIANCE VENT OUTLET, VENT OPENING OF A PLUMBING SYSTEM, OR THE DISCHARGE OUTLET OF EXHAUST FAN, UNLESS THE OUTLET IS 3'-0" ABOVE THE OUTSIDE AIR INLET. (CMC 314.3)
- 14. REFRIGERANT CONTAINING PORTIONS OF A SYSTEM THAT ARE FIELD ERECTED SHALL BE TESTED AND PROVED TIGHT TO THE AUTHORITY HAVING JURISDICTION AFTER COMPLETE INSTALLATION AND BEFORE OPERATION. THE HIGH LOW SIDES OF EACH SYSTEM SHALL BE TESTED AND PROVED TIGHT AT NOT LESS THAN THE LOWER OF THE PRESSURE IN CMC TABLE 1124.2 OR THE SETTING THE PRESSURE RELIEF DEVICE. (CMC 1124.2)

KEY NOTES: (X)

- 1. REMOVE EXISTING EXHAUST FAN & REPLACE W/ NEW PER SCHEDULE, THIS SHEET. RECONNECT EXISTING DUCT WORK TO EXHAUST FAN, VERIFY EXISTING DUCT SIZE MIN. 6".
- 2. EXISTING TRANSFER AIR GRILLS TO REMAIN.

- 15. ONE OF THE FOLLOWING METHODS IS REQUIRED TO COMPLY WITH MECH-3 VENTILATION REQUIREMENTS
- A. AIR BALANCING: ALL SPACE CONDITIONING AND VENTILATION SYSTEMS SHALL BE BALANCED TO THE QUANTITIES SPECIFIED IN THESE PLANS, IN ACCORDANCE THE THE NATIONAL ENVIRONMENTAL BALANCING BUREAU, (NEBB), PROCEDURAL STANDARDS (1983), OR ASSOCIATED AIR BALANCE COUNCIL, (AABC, NATIONAL STANDARDS (1986)
- B. OUTSIDE AIR CERTIFICATION: THE SYSTEM SHALL PROVIDE THE MINIMUM OUTSIDE AIR AS SHOWN ON THE MECHANICAL DRAWINGS, AND SHALL BE MEASURED AND CERTIFIED BY THE INSTALLING LICENSED C-20 MECHANICAL CONTRACTOR. (AIR BALANCING SHALL COMPLY TO CGBSC 5.410.1)
- 16. ALL INSTALLED REFRIGERATION PIPING SHALL BE PHOSPHORIC ACID DEOXIDIZED SEAMLESS COPPER. PRESSURE-LIMITING DEVICES SHALL BE CONNECTED BETWEEN THE PRESSURE-IMPOSING ELEMENT AND THE STOP VALVE ON THE DISCHARGE SIDE PER 2016 CMC SECTION 1111.3.
- 17. ALL FIRE AND SMOKE DAMPES ARE TO BE INSTALLLED IN ACCORDANCE WITH THE MAUFACTURER'S LISTING AND INSTALLATION INSTRUCTIONS. FIRE DAMPERS SHALL BE DYNAMIC TYPE. (CBC 716.3.1,
- 18. WHEN THE AUTOMATIC ACTIVATION OF A SMOKE DAMPER OCCURS, THE HVAC SYSTEMS SERVING SUCH DAMPERS SHALL IMMEDIATELY SHUTDOWN. (CMC 606.8)
- 19. FIRE AND SMOKE DAMPER SHALL BE LISTED AND BEAR THE LABEL OF AN APPROVED TESTING AGENCY.
- 20. FIRE DAMPERS SHALL COMPLY WITH THE REQUIREMENTS OF UL 555. ONLY FIRE DAMPERS LABELED FOR USE IN DYNAMIC SYSTEMS SHALL BE INSTALLED IN HEATING, VENTILATION AND AIR CONDITIONING SYSTEMS DESIGNED TO OPERATE WITH FANS ON DURING A FIRE. SMOKE DAMPERS SHALL COMPLY WITH THE REQUIREMENTS OF UL 555S. COMBINATION FIRE AND SMOKE DAMPERS SHALL COMPLY WITH BOTH UL 555 AND UL 555S. CEILING RADIATION DAMPERS SHALL COMPLY WITH REQUIREMENTS OF UL 555C.
- 21. FIRE DAMPERS SHALL HAVE A MINIMUM DAMPER RATING OF 1.5 HOURS WHEN INSTALLED IN LESS THAN 3-HOUR FIRE-RESISTANCE RATED ASSEMBLIES. RATINGS FOR DAMPERS INSTALLED IN WALLS RATED AT 3 HOURS OR MORE SHALL HAVE MINIMUM FIRE RATING OF 3 HOURS. (CBC 716.3.2)
- 22. FIRE AND SMOKE DAMPERS SHALL BE PROVIDED WITH APPROVED MEANS OF ACCESS, WHICH IS LARGE ENOUGH TO PERMIT INSPECTION AND MAINTENANCE OF THE DAMPER AND ITS OPERATING PARTS. THE ACCESS OPENING SHALL NOT REDUCE THE FIRE RESISTANCE RATING OF THE ASSEMBLY. FIRE AND SMOKE DAMPER ACCESSS POINTS SHALL BE PERMANENTLY IDENTIFIED ON THE EXTERIOR HAVING LETTERS NOT LESS THAN 1 INCH HIGH READING "FIRE DAMPER" OR "FIRE/SMOKE DAMPER" (CBC 716.4)
- 23. WHERE A SMOKE DAMPER IS INSTALLED WITHIN A DUCT, A SMOKE DETECTOR SHALL BE INSTALLED IN THE DUCT WITHIN 5 FEET OF THE DAMPER WITH NO AIR INLETS OR OUTLETS BETWEEN THE DETECTOR AND TH DAMPER. THE DETECTOR SHALL BE LISTED FOR THE AIR VELOCITY, TEMPERATURE AND HUMIDITY ANTICIPATED AT THE POINT WHERE IT IS INSTALLED, OTHER THEN IN MECHANICAL SMOKE CONTROL SYSTEMS, DAMPERS SHALL BE CLOSED UPON FAN SHUTDOWN WHERE THE LOCAL SMOKE DETECTOR REQUIRES A MINIMU VELOCITY TO OPERATE.
- 24. FUEL GAS APPLIANCES AND EQUIPMENT. THE APPROVAL AND INSTALLATION OF FUEL GAS DISTRIBUTION PIPING AND EQUIPMENT, FUEL GAS-FIRED APPLIANCES AND FUEL GAS-FIRED APPLIANCE VENTING SYSTEMS SHALL BE IN ACCORDANCE WITH THE CPC AND CMC.
- 25. LISTED AND LABEL. APPLIANCES, APPURTENANCES AND EQUIPMENT REGULATED BY THE CMC SHALL BE LISTED LABELED FOR THE APPLICATION IN WHICH THEY ARE INSTALLED AND USED (CMC SECTIONS 301.2, 302.1, AND 303.1).
- 26. LABELING. LABELING SHALL BE IN ACCORDANCE WITH THE PROCEDURES SET FORTH IN CMC 307.0.
- 27. LABEL INFORMATION. A PERMANENT FACTORY-APPLIED NAMEPLATE SHALL BE AFFIXED TO APPLIANCES ON WHICH SHALL APPEAR IN LEGIBLE LETTERING, THE MANUFACTURER'S NAME OR TRADEMARK, THE MODEL NUMBER, SERIAL NUMBER AND THE SEAL OR MARK OF THE APPROVED AGENCY. A LABEL SHALL ALSO INCLUDE THE FOLLOWING: (CMC SECTION 307)
- FUEL-BURNING UNITS: HOURLY RATING IN BTU/H (W); TYPE OF FUEL APPROVED FOR USE WITH THE APPLIANCE; AND REQUIRED CLEARANCES.
- 28. FUEL TYPES. FUEL-FIRED APPLIANCES SHALL BE DESIGNED FOR USE WITH THE TYPE OF FUEL TO WHICH THEY WILL BE CONNECTED AND THE ALTITUDE AT WHICH THEY ARE INSTALLED. APPLIANCES THAT COMPRISE PARTS OF THE BUILDING MECHANICAL SYSTEM SHALL NOT BE CONVERTED FOR THE USAGE OF A DIFFERENT FUEL, EXCEPT WHERE APPROVED AND CONVERTED IN ACCORDANCE WITH THE MANUFACTURE'S INSTRUCTIONS. THE FUEL INPUT RATE SHALL NOT BE INCREASED OR DECREASED BEYOND THE LIMIT RATING FOR THE ALTITUDE AT WHICH THE APPLIANCE IS INSTALLED.

