PROJECT DIRECTORY

OWNER

CITY OF OAKLAND
250 FRANK OGAWA PLAZA
OAKLAND, CA 94612
CONTACT: CHRISTINE REED
T: 510.238.6540
E: CREED2@OAKLANDCA.GOV

ELECTRICAL ENGINEER/LIGHTING

UPLIGHT ELECTRICAL ENGINEERS
3130 TWITCHELL ISLAND ROAD
WEST SACRAMENTO, CA 95691
CONTACT: JIM PUGA
T: 916.371.3202
E: JPUGA@UPLIGHTEE.COM

STRUCTURAL ENGINEER

SPECTRUM STRUCTURAL ENGINEERING
1629 TELEGRAPH AVE., SUITE 300
OAKLAND, CA 94612
CONTACT: JEFF TANER
T: 415.519.1820
E: JET@SPECTRUMSE.NET

ARCHITECT

RPR ARCHITECTS
1629 TELEGRAPH AVENUE, MEZZANINE
OAKLAND, CA 94612
CONTACT: KATHLEEN ROUSSEAU
T: 510.272.0654 X101
E: KAR@RPRARCHITECTS.COM

MECHANICAL ENGINEER

ELMENDORF & ASSOCIATES
517 PINE STREET
SAUSALITO, CA 94965
CONTACT: JEFF ELMENDORF
T: 415.332.8388
E: JELMEN@PACBELL.COM

PROJECT INFORMATION

PROJECT DESCRIPTION: BUILDING MAINTENANCE. REPLACE ELECTRICAL SUB-PANELS THROUGHOUT BUILDING. REPLACE BOILER CONTROLS. REPLACE LIGHTING IN MAIN ENTRY LOBBY, READING ROOM & MEZZANINE OFFICE SPACE. REPLACE LIGHTING CONTROLS @ READING ROOM. CLEAN FLOORING IN SELECT AREAS OF BUILDING. PAINT SELECT AREAS OF BUILDING INTERIOR. REPLACE SELECT EXTERIOR DOORS. REPLACE SELECT INTERIOR DOORS. ADD HVAC SPLIT SYSTEM TO COMMUNITY ROOM. ADD POWER & DATA TO SELECT AREAS. CLEAN READING ROOM WINDOW COVERINGS

SITE ADDRESS: OAKLAND MAIN LIBRARY, 125 14TH STREET, OAKLAND, CA

APPLICABLE CODES

2019 CALIFORNIA BUILDING CODE
2019 CALIFORNIA FIRE CODE
2019 CALIFORNIA MECHANICAL CODE
2019 CALIFORNIA PLUMBING CODE
2019 CALIFORNIA ELECTRICAL CODE
2019 CALIFORNIA ENERGY CODE
2019 CALGREEN
CITY OF OAKLAND ADOPTED ORDINANCES
CAL OSHA

BUILDING SEWER INSPECTION & PERMIT

PER OAKLAND MUNICIPAL CODE 13.08.600 (B), TESTING AND INSPECTION OF BUILDING SEWERS ARE REQUIRED. THE CITY OF OAKLAND HAS TESTED THE OAKLAND MAIN LIBRARY SEWER LATERAL AND IT FAILED TO MEET CURRENT MUNICIPAL CODE STANDARDS AND MUST BE REPLACED. G.C. SHALL OBTAIN ALL REQUIRED PERMITS, PERFORM ALL NECESSARY BUILDING SEWER REPAIR OR REPLACEMENT, SCHEDULE INSPECTIONS W/ EBMUD, PASS A VERIFICATION TEST WITNESSED BY EBMUD, OBTAIN AND FILE A COMPLIANCE CERTIFICATE FROM EBMUD AS SET FORTH IN THE EBMUD REGIONAL PRIVATE SEWER LATERAL ORDINANCE FOR THE ENTIRE BUILDING SEWER.

ADDITIVE BID ITEMS

ALTERNATE BID SCOPE OF WORK AS SHOWN ON THE BID DOCUMENTS:

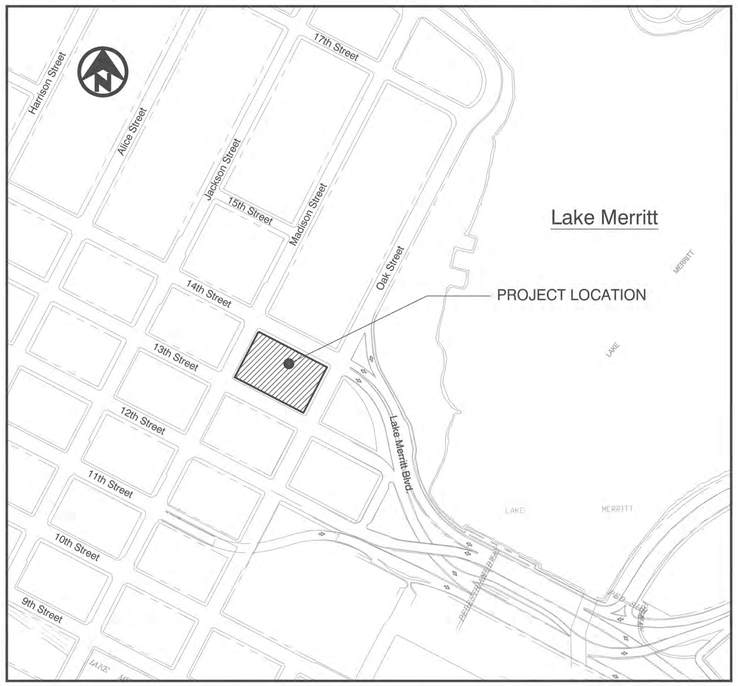
1. PAINTING SCOPE IN VARIOUS AREAS OF THE LIBRARY. SEE SHEET A7.1 FINISH SCHEDULE NOTES.
2. FLOOR REFINISHING IN VARIOUS AREAS OF THE LIBRARY. SEE SHEET A7.1 FINISH SCHEDULE NOTES.
3. NORTH ELEVATION (14TH STREET) MURAL RESTORATION - SEE ELEVATION 1/A3.1 FOR SCOPE OF WORK.
4. CEILING FANS. SEE REFLECTED CEILING PLAN SHEETS A2.7 & A2.8 FOR SCOPE OF WORK.
5. FENCING, GATES & LIGHTING AT EXTERIOR COURTYARD. SEE SHEETS A1.1 & A1.2 FOR SCOPE OF WORK.
6. WINDOW FILM. SEE SHEETS A3.1 & A3.2 FOR SCOPE OF WORK.

INDEX OF DRAWINGS

OAKLAND MAIN LIBRARY INFRASTRUCTURE IMPROVEMENTS (PROJECT #1004859) 125 14TH STREET, OAKLAND, CA

FUNDED BY:
MEASURE KK

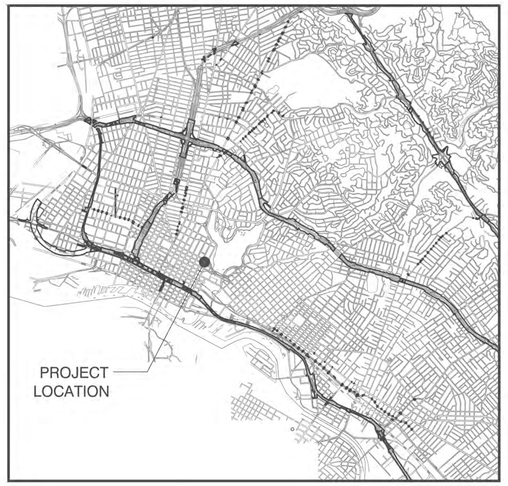
CITY PROJECT NO. 1004859



LOCATION MAP
NOT TO SCALE

LIMITS OF WORK

CITY OF OAKLAND MAP



CALL 811
WWW.811EXPRESS.COM

THE CONTRACTOR SHALL NOTIFY UNDERGROUND SERVICE ALERT & THE CITY PUBLIC WORKS AGENCY AT LEAST 48 HOURS (2 WORKING DAYS) PRIOR TO BEGINNING ANY EXCAVATION IN THE VICINITY OF THE UNDERGROUND FACILITIES

Siew-Chin Yeong (Jul 12, 2023 10:40 PDT)

SIEW-CHIN YEONG, PE
ASSISTANT DIRECTOR, OPW
BUREAU OF DESIGN AND CONSTRUCTION

Project & Grant Management Division, OPW-BDC	CIP COORDINATOR
Project & Grant Management Division, OPW-BDC	SUPERVISOR
Project & Grant Management Division, OPW-BDC	DIVISION MANAGER
ADA Programs, OakDOT	DIVISION MANAGER
Facilities Services Division, OPW-BMIS	DIVISION MANAGER
Facilities Services Division, OPW-BMIS	ASSISTANT DIRECTOR
Oakland Public Library	DIRECTOR
Construction Management	DIVISION MANAGER

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OAKLAND MAIN LIBRARY
INFRASTRUCTURE IMPROVEMENTS
125 14TH STREET

LICENSED ARCHITECT KATHLEEN A. ROUSSEAU No. C19081 Exp. 6/23 STATE OF CALIFORNIA

KATHLEEN ROUSSEAU
RCE NO. C19081 EXP. 06.23
CHECKED BY AWC/KAR
DESIGNED BY AWC/KAR
DRAWN BY AWC

No.	DATE	BY	REFERENCE
1	02.17.23	RPR	ISSUED FOR BID

TITLE SHEET

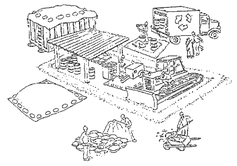
PROJECT NO.
C1004859

SCALE: NOTED
HOR:
VERT:
DATE: 02.17.23

SHEET NO.
T1.1
1 OF 62

DRAWING NAME: O:\Project-Jobs\210302_Oakland Main Library\Drawings\CD\180102_T1.1_OAK_TITLE.dwg
PLOT DATE: 02/17/23
PLOTTED BY: Adam Carr

Pollution Prevention - It's Part of the Plan



Make sure your crews and subs do the job right!

Runoff from streets and other paved areas is a major source of pollution and damage to creeks and the San Francisco Bay. Construction activities can directly affect the health of creeks and the Bay unless contractors and crews plan ahead to keep dirt, debris, and other construction waste away from storm drains and local creeks. Following these guidelines and the project specifications will ensure your compliance with City of Oakland requirements.

Materials storage & spill cleanup

Non-hazardous materials management

- Sand, dirt, and similar materials must be stored at least 10 feet (3 meters) from catch basins. All construction material must be covered with a tarp and contained with a perimeter control during wet weather or when rain is forecasted or when not actively being used within 14 days.
- Use (but don't overuse) reclaimed water for dust control as needed.
- Sweep or vacuum streets and other paved areas daily. Do not wash down streets or work areas with water.
- Recycle all asphalt, concrete, and aggregate base material from demolition activities. Comply with City of Oakland Ordinances for recycling construction materials, wood, gyp board, pipe, etc.
- Check dumpsters regularly for leaks and to make sure they are not overfilled. Repair or replace leaking dumpsters promptly.
- Cover all dumpsters with a tarp at the end of every work day or during wet weather.

Hazardous materials management

- Label all hazardous materials and hazardous wastes (such as pesticides, paints, thinners, solvents, fuel, oil, and antifreeze) in accordance with city, county, state, and federal regulations.
- Store hazardous materials and wastes in water tight containers, store in appropriate secondary containment, and cover them at the end of every work day or during wet weather or when rain is forecasted.
- Follow manufacturer's application instructions for hazardous materials and be careful not to use more than necessary. Do not apply chemicals outdoors when rain is forecasted within 24 hours.
- Be sure to arrange for appropriate disposal of all hazardous wastes.

Spill prevention and control

- Keep a stockpile of spill cleanup materials (rags, absorbents, etc.) available at the construction site at all times.
- When spills or leaks occur, contain them immediately and be particularly careful to prevent leaks and spills from reaching the gutter, street, or storm drain.
- Never wash spilled material into a gutter, street, storm drain, or creek.
- Dispose of all containment and cleanup materials properly.
- Report any hazardous materials spills immediately! Dial 911 or City of Oakland, Public Works Agency hotline at (510) 615-5566.

Construction Entrances and Perimeter

- Establish and maintain effective perimeter controls and stabilize all construction entrances and exits to sufficiently control erosion and sediment discharges from site and tracking off site.
- Sweep or vacuum any street tracking immediately and secure sediment source to prevent further tracking.

Vehicle and equipment maintenance & cleaning

- Inspect vehicles and equipment for leaks frequently. Use drip pans to catch leaks until repairs are made; repair leaks promptly.
- Fuel and maintain vehicles on site only in a bermed area or over a drip pan that is big enough to prevent runoff.
- If you must clean vehicles or equipment on site, clean with water only in a bermed area that will not allow rinse water to run into gutters, streets, storm drains, or creeks.
- Do not clean vehicles or equipment on-site using soaps, solvents, degreasers, steam cleaning equipment, etc.

Earthwork & contaminated soils

- Keep excavated soil on the site where it will not collect in the street.
- Transfer to dump trucks should take place on the site, not in the street.
- Use fiber rolls, silt fences, or other control measures to minimize the flow of silt off the site.

- Earth moving activities shall be approved by the City Resident Engineer in the Field.
- Mature vegetation is the best form of erosion control. Minimize disturbance to existing vegetation whenever possible.
- If you disturb a slope during construction, prevent erosion by securing the soil with erosion control fabric, or seed with fast-growing grasses as soon as possible. Place fiber rolls down-slope until soil is secure.
- If you suspect contamination (from site history, discoloration, odor, texture, abandoned underground tanks or pipes, or buried debris), call the Engineer for help in determining what should be done, and manage disposal of contaminated soil according to their instructions.

Dewatering operations

- Effectively manage all run-on, all runoff within the site, and all runoff that discharges from the site. Run-on from off site shall be directed away from all disturbed areas or shall collectively be in compliance.
- Reuse water for dust control, irrigation, or another on-site purpose to the greatest extent possible.

- Be sure to notify and obtain approval from the Engineer before discharging water to a street, gutter, or storm drain. Filtration or diversion through a basin, tank, or sediment trap may be required.
- In areas of known contamination, testing is required prior to reuse or discharge of groundwater. Consult with the Engineer to determine what testing is required and how to interpret results. Contaminated groundwater must be treated or hauled off-site for proper disposal.

Saw cutting

- Always completely cover or barricade storm drain inlets when saw cutting. Use filter fabric, catch basin inlet filters, or sand/gravel bags to keep slurry out of the storm drain system.
- Shovel, absorb, or vacuum saw-cut slurry and pick up all waste as soon as you are finished in one location or at the end of each work day (whichever is sooner!).
- If saw cut slurry enters a catch basin, clean it up immediately.

Paving/asphalt work

- Always cover storm drain inlets and manholes when paving or applying seal coat, tack coat, slurry seal, or fog seal.
- Protect gutters, ditches, and drainage courses with sand/gravel bags, or earthen beers.
- Do not sweep or wash down excess sand from sand sealing into gutters, storm drains, or creeks. Collect sand and return it to the stockpile, or dispose of it as trash.
- Do not use water to wash down fresh asphalt concrete pavement.

Concrete, grout, and mortar storage & waste disposal

- Store concrete, grout, and mortar under cover, on pallets, and away from drainage areas. These materials must never reach a storm drain.
- Wash out concrete equipment/trucks off-site or into contained washout areas that will not allow discharge of wash water onto the underlying soil or onto the surrounding areas.

- Collect the wash water from washing exposed aggregate concrete and remove it for appropriate disposal off site.

Painting

- Never rinse paint brushes or materials in a gutter or street!
- Paint out excess water-based paint before rinsing brushes, rollers, or containers in a sink.
- Paint out excess oil-based paint before cleaning brushes in thinner.
- Filter paint thinners and solvents for reuse whenever possible.
- Dispose of oil-based paint sludge and unusable thinner as hazardous waste.

Landscape Materials

- Contain, cover, and store on pallets all stockpiled landscape materials (mulch, compost, fertilizers, etc.) during wet weather or when rain is forecasted or when not actively being used within 14 days.
- Discontinue the application of any erodible landscape material within 2 days of forecasted rain and during wet weather.

Storm drain polluters may be liable for fines of $10,000 or more per day!

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Tel 510 272 0654

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SUITE 4314
OAKLAND, CA 94612
(510) 238-3437

OAKLAND MAIN LIBRARY
INFRASTRUCTURE IMPROVEMENTS
125 14TH STREET

LICENSED ARCHITECT KATHLEEN A. ROUSEAU RCE No. C19081 Exp. 6/23 STATE OF CALIFORNIA

KATHLEEN ROUSEAU
RCE NO. C19081 EXP. 06.23
CHECKED BY AWC / KAR
DESIGNED BY AWC / KAR
DRAWN BY AWC

No.	DATE	BY	REFERENCE
1	02.17.23	RPR	ISSUED FOR BID

POLLUTION PREVENTION

PROJECT NO.
C1004859

SCALE: AS NOTED
HOR:
VERT:
DATE: 02.17.23

SHEET NO.
G1.1
2 OF 62

DRAWING NAME: O:\Projects\Jobs\210202_Oakland Main Library\Drawings\CD\180102_G1.1.dwg
PLOT DATE: 02/17/23
PLOTTED BY: Adam Carr

GENERAL NOTES

1. ALL WORK SHALL CONFORM TO THE CONTRACT DOCUMENTS WHICH INCLUDE THE OWNER/SUBCONTRACTOR AGREEMENT, GENERAL CONDITIONS, SPECIFICATIONS, DRAWINGS, AND ALL ADDENDA AND MODIFICATIONS ISSUED BY THE ARCHITECT.

2. THE CONTRACTOR SHALL REVIEW ALL DOCUMENTS AND VERIFY ALL DIMENSIONS AND FIELD CONDITIONS AND SHALL CONFIRM THAT WORK IS BUILDABLE AS SHOWN. ANY CONFLICTS OR OMISSIONS, ETC., SHALL BE IMMEDIATELY REPORTED TO THE ARCHITECT FOR CLARIFICATION PRIOR TO THE PERFORMANCE OF ANY WORK IN QUESTION.

3. IN CASE OF CONFLICT BETWEEN ARCHITECTS AND DESIGN ENGINEERS DRAWINGS IN LOCATING MATERIALS/EQUIPMENT, THE ARCHITECTURAL DRAWINGS SHALL GOVERN.

4. CONTRACTOR SHALL COORDINATE WITH OWNER THE SCHEDULE FOR ALL TELEPHONE COMPANY AND DATA INSTALLATIONS.

5. ALL WORK PERFORMED ON A NON-REGULAR BUSINESS HOURS BASIS TO BE COORDINATED WITH OWNER

6. CONTRACTOR SHALL NOTIFY OWNER IMMEDIATELY OF ALL UTILITIES DETERMINED IN COURSE OF CONSTRUCTION AS BEING NECESSARY TO BE REMOVED WHICH HAVE NOT OTHERWISE BEEN NOTED FOR REMOVAL IN THE CONSTRUCTION DOCUMENTS. CONTRACTOR SHALL REMOVE SUCH UTILITIES ONLY AFTER CONSULTATION WITH OWNER. WHETHER PREDETERMINED IN THE CONSTRUCTION DOCUMENTS OR DETERMINED LATER IN FIELD, DISCONNECT, CUT BACK TO SOURCE, AND CAP ALL UTILITY SERVICES REMOVED.

7. "ALIGN" SHALL MEAN TO ACCURATELY LOCATE FINISH FACES IN THE SAME PLANE.

8. "TYPICAL" OR "TYP" SHALL MEAN THAT THE CONDITION IS REPRESENTATIVE FOR SIMILAR CONDITIONS THROUGHOUT, UNLESS OTHERWISE NOTED. DETAILS ARE USUALLY KEYED AND NOTED "TYP" ONLY ONCE, WHEN THEY FIRST OCCUR.

9. "SIMILAR" MEANS COMPARABLE CHARACTERISTICS FOR THE CONDITIONS NOTED. VERIFY DIMENSIONS AND ORIENTATION ON PLANS AND ELEVATIONS.

10. WORK AREAS ARE TO REMAIN SECURE AND LOCKABLE DURING CONSTRUCTION. CONTRACTOR SHALL COORDINATE WITH OWNER TO ENSURE SECURITY.

11. THE SUBCONTRACTOR SHALL COORDINATE ALL INSPECTIONS AND COMPLY WITH ALL CODES, LAWS, ORDINANCES, RULES, AND REGULATIONS OF ALL PUBLIC AUTHORITIES (FEDERAL, STATE, OR LOCAL) GOVERNING THE WORK. THE MOST STRINGENT SHALL APPLY.

12. THE CONTRACT DOCUMENTS ARE COMPLEMENTARY, WHAT IS SHOWN OR REFERRED TO ON ANY SHALL BE PROVIDED AS THOUGH SHOWN ON ALL.

13. SUBSTITUTIONS, REVISIONS, OR CHANGES MUST BE SUBMITTED TO ARCHITECT FOR REVIEW (IN CONFORMANCE WITH SPECIFIED PROCEDURES) PRIOR TO PURCHASE, FABRICATION OR INSTALLATION.

14. THE CONTRACTOR SHALL MAINTAIN FOR THE ENTIRE DURATION OF THE WORK ALL EXITS, EXIT LIGHTING, FIRE PROTECTIVE DEVICES AND ALARMS IN CONFORMANCE WITH ALL APPLICABLE CODES AND ORDINANCES.

15. ALL WORK SHALL BE COORDINATED WITH THE OWNER INCLUDING SCHEDULING TIME AND LOCATIONS FOR DELIVERIES, BUILDING ACCESS, BUILDING FACILITIES, USE OF ELEVATORS, ETC. DURING ALL PHASES OF WORK, MINIMUM DISTURBANCE OF BUILDING FUNCTIONS AND OCCUPANTS IS ESSENTIAL.

16. THE SCOPE OF WORK AND ADJACENT AREAS SHALL BE PROTECTED FROM ANY DAMAGE THAT OCCURS BECAUSE OF THIS WORK. ANY DAMAGE THAT OCCURS SHALL BE THE FINANCIAL RESPONSIBILITY OF THE CONTRACTOR.

17. ALL MANUFACTURED ARTICLES, MATERIALS AND EQUIPMENT SHALL BE APPLIED, INSTALLED, CONNECTED, ERECTED, CLEANED AND CONDITIONED PER MANUFACTURER'S INSTRUCTIONS. IN CASE OF DIFFERENCES BETWEEN THE MANUFACTURER'S INSTRUCTIONS AND THE CONTRACT DOCUMENTS, THE CONTRACTOR SHALL NOTIFY THE ARCHITECT BEFORE PROCEEDING.

18. ALL WORK NOTED "BY OTHERS" OR "NIC" SHALL BE PROVIDED BY OWNER OR UNDER SEPARATE CONTRACT. INCLUDE SCHEDULE REQUIREMENTS FOR THIS "OTHER" WORK IN CONSTRUCTION PROGRESS SCHEDULE AND COORDINATE AS REQUIRED TO ASSURE ORDERLY SEQUENCE OF INSTALLATION.

19. BUILDING STANDARD MATERIALS REMOVED AND/OR UNUSED SHALL BE RETURNED TO BUILDING STOCK AS DIRECTED BY OWNER.

20. THE ARCHITECT SHALL NOT BE HELD LIABLE FOR ANY ASBESTOS OR OTHER HAZARDOUS MATERIALS ON THE JOBSITE. IF ASBESTOS OR OTHER HAZARDOUS MATERIALS ARE DISCOVERED DURING CONSTRUCTION THE CONTRACTOR SHALL ISOLATE THE AFFECTED AREA AND CONTACT THE OWNER FOR FURTHER INSTRUCTIONS BEFORE PROCEEDING.

21. COMPLY WITH APPLICABLE LOCAL, STATE, AND FEDERAL CODES AND REGULATIONS PERTAINING TO SAFETY OF PERSONS, PROPERTY AND ENVIRONMENTAL PROTECTION.

22. REMOVE FROM SITE AND LEGALLY DISPOSE OF DAILY ALL REFUSE, DEBRIS, RUBBISH, AND OTHER MATERIALS RESULTING FROM DEMOLITION OPERATIONS. BURNING OF DEBRIS ON SITE SHALL NOT BE PERMITTED.

23. REMOVE TOOLS AND EQUIPMENT FROM SITE UPON COMPLETION OF WORK. LEAVE CONTRACT AREAS AND SITE CLEAN, ORDERLY, AND IN A CONDITION ACCEPTABLE FOR NEW OR OTHER CONSTRUCTION.

24. CONTRACTOR TO COORDINATE INTERFACE BETWEEN (E) ELECTRICAL PANELS & (N) LIGHTING CONTROL PANELS.

25. CONTRACTOR MUST TRACE & MAP (E) LIGHTING POWER CIRCUITS IN AREAS OF WORK & PROVIDE CIRCUIT ROUTING MAP OF (E) CONDITIONS TO THE ARCHITECT & ELECTRICAL ENGINEER PRIOR TO THE COMMENCEMENT OF WORK.

26. CONTRACTOR TO SUBMIT A MOVE PLAN TO RELOCATE ALL FREE-STANDING BOOK SHELVES & FURNITURE DURING WORK IN READING ROOMS FOR REVIEW & APPROVAL BY ARCHITECT & LIBRARY STAFF PRIOR TO COMMENCEMENT OF WORK.

27. CONTRACTOR TO SUBMIT CONSTRUCTION PHASING PLAN TO ARCHITECT PRIOR TO COMMENCEMENT OF WORK FOR APPROVAL BY LIBRARY STAFF.

28. (E) LIGHT FIXTURES NOT SHOWN ON REFLECTED CEILING PLANS FOR CLARITY - ONLY (N) LIGHT FIXTURES ARE SHOWN.

29. SEE FINISH SCHEDULE ON SHEET A7.1 FOR CEILING PAINTING INFORMATION

30. CONTRACTOR TO PROVIDE ROUTING DIAGRAMS ON 30X42 PAPER OF ALL PROPOSED INTERIOR & EXTERIOR SURFACE MOUNTED CONDUIT FOR REVIEW & APPROVAL BY ARCHITECTS & CITY OF OAKLAND PRIOR TO COMMENCEMENT OF WORK. SEE ELECTRICAL DRAWINGS FOR CIRCUITING INFORMATION, ELECTRICAL PANEL SCHEDULES & LIGHTING CONTROL PANELS. ALSO SEE GENERAL NOTE #25.

31. NO DIAGONAL CONDUIT HOMERUNS. ALL SURFACE MOUNTED CONDUIT SHALL BE ARRANGED IN A RECTILINEAR MANNER TO MINIMIZE VISUAL DISCONTINUITY & MAINTAIN A SIMPLE, EFFICIENT INSTALLATION. SEE GENERAL NOTE #30.

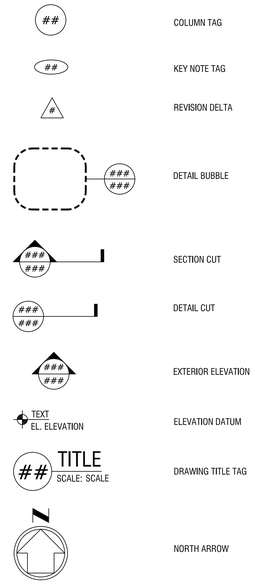
32. CONTRACTOR TO USE CARE WHEN INSTALLING ELECTRICAL CONDUITS & BOXES IN EXISTING WOOD PANELING & SHALL PROTECT ALL EXISTING LIBRARY FINISHES. ANY DAMAGE TO EXISTING LIBRARY FINISHES DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED TO MATCH EXISTING.

33. CONTRACTOR TO SEAL ALL PENETRATIONS AT AREAS OF NEW CONDUIT & POWER RUNS PER SPECIFICATION SECTION 07-90-00 JOINT SEALANTS.

ABBREVIATIONS

A/C	AIR CONDITIONING
ACOUS.	ACOUSTICAL
ADD.	ADDITIONAL
A.F.F.	ABOVE FINISH FLOOR
ALUM.	ALUMINUM
ARCH.	ARCHITECTURAL
BLDG.	BUILDING
BOT	BOTTOM
CLG.	CEILING
CLO.	CLOSET
CLR.	CLEAR
CMU	CONCRETE MASONRY UNIT
COL	COLUMN
CONC.	CONCRETE
CONF.	CONFERENCE
CONT.	CONTINUOUS
C.T.	CERAMIC TILE
D.B.	DESIGN BUILD - UNDER SEPARATE PERMIT
DET.	DETAIL
D.F.	DRINKING FOUNTAIN
DIA.	DIAMETER
DIM.	DIMENSION
DN.	DOWN
DWG.	DRAWING
EA.	EACH
ELEC.	ELECTRICAL
ELEV.	ELEVATION
EQ.	EQUAL
EQUIP.	EQUIPMENT
(E)	EXISTING
EXT.	EXTERIOR
F.E.C.	FIRE EXTINGUISHER CABINET
F.F.	FINISH FLOOR
F.H.C.	FIRE HOSE CABINET
FIN.	FINISHED
F.P.	FIRE PROTECTION
F.R.P.	FIBERGLASS REINFORCED PANEL
FT.	FOOT OR FEET
FTG.	FOOTING
GA.	GAUGE
GALV.	GALVANIZED
GYP. BD.	GYPSUM BOARD
HGT.	HEIGHT
H.M.	HOLLOW METAL
INSUL.	INSULATION
INT.	INTERIOR
JAN.	JANITOR
JT.	JOINT
MAX.	MAXIMUM
M.D.F.	MEDIUM DENSITY FIBERBOARD
MECH.	MECHANICAL
MET.	METAL
MFR.	MANUFACTURER
MIN.	MINIMUM
(N)	NEW
N.I.C.	NOT IN CONTRACT
NO.	NUMBER
O.C.	ON CENTER
O.F.C.I.	OWNER FURNISHED, CONTRACTOR INSTALLED
PGB	PAINTED GYPSUM BOARD
P.LAM.	PLASTIC LAMINATE
PLYWD.	PLYWOOD
PR.	PAIR
RAD.	RADIUS
REF.	REFERENCE
REQ.	REQUIRED
RESIL.	RESILIENT
RM.	ROOM
S.C.W.	SOLID CORE WOOD
SCHED.	SCHEDULE
SHT.	SHEET
SIM.	SIMILAR
SPEC.	SPECIFICATIONS
S.S.D.	SEE STRUCTURAL DRAWINGS
STL.	STEEL
STRUC.	STRUCTURAL
SYM.	SYMMETRICAL
T.O.	TOP OF
TYP.	TYPICAL
U.O.N.	UNLESS OTHERWISE NOTED
V.C.T.	VINYL COMPOSITION TILE
V.I.F.	VERIFY IN FIELD
W/	WITH
W/O	WITHOUT
WDW.	WINDOW

DRAWING TAGS



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OAKLAND MAIN LIBRARY INFRASTRUCTURE IMPROVEMENTS

125 14TH STREET

LICENSED ARCHITECT KATHLEEN A. ROUSEAU C 19081 Exp. 6/23 STATE OF CALIFORNIA

KATHLEEN ROUSEAU
RCE NO. C19081 EXP. 06.23
CHECKED BY AWC / KAR
DESIGNED BY AWC / KAR
DRAWN BY AWC

No.	DATE	BY	REFERENCE
1	02.17.23	RPR	ISSUED FOR BID

GENERAL NOTES, TAGS & ABBREVIATIONS

PROJECT NO. C1004859

SCALE: AS NOTED
HOR:
VERT:
DATE: 02.17.23

SHEET NO. G1.2
3 OF 62

DRAWING NAME: O:\Project\Jobs\210202_Oakland Main Library\Drawings\CD\180102_G1.2.dwg
PLOT DATE: 02/17/23
PLOTTED BY: Adam Carr

City of Oakland

PLANNING & BUILDING DEPARTMENT
250 FRANK H. OGAWA PLAZA. SECOND FLOOR. OAKLAND, CA. 94612

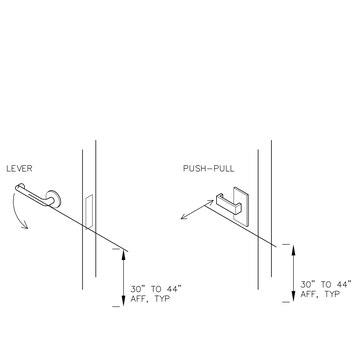
ACCESSIBILITY CHECKLIST

Project Address:	125 14th Street, Oakland, CA 94612							
ALL forms that are required to be completed by this document are required to be reproduced on the plan set.								
1	Proposed Use of the Project	Library					(e.g. Retail, Office, Restaurant etc.)	
2	Describe the area of remodel, including which floor	Building maintenance project including replacement of electrical panels, lighting upgrades, new boiler controls, floor cleaning throughout entire building, I.T. & building data improvements, new window coverings, new HVAC unit in basement, painting of main reading room among other spaces throughout the building, ceiling repairs throughout the building, new ceiling & lighting in Community Room, new ground floor conference room & new fence @ exterior courtyard						
3	The construction cost of this project excluding disabled access upgrades to the path of travel is							
	$ 2,600,00	which is:	(check one)	☒	More than	☐	Less than	
	the Accessibility Threshold amount of **$172,418.00** based on the "2021 ENR Construction Cost Index"							
	(The cost index & threshold are updated annually)							
4	Is this a City project and/or does it receive any form of public funding?	Check one	☒	YES	☐	NO		
	Conditions below must be fully documented by accompanying drawings							
5	Read A through D below carefully and check the most applicable box. Check one box only:							
☐	A: All existing conditions serving the area of remodel fully comply with access requirements. No further upgrades are required: Fill out page 2 of the Accessibility Checklist.							
☒	B: The project's adjusted cost of construction is greater than the current valuation threshold: Fill out page 2 of the Accessibility Checklist.							
☐	C: The project adjusted cost of construction is less than or equal to the current valuation threshold: List all items that will be upgraded on the Accessibility 20% Rule form and then fill out page 2 of the Accessibility Checklist. All items that will not be fully compliant should be checked on page 2 in the "Not required by code" column.							
☐	D: The proposed project consists entirely of Barrier removal: Fill out the Accessibility Work Type form							
☐	E: The proposed project is a minor revision to previously approved permit drawings only. (Note: this shall NOT be used for new or additional work)							
	Provide the previously approved permit application number here:							
	Description of the revision:							

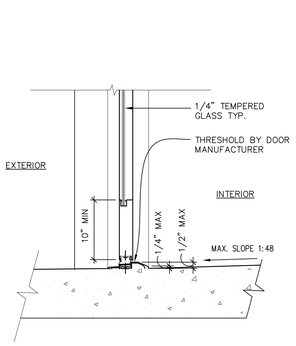
C&C chapter 2 section 202 Definitions:
Technically Infeasible: *An alteration of a building or a facility, that has little likelihood of being accomplished because the existing structural conditions require the removal or alteration of a load-bearing member that is an essential part of the structural frame, or because other existing physical or site constraints prohibit modification or addition of elements, spaces or features that are in full and strict compliance with the minimum requirements for new construction and which are necessary to provide accessibility.*
Unreasonable Hardship: *When the enforcing agency finds that compliance with the building standard would make the specific work of the project affected by the building standard infeasible, based on an overall evaluation of the following factors:*
1. The cost of providing access.
2. The cost of all construction contemplated.
3. The impact of proposed improvements on financial feasibility of the project.
4. The nature of the accessibility which would be gained or lost.
5. The nature of the use of the facility under construction and its availability to persons with disabilities
The details of any Technical Infeasibility or Unreasonable Hardship shall be recorded and entered into the files of the Department. All Unreasonable Hardships shall be ratified by the Access Appeals Commission (AAC).

Project Address:								
Check all applicable boxes and specify where on the drawings the details are shown:								
Note: upgrades below are listed in priority based on CBC 11B-202.4, exception 8	Existing Fully Complying	Will be Upgraded to Full Compliance	Equivalent Facilitation will provide full access	Compliance is Technically Infeasible	Approved in compliance with previous code	Not required by Code (and/or none existing)	Non-compliant request UHR Must be ratified by AAC	Location of detail(s) - include detail no. & drawing sheet *(do not leave this part blank!)*. Also clarification comments can be written here.
A. One accessible entrance including: approach walk, vertical access, platform (landings), door / gate and hardware for door/gate	☒	☐	☐	☐	☐	☐	☐	See site plan on sheet 1/A1.1 for existing fully accessible ramp to main library entrance.
B. An accessible route to the area of remodel including:								
Parking/access aisles and curb ramps	☐	☐	☐	☐		☐	☒	Existing accessible curb ramps occur at the corners of 14th and Madison Streets and 14th and Oak Streets. Existing fully accessible elevator exists in the main library lobby. See sheet A2.2 for public elevator location.
Curb ramps and walks	☒	☐	☐	☐		☐	☐	
Corridors, hallways, floors	☒	☐	☐	☐		☐	☐	
Ramps elevators, lifts	☒	☐	☐	☐		☐	☐	
C. At least one accessible restroom for each sex or a single unisex restroom serving the area of remodel.	☐	☐	☐	☐	☐	☐	☒	
D. Accessible public pay phone.	☐	☐	☐	☐	☐	☐	☒	
E. Accessible drinking fountains.	☐	☐	☐	☐	☐	☐	☒	
F. Additional accessible elements such as parking, stairways, storage, alarms and signage.	☐	☐	☐	☐	☐	☐	☒	
See the requirements for additional forms listed below	1	2	3	4	5	6	7	

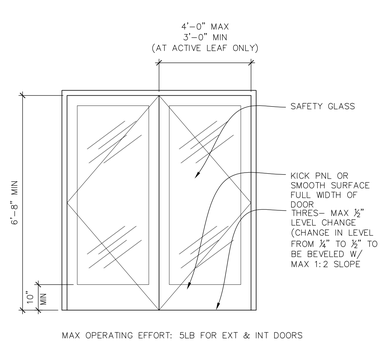
1. No additional forms required
2. No additional forms required
3. Fill out the Accessibility Appeal Form, Equivalent Facilitation section for each item checked and attach to plan.
4. Fill out the Accessibility Appeal Form, Technical Infeasibility section for each item checked and attach to plans.
5. Provide details from a set of City approved reference drawings, provide its permit application number here: _____ and list reference drawing number on plans.
6. No additional forms required
7. Fill out the Accessibility Appeal Form, Unreasonable Hardship section for each item checked and attach to plan. All UHR must be ratified by the Access Appeals Commission (see UHR form for details)



6 TYP. ACCESSIBLE DOOR HARDWARE
SCALE: N.T.S.

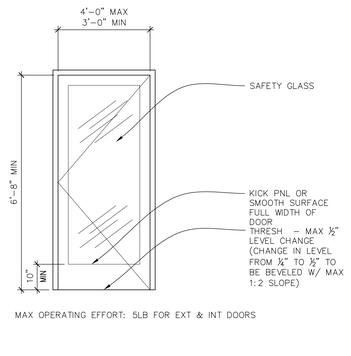


5 TYP. ACCESSIBLE DOOR THRESHOLD
SCALE: 1"=1'-0"

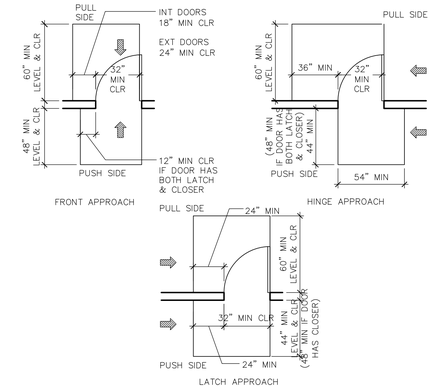


MAX OPERATING EFFORT: 5LB FOR EXT & INT DOORS

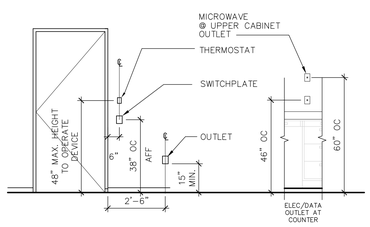
4 TYP. ACCESSIBLE EXIT DOORS
SCALE: 1/2"=1'-0"



MAX OPERATING EFFORT: 5LB FOR EXT & INT DOORS

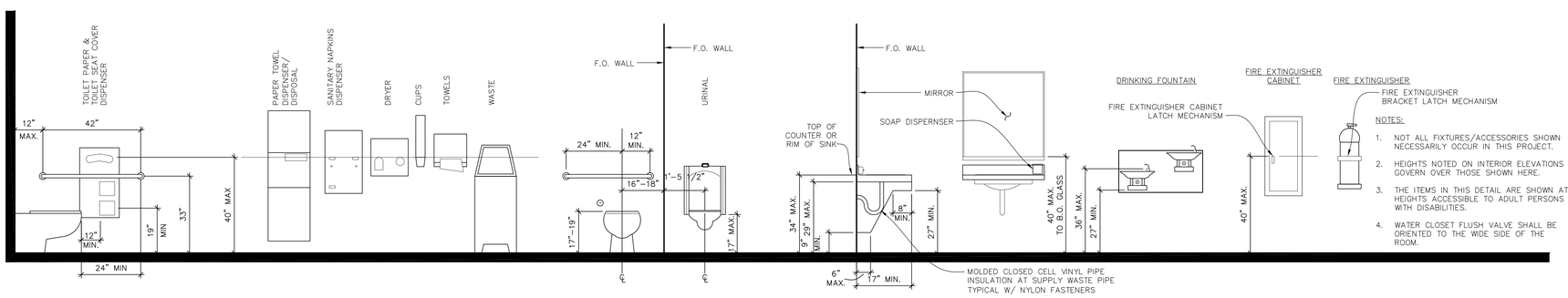


3 TYP. ACCESSIBLE CLEAR SPACE @ DOORS
SCALE: 1/4"=1'-0"



NOTE: FOR SWITCH & THERMOSTAT LOCATIONS, SEE PLANS.

2 TYP. SWITCH & OUTLET LOCATIONS
SCALE: 3/8"=1'-0"



NOTES:

1. NOT ALL FIXTURES/ACCESSORIES SHOWN NECESSARILY OCCUR IN THIS PROJECT.
2. HEIGHTS NOTED ON INTERIOR ELEVATIONS GOVERN OVER THOSE SHOWN HERE.
3. THE ITEMS IN THIS DETAIL ARE SHOWN AT HEIGHTS ACCESSIBLE TO ADULT PERSONS WITH DISABILITIES.
4. WATER CLOSET FLUSH VALVE SHALL BE ORIENTED TO THE WIDE SIDE OF THE ROOM.

NOTE: OPERABLE PARTS (INCLUDING COIN SLOTS) OF ALL FIXTURES OR ACCESORIES ARE LOCATED A MAXIMUM OF 40" ABOVE FLOOR (i.e., SOAP DISPENSERS, TOWELS, TOILET SEAT COVERS, AUTO DRYERS, SANITARY NAPKIN DISPENSERS, WASTE RECEPTACLES, ECT.)

1 TYP. ADA ACCESSIBLE MOUNTING HEIGHTS
SCALE: 1/2"=1'-0"

RPR ARCHITECTS
1629 Telegraph Avenue
Oakland, CA 94612
Tel 510 272 0654

CITY OF OAKLAND
DEPARTMENT OF ENGINEERING & CONSTRUCTION
250 FRANK H. OGAWA PLAZA
SUITE 4314
OAKLAND, CA 94612
(510) 238-3437

OAKLAND MAIN LIBRARY INFRASTRUCTURE IMPROVEMENTS
125 14TH STREET

LICENSED ARCHITECT KATHLEEN A. ROUSEAU C19081 Exp. 6/23 STATE OF CALIFORNIA

KATHLEEN ROUSEAU
RCE NO. C19081 EXP. 06.23
CHECKED BY AWC / KAR
DESIGNED BY AWC / KAR
DRAWN BY AWC

No.	DATE	BY	REFERENCE
1	02.17.23	RPR	ISSUED FOR BID

TYPICAL ADA DETAILS & CITY ACCESSIBILITY FORMS

PROJECT NO. C1004859
SCALE: AS NOTED
HOR:
VERT:
DATE: 02.17.23
SHEET NO. G1.2
4 OF 62

DRAWING NAME: C:\Project Jobs\210202_Oakland Main Library\Drawings\CD1180102_G1.3_ADA.dwg
PLOT DATE: 02/17/23
PLOTTED BY: Adam Carr

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

Y = YES
N/A = NOT APPLICABLE
RESPON. PARTY = RESPONSIBLE PARTY (ie: ARCHITECT, ENGINEER, OWNER, CONTRACTOR, INSPECTOR ETC.)

Y | N/A | RESPON. PARTY

CHAPTER 3
GREEN BUILDING
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] The 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 alterations whenever a permit is required for work.

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:

HCD	Department of Housing and Community Development
BSC	California Building Standards Commission
DSA-SS	Division of the State Architect, Structural Safety
OSHPD	Office of Statewide Health Planning and Development
LR	Low Rise
HR	High Rise
AA	Additions and Alterations
N	New

CHAPTER 5
NONRESIDENTIAL MANDATORY MEASURES

DIVISION 5.1 PLANNING AND DESIGN

SECTION 5.101 GENERAL

5.101.1 SCOPE
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 Department of Motor Vehicles.

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 by implementing an effective combination of erosion and sediment control and good housekeeping BMPs.

1. Soil loss BMPs that should be considered for implementation as appropriate for each project include, but are not limited to, the following:
   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.
   e. Erosion control to protect slopes.
   f. Protection of storm drain inlets (gravel bags or catch basin inserts).
   g. Perimeter sediment control (perimeter silt fence, fiber rolls).
   h. Sediment trap or sediment basin to retain sediment on site.
   i. Stabilized construction exits.
   j. Wind erosion control.
   k. Other soil loss BMPs acceptable to the enforcing agency.
2. 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:
   a. Dewatering activities.
   b. Material handling and waste management.
   c. Building materials stockpile management.
   d. Management of washout areas (concrete, paints, stucco, etc.).
   e. Control of vehicle/equipment fueling to contractor's staging area.
   f. Vehicle and equipment cleaning performed off site.
   g 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 one bicycle parking facility.

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.

5.106.4.1.4 For new shell buildings in phased projects provide secure bicycle parking for 5 percent of the 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 be convenient from the street and shall meet one of the following:

1. Covered, lockable enclosures with permanently anchored racks for bicycles;
2. Lockable bicycle rooms with permanently anchored racks; or
3. 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 the street or staff parking area and shall meet one of the following:

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

☐ ☒ **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 vehicles as follows:

TABLE 5.106.5.2 - PARKING

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 visible beneath a parked 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 or Section 5.106.5.3.2 to facilitate future installation of electric vehicle supply equipment (EVSE). When EVSE(s) is/are installed, it shall be in accordance with the *California Building Code*, the *California Electrical Code* and as follows:

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 and shall be installed in accordance with the *California Electrical Code*. Construction plans and specifications shall include, but are not limited to, the following:

1. 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, enclosure or equivalent.
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 installed in accordance with the *California Electrical Code*. Construction plans and specifications shall include, but are not limited to, the following:

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:

1. Where there is insufficient electrical supply.
2. 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]

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 following:

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
2. 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]

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

Note: [N]
1. See also California Building Code, Chapter 12, Section 1205.6 for college campus lighting 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.

TABLE 5.106.8 [N] MAXIMUM ALLOWABLE BACKLIGHT, UPLIGHT AND GLARE (BUG) RATINGS[1,2]

ALLOWABLE RATING	LIGHTING ZONE LZ0	LIGHTING ZONE LZ1	LIGHTING ZONE LZ2	LIGHTING ZONE LZ3	LIGHTING ZONE LZ4
MAXIMUM ALLOWABLE BACKLIGHT RATING [3]					
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	B3	B4	B4
Luminaire back hemisphere is 0.5-1 MH from property line	N/A	B1	B2	B3	B3
Luminaire back hemisphere is less than 0.5 MH from property line	N/A	B0	B0	B1	B2
MAXIMUM ALLOWABLE UPLIGHT RATING (U)					
For area lighting [4]	N/A	U0	U0	U0	U0
For all other outdoor lighting,including decorative luminaires	N/A	U1	U2	U3	UR
MAXIMUM ALLOWABLE GLARE RATING [5] **(G)**					
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 *California 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 limited to, the following:

1. Swales.
2. Water collection and disposal systems.
3. French drains.
4. Water retention gardens.
5. 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 SHADE TREES [DSA-SS].** Shade Trees shall be planted to comply with Sections 5.106.12.1, 5.106.12.2, and 5.106.12.3. Percentages shown shall be measured at noon on the summer solstice. Landscape irrigation necessary to establish and maintain tree health shall comply with Section 5.304.6.

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 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

SECTION 5.201 GENERAL

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 and in wastewater conveyance.

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 Jurisdiction.

RECYCLED WATER. Water which, as a result of treatment of waste, is suitable for a direct beneficial use or a controlled use that 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 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 503.1.1 and 503.1.2.

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).
   b. 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 and one full flush.

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

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

5.303.3.3 Showerheads. [BSC-CG]
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.

5.303.3.3.2 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.

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OAKLAND MAIN LIBRARY
INFRASTRUCTURE IMPROVEMENTS
125 14TH STREET

LICENSED ARCHITECT KATHLEEN A ROUSEAU RCE C19081 Exp. 6/23 STATE OF CALIFORNIA

KATHLEEN ROUSEAU
RCE NO. C19081 EXP. 06.23
CHECKED BY AWC / KAR
DESIGNED BY AWC / KAR
DRAWN BY AWC

No.	DATE	BY	REFERENCE
1	02.17.23	RPR	ISSUED FOR BID

CALGREEN

PROJECT NO. C1004859
SCALE: AS NOTED
HOR:
VERT:
DATE: 02.17.23
SHEET NO. G1.4
5 OF 62

DRAWING NAME: G:\Projects\Jobs\21\0202_Oakland Main Library\Drawings\CD\160102_01-4_CALGREEN.dwg
LAST SAVED BY: Adam Carr
PLOTTED BY: Adam Carr

2019 CALIFORNIA GREEN BUILDING STANDARDS CODE

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

Y = YES
N/A = NOT APPLICABLE
RESPON. PARTY = RESPONSIBLE PARTY (ie: ARCHITECT, ENGINEER, OWNER, CONTRACTOR, INSPECTOR ETC.)

Y	N/A	RESPON. PARTY	
			5.303.3.4 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 per minute at 60 psi.
			5.303.3.4.3 Wash fountains. Wash fountains shall have a maximum flow rate of not more than1.8 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 reduction.
☐	☒		**5.303.4 COMMERCIAL KITCHEN EQUIPMENT.**
			5.303.4.1 Food Waste Disposers. Disposers shall either modulate the use of water to no more than 1 gpm when the disposer is not in use (not actively grinding food waste/no-load) or shall automatically shut off after no more than 10 minutes of inactivity. Disposers shall use no more than 8 gpm of water. **Note:** This code section does not affect local jurisdiction authority to prohibit or require disposer installation.
☒	☐		**5.303.5 AREAS OF ADDITION OR ALTERATION.** For those occupancies within the authority of the California Building Standards Commission as specified in Section 103, the provisions of Section 5.303.3 and 5.303.4 shall apply to new fixtures in additions or areas of alteration to the building.
☒	☐		**5.303.6 STANDARDS FOR PLUMBING FIXTURES AND FITTINGS.** Plumbing fixtures and fittings shall be installed in accordance with the *California Plumbing Code*, and shall meet the applicable standards referenced in Table 1701.1 of the *California Plumbing Code* and in Chapter 6 of this code.
			SECTION 5.304 OUTDOOR WATER USE
☐	☒		**5.304.1 OUTDOOR POTABLE WATER USE IN LANDSCAPE AREAS.** Nonresidential developments shall comply with a local water efficient landscape ordinance or the current California Department of Water Resources' Model Water Efficient Landscape Ordinance (MWELO), whichever is more stringent.
			Notes: 1. The Model Water Efficient Landscape Ordinance (MWELO) is located in the California Code of Regulations, Title 23, Chapter 2.7, Division 2. 2. MWELO and supporting documents, including a water budget calculator, are available at: https://www.water.ca.gov/.
☐	☒		**5.304.6 OUTDOOR POTABLE WATER USE IN LANDSCAPE AREAS.** For public schools and community colleges, landscape projects as described in Sections 5.304.6.1 and 5.304.6.2 shall comply with the California Department of Water Resources Model Water Efficient Landscape Ordinance (MWELO) commencing with Section 490 of Chapter 2.7, Division 2, Title 23, California Code of Regulations, except that the evapotranspiration adjustment factor (ETAF) shall be 0.65 with an additional water allowance for special landscape areas (SLA) of 0.35.
			Exception: 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.
			5.304.6.1 Newly constructed landscapes. New construction projects with an aggregate landscape area equal to or greater than 500 square feet.
			5.304.6.2 Rehabilitated landscapes. Rehabilitated landscape projects with an aggregate landscape area equal to or greater than 1,200 square feet.
			DIVISION 5.4 MATERIAL CONSERVATION AND RESOURCE EFFICIENCY
			SECTION 5.401 GENERAL
			5.401.1 SCOPE. The provisions of this chapter shall outline means of achieving material conservation and resource efficiency through protection of buildings from exterior moisture, construction waste diversion, employment of techniques to reduce pollution through recycling of materials, and building commissioning or testing and adjusting.
			SECTION 5.402 DEFINITIONS
			5.402.1 DEFINITIONS. The following terms are defined in Chapter 2 *(and are included here for reference)*
			ADJUST. To regulate fluid flow rate and air patterns at the terminal equipment, such as to reduce fan speed or adjust a damper.
			BALANCE. To proportion flows within the distribution system, including sub-mains, branches and terminals, according to design quantities.
			BUILDING COMMISSIONING. A systematic quality assurance process that spans the entire design and construction process, including verifying and documenting that building systems and components are planned, designed, installed, tested, operated and maintained to meet the owner's project requirements.
			ORGANIC WASTE. Food waste, green waste, landscape and pruning wste, nonhazardous wood waste, and food soiled paper waste that is mixed in with food waste.
			TEST. A procedure to determine quantitative performance of a system or equipment
			SECTION 5.407 WATER RESISTANCE AND MOISTURE MANAGEMENT
			5.407.1 WEATHER PROTECTION. Provide a weather-resistant exterior wall and foundation envelope as required by California Building Code Section 1402.2 (Weather Protection), manufacturer's installation instructions or local ordinance, whichever is more stringent.
☐	☒		**5.407.2 MOISTURE CONTROL.** Employ moisture control measures by the following methods.
			5.407.2.1 Sprinklers. Design and maintain landscape irrigation systems to prevent spray on structures.
			5.407.2.2 Entries and openings. Design exterior entries and/or openings subject to foot traffic or wind-driven rain to prevent water intrusion into buildings as follows:
			5.407.2.2.1 Exterior door protection. Primary exterior entries shall be covered to prevent water intrusion 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. 3. 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 RECYCLING
☒	☐		**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 by weight or volume, but not by both.
			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 complies with this section. **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:** 1. 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 and markets.
			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. **Notes:** 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).
☒	☐		**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. **Notes:** 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 quarantine 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 floor area.
			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 CalRecycle's web site.
☐	☒		**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: 1. Owner's or Owner representative's project requirements. 2. Basis of design. 3. Commissioning measures shown in the construction documents. 4. Commissioning plan. 5. Functional performance testing. 6. Documentation and training. 7. Commissioning report. **Exceptions:** 1. Unconditioned warehouses of any size. 2. Areas less than 10,000 square feet used for offices or other conditioned accessory spaces within unconditioned warehouses. 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. **Note:** For the purposes of this section, unconditioned shall mean a building, area, or room which does not provide heating and or air conditioning. **Informational Notes:** 1. 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. 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: 1. Environmental and sustainability goals. 2. Building sustainable goals. 3. Indoor environmental quality requirements. 4. Project program, including facility functions and hours of operation, and need for after hours operation. 5. Equipment and systems expectations. 6. 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: 1. Renewable energy systems. 2. Landscape irrigation systems. 3. 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: 1. General project information. 2. Commissioning goals. 3. 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. 4. 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), Title 8, 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 systems manual shall include the following: 1. Site information, including facility description, history and current requirements. 2. Site contact information. 3. Basic operations and maintenance, including general site operating procedures, basic troubleshooting, recommended maintenance requirements, site events log. 4. Major systems. 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 report and shall include the following: 1. System/equipment overview (what it is, what it does and with what other systems and/or equipment it interfaces). 2. Review and demonstration of servicing/preventive maintenance. 3. Review of the information in the Systems Manual. 4. 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 design and construction phases of the building project shall be completed and provided to the owner or representative.
☒	☐		**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.
			5.410.4.2 (Reserved)
			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 system and controls, as well as water heating systems and controls, refer to California Energy Code Section 120.8 for commissioning requirements and Sections 120.5, 120.6, 130.4, and 140.9(b)3 for additional testing requirements of specific systems.
			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: 1. Renewable energy systems. 2. Landscape irrigation systems. 3. 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 accordance with the procedures defined by the Testing Adjusting and Balancing Bureau National Standards; the 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 regulations. **5.410.4.5.1 Inspections and reports.** Include a copy of all inspection verifications and reports required by the enforcing agency.
			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.
			SECTION 5.502 DEFINITIONS
			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 made.
			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 32^0 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-propelled 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) (EVCS). 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 "100 yr" of Table 2.14.
			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, sec.82.3 (as amended March 10, 2009).
			LONG RADIUS ELBOW. Pipe fitting installed between two lengths of pipe or tubing to allow a change of direction, with a radius 1.5 times the pipe diameter.
			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 10, 2009).
			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 O^3/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 and packaging).
			PSIG. Pounds per square inch, guage.
			REACTIVE ORGANIC COMPOUND (ROC). Any compound that has the potential, once emitted, to contribute to ozone formation in the troposphere.
			SCHRADER ACCESS VALVES. Access fittings with a valve core installed.
			SHORT RADIUS ELBOW. Pipe fitting installed between two lengths of pipe or tubing to allow a change of direction, with a radius 1.0 times the pipe diameter.
			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 units or condensing units.
			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 oxygen, nitrogen and other elements. See CCR Title 17, Section 94508(a) **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.
☐	☒		**SECTION 5.503 FIREPLACES** **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. Woodstoves, pellet stoves and fireplaces shall comply with applicable local ordinances. **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 emission limits.
			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 (MERV) of 8, based on ASHRAE 52.2-1999, or an average efficiency of 30% based on ASHRAE 52.1-1992 Replace all filters immediately prior to occupancy, or, if the building is occupied during alteration, at the conclusion of construction.
☒	☐		**5.504.3 Covering of duct openings and protection of mechanical equipment during construction.** At the time of rough 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.

RPR ARCHITECTS
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DEPARTMENT OF ENGINEERING & CONSTRUCTION
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OAKLAND MAIN LIBRARY
INFRASTRUCTURE IMPROVEMENTS
125 14TH STREET

LICENSED ARCHITECT KATHLEEN A. ROUSEAU No. C 19081 Exp. 6/23 STATE OF CALIFORNIA

KATHLEEN ROUSEAU
RCE NO. C19081 EXP. 06.23
CHECKED BY AWC / KAR
DESIGNED BY AWC / KAR
DRAWN BY AWC

No.	DATE	BY	REFERENCE
1	02.17.23	RPR	ISSUED FOR BID

CALGREEN

PROJECT NO. C1004859
SCALE: AS NOTED
HOR:
VERT:
DATE: 02.17.23
SHEET NO. G1.5
6 OF 62

DRAWING NAME: O:\Projects\Jobs\210202_Oakland Main Library\Drawings\CD\180102_G1.5_CALGREEN.dwg
PLOT DATE: 02/16/23
PLOTTED BY: Adam Carr

2019 CALIFORNIA GREEN BUILDING STANDARDS CODE

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

Y = YES
N/A = NOT APPLICABLE
RESPON. PARTY = RESPONSIBLE PARTY (ie: ARCHITECT, ENGINEER, OWNER, CONTRACTOR, INSPECTOR ETC.)

Y	N/A	RESPON. PARTY
X	☐	

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

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

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, as shown in Tables 5.504.4.1 and 5.504.4.2. Such products also shall comply with the Rule 1168 prohibition on the use of certain toxic compounds (chloroform, ethylene dichloride, methylene chloride, perchloroethylene and trichloroethylene), except for aerosol products as specified in subsection 2, below.

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.

TABLE 5.504.4.1 - ADHESIVE VOC LIMIT[1,2]

Less Water and Less Exempt Compounds in Grams per Liter

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 FOAMS	50
POROUS MATERIAL (EXCEPT WOOD)	50
WOOD	30
FIBERGLASS	80

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

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

TABLE 5.504.4.2 - SEALANT VOC LIMIT

Less Water and Less Exempt Compounds in Grams per Liter

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

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

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

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

TABLE 5.504.4.3 - VOC CONTENT LIMITS FOR ARCHITECTURAL COATINGS[2,3]

GRAMS OF VOC PER LITER OF COATING, LESS WATER & LESS EXEMPT COMPOUNDS

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[1]	120
MAGNESITE CEMENT COATINGS	450
MASTIC TEXTURE COATINGS	100
METALLIC PIGMENTED COATINGS	500
MULTICOLOR COATINGS	250
PRETREATMENT WASH PRIMERS	420
PRIMERS, SEALERS, & UNDERCOATERS	100
REACTIVE PENETRATING SEALERS	350
RECYCLED COATINGS	250
ROOF COATINGS	50
RUST PREVENTATIVE COATINGS	250
SHELLACS:	
CLEAR	730
OPAQUE	550
SPECIALTY PRIMERS, SEALERS & UNDERCOATERS	100
STAINS	250
STONE CONSOLIDANTS	450
SWIMMING POOL COATINGS	340
TRAFFIC MARKING COATINGS	100
TUB & TILE REFINISH COATINGS	420
WATERPROOFING MEMBRANES	250
WOOD COATINGS	275
WOOD PRESERVATIVES	350
ZINC-RICH PRIMERS	340

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

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

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

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

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

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

1. Carpet and Rug Institute's Green Label Plus Program.
2. 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).
3. NSF/ANSI 140 at the Gold level or higher;
4. 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.

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

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

1. Product certifications and specifications.
2. 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 standards.
5. Other methods acceptable to the enforcing agency.

TABLE 5.504.4.5 - FORMALDEHYDE LIMITS[1]

MAXIMUM FORMALDEHYDE EMISSIONS IN PARTS PER MILLION

PRODUCT	CURRENT LIMIT
HARDWOOD PLYWOOD VENEER CORE	0.05
HARDWOOD PLYWOOD COMPOSITE CORE	0.05
PARTICLE BOARD	0.09
MEDIUM DENSITY FIBERBOARD	0.11
THIN MEDIUM DENSITY FIBERBOARD[2]	0.13

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

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

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;
3. 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 Program).

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 rating.

☐ X **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

☐ X **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

X ☐ **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.

☐ X **5.506.2 CARBON DIOXIDE (CO_2) MONITORING.** For buildings or additions equipped with demand control ventilation, CO_2 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

☐ X **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.

