1" = 40'-0" 120 80 40 0 40

1" = 30'-0" 90 60 30 0 30

1" = 20'-0" 60 40 20 0 20

1/8" = 1'-0" 24 16 8 0 8

1/4" = 1'-0" 12 8 4 0 4

DR. MARTIN LUTHER KING JR. ELEMENTARY

MLK ELEMENTARY SCHOOL
TRANSITIONAL KINDERGARTEN
1100 CITADEL
BAKERSFIELD, CA 93307

GENERAL NOTES

1. ALL WORK SHALL CONFORM TO TITLE 24, CALIFORNIA CODE OF REGULATIONS
2. CHANGES MADE TO THE APPROVED DRAWINGS & SPECS SHALL BE MADE BY ADDENDUM OR C.C.D., APPROVED BY DSA AS REQUIRED BY SECTION 4-338, PART 1, TITLE 24, C.C.R. AND DSA IR-6.
3. REFER TO RELOCATABLE BUILDING MANUFACTURER'S DRAWINGS FOR ALL INFORMATION REGARDING THE RELOCATABLE BUILDINGS
4. DSA ACCEPTED TESTING LABORATORY TO BE DIRECTLY EMPLOYED BY THE DISTRICT (OWNER) SHALL CONDUCT ALL REQUIRED TESTS & INSPECTIONS FOR THE PROJECT
5. THE FOLLOWING DOCUMENTS SHALL BE ON THE JOBSITE PRIOR TO INSTALLATION OF UNITS:
   A. IN-PLANT VERIFIED REPORT
   B. LABORATORY VERIFIED REPORT
   C. WELDING VERIFIED REPORT
   THE SITE INSPECTOR SHALL VERIFY THE ABOVE DOCUMENTS & SERIAL NUMBERS ARE APPLICABLE TO EACH UNIT PRIOR TO INSTALLATION OF THE UNITS.
   NOTIFY ARCHITECT & DIVISION OF THE STATE ARCHITECT FIELD ENGINEER IF ANY DISCREPANCIES OCCUR
6. IN-PLANT INSPECTOR & MANUFACTURER SHALL FOLLOW THE REQUIREMENTS OF DSA IR16-1.13 & INCLUDE THE FOLLOWING INFORMATION ON ID TAG OF SHOP FABRICATED RELOCATABLE STRUCTURES:
   1. THE DSA APPLICATION NUMBER & CBC EDITION UNDER WHICH THE BUILDING CONSTRUCTION WAS AUTHORIZED
   2. THE MANUFACTURER OR BUILDINGS NAME
   3. THE SERIAL NUMBER
   4. THE DESIGN CLIMATE ZONE
   5. THE DESIGN LIVE LOADS FOR THE ROOF & FLOOR
   6. THE DESIGN WIND SPEED & EXPOSURE CATEGORY
   7. THE SEISMIC DESIGN Ss
7. FIRE SAFETY DURING CONSTRUCTION AND DEMOLITION SHALL COMPLY WITH CFC CHAPTER 33.

PROJECT DIRECTORY

OWNER:
BAKERSFIELD CITY SCHOOL DISTRICT
MARK LUQUE, SUPERINTENDENT
1300 BAKER ST, BAKERSFIELD, CA 93305
TEL: (661) 631-4600
EMAIL: luquem@bcsd.com

ARCHITECT:
CURTIS FLYNN
INTEGRATED DESIGNS by SOMAM, Inc.
6011 N. FRESNO SUITE #130
FRESNO, CA 93710
TEL: 559-436-0881
FAX. 559-436-0887

MECHANICAL/PLUMBING ENGINEER:
LISA LUM
INTEGRATED DESIGNS by SOMAM, Inc.
6011 N. FRESNO SUITE #130
FRESNO, CA 93710
TEL: 559-436-0881
EMAIL: llum@somam.com

CIVIL ENGINEER:
FREDDIE PORTER
PORTER & ASSOCIATES
1200 21ST ST
BAKERSFIELD, CA 93301
TEL: 661-327-0362

ELECTRICAL ENGINEER:
JMPE ELECTRICAL ENGINEERING
5500 MING AVE., SUITE 251
BAKERSFIELD, CA 93309
TEL: 661-831-7851

STRUCTURAL
DUSTIN LEE
CORNERSTONE STRUCTURAL
986 W ALLUVIAL AVE,
FRESNO, CA 93711
TEL: 661-327-0362
EMAIL: dlee@cseg.com

M.S. FIRE PROTECTION
3644 S BAGLEY AVENUE
FRESNO, CA 93745
TEL: (559) 485-4400
EMAIL: richard@msfireprro.com

INSPECTOR OF RECORD

THIS PROJECT REQUIRES A CLASS 4 INSPECTOR FOR RELO INSTALLATION AND RBIP FOR IN PLANT. THE INSPECTOR OF RECORD SHALL BE DSA APPROVED AND CONFORM TO THE CLASSIFICATION CRITERIA AS PROVIDED IN INTERPRETATION OF REGULATIONS (IR) A-7, DATED SEPTEMBER 18, 2007.

THE INSPECTOR SHALL BE EMPLOYED BY THE DISTRICT AND APPROVED BY THE RESPONSIBLE ARCHITECT AND DSA.

A "DSA CERTIFIED" PROJECT INSPECTOR EMPLOYED BY THE DISTRICT (OWNER) AND APPROVED BY THE DSA SHALL PROVIDE CONTINUOUS INSPECTION OF THE WORK. THE DUTIES OF THE INSPECTOR ARE DEFINED IN SECTION 4-342, PART 1, TITLE 24, CCR.

A DSA ACCEPTED TESTING LABORATORY DIRECTLY EMPLOYED BY THE DISTRICT (OWNER) SHALL CONDUCT ALL THE REQUIRED TESTS AND INSPECTIONS FOR THE PROJECT.

BUILDING DATA

CLASSROOM BUILDINGS

OCCUPANCY = E

TYPE OF CONSTRUCTION = VB (SPRINKLERED)

TOTAL BUILDING AREA:

1 (E) BUILDING @ 11,449 S.F. = 13934 S.F (INC O.H.)

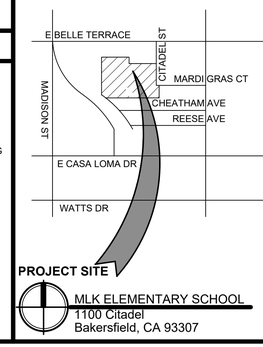
1 BUILDINGS @ 2,709 S.F. EA. = 3,297 S.F. (INC O.H.)

TOTAL 17,231 S.F.

PER 2022 TABLE 506.2 ALLOWABLE AREA = 9,500 S.F.
4,204 PROPOSED < 9,500 ALLOWABLE = OK

FULLY AUTOMATIC FIRE ALARM W/ VOICE EVAC

VICINITY MAP



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1100 Citadel
Bakersfield, CA 93307

SYMBOLS

SECTION KEY — A / A3.03 — SECTION IDENTIFICATION, SHEET NUMBER

DETAIL KEY — 1 / A2.01 — DETAIL NUMBER, SHEET NUMBER

INTERIOR ELEVATION KEY — A, B, C, D; 1 / A5.01 — ELEVATION DIRECTION, ELEVATION IDENTIFICATION, SHEET NUMBER

ELEVATION DATUM — +1'-0" — INDICATES HEIGHT IN RELATION TO 0'-0"

ROOM NUMBER/FINISH TAG — OFFICE / 100 — ROOM NAME, ROOM NUMBER

A — WINDOW SCHEDULE KEY

1 — KEYNOTE SCHEDULE KEY

201 — DOOR SCHEDULE KEY

SEISMIC DESIGN

SEE STRUCTURAL SHEET S0.01 PROJECT DATA

DSA NOTES

THE INTENT OF THESE DRAWINGS AND SPECIFICATIONS IS THAT THE WORK OF THE ALTERATION, REHABILITATION OR RECONSTRUCTION IS TO BE IN ACCORDANCE WITH TITLE 24, CCR. SHOULD ANY EXISTING CONDITIONS SUCH AS DETERIORATION OR NON-COMPLYING CONSTRUCTION BE DISCOVERED WHICH IS NOT COVERED BY THE CONTRACT DOCUMENTS WHEREIN THE FINISHED WORK WILL NOT COMPLY WITH TITLE 24, CCR, A CONSTRUCTION CHANGE DOCUMENT (CCD), OR A SEPARATE SET OF PLANS AND SPECIFICATIONS, DETAILING AND SPECIFYING THE REQUIRED WORK SHALL BY SUBMITTED TO AND APPROVED BY DSA BEFORE PROCEEDING WITH THE WORK. (SECTION 4-317(C), PART 1, TITLE 24, CCR).

GRADING PLANS, DRAINAGE IMPROVEMENTS, ROAD AND ACCESS REQUIREMENTS AND ENVIRONMENTAL HEALTH CONSIDERATIONS SHALL COMPLY WITH ALL LOCAL ORDINANCES.

STATEMENT OF GENERAL CONFORMANCE

ARCHITECT'S STATEMENT FOR PLANS PREPARED BY OTHER LICENSED DESIGN PROFESSIONALS AND/OR CONSULTANTS

THESE DRAWINGS AND/OR SPECIFICATIONS AND/OR CALCULATIONS FOR THE ITEMS LISTED IN THE SHEET INDEX AND CHECKED BELOW HAVE BEEN PREPARED BY OTHER DESIGN PROFESSIONALS OR CONSULTANTS WHO ARE LICENSED AND/OR AUTHORIZED TO PREPARE SUCH DOCUMENTS IN THIS STATE. THESE DOCUMENTS HAVE BEEN EXAMINED BY ME FOR DESIGN INTENT AND HAVE BEEN FOUND TO MEET THE APPROPRIATE REQUIREMENTS OF TITLE 24, CALIFORNIA CODE OF REGULATIONS AND THE PROJECT SPECIFICATIONS PREPARED BY ME.

THE ITEMS CHECKED BELOW ARE ACCEPTABLE FOR INCORPORATION INTO THE CONSTRUCTION OF THIS PROJECT FOR WHICH I AM THE INDIVIDUAL DESIGNATED TO BE IN GENERAL RESPONSIBLE CHARGE (OR FOR WHICH I HAVE DELEGATED RESPONSIBILITY FOR THIS PORTION OF THE WORK.)

SEE THE SHEET INDEX ON THIS SHEET FOR DRAWINGS OTHER THAN ARCHITECTURAL.

THE STATEMENT OF GENERAL CONFORMANCE SHALL NOT BE CONSTRUED AS RELIEVING ME OF MY RIGHTS, DUTIES, AND RESPONSIBILITIES UNDER SECTIONS 17302 AND 81138 OF THE EDUCATION CODE AND SECTIONS 4-336, 4-341 AND 4-334 OF TITLE 24, PART 1. (TITLE 24, PART 1, SECTION 4-317 (b)).

APPLICABLE:

☒ CIVIL ☒ MECHANICAL ☒ ELECTRICAL ☒ PLUMBING
☒ STRUCTURAL ☒ FIRE SUPPRESSION

I FIND THAT:

☒ ALL DRAWINGS OR SHEETS LISTED ON THE COVER OR INDEX SHEET

☒ IS/ARE IN GENERAL CONFORMANCE WITH THE PROJECT DESIGN INTENT, AND
☒ HAS/HAVE BEEN COORDINATED WITH THE PROJECT PLANS AND SPECIFICATIONS.

SIGNATURE OF THE ARCHITECT/ENGINEER — 2/12/24 DATE
NAME, TITLE, AFFILIATION
C-28966 LICENSED NUMBER — 5/31/25 EXPIRATION DATE

APPLICABLE CODES

PARTIAL LIST OF APPLICABLE CODES AS OF JANUARY 1, 2022*

- 2022 CALIFORNIA ADMINISTRATIVE CODE (CAC), PART 1, TITLE 24 CCR.
- 2022 CALIFORNIA BUILDING CODE (CBC), PART 2, TITLE 24 CCR (2021 INTERNATIONAL BUILDING CODE, VOL. 1 & 2, AND 2019 CALIFORNIA AMENDMENTS).
- 2022 CALIFORNIA ELECTRICAL CODE (CEC), PART 3, TITLE 24 CCR (2023 NATIONAL ELECTRICAL CODE AND 2022 CALIFORNIA AMENDMENTS).
- 2019 CALIFORNIA MECHANICAL CODE (CMC), PART 4, TITLE 24 CCR (2018 IAPMO UNIFORM MECHANICAL CODE AND 2019 CALIFORNIA AMENDMENTS).
- 2022 CALIFORNIA PLUMBING CODE (CPC), PART 5, TITLE 24 CCR (2018 IAPMO UNIFORM PLUMBING CODE AND 2021 CALIFORNIA AMENDMENTS).
- 2022 CALIFORNIA ENERGY CODE (CEC), PART 6, TITLE 24 CCR.
- 2022 CALIFORNIA FIRE CODE (CFC), PART 9, TITLE 24 CCR (2018 INTERNATIONAL FIRE CODE AND 2021 CALIFORNIA AMENDMENTS).
- 2022 CALIFORNIA EXISTING BUILDING CODE (CEBC), PART 10, TITLE 24 CCR (2021 INTERNATIONAL EXISTING BUILDING CODE AND 2019 CALIFORNIA AMENDMENTS).
- 2019 CALIFORNIA GREEN BUILDING STANDARDS CODE (CALGREEN), PART 11, TITLE 24 CCR.
- 2022 CALIFORNIA REFERENCED STANDARDS CODE, PART 12, TITLE 24 CCR TITLE 19 CCR, PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS.
- 2022 NFPA-72 NATIONAL FIRE ALARM AND SIGNALING CODE (CA AMENDED)
- 2022 NFPA-80 STANDARD FOR FIRE DOORS AND OTHER OPENING PROTECTIVES
- 2016 UL-464 AUDIBLE SIGNALING DEVICES FOR FIRE ALARM AND SIGNALING SYSTEMS, INCLUDING ACCESSORIES
- 1999 UL-521 STANDARD FOR HEAT DETECTORS FOR FIRE PROTECTIVE SIGNALING SYSTEMS
- 2002 (R2010) UL-1971 STANDARD FOR SIGNALING DEVICES FOR THE HEARING IMPAIRED
- FOR A COMPLETE LIST OF APPLICABLE NFPA STANDARDS REFER TO 2022 CBC (SFM) CHAPTER 35 AND CALIFORNIA FIRE CODE CHAPTER 80. SEE CALIFORNIA BUILDING CODE CHAPTER 35 FOR STATE OF CALIFORNIA AMENDMENTS TO THE NFPA STANDARDS.

SCOPE OF WORK

- ADDITION OF TWO TRANSITIONAL KINDERGARTEN CLASSROOMS WITH ASSOCIATED SITE WORK & UTILITIES

DEFERRED SUBMITTALS

- NONE

CALIFORNIA ENERGY CODE

THE CALIFORNIA ENERGY CODE SECTION 10-103 REQUIRES ACCEPTANCE TESTING ON ALL NEWLY INSTALLED LIGHTING CONTROLS, MECHANICAL SYSTEMS, ENVELOPES, AND PROCESS EQUIPMENT AFTER INSTALLATION AND BEFORE PROJECT COMPLETION. AN ACCEPTANCE TEST IS A FUNCTIONAL PERFORMANCE TEST TO HELP ENSURE THAT NEWLY INSTALLED EQUIPMENT IS OPERATING AND IN COMPLIANCE WITH THE ENERGY CODE.

LIGHTING CONTROLS ACCEPTANCE TESTS MUST BE PERFORMED BY A CERTIFIED LIGHTING CONTROLS ACCEPTANCE TEST TECHNICIAN (ATT).

MECHANICAL SYSTEM ACCEPTANCE TESTS MUST BE PERFORMED BY A CERTIFIED MECHANICAL ATT FOR PROJECTS SUBMITTED ON OR AFTER OCTOBER 1, 2021.

ENVELOPE AND PROCESS EQUIPMENT ACCEPTANCE TESTS SHALL BE PERFORMED BY THE INSTALLING CONTRACTOR, ENGINEER/ARCHITECT OF RECORD OR THE OWNER'S AGENT.

A LISTING OF CERTIFIED ATT CAN BE FOUND AT:
HTTPS://WWW.ENERGY.CA.GOV/PROGRAMS-AND-TOPICS/PROGRAMS/ACCEPTANCE-TEST-TECHNICIAN-CERTIFICATION-PROVIDER-PROGRAM/ACCEPTANCE.

THE ACCEPTANCE TESTING PROCEDURES MUST BE REPEATED, AND DEFICIENCIES MUST BE CORRECTED BY THE BUILDER OR INSTALLING CONTRACTOR UNTIL THE CONSTRUCTION/INSTALLATION OF THE SPECIFIED SYSTEMS CONFORM AND PASS THE REQUIRED ACCEPTANCE CRITERIA.

PROJECT INSPECTORS WILL COLLECT THE FORMS TO CONFIRM THAT THE REQUIRED ACCEPTANCE TESTS HAVE BEEN COMPLETED.

SHEET INDEX

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-123900 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/05/2024

Owner:

BAKERSFIELD CITY SCHOOL DISTRICT
1300 BAKER ST.
BAKERSFIELD CA 93305

Project Name:
TRANSITIONAL KINDERGARTEN

Project Address:
MLK ELEMENTARY SCHOOL
1100 Citadel
Bakersfield, CA 93307

integrated designs
by SOMAM, Inc.

ARCHITECTURE ENGINEERING INTERIOR DESIGN

6011 N. FRESNO STREET, SUITE 130
FRESNO CALIFORNIA 93710
P:(559) 436-0881 F:(559) 436-0887
E: design@somam.com
integrateddesigns.com

Stamp:

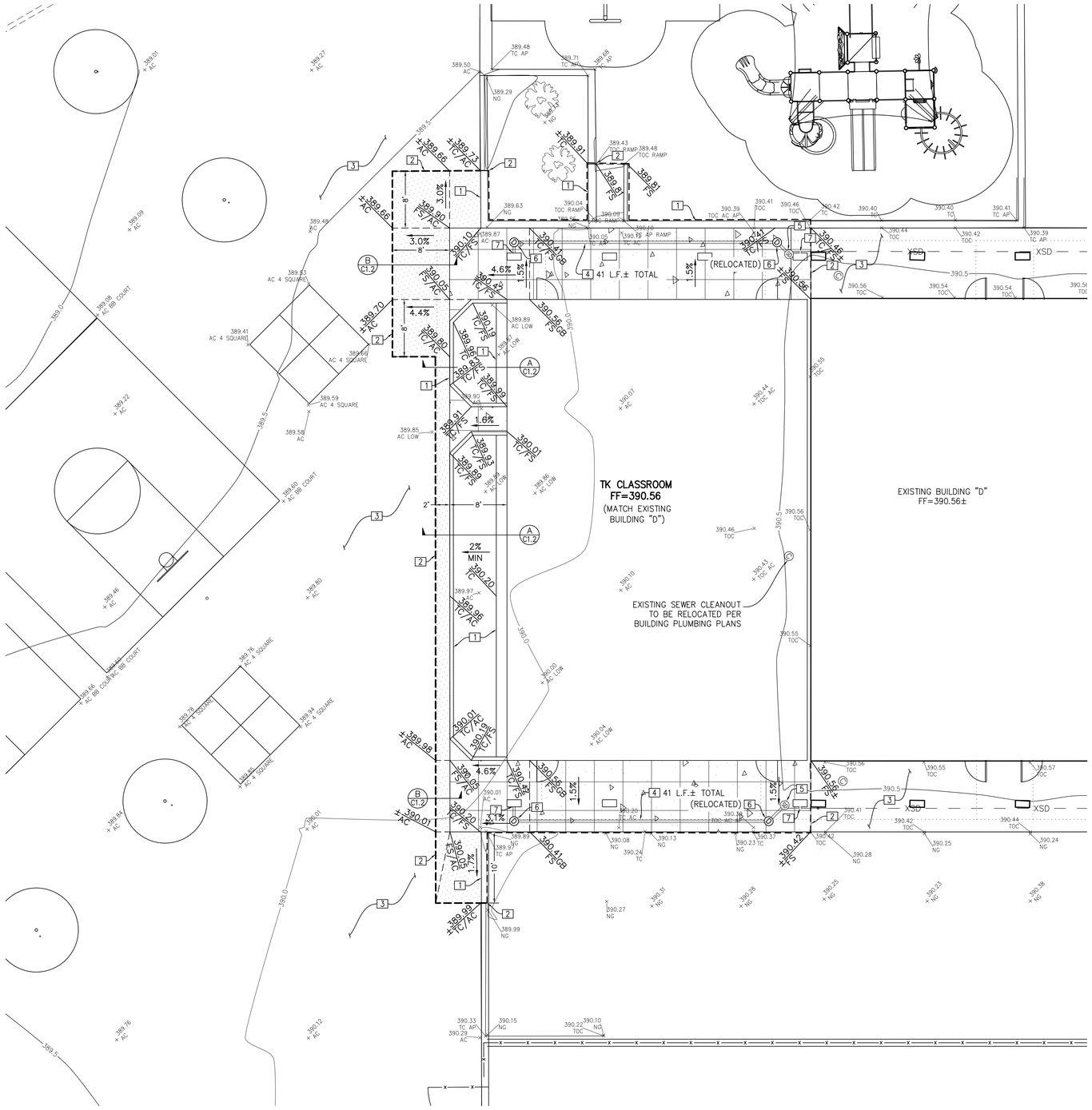
LICENSED ARCHITECT CURTIS E. FLYNN No. C 28966 REN. 5-31-25 STATE OF CALIFORNIA

Sheet Title:
TITLE SHEET

Job No.:
5593

Sheet No.:
T1.01

Release: DSA SUBMITTAL Issue Date



GRADING CONSTRUCTION NOTES

CONSTRUCT 4" MIN. CONCRETE SIDEWALK/FLATWORK, REFER TO ARCHITECT'S PLAN FOR DIMENSIONS NOT SHOWN. COMPACT 12" MIN. SUB-GRADE TO 90% MAX DENSITY.

CONSTRUCT MIN. 0.35' ASPHALT CONCRETE PAVING OVER MIN. 0.40' CLASS II CRUSHED AGGREGATE BASE OVER MIN. 12" NAT. GRD. COMPACTED TO 95% MAX. DENSITY.

1. CONSTRUCT MOW CURB PER ARCHITECTURAL PLANS.
2. SAWCUT TO NEAT/CLEAN VERTICAL FACE. MATCH EXISTING ASPHALT/CONCRETE GRADE.
3. EXISTING ASPHALT/CONCRETE TO REMAIN, PROTECT IN PLACE
4. INSTALL 4" PVC STORM DRAIN PIPE @ MIN 1.0% SLOPE (DISTANCE SHOWN) FOR ROOF DRAIN CONNECTION. VERIFY ROOF DRAIN LOCATION WITH BUILDING PLANS.
5. TIE INTO EXISTING STORM DRAIN AND RELOCATE EXISTING CLEANOUT. CONTRACTOR SHALL VERIFY EXACT LOCATION AND DEPTH OF EXISTING STORM DRAIN IN FIELD AND NOTIFY ENGINEER IF THERE ARE ANY DISCREPANCIES.
6. CONSTRUCT STORM DRAIN CLEANOUT PER DETAIL C/C1.2 MARK LID "DRAIN"
7. CONNECT TO BUILDING ROOF DRAIN DOWN SPOUT. VERIFY ROOF DRAIN LOCATION WITH BUILDING PLANS.

NOTES:

1. CONTRACTOR SHALL PROTECT ALL EXISTING IMPROVEMENTS, UNDERGROUND UTILITIES, LANDSCAPING, IRRIGATION, ETC. TO REMAIN IN PLACE AND SHALL REPAIR ANY DAMAGES DURING DEMOLITION AND/OR CONSTRUCTION ACTIVITIES. ALL REMAINING UTILITY BOXES, VAULTS, MANHOLES, CLEANOUTS, ETC. SHALL BE ADJUSTED TO FINISH GRADE.
2. CONTRACTOR SHALL COORDINATE REMOVAL OR RELOCATION OF EXISTING EQUIPMENT AND UTILITIES IN CONFLICT WITH CONSTRUCTION WITH OWNER PRIOR TO CONSTRUCTION. SEE ARCHITECT'S PLANS FOR DEMOLITION AND REMOVAL/RELOCATION OF EXISTING EQUIPMENT, UTILITIES, ETC.
3. SEE ARCHITECT'S PLANS FOR ALL DIMENSIONS NOT SHOWN.
4. EXISTING UNDERGROUND UTILITIES HAVE BEEN SHOWN BASED ON AVAILABLE RECORDS BY THE OWNER. CONTRACTOR SHALL VERIFY LOCATION AND DEPTH OF UTILITIES PRIOR TO CONSTRUCTION AND NOTIFY ENGINEER OF ANY DISCREPANCIES.
5. WARP CONCRETE TO CALIFORNIA PUBLIC ACCESSIBILITY STANDARDS TO MATCH FINISHED FLOOR AT ALL BUILDING ACCESS OPENINGS.
6. GRADING DESIGN ASSUMES STEM CURB IS CONSTRUCTED ON ALL EXTERIOR WALLS.
7. BUILDING PLUMBER SHALL CONNECT ROOF DRAIN TO STORM DRAIN SYSTEM. CONTRACTOR TO VERIFY EXACT LOCATION ON BUILDING PLANS
8. LATERAL CONNECTIONS TO MAINS THAT DO NOT OCCUR IN JUNCTION BOXES SHALL BE MADE WITH 45° ELLS OR WYES FOR CLEANOUT PURPOSES.
9. CONTRACTOR SHALL PROVIDE AND INSTALL ALL FITTINGS NECESSARY INCLUDING BUT NOT LIMITED TO ELBOWS, WYES, REDUCERS, TEES, PREFABRICATED ANGLED CONNECTIONS ETC.

BENCHMARK USED:

TOP OF CONCRETE MONUMENT IN LAMPHOLE AT THE EAST QUARTER CORNER OF SECTION 5, 30/28 M.D.M. LYING 29.45' SOUTH OF THE CENTERLINE INTERSECTION OF EAST BELLE TERRACE AND COTTONWOOD ROAD.

ELEVATION = 385.41 (USGS DATUM) PER TRACT 6378 PLANS

ABBREVIATIONS

TYPICAL ALL SHEETS UNLESS SUPERSEDED BY SHEET DEFINITION

~	ON THIS SHEET	FS	FINISHED SURFACE
AB	AGGREGATE BASE	FUT	FUTURE
AC	TOP OF ASPHALT CONCRETE PAVEMENT	G	GAS
AF	ACRE-FEET	GB	GRADE BREAK
ASB	AGGREGATE SUB-BASE	HW	HIGH WATER
BDRY	BOUNDARY	L	LENGTH
BTM	BOTTOM	LF	LINEAR FEET
BW	BACK OF SIDEWALK	MAX	MAXIMUM
CB	CATCH BASIN	MH	MANHOLE
CL	CENTERLINE	MIN	MINIMUM
CONC	CONCRETE	NG or OG	NATURAL/ORIGINAL GROUND
CY	CUBIC YARDS	REQ'D	REQUIRED
DWY or D/A	DRIVEWAY OR DRIVE APPROACH	RW	RIGHT-OF-WAY
EA	EACH	SD	STORM DRAIN
EL or ELEV	ELEVATION	SF	SQUARE FEET
EP	EDGE OF ASPHALT CONCRETE PAVEMENT	SWR	SANITARY SEWER
ESMT	EASEMENT	TC	TOP OF CURB
EX	EXISTING	TOC	TOP OF CONCRETE
FF	FINISHED FLOOR	TOG	TOP OF GRATE/CATCH BASIN INLET
FG	FINISHED GROUND	TYP	TYPICAL
FL	FLOWLINE	WTR	WTR
FP	FINISHED PAD	±	MATCH EXISTING GRADE

LEGEND:

- DESIGN ELEVATION
- 1.5% DESIGN GRADE
- PROPOSED STORM DRAIN
- EXISTING CHAIN-LINK FENCE
- EXISTING STORM DRAIN CLEANOUT
- EXISTING SEWER CLEAN-OUT
- EXISTING TREE (SIZE VARIES)
- EXISTING CONTOUR WITH ELEVATION
- EXISTING GRADE
- XSD EXISTING STORM DRAIN LINE

NORTH

SCALE: 1"=8'

0 4 8 16

PORTER & ASSOCIATES, INC.
ENGINEERING & SURVEYING
1707 Eye Street, Suite 111
Bakersfield, California 93301
661.327.0362

J:\3315\Civil Improvements\3315_CI.dwg 01/09/24 matthewcarson

J:\3315\Civil Improvements MATTHEW CARSON 1/9/24

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-123900 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/05/2024

Owner:

BAKERSFIELD CITY SCHOOL DISTRICT

1300 BAKER ST.
BAKERSFIELD, CA 93305

Project Name:

TRANSITIONAL KINDERGARTEN

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**ARCHITECTURE
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Stamp:

REGISTERED PROFESSIONAL ENGINEER
FRED W. PORTER II
RCE 74059
CIVIL
STATE OF CALIFORNIA

Sheet Title:

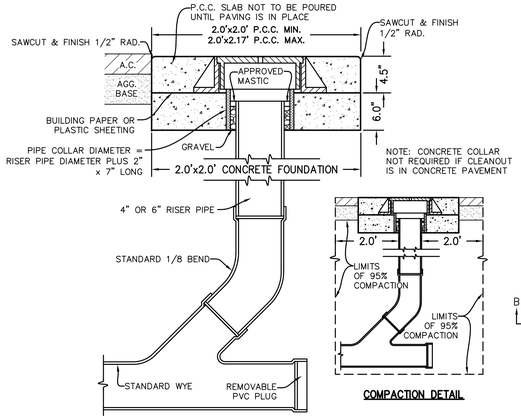
GRADING PLAN

Job No.: **5593**

Sheet No.: **C1.1**

Release: **DSA SUBMITTAL**

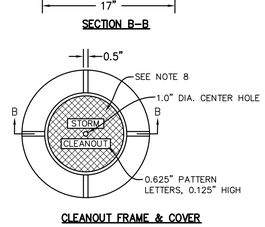
1" = 40'-0"
1" = 30'-0"
1" = 20'-0"
1/8" = 1'-0"
1/4" = 1'-0"



CLEANOUT SECTION

SECTION B-B

COMPACTION DETAIL



CLEANOUT FRAME & COVER

CLEANOUT NOTES:

1. ALL WORK SHALL CONFORM TO THE APPLICABLE SECTIONS OF THE SPECIFICATIONS ENTITLED "STANDARD SPECIFICATIONS, STATE OF CALIFORNIA, BUSINESS AND TRANSPORTATION AGENCY, DEPARTMENT OF TRANSPORTATION", APPROVED CURRENT EDITION.
2. ALL CONCRETE SHALL BE CLASS "A".
3. CONCRETE SHALL HAVE NO ADDITIVES UNLESS PRIOR WRITTEN APPROVAL IS OBTAINED FROM THE ENGINEER.
4. CONCRETE SHALL BE CURED WITH A WHITE PIGMENTED CURING COMPOUND PER SEC. 90-7.01B OF THE STANDARD SPECS.
5. TOP OF SLAB SHALL BE TROWELED SMOOTH AND GIVEN A LIGHT BROOM FINISH.
6. 95% RELATIVE COMPACTION IS REQUIRED FOR ALL BACKFILL WITHIN 24" OF THE RISER PIPE.
7. BUILDING PAPER OR PLASTIC SHALL BE PLACED BETWEEN THE 6" CONCRETE FOUNDATION AND 4.5" SLAB.
8. FILL CAVITY BETWEEN PIPE AND COLLAR WITH GRAVEL TO WITHIN 1/2" OF TOP OF PIPE. CAULK REMAINING 1/2" WITH APPROVED MASTIC TO TOP OF PIPE FOR WATER TIGHT SEAL.
9. COLLAR SHALL BE VCP, ABS, OR PVC PIPE.
10. FINISHED PCC SLAB TO BE 1/8" MIN. AND 1/4" MAX. BELOW FINISHED PAVING SURFACE.

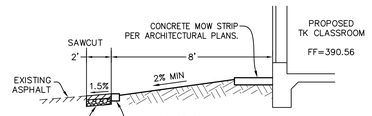
CLEANOUT COVER NOTES:

1. ALL FRAMES AND COVERS SHALL BE TESTED FOR ACCURACY OF FIT AND SHALL BE MARKED IN SETS PRIOR TO DELIVERY.
2. THE SEATS OF FRAMES AND BEARING FACES OF THE COVERS SHALL BE MACHINED FOR A SMOOTH NON-ROCKING FIT BETWEEN THE TWO CASTINGS.
3. CASTINGS SHALL BE THOROUGHLY CLEANED AND DIPPED TWICE IN A QUICK-DRYING, JET-BLACK ASPHALTIC COMPOUND TO PROVIDE A PROTECTIVE COATING.
4. ALL FRAMES AND COVERS SHALL BE GRAY CAST IRON, FREE FROM WARPS, CRACKS, HOLES, SWELLS AND COLD-SHOT, AND SHALL HAVE A WORKMANLIKE FINISH. HIGHWAY LOADING SHOULD BE HS 20-44.
5. CASTING SHALL CONFORM TO THE PROVISIONS OF THE SPECIFICATIONS FOR GRAY-IRON CASTINGS, SERIAL DESIGNATION ASTM: A-48 (LATEST REVISION), CLASS No. 30B.
6. THE NAME OF THE MANUFACTURING COMPANY SHALL BE ON THE UNDERSIDE OF THE COVER.
7. ASSEMBLY SHALL BE DESIGNED FOR HIGHWAY LOADING OF HS 20-44.
8. 2.0"x1.0" DIAMOND MAT 0.125" DEEP.

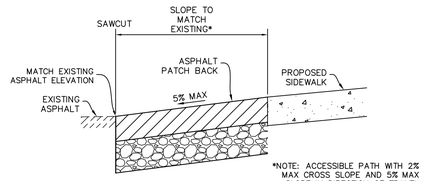
C C1.2 STORM DRAIN CLEANOUT DETAIL
N.T.S.

GENERAL NOTES

1. ALL CONSTRUCTION SHALL CONFORM TO THIS PLAN, THE CALIFORNIA BUILDING CODE, CITY OF ARVIN ORDINANCE, LATEST EDITION AND STANDARDS PERTAINING THERETO. THESE DOCUMENTS SHALL BE MADE A PART HEREOF.
2. ALL CONSTRUCTION WITHIN THE CITY RIGHT-OF-WAY OR CITY EASEMENTS SHALL BE IN ACCORDANCE WITH CITY OF ARVIN STANDARDS AND STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS, CURRENT EDITION. THESE STANDARDS, DRAWINGS AND DETAILS SHALL BE CONSIDERED A PART OF THESE PLANS AND THE CONTRACTOR SHALL OBTAIN A COPY FOR HIS USE.
3. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING DIMENSIONS, DATA AND MEASUREMENTS AT THE BUILDING SITE PRIOR TO CONSTRUCTION. DO NOT SCALE DRAWINGS. WRITTEN DIMENSIONS ON THESE DRAWINGS SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. PORTER & ASSOCIATES, INC. MUST BE NOTIFIED OF ANY VARIATIONS FROM THE DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS.
4. EXISTING UTILITY AND UNDERGROUND LINES HAVE BEEN SHOWN ON THIS PLAN ACCORDING TO AVAILABLE RECORDS. THE ENGINEER IS NOT RESPONSIBLE FOR POSSIBLE ERRORS OR OMISSIONS. THE CONTRACTOR IS RESPONSIBLE FOR VERIFICATION OF THE LOCATION AND DEPTH OF ALL UTILITIES PRIOR TO BEGINNING OF ANY WORK. UNDERGROUND SERVICE ALERT (U.S.A.: 1-800-227-2600) SHALL BE CONTACTED AT LEAST TWO WORKING DAYS PRIOR TO ANY CONSTRUCTION OR EXCAVATION.
5. ANY EXISTING IMPROVEMENTS OR UTILITIES THAT ARE REMOVED, DAMAGED OR UNDERCUT BY CONTRACTOR'S OPERATIONS SHALL BE REPAIRED OR REPLACED AT THE CONTRACTOR'S EXPENSE, AS DIRECTED BY THE ENGINEER AND APPROVED BY THE GOVERNING AUTHORITY.
6. IF A PROBLEM OR CONFLICT SHOULD ARISE DURING THE COURSE OF THE PROJECT, IT IS THE RESPONSIBILITY OF THE OWNER OR THE CONTRACTOR TO NOTIFY THE ENGINEER IMMEDIATELY PRIOR TO ANY FURTHER WORK.
7. THE CONTRACTOR SHALL FURNISH ALL LABOR, MATERIALS, TOOLS, EQUIPMENT AND SUPERVISION NECESSARY FOR A COMPLETE AND FUNCTIONAL PRODUCT.
8. ALL WORK WHICH IS DEFECTIVE IN ITS CONSTRUCTION OR DEFICIENT IN ANY OF THE REQUIREMENTS OF THESE DRAWINGS AND SPECIFICATIONS SHALL BE REMEDIED, OR REMOVED AND REPLACED BY THE CONTRACTOR IN AN ACCEPTABLE MANNER, AND NO COMPENSATION WILL BE ALLOWED FOR SUCH CORRECTION.
9. IN THE EVENT CONSTRUCTION STAKING BASED ON THE CONSULTANT'S PLANS, DRAWINGS OR OTHER DOCUMENTS IS ACCOMPLISHED BY ANYONE OTHER THAN THE CONSULTANT, THE OWNER OR CONTRACTOR SHALL NOTIFY THE BUILDING OFFICIAL IN WRITING AS TO THE CHANGE OF ENGINEER IN RESPONSIBLE CHARGE.
10. THE CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT; INCLUDING EROSION, SEDIMENTATION & DUST CONTROL PLAN AND STORM WATER POLLUTION PREVENTION PLAN IMPLEMENTATION AND THE SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND THE ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR THE ENGINEER.
11. IF THE CONTRACTOR IS IN DOUBT AS TO THE MEANING OF ANY PART OF THE DRAWINGS AND SPECIFICATIONS OR FINDS DISCREPANCIES IN OR OMISSIONS FROM THE DRAWINGS, HE SHALL SUBMIT A WRITTEN REQUEST FOR AN INTERPRETATION OR A CORRECTION THEREOF, PRIOR TO FILING HIS BID PRICE FOR THE PROJECT.
12. PORTER & ASSOCIATES, INC. WILL NOT BE RESPONSIBLE OR LIABLE FOR UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS. ANY AND ALL CHANGES TO THESE PLANS MUST BE APPROVED IN WRITING BY PORTER & ASSOCIATES, INC.



A C1.2 TYPICAL ASPHALT PATCH
NTS



B C1.2 ACCESSIBLE PATH/ASPHALT PATCH DETAIL
NTS

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-123900 INC: A
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/05/2024

Owner:

BAKERSFIELD CITY SCHOOL DISTRICT

1300 BAKER ST.
BAKERSFIELD, CA 93305

Project Name:

TRANSITIONAL KINDERGARTEN

Project Address:

MLK ELEMENTARY SCHOOL

1100 CITADEL
BAKERSFIELD, CA 93307

integrated designs
by SOMAM, Inc.

ARCHITECTURE ENGINEERING INTERIOR DESIGN

6011 N. FRESNO STREET, SUITE 130
FRESNO CALIFORNIA 93710
P:(559) 436-0881 F:(559) 436-0887
E: design@somam.com
integrateddesigns.com

Stamp:

REGISTERED PROFESSIONAL ENGINEER
FRED W. PORTER II
RCE 74059
CIVIL
STATE OF CALIFORNIA

Sheet Title:

NOTES & DETAILS

Job No.: **5593**

Sheet No.: **C1.2**

Release: **DSA SUBMITTAL**

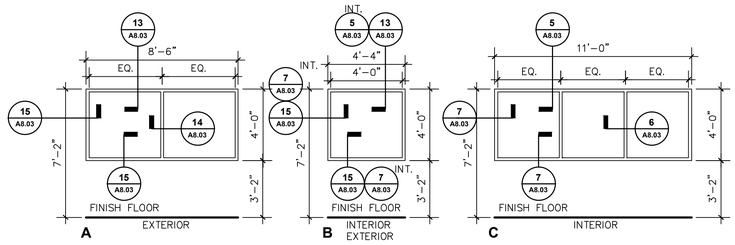
PORTER & ASSOCIATES, INC.
ENGINEERING & SURVEYING
1707 Eye Street, Suite 111
Bakersfield, California 93301
661.327.0362

J:\3315\Civil Improvements\3315_CI.dwg 01/09/24 matthewcarson

WINDOW SCHEDULE

TYPE	FRAME SIZE WIDTH X HEIGHT	FRAME		GLASS TYPE	FIRE RAT'G	DETAILS				REMARKS
		MAT	FIN			HEAD	JAMB	SILL	MULLION	
A	8'-6" X 4'-0"	HM	P	INSUL	-	13/A8.03	15/A8.03	15/A8.03	14/A8.03	
B	4'-4" X 4'-0"	HM	P	INSUL	-	13/A8.03	15/A8.03	15/A8.03	-	
C	11'-0" X 3'-8"	HM	P	INSUL	-	5/A8.03	7/A8.03	7/A8.03	6/A8.03	

WINDOW TYPES



ABBREVIATIONS

HM	HOLLOW METAL
P	PAINT (SEE SPECS)
EQ	EQUAL
INSUL	INSULATED

DOOR SCHEDULE

DOOR NO.	TYPE NO	DOOR OPENING SIZE	DOOR				FRAME		GLASS	LOUVER	U/L	HARDWARE	DETAILS				SIGNAGE	REMARKS
			THK	MAT	CORE	FIN.	MAT	FIN	SIZE	SIZE	RAT'G	NO.	HEAD	JAMB	JAMB	SILL	SHT. A8.01	
1A	A	3'-0" X 7'0"	1 3/4"	HM	INSUL	P	HM	P	6"X30"	-	-	1	9/A8.03	10/A8.03	10/A8.03	11/A8.03	1,4,&5/A8.01	
1B	A	3'-0" X 7'0"	1 3/4"	HM	INSUL	P	HM	P	6"X30"	-	-	1	9/A8.03	10/A8.03	10/A8.03	11/A8.03	1,4,&5/A8.01	
2	B	3'-0" X 7'0"	1 3/4"	WD	SC	FF	HM	P	6"X30"	-	-	2	3/A8.03	4/A8.03	4/A8.03	8/A8.03	5/A8.01	
3	C	3'-0" X 7'0"	1 3/4"	WD	SC	FF	HM	P	24"X30"	-	-	3	3/A8.03	4/A8.03	4/A8.03	-	5/A8.01	
4	B	3'-0" X 7'0"	1 3/4"	WD	SC	FF	HM	P	6"X30"	-	-	4	3/A8.03	4/A8.03	4/A8.03	12/A8.02	2/A8.01	
5	B	3'-0" X 7'0"	1 3/4"	WD	SC	FF	HM	P	6"X30"	-	-	4	3/A8.03	4/A8.03	4/A8.03	12/A8.02	2/A8.01	
6	C	3'-0" X 7'0"	1 3/4"	WD	SC	FF	HM	P	24"X30"	-	-	5	3/A8.03	4/A8.03	4/A8.03	-	5/A8.01	
7	C	3'-0" X 7'0"	1 3/4"	WD	SC	FF	HM	P	24"X30"	-	-	3	3/A8.03	4/A8.03	4/A8.03	-	5/A8.01	
8	B	3'-0" X 7'0"	1 3/4"	WD	SC	FF	HM	P	6"X30"	-	-	2	3/A8.03	4/A8.03	4/A8.03	8/A8.03	5/A8.01	
9A	A	3'-0" X 7'0"	1 3/4"	HM	INSUL	P	HM	P	6"X30"	-	-	1	9/A8.03	10/A8.03	10/A8.03	11/A8.03	1,4,&5/A8.01	
9B	A	3'-0" X 7'0"	1 3/4"	HM	INSUL	P	HM	P	6"X30"	-	-	1	9/A8.03	10/A8.03	10/A8.03	11/A8.03	1,4,&5/A8.01	

DOOR ABBREVIATIONS

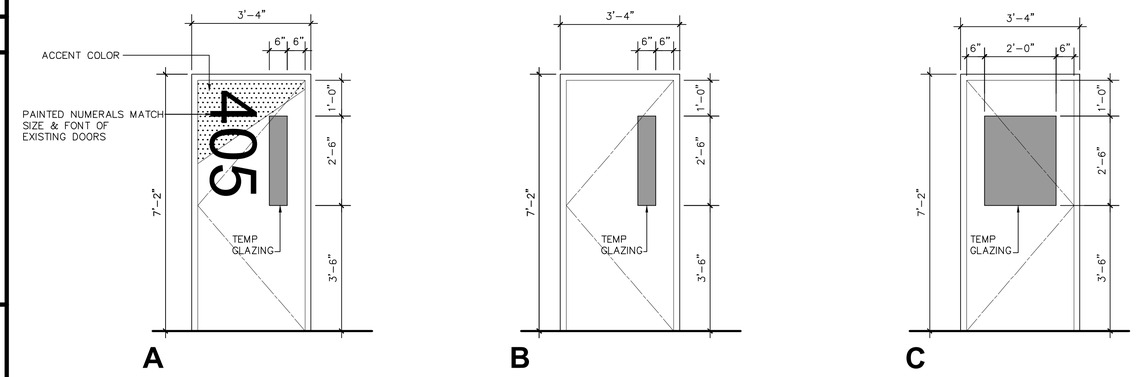
FF	FACTORY FINISH
HM	HOLLOW METAL
INSUL	INSULATED
L	LAMINATED
P	PAINT (SEE SPECS)
SC	SOLID CORE
WD	WOOD

ACCESSIBILITY NOTE

A. THE MAXIMUM EFFORT TO OPERATE EXTERIOR DOORS SHALL NOT EXCEED 5 POUNDS. CBC 11B-404.2.9 AT ACCESSIBLE ENTRANCES

B. CBC 1010.1.11 - NEW BUILDINGS ON A K-12 PUBLIC SCHOOL CAMPUS SHALL BE PROVIDED WITH LOCKS WHICH ALLOW DOORS TO CLASSROOMS AND ANY ROOM WITH AN OCCUPANT LOAD OF FIVE OR MORE PERSONS TO BE LOCKED FROM THE INSIDE. LOCKS SHALL CONFORM TO THE SPECIFICATION AND REQUIREMENTS OF SECTION 1010.1.9. EXCEPTIONS INCLUDE DOORS WHICH ARE NORMALLY LOCKED FROM THE OUTSIDE, RELOCATABLE MOVED WITHIN THE SAME CAMPUS, AND RECONSTRUCTION PROJECTS.

DOOR TYPES



MATERIAL AND FINISH SCHEDULE

Room No.	ROOM NAME	FLOOR		BASE			WAINSCOT			WALLS								CEILING			REMARKS
										NORTH		EAST		SOUTH		WEST					
		MAT	FIN	MAT	FIN	HT	MAT	FIN	HT	MAT	FIN	MAT	FIN	MAT	FIN	MAT	FIN	MAT	FIN	HT	
TK1	CLASSROOM	CPT	FF	RTB	FF	4"	-	-	-	TB	FF	TB	FF	TB	FF	TB	FF	SAT	FF	9'-0"	WALK OFF CARPET TILES AT ENTRANCES VCT AT WET AREAS
TK1.1	STORAGE	VCT	FF	RTB	FF	4"	-	-	-	GB	P	GB	P	GB	P	GB	P	SAT	FF	9'-0"	
TK1.2	WORKROOM	VCT	FF	RTB	FF	4"	-	-	-	TB	FF	TB	FF	TB	FF	TB	FF	SAT	FF	9'-0"	
TK1.3	HALLWAY	VCT	FF	RTB	FF	4"	-	-	-	TB	FF	TB	FF	TB	FF	TB	FF	SAT	FF	9'-0"	
TK1.4	UNISEX TOILET	CT	FF	CTB	FF	6"	-	-	-	CT	FF	CT	FF	CT	FF	CT	FF	GB	P	8'-0"	
TK1.5	UNISEX TOILET	CT	FF	CTB	FF	6"	-	-	-	CT	FF	CT	FF	CT	FF	CT	FF	GB	P	8'-0"	
TK2	CLASSROOM	CPT	FF	RTB	FF	4"	-	-	-	TB	FF	TB	FF	TB	FF	TB	FF	SAT	FF	9'-0"	WALK OFF CARPET TILES AT ENTRANCES VCT AT WET AREAS
TK2.1	STORAGE	VCT	FF	RTB	FF	4"	-	-	-	GB	P	GB	P	GB	P	GB	P	SAT	FF	9'-0"	

M&F NOTES

1. ALL FLOOR PLAN ROOM NAMES AND NUMBERS ARE FOR CONSTRUCTION INFORMATION ONLY. THE CONTRACTOR SHALL COORDINATE ACTUAL ROOM NAMES & NUMBERS WITH THE OWNER AND ARCHITECT PRIOR TO ORDERING ANY ROOM SIGNAGE.
2. SEE SPECIFICATIONS FOR ADDITIONAL FINISH MATERIAL INFORMATION.
3. REFER TO FLOOR PLANS FOR ADDITIONAL INFORMATION.
4. FLOOR AND GROUND SURFACES SHALL BE STABLE, FIRM AND SLIP RESISTANT AS PER CBC 11B-302.1
5. ALL GLAZING TO COMPLY WITH CBC 2406.3
6. GYP BOARD TEXTURE TO BE LIGHT SPAY PER SPECIFICATIONS

M&F ABBREVIATIONS

SAT	=	SUSPENDED ACCOUSTICAL TILE CEILING
CPT	=	CARPET
CT	=	CERAMIC TILE
CTB	=	CERAMIC TILE W/INTEGRAL COVE
FF	=	FACTORY FINISH
GB	=	GYPSUM BOARD
P	=	PAINT SYSTEM - SEE SPECIFICATIONS
RTB	=	RUBBER TOPSET BASE
VCT	=	VINYL COMPOSITION TILE
TB	=	TACK BOARD

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-123900 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/05/2024

Owner:

BAKERSFIELD CITY SCHOOL DISTRICT
1300 BAKER ST.
BAKERSFIELD CA 93305

Project Name:

TRANSITIONAL KINDERGARTEN

Project Address:

MLK ELEMENTARY SCHOOL
1100 Citadel
Bakersfield, CA 93307

integrated designs
by SOMAM, Inc.

ARCHITECTURE
ENGINEERING
INTERIOR DESIGN

6011 N. FRESNO STREET, SUITE 130
FRESNO CALIFORNIA 93710
P:(559) 436-0881 F:(559) 436-0887
E: design@somam.com
integrateddesigns.com

Stamp:

LICENSED ARCHITECT
CURTIS C. FLYNN
No. C 28966
REN. 5-31-25
STATE OF CALIFORNIA

Sheet Title:

SCHEDULES

Job No.: **5593**

Sheet No.: **A0.01**

Release: DSA SUBMITTAL Issue Date

G:\2023frs\23-5593 MLK TK\Sheets SEAN PARKER 7/24/24

1" = 40'-0" 120 80 40 0 40
1" = 30'-0" 90 60 30 0 30
1" = 20'-0" 60 40 20 0 20
1/8" = 1'-0" 24 16 8 0 8
1/4" = 1'-0" 12 8 4 0 4

ACCESSIBILITY NOTES

THE PATH OF TRAVEL (P.O.T.) IDENTIFIED IN THESE CONSTRUCTION DOCUMENTS IS COMPLIANT WITH THE CURRENT APPLICABLE CALIFORNIA BUILDING CODE ACCESSIBILITY PROVISIONS FOR PATH OF TRAVEL REQUIREMENTS FOR ALTERATIONS, ADDITIONS AND STRUCTURAL REPAIRS. AS PART OF THE DESIGN OF THIS PROJECT, THE P.O.T. WAS EXAMINED AND ANY ELEMENTS, COMPONENTS OR PORTIONS OF THE P.O.T. THAT WERE DETERMINED TO BE NONCOMPLIANT 1) HAVE BEEN IDENTIFIED AND 2) THE CORRECTIVE WORK NECESSARY TO BRING THEM INTO COMPLIANCE HAS BEEN INCLUDED WITHIN THE SCOPE OF THIS PROJECT'S WORK THROUGH DETAILS, DRAWINGS AND SPECIFICATIONS INCORPORATED INTO THESE CONSTRUCTION DOCUMENTS. ANY NONCOMPLIANT ELEMENTS, COMPONENTS OR PORTIONS OF THE P.O.T. THAT WILL NOT BE CORRECTED BY THIS PROJECT BASED ON VALUATION THRESHOLD LIMITATIONS OR A FINDING OF UNREASONABLE HARDSHIP ARE SO INDICATED IN THESE CONSTRUCTION DOCUMENTS.
DURING CONSTRUCTION, IF P.O.T. ITEMS WITHIN THE SCOPE OF THE PROJECT REPRESENTED AS CODE COMPLIANT ARE FOUND TO BE NONCONFORMING BEYOND REASONABLE CONSTRUCTION TOLERANCES, THEY SHALL BE BROUGHT INTO COMPLIANCE WITH THE CBC AS A PART OF THIS PROJECT BY MEANS OF A CONSTRUCTION CHANGE DOCUMENT.
ARCHITECT HAS INSPECTED THE PATH OF TRAVEL (P.O.T.) AS INDICATED ON THE PLANS AND HAS FOUND IT TO BE, OR HAS INDICATED ON THE PLANS REMEDIAL WORK WHICH WOULD CAUSE IT TO BE, A BARRIER-FREE ACCESSIBLE ROUTE:

- AT LEAST 48" IN WIDTH; OR AS APPROVED BY CODE
- FREE OF ABRUPT LEVEL CHANGES EXCEEDING ½" IF BEVELED AT 1:2 MAX SLOPE, OR VERTICAL LEVEL CHANGES EXCEEDING ¼"
- WITH A FIRM, STABLE, AND SLIP RESISTANT WALKING SURFACE
- WITH A RUNNING SLOPE OF 1:20 (5%) OR LESS AND WITH A CROSS SLOPE OF 1:50 (2%) OR LESS OR A RAMP WITH A RUNNING SLOPE OF 1:12 (8.33%) AND A CROSS SLOPE OF 1:50 (2%) WITH APPROPRIATE REQUIREMENTS AS DETAILED WITHIN THIS SET OF DOCUMENTS.
- IS FREE OF OVERHEAD OBSTRUCTIONS WITHIN 80" ABOVE THE WALKING SURFACE
- IS FREE OF OBJECTS WHICH PROTRUDE MORE THAN 4" BETWEEN THE HEIGHTS OF 27" AND 80" ABOVE THE WALKING SURFACE

GENERAL NOTES

A. GENERAL CONTRACTOR SHALL FIELD VERIFY ALL SITE CONDITIONS PRIOR TO BID. IF ANY DISCREPANCIES ARE FOUND, THE ARCHITECT SHALL BE NOTIFIED IN WRITING.

B. CONTRACTOR SHALL BE RESPONSIBLE FOR THE CORRECTNESS OF LAYOUTS AND ESTABLISHED LOCATIONS OF BURIED UTILITY LINES. ANY UTILITIES REQUIRING RELOCATION SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR. CONTACT APPLICABLE GOVERNING AGENCIES REGARDING ARRANGEMENT AND COORDINATION OF WORK.

C. GENERAL CONTRACTOR WILL BE RESPONSIBLE FOR ANY COMPACTION RETEST DUE TO INITIAL FAILURE. REFER TO RECOMMENDATIONS IN GEOTECHNICAL REPORT DATED 11/1/2017 BY KRAZAN & ASSOCIATED FOR PROJECT NO. 022-17101.

D. PROJECT INSPECTOR SHALL BE EMPLOYED BY THE OWNER, APPROVED BY THE RESPONSIBLE ARCHITECT AND DSA.

E. A COPY OF TITLE-24, ALL PARTS APPLICABLE, TO BE KEPT AT THE JOB SITE AT ALL TIMES.

F. ADDENDA SHALL BE SIGNED BY THE ARCHITECT (RESPONSIBLE IN CHARGE) AND APPROVED BY DSA.

G. CONSTRUCTION CHANGE DOCUMENTS SHALL BE SIGNED BY THE ARCHITECT (RESPONSIBLE IN CHARGE), OWNER, AND APPROVED BY DSA.

H. TESTING LAB SHALL BE EMPLOYED BY THE OWNER, APPROVED BY THE RESPONSIBLE ARCHITECT AND DSA.

I. ALL COMPLETED WORK SURFACES DISTURBED OR DAMAGED BY SUBSEQUENT WORK SHALL BE REPAIRED IN KIND, TEXTURED AND FINISHED TO MATCH ADJACENT SURFACES.

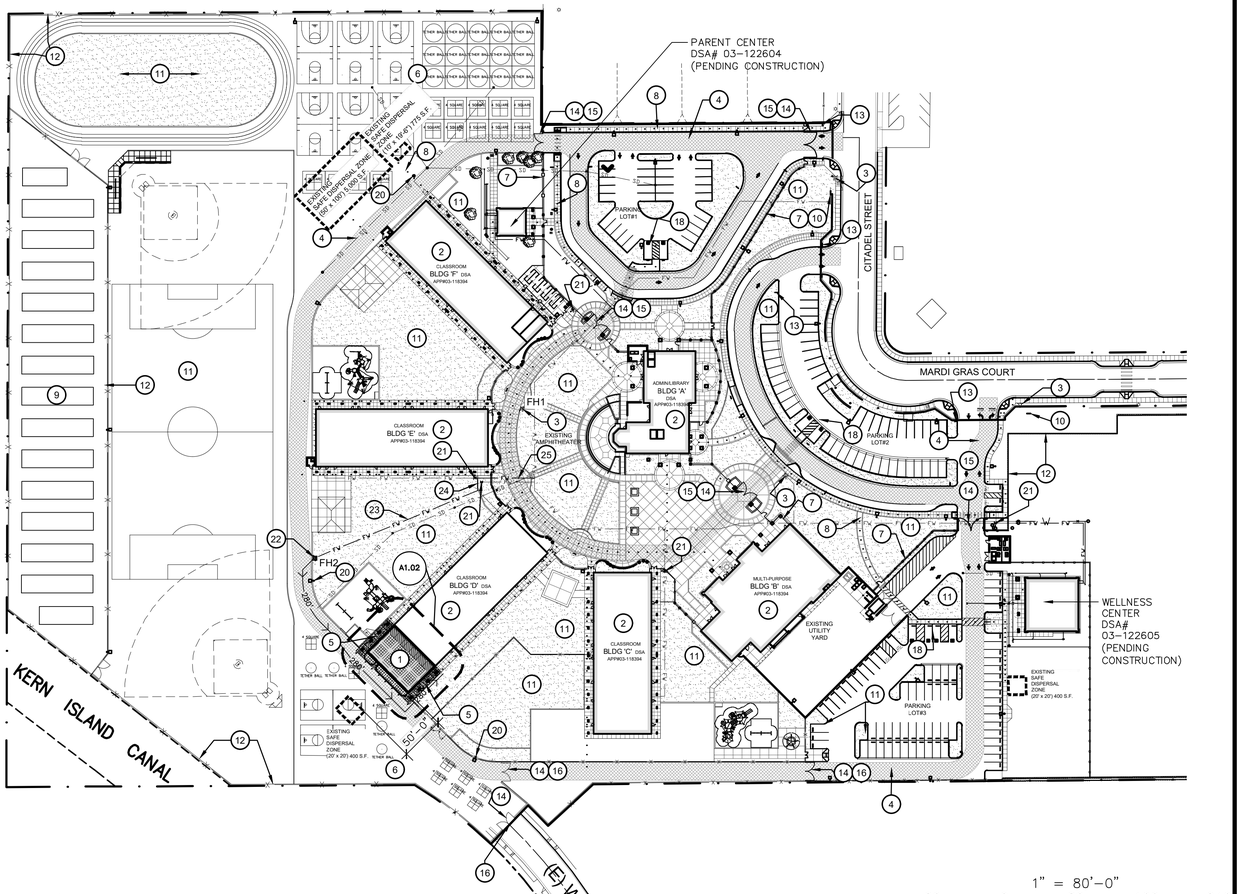
J. PROVIDE 2" MIN. PVC SLEEVES BELOW WALKS FOR FUTURE SPRINKLERS PER DETAIL 14/A1.04

K. NEW CONCRETE WALKS SHALL HAVE SLOPES OF NOT TO EXCEED 1 IN 20 IN THE DIRECTION OF PATH OF TRAVEL AND 1:50 FOR CROSS SLOPE. PROVIDE CONTROL JOINTS (°C.J.°)AT 10'-0" o.c. MAX. AND EXPANSION JOINTS NOT TO EXCEED 30'-0" MAX. OR CLOSER WHERE INDICATED. PROVIDE MEDIUM BROOM FINISH ON ALL WALKS.

L. THE CONTRACTOR IS RESPONSIBLE FOR PROTECTING EXISTING ADJACENT FACILITIES FROM DAMAGE INCLUDING BUT NOT LIMITED TO EXISTING FOUNDATIONS SLAB-ON-GRADE, PAVEMENT, UTILITIES, STREETS, ETC.

M. THE GENERAL CONTRACTOR SHALL REFER TO & COMPLY W/ THE GEOTECHNICAL REPORT & SUPPLEMENTS PRIOR TO SITE DEMOLITION WORK & EARTHWORK.

N. CONTRACTORS SHALL REVIEW AND COORDINATE ALL SITE WORK SHOWN ON ARCHITECTURAL DRAWINGS WITH CIVIL, ELECTRICAL, MECHANICAL, LANDSCAPE AND OTHER DRAWINGS AND SPECIFICATIONS PRIOR TO BID AND CONSTRUCTION THAT WILL INCLUDE OTHER WORK NOT SHOWN ON ARCHITECTURAL DRAWINGS. SHOULD CONTRADICTIONS OCCUR, OBTAIN CLARIFICATION FROM ARCHITECT PRIOR TO BID. OTHERWISE CONTRACTORS SHALL BE RESPONSIBLE TO PROVIDE THE MORE RESTRICTIVE REQUIREMENT AS DIRECTED BY THE ARCHITECT AT NO ADDITIONAL COST TO THE OWNER.



1" = 80'-0"
80 0 80 160 240

SCALE: 1" = 80'

SITE PLAN
TRANSITIONAL KINDERGARTEN

1" = 40'-0" 120 80 40 0 40
1" = 30'-0" 90 60 30 0 30
1" = 20'-0" 60 40 20 0 20
1/8" = 1'-0" 24 16 8 0 8
1/4" = 1'-0" 12 8 4 0 4

DSA 810

FIRE & LIFE SAFETY SITE CONDITIONS SUBMITTAL

Division of the State Architect (DSA) documents referenced within this publication are available on the DSA Forms or DSA Publications webpages.

To facilitate the Division of the State Architect's (DSA) fire and life safety plan review of project site conditions, DSA requires the design professional to provide the following information at time of project submittal for projects consisting of construction of a new campus, construction of new building(s), additions to existing buildings, and for site alternate design means for fire department emergency vehicle access, and fire suppression water supply.

Information associated with compliance items 1 through 3 below is to be provided for all project types indicated above. Information associated with items 4 through 7 is to be completed when an alternate means is utilized. Acknowledgement by the school district and signature from the Local Fire Authority (LFA) is only required when an alternate design means is being requested.

The Project Information and Fire & Life Safety Information sections are to be completed for all projects and imaged onto the fire access site plan. When an alternate design/means is proposed, all sections on pages 1 and 2 are to be completed and imaged on the fire access site plan.

For additional information refer to the instructions at the end of this form and DSA Policy *PL 09-01: Fire Flow for Buildings*.

PROJECT INFORMATION
School District/Owner: Bakersfield City School District
Project Name/School: Dr. Martin Luther King Jr. Elementary School - TRANSITIONAL KINDERGARDEN
Project Address: 1100 Citadel, Bakersfield, CA 93307

FIRE & LIFE SAFETY INFORMATION				
1.	Has a fire hydrant flow test been performed within the past 12 months? *(If yes, provide a copy of the test data.)*	Yes ☑		No ☐
2.	Was the fire hydrant water flow test performed as part of this LFA review?	Yes ☑		No ☐
3.	Is the project located within a designated fire hazard severity zone (FHSZ) as established by Cal-Fire? *(If yes, indicate FHSZ classification below.)*	Yes ☐		No ☑
	Refer to the following website for FHSZ locations: http://egis.fire.ca.gov/FHSZ/	Moderate ☐	High ☐	Very High ☐
	Wildland Interface Area (WIFA) *(If any designations are checked, project design must meet the requirements of CBC Chapter 7A.)*			WIFA ☐

DSA 810
FIRE & LIFE SAFETY SITE CONDITIONS SUBMITTAL

CONDITION MEANS AND METHODS RESOLUTION		ALTERNATE ACCEPTED			
		Yes	No	N/A	N/R
4.	Emergency vehicle access roadways do not meet CFC requirements.			✓	
4a.	**Acceptable Alternate:** Emergency vehicle and personnel access as proposed by the project architect is acceptable for providing fire suppression and protection of life and property.				
5.	**Fire Hydrants:** Number and spacing does not meet CFC requirements.			✓	
5a.	**Acceptable Alternate:** Number of fire hydrants and spacing as proposed by the project architect is acceptable for fire suppression and protection of life and property.				
6.	**Fire Hydrants:** Water flow and pressure are less than CFC minimum.			✓	
6a.	**Acceptable Alternate:** The available flow and pressure is acceptable for providing fire suppression and protection of life and property.				
7.	Location of fire department connection(s) serving fire sprinkler systems or standpipe systems does not meet CFC requirements.			✓	
7a.	**Acceptable Alternate:** The location of fire department connection serving the fire sprinkler system and/or standpipe system is acceptable for providing fire suppression and protection of life and property.				

School District Acceptance of Acceptable Design Alternates

By signing this form, the school district acknowledges and accepts the proposed design as an alternative to California Building Code (CBC) and California Fire Code (CFC) minimum requirements, as indicated by one or more of the conditions indicated at items 4a, 5a, 6a or 7a, for providing fire and life safety protection of life and property.

Accepted by: _____ Title: _____

Signature: _____ Date: _____

LOCAL FIRE AUTHORITY (LFA) INFORMATION	
LFA Agency Name: Bakersfield Fire Department	
LFA Review Official:	
Title:	Work Phone:
Work Email:	

LFA Reviewer's Signature: _____ Date: _____

FH1

Hydrant Flow Test Report

Test Date 2/9/24 **Test Time** 9:40 am

Location
1100 Citadel St.
MLK Elementary School

Tested by
Lilian V.
Dan P.
Henry K.
Hershel M. CWS

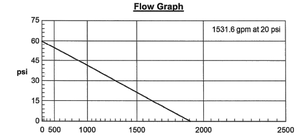
Notes
Read hydrant is 605 ft south of E. Belle Terrace on Citadel St. Flow hydrant is on campus.

Read Hydrant
60 psi **static pressure**
40 psi **residual pressure**
379 ft **hydrant elevation**

Flow Hydrant(s)

Outlet	Elev	Size	C	Pitot Pressure	Flow
#1	379	4	.9	6	1053 gpm

Flow Graph



Created with the free hydrant flow test program from www.lgnaustinc.com

KEY NOTES

1. NEW BUILDING UNDER THIS APPLICATION
2. EXISTING BUILDINGS UNDER DSA APP # 03-118394
3. (E) FIRE HYDRANT (FH1).
4. (E) FIRE TRUCK ACCESS LANE (20'-0"WIDE MIN).
5. NEW CONCRETE SIDEWALK
6. (E) HARDCOVER PLAY AREA
7. (E) 8' HIGH DECORATIVE STEEL FENCE
8. ACCESSIBLE PATH OF TRAVEL
9. (E) SOLAR ARRAY.
10. (E) BACK-FLOW PREVENTER w/FIRE DEPARTMENT CONNECTION (FDC). -SEE DSA #03-118394
11. (E) LANDSCAPING & IRRIGATION
12. (E) 8' HIGH CHAINLINK FENCE
13. (E) TOWAWAY ENTRANCE SIGN. UNDER DSA APP# #02-118394
14. (E) KNOX BOX KEY VAULT PER LOCAL FIRE AUTHORITY REQUIREMENTS, TYP. AT ALL GATES IN FIRE TRUCK ACCESS ROAD
15. 22' WIDE DECOR. STEEL DBL GATE.
16. (E) 20'-0" WIDE DOUBLE CHAINLINK GATE
17. NOT USED
18. (E) ADA PARKING STALLS PER DSA # 03-118294
19. (N) SITE LIGHT, SEE ELECTRICAL SHEETS
20. (E) SITE LIGHTING
21. (E) P.I.V.
22. (N) FIRE HYDRANT (FH2), SEE M1.01, o/ 3'x3' 3" THICK CONCRETE PAD, -SEE 1/A1.04 (SIM.).
23. (N) 6" FIRE WATER LINE (FW), SEE M1.01.
24. REMOVED AND REPLACE (E) CONCRETE MOWSTRIP AS NEEDED FOR (N) FW LINE.
25. REMOVED (E) 4" FW LINE AND REPLACE WITH (N) 8" FW LINE, SEE M1.01.

SAFE DISPERSAL AREA

TRANSITIONAL KINDERGARTEN CLASSROOM 1	=	964 SF
TRANSITIONAL KINDERGARTEN CLASSROOM 2	=	964 SF
TOTAL SF	=	1928 SF
1928 SF / 20 SF PER OCCUPANT	=	96 OCC
96 OCC x 5 SF PER OCC	=	482 SF REQ'D
500 SF (20' x 25') PROVIDED	=	OK

NOTE:
1. SAFE DISPERSAL AREA MUST BE 50' AWAY FROM ANY BUILDING. DISPERSAL AREA SHALL BE PROVIDED WITH A SAFE AND UNOBSTRUCTED PATH OF TRAVEL FROM ANY BUILDING.
2. SEE ELECTRICAL FOR SAFE DISPERSAL AREA LIGHTING.

PARKING LOTS

EXISTING LOT #1 - PER DSA #03-118394

PARKING STALLS; 30

ADA STALLS: 2

(1 VAN)

TOTAL ADA REQUIRED:2

EXISTING LOT #2 - PER DSA #03-118394

PARKING STALLS: 48

ADA STALLS: 2

(1 VAN)

TOTAL ADA REQUIRED: 2

EXISTING LOT #3 - PER DSA #03-118394

TOTAL STALLS: 70

ADA PARKING: 4

(1 VAN)

TOTAL ADA REQUIRED: 3

LEGEND

- NEW BUILDING
- DSA APP# — EXISTING BUILDING
- NEW CONCRETE SIDEWALK
- EXISTING 20'-0" WIDE FIRE TRUCK ACCESS LANE
- PROPERTY LINE
- ACCESSIBLE PATH OF TRAVEL

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APP: 03-123900 INC:
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BAKERSFIELD CITY SCHOOL DISTRICT
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BAKERSFIELD CA 93305

Project Name:

TRANSITIONAL KINDERGARTEN

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integrated designs
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LICENSED ARCHITECT CURTIS C. FLYNN No. C 28966 REN. 5-31-25 STATE OF CALIFORNIA

Sheet Title:

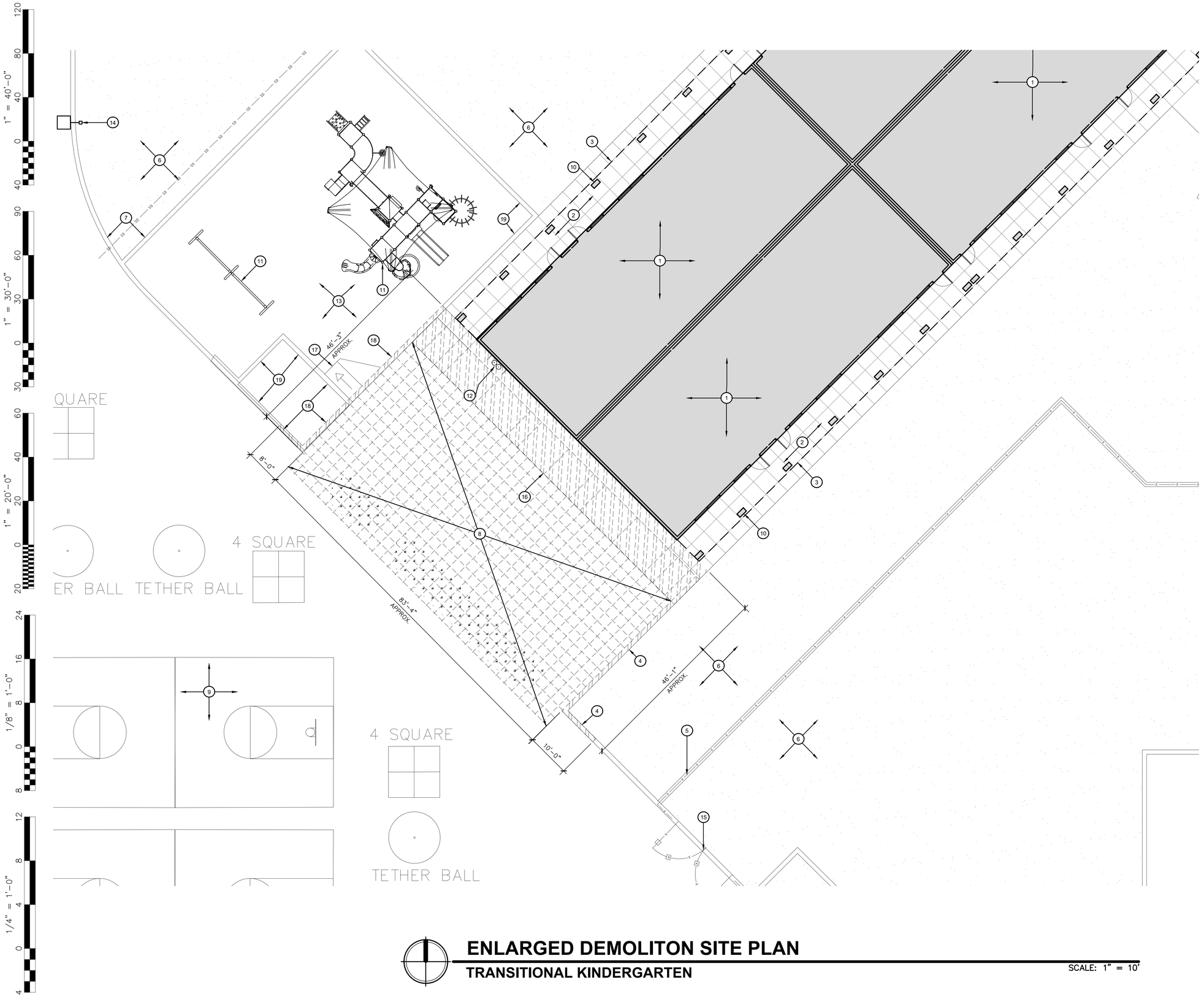
SITE PLAN

Job No.: **5593**

Sheet No.: **A1.01**

Release: DSA SUBMITTAL Issue Date 7/24/24

G:\2023frs\23-5593 MLK TK\Sheets SEAN PARKER



ENLARGED DEMOLITON SITE PLAN

TRANSITIONAL KINDERGARTEN

SCALE: 1" = 10'

KEY NOTES

1. (E) BUILDING, NO WORK UNDER THIS APPLICATION
2. (E) CONCRETE SIDEWALK TO REMAIN.
3. (E) BUILDING OVERHANG TO REMAIN.
4. (E) 6" CONCRETE CURB TO BE REMOVED.
5. (E) CHAINLINK FENCE & MOWSTRIP TO REMAIN.
6. (E) LANDSCAPE AND IRRIGATION TO REMAIN, , -SEE DSA# 03-118394
7. (E) CONCRETE CURB TO REMAIN.
8. (E) AC PAVING TO BE REMOVED.
9. (E) AC PAVING PLAY COURTS TO REMAIN.
10. (E) COLUMNS TO REMAIN
11. (E) PLAYSET TO REMAIN
12. (E) HI/LOW DRINKING FOUNTAIN TO BE REMOVED. CAP PLUMBING IN WALL.
13. (E) FALL MATERIAL TO REMAIN.
14. (E) LIGHT POLE TO REMAIN.
15. (E) CHAINLINK GATE TO REMAIN.
16. (E) CONCRETE SIDEWALK TO BE REMOVED
17. (E) CONCRETE RAMP TO BE REMOVED
18. (E) 12" CONCRETE CURB TO BE REMOVED
19. (E) CONCRETE CURB TO REMAIN

GENERAL NOTES

A. GENERAL CONTRACTOR SHALL FIELD VERIFY ALL SITE CONDITIONS PRIOR TO BID. IF ANY DISCREPANCIES ARE FOUND, THE ARCHITECT SHALL BE NOTIFIED IN WRITING.
B. CONTRACTOR SHALL BE RESPONSIBLE FOR THE CORRECTNESS OF LAYOUTS AND ESTABLISHED LOCATIONS OF BURIED UTILITY LINES. ANY UTILITIES REQUIRING RELOCATION SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR CONTACT APPLICABLE GOVERNING AGENCIES REGARDING ARRANGEMENT AND COORDINATION OF WORK.
C. GENERAL CONTRACTOR WILL BE RESPONSIBLE FOR ANY COMPACTION RETEST DUE TO INITIAL FAILURE.
D. PROJECT INSPECTOR SHALL BE EMPLOYED BY THE OWNER, APPROVED BY THE RESPONSIBLE ARCHITECT AND DSA.
E. A COPY OF TITLE-24, ALL PARTS APPLICABLE, TO BE KEPT AT THE JOB SITE AT ALL TIMES.
F. ADDENDA SHALL BE SIGNED BY THE ARCHITECT (RESPONSIBLE IN CHARGE) AND APPROVED BY DSA.
G. C.C.D.s SHALL BE SIGNED BY THE ARCHITECT (RESPONSIBLE IN CHARGE), OWNER AND APPROVED BY DSA.
H. TESTING LAB SHALL BE EMPLOYED BY THE OWNER, APPROVED BY THE RESPONSIBLE ARCHITECT AND DSA.
I. ALL WORK SURFACES DISTURBED OR DAMAGED BY THE CONSTRUCTION ACTIVITIES SHALL BE REPAIRED IN KIND, TEXTURED AND FINISHED TO MATCH ADJACENT SURFACES.
J. NEW CONCRETE WALKS SHALL HAVE SLOPES NOT TO EXCEED 1 IN 20 IN THE DIRECTION OF PATH OF TRAVEL. PROVIDE CONTROL JOINTS ("C.J.")AT 5'-0" o.c. MAX. AND EXPANSION JOINTS NOT TO EXCEED 30'-0" MAX. PROVIDE MEDIUM BROOM FINISH ON ALL WALKS.
K. ALL BUILDING AND ROOM NAMES INDICATED ON THESE CONSTRUCTION DOCUMENTS ARE "NOT" THE ACTUAL BUILDING/ ROOM SIGNAGE DESIGNATION. THE GENERAL CONTRACTOR SHALL FURNISH, INSTALL AND COORDINATE ALL REQUIRED SIGNAGE WITH THE OWNER/ARCHITECT PRIOR TO STARTING CONSTRUCTION.
L. GENERAL CONTRACTOR WILL BE RESPONSIBLE TO COORDINATE RELOCATABLE BUILDING DELIVERY DATES TO THE SCHOOL SITE WITH THE MFGR.
M. THE GENERAL CONTRACTOR SHALL CONSTRUCT ALL NEW RELOCATABLE BUILDING FOUNDATIONS AS PER THE RELOCATABLE BUILDING MANUFACTURER'S DRAWINGS AND SPECIFICATIONS.
N. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE ALL HOOK-UPS TO THE RELOCATABLE BUILDINGS AFTER INSTALLATION HAS BEEN COMPLETED BY THE MANUFACTURER.
O. 5'-0" DEEP x 5'-0" WIDE MINIMUM LANDINGS AT DOORWAYS SHALL BE AS DETAILED AND SHALL HAVE SLOPES (IN ANY DIRECTION) OF NOT GREATER THAN 1/4 IN 12 SLOPE. SLOPES SHALL BE AWAY FROM DOORWAYS.
P. GENERAL/SITE CONTRACTOR SHALL FIELD VERIFY THAT EXISTING PATH OF TRAVEL (P.O.T.) IS A MINAMUM OF 4'-0" WIDE AND IS SLIP RESISTANT. IF IT IS NOT, THEN THE CONTRACTOR SHALL NOTIFY THE ARCHITECT OF RECORD AND A REMEDY OR ALTERNATE P.O.T. WILL BE PROVIDED.
Q. THE MAXIMUM DROP BETWEEN EXISTING FINISHED GRADES AND THE TOP OF THE P.O.T. SHOULD NOT EXCEED 4". IF IT DOES, PROVIDE THE NECESSARY WARNING CURB PER CBC SEC. 11B-303.5.
R. DETERIORATION OR EXISTING NON-COMPLIANT CONSTRUCTION:

IF ANY CONDITION IS DISCOVERED WHICH, IF LEFT UNCORRECTED, WOULD MAKE THE BUILDING NON-COMPLIANT WITH THE REQUIREMENTS OF THE EDITION OF THE CBC IN FORCE AT THE TIME OF ORIGINAL CONSTRUCTION, THE CONDITION MUST BE CORRECTED IN ACCORDANCE WITH CURRENT CODE REQUIREMENTS. A C.C.D. OR A SEPARATE SET OF PLANS AND SPECIFICATIONS DETAILING AND SPECIFYING THE REQUIRED REPAIR WORK SHALL BE SUBMITTED TO AND APPROVED BY DSA BEFORE PROCEEDING WITH THE REPAIR WORK. *PER DSA IR 16-1, SEC. 5.4

S. CONTRACTOR SHALL ADJUST ALL DOOR CLOSERS TO A MAXIMUM OPENING FORCE OF 5 LBF

LEGEND

- EXISTING BUILDING NO WORK
- REMOVE (E) CONCRETE SIDEWALK
- REMOVE (E) AC PAVING
- (E) CHAIN LINK TO REMAIN

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CURTIS E. FLYNN
No. C 28966
REN: 5-31-25
STATE OF CALIFORNIA

Sheet Title:

ENLARGED DEMOLITON SITE PLAN

Job No.: **5593**

Sheet No.: **A1.02**

Release: DSA SUBMITTAL

Issue Date: 7/24/24

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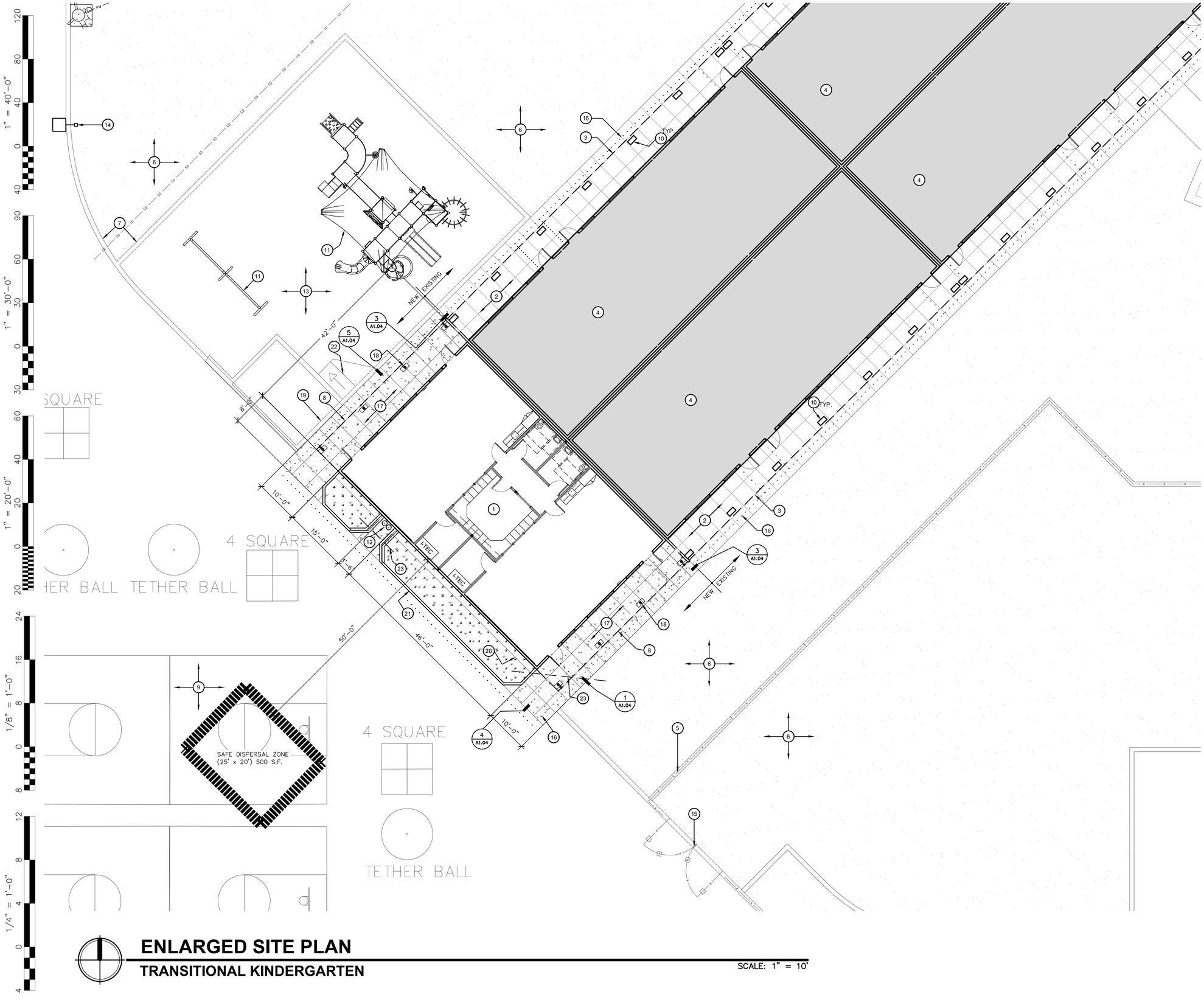

ENLARGED SITE PLAN

TRANSITIONAL KINDERGARTEN

SCALE: 1" = 10'

KEY NOTES

1. (N) BUILDING UNDER THIS APPLICATION - SEE A2.01.
2. (E) CONCRETE SIDEWALK TO REMAIN.
3. (E) BUILDING OVERHANG TO REMAIN.
4. (E) BUILDING NO WORK
5. (E) CHAINLINK FENCE & MOWSTRIP TO REMAIN.
6. (E) LANDSCAPE AND IRRIGATION TO REMAIN.
7. (E) CONCRETE CURB TO REMAIN.
8. NEW BUILDING OVERHANG
9. (E) AC PAVING PLAY COURTS TO REMAIN.
10. (E) COLUMNS TO REMAIN.
11. (E) PLAYSET TO REMAIN.
12. (N) HI/LOW DRINKING FOUNTAIN - SEE DETAIL 12/A8.01
13. (E) FALL MATERIAL TO REMAIN
14. (E) LIGHT POLE TO REMAIN
15. (E) CHAINLINK GATE TO REMAIN.
16. DOTTED LINE INDICATES ACCESSIBLE PATH OF TRAVEL.
17. (N) CONCRETE SIDEWALK - SEE DETAIL 1/A1.04
18. (N) COLUMN - SEE DETAIL 7/A7.01
19. (N) 8" CONCRETE CURB - SEE DETAIL 5/A1.04
20. (N) 18" MOWSTRIP - SEE DETAIL 10/A1.04
21. (N) 6" CONCRETE CURB - SEE DETAIL 11/A1.04
22. (N) CONCRETE RAMP - SEE DETAIL 13/A1.04
23. (N) IRRIGATION SLEEVE - SEE DETAIL 14/A1.04

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S. CONTRACTOR SHALL ADJUST ALL DOOR CLOSERS TO A MAXIMUM OPENING FORCE OF 5 LBF

LEGEND

- EXISTING BUILDING NO WORK
- (N) CONCRETE SIDEWALK
- (N) PLANTER
- (E) CHAINLINK FENCE
- ACCESSIBLE PATH OF TRAVEL

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REN. 5-31-25
STATE OF CALIFORNIA

Sheet Title:

ENLARGED SITE PLAN

Job No.:

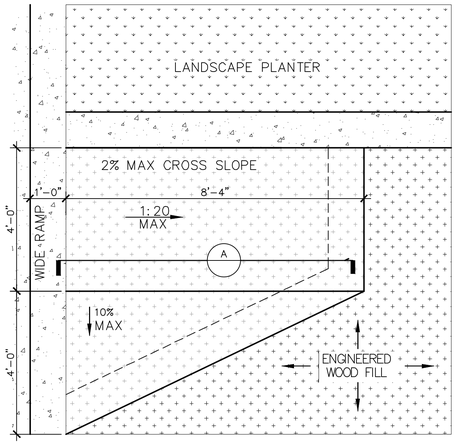
5593

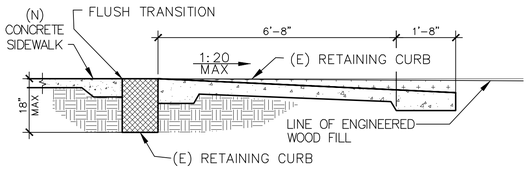
Sheet No.:

A1.03

Release: DSA SUBMITTAL

Issue Date: 7/24/24

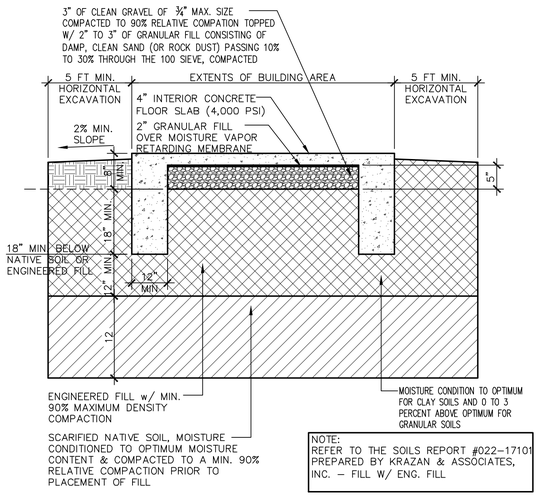




A SECTION

13 A1.04 ACCESSIBILITY RAMP TO PLAY AREA

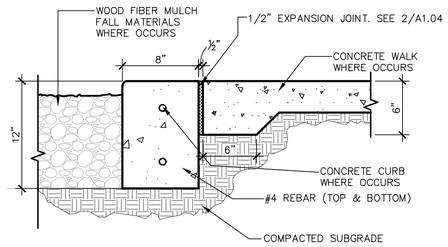
SCALE: 1/2" = 1'-0"



9 A1.04 OVER EXCAVATION REQUIREMENTS @ BLDG S.O.G & FOUND.

ADS100-08
FOR PROPOSED BUILDINGS

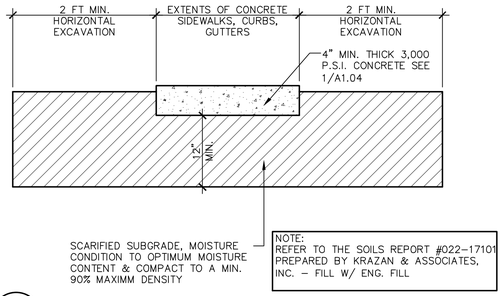
SCALE: N.T.S.