MECHANICAL LEGEND SYMBOL DESCRIPTION ABBREV. SUPPLY DUCT RETURN AIR DUCT EXHAUST AIR DUCT $\leftarrow \boxtimes \rightarrow$ CEILING DIFFUSER C.D. 1-2-3 OR 4 WAY THROW \rightarrow CEILING REGISTER C.R. ACCESS PANEL A.P. FIRE DAMPER F.D. (T) **THERMOSTAT** (S) SMOKE DETECTOR (CO2) CO2 SENSOR GENERAL CONTRACTOR G.C. • POINT OF CONNECTION TO EXISTING POC CUBIC FEET PER MINUTE CFM

GENERAL BUILDING REQUIREMENTS

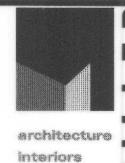
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- 2. BUILDING CODES AND STANDARDS ARE AS FOLLOWS: 2019 CALIFORNIA MECHANICAL CODE (CMC)

Underground Service Alert

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TWO WORKING DAYS BEFORE YOU DIG

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planning

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	HOT WATE	R PIPE IN	ISUL	ATION S	SCHEDU	LE	
FLUID TEMP.	CONDUCTIVITY	INSULATION MEAN			PIPE DIAMTER D INSULATION		
RANGE (°F)	RANGE (BTU-IN./HR/SF/*F)	DATING TEND	<1"	1" TO <1.5"	1.5" TO <4"	4" TO <8"	8" AND LARGER
	ACE HEATING, HOT WA D SERVICE WATER HE		AM, STE	AM CONDENSAT	E AND HOT W	ATER)	(
ABOVE 350 251-350 201-250 141-200 105-140	.3234 .2931 .2730 .2529 .2428	250 200 150 125 100	4.5 3.0 2.5 1.5 1.0	5.0 4.0 2.5 1.5 1.5	5.0 4.5 2.5 2.0 1.5	5.0 4.5 3.0 2.0 1.5	5.0 4.5 3.0 2.0 1.5

INSULATION SHALL BE PROVIDED ON ALL HOT WATER AND CIRCULATING PIPING AND THE FIRST 5 FEET ON THE COLD WATER FROM THE WATER HEATER.

INSTALL APPROVED TEMPERATURE MIXING VALVES AT PLUMBING FIXTURES THAT REQUIRE 110° F. WATER PER CPC AND CALIFORNIA ENERGY CODE.

ALL SERVICE WATER HEATING EQUIPMENT TO BE IN COMPLIANCE WITH THE MODEL ENERGY CODE REQUIREMENTS AND LABELED.

A CERTIFICATE OF INSTALLATION FORM FOR WATER HEATING SYSTEM PER 2013 CALIFORNIA BUILDING ENERGY EFFICIENCY STANDARDS SHALL BE SUBMITTED TO THE BUILDING DEPARTMENT AFTER THE INSTALLATION OF WATER HEATER(S) AND HOT WATER DISTRIBUTION SYSTEM(S).

WITHIN 90 DAYS AFTER THE ENFORCEMENT AGENCY ISSUES A PERMANENT FINAL OCCUPANCY PERMIT, THE BUILDER SHALL PROVIDE RECORD DRAWINGS WITH COPIES OF THE COMPLETED, SIGNED, SUBMITTED COMPLIANCE DOCUMENTS; OPERATING AND MAINTENANCE INFORMATION FOR ALL APPLICABLE MATERIAL, COMPONENTS, AND DEVICES INSTALLED TO THE BUILDING OWNER AT OCCUPANCY.

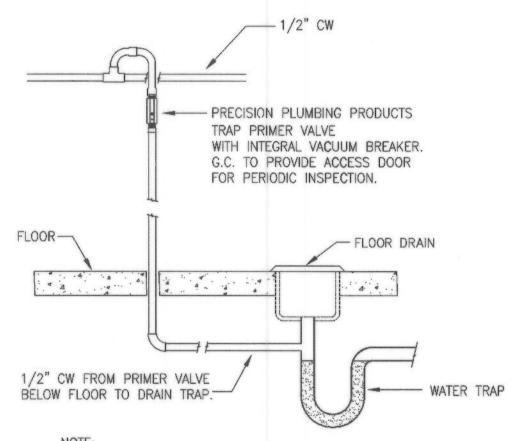
				PL	UMB	ING EQUIPI	MENT SCHEDULE
#	DESCRIPTION	W	٧	CW	HW	REMARKS	
LAV-1	LAVATORY	2"	2"	1/2"	1/2"	MODEL: DESCRIPTION:	LUCERNE 03.012 OR APPROVED EQUAL WALL HUNG, VITREOUS CHINA, WHITE, 4" O.C. FAUCET HOLE, W/ AMERICAN STANDARD INNSBROOK SELECTRONIC SENSOR FAUCET 6053
<u>₩C−1</u>	WATER CLOSET ADA COMPLIANT	3"	2"	1"	-	MODEL: DESCRIPTION:	MADERA FLOWISE 3461.528 OR APPROVED EQUAL 16-1/2" HEIGHT 1.28 GPF FLUSHOMETER TOILET SYSTEM W/SELECTRONIC FLUSH VALVE, ELONGATED BOWL, VITREOUS CHINA, WHITE, W/SEAT COVER 5901.100 HEAVY DUTY, & SELECTRONIC FLUSH VALVE 6065.121
FD-1	FLOOR DRAIN	2"	2"	_	-	MODEL: DESCRIPTION:	ZURN EZ1 6" X 6" SQUARE STRAINER, WITH 1/2" TRAP PRIMER CONNECTION OR APPROVED EQUAL
WHA-1	WATER HAMMER ARRESTOR			VARIES	0 0	MODEL: DESCRIPTION:	ZURN Z1700 SHOKTROL WATER HAMMER ARRESTOR, STAINLESS STEEL CONSTRUCTION. SIZED ACCORDING TO FIXTURE UNITS OR APPROVED EQUAL.
<u>DF-1</u>	DRINKING FOUNTAIN	2"	2"	1/2"		MODEL: DESCRIPTION:	ELKAY LVRC8WSK ezh20 VANDAL-RESISTANT BOTTLE FILING STATION & SINGLE COOLER DRINKING FOUNTAIN WITH FILTERED REFRIGERATED WATER, STAINLESS STEEL CONSTRUCTION.