   Exceptions:

   1. L_{dn} or CNEL for military airports shall be determined by the facility Air Installation Compatible Land Use Zone (AICUZ) plan.
   2. L_{dn} or CNEL for other airports and heliports for which a land use plan has not been developed shall be determined by the local general plan noise element.

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

5.507.4.1.1. Noise exposure where noise contours are not readily available. Buildings exposed to a noise level of 65 dB L_{eq} - 1-hr during any hour of operation shall have building, addition or alteration exterior 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 and public places shall have an STC of at least 40.

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

SECTION 5.508 OUTDOOR AIR QUALITY

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

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

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

☐ X **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 (CO_2), and potentially other refrigerants.

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

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

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

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

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

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

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

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

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

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

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

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

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

5.508.2.2.2.2.1 Chain 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 operation.

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

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

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

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

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

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

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

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

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

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

CHAPTER 7
INSTALLER & SPECIAL INSPECTOR QUALIFICATIONS

702 QUALIFICATIONS

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

1. State certified apprenticeship programs.
2. Public utility training programs.
3. Training programs sponsored by trade, labor or statewide energy consulting or verification organizations.
4. Programs sponsored by manufacturing organizations.
5. 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:

1. 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.

Notes:

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 checklist.

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OAKLAND MAIN LIBRARY
INFRASTRUCTURE IMPROVEMENTS
125 14TH STREET

KATHLEEN ROUSEAU
RCE NO. C19081 EXP. 06.23
CHECKED BY AWC / KAR
DESIGNED BY AWC / KAR
DRAWN BY AWC

No.	DATE	BY	REFERENCE
1	02.17.23	RPR	ISSUED FOR BID

CALGREEN

PROJECT NO. C1004859
SCALE: AS NOTED
HOR:
VERT:
DATE: 02.17.23
SHEET NO. G1.6
7 OF 62

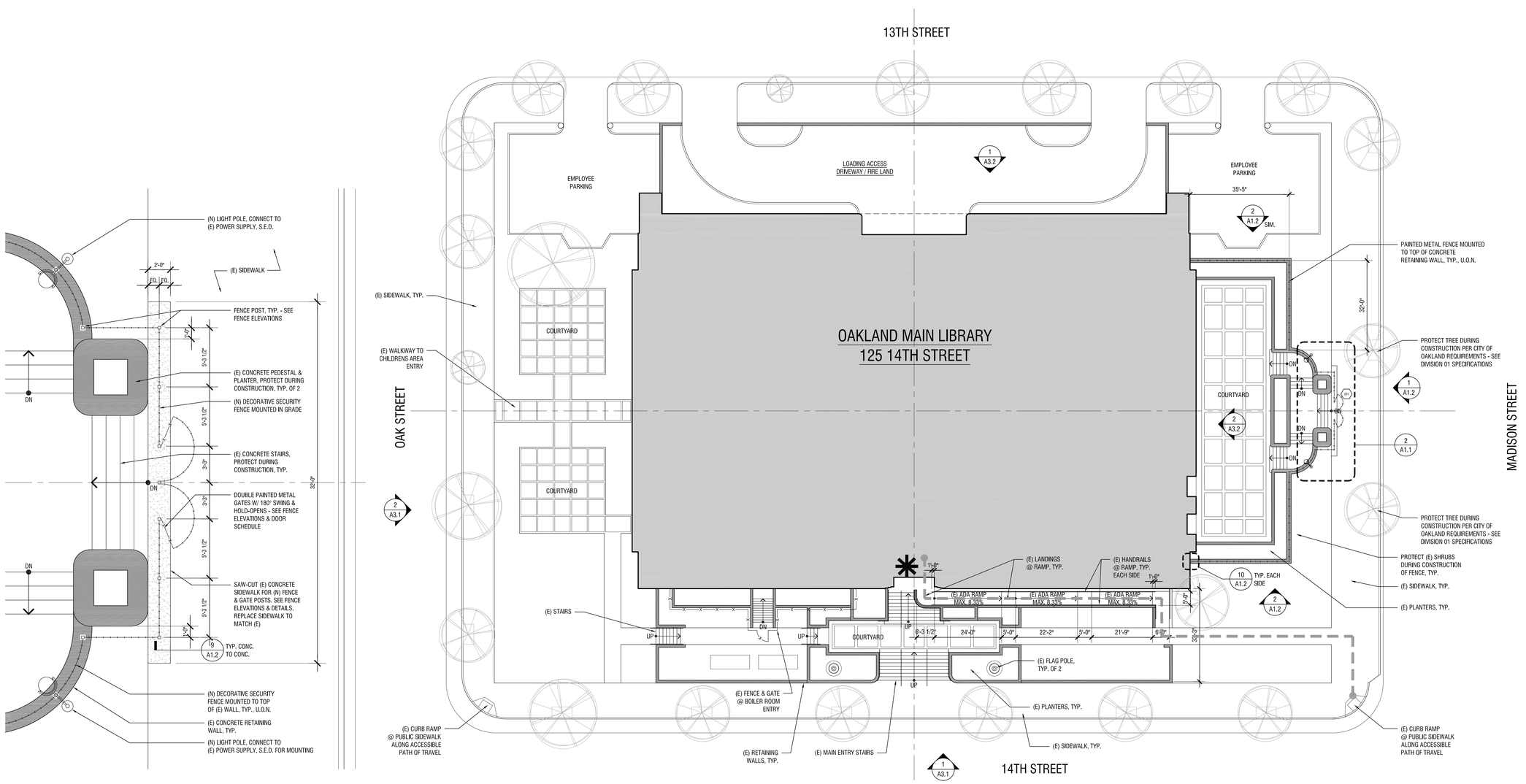
DRAWING NAME: O:\Projects\Jobs\210202_Oakland Main Library\Drawings\CD\180102_G1.6_CALGREEN.dwg
PLOT DATE: 02/17/23
PLOTTED BY: Adam Carr

SITE PLAN KEY

	(E) BUILDING FOOTPRINT
	(E) SITE RETAINING WALLS
	PROPOSED SITE FENCE
	AREA OF (N) SIDEWALK
	(E) ACCESSIBLE PATH OF TRAVEL
*	LOCATION OF (E) ACCESSIBLE BUILDING ENTRANCE

GENERAL NOTES

1. PROTECT (E) SHRUBS @ RETAINING WALL DURING ERECTION OF PROPOSED FENCE, TYP. GENERAL CONTRACTOR TO TRIM & TIE-BACK ALL SHRUBS AS REQUIRED. SEE CITY OF OAKLAND STANDARDS FOR TREE & SHRUB PROTECTION IN DIVISION 01 SPERCATIONS.



2 ENLARGED SITE PLAN @ GATES
SCALE: 1/4"=1'-0"

1 SITE PLAN - OAKLAND MAIN LIBRARY
SCALE: 1/16"=1'-0"

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SITE PLAN

PROJECT NO.
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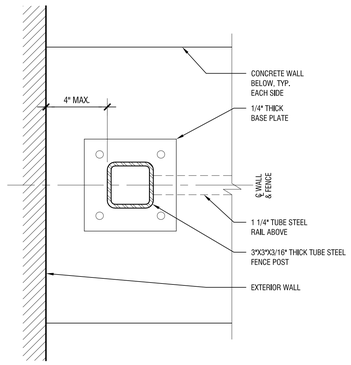
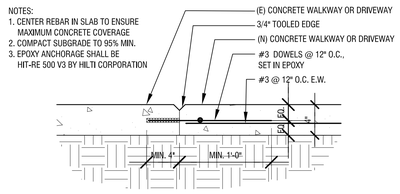
SCALE: AS NOTED
HOR:
VERT:
DATE: 02.17.23

SHEET NO.
A1.1
8 OF 62

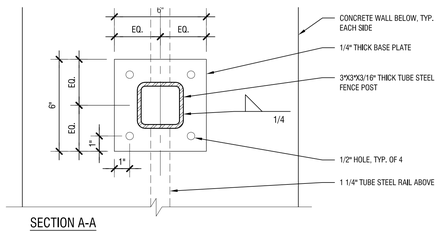
DRAWING NAME: O:\Projects\Jobs\210202_Oakland Main Library\Drawings\CD\190102_A1_1_Site Plan.dwg
PLOT DATE: 2/17/2023
PLOTTED BY: Adam Carr



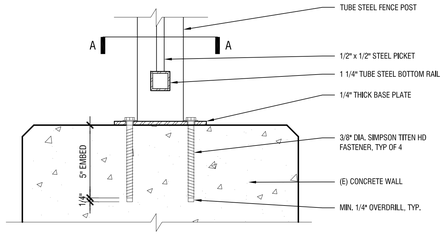
10 TYP. FENCE @ WALL
SCALE: 3"=1'-0"



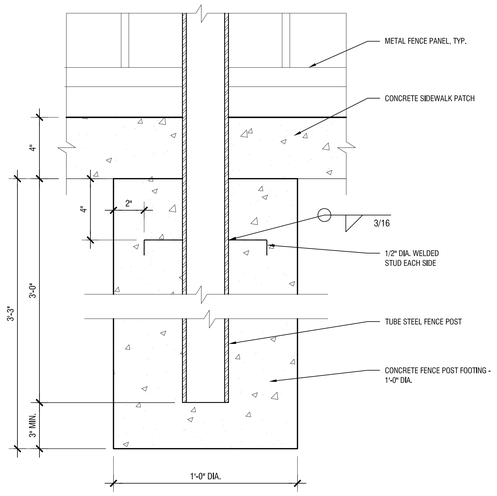
9 TYP. CONCRETE TO CONCRETE DETAIL
SCALE: 1 1/2"=1'-0"



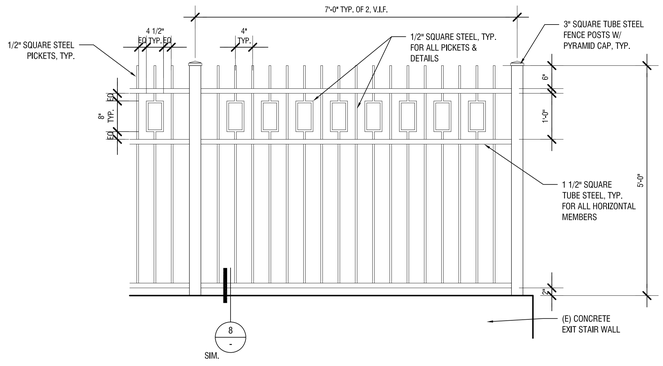
SECTION A-A



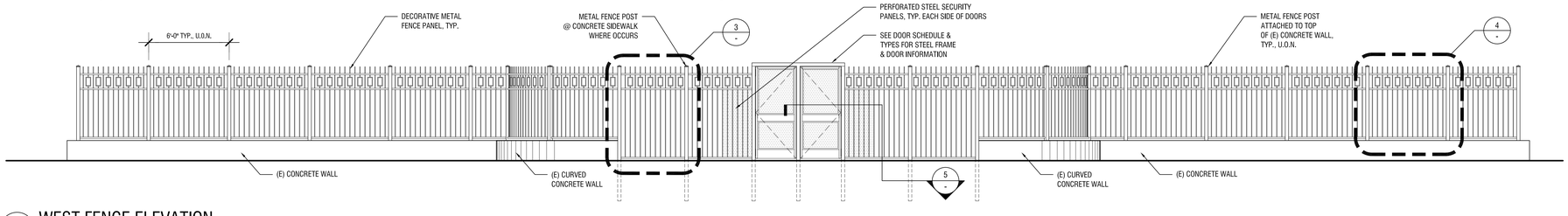
8 FENCE POST MOUNTING @ TOP OF (E) CONC. WALL
SCALE: 3"=1'-0"



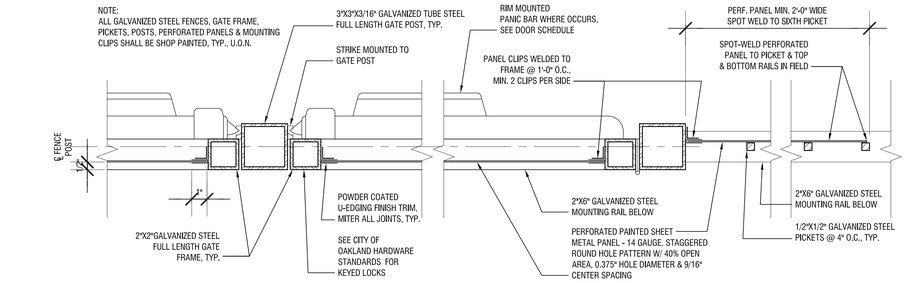
7 FENCE POST MOUNTING @ SIDEWALK - SIM. IN LANDSCAPE
SCALE: 3"=1'-0"



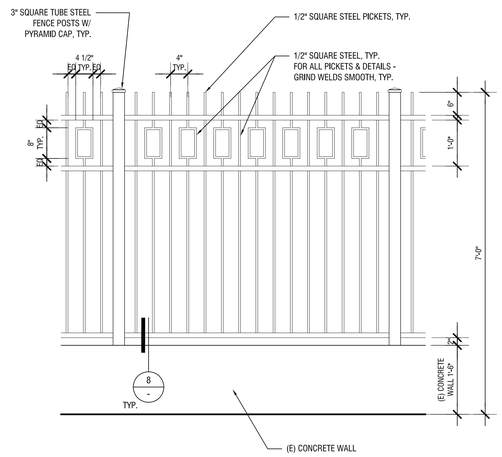
6 WALL MOUNTED FENCE PANEL @ EXIT STAIRS
SCALE: 3/4"=1'-0"

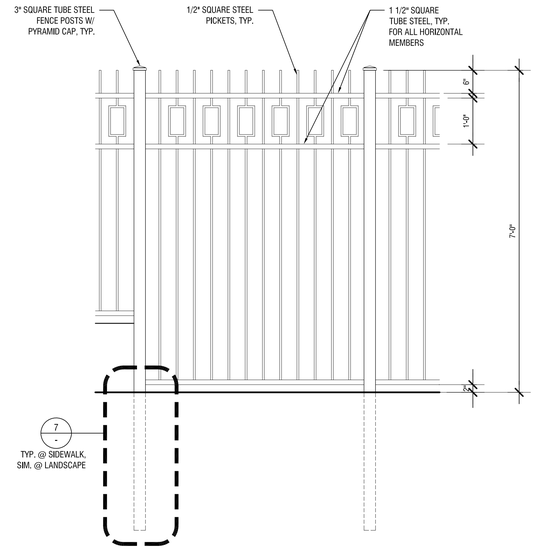


1 WEST FENCE ELEVATION
SCALE: 1/4"=1'-0"



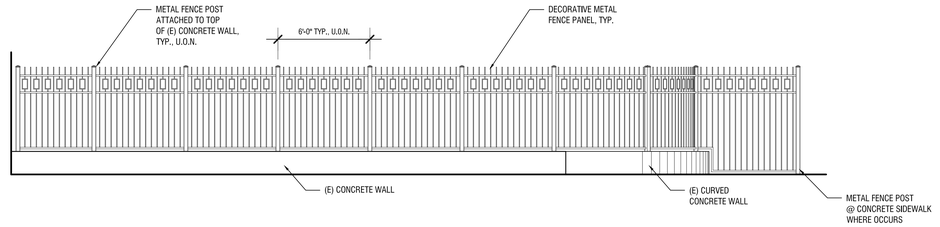
5 STEEL GATE EXIT DEVICE
SCALE: 3"=1'-0"





4 TYP. WALL MOUNTED FENCE PANEL
SCALE: 3/4"=1'-0"

3 TYP. SIDEWALK MOUNTED FENCE PANEL
SCALE: 3/4"=1'-0"



2 NORTH FENCE ELEVATION - SOUTH TYP.
SCALE: 1/4"=1'-0"

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OAKLAND MAIN LIBRARY INFRASTRUCTURE IMPROVEMENTS
125 14TH STREET

LICENSED ARCHITECT KATHLEEN A ROUSEAU RCE C19081 Exp. 6/23 STATE OF CALIFORNIA

KATHLEEN ROUSEAU
RCE NO. C19081 EXP. 06.23

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DESIGNED BY	AWC / KAR
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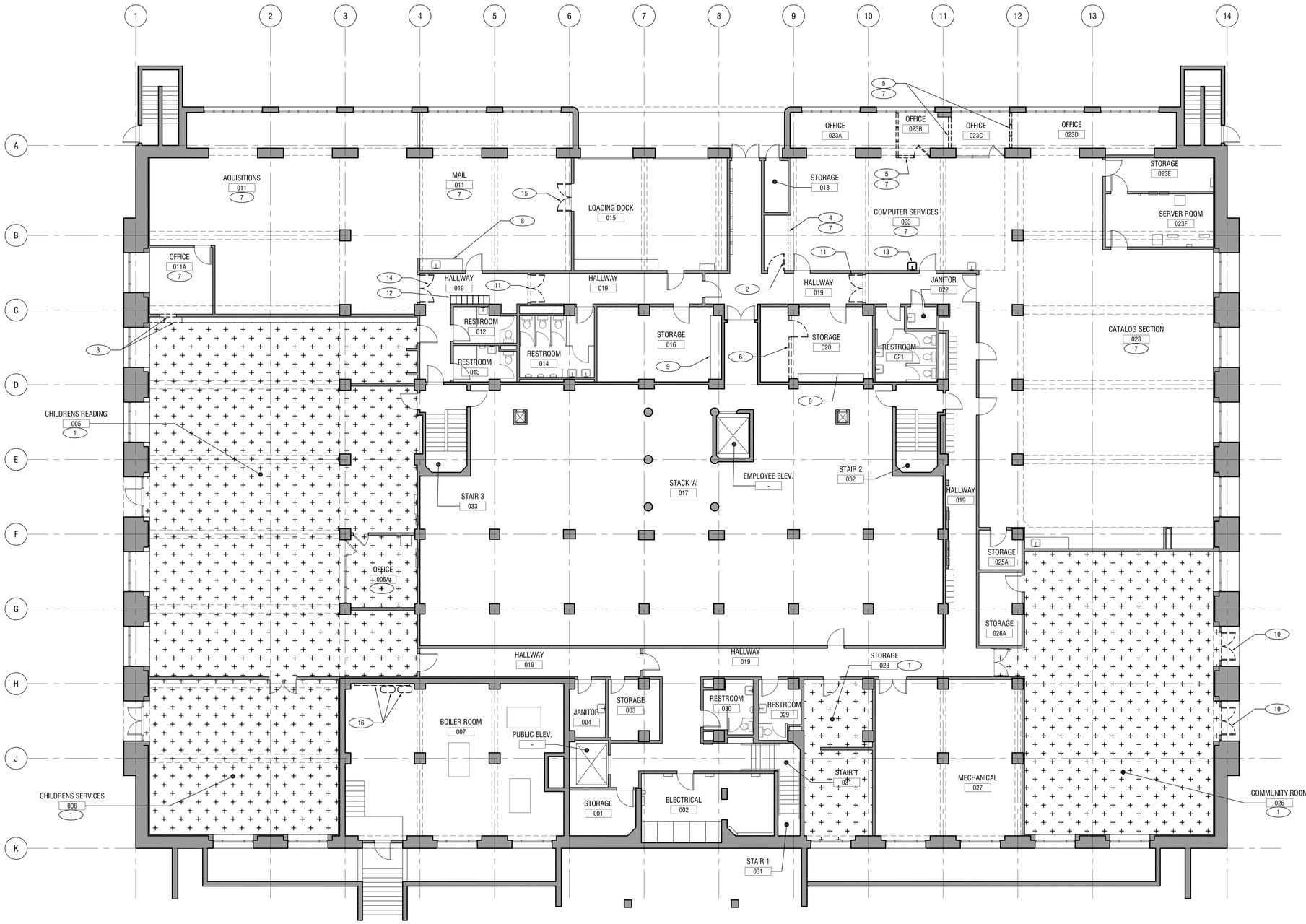
SITE DETAILS

PROJECT NO.
C1004859

SCALE: AS NOTED
HOR:
VERT:
DATE: 02.17.23

SHEET NO.
A1.2
9 OF 62

DRAWING NAME: C:\Projects\Jobs\210202_Oakland Main Library\Drawings\CD\160102_A1.2_Site Details.dwg
LAST SAVED BY: Adam Carr
PLOTTED BY: Adam Carr



1 LEVEL 1 - GROUND FLOOR DEMOLITION PLAN
SCALE: 1/8"=1'-0"

DEMO KEY NOTES

1	DEMO CARPET, ADHESIVES & TRANSITION STRIP - PREPARE SUBSTRATE TO RECEIVE (N) CARPET TILES. IF SUBSTRATE IS VINYL ASBESTOS TILE, PROTECT & CLEAN CARPET ADHESIVE AS REQUIRED.
2	DEMO DOOR, FRAME & PORTIONS OF ADJACENT WALLS AS REQ'D. - SEE FLOOR PLAN
3	DEMO PORTION OF WALL & BOOK SHELVES. PROTECT ADJACENT BOOK SHELVES. SEE FLOOR PLAN
4	DEMO PORTION OF WALL. RE-ROUTE (E) CONDUITS & CAP (E) WATER & DRAIN LINES
5	DEMO WALLS, DOOR, FRAME & GLAZING @ OFFICES
6	DEMO CAGE - PROTECT (E) SHELVING
7	PROTECT (E) VINYL ASBESTOS TILE FLOORING
8	PROTECT (E) MILLWORK
9	PROTECT (E) SHELVING
10	DEMO DOOR, FRAME & GLAZING
11	REMOVE DOOR LEAVES & SAVE. ADJACENT JAMBS, HEAD, FRAME & WALLS TO REMAIN
12	REMOVE & RELOCATE (E) LOCKERS. COORDINATE W/ LIBRARY STAFF FOR (N) LOCATION
13	DEMO SINK. CAP ALL WATER LINES & DRAINS WITHIN WALL. PATCH, REPAIR & PAINT WALL TO MATCH (E)
14	REMOVE & SAVE DOORS & FRAME FOR REINSTALLATION. SEE DOOR SCHEDULE
15	REMOVE & MODIFY DOORS PER DOOR SCHEDULE FOR REINSTALLATION.
16	DEMO COMPRESSORS & ASSOCIATED PNEUMATIC BOILER CONTROLS, S.M.D.

DEMO KEY

+ + + +	DEMO CARPET - VERIFY SUBSTRATE BENEATH. PROTECT VINYL ASBESTOS TILE IF OCCURS BENEATH CARPET

DEMO NOTES

1. GENERAL CONTRACTOR MUST COMPLY W/ CITY OF OAKLAND CONSTRUCTION DEMOLITION & DEBRIS WASTE REDUCTION & RECYCLING ORDINANCE PER O.M.C. SECTION 15.34.

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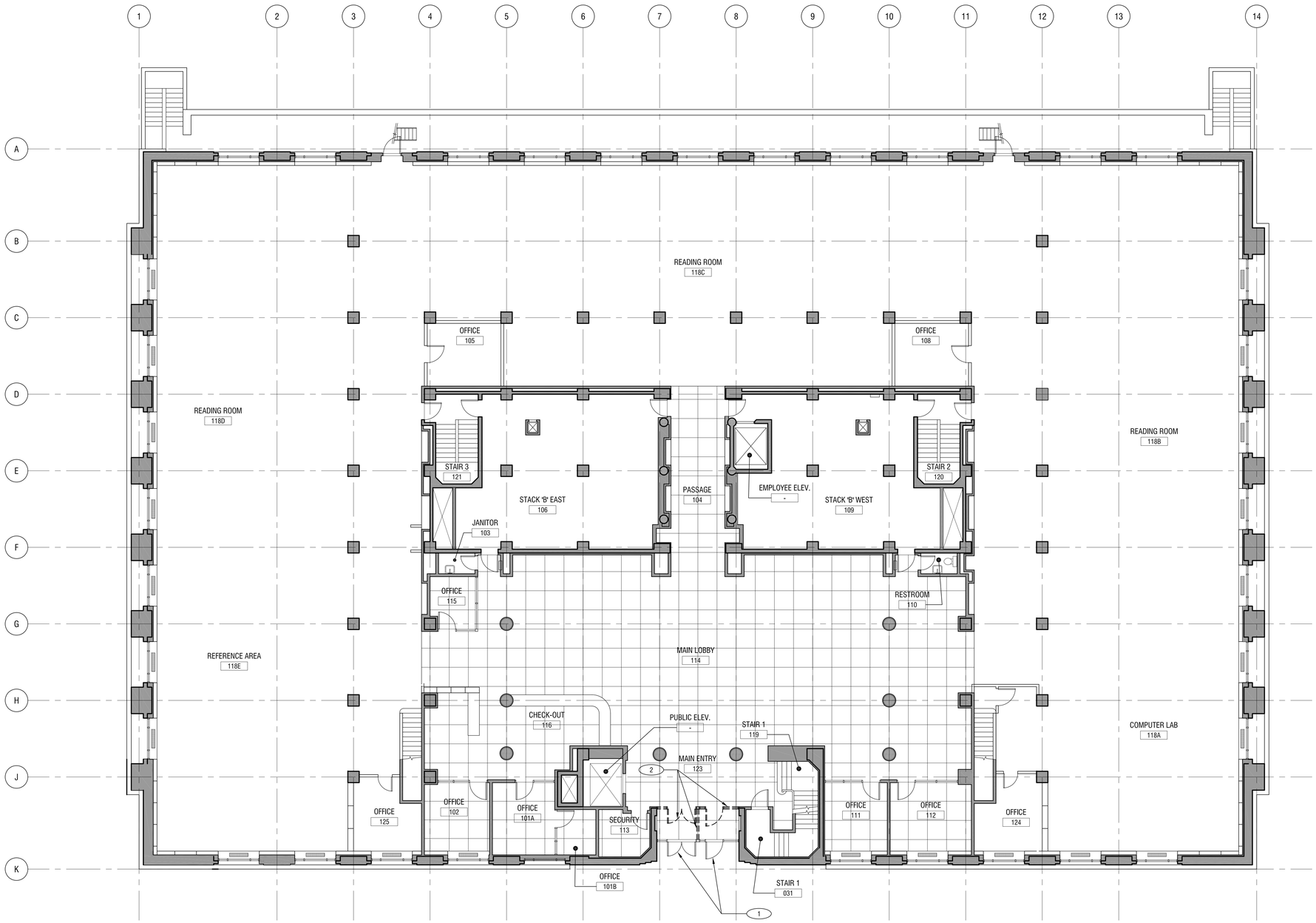
LEVEL 1 - GROUND FLOOR DEMOLITION PLAN

PROJECT NO.
C1004859

SCALE: AS NOTED
HOR:
VERT:
DATE: 02.17.23

SHEET NO.
AD2.1
10 OF 62

DRAWING NAME: O:\Project Jobs\210202_Oakland Main Library\Drawings\CD\16102_AD2.1_Ground Floor_Demo.dwg
PLOT DATE: 2/21/2023
PLOTTED BY: Adam Carr



1 LEVEL 2 - FIRST FLOOR DEMOLITION PLAN
SCALE: 1/8"=1'-0"

KEY NOTES

1	(E) DOOR LEAVES @ MAIN ENTRY TO REMAIN - PROTECT STOREFRONT SYSTEM & (E) AUTOMATIC ADA PUSH BUTTON DOOR OPENER
2	DEMO VESTIBULE & ASSOCIATED DOORS & CEILING - PROTECT FLOORS & WALLS

DEMO NOTES

1. PROTECT ALL FLOORING SURFACES DURING DEMOLITION @ FRONT ENTRY DOORS.
2. GENERAL CONTRACTOR MUST COMPLY W/ CITY OF OAKLAND CONSTRUCTION DEMOLITION & DEBRIS WASTE REDUCTION & RECYCLING ORDINANCE PER O.M.C. SECTION 15.34.
3. REMOVE ALL WINDOW BLINDS FROM ROOMS 118A, 118B, 118C, 118D & 118E. SAVE, CLEAN, INSPECT FOR DAMAGE & STORE. CITY OF OAKLAND WILL DETERMINE W/ ASSISTANCE FROM THE GENERAL CONTRACTOR WHETHER TO REPAIR & REINSTALL WINDOW BLINDS.

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1	02.17.23	RPR	ISSUED FOR BID

LEVEL 2 - FIRST FLOOR DEMOLITION PLAN

PROJECT NO.
C1004859

SCALE: AS NOTED
HOR:
VERT:
DATE: 02.17.23

SHEET NO.
AD2.2
11 OF 62

DRAWING NAME: O:\Projects\Jobs\210200_Oakland Main Library\Drawings\CD\180102_AD2.2_First Floor_Demo.dwg
PLOT DATE: 02/17/23
PLOTTED BY: Adam Carr

1 LEVEL 1 - GROUND FLOOR DEMOLITION REFLECTED CEILING PLAN
SCALE: 1/8" = 1'-0"

DEMO CEILING KEY

	D-1	DEMO RECESSED 2X4 FLUORESCENT LIGHT FIXTURE
	D-2	DEMO SURFACE MOUNTED DOUBLE 1X4 FLUORESCENT LIGHT FIXTURE
	D-3	DEMO FLUORESCENT LIGHT FIXTURE, TYP. @ ALL LEVELS OF STAIR #1 & STAIR #2. PROVIDE TEMPORARY EMERGENCY LIGHTING FOR ENTIRE STAIRWAY DURING CONSTRUCTION
	D-4	DEMO 24X48 ACOUSTICAL CEILING TILES, T-BAR, SUPPORT STRUCTURE & BRACING
	D-5	DEMO 12X12 ACOUSTICAL CEILING TILES & ADHESIVE. CLEAN CONCRETE SUBSTRATE TO ACCEPT (N) CEILING TILES

KEY NOTES

1	DEMO CEILING MOUNTED SIGNAGE. SAVE FOR FUTURE USE
2	(E) LIGHT FIXTURES TO REMAIN

DEMO NOTES

1. GENERAL CONTRACTOR MUST COMPLY W/ CITY OF OAKLAND CONSTRUCTION DEMOLITION & DEBRIS WASTE REDUCTION & RECYCLING ORDINANCE PER O.M.C. SECTION 15.34.

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LEVEL 1 - GROUND FLOOR
R.C.P. DEMOLITION

PROJECT NO.
C1004859

SCALE: AS NOTED
HOR:
VERT:
DATE: 02.17.23

SHEET NO.
AD2.3
12 OF 62

DRAWING NAME: O:\Project Jobs\210202_Oakland Main Library\Drawings\CD\160102_AD2.3_Ground Floor_RCP_Demo.dwg
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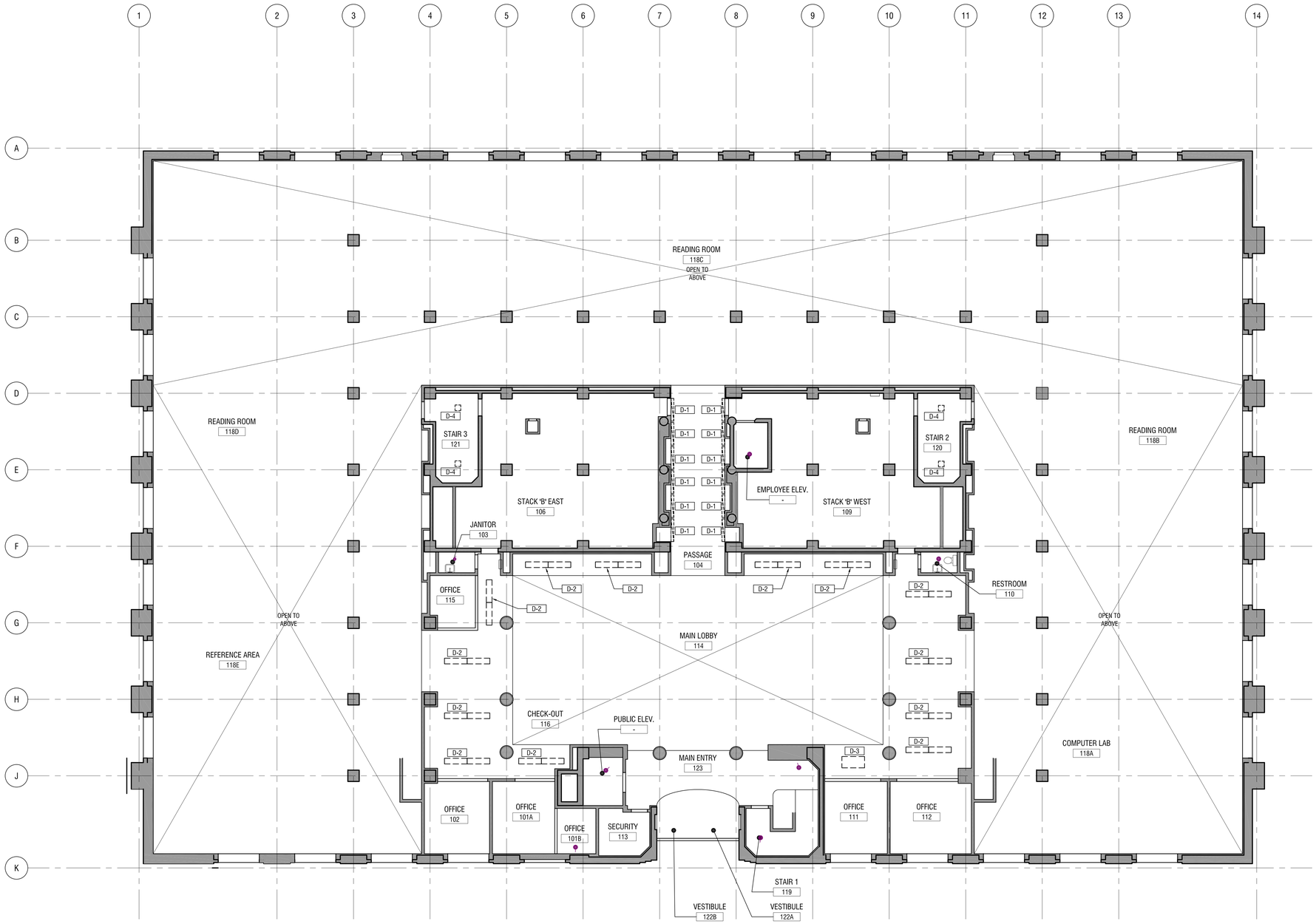
PLOTTED BY: Adam Carr



1 LEVEL 2 - FIRST FLOOR DEMOLITION REFLECTED CEILING PLAN

SCALE: 1/8"=1'-0"

DEMO CEILING KEY

	D-1	DEMO WALL MOUNTED RECESSED FIXTURE
	D-2	DEMO SURFACE MOUNTED DOUBLE 1X4 FLUORESCENT LIGHT FIXTURE
	D-3	DEMO SURFACE MOUNTED 2X4 FLUORESCENT LIGHT FIXTURE
	D-4	DEMO FLUORESCENT LIGHT FIXTURE, TYP. @ ALL LEVELS OF STAIR #1 & STAIR #2. PROVIDE TEMPORARY EMERGENCY LIGHTING FOR ENTIRE STAIRWAY DURING CONSTRUCTION

GENERAL NOTES

1. (E) LIGHT FIXTURES NOT SHOWN ON DEMOLITION REFLECTED CEILING PLANS FOR CLARITY - ONLY LIGHT FIXTURES TO BE REMOVED ARE SHOWN.
2. SEE REFLECTED CEILING PLAN FOR MORE INFORMATION PERTAINING TO REMOVAL & REPLACEMENT OF (E) ACOUSTICAL CEILING TILES.
3. GENERAL CONTRACTOR MUST COMPLY W/ CITY OF OAKLAND CONSTRUCTION DEMOLITION & DEBRIS WASTE REDUCTION & RECYCLING ORDINANCE PER O.M.C. SECTION 15.34.

DRAWING NAME: O:\Project Jobs\210202_Oakland Main Library\Drawings\CD\160102_AD2.4_First Floor_RCP_Demo.dwg
PLOT DATE: 6/20/23
PLOTTED BY: Adam Carr

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OAKLAND MAIN LIBRARY
INFRASTRUCTURE IMPROVEMENTS
125 14TH STREET

LICENSED ARCHITECT
KATHLEEN A. ROUSEAU
C 19081
Exp. 6/23
STATE OF CALIFORNIA

KATHLEEN ROUSEAU
RCE NO. C19081 EXP. 06.23
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DRAWN BY AWC

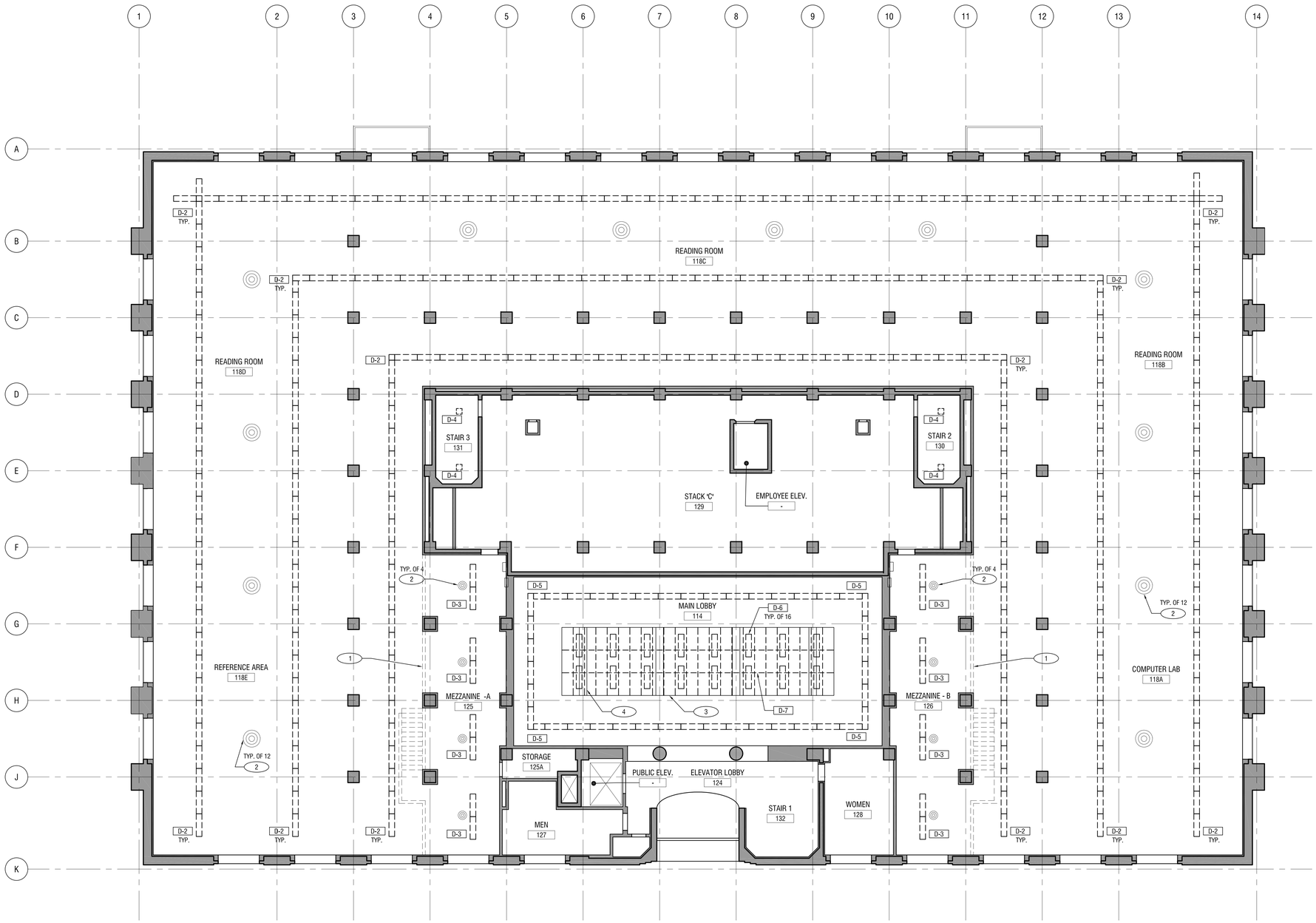
No.	DATE	BY	REFERENCE
1	02.17.23	RPR	ISSUED FOR BID

LEVEL 2 - FIRST FLOOR DEMOLITION REFLECTED CEILING PLAN

PROJECT NO.
C1004859

SCALE: AS NOTED
HOR:
VERT:
DATE: 02.17.23

SHEET NO.
AD2.4
13 OF 62



1 LEVEL 3 - MEZZANINE DEMOLITION REFLECTED CEILING PLAN
SCALE: 1/8" = 1'-0"

N

DEMO CEILING KEY

	D-1	DEMO WALL MOUNTED RECESSED FIXTURE
	D-2	DEMO CONTINUOUS STRIP SURFACE MOUNTED 1X4 FLUORESCENT LIGHT FIXTURES
	D-3	DEMO SURFACE MOUNTED DOUBLE 1X4 FLUORESCENT LIGHT FIXTURE
	D-4	DEMO SURFACE MOUNTED 1X1 FLUORESCENT LIGHT FIXTURE. TYP. @ ALL LEVELS OF STAIR #1 & STAIR #2
	D-5	DEMO RECESSED CONTINUOUS STRIP 1X4 FLUORESCENT LIGHT FIXTURE
	D-6	DEMO PENDANT MOUNTED 1X4 FLUORESCENT LIGHT FIXTURE, TYP. OF 16 IN SKYLIGHT WELL
	D-7	REMOVE & CLEAN 2X4 GRID CEILING & BAFFLES @ SKYLIGHT WELL. SAVE FOR REINSTALLATION. SEE R.C.P., TYP.

KEY NOTES

1. LOW WALLS & STAIRS @ MEZZANINE SHOW DASHED FOR REFERENCE
2. (E) H.V.A.C. REGISTER, TYP.
3. EDGE OF CEILING OPENING @ SKYLIGHT
4. (E) BEAMS WRAPPED IN PLASTER

DEMO NOTES

1. (E) LIGHT FIXTURES NOT SHOWN ON DEMOLITION REFLECTED CEILING PLANS FOR CLARITY - ONLY LIGHT FIXTURES TO BE REMOVED ARE SHOWN.
2. PROTECT ALL (E) 1X1 ACOUSTICAL CEILING TILES TO REMAIN. SEE R.C.P. ON SHEET A2.7 FOR DIRECTION PERTAINING TO REPLACEMENT OF DAMAGED, BROKEN OR WATER STAINED 1X1 TILES.
3. GENERAL CONTRACTOR MUST COMPLY W/ CITY OF OAKLAND CONSTRUCTION DEMOLITION & DEBRIS WASTE REDUCTION & RECYCLING ORDINANCE PER O.M.C. SECTION 15.34.
4. GENERAL CONTRACTOR TO COORDINATE SELECTIVE DEMO IN FIELD @ CEILING WHERE (N) FANS TO BE INSTALLED. SEE A2.7 & S1.2

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No. C19081
Exp. 6/23
STATE OF CALIFORNIA

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RCE NO. C19081 EXP. 06.23
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DESIGNED BY AWC / KAR
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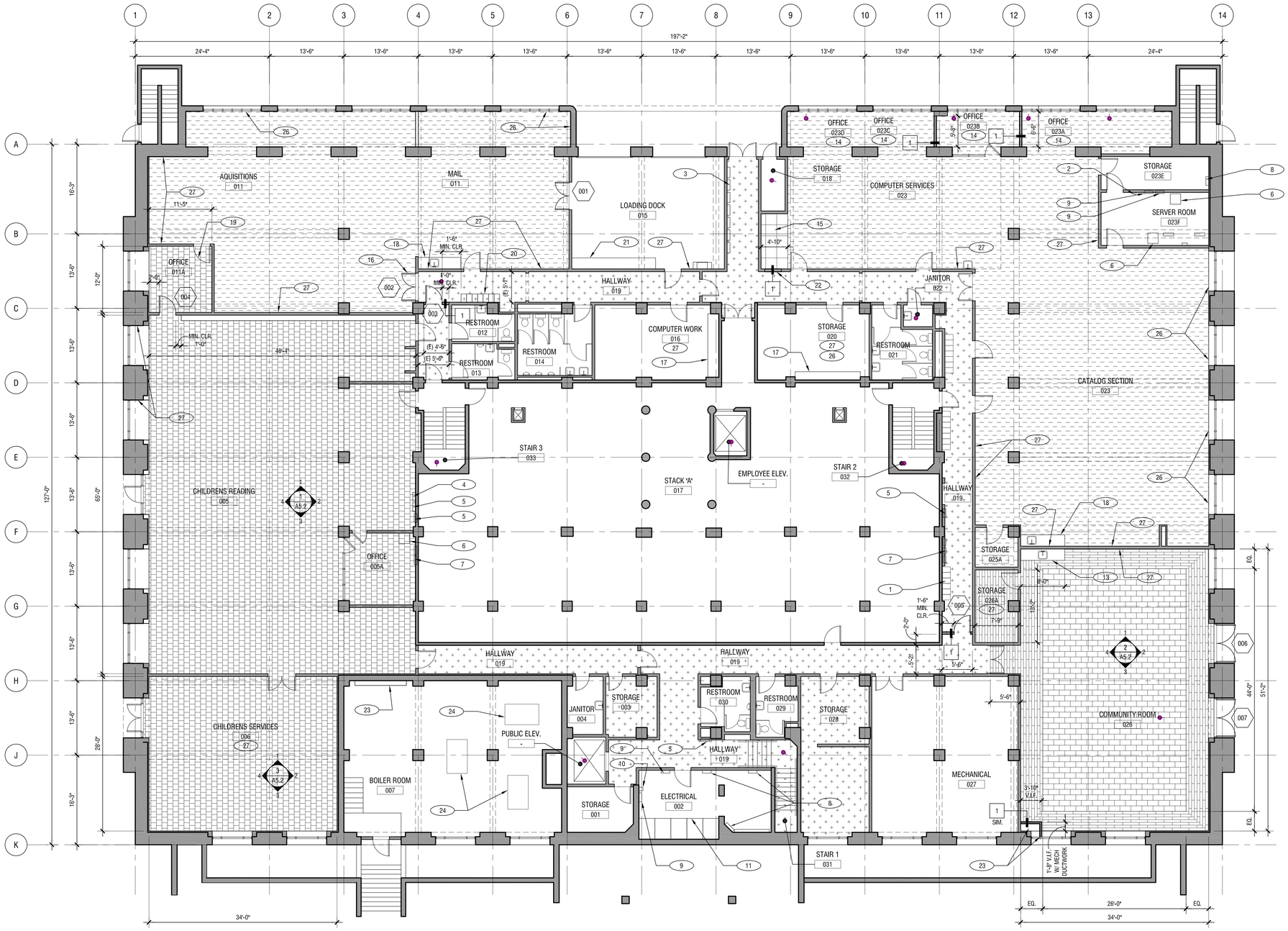
LEVEL 3 - MEZZANINE DEMOLITION REFLECTED CEILING PLAN

PROJECT NO.
C1004859

SCALE: AS NOTED
HOR:
VERT:
DATE: 02.17.23

SHEET NO.
AD2.5
14 OF 62

DRAWING NAME: O:\Project\Jobs\210202_Oakland Main Library\Drawings\CD\180102_AD2.5_Mezzanine_RCP_Demo.dwg
PLOT DATE: 02/17/23
PLOTTED BY: Adam Carr



1 LEVEL 1 - GROUND FLOOR CONSTRUCTION PLAN
SCALE: 1/8"=1'-0"

KEY NOTES

1	(E) LOCKERS - TEMPORARILY REMOVE FOR FLOOR RESTORATION. REINSTALL IN ORIGINAL LOCATION, TYP.
2	(E) SERVER ROOM EMERGENCY DISCONNECT SWITCH
3	(E) FIRE ALARM PANELS, TYP. ALONG WALL - PROTECT DURING CONSTRUCTION
4	REPLACE LIGHTING CONTROL PANEL, S.E.D. PATCH, REPAIR & PAINT SURROUNDING WALLS TO MATCH (E). PROVIDE PAINTED WOOD TRIM AS REQUIRED FOR A CLEAN INSTALLATION, TYP.
5	REPLACE ELECTRICAL PANEL, S.E.D. PATCH, REPAIR & PAINT SURROUNDING WALLS TO MATCH (E). PROVIDE PAINTED WOOD TRIM AS REQUIRED FOR A CLEAN INSTALLATION, TYP.
6	(E) SERVER RACK
7	(E) DATA PANELS
8	(E) PHONE BOARDS
9	(E) ELECTRICAL PANEL, SEE ELECTRICAL DRAWINGS
10	(E) ELECTRICAL METER, SEE ELECTRICAL DRAWINGS
11	(E) MAIN ELECTRICAL SWITCHGEAR, SEE ELECTRICAL DRAWINGS
12	(E) SERVER RACK
13	MILLWORK, COUNTER & SINK - S.E.D., S.P.D.
14	REPAIR FLOORING IN AREA OF DEMO'D WALLS TO MATCH (E), TYP.
15	V.C.T. FLOOR FINISH IN VESTIBULE TO COLOR MATCH (E) ADJACENT V.A.T. - PROVIDE SCHLUTER TRANSITION STRIP BETWEEN FLOOR FINISHES
16	REINSTALL (E) DOORS & REVERSE SWING
17	PROTECT (E) SHELVING
18	PROTECT (E) MILLWORK, SINK & COUNTER
19	(E) DOOR TO BE PERMANENTLY LOCKED
20	RELOCATED (E) LOCKERS
21	(E) CABINETS TO REMAIN - PROTECT DURING CONSTRUCTION
22	WALL INFILL
23	(N) BOILER CONTROLS, S.M.D. - COORDINATE IN FIELD W/ CITY OF OAKLAND PUBLIC WORKS & CITY OF OAKLAND I.T. DEPT. FOR ROUTING OF LOW VOLTAGE COMMUNICATION CABLING TO BOILERS & ROOFTOP FAN ROOMS
24	(E) BOILERS - S.M.D. FOR (N) BOILER CONTROLS
25	(N) MECHANICAL CHASE - COORDINATE IN FIELD W/ MECHANICAL DRAWINGS. LOCATION OF (E) WINDOW MULLION & LOUVER IN WINDOW. PAINT LOUVER TO MATCH (E) WINDOW MULLIONS. PAINT GYPSUM BOARD WALLS OF CHASE TO MATCH SOFFIT & ADJACENT WALLS, TYP.
26	PAINT ALL SURFACE MOUNTED CONDUIT TO MATCH ADJACENT WALL COLOR, S.E.D. FOR NUMBER & LOCATIONS OF OUTLETS, TYP.
27	PATCH, REPAIR & PAINT WALLS @ (N) OUTLET LOCATIONS, S.E.D. FOR NUMBER & LOCATIONS OF OUTLETS, TYP.

FLOORING KEY

	DIAMOND POLISH & STAIN (E) STAINED CONCRETE FLOORING. COLOR TO MATCH (E)
	MANUFACTURER: MANNINGTON COMMERCIAL LINE: STRUCTURE PRIMARY ELEMENTS LVT COLOR F-2: *POINT* #PE137 - 30% FIELD COLOR F-3: *BEAM* #PE132 - 20% ACCENT COLOR F-4 *CADMIA* #PE123 - 20% ACCENT COLOR F-5 *SPAN* #PE127 - 10% ACCENT COLOR F-6 *AZURE* #PE129 - 10% ACCENT COLOR F-7 *AURA* #PE124 - 10% ACCENT SIZE: 12"X12" PATTERN: RANDOM T.B.D. IN FIELD BY INSTALLER PER FIELD & ACCENT COLOR PERCENTAGES
	MANUFACTURER: MANNINGTON COMMERCIAL LINE: NO RESERVATINS XPRESS LVT STYLE: WOOD COLOR F-8: *ENDLESS* #NR106 SIZE: 12"X24" PLANK DESCRIPTION: FIELD
	MANUFACTURER: MANNINGTON LINE: NO RESERVATIONS XPRESS LVT STYLE: STONE COLOR F-9: *REBELLIOUS* #NR202 SIZE: 6"X36" PLANK DESCRIPTION: ACCENT BORDER
	CLEAN & RESTORE (E) VINYL ASBESTOS TILES
	REPAIR & RESTORE (E) TERRAZZO FLOORING & INTEGRAL BASE
	MANUFACTURER: ARMSTRONG LINE: VINYL COMPOSITION TILE COLOR: T.B.D. NUMBER: T.B.D. SIZE: 12"X12" PATTERN: MONOLITHIC

GENERAL NOTES

1. SEE FINISH SCHEDULE, NOTES & PAINT LEGEND ON SHEET A7.1 FOR INFORMATION ON PAINT COLORS, TYPES & BASEBOARD CONDITIONS.
2. SEE INTERIOR ELEVATIONS ON SHEETS A5.1 & A5.2 FOR MORE INFORMATION ON INTERIOR WALL & BASEBOARD PAINTING.

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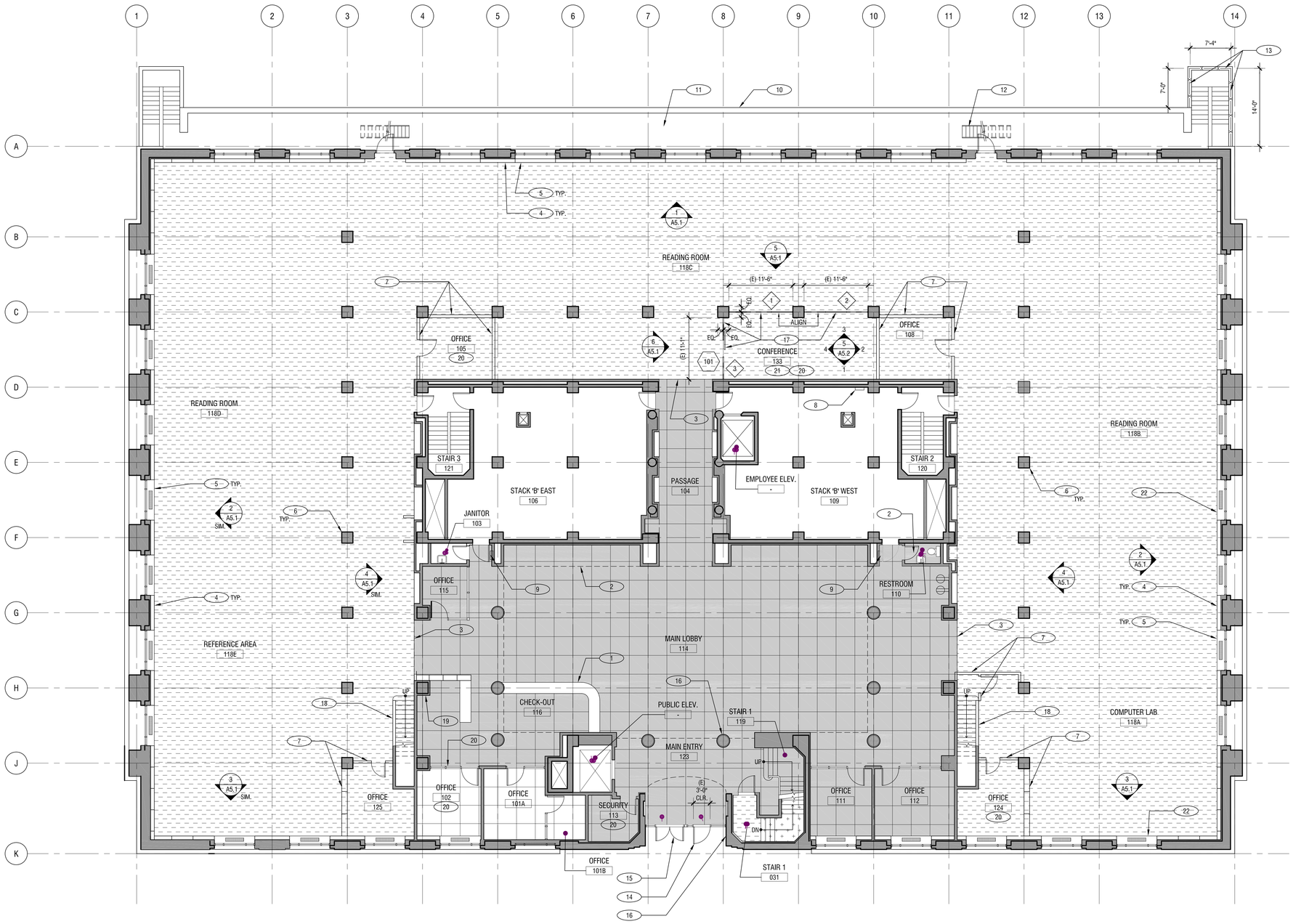
LEVEL 1 - GROUND FLOOR FINISH PLAN

PROJECT NO. C1004859
SCALE: AS NOTED
HOR:
VERT:
DATE: 02.17.23
SHEET NO. A2.1
15 OF 62

DRAWING NAME: O:\Project Jobs\210202_Oakland Main Library\Drawings\CD\160102_A2.1_Ground Floor_Finish.dwg
PLOT DATE: 2/28/23
PLOTTED BY: Adam Carr



1 LEVEL 2 - FIRST FLOOR CONSTRUCTION PLAN

SCALE: 1/8"=1'-0"

KEY NOTES

1	(E) BUILT-IN WOOD CHECK OUT COUNTER
2	CLEAN TILE FLOORING IN RESTROOM #110
3	FLOOR TRANSITION STRIP TO MATCH COLOR OF ADJACENT FLOORING, TYP. OF 3
4	(E) BUILT-IN WOOD BOOKSHELVES W/ CLEAR FINISH, TYP. @ BUILDING PERIMETER - DO NOT PAINT, TYP. - PROTECT DURING CONSTRUCTION
5	(E) BUILT-IN WOOD WINDOW SILL W/ CLEAR FINISH, TYP. @ BUILDING PERIMETER - DO NOT PAINT, TYP. - PROTECT DURING CONSTRUCTION
6	(E) COLUMNS - PAINT PLASTER PORTION - DO NOT PAINT (E) CLEAR FINISH WOOD PANELING, TYP. - PROTECT CURING CONSTRUCTION
7	(E) LOW WALLS @ OFFICE - WOOD PANELED - DO NOT PAINT - PROTECT DURING CONSTRUCTION
8	(E) COMPUTER BREAKER PANEL, SEE ELECTRICAL DRAWINGS
9	REPLACE ELECTRICAL PANEL, S.E.D. PATCH, REPAIR & PAINT SURROUNDING WALLS TO MATCH (E). PROVIDE PAINTED WOOD TRIM AS REQUIRED FOR A CLEAN INSTALLATION, TYP.
10	(E) PARAPET
11	(E) LOW ROOF
12	(E) FIRE ESCAPE, TYP. OF 2
13	ORNAMENTAL SECURITY FENCE MOUNTED TO STAIRWELL PARAPET WALL. SEE EXTERIOR ELEVATIONS
14	(E) ADA ACCESSIBLE STOREFRONT DOOR W/ AUTOMATIC PUSH-BUTTON DOOR CONTROLLER ADDED UNDER PREVIOUS PERMIT.
15	(E) STOREFRONT DOUBLE DOORS @ MAIN ENTRY
16	LOCATION OF (E) ADA ACCESSIBLE AUTOMATIC PUSH BUTTON-DOOR CONTROLLER ADD UNDER PREVIOUS PERMIT.
17	FREE-STANDING GLAZED WALL & SLIDING DOOR SYSTEM @ CONFERENCE ROOM, SEE INTERIOR ELEVATIONS FOR DETAILS
18	(E) LOW WALL @ STAIRS TO MEZZANINE
19	PAINT ALL SURFACE MOUNTED CONDUIT TO MATCH ADJACENT WALL COLOR, S.E.D. FOR NUMBER & LOCATIONS OF OUTLETS, TYP.
20	PATCH, REPAIR & PAINT WALLS @ (N) OUTLET LOCATIONS, S.E.D. FOR NUMBER & LOCATIONS OF OUTLETS, TYP.
21	PATCH & REPAIR FLOORING @ (N) FLOOR MONUMENT, S.E.D. FOR LOCATION OF OUTLET, TYP.
22	PATCH & REPAIR WOOD PANELING TO MATCH (E) @ (N) OUTLET LOCATIONS, S.E.D. FOR NUMBER & LOCATIONS OF OUTLETS, TYP.

FLOORING KEY

	CLEAN & RESTORE (E) VINYL ASBESTOS TILES
	REPAIR & RESTORE (E) TERRAZZO FLOORING & INTEGRAL BASE
	DIAMOND POLISH & STAIN (E) STAINED CONCRETE FLOORING

GENERAL NOTES

1. SEE FINISH SCHEDULE, NOTES & PAINT LEGEND ON SHEET A7.1 FOR INFORMATION ON PAINT COLORS, TYPES & BASEBOARD CONDITIONS.
2. SEE INTERIOR ELEVATIONS ON SHEETS A5.1 & A5.2 FOR MORE INFORMATION ON INTERIOR WALL & BASEBOARD PAINTING.