5 A1.04 CONCRETE SLAB AT PLANTER

ADS100-26

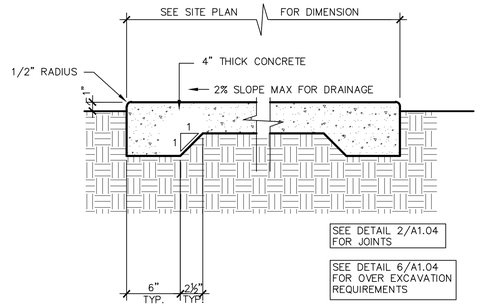
SCALE: 1 1/2" = 1'-0"



6 A1.04 OVER EXCAVATION REQUIREMENTS @ WALKS, CURB & GUTTERS

ADS100-06
FOR SIDEWALKS, CURB, GUTTERS, AND A.C. PAVING

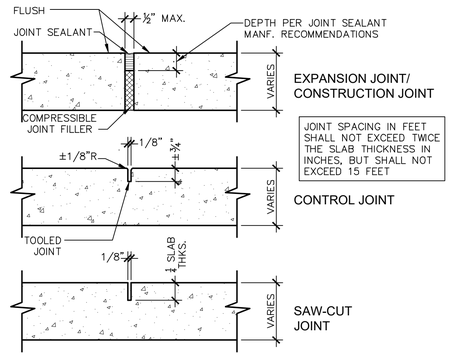
SCALE: 1" = 1'-0"



1 A1.04 TYPICAL CONCRETE WALK

ADS100-15

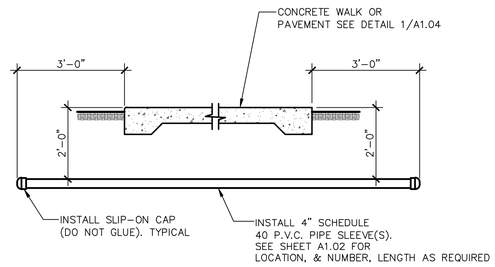
SCALE: 1 1/2" = 1'-0"



2 A1.04 CONCRETE CONTROL JOINTS

ADS110-01

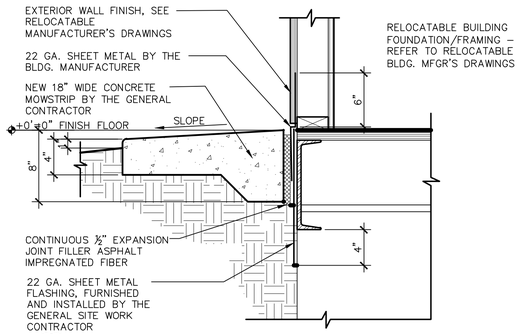
SCALE: 3" = 1'-0"



14 A1.04 TYPICAL IRRIGATION SLEEVE

ADS100-13

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



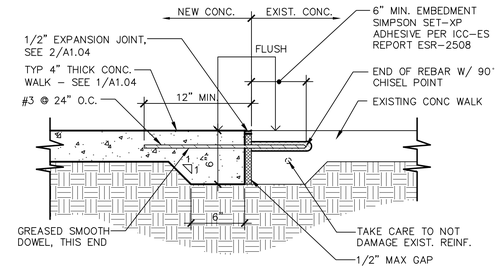
10 A1.04 MOWSTRIP DETAIL

ADS100-32

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

INSTALLATION:

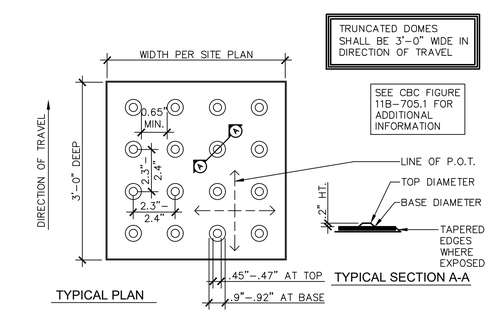
1. DRILL HOLE 1/8" LARGER THAN REBAR DIAMETER
2. CLEAN HOLE THOROUGHLY OF DUST AND FRAGMENTS WITH WATER, WIRE BRUSH, AND AIR.



3 A1.04 (N) CONC WALK TO (E) CONC WALK

ADS100-05

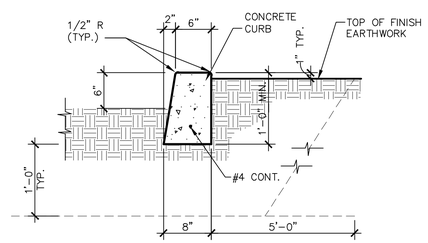
SCALE: 1 1/2" = 1'-0"



15 A1.04 TRUNCATED DOMES COLOR: FEDERAL YELLOW FS 33538

ADA100-23

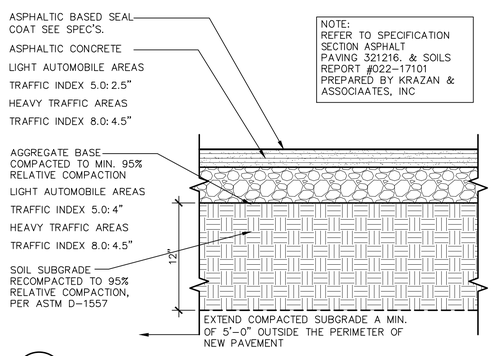
SCALE: N.T.S.



11 A1.04 CONCRETE CURB AT PAVING

ADS100-02

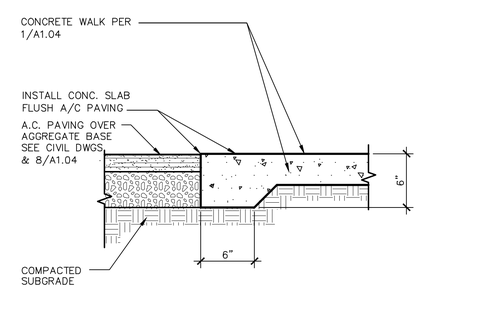
SCALE: 1" = 1'-0"



8 A1.04 ASPHALT PAVING STRUCTURAL SECTION

ADS100-16

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



4 A1.04 CONCRETE SLAB AT PAVING

ADS100-03

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

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SITE DETAILS

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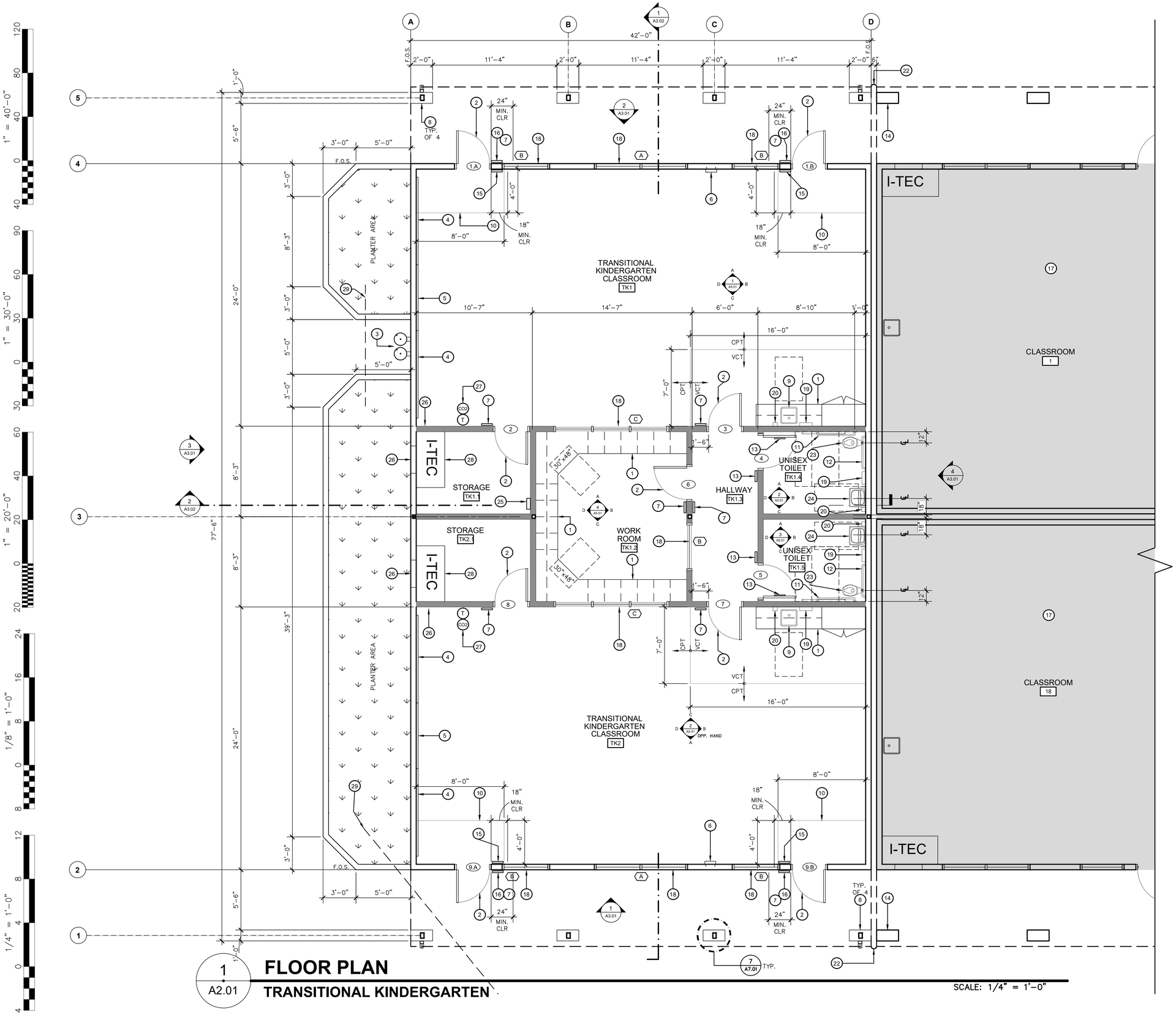

1 A2.01 **FLOOR PLAN**

TRANSITIONAL KINDERGARTEN

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

KEY NOTES

1. (N) CABINETS. SEE DETAIL # 1/A8.02.
2. (N) DOOR, FRAME, AND HARDWARE - SEE DOOR SCHEDULE.
3. (N) ACCESSIBLE HI/LO DRINKING FOUNTAIN - SEE DETAIL 12/A8.01
4. (N) 4'-0" X 8'-0" MARKER BOARDS - SEE DETAIL 9/A8.02
5. (N) SMARTBOARD N.I.C.
6. (N) FIRE EXTINGUISHER CABINET. - SEE DETAIL 13/A8.02
7. (N) TACTILE ROOM IDENTIFICATION SIGN - SEE DETAIL 5/A8.01
8. (N) COLUMN
9. (N) SINK ON COUNTERTOP WITH CABINETS - SEE DETAIL 6 & 7/A8.02
10. (N) WALK-OFF CARPET TILES
11. (N) 48" GRAB BAR - SEE DETAIL 8/A8.01
12. (N) 36" GRAB BAR - SEE DETAIL 8/A8.01
13. (N) RESTROOM SIGNAGE PER DETAIL 2/A8.01
14. (E) COLUMN
15. (N) TACTILE EXIT SIGN - SEE DETAIL 4/A8.01
16. (N) BUILDING ENTRANCE SIGN - SEE DETAIL 1/A8.01
17. NO WORK IN THIS ROOM
18. (N) WINDOW & FRAME - SEE WINDOW SCHEDULE.
19. (N) PAPER TOWEL DISPENSER F.B.O. INSTALLED BY CONTRACTOR - SEE DETAIL 7/A8.01
20. (N) SOAP DISPENSER F.B.O. INSTALLED BY CONTRACTOR - SEE DETAIL 7/A8.01
21. (N) MIRROR - SEE DETAIL A7/A8.01
22. SEISMIC JOINT COVER
23. (N) WATER CLOSET - SEE PLUMBING
24. (N) LAVATORY - SEE PLUMBING
25. (N) ELECTRICAL PANEL - SEE ELECTRICAL
26. (N) WALL GRILL - SEE MECHANICAL
27. (N) THERMOSTAT & CO2 SENSOR - SEE MECHANICAL
28. (N) HEAT PUMP - SEE MECHANICAL
29. (N) IRRIGATION SLEEVE - SEE DETAIL 14/A1.04.

GENERAL NOTES

1. DIMENSIONS ARE GIVEN TO FACE OF STUD UNLESS NOTED OTHERWISE.
2. DIMENSIONS FOR ACCESSIBILTY COMPLIANCE ARE GIVEN FROM CENTERLINE OR FACE OF FIXTURE/ACCESSORY TO FACE OF FINISH OR ADJACENT FIXTURE/ACCESSORY. SEE NOTE BELOW
3. SEE SHEET A8.01 FOR MOUNTING HEIGHT AND CLEARANCE REQUIREMENTS AT ALL TOILET ROOM ACCESSORIES AND ACCESSIBLE FIXTURES: WATER CLOSETS, LAVATORIES, DRINKING FOUNTAINS, ETC.
4. SEE MATERIAL & FINISH SCHEDULE ON FOR MATERIAL & FINISH SELECTIONS.
5. ALL INTERIOR WALLS TO RECEIVE ACOUSTIC BATT INSULATION. PROVIDE GYPSUM BD. FROM FINISH FLOOR TO WITHIN ¾" OF ROOF DECK ABOVE W/ BLOCKING BETWEEN ROOF FRAMING MEMBERS
6. ALL GYPSUM BOARD TO BE 5/8" U.N.O.; 5/8" CEMENT BACKER @ C.T.
7. FRAME ALL INTERIOR WALLS FROM FLOOR SLAB BELOW TO WITHIN 1/4" OF THE UNDERSIDE OF THE ROOF DECK ABOVE U.N.O. W/ 5/8" GYP. BD. BOTH SIDES FROM FIN. FLOOR BELOW TO 6" ABOVE HIGHEST ADJACENT CEILING
8. SEE STRUCTURAL DRAWINGS FOR SHEAR WALL LOCATIONS
9. SEE STRUCTURAL DRAWINGS FOR TYPICAL FRAMING CONSTRUCTION DETAILS
10. ALL INSULATION AT EXTERIOR WALLS SHALL BE R-19 INSULATION. INSULATION IN ATTIC SPACE SHALL BE R-38 FOIL-FACT F.G. BATT INSULATION INSTALLED.
11. PROVIDE ACOUSTIC BATT INSULATION AT ALL INTERIOR TOILET ROOM WALLS. PROVIDE ACOUSTIC SEALANT AT ALL END WALL JOINTS AND AT ALL PENETRATIONS.

WALL LEGEND

- EXTERIOR 6" METAL STUDS
- INTERIOR 6" METAL STUDS
- (T) THERMOSTAT
- (CO2) CARBON MONOXIDE CENSOR

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STATE OF CALIFORNIA

Sheet Title:

FLOOR PLAN

Job No.: **5593**

Sheet No.: **A2.01**

Release: DSA SUBMITTAL — Issue Date: 7/24/24

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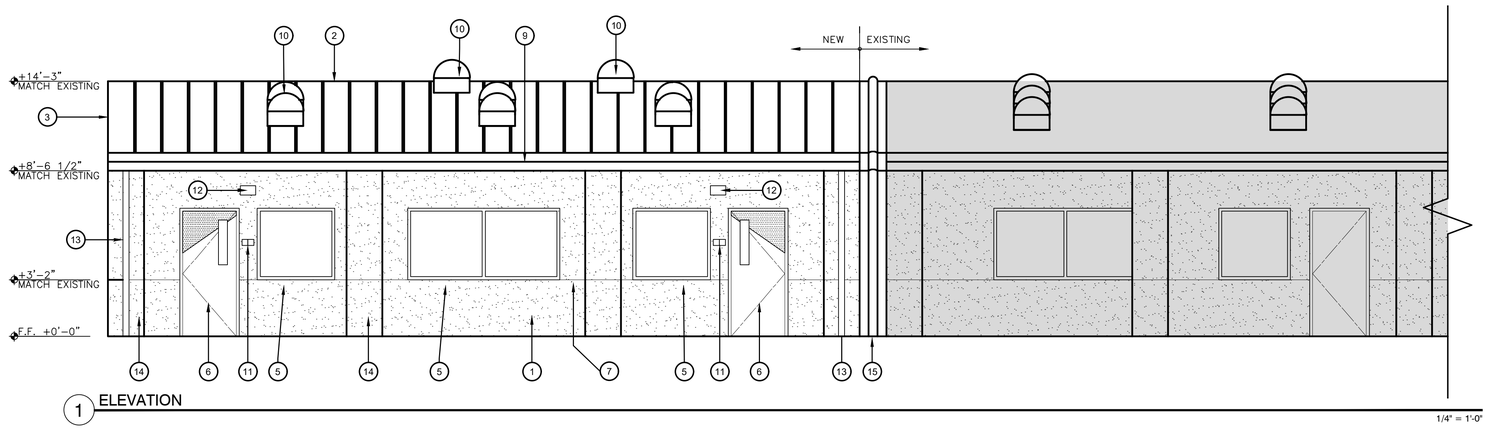
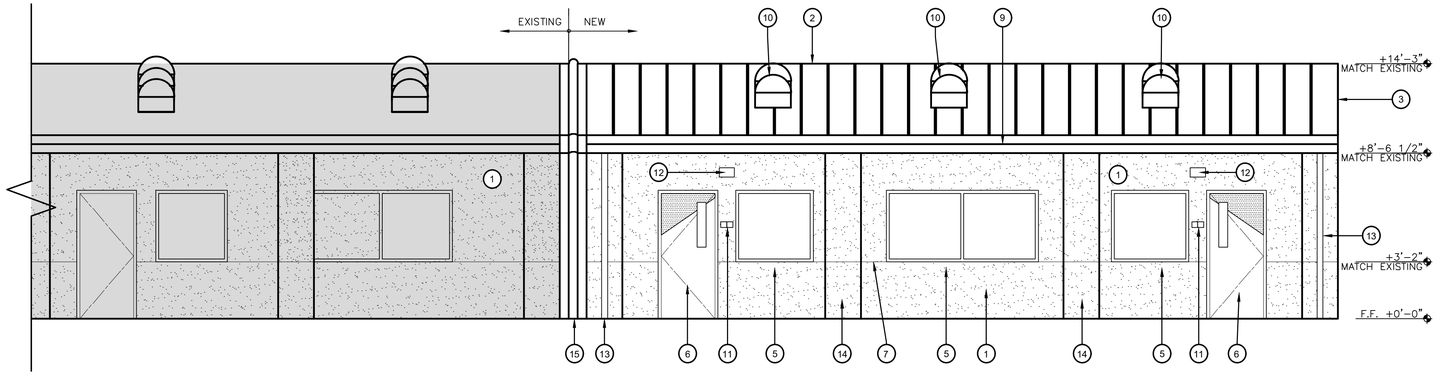


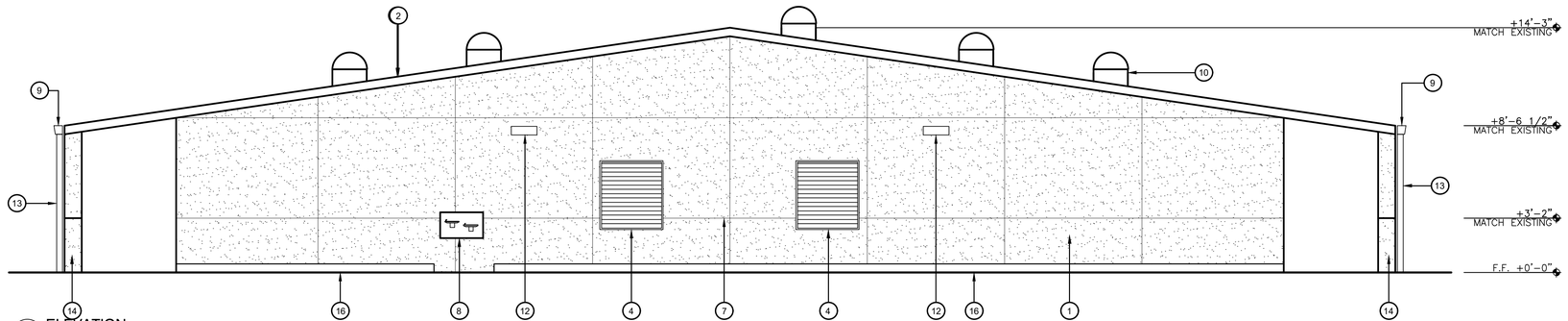
1 ELEVATION

1/4" = 1'-0"



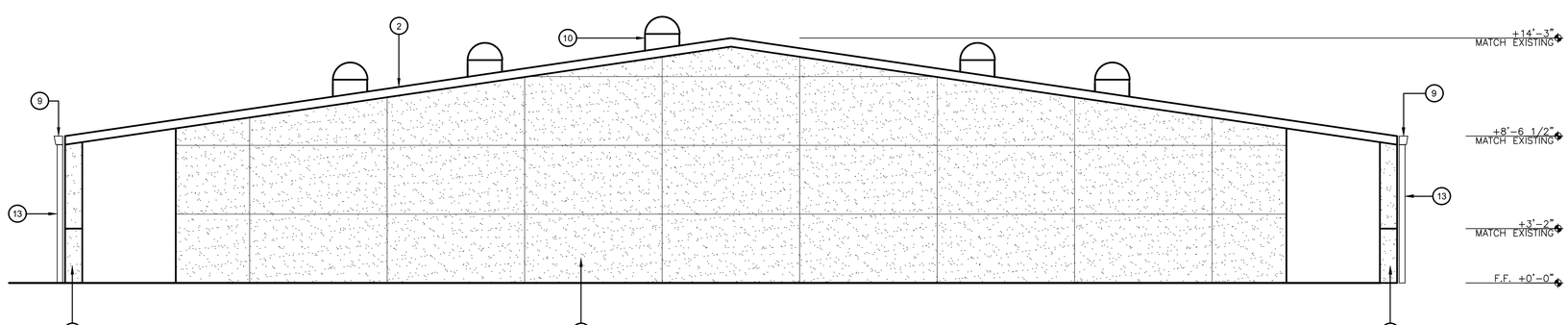
2 ELEVATION

1/4" = 1'-0"



3 ELEVATION

1/4" = 1'-0"



4 ELEVATION

1/4" = 1'-0"

1" = 40'-0" 120 80 40 0 40

1" = 30'-0" 60 30 0 30

1" = 20'-0" 60 40 20 0 20

1/8" = 1'-0" 24 16 8 0 8

1/4" = 1'-0" 12 8 4 0 4

KEY NOTES

1. EXTERIOR CEMENT PLASTER o/ WEATHER BARRIER, PRIME AND PAINT
2. PRE-FINISHED STANDING SEAM METAL ROOF o/ UNDERLAYMENTS - SEE SHEET A7.02 FOR TYPICAL DETAILS
3. 22 GA. SHEET METAL COPING, PROVIDE CLINCH-LOCK SEAM PER SMACNA DETAIL 1 FIGURE 3-2 AT SEAMS ALONG RAKED COPING, PRIME AND PAINT
4. EXTERIOR WALL LOUVER - SEE MECHANICAL
5. H.M. WINDOW FRAME W/ 1" INSULATED GLAZING UNIT, PAINT FRAME - SEE WINDOW ELEVATIONS
6. HOLLOW METAL DOOR AND FRAME - SEE DOOR SCHEDULE, PAINT
7. CONTROL JOINT - TYPE #5 - SEE 8/A7.01
8. (N) HI LOW DRINKING FOUNTAIN - SEE DETAIL 12/A8.01
9. RAIN GUTTER - SEE DETAIL 8/A7.02
10. SKY LIGHT
11. TACTILE ROOM IDENTIFICATION SIGN- SEE 5/A8.01 AND ISA SIGN PER 1/A8.01
12. WALL MOUNTED EXTERIOR LIGHT FIXTURE - SEE ELECTRICAL DRAWINGS
13. DOWNSPOUT - CONNECT TO UNDERGROUND DRAIN SYSTEM
14. COLUMN
15. SEISMIC JOINT COVER
16. 6" CONCRETE CURB PLANTER
17. DENS GLASS SHEATHING OUTER PLYWOOD

GENERAL NOTES

1. ALL METAL LATH WIRE SHALL BE CUT BEHIND ALL EXPANSION/CONTROL JOINTS. THE CONTRACTOR SHALL PROVIDE STUDS AS REQUIRED @ ALL JOINTS
2. ALL EXTERIOR GLASS SEE WINDOW ELEVATIONS AND SCHEDULE
3. CEMENT PLASTER WILL BE PAINTED WITH 3 DIFFERENT COLORS (ELASTOMERIC P50.E)

   1) MAIN BODY
   2) SECONDARY BODY
   3) 12" ACCENT BAND
4. HOLLOW METAL FRAMES & DOORS WILL BE PAINTED WITH A MIN. OF 2 COLORS

   1) EXTERIOR SURFACE : 2. COLOR
      A) JAMB
      B) DOOR
         1. MAIN
         2. ACCENT
         3. DOOR NUMBER

   2) INTERIOR SURFACE : 2. COLORS
      A) JAMB
      B) DOOR

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EXTERIOR ELEVATIONS

Job No.: **5593**

Sheet No.: **A3.01**

Release: DSA SUBMITTAL

Issue Date: 7/24/24

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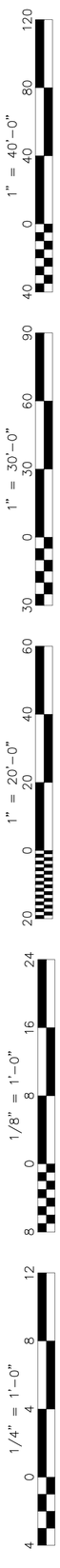
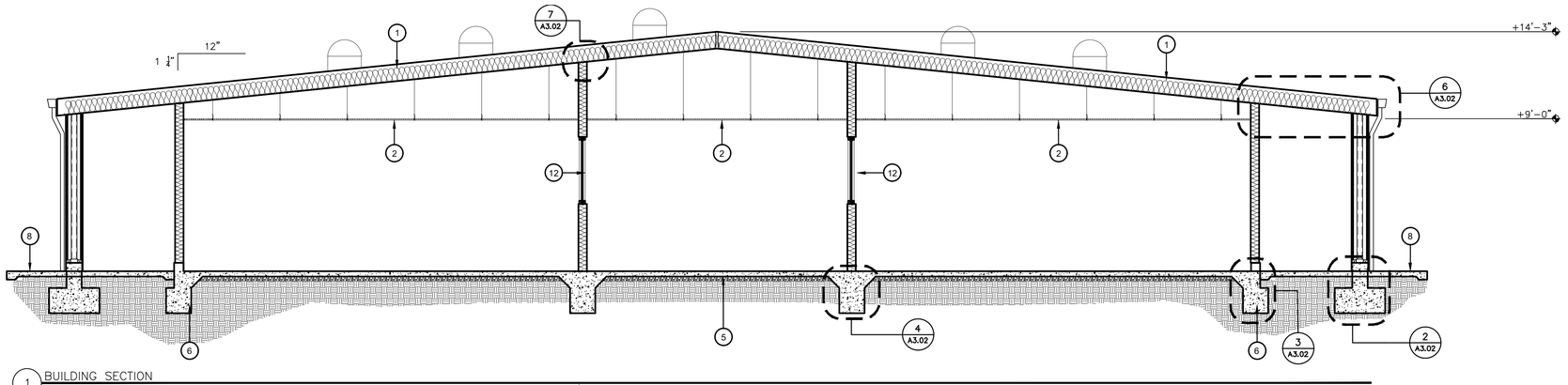
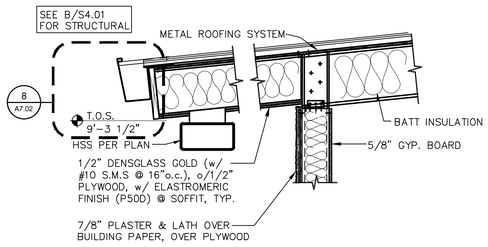
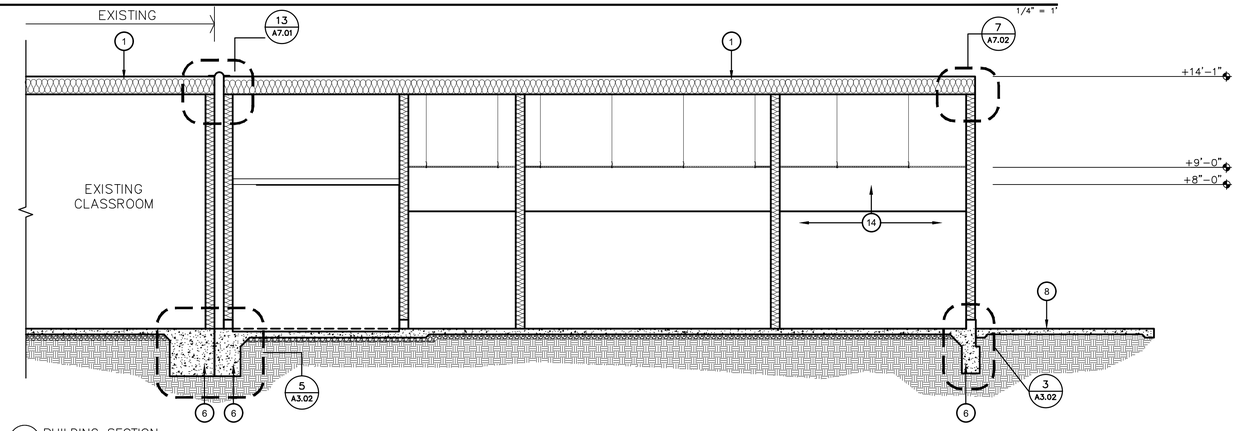




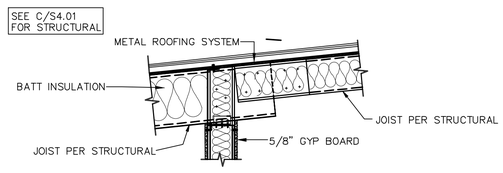
1 BUILDING SECTION — 1/4" = 1'



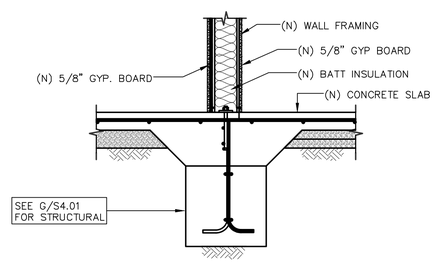
6 A3.02 SOFFIT OVERHANG — B/S4.02 — SCALE: 3/4" = 1'-0"



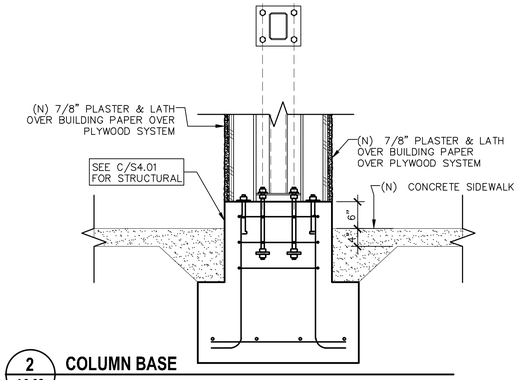
2 BUILDING SECTION — 1/4" = 1'



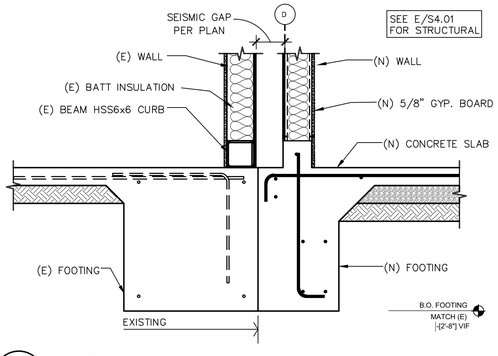
7 A3.02 DETAIL — C/S4.01 — SCALE: 3/4" = 1'-0"



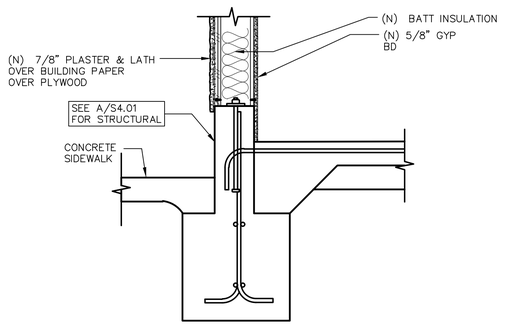
4 A3.02 FOOTING DETAIL — ADW110-04 — SCALE: 3/4" = 1'-0"



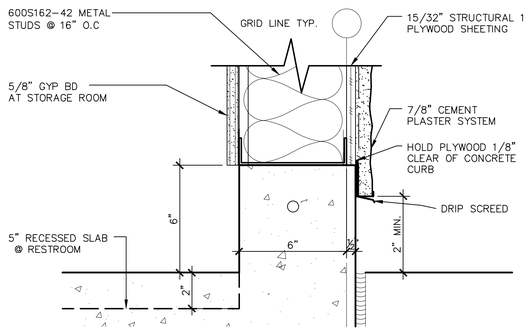
2 A3.02 COLUMN BASE — FILENAME — SCALE: 3/4" = 1'-0"



5 A3.02 FOOTING DETAIL — ADW110-05 — SCALE: 3/4" = 1'-0"



3 A3.02 SILL PLATE @ CURB — ADW110-03 — SCALE: 1" = 1'-0"



1 A3.02 CURB DETAIL — ADB111-02 — SCALE: 3" = 1'-0"

KEY NOTES

1. BATT INSULATION
2. SUSPENDED ACOUSTICAL TILE
3. STRUCTURAL FRAMING - SEE STRUCTURAL
4. SINGLE PLY ROOFING MEMBRANE o/ PLYWOOD
5. CONCRETE SLAB - SEE STRUCTURAL
6. CONCRETE FOOTING - SEE STRUCTURAL
7. STANDING SEAM METAL ROOFING - SEE SHEET A7.05 FOR TYPICAL DETAILS
8. CONCRETE SIDEWALK
9. NOT USED
10. NOT USED
11. CEMENT PLASTER SYSTEM
12. DOOR / WINDOW FRAME
13. NOT USED
14. GYPSUM BD.

GENERAL NOTES

1. THERE SHALL BE A MIN. OF 3 PAINT COLORS THAT WILL BE SELECTED FOR THE PROJECT
2. ALL METAL LATH WIRE SHALL BE CUT BEHIND ALL EXPANSION/CONTROL JOINTS. THE CONTRACTOR SHALL PROVIDE STUDS AS REQUIRED @ ALL JOINTS
3. INSTALL PLASTER CONTROL JOINTS AS REQUIRED BY THE SPECIFICATIONS, FOR JOINTS NOT SHOWN USE TYPE #6 PER DETAIL 5/A7.01
4. ALL EXTERIOR WINDOWS AND DOORS SHALL RECEIVE GREY LIGHT II GLASS
5. CEMENT PLASTER SHALL HAVE AN INTEGRAL COLOR AND SHALL RECEIVE A 3 COAT PLASTER SYSTEM.
6. CEMENT PLASTER WILL BE PAINTED WITH 3 DIFFERENT COLORS
   1) MAIN BODY
   2) SECONDARY BODY
   3) 12" ACCENT BAND
7. HOLLOW METAL FRAMES & DOORS WILL BE PAINTED WITH A MIN. OF 2 COLORS
   1) EXTERIOR SURFACE: 1. COLOR
   2) INTERIOR SURFACE: 2. COLORS
      A)JAMB
      B) DOOR

LEGEND

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SECTIONS

Job No.: **5593**

Sheet No.: **A3.02**

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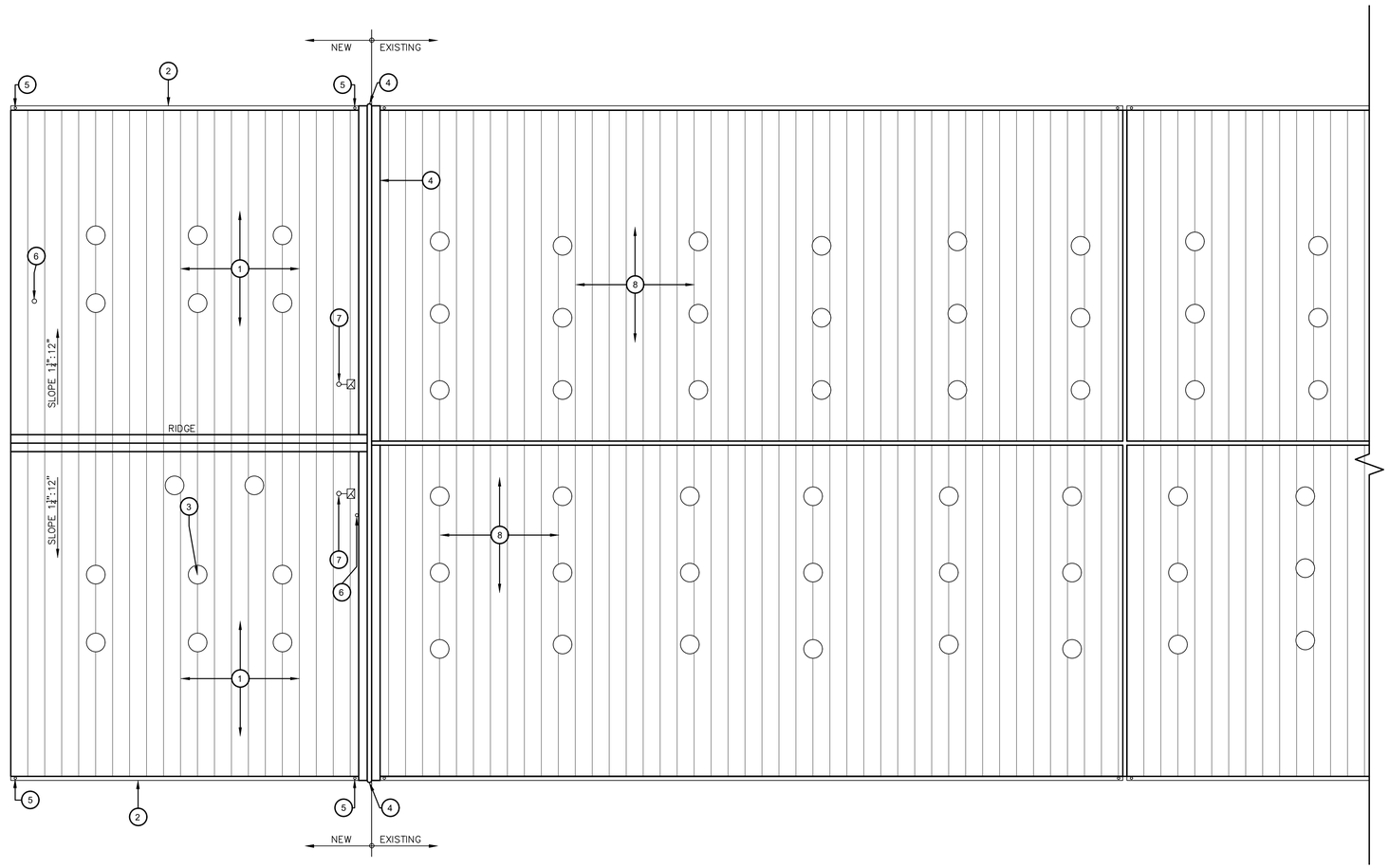
1" = 40'-0"

1" = 30'-0"

1" = 20'-0"

1/8" = 1'-0"

1/4" = 1'-0"



ROOF PLAN

TRANSITIONAL KINDERGARTEN

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

KEY NOTES

1. (N) 24 GA METAL ROOFING
2. (N) SHEET METAL GUTTER
3. (N) SKYLIGHT
4. (N) SEISMIC CONTROL JOINT
5. (N) DOWNSPOUT
6. (N) VENT THROUGH ROOF
7. (N) EXHAUST FAN
8. (E) ROOF NO WORK

GENERAL NOTES

1. ALL ROOF PENETRATIONS SHALL BE WEATHER TIGHT
2. ALL SHEET METAL COPING SHALL BE PAINTED TO MATCH ADJACENT FINISH. ALL FLASHING SHALL HAVE A 15# UNDERLAYMENT.

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Sheet Title:

ROOF PLAN

Job No.: **5593**

Sheet No.: **A4.01**

Release: DSA SUBMITTAL

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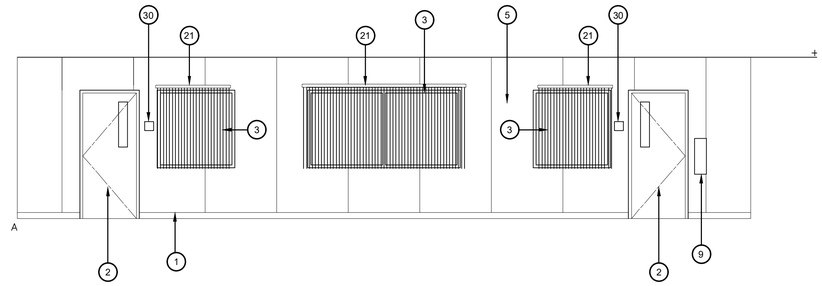
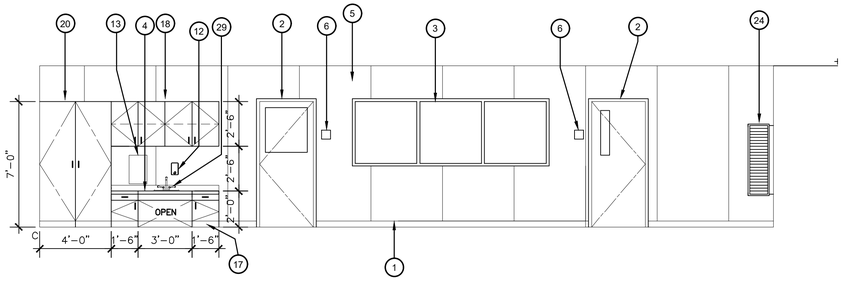


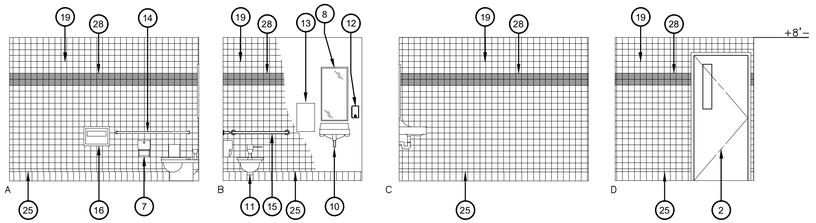
1 TRANSITIONAL KINDERGARTEN TK 1 TK 2 OPP. HAND

1/4" = 1'-0"



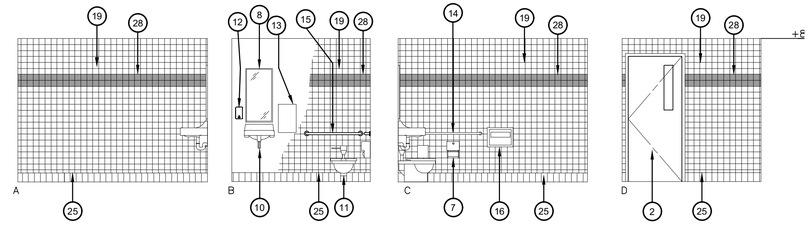
1 TRANSITIONAL KINDERGARTEN TK 1 TK 2 OPP. HAND

1/4" = 1'-0"



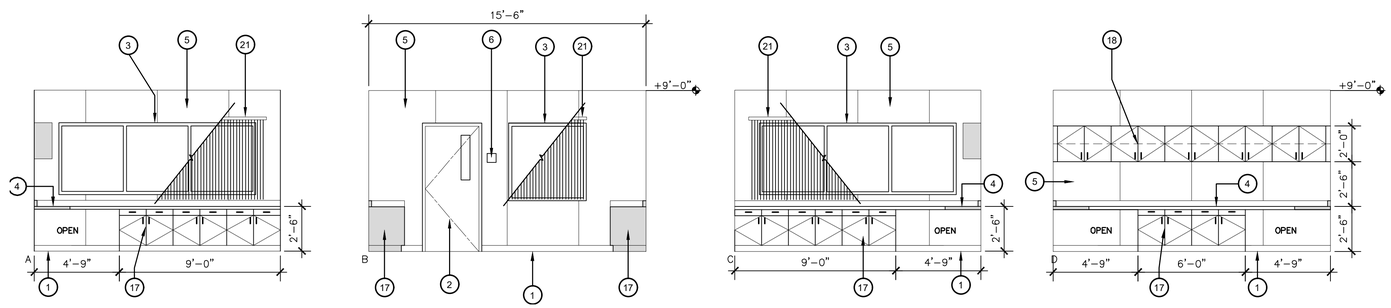
2 TOILET TK 1.4

1/4" = 1'-0"



3 TOILET TK 1.5

1/4" = 1'-0"



4 WORK ROOM TK 1.2

1/4" = 1'-0"

KEY NOTES

1. 4" RUBBER TOPSET BASE
2. DOOR & FRAME,SEE DOOR SCHEDULE
3. WINDOW FRAME, SEE WINDOW SCHEDULE
4. 12 MM CORIAN COUNTERTOP WITH 4" BACKSPLASH
5. (N) TACKBOARD
6. ROOM IDENTIFICATION SIGN, SEE DETAIL 5/A8.01
7. TOILET TISSUE DISPENSER
8. MIRROR
9. FIRE EXTINGUISHER CABINET
10. LAVATORY - SEE PLUMBING DRAWINGS
11. FLOOR MOUNTED WATER CLOSET - SEE PLUMBING
12. WALL MOUNTED SOAP DISPENSER - F.B.O. INSTALLED BY CONTRACTOR
13. PAPER TOWEL DISPENSER F.B.O INSTALLED BY CONTRACTOR
14. 48" LONG GRAB BAR GB-1 - SEE DETAIL 8/A8.01
15. 36" LONG GRAB BAR GB-1 - SEE DETAIL 8/A8.01
16. TOILET SEAT COVER DISPENSER
17. BASE CABINETS - SEE DETAIL 1/A8.02
18. UPPER CABINET - SEE DETAIL 1/A8.02
19. CERAMIC WALL TILE
20. TALL STORAGE CABINET -SEE DETAIL 1/A8.02
21. VERTICAL BLINDS
22. SMART BOARD
23. MARKER BOARD - SEE DETAIL 9/A8.02
24. WALL LOUVER - SEE MECHANICAL
25. 6" HIGH CERAMIC TILE COVE BASE
26. NOT USED
27. NOT USED
28. CERAMIC WALL TILE ACCENT COLOR
29. SINK W/ FAUCET - SEE PLUMBING
30. TACTILE EXIT SIGN - SEE DETAIL 4/A8.01

GENERAL NOTES

1. REFER TO ROOM FINISH SCHEDULE FOR FINISHES SEE REFLECTED CEILING PLANS FOR CEILING HEIGHTS & FINISHES
2. CONTRACTOR SHALL PROVIDE BACKING AS PER MANUFACTURES REQUIREMENTS FOR ALL WALL MOUNTED ACCESSORIES. SEE DETAIL 7/A8.01 FOR ACCESSORY MOUNTING HEIGHTS AND DETAIL 1/A8.02 FOR CASEWORK ANCHORING
3. COLORS FOR ALL ITEMS OF WORK SHALL BE SELECTED BY ARCHITECT
4. ALL CABINET DOOR PULLS SHALL BE MOUNTED VERTICALLY AND DRAWER PULLS SHALL BE MOUNTED HORIZONTALLY
5. CONTRACTOR SHALL COORDINATE w/ ELECTRICAL, PLUMBING, AND MECHANICAL DRAWINGS FOR LOCATIONS OF ALL OUTLETS, EXITS SIGNS, DATA BOXES, ACCESS DOORS, AND REQUIRED FINISHES
6. SEE DETAILS ON SHEET A8.01 FOR STANDARD MINIMUM ACCESSIBLE CLEARANCES/HEIGHTS AT TOILETS, LAVATORIES, TOILET ACCESSORIES, DRINKING FOUNTAINS, ETC.

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LICENSED ARCHITECT
CURTIS C. FLYNN
No. C 28966
REN. 5-31-25
STATE OF CALIFORNIA

Sheet Title:

INTERIOR ELEVATIONS

Job No.: **5593**

Sheet No.: **A5.01**

Release: DSA SUBMITTAL Issue Date: 7/24/24

G:\2023frs\23-5593 MLK TK\Sheets SEAN PARKER

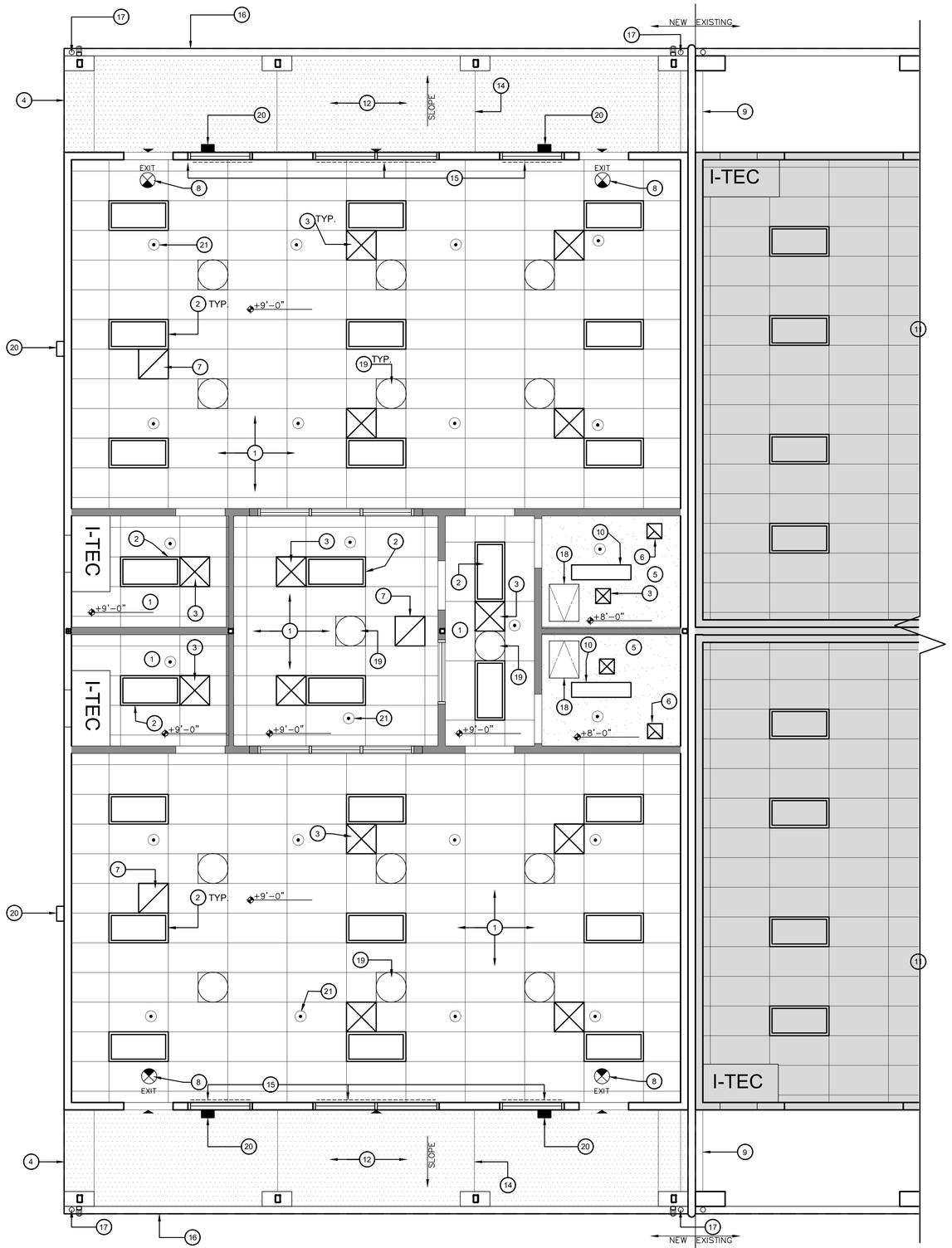
1" = 40'-0"

1" = 30'-0"

1" = 20'-0"

1/8" = 1'-0"

1/4" = 1'-0"



1 A6.01

REFLECTED CEILING PLAN

TRANSITIONAL KINDERGARTEN

1/4" = 1'0"

KEY NOTES

1. SUSPENDED ACOUSTICAL PANEL CEILING SEE SHEETS A8.04 & A8.05
2. RECESSED LIGHT FIXTURE - SEE ELECTRICAL
3. MECHANICAL SUPPLY GRILLE - SEE MECHANICAL
4. ROOF OVERHANG
5. GYPSUM BOARD CEILING - SEE DETAIL 14/A7.05
6. EXHAUST FAN - SEE MECHANICAL
7. RETURN GRILLE - SEE MECHANICAL
8. ILLUMINATED EXIT SIGN - SEE ELECTRICAL
9. SEISMIC CONTROL JOINT
10. 1'X4' SURFACE MOUNTED LIGHT FIXTURE - SEE ELECTRICAL
11. NO WORK IN THIS ROOM
12. CEMENT PLASTER SOFFIT - SEE DETAIL 6/A3.02.
13. 3" CONTINUOUS VENT SCREED
14. CONTROL JOINT
15. VERTICAL BLINDS
16. SHEET METAL RAIN GUTTER
17. DOWNSPOUT
18. ATTIC ACCESS DOOR - SEE DETAIL 2/A7.02.
19. SOLATUBE - SKYLIGHT DIFFUSER - SEE DETAIL 11/A7.02.
20. WALL MOUNTED LIGHT FIXTURE - SEE ELECTRICAL

GENERAL NOTES

1. ALL GYPSUM BOARD SOFFITS AND CEILINGS SHALL BE 5/8" THICK, UNLESS NOTED OTHERWISE.
2. SEE INTERIOR ELEVATIONS / SECTIONS FOR ADDITIONAL INFORMATION AT SPECIAL CEILING AREAS
3. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING PROPER WATER TIGHT FLASHING AROUND ALL ROOF PENETRATIONS, PER SMACNA STANDARDS

LEGEND

- SUSPENDED ACOUSTICAL TILE CEILING TO REMAIN
- CEMENT PLASTER SOFFIT
- 2x4 RECESSED LIGHT FIXTURE (SEE ELECTRICAL DRAWINGS)
- WALL MOUNTED LIGHT FIXTURE
- 1x4 SURFACE MOUNTED LIGHT FIXTURE (SEE ELECTRICAL DRAWINGS)
- EXIT SIGN
- MECHANICAL SUPPLY GRILLE (SEE MECHANICAL DRAWINGS)
- MECHANICAL RETURN GRILLE (SEE MECHANICAL DRAWINGS)
- EXHAUST FAN (SEE MECHANICAL DRAWINGS)
- GYPSUM BOARD CEILING
- SOLATUBE - SKYLIGHT DIFFUSER
- CEILING FIRE SPRINKLER
- WALL FIRE SPRINKLER

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-123900 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/05/2024

Owner:

BAKERSFIELD CITY SCHOOL DISTRICT
1300 BAKER ST.
BAKERSFIELD CA 93305

Project Name:

TRANSITIONAL KINDERGARTEN

Project Address:

MLK ELEMENTARY SCHOOL

1100 Citadel
Bakersfield, CA 93307

integrated designs
by SOMAM, Inc.

ARCHITECTURE
ENGINEERING
INTERIOR DESIGN

6011 N. FRESNO STREET, SUITE 130
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REFLECTED CEILING PLAN

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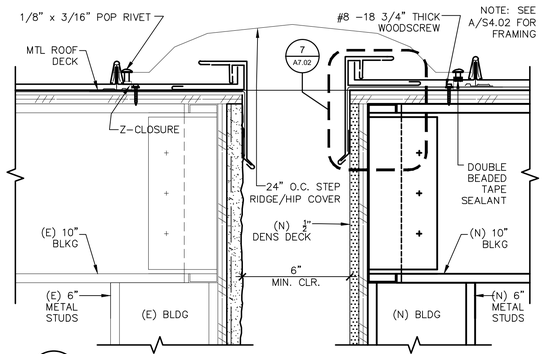
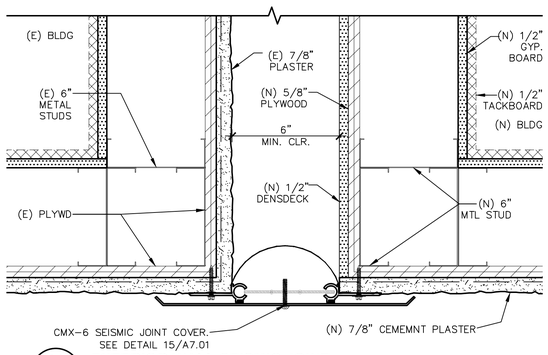
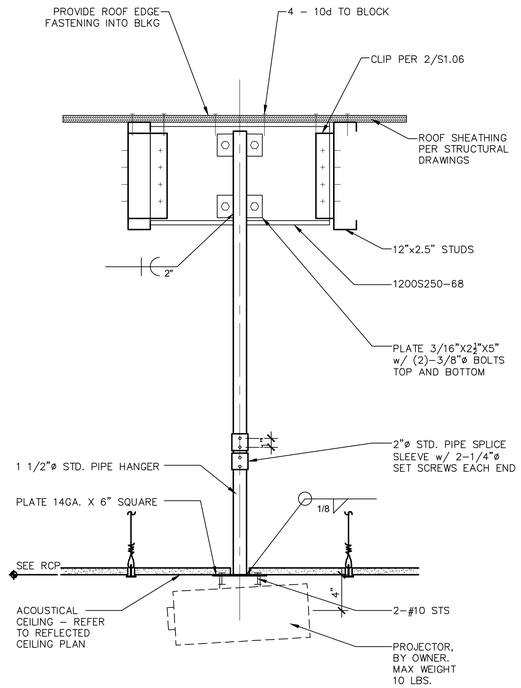


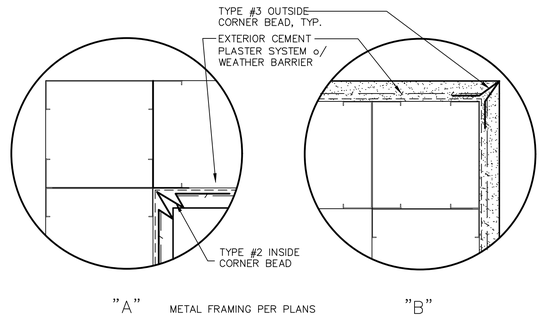
13 A7.01 EXPANSION JOINT COVER — ADB130-01 — SCALE: 3" = 1'-0"



14 A7.01 EXTERIOR WALL SEISMIC JOINT — ADB141-01 — SCALE: 3" = 1'-0"

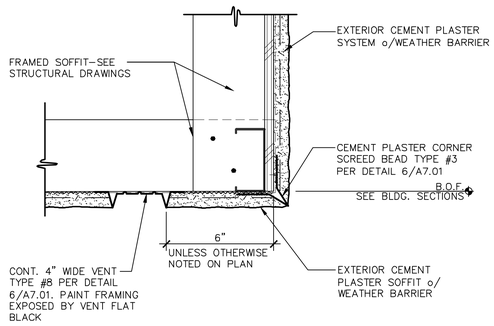


10 A7.01 PROJECTOR MOUNTING — ADM200-02 — SCALE: 1 1/2" = 1'-0"

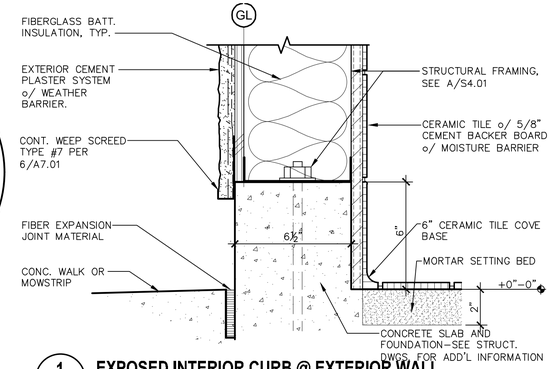


NOTE: SEE STRUCTURAL DRAWINGS FOR TYPICAL FRAMING DETAILS

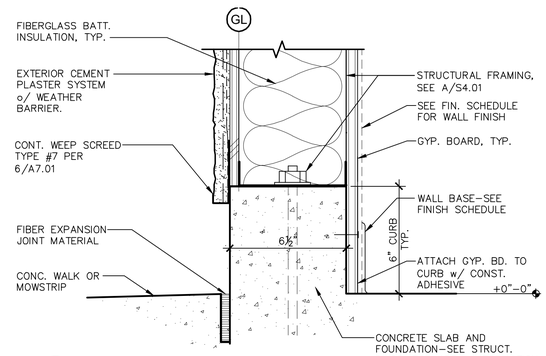
5 A7.01 TYP. INSIDE/OUTSIDE PLASTER CORNER — ADW132-21 — SCALE: 3" = 1'-0"



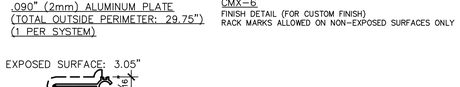
6 A7.01 SOFFIT VENTED SCREED — ADW131-10 — SCALE: 3" = 1'-0"

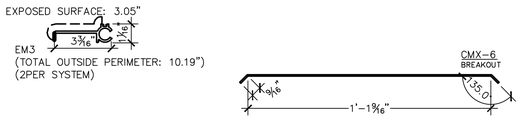


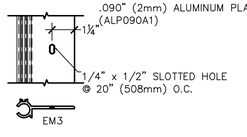
1 A7.01 EXPOSED INTERIOR CURB @ EXTERIOR WALL — ADW131-20 — SIM. CONDITION @ KITCHEN — SCALE: 3" = 1'-0"

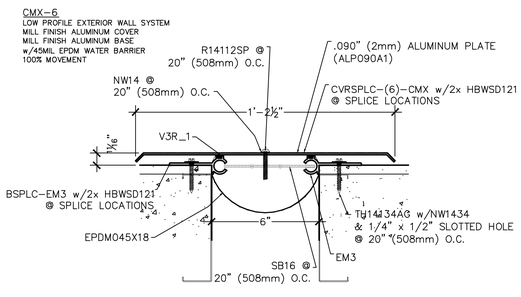


2 A7.01 TYPICAL EXTERIOR CURB — ADW131-16 — SCALE: 3" = 1'-0"



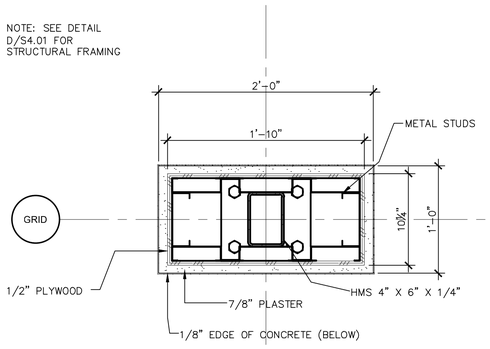




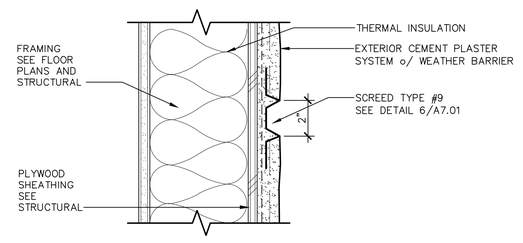


NOTE:
FOR WATER BARRIER - APPLY A MASTIC SETTING BED, BY OTHERS

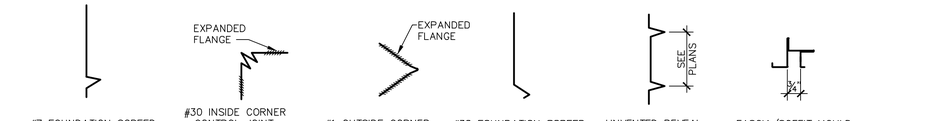
16 A7.01 CMX-6 EXPANSION JOINT COVER — ADO100-01 — SCALE: 3" = 1'-0"



7 A7.01 COLUMN DETAIL — ADW132-05 — SCALE: 1 1/2" = 1'-0"



3 A7.01 REVEAL SCREED — ADW131-07 — SCALE: 3" = 1'-0"



NOTE:
ALL MATERIAL TO BE 26 GA. MIN. GALVANIZED STEEL OR ZINC COATED UNLESS NOTED OTHERWISE, TYPICAL

8 A7.01 EXTERIOR PLASTER SCREED TYPES — ADO101-01 — SCALE: 3" = 1'-0"

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No. C 28966
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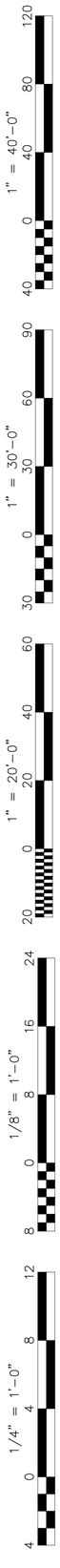
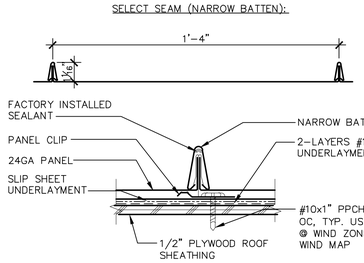
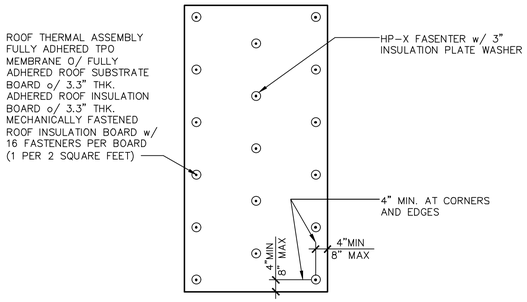


SELECT SEAM (NARROW BATTEN):

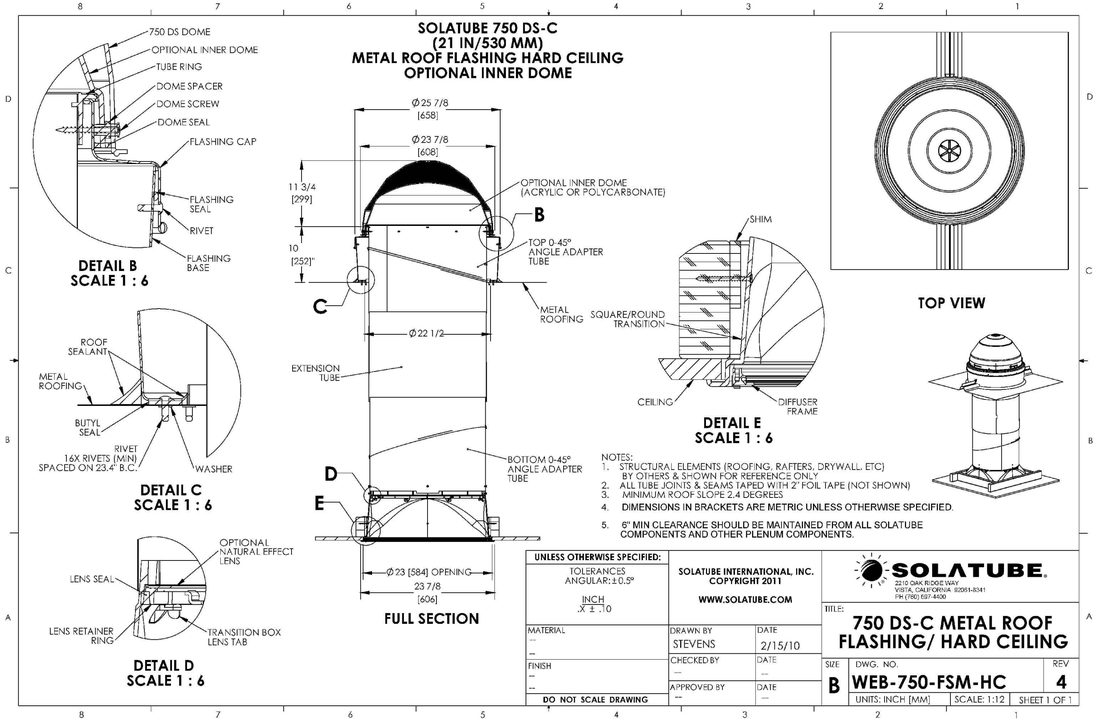


APPROVED UNDER UES #ER-0309

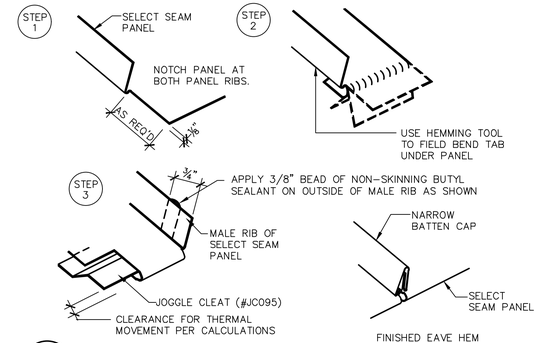
9 A7.02 STANDING SEAM METAL ROOF PANEL — ADR-SS1 — SCALE: 3" = 1'-0"



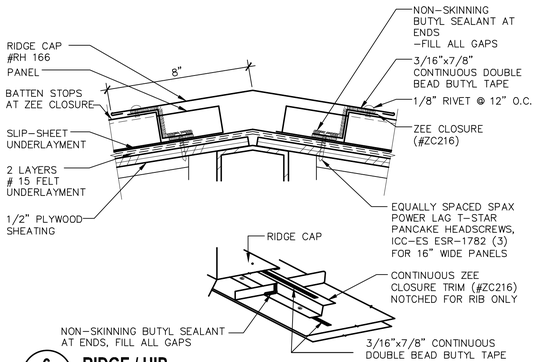
10 A7.02 TYP. 4'x8' ROOF INSUL. BD. ATTACHMENT — A702_25 — SCALE: 1/2" = 1'-0"



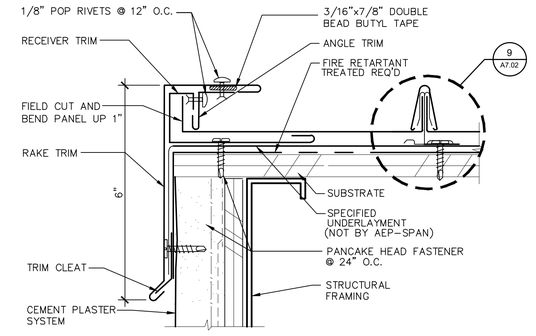
11 A7.02



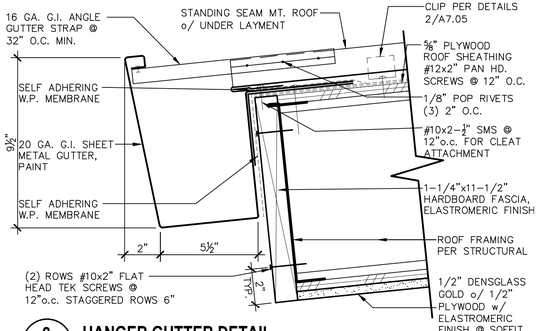
5 A7.02 TYPICAL EAVE HEM — ADR-SS4 — NO SCALE



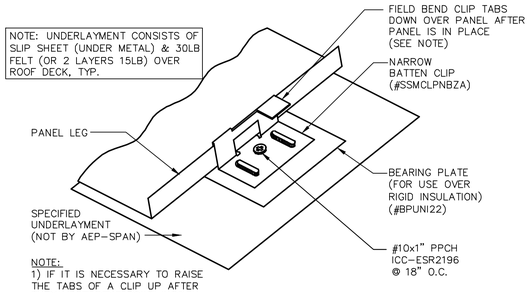
6 A7.02 RIDGE / HIP — ADR-SS2 — SCALE: 3" = 1'-0"



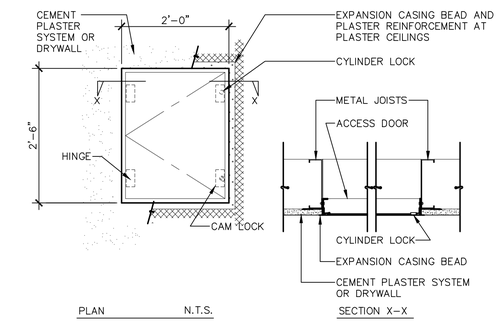
7 A7.02 STANDING SEAM METAL ROOF RAKE DETAIL — ADR-SS12 — SCALE: 6" = 1'-0"



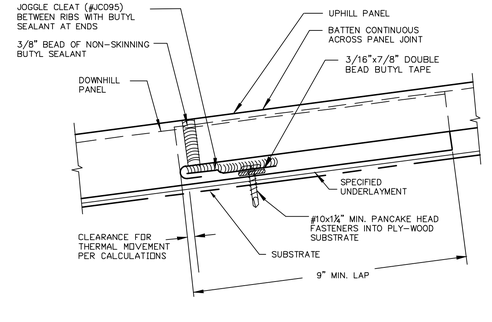
8 A7.02 HANGER GUTTER DETAIL — ADR-SS14 — SCALE: 3" = 1'-0"



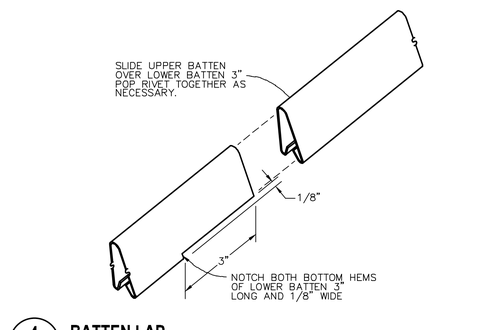
1 A7.02 PANEL CLIP — ADR-SS6 — SCALE: 1' = 1'-0"



2 A7.02 FLUSH METAL ACCESS DOOR AT CEILING — ADC030-01 — SCALE: 3/4" = 1'-0"



3 A7.02 STANDING SEAM PANEL LAP — ADR-SS8 — NO SCALE



4 A7.02 BATTEN LAP — ADR-SS9 — NO SCALE

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LICENSED ARCHITECT CURTIS E. FLYNN No. C 28966 REN. 5-31-25 STATE OF CALIFORNIA

Sheet Title:

EXTERIOR DETAILS

Job No.: **5593**

Sheet No.: **A7.02**

Release: DSA SUBMITTAL — Issue Date: 7/24/24

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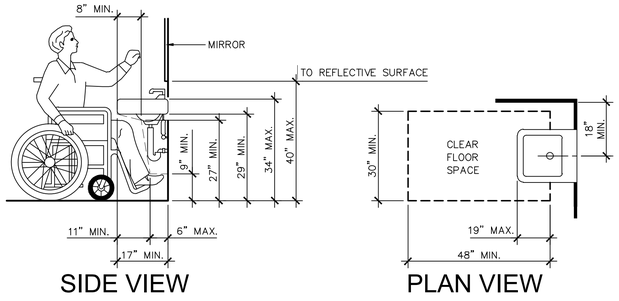
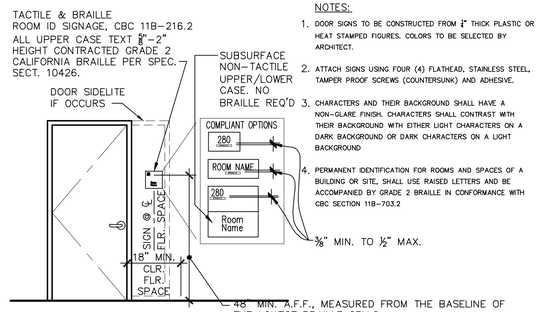


NOTES:

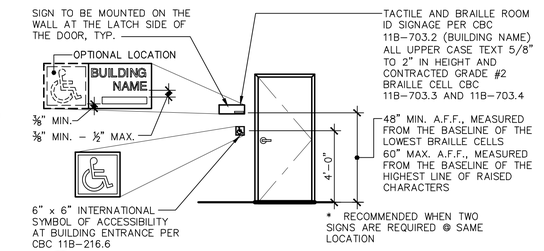
1. NO SHARP OR ABRASIVE SURFACES SHALL BE PRESENT UNDER LAVATORIES.
2. ALL PIPES UNDERNEATH LAVATORIES SHALL BE INSULATED TO PROTECT AGAINST CONTACT FROM THE PERSONS USING THE FIXTURE. (REFER TO SPECIFICATIONS)
3. THE LOWER REFLECTIVE EDGE OF MIRRORS SHALL NOT EXCEED 40 INCHES ABOVE THE FINISHED FLOOR.
4. ACCEPTABLE FAUCETS SHALL INCLUDE PUSH ELECTRONIC AND LEVER MECHANISM. FAUCETS WITH SELF-CLOSING VALVES SHALL REMAIN OPEN FOR NO LESS THAN 10 SECONDS. SEE PLUMBING DRAWINGS.
5. ACCESIBLE FAUCET CONTROLS SHALL BE PUSH TYPE WITH 5 LBS MAX. OPERATING FORCE.