1/2" HOT WATER -1/2" COLD WATER Hand Sink/LAV. -3/8" COPPER BRAIDED FLEX COLD & TEMPERED WATER TO FAUCET ANGLE STOP DUAL OUTLET

MIXING VALVE MV-1

SLOAN MIX-60-A-

MECHANICAL MIXING VALVE.



DO NOT DIRECT CONNECT PRIMER VALVE TO WATER LINE. FIELD VERIFY TRAP PRIMER LOCATION. ACCESS PANEL BY G.C.

TRAP PRIMER DETAIL

INDOOR WATER USE

A. METERS

SEPARATE METERS OR METERING DEVICES SHALL BE INSTALLED FOR BUILDINGS IN EXCESS OF 50,000 SQUARE FEET FOR THE USES DESCRIBED IN 1, 2 AND 3 BELOW. (SEC. 5.303.1)

1. FOR EACH INDIVIDUAL LEASED RENTED OR OTHER TENANT SPACE WITHIN THE BUILDING PROJECTED TO CONSUME MORE THAN 100 GALLON PER DAY.

2. FOR SPACES USED FOR LAUNDRY OR CLEANERS, RESTAURANT OR FOOD SERVICE, MEDICAL OR DENTAL OFFICE, LABORATORY, OR BEAUTY SALON OR BARBER SHOP PROJECTED TO CONSUME MORE THAN 100 GALLONS PRE DAY.

3. FOR ANY BUILDING WITHIN A PROJECT OR SPACE WITHIN A BUILDING THAT IS PROJECTED TO CONSUME MORE THAN 100 GALLONS PER DAY.

B. TWENTY PERCENT SAVINGS.

A SCHEDULE OF PLUMBING FIXTURES AND FIXTURE FITTINGS THAT WILL REDUCE THE OVERALL USE OF POTABLE WATER WITHIN THE BUILDINGS BY 20% SHALL BE PROVIDED. THE REDUCTION SHALL BE BASED ON THE MAXIMUM ALLOWABLE WATER USE PER PLUMBING FIXTURE AND FITTINGS AS REQUIRED BY THE CALIFORNIA BUILDING STANDARDS CODE. THE 20% REDUCTION IN POTABLE WATER USE SHALL BE DEMONSTRATED BY ONE OF THE FOLLOWING METHODS:

1. EACH PLUMBING FIXTURE AND FITTING SHALL MEET THE 20% REDUCED FLOW RATE SPECIFIED IN TABLE 5.303.2.3, OR 2. A CALCULATION DEMONSTRATING A 20% REDUCTION IN THE BUILDING WATER USE BASELINE AS ESTABLISHED IN TABLE

5.303.2.2 SHALL BE PROVIDED. 5.303.2

MULTIPLE SHOWER HEADS SERVING ONE SHOWER. WHEN SINGLE SHOWER FIXTURES ARE SERVED BY MORE THAN ONE SHOWER HEAD, THE COMBINED FLOW RATE OF ALL THE SHOWER HEADS SHALL NOT EXCEED THE MAXIMUM FLOW RATES SPECIFIED IN THE 20% REDUCTION COLUMN CONTAINED IN TABLE 5.303.2.3 OR THE SHOWER SHALL BE DESIGNED TO ALLOW ONLY ONE SHOWER HEAD TO BE IN OPERATION AT A TIME.

EXCEPTION: THE MAXIMUM FLOW RATE FOR SHOWER HEADS WHEN USING THE CALCULATION METHOD SPECIFIED IN THE 20% SAVING ITEM #2 ABOVE IS 2.5 GPM @ 80 PSI. 5.303.2.1.

. WASTE WATER REDUCTION.

EACH BUILDING SHALL REDUCE BY 20% WASTE WATER BY ONE OF THE FOLLOWING METHODS:

1. THE INSTALLATION OF WATER CONSERVING FIXTURES (TOILETS, URINALS).

2. UTILIZING NON-POTABLE WATER SYSTEMS (CAPTURED RAINWATER, GRAYWATER) COMPLYING WITH THE CALIFORNIA PLUMBING CODE.

E. PLUMBING FIXTURES AND FITTINGS.

PLUMBING FIXTURES (TOILETS, URINALS) AND FITTINGS (FAUCETS, SHOWER HEADS) SHALL MEET THE STANDARDS REFERENCED IN TABLE 5.503.6.

F	IXTURE FLOW RATES		
FIXTURE TYPE	BASELINE FLOW RATE	MAXIMUM FLOW RATE AT 20% REDUCTION	
SHOWERHEADS	2.5 GPM @ 80 PSI	2 GPM @ 80 PSI	
LAVATORY FAUCETS - NONRESIDENTIAL	0.5 GPM @ 60 PSI	0.4 GPM @ 60 PSI	
KITCHEN FAUCETS	2.2 GPM @ 60 PSI	1.8 GPM @ 60 PSI	
WASH FOUNTAINS	2.2 RIM SPACE (in)/20 GPM @ 60 PSI	1.8 RIM SPACE (in)/20 GPM @ 60 PS	
METERING FAUCETS	0.25 GALLONS/CYCLE	0.2 GALLONS/CYCLE	
METERING FAUCETS FOR WASH FOUNTAINS	.25 RIM SPACE (in)/20 GPM @ 60 PSI	.20 RIM SPACE (in)/20 GPM @ 60 PS	
GRAVITY TANK TYPE WATER CLOSETS	1.6 GALLONS/FLLUSH	1.28 GALLONS/FLUSH	
FLUSHOMETER TANK WATER CLOSETS	1.6 GALLONS/FLLUSH	1.28 GALLONS/FLUSH	
FLUSHOMETER VALVE WATER CLOSETS	1.6 GALLONS/FLLUSH	1.28 GALLONS/FLUSH	
ELECTROMECHANICAL HYDRAULIC WATER CLOSETS	1.6 GALLONS/FLLUSH	1.28 GALLONS/FLUSH	
URINALS	1.0 GALLONS/FLLUSH	0.5 GALLONS/FLUSH	