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LEVEL 2 - FIRST FLOOR FINISH PLAN

PROJECT NO. C1004859

SCALE: AS NOTED
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VERT:
DATE: 02.17.23

SHEET NO. A2.2
16 OF 62

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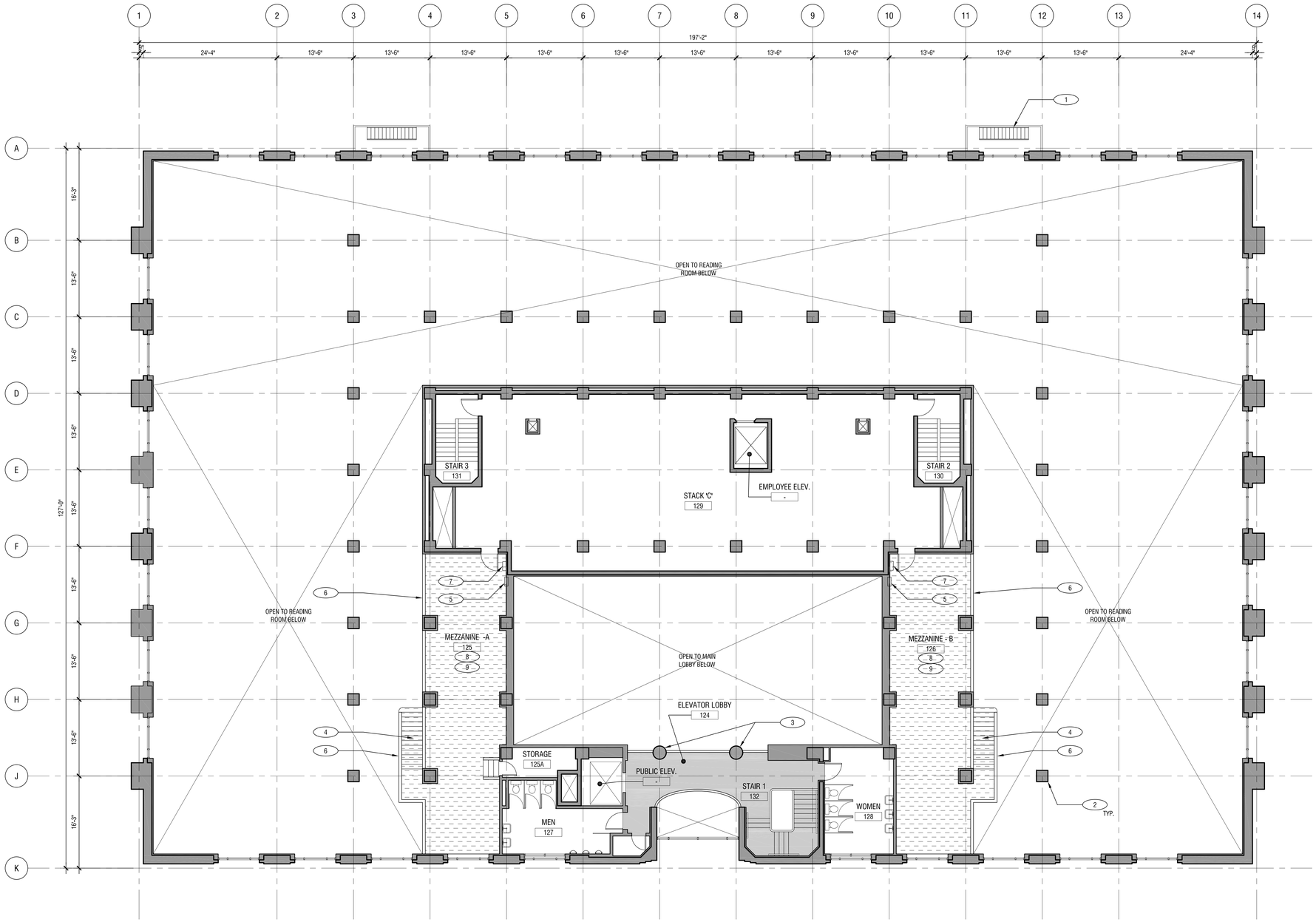
PLOT DATE: 02.17.23
PLOTTED BY: Adam Carr



1 LEVEL 3 - MEZZANINE CONSTRUCTION PLAN
SCALE: 1/8" = 1'-0"

N

KEY NOTES

1	(E) FIRE ESCAPE, TYP. OF 2
2	(E) COLUMNS - PAINT PLASTER PORTION - DO NOT PAINT (E) CLEAR FINISH WOOD PANELING, TYP.
3	(E) WOOD PANELED ROUND COLUMNS - REFINISH TO MATCH (E) WOOD PANELING, TYP. OF 2
4	RESTORE (E) V.A.T. FLOORING @ STAIRS, TYP.
5	REPLACE ELECTRICAL PANEL, S.E.D. PATCH, REPAIR & PAINT SURROUNDING WALLS TO MATCH (E). PROVIDE PAINTED WOOD TRIM AS REQUIRED FOR A CLEAN INSTALLATION, TYP.
6	LOW WALL @ STAIRS & MEZZANINE, TYP.
7	REPLACE LIGHTING CONTROL PANEL, S.E.D. PATCH, REPAIR & PAINT SURROUNDING WALLS TO MATCH (E). PROVIDE PAINTED WOOD TRIM AS REQUIRED FOR A CLEAN INSTALLATION, TYP.
8	PAINT ALL SURFACE MOUNTED CONDUIT TO MATCH ADJACENT WALL COLOR, S.E.D. FOR NUMBER & LOCATIONS OF OUTLETS, TYP.
9	PATCH, REPAIR & PAINT WALLS @ (N) OUTLET LOCATIONS, S.E.D. FOR NUMBER & LOCATIONS OF OUTLETS, TYP.

FLOORING KEY

CLEAN & RESTORE (E) VINYL ASBESTOS TILES

REPAIR & RESTORE (E) TERRAZZO FLOORING & INTEGRAL BASE

GENERAL NOTES

1. SEE FINISH SCHEDULE, NOTES & PAINT LEGEND ON SHEET A7.1 FOR INFORMATION ON PAINT COLORS, TYPES & BASEBOARD CONDITIONS.
2. SEE INTERIOR ELEVATIONS ON SHEETS A5.1 & A5.2 FOR MORE INFORMATION ON INTERIOR WALL & BASEBOARD PAINTING.

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LEVEL 3 - MEZZANINE FINISH PLAN

PROJECT NO. C1004859
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SHEET NO. A2.3
17 OF 62

DRAWING NAME: O:\Project Jobs\210202_Oakland Main Library\Drawings\CD\160102_A2.3_Mezzanine_Finish.dwg
PLOT DATE: 2/20/23
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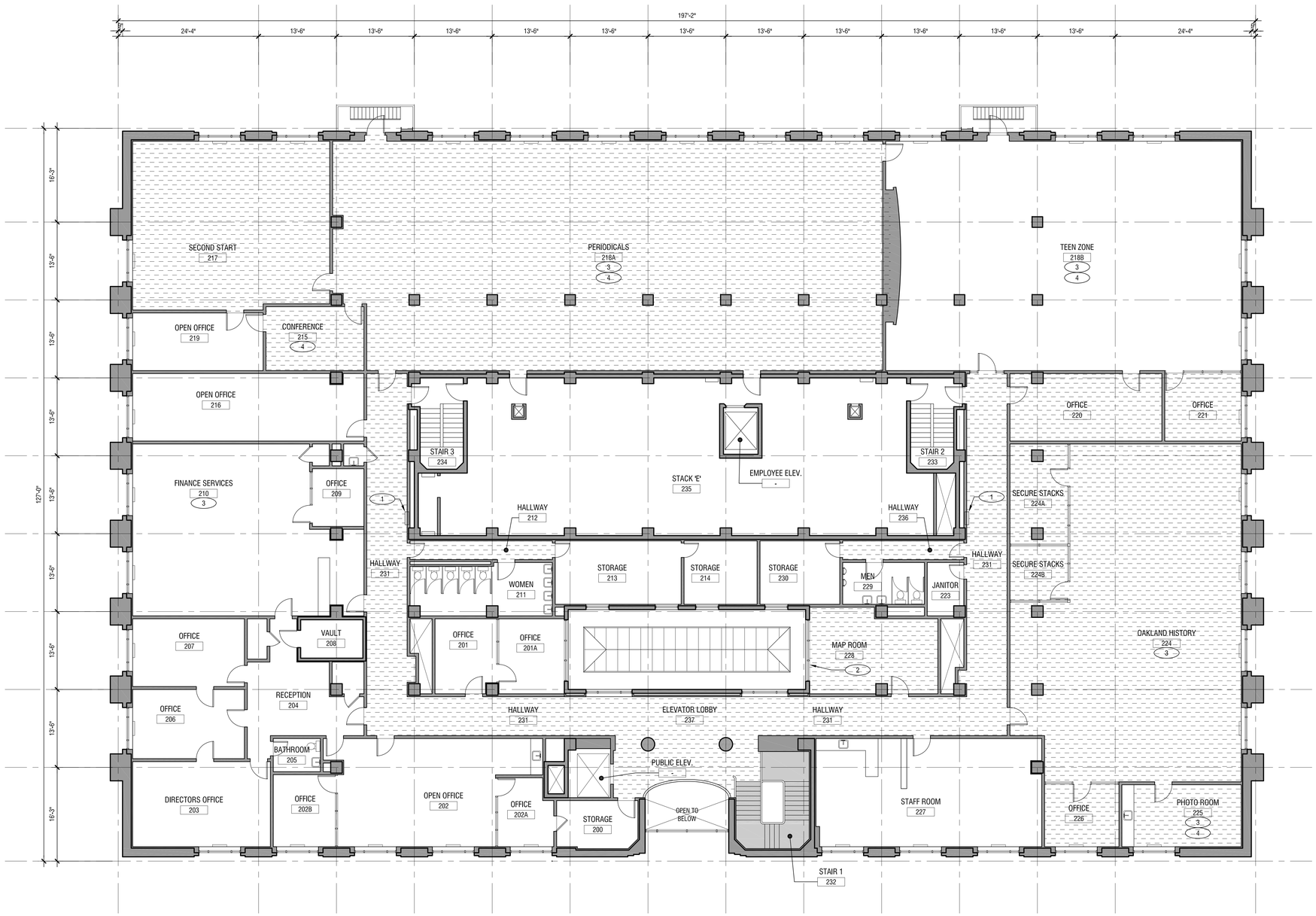

1 LEVEL 5 - SECOND FLOOR CONSTRUCTION PLAN

SCALE: 1/8"=1'-0"

KEY NOTES

1	REPLACE ELECTRICAL PANEL. S.E.D. PATCH, REPAIR & PAINT SURROUNDING WALLS TO MATCH (E). PROVIDE PAINTED WOOD TRIM AS REQUIRED FOR A CLEAN INSTALLATION, TYP.
2	BID ALTERNATE: PROVIDE U.V. RESISTANT WINDOW FILM ON INTERIOR SURFACE OF WINDOW IN MAP ROOM #228
3	PAINT ALL SURFACE MOUNTED CONDUIT TO MATCH ADJACENT WALL COLOR, S.E.D. FOR NUMBER & LOCATIONS OF OUTLETS, TYP.
4	PATCH, REPAIR & PAINT WALLS @ (N) OUTLET LOCATIONS, S.E.D. FOR NUMBER & LOCATIONS OF OUTLETS, TYP.

FLOORING KEY

	CLEAN & RESTORE (E) VINYL ASBESTOS TILES
	REPAIR & RESTORE (E) TERRAZZO FLOORING & INTEGRAL BASE

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LEVEL 5 - SECOND FLOOR FINISH PLAN

PROJECT NO.
C1004859

SCALE: AS NOTED
HOR:
VERT:
DATE: 02.17.23

SHEET NO.
A2.4
18 OF 62

DRAWING NAME: O:\Project\Jobs\210202_Oakland Main Library\Drawings\CD\180102_A2.4_Second Floor_Finish.dwg
PLOT DATE: 6/20/2023
PLOTTED BY: Adam Carr

1 LEVEL 1 - GROUND FLOOR REFLECTED CEILING PLAN

SCALE: 1/8"=1'-0"

KEY NOTES

1	(E) PLASTER SOFFIT. PATCH, REPAIR & PAINT TO MATCH (E)
2	REINSTALL (E) LIGHT FIXTURES OVER (N) CEILING TILES
3	LIGHT FIXTURES TO REMAIN. PROTECT DURING CONSTRUCTION
4	(N) L.E.D. RECESSED LIGHT FIXTURE IN (E) LOCATION @ STAIR WELL
5	PATCH, REPAIR & PAINT (E) PLASTER SOFFIT IN HALLWAY AS REQUIRED TO MATCH (E) SURROUNDING SURFACES, TYP. @ AREA OF LIGHT FIXTURE & SIGNAGE REMOVAL
6	(E) PLASTER BEAM. PATCH, REPAIR & PAINT ALL HOLES OR DAMAGE TO MATCH (E) SURROUNDING FINISH, TYP.
7	(N) GYPSUM BOARD SOFFIT +8'-0" A.F.F. TO MATCH SOFFIT @ ENTRY DOORS. PAINT TO MATCH (E) WALLS & CEILING BEAMS, TYP.
8	(E) +8'-0" A.F.F. GYPSUM BOARD SOFFIT @ ENTRY DOORS, PAINT TO MATCH (N) SOFFIT
9	(N) MECHANICAL CHASE - COORDINATE IN FIELD W/ MECHANICAL DRAWINGS, LOCATION OF (E) WINDOW MULLION & LOUVER IN WINDOW. LOUVER SIZE 1'-5"W X 2'-9"H - V.I.F.
10	PAINT ALL EXPOSED CONDUIT ON CEILING TO MATCH (E) ADJACENT SURFACES, TYP.
11	CORE DRILL @ LOCATION OF (N) FLOOR MONUMENT IN CONFERENCE ROOM ABOVE. PATCH, REPAIR & PAINT (E) CONCRETE SLAB TO MATCH (E) ADJACENT SURFACE

LIGHTING & CEILING KEY

A	L.E.D. SURFACE MOUNTED LIGHT FIXTURE, S.E.D. FOR SIZING & CONTROLS
B	CONTINUOUS L.E.D. RECESSED LIGHT FIXTURE W/ MITERED CORNERS, S.E.D. FOR SIZING & CONTROLS
C	L.E.D. PENDANT MOUNTED LIGHT FIXTURE, S.E.D. FOR SIZING & CONTROLS
D	L.E.D. RECESSED WALL MOUNTED LIGHT FIXTURE, S.E.D. FOR SIZING & CONTROLS
E	TOTAL 24 - L.E.D. SURFACE MOUNT DOWNLIGHT IN STACK EXIT STAIRS, TYP.
F	2'-0" X 4'-0" L.E.D. LIGHT FIXTURE MOUNTED IN A.C.T. CEILING
G	6" L.E.D. RECESSED LIGHT FIXTURE MOUNTED IN (E) PLASTER SOFFIT
	CEILING MOUNTED L.E.D. EXIT SIGN
	WALL MOUNTED L.E.D. EXIT SIGN
	FAN COIL UNIT, S.M.D.
	(E) CEILING MOUNTED 3'-0" DIAMETER H.V.A.C. DIFFUSER. CLEAN & PAINT TO MATCH SURROUNDING CEILING IN SEMI-GLOSS, TYP.
	(E) CEILING MOUNTED 1'-6" DIAMETER H.V.A.C. DIFFUSER. CLEAN & PAINT TO MATCH SURROUNDING CEILING IN SEMI-GLOSS, TYP.
	(E) 1'-0" X 1'-0" GLUE-ON ACOUSTICAL TILES IN CEILING FIELD, TYP., U.O.N. REPLACE DAMAGED, BROKEN & WATER STAINED TILES - ASSUME 15% OF TILES WILL BE REPLACED. INFILL AREAS @ LIGHT FIXTURE DEMO W/ (N) TILES. PAINT ENTIRE CEILING IN AREA OF WORK, TYP.
	REINSTALL (E) 2X4 CEILING GRID & GRATE @ SKYLIGHT OPENING
	PAINT (E) & (N) PLASTER CEILING / SOFFIT U.O.N.
	(N) 1'-0" X 1'-0" GLUE-ON ACOUSTICAL TILES IN CEILING FIELD TO MATCH (E) AS SHOWN
	(N) 2'-0" X 4'-0" ACOUSTIC CEILING TILES & T-BAR ARMSTRONG PRELUDE XL 15/16" EXPOSED TEE W/ ARMSTRONG CORTEGA SECOND LOOK - SCORED ANGLED TEGULAR TILES
	MFR: BIG ASS FAN MODEL: HAIKU SIZE: 52" DIA. COLOR: WHITE CONTROLS: BAFCON SMART CONTROLLER
	MFR: BIG ASS FAN MODEL: ESSENCE SIZE: 12'-0" DIA. COLOR: WHITE MOTOR HOUSING W/ SILVER TRIM CONTROLS: BAFCON SMART CONTROLLER

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LEVEL 1 - GROUND FLOOR
REFLECTED CEILING PLAN

PROJECT NO.
C1004859

SCALE: AS NOTED
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VERT:
DATE: 02.17.23

SHEET NO.
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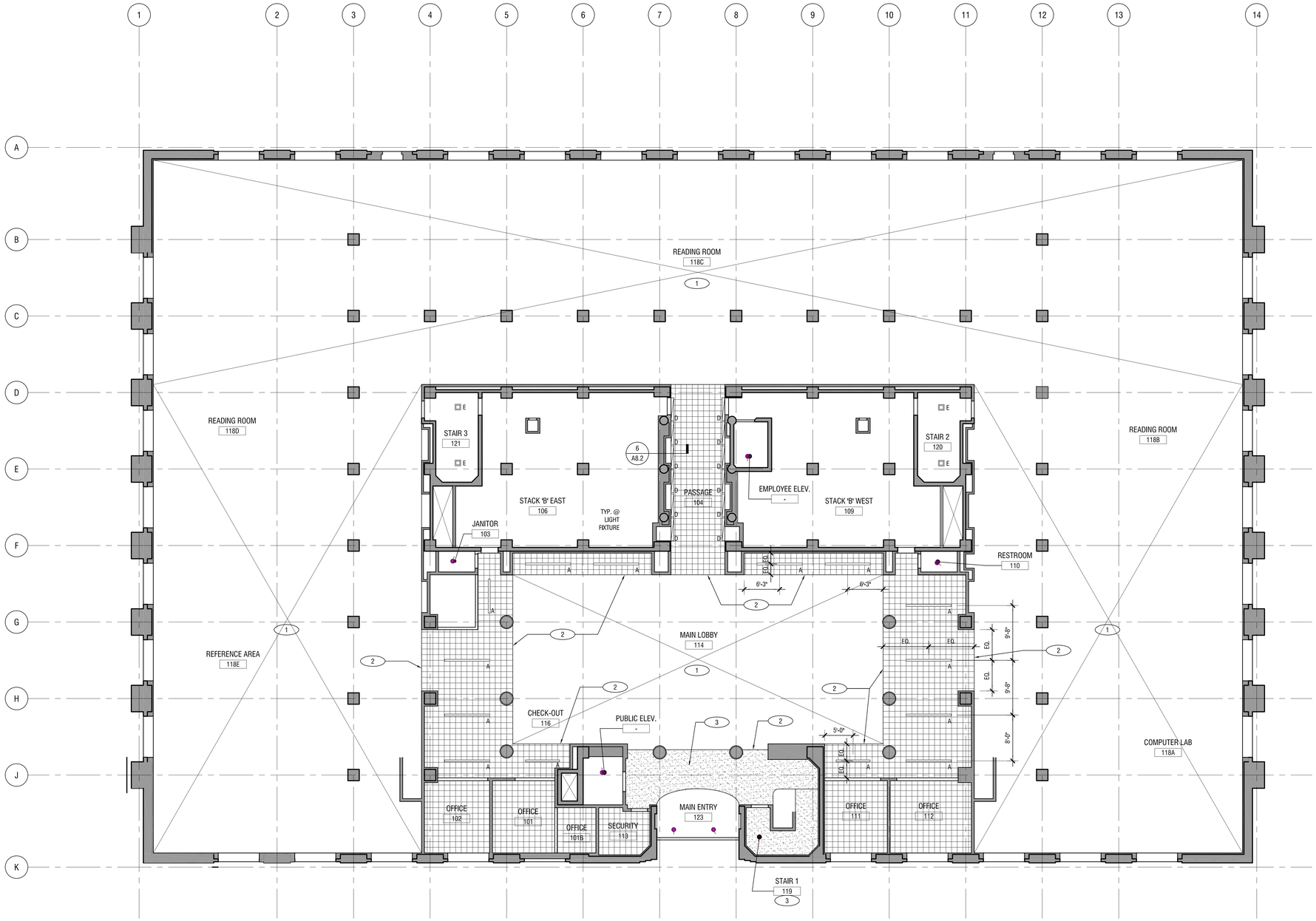

1 LEVEL 2 - FIRST FLOOR REFLECTED CEILING PLAN
SCALE: 1/8"=1'-0"

KEY NOTES

1	OPEN TO ABOVE - SEE SHEET A2.6 FOR REFLECTED CEILING PLAN @ MEZZANINE FOR SCOPE OF WORK IN THESE AREAS
2	EDGE OF CEILING - TRANSITION TO WOOD PANELING. DO NOT PAINT WOOD PANELING, TYP.
3	PAINT (E) PLASTER CEILING @ CEILING STAIRS & MAIN ENTRY

LIGHTING & CEILING KEY

A	L.E.D. SURFACE MOUNTED LIGHT FIXTURE, S.E.D. FOR SIZING & CONTROLS
B	CONTINUOUS L.E.D. RECESSED LIGHT FIXTURE W/ MITERED CORNERS, S.E.D. FOR SIZING & CONTROLS
C	L.E.D. PENDANT MOUNTED LIGHT FIXTURE, S.E.D. FOR SIZING & CONTROLS
D	L.E.D. RECESSED WALL MOUNTED LIGHT FIXTURE, S.E.D. FOR SIZING & CONTROLS
E	TOTAL 24 - L.E.D. SURFACE MOUNT DOWNLIGHT IN STACK EXIT STAIRS, TYP.
F	2'-0" X 4'-0" L.E.D. LIGHT FIXTURE MOUNTED IN A.C.T. CEILING
G	6" L.E.D. RECESSED LIGHT FIXTURE MOUNTED IN (E) PLASTER SOFFIT
	CEILING MOUNTED L.E.D. EXIT SIGN
	WALL MOUNTED L.E.D. EXIT SIGN
	FAN COIL UNIT, S.M.D.
	(E) CEILING MOUNTED 3'-0" DIAMETER H.V.A.C. DIFFUSER. CLEAN & PAINT TO MATCH SURROUNDING CEILING IN SEMI-GLOSS, TYP.
	(E) CEILING MOUNTED 1'-6" DIAMETER H.V.A.C. DIFFUSER. CLEAN & PAINT TO MATCH SURROUNDING CEILING IN SEMI-GLOSS, TYP.
	(E) 1'-0" X 1'-0" GLUE-ON ACOUSTICAL TILES IN CEILING FIELD, TYP., U.O.N. REPLACE DAMAGED, BROKEN & WATER STAINED TILES - ASSUME 15% OF TILES WILL BE REPLACED. INFILL AREAS @ LIGHT FIXTURE DEMO W/ (N) TILES. PAINT ENTIRE CEILING IN AREA OF WORK, TYP.
	REINSTALL (E) 2X4 CEILING GRID & GRATE @ SKYLIGHT OPENING
	PAINT (E) PLASTER CEILING / SOFFIT U.O.N.
	(N) 1'-0" X 1'-0" GLUE-ON ACOUSTICAL TILES IN CEILING FIELD TO MATCH (E) AS SHOWN
	(N) 2'-0" X 4'-0" ACOUSTIC CEILING TILES & T-BAR
	MFR: BIG ASS FAN MODEL: HAIKU SIZE: 52" DIA. COLOR: WHITE CONTROLS: BAFCON SMART CONTROLLER
	MFR: BIG ASS FAN MODEL: ESSENCE SIZE: 12'-0" DIA. COLOR: WHITE MOTOR HOUSING W/ SILVER TRIM CONTROLS: BAFCON SMART CONTROLLER

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No.	DATE	BY	REFERENCE
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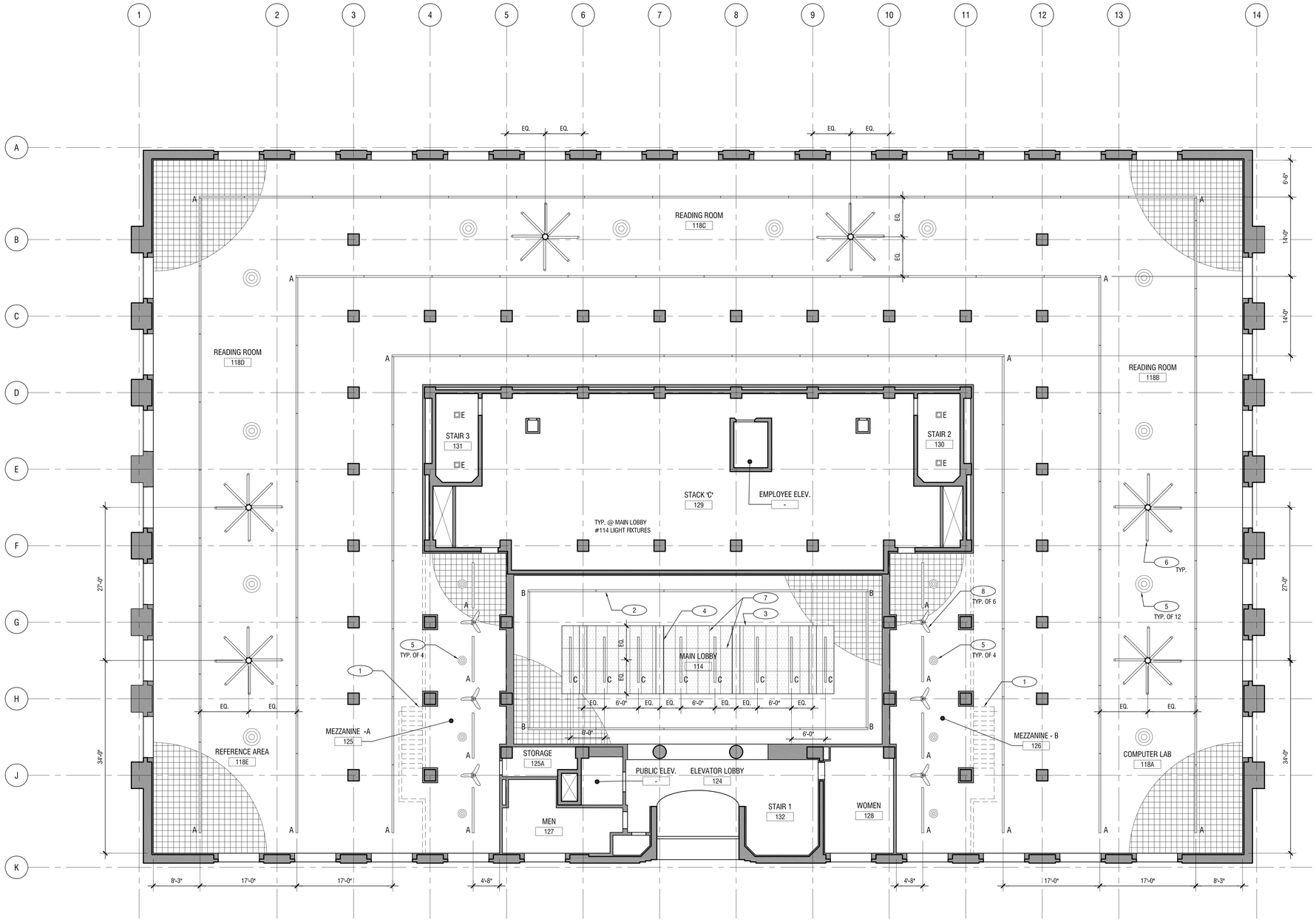
LEVEL 2 - FIRST FLOOR REFLECTED CEILING PLAN

PROJECT NO.
C1004859

SCALE: AS NOTED
HOR:
VERT:
DATE: 02.17.23

SHEET NO.
A2.6
20 OF 62

DRAWING NAME: O:\Projects\Jobs\210209_Oakland Main Library\Drawings\CD\180102_A2.6_First Floor_RCP.dwg
PLOT DATE: 02.23.23
PLOTTED BY: Adam Carr



1 LEVEL 3 - MEZZANINE REFLECTED CEILING PLAN
SCALE: 1/8"=1'-0"

KEY NOTES

1	LOW WALLS & STAIRS @ MEZZANINE SHOW DASHED FOR REFERENCE
2	CONTINUOUS RECESSED L.E.D. STRIP LIGHT FIXTURE IN SAME LOCATION AS (E). REPLACE ACOUSTICAL CEILING TILES @ AREA AROUND LIGHT FIXTURES, TYP.
3	EDGE OF CEILING OPENING @ SKYLIGHT. PAINT INSIDE WALLS OF SKYLIGHT OPENING & METAL SKYLIGHT MULLIONS, TYP.
4	(E) BEAMS WRAPPED IN PLASTER TO BE PAINTED, TYP. OF 4
5	(E) H.V.A.C. DIFFUSERS TO BE CLEANED & PAINTED, TYP.
6	(N) LARGE CEILING FANS, TYP. OF 6. - G.C. TO COORDINATE SELECTIVE CEILING DEMO IN FIELD W/ STRUCTURAL DRAWINGS, SEE SHEET S.1.2. CONCEAL ALL ELECTRICAL ROUTING IN CEILING INTERSTITIAL SPACE. FAN TO BE MOUNTED +16'-0" A.F.F., TYP.
7	REINSTALL (E) 2X4 CEILING GRID & BAFFLES IN ORIGINAL LOCATION & ORIENTATION. MOUNT CEILING GRID FLUSH W/ BOTTOM OF (E) CEILING. COORDINATE REINSTALLATION W/ (N) LIGHT FIXTURES.
8	(N) SMALL CEILING FANS, TYP. OF 6. - G.C. TO COORDINATE SELECTIVE CEILING DEMO IN FIELD W/ STRUCTURAL DRAWINGS, SEE SHEET S.1.2., SIM. CONCEAL ALL ELECTRICAL ROUTING IN CEILING INTERSTITIAL SPACE, TYP.

LIGHTING & CEILING KEY

A	L.E.D. SURFACE MOUNTED LIGHT FIXTURE, S.E.D. FOR SIZING & CONTROLS
B	CONTINUOUS L.E.D. RECESSED LIGHT FIXTURE W/ MITERED CORNERS, S.E.D. FOR SIZING & CONTROLS
C	L.E.D. PENDANT MOUNTED LIGHT FIXTURE, S.E.D. FOR SIZING & CONTROLS. MOUNT FIXTURES ABOVE CEILING GRID @ ELEVATION TO MATCH (E)
D	L.E.D. RECESSED WALL MOUNTED LIGHT FIXTURE, S.E.D. FOR SIZING & CONTROLS
E	TOTAL 24 - L.E.D. SURFACE MOUNT DOWNLIGHT IN STACK EXIT STAIRS, TYP.
F	2'-0" X 4'-0" L.E.D. LIGHT FIXTURE MOUNTED IN A.C.T. CEILING
G	6" L.E.D. RECESSED LIGHT FIXTURE MOUNTED IN (E) PLASTER SOFFIT
	CEILING MOUNTED L.E.D. EXIT SIGN
	WALL MOUNTED L.E.D. EXIT SIGN
	FAN COIL UNIT, S.M.D.
	(E) CEILING MOUNTED 3'-0" DIAMETER H.V.A.C. DIFFUSER. CLEAN & PAINT TO MATCH SURROUNDING CEILING IN SEMI-GLOSS, TYP.
	(E) CEILING MOUNTED 1'-6" DIAMETER H.V.A.C. DIFFUSER. CLEAN & PAINT TO MATCH SURROUNDING CEILING IN SEMI-GLOSS, TYP.
	(E) 1'-0" X 1'-0" GLUE-ON ACOUSTICAL TILES IN CEILING FIELD, TYP., U.O.N. REPLACE DAMAGED, BROKEN & WATER STAINED TILES - ASSUME 15% OF TILES WILL BE REPLACED, INFILL AREAS @ LIGHT FIXTURE DEMO W/ (N) TILES. PAINT ENTIRE CEILING IN AREA OF WORK, TYP.
	REINSTALL (E) 2X4 CEILING GRID & GRATE @ SKYLIGHT OPENING
	PAINT (E) PLASTER CEILING / SOFFIT U.O.N.
	(N) 1'-0" X 1'-0" GLUE-ON ACOUSTICAL TILES IN CEILING FIELD TO MATCH (E) AS SHOWN
	(N) 2'-0" X 4'-0" ACOUSTIC CEILING TILES & T-BAR
	MFR: BIG ASS FAN MODEL: HAIKU SIZE: 52" DIA. COLOR: WHITE CONTROLS: BAFCON SMART CONTROLLER
	MFR: BIG ASS FAN MODEL: ESSENCE SIZE: 12'-0" DIA. COLOR: WHITE MOTOR HOUSING W/ SILVER TRIM CONTROLS: BAFCON SMART CONTROLLER

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LEVEL 3 - MEZZANINE REFLECTED CEILING PLAN

PROJECT NO.
C1004859

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HOR:
VERT:
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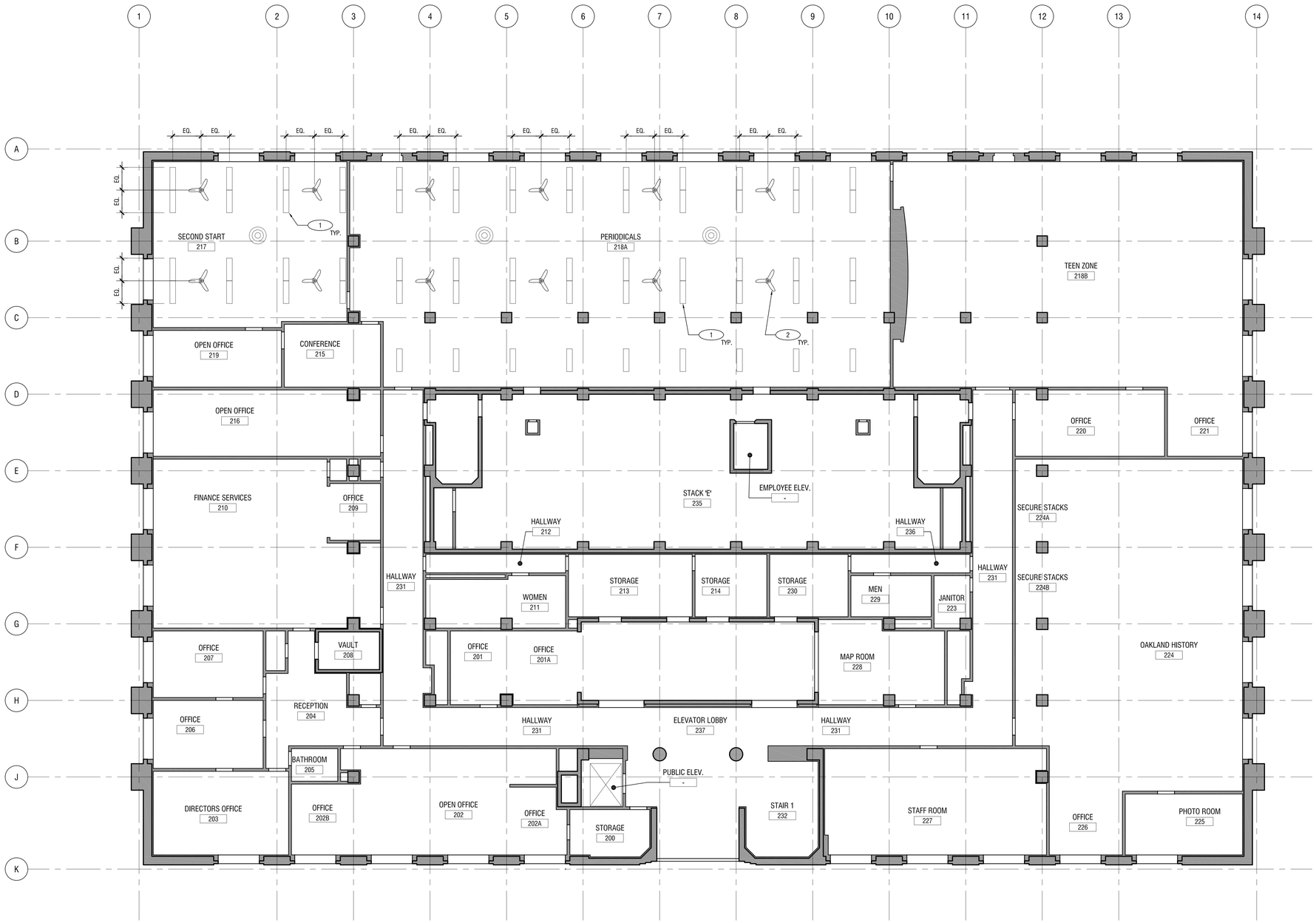
SHEET NO.
A2.7
21 OF 62

DRAWING NAME: O:\Projects\Jobs\210202_Oakland Main Library\Drawings\CD\180102_A2.7_Mezzanine_RCP.dwg
PLOT DATE: 02/16/23
PLOTTED BY: Adam Carr



1 LEVEL 5 - SECOND FLOOR REFLECTED CEILING PLAN

SCALE: 1/8"=1'-0"

N

KEY NOTES

1	(E) LIGHT FIXTURES, V.I.F., TYP.
2	(N) CEILING FANS, TYP. OF 12. CONDUIT TO BE RUN ON CEILING. ALL EXPOSED CONDUIT TO BE PAINTED TO MATCH (E) ADJACENT SURFACES

GENERAL CEILING NOTES

1. SCOPE OF CEILING WORK ON SECOND FLOOR LIMITED TO (N) FANS IN #217 - SECOND START & 218A - PERIODICALS.
2. CONTRACTOR TO COORDINATE CONDUIT ROUTING TO (N) FANS IN FIELD W/ ARCHITECT PRIOR TO FAN INSTALLATION.
3. PLEASE INCLUDE FAN SCOPE OF WORK ON THIS FLOOR AS A BID ALTERNATE

LIGHTING & CEILING KEY

A	L.E.D. SURFACE MOUNTED LIGHT FIXTURE, S.E.D. FOR SIZING & CONTROLS
B	CONTINUOUS L.E.D. RECESSED LIGHT FIXTURE W/ MITERED CORNERS, S.E.D. FOR SIZING & CONTROLS
C	L.E.D. PENDANT MOUNTED LIGHT FIXTURE, S.E.D. FOR SIZING & CONTROLS
D	L.E.D. RECESSED WALL MOUNTED LIGHT FIXTURE, S.E.D. FOR SIZING & CONTROLS
E	TOTAL 24 - L.E.D. SURFACE MOUNT DOWNLIGHT IN STACK EXIT STAIRS, TYP.
F	2'-0" X 4'-0" L.E.D. LIGHT FIXTURE MOUNTED IN A.C.T. CEILING
G	6" L.E.D. RECESSED LIGHT FIXTURE MOUNTED IN (E) PLASTER SOFFIT
	CEILING MOUNTED L.E.D. EXIT SIGN
	WALL MOUNTED L.E.D. EXIT SIGN
	FAN COIL UNIT, S.M.D.
	(E) CEILING MOUNTED 3'-0" DIAMETER H.V.A.C. DIFFUSER. CLEAN & PAINT TO MATCH SURROUNDING CEILING IN SEMI-GLOSS, TYP.
	(E) CEILING MOUNTED 1'-0" DIAMETER H.V.A.C. DIFFUSER. CLEAN & PAINT TO MATCH SURROUNDING CEILING IN SEMI-GLOSS, TYP.
	(E) 1'-0" X 1'-0" GLUE-ON ACOUSTICAL TILES IN CEILING FIELD, TYP., U.O.N. REPLACE DAMAGED, BROKEN & WATER STAINED TILES - ASSUME 15% OF TILES WILL BE REPLACED. INFILL AREAS @ LIGHT FIXTURE DEMO W/ (N) TILES. PAINT ENTIRE CEILING IN AREA OF WORK, TYP.
	REINSTALL (E) 2X4 CEILING GRID & GRATE @ SKYLIGHT OPENING
	PAINT (E) PLASTER CEILING / SOFFIT U.O.N.
	(N) 1'-0" X 1'-0" GLUE-ON ACOUSTICAL TILES IN CEILING FIELD TO MATCH (E) AS SHOWN
	(N) 2'-0" X 4'-0" ACOUSTIC CEILING TILES & T-BAR
	MFR: BIG ASS FAN MODEL: HAIKU SIZE: 52" DIA. COLOR: WHITE CONTROLS: BAFCON SMART CONTROLLER
	MFR: BIG ASS FAN MODEL: ESSENCE SIZE: 12'-0" DIA. COLOR: WHITE MOTOR HOUSING W/ SILVER TRIM CONTROLS: BAFCON SMART CONTROLLER

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LEVEL 5 - SECOND FLOOR REFLECTED CEILING PLAN

PROJECT NO.
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SHEET NO.
A2.8
22 OF 62

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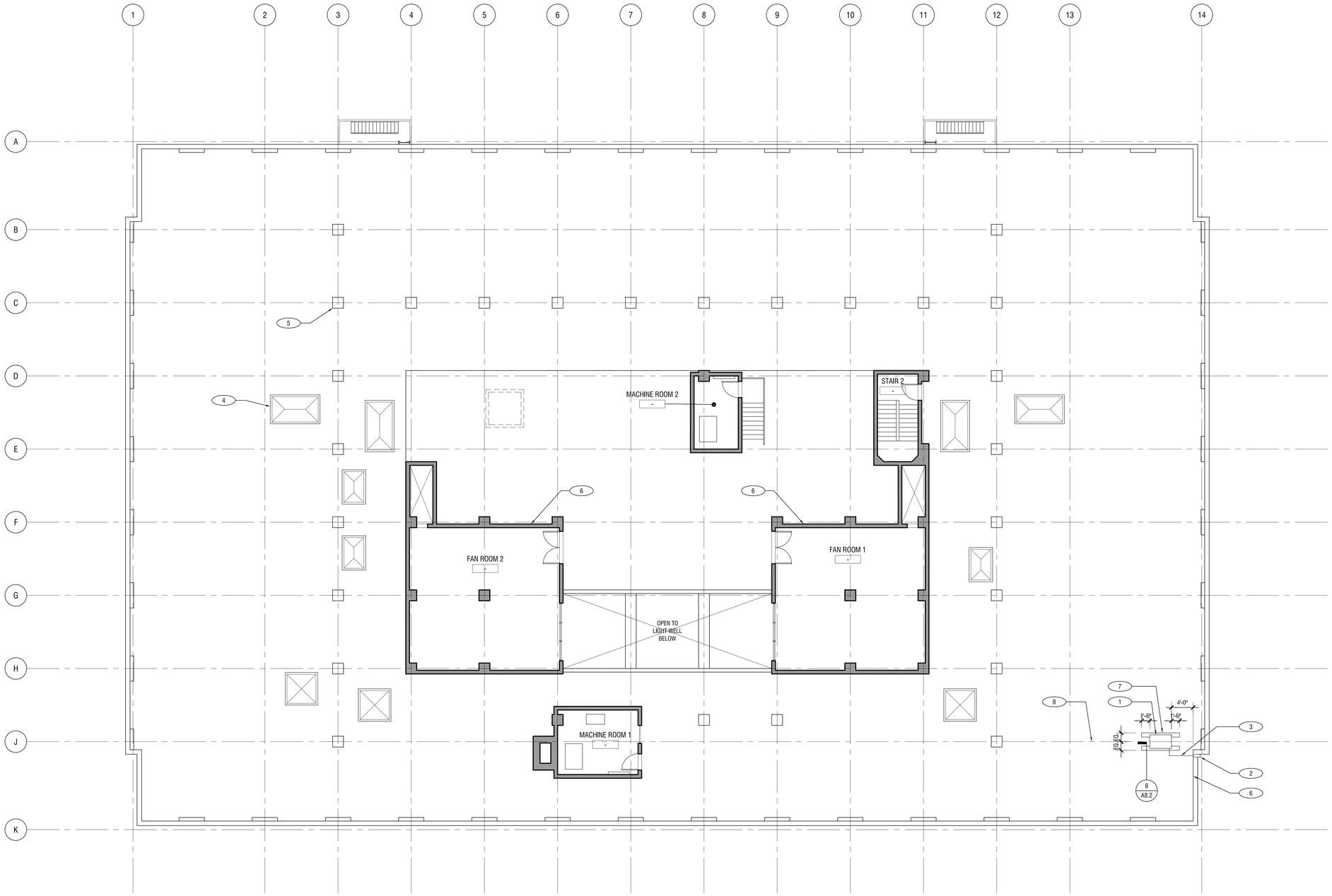
PLOT DATE: 2/16/2023
PLOTTED BY: Adam Carr



1 LEVEL 7 - ROOF PLAN & FAN ROOM PLANS
SCALE: 1/8"=1'-0"

KEY NOTES

1	H.V.A.C. SYSTEM CONDENSING UNIT MOUNTED ON SLEEPERS TO CONCRETE ROOF - CENTER ON BEAM BELOW, S.M.D., S.E.D., S.S.D.
2	PAINTED S.S. SHEET METAL SHROUD @ REFRIGERANT PIPING. SEE EXTERIOR ELEVATIONS
3	REFRIGERANT LINES, S.M.D.
4	(E) SKYLIGHTS, TYP.
5	(E) COLUMN EXTENSIONS W/ SHEET METAL CAP, TYP.
6	PATCH, REPAIR & PAINT BUILDING WALL @ (N) POWER RECEPTACLES. PAINT CONDUIT TO MATCH ADJACENT SURFACES, S.E.D.
7	SLEEPER ASSEMBLY, S.S.D.
8	CENTER LINE OF CONCRETE BEAM BELOW

GENERAL NOTES

1. COORDINATE LOCATION OF (N) POWER TO CONDENSING UNIT IN FIELD. GENERAL CONTRACTOR TO CONFIRM WHERE POWER IS TO BE PULLED & NOTIFY ARCHITECT OF CONDUIT ROUTING PRIOR TO COMMENCEMENT OF WORK

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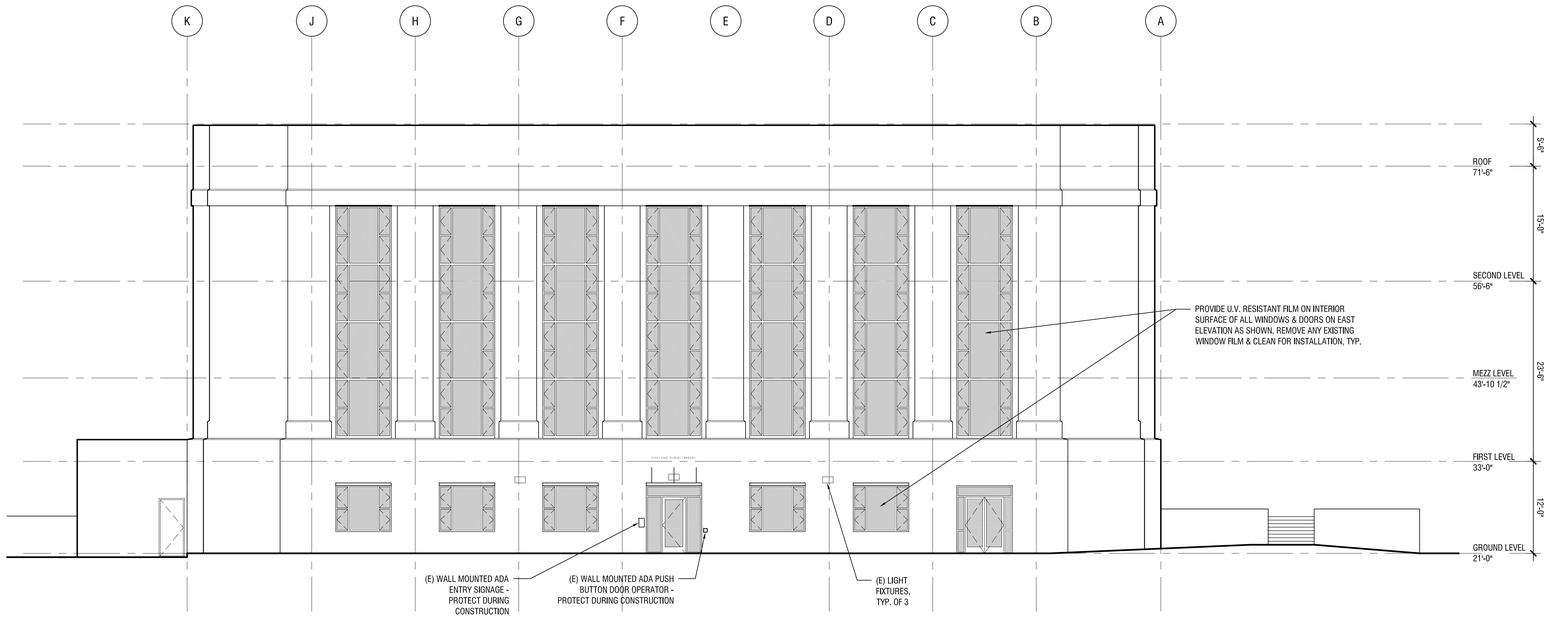
LEVEL 7 - ROOF PLAN

PROJECT NO.
C1004859

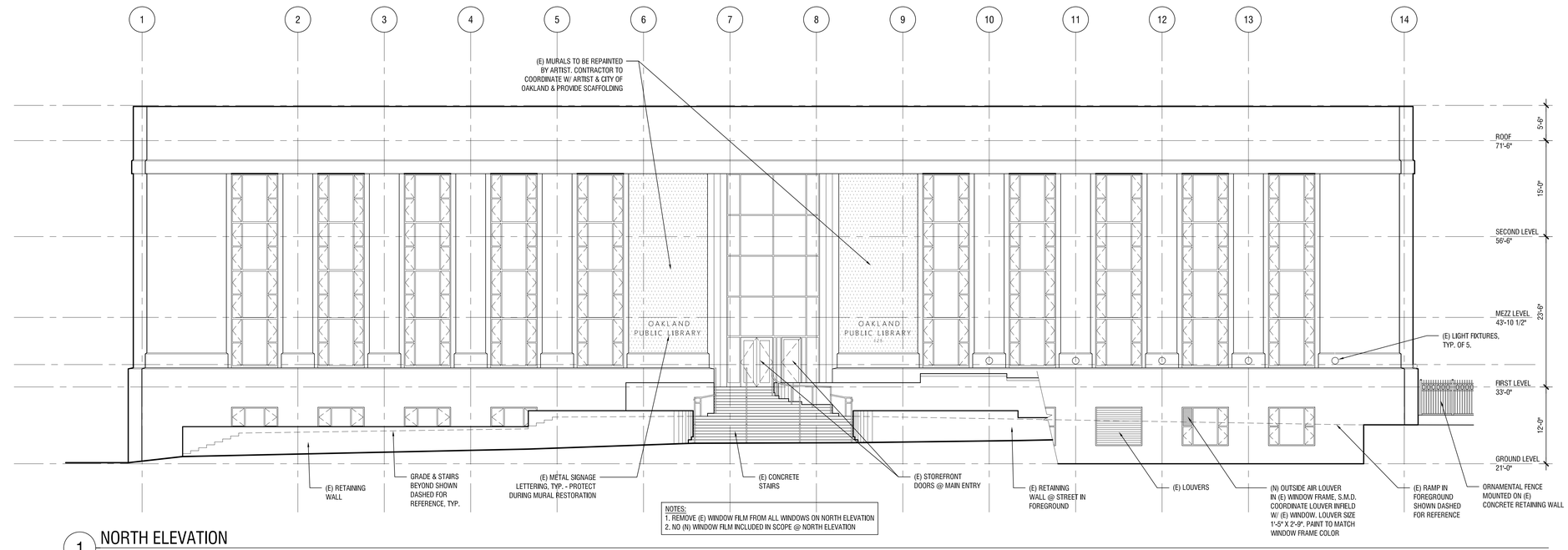
SCALE: AS NOTED
HOR:
VERT:
DATE: 02.17.23

SHEET NO.
A2.9
23 OF 62

DRAWING NAME: O:\Project Jobs\210202_Oakland Main Library\Drawings\CD-160102_A2.9_ROOF PLAN.dwg
PLOT DATE: 2/28/2023
PLOTTED BY: Adam Carr



2 EAST ELEVATION
SCALE: 1/8"=1'-0"



NOTES:
1. REMOVE (E) WINDOW FILM FROM ALL WINDOWS ON NORTH ELEVATION
2. NO (N) WINDOW FILM INCLUDED IN SCOPE @ NORTH ELEVATION

1 NORTH ELEVATION
SCALE: 1/8"=1'-0"

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EXTERIOR ELEVATIONS

PROJECT NO.
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SHEET NO.
A3.1
24 OF 62

DRAWING NAME: G:\Projects\Jobs\210202_Oakland Main Library\Drawings\CD\160102_A3.1_Elevations.dwg
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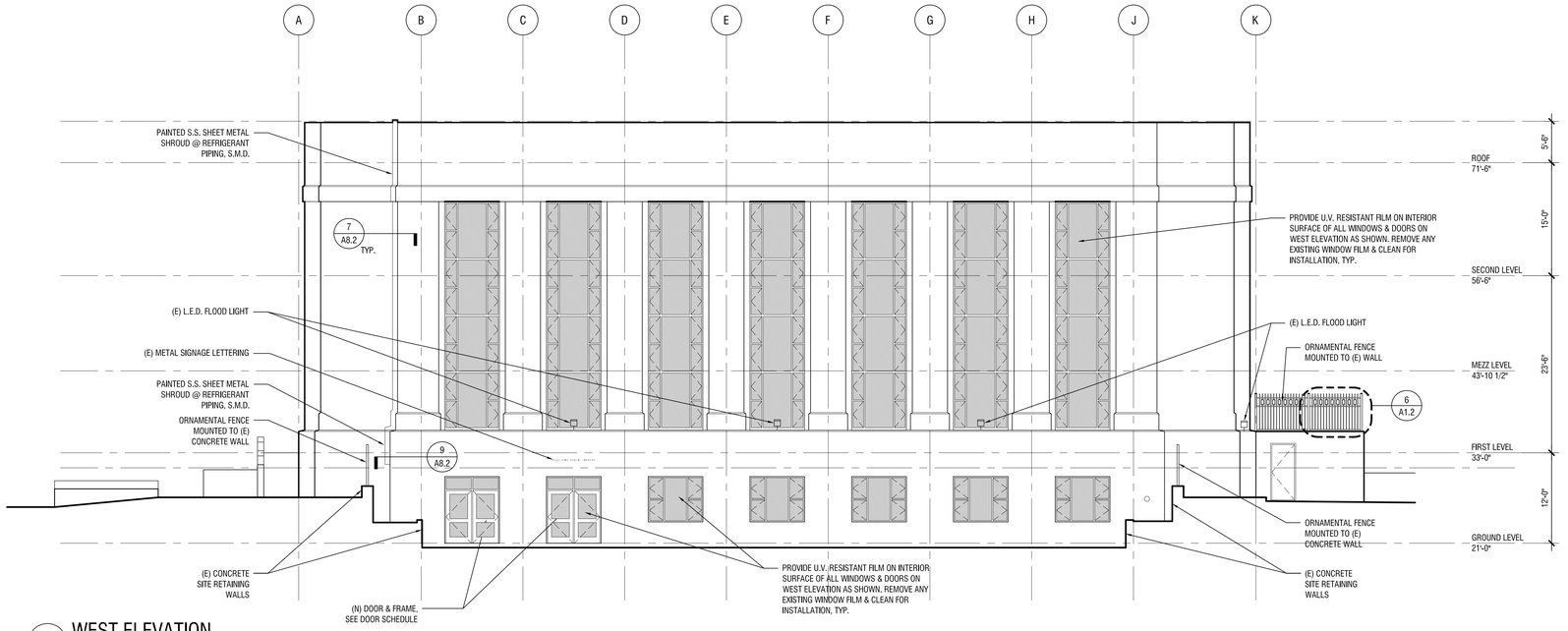
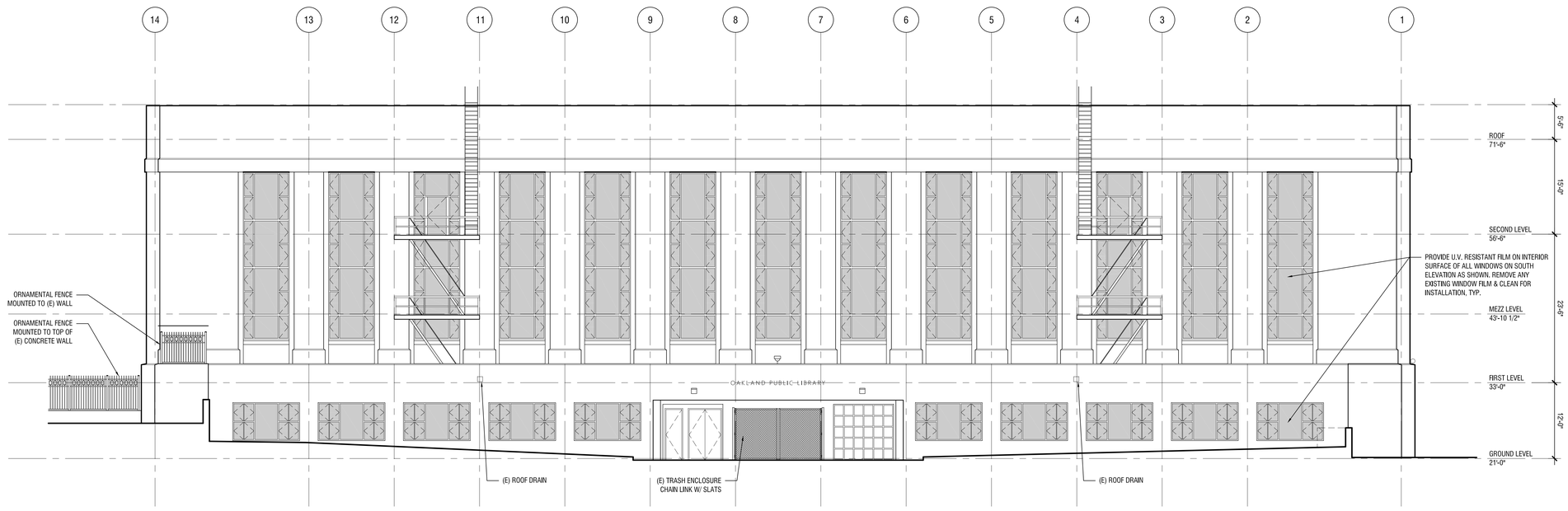


4 WEST ELEVATION
SCALE: 1/8"=1'-0"



3 SOUTH ELEVATION
SCALE: 1/8"=1'-0"

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EXTERIOR ELEVATIONS

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SHEET NO.
A3.2
25 OF 62

DRAWING NAME: O:\Project-Jobs\210202_Oakland Main Library\Drawings\CD\180102_A3.2_Elevations.dwg
PLOT DATE: 02/17/23
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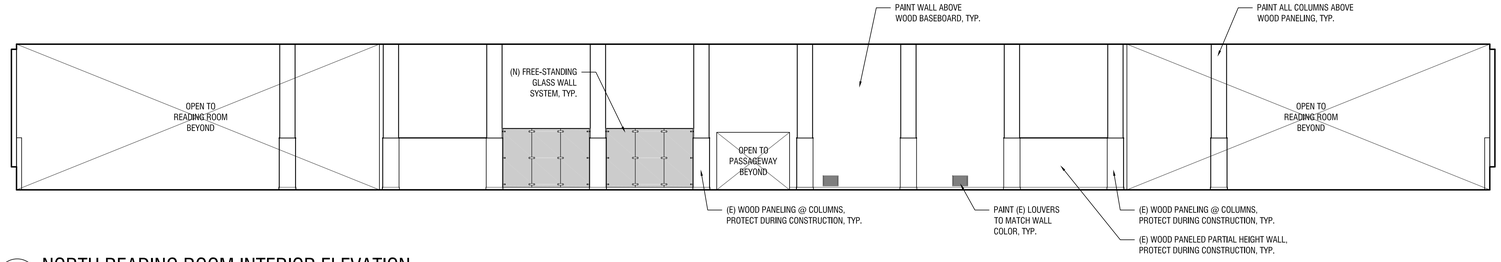
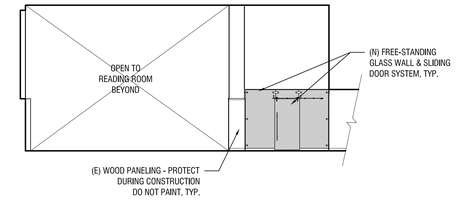
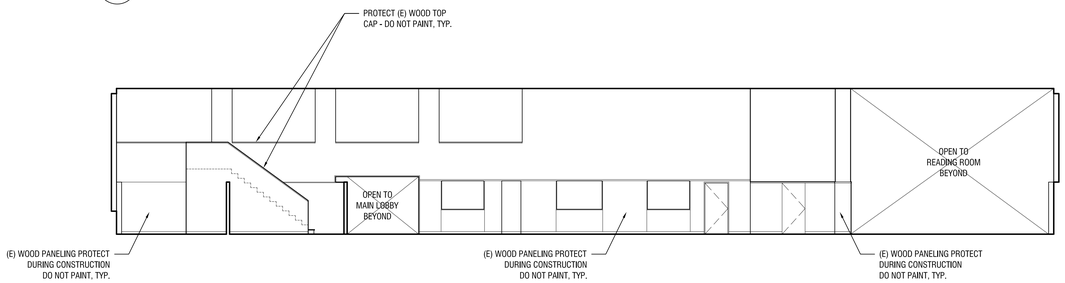


5 NORTH READING ROOM INTERIOR ELEVATION
SCALE: 1/8"=1'-0"

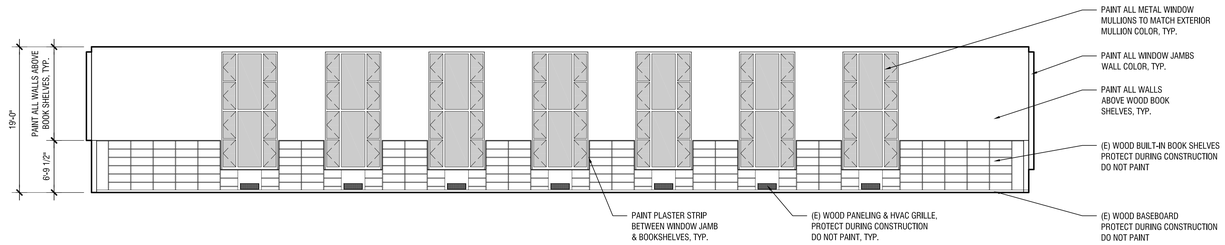


6 PARTIAL INTERIOR ELEVATION @ CONFERENCE ROOM
SCALE: 1/8"=1'-0"

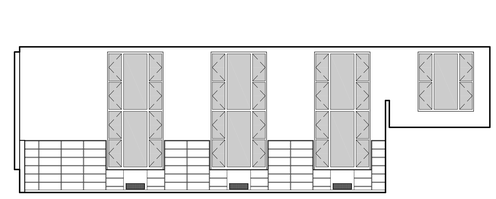


4 EAST READING ROOM INTERIOR ELEVATION, TYP. @ MEZZANINE BOTH SIDES
SCALE: 1/8"=1'-0"

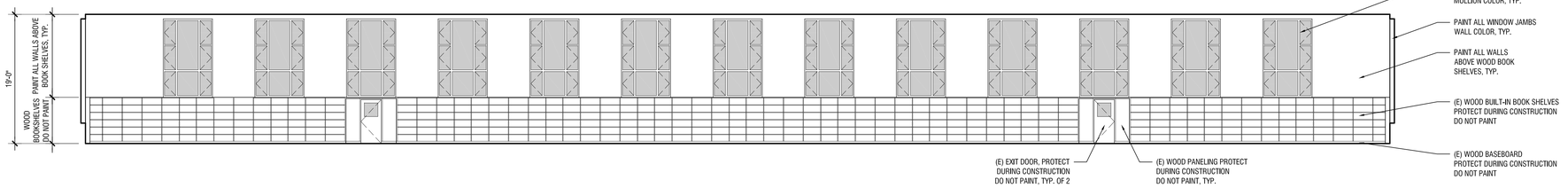
NOTES:
1. SEE FINISH SCHEDULE ON SHEET A7.1 FOR FULL PAINTING SCOPE & PAINT TYPES