13 / A8.01 KNEE AND TOE CLEARANCE @ ACCESSIBLE LAVATORY
ADA200-10 SCALE: 1/2" = 1'-0"



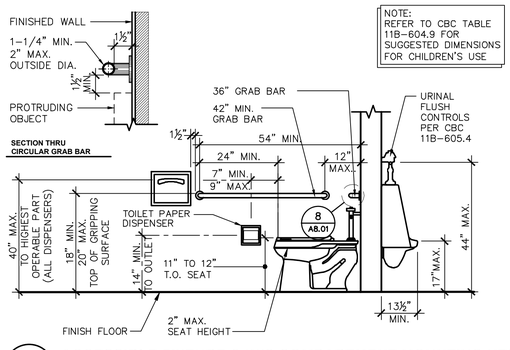
NOTES:
1. DOOR SIGNS TO BE CONSTRUCTED FROM ¼" THICK PLASTIC OR HEAT STAMPED FIGURES. COLORS TO BE SELECTED BY ARCHITECT.
2. ATTACH SIGNS USING FOUR (4) FLATHEAD, STAINLESS STEEL, TAMPER PROOF SCREWS (COUNTERSUNK) AND ADHESIVE.
3. CHARACTERS AND THEIR BACKGROUND SHALL HAVE A NON-GLARE FINISH. CHARACTERS SHALL CONTRAST WITH THEIR BACKGROUND WITH EITHER LIGHT CHARACTERS ON A DARK BACKGROUND OR DARK CHARACTERS ON A LIGHT BACKGROUND
4. PERMANENT IDENTIFICATION FOR ROOMS AND SPACES OF A BUILDING OR SITE, SHALL USE RAISED LETTERS AND BE ACCOMPANIED BY GRADE 2 BRAILLE IN CONFORMANCE WITH CBC SECTION 11B-703.2

5 / A8.01 ROOM ID SIGNAGE
ADX100-01 SCALE: NO SCALE

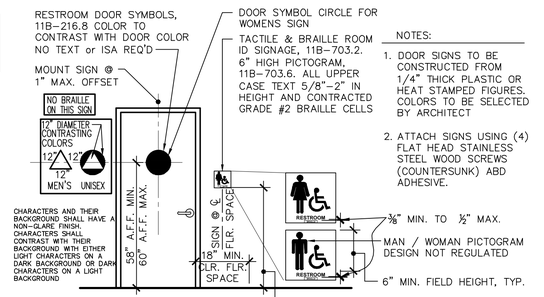


NOTES:
1. DOOR SIGNS TO BE CONSTRUCTED FROM 1/4" THICK PLASTIC OR HEAT STAMPED FIGURES. COLORS TO BE SELECTED BY ARCHITECT.
2. ATTACH SIGNS USING FOUR (4) FLATHEAD, STAINLESS STEEL, TAMPER PROOF SCREWS (COUNTERSUNK) AND ADHESIVE.
3. CHARACTERS AND THEIR BACKGROUND SHALL HAVE A NON-GLARE FINISH AND CONTRAST WITH EITHER LIGHT CHARACTERS ON A DARK BACKGROUND OR DARK CHARACTERS ON A LIGHT BACKGROUND, CBC 11B-703.5.1.
4. ISA SYMBOL CAN ALSO BE PLACED ON DOOR. THE LOCATION IS NOT REGULATED.

1 / A8.01 BUILDING ENTRANCE/I.S.A. SIGNAGE
ADA100-01 SCALE: 1/4" = 1'-0"

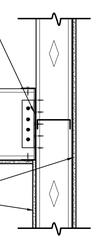


6 / A8.01 ACCESSIBLE FIXTURE & W/C COMPARTMENT MOUNTING HTS
ADA200-12 SCALE: 1/2" = 1'-0"



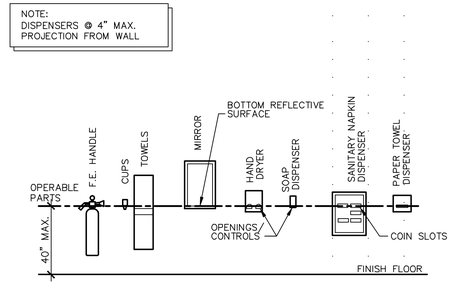
NOTES:
1. DOOR SIGNS TO BE CONSTRUCTED FROM 1/4" THICK PLASTIC OR HEAT STAMPED FIGURES. COLORS TO BE SELECTED BY ARCHITECT
2. ATTACH SIGNS USING (4) FLAT HEAD STAINLESS STEEL WOOD SCREWS (COUNTERSUNK) ABD ADHESIVE.

2 / A8.01 ACCESSIBLE RESTROOM SIGNAGE
ADA000-01 SCALE: 1' = 1'-0"

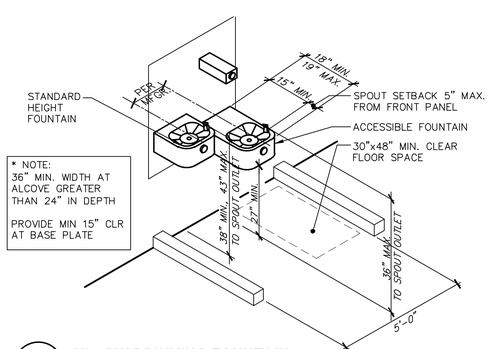


15 / A8.01 TYP. FRAMING DETAIL
ADR134-01 SCALE: 1" = 1'-0"

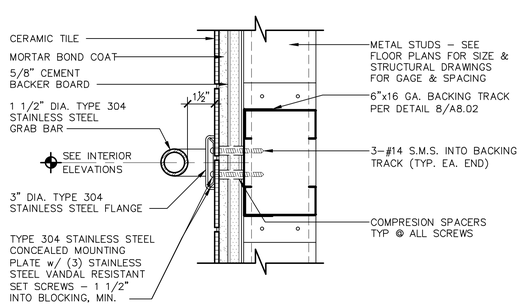
NOTE:
DISPENSERS @ 4" MAX. PROJECTION FROM WALL



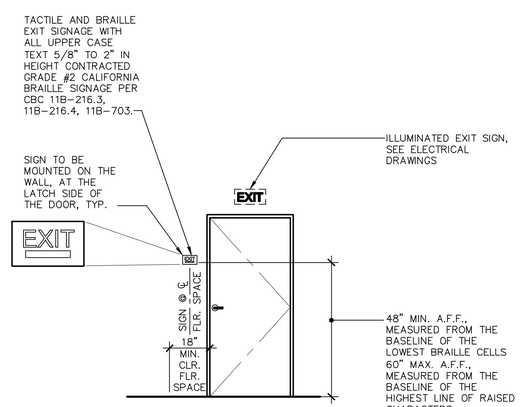
7 / A8.01 ACCESSIBLE MOUNTING HTS FOR TOILET RM ACCESSORIES
ADA200-13 SCALE: 1/2" = 1'-0"



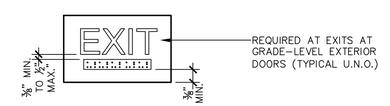
12 / A8.01 HI-LOW DRINKING FOUNTAIN
ADA000-12 SCALE: 1' = 1'-0"



8 / A8.01 GRAB BAR ANCHORAGE
ADM236-01 SCALE: 3" = 1'-0"



4 / A8.01 TYPICAL EXIT SIGNAGE
ADX200-01 SCALE: 3/8" = 1'-0"



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TRANSITIONAL KINDERGARTEN

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Sheet Title:
INTERIOR DETAILS

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Sheet No.: **A8.01**

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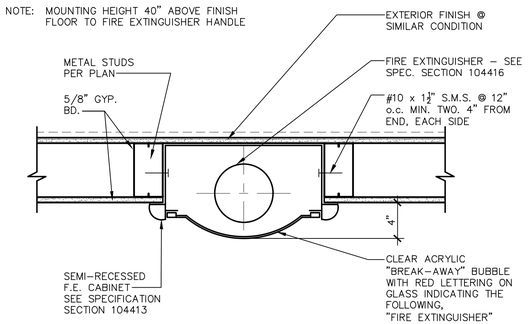
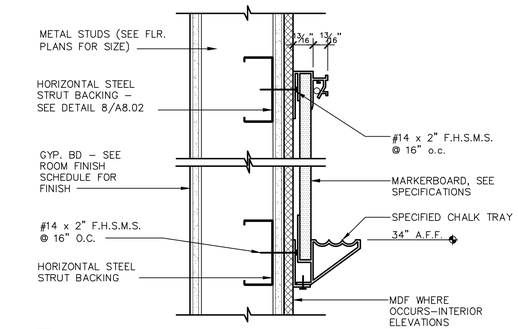
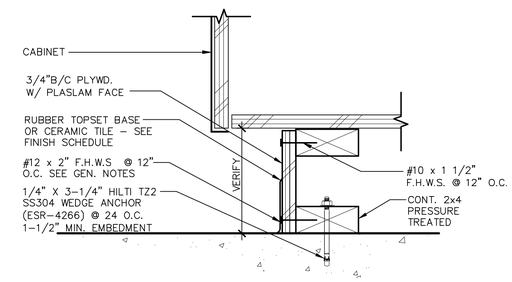


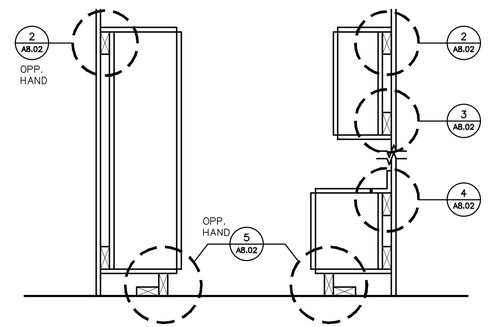
13 / A8.02 — SEMI-RECESSED F.E. CABINET @ NON-RATED WALLS
ADW234-06 SCALE: 1 1/2" = 1'-0"



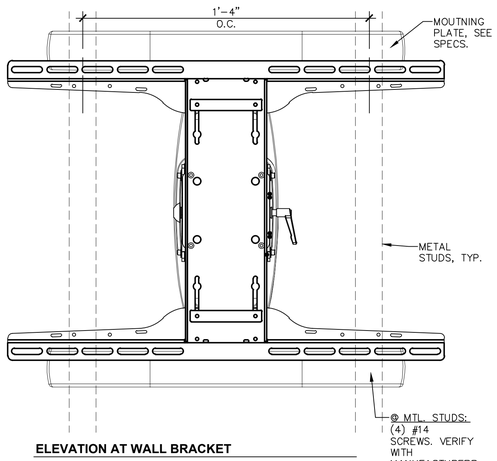
9 / A8.02 — MARKERBOARD ANCHORAGE
ADI234-01 SCALE: 3" = 1'-0"



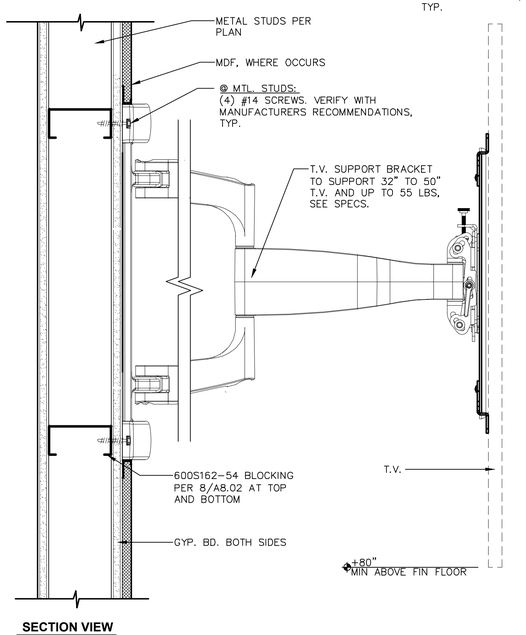
5 / A8.02 — BASE ANCHORAGE
ADI244-06 SCALE: 3" = 1'-0"



1 / A8.02 — CABINET SECTIONS
ADI244-02 SCALE: 3" = 1'-0"

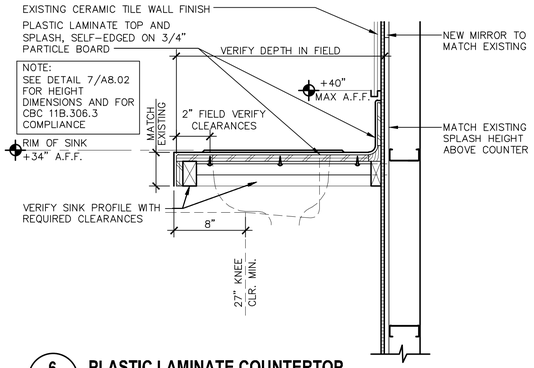


ELEVATION AT WALL BRACKET

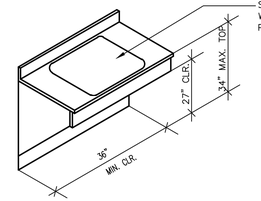


SECTION VIEW

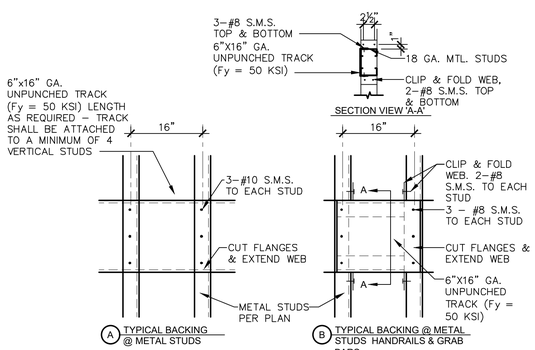
12 / A8.02 — FLAT PANEL T.V. SUPPORT
ADM234-01 SCALE: 3" = 1'-0"



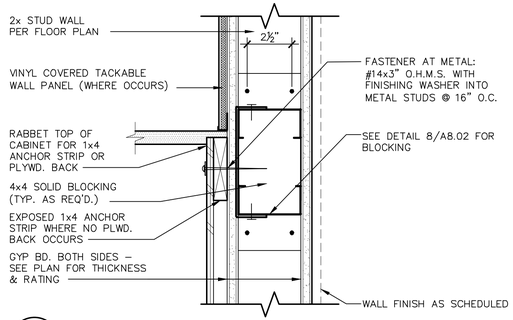
6 / A8.02 — PLASTIC LAMINATE COUNTERTOP
ADI230-05 SCALE: 1 1/2" = 1'-0"



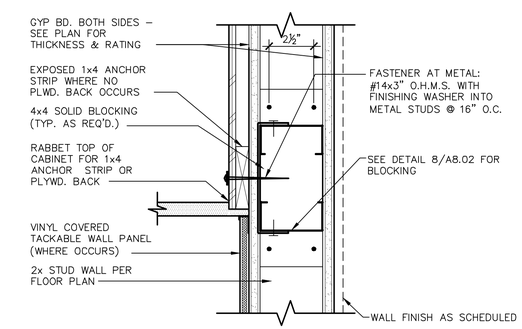
7 / A8.02 — ACCESSIBLE STATION OR SINK COUNTERS
ADI200-20 SCALE: 1' = 1'-0"



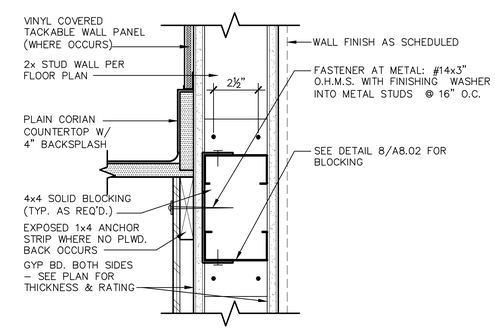
8 / A8.02 — SOLID BLOCKING FRAMING ELEV. @ METAL STUDS
ADB230-02 SCALE: 3/4" = 1'-0"



2 / A8.02 — WALL CABINET TOP ANCHOR DETAIL
ADI244-03 SCALE: 3" = 1'-0"



3 / A8.02 — WALL CABINET BOTTOM ANCHOR DETAIL
ADI244-04 SCALE: 3" = 1'-0"



4 / A8.02 — BASE CABINET COUNTER TOP DETAIL
ADI244-05 SCALE: 3" = 1'-0"

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INTERIOR DETAILS

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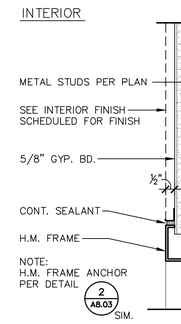
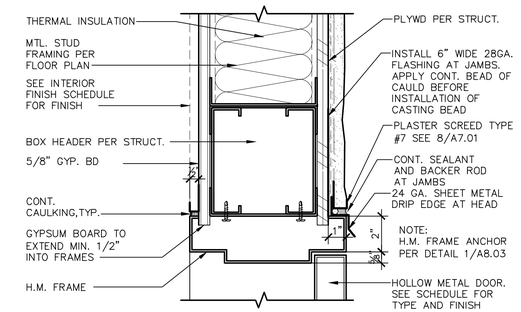
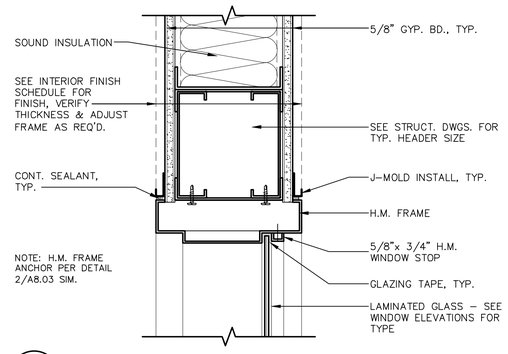


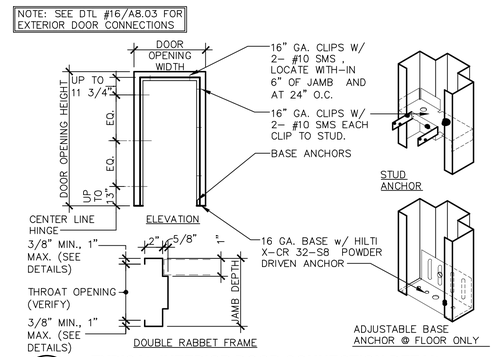
13 / A8.03 — HOLLOW METAL WINDOW HEAD AT EXTERIOR WALL
ADG131–01 SCALE: 3" = 1'–0"



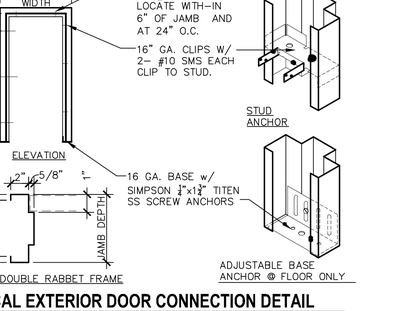
9 / A8.03 — EXTERIOR HOLLOW METAL DOOR HEAD
ADD131–01 SCALE: 3" = 1'–0"



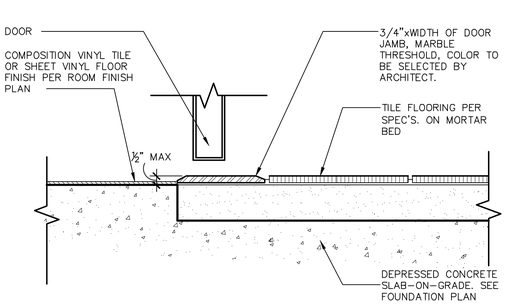
5 / A8.03 — INTERIOR HOLLOW METAL WINDOW HEAD
ADG230–01 SCALE: 3" = 1'–0"



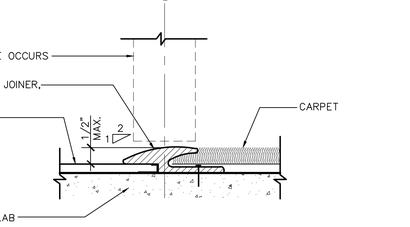
1 / A8.03 — TYPICAL INTERIOR DOOR CONNECTION DETAIL
ADD131–05 SCALE: 1/4" = 1'–0"



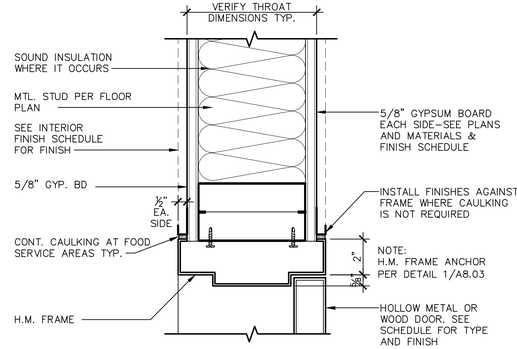
14 / A8.03 — WINDOW H.M. FRAME MULLION
ADG141–02 SCALE: 3" = 1'–0"



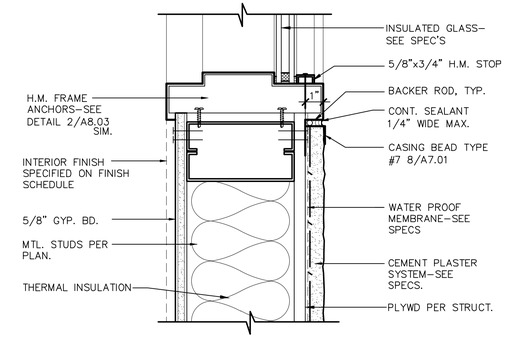
10 / A8.03 — EXTERIOR HOLLOW METAL DOOR JAMB
ADD131–02 SCALE: 3" = 1'–0"



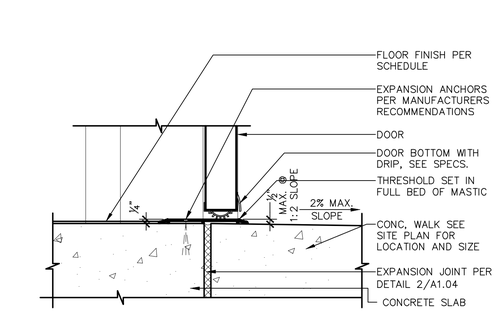
6 / A8.03 — INTERIOR HOLLOW METAL WINDOW MULLION
ADG230–04 SCALE: 3" = 1'–0"



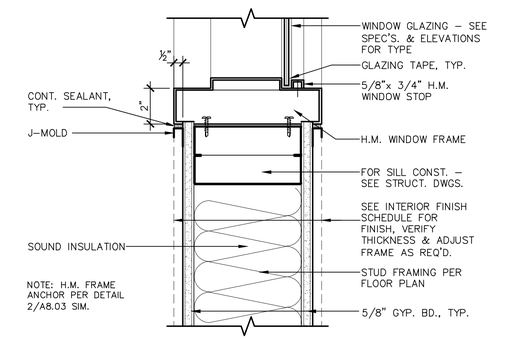
2 / A8.03 — TYPICAL INTERIOR H.M. FRAME CONNECTION
ADG130–01 SCALE: N.T.S.



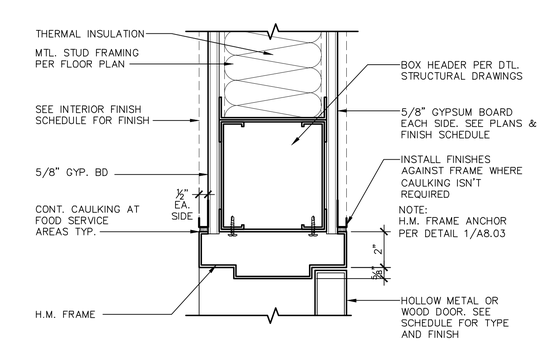
15 / A8.03 — EXTERIOR HOLLOW METAL WINDOW JAMB
ADG131–02 SCALE: 3" = 1'–0"



11 / A8.03 — EXTERIOR DOOR THRESHOLD
ADD130–01 SCALE: 3" = 1'–0"



7 / A8.03 — INTERIOR WINDOW SILL (JAMB SIM.)
ADG230–03 SCALE: 3" = 1'–0"



3 / A8.03 — INTERIOR HOLLOW METAL DOOR HEAD
ADD230–03 SCALE: 3" = 1'–0"

16 / A8.03 — TYPICAL EXTERIOR DOOR CONNECTION DETAIL
ADD131–05 SCALE: NTS

12 / A8.03 — FLOORING TRANSITION
ADI200–04 SCALE: 3" = 1'–0"

8 / A8.03 — CARPET TO TILE TRANSITION
ADI200–11 SCALE: 1' = 1'–0"

4 / A8.03 — INTERIOR HOLLOW METAL DOOR JAMB
ADD230–04 SCALE: 3" = 1'–0"

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Sheet Title:
DOOR & WINDOW DETAILS

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Sheet No.: **A8.03**

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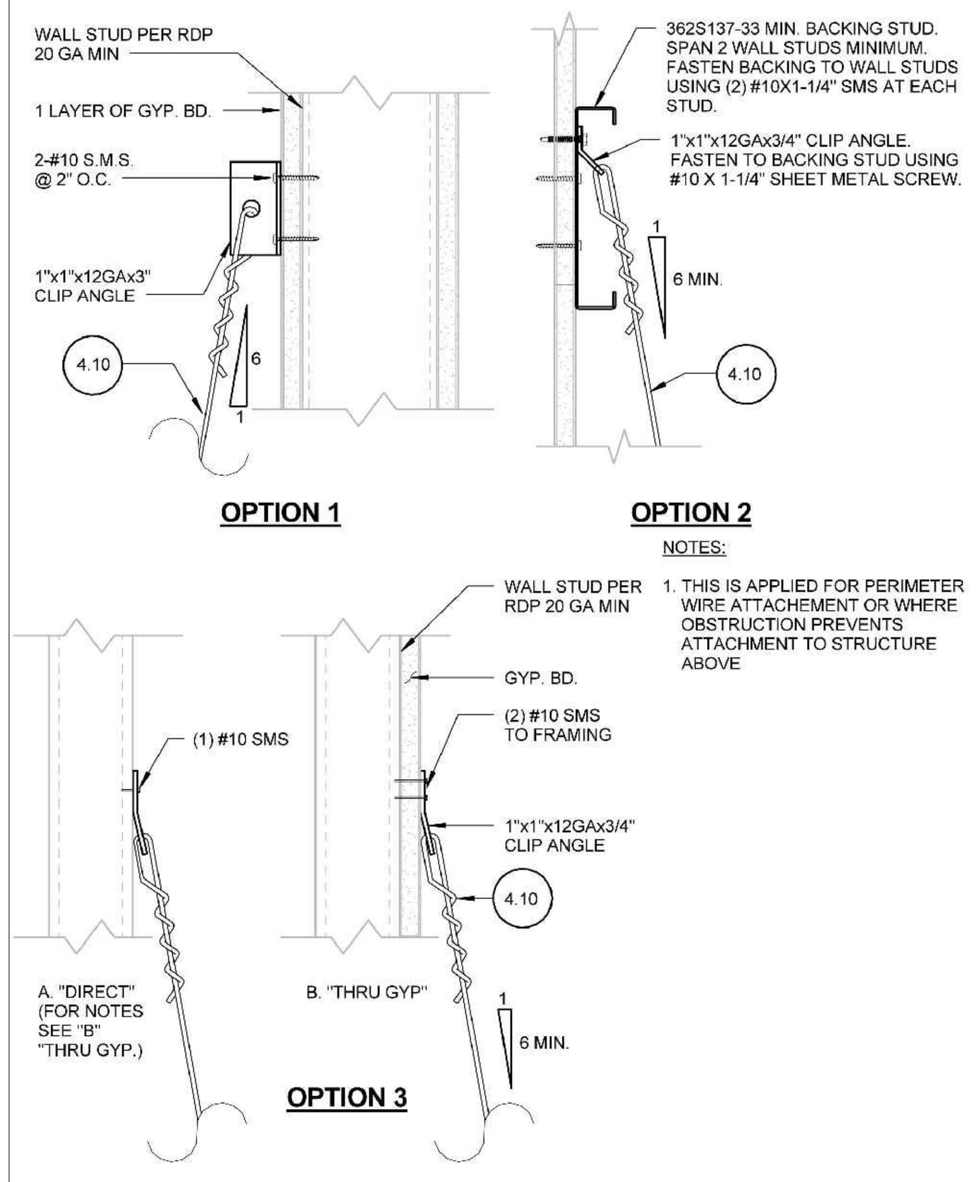


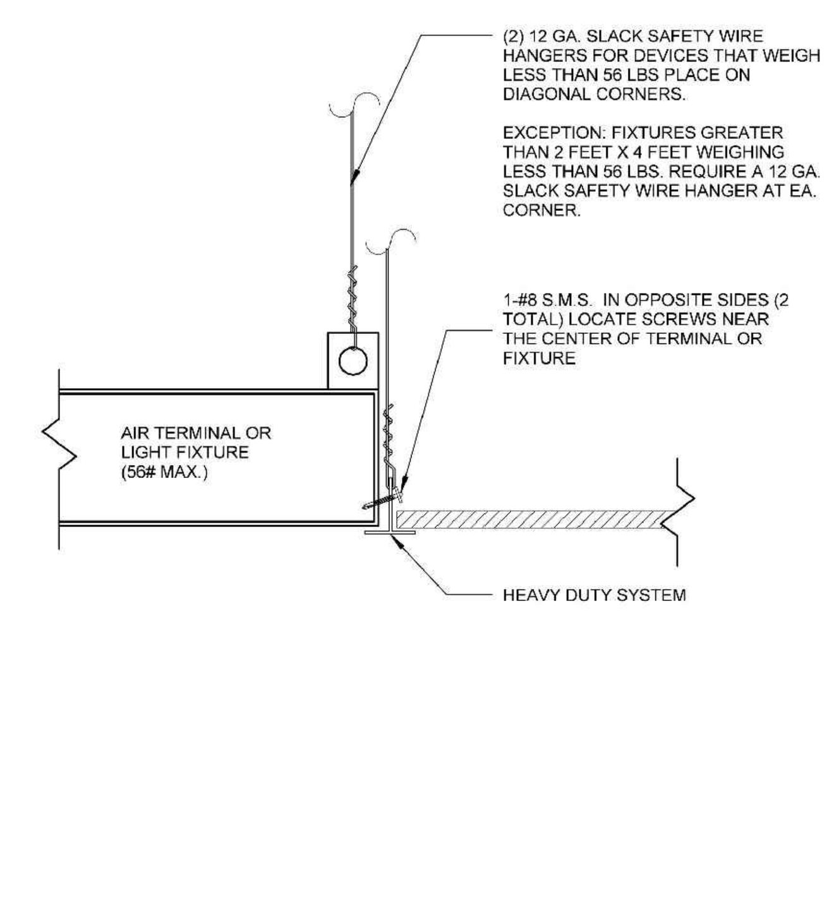
Basis Document: DSA IR 25-2.13
Sheet Title: HANGER WIRE CONNECTION TO METAL STUD WALL — rev. 09-21-15 — Sheet No: 4.24

COMPRESSION STRUT TABLE

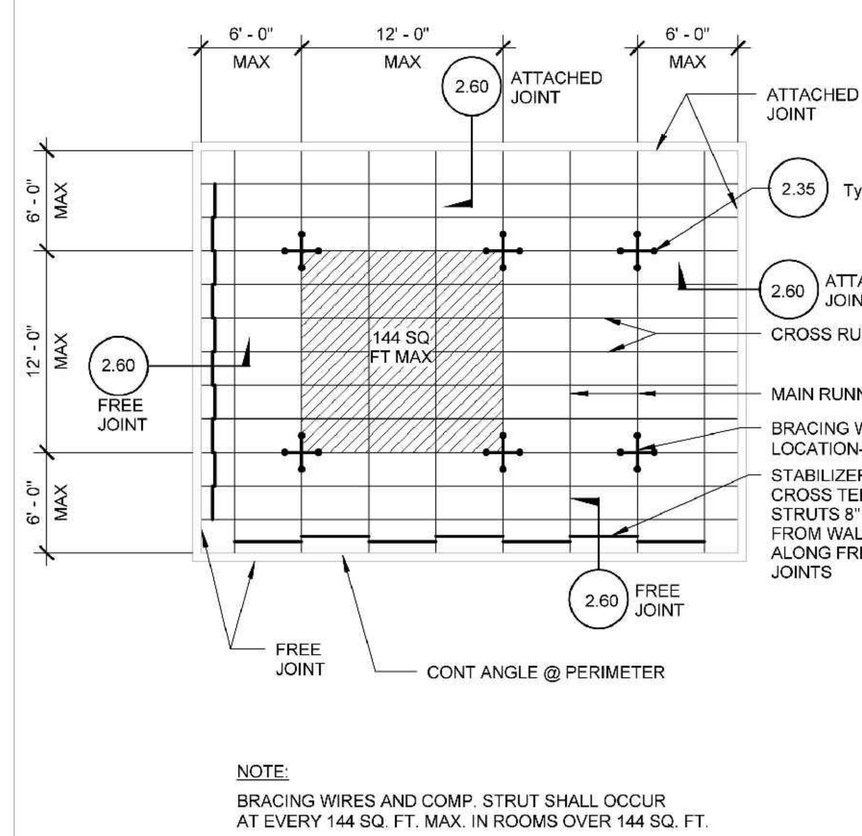
EMT COMPRESSION STRUT	MAXIMUM LENGTH
1/2" DIAMETER EMT (0.042" WALL THICKNESS)	3'-11"
3/4" DIAMETER EMT (0.049" WALL THICKNESS)	6'-4"
1" DIAMETER EMT (0.057" WALL THICKNESS)	9'-9"
1 1/4" DIAMETER EMT (0.065" WALL THICKNESS)	12'-9"
1 1/2" DIAMETER EMT (0.065" WALL THICKNESS)	14'-9"
2" DIAMETER EMT (0.065" WALL THICKNESS)	18'-10"

CHANNEL COMPRESSION STRUT	MAXIMUM LENGTH
250S125-33	5'-0"
250S137-33	6'-10"
362S137-33	8'-0"
250137-43	8'10"
400S137-43	10'-10"

Basis Document: DSA IR 25-2.13
Sheet Title: COMPRESSION STRUT TABLE — rev. 09-21-15, rev. 03-10-17 — Sheet No: 3.21

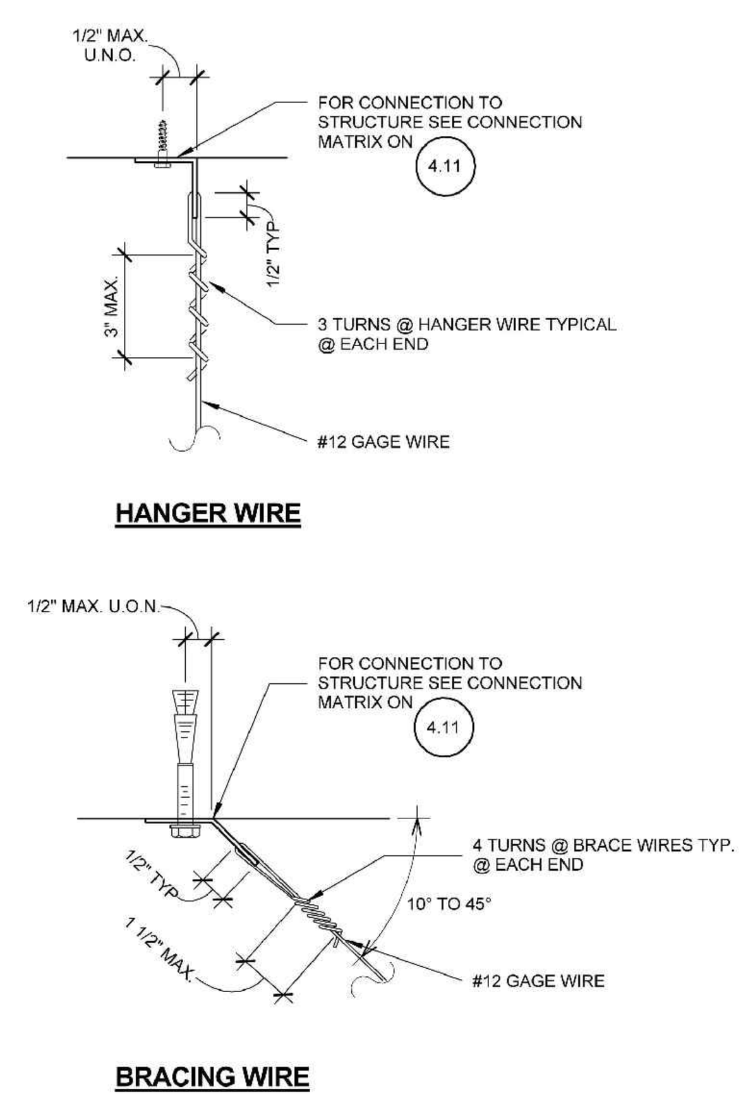


Basis Document: DSA IR 25-2.13
Sheet Title: SUSPENDED ACOUSTICAL CEILING - LIGHT FIXTURES/ AIR TERMINAL SUPPORT DETAIL — rev. 09-21-15, 03-15-16 — Sheet No: 2.80

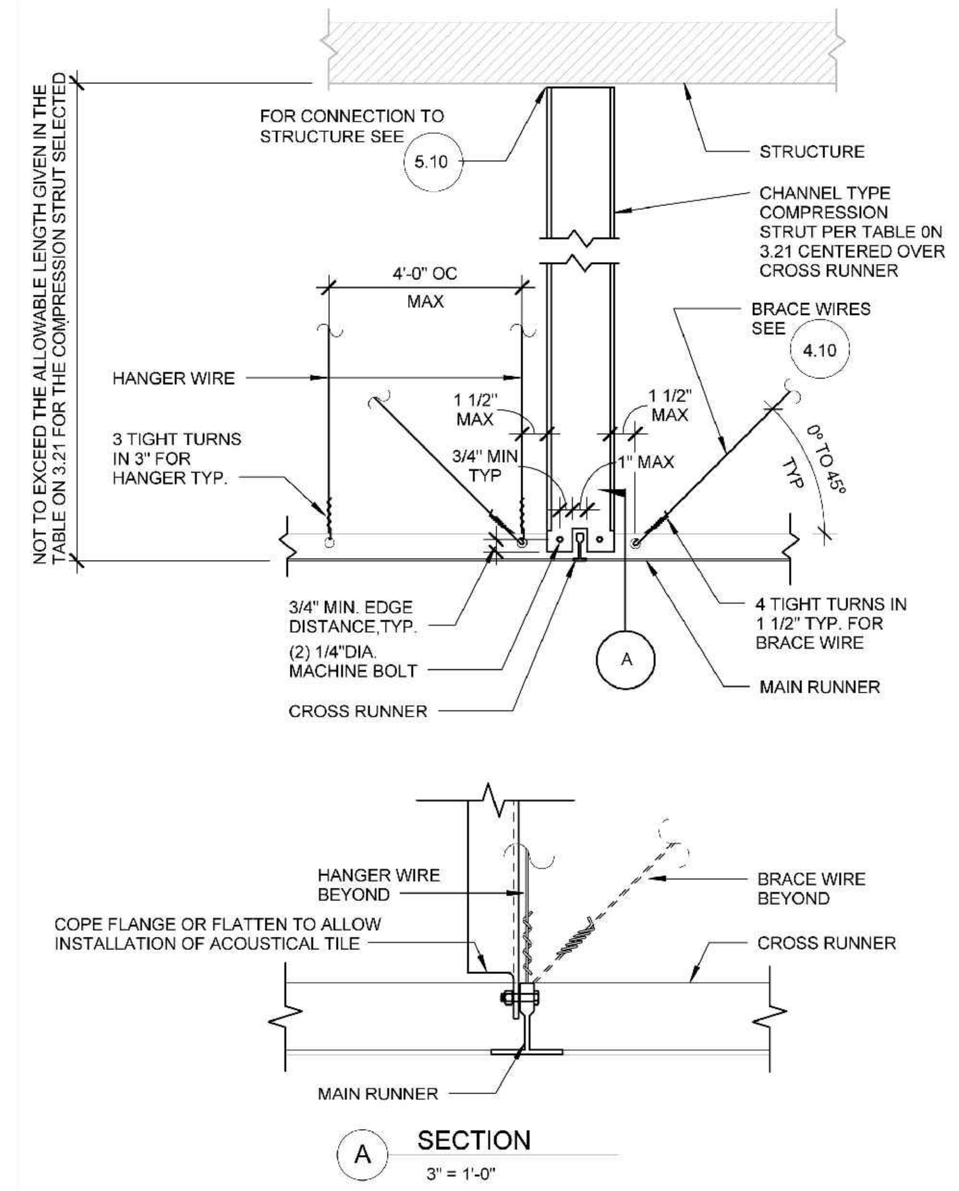


NOTE:
BRACING WIRES AND COMP. STRUT SHALL OCCUR AT EVERY 144 SQ. FT. MAX. IN ROOMS OVER 144 SQ. FT.

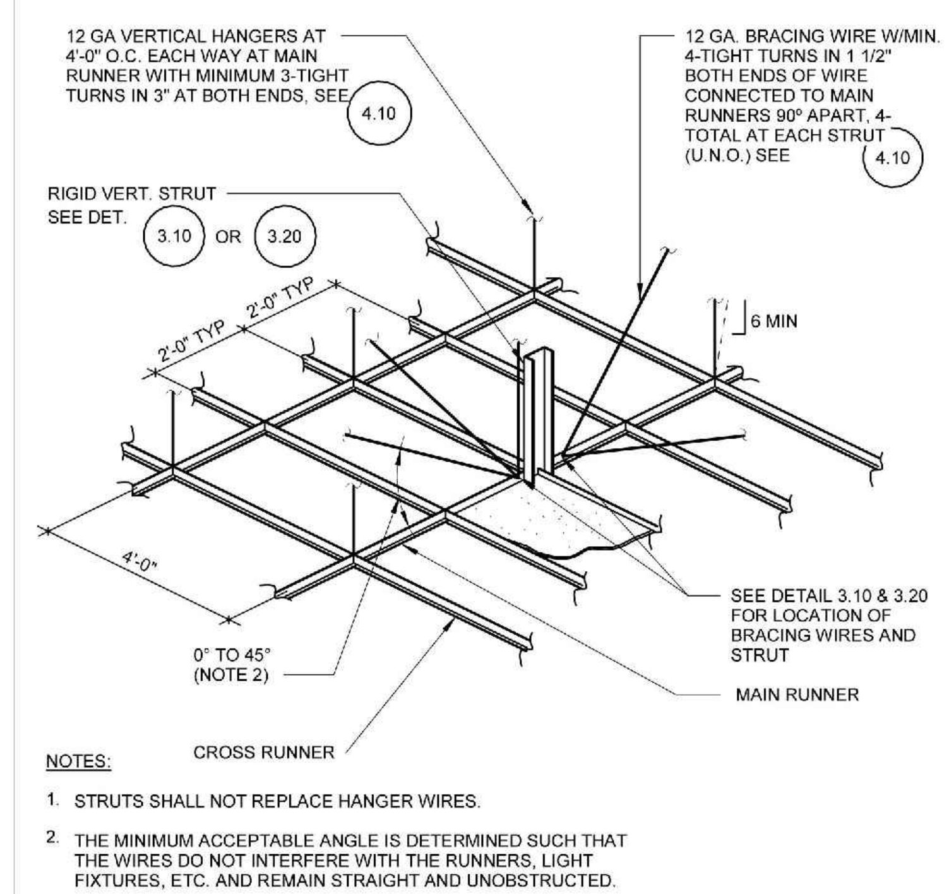
Basis Document: DSA IR 25-2.13
Sheet Title: TYPICAL CEILING PLAN FOR 12'-0" x 12'-0" Brace Assembly Spacing — rev. 09-21-15 — Sheet No: 2.12



Basis Document: DSA IR 25-2.13
Sheet Title: HANGER AND BRACING WIRE CONNECTION - TYPICAL WIRE TURNS — rev. 09-21-15 — Sheet No: 4.10



Basis Document: DSA IR 25-2.13
Sheet Title: SUSPENDED ACOUSTICAL CEILING - CHANNEL TYPE STRUT — rev. 09-21-15 — Sheet No: 3.10

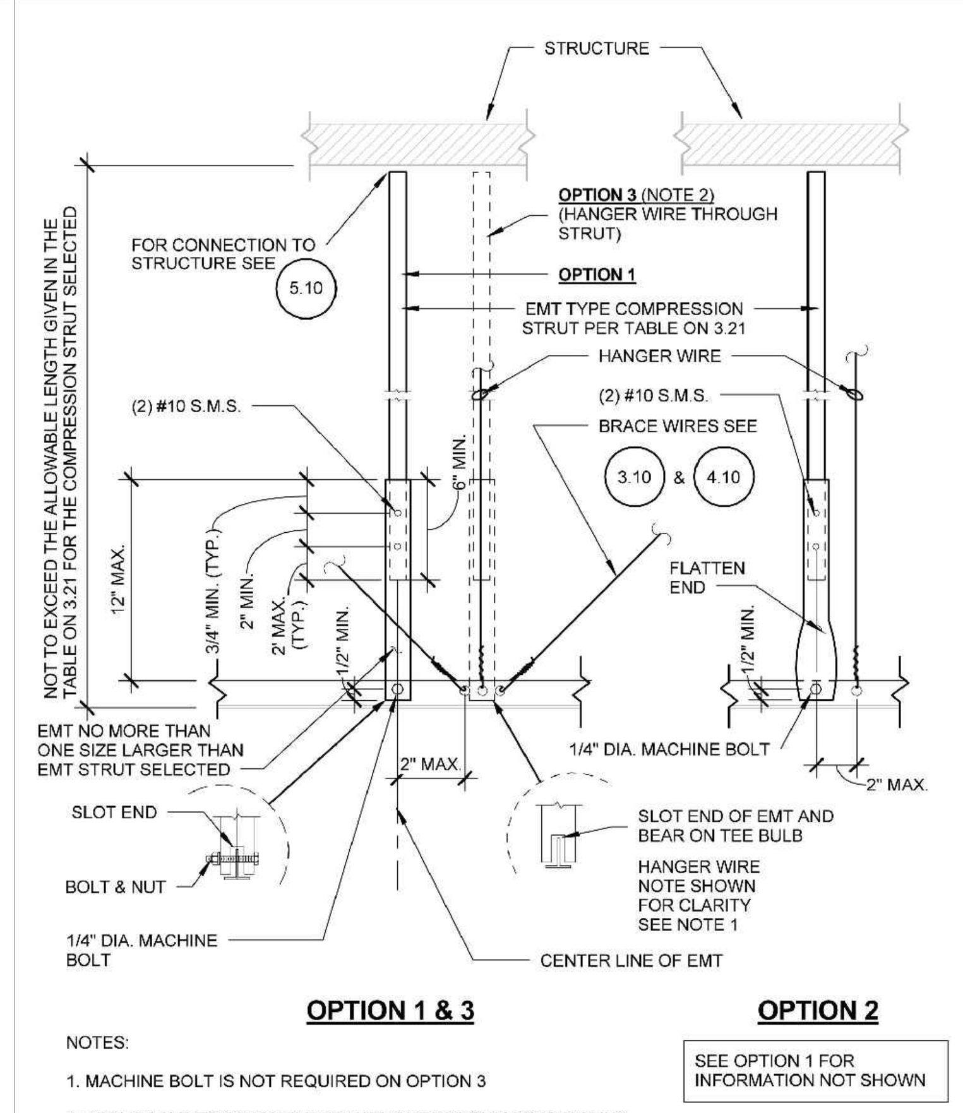


NOTES:
1. STRUTS SHALL NOT REPLACE HANGER WIRES.
2. THE MINIMUM ACCEPTABLE ANGLE IS DETERMINED SUCH THAT THE WIRES DO NOT INTERFERE WITH THE RUNNERS, LIGHT FIXTURES, ETC. AND REMAIN STRAIGHT AND UNOBSTRUCTED.

Basis Document: DSA IR 25-2.13
Sheet Title: SUSPENDED CEILING - SUSPENSION AND BRACING ASSEMBLY — rev. 09-21-15, 03-10-17 — Sheet No: 2.35

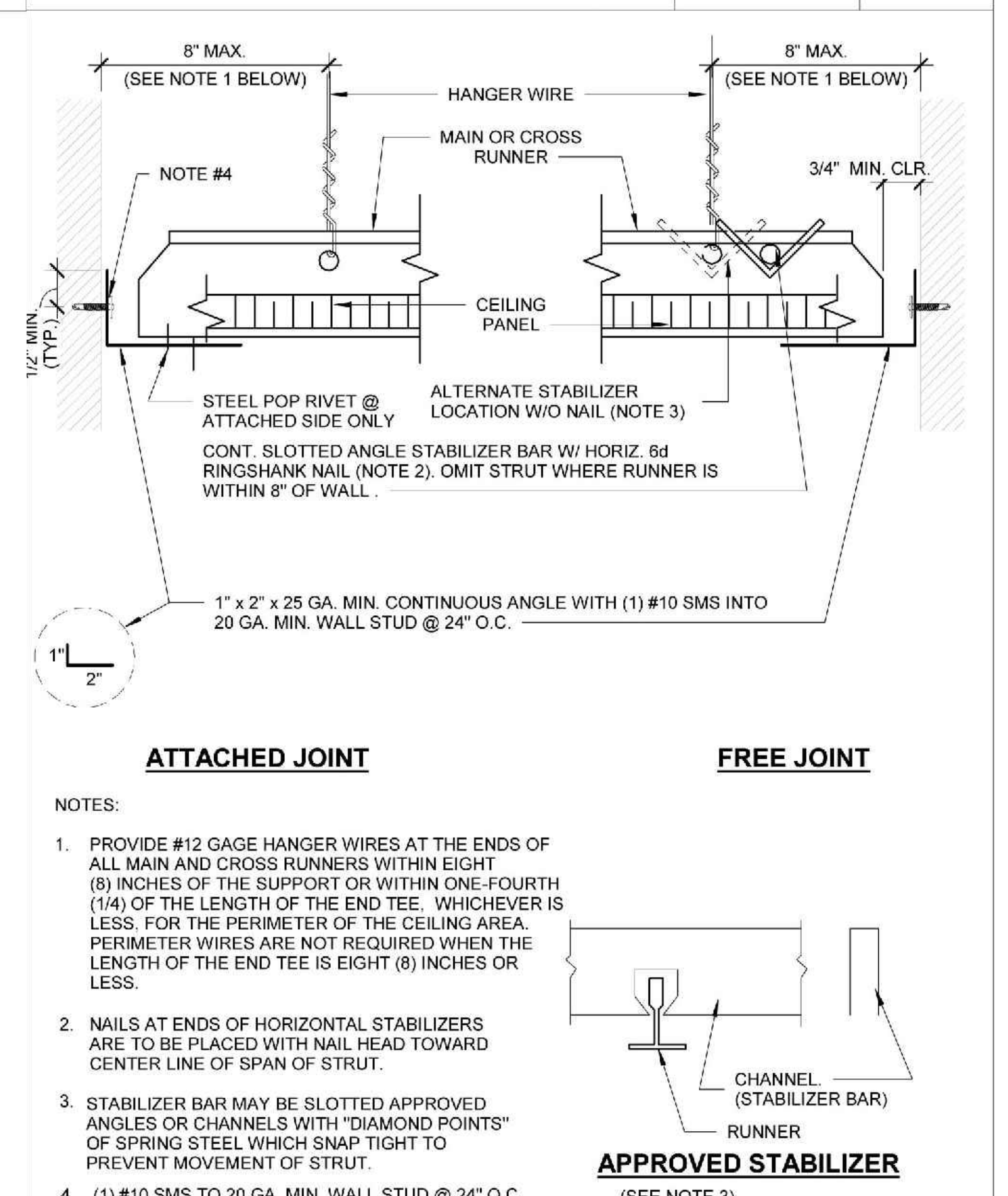
STRUCTURAL CONDITION OF FLOOR/ ROOF ABOVE SUSPENDED CEILING	APPLICABLE HANGER WIRE DETAIL	APPLICABLE BRACING WIRE DETAIL
METAL DECK	4.20	4.30
CONCRETE OVER METAL DECK	4.21	4.31
CONCRETE SLAB, BEAM, OR JOIST	4.22	4.32
STRUCTURAL STEEL	4.23	4.33
METAL STUD WALL	4.24	4.34
SAWN TIMBER	4.25, 4.29	4.35
WOOD I JOIST	4.26	4.36, 4.37
WOOD CHORD TRUSS	4.27, 4.29	4.38, 4.29
OPEN WEB STEEL JOIST	4.28, 4.29	4.39, 4.29

Basis Document: DSA IR 25-2.13
Sheet Title: HANGER AND BRACING WIRE CONNECTION MATRIX — rev. 09-21-15 — Sheet No: 4.11



NOTES:
1. MACHINE BOLT IS NOT REQUIRED ON OPTION 3
2. APPLICABLE TO SAWN TIMBER WITHOUT GYPSUM BOARD ONLY.

Basis Document: DSA IR 25-2.13
Sheet Title: SUSPENDED ACOUSTICAL CEILING - EMT TYPE STRUT — rev. 09-21-15, 03-10-17 — Sheet No: 3.20



NOTES:
1. PROVIDE #12 GAGE HANGER WIRES AT THE ENDS OF ALL MAIN AND CROSS RUNNERS WITHIN EIGHT (8) INCHES OF THE SUPPORT OR WITHIN ONE-FOURTH (1/4) OF THE LENGTH OF THE END TEE. WHICHEVER IS LESS, FOR THE PERIMETER OF THE CEILING AREA. PERIMETER WIRES ARE NOT REQUIRED WHEN THE LENGTH OF THE END TEE IS EIGHT (8) INCHES OR LESS.
2. NAILS AT ENDS OF HORIZONTAL STABILIZERS ARE TO BE PLACED WITH NAIL HEAD TOWARD CENTER LINE OF SPAN OF STRUT.
3. STABILIZER BAR MAY BE SLOTTED APPROVED ANGLES OR CHANNELS WITH "DIAMOND POINTS" OF SPRING STEEL WHICH SNAP TIGHT TO PREVENT MOVEMENT OF STRUT.
4. (1) #10 SMS TO 20 GA. MIN. WALL STUD @ 24" O.C.

Basis Document: DSA IR 25-2.13
Sheet Title: CEILING PERIMETER — rev. 09-21-15, 03-10-17 — Sheet No: 2.60

CEILING SYSTEM GENERAL NOTES

1. **GENERAL REQUIREMENTS:** CBC Section 1616A.1.20 (1616.10.16*) requires the design and installation to be in compliance with ASTM C635, C636, and E580, Section 5, with modifications.

Note: Amendments in CBC Section 1616A.1.20 (1616.10.16*) replace and append ASCE 7, Section 13.5.6.

The requirements in this IR apply to flat and level ceiling systems whose total weight, including ceiling mounted air terminals, services and light fixtures, does not exceed four (4) psf. Heavier systems, systems that are not flat and level, those supporting lateral loads from partitions, and free floating ceilings supported by chains or cables are beyond the minimum requirements of this IR and will require special design and details.

2. **CEILING DESIGN & INSTALLATION REQUIREMENTS:**

2.1 Ceiling System Components:

a) Shall comply with ASTM C635 and Section 5.1 of ASTM E580.

b) The ceiling grid system must be rated heavy duty as defined by ASTM C635.

c) Main runners, cross runners, splices, expansion devices and intersection connectors shall be designed to carry a mean ultimate test load of not less than 180 lbs. in compression and tension per ASTM E580 Section 5.1.2.

d) Ceiling wire shall be Class 1 zinc coated (galvanized) carbon steel conforming to ASTM A641. Wire shall be #12 gauge (0.106" diameter) with soft temper and minimum tensile strength = 70 ksi. The maximum allowable (ASD) tension load for wire meeting this specification is 350 lbs.
• Four (4) turns of the wire within 1.5" will develop the wire allowable load.
• Three (3) turns of the wire within 3" is assumed to develop no more than 50 percent of wire allowable load.

2.2 Suspension System Installation:

a) Shall comply with ASTM C636 and Section 5.2 of ASTM E580.

b) #12 gauge hanger wires may be used for up to and including a 4 foot by 4 foot grid spacing and shall be attached to main runners. Splices in hanger wires shall develop 50 percent of the wire allowable load.

c) Provide #12 gauge hanger wires at the ends of all main and cross runners within eight (8) inches of the support or within one-fourth (1/4) of the length of the end tee, whichever is least, for the perimeter of the ceiling area. Perimeter wires are not required when the length of the end tee is eight (8) inches or less.

d) Ceiling grid members shall be attached to two (2) adjacent walls per ASTM E580, Section 5.2.3. Ceiling grid members shall be at least 3/4 inch clear of other walls. If walls run diagonally to ceiling grid system runners, one end of main and cross runners should be free, and a minimum of 3/4 inch clear of wall.

e) The width of the perimeter supporting closure angle shall be not less than two (2) inches. Use of angles with smaller widths in conjunction with proprietary perimeter clips may be acceptable in accordance with Section 5 of this IR.

f) At the perimeter of the ceiling area, where main or cross runners are not connected to the adjacent wall, provide interconnection between the runners at the free end to prevent lateral spreading. A metal stabilizer or a #16 gauge wire with a positive mechanical connection to the runner may be used and placed within eight (8) inches of the wall. Where the perpendicular distance from the wall to the first parallel runner is eight (8) inches or less, the stabilizer or #16 gauge wire is not required.

2.3 Lateral Force Bracing Assembly Installation:

a) Lateral force bracing assemblies consisting of a compression strut and four (4) #12 gauge splayed bracing wires oriented 90 degrees from each other are required for all ceiling areas.

Exception: Lateral force bracing may be omitted for suspended acoustical ceiling systems with a ceiling area not to exceed 144 square feet, for all values of SDS, when perimeter support is provided in accordance with Section 2.2 of this IR and perimeter walls are designed to carry the ceiling lateral forces.

b) Lateral force bracing assemblies shall be spaced per Table 1 for all values of the component importance factor (Ip) of the ceiling.

c) There shall be a brace assembly a distance of not more than one-half (1/2) of the above spacing from each surrounding wall, expansion joint and at the edges of any ceiling vertical offset. For example, where the brace spacing is 8' x 12', the edge distance shall be 4 feet in the direction of the 8 foot spacing and 6 feet in the direction of the 12 foot spacing.

d) The slope of bracing wires shall not exceed 45 degrees from the horizontal plane and wires shall be taut. Splices in bracing wires shall develop the wire allowable load.

e) Compression struts shall meet the following requirements:
• The strut shall be sized to adequately resist the vertical component force induced by the ceiling bracing wires and have a maximum kl/r not to exceed 300. The struts listed in Appendix A meet this requirement for ceilings complying with the general requirements of this IR.
• The strut shall not be more than one (horizontal) in six (vertical) out of plumb.

TABLE 1
LATERAL FORCE BRACE ASSEMBLY SPACING

Design Spectral Acceleration Parameter, S_{DS}	Brace Assembly Spacing (ft.)	
	$z/h \le 0.5^{a}$	$z/h > 0.5^{a,b}$
$S_{DS} \le 1.15$	12 x 12	12 x 12
$1.15 < S_{DS} \le 1.73$	12 x 12	8 x 12
$S_{DS} > 1.73$	8 x 12	8 x 8

Footnotes:
a. Where, as defined in ASCE 7, Section 13.3.1:
z = height in structure of point of attachment of ceiling with respect to the base.
h = average roof height of the structure with respect to the base.
b. It shall be permitted to use the brace assembly spacing for "z/h > 0.5" for the full building height.

2.4 Attachment of Hanger and Bracing Wires:

a) Fasten hanger wires with not less than three (3) tight turns in three (3) inches. Hanger wire loops shall be tightly wrapped and sharply bent to prevent any vertical movement or rotation of the member within the loops (see ASTM E580, Section 5.2.7.2).

b) Fasten bracing wires with not less than four (4) tight turns in one and one-half (1-1/2) inches.

c) Hanger and bracing wire anchorage to the structure shall be installed in such a manner that the direction of the anchorage aligns closely with the direction of the wire (e.g. bracing wire ceiling clips must be bent as shown in the details and rotated as required to align closely with the direction of the wire, screw eyes in wood must be installed so they align closely with the direction of the wire, etc.).

d) Separate all ceiling hanger and bracing wires at least six (6) inches from all unbraced ducts, pipes, conduit, etc.

e) Hanger and bracing wires shall not attach to or bend around obstructions including but not limited to: piping, ductwork, conduit and equipment. Provide trapeze or other supplementary support members at obstructions to allow typical hanger spacing. Brace assemblies must be configured and/or located in order to avoid obstructions in addition to maintaining the required brace assembly spacing.

f) Provide additional hangers, struts and brace assemblies as required at all ceiling breaks, soffits or discontinuous areas.

g) Hanger wires that are more than one (horizontal) in six (vertical) out of plumb shall have counter-sloping wires.

Note: See ASTM C636, Figure 1, for counter-sloping methods.

h) Attachment of the bracing wires to the structure above and to the main runners shall be adequate for the load imposed. The weight (Wp) shall be taken as not less than four (4) psf for calculating seismic forces (Fp).

i) i) Post-installed anchors (e.g. expansion anchors, screw anchors and power actuated fasteners) shall have a current Evaluation Report acceptable to DSA in accordance with DSA IR A-5.

j) Power actuated fasteners in concrete are not permitted for bracing wires.

k) DSA approval of a construction plan is required prior to installing post-installed anchors in prestressed concrete. The construction plan shall demonstrate how the location of existing prestressing tendons and strands will be located and denoted as necessary to avoid interference.

2.5 Expansion Joints, Seismic Separation Joints:

a) Expansion joints shall be provided in the ceiling at intersections of corridors and at junctions of corridors and lobbies or other similar areas.

b) For ceiling areas exceeding 2,500 square feet, a seismic separation joint shall be provided to divide the ceiling into areas not exceeding 2,500 square feet in accordance with ASTM E580, Section 5.2.9.

2.6 Ceiling Fixtures, Terminals and Devices:

a) All fixtures, terminals and other devices shall be mounted in a manner that will not compromise ceiling performance in accordance with Section 13.5.6.2.2 Item 5 of ASCE 7 as amended by CBC Section 1616A.1.20 (1616.10.16*) and ASTM E580 Sections 5.3 and 5.4.

b) Ceiling panels shall not support any light fixtures, air terminals or devices.

c) Penetrations through the ceiling for sprinkler heads and other similar devices that are not integrally tied to the ceiling system in the lateral direction shall have a two (2) inch oversized ring, sleeve or adapter through the ceiling tile to allow free movement of one (1) inch in all horizontal directions. Alternatively, per ASTM E580, Section 5.2.8.5, a flexible sprinkler hose fitting that can accommodate one (1) inch of ceiling movement shall be permitted to be used in lieu of the oversized ring, sleeve or adapter.

d) Slack safety wires shall be considered hanger wires for installation and testing requirements.

2.6.1 Light Fixtures:

a) All light fixtures** shall be positively attached to the ceiling suspension systems by mechanical means per California Electrical Code (CEC) Article 410.36 to resist a horizontal force equal to the weight of the fixture. A minimum of two screws or approved fasteners are required at each light fixture, per ASTM E580, Section 5.3.1.

**See Section 3.1 of this IR for pendant-mounted light fixture support and bracing requirements.

b) Surface-mounted light fixtures shall be attached to the main runner with at least two positive clamping devices on each fixture. The clamping device shall completely surround the supporting ceiling runner and be made of steel with a minimum thickness of #14 gauge. Rotational spring catches do not comply. A #12 gauge slack safety wire shall be connected from each clamping device to the structure above. Provide additional supports when light fixtures are eight (8) feet or longer or exceed 56 lbs. Maximum spacing between supports shall not exceed eight (8) feet.

c) Light fixtures weighing less than or equal to 10 lbs. shall have a minimum of one (1) #12 gauge slack safety wire connected from the fixture housing to the structure above.

d) Light fixtures weighing greater than 10 lbs. but less than or equal to 56 lbs. may be supported directly on the ceiling runners, but they shall have a minimum of two (2) #12 gauge slack safety wires connected from the fixture housing at diagonal corners to the structure above.

Exception: All light fixtures greater than two by four feet weighing less than 56 lbs. shall have a #12 gauge slack safety wire at each corner.

e) All light fixtures weighing greater than 56 lbs. shall be independently supported by not less than four (4) taut #12 gauge hanger wires (one at each corner) attached from the fixture housing to the structure above or other approved hangers. The four (4) taut #12 gauge wires or other approved hangers, including their attachment to the structure above, shall be capable of supporting four (4) times the weight of the fixture.

2.6.2 Services within the Ceiling:

a) All flexible sprinkler hose fitting mounting brackets, ceiling-mounted air terminals or other services shall be positively attached to the ceiling suspension systems by mechanical means to resist a horizontal force equal to the weight of the component. Screws or approved fasteners are required. A minimum of two attachments are required at each component.

b) Ceiling-mounted air terminals or other services weighing less than or equal to 20 lbs. shall have one (1) #12 gauge slack safety wire attached from the terminal or service to the structure above.

c) Flexible sprinkler hose fittings, ceiling-mounted air terminals or other services weighing more than 20 lbs. but less than or equal to 56 lbs. shall have two (2) #12 gauge slack safety wires (at diagonal corners) connected from the terminal or service to the structure above.

d) Flexible sprinkler hose fittings, ceiling-mounted air terminals or other services weighing more than 56 lbs. shall be supported directly from the structure above by not less than four (4) taut #12 gauge hanger wires attached from the terminal or service to the structure above or other approved hangers. The four (4) taut #12 gauge wires or other approved hangers, including their attachment to the structure above, must be capable of supporting four (4) times the weight of the unit.

2.6.3 Other Devices within the Ceiling:

All lightweight miscellaneous devices, such as strobe lights, occupancy sensors, speakers, exit signs, etc., shall be attached to the ceiling grid per Section 2.6.2 a) of this IR. In addition, devices weighing more than 10 lbs. shall have a #12 gauge slack safety wire anchored to the structure above per Section 2.6.1 b) of this IR. Devices weighing more than 20 lbs. shall be supported from the structure above using details provided by the registered design professional.

IR 25-2
SUSPENDED LAY-IN PANEL CEILING: 2022 CBC

1. CEILING SYSTEM GENERAL NOTES

1.01 Ceiling system components shall comply with ASTM C635 and Section 5.1 of ASTM E580.

1.02 The ceiling grid system shall be rated heavy duty as defined by ASTM C635.

1.03 Ceiling systems. The following ceiling system(s) is/are part of the scope of this project:

Manufacturer:	ARMSTRONG WORLD INDUSTIES
Product Name:	CORTEGA 703 PANEL WITH PRELUDE XL SUSPENSION SYSTEM
Evaluation Report Number:	1308
Main Runner Part, Model, or Catalog Number:	7306
Cross Runner Part, Model, or Catalog Number:	XL7380

1.04 Seismic Wall Clip: BERC2
Manufacturer's Model:

1.05 Ceiling panels shall not support any luminaires, air terminals, or devices.

1.06 For acoustical tile panels of any material other than mineral or glass fiber, a ¾" clearance shall be provided between the panel and the wall on the sides of the ceiling free to slip. Clearance between ceiling grid runners and walls shall comply with the details on these drawings regardless of ceiling tile material.

2. MATERIALS

2.01 Ceiling wire shall be Class 1 zinc coated (galvanized) carbon steel conforming to ASTM A641. Wire shall be #12 gauge (0.106" diameter) with soft temper and minimum ultimate tensile strength = 70 ksi.

2.02 Galvanized sheet steel (including that used for metal stud compression struts) shall conform to ASTM A653, or other equivalent sheet steel listed in Section A3.1 of the North American Specification for the Design of Cold-Formed Steel Structural Members, (AISI S100). Material 43 mil (18 gauge) thick and lighter shall have minimum yield strength of 33 ksi. Material 54 mil (16 gauge) thick and heavier shall have a minimum yield strength of 50 ksi.

2.03 Electrical metallic tube (EMT) shall conform to ANSI C80.3/UL 797 carbon steel with G90 galvanizing. EMT shall have minimum yield strength of 30 ksi and minimum ultimate strength of 48 ksi.

3. ATTACHMENT OF HANGER AND BRACING WIRES

3.01 All ceiling hanger and bracing wires shall be separated at least 6 inches from all unbraced ducts, pipes, conduit, etc.

3.02 Hanger and bracing wires shall not attach to or bend around obstructions including but not limited to piping, ductwork, conduit, and equipment.

3.03 Hanger wires that are more than one (horizontal) in six (vertical) out of plumb shall have counter-sloping wires.

Detail Title:		Detail No.
CEILING NOTES	REV: 09/21/2015 REV: 03/2022 REV: 11/2023	1.00

IR 25-2 (Revised 11/03/23) — Page 17 of 70
DIVISION OF THE STATE ARCHITECT — DEPARTMENT OF GENERAL SERVICES — STATE OF CALIFORNIA

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-123900 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/05/2024

Owner:
BAKERSFIELD CITY SCHOOL DISTRICT
1300 BAKER ST.
BAKERSFIELD CA 93305

Project Name:
TRANSITIONAL KINDERGARTEN

Project Address:
MLK ELEMENTARY SCHOOL
1100 Citadel
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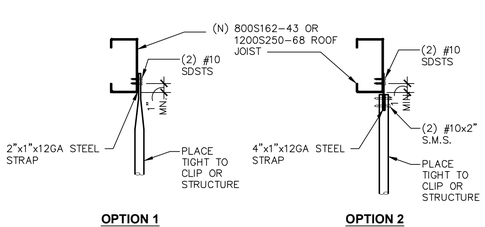
LICENSED ARCHITECT — CURTIS E. FLYNN — No. C 28966 — REN. 5-31-25 — STATE OF CALIFORNIA

Sheet Title:
REFLECTED CEILING DETAILS

Job No.: **5593**

Sheet No.: **A8.04**

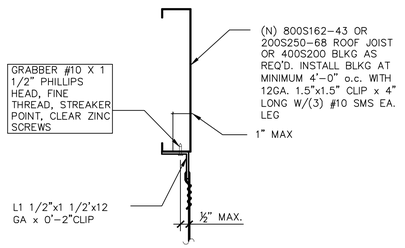
Release: DSA SUBMITTAL — Issue Date: 7/24/24



TUBE STRUT

13 / A8.05 STRUT CONNECTION TO ROOF JOIST

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

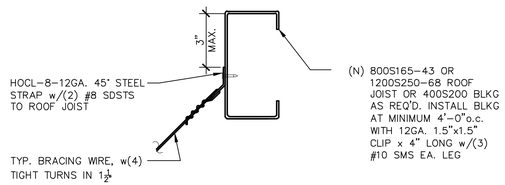


HANGER WIRE

NOTES:
1. REFER TO 4/A8.03 FOR ADDITIONAL DETAILS.

14 / A8.05 HANGER WIRE CONNECTION TO ROOF JOIST

4.23 SCALE: 3" = 1'-0"

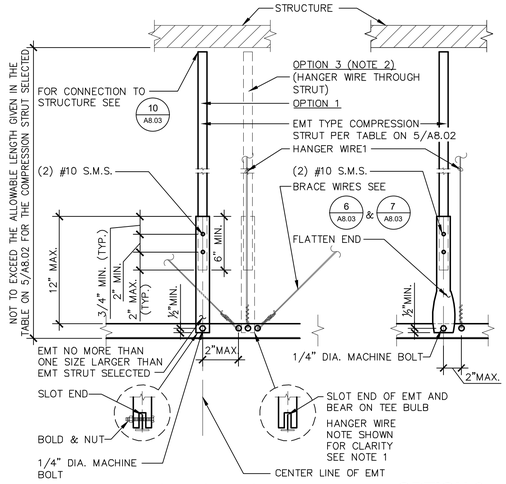


BRACING WIRE

NOTES:
1. REFER TO 4/A8.03 FOR ADDITIONAL DETAILS.

15 / A8.05 BRACING WIRE CONNECTION TO ROOF JOIST

4.33 SCALE: 3" = 1'-0"



OPTION 1 & 3

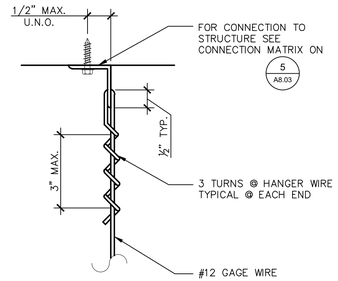
OPTION 2

SEE OPTION 1 FOR INFORMATION NOT SHOWN

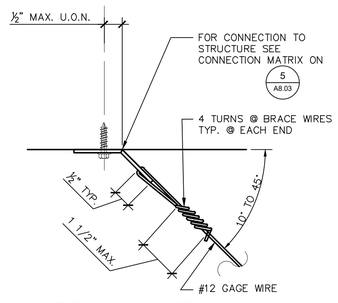
NOTES:
1. MACHINE BOLT IS NOT REQUIRED ON OPTION 3
2. APPLICABLE TO STEEL WITHOUT GYPSUM BOARD ONLY.

10 / A8.05 SUSPENDED ACOUSTICAL CEILING - EMT TYPE STRUT

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



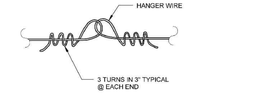
HANGER WIRE



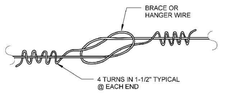
BRACING WIRE

12 / A8.05 HANGER AND BRACING WIRE CONNECTION - TYPICAL WIRE TURNS

4.10 SCALE: 6" = 1'-0"



HANGER WIRE ONLY

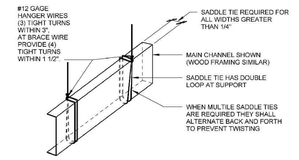


HANGER OR BRACE WIRE

NOTES:

WIRE SPLICES ARE SHOWN LOOSELY TIED FOR ILLUSTRATIVE PURPOSES ONLY AND SHALL BE DRAWN TIGHT TO COMPLETE INSTALLATION WHEN CONSTRUCTED

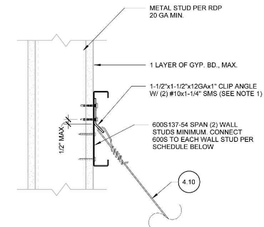
Basis Document: DSA IR 25-2.13 | Sheet No: 6.10
Sheet Title: CEILING WIRE SPLICES | rev. 09-21-15



TYPICAL SADDLE TIE DETAIL

HANGER WIRE CONDITION SHOWN. BRACE WIRE CONDITION SIMILAR

Basis Document: DSA IR 25-2.13 | Sheet No: 4.29
Sheet Title: TYPICAL SADDLE TIE DETAIL | rev. 09-21-15



WALL STUD GAUGE	CONNECTION TO WALL STUD (WITH GYP. BD.)	CONNECTION TO WALL STUD (WITHOUT GYP. BD.)
20 GAUGE	(5) #10x1-1/4" SMS	(3) #10x1-1/4" SMS
18 GAUGE	(4) #10x1-1/4" SMS	(2) #10x1-1/4" SMS

NOTES:

1. THE CLIP ANGLE CAN BE ATTACHED DIRECTLY TO THE WALL STUD FLANGE PROVIDED BOTH OF THE FOLLOWING CONDITIONS ARE MET:
   - THE WALL STUD IS 18 GA MIN. AND CAPABLE OF SUPPORTING THE BRACE FORCE.
   - THE BRACE WIRE ALIGNS WITH THE WALL STUD WEB.

Basis Document: DSA IR 25-2.13 | Sheet No: 4.34
Sheet Title: BRACING WIRE CONNECTION TO METAL STUD WALL | rev. 09-21-15 | rev. 03-10-17

STRUCTURAL CONDITION OF FLOOR / ROOF ABOVE COMPRESSION STRUT	APPLICABLE DETAIL
METAL DECK	5.20
CONCRETE OVER METAL DECK	5.21
CONCRETE SLAB, BEAM, OR JOIST	5.30
STRUCTURAL STEEL	5.40
SAWN TIMBER WITH GYPSUM BOARD	5.50
SAWN TIMBER WITHOUT GYPSUM BOARD	5.60

Basis Document: DSA IR 25-2.13 | Sheet No: 5.10
Sheet Title: COMPRESSION STRUT CONNECTION TO STRUCTURE - CONNECTION MATRIX | rev. 09-21-15

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-123900 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/05/2024

Owner:

BAKERSFIELD CITY SCHOOL DISTRICT
1300 BAKER ST.
BAKERSFIELD CA 93305

Project Name:

TRANSITIONAL KINDERGARTEN

Project Address:

MLK ELEMENTARY SCHOOL

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Bakersfield, CA 93307

integrated designs
by SOMAM, Inc.

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LICENSED ARCHITECT CURTIS E. FLYNN No. C 28966 REN. 5-31-25 STATE OF CALIFORNIA

Sheet Title:

REFLECTED CEILING DETAILS

Job No.: **5593**

Sheet No.: **A8.05**

Release: DSA SUBMITTAL | Issue Date: 7/24/24

MATERIAL SPECIFICATIONS

GENERAL

ALL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE GOVERNING CODE. SEE 'PROJECT DATA'

CONSTRUCTION LIABILITY
THE CONSTRUCTION CONTRACTOR AND HIS SUBCONTRACTORS AGREE THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONSTRUCTION CONTRACTOR AND HIS SUBCONTRACTORS WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT LIMITED TO NORMAL WORKING HOURS, AND THE CONSTRUCTION CONTRACTOR AND HIS SUBCONTRACTORS FURTHER AGREE TO DEFEND, INDEMNIFY AND HOLD THE DESIGN PROFESSIONAL HARMLESS FROM ANY LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPT LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE DESIGN PROFESSIONAL.

CONCRETE & REINFORCING

REINFORCING STEEL
BARS FOR REINFORCING SHALL BE GRADE 60 DEFORMED BARS CONFORMING TO ASTM A706 OR A615. LAP SPLICES SHALL BE IN ACCORDANCE WITH ACI 318, CURRENT EDITION UNLESS NOTED OTHERWISE ON THE PLANS. BARS TO BE WELDED OR FIELD BENT SHALL CONFORM TO ASTM A706.

CONCRETE
CONCRETE SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE **2019** EDITION OF
ACI 301 & 318. CONCRETE SHALL BE READY-MIXED CONCRETE IN ACCORDANCE WITH ASTM C94.

MAXIMUM WATER-CEMENT RATIO, BY WEIGHT

28 DAY COMPRESSIVE STRENGTH	WATER-CEMENT RATIO
3500 PSI CONCRETE	0.45
3000 PSI CONCRETE	0.50

AVERAGE DRYING SHRINKAGE FOR CONCRETE AFTER 21 DAYS OF DRYING SHALL NOT EXCEED 0.048% IN SLABS ON GRADE.

AT THE CONTRACTOR'S OPTION, AN AIR ENTRAINING AGENT CONFORMING TO THE LATEST REVISION OF ASTM SPECIFICATION C260 MAY BE ADDED TO THE CONCRETE TO PROVIDE UP TO A MAXIMUM OF 3% ± 1.5% ENTRAINED AIR. CEMENT SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR PORTLAND CEMENT PER ASTM DESIGNATION C150, TYPE II. NO MORE THAN 15% BY WEIGHT OF CEMENT MAY BE REPLACED BY FLY ASH CONFORMING TO ASTM C618, CLASS N OR F.

CONCRETE ELEMENT	MIN 28 DAY COMPRESSIVE STRENGTH	MAX SIZE AGGREGATE (INCHES)	SLUMP (INCHES)
FOOTINGS	3000	1-1/2	3
SLABS ON GRADE	3500	1	4

SLUMP WILL BE MEASURED AT THE TRUCK DISCHARGE. SLUMPS NOTED ABOVE ARE FOR CONCRETE WITHOUT ADMIXTURES TO BE CONSOLIDATED USING VIBRATION. FORMWORK CONSTRAINTS, CONGESTION OF REBAR, AND PUMPING OF CONCRETE MAY REQUIRE INCREASED SLUMP BEYOND THE SLUMP LISTED ABOVE. THE CONTRACTOR SHALL ADJUST THE SLUMP UP TO 8" MAX USING ADMIXTURES AS NECESSARY TO PROVIDE WORKABILITY AND CONSISTENCY TO PERMIT CONCRETE TO BE WORKED READILY INTO FORMS AND AROUND REINFORCEMENT UNDER CONDITIONS OF PLACEMENT TO BE EMPLOYED WITHOUT SEGREGATION OR EXCESSIVE BLEEDING. ALL ADMIXTURES SHALL BE NOTED IN THE SUBMITTED MIX DESIGN AND ARE SUBJECT TO THE ENGINEER'S REVIEW. THE SPECIAL INSPECTOR SHALL BE PROVIDED WITH A BATCH TICKET AND WEIGHT TAG UPON DELIVERY OF EACH LOAD OF CONCRETE.

ALL CONCRETE SHALL BE PLACED WITH MECHANICAL VIBRATION UNLESS NOTED OTHERWISE.

EXPOSURE CATEGORIES AND CLASSES FOR ALL CONCRETE TYPES ARE AS FOLLOW:
A. FREEZING AND THAWING: CLASS: F0
B. SULFATE EXPOSURE: CLASS: S0
C. IN CONTACT WITH WATER: CLASS: W0
D. CORROSION PROTECTION OF REINFORCEMENT: CLASS: C1

SLAB MEMBRANE - 15 MIL POLYETHYLENE FILM, UNLESS NOTED OTHERWISE.