GENERAL PLUMBING NOTES

- 1. All soil piping to be cast iron or ABS where local codes permit. Vent piping may be galvanized steel, cast iron, copper or ABS as local codes permit (verify). Soil and vent piping to slope a minimum of 1/4" per foot unless noted otherwise. ABS not allowed in fire rated construction. Waste risers above slab serving floor(s) above to be cast iron.
- 2. Domestic site water piping to be schedule 80 PVC below ground, water and condensate piping above grade to be type 'L' hard copper wrought copper fittings. Solder and flux shall contain no lead. Solder and flux with containing lead shall not be used in potable water systems per Sec. 316.1.3, 2016 CPC.
- 3. All materials and equipment shall be new and unused unless specified on plans. Contractor to use only qualified labor and supervision for the installation of materials and equipment.
- 4. All work shall conform with the 2016 CPC and all local codes. No work shall be covered until it has been inspected, tested and approved by inspector.
- 5. Contractor shall make utility connections and provide permits per contract. Any additional fees and permits will be at extra cost.
- 6. Contractor shall verify size, depth, location and adequacy of all utilities including meter location and sewer inverts prior to start of work.
- Contractor shall install cleanouts where indicated on plans and as required by local codes and authorities. Clean out to grade shall be in Brooks box or equal.
- 8. Coordinate work with all trades to avoid conflict and interferences.
- 9. Verify all rough—in heights and locations with general contractor and/or architect.
- 10. All pipes below ground shall be located away from bearing footings or as indicated on structural
- 11. Install reduced pressure backflow preventer as indicated on plans or as required by local codes. Where street pressure exceeds 80 P.S.I. install approved pressure regulating valve with relief valve
- 12. Contractor shall verify that equipment and fixtures will physically fit in the locations indicated.
- 13. All penetrations of fire rated assemblies shall be made with non—combustible material of an equal fire rating and shall be completely stopped. Refer to architectural plans to identify fire rated
- 14. Contractor shall include (but not limited to) all piping, valves, fittings and fixture supports associated wtih each new fixture.
- 16. Each fixture shall have its own shut off valve(s). Valves to be located below or adjacent to the fixture it serves. General contractor to provide access panel when valves are within a wall or above the ceiling. All stub out heights and locations to be verified.
- 17. All gas piping to be schedule 40 black steel with threaded malleable fittings. Final connection to each gas appliance shall be with an approved flexible connection and shut off valve. When the gas connection to the appliance is within the appliance cabinet the connection shall have a rigid threaded nipple, length as required, extending from the connection through the cabinet. Flexible connection shall not enter the cabinet.
- 18. All valves, unions, etc., shall be the same size as the piping unless otherwise specified. Unions shall be installed after each screw type valve and prior to equipment connections. Install isolation unions at all connections between dissimilar metals.
- 19. All plumbing vents shall terminate not less than ten feet away from or at least 3 feet above any window of door openning, fresh air intake nor less than 1 foot from a verticle surface.
- 20. Insulate all exposed drain piping below lavatories and sinks with "Armaflex"."
- 21. Compressed air piping may be copper or galv. steel. Verify with general contractor or owner.
- 22. All pipes discharging to floor sinks shall have the minimum air gap as required by the current CPC
- 23. Contractor shall be responsible for the entire scope of work as outlined per the contract. Final testing procedures and connections are to conform to the current codes.
- 24. Contractor shall provide owner with all required manuals for the proper maintenance and operation
- 25. These plans are of schematic form and are drawn for maximum clarity. Changes may be necessary for convience, obstructions, economics and efficiency.

	MATERIA	AL	SF	E	CII	FI(CA	TI	ONS
	SERVICES	SCH 40 ABS DWV	CAST IRON NO-HUB	GALV. STEEL SCH 40	BLACK STEEL SCH 40	TYPE M COPPER	TYPE L COPPER	TYPE K COPPER	REMARKS
COLD	ABOVE GROUND						•		
WATER	BELOW GROUND							•	
HOT	ABOVE GROUND						•		
WATER	BELOW GROUND							•	
WASTE	ABOVE GROUND	•							
1171012	BELOW GROUND	•							
VENT	ABOVE GROUND	•							
V LIVI	BELOW GROUND	•							
INDIRECT	INDOOR					•			
WASTE	OUTDOOR					•			
NATURAL	INDOOR				•				PAINTED WITH RUST
GAS	OUTDOOR			•					INHIBITING PAINT
STORM	ABOVE GROUND		•						
DRAIN	BELOW GROUND		•						
C02	ABOVE GROUND	-					•		SILVER BRAZED;
-	4501/5 0501/11/5	-							NITROGEN PURGED
CO2 VENT	ABOVE GROUND						•		SILVER BRAZED; NITROGEN PURGED

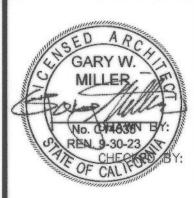
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minimum					
SED A PC					
MILLER	MARK	REVISIONS	BY	APPR	D
No. 044638N BY:	BENCH MARK:				

APPROVED 9/22 -2018 2022	CITY OF SAN
CITY ENGINEER: ALEX QISHTA REGISTERED CIVIL ENGINEER NO. 66702	PLUMBI GENERAL
DRAWN BY: LS/VM	FOR
CHECKED BY: VM	ROWE LIB
RECOMMENDED BY:	FOR CITY USE ONLY: FILE NO.

CITY OF SAN BERNARDINO DEPARTMENT OF PUBLIC WORKS **PLUMBING**

GENERAL NOTES FOR ROWE LIBRARY

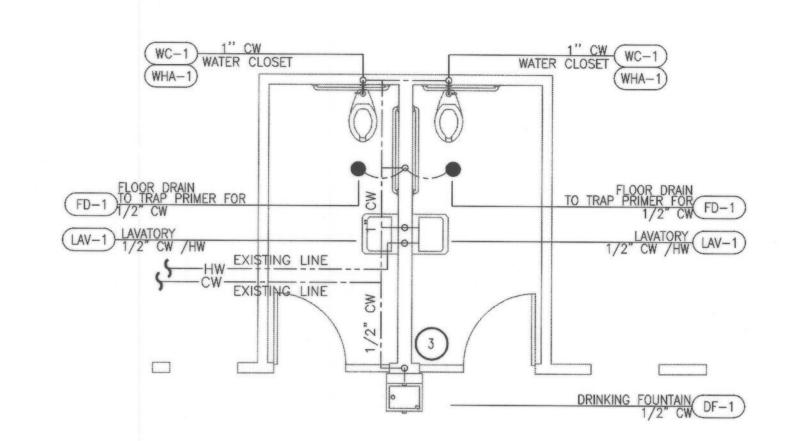
13476 SHEET 23 OF P-101 26 SHEETS

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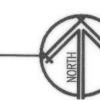
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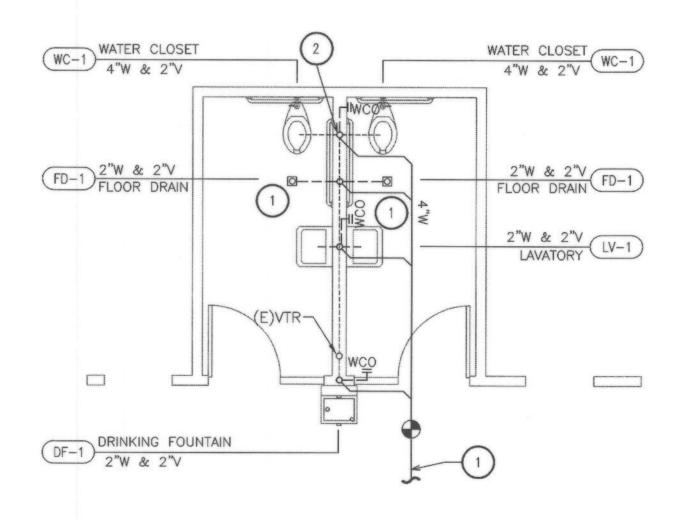
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PLUMBING WATER SUPPLY

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





PLUMBING WASTE

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



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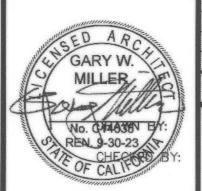
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APPROVED 9/22 2018 2022	CITY OF
CITY ENGINEER: ALEX QISHTA REGISTERED CIVIL ENGINEER NO. 66702	PI
DRAWN BY: LS/VM	

CITY	OF SAN BERNA DEPARTMENT OF PUBLIC W	
	PLUMBING PLAN	D 102

ROWE LIBRARY

GENERAL NOTES:

PIPE INSULATION.