2 WEST READING ROOM INTERIOR ELEVATION
SCALE: 1/8"=1'-0"



3 NORTH READING ROOM INTERIOR ELEVATION, TYP.
SCALE: 1/8"=1'-0"



1 SOUTH READING ROOM INTERIOR ELEVATION
SCALE: 1/8"=1'-0"

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INTERIOR ELEVATIONS

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SHEET NO.
A5.1
26 OF 62

DRAWING NAME: O:\Project Jobs\210202_Oakland Main Library\Drawings\CD-180102_A5_1_Int Elevations.dwg
PLOT DATE: 2/23/2023
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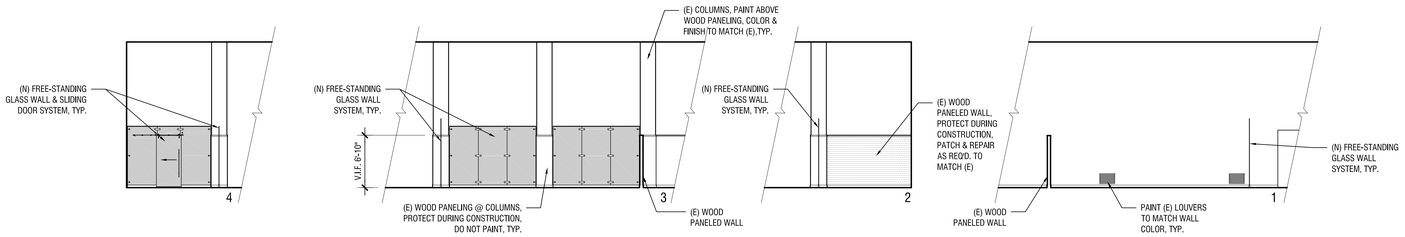
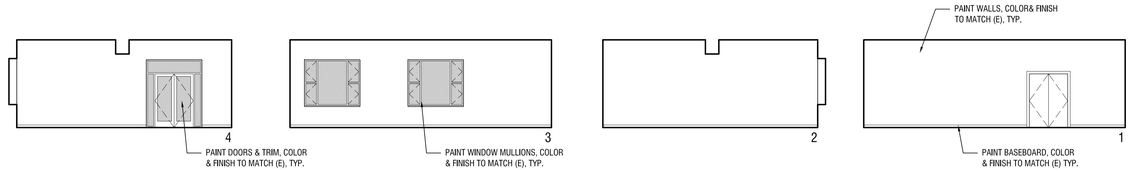


4 CONFERENCE ROOM #126 INTERIOR ELEVATIONS

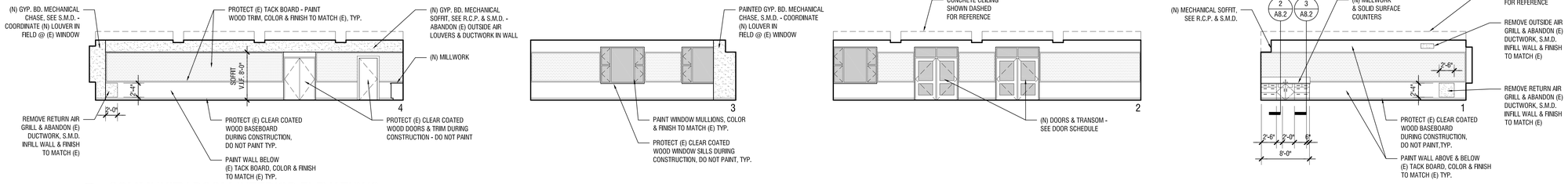
SCALE: 1/8"=1'-0"



NOTES:
1. SEE FINISH SCHEDULE ON SHEET A7.1 FOR FULL PAINTING SCOPE & PAINT TYPES

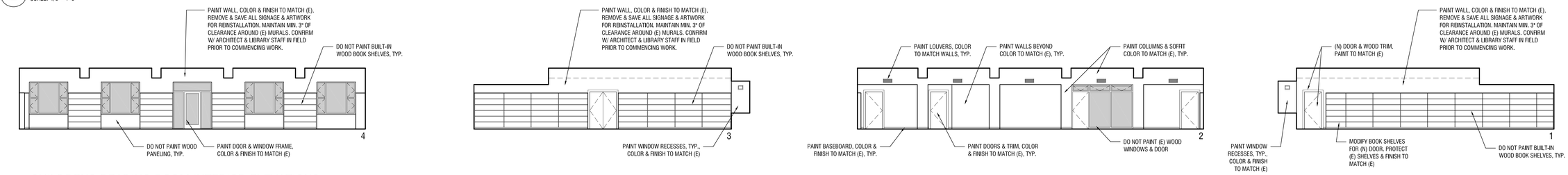
3 CHILDRENS SERVICES INTERIOR ELEVATIONS

SCALE: 1/8"=1'-0"



2 COMMUNITY ROOM INTERIOR ELEVATIONS

SCALE: 1/8"=1'-0"



1 CHILDRENS READING ROOM INTERIOR ELEVATIONS

SCALE: 1/8"=1'-0"

RPR ARCHITECTS
1629 Telegraph Avenue
Oakland, CA 94612
Tel 510 272 0654

CITY OF OAKLAND
DEPARTMENT OF ENGINEERING & CONSTRUCTION
250 FRANK H. OGAWA PLAZA
SUITE 4314
OAKLAND, CA 94612
(510) 238-3437

OAKLAND MAIN LIBRARY
INFRASTRUCTURE IMPROVEMENTS
125 14TH STREET

KATHLEEN ROUSEAU
RCE NO. C19081 EXP. 06.23
CHECKED BY AWC / KAR
DESIGNED BY AWC / KAR
DRAWN BY AWC

No.	DATE	BY	REFERENCE
1	02.17.23	RPR	ISSUED FOR BID

INTERIOR ELEVATIONS

PROJECT NO.
C1004859

SCALE: AS NOTED
HOR:
VERT:
DATE: 02.17.23

SHEET NO.
A5.2
27 OF 62

DRAWING NAME: O:\Projects\Jobs\21020Z_Oakland Main Library\Drawings\CD\180102_A5.2_Int Elevations.dwg
PLOT DATE: 2023
PLOTTED BY: Adam Carr

ROOM FINISH SCHEDULE

ROOM NAME	ROOM NO.	FLOORING				CEILINGS						WALLS								WAINSCOT		REMARKS
		FLOOR		BASE		MATERIAL		HEIGHT	SOFFIT		HEIGHT	NORTH		SOUTH		EAST		WEST				
		MAT'L.	FINISH	MAT'L.	FINISH	MAT'L.	FINISH		MAT'L.	FINISH		MAT'L.	FINISH	MAT'L.	FINISH	MAT'L.	FINISH	MAT'L.	FINISH	MAT'L.	FINISH	
LEVEL 1 - GROUND FLOOR																						
CHILDREN'S READING ROOM	005	F-2 - F-7	--	B-1	P-SG	C-1	P-LS	(E) 8'-0" LOW (E) 11'-0" HIGH	C-2	P-LS	(E) 8'-0" SOFFIT (E) 9'-7" BEAMS	W-1	P-LS	W-1	P-LS	W-1	P-LS	W-1	P-LS	--	--	BASE BID
OFFICE	005A	F-2 - F-7	--	B-1	P-SG	C-1	P-LS	(E) 8'-0"	--	--	--	W-1	P-LS	W-1	P-LS	W-1	P-LS	W-1	P-LS	--	--	BASE BID
CHILDREN'S SERVICES	006	F-2 - F-7	--	B-1	P-SG	C-1	P-LS	(E) 11'-0"	C-2	P-LS	(E) 9'-7" BEAMS	W-1	P-LS	W-1	P-LS	W-1	P-LS	W-1	P-LS	--	--	BASE BID: FLOORING BID ALTERNATE: PAINTING
ACQUISITIONS / MAIL ROOM	011	F-10	VAT	B-1	P-SG	C-1	P-LS	(E) 11'-0"	C-2	P-LS	(E) 9'-7" BEAMS & SOFFITS	--	--	--	--	--	--	--	--	--	--	BASE BID
OFFICE	011A	F-10	VAT	B-1	P-SG	C-1	P-LS	(E) 11'-0"	C-2	P-LS	(E) 9'-7" BEAMS	W-1	P-LS	--	--	--	--	--	--	--	--	BASE BID
COMPUTER WORK	016	--	--	--	--	C-2	P-LS	(E) 11'-0"	C-2	P-LS	(E) 9'-7" BEAMS	W-1	P-LS	W-1	P-LS	W-1	P-LS	W-1	P-LS	--	--	BASE BID
HALLWAY	019	F-1	CSS	B-1	P-SG	C-2	--	(E) 8'-0"	--	--	--	--	--	--	--	--	--	--	--	--	--	BASE BID: PATCH, REPAIR & PAINT (E) WALLS & CEILINGS AT AREAS OF WORK @ (N) DOORS
COMPUTER SERVICES & OFFICES	023-023D	F-10	VAT	B-1	P-SG	C-1	P-LS	(E) 11'-0"	C-2	P-LS	(E) 9'-7" BEAMS	--	--	--	--	--	--	--	--	--	--	BASE BID: PATCH, REPAIR & PAINT (E) & (N) WALLS AT AREAS OF WORK W/ NEW OFFICES
CATALOG SECTION	025	F-10	VAT	B-1	P-SG	C-1	P-LS	(E) 11'-0"	C-2	P-LS	(E) 9'-7" BEAMS	--	--	--	--	--	--	--	--	--	--	BASE BID
STORAGE	025A	F-10	VAT	B-1	P-SG	C-1	P-LS	(E) 11'-0"	--	--	--	--	--	--	--	--	--	--	--	--	--	BASE BID
COMMUNITY ROOM	026	F-10 F-11	--	B-5	SL	C-3	--	10'-0"	C-2	P-LS	(E) 9'-7" BEAMS (N) 8'-0" SOFFIT	W-1	P-LS	W-1	P-LS	W-1	P-LS	W-1	P-LS	--	--	BASE BID
STORAGE	026A	F-11	--	B-5	SL	C-2	--	--	C-2	--	--	--	--	--	--	--	--	--	--	--	--	BASE BID
STAIR - 1	031	F-1	CSS	B-1	P-SG	C-2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	BASE BID
LOADING DOCK	015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
STORAGE	020	--	--	B-1	P-SG	C-2	P-LS	(E) 11'-0"	C-2	P-LS	(E) 9'-7" BEAMS	W-1	P-LS	W-1	P-LS	W-1	P-LS	W-1	P-LS	--	--	BID ALTERNATE: PAINTING
STORAGE	028	--	--	B-1	P-SG	C-2	P-LS	(E) 11'-0"	C-2	P-LS	(E) 9'-7" BEAMS	W-1	P-LS	W-1	P-LS	W-1	P-LS	W-1	P-LS	--	--	BID ALTERNATE: PAINTING
LEVEL 2 - FIRST FLOOR																						
PASSAGE	104	F-11	RF	B-2	RF	C-1	P-LS	(E) 7'-6"	--	--	--	--	--	--	--	--	--	--	--	--	--	BASE BID
OFFICE	105	F-10	VAT	B-1	SL	--	--	OPEN TO ABOVE SEE MEZZANINE RCP	--	--	--	--	--	--	--	--	--	--	--	--	--	BASE BID
OFFICE	108	F-10	VAT	B-1	SL	--	--	OPEN TO ABOVE SEE MEZZANINE RCP	--	--	--	--	--	--	--	--	--	--	--	--	--	BASE BID
OFFICE	111	F-11	RF	B-2	RF	C-1	--	(E) 7'-6"	--	--	--	--	--	--	--	--	--	--	--	--	--	BASE BID
OFFICE	112	F-11	RF	B-2	RF	C-1	--	(E) 7'-6"	--	--	--	--	--	--	--	--	--	--	--	--	--	BASE BID
SECURITY	113	F-11	RF	B-2	RF	C-1	--	(E) 7'-6"	--	--	--	--	--	--	--	--	--	--	--	--	--	BASE BID
MAIN LOBBY	114	F-11	RF	B-2	RF	C-1	P-LS	(E) 7'-6" LOW	--	--	--	--	--	--	--	--	--	--	--	--	--	BASE BID
CHECK OUT	116	F-11	RF	B-2	RF	C-1	P-LS	(E) 7'-6" LOW	--	--	--	--	--	--	--	--	--	--	--	--	--	BASE BID
READING ROOMS, COMPUTER LAB & REFERENCE AREA	118A-E	F-10	VAT	--	--	OPEN TO ABOVE - SEE LEVEL 3 MEZZANINE FOR CEILING SCOPE			--	--	--	W-1	P-LS	W-1	P-LS	W-1	P-LS	W-1	P-LS	--	--	BASE BID: PAINT ALL WALLS IN READING ROOMS ABOVE BOOK SHELVES, SEE INT. ELEVS.
STAIR	119	F-11	RF	B-2	RF	C-2	P-ES	(E) VARIES	--	--	--	--	--	--	--	--	--	--	--	--	--	BASE BID
MAIN ENTRY	123	F-11	RF	B-2	RF	C-2	P-ES	(E) 7'-6" LOW	--	--	--	--	--	--	--	--	--	--	--	--	--	BASE BID
CONFERENCE ROOM	133	F-10	RF	B-4	SL	--	--	OPEN TO ABOVE SEE MEZZANINE RCP	--	--	--	W-1	P-SF	--	--	--	--	--	--	--	--	BASE BID
LEVEL 3 - MEZZANINE																						
READING ROOMS, COMPUTER LAB & REFERENCE AREA	118A-E	SEE LEVEL 2 - FIRST FLOOR FOR FLOORING SCOPE				C-1	P-LS	(E) 19'-0"	--	--	--			SEE LEVEL 2 - FIRST FLOOR FOR WALL PAINTING SCOPE									BASE BID
ELEVATOR LOBBY	124	F-11	RF	B-2	RF	C-2	P-LS	(E) 7'-6" LOW	--	--	--	--	--	--	--	--	--	--	--	--	--	BASE BID
MEZZANINE - A	125	F-10	VAT	B-5	SL	C-1	P-LS	(E) 10'-6"	--	--	--	W-1	P-LS	W-1	P-LS	W-1	P-LS	W-1	P-LS	--	--	BASE BID
MEZZANINE - B	126	F-10	VAT	B-5	SL	C-1	P-LS	(E) 10'-6"	--	--	--	W-1	P-LS	W-1	P-LS	W-1	P-LS	W-1	P-LS	--	--	BASE BID
STAIR	132	F-11	RF	B-2	RF	C-2	P-LS	(E) VARIES	--	--	--	--	--	--	--	--	--	--	--	--	--	BASE BID
LEVEL 5 - SECOND FLOOR																						
OFFICE	201	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OFFICE	201A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OPEN OFFICE	202	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OFFICE	202A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OFFICE	202B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
DIRECTORS OFFICE	203	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
RECEPTION	204	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OFFICE	206	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OFFICE	207	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OFFICE	209	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
FINANCE SERVICES	210	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
CONFERENCE	215	F-10	VAT	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	BASE BID
OPEN OFFICE	216	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
SECOND START	217	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
PERIODICALS	218A	F-10	VAT	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	BASE BID
TEEN ZONE	218B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OPEN OFFICE	219	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OFFICE	220	F-10	VAT	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	BASE BID
OFFICE	221	F-10	VAT	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	BASE BID
OAKLAND HISTORY	224	F-10	VAT	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	BASE BID
SECURE STACKS	224A	F-10	VAT	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	BID ALTERNATIVE - FLOOR REFINISHING
SECURE STACKS	224B	F-10	VAT	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	BID ALTERNATIVE - FLOOR REFINISHING
PHOTO ROOM	225	F-10	VAT	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	BASE BID
OFFICE	226	F-10	VAT	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	BASE BID
MAP ROOM	228	F-10	VAT	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	BASE BID
HALLWAY	231	F-10	VAT	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	BASE BID
STAIRS	232	F-11	RF	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	BASE BID
ELEVATOR LOBBY	237	F-11	RF	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	BASE BID

MATERIAL LEGEND

LOCATION	CODE	MATERIAL DESCRIPTION	REMARKS
FLOORING	F-1	(E) CONCRETE	DIAMOND POLISH, STAIN FINISH & SEAL
	F-2	L.V.T. - FIELD	SEE SHEET A2.1 FOR FOR LVT FIELD & ACCENT COLORS
	F-3	L.V.T. - ACCENT	SEE SHEET A2.1 FOR FOR LVT FIELD & ACCENT COLORS
	F-4	L.V.T. - ACCENT	SEE SHEET A2.1 FOR FOR LVT FIELD & ACCENT COLORS
	F-5	L.V.T. - ACCENT	SEE SHEET A2.1 FOR FOR LVT FIELD & ACCENT COLORS
	F-6	L.V.T. - ACCENT	SEE SHEET A2.1 FOR FOR LVT FIELD & ACCENT COLORS
	F-7	L.V.T. - ACCENT	SEE SHEET A2.1 FOR FOR LVT FIELD & ACCENT COLORS
	F-8	L.V.T. - FIELD	SEE SHEET A2.1 FOR FOR LVT FIELD & ACCENT COLORS
	F-9	L.V.T. - ACCENT	SEE SHEET A2.1 FOR FOR LVT FIELD & ACCENT COLORS
	F-10	(E) VINYL ASBESTOS TILE	CLEAN & RESTORE, SEE SPECS FOR METHOD
	F-11	(E) TERRAZZO	REFINISH INCLUDING INTEGRAL COVED BASE
BASE	B-1	(E) PAINTED WOOD	PAINT TO MATCH (E)
	B-2	(E) TERRAZZO COVE BASE	RESTORE TO MATCH FLOOR
	B-3	(N) RESILIENT BASE	
	B-4	(N) STAINED WOOD	STAIN & CLEAR COAT TO MATH (E)
	B-5	(E) STAINED WOOD	REFINISH TO MATCH (E) STAIN & CLEARCOAT
WALLS	W-1	(E) PLASTER	PAINT TO MATCH (E) AS NOTED
	W-2	(N) DRYWALL	LEVEL 5 SMOOTH FINISH, PAINT TO MATCH (E)
	W-3	(N) WOOD PANELING	STAIN & CLEAR COAT TO MATH (E)
CEILING	C-1	(E) 12" X 12" ACOUSTIC CEILING TILE	PAINT ALL (E) CEILING TILES
	C-2	(E) PLASTER	PAINT TO MATCH (E) AS NOTED
	C-3	(N) 24" X 48" ACOUSTIC CEILING TILE	
	C-4	(N) 12" X 12" ACOUSTIC CEILING TILE	PAINT ALL (N) CEILING TILES TO MATCH (E)
	C-5	(N) GYPSUM BOARD SOFFIT	PAINT TO MATCH (E) BEAMS

FINISH LEGEND

CODE	MATERIAL DESCRIPTION	REMARKS
P-LS	PAINT - LOW-SHEEN FINISH	
P-ES	PAINT - EGG SHELL FINISH	
P-SG	PAINT - SEMI GLOSS FINISH	
P-G	PAINT - GLOSS FINISH	
FF	FACTORY FINISH	
CS	CONCRETE SEALER	
CSS	CONCRETE STAIN & SEALER	
SL	REFINISH W/ STAIN & LACQUER TO MATCH (E)	
AD	ANILINE DYE FINISH	
RF	REFINISH FLOORS & INTEGRAL COVE BASE	
CL-C	STEAM CLEAN CARPET	
CL-V	CLEAN & WAX V.C.T.	
CPF	CLEAR POLYURETHANE FINISH TO MATCH (E)	
VAT	STRIP, CLEAN & WAX (E) V.A.T. FLOORING	

PAINT LEGEND

CODE	PAINT MANUFACTURER, COLOR & MODEL #	FINISH	REMARKS
P-1	DUNN EDWARDS COLOR TO MATCH (E)	P-ES	EXTERIOR BODY, TYP.
P-2	DUNN EDWARDS COLOR TO MATCH (E)	P-SG	EXTERIOR WINDOWS & METALS, TYP.
P-3	DUNN EDWARDS COLOR TO MATCH (E)	P-SG	EXTERIOR METAL CANOPIES, TYP.
P-4	DUNN EDWARDS COLOR TO MATCH (E)	P-ES	INTERIOR WALL - FIELD
P-5	DUNN EDWARDS COLOR TO MATCH (E)	P-SG	INTERIOR TRIM
P-6	DUNN EDWARDS COLOR TO MATCH (E)	P-ES	INTERIOR WALL - FIELD
P-7	DUNN EDWARDS COLOR TO MATCH (E)	P-SG	INTERIOR TRIM
P-8	DUNN EDWARDS COLOR TO MATCH (E)	P-ES	INTERIOR WALL - ACCENT
P-9	DUNN EDWARDS COLOR TO MATCH (E)	P-ES	INTERIOR WALL - ACCENT
P-10	DUNN EDWARDS COLOR TO MATCH (E)	P-LS	INTERIOR CEILING - FIELD, TYP., U.O.N.
P-10	DUNN EDWARDS COLOR TO MATCH (E)	P-ES	INTERIOR SOFFIT - ACCENT
P-11	DUNN EDWARDS COLOR TO MATCH (E)	P-ES	INTERIOR CEILING

FINISH NOTES

1. ALL WALL & CEILING PAINT TO BE SATIN, U.O.N.
2. ALL ADHESIVES, SEALANTS & CAULKS SHALL MEET 2019 CAL GREEN V.O.C. REQUIREMENTS
3. ALL PAINTS, COATINGS & AEROSOLS SHALL MEET 2019 CAL GREEN V.O.C. REQUIREMENTS
4. ALL CARPET, FLOOR COVERINGS & ADHESIVES SHALL MEET 2019 CAL GREEN V.O.C. & RECYCLED CONTENT REQUIREMENTS.
5. CONTRACTOR SHALL SUBMIT VERIFICATION / CERTIFICATION OF COMPLIANCE FORMS AS STATED IN GREEN BUILDING CHECKLIST PRIOR TO FINAL INSPECTION.
6. DO NOT PAINT ANY CLEAR COATED (NON-PAINTED) WOOD PANELING, TRIM, BOOKSHELVES, DOORS, RAILINGS OR BASEBOARD UNLESS OTHERWISE NOTED ON THE DRAWINGS.
7. ALL (E) METAL FRAMED WINDOWS IN AREAS OF WORK TO BE PAINTED IN SEMI-GLOSS W/
8. COLOR TO MATCH (E) ON THE INTERIOR SIDE, TYP., UNLESS OTHERWISE NOTED.
9. REPLACE ANY DAMAGED, ROTTED OR WATER STAINED ACOUSTICAL CEILING TILES TO MATCH (E), TYP. THROUGH AREAS OF CEILING PAINTING SCOPE. SEE REFLECTED CEILING PLANS FOR MORE INFORMATION.
10. REPLACE ANY BROKEN OR MISSING VINYL ASBESTOS FLOOR TILES W/ V.C.T. TILES CUT TO FIT & COLORS TO MATCH. ASSUME LESS THAN 100 S.F. OF VINYL ASBESTOS FLOOR TILES TO BE REPLACED. SEE FLOOR PLANS FOR MORE INFORMATION.
11. ALL SURFACE MOUNTED CONDUIT, J-BOXES & ATTACHMENT BRACKETS ARE TO BE PAINTED TO MATCH THE ADJACENT WALL OR CEILING SURFACE, TYP.
12. ALL PAINT COLORS IN PROJECT SHALL MATCH (E) COLORS, TYP. CONFIRM COLORS W/ ARCHITECT & LIBRARY STAFF.

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1629 Telegraph Avenue
Oakland, CA 94612
Tel 510 272 0654

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OAKLAND, CA 94612
(510) 238-3437

OAKLAND MAIN LIBRARY
INFRASTRUCTURE IMPROVEMENTS
125 14TH STREET

KATHLEEN ROUSEAU
RCE NO. C19081 EXP. 06.23
CHECKED BY AWC / KAR
DESIGNED BY AWC / KAR
DRAWN BY AWC

No.	DATE	BY	REFERENCE
1	02.17.23	RPR	ISSUED FOR BID

FINISH SCHEDULE

PROJECT NO. C1004859

SCALE: AS NOTED
HOR:
VERT:
DATE: 02.17.23

SHEET NO. A7.1
28 OF 62

DRAWING NAME: C:\Project Jobs\210202_Oakland Main Library\Drawings\CD\160102_A7.1_Finish Schedule.dwg
PLOT DATE: 2/28/23
PLOTTED BY: Adam Carr

GENERAL DOOR & WINDOW NOTES

1. SEE TYPICAL ACCESSIBLE DOOR ON SHEET A0.3
2. SEE SPECIFICATIONS FOR DOOR HARDWARE, TYP.

ABBREVIATIONS

FLOAT	FLOAT GLASS	VNL	VINYL CLAD
FIXED	FIXED GLASS	G-STL	GALVANIZED STEEL
1/4 - TG	1/4" THICK TEMPERED GLASS	ALUM	ALUMINUM
1- LAM	1" THK. LAMINATED SAFETY GLASS	B-ANO	BLACK ANODIZED
1- LF	1" THK. INSUL. LAMINATED/ FLOAT GLASS	C-ANO	CLEAR ANODIZED
1- TG	1" THICK INSULATED TEMPERED GLASS	PT	PAINTED
TEMP	TEMPERED GLASS	ST	STAIN
WIRE	WIRE SAFETY GLASS	SCW	SOLID CORE WOOD
FROST	FROSTED GLASS	HM	HOLLOW METAL
OBSC	OBSCURE GLASS	CLAD	ALUMINUM CLAD WOOD WINDOW - ALUMINUM EXT. W/ WOOD INT.
CL	CHAIN LINK		
PA	CUSTOM PERFORATED ALUMINUM PANEL	FF	FACTORY FINISH
VC	VINYL COATED	CLR	CLEAR POLYURETHANE FINISH
TS	TUBE STEEL POSTS	SS	STAINLESS STEEL

WINDOW SCHEDULE

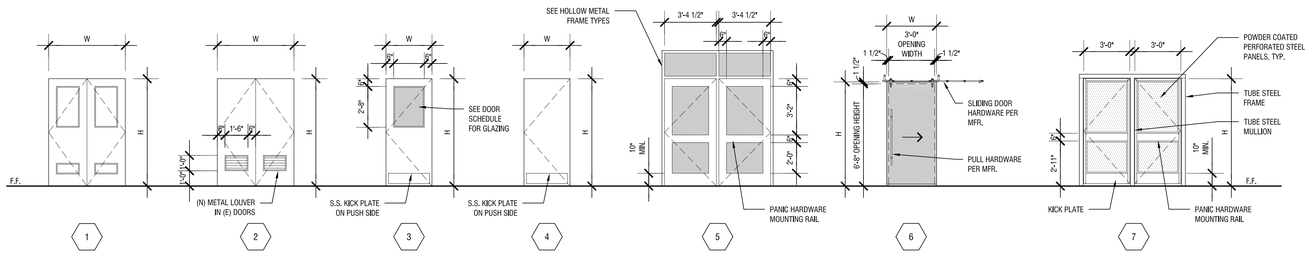
WIN. NO.	ROOM NAME	ROOM NO.	FIRE RATING	WIN. TYPE	FRAME THK.	WINDOW				DETAIL			REMARKS
						SIZE (W X H)	MAT	FIN	GLZ	HEAD	JAMB	SILL	
101	CONFERENCE ROOM	133	NR	1	--	SEE WIN. TYPE	TEMP	--	1/4"-TG	--	18/A8.1 19/A8.1	17/A8.1	CUSTOM FREE STANDING GLASS WALL SYSTEM - BASIS OF DESIGN: AVANTI SYSTEMS SALES@ AVANTISYSTEMSUSA.COM (877) 282.6843
102	CONFERENCE ROOM	133	NR	1	--	SEE WIN. TYPE	TEMP	--	1/4"-TG	--	18/A8.1 19/A8.1	17/A8.1	CUSTOM FREE STANDING GLASS WALL SYSTEM - BASIS OF DESIGN: AVANTI SYSTEMS SALES@ AVANTISYSTEMSUSA.COM (877) 282.6843
103	CONFERENCE ROOM	133	NR	2	--	SEE WIN. TYPE	TEMP	--	1/4"-TG	--	18/A8.1 19/A8.1	17/A8.1	CUSTOM FREE STANDING GLASS WALL SYSTEM - BASIS OF DESIGN: AVANTI SYSTEMS SALES@ AVANTISYSTEMSUSA.COM (877) 282.6843

DOOR SCHEDULE

DOOR NO.	ROOM NAME	ROOM NO.	FIRE RATING	DOOR TYPE	THK.	DOOR				FRAME			DETAIL			HARD-WARE	REMARKS
						SIZE (W X H)	MAT	FIN	GLZ	TYPE	FIN	GLZ	HEAD	JAMB	SILL		
001	LOADING DOCK	015	--	2	1 3/4"	5'-0" X 7'-0" PAIR	SCW (E)	CLR (E)	--	(E)	(E)	--	--	--	--	--	ADD LOUVERS & REINSTALL, PAINT DOOR & LOUVERS TO MATCH (E)
002	ACQUISITIONS	011	--	1	1 3/4"	5'-0" X 7'-0" PAIR	SCW (E)	CLR (E)	--	(E)	(E)	--	--	--	--	--	REVERSE DOOR SWING PER FLOOR PLAN - MODIFY, REPAIR & REFINISH WOOD DOORS & FRAME AS REQUIRED TO MATCH (E)
003	HALLWAY	019	--	3	1 3/4"	3'-0" X 7'-0"	SCW	CLR	TEMP	WD	PT	--	13/A8.1	14/A8.1	12/A8.1	--	
004	OFFICE	011A	--	4	1 3/4"	3'-0" X 7'-0"	SCW	CLR	--	WD	PT	--	13/A8.1	14/A8.1	12/A8.1	--	
005	HALLWAY	019	--	3	1 3/4"	3'-0" X 7'-0"	SCW	CLR	TEMP	WD	PT	--	13/A8.1	14/A8.1	12/A8.1	--	
006	COMMUNITY ROOM	026	--	5	1 3/4"	3'-4 1/2" X 7'-0" PAIR	HM	PT	1-LAM	A	PT	1-LAM	16/A8.1	16/A8.1	15/A8.1	--	
007	COMMUNITY ROOM	026	--	5	1 3/4"	3'-4 1/2" X 7'-0" PAIR	HM	PT	1-LAM	A	PT	1-LAM	16/A8.1	16/A8.1	15/A8.1	--	
101	CONFERENCE ROOM	133	--	6	--	SEE WIN. TYPES	TEMP	--	TEMP	--	--	--	10/A8.1	11/A8.1	9/A8.1	--	CUSTOM GLASS SLIDING DOOR - BASIS OF DESIGN: AVANTI SYSTEMS SALES@ AVANTISYSTEMSUSA.COM (877) 282.6843
201	COURTYARD	--	--	7	--	3'-0" X 7'-0" PAIR	STL	PT	--	B	PT	--	--	5/A1.2	7/A1.2	--	CUSTOM STEEL GATES W/ CLOSERS

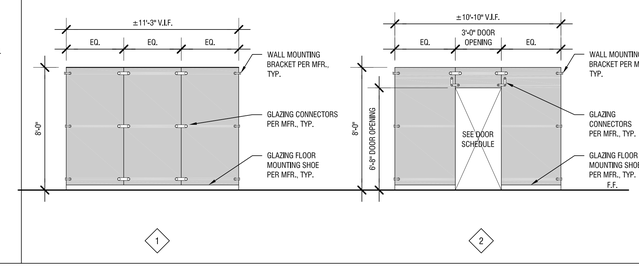
DOOR TYPES

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



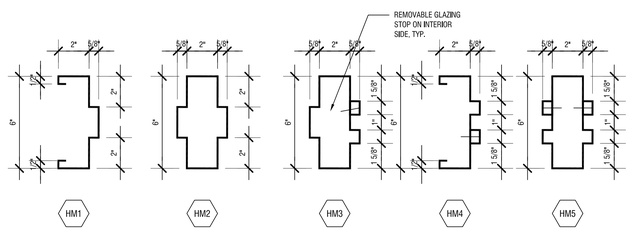
WINDOW TYPES

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



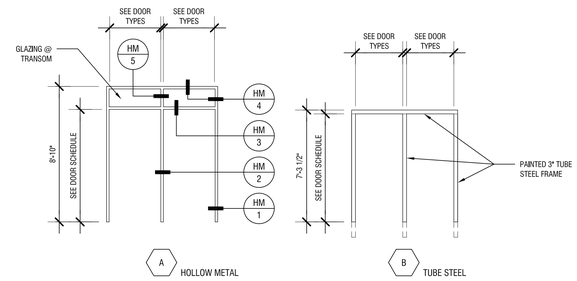
HOLLOW METAL PROFILES

SCALE: 3"=1'-0"



METAL DOOR FRAME TYPES

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



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OAKLAND MAIN LIBRARY INFRASTRUCTURE IMPROVEMENTS

125 14TH STREET

LICENSED ARCHITECT KATHLEEN A. ROUSEAU RCE No. C19081 Exp. 6/23 STATE OF CALIFORNIA

KATHLEEN ROUSEAU
RCE NO. C19081 EXP. 06.23

CHECKED BY	AWC / KAR
DESIGNED BY	AWC / KAR
DRAWN BY	AWC

No.	DATE	BY	REFERENCE
1	02.17.23	RPR	ISSUED FOR BID

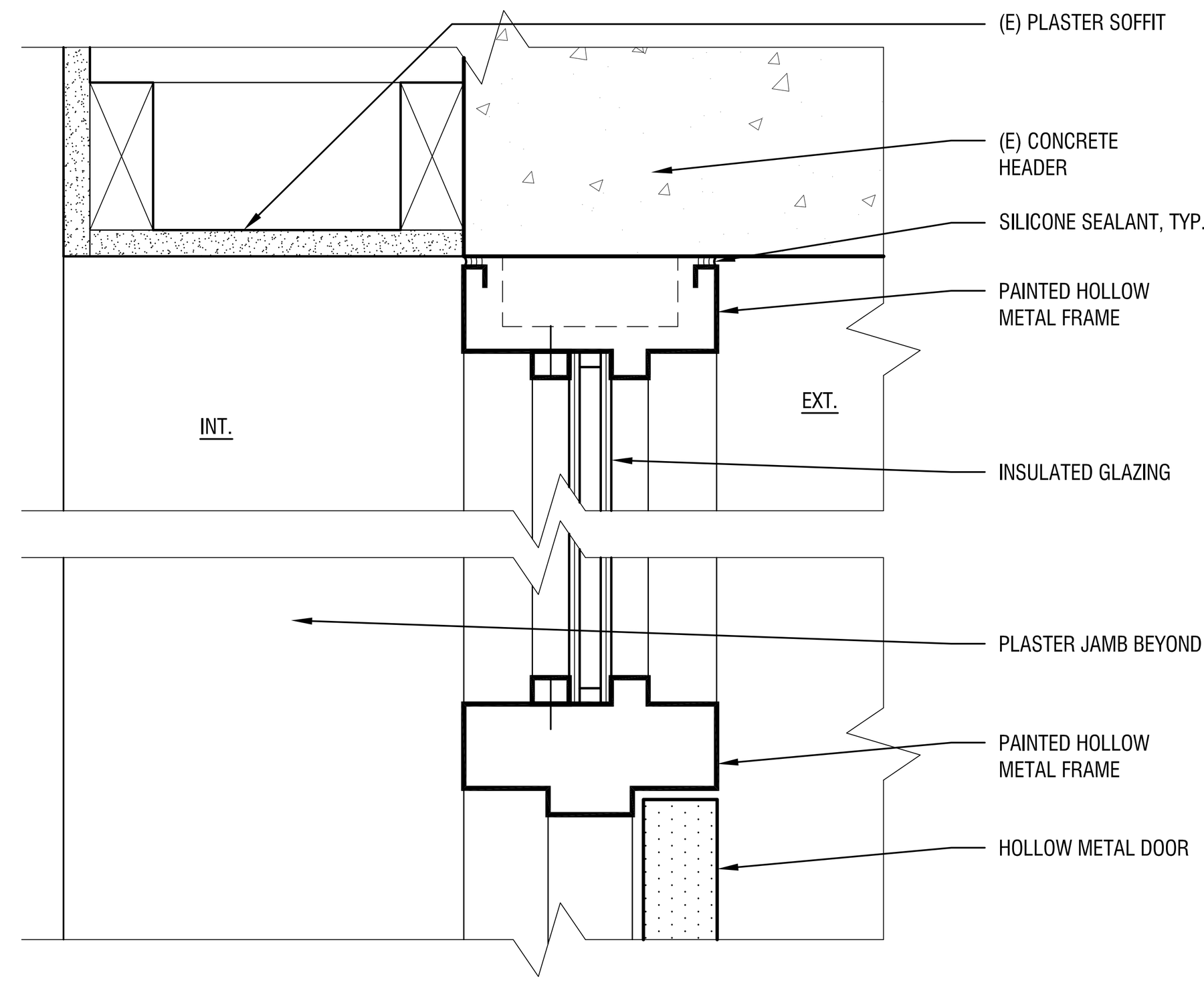
DOOR SCHEDULE

PROJECT NO. C1004859

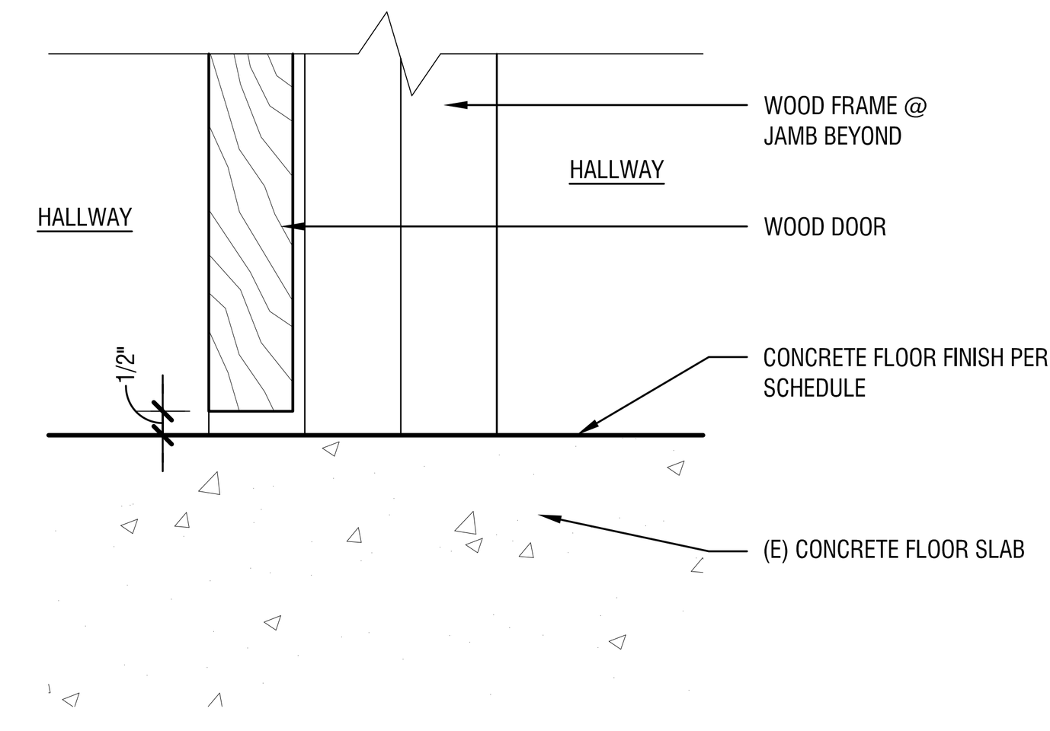
SCALE: AS NOTED
HOR:
VERT:
DATE: 02.17.23

SHEET NO. A7.2
29 OF 62

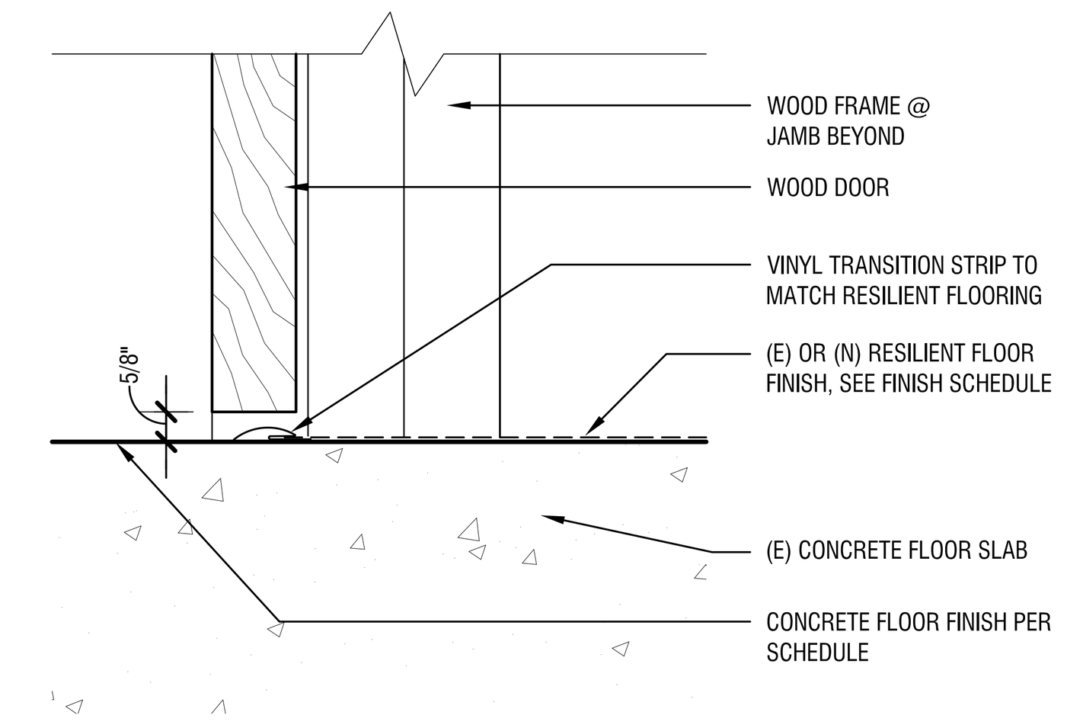
DRAWING NAME: O:\Project\Jobs\210202_Oakland Main Library\Drawings\CD\180102_A7.2_Door_Window_Schedule.dwg
PLOT DATE: 2/23/23
PLOTTED BY: Adam Carr



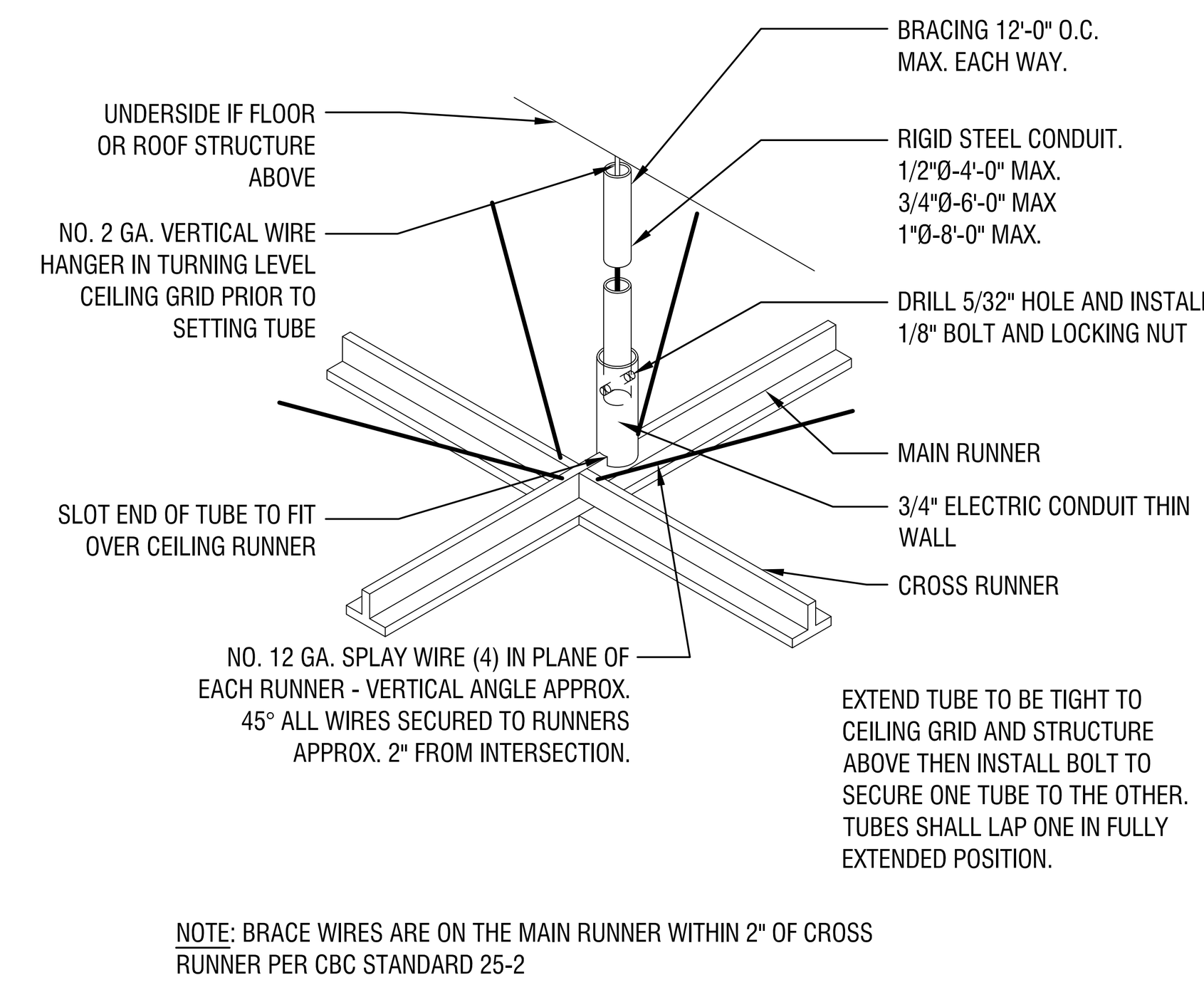
16 HOLLOW METAL DOOR HEAD - JAMB SIM.
SCALE: 3"=1'-0"



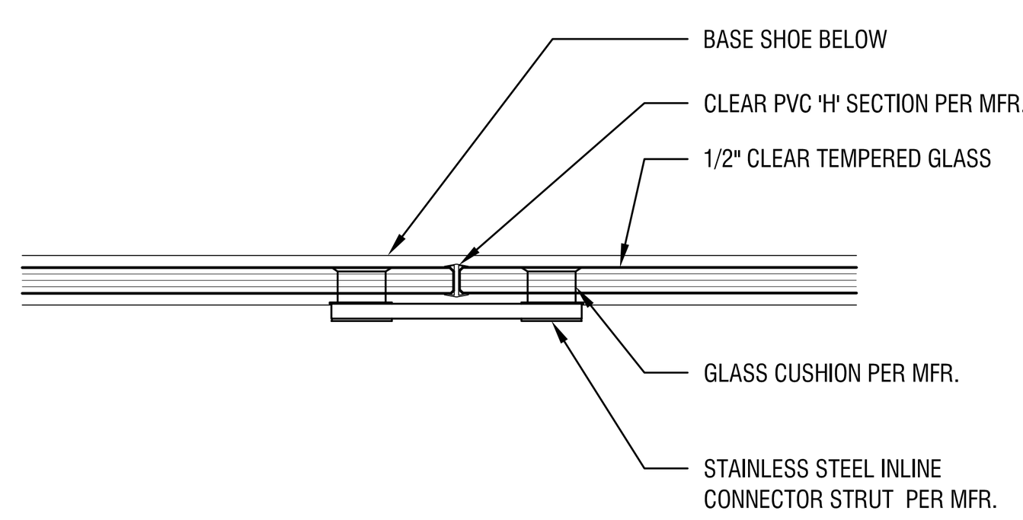
12 TYP. DOOR SILL @ CONCRETE FLOORING
SCALE: 3"=1'-0"



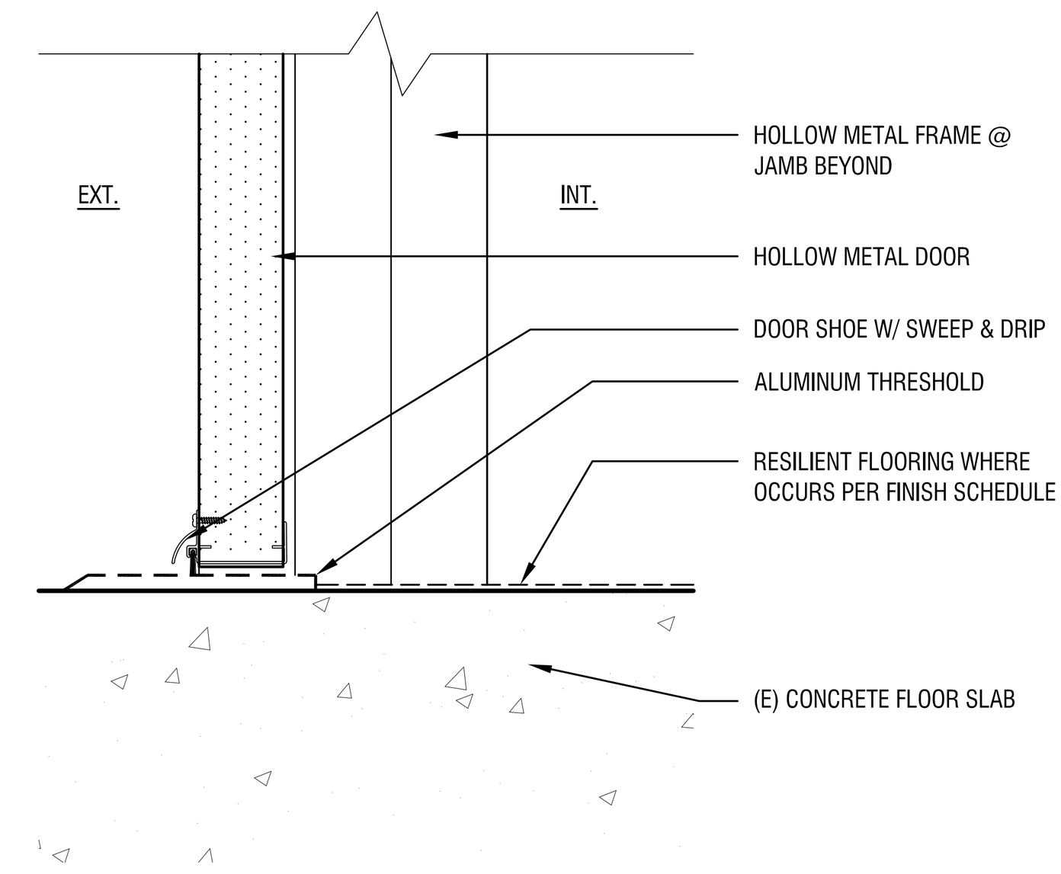
8 TYP. DOOR SILL @ FLOORING TRANSITION
SCALE: 3"=1'-0"



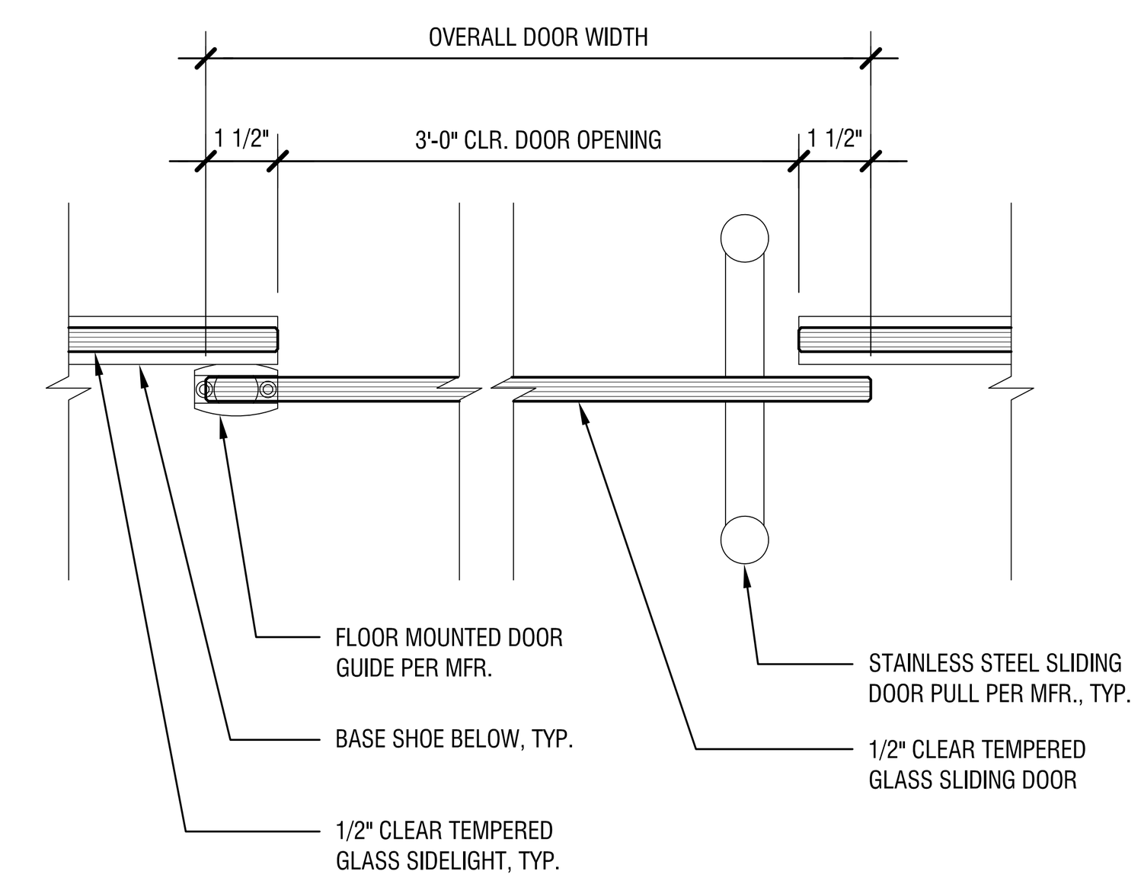
4 TYP. A.C.T. BRACING
SCALE: 3"=1'-0"



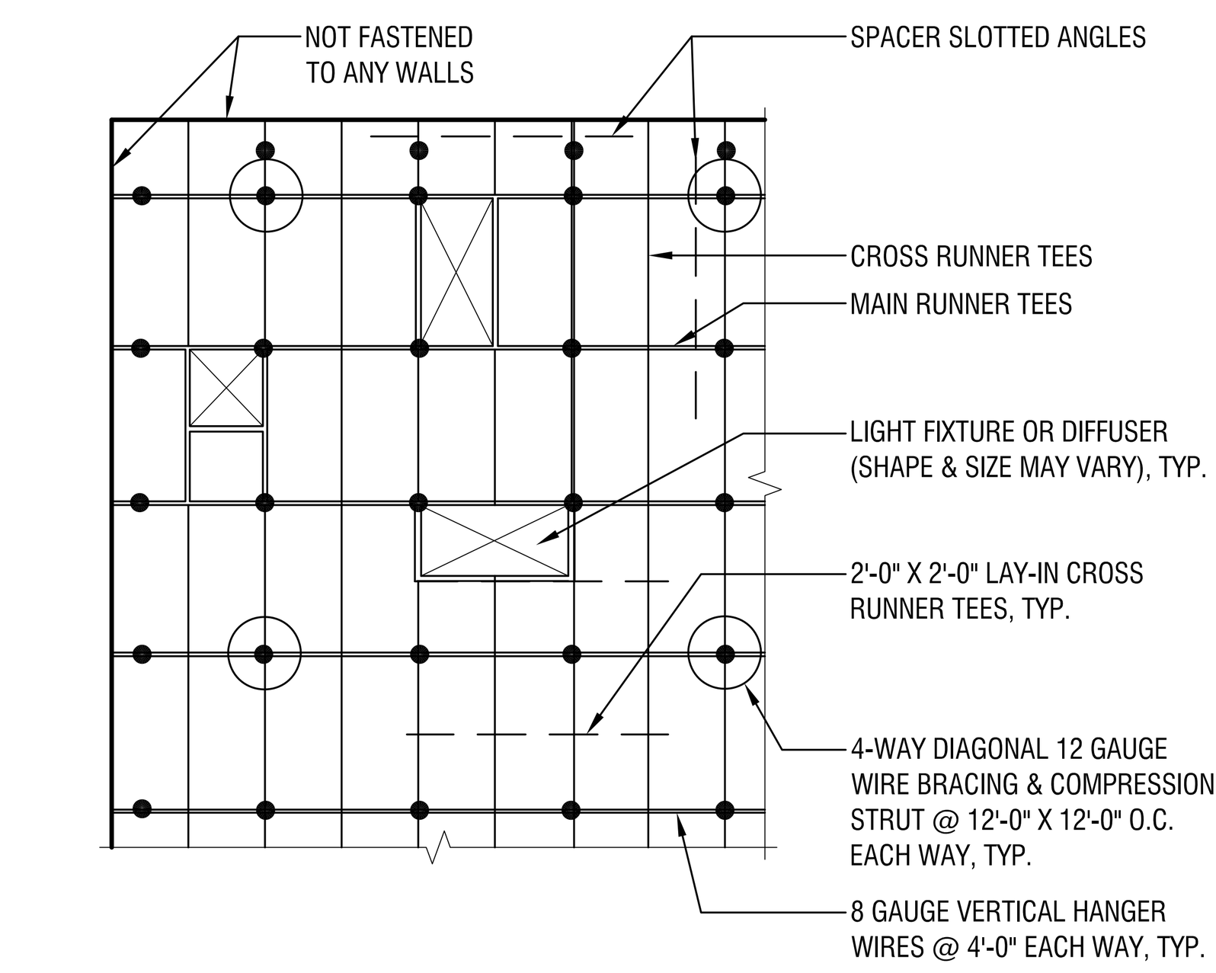
19 GLASS WALL BUTT JOINT CONNECTION
SCALE: 3"=1'-0"



15 EXT.SILL @ HOLLOW METAL DOOR
SCALE: 3"=1'-0"

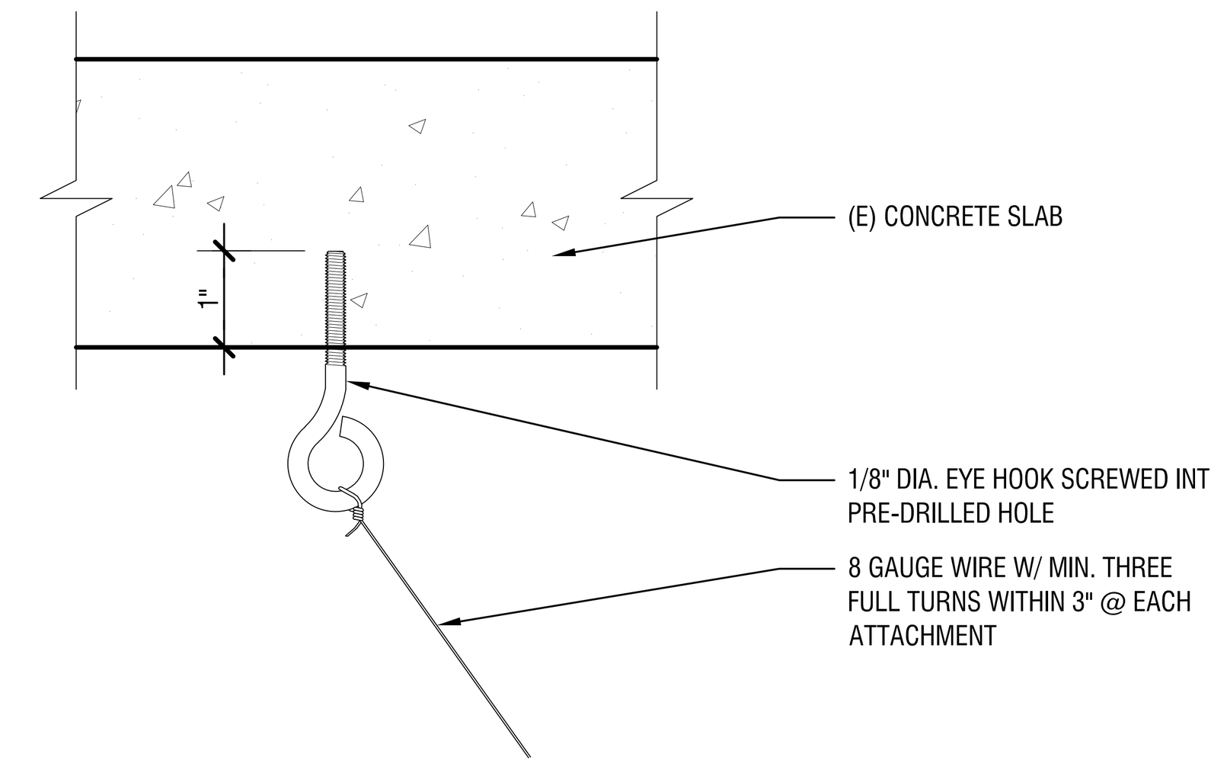


11 SLIDING GLASS DOOR JAMB
SCALE: 3"=1'-0"

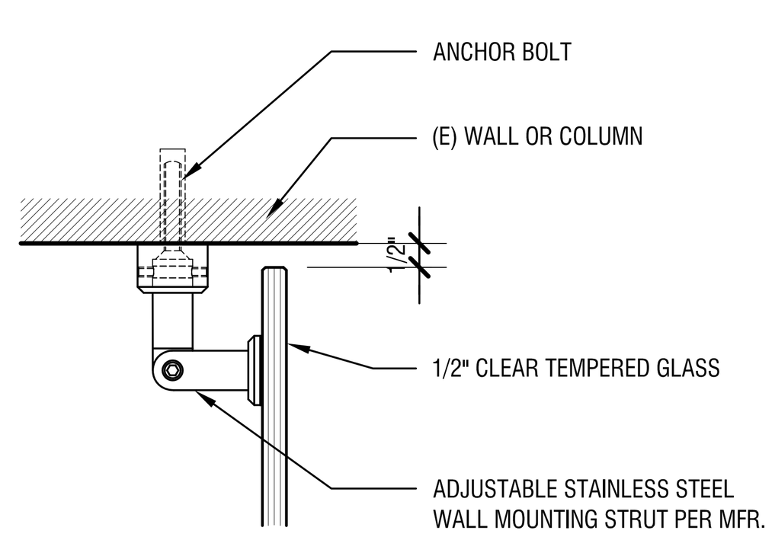


NOTES:
1. INSTALL COMPRESSION STRUTS (1 PER 144 S.F. MAX.) @ ALL SUSPENDED CEILINGS
2. LOCATE BRACES WITHIN 6'-0" OF ANY WALL