UNDER SLAB MATERIALS
SLAB MEMBRANE SHALL BE 15 MIL POLYETHYLENE FILM, UNLESS NOTED OTHERWISE. LAP SLAB MEMBRANE PER THE MANUFACTURER'S RECOMMENDATIONS, BUT NO LESS THAN 12 INCHES.

GRAVEL SHALL BE 3/4" CLEAN MATERIAL MEETING THE REQUIREMENTS OF ACI 302.1R.

NON-SHRINK GROUT
NON SHRINK GROUT SHALL BE FLOWABLE, WITH A MINIMUM 7 DAY COMPRESSIVE STRENGTH OF 5000 PSI. NON-SHRINK GROUT SHALL BE MASTERFLOW 928 GROUT AS MANUFACTURED BY BASF OR APPROVED EQUAL.

POST INSTALLED ANCHORS

EXISTING CONCRETE SURFACES SHALL BE SCANNED PER "AS-BUILT INFORMATION" ON **S0.01** TO ENSURE EXISTING REINFORCEMENT REMAINS UNDAMAGED DURING POST INSTALLED ANCHOR INSTALLATION.

MECHANICAL ANCHORING SYSTEMS FOR CONCRETE
MECHANICAL ANCHORING SYSTEMS SHALL BE
- SIMPSON TITEN HD (ICC ESR-2713)
- APPROVED EQUAL W/ VALID EVALUATION REPORT PER DSA IR A-5

INSTALLATION OF ANCHORS INCLUDING DRILLING AND CLEANING OF HOLES SHALL BE IN ACCORDANCE WITH THE CURRENT ICC OR IAPMO REPORT

ADHESIVE ANCHORING SYSTEMS FOR CONCRETE
ADHESIVE ANCHORING SYSTEMS SHALL BE:
- HILTI HIT-RE 500 V3 (ICC ESR-3814) OR HIT-HY 200 **A or R *(choose)*** (ICC ESR 3187)
- SIMPSON SET-XP (ICC ESR-2508) OR AT-XP (IAPMO UES ER-263)
- DEWALT\POWERS PURE 110+ (ICC ESR-3298) OR AC100+ GOLD (ICC ESR-2582)
- APPROVED EQUAL W/ VALID EVALUATION REPORT PER DSA IR A-5

INSTALLATION OF ANCHORS AND ADHESIVE INCLUDING DRILLING AND CLEANING OF HOLES SHALL BE IN ACCORDANCE WITH **CBC** 1910A.5.4 AND THE CURRENT ICC OR IAPMO REPORT. ADHESIVES SHALL BE USED ONLY IN APPLICATIONS PERMITTED BY THE ADHESIVE'S ICC OR IAPMO REPORT. ADHESIVE ANCHORS SHALL BE INSTALLED IN CONCRETE HAVING A MINIMUM AGE OF 21 DAYS AT TIME OF ANCHOR INSTALLATION.

EXPANSION ANCHORS FOR CONCRETE
EXPANSION ANCHORS SHALL BE:
- HILTI KWIK BOLT TZ2 ANCHORS (ICC ESR-4266),
- SIMPSON STRONG BOLT 2 WEDGE ANCHOR (ICC ESR-3037)
- DEWALT\POWERS POWER-STUD+ SD2 (ICC ESR-2502)
- APPROVED EQUAL

CONTRACTOR SHALL TORQUE ANCHORS IN ACCORDANCE WITH THE ICC OR IAPMO REPORT. EXPANSION ANCHORS SHALL USE WASHERS SIZED TO PREVENT CRUSHING OF THE ATTACHED MEMBER UNDER THE INSTALLATION TORQUE.

STRUCTURAL STEEL

STRUCTURAL STEEL AND MISCELLANEOUS IRON
STRUCTURAL STEEL AND MISCELLANEOUS IRON SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CURRENT EDITION OF THE AISC CODE OF STANDARD PRACTICE.

1. WIDE FLANGE AND STRUCTURAL TEE SHAPES SHALL CONFORM TO ASTM A992.
2. CHANNELS AND ANGLES SHALL CONFORM TO ASTM A36.
3. HOLLOW STRUCTURAL SECTIONS SHALL CONFORM TO ASTM A500, GRADE C.
4. STEEL PIPE SHALL CONFORM TO ASTM A53, GRADE B.
5. STRUCTURAL PLATE SHALL CONFORM TO ASTM A36 OR ASTM A572 GR50.
6. RAISED-PATTERN FLOOR PLATE SHALL CONFORM TO ASTM A786.

ALL STRUCTURAL STEEL AND MISCELLANEOUS IRON SHALL RECEIVE SHOP PRIME COAT EXCEPT ON SURFACES RECEIVING WELDS, EMBEDDED IN CONCRETE, OR AT SLIP CRITICAL HIGH STRENGTH BOLTS WHICH SHALL BE TOUCHED UP AFTER CONNECTION IS COMPLETE. STRUCTURAL STEEL AND MISCELLANEOUS IRON WHICH IS TO HAVE SPRAY ON FIREPROOFING SHALL NOT BE PAINTED. STRUCTURAL STEEL PERMANENTLY EXPOSED TO WEATHER SHALL RECEIVE TWO COATS OF SEMI-GLOSS ALKYD ENAMEL COMPATIBLE WITH PRIMER.

MACHINE BOLTS, ANCHOR BOLTS AND THREADED RODS
BOLTS, NUTS, WASHERS AND RODS PERMANENTLY EXPOSED TO WEATHER SHALL BE HOT DIPPED GALVANIZED.

1. BOLTS SHALL CONFORM TO ASTM A307 GRADE A OR B OR A36.
2. ANCHOR BOLTS AND RODS SHALL CONFORM TO ASTM F1554 GR 36.
3. ALL BOLTS & LAG SCREWS SHALL HAVE STANDARD STEEL WASHERS THAT CONFORM TO ASTM F436 TYP 1, U.N.O.
4. NUTS SHALL BE AS SHOWN BELOW AND FINISH SHALL MATCH FASTENER.
5. BOLT HOLES SHALL BE STANDARD SIZE (BOLT DIA + 1/16") TYP, U.N.O.

FASTENER GRADE AND SIZE	NUT CLASS	NUT STYLE
ASTM A307 GR A, F1554 GR 36: 1/4" TO 1-1/2"	ASTM A563-A	HEX
ASTM A307 GR A, F1554 GR 36: OVER 1-1/2" TO 4"	ASTM A563-A	HEAVY HEX
ASTM A307 GR B, 1/4" TO 4"	ASTM A563-A	HEAVY HEX

WELDING
ALL WELDING SHALL BE PERFORMED BY CERTIFIED WELDERS PER AWS "STANDARD QUALIFICATION PROCEDURE" TO PERFORM THE TYPE OF WORK REQUIRED. ALL WELDING SHALL BE IN ACCORDANCE WITH THE CURRENT AWS WELDING CODE. ARC WELDING ELECTRODES SHALL BE E70 SERIES FOR A36, A53, A500, A572 & A992 MATERIAL, AND E80 SERIES FOR A706 REINFORCING STEEL.

WELD METAL TOUGHNESS SHALL BE REPORTED ON THE ELECTRODE MANUFACTURER'S CERTIFICATE OF COMPLIANCE. ALL ELECTRODES SHALL BE LOW HYDROGEN WITH A MINIMUM CVN VALUE OF 20 FT-LBS AT -20 DEGREE F. EXCEPTIONS: METAL DECK WELDING, STAIR AND HANDRAIL WELDING, LIGHT GAGE STEEL WELDING.

TACK WELDS, AIR-ARC GOUGING AND FLAME CUTTING SHALL NOT BE PERFORMED WITHOUT ADEQUATE PREHEAT OR INCORPORATION INTO THE FINAL WELD.

THE FILLER METAL MANUFACTURER'S PUBLISHED RECOMMENDATIONS SHALL BE THE BASIS FOR DETERMINING THE ALLOWABLE RANGE OF ESSENTIAL VARIABLES FOR THE PRE QUALIFIED WPS. UNLESS NOTED OTHERWISE ON THE PLANS, BACK-UP BARS FOR CJP WELDS SHALL BE REMOVED FOLLOWED BY BACKGOUGING AND BACKWELDING.

AUTOMATIC END WELDED STUDS
AUTOMATIC END WELDED STUDS SHALL BE NELSON GRANULAR FLUX-FILLED S3L SHEAR CONNECTORS OR CFL FULLY THREADED STUDS (OR APPROVED EQUAL).

1. STUDS SHALL CONFORM TO ASTM A108, GRADES C1010 THROUGH C1020, COLD DRAWN STEEL.
2. HEADED ANCHOR STUDS SHALL BE AWS D1.1 TYPE B.
3. THREADED STUDS SHALL BE AWS D1.1 TYPE A.
4. ALL THREADED STUDS SHALL HAVE STANDARD STEEL WASHERS, U.N.O.

THE STUDS SHALL BE AUTOMATICALLY END WELDED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS IN SUCH A MANNER AS TO PROVIDE COMPLETE FUSION BETWEEN THE END OF THE STUD AND THE PLATE. THERE SHOULD BE NO POROSITY OR EVIDENCE OF LACK OF FUSION BETWEEN THE WELDED END OF THE STUD AND THE PLATE. THE STUD SHALL DECREASE IN LENGTH DURING WELDING APPROXIMATELY 1/8" FOR 5/8" DIAMETER AND UNDER, AND 3/16" FOR OVER 5/8" DIAMETER. WELDING SHALL BE DONE BY QUALIFIED WELDERS APPROVED BY THE WELDING INSPECTOR.

LIGHT GAGE METAL FRAMING

MEMBERS
ALL LIGHT GAGE METAL FRAMING SHALL CONFORM TO ASTM A1003 GR33 TYPE H FOR MEMBERS WITH A DESIGNATION THICKNESS OF 33 AND 43 MILS AND ASTM A1003 GR50 TYPE H FOR MEMBERS WITH A DESIGNATION THICKNESS EQUAL TO OR GREATER THAN 54 MILS. STUDS SHALL HAVE PUNCHED WEBS. STUDS AND JOISTS SHALL HAVE STIFFENED FLANGES W/ 1-5/8" MIN WIDTH UNLESS NOTED OTHERWISE ON THE PLANS.

SHEET METAL SCREWS
SHEET METAL SCREWS SHALL CONFORM TO ASTM C1513

SHOT PINS/ POWER ACTUATED FASTENERS (PAF):
ALL SHOT PINS SHALL BE AS MANUFACTURED BY HILTI, INCORP. REFERENCE SHALL BE MADE TO THE LATEST EDITION OF THE HILTI 'PRODUCT TECHNICAL GUIDE' AND THE ICC ES ESR 2269 REPORT FOR ADDITIONAL INFORMATION.

SHOT PINS DRIVEN INTO STEEL BASE MATERIAL SHALL BE XU TYPE WITH P8 WASHERS. LENGTH OF PIN SHALL BE AS REQUIRED TO PENETRATE THROUGH THE STEEL BASE MATERIAL. MINIMUM EDGE DISTANCE TO ANY CONNECTED PART SHALL BE 1/2" AND MINIMUM FASTENER SPACING SHALL BE 2". ENTIRE POINTED END OF PIN MUST PENETRATE THROUGH STEEL LESS THAN 1/2" THICK OR PENETRATE A MINIMUM OF 1/2" INTO STEEL 1/2" THICK OR GREATER. PINS IN STEEL SUBJECT TO WITHDRAW LOADS ARE REQUIRED TO HAVE KNURLED SHANK.

SHOT PINS DRIVEN INTO CONCRETE BASE MATERIAL SHALL BE XU TYPE WITH P8 WASHERS. LENGTH OF PIN SHALL BE AS REQUIRED TO PENETRATE 1 1/2" INTO THE CONCRETE BASE MATERIAL. MINIMUM EDGE DISTANCE TO ANY CONCRETE MATERIAL SHALL BE 3" AND MINIMUM FASTENER SPACING SHALL BE 4".

SHOT PINS DRIVEN INTO CONCRETE BASE MATERIAL THROUGH METAL DECK SHALL BE XU TYPE WITH P8 WASHERS. LENGTH OF PIN SHALL BE AS REQUIRED TO PENETRATE 1" INTO THE CONCRETE THROUGH THE LOW FLUTE. PIN SHALL BE CENTERED IN THE LOW FLUTE AND MINIMUM FASTENER SPACING SHALL BE 4".

WHERE STEEL WASHERS ARE INDICATED ON THE DRAWINGS, PINS SHALL BE XU WITH PREMOUNTED STEEL WASHERS WITH A MINIMUM DIAMETER OF 36mm (1 7/16").

POST INSTALLED ANCHOR TESTING NOT REQUIRED FOR INTERIOR NON-BEARING NON-SHEAR WALL SILL ATTACHMENT

WOOD FRAMING

PLYWOOD
ALL PLYWOOD SHALL CONFORM TO U.S. PRODUCT STANDARD PS 1-19, AMERICAN PLYWOOD ASSOCIATION. EACH SHEET SHALL BE STAMPED WITH THE PS AND/OR APA GRADEMARK.

ALL PLYWOOD PERMANENTLY EXPOSED TO WEATHER SHALL BE EXTERIOR TYPE PLYWOOD.

ALL UNBLOCKED PLYWOOD EDGES SHALL BE TONGUE-AND-GROOVE OR SUPPORTED WITH PLYWOOD CLEATS OR PLYWOOD CLIPS.

ROOF PLYWOOD:
- 5 PLY EXPOSURE 1, CDX, SPAN RATING 32/16, SPECIES GROUP 2 OR BETTER.

WALL PLYWOOD:
- 4 PLY EXPOSURE 1, STRUCTURAL 1, SPAN RATING 32/16, SPECIES GROUP 1.

SHEATHING
ALL SHEATHING SHALL CONFORM TO U.S. PRODUCT STANDARDS PS 2-18, AMERICAN PLYWOOD ASSOCIATION. EACH SHEET SHALL BE STAMPED WITH THE PS AND.OR APA GRADEMARK.

ROOF SHEATHING:
- EXPOSURE 1, OSB-STRUCT I, SPAN RATING 32/16, SPECIES GROUP 2 OR BETTER.

WALL SHEATHING:
- EXPOSURE 1, OSB-STRUCT I, SPAN RATING 24/0, SPECIES GROUP 2 OR BETTER.

LIGHT GAGE METAL CONNECTORS
ALL LIGHT GAGE METAL CONNECTORS SHALL BE SIMPSON STRONG TIE CONNECTORS OR APPROVED EQUAL, UNLESS NOTED OTHERWISE ON THE DRAWINGS. CONNECTORS IN CONTACT WITH PRESSURE TREATED LUMBER TO BE HOT DIPPED ZINC-COATED GALVANIZED STEEL IN COMPLIANCE WITH ASTM A653 OR ASTM A123.

SUBMITTALS

SUBMITTALS FOR THE ENGINEERS REVIEW WILL BE REQUIRED AS FOLLOWS:
1. REINFORCING STEEL SHOP DRAWINGS
2. MIX DESIGNS
3. STRUCTURAL STEEL AND MISCELLANEOUS METALS SHOP DRAWINGS
4. WELDING PROCEDURE SPECIFICATIONS (AND PQR IF APPLICABLE)

NOTES:
1. CONTRACTOR SHALL ELECTRONICALLY SUBMIT SUBMITTALS FOR REVIEW OR SHALL SUBMIT A MINIMUM OF TWO SETS OF HARD PRINTS FOR REVIEW.
2. THE GENERAL CONTRACTOR SHALL REVIEW EACH SUBMITTAL PRIOR TO FORWARDING TO ARCHITECT AND STRUCTURAL ENGINEER. THE GENERAL CONTRACTOR SHALL VERIFY THAT THE SHOP DRAWING IS COORDINATED AMONG ALL CONSTRUCTION TRADES AND THAT THE ARCHITECT'S AND STRUCTURAL ENGINEER'S COMMENTS FROM ANY PREVIOUS SUBMITTALS ARE ADDRESSED.
3. CONTRACTOR SHALL SUBMIT IN WRITING, ANY REQUEST FOR MODIFICATIONS TO THE PLANS AND SPECIFICATIONS. SHOP DRAWINGS SUBMITTED FOR REVIEW DO NOT CONSTITUTE "IN WRITING" UNLESS IT IS CLEARLY NOTED THAT SPECIFIC CHANGES ARE BEING REQUESTED.
4. REVISIONS FROM PREVIOUS SUBMITTALS SHALL BE CLEARLY MARKED BY CLOUDS.
5. FABRICATION SHALL NOT PROCEED UNTIL SUBMITTALS HAVE BEEN REVIEWED BY THE ENGINEER.

CONTRACTOR'S STATEMENT OF RESPONSIBILITY
EACH CONTRACTOR RESPONSIBLE FOR THE CONSTRUCTION OF A SEISMIC OR WIND-FORCE RESISTING SYSTEM OR COMPONENT SHALL ISSUE A WRITTEN STATEMENT OF RESPONSIBILITY IN COMPLIANCE WITH SECTION 1704A.4 OF THE CURRENT GOVERNING EDITION OF THE CALIFORNIA BUILDING CODE. THE CONTRACTORS STATEMENT OF RESPONSIBILITY SHALL CONTAIN ACKNOWLEDGEMENT OF AWARENESS OF THE SPECIAL REQUIREMENTS CONTAINED IN THE STATEMENT OF SPECIAL INSPECTION.

PROJECT DATA

1. PLANS AND CALCULATIONS FOR THE STRUCTURAL DESIGN WERE BASED UPON:
   - GOVERNING CODE: 2022 CALIFORNIA BUILDING CODE W/ CHAPTER A AMENDMENTS
   - SOILS REPORT: "GEOTECHNICAL ENGINEERING AND GEOLOGIC/SEISMIC HAZARD INVESTIGATION" PROJECT NUMBER: 022-17101 BY KRAZAN & ASSOCIATES, INC. DATED NOVEMBER 30, 2023

2. VERTICAL LOADS:
   ROOF DEAD LOAD = 16 PSF
   ROOF DEAD LOAD @ SOLAR ZONE= 19 PSF
   ROOF LIVE LOAD = 20 PSF [REDUCED PER CODE]

3. EARTHQUAKE DESIGN DATA:
   EQUIVALENT LATERAL FORCE PROCEDURE
   $V = \frac{S_{DS} I}{R} W$
   $S_{DS} = 0.966$; $S_1 = 0.345$
   $S_{DS} = 0.712$; $S_{D1} = 0.450$
   I = 1.25; RISK CATEGORY III
   SITE CLASS = D; SEISMIC DESIGN CAT = D
   SEISMIC RESISTING SYSTEM: LIGHT FRAME COLD FORMED STEEL WALLS SHEATHED WITH WOOD STRUCTURAL PANELS
   $R = 6.5$; $\Omega_0 = 3.0$; $C_d = 4.0$

   V = 0.137 W [LRFD]

4. WIND DESIGN DATA:
   BASIC WIND SPEED = 101 MPH
   RISK CATEGORY III
   WIND EXPOSURE = C
   INTERNAL PRESSURE COEFFICIENT = +0.18, -0.18
   DESIGN WIND PRESSURE = 22.2 PSF
   WALL COMPONENTS AND CLADDING PRESSURE = +22.3 (ZONE 4&5), -24.2 (ZONE 4), -29.8 (ZONE 5) PSF [LRFD]
   ROOF COMPONENTS AND CLADDING PRESSURE = +16.0 (ALL ZONES), -20.4 (ZONE 1'), -35.5 (ZONE 1), -46.8 (ZONE 2), -63.8 (ZONE 3) PSF [LRFD]

   NOTE: COMPONENTS & CLADDING PRESSURES ABOVE ARE WORST CASE PRESSURES BASED ON 10 SF TRIBUTARY AREA AND MAY BE REDUCED PER ASCE 7. POSITIVE AND NEGATIVE PRESSURES SIGNIFY WIND ACTING TOWARD AND AWAY FROM SURFACES, RESPECTIVELY.

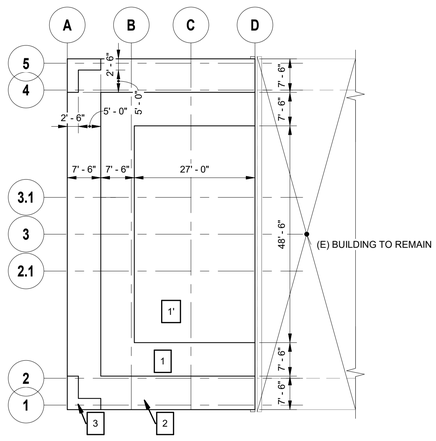
5. FOUNDATION DESIGN CRITERIA:
   BEARING PRESSURES:
   DL + LL 2500 PSF
   TOTAL LOAD 3325 PSF

8. SEISMIC JOINT BETWEEN NEW BUILDING AND (E) BUILDING SHALL HAVE A MINIMUM MOVEMENT CAPABILITY IN ANY DIRECTION AS SHOWN BELOW:
   ROOF: 6"

9. SOLAR PANEL ALLOWANCE:
   THE DESIGN HAS ACCOUNTED FOR FUTURE SOLAR PANELS TO BE LOCATED ON THE ROOFS. HOWEVER A DESIGN OF THE SOLAR PANEL SUPPORT STRUCTURE IS NOT INCLUDED IN THIS CONTRACT.

   MAXIMUM SOLAR PANEL ALLOWANCE = 3 PSF

WIND ZONE MAP



PROJECT DESCRIPTION

LEVELS:	SINGLE STORY
FOUNDATION:	CONTINUOUS GRADE BEAMS AND ISOLATED COLUMN FOUNDATIONS & CONCRETE SLAB ON GRADE
ROOF SYSTEM:	WOOD SHEATHING OVER LIGHT GAUGE METAL JOISTS
LATERAL FORCE RESISTING SYSTEM:	LIGHT GAUGE STUD WOOD SHEATHED SHEARWALLS
DIAPHRAGMS:	WOOD SHEATHING
CHORDS & COLLECTORS:	LIGHT GAUGE STEEL WALL TOP TRACK
MISC:	BUILDING IS SEISMICALLY SEPERATED FROM EXISTING STRUCTURE

GENERAL NOTES

1. CONSIDER GENERAL NOTES AS APPLYING TO ALL DRAWINGS.
2. DO NOT SCALE DRAWINGS. SCALE SHOWN FOR REFERENCE ONLY.
3. THE CONTRACTOR SHALL REFER TO THE PROJECT SPECIFICATIONS IN CONJUNCTION WITH THE STRUCTURAL DRAWINGS.
4. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF THE STRUCTURAL WORK WITH THE ARCHITECTURAL, CIVIL, AND MEP CONTRACT DOCUMENTS, AS WELL AS ANY OTHER APPLICABLE TRADES. OMISSIONS OR CONFLICTS BETWEEN VARIOUS ELEMENTS OF THE DRAWINGS, NOTES, AND DETAILS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AND RESOLVED PRIOR TO BIDDING AND PROCEEDING WITH THE WORK.
5. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE DESIGN, INSTALLATION, AND REMOVAL OF TEMPORARY BRACING AND CONSTRUCTION SUPPORTS REQUIRED TO COMPLETE THE PROJECT. NO PORTION OF THE STRUCTURE SHALL BE CONSIDERED TO BE SELF SUPPORTING UNTIL THE ENTIRE VERTICAL AND LATERAL LOAD RESISTING SYSTEM IS IN PLACE.
6. THE CONTRACTOR SHALL PROTECT AND SHORE ALL EXCAVATIONS WITH BRACING AND SHORING AS REQUIRED TO MAINTAIN SOIL STABILITY.
7. CONSTRUCT THOSE FEATURES OF THE PROJECT, WHICH MAY NOT BE FULLY SHOWN, IN MANNER SIMILAR TO THAT USED FOR SIMILAR FEATURES.
8. CENTERLINES OF COLUMNS AND FOUNDATIONS COINCIDE WITH GRID LINE INTERSECTIONS, U.N.O.
9. CENTERLINES OF FOUNDATION GRADE BEAMS COINCIDE WITH CENTERLINES OF WALLS, U.N.O.
10. CENTERLINES OF FRAMING MEMBERS COINCIDE WITH COLUMN CENTERLINES, U.N.O.
11. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS SHOWING PROPOSED FOUNDATION CONSTRUCTION JOINT LOCATIONS, DETAILS, AND THE PLACEMENT SEQUENCE FOR THE STRUCTURAL ENGINEER'S APPROVAL PRIOR TO PROCEEDING WITH WORK.
12. NO CONSTRUCTION JOINTS WILL BE PERMITTED IN BEAMS, WALLS, AND SLABS UNLESS SPECIFICALLY SHOWN ON THE DRAWINGS OR APPROVED BY THE ENGINEER PRIOR TO CONSTRUCTION.
13. SPLICES SHALL BE ALLOWED ONLY AT LOCATIONS SPECIFICALLY INDICATED ON THE STRUCTURAL DRAWINGS UNLESS APPROVED OTHERWISE BY THE ENGINEER.
14. SEE ARCHITECTURAL DRAWINGS FOR SIZE AND LOCATION OF OPENINGS. VERIFY SIZE AND LOCATION OF ALL OPENINGS WITH ARCHITECTURAL DRAWINGS AND MECHANICAL DRAWINGS. NOTIFY STRUCTURAL ENGINEER IMMEDIATELY OF ANY DISCREPANCIES TYPICAL, U.N.O.

SHEET INDEX

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IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-123900 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/05/2024

Owner:

BAKERSFIELD CITY SCHOOL DISTRICT

1300 BAKER ST,
BAKERSFIELD, CA 93305

Project Name:

TRANSITIONAL KINDERGARTEN

Project Address:

MLK ELEMENTARY SCHOOL

1100 CITADEL
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integrated designs
by SOMAM, Inc.

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Stamp:

REGISTERED PROFESSIONAL ENGINEER
DUSTIN G. LEE
No. 36623
EXP. 3/31/25
STRUCTURAL
STATE OF CALIFORNIA

Sheet Title:

MATERIALS DATA & PROJECT INFORMATION

Job No.: **5593**

Sheet No.: **S0.01**

Release: DSA SUBMITTAL Date: 01-09-24

TESTING AND SPECIAL INSPECTION

GENERAL

THE OWNER SHALL EMPLOY A SPECIAL INSPECTOR AND PROJECT INSPECTOR [IOR] DURING CONSTRUCTION ON THE FOLLOWING TYPES OF WORK. THE INSPECTIONS NOTED BELOW SHALL BE PERFORMED BY THE SPECIAL INSPECTOR UNLESS NOTED AS "IOR".

SEE THE APPROVED DSA 103 FORM FOR MORE INFORMATION.

SPECIAL INSPECTOR

- THE SPECIAL INSPECTOR SHALL BE A QUALIFIED PERSON WHO SHALL DEMONSTRATE HIS COMPETENCE, TO THE SATISFACTION OF THE DIVISION OF THE STATE ARCHITECT, FOR INSPECTION OF A PARTICULAR TYPE OF CONSTRUCTION OR OPERATION REQUIRING SPECIAL INSPECTION.
- TESTING AND INSPECTIONS WILL BE PERFORMED BY AN INDEPENDENT TESTING LABORATORY SELECTED AND EMPLOYED BY THE DISTRICT AND APPROVED BY THE DIVISION OF THE STATE ARCHITECT (DSA). QUALIFICATION OF A TESTING AGENCY OR LABORATORY WILL BE UNDER THE JURISDICTION OF THE DSA STRUCTURAL SAFETY SECTION (SSS). PROCEDURAL AND ACCEPTANCE CRITERIA ARE SET FORTH IN THE 2022 CALIFORNIA ADMINISTRATIVE CODE (CAC) SEC. 4-333(c) AND 2022 CALIFORNIA BUILDING CODE (CBC) SEC. 1704.2.

DUTIES AND RESPONSIBILITIES OF THE SPECIAL INSPECTOR

- THE SPECIAL INSPECTOR SHALL OBSERVE THE WORK ASSIGNED FOR CONFORMANCE WITH THE APPLICABLE PROJECT DRAWINGS AND SPECIFICATIONS.
- MATERIAL REQUIRED TO BE TESTED WILL BE SELECTED BY THE TESTING LAB OR THE DISTRICT'S PROJECT INSPECTOR AND NOT BY THE CONTRACTOR.
- THE SPECIAL INSPECTOR SHALL FURNISH INSPECTION REPORTS TO THE DIVISION OF THE STATE ARCHITECT, THE DISTRICT OR DISTRICT'S DESIGNATED REPRESENTATIVE, THE ARCHITECT OR PROJECT MANAGER, THE STRUCTURAL ENGINEER OF RECORD, THE CONTRACTOR AND OTHER PERSONS DESIGNATED BY THE DISTRICT OR DISTRICT'S REPRESENTATIVE. ALL DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION, THEN IF UNCORRECTED, TO THE PROPER DESIGN AUTHORITY AND TO THE BUILDING OFFICIAL. TEST REPORTS SHALL BE SIGNED BY A REGISTERED CIVIL ENGINEER LICENSED IN THE STATE OF CALIFORNIA.
- THE SPECIAL INSPECTOR SHALL SUBMIT A FINAL SIGNED VERIFIED REPORT STATING WHETHER THE WORK REQUIRING SPECIAL INSPECTION WAS, TO THE BEST OF THE INSPECTOR'S KNOWLEDGE, IN CONFORMANCE WITH THE PROJECT PLANS AND SPECIFICATIONS AND THE APPLICABLE WORKMANSHIP PROVISIONS OF THE CBC.

PROJECT INSPECTOR (IOR)

- THE DISTRICT MUST PROVIDE FOR AND REQUIRE COMPETENT, ADEQUATE AND CONTINUOUS INSPECTION BY AN INSPECTOR SATISFACTORY TO THE ARCHITECT OR REGISTERED ENGINEER IN GENERAL RESPONSIBLE CHARGE OF OBSERVATION OF THE WORK OF CONSTRUCTION, TO ANY ARCHITECT OR REGISTERED ENGINEER DELEGATED RESPONSIBILITY FOR A PORTION OF THE WORK, AND TO DSA. THE COST OF PROJECT INSPECTION SHALL BE PAID FOR BY THE DISTRICT. AN INSPECTOR SHALL NOT HAVE ANY CURRENT EMPLOYMENT RELATIONSHIP WITH ANY ENTITY THAT IS A CONTRACTING PARTY FOR THE CONSTRUCTION. AN APPROVED PROJECT INSPECTOR MAY BE REMOVED AND REPLACED IF THE WORK PERFORMED IS NOT IN CONFORMANCE WITH ACCEPTED INSPECTION STANDARDS AS DETERMINED BY THE DISTRICT AND THE PROJECT ARCHITECT AND ENGINEER WITH CONCURRENCE OF DSA.

SOILS & FOUNDATIONS

SOILS

- PERIODICALLY INSPECT MATERIALS BELOW FOOTING FOR BEARING CAPACITY.
- PERIODICALLY INSPECT EXCAVATIONS FOR PROPER DEPTH.
- PERIODICALLY PERFORM CLASSIFICATION AND TESTING OF CONTROLLED FILL MATERIALS.
- CONTINUOUSLY VERIFY USE OF PROPER MATERIALS, DENSITIES, AND LIFT THICKNESS DURING PLACEMENT AND COMPACTION OF CONTROLLED FILL.
- PRIOR TO PLACEMENT OF CONTROLLED FILL, OBSERVE SUBGRADE AND VERIFY SITE HAS BEEN PREPARED PROPERLY.

FOUNDATIONS

PRIOR TO THE CONTRACTOR REQUESTING A BUILDING DEPARTMENT AN IOR FOUNDATION INSPECTION, THE SOILS ENGINEER SHALL ADVISE THE BUILDING DEPARTMENT IOR OF THE FOLLOWING IN WRITING:

- THAT THE BUILDING PAD WAS PREPARED IN ACCORDANCE WITH THE SOILS REPORT.
- THAT THE UTILITY TRENCHES HAVE BEEN PROPERLY BACKFILLED AND COMPACTED.
- THAT THE FOUNDATION COMPLY WITH THE SOILS REPORT AND THE APPROVED PLANS.

CONCRETE & REINFORCING

REINFORCING STEEL

- VERIFY THAT MILL CERTIFICATES SHOW REINFORCING STEEL IS IN COMPLIANCE WITH PROJECT SPECIFICATIONS.
- IOR PERIODICALLY INSPECT THE PLACEMENT OF REINFORCING STEEL FOR SHOTCRETE, FOR CONCRETE WHICH IS REQUIRED TO HAVE CONTINUOUS INSPECTION AND FOR MASONRY.
- CONTINUOUSLY INSPECT THE INSTALLATION OF ALL MECHANICAL COUPLING DEVICES.

BOLTS INSTALLED IN CONCRETE

- IOR PERIODICALLY INSPECT INSTALLATION OF BOLTS AND CONTINUOUSLY INSPECT PLACEMENT OF CONCRETE AROUND SUCH BOLTS.

CONCRETE

- IOR CONTINUOUSLY INSPECT THE PLACEMENT OF ALL CONCRETE EXCEPT PERIODIC INSPECTION MAY BE PROVIDED FOR THE PLACEMENT OF CONCRETE FOR FOUNDATIONS WITH f'c EQUAL TO 2500 PSI OR LESS AND NON-STRUCTURAL SLABS ON GRADE.
- SAMPLE CONCRETE: ASTM C172, EXCEPT SLUMP SHALL COMPLY WITH ASTM C94.
- TEST SLUMP: ASTM C143, ONE TEST AT POINT OF TRUCK DISCHARGE FOR 50 CY OR FRACTION THEREOF FOR EACH TYPE OF CONCRETE; ADDITIONAL TESTS REQUIRED WHEN CONCRETE CONSISTENCY SEEMS TO HAVE CHANGED.
- TEST AIR CONTENT: ASTM C173, VOLUMETRIC METHOD FOR LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE, ONE FOR EACH 50 CY PLACED OR FRACTION THEREOF FOR EACH TYPE OF AIR-ENTRAINED CONCRETE.
- TEST CONCRETE TEMPERATURE: TEST HOURLY WHEN AIR TEMPERATURE IS 50 DEGREES F. (10 DEGREES C.) AND BELOW, AND WHEN 85 DEGREES F. (29 DEGREES C.) AND ABOVE; AND EACH TIME A SET OF COMPRESSION TEST SPECIMENS ARE MADE.
- TAKE COMPRESSION TEST SPECIMENS: ASTM C31, TAKE ONE SET OF 3 STANDARD CYLINDERS FOR EACH 50 CY OF CONCRETE OR 2000 SQ. FT. OF SLABS & WALLS OR FRACTION THEREOF FOR EACH TYPE OF CONCRETE TAKEN EACH DAY. MOLD AND STORE CYLINDERS FOR LABORATORY CURED TEST SPECIMENS EXCEPT WHEN FIELD-CURE TEST SPECIMENS ARE REQUIRED.
- TEST COMPRESSIVE STRENGTH: ASTM C39; ONE SPECIMEN TESTED AT 7 DAYS, TWO SPECIMENS TESTED AT 28 DAYS.
- TEST DRYING SHRINKAGE: ASTM C157, TAKE 1 SET OF 3 DRYING SHRINKAGE SAMPLES FOR EACH DAY'S POUR OF SLABS ON GRADE, SUSPENDED SLABS, AND POST-TENSIONED CONCRETE SLABS.

NON-SHRINK GROUT

- TAKE TEST SPECIMENS AND CONTINUOUSLY INSPECT THE PLACEMENT OF NON-SHRINK GROUT.

POST INSTALLED ANCHORS

- **POST-INSTALLED ANCHORS**
- CONTINUOUSLY INSPECT PLACEMENT OF POST-INSTALLED ANCHORS.
- THE SPECIAL INSPECTOR SHALL VERIFY THE FOLLOWING AND RECORD THE INSTALLATION IN THE INSPECTION REPORT:

1. ANCHOR TYPE, SIZE, AND DIMENSIONS.
2. HOLE DIMENSIONS AND CLEANLINESS.
3. ANCHOR SPACING.
4. EDGE DISTANCE.
5. ANCHOR EMBEDMENT.
6. TORQUE VALUE (AS APPLICABLE).
7. ADHESIVE ANCHOR INSTALLER CERTIFICATION (AS APPLICABLE).

- TEST ANCHORS PER THE REQUIREMENTS OF CBC SECTION 1901.3.4 AND ANCHOR'S ICC REPORT AND WITH THE FOLLOWING FREQUENCY:
- 100% FOR STRUCTURAL APPLICATIONS:

EXCEPTIONS:

1. 10% AT SILL PLATE BOLTING.
2. 25% AT INTERFACE DOWELS AT CAST-IN-PLACE CONCRETE OR SHOTCRETE WALL OVERLAYS.
3. SLAB-ON-GRADE COLD JOINT DOWELS WHERE APPROVED BY THE ENGINEER.

- 50% FOR NON-STRUCTURAL APPLICATIONS SUCH AS EQUIPMENT ANCHORAGE (ANCHORS NOT SHOWN ON STRUCTURAL DRAWINGS).

- TESTING OF ANCHORS SHALL BE DONE IN THE PRESENCE OF THE PROJECT INSPECTOR AND A REPORT OF THE TEST RESULTS SHALL BE SUBMITTED TO DSA. IF ANY ANCHOR FAILS TESTING, ALL ANCHORS SHALL BE TESTED UNTIL TWENTY (20) CONSECUTIVE ANCHORS PASS, THEN RESUME THE INITIAL TEST FREQUENCY

TESTING VALUES AS NOTED IN POST-INSTALLED ANCHOR TESTING LOADS ON SHEET S0.02

STRUCTURAL STEEL

STRUCTURAL STEEL AND MISCELLANEOUS IRON

- VERIFY THAT MILL CERTIFICATES SHOW STRUCTURAL STEEL AND MISCELLANEOUS IRON IS IN COMPLIANCE WITH PROJECT SPECIFICATIONS.

WELDING

- VERIFY WELDER CERTIFICATIONS, COMPLIANCE WITH WELDING PROCEDURE SPECIFICATIONS AND PQR (IF APPLICABLE).
- CONTINUOUSLY INSPECT ALL STRUCTURAL WELDING, INCLUDING WELDING OF REINFORCING STEEL.

EXCEPTIONS:

- SINGLE PASS FILLET WELDS NOT EXCEEDING 5/16" MAY HAVE PERIODIC INSPECTION.
- FLOOR AND ROOF DECK WELDING MAY HAVE PERIODIC INSPECTION.
- WELDED STUDS USED FOR DIAPHRAGM OR COMPOSITE CONSTRUCTION MAY HAVE PERIODIC INSPECTION.
- WELDED SHEET STEEL FOR COLD FORMED STEEL FRAMING MAY HAVE PERIODIC INSPECTION.
- WELDED STAIRS AND RAILING SYSTEMS MAY HAVE PERIODIC INSPECTION.

EXCEPTION:

- THE RATE OF TESTING FOR ULTRASONIC WELDS MAY BE REDUCED TO 25% IF THE FAILURE RATE MEETS THE REQUIREMENTS OF AISC 341 APPENDIX Q.

AUTOMATIC END – WELDED STUDS

- THE SPECIAL INSPECTOR SHALL VERIFY THE FOLLOWING WITH THE MANUFACTURER'S RECOMMENDATIONS AND PROJECT SPECIFICATIONS. RECORD THE INSTALLATION IN THE INSPECTION REPORT:

1. STUD TYPE, SIZE, AND CLEARANCES TO EDGES AND ADJACENT STUDS.
2. TYPE OF WELDING EQUIPMENT.
3. WELDER'S QUALIFICATIONS.
4. WELDING PROCEDURE.
5. WELD JOINT PREPARATION.

- PERIODICALLY INSPECT INSTALLATION OF STUDS.
- TEST STUDS PER THE REQUIREMENTS OF AWS D1.1, AISC 360, AND THE STUD'S ICC REPORT. PERFORM TORQUE TEST FOR TYPE A STUDS AND BEND TESTS FOR TYPE B STUDS.
- TEST STUDS WITH THE FOLLOWING FREQUENCY:

1. AT THE BEGINNING OF EACH DAY'S WORK, A MINIMUM OF TWO TEST STUD WELDS SHALL BE MADE WITH THE EQUIPMENT TO BE USED TO METAL WHICH IS THE SAME AS ACTUAL WORK PIECE.
2. AT ANY CHANGE IN WELDING SETUP OR PERSONNEL, RETEST TWO STUDS PRIOR TO PRODUCTION WORK.

LIGHT GAGE METAL FRAMING

- VERIFY THAT MILL CERTIFICATES SHOW STRUCTURAL STEEL AND MISCELLANEOUS IRON USED IN FABRICATION OF LIGHT GAGE METAL FRAMING IS IN COMPLIANCE WITH PROJECT SPECIFICATIONS.

LIGHT GAGE METAL FRAMING SHEATHING DIAPHRAGMS & SHEARWALLS

- PERIODICALLY INSPECT INSTALLATION OF ANY DIAPHRAGMS & SHEARWALLS, PORTION REQUIRING TWO ROW OR THREE ROW FASTENING/SCREWING, DOUBLE SIDED PLYWOOD SHEATHING, OR FASTENING/SCREWING @ 4" OC OR LESS, INCLUDING FASTENING OF PLYWOOD, BOLTING OF ANCHORS & HOLDOWNS, & FASTENING OF STRAPS.

STRUCTURAL OBSERVATION

REQUIRED OBSERVATION BY THE STRUCTURAL ENGINEER OF RECORD

1. FOUNDATION REINFORCING.
2. STEEL ERECTION.
3. ROUGH FRAMING, TRUSSES AND JOISTS.
4. SHEATHING AND NAILING.

CONTRACTOR SHALL NOTIFY ENGINEER A MINIMUM OF 2 WORKING DAYS PRIOR TO THE TIME WHEN HIS PRESENCE IS REQUIRED. PLEASE NOTE THAT THESE OBSERVATIONS ARE INDEPENDENT OF INSPECTIONS REQUIRED BY THE BUILDING DEPARTMENT.

POST-INSTALLED ANCHOR TESTING

TORQUE INSTALLATION REQUIREMENTS - CONCRETE ANCHORS

ANCHOR DIAMETER	HILTI KB-TZ2 (ICC ESR 4266)		SIMPSON STRONG-BOLT 2 (ICC ESR 3037)		POWERS POWER-STUD+ SD2 (ICC ESR 2502)		SIMPSON TITEN HD (ICC ESR 2713)		HILTI KH-EZ (ICC ESR 3027)		POWERS WEDGE-BOLT+ (ICC ESR 2526)	
	MINIMUM NOMINAL EMBED	INSTALL TORQUE (FT-LBS)	MINIMUM NOMINAL EMBED	INSTALL TORQUE (FT-LBS)	MINIMUM NOMINAL EMBED	INSTALL TORQUE (FT-LBS)	MINIMUM NOMINAL EMBED	MAX INSTALL TORQUE (FT-LBS)	MINIMUM NOMINAL EMBED	MAX INSTALL TORQUE (FT-LBS)	MINIMUM NOMINAL EMBED	MAX INSTALL TORQUE (FT-LBS)
1/4"	1 3/4"	4	1 3/4"	4	-	-	2 1/2"	24	2 1/2"	18	1 3/4"	115
3/8"	3"	30	2 7/8"	30	2 3/8"	20	3 1/4"	50	3 1/4"	40	2 1/8"	245
1/2"	3 3/4"	50	3 7/8"	60	3 3/4"	40	4"	65	4 1/4"	45	3 1/2"	300
5/8"	4 1/2"	40	5 1/8"	90	4 7/8"	60	5 1/2"	100	5"	85	4 3/8"	350
3/4"	5 1/2"	110	5 3/4"	150	5 3/4"	110	6 1/4"	150	6 1/4"	95	4 1/4"	400
1"	6 3/8"	185	9 3/4"	230	-	-	-	-	-	-	-	-

ALLOWABLE LOAD AND TESTING REQUIREMENTS FOR EPOXY SET DOWELS IN CONCRETE

ANCHOR DIAMETER	MINIMUM EMBED	ALLOWABLE TENSION (LBS)	TENSION TEST (LBS)	SHEAR TEST
3/8"	2 3/4"	1200	2400	NONE
1/2"	4 1/2"	1900	3800	NONE
5/8"	5"	2500	5000	NONE
3/4"	6 3/4"	3600	7200	NONE
7/8"	7 3/4"	7000	14000	NONE

NOTES:

1. MINIMUM EMBEDMENTS VARY BETWEEN MANUFACTURERS. EMBEDMENTS NOTED ARE MINIMUMS AND SHOULD BE INCREASED AS REQUIRED TO MEET MANUFACTURER'S PUBLISHED MINIMUM EMBEDMENTS.
2. ANCHORS SHOULD BE INSTALLED INTO MEMBERS WITH A MINIMUM THICKNESS AS NOTED IN THE MANUFACTURER'S ICC REPORT.
3. WHERE DRILLED HOLE DEPTH IS WITHIN 2 1/2" OF THE EDGE OF MEMBER, CONTRACTOR SHALL USE ROTARY DRILL.
4. TENSION TESTED ANCHORS SHALL MAINTAIN THE TEST LOAD FOR A MINIMUM OF 15 SECONDS, AND SHALL EXHIBIT NO DISCERNIBLE MOTION DURING THE TEST (SUCH AS LOOSENING OF THE WASHER BELOW THE NUT)
5. TORQUE TESTED ANCHORS SHALL ATTAIN THE SPECIFIED TORQUE WITH ONE-HALF (1/2) TURN OF THE NUT.

ABBREVIATIONS

ABBREVIATIONS

@	AT
ø	DIAMETER
#	NUMBER
AB	ANCHOR BOLT
ACI	AMERICAN CONCRETE INSTITUTE
AESS	ARCHITECTURALLY EXPOSED STRUCTURAL STEEL
ALT	ALTERNATE
APPROX	APPROXIMATE(LY)
ARCH	ARCHITECT(URAL)
BLDG	BUILDING
BLK	BLOCK
BLKG	BLOCKING
BM	BEAM
BN	BOUNDARY NAILING
BOF	BOTTOM OF FOOTING
BOT	BOTTOM
BVC	BEGIN VERTICAL CURVE
C-C	CENTER TO CENTER
CL	CENTERLINE
CF	CUBIC FOOT
CIDH	CAST IN DRILLED HOLE
CIP	CAST IRON PIPE
CJ	CONSTRUCTION JOINT
CJP	COMPLETE JOINT PENETRATION
CLG	CEILING
CLR	CLEAR. CLEARANCE
CMP	CORRUGATED STEEL PIPE
CMU	CONCRETE MASONRY UNIT
COL	COLUMN
CONC	CONCRETE
CONN	CONNECTION
CONST	CONSTRUCTION
CONT	CONTINUOUS
COORD	COORDINATE
CSK	COUNTERSINK
CY	CUBIC YARD
DBL	DOUBLE
DCW	DEMAND CRITICAL WELD
DET	DETAIL
DF	DOUGLAS FIR
DIAG	DIAGONAL
Ø	DIAMETER
DIST	DISTANCE
DL	DEAD LOAD
DN	DOWN
DO	DITTO
DWG	DRAWING
(E)	EXISTING
EA	EACH
EC	END HORIZONTAL CURVE
ECR	END CURB RETURN
EL	ELEVATION
ELEV	ELEVATOR
EMB	EMBANKMENT
EN	EDGE NAILING
EQ	EQUAL
EVC	END VERTICAL CURVE
EW	EACH WAY
EXIST	EXISTING
EXP	EXPRESSWAY
FBC	FRAMED BEAM CONNECTION
FG	FINISHED GRADE
FIN	FINISH(ED)
FL	FLOW LINE
FND	FOUNDATION
FN	FIELD NAILING
FOC	FACE OF CONCRETE
FOHC	FREE OF HEART CENTER
FOM	FACE OF MASONRY
FOS	FACE OF STUD(S)
FP	FULL PENETRATION
FS	FAR SIDE
FTG	FOOTING
Ga	GAUGE
GALV	GALVANIZED
GLB	GLUE LAMINATED BEAM
H or HT	HEIGHT
HDR	HEADER
HEX	HEXAGONAL
HGR	HANGER
HORIZ	HORIZONTAL
HS	HIGH STRENGTH
HSB	HIGH STRENGTH BOLT
HSS	HOLLOW STRUCTURAL SECTION
ID	INSIDE DIAMETER
INSP	INSPECTION/INSPECTOR
INSUL	INSULATION
JT	JOINT
KIPS	ONE THOUSAND POUNDS
LBS	POUNDS
LF	LINEAR FOOT
LGS	LIGHT GAUGE STEEL
LL	LIVE LOAD
LLBB	LONG LEGS BACK TO BACK
LLH	LONG LEG HORIZONTAL
LLV	LONG LEG VERTICAL
LOC	LOCATION
LOL	LAYOUT LINE
LONGIT	LONGITUDINAL
LS	LAG SCREW(S)
LT	LEFT
LW	LIGHT WEIGHT
MAX	MAXIMUM
MB	MACHINE BOLT(S)
MECH	MECHANICAL
MFR	MANUFACTURER
MIN	MINIMUM, MINUTES
MISC	MISCELLANEOUS
MOD	MODIFIED OR MODIFY
(N)	NEW
NIC	NOT IN CONTRACT
No.	NUMBER
Ø	NOMINAL DIAMETER
NOM	NOMINAL
NS	NEAR SIDE
NTS	NOT TO SCALE
O.C.	ON CENTER
OD	OUTSIDE DIAMETER
OG	ORIGINAL GROUND
OH	OPPOSITE HAND
OPP	OPPOSITE
OWSJ	OPEN WEB STEEL JOIST
PL	STEEL PLATE
PC	POINT OF CURVATURE
PCC	POINT OF COMPOUND CURVE OR PORTLAND CEMENT CONCRETE
PCP	PERFORATED CONCRETE PIPE
PCVC	POINT OF COMPOUND VERTICAL CURVE
PDF	POWDER DRIVEN FASTENER
PG	PROFILE GRADE
PI	POINT OF INTERSECTION
PJP	PARTIAL JOINT PENETRATION
P/L	PROPERTY LINE
PL	PLATE
PLY	PLYWOOD
POC	POINT ON HORIZONTAL CURVE
POT	POINT ON TANGENT
POVC	POINT ON VERTICAL CURVE
PRC	POINT OF REVERSE CURVE
PRVC	POINT OF REVERSE VERTICAL CURVE
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PT	POINT OR POST TENSION
PTDF	PRESSURE TREATED DOUGLAS FIR
PVC	POLYVINYL CHLORIDE
RAD or R	RADIUS
RCP	REINFORCED CONCRETE PIPE
REINF	REINFORCED, REINFORCING
REQ'D	REQUIRED
REV	REVISION
RS	ROUGH SAWN
RT	RIGHT
RW	RETAINING WALL
RWD	REDWOOD
R/W	RIGHT OF WAY
SAD	SEE ARCHITECTURAL DRAWINGS
SCHED	SCHEDULE
SEC	SECTION
SHT	SHEET
SHTG	SHEATHING
SIM	SIMILAR
SLRS	SEISMIC LOAD RESISTING SYSTEM
SM	SHEET STEEL
SMS	SHEET STEEL SCREW
SPEC(S)	SPECIFICATION(S)
SQ	SQUARE
SQFT	SQUARE FOOT
SQYD	SQUARE YARD
STAG	STAGGERED
STD	STANDARD
STL	STEEL
STRUCT	STRUCTURAL
STS	SELF TAPPING SCREW
SYM	SYMMETRICAL
T&G	TONGUE AND GROOVE
TBR	TO BE REMOVED
TEMP	TEMPORARY
TO	TOP OF
TOF	TOP OF FOOTING
TOP	TOP OF PLATE
TOS	TOP OF SLAB OR STEEL
TOW	TOP OF WALL
TRANS	TRANSVERSE
TYP	TYPICAL
U.N.O.	UNLESS NOTED OTHERWISE
VC	VERTICAL CURVE
VERT	VERTICAL
W/	WITH
WF	WIDE FLANGE
WP	WATERPROOF or WORKPOINT
WT	WEIGHT
WWF	WELDED WIRE FABRIC

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-123900 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/05/2024

Owner:

BAKERSFIELD CITY SCHOOL DISTRICT

1300 BAKER ST,
BAKERSFIELD, CA 93305

Project Name:

TRANSITIONAL KINDERGARTEN

Project Address:

MLK ELEMENTARY SCHOOL

1100 CITADEL
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by SOMAM, Inc.

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EXP. 3/31/25
STRUCTURAL
STATE OF CALIFORNIA

Sheet Title:

TESTING & SPECIAL INSPECTION

Job No.: **5593**

Sheet No.: **S0.02**

Release: DSA SUBMITTAL Date: 01-09-24

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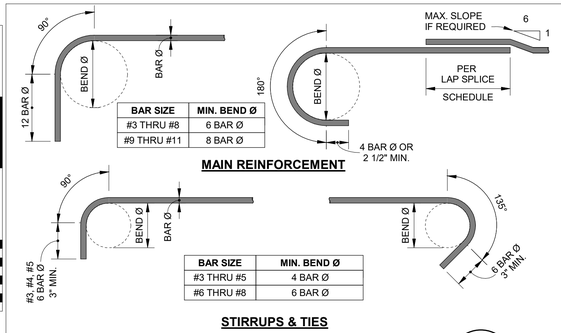


BAR SIZE	MIN. BEND Ø
#3 THRU #8	6 BAR Ø
#9 THRU #11	8 BAR Ø

MAIN REINFORCEMENT

BAR SIZE	MIN. BEND Ø
#3 THRU #5	4 BAR Ø
#6 THRU #8	6 BAR Ø

STIRRUPS & TIES

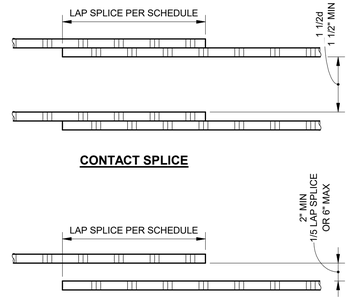
REINFORCING BAR HOOKS

NO SCALE

1 S1.01

MINIMUM LAP SPLICE SCHEDULE			
BAR SIZE	POSITION	LAP SPLICE LENGTH IN INCHES F'c ≤ 3500 PSI	
		CLASS A	CLASS B
#3	TOP	24	28
	BOTTOM	24	24
#4	TOP	29	38
	BOTTOM	24	29
#5	TOP	36	47
	BOTTOM	28	36
#6	TOP	43	56
	BOTTOM	33	43

NOTES:
1. LAP SPLICE LOCATIONS SHALL BE APPROVED BY THE ENGINEER.
2. LAP SPLICES SHALL BE CONTACT (CLASS B) FOR CAST-IN-PLACE CONCRETE UNLESS NOTED OTHERWISE.
3. TOP BARS ARE HORIZONTAL BARS WITH 12 INCHES OR MORE OF FRESH CONCRETE BELOW THE BAR.
4. WHEN TWO BARS OF DIFFERENT SIZE ARE SPLICED, USE THE LARGER LAP LENGTH.
5. STAGGER LAP SPLICES WHERE POSSIBLE. WHERE CLASS A SPLICES ARE CALLED OUT ON THE DRAWINGS, STAGGER LAP SPLICES 24 INCHES FOR ADJACENT BARS.
6. LAP SPLICES NOTED ARE FOR NORMAL WEIGHT CONCRETE. LAP SPLICE LENGTHS SHALL BE MULTIPLIED BY 1.3 FOR LIGHTWEIGHT CONCRETE.
7. NO SPLICES ARE ALLOWED FOR #14 AND #18 REINFORCEMENT.
8. BAR DEVELOPMENT LENGTHS EQUAL CLASS A LAP SPLICE LENGTHS.
9. ENTIRE BUNDLED BARS SHALL NOT BE LAP SPLICED. LAP SPLICES OF INDIVIDUAL BARS WITHIN THE BUNDLE SHALL NOT OVERLAP.
10. LAP SPLICE LENGTHS ARE BASED ON THE ASSUMPTION THAT BARS ARE SPACED AT 6" OC MIN WITH 1.5" OF CLEAR COVER.



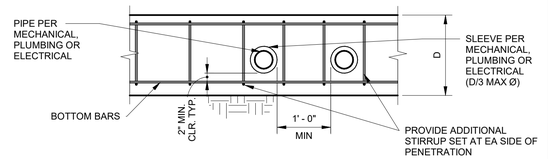
CONTACT SPLICE

NON - CONTACT SPLICE

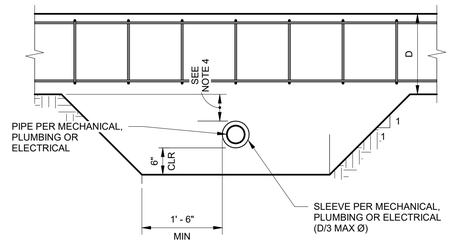
LAP SPLICE SCHEDULE FOR CONCRETE

NO SCALE

2 S1.01



CLEAR OF TOP & BOTTOM REINFORCING



BELOW BOTTOM REINFORCING

NOTES:
1. SLEEVE ID 2" LARGER THAN PIPE OD OR BELL OD.
2. SEAL VOID BETWEEN PIPE AND SLEEVE WITH ELASTIC WATERPROOF MATERIAL, TYP.
3. DETAIL APPLICABLE TO MAXIMUM 8"Ø SLEEVE.
4. 4" MIN. NO FTG EXTENSION REQ'D FOR PIPE DEEPER THAN 12" BELOW FTG (SLEEVE STILL REQ'D).
5. WHERE PENETRATION CONFLICTS WITH REBAR TIE, OMIT TIE & PROVIDE 1 ADDITIONAL TIE EACH SIDE OF SLEEVE.

FOOTING PENETRATIONS

NO SCALE

6 S1.01

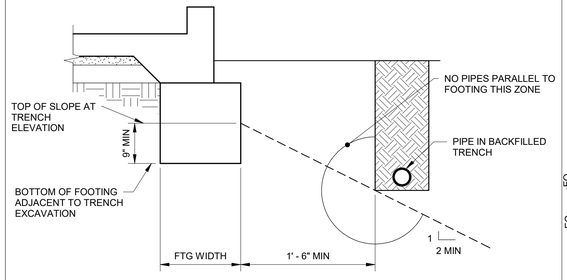
MINIMUM CONCRETE COVER SCHEDULE	
ELEMENT	CLEAR COVER
CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH	3"
CONCRETE EXPOSED TO EARTH OR WEATHER: #5 AND SMALLER #6 AND LARGER	 1 1/2" 2"
CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND: SLABS, WALLS & JOISTS: #11 AND SMALLER #14 AND #18 BEAMS & COLUMNS PRIMARY REINFORCEMENT, TIES, STIRRUPS, & SPIRALS SHELLS & FOLDED PLATE MEMBERS #5 AND SMALLER #6 AND LARGER	 3/4" 1 1/2" 1 1/2" 1/2" 3/4"

NOTES:
1. COVERS NOTED SHALL BE USED UNLESS NOTED OTHERWISE ON THE CONTRACT DOCUMENTS.
2. COVERS NOTED ARE FOR CAST-IN-PLACE, NON-PRESTRESSED MEMBERS.
3. MINIMUM CLEAR COVER FOR BUNDLED BARS SHALL BE THE LESSER OF THE EQUIVALENT DIAMETER OF THE BUNDLE AND 2".

MINIMUM CONCRETE COVER SCHEDULE

NO SCALE

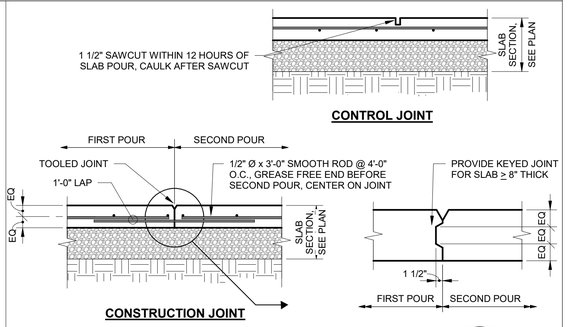
3 S1.01



EXCAVATION PARALLEL TO FTG

NO SCALE

4 S1.01



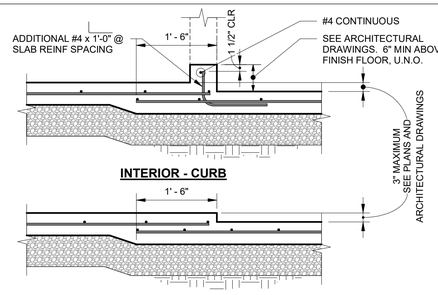
CONTROL JOINT

CONSTRUCTION JOINT

SLAB JOINT

NO SCALE

5 S1.01



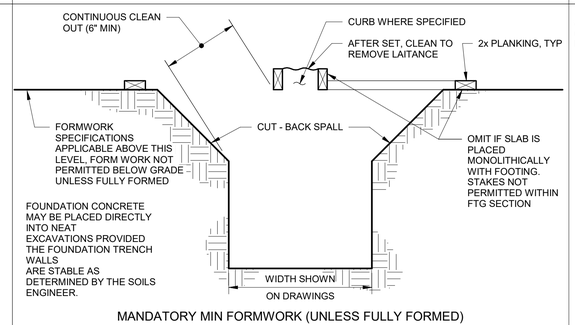
INTERIOR - CURB

INTERIOR - NO CURB

SLAB DEPRESSION

NO SCALE

7 S1.01

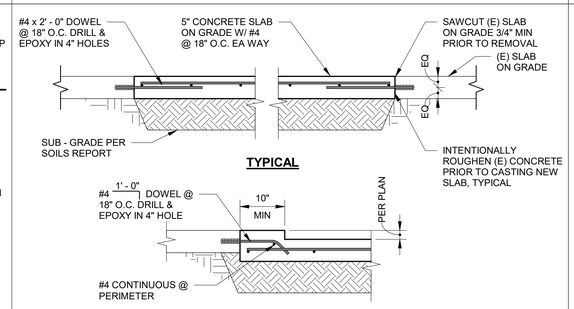


MANDATORY MIN FORMWORK (UNLESS FULLY FORMED)

FORMING DETAIL

NO SCALE

8 S1.01



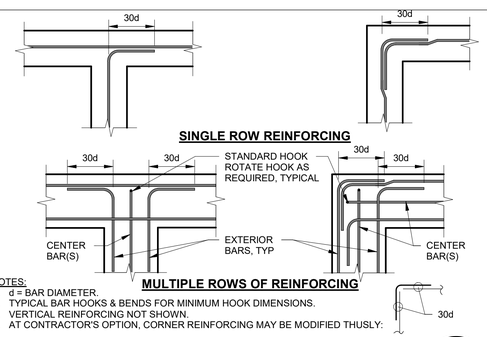
TYPICAL

SECTION AT SLAB DEPRESSION

SLAB INFILL

3/4" = 1'-0"

9 S1.01

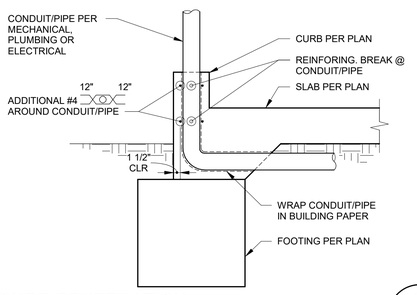


NOTES:
1. d = BAR DIAMETER.
2. TYPICAL BAR HOOKS & BENDS FOR MINIMUM HOOK DIMENSIONS.
3. VERTICAL REINFORCING NOT SHOWN.
4. AT CONTRACTOR'S OPTION, CORNER REINFORCING MAY BE MODIFIED THUSLY:

FOOTING, WALL & CURB INTERSECTIONS

NO SCALE

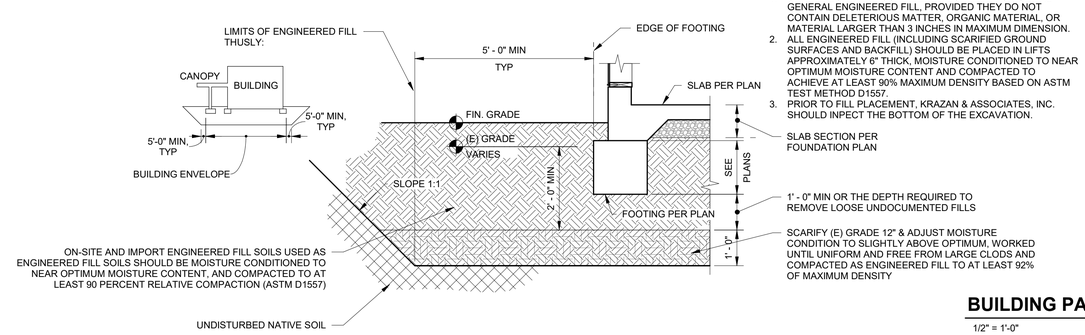
10 S1.01



CURB PENETRATION

NO SCALE

11 S1.01



NOTES:
1. ON-SITE SOILS ARE CONSIDERED SUITABLE FOR USE AS GENERAL ENGINEERED FILL, PROVIDED THEY DO NOT CONTAIN DELETERIOUS MATTER, ORGANIC MATERIAL, OR MATERIAL LARGER THAN 3 INCHES IN MAXIMUM DIMENSION.
2. ALL ENGINEERED FILL (INCLUDING SCARIFIED GROUND SURFACES AND BACKFILL) SHOULD BE PLACED IN LIFTS APPROXIMATELY 6" THICK, MOISTURE CONDITIONED TO NEAR OPTIMUM MOISTURE CONTENT AND COMPACTED TO ACHIEVE AT LEAST 90% MAXIMUM DENSITY BASED ON ASTM TEST METHOD D1557.
3. PRIOR TO FILL PLACEMENT, KRAZAN & ASSOCIATES, INC. SHOULD INPECT THE BOTTOM OF THE EXCAVATION.

SLAB SECTION PER FOUNDATION PLAN

1' - 0" MIN OR THE DEPTH REQUIRED TO REMOVE LOOSE UNDOCUMENTED FILLS

SCARIFY (E) GRADE 12" & ADJUST MOISTURE CONDITION TO SLIGHTLY ABOVE OPTIMUM, WORKED UNTIL UNIFORM AND FREE FROM LARGE CLODS AND COMPACTED AS ENGINEERED FILL TO AT LEAST 92% OF MAXIMUM DENSITY

BUILDING PAD PREPARATION

1/2" = 1'-0"

12 S1.01

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DATE: 08/05/2024

Owner:

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1300 BAKER ST,
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Project Name:

TRANSITIONAL KINDERGARTEN

Project Address:

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STATE OF CALIFORNIA

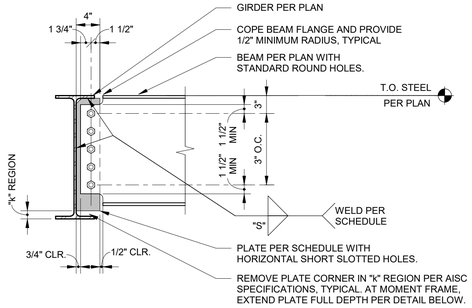
Sheet Title:

TYPICAL DETAILS No. 1

Job No.: **5593**

Sheet No.: **S1.01**

Release: DSA SUBMITTAL Date: 01-09-24



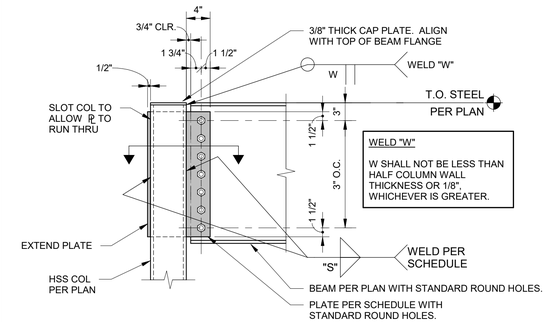
CONNECTION SCHEDULE				
BEAM SIZE	PLATE (3)		WELD SIZE "S"	BOLTS (2)
	MIN. DEPTH	THICKNESS		NO. & SIZE (1,4)
W8x, C8x	6"	3/8"	5/16	(2) 3/4"Ø

NOTES:
1. FOR SINGLE COLUMN OF BOLTS, UNLESS NOTED OTHERWISE.
2. ALL BOLTS SHALL BE A307 AND ORIENTED IN THE SAME DIRECTION, UNLESS NOTED OTHERWISE.
3. STEEL PLATE SHALL BE ASTM A36, UNLESS NOTED OTHERWISE.
4. COPE FLANGES OR LOCATE TAB PLATE TO BE 1/16" MIN. CLEAR OF "K" PER AISC SPECIFICATIONS.

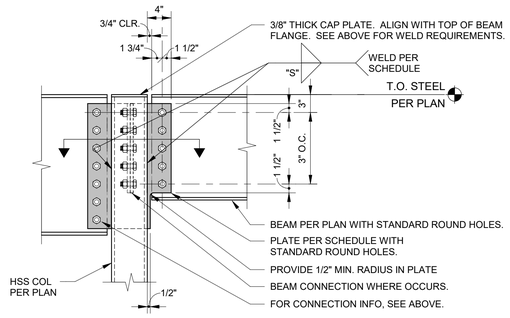
BEAM CONNECTION

NO SCALE

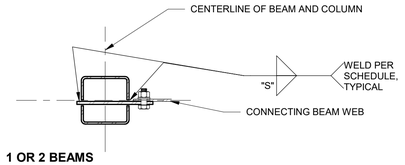
1 S1.02



WIDE FLANGE BEAM TO HSS/PIPE COLUMN - ONE SIDE



WIDE FLANGE BEAM TO HSS/PIPE COLUMN - EACH SIDE



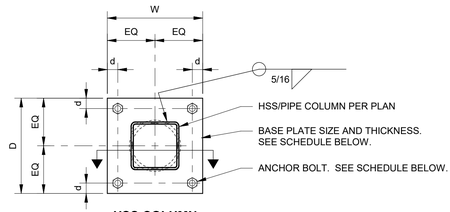
1 OR 2 BEAMS

SECTION - MULTIPLE BEAM TO COLUMN

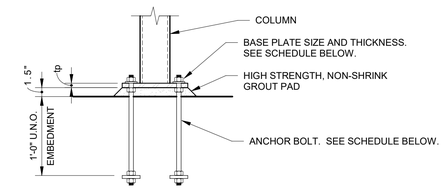
BEAM TO HSS/PIPE COLUMN

NO SCALE

2 S1.02



HSS COLUMN



SECTION VIEW

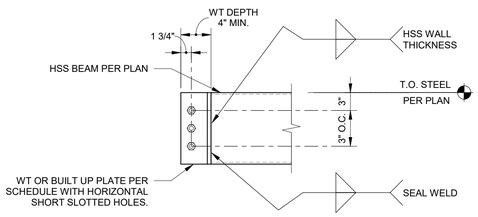
STEEL COLUMN PLATE SCHEDULE (2)						
COLUMN	BASE PLATE					ANCHOR BOLT (1)
	D	W	tp	d	GRADE	
HSS4x	10"	10"	3/4"	1 1/2"	A36 (36KSI)	(4) 3/4"Ø
HSS5x	11"	11"	3/4"	1 1/2"	A36 (36KSI)	(4) 3/4"Ø
HSS6x	12"	12"	3/4"	1 1/2"	A36 (36KSI)	(4) 3/4"Ø

NOTES:
1. FOR ADDITIONAL ANCHOR BOLT REQUIRMENTS, SEE DETAIL 6/S1.02
2. ALL BASE PLATE SHALL CONFORM TO THESE REQUIREMENTS UNLESS OTHERWISE NOTED.

BASE PLATE DETAIL

NO SCALE

3 S1.02



COLUMN CONNECTION

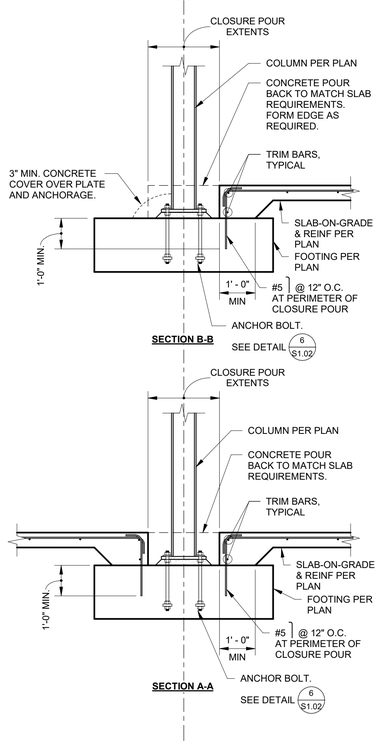
CONNECTION SCHEDULE			
HSS WIDTH	WT OPTION	BUILT UP PLATE OPTION (2) (4)	
	SECTION	TAB PLATE	END PLATE
W ≤ 4"	WT4x14	3/8"	1/2"
4" < W ≤ 6"	WT4x20	3/8"	1/2"
6" < W ≤ 8"	WT5x27	3/8"	1/2"
W > 8"	-	1/2"	1/2"

NOTES:
1. FOR BOLTING REQUIREMENTS, REFER TO DETAIL 1/S1.02
2. STEEL PLATE SHALL BE ASTM A36, UNLESS NOTED OTHERWISE.
3. CENTER TAB PLATE ON END PLATE. PROVIDE 5/16" FILLET WELD FROM TAB PLATE TO END PLATE, EACH SIDE.
4. REFER TO THE FOLLOWING DETAILS FOR ADDITIONAL CONNECTION INFORMATION:
   A. FOR BEAM CONNECTION, SEE 1/S1.02
   B. FOR HSS COLUMN CONNECTION, SEE 2/S1.02

BEAM CONNECTION

NO SCALE

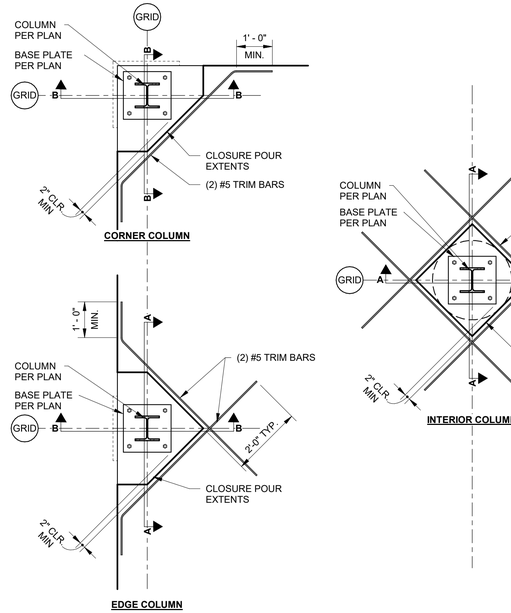
4 S1.02

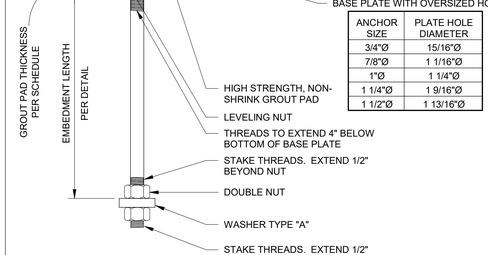


CLOSURE POUR DETAIL

1/2" = 1'-0"

5 S1.02





ANCHOR SIZE	PLATE HOLE DIAMETER
3/4"Ø	15/16"Ø
7/8"Ø	1 1/16"Ø
1"Ø	1 1/4"Ø
1 1/4"Ø	1 9/16"Ø
1 1/2"Ø	1 13/16"Ø

ANCHOR ROD		WASHER [1]		HEX NUT	GROUT PAD THICKNESS
SIZE	MATERIAL	TYPE	SIZE		
3/4"Ø	F1554 GRADE 36	A	3"x1/2"x0'-3" PLATE W/ 13/16"Ø HOLE CENTERED	ASTM A563	1.5"
		B (2)	2"x1/4" PLATE* W/ 13/16"Ø HOLE CENTERED		
7/8"Ø	F1554 GRADE 36	A	3"x3/4"x0'-3" PLATE W/ 15/16"Ø HOLE CENTERED	ASTM A563	1.5"
		B (2)	2 1/2"x5/16" PLATE* W/ 15/16"Ø HOLE CENTERED		
1"Ø	F1554 GRADE 36	A	3"x3/4"x0'-3" PLATE W/ 1 1/16"Ø HOLE CENTERED	ASTM A563	1.5"
		B (2)	3"x3/8" PLATE* W/ 1 1/16"Ø HOLE CENTERED		

1. CIRCULAR OR SQUARE WASHERS MEETING THE WASHER SIZE ARE ACCEPTABLE.

ANCHOR BOLT

1 1/2" = 1'-0"

6 S1.02

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Sheet Title:

TYPICAL DETAILS No. 2

Job No.:

5593

Sheet No.:

S1.02

Release: DSA SUBMITTAL Date: 01-09-24

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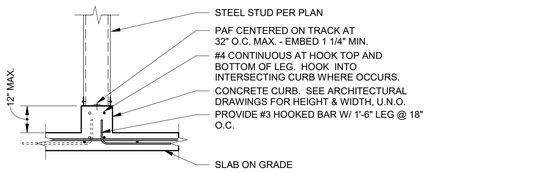
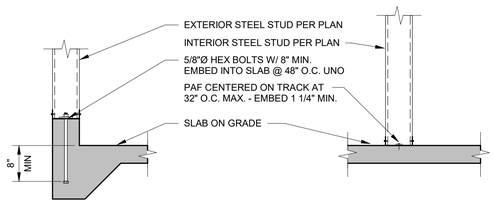


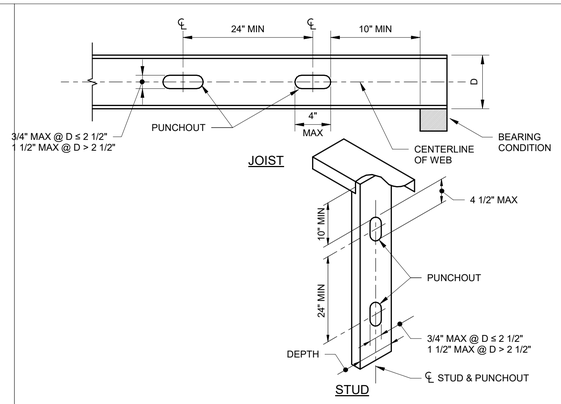
INTERIOR NON-BEARING & NON-SHEAR WALL



EXTERIOR & BEARING WALL | **INTERIOR NON-BEARING & NON-SHEAR WALL**

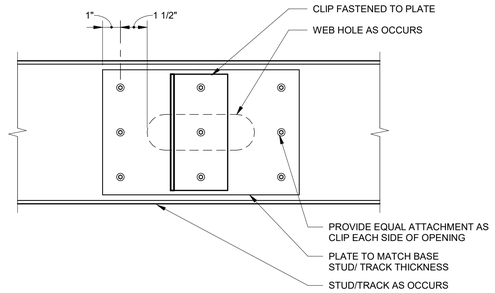
SILL CONNECTION - SLAB ON GRADE — 1 / S1.03

NO SCALE



STUD PENETRATION DETAIL — 2 / S1.03

NO SCALE



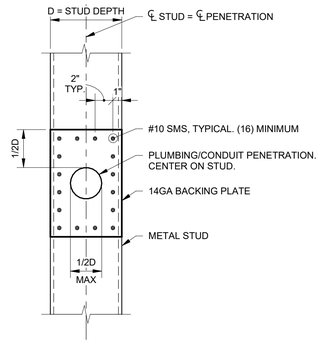
REINFORCING PLATE DETAIL — 3 / S1.03

NO SCALE

NOTE:

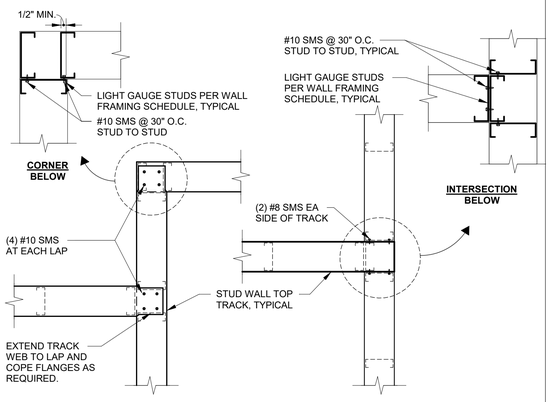
PROVIDE REINFORCING PLATE AT HOLES THAT EXCEED PUNCHOUT SIZE & SPACING.