EXISTING WASTE LINE.

3. PIPE SLEEVE THROUGH FOOTING SHALL BE PVC.

1. ALL PLUMBING WORK SHALL CONFORM TO THE REQUIREMENTS OF THE 2019 CPC.

POTABLE COLD WATER MATERIAL SHALL OCCUR ABOVE THE SLAB.

6. CUT EXISTING CONCRETE SLAB AS NECESSARY FOR NEW PLUMBING LINE.

2. CONNECT NEW VENT LINE TO EXISTING VENT LINE THRU ROOF. VERIFY EXISTING CONDITIONS AND LOCATION OF HOT WATER LINE

3. CONNECT NEW COLD WATER LINE TO EXISTING COLD WATER LINE SYSTEM VERIFY EXISTING CONDITIONS AND LOCATION OF COLD WATER LINE

WATER CLOSETS SHALL BE WATER CONSERVING TYPES USING LESS THAN 1.28 GALLONS PER FLUSH. LAVATORY FAUCETS SHALL FLOW LESS THAN 0.50 GALLONS PER MINUTE.

4. THE TRANSITION FROM BELOW GROUND POTABLE COLD WATER MATERIAL TO ABOVE GROUND

5. FIRE HAZARD RATING: INSULATION, JACKETS, FACINGS, ADHESIVES, COATINGS, AND ACCESSORIES SHALL BE ACCEPTABLE TO THE FIRE MARSHALL, AND SHALL NOT EXCEED THE FOLLOWING FIRE HAZARD CLASSIFICATIONS: FLAME—SPREAD: MAXIMUM 25, FUEL CONTRIBUTED: MAXIMUM 50, SMOKE DEVELOPED: MAXIMUM 50. RATED TO BE IN ACCORDANCE WITH UL TEST METHOD FOR FIRE HAZARD CLASSIFICATION OF BUILDING MATERIALS, NO. 763. OWENS CORNING FIBERGLASS PURE INSULATION.

PLUMBING CONTRACTOR TO VERIFY ALL EXISTING CONDITIONS, LOCATIONS, AND PIPE SIZES OF COLD / HOT WATER LINES AND POINT OF CONNECTIONS.

PLUMBING CONTRACTOR TO VERIFY ALL EXISTING CONDITIONS, LOCATIONS, AND PIPE SIZES OF WASTE AND VENT LINES AND POINT OF CONNECTIONS.

1. CUT EXISTING SLAB FOR NEW WASTE LINES TO RE-CONNECT NEW PLUMBING FIXTURES TO

13476 SHEET 24 OF P-102 26 SHEETS

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interiors

	HOT WATE	R PIPE IN	ISUL	ATION S	SCHEDU	LE	
FLUID TEMP.	CONDUCTIVITY	INSULATION MEAN			PIPE DIAMTER D INSULATION		
RANGE (°F)	RANGE (BTU-IN./HR/SF/*F)	DATING TEMP	<1"	1" TO <1.5"	1.5" TO <4"	4" TO <8"	8" AND LARGER
	ACE HEATING, HOT W D SERVICE WATER HI		AM, STE	AM CONDENSAT	E AND HOT W	ATER)	
ABOVE 350 251-350 201-250 141-200 105-140	.3234 .2931 .2730 .2529 .2428	250 200 150 125 100	4.5 3.0 2.5 1.5	5.0 4.0 2.5 1.5 1.5	5.0 4.5 2.5 2.0 1.5	5.0 4.5 3.0 2.0 1.5	5.0 4.5 3.0 2.0 1.5

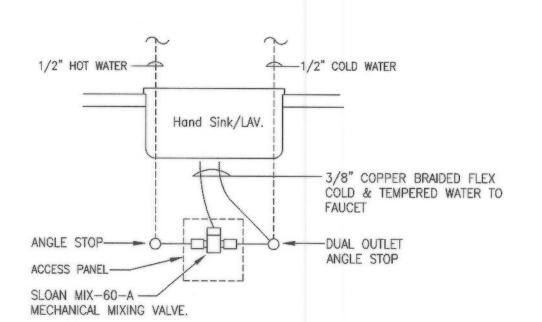
INSULATION SHALL BE PROVIDED ON ALL HOT WATER AND CIRCULATING PIPING AND THE FIRST 5 FEET ON THE COLD WATER FROM THE WATER HEATER.

INSTALL APPROVED TEMPERATURE MIXING VALVES AT PLUMBING FIXTURES THAT REQUIRE 110° F. WATER PER CPC AND CALIFORNIA ENERGY CODE.

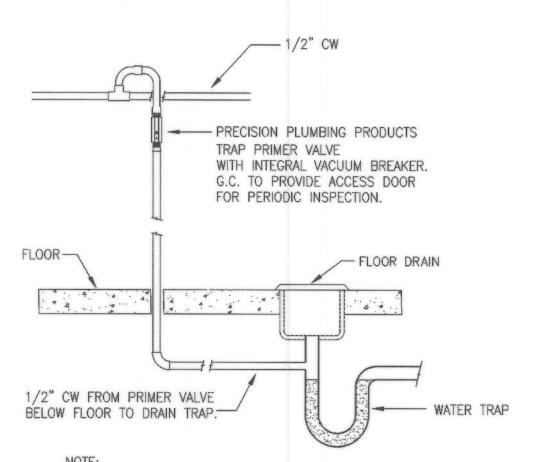
ALL SERVICE WATER HEATING EQUIPMENT TO BE IN COMPLIANCE WITH THE MODEL ENERGY CODE REQUIREMENTS AND LABELED.

A CERTIFICATE OF INSTALLATION FORM FOR WATER HEATING SYSTEM PER 2013 CALIFORNIA BUILDING ENERGY EFFICIENCY STANDARDS SHALL BE SUBMITTED TO THE BUILDING DEPARTMENT AFTER THE INSTALLATION OF WATER HEATER(S) AND HOT WATER DISTRIBUTION SYSTEM(S).

WITHIN 90 DAYS AFTER THE ENFORCEMENT AGENCY ISSUES A PERMANENT FINAL OCCUPANCY PERMIT, THE BUILDER SHALL PROVIDE RECORD DRAWINGS WITH COPIES OF THE COMPLETED, SIGNED, SUBMITTED COMPLIANCE DOCUMENTS: OPERATING AND MAINTENANCE INFORMATION FOR ALL APPLICABLE MATERIAL, COMPONENTS, AND DEVICES INSTALLED TO THE BUILDING OWNER AT OCCUPANCY.



MIXING VALVE MV-1



DO NOT DIRECT CONNECT PRIMER VALVE TO WATER LINE. FIELD VERIFY TRAP PRIMER LOCATION. ACCESS PANEL BY G.C.