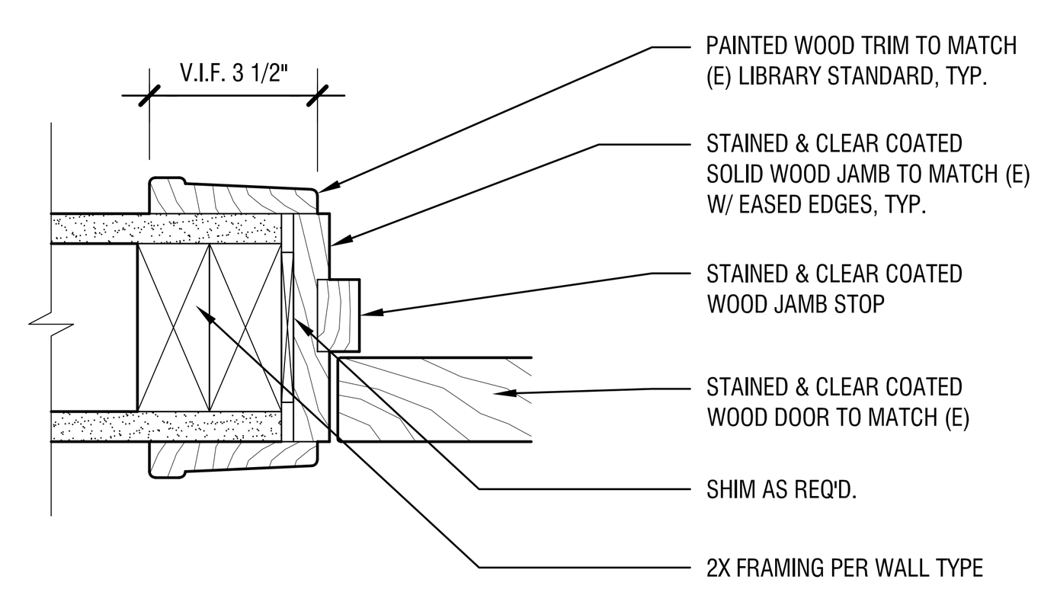
7 TYP. A.C.T. FRAMING
SCALE: 1/4"=1'-0"



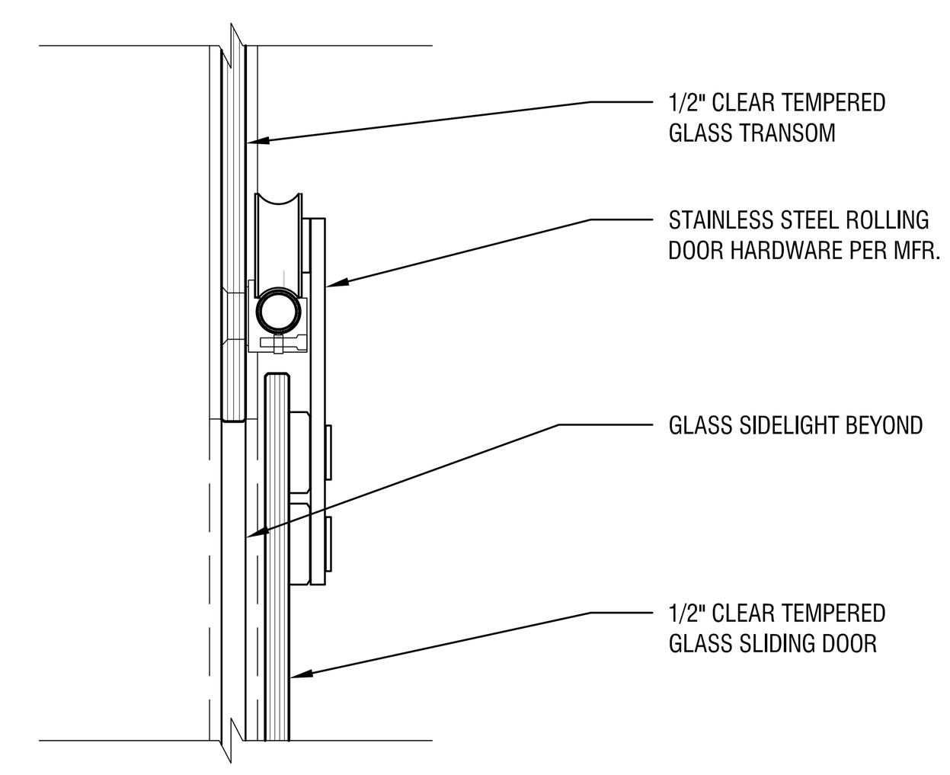
3 TYP. A.C.T. SPLAY WIRE CONNECTION
SCALE: 6"=1'-0"



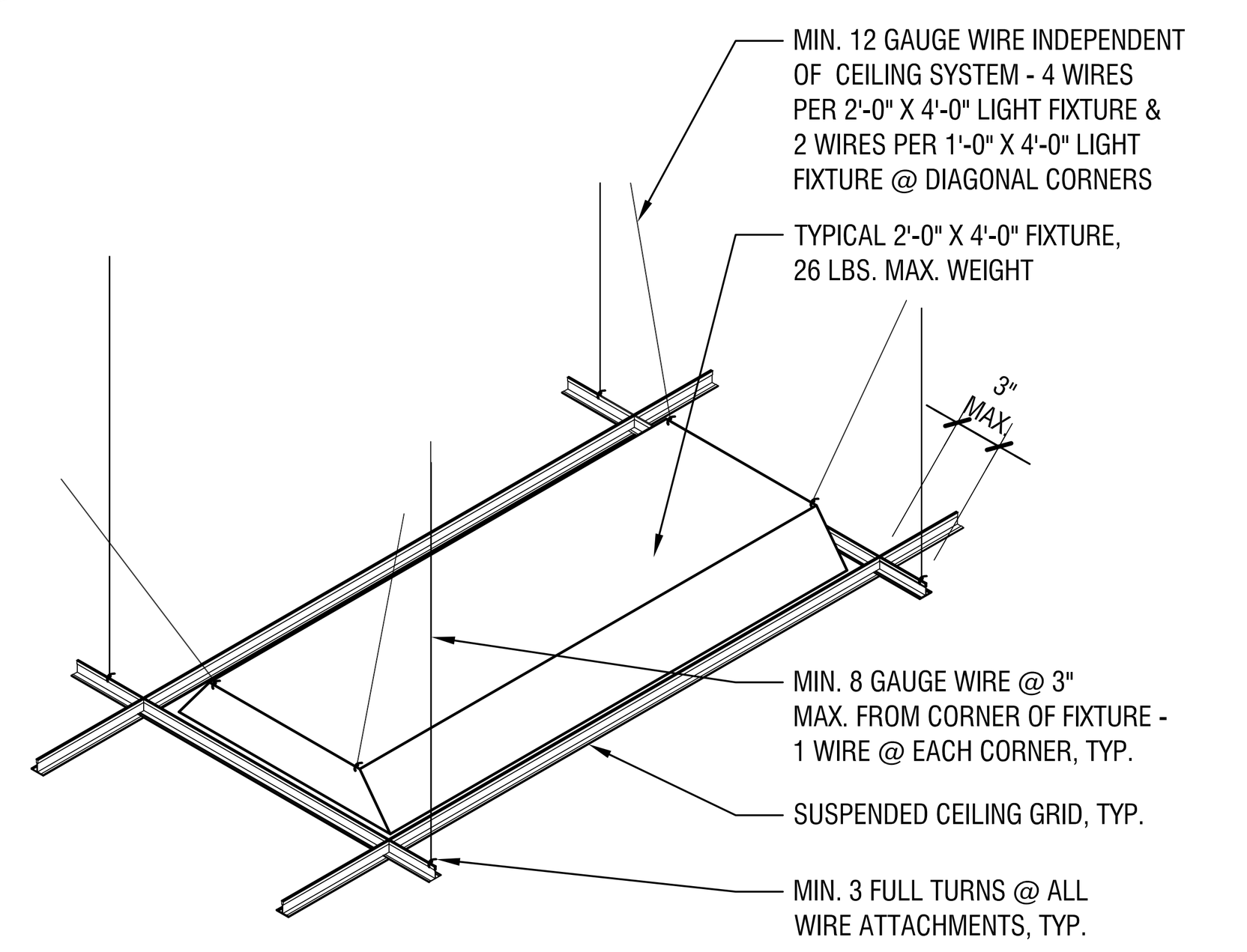
18 GLASS WALL JAMB CONNECTION @ WALL
SCALE: 3"=1'-0"



14 TYP. WOOD DOOR JAMB
SCALE: 3"=1'-0"

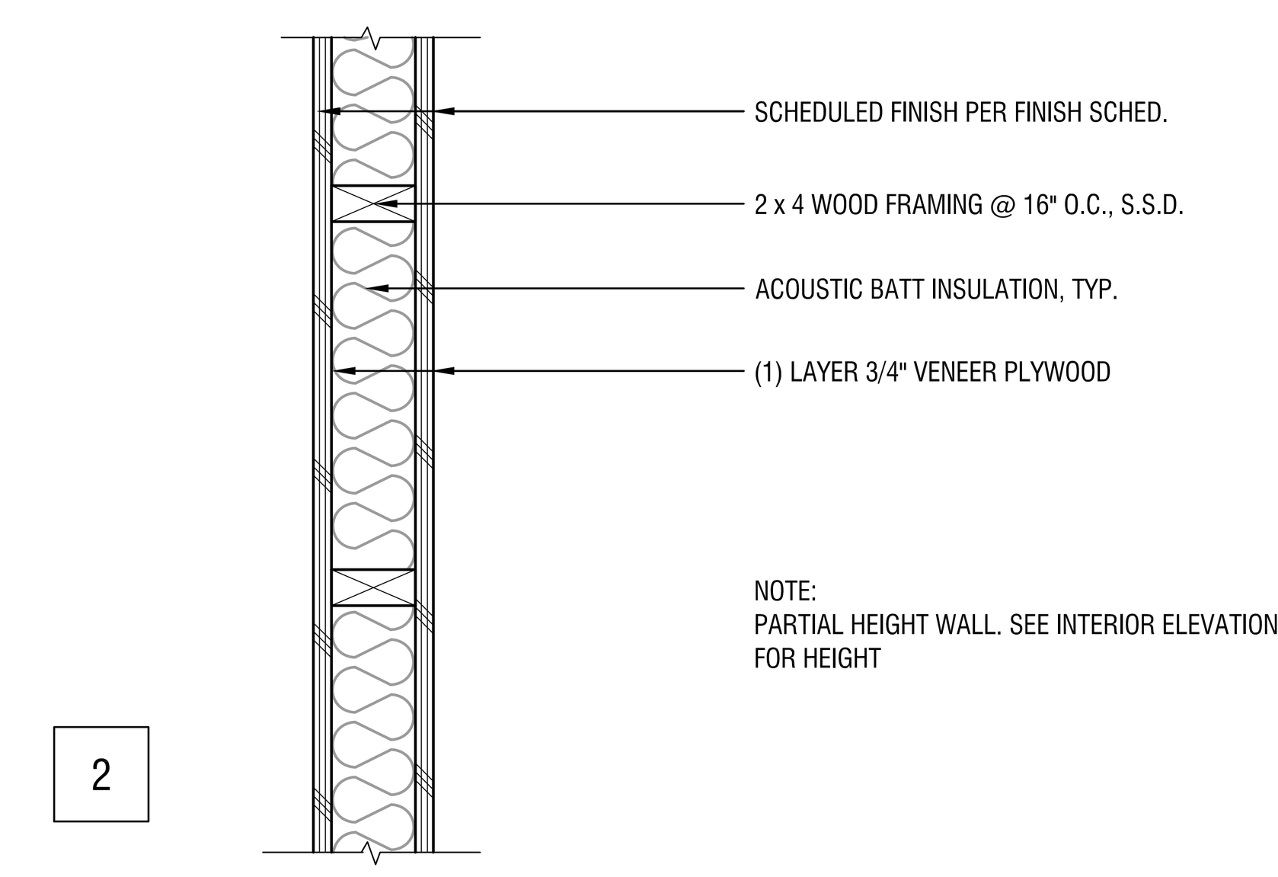


10 SLIDING GLASS DOOR HEAD
SCALE: 3"=1'-0"

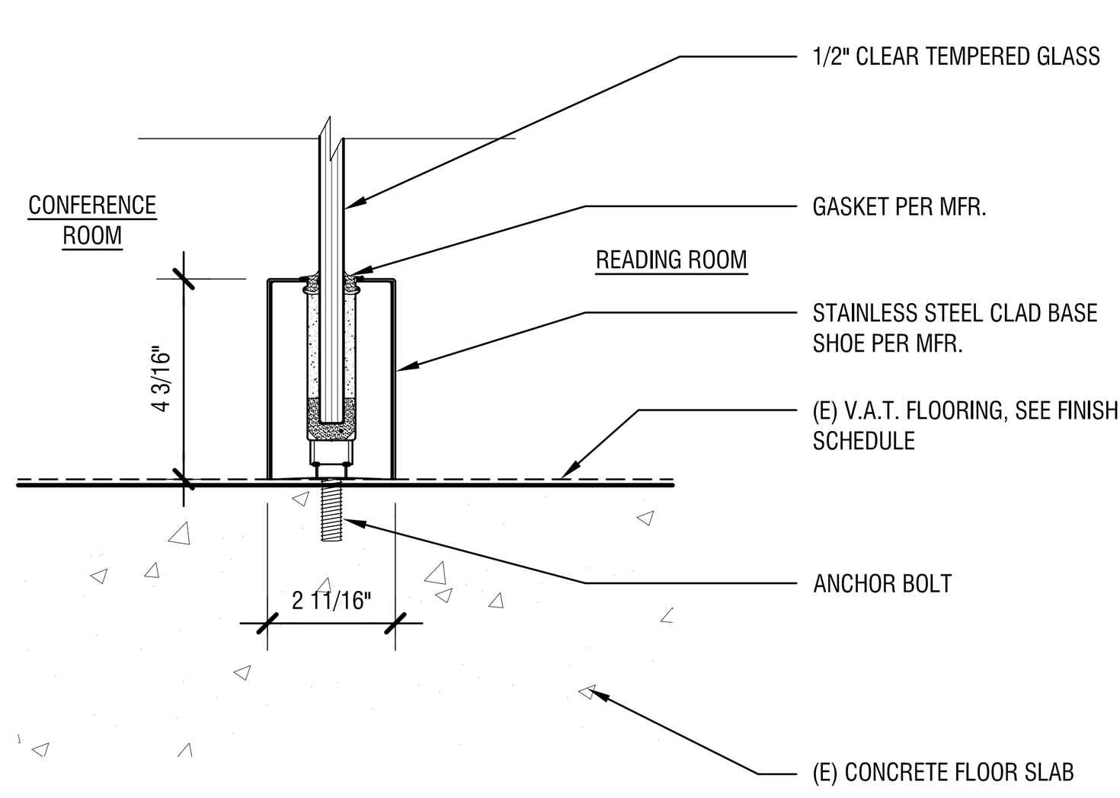


NOTES:
1. ATTACH LIGHT FIXTURE TO RUNNERS W/ MECHANICAL FASTENERS

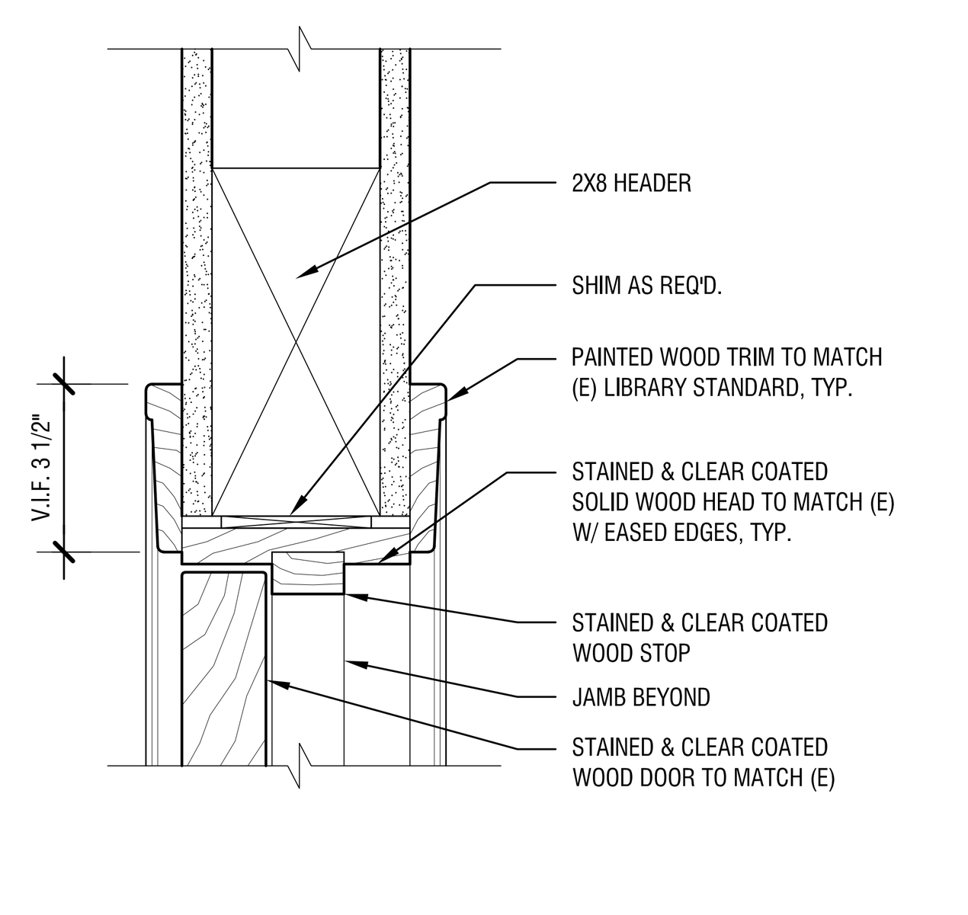
6 TYP. A.C.T. FIXTURE SEISMIC BRACING
SCALE: 3"=1'-0"



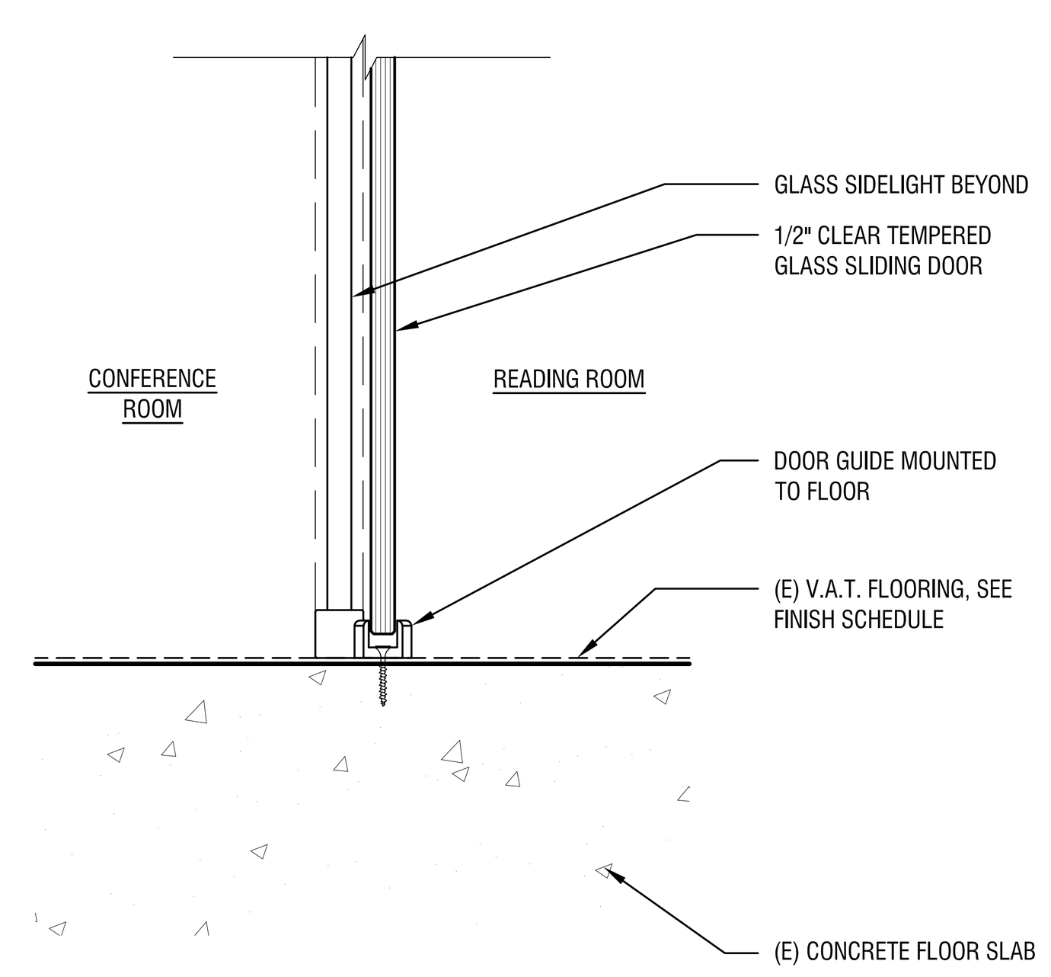
2 WALL TYPE - 2
SCALE: 1 1/2"=1'-0"



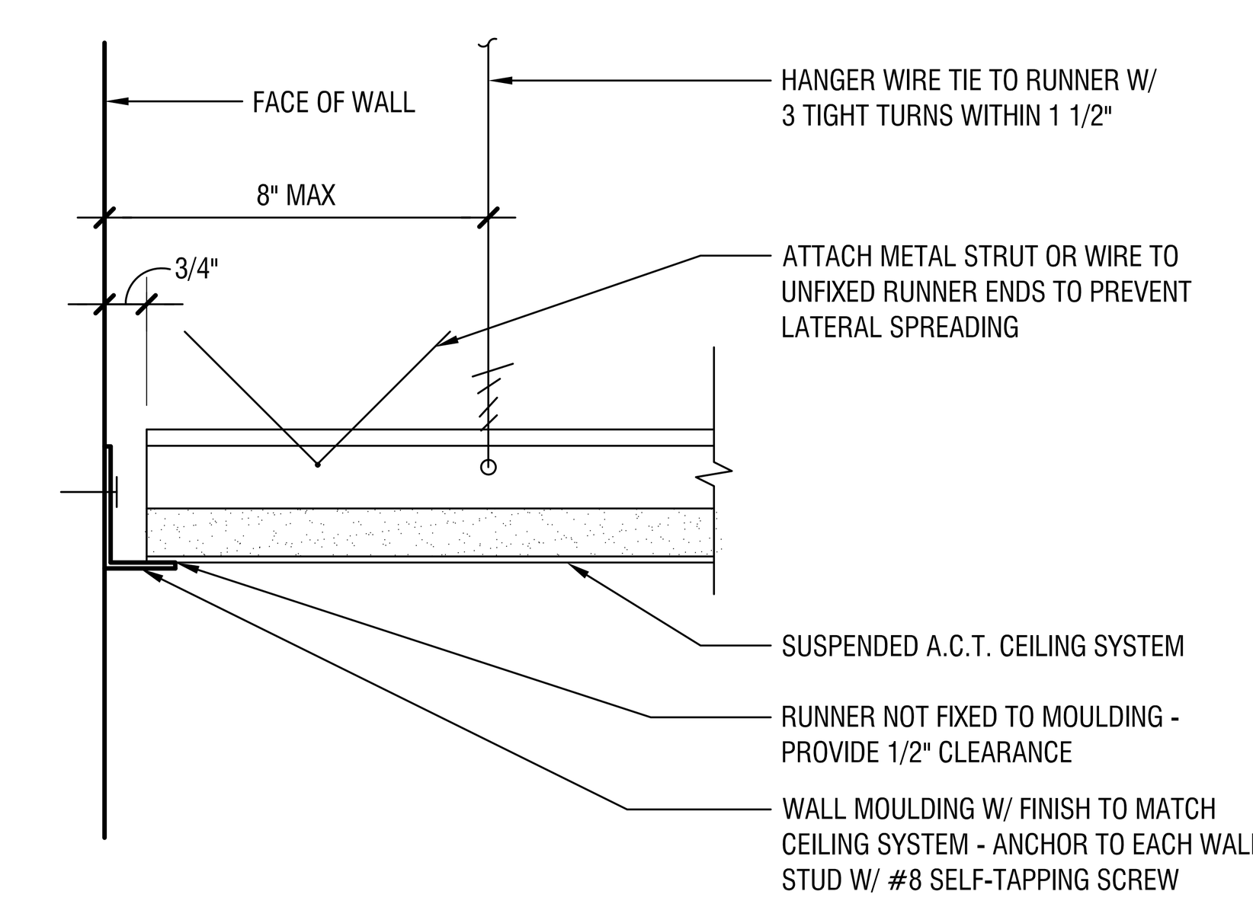
17 GLASS WALL SILL / BASE CONNECTION
SCALE: 3"=1'-0"



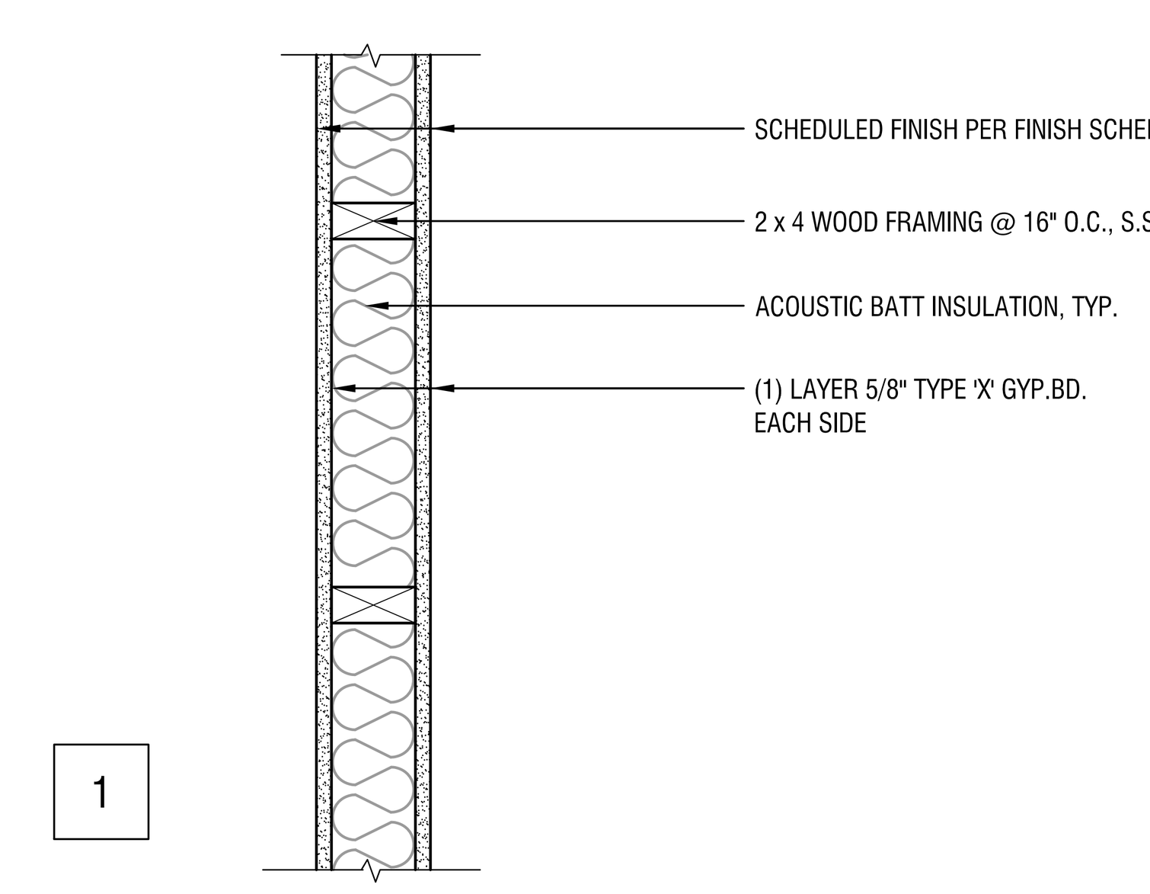
13 TYP. WOOD DOOR HEAD
SCALE: 3"=1'-0"



9 SLIDING GLASS DOOR SILL
SCALE: 3"=1'-0"



5 TYP. A.C.T. EDGE @ WALL
SCALE: 3"=1'-0"



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

DRAWING NAME: O:\Project\Jobs\210202_Oakland Main Library\Drawings\CD\180102_A8.1_Details.dwg
PLOT DATE: 02-23-23
PLOTTED BY: Adam Carr

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OAKLAND MAIN LIBRARY
INFRASTRUCTURE IMPROVEMENTS
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KATHLEEN ROUSEAU
RCE NO. C19081 EXP. 06.23

CHECKED BY		AWC / KAR
DESIGNED BY		AWC / KAR
DRAWN BY		AWC

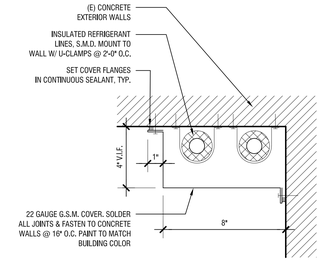
No.	DATE	BY	REFERENCE
1	02.17.23	RPR	ISSUED FOR BID

CONSTRUCTION DETAILS

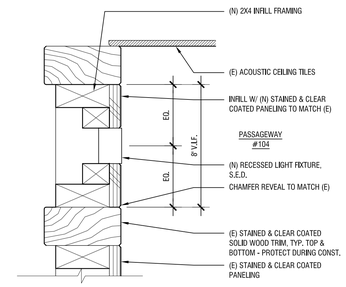
PROJECT NO.
C1004859

SCALE: AS NOTED
HOR:
VERT:
DATE: 02.17.23

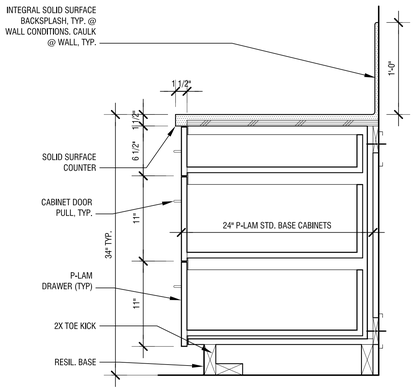
SHEET NO.
A8.1
30 OF 62



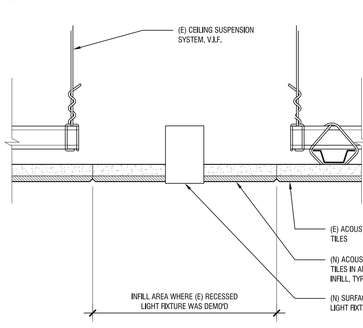
7 SHEET METAL PIPE COVER
SCALE: 3"=1'-0"



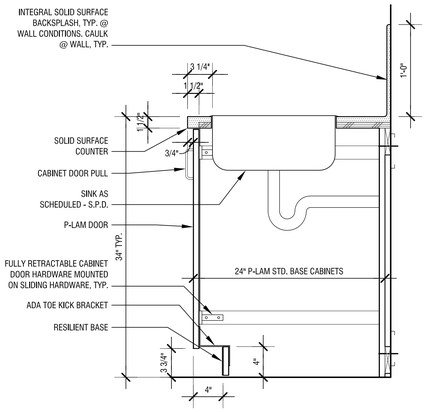
6 DETAIL @ PASSAGE #104 LIGHT FIXTURE
SCALE: 3"=1'-0"



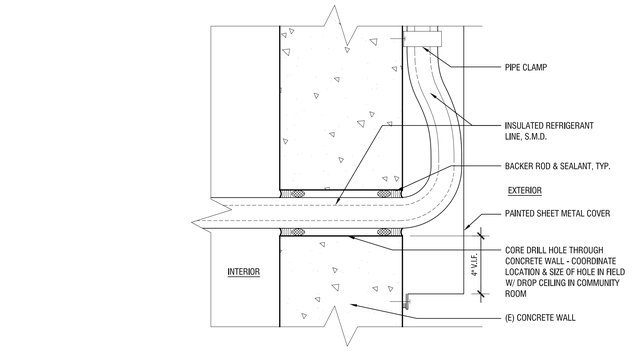
3 TYP. BASE CABINET
SCALE: 1 1/2"=1'-0"



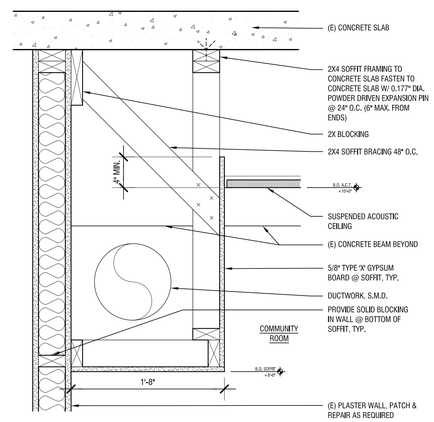
5 DETAIL @ RECESSED CEILING LIGHT FIXTURE
SCALE: 3"=1'-0"



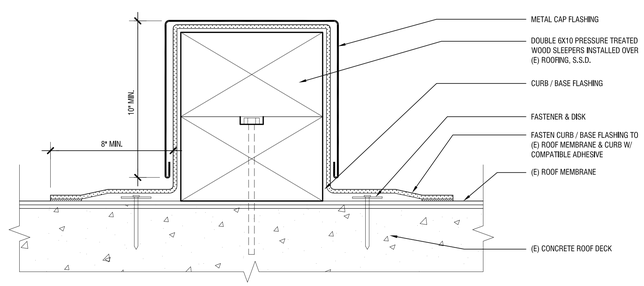
2 TYP. BASE CABINET @ SINK
SCALE: 1 1/2"=1'-0"



9 PIPE PENETRATION @ EXTERIOR WALL
SCALE: 3"=1'-0"



1 SOFFIT @ COMMUNITY ROOM
SCALE: 1 1/2"=1'-0"



8 TYP. ROOFTOP EQUIPMENT SLEEPERS
SCALE: 3"=1'-0"

4 DETAIL NOT USED
SCALE: 3"=1'-0"

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OAKLAND MAIN LIBRARY INFRASTRUCTURE IMPROVEMENTS
125 14TH STREET

LICENSED ARCHITECT KATHLEEN A. ROUSEAU RCE C 19081 Exp. 6/23 STATE OF CALIFORNIA

KATHLEEN ROUSEAU
RCE NO. C19081 EXP. 06.23
CHECKED BY AWC / KAR
DESIGNED BY AWC / KAR
DRAWN BY AWC

No.	DATE	BY	REFERENCE
1	02.17.23	RPR	ISSUED FOR BID

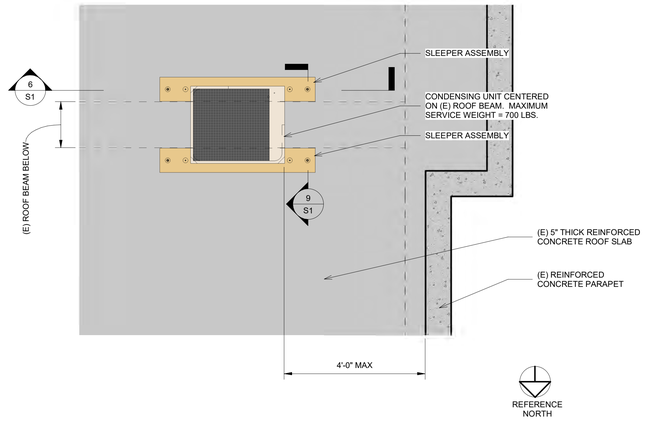
CONSTRUCTION DETAILS

PROJECT NO.
C1004859

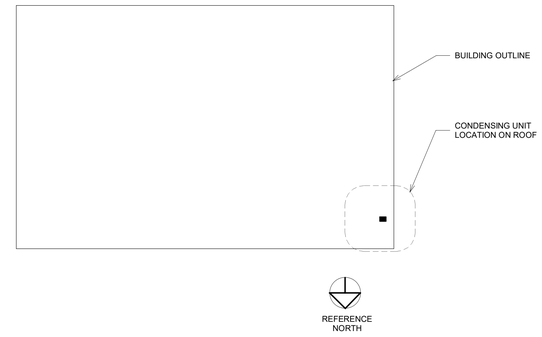
SCALE: AS NOTED
HOR:
VERT:
DATE: 02.17.23

SHEET NO.
A8.2
31 OF 62

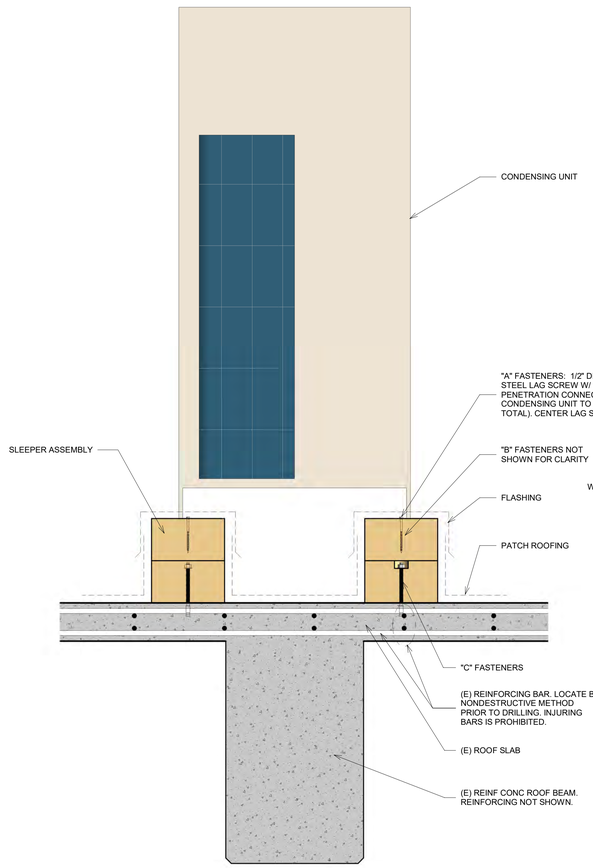
DRAWING NAME: O:\Project Jobs\210202_Oakland Main Library\Drawings\CD\180102_A8.2_Details.dwg
PLOT DATE: 02/17/23
PLOTTED BY: Adam Carr



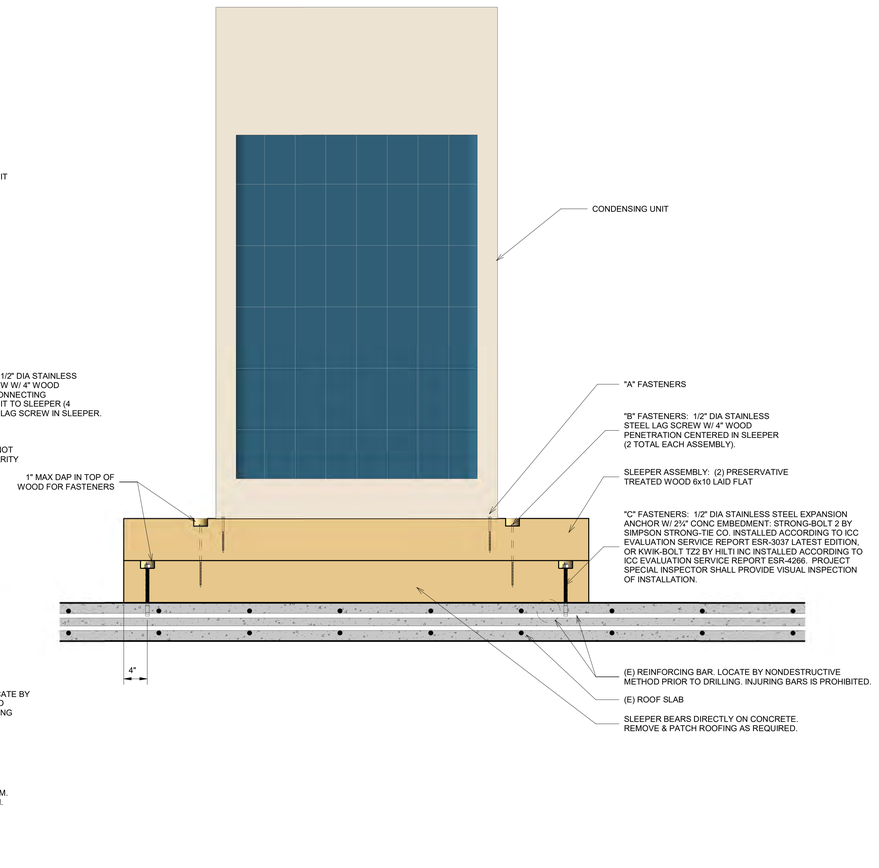
4 PARTIAL ROOF FRAMING PLAN AT CU1
1/2" = 1'-0"



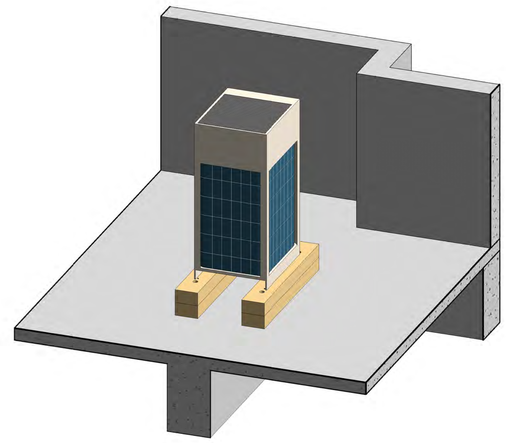
1 ROOF KEY PLAN
1/32" = 1'-0"



9 TYPICAL TRANSVERSE SECTION
1 1/2" = 1'-0"



6 TYPICAL LONGITUDINAL SECTION
1 1/2" = 1'-0"



2 CU1 3D VIEW LOOKS SOUTHWEST

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OAKLAND MAIN LIBRARY INFRASTRUCTURE IMPROVEMENTS

125 14TH STREET

JEFFREY TANER
RCE NO. S3863
2-17-2023

CHECKED BY	JET
DESIGNED BY	JET
DRAWN BY	JET

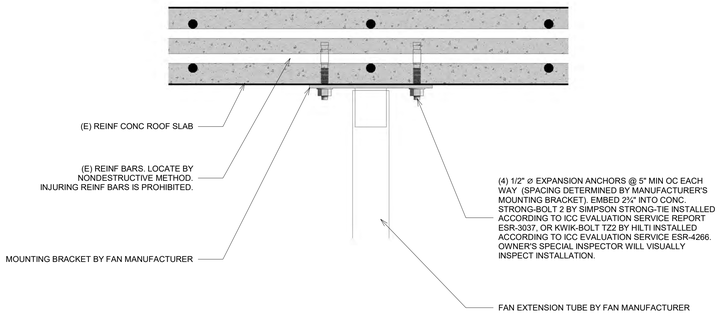
No.	DATE	BY	REFERENCE
1	02.17.23	JET	ISSUED FOR BID

CONDENSER PLANS & DETAILS

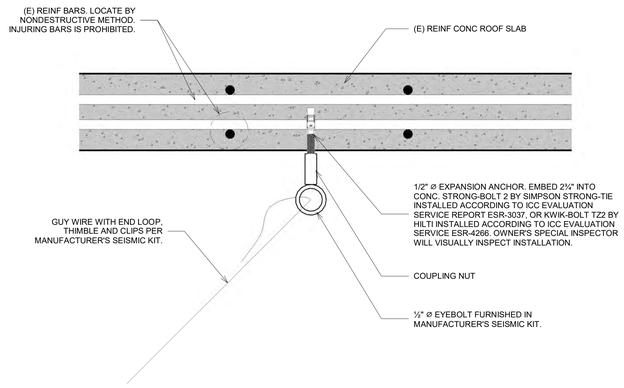
PROJECT NO.
C1004859

SCALE: AS NOTED
HOR:
VERT:
DATE: 02.17.23

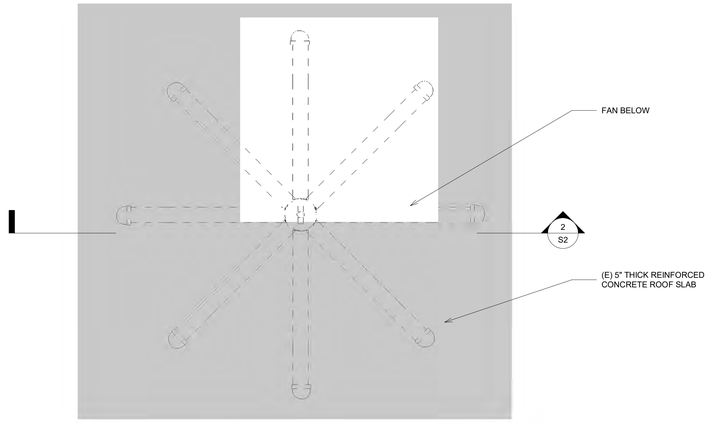
SHEET NO.
S1
32 OF 62



7 FAN CONN DETAIL
3" = 1'-0"

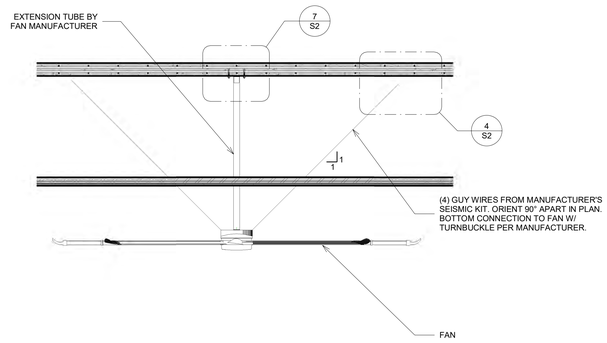


4 GUY WIRE CONN DETAIL
3" = 1'-0"



1 PARTIAL ROOF FRAMING PLAN AT FAN
1/2" = 1'-0"

8 FAN 3D VIEW



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

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INFRASTRUCTURE IMPROVEMENTS

125 14TH STREET

REGISTERED PROFESSIONAL ENGINEER JEFFREY E. TANER STRUCTURAL STATE OF CALIFORNIA
2-17-2023

JEFFREY TANER
RCE NO. S3863

CHECKED BY	JET
DESIGNED BY	JET
DRAWN BY	JET

No.	DATE	BY	REFERENCE
1	02.17.23	JET	ISSUED FOR BID

CEILING FAN ANCHORAGE

PROJECT NO.
C1004859

SCALE: AS NOTED
HOR:
VERT:
DATE: 02.17.23

SHEET NO.
S2
33 OF 62

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DRAWING NAME: C:\CSF\Cad\jobs\202031\202031 M1.1.dwg
PLOT DATE: 02-23-23
PLOTTED BY: Jeff

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ELMENDORF & ASSOCIATES
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OAKLAND, CA 94612
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OAKLAND MAIN LIBRARY
INFRASTRUCTURE IMPROVEMENTS
125 14TH STREET

REGISTERED PROFESSIONAL ENGINEER JEFF ELMENDORF No. 27243 Exp. 6/30/23 MECHANICAL State of California
MECHANICAL ENGINEER

JEFF ELMENDORF
RCE NO. M 27243 EXP. 06/23
CHECKED BY JJE
DESIGNED BY JJE
DRAWN BY MAH

No.	DATE	BY	REFERENCE
1	02.17.23	JJE	ISSUE FOR BID

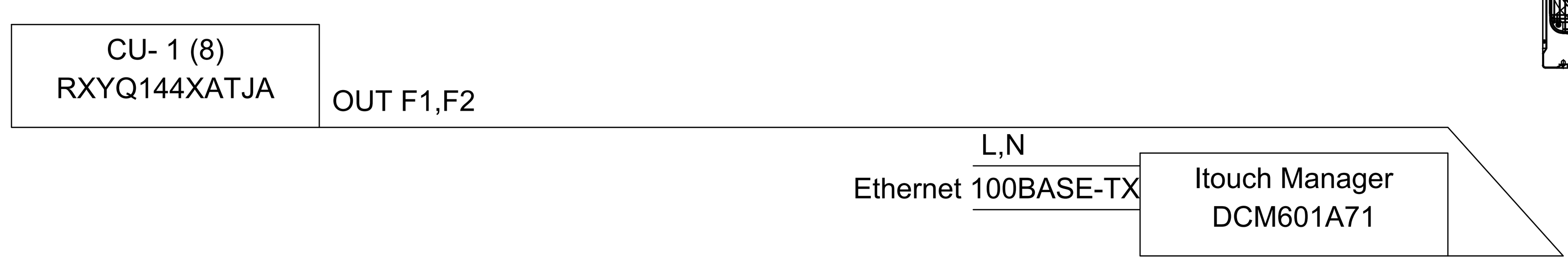
CONSTRUCTION PLANS:
MECHANICAL SCHEDULES & DETAILS

PROJECT NO.
C1004859

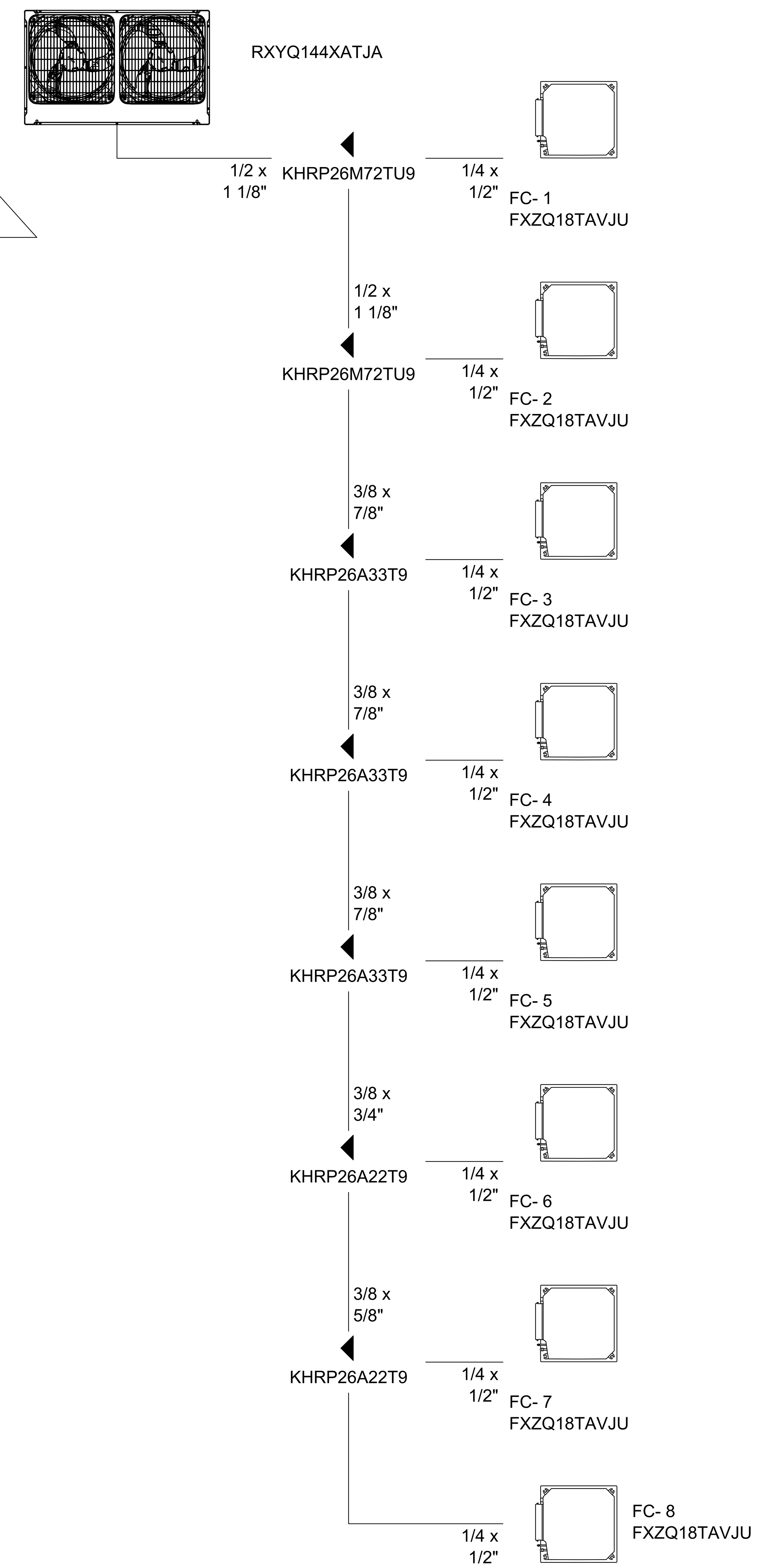
SCALE: AS NOTED
HOR:
VERT:
DATE: 08.15.22

SHEET NO.
M1.1

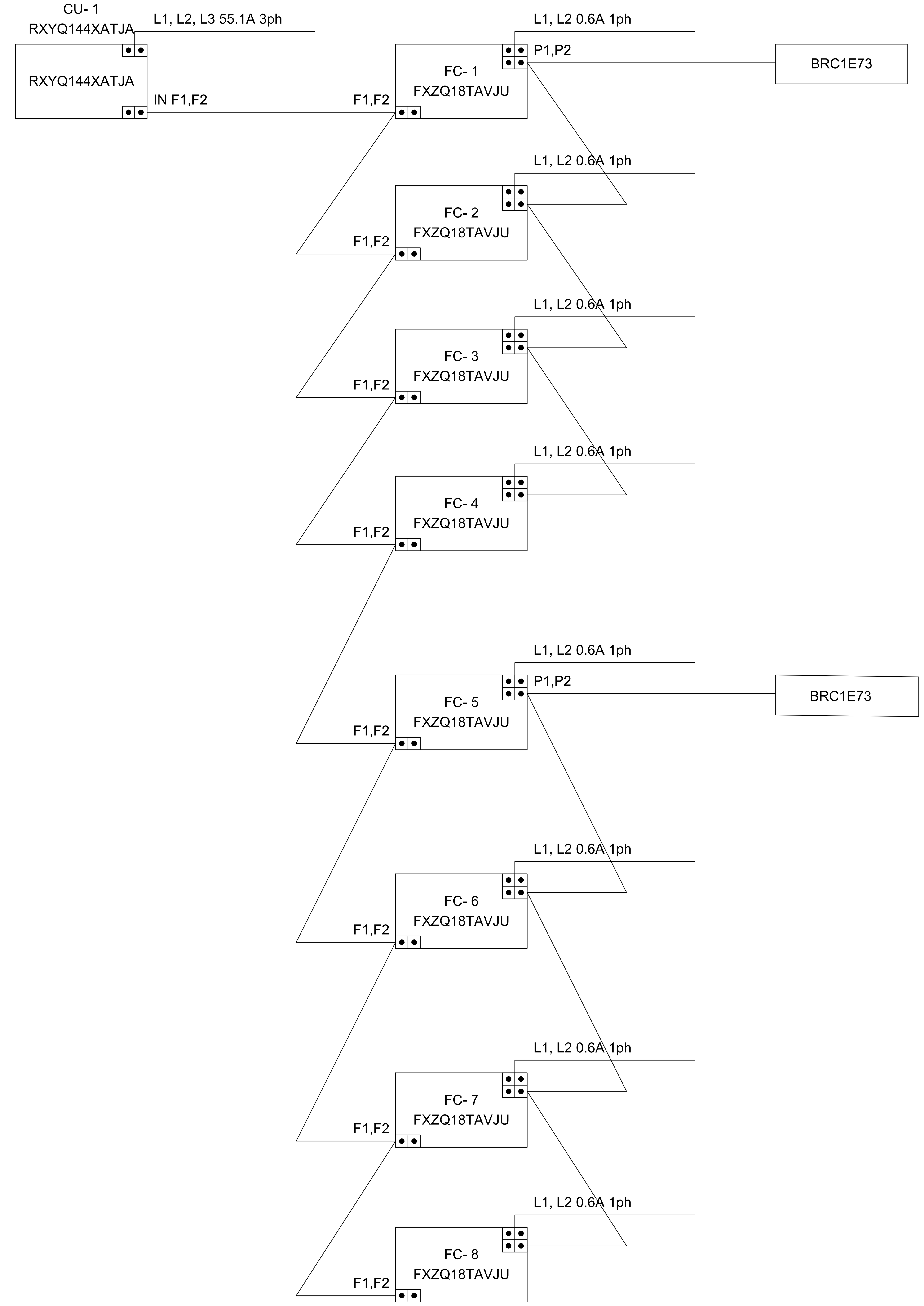
Client	USA
Project	Oakland Library
Title	Controller wiring schematics Control Group
Date	05/14/2021
Drawing No	



Client	USA
Project	Oakland Library
Title	Piping schematics CU- 1 Air cooled heat pump VRV-IV-X -A RXYQ144XATJA
Date	05/13/2021
Drawing No	



Client	USA
Project	Oakland Library
Title	Wiring schematics CU- 1 Air cooled heat pump VRV-IV-X -A RXYQ144XATJA
Date	05/13/2021
Drawing No	



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MECHANICAL ENGINEER

JEFF ELMENDORF
RCE NO. M 27243 EXP. 06/23
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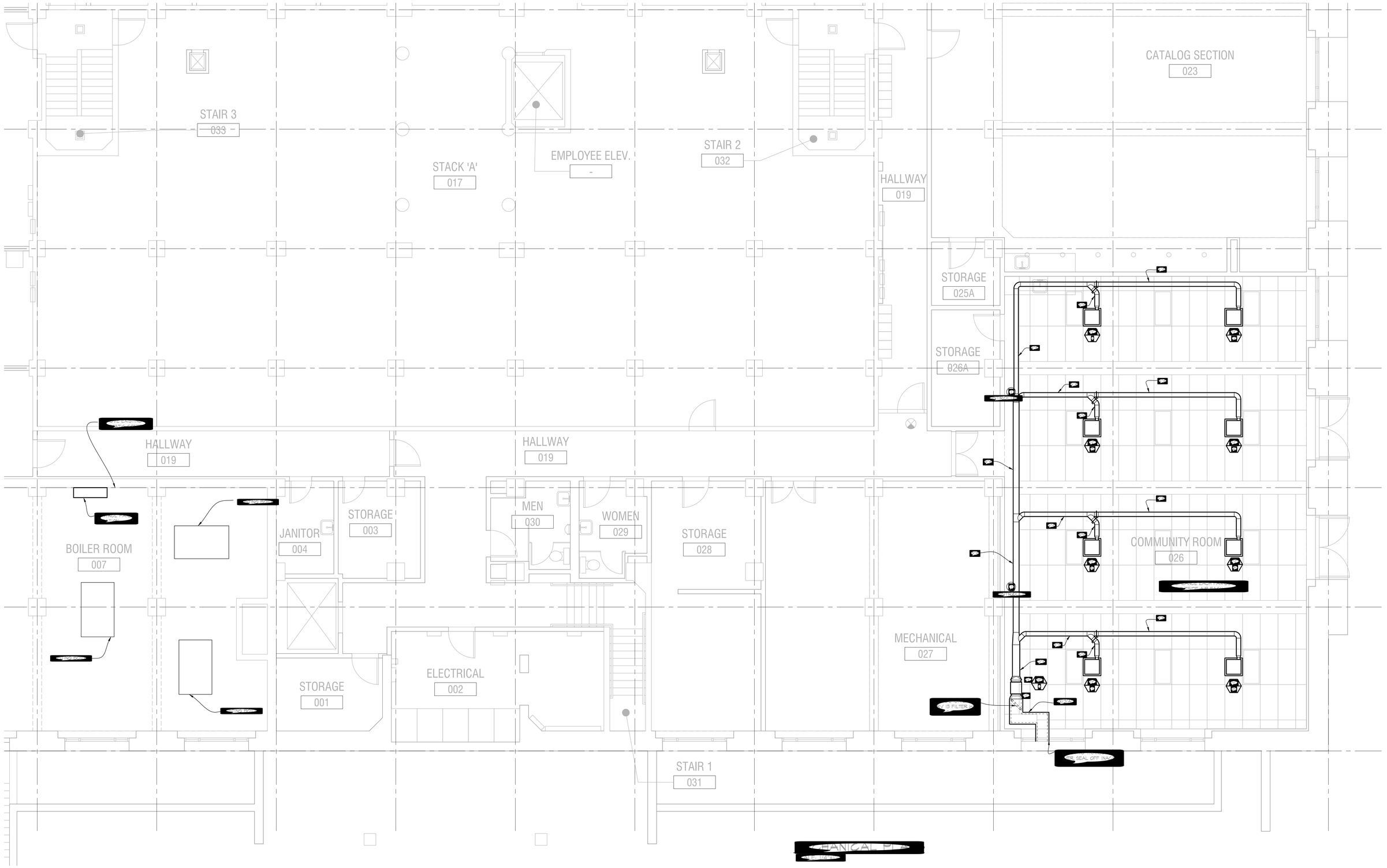
No.	DATE	BY	REFERENCE
1	02.17.23	JJE	ISSUE FOR BID

CONSTRUCTION PLANS:
REFRIGERATION PIPING AND WIRING DETAILS

PROJECT NO. C1004859
SCALE: AS NOTED
HOR:
VERT:
DATE: 08.15.22
SHEET NO. M1.2



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125 14TH STREET

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MECHANICAL ENGINEER

JEFF ELMENDORF
RCE NO. M 27243 EXP. 06/23
CHECKED BY JJE
DESIGNED BY JJE
DRAWN BY MAH

No.	DATE	BY	REFERENCE
1	02.17.23	JJE	ISSUE FOR BID

CONSTRUCTION PLANS:

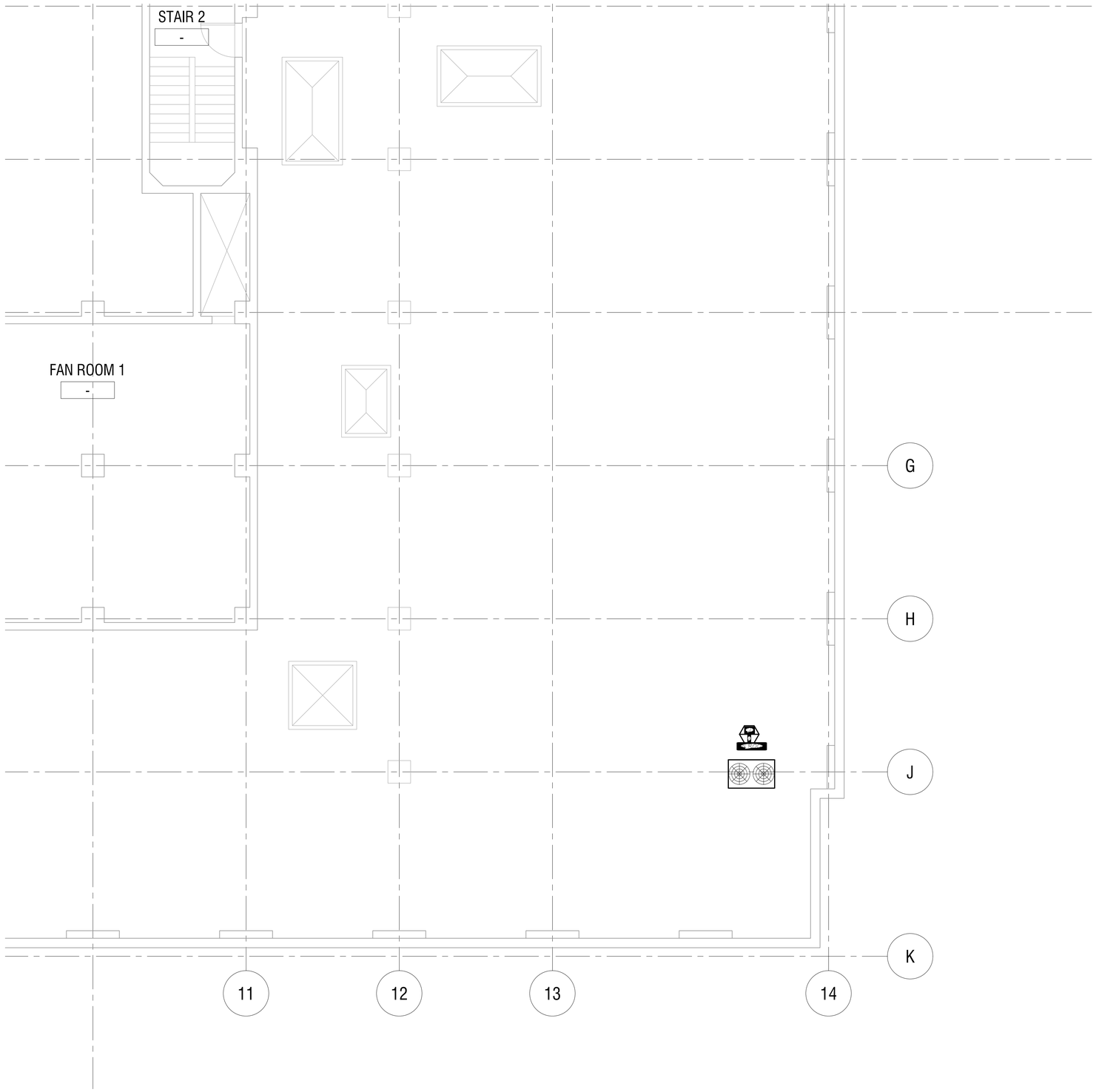
MECHANICAL PLANS

PROJECT NO.
C1004859

SCALE: AS NOTED
HOR:
VERT:
DATE: 08.15.22

SHEET NO.
M2.1
36 OF 62

DRAWING NAME: C:\CSP\Cad\jobs\202031\202031 M2.1.dwg
PLOT DATE: 08/15/23
PLOTTED BY: Jeff



MECHANICAL ROOF P
SHEET

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MECHANICAL ENGINEER

JEFF ELMENDORF	
RCE NO. M 27243.	EXP. 06/23
CHECKED BY	JJE
DESIGNED BY	JJE
DRAWN BY	MAH

No.	DATE	BY	REFERENCE
1	02.17.23	JJE	ISSUE FOR BID

CONSTRUCTION PLANS:

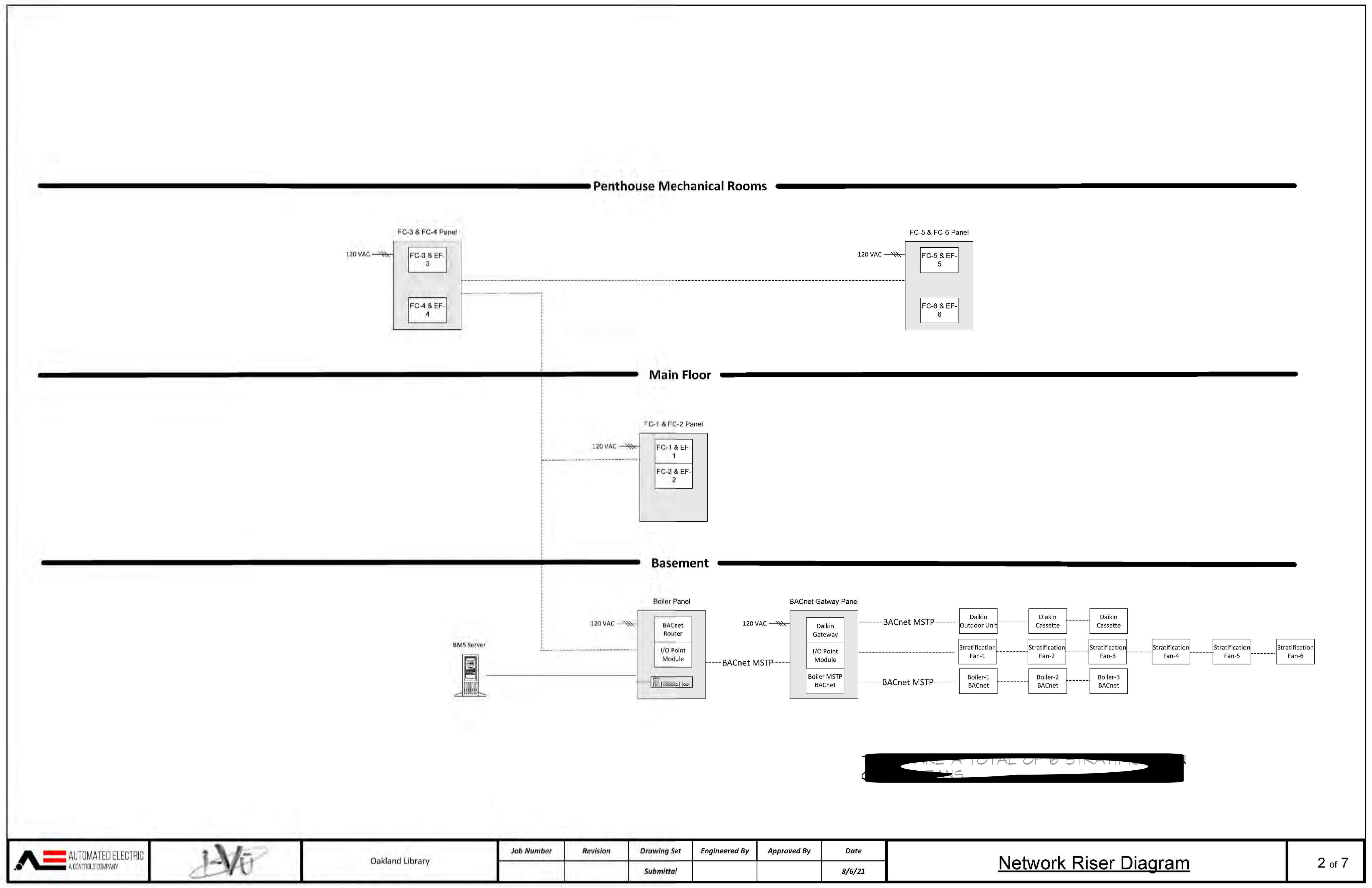
MECHANICAL ROOF PLAN

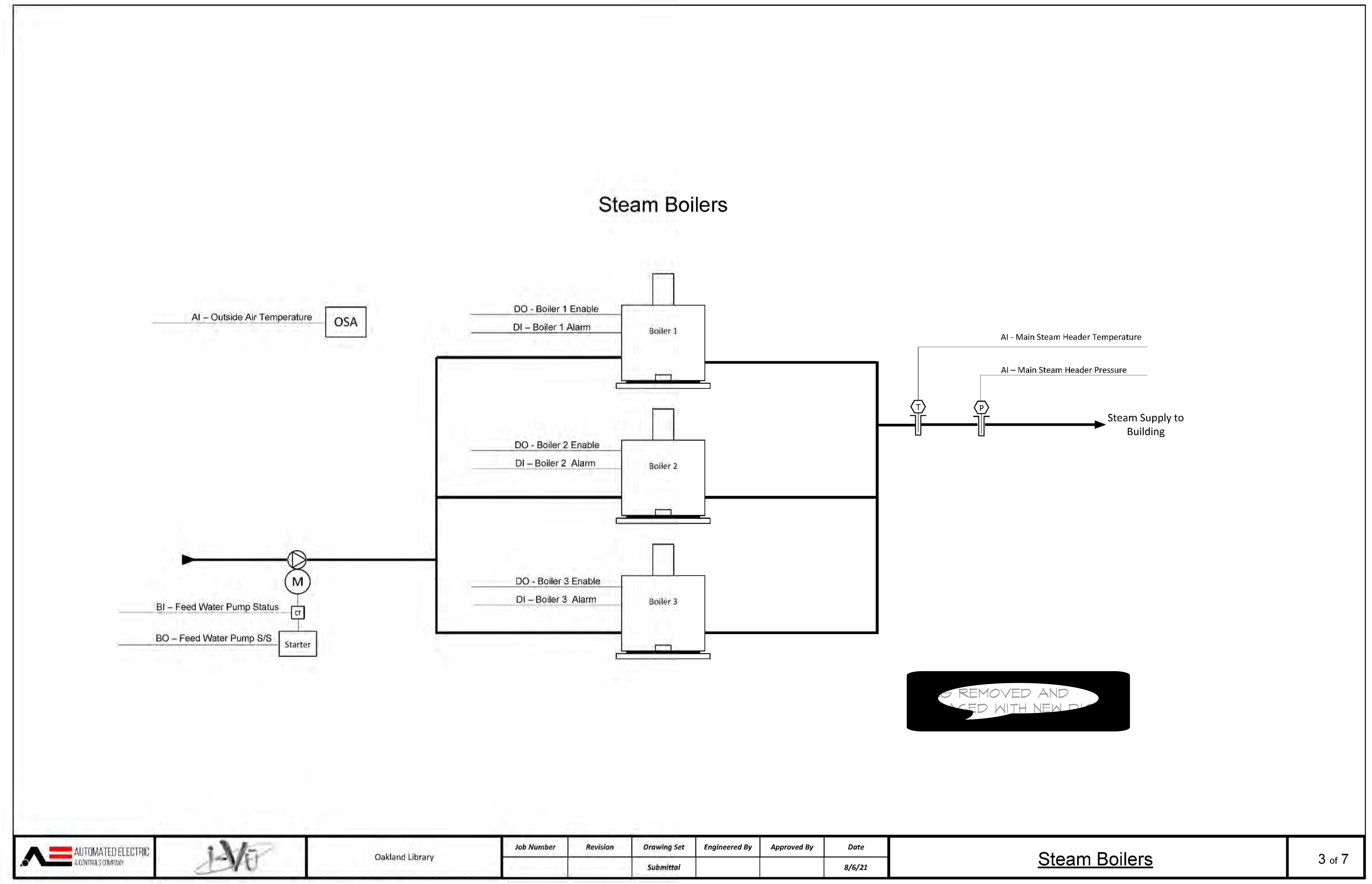
PROJECT NO.
C1004859

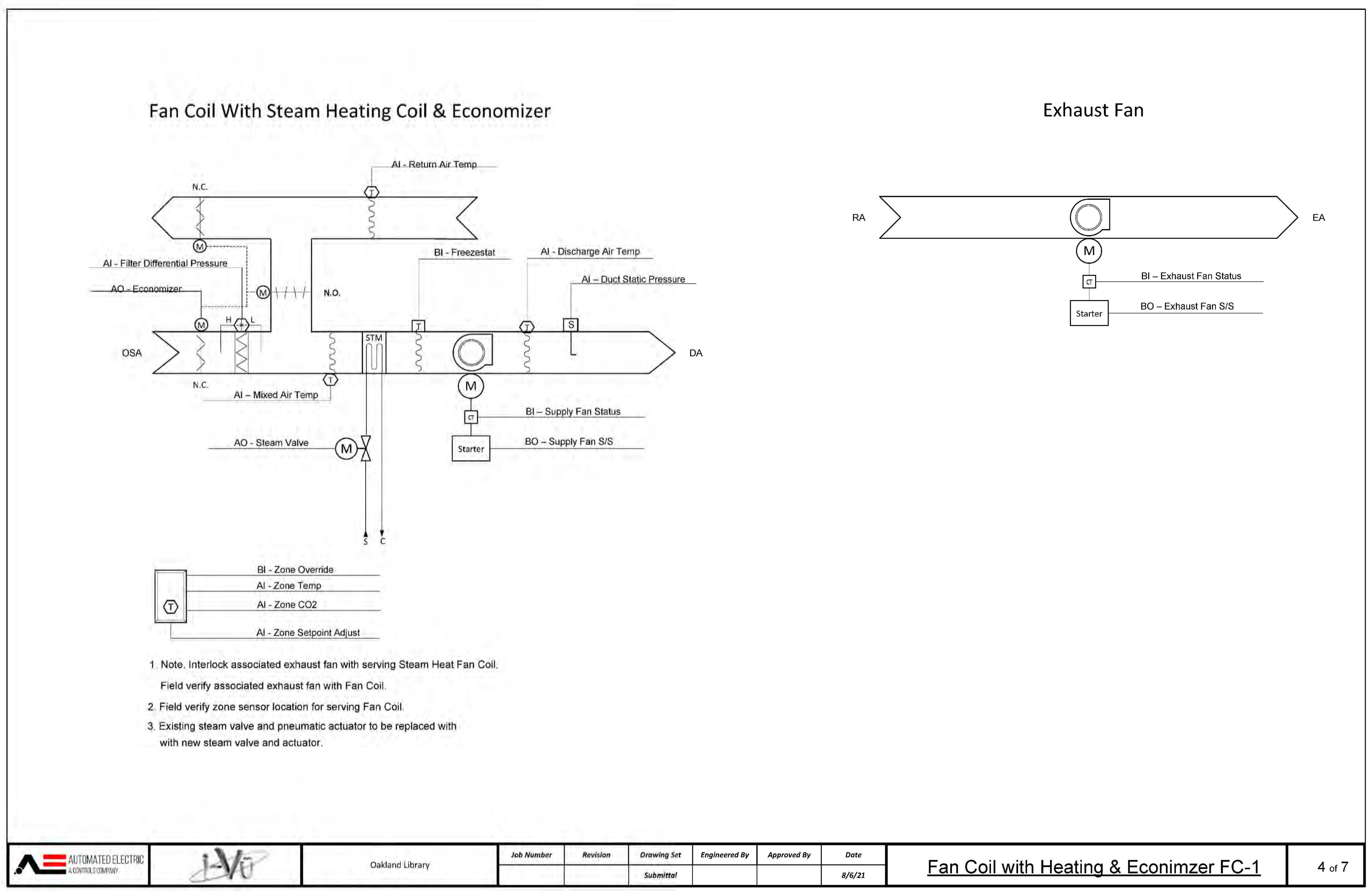
SCALE: AS NOTED
HOR:
VERT:
DATE: 08.15.22

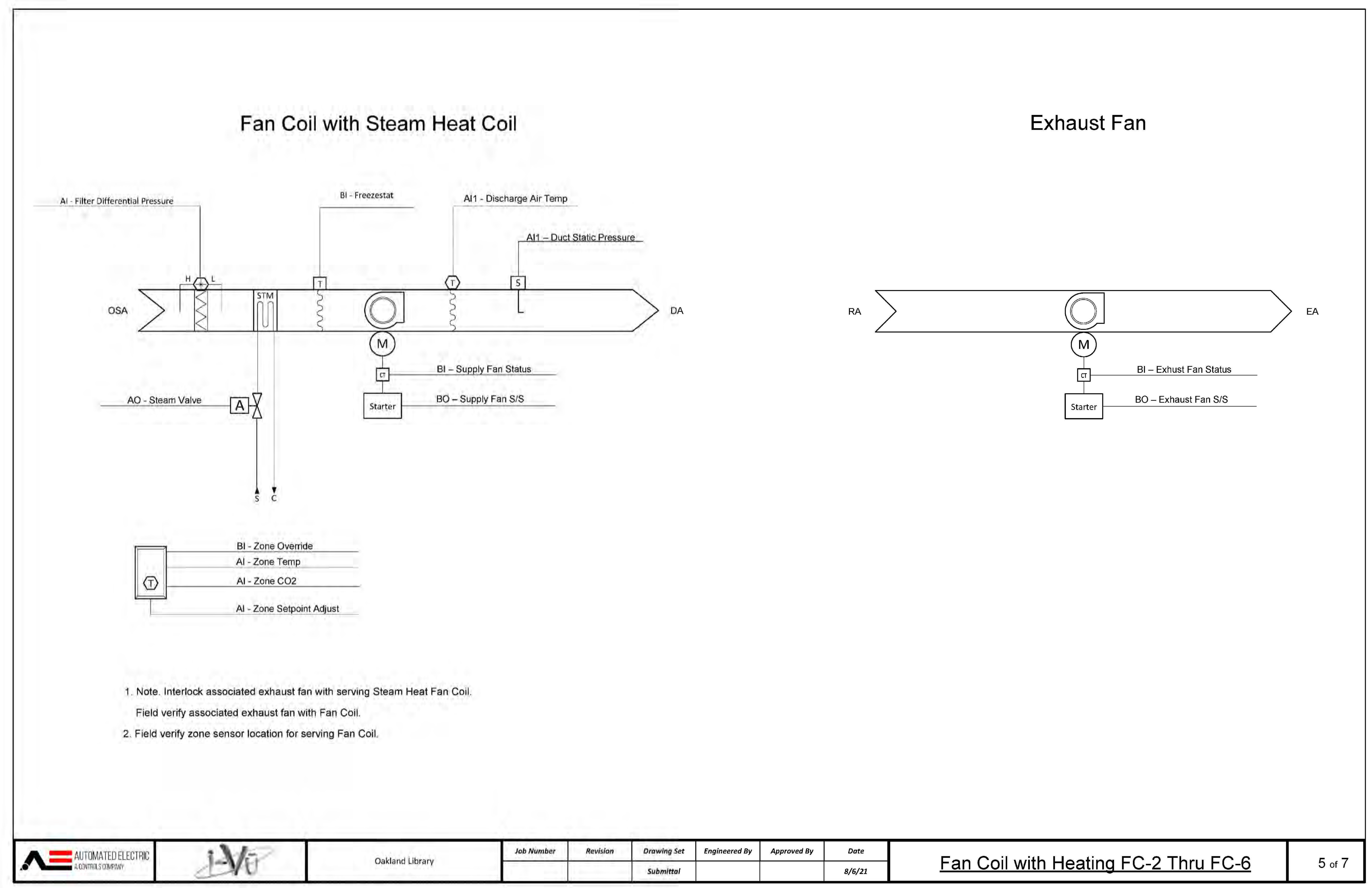
SHEET NO.
M2.2
37 OF 62

DRAWING NAME: C:/CSF/Cad/jobs/2020/01/202001 M2.2.dwg
LAST PLOT: 02.20.23
PLOTTED BY: Jeff









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PLOT DATE: 02-23-23
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RCE NO. M 27243 EXP. 06/23
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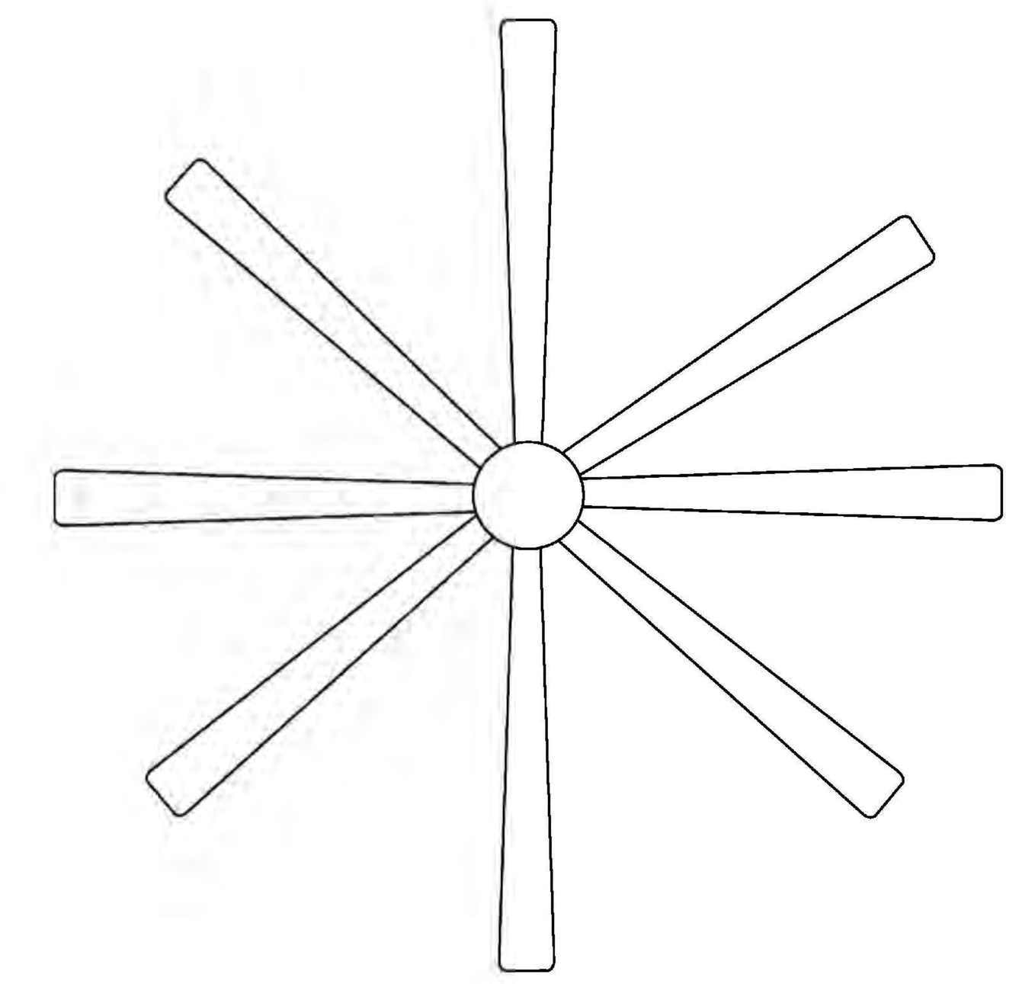
No.	DATE	BY	REFERENCE
1	02.17.23	JJE	ISSUE FOR BID

CONSTRUCTION PLANS:
MECHANICAL CONTROL SYSTEMS

PROJECT NO. C1004859
SCALE: AS NOTED
HOR:
VERT:
DATE: 08.15.22
SHEET NO. M3.1

Stratification Fans



BI – Exhust Fan Status

AO – Fan Speed

1. Note.Typical of 6 Fans.

AUTOMATED ELECTRIC A CONTROLS COMPANY	i-Vu	Oakland Library	Job Number	Revision	Drawing Set	Engineered By	Approved By	Date	Stratification Fans 1 Thru 6	6 of 7
					Submittal			8/6/21		

DRAWING NAME: C:\CSF\Cad\jobs\202031\202031 M3.2.dwg
PLOT DATE: 02-23-23
PLOTTED BY: Jeff

RPR ARCHITECTS

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125 14TH STREET

REGISTERED PROFESSIONAL ENGINEER JEFF ELMENDORF No. 27243 Exp. 6/30/23 MECHANICAL State of California
MECHANICAL ENGINEER

JEFF ELMENDORF
RCE NO. M 27243 EXP. 06/23
CHECKED BY JJE
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DRAWN BY MAH

No.	DATE	BY	REFERENCE
1	02.17.23	JJE	ISSUE FOR BID

CONSTRUCTION PLANS:
MECHANICAL CONTROL SYSTEMS

PROJECT NO. C1004859
SCALE: AS NOTED
HOR:
VERT:
DATE: 08.15.22
SHEET NO. M3.2

Fan Coil with Heating (Typical of 5)

Run Conditions - Scheduled:
The unit will run according to a user definable time schedule in the following modes:

Occupied Mode: The unit will maintain

A 70°F (adj.) heating setpoint.

Unoccupied Mode (night setback): The unit will maintain

A 55°F (adj.) heating setpoint.

Alarms will be provided as follows:

Low Zone Temp: If the zone temperature is less than the heating setpoint by a user definable amount (adj.).

Freeze Protection:
The unit will shut down and generate an alarm upon receiving a freezestat status.

Supply Air Smoke Detection:
The unit will shut down and generate an alarm upon receiving a supply air smoke detector status.

Supply Fan:
The supply fan will run anytime the unit is commanded to run, unless shutdown on safeties. To prevent short cycling, the supply fan will have a user definable (adj.) minimum runtime.

Alarms will be provided as follows:

Supply Fan Failure: Commanded on, but the status is off.

Supply Fan in Hand: Commanded off, but the status is on.

Supply Fan Runtime Exceeded: Status runtime exceeds a user definable limit (adj.).

Heating Coil Steam Valve:
The controller will measure the zone space temperature and modulate the heating coil steam valve to maintain its heating setpoint.

The heating will be enabled whenever:

Outside air temperature is less than 65°F (adj.).

AND the zone temperature is below heating setpoint.

AND the supply fan status is on.

The heating coil steam valve will open whenever the freezestat (if present) is on.

Filter Differential Pressure Monitor:
The controller will monitor the differential pressure across the filter.

Alarms will be provided as follows:

Filter Change Required: Prefilter differential pressure exceeds a user definable limit (adj.).

Supply Air Temperature:
The controller will monitor the supply air temperature.

Alarms will be provided as follows:

High Supply Air Temp: If the supply air temperature is greater than 110°F (adj.).

Low Supply Air Temp: If the supply air temperature is less than 50°F (adj.).

The associated exhaust fan will be enabled whenever:

- The Fan Coil is commanded to run.

Alarms will be provided as follows:

- Exhaust Fan Failure: Commanded on, but the status is off.
- Exhaust Fan in Hand: Commanded off, but the status is on.
- Exhaust Fan Runtime Exceeded: Status runtime exceeds a user definable limit (adj.).

	Hardware Points				Software Points						
Point Name	AI	AO	BI	BO	AV	BV	Loop	Sched	Trend	Alarm	Show On Graphic
Filter Differential Pressure	x								x		
Return Air Temp	x								x		x
Supply Air Temp	x								x		x
Heating Steam Valve		x							x		x
Mixed Air Dampers		x							x		x
Freezestat			x						x	x	x
Supply Air Smoke Detector			x						x	x	x
Supply Fan Status			x						x		x
Zone Override			x						x		x
Supply Fan Start/Stop				x					x		x
Exhaust Fan Start/Stop				x					x		x
Exhaust Fan Status			x						x		x
Cooling Setpoint					x				x		x
Economizer Zone Temp Setpoint					x				x		x
Heating Setpoint					x				x		x
Zone Temp					x				x		x
Schedule								x			
High Mixed Air Temp										x	
High Return Air Temp										x	
High Supply Air Temp										x	
High Zone Temp										x	
Low Mixed Air Temp										x	
Low Return Air Temp										x	
Low Supply Air Temp										x	

	Hardware Points				Software Points						
Point Name	AI	AO	BI	BO	AV	BV	Loop	Sched	Trend	Alarm	Show On Graphic
Low Zone Temp										x	
Filter Change Required										x	x
Supply Fan Failure										x	
Supply Fan in Hand										x	
Supply Fan Runtime Exceeded										x	
Totals	4	2	4	1	4	0	0	1	15	14	15

Total Hardware (11) Total Software (34)

Stratification Fans (Typical of 6)

Run Conditions - Scheduled:
The stratification fans will run according to the building occupied time schedule:

Stratification Fan:
The stratification fans will run anytime the building is scheduled to run. To prevent short cycling, the supply fan will have a user definable (adj.) minimum runtime.

Alarms will be provided as follows:

Fan Failure: Commanded on, but the status is off.

Fan in Hand: Commanded off, but the status is on.

	Hardware Points				Software Points						
Point Name	AI	AO	BI	BO	AV	BV	Loop	Sched	Trend	Alarm	Show On Graphic
Fan Start/Stop				x					x		x
Fan Speed		x							x		x
Totals	0	1	0	1	0	0	0	1	2	0	2

Total Hardware (2) Total Software (3)

Daikin VRF System

Run Conditions - Scheduled:
The VRF system will run according to a user definable time schedule in the following modes:

Occupied Mode: The unit indoor unit will maintain

- A 75°F (adj.) cooling setpoint
- A 70°F (adj.) heating setpoint.

BACnet integration:
The Daikin VRF system gateway will be monitored from the BMS system by BACnet/MSTP. The operator shall have the ability to monitor and change the zone temperature setpoints from the BMS system frontend.

Alarms will be provided as follows:

- High Zone Temp: If the zone temperature is greater than the cooling setpoint by a user definable amount (adj.).
- Low Zone Temp: If the zone temperature is less than the heating setpoint by a user definable amount (adj.).

	Hardware Points				Software Points						
Point Name	AI	AO	BI	BO	AV	BV	Loop	Sched	Trend	Alarm	Show On Graphic
Indoor Fan Schedule								x			x
Zone Temperature					x				x		x
Zone Cooling Setpoint					x				x		x
Zone Heating Setpoint					x				x		x
Low Zone Temp					x					x	x
High Zone Temp					x					x	x
Totals	0	0	0	0	5	0	0	1	2	0	6

Total Hardware (2) Total Software (11)

[redacted]

RPR ARCHITECTS

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OAKLAND MAIN LIBRARY INFRASTRUCTURE IMPROVEMENTS

125 14TH STREET

REGISTERED PROFESSIONAL ENGINEER JEFFREY J. ELMENDORF No. M 27243 Exp. 6/30/23 MECHANICAL State of California

MECHANICAL ENGINEER

JEFF ELMENDORF
RCE NO. M 27243 EXP. 06/23
CHECKED BY JJE
DESIGNED BY JJE
DRAWN BY MAH

No.	DATE	BY	REFERENCE
1	02.17.23	JJE	ISSUE FOR BID

CONSTRUCTION PLANS:

MECHANICAL CONTROL SYSTEMS SEQUENCE OF OPERATIONS

PROJECT NO.
C1004859

SCALE: AS NOTED
HOR:
VERT:
DATE: 08.15.22

SHEET NO.
M3.3
40 OF 62

DRAWING NAME: C:\CSF\Cad\plot\202031\202031 M3.3.dwg
PLOTTING DATE: 02/17/23
PLOTTED BY: Jeff

Fan Coil with Heating & Economizer

Run Conditions - Scheduled:
The unit will run according to a user definable time schedule in the following modes:

Occupied Mode: The unit will maintain

- A 75°F (adj.) cooling setpoint
- A 70°F (adj.) heating setpoint.

Unoccupied Mode (night setback): The unit will maintain

- A 70°F (adj.) heating setpoint.

Alarms will be provided as follows:

- High Zone Temp: If the zone temperature is greater than the cooling setpoint by a user definable amount (adj.).
- Low Zone Temp: If the zone temperature is less than the heating setpoint by a user definable amount (adj.).

Freeze Protection:
The unit supply fan will shut down and generate an alarm upon receiving a freezestat status.

Supply Air Smoke Detection:
The unit will shut down and generate an alarm upon receiving a supply air smoke detector status.

Supply Fan:
The supply fan will run anytime the unit is commanded to run, unless shutdown on safeties. To prevent short cycling, the supply fan will have a user definable (adj.) minimum runtime.

Alarms will be provided as follows:

- Supply Fan Failure: Commanded on, but the status is off.
- Supply Fan in Hand: Commanded off, but the status is on.
- Supply Fan Runtime Exceeded: Status runtime exceeds a user definable limit (adj.).

	Hardware Points				Software Points						
Point Name	AI	AO	BI	BO	AV	BV	Loop	Sched	Trend	Alarm	Show On Graphic
Supply Fan Start/Stop				x					x		x
Exhaust Fan Start/Stop				x					x		x
Exhaust Fan Status			x						x		x
Cooling Setpoint					x				x		x
Heating Setpoint					x				x		x
Zone Temp					x				x		x
Schedule								x			
High Mixed Air Temp										x	
High Return Air Temp										x	
High Supply Air Temp										x	
High Zone Temp										x	
Low Mixed Air Temp										x	
Low Return Air Temp										x	
Low Supply Air Temp										x	
Low Zone Temp										x	
Filter Change Required										x	x
Supply Fan Failure										x	
Supply Fan in Hand										x	
Supply Fan Runtime Exceeded										x	
Totals	5	2	4	1	4	0	0	1	15	14	16

Total Hardware (12) Total Software (34)

Heating Coil Steam Valve:
The controller will measure the zone temperature and modulate the heating coil steam valve to maintain its heating setpoint.

The heating will be enabled whenever:

- Outside air temperature is less than 65°F (adj.).
- AND the zone temperature is below heating setpoint.
- AND the supply fan status is on.
- AND the economizer is not active.

The heating coil steam valve will open whenever the freezestat (if present) is on.

Filter Differential Pressure Monitor:
The controller will monitor the differential pressure across the filter.

Alarms will be provided as follows:

Filter Change Required: Prefilter differential pressure exceeds a user definable limit (adj.).

Economizer:
The controller will measure the zone temperature and modulate the economizer dampers in sequence to maintain a setpoint 2°F less than the zone cooling setpoint. The outside air dampers will maintain a minimum adjustable position of 20% (adj.) open whenever occupied.

The economizer will be enabled whenever:

- Outside air temperature is less than 65°F (adj.).
- AND the outside air temperature is less than the return air temperature.
- AND the supply fan status is on.

The economizer will close whenever:

- Mixed air temperature drops from 45°F to 40°F (adj.).
- OR on loss of supply fan status.
- OR the freezestat (if present) is on.

The outside and exhaust air dampers will close and the return air damper will open when the unit is off. If Optimal Start Up is available, the mixed air damper will operate as described in the occupied mode except that the outside air damper will modulate to fully closed.
Minimum Outside Air Ventilation - Fixed Percentage:
The outside air dampers will maintain a minimum position (adj.) during building occupied hours and be closed during unoccupied hours.

Filter Differential Pressure Monitor:
The controller will monitor the differential pressure across the prefilter.

Alarms will be provided as follows:

- Filter Change Required: Prefilter differential pressure exceeds a user definable limit (adj.).

Mixed Air Temperature:
The controller will monitor the mixed air temperature and use as required for economizer control.

Alarms will be provided as follows:

- High Mixed Air Temp: If the mixed air temperature is greater than 90°F (adj.).
- Low Mixed Air Temp: If the mixed air temperature is less than 45°F (adj.).

Return Air Temperature:
The controller will monitor the return air temperature and use as required for economizer control.

Alarms will be provided as follows:

- High Return Air Temp: If the return air temperature is greater than 90°F (adj.).
- Low Return Air Temp: If the return air temperature is less than 45°F (adj.).

Supply Air Temperature:
The controller will monitor the supply air temperature.

Alarms will be provided as follows:

- High Supply Air Temp: If the supply air temperature is greater than 120°F (adj.).
- Low Supply Air Temp: If the supply air temperature is less than 45°F (adj.).

The associated exhaust fan will be enabled whenever:

- The Fan Coil is commanded to run.

Alarms will be provided as follows:

- Exhaust Fan Failure: Commanded on, but the status is off.
- Exhaust Fan in Hand: Commanded off, but the status is on.
- Exhaust Fan Runtime Exceeded: Status runtime exceeds a user definable limit (adj.).

	Hardware Points				Software Points						
Point Name	AI	AO	BI	BO	AV	BV	Loop	Sched	Trend	Alarm	Show On Graphic
Mixed Air Temp	x								x		x
Prefilter Differential Pressure	x								x		
Return Air Temp	x								x		x
Supply Air Temp	x								x		x
Mixed Air Temp	x								x		x
Heating Steam Valve		x							x		x
Mixed Air Dampers		x							x		x
Freezestat			x						x	x	x
Supply Air Smoke Detector			x						x	x	x
Supply Fan Status			x						x		x
Zone Override			x						x		x

Steam Boiler Manager

Steam System - Boiler Manager - Run Conditions:
The steam boiler system will be enabled to run whenever the building is within 2 hours (adj.) of the building occupancy, the (outside air temperature is less than 70°F (adj.) and the average space temperature being monitored is less than 70°F (adj.).

To prevent short cycling, the boiler manager will run for and be off for minimum adjustable times (both user definable).

Each steam boiler will run subject to its own internal safeties and controls.

Boiler Staging - Two Equal Sized Steam Boilers Running in Parallel:
This section refers to the staging and sequencing of each boiler "train". The sequence of operation for each individual boiler and its associated support equipment (such as pumps) are not included in this section.

The steam boiler manager controller will determine the library heating load and will stage the boilers on a lead/lag basis to meet rising heating demand by monitoring the main steam header pressure and enabling the lead/lag boiler as required to maintain the steam header pressure setpoint:

The following setpoints are recommended values. All setpoints will be field adjusted during the commissioning period to meet the requirements of actual field conditions.

The lead steam boiler will run anytime the boiler manager is enabled. The lag boiler shall be enabled to run as follows when the lead boiler has been enabled for 30 minutes (adj.) and the main steam header pressure has dropped below xx psig for 30 minutes (adj.). To prevent short cycling, there will be a user definable (adj.) delay between boiler stages, and each stage will have a user definable (adj.) minimum runtime. The third boiler in sequence shall operate as a standby boiler upon a failure with either the lead or lag boiler.

The steam boiler staging order will be user definable. The designated lead boiler (user definable) will rotate upon one of the following conditions (user selectable):

- manually through a software switch
- if boiler runtime (adj.) is exceeded
- daily
- weekly
- monthly

Each boiler will run subject to its own internal safeties and controls. On failure of any boiler, the failed boiler will be "removed" from operation and the next available piece of equipment as defined by the user will be staged on in its place.

Alarms will be provided as follows:

- Steam Boiler1 Failure: Commanded on, but the status is off.
- Steam Boiler2 Failure: Commanded on, but the status is off.
- Steam Boiler3 Failure: Commanded on, but the status is off.

The boiler feedwater pump shall be monitored anytime the steam boiler system is enable for pump status

Alarms will be provided as follows:

- Feedwater Pump Failure: Commanded on, but the status is off.

	Hardware Points										
Point Name	AI	AO	BI	BO	AV	BV	Loop	Sched	Trend	Alarm	Show On Graphic
Main Steam Temperature	x								x		x
Main Steam Header Pressure	x								x		x
Outside Air Temp	x								x		x
Steam Boiler 1 Failure			x						x	x	x
Steam Boiler 2 Failure			x						x	x	x
Steam Boiler 3 Failure			x						x	x	x
Feedwater Pump System Enable				x					x		x
Feedwater Pump Status									x		x
Zone Space Temperature	x								x	x	x
Totals	4	0	3	1	0	0	0	0	9	4	7

Total Hardware (8) Total Software (13)

DRAWING NAME: C:\CSF\Cad\jobs\202031\202031 M3.4.dwg
PLOT DATE: 02-23-23
PLOTTED BY: Jeff

RPR ARCHITECTS

ELMENDORF & ASSOCIATES
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OAKLAND, CA 94612
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OAKLAND MAIN LIBRARY
INFRASTRUCTURE IMPROVEMENTS
125 14TH STREET

MECHANICAL ENGINEER

JEFF ELMENDORF
RCE NO. M 27243 EXP. 06/23

CHECKED BY	JJE
DESIGNED BY	JJE
DRAWN BY	MAH

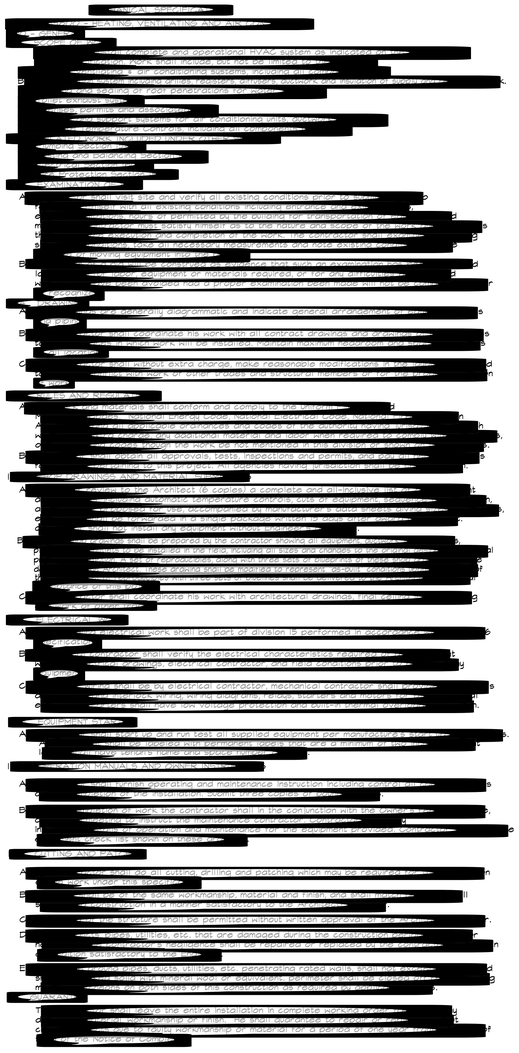
No.	DATE	BY	REFERENCE
1	02.17.23	JJE	ISSUE FOR BID

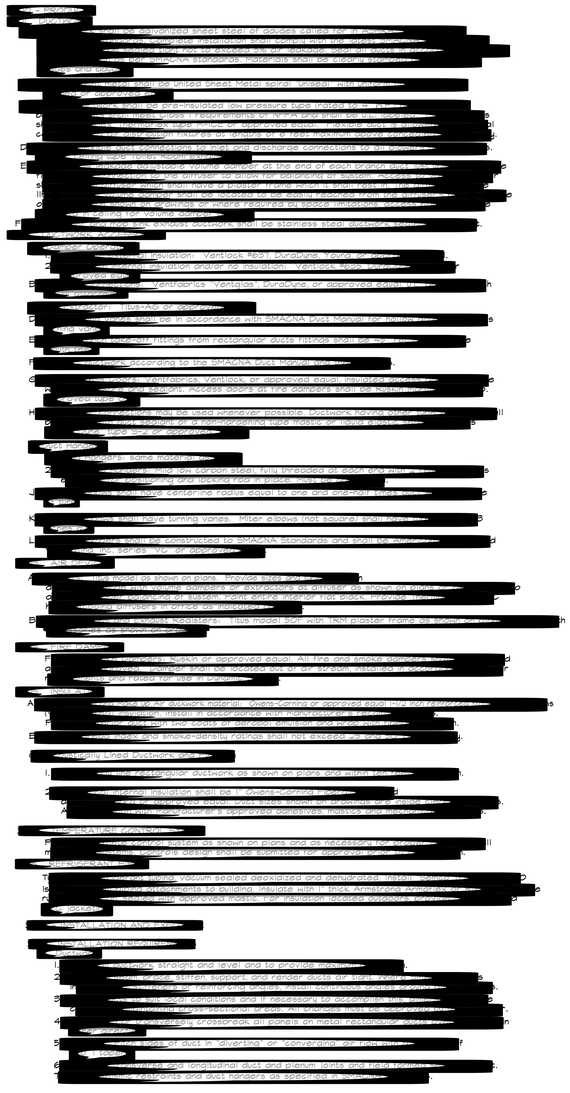
CONSTRUCTION PLANS:
MECHANICAL CONTROL SYSTEMS SEQUENCE OF OPERATIONS

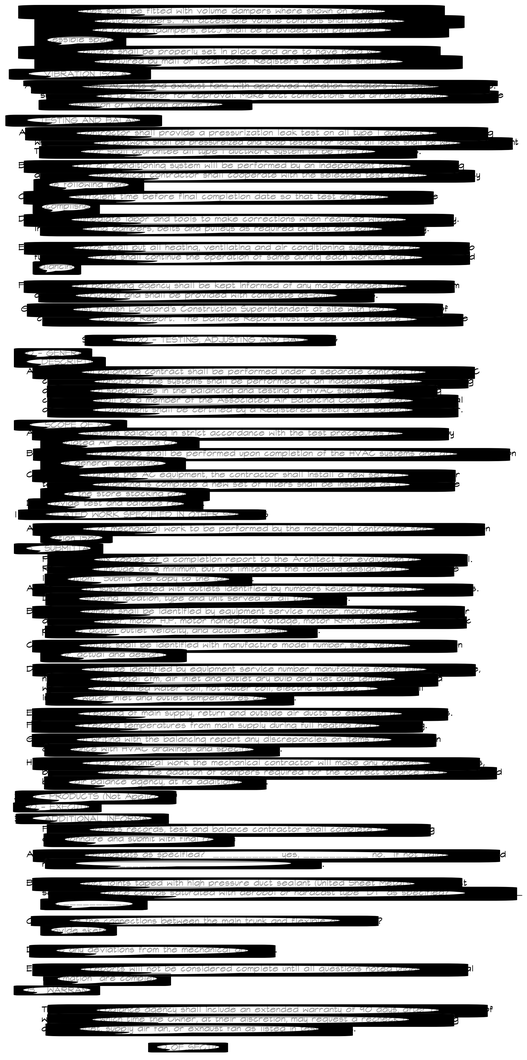
PROJECT NO. C1004859

SCALE: AS NOTED
HOR:
VERT:
DATE: 08.15.22

SHEET NO. M3.4







DRAWING NAME: O:\CSF\Cad\jobs\2020\12002031 M4.1.dwg
PLOT DATE: 08/24/23
PLOTTED BY: Jeff

RPR ARCHITECTS

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OAKLAND MAIN LIBRARY
INFRASTRUCTURE IMPROVEMENTS
125 14TH STREET

REGISTERED PROFESSIONAL ENGINEER — JEFFREY J. ELMENDORF — Exp. 6/30/23 — MECHANICAL — State of California
MECHANICAL ENGINEER

JEFF ELMENDORF
RCE NO. M 27243 EXP. 06/23
CHECKED BY JJE
DESIGNED BY JJE
DRAWN BY MAH

No.	DATE	BY	REFERENCE
1	02.17.23	JJE	ISSUE FOR BID

CONSTRUCTION PLANS:
MECHANICAL SPECIFICATIONS

PROJECT NO.
C1004859

SCALE: AS NOTED
HOR:
VERT:
DATE: 08.15.22

SHEET NO.
M4.1
42 OF 62

CERTIFICATE OF COMPLIANCE	NRCC-MCH-E
This document is used to demonstrate compliance for mechanical systems that are within the scope of the permit application and are demonstrating compliance using the prescriptive path outlined in §140.4, or §141.0(b)2 for alterations.	
Project Name: Oakland Main Library Infrastructure Improvements	Report Page: Page 1 of 10
Project Address: 125 14th Street	Date Prepared: 2022-02-23

A. GENERAL INFORMATION

01	Project Location (city)	Oakland	04	Total Conditioned Floor Area	1,830
02	Climate Zone	3	05	Total Unconditioned Floor Area	
03	Occupancy Types Within Project:		06	# of Stories (Habitable Above Grade)	1

☐ Office (B) ☐ Retail (M) ☐ Non-refrigerated Warehouse (S)
☐ Hotel/ Motel Guest Rooms (R-1) ☐ School (E) ☐ Healthcare Facility (I)
☐ High-Rise Residential (R-2/R-3) ☐ Relocatable Class Bldg (E) ☑ Other (Write in): Community Room

[1] *FOOTNOTES: Climate zone can be determined on the California Energy Commission's website at http://www.energy.ca.gov/maps/renewable/building_climate_zones.html*

B. PROJECT SCOPE

Table Instructions: Include any mechanical systems that are within the scope of the permit application and are demonstrating compliance using the prescriptive path outlined in §140.4, or §141.0(b)2 for alterations.

My project consists of (check all that apply)

01 Air System(s)	02 Wet System Components	03 Dry System Components
☑ Heating Air System	☐ Water Economizer	☐ Air Economizer
☑ Cooling Air System	☐ Pumps	☐ Electric Resistance Heat
Mechanical Controls	☐ Hydronic System Piping	☐ Fan Systems
☑ Mechanical Controls (existing to remain, altered or new)	☐ Cooling Towers	☐ Ductwork (existing to remain, altered or new)
	☐ Chillers	☑ Ventilation
	☐ Boilers	☐ Zonal Systems/ Terminal Boxes

C. COMPLIANCE RESULTS

Table Instructions: If any cell on this table says "DOES NOT COMPLY" or "COMPLIES with Exceptional Conditions" refer to Table D. for guidance.

01		02		03		04		05		06		07		08	09
System Summary §110.1, §110.2, §140.4	AND	Pumps §140.4(k)	AND	Fans/ Economizers §140.4(c), §140.4(e)	AND	System Controls §110.2, §120.2, §140.4(f)	AND	Ventilation §120.1	AND	Terminal Box Controls §140.4(d)	AND	Distribution §120.3, §140.4(l)	AND	Cooling Towers §110.2(e)2	**Compliance Results**
(See Table F)		(See Table G)		(See Table H)		(See Table I)		(See Table J)		(See Table K)		(See Table L)		(See Table M)	
Yes	AND		AND		AND	Yes	AND	Yes	AND		AND		AND		**COMPLIES**
Mandatory Measures Compliance (See Table Q for Details)															**COMPLIES**

CERTIFICATE OF COMPLIANCE	NRCC-MCH-E
Project Name: Oakland Main Library Infrastructure Improvements	Report Page: Page 2 of 10
Project Address: 125 14th Street	Date Prepared: 2022-02-23

D. EXCEPTIONAL CONDITIONS

This table is auto-filled with uneditable comments because of selections made or data entered in tables throughout the form.

Selections made in Table O have been changed by the permit applicant. See Table E. Additional Remarks for permit applicant's explanation.

E. ADDITIONAL REMARKS

This table includes remarks made by the permit applicant to the Authority Having Jurisdiction.

F. HVAC SYSTEM SUMMARY (DRY & WET SYSTEMS)

Table Instructions: Complete the following equipment schedules to show compliance with mandatory requirements found in §110.1 and §110.2(a) and prescriptive requirements found in §140.4(a), §140.4(b) and §140.4(k) or §141.0(b)2 for alterations.

Dry System Equipment Sizing (includes air conditioners, condensers, heat pumps, VRF, furnaces and unit heaters)

01	02	03	04	05	06	07	08	09	10	11
				Equipment Sizing per Mechanical Schedule (kBtu/h) §140.4 (a&b)						
				Heating Output[2,3]			Cooling Output[2,3]		Load Calculations[3,4]	
Name or Item Tag	Equipment Category per Tables 110.2	Equipment Type per Tables 110.2 & Title 20	Smallest Size Available[1] §140.4(a)	Per Design (kBtu/h)	Rated (kBtu/h)	Supp. Heating Output (kBtu/h)	Sensible Per Design (kBtu/h)	Rated (kBtu/h)	Total Heating Load (kBtu/h)	Total Sensible Cooling Load (kBtu/h)
FC-1-FC-8	Variable Refrigerant Flow	VRF heat pump, air cooled	Yes	144	144	0	144	144	54.5	78.8

[1] *FOOTNOTES: Equipment shall be the smallest size, within the available options of the desired equipment line, necessary to meet the design heating and cooling loads of the building per §140.4(a). Healthcare facilities are excepted.*
[2] *It is common practice to show rated output capacity on the equipment schedule. Sensible cooling output comes from specification sheet tables.*
[3] *If equipment is heating only, leave cooling output and load blank. If equipment is cooling only, leave heating output and load blank.*
[4] *Authority Having Jurisdiction may ask for load calculations used for compliance per §140.4(b).*

Table Continued

CERTIFICATE OF COMPLIANCE	NRCC-MCH-E
Project Name: Oakland Main Library Infrastructure Improvements	Report Page: Page 3 of 10
Project Address: 125 14th Street	Date Prepared: 2022-02-23

Dry System Equipment Efficiency (other than Package Terminal Air Conditioners (PTAC) and Package Terminal Heat Pumps (PTHP))

01	02	03	04	05	06	07	08	09
		Heating Mode					Cooling Mode	
Name or Item Tag	Size Category (Btu/h)	Rating Condition (°F)	Efficiency Unit	Min Efficiency Required per Tables 110.2/ Title 20	Design Efficiency	Efficiency Unit	Min Efficiency Required per Tables 110.2/ Title 20	Design Efficiency
F	≥135,000 and <240,000	47°Fdb/43°Fwb OSA	COP	3.2	3.67	**EER**	**10.6**	12.3
						IEER	**13.9**	24.8

G. PUMPS

This Section Does Not Apply

H. FAN SYSTEMS & AIR ECONOMIZERS

This Section Does Not Apply

I. SYSTEM CONTROLS

Table Instructions: Complete the following Table to demonstrate compliance with mandatory controls in §110.2 and §120.2 and prescriptive controls in §140.4(f) and (n) or requirements in §141.0(b)2E for altered space conditioning systems.

01	02	03	04	05	06	07	08	09
System Name	System Zoning	Conditioned Floor Area Being Served (ft²)	Thermostats §110.2(b) & (c)[1] §120.2(e) or §141.0(b)2E	Shut-Off Controls §120.2(e)	Isolation Zone Controls §120.2(g)	Demand Response §110.12 and §120.2(b)	Supply Air Temp. Reset §140.4(f)	Window Interlocks per §140.4(n)
FC-1-FC-8	single zone	≤ 25,000 ft²	Setback Thermostat	NA: 7 day per §120.2(e)1	NA: Single Zone	DR Tstat per §110.12	NA: Alteration	NA: No operable windows

[1] *FOOTNOTES: Gravity gas wall heaters, gravity floor heaters, gravity room heaters, non-central electric heaters, fireplaces or decorative gas appliances, wood stoves are not required to have setback thermostats.*
* *NOTES: Controls with a * require a note in the space below explaining how compliance is achieved.*
EX: System 1: SA Temp Reset: Exempt because zones compliant with §140.4(d); EXCEPTION 1 to §140.4(f)

CERTIFICATE OF COMPLIANCE	NRCC-MCH-E
Project Name: Oakland Main Library Infrastructure Improvements	Report Page: Page 4 of 10
Project Address: 125 14th Street	Date Prepared: 2022-02-23

J. VENTILATION AND INDOOR AIR QUALITY

Table Instructions: Complete the following Table to demonstrate compliance with mandatory ventilation requirements in §120.1 and §120.2(e)3B for all nonresidential, high-rise residential and hotel/motel occupancies. For alterations, only ventilation systems being altered within the scope of the permit application need to be documented in this table. In lieu of this table, the required outdoor ventilation rates and airflows may be shown on the plans or the calculations can be presented in a spreadsheet.

01	☐	Check the box if the project is showing ventilation calculations on the plans, or attaching the calculations instead of completing this table.
02	☐	Check this box if the project includes Nonresidential or Hotel/Motel spaces
	☐	Check this box if the project includes new or altered high-rise residential dwelling units
03	☐	Check the box if the project is using natural ventilation in any spaces to meet required ventilation rates per §120.1(c)2.

Nonresidential and Hotel/ Motel Ventilation Systems

04	05	06	07
System Name: FC-1-FC-8	System Design OA CFM Air Flow[1]: 280	System Design Transfer Air CFM: 0	Air Filtration per §120.1(c) and §141.0(b)2[2]: Provided per §141.0(b)2c (alteration)

08	09	10	11	12	13	14	15	16
	Mechanical Ventilation Required per §120.1(c)3[3]				Exh. Vent. per §120.1(c)4			DCV or Occupant Sensor Controls per §120.1(d)3, §120.1(d)5 & §120.2(e)3[4]
Space Name or Item Tag	Occupancy Type[4]	Conditioned Floor Area (ft²)	# of showerheads / toilets	# of people[5]	Required Min OA CFM	Required Minimum CFM	Provided per Design CFM	
Community Room	All others	1,830		16	274.5		280	DCV: NA: Not required per §120.1(d)3 Occ Sensor: Provided per §120.1(d)5

17	Total System Required Min OA CFM	274.5	18	Ventilation for this System Complies?	Yes

CERTIFICATE OF COMPLIANCE	NRCC-MCH-E
Project Name: Oakland Main Library Infrastructure Improvements	Report Page: Page 5 of 10
Project Address: 125 14th Street	Date Prepared: 2022-02-23

[1] *FOOTNOTES: System CFM should include both mechanical and natural ventilation for the zone/system.*
[2] *Air filtration requirements apply to the following three system types per §120.1(c)14: space conditioning systems utilizing ducts to supply air to occupiable space; supply-only ventilation systems providing outside air to occupiable space; supply side of balanced ventilation systems including heat recovery and energy recovery ventilation systems providing outside air to occupiable space.*
[3] *Uniform Mechanical Code may have more stringent ventilation requirements; the most stringent code requirement takes precedence.*
[4] *See Standards Tables 120.1-A and 120.1-B*
[5] *For lecture halls with fixed seating, the expected number of occupants shall be determined in accordance with the California Building Code.*
[6] *§120.2(e)3 requires systems serving rooms that are required by §130.1(c) to have lighting occupancy sensing controls to also have occupancy sensing zone controls for ventilation. Examples of spaces which require lighting occupancy sensors include offices 250ft² or smaller, multipurpose rooms less than 1,000ft², classrooms, conference rooms, restrooms, aisles and open areas in warehouses, library book stack aisles, corridors, stairwells, parking garages, and loading and unloading zones, unless excepted by §130.1(c).*

K. TERMINAL BOX CONTROLS

This Section Does Not Apply

L. DISTRIBUTION (DUCTWORK AND PIPING)

This Section Does Not Apply

M. COOLING TOWERS

This Section Does Not Apply

N. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION

Table Instructions: Selections have been made based on information provided in previous tables of this document. If any selection needs to be changed, please explain why 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/

YES	NO	Form/Title	Systems To Be Field Verified	Field Inspector Pass	Field Inspector Fail
◉		NRCI-MCH-01-E - Must be submitted for all buildings.	FC-1-FC-8	☐	☐

CERTIFICATE OF COMPLIANCE	NRCC-MCH-E
Project Name: Oakland Main Library Infrastructure Improvements	Report Page: Page 6 of 10
Project Address: 125 14th Street	Date Prepared: 2022-02-23

O. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

Table Instructions: Selections have been made based on information provided in previous tables of this document. If any selection needs to be changed, please explain why 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/NRCA/

YES	NO	Form/Title	Systems To Be Field Verified	Field Inspector Pass	Field Inspector Fail
◉	○	NRCA-MCH-02-A Outdoor Air must be submitted for all newly installed HVAC units. *Note: MCH02-A can be performed in conjunction with MCH-07-A Supply Fan VFD Acceptance (if applicable) since testing activities overlap.*	FC-1-FC-8	☐	☐
○	◉	NRCA-MCH-03-A Constant Volume Single Zone HVAC *NOTE: This form does not automatically move to "Yes". If Constant Volume Single Zone HVAC Systems are included in the scope, permit applicant should move this form to "Yes".*		☐	☐
○	◉	NRCA-MCH-04-A Air Distribution Duct Leakage		☐	☐
○	◉	NRCA-MCH-05-A Air Economizer Controls		☐	☐
○	◉	NRCA-MCH-06-A Demand Control Ventilation Systems Acceptance must be submitted for all systems required to employ demand controlled ventilation (refer to §120.1(c)3) can vary outside ventilation flow rates based on maintaining interior carbon dioxide (CO2) concentration setpoints.		☐	☐
○	◉	NRCA-MCH-07-A Supply Fan Variable Flow Controls		☐	☐
○	◉	NRCA-MCH-08-A Valve Leakage Test		☐	☐
○	◉	NRCA-MCH-09-A Supply Water Temperature Reset Controls		☐	☐
○	◉	NRCA-MCH-10-A Hydronic System Variable Flow Controls		☐	☐
○	◉	NRCA-MCH-11-A Automatic Demand Shed Controls		☐	☐

CERTIFICATE OF COMPLIANCE	NRCC-MCH-E
Project Name: Oakland Main Library Infrastructure Improvements	Report Page: Page 7 of 10
Project Address: 125 14th Street	Date Prepared: 2022-02-23

○	◉	NRCA-MCH-12-A FDD for Packaged Direct Expansion Units		☐	☐
○	◉	NRCA-MCH-13-A Automatic FDD for Air Handling Units and Zone Terminal Units Acceptance		☐	☐
○	◉	NRCA-MCH-14-A Distributed Energy Storage DX AC Systems Acceptance *NOTE: This form does not automatically move to "Yes". If Distributed Energy Storage DX AC Systems are included in the scope, permit applicant should move this form to "Yes".*		☐	☐
○	◉	NRCA-MCH-15-A Thermal Energy Storage (TES) System Acceptance *NOTE: This form does not automatically move to "Yes". If Chilled Water Storage, Ice-on-Coil Internal Melt, Ice-on-Coil External Melt, Ice Harvester, Brine, Ice-Slurry, Eutectic Salt, Clathrate Hydrate Slurry (CHS), Cryogenic or Encapulated (Ice Ball) Systems are included in the scope, permit applicant should move this form to "Yes".*		☐	☐
○	◉	NRCA-MCH-16-A Supply Air Temperature Reset Controls		☐	☐
○	◉	NRCA-MCH-17-A Condenser Water Temperature Reset Controls		☐	☐
○	◉	NRCA-MCH-18 Energy Management Control Systems		☐	☐
◉	○	NRCA-MCH-19 Occupancy Sensor Controls		☐	☐
○	◉	NRCA-MCH-20 Multi-Family Ventilation		☐	☐
○	◉	NRCA-MCH-21 Multi-Family Envelope Leakage		☐	☐

CERTIFICATE OF COMPLIANCE	NRCC-MCH-E
Project Name: Oakland Main Library Infrastructure Improvements	Report Page: Page 8 of 10
Project Address: 125 14th Street	Date Prepared: 2022-02-23

P. DECLARATION OF REQUIRED CERTIFICATES OF VERIFICATION

Table Instructions: Selections have been made based on information provided in previous tables of this document. If any selection needs to be changed, please explain why in Table E. Additional Remarks. These documents must be completed by a HERS Rater and provided to the building inspector during construction. The final documents must be created by a HERS Providers registry, but drafts can be found online at https://www.energy.ca.gov/title24/2019standards/2019_compliance_documents/Nonresidential_Documents/NRCV/

YES	NO	Form/Title	Field Inspector Pass	Field Inspector Fail
○	◉	NRCV-MCH-04-H Duct Leakage Test *NOTE: Must be completed by a HERS Rater*	☐	☐
○	◉	NRCV-MCH-24 Enclosure Air Leakage Worksheet *NOTE: Must be completed by a HERS Rater*	☐	☐
○	◉	NRCV-MCH-27 High-rise Residential *NOTE: Must be completed by a HERS Rater*	☐	☐
○	◉	NRCV-MCH-32 Local Mechanical Exhaust *NOTE: Must be completed by a HERS Rater*	☐	☐

CERTIFICATE OF COMPLIANCE	NRCC-MCH-E
Project Name: Oakland Main Library Infrastructure Improvements	Report Page: Page 9 of 10
Project Address: 125 14th Street	Date Prepared: 2022-02-23

Q. MANDATORY MEASURES DOCUMENTATION LOCATION

Table Instructions: Indicate where mandatory measures are documented in the plan set or construction documentation. For any mandatory measures that do not apply, mark the plan sheet or construction document location as "N/A", any active cells that are left blank will result in non-compliance in Table C.