SEE DETAIL 2 / S1.03



STUD PENETRATION DETAIL — 4 / S1.03

NO SCALE



INTERSECTION WITH TRACKS AT THE SAME ELEVATION | **INTERSECTION WITH TRACKS AT DIFFERENT ELEVATIONS**

CORNER/INTERSECTION FRAMING — 5 / S1.03

1" = 1'-0"

WALL FRAMING SCHEDULE (14)

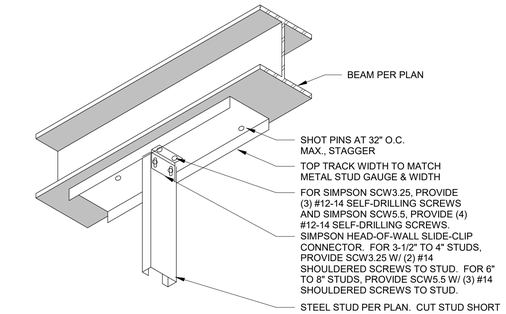
LOCATION	SPAN LENGTH	WALL	WALL STUDS	BOX HEADER(15)		JAMB/TRIMMER	OPENING SILL	NO. #10 SMS AT HEADER ATTACHMENT
				DBL. JOIST	TRACK			
EXTERIOR & BEARING WALLS	0'-0" TO 4'-0"	6" STUD	600S162-43 @ 16" O.C.	600S162-43	600T150-43	(2) 600S162-43	(2) 600S162-43	(12)
	4'-1" TO 8'-0"	6" STUD	600S162-43 @ 16" O.C.	600S162-68	600T150-54	(2) 600S162-54	(2) 600S162-43	(12)
	8'-1" TO 14'-0"	6" STUD	600S162-43 @ 16" O.C.	1000S250-97	600T200-68	(2) 600S200-68	(2) 600S162-54	(16)
INTERIOR (NON BEARING AND NON SHEAR WALLS)	0'-0" TO 4'-0"	6" STUD	600S162-33 @ 24" O.C.	600S162-33	600T150-33	(2) 600S162-43	600S162-43	(8)
	4'-1" TO 8'-0"	6" STUD	600S162-33 @ 24" O.C.	600S162-43	600T150-43	(2) 600S162-54	600S162-43	(8)
	8'-1" TO 14'-0"	6" STUD	600S162-33 @ 24" O.C.	600S200-68	600T200-54	(2) 600S200-68	600S162-54	(8)

NOTES:

1. ALL BEARING & NON-BEARING STEEL STUD WALLS SHALL BE PER WALL FRAMING SCHEDULE UNLESS NOTED OTHERWISE. FOR WALL TYPE AND LOCATION SEE ARCHITECTURAL DRAWINGS.
2. ALL SECTIONS SHALL BE MANUFACTURED IN ACCORDANCE WITH THE LATEST A.I.S.I. SPECIFICATION AND MEET THE FOLLOWING THICKNESS REQUIREMENTS:

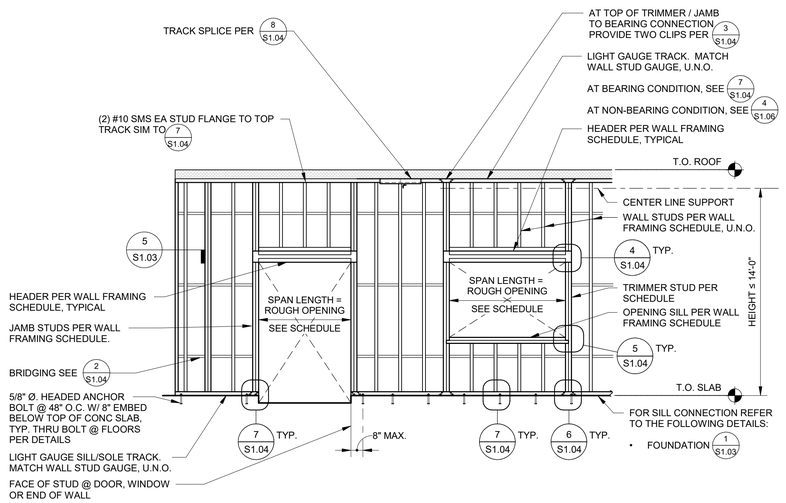
MILS/GAUGE SCHEDULE		
MILS	MINIMUM THICKNESS	GAUGE
33	0.0329"	20
43	0.0428"	18
54	0.0538"	16
68	0.0677"	14
97	0.0966"	12

3. BENT, KINKED, DISTORTED, OR DAMAGED SECTIONS SHALL NOT BE USED.
4. STUDS MAY HAVE FACTORY WEB PUNCHOUTS U.N.O. AT 24" O.C. ALONG CENTERLINE OF WEB WITH A MAXIMUM WIDTH = HALF THE MEMBER DEPTH (d/2) OR 2 1/2" WHICHEVER IS LESS, AND A MAXIMUM LENGTH = 4 1/2". PUNCHOUTS SHALL NOT BE CLOSER THAN 10" FROM SECTION ENDS. SEE ARCHITECTURAL DRAWINGS FOR UNPUNCHED STUD REQUIREMENTS AT ACOUSTICAL WALLS.
5. ALL STUDS AND JAMBS SHALL EXTEND FULL-HEIGHT (SUPPORT TO SUPPORT).
6. FOR SIZES OF OPENINGS AND ELEVATION TO BOTTOM/TOP OF OPENINGS, SEE ARCHITECTURAL PLANS
7. ALL JAMBS, HEADERS AND WINDOW SILLS SHALL BE AS NOTED IN SCHEDULE. TOP OF WALL TRACK AND BOTTOM OF WALL TRACK SHALL MATCH WALL STUD GAUGE WITH 1 1/2" MINIMUM FLANGE.
8. PROVIDE BRIDGING PER DETAIL 2 / S1.04
9. ALL PARAPETS SHALL BE CAPPED WITH A LIGHT GAUGE TRACK MATCHING STUD GAUGE AND THICKNESS.
10. WHERE NON-BEARING WALLS EXTEND TO STRUCTURE, SEE 4 / S1.06
11. ALL WELDS SHALL BE 1/8" " FILLET MAXIMUM. FOR MATERIALS THINNER THAN 0.15", EFFECTIVE THROAT SHALL NOT BE LESS THAN THINNEST MATERIAL. WELD IN ACCORDANCE WITH "STRUCTURAL WELDING CODE - SHEET STEEL" AWS D1.3.
12. SCREWS SHALL BE THREAD-FORMING OR THREAD-CUTTING, WITH OR WITHOUT A SELF DRILLING POINT. SCREWS SHALL BE INSTALLED AND TIGHTENED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATION. MINIMUM SPACING IS THREE SCREW DIAMETERS. A MINIMUM OF (3) THREADS SHALL BE VISIBLE BEYOND THE BACK OF THE MEMBER.
13. USE LOW PROFILE HEAD SCREWS AT ALL LOCATIONS THAT HAVE GYPSUM BOARD FINISH.
14. USE UNPUNCHED STUDS FOR ALL BOX HEADERS AND JAMB STUDS.
15. WALL STUDS LISTED IN THE WALL FRAMING SCHEDULE SHALL BE USED, UNLESS NOTED OTHERWISE. SEE PLANS AND SPECIFIC DETAILS FOR ADDITIONAL REQUIREMENTS.
16. FOR ADDITIONAL STUD REQUIREMENTS, AND MINIMUM PROPERTIES, SEE 9 / S1.04
17. FOR STUD PENETRATIONS, SEE DETAILS 4 / S1.03 & 2 / S1.03
18. WHERE CLIP ALIGNS WITH STUD KNOCKOUT, REINFORCE PER 3 / S1.03



NON-BEARING WALL AT SLOPED BEAM — 6 / S1.03

NO SCALE



STEEL STUD WALL — 7 / S1.03

NO SCALE

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Sheet Title:

TYPICAL DETAILS No. 3

Job No.: **5593**

Sheet No.: **S1.03**

Release: DSA SUBMITTAL Date: 01-09-24

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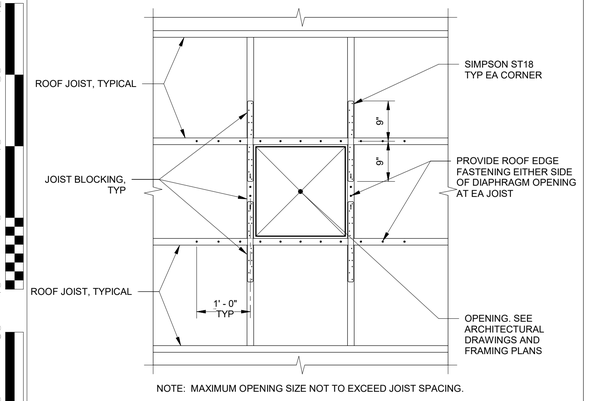
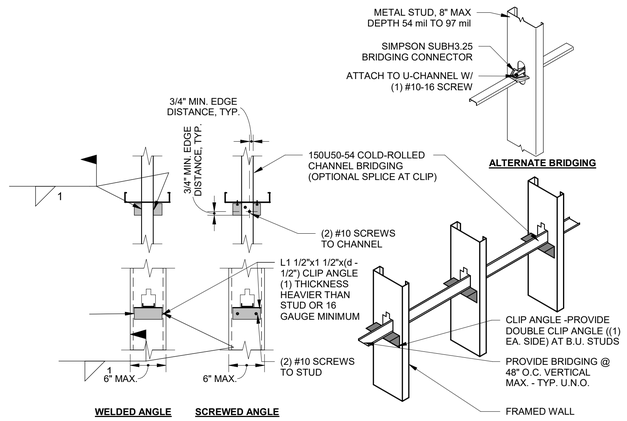


NOTE: MAXIMUM OPENING SIZE NOT TO EXCEED JOIST SPACING.

SMALL ROOF OPENING

3/4" = 1'-0"

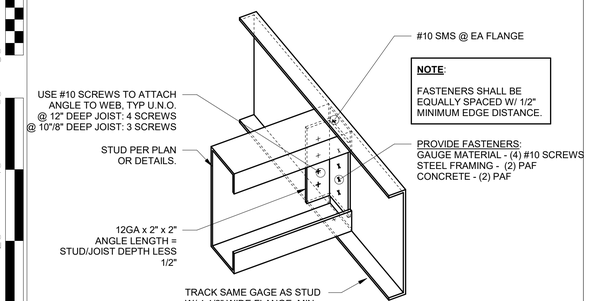
1 S1.04



BRIDGING - ALTERNATE

NO SCALE

2 S1.04



NOTE:

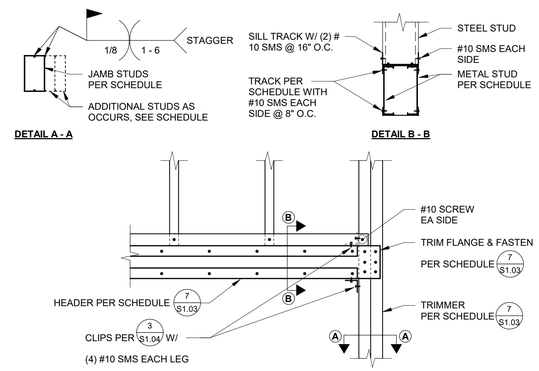
FASTENERS SHALL BE EQUALLY SPACED W/ 1/2" MINIMUM EDGE DISTANCE.

NOTE: SEE (3 / S1.03) FOR REINFORCING PLATE WHEN CLIP ALIGNS W/ STUD PUNCHOUT.

CLIP DETAIL

NO SCALE

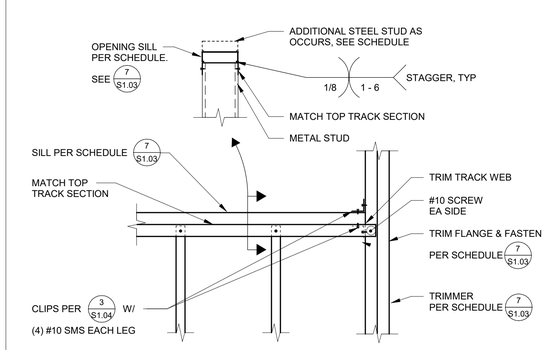
3 S1.04



HEADER ATTACHMENT

NO SCALE

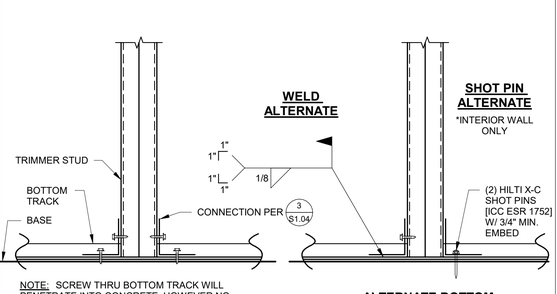
4 S1.04



SILL DETAIL

NO SCALE

5 S1.04



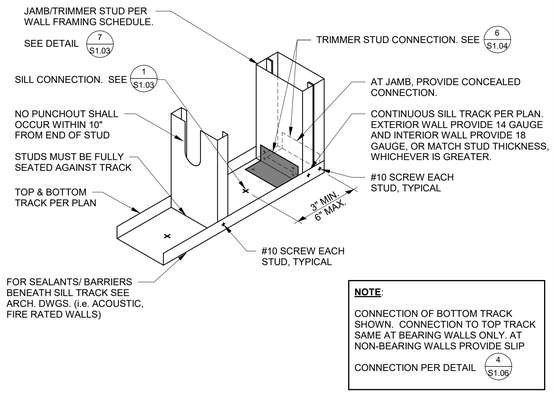
NOTE: SCREW THRU BOTTOM TRACK WILL PENETRATE INTO CONCRETE; HOWEVER NO CONNECTION TO CONCRETE IS REQD. SCREW SHALL PENETRATE MIN (3) THREADS INTO OUTER MOST TRACK

ALTERNATE BOTTOM TRACK CONNECTION

TRIMMER STUD AT BOTTOM TRACK

NO SCALE

6 S1.04



NOTE:

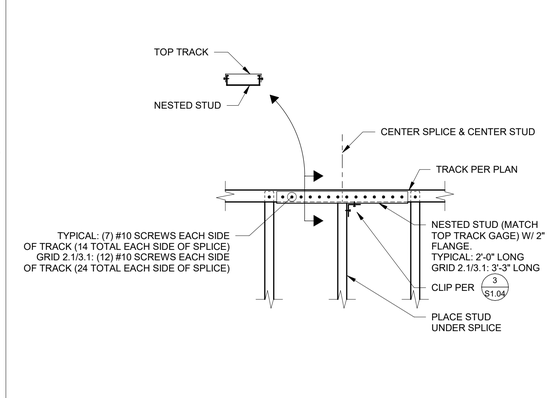
CONNECTION OF BOTTOM TRACK SHOWN. CONNECTION TO TOP TRACK SAME AT BEARING WALLS ONLY. AT NON-BEARING WALLS PROVIDE SLIP

CONNECTION PER DETAIL (4 / S1.06)

STUD DETAIL

NO SCALE

7 S1.04



TRACK SPLICE DETAIL

NO SCALE

8 S1.04

LIGHT GAGE STEEL PROPERTIES

TYPE	STUD MARK	DIMENSIONS IN INCHES		MINIMUM SECTION PROPERTIES		Fy (ksi)
		L	B	Ix in^4	Sx in^3	
LIGHT GAUGE STEEL STUDS						
1	362S162-33	0.500	1.625	0.551	0.304	33
	362S162-43	0.500	1.625	0.710	0.392	33
	362S162-54	0.500	1.625	0.873	0.481	50
	600S162-33	0.500	1.625	1.793	0.598	33
	600S162-43	0.500	1.625	2.316	0.772	33
	600S162-54	0.500	1.625	2.860	0.953	50
	600S162-68	0.500	1.625	3.525	1.175	50
	800S162-33 *	0.500	1.625	3.582	0.896	33
	800S162-43	0.500	1.625	4.633	1.158	33
	800S162-54	0.500	1.625	5.736	1.434	50
	800S162-68	0.500	1.625	7.089	1.772	50
	800S200-33 *	0.625	2.000	4.096	1.024	33
	800S200-43	0.625	2.000	5.302	1.325	33
	800S200-54	0.625	2.000	6.573	1.643	50
	800S200-68	0.625	2.000	8.140	2.035	50
	1000S162-43 *	0.500	1.625	8.025	1.605	33
	1000S162-54	0.500	1.625	9.950	1.990	50
	1000S162-68	0.500	1.625	12.325	2.465	50
	1000S200-43 *	0.625	2.000	9.085	1.817	33
	1000S200-54	0.625	2.000	11.278	2.256	50
	1000S200-68	0.625	2.000	13.994	2.799	50
	1000S250-43 *	0.625	2.500	10.203	2.041	33
	1000S250-54	0.625	2.500	12.677	2.535	50
	1000S250-68	0.625	2.500	15.751	3.150	50
	1200S162-54 *	0.500	1.625	15.730	2.622	50
	1200S162-68	0.500	1.625	19.518	3.253	50
	1200S200-54 *	0.625	2.000	17.662	2.944	50
	1200S200-68	0.625	2.000	21.947	3.658	50
	1200S250-54 *	0.625	2.500	19.681	3.280	50
	1200S250-68	0.625	2.500	24.484	4.081	50
	1200S250-97	0.625	2.500	34.016	5.669	50
	1200S300-54 *	0.625	3.000	21.699	3.617	50
	1200S300-68	0.625	3.000	27.020	4.503	50
	1200S300-97	0.625	3.000	37.616	6.269	50
LIGHT GAUGE STEEL TRACKS						
	250T125-33	-	1.250	0.192	0.145	33
	362T125-33	-	1.250	0.438	0.232	33
	362T125-43	-	1.250	0.571	0.302	33
	362T125-54	-	1.250	0.723	0.378	50
	600T125-33	-	1.250	1.428	0.465	33
	600T125-43	-	1.250	1.861	0.604	33
	600T125-54	-	1.250	2.344	0.756	50
	600T125-68	-	1.250	2.969	0.950	50
	800T125-33	-	1.250	2.895	0.711	33
	800T125-43	-	1.250	3.773	0.924	33
	800T125-54	-	1.250	4.745	1.158	50
	800T125-68	-	1.250	5.998	1.454	50
	1000T125-43	-	1.250	6.630	1.305	33
	1000T125-54	-	1.250	8.333	1.634	50
	1000T125-68	-	1.250	10.522	2.053	50
	1200T125-54	-	1.250	13.335	2.186	50
	1200T125-68	-	1.250	16.826	2.747	50

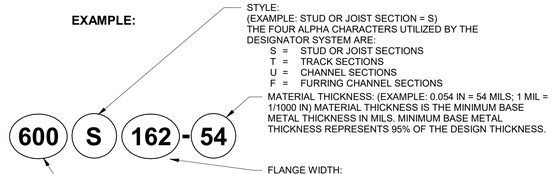
NOTES:

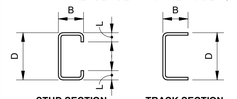
1. ALL SECTIONS SHALL BE MANUFACTURED IN ACCORDANCE WITH THE LATEST A.I.S.I. SPECIFICATION AND SHALL BE ASTM A653.
2. BENT, KINKED, DISTORTED, OR DAMAGED SECTIONS SHALL NOT BE USED.
3. STUDS MAY HAVE 1 1/2"x4" WEB CUTOUTS AT 24" O.C. CUTOUTS SHALL NOT BE CLOSER THAN 10" FROM SECTION ENDS.
4. SECTION PROPERTIES ARE BASED UPON THE "STEEL STUD MANUFACTURERS ASSOCIATION" (SSMA) CATALOG OF PARTICIPATING PRODUCERS. (ICBO 4943P)
5. WHERE POWER ACTUATED FASTERERS OR "SHOT PINS" ARE SPECIFIED, SEE POWER ACTUATED FASTERS SPECIFICATION ON S0.01
6. SCREW FASTENERS SHALL MEET THE FOLLOWING REQUIREMENTS:

STEEL TO STEEL FASTENER SIZE	
STEEL THICKNESS 'T'	SCREW TYPE
T < 12 GA.	#10 W/ #2 POINT
12 GA. < T < 1/4"	#10 W/ #3 POINT
1/4" < T < 1/2"	#10 W/ #5 POINT
STEEL TO WOOD FASTENER SIZE	
STEEL THICKNESS 'T'	SCREW TYPE
T < 12 GA.	#10 W/ #3 POINT

7. LIGHT GAUGE SECTIONS ARE DESIGNATED AS FOLLOWS: ALL LIGHT GAUGE (SSMA) PRODUCTS HAVE A FOUR PART IDENTIFICATION CODE WHICH IDENTIFIES THE SIZE (BOTH DEPTH AND FLANGE WIDTH), STYLE, AND MATERIAL THICKNESS OF EACH MEMBER

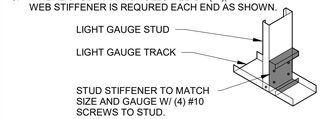
EXAMPLE:





STEEL THICKNESS TABLE		
DESIGNATION THICKNESS (mil)	GAUGE	MIN. THICKNESS (in)
33	20	0.0329
43	18	0.0428
54	16	0.0538
68	14	0.0677
97	12	0.0966

8. WHERE STUD MARK IS FOLLOWED BY (*), WEB STIFFENER IS REQURED EACH END AS SHOWN.



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IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-123900 INC: A
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DATE: 08/05/2024

Owner:

BAKERSFIELD CITY SCHOOL DISTRICT

1300 BAKER ST,
BAKERSFIELD, CA 93305

Project Name:

TRANSITIONAL KINDERGARTEN

Project Address:

MLK ELEMENTARY SCHOOL

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DUSTIN G. LEE
No. 36623
EXP. 3/31/25
STRUCTURAL
STATE OF CALIFORNIA

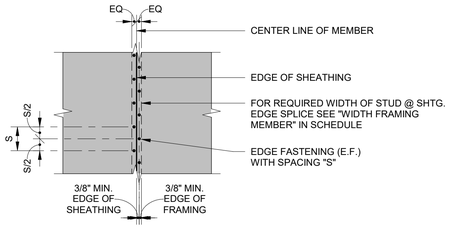
Sheet Title:

TYPICAL DETAILS No. 4

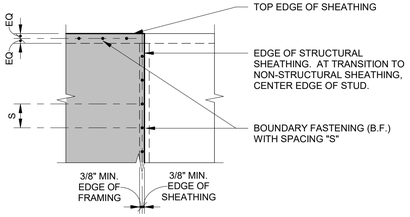
Job No.: **5593**

Sheet No.: **S1.04**

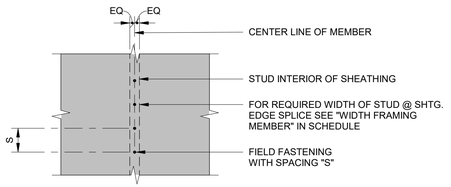
Release: DSA SUBMITTAL Date: 01-09-24



SHEAR PANEL FASTENING AT EDGE/BLOCKING



SHEAR PANEL FASTENING AT BOUNDARY

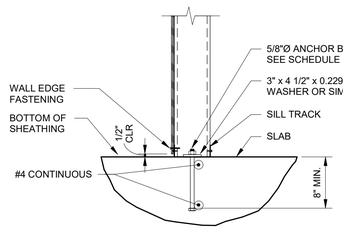


SHEAR PANEL FASTENING AT FIELD/INTERMEDIATE STUD

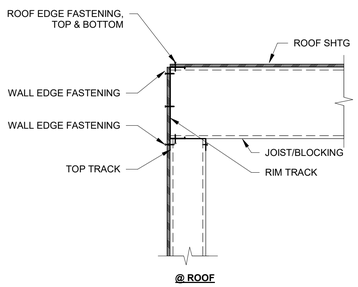
NOTE: THE FASTENING DESIGNATION 6:6:12 INDICATES (6" O.C. EDGE):(6" O.C. BOUNDARY):(12" O.C. FIELD)

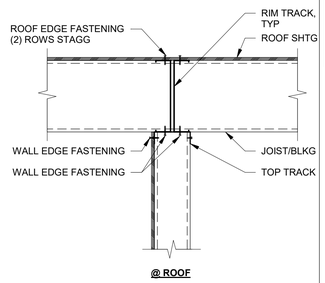
PLY EDGE/BOUNDARY FASTENING

NO SCALE — 1 / S1.05

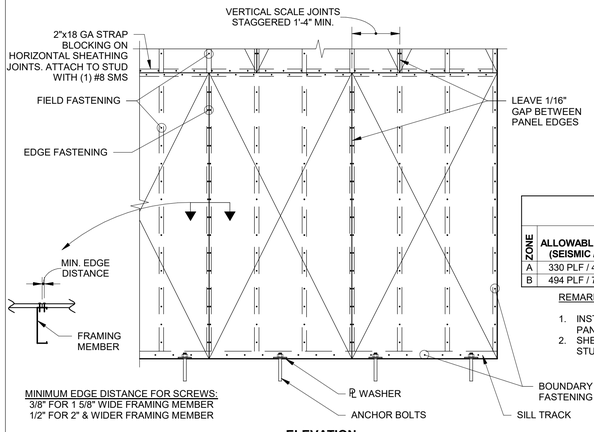


TYPICAL INTERIOR WALL





NOTES:
1. FRAMING AND CONNECTIONS SHOWN ARE FOR LATERAL SYSTEM LOAD TRANSFER ONLY. SEE PLANS AND DETAILS FOR ADDITIONAL VERTICAL SUPPORT FRAMING.
2. PROVIDE STANDARD CUT WASHER BETWEEN NUT & BPS PLATE.



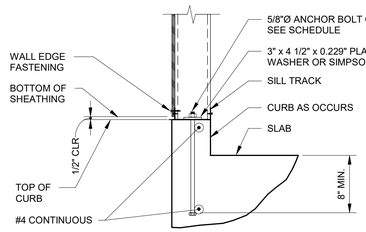
MINIMUM EDGE DISTANCE FOR SCREWS:
3/8" FOR 1 5/8" WIDE FRAMING MEMBER
1/2" FOR 2" & WIDER FRAMING MEMBER

ELEVATION

NOTES:
1. HOLDOWN BOLTS SHALL NOT REPLACE ANCHOR BOLTS.
2. RETIGHTEN ALL ANCHOR BOLTS AND HOLDOWN NUTS PRIOR TO CLOSING FRAMING.
3. SCREWS SHALL CONFORM TO ASTM C1513. SCREWS SHALL BE SIMPSON SELD DRILLING BUGLE HEAD OR SIMILAR SHEATHING TO METAL STUD SCREW. NO. 8 SCREWS SHALL HAVE A MINIMUM HEAD DIAMETER OF 0.285". NO. 10 SCREWS SHALL HAVE A MINIMUM HEAD DIAMETER OF 0.333.
4. SCREWS SHALL BE DEEMED 'OVERDRIVEN' WHERE THE FLAT OUTER SURFACE OF THE HEAD IS DRIVEN BELOW THE SURFACE OF THE PANEL BEYOND 1/8" OR GREATER.
5. OVERDRIVEN SCREW FASTENERS ARE PERMITTED TO BE REMEDIATED BY REMOVAL AND REPLACEMENT WITH A SCREW WITH A LARGER HEAD DIAMETER. UNSCREWING AN OVERDRIVEN SCREW UNTIL ITS FLUSH WITH THE PANEL IS NOT PERMITTED.
6. IT IS PERMITTED TO USE OVERDRIVEN SCREWS WITH THE FOLLOWING CRITERIA:
   A. IN ANY OF THE 4 CORNERS OF A WOOD PANEL, NONE OF THE 3 FASTENERS CLOSEST TO A PANEL CORNER ARE OVERDRIVEN
   B. NO MORE THAN 10% OF FASTENERS ALONG THE PERIMETER ARE OVERDRIVEN
   C. NO MORE THAN 20% OF THE FASTENERS IN THE FIELD ARE OVERDRIVEN
7. MINIMUM SHEATHING WIDTH IS 12".
8. UPSET THREAD BOLTS ARE NOT PERMITTED.
9. MINIMUM FRAMING THICKNESS = 18 GAGE, U.N.O.

STEEL STUD & WOOD SHEATHED SHEARWALL

NO SCALE — 2 / S1.05



TYPICAL EXTERIOR WALL

SHEARWALL SCHEDULE - STEEL STUD

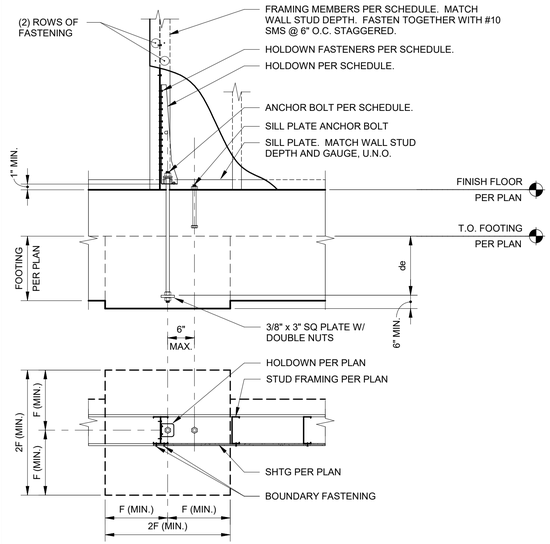
ZONE	ALLOWABLE SHEAR (SEISMIC / WIND)	SHEATHING	EDGE FASTENING	FIELD FASTENING	BOLTED PLATE CONNECTION	MINIMUM FRAMING THICKNESS	REMARKS
A	330 PLF / 455 PLF	7/16" OSB	No. 8 @ 6" O.C.	No. 8 @ 12" O.C.	AB @ 48" OC	18 GAUGE	1, 3
B	494 PLF / 705 PLF	7/16" OSB	No. 8 @ 4" O.C.	No. 8 @ 12" O.C.	AB @ 32" OC	18 GAUGE	2, 3

REMARKS:
1. INSTALL 1 5/8" OR WIDER FRAMING & BLOCKING WITH STAGGERED EDGE FASTENING AT ALL ADJOINING PANEL EDGES.
2. SHEATHING SHALL BE EDGE FASTENED AT ALL PANEL EDGES, TOP TRACKS, SILL TRACKS, HOLDOWN STUDS, POSTS AND BLOCKING LOCATIONS AS WELL AS OTHER LOCATIONS SHOWN IN THE DRAWINGS.

HOLDOWN SCHEDULE - LIGHT GAUGE STEEL

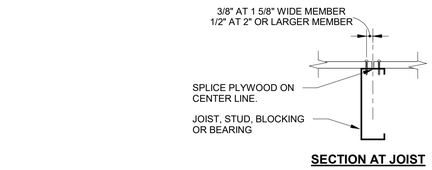
TYPE	DESCRIPTION	No. OF FASTENERS TO POST	THREADED ROD ø(ASTM F1554 GR-36)	END POST	SERVICE LOAD CAPACITY (LBS)	ANCHOR EMBED de	ANCHOR EMBED F
1	SIMPSON S/HDU4	(6) - #14	5/8"	(2) 600S200-43 MIN.	3,060#	6 1/2"	10"
2	SIMPSON S/HDU6	(12) - #14	5/8"	(2) S200-43 MIN.	4,900#	6 1/2"	10"
3	SIMPSON S/HDU9	(18) - #14	7/8"	(2) 600S200-54 MIN.	7,404#	10"	1' - 3"

1. ALL HOLDOWNS AND ANCHOR BOLTS IN THIS DETAIL ARE MANUFACTURED BY SIMPSON STRONGTIE. SEE PRODUCT CATALOG AND IAPMO REPORT UES ER-124 FOR ADDITIONAL INFORMATION.
2. 1/4" SELF-TAPPING SCREWS MAY BE SUBSTITUTED FOR #14 SELF-TAPPING SCREWS.
3. LOAD DEMAND SHOWN IS FOR WORST CASE WIND AND SEISMIC LOADING, AND LIMITING LOAD BETWEEN HOLDOWN AND ANCHOR BOLT. ANCHOR DESIGNS CONFORM TO ACI 318-14 CHAPTER 17 AND ASSUMES CRACKED CONCRETE WITH NO SUPPLEMENTARY REINFORCEMENT. 0.8 REDUCTION FACTOR APPLIED TO ALLOWABLE CAPACITY OF HOLDOWN.
4. FOOTING SIZE SHOWN IS THE MINIMUM REQUIRED FOR CORRESPONDING ANCHOR BOLT AND EDGE/EMBEDMENT REQUIREMENTS de/F. ALL FOOTINGS SHALL BE CENTERED ON ANCHOR BOLT. AT LOCATIONS ON PLAN WHERE A LARGER FOOTING IS INDICATED, THE "F" VALUE SHALL BE MAINTAINED AS THE MINIMUM EDGE DISTANCE.

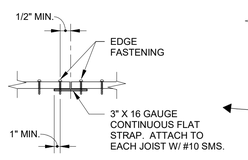


HOLDOWN AT FOOTING

NO SCALE — 3 / S1.05

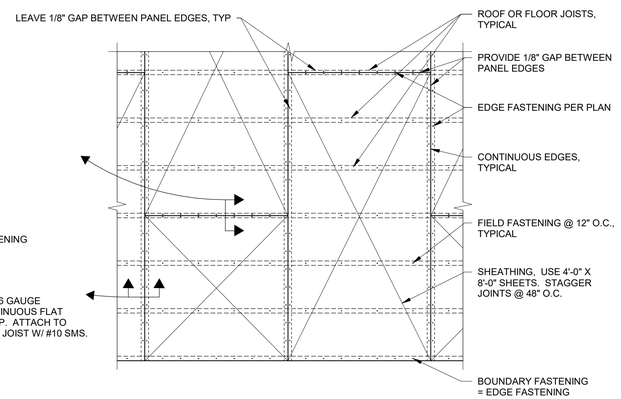


SECTION AT JOIST



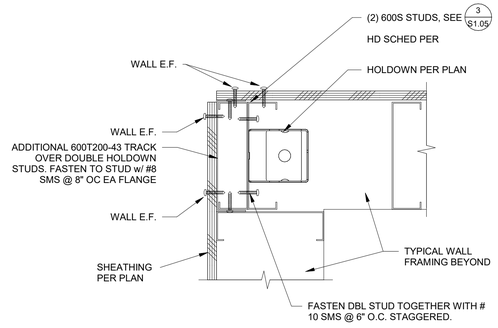
SECTION AT BLOCK

NOTES:
1. PLYWOOD SHEETS ARE TO BE AS LARGE AS POSSIBLE. JOINTS ARE TO BE CENTERED OVER BEARINGS. SHEET SIZE LESS THAN 24" IN DIMENSION ARE NOT PERMITTED. STAGGER ALL END JOINTS OF SHEATHING. OUTSIDE FACE GRAINS TO RUN PERPENDICULAR TO BEARING. BLOCKING ALL JOINTS AND EDGES.
2. MINIMUM FRAMING THICKNESS = 20 GAUGE, U.N.O.
3. PROVIDE MINIMUM #8 SCREWS FOR FRAMING THICKNESS OF 18 GAUGE OR LESS AND MINIMUM #10 SCREWS FOR FRAMING THICKNESS OF MORE THAN 18 GAUGE.



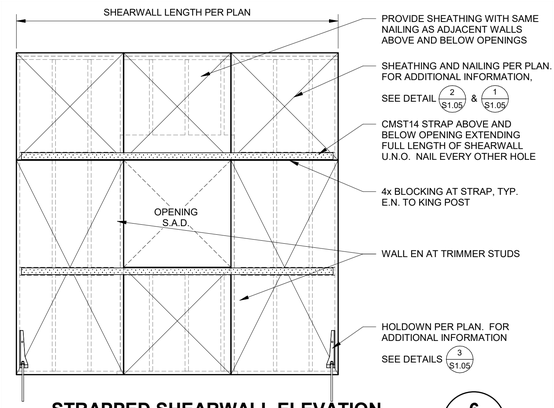
SHEATHING DIAPHRAGM

NO SCALE — 4 / S1.05



TYPICAL CORNER HOLDOWN DETAIL

3" = 1'-0" — 5 / S1.05



STRAPPED SHEARWALL ELEVATION

3/8" = 1'-0" — 6 / S1.05

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APP: 03-123900 INC:
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DATE: 08/05/2024

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BAKERSFIELD CITY SCHOOL DISTRICT

1300 BAKER ST,
BAKERSFIELD, CA 93305

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REGISTERED PROFESSIONAL ENGINEER — JUSTIN G. LEE — No. S6623 EXP. 3/31/25 — STRUCTURAL — STATE OF CALIFORNIA

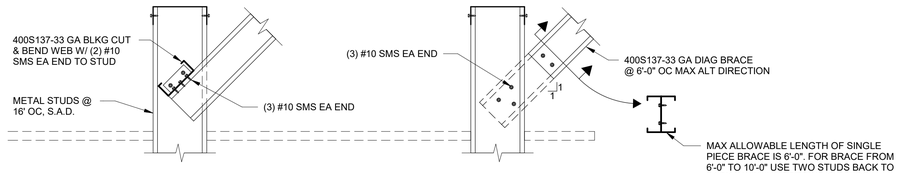
Sheet Title:

TYPICAL DETAILS No. 5

Job No.: **5593**

Sheet No.: **S1.05**

Release: DSA SUBMITTAL Date: 01-09-24



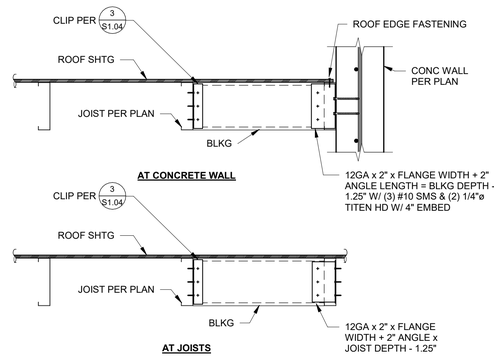
AT LOCATIONS WHERE BRACE FALLS BETWEEN STUDS

TYPICAL BRACE TO STUD

TYPICAL METAL PARITION WALL BRACE DETAIL

NO SCALE

1 / S1.06



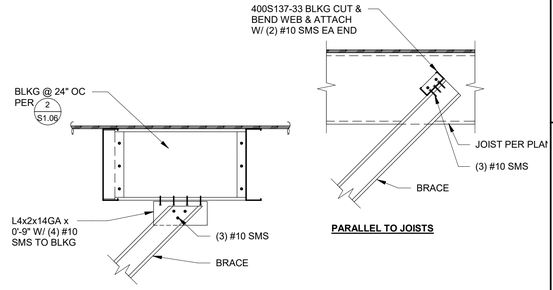
AT CONCRETE WALL

AT JOISTS

TYPICAL JOIST BLOCKING DETAIL

1" = 1'-0"

2 / S1.06



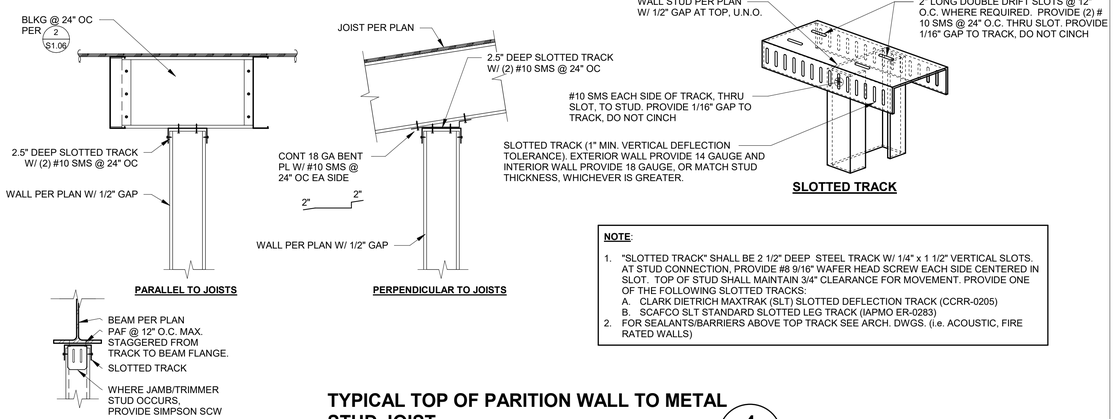
PERPENDICULAR TO JOISTS

PARALLEL TO JOISTS

TYPICAL TOP OF BRACE CONNECTION TO METAL STUD JOISTS

NO SCALE

3 / S1.06



PARALLEL TO JOISTS

PERPENDICULAR TO JOISTS

SLOTTED TRACK

NOTE:

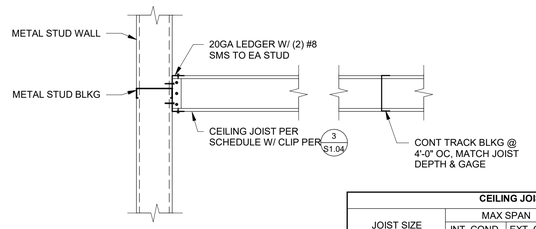
1. "SLOTTED TRACK" SHALL BE 2 1/2" DEEP. STEEL TRACK W/ 1/4" x 1 1/2" VERTICAL SLOTS. AT STUD CONNECTION, PROVIDE #8 9/16" WAFER HEAD SCREW EACH SIDE CENTERED IN SLOT. TOP OF STUD SHALL MAINTAIN 3/4" CLEARANCE FOR MOVEMENT. PROVIDE ONE OF THE FOLLOWING SLOTTED TRACKS:
   A. CLARK DIETRICH MAXTRAK (SLT) SLOTTED DEFLECTION TRACK (CCRR-0205)
   B. SCAFCO SLT STANDARD SLOTTED LEG TRACK (IAPMO ER-0283)
2. FOR SEALANTS/BARRIERS ABOVE TOP TRACK SEE ARCH. DWGS. (i.e. ACOUSTIC, FIRE RATED WALLS)

WALL PARALLEL TO BEAM

TYPICAL TOP OF PARITION WALL TO METAL STUD JOIST

NO SCALE

4 / S1.06



PERPENDICULAR TO WALL

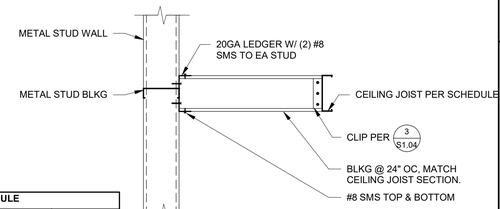
CEILING JOIST SCHEDULE

JOIST SIZE	MAX SPAN		BRIDGING	TRACK TO STEEL
	INT. COND. GYP BOARD	EXT. COND. PLASTER		
400S162-33 @ 24" oc	8'-0"	7'-0"	AT MIDSPAN	(3) #10 SMS
600S162-33 @ 24" oc	10'-0"	9'-0"	AT MIDSPAN	(3) #10 SMS
600S162-43 @ 24" oc	12'-0"	11'-6"	AT 1/3 POINTS	(3) #10 SMS
800S162-43 @ 24" oc	14'-0"	13'-0"	AT 1/3 POINTS	(4) #10 SMS

TYPICAL CEILING DETAIL

NO SCALE

5 / S1.06



PARALLEL TO WALL

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DATE: 08/05/2024

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BAKERSFIELD CITY SCHOOL DISTRICT

1300 BAKER ST,
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Project Name:

TRANSITIONAL KINDERGARTEN

Project Address:

MLK ELEMENTARY SCHOOL

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Sheet Title:

TYPICAL DETAILS No. 6

Job No.: **5593**

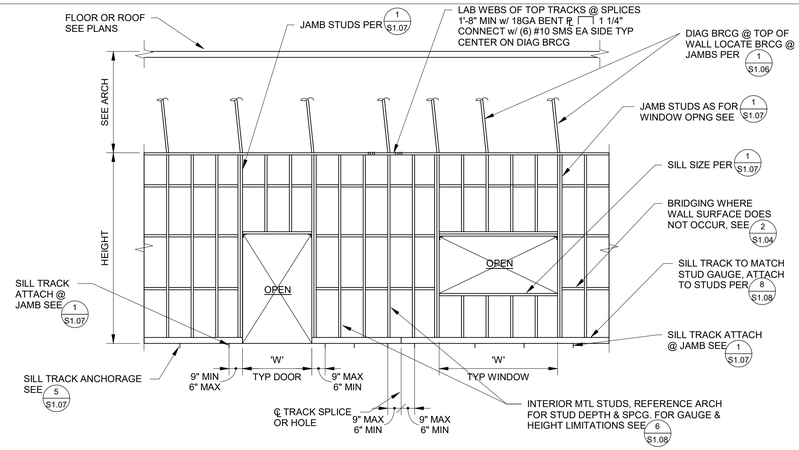
Sheet No.: **S1.06**

Release: DSA SUBMITTAL Date: 01-09-24

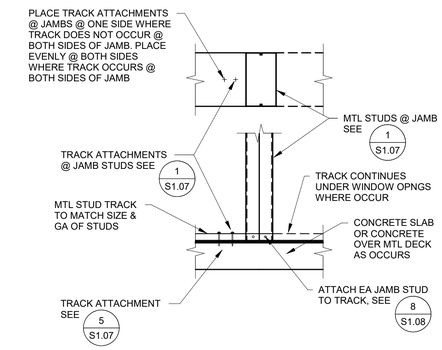
INTERIOR WALL OPENING FRAMING SCHEDULE					
DEFLECTION LIMIT = L/120. NON-BEARING					
"W"[13] MAX WIDTH	JAMBS	HEADER	SILL	HC4-8 SCREW SPCG	
				3 5/8" & 4" WALLS	6" & 8" WALLS
4'-0"	J1[1,2,3]	H2	S1		
8'-0"	J2	H4	S1[8]		
12'-0"	J3	HC4-8[4,5,13]	S2	8"CC	4"CC
16'-0"	J4	HC4-8[5,6,7,13]	S4[8]	8"CC	4"CC

NOTES:
1. USE J2 MINIMUM AT DOOR OPENINGS.
2. USE J2 AT 4'-0" MAX OPNGS IN 20GA WALLS.
3. USE J2 AT 4'-0" MAX OPNGS IN 8"x18GA WALLS.
4. H4-6 MAY BE USED AT 12'-0" MAX OPNGS IN 16GA AND 14GA WALLS w/ THE EXCEPTION OF 8" WALLS.
5. USE 18GA MIN. HEADERS AT 12'-0" MAX OPNGS IN 8" WALLS.
6. USE 16GA MIN. HEADERS AT 16'-0" MAX OPNGS IN 3 5/8" & 4" WALLS.
7. USE 14GA MIN. HEAEERS AT 16'-0" MAX OPNGS IN 6" & 8" WALLS UNO.
8. USE HC4-10 HEADERS AT 16'-0" MAX OPNGS IN 8"x14GA WALLS.
9. USE S2 SILLS AT 8'-0" MAX OPNGS IN 3 5/8"x20GA, 4"x20GA, AND 6"x20GAWALLS. S2 MAY BE USED AT 16'-0" MAX OPNGS IN 16GA AND 14GA WALLS w/ THE EXCEPTION OF 3 5/8" WALLS.
10. FOR JAMB, HEADER, AND SILL DETAILS, SEE SHEET S1.07
11. "H4-8" INDICATED HEADER TYPE AND DEPTH OF VERTICAL STUD ELEMENTS INSIDE HEADER. "HC4-8" INDICATED COMPOSITE HEADER w/ ADDL SCREW REQUIREMENTS, SEE SCHEDULE & 4/S1.04
12. FOR CONNECTION OF WALL AT JAMBS SEE 7/S1.04
13. 'W' WIDTH IS THE MAX WIDTH OF A SINGLE OPENING OR THE COMBINED WIDTH OF SIDE BY SIDE OPENINGS THAT SHARE A SINGLE JAMB STUD CONFIGURATION.

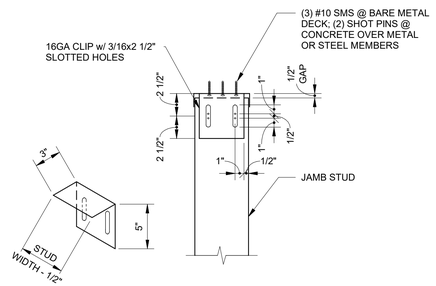
INTERIOR WALL OPENING FRAMING SCHEDULE
NO SCALE — 1 / S1.07



PARTIAL HEIGHT INTERIOR METAL STUD WALL ELEVATION
NO SCALE — 2 / S1.07

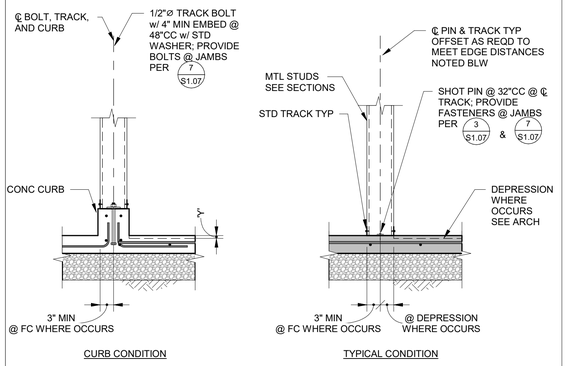


JAMB STUD AT SILL TRACK
NO SCALE — 3 / S1.07



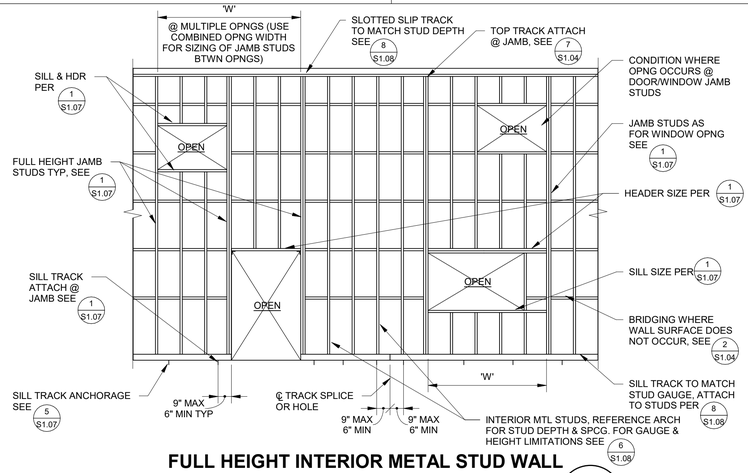
NOTES:
PROVIDE CLIP AT ALL EXTERIOR WALL JAMB STUDS AT SLOTTED TRACKS. PROVIDE CLIP AT ALL INTERIOR WALL DEFLECTION TRACKS WHERE OPENING WIDTH IS GREATER THAN 8'-0" WIDE.
CLIP TO OCCUR ONE SIDE OF J2 JAMBS, BOTH SIDES OF J3 & J4 JAMBS.

JAMB STUD CLIP AT SLIP TRACK
NO SCALE — 4 / S1.07



NOTE:
WHERE SLAB DEPRESSION OCCURS, VERIFY DEPTH 'Y' LOCATION & EXTENT w/ ARCH. WHERE "Y" EXCEEDS 2" USE PROVISIONS OF CURB COND.

SILL TRACK TO SLAB
NO SCALE — 5 / S1.07



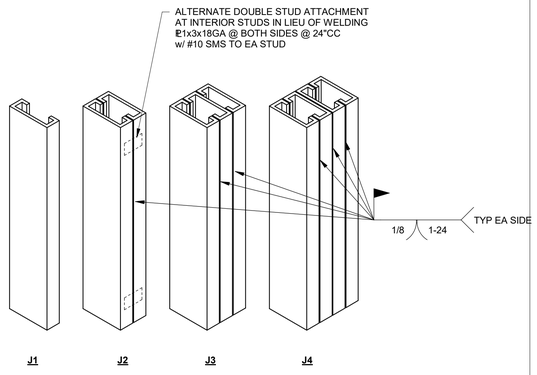
FULL HEIGHT INTERIOR METAL STUD WALL ELEVATION
NO SCALE — 6 / S1.07

TRACK ATTACHMENT @ JAMB STUDS

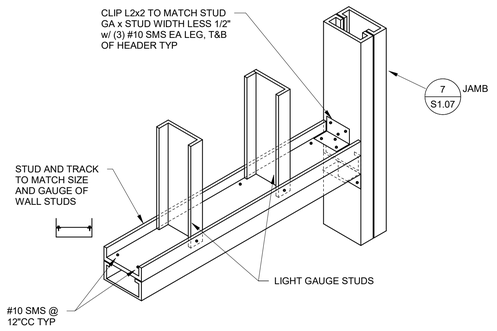
JAMB TYPE	TRACK ATTACHMENT METHOD		
	SHOT PIN	SMS	BOLTS
J1	1	1	1
J2	2	2	1
J3	3	3	1
J4	4	4	2 (SEE NOTE 3)

NOTES:
1. SCHEDULE INDICATES TRACK ATTACHMENTS REQUIRED WHERE JAMB STUDS OCCUR. SEE TYPICAL SILL AND TOP TRACK ATTACHMENT DETAILS FOR BASIC ATTACHMENT METHODS (I.E. SHOT PINS, SMS, BOLTS ETC...) & CONDITIONS BEYOND JAMB STUDS.
2. LOCATE ALL REQUIRED ATTACHMENTS AS CLOSE TO JAMB STUDS AS POSSIBLE. MAINTAIN ALL FASTENER SPACING AND EDGE DISTANCE REQUIREMENTS, AT SHOT PINS, SEE TYPICAL NOTES. AT SMS, MAINTAIN 1.5 x DIAMETER MIN EDGE DSTANCE & SPACING. AT BOLTS, SPACE NO CLOSER THAN 12 DIAMETERS AND NO MORE THAN 9" FROM END OF TRACK.
3. AT 16'-0" MAX WIDTH OPENINGS, PROVIDE CLIP L EA SIDEJAMB JAMB STUDS AT SILL PER 4/XS602 SIM - NO SLOTTED HOLES, w/ AB's CENTERED ON L LEGS. AT DOOR OPENINGS, TURN HORIZ LEG OF CLIP AT ADJACENT TO DOOR UNDER JAMB STUDS AT NEST AB WITHIN BUILT-UP JAMB STUDS.

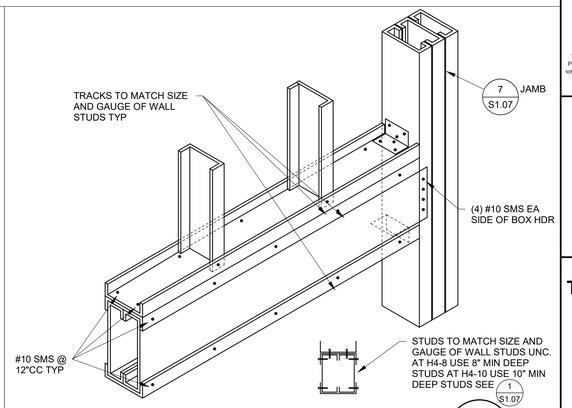
TRACK ATTACHMENT @ JAMB STUDS
NO SCALE — 7 / S1.07



JAMB DETAIL
NO SCALE — 8 / S1.07



H2 HEADER DETAIL
NO SCALE — 9 / S1.07



H4/HC-4 HEADER DETAIL
NO SCALE — 10 / S1.07

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TYPICAL DETAILS No. 7

Job No.: **5593**

Sheet No.: **S1.07**

Release: DSA SUBMITTAL Date: 01-09-24

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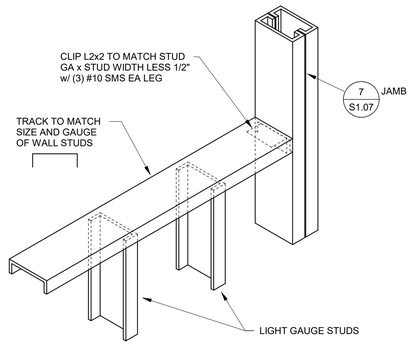
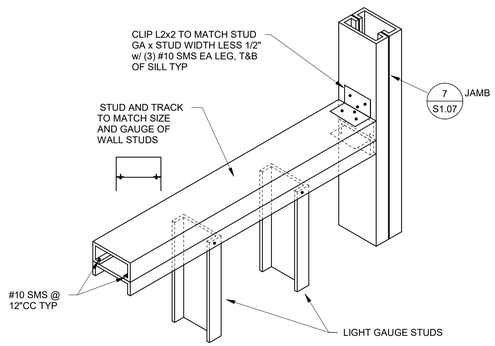


S1 SILL DETAIL

NO SCALE

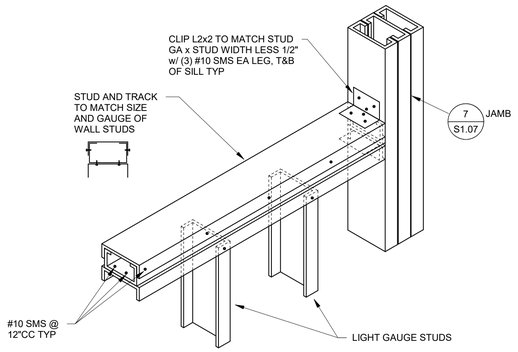
1 / S1.08



S2 SILL DETAIL

NO SCALE

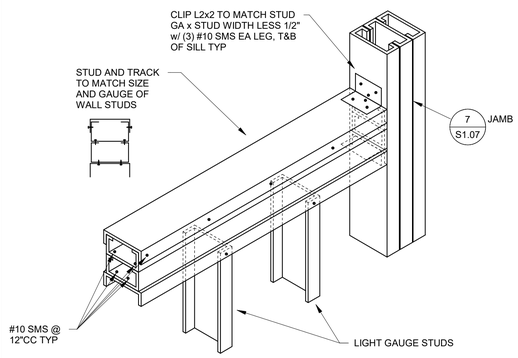
2 / S1.08



S3 SILL DETAIL @ EDGE

NO SCALE

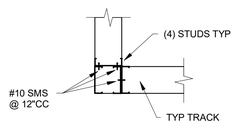
3 / S1.08



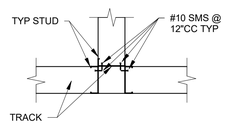
S4 SILL DETAIL

NO SCALE

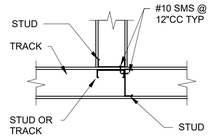
4 / S1.08



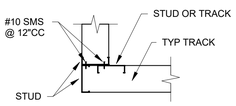
EXTERIOR



EXTERIOR



RATED INTERSECTION



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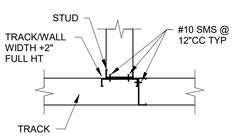

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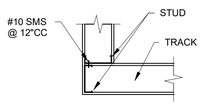


RATED CORNER

NOTE:
SEE ARCH DRAWINGS FOR
WALL FINISH CONSTRUCTION.

LGS - TYPICAL WALL INTERSECTION DETAILS

NO SCALE

5 / S1.08

INTERIOR METAL STUD PARTITIONS

MAXIMUM HEIGHT FOR METAL STUDS WITH S_{CS}=0.75, I_e=1.0
DEFLECTION LIMIT L/120, NON-BEARING WITH CABINET OR EQUIPMENT

16"CC SPACING

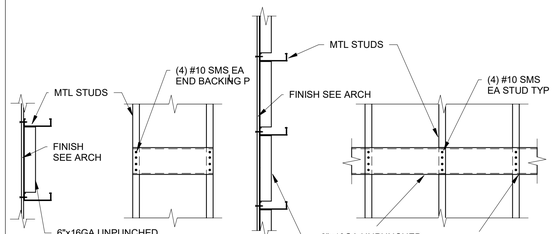
DEPTH	GAGE	DESIGNATION[3]	MAX HEIGHT
6"	20	600S162-33	22'-6"
6"	18	600S162-43	26'-3"
6"	16	600S162-54	32'-0"
6"	14	600S162-68	35'-6"

NOTES:
1. STUDS SHALL BE DEPTH AS INDICATED ON ARCH DRAWINGS AND GAUGE AS DETERMINED BY THIS SCHEDULE.
2. DESIGNATION CONFORMS TO STEEL STUD MANUFACTURER'S ASSOCIATION STANDARDS.
3. THE MAX HEIGHTS NOTED IN THIS SCHEDULE ARE BASED ON THE USE OF SEISMIC COMPONENT LOAD F_P OR A LIVE LOAD OF 5PSF, WHICHEVER GOVERNS.

INTERIOR METAL STUD PARTITION

NO SCALE

6 / S1.08



PLAN **ELEVATION** **PLAN** **ELEVATION**

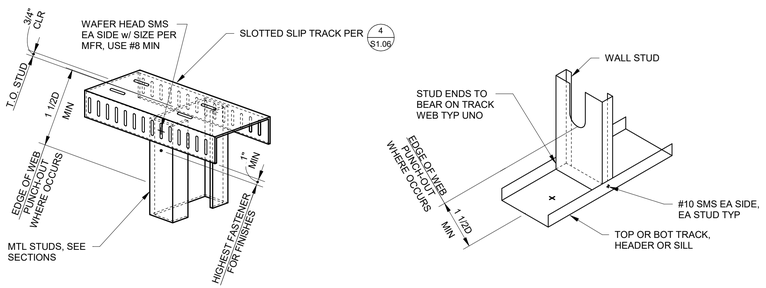
SINGLE BAY CONDITION **CONTINUOUS CONDITION**

NOTES:
1. IN LIEU OF TRACK, THE FOLLOWING BACKING OPTIONS MAY BE USED. ATTACH TO STUDS AS NOTED ABOVE:
   A. 6"x16GA FLAT STRAP FOR MAX LOADS OF 20 LBS/FT w/ A MAX CONCENTRATED LOAD OG 50 LBS. STRAP SHALL BE CONT OVER 3 STUDS MIN.
   B. 6"x16GA (600NS050-54) NOTCHED STUD BACKING BY SCAFCO.

LGS - BACKING ATTACHMENT DETAIL

NO SCALE

7 / S1.08



TYP STUD TO SLIP TRACK

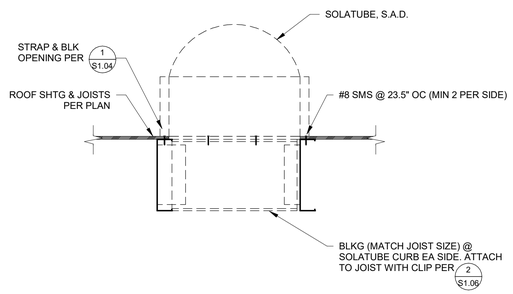
TYP STUD TO TRACK

NOTES:
1. SEE OTHER DETAILS FOR ATTACHMENTS OF T&B TRACK TO STRUCTURE. SCREWS & SHOT PINS @ WEBS OF SLIP TRACKS SHALL BE LOCATED IN SLOTTED HOLES PROVIDED BY MFR.
2. FOR ADDL INFO @ FIRE RATED WALLS, SEE ARCH (FOR WALL TYPE, DETAILS ETC...) & MFR UL LISTING.
3. D = STUD DEPTH.
4. WHERE SLOPE OF SUPPORTING STRUCTURE IS GREATER THAN 1:12, A NESTED TRACK ASSEMBLY SHALL BE USED.

STUD TO TRACK CONNECTION

NO SCALE

8 / S1.08



SOLATUBE ANCHORAGE

1" = 1'-0"

9 / S1.08

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TYPICAL DETAILS No. 8

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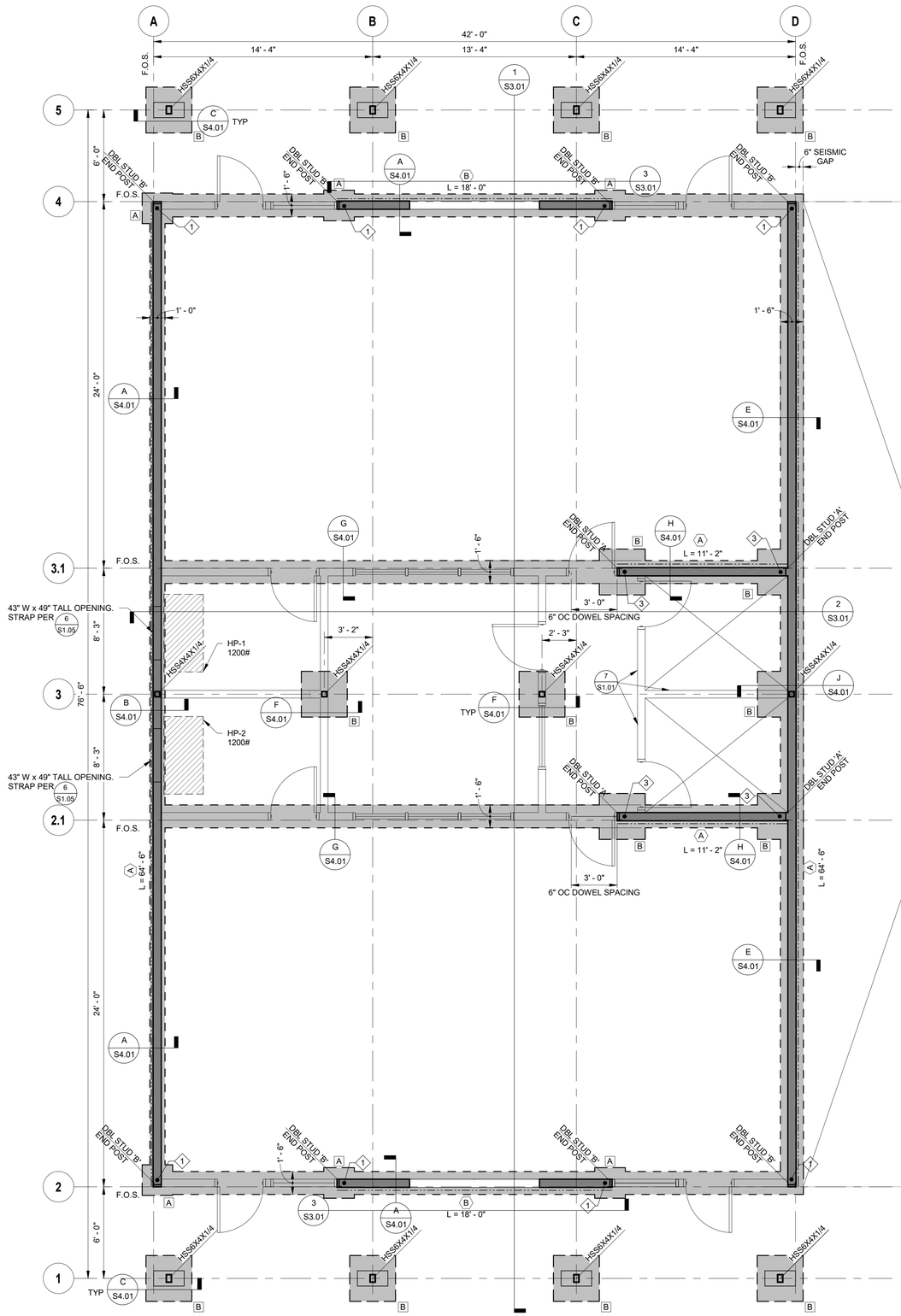


FOUNDATION PLAN

1/4" = 1'-0"

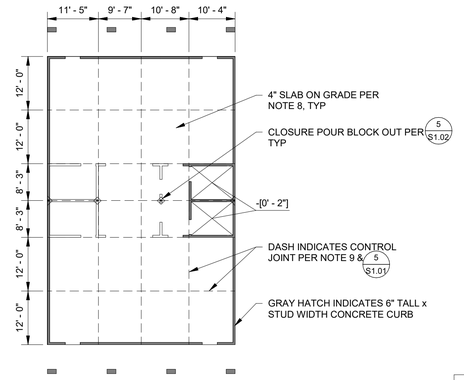
FOUNDATION PLAN NOTES:

1. REFER TO GENERAL NOTES & SPECIFICATIONS ON SHEET S0.01 & S0.02.
2. SEE SHEET S1.01-S1.08 FOR TYPICAL DETAILS.
3. TOP OF SLAB & GROUND FLOOR REFERENCE ELEVATION = +[0' - 0"] TYP, U.N.O.
4. FOR DETAILED SOILS INFORMATION AND COMPLETE REQUIREMENTS, REFER TO SOILS REPORT.
5. SEE DETAIL FOR BUILDING PAD PREPARATION, INCLUDING OVER EXCAVATION AND FILL REQUIREMENTS. FOR DETAILED SOILS INFORMATION AND COMPLETE REQUIREMENTS, REFER TO SOILS REPORT. (12 / S1.01)
6. CONTRACTOR TO VERIFY ALL DIMENSIONS AND ELEVATIONS SHOWN WITH ARCHITECTURAL DRAWINGS AND INFORM BOTH ARCHITECT AND ENGINEER OF ANY CONFLICTING INFORMATION.
7. THE SIZE & LOCATION OF ALL FOOTING AND SLAB PENETRATIONS SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW PRIOR TO INSTALLATION.
8. 4" THICK SLAB-ON-GRADE SECTION AS FOLLOWS: 4" THICK CONCRETE SLAB w/ #4 @ 18" O.C. EACH WAY AT 2" BELOW TOP OF SLAB. PLACE SLAB OVER SLAB MEMBRANE AND MINIMUM 3" OF 3/4" CRUSHED ROCK.
9. CONTROL JOINTS ARE TO BE INSTALLED @ 12'-6" O.C. MAX AS SHOWN.
10. CONCRETE CONTRACTOR IS RESPONSIBLE FOR THE PLACEMENT OF ALL EMBEDDED ITEMS.
11. ANCHOR BOLTS AND BASE PLATES SHALL NOT BE WET SET.
12. ALL DIMENSIONS ARE TO CENTERLINE OF COLUMNS OR FACE OF STUD, TYPICAL UNLESS NOTED OTHERWISE.
13. STUDWALL CONSTRUCTION SHALL BE:
    600S162-43 @ 16" O.C., U.N.O.
    600T150-43 SILL PLATE & TOP PLATE, U.N.O.
    5/8" Ø AB @ 32" O.C. W/ 8" MIN EMBED BELOW TOP OF SLAB.
    THE OUTSIDE FACE OF EXTERIOR WALLS SHALL BE SHEATHED W/ 7/16" OSB SHEATHING. EDGE/BOUNDARY FASTENING SHALL BE #8 SMS @ 6" OC & FIELD FASTENING SHALL BE #8 SMS 12" O.C.

14. (1 / A101) INDICATES DETAIL/SECTION VIEW WITH VIEW DIRECTION ARROW, DETAIL NUMBER AND SHEET REFERENCE.
15. (1) INDICATES GRID
16. INDICATES FOOTING
17. -[0'-2"] INDICATES DEPRESSED SLAB ELEVATION (7 / S1.01)
18. INDICATES STEP/DEPRESSION (7 / S1.01)
19. (A) L = X' - X" INDICATES SHEARWALL CONSTRUCTION WITH NAILING TAG & LENGTH. SEE SCHEDULE (2 / S1.05); (1) INDICATES SHEARWALL HOLDOWN & END POST PER (3 / S1.05)
20. INDICATES METAL STUDWALL. SEE PLAN NOTES
21. [A] INDICATES FOUNDATION TAG. SEE SCHEDULE BELOW.
22. -[1' - 0"] INDICATES TOP OF FOOTING ELVATION BELOW TOP OF SLAB. TOP OF FOOTING SHALL BE 1' - 0" BELOW TOP OF SLAB, UNO
23. INIDCATES NEW MECHANICAL UNIT ON SLAB. ANCHOR TO SLAB PER MECHANICAL DRAWINGS
24. 'A' INDICATES DBL 600S200-54 END POST
25. 'B' INDICATES DBL 600S200-43 END POST

FOOTING SCHEDULE				
TYPE	SIZE	REINFORCING		REMARKS
		LONGITUDINAL	TRANSVERSE	
A	2'-0" x 2'-0"	2 - #5	2 - #5	1, 3
B	3'-0" x 3'-0"	3 - #5	3 - #5	1, 3

NOTES:
1. RUN CONTINUOUS STEEL THROUGH FOOTING.
2. REINFORCING INDICATES BOTTOM MAT ONLY.
3. REINFORCING INDICATES TOP AND BOTTOM MAT.



CURB & SLAB PLAN

1/16" = 1'-0"

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No. 36623
EXP. 3/31/25
STRUCTURAL
STATE OF CALIFORNIA

Sheet Title:
FOUNDATION PLAN

Job No.:
5593

Sheet No.:
S2.01

Release: DSA SUBMITTAL Date: 01-09-24

CORNERSTONE
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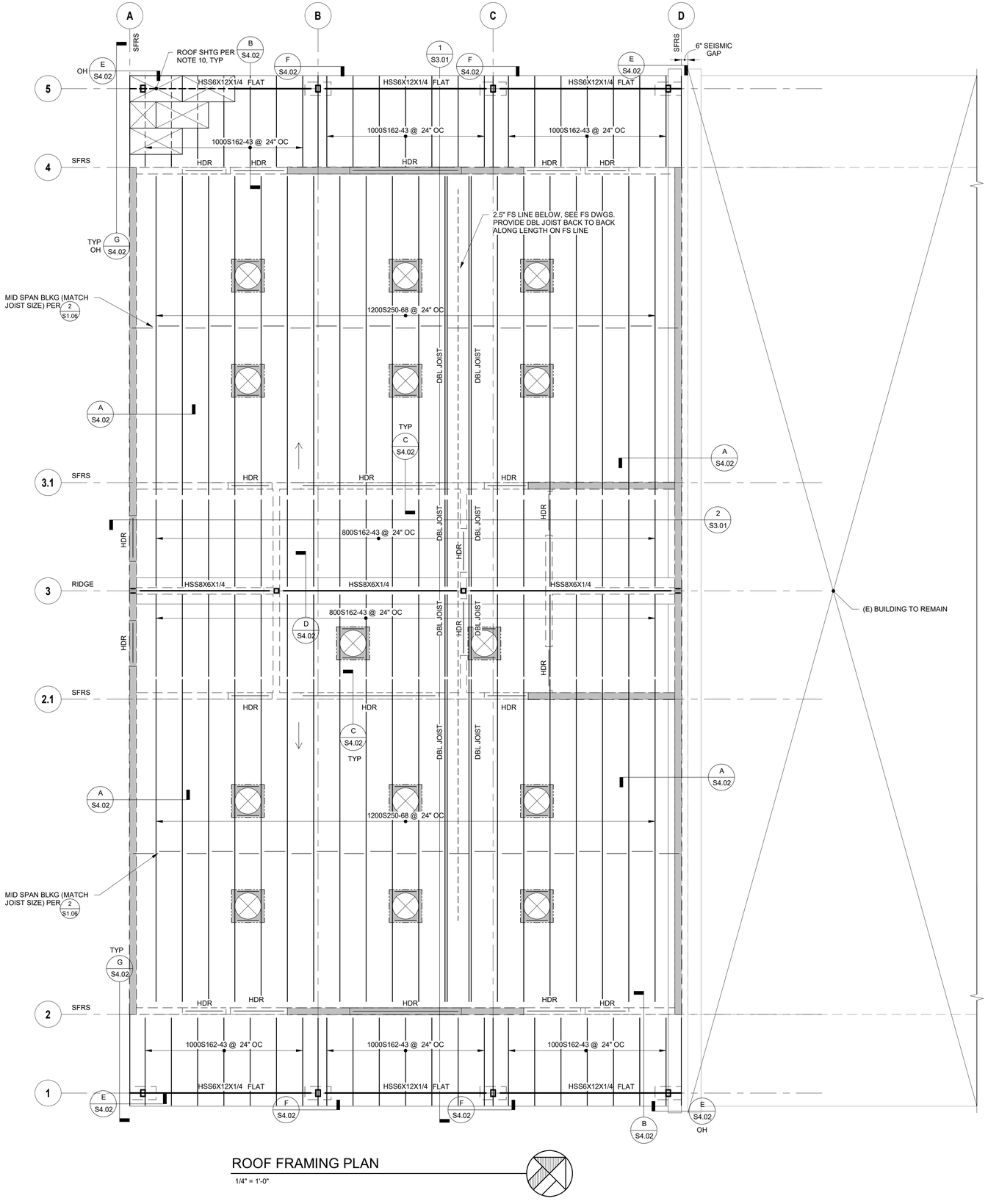
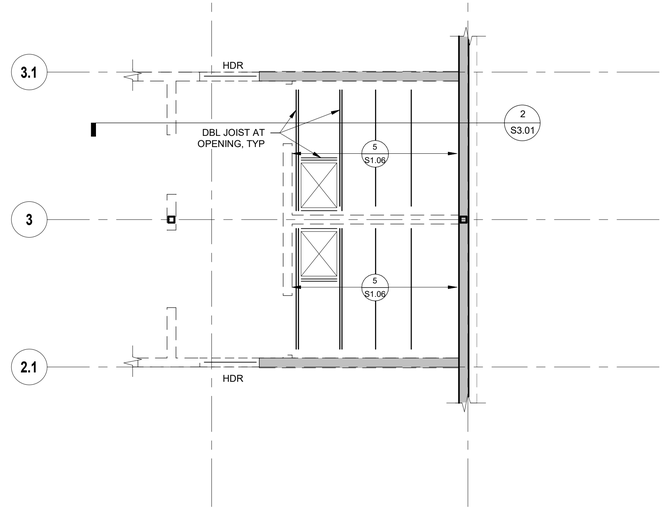


ROOF FRAMING PLAN

1/4" = 1'-0"

ROOF FRAMING NOTES:

1. REFER TO GENERAL NOTES & SPECIFICATIONS ON SHEET S0.01 & S0.02.
2. SEE SHEET S1.01 - S1.08 FOR TYPICAL DETAILS.
3. SEE ARCHITECTURAL DRAWINGS FOR ROOF ELEVATIONS.
4. CONTRACTOR TO VERIFY ALL DIMENSIONS & ELEVATIONS SHOWN WITH ARCHITECTURAL DRAWINGS AND INFORM ARCHITECT & STRUCTURAL ENGINEER OF ANY DISCREPANCY.
5. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING SIZES, CONDITIONS, MEMBER ELEVATIONS AND DIMENSIONS BEFORE BEGINNING CONSTRUCTION AND/OR ORDERING MATERIALS. ANY CONDITIONS ENCOUNTERED IN THE FIELD THAT CONFLICT WITH THESE PLANS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER IMMEDIATELY.
6. SEE ARCHITECTURAL DRAWINGS FOR SIZE & LOCATION OF DECK PENETRATIONS.
7. VERIFY SIZE AND LOCATION OF ALL OPENINGS WITH ARCHITECTURAL DRAWINGS AND MECHANICAL DRAWINGS. NOTIFY STRUCTURAL ENGINEER IMMEDIATELY OF ANY DISCREPANCIES TYP, U.N.O.
8. THE SIZE, LOCATIONS AND ORIENTATIONS OF ALL MECHANICAL UNITS, CURBS, SLEEPERS AND OPENINGS SHALL BE VERIFIED WITH THE UNIT SUPPLIERS. ANY CONFLICTS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER IMMMEDIATELY.
9. SEE ARCHITECTURAL DRAWINGS FOR EDGE OF DECK LOCATIONS.
10. ROOF SHEATHING SHALL CONSIST OF 7/16" OSB SHEATHING W/ #8 SMS @ 6" O.C. AT BOUNDARIES AND EDGES AND #8 SMS @ 12" O.C. AT FIELD FASTENING. ALL PLYWOOD SHALL BE FULLY BLOCKED W/ FLAT STRAP, UNO. SEE 4 S1.05 FOR DIAPHRAGM FASTENING & BLOCKING REQUIREMENTS
11. 1 A101 — INDICATES DETAIL/SECTION VIEW WITH VIEW DIRECTION ARROW, DETAIL NUMBER AND SHEET REFERENCE.
12. 1 — INDICATES GRID
13. INDICATES WALL BELOW
14. INDICATES SHEARWALL BELOW
15. INDICATES FRAMED DECK OPENING.
16. INDICATES DIRECTION OF ROOF SLOPE. S.A.D.
17. INDICATES NEW SKYLIGHT UNITS ABOVE ROOF, S.M.D. & 9 S1.08
18. HDR — INDICATES HEADER PER 4 S1.04 UNO.
19. SFRS — INDICATES SEISMIC FORCE RESISTING SYSTEM GRID LINE. ALL TOP TRACK SPLICES SHALL BE PER 8 S1.04



CEILING FRAMING PLAN

1/4" = 1'-0"

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APP: 03-123900 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/05/2024

Owner:

BAKERSFIELD CITY SCHOOL DISTRICT

1300 BAKER ST,
BAKERSFIELD, CA 93305

Project Name:

TRANSITIONAL KINDERGARTEN

Project Address:

MLK ELEMENTARY SCHOOL

1100 CITADEL
BAKERSFIELD, CA93307

integrated designs
by SOMAM, Inc.