TRAP PRIMER DETAIL

				PL	UMB	ING EQUIP	MENT SCHEDULE		
#	DESCRIPTION	W	٧	CW	HW	REMARKS			
LAV-1	LAVATORY	2"	2"	1/2"	1/2"	MODEL: DESCRIPTION:	RONDALYN 0491.019 APPROVED EQUAL WALL HUNG, VITREOUS CHINA, WHITE, 4" O.C. FAUCET HOLE, W/ AMERICAN STANDARD INNSBROOK SELECTRONIC SENSOR FAUCET 6053		
<u>₩C−1</u>	WATER CLOSET ADA COMPLIANT	3"	2"	1"	-	MODEL: DESCRIPTION:	AFWALL MILLENIUM FLOWISE 3351.101 OR APPROVED EQUAL 16-1/2" HEIGHT 1.28 GPF FLUSHOMETER TOILET SYSTEM W/SELECTRONIC FLUSH VALVE, ELONGATED BOWL, VITREOUS CHINA, WHITE, W/SEAT COVER 5901.100 HEAVY DUTY, & SELECTRONIC FLUSH VALVE 6065.121		
<u>₩C−2</u>	WATER CLOSET	3"	2"	1"	_	MODEL: DESCRIPTION:	MADERA FLOWISE 3451.528 OR APPROVED EQUAL 15" HEIGHT 1.28 GPF FLUSHOMETER TOILET SYSTEM W/SELECTRONIC FLUSH VALVE, ELONGATED BOWL, VITREOUS CHINA, WHITE, W/SEAT COVER 5901.100 HEAVY DUTY, & SELECTRONIC FLUSH VALVE 6065.121		
<u>UR-1</u>	URINAL	2"	2"	1"	-	MODEL: DESCRIPTION:	AMERICAN STANDARD 6590.505 WASHBROOK FLOWISE HIGH EFFICIENCY URINAL SYSTEM WITH AMERICAN STANDARD 6063.051 SELECTRONIC FLUSH VALVE OR APPROVED EQUAL VITREOUS CHINA, 0.125 GPF		
<u>TP-1</u>	TRAP PRIMER VALVE	_	-	1/2"	-	MODEL: DESCRIPTION:	PRECISION PLUMBING PRODUCTS PR-500 OR APPROVED EQUAL PRESSURE DROP ACTIVATED TRAP PRIMER		
<u>FD-1</u>	FLOOR DRAIN	2"	2"	_	1	MODEL: DESCRIPTION:	ZURN EZ1 6" X 6" SQUARE STRAINER, WITH 1/2" TRAP PRIMER CONNECTION OR APPROVED EQUAL		
<u>WHA-1</u>	WATER HAMMER ARRESTOR			VARIES	-	MODEL: DESCRIPTION:	ZURN Z1700 SHOKTROL WATER HAMMER ARRESTOR, STAINLESS STEEL CONSTRUCTION. SIZED ACCORDING TO FIXTURE UNITS OR APPROVED EQUAL.		
<u>DF-1</u>	DRINKING FOUNTAIN	2"	2"	1/2"		MODEL: DESCRIPTION:	ELKAY LVRC8WSK ezH20 VANDAL-RESISTANT BOTTLE FILING STATION & SINGLE COOLER DRINKING FOUNTAIN WITH FILTERED REFRIGERATED WATER, STAINLESS STEEL CONSTRUCTION.		

INDOOR WATER USE

A. METERS

SEPARATE METERS OR METERING DEVICES SHALL BE INSTALLED FOR BUILDINGS IN EXCESS OF 50,000 SQUARE FEET FOR THE USES DESCRIBED IN 1, 2 AND 3 BELOW. (SEC. 5.303.1)

- 1. FOR EACH INDIVIDUAL LEASED RENTED OR OTHER TENANT SPACE WITHIN THE BUILDING PROJECTED TO CONSUME MORE THAN 100 GALLON PER DAY.
- 2. FOR SPACES USED FOR LAUNDRY OR CLEANERS, RESTAURANT OR FOOD SERVICE, MEDICAL OR DENTAL OFFICE, LABORATORY, OR BEAUTY SALON OR BARBER SHOP PROJECTED TO CONSUME MORE THAN 100 GALLONS PRE DAY.
- 3. FOR ANY BUILDING WITHIN A PROJECT OR SPACE WITHIN A BUILDING THAT IS PROJECTED TO CONSUME MORE THAN 100 GALLONS PER DAY.

A SCHEDULE OF PLUMBING FIXTURES AND FIXTURE FITTINGS THAT WILL REDUCE THE OVERALL USE OF POTABLE WATER WITHIN THE BUILDINGS BY 20% SHALL BE PROVIDED. THE REDUCTION SHALL BE BASED ON THE MAXIMUM ALLOWABLE WATER USE PER PLUMBING FIXTURE AND FITTINGS AS REQUIRED BY THE CALIFORNIA BUILDING STANDARDS CODE. THE 20% REDUCTION IN POTABLE WATER USE SHALL BE DEMONSTRATED BY ONE OF THE FOLLOWING METHODS:

- 1. EACH PLUMBING FIXTURE AND FITTING SHALL MEET THE 20% REDUCED FLOW RATE SPECIFIED IN TABLE 5.303.2.3, OR
- 2. A CALCULATION DEMONSTRATING A 20% REDUCTION IN THE BUILDING WATER USE BASELINE AS ESTABLISHED IN TABLE

C. MULTIPLE SHOWER HEADS SERVING ONE SHOWER.

5.303.2.2 SHALL BE PROVIDED. 5.303.2

WHEN SINGLE SHOWER FIXTURES ARE SERVED BY MORE THAN ONE SHOWER HEAD, THE COMBINED FLOW RATE OF ALL THE SHOWER HEADS SHALL NOT EXCEED THE MAXIMUM FLOW RATES SPECIFIED IN THE 20% REDUCTION COLUMN CONTAINED IN TABLE 5.303.2.3 OR THE SHOWER SHALL BE DESIGNED TO ALLOW ONLY ONE SHOWER HEAD TO BE IN OPERATION AT A TIME. EXCEPTION: THE MAXIMUM FLOW RATE FOR SHOWER HEADS WHEN USING THE CALCULATION METHOD SPECIFIED IN THE 20% SAVING ITEM #2 ABOVE IS 2.5 GPM @ 80 PSI. 5.303.2.1.

D. WASTE WATER REDUCTION.

- EACH BUILDING SHALL REDUCE BY 20% WASTE WATER BY ONE OF THE FOLLOWING METHODS:
- 1. THE INSTALLATION OF WATER CONSERVING FIXTURES (TOILETS, URINALS).
- 2. UTILIZING NON-POTABLE WATER SYSTEMS (CAPTURED RAINWATER, GRAYWATER) COMPLYING WITH THE CALIFORNIA PLUMBING CODE.

E. PLUMBING FIXTURES AND FITTINGS.

PLUMBING FIXTURES (TOILETS, URINALS) AND FITTINGS (FAUCETS, SHOWER HEADS) SHALL MEET THE STANDARDS REFERENCED IN TABLE 5.503.6.