01		02
		Plan sheet or construction document location
Compliance with Mandatory Measures documented through MCH Mandatory Measures Note Block:	Yes	Mech Sheets

DRAWING NAME: C:\CSF\Cad\Jobs\2020\1202001 M4.2.dwg
DATE/TIME: 08.15.22
PLOTTED BY: Jeff

RPR ARCHITECTS

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125 14TH STREET

REGISTERED PROFESSIONAL ENGINEER — JEFF L. ELMENDORF — No. M 27243 — Exp. 6/30/23 — MECHANICAL — State of California
MECHANICAL ENGINEER

JEFF ELMENDORF
RCE NO. M 27243 EXP. 06/23
CHECKED BY JJE
DESIGNED BY JJE
DRAWN BY MAH

No.	DATE	BY	REFERENCE
1	02.17.23	JJE	ISSUE FOR BID

CONSTRUCTION PLANS:
ENERGY COMPLIANCE

PROJECT NO.
C1004859

SCALE: AS NOTED
HOR:
VERT:
DATE: 08.15.22

SHEET NO.
M4.2
43 OF 62

STATE OF CALIFORNIA

Mechanical Systems

NRCC-MCH-E (Created)

CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-MCH-E
Project Name: Oakland Main Library Infrastructure Improvements	Report Page:	Page 10 of 10
Project Address: 125 14th Street	Date Prepared:	2022-02-23

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT			
1. I certify that this Certificate of Compliance documentation is accurate and complete.			
Documentation Author Name:	Nicholas Mott	Documentation Author Signature:	Nicholas Mott
Company:	Wade Energy	Signature Date:	2/23/2022
Address:	1942 Linda Drive	CEA/ HERS Certification Identification (if applicable):	n/a
City/State/Zip:	Pleasant Hill, CA 94523	Phone:	408-963-9735

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 are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.**
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 inspections. I understand that a completed signed copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy.**

Responsible Designer Name:	Jeff Elmendorf	Responsible Designer Signature:	[signature]
Company :	Elmendorf & Associates	Date Signed:	2/23/22
Address:	517 Pine Street	License:	M27243
City/State/Zip:	Sausalito, CA 94965	Phone:	415-332-8388

DRAWING NAME: C:\CSF\Cad\jobs\202031\202031 M4.3.dwg
PLOT DATE: 02-23-23
PLOTTED BY: Jeff

RPR ARCHITECTS

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CITY OF OAKLAND
DEPARTMENT OF ENGINEERING & CONSTRUCTION
250 FRANK H. OGAWA PLAZA
SUITE 4314
OAKLAND, CA 94612
(510) 238-3437

OAKLAND MAIN LIBRARY
INFRASTRUCTURE IMPROVEMENTS
125 14TH STREET

REGISTERED PROFESSIONAL ENGINEER JEFF ELMENDORF No. 27243 Exp. 6/30/23 MECHANICAL State of California
MECHANICAL ENGINEER

JEFF ELMENDORF
RCE NO. M 27243 EXP. 06/23
CHECKED BY JJE
DESIGNED BY JJE
DRAWN BY MAH

No.	DATE	BY	REFERENCE
1	02.17.23	JJE	ISSUE FOR BID

CONSTRUCTION PLANS:
ENERGY COMPLIANCE

PROJECT NO. C1004859
SCALE: AS NOTED
HOR:
VERT:
DATE: 08.15.22
SHEET NO. M4.3
44 OF 62

LIGHTING FIXTURE SCHEDULE

TAG	DESCRIPTION	MANUFACTURER	V	LAMPS	W	DIMMING	MOUNTING	REMARKS
A4	4 FT LINEAR 2" SURFACE MOUNTED SLOT LUMINAIRE, 600L/FT	LITHONIA SL2S LLP 4 4 80CRI 35K 600LMF MIN1 MVOLT (SCBA) ZT	MV	LED 2,400 LUMENS, 80 CRI 3500K	24	0-10V	SURFACE MOUNTED	
A4E	SAME AS ABOVE w/ CA APPROVED 90 MIN EMERGENCY BATTERY BACK-UP	LITHONIA SL2S LLP 4 4 80CRI 35K 600LMF MIN1 MVOLT (SCBA) ZT E10WLCP (BATTERY)	MV	LED 2,400 LUMENS, 80 CRI 3500K	24	0-10V	SURFACE MOUNTED	
A8	8 FT LINEAR 2" SURFACE MOUNTED SLOT LUMINAIRE, 600L/FT	LITHONIA SL2S LLP 8 8 80CRI 35K 600LMF MIN1 MVOLT (SCBA) ZT	MV	LED 4,800 LUMENS, 80 CRI 3500K	45	0-10V	SURFACE MOUNTED	
A12	12 FT LINEAR 2" SURFACE MOUNTED SLOT LUMINAIRE, 600L/FT	LITHONIA SL2S LLP 12 12 80CRI 35K 600LMF MIN1 MVOLT (SCBA) ZT	MV	LED 7,200 LUMENS, 80 CRI 3500K	68	0-10V	SURFACE MOUNTED	
A4R	4 FT LINEAR 2" RECESSED MOUNTED SLOT LUMINAIRE, 600L/FT	LITHONIA SL2L LDP 4 4 80CRI 35K 600LMF MIN1 MVOLT (SCBA) ZT	MV	LED 2,400 LUMENS, 80 CRI 3500K	24	0-10V	RECESSED IN CEILING	
A4ER	SAME AS ABOVE w/ CA APPROVED 90 MIN EMERGENCY BATTERY BACK-UP	LITHONIA SL2L LDP 4 4 80CRI 35K 600LMF MIN1 MVOLT (SCBA) ZT E10WLCP (BATTERY)	MV	LED 2,400 LUMENS, 80 CRI 3500K	24	0-10V	RECESSED IN CEILING	
A8R	8 FT LINEAR 2" RECESSED MOUNTED SLOT LUMINAIRE, 600L/FT	LITHONIA SL2L LDP 8 8 80CRI 35K 600LMF MIN1 MVOLT (SCBA) ZT	MV	LED 4,800 LUMENS, 80 CRI 3500K	45	0-10V	RECESSED IN CEILING	
A12R	12 FT LINEAR 2" RECESSED MOUNTED SLOT LUMINAIRE, 600L/FT	LITHONIA SL2L LDP 12 12 80CRI 35K 600LMF MIN1 MVOLT (SCBA) ZT	MV	LED 7,200 LUMENS, 80 CRI 3500K	68	0-10V	RECESSED IN CEILING	
B4	4 FT LINEAR 2" SURFACE MOUNTED SLOT LUMINAIRE, 400L/FT	LITHONIA SL2S LLP 4 4 80CRI 35K 400LMF MIN1 MVOLT (SCBA) ZT	MV	LED 1,600 LUMENS, 80 CRI 3500K	14	0-10V	SURFACE MOUNTED	
B4E	SAME AS ABOVE w/ CA APPROVED 90 MIN EMERGENCY BATTERY BACK-UP	LITHONIA SL2S LLP 4 4 80CRI 35K 400LMF MIN1 MVOLT (SCBA) ZT E10WLCP (BATTERY)	MV	LED 1,600 LUMENS, 80 CRI 3500K	14	0-10V	SURFACE MOUNTED	
B8	8 FT LINEAR 2" SURFACE MOUNTED SLOT LUMINAIRE, 400L/FT	LITHONIA SL2S LLP 8 8 80CRI 35K 400LMF MIN1 MVOLT (SCBA) ZT	MV	LED 3,200 LUMENS, 80 CRI 3500K	28	0-10V	SURFACE MOUNTED	
C4R	4 FT LINEAR 2" RECESSED IN WALL DIRECT SLOT LUMINAIRE, 400L / FT.	LITHONIA SL2L LOP 4FT x FLP (VERIFY) 80CRI 35K 400LMF MIN10 MVOLT (SCBA) ZT	MV	LED 1,600 LUMENS, 80 CRI 3500K	16	0-10V	RECESSED IN WALL	
C4ER	SAME AS ABOVE w/ CA APPROVED 90 MIN EMERGENCY BATTERY BACK-UP	LITHONIA SL2L LOP 4FT x FLP (VERIFY) 80CRI 35K 400LMF MIN10 MVOLT (SCBA) ZT E10WLCP	MV	LED 1,600 LUMENS, 80 CRI 3500K	16	0-10V	RECESSED IN WALL	PROVIDE UNSWITCHED CIRCUIT PER NEC REQUIREMENTS FOR BATTERY
C8R	8 FT LINEAR 2" RECESSED IN WALL MOUNTED DIRECT SLOT LUMINAIRE, 400L / FT.	LITHONIA SL2L LOP 8FT x FLP (VERIFY) 80CRI 35K 400LMF MIN10 MVOLT (SCBA) ZT	MV	LED 3,200 LUMENS, 80 CRI 3500K	32	0-10V	RECESSED IN WALL	
D8	8 FT LINEAR LENSED STRIPLIGHT	LITHONIA TZL1D L96 SMR 6000LM FST 35K 80CRI	MV	LED 6,000 LUMENS, 80 CRI 3500K	60	0-10V	CHAIN HUNG	
GE	14" SQ. SURFACE MOUNTED STAIRWELL LUMINAIRE w/ 90 MIN. BATTERY BACK-UP	JUNO JSFSQ 14IN 35K 90CRI MVOLT ZT WH E10WLCP (BATTERY & BACKBOX)	MV	LED 1,800 LUMENS, 80 CRI 3500K	20	0-10V	SURFACE MOUNTED	
H	2FT x 4FT LAY-IN TROFFER	LITHONIA 2FSL4 60L LP835 EZ1	MV	LED 6,000 LUMENS, 80 CRI 3500K	46	0-10V	LAY-IN GRID	
HE	2FT x 4FT LAY-IN TROFFER WITH 90 MINUTE EMERGENCY BATTERY BACK-UP (1400 LUMENS)	LITHONIA 2FSL4 60L LP835 EZ1 EL14L	MV	LED 6,000 LUMENS, 80 CRI 3500K	46	0-10V	LAY-IN GRID	PROVIDE UNSWITCHED CIRCUIT PER NEC REQUIREMENTS FOR BATTERY
J	4" DIA. RECESSED DOWNLIGHT WITH CLEAR DIFFUSE TRIM	JUNO L4 13LM 35K MVOLT G4 80CRI EZ1 w/ P CD PF	MV	LED 1300 LUMENS, 80 CRI 3500K	12	0-10V	RECESSED	
SL	DECORATIVE POLE MOUNTED AREA LIGHT w/ 4" RSS POLE	ANP LIGHTING LA623 1 PO29LD4D T3N 35K 72 w/ MATCHING 12FTx 4"D. RSS POLE	MV	LED 3,000 LUMENS, 70 CRI 3500K	30	0-10V	POLE MOUNTED @+12FT	
X	EXIT SIGN WITH 90 MIN. BATTERY BACK-UP	LITHONIA LQM S W 3 G 120 ELN SD	120	LED	4	N/A	WALL OR CEILING	PROVIDE UNSWITCHED CIRCUIT PER NEC REQUIREMENTS
XL	EXIT SIGN WITH 90 MIN. HIGH OUTPUT BATTERY FOR REMOTE HEADS	LITHONIA LHQM LED G HO RO	120	LED	4	N/A	WALL OR CEILING	PROVIDE UNSWITCHED CIRCUIT PER NEC REQUIREMENTS
XR	REMOTE WEATHERPROOF TWIN HEAD ADJUSTABLE LOW VOLTAGE EMERGENCY LIGHTS	LITHONIA ELA B T QWP LO309	120	LED	-	N/A	WALL OR CEILING	PROVIDE LOW VOLTAGE CONNECTION TO NEAREST H.O. BATTERY PACK

NOTE:

DEMAND READING FOR THE LAST 12 MONTHS, AS REQUIRED BY THE NEC, IS UNAVAILABLE. TO VERIFY ADEQUACY OF EXISTING SERVICE, E.C. SHALL RUN A 30-DAY STUDY PER NEC REQUIREMENTS. SHOULD LOAD CALCULATIONS, USING STUDY RESULTS, BE GREATER THAN THE EXISTING SERVICE, E.C. IS TO INFORM OWNER IMMEDIATELY.

GENERAL NOTES

1. ELECTRICAL CONTRACTOR SHALL VERIFY ALL ONSITE UTILITY REQUIREMENTS WITH THE ELECTRIC UTILITY AND THE TELEPHONE COMPANY PRIOR TO SUBMITTING A BID. INCLUDE ALL PULLBOXES, CONDUITS, SPLICEBOXES, TRANSFORMER PAD, TERMINAL BOXES, RISERS, TRENCHING, ETC. AS REQUIRED FOR COMPLETE AND OPERATIONAL UTILITY SERVICES, WHETHER INDICATED ON DRAWINGS OR NOT. VERIFY POINT OF SERVICE FEEDS WITH UTILITY COMPANIES AT JOBSITE.
2. PRIOR TO SUBMITTING BID, CONTRACTOR SHALL VISIT JOBSITE AND THOROUGHLY EXAMINE ALL EXISTING CONDITIONS WHICH MAY AFFECT THE WORK. NO ADDITIONAL COSTS WILL BE CONSIDERED FOR CONTRACTOR'S FAILURE TO DO SO. REPORT ANY DISCREPANCIES OR PROBLEMS ENCOUNTERED TO ARCHITECT.
3. REFER TO ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS. **DO NOT SCALE FROM ELECTRICAL DRAWINGS.**
4. CONTRACTOR SHALL INSTALL A #14 AWG OR 3/16" POLYPYLENE PULL LINE IN ALL EMPTY CONDUITS.
5. PROVIDE WEATHERPROOF CAPS ON ALL ENDS OF CONDUITS TERMINATED OUTSIDE OF BUILDING. STAKE AND RECORD ALL CONDUIT LOCATIONS. PLACE AN ELECTRONIC MARKER FOR ALL STUB OUTS.
6. ALL WIRING METHODS SHALL BE IN ACCORDANCE W/ LOCAL & NATIONAL CODES. ALL POWER WIRE IN THE PREMISE SHALL BE INSTALLED IN CONDUIT. CONDUCTOR INSULATION SHALL BE THW, THHN, OR THWN. NO ROMEX CABLES ARE ALLOWED.
7. ALL ELECTRICAL MATERIALS SHALL BE NEW & SHALL BE NEC STANDARD UNLESS BETTER GRADE IS REQUIRED BY LOCAL CODE, & SHALL BEAR THE UNDERWRITERS' LABORATORIES LABEL.
9. FIRE SEAL ALL FIRE WALL PENETRATIONS FOR CONDUITS WITH AN APPROVED FIRE SEALANT AFTER CONDUIT INSTALLATION. FIRE SEAL SHALL PROVIDE EQUAL FIRE RATING AS WALL.

SYMBOL LEGEND

- FLUORESCENT LIGHT FIXTURE - SURFACE MOUNTED
- PENDANT MOUNTED FIXTURE
- FLUORESCENT STRIP LIGHT - SURFACE MOUNTED UNO
- RECESSED DOWNLIGHT
- CEILING MOUNTED FIXTURE
- WALL MOUNTED FIXTURE
- EXIT LIGHT - CEILING MOUNTED WITH EMERGENCY LIGHTS
- EXIT LIGHT - WALL MOUNTED WITH ARROWS AS SHOWN
- EMERGENCY LIGHTING FIXTURE - SURFACE MOUNTED
- SINGLE POLE TOGGLE SWITCH, @ +46" UNO
- ^{2} TWO POLE TOGGLE SWITCH, @ +46" UNO
- ^{3} THREE-WAY TOGGLE SWITCH, @ +46" UNO
- ^{M} MOTOR RATED SINGLE POLE SWITCH, @ UNIT UNO
- MASTER LIGHTING CONTROL STATION
- OCCUPANCY SENSOR
- (A) FIXTURE TAG: LETTER INDICATES TYPE
- JUNCTION BOX, SIZE & TYPE AS INDICATED OR AS REQUIRED
- FLEX CONNECTION FROM J-BOX/DISCONNECT TO EQUIPMENT.
- 15 OR 20 AMP 125V 3W DUPLEX RECEPTACLE, @ +18" UNO
- 20 AMP 125V 3W DEDICATED DUPLEX RECEPTACLE, @ +18" UNO
- 15 OR 20 AMP 125V 3W DOUBLE DUPLEX RECEPTACLE, @ +18" UNO
- CEILING MOUNTED DUPLEX RECEPTACLE
- PLUGMOLD W/ DATA & RECEPTACLES SPACED A MINIMUM 12" APART
- NON-FUSED DISCONNECT SWITCH
- FUSED DISCONNECT SWITCH, SIZE PER UNIT LABEL
- MOTOR, N.I.E.S. CONNECT AS REQUIRED, NUMBER INDICATES HP
- PANELBOARD - SEE SCHEDULE
- MAIN SWITCHBOARD OR MOTOR CONTROL CENTER, SEE ONE LINE DIAGRAM
- DISTRIBUTION TRANSFORMER, MOUNTING AS NOTED
- TERMINAL CABINET, SIZE & TYPE AS NOTED
- CEILING EXHAUST FAN
- DATA OUTLET, 4" SQ. BOX w/ SINGLE DEVICE RING & PLATE @ +18" UNO
- TELEPHONE OUTLET, 4" SQ. BOX w/ SINGLE DEVICE RING & PLATE @ +18" UNO
- DUPLEX RECEPTACLE FLUSH w/ FINISHED FLOOR
- TELEPHONE TERMINAL BOARD: 4' x 8' x [" PLYWOOD OR AS NOTED w/ DOUBLE DUPLEX RECEPTACLE & 1 #6 GND
- LV LOW VOLTAGE WIRING IN CONDUIT
- CONDUIT RUN CONCEALED BELOW FLOOR OR FINISHED GRADE, U.N.O.
- CONDUIT CONCEALED IN CEILING OR WALL, U.N.O.
- HOMERUN TO RESPECTIVE PANEL OR TERMINAL CABINET - OVERHEAD
- HOMERUN TO RESPECTIVE PANEL OR TERMINAL CABINET - UNDERGROUND
- CONDUIT RISER - UP
- CONDUIT RISER - DOWN

BRANCH CIRCUIT WITHOUT FURTHER DESIGNATION INDICATES A 2 #12 WIRE CIRCUIT
ADDITIONAL NO. OF #12: —|— , 3 #12; —|/— , 2 #12 & 1 #12 GND; —|||/— , 5 #12 & 1 #12 GND; ETC. OTHER WIRE SIZES: —|/— (#10 #12) , 2 #10 & 1 #12 GND; —|/— (#4 #8) , 3 #4 & 1 #8 GND; ETC.

- MT EMPTY CONDUIT WITH PULLSTRING
- EL EMERGENCY LIGHT
- NL NIGHT LIGHT
- SB LIGHTING CONTROL & DESIGN "SILVER BULLET" CURRENT LIMITING PANEL.
- (E) EXISTING
- (N) NEW
- (R) RELOCATE
- C. CONDUIT
- WR WEATHER RESISTANT
- FACP FIRE ALARM CONTROL PANEL
- X-Y/CR X=PANEL; Y=CIRCUIT #; CR=INDICATES RECEPTACLE CONTROLLED VIA RELAY CONTROL
- SMOKE DETECTOR, MOUNTING AS NOTED
- TC TIME CLOCK (LCC)
- DUCT SMOKE DETECTOR
- FIRE ALARM STROBE UNIT, WALL MOUNTED
- FIRE ALARM COMBINATION HORN/STROBE UNIT, WALL MOUNTED

DETAIL DESIGNATION: TOP NUMBER INDICATES DETAIL, BOTTOM LETTER/NUMBER INDICATES SHEET

MECHANICAL & PLUMBING EQUIPMENT DESIGNATION

NOTE: SYMBOLS INDICATED ABOVE MAY NOT NECESSARILY APPEAR AS PART OF THESE DRAWINGS IF NOT REQUIRED.

NOTE TO CONTRACTOR

THE CONTRACTOR SHALL THOROUGHLY REVIEW THESE ELECTRICAL CONSTRUCTION DOCUMENTS PRIOR TO PREPARING A BID FOR THE ELECTRICAL WORK SHOWN. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFICATION OF EXISTING ELECTRICAL SERVICES AND CONNECTION REQUIREMENTS. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY OF ANY CONFLICTS OR DISCREPANCIES FOUND PRIOR TO BID. BY SUBMITTING A BID FOR THE ELECTRICAL WORK, THE ELECTRICAL CONTRACTOR IS AFFIRMING THAT THE REQUIRED FIELD VERIFICATION OF EXISTING CONDITIONS HAS BEEN COMPLETED AND ASSUMES FULL RESPONSIBILITY FOR CONFLICTS FOUND AFTER THE AWARD OF THE ELECTRICAL CONTRACT. NO ADDITIONAL COMPENSATION WILL BE CONSIDERED FOR CONFLICTS AND/OR DISCREPANCIES FOUND TO EXIST AFTER THE AWARD OF THE ELECTRICAL CONTRACT.

RPR
1629 Telegraph Avenue
Oakland, CA 94612
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3130 Twitchell Island Rd., West Sacramento, CA 95691
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DEPARTMENT OF ENGINEERING & CONSTRUCTION
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REGISTERED PROFESSIONAL ENGINEER — No. 16872 — EXP: 03/31/23 — ELECTRICAL — STATE OF CALIFORNIA

JIM PUGA
RCE NO. E16872 EXP. 03.23
CHECKED BY JP
DESIGNED BY JL/JP
DRAWN BY JL/JP

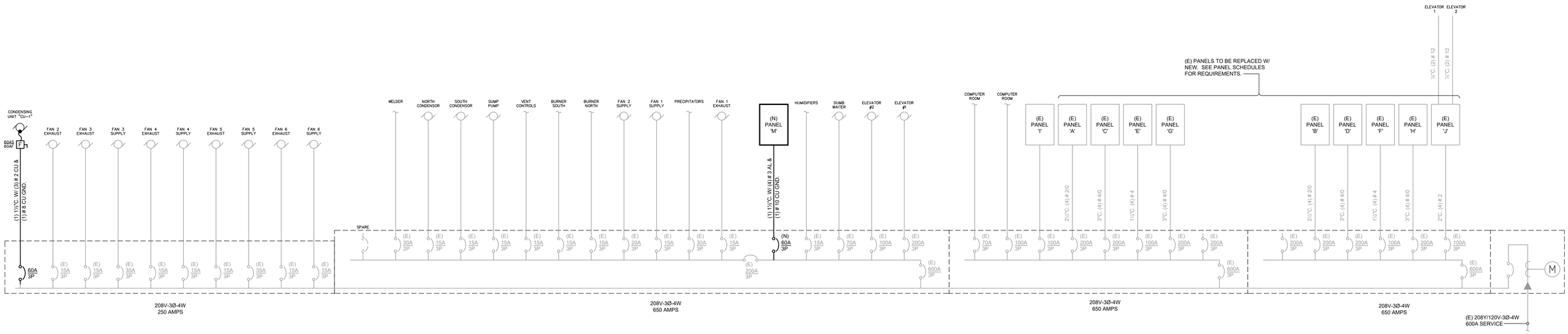
No.	DATE	BY	REFERENCE
1	02.17.23	RPR	ISSUED FOR BID

GENERAL NOTES & SYMBOL LIST

PROJECT NO.
C1004859

SCALE: AS NOTED
HOR:
VERT:
DATE: 02.17.2023

SHEET NO.
E1.0
45 OF 62



1 ONE-LINE DIAGRAM
SCALE: NONE

RPR
1629 Telegraph Avenue
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OAKLAND MAIN LIBRARY INFRASTRUCTURE IMPROVEMENTS

125 14TH STREET

REGISTERED PROFESSIONAL ENGINEER
No. 16872
EXP: 03/31/23
ELECTRICAL
STATE OF CALIFORNIA

JIM PUGA
RCE NO. E16872 EXP. 03.23
CHECKED BY JP
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No.	DATE	BY	REFERENCE
1	02.17.23	RPR	ISSUED FOR BID

ONE-LINE DIAGRAM

PROJECT NO.
C1004859

SCALE: AS NOTED
HOR:
VERT:
DATE: 02.17.2023

SHEET NO.
E1.1
46 OF 62

"A"

■ NEW ☐ EXISTING | AIC: TO MATCH EXISTING
VOLTAGE: 208Y/120V-3Ø-4W | MAIN: MLO
BUS: 200A | MOUNTING: RECESSED | LOCATION: BASEMENT HALLWAY

CKT NO	LOAD DESCRIPTION	VOLT-AMPERES ØA	ØB	ØC	CB	BUS A B C	CB	VOLT-AMPERES ØA	ØB	ØC	LOAD DESCRIPTION	CKT NO	
1	ROOMS 24, 25, & 26				20/1		20/1				ROOM 23 SOUTH	2	
3	ROOM 23 CENTER				20/1		20/1				ROOM 23 NORTH	4	
5	ROOM 26				20/1		20/1				ROOMS 28, 30, & 31	6	
7	ROOM 21 SE				20/1		20/1				ROOM 21 SW	8	
9	ROOMS 20, 21 N, 105				20/1		20/1				AUDITORIUM	10	
11	AUDITORIUM				20/1		20/1				ROOMS 18 & 19	12	
13	SW STACKROOM				20/1		20/1				W STACKROOM RECS	14	
15	W STACKROOM RECS				20/1		20/1				SW STACKROOM RECS	16	
17	EXIT LIGHTS				20/1		20/1				LOAD	18	
19	NW STACKROOM				20/1		20/1				NW STACKROOM	20	
21	MODULAR CUBICLE				20/1		20/1				FIRE ALARM	22	(1)
(1) 23	FIRE ALARM				20/1		20/1				ROOMS 23, 26, 27, & 31 RECS	24	
25	MODULAR CUBICLE				20/1		20/1				W AUDITORIUM N & E WALL RECS	26	
27	W AUDITORIUM S WALL RECS				20/1		20/1				ROOMS 20 & 21 RECS	28	
29	SERVICE ENTRANCE				20/1		20/1				COPIER	30	(1)
31	LOAD				20/1		20/1				1ST FLR RECS ABOVE SERV ENTR	32	
33	LOADING DOCK/STORAGE RECS		900		20/1		20/1	900			ROOM 23 RECS	34	
35	FAN COILS "FC-1" - "FC-4"				20/1		20/1		900		ROOM 23 RECS	36	
37	↓				20/1		20/1				SPARE	38	
39	FAN COILS "FC-5" - "FC-8"				20/1		40/	3,600			EV CHARGER	40	(2)
41	↓				20/1		2		3,600		↓	42	
	SUBTOTAL	-	-	-				-	-	-	SUBTOTAL		

TOTAL VOLT-AMPERES/PHASE: ØA = - ØB = - ØC = -
TOTAL DESIGN VOLT-AMPERES: - AMPS = -

"B"

■ NEW ☐ EXISTING | AIC: TO MATCH EXISTING
VOLTAGE: 208Y/120V-3Ø-4W | MAIN: MLO
BUS: 200A | MOUNTING: RECESSED | LOCATION: CHILDREN'S AREA

CKT NO	LOAD DESCRIPTION	VOLT-AMPERES ØA	ØB	ØC	CB	BUS A B C	CB	VOLT-AMPERES ØA	ØB	ØC	LOAD DESCRIPTION	CKT NO	
1	ROOM 39 SOUTH				20/1		20/1				ROOM 34 SOUTH	2	
3	ROOM 39 CENTER				20/1		20/1				ROOM 39 NORTH	4	
5	ROOMS 33 & 34				20/1		20/1				ROOM 1 SOUTH	6	
7	ROOM 1 SE				20/1		20/1				ROOM 1 CENTER	8	
9	ROOM 1 W				20/1		20/1				NIGHT LIGHTS	10	(1)
11	ROOMS 2, 3, & 4				20/1		20/1				ROOM 5	12	
13	ROOM 5				20/1		20/1				SE STACKROOM	14	
15	STAIRWELL LTG				20/1		20/1				SE STACKROOM	16	
17	SE STACKROOM				20/1		20/1				SE STACKROOM	18	
19	NE STACKROOM & RECS 1, 2, & 3				20/1		20/1				NE STACKROOM & RECS 1, 2, & 3	20	
21	NE STACKROOM RECS				20/1		20/1				NE STACKROOM RECS	22	
23	E STACKROOM RECS				20/1		20/1				ROOMS 34 & 39 RECS	24	
25	ROOMS 32, 33, & 34 RECS				20/1		20/1				RM 220 PAPER CUTTER	26	
27	SUBPANEL "B1"				90/		3				↓	28	
29					/		20/1				CENTRAL	30	
31	↓				3		20/1				ROOM 6 RECS	32	
33	CHILDREN'S SERVICES RECS		720		20/1		20/1		800		BOILER/BACNET CONTROL PANELS	34	(1)
35	CHILDREN'S RDNG/AQUIS RECS			900	20/1		20/1				SPARE	36	
37	MAIL RECS	1,080			20/1		20/1				SPARE	38	
39	BOILER ROOM REC		180		20/1		20/1				SPARE	40	
41	SPARE				20/1		20/1				SPARE	42	
	SUBTOTAL	-	-	-				-	-	-	SUBTOTAL		

TOTAL VOLT-AMPERES/PHASE: ØA = - ØB = - ØC = -
TOTAL DESIGN VOLT-AMPERES: - AMPS = -

"C"

■ NEW ☐ EXISTING | AIC: TO MATCH EXISTING
VOLTAGE: 208Y/120V-3Ø-4W | MAIN: MLO
BUS: 200A | MOUNTING: RECESSED | LOCATION: 1ST FLOOR HALLWAY

CKT NO	LOAD DESCRIPTION	VOLT-AMPERES ØA	ØB	ØC	CB	BUS A B C	CB	VOLT-AMPERES ØA	ØB	ØC	LOAD DESCRIPTION	CKT NO
1	MAIN LOBBY - PENDANTS	384			20/1		20/1	1,260			ROOM 111 EXTERIOR WALL RECS	2
3	MAIN LOBBY - OUTLINE		970		20/1		20/1		864		NW LOWER LOBBY LTG	4
5	ROOM 111 LTG - NE			1,440	20/1		20/1				LIGHTING CONTROL PANEL "LCC2"	6
7	ROOM 111 LTG - E	1,440			20/1		20/1				SPARE	8
9	ROOM 111 LTG - SE		1,440		20/1		20/1				SPARE	10
11	ROOM 112 LTG - SE			1,440	20/1		20/1				SPARE	12
13	SPARE				20/1		20/1				SPARE	14
15	SPARE				20/1		20/1				SPARE	16
17	SPARE				20/1		20/1				SPARE	18
19	SPARE				20/1		20/1				SPARE	20
21	SPARE				20/1		20/1				STACK ROOM - WEST	22
23	STACK ROOM - WEST				20/1		20/1				SPARE	24
25	CENTRAL HALL - SOUTH				20/1		20/1				ROOM 108	26
27	CENTRAL HALL - WEST				20/1		20/1				ROOM 112 - SOUTH RECS	28
29	MAP ROOM COLUMN RECS				20/1		20/1				ROOM 112 - NORTH RECS	30
31	HISTORY CASE				20/1		20/1				ROOM 111 - COLUMN RECS	32
33	ROOM 111 - COLUMN RECS				20/1		20/1				ROOM 108 RECS	34
35	COMP. LAB MOTION DETECTOR				20/1		20/1				STACK ROOM RECS	36
37	SPARE (VERIFY)				20/1		20/1	540			CONF ROOM 126 RECS	38
39	SPARE				20/1		20/1			667	SUPPLY FAN "SF-1"	40
41	SPARE				20/1		20/1				SPARE	42
	SUBTOTAL	-	-	-				-	-	-	SUBTOTAL	

TOTAL VOLT-AMPERES/PHASE: ØA = - ØB = - ØC = -
TOTAL DESIGN VOLT-AMPERES: - AMPS = -

"D"

■ NEW ☐ EXISTING | AIC: TO MATCH EXISTING
VOLTAGE: 208Y/120V-3Ø-4W | MAIN: MLO
BUS: 200A | MOUNTING: RECESSED | LOCATION: 1ST FLOOR HALLWAY

CKT NO	LOAD DESCRIPTION	VOLT-AMPERES ØA	ØB	ØC	CB	BUS A B C	CB	VOLT-AMPERES ØA	ØB	ØC	LOAD DESCRIPTION	CKT NO	
1	ROOM 101 LTG - NW	1,440			20/1		20/1	100			FRESCO LTG CONTROLLER	2	(1)
3	ROOM 101 LTG - W		1,440		20/1		20/1		1,260		ROOM 101 EXTERIOR WALL RECS	4	
5	ROOM 101 LTG - SW			1,440	20/1		20/1			540	ROOM 102/7 CHECKOUT RECS	6	
7	ROOM 112 LTG - SW	1,440			20/1		20/1	784			CHECKOUT/SE LOWER LOBBY LTG	8	
9	PASSAGEWAY LTG		230		20/1		20/1				LIGHTING CONTROL PANEL "LCC1"	10	
11	READING ROOM REC			180	20/1		20/1				SPARE	12	
13	SPARE				20/1		20/1				SPARE	14	
15	SPARE				20/1		20/1				SPARE	16	
17	SPARE				20/1		20/1				SPARE	18	
19	STOCK ROOMS - EAST				20/1		20/1				STOCK ROOMS - EAST	20	
21	STOCK ROOMS - EAST				20/1		20/1				STOCK ROOMS - EAST	22	
23	RMS 103 - 106 & M / OFFICE				20/1		20/1				CENTER HALL - EAST	24	
25	CENTER HALL - SOUTH TELEPHONE				20/1		20/1				ROOM 112 RECS - SOUTH	26	
27	ROOM 112 COLUMN RECS				20/1		20/1				ROOM 112 COLUMN RECS	28	
29	ROOM 112 RECS - NORTH				20/1		20/1				ROOM 101 RECS - WEST	30	
31	ROOM 101 RECS - NORTHEAST				20/1		20/1	400			"FC-1" / "FC-2" CONTROL PANEL	32	(1)
33	ROOM 101 RECS - NORTHEAST COL				20/1		20/1				ROOM 101 COLUMN RECS	34	
35	COPY MACHINE				20/1		20/1				COPY MACHINE	36	
37	SPARE				20/1		20/1				SPARE (VERIFY)	38	
39	STACK ROOM RECS				20/1		20/1				PHONE REC / FILM WINDER	40	
41	MEZZANINE RECS - EAST				20/1		20/1				EAST COLUMN REC	42	
	SUBTOTAL	-	-	-				-	-	-	SUBTOTAL		

TOTAL VOLT-AMPERES/PHASE: ØA = - ØB = - ØC = -
TOTAL DESIGN VOLT-AMPERES: - AMPS = -

"E"

■ NEW ☐ EXISTING | AIC: TO MATCH EXISTING
VOLTAGE: 208Y/120V-3Ø-4W | MAIN: MLO
BUS: 100A | MOUNTING: RECESSED | LOCATION: MEZZANINE

CKT NO	LOAD DESCRIPTION	VOLT-AMPERES ØA	ØB	ØC	CB	BUS A B C	CB	VOLT-AMPERES ØA	ØB	ØC	LOAD DESCRIPTION	CKT NO
1	MEZZANINE STACK RM 'A' LTG - W				20/1		20/1				MEZZANINE STACK RM 'A' LTG - W	2
3	MEZZANINE STACK RM 'A' LTG - W				20/1		20/1				MEZZANINE STACK RM 'A' LTG - W	4
5	MEZZANINE STACK RM 'A' LTG - W				20/1		20/1			768	MEZZANINE LTG - W	6
7	SPARE				20/1		20/1				MEZZANINE W RECS	8
9	READING ROOM RECS		540		20/1		20/1				MEZZANINE STACK RM 'B' LTG- W	10
11	MEZZANINE STACK RM 'B' LTG- W				20/1		20/1				MEZZANINE STACK RM 'B' LTG- W	12
13	MEZZANINE STACK RM 'B' LTG- W				20/1		20/1				LOAD	14
15	LOAD				20/1		20/1				LOAD	16
17	MEZZANINE W RECS			540	20/1		20/1				SPARE	18
	SUBTOTAL	-	-	-				-	-	-	SUBTOTAL	

TOTAL VOLT-AMPERES/PHASE: ØA = - ØB = - ØC = -
TOTAL DESIGN VOLT-AMPERES: - AMPS = -

"F"

■ NEW ☐ EXISTING | AIC: TO MATCH EXISTING
VOLTAGE: 208Y/120V-3Ø-4W | MAIN: MLO
BUS: 100A | MOUNTING: RECESSED | LOCATION: MEZZANINE

CKT NO	LOAD DESCRIPTION	VOLT-AMPERES ØA	ØB	ØC	CB	BUS A B C	CB	VOLT-AMPERES ØA	ØB	ØC	LOAD DESCRIPTION	CKT NO
1	MEZZANINE STACK RM 'A' LTG - E				20/1		20/1				MEZZANINE STACK RM 'A' LTG - E	2
3	MEZZANINE STACK RM 'A' LTG - E				20/1		20/1				EAST MEZZANINE STACK RM 'A' LTG - E	4
5	MEZZANINE LTG - E			768	20/1		20/1				SPARE	6
7	MEZZANINE E RECS	540			20/1		20/1				2ND FL. ACCOUNTING OFFICE RECS	8
9	MEZZANINE STACK RM 'B' LTG- E				20/1		20/1				MEZZANINE STACK RM 'B' LTG- E	10
11	MEZZANINE STACK RM 'B' LTG- E				20/1		20/1				MEN'S HAND DRYER - MEZZANINE	12
13	2ND FL. ACCOUNTING OFFICE RECS				20/1		20/1				STOREROOM	14
15	COMPUTER REC				20/1		20/1				COPY MACHINE	16
17	SPARE				20/1		20/1			180	MEZZANINE REC	18
	SUBTOTAL	-	-	-				-	-	-	SUBTOTAL	

TOTAL VOLT-AMPERES/PHASE: ØA = - ØB = - ØC = -
TOTAL DESIGN VOLT-AMPERES: - AMPS = -

"G"

■ NEW ☐ EXISTING | AIC: TO MATCH EXISTING
VOLTAGE: 208Y/120V-3Ø-4W | MAIN: MLO
BUS: 200A | MOUNTING: RECESSED | LOCATION: 2ND FLOOR HALLWAY

CKT NO	LOAD DESCRIPTION	VOLT-AMPERES ØA	ØB	ØC	CB	BUS A B C	CB	VOLT-AMPERES ØA	ØB	ØC	LOAD DESCRIPTION	CKT NO	
1	ROOM 223 - SE				20/1		20/1				ROOM 223 - SW	2	
3	ROOM 223 - CENTER E				20/1		20/1				ROOM 223 - CENTER W	4	
5	ROOM 223 - NE				20/1		20/1				ROOM 223 - NW	6	
7	ROOMS 231 & 232				20/1		20/1				ROOMS 229 & 230	8	
9	ROOM 226 - S				20/1		20/1				ROOM 226 - CENTER	10	
11	ROOMS 226, 227, & 228				20/1		20/1				ROOM 225 - S	12	
13	ROOM 225 - N				20/1		20/1				ROOM 224	14	
15	ROOMS 219, 220, & 222				20/1		20/1				STOCKROOM W	16	
17	STOCKROOM W				20/1		20/1				STOCKROOM W	18	
19	STOCKROOM W				20/1		20/1				ROOM 223 - S RECS	20	
21	ROOM 223 COLUMN RECS				20/1		20/1				ROOMS 231, 232, & 233 RECS	22	
23	ROOMS 230, 231, & 232 RECS				20/1		20/1				ROOMS 229 & 230 RECS	24	
25	ROOM 225 RECS				20/1		20/1				ROOM 224 STAFF WALL RECS	26	
27	ROOMS 219 & 220 RECS				20/1		20/1				ROOMS 225 & 226 RECS	28	
29	ROOMS 225 & 226 RECS				20/1		20/1				ROOMS 226 RECS	30	
31	2ND FL. STOCKROOM MEZZ - W				20/1		20/1				2ND FL. STOCKROOM MEZZ - W	32	
33	2ND FL. STOCKROOM MEZZ - W				20/1		20/1				2ND FL. STOCKROOM MEZZ - W	34	
35	EAST FAN ROOM				20/1		20/1				WEST FAN ROOM	36	
37	EAST FAN ROOM RECS				20/1		20/1				WEST FAN ROOM RECS & EXIT LTS	38	(1)
(1) 39	STACK ROOM 2M RECS & EXIT LTS				20/1		20/1				STACK ROOM 2 RECS	40	
41	ROOM 218B / 224 RECS		900		20/1		20/1			900	ROOM 218A / 218B RECS	42	
	SUBTOTAL	-	-	-				-	-	-	SUBTOTAL		

TOTAL VOLT-AMPERES/PHASE: ØA = - ØB = - ØC = -
TOTAL DESIGN VOLT-AMPERES: - AMPS = -

"H"

■ NEW ☐ EXISTING | AIC: TO MATCH EXISTING
VOLTAGE: 208Y/120V-3Ø-4W | MAIN: MLO
BUS: 200A | MOUNTING: RECESSED | LOCATION: 2ND FLOOR HALLWAY

CKT NO	LOAD DESCRIPTION	VOLT-AMPERES ØA	ØB	ØC	CB	BUS A B C	CB	VOLT-AMPERES ØA	ØB	ØC	LOAD DESCRIPTION	CKT NO	
1	ROOM 234 S LTS				20/1		20/1				ROOM 234 CENTER LTS	2	
3	ROOM 234 N LTS				20/1		20/1				ROOM 235 S LTS	4	
5	ROOM 23 CENTER LTS				20/1		20/1				ROOM 235 N LTS	6	
7	ROOM 236 / 237 LTS				20/1		20/1				MAGAZINE ROOM RECS	8	
9	ROOMS 201 & 203				20/1		20/1				ROOM 201 - N	10	
11	ROOM 213 - N				20/1		20/1				ROOM 213 - S	12	
13	ROOM 215				20/1		20/1				ROOM 218	14	
15	ROOMS 211 & 212				20/1		20/1				ROOM 210	16	
17	ROOM 209				20/1		20/1				ROOMS 205 & 207	18	
19	ROOMS 204, 206, & 208				20/1		20/1				ROOMS 234 & 235 RECS	20	
21	CHECKPOINT				20/1		20/1				COPIER	22	
23	ROOM 236 RECS				20/1		20/1				ROOMS 213 & 214 RECS	24	
25	ROOMS 210, 212, & 213 RECS				20/1		20/1				ROOMS 207 & 203 RECS	26	
27	ROOMS 209 & 210 RECS				20/1		20/1				ROOMS 201, 208, & 209 RECS	28	
29	ROOMS 201 & 236 RECS				20/1		20/1				ROOM 201 RECS	30	
31	2ND FLOOR STOCKROOM				20/1		20/1				2ND FLOOR STOCKROOM	32	
33	2ND FLOOR STOCKROOM				20/1		20/1				2ND FLOOR MEZZANINE STOCKRM	34	
35	2ND FLOOR MEZZANINE STOCKRM				20/1		20/1				2ND FLOOR MEZZANINE STOCKRM	36	
(1) 37	EXIT LIGHTS				20/1		20/1				LOAD	38	
39	LOAD				20/1		20/1	800			"FC-3" - "FC-6" CONTROL PANELS	40	(1)
41	CONFERENCE/FINANCE SERV RECS			360	20/1		20/1			720	ROOM 218 COLUMN RECS	42	
	SUBTOTAL	-	-	-				-	-	-	SUBTOTAL		

TOTAL VOLT-AMPERES/PHASE: ØA = - ØB = - ØC = -
TOTAL DESIGN VOLT-AMPERES: - AMPS = -

"J"

■ NEW ☐ EXISTING | AIC: TO MATCH EXISTING
VOLTAGE: 208Y/120V-3Ø-4W | MAIN: MLO
BUS: 100A | MOUNTING: RECESSED | LOCATION: BASEMENT HALLWAY

CKT NO	LOAD DESCRIPTION	VOLT-AMPERES ØA	ØB	ØC	CB	BUS A B C	CB	VOLT-AMPERES ØA	ØB	ØC	LOAD DESCRIPTION	CKT NO	
1	GND FLOOR W/SW CORRIDORS				20/1		90/				GROUND FLOOR RESTROOMS	2	
3	GND FLOOR E/SE CORR/SERV ENTR				20/1		20/1				PANEL J PASSAGE WAY	4	
5	SPARE				20/1		20/1				SPARE	6	
7	W ENTRANCE WINDOWS				20/1		20/1				GND FRONT STRS/1ST FLR LOBBY	8	
(1) 9	1ST & 2ND FLOOR EXIT LTS				20/1		20/1				1ST & 2ND FLOOR EXIT LTS	10	(1)
11	2ND FLR E CORR/HALL/WOMEN RR				20/1		20/1				HALL STAIRS MEZZ/2ND FLR/ATTIC	12	
13	MAIN ENTRANCE/2ND FLOOR LTG				20/1		20/1				2ND FLOOR CORRIDOR ENTRANCE	14	
15	SPARE				20/1		20/1				SPARE	16	
17	ELEVATORS - FRONT/STACKS				20/1		20/1				MEZZANINE BALCONY/RESTROOMS	18	
19	SPARE				20/1		20/1				CASH REG / ANSWERING MACHINE	20	
21	SPARE				20/1		20/1				SPARE	22	
23	SPARE				20/1		20/1				2ND FLR W CORR/MEN'S RR/PASSG	24	
25	SPARE				20/1		20/1				SPARE	26	
27	SPARE				20/1		20/1				SPARE	28	
29	SPARE				20/1		20/1				SPARE	30	
	SUBTOTAL	-	-	-				-	-	-	SUBTOTAL		

TOTAL VOLT-AMPERES/PHASE: ØA = - ØB = - ØC = -
TOTAL DESIGN VOLT-AMPERES: - AMPS = -

"M"

■ NEW ☐ EXISTING | AIC: TO MATCH EXISTING
VOLTAGE: 208Y/120V-3Ø-4W | MAIN: MLO
BUS: 100A | MOUNTING: RECESSED | LOCATION: STORAGE ROOM 125A

CKT NO	LOAD DESCRIPTION	VOLT-AMPERES ØA	ØB	ØC	CB	BUS A B C	CB	VOLT-AMPERES ØA	ØB	ØC	LOAD DESCRIPTION	CKT NO
1	EAST FAN 1	1,200			20/1		20/1				SPARE	2
3	EAST FAN 2		1,200		20/1		20/1		1,200		WEST FAN 1	4
5	SOUTH FAN 1			1,200	20/1		20/1			1,200	WEST FAN 2	6
7	SOUTH FAN 2	1,200			20/1		15/1	300			MEZZANINE 'A' FANS	8
9	ROOM 217 FANS		400		15/1		15/1		300		MEZZANINE 'B' FANS	10
11	ROOM 218 FANS			800	15/1		20/1				SPARE	12
13	SPARE				20/1		20/1				SPARE	14
15	SPARE				20/1		20/1				SPARE	16
17	SPARE				20/1		20/1				SPARE	18
	SUBTOTAL	2,400	1,600	2,000				300	1,500	1,200	SUBTOTAL	

TOTAL VOLT-AMPERES/PHASE: ØA = 2,700 ØB = 3,100 ØC = 3,200
TOTAL DESIGN VOLT-AMPERES: 9,000 AMPS = 25

(1) PROVIDE BREAKER "LOCK-ON" DEVICE.
(2) PROVIDE NEW BREAKER TO MATCH EXISTING.

GENERAL NOTES

1. EXISTING PANEL LOCATIONS TO REMAIN.
2. EC TO REPLACE EXISTING PANEL INTERIORS W/ NEW. BUS & SPACES TO BE AS SHOWN.
3. IF NEW INTERIOR DOES NOT FIT IN EXISTING PANEL CAN, COORDINATE W/ PM & LIBRARY REPRESENTATIVE FOR RESOLUTION.
4. LOAD DESCRIPTIONS SHOWN TAKEN FROM EXISTING PANELS. EC SHALL PROVIDE TYPED, UPDATED SCHEDULES AFTER COMPLETION.
5. NO PANEL SCHEDULE AVAILABLE FOR PANEL 'E'. EC TO PROVIDE PANEL SCHEDULE W/ LOAD DESCRIPTIONS AS BEST AS POSSIBLE.
6. BREAKERS W/ INDICATED LOCK-ON DEVICE DETERMINED FROM EXISTING PANEL SCHEDULES. EC SHALL VERIFY SHOWN & PROVIDE ADDITIONAL LOCK-ON DEVICES WHERE NECESSARY.
7. EC SHALL VERIFY PANEL FEEDERS ARE CAPABLE OF ACCEPTING NEW LOADS.

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250 FRANK H. OGAWA PLAZA
SUITE 4314
OAKLAND, CA 94612
(510) 238-3437

OAKLAND MAIN LIBRARY INFRASTRUCTURE IMPROVEMENTS

125 14TH STREET

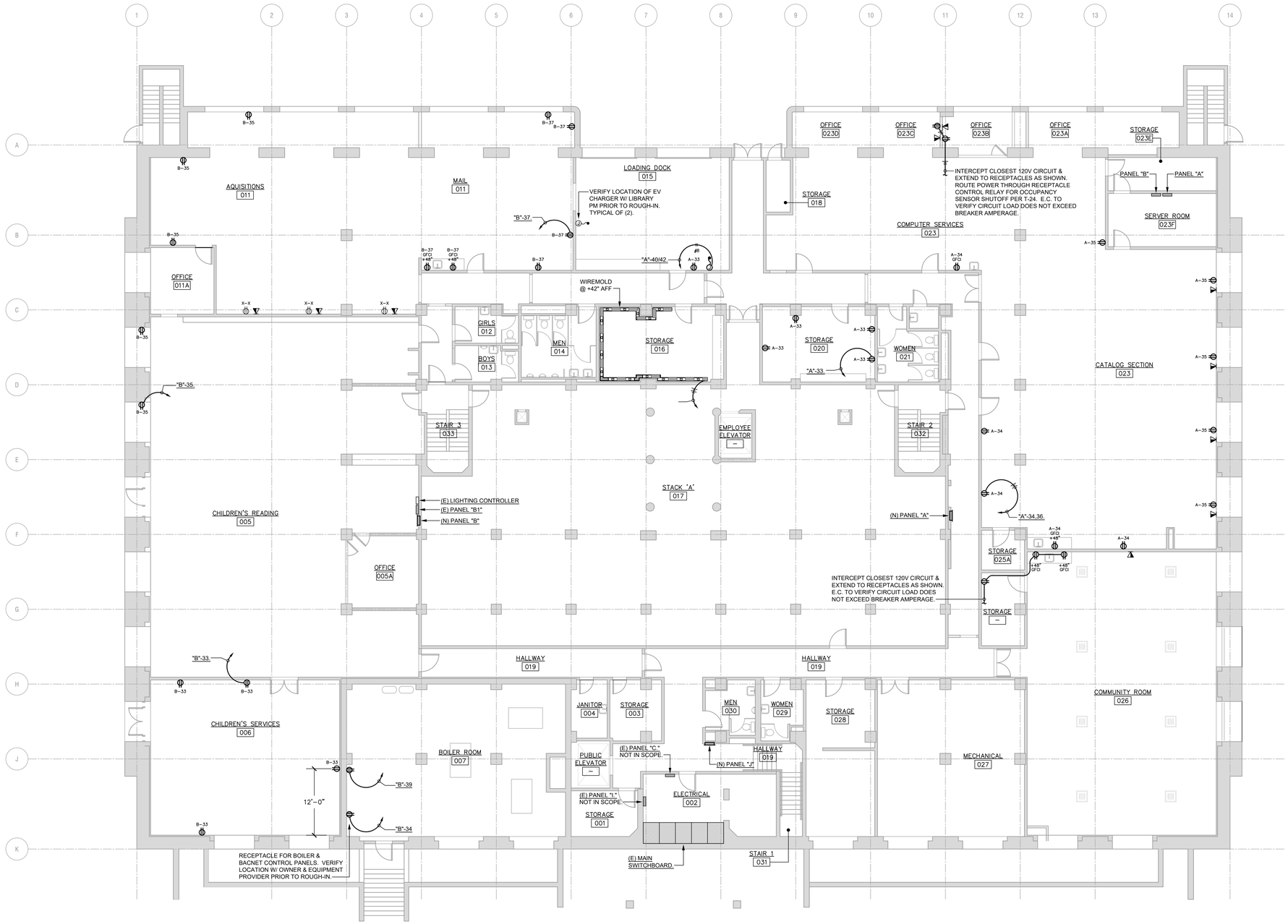
REGISTERED PROFESSIONAL ENGINEER — No. 16872 — EXP: 03/31/23 — ELECTRICAL — STATE OF CALIFORNIA

JIM PUGA
RCE NO. E16872 EXP. 03.23
CHECKED BY JP
DESIGNED BY JL/JP
DRAWN BY JL/JP

No.	DATE	BY	REFERENCE
1	02.17.23	RPR	ISSUED FOR BID

PANEL SCHEDULES

PROJECT NO. C1004859
SCALE: AS NOTED
HOR:
VERT:
DATE: 02.17.2023
SHEET NO. E1.2
47 OF 62



1 GROUND FLOOR POWER PLAN

SCALE: 1/8" = 1'-0"

NORTH

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OAKLAND MAIN LIBRARY INFRASTRUCTURE IMPROVEMENTS

125 14TH STREET

REGISTERED PROFESSIONAL ENGINEER No.16872 EXP: 03/31/23 ELECTRICAL STATE OF CALIFORNIA

JIM PUGA	
RCE NO. E16872	EXP. 03.23
CHECKED BY	JP
DESIGNED BY	JL/JP
DRAWN BY	JL/JP

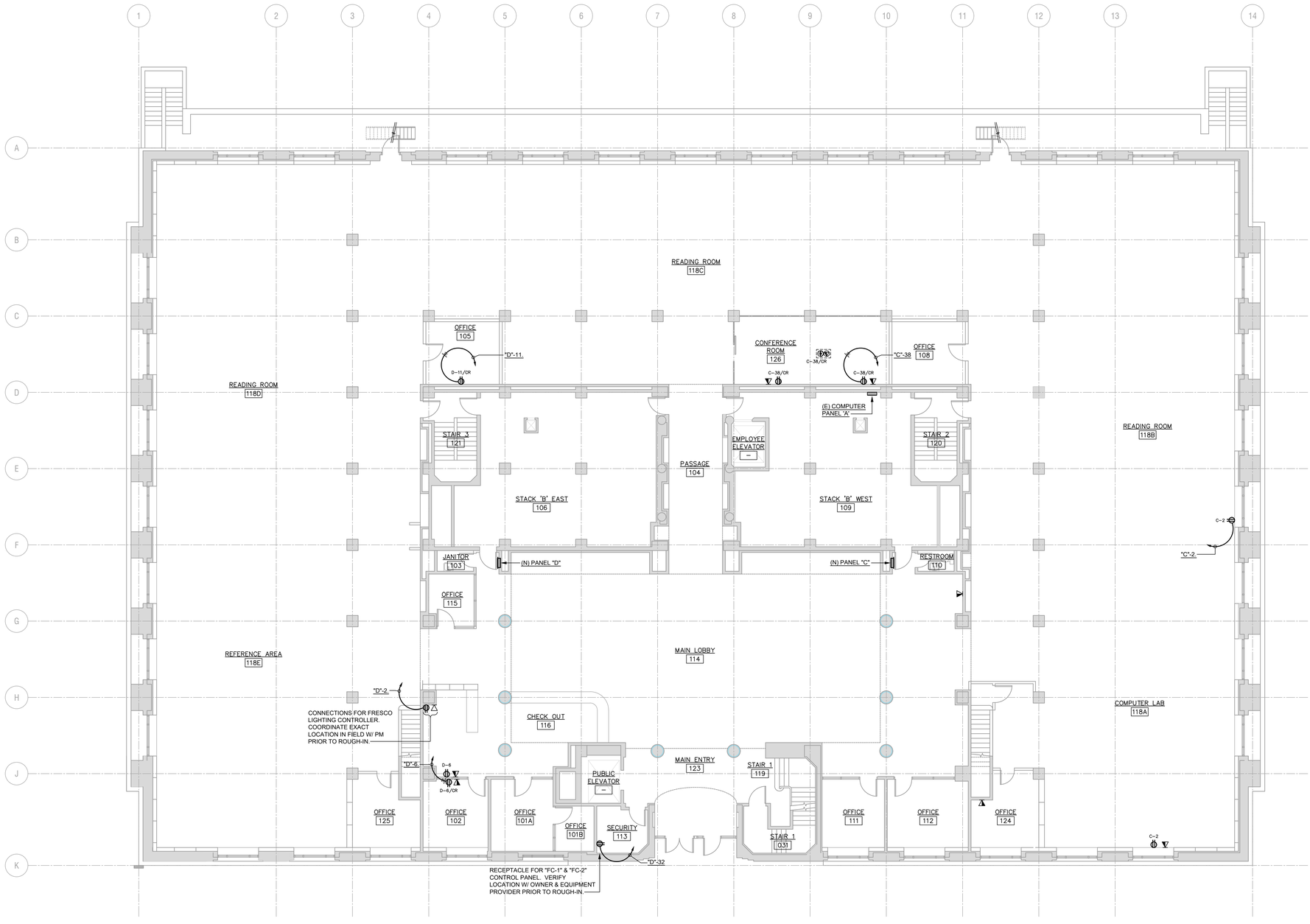
No.	DATE	BY	REFERENCE
1	02.17.23	RPR	ISSUED FOR BID

GROUND FLOOR POWER PLAN

PROJECT NO. C1004859

SCALE: AS NOTED
HOR:
VERT:
DATE: 02.17.2023

SHEET NO. E2.0



1 1ST FLOOR POWER PLAN
SCALE: 1/8" = 1'-0"

NORTH

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OAKLAND MAIN LIBRARY INFRASTRUCTURE IMPROVEMENTS

125 14TH STREET

REGISTERED PROFESSIONAL ENGINEER
No. 16872
EXP: 03/31/23
ELECTRICAL
STATE OF CALIFORNIA

JIM PUGA
RCE NO. E16872 EXP. 03.23
CHECKED BY JP
DESIGNED BY JL/JP
DRAWN BY JL/JP

No.	DATE	BY	REFERENCE
1	02.17.23	RPR	ISSUED FOR BID

1ST FLOOR POWER PLAN

PROJECT NO.
C1004859

SCALE: AS NOTED
HOR:
VERT:
DATE: 02.17.2023

SHEET NO.
E2.1
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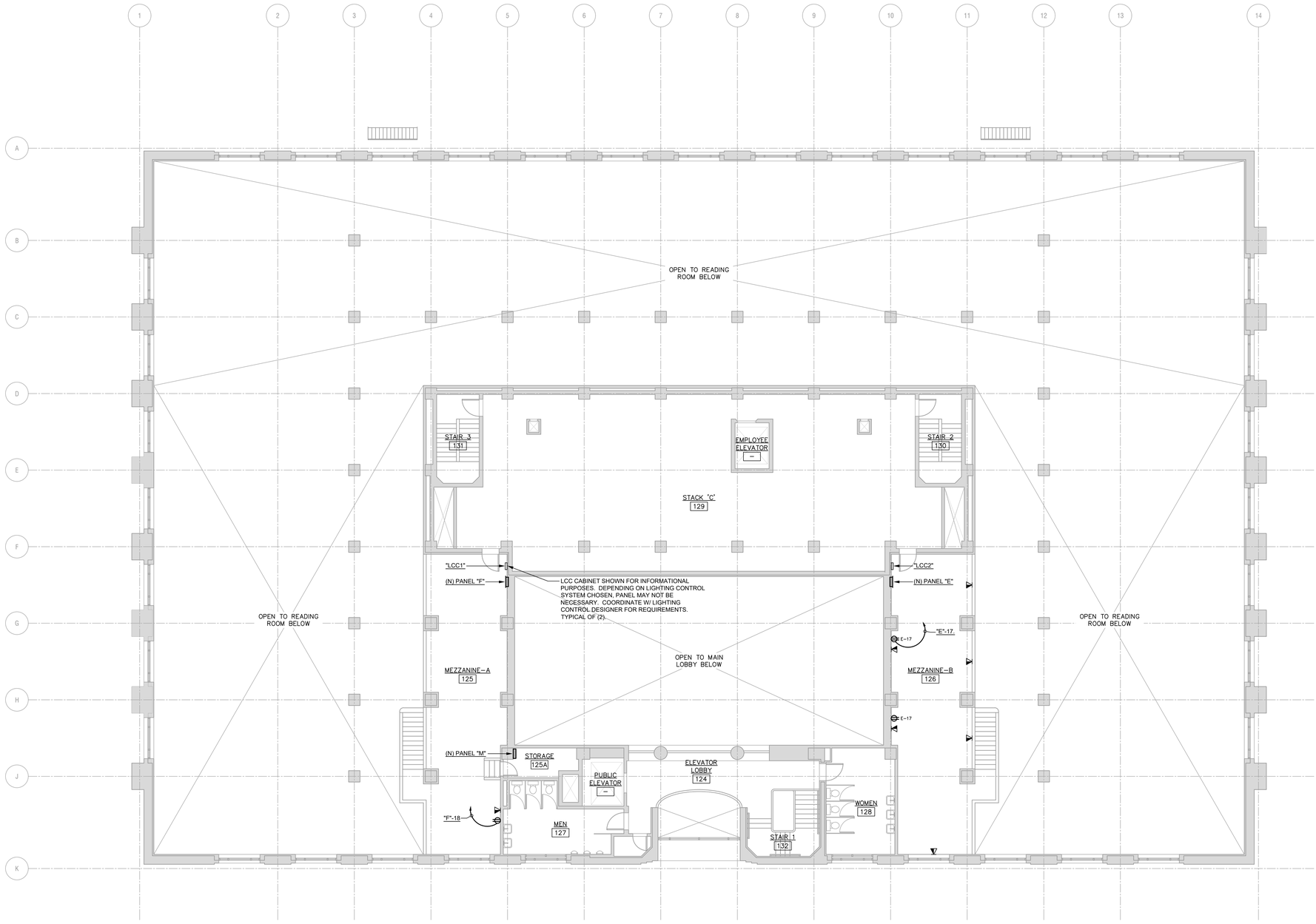

1 MEZZANINE POWER PLAN

SCALE: 1/8" = 1'-0"