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REGISTERED PROFESSIONAL ENGINEER — DUSTIN G. LEE — No. S9623 EXP. 3/31/25 — STRUCTURAL — STATE OF CALIFORNIA

Sheet Title:

ROOF FRAMING PLAN

Job No.: **5593**

Sheet No.: **S2.02**

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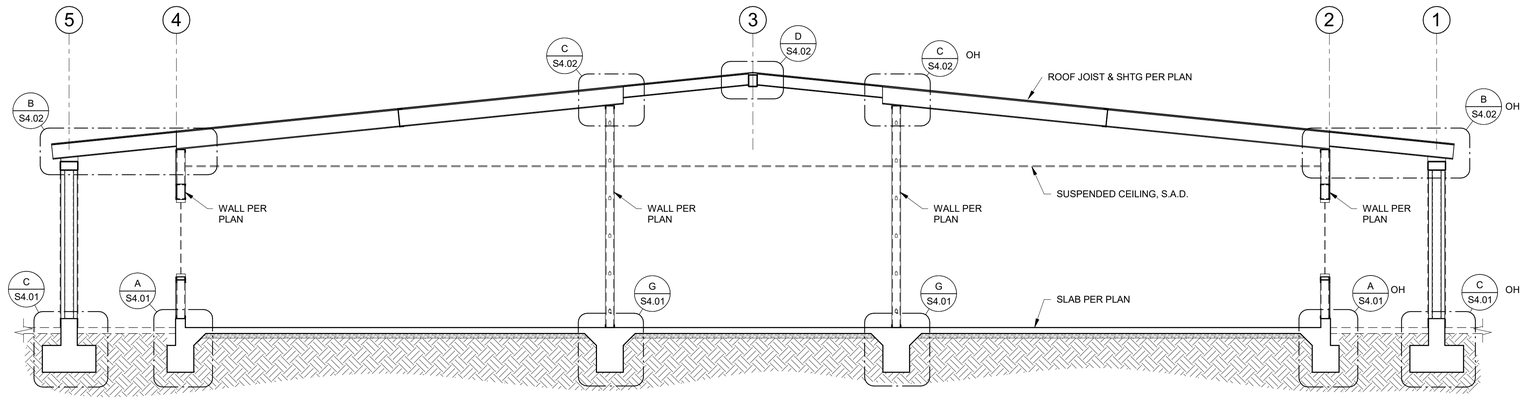
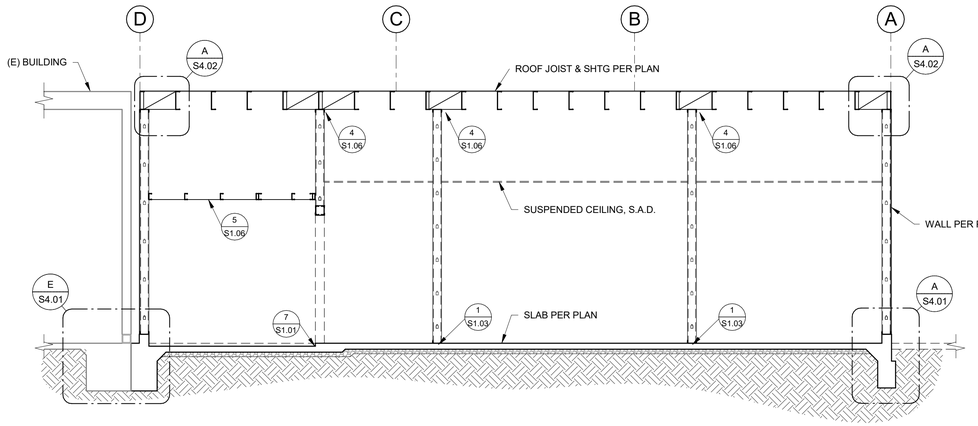


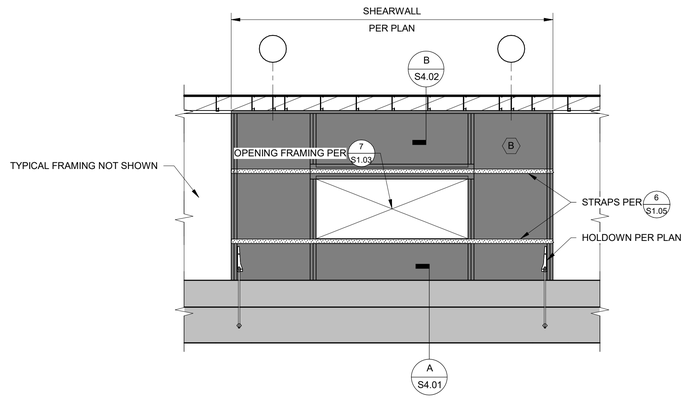
SECTION 1 / S3.01

1/4" = 1'-0"



SECTION 2 / S3.01

1/4" = 1'-0"



ELEVATION 3 / S3.01

1/4" = 1'-0"

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BUILDING SECTIONS

Job No.: **5593**

Sheet No.: **S3.01**

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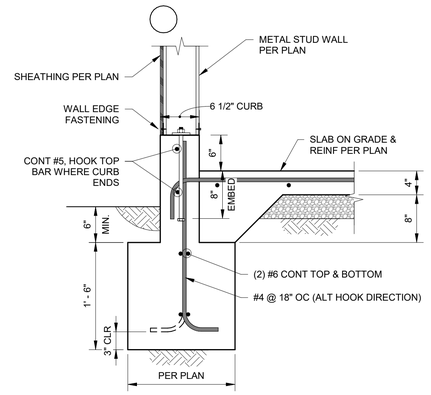
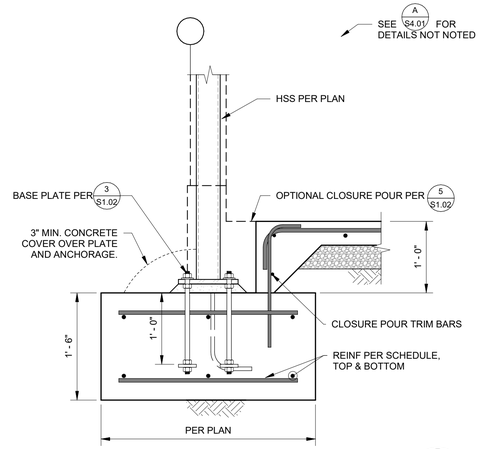
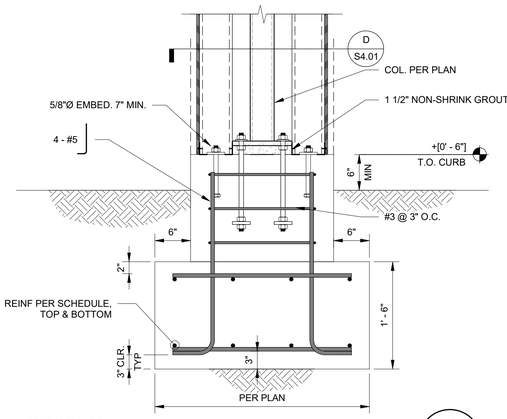


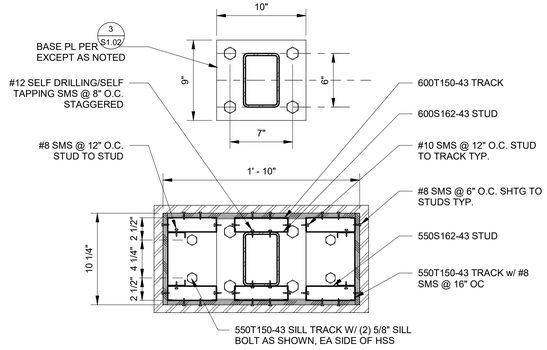
SECTION A
1" = 1'-0"
S4.01



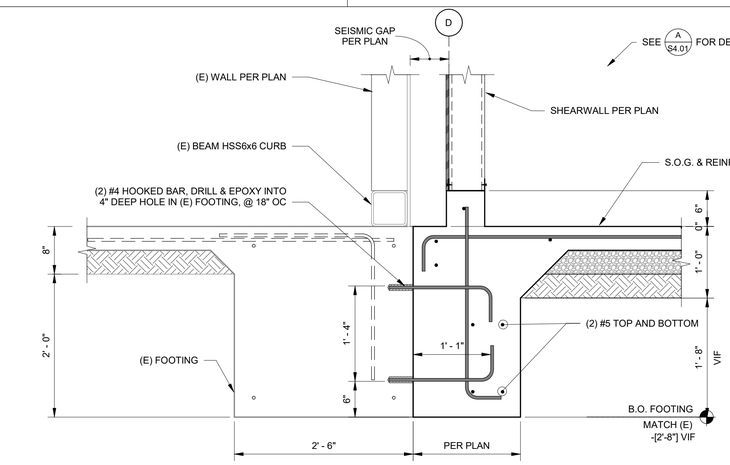
SECTION B
1" = 1'-0"
S4.01



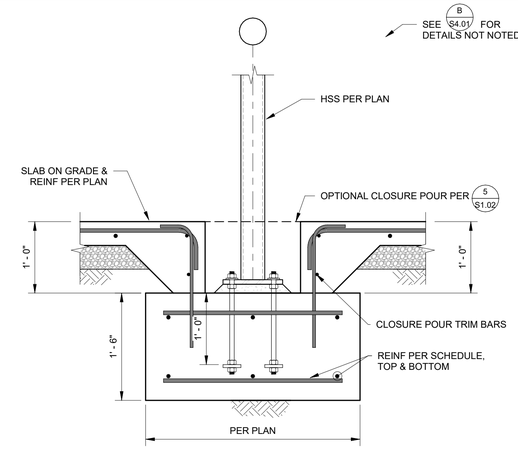
SECTION C
1" = 1'-0"
S4.01



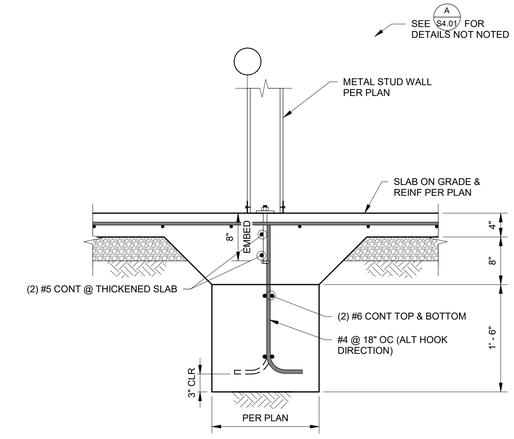
SECTION D
1 1/2" = 1'-0"
S4.01



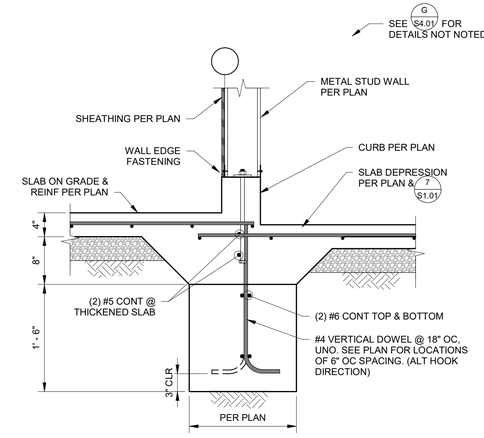
SECTION E
1" = 1'-0"
S4.01



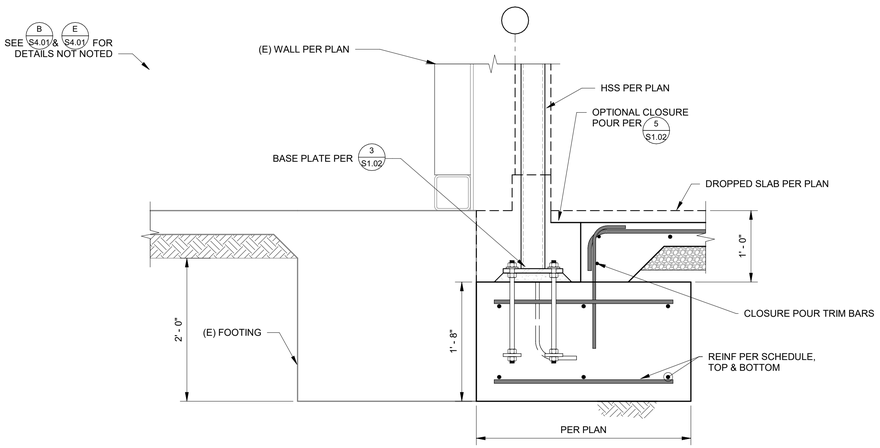
SECTION F
1" = 1'-0"
S4.01



SECTION G
1" = 1'-0"
S4.01



SECTION H
1" = 1'-0"
S4.01



SECTION J
1" = 1'-0"
S4.01

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FOUNDATION DETAILS

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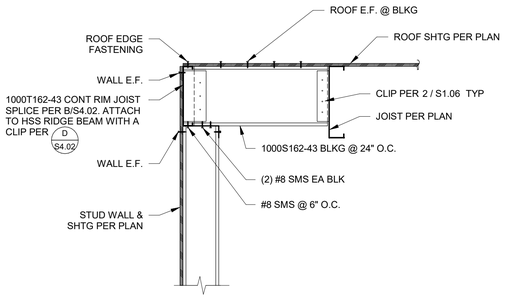
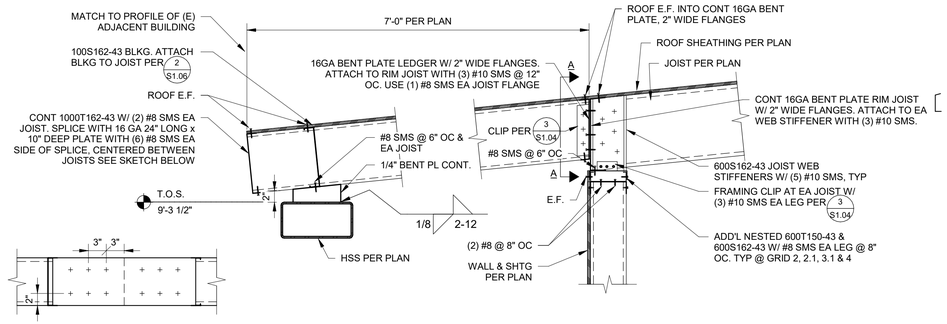
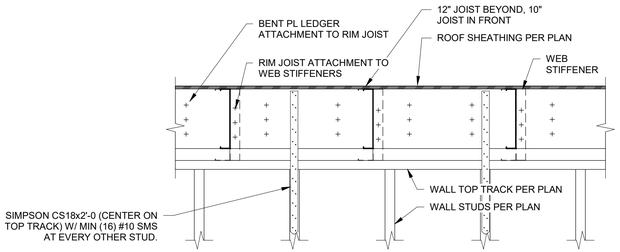


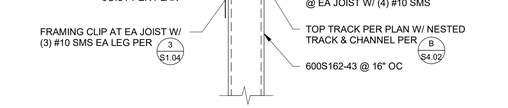
SECTION A — 1" = 1'-0" — S4.02



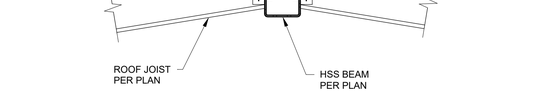
SECTION B — 1" = 1'-0" — S4.02



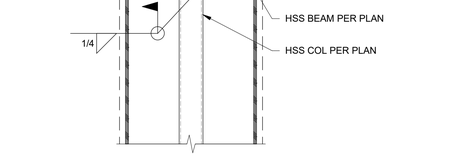
SECTION A-A



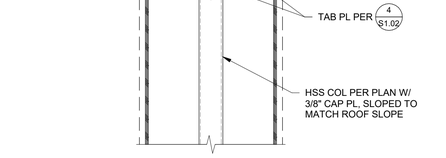
SECTION C — 1" = 1'-0" — S4.02



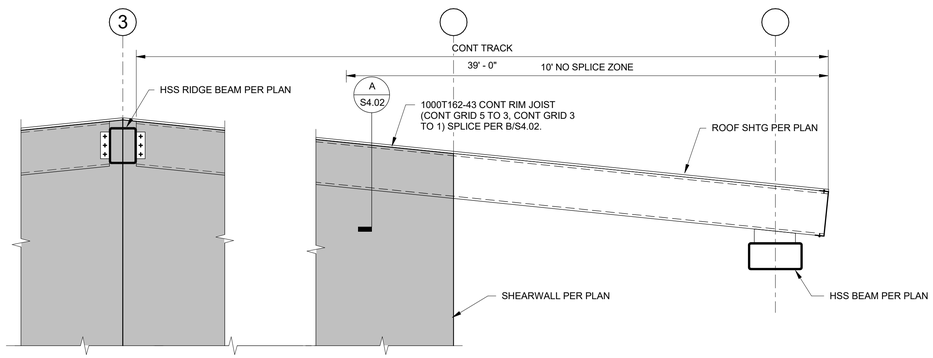
SECTION D — 1" = 1'-0" — S4.02



SECTION E — 1" = 1'-0" — S4.02



SECTION F — 1" = 1'-0" — S4.02



SECTION G — 3/4" = 1'-0" — S4.02

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ROOF FRAMING DETAILS

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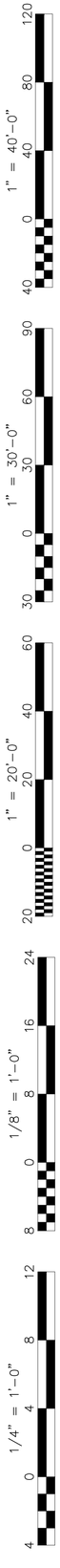

GRILLE SCHEDULE

MARK	LOCATION	DESCRIPTION
A	CEILING SUPPLY	TITUS TDC STEEL FULL LOUVER FACE WITH SQUARE OR RECTANGULAR NECK, TYPE 3 BORDER FOR LAY-IN CEILING, STANDARD #26 WHITE FINISH.
B	CEILING SUPPLY	TITUS TDC STEEL FULL LOUVER FACE WITH SQUARE OR RECTANGULAR NECK, TYPE 1 BORDER FOR SURFACE MOUNT, STANDARD #26 WHITE FINISH.
C	CEILING RETURN	TITUS 50F ALUMINUM EGGCRATE WITH 1/2x1/2x1/2 GRID, TYPE 3 BORDER FOR LAY-IN CEILING, STANDARD #26 WHITE FINISH.
D	WALL SUPPLY	TITUS 272RS STEEL DOUBLE DEFLECTION SUPPLY GRILLE, 3/4" BLADE SPACING, 20 GAUGE BLADES PARALLEL TO LONG DIMENSION, SET ADJUSTABLE BLADES TO 0 DEGREE DEFLECTION, STANDARD #26 WHITE FINISH.
E	WALL RETURN	TITUS 350RS STEEL RETURN GRILLE, 3/4" BLADE SPACING, 35 DEGREE DEFLECTION, BLADES PARALLEL TO SHORT DIMENSION, STANDARD #26 WHITE FINISH.

NOTE: ALL INTERIOR COMPONENTS, EVERYTHING BEHIND THE FACE PLATE, SHALL BE PAINTED FLAT BLACK.

PLUMBING FIXTURE & EQUIPMENT SCHEDULE

MARK	FIXTURE	CONNECTIONS CW	HW	W	V	DESCRIPTION
WC 1	WATER CLOSET ADA	1/2"	-	4"	2"	KOHLER K-96064-SS "PRIMARY" WITH ANTIMICROBIAL FINISH, ELONGATED BOWL, FLOOR MOUNT, 10-1/2" HIGH BOWL WITH K-4686 SCALLOPED SEAT, 1.28 TO 1.6 GPF. SLOAN "ROYAL" 111-1.28 FLUSH VALVE WITH HANDLE POINTED TOWARDS WIDE SIDE OF STALL, 1.28 GPF.
L 1	LAVATORY ADA	1/2"	-	2"	1-1/2"	KOHLER K-2005 "KINGSTON", 21"x18" WALL HUNG VITREOUS CHINA WITH 4" CENTERS. MCGUIRE 155A GRID DRAIN AND TAILPIECE. CHICAGO 420-E2805ABCP 0.5 GPM, SINGLE LEVER FAUCET WITH VANDAL PROOF NON-AERATING OUTLET. PROVIDE J.R. SMITH 723 CONCEALED ARMS AND STEEL SUPPORT PLATE PER 2/M0.11 FOR FIXTURE MOUNTING. REFER TO ARCHITECTURAL PLANS FOR ACCESSIBLE MOUNTING HEIGHT. CONNECT COLD WATER TO BOTH INLETS.
S 1	CLASSROOM SINK ADA	1/2"	-	2"	1-1/2"	JUST CRAF-ADA-1931-A-GR SINGLE COMPARTMENT 18 GAUGE STAINLESS STEEL, 22"x16"x6-1/2" DEEP BOWL SIZE, J-35-SSF SINK STRAINER. CHICAGO 350-E35ABCP 1.5 GPM GOOSENECK FAUCET WITH VANDAL PROOF LEVER HANDLE AT CENTER OF LEFT LEDGE, 748-665ABCP DRINKING BUBBLER AT RIGHT FRONT.
DF 1	DRINKING FOUNTAIN ADA	1/2"	-	2"	1-1/2"	HAWS 1119.14 HI-LO WALL MOUNT DRINKING FOUNTAIN WITH BACK PANEL, 14 GAUGE STAINLESS STEEL, PUSH BUTTON OPERATION, VANDAL RESISTANT CHROME PLATED BRASS BUBBLER HEADS AND WASTE STRAINERS, INTEGRAL TRAPS. PROVIDE 6700.4 MOUNTING PLATE, 6800 MOUNTING SUPPORT. REFER TO ARCHITECTURAL PLANS FOR ACCESSIBLE MOUNTING HEIGHT.
WHA 1	WATER HAMMER ARRESTER	1/2"	-	-	-	SIOUX CHIEF HYDRA-RESTER 652-AS, SEAMLESS COPPER CHAMBER APPROVED FOR CONCEALED INSTALLATION, UP TO 11 FIXTURE UNITS. INSTALL IN UPWARD POSITION.
HB 1	HOSE BIBB	3/4"	-	-	-	WOODFORD 24-P-PC POLISHED CHROME WALL FAUCET, 34HF ANTI-SIPHON VACUUM BREAKER, AND LOOSE TEE KEY.
HB 2	HOSE BIBB	3/4"	-	-	-	WOODFORD MODEL B75 RECESSED WALL FAUCET IN CONCEALED BOX WITH LOCKING DOOR, MOUNTING BRACKET, 34HF ANTI-SIPHON VACUUM BREAKER, AND LOOSE TEE KEY. SELF DRAINING.
TP 1	TRAP PRIMER	1/2"	-	-	-	PRECISION PLUMBING PRODUCTS P1-500 VALVE. PROVIDE DU-U DISTRIBUTION UNIT WHEN MORE THAN ONE DRAIN IS SERVED, UP TO 4 DRAINS PER DISTRIBUTION UNIT. PLUG UNUSED OUTLETS AS REQUIRED. PROVIDE WALL ACCESS DOOR. REFER TO PLANS FOR NUMBER OF DRAINS SERVED.
FD 1	FLOOR DRAIN	1/2"	-	2"	1-1/2"	J.R. SMITH 2005(A)-P050-AHP 5" ROUND NICKEL BRONZE STRAINER HEAD, DUCO CAST IRON BODY WITH FLASHING COLLAR, TRAP PRIMER CONNECTION, HEEL PROOF GRATE. PROVIDE 5" SQUARE HEAD FOR TILE FLOOR.

PACKAGE HEAT PUMP UNIT SCHEDULE

MARK	HP 1	HP 2
VOLTS/PHASE	460/3	
MCA / MOCP	25 / 25	
FLA / LRA	/ 54.7	
FUSE SIZE	25	
BLOWER:		
CFM	1600	
DUCT SP (IN WC)	0.2	
MINIMUM OSA (CFM)	415	
HP / BHP	0.75 /	
DRIVE	ECM	
COOLING:		
TOTAL (MBH)	53.5	
SENSIBLE (MBH)	39.0	
EADB / EAWB (°F)	80 / 67	
AMBIENT DB (°F)	95	
REFRIGERANT	R410A	
CONDENSATE CONN	3/4"	
STAGES	2	
SEER / EER / IEER, AHRI	- / 11.0 / 12.5	
HEATING:		
CAPACITY (MBH)	53.5	
EADB (°F)	70	
AMBIENT DB (°F)	47	
STRIP HEATER (KW)	6.0	
HSPF / COP	- / 3.5	
FILTERS:		
RA: QUANTITY / SIZE	2 / 24x30x2	
TYPE	MERV 13	
PD, CLEAN (IN WC)	0.3	
MOUNTING	FLOOR (6)	
MANUFACTURER	BARD	
TYPE	HEAT PUMP	
MODEL NUMBER	I60Z2	
CONTROL	T'STAT (5)	
SERVICE	SEE PLANS	
OP WEIGHT (LBS)	1,200	
ACCESSORIES	(1),(2),(3),(4)	

NOTES:
(1) CA COMPLIANT ECONOMIZER ASSEMBLY WITH FDD, FULLY MODULATING DAMPERS, INTEGRAL POWER EXHAUST, AND DEMAND CONTROL VENTILATION; PELICAN WIRELESS PEARL ECONOMIZER CONTROLLER.
(2) UL 867 AND 2998 LISTED NPBI TYPE ION GENERATOR IN SUPPLY AIR DUCT WITH SEPARATE 120V POWER; NU-CALGON iWAVE-C.
(3) WALL SLEEVE, ALUMINUM OUTDOOR LOUVERED GRILLE WITH BIRD SCREEN, TOP CABINET EXTENSION KIT.
(4) DISCONNECT BY DIV 26 ELECTRICAL
(5) THERMOSTAT WITH INTEGRAL CO2 SENSOR; PELICAN WIRELESS TC3.
(6) SEE 11/M0.11

EXHAUST FAN SCHEDULE

MARK	EF 1	EF 2
CFM	110	110
ESP (IN WC)	0.25	0.25
HP / BHP / WATTS	- / - / 24.2	- / - / 24.2
VOLTAGE/PHASE	115/1	115/1
RPM	960	960
SONES	1.3	1.3
DRIVE	DIRECT	DIRECT
MOUNTING	CEILING (5)	CEILING (5)
MANUFACTURER	GREENHECK	GREENHECK
TYPE		
MODEL NUMBER	SP-A90-130-VG	SP-A90-130-VG
CONTROL	(1)	(1)
SERVICE	UNISEX RR	UNISEX RR
OP WEIGHT (LBS)	12	12
ACCESSORIES	(2),(3),(4)	(2),(3),(4)

NOTES:
(1) INTERLOCK WITH LIGHTS
(2) INTEGRAL BACKDRAFT DAMPER
(3) ROOF CAP WITH BIRDSCREEN, GREENHECK RJ-6x9
(4) DISCONNECT BY DIV 26 ELECTRICAL
(5) SEE 8/M0.11

MEP COMPONENT ANCHORAGE NOTE

ALL MECHANICAL, PLUMBING, AND ELECTRICAL COMPONENTS SHALL BE ANCHORED AND INSTALLED PER THE DETAILS ON THE DSA APPROVED CONSTRUCTION DOCUMENTS. THE FOLLOWING COMPONENTS SHALL BE ANCHORED OR BRACED TO MEET THE FORCE AND DISPLACEMENT REQUIREMENTS PRESCRIBED IN THE 2022 CBC SECTIONS 1617A.1.18 THROUGH 1617A.1.26 AND ASCE 7-16 CHAPTERS 13, 26, AND 30:

1. ALL PERMANENT EQUIPMENT AND COMPONENTS.
2. TEMPORARY, MOVABLE OR MOBILE EQUIPMENT THAT IS PERMANENTLY ATTACHED (e.g. HARD WIRED) TO THE BUILDING UTILITY SERVICES SUCH AS ELECTRICITY, GAS OR WATER. "PERMANENTLY ATTACHED" SHALL INCLUDE ALL ELECTRICAL CONNECTIONS EXCEPT PLUGS FOR 110/220 VOLT RECEPTACLES HAVING A FLEXIBLE CABLE.
3. TEMPORARY, MOVABLE OR MOBILE EQUIPMENT WHICH IS HEAVIER THAN 400 POUNDS OR HAS A CENTER OF MASS LOCATED 4 FEET OR MORE ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENT IS REQUIRED TO BE RESTRAINED IN A MANNER APPROVED BY DSA.

THE FOLLOWING MECHANICAL AND ELECTRICAL COMPONENTS SHALL BE POSITIVELY ATTACHED TO THE STRUCTURE BUT NEED NOT DEMONSTRATE DESIGN COMPLIANCE WITH THE REFERENCES NOTED ABOVE. THESE COMPONENTS SHALL HAVE FLEXIBLE CONNECTIONS PROVIDED BETWEEN THE COMPONENT AND ASSOCIATED DUCTWORK, PIPING, AND CONDUIT. FLEXIBLE CONNECTIONS MUST ALLOW MOVEMENT IN BOTH TRANSVERSE AND LONGITUDINAL DIRECTIONS:

A. COMPONENTS WEIGHING LESS THAN 400 POUNDS AND HAVE A CENTER OF MASS LOCATED 4 FEET OR LESS ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENT.
B. COMPONENTS WEIGHING LESS THAN 20 POUNDS, OR IN THE CASE OF DISTRIBUTED SYSTEMS, LESS THAN 5 POUNDS PER FOOT, WHICH ARE SUSPENDED FROM A ROOF OR FLOOR OR HUNG FROM A WALL.

THE ANCHORAGE OF ALL MECHANICAL, ELECTRICAL AND PLUMBING COMPONENTS SHALL BE SUBJECT TO THE APPROVAL OF THE DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE OR STRUCTURAL ENGINEER DELEGATED RESPONSIBILITY AND ACCEPTANCE BY DSA. THE PROJECT INSPECTOR WILL VERIFY THAT ALL COMPONENTS AND EQUIPMENT HAVE BEEN ANCHORED IN ACCORDANCE WITH THE ABOVE REQUIREMENTS.

PIPING, DUCTWORK, AND ELECTRICAL DISTRIBUTION SYSTEM BRACING NOTE

PIPING, DUCTWORK, AND ELECTRICAL DISTRIBUTION SYSTEMS SHALL BE BRACED TO COMPLY WITH THE FORCES AND DISPLACEMENTS PRESCRIBED IN ASCE 7-16 SECTION 13.3 AS DEFINED IN ASCE 7-16 SECTIONS 13.6.5, 13.6.6, 13.6.7, 13.6.8; AND 2022 CBC, SECTIONS 1617A.1.24, 1617A.1.25 AND 1617A.1.26.

THE METHOD OF SHOWING BRACING AND ATTACHMENTS TO THE STRUCTURE FOR THE IDENTIFIED DISTRIBUTION SYSTEM ARE AS NOTED BELOW. WHEN BRACING AND ATTACHMENTS ARE BASED ON A PREAPPROVED INSTALLATION GUIDE (e.g., HCAi OPM FOR 2013 CBC OR LATER), COPIES OF THE BRACING SYSTEM INSTALLATION GUIDE OR MANUAL SHALL BE AVAILABLE ON THE JOBSITE PRIOR TO THE START OF AND DURING THE HANGING AND BRACING OF THE DISTRIBUTION SYSTEMS. THE STRUCTURAL ENGINEER OF RECORD SHALL VERIFY THE ADEQUACY OF THE STRUCTURE TO SUPPORT THE HANGER AND BRACE LOADS.

MECHANICAL PIPING (MP), MECHANICAL DUCTS (MD), PLUMBING PIPING (PP), ELECTRICAL DISTRIBUTION SYSTEMS (E):

MP☒ MD☒ PP☒ E☐ OPTION 1: DETAILED ON THE APPROVED DRAWINGS WITH PROJECT SPECIFIC NOTES AND DETAILS.

MP☐ MD☐ PP☐ E☐ OPTION 2: SHALL COMPLY WITH HCAi (OSHPD) PRE-APPROVAL (OPM #) #OPM-0052-13 TOLCO SEISMIC RESTRAINT SYSTEMS, AS INCLUDED IN THESE DRAWINGS WITH PROJECT-SPECIFIC NOTES AND DETAILS.

GENERAL MECHANICAL NOTES

A. THE PLANS AND SPECIFICATIONS DESCRIBE THE MECHANICAL WORK OF THIS PROJECT. ANY ITEMS MENTIONED IN ONE PART SHALL BE AS BINDING AS THOUGH MENTIONED IN BOTH. PROVIDE THE NECESSARY LABOR, MATERIALS, EQUIPMENT, TOOLS, AND SERVICES FOR A COMPLETE FUNCTIONING SYSTEM.

B. ALL LOCATIONS OF EXISTING UTILITIES, EQUIPMENT, DUCTWORK, AND PIPING SHOWN ARE APPROXIMATE. CONTRACTOR SHALL VERIFY ALL CONDITIONS PRIOR TO PROCEEDING WITH ANY WORK, INCLUDING EXACT LOCATION, SIZE, SERVICE, AND ROUTING OF EXISTING UTILITIES, DUCTWORK, AND PIPING. CONTRACTOR SHALL IMMEDIATELY NOTIFY ARCHITECT/ENGINEER OF ANY EXISTING CONDITIONS WHICH MAY CONFLICT WITH INFORMATION PROVIDED IN CONSTRUCTION DOCUMENTS.

C. MECHANICAL LAYOUTS INDICATED ON PLANS ARE DIAGRAMMATIC ONLY. SOME WORK MAY BE SHOWN OFFSET FOR CLARITY. EXACT LOCATION OF EQUIPMENT, DUCTWORK, AND PIPES SHALL BE COORDINATED WITH OTHER TRADES.

D. PROVIDE CLEANOUTS PER CPC SECTIONS 707, 719, AND 1101.13.

E. PROVIDE PLUMBING VENT TERMINATION PER CPC SECTION 906. PLUMBING VENTS SHALL TERMINATE NOT LESS THAN TEN FEET FROM, OR NOT LESS THAN THREE FEET ABOVE, AN OPENABLE WINDOW, DOOR, OPENING, AIR INTAKE, OR VENT SHAFT. COORDINATE EXACT LOCATION WITH OTHER TRADES.

F. PENETRATIONS THROUGH FIRE RATED ASSEMBLIES SHALL BE PER CBC SECTIONS 714 AND 717. FIRE STOP MATERIAL SHALL BE A TESTED ASSEMBLY APPROVED BY THE FIRE MARSHAL. SEE ARCHITECTURAL PLANS FOR LOCATION OF FIRE RATED ASSEMBLIES.

G. THE SEISMIC RESTRAINT OF MECHANICAL EQUIPMENT, DUCTWORK, AND PIPES SHALL CONFORM TO CBC CHAPTER 16A.

H. PROVIDE FRESH AIR INTAKE SEPARATION FROM EXHAUST TERMINATION AND PLUMBING VENT TERMINATION PER CMC SECTIONS 502, 510.9 AND 519.5, AND CPC SECTION 906. COORDINATE WITH OTHER TRADES.

J. DUCTWORK SIZES INDICATED ARE INSIDE CLEAR DIMENSIONS. WHERE ACOUSTIC LINING IS SHOWN, MAINTAIN THE INSIDE CLEAR DIMENSIONS BY INCREASING THE SHEET METAL SIZE TO ACCOMMODATE LINING THICKNESS.

K. ACCEPTANCE TESTING SHALL BE PERFORMED BY A CERTIFIED MECHANICAL ACCEPTANCE TEST TECHNICIAN (CMATT). THE CMATT SHALL PERFORM, DOCUMENT, REGISTER, AND SUBMIT ALL ACCEPTANCE TESTING AS REQUIRED BY CALIFORNIA CODE OF REGULATIONS, TITLE 24, AND AS NOTED ON THE CERTIFICATE OF COMPLIANCE FORM, WHERE APPLICABLE.

L. SEE ARCHITECTURAL REFLECTED CEILING PLANS FOR LOCATIONS OF CEILING DIFFUSERS, REGISTERS, AND GRILLES.

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-123900 INC: A
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/05/2024

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BAKERSFIELD CITY SCHOOL DISTRICT
1300 BAKER ST.
BAKERSFIELD CA 93305

Project Name:

TRANSITIONAL KINDERGARTEN

Project Address:

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1100 Citadel
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integrated designs
by SOMAM, Inc.

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LISA LU
32712
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STATE OF CALIFORNIA

Sheet Title:

GENERAL NOTES - SCHEDULES

Job No.: **5593**

Sheet No.: **M0.01**

Release: DSA SUBMITTAL Issue Date

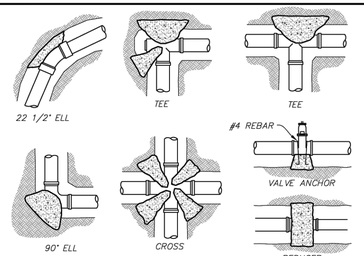
1" = 40'-0" 120 80 40 0

1" = 30'-0" 90 60 30 0

1" = 20'-0" 60 40 20 0

1/8" = 1'-0" 24 16 8 0

1/4" = 1'-0" 12 8 4 0



THRUST BLOCK SCHEDULE

BEARING AREA IN SQUARE FEET

PIPE SIZE	TEE OR PLUG	90° ELL	45° ELL	22 1/2° ELL	CROSS	VALVE
4"–6"	3	4	2	2	1.5 EA.	3.0
8"	5	7	4	2	3.0 EA.	5.5
10"	8	11	6	3	4.5 EA.	9.0
12"	11	16	8	4	6.5 EA.	13.0
16"	16	23	13	7	8.0 EA.	16.0

NOTES:

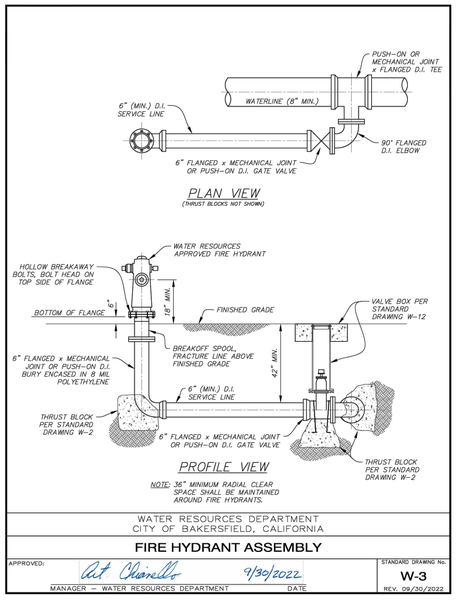
1. ALL (INCLUDING RESTRAINED) VALVES, FITTINGS, AND DIRECTIONAL CHANGES SHALL BE HELD IN PLACE BY CONCRETE THRUSTS BLOCKS.
2. BEARING AREAS INDICATED ARE BASED ON ALLOWABLE SOIL PRESSURE OF 1500 PSF.
3. CONCRETE IS NOT TO BEAR AGAINST PIPE. THRUST BLOCK TO ONLY BE IN CONTACT WITH FITTING.
4. THRUST BLOCKS SHALL BE POURED AGAINST UNDISTURBED SOIL.
5. JOINTS SHALL BE KEPT CLEAR OF CONCRETE.
6. CONCRETE SHALL CONTAIN A MINIMUM OF FIVE AND ONE–HALF (5½) SACKS (517 POUNDS) OF TYPE II PORTLAND CEMENT PER CUBIC YARD. CONCRETE SHALL HAVE A MINIMUM TWENTY–EIGHT (28) DAY COMPRESSIVE STRENGTH OF 3,000 PSI.

WATER RESOURCES DEPARTMENT
CITY OF BAKERSFIELD, CALIFORNIA

THRUST BLOCKS

APPROVED: Art Chianello 9/30/2022
MANAGER – WATER RESOURCES DEPARTMENT DATE

STANDARD DRAWING No. W-2
REV. 09/30/2022

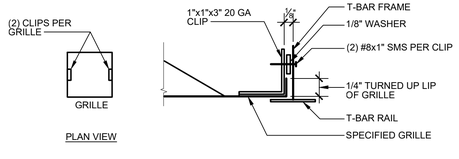


WATER RESOURCES DEPARTMENT
CITY OF BAKERSFIELD, CALIFORNIA

FIRE HYDRANT ASSEMBLY

APPROVED: Art Chianello 9/30/2022
MANAGER – WATER RESOURCES DEPARTMENT DATE

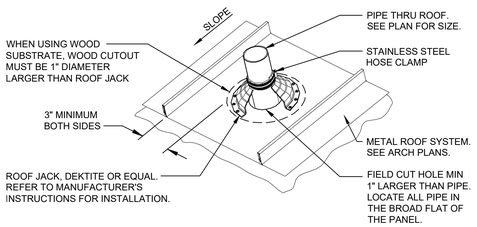
STANDARD DRAWING No. W-3
REV. 09/30/2022



16 M0.11 GRILLE RESTRAINT

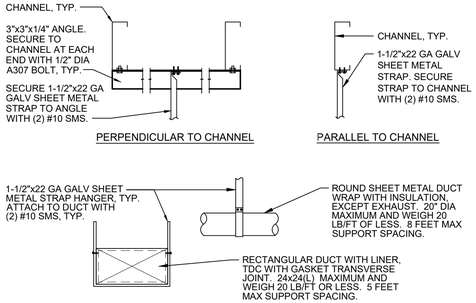
SCALE: N.T.S.

NOTES:
1. PENETRATIONS SHOULD BE CENTERED IN PANELS IF AT ALL POSSIBLE
2. SUBSTRATE MUST BE CUT OUT ENOUGH SO THAT ROOF JACK IS ONLY ATTACHED TO ROOF PANEL.
3. FOR VENT PIPE, TERMINATE 12" ABOVE FINISH ROOF, UNLESS NOTED OTHERWISE.



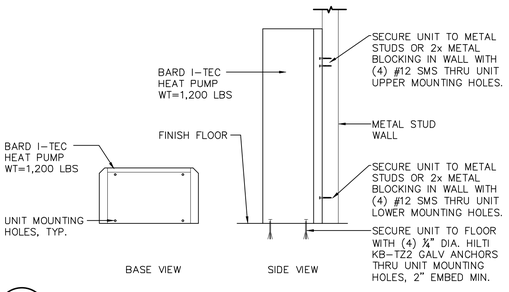
9 M0.11 PIPE THROUGH ROOF

SCALE: N.T.S.



10 M0.11 DRINKING FOUNTAINS - MOUNTING ON WALL

SCALE: N.T.S.



11 M0.11 HEAT PUMP - MOUNTING

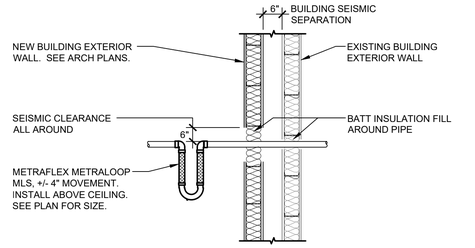
HEAT PUMP – MOUNTING

SCALE: N.T.S.

12 M0.11 DUCT SUPPORT

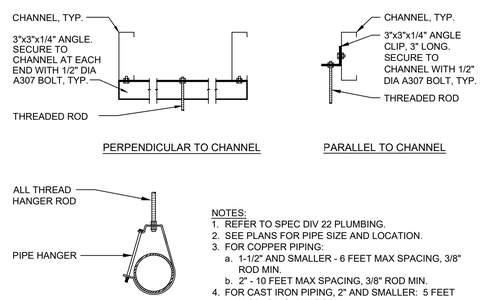
SCALE: N.T.S.

NOTES:
1. INSTALL U-LOOP WITH THE CLOSEST ELBOW WITHIN 24" OF BUILDING SEISMIC SEPARATION.



5 M0.11 PIPE - BUILDING SEISMIC SEPARATION

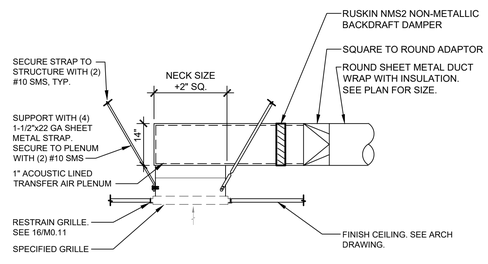
SCALE: N.T.S.



NOTES:
1. REFER TO SPEC DIV 22 PLUMBING.
2. SEE PLANS FOR PIPE SIZE AND LOCATION.
3. FOR COPPER PIPING:
   a. 1-1/2" AND SMALLER - 6 FEET MAX SPACING, 3/8" ROD MIN.
   b. 2" - 10 FEET MAX SPACING, 3/8" ROD MIN.
4. FOR CAST IRON PIPING, 2" AND SMALLER: 5 FEET MAX SPACING, 3/8" ROD MIN.

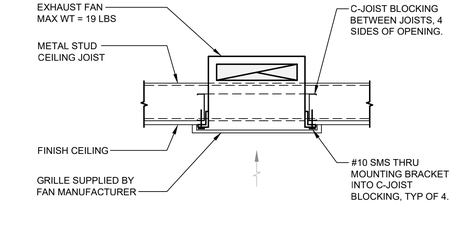
6 M0.11 PIPE SUPPORT - HANGER

SCALE: N.T.S.



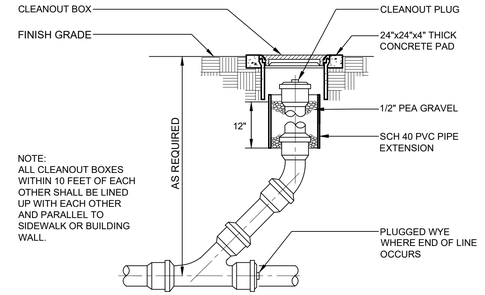
7 M0.11 RETURN / TRANSFER AIR

SCALE: N.T.S.



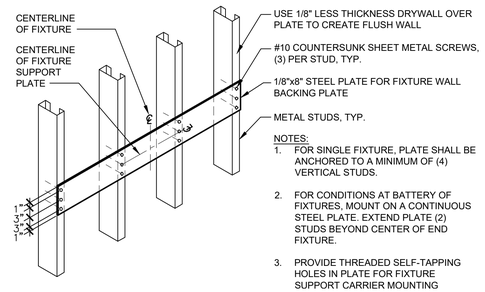
8 M0.11 EXHAUST FAN - CEILING

SCALE: N.T.S.



1 M0.11 CLEANOUT TO GRADE (COTG)

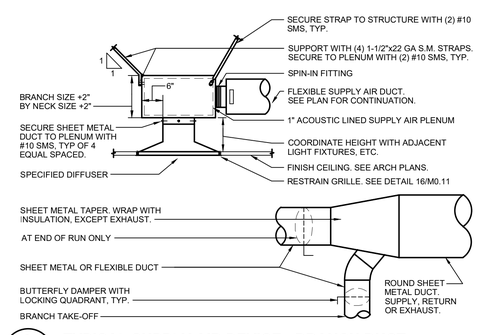
SCALE: N.T.S.



NOTES:
1. FOR SINGLE FIXTURE, PLATE SHALL BE ANCHORED TO A MINIMUM OF (4) VERTICAL STUDS.
2. FOR CONDITIONS AT BATTERY OF FIXTURES, MOUNT ON A CONTINUOUS STEEL PLATE. EXTEND PLATE (2) STUDS BEYOND CENTER OF END FIXTURE.
3. PROVIDE THREADED SELF-TAPPING HOLES IN PLATE FOR FIXTURE SUPPORT CARRIER MOUNTING
4. PROVIDE J.R. SMITH CONCEALED ARMS MOUNTED TO PLATE FOR LAVATORY INSTALLATION.

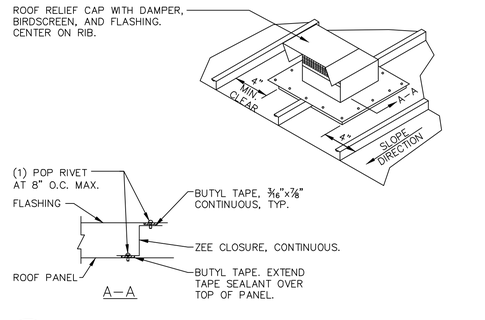
2 M0.11 FIXTURE SUPPORT BACKING - METAL STUDS

SCALE: N.T.S.



3 M0.11 TYPICAL SUPPLY AIR DEVICE - BRANCH DUCT

SCALE: N.T.S.



4 M0.11 ROOF CAP AND FLASHING

ROOF CAP

SCALE: N.T.S.

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DIV. OF THE STATE ARCHITECT
APP: 03-123900 INC:
REVIEWED FOR
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DATE: 08/05/2024

Owner:

BAKERSFIELD CITY SCHOOL DISTRICT
1300 BAKER ST.
BAKERSFIELD CA 93305

Project Name:
TRANSITIONAL KINDERGARTEN

Project Address:
MLK ELEMENTARY SCHOOL
1100 Citadel
Bakersfield, CA 93307

integrated designs
by SOMAM, Inc.

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REGISTERED PROFESSIONAL ENGINEER LISA LUPE 32712 MECHANICAL STATE OF CALIFORNIA

Sheet Title:
DETAILS

Job No.:
5593

Sheet No.:
M0.11

Release: DSA SUBMITTAL Issue Date

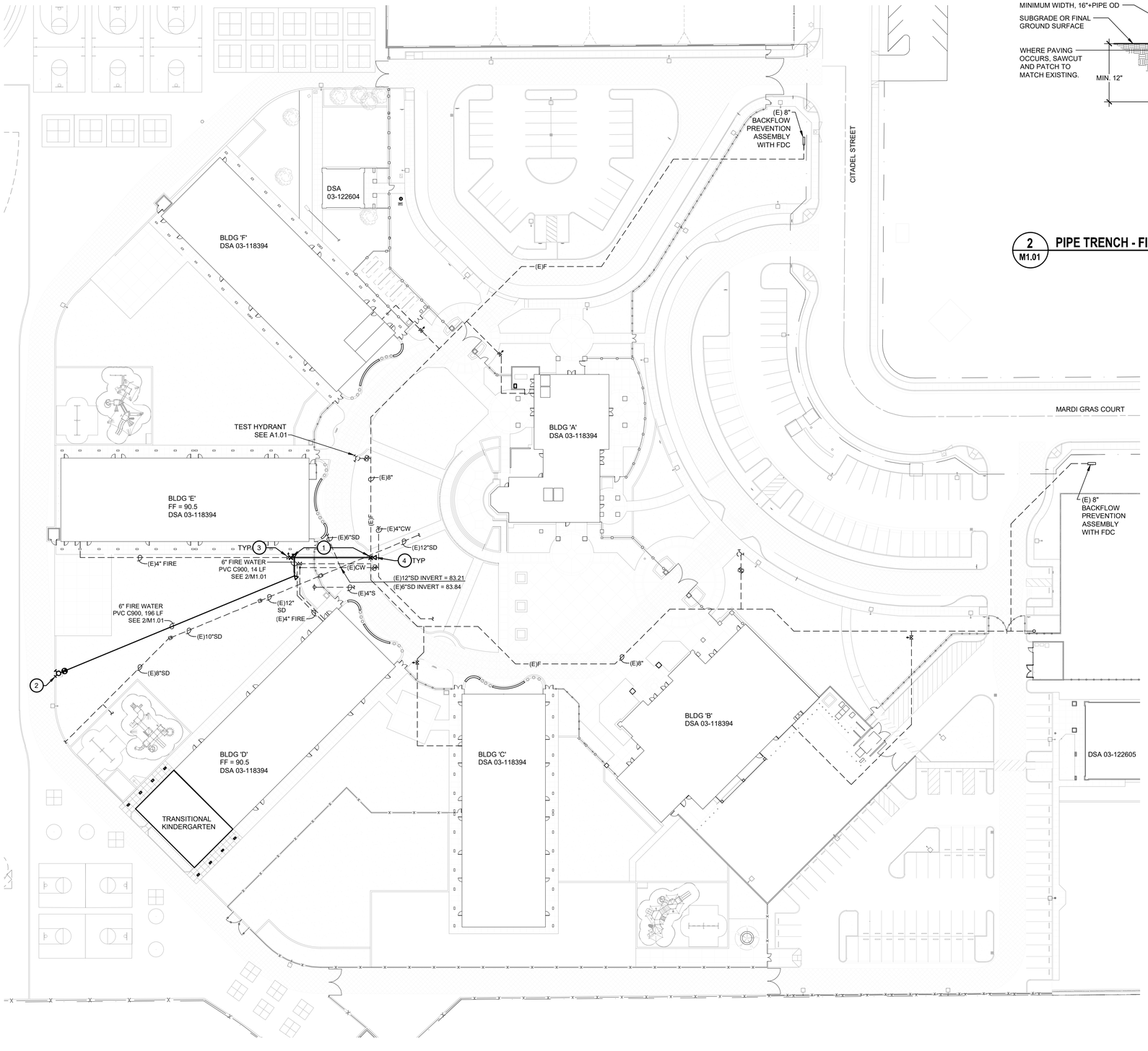
1" = 40'-0"

1" = 30'-0"

1" = 20'-0"

1/8" = 1'-0"

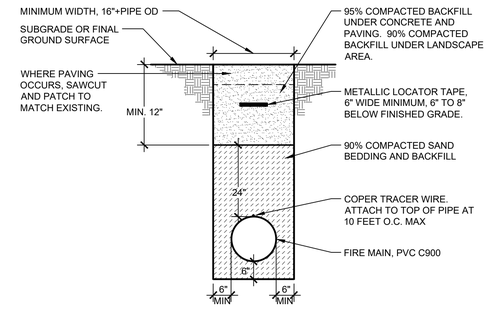
1/4" = 1'-0"



1 M1.01 **FIRE PROTECTION SITE PLAN**

TRANSITIONAL KINDERGARTEN

SCALE: 1" = 40'



2 M1.01 **PIPE TRENCH - FIRE MAIN**

SCALE: N.T.S.

KEY NOTES

1. REMOVE EXISTING 4" FIRE WATER PIPING BELOW GRADE AND REPLACE WITH NEW 8" FIRE WATER PIPING BETWEEN THE POC'S. FIELD VERIFY SERVICE, SIZE, AND LOCATION. SAWCUT AND PATCH TO MATCH EXISTING.
2. FIRE HYDRANT AND SHUTOFF VALVE PER CITY OF BAKERSFIELD WATER RESOURCES DEPT STANDARD W-3. SEE M0.11
3. EXISTING POST INDICATOR VALVE (PIV) TO REMAIN, TYP. PROTECT FROM DAMAGE.
4. THRUST BLOCK, TYP. SEE CITY OF BAKERSFIELD WATER RESOURCES DEPT STANDARD W-2 ON SHEET M0.11.

GENERAL NOTES

A. WATER PIPE FOR FIRE SERVICE SHALL BE POLYVINYL CHLORIDE (PVC) PIPE CONFORMING TO AWWA C900, DR 14 PRESSURE CLASS 305 PSI, AND SHALL BE INSTALLED PER MANUFACTURER'S INSTRUCTIONS.

B. PROVIDE THRUST BLOCKS FOR ALL TEES, PLUGS, CAPS AND BENDS PER NFPA 24. INSTALLING CONTRACTOR SHALL SIZE THE THRUST BLOCKS PER CITY OF BAKERSFIELD WATER RESOURCES DEPT STANDARD W-2. SEE M0.11

C. HYDRANTS, FIRE DEPARTMENT CONNECTIONS, AND POST INDICATOR VALVES SHALL BE INSTALLED PER LOCAL FIRE PROTECTION DISTRICT STANDARDS.

LEGEND

SYMBOL	ABBR	DESCRIPTION
— F —	F	FIRE WATER
— - —	CW	DOMESTIC COLD WATER
———	S. W. D.	SOIL, WASTE OR DRAIN
— SD —	SD	STORM DRAIN
	GV	GATE VALVE
	FH	FIRE HYDRANT
		ELBOW UP
		ELBOW DOWN
		CAP
	FDC	FIRE DEPT CONNECTION
	PIV	POST INDICATOR VALVE
	TB	THRUST BLOCK
	(E)	EXISTING
	DEMO	(E) TO BE REMOVED
	POC	POINT OF CONNECTION
	TYP	TYPICAL

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BAKERSFIELD CA 93305

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LISA LUM
32712
MECHANICAL
STATE OF CALIFORNIA

Sheet Title:

FIRE PROTECTION SITE PLAN

Job No.:

5593

Sheet No.:

M1.01

Release: DSA SUBMITTAL Issue Date

G:\2023\rs\23-5593 MLK TK\Sheets SEAN PARKER 7/24/24

1" = 40'-0"

1" = 30'-0"

1" = 20'-0"

1/8" = 1'-0"

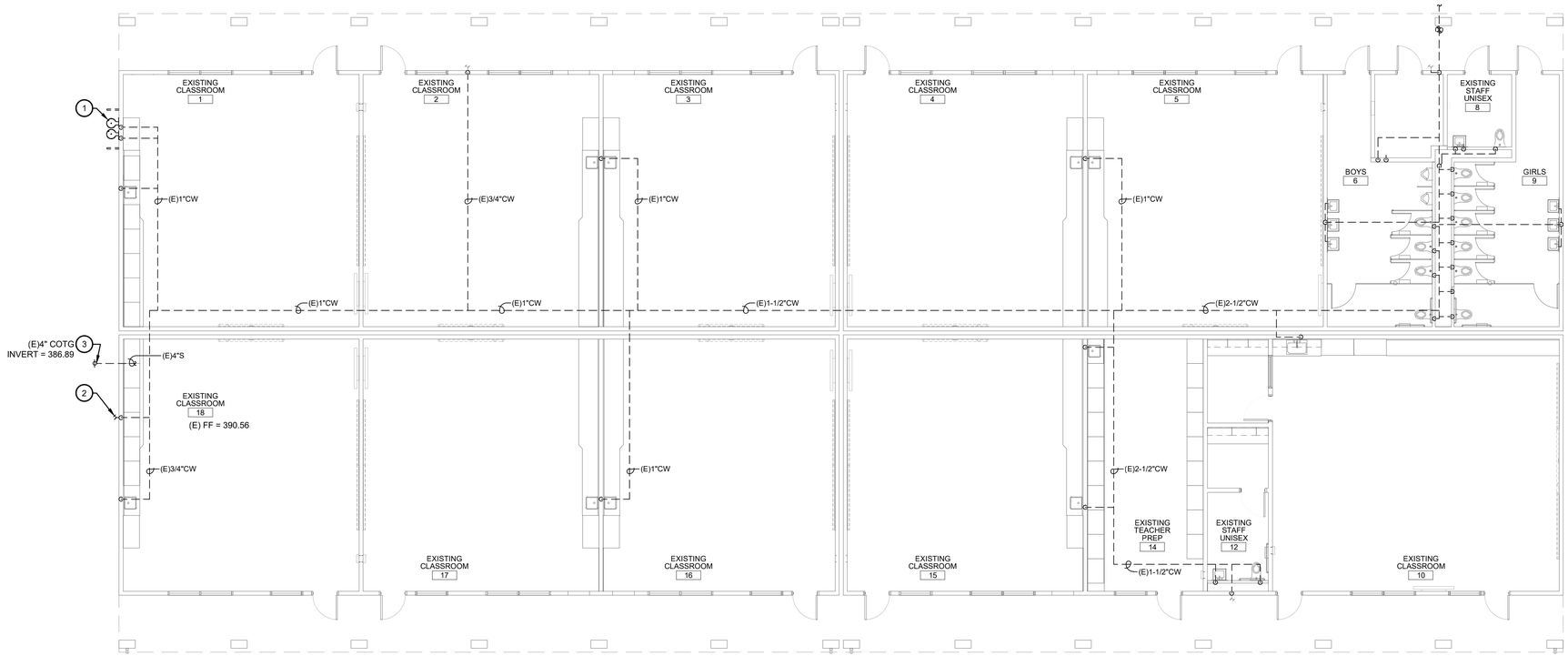
1/4" = 1'-0"

KEY NOTES

1. REMOVE EXISTING HI/LO DRINKING FOUNTAIN. CAP PIPING BEHIND FINISH SURFACES. PATCH, REPAIR, AND PAINT OPENINGS TO MATCH EXISTING ADJACENT SURFACES.
2. REMOVE EXISTING HOSE BIBB. CAP PIPING BEHIND FINISH SURFACES. PATCH, REPAIR, AND PAINT OPENING TO MATCH EXISTING ADJACENT SURFACES.
3. EXISTING 4" COTG TO BE ADJUSTED AND REPLACED WITH NEW FLOOR CLEANOUT, FLUSH WITH NEW FINISH FLOOR. FIELD VERIFY SIZE, DEPTH, AND LOCATION.

LEGEND

SYMBOL	ABBR	DESCRIPTION
	S. W. D.	SOIL, WASTE OR DRAIN
	CW	DOMESTIC COLD WATER
	COTG	CLEANOUT TO GRADE
	GV OR SOV	GATE OR SHUT - OFF VALVE
		ELBOW UP
		ELBOW DOWN
	RED	REDUCER
	HB	HOSE BIBB
	AFF	ABOVE FINISH FLOOR
		CAP
	(E)	EXISTING
	DEMO	(E) TO BE REMOVED
	(N)	NEW
	POC	POINT OF CONNECTION
	TYP	TYPICAL



1 / M2.11 **MECHANICAL PLAN - DEMO**

TRANSITIONAL KINDERGARTEN

SCALE: 1/8" = 1'

IDENTIFICATION STAMP
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MECHANICAL
STATE OF CALIFORNIA

Sheet Title:

MECHANICAL PLAN - DEMO

Job No.: **5593**

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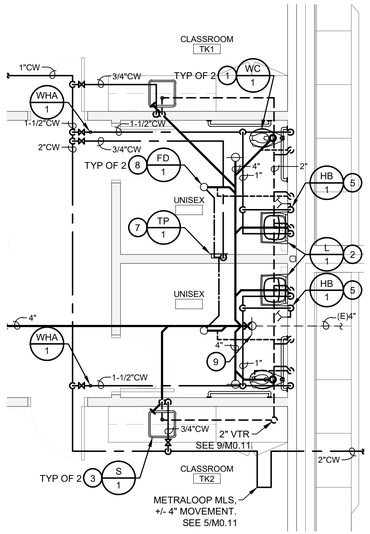
Release: DSA SUBMITTAL

Issue Date

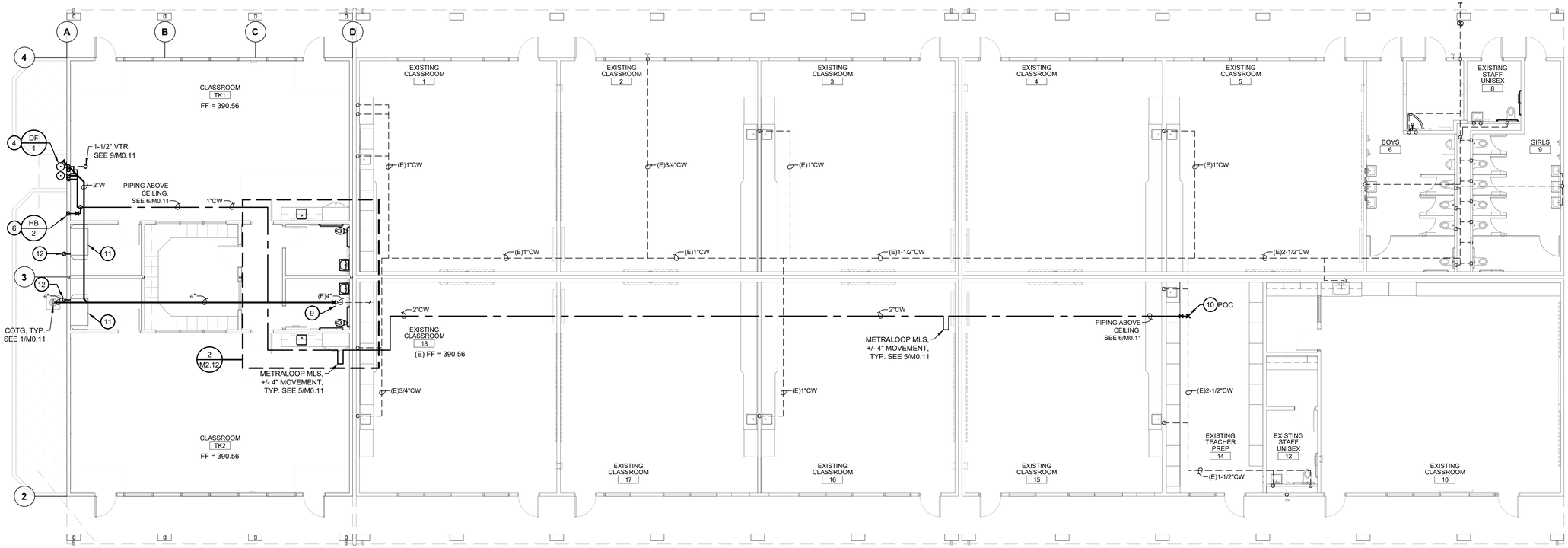
G:\2023frs\23-5593 MLK TK\Sheets SEAN PARKER 7/24/24



2 / M2.12 ENLARGED PLUMBING PLAN

TRANSITIONAL KINDERGARTEN

SCALE: 1/4" = 1'



1 / M2.12 MECHANICAL PLAN - PLUMBING

TRANSITIONAL KINDERGARTEN

SCALE: 1/8" = 1'

KEY NOTES

1. 1-1/2"CW, 4"S, 2"V TO WATER CLOSET, TYP.
2. 3/4"CW, 2"W, 1-1/2"V TO LAV, TYP. SEE 2/M0.11
3. 3/4"CW, 2"W WITH WCO, 1-1/2"V TO SINK, TYP. BRANCH 1/2"CW TO BUBBLER.
4. 3/4"CW, 2"W WITH WCO, 1-1/2"V TO DRINKING FOUNTAIN, FOR EACH CONNECTION. SEE 10/M0.11
5. 3/4"CW TO HOSE BIBB BELOW LAV, TYP.
6. 3/4"CW TO HOSE BIBB AT +12" ABOVE FINISH GRADE, TYP.
7. 3/4"CW TO TRAP PRIMER WITH SHUTOFF VALVE IN WALL AT +24" BEHIND WALL ACCESS PANEL. EXTEND 1/2"CW BELOW FLOOR TO FLOOR DRAIN, TYP.
8. 1/2"CW BELOW FLOOR FROM TRAP PRIMER TO FLOOR DRAIN, TYP.
9. REPLACE WITH NEW FLOOR CLEANOUT, FLUSH WITH NEW FINISH FLOOR. EXTEND 4" SEWER FOR NEW WORK.
10. POC NEW 2"CW TO EXISTING 2-1/2"CW ABOVE CEILING WITH SHUTOFF VALVE, EXTEND 2"CW TO NEW ADDITION. FIELD VERIFY SIZE AND LOCATION. REPLACE CEILING TILES AS NEEDED. PATCH OPENINGS TO MATCH EXISTING.
11. PACKAGE INDOOR HEAT PUMP UNIT ON FLOOR, TYP. SEE HVAC PLANS FOR EXACT LOCATION.
12. CONNECT 3/4" DRAIN TO PACKAGE INDOOR HEAT PUMP UNIT. DISCHARGE THROUGH WALL WITH 90 ELL TURNED DOWN AT +12" ABOVE PLANTER. SEAL OPENING WATER-TIGHT.

LEGEND

SYMBOL	ABBR	DESCRIPTION
	S. W. D.	SOIL, WASTE OR DRAIN
	CW	DOMESTIC COLD WATER
	COTG	CLEANOUT TO GRADE
	FCO	FLOOR CLEANOUT
	GV OR SOV	GATE OR SHUT - OFF VALVE
		ELBOW UP
		ELBOW DOWN
	RED	REDUCER
	HB	HOSE BIBB
	AFF	ABOVE FINISH FLOOR
		CAP
	(E)	EXISTING
	DEMO	(E) TO BE REMOVED
	(N)	NEW
X	POC	POINT OF CONNECTION
	TYP	TYPICAL

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-123900 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/05/2024

Owner:

BAKERSFIELD CITY SCHOOL DISTRICT
1300 BAKER ST.
BAKERSFIELD CA 93305

Project Name:

TRANSITIONAL KINDERGARTEN

Project Address:

MLK ELEMENTARY SCHOOL
1100 Citadel
Bakersfield, CA 93307

integrated designs
by SOMAM, Inc.

ARCHITECTURE
ENGINEERING
INTERIOR DESIGN

6011 N. FRESNO STREET, SUITE 130
FRESNO CALIFORNIA 93710
P:(559) 436-0881 F:(559) 436-0887
E: design@somam.com
integrateddesigns.com

Stamp:

REGISTERED PROFESSIONAL ENGINEER
LISA LUM
32712
MECHANICAL
STATE OF CALIFORNIA

Sheet Title:

MECHANICAL PLAN - PLUMBING

Job No.: **5593**

Sheet No.: **M2.12**

Release: DSA SUBMITTAL Issue Date

G:\2023frs\23-5593 MLK TK\Sheets SEAN PARKER 7/24/24

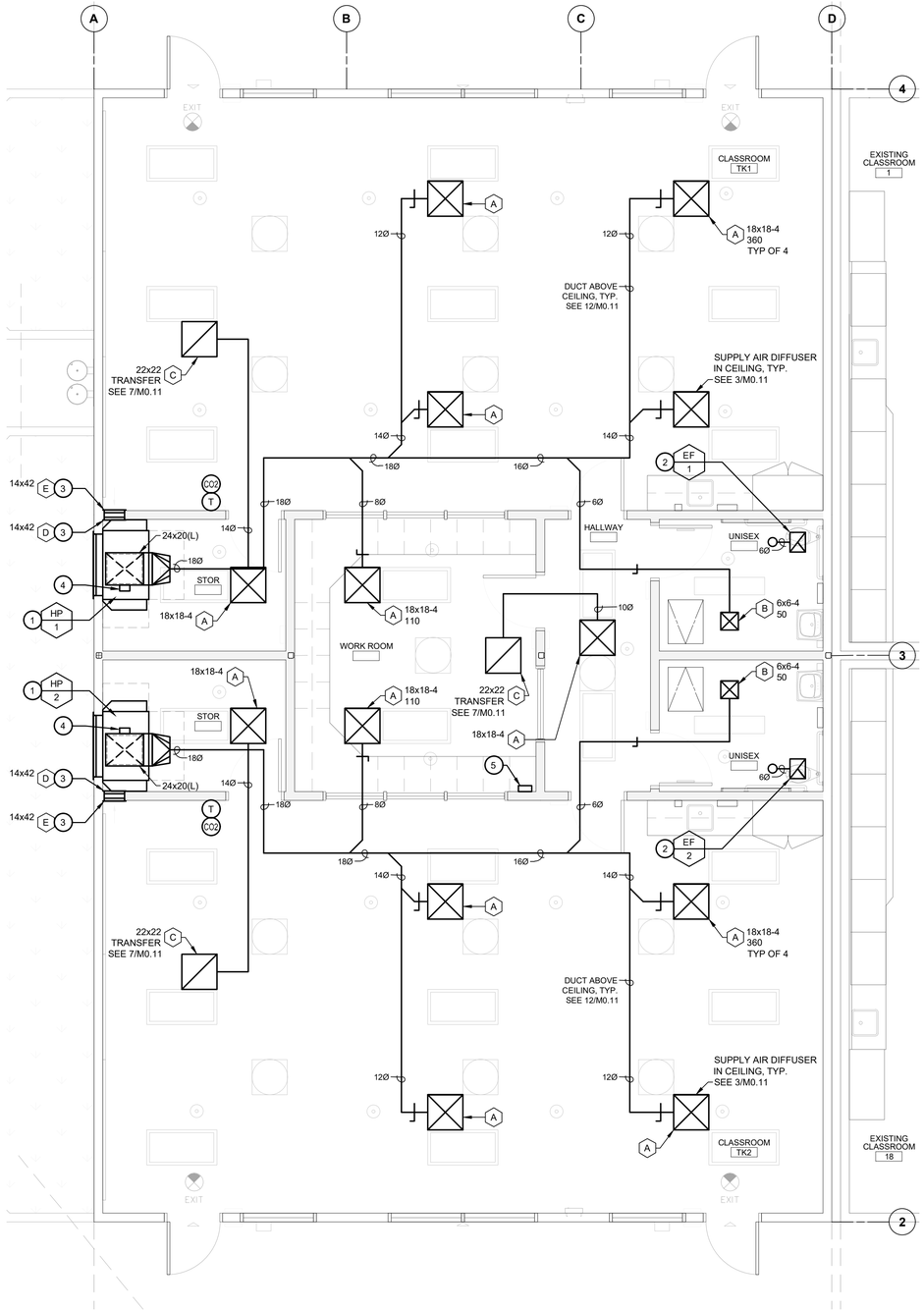
1" = 40'-0" 120 80 40 0 40

1" = 30'-0" 90 60 30 0 30

1" = 20'-0" 60 40 20 0 20

1/8" = 1'-0" 24 16 8 0 8

1/4" = 1'-0" 12 8 4 0 4



1 M3.11 **MECHANICAL PLAN - HVAC**

TRANSITIONAL KINDERGARTEN

SCALE: 1/4" = 1'

KEY NOTES

1. INTERIOR PACKAGED HEAT PUMP UNIT ON FLOOR WITH WALL SLEEVE, WALL LOUVER, TOP CABINET EXTENSION TO CEILING SUPPLIED BY UNIT MANUFACTURER. SEE 11/M0.11
2. CEILING EXHAUST FAN WITH 6" ROUND EXHAUST DUCT THRU ROOF. PROVIDE ROOF FLASHING AND CAP ASSEMBLY, PAINT TO MATCH ADJACENT SURFACES. SEE DETAILS 4 AND 8/M0.11
3. 14x42 DUCT IN WALL WITH GRILLES ON BOTH ENDS, DUCT TO FIT IN BETWEEN 2x STUDS WITH 16" SPACING. BOTTOM OF GRILLES AT 21" ABOVE FINISH FLOOR.
4. AIR IONIZATION SYSTEM IN SUPPLY AIR DUCT, NU-CALGON iWAVE-C. PROVIDE 120V POWER.
5. HVAC WIRELESS REPEATER. COORDINATE EXACT LOCATION WITH OWNER. PROVIDE 120V WALL OUTLET.

LEGEND

SYMBOL	DESCRIPTION	ABBR
AC 1	EQUIPMENT DESIGNATION UNIT ABBREVIATION NUMBER	AC-1
A 10x10-3 120	GRILLE DESIGNATION NECK SIZE & BLOW CFM	
	SUPPLY AIR	SA
	RETURN AIR	RA
	EXHAUST AIR	EXH
	ACOUSTIC LINED DUCT	(L)
	DUCT RISER	
	DUCT DROP	
	SQUARE TO ROUND FITTING	
	FIRE/SMOKE DAMPER	FSD
SD	DUCT SMOKE DETECTOR	SD
	VOLUME CONTROL DAMPER	VCD
CO2	CARBON DIOXIDE SENSOR AT 48" MAXIMUM TO TOP OF BOX	CO2
S	SWITCH	
T	THERMOSTAT AT 48" MAXIMUM TO TOP OF BOX	T'STAT
RL	REFRIGERANT LIQUID	RL
RS	REFRIGERANT SUCTION	RS
	ABOVE FINISH FLOOR	AFF
	EXISTING	(E)
	(E) TO BE REMOVED	DEMO
	NEW	(N)
	OUTSIDE AIR	OSA
X	POINT OF CONNECTION	POC
	TYPICAL	TYP

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REVIEWED FOR
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Owner:

BAKERSFIELD CITY SCHOOL DISTRICT
1300 BAKER ST.
BAKERSFIELD CA 93305

Project Name:

TRANSITIONAL KINDERGARTEN

Project Address:

MLK ELEMENTARY SCHOOL
1100 Citadel
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ARCHITECTURE ENGINEERING INTERIOR DESIGN

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FRESNO CALIFORNIA 93710
P:(559) 436-0881 F:(559) 436-0887
E: design@somam.com
integrateddesigns.com

Stamp:

REGISTERED PROFESSIONAL ENGINEER LISA LUK 32712 MECHANICAL STATE OF CALIFORNIA

Sheet Title:

MECHANICAL PLAN - HVAC

Job No.: **5593**

Sheet No.: **M3.11**

Release: DSA SUBMITTAL

Issue Date: 7/24/24

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CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD	NRCC-PRF-E
Nonresidential Performance Compliance Method	(Page 7 of 16)

C5. SOURCE ENERGY RESULTS FOR NON-REGULATED COMPONENTS[1]

Non-Regulated Energy Component	Standard Design (SOURCE)	Proposed Design (SOURCE)	Compliance Margin (SOURCE)[1]
Receptacle	4.93	4.93	---
Process	---	---	---
Other Ltg	---	---	---
Process Motors	---	---	---
TOTAL (TOTAL COMPLIANCE + NON-REGULATED COMPONENTS)	**23.1**	**22.66**	**0.44 (1.9%)**

[1] Notes: This table is not used for Energy Code Compliance.

C6. 'ABOVE CODE' QUALIFICATIONS

☐ This project is pursuing CalGreen Tier 1 ☐ This project is pursuing CalGreen Tier 2

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD	NRCC-PRF-E
Nonresidential Performance Compliance Method	(Page 4 of 16)

C2. TDV ENERGY COMPLIANCE RESULTS FOR PERFORMANCE COMPONENTS (Annual TDV Energy Use, kBtu/ft² - yr)

COMPLIES[2]

Energy Component	Standard Design (TDV)	Proposed Design (TDV)	Compliance Margin (TDV)[1]
Space Heating	8.83	11.06	-2.23
Space Cooling	80.01	86.77	-6.76
Indoor Fans	98.72	77.78	20.94
Heat Rejection	0	0	0
Pumps & Misc.	0	0	0
Domestic Hot Water	31.41	31.49	-0.08
Indoor Lighting	26.72	32.07	-5.35
Flexibility	---	---	---
EFFICIENCY COMPLIANCE TOTAL	**245.69**	**239.17**	**6.52 (2.7%)**
Photovoltaics	---	---	---
Batteries	---	---	---
TOTAL COMPLIANCE	**245.69**	**239.17**	**6.52 (2.7%)**

[1] Notes: This number in parenthesis following the Compliance Margin in column 4, represents the Percent Better than Standard.

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD	NRCC-PRF-E
Nonresidential Performance Compliance Method	(Page 1 of 16)

Project Name:	BCSD MLK Elem School - Transitional Kindergarten	Date Prepared:	2024-01-05

A. General Information

1	Project Name	BCSD MLK Elem School - Transitional Kindergarten			
2	Run Title	Title 24 Analysis			
3	Project Location	1100 Citadel Street			
4	City	Bakersfield	5	Standards Version	Compliance 2022
6	Zip code	93307	7	Compliance Software (version)	EnergyPro 9.2
8	Climate Zone	13	9	Building Orientation (deg)	315
10	Building Type(s)	• Nonresidential	11	Weather File	MEADOWS-FIELD_STYP20.epw
12	Project Scope	• New envelope and mechanical	13	Number of Dwelling Units	0
14	Total Conditioned Floor Area in Scope (ft²)	2530	15	Total # of hotel/motel rooms	0
16	Total Unconditioned Floor Area (ft²)	0	17	Fuel Type	Natural gas
18	Nonresidential Conditioned Floor Area	2530	19	Total # of Stories (Habitable Above Grade)	1
20	Residential Conditioned Floor Area	0			

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD	NRCC-PRF-E
Nonresidential Performance Compliance Method	(Page 8 of 16)

C7. ENERGY USE SUMMARY

Energy Component	Standard Design Site (MWh)	Proposed Design Site (MWh)	Margin (MWh)	Standard Design Site (MBtu)	Proposed Design Site (MBtu)	Margin (MBtu)
Space Heating	0.6	0.8	-0.2	---	---	---
Space Cooling	5.7	6.2	-0.5	---	---	---
Indoor Fans	8.8	6.9	1.9	---	---	---
Heat Rejection	---	---	---	---	---	---
Pumps & Misc.	---	---	---	---	---	---
Domestic Hot Water	3.2	3.2	0	---	---	---
Indoor Lighting	2.6	3.1	-0.5	---	---	---
Flexibility	---	---	---	---	---	---
EFFICIENCY TOTAL	**20.9**	**20.2**	**0.7**	**0**	**0**	**0**
Photovoltaics	---	---	---	---	---	---
Batteries	---	---	---	---	---	---
ENERGY USE SUBTOTAL	**20.9**	**20.2**	**0.7**	**0**	**0**	**0**
Receptacle	6.7	6.7	0	---	---	---
Process	---	---	---	---	---	---
Other Ltg	---	---	---	---	---	---
Process Motors	---	---	---	---	---	---
ENERGY USE TOTAL	**27.6**	**26.9**	**0.7**	**0**	**0**	**0**

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD	NRCC-PRF-E
Nonresidential Performance Compliance Method	(Page 5 of 16)

C3. TDV ENERGY RESULTS FOR NON-REGULATED COMPONENTS[1]

Non-Regulated Energy Component	Standard Design (TDV)	Proposed Design (TDV)	Compliance Margin (TDV)[1]
Receptacle	65.89	65.89	---
Process	---	---	---
Other Ltg	---	---	---
Process Motors	---	---	---
TOTAL (TOTAL COMPLIANCE + NON-REGULATED COMPONENTS)	**311.58**	**305.06**	**6.52 (2.1%)**

[1] Notes: This table is not used for Energy Code Compliance.

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD	NRCC-PRF-E
Nonresidential Performance Compliance Method	(Page 2 of 16)

B. PROJECT SUMMARY

Table B shows which building components are included in the performance calculation. If indicated as not included, the project must show compliance prescriptively if within the permit application.

Building Components Complying via Performance						Building Components Complying Prescriptively	
Envelope (See Table G)	Nonres	Performance	Solar Thermal Water Heating (See Table I3)	☐	Performance	The following building components are ONLY eligible for prescriptive compliance and should be documented on the NRCC form listed if within the scope of the permit application (i.e. compliance will not be shown on the NRCC-PRF-E).	
	MultiFam	Not Included		☒	Not Included		
Mechanical (See Table H)	Nonres	Performance	Covered Process: Commercial Kitchens (see Table J)	☐	Performance	Indoor Lighting (Unconditioned) 140.6 & 170.2(e)	NRCC-LTI-E is required
	MultiFam	Not Included		☒	Not Included	Outdoor Lighting 140.7 & 170.2(e)	NRCC-LTO-E is required
Domestic Hot Water (See Table I)	Nonres	Not Included	Covered Process: Laboratory Exhaust (see Table J)	☐	Performance	Sign Lighting 140.8 & 170.2(e)	NRCC-LTS-E is required
	MultiFam	Not Included		☒	Not Included	**Building Components Complying with Mandatory Measures**	
Lighting (Indoor Conditioned, see Table K)	Nonres	Not Included	Photovoltaics (see Table F)	☐	Performance	Electrical power systems, commissioning, solar ready, elevator and escalator requirements are mandatory and should be documented on the NRCC form listed if applicable (i.e. compliance will not be shown on the NRCC-PRF-E.)	
	MultiFam	Not Included		☒	Not Included	Electrical Power Distribution 110.11	NRCC-ELC-E is required
			Battery (see Table F)	☐	Performance	Commissioning 120.8	NRCC-CXR-E is required
				☒	Not Included	Solar and Battery 110.10	NRCC-SAB-E is required

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD	NRCC-PRF-E
Nonresidential Performance Compliance Method	(Page 9 of 16)

C8. ENERGY USE INTENSITY (EUI)

	Standard Design (kBtu/ft² / yr)	Proposed Design (kBtu/ft² / yr)	Margin (kBtu/ft² / yr)	Margin Percentage
GROSS EUI[1]	37.22	36.28	0.94	2.53
NET EUI[1]	37.22	36.28	0.94	2.53

[1] Notes: Gross EUI is Energy Use Total (not including PV)/Total Building Area. Net EUI is Energy Use Total (including PV)/Total Building Area.

D1. EXCEPTIONAL CONDITIONS

• The project uses the Simplified Geometry Performance Modeling Approach which is not capable of modeling daylighting controls and assumes the prescriptive Secondary Daylit Control requirements are met. PRESCRIPTIVE COMPLIANCE documentation (form NRCC-LTI-02-E) for the requirements of section 140.6(d) Automatic Daylighting Controls in Secondary Daylit Zones is required.
• The building does not include service water heating. Verify that service water heating is not required and is not included in the design.
• PV/Battery Building Type has been modified from software defaults for one or more spaces. Review project's PV/Battery Building Type(s) with documentation author. Refer to Energy Code section 140.10 for Nonresidential or 170.2(g) for more information.

G1. ENVELOPE GENERAL INFORMATION (conditioned spaces only)

01	02	03	04
Opaque Surfaces & Orientation	**Total Gross Surface Area (ft²)**	**Total Fenestration Area (ft²)**	**Window to Wall Ratio (%)**
North-Facing[1]	0	0	0
East-Facing[2]	378	72	19.05
South-Facing[3]	580.5	0	0
West-Facing[4]	378	72	19.05
Total	**1336.5**	**144**	**10.77**

Notes
[1]North-Facing is oriented to within 45 degrees of true north, including 45 00'00" east of north (NE), but excluding 45 00'00" west of north (NW),
[2]East-Facing is oriented to within 45 degrees of true east, including 45 00'00" south of east (SE), but excluding 45 00'00" north of east (NE),
[3]South-Facing is oriented to within 45 degrees of true south, including 45 00'00" west of south (SW), but excluding 45 00'00" east of south (SE),
[4]West-Facing is oriented to within 45 degrees of true west, including 45 00'00" north of west (NW), but excluding 45 00'00" south of west (SW),

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD	NRCC-PRF-E
Nonresidential Performance Compliance Method	(Page 6 of 16)

C4. SOURCE ENERGY COMPLIANCE RESULTS FOR PERFORMANCE COMPONENTS (Annual SOURCE Energy Use, kBtu/ft² /yr)

COMPLIES[2]

Energy Component	Standard Design (SOURCE)	Proposed Design (SOURCE)	Compliance Margin (SOURCE)[1]
Space Heating	1.14	1.45	-0.31
Space Cooling	3.6	4.04	-0.44
Indoor Fans	8.3	6.68	1.62
Heat Rejection	0	0	0
Pumps & Misc.	0	0	0
Domestic Hot Water	2.99	2.99	0
Indoor Lighting	2.14	2.57	-0.43
Flexibility	---	---	---
EFFICIENCY COMPLIANCE TOTAL	**18.17**	**17.73**	**0.44 (2.4%)**
Photovoltaics	---	---	---
Batteries	---	---	---
TOTAL COMPLIANCE	**18.17**	**17.73**	**0.44 (2.4%)**

[1] Notes: This number in parenthesis following the Compliance Margin in column 4, represents the Percent Better than Standard.

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD	NRCC-PRF-E
Nonresidential Performance Compliance Method	(Page 3 of 16)

C1. COMPLIANCE SUMMARY

COMPLIES[3]

	Time Dependent Valuaton (TDV)		Source Energy Use
	Efficiency[1] (kBtu/ft² - yr)	**Total[2] (kBtu/ft² - yr)**	**Total[2] (kBtu/ft² - yr)**
Standard Design	245.69	245.69	18.17
Proposed Design	239.17	239.17	17.73
Compliance Margins	**6.52**	**6.52**	**0.44**
	Pass	**Pass**	**Pass**

[1] Efficiency measures include improvements like a better building envelope and more efficient equipment
[2] Compliance Totals include efficiency, photovoltaics and batteries
[3] New Construction, Complete Addition Scope: Building complies when all efficiency and total compliance margins are greater than or equal to zero and unmet load hour limits are not exceeded
Existing, Addition and Alteration Scope: Building complies when efficiency compliance margin is greater than or equal to zero and unmet load hour limits are not exceeded

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-123900 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
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Owner:

BAKERSFIELD CITY SCHOOL DISTRICT
1300 BAKER ST.
BAKERSFIELD CA 93305

Project Name:

TRANSITIONAL KINDERGARTEN

Project Address:

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P:(559) 436-0881 F:(559) 436-0887
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integrateddesigns.com

Stamp:

REGISTERED PROFESSIONAL ENGINEER
LISA LUK
32712
MECHANICAL
STATE OF CALIFORNIA

Sheet Title:

TITLE 24 DOCS

Job No.: **5593**

Sheet No.: **M4.01**

Release: DSA SUBMITTAL Issue Date

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CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD	NRCC-PRF-E
Nonresidential Performance Compliance Method	(Page 16 of 16)

Documentation Author's Declaration Statement

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

Documentation Author Name: Lisa Lum	Documentation Author Signature: Lum
Company: Integrated Designs by SOMAM, Inc.	Signature Date: 2024-01-05
Address: 6011 North Fresno Street, Suite 130	CEA/HERS Certification Identification (if applicable):
City/State/Zip: Fresno, CA 93710	Phone: 559-436-0881

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 understand that a registered 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, and I will take the necessary steps to accomplish this requirement.
6. I understand that a registered copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy, and I will take the necessary steps to accomplish these requirements.