F	TIXTURE FLOW RATES	
FIXTURE TYPE	BASELINE FLOW RATE	MAXIMUM FLOW RATE AT 20% REDUCTION
SHOWERHEADS	2.5 GPM @ 80 PSI	2 GPM @ 80 PSI
LAVATORY FAUCETS - NONRESIDENTIAL	0.5 GPM @ 60 PSI	0.4 GPM @ 60 PSI
KITCHEN FAUCETS	2.2 GPM @ 60 PSI	1.8 GPM @ 60 PSI
WASH FOUNTAINS	2.2 RIM SPACE (in)/20 GPM @ 60 PSI	1.8 RIM SPACE (in)/20 GPM @ 60 PS
METERING FAUCETS	0.25 GALLONS/CYCLE	0.2 GALLONS/CYCLE
METERING FAUCETS FOR WASH FOUNTAINS	.25 RIM SPACE (in)/20 GPM @ 60 PSI	.20 RIM SPACE (in)/20 GPM @ 60 PS
GRAVITY TANK TYPE WATER CLOSETS	1.6 GALLONS/FLLUSH	1.28 GALLONS/FLUSH
FLUSHOMETER TANK WATER CLOSETS	1.6 GALLONS/FLLUSH	1.28 GALLONS/FLUSH
FLUSHOMETER VALVE WATER CLOSETS	1.6 GALLONS/FLLUSH	1.28 GALLONS/FLUSH
ELECTROMECHANICAL HYDRAULIC WATER CLOSETS	1.6 GALLONS/FLLUSH	1.28 GALLONS/FLUSH
URINALS	1.0 GALLONS/FLLUSH	0.5 GALLONS/FLUSH

GENERAL PLUMBING NOTES

- 1. All soil piping to be cast Iron or ABS where local codes permit. Vent piping may be galvanized steel, cast iron, copper or ABS as local codes permit (verify). Soil and vent piping to slope a minimum of 1/4" per foot unless noted otherwise. ABS not allowed in fire rated construction. Waste risers above slab serving floor(s) above to be cast iron.
- 2. Domestic site water piping to be schedule 80 PVC below ground, water and condensate piping above grade to be type 'L' hard copper wrought copper fittings. Solder and flux shall contain no lead. Solder and flux with containing lead shall not be used in potable water systems per Sec. 316.1.3, 2016 CPC.
- 3. All materials and equipment shall be new and unused unless specified on plans. Contractor to use only qualified labor and supervision for the installation of materials and equipment.
- 4. All work shall conform with the 2016 CPC and all local codes. No work shall be covered until it has been inspected, tested and approved by inspector.
- 5. Contractor shall make utility connections and provide permits per contract. Any additional fees and permits will be at extra cost.
- 6. Contractor shall verify size, depth, location and adequacy of all utilities including meter location and sewer inverts prior to start of work.
- 7. Contractor shall install cleanouts where indicated on plans and as required by local codes and authorities. Clean out to grade shall be in Brooks box or equal.
- 8. Coordinate work with all trades to avoid conflict and interferences.
- 9. Verify all rough-in heights and locations with general contractor and/or architect.
- 10. All pipes below ground shall be located away from bearing footings or as indicated on structural
- 11. Install reduced pressure backflow preventer as indicated on plans or as required by local codes. Where street pressure exceeds 80 P.S.I. install approved pressure regulating valve with relief valve and strainer per code.
- 12. Contractor shall verify that equipment and fixtures will physically fit in the locations indicated.
- 13. All penetrations of fire rated assemblies shall be made with non-combustible material of an equal fire rating and shall be completely stopped. Refer to architectural plans to identify fire rated
- 14. Contractor shall include (but not limited to) all piping, valves, fittings and fixture supports associated wtih each new fixture.
- 16. Each fixture shall have its own shut off valve(s). Valves to be located below or adjacent to the fixture it serves. General contractor to provide access panel when valves are within a wall or above the ceiling. All stub out heights and locations to be verified.
- 17. All gas piping to be schedule 40 black steel with threaded malleable fittings. Final connection to each gas appliance shall be with an approved flexible connection and shut off valve. When the gas connection to the appliance is within the appliance cabinet the connection shall have a rigid threaded nipple, length as required, extending from the connection through the cabinet. Flexible connection shall not enter the cabinet.
- 18. All valves, unions, etc., shall be the same size as the piping unless otherwise specified. Unions shall be installed after each screw type valve and prior to equipment connections. Install isolation unions at all connections between dissimilar metals.
- 19. All plumbing vents shall terminate not less than ten feet away from or at least 3 feet above any window of door openning, fresh air intake nor less than 1 foot from a verticle surface.
- 20. Insulate all exposed drain piping below lavatories and sinks with "Armaflex"."
- 21. Compressed air piping may be copper or galv. steel. Verify with general contractor or owner.
- 22. All pipes discharging to floor sinks shall have the minimum air gap as required by the current CPC and local codes.
- 23. Contractor shall be responsible for the entire scope of work as outlined per the contract. Final testing procedures and connections are to conform to the current codes.
- 24. Contractor shall provide owner with all required manuals for the proper maintenance and operation of equipment.
- 25. These plans are of schematic form and are drawn for maximum clarity. Changes may be necessary for convience, obstructions, economics and efficiency.

	MATERIA	AL	SF	PE	CII	FI(CA	TI	ONS
	SERVICES	SCH 40 ABS DWV	CAST IRON NO-HUB	GALV. STEEL SCH 40	BLACK STEEL SCH 40	TYPE M COPPER	TYPE L COPPER	TYPE K COPPER	REMARKS
COLD WATER	ABOVE GROUND BELOW GROUND						•	•	
HOT WATER	ABOVE GROUND BELOW GROUND						•		
WASTE	ABOVE GROUND BELOW GROUND	•	Andrew State of the State of th						
VENT	ABOVE GROUND BELOW GROUND	•							
INDIRECT WASTE	INDOOR OUTDOOR					•			
NATURAL GAS	INDOOR OUTDOOR			•	•				PAINTED WITH RUST INHIBITING PAINT
STORM DRAIN	ABOVE GROUND BELOW GROUND		•						_
C02	ABOVE GROUND						•		SILVER BRAZED; NITROGEN PURGED
CO2 VENT	ABOVE GROUND						٠		SILVER BRAZED; NITROGEN PURGED

Underground Service Alert

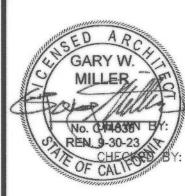


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planning

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ED ARCH GARY W. MILLER	MARK	REVISIONS	BY	APPR	DATE
Mille	MARK BENCH MARK:	REVISIONS	BY	APPR	DATE
No. 044636N BY:	DENCH MARK.				

APPROVED 9/22 2018 About 2022	CITY OF SAN
CITY ENGINEER: ALEX QISHTA REGISTERED CIVIL ENGINEER NO. 66702	PLUMB GENERAL
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8 2	CITY OF SAN BERNARDINO DEPARTMENT OF PUBLIC WORKS				
	PLUMBING GENERAL NOTES				