NORTH

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OAKLAND MAIN LIBRARY INFRASTRUCTURE IMPROVEMENTS

125 14TH STREET

REGISTERED PROFESSIONAL ENGINEER No.16872 EXP: 03/31/23 ELECTRICAL STATE OF CALIFORNIA

JIM PUGA
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CHECKED BY JP
DESIGNED BY JL/JP
DRAWN BY JL/JP

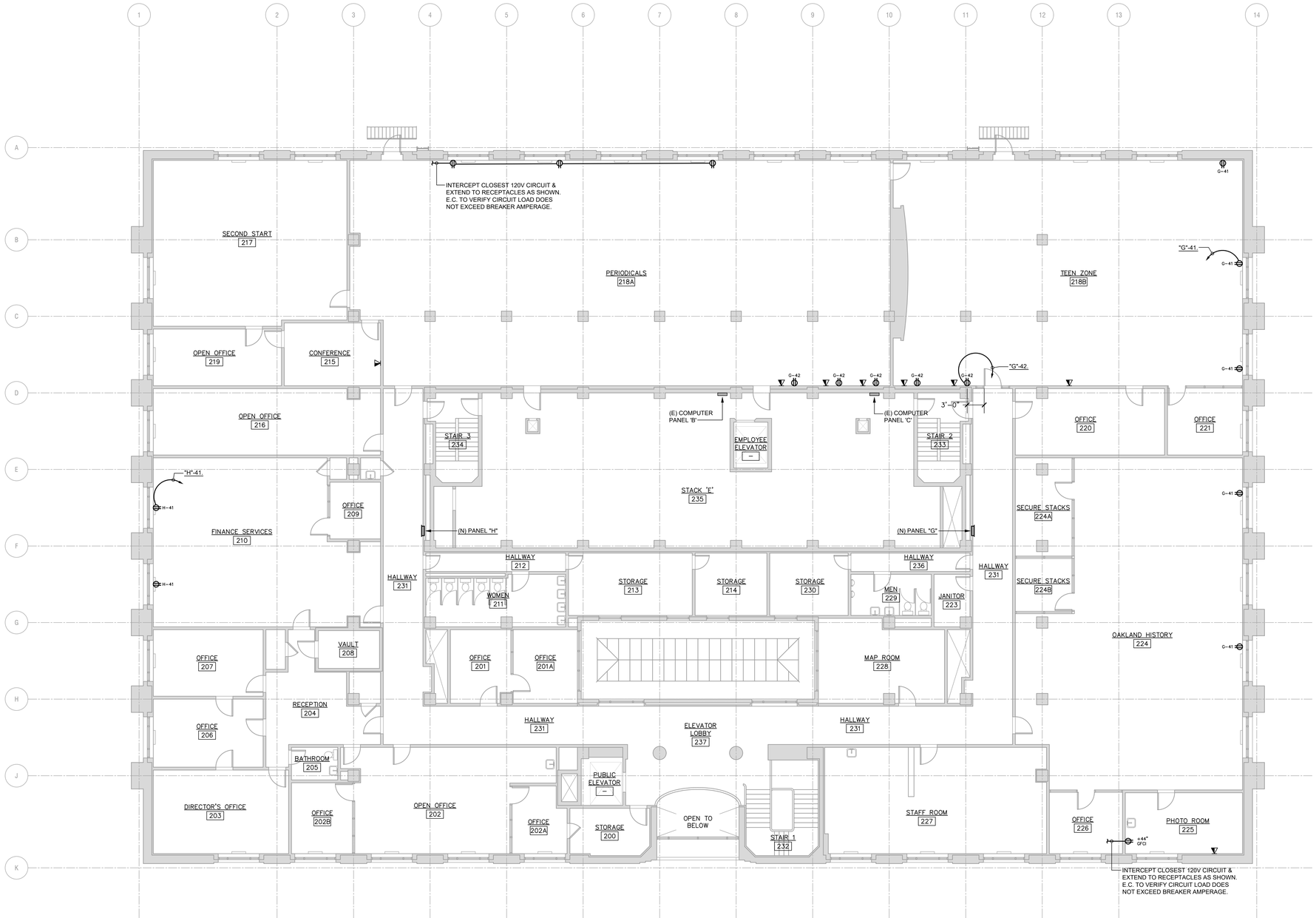
No.	DATE	BY	REFERENCE
1	02.17.23	RPR	ISSUED FOR BID

MEZZANINE POWER PLAN

PROJECT NO.
C1004859

SCALE: AS NOTED
HOR:
VERT:
DATE: 02.17.2023

SHEET NO.
E2.2
50 OF 62



1 2ND FLOOR POWER PLAN

SCALE: 1/8" = 1'-0"

NORTH

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OAKLAND MAIN LIBRARY INFRASTRUCTURE IMPROVEMENTS

125 14TH STREET

REGISTERED PROFESSIONAL ENGINEER No.16872 EXP: 03/31/23 ELECTRICAL STATE OF CALIFORNIA

JIM PUGA
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CHECKED BY JP
DESIGNED BY JL/JP
DRAWN BY JL/JP

No.	DATE	BY	REFERENCE
1	02.17.23	RPR	ISSUED FOR BID

2ND FLOOR POWER PLAN

PROJECT NO. C1004859

SCALE: AS NOTED
HOR:
VERT:
DATE: 02.17.2023

SHEET NO. E2.3
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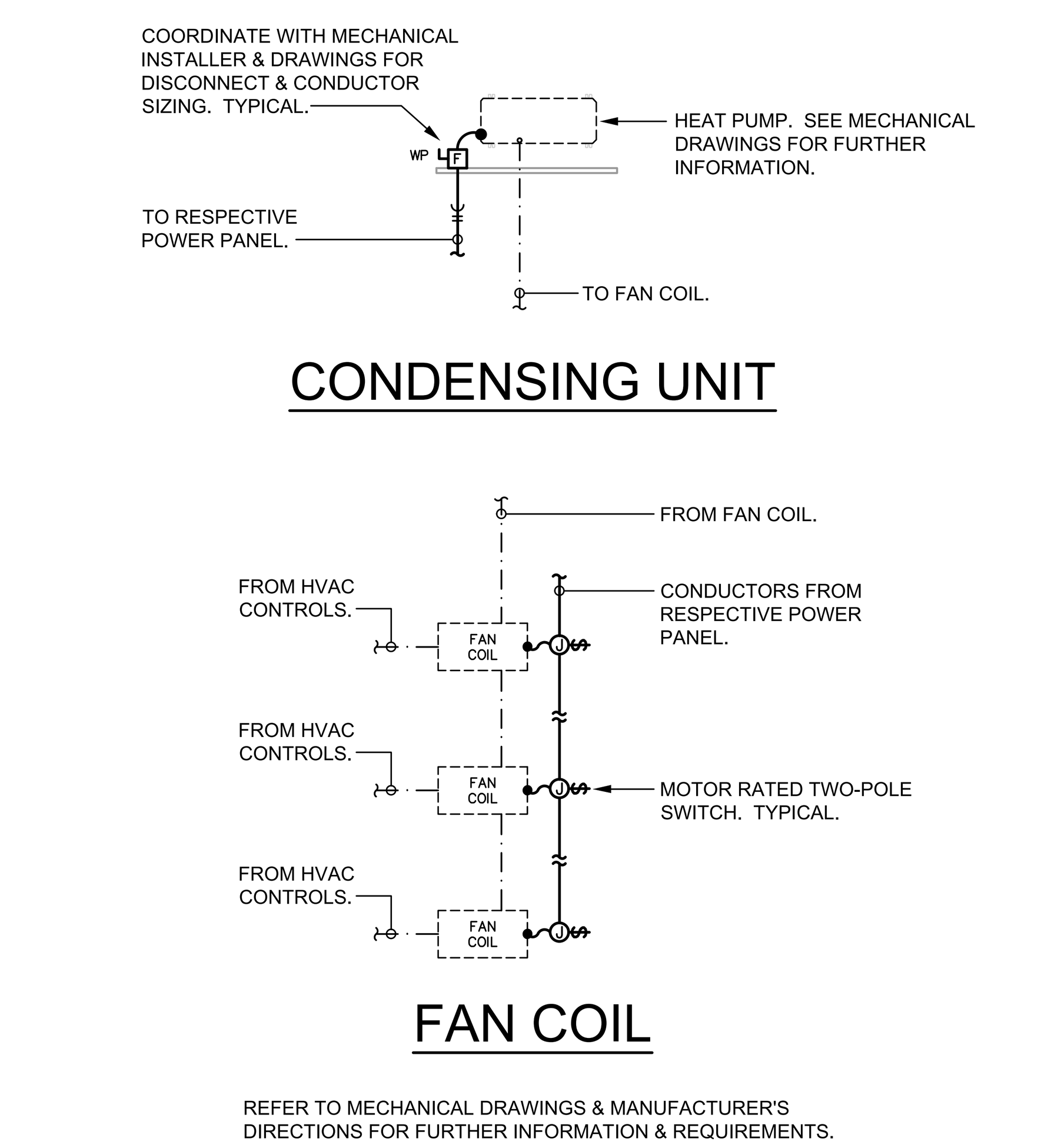
1 COMMUNITY ROOM HVAC POWER PLAN
SCALE: 1/4" = 1'-0"



2 TYPICAL HVAC CONNECTIONS
SCALE: NONE

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OAKLAND MAIN LIBRARY
INFRASTRUCTURE IMPROVEMENTS
125 14TH STREET

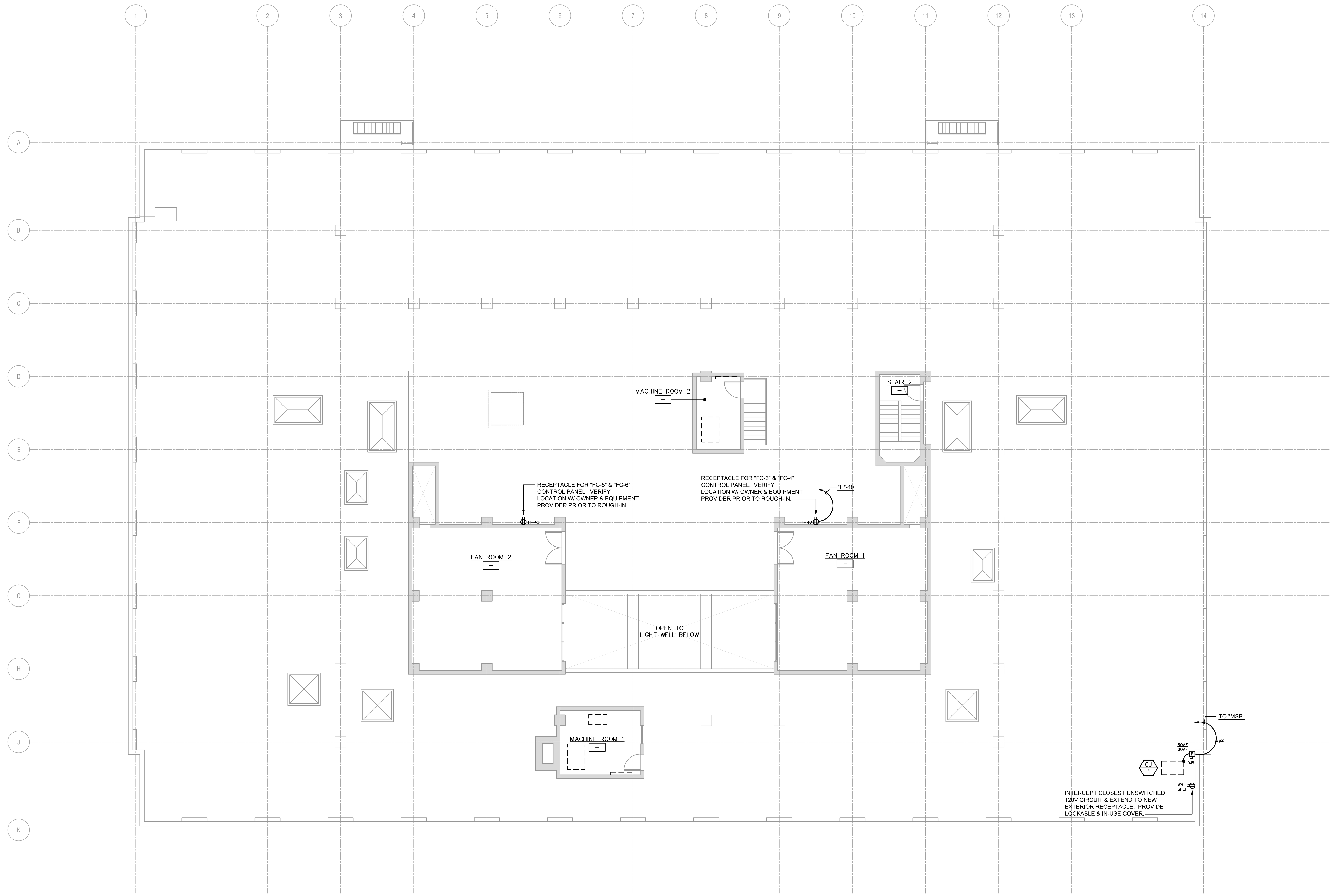
REGISTERED PROFESSIONAL ENGINEER JAMES H. PUGA No.16872 EXP: 03/31/23 ELECTRICAL STATE OF CALIFORNIA

JIM PUGA
RCE NO. E16872 EXP. 03.23
CHECKED BY JP
DESIGNED BY JL/JP
DRAWN BY JL/JP

No.	DATE	BY	REFERENCE
1	02.17.23	RPR	ISSUED FOR BID

COMMUNITY ROOM HVAC POWER PLAN

PROJECT NO. C1004859
SCALE: AS NOTED
HOR:
VERT:
DATE: 02.17.2023
SHEET NO. E2.4
52 OF 62



1 ROOF POWER PLAN
SCALE: 1/8" = 1'-0"

NORTH

RPR
1629 Telegraph Avenue
Oakland, CA 94612
Tel 510 272 0654

UP-LIGHT ELECTRICAL ENGINEERING, INC
3130 Twitchell Island Rd., West Sacramento, CA 95691
T/F - 916.371.3202
442 Livingston Avenue, Placentia, CA 92870
T - 916.826.1825

CITY OF OAKLAND
DEPARTMENT OF ENGINEERING & CONSTRUCTION
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SUITE 4314
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OAKLAND MAIN LIBRARY
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125 14TH STREET

REGISTERED PROFESSIONAL ENGINEER JAMES H. PUGA No.16872 EXP: 03/31/23 ELECTRICAL STATE OF CALIFORNIA

JIM PUGA
RCE NO. E16872 EXP. 03.23

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DESIGNED BY	JL/JP
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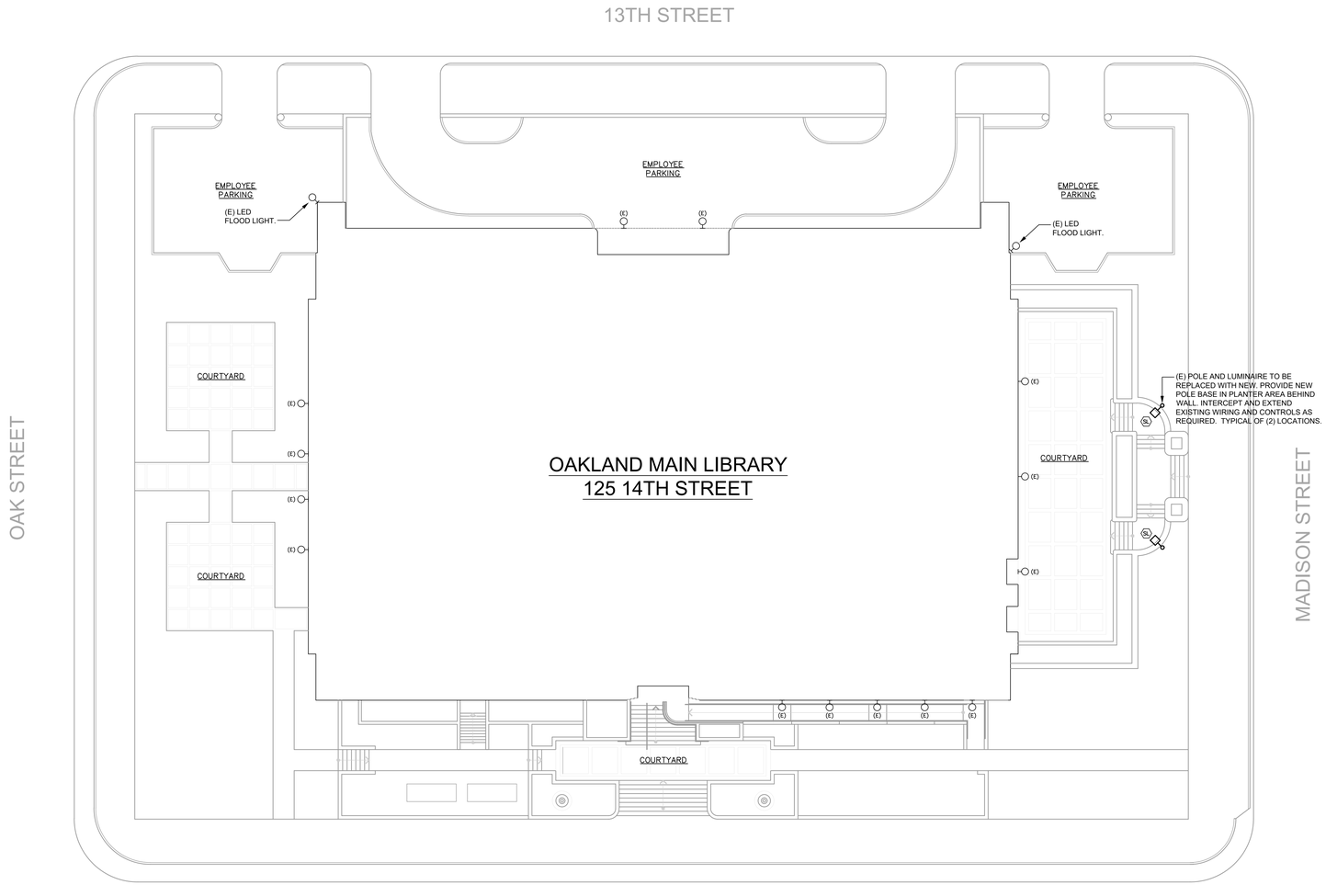
No.	DATE	BY	REFERENCE
1	02.17.23	RPR	ISSUED FOR BID

ROOF POWER PLAN

PROJECT NO.
C1004859

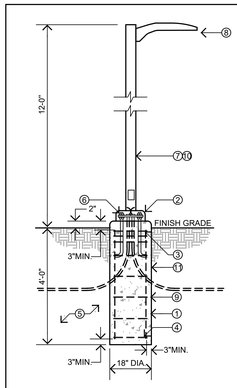
SCALE: AS NOTED
HOR:
VERT:
DATE: 02.17.2023

SHEET NO.
E2.5
53 OF 62



1 SITE LIGHTING PLAN
SCALE: 1/16" = 1'-0"

NORTH



1. CIRCULAR LIGHT POLE FOOTING (Fc=3000 PSI) w/ (4) #5 VERTICAL BARS EQUALLY SPACED AROUND FOOTING PERIMETER
2. BASE COVER DETAIL PER POLE MANUFACTURER
3. (3) #3 TIES AT FIRST 5"
4. #3 TIES @ 12" O.C. MAX
5. SUBGRADE PREPARATION PER SOILS REPORT
6. ANCHOR BOLT PER MANUFACTURER
7. 4" DIA. AREA LIGHT POLE & BASEPLATE PER MANUFACTURER MAX WEIGHT 200 LBS.
8. POLE MOUNTED LUMINAIRE MAX WEIGHT 50 LBS.
9. BARS TO CONFORM TO ASTM A615, GRADE 40 FOR #3 BARS AND GRADE 60 FOR #5 BARS.
10. LIGHT POLE TO BE DESIGNED TO RESIST WINDS UP TO 100MPH WITH EXPOSURE C.
11. FOOTING SHALL BE SUPPORTED ON UNDISTURBED NATURAL SOIL OR ENGINEERED FILL.

Fc = 3,000PSI, TYPE CEMENT W/C RATIO = 0.45

NOTE:
POLE BASE REQUIREMENTS TO BE EVALUATED BY A STRUCTURAL ENGINEER BEFORE INSTALLATION.

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JIM PUGA
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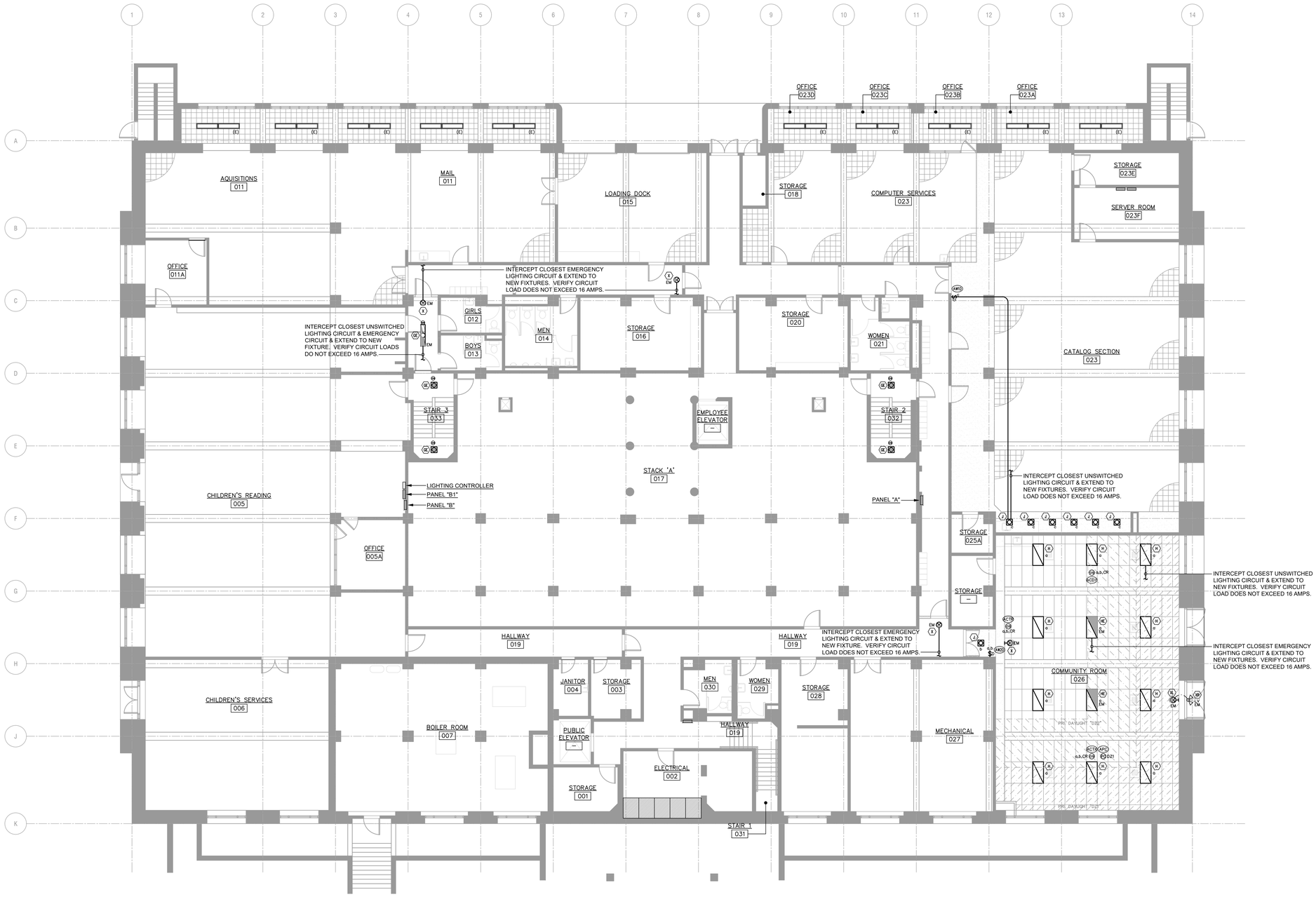
No.	DATE	BY	REFERENCE
1	02.17.23	RPR	ISSUED FOR BID

SITE LIGHTING PLAN

PROJECT NO.
C1004859
SCALE: AS NOTED
HOR:
VERT:
DATE: 02.17.2023
SHEET NO.
E3.0
54 OF 62



1 GROUND FLOOR LIGHTING PLAN
SCALE: 1/8" = 1'-0"

NORTH

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1629 Telegraph Avenue
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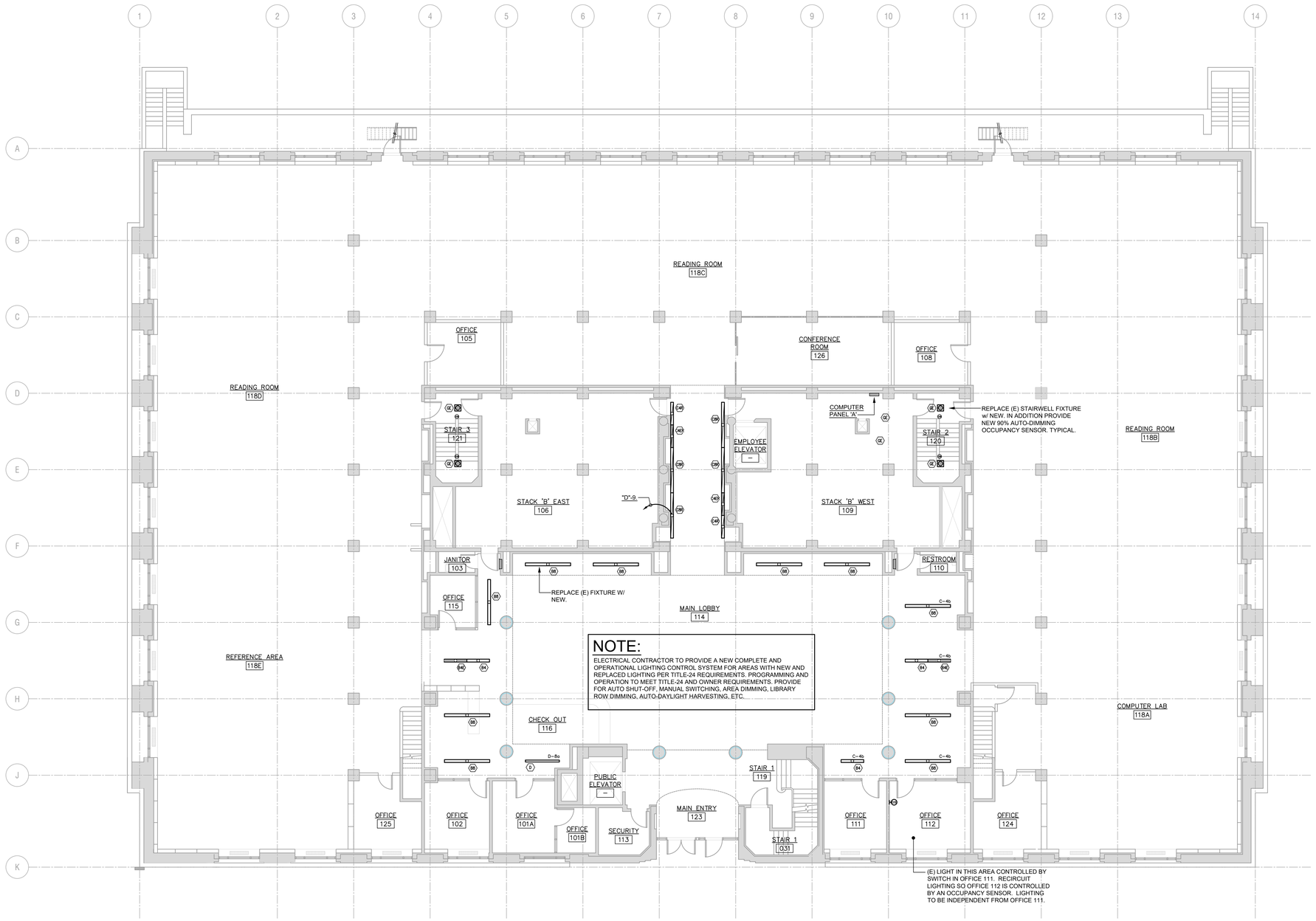
No.	DATE	BY	REFERENCE
1	02.17.23	RPR	ISSUED FOR BID

GROUND FLOOR LIGHTING PLAN

PROJECT NO.
C1004859

SCALE: AS NOTED
HOR:
VERT:
DATE: 02.17.2023

SHEET NO.
E3.1
55 OF 62



1 1ST FLOOR LIGHTING PLAN
SCALE: 1/8" = 1'-0"

NORTH

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OAKLAND MAIN LIBRARY INFRASTRUCTURE IMPROVEMENTS

125 14TH STREET

REGISTERED PROFESSIONAL ENGINEER
No. 16872
EXP: 03/31/23
ELECTRICAL
STATE OF CALIFORNIA

JIM PUGA
RCE NO. E16872 EXP. 03.23
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No.	DATE	BY	REFERENCE
1	02.17.23	RPR	ISSUED FOR BID

1ST FLOOR LIGHTING PLAN

PROJECT NO.
C1004859

SCALE: AS NOTED
HOR:
VERT:
DATE: 02.17.2023

SHEET NO.
E3.2
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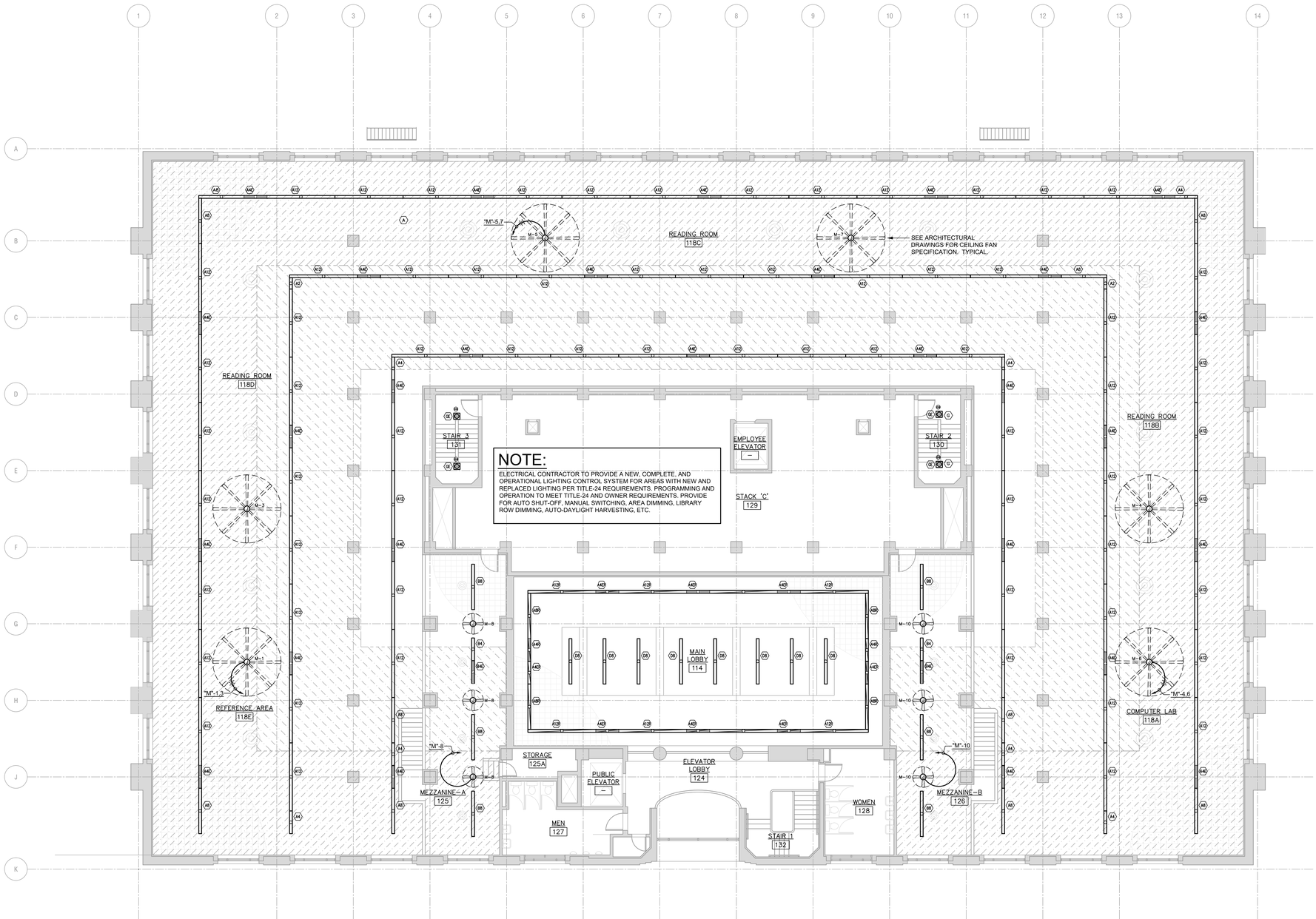
NOTE:

FOR LUMINAIRES SHOWN ON THIS SHEET, REUSE EXISTING LIGHTING CIRCUITS & EMERGENCY CIRCUITS. ROUTE CIRCUITS THROUGH RESPECTIVE LIGHTING CONTROLLER. PROVIDE UPDATED PANEL SCHEDULES & LIGHTING CONTROL SCHEDULES INDICATING CONTROL ZONES. PROVIDE OWNER W/ DRAWINGS DESIGNATING VARIOUS CONTROL ZONES.



1 MEZZANINE LIGHTING PLAN
SCALE: 1/8" = 1'-0"

NORTH

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Oakland, CA 94612
Tel 510 272 0654

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OAKLAND MAIN LIBRARY INFRASTRUCTURE IMPROVEMENTS

125 14TH STREET

REGISTERED PROFESSIONAL ENGINEER No. 16872 EXP: 03/31/23 ELECTRICAL STATE OF CALIFORNIA

JIM PUGA
RCE NO. E16872 EXP. 03.23
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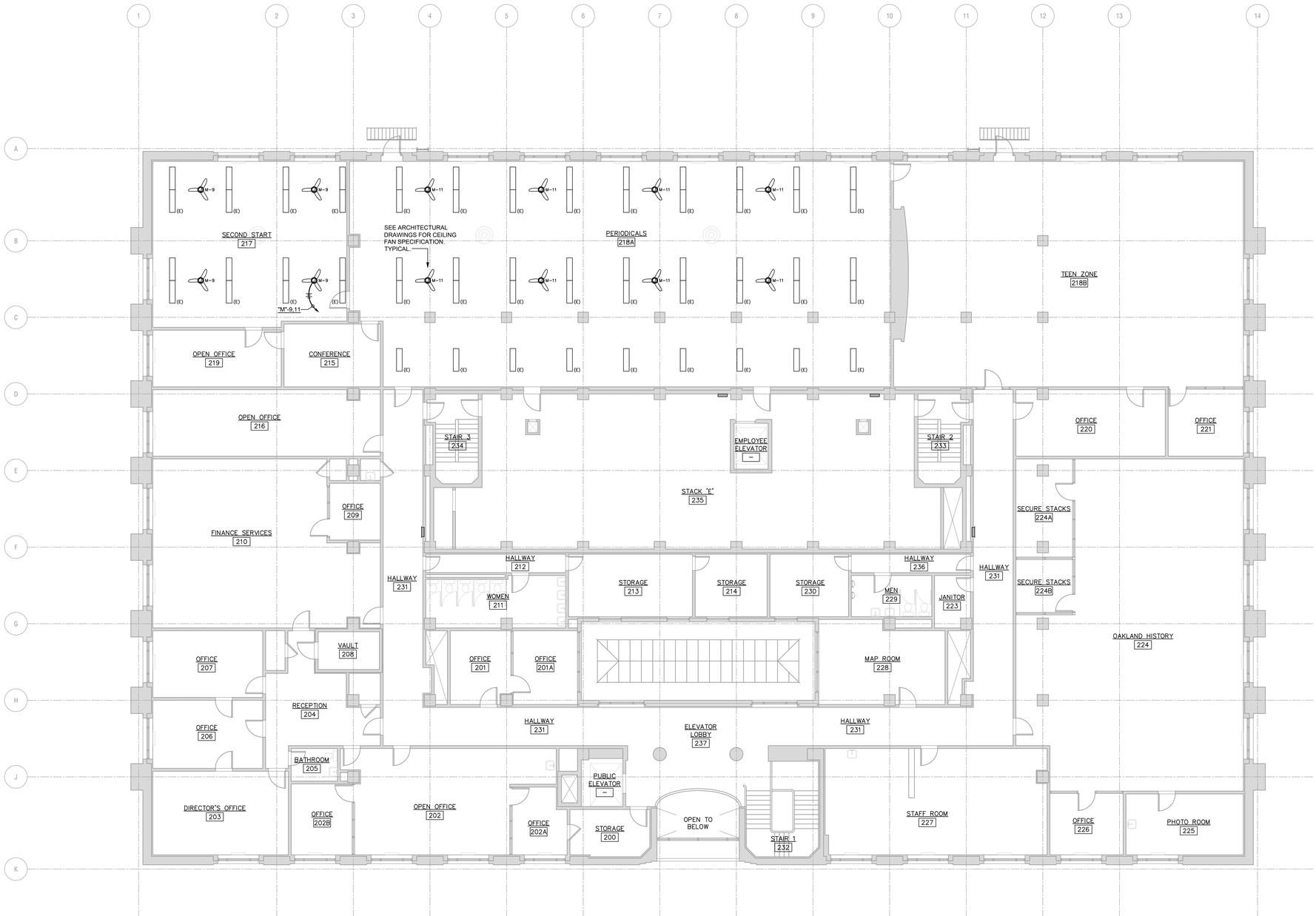
No.	DATE	BY	REFERENCE
1	02.17.23	RPR	ISSUED FOR BID

MEZZANINE LIGHTING PLAN

PROJECT NO. C1004859

SCALE: AS NOTED
HOR:
VERT:
DATE: 02.17.2023

SHEET NO. E3.3
57 OF 62



1 2ND FLOOR LIGHTING PLAN
SCALE: 1/8" = 1'-0"

NORTH

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DEPARTMENT OF ENGINEERING & CONSTRUCTION
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OAKLAND MAIN LIBRARY INFRASTRUCTURE IMPROVEMENTS

125 14TH STREET

REGISTERED PROFESSIONAL ENGINEER No.16872 EXP: 03/31/23 ELECTRICAL STATE OF CALIFORNIA

JIM PUGA	
RCE NO. E16872	EXP. 03.23
CHECKED BY	JP
DESIGNED BY	JL/JP
DRAWN BY	JL/JP

No.	DATE	BY	REFERENCE
1	02.17.23	RPR	ISSUED FOR BID

2ND FLOOR LIGHTING PLAN

PROJECT NO. C1004859

SCALE: AS NOTED
HOR:
VERT:
DATE: 02.17.2023

SHEET NO. E3.4
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STATE OF CALIFORNIA
INDOOR LIGHTING
CEC-NRCC-LTI-01-E (Revised 04/16) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-01-E
Indoor Lighting	(Page 1 of 6)
Project Name: Oakland Public Library	Date Prepared: 8/7/2018

A. General Information

Climate Zone: 3	Conditioned Floor Area: 20,612						
	Unconditioned Floor Area: 0						
Building Type:		☑	Nonresidential	☐	High-Rise Residential	☐	Hotel/Motel
☐ Schools		☐	Relocatable Public Schools	☑	Conditioned Spaces	☐	Unconditioned Spaces
Phase of Construction:		☐	New Construction	☐	Addition	☑	Alteration
Method of Compliance:		☐	Complete Building	☑	Area Category	☐	Tailored
Project Address: 125 14th Street							

B. Lighting Compliance Documents (select yes for each document included)

For detailed instructions on the use of this and all Energy Efficiency Standards compliance documents, refer to the Nonresidential Manual published by the California Energy Commission.

YES	NO	COMP. DOC.	TITLE
☑	☐	NRCC-LTI-01-E	Certificate of Compliance. All Pages required on plans for all submittals.
☑	☐	NRCC-LTI-02-E	Lighting Controls, Certificate of Compliance, and PAF Calculation. All Pages required on plans for all submittals.
☐	☑	NRCC-LTI-03-E	Indoor Lighting Power Allowance
☐	☑	NRCC-LTI-04-E	Tailored Method Worksheets
☐	☑	NRCC-LTI-05-E	Line Voltage Track Lighting Worksheets
☐	☐	NRCC-LTI-06-E	Indoor Lighting Existing Conditions

STATE OF CALIFORNIA
INDOOR LIGHTING
CEC-NRCC-LTI-01-E (Revised 04/16) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-01-E
Indoor Lighting	(Page 2 of 6)
Project Name: Oakland Public Library	Date Prepared: 8/7/2018

C. Summary of Allowed Lighting Power

Conditioned and Unconditioned space Lighting must not be combined for compliance

	Indoor Lighting Power for Conditioned Spaces		Watts	Indoor Lighting Power for Unconditioned Spaces		Watts
01	**Installed** Lighting NRCC-LTI-01-E, Table H, page 5	+	14,716	**Installed** Lighting NRCC-LTI-01-E, Table H, page 5	+	0
02	Portable Only for Offices NRCC-LTI-01-E, Table G, page 4	+				
03	Minus Lighting Control Credits NRCC-LTI-02-E, page 2	-	0	Minus Lighting Control Credits NRCC-LTI-02-E, page 2	-	0
04	Adjusted **Installed** Lighting Power (row 1 plus row 2 minus row 3)	=	14,716	Adjusted **Installed** Lighting Power (row 1 minus row 3)	=	0
	Complies ONLY if **Installed** ≤ **Allowed** (Box 04 < Box 05)			Complies ONLY if **Installed** ≤ **Allowed** (Box 04 < Box 05)		
05	**Allowed** Lighting Power Conditioned NRCC-LTI-03-E, page 1 Alterations with replacement luminaires that have at least 50/35% lower power compared to the original existing luminaires, may instead use the allowed wattage from NRCC-LTI-06, page 2		21,980	**Allowed** Lighting Power Unconditioned NRCC-LTI-03-E, page 1 Alterations with replacement luminaires that have at least 50/35% lower power compared to the original existing luminaires, may instead use the allowed wattage from NRCC-LTI-06, page 2		0

D. Declaration of Required Certificates of Installation

Declare by selecting yes for all of the Certificates that will be submitted. (Retain copies and verify forms are completed and signed.)

YES	NO	Compliance Document/Title	
☑	☐	NRCI-LTI-01-E - Must be submitted for all buildings	☐ Field Inspector
☐	☑	NRCI-LTI-02-E - Must be submitted for a lighting control system, or for an Energy Management Control System (EMCS), to be recognized for compliance.	☐ Field Inspector
☐	☑	NRCI-LTI-03-E - Must be submitted for a line-voltage track lighting integral current limiter, or for a supplementary overcurrent protection panel used to energize only line-voltage track lighting, to be recognized for compliance.	☐ Field Inspector
☐	☑	NRCI-LTI-04-E - Must be submitted for two interlocked systems serving an auditorium, a convention center, a conference room, a multipurpose room, or a theater to be recognized for compliance.	☐ Field Inspector
☐	☑	NRCI-LTI-05-E - Must be submitted for a Power Adjustment Factor (PAF) to be recognized for compliance.	☐ Field Inspector
☐	☑	NRCI-LTI-06-E - Must be submitted for additional wattage installed in a video conferencing studio to be recognized for compliance.	☐ Field Inspector

STATE OF CALIFORNIA
INDOOR LIGHTING
CEC-NRCC-LTI-01-E (Revised 04/16) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-01-E
Indoor Lighting	(Page 3 of 6)
Project Name: Oakland Public Library	Date Prepared: 8/7/2018

E. Declaration of Required Certificates of Acceptance

Declare by selecting yes for all of the Certificates that will be submitted. (Retain copies and verify forms are completed and signed.)

YES	NO	Compliance Document/Title	
☐	☑	NRCA-LTI-02-A - Must be submitted for occupancy sensors and automatic time switch controls.	☐ Field Inspector
☐	☑	NRCA-LTI-03-A - Must be submitted for automatic daylight controls.	☐ Field Inspector
☐	☑	NRCA-LTI-04-A - Must be submitted for demand responsive lighting controls.	☐ Field Inspector
☐	☑	NRCA-LTI-05-A – Must be submitted for institutional tuning power adjustment factor (PAF).	☐ Field Inspector

A Separate Lighting Schedule Must Be Filled Out for Conditioned and Unconditioned Spaces. Installed Lighting Power listed on this Lighting Schedule is only for:
☐ **CONDITIONED SPACE** ☐ **UNCONDITIONED SPACE**

F. Indoor Lighting Schedule and Field Inspection Energy Checklist

- ☐ The actual indoor lighting power listed on the next 2 pages includes all installed permanent and planned portable lighting systems.
- ☐ When Complete Building Method is used for compliance, list each different type of luminaire on separate lines.
- ☐ When Area Category Method or Tailored Method is used for compliance, list each different type of luminaire by each different function area on separate lines
- ☐ Also include track lighting in schedule, and submit the track lighting compliance document (NRCC-LTI-05-E) when line-voltage track lighting is installed.

STATE OF CALIFORNIA
INDOOR LIGHTING
CEC-NRCC-LTI-01-E (Revised 04/16) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-01-E
Indoor Lighting	(Page 4 of 6)
Project Name: Oakland Public Library	Date Prepared: 8/7/2018

G. Installed Portable Luminaires in Offices – Exception to Section 140.6(a)

- ☐ This section shall be filled out ONLY for portable luminaires in offices (As defined in §100.1). All other planned portable luminaires shall be documented on next page of this compliance document.
- ☐ This section is used to determine if greater than 0.3 watts of portable lighting is planned for any office
- ☐ Fill out a separate line for each different office. Small offices that are typical (having the same general and portable lighting) may be grouped together. This allowance shall not be traded between offices having different lighting systems.

Office Portable Luminaire Schedule	Office Installed Portable Luminaire W/ft²							Office Location	Field Inspector	
1	2	3	4	5	6	7	8	9	10	
Complete Luminaire Description (i.e., LED, under cabinet, furniture mounted direct/indirect)	Watts per Luminaire	Number of Luminaires	Installed portable luminaire watts in this office (G02 x G03)	Square feet of this office	Watts per square foot (G04 / G05)	If G06 ≤ 0.3, enter zero; if G06 > 0.3, (G06-0.3)	(G05 x G07)	Identify Office area in which these portable luminaires are installed	Pass	Fail
									☐	☐
									☐	☐
									☐	☐
									☐	☐
									☐	☐
Total installed portable luminaire watts that are greater than 0.3 W/ft² per office:								Enter sum total of all pages into NRCC-LTI-01-E; Page 1		

STATE OF CALIFORNIA
INDOOR LIGHTING
CEC-NRCC-LTI-01-E (Revised 04/16) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-01-E
Indoor Lighting	(Page 5 of 6)
Project Name: Oakland Public Library	Date Prepared: 8/7/2018

A Separate Lighting Schedule Must Be Filled Out for Conditioned and Unconditioned Spaces. Installed Lighting Power listed on this Lighting Schedule is only for:
☑ **CONDITIONED SPACE** ☐ **UNCONDITIONED SPACE**

H. Indoor Lighting Schedule and Field Inspection Energy Checklist

Luminaire Schedule		Installed Watts					Location	Field Inspector [1]	
01	02	03	04	05	06	07	08		
Name or Item Tag	Complete Luminaire Description (i.e., 3 lamp fluorescent troffer, F32T8, one dimmable electronic ballast)	Watts per Luminaire	How wattage was determined: CEC Default from NA8	How wattage was determined: According to §130.0(c)	Number Luminaires	Total Installed Watts in this area (W03 x H05)	Primary Function area in which these luminaires are installed	Pass	Fail
A/AE	240w LED	240.0	☐	☑	48	11,520	Library, Reading Area	☐	☐
B1	96w LED	96.0	☐	☑	8	768	Library, Reading Area	☐	☐
B2	96w LED	96.0	☐	☑	4	384	Lobby, Main Entry	☐	☐
C	6.3w/ft LED	6.3	☐	☑	154	970	Lobby, Main Entry	☐	☐
D	48w LED	48.0	☐	☑	3	144	Lobby, Main Entry	☐	☐
E	64w LED	64.0	☐	☑	11	704	Lobby, Main Entry	☐	☐
F	4.7w/ft LED	4.7	☐	☑	48	226	Corridor/Restroom/Support	☐	☐
			☐	☐				☐	☐
			☐	☐				☐	☐
INSTALLED WATTS PAGE TOTAL:						14,716	Enter sum total of all pages into NRCC-LTI-01-E; Page 2		

STATE OF CALIFORNIA
INDOOR LIGHTING
CEC-NRCC-LTI-01-E (Revised 04/16) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-01-E
Indoor Lighting	(Page 6 of 6)
Project Name: Oakland Public Library	Date Prepared: 8/7/2018

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

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

Documentation Author Name:	Documentation Author Signature:
Company: Up-Light Electrical Engineering, Inc.	Signature Date: 8/7/2018
Address:	CEA Certification Identification (if applicable):
City/State/Zip:	Phone:

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 are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.
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 inspections. I understand that a completed signed copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy.

Responsible Designer Name: Jim Puga	Responsible Designer Signature:
Company : Up-Light Electrical Engineering, Inc.	Date Signed:
Address: 3130 Twitchell Island Road	License: E16872
City/State/Zip: West Sacramento, CA 95691	Phone: 916.371.3202

STATE OF CALIFORNIA
INDOOR LIGHTING – LIGHTING CONTROLS
CEC-NRCC-LTI-02-E (Revised 01/16) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-02-E
Indoor Lighting - Lighting Controls	(Page 1 of 3)
Project Name: Oakland Public Library	Date Prepared: 8/7/2018

A. Mandatory Lighting Control Declaration Statements (Indicate if the measure applies by checking yes or no below.)

YES	NO	Control Requirements
☐	☑	Lighting shall be controlled by self-contained lighting control devices which are certified to the Energy Commission according to the Title 20 Appliance Efficiency Regulations in accordance with Section 110.9.
☐	☑	Lighting shall be controlled by a lighting control system or energy management control system in accordance with §110.9. An Installation Certificate shall be submitted in accordance with Section 130.4(b).
☐	☑	One or more Track Lighting Integral Current Limiters shall be installed which have been certified to the Energy Commission in accordance with §110.9 and §130.0. Additionally, an Installation Certificate shall be submitted in accordance with Section 130.4(b).
☐	☑	A Track Lighting Supplementary Overcurrent Protection Panel shall be installed in accordance with Section 110.9 and Section 130.0. Additionally, an Installation Certificate shall be installed in accordance with Section 130.4(b).
☑	☐	All lighting controls and equipment shall comply with the applicable requirements in §110.9 and shall be installed in accordance with the manufacturer's instructions in accordance with Section 130.1.
☐	☑	All luminaires shall be functionally controlled with manually switched ON and OFF lighting controls in accordance with Section 130.1(a).
☑	☐	General lighting shall be separately controlled from all other lighting systems in an area. Floor and wall display, window display, case display, ornamental, and special effects lighting shall each be separately controlled on circuits that are 20 amps or less. When track lighting is used, general, display, ornamental, and special effects lighting shall each be separately controlled; in accordance with Section 130.1(a)4.
☑	☐	The general lighting of any enclosed area 100 square feet or larger, with a connected lighting load that exceeds 0.5 watts per square foot shall meet the multi-level lighting control requirements in accordance with Section 130.1(b).
☐	☑	All installed indoor lighting shall be equipped with controls that meet the applicable Shut-OFF control requirements in Section 130.1(c).
☐	☑	Lighting in all Daylit Zones shall be controlled in accordance with the requirements in Section 130.1(d) and daylit zones are shown on the plans.
☐	☑	Lighting power in buildings larger than 10,000 square feet shall be capable of being automatically reduced in response to a Demand Responsive Signal in accordance with Section 130.1(e).
☑	☐	Before an occupancy permit is granted for a newly constructed building or area, or a new lighting system serving a building, area, or site is operated for normal use, indoor lighting controls serving the building, area, or site shall be certified as meeting the Acceptance Requirements for Code Compliance in accordance with Section 130.4.(a). The controls required to meet the Acceptance Requirements include automatic daylight controls, automatic shut-OFF controls, and demand responsive controls.

STATE OF CALIFORNIA
INDOOR LIGHTING – LIGHTING CONTROLS
CEC-NRCC-LTI-02-E (Revised 01/16) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-02-E
Indoor Lighting - Lighting Controls	(Page 2 of 3)
Project Name: Oakland Public Library	Date Prepared: 8/7/2018

A separate document must be filled out for Conditioned and Unconditioned Spaces. This page is used only for the following:
☑ CONDITIONED SPACES ☐ UNCONDITIONED SPACES

B. Mandatory and Prescriptive Indoor Lighting Control Schedule, PAF Calculation, and Field Inspection Checklist

Lighting Control Schedule			Standards Complying With [1] (✓ all that apply, or enter 'E' if Exempted)						PAF Credit Calculation [2]				Field Inspector	
									Watts of Controlled Lighting	PAF	Control Credit (K x L)	✓ if Acceptance Test Required		
01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	
Location in Building	Type/Description of Lighting Control (i.e.: occupancy sensor, automatic time switch, dimmer, automatic daylight, etc...)	# of Units	§130.1(a)	§130.0(b)	§130.1(c)	§130.1(d)	§130.1(e)	§140.6(a)2	§140.6(d)					Pass	Fail
Reading Room	Multi Level	3	☐	☑	☐	☐	☐	☐	☐				✓	☐	☐
West Mezzanine	Multi Level	1	☐	☑	☐	☐	☐	☐	☐				✓	☐	☐
East Mezzanine	Multi Level	1	☐	☑	☐	☐	☐	☐	☐				✓	☐	☐
Lobby	Multi Level	1	☐	☑	☐	☐	☐	☐	☐				✓	☐	☐
			☐	☐	☐	☐	☐	☐	☐					☐	☐
			☐	☐	☐	☐	☐	☐	☐					☐	☐
Control Credit PAGE TOTAL (Sum of Column 13):												0			
IF MULTIPLE PAGES ARE USED, ENTER SUM TOTAL OF Control Credit for all pages HERE (Sum of all Column 13):												0			
												Enter Control Credit total into NRCC-LTI-01-E; Page 1.			

1. §130.1(a) = Manual area controls; §130.0(b) = Multi Level; §130.1(c) = Auto Shut-Off; §130.1(d) = Mandatory Daylight; §130.1(e) = Demand Responsive; §140.6(d) = Additional lighting controls installed to earn a PAF; §140.6(d) = Prescriptive Secondary Sidelit Daylight Controls.
2. Check Table 140.6-A for correct Factor. PAFs shall not be traded between conditioned and unconditioned spaces. As a condition to earn a PAF, an Installation Certificate is also required to be filled out, signed, and submitted.

STATE OF CALIFORNIA
INDOOR LIGHTING – LIGHTING CONTROLS
CEC-NRCC-LTI-02-E (Revised 01/16) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-02-E
Indoor Lighting - Lighting Controls	(Page 3 of 3)
Project Name: Oakland Public Library	Date Prepared: 8/7/2018

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

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

Documentation Author Name:	Documentation Author Signature:
Company: Up-Light Electrical Engineering, Inc.	Signature Date: 8/7/2018
Address:	CEA Certification Identification (if applicable):
City/State/Zip:	Phone:

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 are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.
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 inspections. I understand that a completed signed copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy.

Responsible Designer Name: Jim Puga	Responsible Designer Signature:
Company : Up-Light Electrical Engineering, Inc.	Date Signed:
Address: 3130 Twitchell Island Road	License: E16872
City/State/Zip: West Sacramento, CA 95691	Phone: 916.371.3202

RPR
1629 Telegraph Avenue
Oakland, CA 94612
Tel 510 272 0654

UP-LIGHT ELECTRICAL ENGINEERING, INC
3130 Twitchell Island Rd., West Sacramento, CA 95691
T/F - 916.371.3202
442 Livingston Avenue, Placentia, CA 92870
T - 916.826.1825

CITY OF OAKLAND
DEPARTMENT OF ENGINEERING & CONSTRUCTION
250 FRANK H. OGAWA PLAZA
SUITE 4314
OAKLAND, CA 94612
(510) 238-3437

OAKLAND MAIN LIBRARY INFRASTRUCTURE IMPROVEMENTS
125 14TH STREET

REGISTERED PROFESSIONAL ENGINEER — No.16872 EXP: 03/31/23 — ELECTRICAL — STATE OF CALIFORNIA

JIM PUGA
RCE NO. E16872 EXP. 03.23
CHECKED BY JP
DESIGNED BY JL/JP
DRAWN BY JL/JP

No.	DATE	BY	REFERENCE
1	02.17.23	RPR	ISSUED FOR BID

TITLE-24 FORMS

PROJECT NO. C1004859
SCALE: AS NOTED
HOR:
VERT:
DATE: 02.17.2023
SHEET NO. E4.0
59 OF 62

[redacted]

[redacted]	[redacted]	[redacted]					[redacted]
		[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]		[redacted]

[redacted]

[redacted]	[redacted]	[redacted]
[redacted]		[redacted]
	[redacted]	[redacted]

RPR ARCHITECTS

ELMENDORF & ASSOCIATES
MECHANICAL ENGINEERS
517 PINE STREET
SAUSALITO, CA 94965
415-332-8388

CITY OF OAKLAND
DEPARTMENT OF ENGINEERING & CONSTRUCTION
250 FRANK H. OGAWA PLAZA
SUITE 4314
OAKLAND, CA 94612
(510) 238-3437

OAKLAND MAIN LIBRARY
INFRASTRUCTURE IMPROVEMENTS

125 14TH STREET

REGISTERED PROFESSIONAL ENGINEER JEFF ELMENDORF No. 27243 Exp. 6/30/23 MECHANICAL State of California

MECHANICAL ENGINEER

JEFF ELMENDORF

RCE NO. M 27243 EXP. 06/23

CHECKED BY	JJE
DESIGNED BY	JJE
DRAWN BY	MAH

No.	DATE	BY	REFERENCE
1	02.17.23	JJE	ISSUE FOR BID

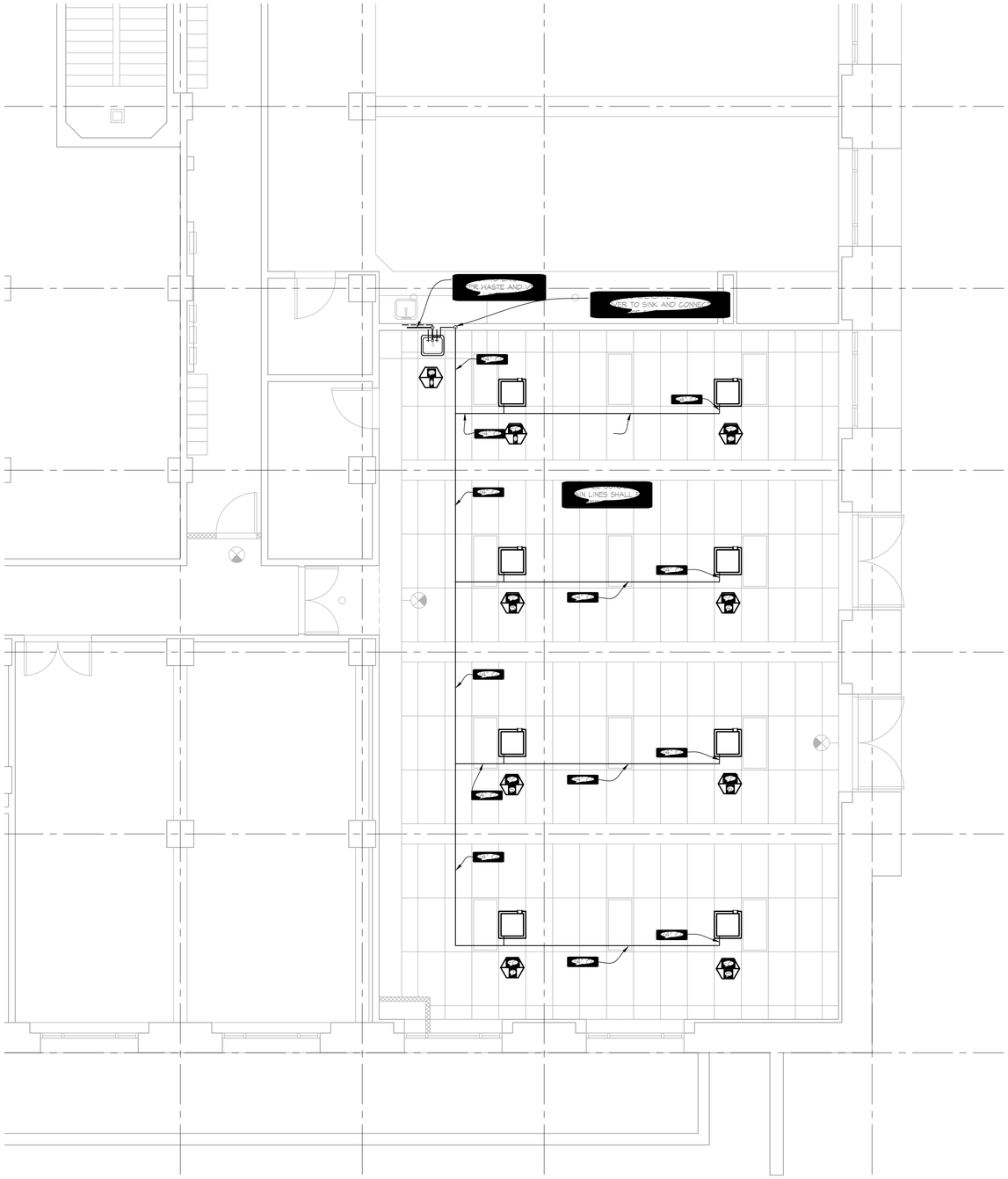
CONSTRUCTION PLANS:

PLUMBING SCHEDULES & DETAILS

PROJECT NO.
C1004859

SCALE: AS NOTED
HOR:
VERT:
DATE: 08.15.22

SHEET NO.
P1.1



DRAWING NAME:	C:\CSF\Cad\jobs\2020\01\202001 P2.1.dwg
DATE:	08-Feb-23
PLOTTED BY:	Jeff

RPR ARCHITECTS

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OAKLAND MAIN LIBRARY INFRASTRUCTURE IMPROVEMENTS

125 14TH STREET

REGISTERED PROFESSIONAL ENGINEER — JEFF J. ELMENDORF — Exp. 6/30/23 — MECHANICAL — State of California

MECHANICAL ENGINEER

JEFF ELMENDORF
RCE NO. M 27243. EXP. 06/23

CHECKED BY	JJE
DESIGNED BY	JJE
DRAWN BY	MAH

No.	DATE	BY	REFERENCE
1	02.17.23	JJE	ISSUE FOR BID

CONSTRUCTION PLANS:

PLUMBING PLAN

PROJECT NO.
C1004859

SCALE: AS NOTED
HOR:
VERT:
DATE: 08.15.22

SHEET NO.
P2.1
61 OF 62

DRAWING NAME: C:\CSP\Oak\plots\202031\202031 P3.1.dwg
PLOT DATE: 08.15.23
PLOTTED BY: Jeff

RPR ARCHITECTS

ELMENDORF
&
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OAKLAND MAIN LIBRARY
INFRASTRUCTURE IMPROVEMENTS
125 14TH STREET

REGISTERED PROFESSIONAL ENGINEER
JEFFREY J. ELMENDORF
Exp. 6/30/23
MECHANICAL
State of California
MECHANICAL ENGINEER

JEFF ELMENDORF
RCE NO. M 27243 EXP. 06/23
CHECKED BY JJE
DESIGNED BY JJE
DRAWN BY MAH

No.	DATE	BY	REFERENCE
1	02.17.23	JJE	ISSUE FOR BID

CONSTRUCTION PLANS:

PLUMBING SPECIFICATIONS

PROJECT NO.
C1004859

SCALE: AS NOTED
HOR:
VERT:
DATE: 08.15.22

SHEET NO.
P3.1
62 OF 62