Responsible Designer Name: Curtis Flynn	Responsible Designer Signature:	
Company: Integrated Designs by SOMAM, Inc.		
Address: 6011 North Fresno Street, Suite 130	Date Signed: 2024-01-05	
City/State/Zip: Fresno, CA 93710	License #: C 28966	
Phone: 559-436-0881	Title: ARCH	Scope: ENV
Responsible Designer Name: Lisa Lum, PE	Responsible Designer Signature: Lum	
Company: Integrated Designs by SOMAM, Inc.		
Address: 6011 North Fresno Street, Suite 130	Date Signed: 2024-01-05	
City/State/Zip: Fresno, CA 93710	License #: M32712	
Phone: 559-436-0881	Title: ENGR	Scope: MECH

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD	NRCC-PRF-E
Nonresidential Performance Compliance Method	(Page 13 of 16)

H1. DRY SYSTEM EQUIPMENT (FURNACES, AIR HANDLING UNITS, HEAT PUMPS, VRF, ECONOMIZERS ETC.)

01	02	03	04	05	06	07	08	09	10	11	12
Equipment Name	Equipment Type	Qty	Heating				Cooling			Economizer Type (if present)	Status[1]
			Total Heating Output (kBtu/h)	Supp Heat Output (kBtu/h)	Efficiency Unit	Efficiency	Total Cooling Output (kBtu/h)	Efficiency Unit	Efficiency		
HP-1 and HP-2	Single Package VHP Air System	2	56.24	0	COP	3.5	51.37	EER	11	Fixed DB	N

[1] *Status: N - New, A - Altered, E - Existing*

H3. NONRESIDENTIAL / COMMON USE AREA FAN SYSTEMS SUMMARY

01	02	03	04	05	06	07	08	09	10	11	12	13
Name or Item Tag	Qty	Design OA CFM	Supply Fan				Return / Relief Fan					Status[1]
			CFM	Power	Power Units	Control	Fan Type	CFM	Power	Power Units	Control	
HP-1 and HP-2	2	480.7	1,600	0.75	BHP	Constant Vol	N/A	N/A	N/A	N/A	N/A	N

[1] *Status: N - New, A - Altered, E - Existing*

H5. GENERAL EXHAUST FAN SUMMARY

01	02	03	04	05	06	07	08
System ID	Zone Name	Qty	CFM	Power	Power Units	Continuous Operation?	Status[1]
TK Classrooms1	1-TK Classrooms	2	110	0.03	BHP	No	N

[1] *Status: N - New, A - Altered, E - Existing*

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD	NRCC-PRF-E
Nonresidential Performance Compliance Method	(Page 10 of 16)

G1. ENVELOPE GENERAL INFORMATION (conditioned spaces only)

01	02	03	04
Opaque Surfaces & Orientation	Total Gross Surface Area (ft²)	Total Fenestration Area (ft²)	Window to Wall Ratio (%)
Roof	2608	43.96	1.69

Notes
[1] *North-Facing is oriented to within 45 degrees of true north, including 45 00'00" east of north (NE), but excluding 45 00'00" west of north (NW),*
[2] *East-Facing is oriented to within 45 degrees of true east, including 45 00'00" south of east (SE), but excluding 45 00'00" north of east (NE),*
[3] *South-Facing is oriented to within 45 degrees of true south, including 45 00'00" west of south (SW), but excluding 45 00'00" east of south (SE),*
[4] *West-Facing is oriented to within 45 degrees of true west, including 45 00'00" north of west (NW), but excluding 45 00'00" south of west (SW),*

G4. NONRESIDENTIAL AIR BARRIER

01	02
Building Story Name	Air Barrier
Com-Floor 1 - 9ft-0in ceiling	Air barrier - not verified

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD	NRCC-PRF-E
Nonresidential Performance Compliance Method	(Page 14 of 16)

H8. SYSTEM SPECIAL FEATURES

01	02	03	04
System Name	Equipment Type	Interlocks per 140.4(n)[1]	Other Special Features and Controls
HP-1 and HP-2	Single Package VHP Air System	N/A	Zone(s) With CO2 Sensor Vent. Control Fixed DB

Notes: This table includes controls related to the performance path only. For projects using the prescriptive path, mandatory and prescriptive controls requirements are documented on the NRCC-MCH-E.

[1] *Yes = interlocks are provided, No = interlocks are not provided, NA means no operable openings.*

H9. NONRESIDENTIAL / COMMON USE AREA & HOTEL/MOTEL VENTILATION

01	02	03	04	05	06	07
Zone Name	Mechanical Ventilation				Conditioned Area (sf)	DCV or Occupant Sensor Controls, or Both
	Ventilation Function	# of People	Supply OA CFM	Exhaust CFM		
1-TK Classrooms	Education - Classrooms (ages 5-8)	63.25	961.4	220	2530	DCV

H11. ZONAL SYSTEM AND TERMINAL UNIT SUMMARY

01	02	03	04	05	06	07	08	09	10	11	12
System ID	System Type	Qty	Rated Capacity (kBtuh)		Airflow (cfm)			Fan			VSD
			Heating	Cooling	Design	Min.	Min. Ratio	Power	Power Units	Cycles	
1-TK Classrooms-Trm	Uncontrolled	2	N/A	N/A	3,200	N/A	0	N/A	N/A	N/A	☐

I. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION

Selections made by Documentation Author indicate which Certificates of Installation must be submitted for the features to be recognized for compliance. These documents must be retained and provided to the building inspector during construction and can be found online

Building Component	Form/Title
Envelope	NRCI-ENV-01-E - Must be submitted for all buildings

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD	NRCC-PRF-E
Nonresidential Performance Compliance Method	(Page 11 of 16)

G5. OPAQUE SURFACE ASSEMBLY SUMMARY

01	02	03	04	05	06		07	08	09	10
Surface Name	Construction Type	Area (ft²)	Framing Type	Cavity R-Value	Continuous R-Value		Units	Value	Description of Assembly Layers	Status[1]
					Interior	Exterior				
StandingSeamRoof12inMtlRa7	Roof	1,988	Metal	30	N/A	N/A	U-factor	0.0548	Metal Standing Seam - 1/16 in. Plywood - 1/2 in. Composite-1 Air - Cavity - Wall Roof Ceiling - 4 in. or more Acoustic Tile - 1/2 in.	N
6inMtlStud16ocR19TackBoar15	Exterior Wall	1,188	Metal	19	N/A	N/A	U-factor	0.141	Stucco - 7/8 in. Building Paper - 1/16 in. Plywood - 1/2 in. Composite-2 Gypsum Board - 1/2 in. Fiberboard sheathing - 1/2 in.	N
SlabOnGrade4in-24	Underground Floor	2,530	N/A	0	N/A	N/A	F-factor	0.73	Slab Type =Unheated slab on grade Insulation Orientation =None Insulation R-Value =none	N
StandingSeamRoof8inMtlRaf41	Roof	620	Metal	21	N/A	N/A	U-factor	0.0704	Metal Standing Seam - 1/16 in. Plywood - 1/2 in. Composite-3 Air - Cavity - Wall Roof Ceiling - 4 in. or more Gypsum Board - 1/2 in.	N
6inMtlStud16ocR19Gyp-55	Exterior Wall	148.5	Metal	19	N/A	N/A	U-factor	0.162	Stucco - 7/8 in. Building Paper - 1/16 in. Plywood - 1/2 in. Composite-4 Gypsum Board - 5/8 in.	N

[1] *Status: N - New, A - Altered, E - Existing*

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD	NRCC-PRF-E
Nonresidential Performance Compliance Method	(Page 15 of 16)

L. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION

Selections made by Documentation Author indicate which Certificates of Installation must be submitted for the features to be recognized for compliance. These documents must be retained and provided to the building inspector during construction and can be found online

Building Component	Form/Title
Envelope	NRCI-ENV-E - Envelope (for all buildings)
Mechanical	NRCI-MCH-01-E - Must be submitted for all buildings
Mechanical	NRCI-MCH-E - For all buildings with Mechanical Systems

M. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

Selections made by Documentation Author indicate which Certificates of Acceptance must be submitted for the features to be recognized for compliance. These documents must be provided to the building inspector during construction and must be completed through an Acceptance Test Technician Certification Provider (ATTCP).

Building Component	Form/Title
Envelope	NRCA-ENV-02-F - NRFC label verification for fenestration
Mechanical	NRCA-MCH-02-A - Outdoor Air must be submitted for all newly installed HVAC units. Note: MCH-02-A can be performed in conjunction with MCH-07-A Supply Fan VFD Acceptance (if applicable) since testing activities overlap
Mechanical	NRCA-MCH-05-A - Air Economizer Controls
Mechanical	NRCA-MCH-06-A Demand Control Ventilation Systems must be submitted for all systems required to employ demand controlled ventilation (refer to) can vary outside ventilation flow rates based on maintaining interior carbon dioxide (CO2) concentration setpoints.

N. DECLARATION OF REQUIRED CERTIFICATES OF VERIFICATION

Selections made by Documentation Author indicate which Certificates of Verification must be submitted for the features to be recognized for compliance. These documents must be retained and provided to the building inspector during construction and can be found online

There are no Certificates of Verification applicable to this project

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD	NRCC-PRF-E
Nonresidential Performance Compliance Method	(Page 12 of 16)

G6A. OPAQUE DOOR SUMMARY (NONRESIDENTIAL)

01	02	03	04
Assembly Name	Area (ft²)	Overall U-factor	Status[1]
MetalDoorInsulated-17	84	0.5	N

[1] *Status: N - New, A - Altered, E - Existing*

G7A. FENESTRATION ASSEMBLY SUMMARY (NONRESIDENTIAL)

01	02	03	04	05	06	07	08	09
Fenestration Assembly Name	Fenestration Type/ Product Type / Frame Type	Certification Method[1]	Assembly Method	Area (ft²)	Overall U-factor	Overall SHGC	Overall VT	Status[2]
Solatube 750 DS-C TubularDaylightSystem	Skylight Fixed window N/A	NFRC	Manufactured	43.96	0.32	0.25	0.48	N
Double Metal Tinted	Vertical fenestration Fixed window Metal	Default 110.6	Site built	144	0.76	0.6	0.77	N

[1] *Notes: Newly installed fenestration shall have a certified NFRC Label Certificate or use the CEC default tables found in Table 110.6-A and Table 110.6-B. Center of Glass (COG) values are for the glass-only, determined by the manufacturer, and are shown for ease of verification. Site-built fenestration values are calculated per Nonresidential Appendix NA6 and are used in the analysis.*
[2] *Status: N - New, A - Altered, E - Existing*

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-123900 INC: A
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/05/2024

Owner:

BAKERSFIELD CITY SCHOOL DISTRICT
1300 BAKER ST.
BAKERSFIELD CA 93305

Project Name:

TRANSITIONAL KINDERGARTEN

Project Address:

MLK ELEMENTARY SCHOOL
1400 Baker St.
Bakersfield, CA 93307

integrated designs
by SOMAM, Inc.

ARCHITECTURE ENGINEERING INTERIOR DESIGN

6011 N. FRESNO STREET, SUITE 130
FRESNO CALIFORNIA 93710
P:(559) 436-0881 F:(559) 436-0887
E: design@somam.com
integrateddesigns.com

Stamp:

REGISTERED PROFESSIONAL ENGINEER
LISA LUM
32712
RENEWAL 08/31/2025
MECHANICAL
STATE OF CALIFORNIA

Sheet Title:

TITLE 24 DOCS

Job No.:

5593

Sheet No.:

M4.02

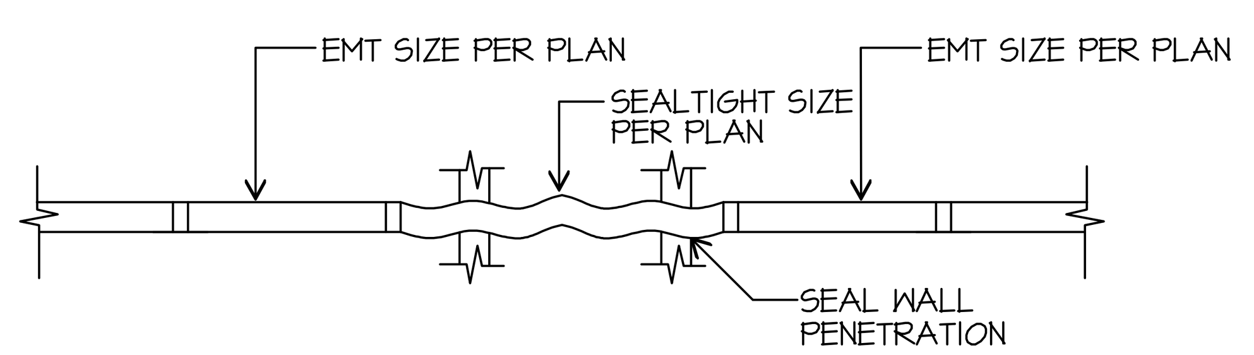
Release: DSA SUBMITTAL Issue Date: 7/24/24

G:\2023frs\23-5593 MLK TK\Sheets SEAN PARKER

1" = 40'-0" 120 80 40 0
1" = 30'-0" 90 60 30 0
1" = 20'-0" 60 40 20 0
1/8" = 1'-0" 24 16 8 0
1/4" = 1'-0" 12 8 4 0

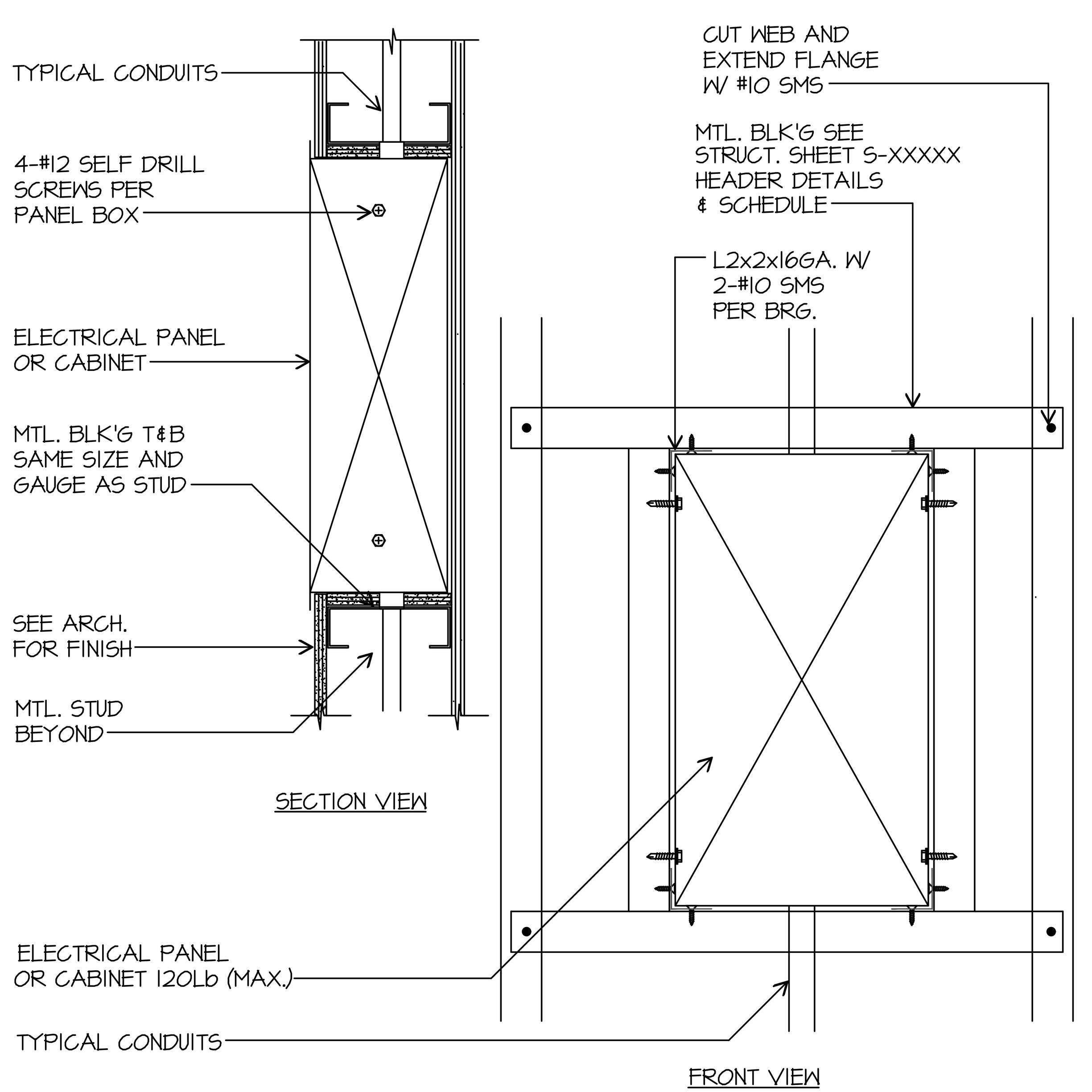
LED FIXTURE SCHEDULE

TYPE	MANUFACTURER AND CATALOG NUMBER	LED MODULE TYPE	LED MODULE COLOR TEMP	LED MODULE WATTS	DRIVER	OPTIC/LENS	REMARKS
A 38	LITHONIA 2BIT448LADPGZ10LP840WH		4000K	38	0-10V 10%	DIFFUSE	2X4
B 38	LITHONIA FMLWL48840K		4000K	38	0-10V 10%	DIFFUSE	4 FT WRAP
X 20	LITHONIA WDGE2LEDP340K80CRIVF		4000K	20	0-10V 10%	FLAT CLEAR	WEDGE FULL CUT-OFF SCONCE
E 1	ISOLITE RLP-GUWHMTEB		GREEN	1	NICAD BATTERY	PRISMATIC	EXIT SIGN W/EM LIGHT
EM 6	ISOLITE BUG-6-WH		4000K	6	NICAD BATTERY	PRISMATIC	EM LIGHT



SEISMIC JOINT DETAIL (C)

SCALE: NONE



PANELBOARD MOUNTING DETAIL (B)

SCALE: NONE

EXISTING ELECTRICAL SERVICES HAS BEEN INVESTIGATED AND FOUND TO HAVE ADEQUATE CAPACITY FOR THE PROPOSED LOAD ADDITION SHOWN ON THESE PLANS
SITE INSPECTOR IS TO WITNESS AND VERIFY GROUNDING TESTS

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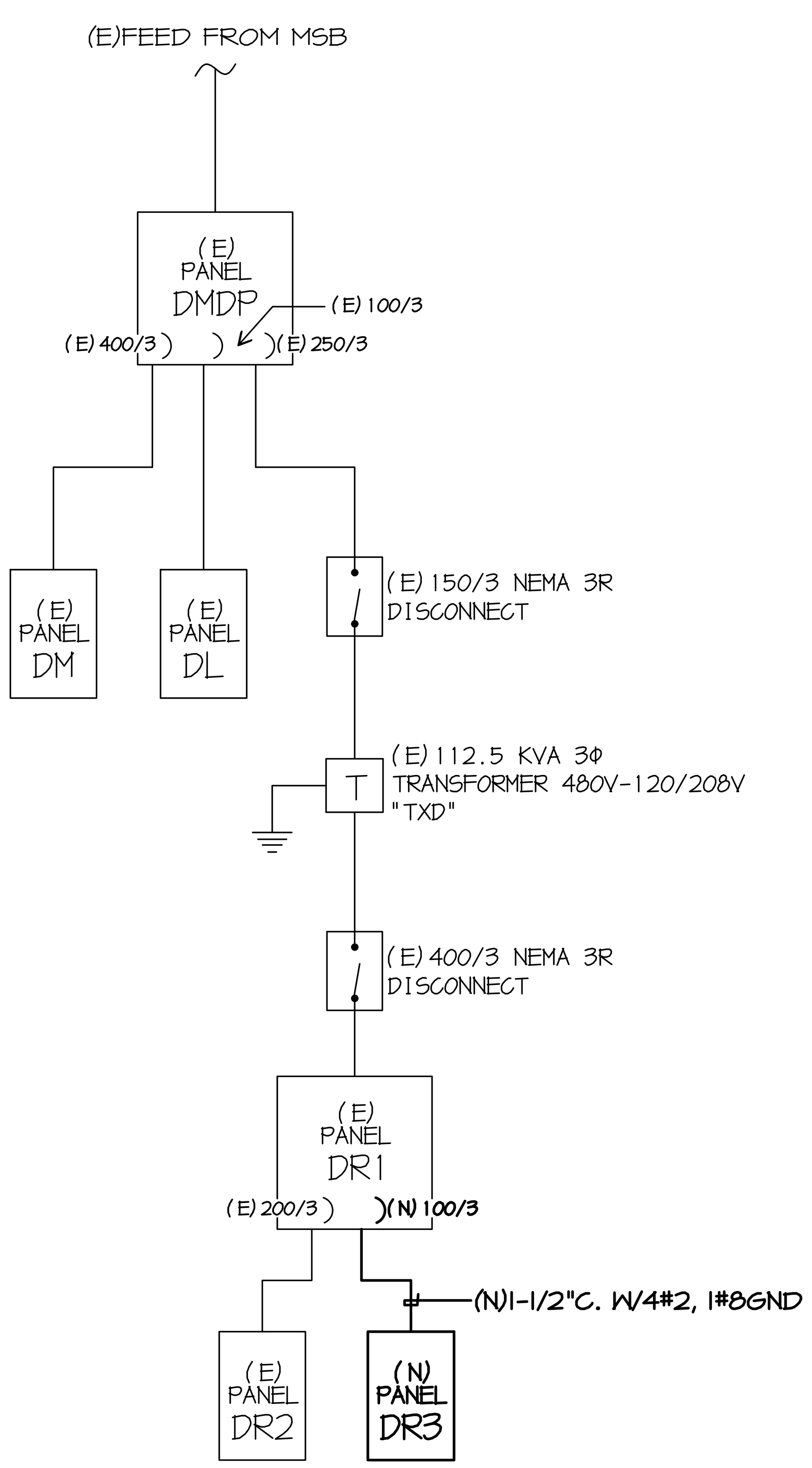

SINGLE LINE DIAGRAM (A)

GENERAL NOTES

1. VISIT JOB SITE AND VERIFY EXISTING CONDITIONS PRIOR TO BID.
2. THE ELECTRICAL WORK SHALL BE INSTALLED IN ACCORDANCE WITH THE 2022 CALIFORNIA ELECTRICAL CODE AND ALL APPLICABLE LOCAL ORDINANCES. WHERE PLANS CALL FOR A HIGHER STANDARD THAN APPLICABLE CODES, THE PLANS SHALL GOVERN.
3. CONDUIT RUNS ARE SHOWN DIAGRAMMATICALLY. EXACT LOCATIONS SHALL BE DETERMINED IN THE FIELD TO SUIT FIELD CONDITIONS.
4. ALL ELECTRICAL EQUIPMENT, APPLIANCES AND LIGHTING FIXTURES SHALL BE LISTED BY A RECOGNIZED TEST LAB AND BEAR THAT LABEL OF APPROVAL.
5. CONTRACTOR SHALL FURNISH, INSTALL AND CONNECT ALL MATERIAL AND EQUIPMENT FOR THIS WORK UNLESS OTHERWISE NOTED.
6. FURNISH DISCONNECT SWITCHES AT REMOTE MOTORS.
7. ALL SPACES AS INDICATED ON PANELS OR SWITCHBOARDS SHALL BE COMPLETE WITH HARDWARE AND BUSSING FOR FUTURE BREAKER OR SWITCH.
8. CHECK ARCHITECTURAL PLANS FOR DOOR SWINGS BEFORE INSTALLING SWITCH OUTLETS.
9. GROUNDING AND BONDING SHALL BE PER CODE PLUS ANY ADDITIONAL PROVISIONS SPECIFIED OR SHOWN ON DRAWINGS.
10. ALL CONDUIT RUNS SHALL CONTAIN A CODE SIZED GREEN GROUND WIRE.
11. THESE PLANS ARE NOT COMPLETE UNTIL APPROVED BY THE AUTHORITY HAVING JURISDICTION.
12. ALL CONDUCTORS SHALL BE IN CONDUIT.
13. ALL CONDUCTORS SHALL BE COPPER WITH TYPE THHN/THWN INSULATION.

APPLICABLE CODE: 2022 CBC

MEP COMPONENT ANCHORAGE NOTE

ALL MECHANICAL, PLUMBING, AND ELECTRICAL COMPONENTS SHALL BE ANCHORED AND INSTALLED PER THE DETAILS ON THE DSA-APPROVED CONSTRUCTION DOCUMENTS. THE FOLLOWING COMPONENTS SHALL BE ANCHORED OR BRACED TO MEET THE FORCE AND DISPLACEMENT REQUIREMENTS PRESCRIBED IN THE 2022 CBC SECTIONS 1617A.1.18 THROUGH 1617A.1.26 AND ASCE 7-16 CHAPTERS 13, 26, AND 30:

1. ALL PERMANENT EQUIPMENT AND COMPONENTS.
2. TEMPORARY, MOVABLE OR MOBILE EQUIPMENT THAT IS PERMANENTLY ATTACHED (E.G., HARD WIRED) TO THE BUILDING UTILITY SERVICES SUCH AS ELECTRICITY, GAS OR WATER. "PERMANENTLY ATTACHED" SHALL INCLUDE ALL ELECTRICAL CONNECTIONS EXCEPT PLUGS FOR 110/220 VOLT RECEPTACLES HAVING A FLEXIBLE CABLE.
3. TEMPORARY, MOVABLE OR MOBILE EQUIPMENT WHICH IS HEAVIER THAN 400 POUNDS OR HAS A CENTER OF MASS LOCATED 4 FEET OR MORE ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENT IS REQUIRED TO BE RESTRAINED IN A MANNER APPROVED BY DSA.

THE FOLLOWING MECHANICAL AND ELECTRICAL COMPONENTS SHALL BE POSITIVELY ATTACHED TO THE STRUCTURE BUT NEED NOT DEMONSTRATE DESIGN COMPLIANCE WITH THE REFERENCES NOTED ABOVE. THESE COMPONENTS SHALL HAVE FLEXIBLE CONNECTIONS PROVIDED BETWEEN THE COMPONENT AND ASSOCIATED DUCTWORK, PIPING, AND CONDUIT. FLEXIBLE CONNECTIONS MUST ALLOW MOVEMENT IN BOTH TRANSVERSE AND LONGITUDINAL DIRECTIONS:

A. COMPONENTS WEIGHING LESS THAN 400 POUNDS AND HAVING A CENTER OF MASS LOCATED 4 FEET OR LESS ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENT.
B. COMPONENTS WEIGHING LESS THAN 20 POUNDS, OR IN THE CASE OF DISTRIBUTED SYSTEMS, LESS THAN 5 POUNDS PER FOOT, WHICH ARE SUSPENDED FROM A ROOF OR FLOOR OR HUNG FROM A WALL.

THE ANCHORAGE OF ALL MECHANICAL, ELECTRICAL AND PLUMBING COMPONENTS SHALL BE SUBJECT TO THE APPROVAL OF THE DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE OR STRUCTURE ENGINEER DELEGATED RESPONSIBILITY AND ACCEPTANCE BY DSA. THE PROJECT INSPECTOR WILL VERIFY THAT ALL COMPONENTS AND EQUIPMENT HAVE BEEN ANCHORED IN ACCORDANCE WITH THE ABOVE REQUIREMENTS.

PIPING, DUCTWORK AND ELECTRICAL DISTRIBUTION SYSTEM BRACING

PIPING, DUCTWORK AND ELECTRICAL DISTRIBUTION SYSTEMS SHALL BE BRACED TO COMPLY WITH THE FORCES AND DISPLACEMENTS PRESCRIBED IN ASCE 7-16 SECTION 13.3 AS DEFINED IN ASCE 7-16 SECTIONS 13.6.5, 13.6.6, 13.6.7, 13.6.8; AND 2022 CBC, SECTIONS 1617A.1.24, 1617A.1.25 AND 1617A.1.26.

THE METHOD OF SHOWING BRACING AND ATTACHMENTS TO THE STRUCTURE FOR THE IDENTIFIED DISTRIBUTION SYSTEM ARE AS NOTED BELOW. WHEN BRACING AND ATTACHMENTS ARE BASED ON A PREAPPROVED INSTALLATION GUIDE (E.G., HCAI OPM FOR 2013 CBC OR LATER), COPIES OF THE BRACING SYSTEM INSTALLATION GUIDE OR MANUAL SHALL BE AVAILABLE ON THE JOBSITE PRIOR TO THE START OF AND DURING THE HANGING AND BRACING OF THE DISTRIBUTION SYSTEMS. THE STRUCTURAL ENGINEER OF RECORD SHALL VERIFY THE ADEQUACY OF THE STRUCTURE TO SUPPORT THE HANGER AND BRACE LOADS.

MECHANICAL PIPING (MP), MECHANICAL DUCTS (MD), PLUMBING PIPING(PP), ELECTRICAL DISTRIBUTION SYSTEMS (E):

MP☐ MD☐ PP☐ E☒ OPTION 1: DETAILED ON THE APPROVED DRAWINGS WITH PROJECT SPECIFIC NOTES AND DETAILS.

MP☐ MD☐ PP☐ E☐ OPTION 2: SHALL COMPLY WITH HCAi PREAPPROVAL (OPM #) #________________.

SYMBOLS

- CONDUIT EXISTING
- CONDUIT CONCEALED IN WALL OR CEILING
- CONDUIT CONCEALED UNDER FLOOR OR BELOW GRADE
- CONDUIT STUBBED OUT AND CAPPED
- CONDUIT TURNED UP
- CONDUIT TURNED DOWN
- HATCH MARKS INDICATE NO. OF #12 WIRES IN CODE SIZED CONDUIT (3) MAX. IN 1/2" C., (5) MAX. IN 3/4" C., (8) MAX. IN 1"C., NO MARKS = 2#12
- A-3 — HOME RUN: LETTER INDICATES PANEL, NUMBER(S) INDICATES CIRCUIT(S).
- SAWCUT
- GROUND CONNECTION
- DISTRIBUTION SWITCHBOARD OR PANEL
- PANEL, BRANCH CIRCUIT TYPE, SURFACE AND FLUSH
- SIGNAL TERMINAL CABINET, SURFACE & FLUSH
- LINEAR SURFACE FIXTURE
- 2 a — OUTLET DATA: BAR INDICATES WALL MOUNT, LETTER INDICATES SWITCH CONTROL, NO. INDICATES CIRCUIT.
- SURFACE FIXTURE ON FLUSH OUTLET.
- RECESSED FIXTURE WITH JUNCTION BOX FOR THRU WIRING
- EXIT LIGHT WITH ARROWS AS SHOWN ON PLANS, WALL AND CEILING MOUNT.
- LOW LEVEL EXIT SIGN, +6" AFF, +4" FROM DOOR JAMB
- A 100 — LIGHT FIXTURE DESIGNATION, LETTER INDICATES TYPE, NO. INDICATES WATTAGE. SEE FIXTURE SCHEDULE.
- FC 1 — MECHANICAL EQUIPMENT DESIGNATION. SEE MECHANICAL DRAWINGS.
- SPECIAL RECEPTACLE – SEE PLAN
- M — METER
- FLUSH FLOOR RECEPTACLE
- RECEPTACLE, DUPLEX, 15A, 125V, NEMA 5-15R +18" U.N.O.
- DUPLEX RECEPTACLE MTD. ABOVE BACKSPLASH
- DUPLEX RECEPTACLE W/LOWER HALF SWITCHED
- GFI — GROUND FAULT CIRCUIT INTERRUPTING RECEPTACLE
- DOUBLE DUPLEX RECEPTACLE
- CEILING RECEPTACLE
- RECEPTACLE, DUPLEX, 20A, 125V, NEMA 5-20R +18" U.N.O.
- J — JUNCTION BOX 4" SQUARE, 1-1/2" DEEP U.N.O.
- T — THERMOSTAT F.B.O. +48"
- 2 — MOTOR, NO. INDICATES HORSEPOWER
- CLOCK OUTLET +7'-6" U.N.O.
- DISCONNECT SWITCH, NON-FUSED
- F — DISCONNECT SWITCH FUSED HORSEPOWER RATED OR SIZED AS NOTED
- COMBINATION MAGNETIC STARTER WITH DISCONNECT SWITCH AND FUSES
- MAGNETIC MOTOR STARTER W/OVERLOADS IN EACH PHASE
- D — DIMMER W/INTEGRAL "ON-OFF" SW.
- PUSHBUTTON
- PC — PHOTOCELL
- SD — SMOKE DETECTOR
- HD — ADDRESSABLE ATTIC HEAT DETECTOR
- DM — DUAL MONITORING MODULE
- TELEPHONE/COMPUTER/DATA OUTLET, TWO GANG BOX W/1 GANG COVERPLATE & GROMMETED OPENING +18" U.N.O.
- TV — CABLE TV OUTLET +18" U.N.O.
- M — MOTION SENSOR
- $ — EXISTING SWITCH
- S — SINGLE POLE SWITCH
- S^2 — DOUBLE POLE SWITCH
- S^3 — THREE WAY SWITCH
- S^P — SWITCH W/PILOT LT.
- (S, S^2, S^3, S^P:) QUIET TOGGLE TYPE RATED AT 20A, 120/277V A.C. +42" U.N.O.
- S^M — MANUAL MOTOR STARTER
- FACP — FIRE ALARM CONTROL PANEL
- GFI — GROUND FAULT CIRCUIT INTERRUPTING
- LST — LABOR SAVING TANDEM
- MLO — MAIN LUGS ONLY
- w/ — WITH
- C.O. — CONDUIT ONLY
- W.P. — WEATHERPROOF
- F.B.O. — FURNISHED BY OTHERS, INSTALL & CONNECT
- U.N.O. — UNLESS NOTED OTHERWISE
- N.E.C. — NATIONAL ELECTRICAL CODE
- N.I.C. — NOT IN CONTRACT
- (E) — EXISTING
- (N) — NEW
- (R) — REMOVE
- (RL) — RELOCATE
- S/M — SURFACE MOUNT
- U/G — UNDERGROUND
- CWP — COLD WATER PIPE
- AFF — ABOVE FINISHED FLOOR
- HACR — HEATING AND AIR CONDITIONING RATED CIRCUIT BREAKER
- N.L. — NIGHT LIGHT

NOTE: NOT ALL SYMBOLS SHOWN ARE USED ON THIS PROJECT

JMPE
ELECTRICAL ENGINEERING
LIGHTING DESIGN
CA REGISTRATION NO E13083
23769
5500 MING AVENUE, SUITE 251
BAKERSFIELD, CA 93309
(661) 831-7851
FAX (661) 831-7813
email : maloney@jmpe.net
www.jmpe.net

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-123900 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/05/2024

Owner:

BAKERSFIELD CITY SCHOOL DISTRICT
1300 BAKER ST.
BAKERSFIELD CA 93305

Project Name:

TRANSITIONAL KINDERGARTEN

Project Address:

MLK ELEMENTARY SCHOOL
1100 CITADEL
BAKERSFIELD, CA 93307

integrated designs
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ARCHITECTURE
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6011 N. FRESNO STREET, SUITE 130
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Stamp:

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Sheet Title:

GENERAL NOTES AND SYMBOLS

Job No.: 5593

Sheet No.: E0.01

Release: DSA SUBMITTAL

(E) PANEL "DL"

SERVICE: 277/480V 3Φ 4W | MAIN BKR.: 100A | BUS: 125A | LOC.: SEE PLAN
GE PANELBOARD | MTG.: SURFACE

REMARKS	LOAD ΦA	LOAD ΦB	LOAD ΦC	REC	LTG	MISC	POLE	TRIP	CIRC	CIRC	TRIP	POLE	REC	LTG	MISC	LOAD ΦA	LOAD ΦB	LOAD ΦC	REMARKS
LIGHTS	800								1	2						800			LIGHTS
LIGHTS		800							3	4							800		LIGHTS
LIGHTS			800						5	6								800	LIGHTS
LIGHTS	800								7	8						800			LIGHTS
LIGHTS		800							9	10							800		LIGHTS
LIGHTS			400						11	12								100	LIGHTS
LIGHTS	100								13	14						60			LIGHTS
LIGHTS		60							15	16							20		LIGHTS
LIGHTS			20						17	18								20	LIGHTS
EMERGENCY LIGHTS	100								19	20						600			EXTERIOR LIGHTS
(N) TK RM 1 LIGHTS		**855**			**19**				**21**	**22**				**19**			**855**		**(N) TK RM 2 LIGHTS**
									23	24									
									25	26									
									27	28									
									29	30									
									31	32									
									33	34									
									35	36									
									37	38									
									39	40									
									41	42									
	1800	2515	1220													2260	2475	920	

TOTAL WATTS= 11190 | ΦA= 4060 | ΦB= 4990 | ΦC= 2140
AMPS= 13.459 | MINIMUM BKR | A.I.C. RATING= 10,000 AMPS SYM

(E) PANEL "DM"

SERVICE: 277/480V 3Φ 4W | MAIN BKR.: 400A | BUS: 400A | LOC.: SEE PLAN
GE PANELBOARD | MTG.: SURFACE

REMARKS	LOAD ΦA	LOAD ΦB	LOAD ΦC	REC	LTG	MISC	POLE	TRIP	CIRC	CIRC	TRIP	POLE	REC	LTG	MISC	LOAD ΦA	LOAD ΦB	LOAD ΦC	REMARKS
HP-2	7200						3	25	1	2	25	3				7200			HP-2
"		7200							3	4							7200		"
"			7200						5	6								7200	"
HP-2	7200						3	25	7	8	25	3				7200			HP-2
"		7200							9	10							7200		"
"			7200						11	12								7200	"
HP-2	7200						3	25	13	14	25	3				7200			HP-2
"		7200							15	16							7200		"
"			7200						17	18								7200	"
HP-2	7200						3	25	19	20	25	3				7200			HP-2
"		7200							21	22							7200		"
"			7200						23	24								7200	"
HP-2	7200						3	25	25	26	25	3				7200			HP-2
"		7200							27	28							7200		"
"			7200						29	30								7200	"
(N) ITEC HP	**7200**						**3**	**25**	31	**32**	**25**	**3**				**7200**			**(N) ITEC HP**
"		**7200**							33	34							**7200**		"
"			**7200**						35	36								**7200**	"
									37	38									
									39	40									
									41	42									
	43200	43200	43200													43200	43200	43200	

TOTAL WATTS= 259200 | ΦA= 86400 | ΦB= 86400 | ΦC= 86400
AMPS= 311.769 | MINIMUM BKR | A.I.C. RATING= 10,000 AMPS SYM

PANEL "DMDP"

SERVICE: 277/480V 3Φ 4W | MAIN BKR.: 600A | BUS: 600A | LOC.: SEE PLAN
GE APNB PANELBOARD | MTG.: SURFACE

REMARKS	LOAD ΦA	LOAD ΦB	LOAD ΦC	REC	LTG	MISC	POLE	TRIP	CIRC	CIRC	TRIP	POLE	REC	LTG	MISC	LOAD ΦA	LOAD ΦB	LOAD ΦC	REMARKS
PANEL DM	86400						3	400	1	2	20	1							SPARE
"		86400							3	4	20	1							SPARE
"			86400						5	6	20	1							SPARE
PANEL DL	4060						3	100	7	8	20	1							SPARE
"		4990							9	10	20	1							SPARE
"			2140						11	12	20	1							SPARE
XFMR TXD	**16500**						3	250	13	14	20	1							SPARE
"		**19480**							15	16	20	1							SPARE
"			**17480**						17	18	20	1							SPARE
SPARE							1	20	19	20	20	1							SPARE
SPARE							1	20	21	22	20	1							SPARE
SPARE							1	20	23	24	20	1							SPARE
SPARE							1	20	25	26	20	1							SPARE
SPARE							1	20	27	28	20	1							SPARE
SPARE							1	20	29	30	20	1							SPARE
SPARE							1	20	31	32	20	1							SPARE
SPARE							1	20	33	34	20	1							SPARE
SPARE							1	20	35	36	20	1							SPARE
SPARE							1	20	37	38	20	1							SPARE
SPARE							1	20	39	40	20	1							SPARE
SPARE							1	20	41	42	20	1							SPARE
	106960	110870	106020													0	0	0	

TOTAL WATTS= 323850 | ΦA= 106960 | ΦB= 110870 | ΦC= 106020
AMPS= 389.53 | MINIMUM BKR | A.I.C. RATING= 10,000 AMPS SYM

(E) PANEL " DR1 "

SERVICE: 120/208V 3Φ 4W | MAIN BKR.: 300A | BUS: 400A | LOC.: SEE PLAN
GE PANELBOARD | MTG :SURFACE

REMARKS	LOAD ΦA	LOAD ΦB	LOAD ΦC	REC	LTG	MISC	POLE	TRIP	CIRC	CIRC	TRIP	POLE	REC	LTG	MISC	LOAD ΦA	LOAD ΦB	LOAD ΦC	REMARKS
ROOM 1 REC	**200**						1	20	1	2	20	1				**400**			ROOM 1 REC
ROOM 1 REC		**600**					1	20	3	4	20	1					**600**		ROOM 1 REC
ROOM 1 REC			**600**				1	20	5	6	20	1						**200**	ROOM 2 REC
ROOM 2 REC	**400**						1	20	7	8	20	1				**600**			ROOM 2 REC
ROOM 2 REC		**600**					1	20	9	10	20	1					**600**		ROOM 2 REC
ROOM 3 REC			**200**				1	20	11	12	20	1						**400**	ROOM 3 REC
ROOM 3 REC	**600**						1	20	13	14	20	1				**600**			ROOM 3 REC
ROOM 3 REC		**600**					1	20	15	16	20	1					**200**		ROOM 4 REC
ROOM 4 REC			**400**				1	20	17	18	20	1						**600**	ROOM 4 REC
ROOM 4 REC	**600**						1	20	19	20	20	1				**600**			ROOM 4 REC
ROOM 5 REC		**200**					1	20	21	22	20	1					**400**		ROOM 5 REC
ROOM 5 REC			**600**				1	20	23	24	20	1						**600**	ROOM 5 REC
ROOM 5 REC	**600**						1	20	25	26	20	1				**1500**			HAND DRYER
HAND DRYER		**1500**					1	20	27	28	20	1					**1500**		HAND DRYER
HAND DRYER			**1500**				1	20	29	30	20	1						**200**	RR 8 REC
SPARE							1	20	31	32	20	1				**400**			GFI/WP REC
SPARE							1	20	33	34	20	2					**3000**		WH-1
SPARE							1	20	35	36	———							**3000**	"
PANEL DR2	**5200**						3	200	37	(N) 38	**100**	**3**				**4800**			**(N) DR-3**
"		**7700**							39	40							**1980**		"
"			**5100**						41	42								**4080**	"
	7600	11200	8400													8900	8280	9080	

TOTAL WATTS= 53460 | ΦA= 16500 | ΦB= 19480 | ΦC= 17480
AMPS= 148.39 | MINIMUM BKR | A.I.C. RATING= 10,000 AMPS SYM

(N) PANEL " DR3 "

SERVICE: 120/208V 3Φ 4W | MAIN BKR.: 100A | BUS: 100A | LOC.: SEE PLAN
PANELBOARD | MTG :SURFACE

REMARKS	LOAD ΦA	LOAD ΦB	LOAD ΦC	REC	LTG	MISC	POLE	TRIP	CIRC	CIRC	TRIP	POLE	REC	LTG	MISC	LOAD ΦA	LOAD ΦB	LOAD ΦC	REMARKS
TK RM 1 REC	**720**			4					1	2	20	1							SPARE
TK RM 1 REC		**720**		4					3	4	20	1							SPARE
TK RR REC			**720**	4					5	6	30	2						**3000**	WATER HEATER
TK HALL REC	**360**			2					7	8	———					**3000**			"
TK WORK RM REC		**540**		3					9	10	20	1					180		HVAC REPEATER
TK STORAGE RM REC			**360**	2					11	12	20	1						**180**	AIR IONIZER
TK RM 2 REC	**720**			4					13	14	20	1				**180**			AIR IONIZER
TK RM 2 REC		**720**		4					15	16									
									17	18									
									19	20									
									21	22									
									23	24									
									25	26									
									27	28									
									29	30									
									31	32									
									33	34									
									35	36									
									37	38									
									39	40									
									41	42									
	1800	1980	1080													3180	0	3180	

TOTAL WATTS= 11220 | ΦA= 4980 | ΦB= 1980 | ΦC= 4260
AMPS= 26.991 | MINIMUM BKR | A.I.C. RATING= 10,000 AMPS SYM

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-123900 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/05/2024

Owner:

BAKERSFIELD CITY SCHOOL DISTRICT
1300 BAKER ST.
BAKERSFIELD CA 93305

Project Name:

TRANSITIONAL KINDERGARTEN

Project Address:

MLK ELEMENTARY SCHOOL
1100 CITADEL
BAKERSFIELD, CA 93307

integrated designs
by SOMAM, Inc.

ARCHITECTURE ENGINEERING INTERIOR DESIGN

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FRESNO CALIFORNIA 93710
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E: design@somam.com
integrateddesigns.com

Stamp:

REGISTERED PROFESSIONAL ENGINEER
CHRISTOPHER J. MALONEY
No. E013083
EXP. 06/30/2024
ELECTRICAL
STATE OF CALIFORNIA

Sheet Title:

PANEL SCHEDULES

Job No.: 5593

Sheet No.: E0.02

Release:DSA SUBMITTAL

JMPE
ELECTRICAL ENGINEERING
LIGHTING DESIGN
CA REGISTRATION NO E13083
23769
5500 MING AVENUE,
SUITE 251
BAKERSFIELD, CA 93309
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FAX (661) 831-7813
email : maloney@jmpe.net
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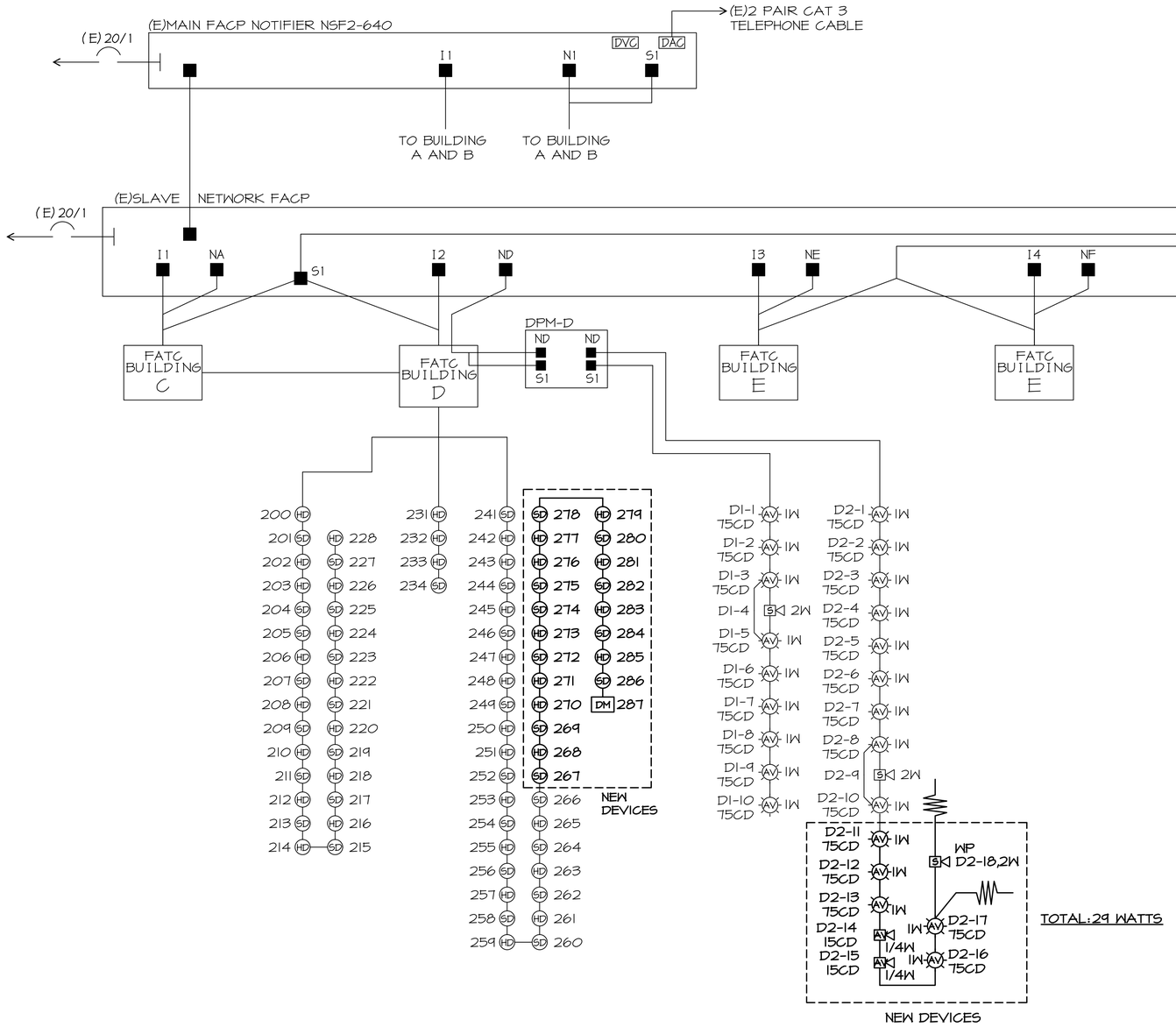

FIRE ALARM RISER PLAN

SCALE: NONE

JMPE
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LIGHTING DESIGN
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Stamp:

REGISTERED PROFESSIONAL ENGINEER
JOHN MALONEY
No. E013083
EXP. 06/30/2025
ELECTRICAL
STATE OF CALIFORNIA

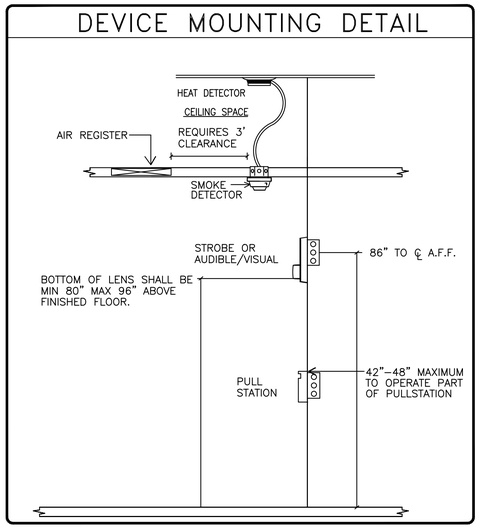
Sheet Title:

FIRE ALARM RISER

Job No.: 5593

Sheet No.: E0.03

Release:DSA SUBMITTAL



FIRE ALARM MOUNTING DETAIL

SCALE : NONE

C
E700

FIRE LIFE SAFETY NOTES

1 CBC 3401.12 - BUILDING AND PARTS OF THEREOF SHALL BE MAINTAINED IN A SAFE AND SANITARY CONDITION. DEVICES OR SAFEGUARDS WHICH ARE REQUIRED BY THIS CODE SHALL BE MAINTAINED IN CONFORMANCE WITH THE CODE EDITION UNDER WHICH INSTALLED. THE OWNER OR THE OWNERS DESIGNATED AGENT SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF BUILDING.

2 CFC 503.1; TITLE 19 DIVISION 1 §3.05 MAINTAIN FIRE ACCESS ROUTE(S). PUBLIC STREET ACCESS - PROVIDE SIGN(S) 'NO PARKING FIRE LANE WITH CALIFORNIA VEHICLE CODE 22500.1' AND DETAIL. (OR INCLUDE NOTE - EXISTING NO PARKING FIRE LANE SIGN TO BE FIELD VERIFIED BY IOR)

3 CFC 503.1 - MAINTAIN / PROVIDE KEY BOXES FOR FIRE DEPARTMENT ACCESS, AS APPROPRIATE.

4 CFC 701.2 - WHERE ANY COMPONENTS IN THIS CHAPTER ARE NOT MAINTAINED AND DO NOT FUNCTION AS INTENDED OR DO NOT HAVE THE FIRE RESISTANCE REQUIRED BY THE CODE UNDER WHICH THE BUILDING WAS CONSTRUCTED, REMODELED OR ALTERED, SUCH COMPONENT(S) OR PORTIONS THEREOF SHALL BE DEEMED AN UNSAFE CONDITION, IN ACCORDANCE WITH SECTION 110.1.1. COMPONENTS OR PORTIONS THEREOF DETERMINED TO BE UNSAFE SHALL BE REPAIRED OR REPLACED TO CONFORM TO THAT CODE UNDER WHICH THE BUILDING WAS CONSTRUCTED, REMODELED, ALTERED OR THIS CHAPTER, AS DEEMED APPROPRIATE BY THE FIRE CODE OFFICIAL.

5 CFC 703.1 AND TITLE 19 DIVISION 1 §1.14 - THE REQUIRED FIRE-RESISTANCE RATING OF FIRE-RESISTANCE CONSTRUCTION (INCLUDING WALLS, FIRESTOPS, SHAFT ENCLOSURES, PARTITIONS, SMOKE-BARRIERS, FLOORS, FIRE-RESISTIVE COATINGS AND SPRAYED FIRE-RESISTANT MATERIALS APPLIED TO STRUCTURAL MEMBERS AND FIRE-RESISTANT JOINTS SYSTEMS) SHALL BE MAINTAINED. SUCH ELEMENTS SHALL BE VISUALLY INSPECTED BY THE OWNER AND PROPERLY REPAIRED, RESTORED OR REPLACED WHEN DAMAGED, ALTERED, BREACHED OR PENETRATED. OPENINGS THROUGH FIRE-RESTANCE-RATED ASSEMBLIES SHALL BE PROTECTED BY SELF- OR AUTOMATIC-CLOSING DOORS OF APPROVED CONSTRUCTION MEETING THE FIRE PROTECTION REQUIRMENTS FOR THE ASSEMBLY.

6 CFC 703.2 - OPENING PROTECTIVE SHALL BE MAINTAINED IN AN OPERATIVE CONDITION IN ACCORDANCE WITH NFPA 80. FIRE DOORS AND SMOKE BARRIER DOORS SHALL NOT BE BLOCKED OR OBSTRUCTED OR OTHERWISE BE MADE INOPERABLE. FUSIBLE LINKS SHALL BE REPLACED PROMPTLY WHENEVER FUSED OR DAMAGED. FIRE ASSEMBLIES SHALL NOT BE MODIFIED.

7 CFC 901.4; 907.8.5 AND TITLE 19 DIVISION 1 1.14 - INSTALLATION FIRE PROTECTION SYSTEM SHALL BE MAINTAINED IN ACCORDANCE WITH ORIGINAL INSTALLATION STANDARDS FOR THAT SYSTEM. REQUIRED SYSTEMS SHALL BE EXTENDED, ALTERED OR AUGMENTED AS NECESSARY TO MAINTAIN AND CONTINUE PROTECTION WHENEVER THE BUILDING IS ALTERED, REMODELED OR ADDED TO. ALTERATIONS TO FIRE PROTECTION SYSTEM SHALL BE DONE IN ACCORDANCE WITH APPLICABLE STANDARDS.

8 TITLE 19 DIVISION 1 §1.14 - EVERY FIRE ALARM SYSTEM OR DEVICE, SPRINKLER SYSTEM, FIRE EXTINGUISHER, FIRE HOSE, FIRE-RESISTIVE ASSEMBLY OR ANY OTHER FIRE SAFETY ASSEMBLY, DEVICE MATERIAL OR EQUIPMENT INSTALLED AND RETAINED IN SERVICE IN ANY BUILDING OR STRUCTURE SUBJECT TO CALIFORNIA CODE OF REGULATIONS, TITLE 19 DIVISION 1 REGULATIONS SHALL BE MAINTAINED IN AN OPERABLE CONDITION AT ALL TIMES IN ACCORDANCE WITH CALIFORNIA CODE OF REGULATIONS TITLE 19 DIVISION 1 REGULATIONS AND WITH THEIR INTENDED USE.

9 TITLE 19 DIVISION 1 §3.24 - UPON DISRUPTION OF DIMINISHMENT OF THE FIRE PROTECTIVE QUALITIES OF SUCH EQUIPMENT, MATERIAL OR SYSTEMS IMMEDIATE ACTION SHALL BE INSTITUTED TO EFFECT A REESTABLISHMENT OF SUCH EQUIPMENT MATERIAL OR SYSTEMS TO THEIR ORIGINAL NORMAL OPERATIONAL CONDITION.

10 CFC 901.5.1 - IT SHALL BE UNLAWFUL TO OCCUPY ANY PORTION OF A BUILDING OR STRUCTURE UNTIL THE REQUIRED FIRE DETECTION, ALARM SYSTEM HAS BEEN TESTED AND APPROVED.

11 CFC 901.5.1 - IT SHALL BE UNLAWFUL TO OCCUPY ANY PORTION OF A BUILDING OR STRUCTURE UNTIL THE REQUIRED FIRE DETECTION, ALARM SYSTEM HAS BEEN TESTED AND APPROVED.

12 FIRE ALARM SCOPE REQUIRES DSA APPROVED DRAWINGS FOR REFERENCE OF AREAS IN SCOPE INCLUDE COMPLIANT FIRE ALARM COMPONENTS (SMOKE-HEAT-AUDIBLE-VISUAL-MANUAL). (STATEMENT OF COMPLIANCE PER CFC 901.2.1; 901.6.2.1 & TITLE 19 DIVISION 1 § 904.1(b) 904.2(c) RECORD AS-BUILT DRAWINGS AND TEST REPORTS.) ROOMS / AREAS IN SCOPE TO INCLUDE EXISTING FIRE ALARM COMPONENTS.

13 CFC 1030.1 - THE MEANS OF EGRESS FOR BUILDING OR PORTIONS THEREOF SHALL BE MAINTAINED IN ACCORDANCE WITH THIS SECTION.

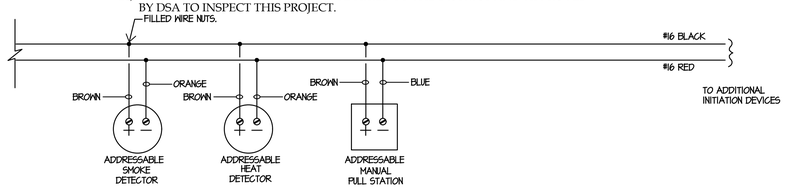
14 CFC 1030.4 - EXIT SIGNS SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH SECTION 1011.

15 CFC CHAPTER 11, PROVISIONS APPLICABLE TO EXISTING BUILDING.

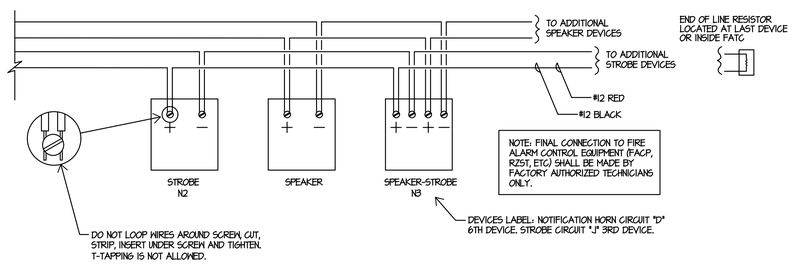
16 CFC CHAPTER 33, FIRE SAFETY DURING CONSTRUCTION AND DEMOLITION APPLICABLE PROVISIONS TO BE REPLICATED VERBATIM - SAMPLE SECTIONS - 3304 PRECAUTIONS AGAINST FIRE: 3304.2 WASTE DISPOSAL; 3304.5 FIRE WATCH; 3304.6 CUTTING AND WELDING; 3305 FLAMMABLE AND COMBUSTIBLE LIQUIDS; 3308 OWNERS RESPONSIBILITY; 3310 ACCESS FOR FIREFIGHTING; 3311 MEANS OF EGRESS; 3315 FIRE EXTINGUISHERS.

FIRE ALARM SYSTEM REQUIREMENTS

1) APPLICABLE STANDARD 2022 NFPA 72
2) INSTALLATION OF THE SYSTEMS SHALL NOT BE STARTED UNTIL DETAILED DESIGN DOCUMENTS AND SPECIFICATION, INCLUDING STATE FIRE MARSHAL LISTING NUMBERS FOR EACH COMPONENT OF THE SYSTEM HAS BEEN APPROVED BY DSA.
3) UPON COMPLETION OF THE INSTALLATION OF THE SYSTEMS, A SATISFACTORY TEST OF THE ENTIRE SYSTEM SHALL BE MADE IN THE PRESENCE OF A DSA PROJECT INSPECTOR.
4) A STAMPED SET OF APPROVED FIRE ALARM DESIGN DOCUMENTS SHALL BE ON THE JOB SITE AND USED FOR INSTALLATION.
5) ANY DISCREPANCIES BETWEEN THE DRAWINGS AND THE CODE OR RECOGNIZED STANDARDS SHALL BE BROUGHT TO THE ATTENTION OF DSA AND THE ARCHITECT/ENGINEER OF THE PROJECT.
6) DSA, ARCHITECT/ENGINEER AND OWNER SHALL BE NOTIFIED A MINIMUM OF 48 HOURS PRIOR TO THE FINAL INSPECTION AND /OR TESTING.
7) ALL PENETRATIONS THROUGH RATED ASSEMBLIES, REQUIRING OPENING PROTECTION SHALL BE PROVIDED WITH A PENETRATION FIRE STOP SYSTEM AS IDENTIFIED IN CBC CHAPTER 7, UL OR OTHER LAB TESTING CRITERIA. APPROVED TYPE OF MATERIALS SHALL BE IDENTFIED WITHIN THE SPECIFICATION WITHIN THE FIRE ALARM SECTION.
8) WALL MOUNTED VISUAL NOTIFICATION DEVICES SHALL HAVE THEIR ENTIRE LENS TO BE BETWEEN 80" AND 90"FROM FINISHED FLOOR.
9) WALL MOUNTED AUDIBLE NOTIFICATION DEVICES SHALL HAVE THEIR TOPS MOUNTED AT 90" MINIMUM AND 100" MAXIMUM FROM FINISHED FLOOR AND NO CLOSER THEN 6" TO A HORIZONTAL STRUCTURE.
10) AUDIBLE DEVICES TO BE AT LEAST 15 DBA ABOVE THE AVERAGE AMBIENT SOUND LEVEL BUT NOT LESS THAN 75 DBA AT 10 FEET OR MORE THAN 110 DBA AT THE MINIM HEARING DISTANCE . SOUND LEVEL SHALL BE MAINTAIND FOR DURATION OF AT LEAST 60 SECTIONS 5 DBA MUST BE MAINTAINED.
11) AUDIBLE DEVICES SHALL BE SYNCHRONIZED TEMPORAL CODE 3 PATTERN.
12) THE CONTRACTOR SHALL ADJUST/INSTALL ALL DEVICES TO MAXIMIZE PERFORMANCE AND TO MINIMIZE FALSE ALARMS.
13) VISUAL DEVICES SHOULD NOT EXCEED 2 FLASHES PER SECOND AND SHOULD NOT BE SLOWER THAN 1 FLASH EVERY SECOND. THE DEVICE SHALL HAVE A PULSING LIGHT SOURCE NOT LESS THAN 15 CANDELLA. VISUAL DEVICES WITHIN 55' FROM EACH OTHER SHALL BE SYNCHRONIZED.
14) UNDERGROUND AND EXTERIOR CONDUITS TO HAVE WATERTIGHT FITTINGS AND WIRE TO BE APPROVAL FOR WET LOCATIONS.
15) ALL FIRE ALARM WIRING SHALL BE FLP OR FPLP (FIRE POWER LIMITED OR FIRE POWER LIMITED PLENUM) AS REQUIRED FOR APPLICATION. WIRING IN CONDUIT ABOVE GROUND MAY BE THHN OR THWN.
16) PER CEC STANDARDS, ALL WIRING IS TO BE PULLED THROUGH EACH JUNCTION BOX AND CONNECTED DIRECTLY TO EACH FIRE DEVICE. DO NOT SPLICE THE WIRE. THERE MUST BE AT LEAST 6' OF LEAD WIRE FROM THE BOX TO THE DEVICE. ALL BOXES TO BE SIZED PER CEC.
17) SMOKE DETECTORS SHALL NOT BE ANY CLOSER THAN 1' FROM FIRE SPRINKLERS OR 3' FROM ANY SUPPLY DIFFUSER. IN AREA OF CONSTRUCTION OR POSSIBLE DAMAGE/CONTAMINATION ON NEWLY INSTALLED FIRE ALARM DEVICES SHALL BE COVERED UNTIL THAT AREA IS READY TO BE TURNED OVER TO THE OWNER.
18) ALL FIRE ALARM CIRCUITS SHALL BE IN CONDUIT, SURFACE RACEWAY OR OPEN RUN ABOVE CEILINGS, UNDER FLOORS AND IN WALLS IN A NEAT AND PROTECTED MANOR AS INDICATED ON DESIGN DOCUMENTS. EXPOSED CIRCUITS ARE ONLY PERMITTED WHEN NOTED AS EXPOSED ON DESIGN DOCUMETS.
19) FIRE ALARM PANEL, REMOTES, AND COMPONENETS SHALL BE SECURED TO MOUNTING SURFACES PER MANUFACTURERS SPECIFICATIONS. NO SINGLE DEVICE SHALL EXCEED THE WEIGHT OF 20 LBS. WITHOUT SPECIAL MOUNTING DETAILS.
20) A DEDICATED BRANCH CIRCUIT SHALL BE PROVIDED FOR FIRE ALARM EQUIPMENT. THIS CIRCUIT SHALL BE ENERGIZED FROM THE COMMON USE AREA PANEL AND SHALL HAVE NO OTHER OUTLETS. THE BREAKER SHALL HAVE A RED LOCKING DEVICE TO BLOCK THE HANDLE IN THE "ON" POSITION. THE CIRCUIT BREAKER SHALL BE LABELED "FIRE ALARM CIRCUIT CONTROL". CIRCUIT ID TO BE LABELED AT FIRE PANEL/EXTENDERS.
21) THE INSTALLING CONTRACTOR SHALL PROVIDE A RECORD OF COMPLETION PER NFPA 72, REQUIREMENTS.
22) CONTROL PANELS, REMOTE ANNUNCIATORS SHALL BE INSTALLED WITH THEIR BOTTOMS MOUNTED AT 48" 23) THE INSTALLING CONTRACTOR SHALL PROVIDE SYSTEM PROGRAMMING FOR SUPERVISORY MONITORING PER CBC SECTION 901.6.3.
24) SUPERVISORY MONITORING SHALL BE TESTED AND VERIFIED AS SENDING CORRECT SIGNALS IN CONJUNCTION WITH FINAL ACCEPTANCE TEST.
25) OWNER SHALL BE RESPONSIBLE FOR ESTABLISHING A FIRE SYSTEM MONITORING CONTRACT OR PROVISIONS.
26) A DSA CLASS 3 INSPECTOR SHALL BE HIRED BY THE DISTRICT AND APPROVED BY DSA TO INSPECT THIS PROJECT.



INITIATION DEVICES



NOTIFICATION DEVICES

FIRE ALARM DEVICES
TYPICAL MOUNTING DETAIL

SCALE : NONE

A
E700

APPLICABLE CODE REQUIREMENTS

PERFORMANCE OF THE WORK OF THIS CONTRACT SHALL CONFORM TO THE REQUIREMENTS OF APPLICABLE GOVERNING CODES AND ORDINANCES INCLUDING THE FOLLOWING:

2022 BUILDING STANDARDS ADMINISTRATIVE CODE, PART 1, TITLE 24, C.C.R.

2022 CALIFORNIA BUILDING CODE, PART 2, TITLE 24 C.C.R. (2021 IBC, VOLUMES 1-3 WITH CALIFORNIA AMENDMENTS)

2022 CALIFORNIA ELECTRICAL CODE, PART 3, TITLE 24 C.C.R. (2020 N.E.C. WITH CALIFORNIA AMENDMENTS)

2022 CALIFORNIA MECHANICAL CODE, PART 4, TITLE 24 C.C.R (2021 U.M.C. WITH CALIFORNIA AMENDMENTS)

2022 CALIFORNIA PLUMBING CODE, PART 5, TITLE 24 C.C.R. (2021 U.P.C. WITH CALIFORNIA AMENDMENTS)

2022 CALIFORNIA ENERGY CODE, PART 6, TITLE 24 C.C.R.

2022 CALIFORNIA FIRE CODE, PART 9, TITLE 24 C.C.R. (2021 I.F.C. WITH CALIFORNIA AMENDMENTS)

2022 CALIFORNIA REFERENCED STANDARDS, PART 12, TITLE 24 C.C.R. TITLE 19 C.C.R. PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS.

NFPA 13 AUTOMATIC SPRINKLER SYSTEM ----------2022 EDITION

NFPA 14 STANDPIPE SYSTEM ----------2019 EDITION

NFPA 17A WET CHEMICAL SYSTEM ----------2021 EDITION

NFPA 24 PRIVATE SERVICE MAINS ----------2022 EDITION

NFPA 72 NATIONAL FIRE ALARM CODE ----------2022 EDITION (NOTE SEE UL STANDARDS 1971 FOR ("VISUAL DEVICES")

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-123900 INC:
REVIEWED FOR
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BAKERSFIELD CITY SCHOOL DISTRICT
1300 BAKER ST.
BAKERSFIELD CA 93305

Project Name:

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Stamp:

REGISTERED PROFESSIONAL ENGINEER
JOHN MALONEY
No. E011408
EXP. 06/30/2025
ELECTRICAL
STATE OF CALIFORNIA

Sheet Title:

FIRE ALARM NOTES

Job No.: 5593

Sheet No.: E0.04

Release:DSA SUBMITTAL

JMPE
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FAX (661) 831-7813
email : maloney@jmpe.net
www.jmpe.net

EXISTING SLAVE FACP BATTERY CALCULATION MFACP

EQUIPMENT DESCRIPTION	QUANTITY		SUPERVISORY CURRENT (AMPERES)		ALARM CURRENT (AMPERES)	
	EXISTING	NEW	EACH	SUB-TOTAL	EACH	SUB-TOTAL
FIRE ALARM PANEL	1	0	0.12	0.12	9	9
SMOKE DETECTOR	118	10	0.0003	0.0384	0.0065	0.832
HEAT DETECTOR	120	10	0.0003	0.039	0.00065	0.0845
MODULE	4	0	0.0003	0.0012	0.0065	0.026
SUB TOTAL AMPERES			0.1986 AMPS		9.9425 AMPS	
			x 24 HOURS		X 0.25 HOURS	
SUB TOTAL AMPERE-HOURS			4.7664	A.H.	2.485625	A.H.
TOTAL REQUIRED AMPERE-HOURS FOR DISTRIBUTED POWER MODULE					7.252025	A.H.
BATTERY NON-LINEAR DISCHARGE CHARACTERISTIC FACTOR					x 1.2	
TOTAL MINIMUM AMPERE HOURS REQUIRED					8.70243	A.H.
PROVIDED BATTERY CAPACITY					24.00	A.H.

EXISTING DPM-D BATTERY CALCULATION

EQUIPMENT DESCRIPTION	QUANTITY		SUPERVISORY CURRENT (AMPERES)		ALARM CURRENT (AMPERES)	
	EXISTING	NEW	EACH	SUB-TOTAL	EACH	SUB-TOTAL
UNIT	1	0	0.075	0.075	0.175	0.175
OUTDOOR 2W SPEAKER	2	1	0	0	0.175	0.525
1/4 W SPEAKERS	20	0	0	0	0.035	0.7
75CD VISUAL	0	0	0	0	0.05	0
15CD AV	4	2	0	0	0.025	0.15
30CD AV	0	0	0	0	0.066	0
75CD AV	18	5	0	0	0.094	2.162
110CD AV	0	0	0	0	0.158	0
SYNC MODULE	2	0	0	0	0.35	0.7
SUB TOTAL AMPERES			0.075 AMPS		4.412 AMPS	
			x 24 HOURS		X 0.25 HOURS	
SUB TOTAL AMPERE-HOURS			1.8	A.H.	1.103	A.H.
TOTAL REQUIRED AMPERE-HOURS FOR DISTRIBUTED POWER MODULE					2.903	A.H.
BATTERY NON-LINEAR DISCHARGE CHARACTERISTIC FACTOR					x 1.2	
TOTAL MINIMUM AMPERE HOURS REQUIRED					3.4836	A.H.
PROVIDED BATTERY CAPACITY					12.00	A.H.

FIRE ALARM SYMBOL LIST MATRIX

	SYMBOL	DEVICE	MFR & CAT#	REMARKS	CSFM LISTING
	■	MAIN FIRE ALARM PANEL	NOTIFIER NFS2-640	EXISTING	7165-0028:0243
(E)	DPM	ADDRESSABLE DISTRIBUTED POWER MODULE	NOTIFIER ACPS-210	EXISTING	7315-0028:0243
(E)	DVC	DIGITAL VOICE COMMAND	NOTIFIER DVM EM	EXISTING	7165-0028:0224
(E)	DAA-5025	DIGITAL AUDIO AMPLIFIER	NOTIFIER DAA-5025	PART OF DVC	7165-0028:0224
(E)	DAC	FIRE ALARM COMMUNICATOR	NOTIFIER 411UDACT	EXISTING	7300-0075:0174
(E)	SD	SMOKE DETECTOR	NOTIFIER FSP-851	PROVIDE BASE B210 LP(A) ON 4"SQ. DEEP BOX	7272-0028:0206
(N)	HD	HEAT DETECTOR (IN ATTIC SPACE)	NOTIFIER FST-851H	PROVIDE BASE B210 LP(A) ON 4"SQ. DEEP BOX	7270-0028:0196
(E)	DM	DUAL MONITOR MODULE	NOTIFIER FDM-1(A)	4"SQ. DEEP EXTENSION & DBL GANG	7300-0028:0219
(N)	AV	SPEAKER STROBE	SYSTEM SENSOR SPSCR AV CM	PROVIDE DEEP SQ. J-BOX	7320-1653:0201
(N)	V	SPEAKER STROBE	SYSTEM SENSOR SCWLA	PROVIDE DEEP SQ. J-BOX	7320-1653:0505
(E) WP	S	EXTERIOR SPEAKER	SYSTEM SENSOR SPRK	PROVIDE MWBB BACKBOX	7320-1653:0201
	———	FPLR CABLE	WESTPENN 975	18/2 BARE, CU, SHEILDED	7161-0859:0101
	———	FPLR CABLE	WESTPENN 998	12/2 SOLID, CU, UNSHIELDED	7161-0859:0101
	———	FPLR CABLE	WESTPENN AQ294	16/2 STRANDED, CU, SHIELDED W/ AQUASEAL	7161-0859:0101
	———	FPLR CABLE	WESTPENN AQC294	16/2 STRANDED, CU, SHIELDED W/ AQUASEAL	7161-0859:0101

FIRE ALARM SEQUENCE OF OPERATION

INPUT & OUTPUT MATRIX

	SYSTEM OUTPUTS	SYSTEM INPUTS: AREA SMOKE DETECTOR	AREA HEAT DETECTOR		FIRE ALARM SYSTEM AC POWER FAILURE	FIRE ALARM SYSTEM LOW BATTERY	OPEN CIRCUIT	GROUND FAULT	NOTIFICATION APPLIANCE CIRCUIT SHORT	TAMPER SWITCH	FLOW SWITCH	SPRINKLER LOW	DDCV TAMPER SWITCH	DDCV FLOW SWITCH	
Control Unit Annunciation	ACTUATE COMMON ALARM SIGNAL INDICATOR (RED LED)	●	●								●	●		●	
	ACTUATE AUDIBLE ALARM SIGNAL (PIEZO BUZZER)	●	●								●	●		●	
	ACTUATE COMMON SUPERVISORY SIGNAL INDICATOR (AMBER LED)														
	ACTUATE AUDIBLE SUPERVISORY SIGNAL (PIEZO BUZZER)														
	ACTUATE COMMON TROUBLE SIGNAL INDICATOR (AMBER LED)				●	●	●	●	●	●			●		
	ACTUATE AUDIBLE COMMON TROUBLE SIGNAL (PIEZO BUZZER)				●	●	●	●	●	●			●		
Notification	ACTUATE EVACUATION SIGNAL THROUGHOUT THE BUILDING SPEAKERS & SPEAKER/STROBES	●	●								●	●		●	
	TRANSMIT FIRE ALARM SIGNAL TO SUPERVISING STATION	●	●								●	●		●	
	TRANSMIT SUPERVISORY SIGNAL TO SUPERVISING STATION														
	TRANSMIT TROUBLE SIGNAL TO SUPERVISING STATION				●	●	●	●	●	●			●		
Supplementary	ELEVATOR RECALL														
	ELEVATOR SHUTDOWN														
	HVAC SHUTDOWN										●	●		●	
	ELEVATOR SHAFT														

CENTRAL STATION MONITORING

COMPANY NAME:	KIMBERLITE CORP. DBA SONITROL
ADDRESS:	6321 W. BEECHWOOD AVE, FRESNO, CA 93711
PHONE:	(661)324-6448
LICENSE NUMBER:	# ACO-2599
U.L. LISTING CERT:	WFX #S8535-1

JMPE
ELECTRICAL ENGINEERING
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IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-123900 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/05/2024

Owner:

BAKERSFIELD CITY SCHOOL DISTRICT
1300 BAKER ST.
BAKERSFIELD CA 93305

Project Name:

TRANSITIONAL KINDERGARTEN

Project Address:

MLK ELEMENTARY SCHOOL
1100 CITADEL
BAKERSFIELD, CA 93307

integrated designs
by SOMAM, Inc.

ARCHITECTURE
ENGINEERING
INTERIOR DESIGN

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REGISTERED PROFESSIONAL ENGINEER
MARK ONEY
No. E013083
EXP. 09/30/2024
ELECTRICAL
STATE OF CALIFORNIA

Sheet Title:
FIRE ALARM CALCS AND MATRICES

Job No.: 5593

Sheet No.: E0.05

Release: DSA SUBMITTAL

STATE OF CALIFORNIA
Indoor Lighting
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-LTI-E
Project Name: MLK ELEMENTARY SCHOOL TK	Report Page:	(Page 1 of 8)
Project Address:	Date Prepared:	2023-12-19T13:16:12-05:00

This document is used to demonstrate compliance with requirements in 110.9, 110.12(c), 130.0, 130.1, 140.6 and 141.0(b)2.for indoor lighting scopes using the prescriptive path for nonresidential and hotel/motel occupancies. It is also used to document compliance with requirements in 160.5, 170.2(e) and 180.2(b)4 for indoor lighting scopes using the prescriptive path for multifamily occupancies. Multifamily includes dormitory and senior living facilities.

A. GENERAL INFORMATION

01	Project Location (city)	BAKERSFIELD	04	Total Conditioned Floor Area (ft²)	2,530
02	Climate Zone	13	05	Total Unconditioned Floor Area (ft²)	0
03	Occupancy Types Within Project (select all that apply):		06	# of Stories (Habitable Above Grade)	0
• Classroom					

B. PROJECT SCOPE

This table includes any lighting systems that are within the scope of the permit application and are demonstrating compliance using the prescriptive path outlined in 140.6 / 170.2(e) or 141.0(b)2 / 180.2(b)4 for alterations.

Scope of Work	Conditioned Spaces		Unconditioned Spaces	
01	02	03	04	05
My Project Consists of (check all that apply):	Calculation Method	Area (ft²)	Calculation Method	Area (ft²)
☒ New Lighting System	Area Category Method	2530	N/A	0
☐ New Lighting System - Parking Garage	N/A	0	N/A	0
Total Area of Work (ft²)	2530			

STATE OF CALIFORNIA
Indoor Lighting
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-LTI-E
Project Name: MLK ELEMENTARY SCHOOL TK	Report Page:	(Page 2 of 8)
	Date Prepared:	2023-12-19T13:16:12-05:00

C. COMPLIANCE RESULTS

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

Lighting in conditioned and unconditioned spaces must not be combined for compliance per 140.6(b)1 / 170.2(e)	Allowed Lighting Power per 140.6(b) / 170.2(e) (Watts)						Adjusted Lighting Power per 140.6(a) / 170.2(e) (Watts)			Compliance Results
	01	02	03	04		05	06	07	08	09
	Complete Building 140.6(c)1	Area Category 140.6(c)2 / 170.2(e)4	Area Category Additional 140.6(c)2G / 170.2(e)4Av (+)	Tailored 140.6(c)3 / 170.2(e)4B (+)	=	Total Allowed (Watts)	≥	Total Designed (Watts)	Adjustments PAF Lighting Control Credits 140.6(a)2 / 170.2(e)1B (-) = Total Adjusted (Watts) *Includes Adjustments		05 must be >= 08 140.6 / 170.2(e)
	(See Table I)	(See Table I)	(See Table J)	(See Table K)				(See Table F)	(See Table P)	
Conditioned		1,464.55			=	1,464.55	≥	770	= 770	COMPLIES
Unconditioned					=		≥		=	
Controls Compliance (See Table H for Details)										COMPLIES
Rated Power Reduction Compliance (See Table Q for Details)										

D. EXCEPTIONAL CONDITIONS

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

E. ADDITIONAL REMARKS

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

STATE OF CALIFORNIA
Indoor Lighting
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-LTI-E
Project Name: MLK ELEMENTARY SCHOOL TK	Report Page:	(Page 3 of 8)
	Date Prepared:	2023-12-19T13:16:12-05:00

F. INDOOR LIGHTING FIXTURE SCHEDULE

This table includes all planned permanent and portable lighting other than dwelling unit/ hotel/ motel room lighting. Multifamily dwelling unit and hotel/motel room lighting is documented in Table T. If using Table T to document lighting in multifamily common use areas providing shared provisions for living, eating, cooking or sanitation, those luminaires are not included here.

Designed Wattage: Conditioned Spaces

01	02	03	04	05	06	07	08	09	10	
									Field Inspector	
Name or Item Tag	Complete Luminaire Description	Modular (Track) Fixture	Small Aperture & Color Change[1]	Watts per luminaire[2]	How is Wattage determined	Total Number of Luminaires	Excluded per 140.6(a)3 / 170.2(e)2C	Design Watts	Pass	Fail
A	2X4 LED	No	NA	30	Mfr. Spec	24	No	720	☐	☐
B	2X6	No	NA	25	Mfr. Spec	2	No	50	☐	☐
							Total Designed Watts: CONDITIONED SPACES	770		

[1]*FOOTNOTE: Design Watts for small aperture and color changing luminaires which qualify per 140.6(a)4B / 170.2(e)2D is adjusted to be 75% /80% of their rated wattage. Table F automatically makes this adjustment, the permit applicant should enter full rated wattage in column 05.*

[2]*Authority Having Jurisdiction may ask for Luminaire cut sheets to confirm wattage used for compliance per 130.0(c) / 160.5(b). Wattage used must be the maximum rated for the luminaire, not the lamp.*

G. MODULAR LIGHTING SYSTEMS

This section does not apply to this project.

H. INDOOR LIGHTING CONTROLS (Not including PAFs)

This table includes lighting controls for conditioned and unconditioned spaces.