ROWE LIBRARY

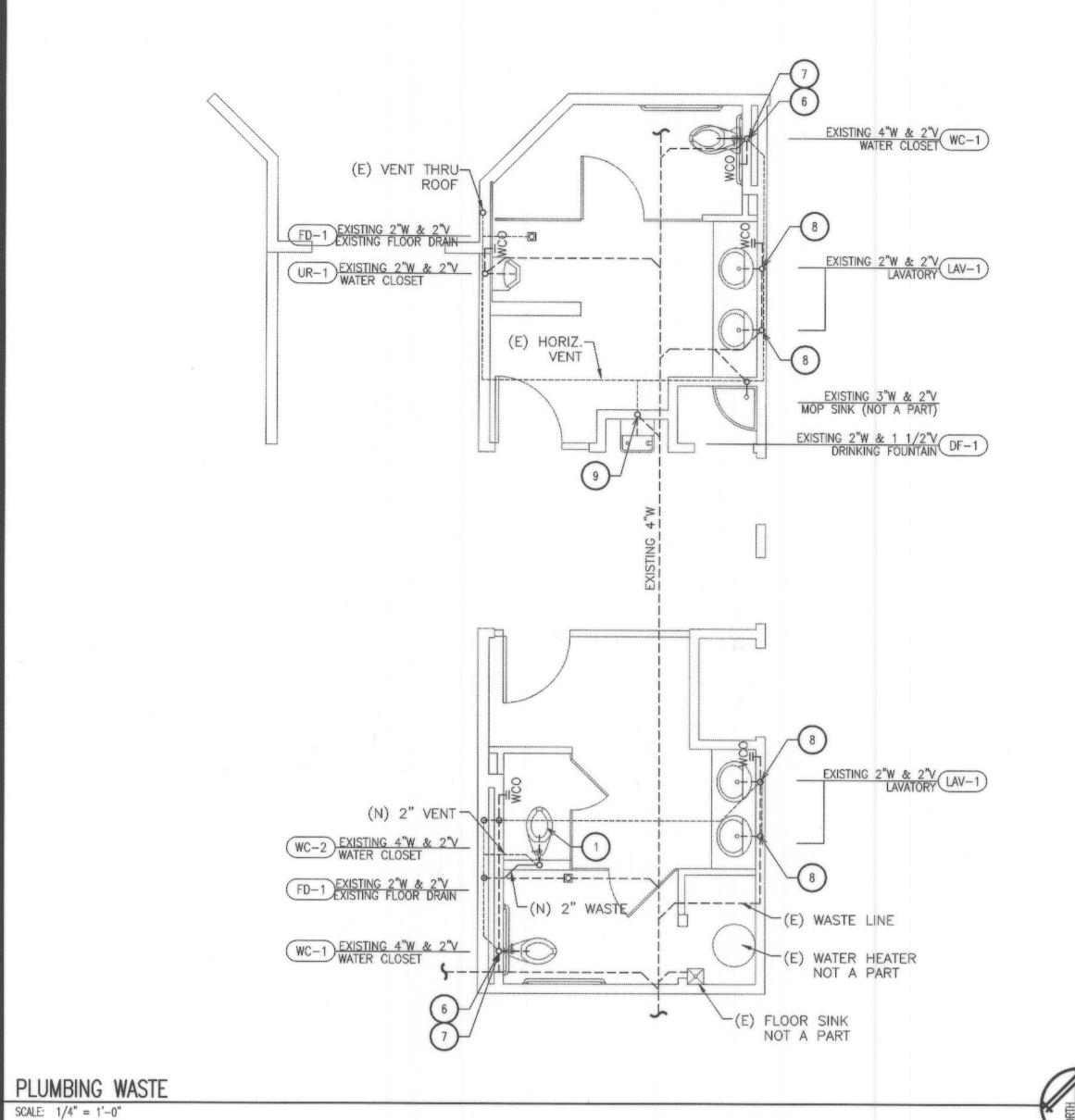
1347k SHEET 25 OF P-201 26_SHEETS

C.I.P. NO.

W.O. NO.

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NO.



SEXISTING 1 1/4" CW EXISTING CW/HW
MOP SINK NOT A PART (E) WATER HEATER NOT A PART (E) 2" C.W.— ABOVE CEILING

PLUMBING WATER SUPPLY

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



- 1. ALL PLUMBING WORK SHALL CONFORM TO THE REQUIREMENTS OF THE 2019 CPC.
- WATER CLOSETS SHALL BE WATER CONSERVING TYPES USING LESS THAN 1.28 GALLONS PER FLUSH. LAVATORY FAUCETS SHALL FLOW LESS THAN 0.50 GALLONS PER MINUTE.
- 3. PIPE SLEEVE THROUGH FOOTING SHALL BE PVC.
- 4. THE TRANSITION FROM BELOW GROUND POTABLE COLD WATER MATERIAL TO ABOVE GROUND POTABLE COLD WATER MATERIAL SHALL OCCUR ABOVE THE SLAB.
- 5. FIRE HAZARD RATING: INSULATION, JACKETS, FACINGS, ADHESIVES, COATINGS, AND ACCESSORIES SHALL BE ACCEPTABLE TO THE FIRE MARSHALL, AND SHALL NOT EXCEED THE FOLLOWING FIRE HAZARD CLASSIFICATIONS: FLAME-SPREAD: MAXIMUM 25, FUEL CONTRIBUTED: MAXIMUM 50, SMOKE DEVELOPED: MAXIMUM 50. RATED TO BE IN ACCORDANCE WITH UL TEST METHOD FOR FIRE HAZARD CLASSIFICATION OF BUILDING MATERIALS, NO. 763. OWENS CORNING FIBERGLASS PIPE INSULATION.
- 6. CUT EXISTING CONCRETE SLAB AS NECESSARY FOR NEW PLUMBING LINE.
- 7. PLUMBING CONTRACTOR TO VERIFY ALL EXISTING CONDITIONS, LOCATIONS, AND PIPE SIZES OF COLD / HOT WATER LINES AND POINT OF CONNECTIONS.
- PLUMBING CONTRACTOR TO VERIFY ALL EXISTING CONDITIONS, LOCATIONS, AND PIPE SIZES OF WASTE AND VENT LINES AND POINT OF CONNECTIONS.

KEY NOTES:

- 1. CUT EXISTING SLAB FOR NEW WASTE LINES TO RE-CONNECT NEW PLUMBING FIXTURES TO EXISTING WASTE LINE.
- 2. CONNECT NEW VENT LINE TO EXISTING VENT LINE THRU ROOF.
- 3. RECONFIGURE AND CONNECT NEW COLD WATER LINE TO EXISTING COLD WATER LINE SYSTEM VERIFY EXISTING CONDITIONS AND LOCATION OF COLD WATER LINE
- 4. CONNECT NEW VENT LINE TO EXISTING VENT LINE THRU ROOF. VERIFY EXISTING CONDITIONS AND LOCATION OF HOT WATER LINE
- 5. CAP OFF EXISTING COLD WATER LINE. VERIFY EXISTING CONDITIONS AND LOCATION OF COLD WATER LINE
- 6. EXISTING ACCESS PANEL TO REMAIN
- 7. RELOCATE OR REPLACE EXISTING PLUMBING WASTE LINE IF NECESSARY FOR NEW WATER CLOSET.
- 8. RELOCATE OR REPLACE EXISTING PLUMBING WASTE LINE IF NECESSARY FOR NEW LAVATORY.
- 9. RELOCATE OR REPLACE EXISTING PLUMBING WASTE LINE IF NECESSARY FOR NEW DRINKING FOUNTAIN.
- 10. RECONFIGURE AND CONNECT NEW COLD WATER LINE TO EXISTING COLD WATER LINE SYSTEM VERIFY EXISTING CONDITIONS AND LOCATION OF HOT WATER LINE

Underground Service Alert

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

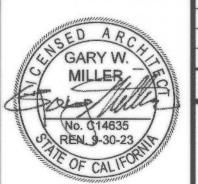
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ARY W.	MARK	REVISIONS	BY	APPR	DATE
CALIFORNIA	BENCH MARK:				

APPROVED 9/22 CITY OF SAN BERNARDINO 2018-2022 CITY ENGINEER: ALEX QISHTA
REGISTERED CIVIL ENGINEER NO. 66702

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