Building Level Controls

01	02	03	
		Field Inspector	
Mandatory Demand Response 110.12(c)	Shut-off controls 130.1(c) / 160.5(b)4C	Pass	Fail
NA < 4,000W subject to multilevel	See Area/Space Level Controls	☐	☐

STATE OF CALIFORNIA
Indoor Lighting
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-LTI-E
Project Name: MLK ELEMENTARY SCHOOL TK	Report Page:	(Page 4 of 8)
	Date Prepared:	2023-12-19T13:16:12-05:00

H. INDOOR LIGHTING CONTROLS (Not including PAFs)

Area Level Controls

04	05	06	07	08	09	10	11	12	
								Field Inspector	
Area Description	Complete Building or Area Category Primary Function Area	Manual Area Controls 130.1(a) / 160.5(b)4A	Multi-Level Controls 130.1(b) / 160.5(b)4B	Shut-Off Controls 130.1(c) // 160.5(b)4C	Primary/Sky lit Daylighting 130.1(d) / 160.5(b)4D	Secondary Daylighting 130.1(d) / 160.5(b)4D	Interlocked Systems 140.6(a)1/ 170.2(e)2A	Pass	Fail
CLASSROOM	Classroom, Lecture, or Training Vocational	Readily Accessible	Dimmer	Occupancy Sensor	NA: Not daylit zone	NA: Not daylit zone	No	☐	☐
LOUNGE	Lounge	Readily Accessible	Dimmer	Occupancy Sensor	NA: Not daylit zone	NA: Not daylit zone	No	☐	☐
I.T. CLOSET	Electrical Mechancial Telephone Room	Readily Accessible	NA: Enclosed area <100SF	Occupancy Sensor	NA: Not daylit zone	NA: Not daylit zone	No	☐	☐
HALLWAY	Corridor	Readily Accessible	NA: Enclosed area <100SF	Occupancy Sensor	NA: Not daylit zone	NA: Not daylit zone	No	☐	☐
RESTROOM	Restroom	Readily Accessible	NA: Restrooms	Occupancy Sensor	NA: Not daylit zone	NA: Not daylit zone	No	☐	☐
							13		
							Plan Sheet Showing Daylit Zones:		

I. LIGHTING POWER ALLOWANCE: COMPLETE BUILDING OR AREA CATEGORY METHODS

Each area complying using the Complete Building or Area Category Methods per 140.6(b) are included in this table. Column 06 indicates if additional lighting power allowances per 140.6(c) or adjustments per 140.6(a) are being used .

Conditioned Spaces

01	02	03	04	05	06	
					Additional Allowance / Adjustment	
Area Description	Complete Building or Area Category Primary Function Area	Allowed Density (W/ft²)	Area (ft²)	Allowed Wattage (Watts)	Area Category	PAF
CLASSROOM	Classroom, Lecture, or Training Vocational	0.6	1,928	1,156.8	No	No

STATE OF CALIFORNIA
Indoor Lighting
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-LTI-E
Project Name: MLK ELEMENTARY SCHOOL TK	Report Page:	(Page 5 of 8)
	Date Prepared:	2023-12-19T13:16:12-05:00

I. LIGHTING POWER ALLOWANCE: COMPLETE BUILDING OR AREA CATEGORY METHODS

LOUNGE	Lounge	0.55	213	117.15	No	No
I.T. CLOSET	Electrical Mechancial Telephone Room	0.4	156	62.4	No	No
HALLWAY	Corridor	0.4	93	37.2	No	No
RESTROOM	Restroom	0.65	140	91	No	No
		TOTALS:	2,530	1,464.55	See Tables J, or P for detail	

J. ADDITIONAL ALLOWANCE: AREA CATEGORY METHOD QUALIFYING LIGHTING SYSTEM

This section does not apply to this project.

K. TAILORED METHOD GENERAL LIGHTING POWER ALLOWANCE

This section does not apply to this project.

L. ADDITIONAL LIGHTING ALLOWANCE: TAILORED WALL DISPLAY

This section does not apply to this project.

M. ADDITIONAL LIGHTING ALLOWANCE: TAILORED FLOOR AND TASK LIGHTING

This section does not apply to this project.

N. ADDITIONAL LIGHTING ALLOWANCE: TAILORED DECORATIVE /SPECIAL EFFECTS

This section does not apply to this project.

O. ADDITIONAL LIGHTING ALLOWANCE: TAILORED VERY VALUABLE MERCHANDISE

This section does not apply to this project.

STATE OF CALIFORNIA
Indoor Lighting
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-LTI-E
Project Name: MLK ELEMENTARY SCHOOL TK	Report Page:	(Page 6 of 8)
	Date Prepared:	2023-12-19T13:16:12-05:00

P. POWER ADJUSTMENT: LIGHTING CONTROL CREDIT (POWER ADJUSTMENT FACTOR (PAF))

This section does not apply to this project.

Q. RATED POWER REDUCTION COMPLIANCE FOR ONE-FOR-ONE ALTERATIONS

This section does not apply to this project.

R. 80% LIGHTING POWER FOR ALL ALTERATIONS - CONTROLS EXCEPTIONS

This section does not apply to this project.

S. DAYLIGHT DESIGN POWER ADJUSTMENT FACTOR (PAF)

This section does not apply to this project.

T. DWELLING UNIT LIGHTING

This section does not apply to this project.

U. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION

Selections have been made based on information provided in this document. If any selections have been changed by permit applicant, an explanation should be included in Table E. Additional Remarks. These documents must be provided to the building inspector during construction and can be found online

Form/Title
NRCI-LTI-E - Must be submitted for all buildings

STATE OF CALIFORNIA
Indoor Lighting
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-LTI-E
Project Name: MLK ELEMENTARY SCHOOL TK	Report Page:	(Page 7 of 8)
	Date Prepared:	2023-12-19T13:16:12-05:00

V. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

Selections have been made based on information provided in this document. If any selections have been changed by the permit applicant, an explanation should be included in Table E. Additional Remarks. These documents must be provided to the building inspector during construction and any with "-A" in the form name must be completed through an Acceptance Test Technician Certification Provider (ATTCP). For more information visit: http://www.energy.ca.gov/title24/attcp/providers.html

Form/Title	Systems/Spaces To Be Field Verified
NRCA-LTI-02-A - Must be submitted for occupancy sensors and automatic time switch controls.	CLASSROOM; LOUNGE; I.T. CLOSET; HALLWAY; RESTROOM

STATE OF CALIFORNIA
Indoor Lighting
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-LTI-E
Project Name: MLK ELEMENTARY SCHOOL TK	Report Page:	(Page 8 of 8)
Project Address:	Date Prepared:	2023-12-19T13:16:12-05:00

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

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

Documentation Author Name: John Maloney	Documentation Author Signature: John
Company: JMPE	Signature Date: 12-14-2023
Address: 621 OLIVE STREET	CEA/ HERS Certification Identification (if applicable): E013088 / 06-25
City/State/Zip: SANTA BARBARA, CA 93101	Phone: (805)564-4216

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: JOHN MALONEY	Responsible Designer Signature: John
Company: JMPE	Date Signed: 12-14-2023
Address: 621 OLIVE STREET	License: E013088 / 06-25
City/State/Zip: SANTA BARBARA, CA 93101	Phone: (805)564-4216

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-123900 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/05/2024

Owner:

BAKERSFIELD CITY SCHOOL DISTRICT
1300 BAKER ST.
BAKERSFIELD CA 93305

Project Name:

TRANSITIONAL KINDERGARTEN

Project Address:

MLK ELEMENTARY SCHOOL
1100 CITADEL
BAKERSFIELD, CA 93307

integrated designs
by SOMAM, Inc.

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Stamp:

REGISTERED PROFESSIONAL ENGINEER JOHN T. MALONEY No. E013088 EXP. 6/30/25 ELECTRICAL STATE OF CALIFORNIA

Sheet Title:

INDOOR TITLE 24 FORMS

Job No.:

5593

Sheet No.:

E0.06

Release:DSA SUBMITTAL

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STATE OF CALIFORNIA
Outdoor Lighting CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTO-E
Project Name: MLK ELEMENTARY SCHOOL TK	Report Page: (Page 1 of 7)
Project Address:	Date Prepared: 2023-12-19T13:23:38-05:00

A. GENERAL INFORMATION

01	Project Location (city)	BAKERSFIELD	04	Total Illuminated Hardscape Area (ft²)	1685
02	Climate Zone	13			
03	Outdoor Lighting Zone per Title 24 Part 1 10.114 or as designated by Authority Having Jurisdiction (AHJ):				
☐	LZ-0: Very Low - Undeveloped Parkland	☐ LZ-2: Moderate - Urban Clusters	☐ LZ-4: High - Must be reviewed by CA Energy Commission for Approval		
☐	LZ-1: Low - Rural Areas	☒ LZ-3: Moderately High - Urban Areas			
05	Occupancy Types within Project				
• Classroom					

B. PROJECT SCOPE

This table includes outdoor lighting systems that are within the scope of the permit application and are demonstrating compliance using the prescriptive path outlined in 140.7 / 170.2(e)6 or 141.0(b)2L / 180.2(b)4Bv for alterations.

My Project Consists of:

01	02		
☒ New Lighting System	Must Comply with Allowances from 140.7 / 170.2(e)6		
☐ Altered Lighting System	Is your alteration increasing the connected lighting load (Watts)?	Yes	No
03	04	05	
% of Existing Luminaires Being Altered[1]	Sum Total of Luminaires Being Added or Altered	Calculation Method	
☐ < 10% ☐ >= 10% and < 50% ☐ >= 50%			

Please proceed to Table F. Outdoor Lighting Fixture Schedule to define the project's luminaires.

[1] FOOTNOTES: % of Existing Luminaires Being Altered = (Sum Total of Luminaires Being Added or Altered / Existing Luminaires within the Scope of the Permit Application) x 100.

STATE OF CALIFORNIA
Outdoor Lighting CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTO-E
Project Name: MLK ELEMENTARY SCHOOL TK	Report Page: (Page 2 of 7)
	Date Prepared: 2023-12-19T13:23:38-05:00

C. COMPLIANCE RESULTS

Results in this table are automatically calculated from data input and calculations in Tables F through N. Note: If any cell on this table says "COMPLIES with Exceptional Conditions" refer to Table D. Exceptional Conditions for guidance or see applicable Table referenced below.

Calculations of Total Allowed Lighting Power (Watts) 140.7 / 170.2(e)6 or 141.0(b)2L / 180.2(b)4Bv												Compliance Results		
01		02		03		04		05		06		07	08	09
General Hardscape Allowance 140.7(d)1 / 170.2(e)6 (See Table I)	+	Per Application 140.7(d)2 / 170.2(e)6 (See Table J)	+	Sales Frontage 140.7(d)2 (See Table K)	+	Ornamental 140.7(d)2 / 170.2(e)6 (See Table L)	+	Per Specific Area 140.7(d)2 / 170.2(e)6 (See Table M)	OR	Existing Power Allowance 141.0(b)2L / 180.2(b)4Bv (See Table N)	=	**Total Allowed** (Watts)	≥	**Total Actual** (Watts)	**07 must be >= 08**
382.59	+	---	+	---	+	---	+	---	OR	---	=	382.59	≥	210	COMPLIES
Shielding Compliance (See Table G for Details)															N/A
Controls Compliance (See Table H for Details)															COMPLIES

D. EXCEPTIONAL CONDITIONS

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

E. ADDITIONAL REMARKS

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

STATE OF CALIFORNIA
Outdoor Lighting CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTO-E
Project Name: MLK ELEMENTARY SCHOOL TK	Report Page: (Page 3 of 7)
	Date Prepared: 2023-12-19T13:23:38-05:00

F. OUTDOOR LIGHTING FIXTURE SCHEDULE

For new or altered lighting systems demonstrating compliance with 140.7 / 170.2(e)6 all new luminaires being installed and any existing luminaires remaining or being moved within the spaces covered by the permit application are included in the Table below. For altered lighting systems using the Existing Power method per 141.0(b)2L only new luminaires being installed and replacement luminaires being installed as part of the project scope are included (ie, existing luminaires remaining or existing luminaires being moved are not included). Outdoor lighting attached to multifamily buildings and controlled from the inside of a dwelling unit are included in Table H. and are not included here. All other multifamily outdoor lighting is included here.

Designed Wattage:

01	02		03	04	05	06	07	08	09	10	
Name or Item Tag	Complete Luminaire Description		Watts per luminaire[1, 2]	How is Wattage determined	Total Number Luminaires[2]	Luminaire Status[3]	Excluded per 140.7(a) / 170.2(e)6A	Design Watts	Cutoff Req. > 6,200 initial lumen output 130.2(b) / 160.5(c)1[4]	Field Inspector	
										Pass	Fail
X	EXTERIOR LED WALL MOUNT	☐ Linear	35	Mfr. Spec	6	New	☐	210	NA: < 6200 lumens	☐	☐
							Total Design Watts:	210			

** NOTES: Selections with a * require a note in the space below explaining how compliance is achieved.*
EX: Luminaire is lighting a statue; EXCEPTION 2 to 130.2(b)

[1] FOOTNOTES: Authority Having Jurisdiction may ask for Luminaire cut sheets to confirm wattage used for compliance per 130.0(c) / 160.5(b)
[2] For linear luminaires, wattage should be indicated as W/lf instead of Watts/luminaire. Total linear feet should be indicated in column 05 instead of number of luminaires.
[3] Select "New" for new luminaires in a new outdoor lighting project, or for added luminaires in an alteration. Select "Altered" for replacement luminaires in an alteration. Select "Existing to Remain" for existing luminaires within the project scope that are not being altered and are remaining. Select "Existing Reinstalled" for existing luminaires which are being removed and reinstalled as part of the project scope.
[4] Compliance with mandatory shielding requirements is required for luminaires with initial lumen output >= 6,200 unless exempted by 130.2(b)/ 160.5(c)

G. SHIELDING REQUIREMENTS (BUG)

This section does not apply to this project.

STATE OF CALIFORNIA
Outdoor Lighting CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTO-E
Project Name: MLK ELEMENTARY SCHOOL TK	Report Page: (Page 4 of 7)
	Date Prepared: 2023-12-19T13:23:38-05:00

H. OUTDOOR LIGHTING CONTROLS

This table demonstrates compliance with controls requirements for all new or altered luminaires installed as part of the permit application. For alteration projects, luminaires which are existing to remain (ie untouched) and luminaires which are removed and reinstalled (wiring only) do not need to be included in this table even if they are within the spaces covered by the permit application.
Outdoor lighting for nonresidential buildings, parking garages and common service areas in multifamily buildings must be documented separately from outdoor lighting attached to multifamily buildings and controlled from the inside of a dwelling unit

Mandatory Controls for Nonresidential Occupancies, Parking Garages & Common Areas in Multifamily Buildings

01	02	03	04	05	
Area Description	Shut-Off 130.2(c)1 / 160.5(c)	Auto-Schedule 130.2(c)2 / 160.5(c)	Motion Sensor 130.2(c)3 / 160.5(c)	Field Inspector	
				Pass	Fail
WALKWAY: "X"	Astronomical Timer	Provided	NA: Facade, etc. <=24 ft	☐	☐

[1] FOOTNOTE: Text has been abbreviated, please refer to Table 160.5-A to confirm compliance with the specific light source technologies listed.
[2] Authority having jurisdiction may ask for cutsheets or other documentation to confirm compliance of light source.
[3] Recessed luminaires marked for use in fire-rated installations, and recessed luminaires installed in non-insulated ceilings are excepted from ii and iii.

STATE OF CALIFORNIA
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CERTIFICATE OF COMPLIANCE	NRCC-LTO-E
Project Name: MLK ELEMENTARY SCHOOL TK	Report Page: (Page 5 of 7)
	Date Prepared: 2023-12-19T13:23:38-05:00

I. LIGHTING POWER ALLOWANCE (per 140.7 / 170.2(e))

This table includes areas using allowance calculations per 140.7 / 170.2(e). General Hardscape Allowance is per Table 140.7-A/Table 170.2-A while "Use it or lose it" Allowances are per Table 140.7-B /Table 170.2-5. Indicate which allowances are being used to expand sections for user input. Luminaires that qualify for one of the "Use it or lose it" allowances shall not qualify for another "Use it or lose it" allowance. Outdoor lighting attached to multifamily buildings and controlled from the inside of a dwelling unit are included in Table H. and are not included here. All other multifamily outdoor lighting is included here.

	01			
	"Use it or lose it" Allowance (select all that apply) (select all that apply)			
	☒ General Hardscape Allowance Table I (below)	☐ Per Application Table J	☐ Sales Frontage Table K	☐ Ornamental Table L	☐ Per Specific Area Table M

Calculated General Hardscape Lighting Power Allowance per Table 140.7-A for Nonresidential & Hotel/Motel

02	03	04	05	06	07	08	09
Area Description	Area Wattage Allowance (AWA)			Linear Wattage Allowance (LWA)			Total General AWA + LWA (Watts)
	Illuminated Area (ft²)	Allowed Density (W/ft²)	Area Allowance (Watts)	Perimeter Length (lf)	Allowed Density (W/lf)	Linear Allowance (Watts)	
WALKWAY	1685	0.021	35.39	486	0.2	97.2	132.59
Initial Wattage Allowance for Entire Site (Watts):							250
Instances of Initial Wattage Allowance (LZ 0 only)[1]							
Total General Hardscape Allowance (Watts):							382.59

J. LIGHTING ALLOWANCE: PER APPLICATION

This section does not apply to this project.

K. LIGHTING ALLOWANCE: SALES FRONTAGE

This section does not apply to this project.

L. LIGHTING ALLOWANCE: ORNAMENTAL

This section does not apply to this project.

STATE OF CALIFORNIA
Outdoor Lighting CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTO-E
Project Name: MLK ELEMENTARY SCHOOL TK	Report Page: (Page 6 of 7)
	Date Prepared: 2023-12-19T13:23:38-05:00

M. LIGHTING ALLOWANCE: PER SPECIFIC AREA

This section does not apply to this project.

N. EXISTING CONDITIONS POWER ALLOWANCE (alterations only)

This section does not apply to this project.

O. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION

Selections have been made based on information provided in this document. If any selection has been changed by permit applicant, an explanation should be included in Table E. Additional Remarks. These documents must be provided to the building inspector during construction and can be found online

Form/Title
NRCI-LTO-E - Must be submitted for all buildings

P. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

Selections have been made based on information provided in this document. If any selection has been changed by permit applicant, an explanation should be included in Table E. Additional Remarks. These documents must be provided to the building inspector during construction and must be completed through an Acceptance Test Technician Certification Provider (ATTCP). For more information visit: http://www.energy.ca.gov/title24/attcp/providers.html

Form/Title	Systems/Spaces To Be Field Verified
NRCA-LTO-02-A - Must be submitted for all outdoor lighting controls except for alterations where controls are added to <= 20 luminaires.	WALKWAY: "X"

STATE OF CALIFORNIA
Outdoor Lighting CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTO-E
Project Name: MLK ELEMENTARY SCHOOL TK	**Report Page:** (Page 7 of 7)
Project Address:	**Date Prepared:** 2023-12-19T13:23:38-05:00

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

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

Documentation Author Name: John Maloney	Documentation Author Signature: John
Company: JMPE	Signature Date: 12-19-2023
Address: 621 OLIVE STREET	CEA/ HERS Certification Identification (if applicable): E015088 / 06-25
City/State/Zip: SANTA BARBARA, CA 93101	Phone: (805)564-9216

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: JOHN MALONEY	Responsible Designer Signature: John
Company: JMPE	Date Signed: 12-19-2023
Address: 621 OLIVE STREET	License: E015088 / 06-25
City/State/Zip: SANTA BARBARA, CA 93101	Phone: (805)564-9216

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-123900 INC: A
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/05/2024

Owner:

BAKERSFIELD CITY SCHOOL DISTRICT
1300 BAKER ST.
BAKERSFIELD CA 93305

Project Name:

TRANSITIONAL KINDERGARTEN

Project Address:

MLK ELEMENTARY SCHOOL
1100 CITADEL
BAKERSFIELD, CA 93307

integrated designs
by SOMAM, Inc.

ARCHITECTURE ENGINEERING INTERIOR DESIGN

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E: design@somam.com
integrateddesigns.com

Stamp:

REGISTERED PROFESSIONAL ENGINEER JOHN MALONEY No. E015088 EXP. 06/30/2025 ELECTRICAL STATE OF CALIFORNIA

Sheet Title:

OUTDOOR TITLE 24 FORMS

Job No.: 5593

Sheet No.: E0.07

Release:DSA SUBMITTAL

JMPE
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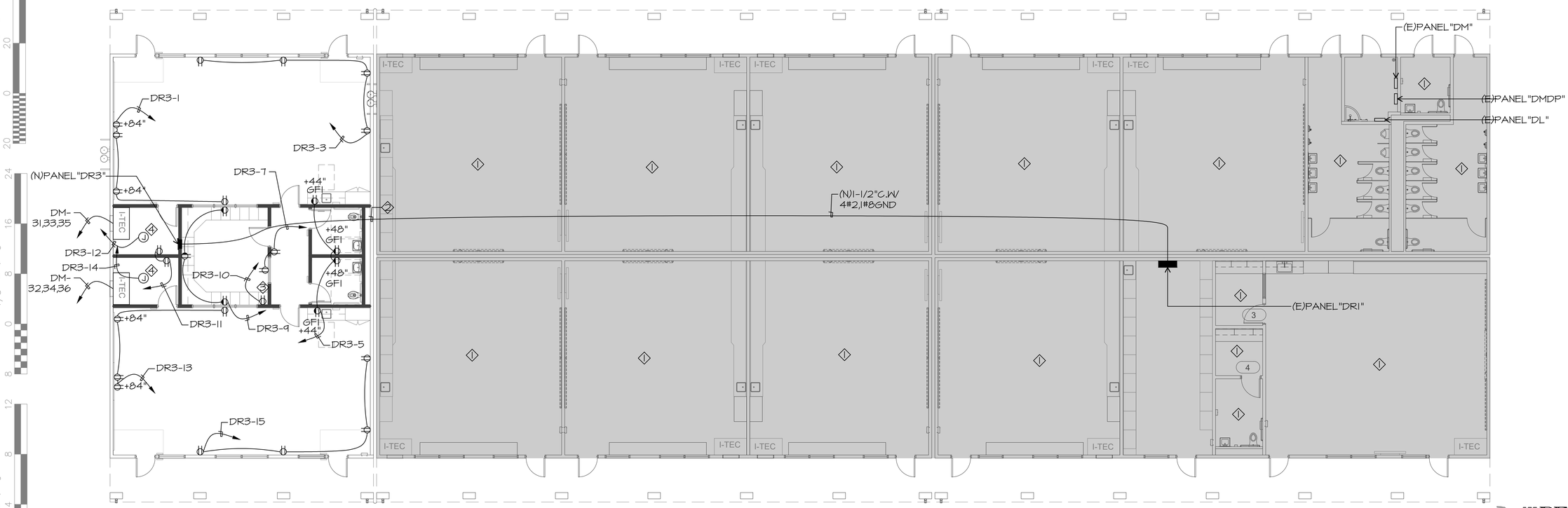
SUITE 251
BAKERSFIELD, CA 93309
(661) 831-7851
FAX (661) 831-7813
email : maloney@jmpe.net
www.jmpe.net

ELECTRICAL NOTES

1. NO WORK IN THIS SPACE
2. SEE SEISMIC JOINT DETAIL C/E0.01
3. PROVIDE OUTLET FOR HVAC WIRELESS REPEATER. COORDINATE EXACT LOCATION WITH MECHANICAL SHEET M3.11.
4. CONNECT AIR IONIZERS. COORDINATE EXACT LOCATION WITH MECHANICAL SHEET M3.11



ELECTRICAL FLOOR PLAN

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

JMPE
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APP: 03-123900 INC:
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DATE: 08/05/2024

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1300 BAKER ST.
BAKERSFIELD CA 93305

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Stamp:

REGISTERED PROFESSIONAL ENGINEER
JAMES T. MALONEY
No. E013083
EXP. 06/30/2025
ELECTRICAL
STATE OF CALIFORNIA

Sheet Title:

ELECTRICAL FLOOR PLAN

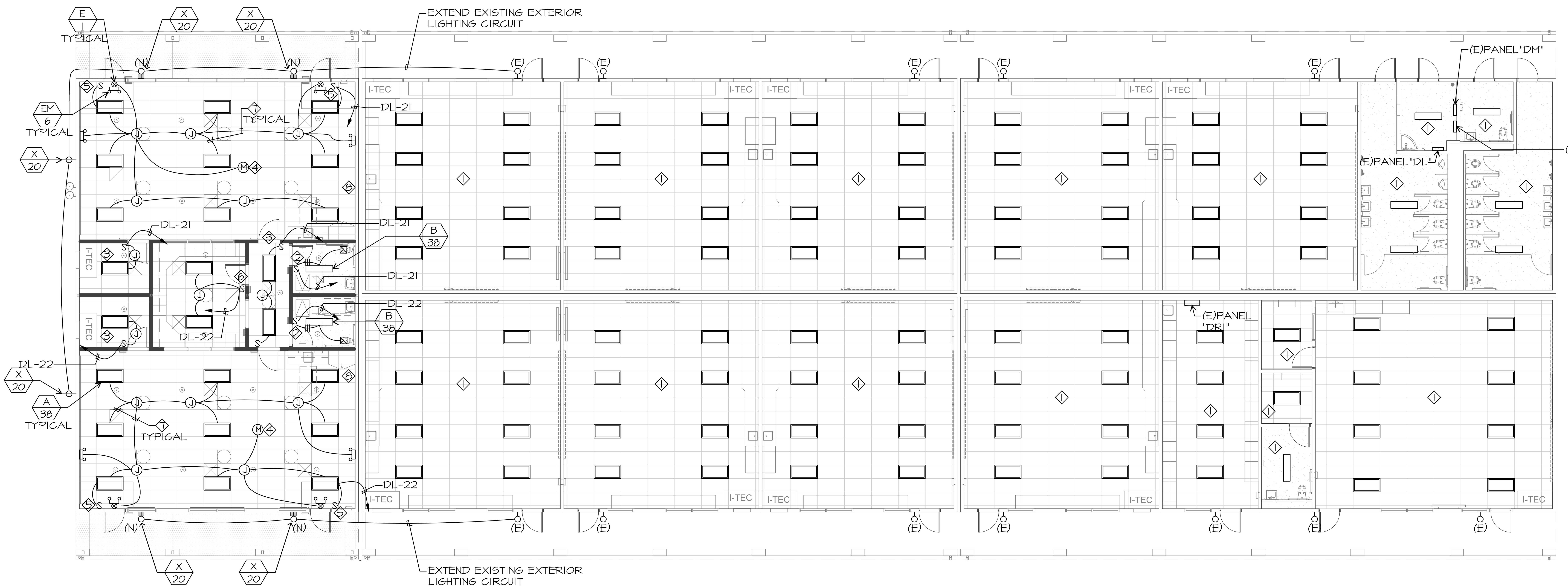
Job No.: 5593

Sheet No.: E1.00

Release: DSA SUBMITTAL

ELECTRICAL NOTES

1. NO WORK IN THIS SPACE
2. SENSOR SWITCH #WSX-PDT-2P-FAN-WH
3. SENSOR SWITCH #WSX-PDT-WH
4. SENSOR SWITCH #CMR9-PDT
5. 0-10V DIMMER
6. LUTRON #MSZ101WH
7. MCLUMINARY CABLE, 2#12, 2#14, 1#12GND.
8. REMOVE EXISTING SCONCE FIXTURES ON EXTERIOR WALL. RECONNECT CIRCUIT TO REMAINING FIXTURES



LIGHTING PLAN

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

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-123900 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/05/2024

Owner:

BAKERSFIELD CITY SCHOOL DISTRICT
1300 BAKER ST.
BAKERSFIELD CA 93305

Project Name:

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www.jmpe.net

Sheet Title:

LIGHTING PLAN

Job No.: 5593

Sheet No.: E1.01

Release: DSA SUBMITTAL

1" = 40'-0" 120 80 40 0

1" = 30'-0" 90 60 30 0

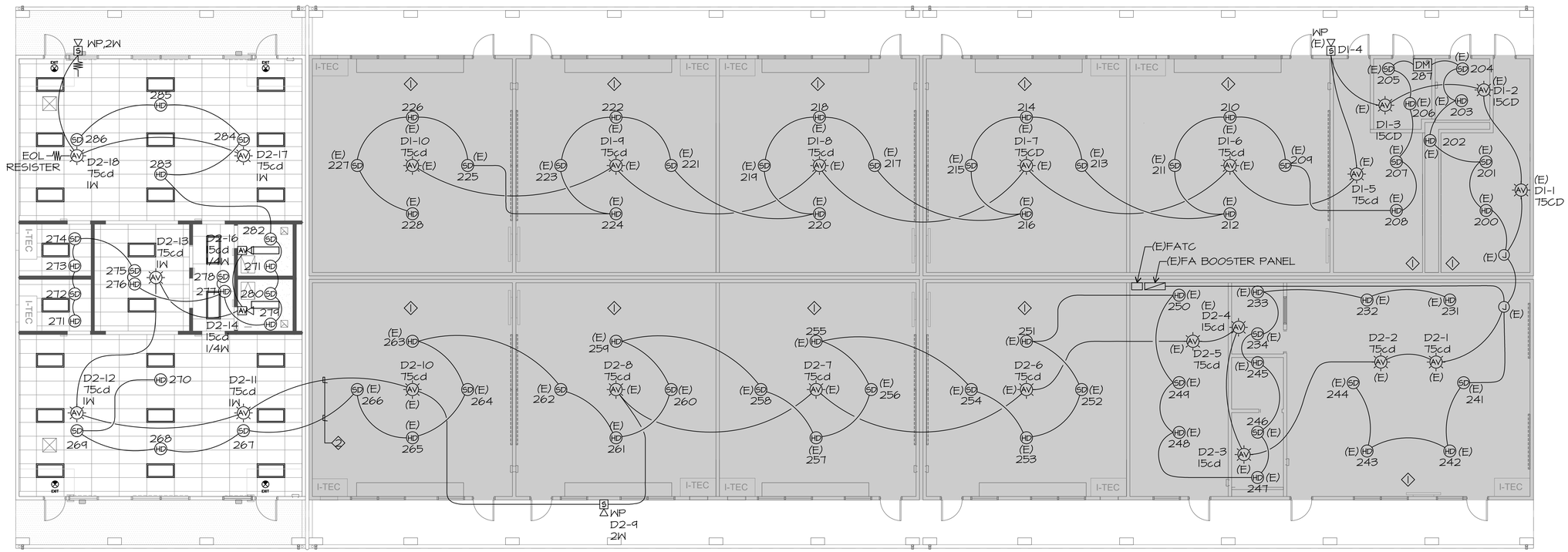
1" = 20'-0" 60 40 20 0

1/8" = 1'-0" 24 16 8 0

1/4" = 1'-0" 12 8 4 0

FIRE ALARM NOTES

1. EXISTING DEVICES NO WORK IN THIS AREA
2. EXTEND EXISTING FIRE ALARM CIRCUIT



FIRE ALARM PLAN

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

JMPE
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IDENTIFICATION STAMP
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APP: 03-123900 INC:
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SS ☑ FLS ☑ ACS ☑
DATE: 08/05/2024

Owner:

BAKERSFIELD CITY SCHOOL DISTRICT
1300 BAKER ST.
BAKERSFIELD CA 93305

Project Name:

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Project Address:

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Stamp:

REGISTERED PROFESSIONAL ENGINEER
JOHN MALONEY
No. E013083
EXP. 06/30/2025
ELECTRICAL
STATE OF CALIFORNIA

Sheet Title:

FIRE ALARM PLAN

Job No.: 5593

Sheet No.: E1.02

Release:DSA SUBMITTAL

1" = 40'-0" 120 80 40 0

1" = 30'-0" 90 60 30 0

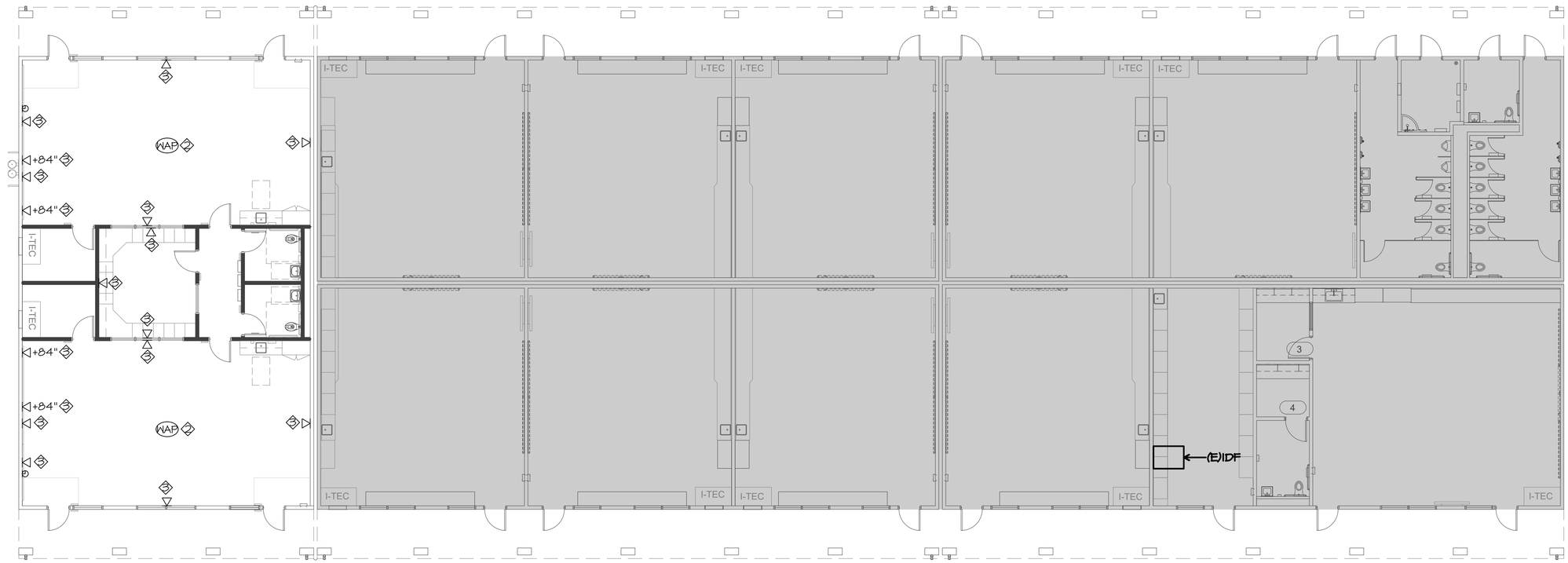
1" = 20'-0" 60 40 20 0

1/8" = 1'-0" 24 16 8 0

1/4" = 1'-0" 12 8 4 0

ELECTRICAL NOTES

1. NO WORK IN THIS SPACE
2. (2)CAT 6A BACK TO IDF. WAP FURNISHED BY BCSD.
3. DATA OUTLET W/ (2)RJ45 CONNECTORS AND (2)CAT6 CABLES BACK TO IDF



DATA AND COMMUNICATIONS PLAN

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

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IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-123900 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/05/2024

Owner:

BAKERSFIELD CITY SCHOOL DISTRICT
1300 BAKER ST.
BAKERSFIELD CA 93305

Project Name:

TRANSITIONAL KINDERGARTEN

Project Address:

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Stamp:

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No. E013083
EXP. 06/30/2025
ELECTRICAL
STATE OF CALIFORNIA

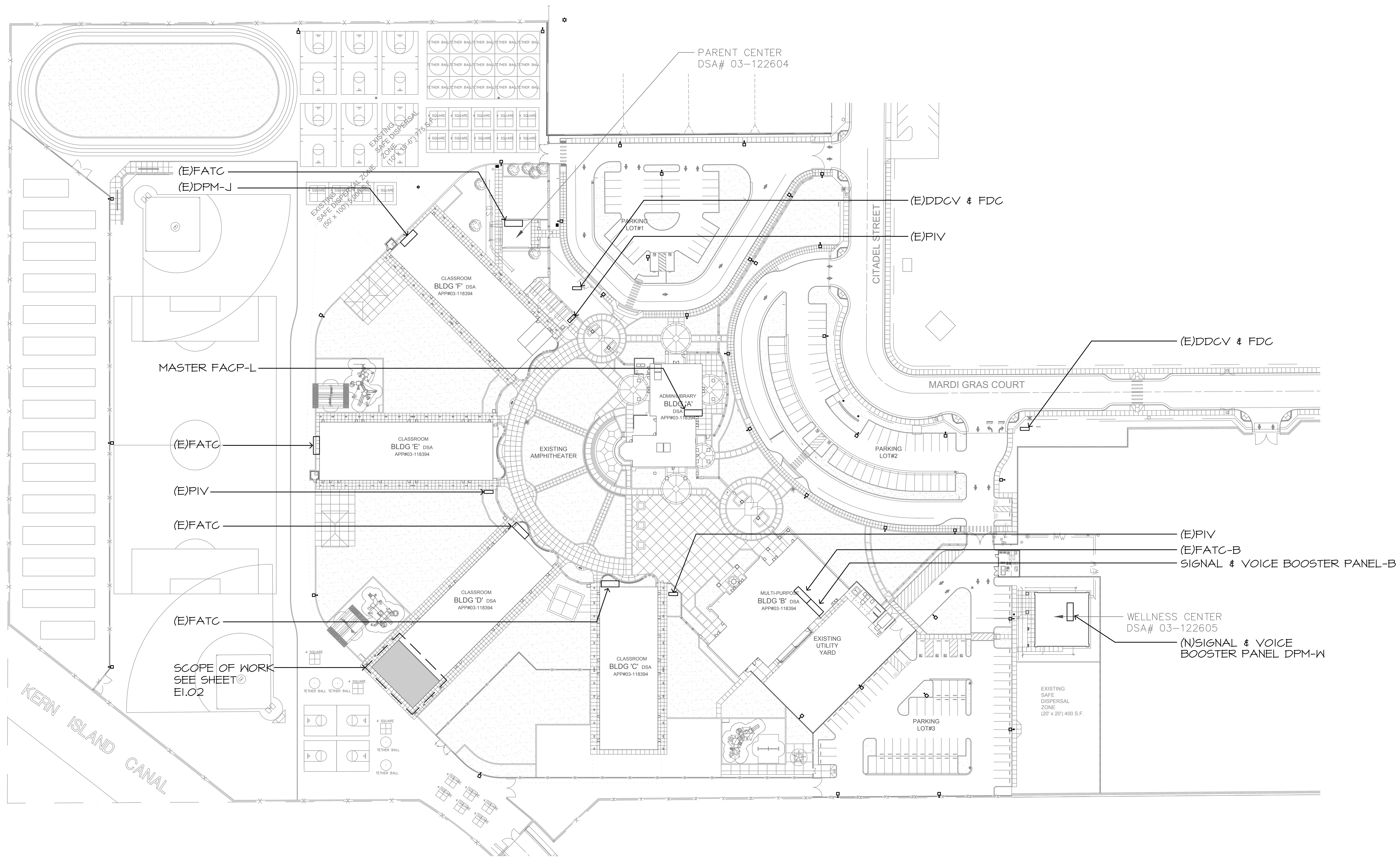
Sheet Title:

DATA AND COMM. PLAN

Job No.: 5593

Sheet No.: E1.03

Release:DSA SUBMITTAL



FIRE ALARM PLAN

SCALE: 1/64" = 1'-0"

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-123900 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/05/2024

Owner:

BAKERSFIELD CITY SCHOOL DISTRICT
1300 BAKER ST.
BAKERSFIELD CA 93305

Project Name:

TRANSITIONAL KINDERGARTEN

Project Address:

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E01308
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STATE OF CALIFORNIA

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email: maloney@jmpe.net
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Sheet Title:

FIRE ALARM SITE PLAN

Job No.: 5593

Sheet No.: E2.00

Release:DSA SUBMITTAL

LIGHT HAZARD AREAS

1. ALL CLASSROOMS, OFFICE AREAS, CORRIDORS, BATHROOMS, ATTICS AND SIMILAR AREAS ARE LIGHT HAZARD. DENSITY 0.10 GPM/FT².
2. HOSE ALLOWANCE FOR LIGHT HAZARD SHALL BE 100 GPM.

VICINITY MAP
SCALE: NONE

MAXIMUM HANGER SPACING PER NFPA 13 TABLE 17.4.2.1(a)									
	1"	1¼"	1½"	2"	2½"	3"	4"	6"	8"
STEEL PIPE EXCEPT THREADED LIGHTWALL	12'-0	12'-0	15'-0	15'-0	15'-0	15'-0	15'-0	15'-0	15'-0

NFPA 13 §17.4.3.4.1
For steel pipe, the unsupported horizontal length between the end sprinkler and the last hanger on the line shall not be greater than 36 in. for 1 in. pipe, 48 in. for 1¼ in. pipe, and 60 in. for 1½ in. or larger pipe.
NFPA 13 §17.4.3.5.1
The cumulative horizontal length of an unsupported armover to a sprinkler, sprinkler drop, or sprig shall not exceed 24 in. (600 mm) for steel pipe

SPRINKLER SPECIFICATIONS

SYSTEM DESIGN:

1. SYSTEM SHALL BE DESIGNED TO CONFORM WITH NFPA 13 (2022), CBC (2022), AND LOCAL MUNICIPAL CODES.
2. SYSTEM TO BE AUTOMATIC WET PIPE SPRINKLER SYSTEM.
3. SPRINKLER DISCHARGE DENSITY SHALL BE A MINIMUM OF 0.10 GPM/SQFT FOR LIGHT HAZARD AREAS
4. SPRINKLER TEMPERATURE RATINGS SHALL BE 155° FOR ALL CONDITIONED AREAS AND 200° FOR NON-CONDITIONED AREAS
5. SPACING SHALL NOT EXCEED 196 SQFT IN LIGHT HAZARD AREAS, 130 SQFT IN CONCEALED OBSTRUCTED AREAS.
6. BUILDING SHALL BE SUPPLIED AS SHOWN ON SITE PLAN.
7. FLOW DETECTOR AND TAMPER RESISTANT VALVES WILL BE SUPPLIED AND INSTALLED BY FIRE SPRINKLER CONTRACTOR AND WIRED BY ALARM CONTRACTOR.
8. FIRE SPRINKLER PIPING SHALL BE AS FOLLOWS (UNLESS NOTED OTHERWISE ON PLANS):
   A. PIPING 1¼" AND LARGER SHALL BE EDDYFLOW BLACK STEEL WITH ROLLED FITTINGS.
   B. PIPING LESS THAN 1¼" SHALL BE EDDYTHREAD BLACK STEEL WITH THREADED FITTINGS.
9. HANGERS SHALL BE INSTALLED IN ACCORDANCE WITH NFPA 13 (2022).
10. SPRINKLERS TO BE INSTALLED PER NFPA (2022) §10.2.6.1.2 SPRINKLER DEFLECTORS TO BE WITHIN 1"-6" BELOW STRUCTURAL MEMBERS AND A MAXIMUM DISTANCE OF 22" BELOW THE ROOF DECK/CEILING (BOTTOM OF INSULATION PER NFPA 13
11. MICROBIAL INDUCED CORROSION WILL NOT BE A FACTOR FOR THIS SYSTEM.
12. ACCEPTANCE TEST IN ACCORDANCE WITH NFPA 13 (2022).

GENERAL NOTES

SPRINKLER SYSTEM DESIGNED IN ACCORDANCE WITH NFPA 13 (2022). ALL WORK TO BE DONE IN ACCORDANCE WITH THESE PLANS, STATE, LOCAL, AND NATIONAL CODES.

THESE DRAWINGS ARE SCHEMATIC IN NATURE, AND ARE NOT INTENDED TO SHOW EVERY MINOR DETAIL. THE CONTRACTOR SHALL FURNISH AND INSTALL ALL ITEMS REQUIRED FOR A COMPLETE ACCEPTABLE WORKING INSTALLATION.

CONTRACTOR TO BID SYSTEM AS DESIGNED (SCHEMATICALLY) BY THE DESIGNER. ANY ALTERNATE DESIGNS BY CONTRACTOR ARE TO BE SUBMITTED AND APPROVED BY ENGINEER PRIOR TO BIDDING. ANY DEVIATIONS FROM THE ORIGINAL DESIGN INTENTION SHALL BE CLOUDED AND NOTED ON SHOP DRAWINGS.

GENERAL CONTRACTOR IS SOLELY RESPONSIBLE FOR INSURING ALL SUB-CONTRACTOR'S COORDINATE SHOP DRAWINGS PRIOR TO ORDERING OR INSTALLATION OF ANY EQUIPMENT, DEVICE, MATERIAL, AND ETC. SUBMISSION OF SHOP DRAWINGS TO THE ENGINEER OF RECORD CONSTITUTES THAT THE DRAWINGS SUBMITTED HAVE BEEN COORDINATED AMONGST THE TRADES. FAILURE TO COORDINATE SHOP DRAWINGS DOES NOT CONSTITUTE A CHANGE ORDER TO THE OWNER.

ANY COORDINATION ITEMS THAT ARISE FROM COORDINATION OF TRADES SHALL EITHER BE HANDLED IN THE FIELD AND SHOWN ON THE AS-BUILTS, OR SHALL BE PROVIDED TO THE ARCHITECT BY RFI DETAILING COORDINATION ISSUE AND PROPOSED SOLUTION. COORDINATION ISSUES THAT ARISE AFTER DRAWINGS ARE APPROVED SHALL BE SHOWN ON THE AS-BUILTS.

CONTRACTOR TO PROVIDE SIX (6) SETS OF THE FOLLOWING:

A. COORDINATED SHOP DRAWINGS INCLUDING ALL CUT LENGTHS.
B. BOUND SUBMITTALS INCLUDING COVER PAGE, PIPING, HARDWARE, AND MATERIALS (INCLUDING FIRE STOPPING). COVER PAGE TO INCLUDE PROJECT NAME, SPRINKLER CONTRACTOR, GENERAL CONTRACTOR, ARCHITECT, AND DATE SUBMITTED FOR REVIEW.

ALL ITEMS REQUIRED BY NFPA 13 (2022) CHAPTER 23 (FOR WORKING DRAWINGS) SHALL BE PROVIDED ON THE SHOP DRAWINGS, SUBMITTALS ARE IN ADDITION AND NOT IN LIEU OF THIS REQUIREMENT.

ACTUAL SPACING FOR SPRINKLER PIPING AND HEADS MAY VARY WITH FIELD COORDINATION ISSUES, BUT SHALL MEET MINIMUM REQUIREMENTS OF NFPA 13 (2022).

ALL HANGERS, THREADED ROD, AND HARDWARE SHALL BE HOT DIPPED GALVANIZED.

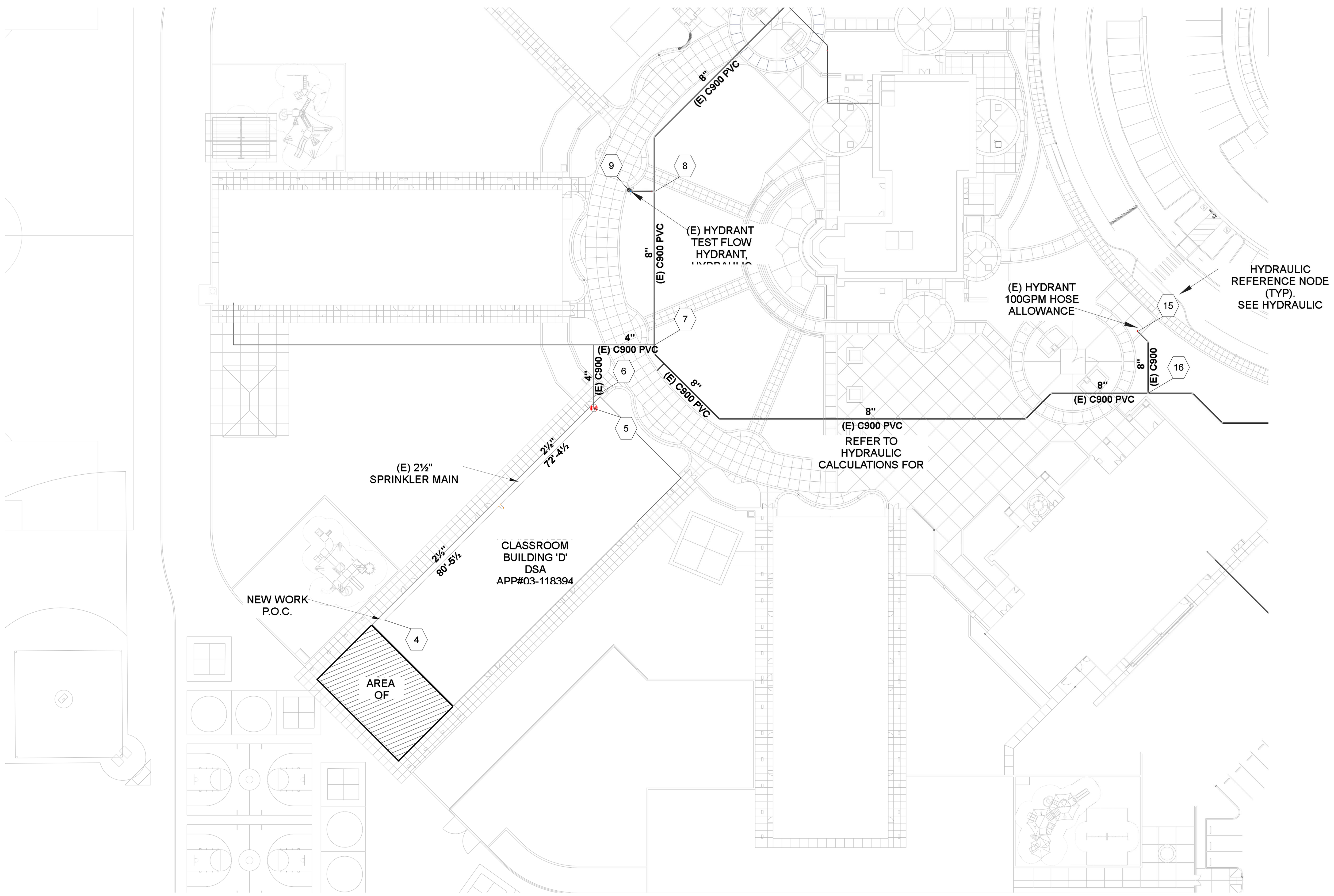
ALL UNDERGROUND PVC, C-900, OR OTHER PLASTIC PIPING IS UTILIZED SHALL BE EQUIPPED WITH A SUITABLE MAGNETIC LOCATOR TAPE INSTALLED APPROPRIATELY TO THE TOP OF THE PIPING.

HEADS ARE TO BE LOCATED CENTER TILE (OR AS SHOWN) ACCORDING TO INDUSTRY STANDARDS AND PRACTICES.

LOCATION OF SEISMIC HANGERS ARE SCHEMATIC IN NATURE AND INTENDED TO SHOW APPROXIMATE LOCATIONS OF RESTRAINTS. SUB-CONTRACTOR SHALL BE RESPONSIBLE FOR SHOWING THE EXACT LOCATION OF SEISMIC RESTRAINTS ON SHOP DRAWINGS AND AS-BUILTS.

SHOP DRAWINGS SHALL DESIGNATE THE TYPE AND LOCATION OF EACH RESTRAINT AND SHALL BE ACCOMPANIED BY A DETAIL AND CALCULATIONS IN ACCORDANCE WITH NFPA

ANY SUBSTITUTION OF "FLEXIBLE" TYPE PIPING IN LIEU OF "RIGID" PIPE OR ANY CHANGES TO SIZE, MANUFACTURER OR LENGTHS OF "FLEXIBLE" TYPE PIPING WILL REQUIRED RESUBMITTAL OF PIPING PLANS, PRODUCT DATA SHEETS AND HYDRAULIC CALCULATIONS TO DSA FLS FOR REVIEW AND APPROVAL.



HYDRAULIC REFERENCE SITE PLAN
SCALE: NONE

FIRE WATER UG PIPING IS SHOWN FOR HYDRAULIC REFERENCE ONLY. REFER TO CIVIL SHEETS FOR FIRE WATER PLAN.

Hydrant Flow Test Report

Test Date 10/26/2022 **Test Time** 4:00pm

Location
Martin Luther King Jr. Elementary School
1100 Citadel St.
Bakersfield, CA 93307

Tested by
RLH Fire Protection
4300 Stine Rd. Ste 800
Bakersfield, CA 93308
661-322-9344
LIC# 777717
Josh Castillo & Randy Seaton

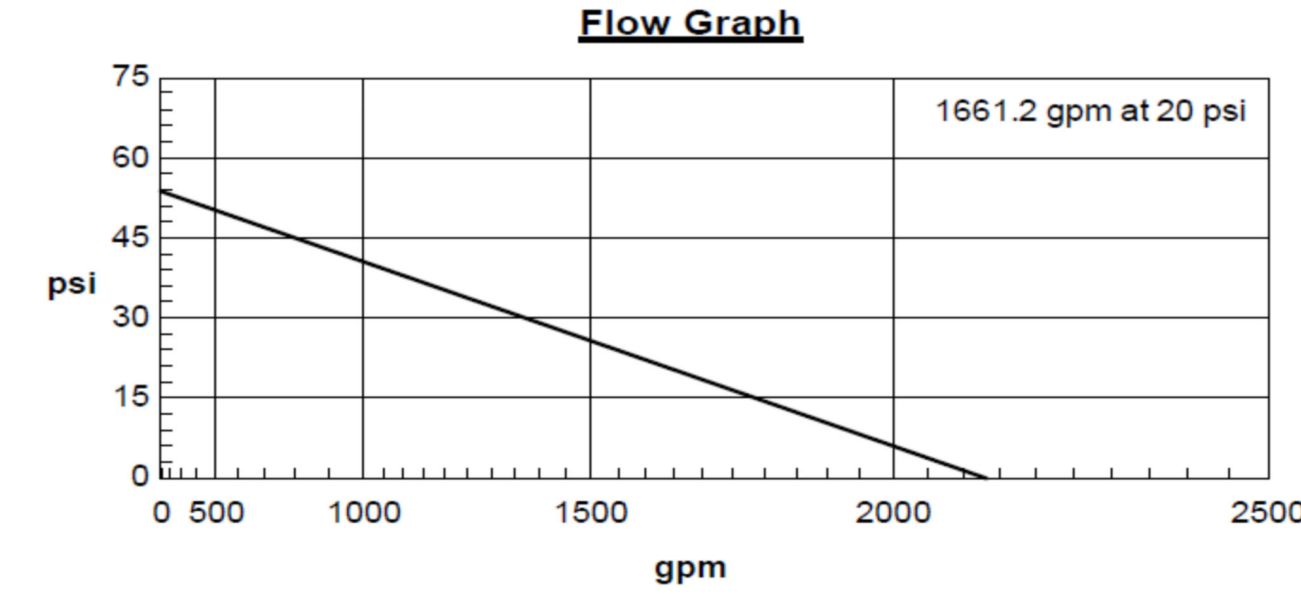
Notes
4inch Big Hose Monster used for flow test
Flow: Center of Campus
Read: East of building A & B

Read Hydrant
54 psi **static pressure**
34 psi **residual pressure**
1.5 ft **hydrant elevation**

Flow Hydrant(s)

Outlet	Elev	Size	C	Pitot Pressure	Flow
#1	1.5	4	.85		1247 gpm

Flow Graph



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STATE OF CALIFORNIA C-16 LICENSE No. 986234
3644 SOUTH BAGLEY AVENUE
FRESNO, CALIFORNIA 93725
559 485-4400 | FAX 559 485-4402
WWW.MSFIREPRO.COM

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DATE: 08/05/2024

Owner:
BAKERSFIELD CITY SCHOOL DISTRICT
1300 BAKER STREET
BAKERSFIELD, CA 93305

Project Name:
TRANSITIONAL KINDERGARTEN

Project Address:
DR. MARTIN LUTHER KING JR. ELEMENTARY SCHOOL
1100 CITADEL STREET
BAKERSFIELD, CA 93307

integrated designs
by SOMAM, Inc.
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REGISTERED PROFESSIONAL ENGINEER
JOELON D. CHINN
No. 35784
Exp. 03-31-26
MECHANICAL
STATE OF CALIFORNIA

Sheet Title:
FIRE SPRINKLER SITE PLAN & NOTES

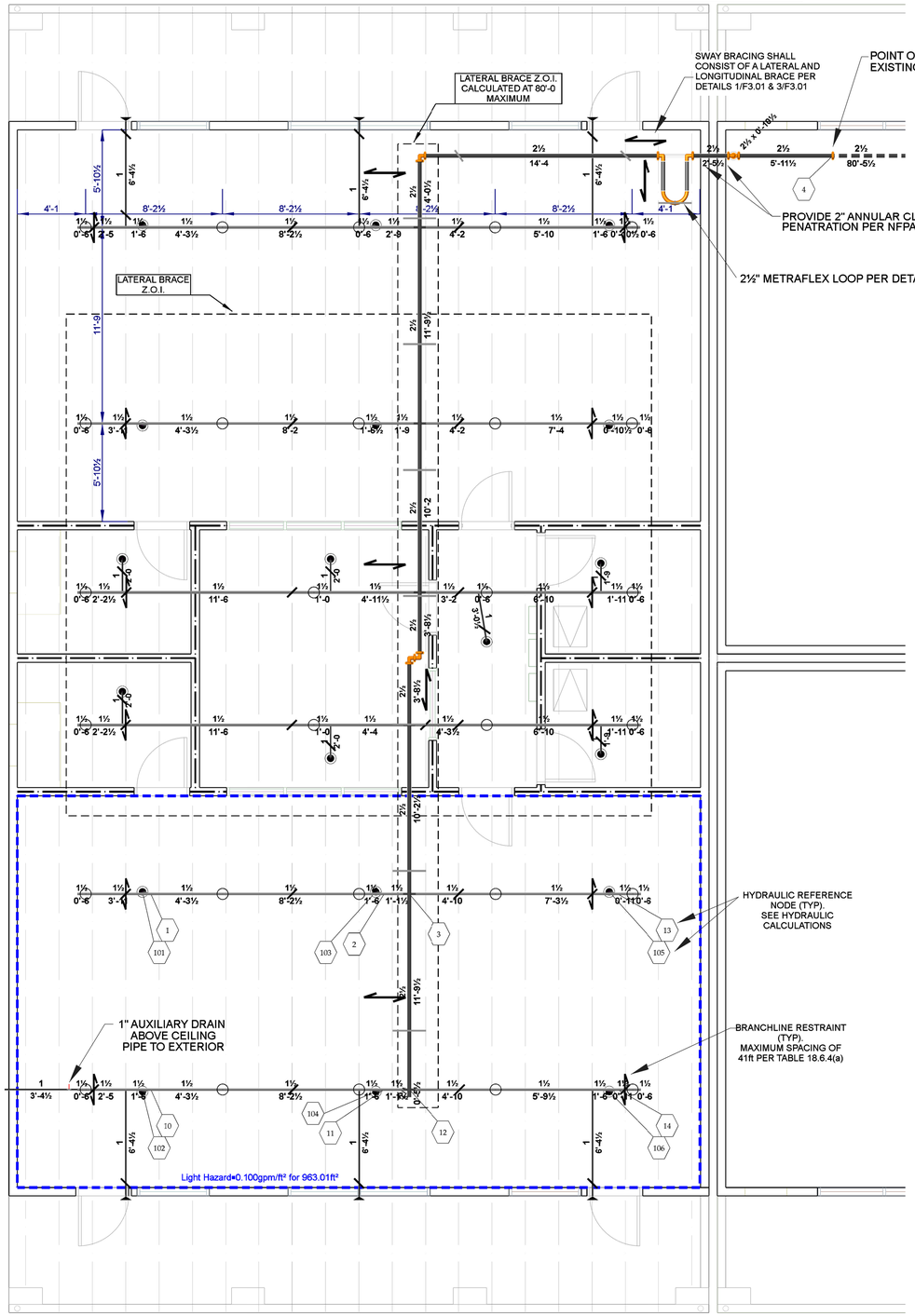
Job No.: 5593

Sheet No.: F1.01

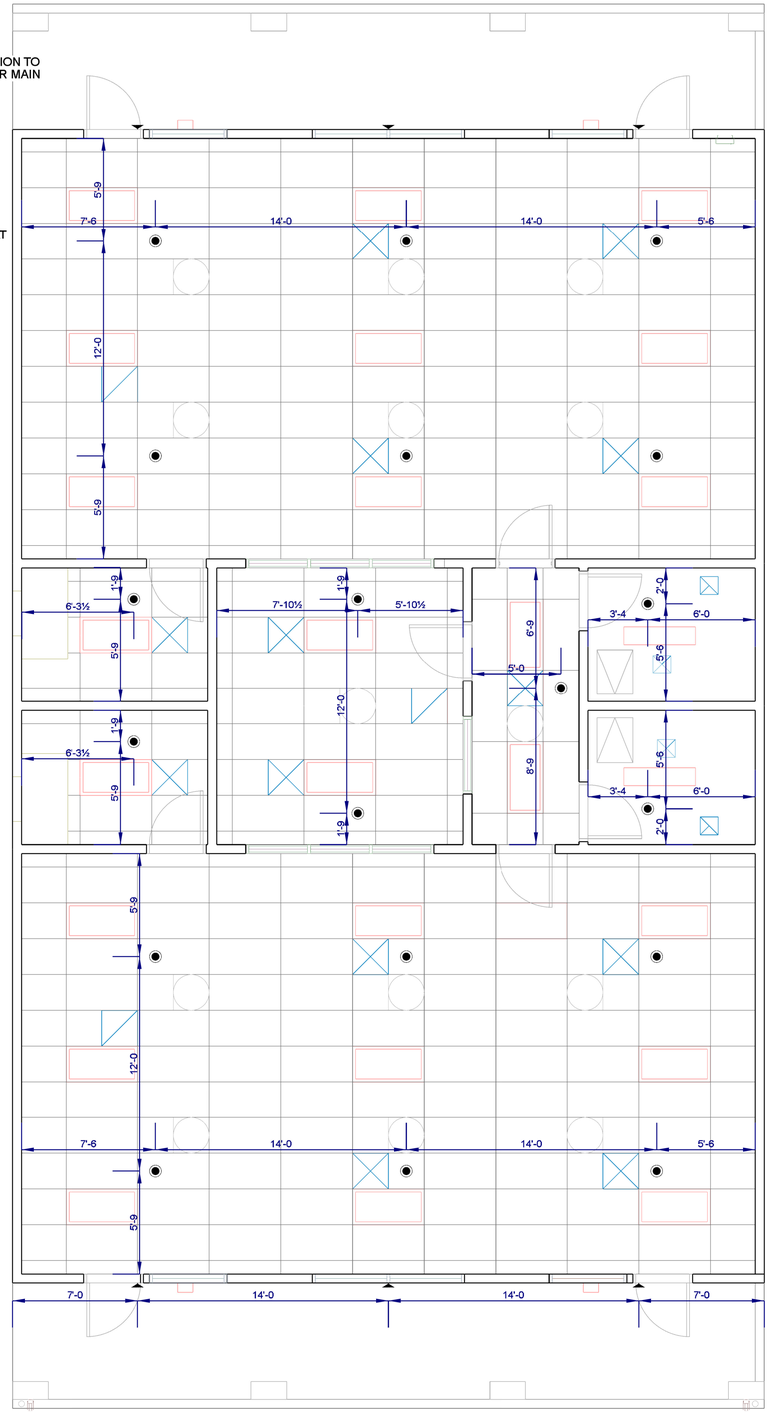
Release: DSA SUBMITTAL Date:

Sprinkler Legend									
Symbol	Manufacturer	SIN	Quantity	K-Factor	Type	Size	Response	Finish	Temperature
○	Tyco	TY3131	28	5.6	Upright	½	Quick	Brass	200°F
◉	Tyco	TY3331	19	5.6	Pendent	½	Quick	Chrome	155°F
◗	Tyco	TY3331	6	5.6	Sidewall	½	Quick	Chrome	200°F
			Total = 53						
Exterior sprinkler heads are to be corrosion resistant per manufacturer.									

Hydraulic Information	
Remote Area 1	
OCCUPANCY CLASSIFICATION	Light Hazard
DENSITY (gpm/ft²)	0.10 for 1500.00ft² (Actual 963.01ft²)
QUICK RESPONSE REDUCTION	9'-0 Ceiling (40.0%) 900.00ft²
TOTAL HOSE STREAMS	100.00
TOTAL HEADS FLOWING	6
K-FACTOR	5.6
TOTAL WATER REQUIRED	235.93
TOTAL PRESSURE REQUIRED	41.059
SAFETY MARGIN (psi)	+12.022 (22.6%)
AFS MAX HEAD SPACING (ft²)	15'x15' - 225ft²



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



REFLECTED CEILING PLAN
SCALE: 1/4" = 1'-0

SYMBOL LEGEND	
SYMBOL	DESCRIPTION
	LATERAL SEISMIC BRACE (PERPENDICULAR)
	LONGITUDINAL SEISMIC BRACE (PARALLEL)
	4-WAY SEISMIC BRACE (PARALLEL/PERPENDICULAR)
	PIPE HANGERS - SEE DETAILS, SHEET F3.01
	200° PENDENT SPRINKLER
	155° SIDEWALL SPRINKLER
	200° UPRIGHT SPRINKLER
	HYDRAULIC NODE
	FIRE PIPING

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REGISTERED PROFESSIONAL ENGINEER
CHRISTOPHER D. COLLINS
No. 35784
Exp. 03-31-26
MECHANICAL
STATE OF CALIFORNIA

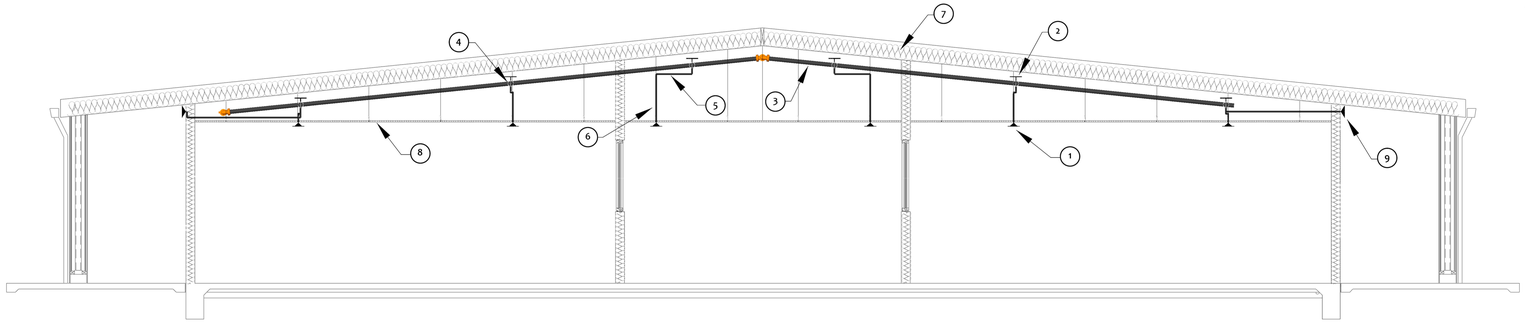
Sheet Title:

FIRE SPRINKLER PIPING PLAN & RCP

Job No.: **5593**

Sheet No.: **F2.01**

Release: DSA SUBMITTAL Date:



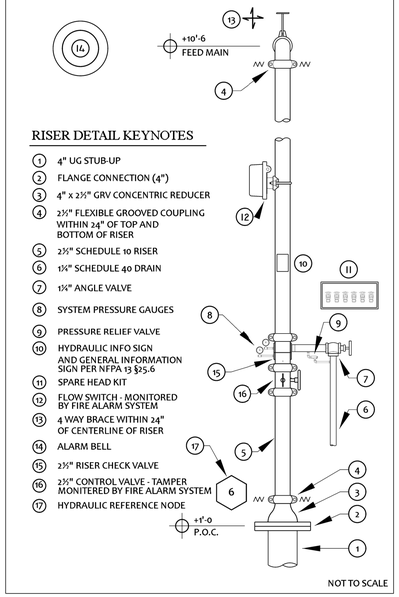
SECTION 'A'

SCALE: 1/4" = 1'

SECTION NOTES:

1. PENDENT SPRINKLER
2. UPRIGHT SPRINKLER
3. EDDYFLOW MAIN PIPING
4. EDDYFLOW BRANCHLINE PIPING
5. EDDYTHREAD 40 ARM-OVER PIPING
6. EDDYTHREAD 40 DROP PIPING
7. INSULATION
8. SUSPENDED ACOUSTIC CEILING TILE
9. SIDEWALL SPRINKLER

EXISTING RISER DETAIL FOR REFERENCE ONLY



RISER DETAIL KEYNOTES

1. 4" UG STUB-UP
2. FLANGE CONNECTION (4")
3. 4" x 2½" GRV CONCENTRIC REDUCER
4. 2½" FLEXIBLE GROOVED COUPLING WITHIN 24" OF TOP AND BOTTOM OF RISER
5. 2½" SCHEDULE 10 RISER
6. 1¼" SCHEDULE 40 DRAIN
7. 1¼" ANGLE VALVE
8. SYSTEM PRESSURE GAUGES
9. PRESSURE RELIEF VALVE
10. HYDRAULIC INFO SIGN AND GENERAL INFORMATION SIGN PER NFPA 13 §25.6
11. SPARE HEAD KIT
12. FLOW SWITCH - MONITORED BY FIRE ALARM SYSTEM
13. 4 WAY BRACE WITHIN 24" OF CENTERLINE OF RISER
14. ALARM BELL
15. 2½" RISER CHECK VALVE
16. 2½" CONTROL VALVE - TAMPER MONITERED BY FIRE ALARM SYSTEM
17. HYDRAULIC REFERENCE NODE

NOT TO SCALE

NFPA 13 2022 Seismic Bracing Calculations

Project Name:	MLK TK Classrooms	Brace Design:	Lateral
Address:	1100 Citadel St.	Contractor Name:	MS FIRE
City, State, Zip:	Bakersfield, CA 93307	Address:	
Prepared By:	MS FIRE, Kevin	City, State, Zip:	,
Date: 27-Dec-2023		Fax:	Phone:

Brace Information	Seismic Brace Attachments
Maximum Length of Brace: 10'-6"	Structure Attachment Fitting: Universal Structural Bracket, EG, 9/16" Hole
Size of Brace (in): 1" - Sch40	Make: CADDY Model: CSBU1
Type of Brace: Sch 40 Pipe	FM Load Rating (lbs): 2210
Brace Angle Range: 45-59 Degrees	Structure Attachment Adapter: n/a
Maximum Brace Spacing (ft): 30.00	Make: CADDY Model: n/a
Least Radius of Gyration* (in): 0.421	FM Load Rating (lbs): n/a
kl/r Value: * 300	Sway Brace Fitting: Universal Sway Brace, EG, 2 1/2" Pipe
Maximum Horizontal Load (lbs): 582	Make: CADDY Model: CSB0250
	FM Load Rating (lbs): 2030
Fastener Information	**SEE DETAIL 1/F3.01**
Fastener Orientation: E	
Structure: Steel (I-Beam, C Purlin or Z Purlin)	
Fastener Qty: 1	
Fastener Type: 1/2 inch dia. bolt	
Fastener Size: n/a	
Fastener Embedment: n/a	
Fastener Max. Load (lbs): 2050	
Brace Orientation: Lateral	
Brace I.D. (on plan): Lateral	

Sprinkler System Zone of Influence (ZOI) Load Calculation (*Fpw = Cp x Wp*)

Pipe Size	Pipe Description	Wt/ft (lbs)	15% for Fittings	Total Wt/ft	Length (ft)	Total Wt
2 1/2"	EDDY Flow	5.30	0.80	6.10	30.00	182.90
1 1/2"	EDDY Flow	2.86	0.43	3.29	102.00	335.48
					Weight of Misc. ZOI Valves and Fittings	0.00
					Total Zone of Influence (ZOI) Weight (Wp)	518.38

Ss = 0.956 per Structural Project Data - Sheet S0.01

CP = 0.56 per Table 18.5.9.3 NFPA 13 (2022)

Sway Brace Attached to 2 1/2" Eddy_Flow Pipe

Horizontal Earthquake Load

Fpw = Cp x Wp
Fpw = 0.56 x 518.38
***Fpw* = 290.00 lbs**

*Excludes tension-only bracing systems

NFPA 13 2022 Seismic Bracing Calculations

Project Name:	MLK TK Classrooms	Brace Design:	Longitudinal
Address:	1100 Citadel St.	Contractor Name:	MS FIRE
City, State, Zip:	Bakersfield, CA 93307	Address:	
Prepared By:	MS FIRE, Kevin	City, State, Zip:	,
Date: 27-Dec-2023		Fax:	Phone:

Brace Information	Seismic Brace Attachments
Maximum Length of Brace: 10'-6"	Structure Attachment Fitting: Universal Structural Bracket, EG, 9/16" Hole
Size of Brace (in): 1" - Sch40	Make: CADDY Model: CSBU1
Type of Brace: Sch 40 Pipe	FM Load Rating (lbs): 2210
Brace Angle Range: 45-59 Degrees	Structure Attachment Adapter: n/a
Maximum Brace Spacing (ft): 80.00	Make: CADDY Model: n/a
Least Radius of Gyration* (in): 0.421	FM Load Rating (lbs): n/a
kl/r Value: * 300	Sway Brace Fitting: Universal Sway Brace, EG, 2 1/2" Pipe
Maximum Horizontal Load (lbs): 582	Make: CADDY Model: CSB0250
	FM Load Rating (lbs): 1820
Fastener Information	**SEE DETAIL 3/F3.01**
Fastener Orientation: E	
Structure: Steel (I-Beam, C Purlin or Z Purlin)	
Fastener Qty: 1	
Fastener Type: 1/2 inch dia. bolt	
Fastener Size: n/a	
Fastener Embedment: n/a	
Fastener Max. Load (lbs): 2050	
Brace Orientation: Longitudinal	
Brace I.D. (on plan): New Design 2	

Sprinkler System Zone of Influence (ZOI) Load Calculation (*Fpw = Cp x Wp*)

Pipe Size	Pipe Description	Wt/ft (lbs)	15% for Fittings	Total Wt/ft	Length (ft)	Total Wt
2 1/2"	EDDY Flow	5.30	0.80	6.10	80.00	487.60
					Weight of Misc. ZOI Valves and Fittings	0.00
					Total Zone of Influence (ZOI) Weight (Wp)	487.60

Ss = 0.956 per Structural Project Data - Sheet S0.01

CP = 0.56 per Table 18.5.9.3 NFPA 13 (2022)

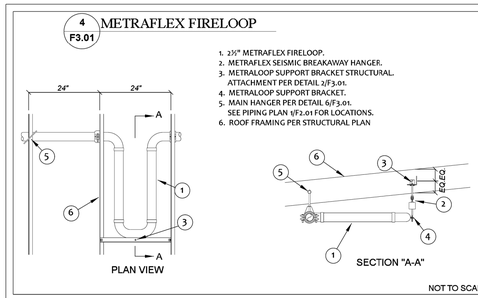
Sway Brace Attached to 2 1/2" Eddy_Flow Pipe

Horizontal Earthquake Load

Fpw = Cp x Wp
Fpw = 0.56 x 487.60
***Fpw* = 273.00 lbs**

*Excludes tension-only bracing systems

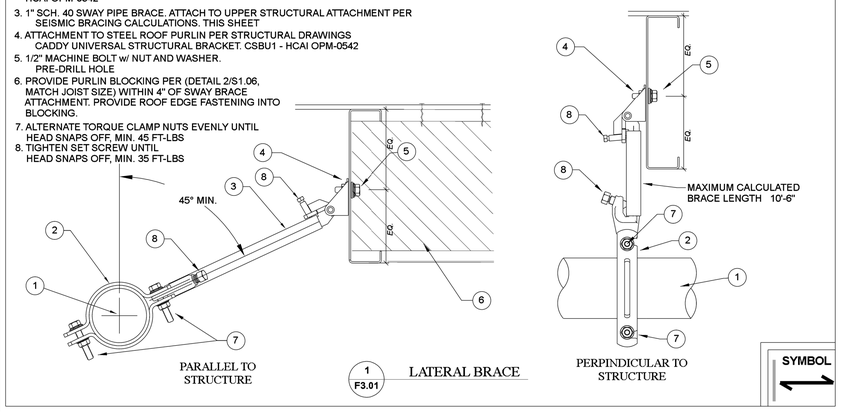
4 F3.01 METRAFLEX FIRELOOP



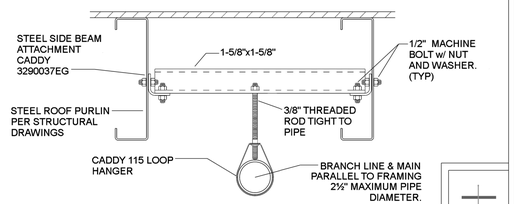
1. 2½" METRAFLEX FIRELOOP.
2. METRAFLEX SEISMIC BREAKAWAY HANGER.
3. METRALOOP SUPPORT BRACKET STRUCTURAL ATTACHMENT PER DETAIL 2/F3.01.
4. METRALOOP SUPPORT BRACKET.
5. MAIN HANGER PER DETAIL 6/F3.01. SEE PIPING PLAN 1/F2.01 FOR LOCATIONS.
6. ROOF FRAMING PER STRUCTURAL PLAN

NOT TO SCALE

1. SPRINKLER MAIN PER PLAN.
2. CADDY UNIVERSAL SWAY BRACE. CSB0250 HCAI OPM-0542
3. 1" SCH. 40 SWAY PIPE BRACE. ATTACH TO UPPER STRUCTURAL ATTACHMENT PER SEISMIC BRACING CALCULATIONS. THIS SHEET
4. ATTACHMENT TO STEEL ROOF PURLIN PER STRUCTURAL DRAWINGS CADDY UNIVERSAL STRUCTURAL BRACKET. CSBU1 - HCAI OPM-0542
5. 1/2" MACHINE BOLT w/ NUT AND WASHER. PRE-DRILL HOLE
6. PROVIDE PURLIN BLOCKING PER (DETAIL 2/S1.06, MATCH JOIST SIZE) WITHIN 4" OF SWAY BRACE ATTACHMENT. PROVIDE ROOF EDGE FASTENING INTO BLOCKING.
7. ALTERNATE TORQUE CLAMP NUTS EVENLY UNTIL HEAD SNAPS OFF, MIN. 45 FT-LBS
8. TIGHTEN SET SCREW UNTIL HEAD SNAPS OFF, MIN. 35 FT-LBS



2 F3.01 HANGER: BRANCH AND MAIN PIPING PARALLEL TO STRUCTURE

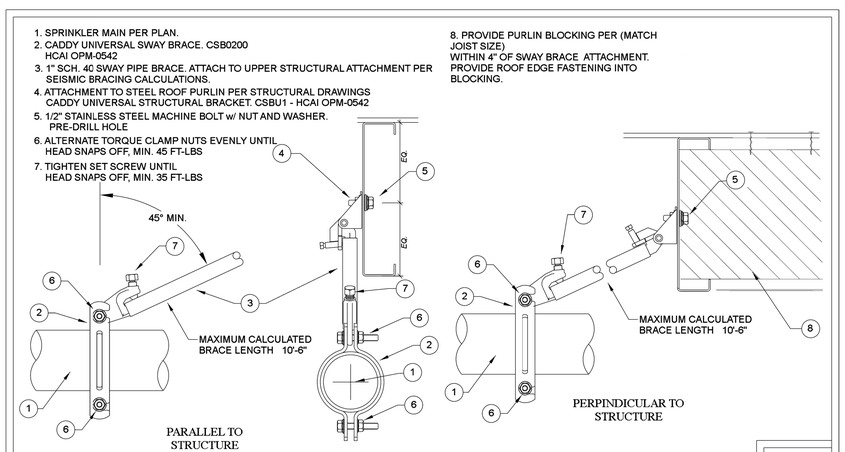


15'-0 MAX SPACING PER TRAPEZE MODULUS CALCULATION

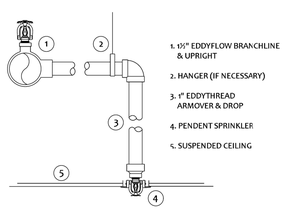
TRAPEZE MODULUS CALCULATION

SPAN INFORMATION	
2.00	Length of Trapeze (in Feet)
1.00	Location of Point Load
TRAPEZE MATERIAL	
1-5/8" STRUT	Trapeze Material Type
2 inch	Trapeze Size/Depth
0.338	Section Modulus of Trapeze Material
PIPE TO BE SUPPORTED	
EDDYFLOW	Piping Material to be Supported
2½ inch	Maximum Size of Pipe being supported
4.97	Weight per Foot
15-0	Length of Pipe (NFPA Tables are based on 15-feet of pipe)
324.55	Adjusted Point Load (1.0 Safety Factor plus an additional 250lb load)
MIN REQ'D MODULUS	
0.1298	Minimum Required Section Modulus for a maximum allowable bending stress of 15 kpsi with the adjusted trapeze length and point load location.

1. SPRINKLER MAIN PER PLAN.
2. CADDY UNIVERSAL SWAY BRACE. CSB0200 HCAI OPM-0542
3. 1" SCH. 40 SWAY PIPE BRACE. ATTACH TO UPPER STRUCTURAL ATTACHMENT PER SEISMIC BRACING CALCULATIONS.
4. ATTACHMENT TO STEEL ROOF PURLIN PER STRUCTURAL DRAWINGS CADDY UNIVERSAL STRUCTURAL BRACKET. CSBU1 - HCAI OPM-0542
5. 1/2" STAINLESS STEEL MACHINE BOLT w/ NUT AND WASHER. PRE-DRILL HOLE
6. ALTERNATE TORQUE CLAMP NUTS EVENLY UNTIL HEAD SNAPS OFF, MIN. 45 FT-LBS
7. TIGHTEN SET SCREW UNTIL HEAD SNAPS OFF, MIN. 35 FT-LBS
8. PROVIDE PURLIN BLOCKING PER (MATCH JOIST SIZE) WITHIN 4" OF SWAY BRACE. ATTACHMENT. PROVIDE ROOF EDGE FASTENING INTO BLOCKING.



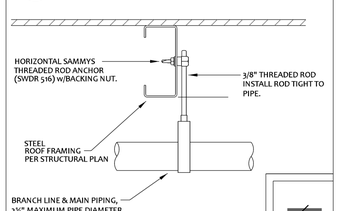
5 F3.01 TYPICAL ARMOVER / DROP DETAIL



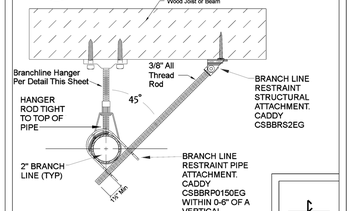
1. 1½" EDDYFLOW BRANCHLINE & UPRIGHT
2. HANGER (IF NECESSARY)
3. 1" EDDYTHREAD ARMOVER & DROP
4. PENDENT SPRINKLER
5. SUSPENDED CEILING

NO SCALE

6 F3.01 HANGER: BRANCH AND MAIN PIPING PARALLEL TO STRUCTURE



7 F3.01 BRANCH LINE RESTRAINT



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FIRE SPRINKLER NOTES & DETAILS

Job No.: **5593**

Sheet No.: **F3.01**

Release: DSA SUBMITTAL Date: